



Analytical Resources, LLC
Analytical Chemists and Consultants

18 May 2023

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

RE: AOC5 MR Phase 1

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

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

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

Associated Work Order(s)
23B0229

Associated SDG ID(s)
N/A

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

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

Analytical Resources, LLC

Susan Dunninghoo, Director, Client Services

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



CHAIN-OF-CUSTODY/TEST REQUEST FORM

No. **3983**

Project/Client Name: AOC5 MR Phase 1
 Project Number: 210075.01.02
 Contact Name: Amara Vandervort
 Sampled By: Windward

Ship to: ARL
 Attn: Sue Dunnihoo
 Shipper: Carrier
 Form filled out by: AV/CC
 Shipping Date: 2/18/23
 Airbill Number: _____
 Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)							Comments / Instructions (Jar tag number(s))
					PCBs	SMS SVUcs	TUClTS	DIF	Archive	SPUS Metals	Arsenic		CPAHs
2/18/23	1004	LDW23-SC1236	3	sediment	X		X		X			
	1128	-SS1236	4	↓	X	X	X	NA	X	X		
	1152	-SS1237	4		X	X	X	NA	X	X		
	1211	-SS1150	4		X	X	X	NA	X	X		
	1245	-SS1008	4		X	X	X	NA	X	X		
	1330	-SC1008	4		X	X	X	NA	X	X		
2/18/23	1424	LDW23-SC1014	3			X		X		X		
2/18/23	1525	LDW23-SC1013	4		X	X	X	NA	X	X		
Total Number of Containers			30 210	Purchase Order / Statement of Work # <u>APJ-110222-AOC5-ARL</u>								

1) Released by: <u>Amara Vandervort</u>	1) Rec'd by: <u>Phillip</u>	2) Released by: _____	2) Rec'd by: _____
Print name: _____	Print name: _____	Print name: _____	Print name: _____
Signature: <u>[Signature]</u>	Signature: _____	Signature: _____	Signature: _____
Company: <u>Windward</u>	Company: <u>AR</u>	Company: _____	Company: _____
Date/Time: <u>2/18/23 16:47</u>	Date/Time: <u>2/18/23 16:47</u>	Date/Time: _____	Date/Time: _____

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



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

To be completed by Laboratory upon sample receipt:

Date of receipt: <u>2/18/23</u>	Laboratory W.O. #: <u>23B0229</u>
Condition upon receipt: <u>good</u>	Time of receipt: <u>16:47</u>
Cooler temperature: <u>2.90C</u>	Received by: <u>Phillip Bates</u>



Cooler Receipt Form

ARI Client: Anchor @EA/Windward
 COC No(s): 3983 NA
 Assigned ARI Job No: 23B0229

Project Name: AOC5 MR Phase 1
 Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____
 Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO
 Were custody papers included with the cooler? YES NO
 Were custody papers properly filled out (ink, signed, etc.) YES NO
 Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 16:59 2.9
 If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: J009708
 Cooler Accepted by: PIA Date: 2/18/23 Time: 16:47

Complete custody forms and attach all shipping documents

Log-In Phase:

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

Samples Logged by: PIA Date: 2/10/23 Time: 9:39 Labels checked by: _____

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

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

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Anchor QEA, LLC

1201 3rd Ave, Suite 2600

Seattle, WA 98101

Project: AOC5 MR Phase 1

Project Number: 210075-01.02

Project Manager: Ali Judkins

Reported:

05/18/2023 13:42

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23B0229-01	LDW23-SC1236	Solid	02/08/23 10:04	02/08/23 16:47
23B0229-02	LDW23-SS1236	Solid	02/08/23 11:28	02/08/23 16:47
23B0229-03	LDW23-SS1237	Solid	02/08/23 11:52	02/08/23 16:47
23B0229-04	LDW23-SS1150	Solid	02/08/23 12:11	02/08/23 16:47
23B0229-05	LDW23-SS1008	Solid	02/08/23 12:45	02/08/23 16:47
23B0229-06	LDW23-SC1008	Solid	02/08/23 13:30	02/08/23 16:47
23B0229-07	LDW23-SC1014	Solid	02/08/23 14:24	02/08/23 16:47
23B0229-08	LDW23-SC1013	Solid	02/08/23 15:25	02/08/23 16:47



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

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

Reported:
18-May-2023 13:42

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23B0229

Sample receipt

Samples as listed on the preceding page were received 08-Feb-2023 16:47 under ARI work order 23B0229. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

Semivolatiles - EPA Method SW8270E

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

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

Several samples showed failures for internal standard areas and were rerun at dilution to reduce matrix effect. Both sets of results have been reported.

The surrogate percent recovery for d14-p-terphenyl in several samples were high outside control limits and flagged on the summary sheet.

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

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries for butylbenzylphthalate were just high of control limits, and the relative percent difference (RPD) were within control limits, attributed to the continued effect of the matrix of project samples on the instruments.

The batch BLB0424 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries were high of advisory control limits for fluoranthene, pyrene and butylbenzylphthalate. The relative percent difference (RPD) high of advisory control limits, reported under work order 23B0276.

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

Samples LDW23-SS1150, LDW23-SC1008 and LDW23-SC1013 were rerun at dilution to attempt to address matrix interference. Both sets of data are submitted here.

Semivolatiles - EPA Method SW8270E-SIM

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

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

The analyst noted SLC0376-ICV2 had failure low for d12-perylene when compared to the ICAL. None of the project target compounds are associated with this standard.

The surrogate percent recovery for d14-p-terphenyl in several samples were high outside control limits and flagged on the summary sheet.

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



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

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

Reported:
18-May-2023 13:42

Case Narrative

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries were within control limits. The relative percent difference (RPD) was high of control limits for 2,4-dimethylphenol.

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

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

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

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

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

PCB Aroclors - EPA Method SW8082A

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

SLC0014-ICV2, SLC014-CCV2, SCL014-CCV4 and SLC014-CCV6 failed high for 1260 on the ZB5 column, but all results were reported with ZB35 as the primary result.

Hexabromobiphenyl failed on the ZB5 column, attributed to continued issues with the matrix. Results were reported from the ZB35 column which had passing results.

The surrogate percent recoveries were within control limits.

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

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

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

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

Total Metals - EPA Method 6020B

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

The calibration SLC0248-CAL3 was noted to have indium-1, cadmium-114 and selenium to be slightly noisy, with acceptable %R, intensities and r-values. The calibration SLC0248-CCV4 had germanium and the associate group noisy and was rerun.



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

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

Reported:
18-May-2023 13:42

Case Narrative

SLC02480-CCVF showed chromium slightly noisy with a passing value.

Chromium was rerun on sequence SLC0300. Digest BLC0079-MSD2 had scandium noted to be slightly noisy. SLC0300- IFA was noted to have chromium-53 high.

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

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

The batch BLC0079 matrix spike (MS) percent recovery for silver was low of advisory control limits. The matrix spike duplicate (MSD) recovery for silver was low of advisory control limits and the recovery for lead high of advisory control limits and flagged on the summary sheet. The relative percent difference (RPD) for lead was high of advisory control limits. A post spike had acceptable results for all three elements, reported under work order 23B0088.

The batch BLC0079 duplicate (DUP) relative percent difference (RPD) were within advisory control limits, reported under work order 23A0088.

Total Mercury - EPA Method 7471B

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

Initial and continuing calibrations were within method requirements.

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

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

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

The batch BLC0077 matrix spike (MS) percent recovery was low of advisory control limits and the matrix spike duplicate relative percent difference (RPD) was high of control limits and flagged on the summary sheet. A post spike had acceptable recovery, reported under work order 23A0088.

Wet Chemistry (Total Organic Carbon and Total Solids)

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

Initial and continuing calibrations were within method requirements.

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

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

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

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

Revised 05/18/2023 to correct calibration reference for CCAL in sequence SLB0179.



QUALIFIERS AND NOTES

<u>Qualifier</u>	<u>Definition</u>
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
J	Estimated concentration value detected below the reporting limit.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
D	The reported value is from a dilution
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

ICP-MS Metals

Analyzed with Secondary Isotopes

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

These results were reported from a secondary ion:

<u>Labnumber</u>	<u>SampleName</u>	<u>Analyte</u>
23B0229-04	LDW23-SS1150	Copper-65
23B0229-08	LDW23-SC1013	Copper-65



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-02 A

SDG: 23B0229

Sampled: 02/08/23 11:28

Prepared: 02/17/23 15:00

File ID: NT1403172321.D

% Solids: 55.99

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 02:31

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 17.59 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	47.6		4.5	20.3
106-44-5	4-Methylphenol	1	12.0	J	7.5	20.3
91-20-3	Naphthalene	1	12.2	J	4.3	20.3
91-57-6	2-Methylnaphthalene	1	9.9	J	4.6	20.3
208-96-8	Acenaphthylene	1	20.3	U	6.3	20.3
131-11-3	Dimethylphthalate	1	20.3	U	4.5	20.3
83-32-9	Acenaphthene	1	8.9	J	5.3	20.3
132-64-9	Dibenzofuran	1	20.3	U	14.3	20.3
86-73-7	Fluorene	1	20.3	U	14.8	20.3
85-01-8	Phenanthrene	1	67.3		8.9	20.3
120-12-7	Anthracene	1	19.0	J	7.3	20.3
206-44-0	Fluoranthene	1	305	Q	6.2	20.3
129-00-0	Pyrene	1	284		5.8	20.3
85-68-7	Butylbenzylphthalate	1	86.8	Q	9.6	20.3
56-55-3	Benzo(a)anthracene	1	83.1		6.1	20.3
218-01-9	Chrysene	1	118		6.2	20.3
117-81-7	bis(2-Ethylhexyl)phthalate	1	188		5.5	50.8
	Benzo(a)fluoranthene, Total	1	235		10.2	40.6
50-32-8	Benzo(a)pyrene	1	61.8		4.3	20.3
193-39-5	Indeno(1,2,3-cd)pyrene	1	46.1		14.9	20.3
53-70-3	Dibenzo(a,h)anthracene	1	20.3	U	17.5	20.3
191-24-2	Benzo(g,h,i)perylene	1	58.2	Q	13.8	20.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	761.53	325	42.6	27 - 120	
Phenol-d5	761.53	442	58.1	29 - 120	
2-Chlorophenol-d4	761.53	444	58.3	31 - 120	
1,2-Dichlorobenzene-d4	507.68	362	71.2	32 - 120	
Nitrobenzene-d5	507.68	381	75.1	30 - 120	
2-Fluorobiphenyl	507.68	424	83.6	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-02 A

SDG: 23B0229

Sampled: 02/08/23 11:28

Prepared: 02/17/23 15:00

File ID: NT1403172321.D

% Solids: 55.99

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 02:31

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 17.59 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	761.53	192	25.2	24 - 134	
p-Terphenyl-d14	507.68	625	123	37 - 120	*,Q

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172321.D

Date: 18-MAR-2023 02:31

Client ID:

Sample Info: 23B0229-02

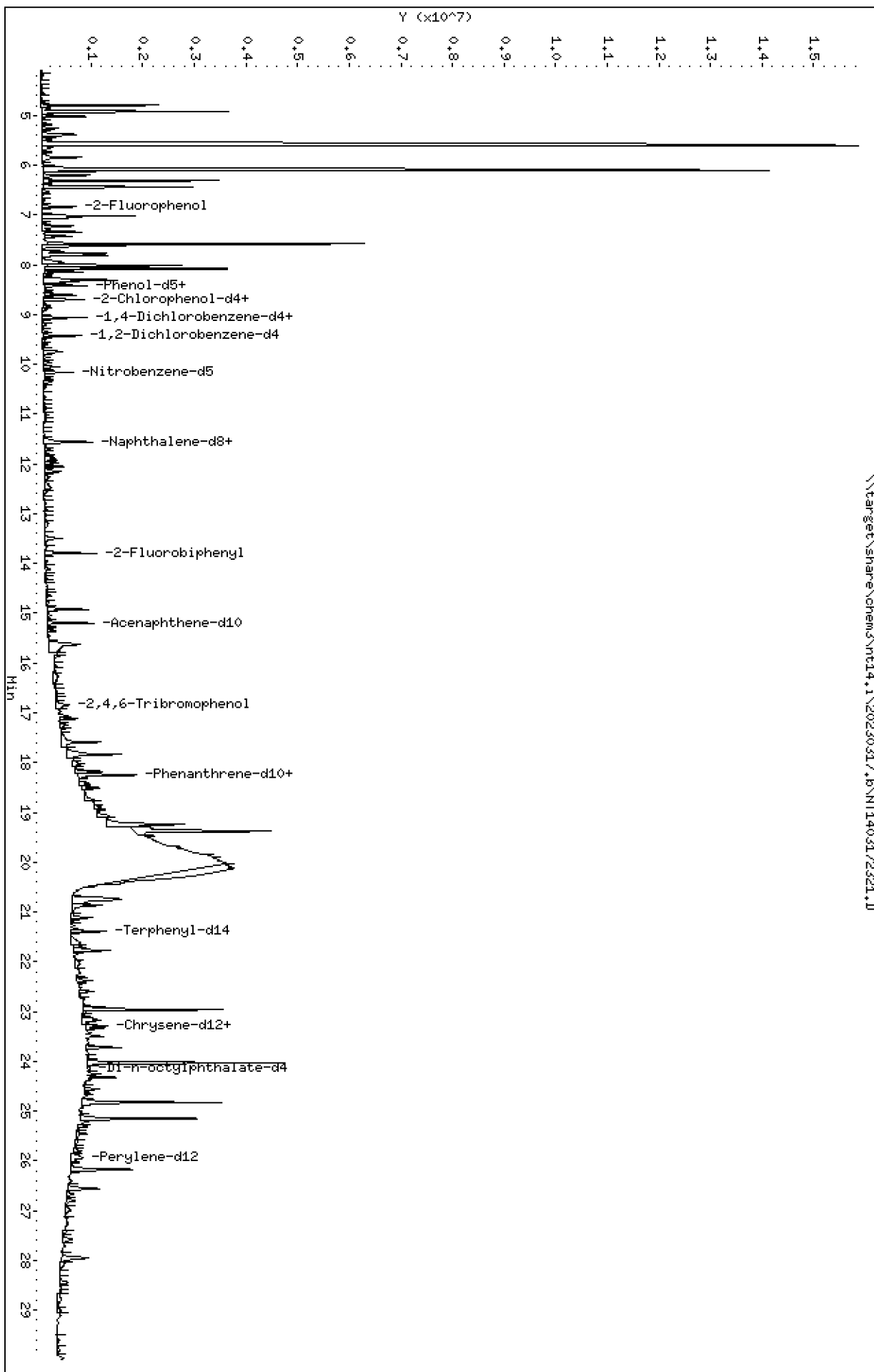
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172321.D



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

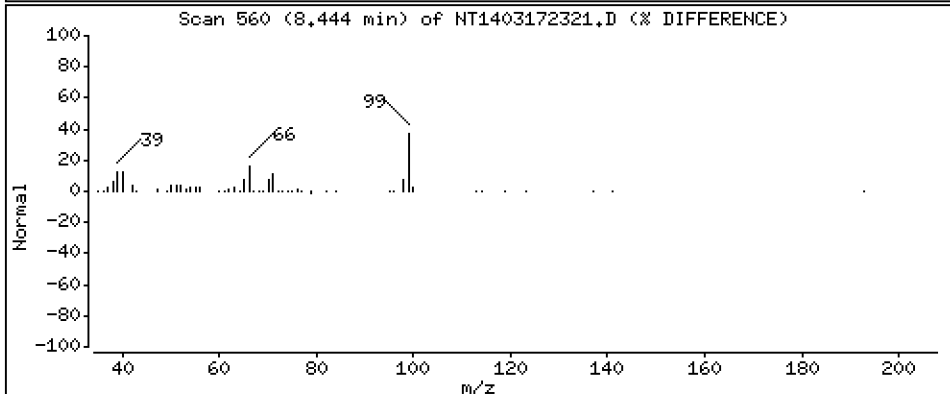
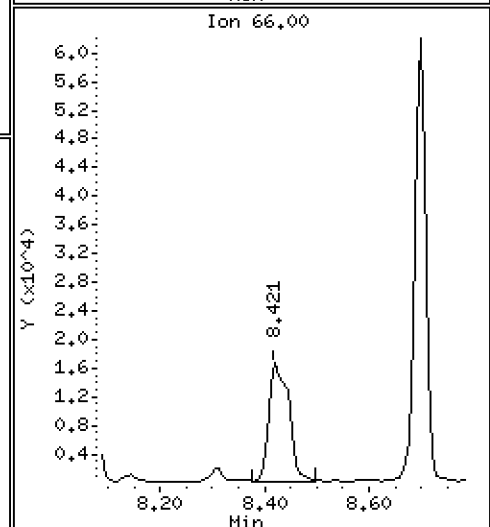
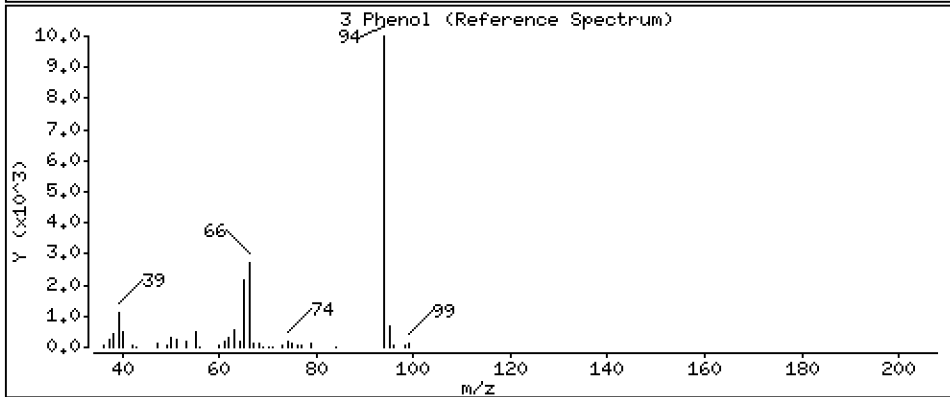
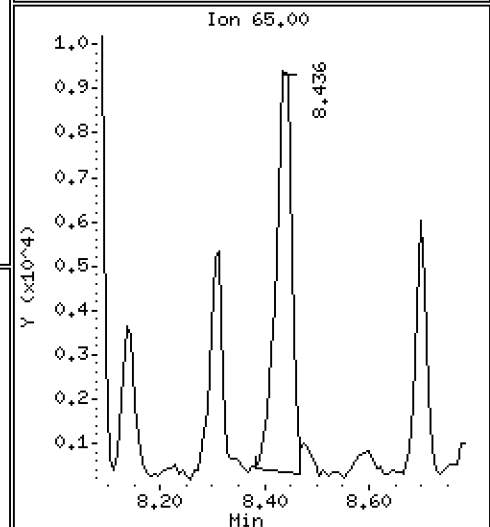
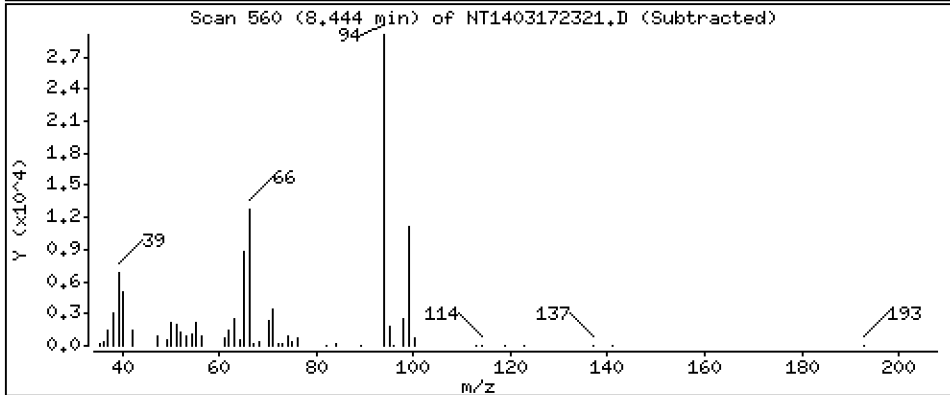
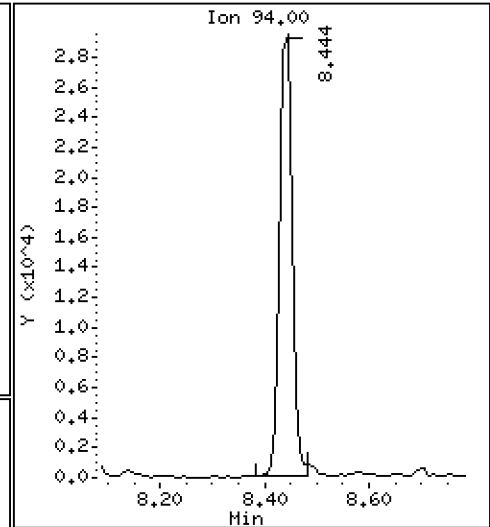
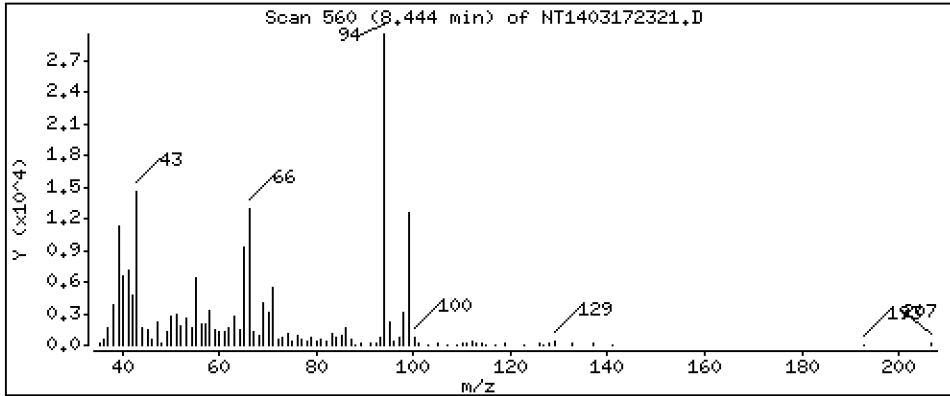
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,4690 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

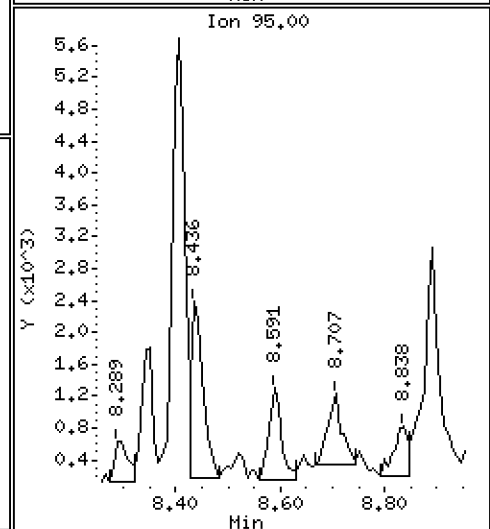
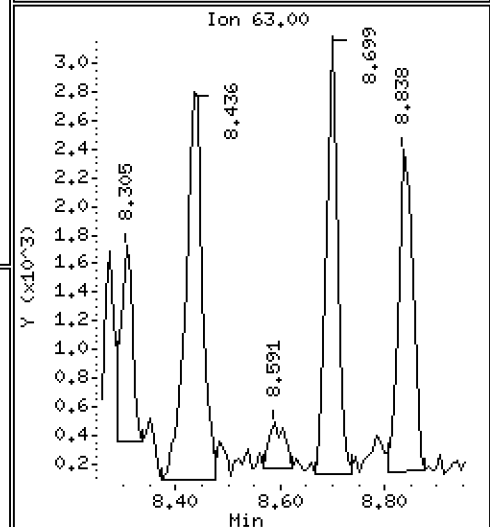
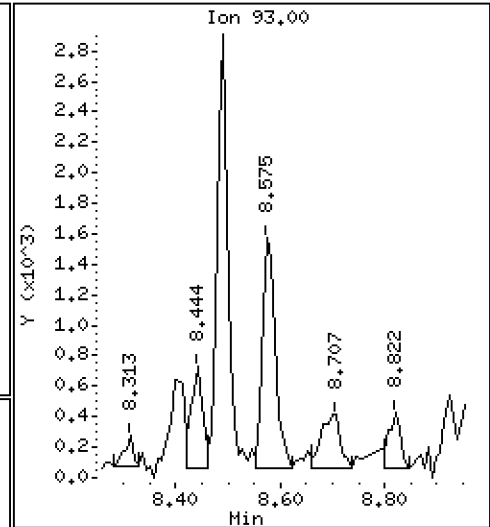
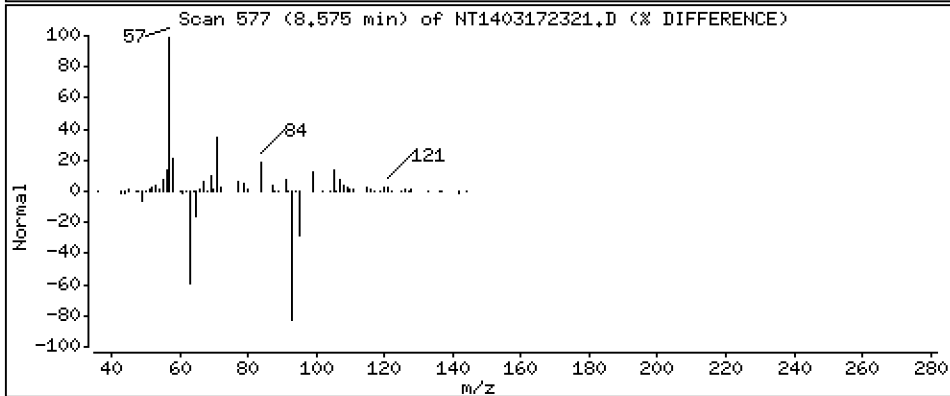
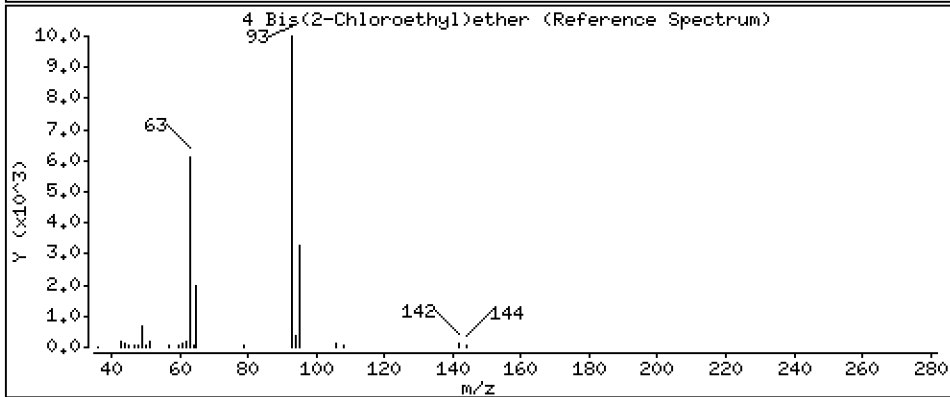
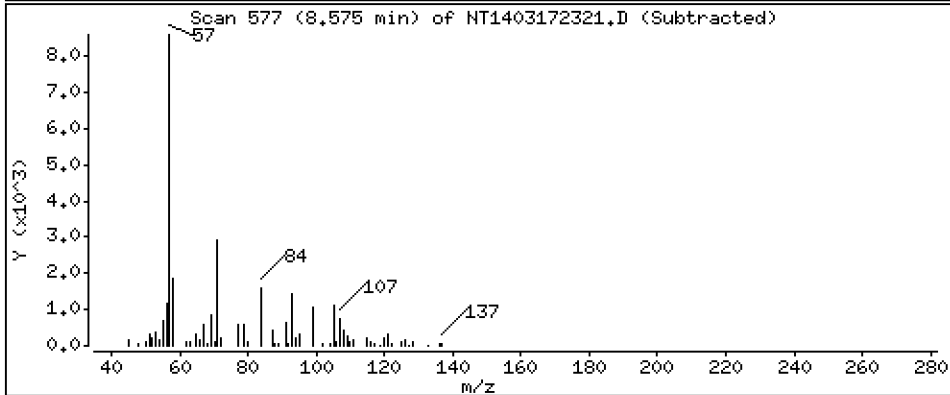
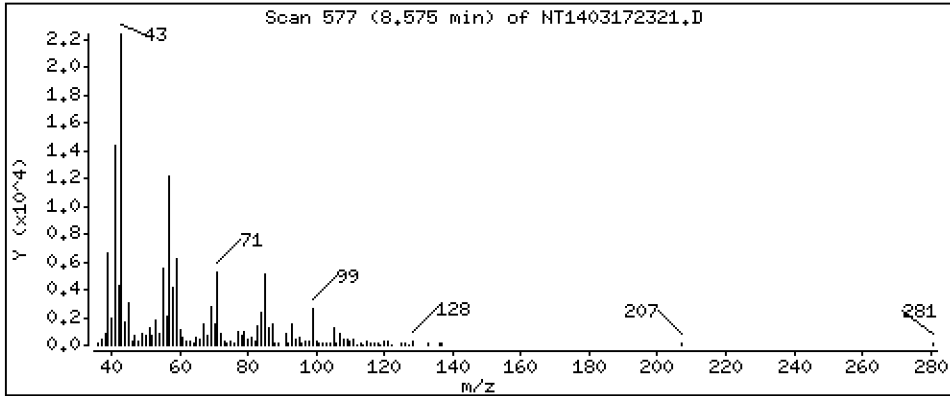
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

4 Bis(2-Chloroethyl)ether

Concentration: 0.03755 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

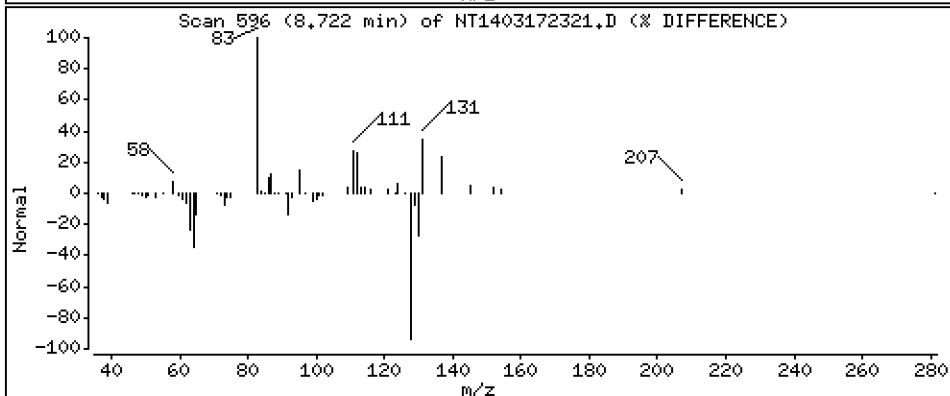
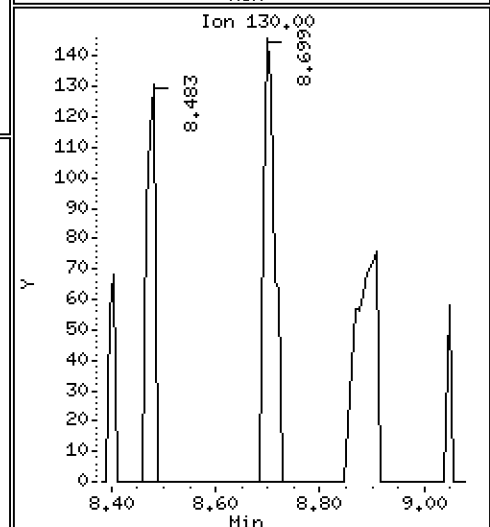
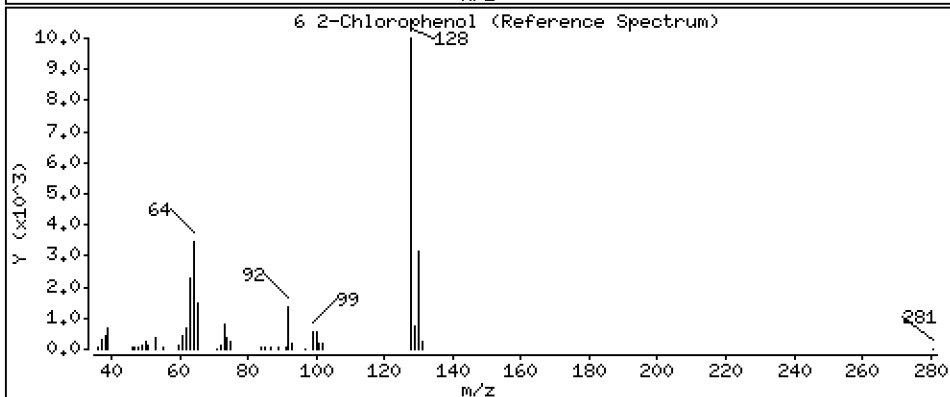
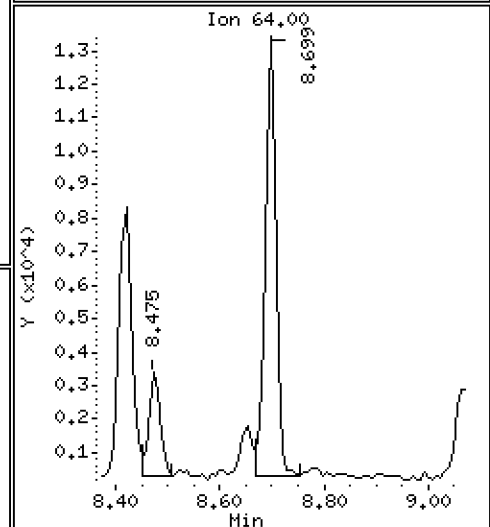
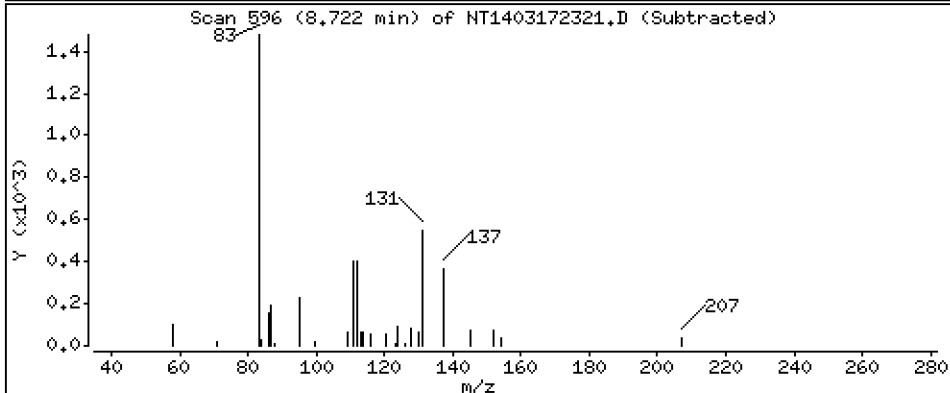
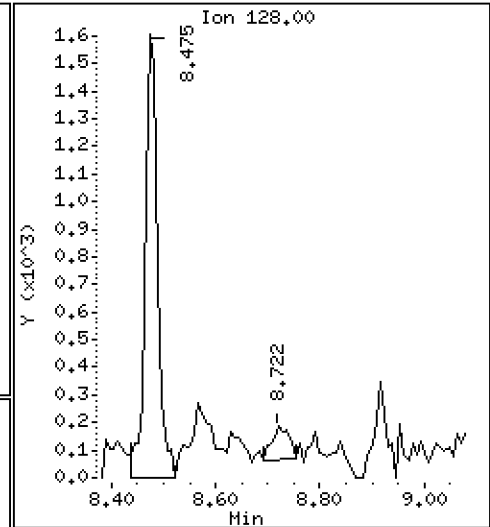
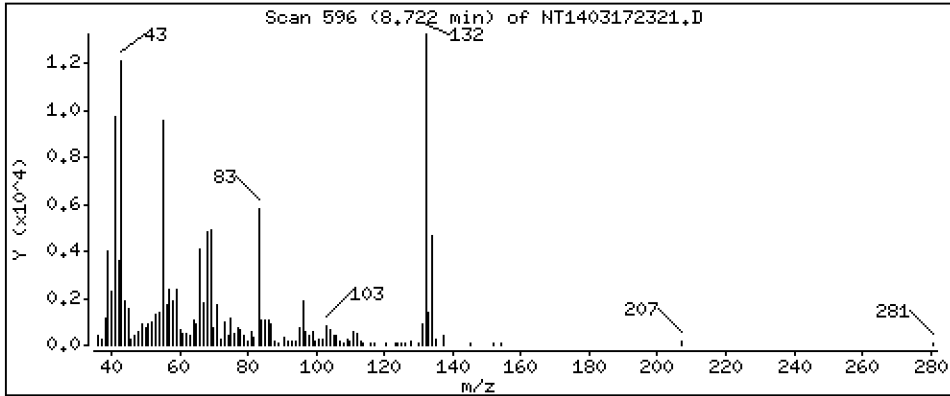
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 0.003580 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

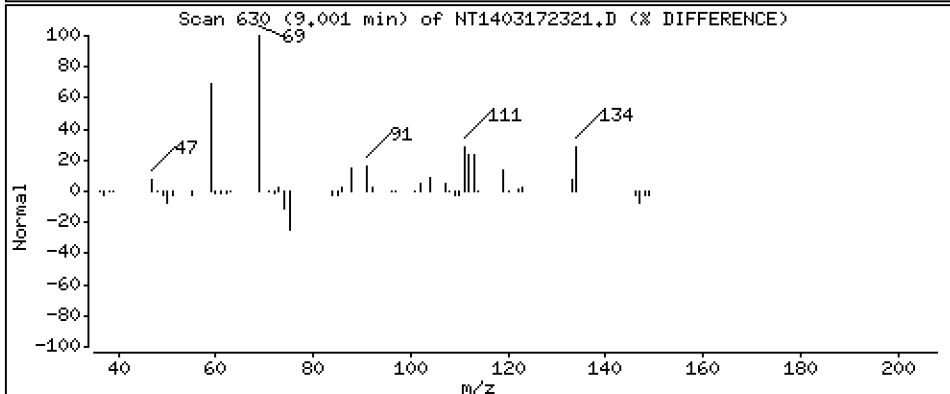
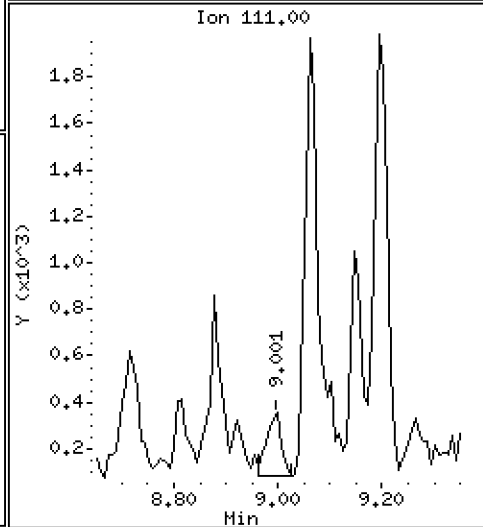
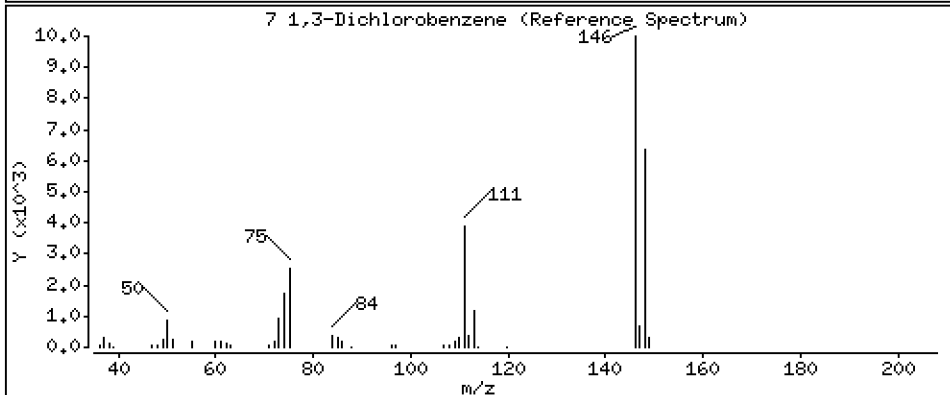
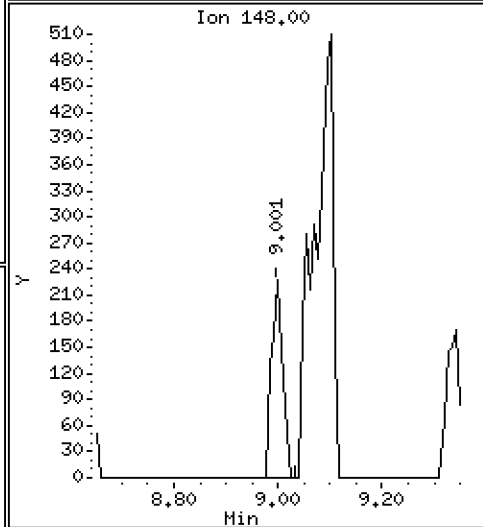
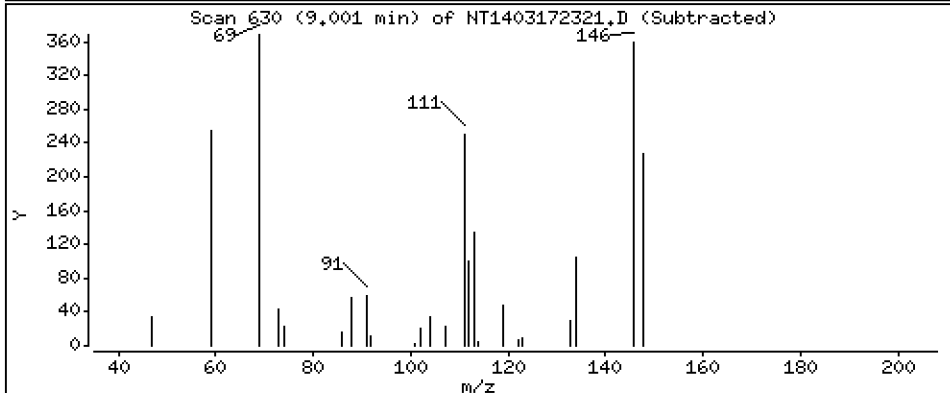
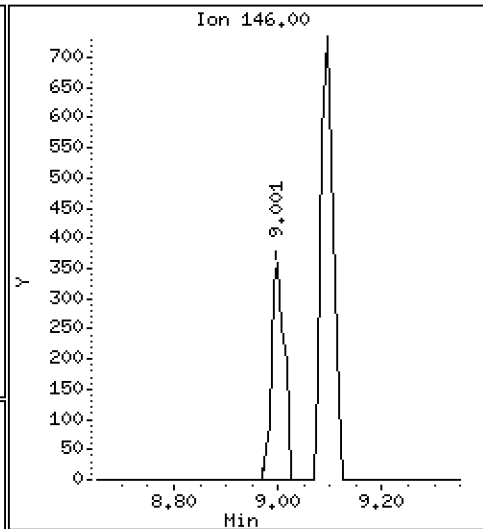
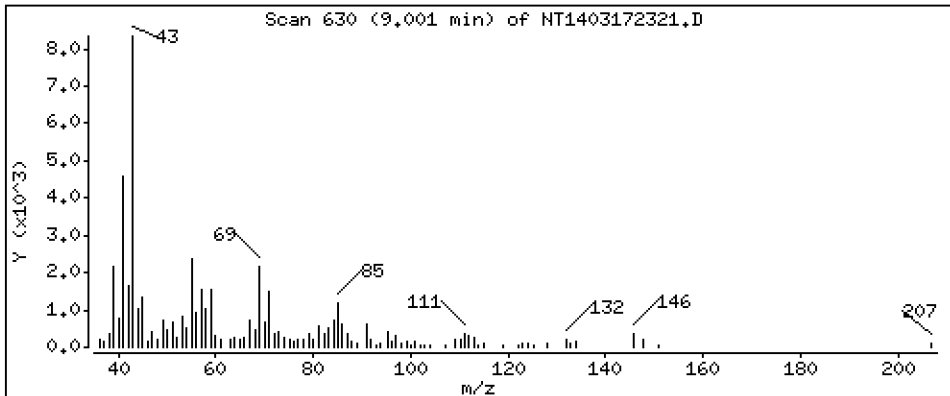
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.007425 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

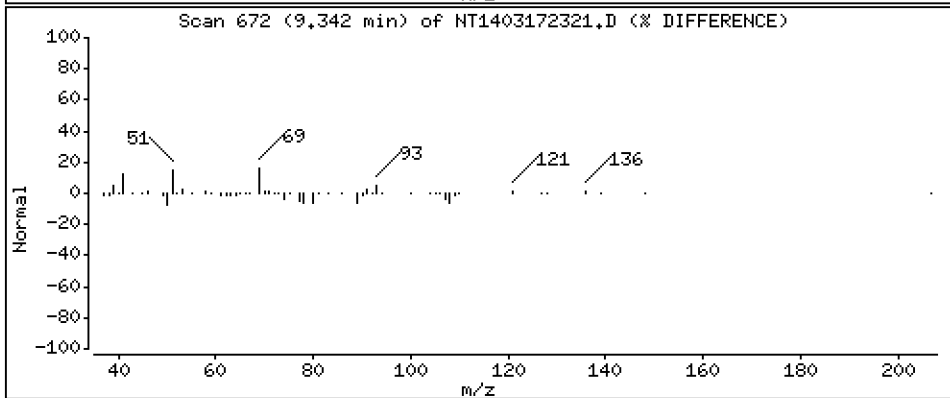
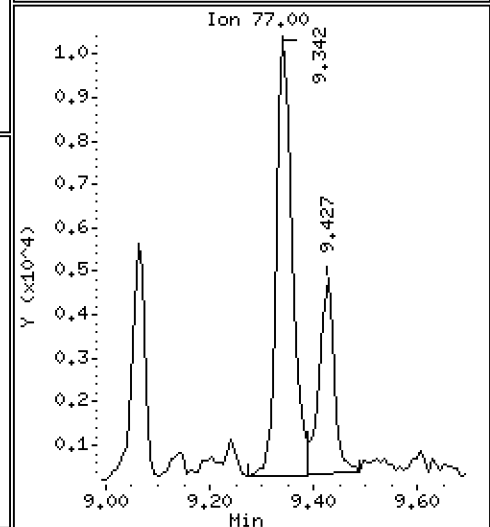
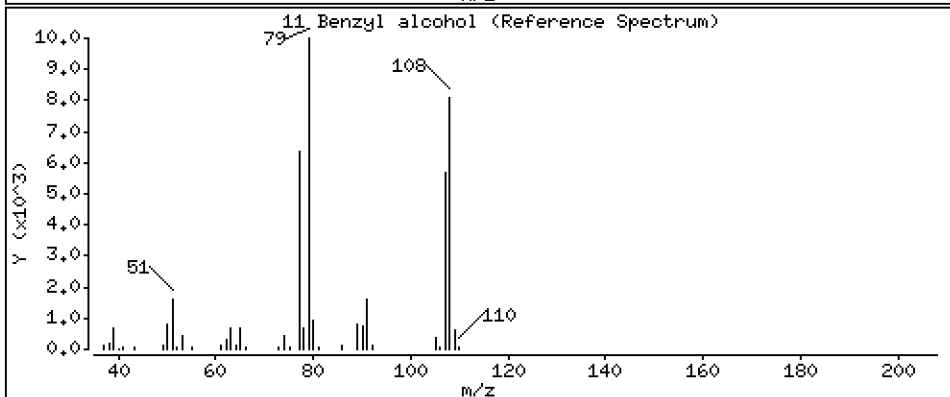
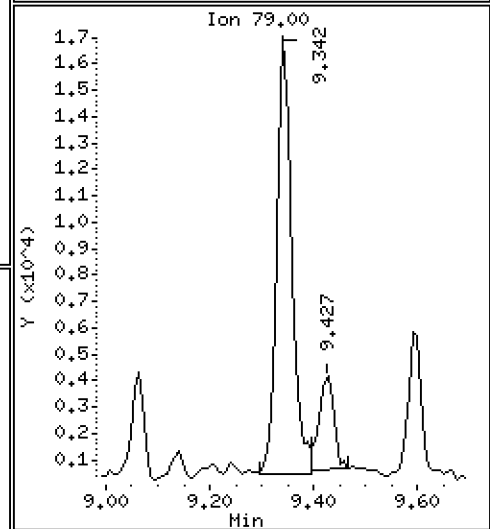
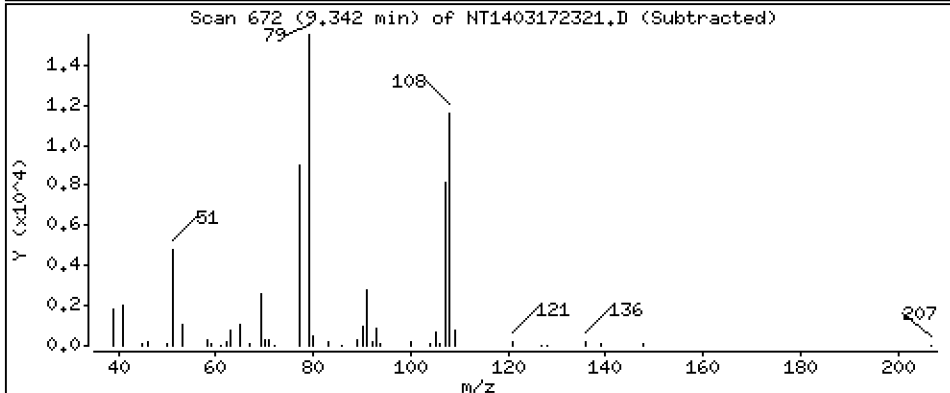
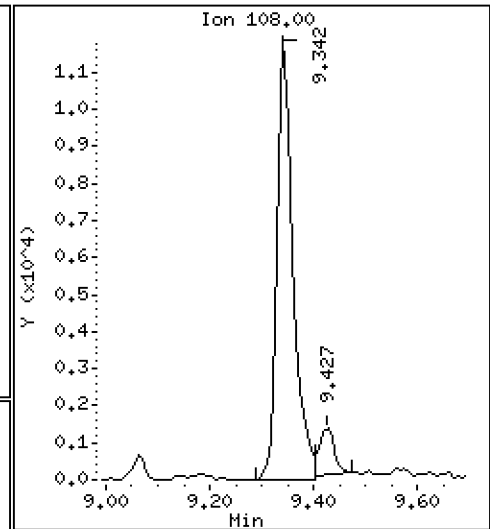
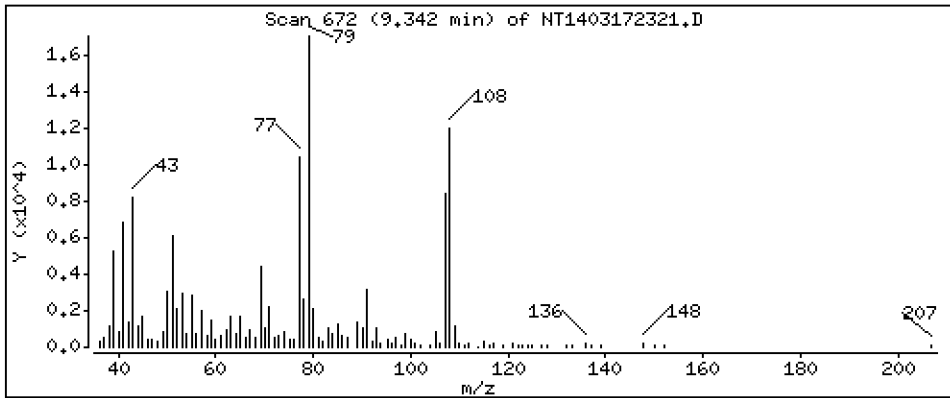
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,5263 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

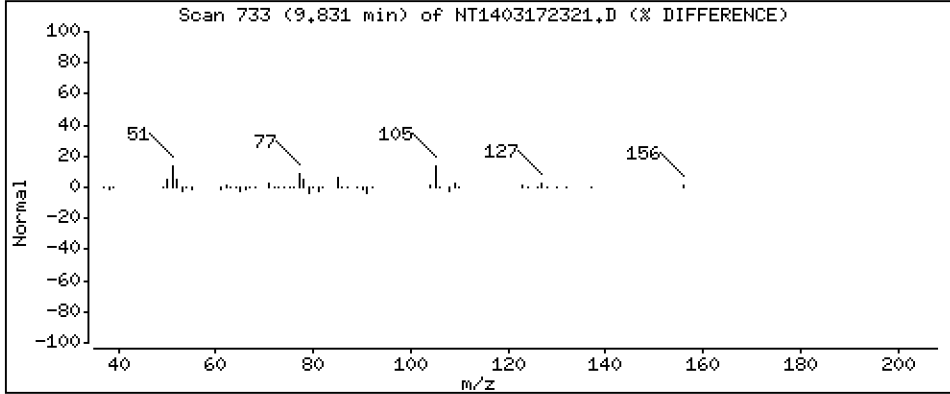
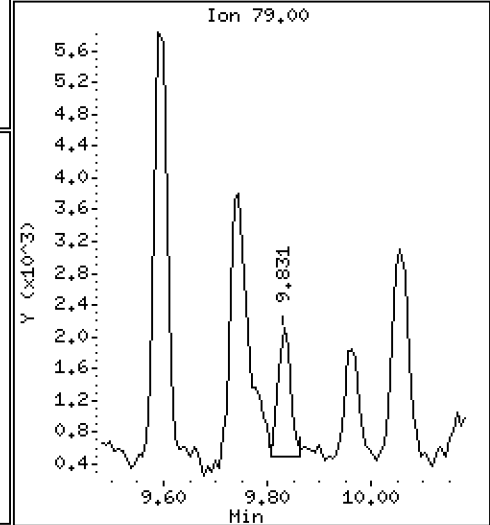
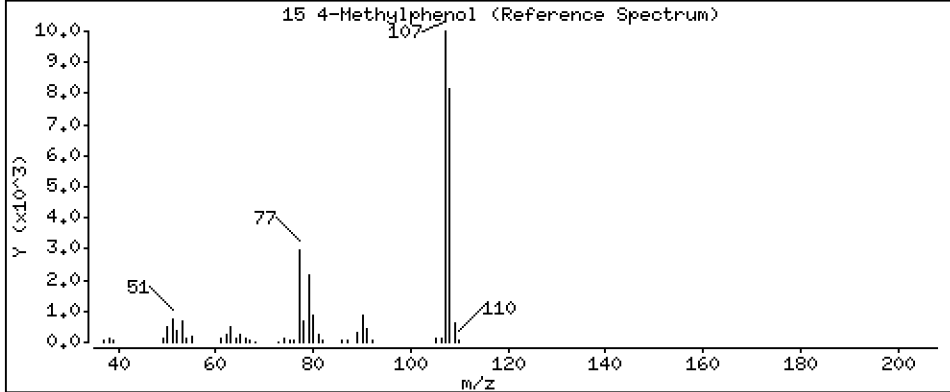
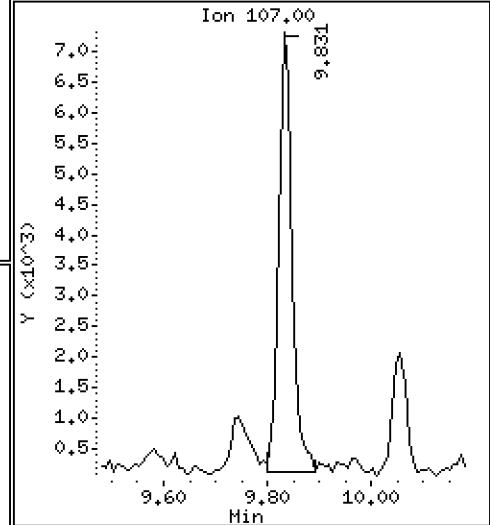
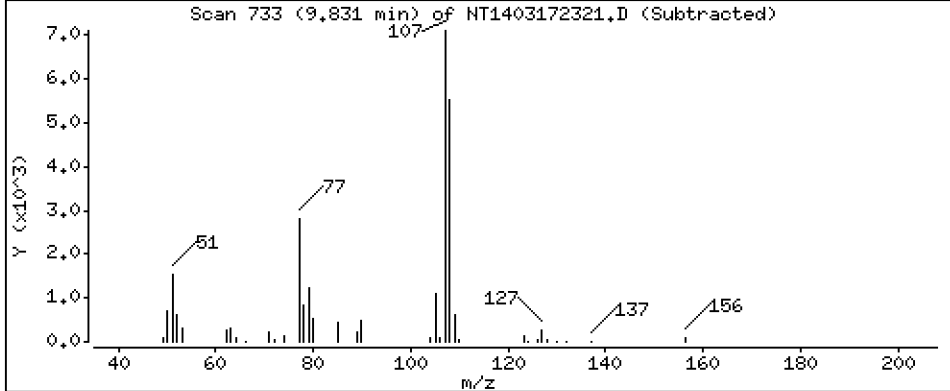
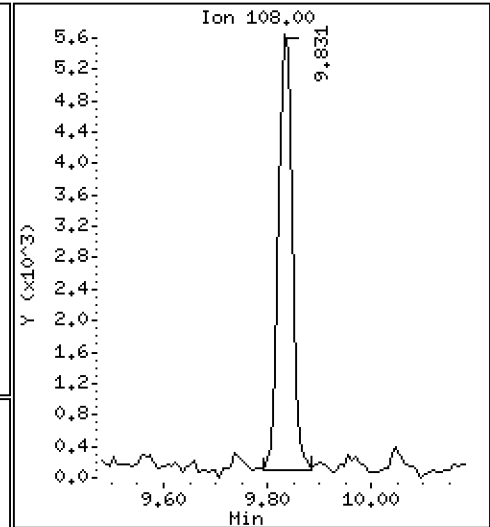
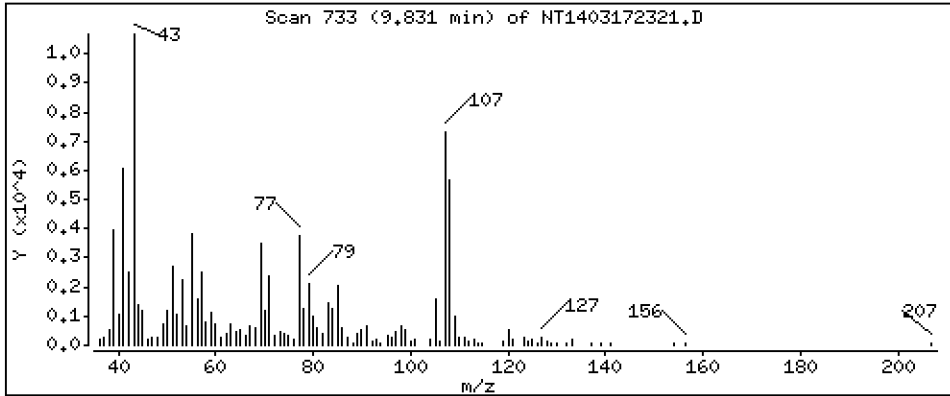
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1181 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

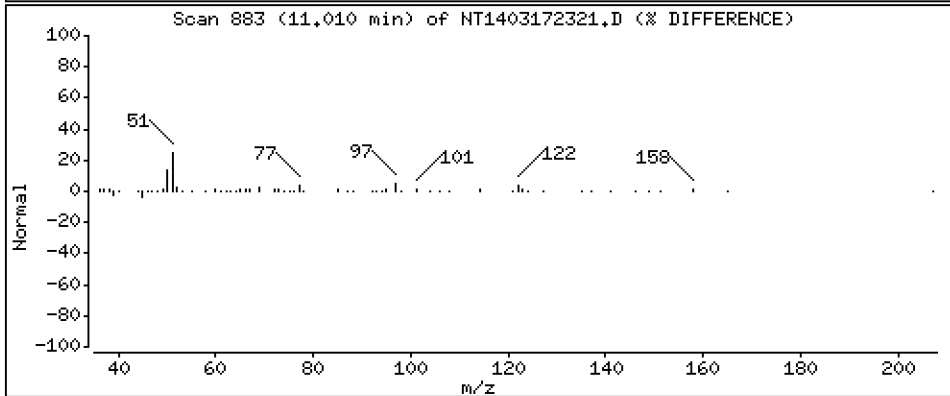
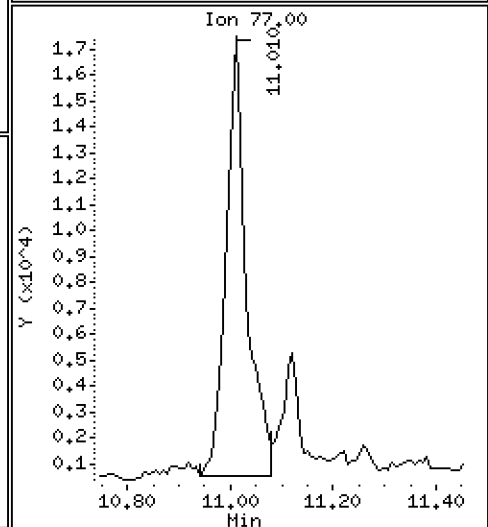
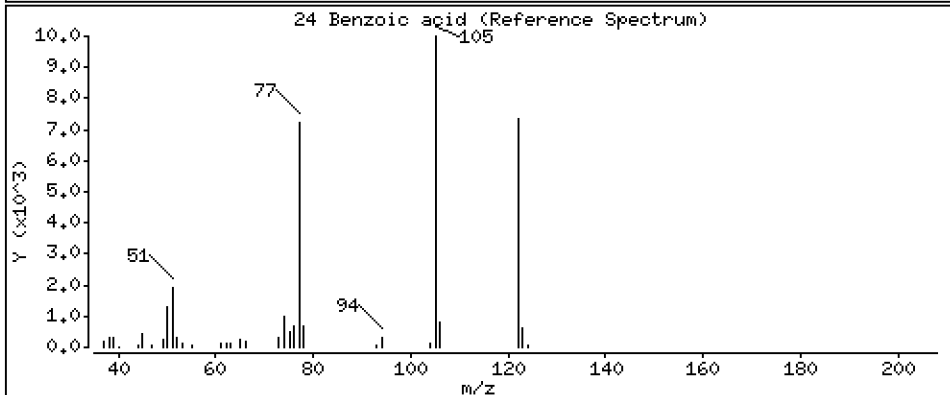
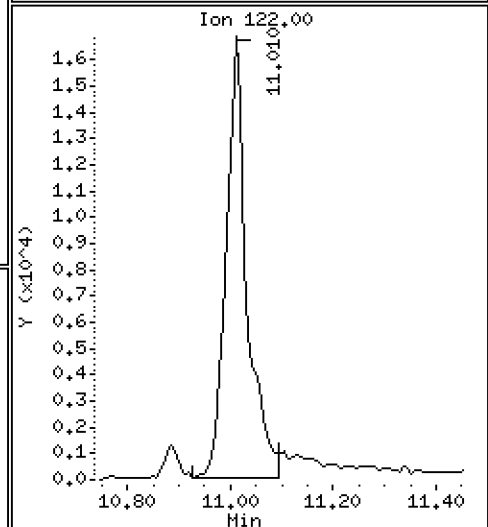
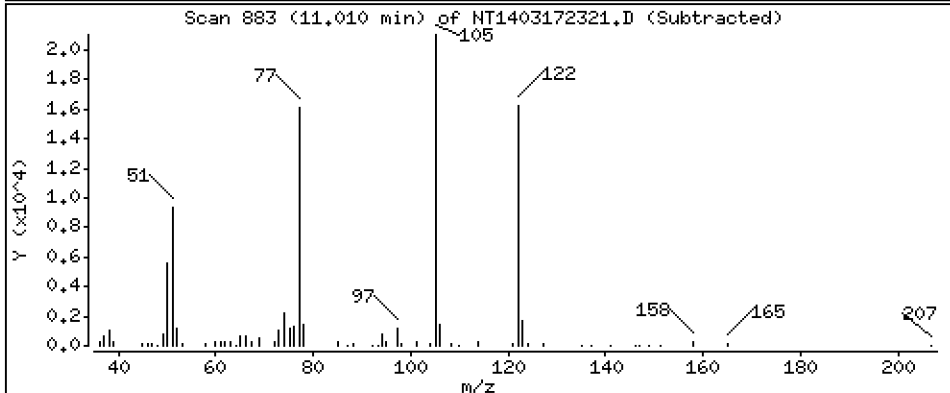
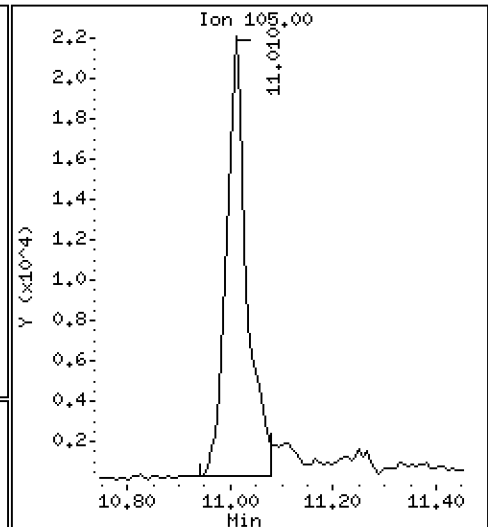
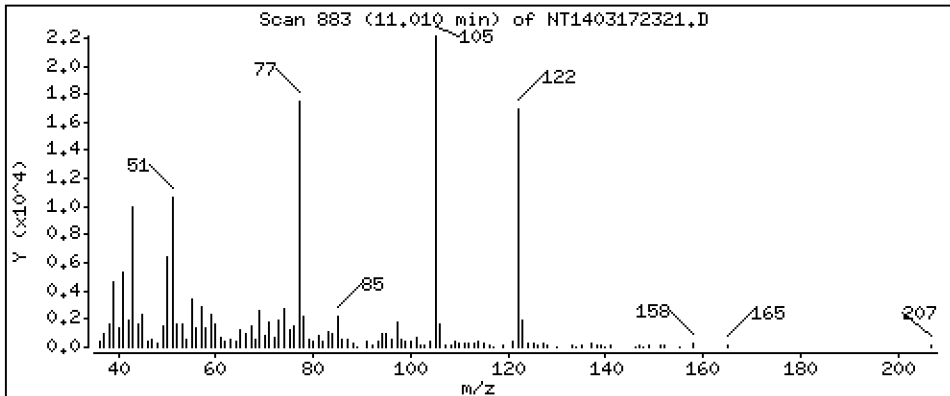
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.9873 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

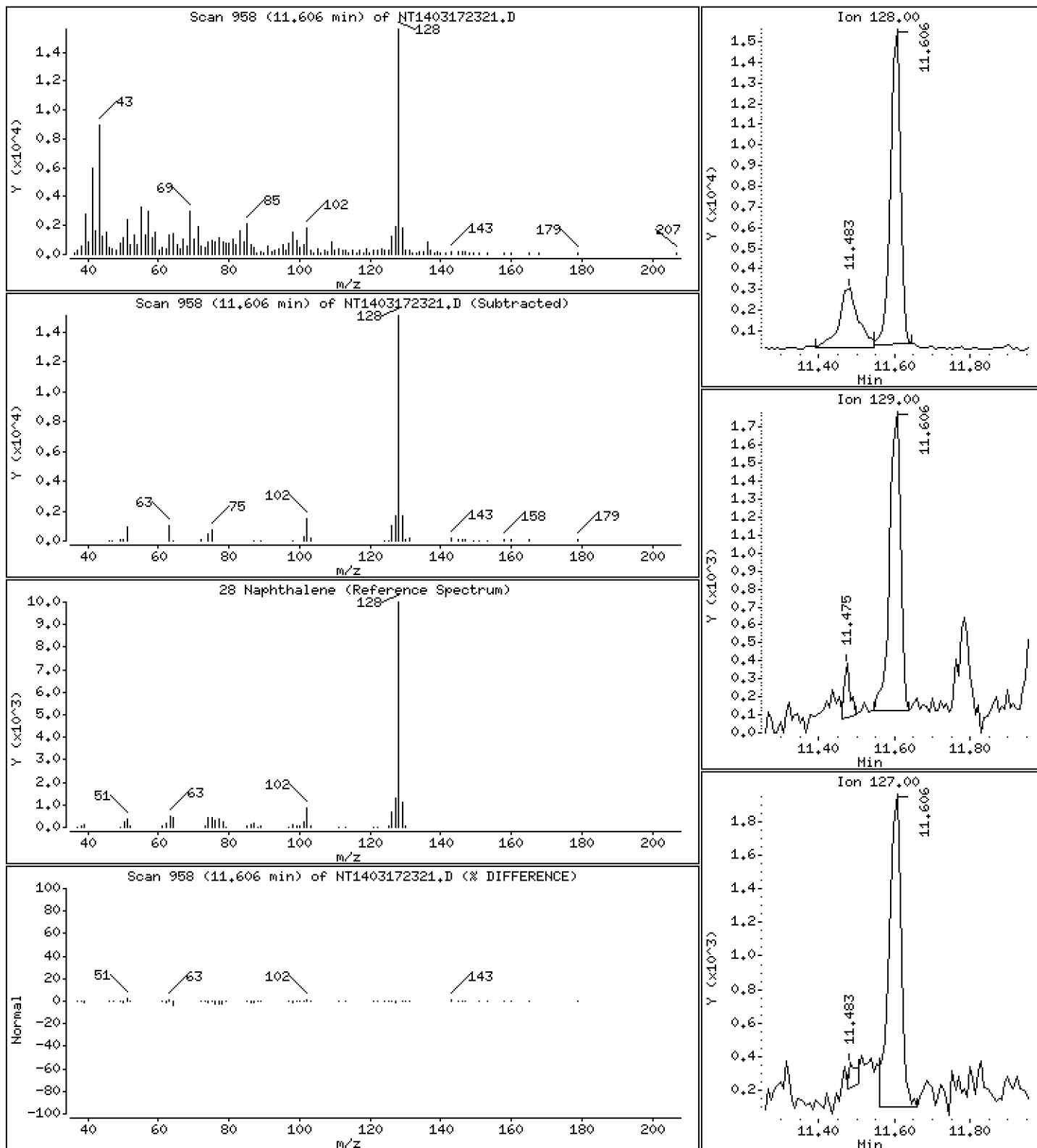
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1197 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

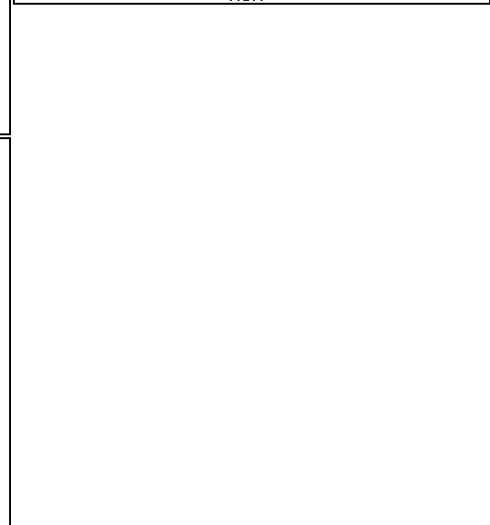
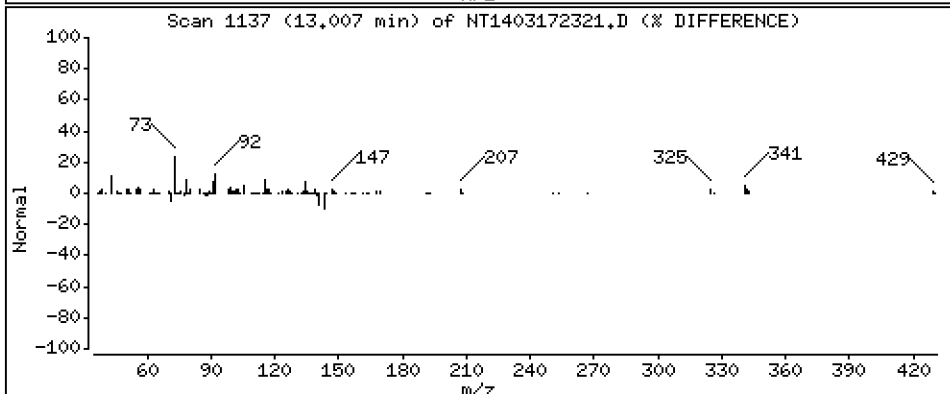
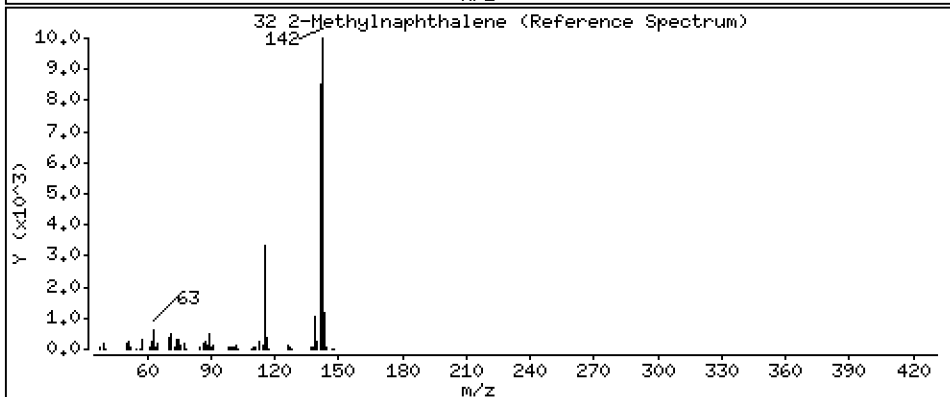
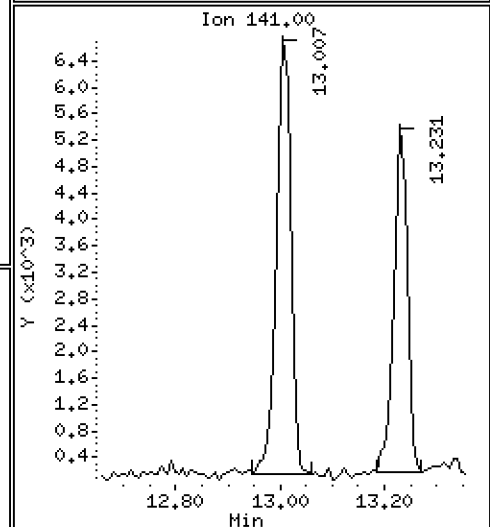
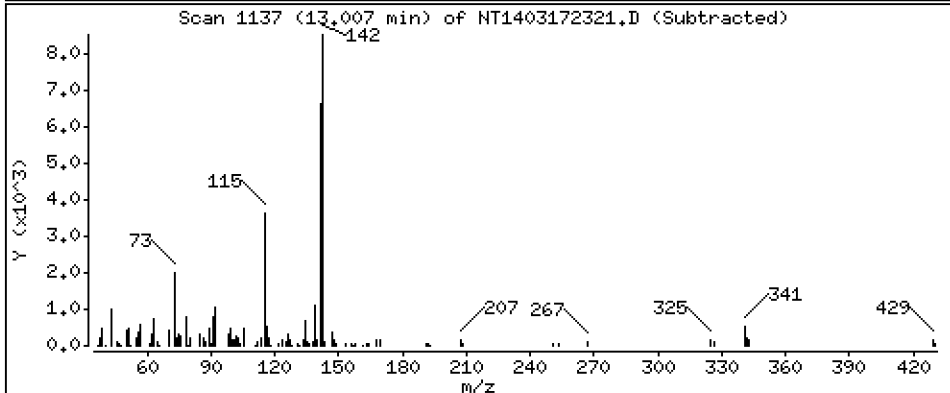
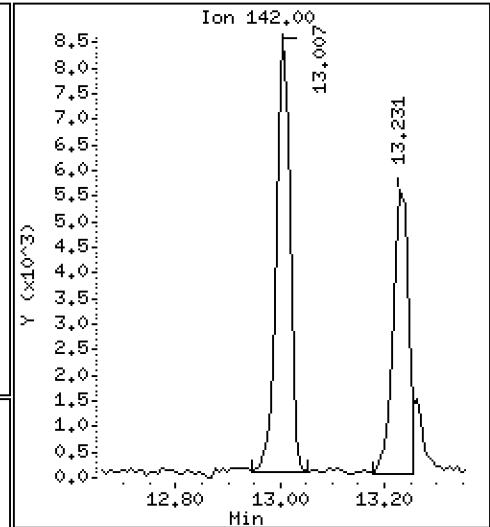
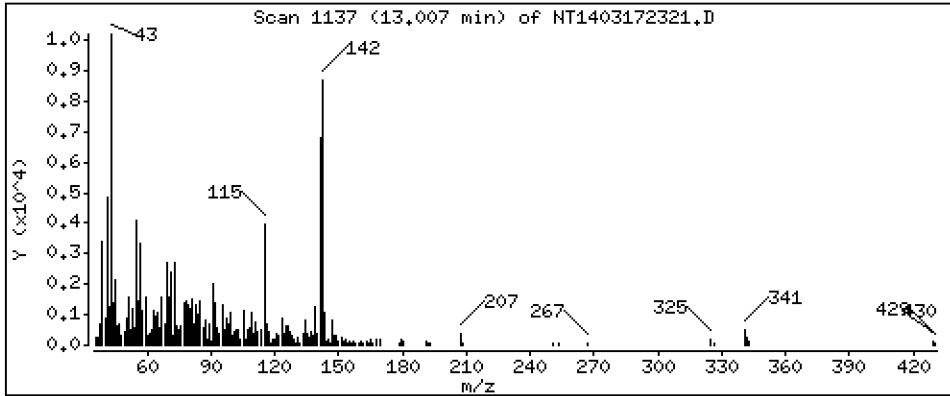
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,09722 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

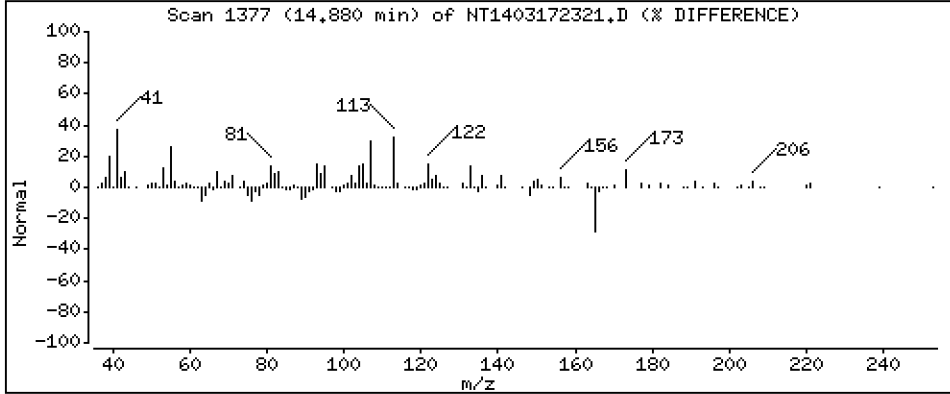
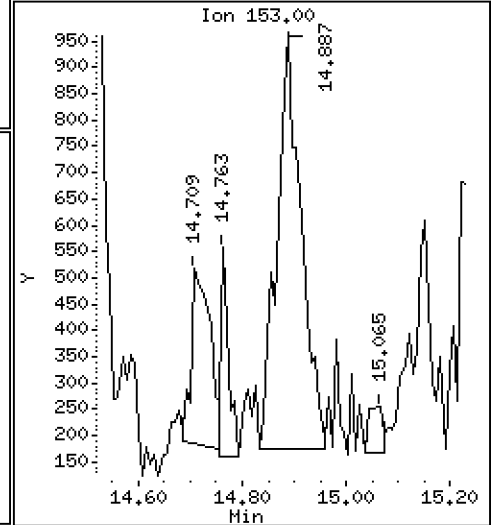
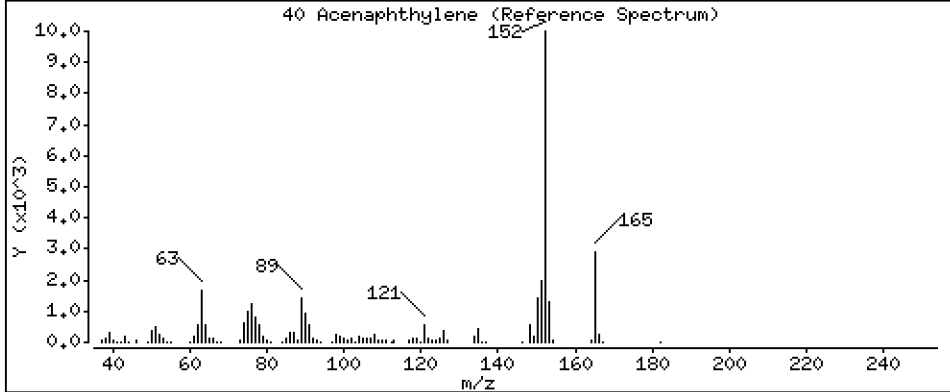
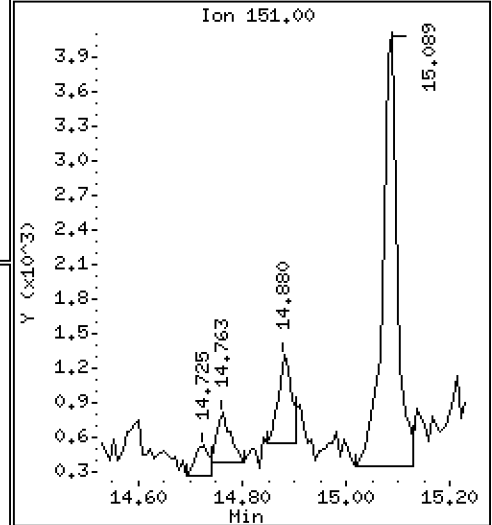
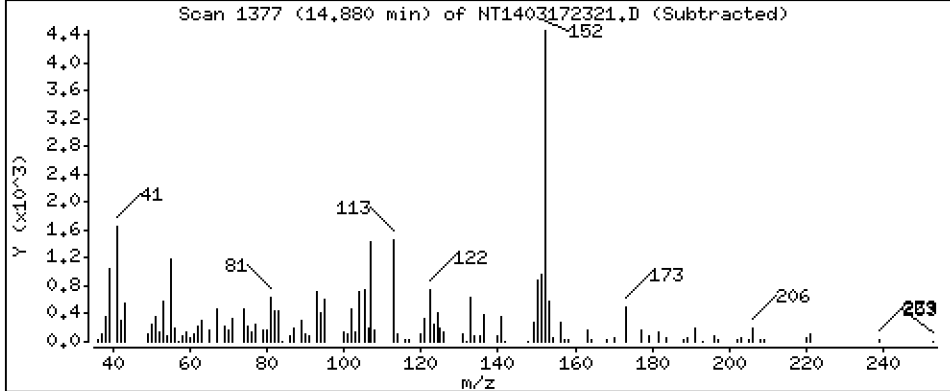
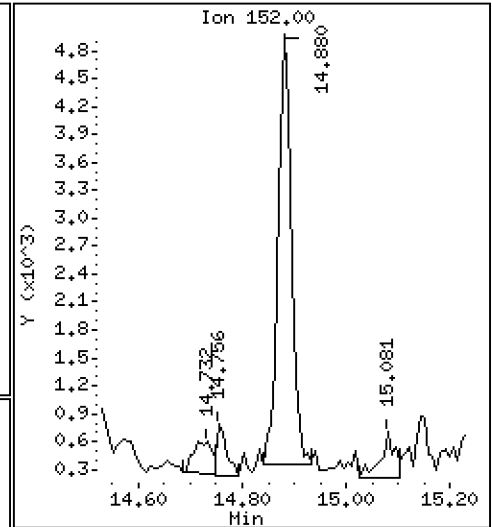
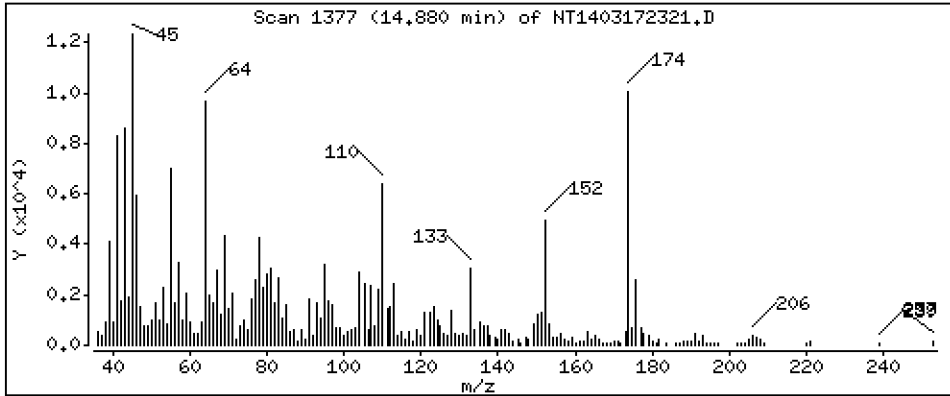
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.03922 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

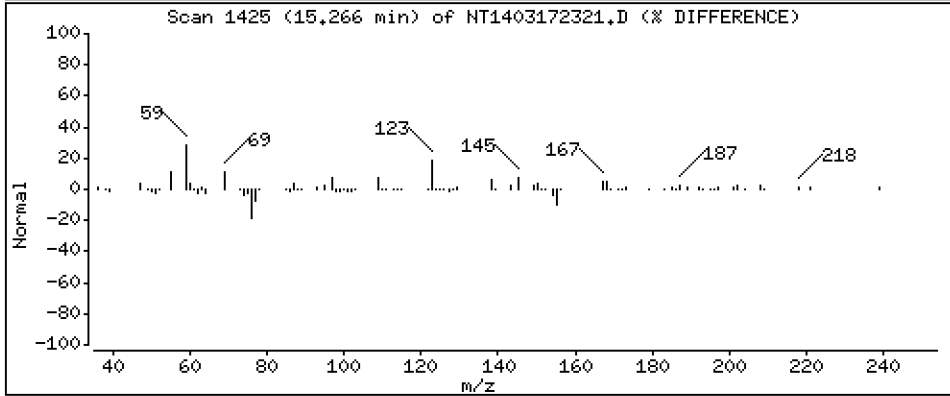
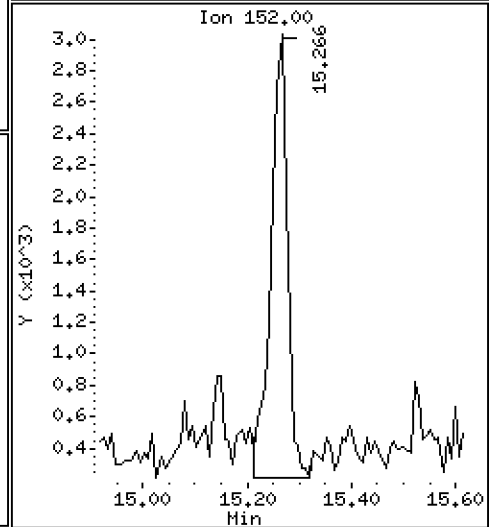
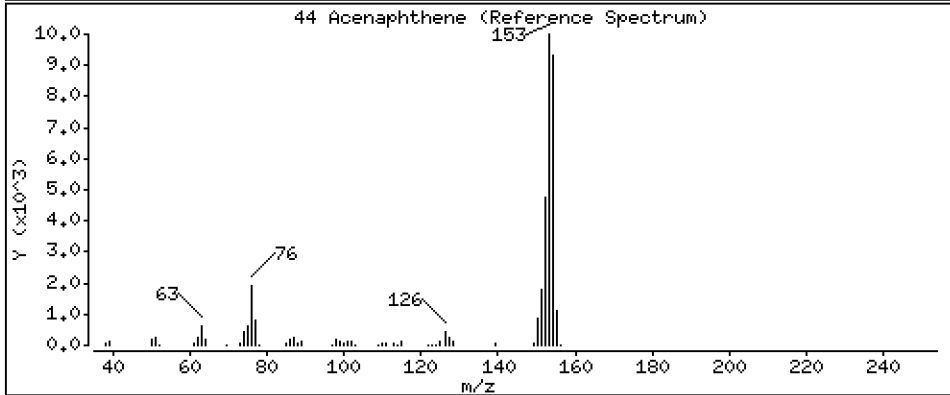
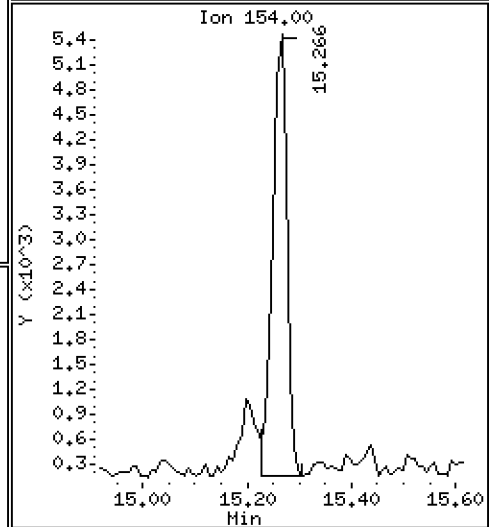
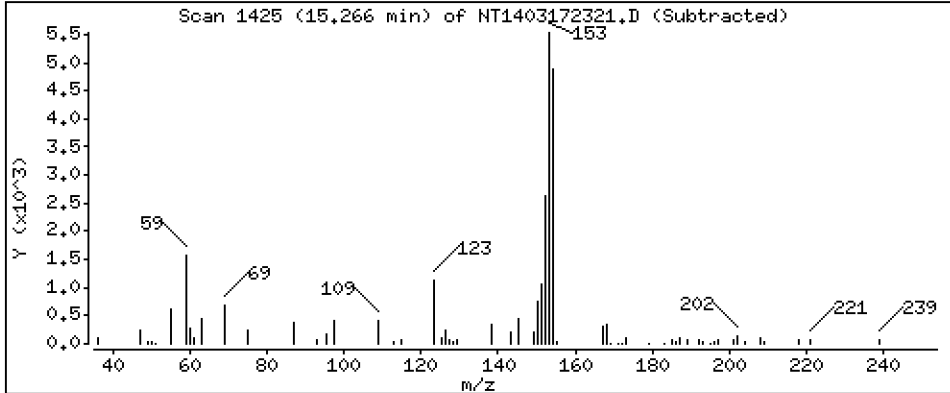
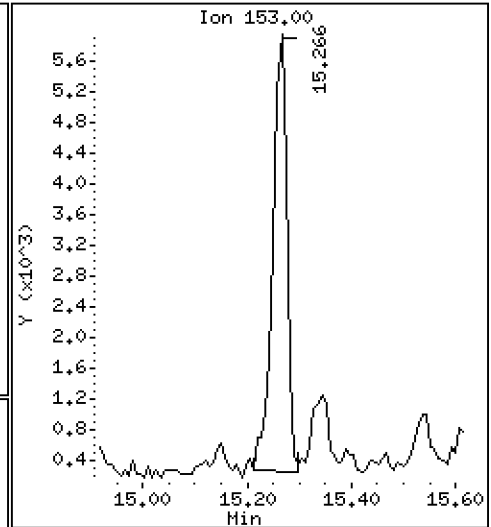
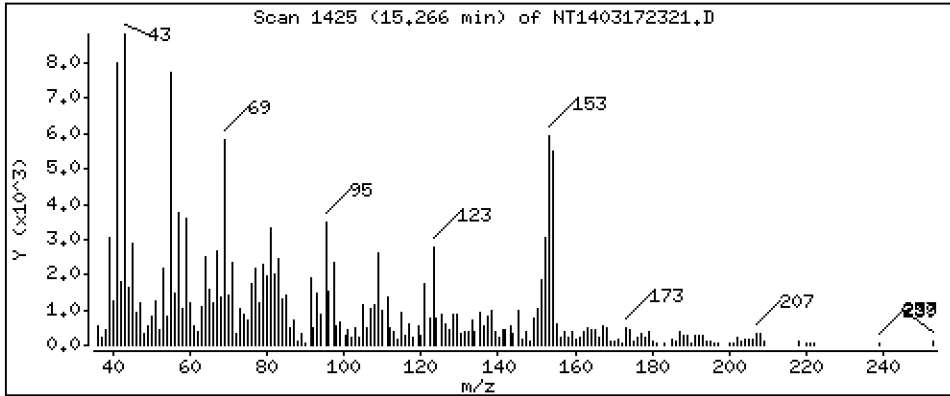
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.08797 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

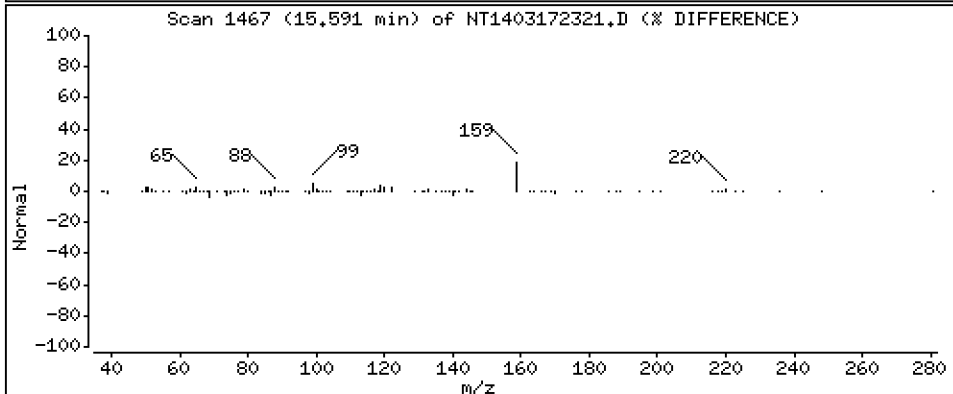
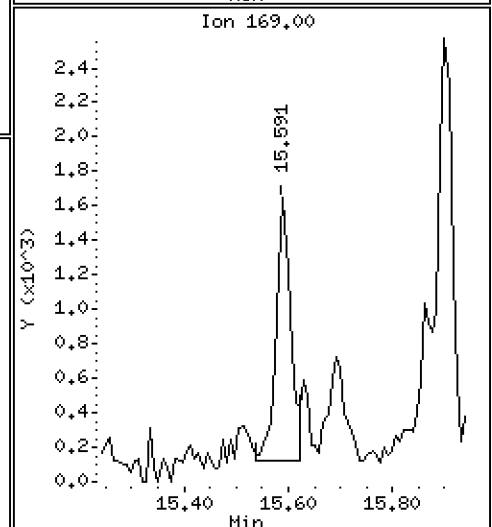
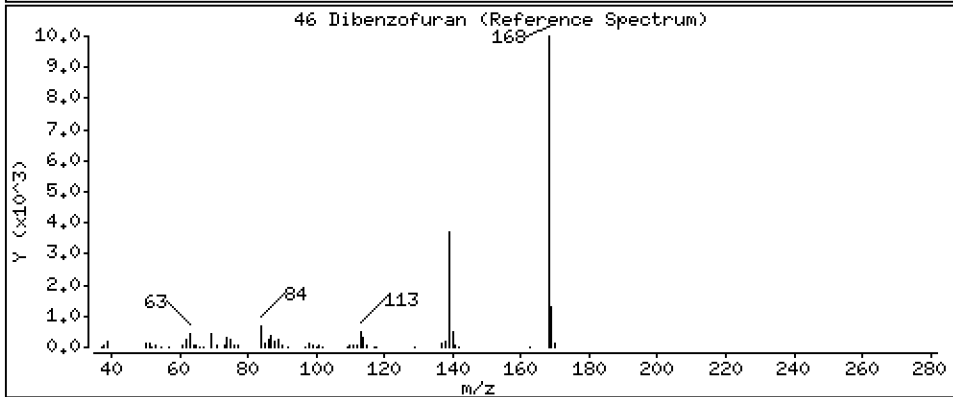
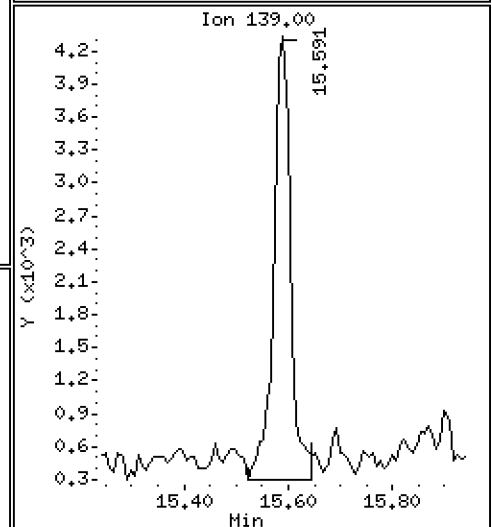
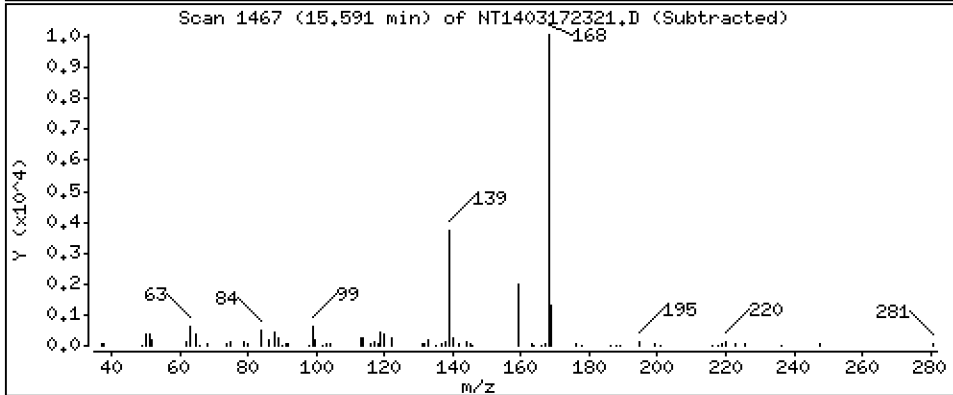
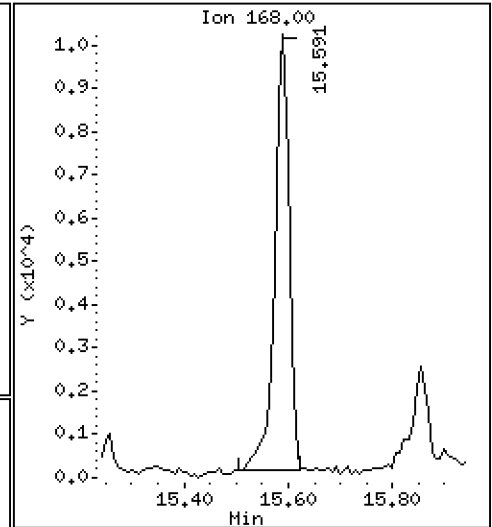
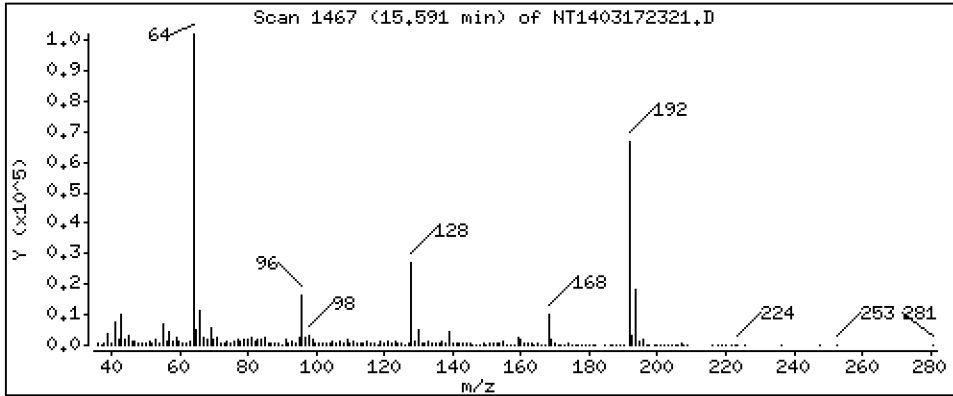
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1111 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

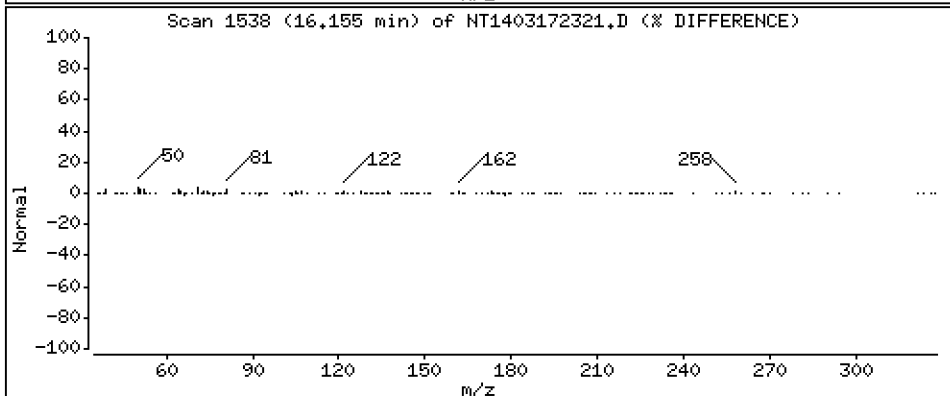
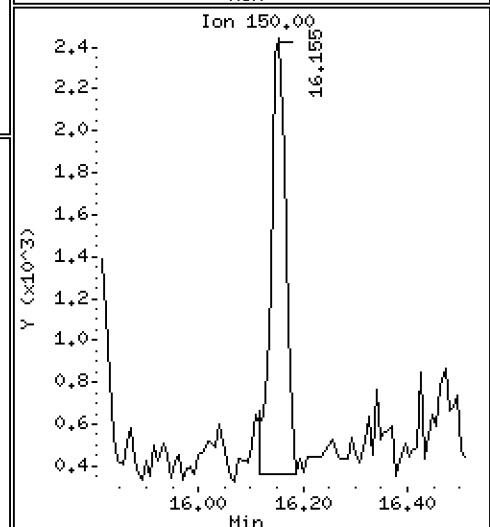
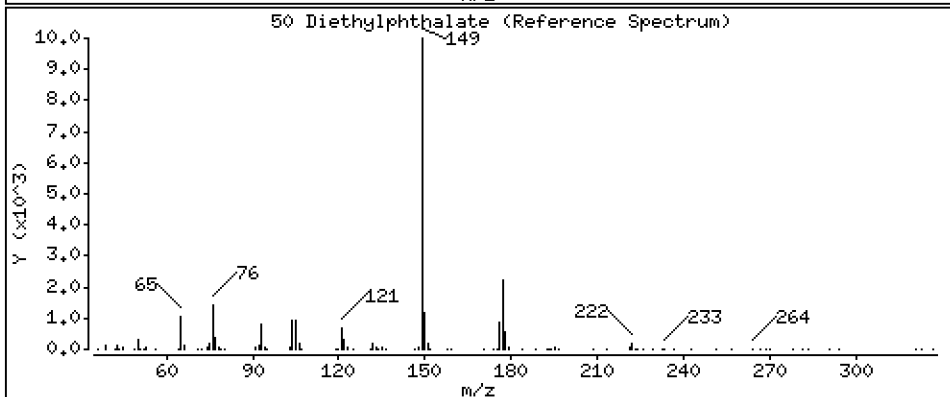
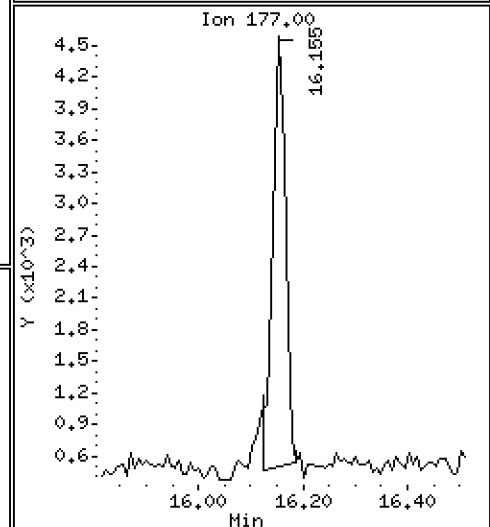
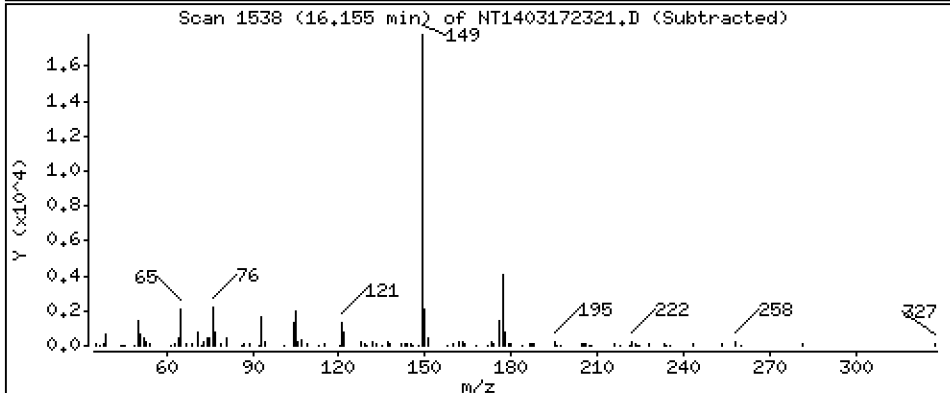
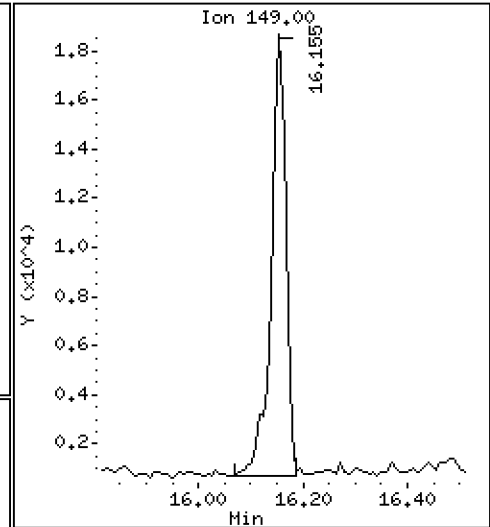
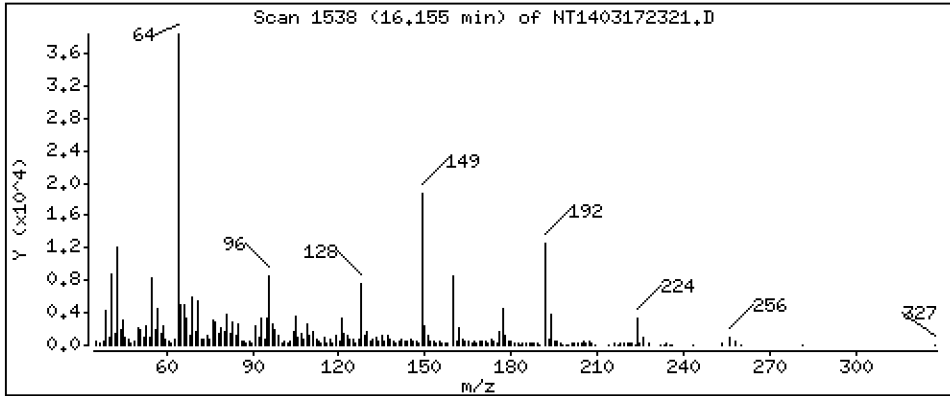
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2562 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

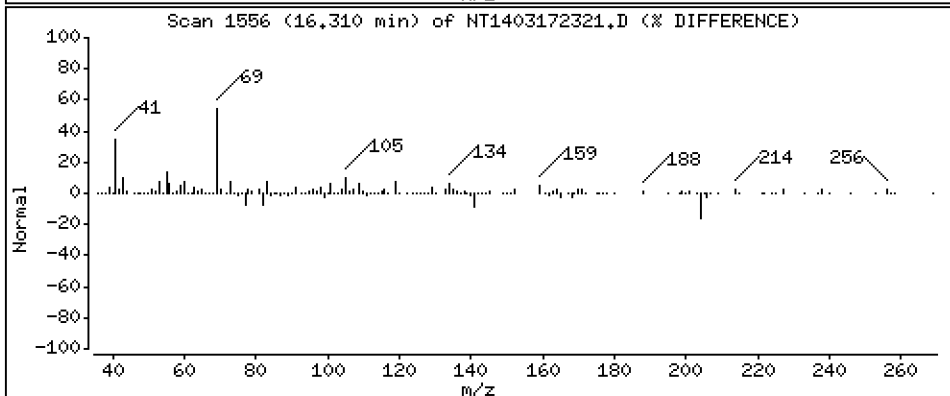
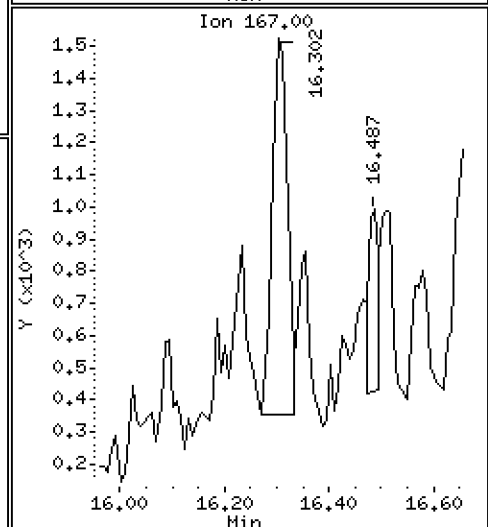
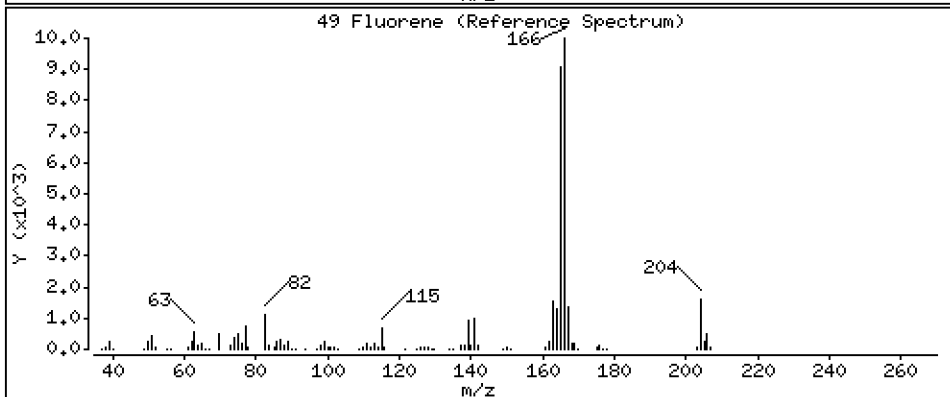
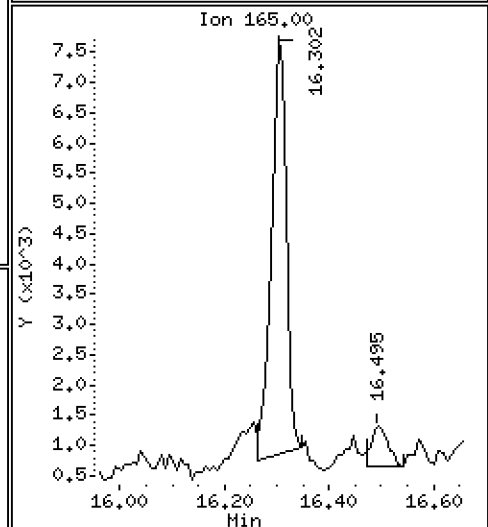
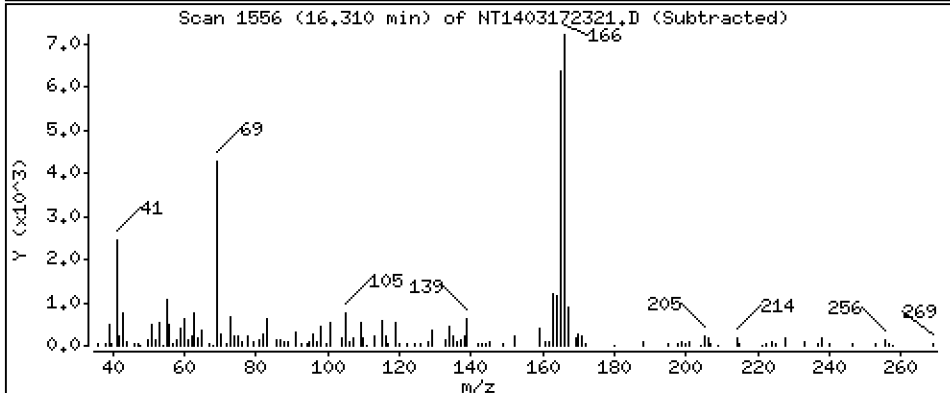
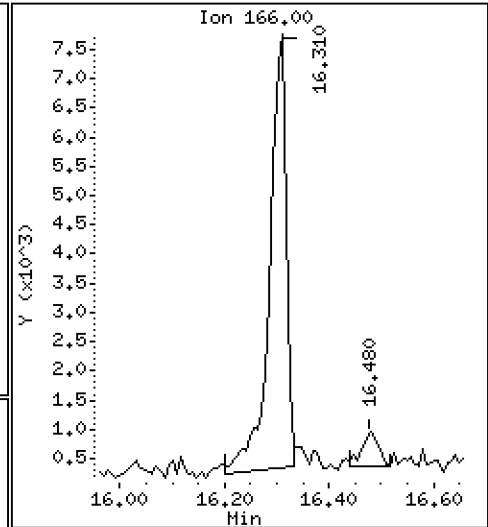
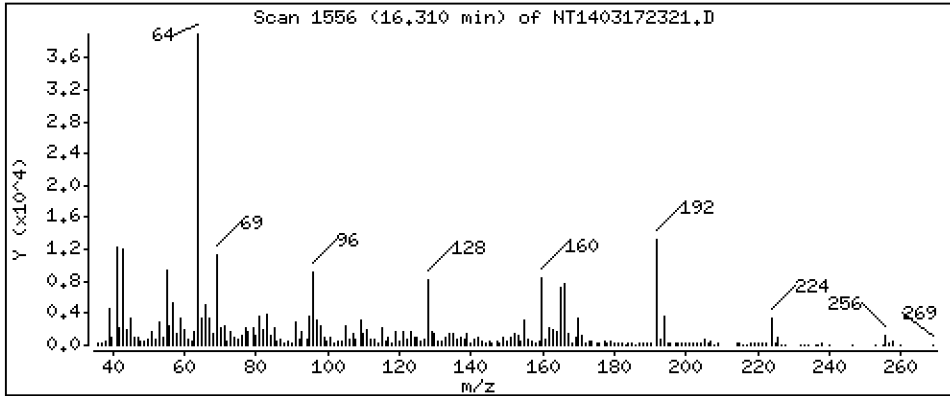
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1137 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

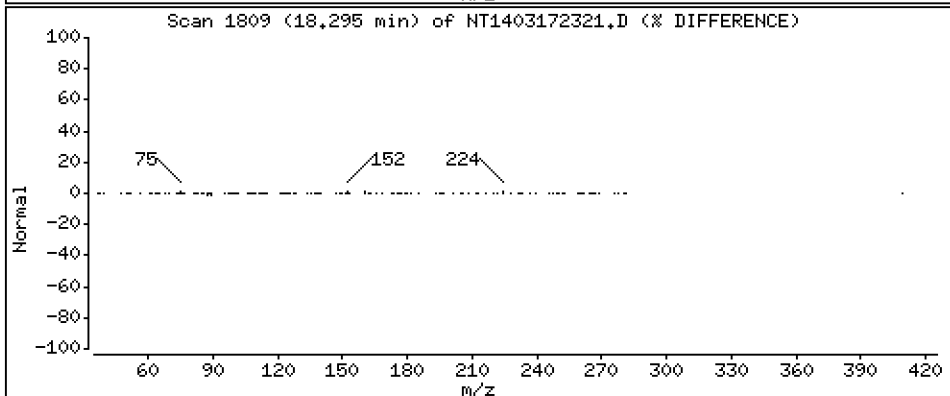
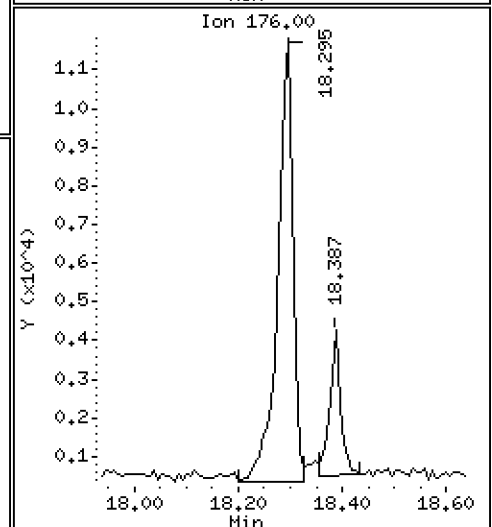
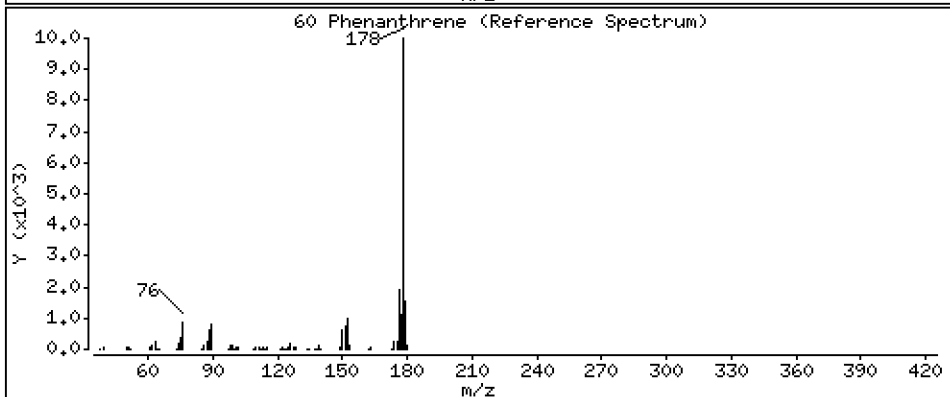
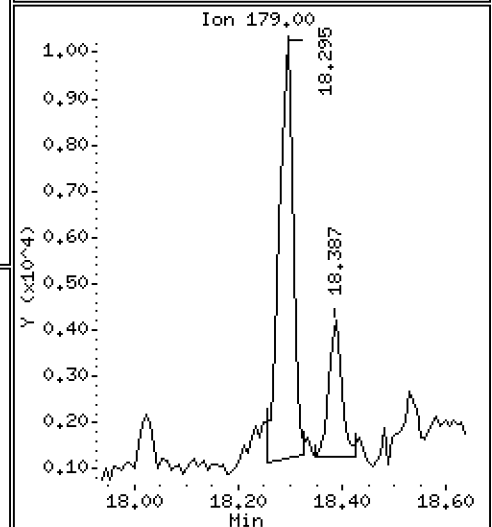
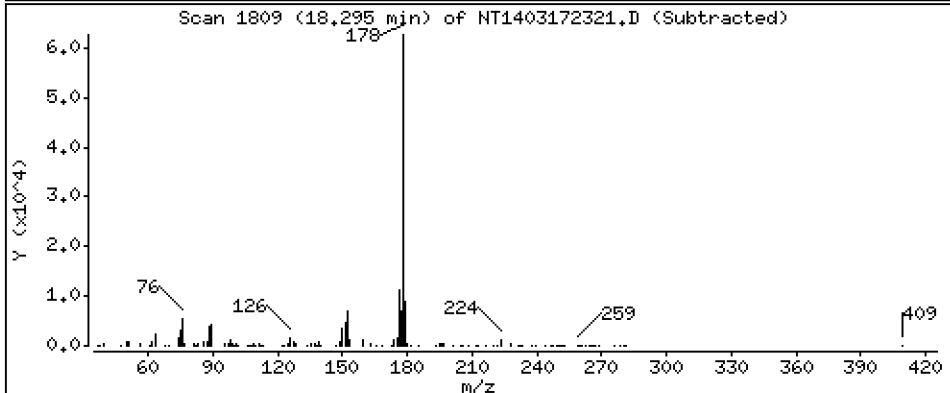
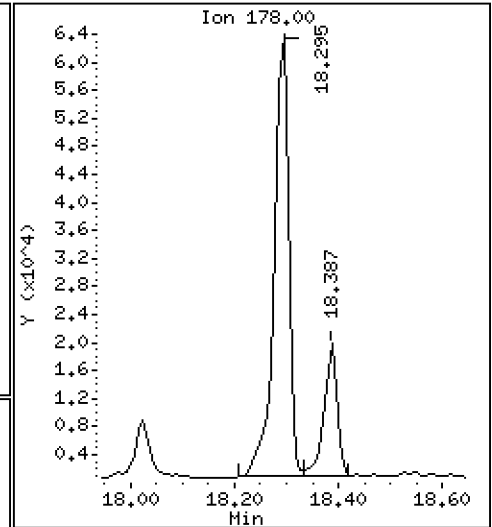
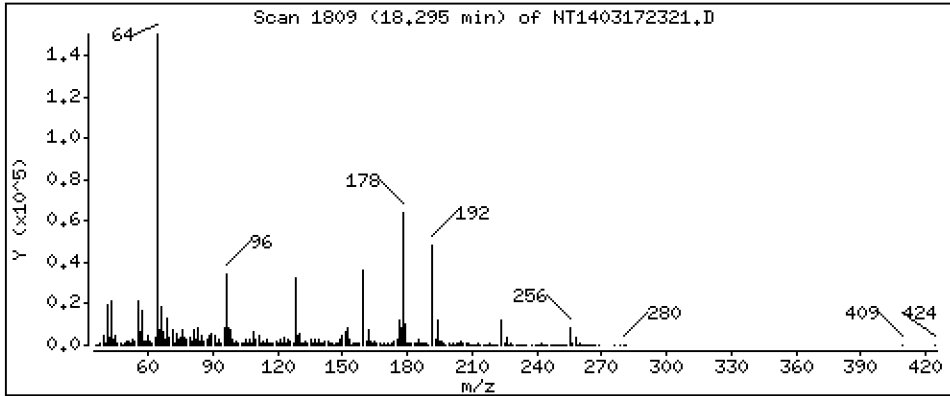
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,6631 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

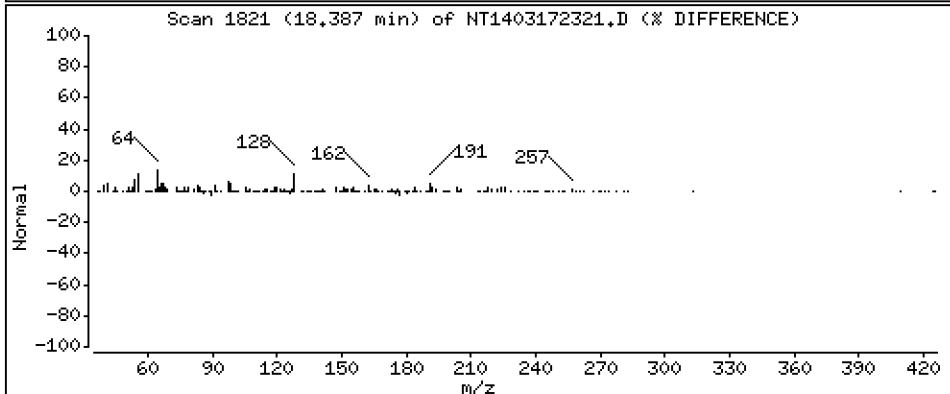
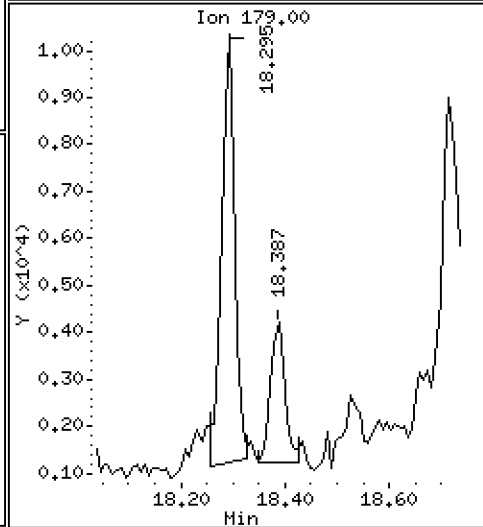
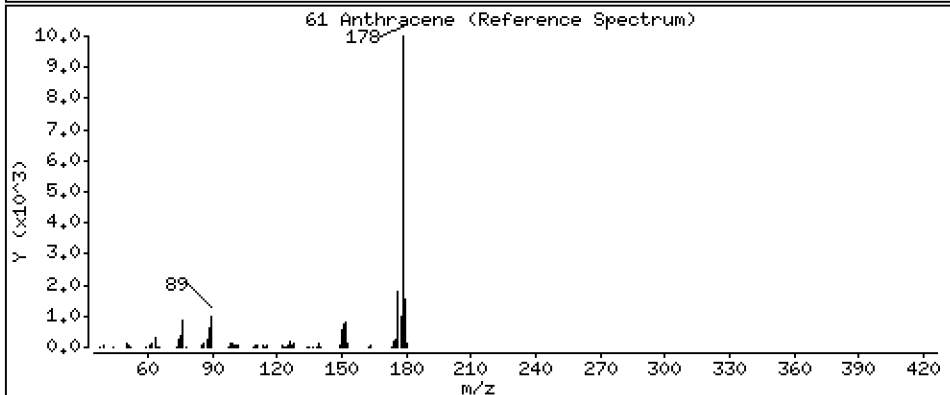
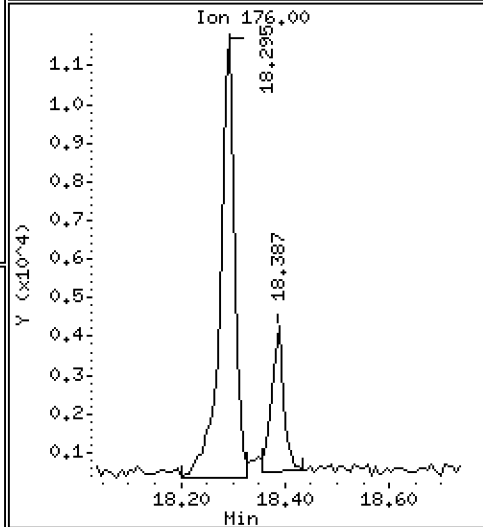
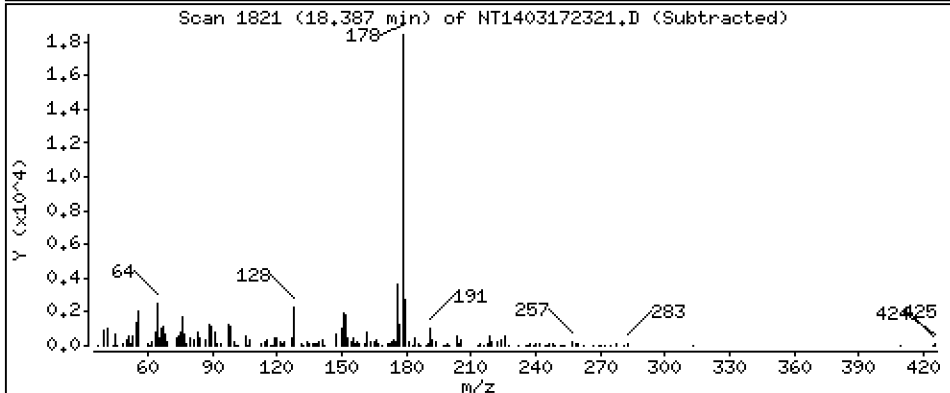
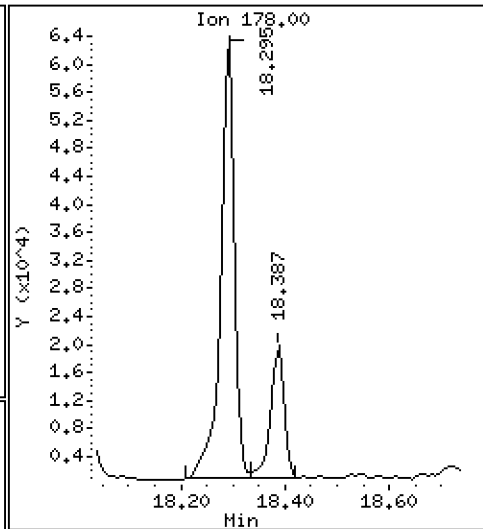
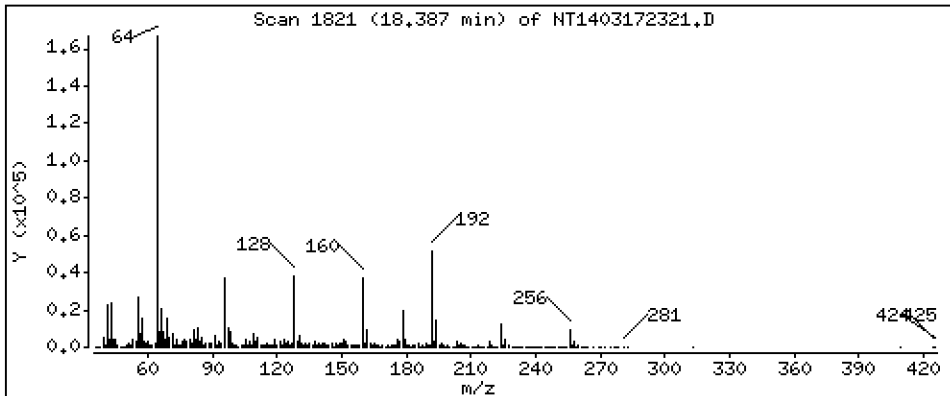
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1868 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

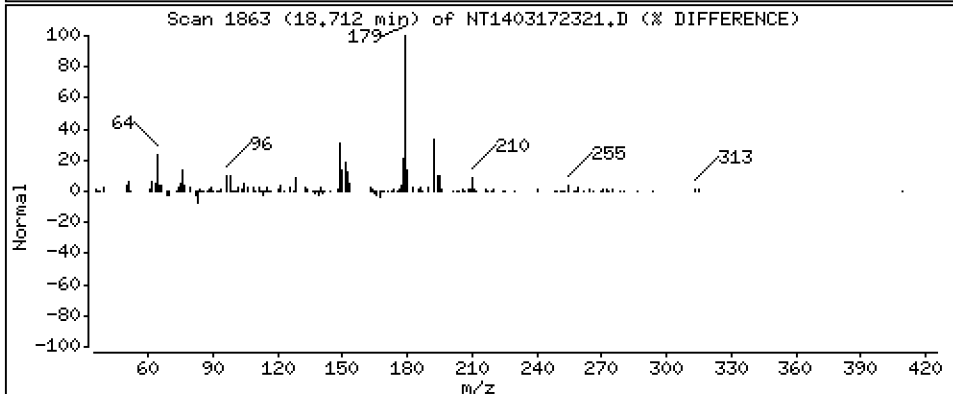
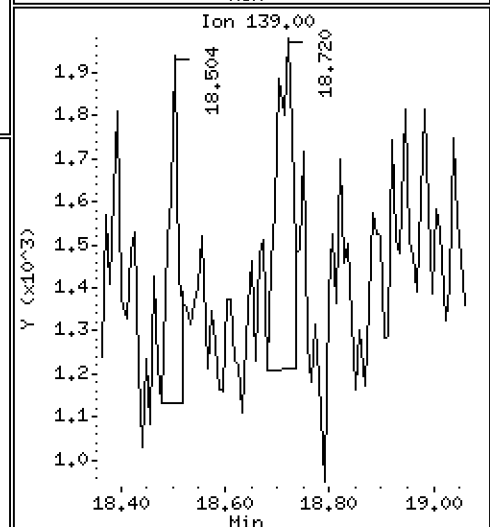
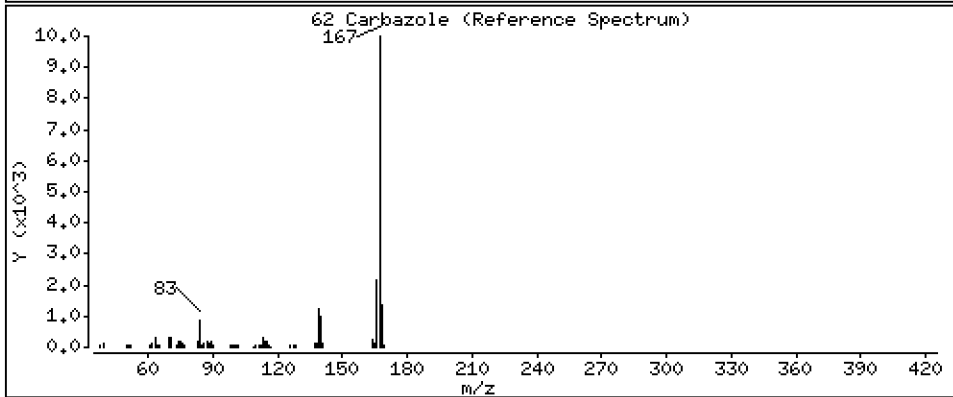
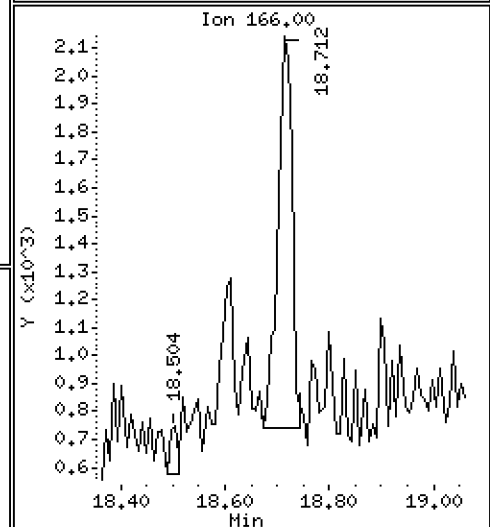
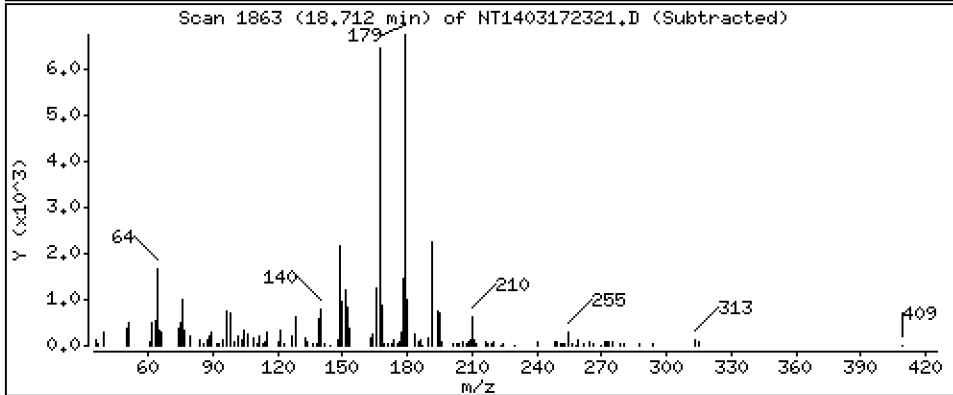
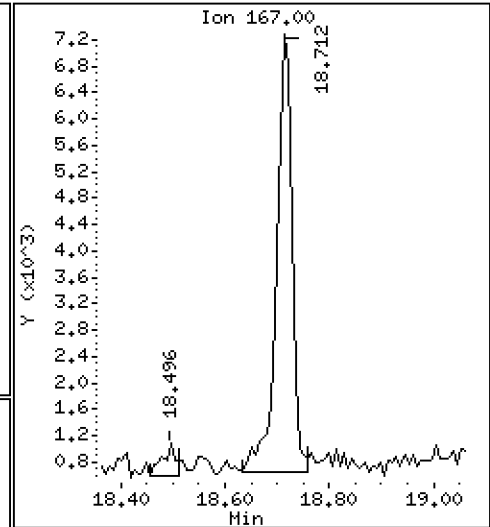
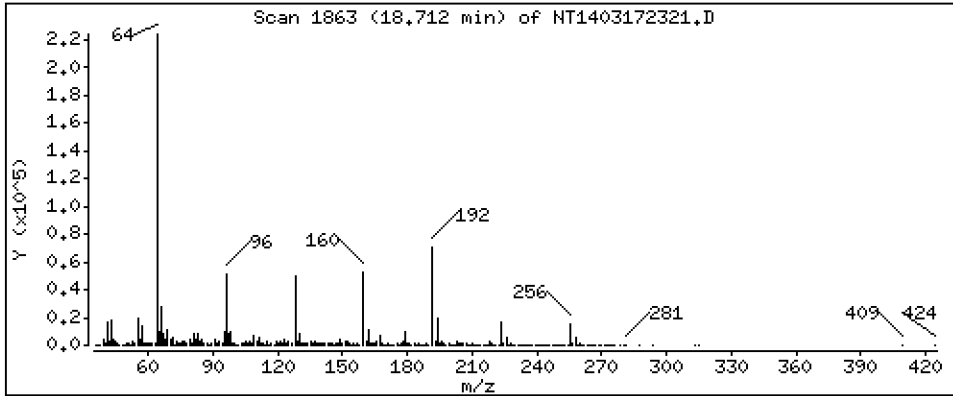
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.08775 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

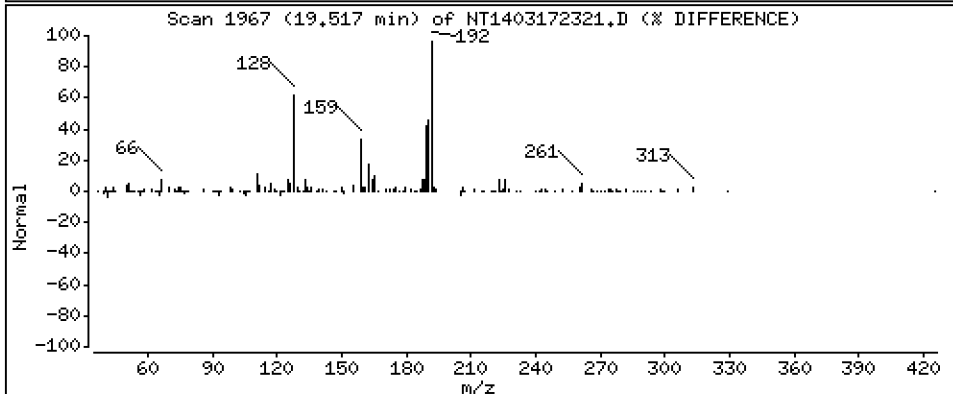
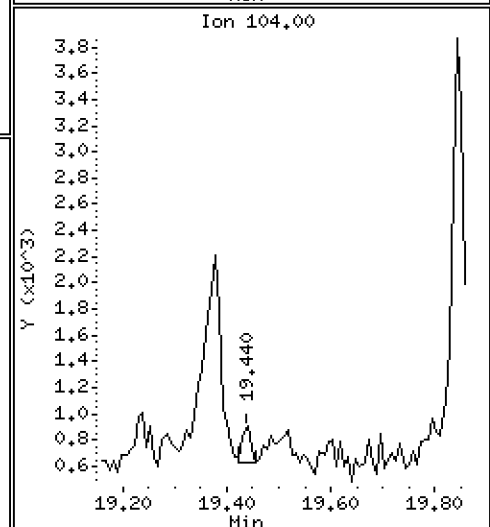
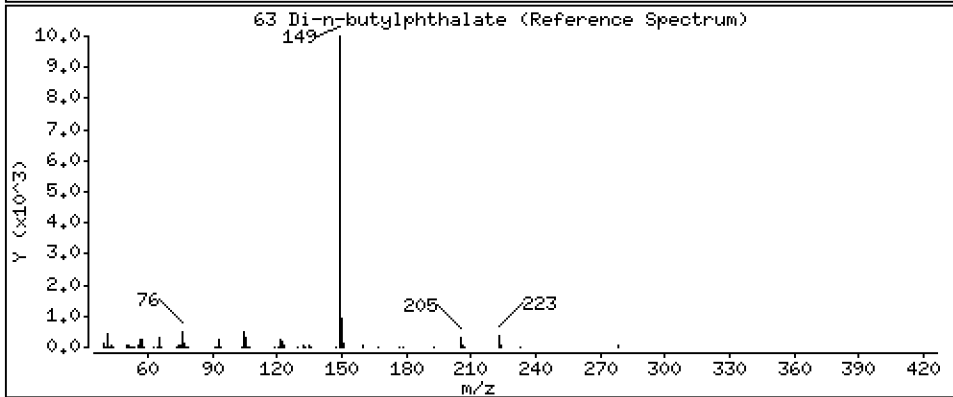
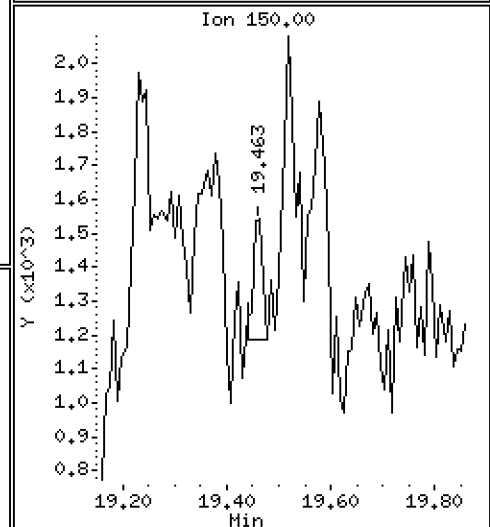
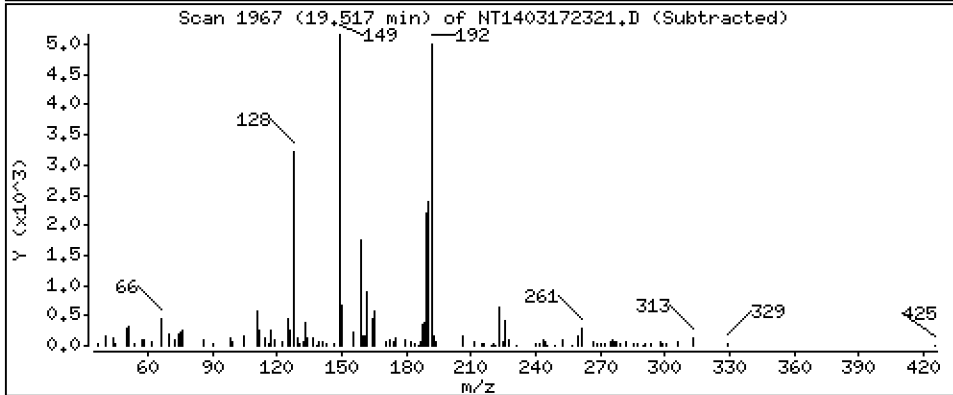
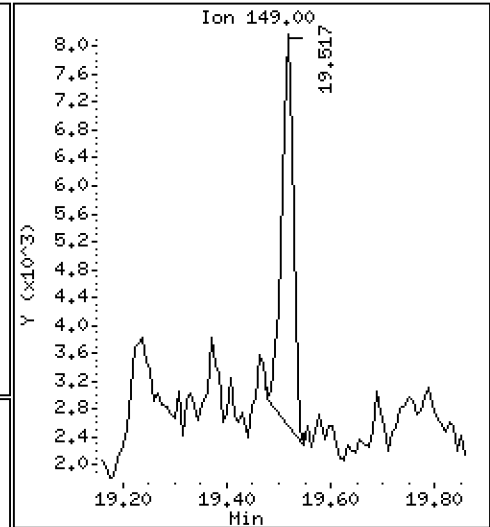
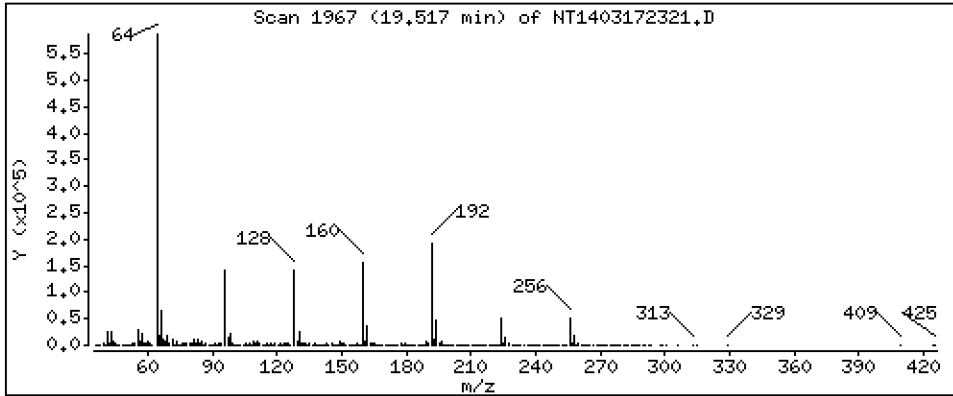
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,04451 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

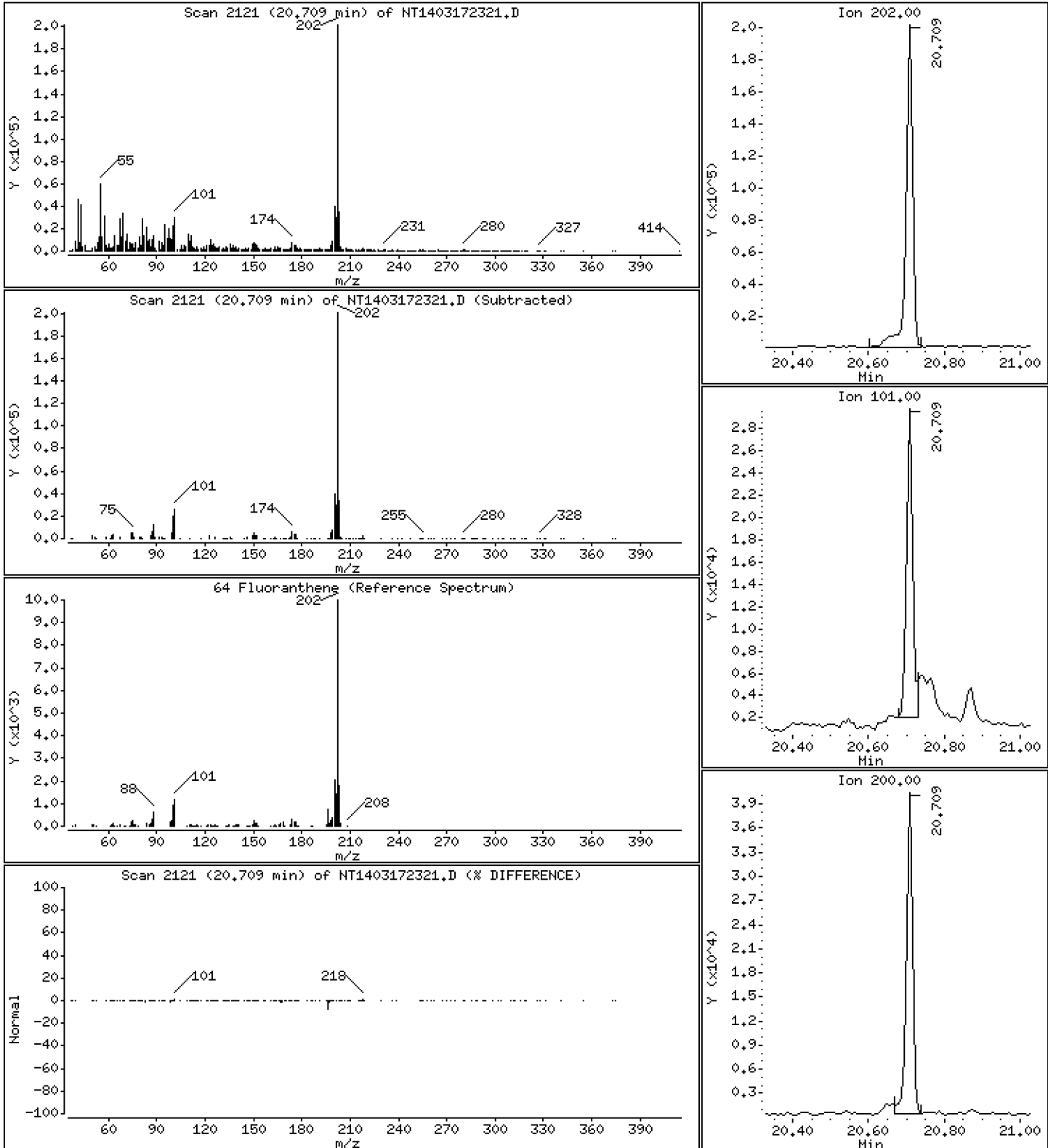
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 3,000 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

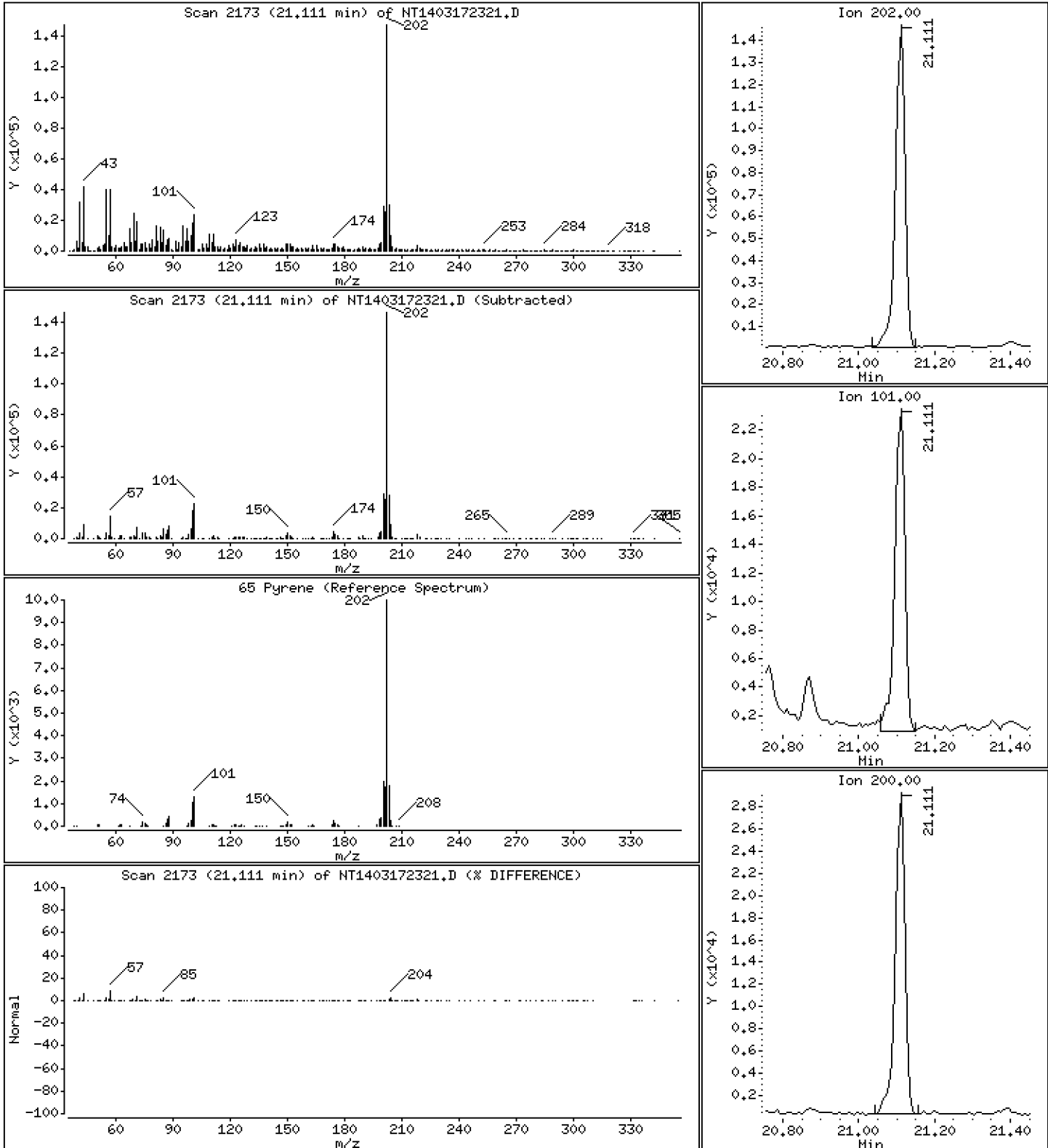
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,797 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

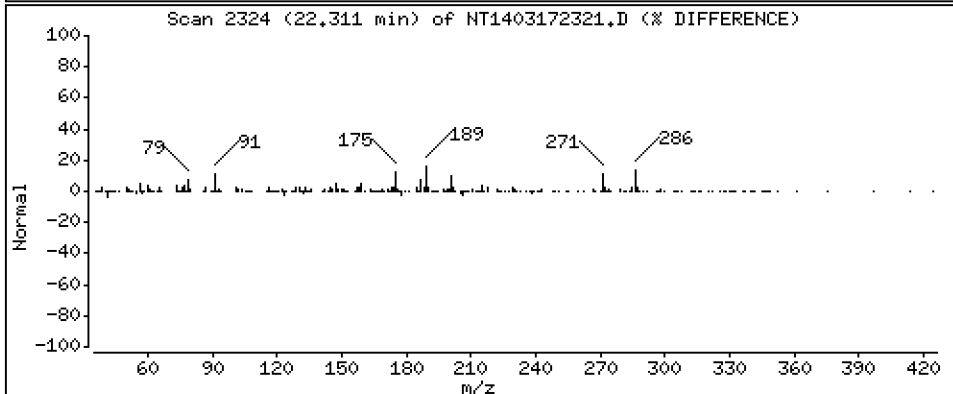
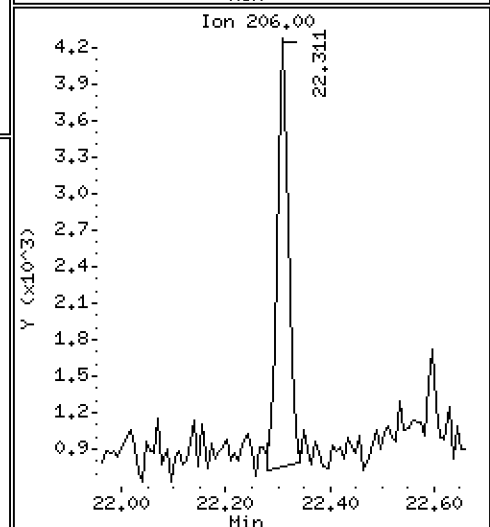
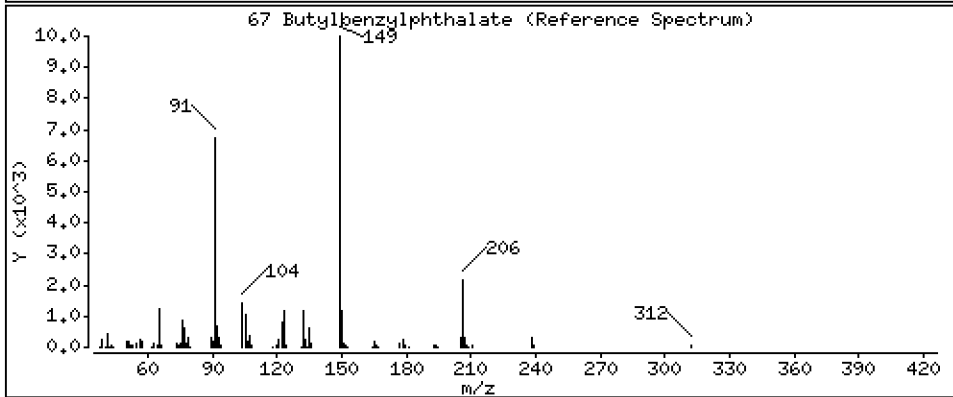
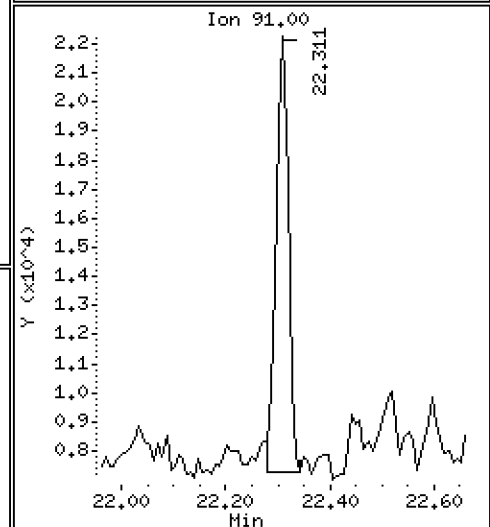
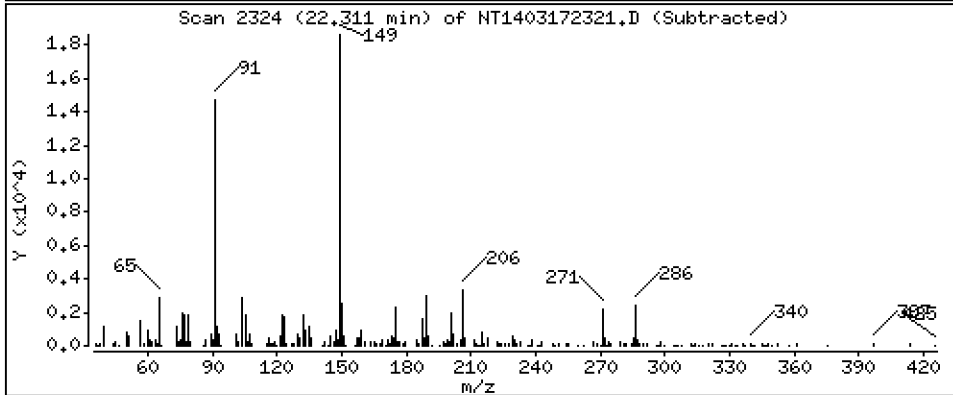
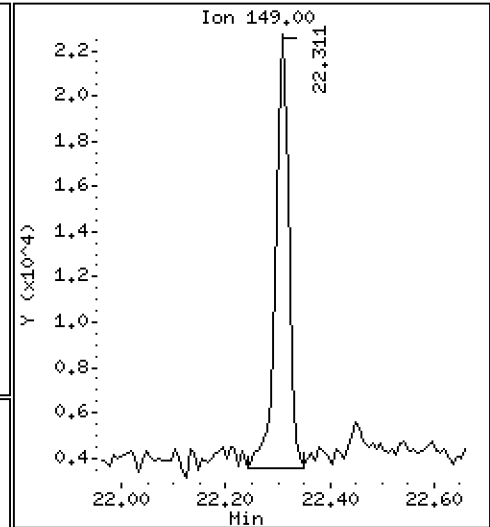
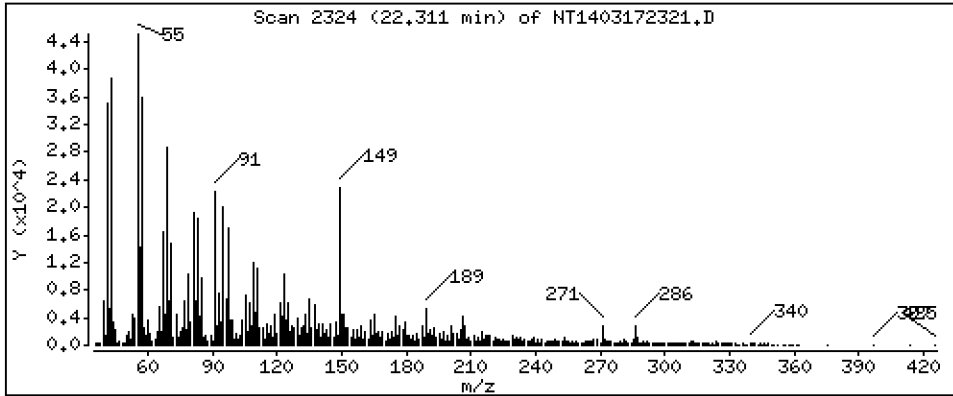
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.8553 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

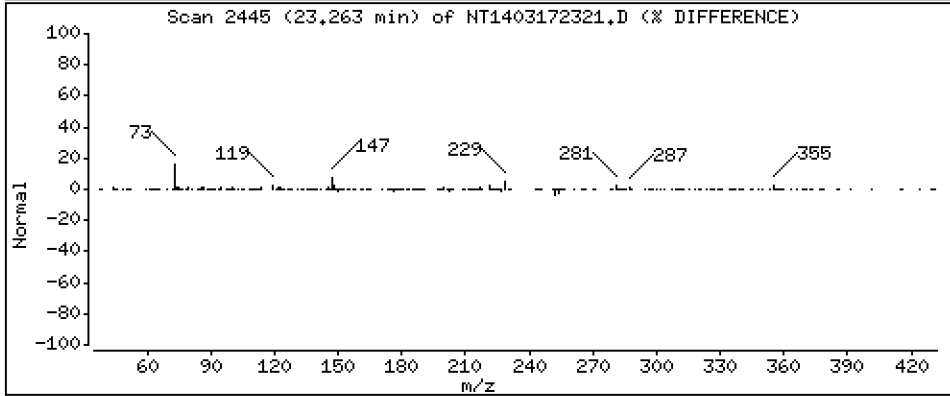
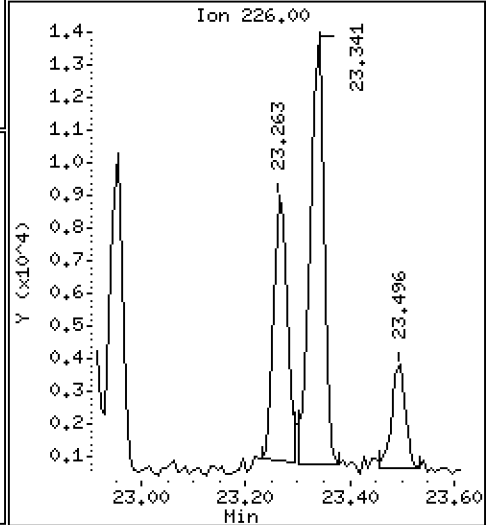
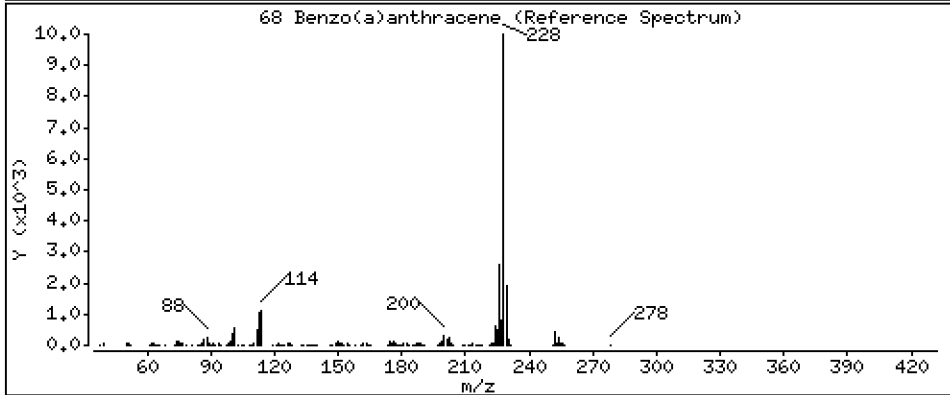
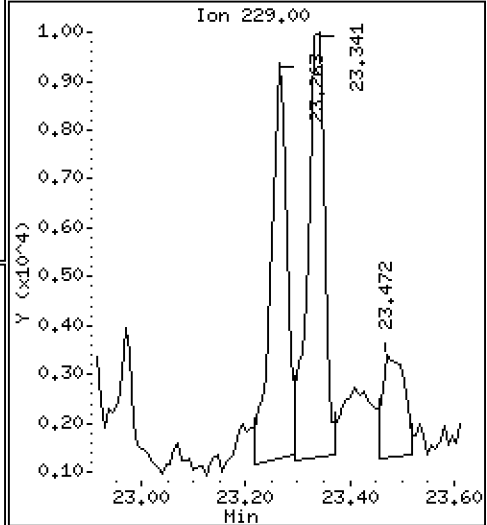
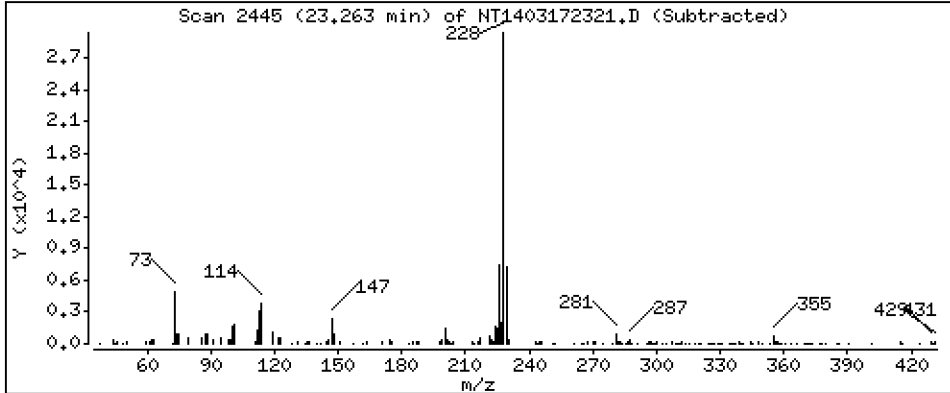
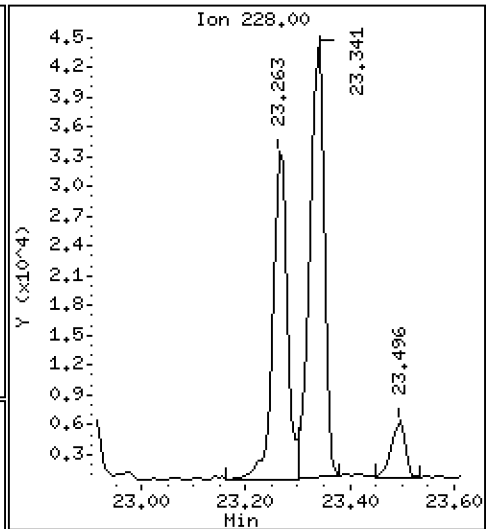
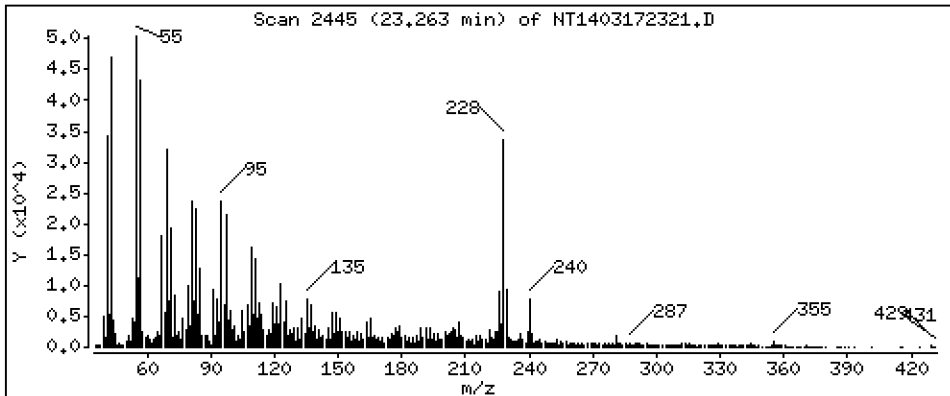
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,8183 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

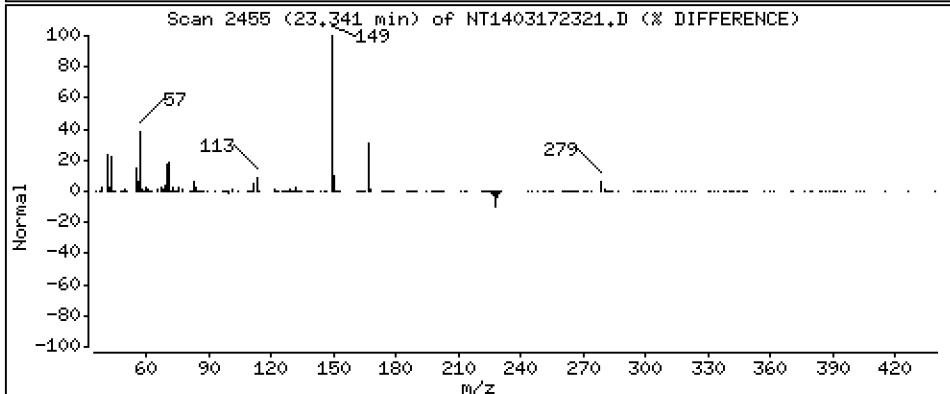
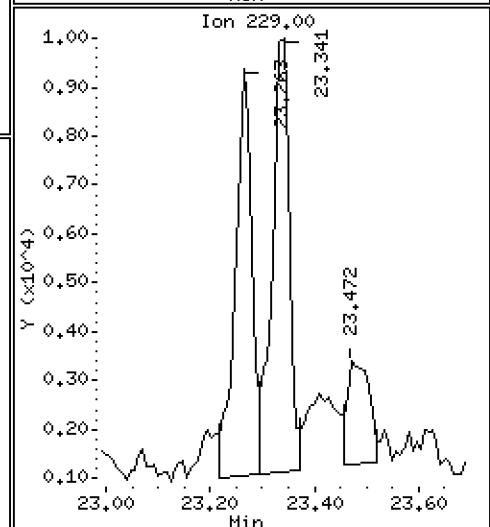
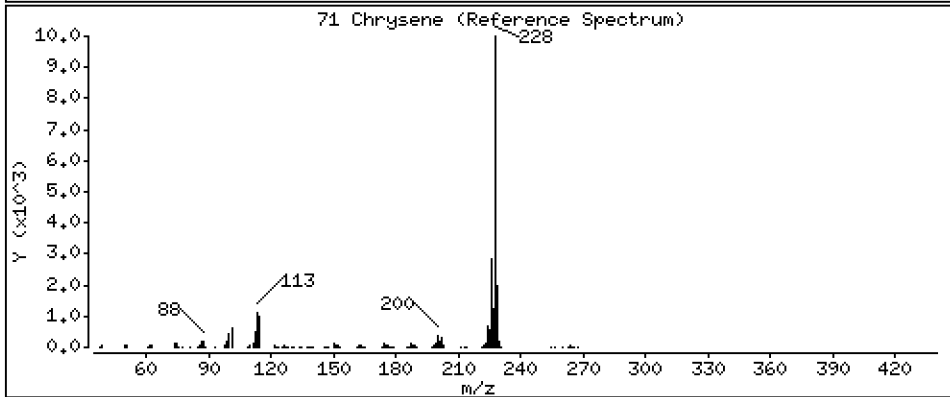
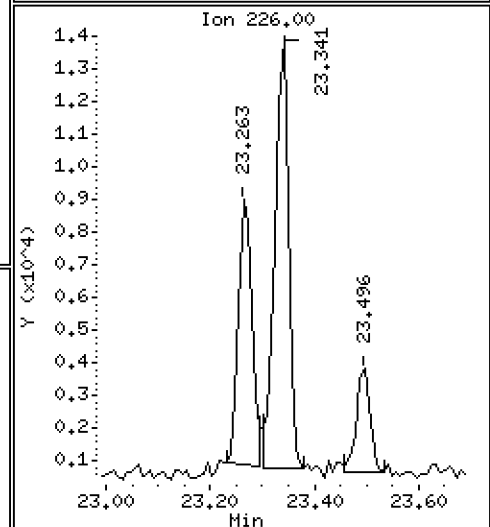
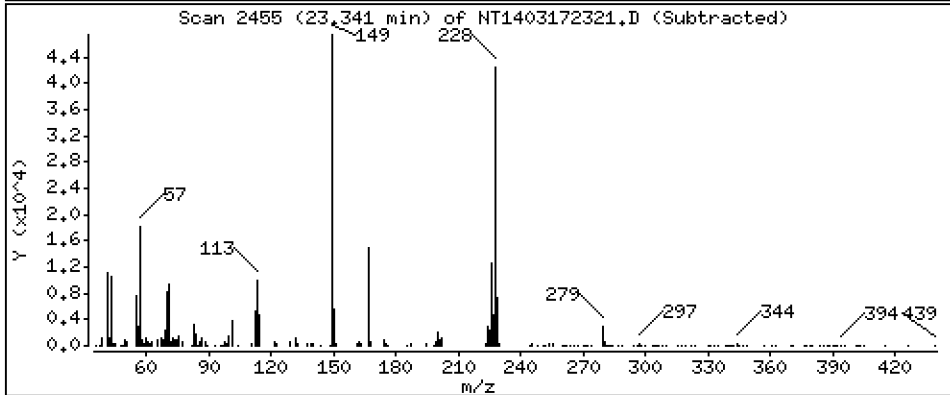
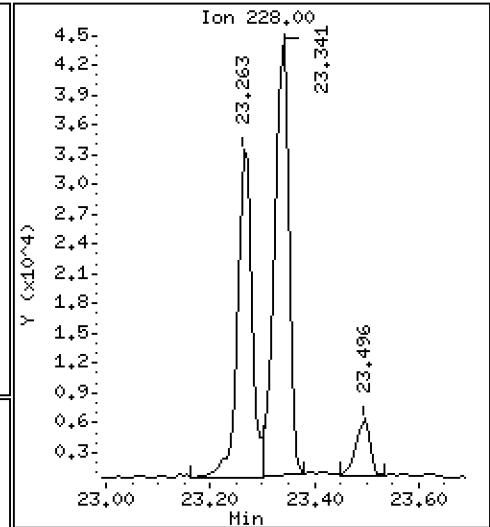
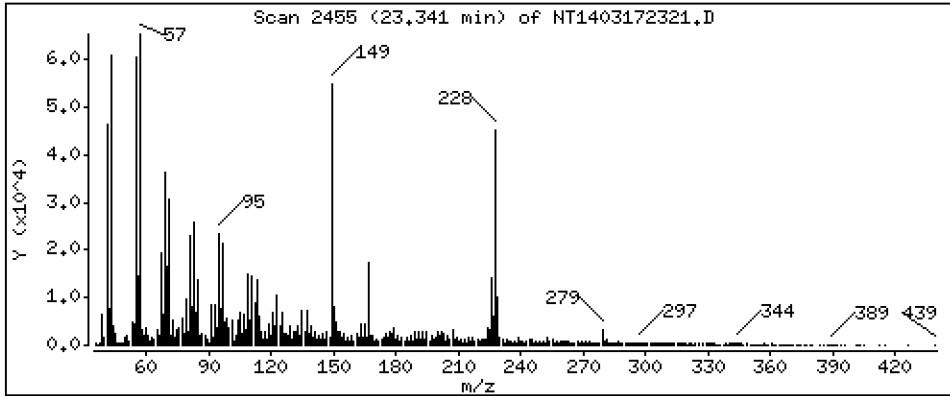
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,164 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

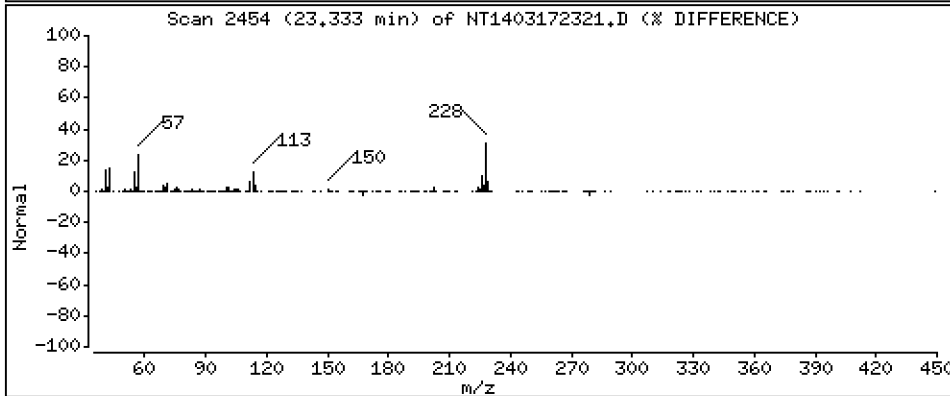
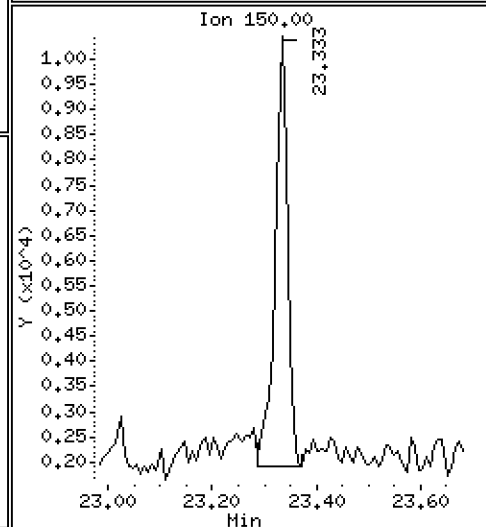
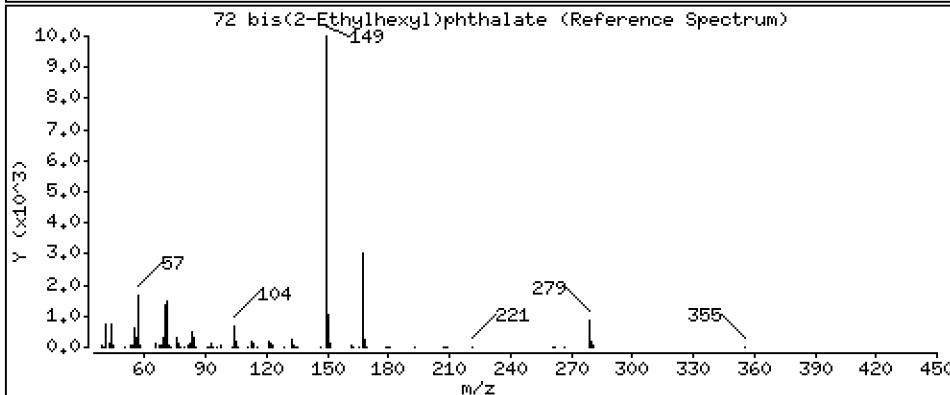
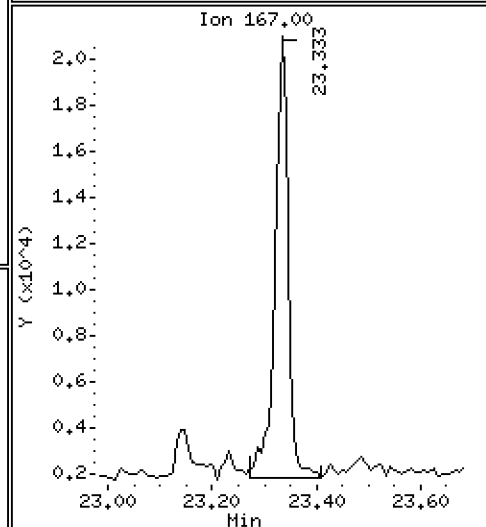
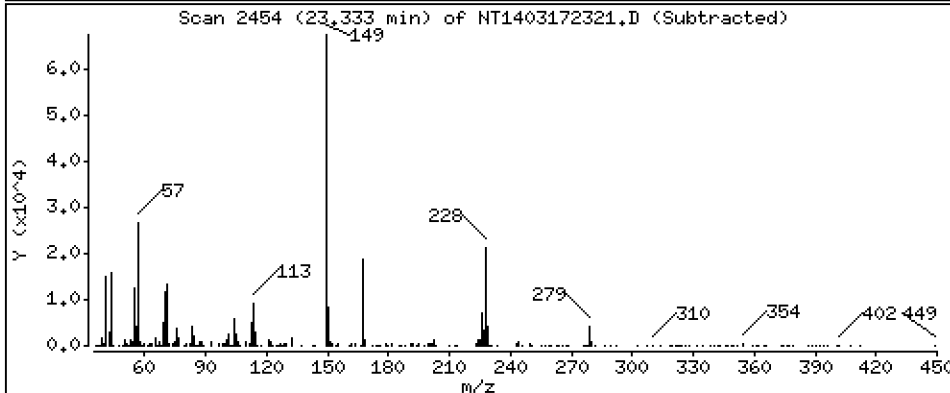
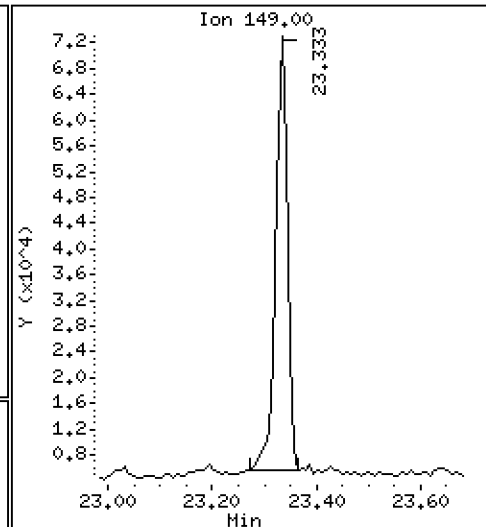
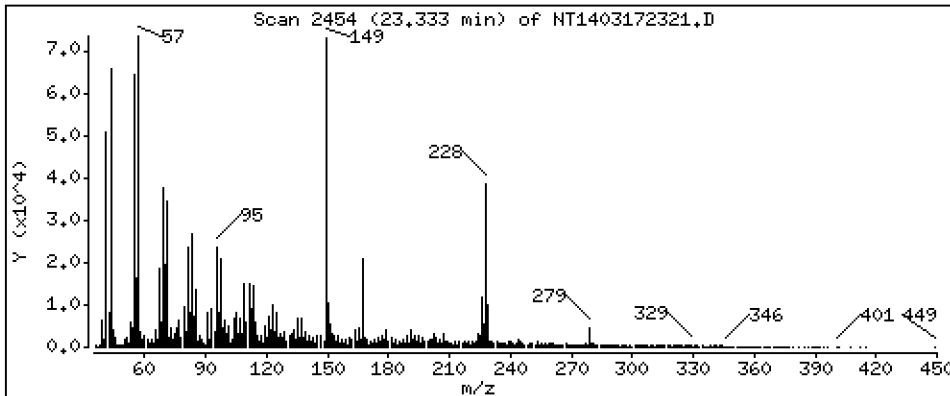
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,851 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

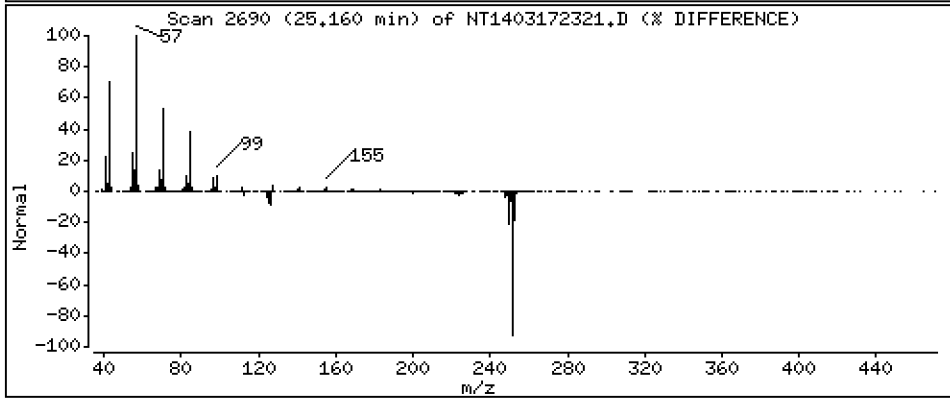
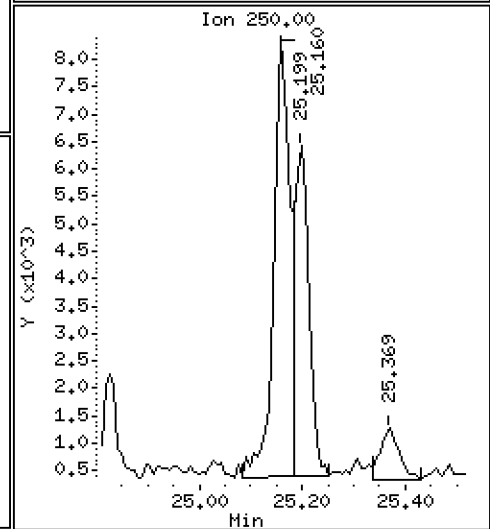
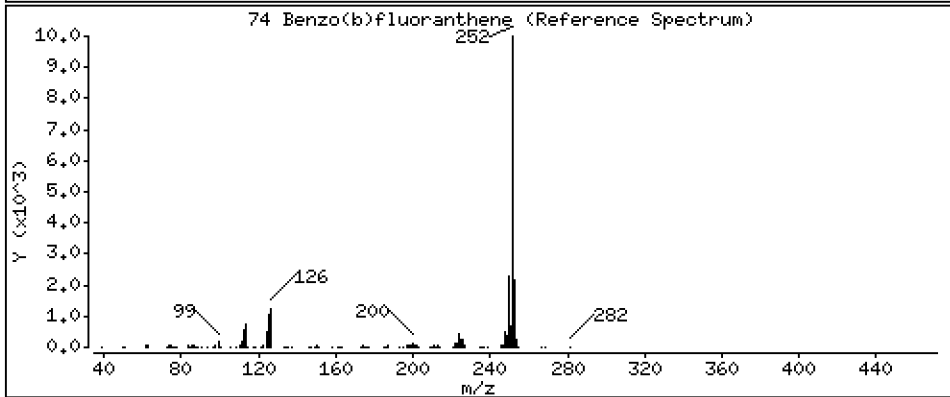
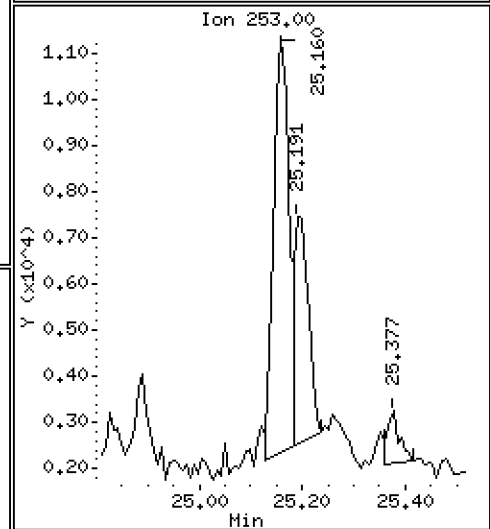
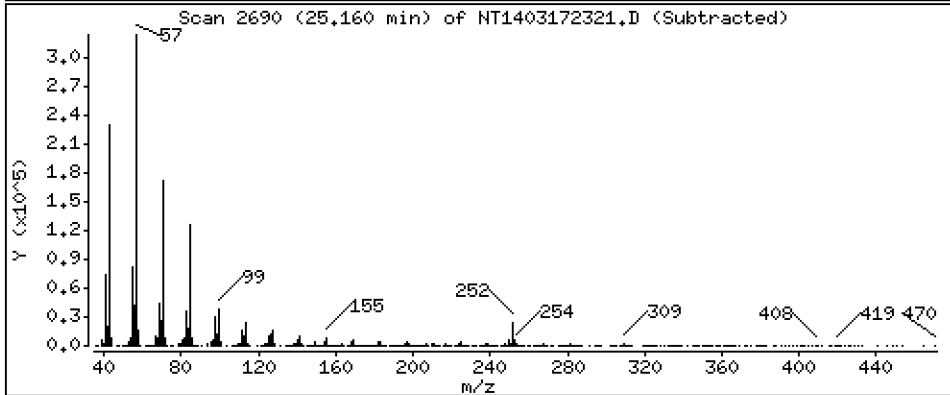
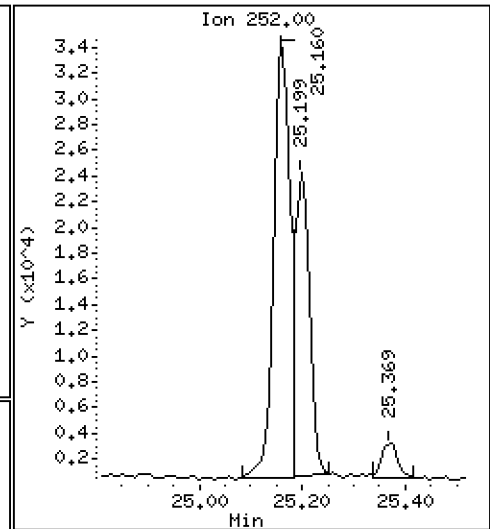
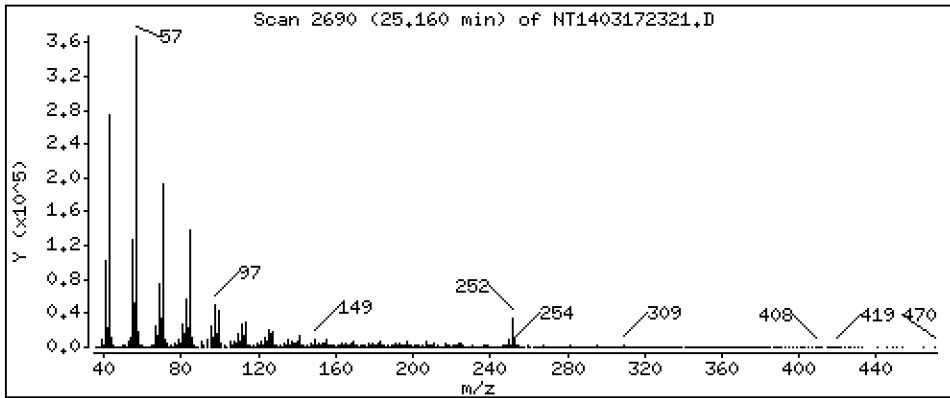
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,398 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

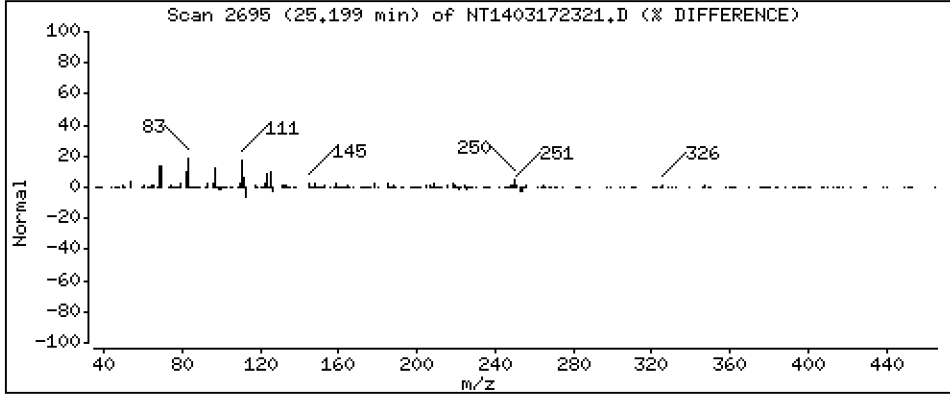
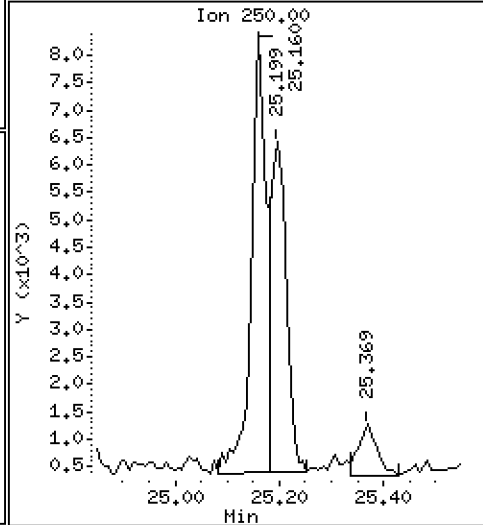
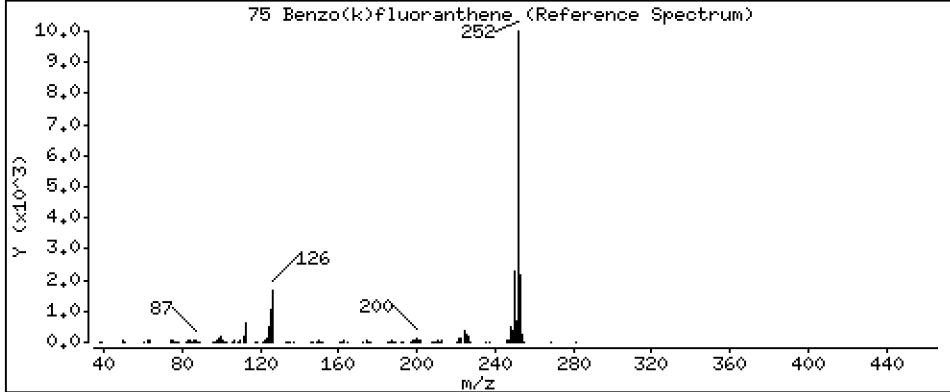
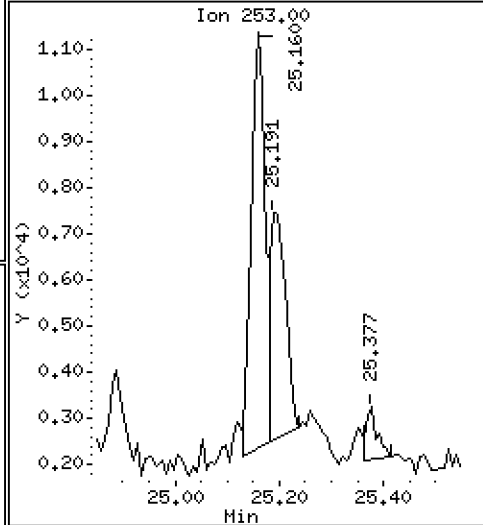
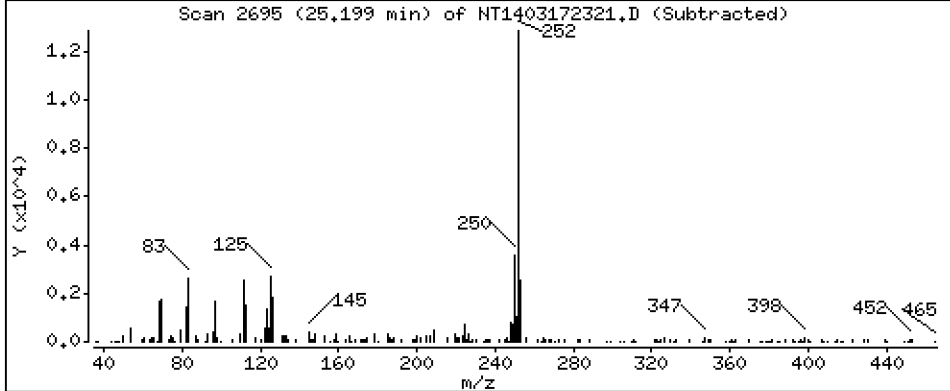
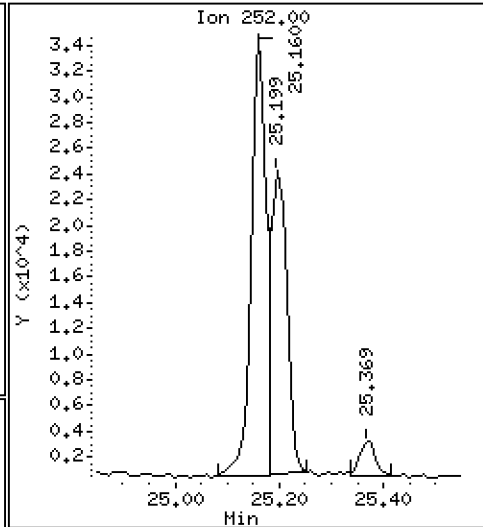
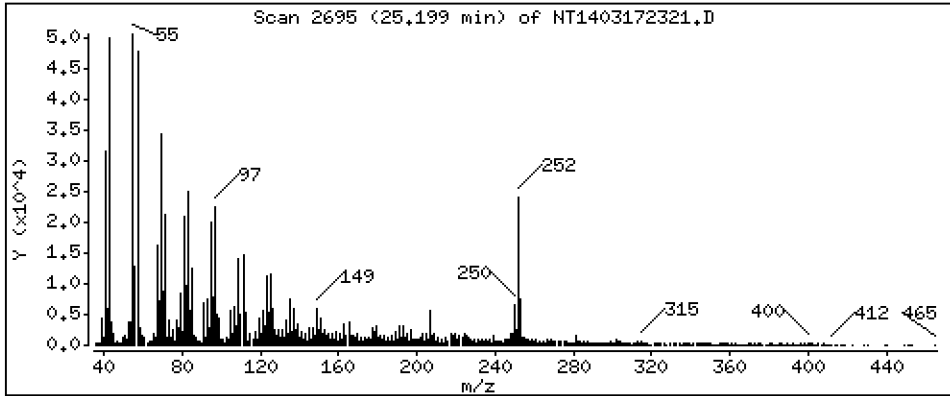
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,9399 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

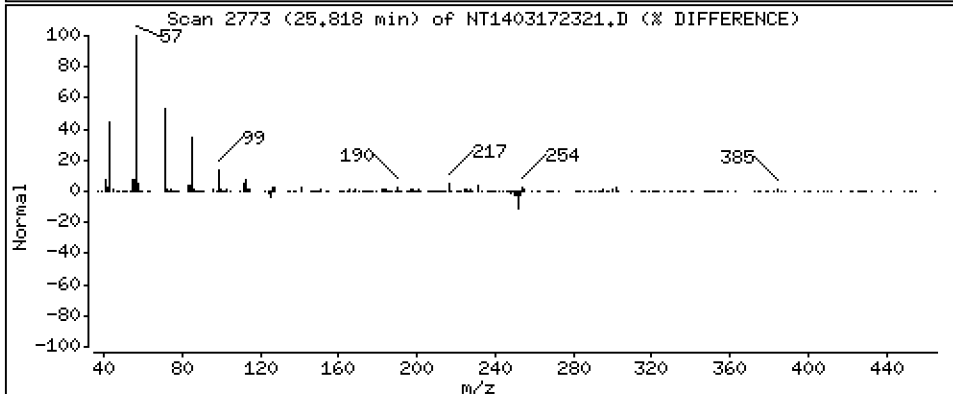
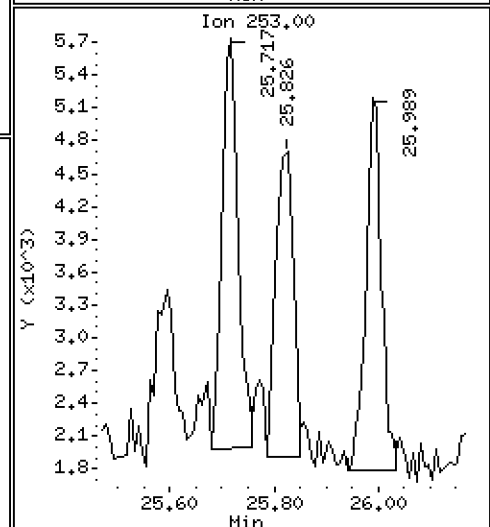
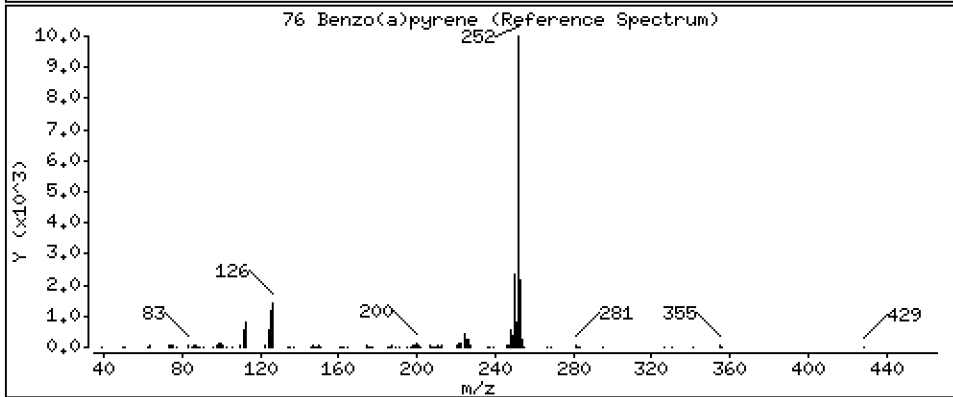
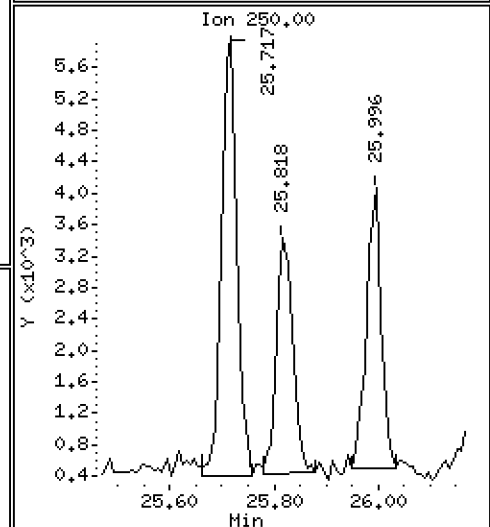
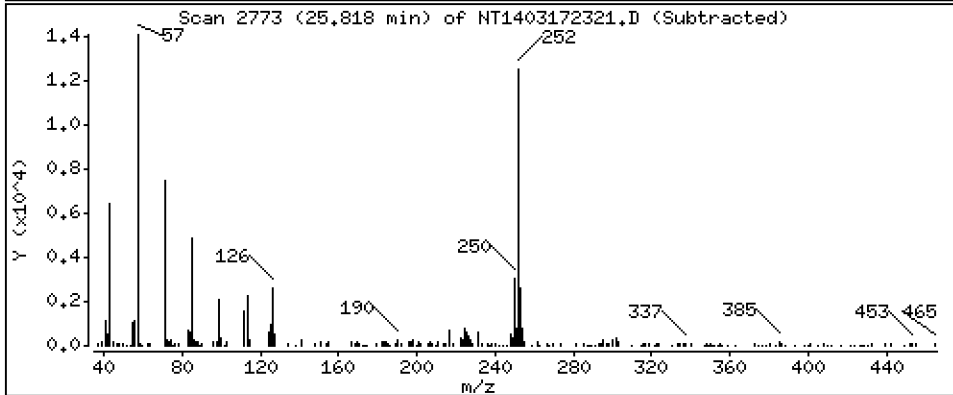
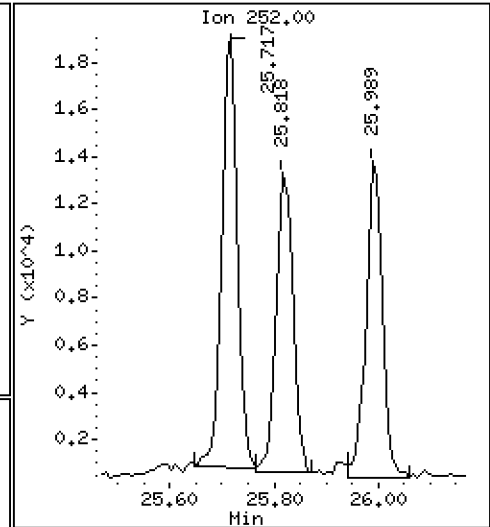
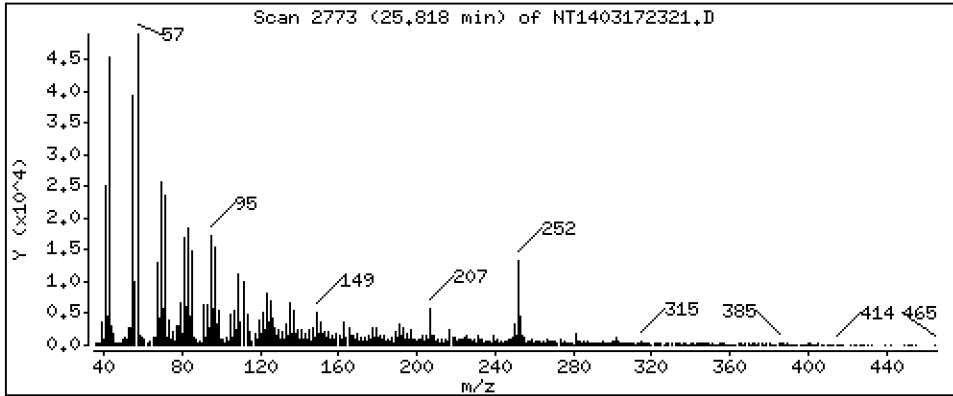
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,6082 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

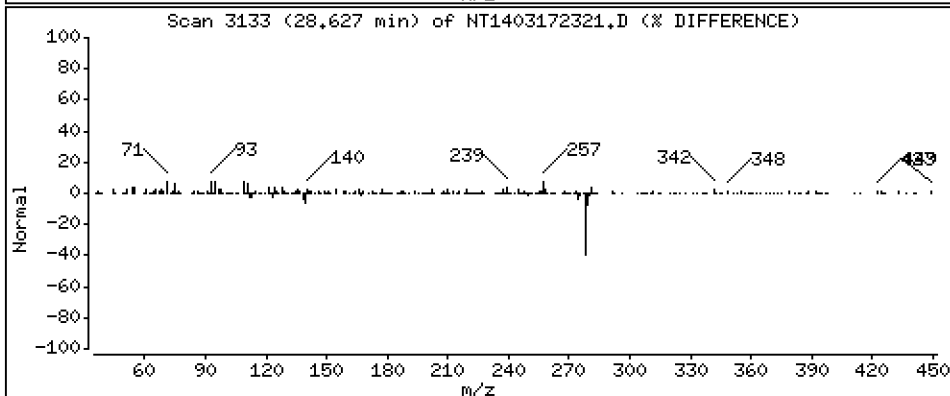
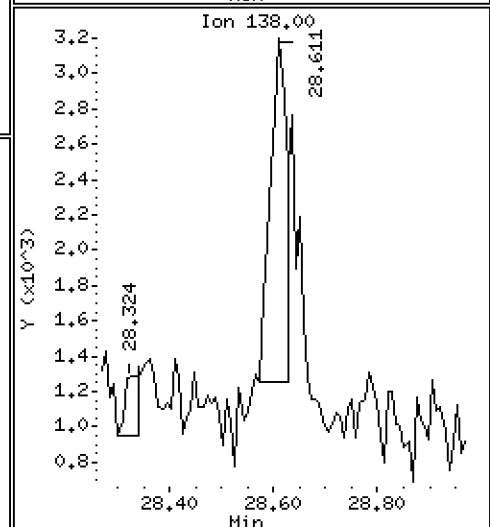
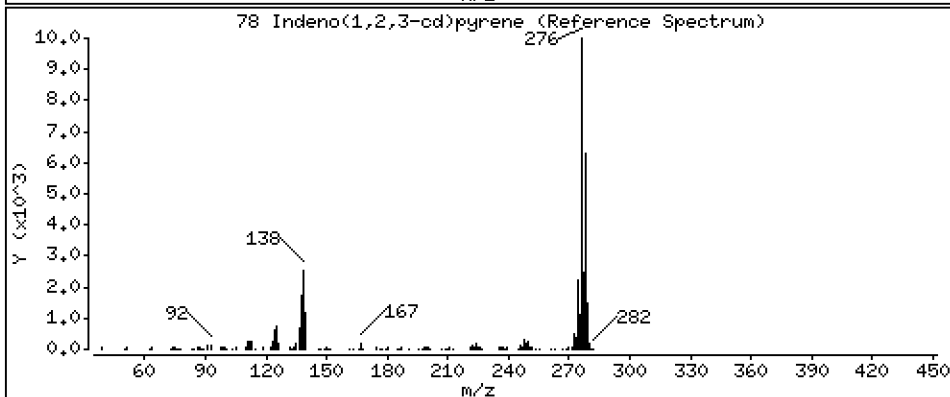
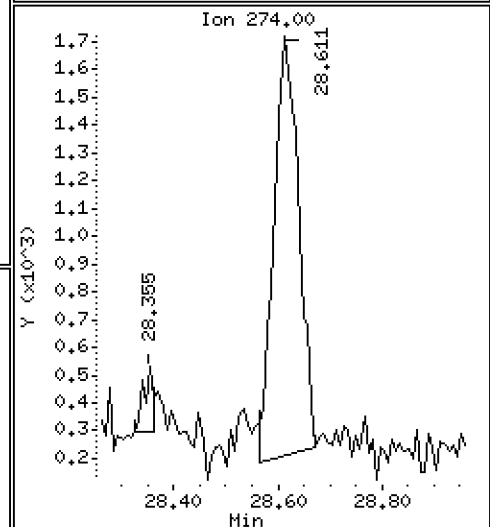
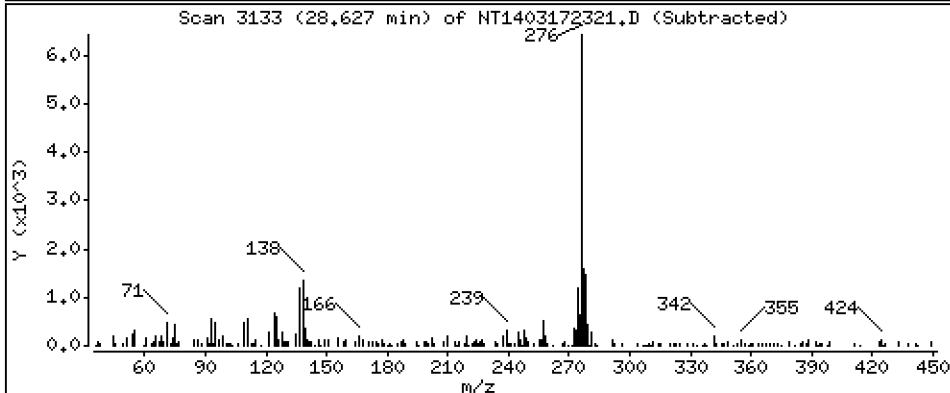
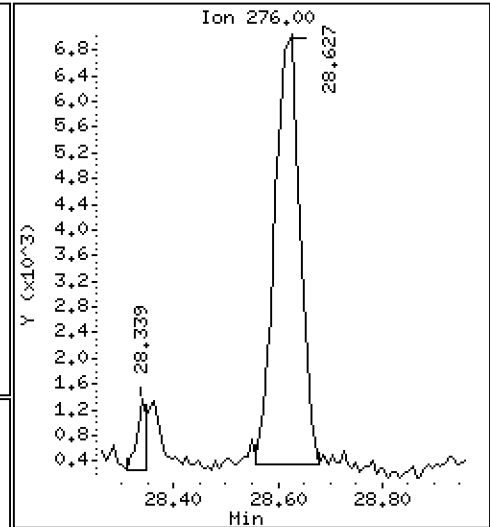
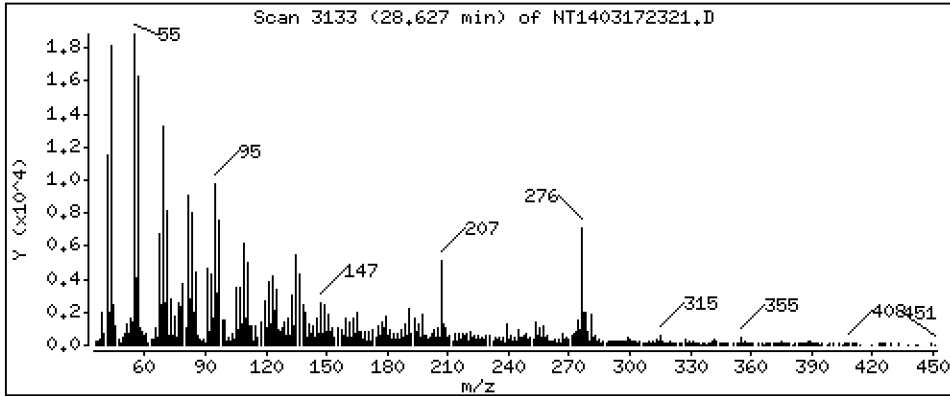
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 0.4540 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

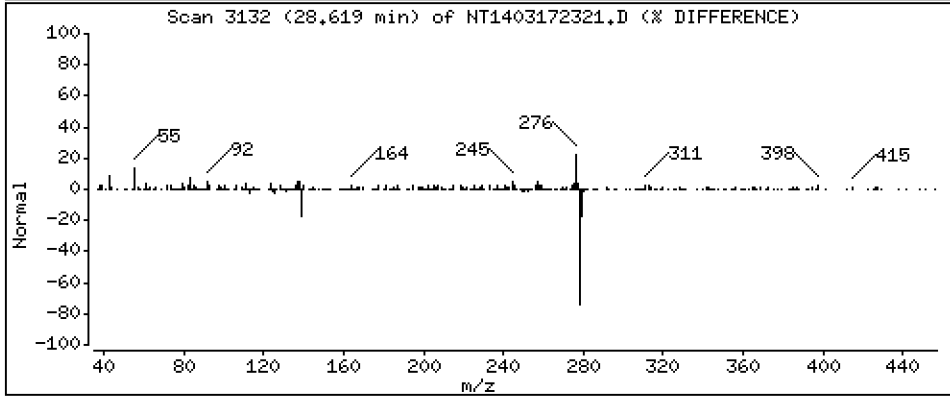
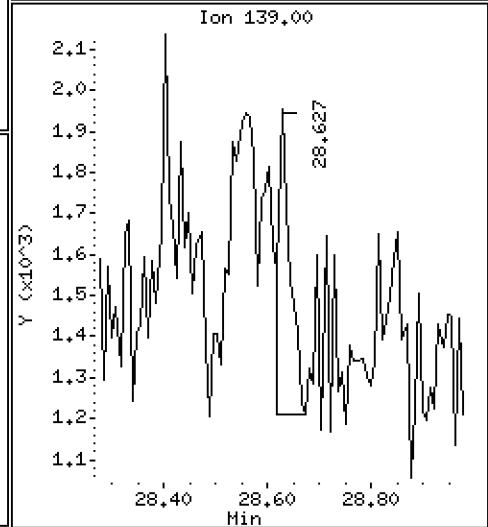
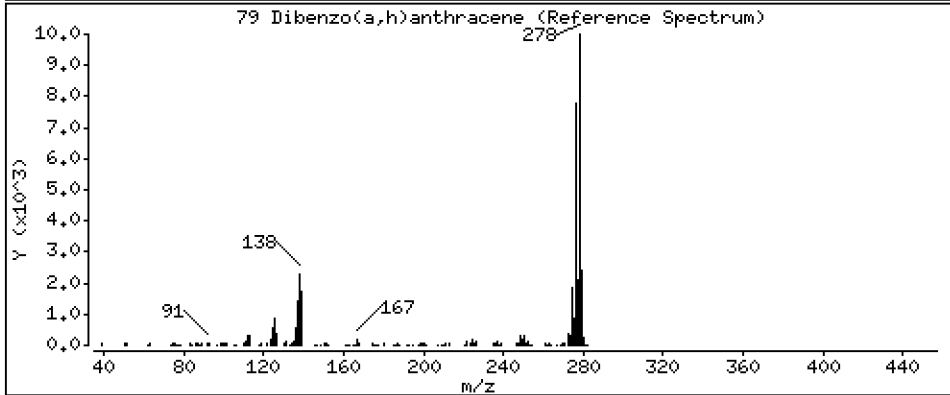
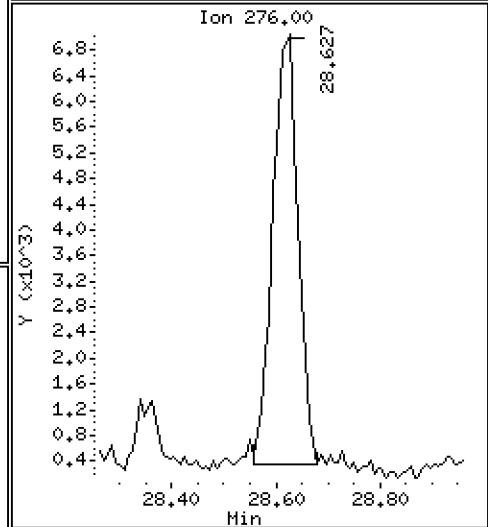
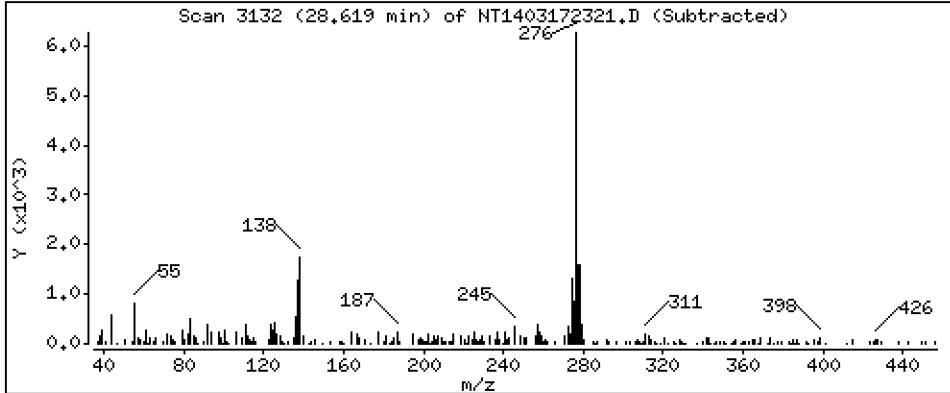
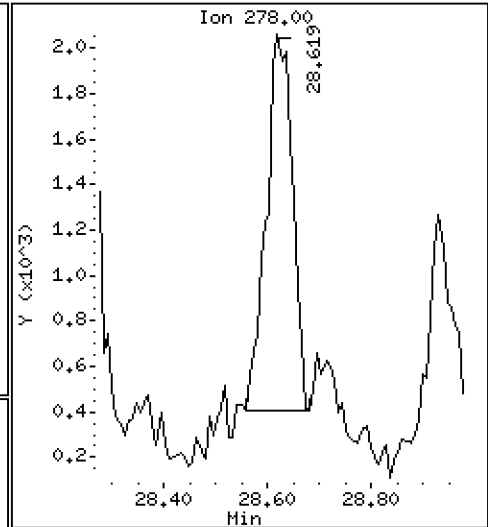
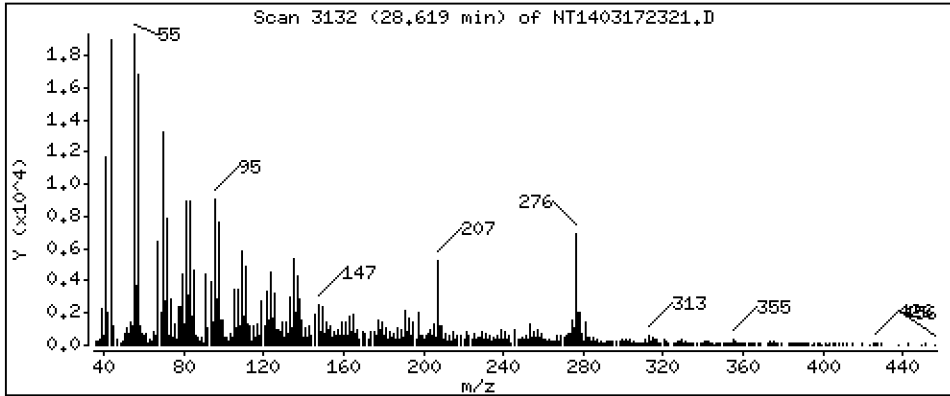
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1381 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

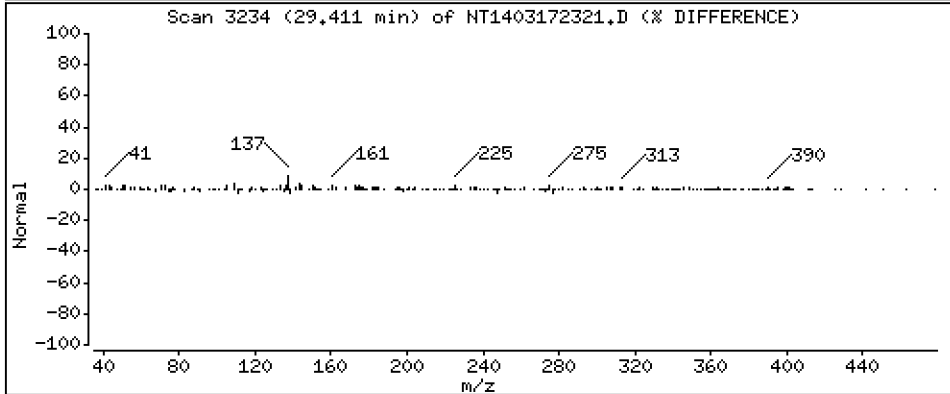
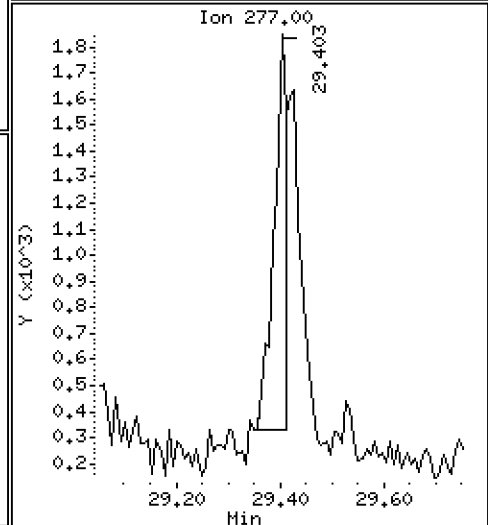
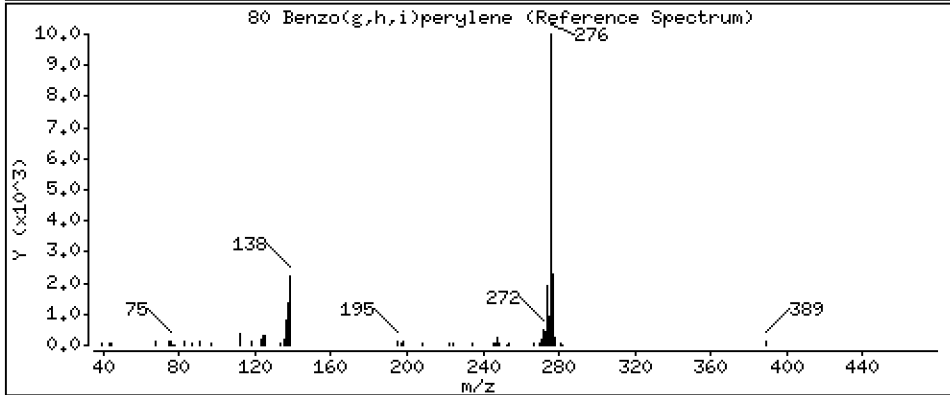
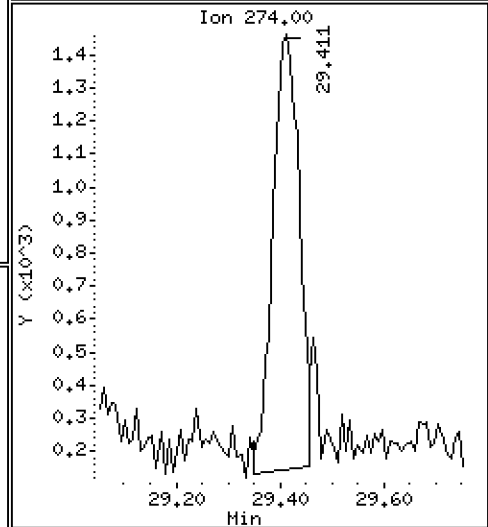
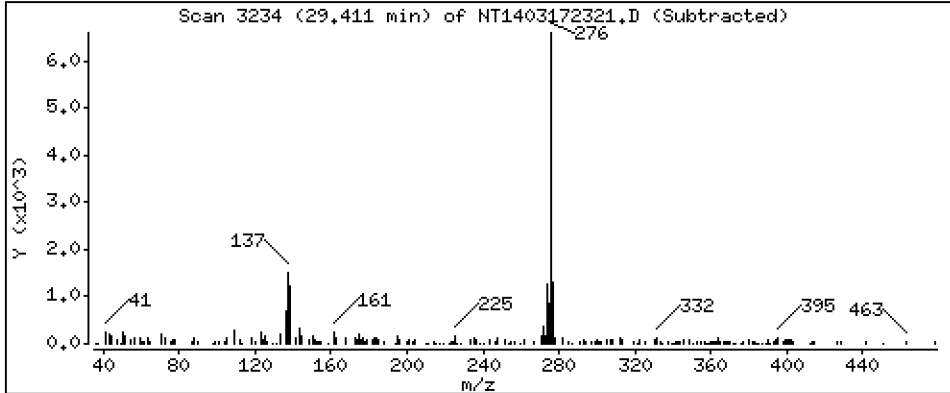
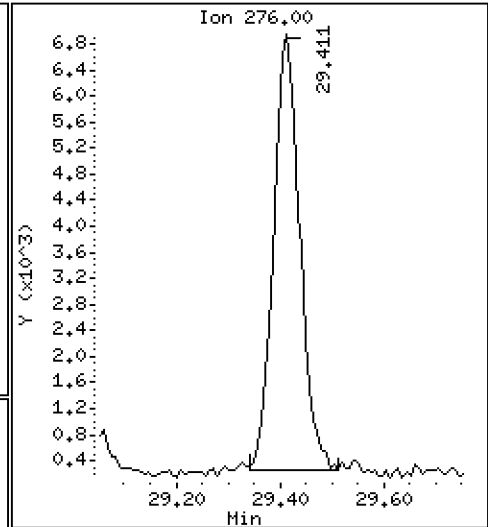
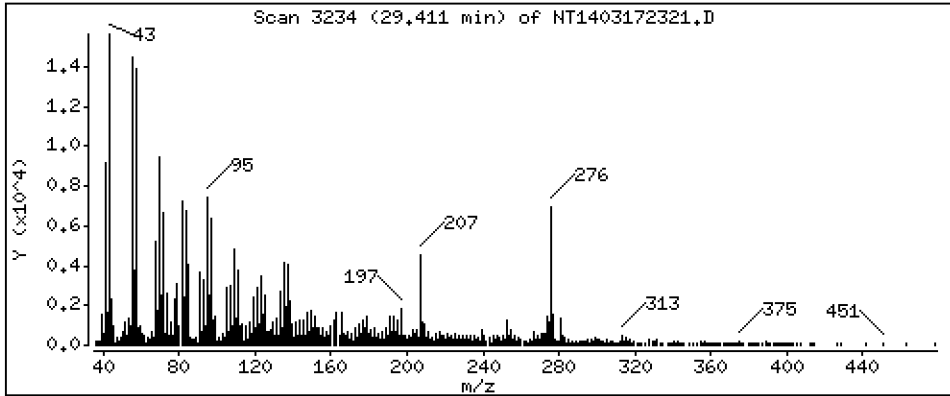
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,5729 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

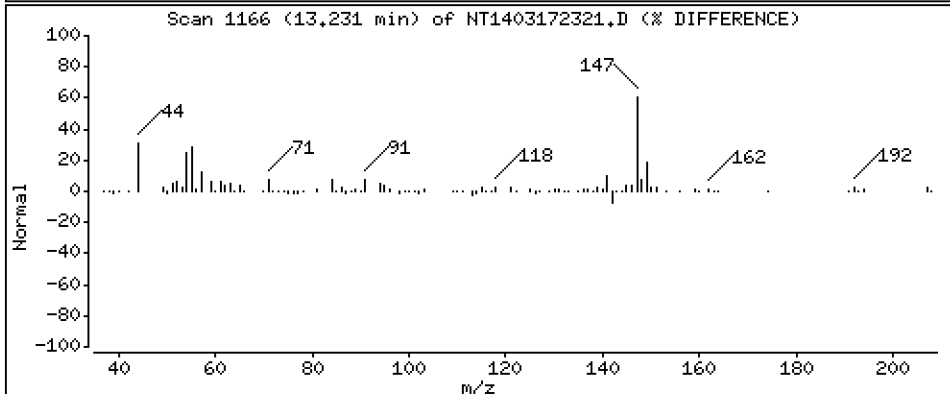
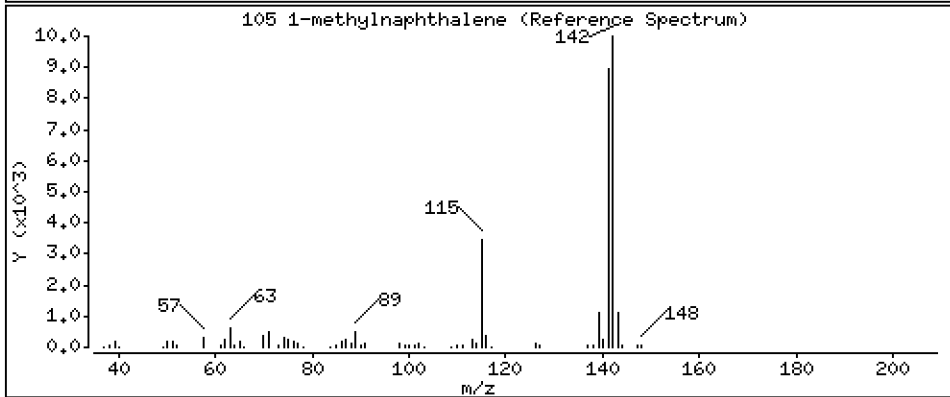
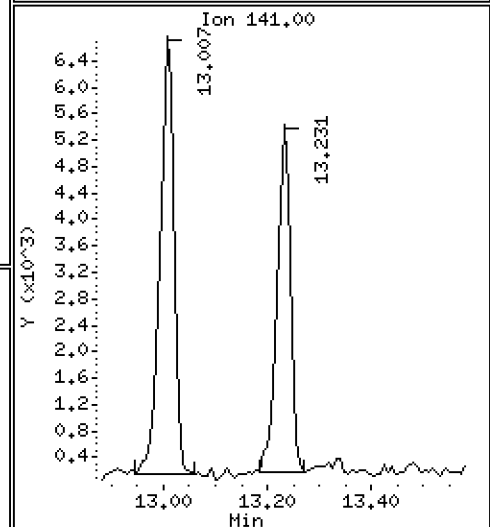
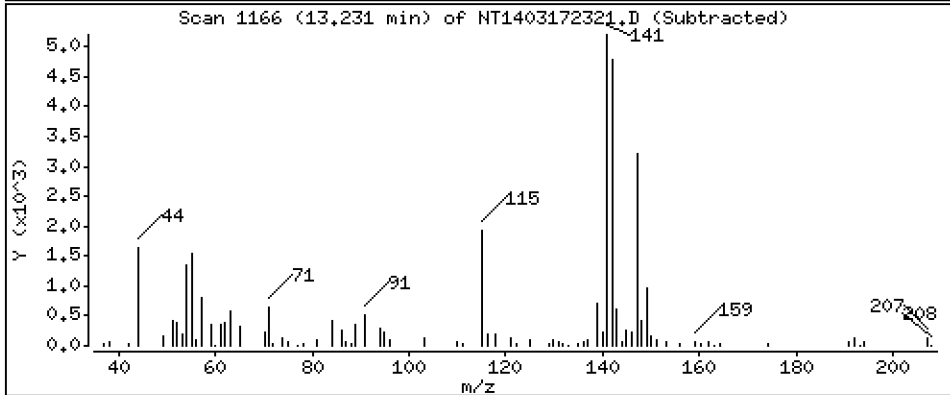
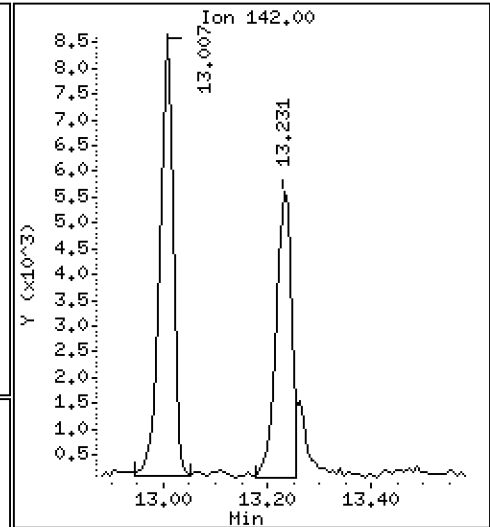
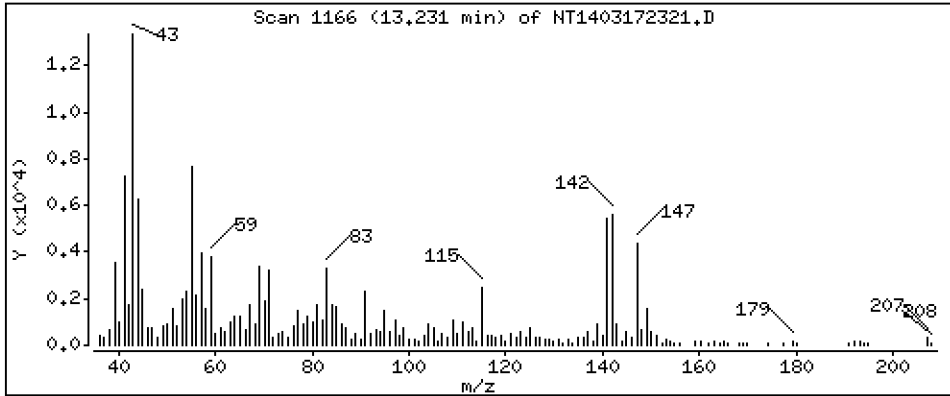
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,07935 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

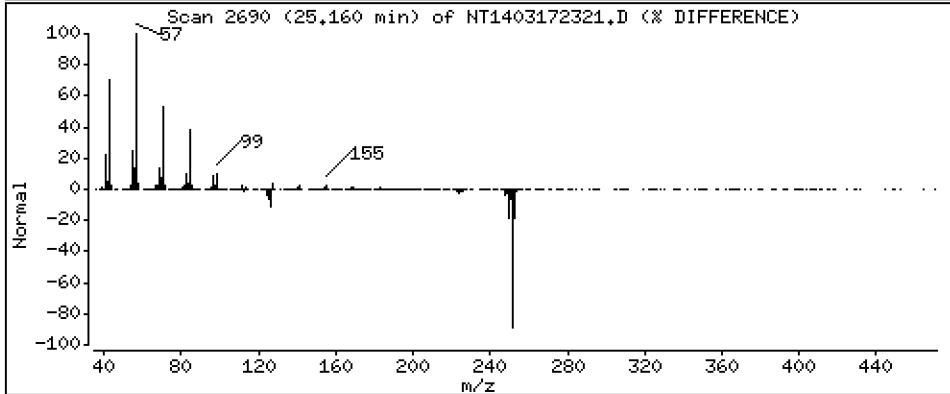
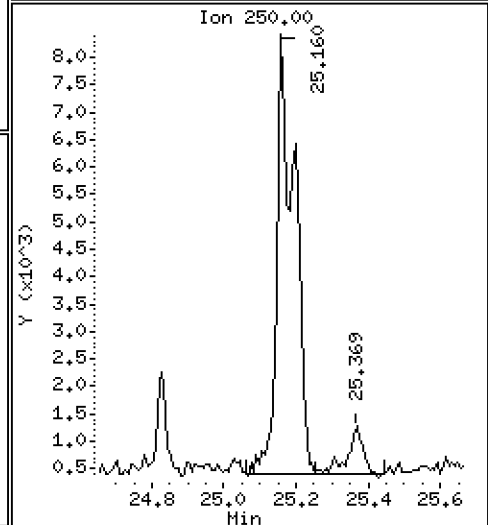
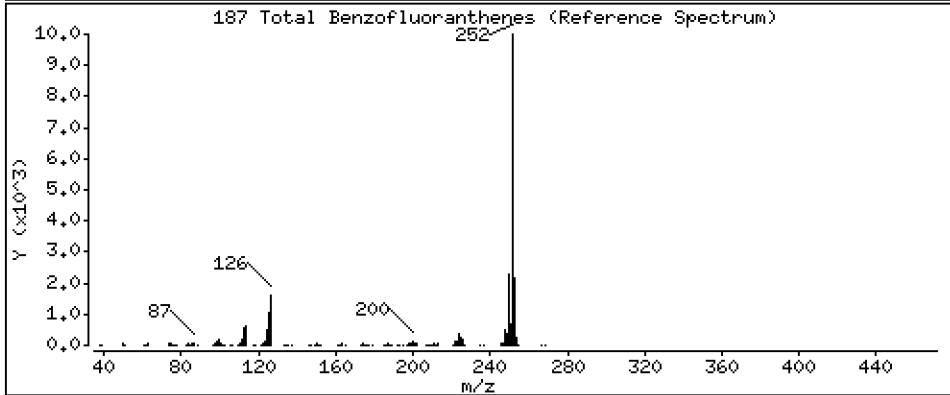
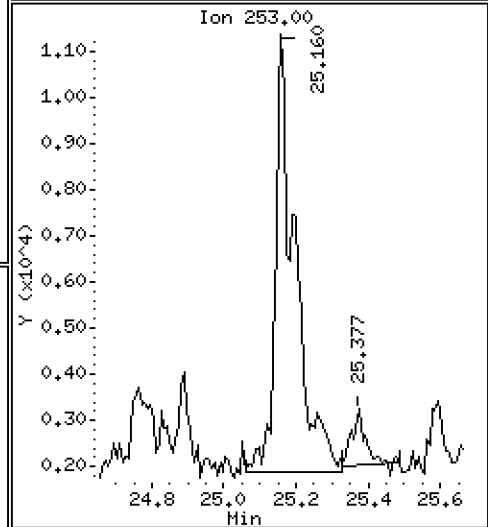
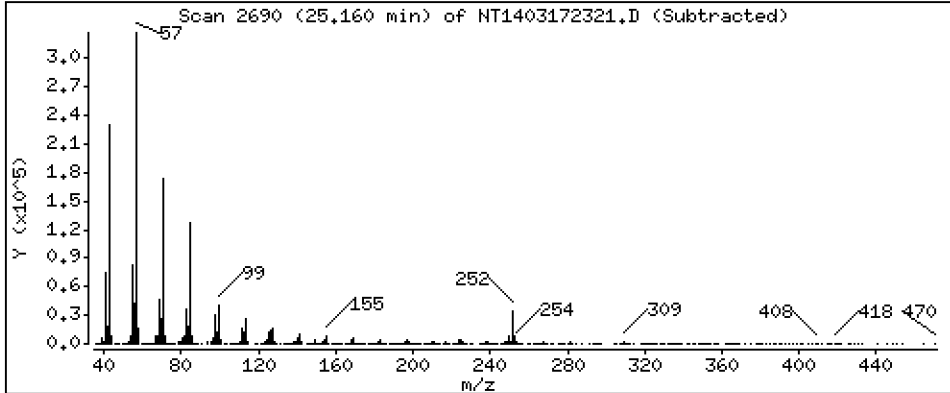
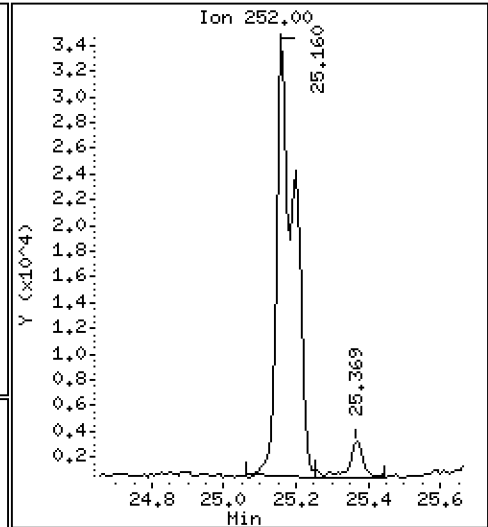
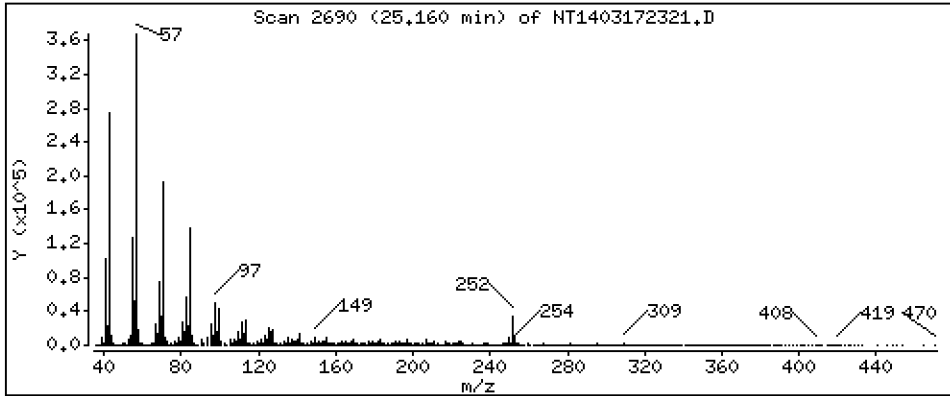
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,310 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172321.D
 Lab Smp Id: 23B0229-02
 Inj Date : 18-MAR-2023 02:31 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-02
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.821	(1.000)	228570	3.19595	3.196
\$ 2 Phenol-d5	99		8.420	8.412	(1.000)	410017	4.35449	4.354
3 Phenol	94		8.443	8.436	(1.000)	46932	0.46900	0.4690
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	324541	4.37191	4.372
4 Bis(2-Chloroethyl)ether	93		8.575	8.606	(1.000)	2706	0.03755	0.03755
6 2-Chlorophenol	128		8.721	8.729	(1.000)	282	0.00358	0.003580
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	592	0.00743	0.007425
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	210545	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	176647	3.56189	3.562
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.341	9.341	(1.000)	24517	0.52627	0.5263
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.831	9.830	(1.000)	9894	0.11811	0.1181
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	326834	3.75335	3.753
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.010	11.103	(0.952)	59686	0.98728	0.9873
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.560	11.567	(1.000)	822847	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	26313	0.11970	0.1197
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	14904	0.09722	0.09722
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	581758	4.17897	4.179
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163							
40 Acenaphthylene	152		14.879	14.879	(0.979)	7860	0.03922	0.03922
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	384402	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153		15.266	15.266	(1.005)	10293	0.08797	0.08797
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168		15.591	15.590	(1.026)	18558	0.11109	0.1111
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.155	16.163	(1.063)	33958	0.25623	0.2562
49 Fluorene	166		16.309	16.309	(1.073)	18007	0.11372	0.1137
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	27595	1.89082	1.891
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.248	18.240	(1.000)	620504	4.00000	
60 Phenanthrene	178		18.294	18.294	(1.003)	117563	0.66313	0.6631
61 Anthracene	178		18.387	18.387	(1.008)	31908	0.18681	0.1868
62 Carbazole	167		18.712	18.712	(1.025)	13335	0.08775	0.08775
63 Di-n-butylphthalate	149		19.517	19.509	(1.070)	8574	0.04451	0.04451 (M)
64 Fluoranthene	202		20.708	20.677	(0.889)	252745	3.00010	3.000
65 Pyrene	202		21.110	21.103	(0.906)	241668	2.79726	2.797
\$ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	359878	6.15318	6.153
67 Butylbenzylphthalate	149		22.310	22.310	(0.958)	32375	0.85534	0.8553
68 Benzo(a)anthracene	228		23.263	23.263	(0.999)	62480	0.81832	0.8183
* 69 Chrysene-d12	240		23.294	23.294	(1.000)	207072	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228		23.340	23.340	(1.002)	80452	1.16426	1.164
72 bis(2-Ethylhexyl)phthalate	149		23.332	23.332	(0.959)	100312	1.85142	1.851
* 134 Di-n-octylphthalate-d4	153		24.323	24.316	(1.000)	411581	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252		25.160	25.159	(0.970)	74407	1.39804	1.398
75 Benzo(k)fluoranthene	252		25.198	25.198	(0.971)	49589	0.93991	0.9399
76 Benzo(a)pyrene	252		25.818	25.818	(0.995)	27679	0.60816	0.6082
* 77 Perylene-d12	264		25.942	25.934	(1.000)	150614	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.626	28.610	(1.103)	22490	0.45402	0.4540
79 Dibenzo(a,h)anthracene	278		28.618	28.626	(1.103)	5766	0.13811	0.1381
80 Benzo(g,h,i)perylene	276		29.411	29.403	(1.134)	23389	0.57292	0.5729
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.231	13.230	(1.145)	11022	0.07935	0.07935
111 Azobenzene (1,2-DP-Hydrazine)	77							

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ug/mL)	FINAL (ug/mL)	
187 Total Benzofluoranthenes	252		25.160	25.159	(0.970)	116768	2.31010	2.310	
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172321.D Calibration Time: 23:31
 Lab Smp Id: 23B0229-02
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	210545	-8.86
27 Naphthalene-d8	843789	421895	1687578	822847	-2.48
42 Acenaphthene-d10	432455	216228	864910	384402	-11.11
59 Phenanthrene-d10	793780	396890	1587560	620504	-21.83
69 Chrysene-d12	411057	205529	822114	207072	-49.62
134 Di-n-octylphthala	799010	399505	1598020	411581	-48.49
77 Perylene-d12	254782	127391	509564	150614	-40.89

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172321.D

Lab ID: 23B0229-02
nt14.i, ABN.m, 18-MAR-2023 02:31

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.960	-0.0074	Benzoic acid

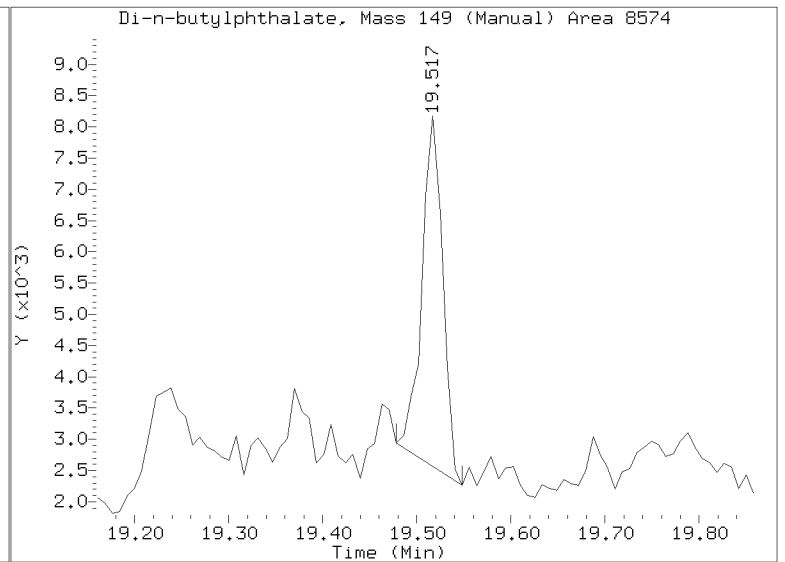
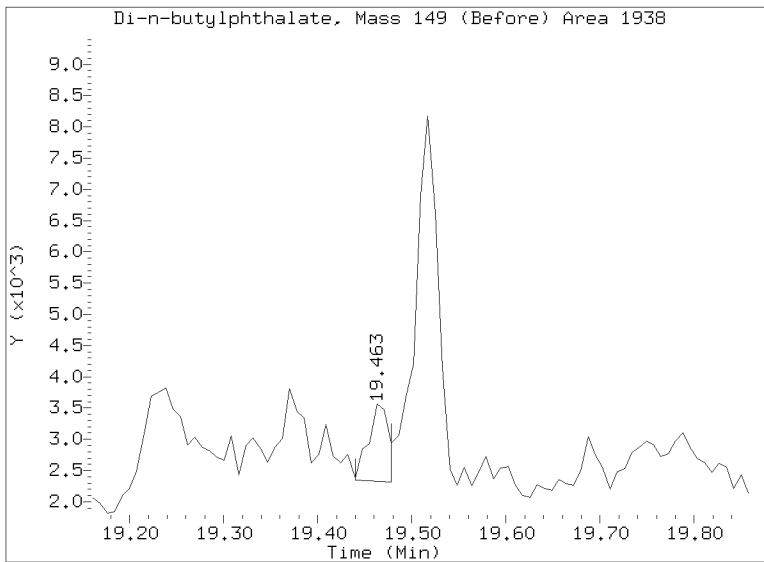
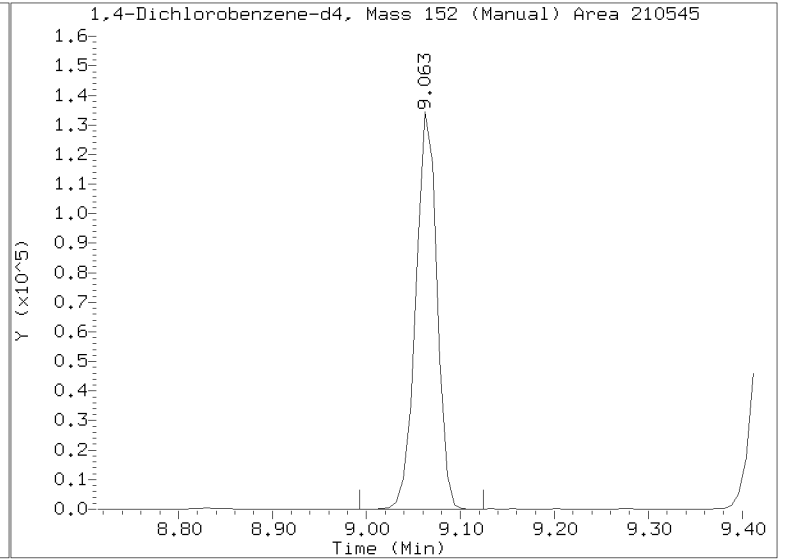
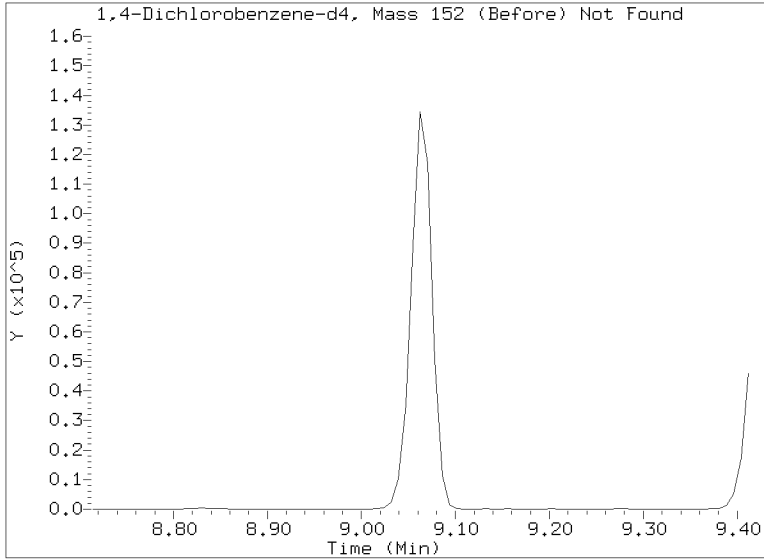
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172321.D
Injection Date: 18-MAR-2023 02:31
Lab ID:23B0229-02 Client ID:
Report Date: 03/22/2023 09:50





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-03 A

SDG: 23B0229

Sampled: 02/08/23 11:52

Prepared: 02/17/23 15:00

File ID: NT1403172322.D

% Solids: 54.81

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 03:07

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 18.45 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	18.1	J	4.3	19.8
106-44-5	4-Methylphenol	1	19.8	U	7.3	19.8
91-20-3	Naphthalene	1	11.2	J	4.2	19.8
91-57-6	2-Methylnaphthalene	1	9.5	J	4.5	19.8
208-96-8	Acenaphthylene	1	19.8	U	6.2	19.8
131-11-3	Dimethylphthalate	1	19.8	U	4.3	19.8
83-32-9	Acenaphthene	1	6.5	J	5.2	19.8
132-64-9	Dibenzofuran	1	19.8	U	14.0	19.8
86-73-7	Fluorene	1	17.7	J	14.4	19.8
85-01-8	Phenanthrene	1	84.3		8.6	19.8
120-12-7	Anthracene	1	26.3		7.1	19.8
206-44-0	Fluoranthene	1	288	Q	6.0	19.8
129-00-0	Pyrene	1	283		5.6	19.8
85-68-7	Butylbenzylphthalate	1	12.0	J	9.3	19.8
56-55-3	Benzo(a)anthracene	1	87.9		5.9	19.8
218-01-9	Chrysene	1	127		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	171		5.4	49.4
	Benzo(a)fluoranthenes, Total	1	232		9.9	39.6
50-32-8	Benzo(a)pyrene	1	46.5		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	45.8		14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	17.9	J	17.0	19.8
191-24-2	Benzo(g,h,i)perylene	1	53.9	Q	13.4	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.66	393	53.0	27 - 120	
Phenol-d5	741.66	497	67.0	29 - 120	
2-Chlorophenol-d4	741.66	508	68.6	31 - 120	
1,2-Dichlorobenzene-d4	494.44	377	76.2	32 - 120	
Nitrobenzene-d5	494.44	403	81.6	30 - 120	
2-Fluorobiphenyl	494.44	434	87.8	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-03 A

SDG: 23B0229

Sampled: 02/08/23 11:52

Prepared: 02/17/23 15:00

File ID: NT1403172322.D

% Solids: 54.81

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 03:07

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 18.45 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	741.66	309	41.7	24 - 134	
p-Terphenyl-d14	494.44	712	144	37 - 120	*,Q

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172322.D

Date: 18-MAR-2023 03:07

Client ID:

Sample Info: 23B0229-03

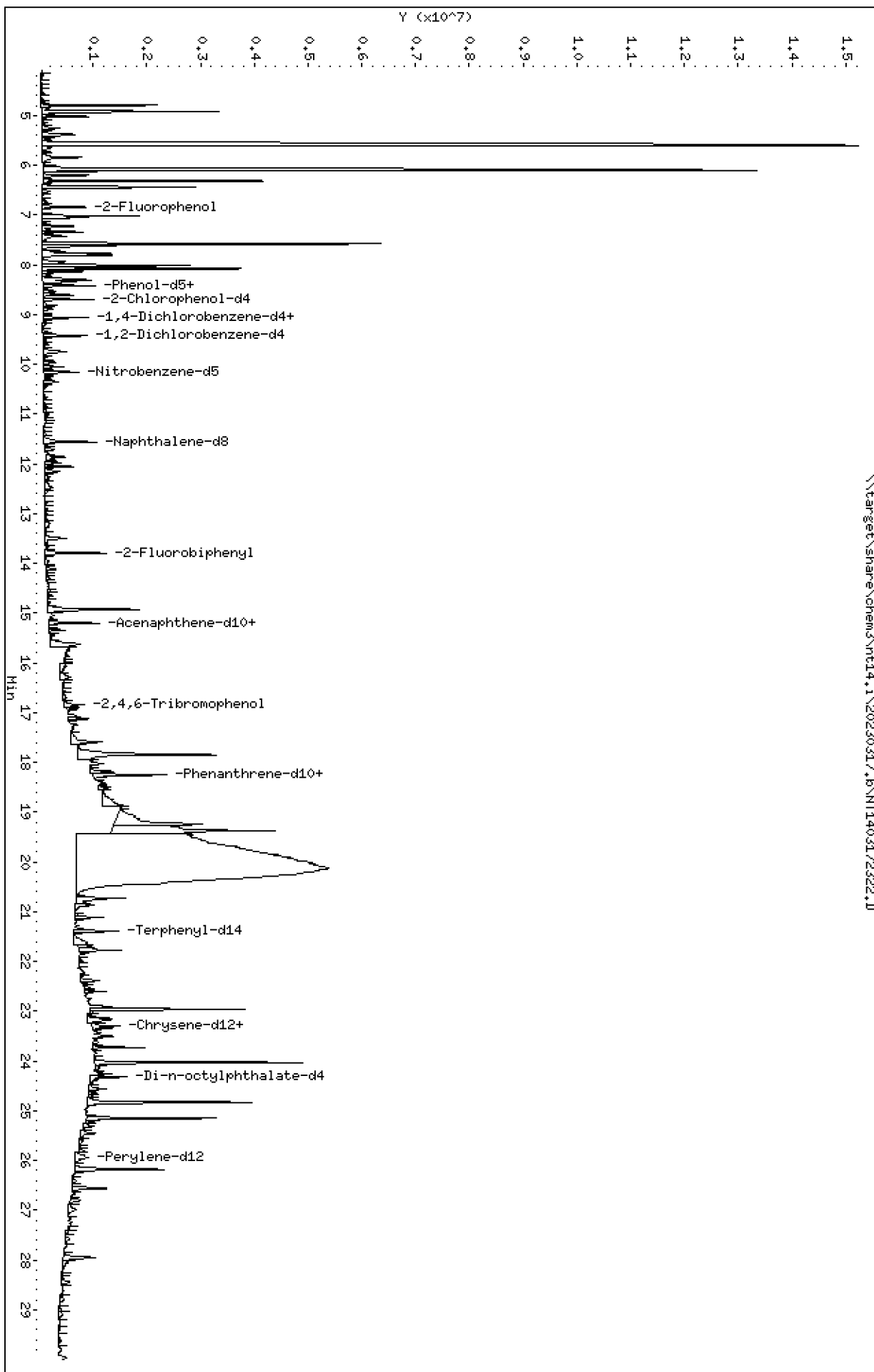
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172322.D



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

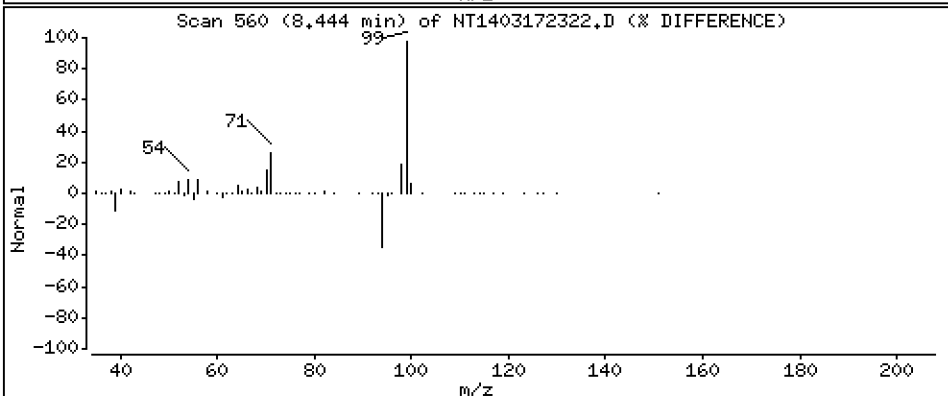
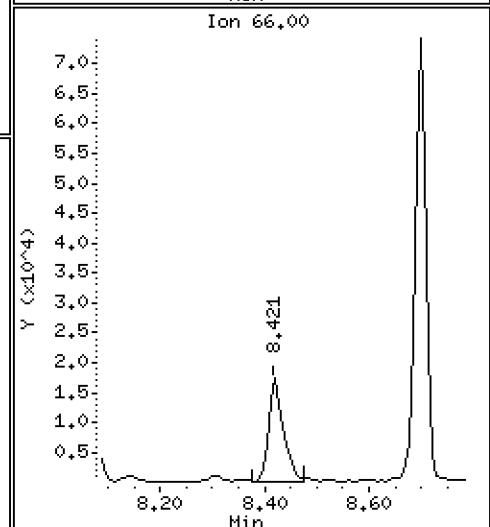
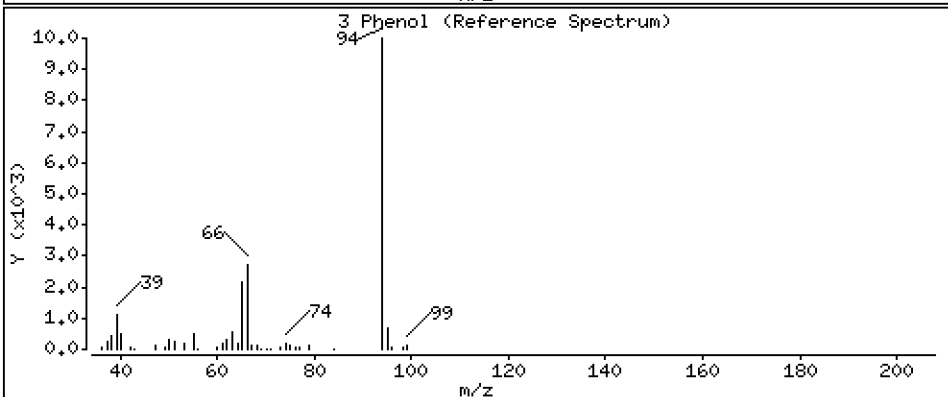
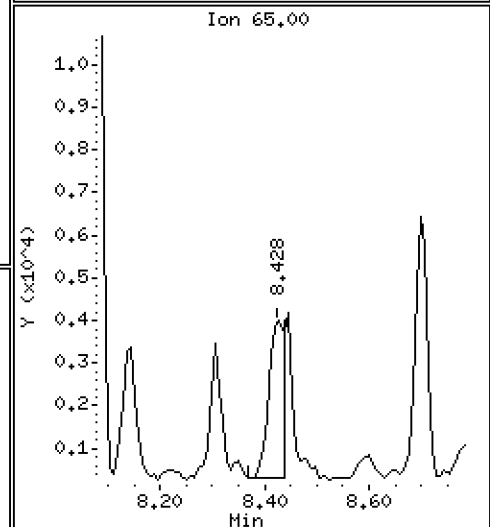
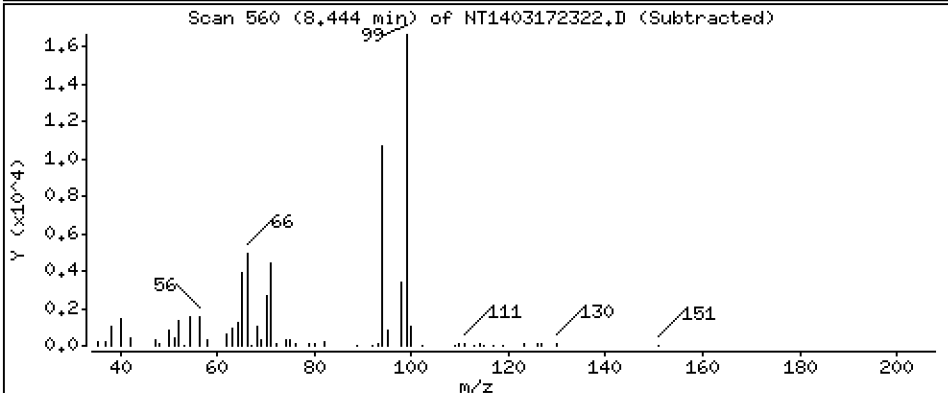
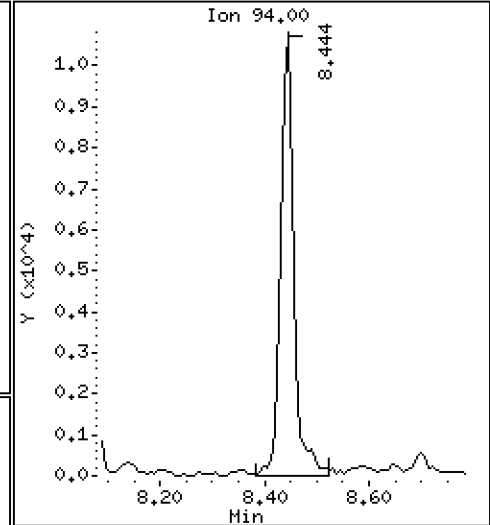
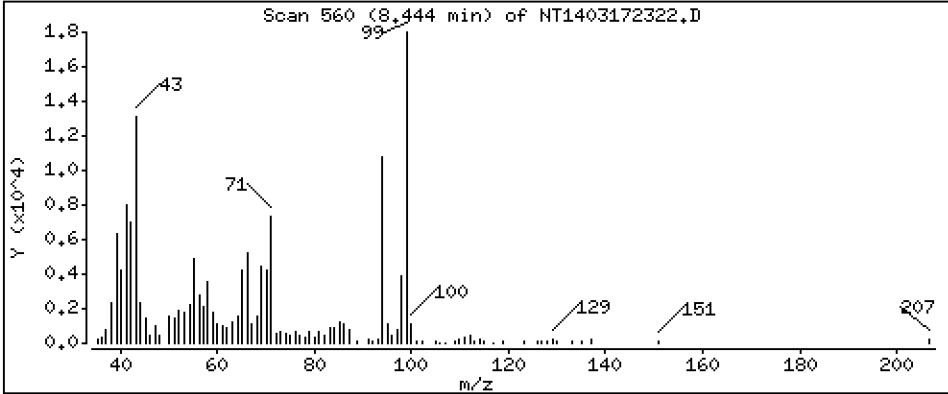
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1826 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

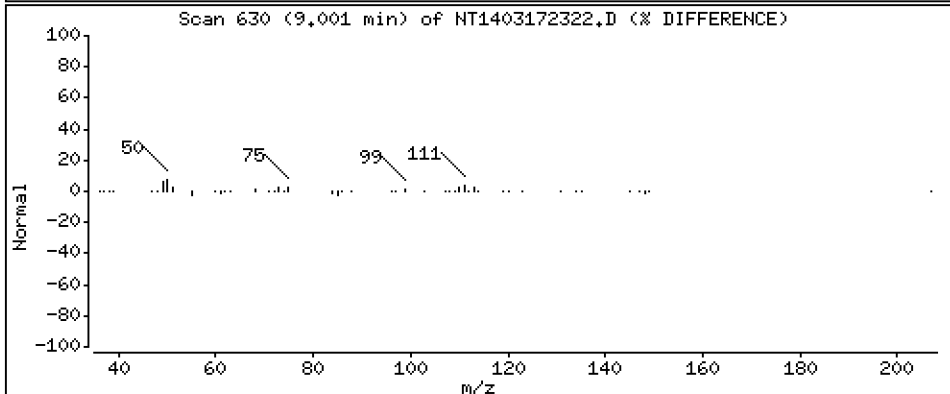
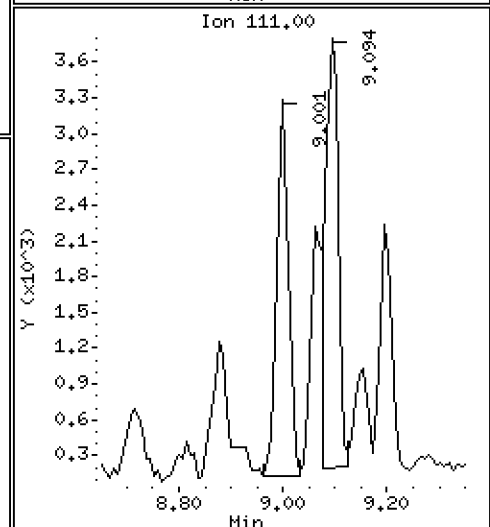
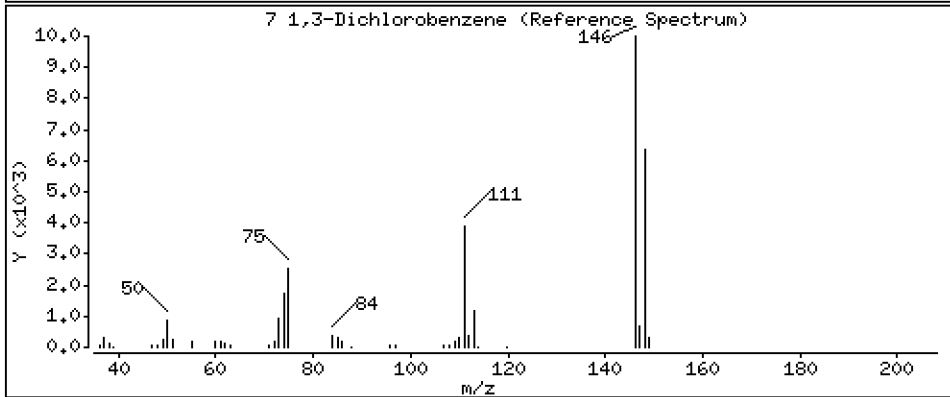
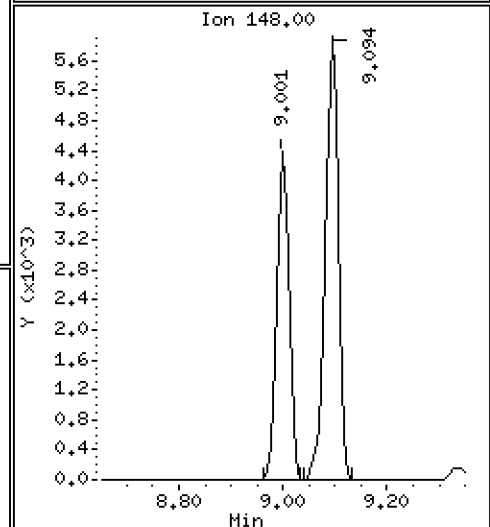
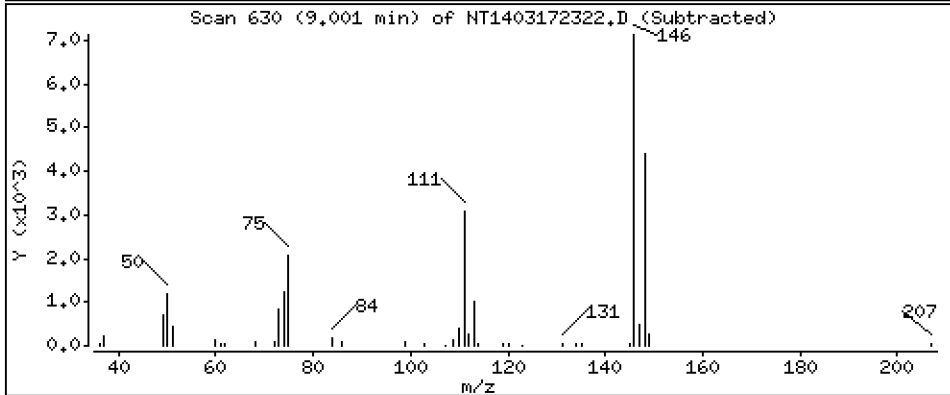
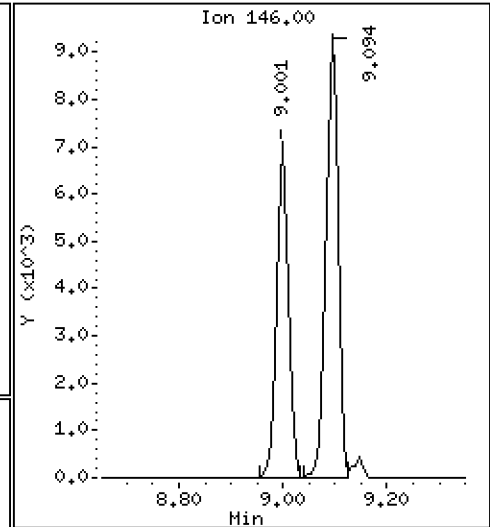
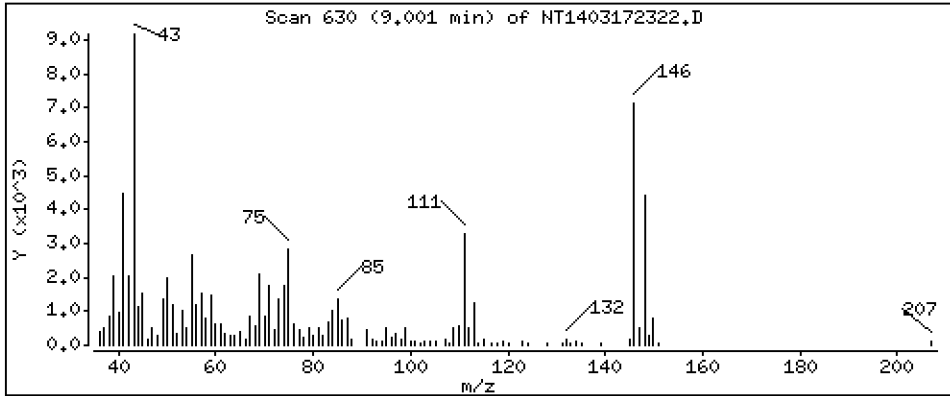
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.1345 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

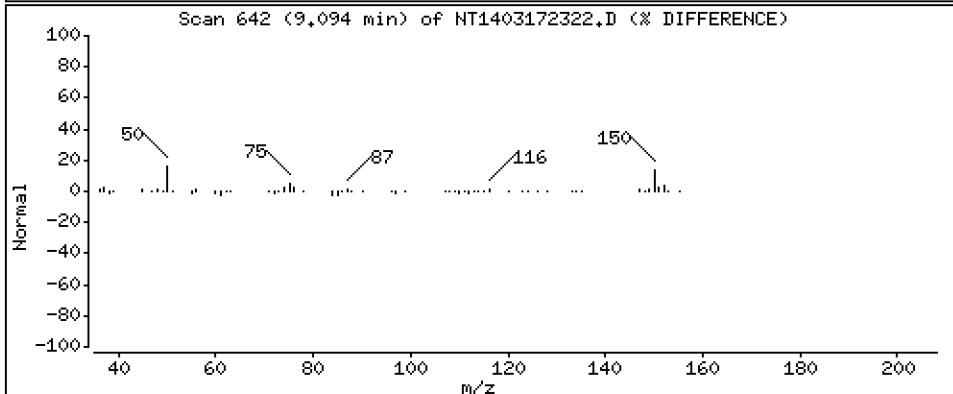
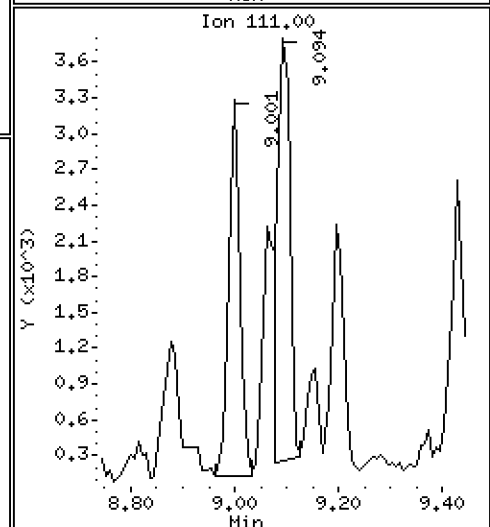
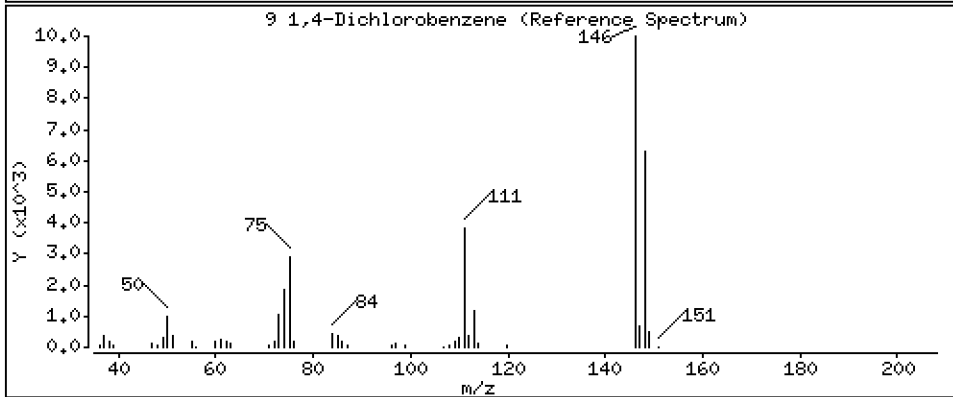
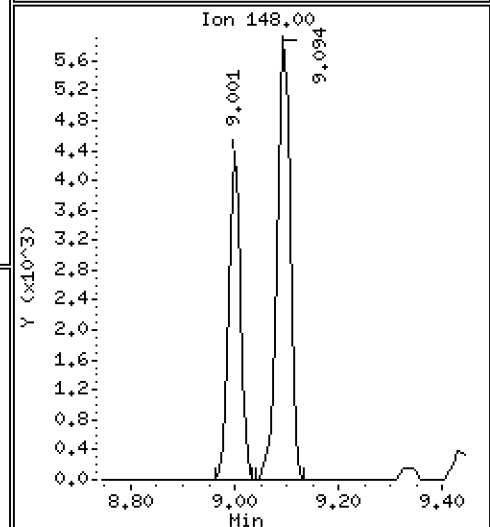
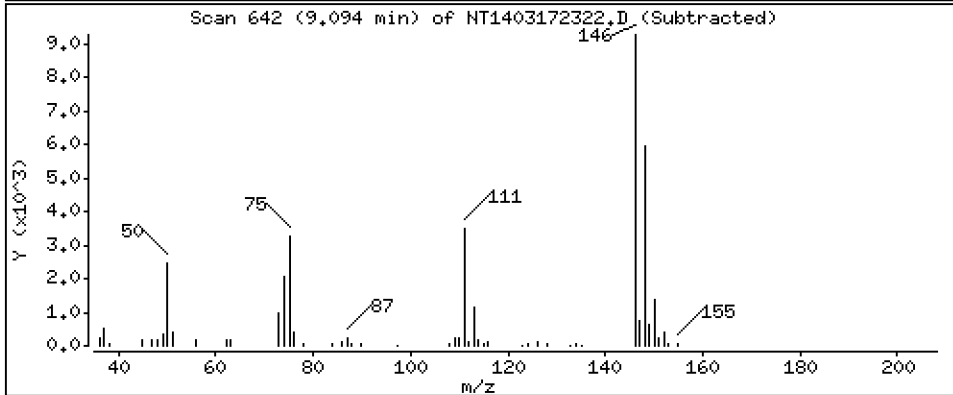
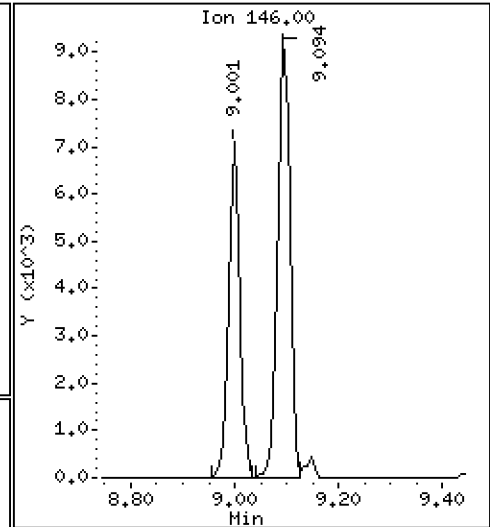
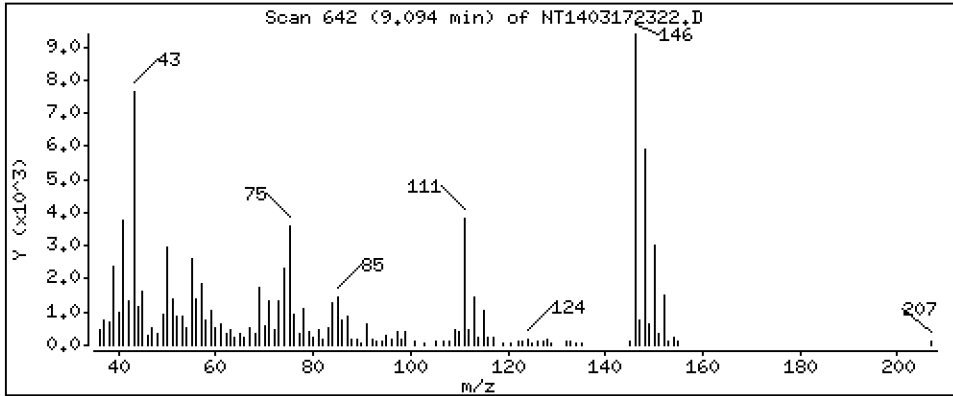
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1850 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

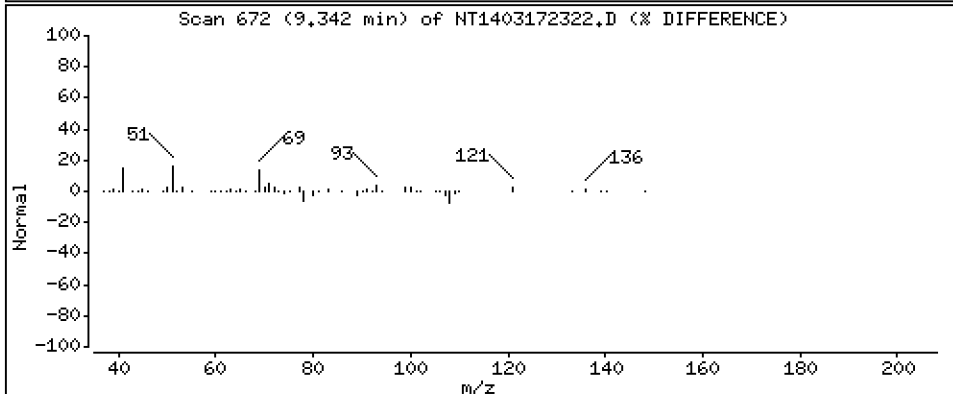
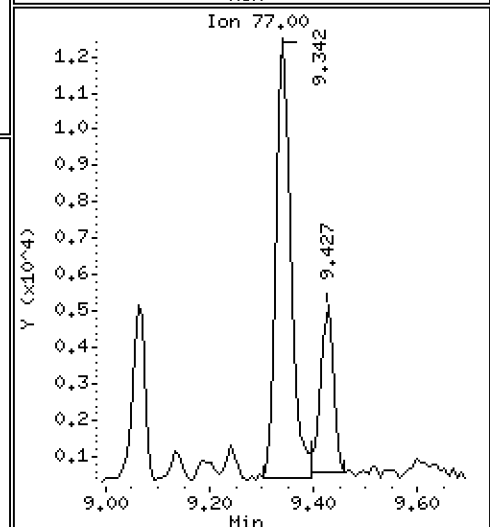
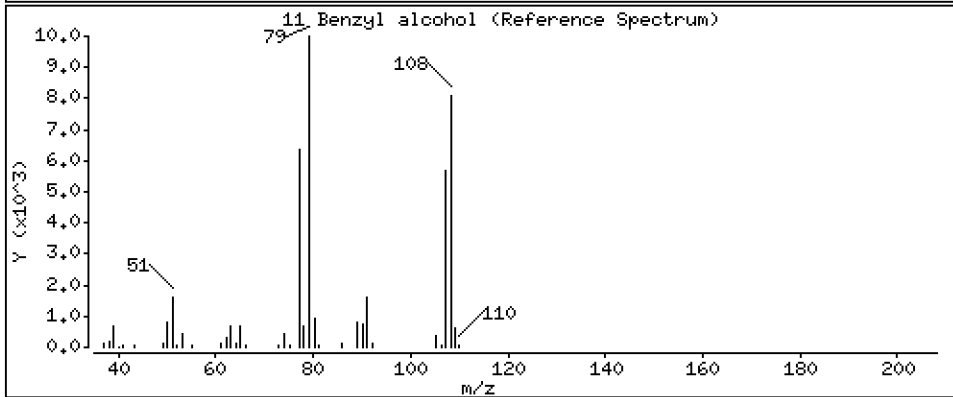
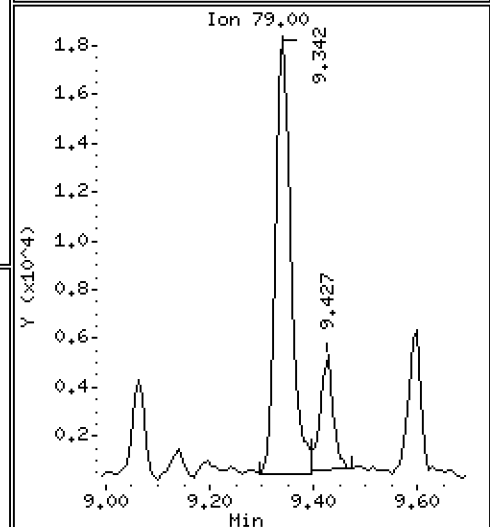
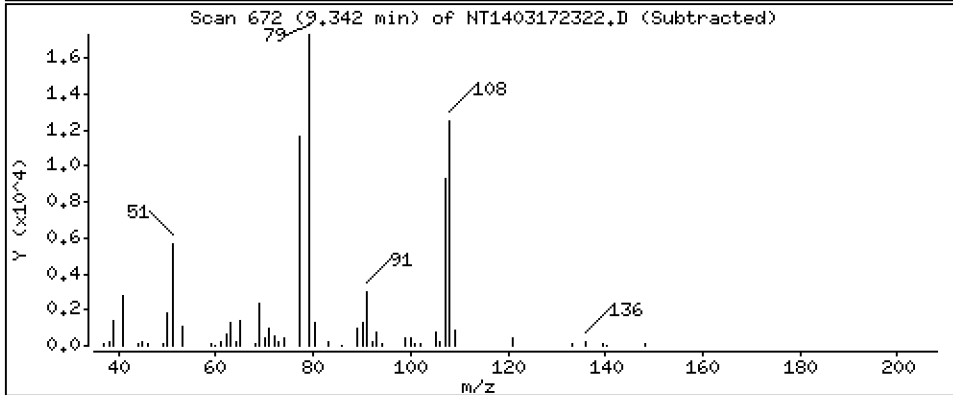
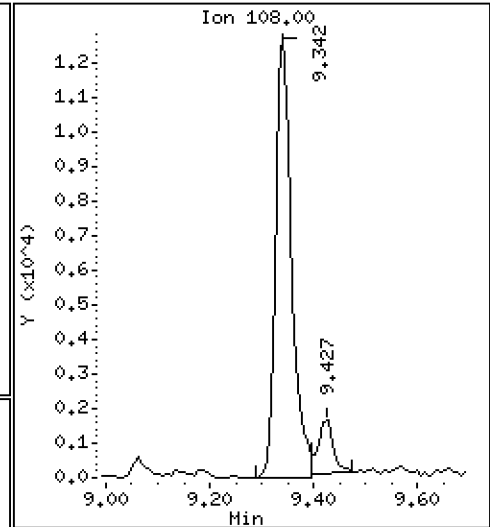
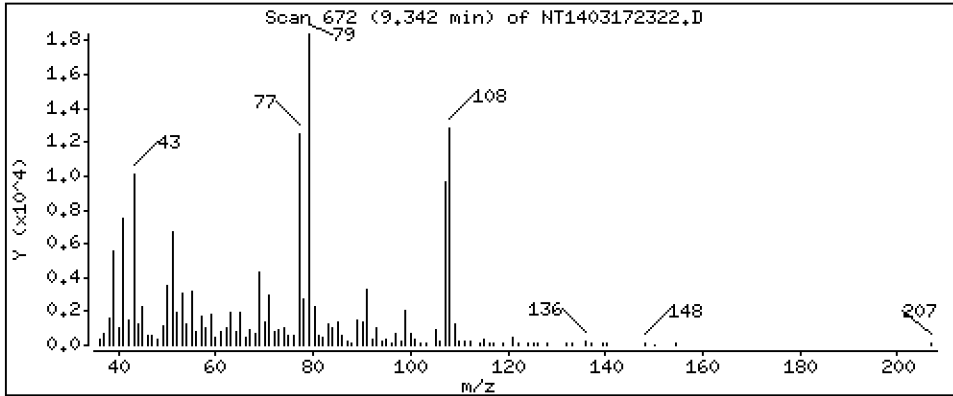
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,5563 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

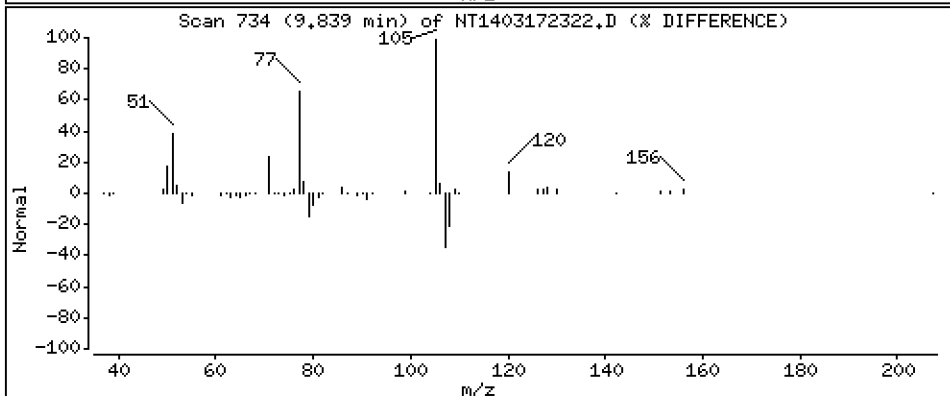
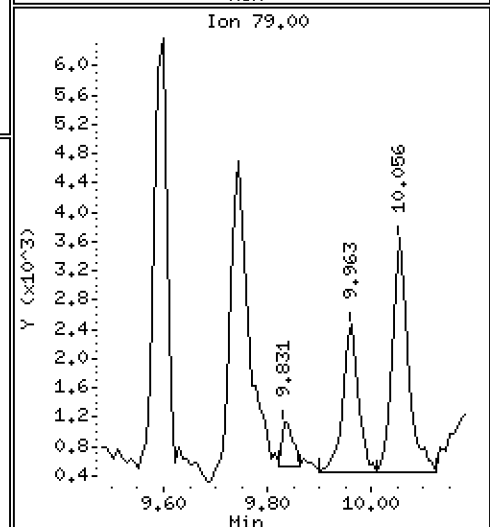
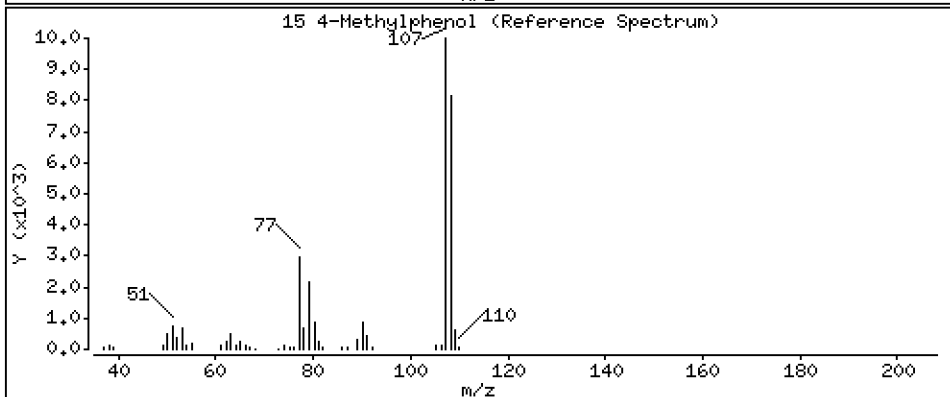
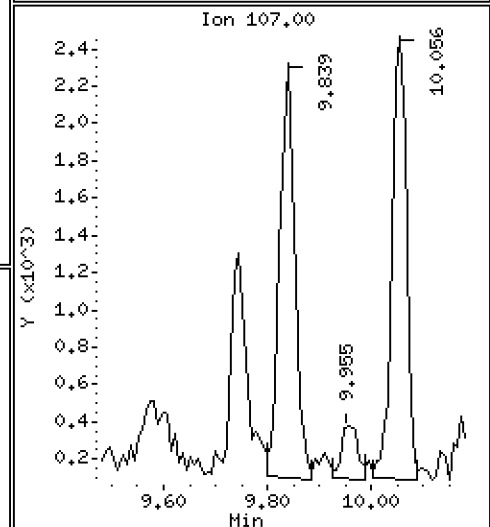
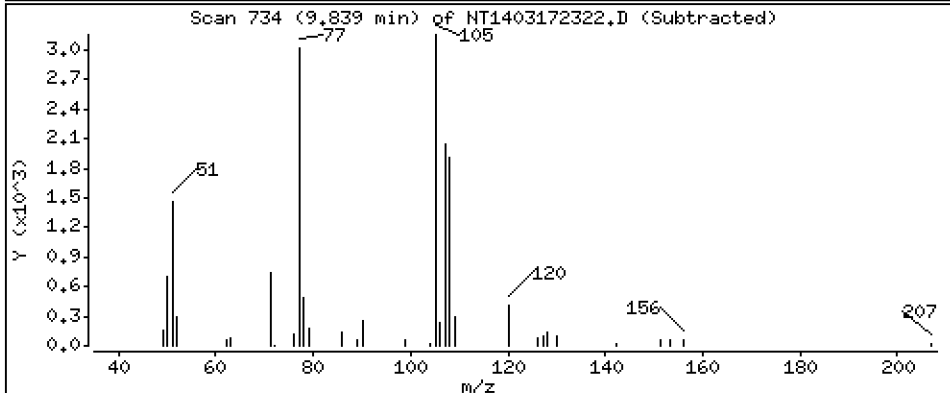
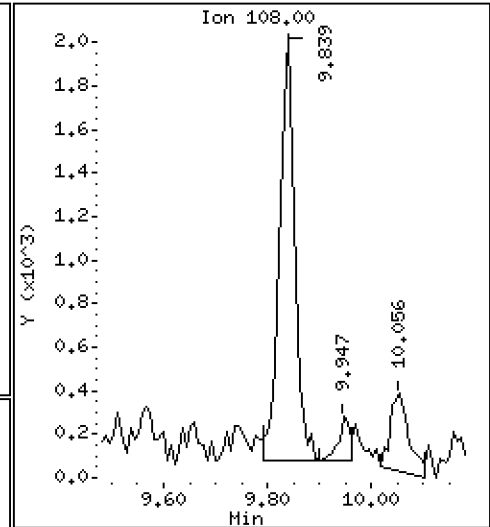
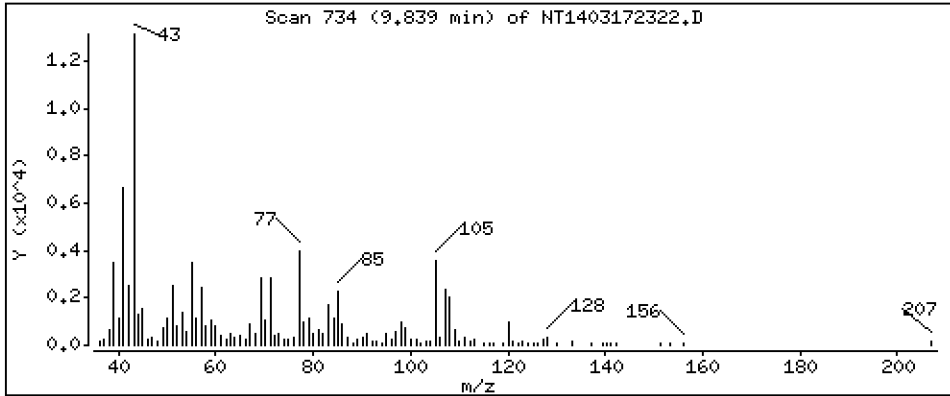
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.04611 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

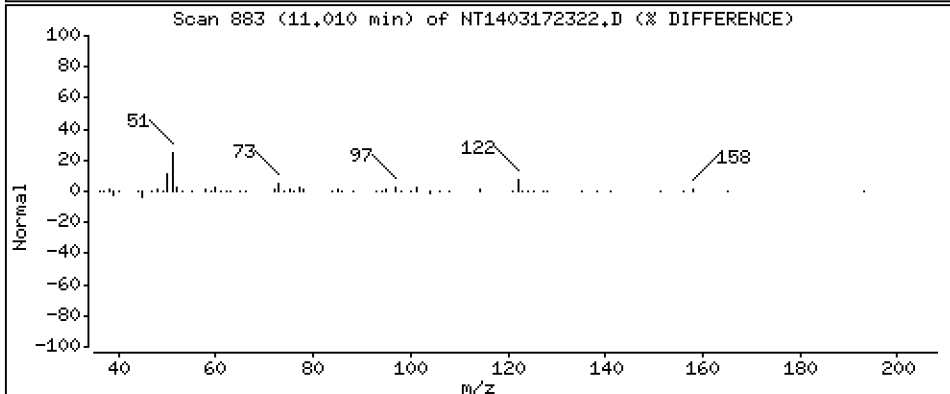
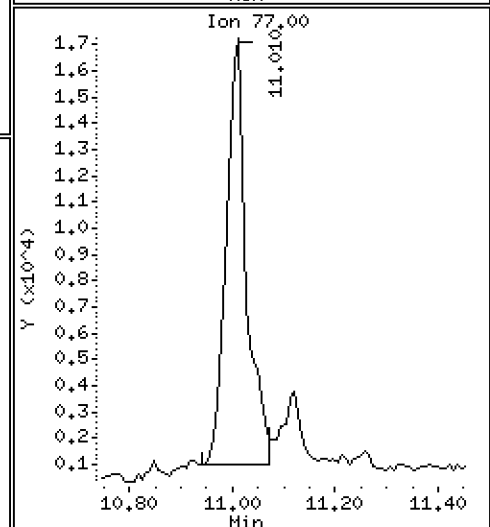
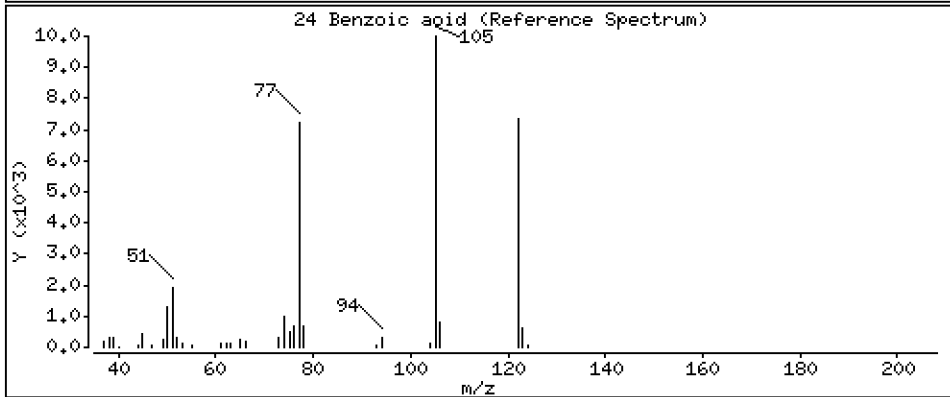
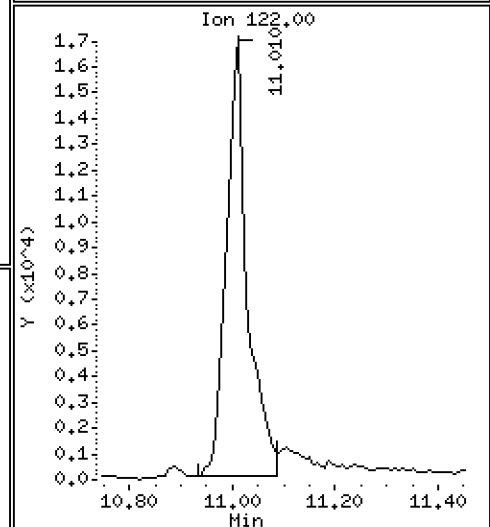
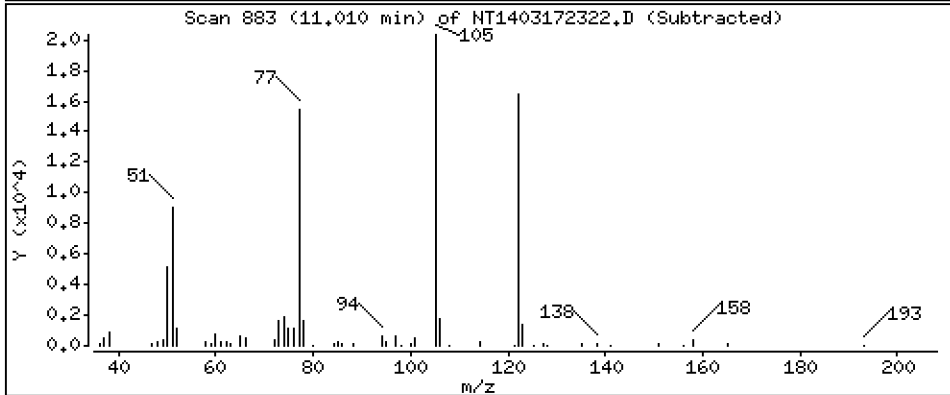
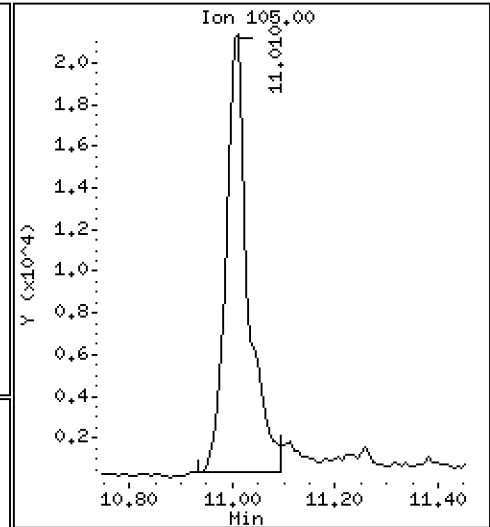
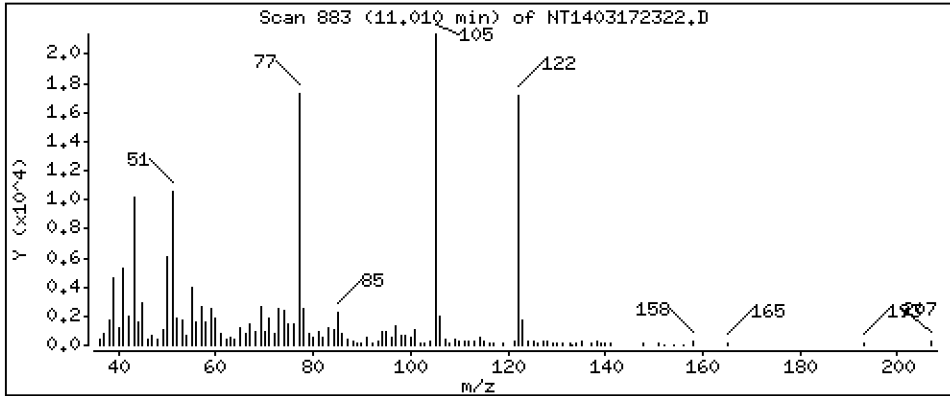
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 1.001 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

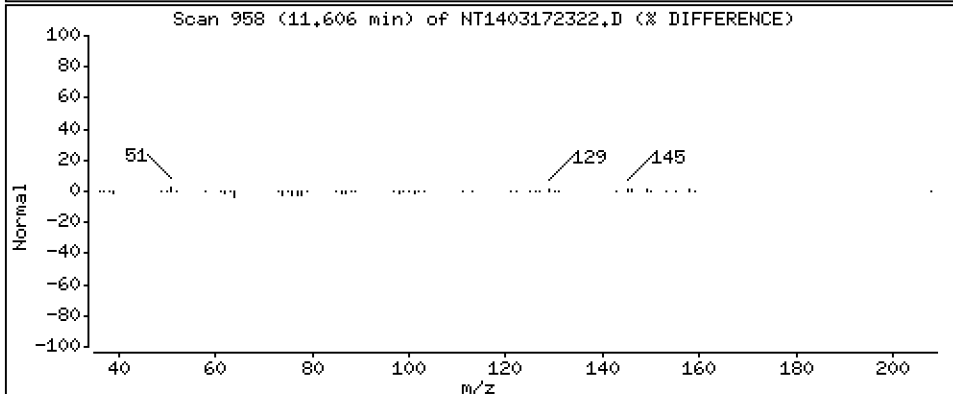
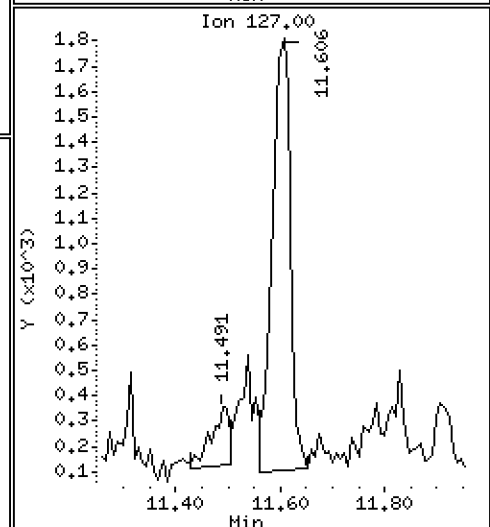
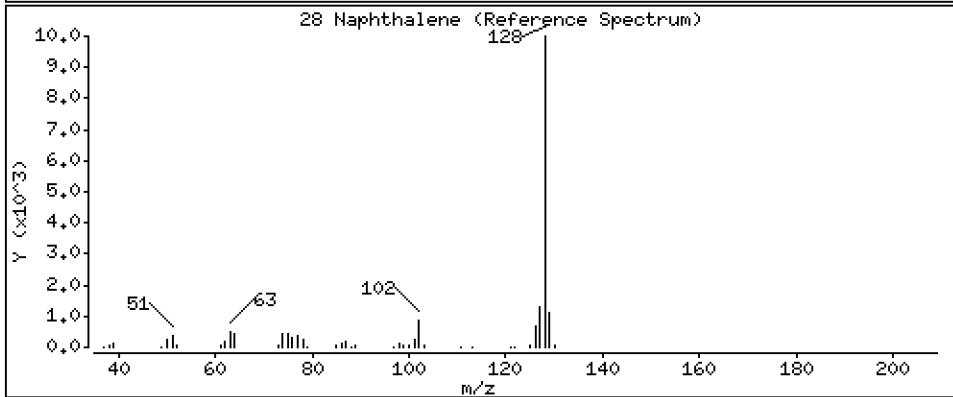
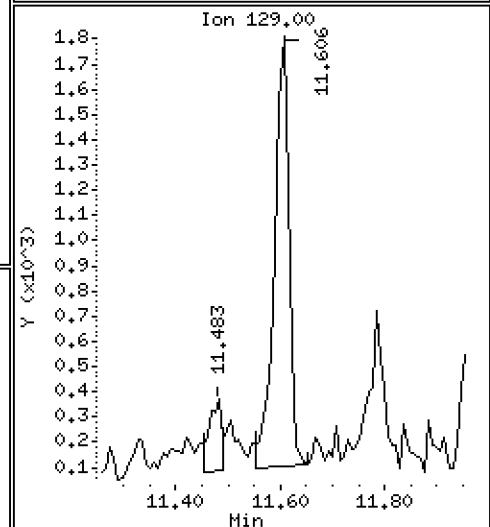
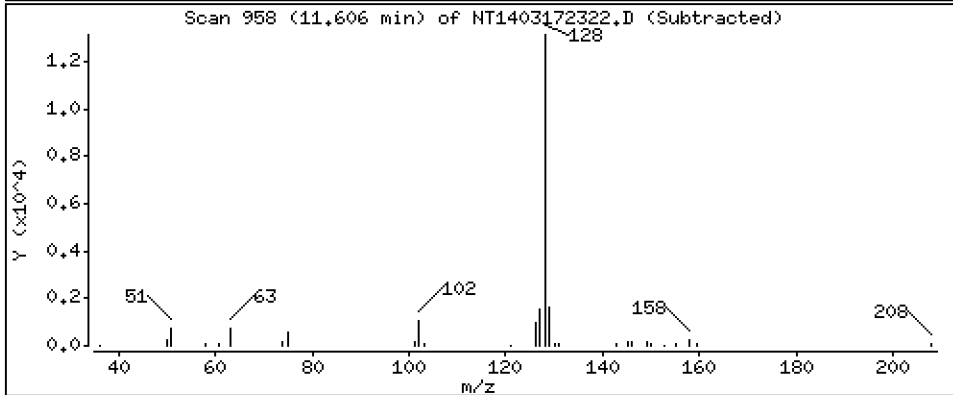
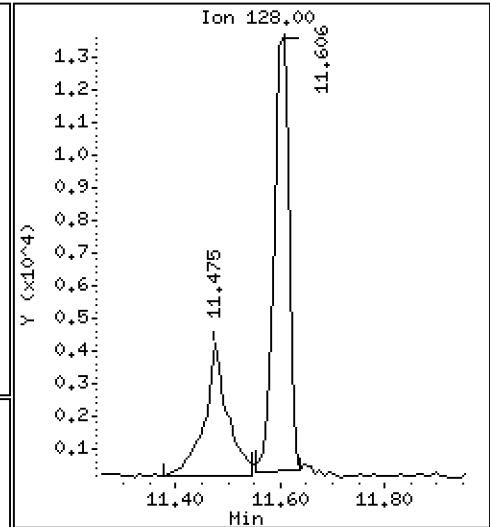
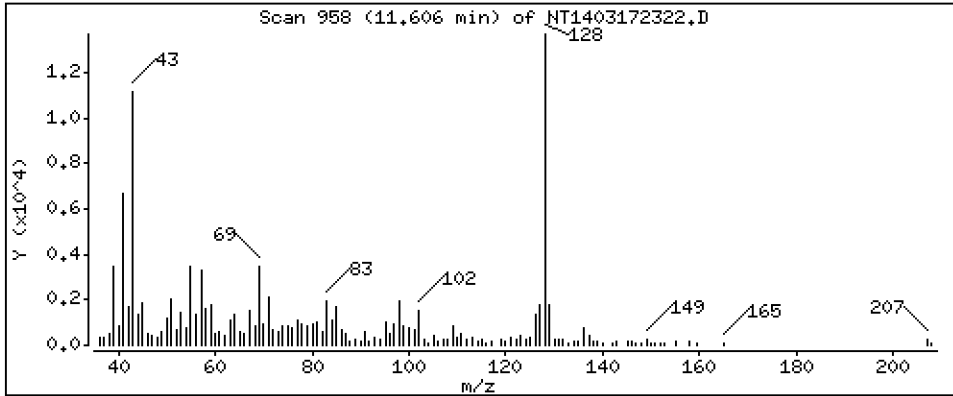
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1138 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

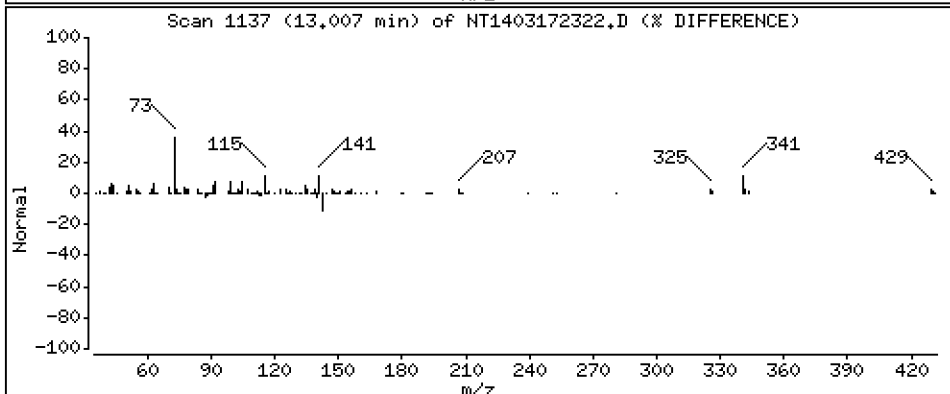
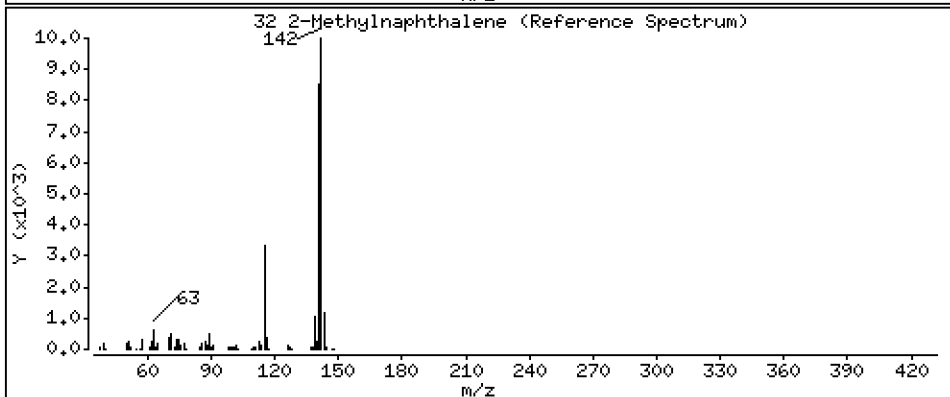
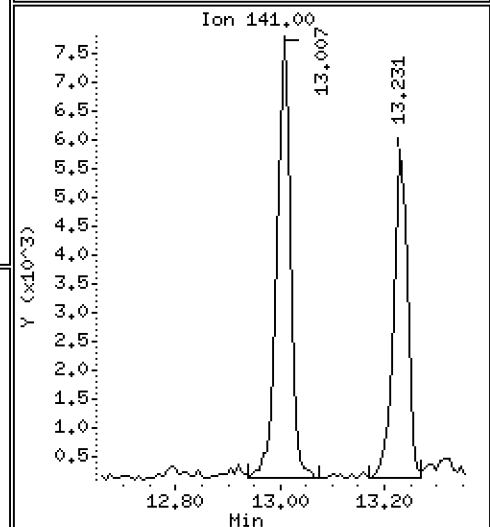
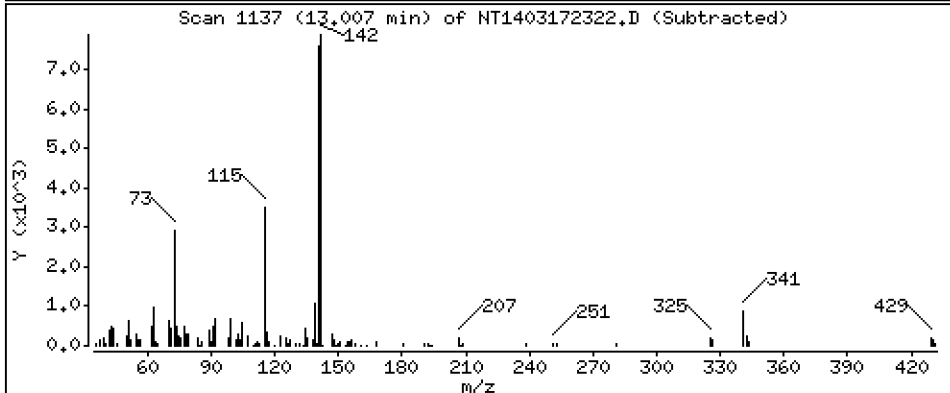
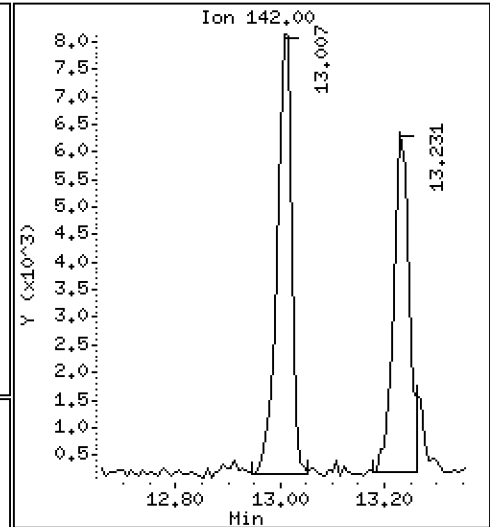
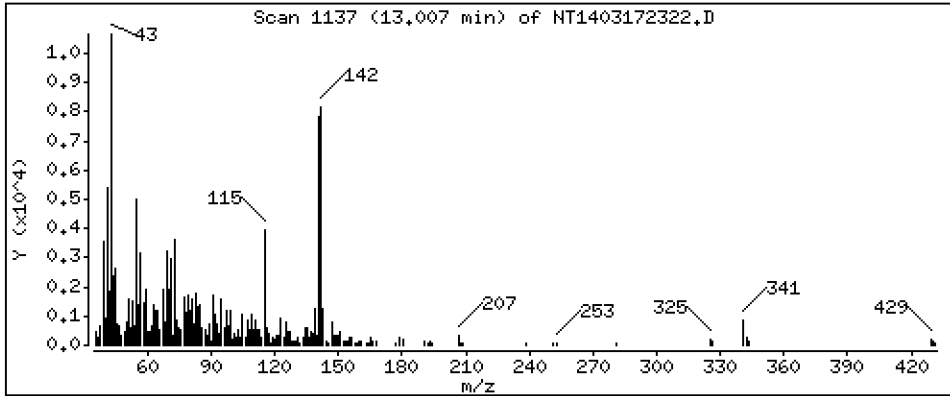
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,09611 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

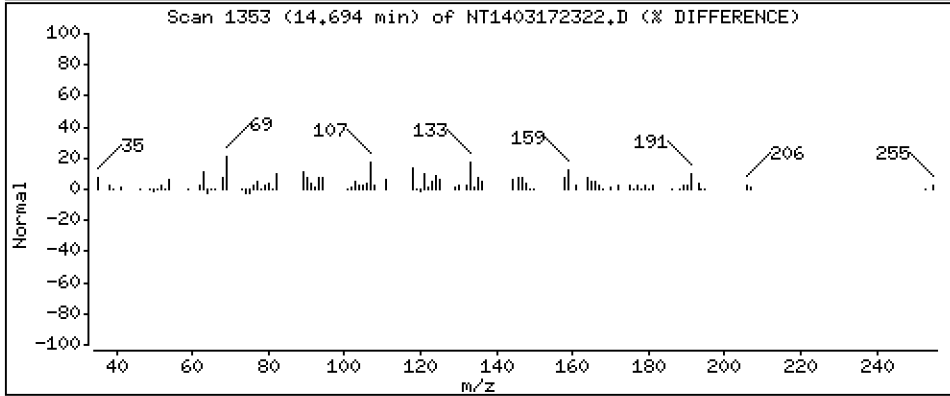
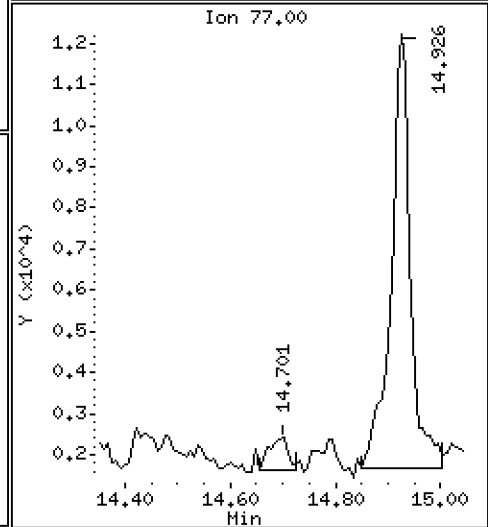
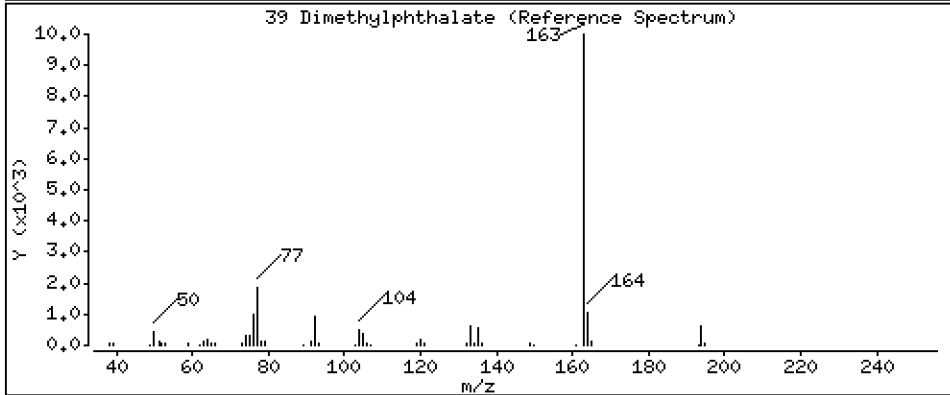
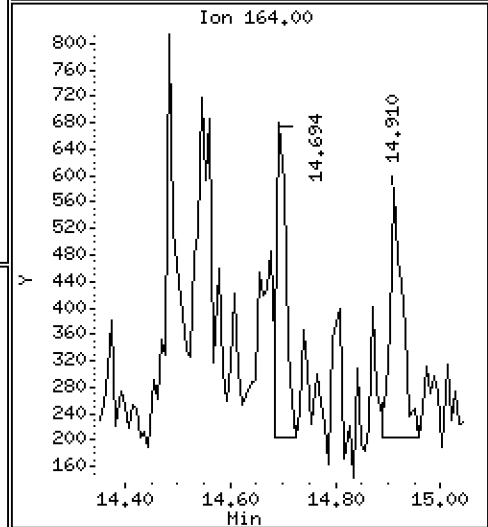
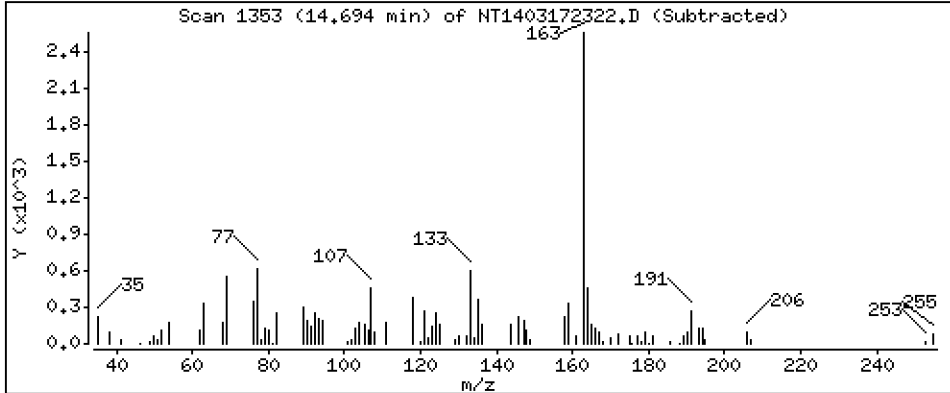
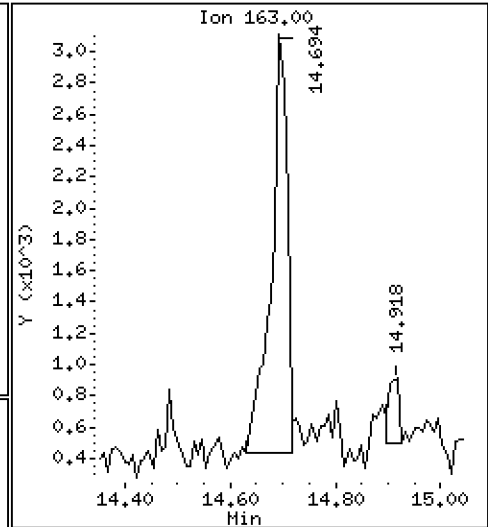
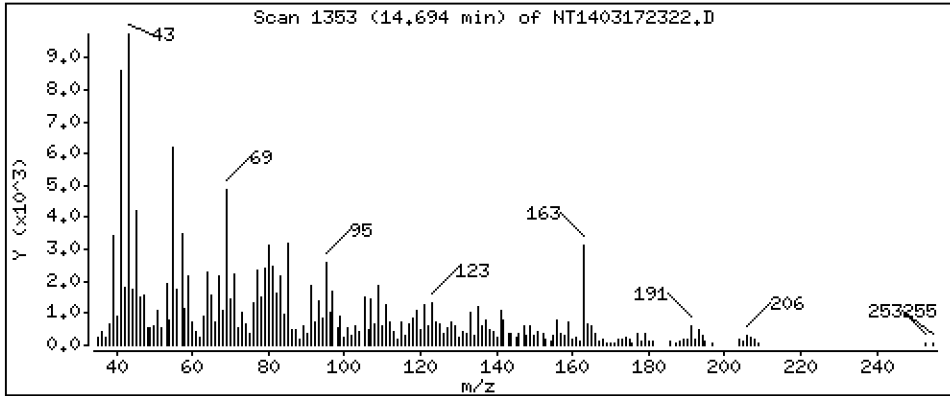
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.03995 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

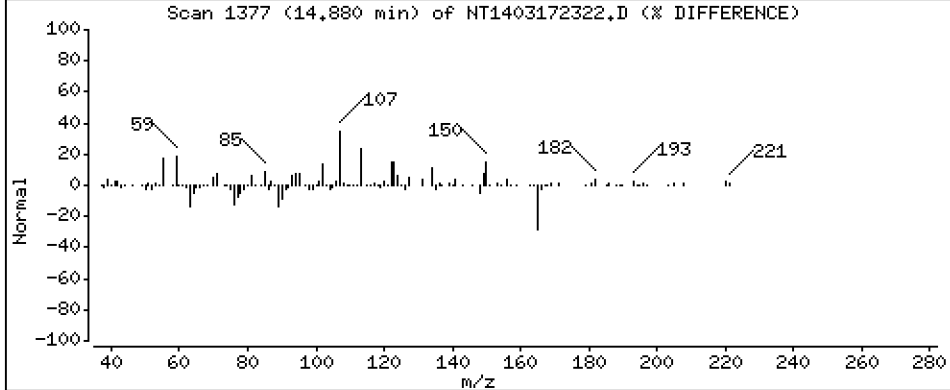
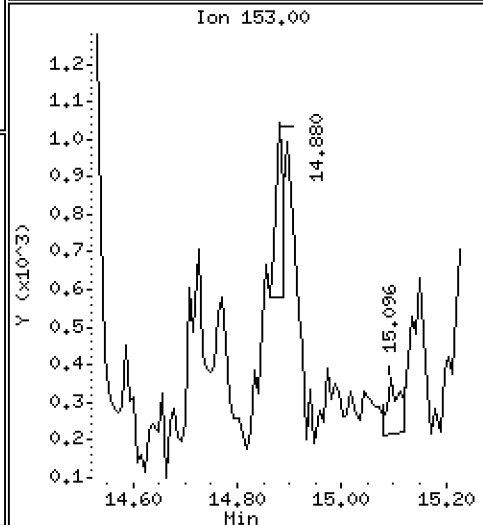
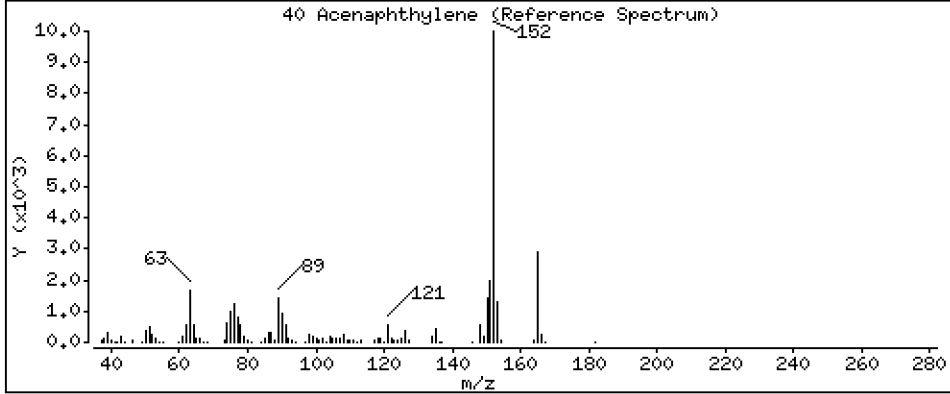
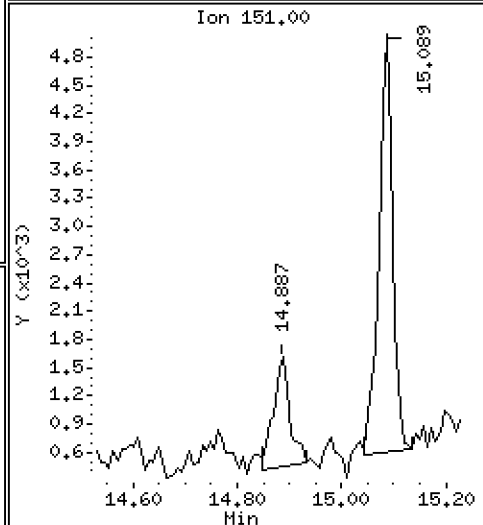
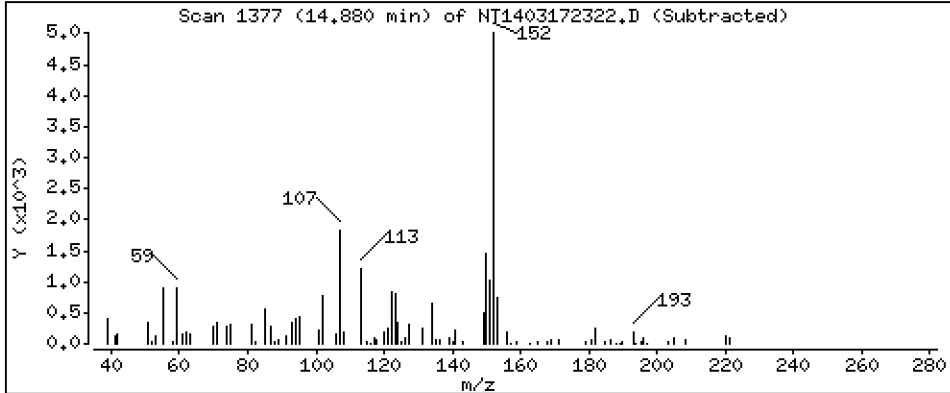
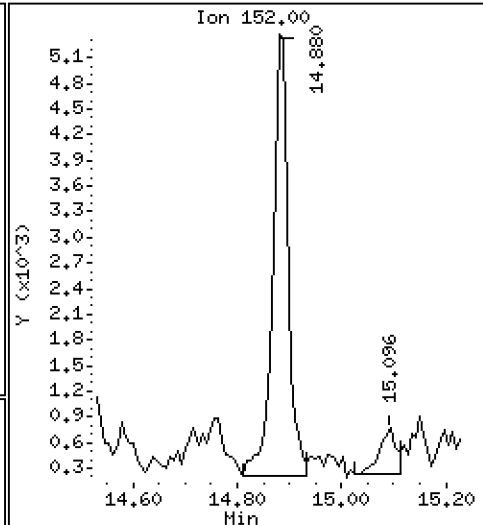
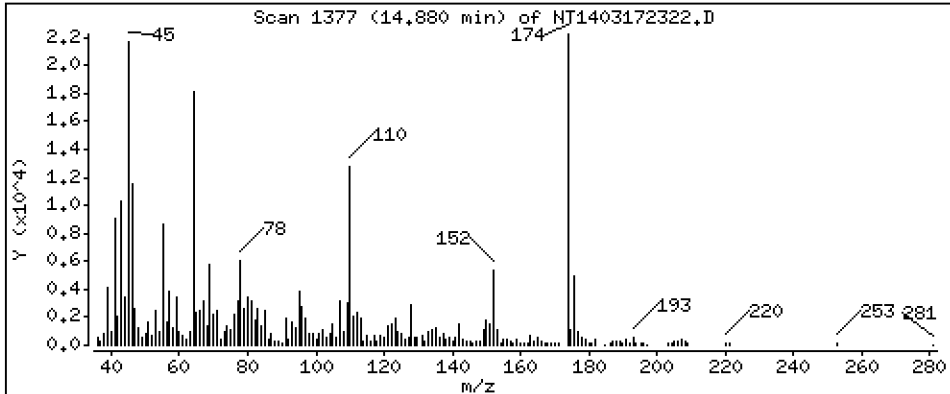
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.04780 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

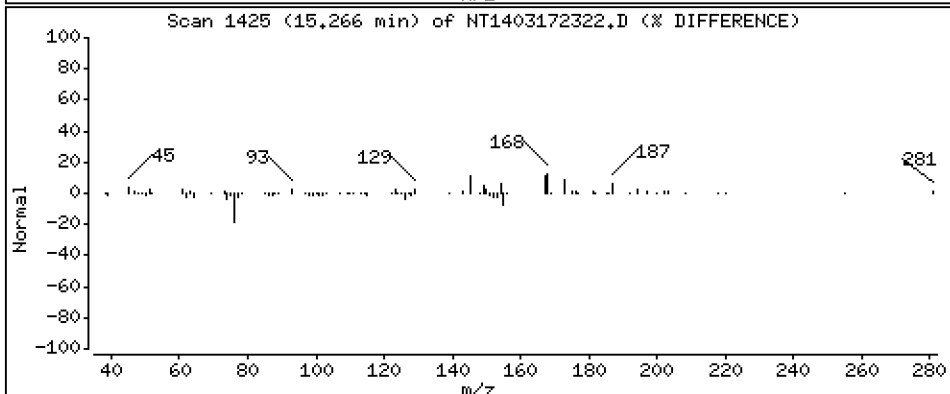
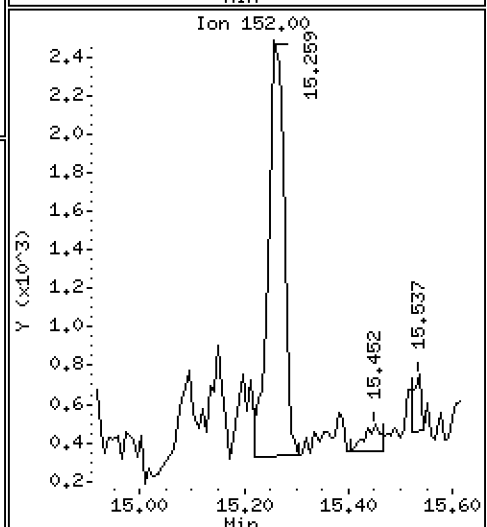
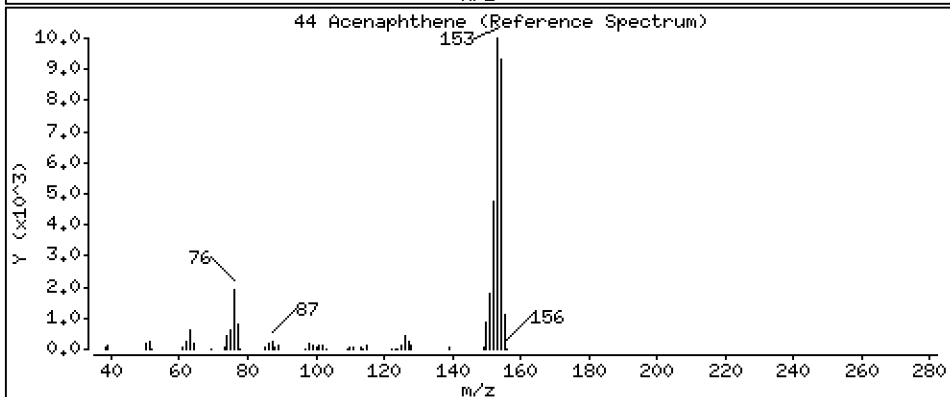
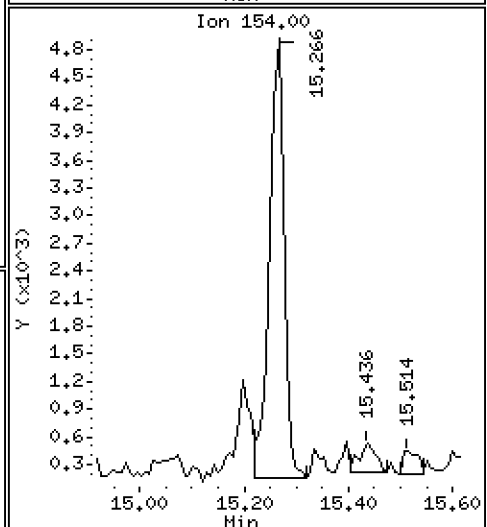
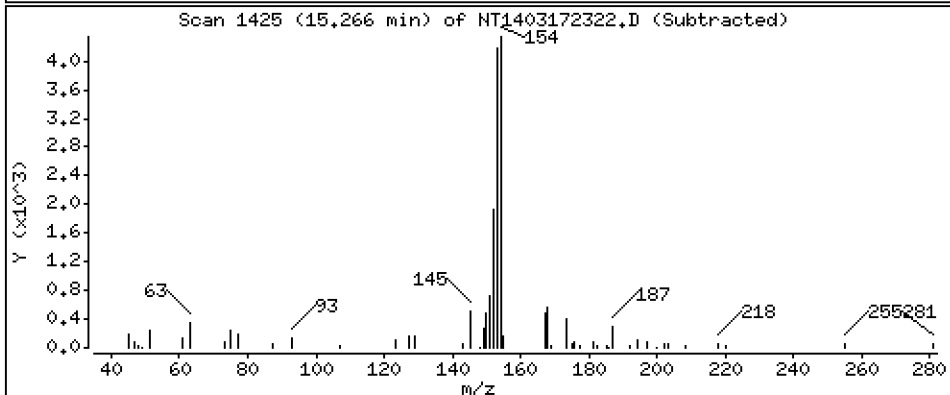
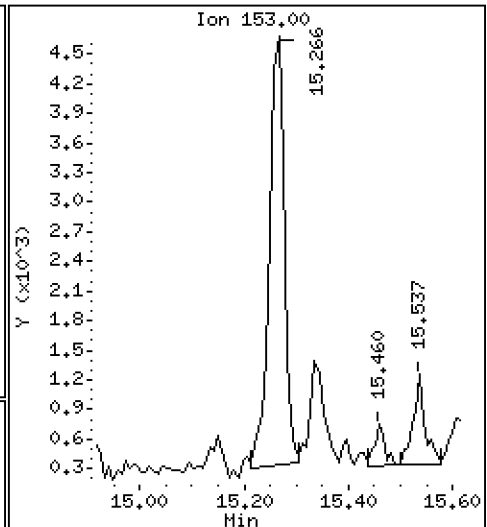
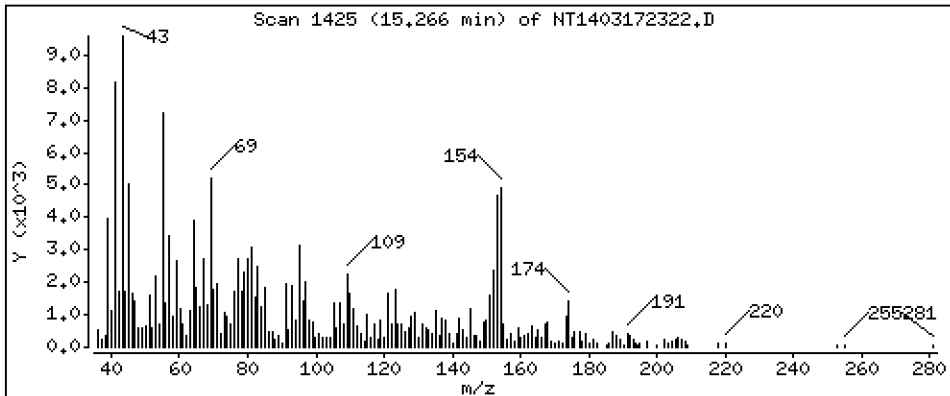
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.06611 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

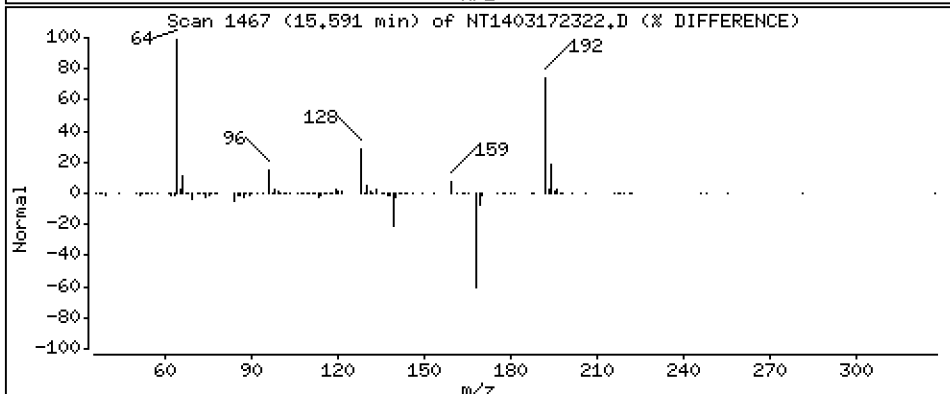
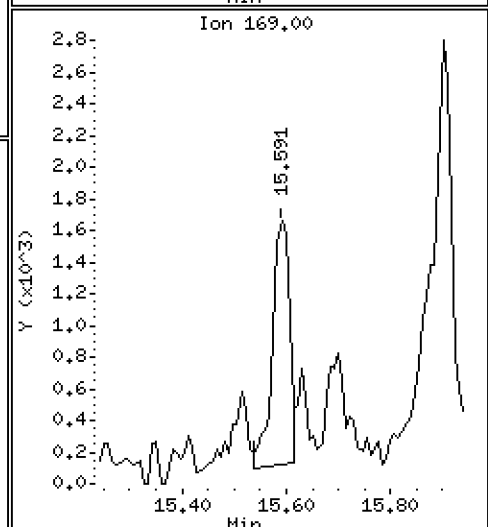
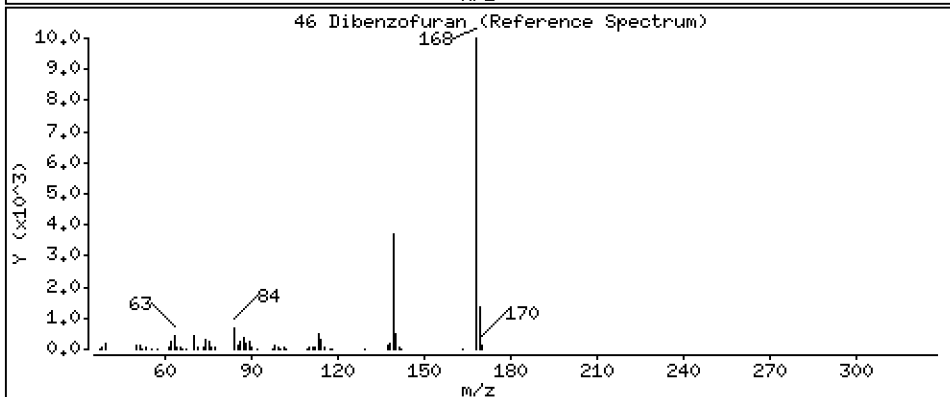
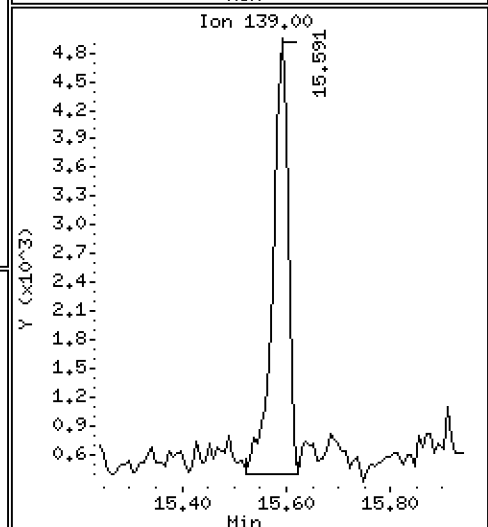
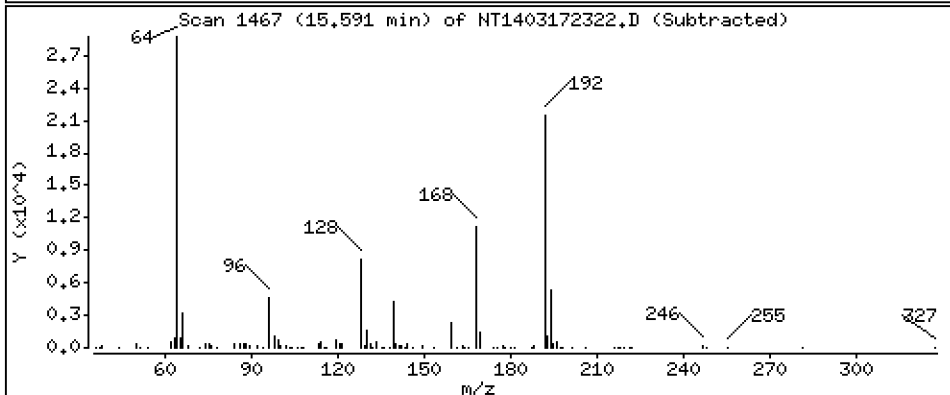
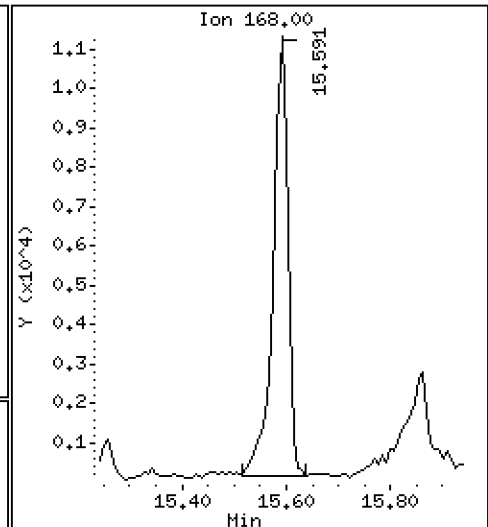
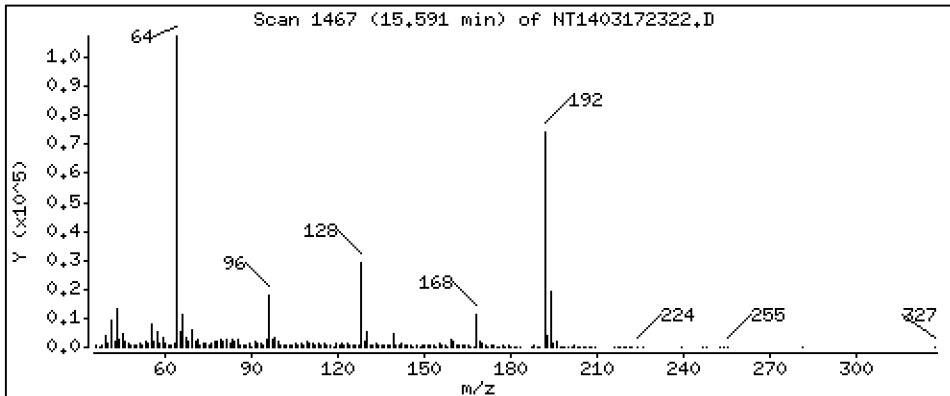
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1181 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

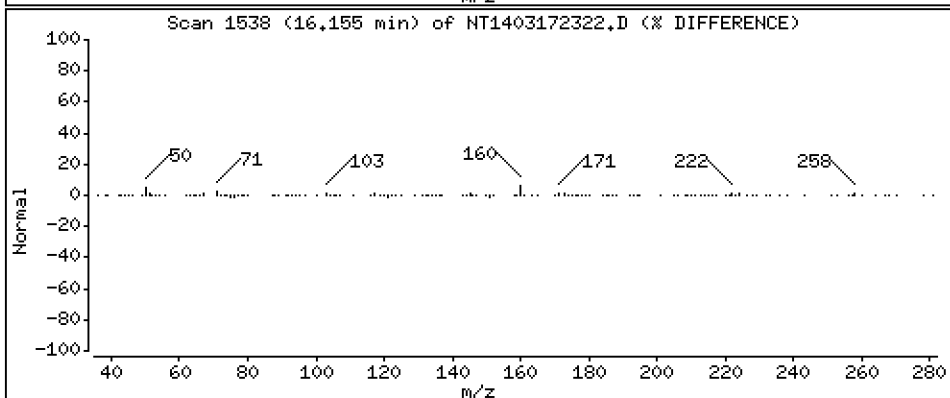
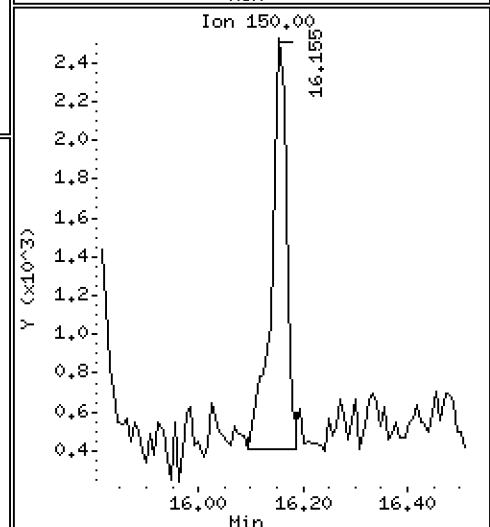
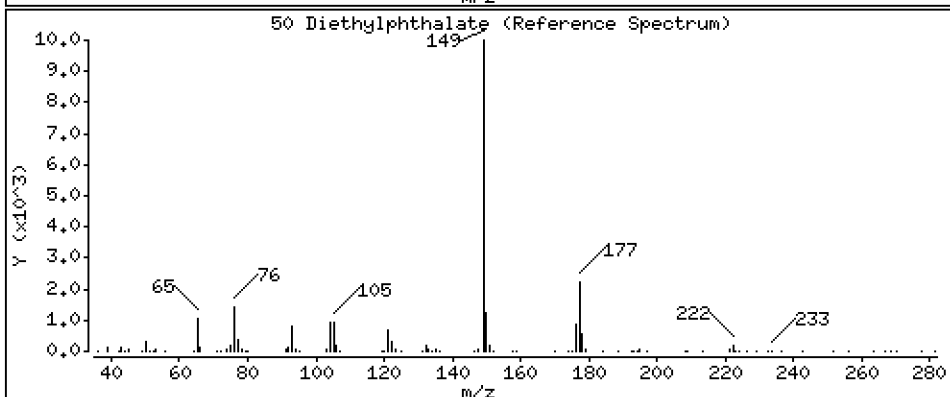
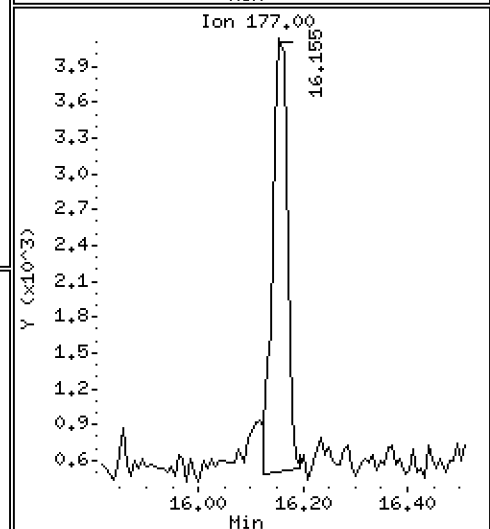
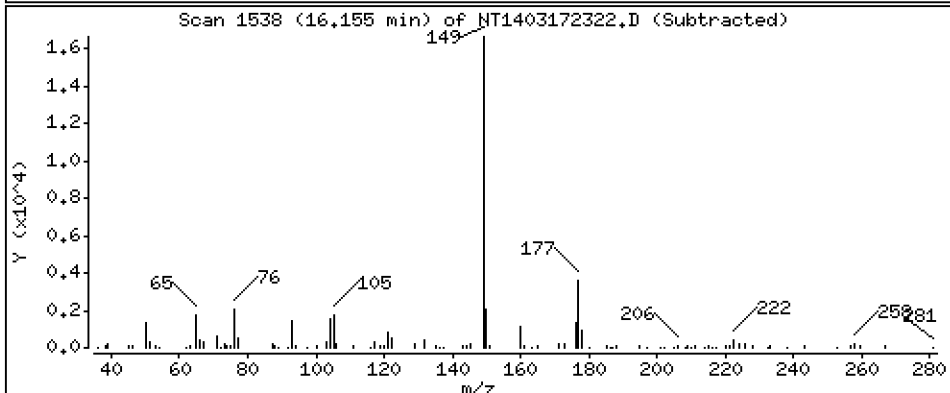
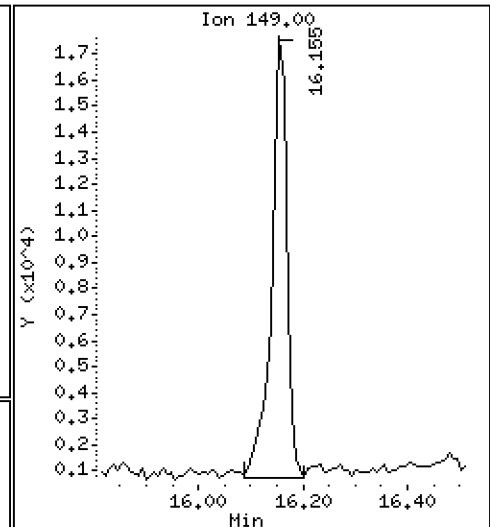
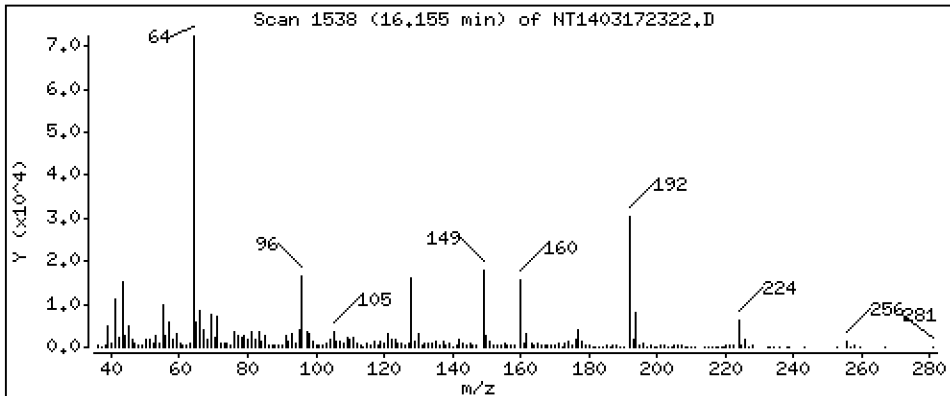
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.2327 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

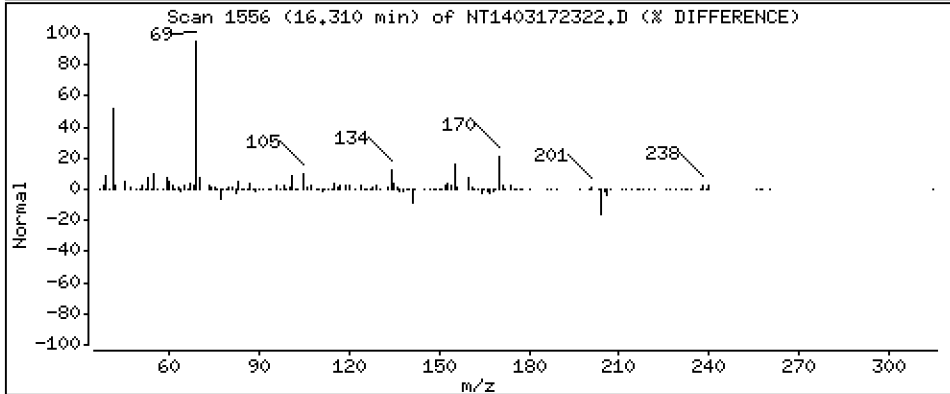
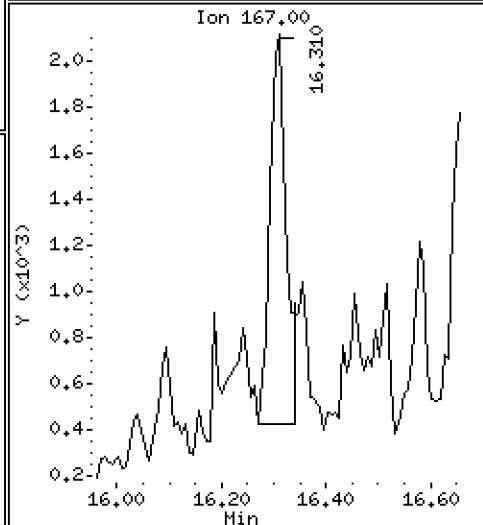
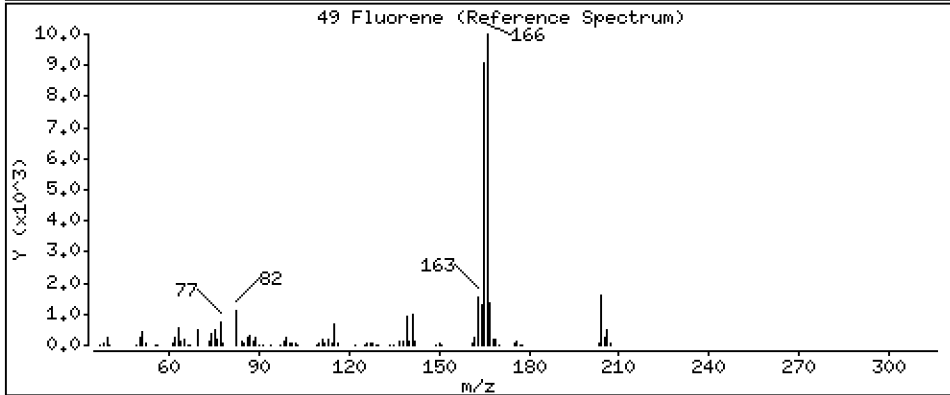
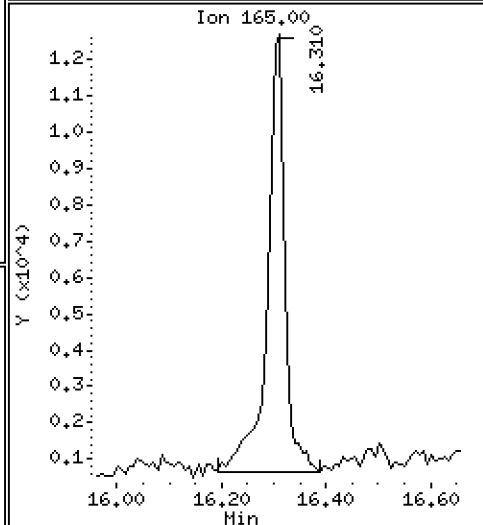
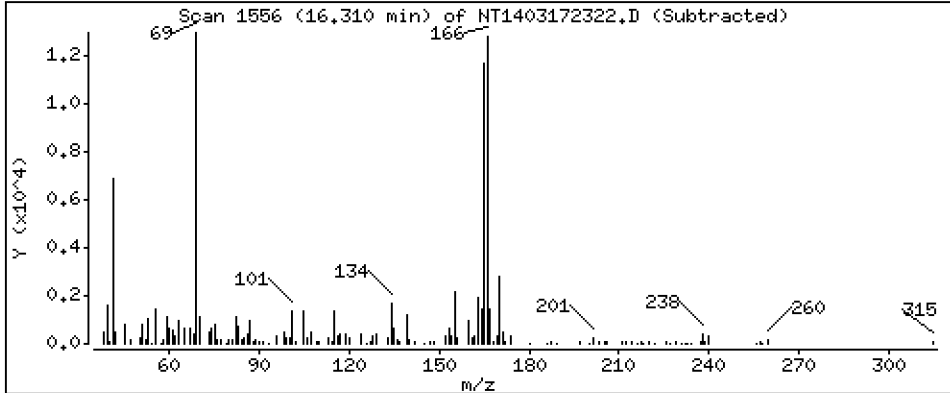
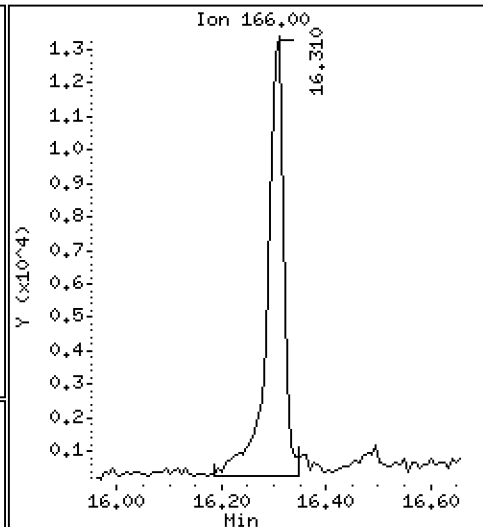
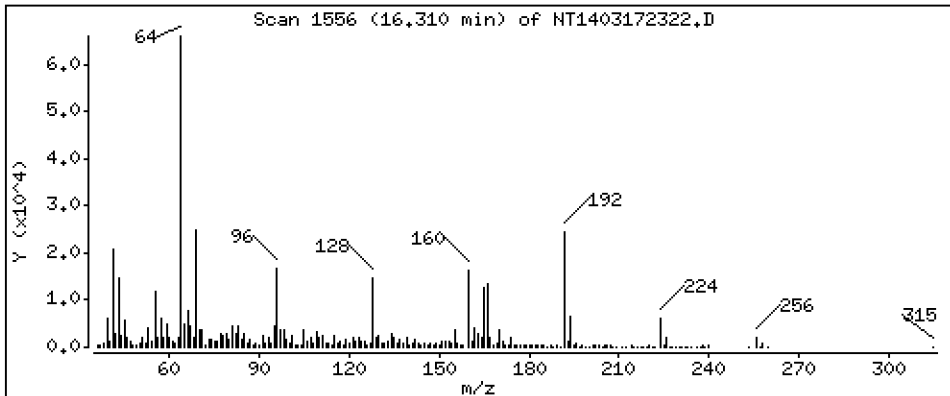
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1785 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

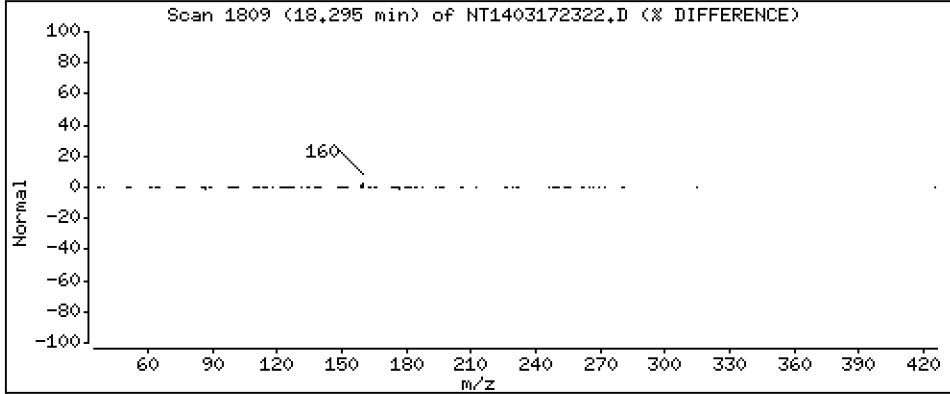
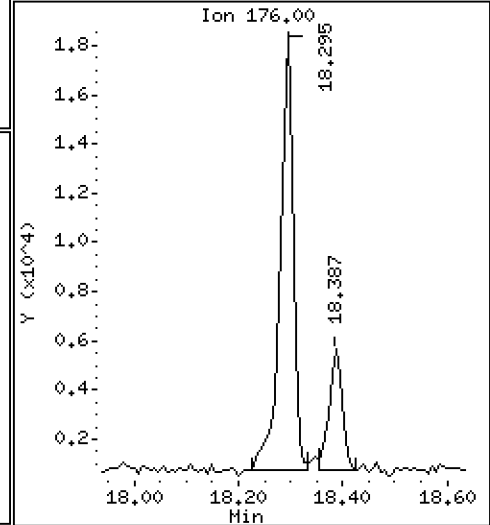
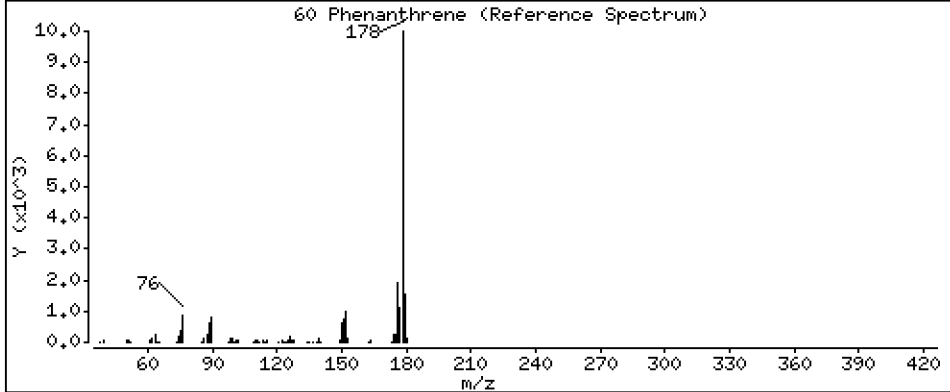
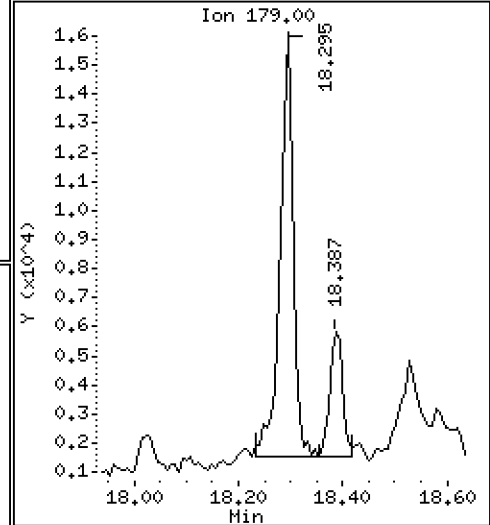
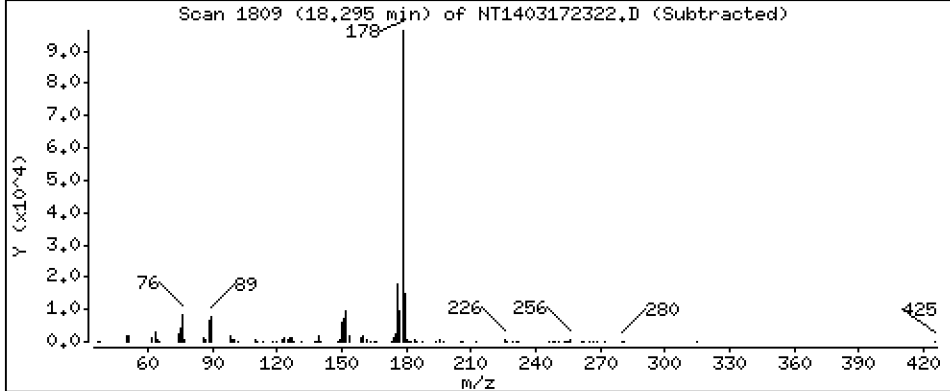
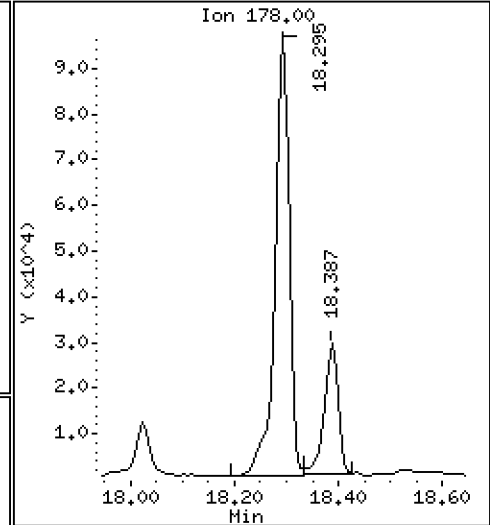
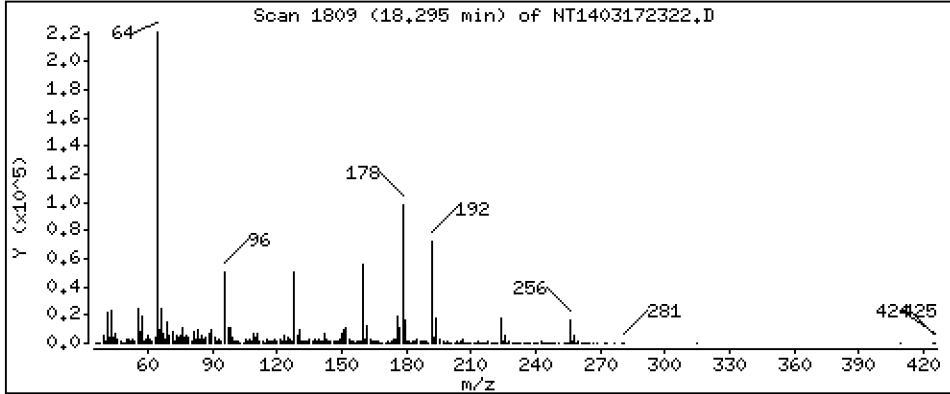
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,8527 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

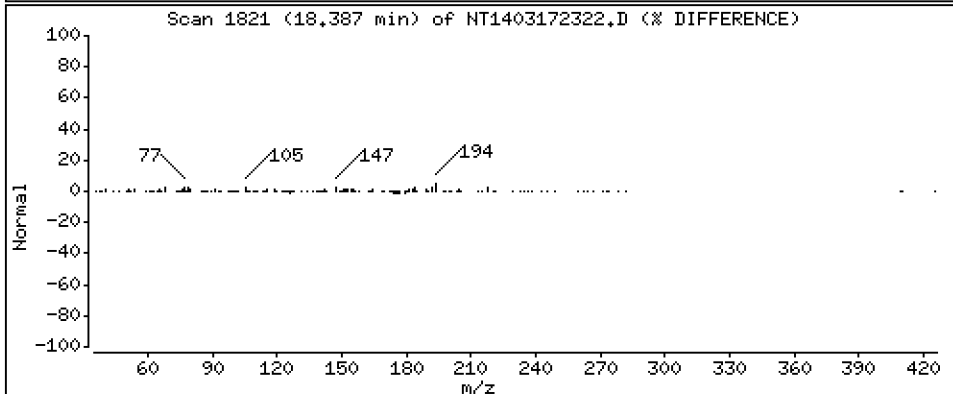
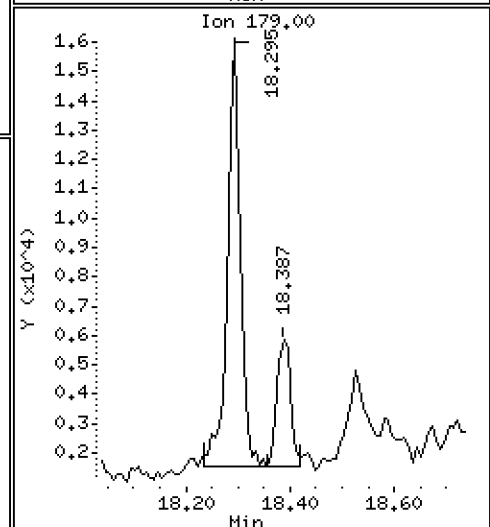
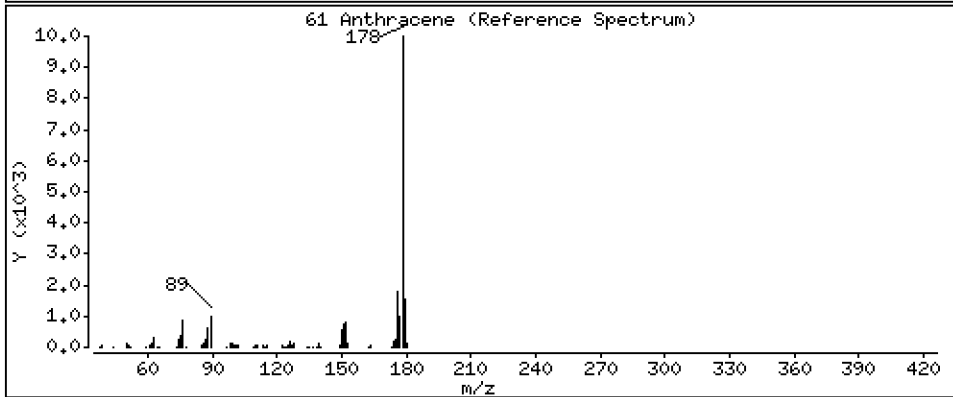
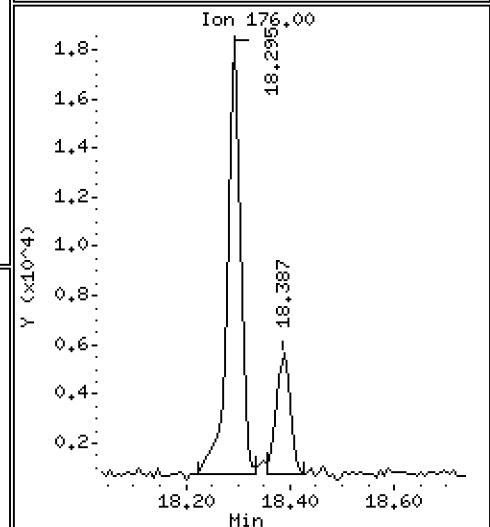
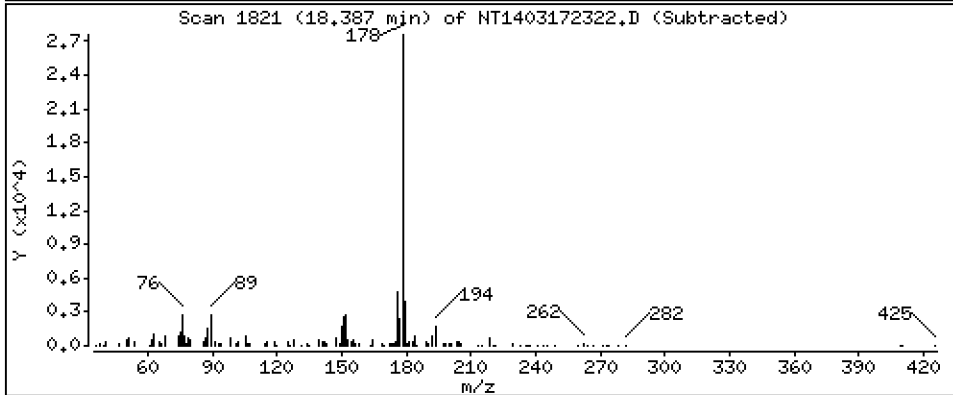
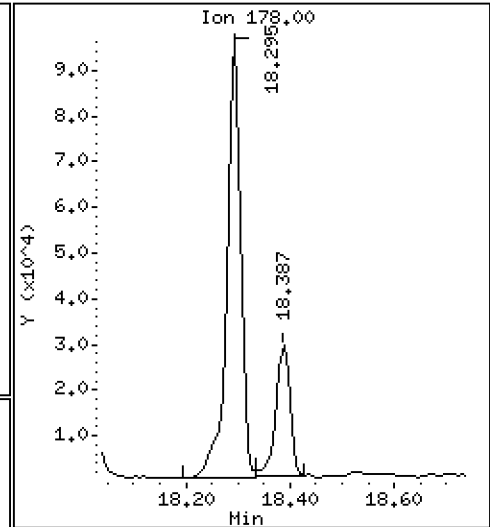
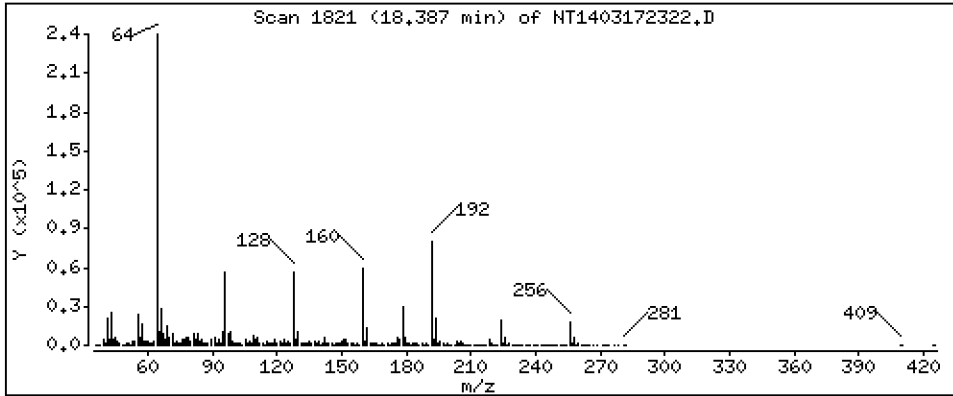
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,2659 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

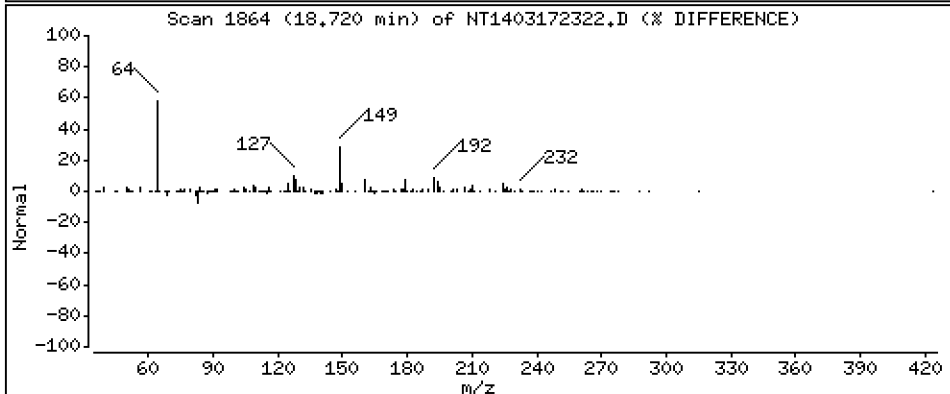
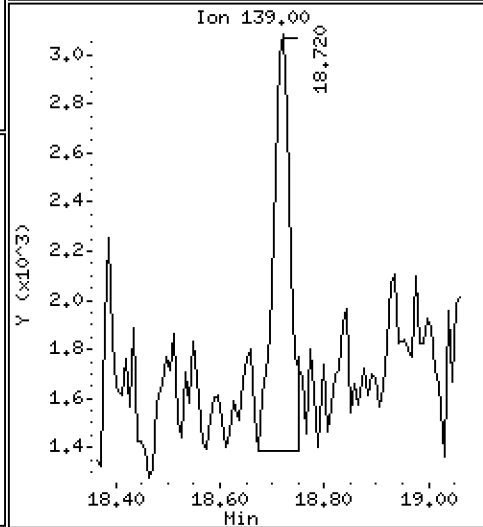
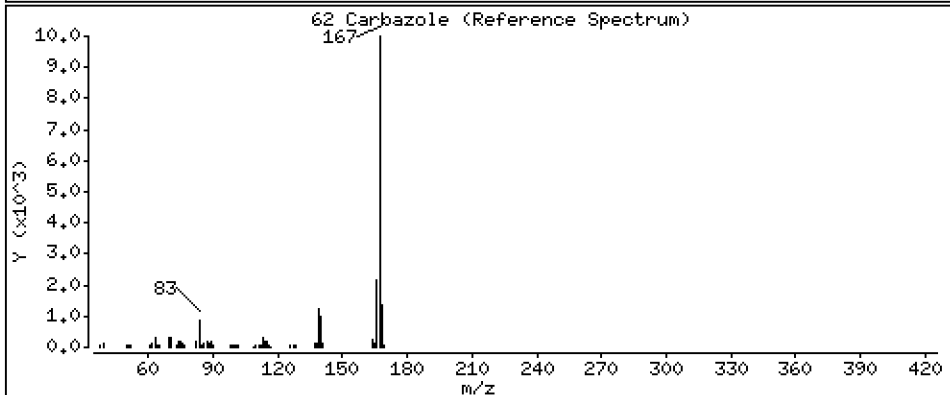
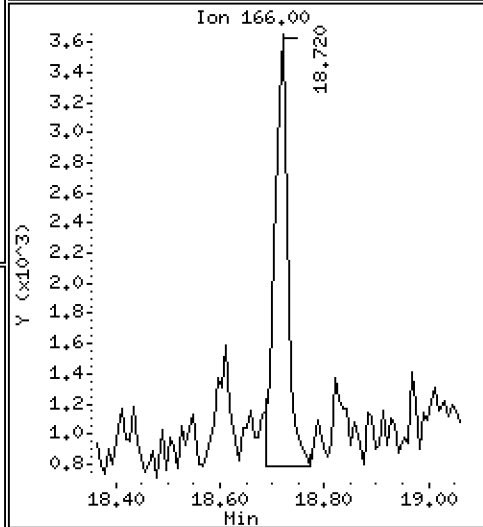
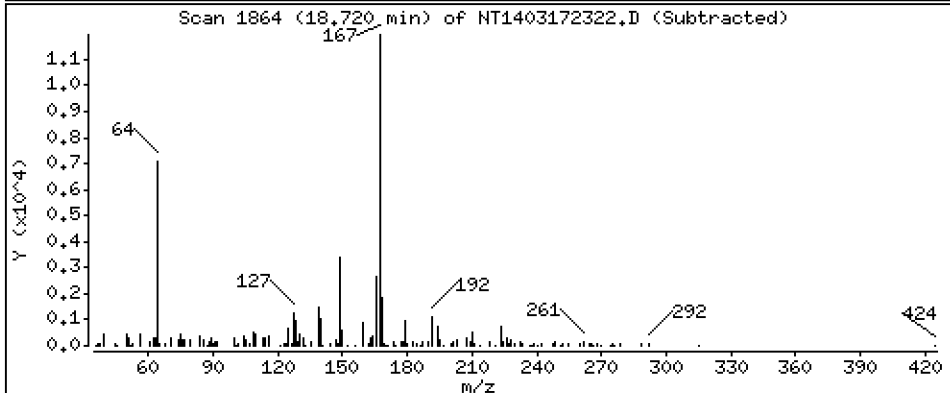
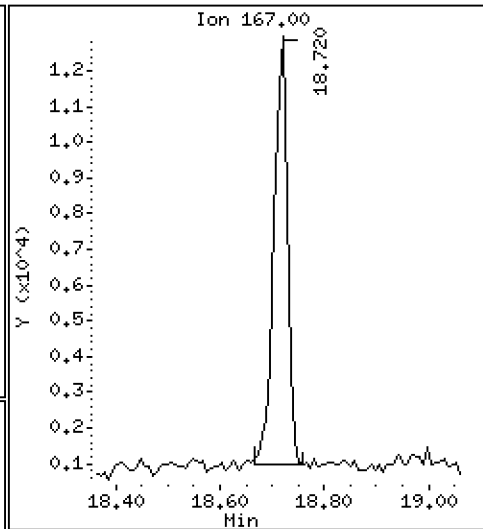
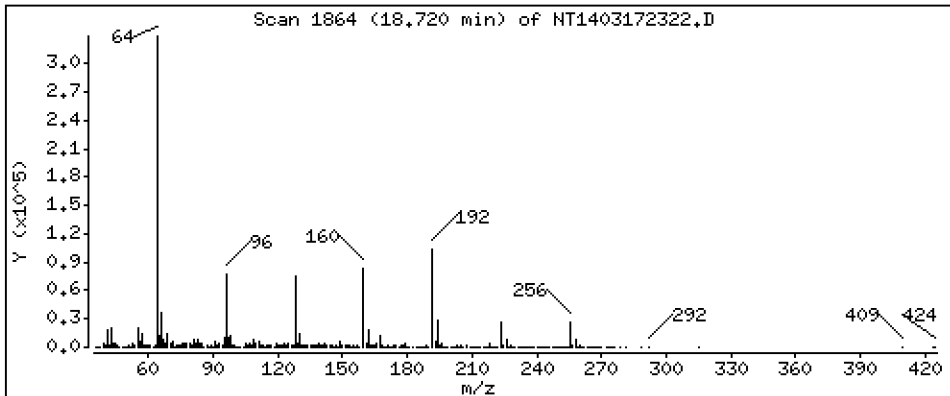
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1199 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

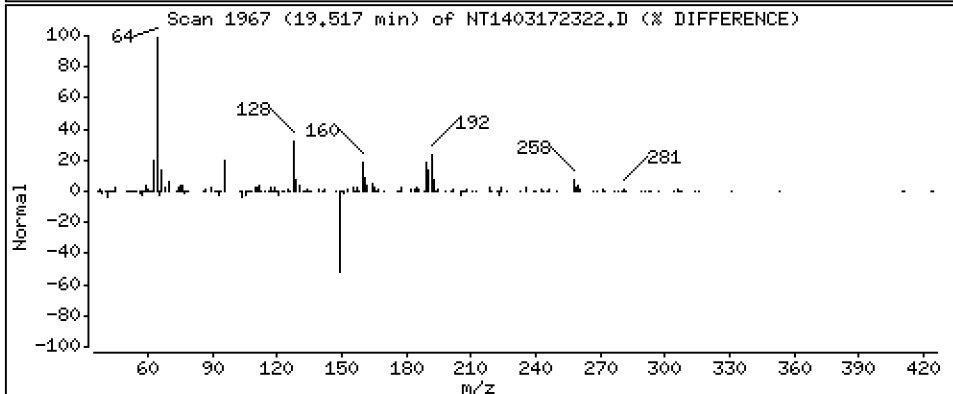
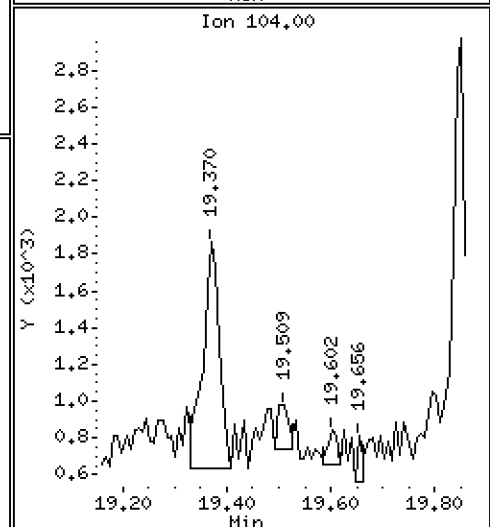
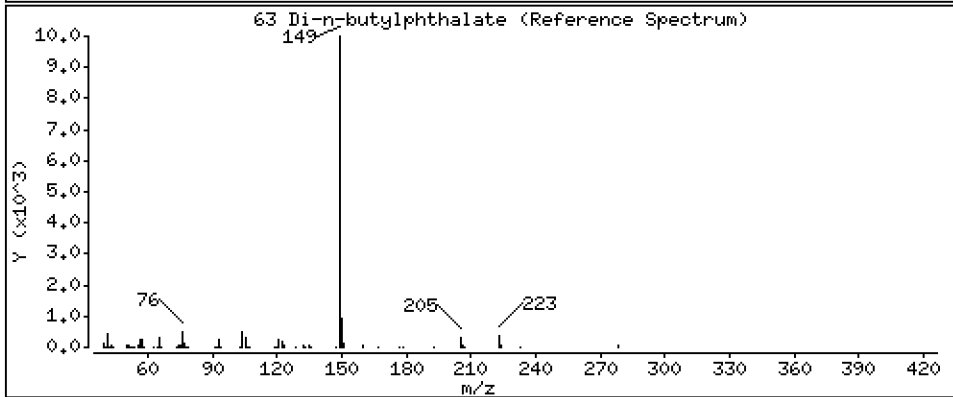
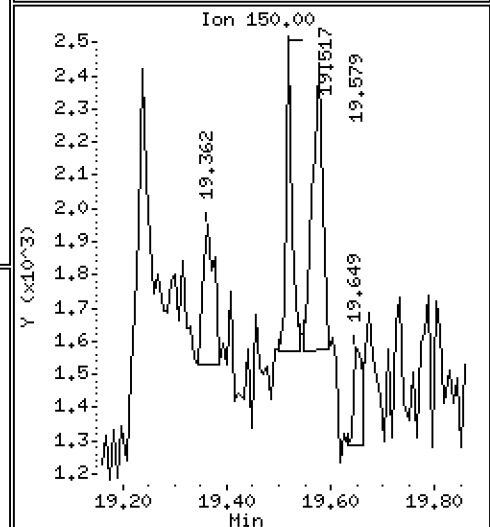
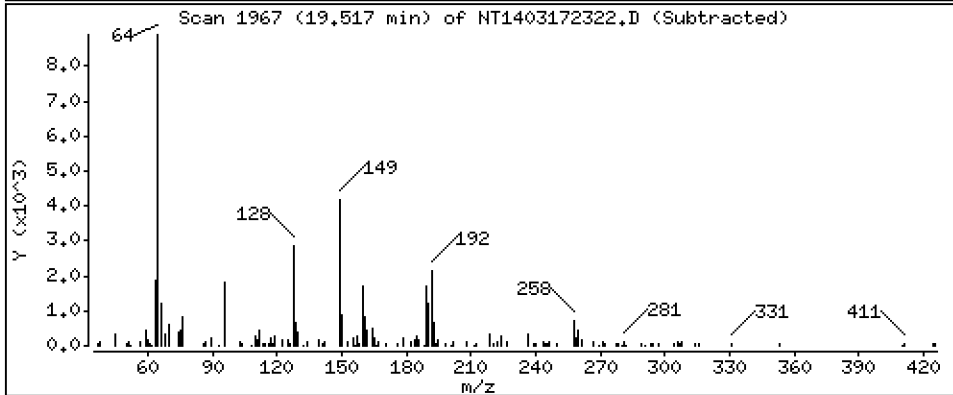
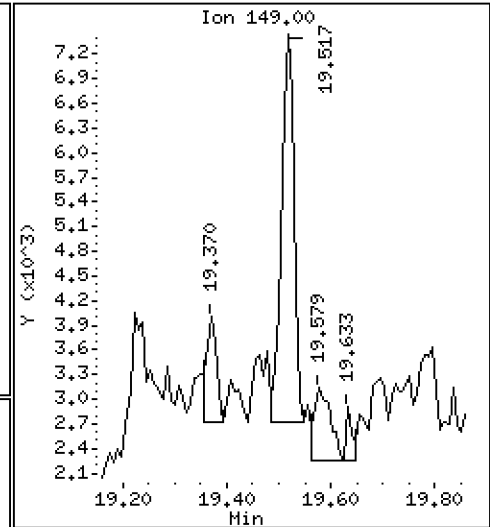
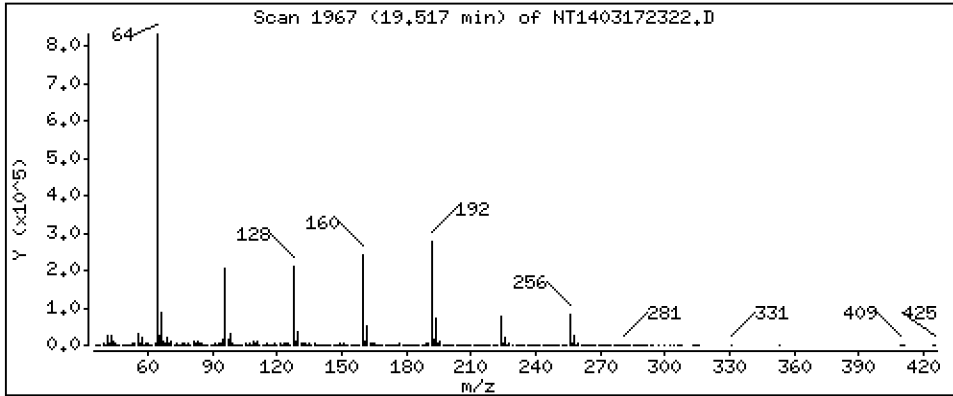
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.03477 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

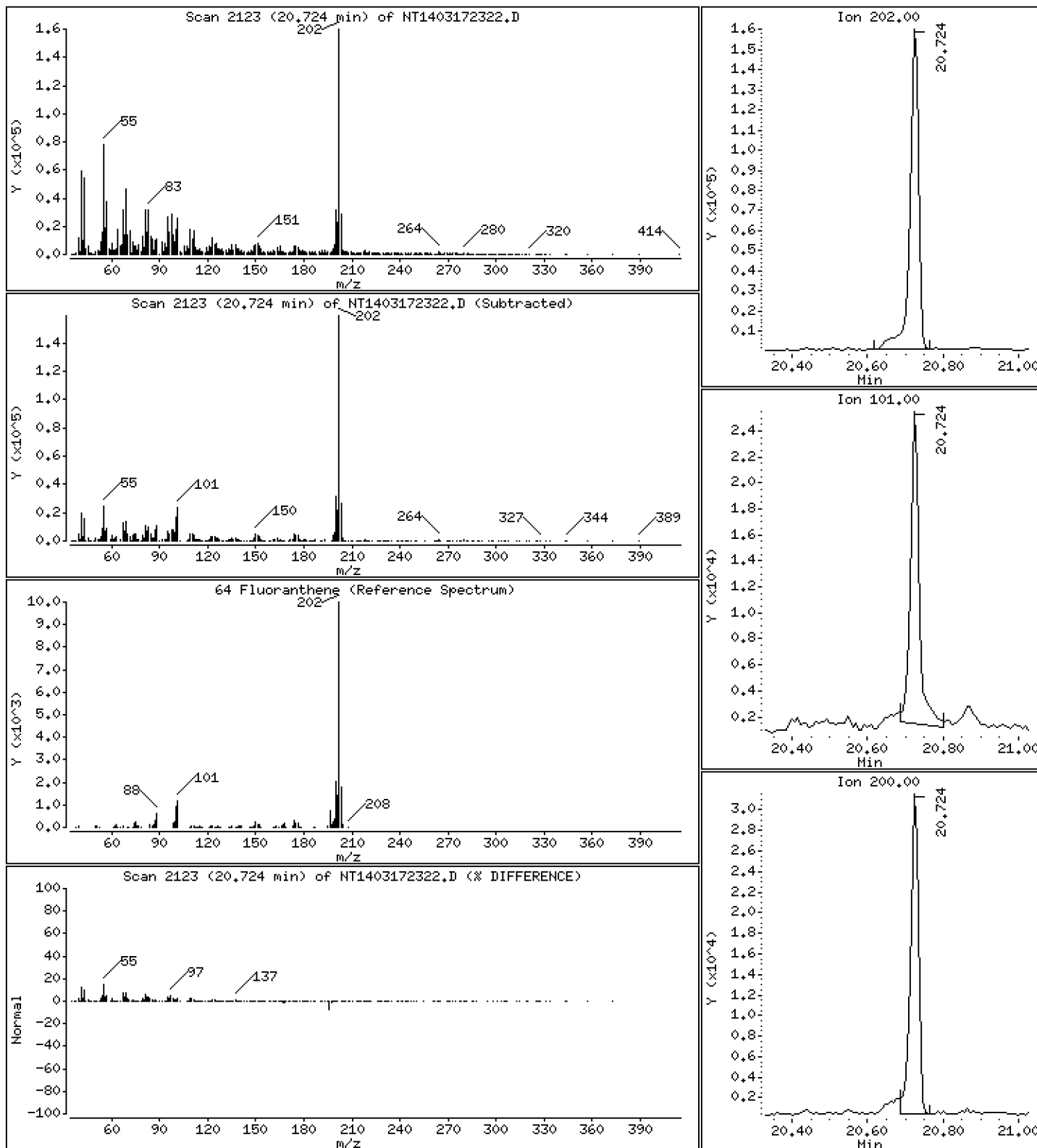
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 2,915 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

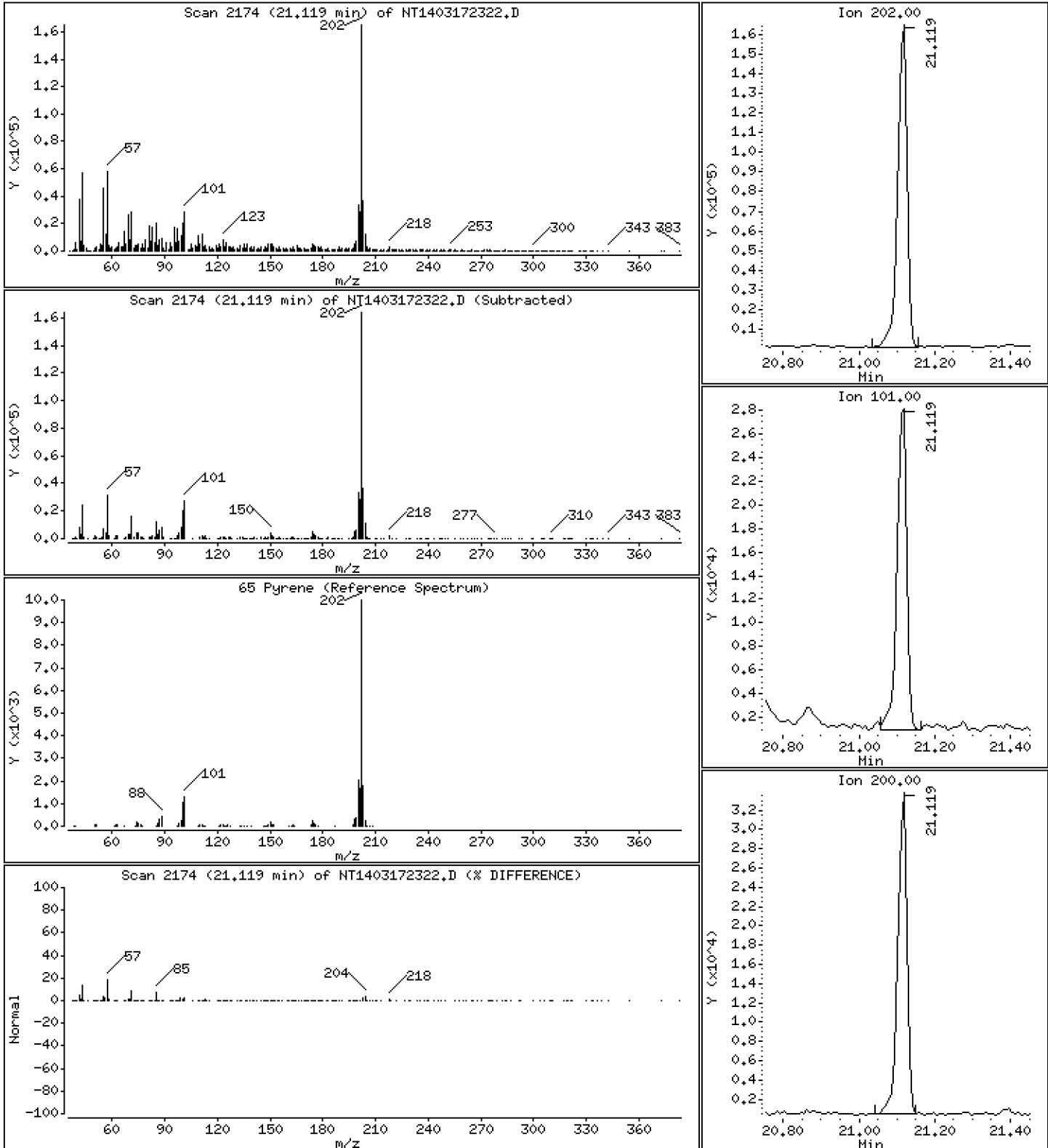
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,864 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

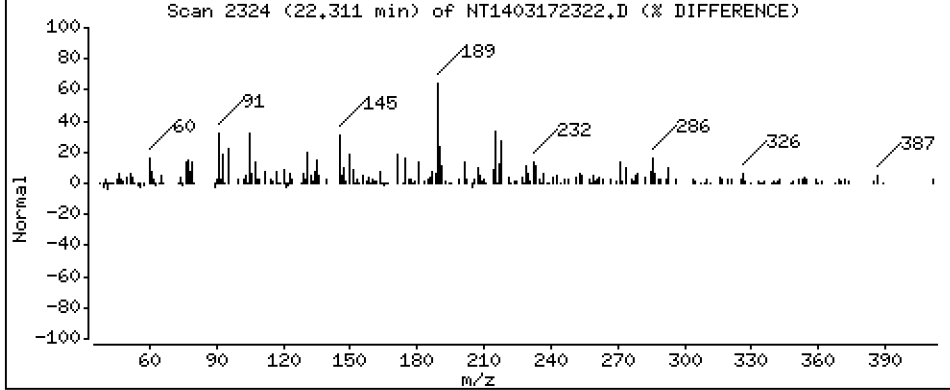
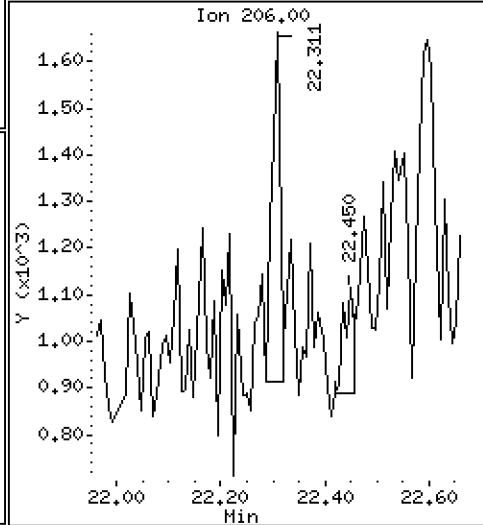
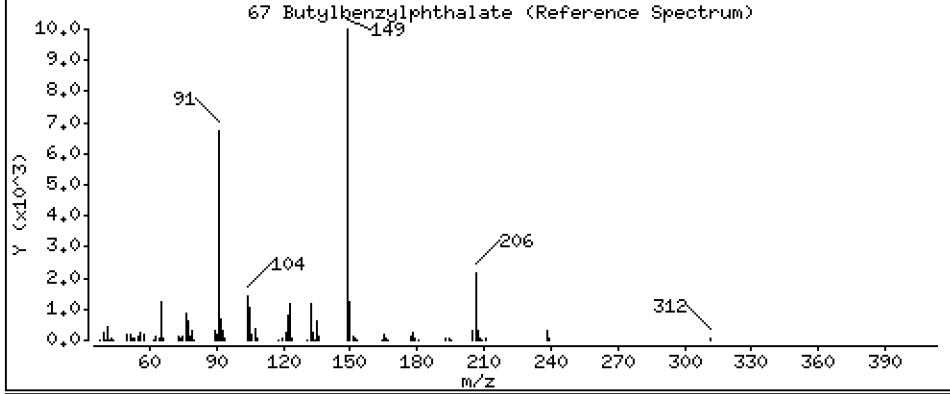
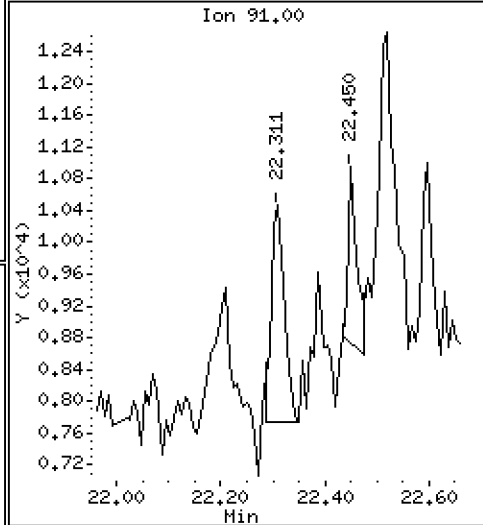
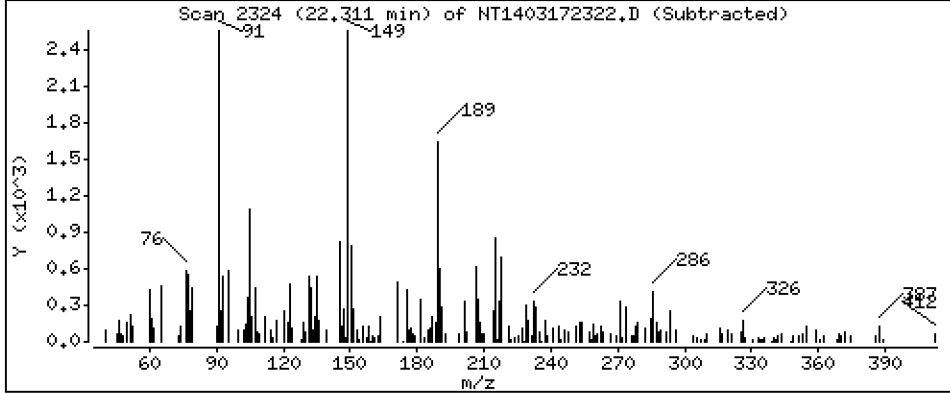
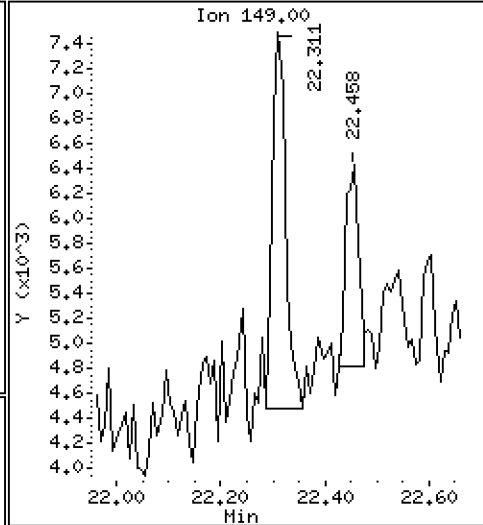
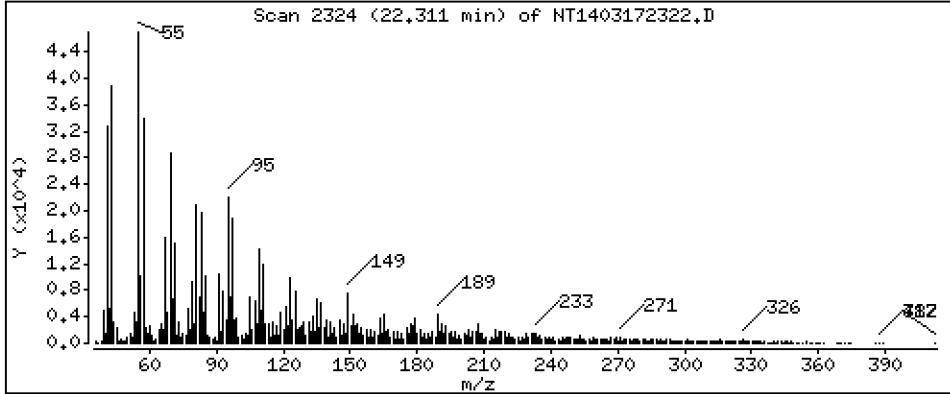
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1218 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

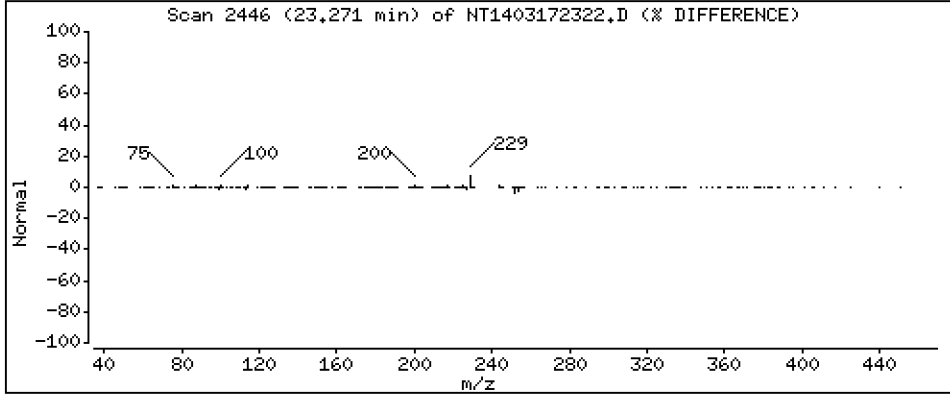
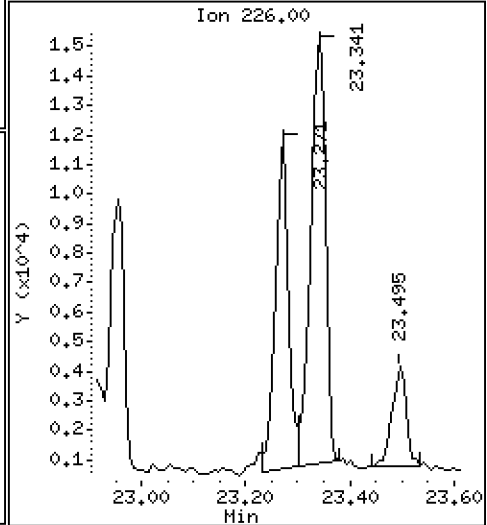
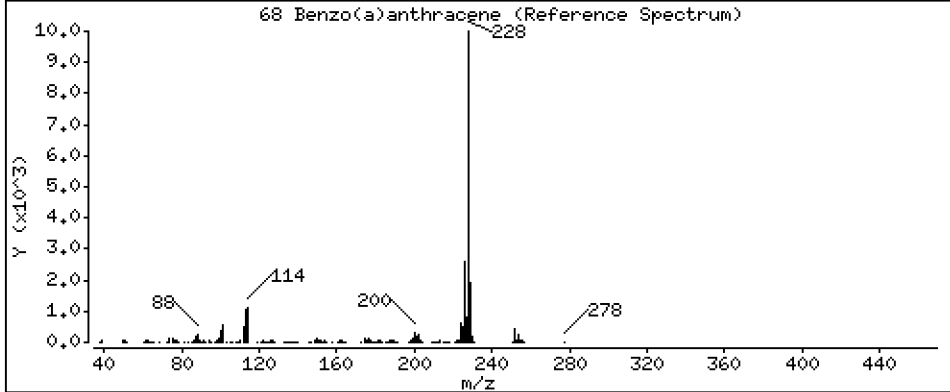
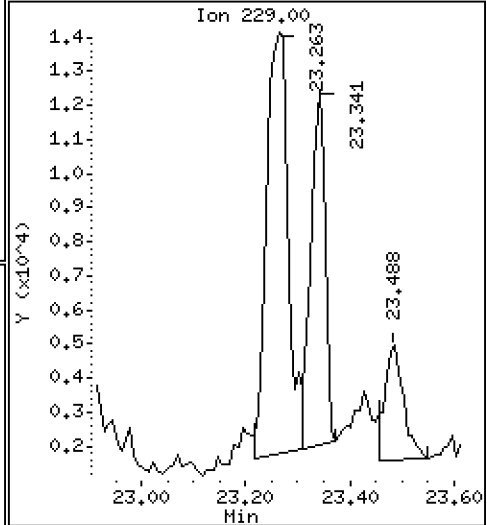
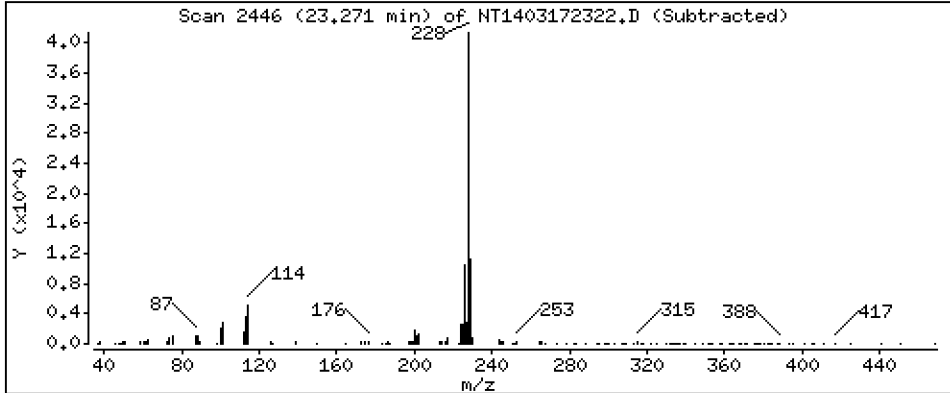
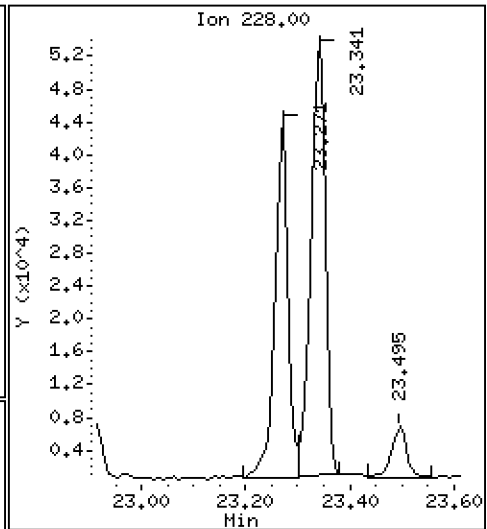
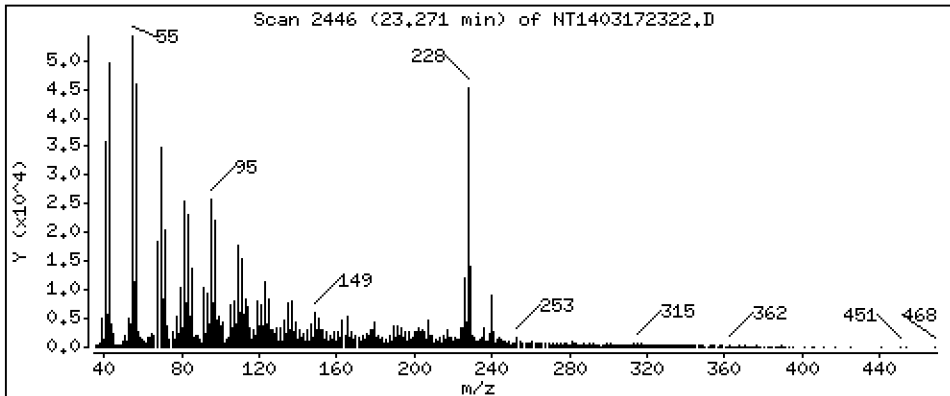
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,8886 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

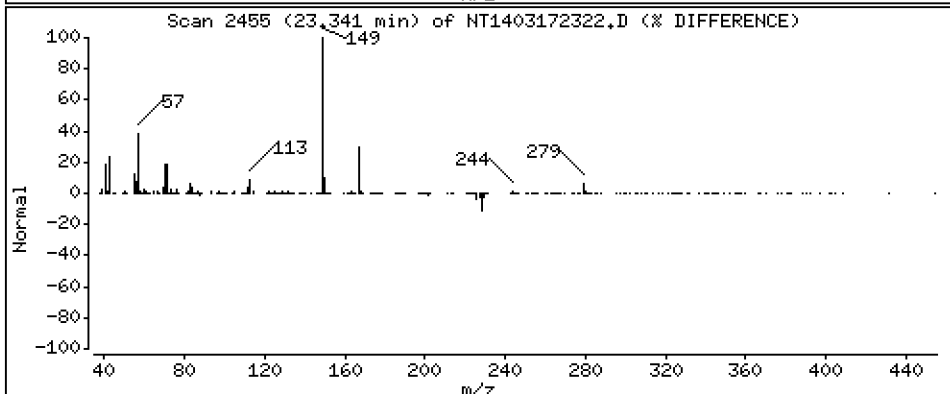
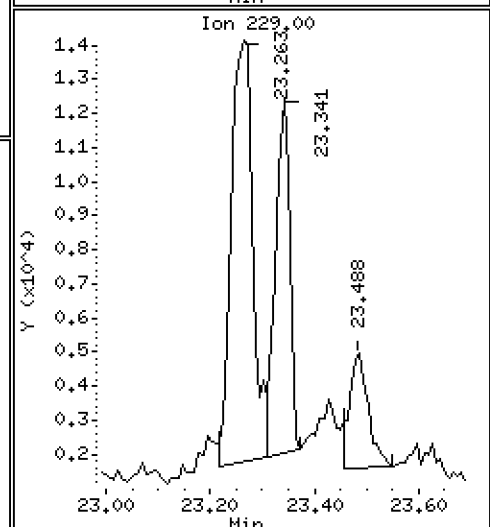
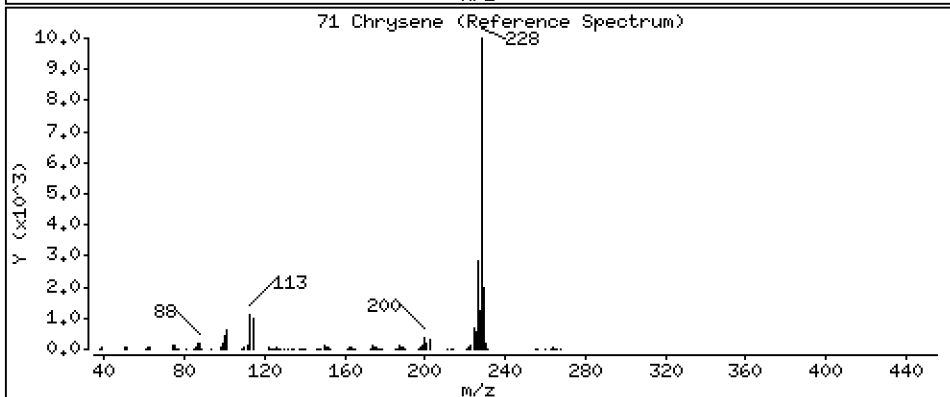
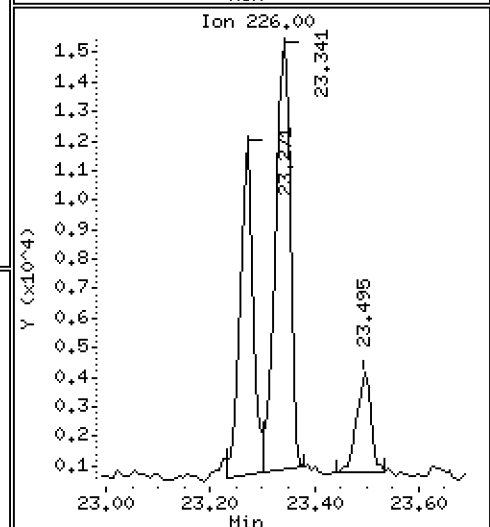
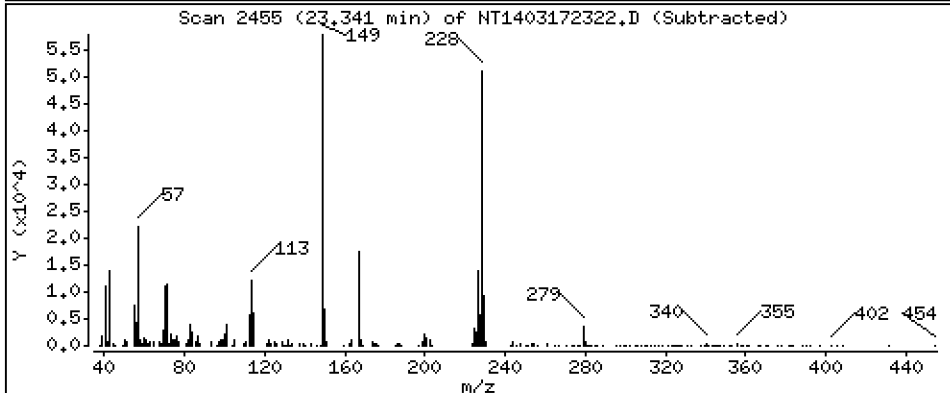
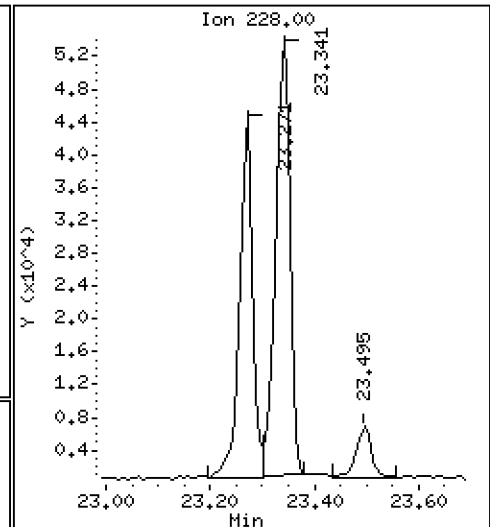
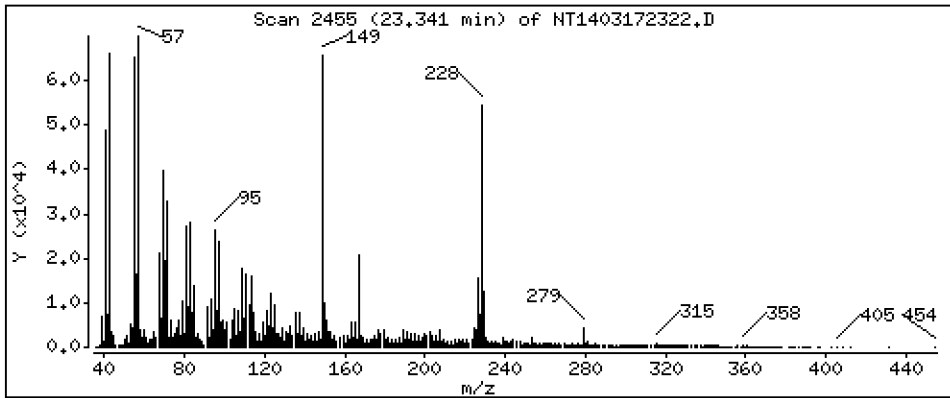
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,284 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

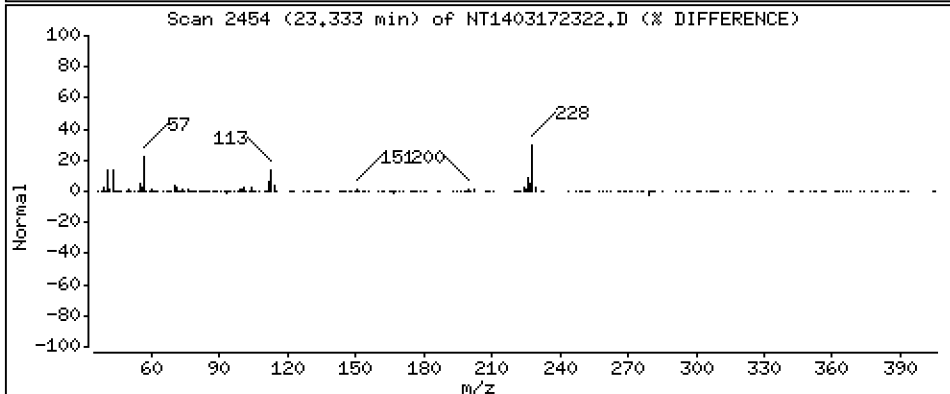
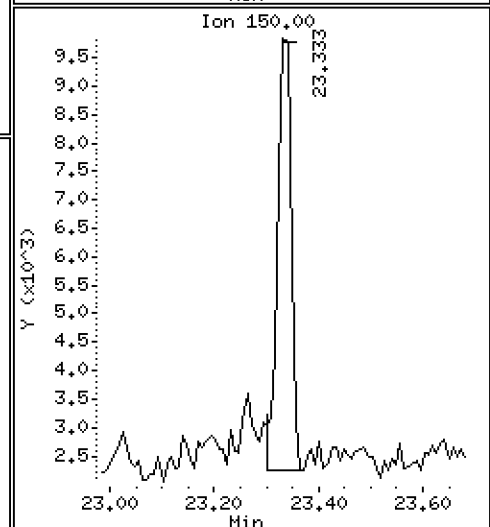
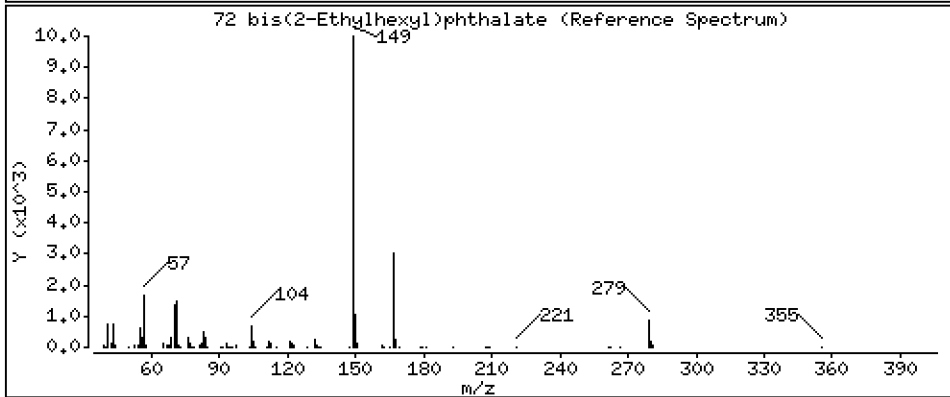
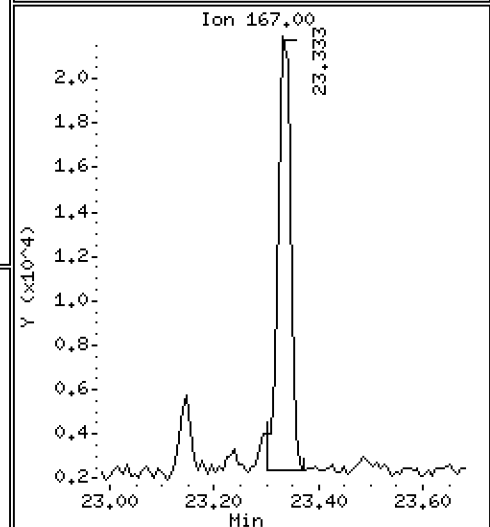
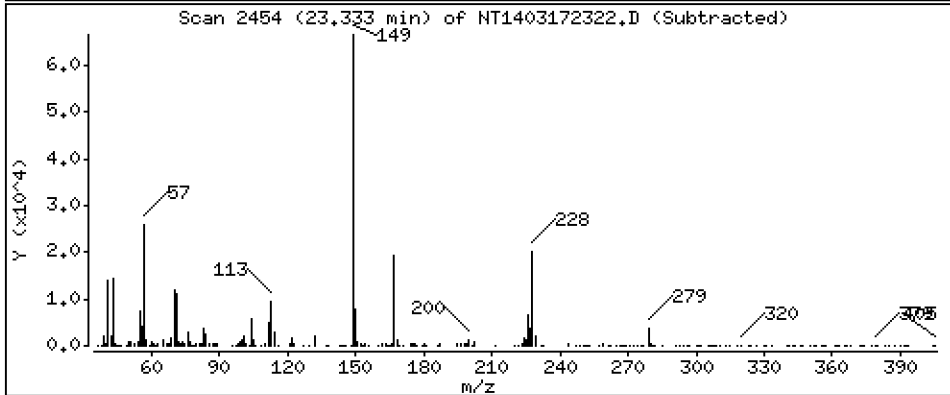
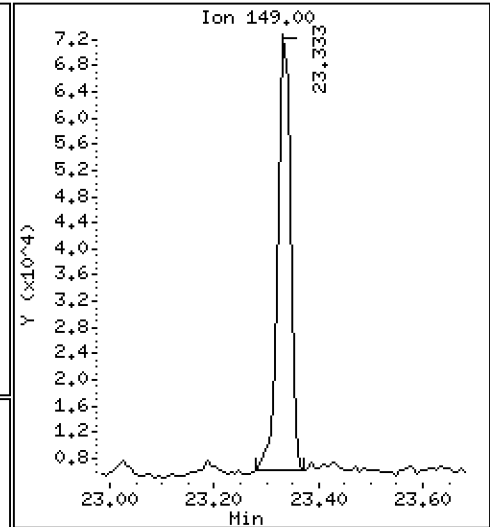
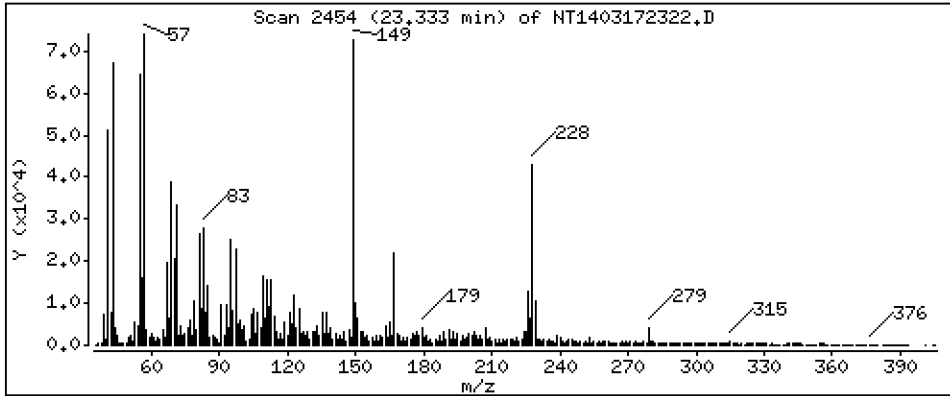
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1.728 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

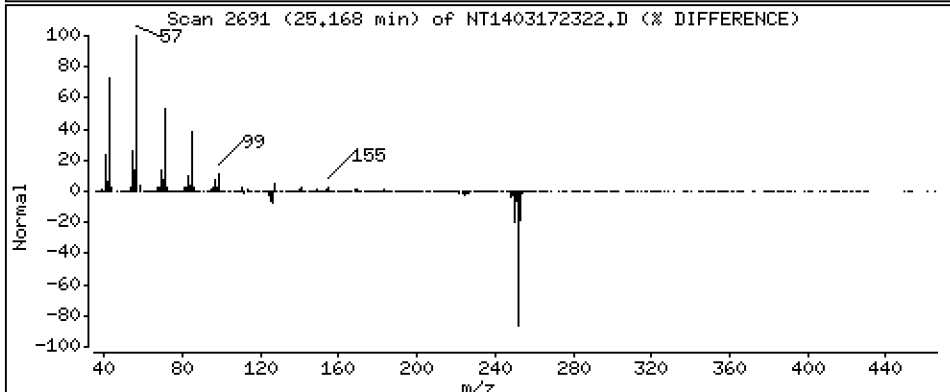
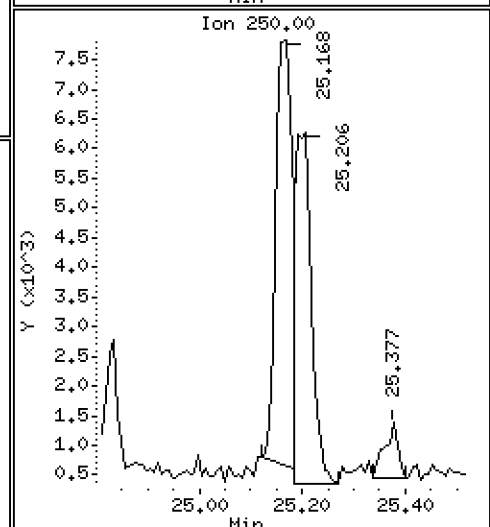
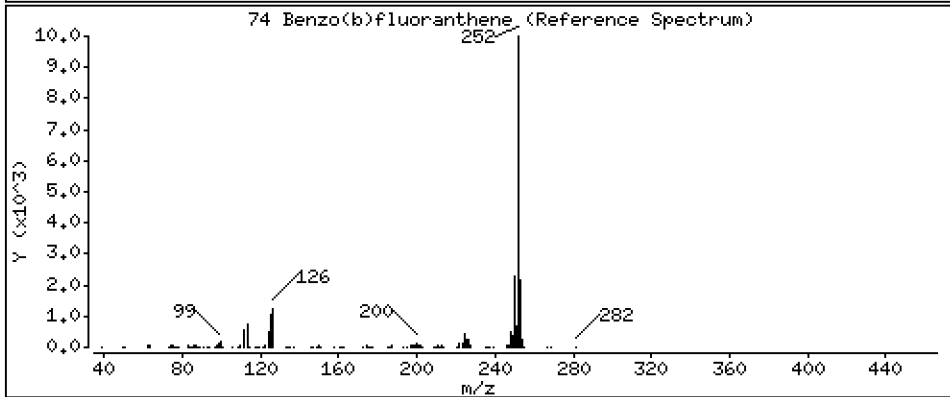
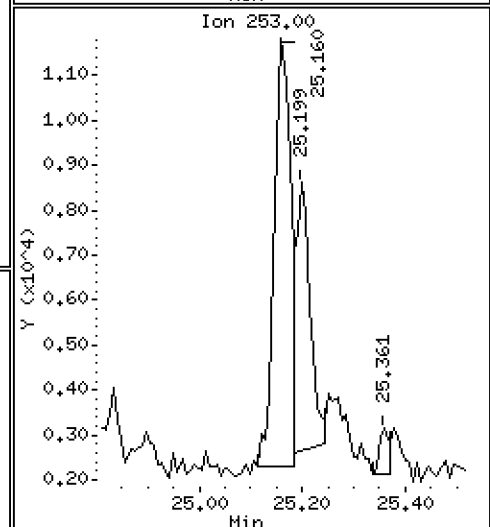
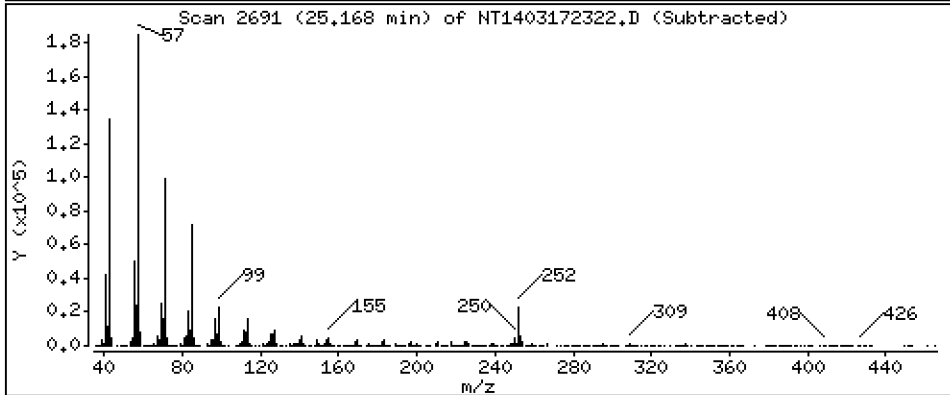
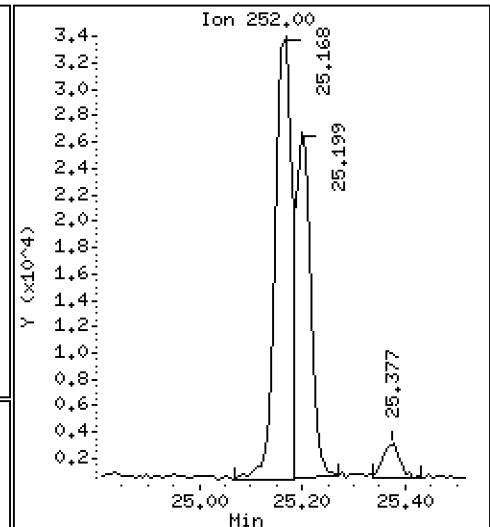
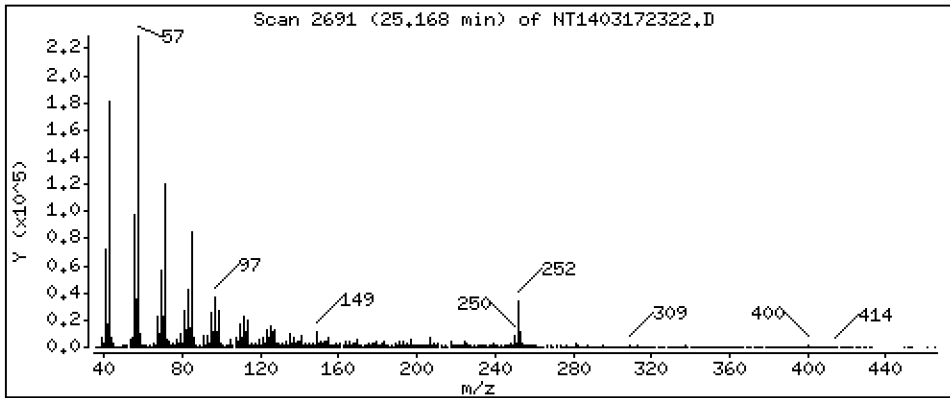
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,335 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

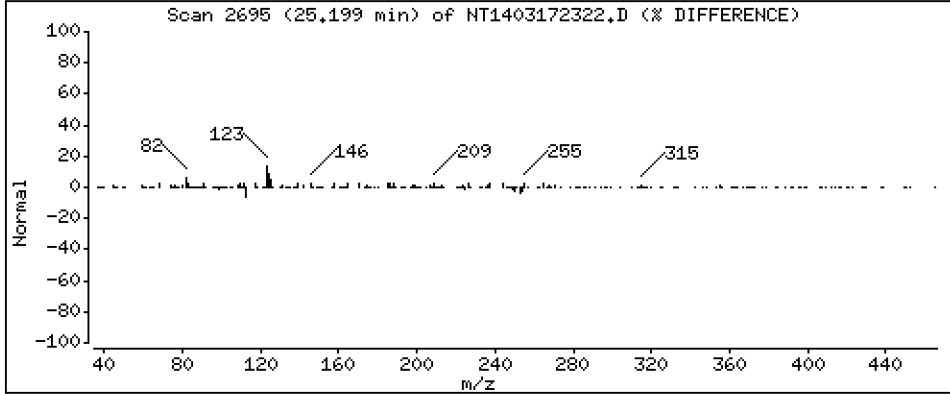
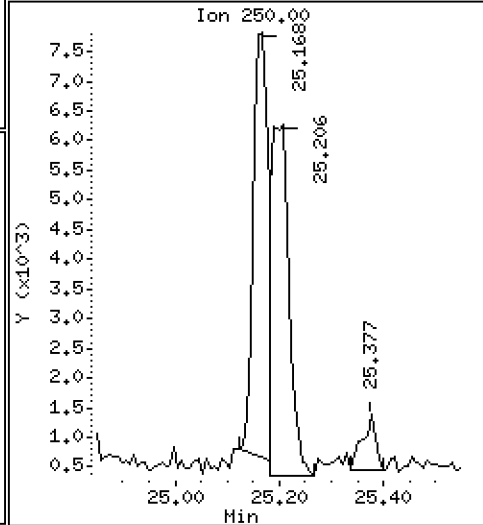
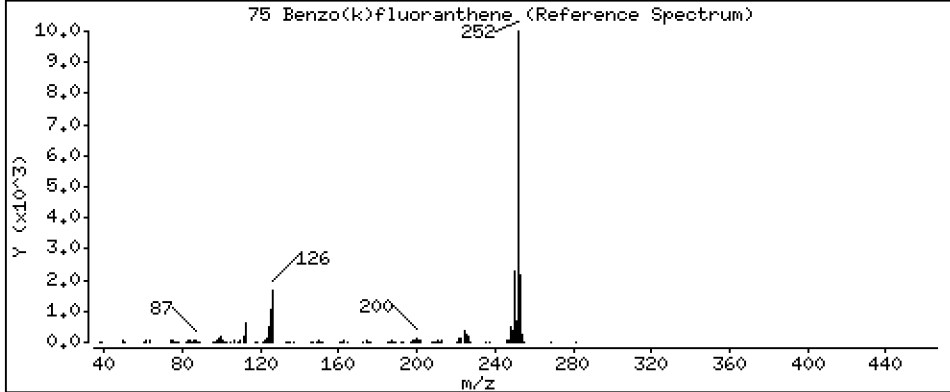
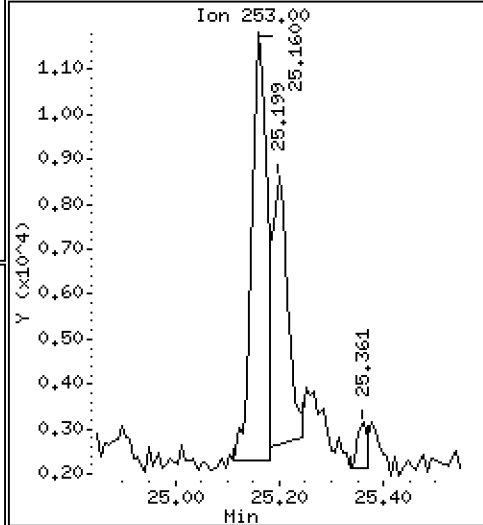
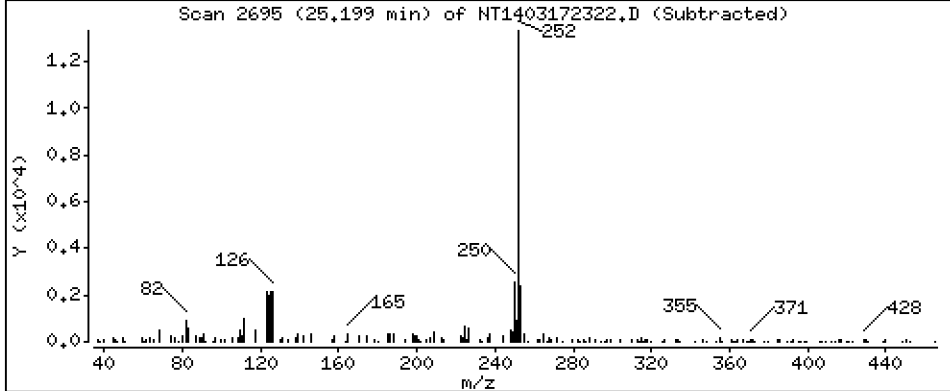
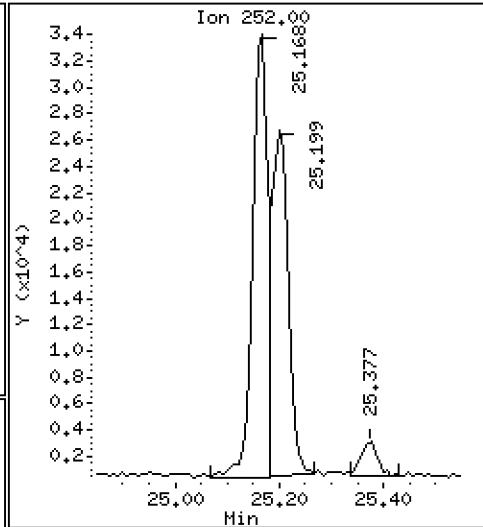
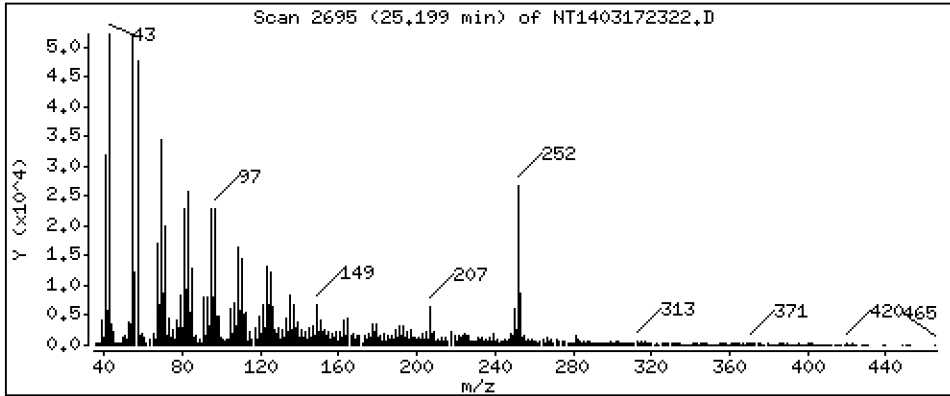
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,080 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

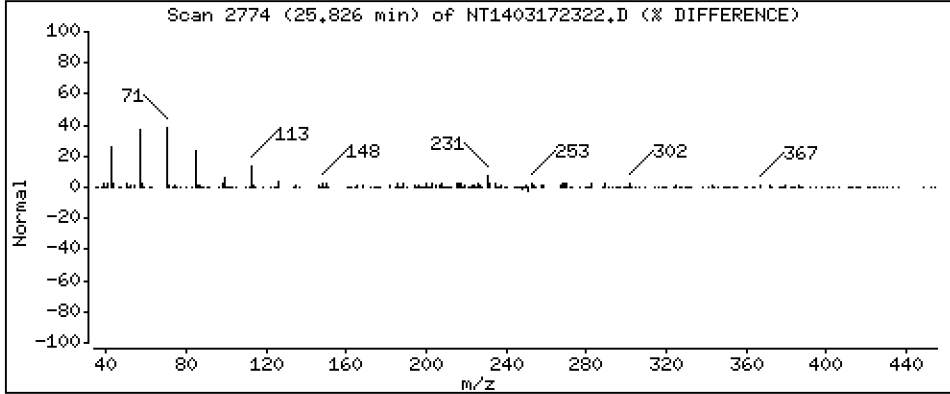
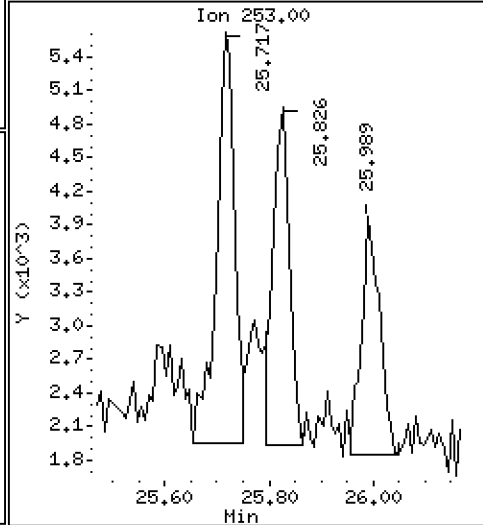
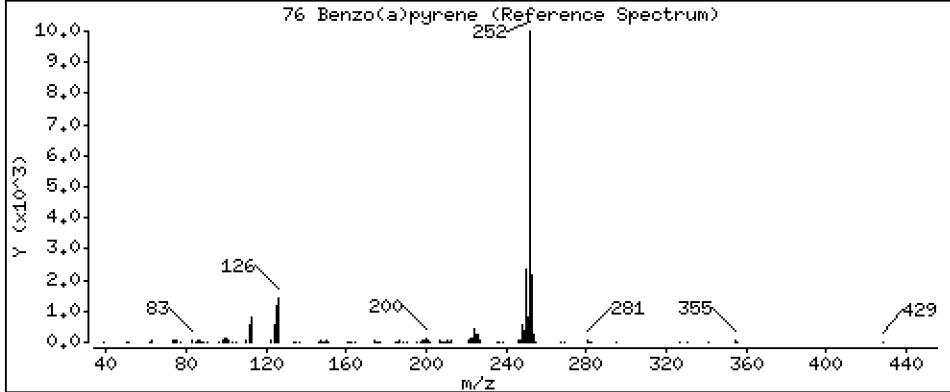
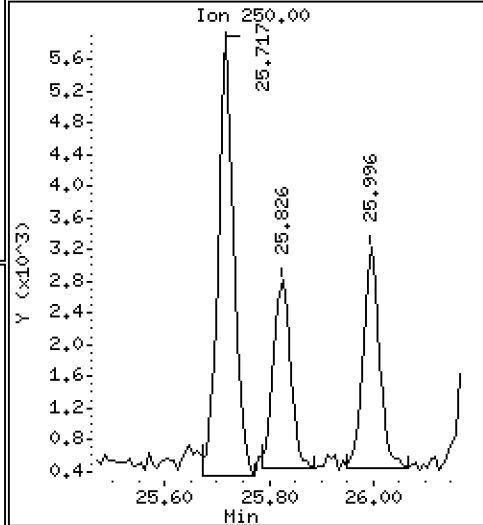
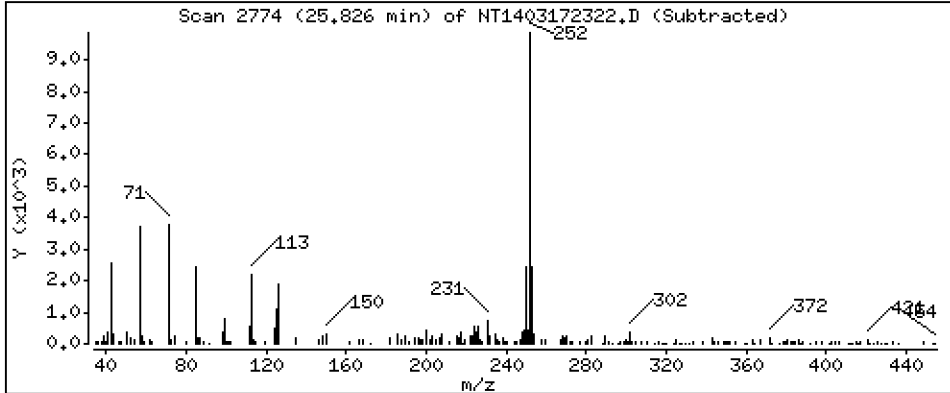
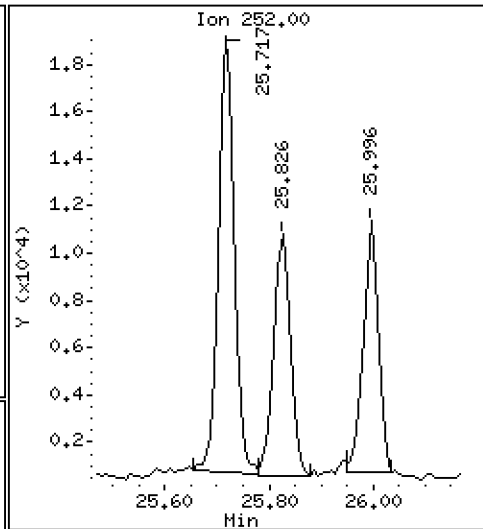
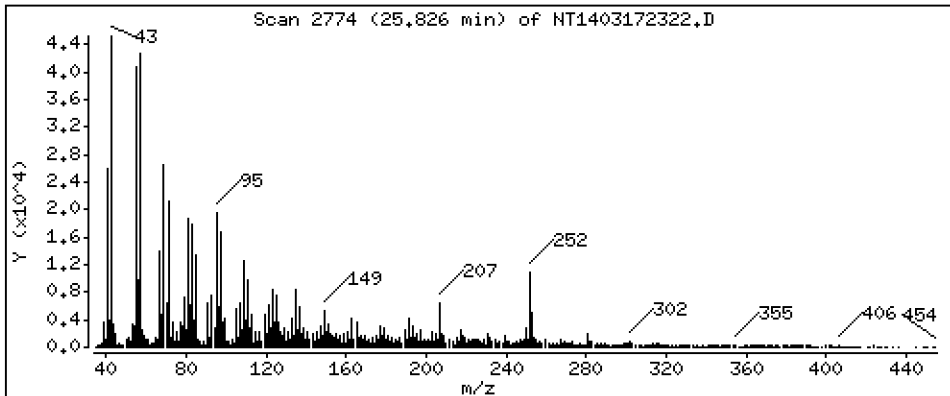
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,4707 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

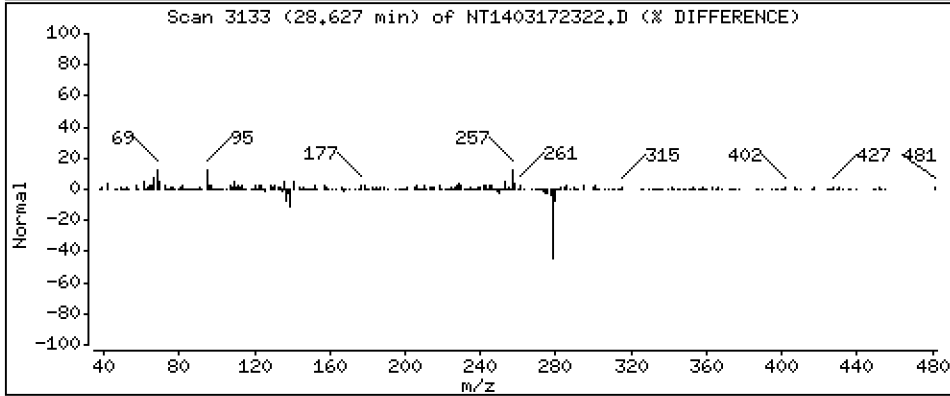
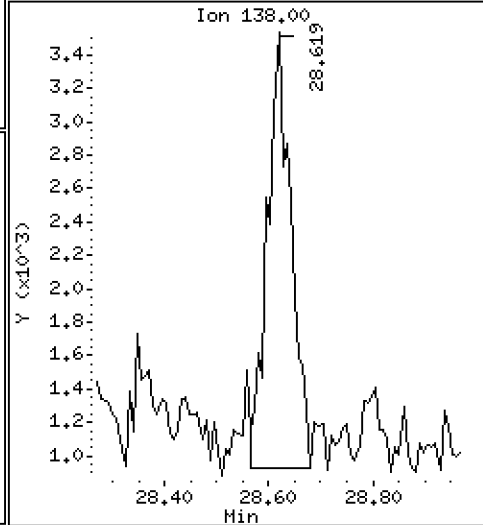
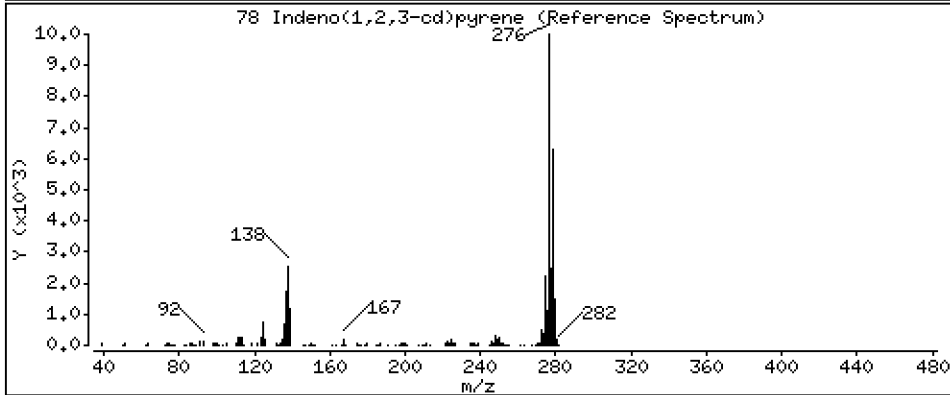
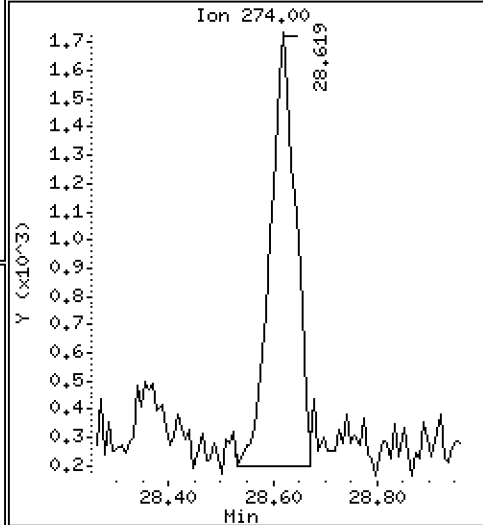
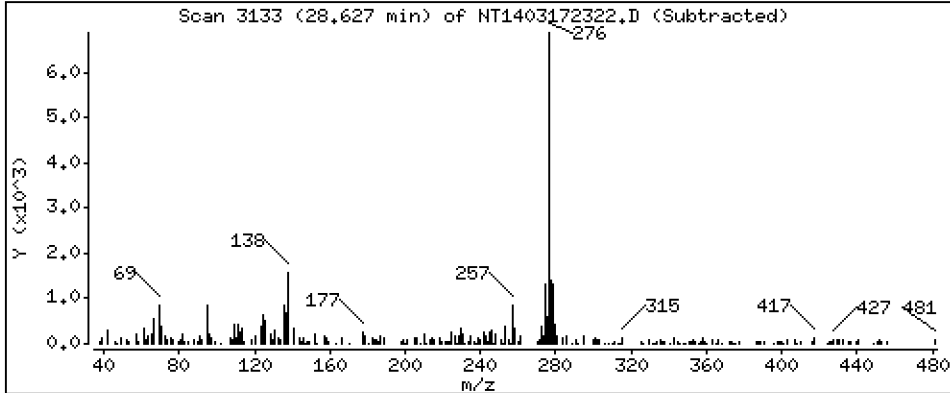
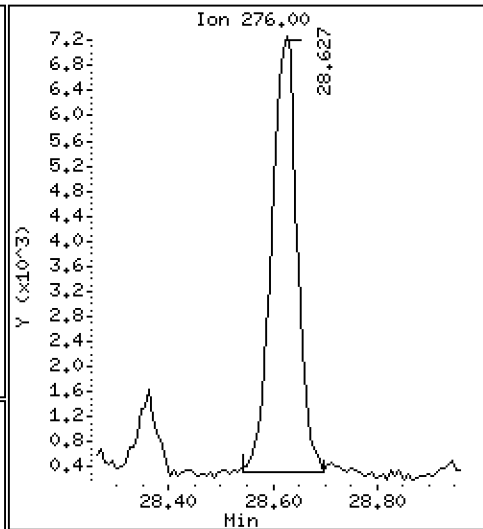
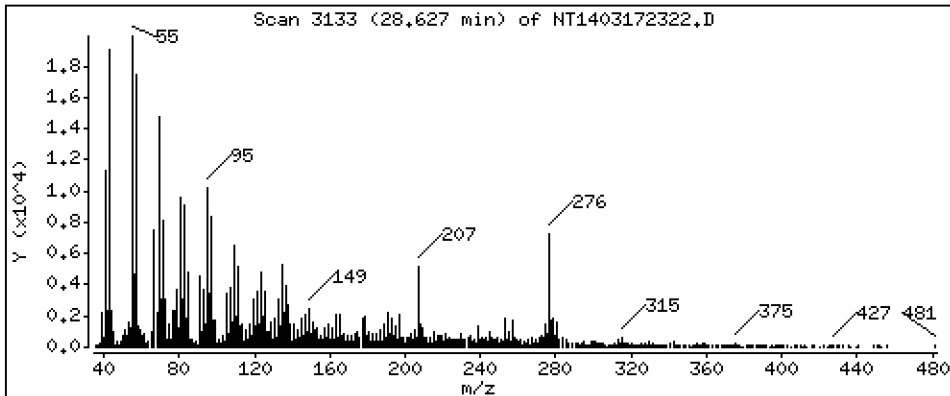
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,4636 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

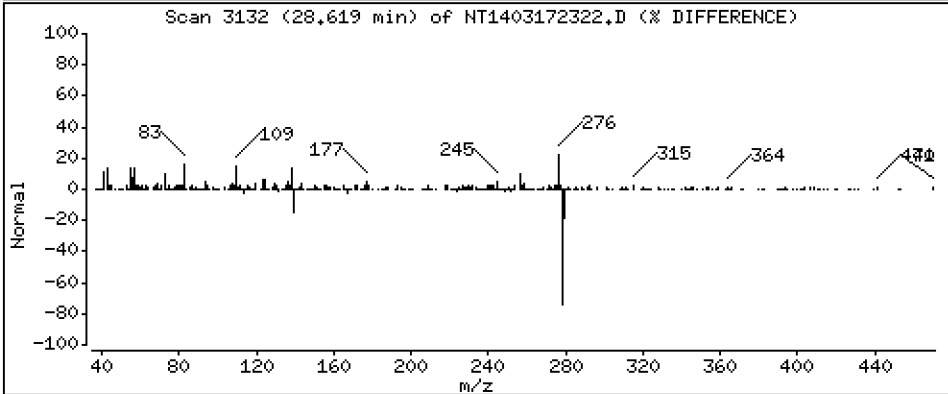
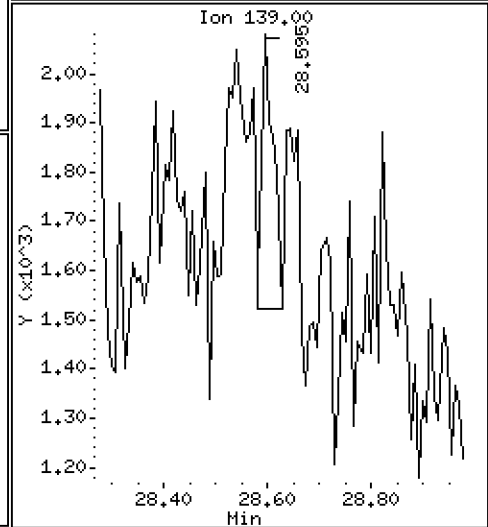
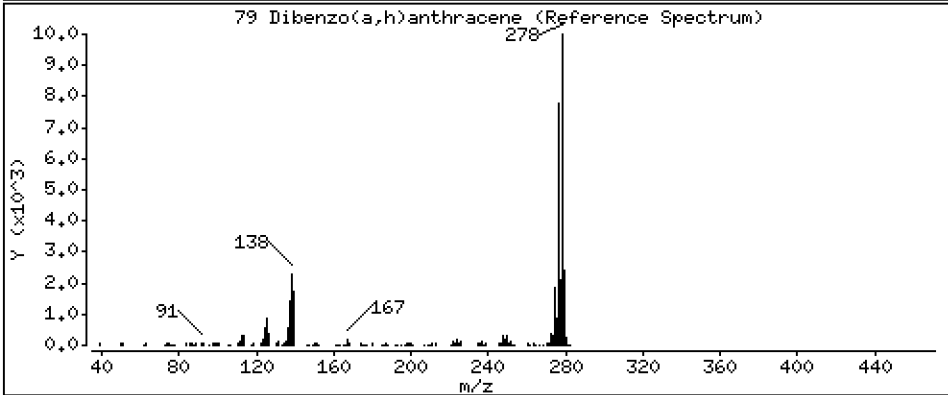
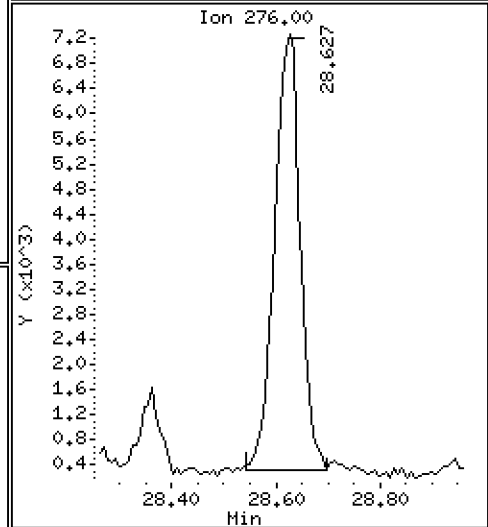
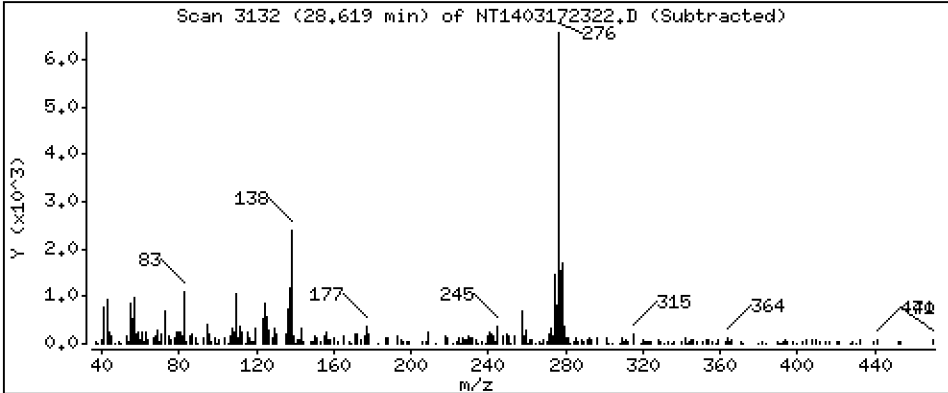
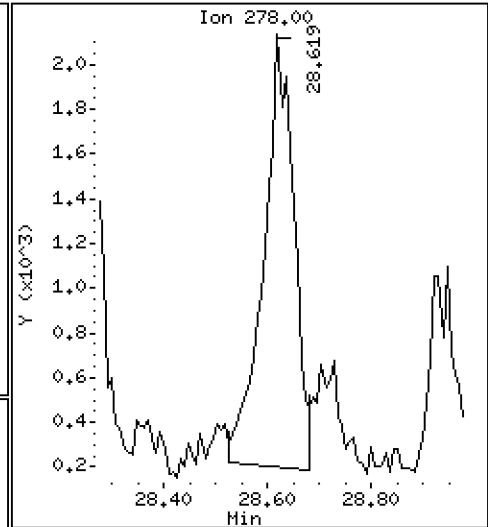
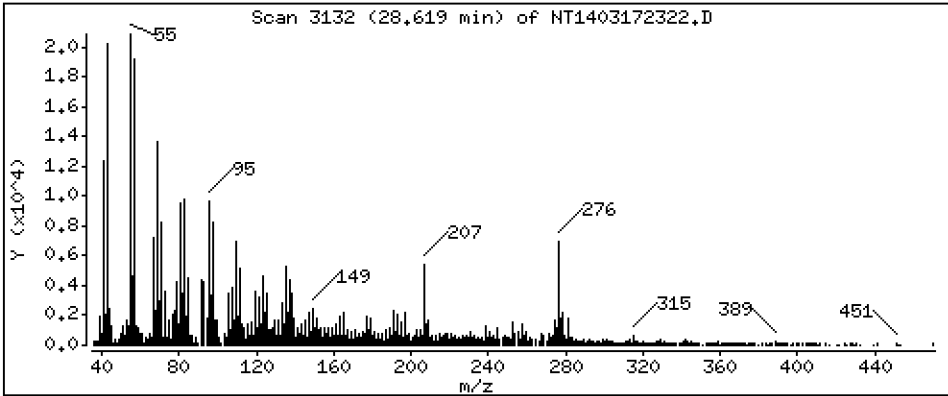
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1811 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

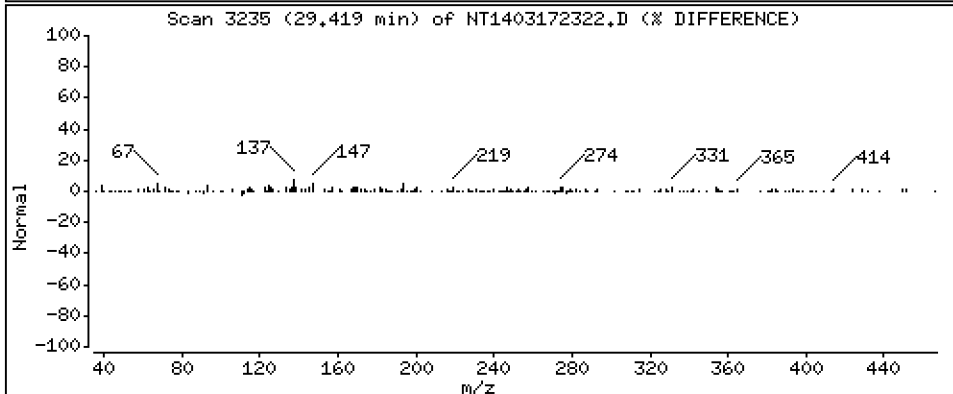
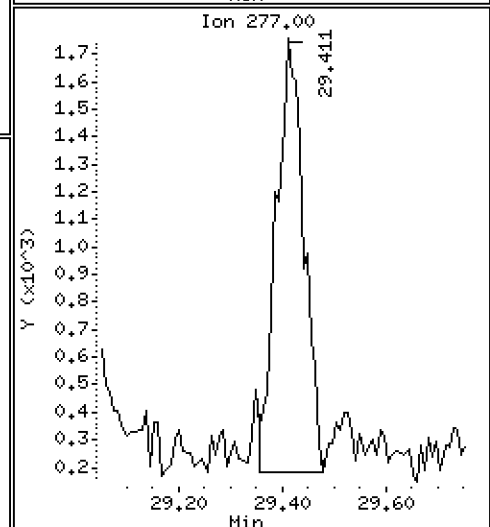
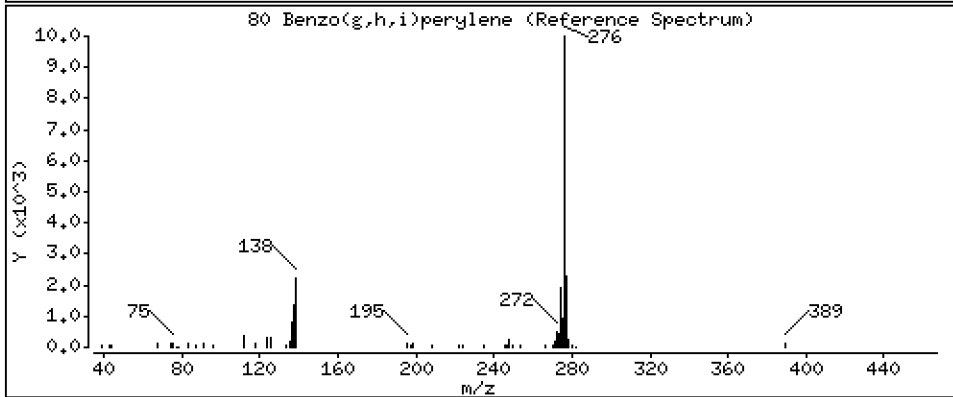
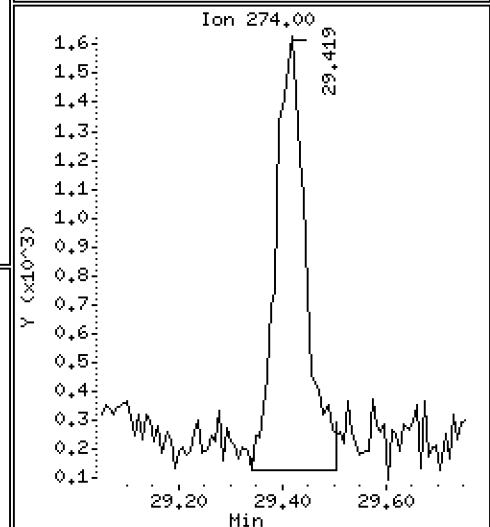
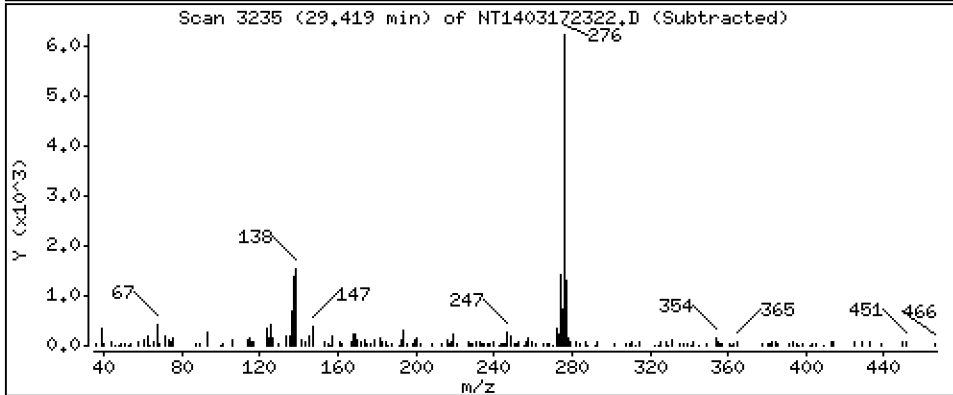
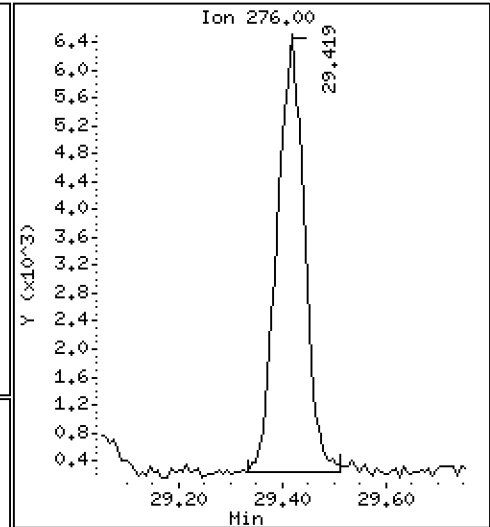
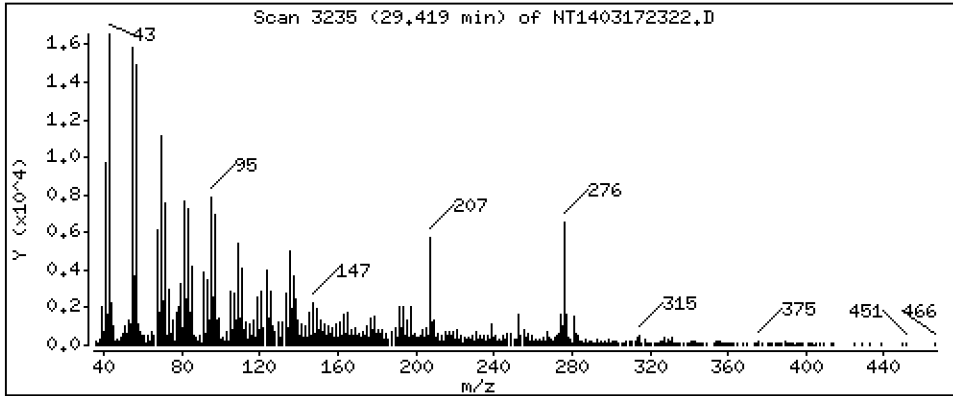
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,5451 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

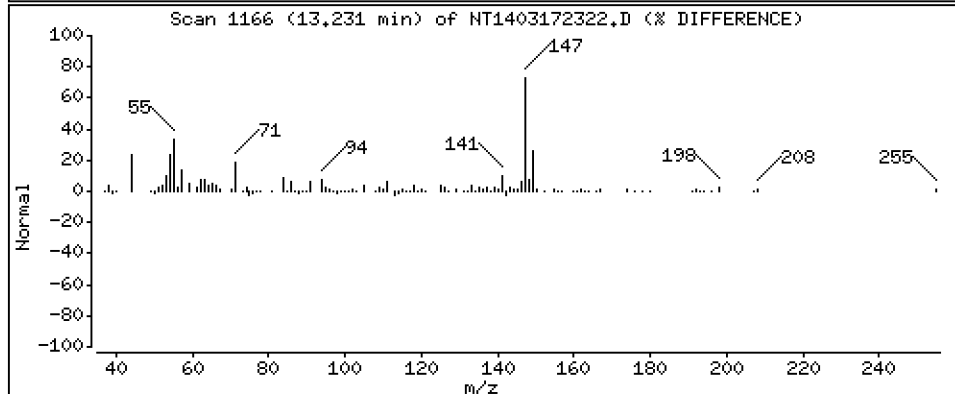
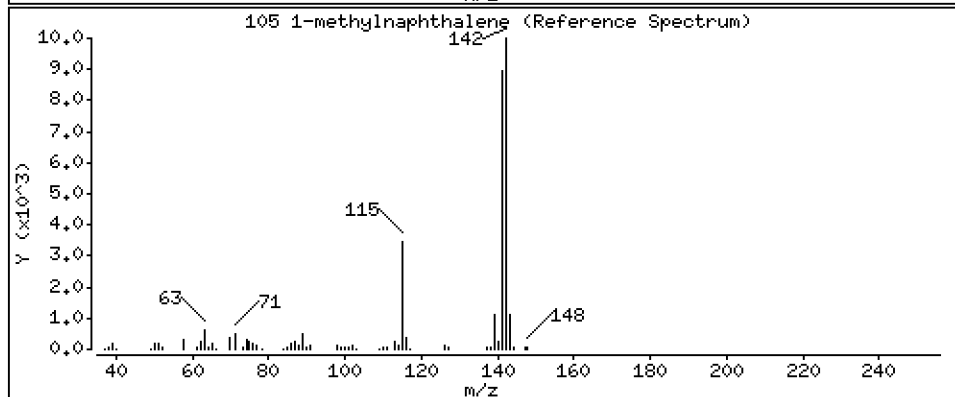
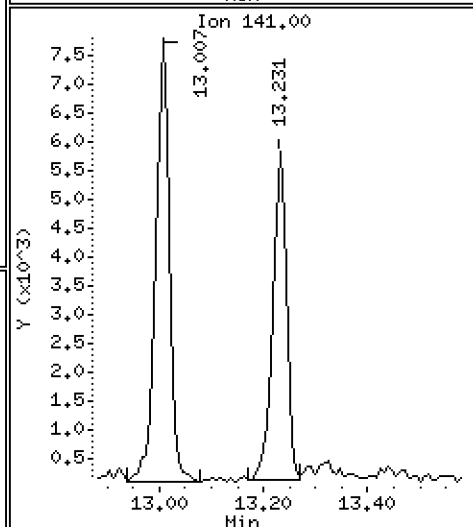
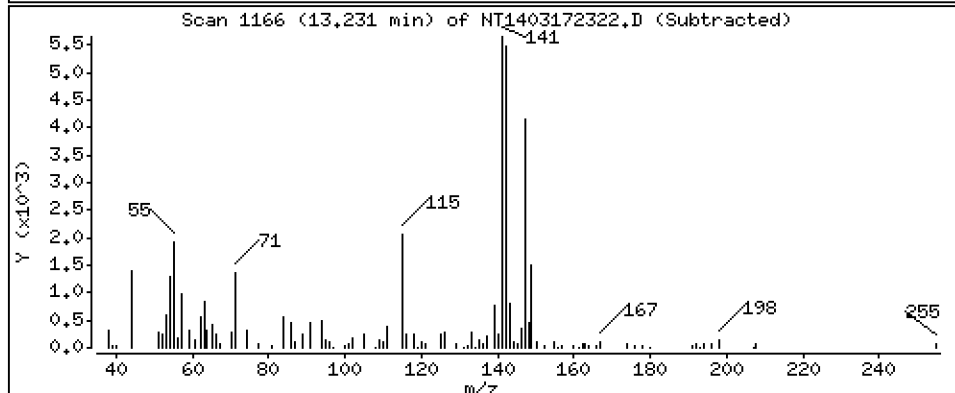
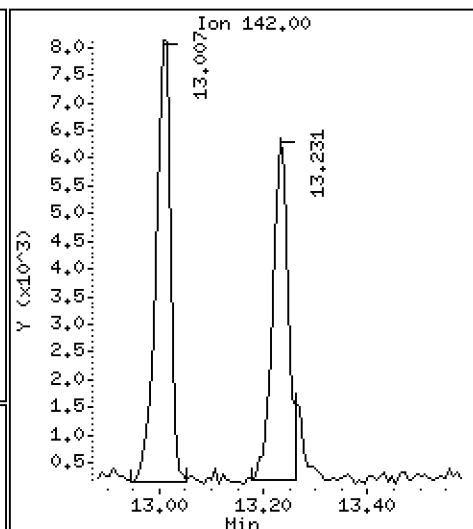
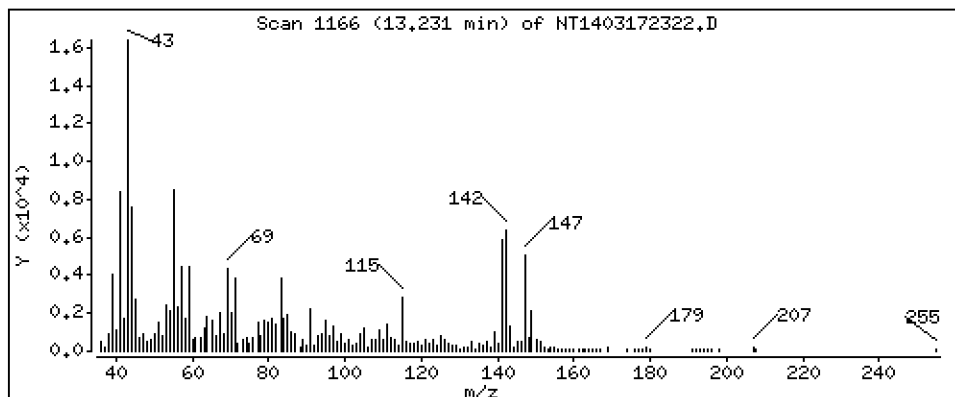
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,08736 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

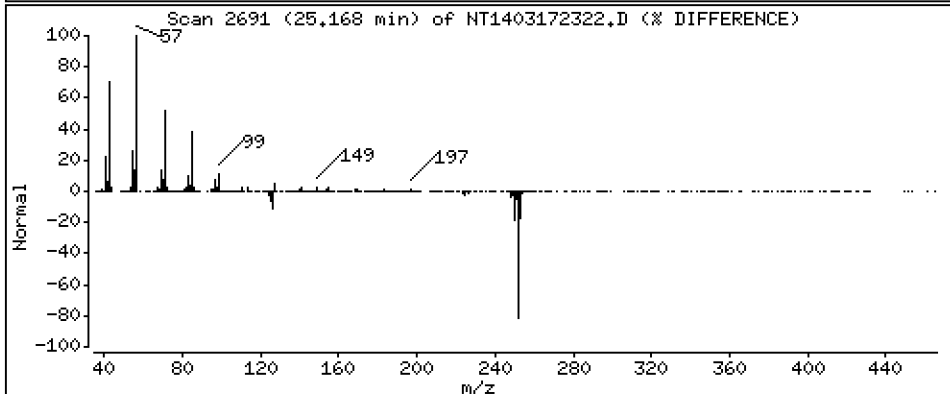
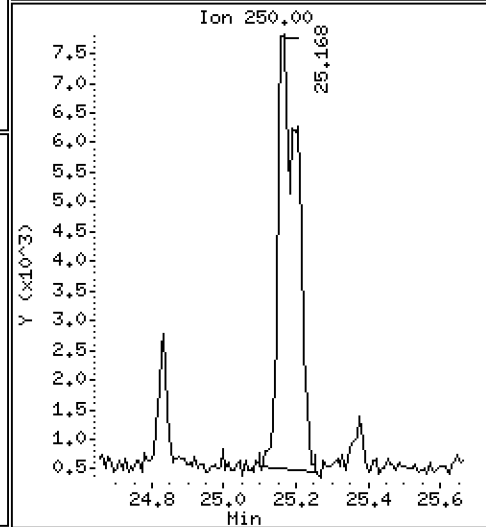
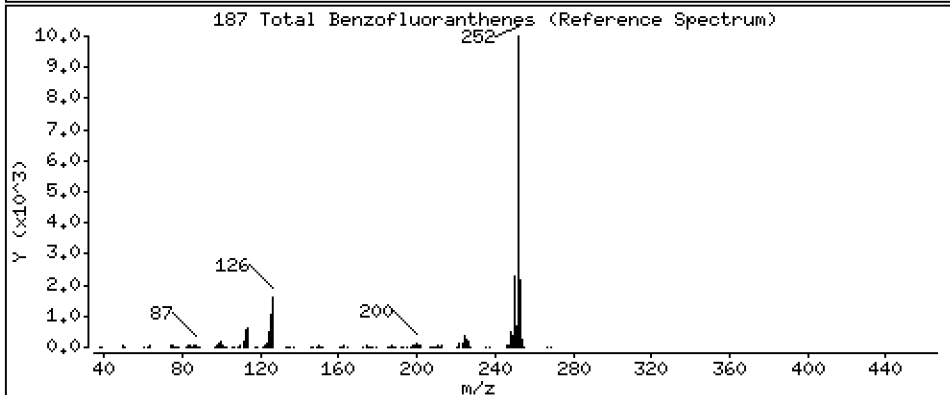
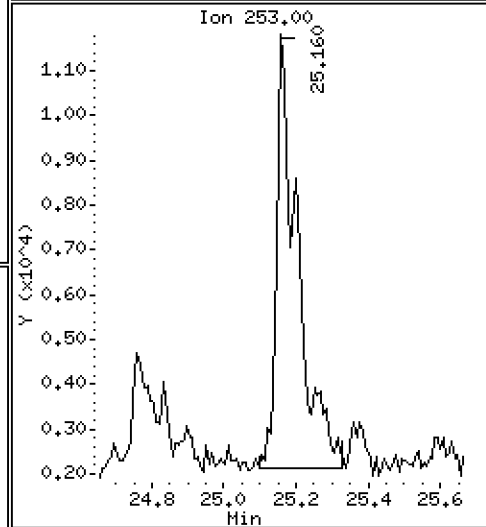
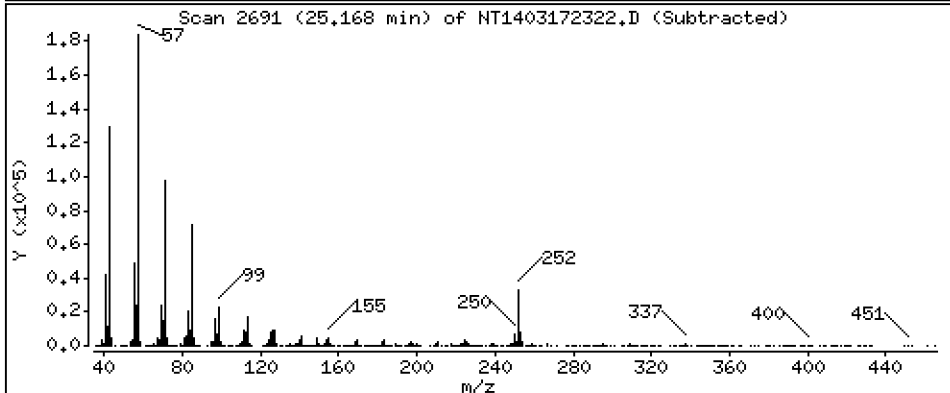
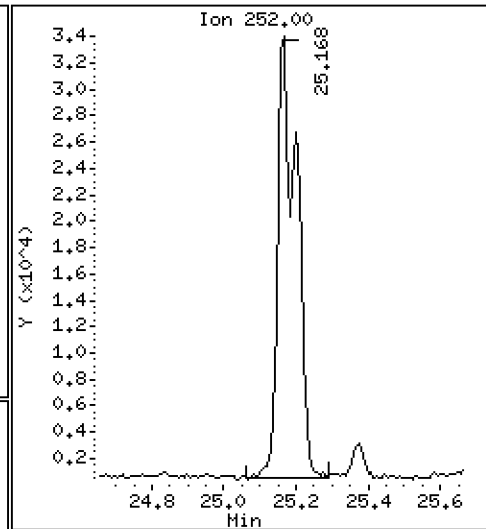
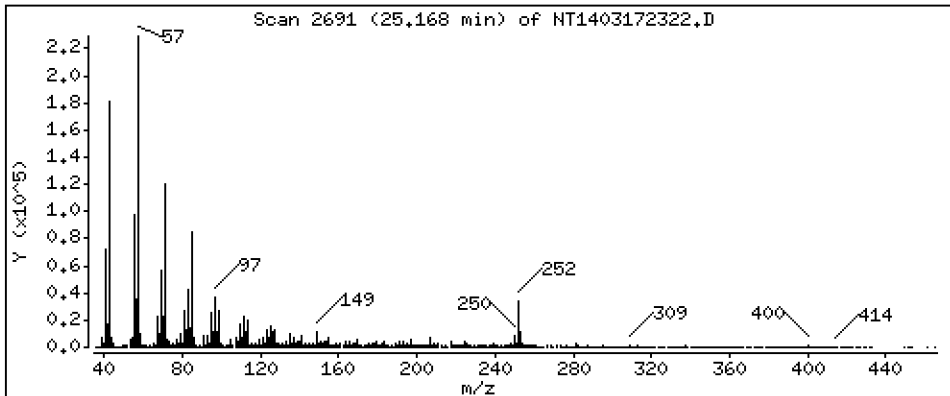
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,345 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172322.D
 Lab Smp Id: 23B0229-03
 Inj Date : 18-MAR-2023 03:07 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-03
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.844	6.821	(1.000)	288111	3.97845	3.978
\$ 2 Phenol-d5	99		8.420	8.412	(1.000)	479028	5.02424	5.024
3 Phenol	94		8.443	8.436	(1.000)	18500	0.18258	0.1826
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	386465	5.14146	5.141
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	10857	0.13448	0.1345
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	213192	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	14387	0.18502	0.1850
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	191445	3.81234	3.812
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.341	9.341	(1.000)	26244	0.55635	0.5563
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.838	9.830	(1.000)	3911	0.04611	0.04611
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	360879	4.07890	4.079
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.010	11.103	(0.952)	61500	1.00121	1.001
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.560	11.567	(1.000)	836044	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	25407	0.11375	0.1138
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	14970	0.09611	0.09611
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	653762	4.39235	4.392
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163		14.693	14.701	(0.967)	5475	0.03995	0.03995
40 Acenaphthylene	152		14.879	14.879	(0.979)	10242	0.04780	0.04780
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	410994	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153		15.266	15.266	(1.005)	8271	0.06611	0.06611
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168		15.590	15.590	(1.026)	21095	0.11811	0.1181
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.155	16.163	(1.063)	32979	0.23275	0.2327
49 Fluorene	166		16.309	16.309	(1.073)	30219	0.17849	0.1785
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	48766	3.12527	3.125
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.248	18.240	(1.000)	717073	4.00000	
60 Phenanthrene	178		18.294	18.294	(1.003)	174705	0.85273	0.8527
61 Anthracene	178		18.387	18.387	(1.008)	52480	0.26588	0.2659
62 Carbazole	167		18.720	18.712	(1.026)	21051	0.11987	0.1199
63 Di-n-butylphthalate	149		19.517	19.509	(1.070)	7741	0.03477	0.03477
64 Fluoranthene	202		20.723	20.677	(0.889)	269469	2.91485	2.915
65 Pyrene	202		21.118	21.103	(0.906)	271480	2.86355	2.864
\$ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	462040	7.19909	7.199
67 Butylbenzylphthalate	149		22.310	22.310	(0.957)	5060	0.12182	0.1218
68 Benzo(a)anthracene	228		23.270	23.263	(0.999)	74449	0.88857	0.8886
* 69 Chrysene-d12	240		23.301	23.294	(1.000)	227231	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228		23.340	23.340	(1.002)	97392	1.28437	1.284
72 bis(2-Ethylhexyl)phthalate	149		23.332	23.332	(0.959)	105897	1.72778	1.728
* 134 Di-n-octylphthalate-d4	153		24.323	24.316	(1.000)	465589	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252		25.167	25.159	(0.970)	73401	1.33475	1.335
75 Benzo(k)fluoranthene	252		25.198	25.198	(0.971)	58862	1.07976	1.080
76 Benzo(a)pyrene	252		25.825	25.818	(0.996)	22133	0.47066	0.4707
* 77 Perylene-d12	264		25.942	25.934	(1.000)	155623	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.626	28.610	(1.103)	23729	0.46361	0.4636
79 Dibenzo(a,h)anthracene	278		28.618	28.626	(1.103)	7810	0.18105	0.1811
80 Benzo(g,h,i)perylene	276		29.418	29.403	(1.134)	22992	0.54507	0.5451
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.230	13.230	(1.145)	12328	0.08736	0.08736
111 Azobenzene (1,2-DP-Hydrazine)	77							

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.167	25.159	(0.970)	122454	2.34461	2.345
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172322.D Calibration Time: 23:31
 Lab Smp Id: 23B0229-03
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	213192	-7.72
27 Naphthalene-d8	843789	421895	1687578	836044	-0.92
42 Acenaphthene-d10	432455	216228	864910	410994	-4.96
59 Phenanthrene-d10	793780	396890	1587560	717073	-9.66
69 Chrysene-d12	411057	205529	822114	227231	-44.72
134 Di-n-octylphthala	799010	399505	1598020	465589	-41.73
77 Perylene-d12	254782	127391	509564	155623	-38.92

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172322.D

Lab ID: 23B0229-03
nt14.i, ABN.m, 18-MAR-2023 03:07

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.960	-0.0074	Benzoic acid

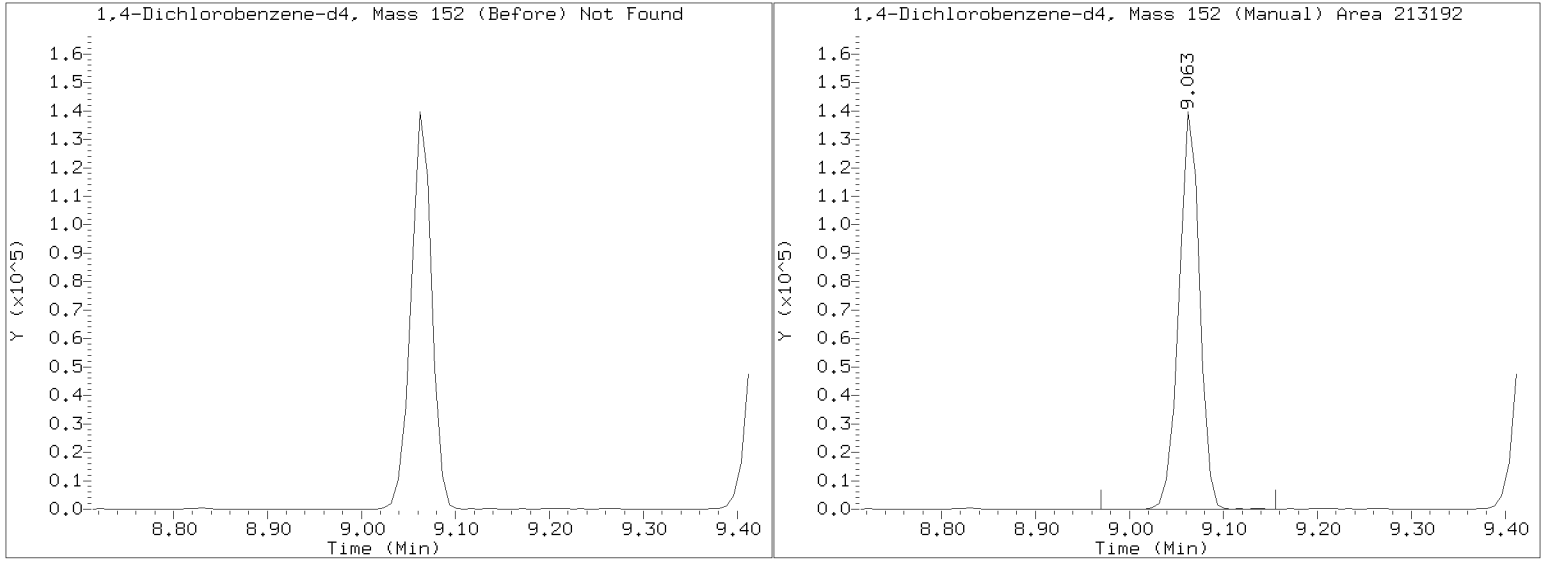
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172322.D
Injection Date: 18-MAR-2023 03:07
Lab ID:23B0229-03 Client ID:
Report Date: 03/22/2023 09:50





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-04 A

SDG: 23B0229

Sampled: 02/08/23 12:11

Prepared: 02/17/23 15:00

File ID: NT1403172323.D

% Solids: 52.16

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 03:42

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 19.43 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	19.1	J	4.3	19.7
106-44-5	4-Methylphenol	1	19.7	U	7.3	19.7
91-20-3	Naphthalene	1	14.4	J	4.2	19.7
91-57-6	2-Methylnaphthalene	1	12.0	J	4.5	19.7
208-96-8	Acenaphthylene	1	19.7	U	6.2	19.7
131-11-3	Dimethylphthalate	1	5.8	J	4.3	19.7
83-32-9	Acenaphthene	1	9.8	J	5.2	19.7
132-64-9	Dibenzofuran	1	19.7	U	13.9	19.7
86-73-7	Fluorene	1	19.7	U	14.4	19.7
85-01-8	Phenanthrene	1	70.0		8.6	19.7
120-12-7	Anthracene	1	22.9		7.1	19.7
206-44-0	Fluoranthene	1	294	Q	6.0	19.7
129-00-0	Pyrene	1	254		5.6	19.7
85-68-7	Butylbenzylphthalate	1	19.3	J	9.3	19.7
56-55-3	Benzo(a)anthracene	1	71.7		5.9	19.7
218-01-9	Chrysene	1	114		6.0	19.7
117-81-7	bis(2-Ethylhexyl)phthalate	1	151		5.4	49.3
	Benzo(a)fluoranthenes, Total	1	215		9.9	39.5
50-32-8	Benzo(a)pyrene	1	52.6		4.2	19.7
193-39-5	Indeno(1,2,3-cd)pyrene	1	42.4		14.5	19.7
53-70-3	Dibenzo(a,h)anthracene	1	19.7	U	17.0	19.7
191-24-2	Benzo(g,h,i)perylene	1	54.8	Q	13.4	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	740.03	468	63.2	27 - 120	
Phenol-d5	740.03	517	69.9	29 - 120	
2-Chlorophenol-d4	740.03	546	73.8	31 - 120	
1,2-Dichlorobenzene-d4	493.36	363	73.6	32 - 120	
Nitrobenzene-d5	493.36	389	78.9	30 - 120	
2-Fluorobiphenyl	493.36	417	84.5	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-04 A

SDG: 23B0229

Sampled: 02/08/23 12:11

Prepared: 02/17/23 15:00

File ID: NT1403172323.D

% Solids: 52.16

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 03:42

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 19.43 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	740.03	462	62.4	24 - 134	
p-Terphenyl-d14	493.36	660	134	37 - 120	*,Q

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172323.D

Date: 18-MAR-2023 03:42

Client ID:

Sample Info: 23B0229-04

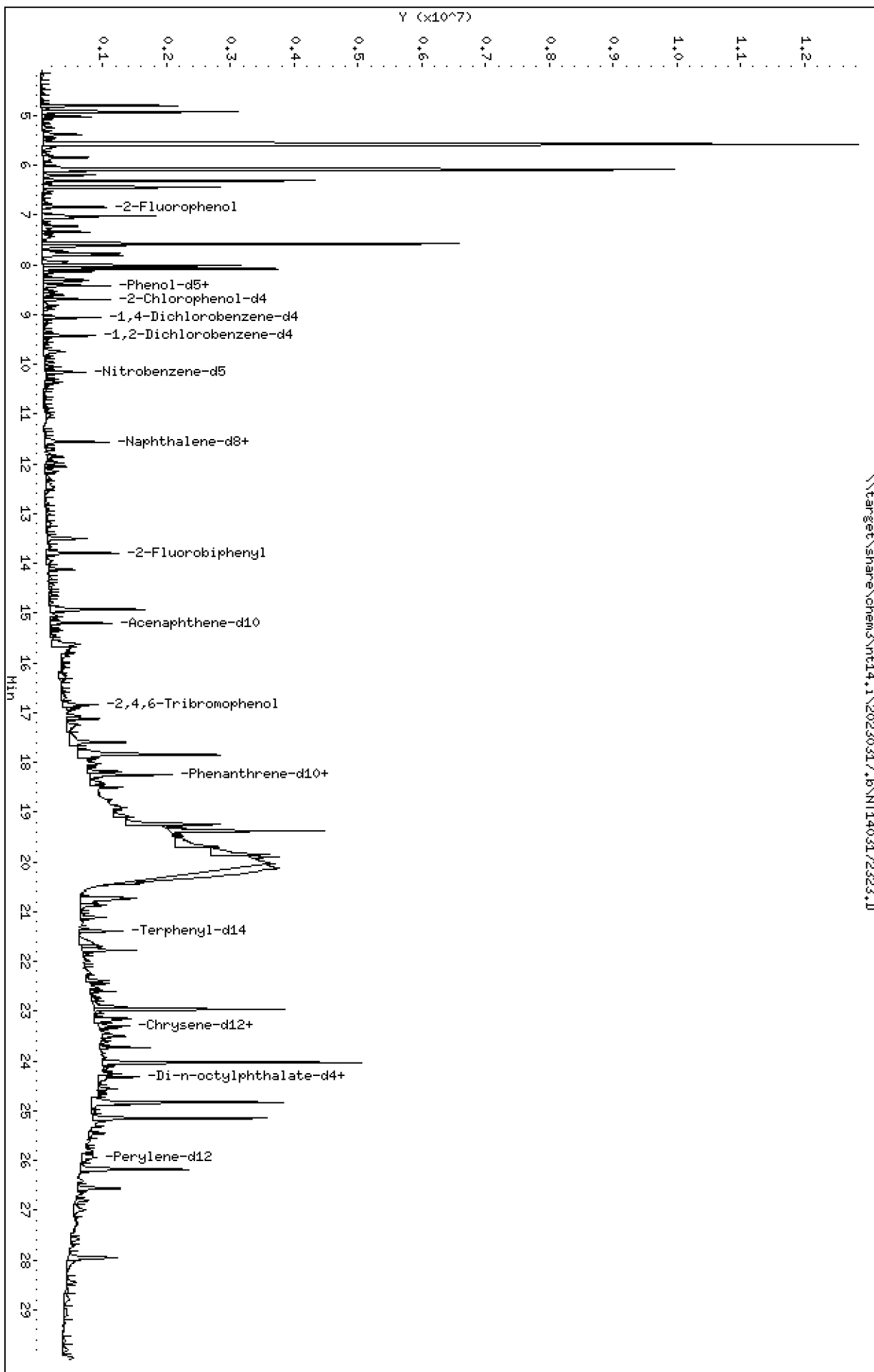
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172323.D



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

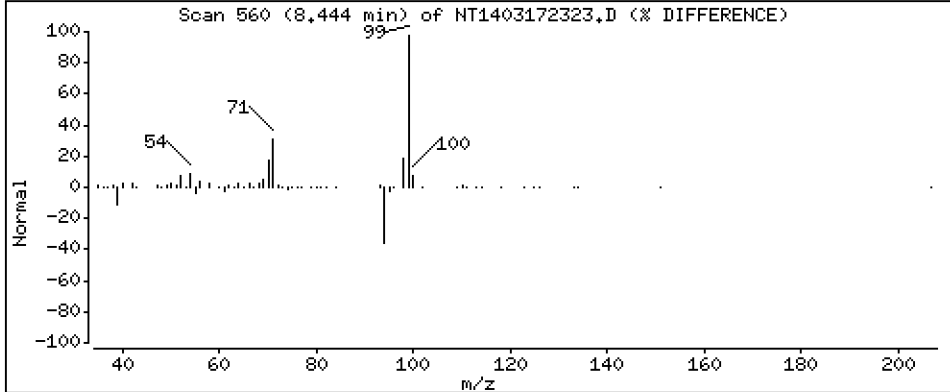
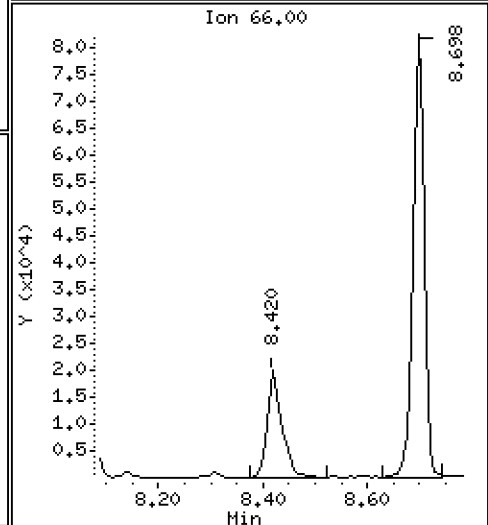
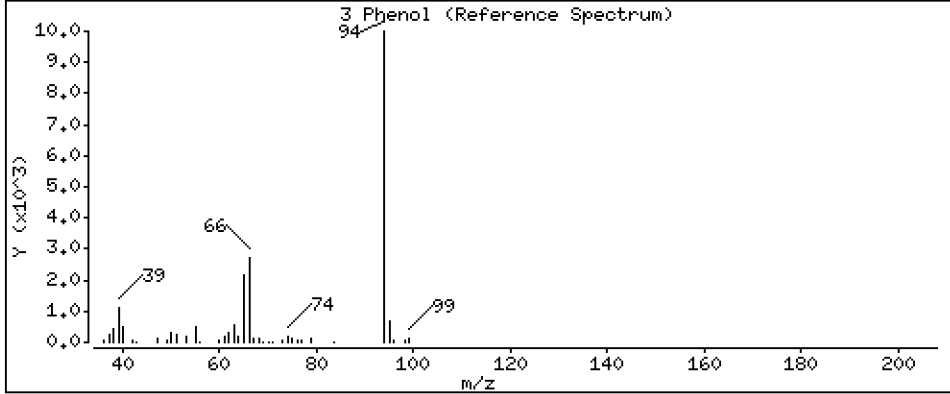
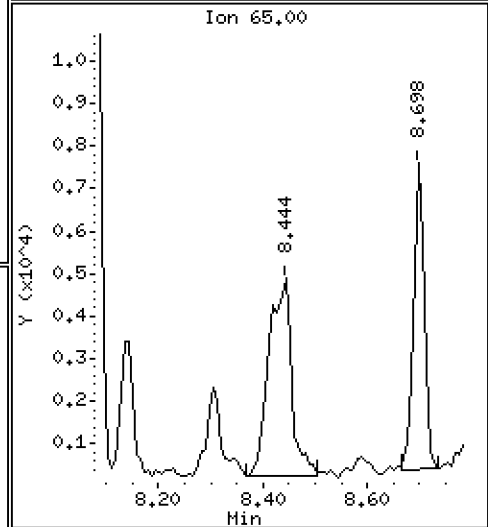
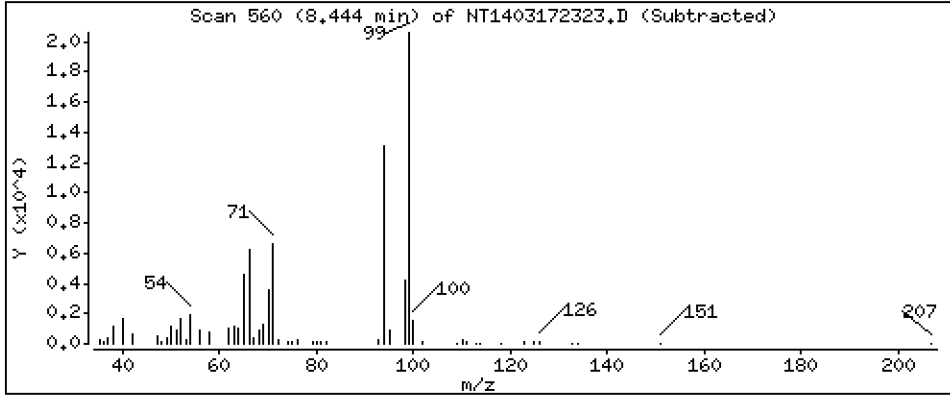
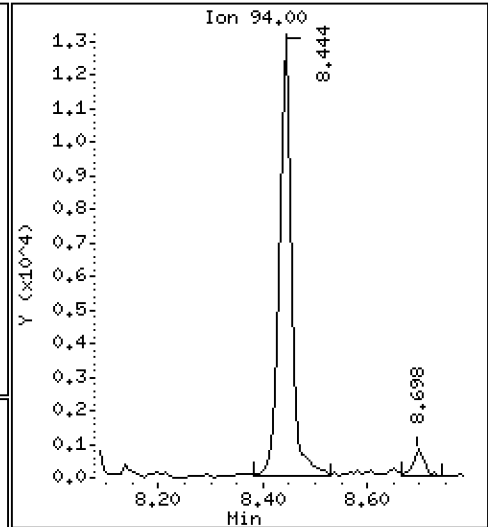
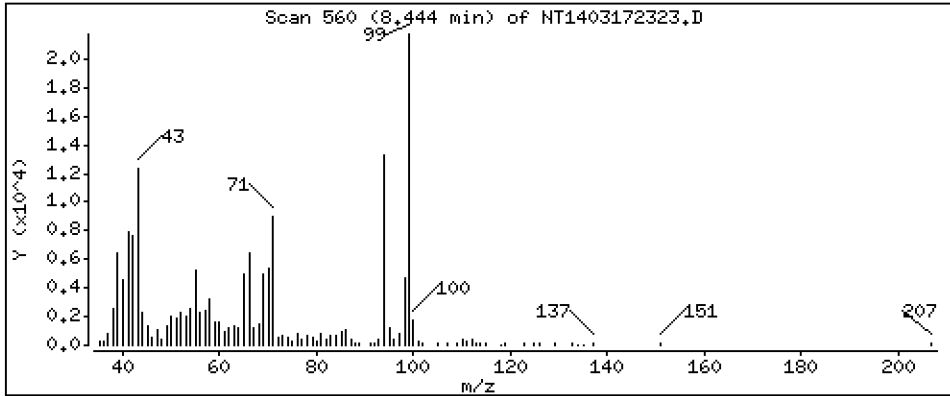
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1940 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

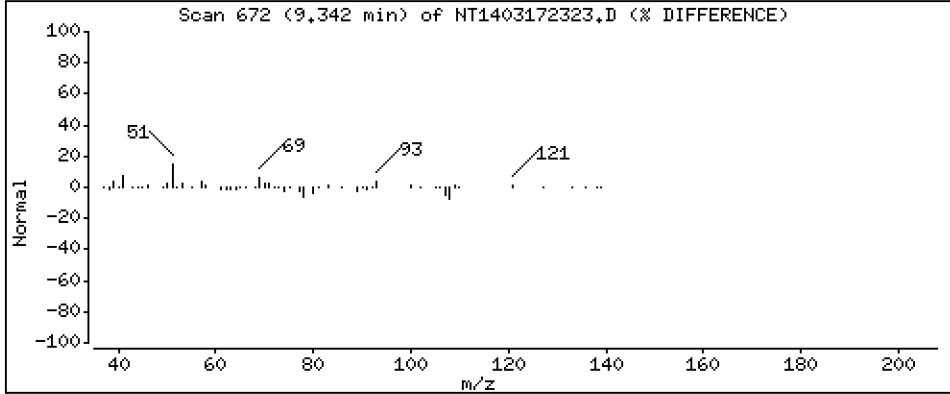
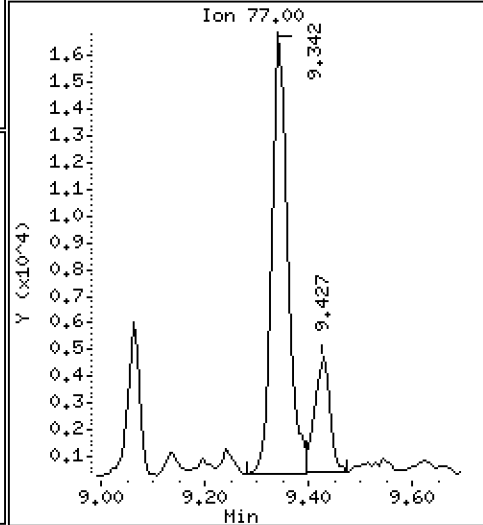
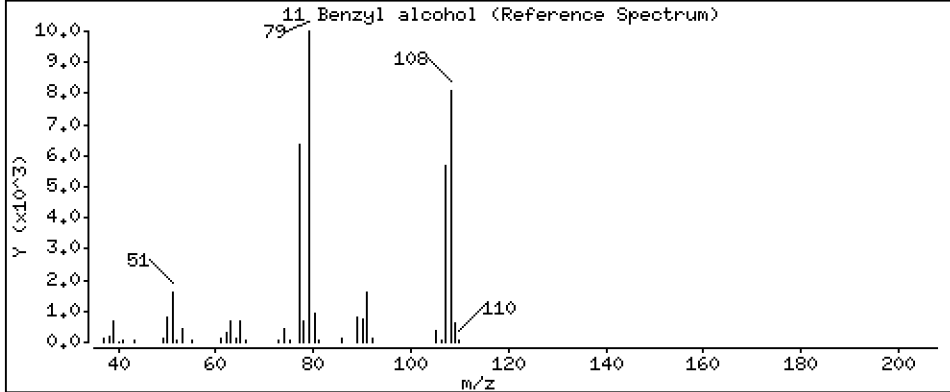
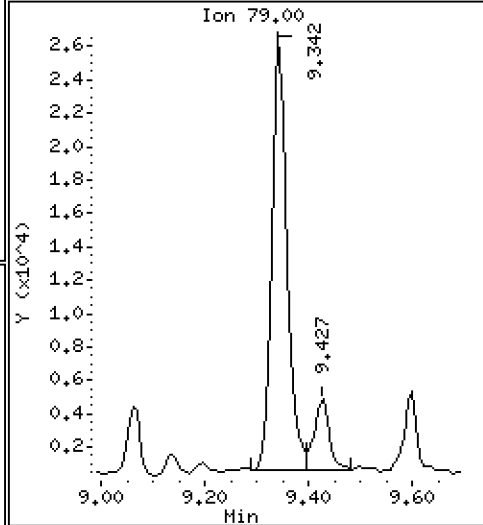
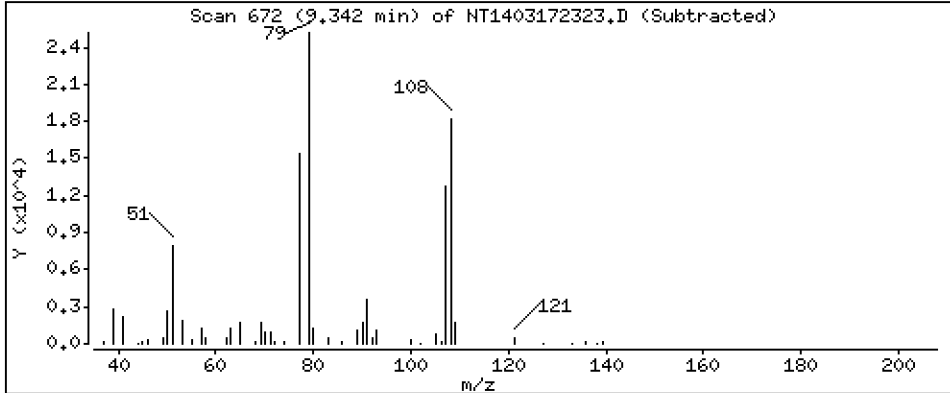
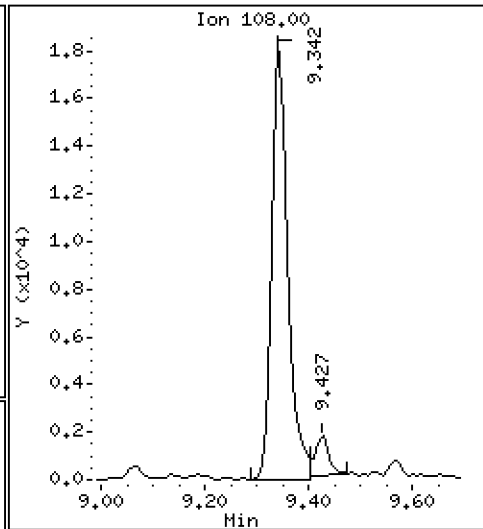
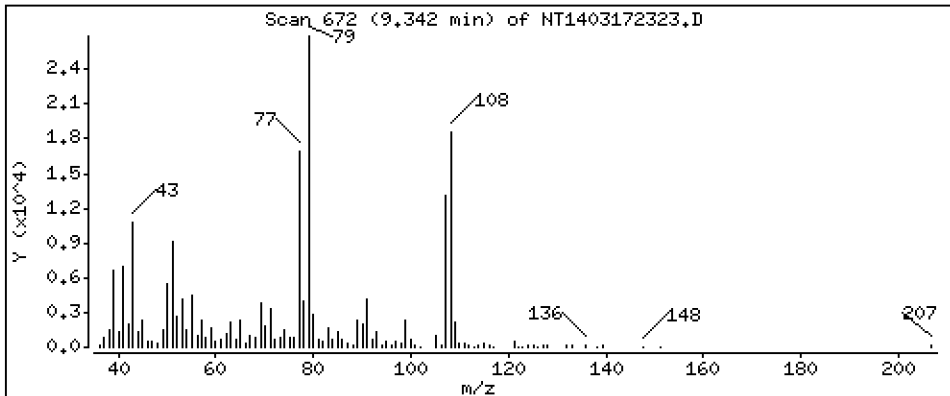
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,7629 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

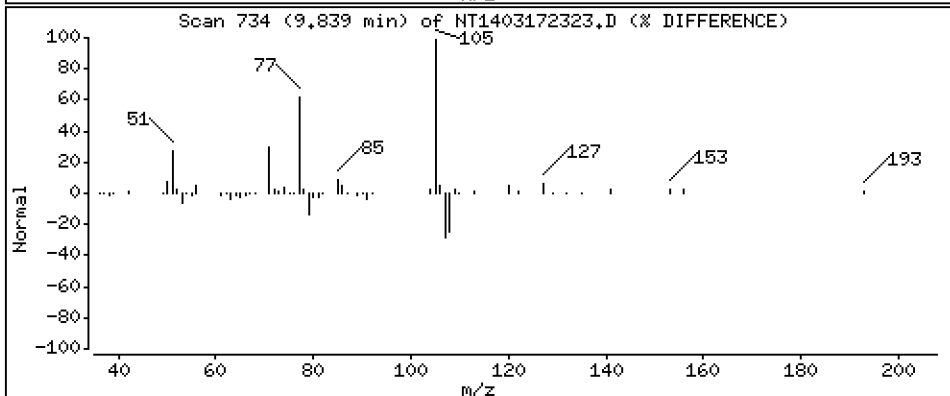
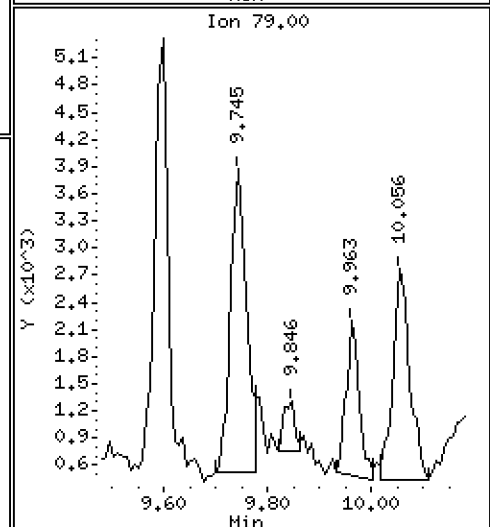
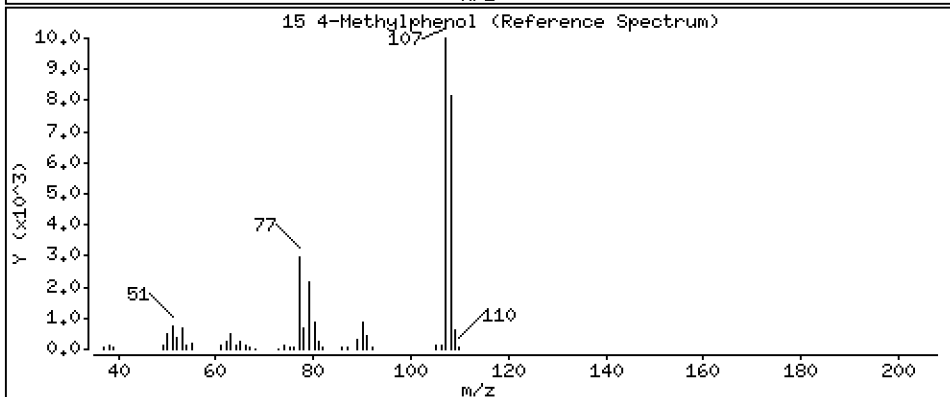
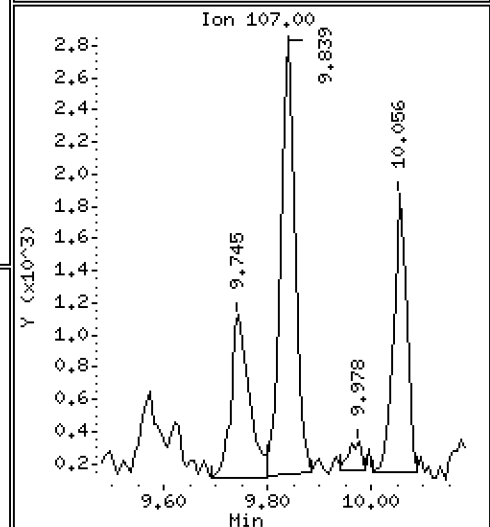
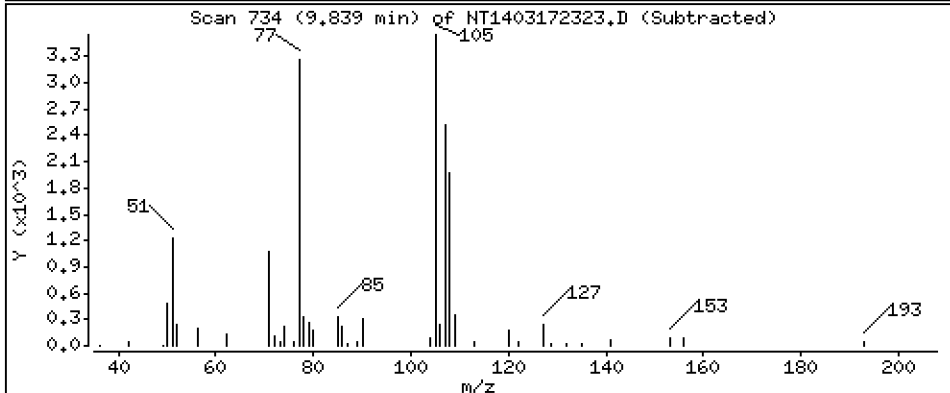
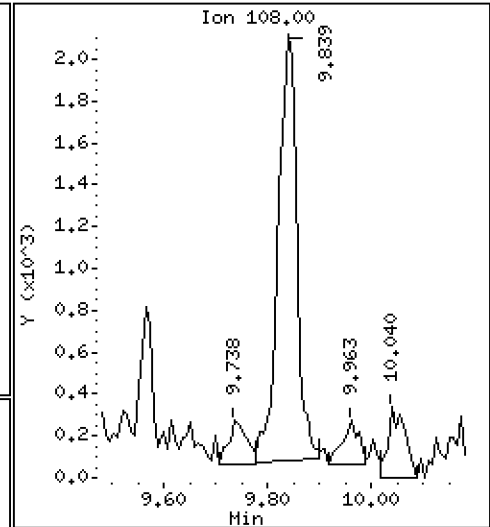
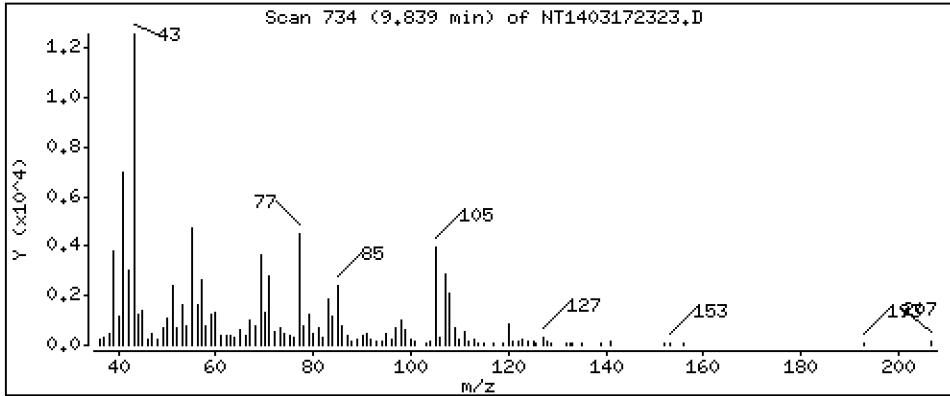
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.05645 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

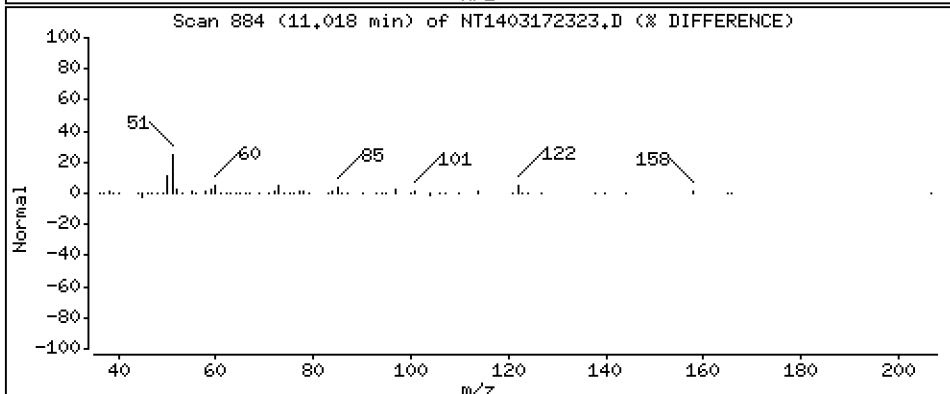
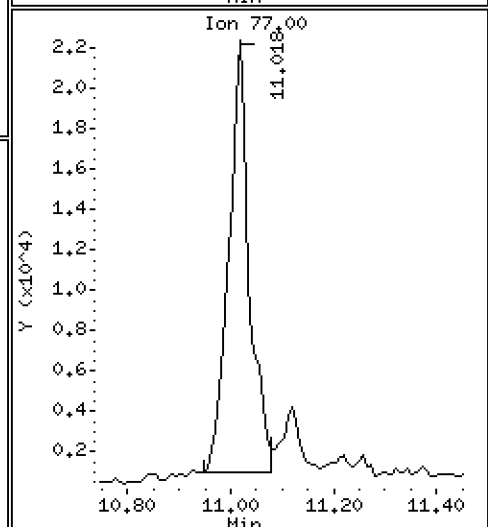
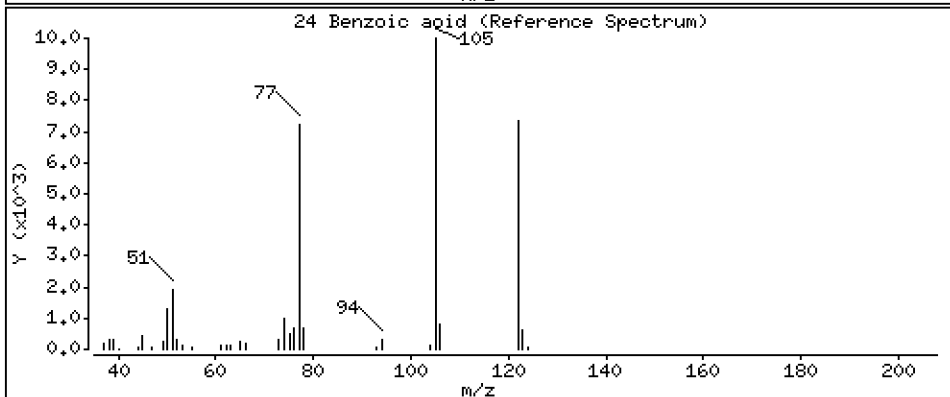
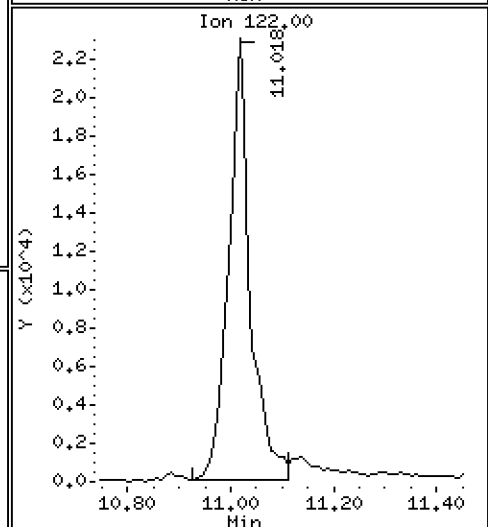
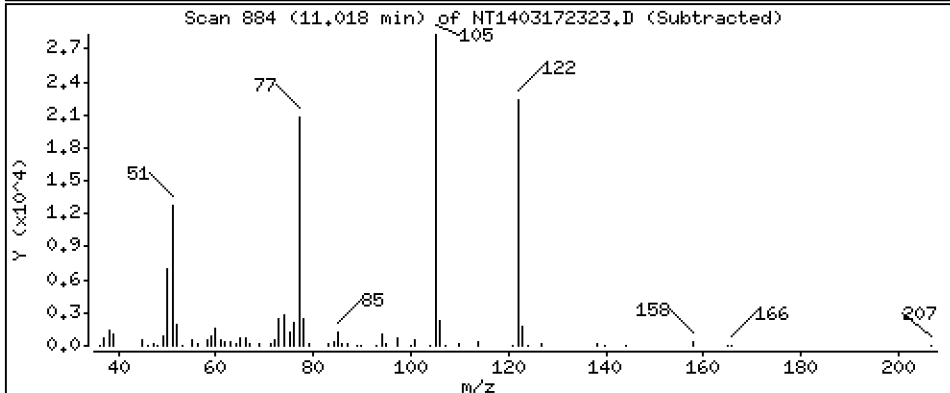
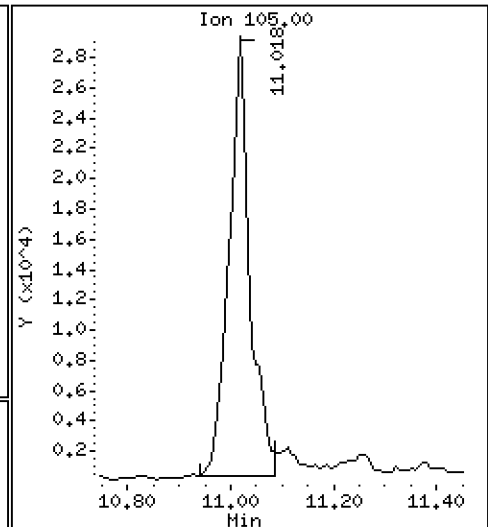
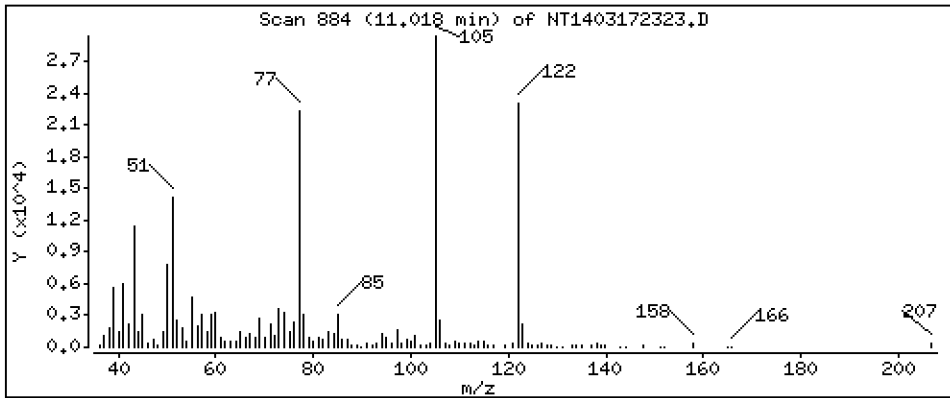
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,286 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

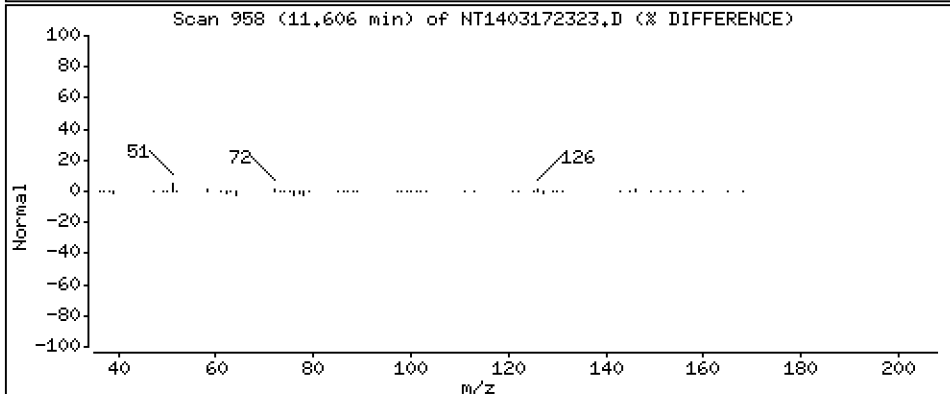
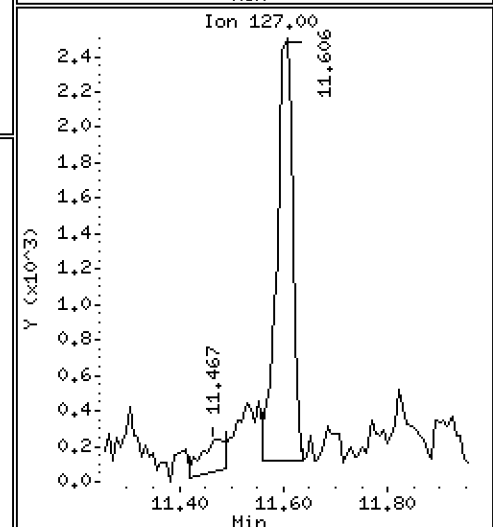
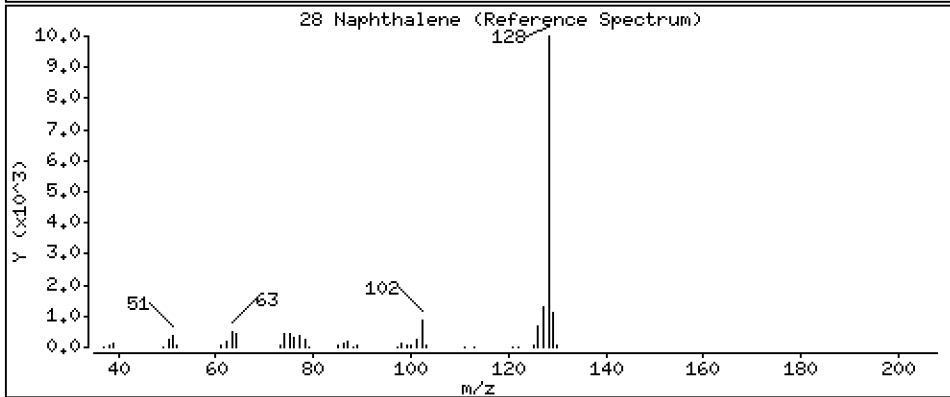
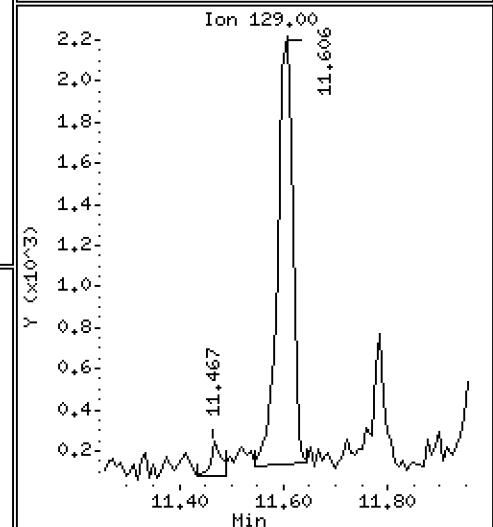
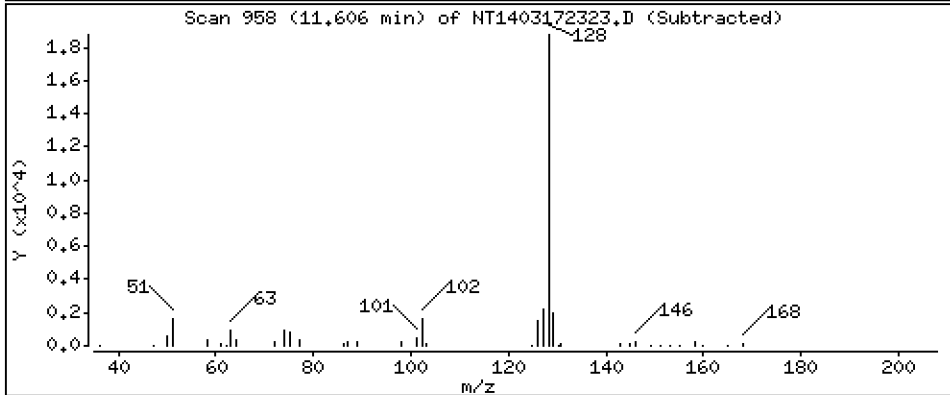
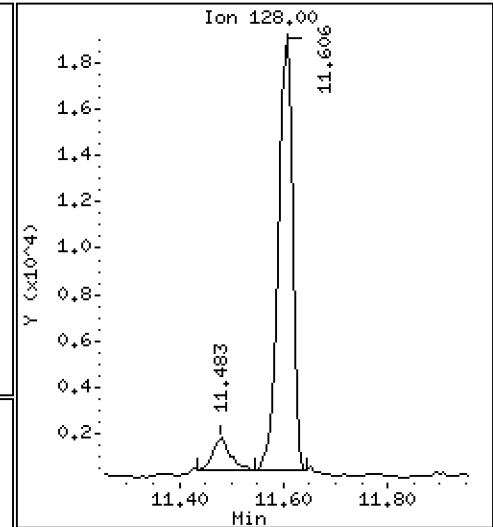
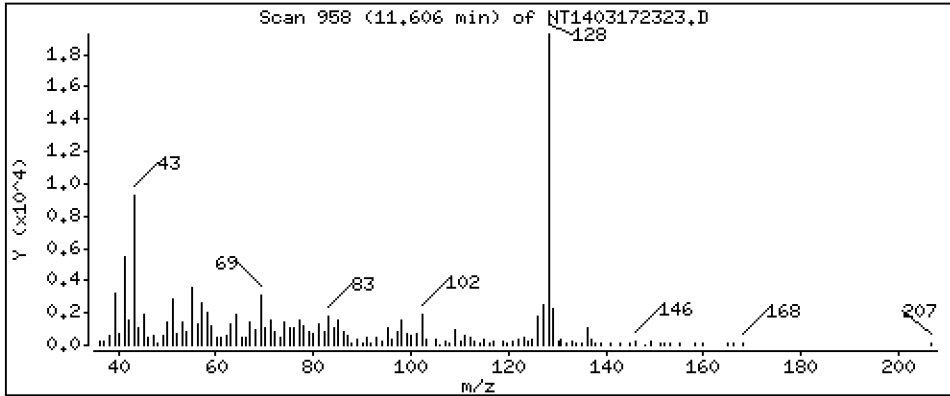
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1455 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

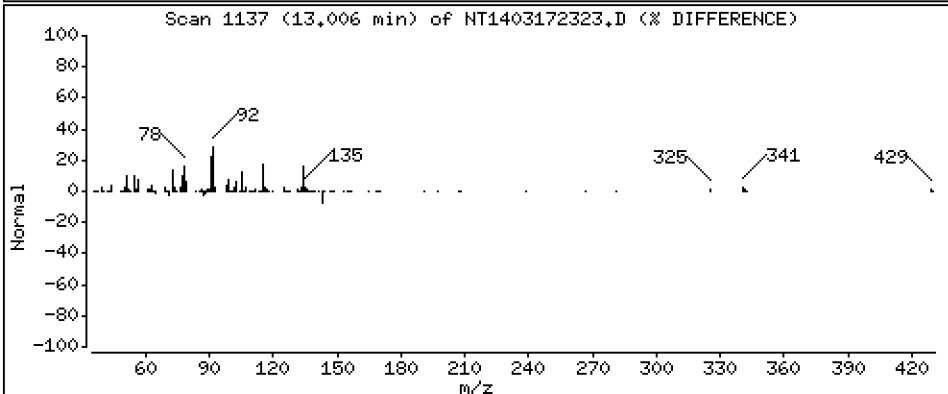
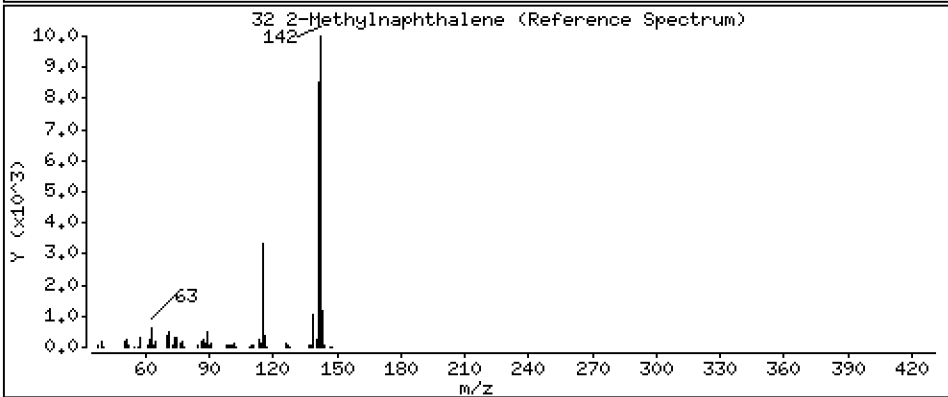
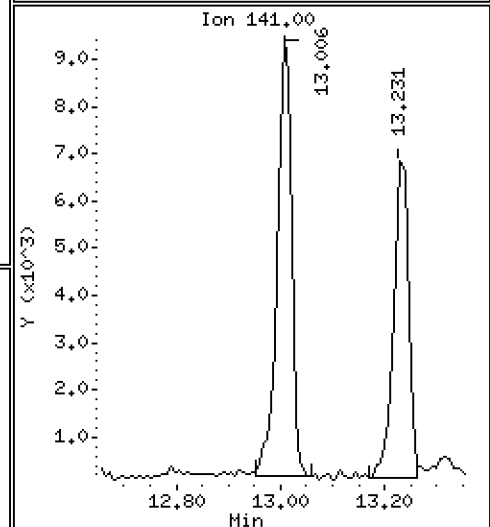
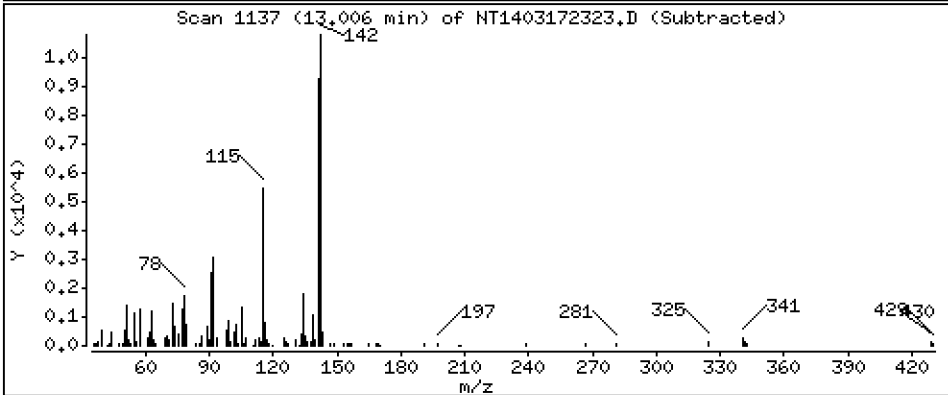
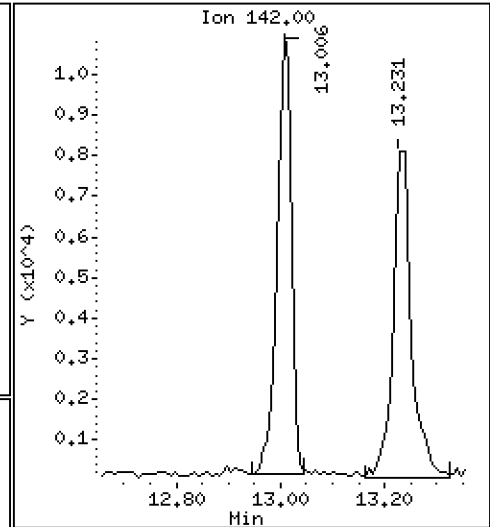
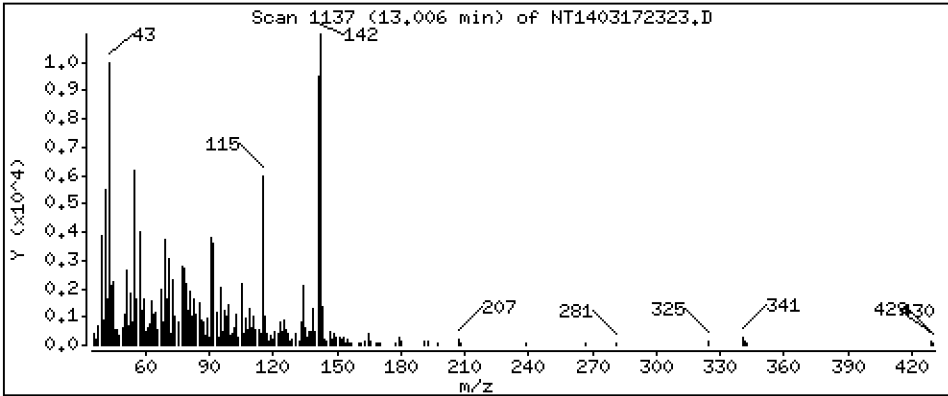
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 0.1214 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

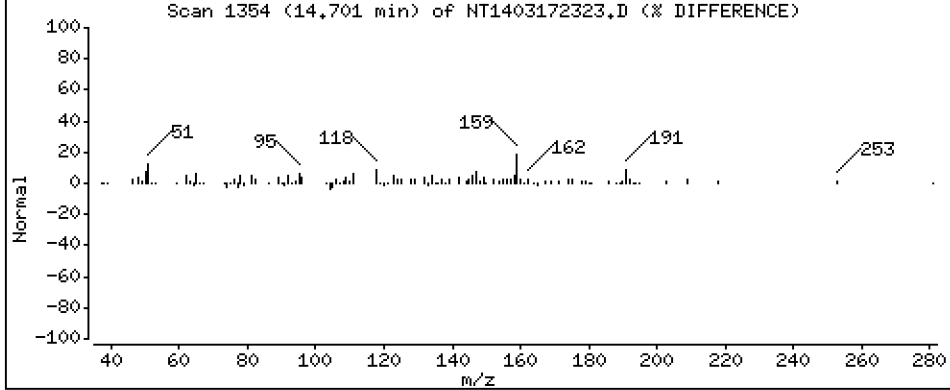
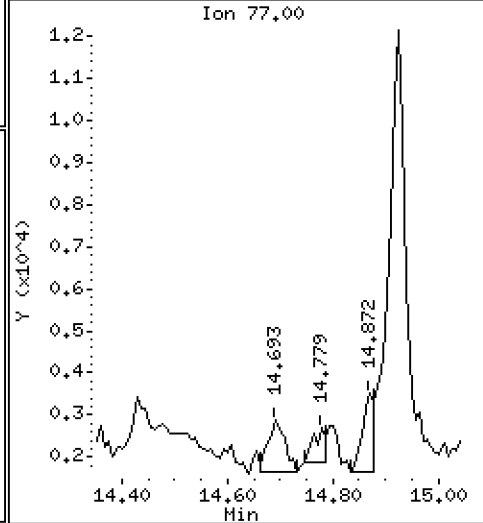
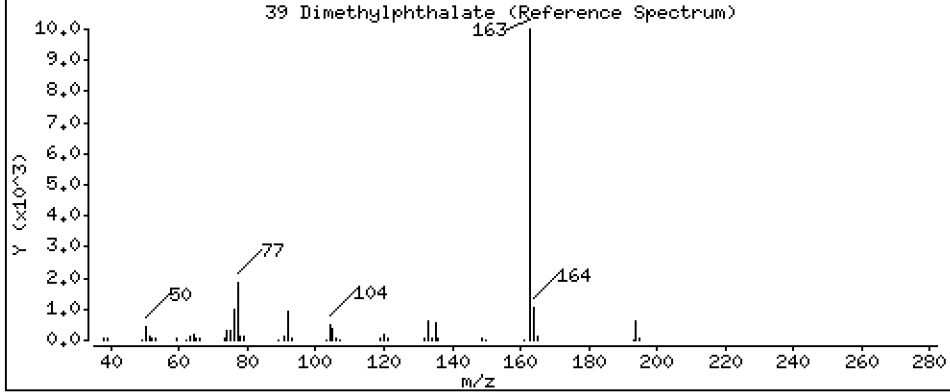
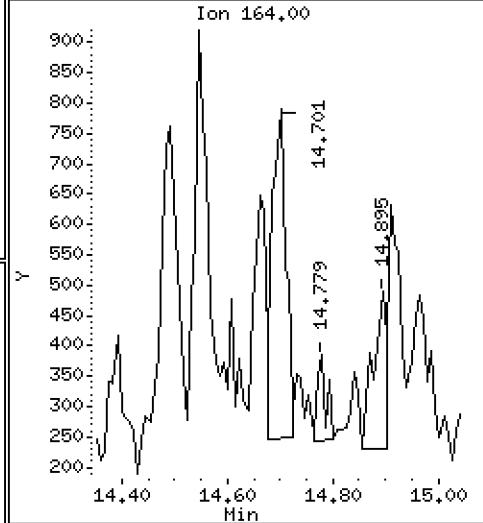
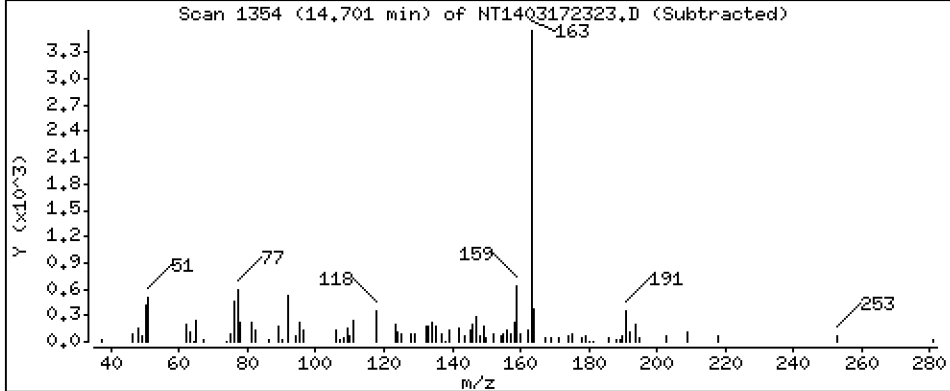
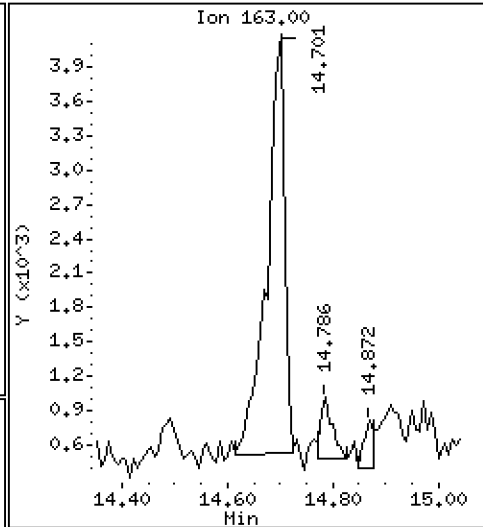
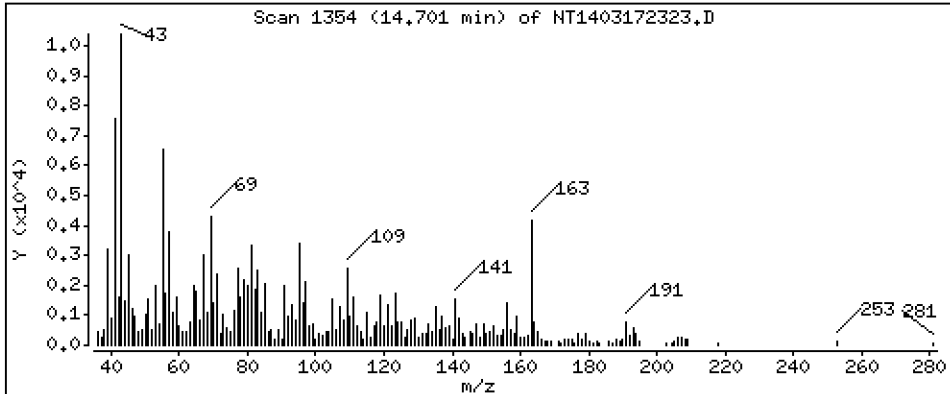
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.05843 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

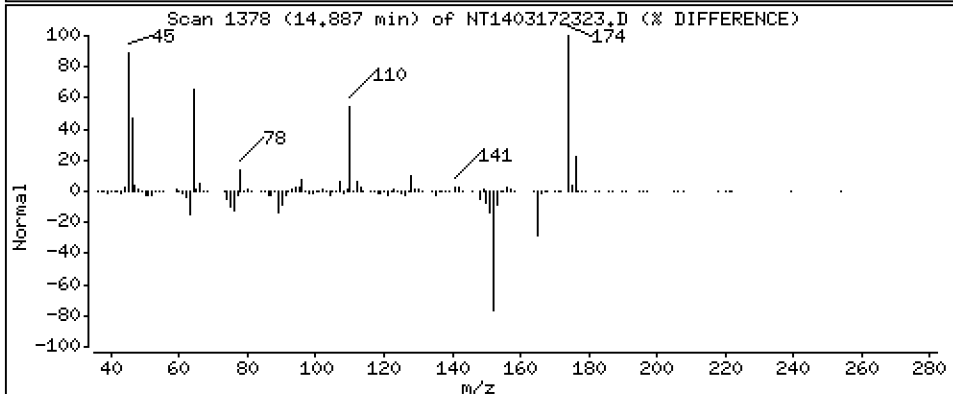
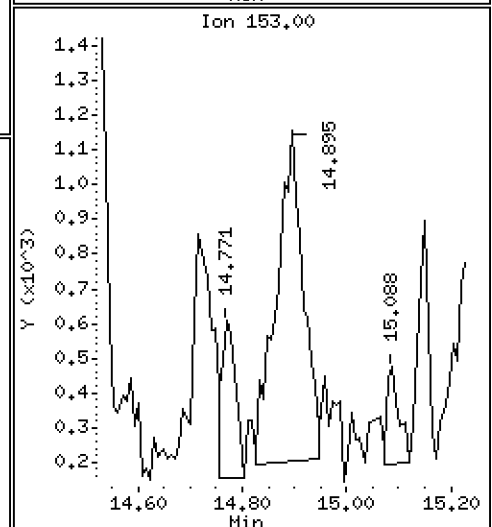
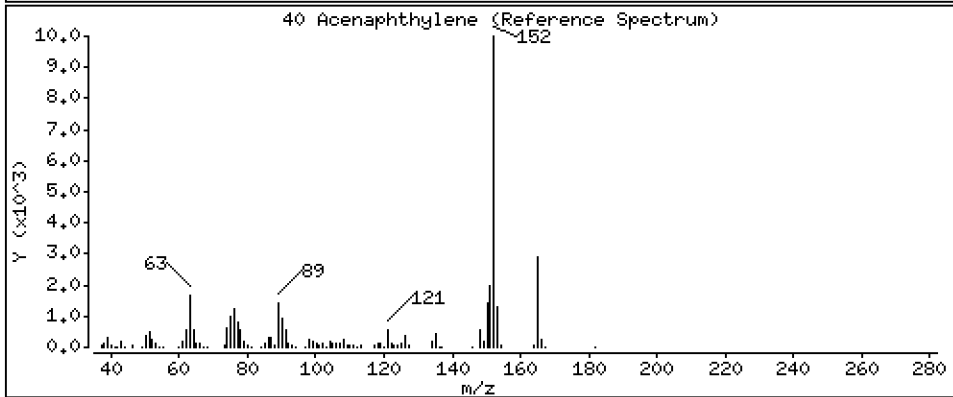
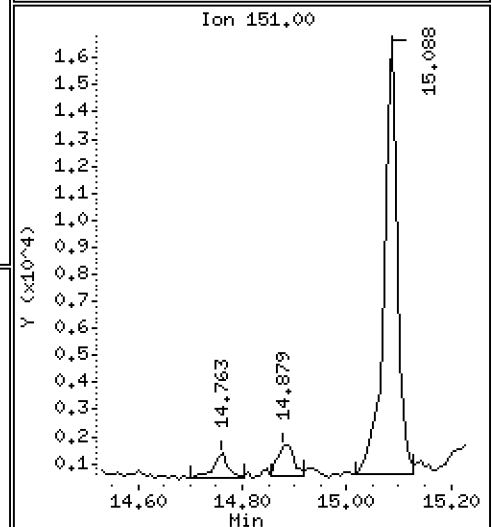
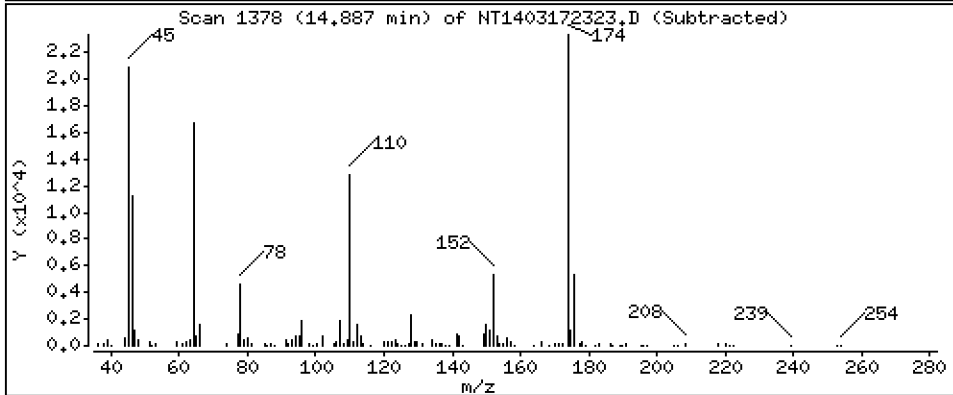
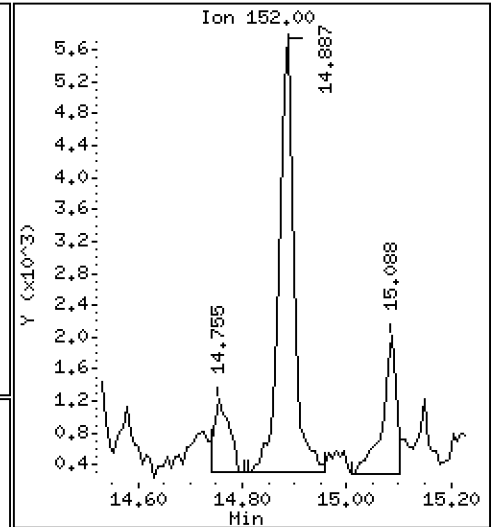
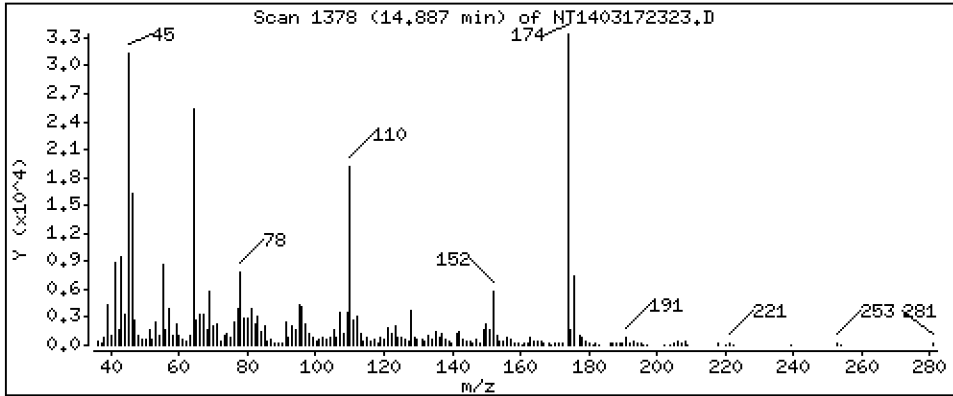
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.04869 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

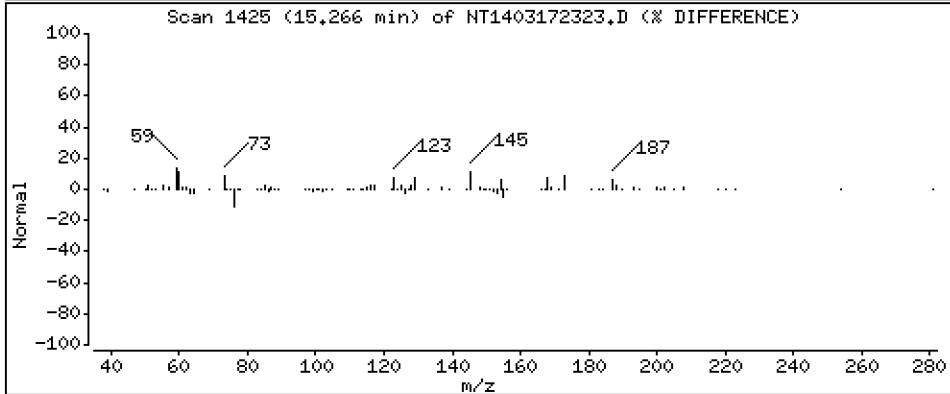
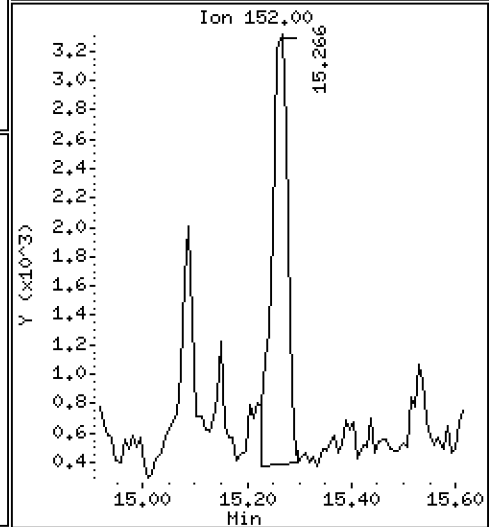
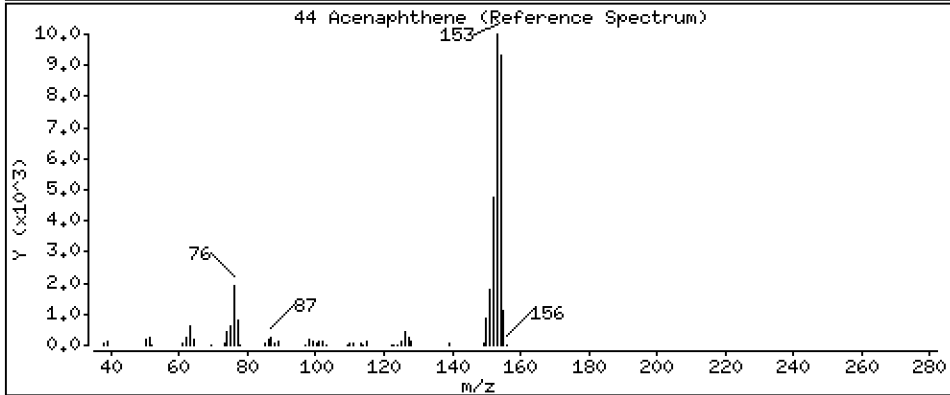
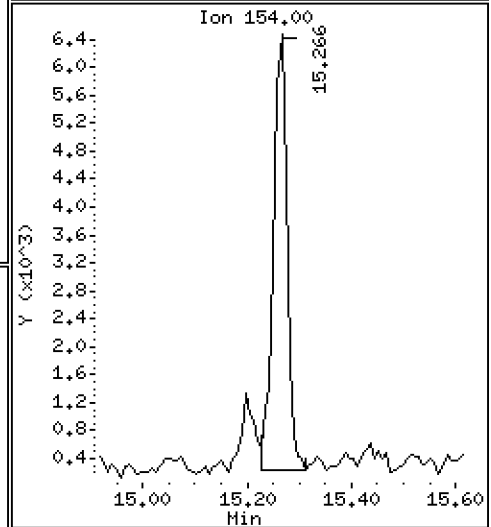
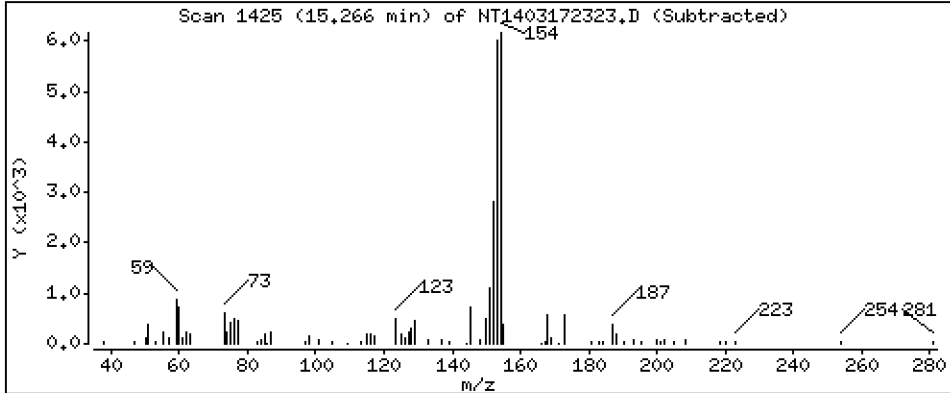
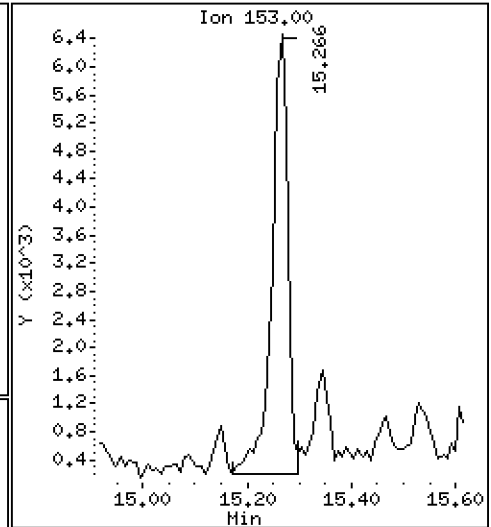
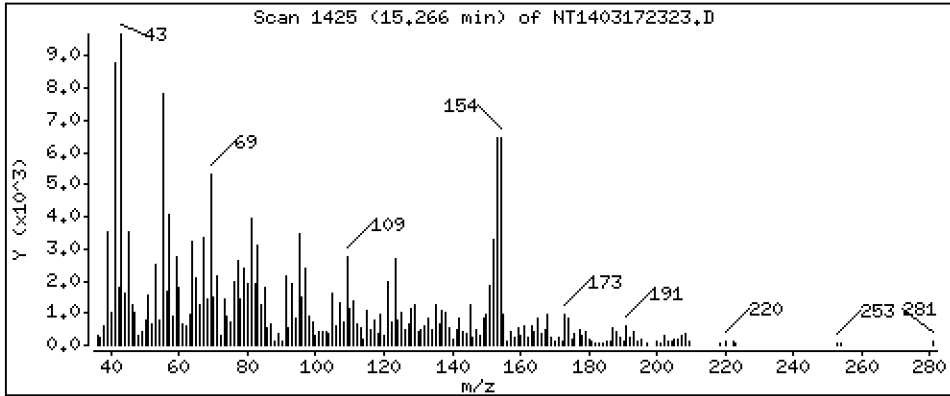
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.09949 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

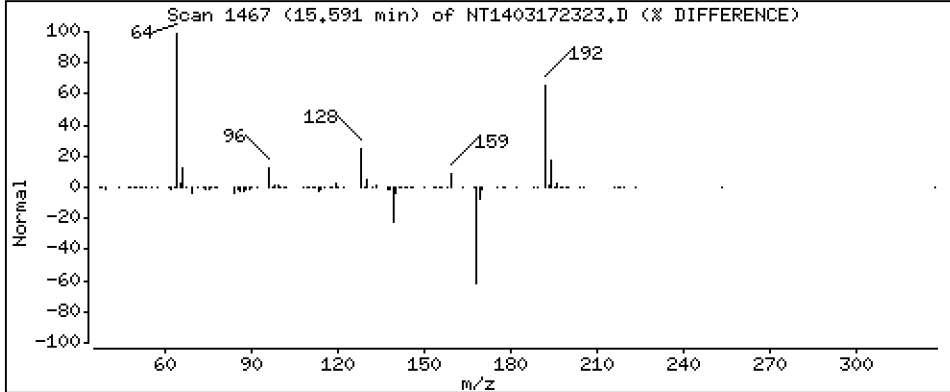
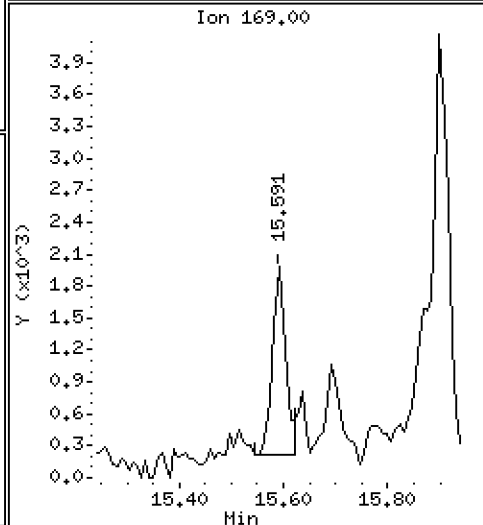
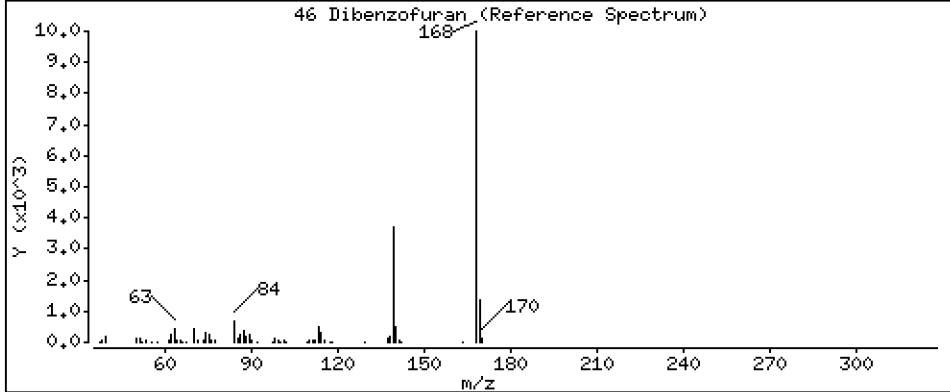
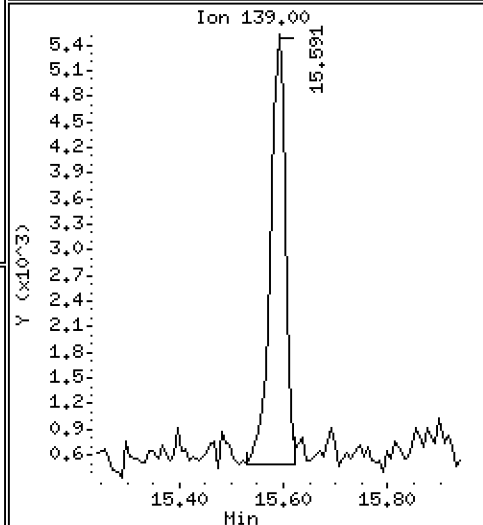
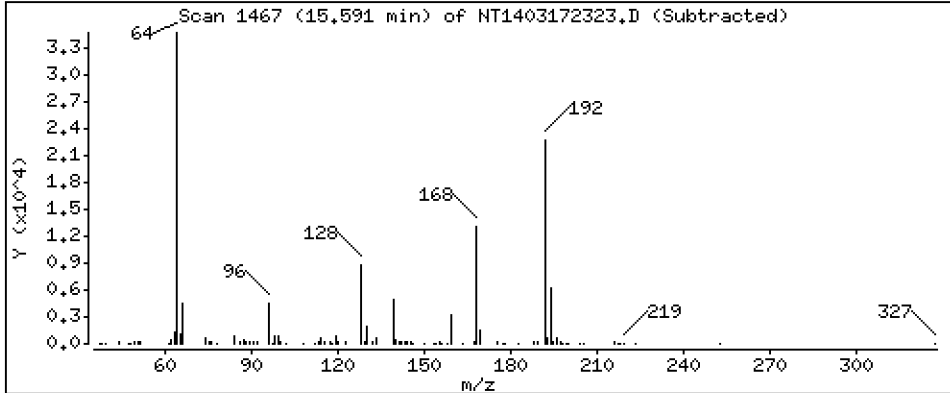
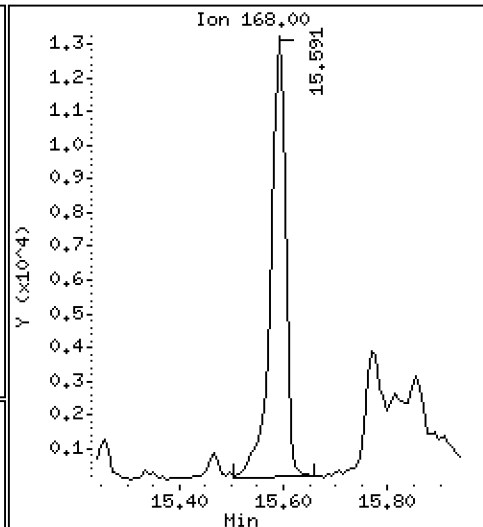
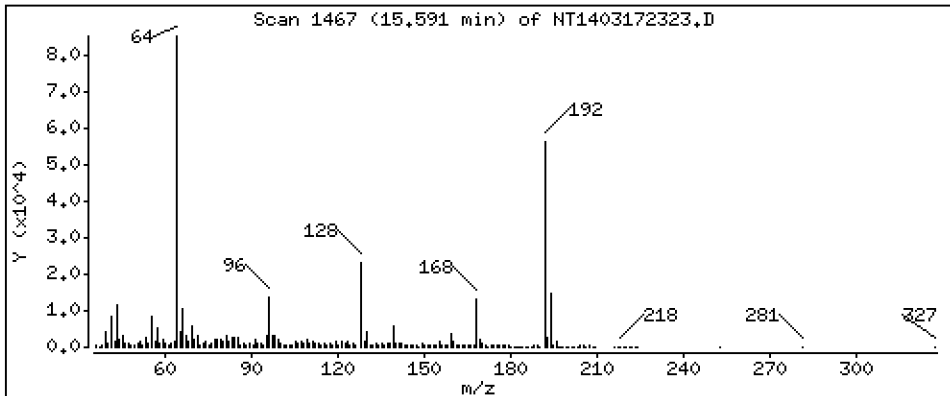
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1377 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

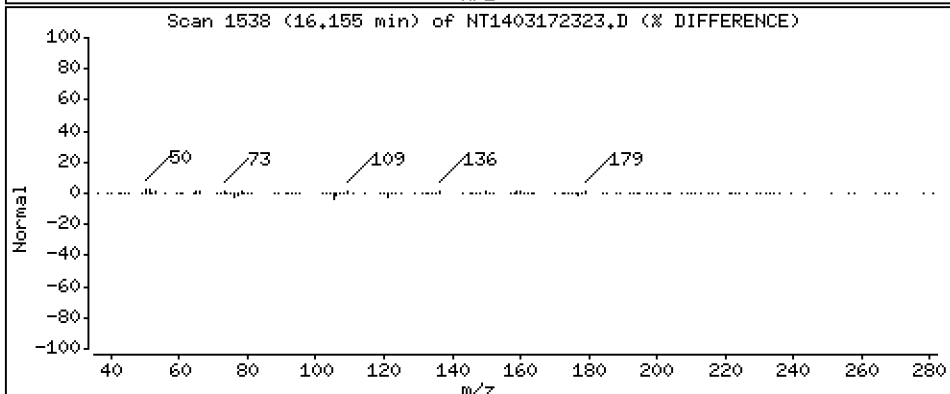
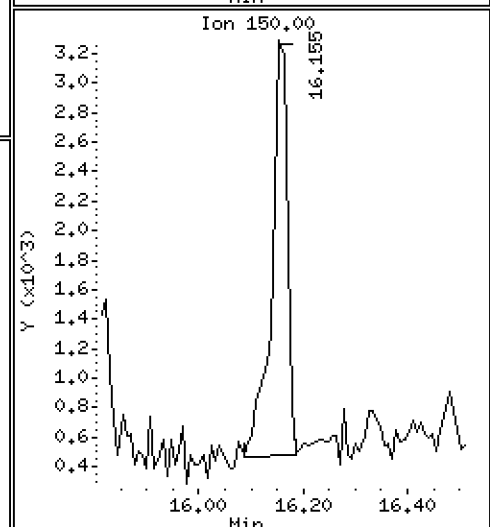
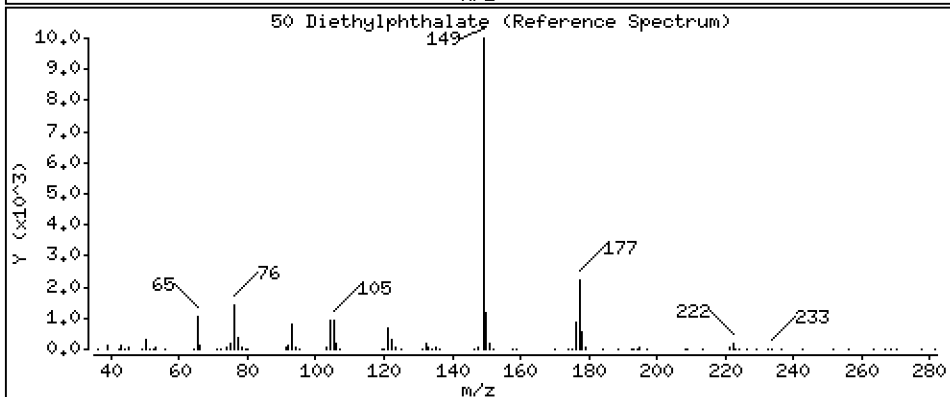
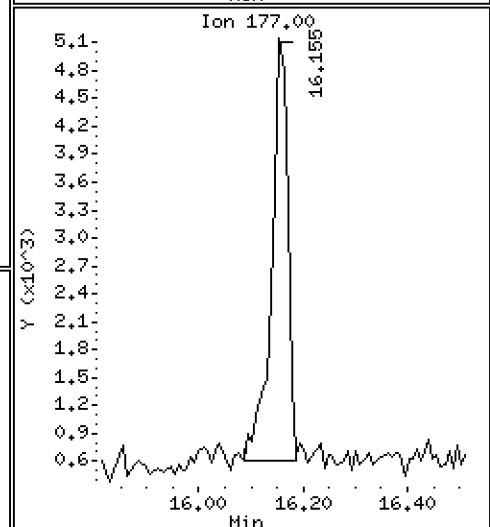
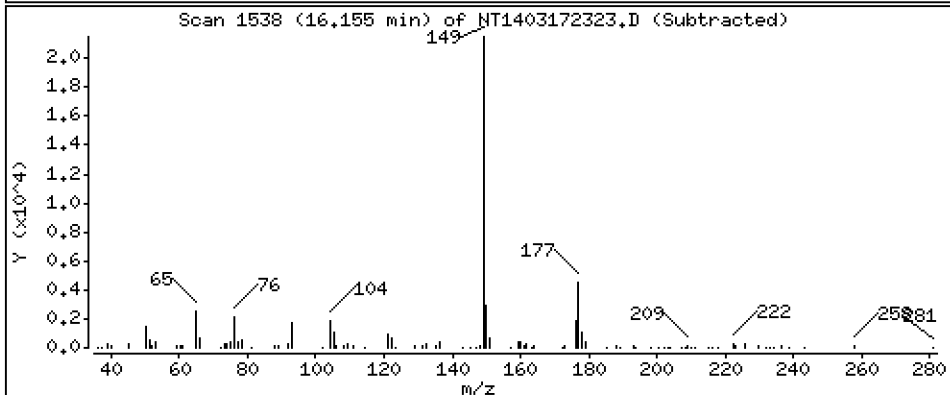
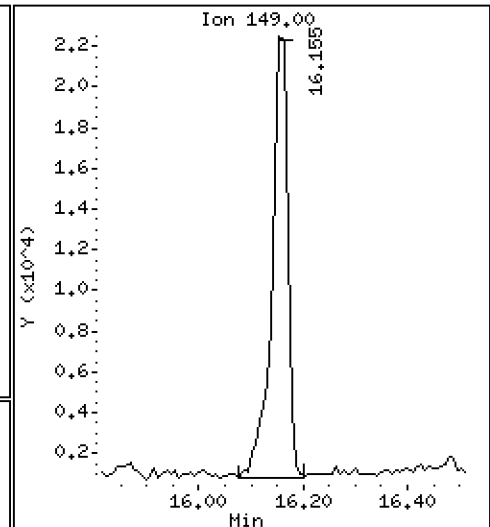
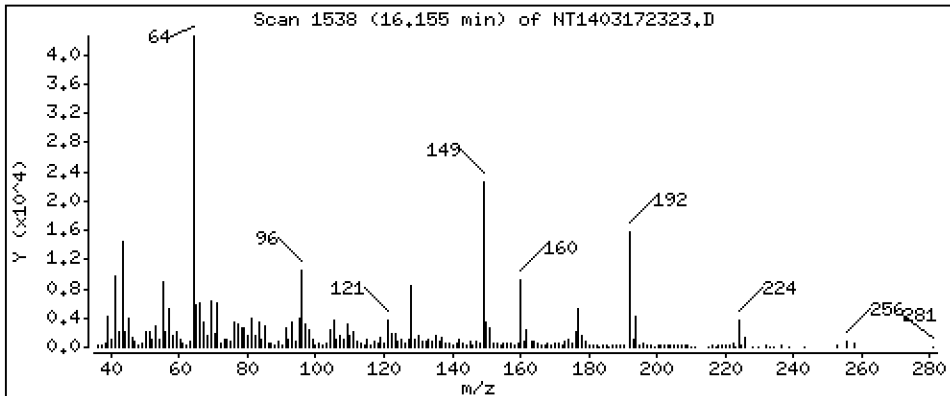
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3095 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

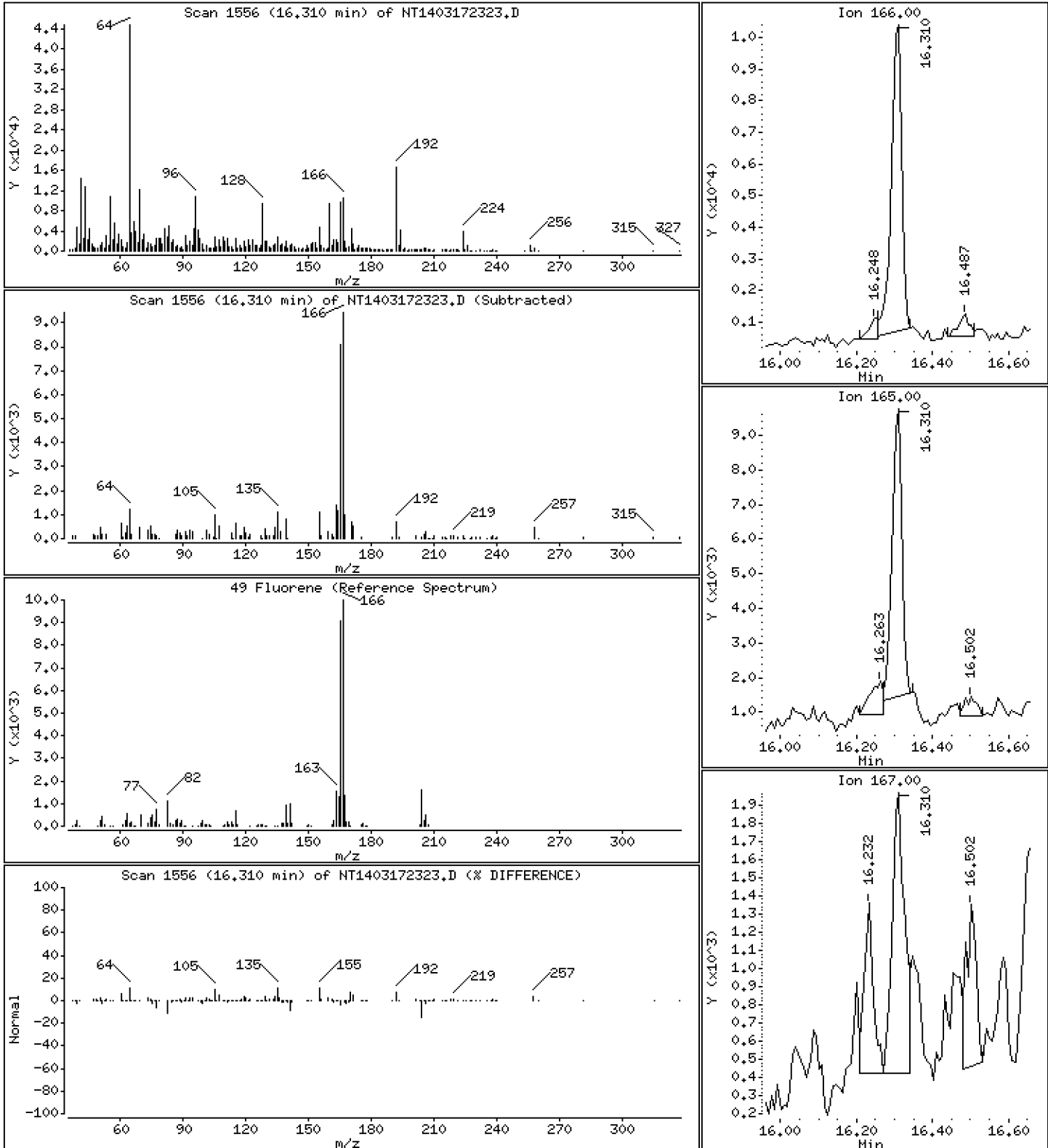
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1042 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

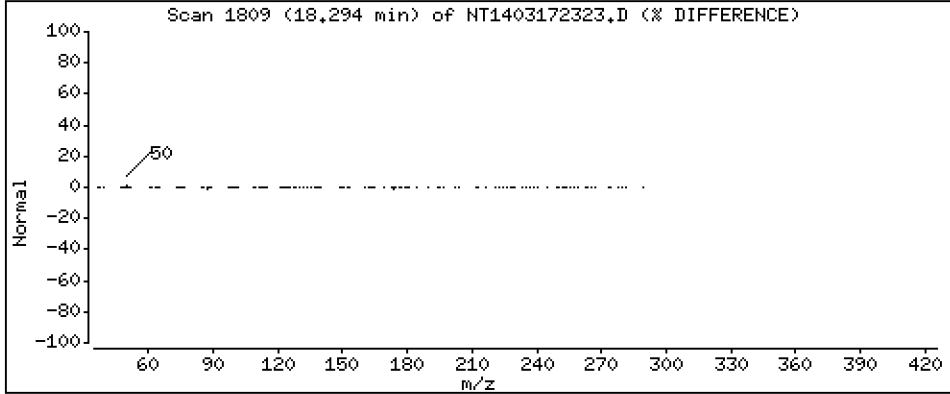
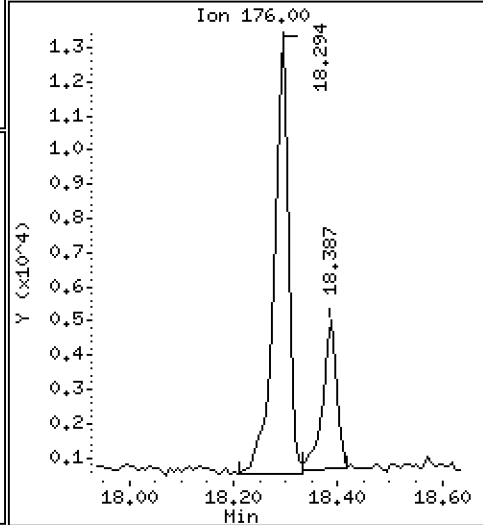
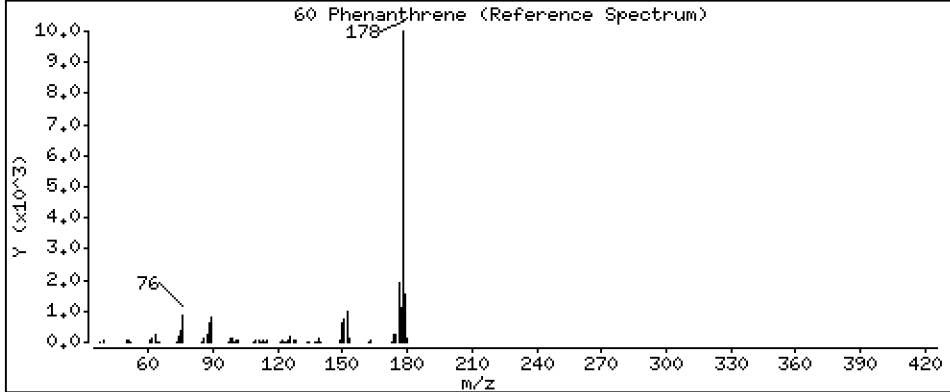
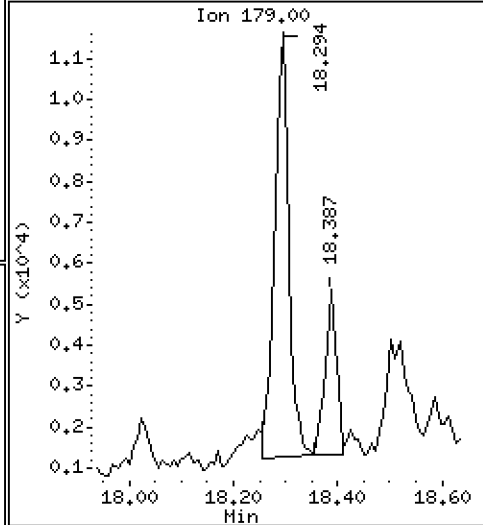
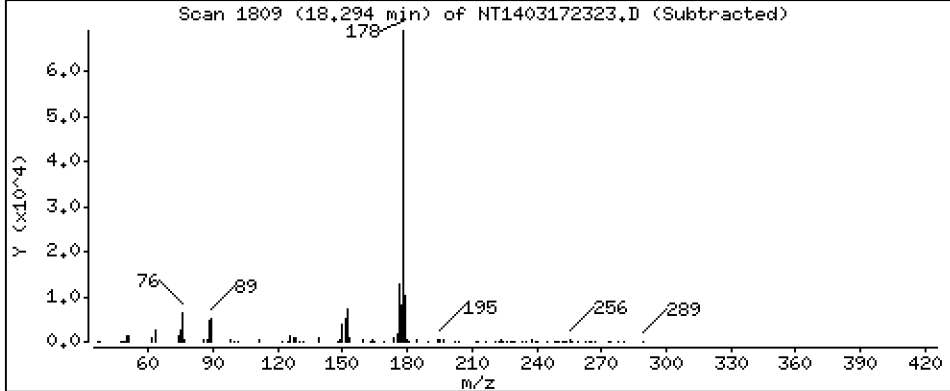
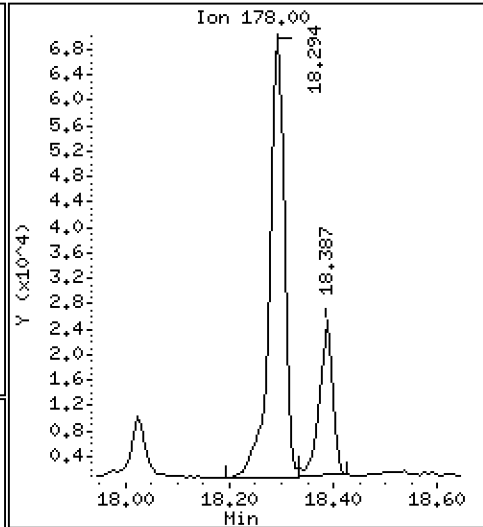
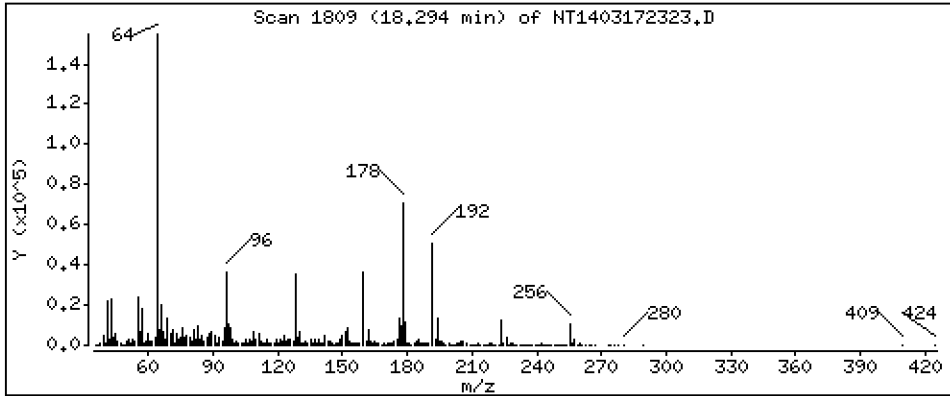
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,7092 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

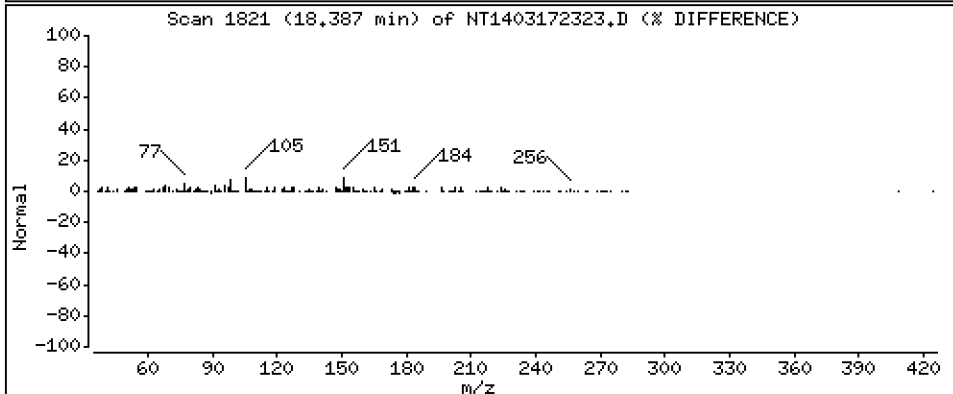
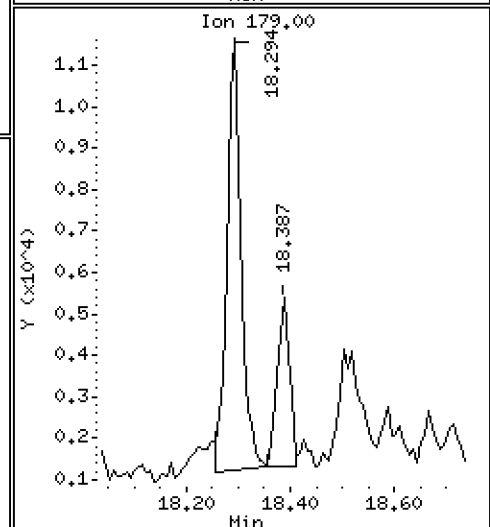
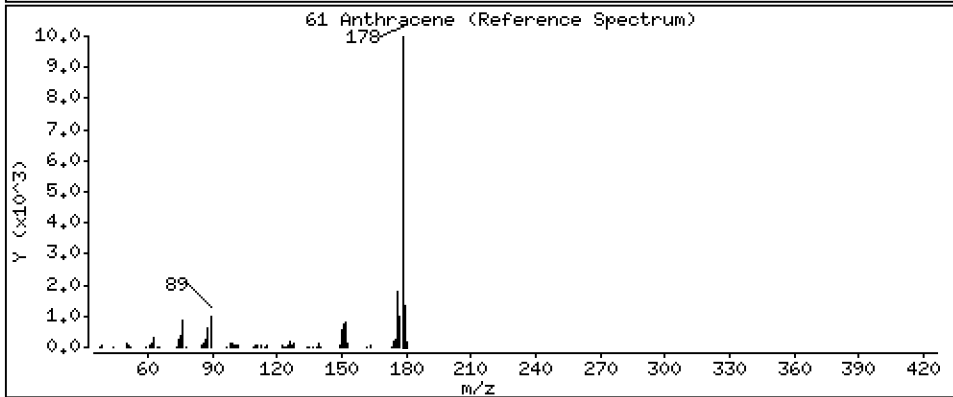
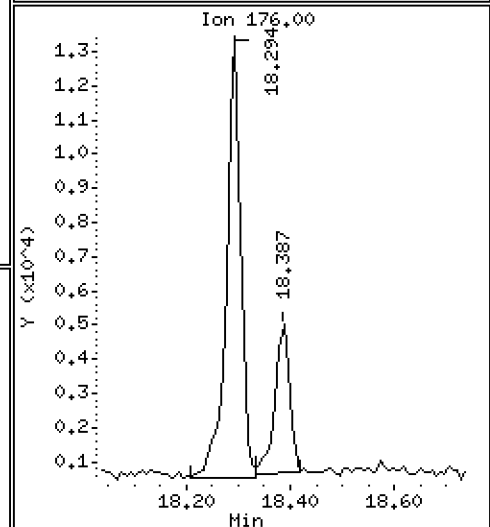
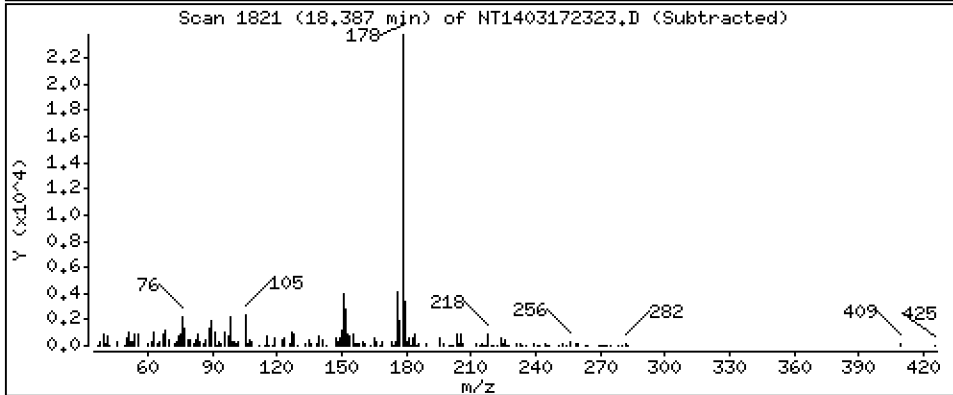
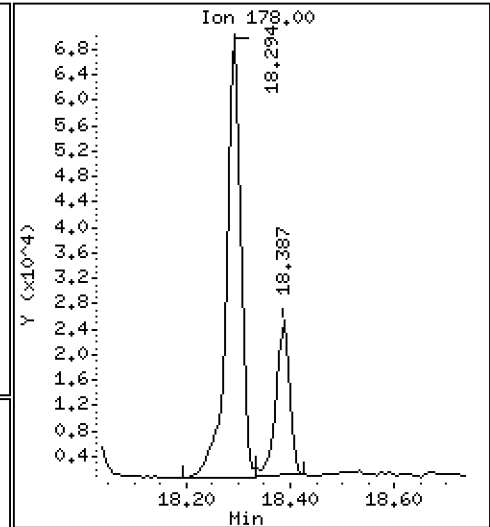
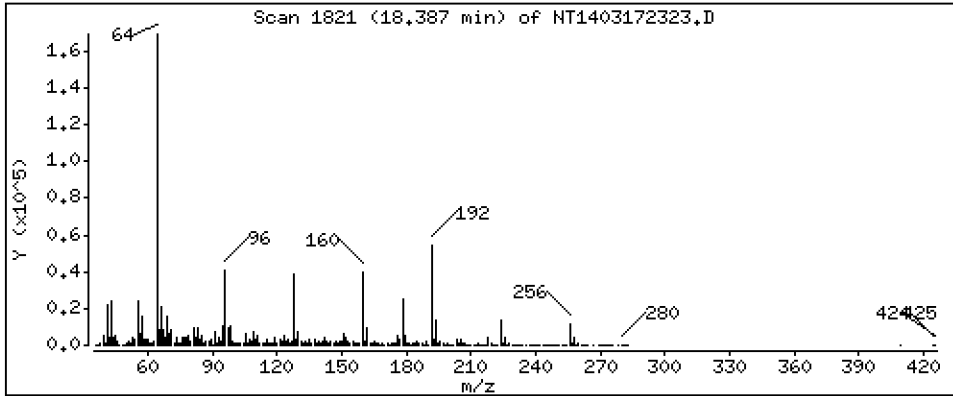
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 0.2320 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

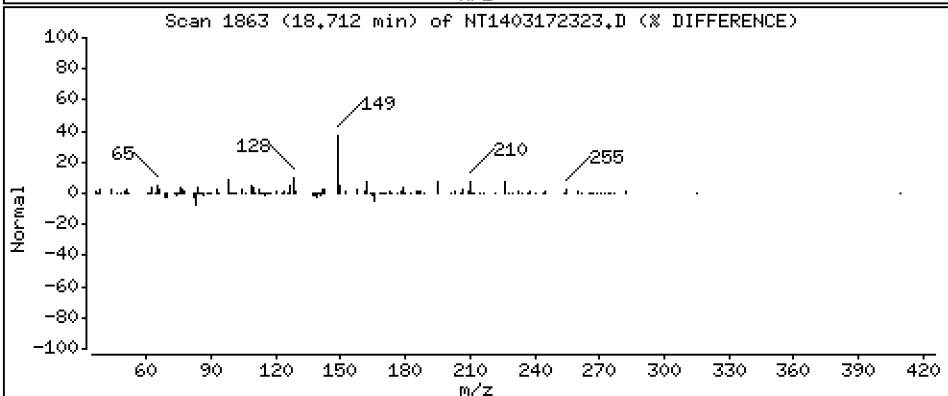
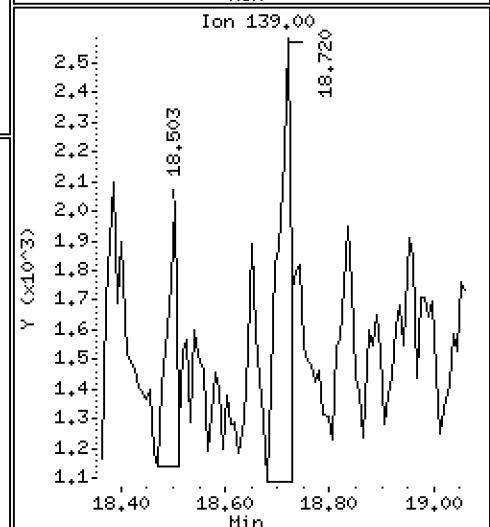
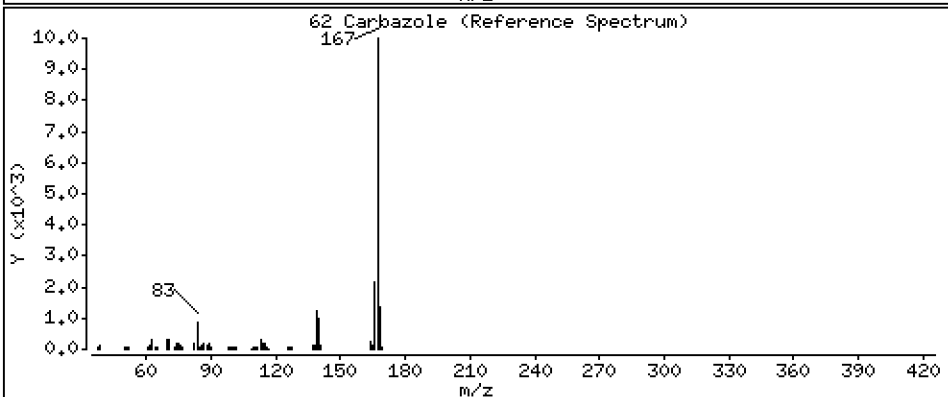
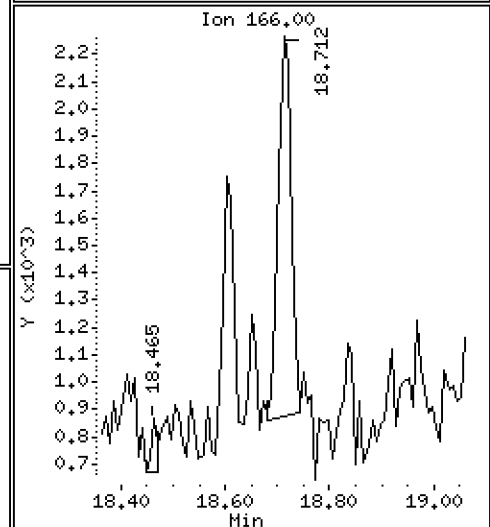
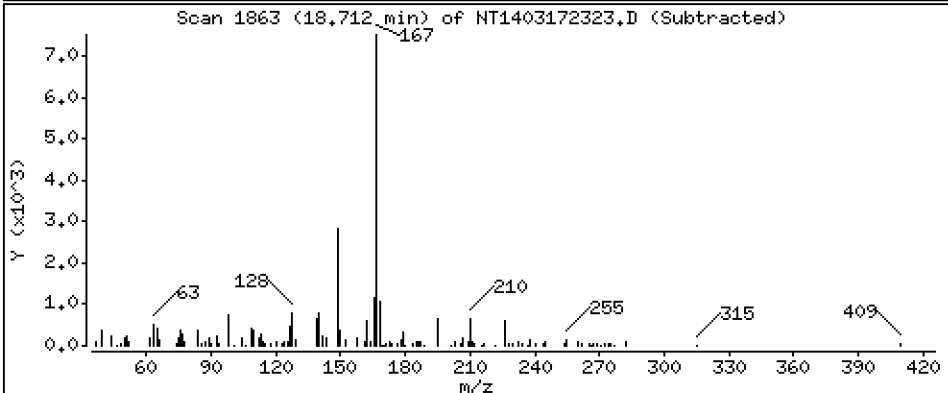
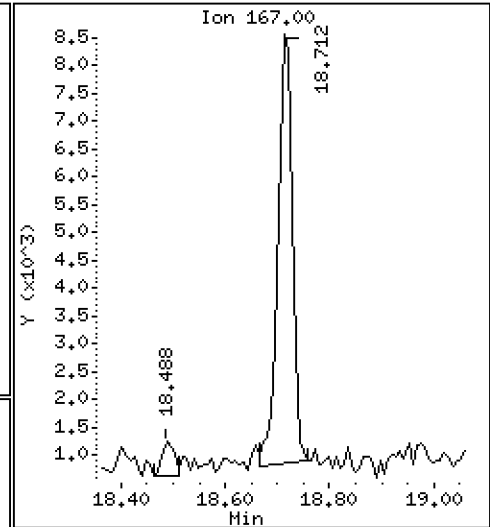
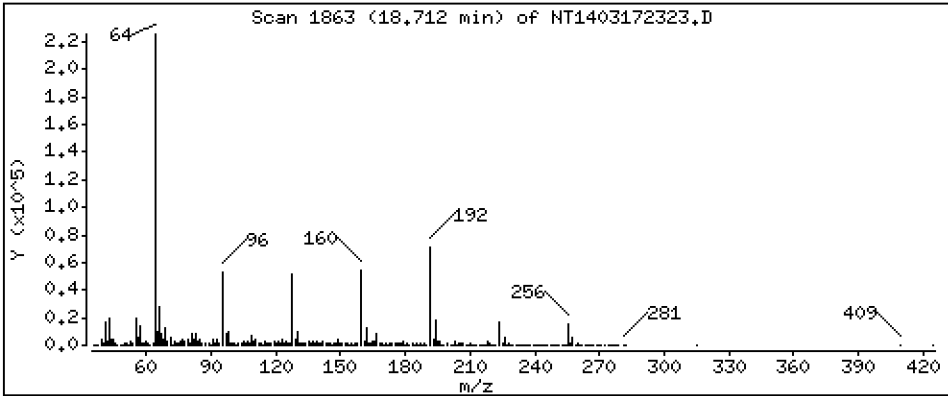
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,09034 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

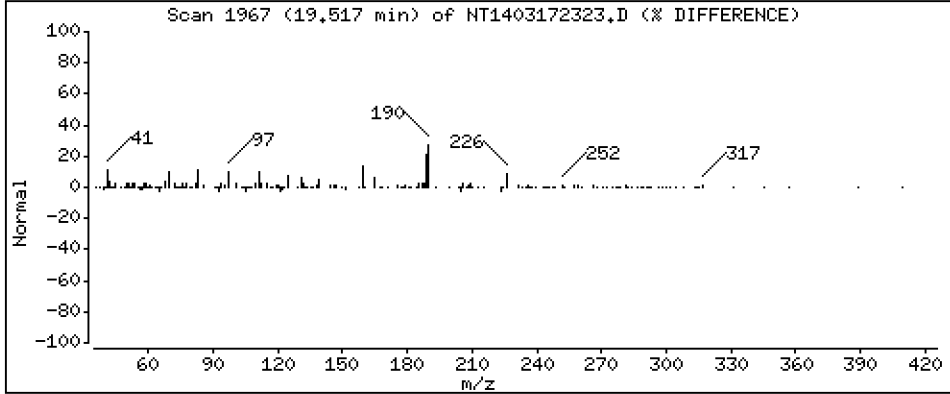
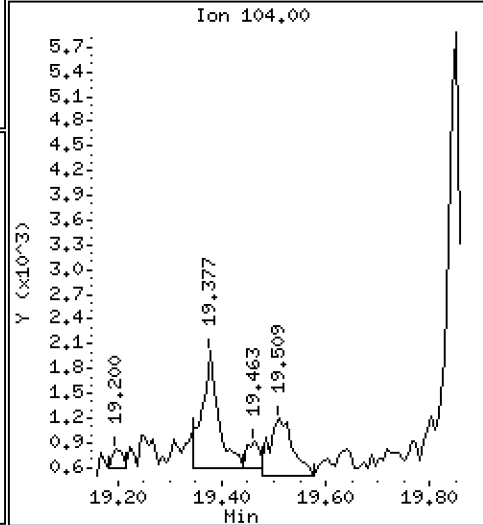
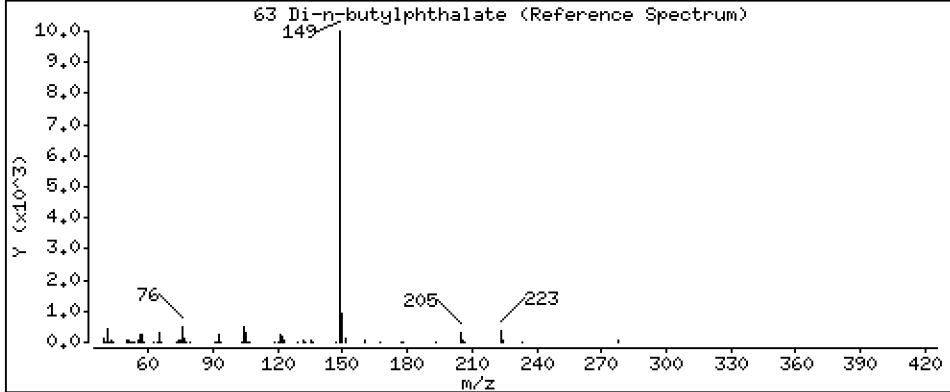
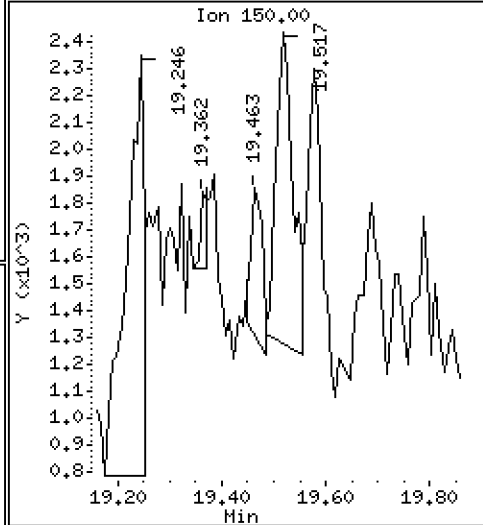
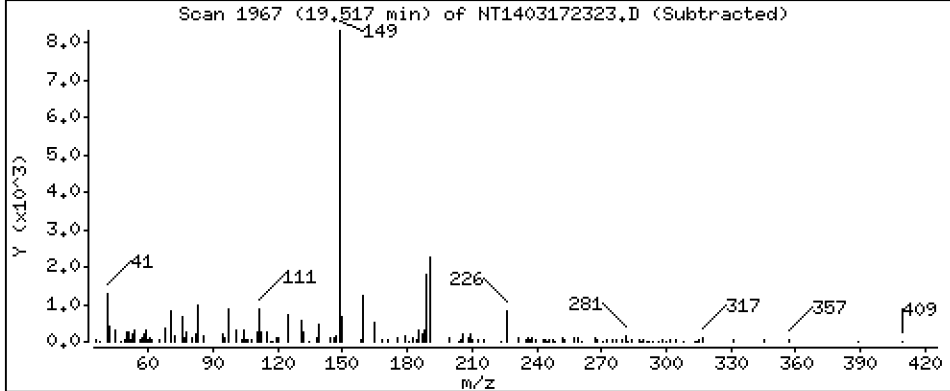
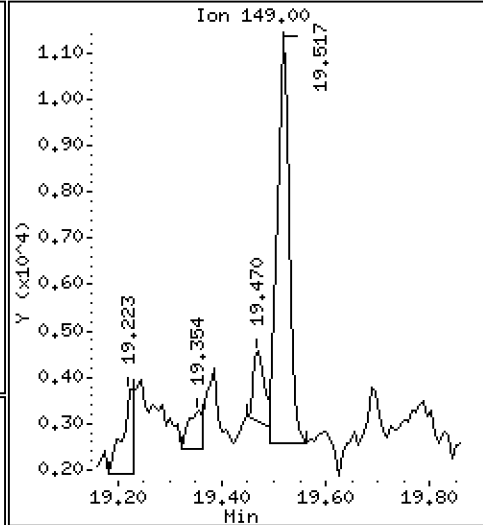
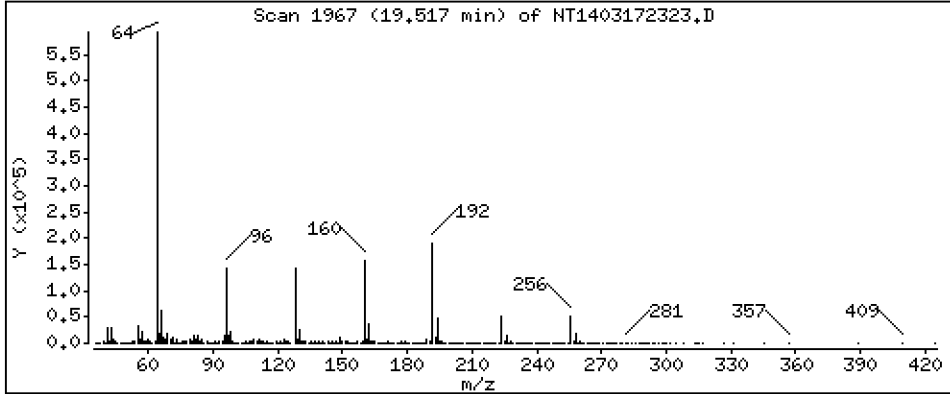
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.06962 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

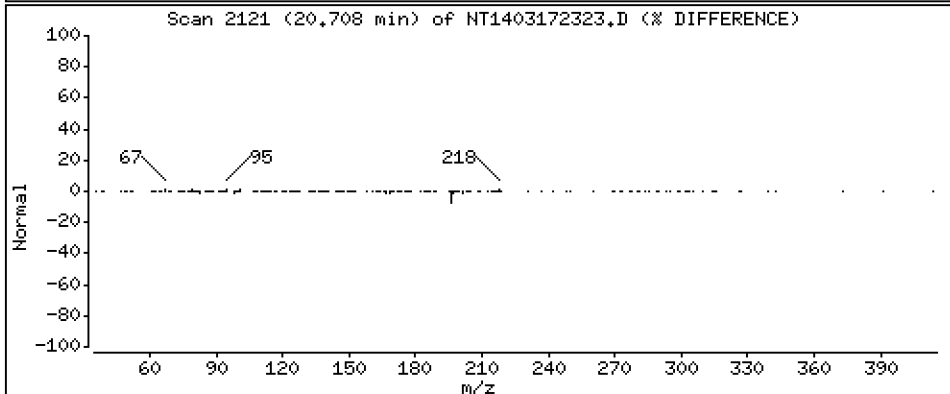
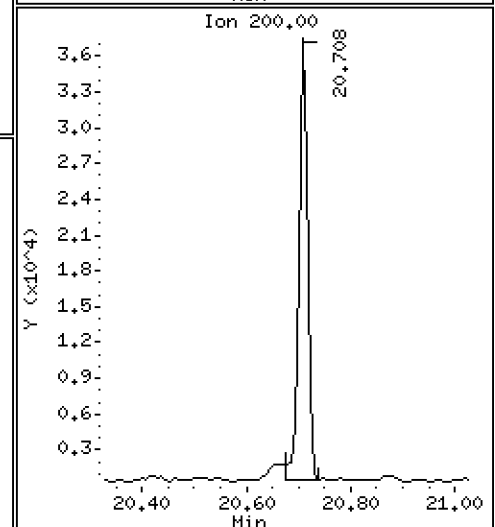
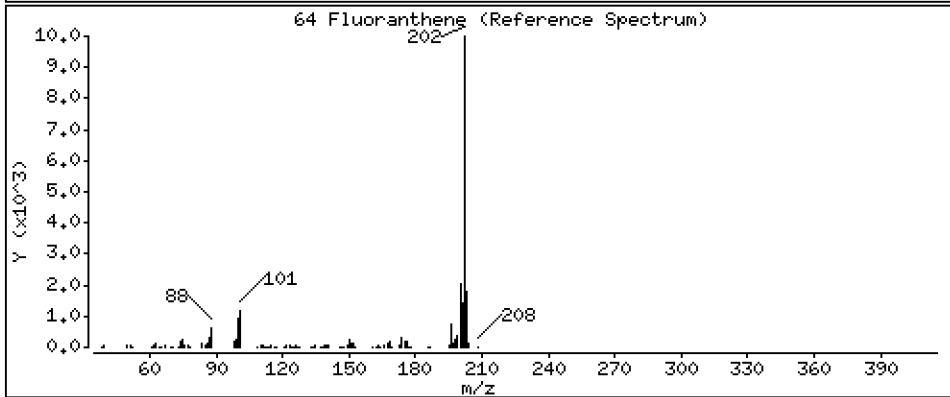
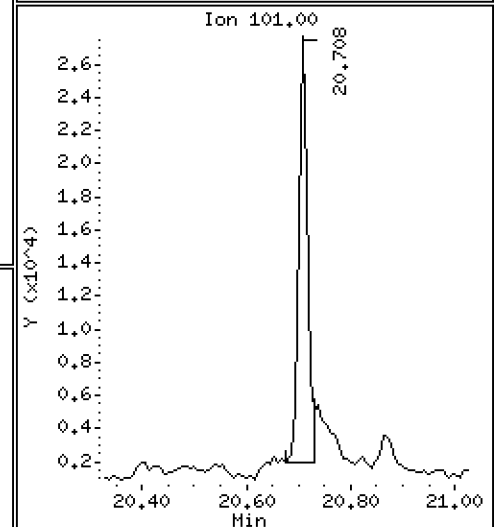
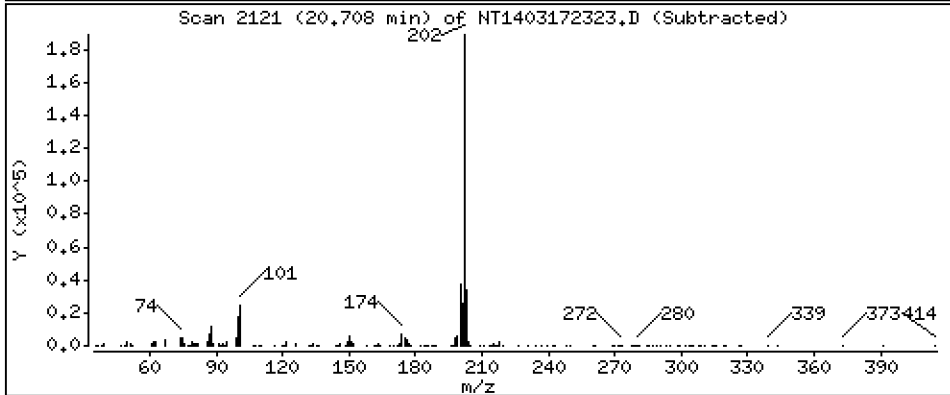
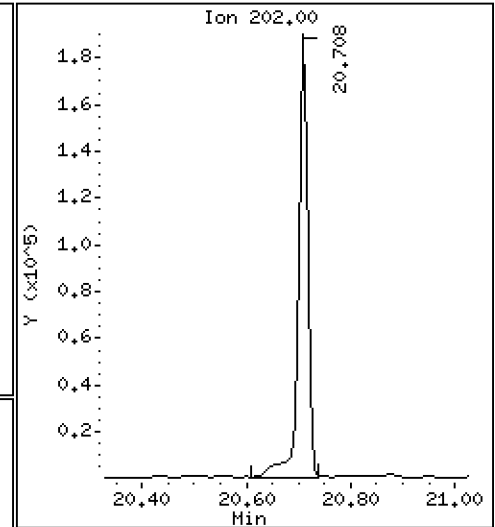
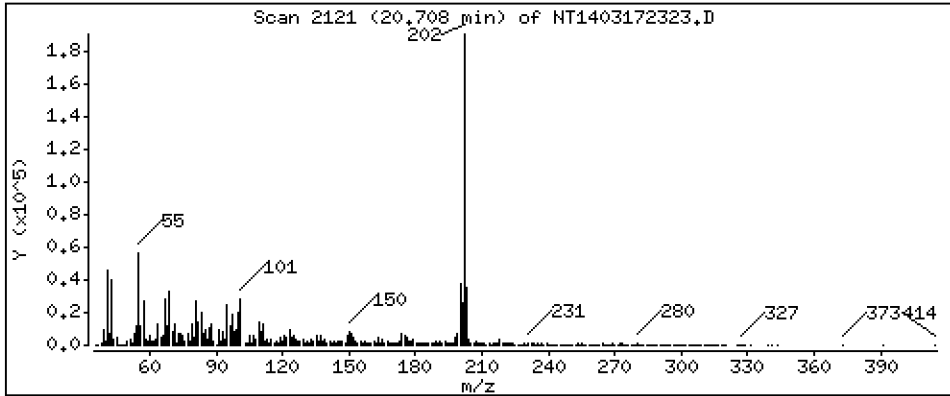
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 2,980 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

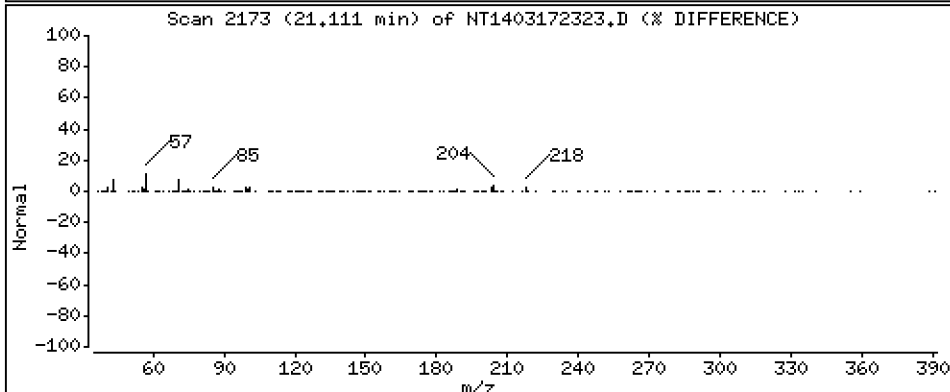
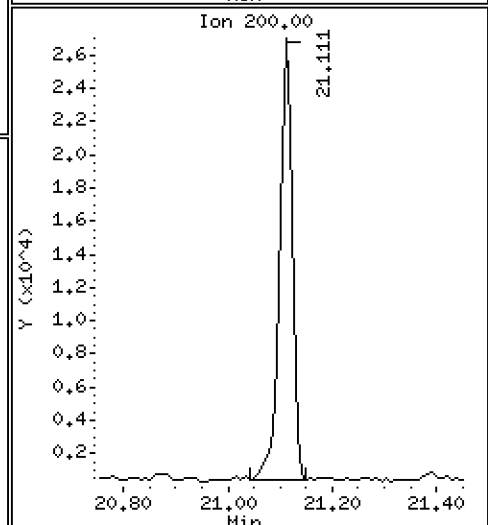
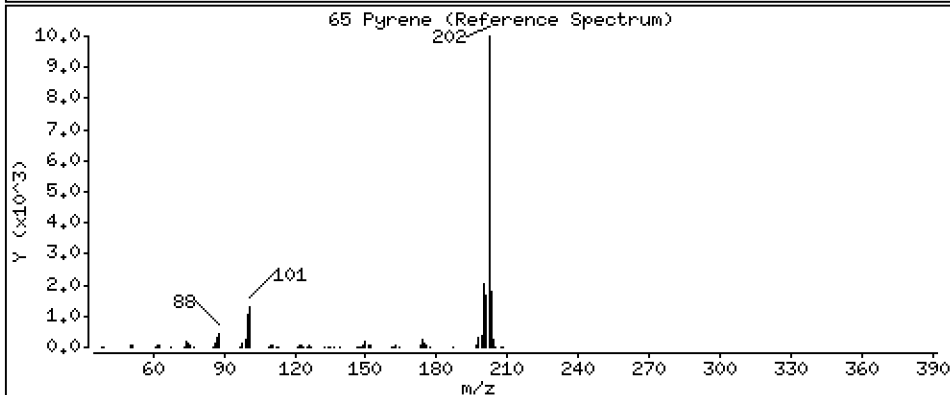
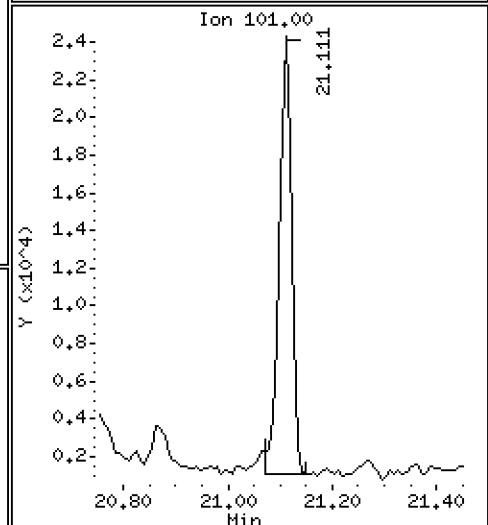
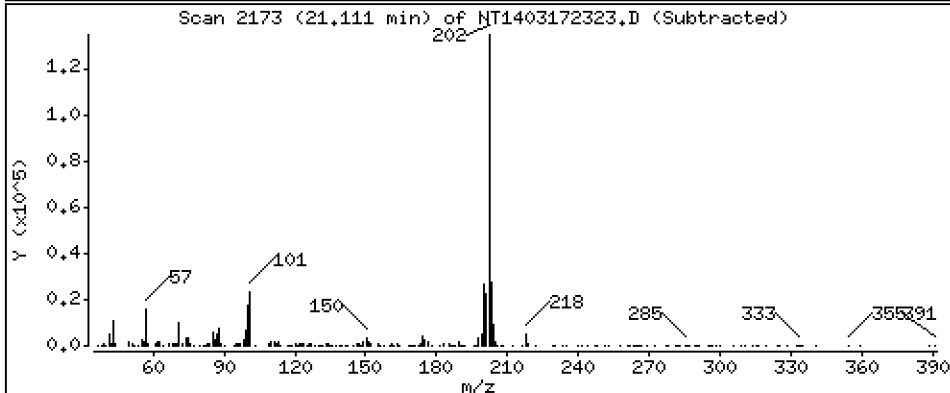
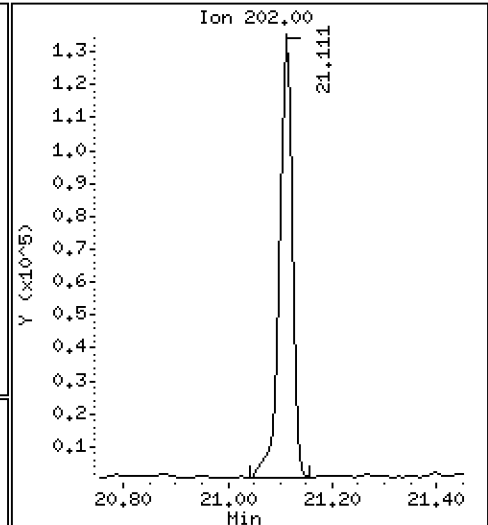
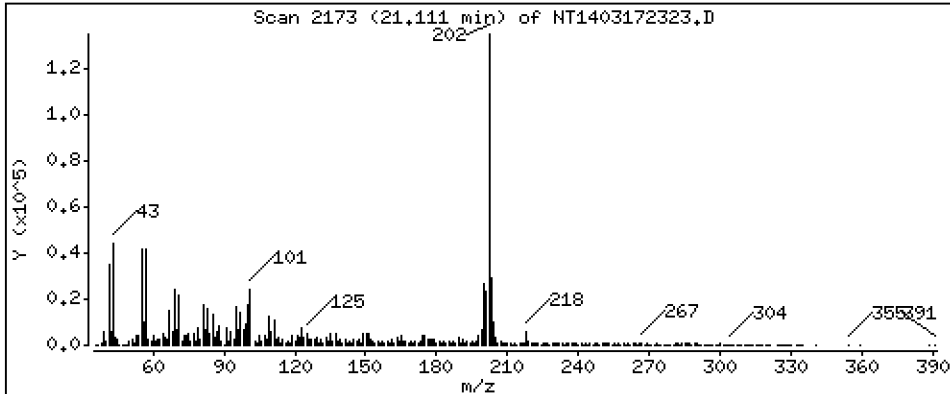
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,570 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

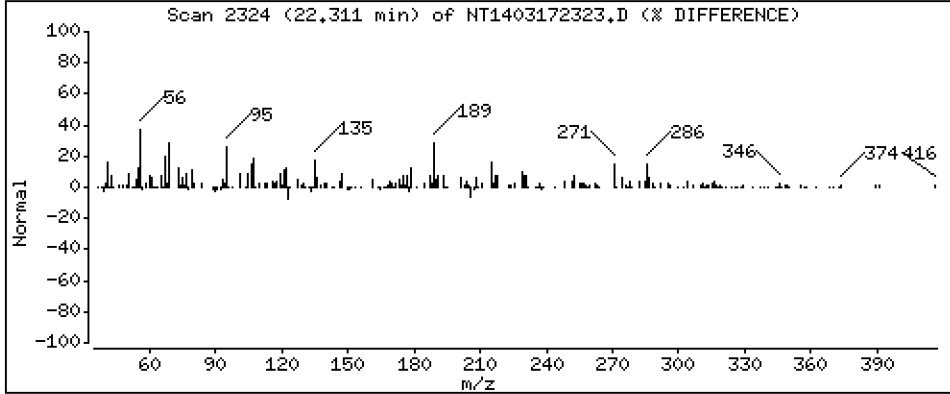
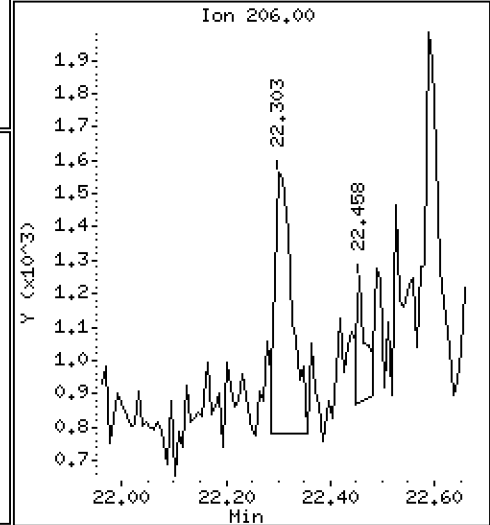
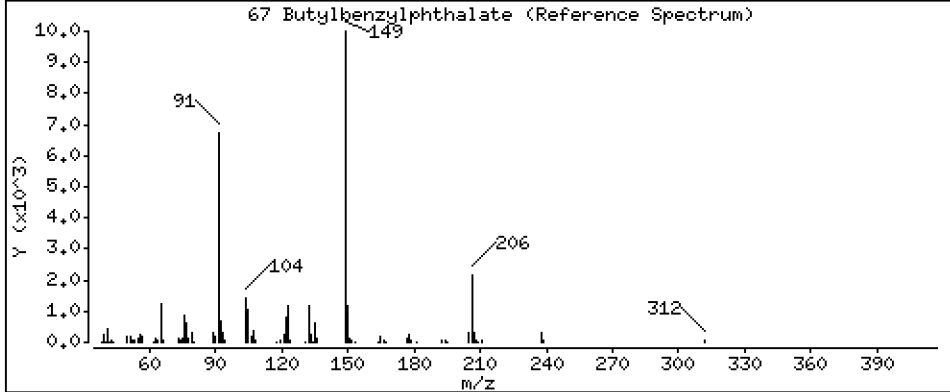
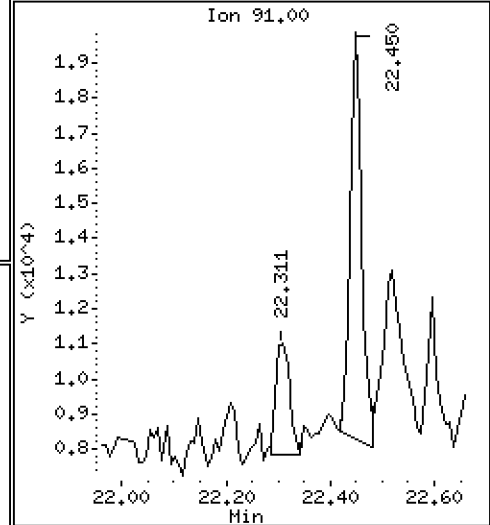
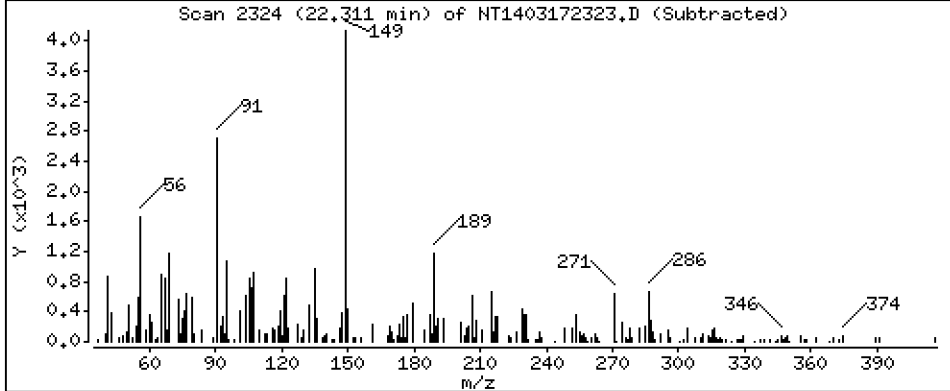
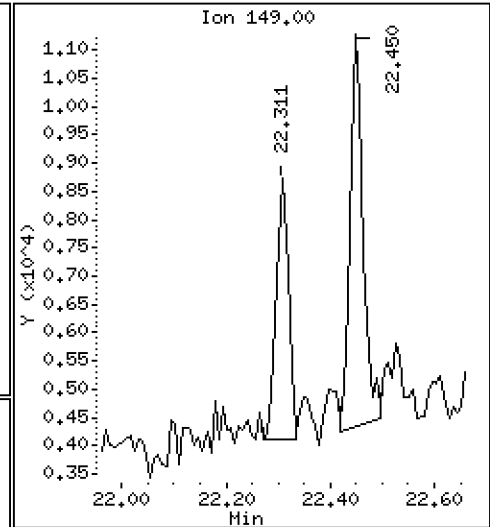
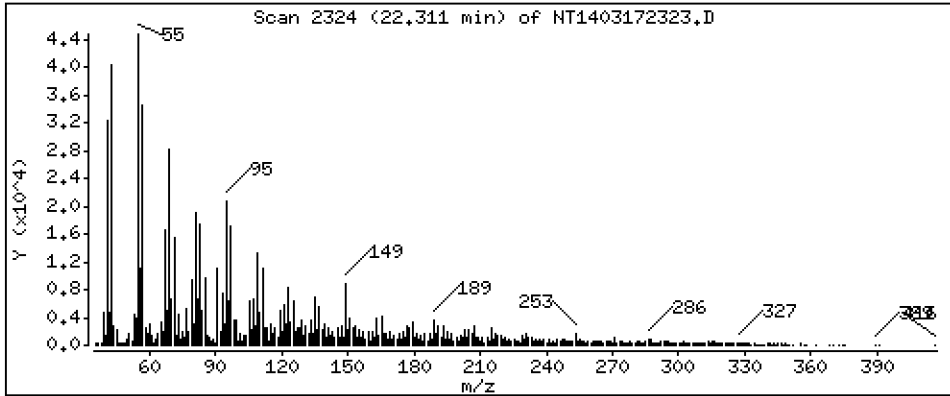
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1954 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

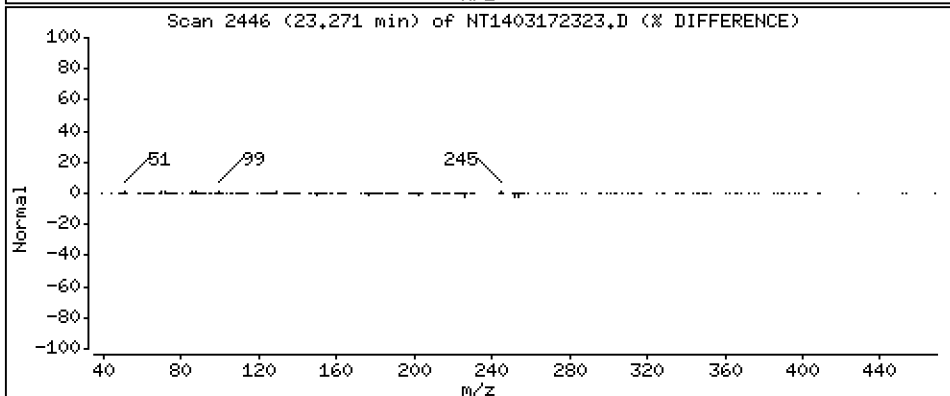
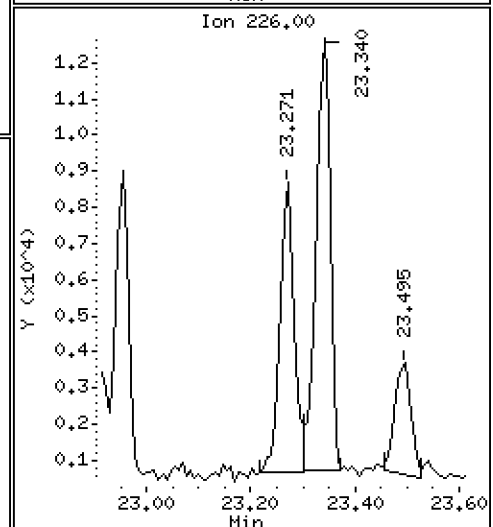
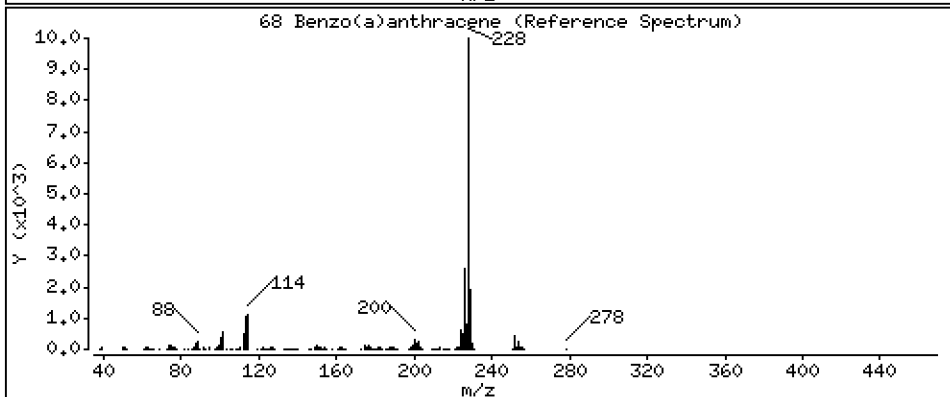
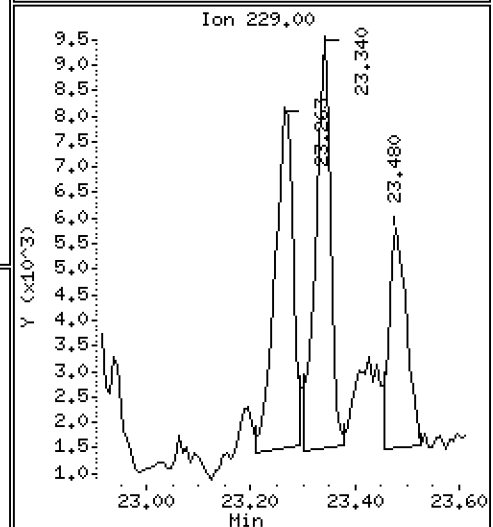
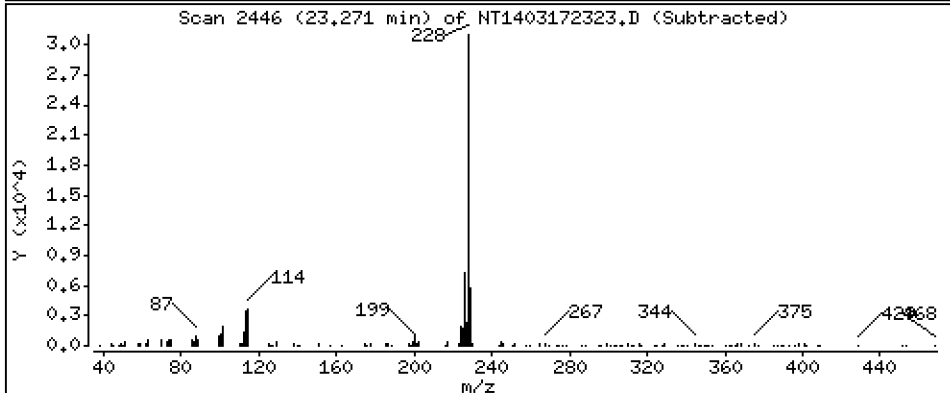
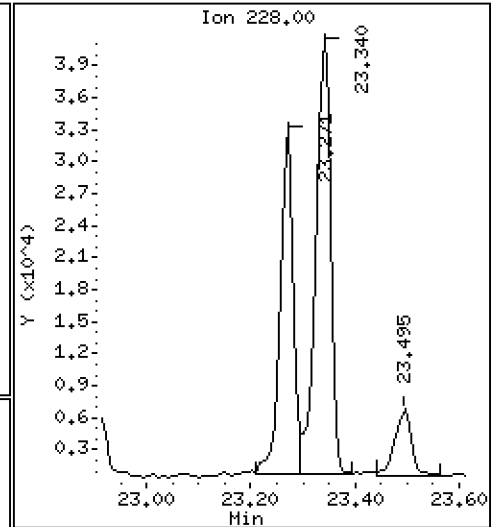
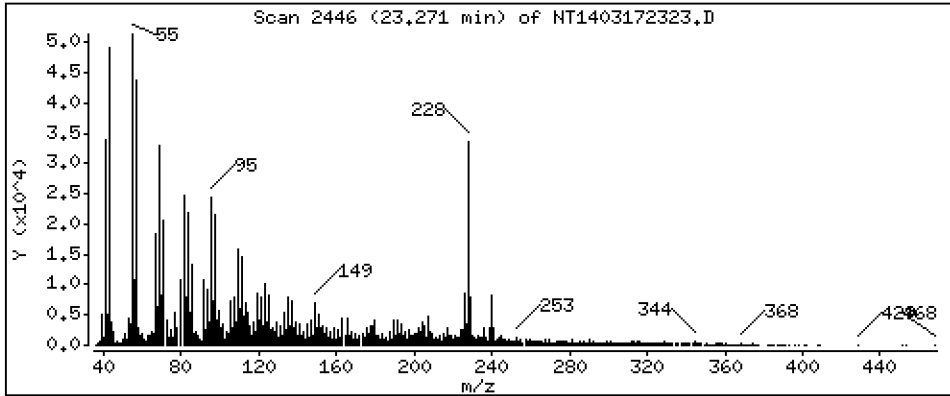
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,7269 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

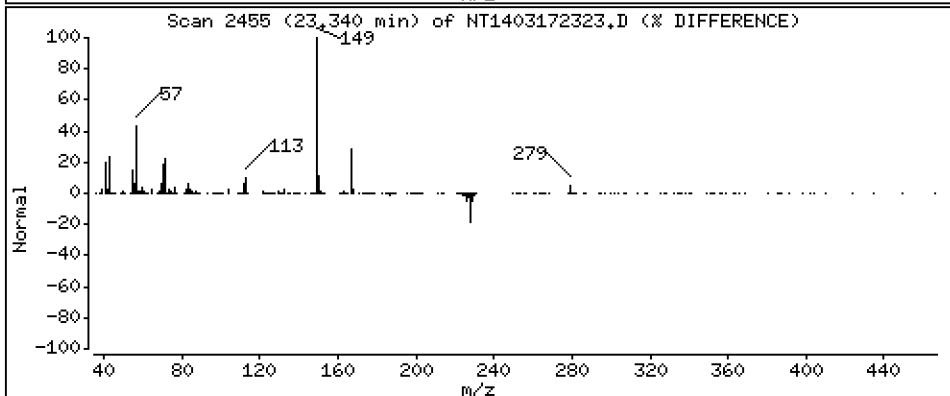
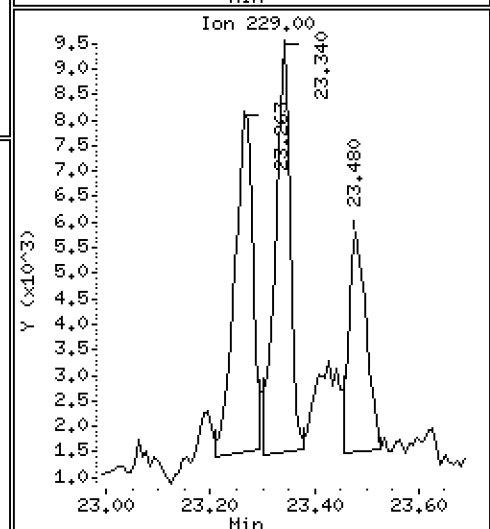
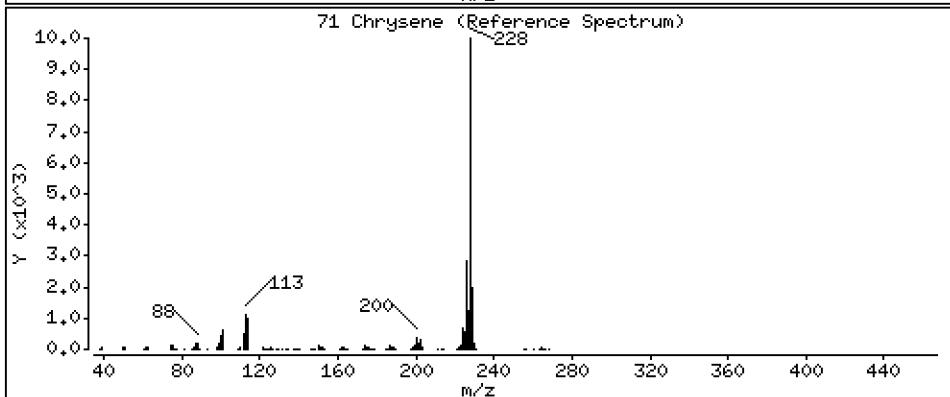
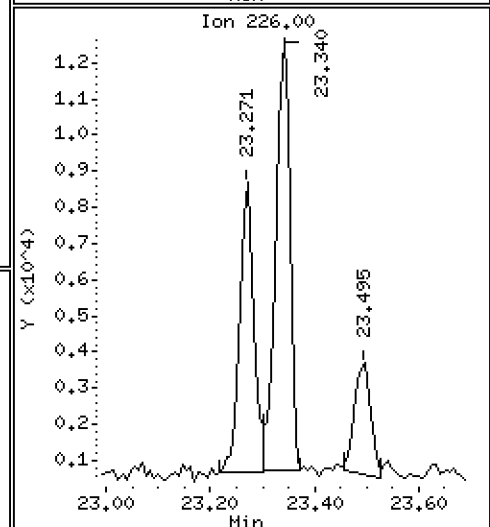
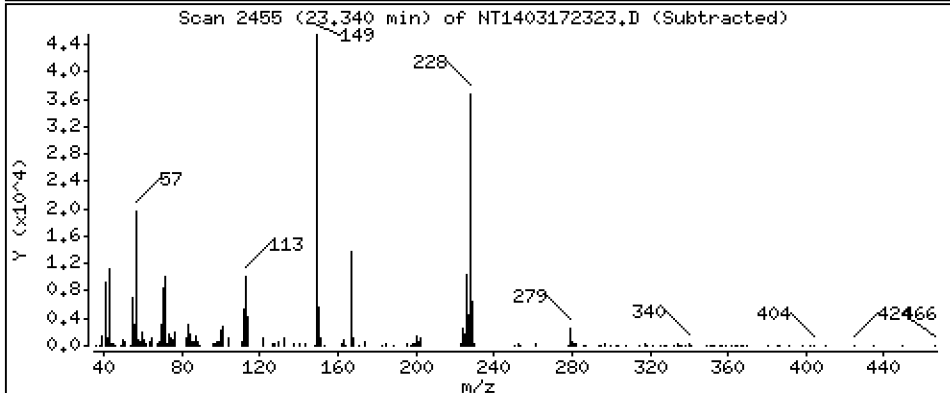
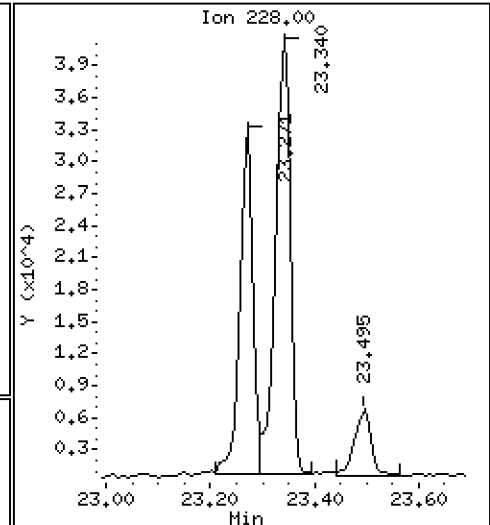
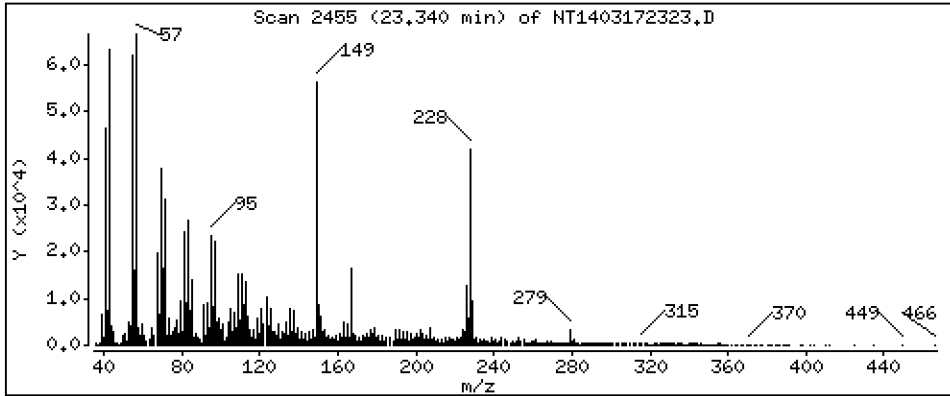
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,156 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

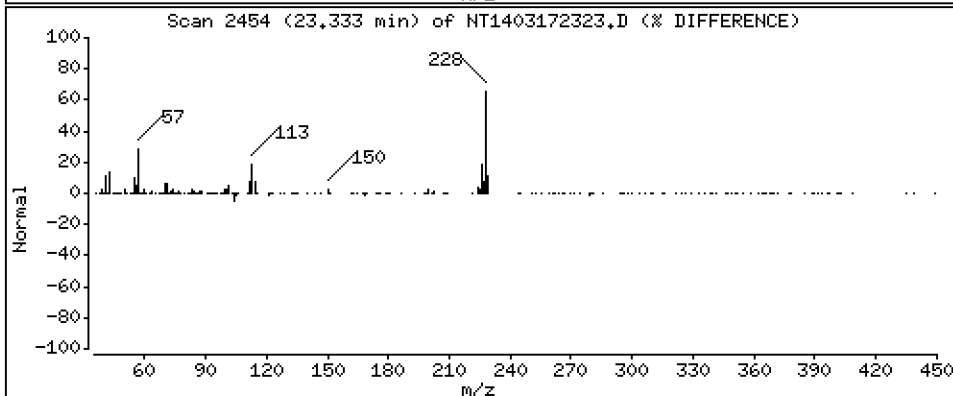
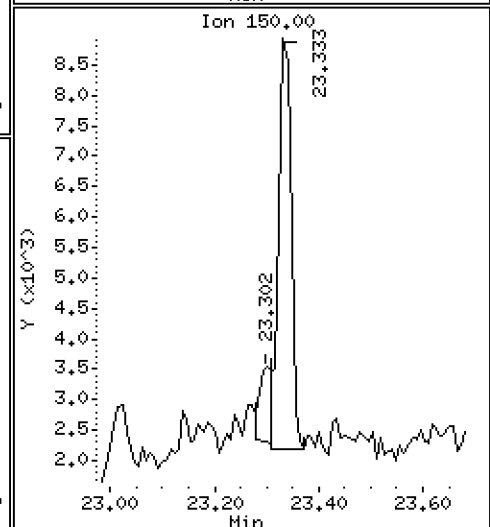
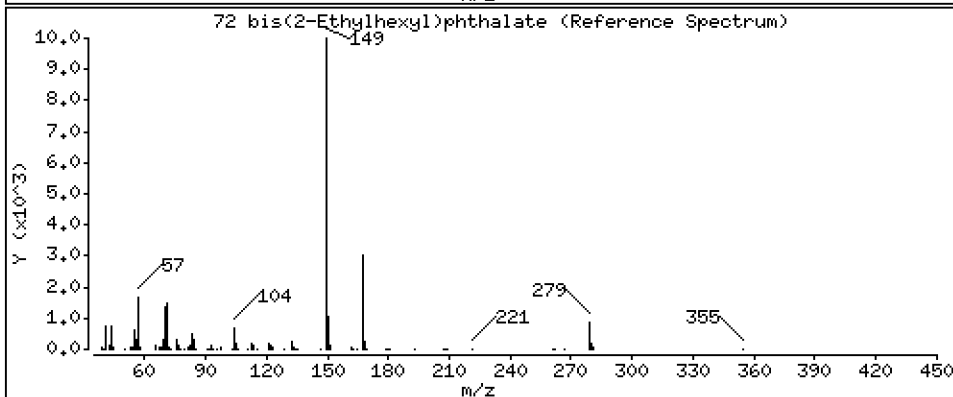
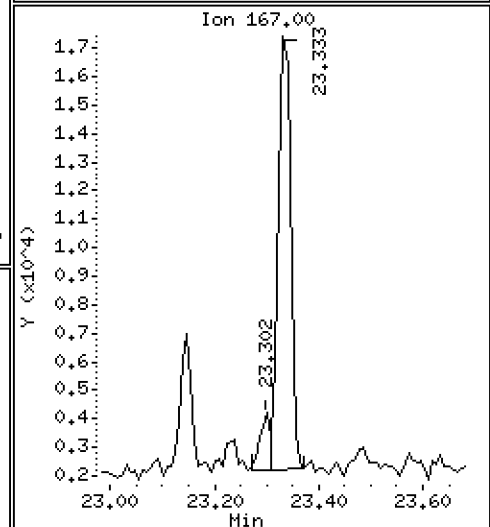
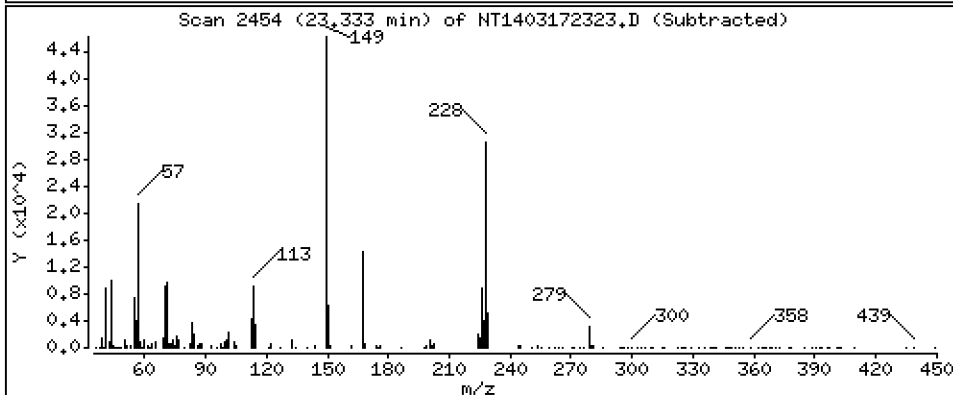
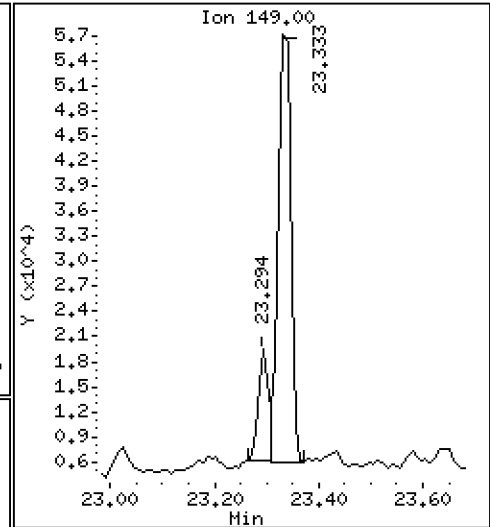
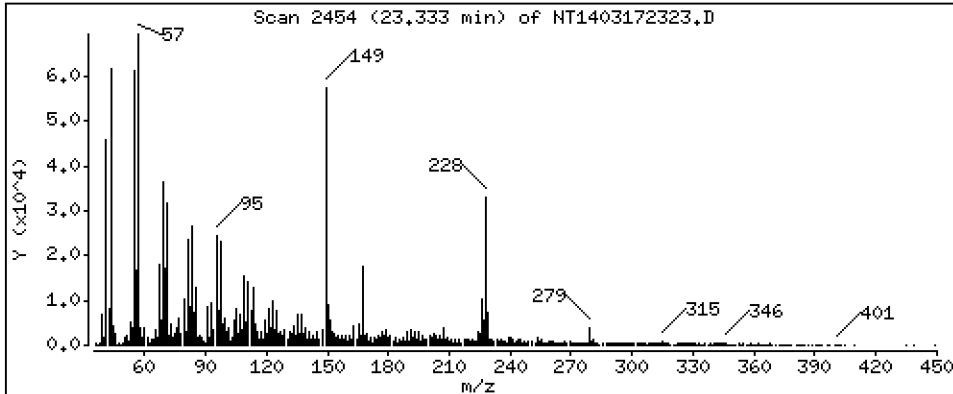
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,529 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

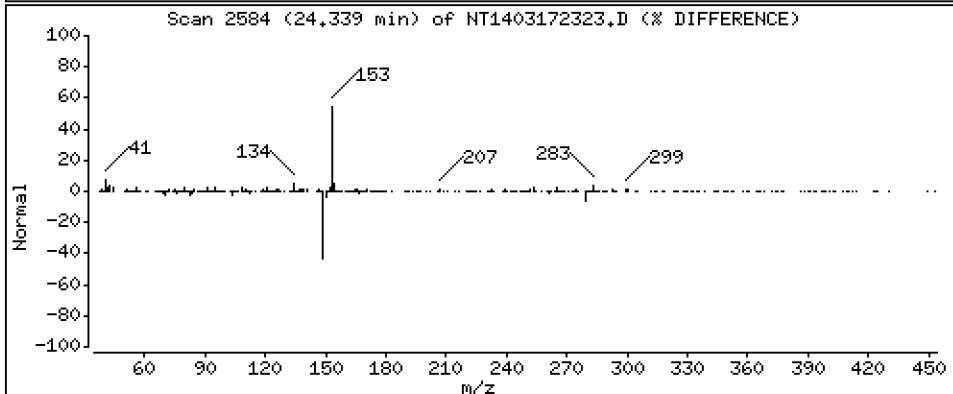
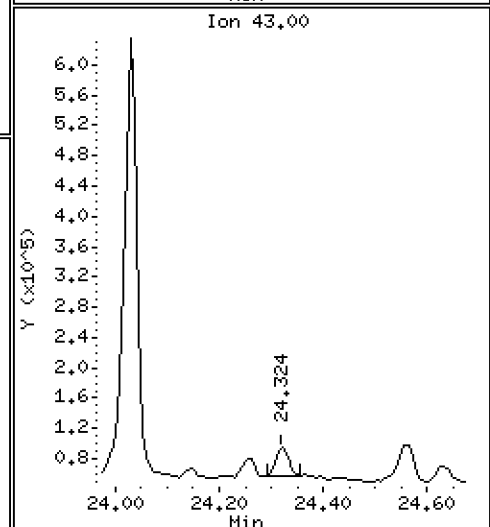
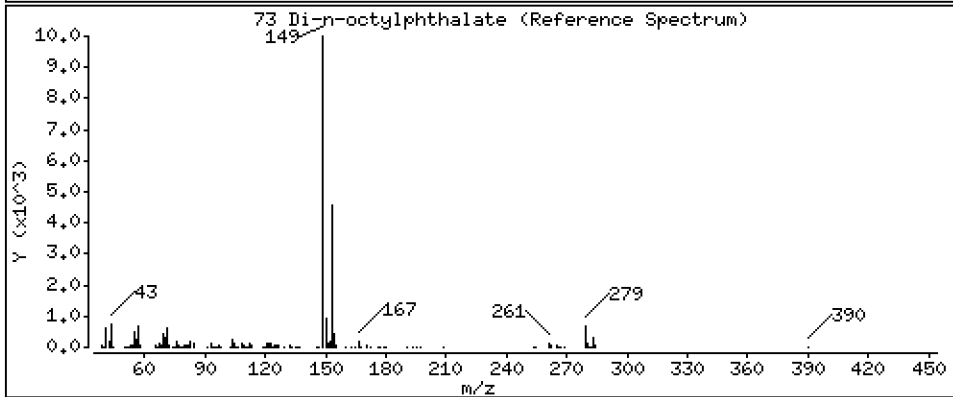
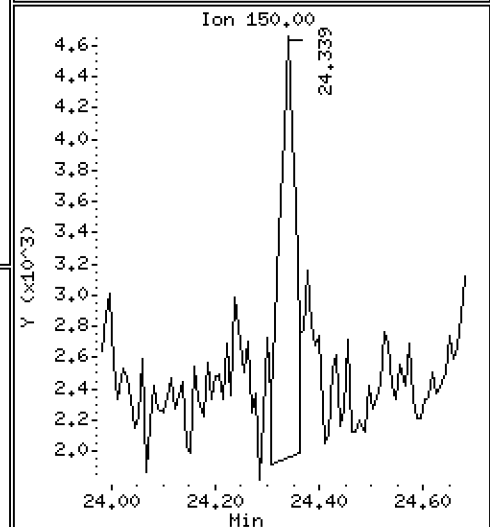
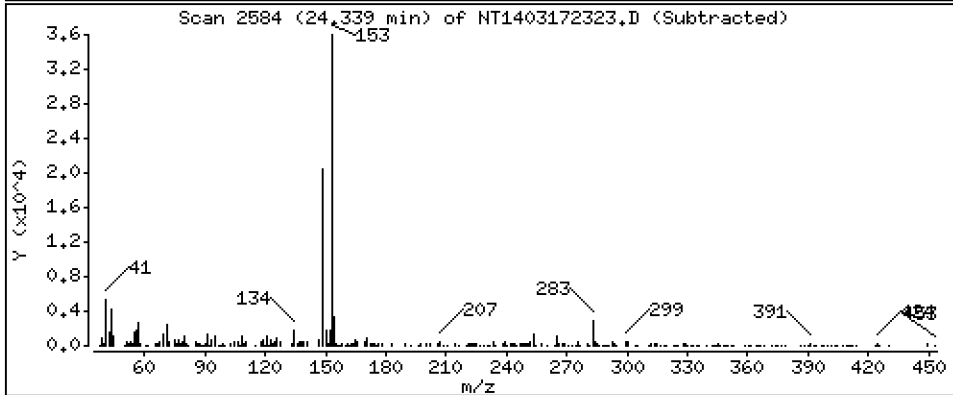
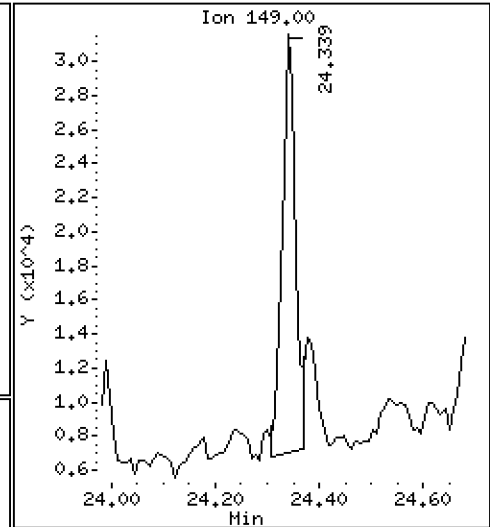
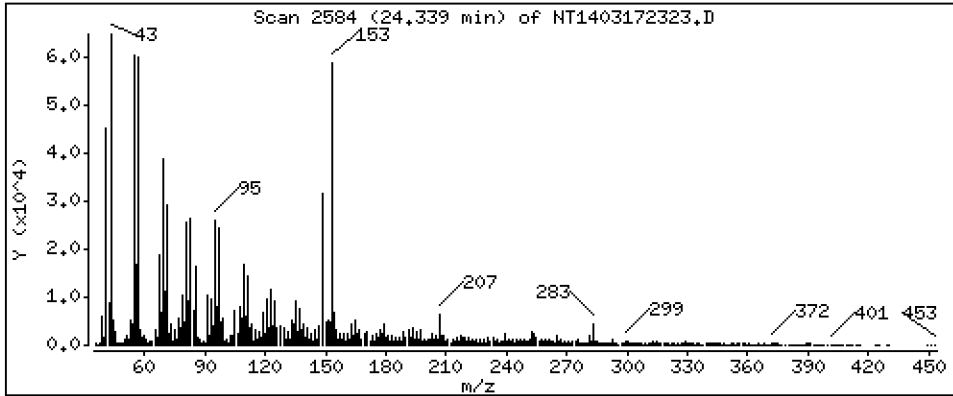
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,4164 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

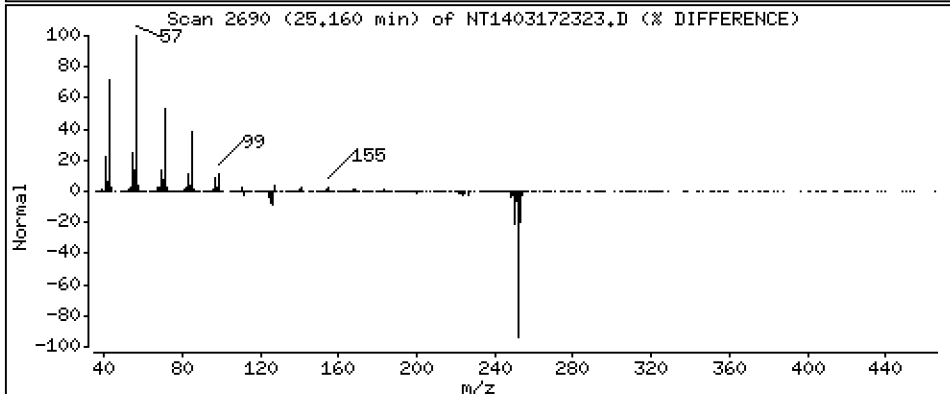
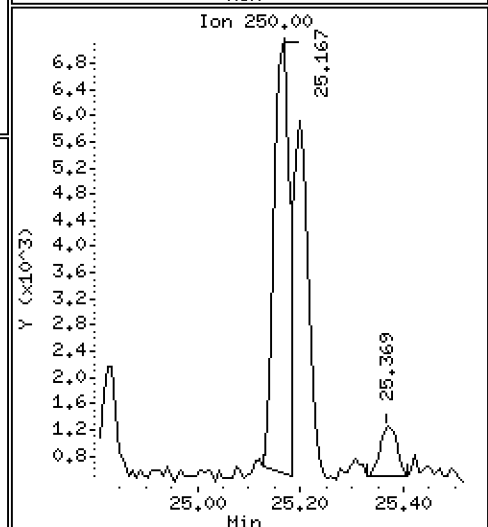
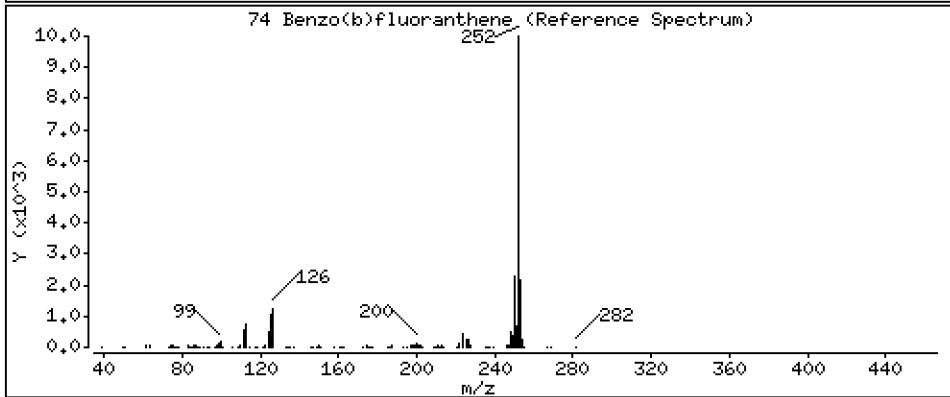
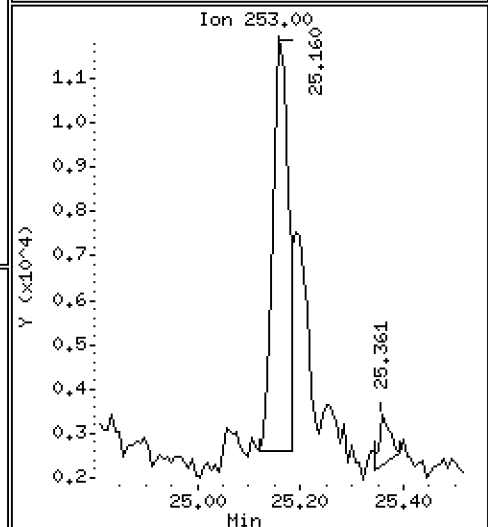
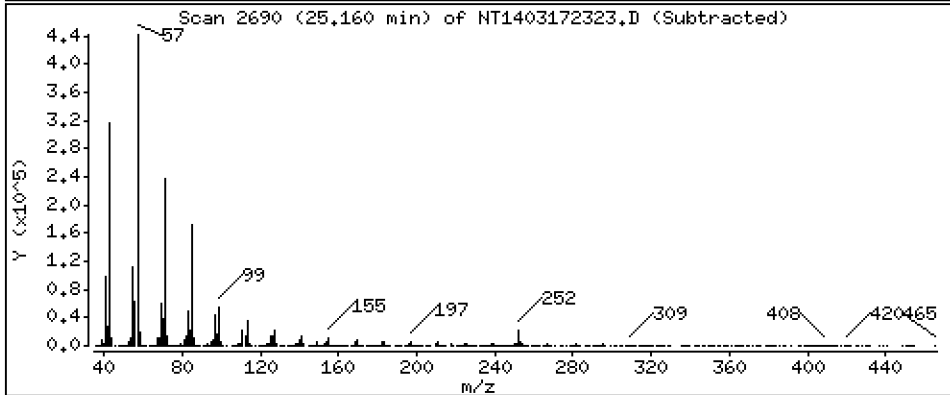
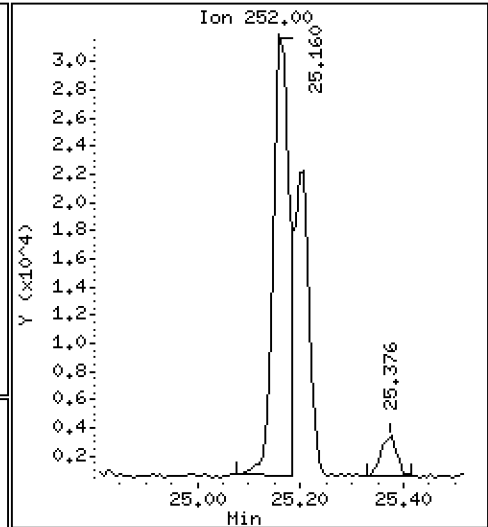
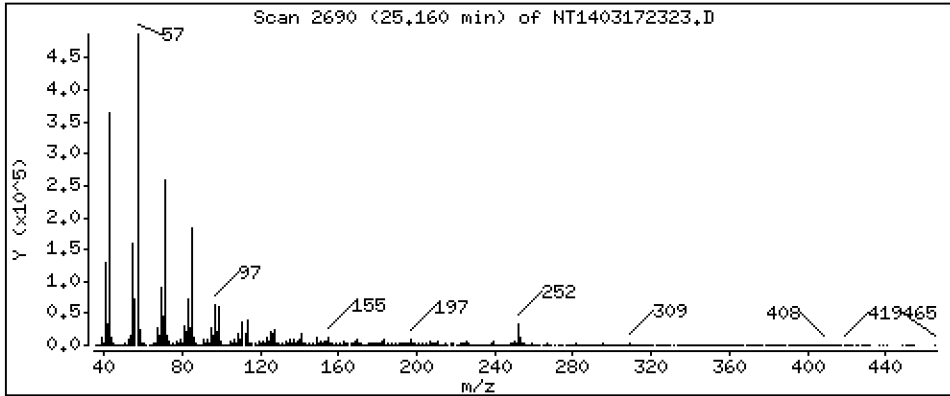
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,240 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

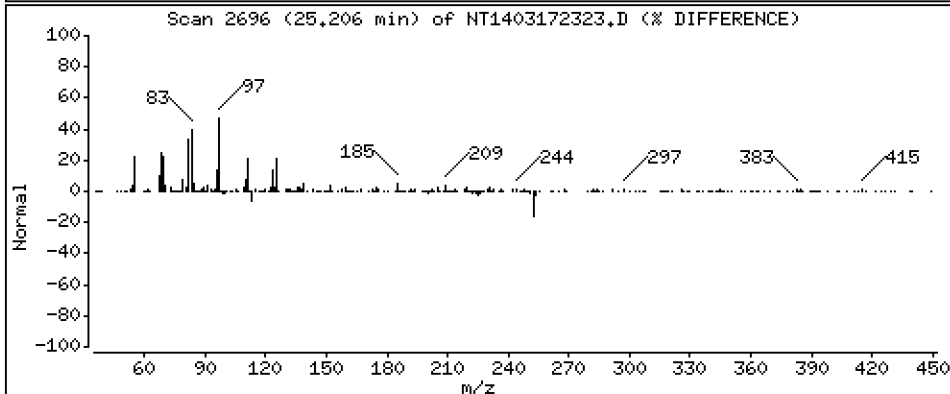
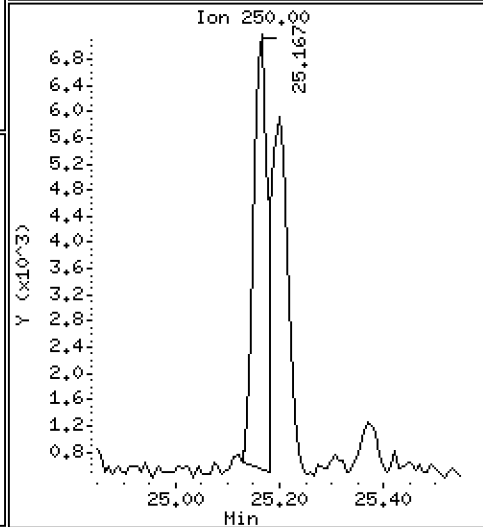
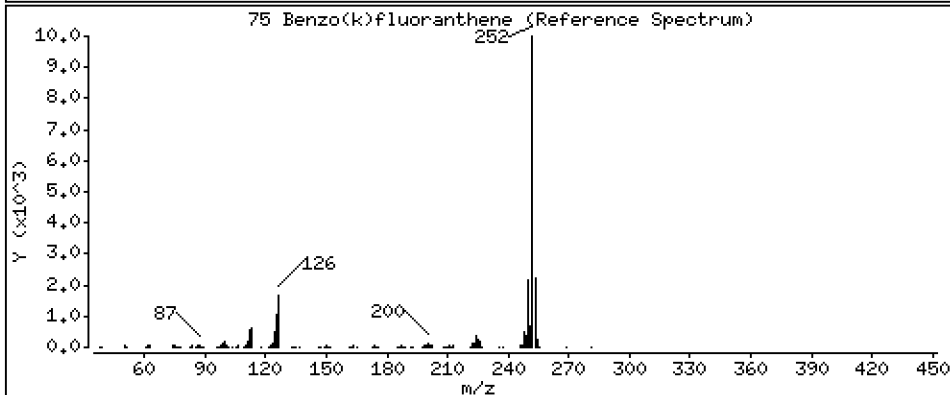
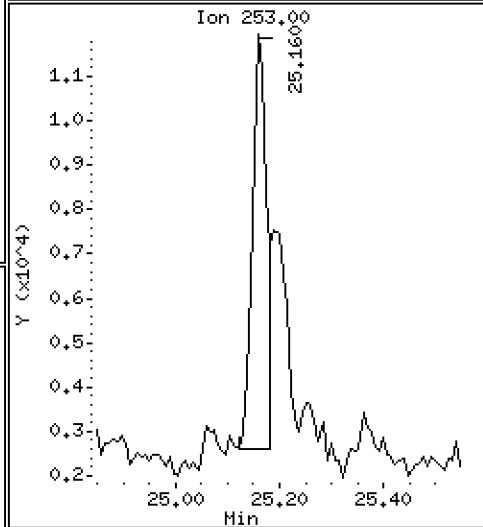
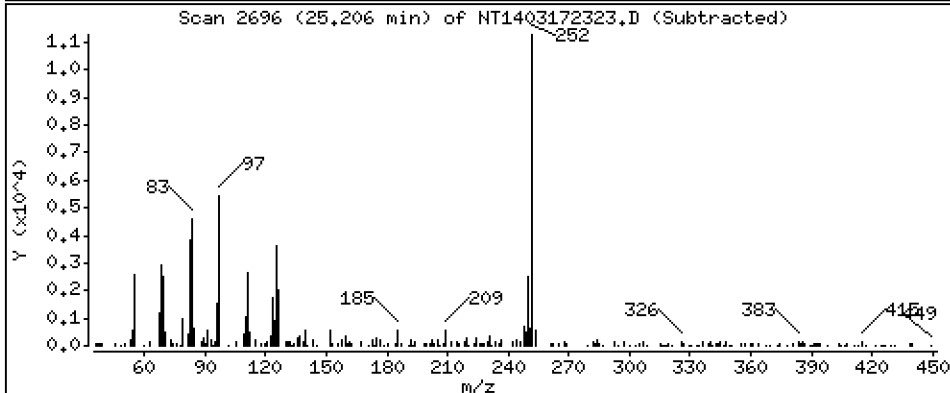
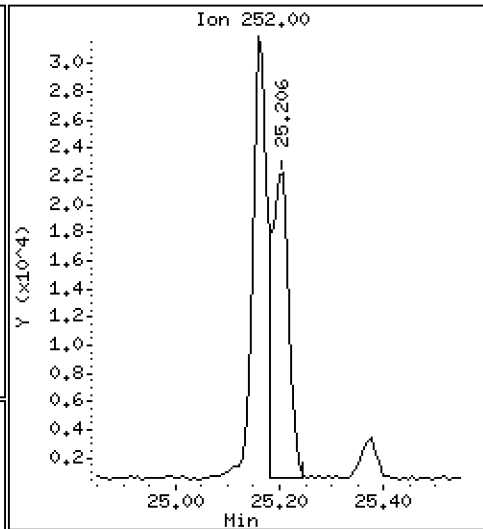
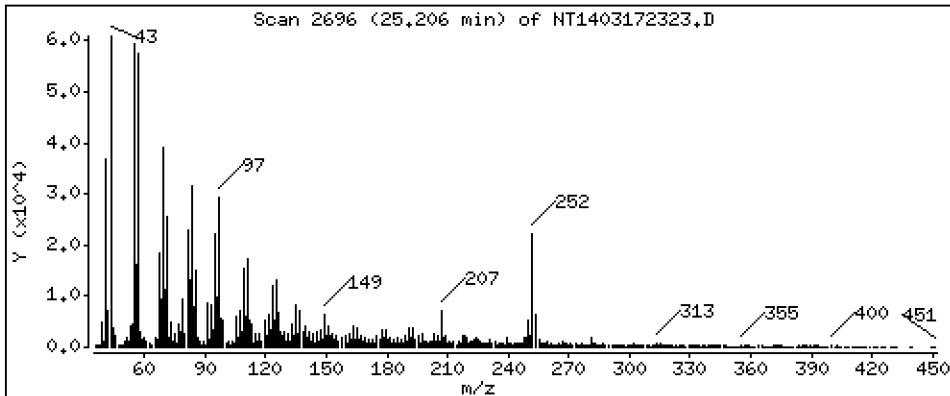
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,9574 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

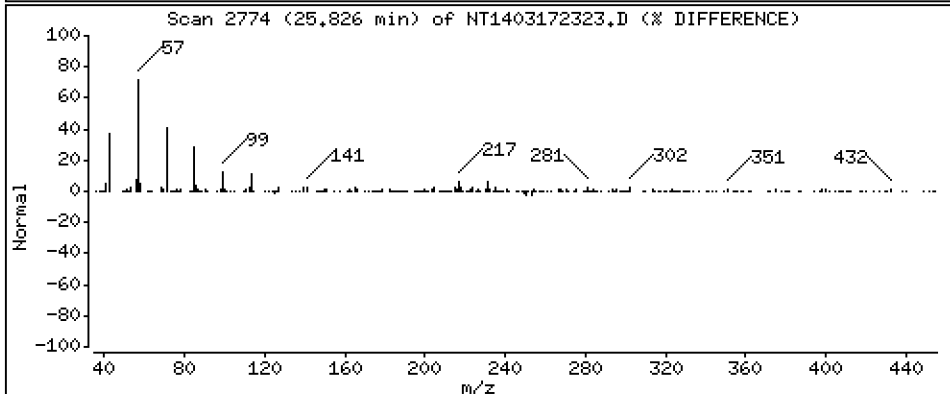
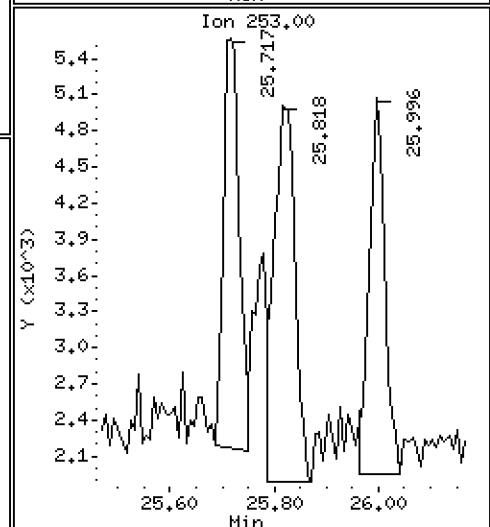
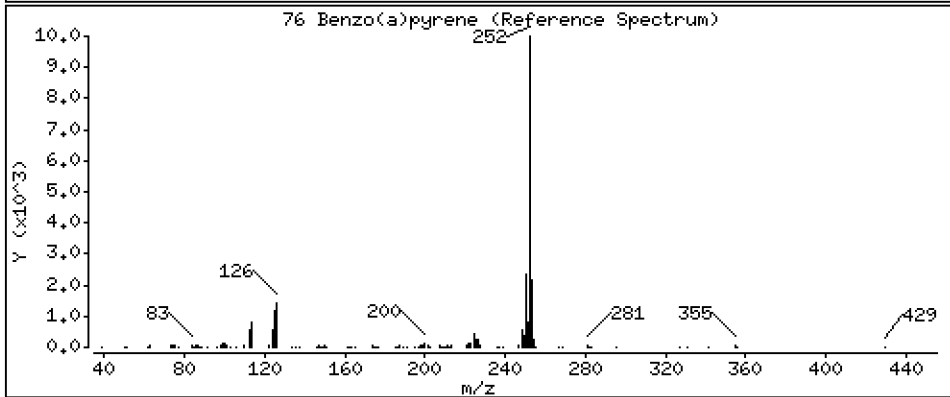
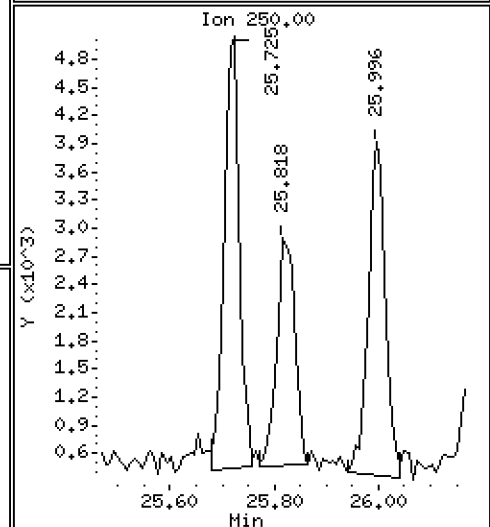
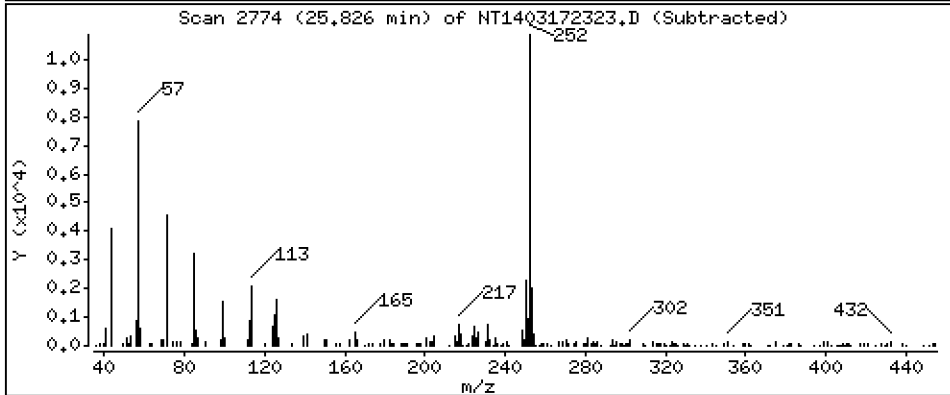
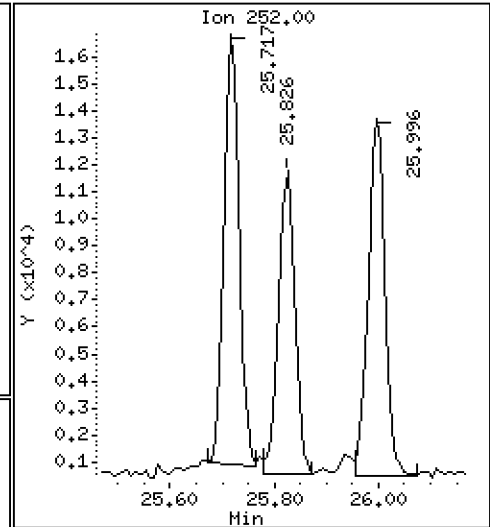
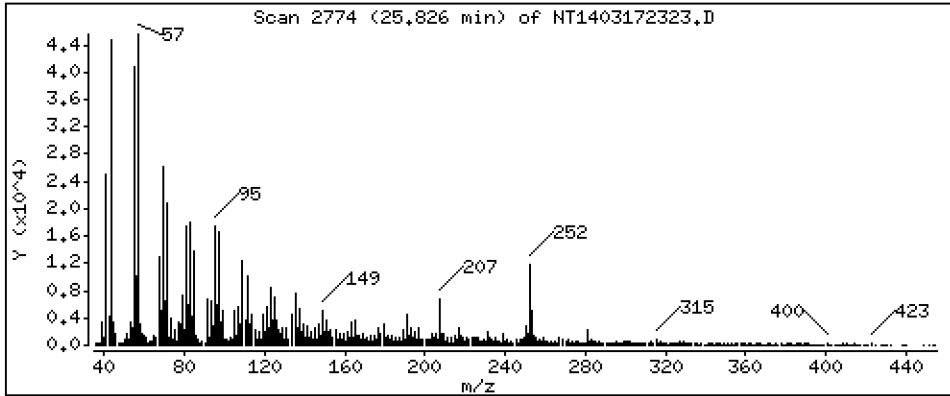
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,5333 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

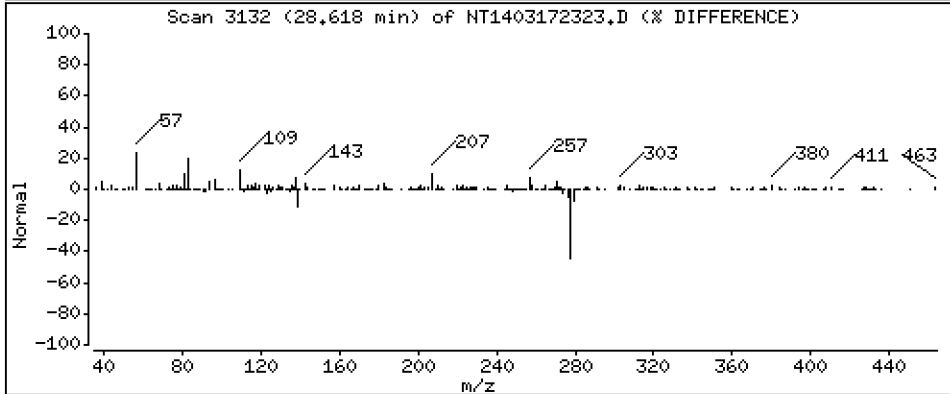
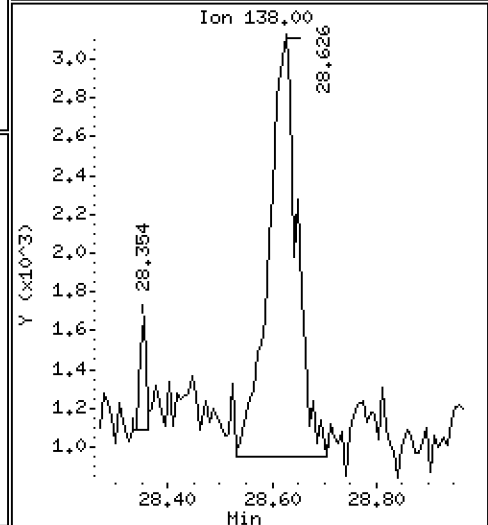
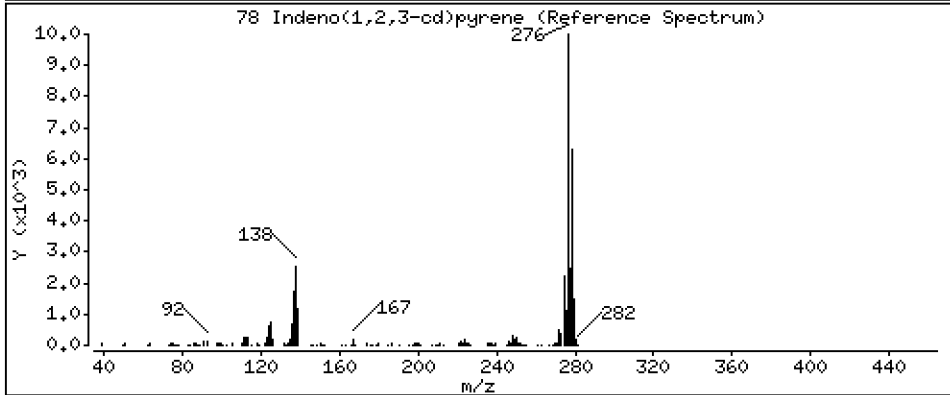
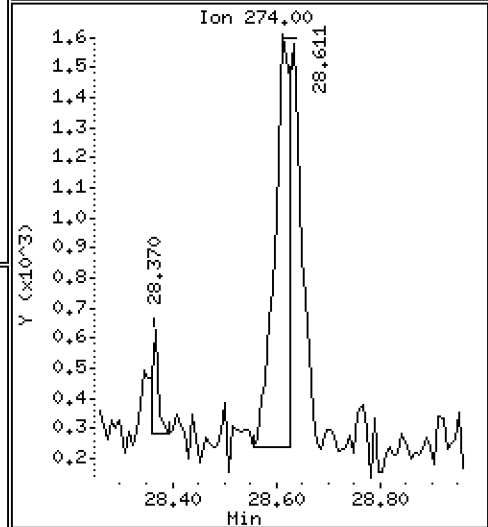
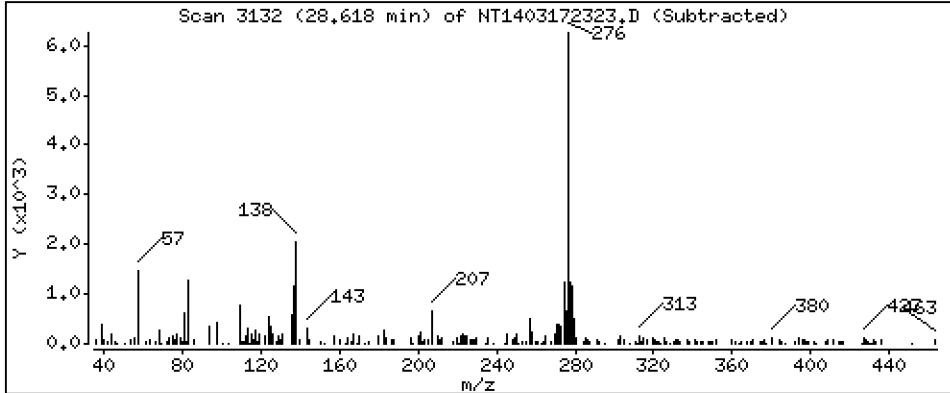
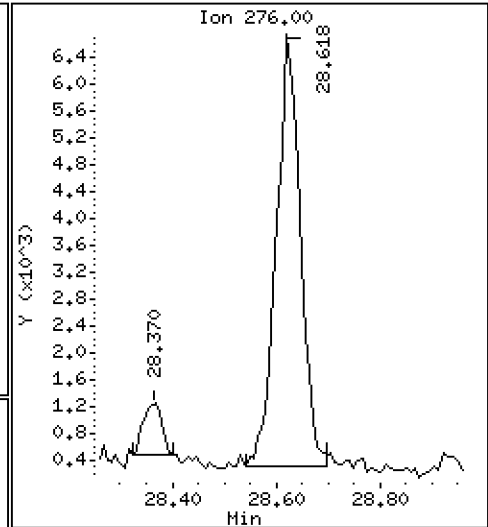
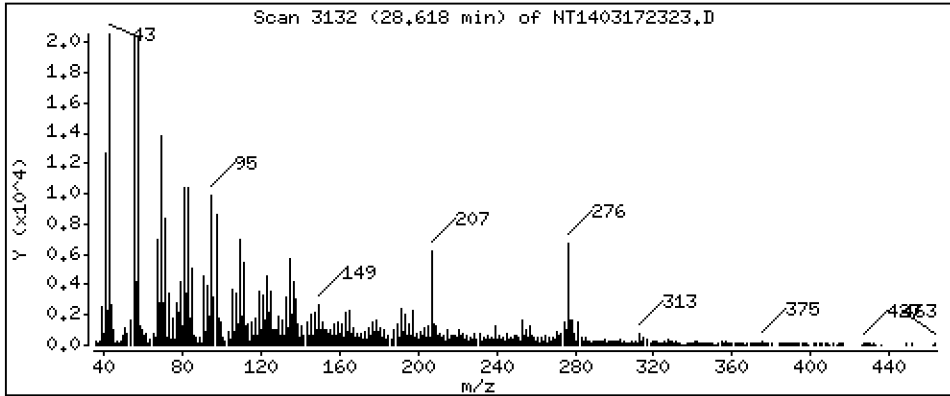
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,4294 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

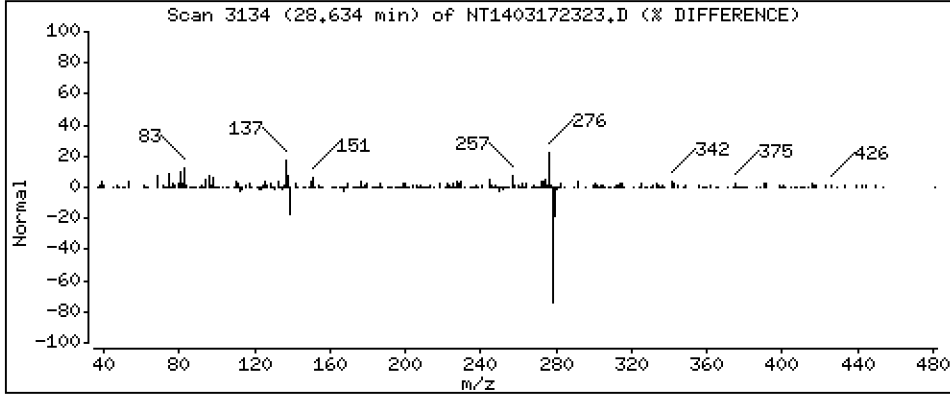
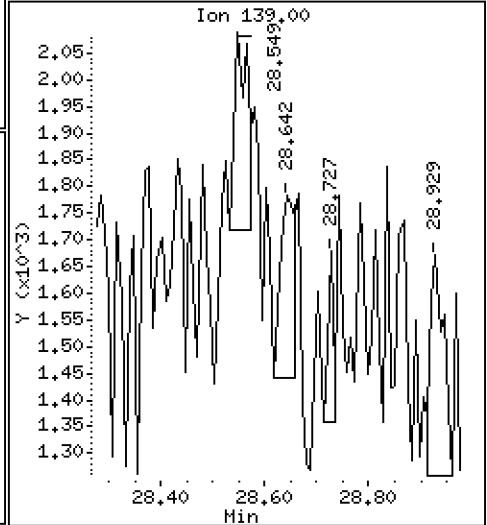
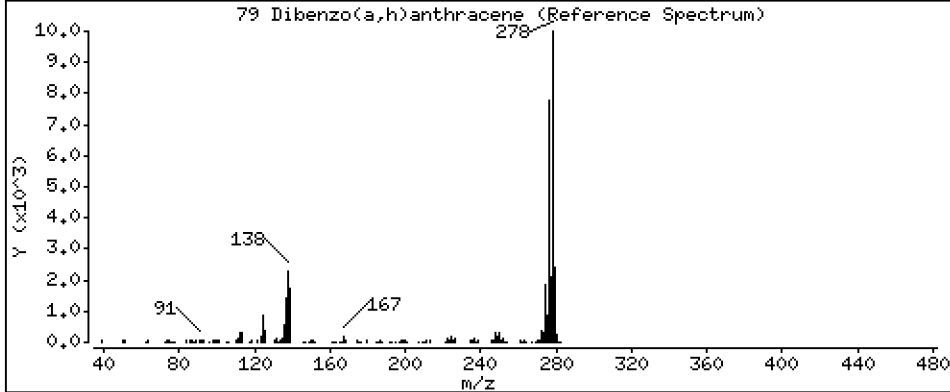
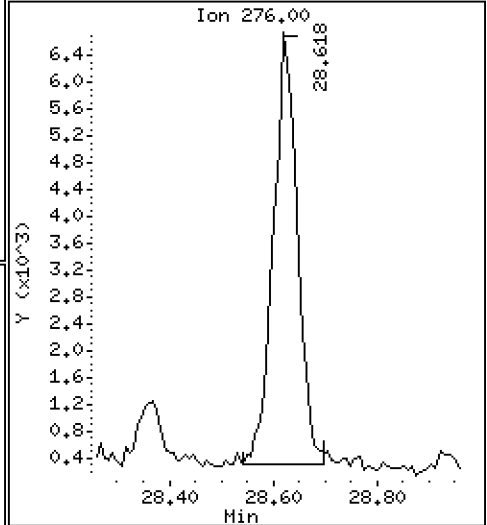
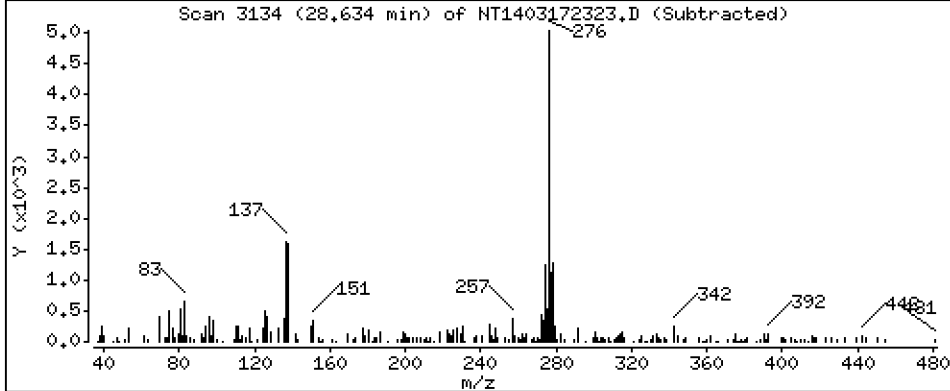
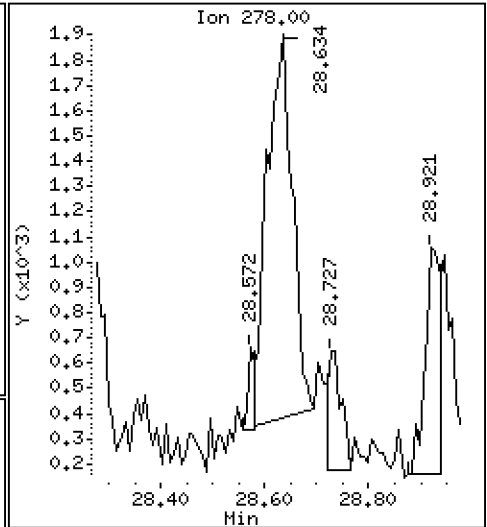
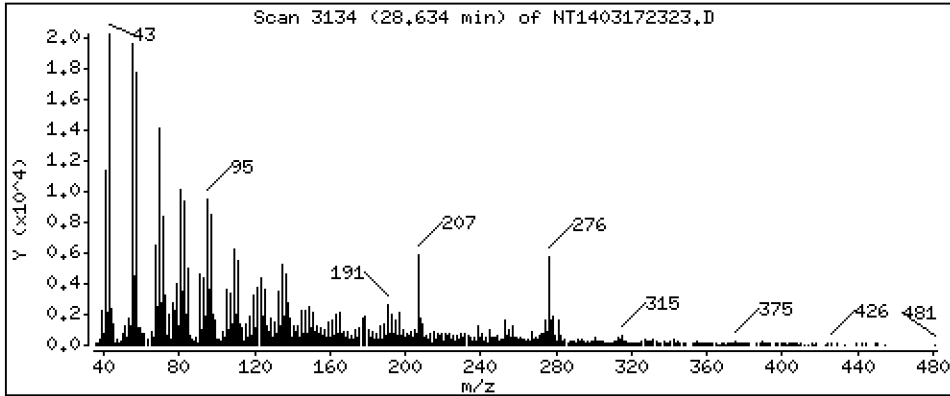
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1278 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

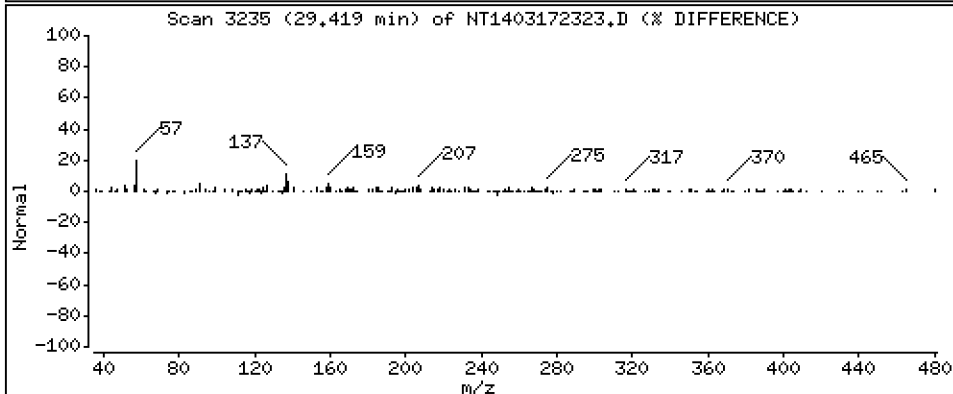
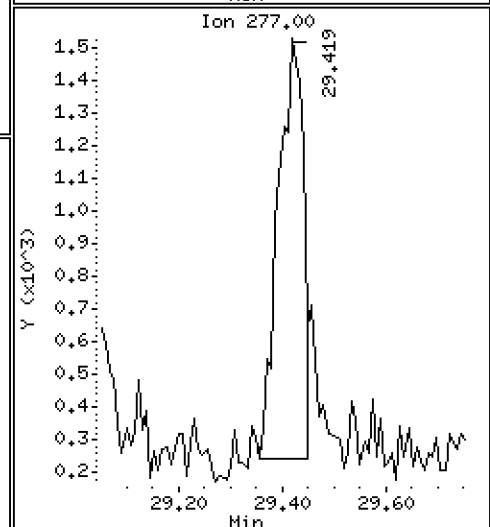
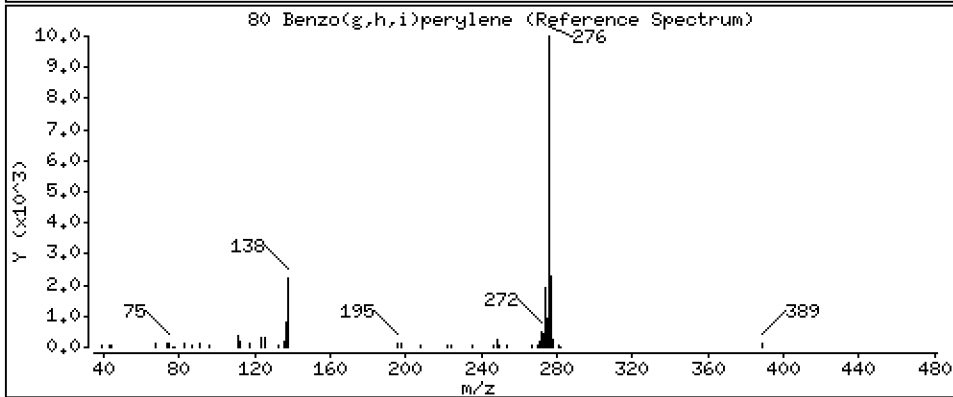
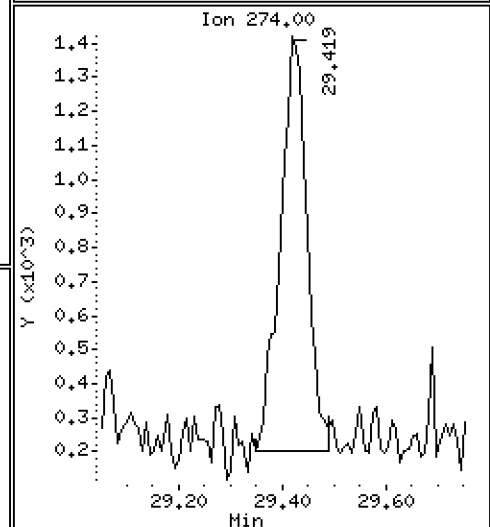
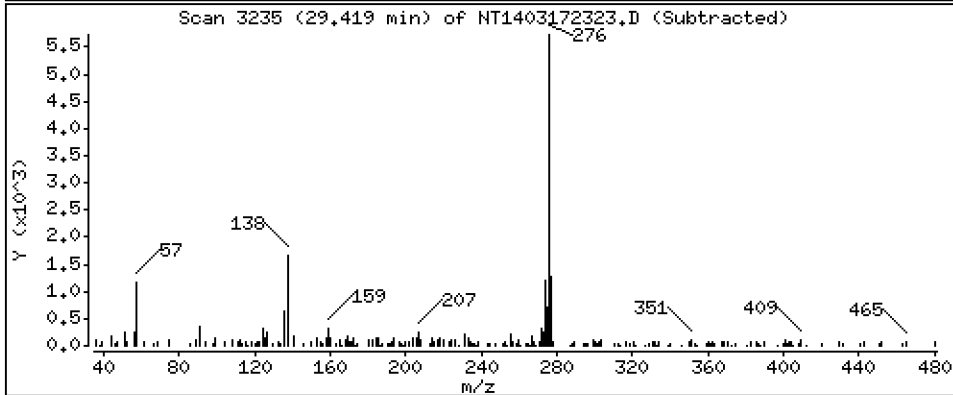
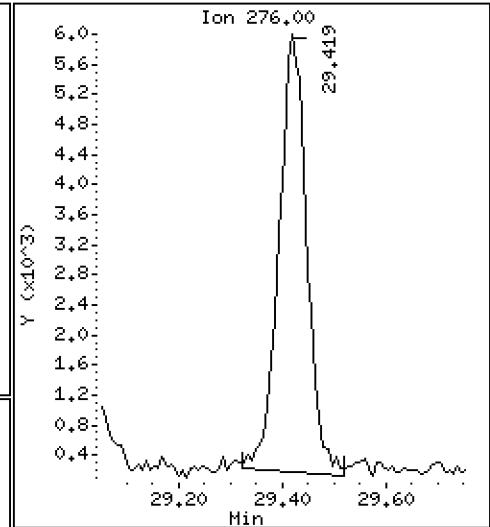
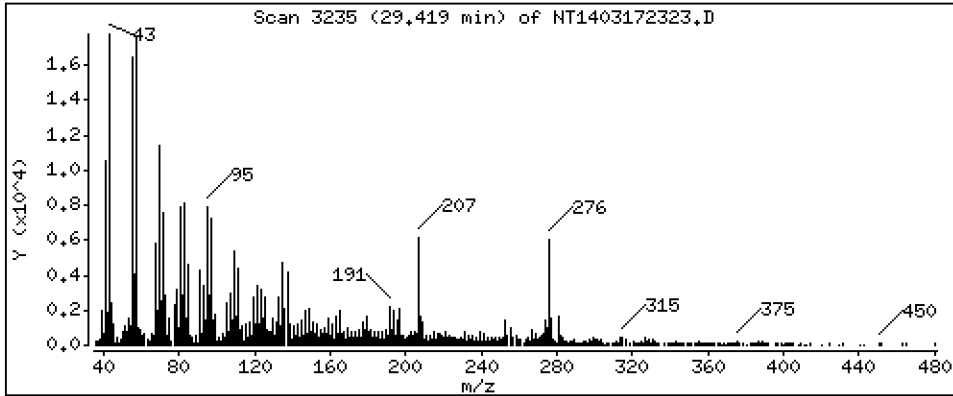
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,5552 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

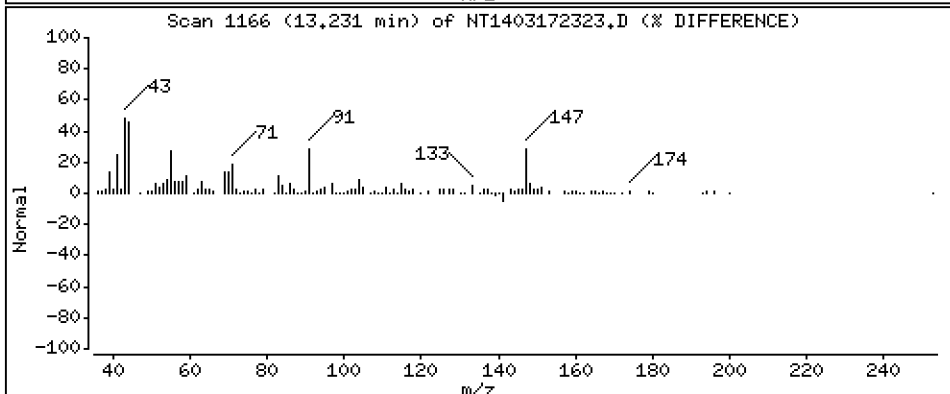
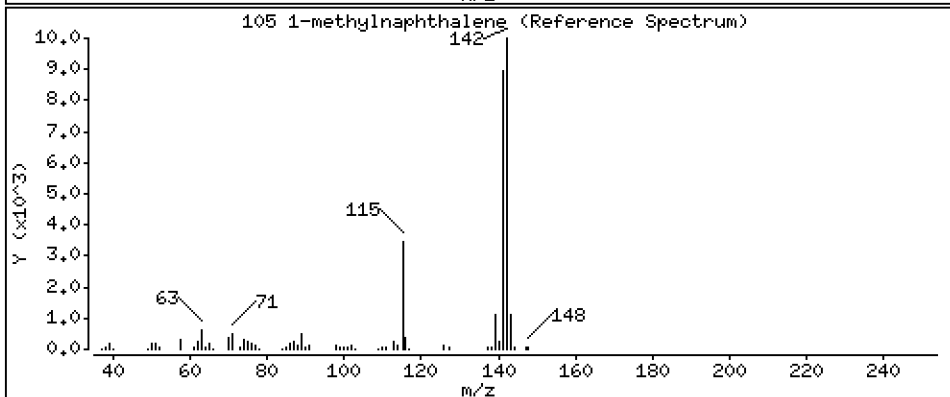
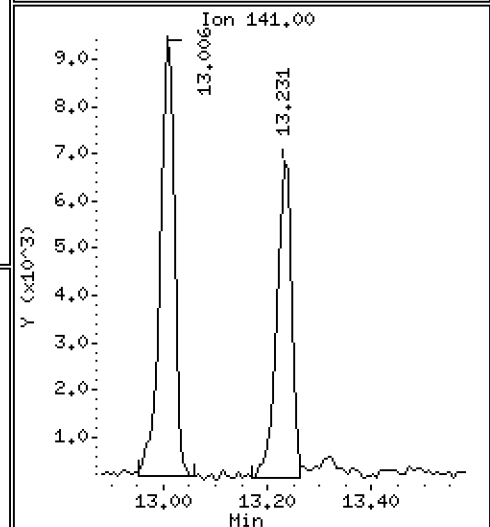
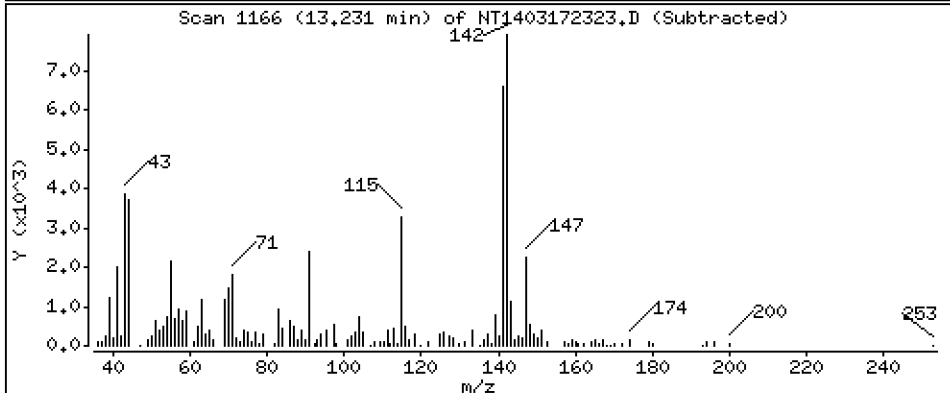
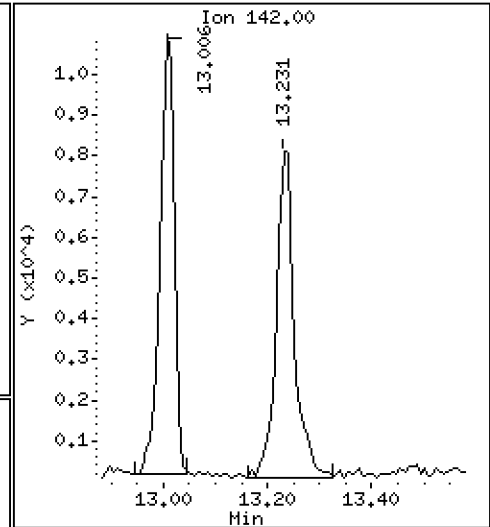
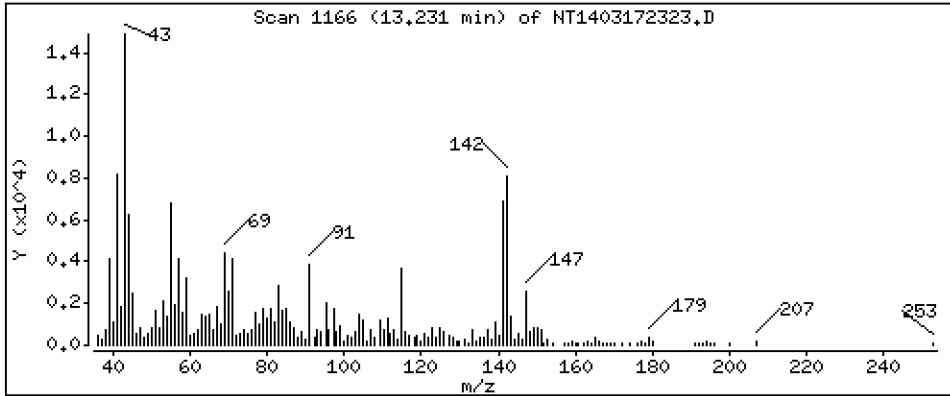
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1286 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

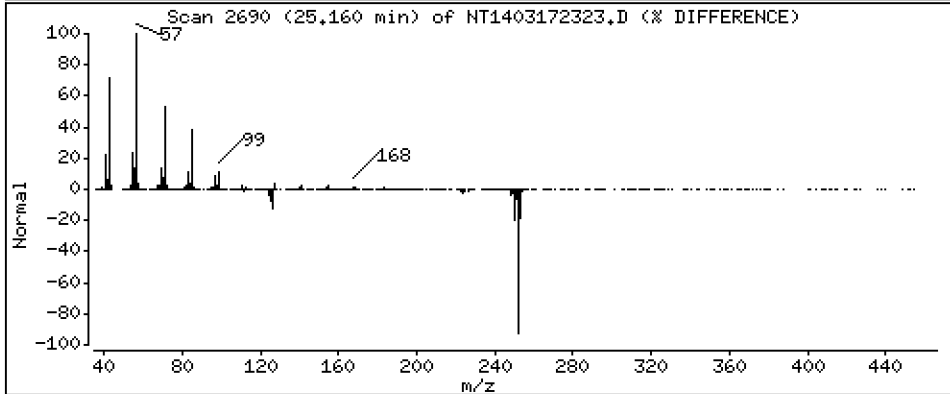
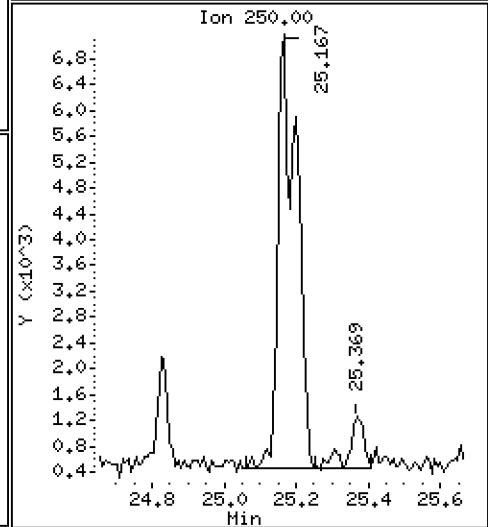
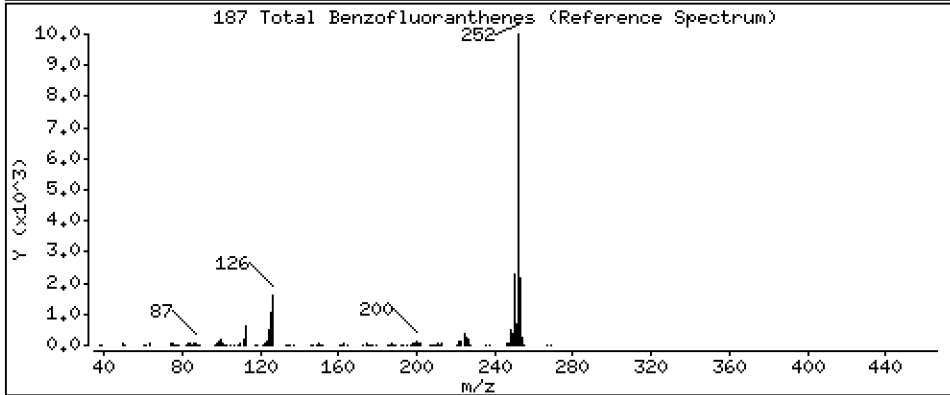
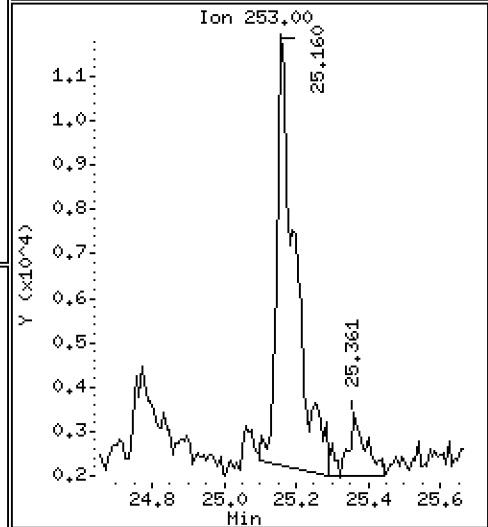
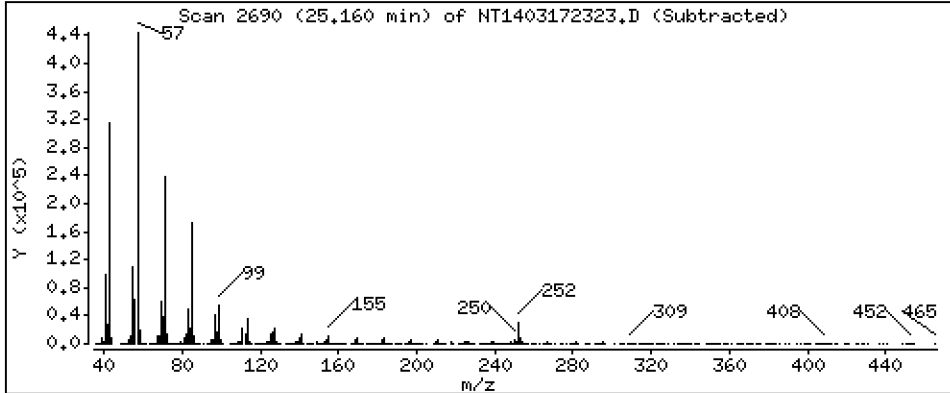
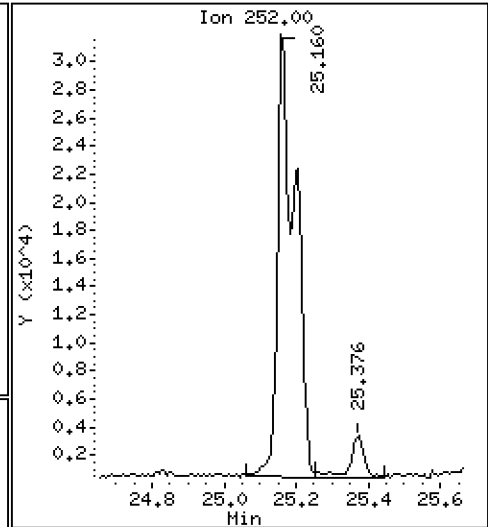
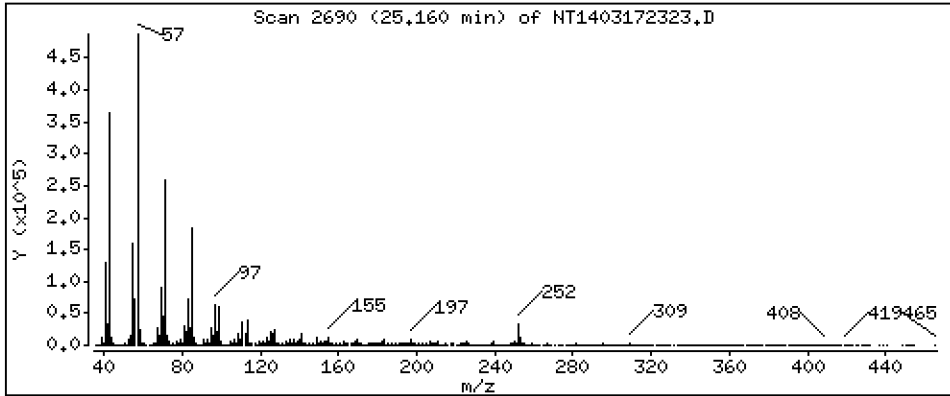
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,177 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172323.D
 Lab Smp Id: 23B0229-04
 Inj Date : 18-MAR-2023 03:42 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-04
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.844	6.821	(1.000)	359246	4.74043	4.740
\$ 2 Phenol-d5	99		8.420	8.412	(1.000)	522694	5.23876	5.239
3 Phenol	94		8.443	8.436	(1.000)	20569	0.19398	0.1940
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	435445	5.53580	5.536
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	223100	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	193484	3.68184	3.682
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.341	9.341	(1.000)	37658	0.76286	0.7629
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.838	9.830	(1.000)	5011	0.05645	0.05645
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	362479	3.94451	3.945
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.017	11.103	(0.952)	82051	1.28553	1.286
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	868361	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	33763	0.14554	0.1455
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	19648	0.12144	0.1214
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	640449	4.22398	4.224
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163		14.701	14.701	(0.967)	8157	0.05843	0.05843
40 Acenaphthylene	152		14.886	14.879	(0.980)	10629	0.04869	0.04869
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	418674	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153		15.266	15.266	(1.005)	12679	0.09949	0.09949
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168		15.590	15.590	(1.026)	25061	0.13774	0.1377
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.155	16.163	(1.063)	44672	0.30948	0.3095
49 Fluorene	166		16.309	16.309	(1.073)	17967	0.10418	0.1042
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	74421	4.68193	4.682
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.247	18.240	(1.000)	651987	4.00000	
60 Phenanthrene	178		18.294	18.294	(1.003)	132106	0.70918	0.7092
61 Anthracene	178		18.387	18.387	(1.008)	41633	0.23198	0.2320
62 Carbazole	167		18.712	18.712	(1.025)	14426	0.09034	0.09034
63 Di-n-butylphthalate	149		19.516	19.509	(1.070)	14092	0.06962	0.06962
64 Fluoranthene	202		20.708	20.677	(0.889)	246033	2.97974	2.980
65 Pyrene	202		21.110	21.103	(0.906)	217576	2.56955	2.570
\$ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	383667	6.69316	6.693
67 Butylbenzylphthalate	149		22.310	22.310	(0.957)	7248	0.19538	0.1954
68 Benzo(a)anthracene	228		23.270	23.263	(0.999)	54396	0.72691	0.7269
* 69 Chrysene-d12	240		23.301	23.294	(1.000)	202950	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228		23.340	23.340	(1.002)	78264	1.15560	1.156
72 bis(2-Ethylhexyl)phthalate	149		23.332	23.332	(0.959)	82627	1.52852	1.529
* 134 Di-n-octylphthalate-d4	153		24.323	24.316	(1.000)	410637	4.00000	
73 Di-n-octylphthalate	149		24.339	24.331	(1.001)	43951	0.41635	0.4164
74 Benzo(b)fluoranthene	252		25.159	25.159	(0.970)	64398	1.24033	1.240
75 Benzo(k)fluoranthene	252		25.206	25.198	(0.972)	49276	0.95741	0.9574 (M)
76 Benzo(a)pyrene	252		25.825	25.818	(0.996)	23678	0.53331	0.5333
* 77 Perylene-d12	264		25.941	25.934	(1.000)	146928	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.618	28.610	(1.103)	20752	0.42944	0.4294
79 Dibenzo(a,h)anthracene	278		28.634	28.626	(1.104)	5204	0.12778	0.1278
80 Benzo(g,h,i)perylene	276		29.418	29.403	(1.134)	22112	0.55523	0.5552
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.230	13.230	(1.144)	18856	0.12864	0.1286
111 Azobenzene (1,2-DP-Hydrazine)	77							

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ug/mL)	FINAL (ug/mL)	
187 Total Benzofluoranthenes	252		25.159	25.159	(0.970)	107332	2.17669	2.177	
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172323.D Calibration Time: 23:31
 Lab Smp Id: 23B0229-04
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	223100	-3.43
27 Naphthalene-d8	843789	421895	1687578	868361	2.91
42 Acenaphthene-d10	432455	216228	864910	418674	-3.19
59 Phenanthrene-d10	793780	396890	1587560	651987	-17.86
69 Chrysene-d12	411057	205529	822114	202950	-50.63
134 Di-n-octylphthala	799010	399505	1598020	410637	-48.61
77 Perylene-d12	254782	127391	509564	146928	-42.33

<-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172323.D

Lab ID: 23B0229-04
nt14.i, ABN.m, 18-MAR-2023 03:42

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.960	-0.0074	Benzoic acid

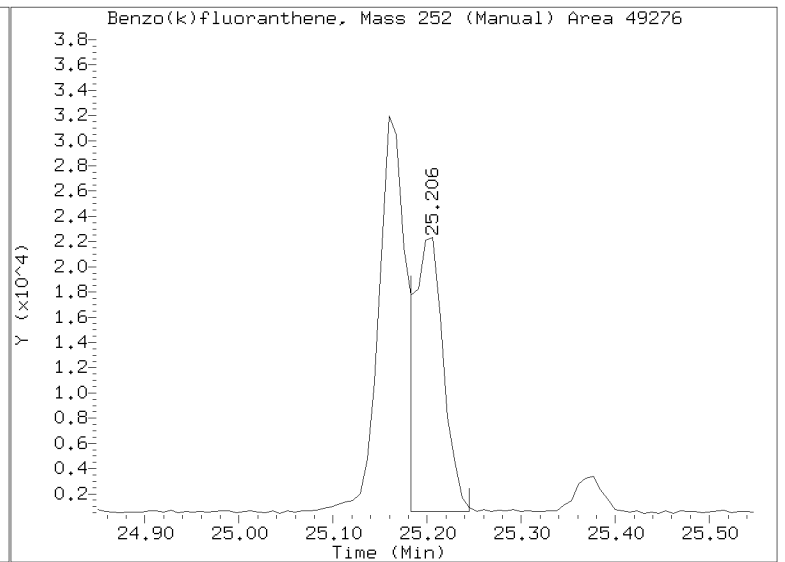
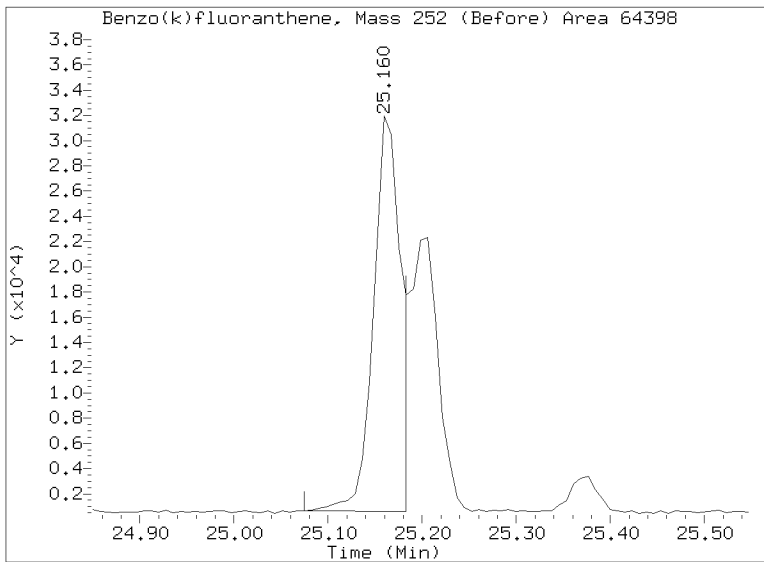
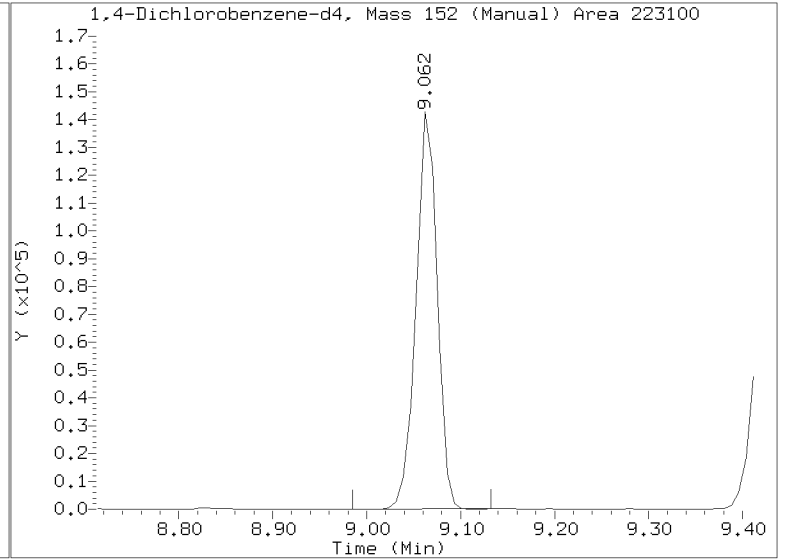
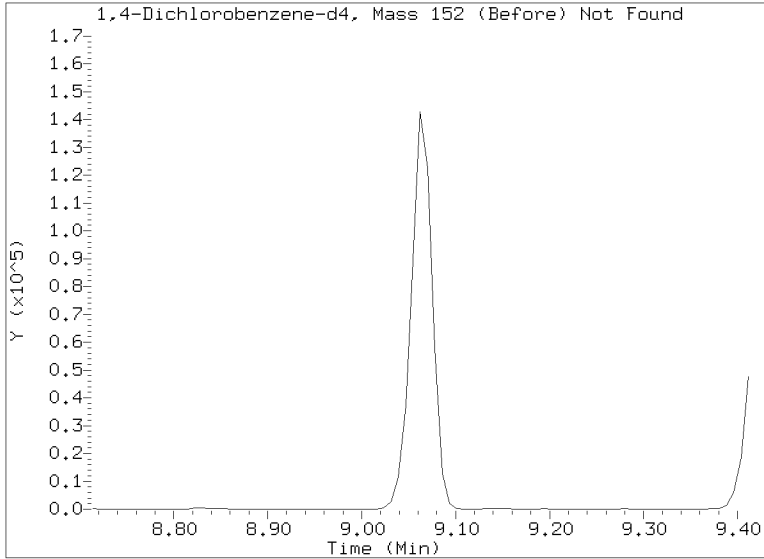
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172323.D
Injection Date: 18-MAR-2023 03:42
Lab ID:23B0229-04 Client ID:
Report Date: 03/22/2023 09:50





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-04RE1 A

SDG: 23B0229

Sampled: 02/08/23 12:11

Prepared: 02/17/23 15:00

File ID: NT1403182311.D

% Solids: 52.16

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 23:04

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 19.43 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	4	21.9	J, D	17.3	78.9
106-44-5	4-Methylphenol	4	78.9	U	29.2	78.9
91-20-3	Naphthalene	4	78.9	U	16.7	78.9
91-57-6	2-Methylnaphthalene	4	78.9	U	17.8	78.9
208-96-8	Acenaphthylene	4	78.9	U	24.6	78.9
131-11-3	Dimethylphthalate	4	78.9	U	17.3	78.9
83-32-9	Acenaphthene	4	78.9	U	20.6	78.9
132-64-9	Dibenzofuran	4	78.9	U	55.7	78.9
86-73-7	Fluorene	4	78.9	U	57.5	78.9
85-01-8	Phenanthrene	4	72.7	J, D	34.4	78.9
120-12-7	Anthracene	4	78.9	U	28.4	78.9
206-44-0	Fluoranthene	4	240	D	24.0	78.9
129-00-0	Pyrene	4	222	D	22.4	78.9
85-68-7	Butylbenzylphthalate	4	78.9	U	37.1	78.9
56-55-3	Benzo(a)anthracene	4	79.6	D	23.5	78.9
218-01-9	Chrysene	4	117	D	23.9	78.9
117-81-7	bis(2-Ethylhexyl)phthalate	4	131	J, D	21.5	197
	Benzo(a)fluoranthenes, Total	4	196	D	39.5	158
50-32-8	Benzo(a)pyrene	4	51.1	J, D	16.7	78.9
193-39-5	Indeno(1,2,3-cd)pyrene	4	78.9	U	57.8	78.9
53-70-3	Dibenzo(a,h)anthracene	4	78.9	U	68.0	78.9
191-24-2	Benzo(g,h,i)perylene	4	65.0	J, D	53.6	78.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	740.03	490	66.2	27 - 120	
Phenol-d5	740.03	510	68.9	29 - 120	
2-Chlorophenol-d4	740.03	553	74.7	31 - 120	
1,2-Dichlorobenzene-d4	493.36	364	73.8	32 - 120	
Nitrobenzene-d5	493.36	381	77.3	30 - 120	
2-Fluorobiphenyl	493.36	417	84.5	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-04RE1 A

SDG: 23B0229

Sampled: 02/08/23 12:11

Prepared: 02/17/23 15:00

File ID: NT1403182311.D

% Solids: 52.16

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 23:04

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 19.43 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	740.03	507	68.5	24 - 134	
p-Terphenyl-d14	493.36	544	110	37 - 120	

Data File: \\target\share\chem3\nt14,1\20230318,6\NT1403182311.D

Date: 18-MAR-2023 23:04

Client ID:

Sample Info: 23B0229-04REL,4

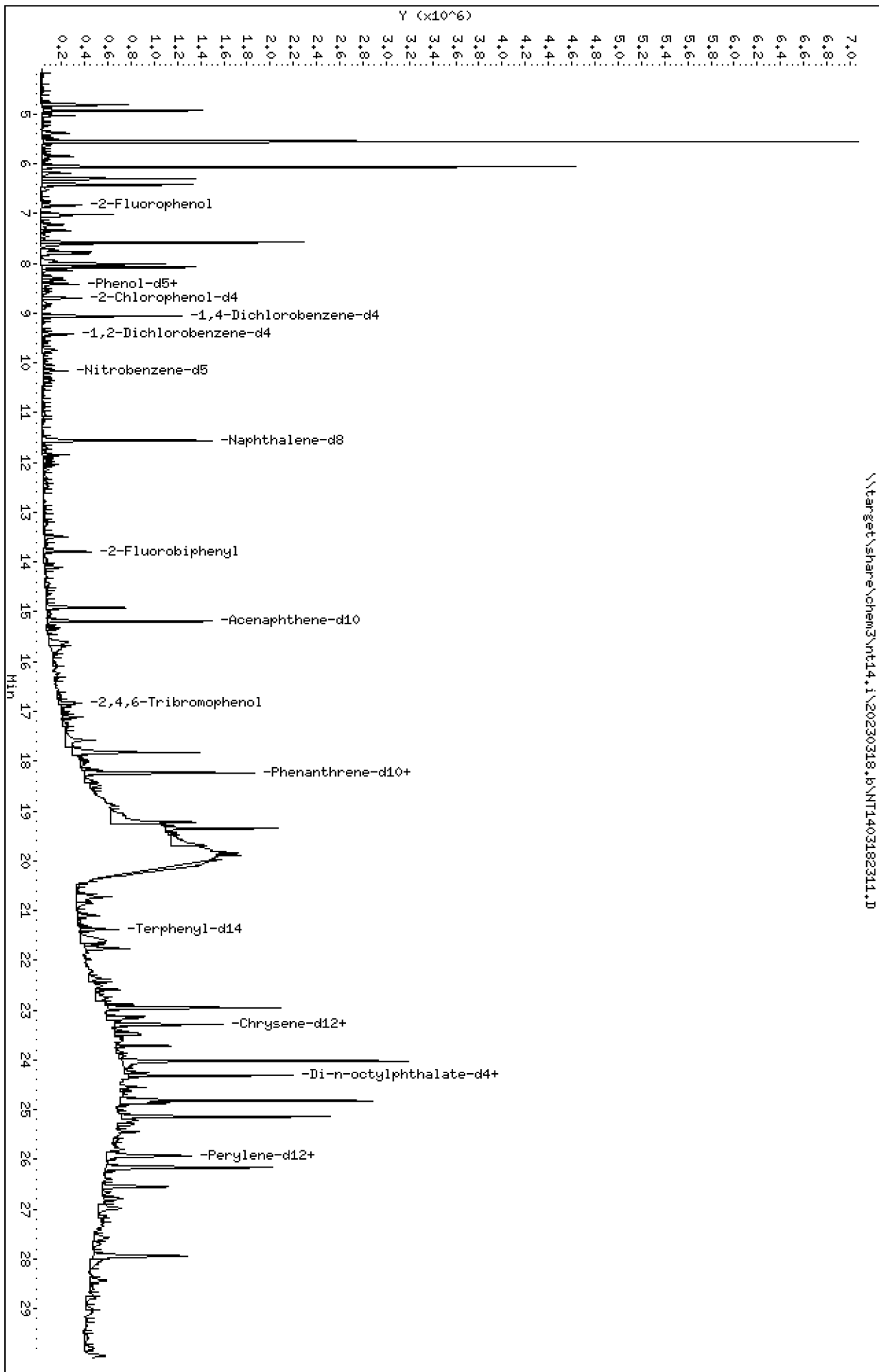
Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14,1\20230318,6\NT1403182311.D



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

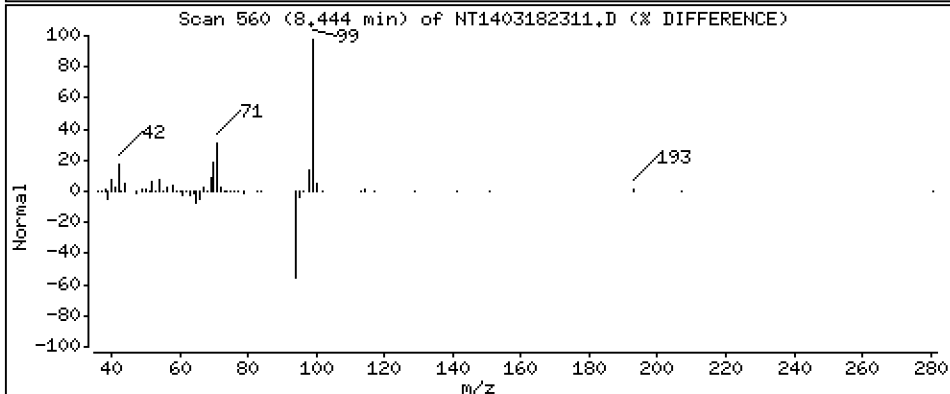
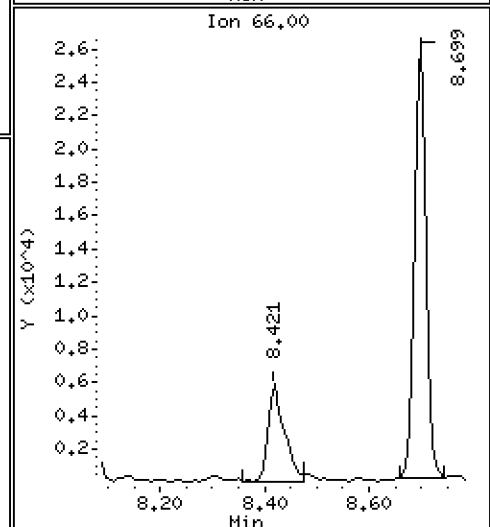
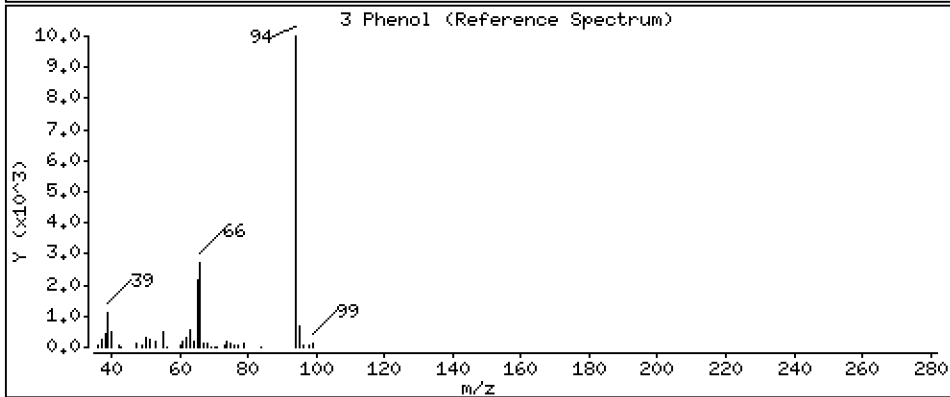
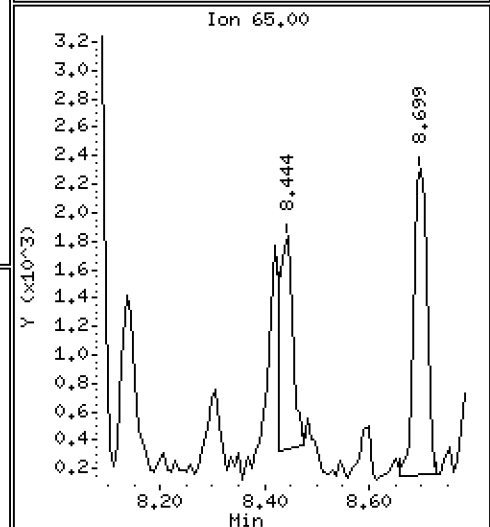
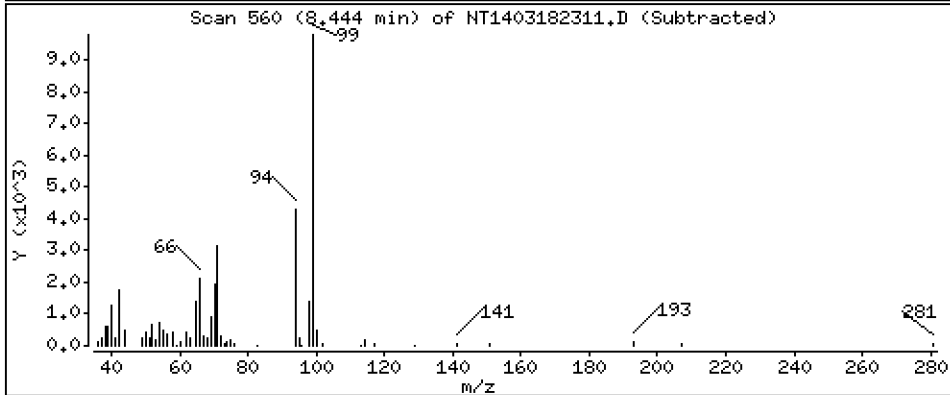
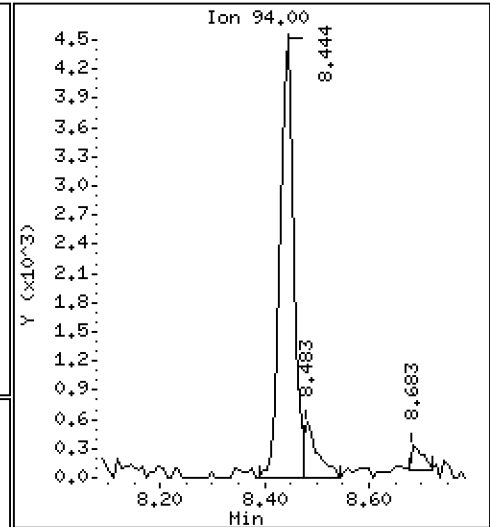
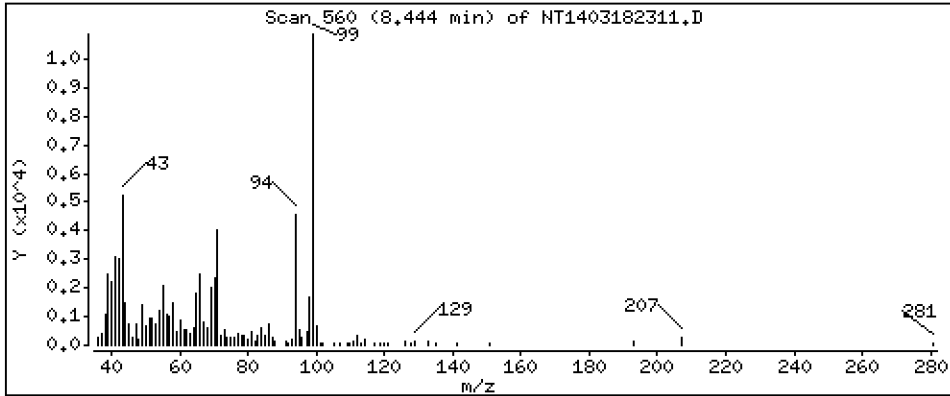
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,2224 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

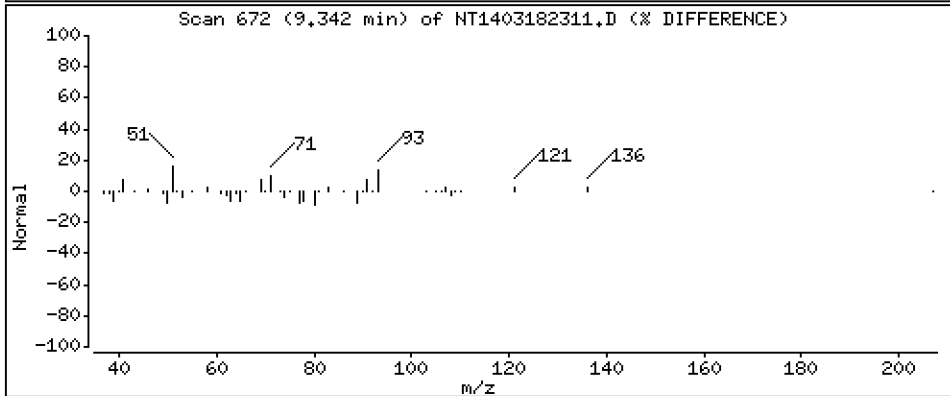
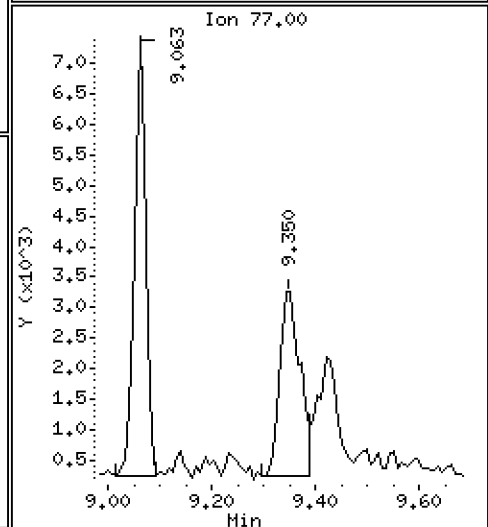
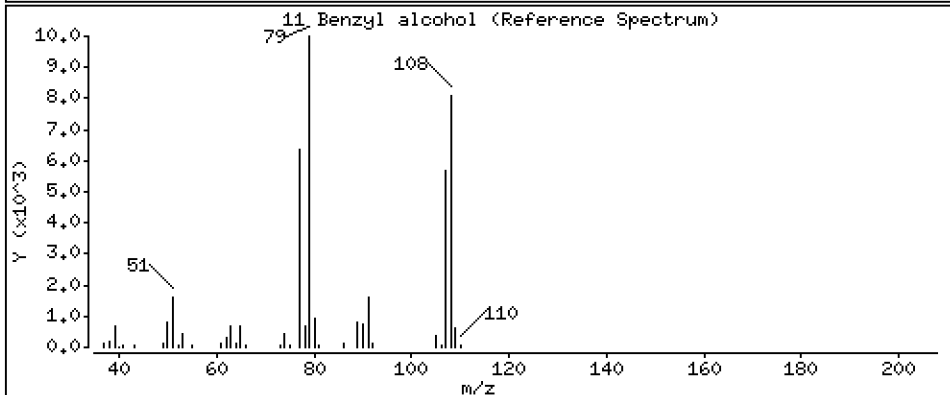
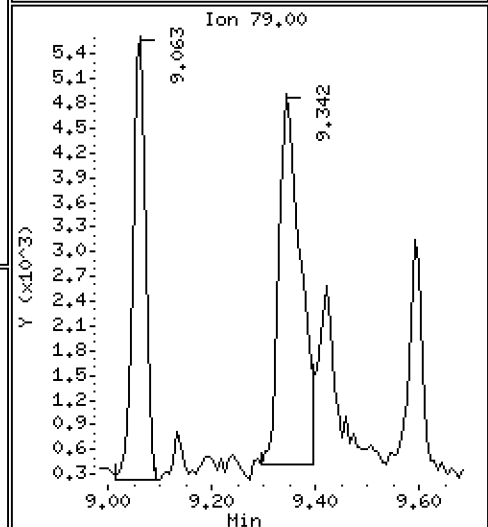
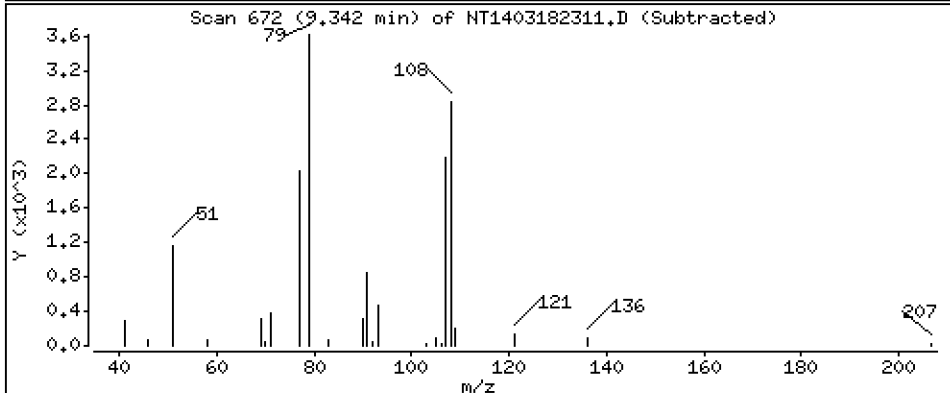
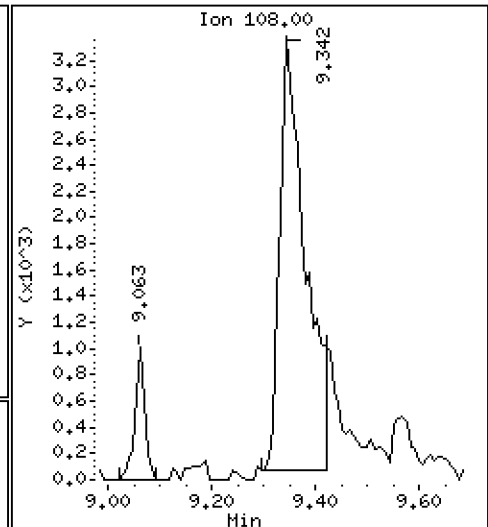
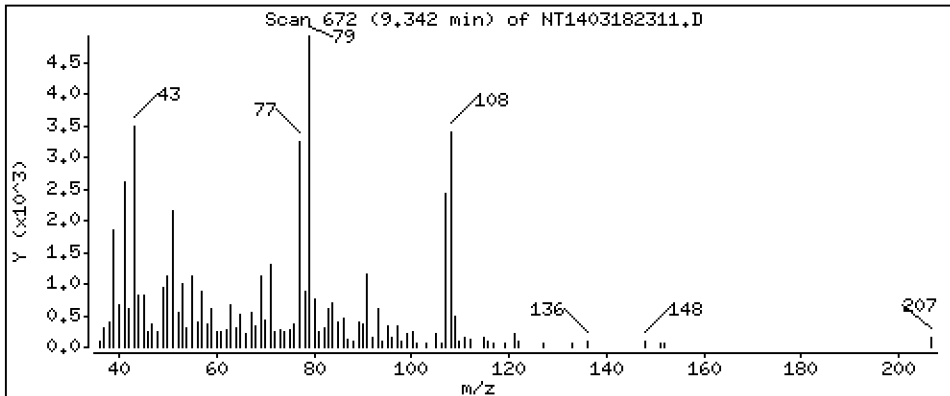
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,6632 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

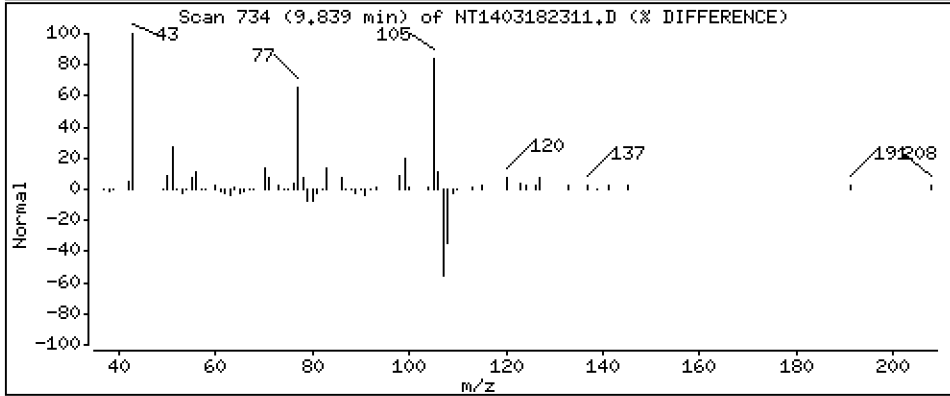
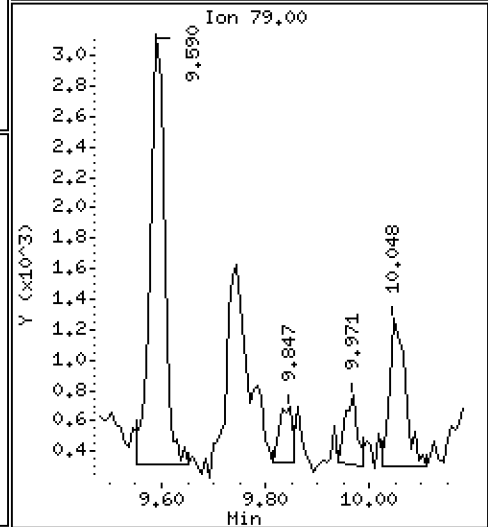
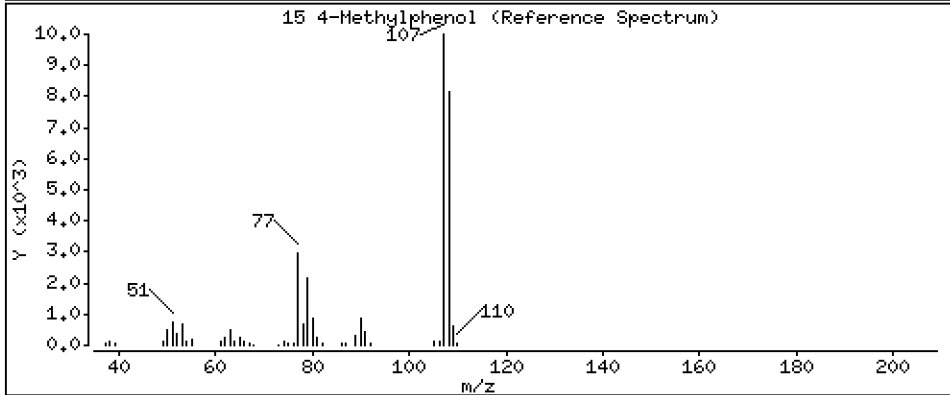
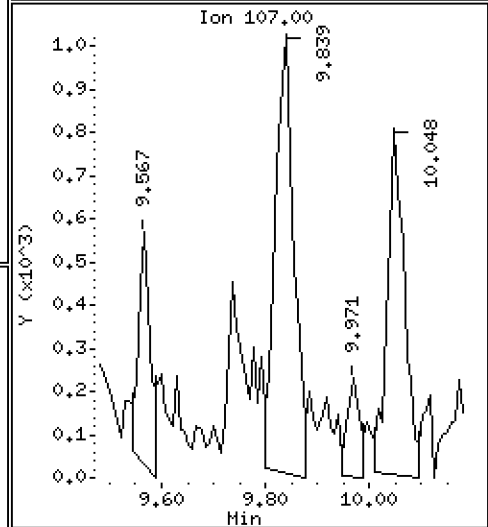
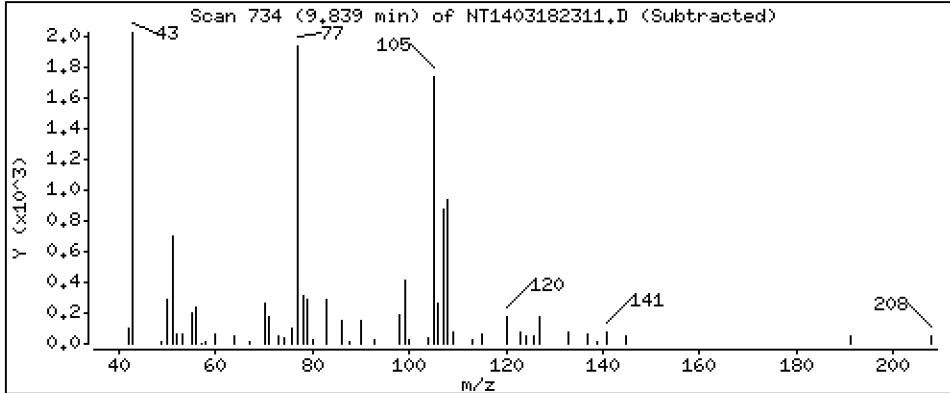
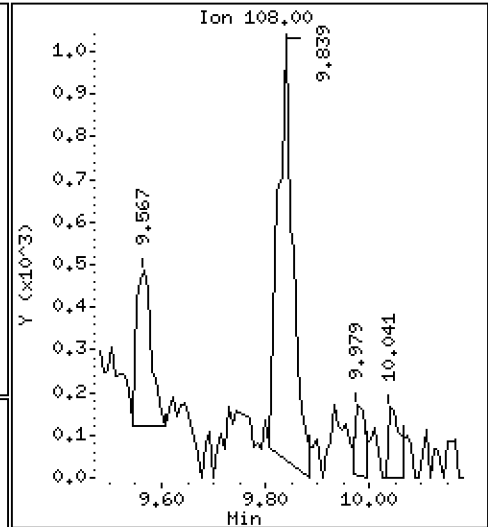
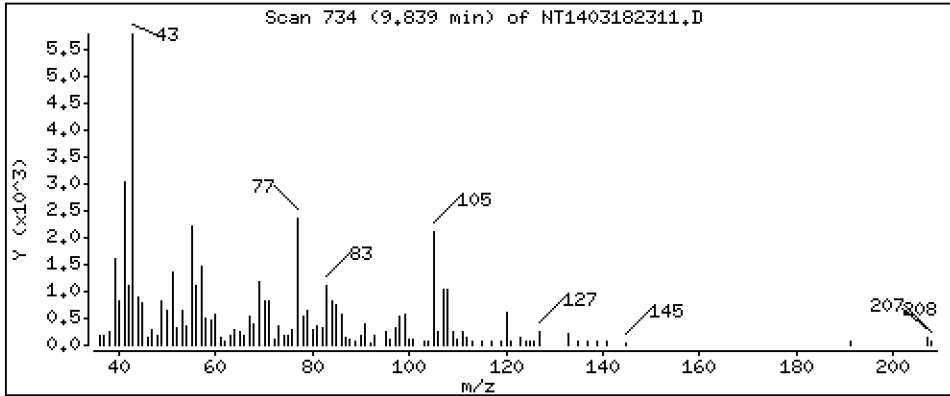
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.06457 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

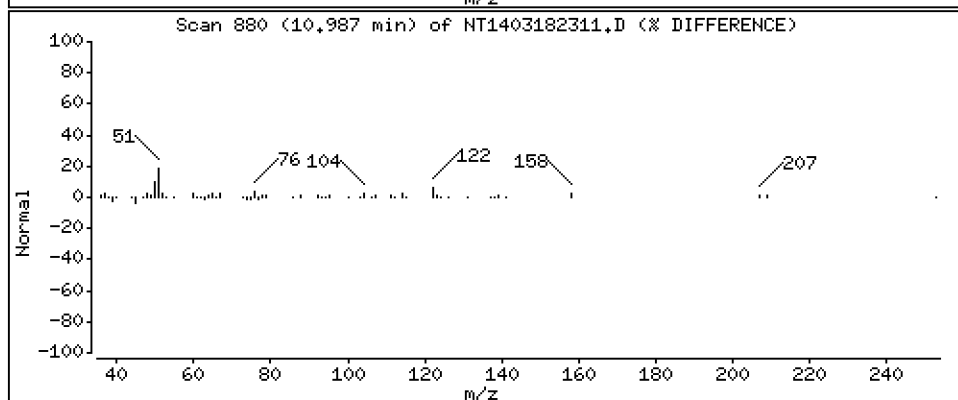
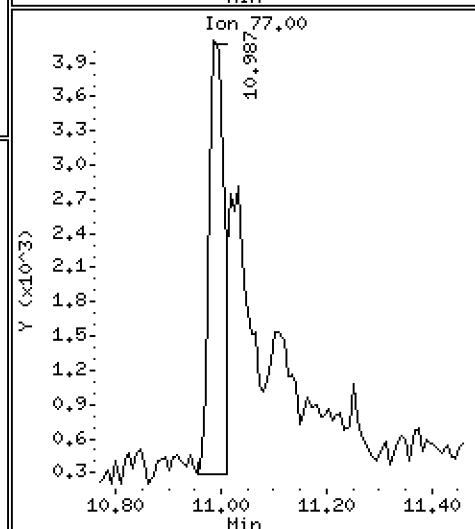
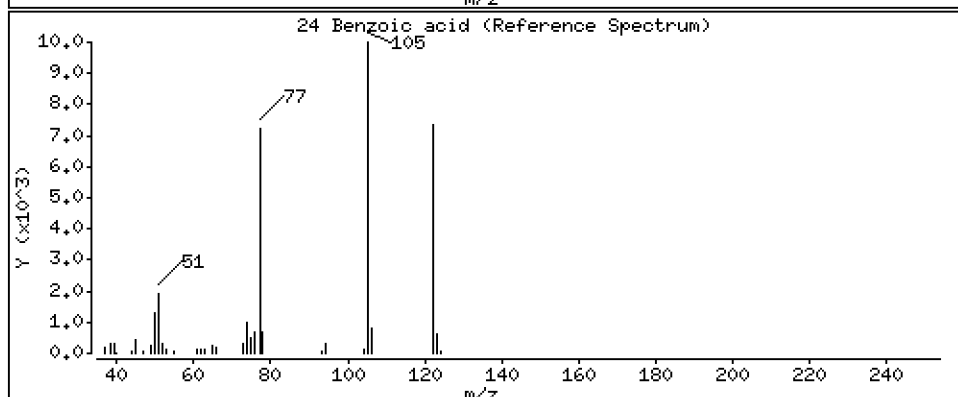
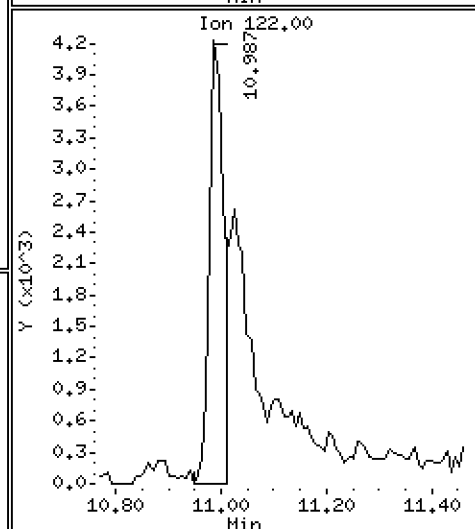
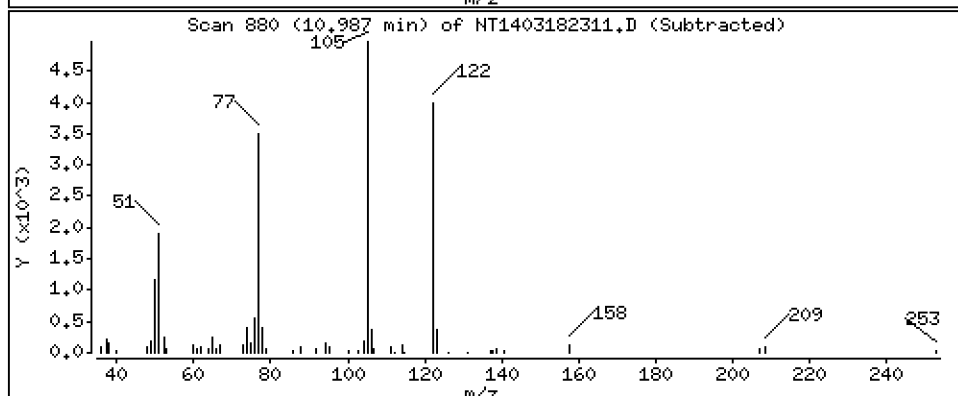
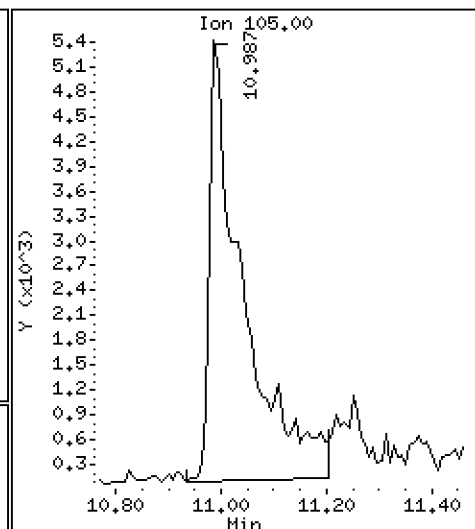
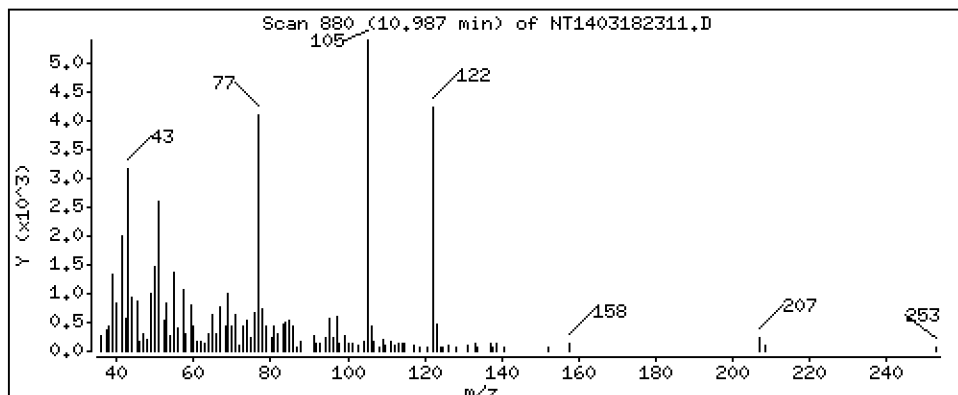
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,100 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

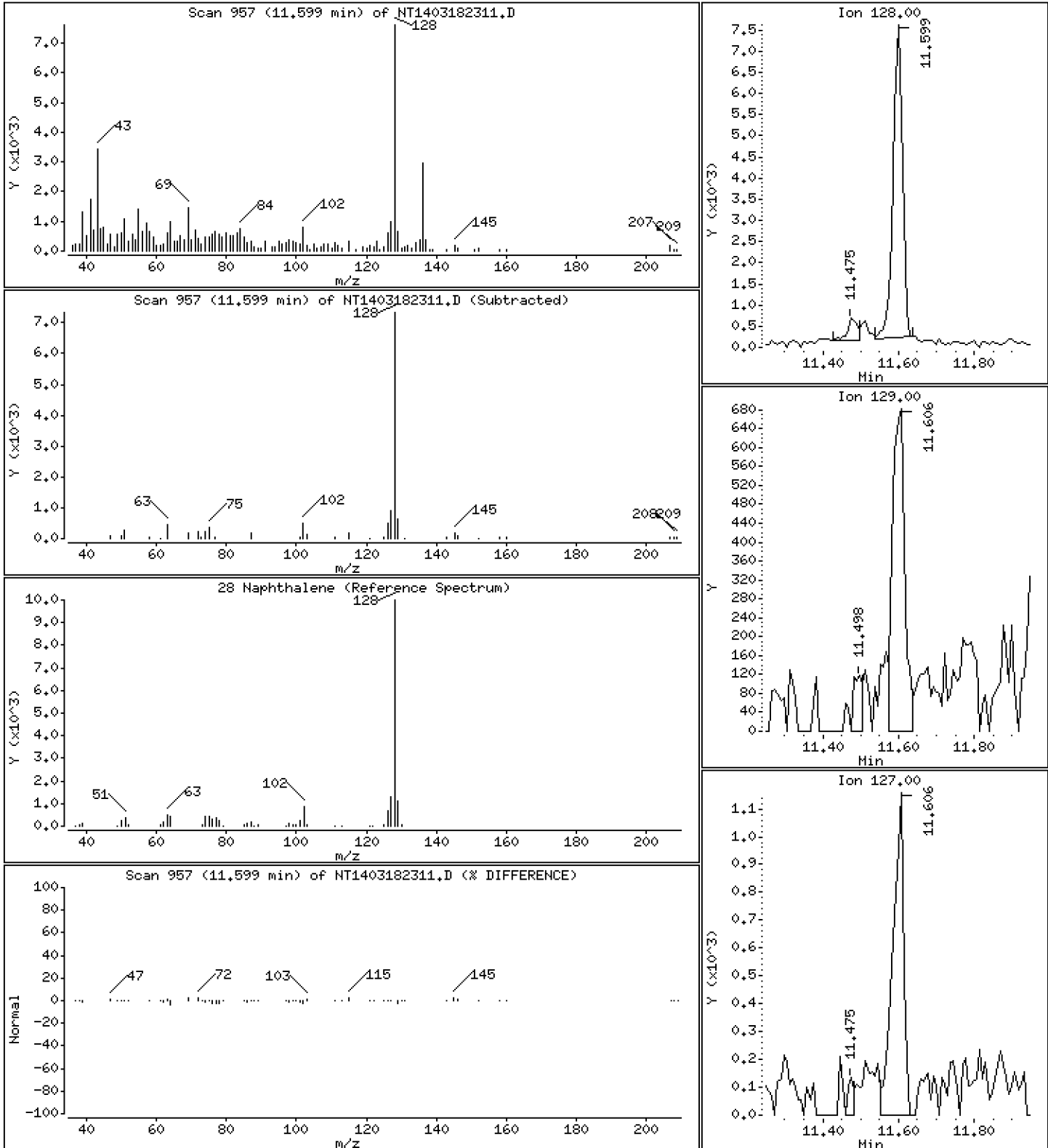
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,1509 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

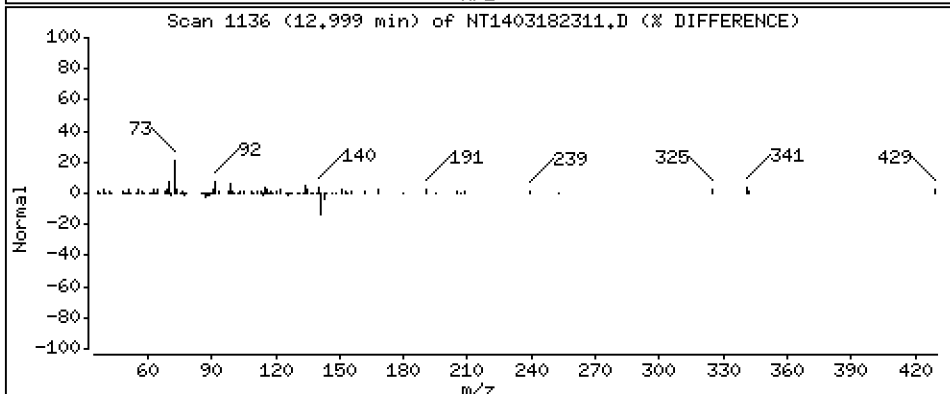
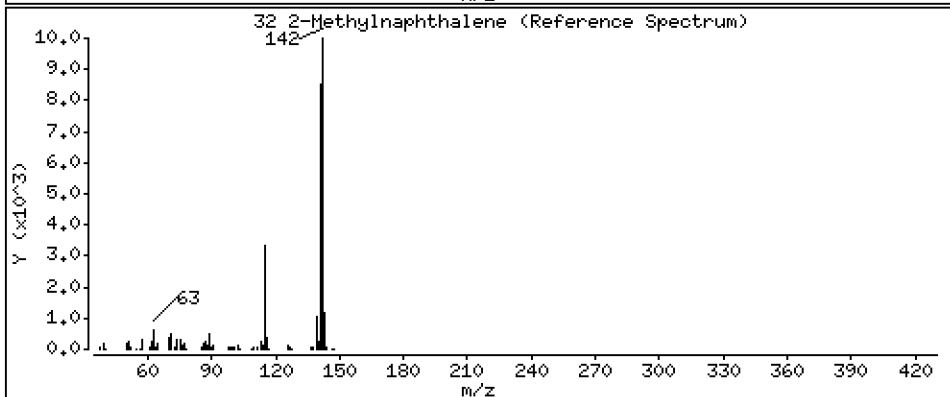
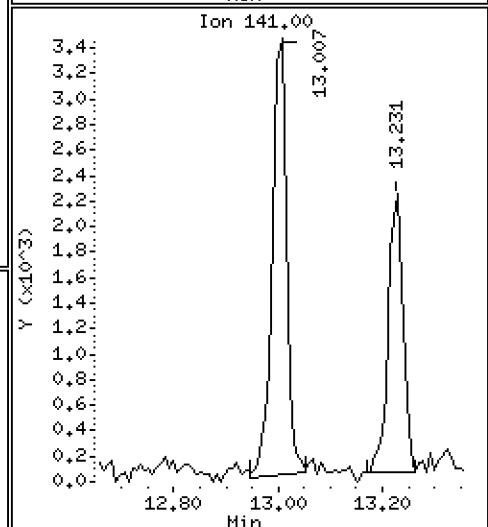
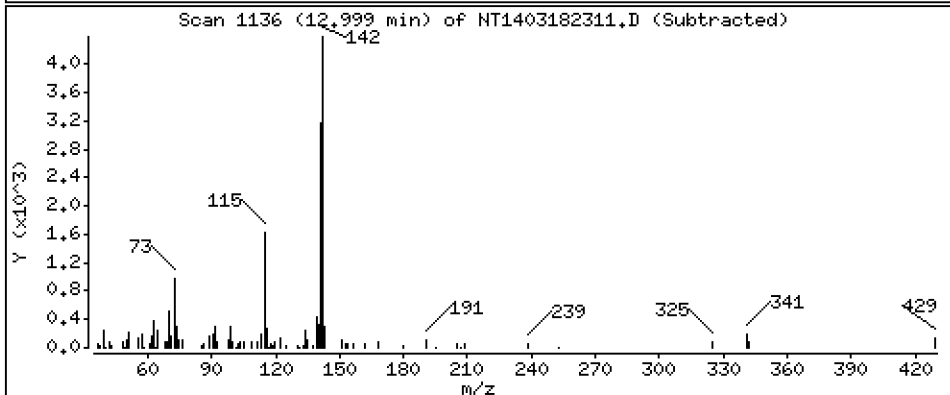
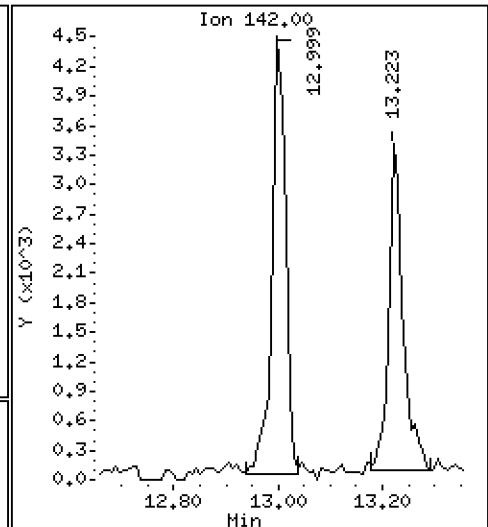
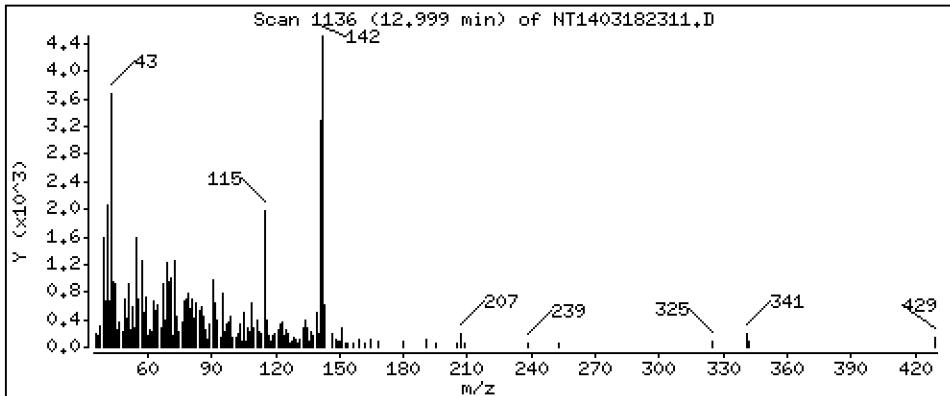
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1387 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

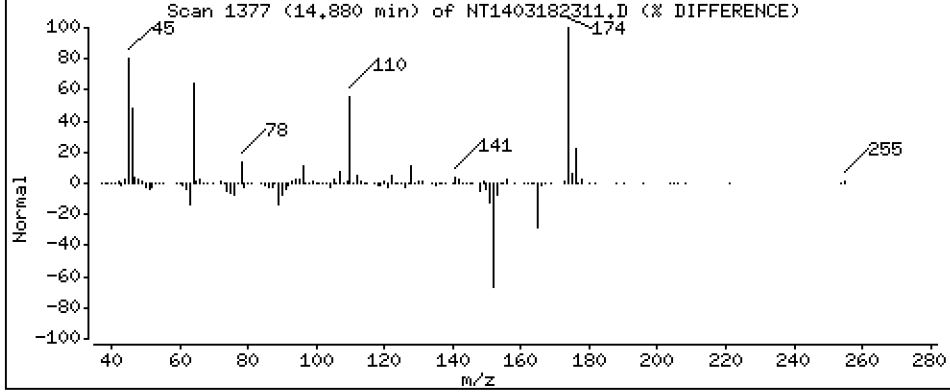
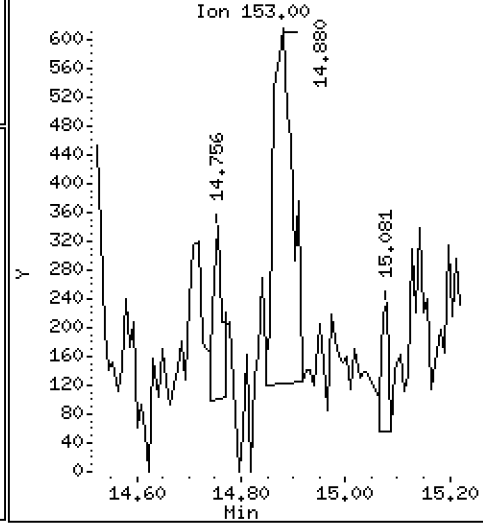
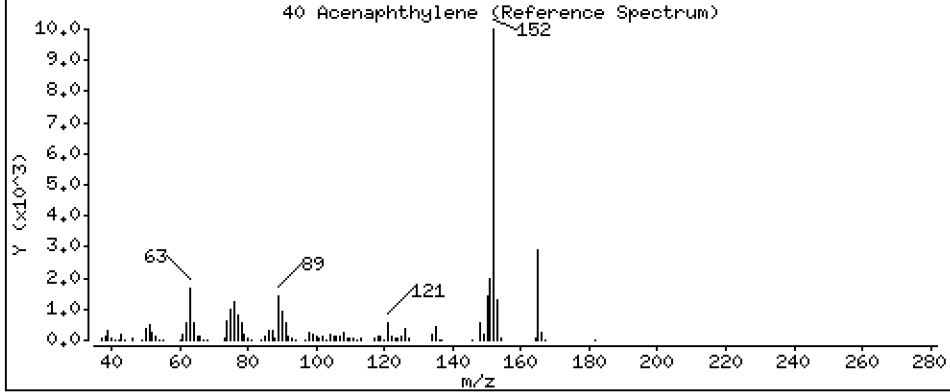
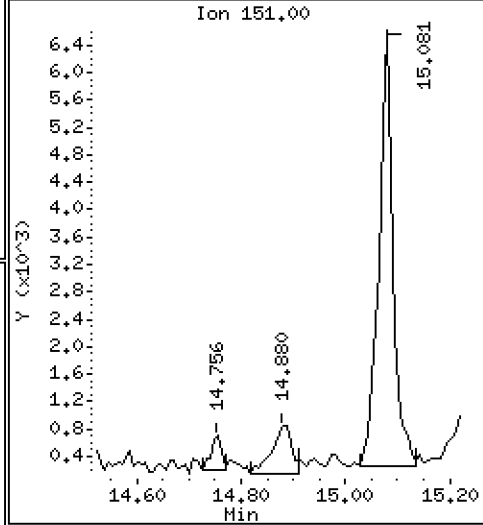
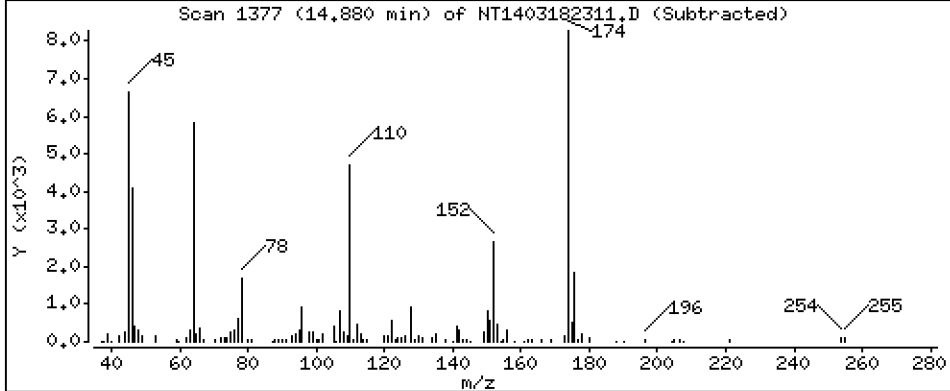
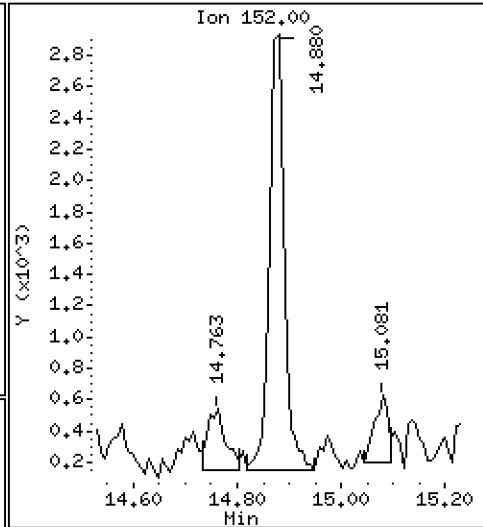
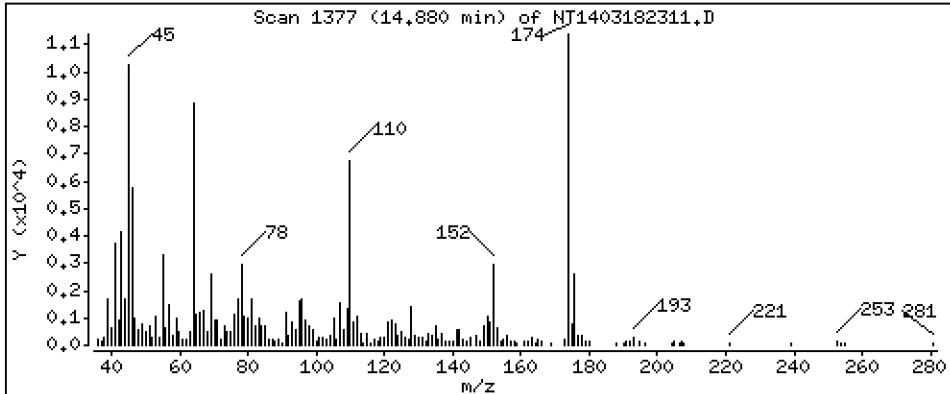
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,06877 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

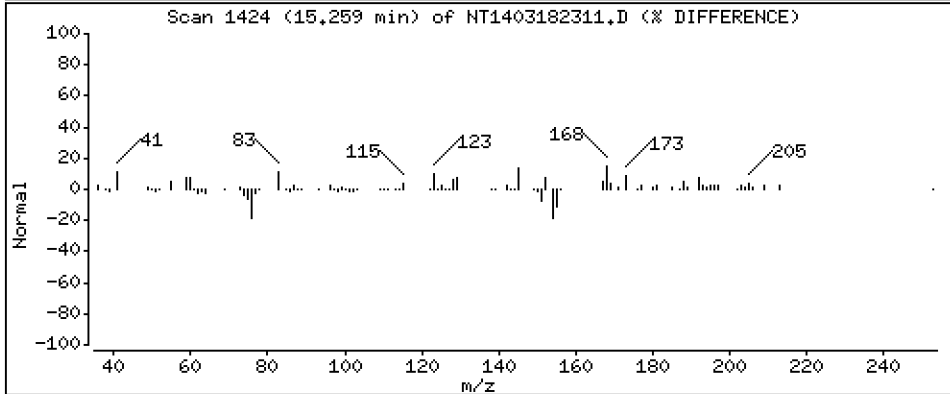
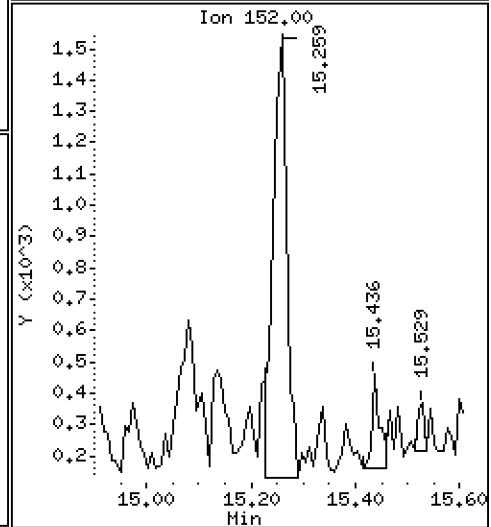
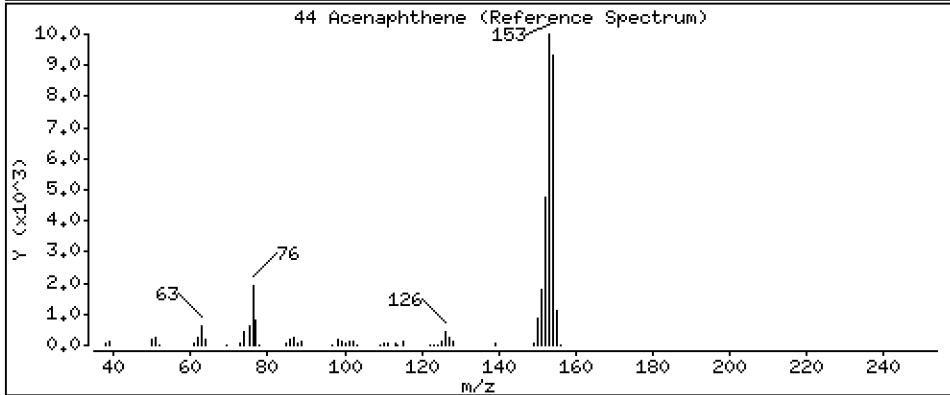
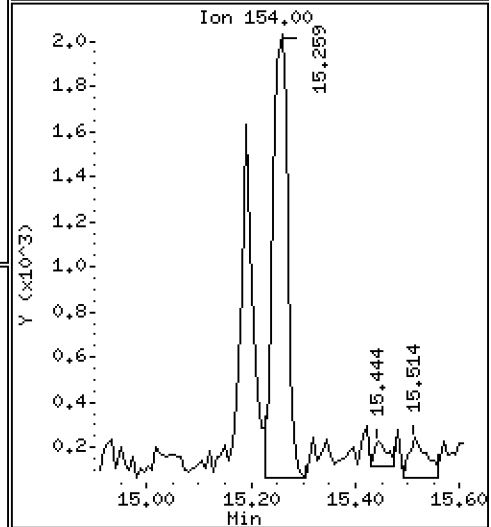
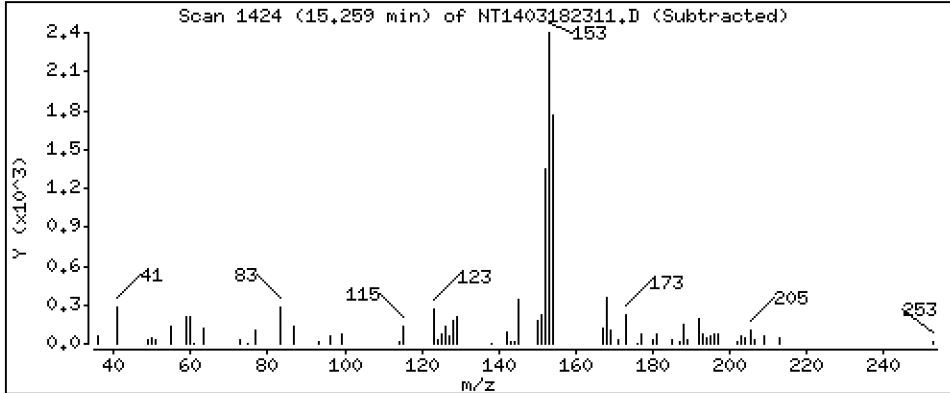
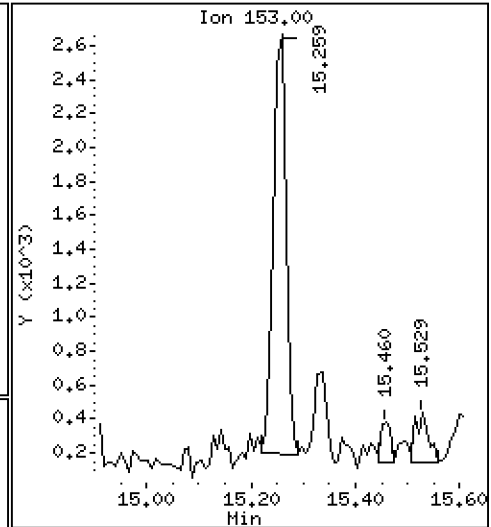
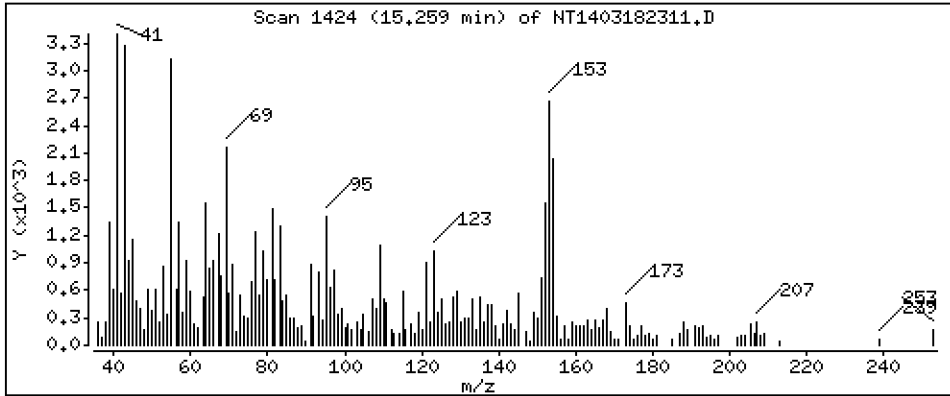
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,08923 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

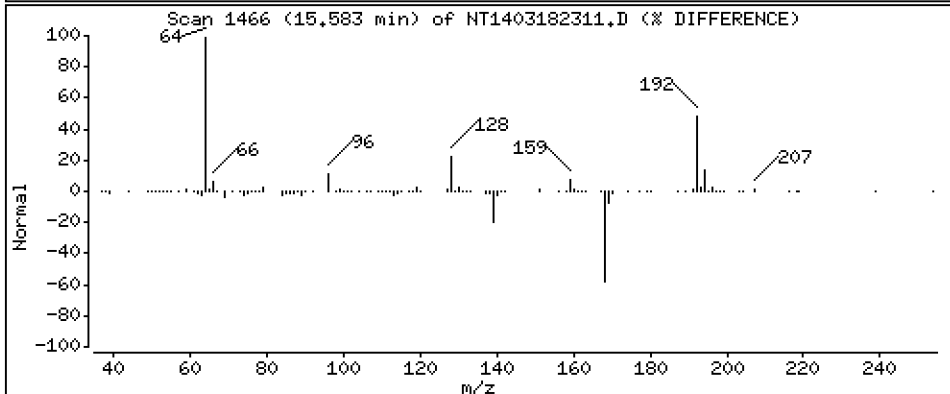
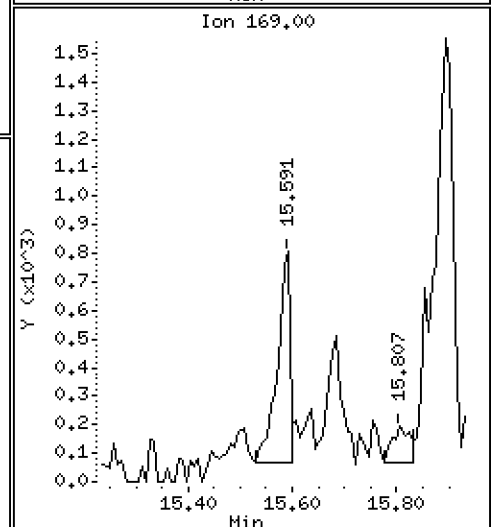
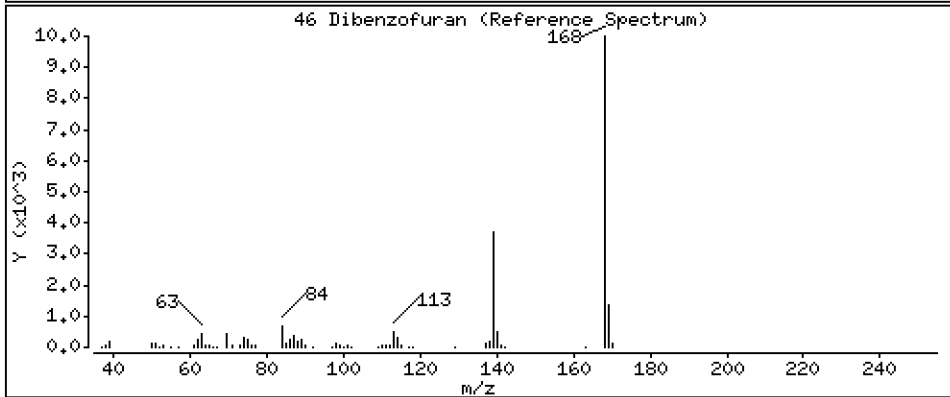
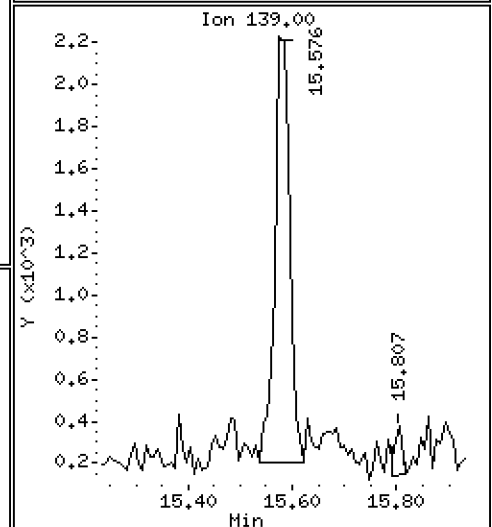
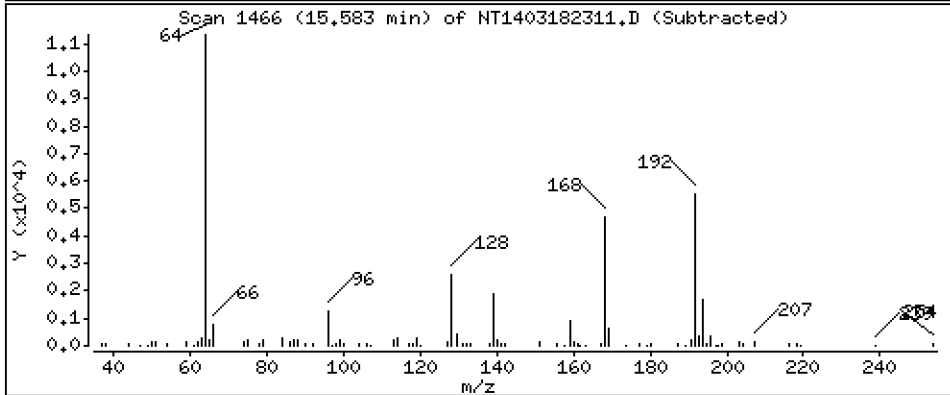
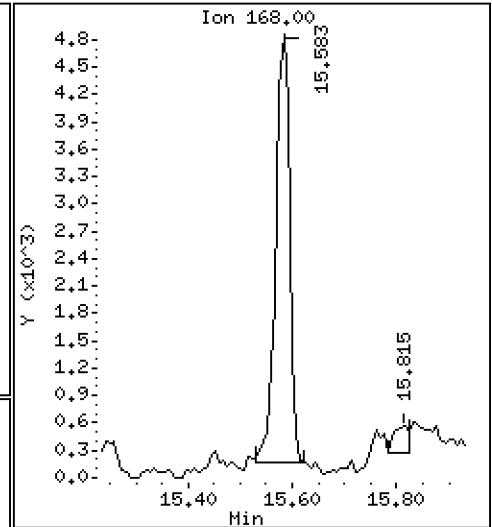
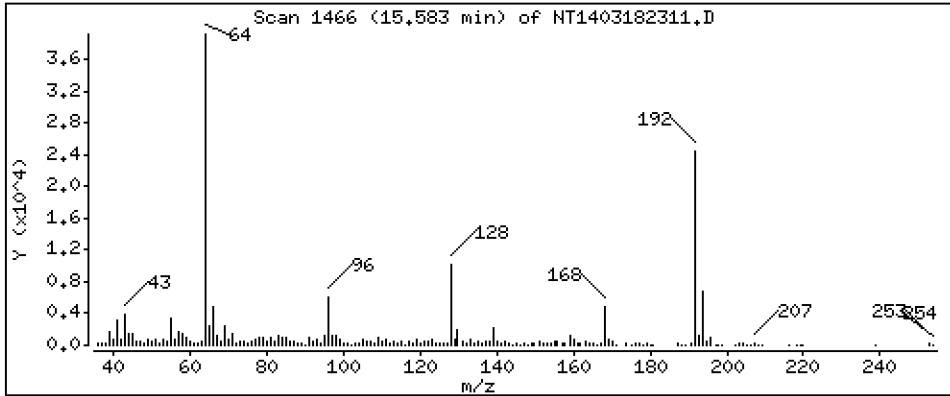
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1280 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

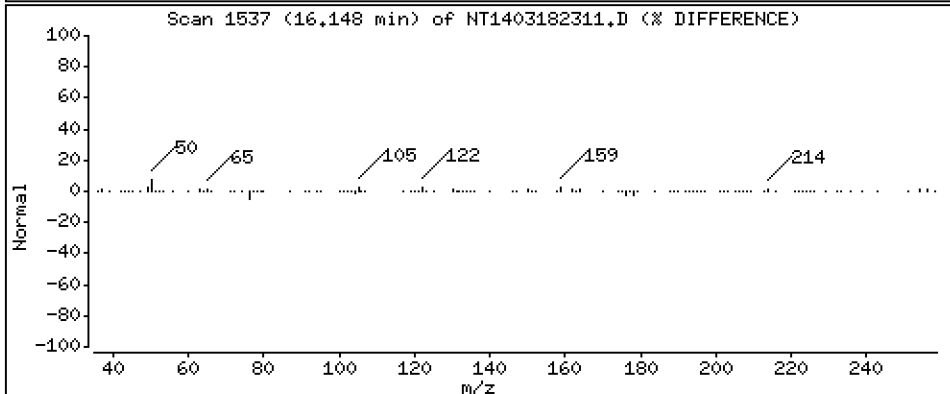
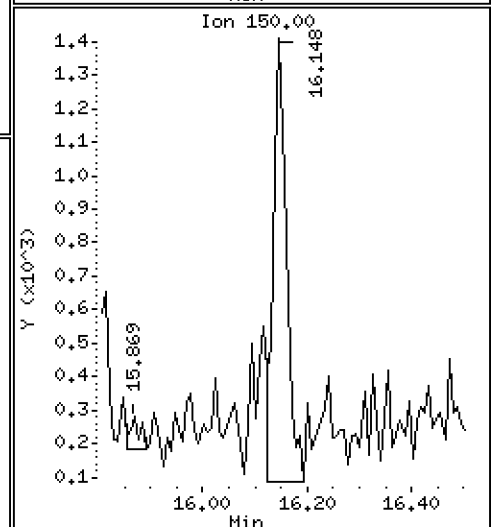
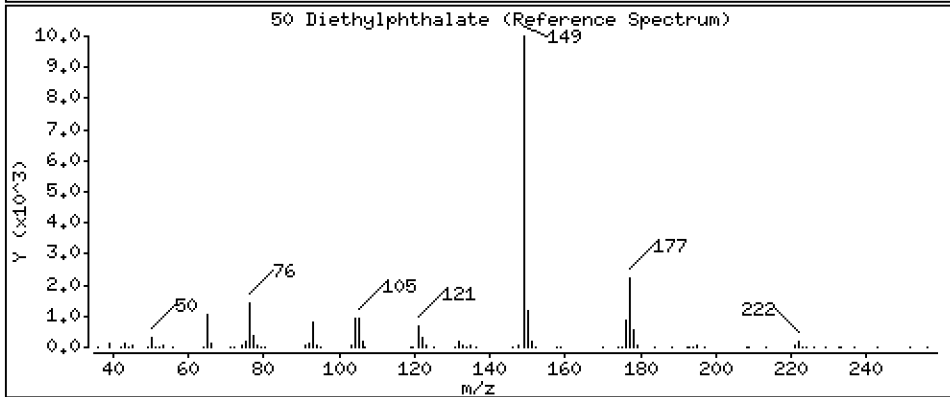
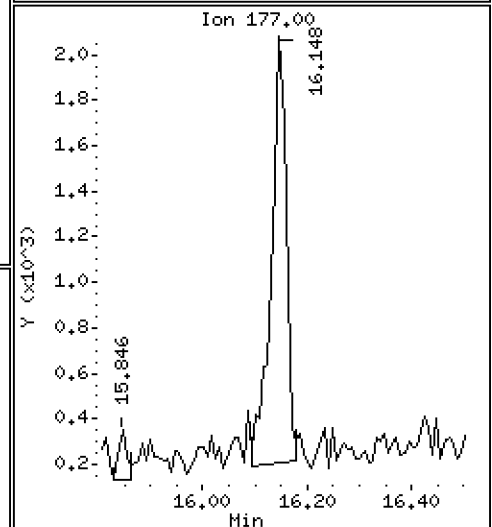
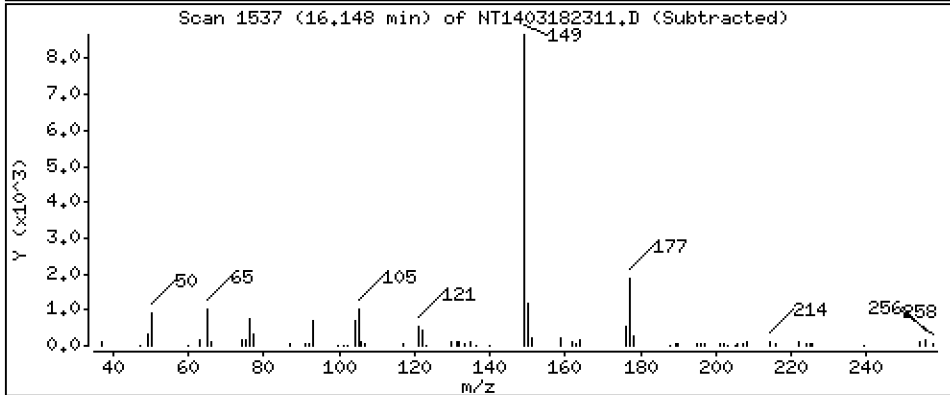
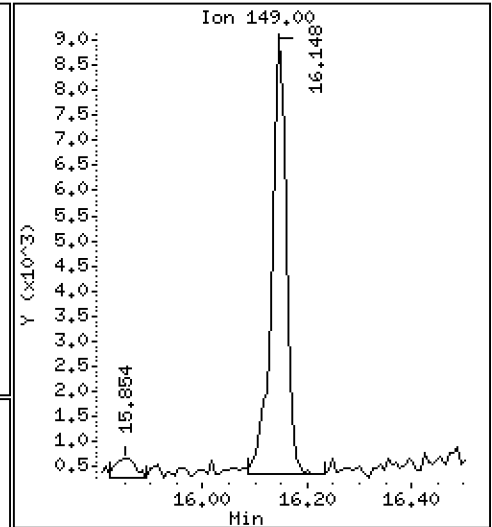
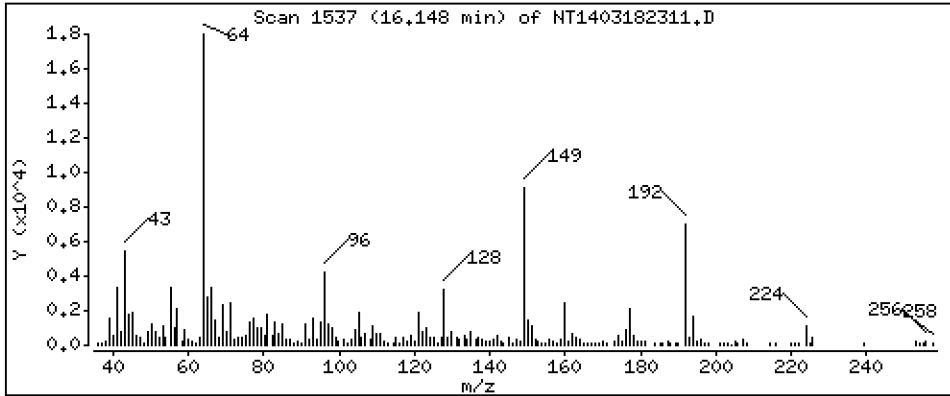
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3570 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

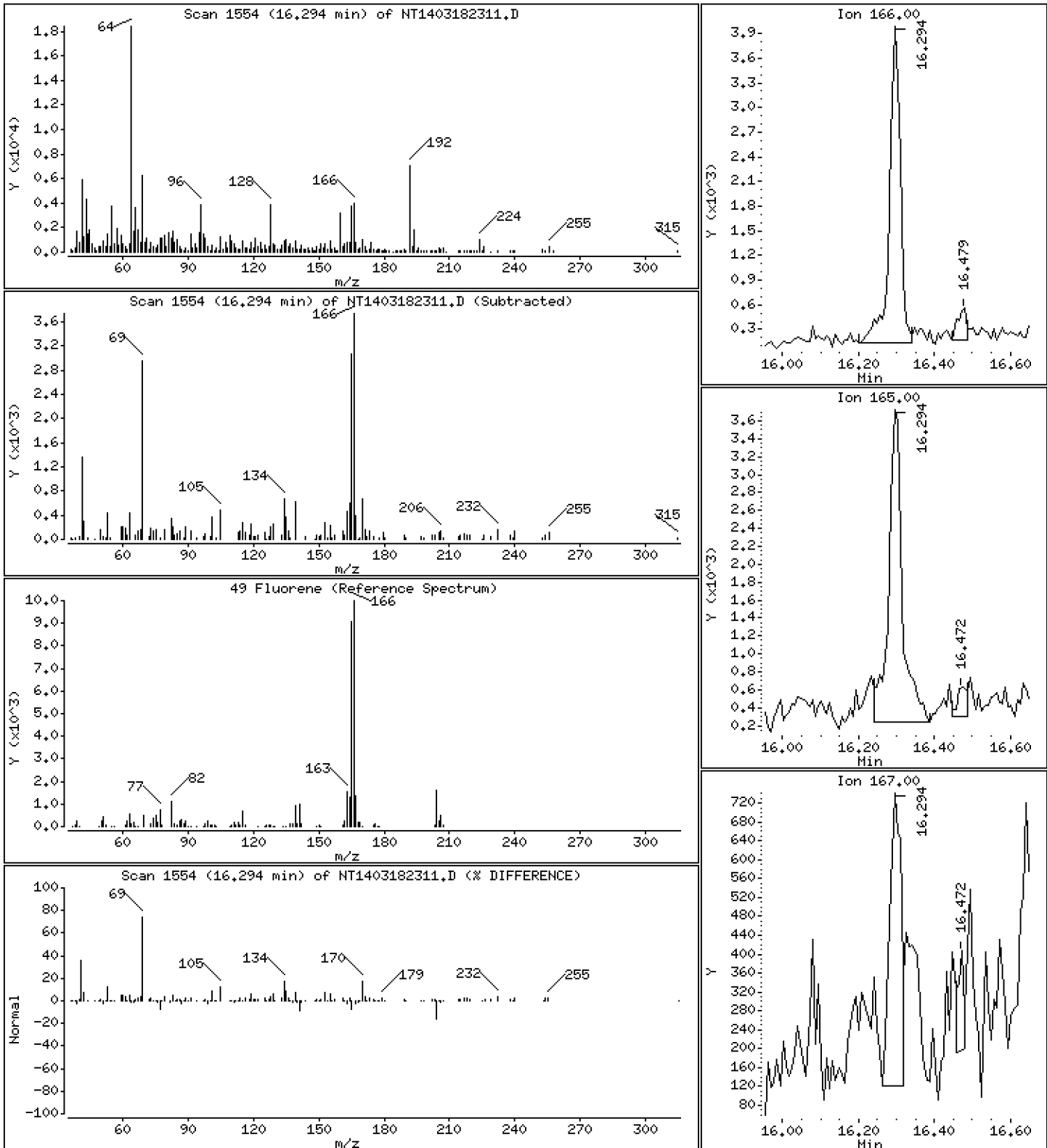
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1348 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

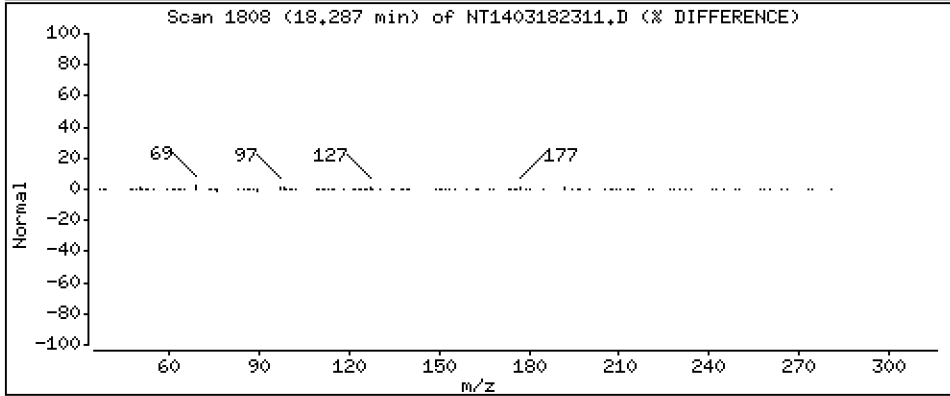
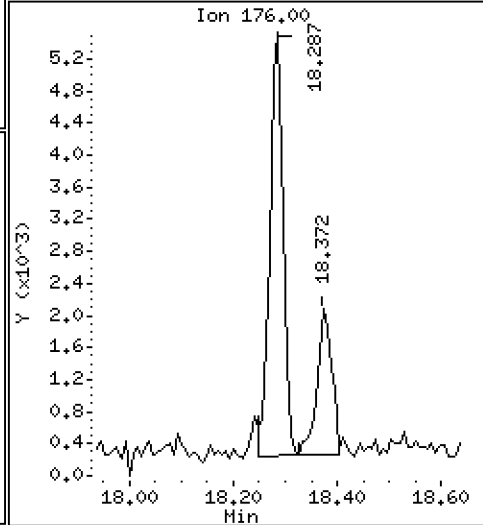
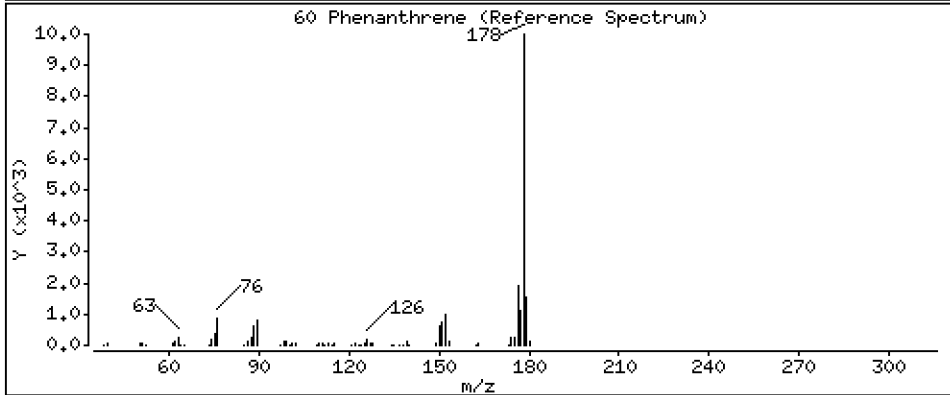
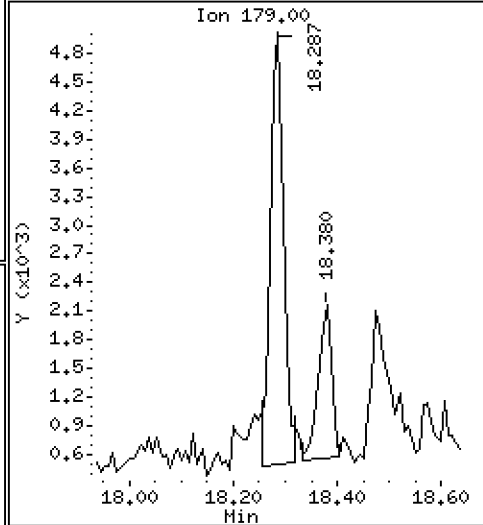
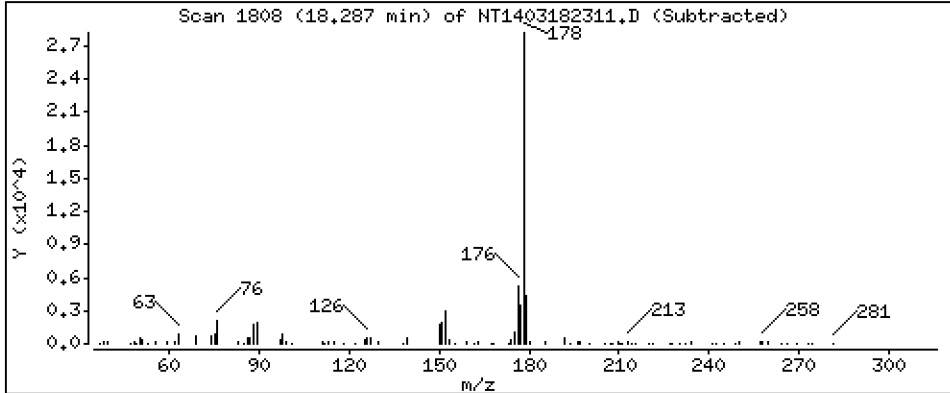
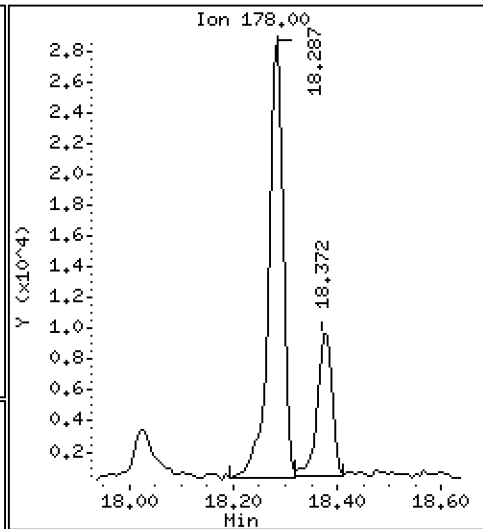
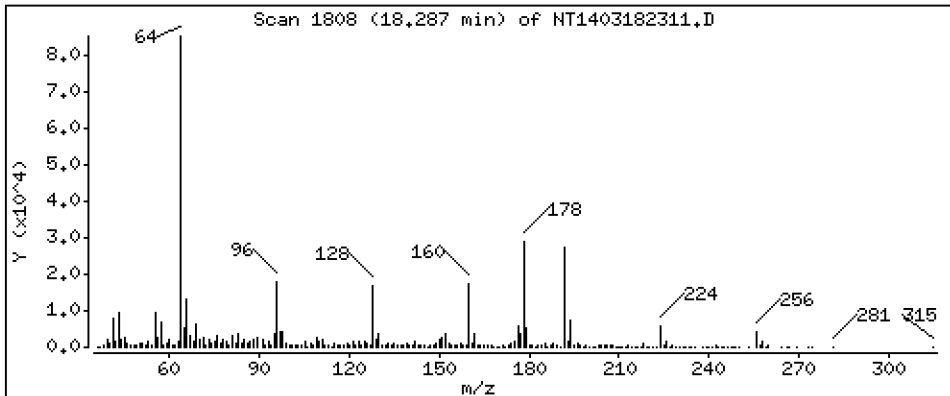
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,7367 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

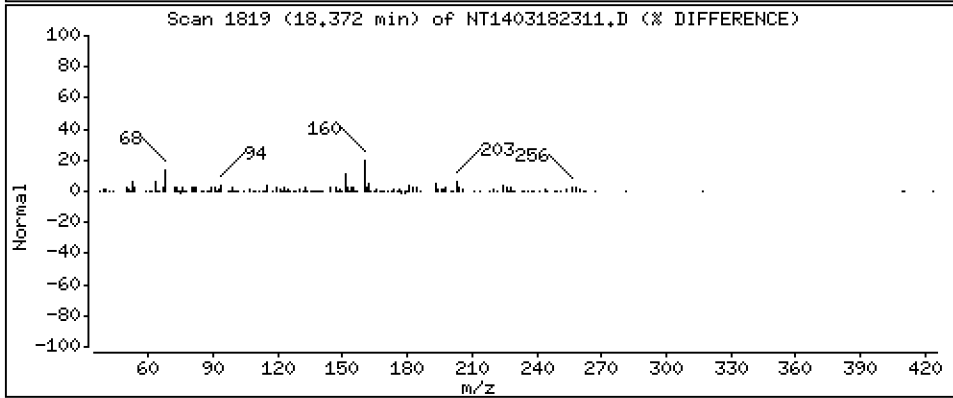
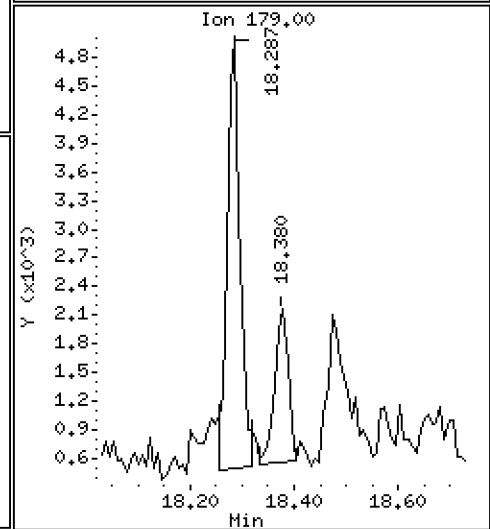
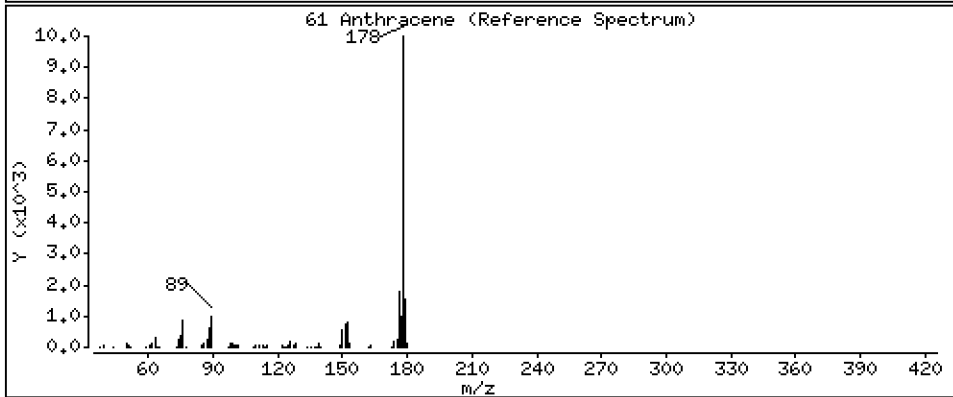
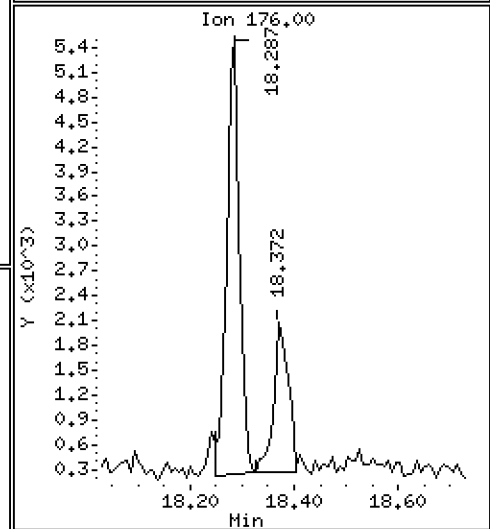
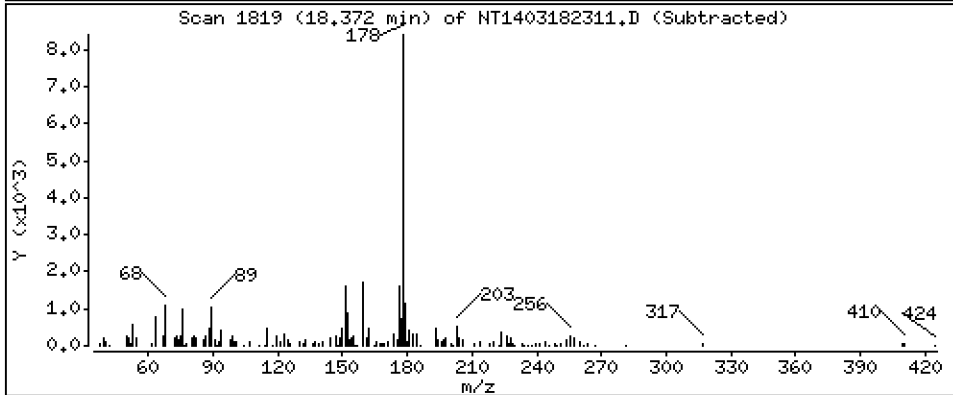
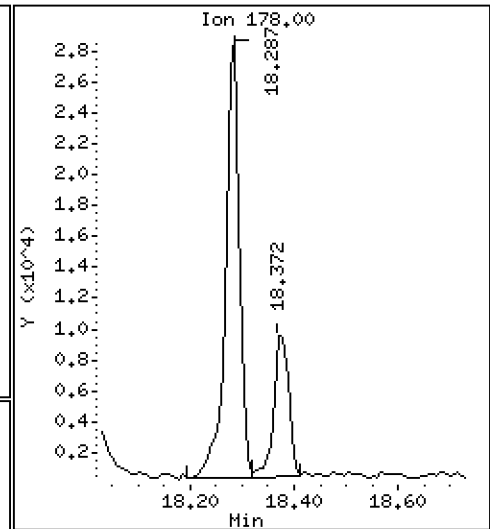
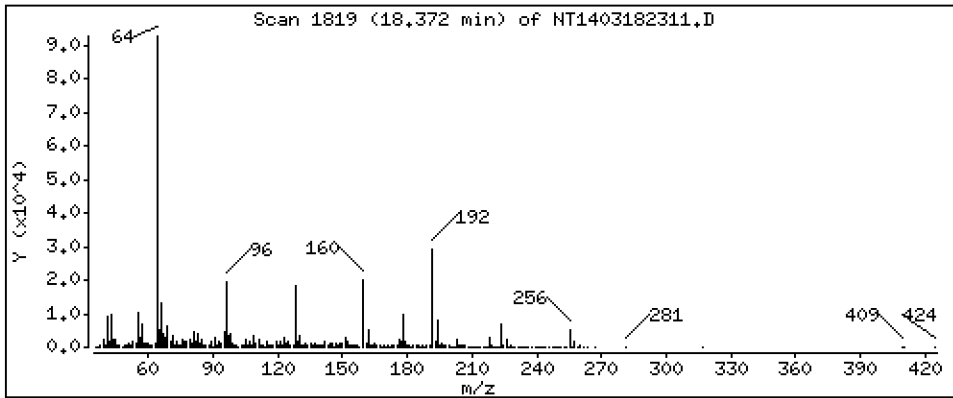
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,2605 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

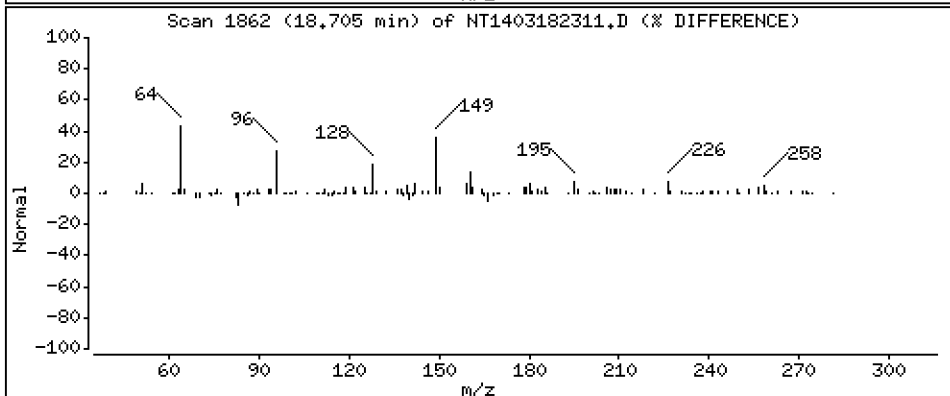
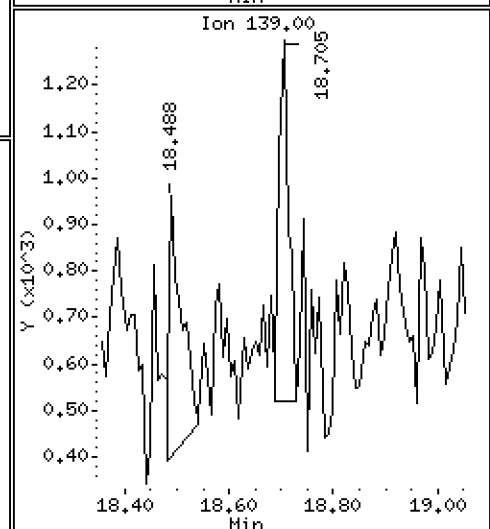
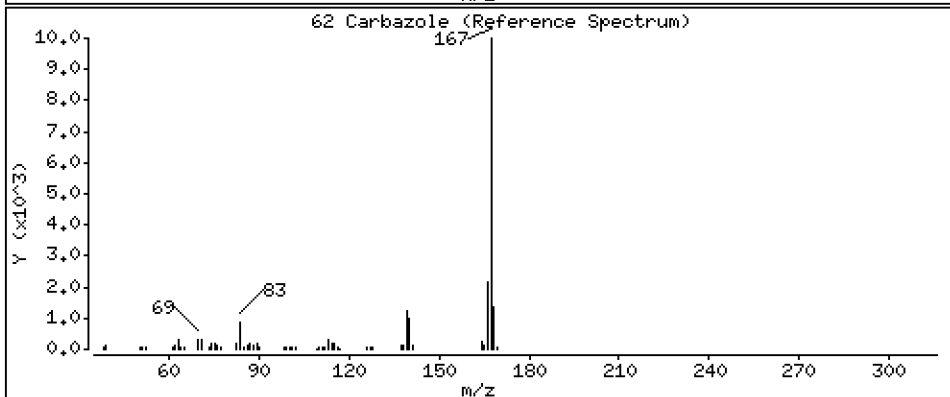
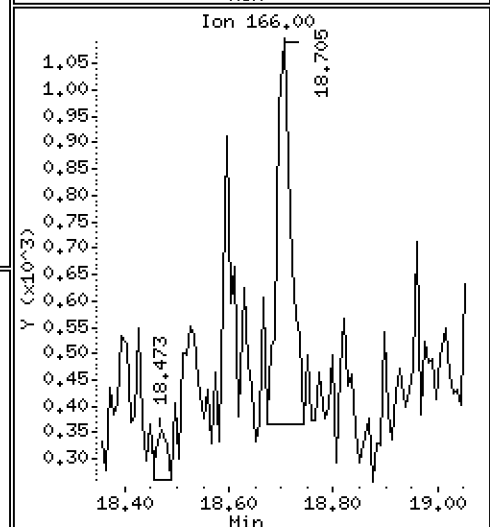
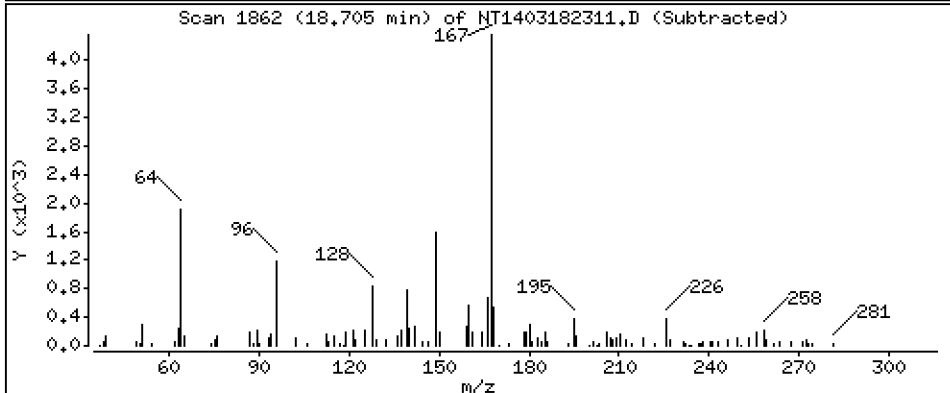
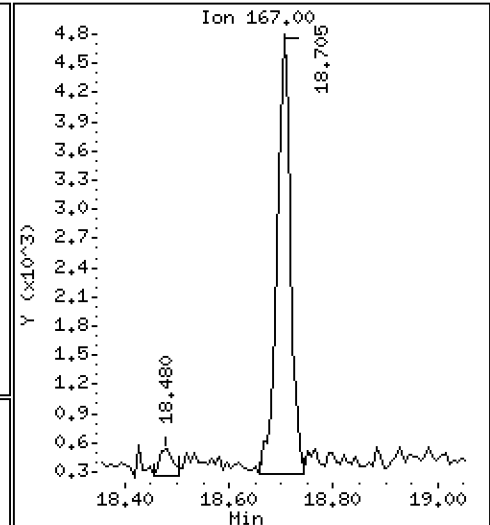
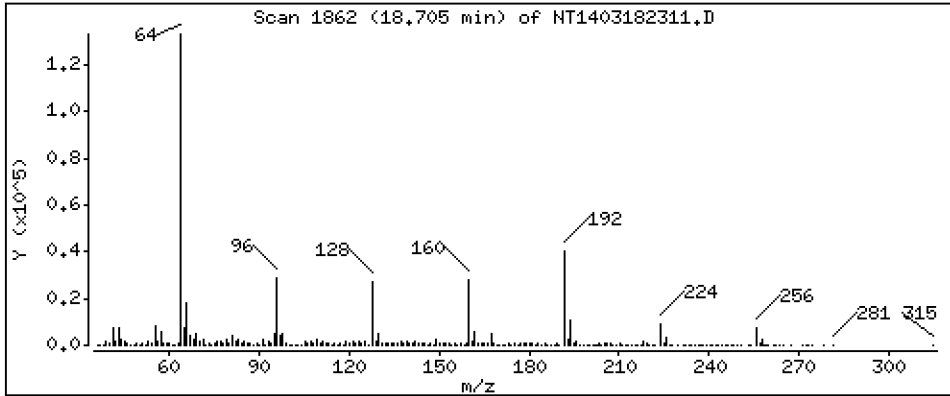
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1258 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

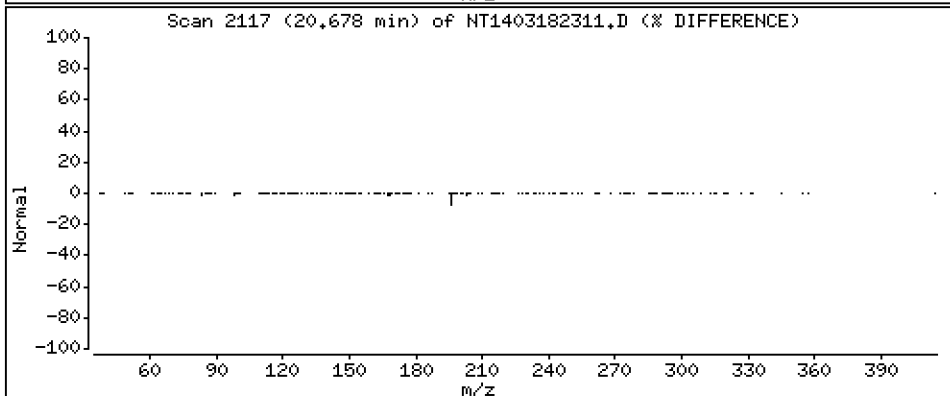
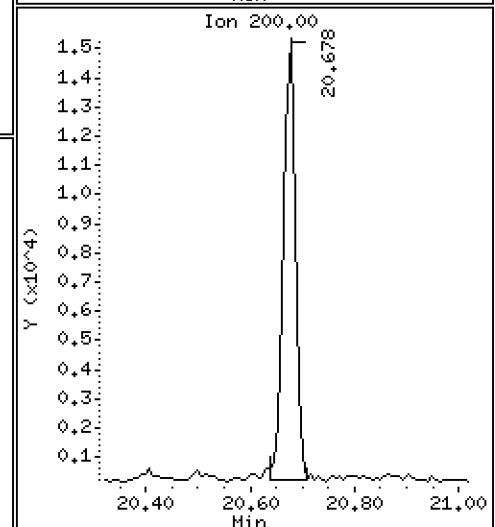
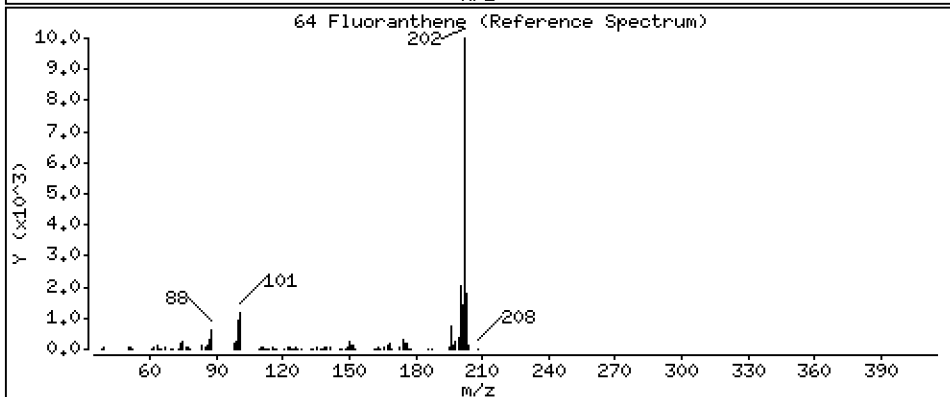
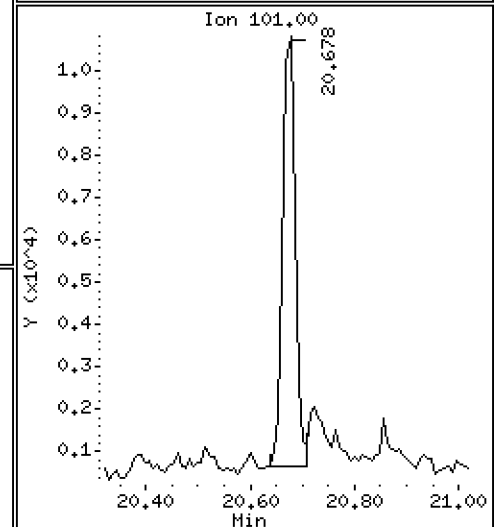
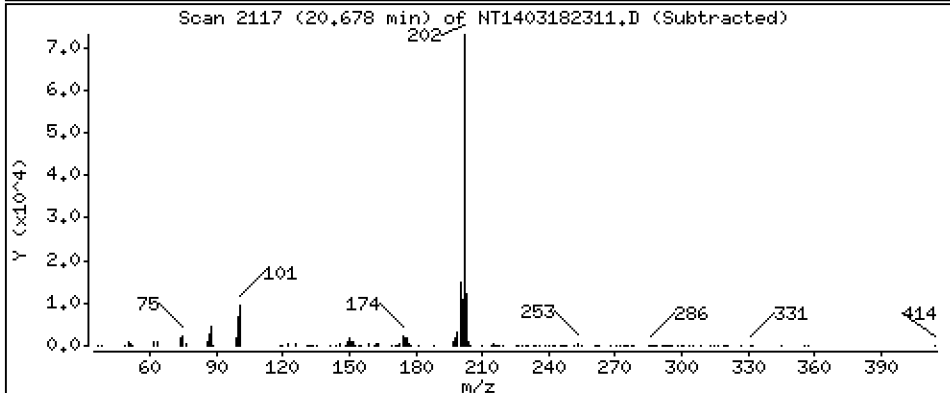
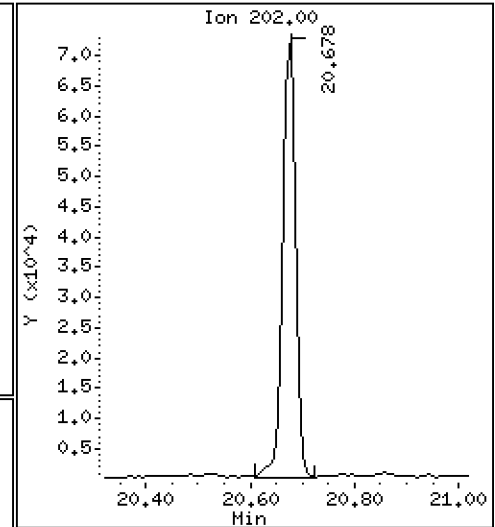
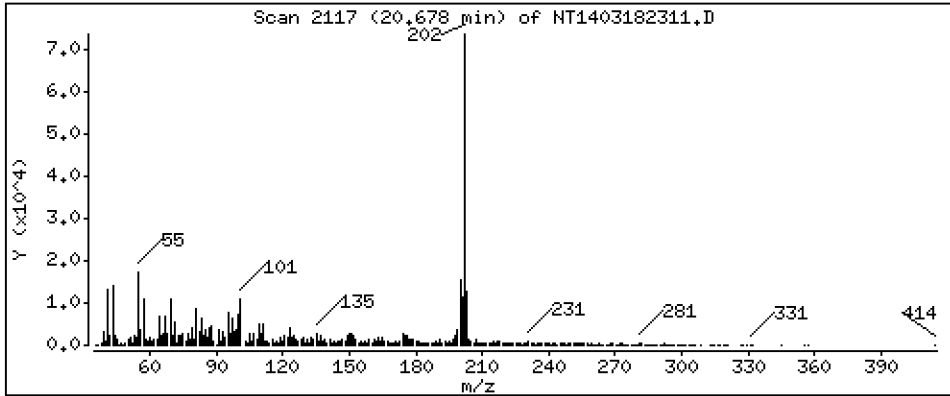
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 2,432 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

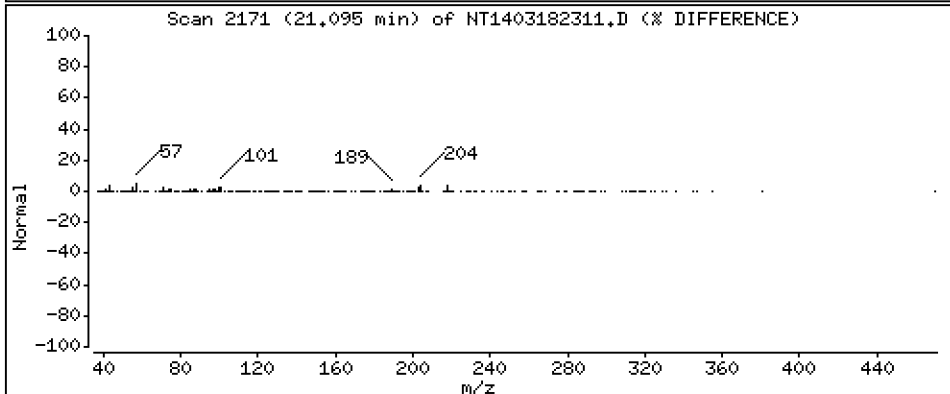
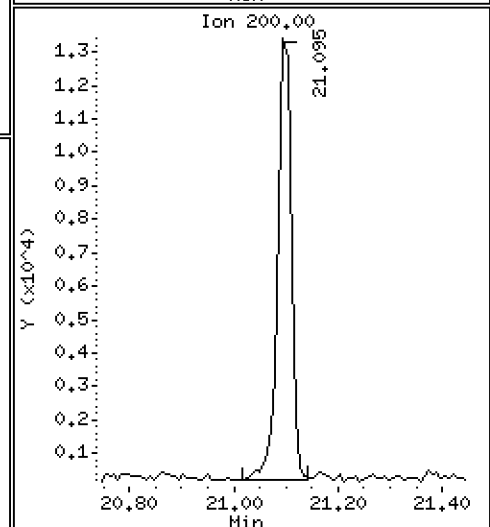
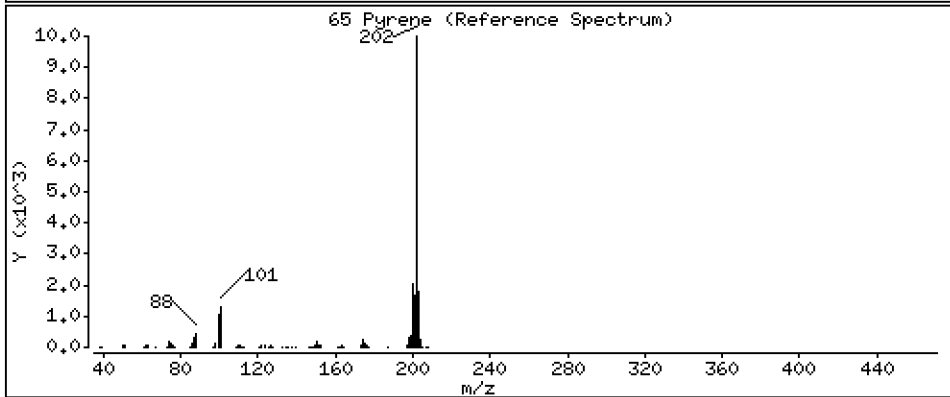
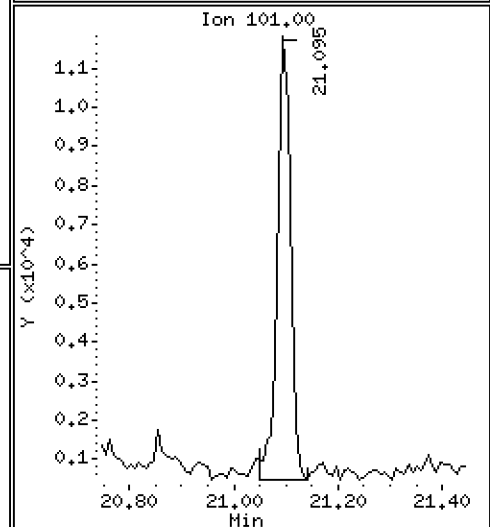
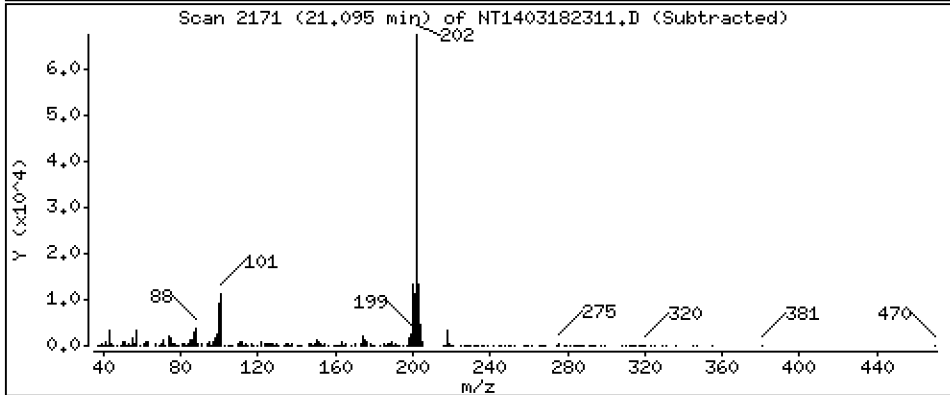
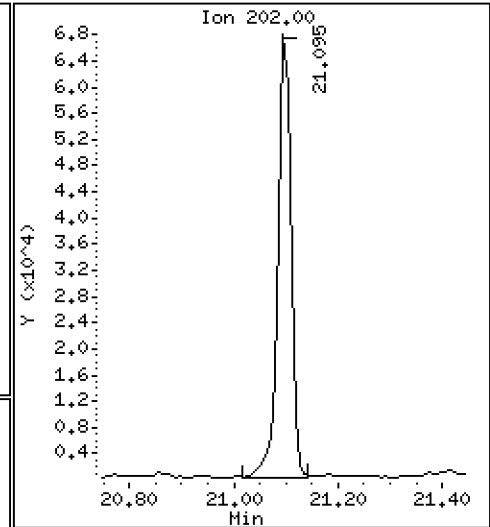
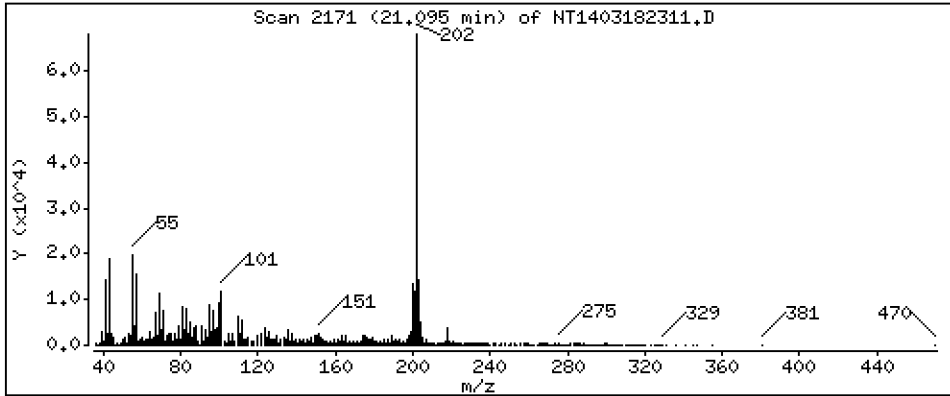
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,249 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

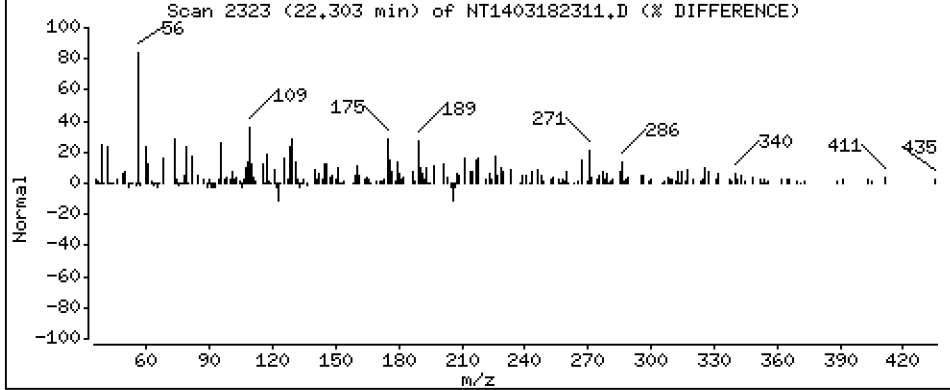
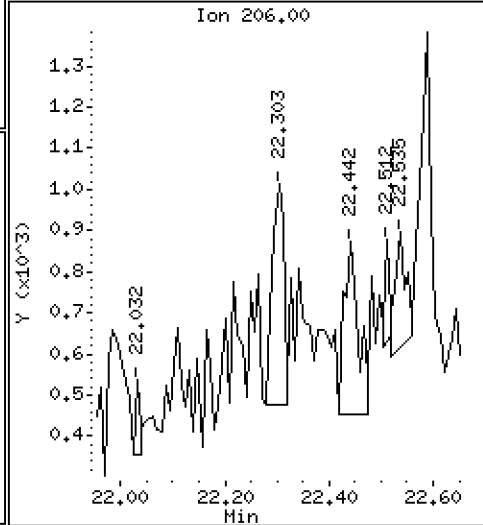
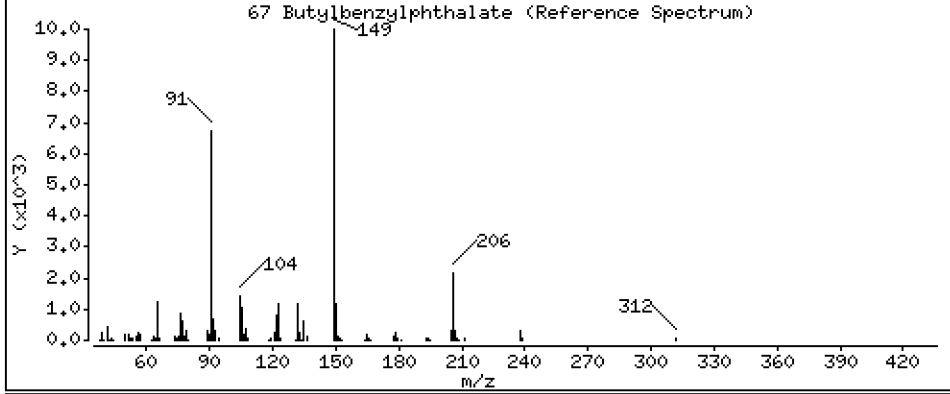
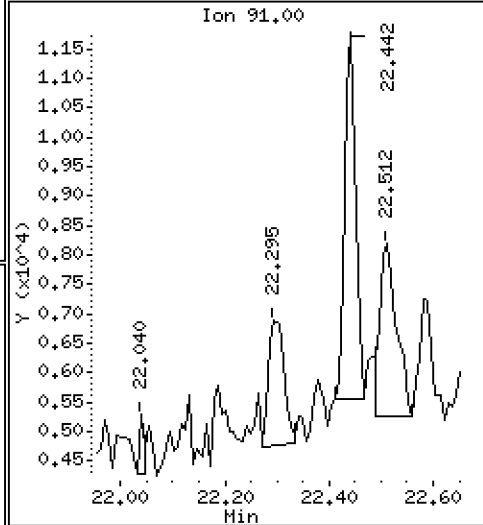
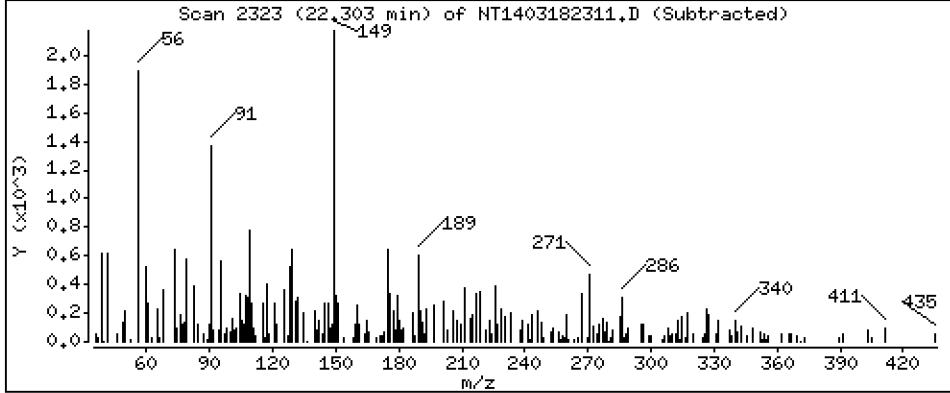
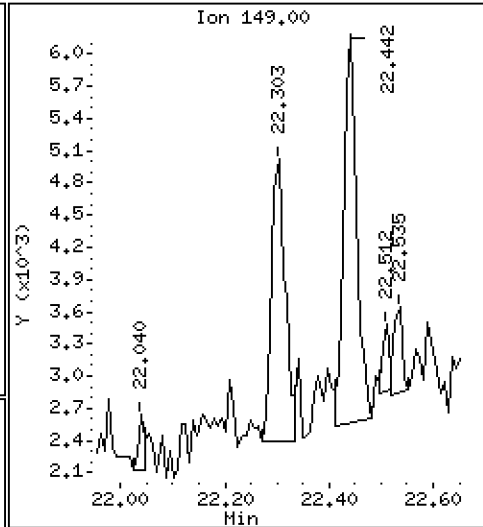
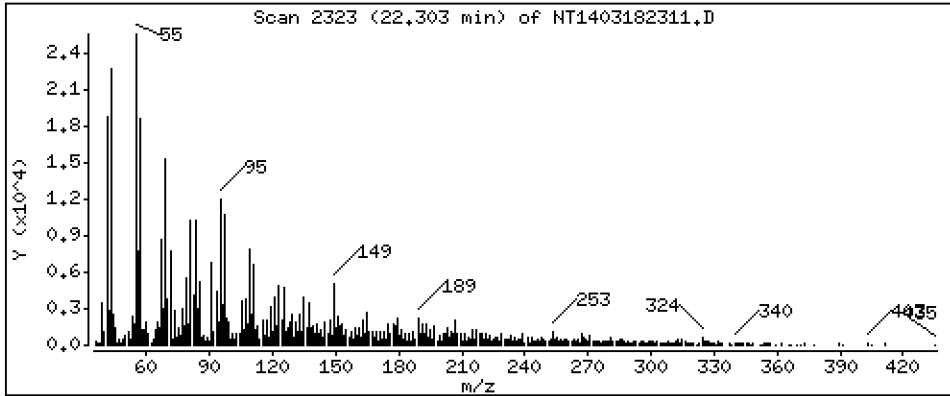
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2133 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

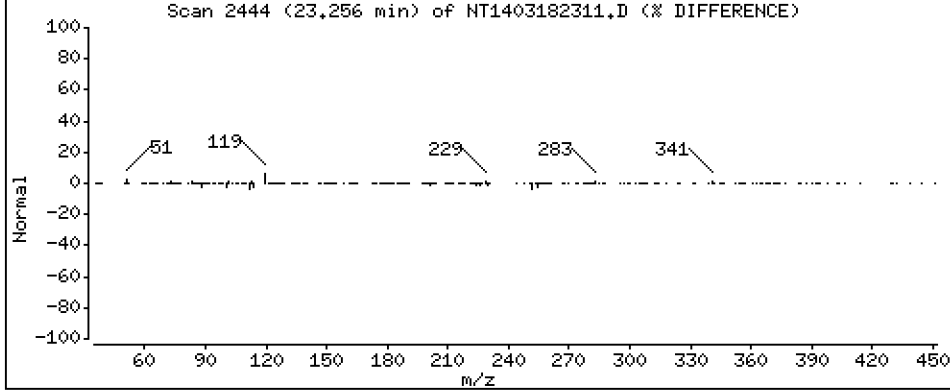
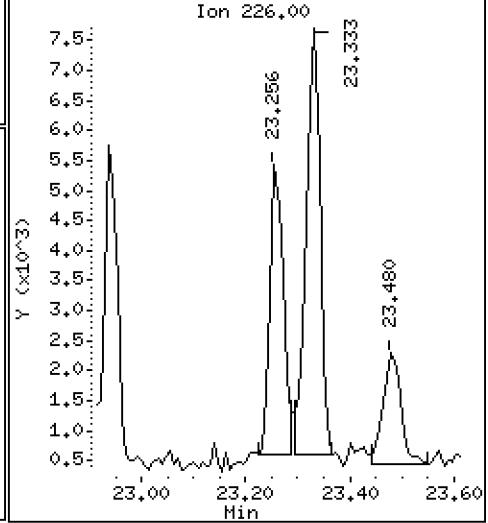
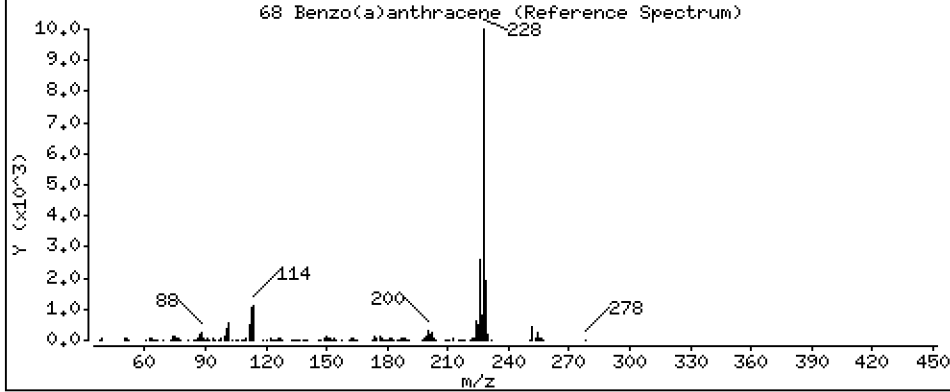
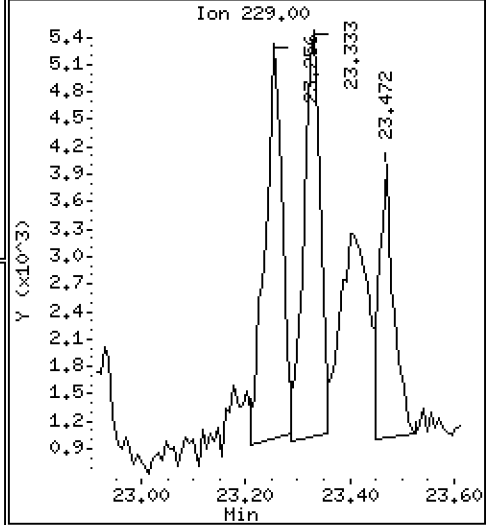
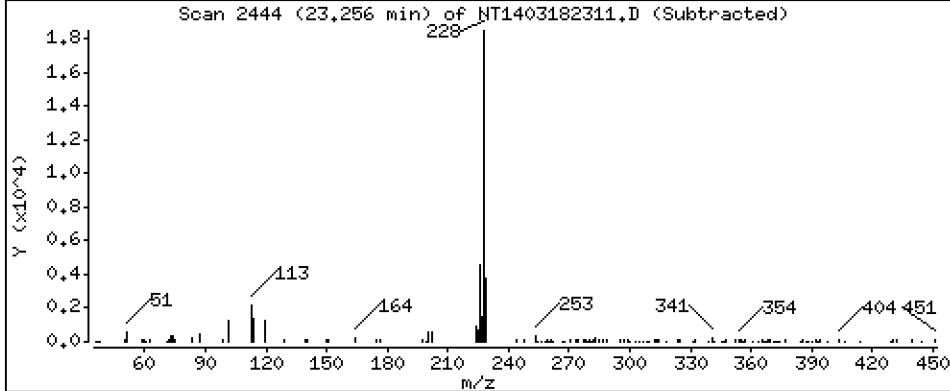
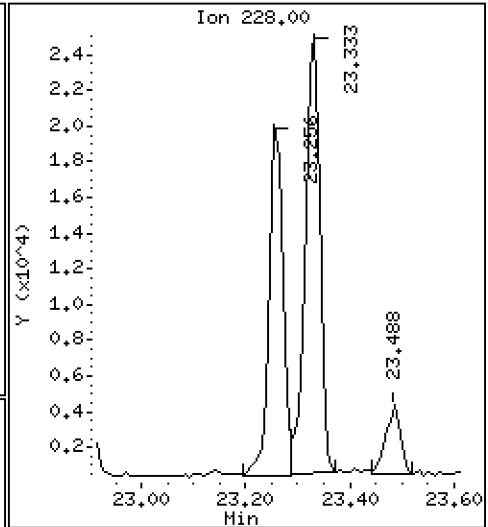
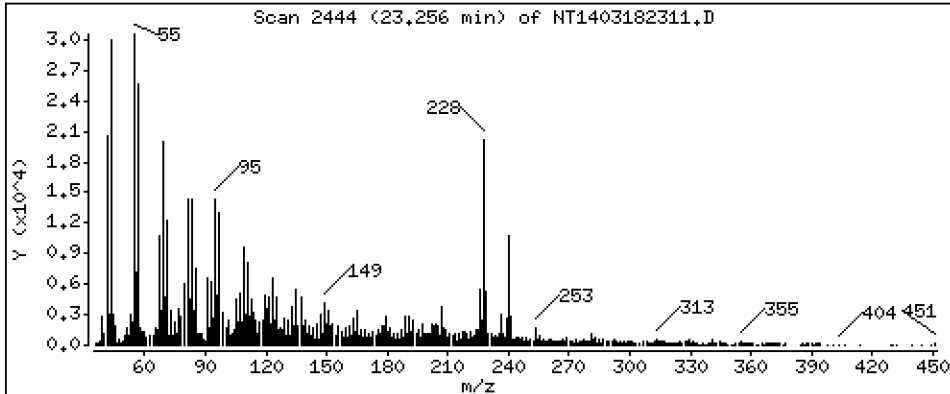
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,8064 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

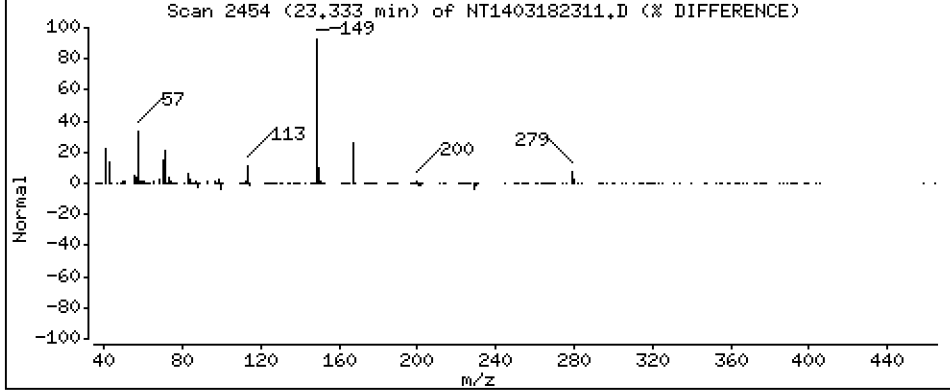
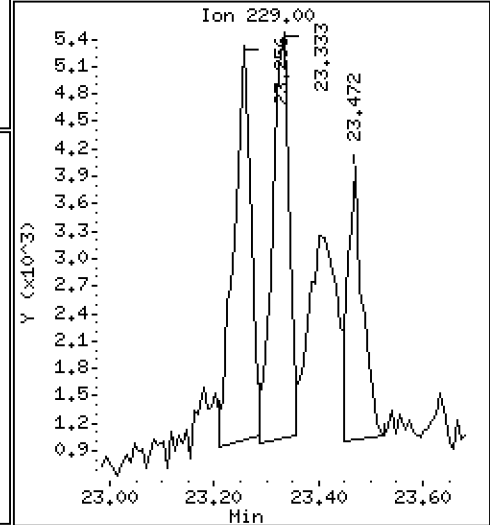
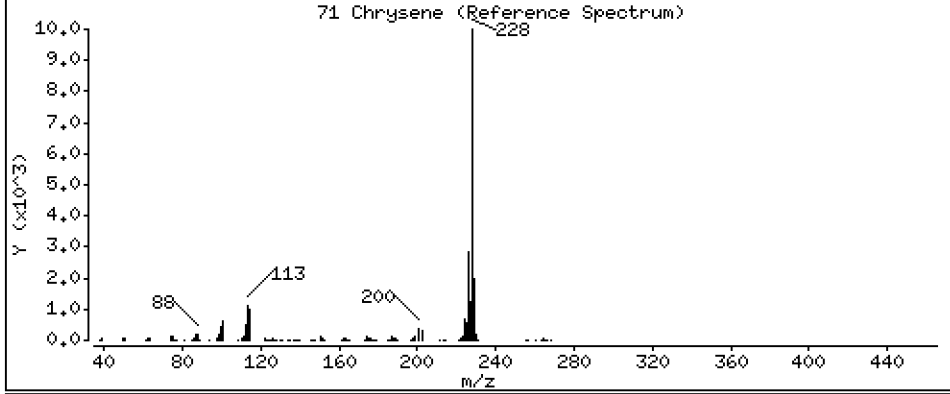
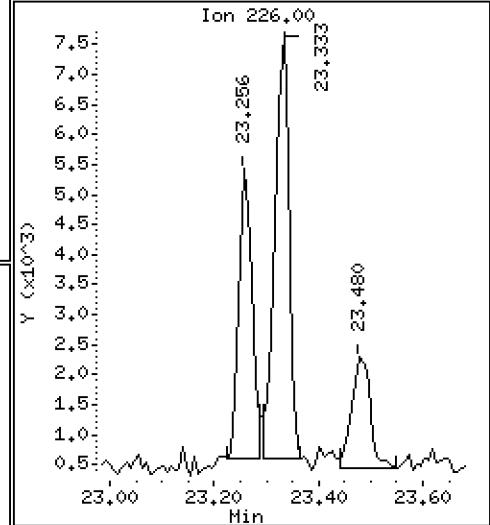
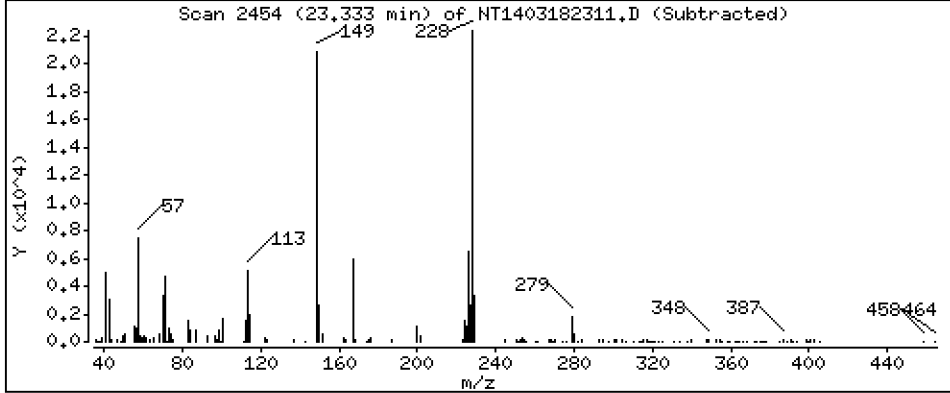
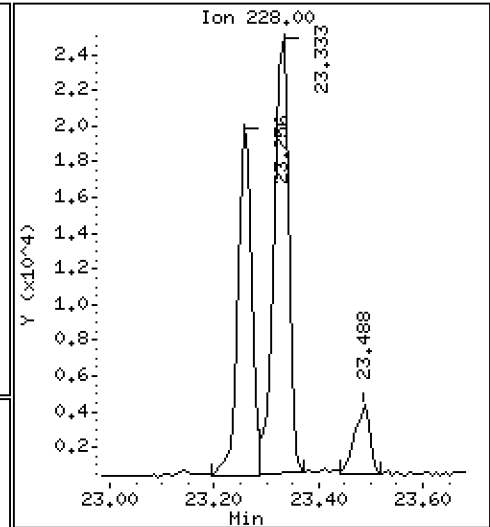
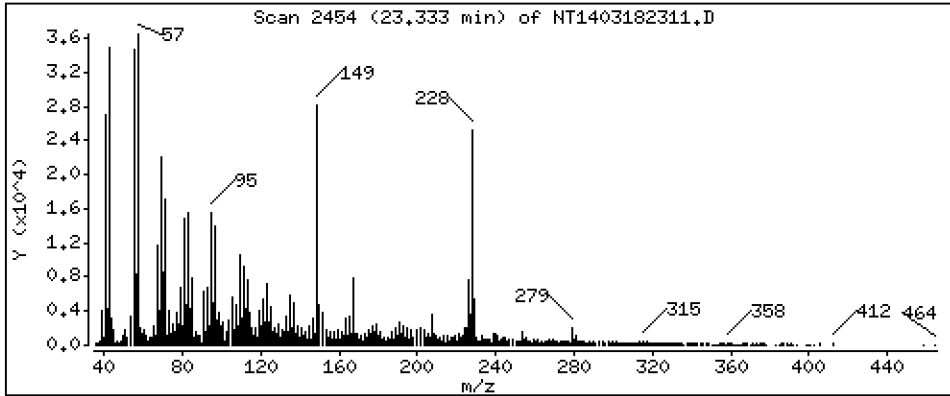
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,186 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

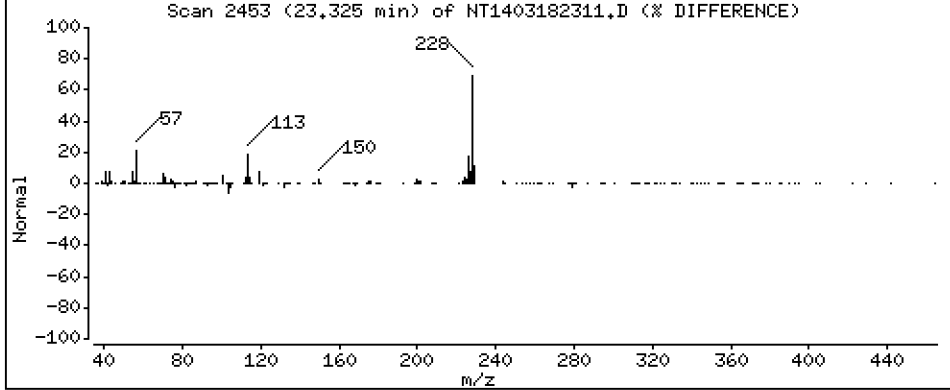
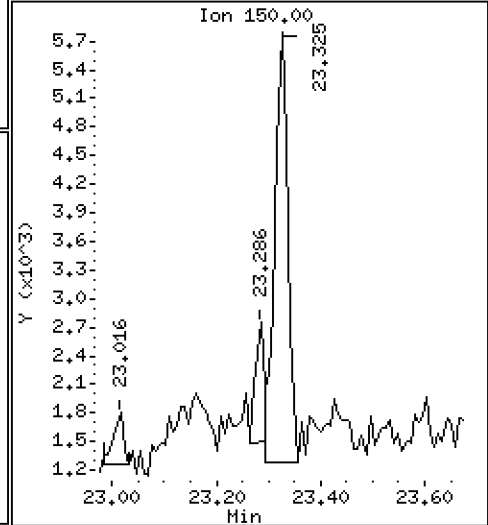
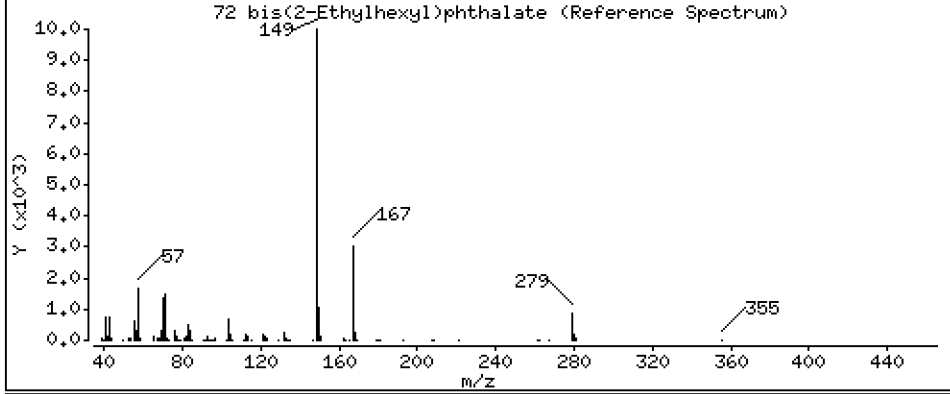
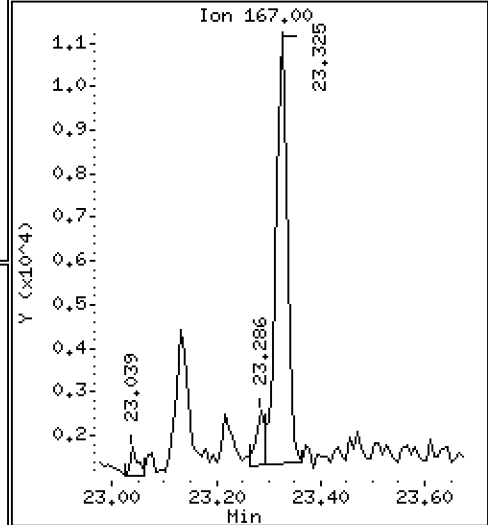
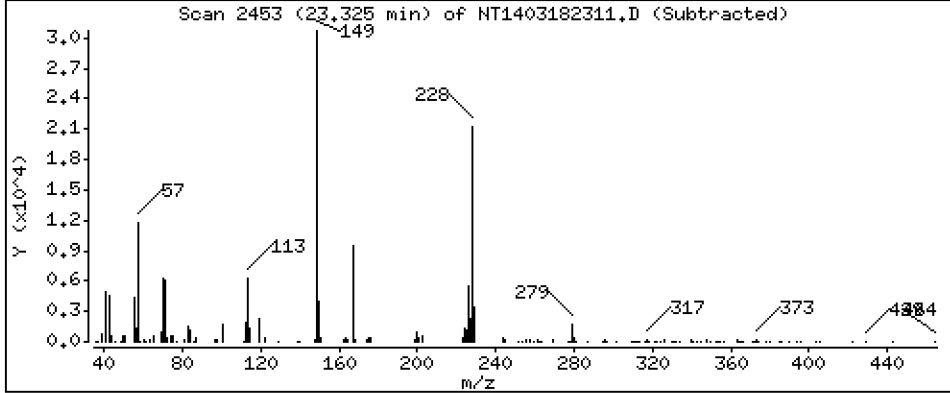
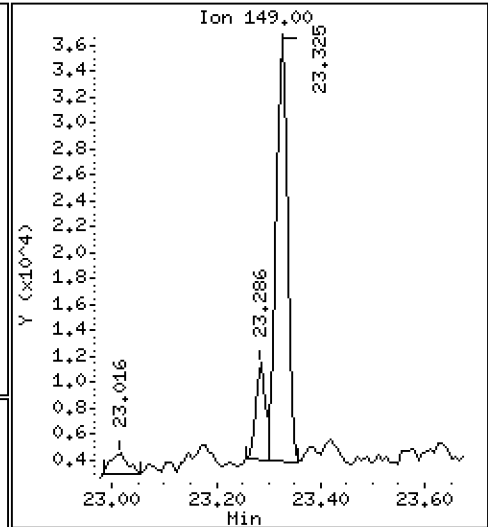
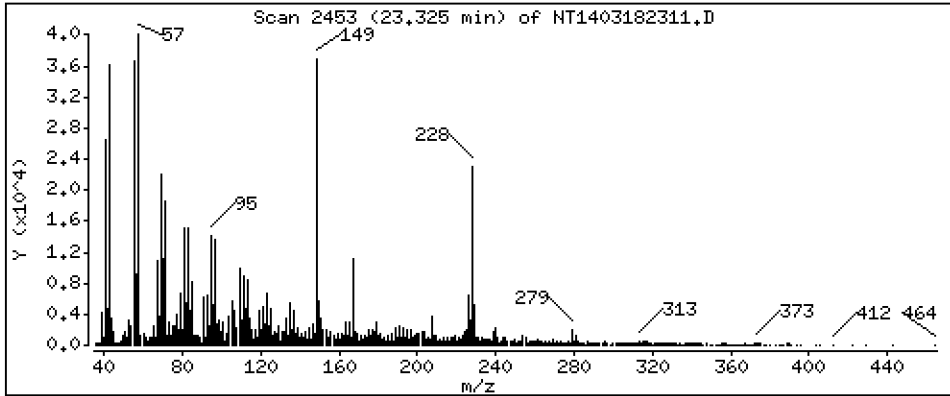
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,333 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

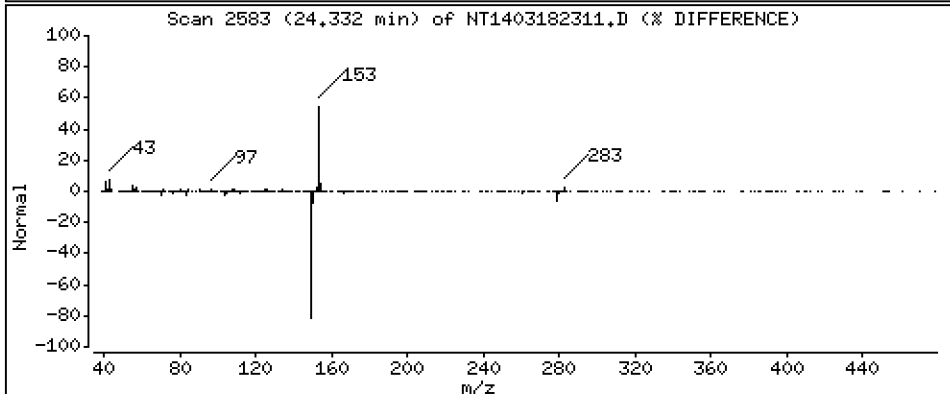
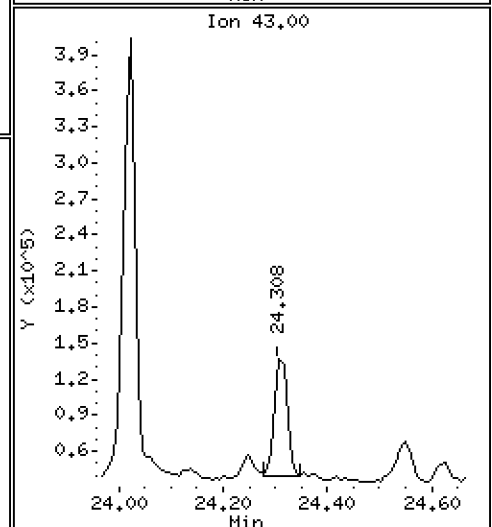
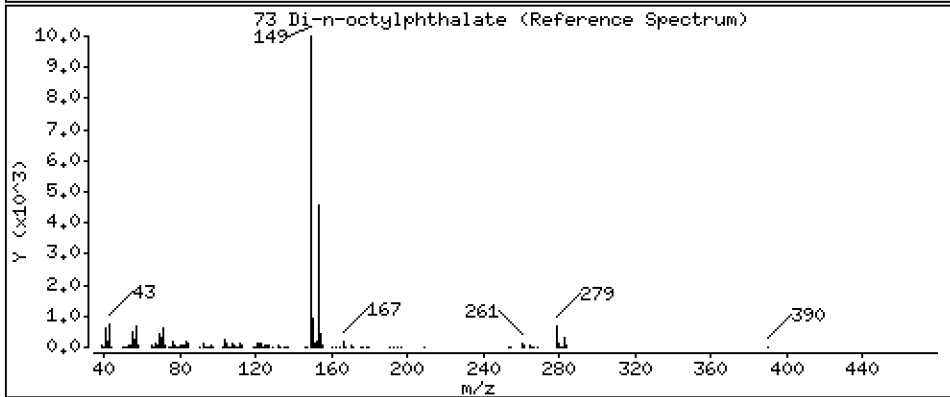
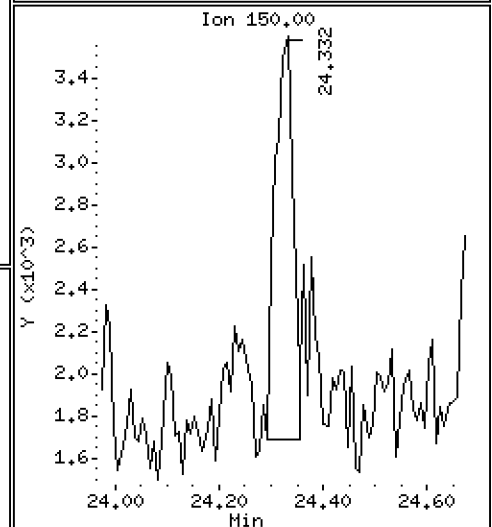
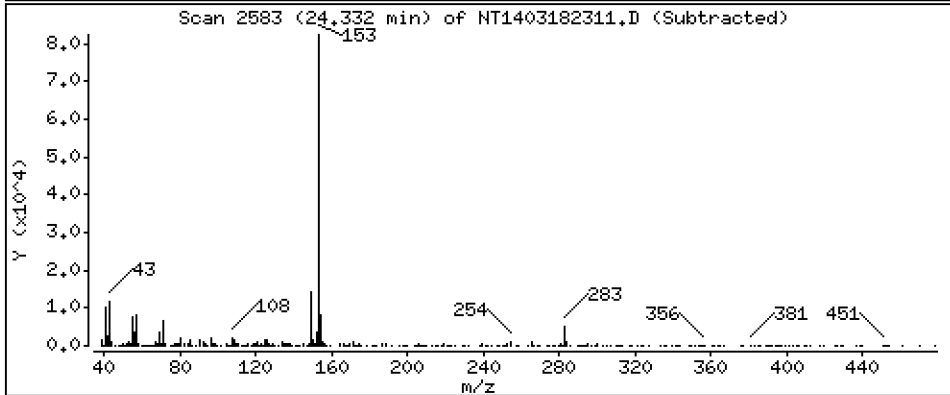
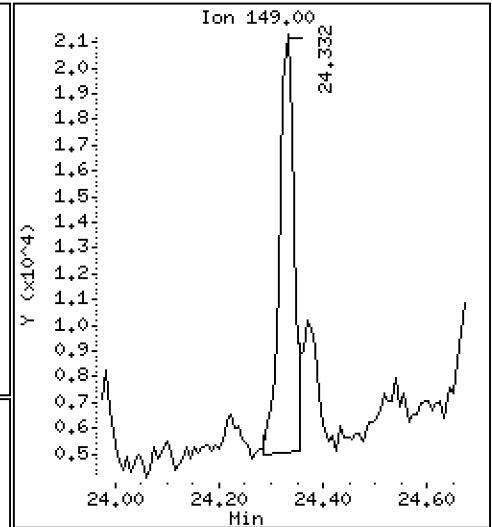
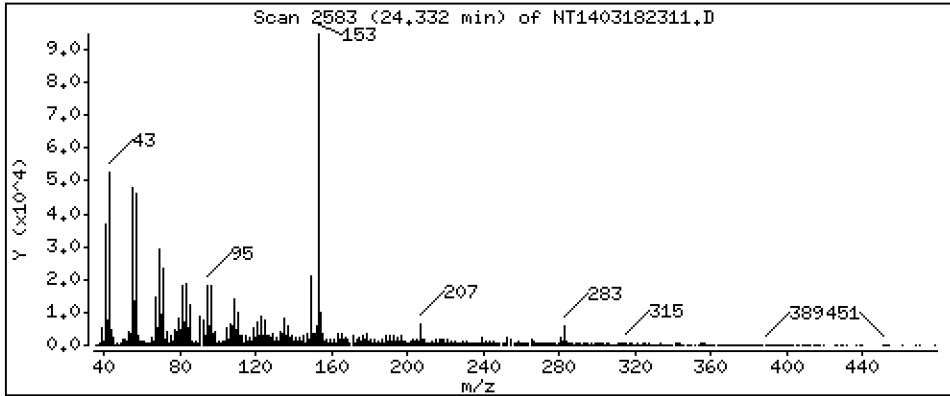
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,4385 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

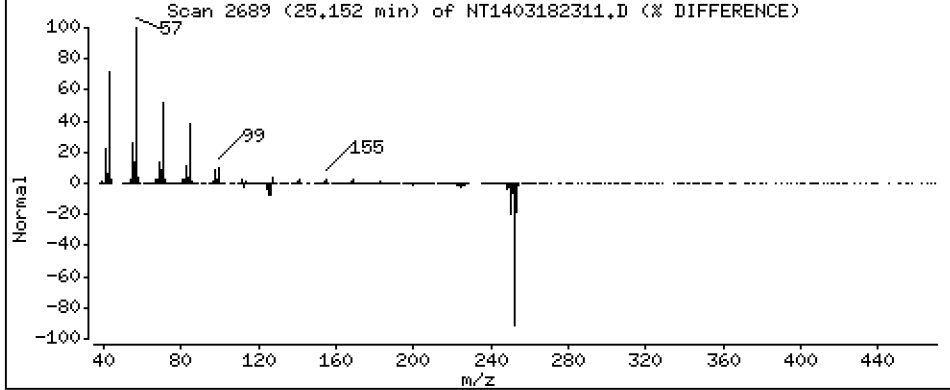
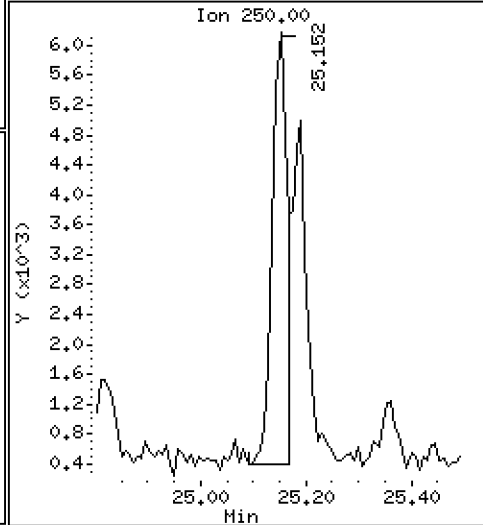
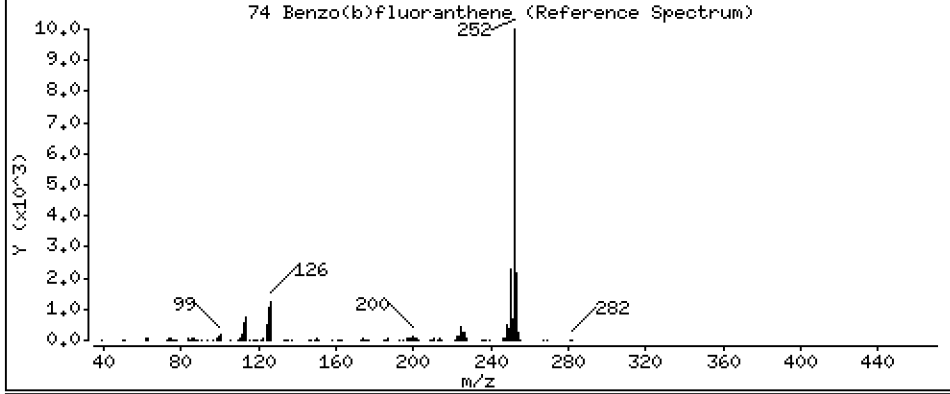
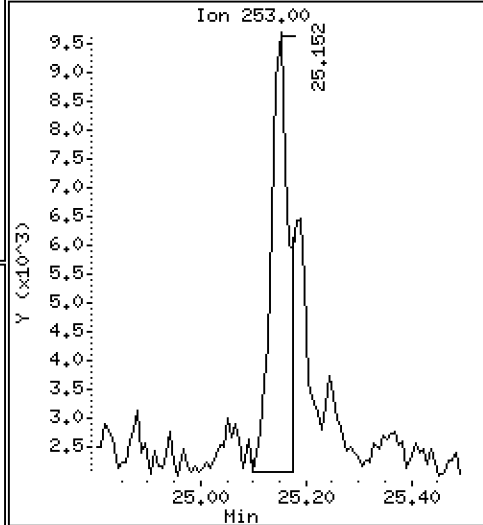
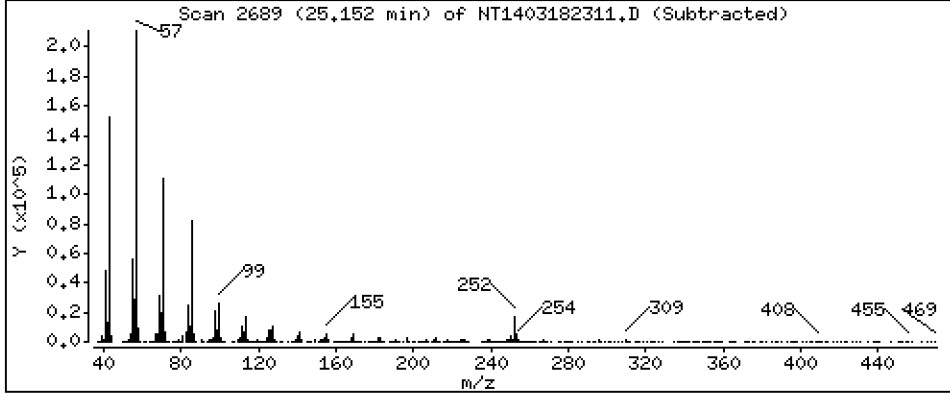
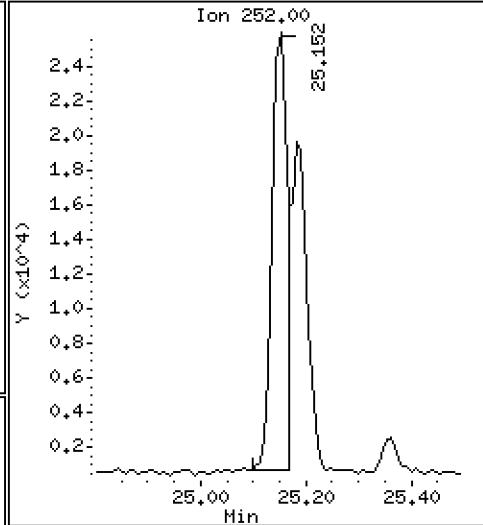
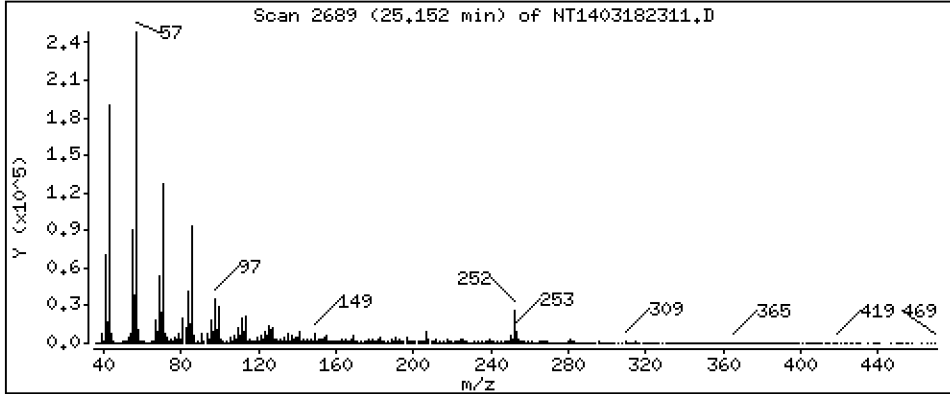
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,063 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

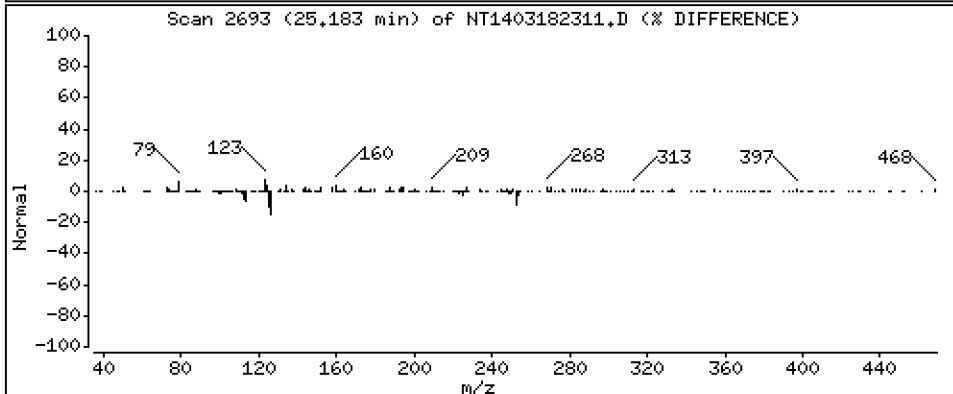
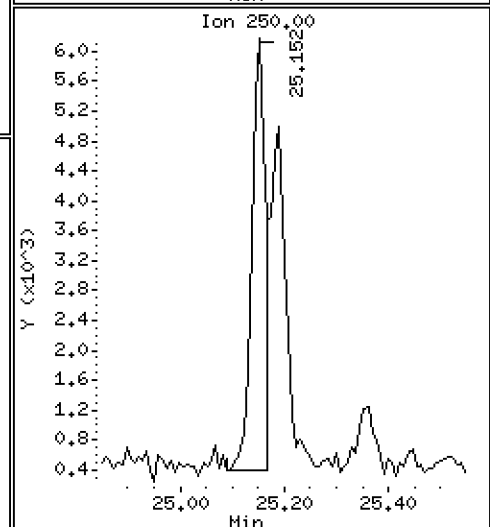
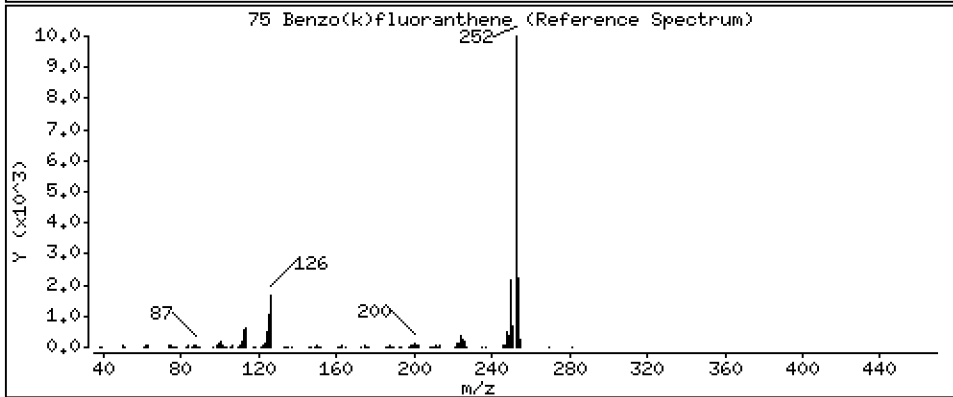
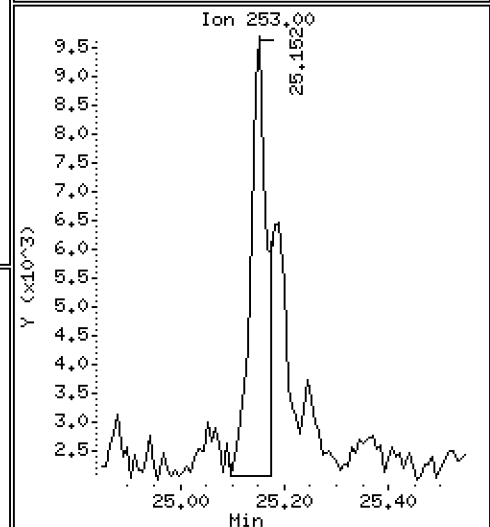
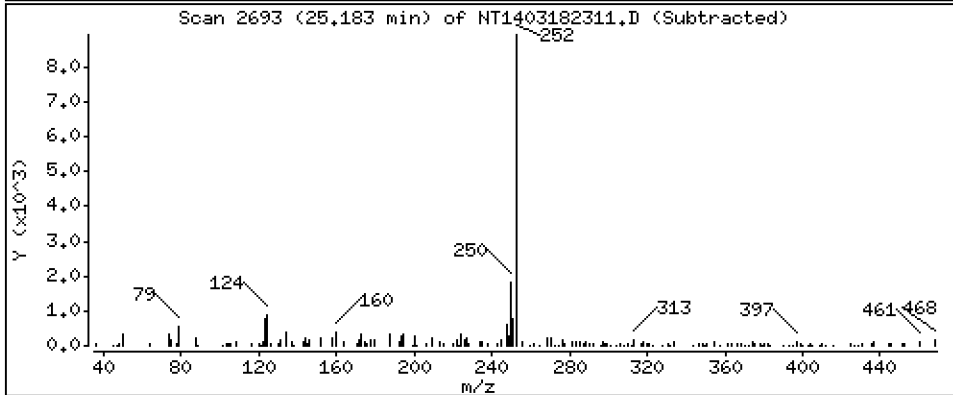
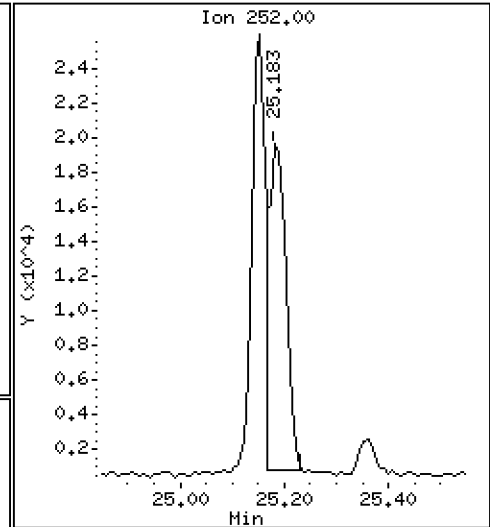
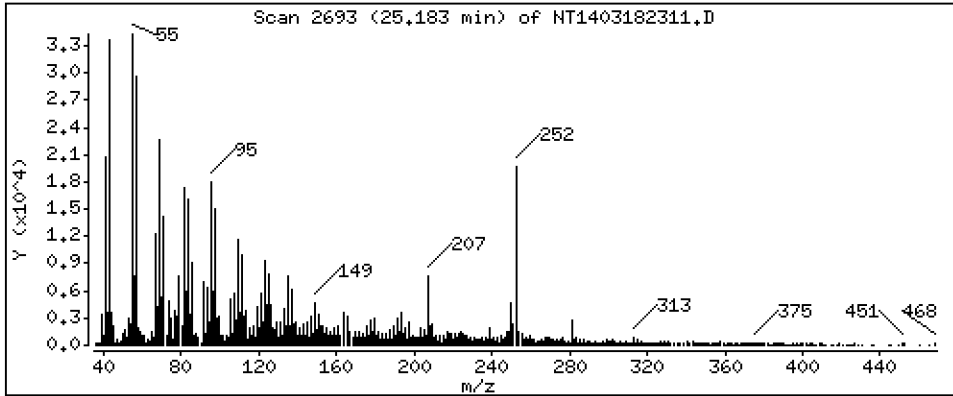
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,9619 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

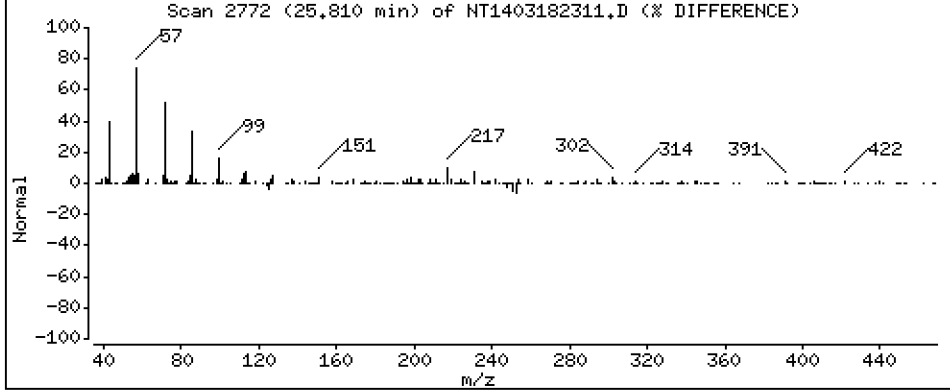
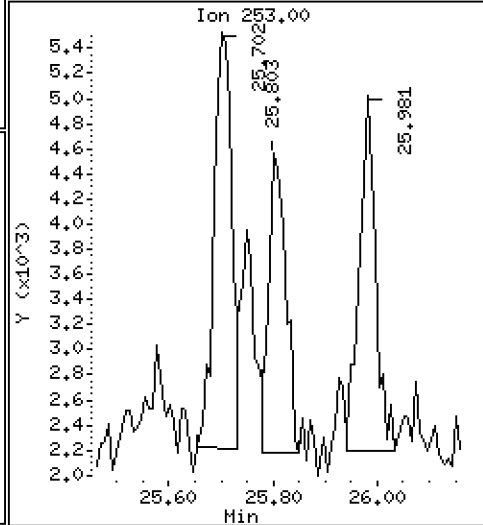
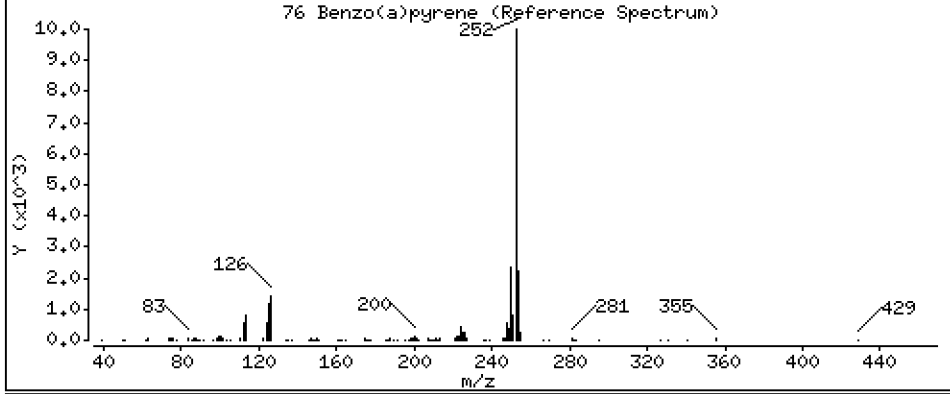
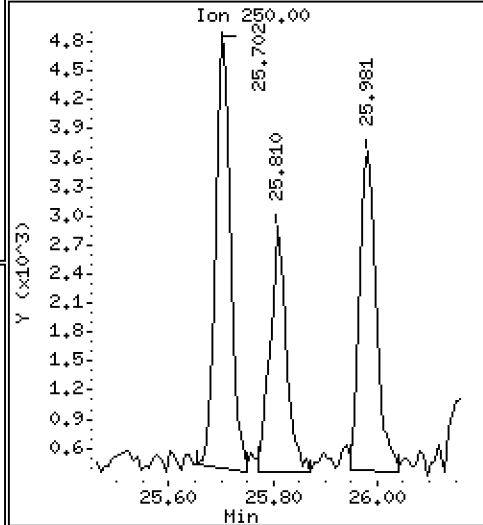
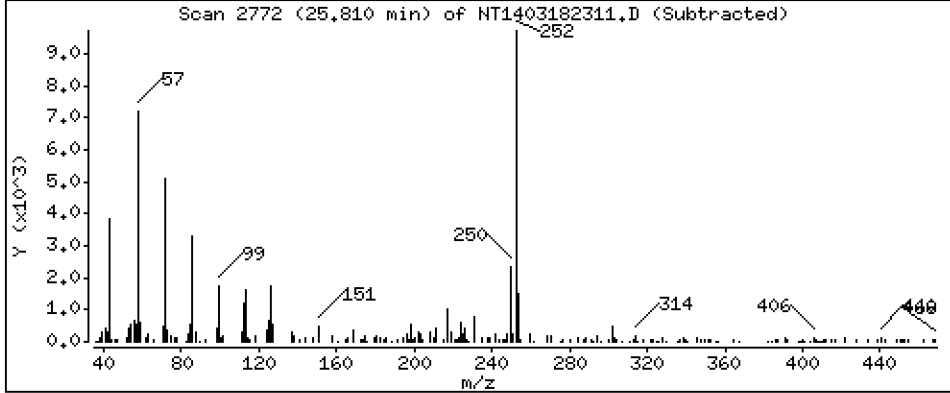
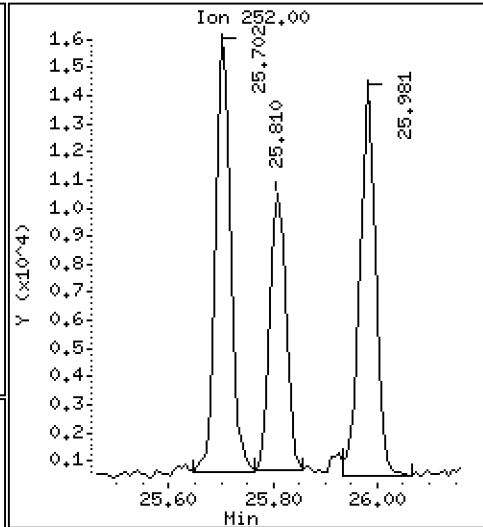
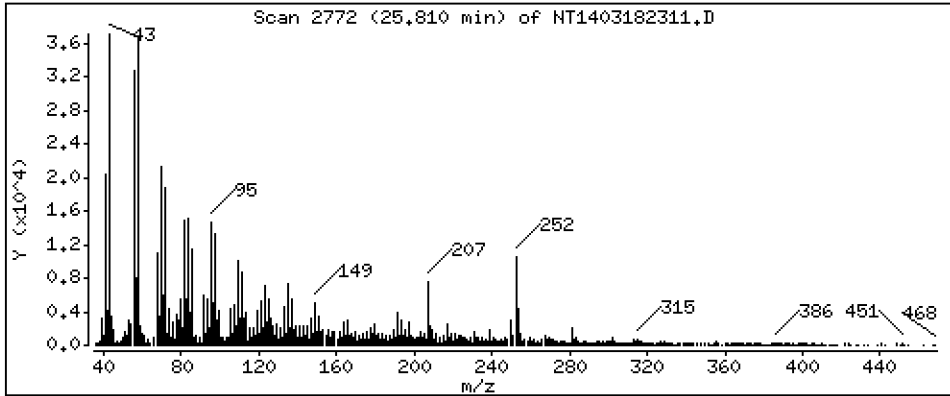
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,5174 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

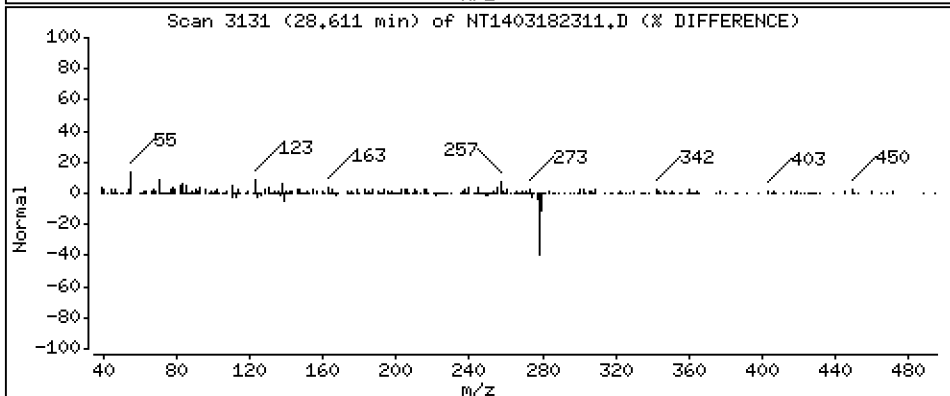
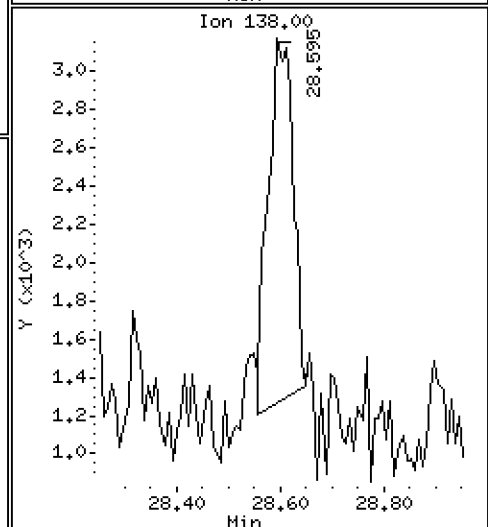
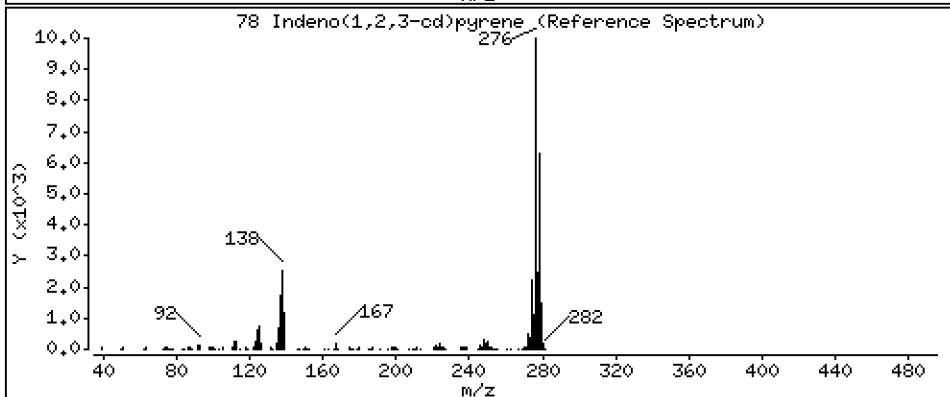
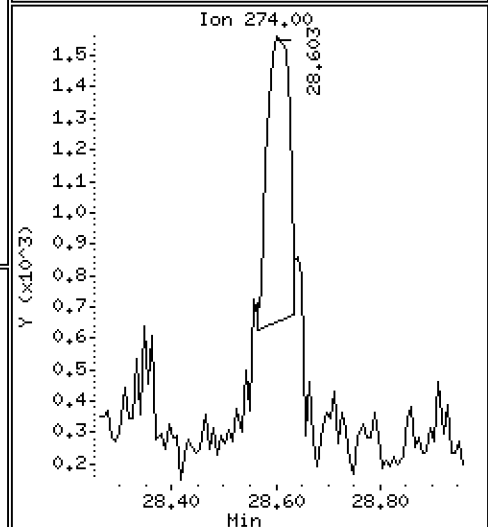
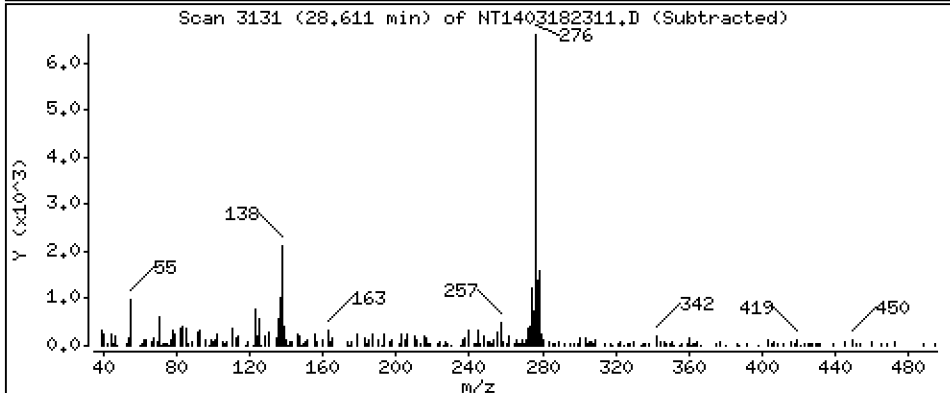
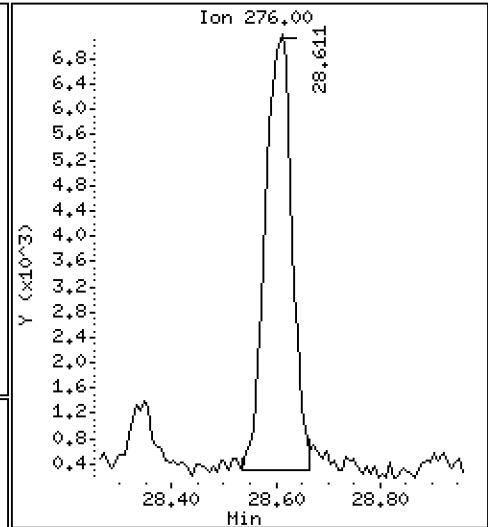
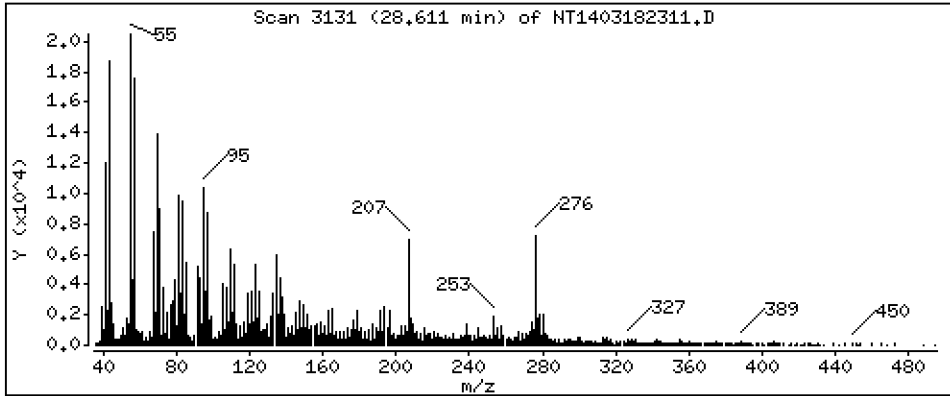
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,5661 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

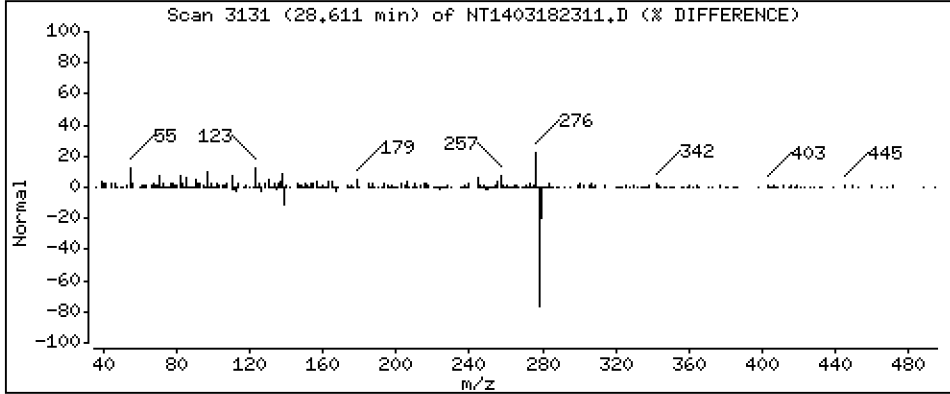
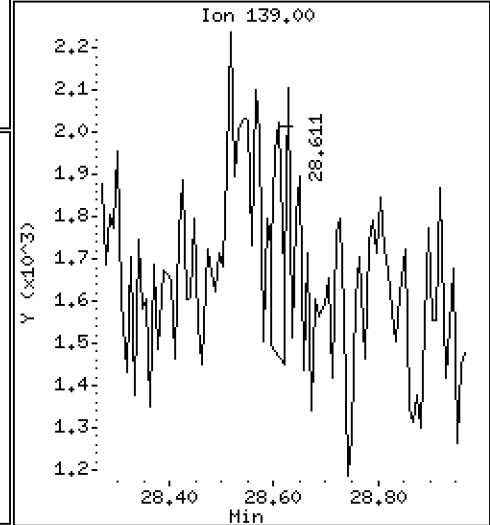
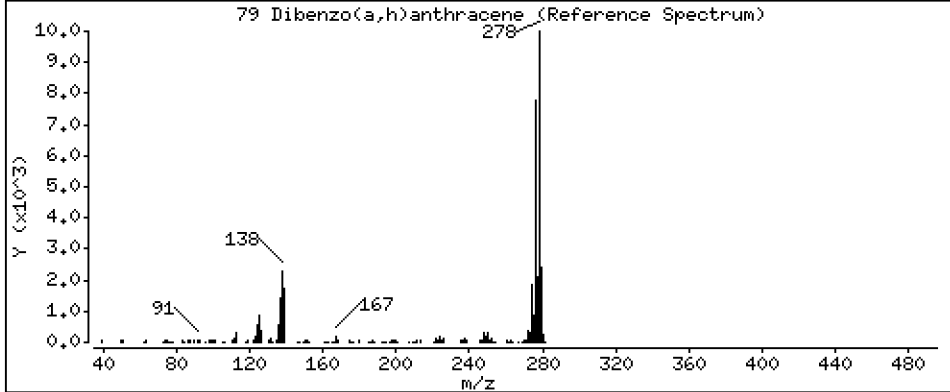
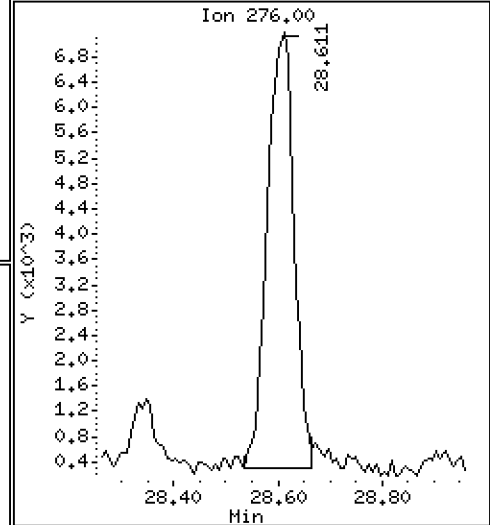
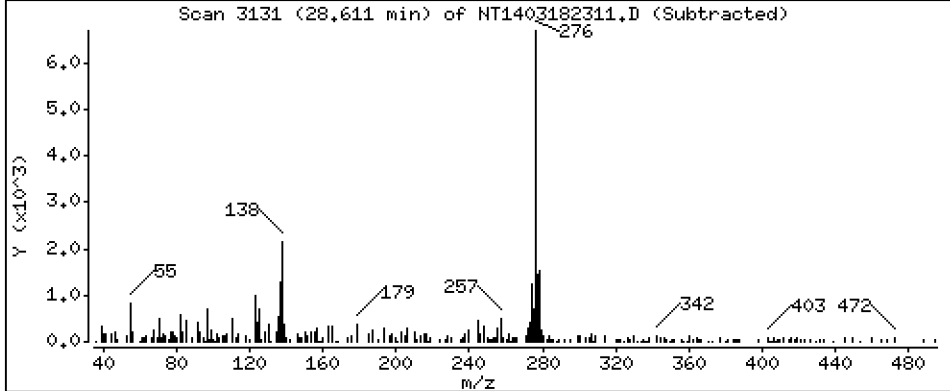
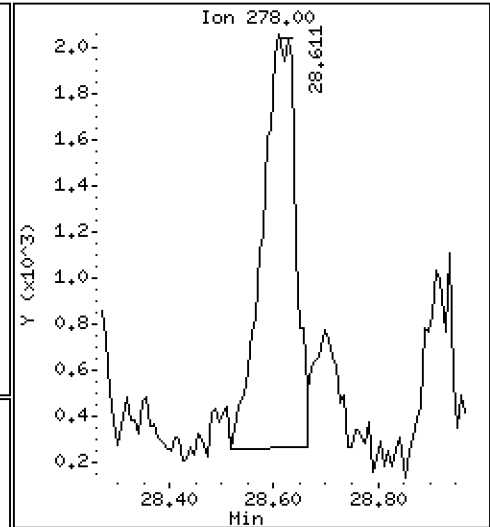
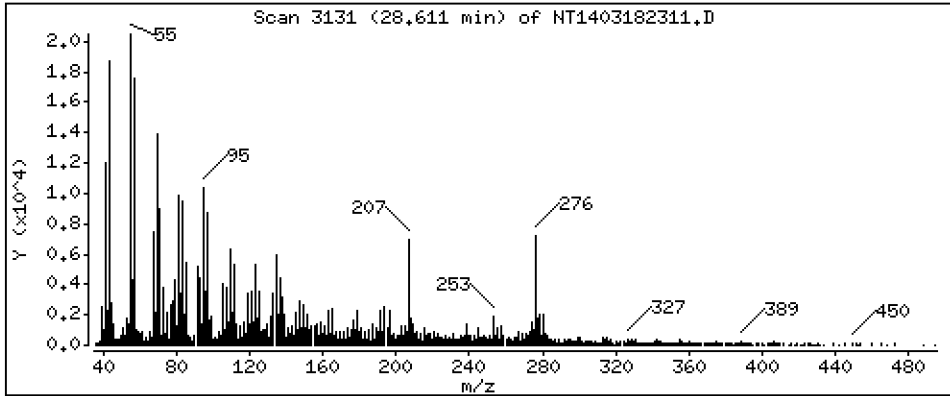
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2200 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

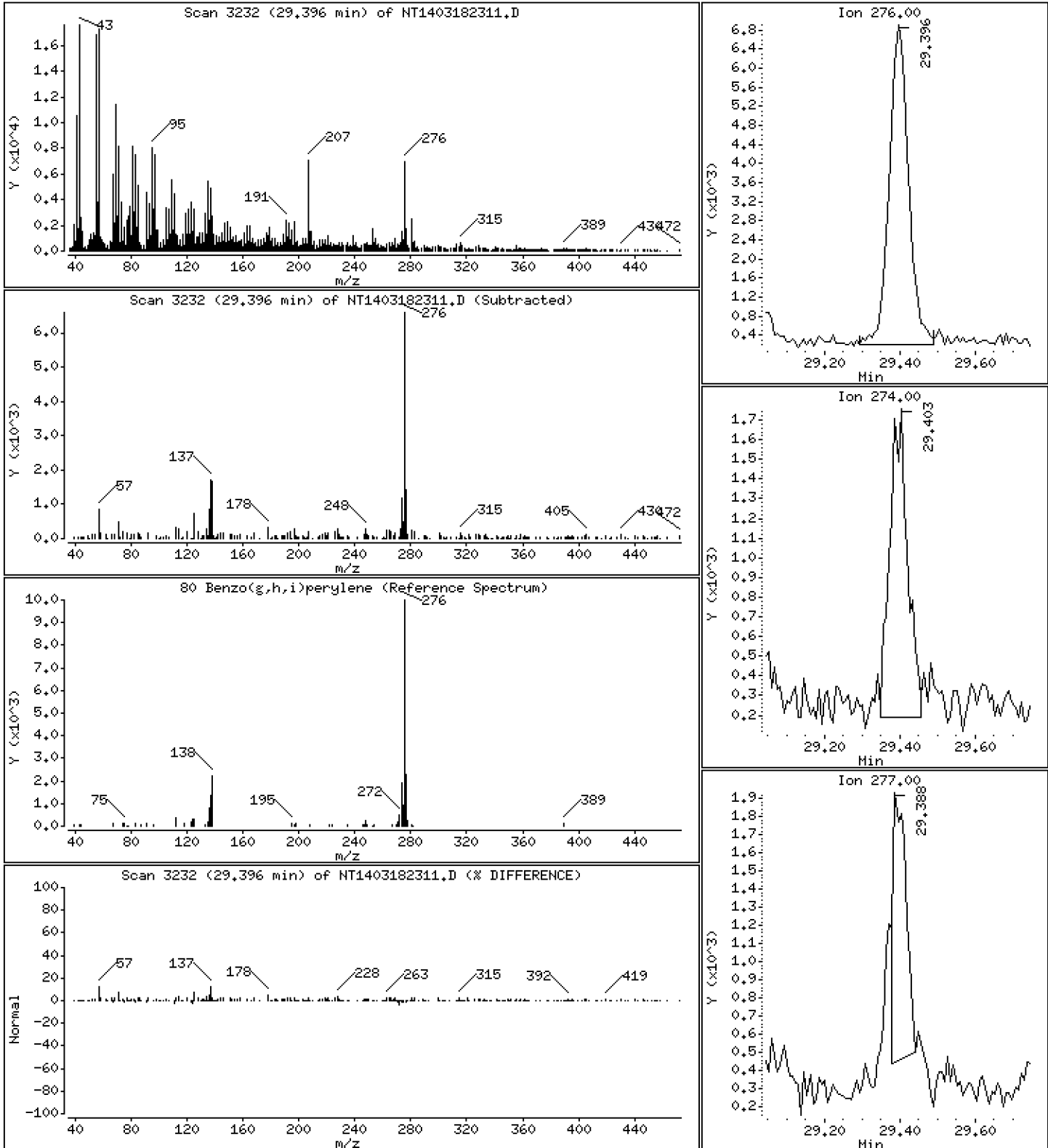
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,6593 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

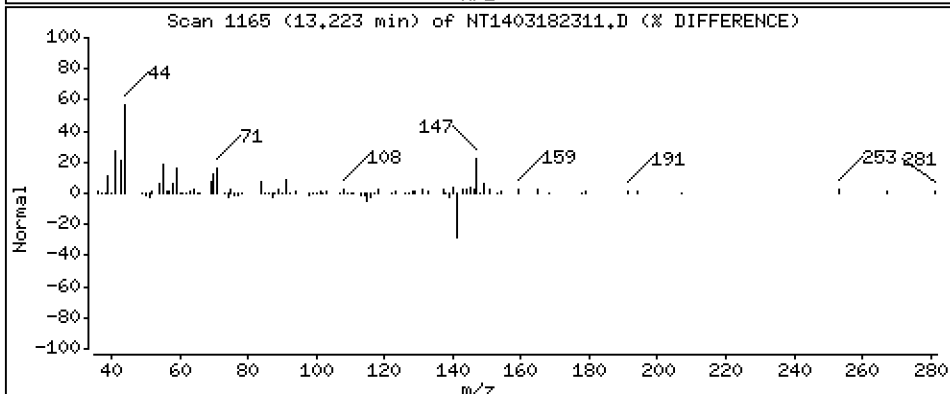
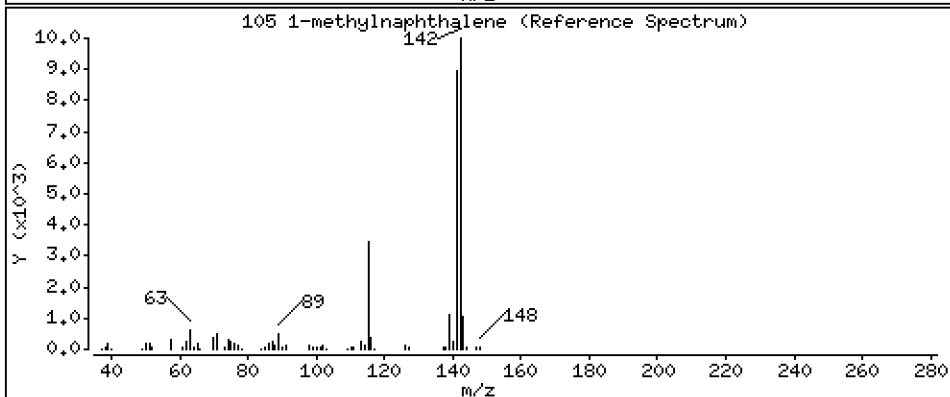
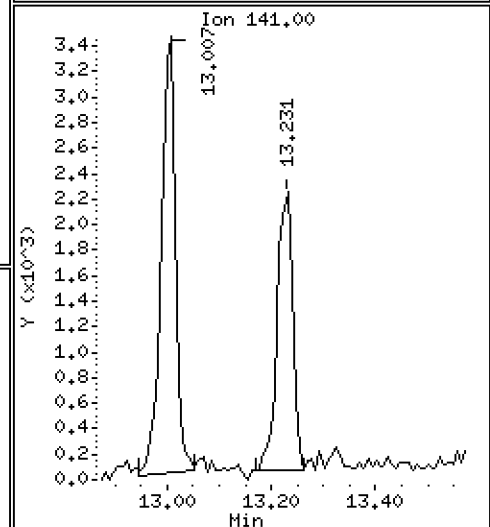
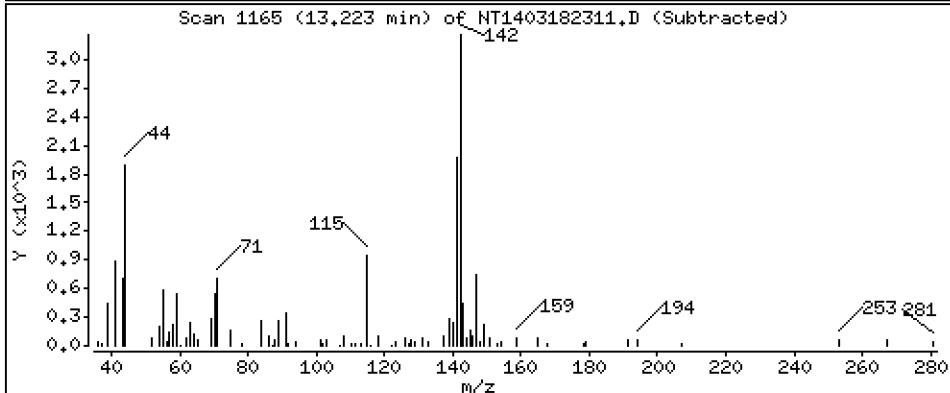
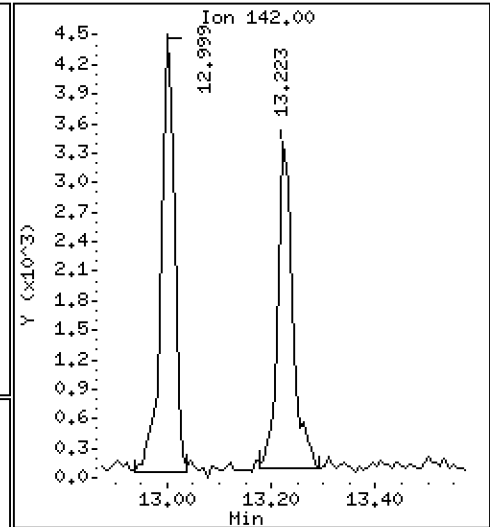
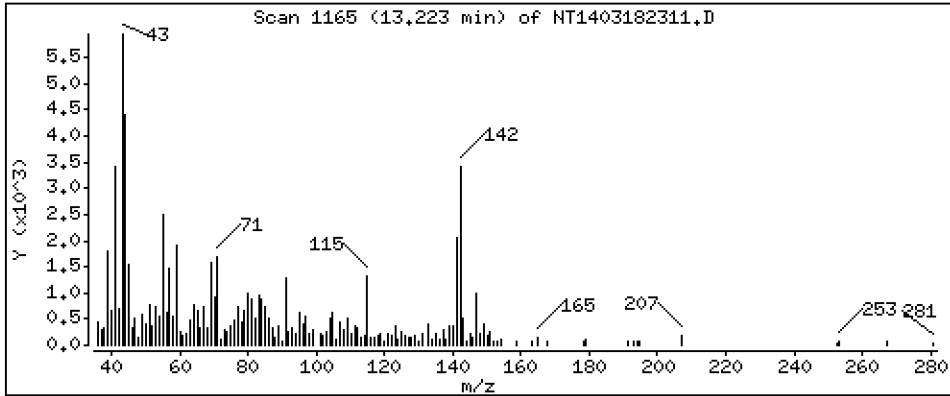
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1271 ug/mL



Date : 18-MAR-2023 23:04

Client ID:

Instrument: nt14.i

Sample Info: 23B0029-04RE1,4

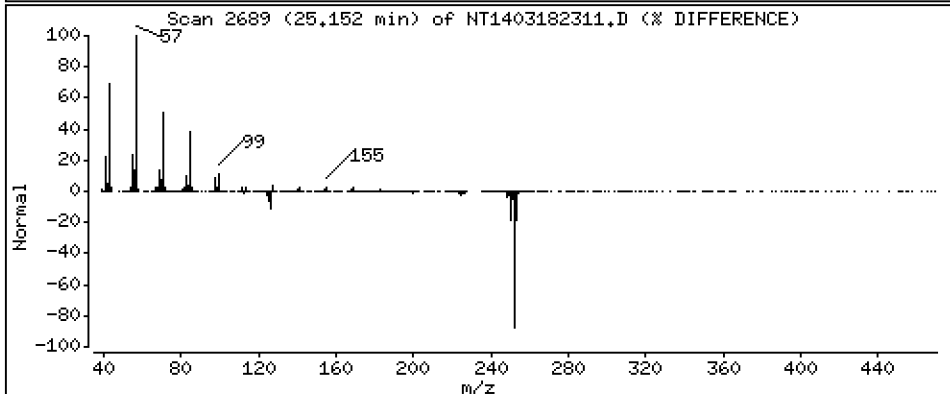
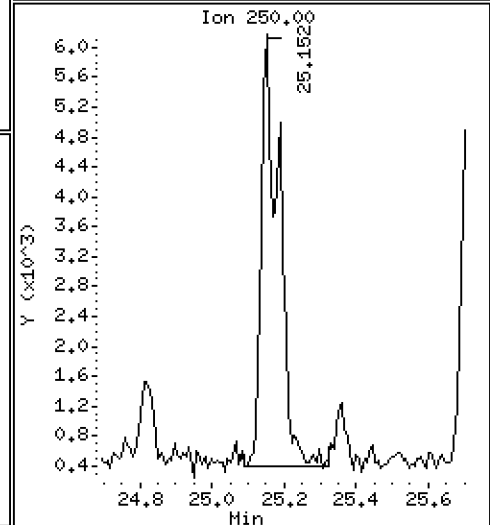
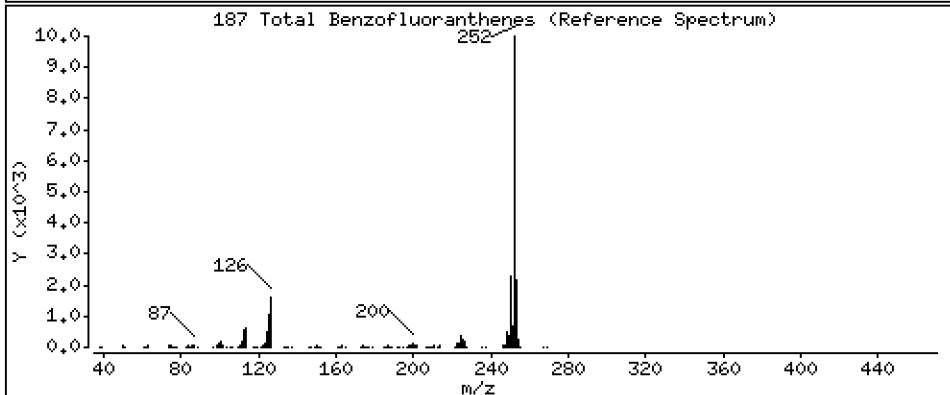
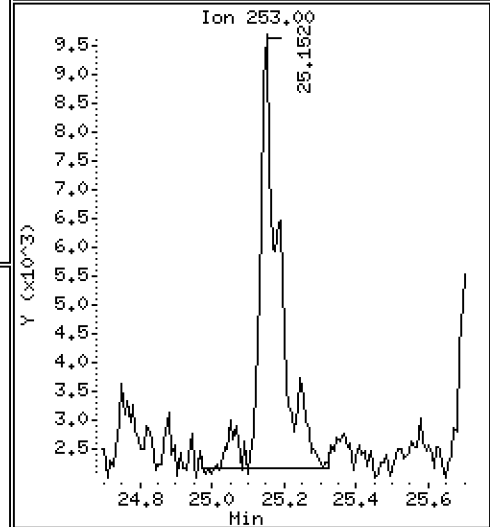
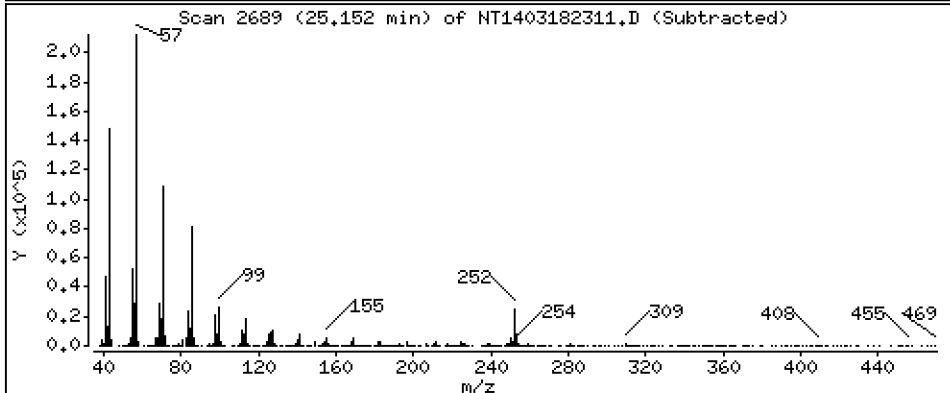
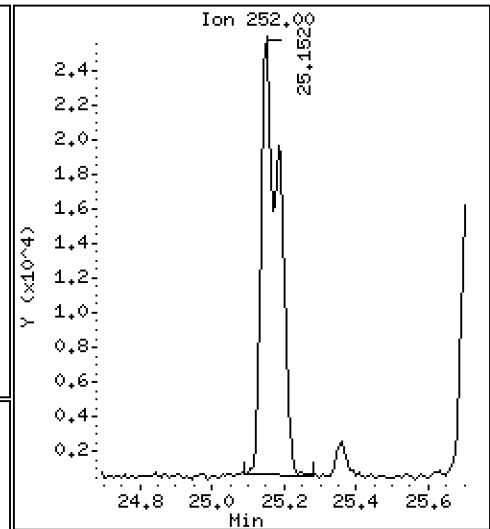
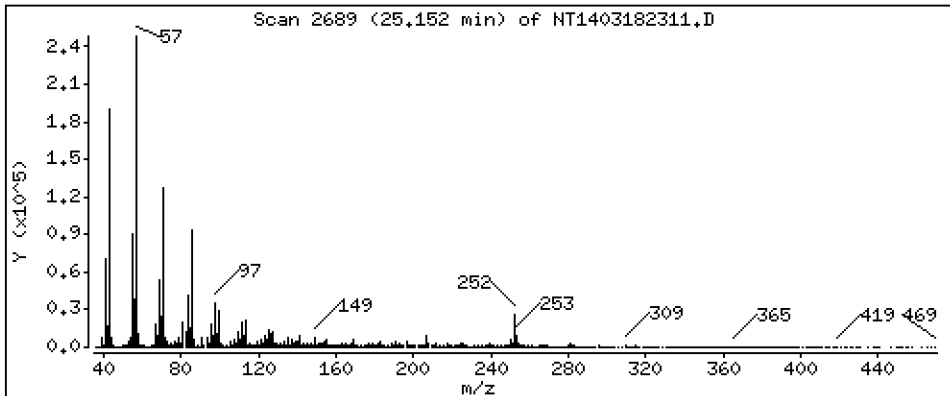
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 1,987 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182311.D
 Lab Smp Id: 23B0029-04RE1
 Inj Date : 18-MAR-2023 23:04 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0029-04RE1,4
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 10:18 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 10
 Dil Factor: 4.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112		6.836	6.829	(1.000)	128243	1.24080	4.963
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	175907	1.29273	5.171
3 Phenol	94		8.443	8.435	(1.000)	8040	0.05560	0.2224
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	150315	1.40118	5.605
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	304268	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	66099	0.92227	3.689
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.341	9.333	(1.000)	11162	0.16579	0.6632
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.838	9.830	(1.000)	1954	0.01614	0.06457
\$ 18 Nitrobenzene-d5	82		10.156	10.156	(0.879)	121563	0.96635	3.865
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		10.987	11.110	(0.950)	23172	0.27510	1.100 (M)
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.560	11.559	(1.000)	1188710	4.00000	
28 Naphthalene	128		11.598	11.598	(1.003)	11979	0.03772	0.1509
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		12.998	13.006	(1.124)	7680	0.03468	0.1387
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.788	13.787	(0.908)	225622	1.05603	4.224
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163					Compound Not Detected.		
40 Acenaphthylene	152		14.879	14.879	(0.980)	5288	0.01719	0.06877
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.189	15.188	(1.000)	589954	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.258	15.258	(1.005)	4006	0.02231	0.08923
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.583	15.583	(1.026)	8203	0.03200	0.1280
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.147	16.155	(1.063)	18154	0.08926	0.3570
49 Fluorene	166		16.294	16.301	(1.073)	8192	0.03371	0.1348
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.834	16.833	(1.108)	29778	1.28379	5.135
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.240	18.232	(1.000)	996660	4.00000	
60 Phenanthrene	178		18.286	18.286	(1.003)	52442	0.18416	0.7367
61 Anthracene	178		18.371	18.379	(1.007)	17865	0.06512	0.2605
62 Carbazole	167		18.704	18.704	(1.025)	7675	0.03144	0.1258
63 Di-n-butylphthalate	149					Compound Not Detected.		
64 Fluoranthene	202		20.677	20.669	(0.888)	116722	0.60800	2.432
65 Pyrene	202		21.095	21.095	(0.906)	110673	0.56215	2.249
\$ 66 Terphenyl-d14	244		21.381	21.381	(0.918)	183747	1.37868	5.515
67 Butylbenzylphthalate	149		22.303	22.302	(0.958)	4599	0.05332	0.2133
68 Benzo(a)anthracene	228		23.255	23.263	(0.999)	35074	0.20159	0.8064
* 69 Chrysene-d12	240		23.286	23.294	(1.000)	471870	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.332	23.332	(1.002)	46688	0.29649	1.186
72 bis(2-Ethylhexyl)phthalate	149		23.325	23.324	(0.960)	46989	0.33316	1.333
* 134 Di-n-octylphthalate-d4	153		24.308	24.315	(1.000)	1071397	4.00000	
73 Di-n-octylphthalate	149		24.331	24.323	(1.001)	30195	0.10963	0.4385
74 Benzo(b)fluoranthene	252		25.152	25.152	(0.970)	49242	0.26573	1.063
75 Benzo(k)fluoranthene	252		25.183	25.198	(0.971)	44173	0.24046	0.9619 (M)
76 Benzo(a)pyrene	252		25.810	25.810	(0.995)	20499	0.12936	0.5174
* 77 Perylene-d12	264		25.934	25.926	(1.000)	524412	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.610	28.610	(1.103)	24409	0.14152	0.5661
79 Dibenzo(a,h)anthracene	278		28.610	28.618	(1.103)	7996	0.05501	0.2200 (M)
80 Benzo(g,h,i)perylene	276		29.395	29.395	(1.133)	23427	0.16481	0.6593
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.223	13.223	(1.144)	6377	0.03178	0.1271
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.152	25.198	(0.970)	87303	0.49684	1.987
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 18-MAR-2023
 Lab File ID: NT1403182311.D Calibration Time: 17:38
 Lab Smp Id: 23B0029-04RE1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	247621	123811	495242	304268	22.88
27 Naphthalene-d8	955275	477638	1910550	1188710	24.44
42 Acenaphthene-d10	510589	255295	1021178	589954	15.54
59 Phenanthrene-d10	920812	460406	1841624	996660	8.24
69 Chrysene-d12	546688	273344	1093376	471870	-13.69
134 Di-n-octylphthala	1067789	533895	2135578	1071397	0.34
77 Perylene-d12	445520	222760	891040	524412	17.71

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.23	17.73	18.73	18.24	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.31	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.03

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

REVIEW SUMMARY FOR FILE - NT1403182311.D

Lab ID: 23B0029-04RE1
nt14.i, ABN.m, 18-MAR-2023 23:04

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.961	-0.0107	Benzoic acid

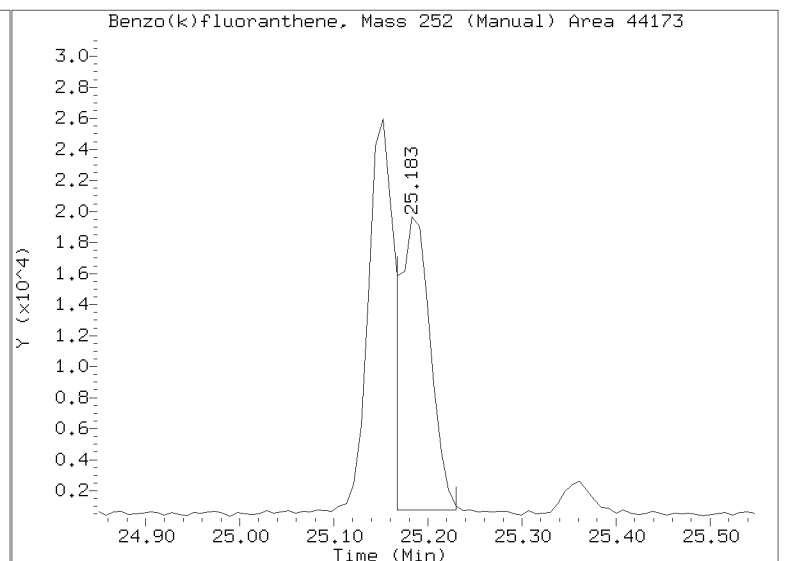
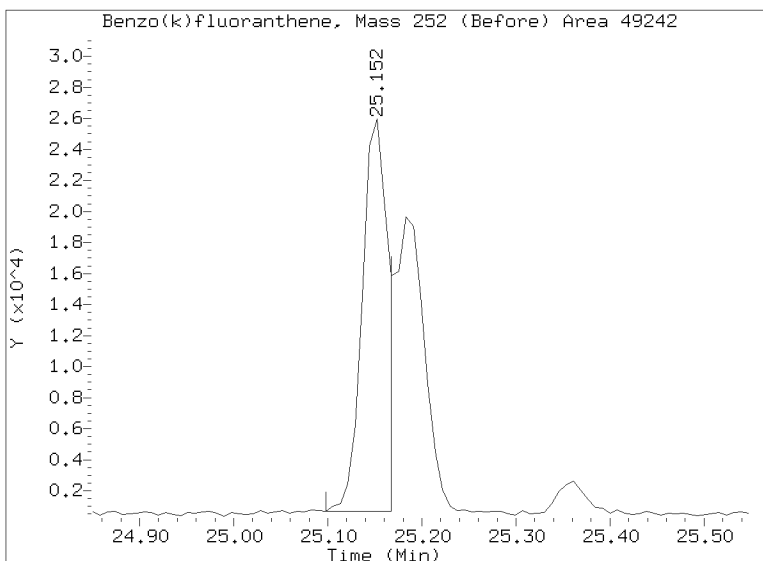
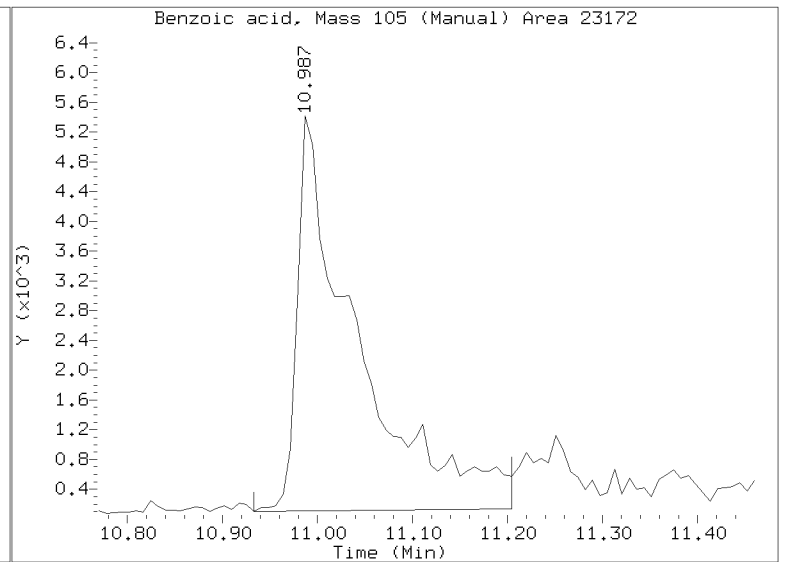
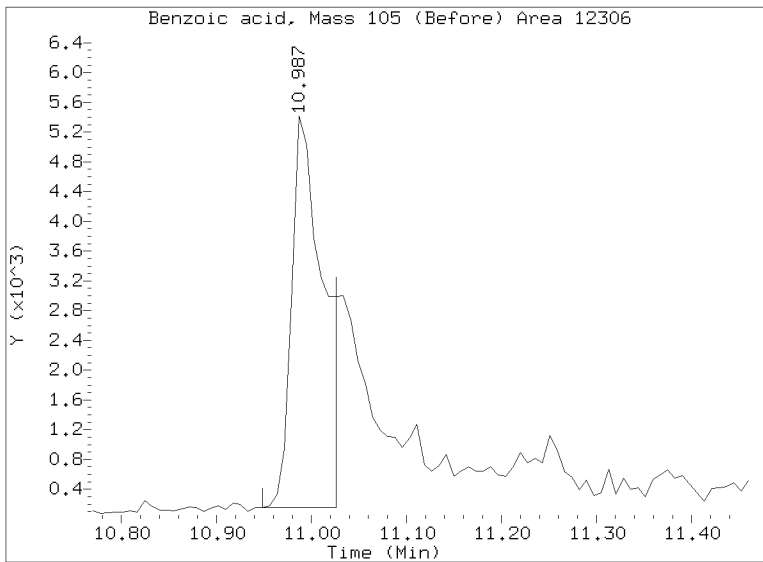
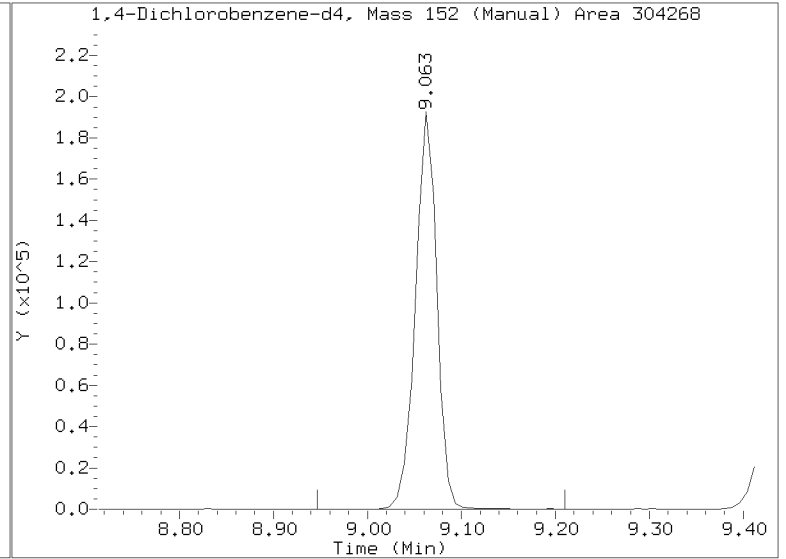
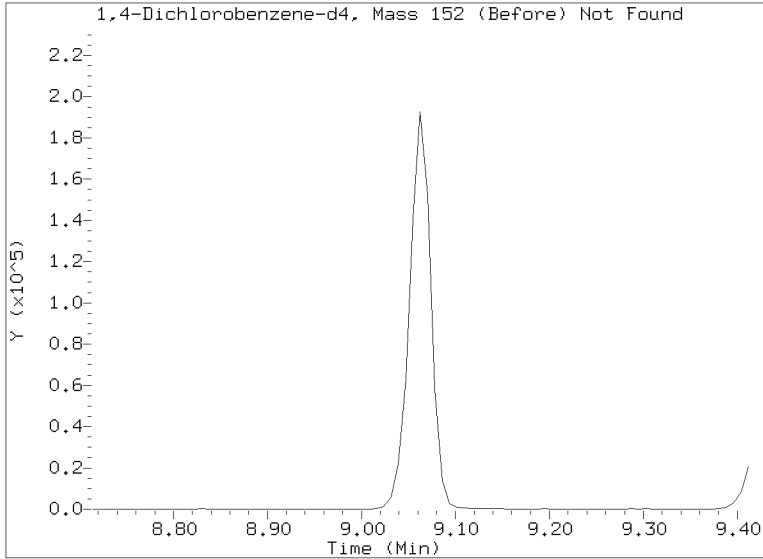
RRT check based on Ccal File: NT1403182302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

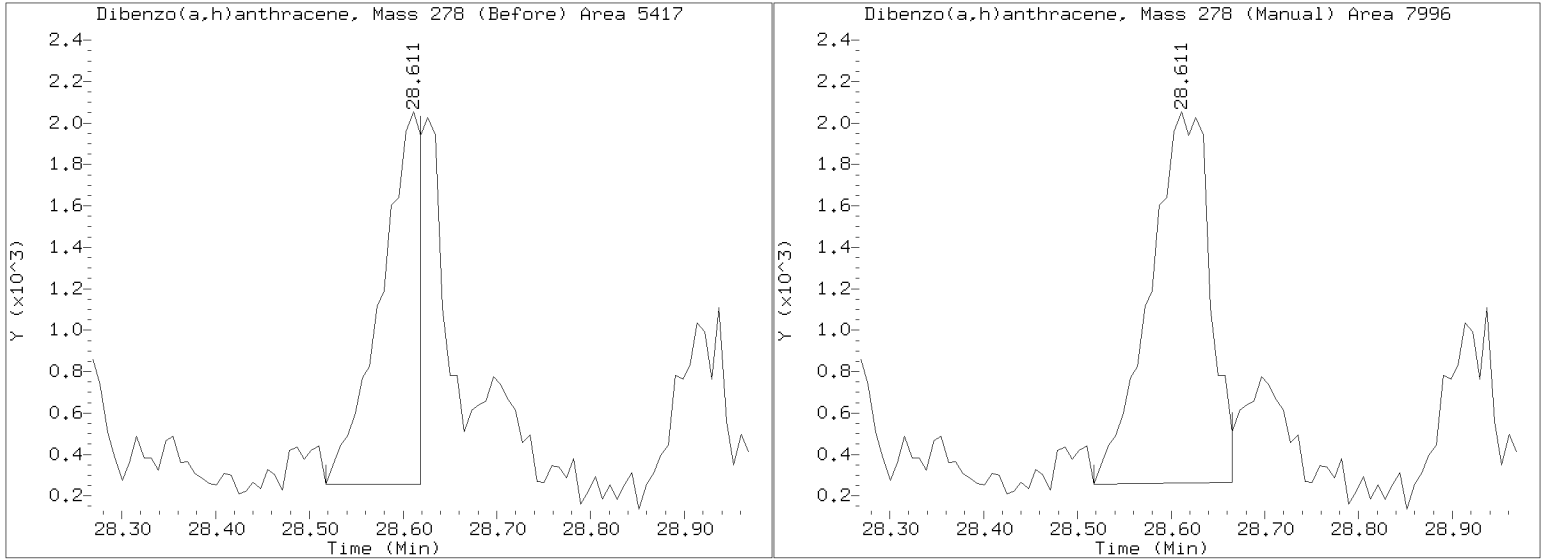
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182311.D
Injection Date: 18-MAR-2023 23:04
Lab ID: 23B0029-04RE1 Client ID:
Report Date: 03/23/2023 11:34



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182311.D
Injection Date: 18-MAR-2023 23:04
Lab ID: 23B0029-04RE1 Client ID:
Report Date: 03/23/2023 11:34





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-05 A

SDG: 23B0229

Sampled: 02/08/23 12:45

Prepared: 02/17/23 15:00

File ID: NT1403172324.D

% Solids: 44.93

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 04:18

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 22.79 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	20.3		4.3	19.5
106-44-5	4-Methylphenol	1	19.5	U	7.2	19.5
91-20-3	Naphthalene	1	30.1		4.1	19.5
91-57-6	2-Methylnaphthalene	1	19.2	J	4.4	19.5
208-96-8	Acenaphthylene	1	10.8	J	6.1	19.5
131-11-3	Dimethylphthalate	1	11.5	J	4.3	19.5
83-32-9	Acenaphthene	1	19.5	J	5.1	19.5
132-64-9	Dibenzofuran	1	26.2		13.8	19.5
86-73-7	Fluorene	1	44.7		14.2	19.5
85-01-8	Phenanthrene	1	203		8.5	19.5
120-12-7	Anthracene	1	104		7.0	19.5
206-44-0	Fluoranthene	1	572	Q	5.9	19.5
129-00-0	Pyrene	1	488		5.5	19.5
85-68-7	Butylbenzylphthalate	1	20.0	Q	9.2	19.5
56-55-3	Benzo(a)anthracene	1	202		5.8	19.5
218-01-9	Chrysene	1	420		5.9	19.5
117-81-7	bis(2-Ethylhexyl)phthalate	1	312		5.3	48.8
	Benzo(a)fluoranthene, Total	1	459		9.8	39.1
50-32-8	Benzo(a)pyrene	1	143		4.1	19.5
193-39-5	Indeno(1,2,3-cd)pyrene	1	90.5		14.3	19.5
53-70-3	Dibenzo(a,h)anthracene	1	34.8	Q	16.8	19.5
191-24-2	Benzo(g,h,i)perylene	1	99.4	Q	13.3	19.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	732.45	441	60.2	27 - 120	
Phenol-d5	732.45	459	62.7	29 - 120	
2-Chlorophenol-d4	732.45	511	69.8	31 - 120	
1,2-Dichlorobenzene-d4	488.30	328	67.1	32 - 120	
Nitrobenzene-d5	488.30	360	73.7	30 - 120	
2-Fluorobiphenyl	488.30	394	80.7	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-05 A

SDG: 23B0229

Sampled: 02/08/23 12:45

Prepared: 02/17/23 15:00

File ID: NT1403172324.D

% Solids: 44.93

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 04:18

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 22.79 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	732.45	514	70.2	24 - 134	
p-Terphenyl-d14	488.30	614	126	37 - 120	*,Q

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172324.D

Date: 18-MAR-2023 04:18

Client ID:

Sample Info: 23B0229-05

Page 1

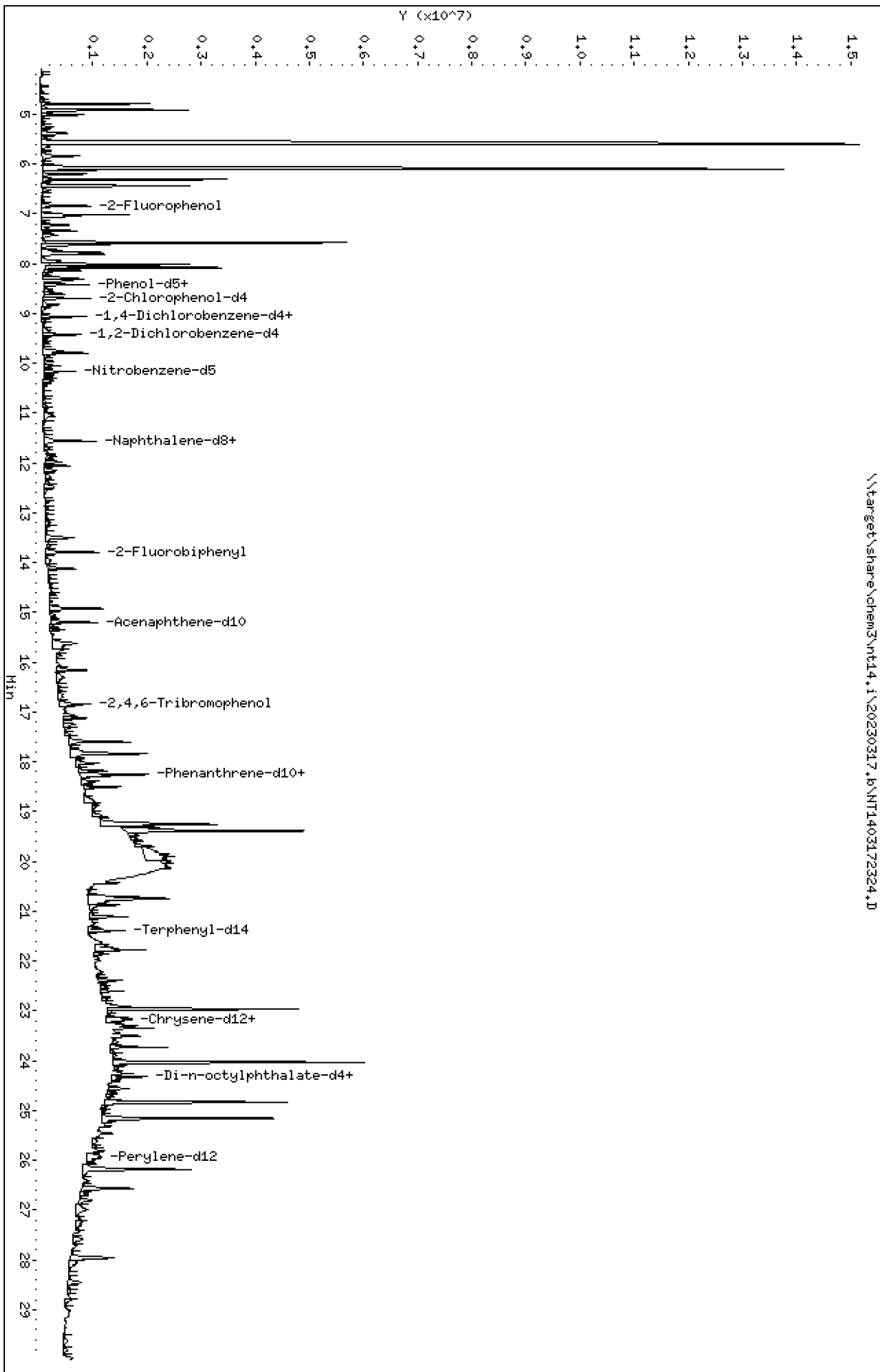
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172324.D



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

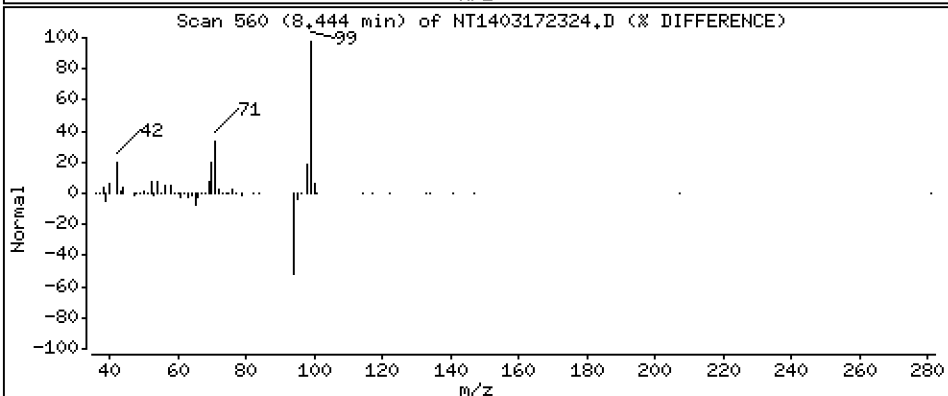
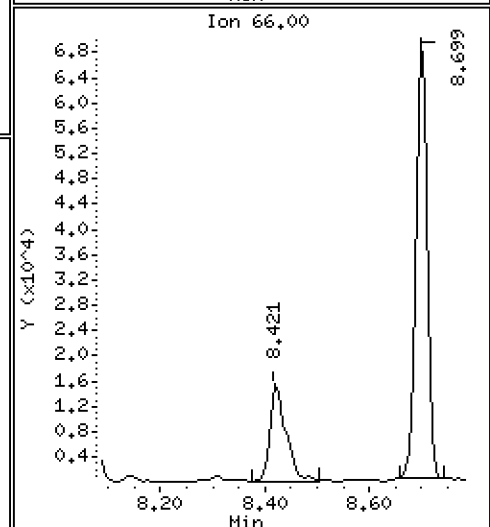
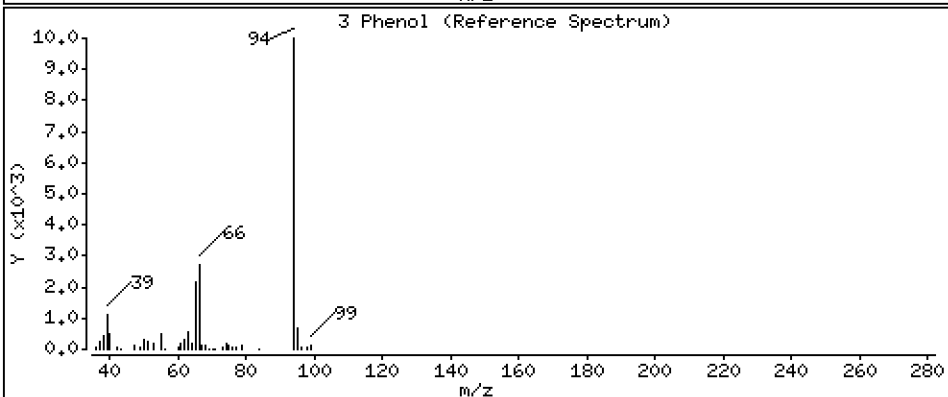
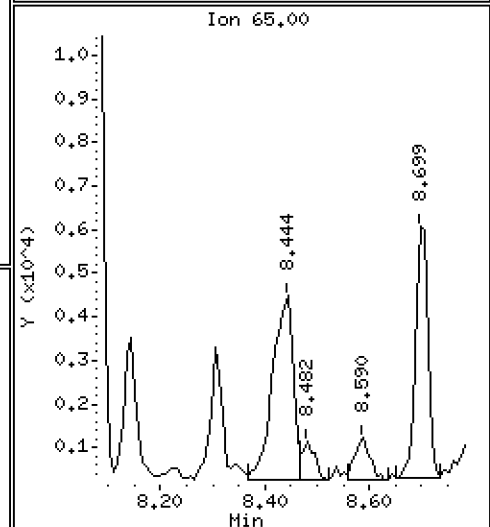
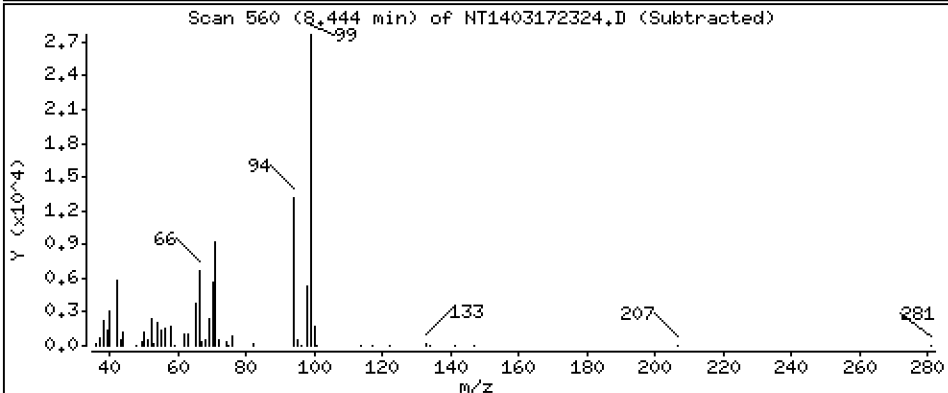
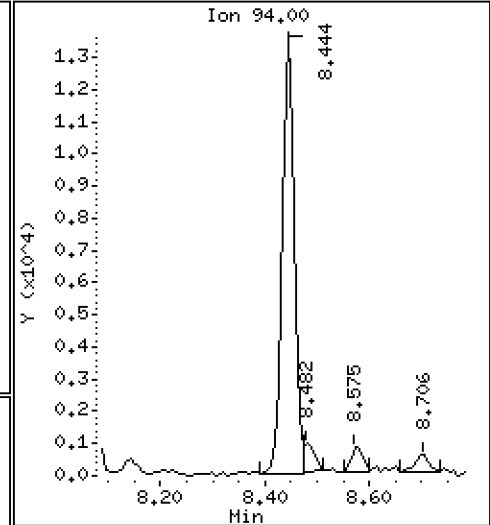
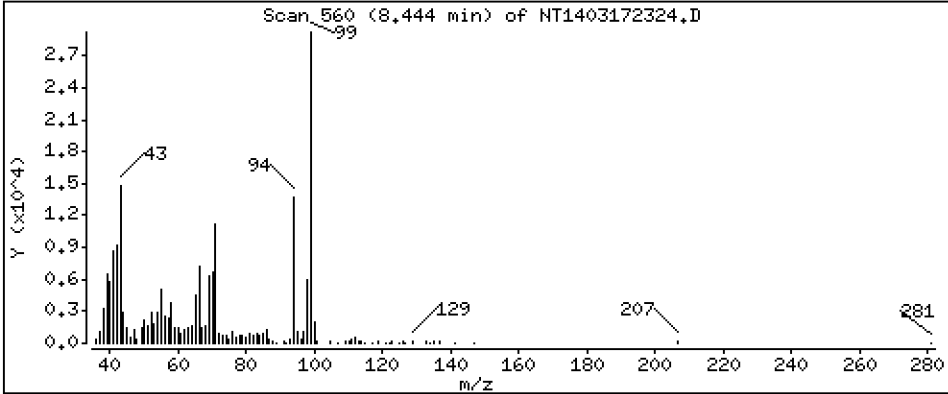
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,2081 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

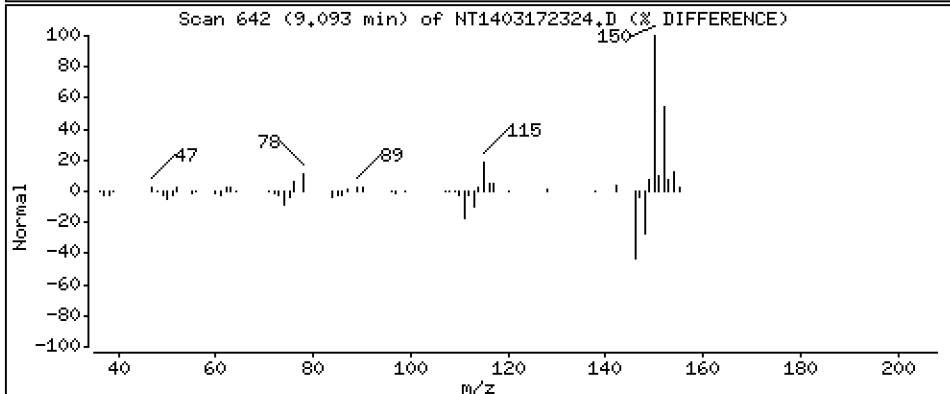
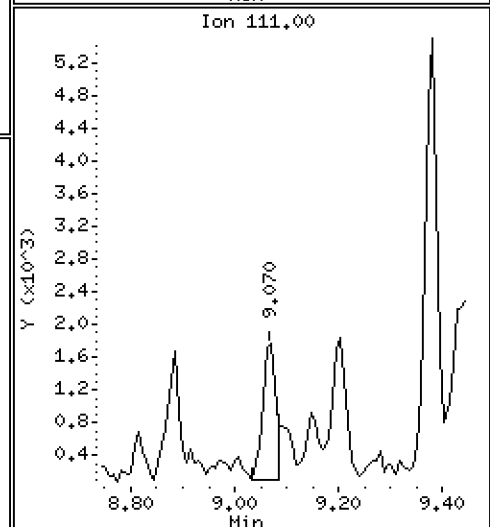
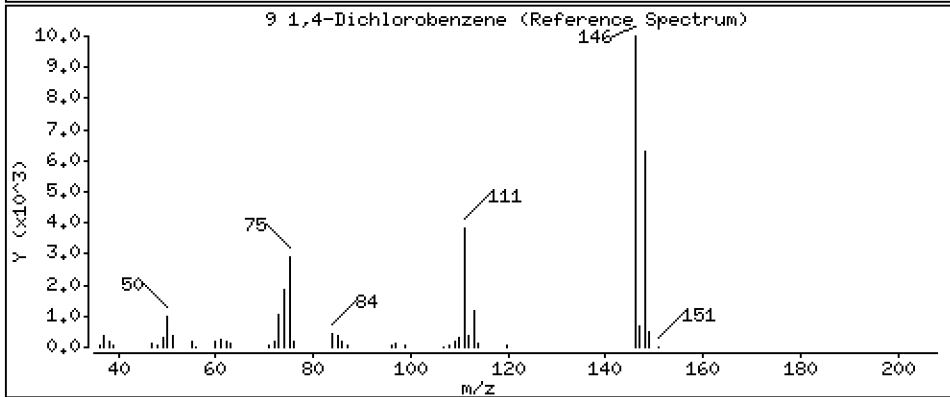
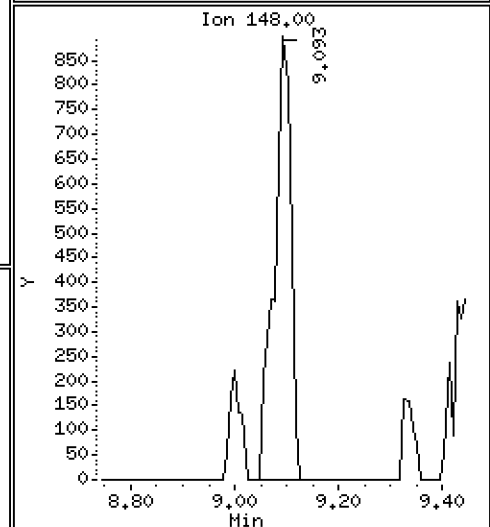
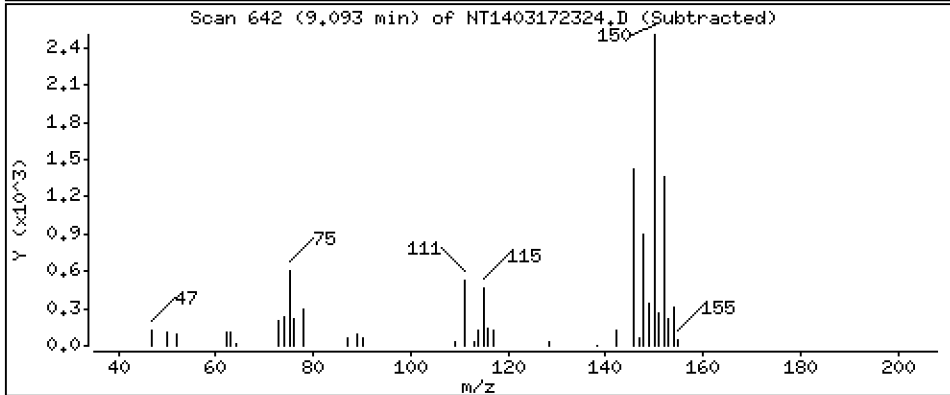
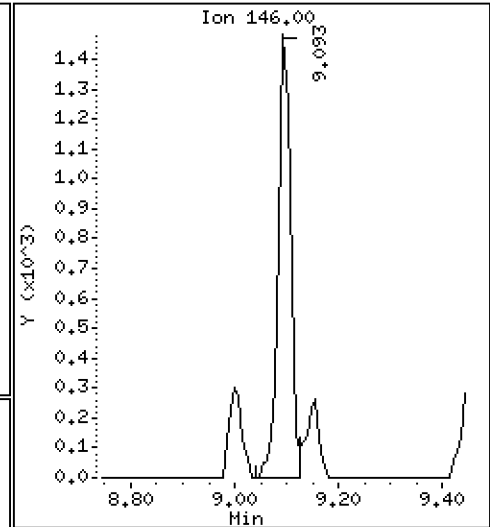
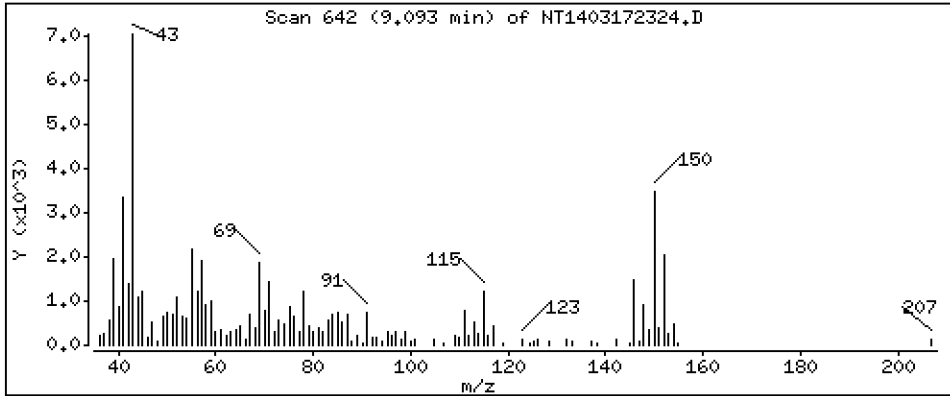
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.03068 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

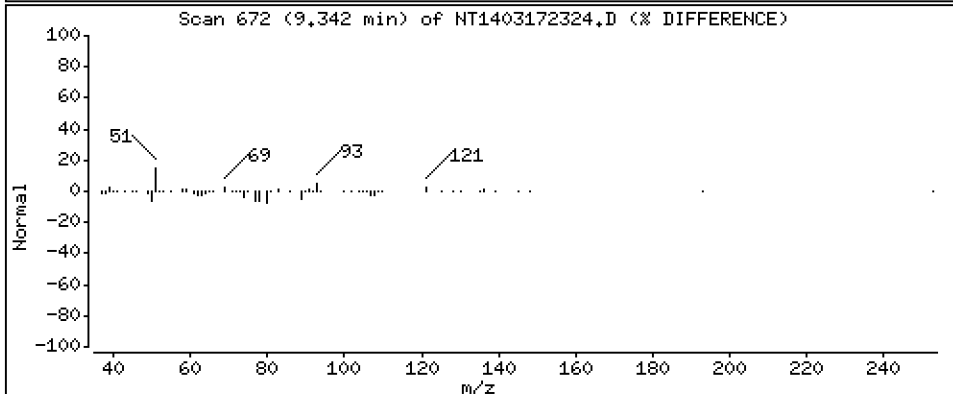
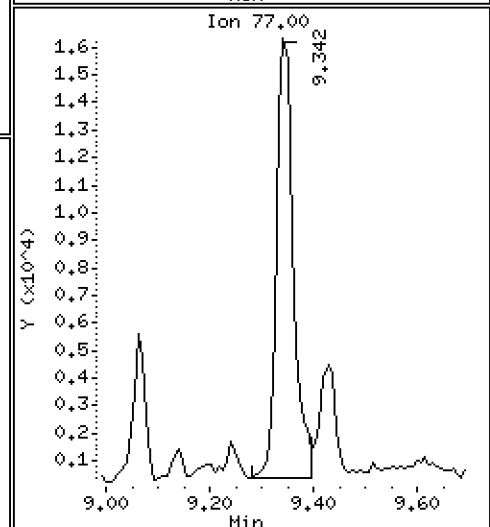
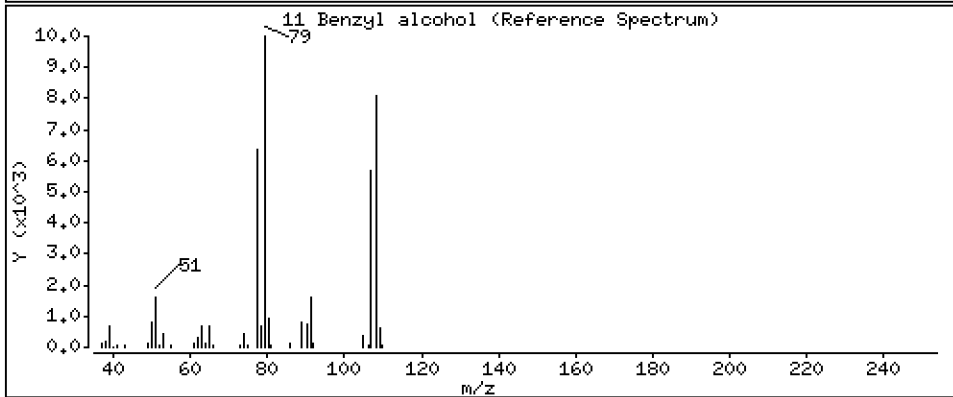
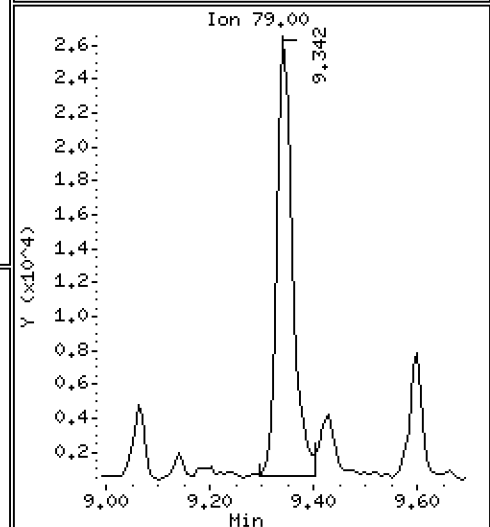
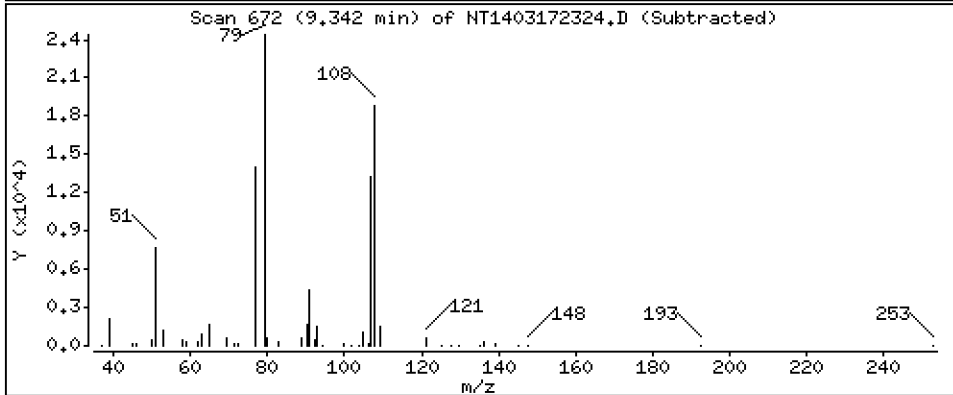
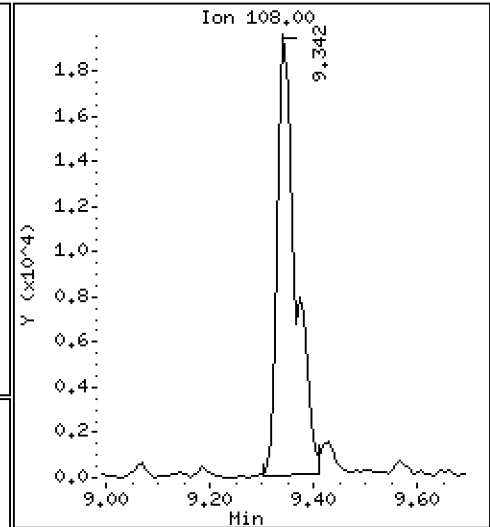
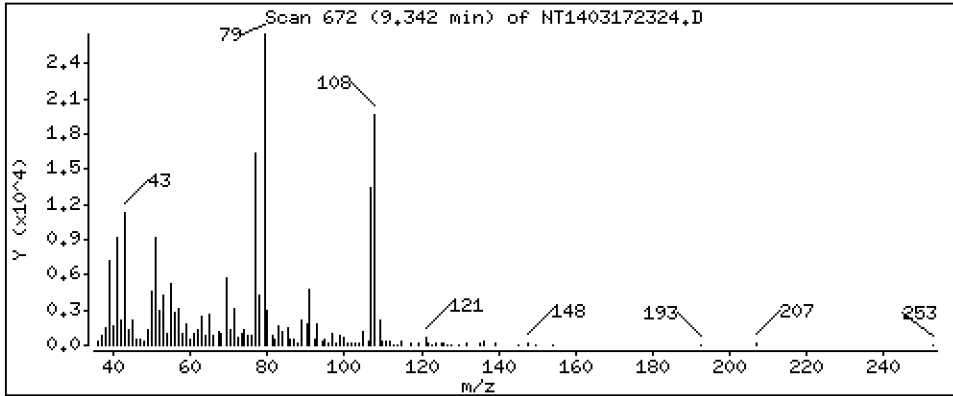
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 1,014 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

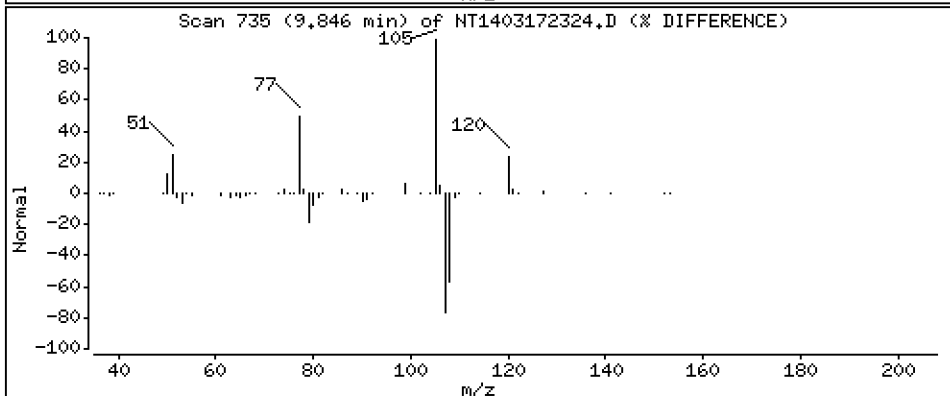
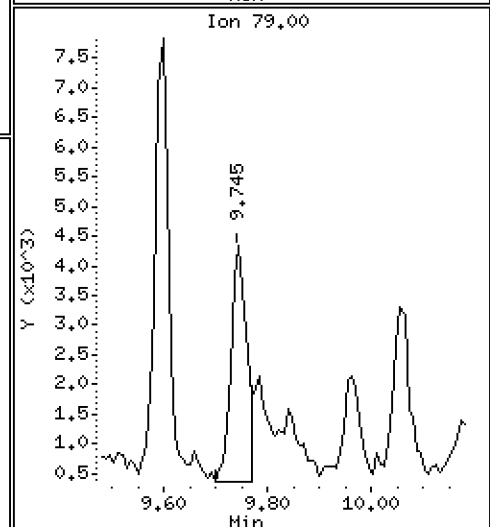
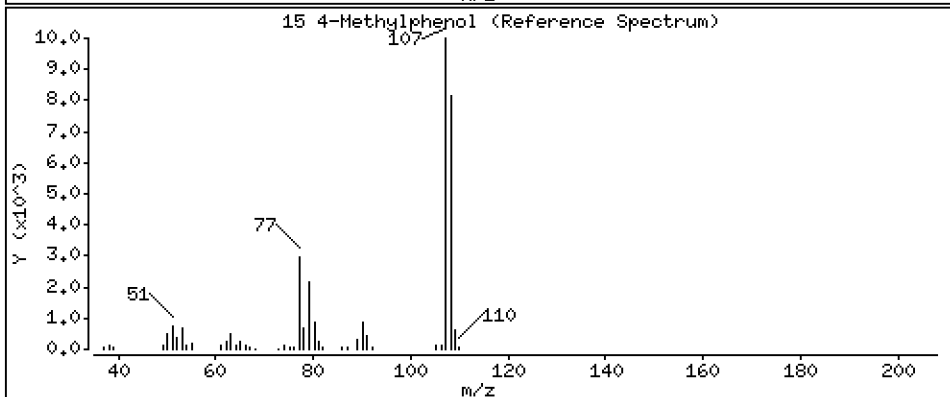
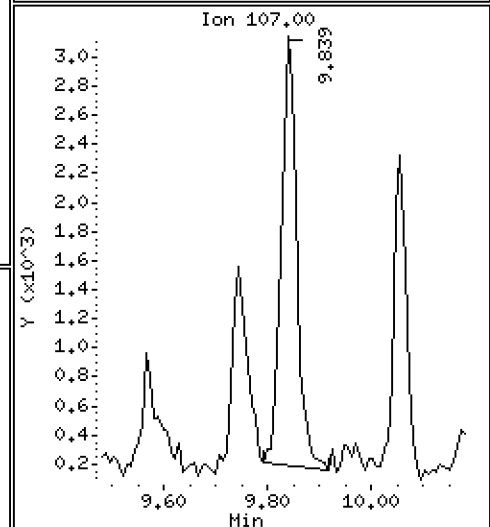
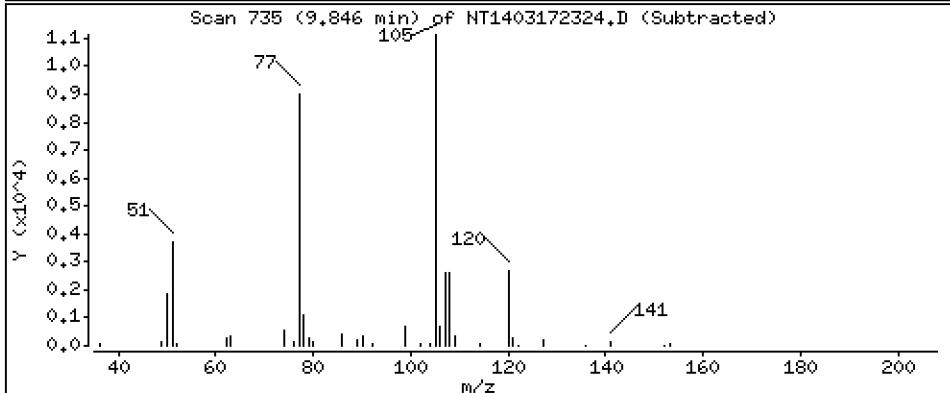
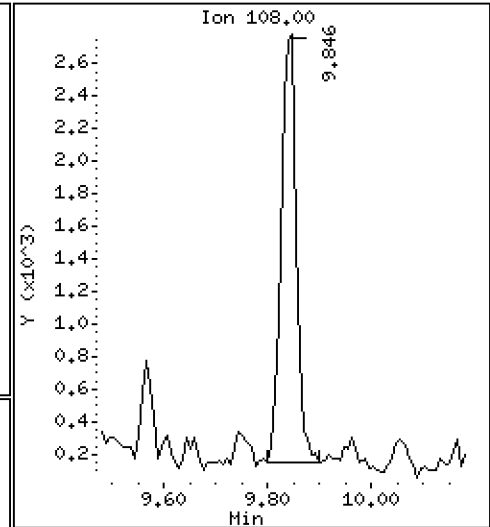
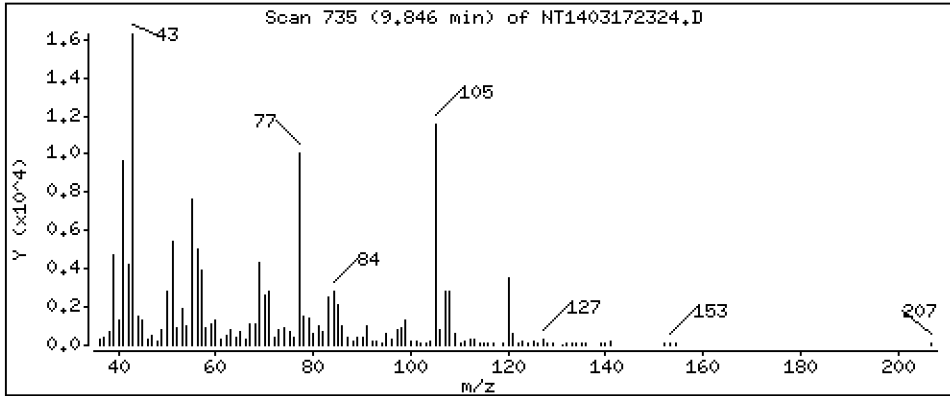
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.06410 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

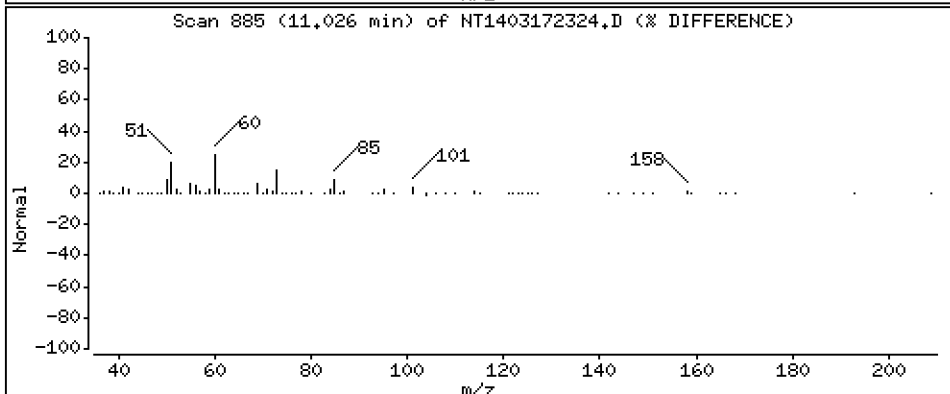
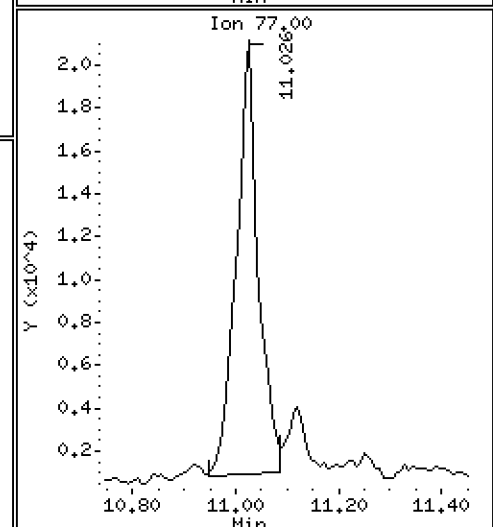
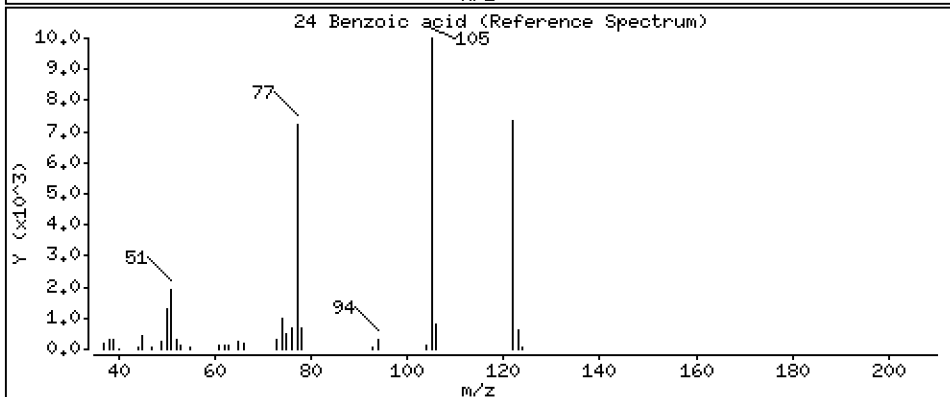
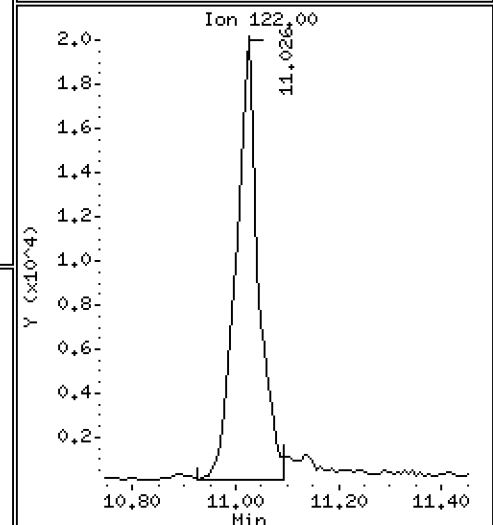
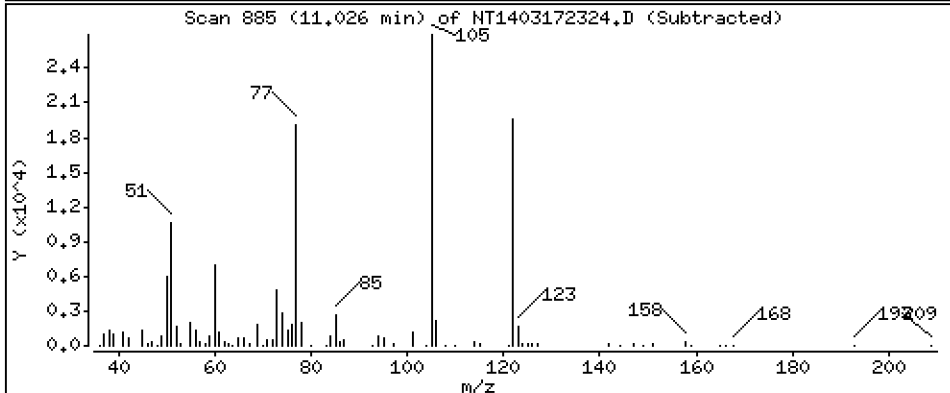
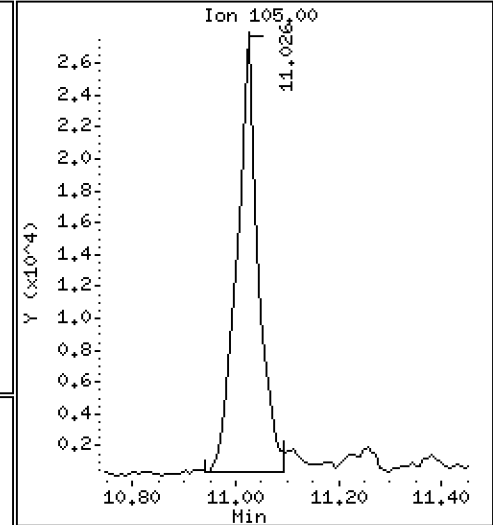
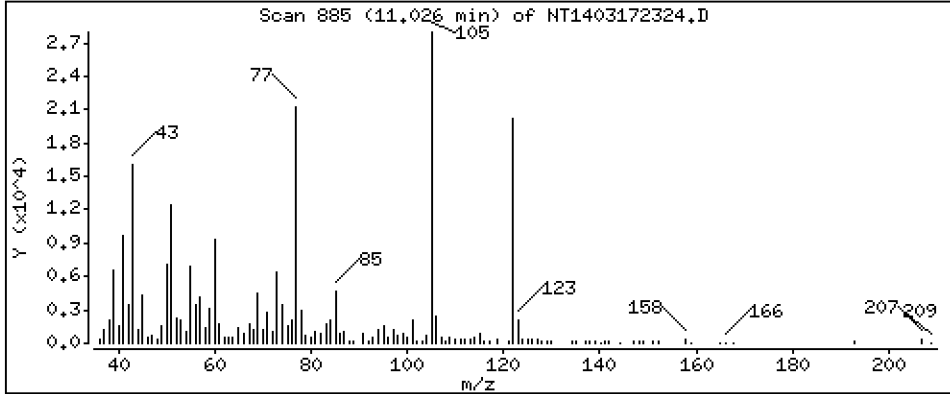
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,362 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

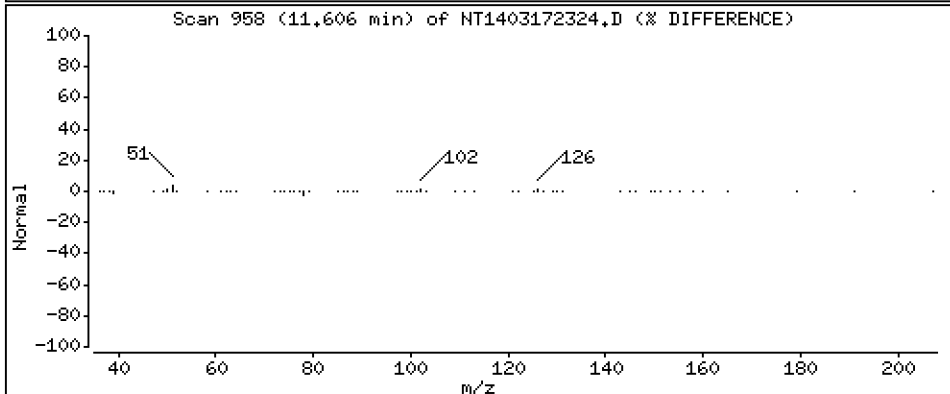
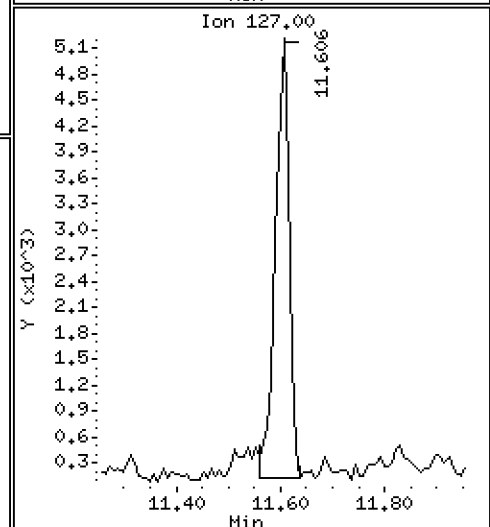
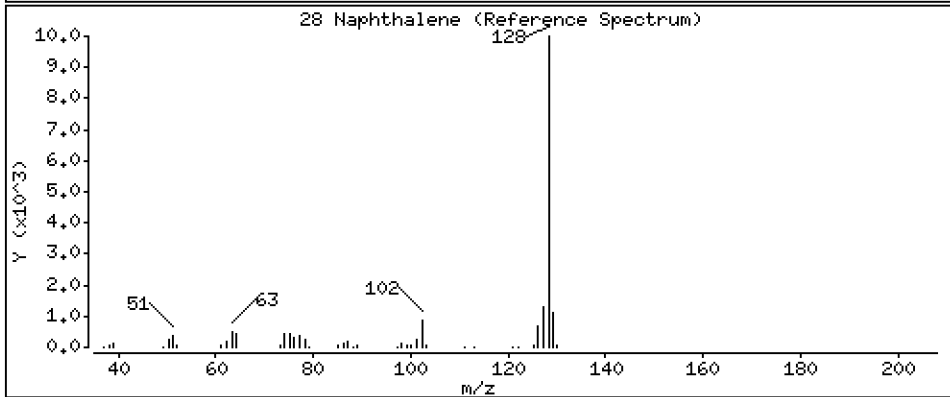
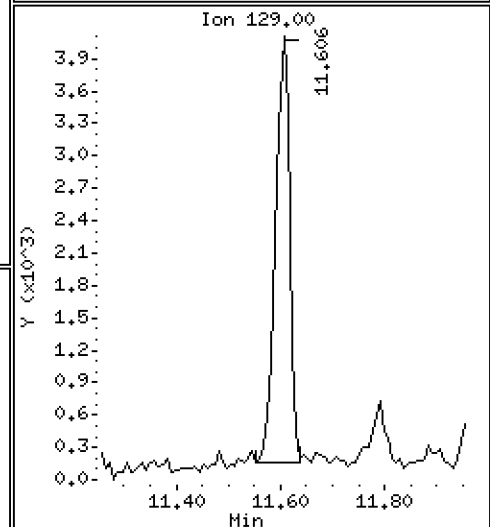
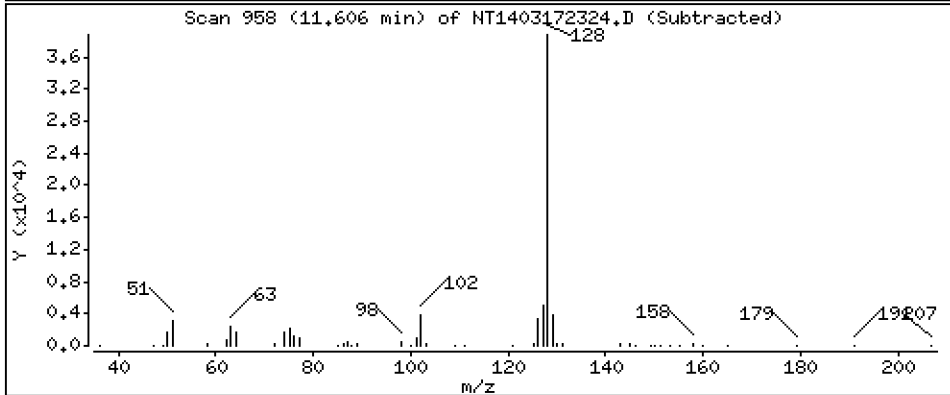
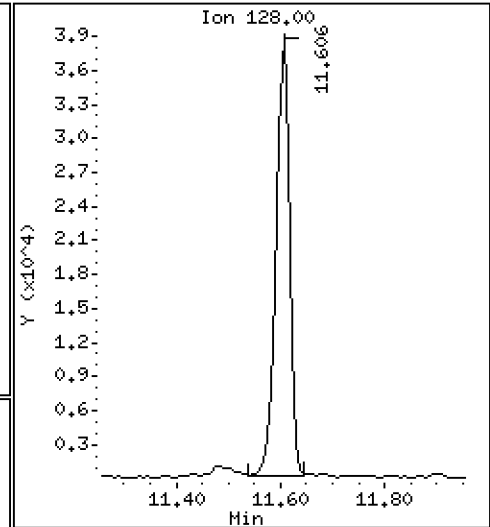
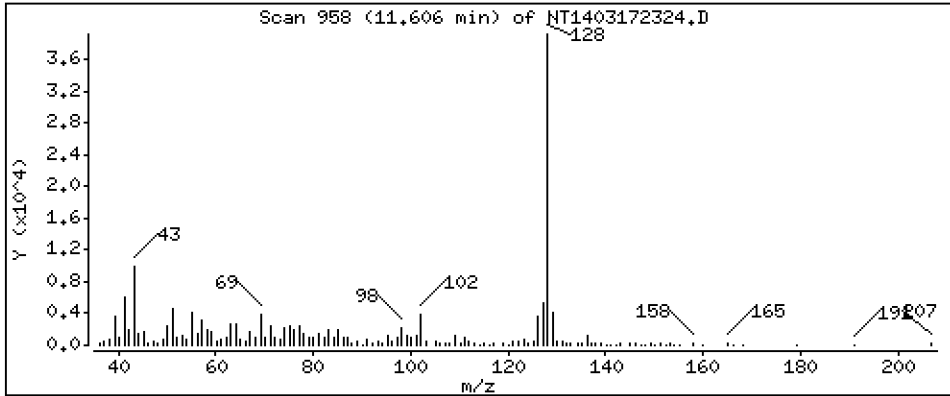
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.3084 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

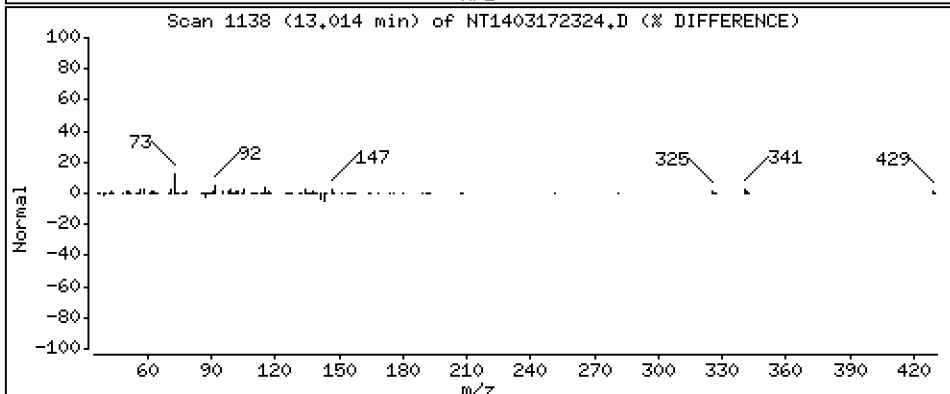
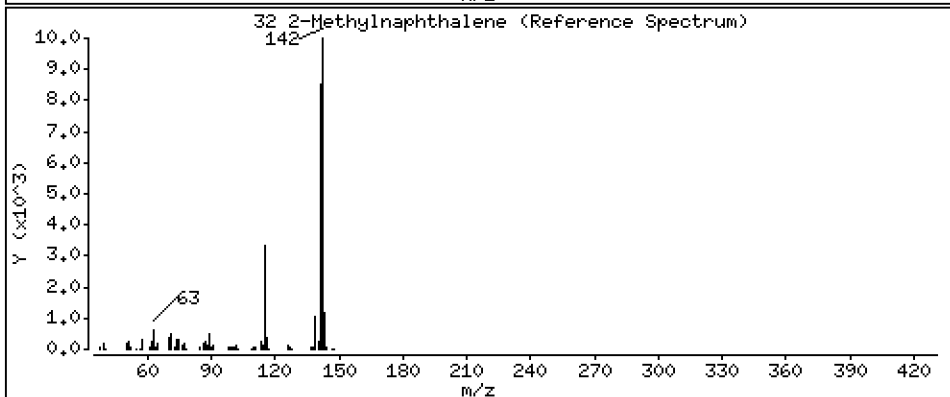
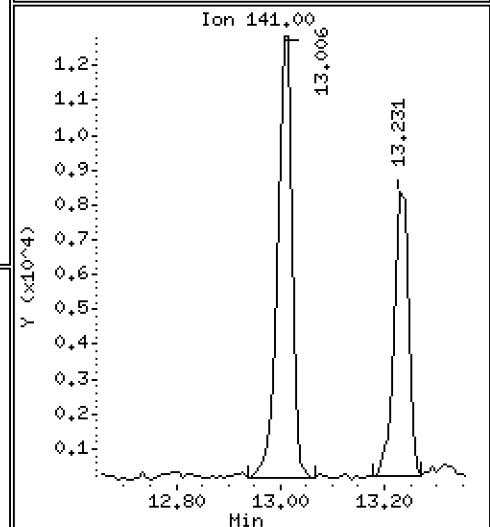
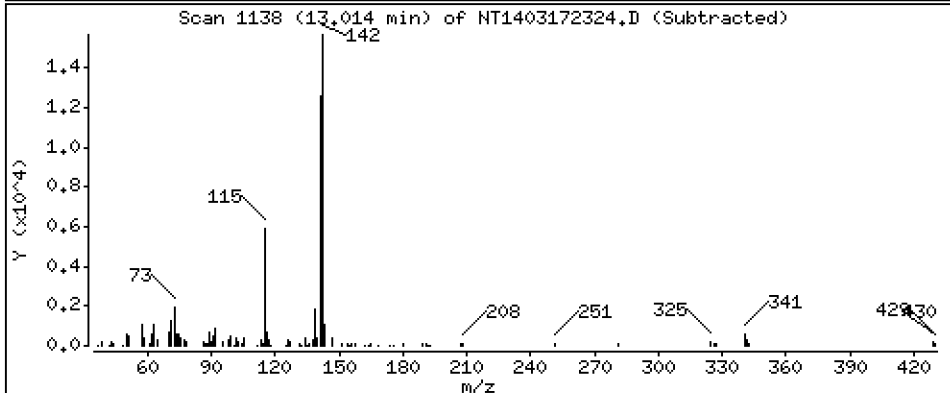
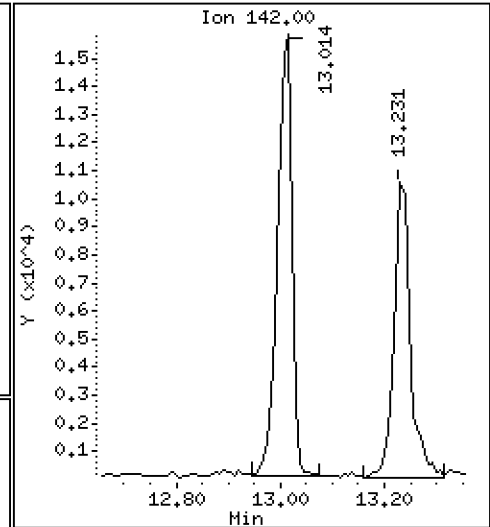
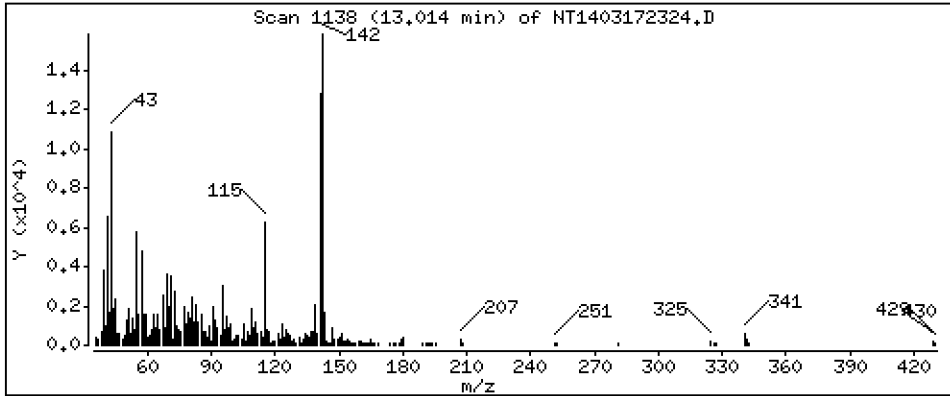
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1967 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

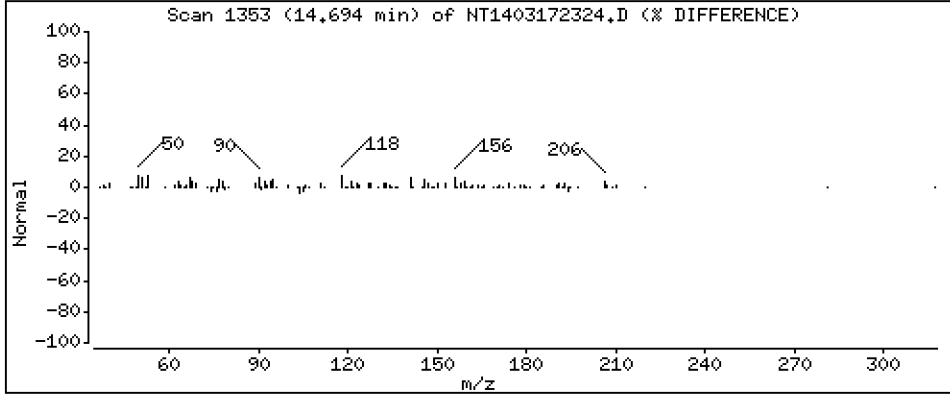
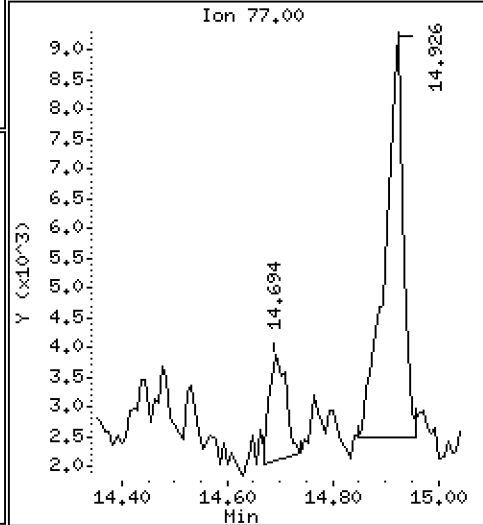
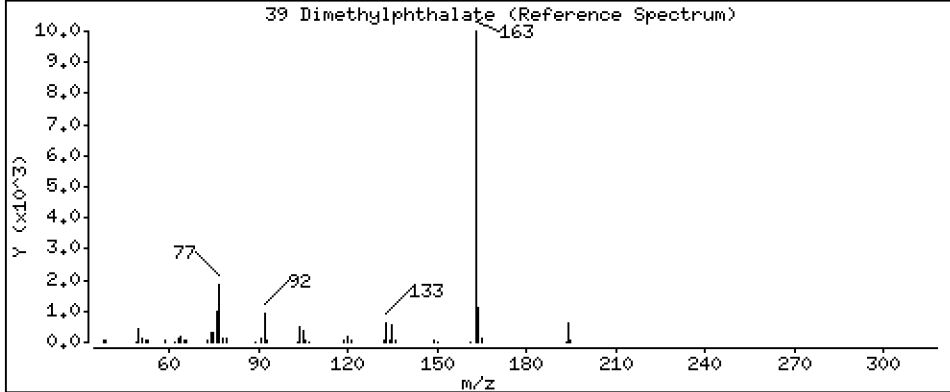
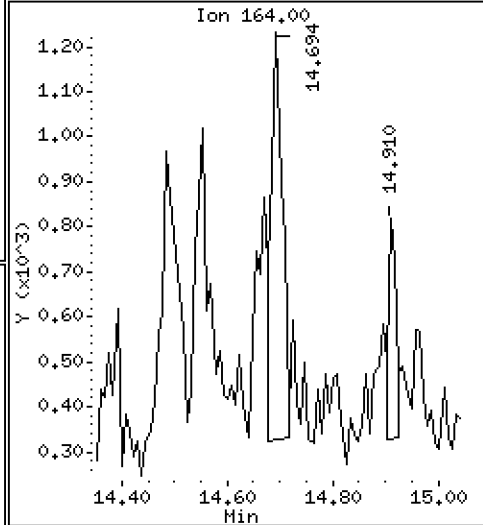
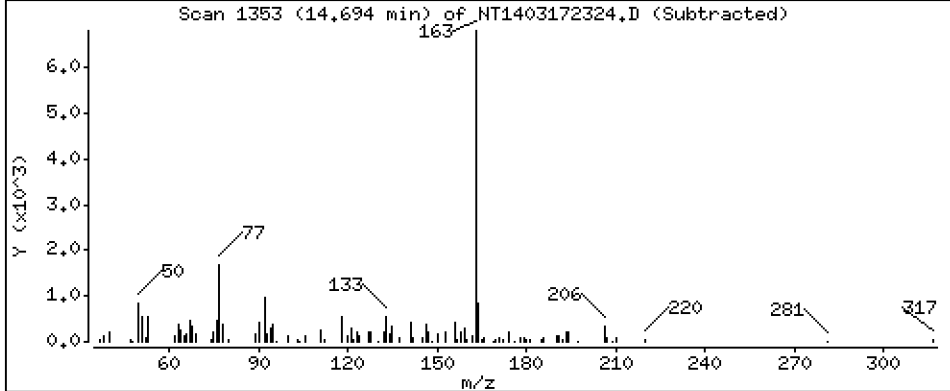
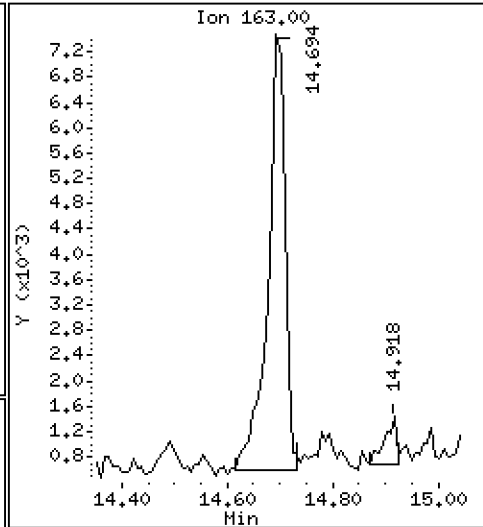
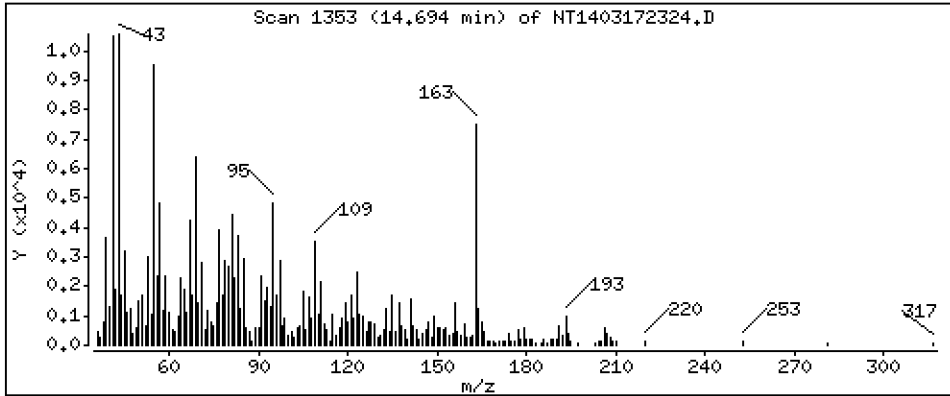
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1180 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

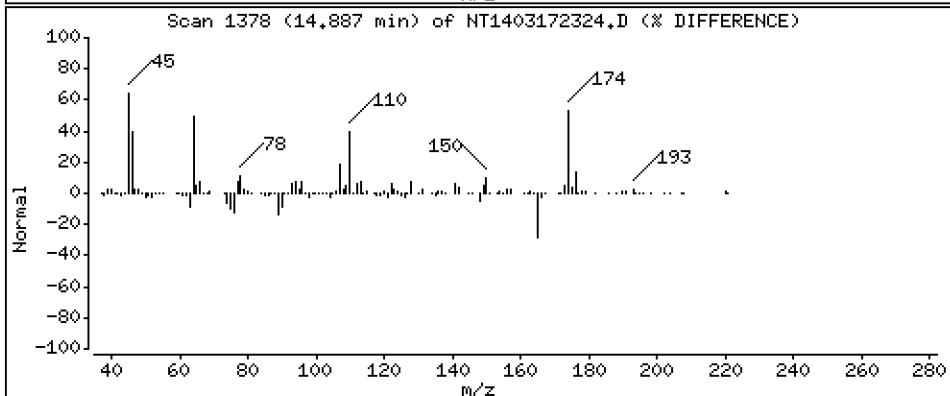
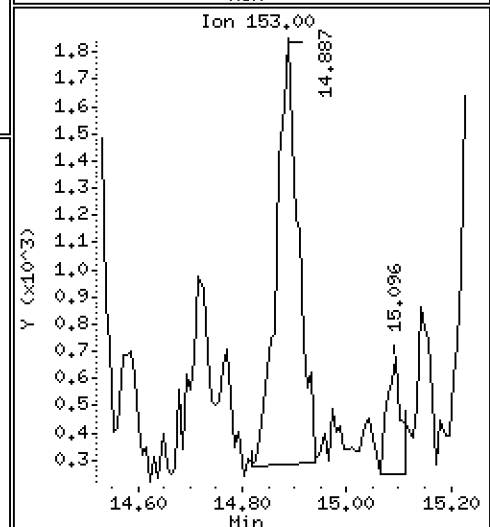
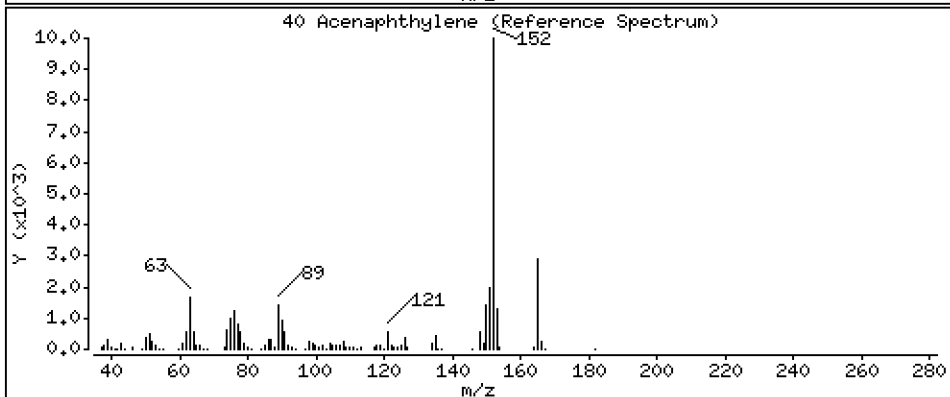
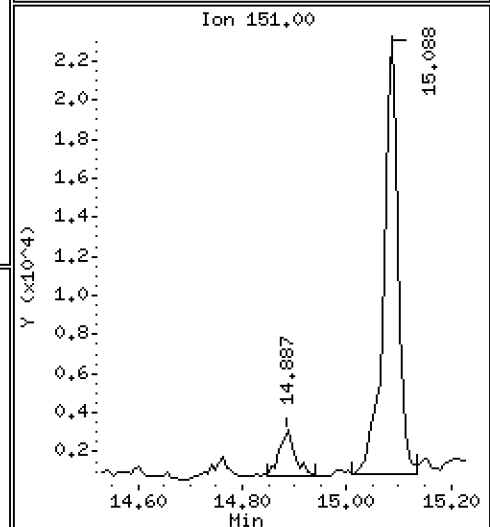
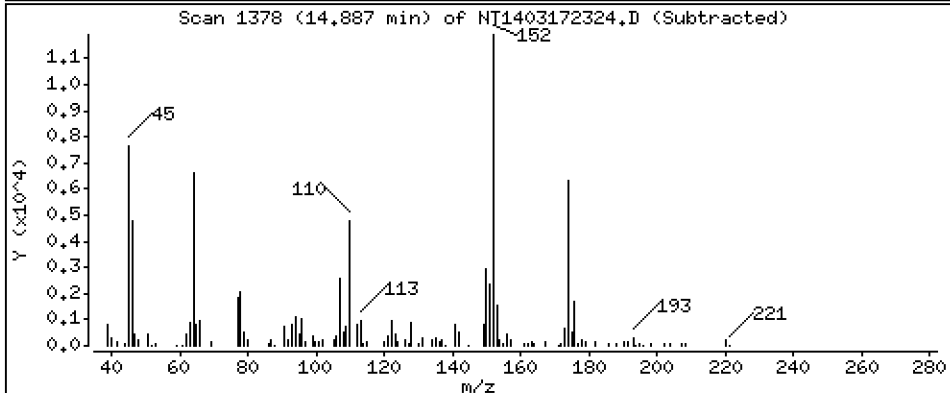
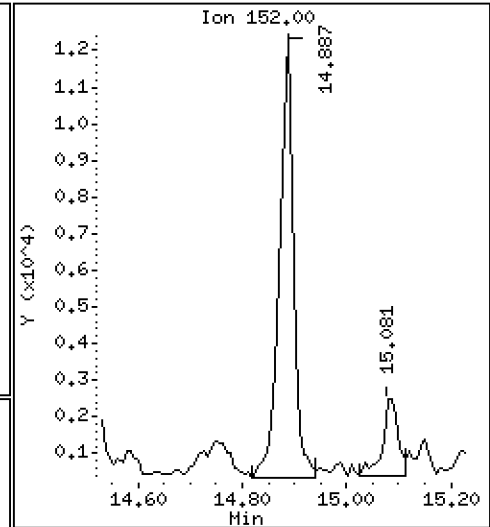
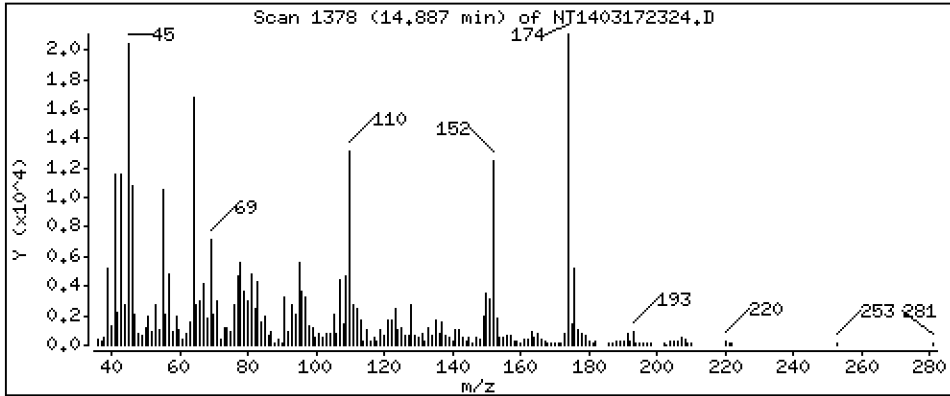
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.1111 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

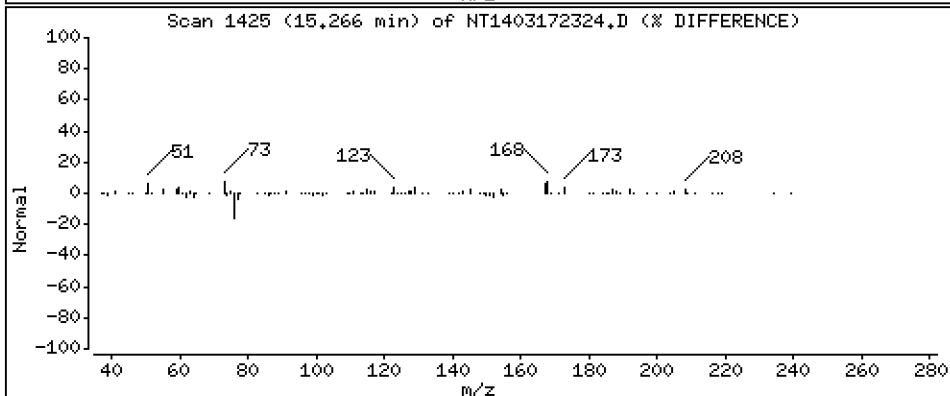
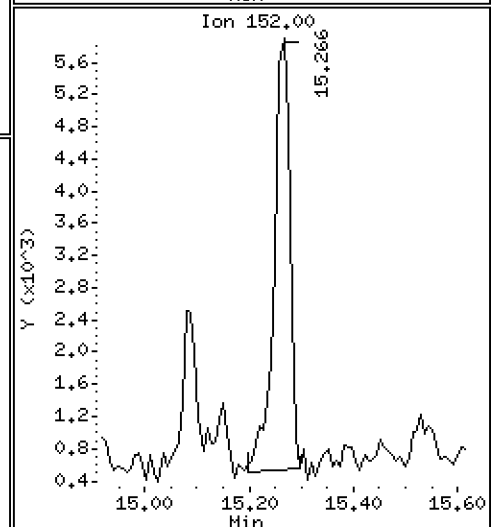
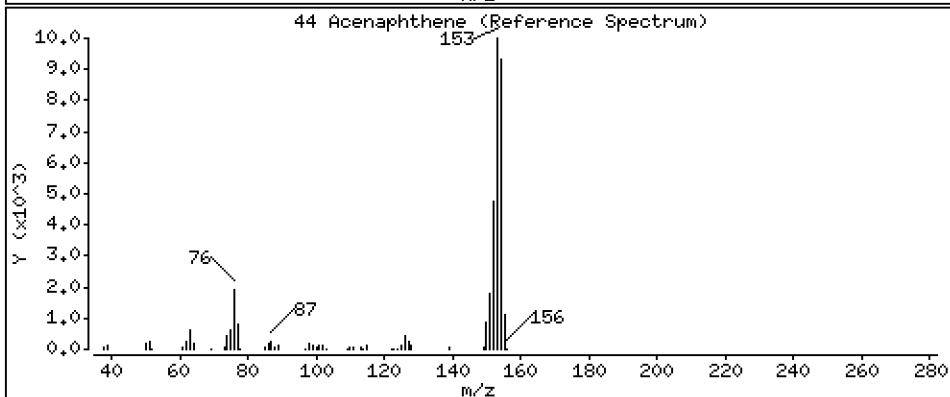
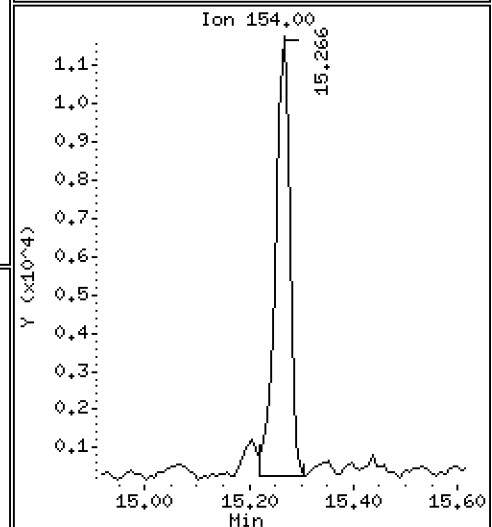
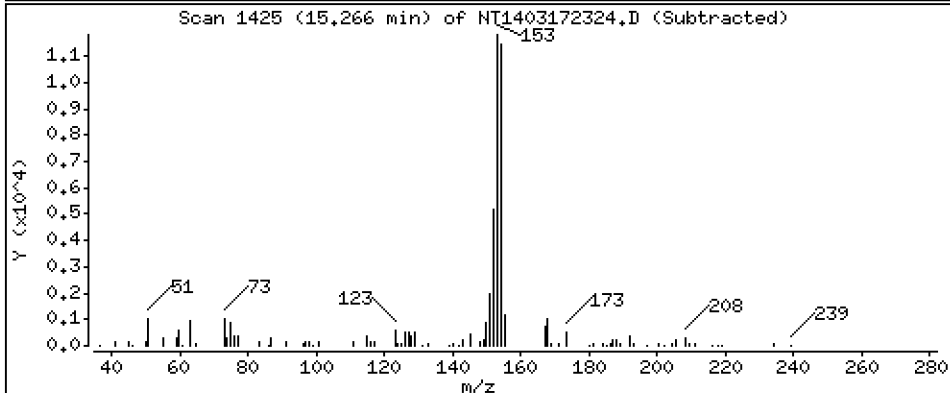
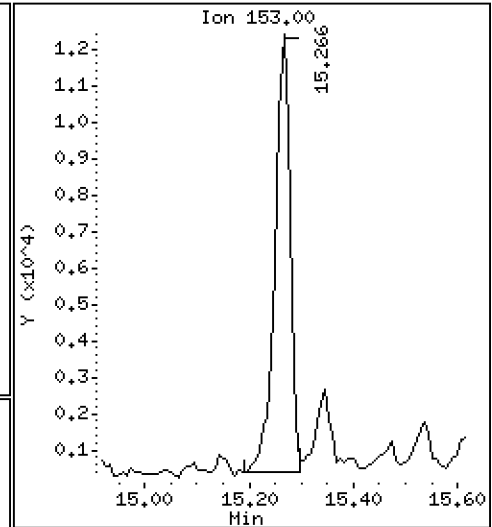
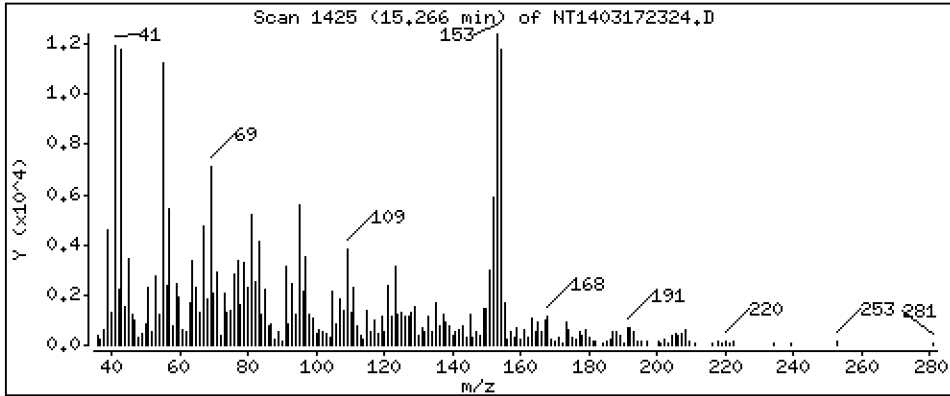
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.1999 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

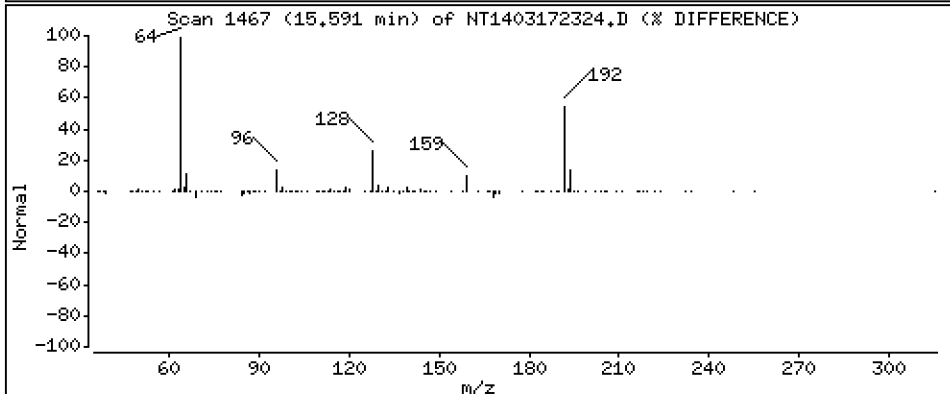
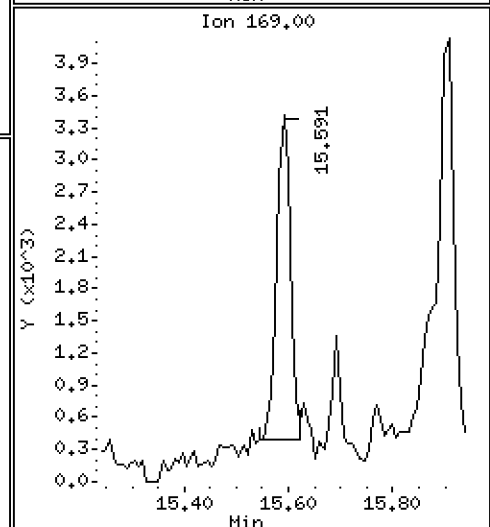
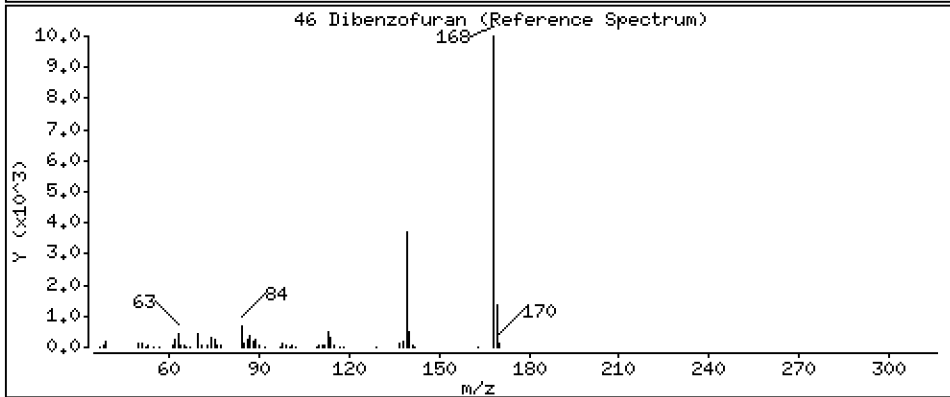
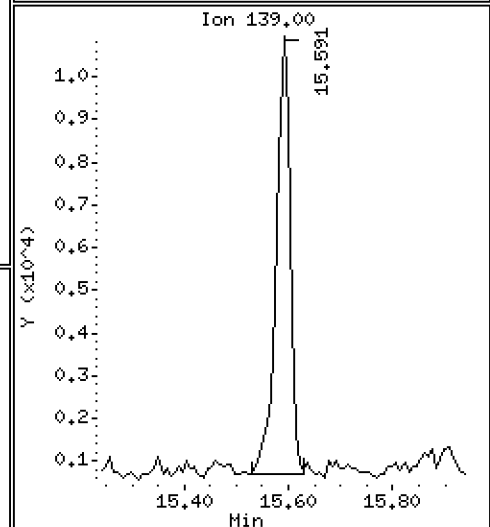
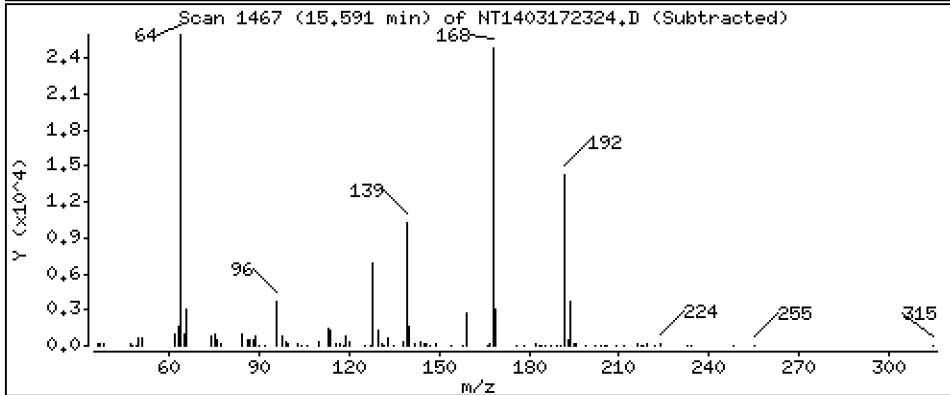
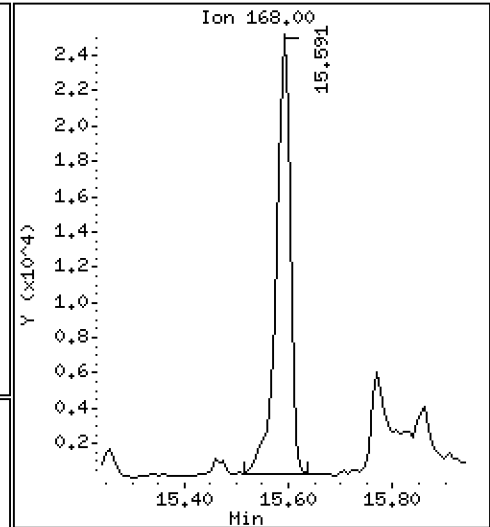
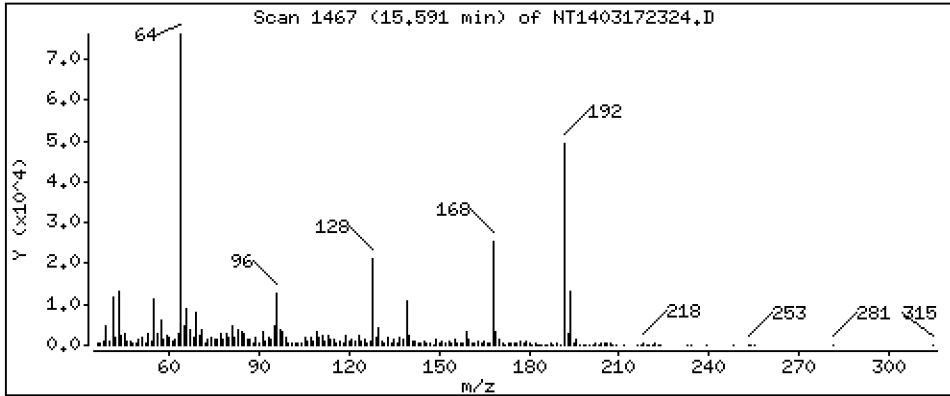
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2682 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

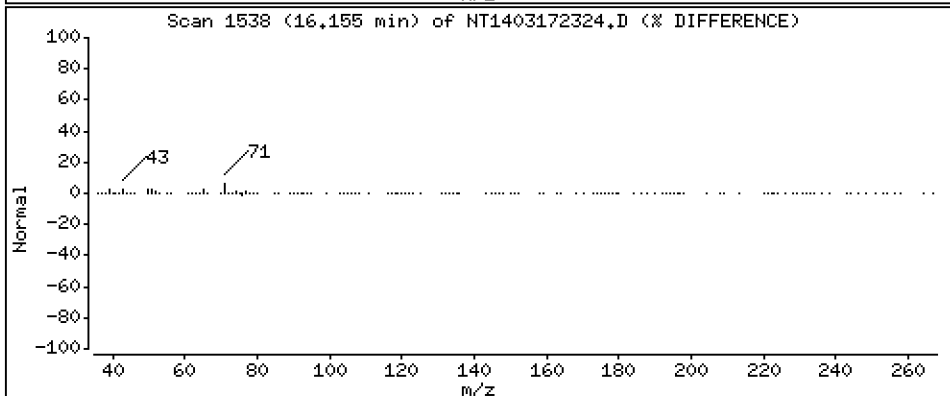
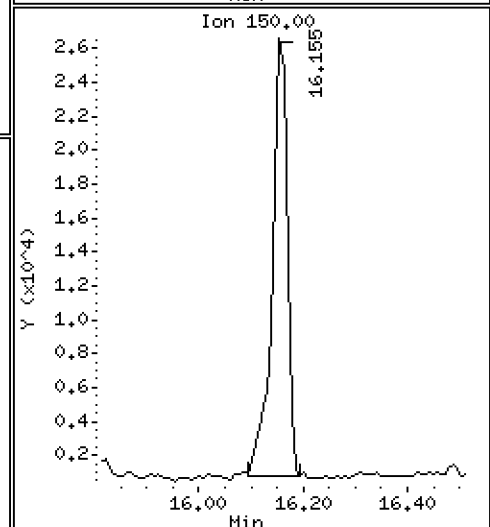
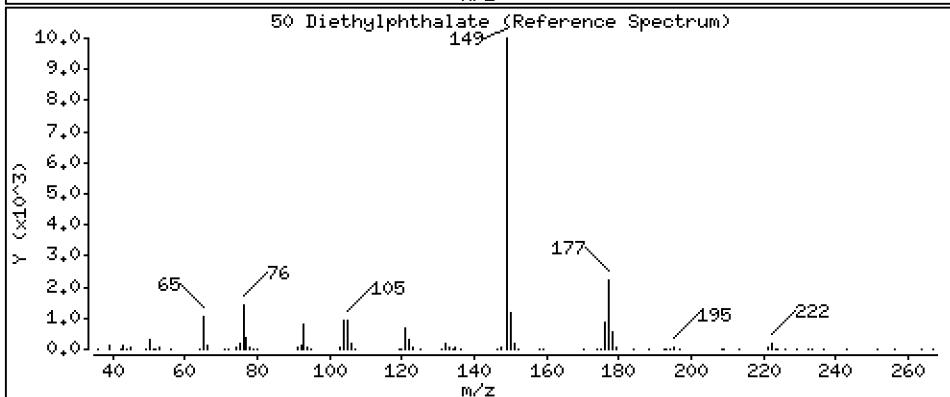
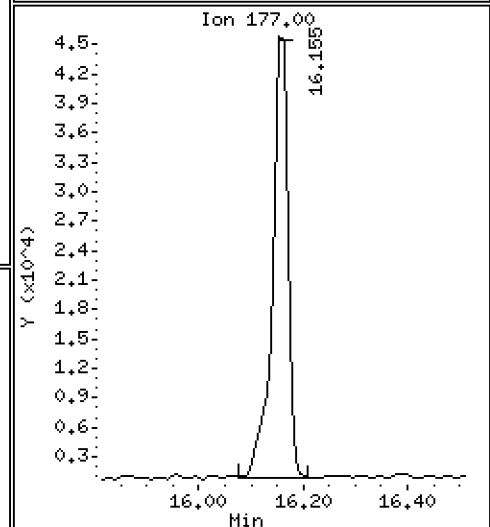
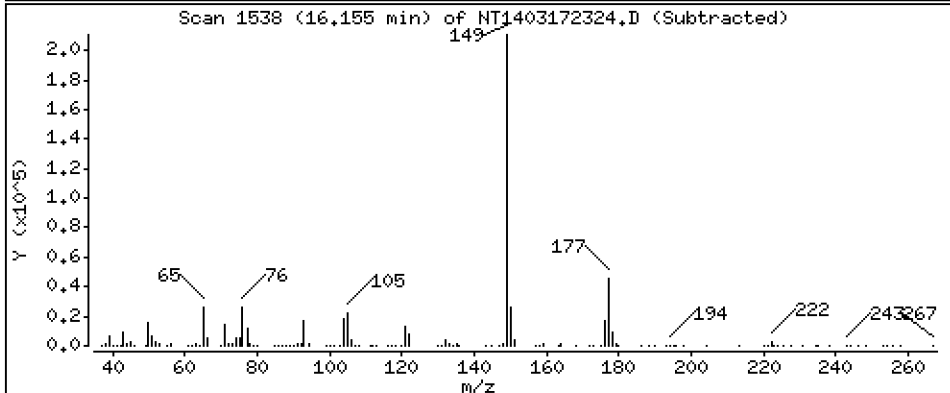
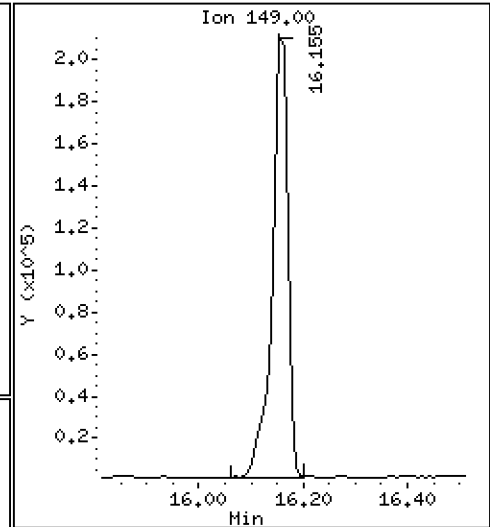
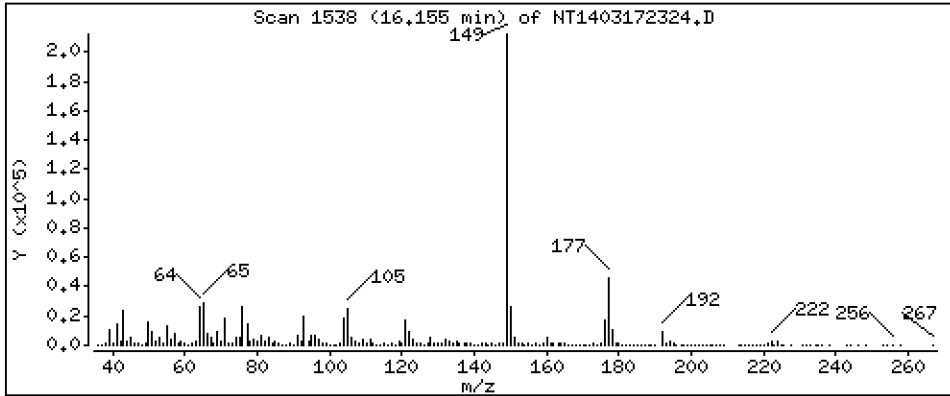
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 3,165 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

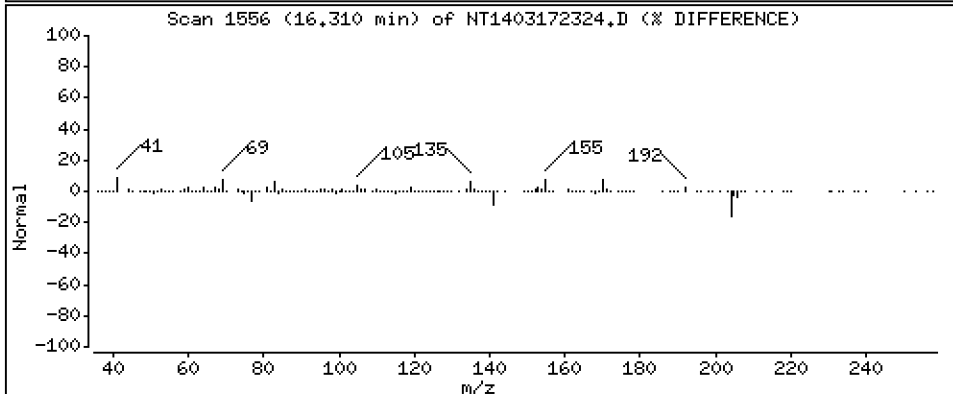
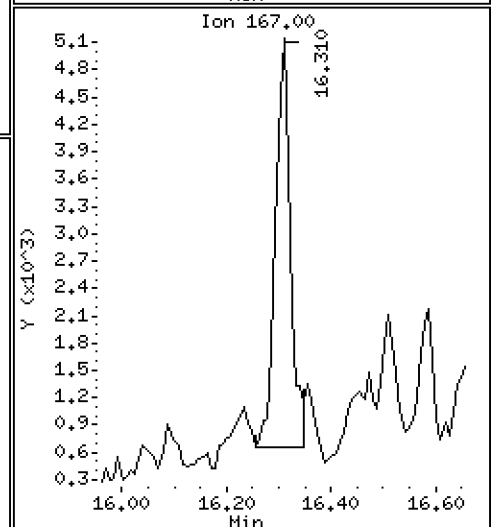
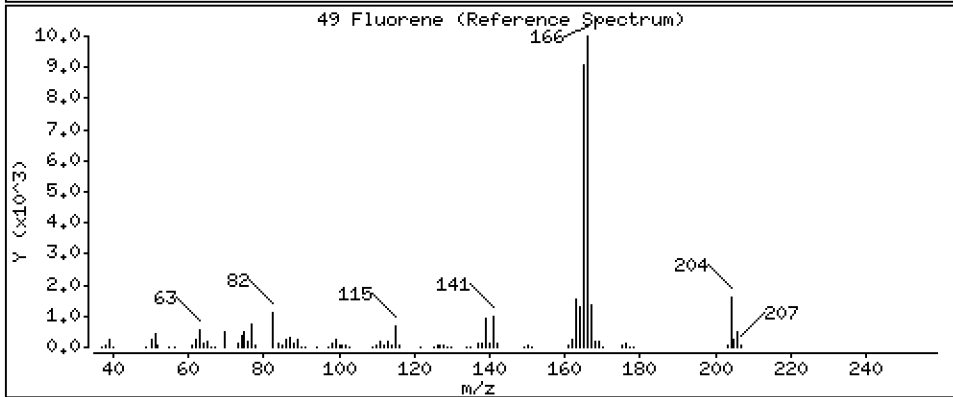
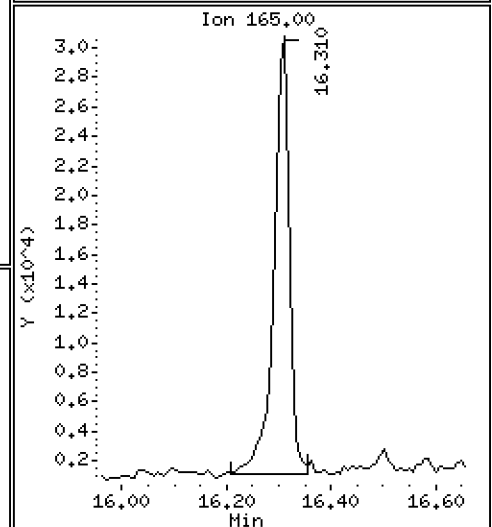
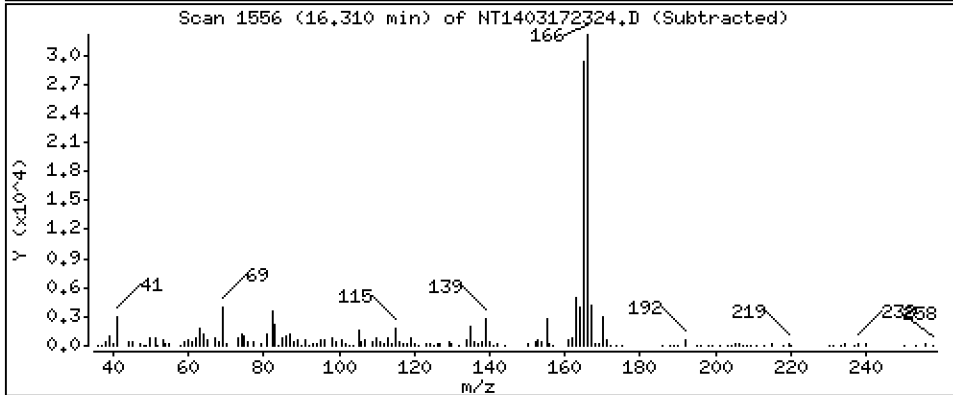
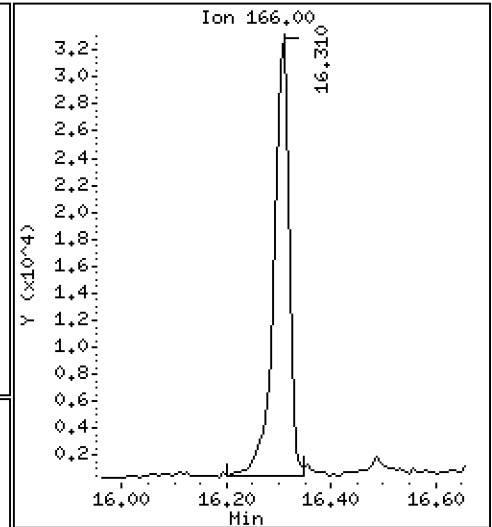
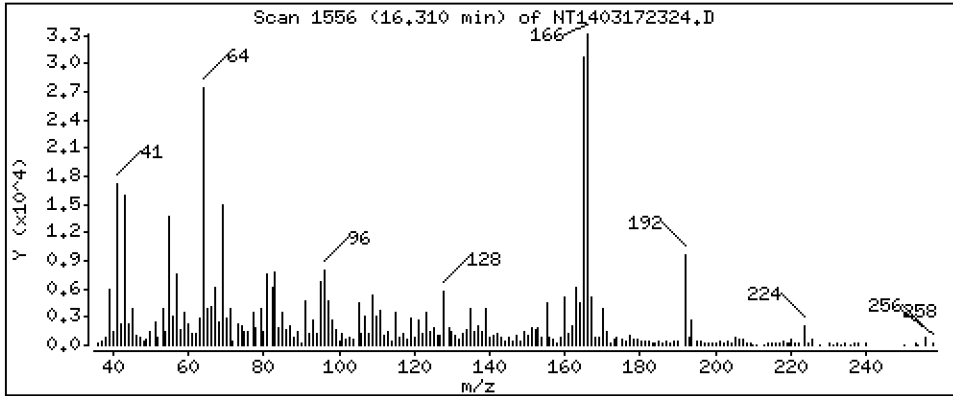
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,4577 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

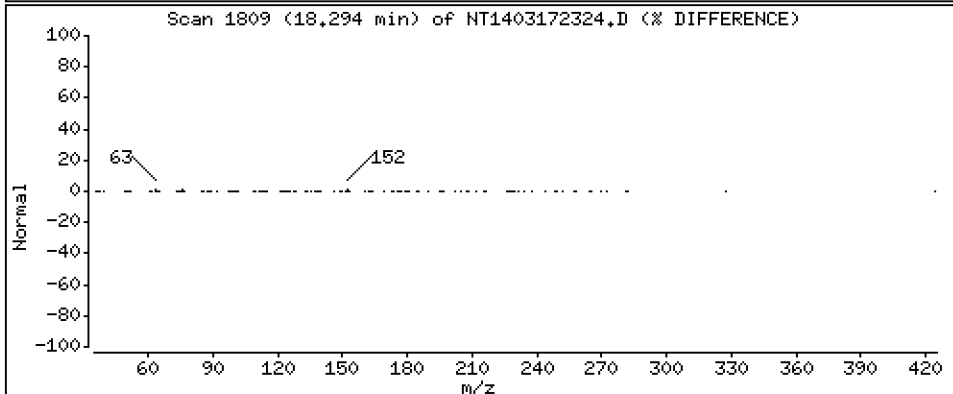
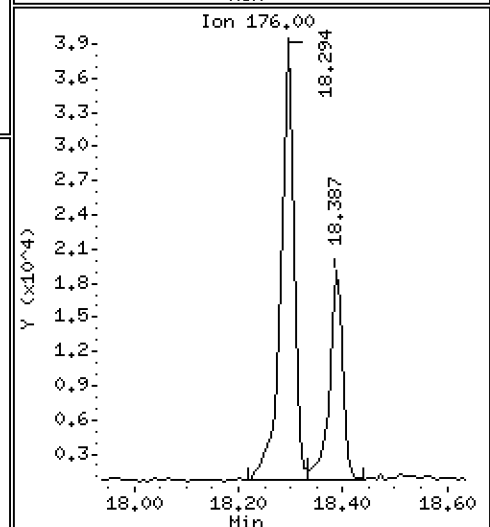
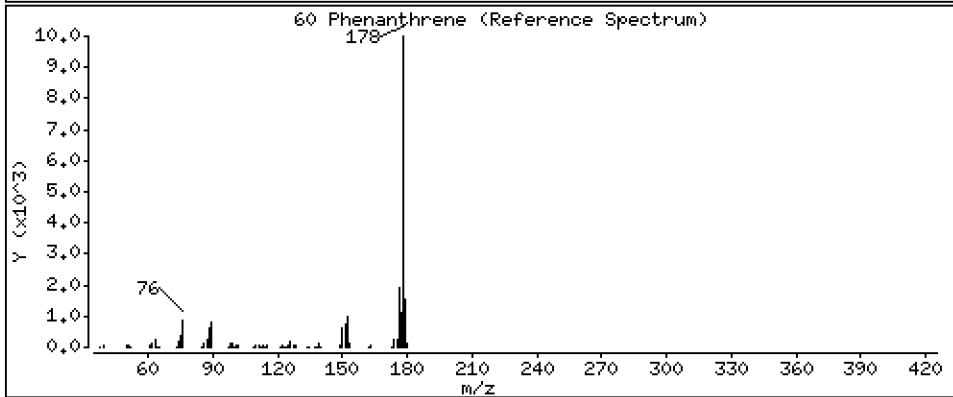
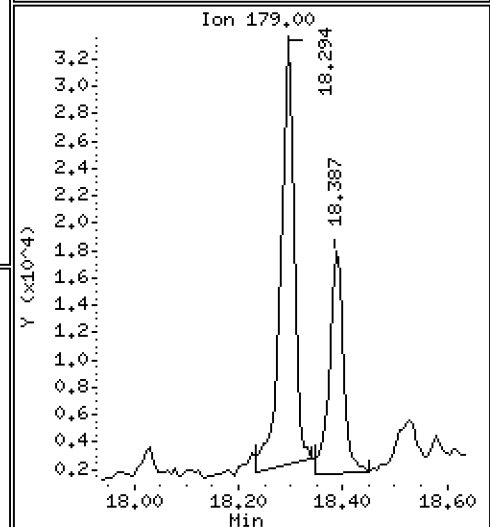
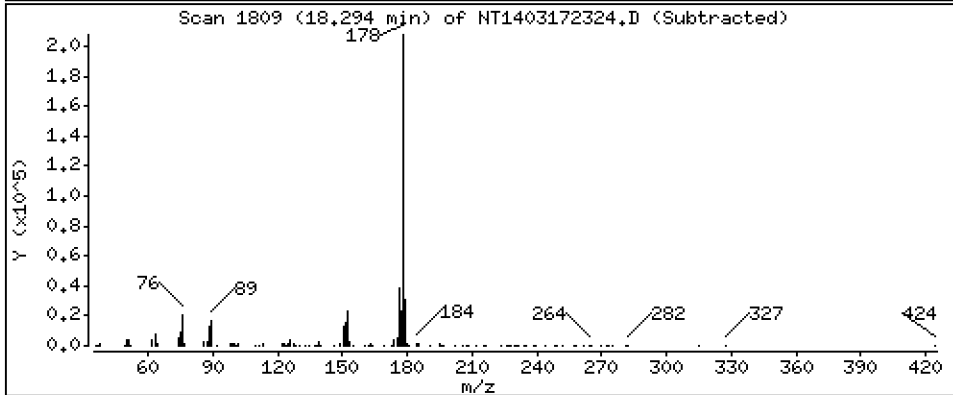
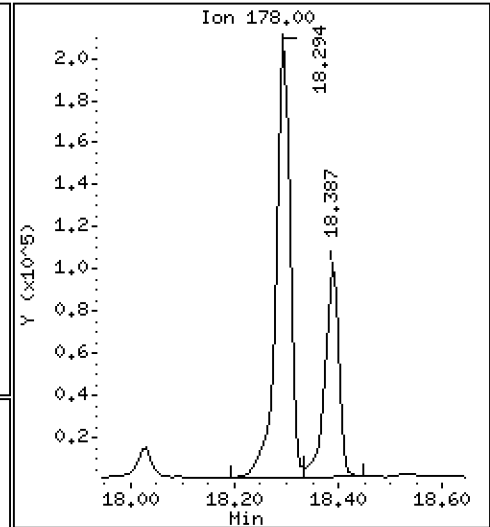
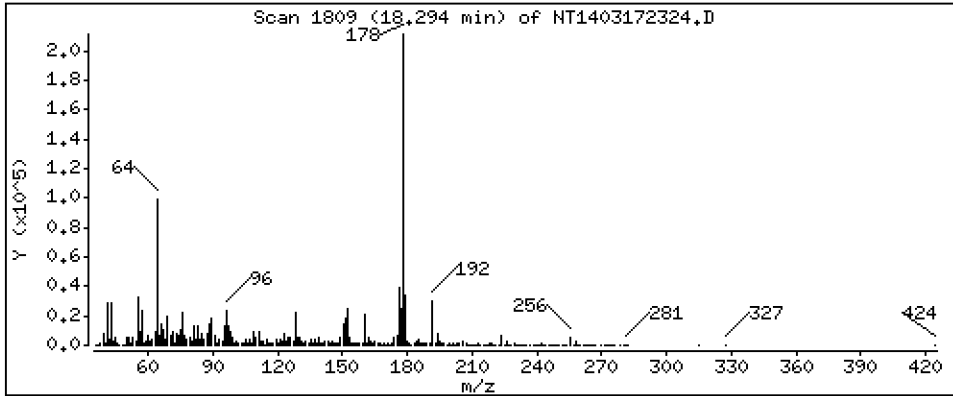
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 2,079 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

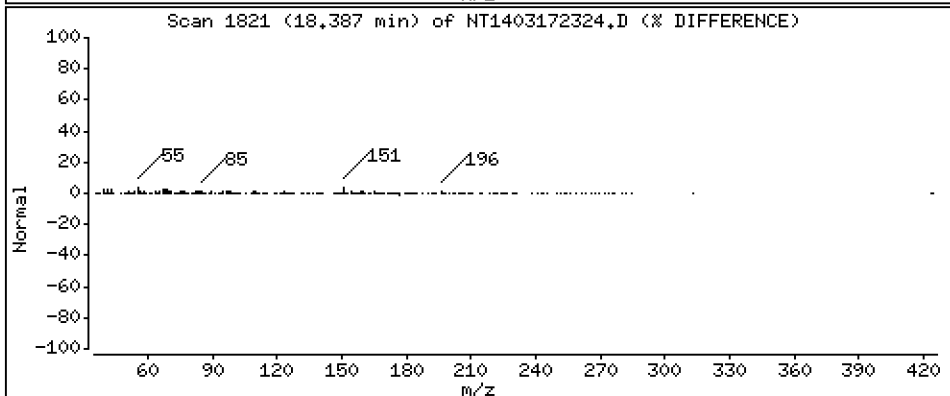
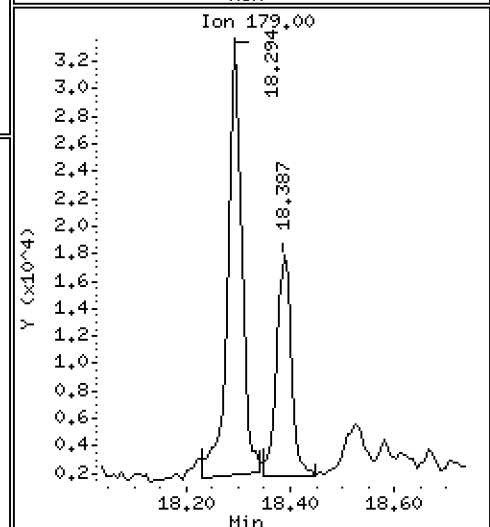
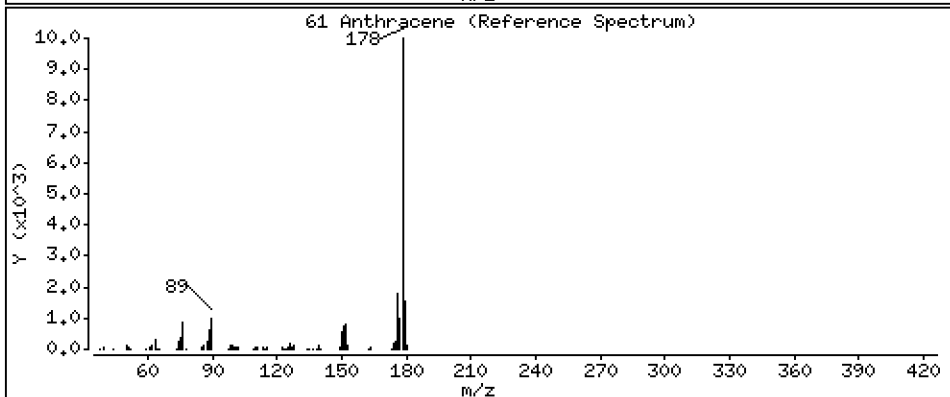
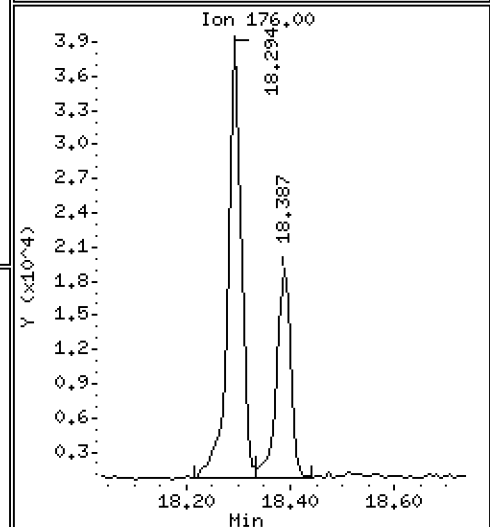
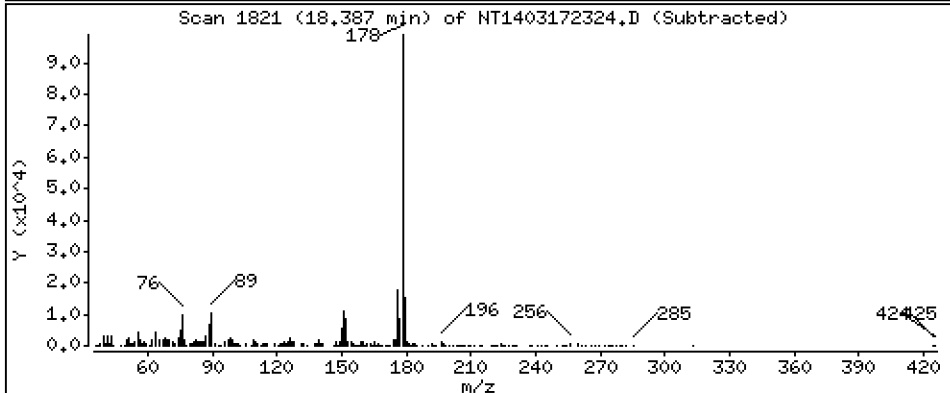
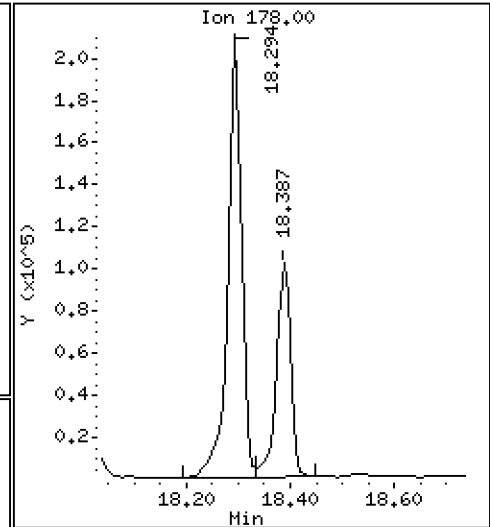
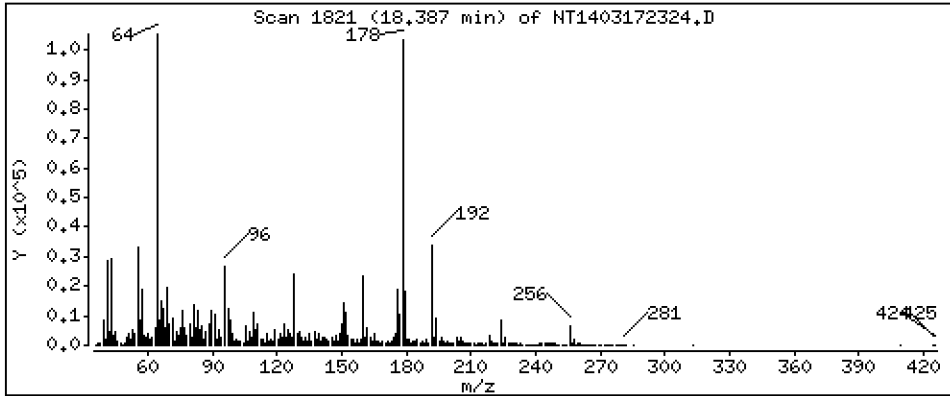
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 1,069 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

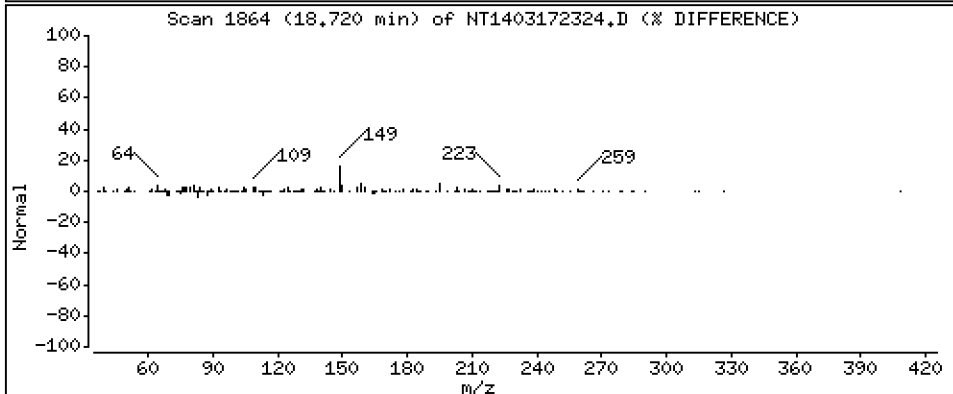
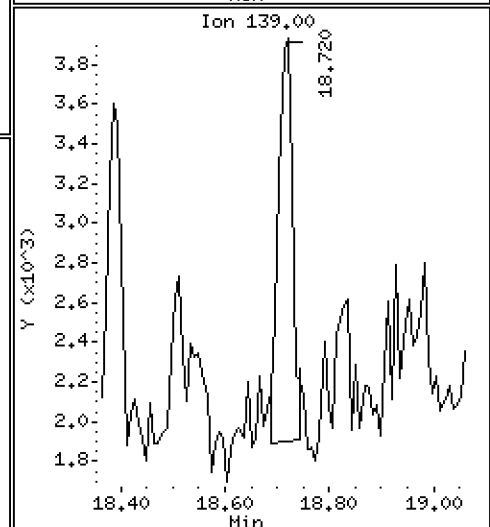
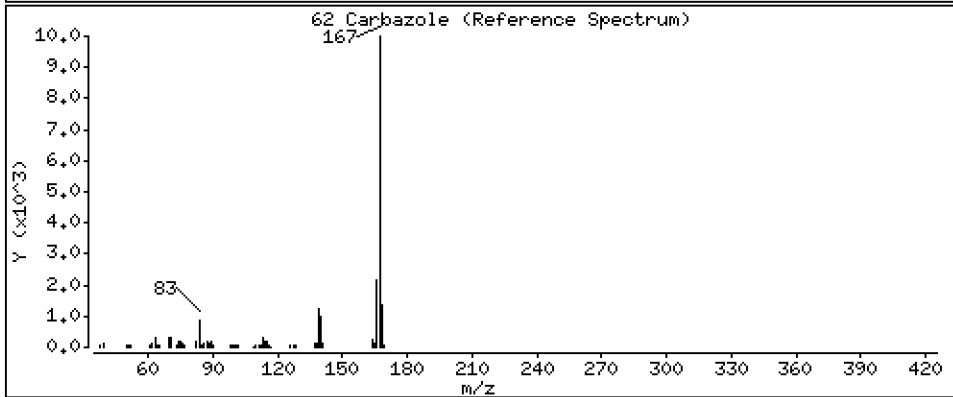
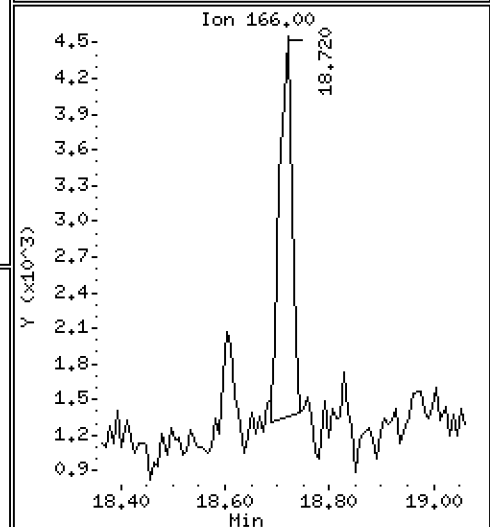
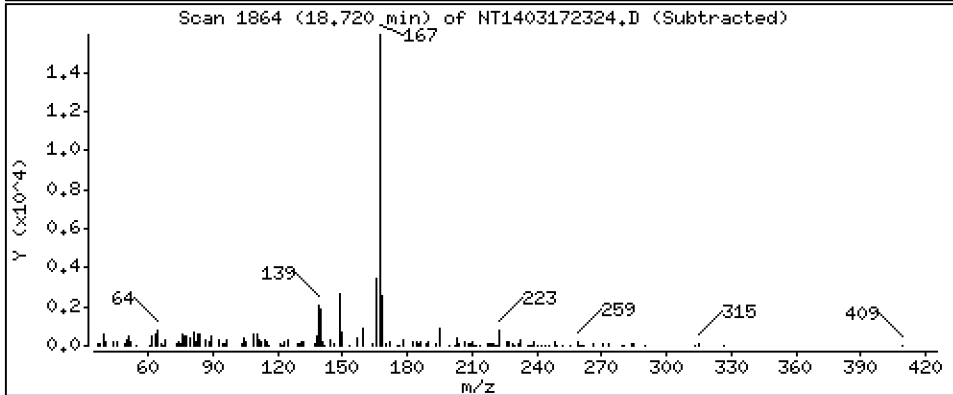
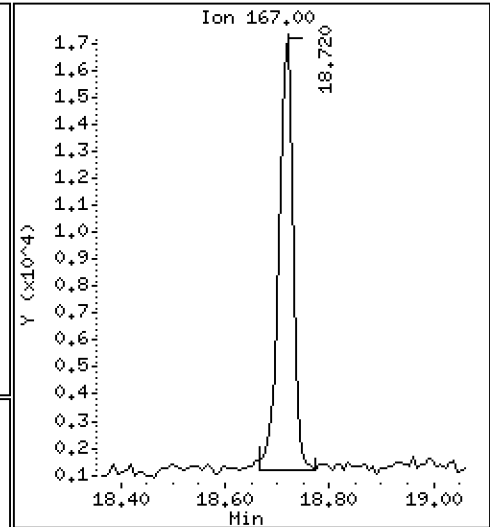
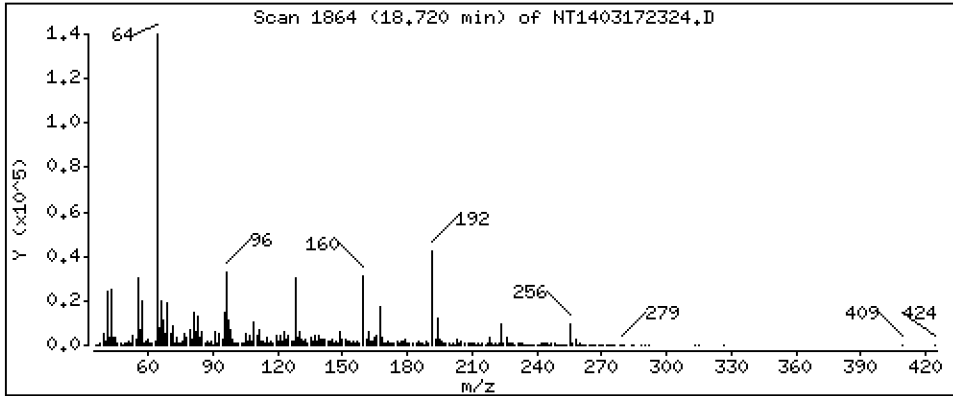
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1925 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

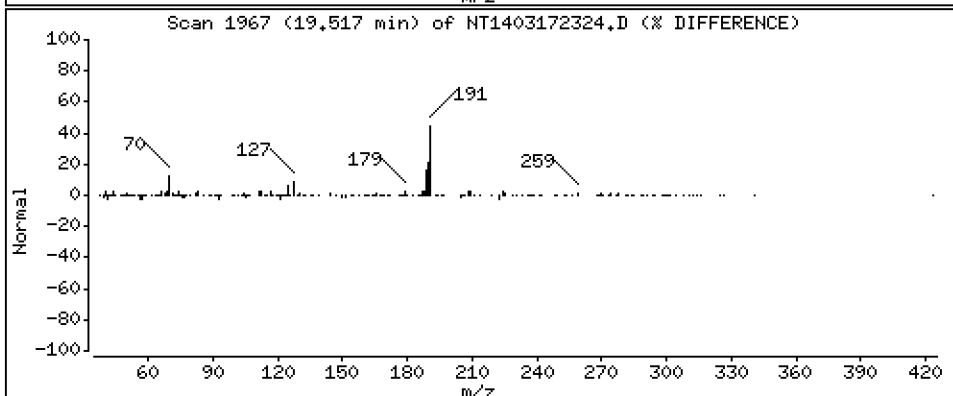
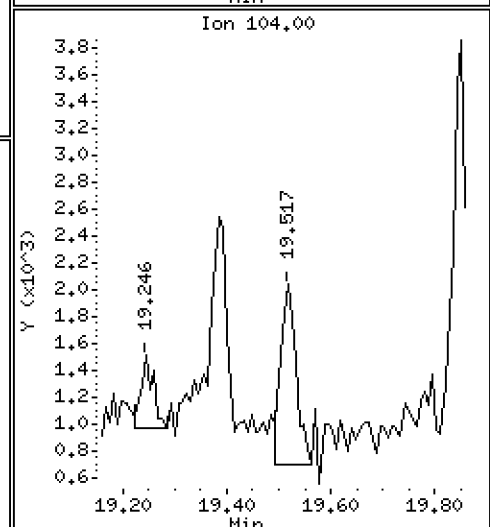
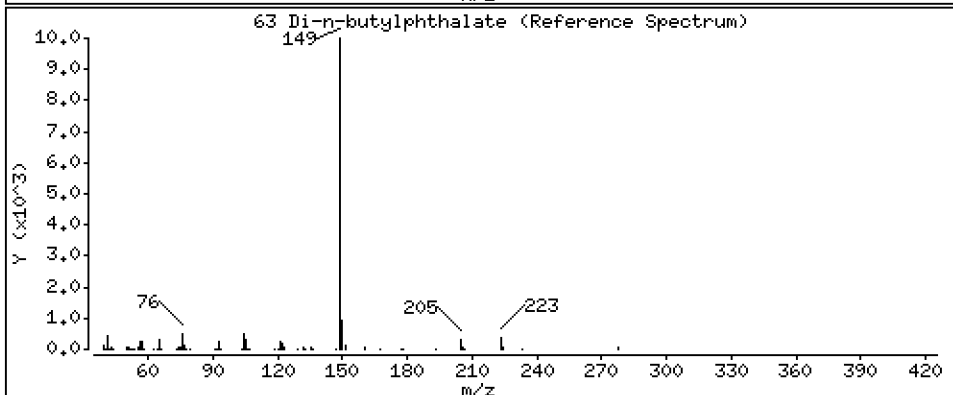
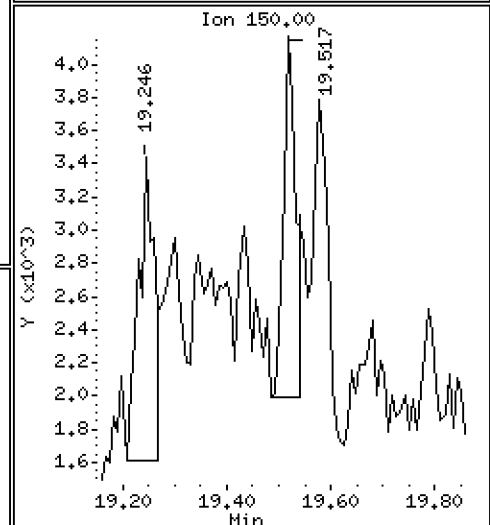
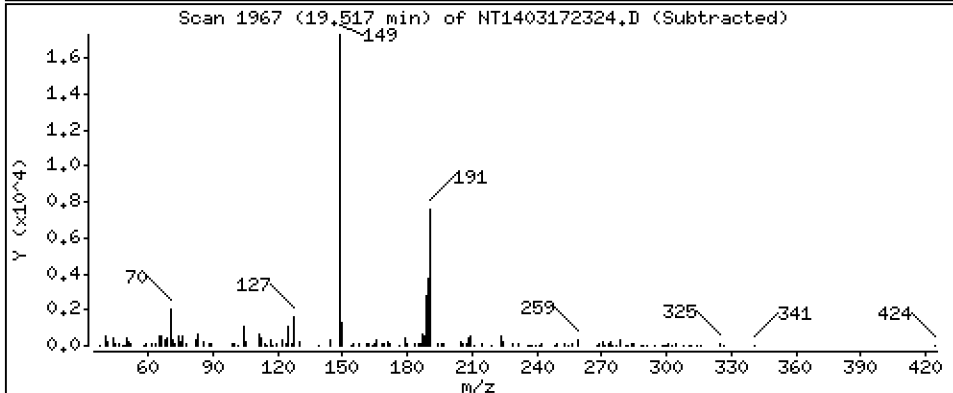
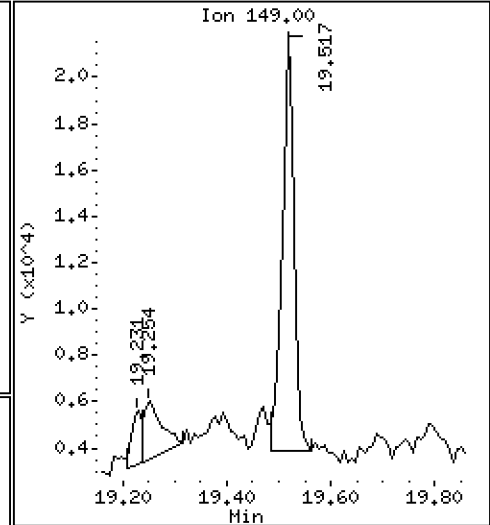
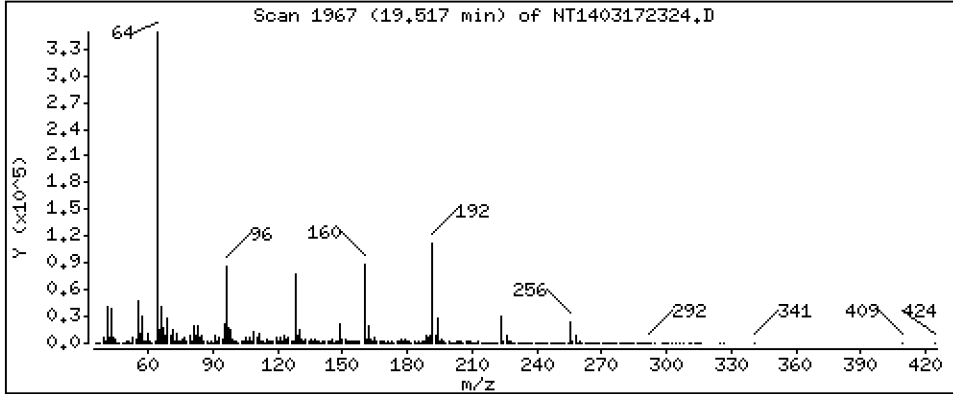
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1432 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

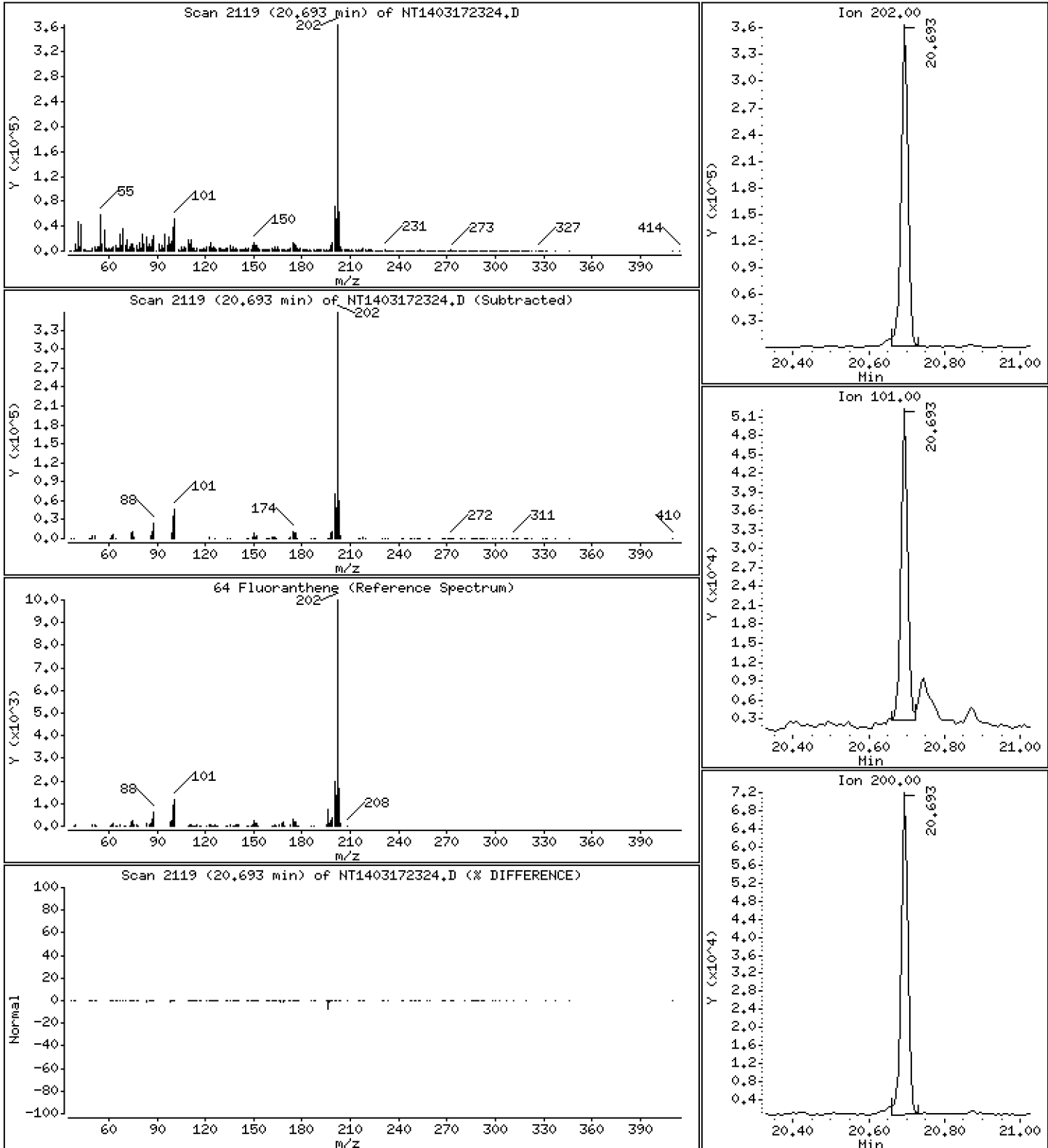
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 5,856 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

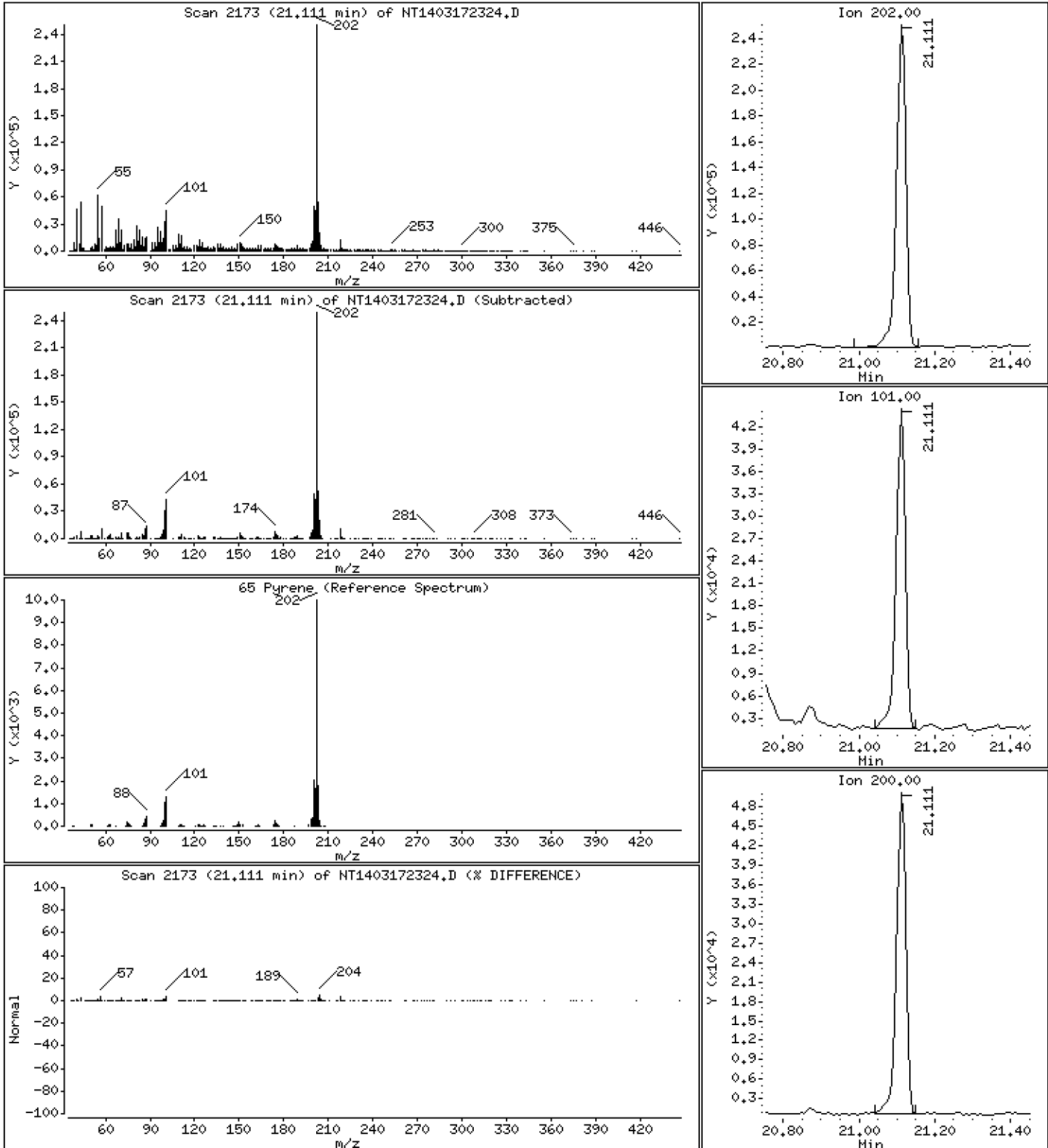
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,995 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

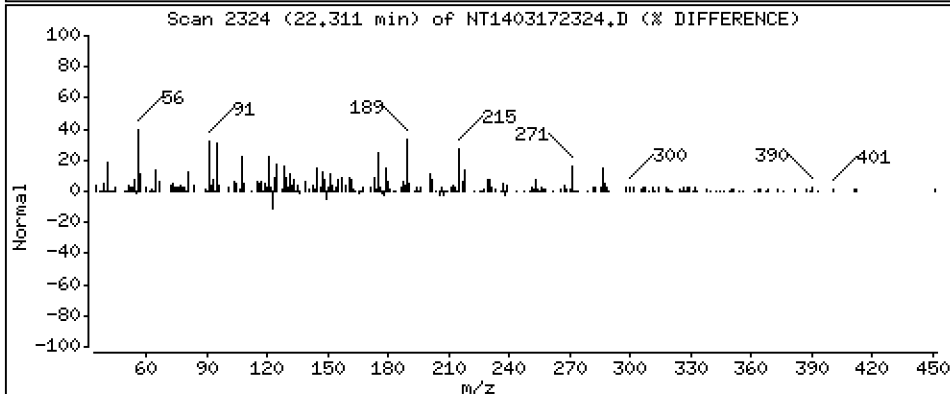
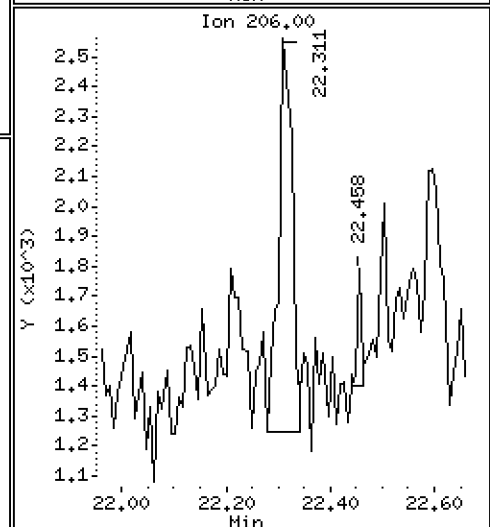
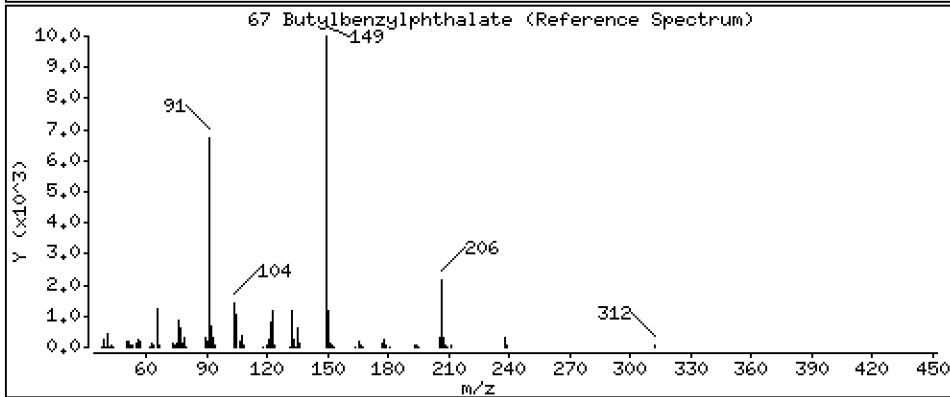
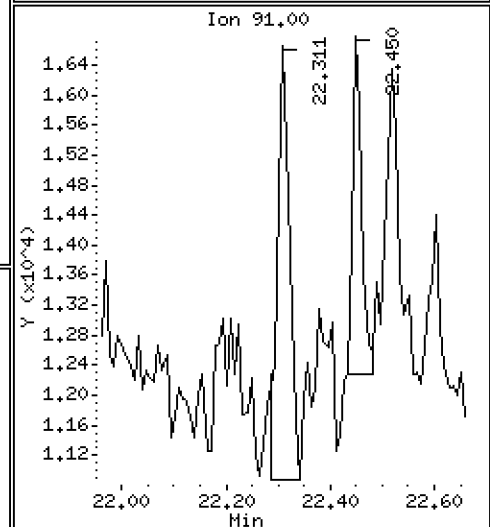
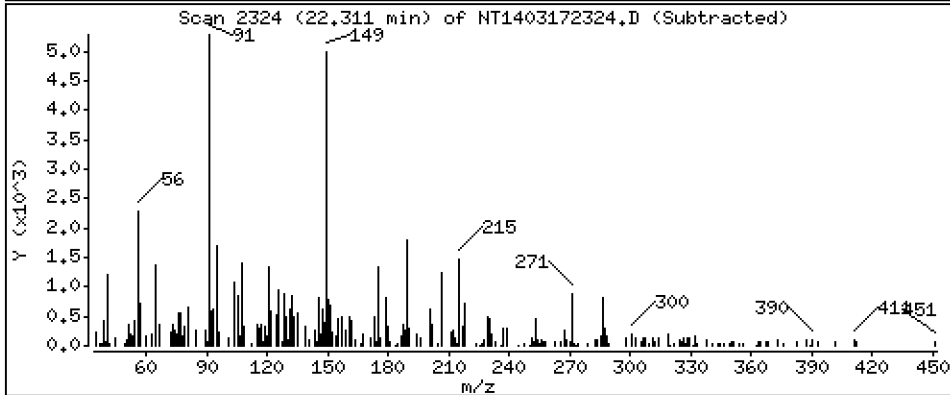
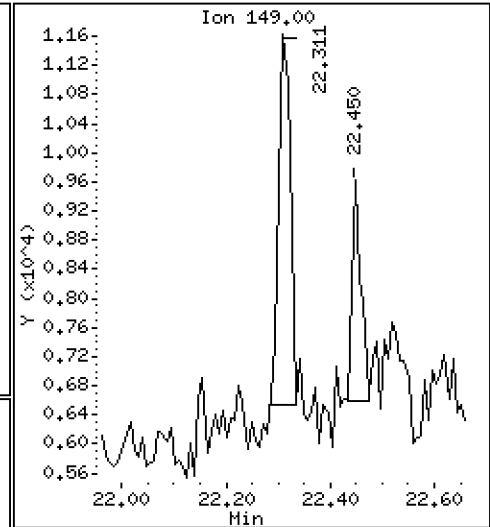
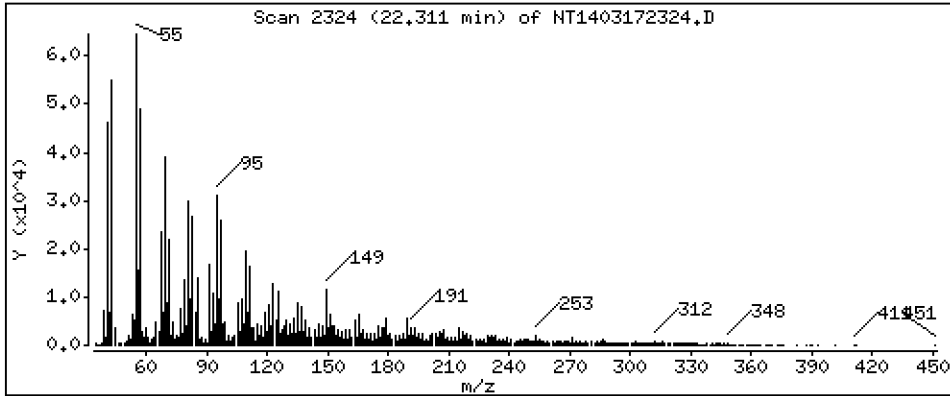
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.2052 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

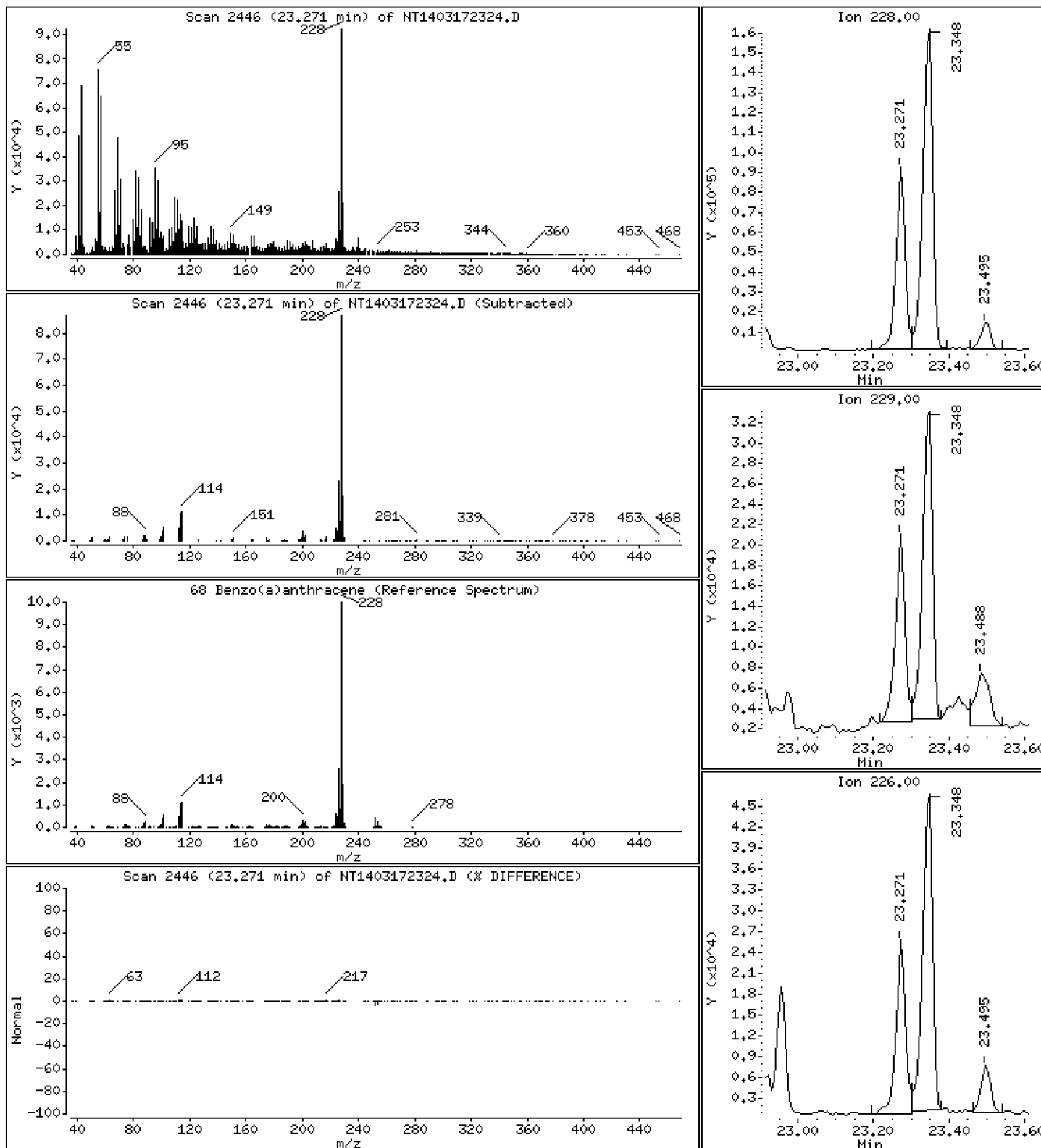
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 2,067 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

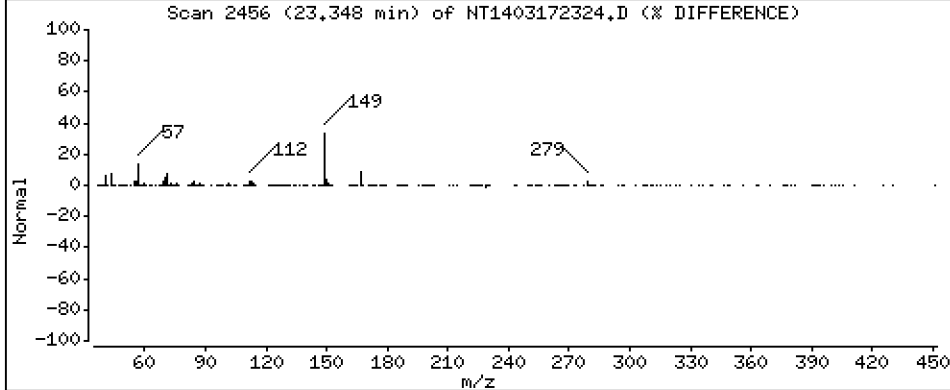
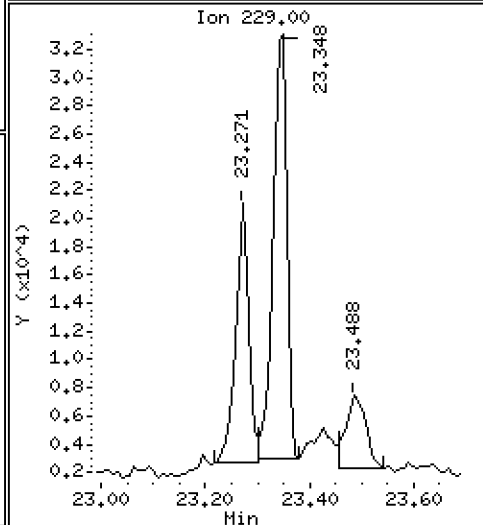
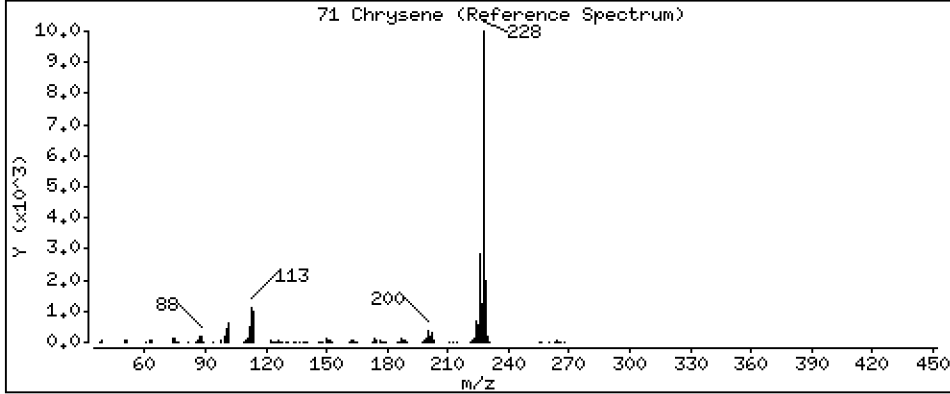
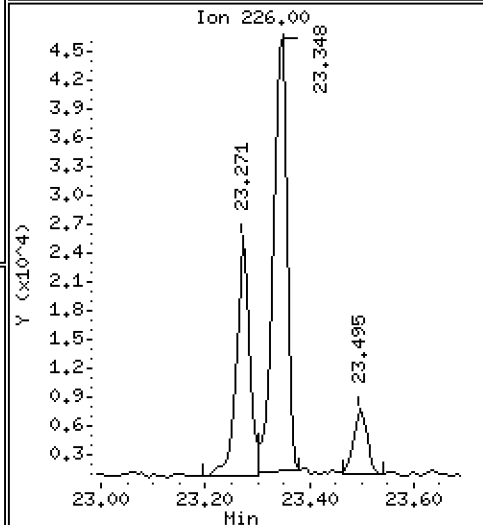
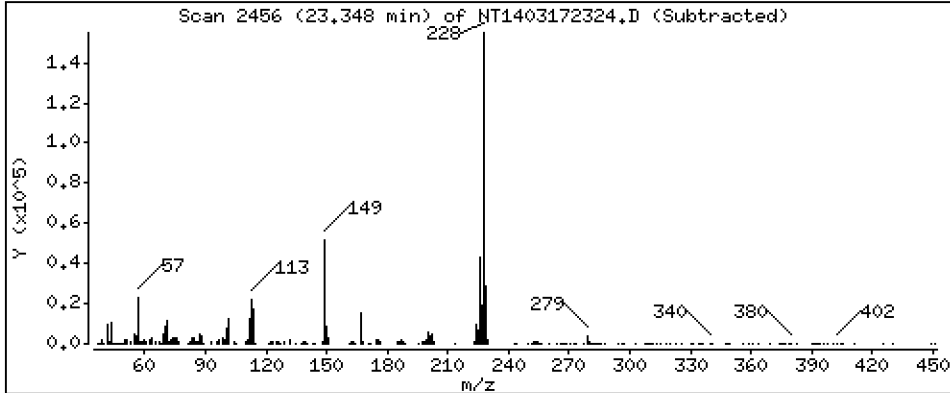
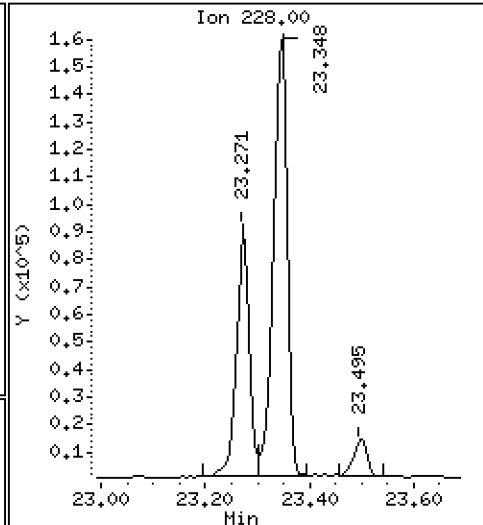
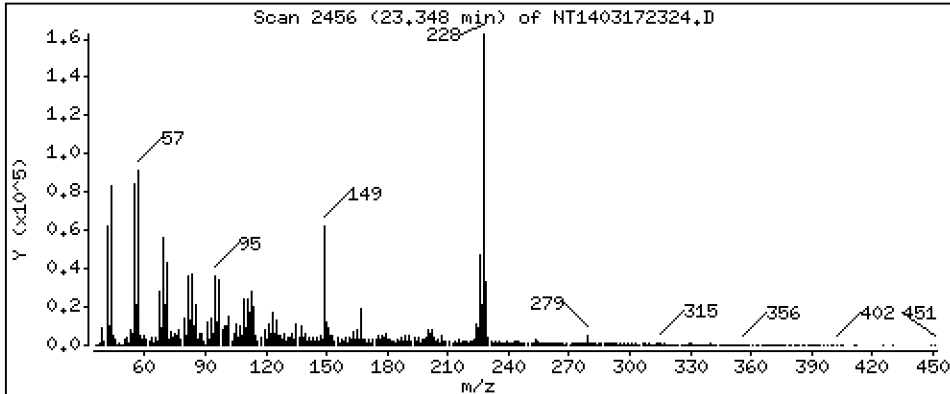
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

71 Chrysene

Concentration: 4.296 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

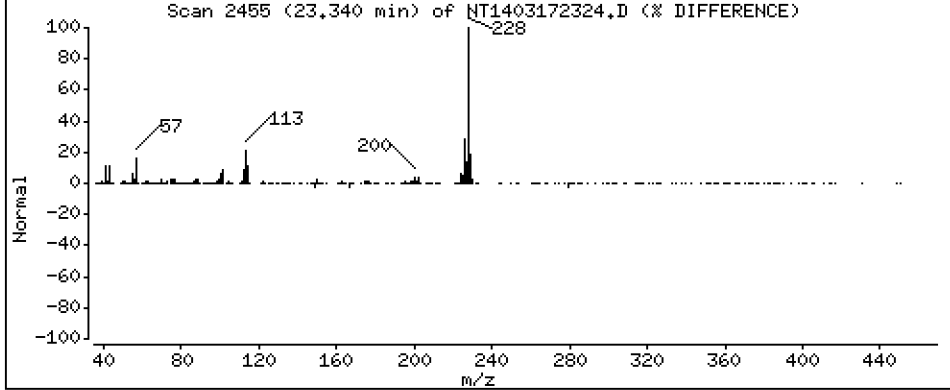
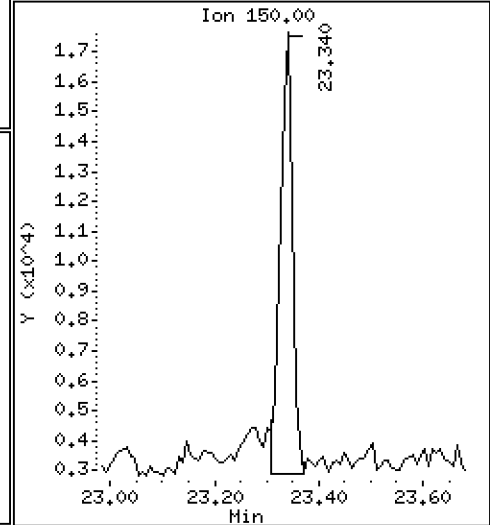
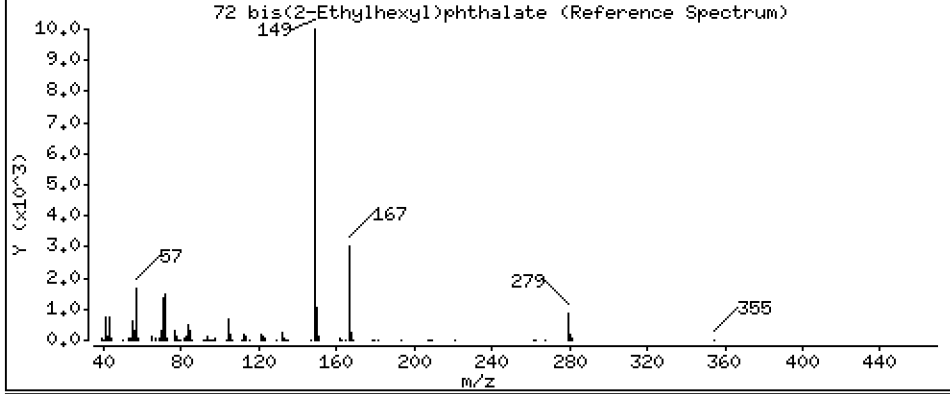
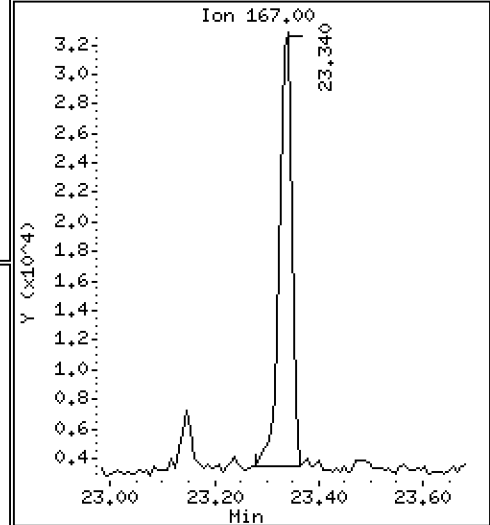
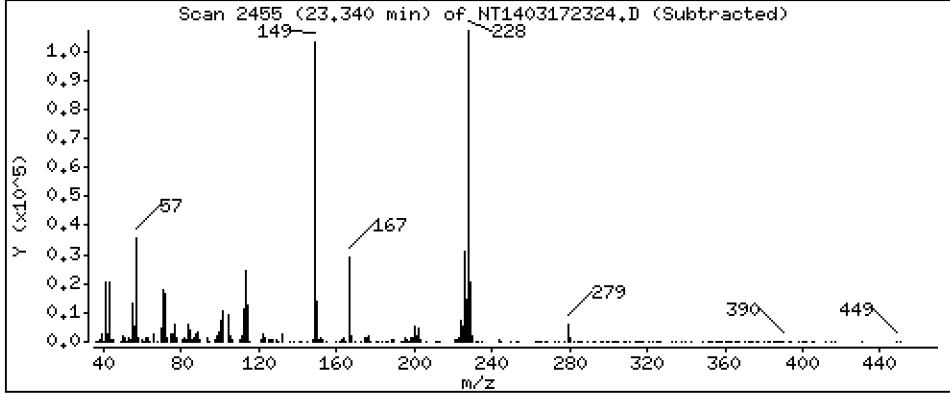
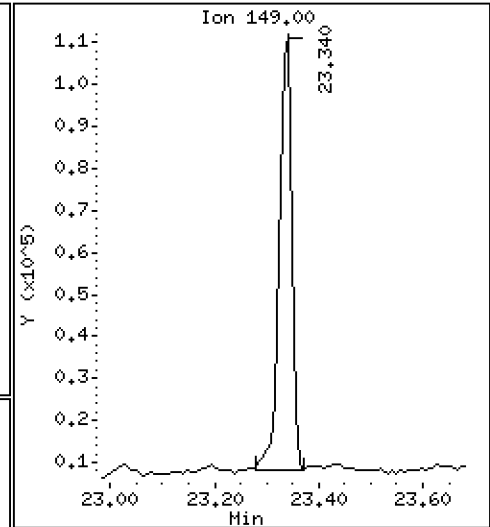
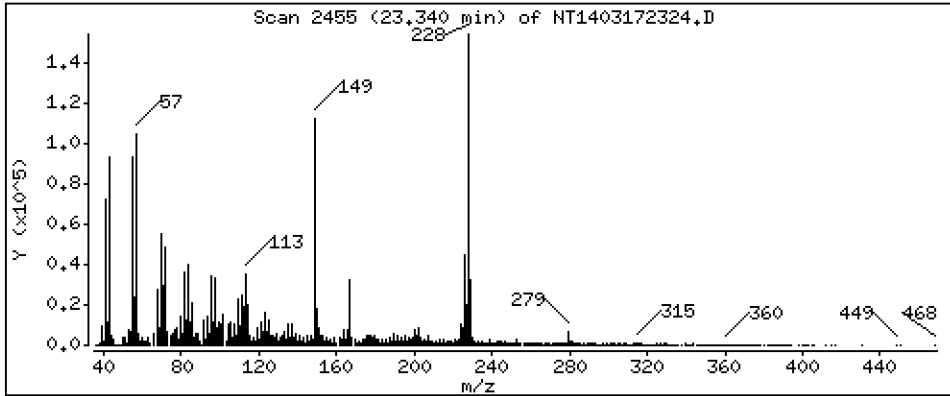
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 3,193 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

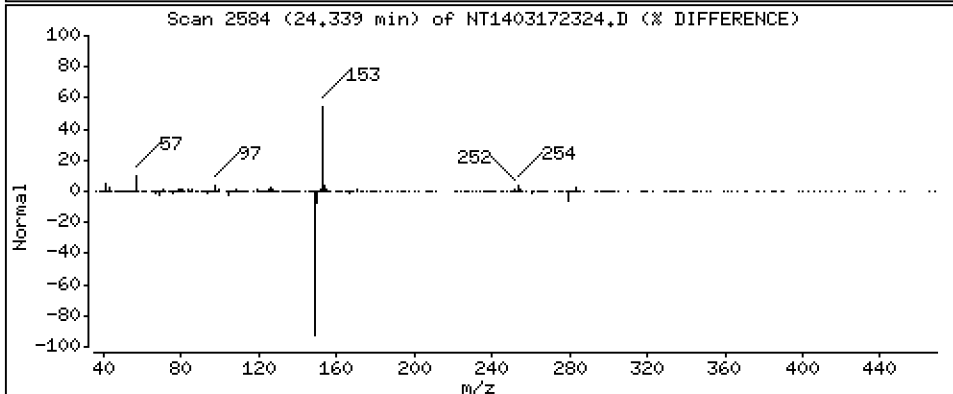
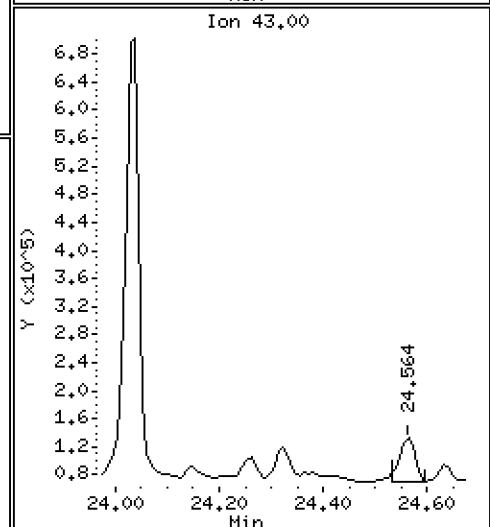
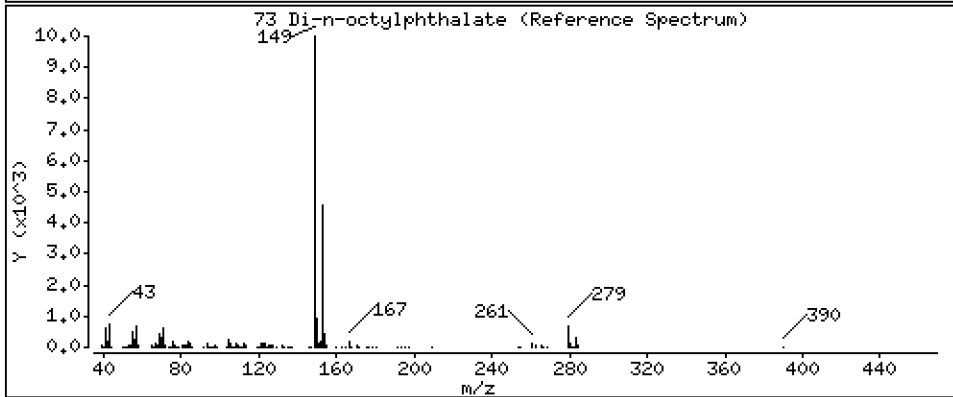
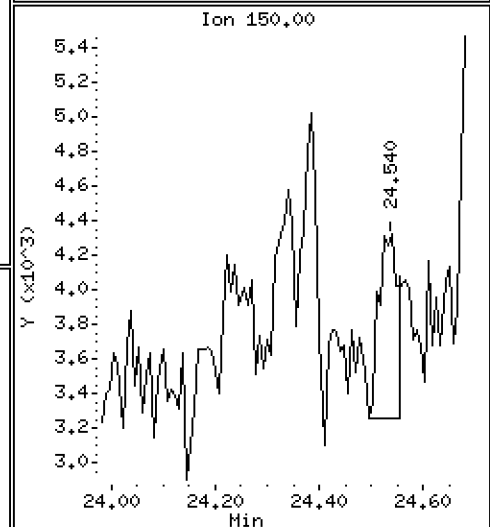
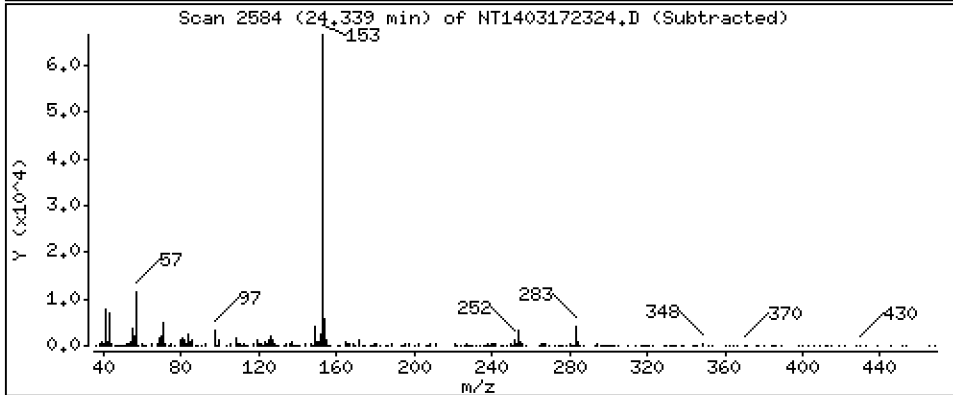
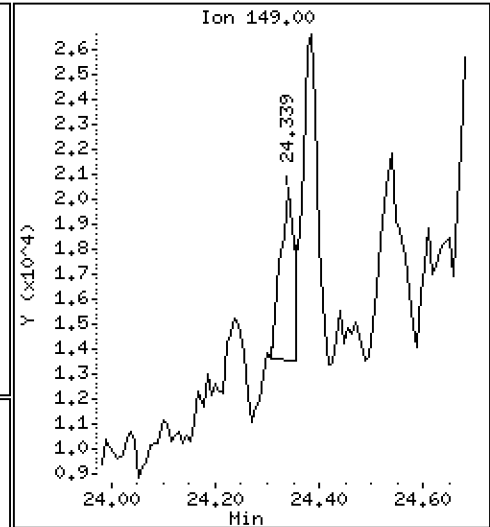
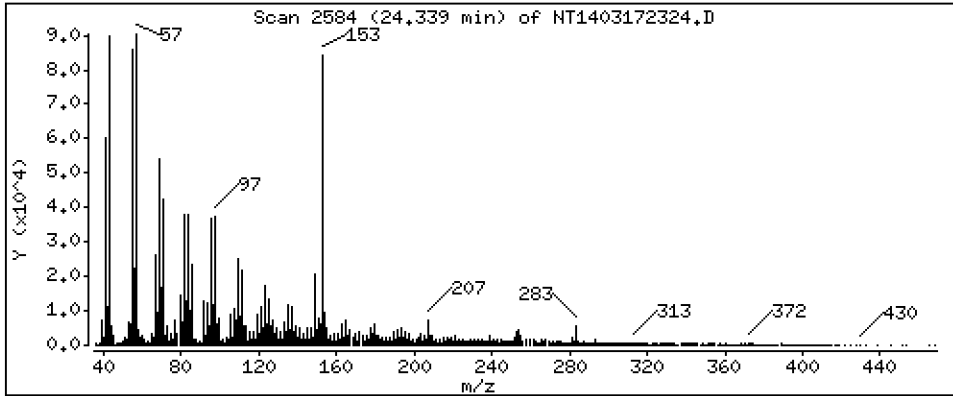
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,1246 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

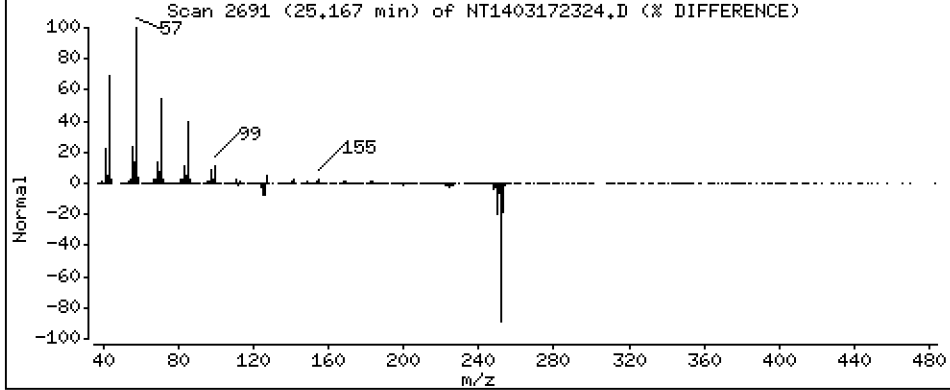
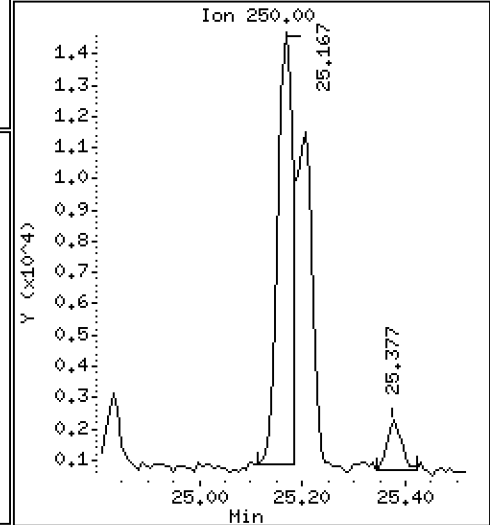
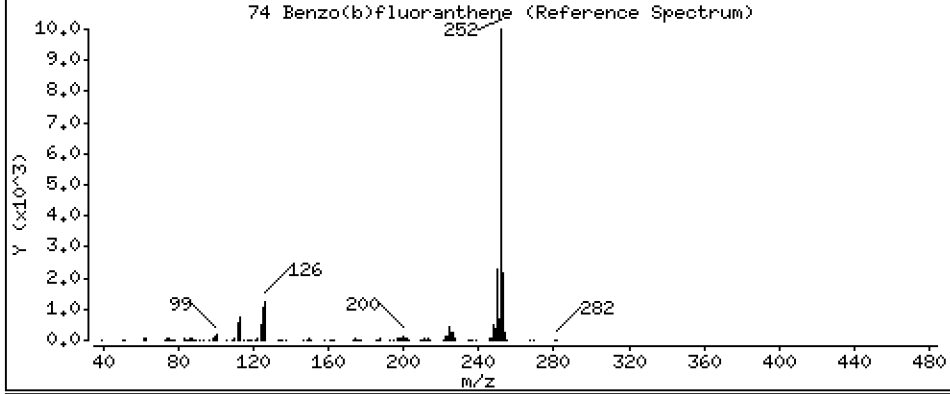
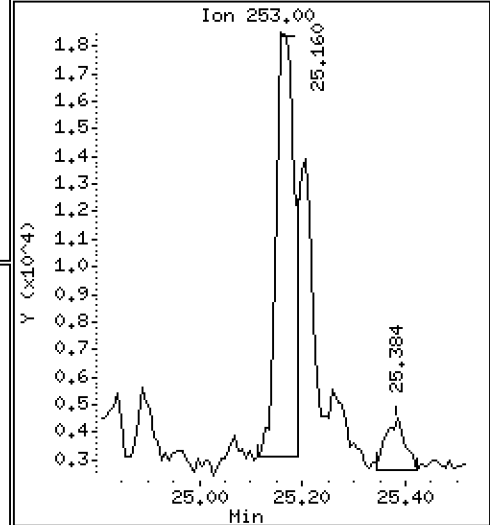
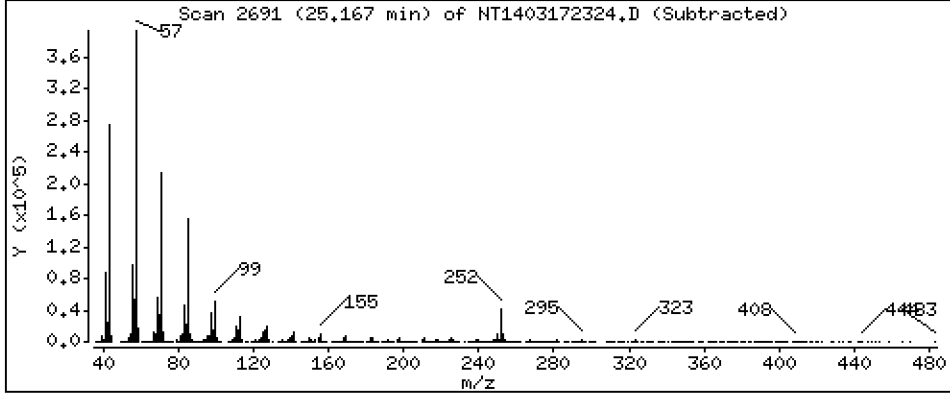
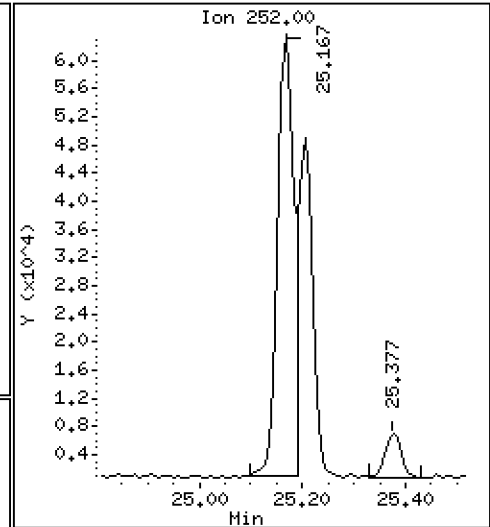
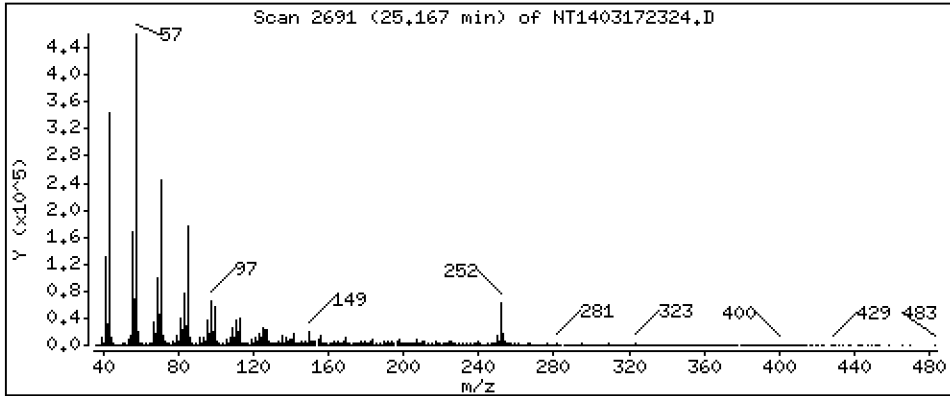
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,792 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

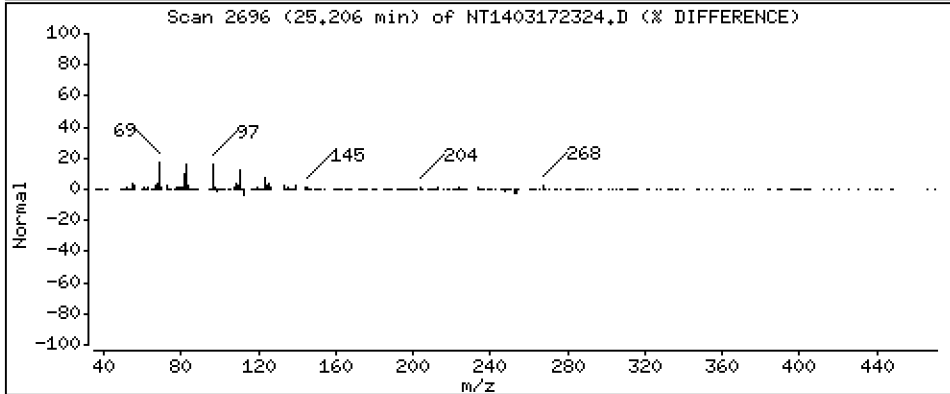
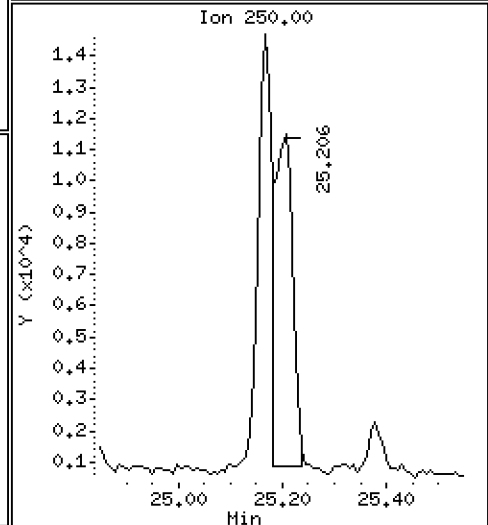
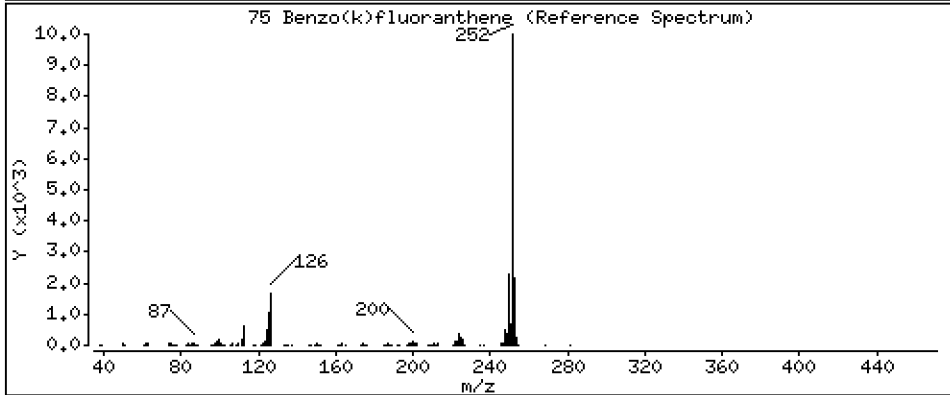
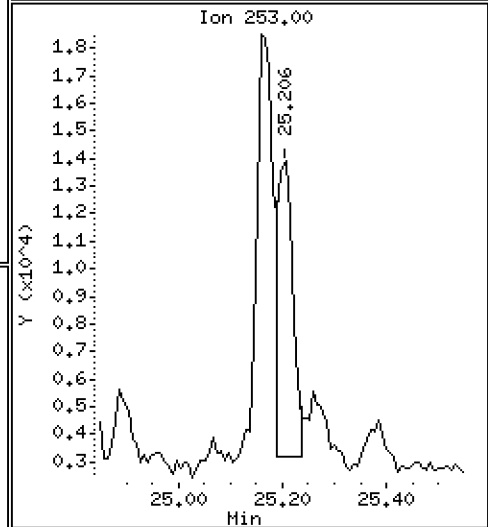
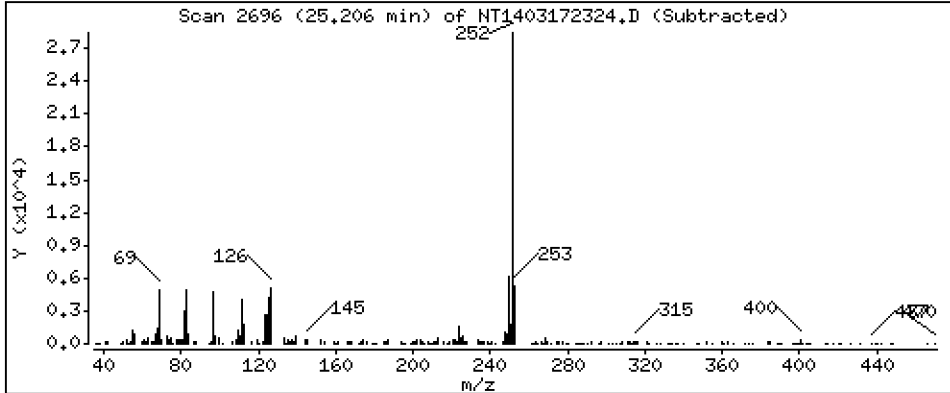
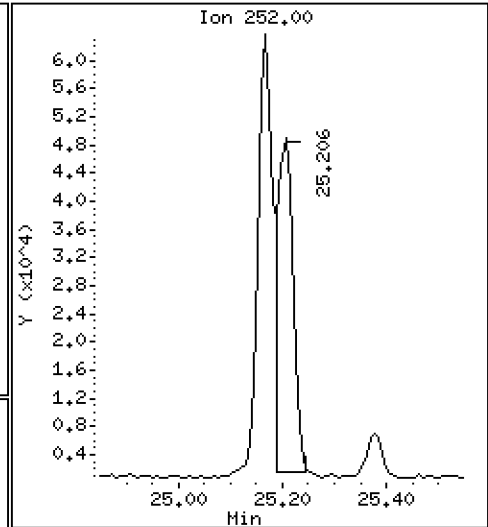
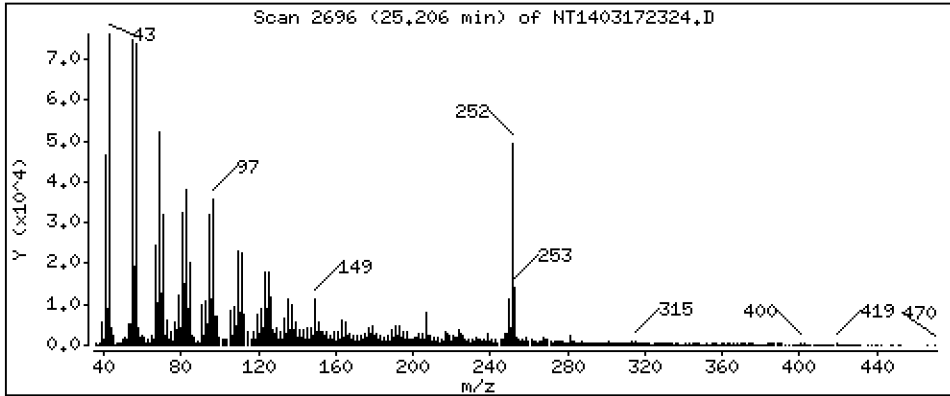
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,939 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

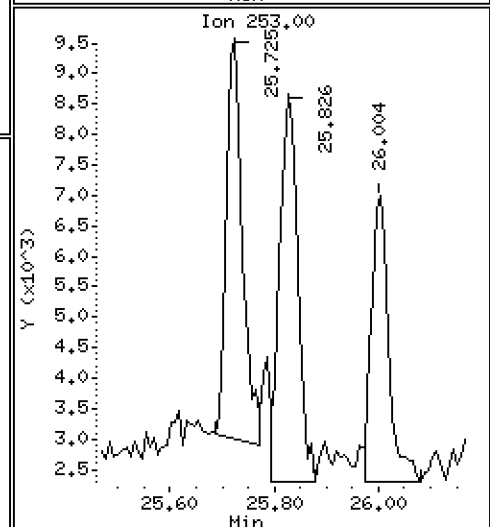
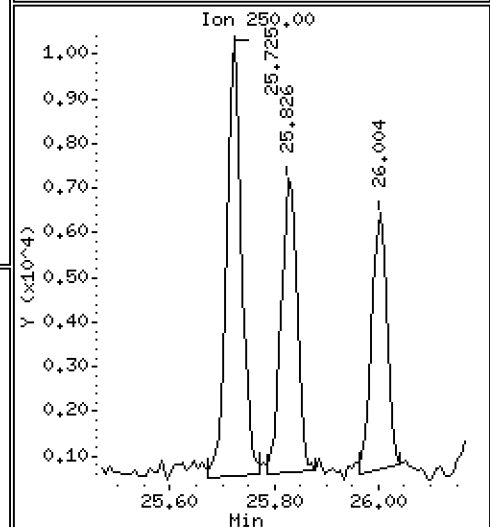
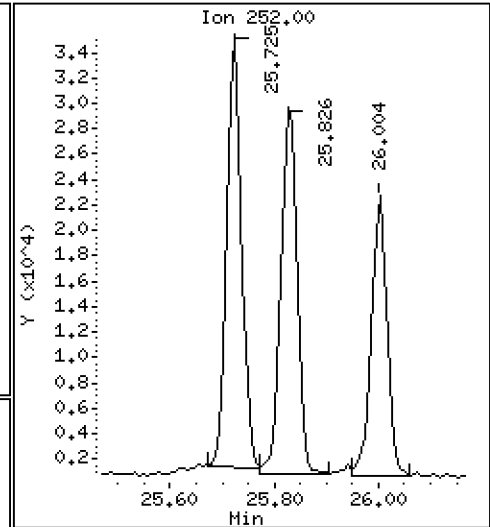
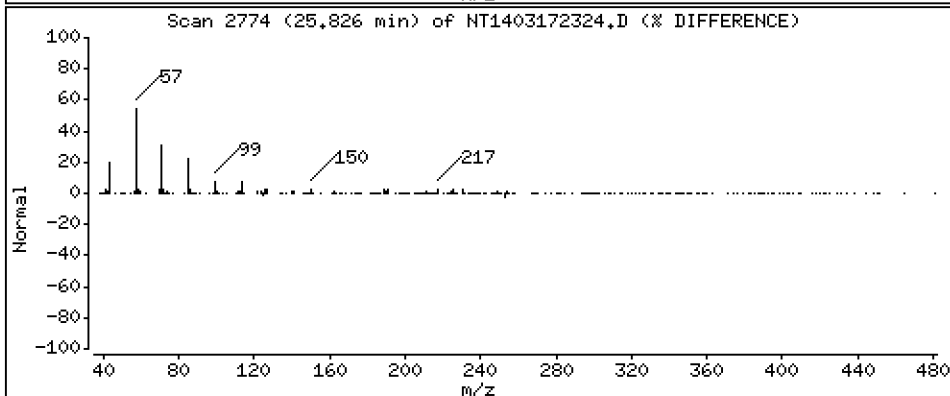
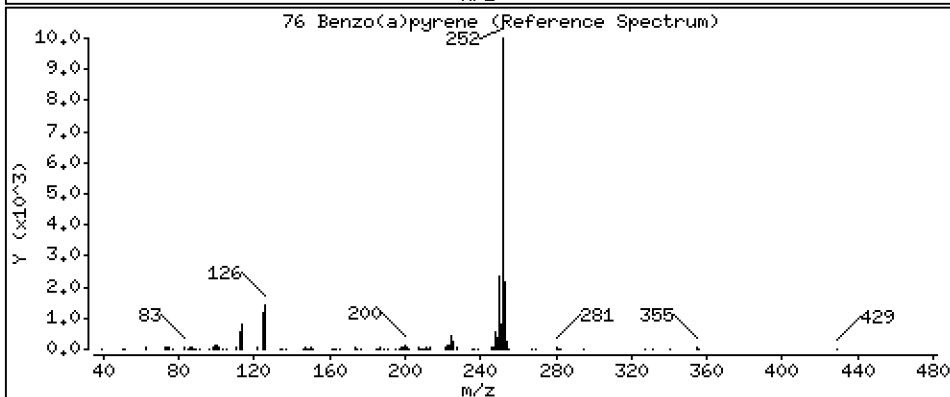
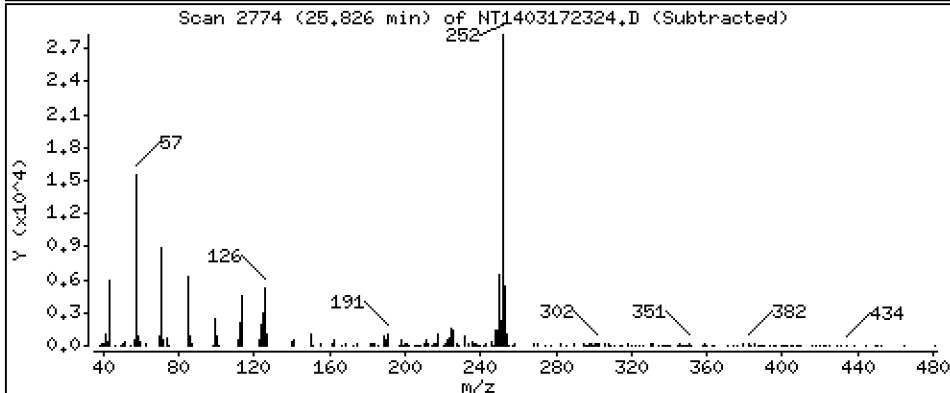
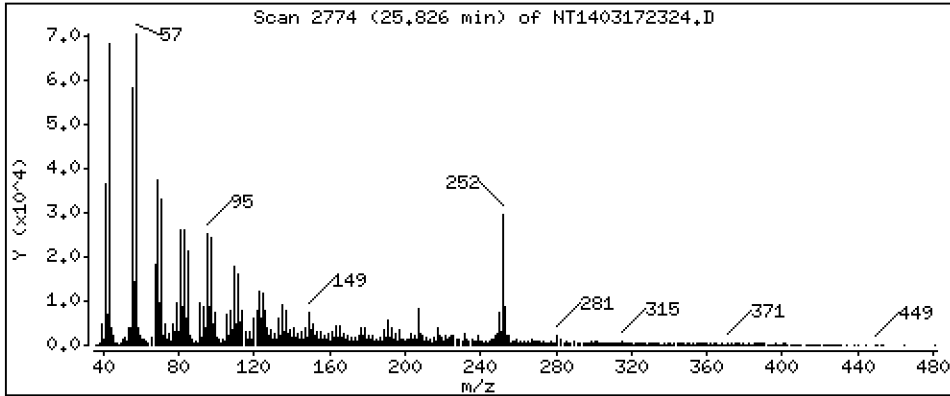
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,462 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

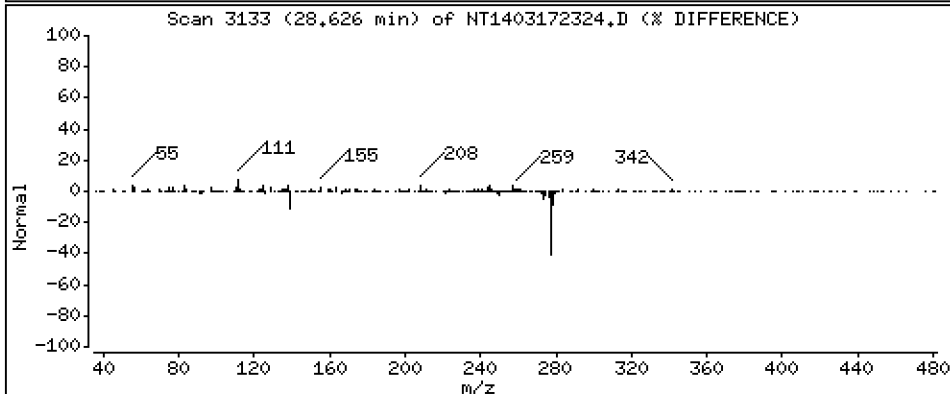
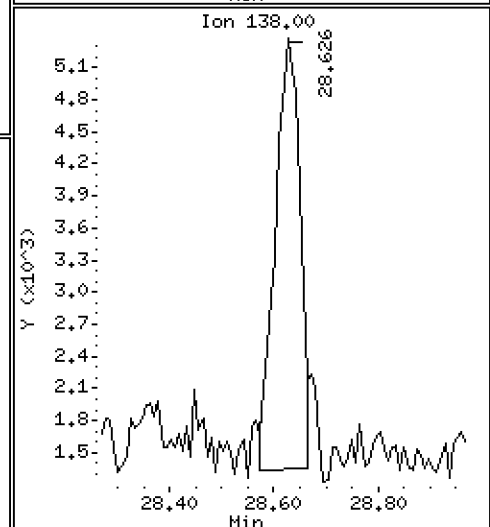
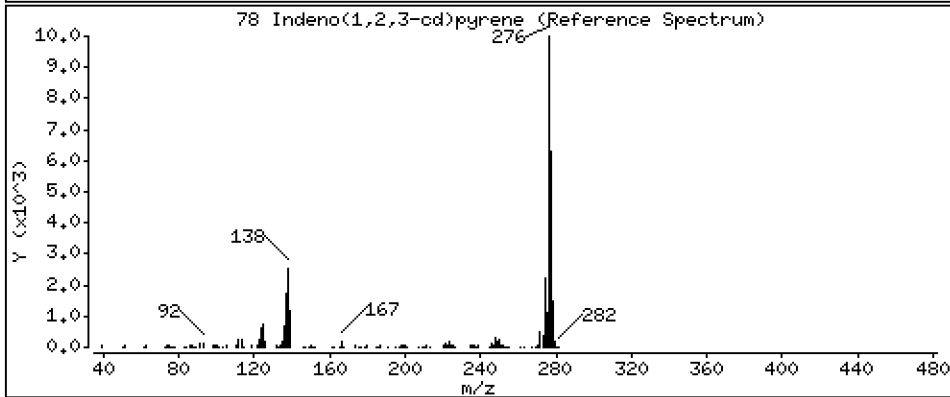
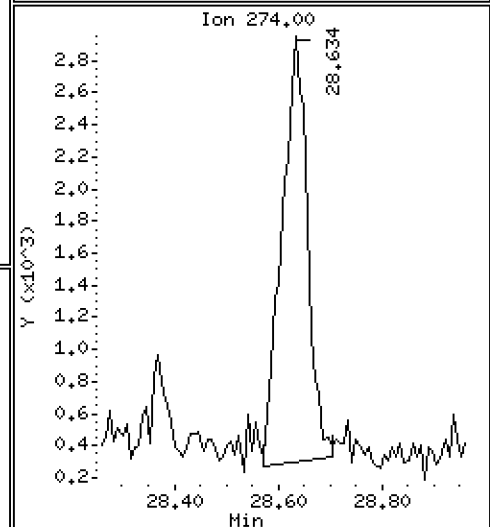
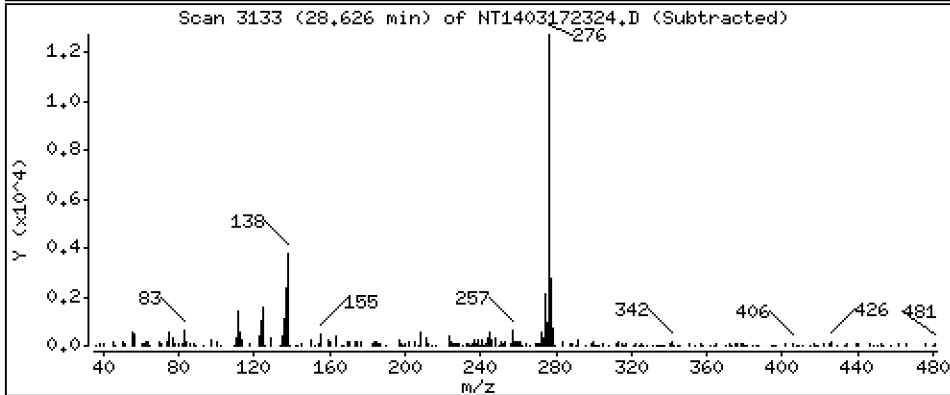
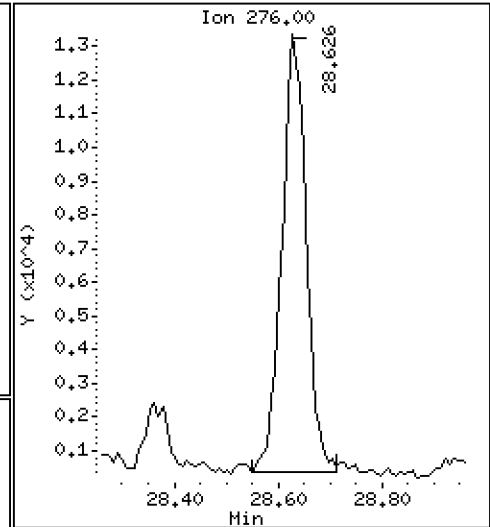
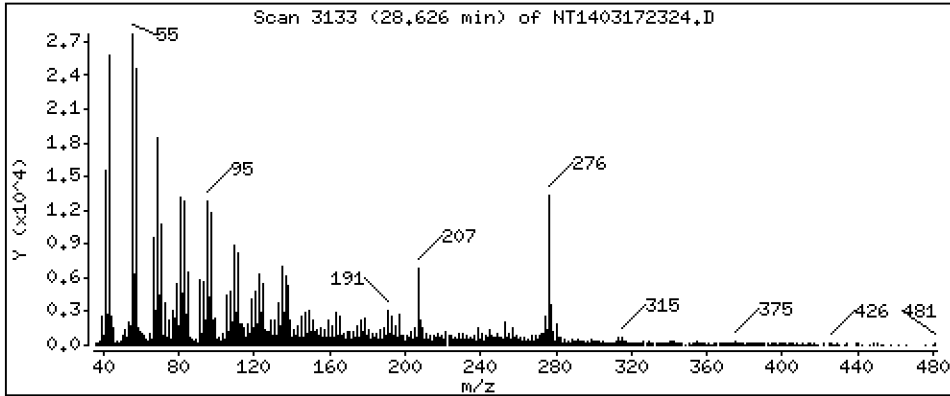
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,9270 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

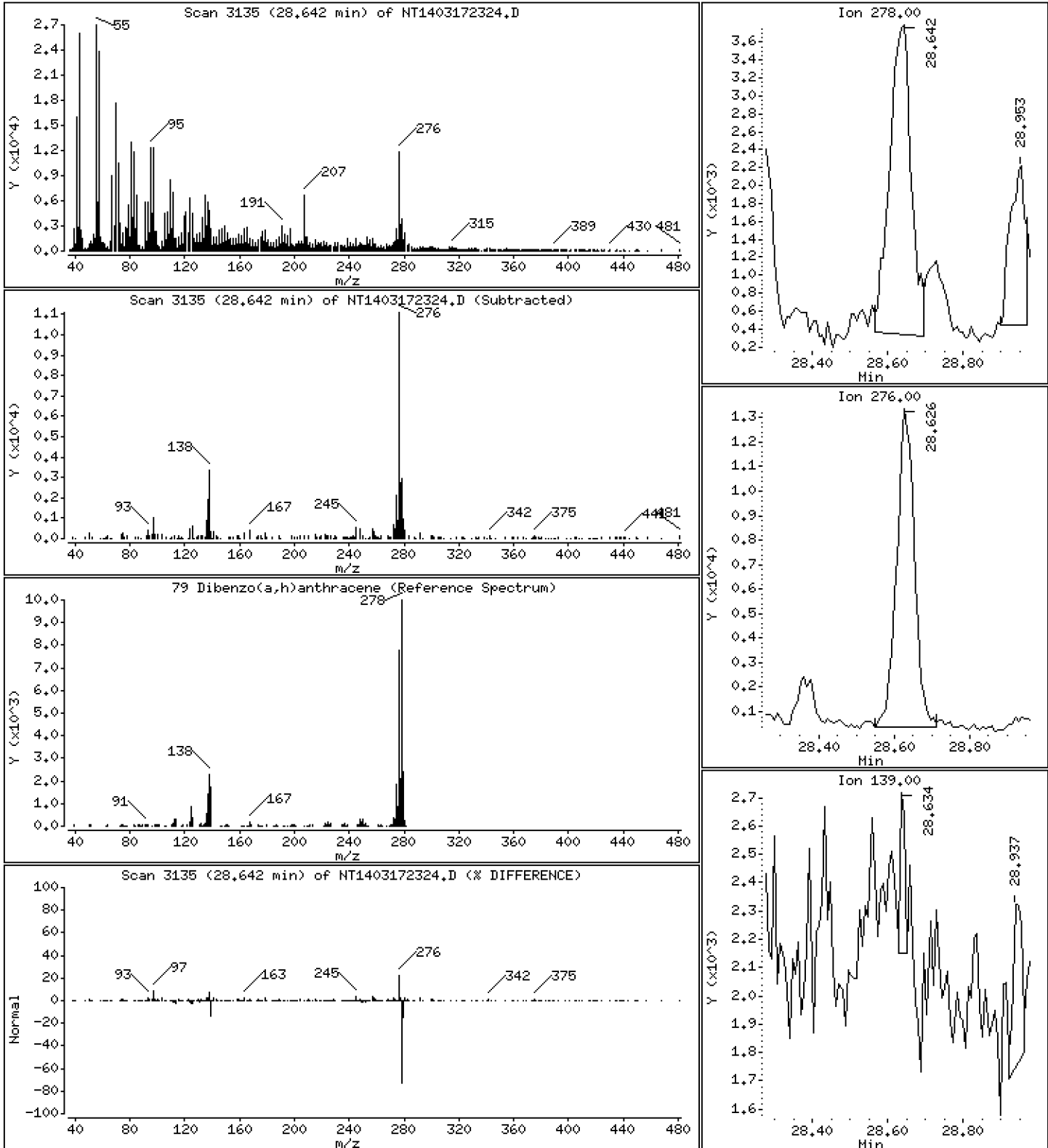
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,3559 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

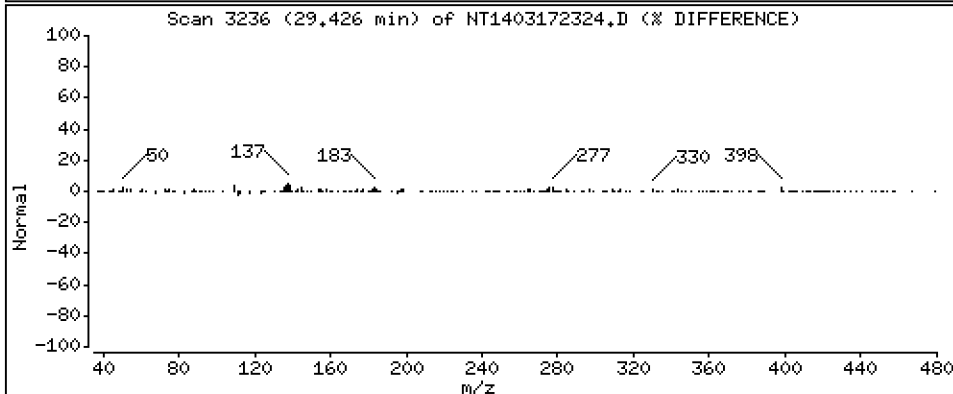
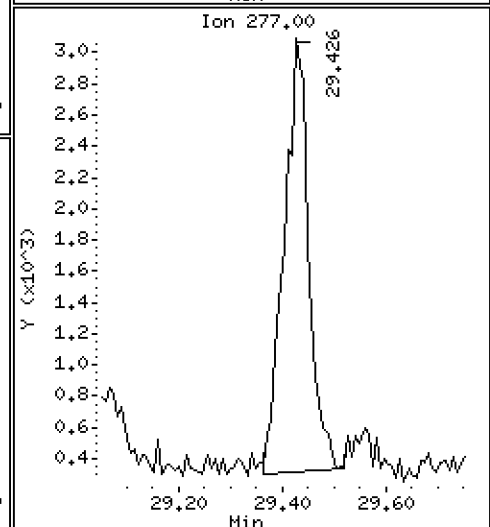
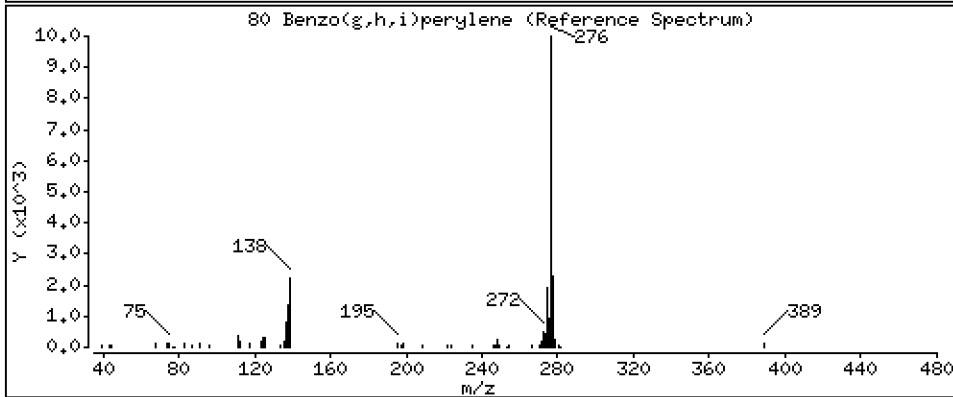
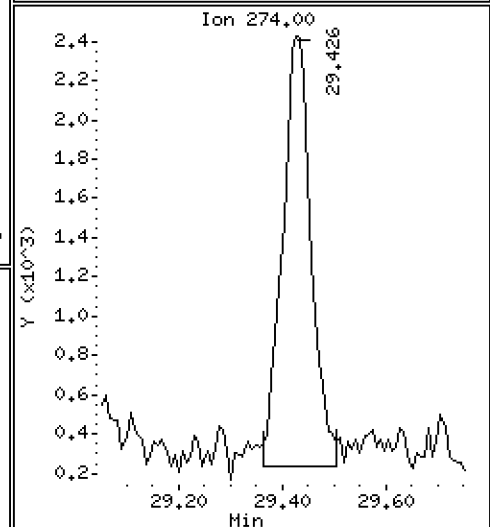
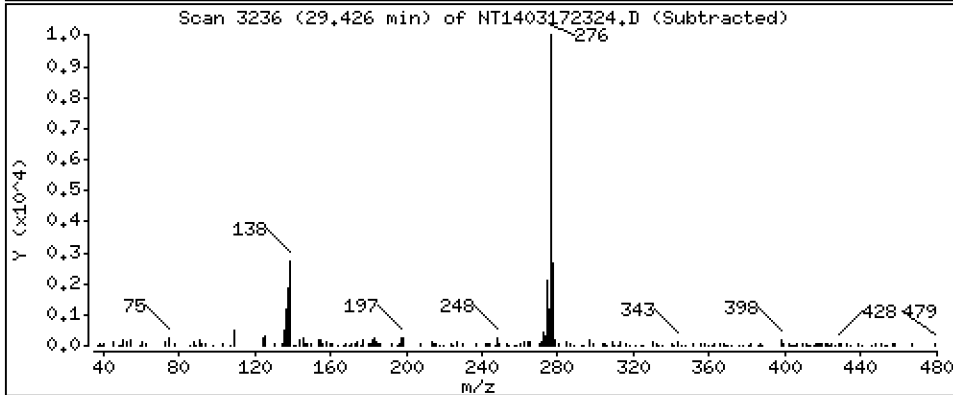
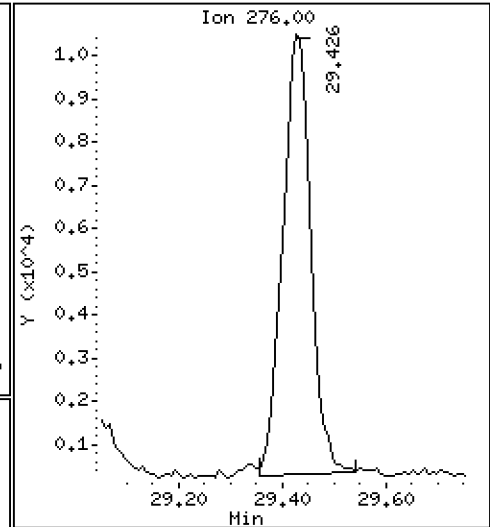
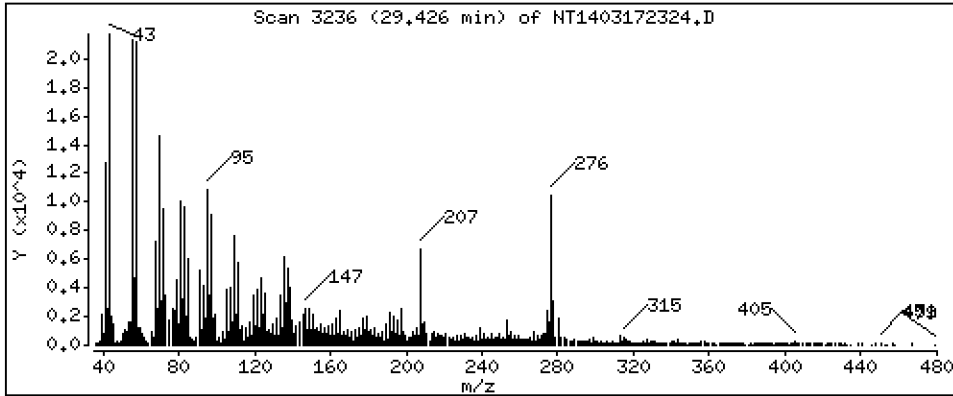
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 1,018 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

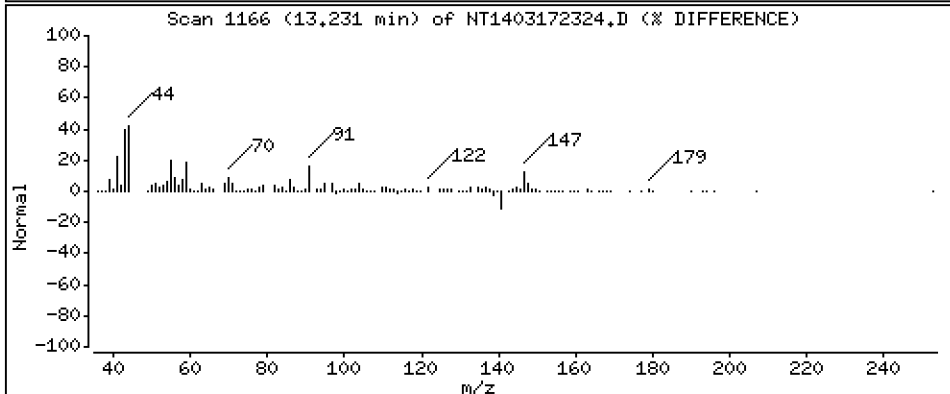
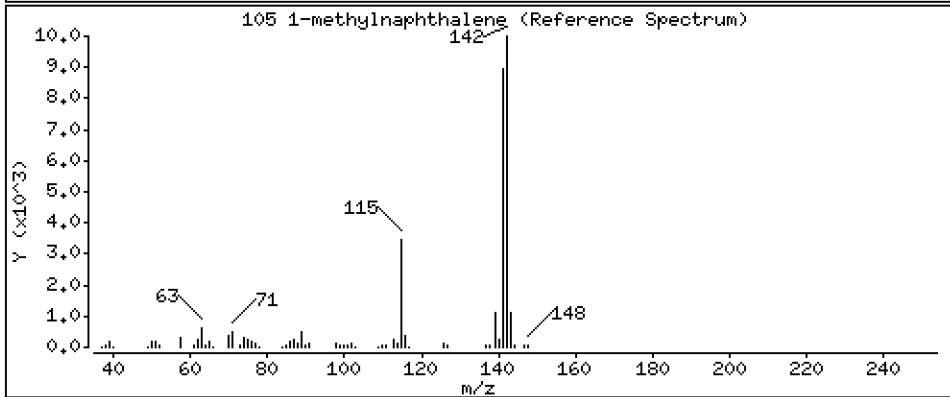
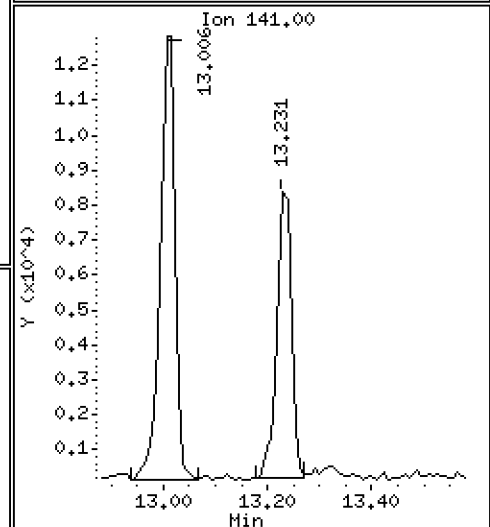
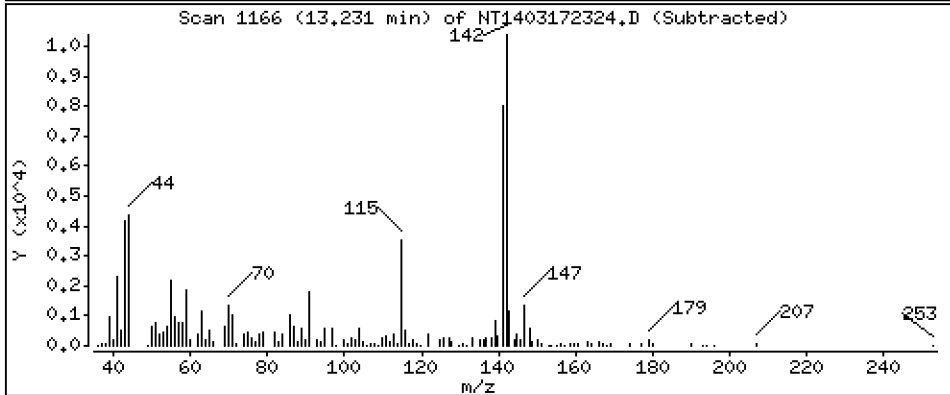
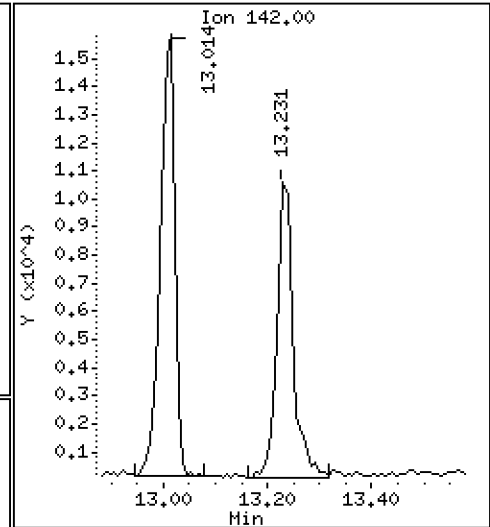
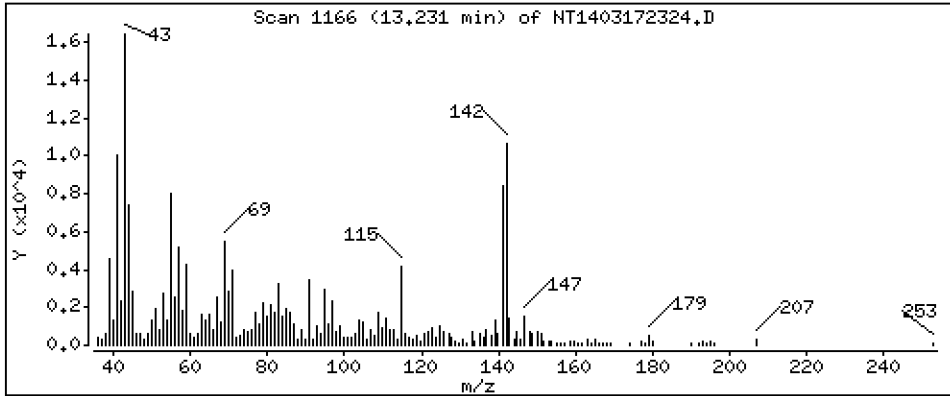
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1632 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

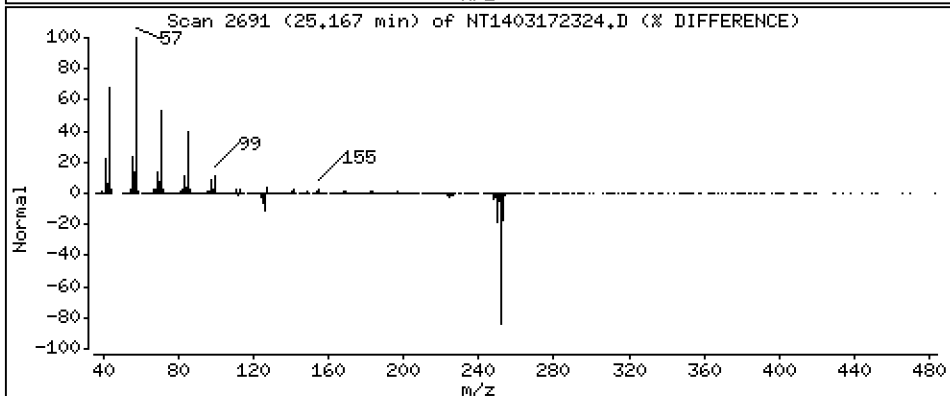
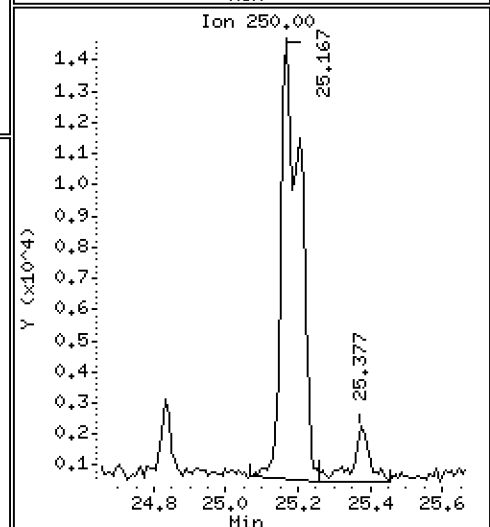
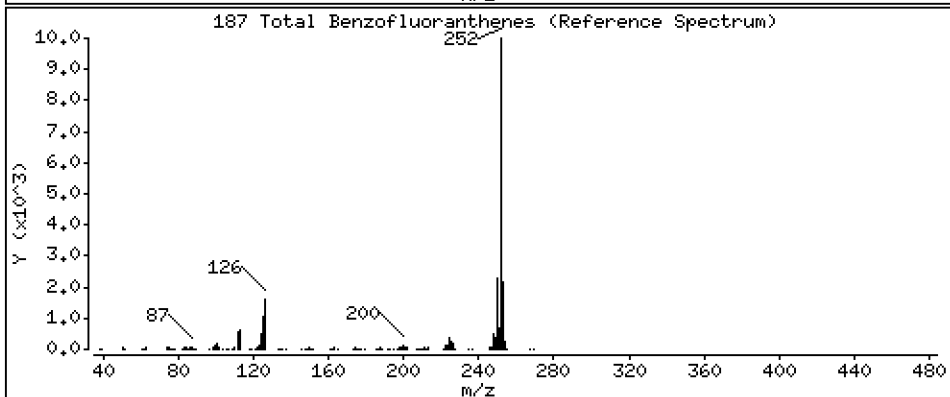
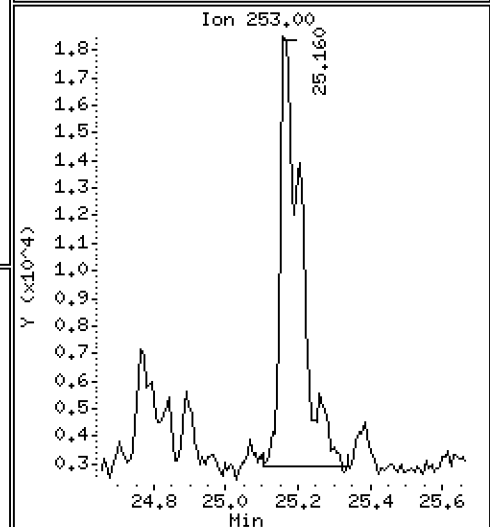
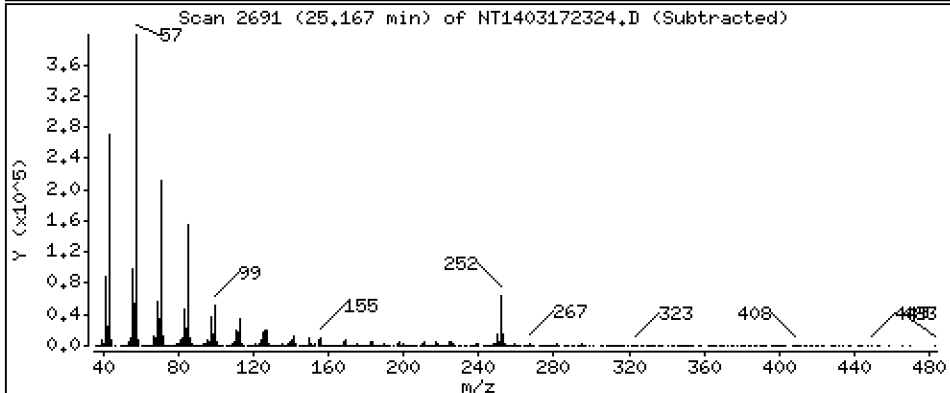
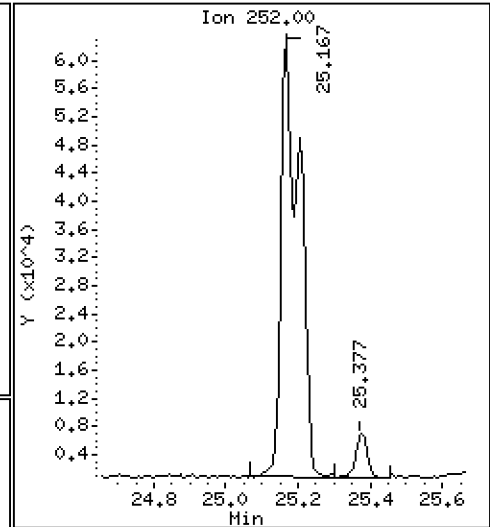
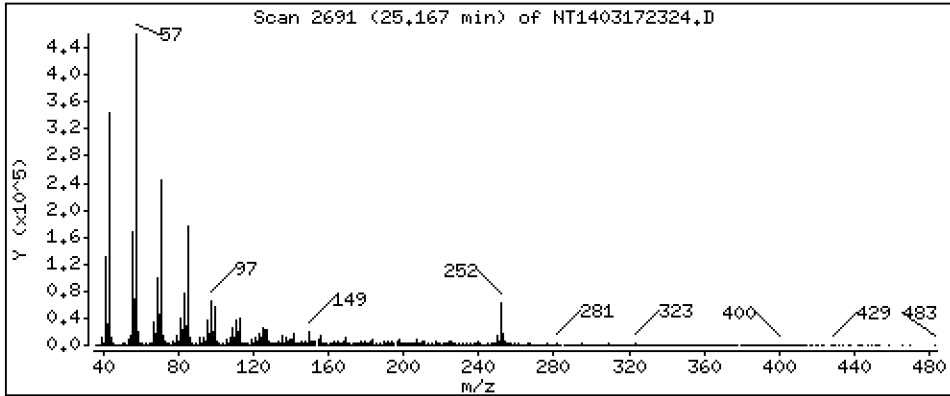
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 4,698 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172324.D
 Lab Smp Id: 23B0229-05
 Inj Date : 18-MAR-2023 04:18 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-05
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.844	6.821	(1.000)	318803	4.51741	4.517
\$ 2 Phenol-d5	99		8.420	8.412	(1.000)	436929	4.70256	4.703
3 Phenol	94		8.443	8.436	(1.000)	20550	0.20811	0.2081
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	383507	5.23555	5.236
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	207758	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	2325	0.03068	0.03068
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	164249	3.35632	3.356
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.341	9.341	(1.031)	46630	1.01436	1.014 (M)
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.846	9.830	(1.087)	5298	0.06410	0.06410 (M)
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	310866	3.68365	3.684
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.025	11.103	(0.953)	79866	1.36240	1.362
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	797455	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	65693	0.30835	0.3084
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.014	13.006	(1.125)	29218	0.19665	0.1967
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.907)	559666	4.03712	4.037
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.693	14.701	(0.966)	15061	0.11799	0.1180
40 Acenaphthylene	152		14.887	14.879	(0.979)	22167	0.11107	0.1111
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.204	15.196	(1.000)	382798	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.266	15.266	(1.004)	23297	0.19994	0.1999
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.590	15.590	(1.025)	44612	0.26818	0.2682
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.155	16.163	(1.063)	417686	3.16490	3.165
49 Fluorene	166		16.309	16.309	(1.073)	72167	0.45766	0.4577
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	76532	5.26598	5.266
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.247	18.240	(1.000)	628064	4.00000	
60 Phenanthrene	178		18.294	18.294	(1.003)	373096	2.07916	2.079
61 Anthracene	178		18.387	18.387	(1.008)	184898	1.06949	1.069
62 Carbazole	167		18.719	18.712	(1.026)	29607	0.19248	0.1925
63 Di-n-butylphthalate	149		19.516	19.509	(1.070)	27922	0.14321	0.1432
64 Fluoranthene	202		20.692	20.677	(0.888)	470447	5.85586	5.856
65 Pyrene	202		21.110	21.103	(0.906)	411507	4.99479	4.995
\$ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	350465	6.28371	6.284
67 Butylbenzylphthalate	149		22.310	22.310	(0.957)	7408	0.20524	0.2052
68 Benzo(a)anthracene	228		23.270	23.263	(0.999)	150504	2.06707	2.067
* 69 Chrysene-d12	240		23.301	23.294	(1.000)	197467	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.348	23.340	(1.002)	283117	4.29641	4.296
72 bis(2-Ethylhexyl)phthalate	149		23.340	23.332	(0.960)	165757	3.19290	3.193
* 134 Di-n-octylphthalate-d4	153		24.323	24.316	(1.000)	394361	4.00000	
73 Di-n-octylphthalate	149		24.339	24.331	(1.001)	12627	0.12455	0.1246 (M)
74 Benzo(b)fluoranthene	252		25.167	25.159	(0.970)	138588	2.79220	2.792
75 Benzo(k)fluoranthene	252		25.206	25.198	(0.971)	95425	1.93945	1.939 (M)
76 Benzo(a)pyrene	252		25.825	25.818	(0.995)	62041	1.46172	1.462
* 77 Perylene-d12	264		25.949	25.934	(1.000)	140459	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.626	28.610	(1.103)	42824	0.92701	0.9270
79 Dibenzo(a,h)anthracene	278		28.641	28.626	(1.104)	13858	0.35594	0.3559
80 Benzo(g,h,i)perylene	276		29.426	29.403	(1.134)	38761	1.01811	1.018
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.230	13.230	(1.144)	21973	0.16324	0.1632
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ug/mL)	FINAL (ug/mL)	
187 Total Benzofluoranthenes	252		25.167	25.159	(0.970)	221472	4.69830	4.698	
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172324.D Calibration Time: 23:31
 Lab Smp Id: 23B0229-05
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	207758	-10.07
27 Naphthalene-d8	843789	421895	1687578	797455	-5.49
42 Acenaphthene-d10	432455	216228	864910	382798	-11.48
59 Phenanthrene-d10	793780	396890	1587560	628064	-20.88
69 Chrysene-d12	411057	205529	822114	197467	-51.96
134 Di-n-octylphthala	799010	399505	1598020	394361	-50.64
77 Perylene-d12	254782	127391	509564	140459	-44.87

<-
 <-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.05
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172324.D

Lab ID: 23B0229-05
nt14.i, ABN.m, 18-MAR-2023 04:18

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.031	1.000	0.0308	Benzyl alcohol
1.087	1.000	0.0865	4-Methylphenol
0.953	0.960	-0.0067	Benzoic acid

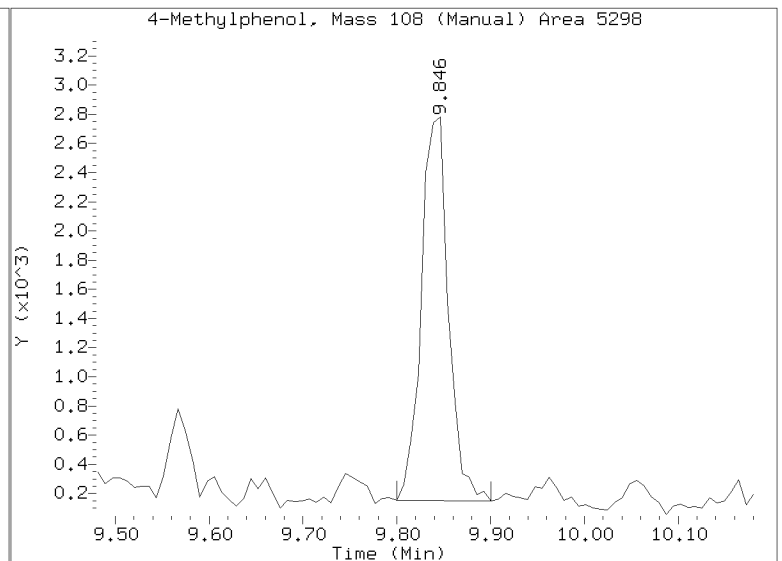
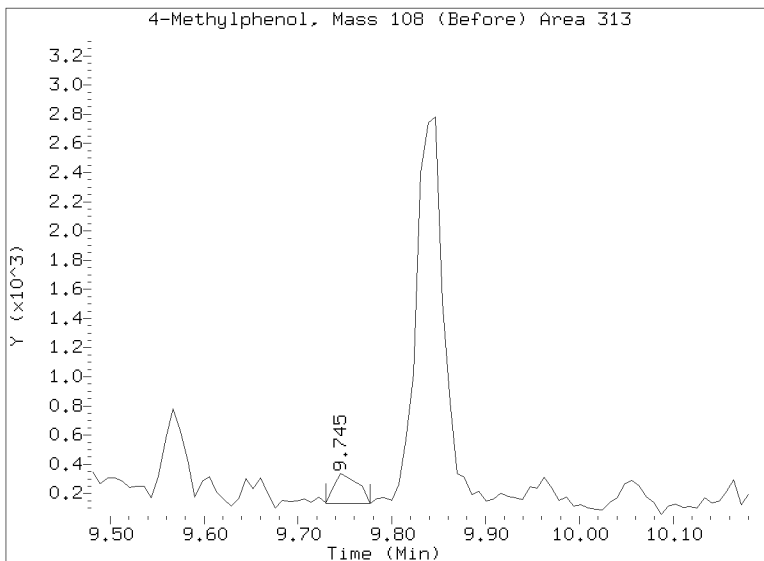
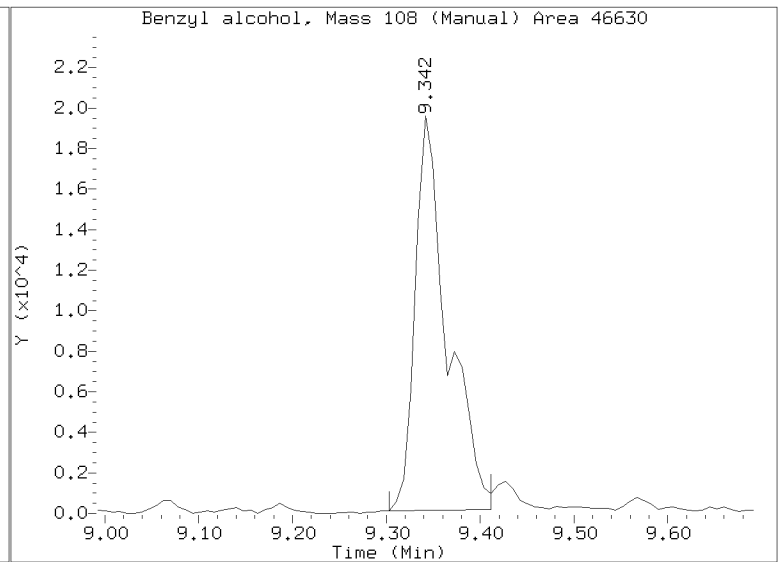
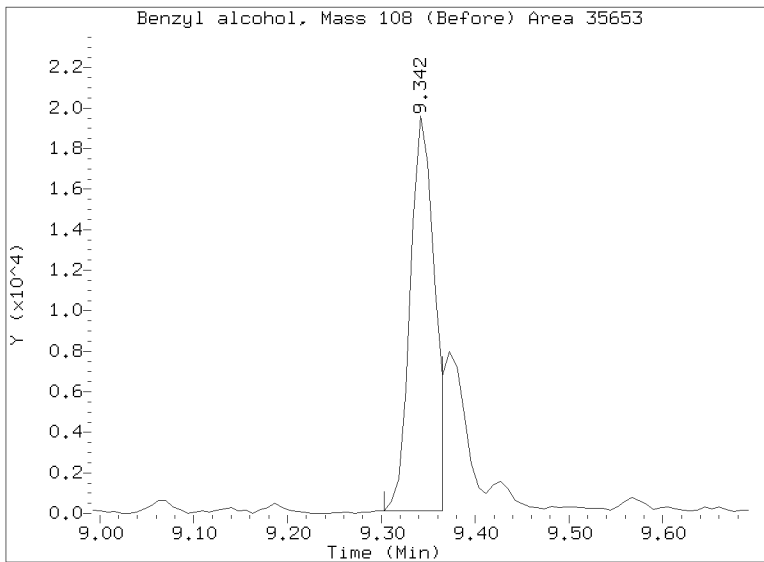
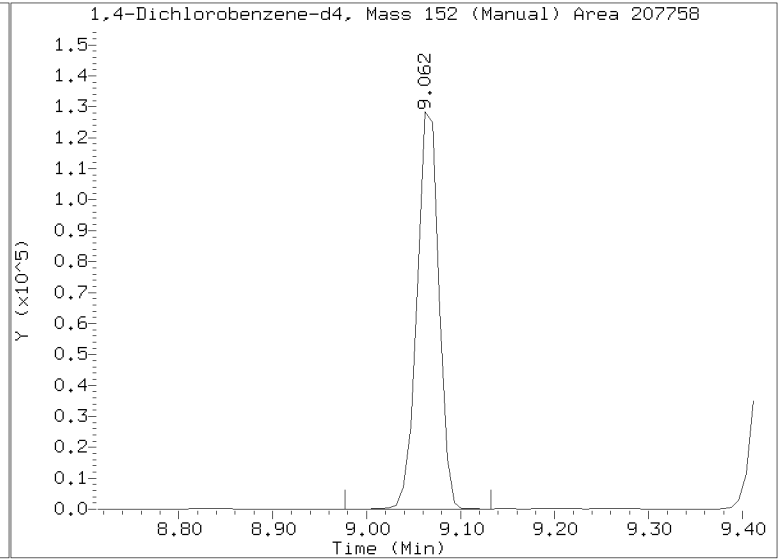
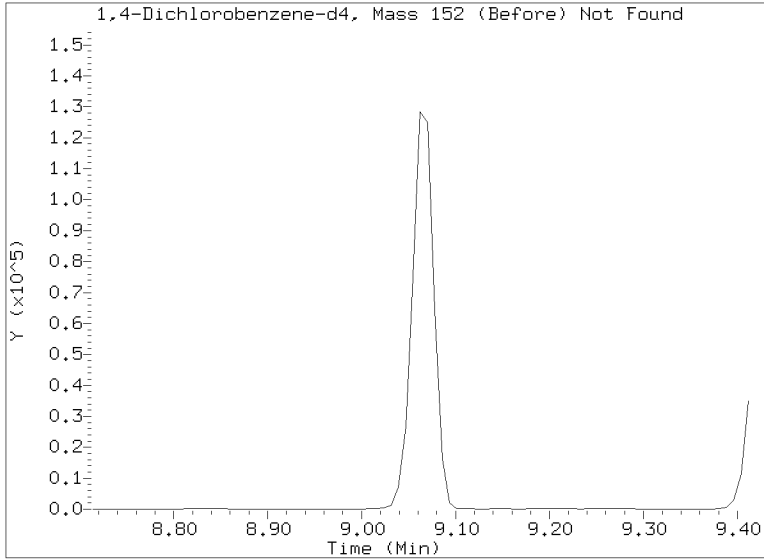
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

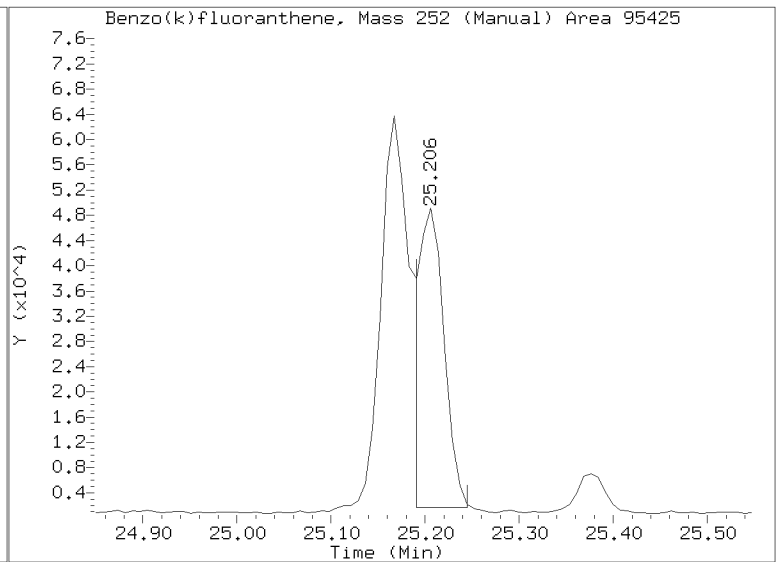
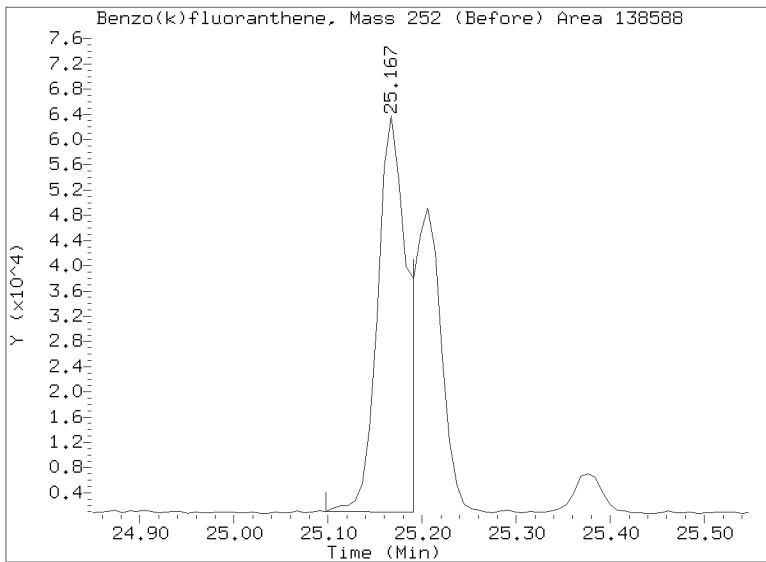
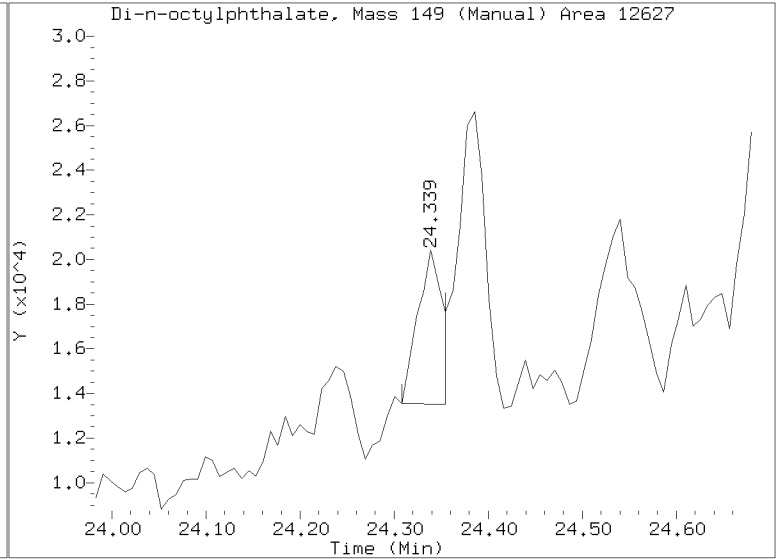
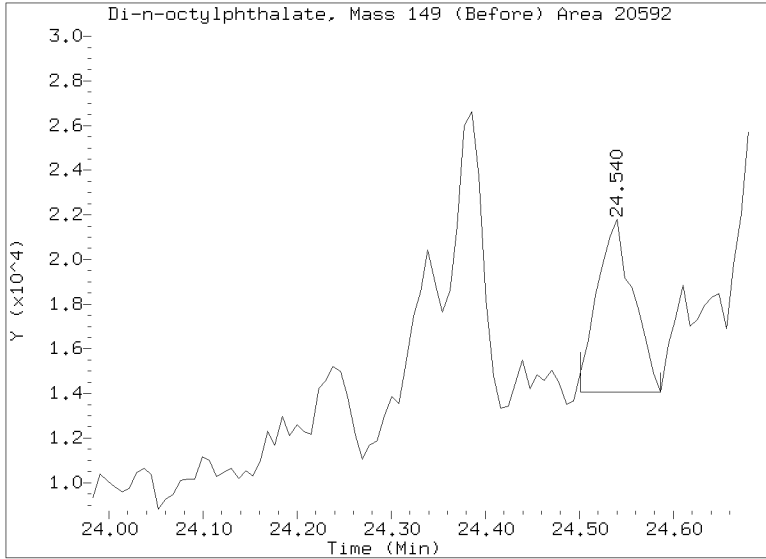
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172324.D
Injection Date: 18-MAR-2023 04:18
Lab ID:23B0229-05 Client ID:
Report Date: 03/22/2023 09:50



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172324.D
Injection Date: 18-MAR-2023 04:18
Lab ID:23B0229-05 Client ID:
Report Date: 03/22/2023 09:50





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-05RE1 A

SDG: 23B0229

Sampled: 02/08/23 12:45

Prepared: 02/17/23 15:00

File ID: NT1403182312.D

% Solids: 44.93

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 23:40

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 22.79 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	4	25.8	J, D	17.1	78.1
106-44-5	4-Methylphenol	4	78.1	U	28.9	78.1
91-20-3	Naphthalene	4	31.1	J, D	16.6	78.1
91-57-6	2-Methylnaphthalene	4	19.9	J, D	17.6	78.1
208-96-8	Acenaphthylene	4	78.1	U	24.4	78.1
131-11-3	Dimethylphthalate	4	78.1	U	17.1	78.1
83-32-9	Acenaphthene	4	20.5	J, D	20.4	78.1
132-64-9	Dibenzofuran	4	78.1	U	55.2	78.1
86-73-7	Fluorene	4	78.1	U	56.9	78.1
85-01-8	Phenanthrene	4	214	D	34.1	78.1
120-12-7	Anthracene	4	114	D	28.1	78.1
206-44-0	Fluoranthene	4	449	D	23.8	78.1
129-00-0	Pyrene	4	387	D	22.2	78.1
85-68-7	Butylbenzylphthalate	4	78.1	U	36.8	78.1
56-55-3	Benzo(a)anthracene	4	208	D	23.3	78.1
218-01-9	Chrysene	4	421	D	23.7	78.1
117-81-7	bis(2-Ethylhexyl)phthalate	4	249	D	21.3	195
	Benzo(a)fluoranthenes, Total	4	413	D	39.1	156
50-32-8	Benzo(a)pyrene	4	143	D	16.5	78.1
193-39-5	Indeno(1,2,3-cd)pyrene	4	108	D	57.2	78.1
53-70-3	Dibenzo(a,h)anthracene	4	78.1	U	67.3	78.1
191-24-2	Benzo(g,h,i)perylene	4	122	D	53.1	78.1

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	732.45	464	63.3	27 - 120	
Phenol-d5	732.45	469	64.0	29 - 120	
2-Chlorophenol-d4	732.45	517	70.6	31 - 120	
1,2-Dichlorobenzene-d4	488.30	351	71.8	32 - 120	
Nitrobenzene-d5	488.30	363	74.3	30 - 120	
2-Fluorobiphenyl	488.30	399	81.7	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-05RE1 A

SDG: 23B0229

Sampled: 02/08/23 12:45

Prepared: 02/17/23 15:00

File ID: NT1403182312.D

% Solids: 44.93

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 23:40

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 22.79 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	732.45	474	64.7	24 - 134	
p-Terphenyl-d14	488.30	485	99.4	37 - 120	

Data File: \\target\share\chem3\nt14.1\20230318.16\NT1403182312.D

Date: 18-MAR-2023 23:40

Client ID:

Sample Info: 23B0229-05REL1,4

Page 1

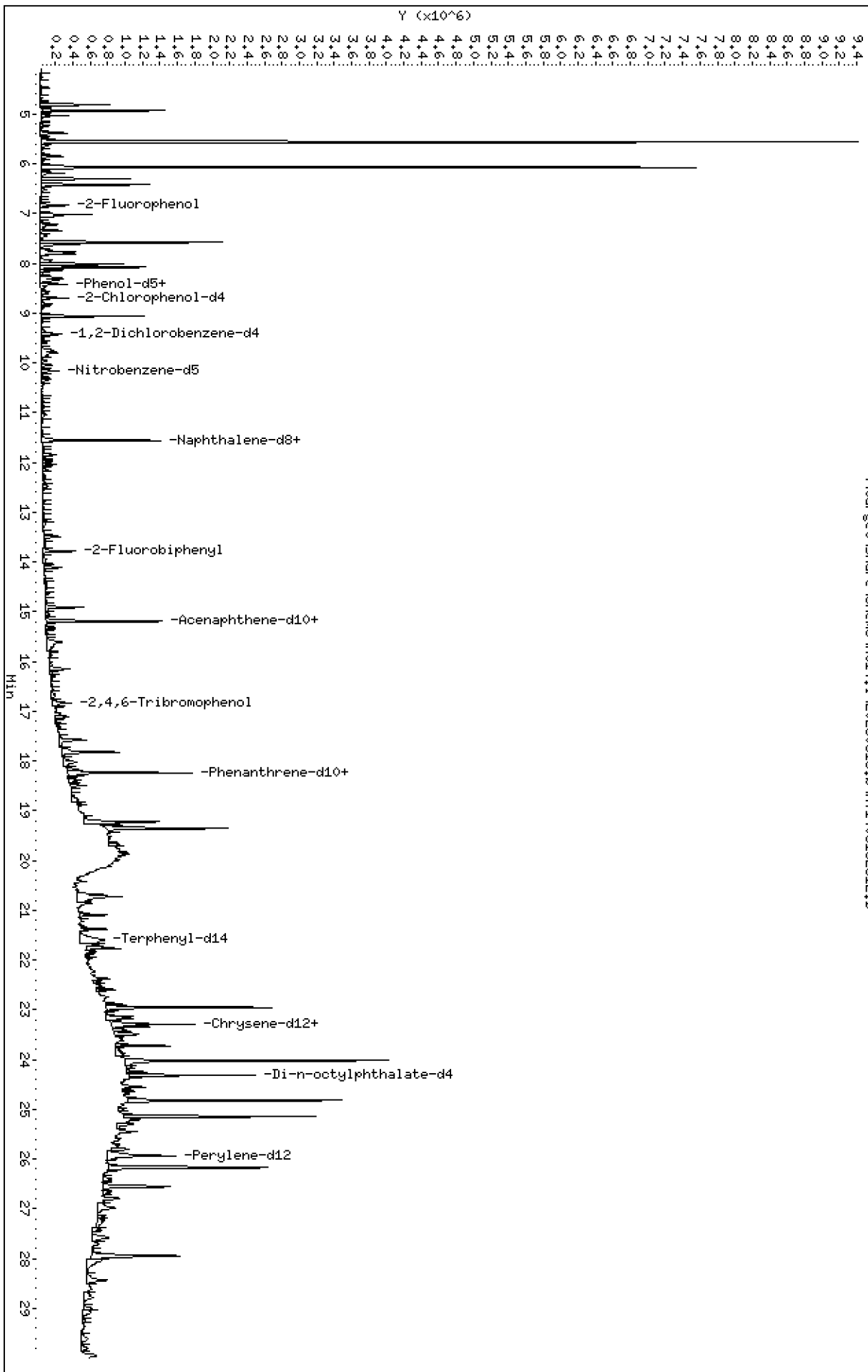
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230318.16\NT1403182312.D



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

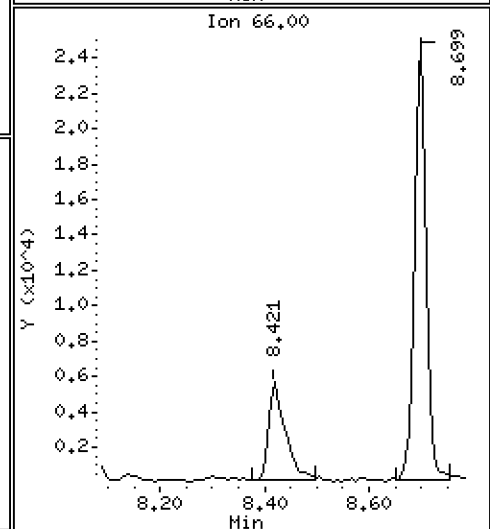
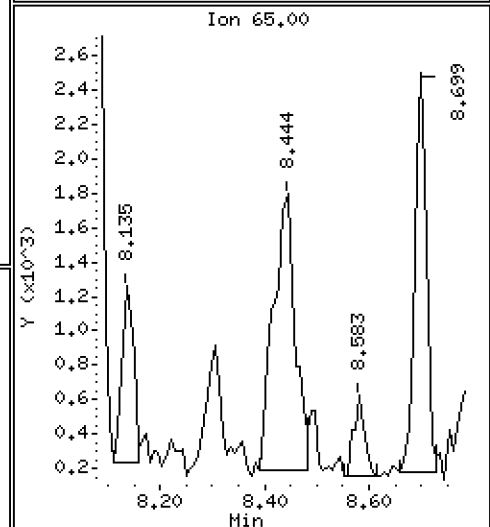
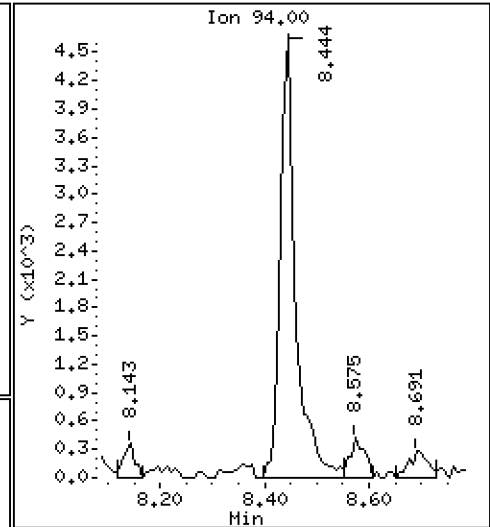
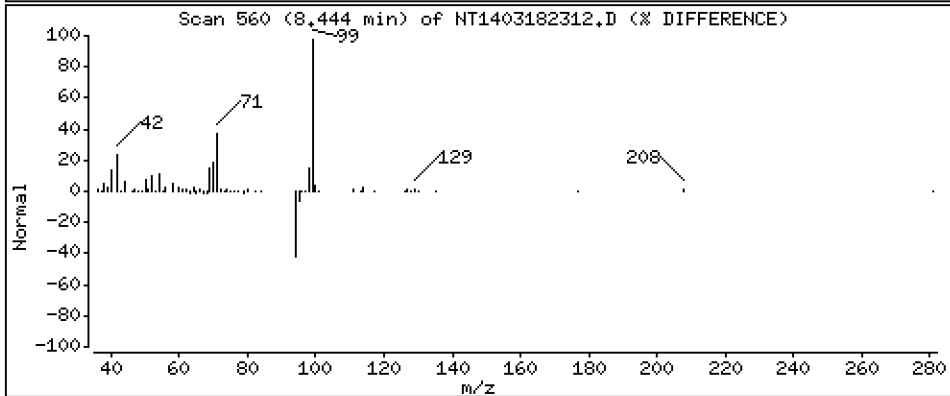
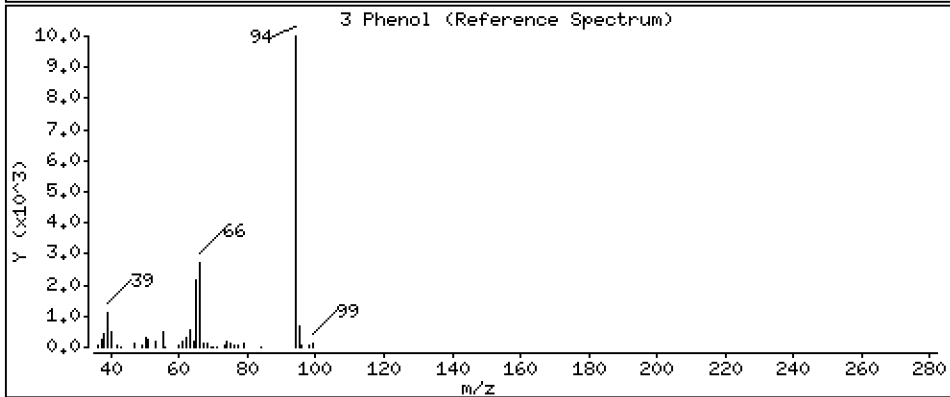
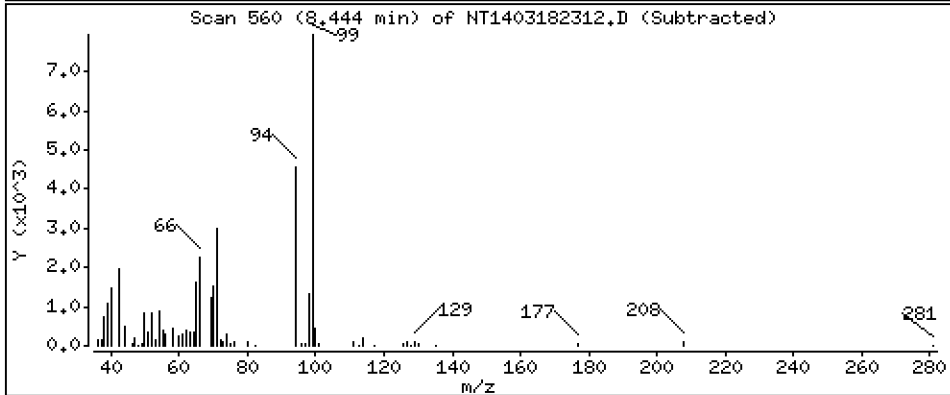
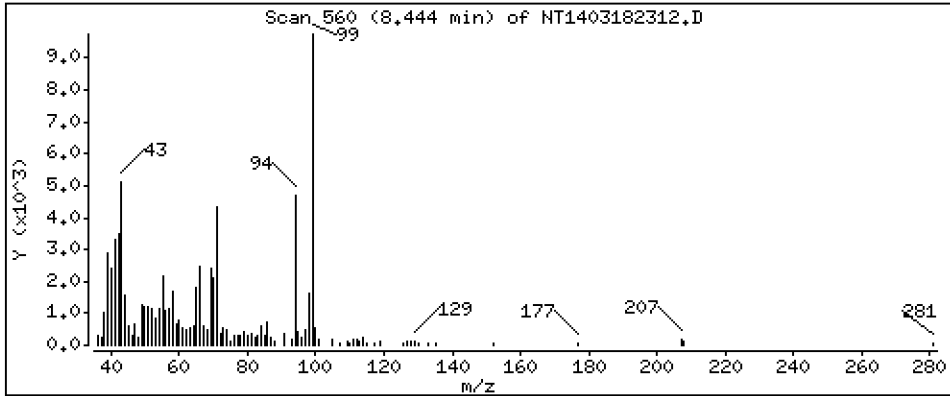
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,2639 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

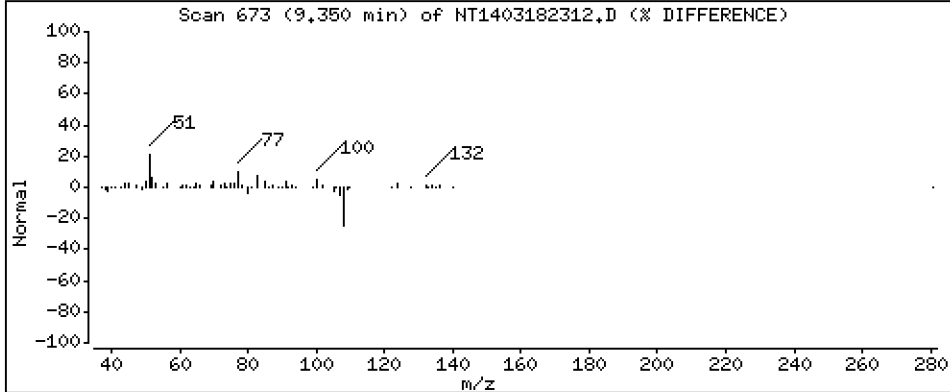
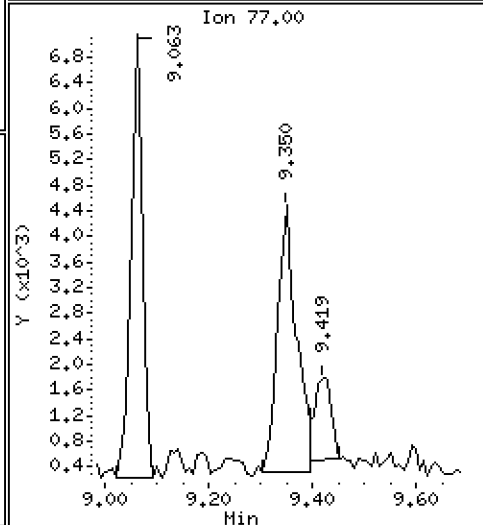
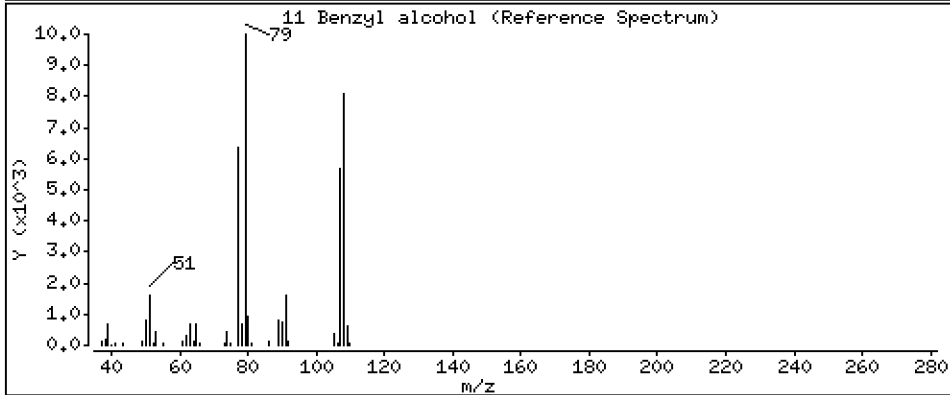
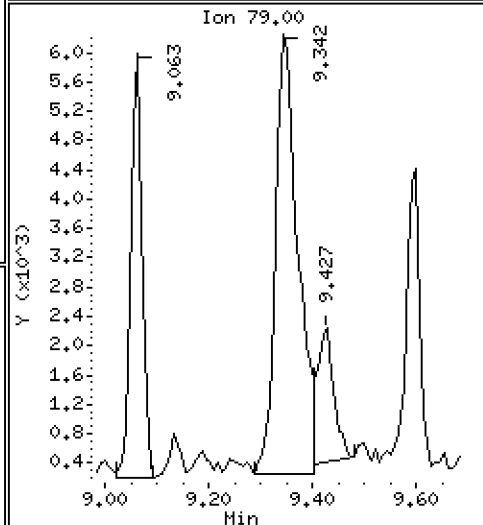
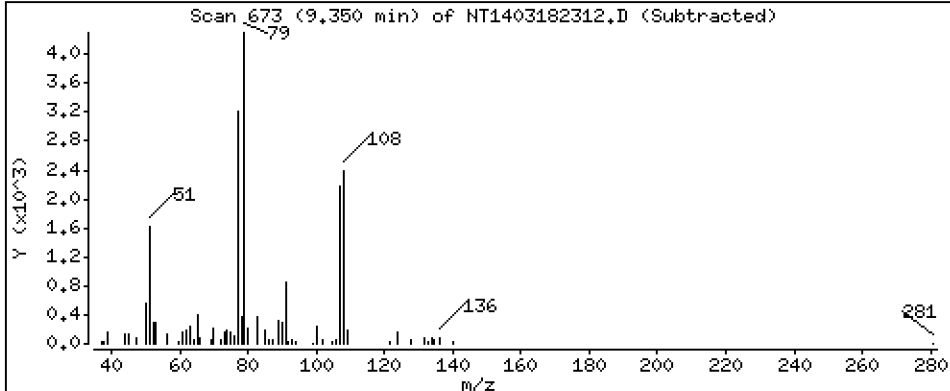
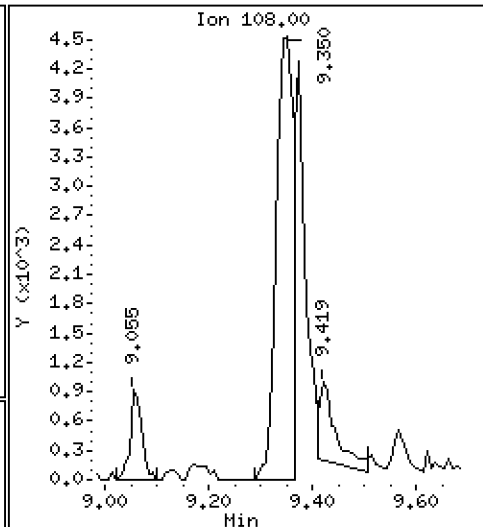
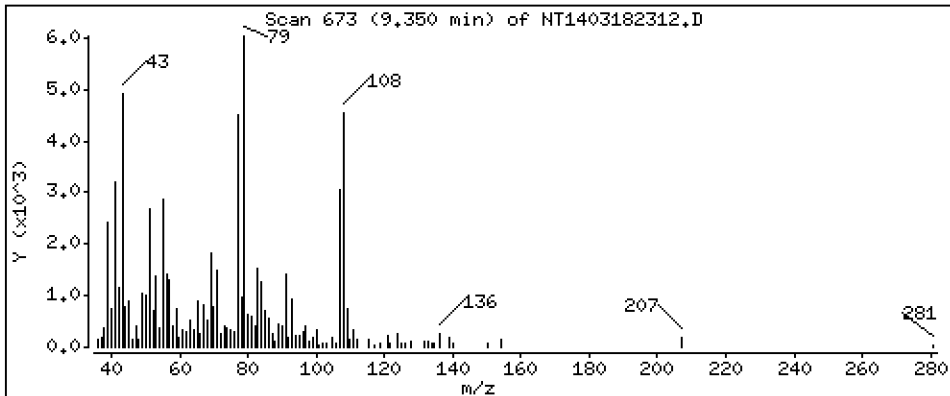
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,6466 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

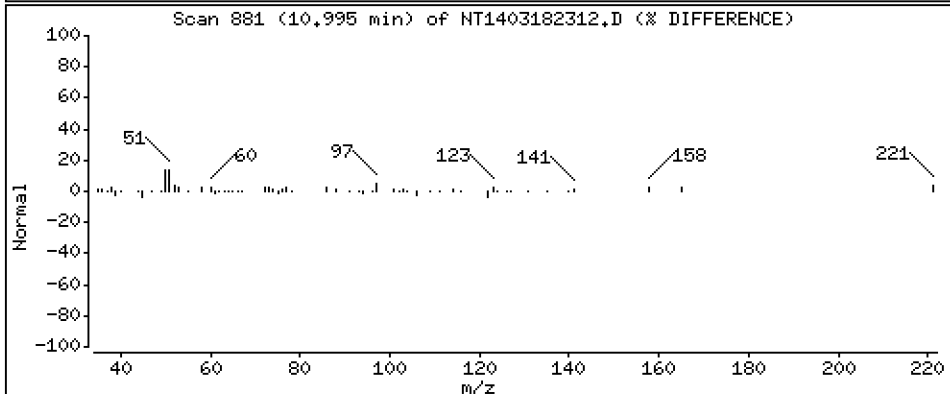
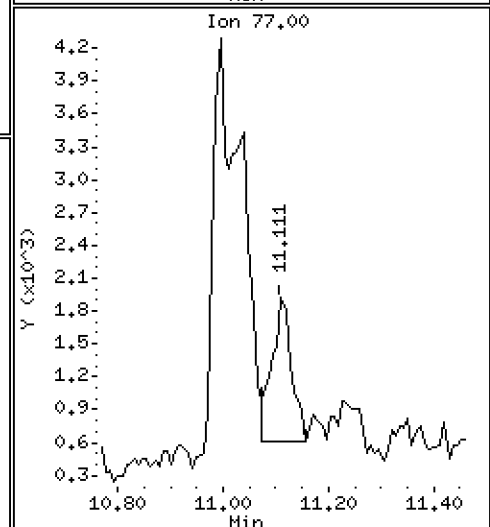
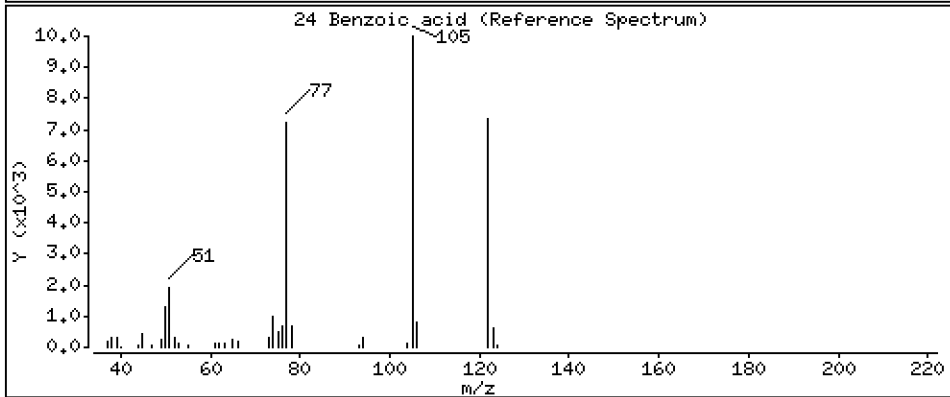
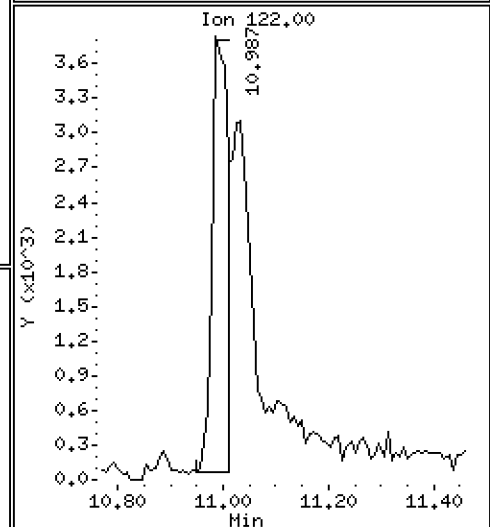
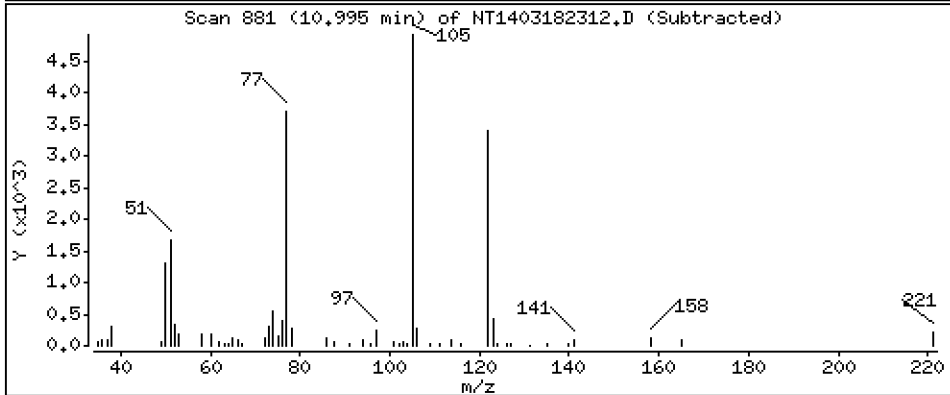
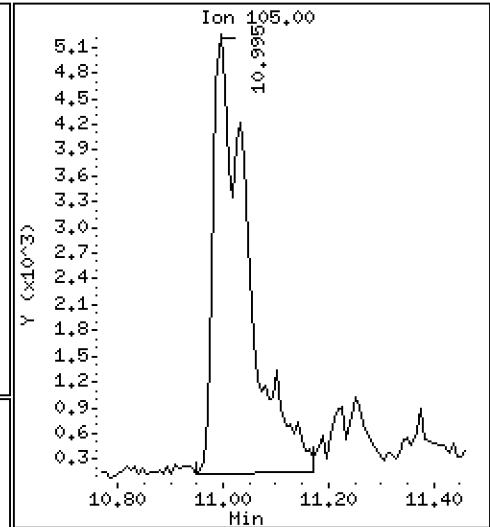
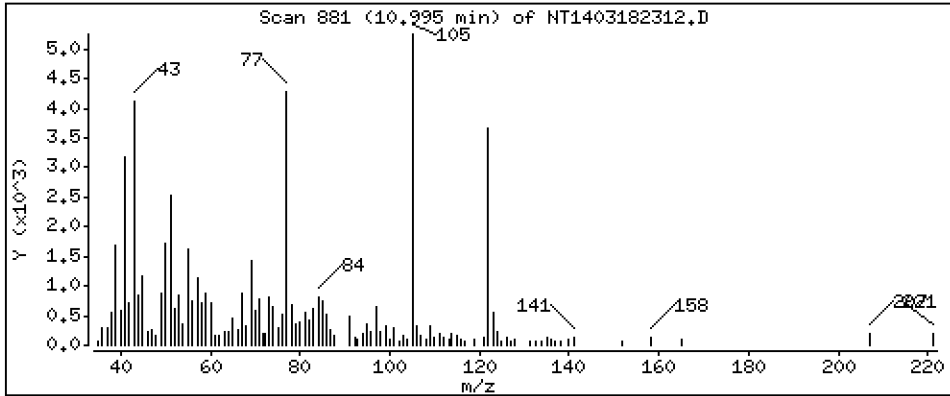
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,142 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

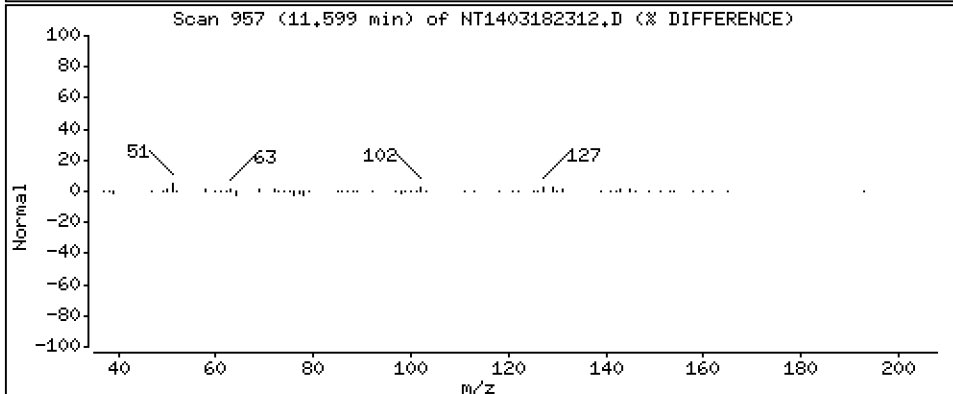
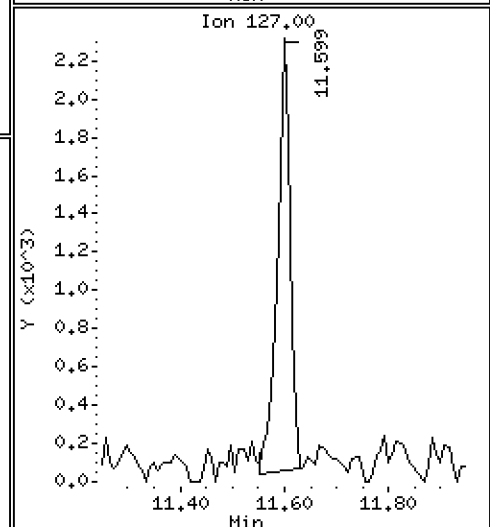
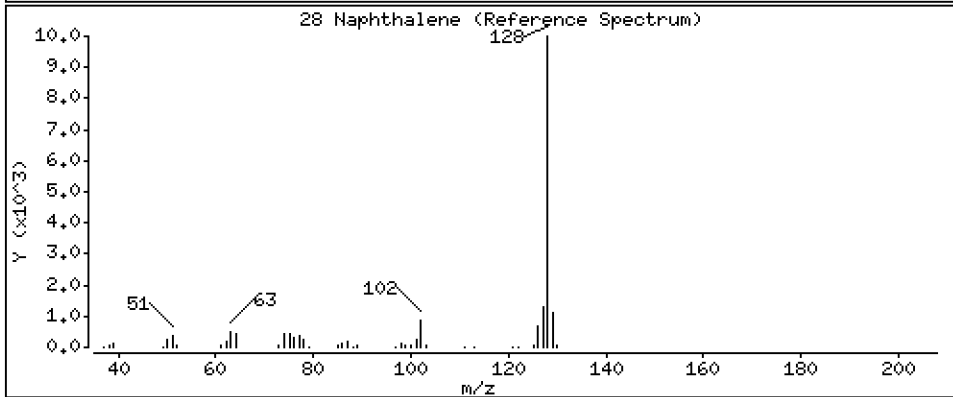
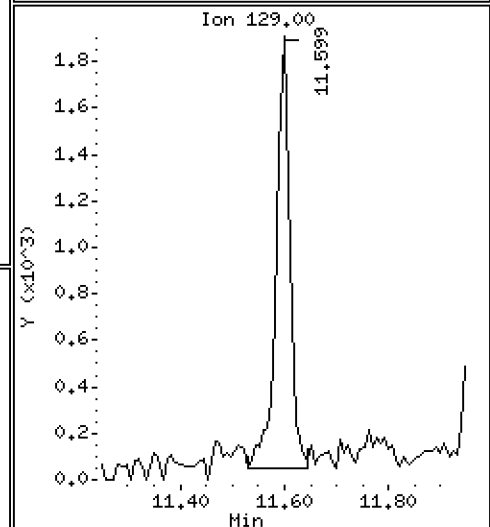
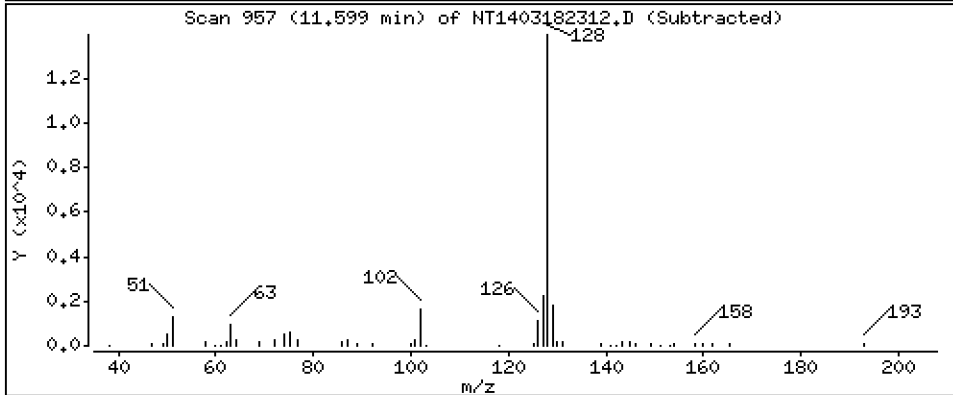
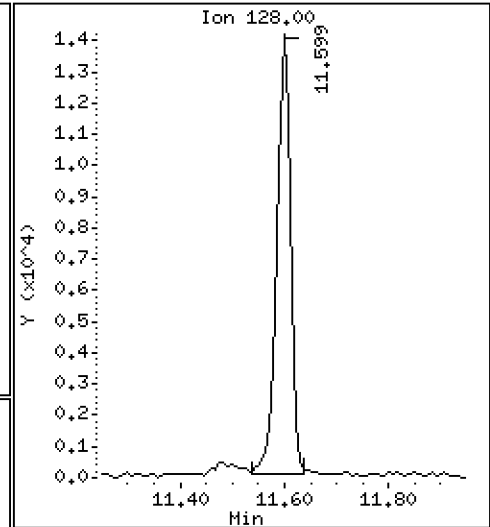
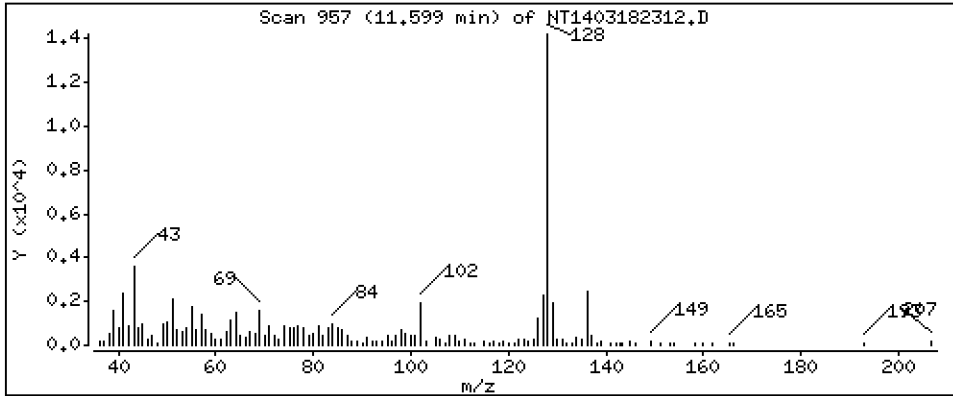
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,3184 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

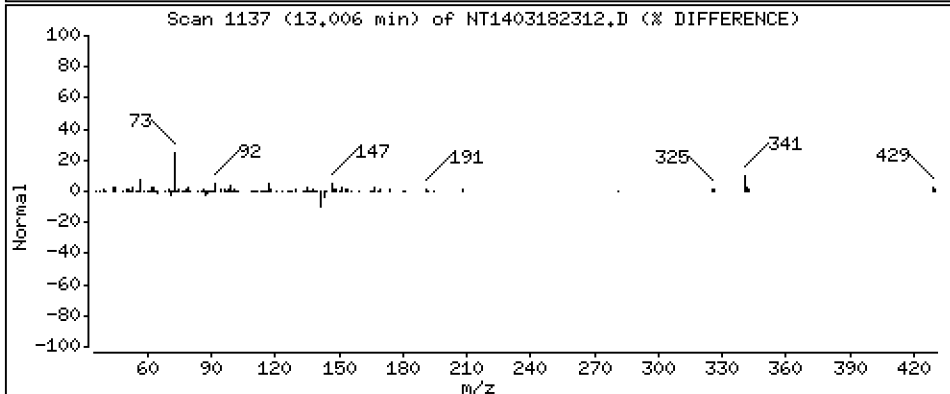
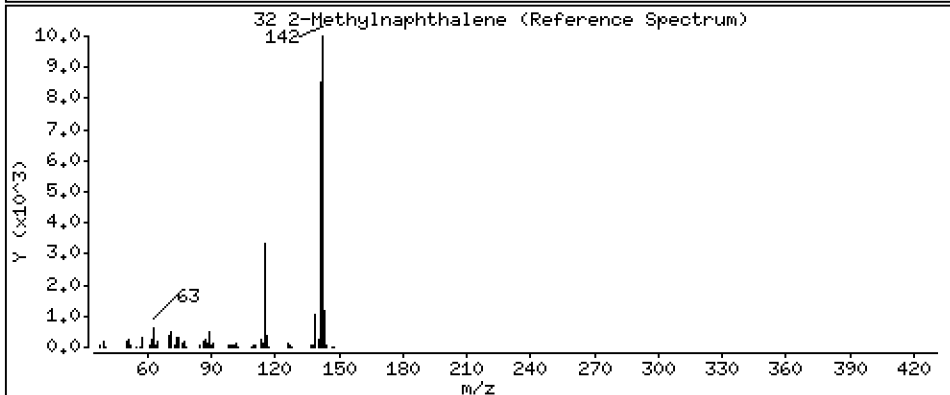
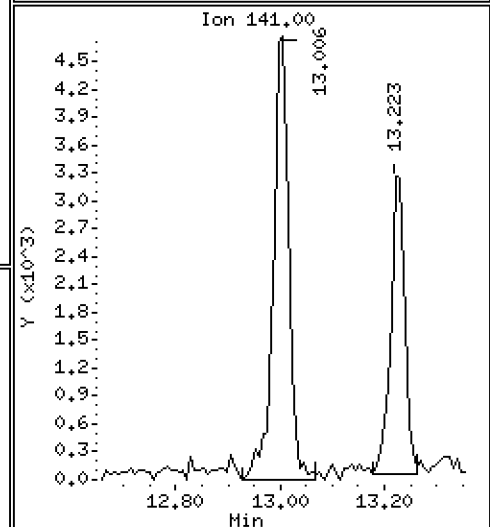
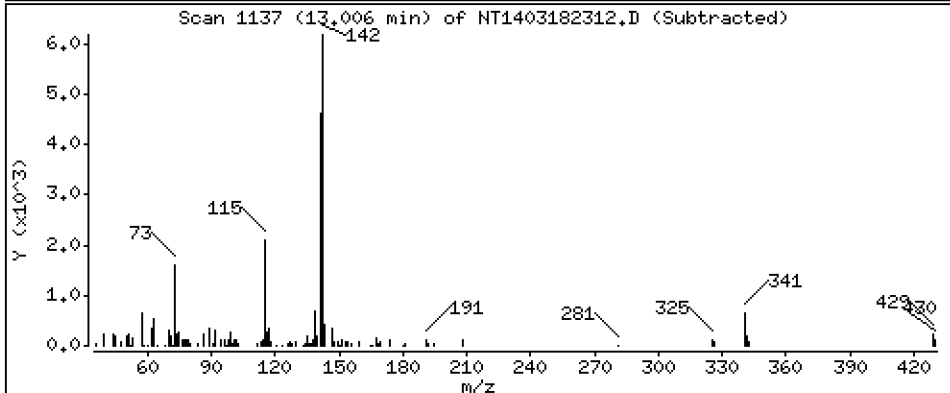
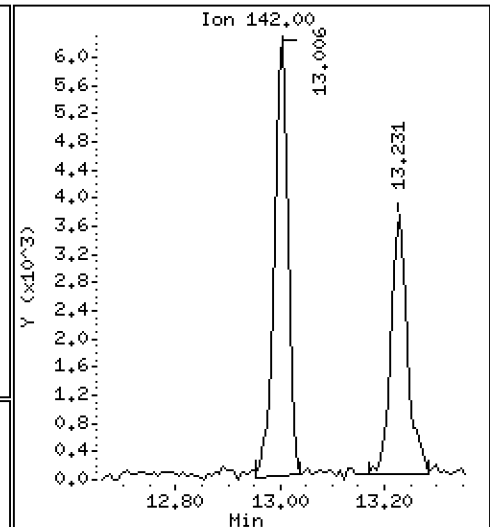
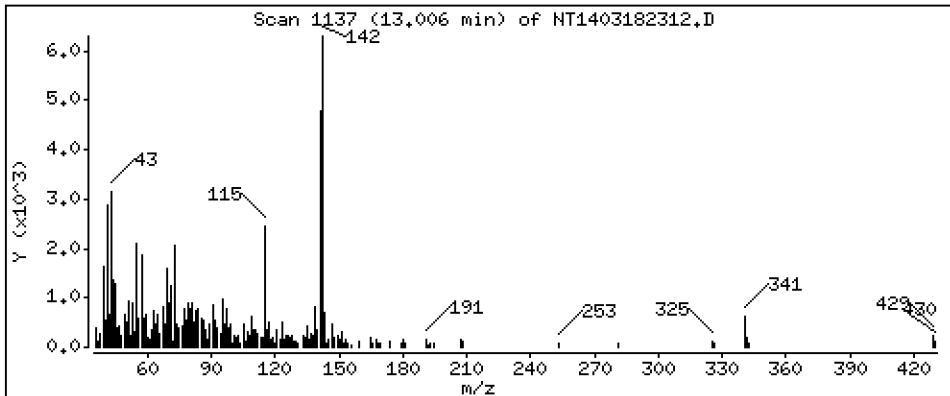
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,2036 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

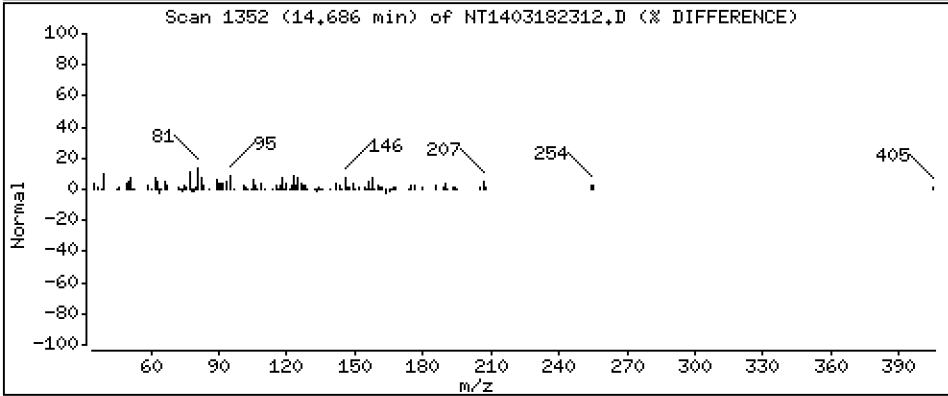
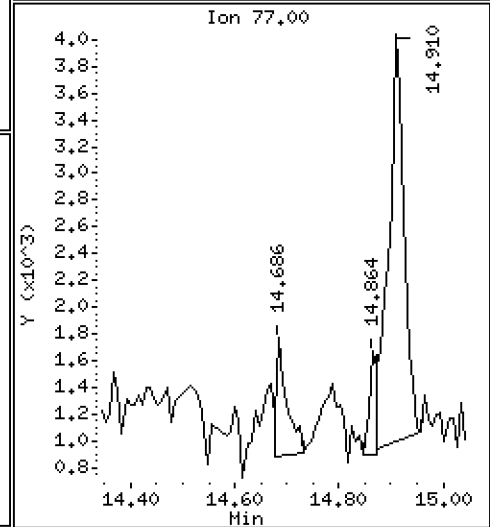
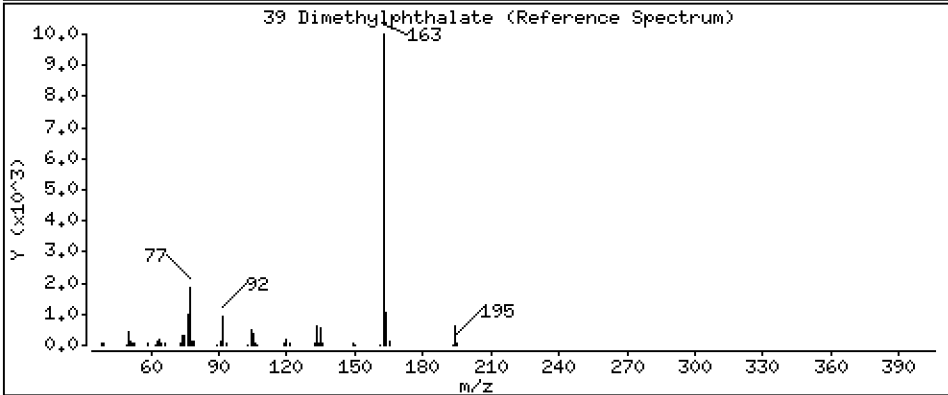
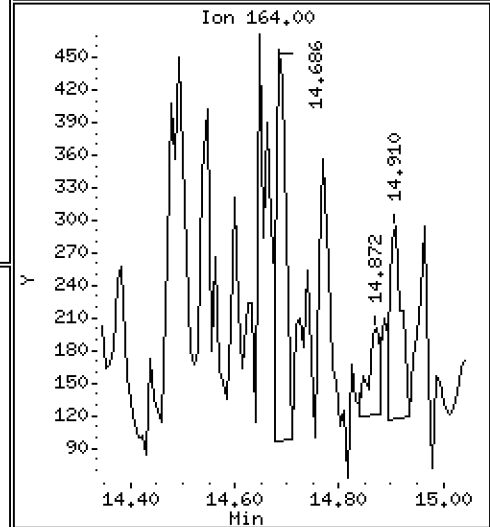
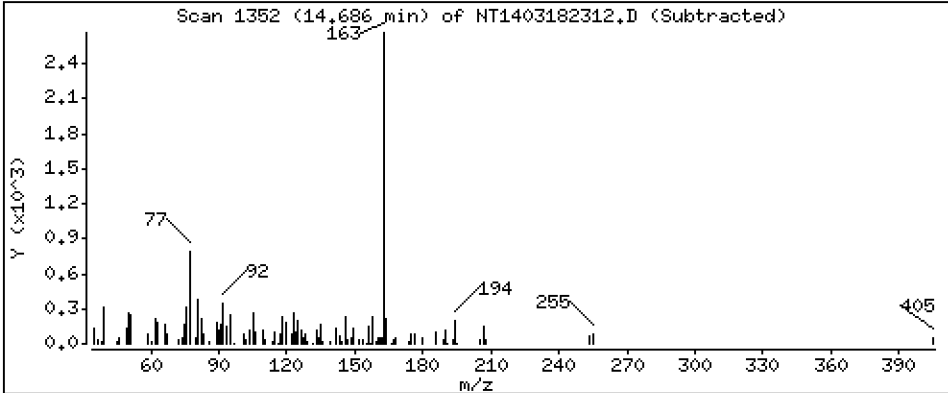
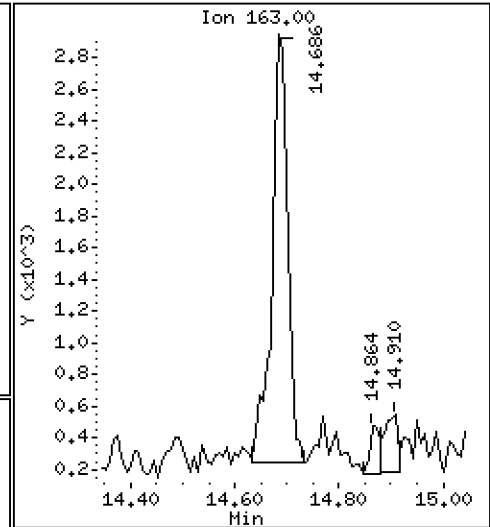
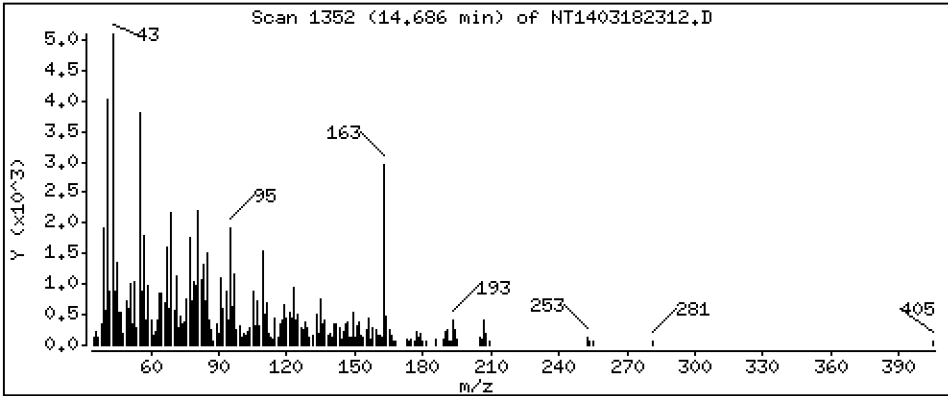
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1186 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

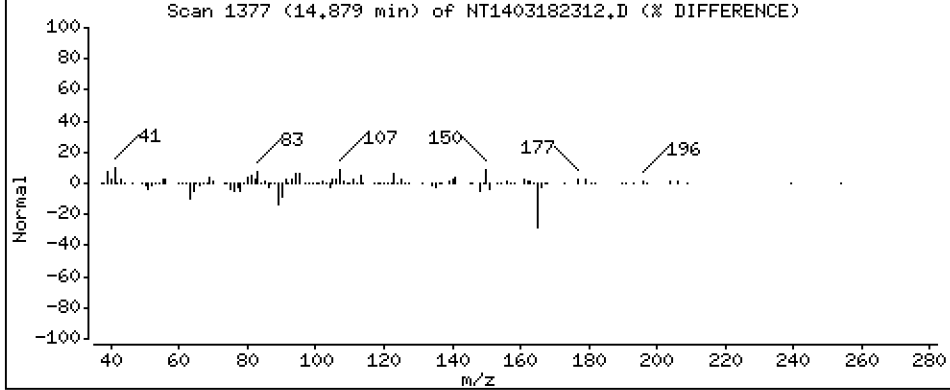
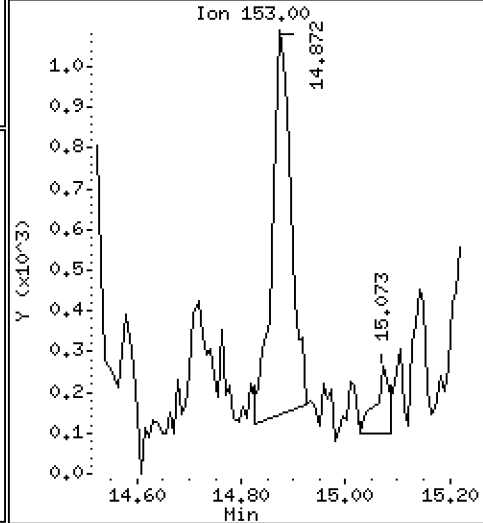
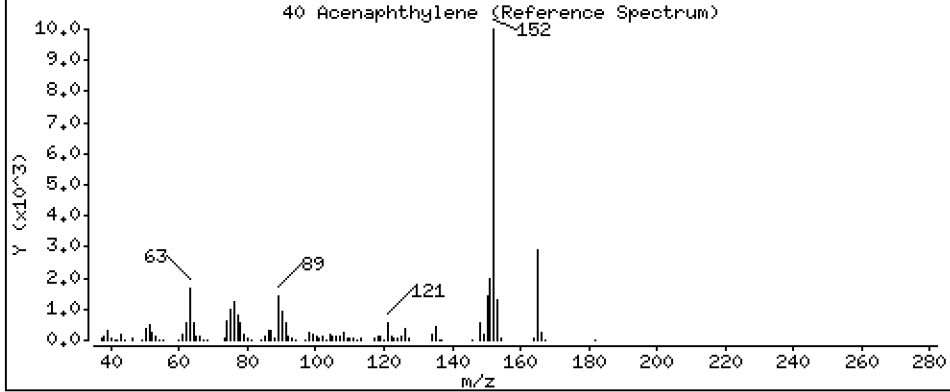
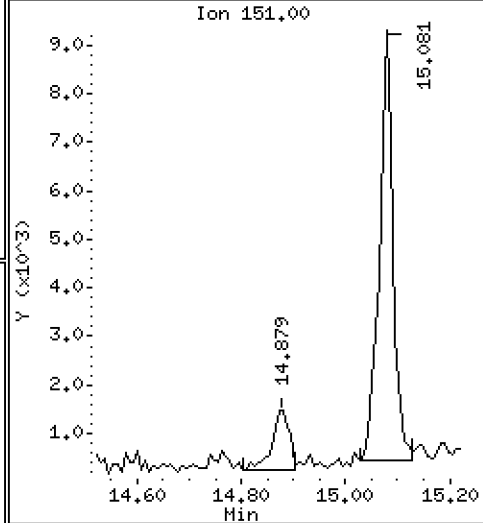
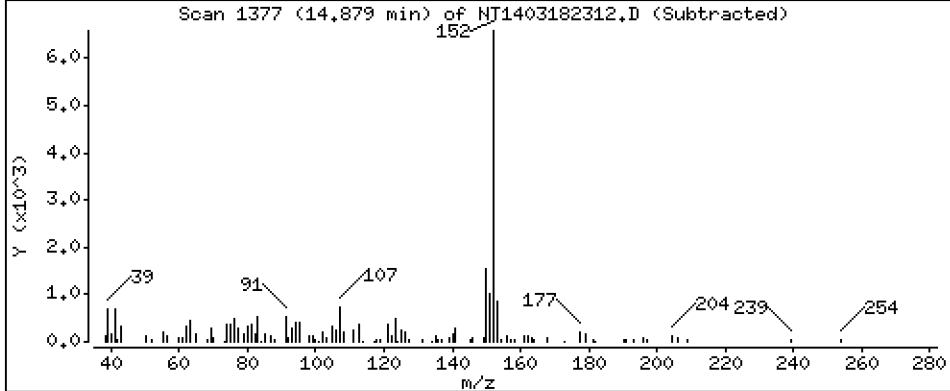
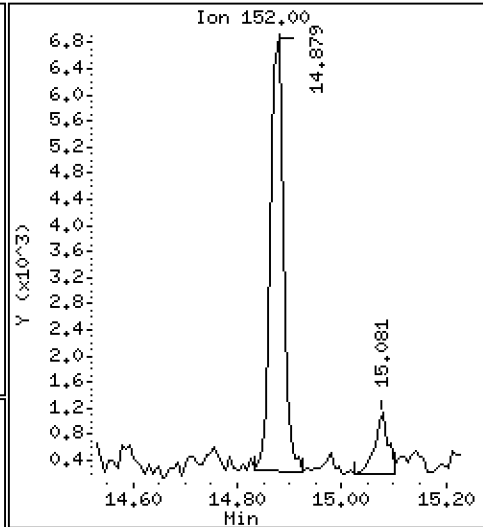
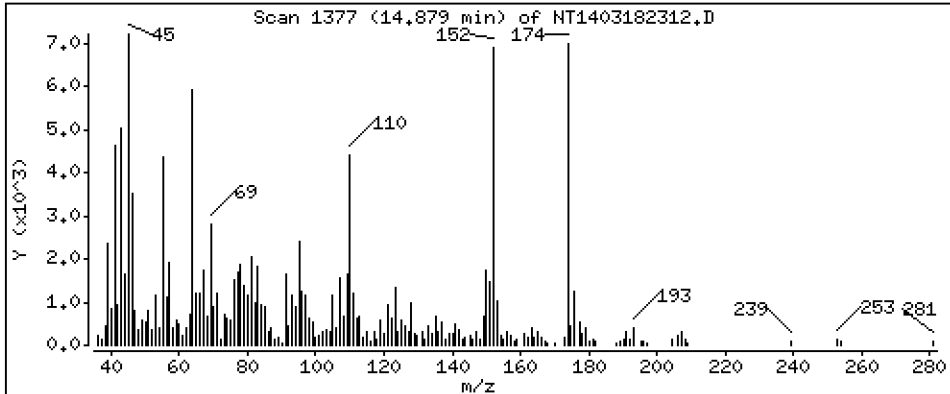
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1497 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

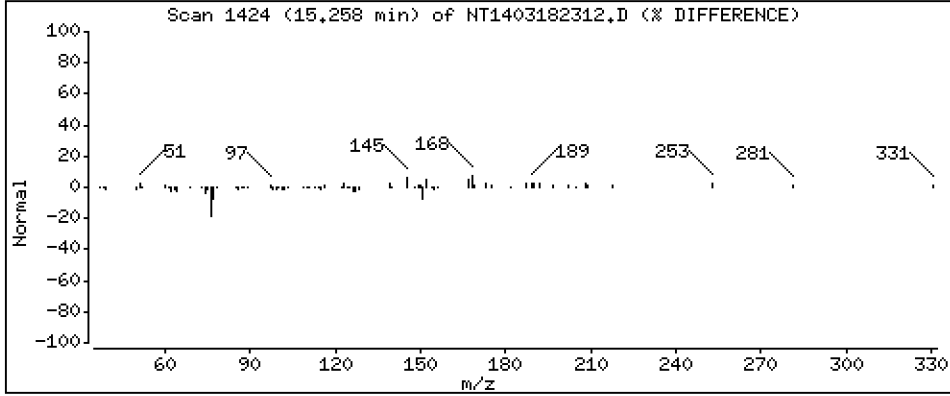
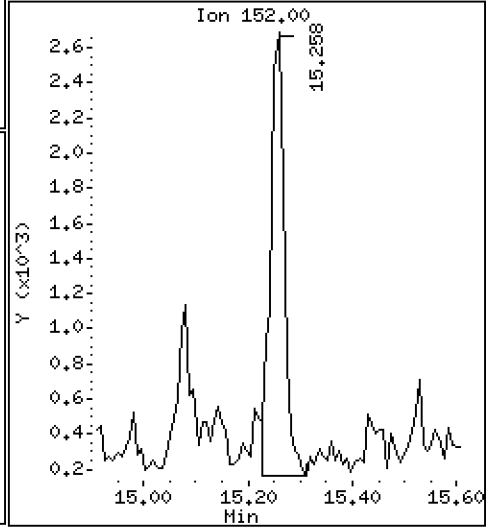
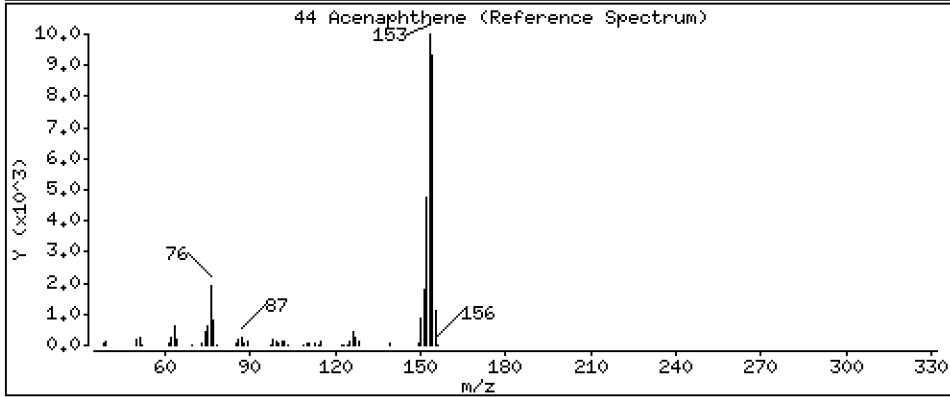
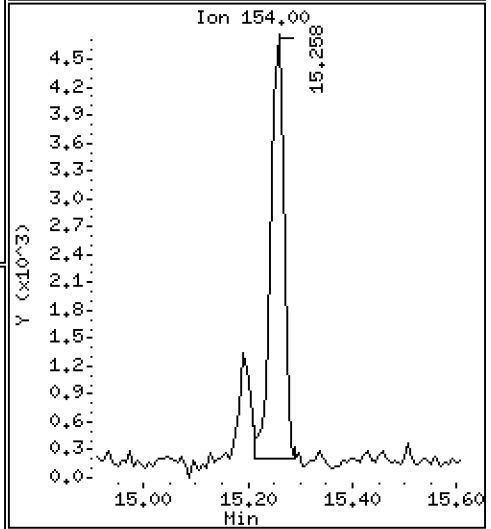
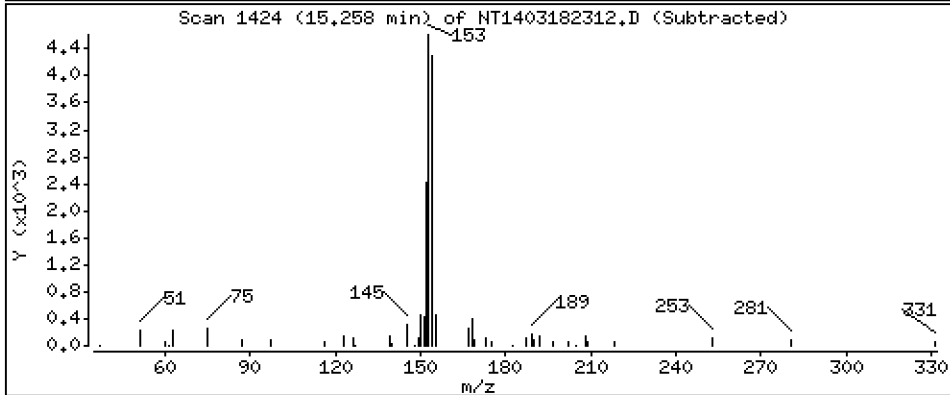
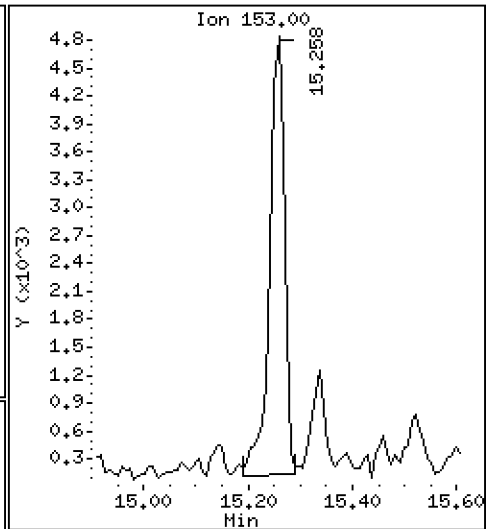
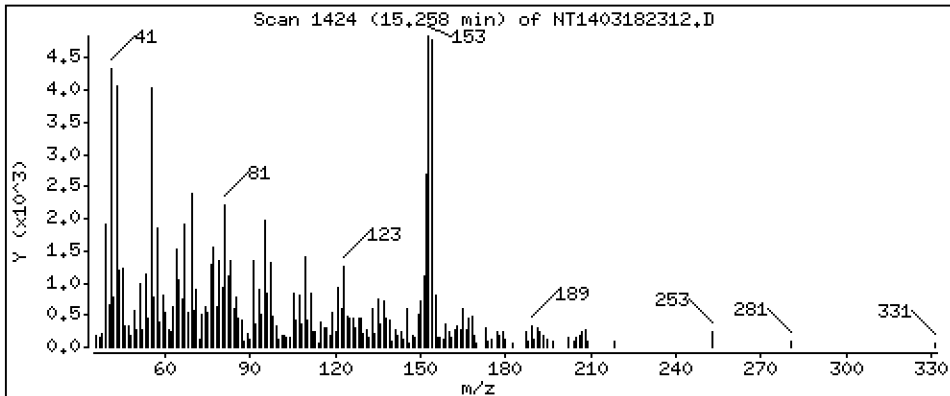
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,2096 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

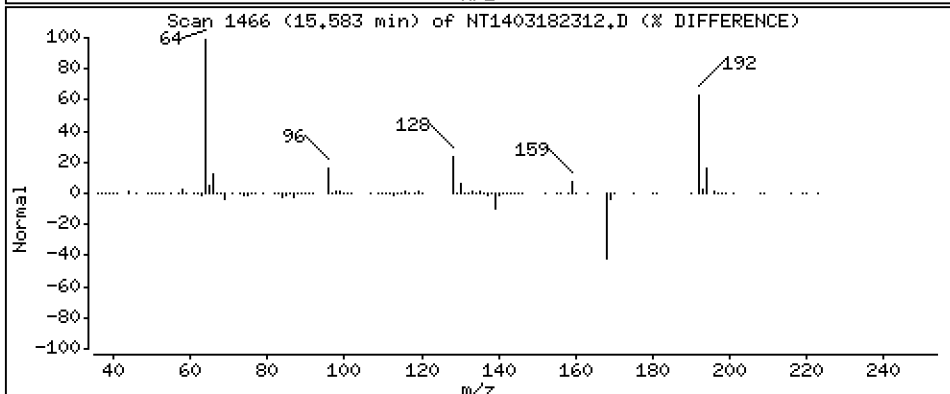
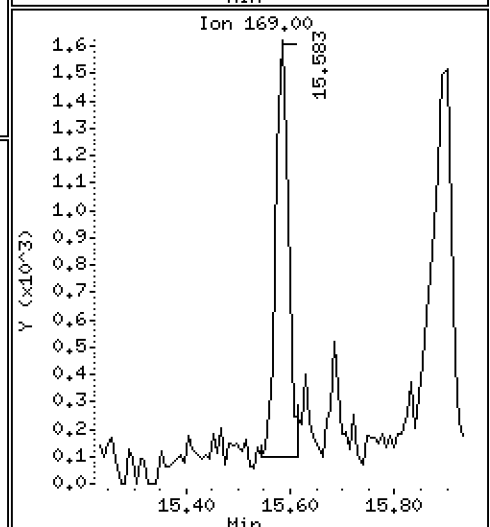
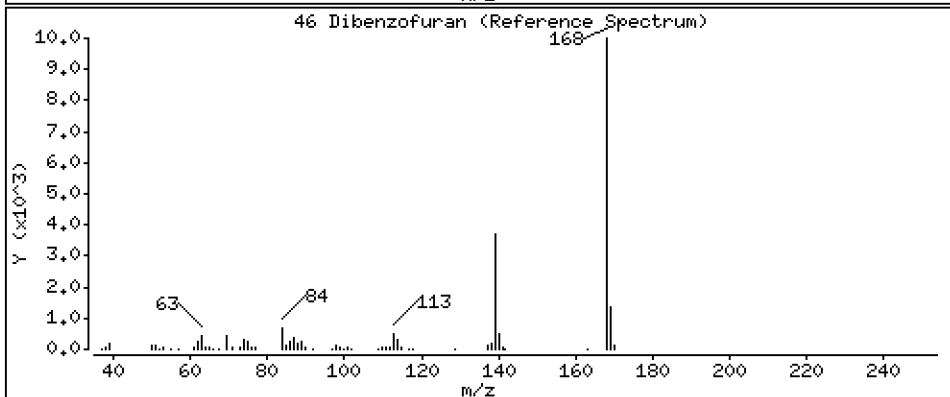
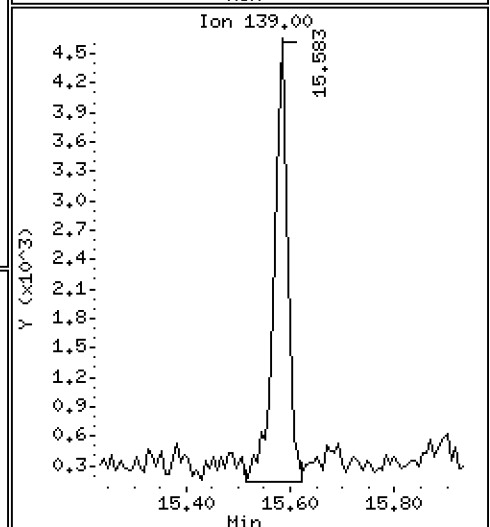
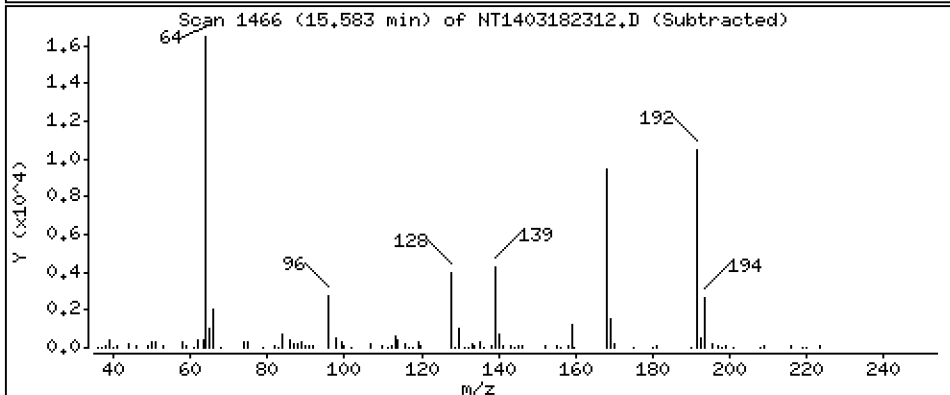
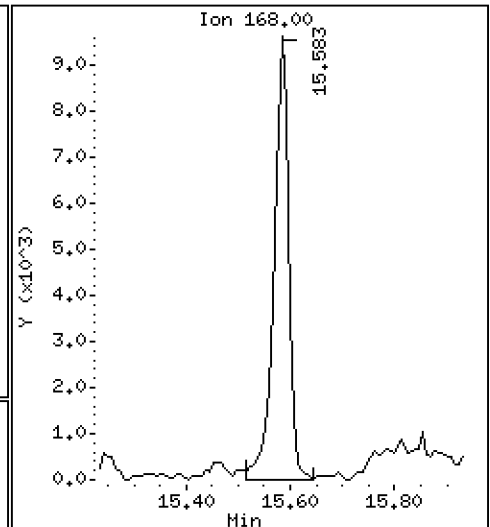
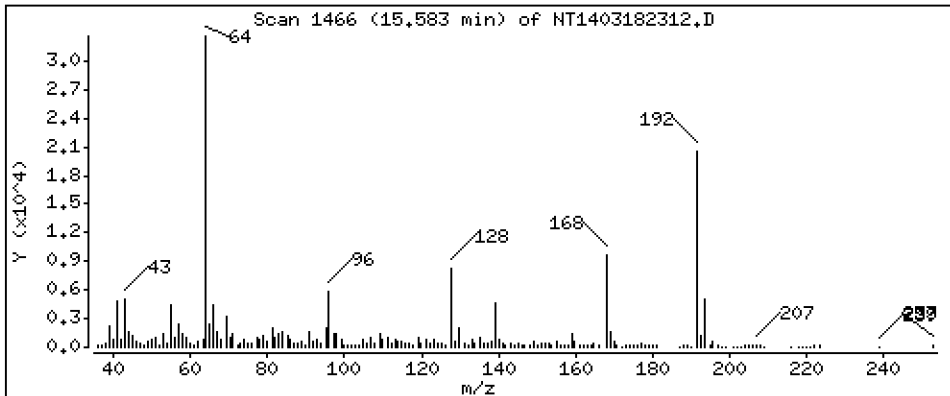
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2958 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

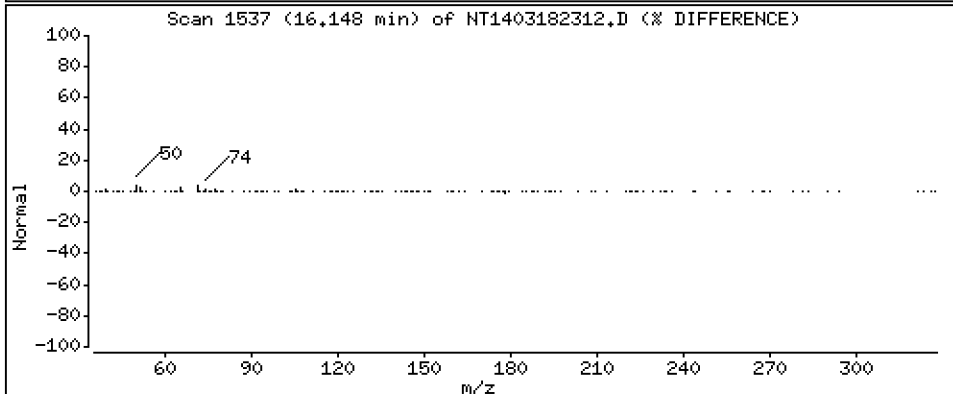
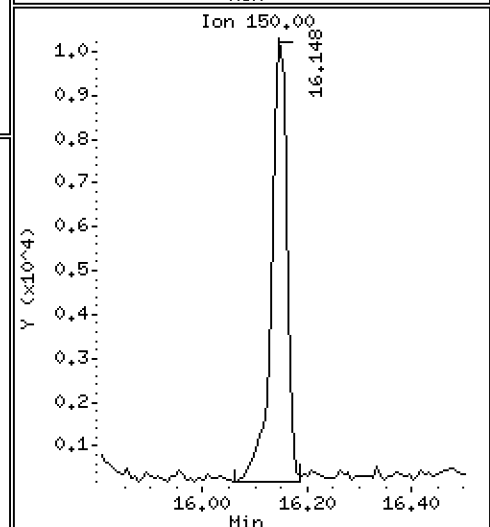
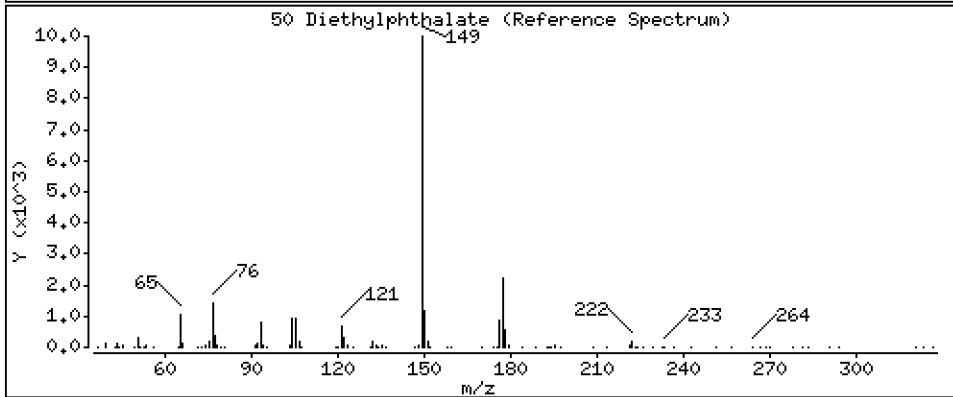
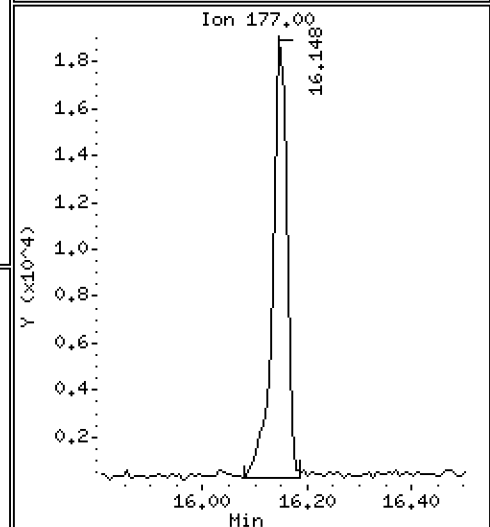
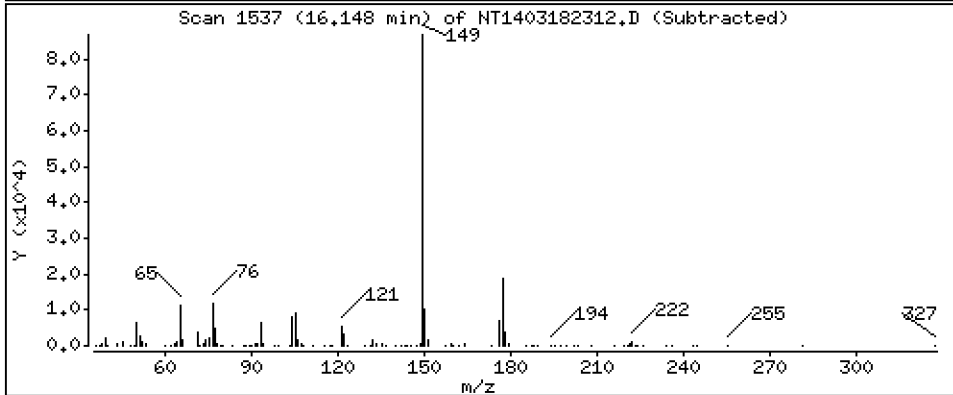
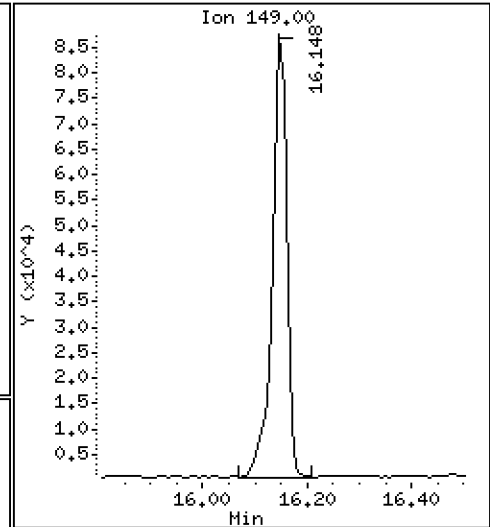
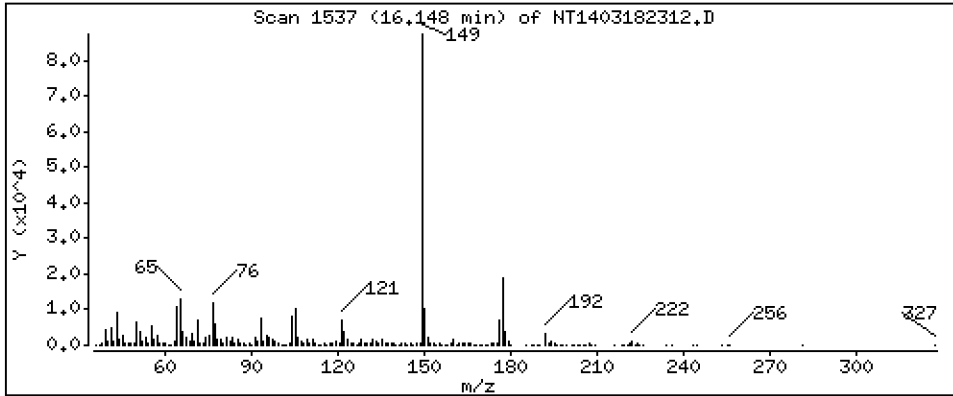
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 3,276 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

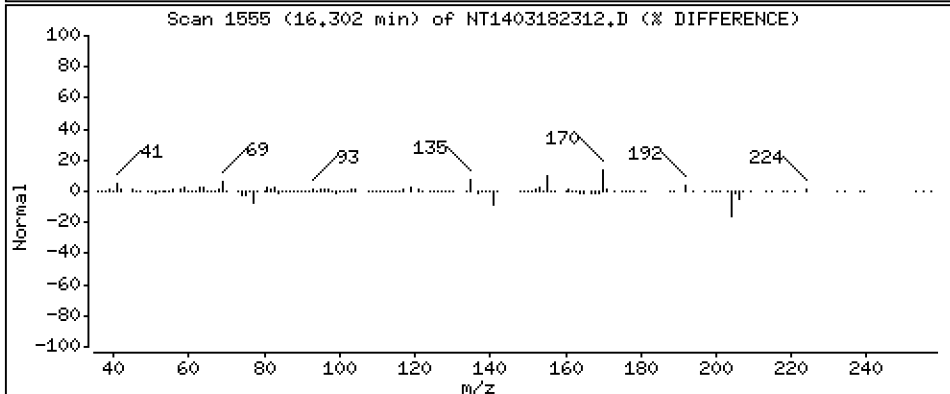
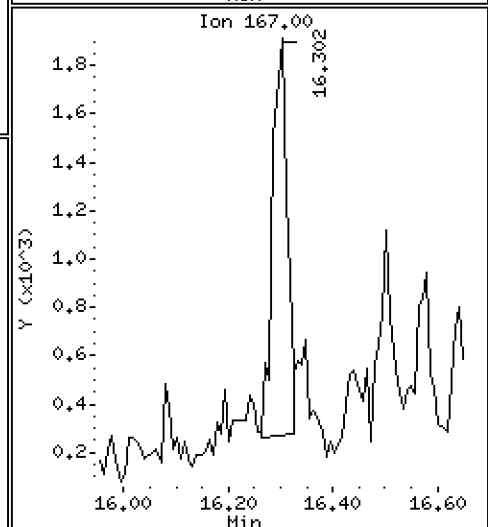
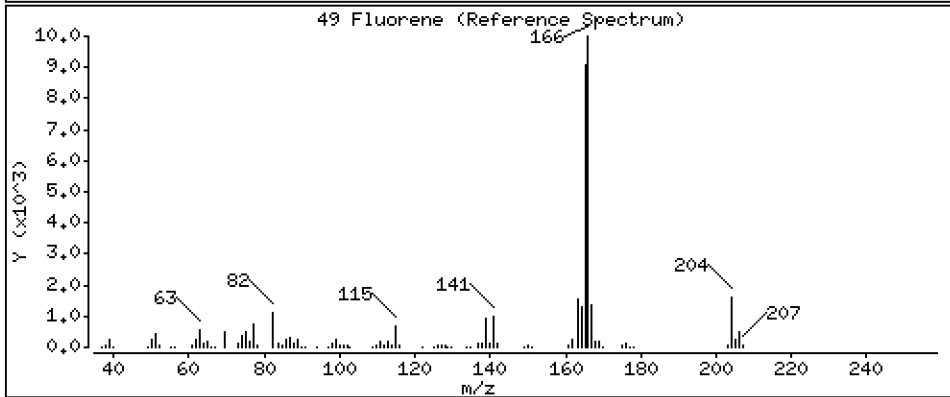
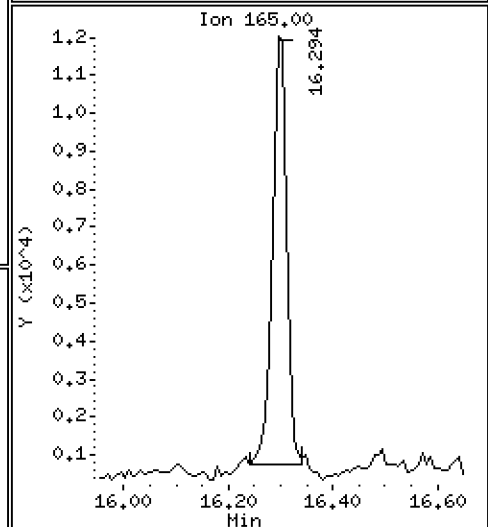
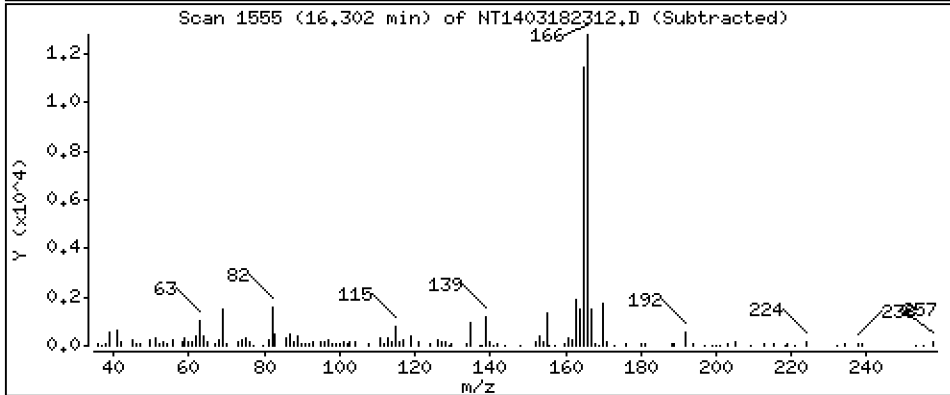
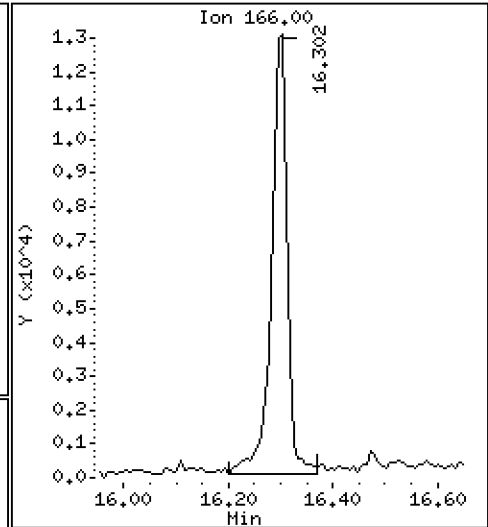
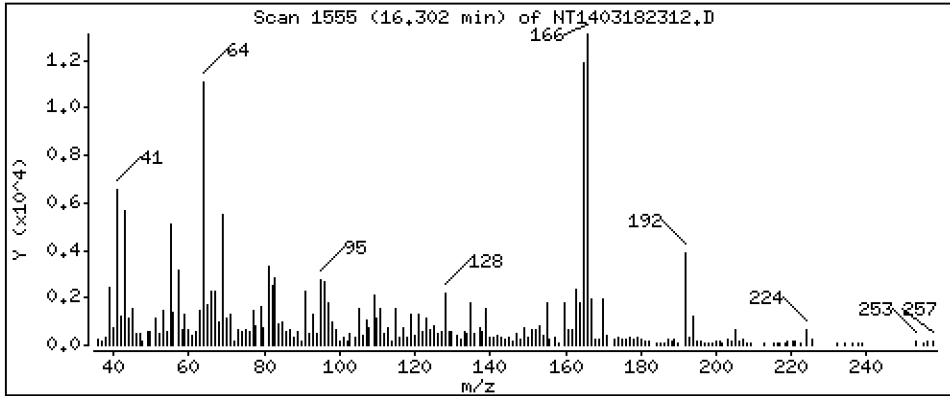
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,4978 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

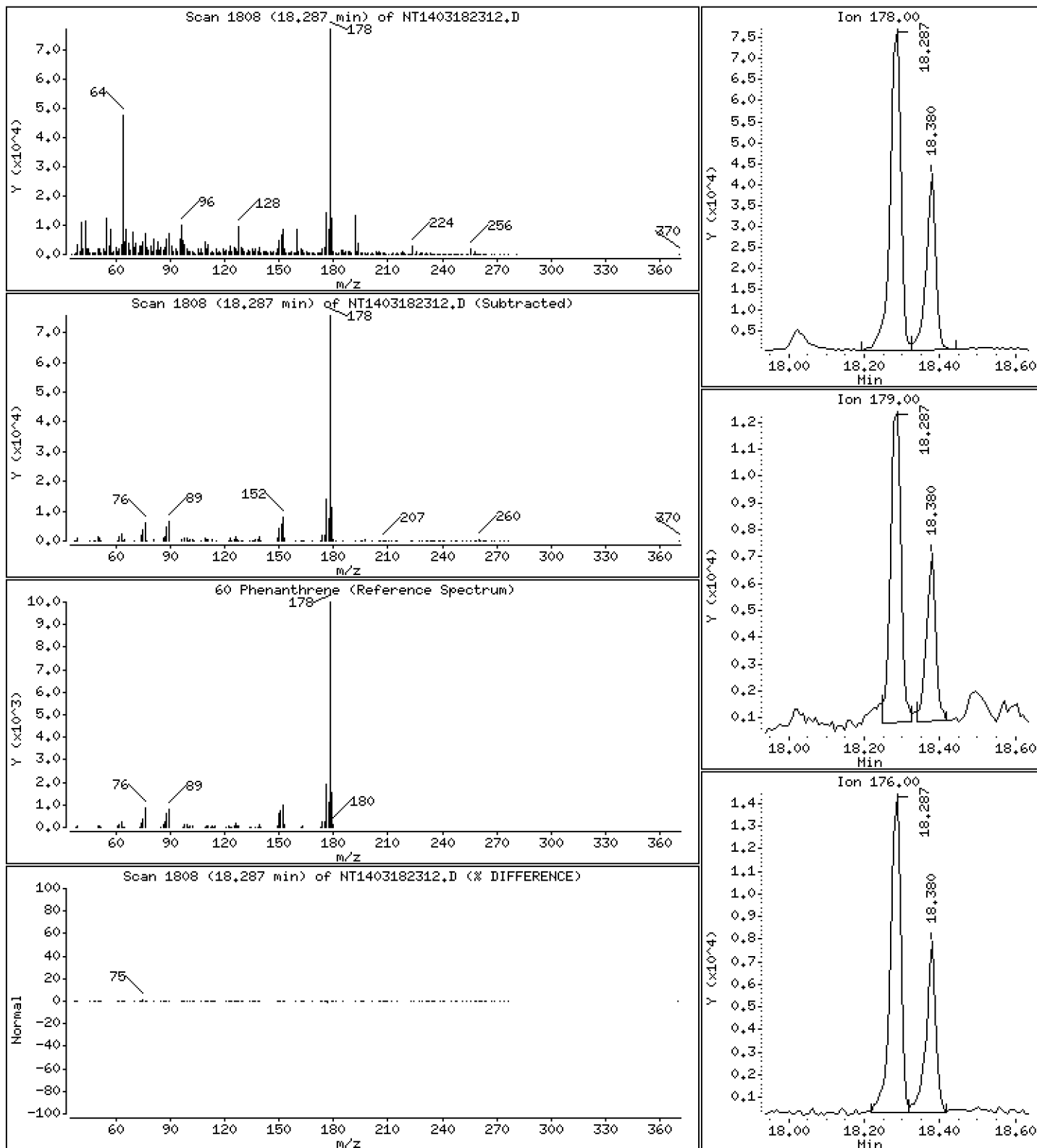
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 2,190 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

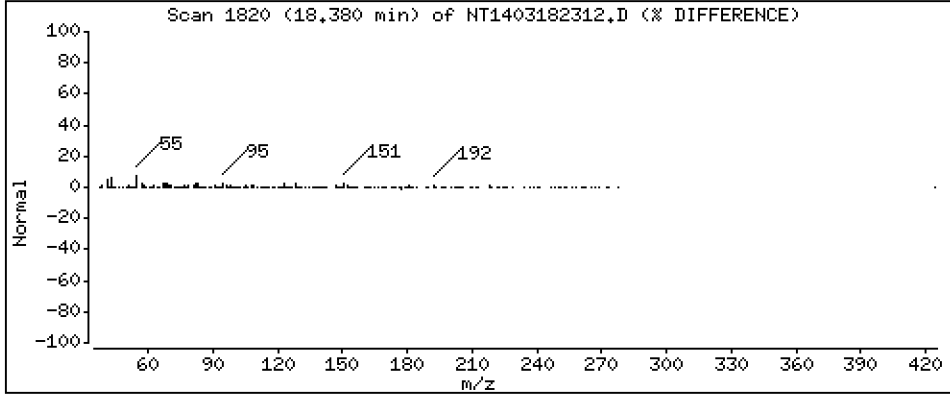
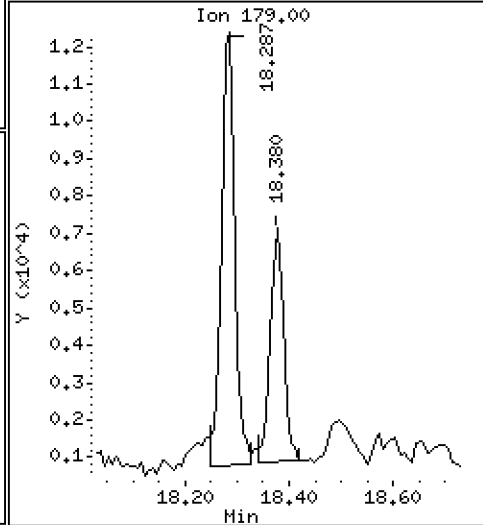
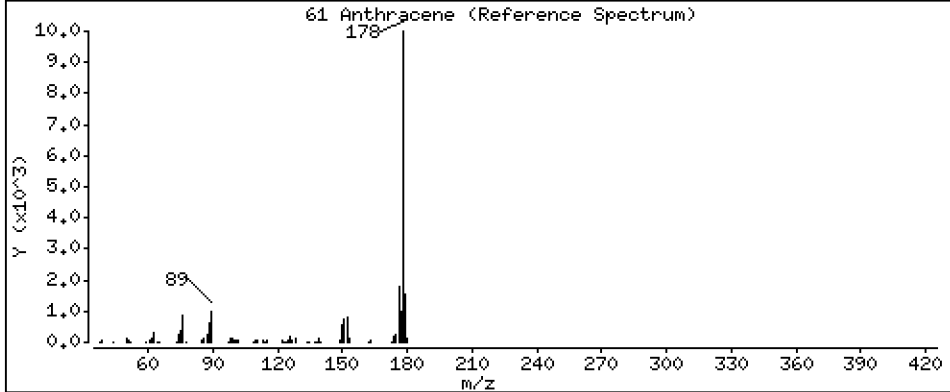
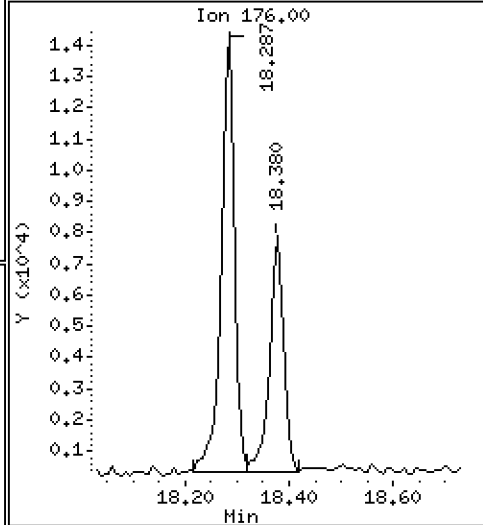
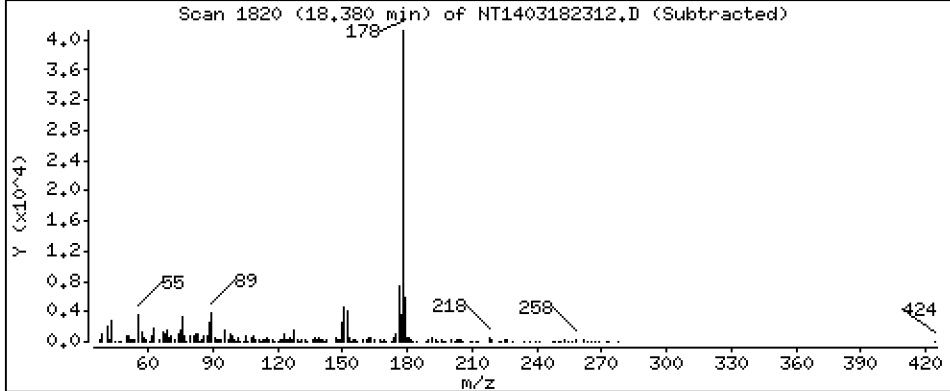
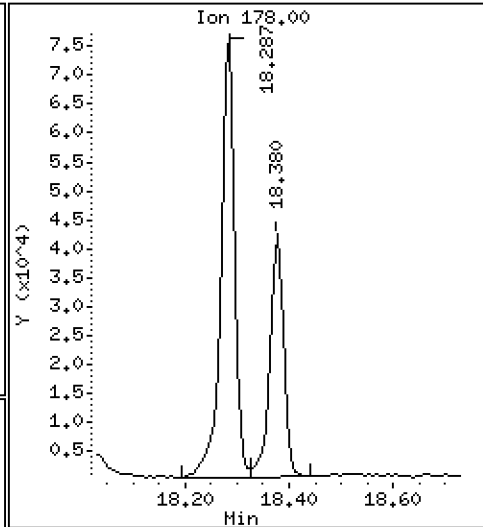
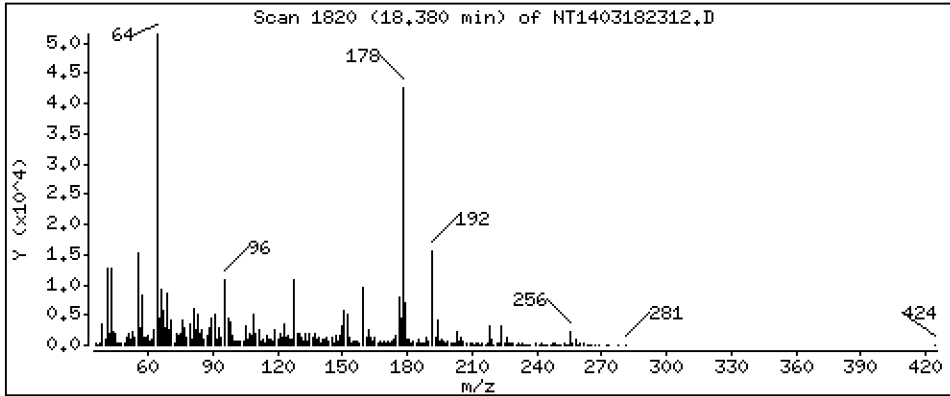
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 1,164 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

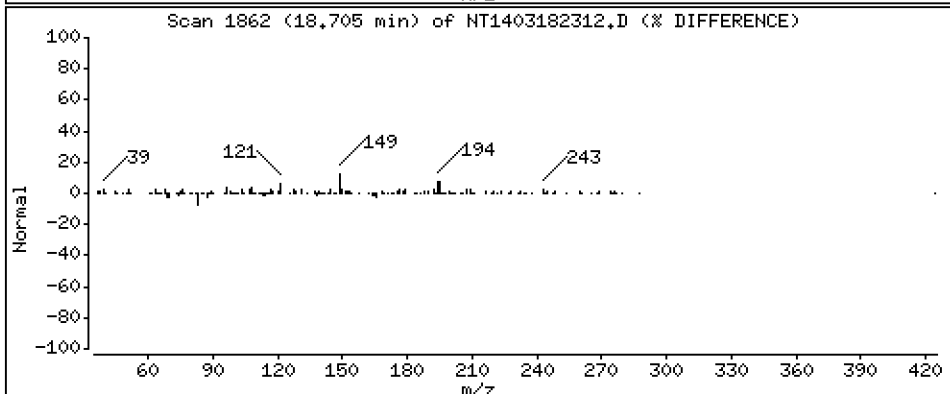
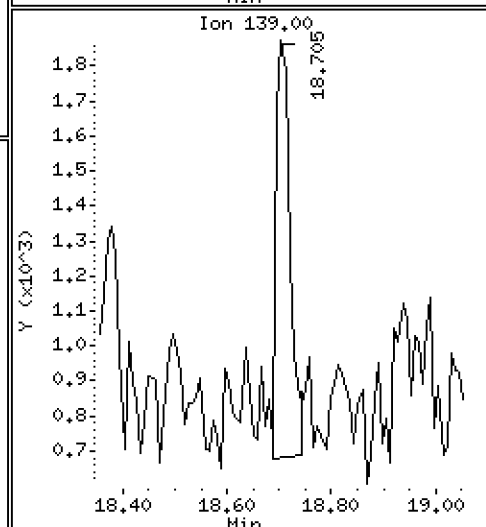
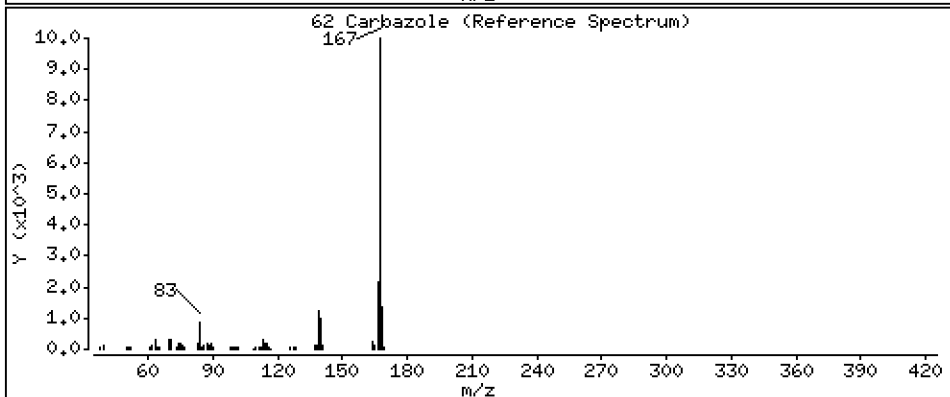
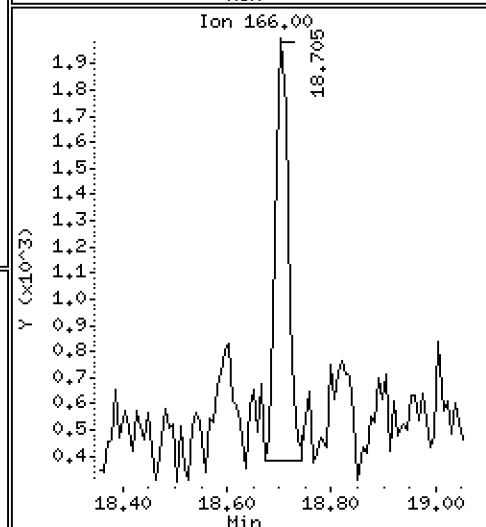
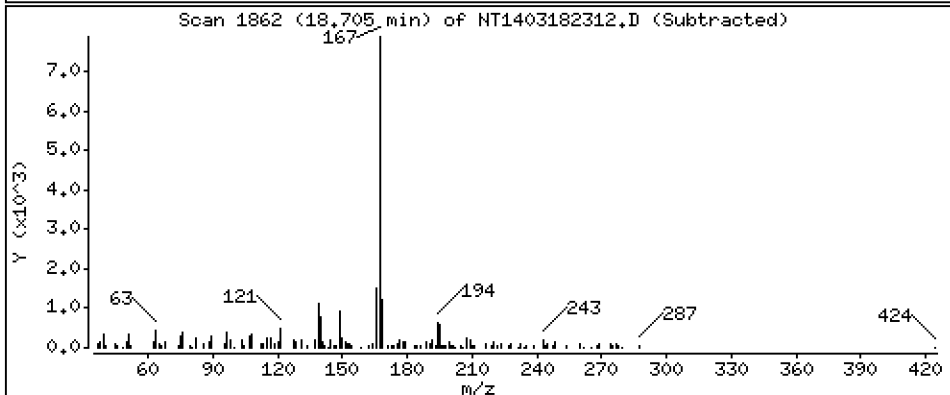
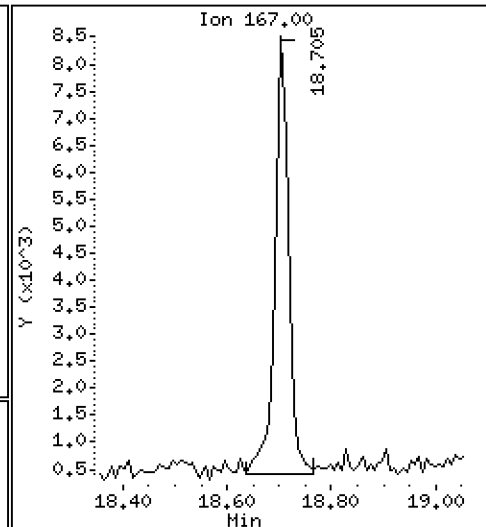
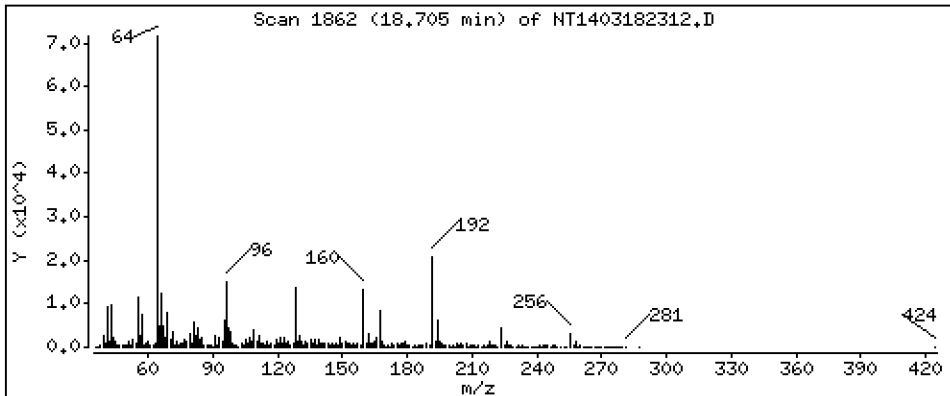
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,2537 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

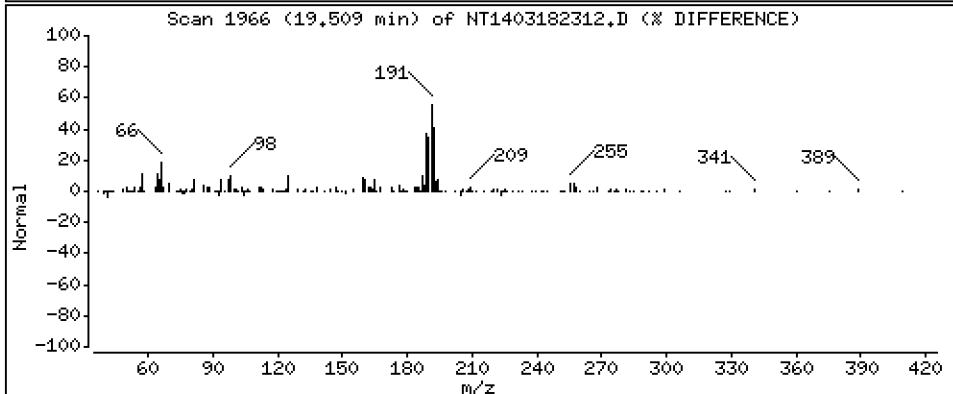
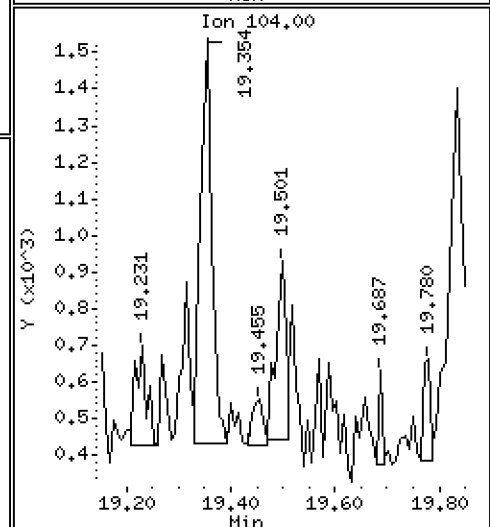
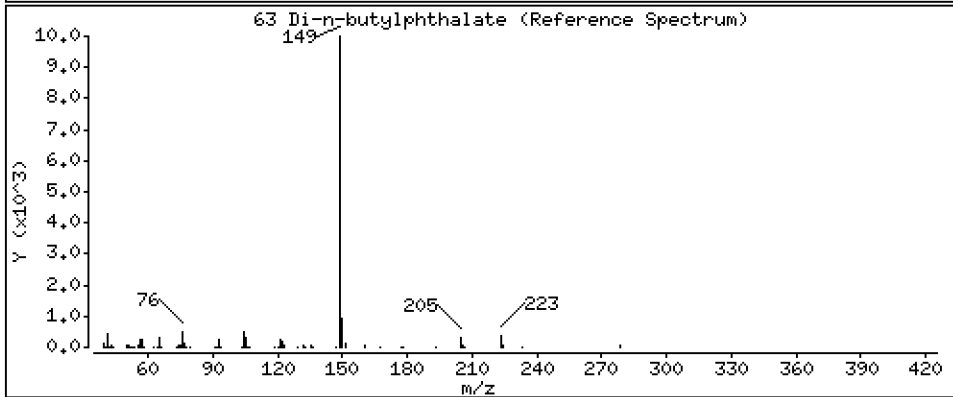
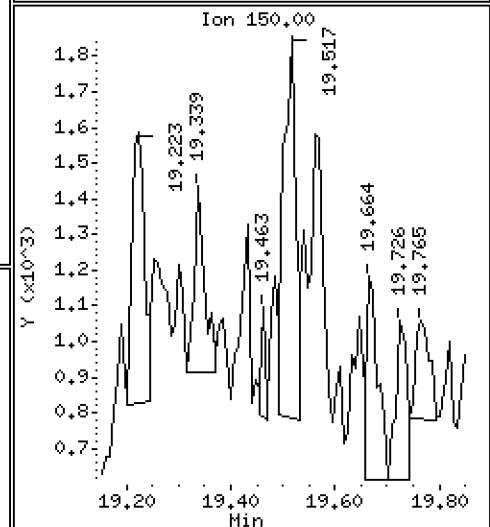
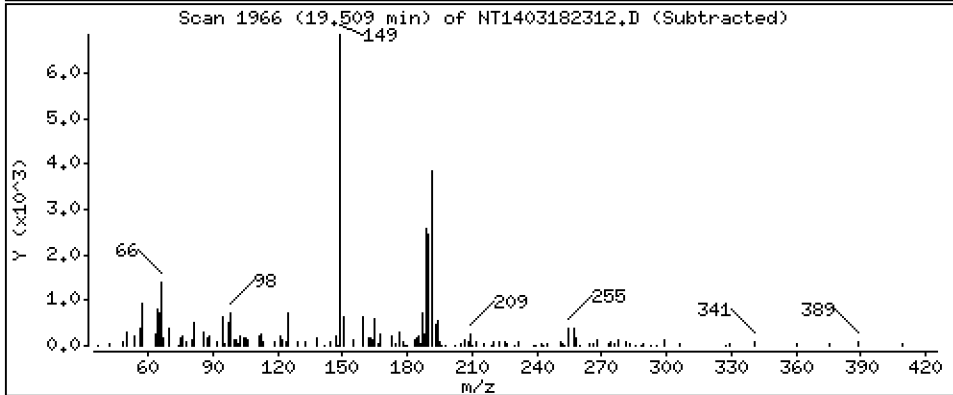
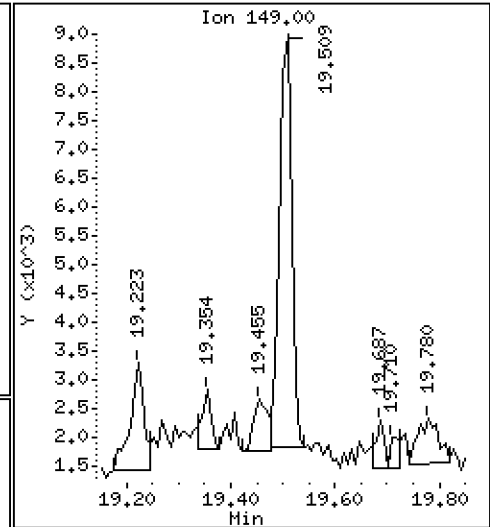
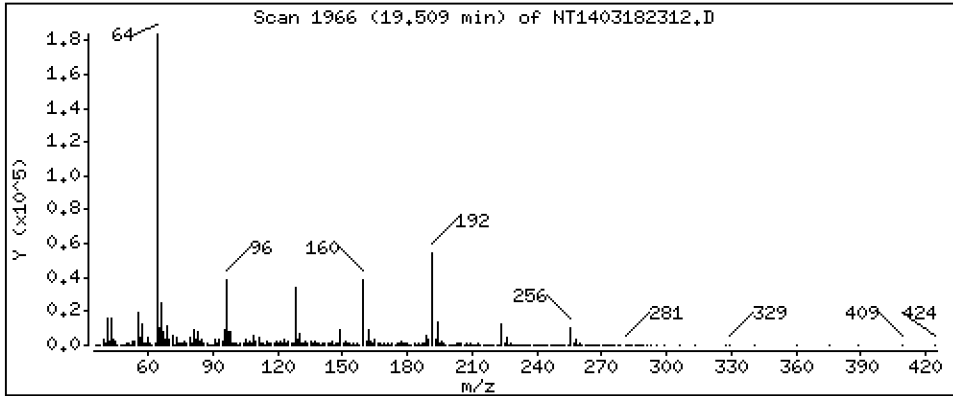
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,1571 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

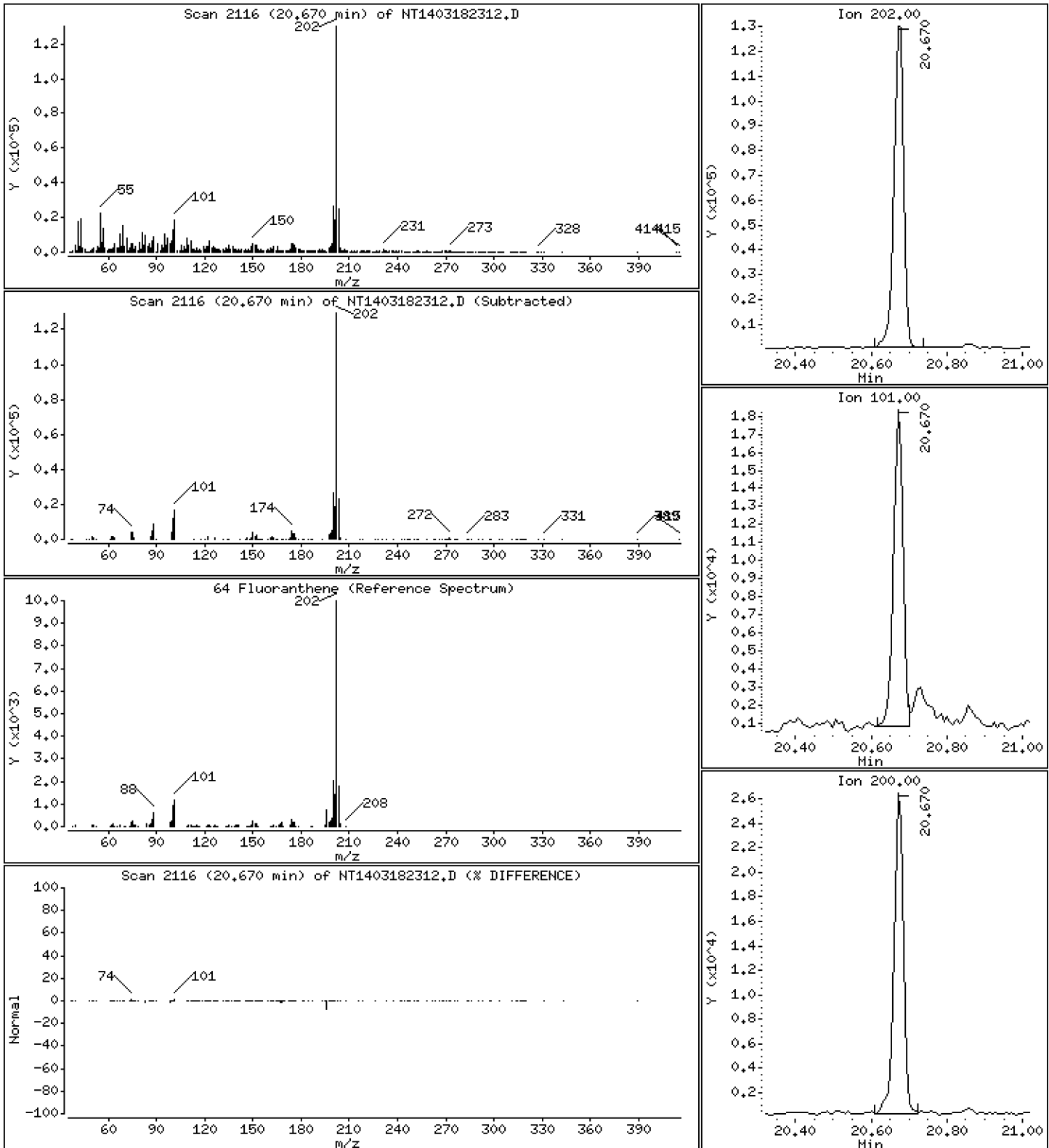
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,593 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

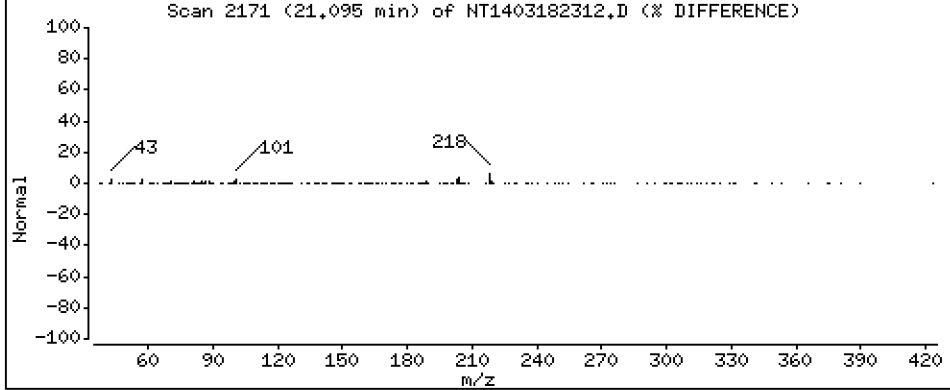
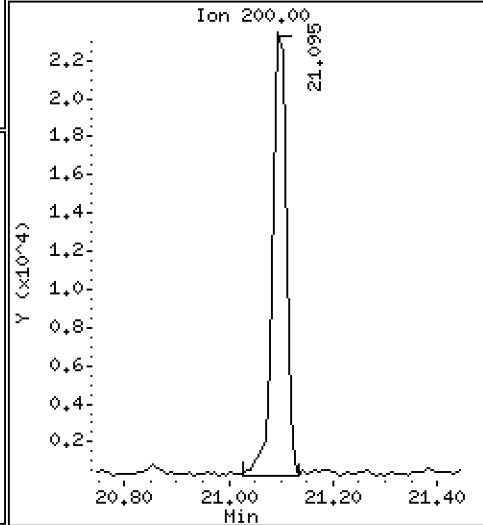
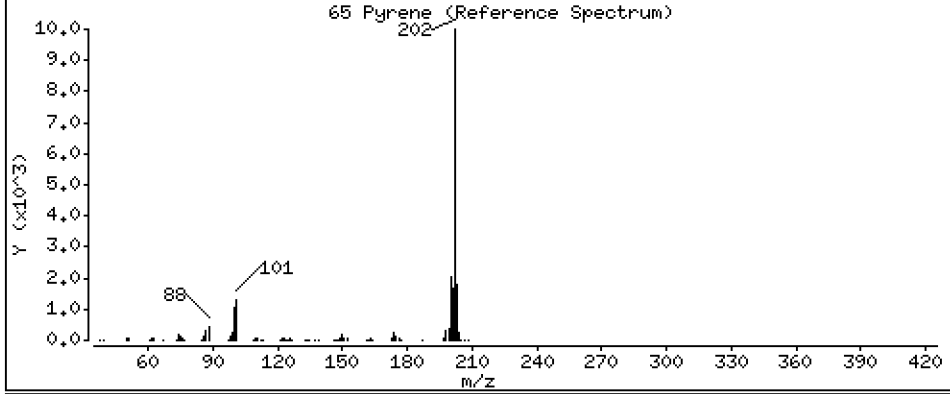
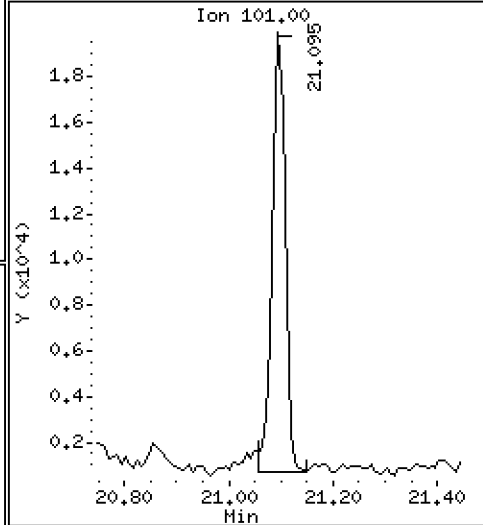
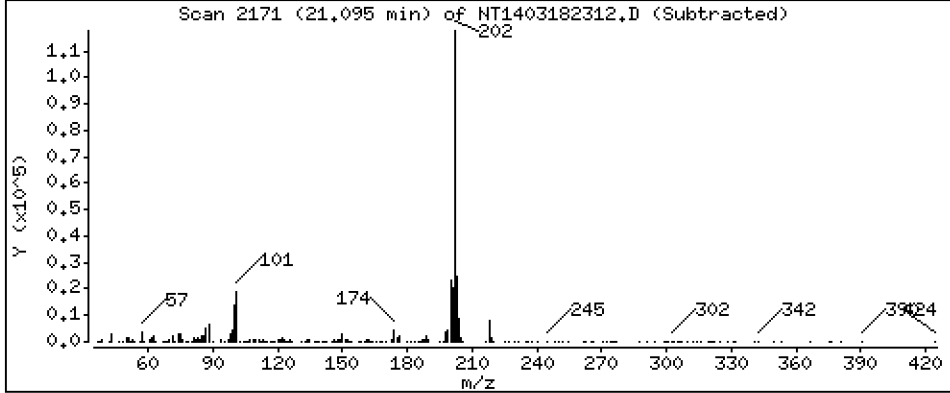
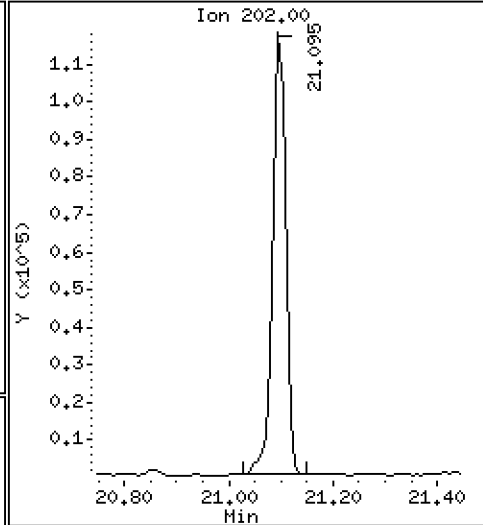
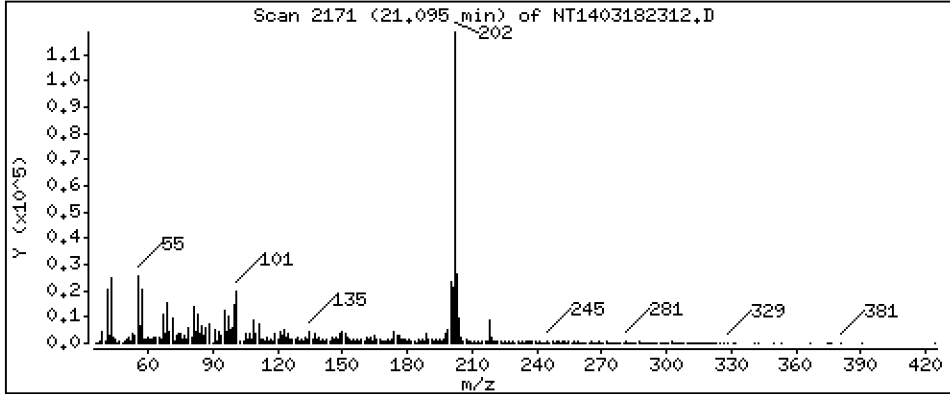
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 3,958 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

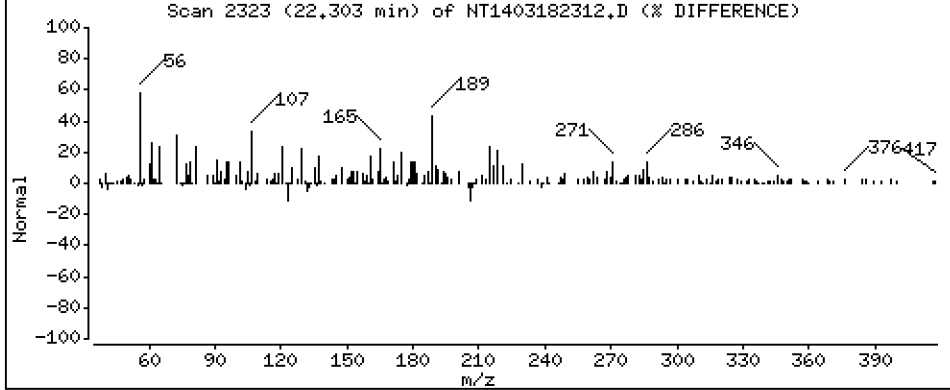
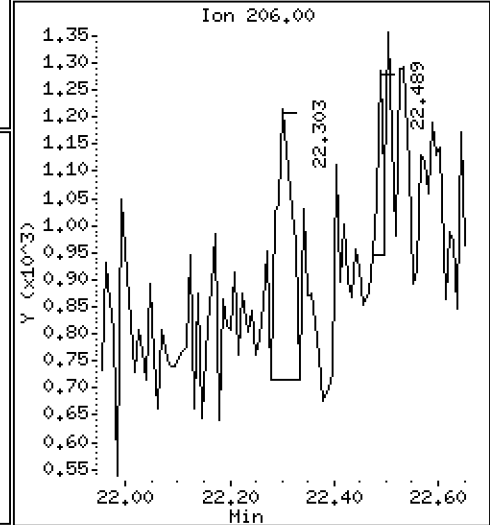
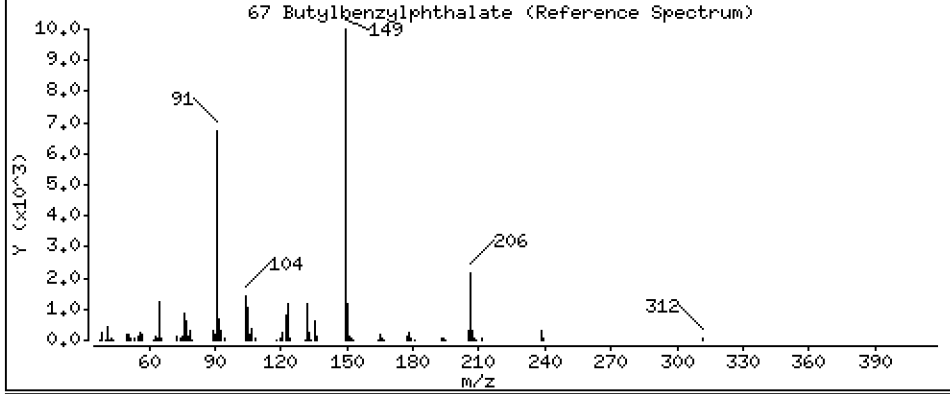
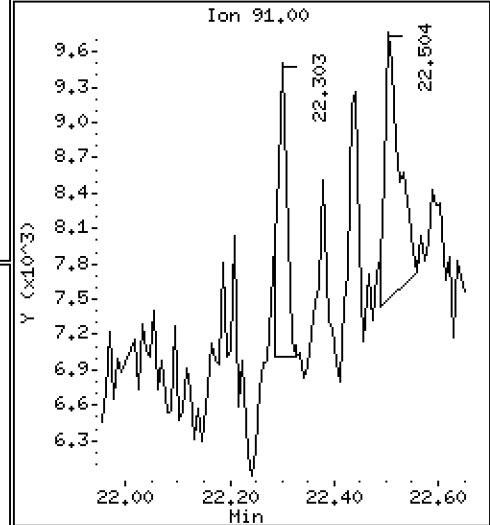
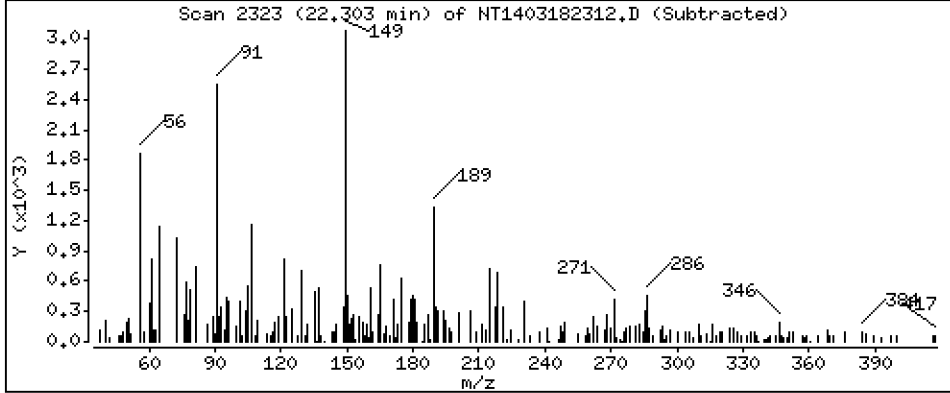
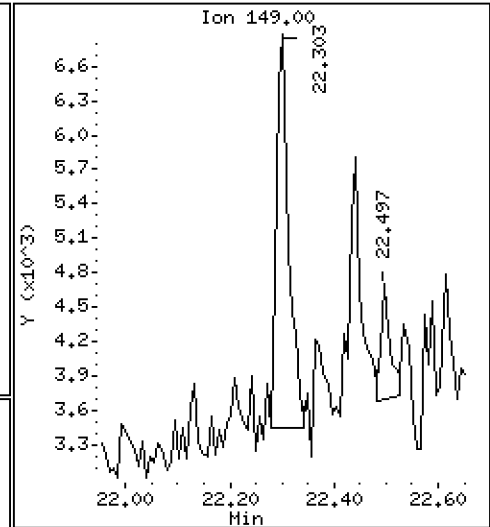
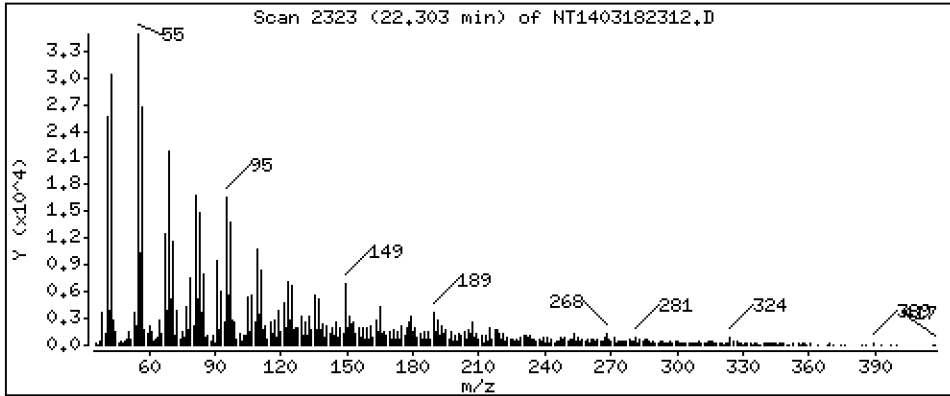
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2495 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

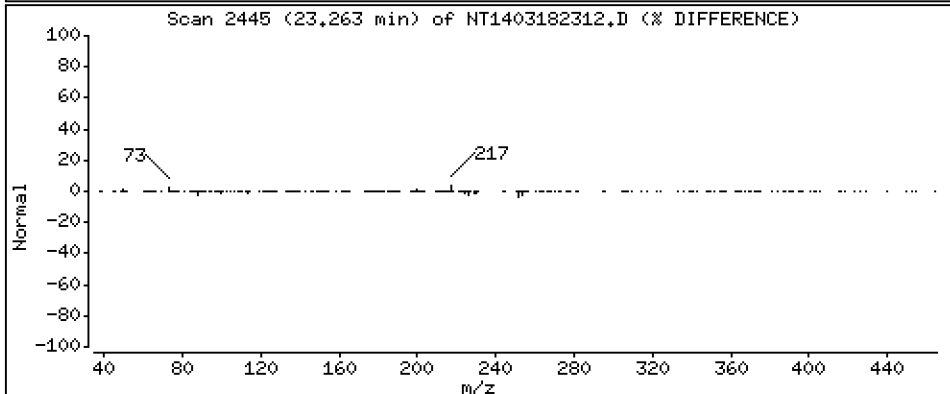
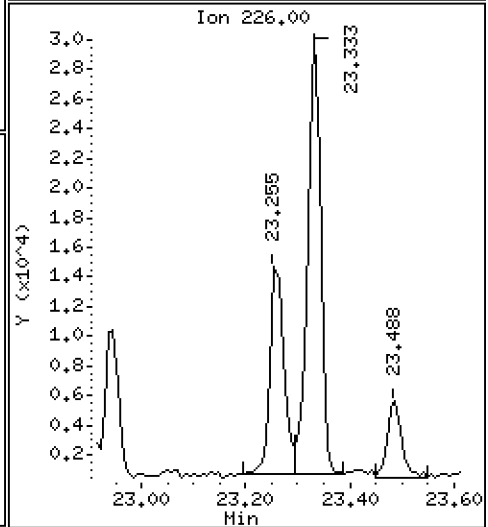
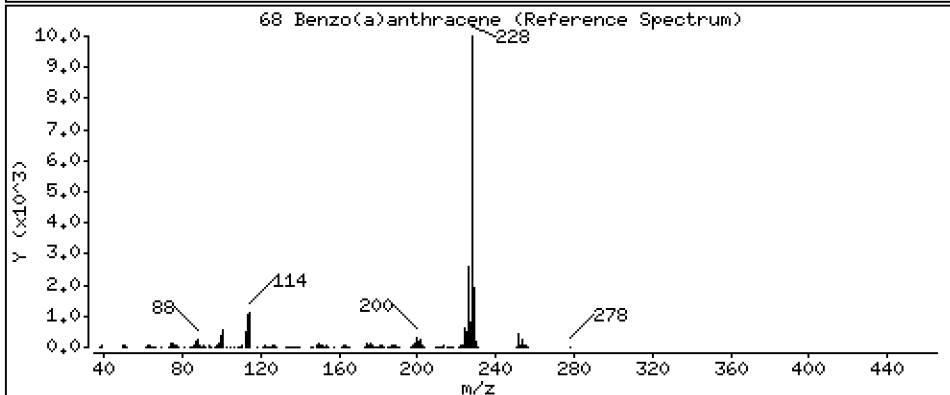
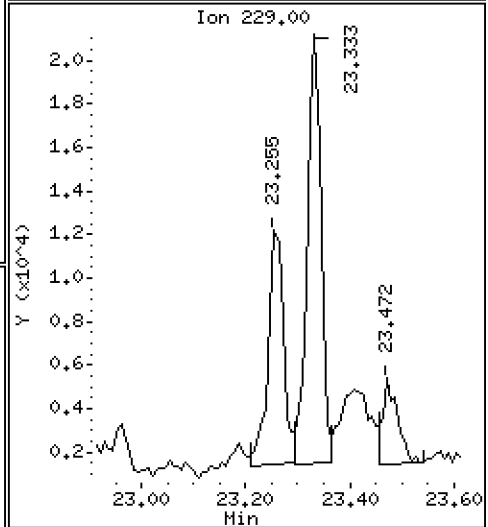
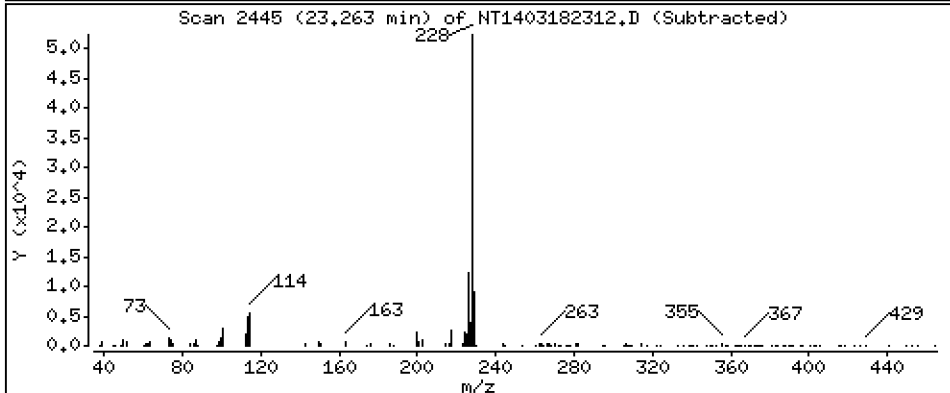
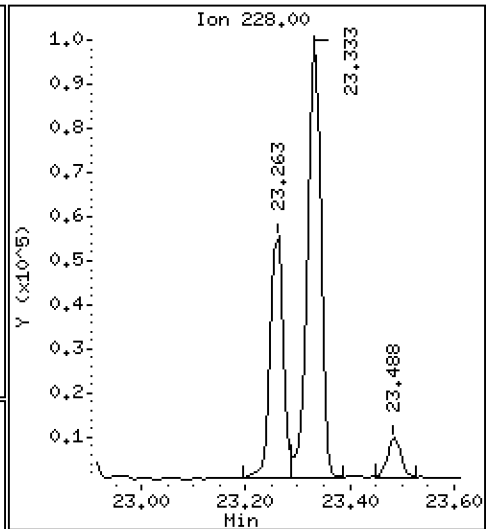
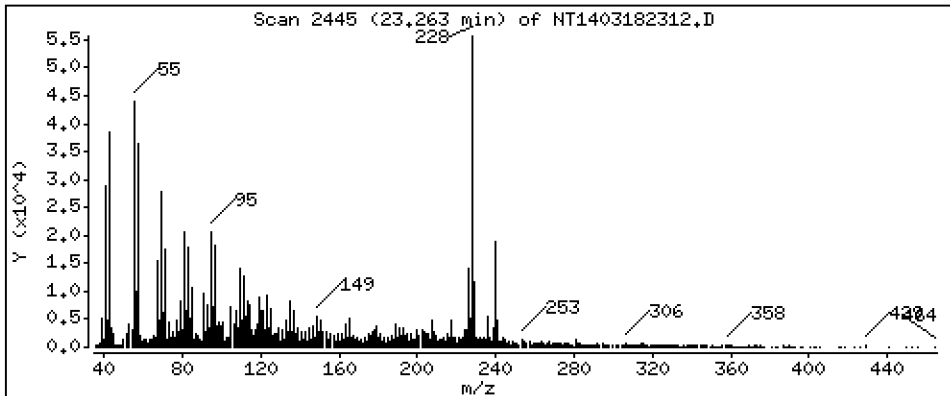
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 2,133 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

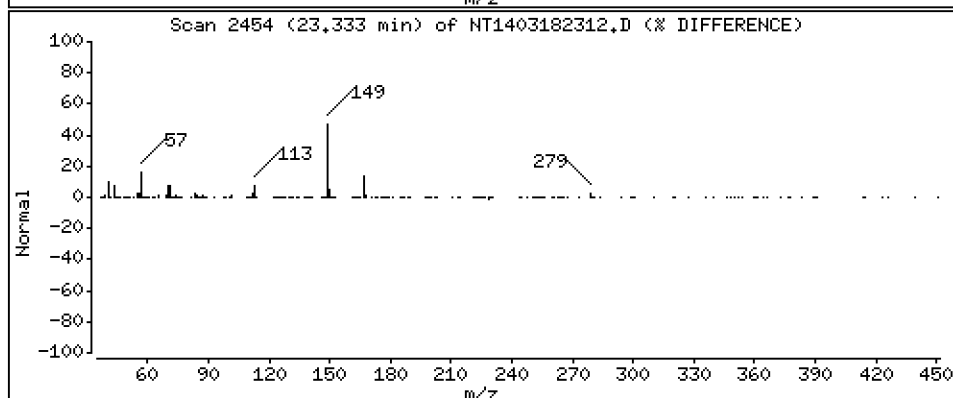
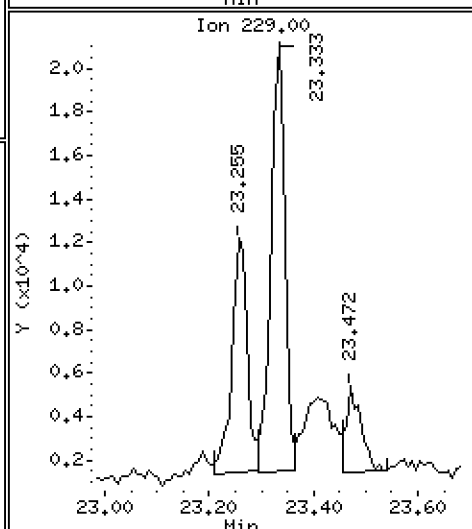
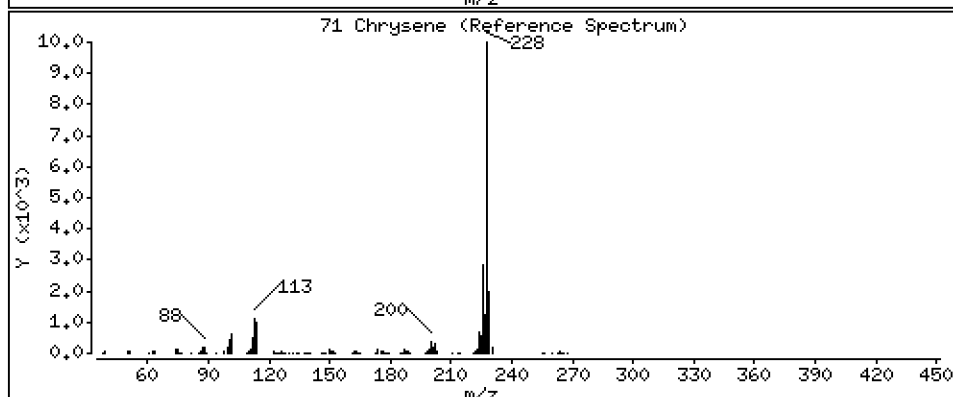
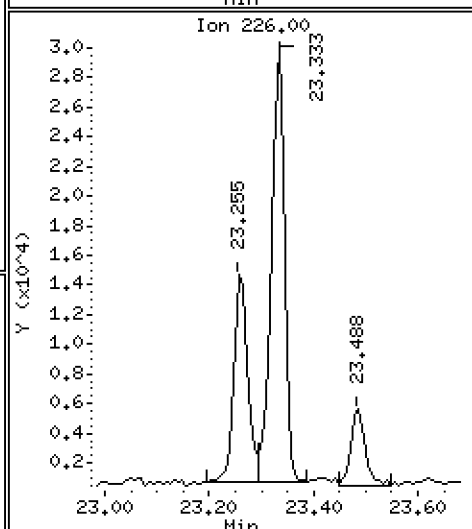
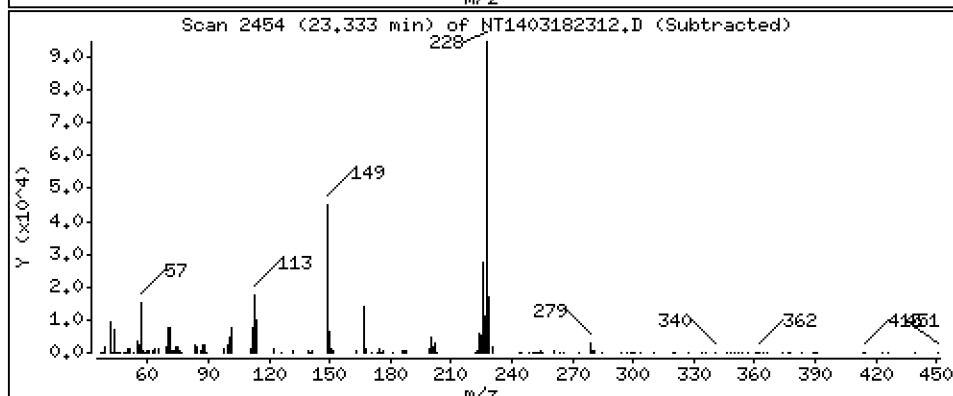
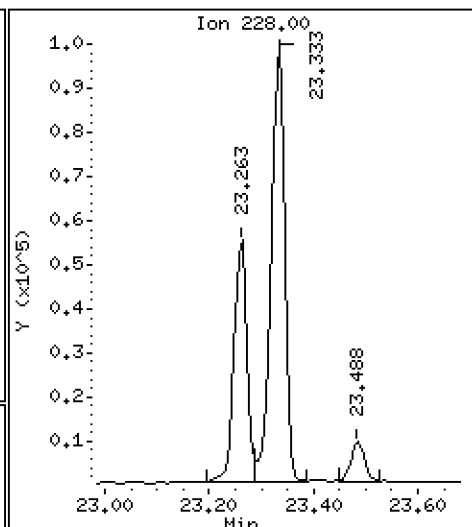
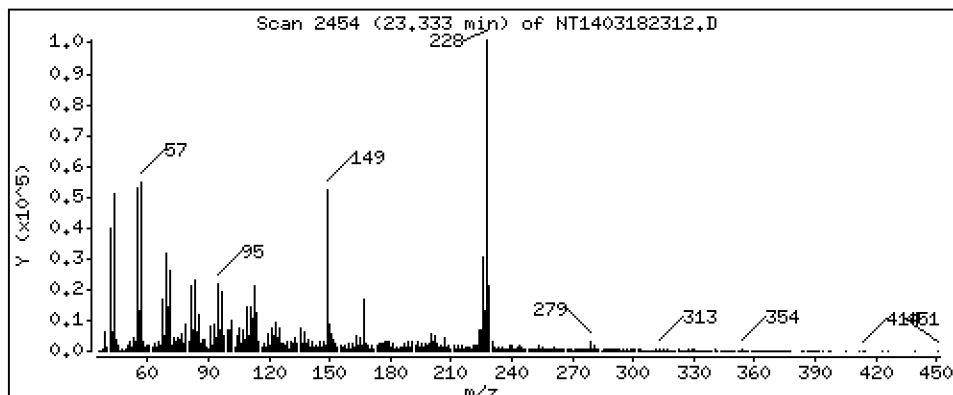
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,316 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

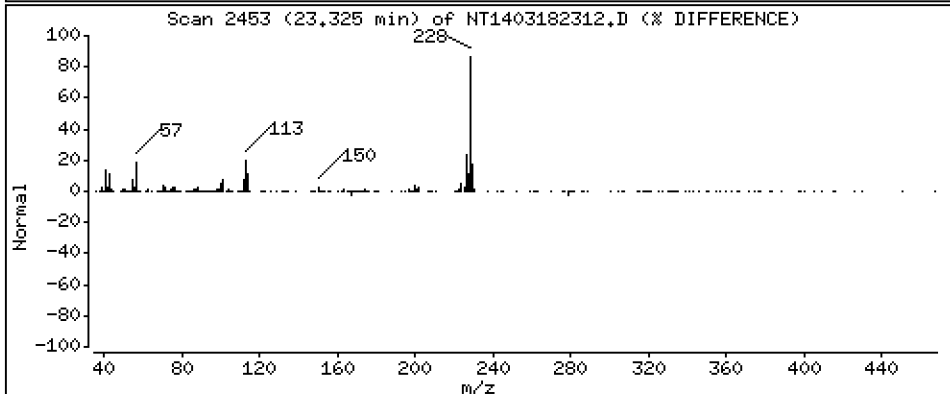
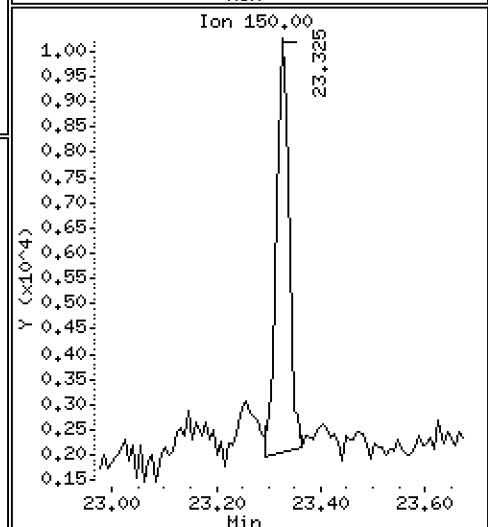
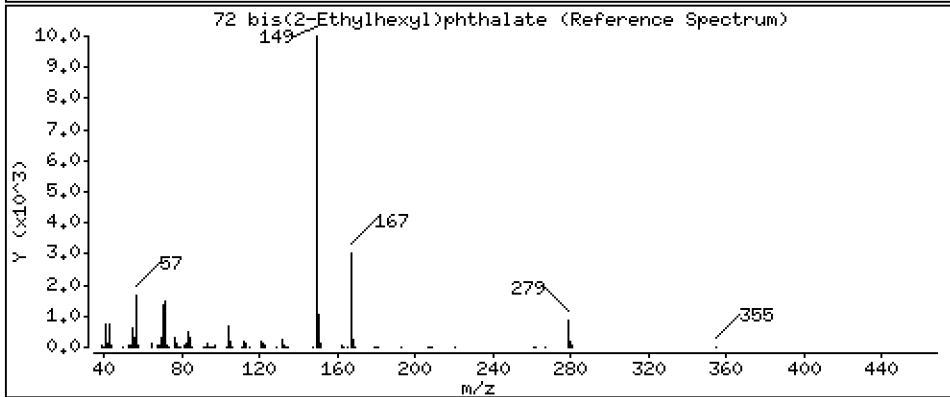
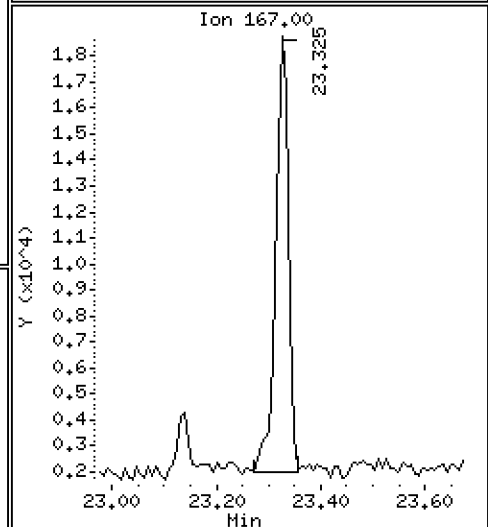
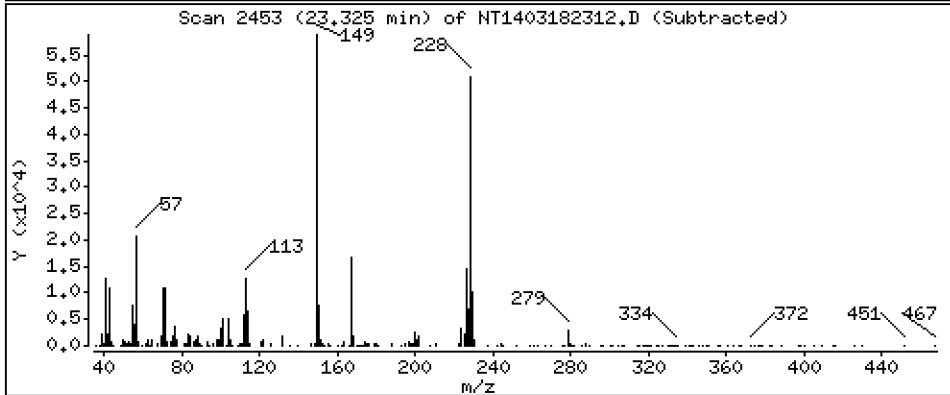
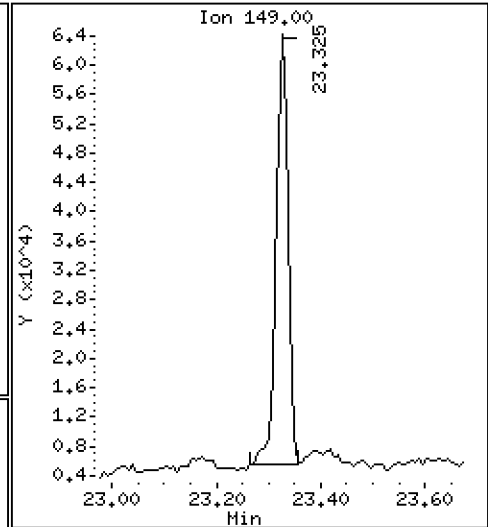
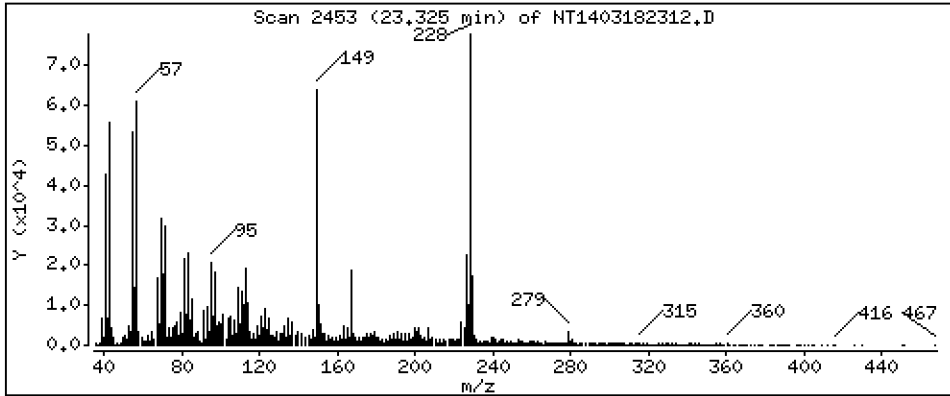
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 2,551 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

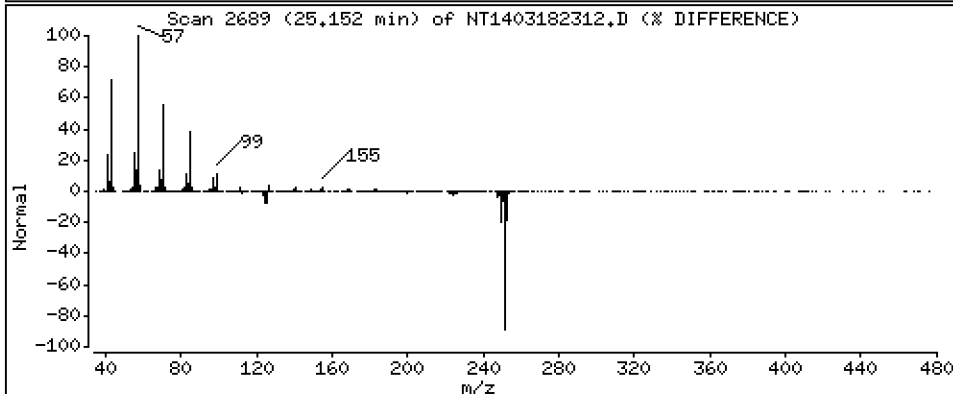
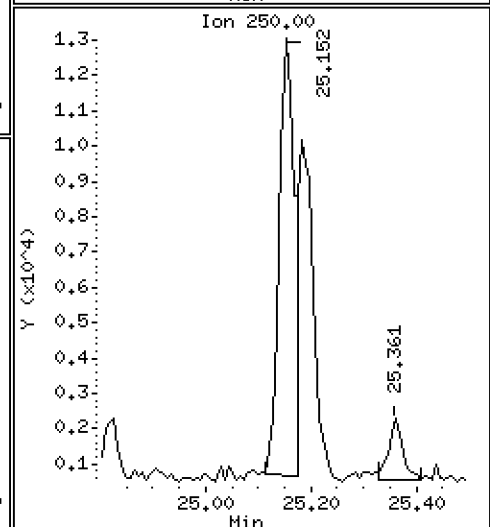
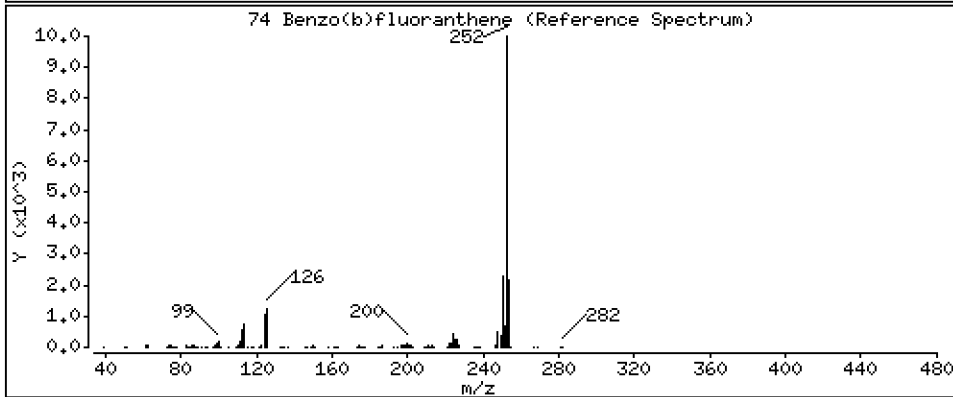
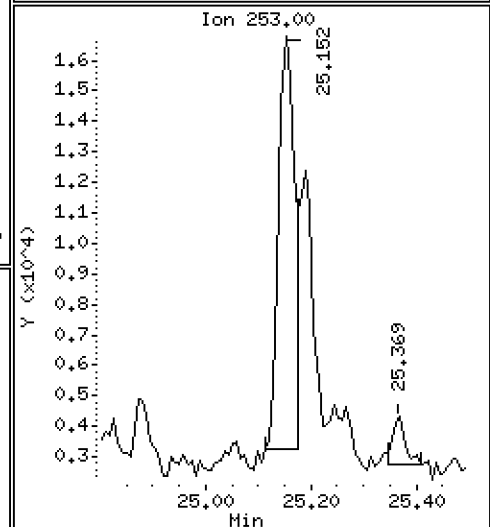
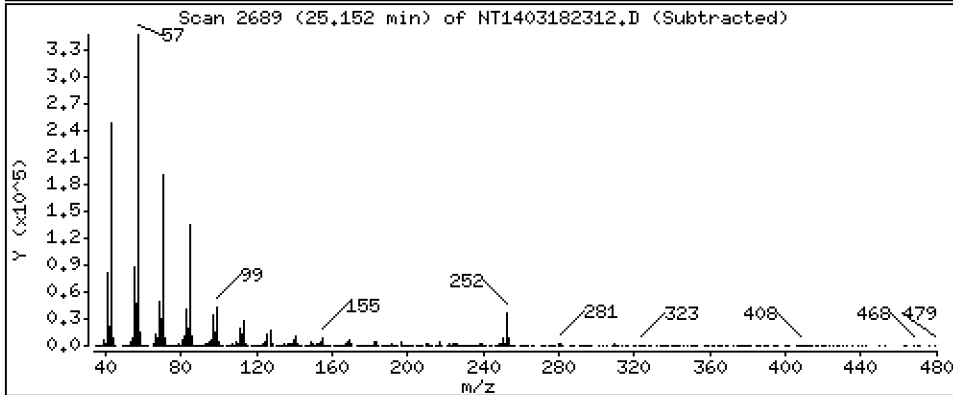
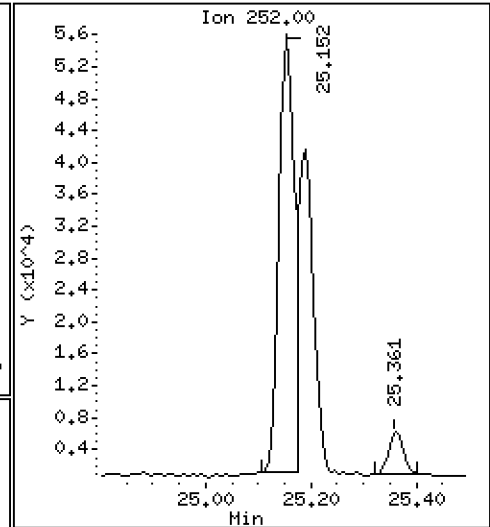
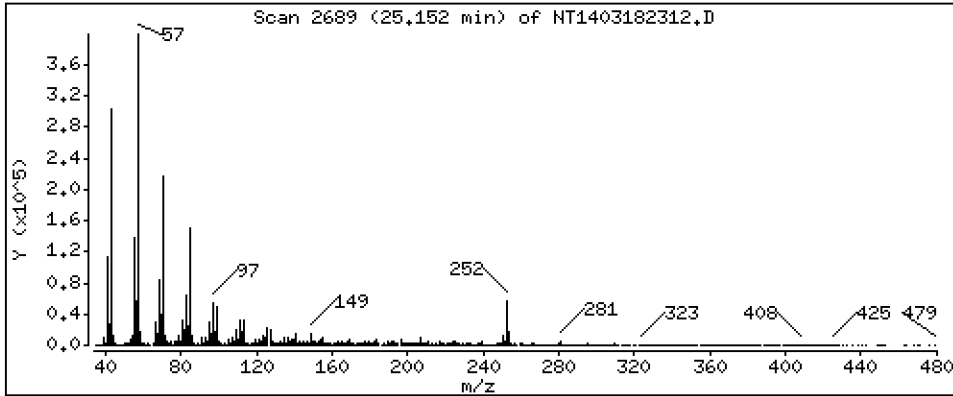
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,422 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

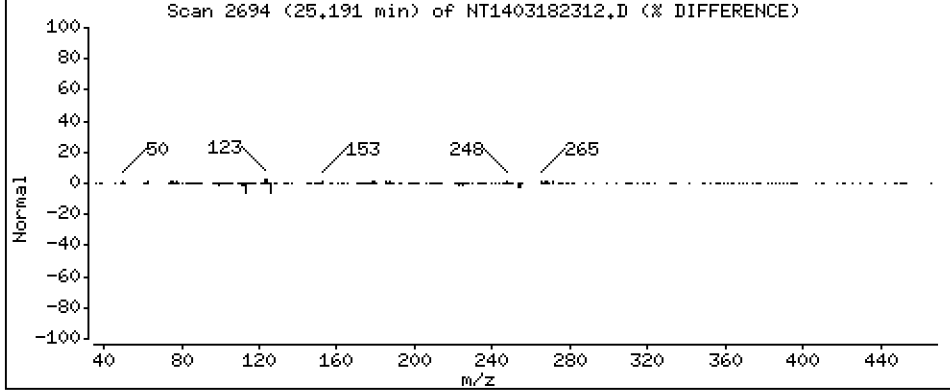
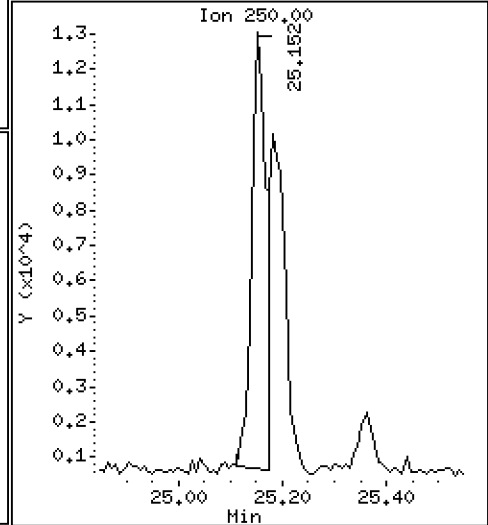
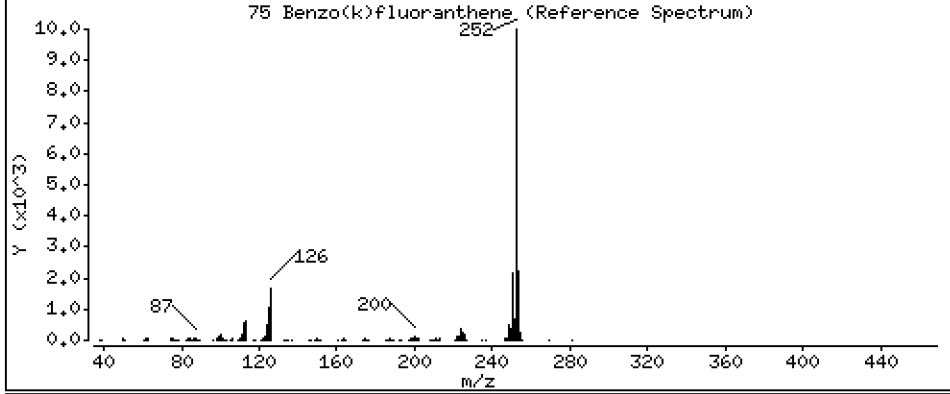
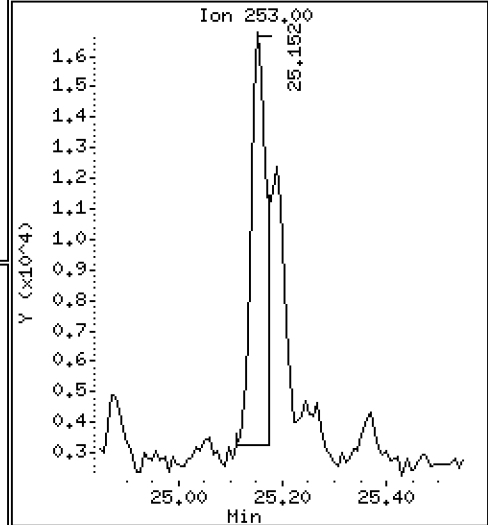
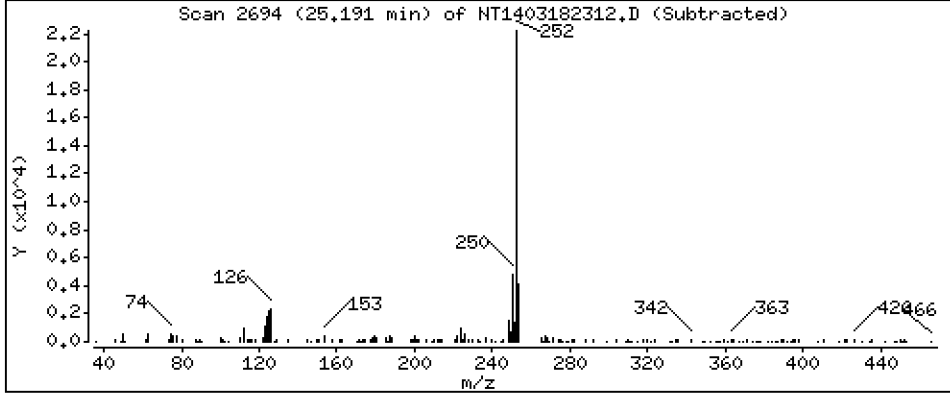
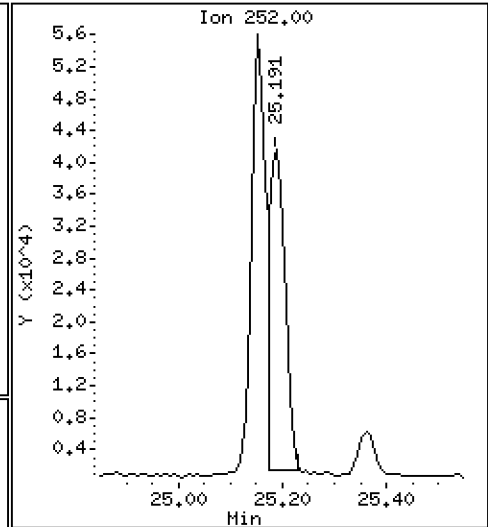
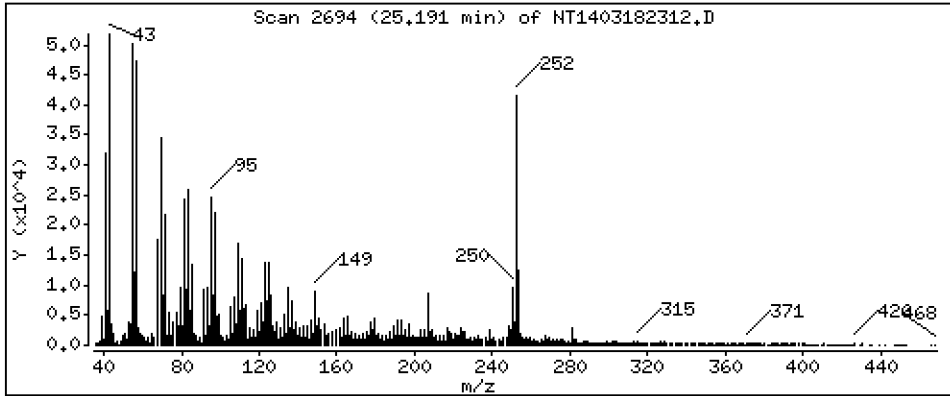
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,795 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

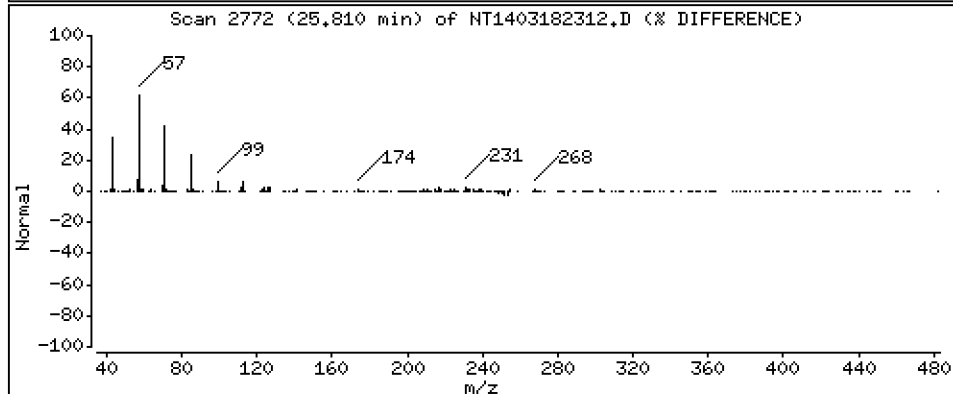
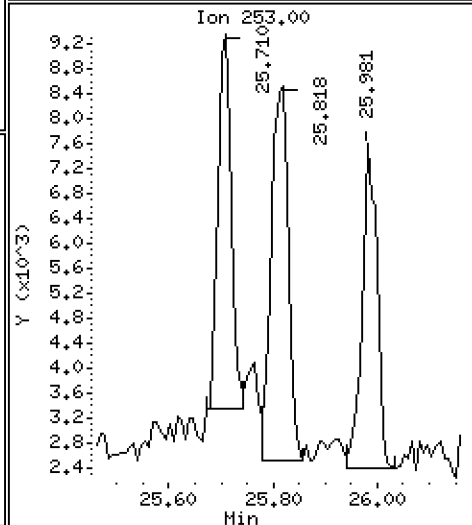
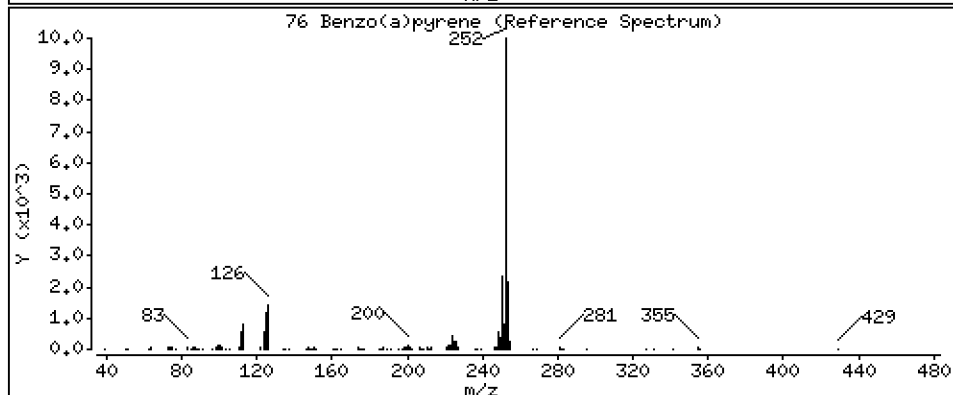
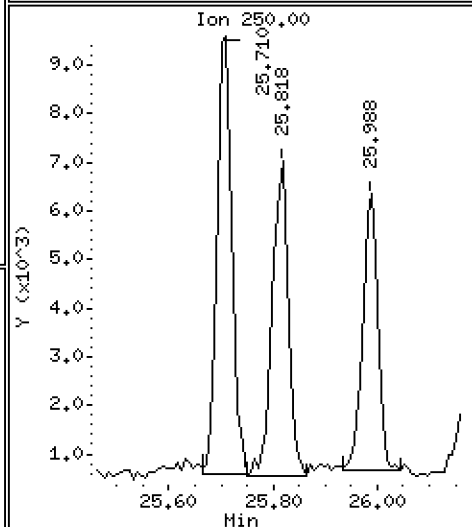
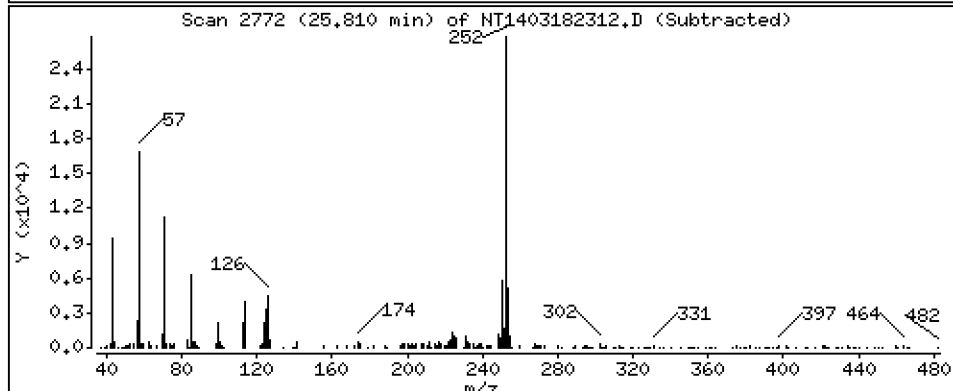
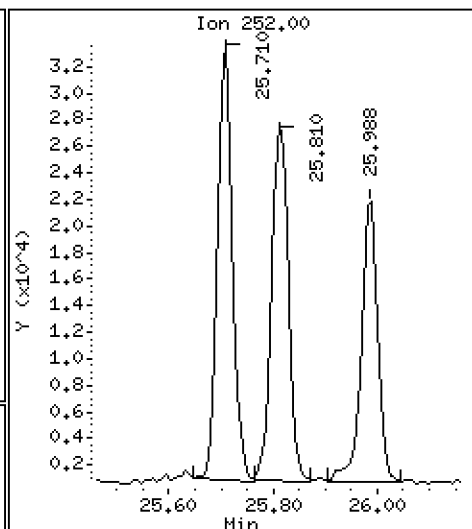
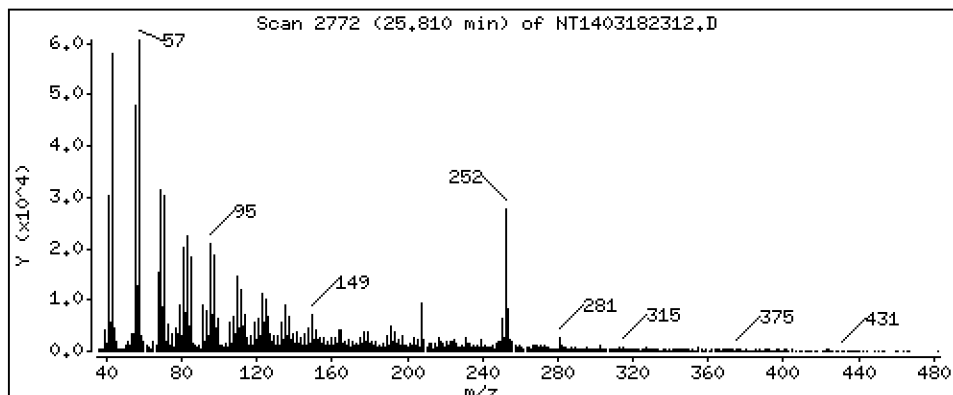
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,461 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

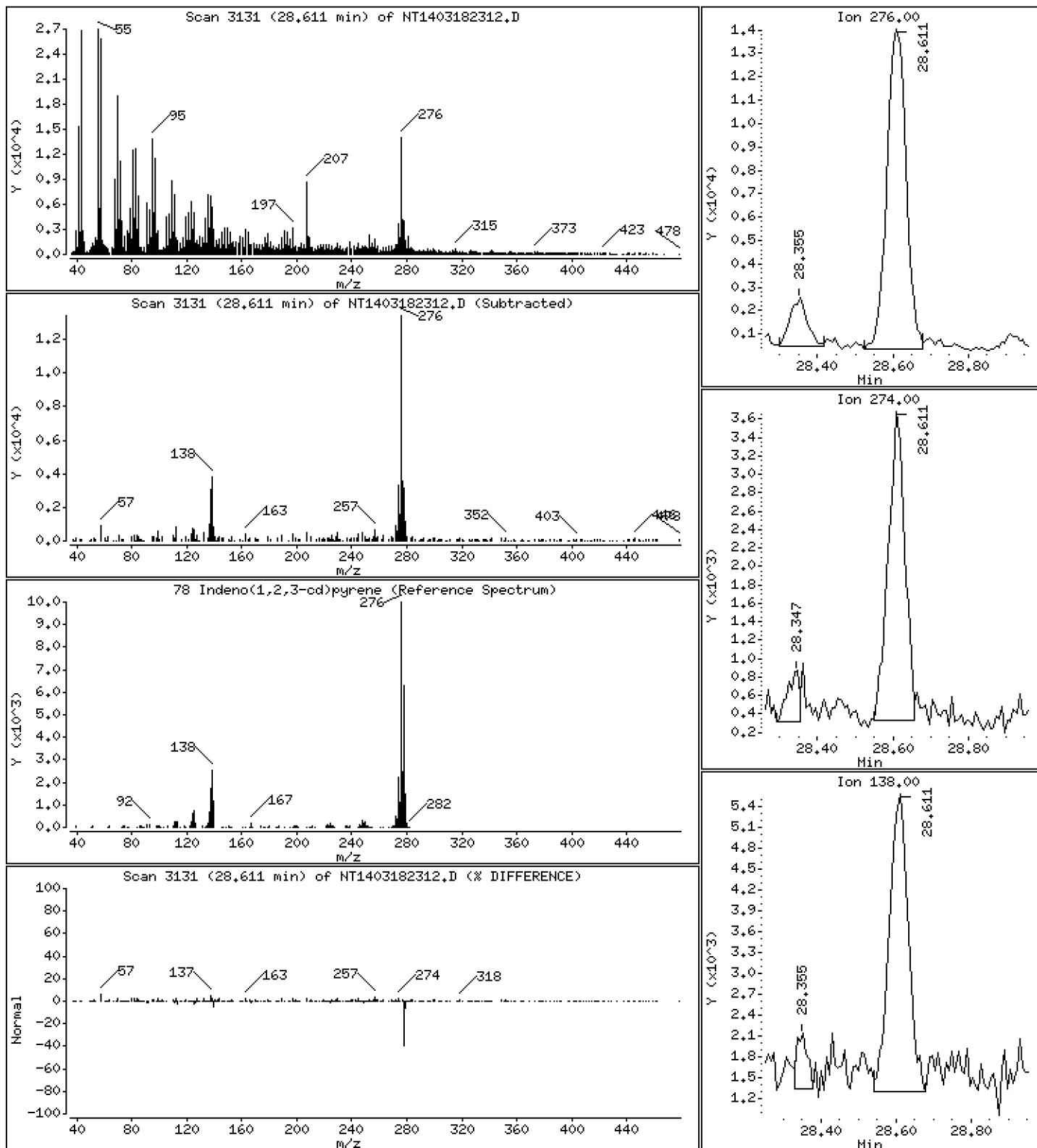
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 1,108 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

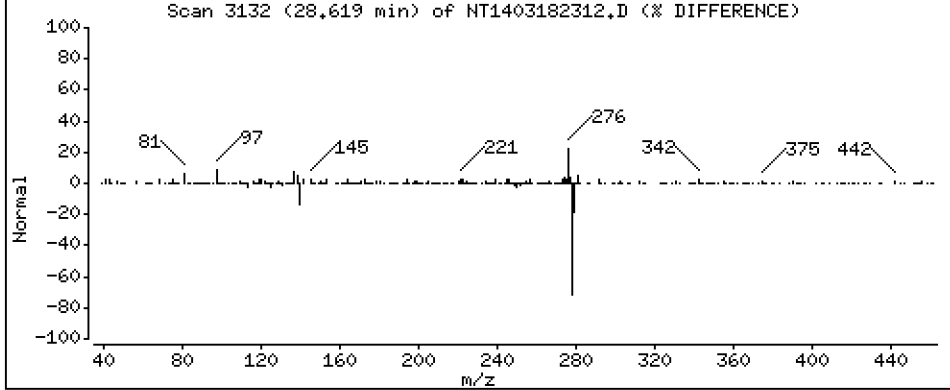
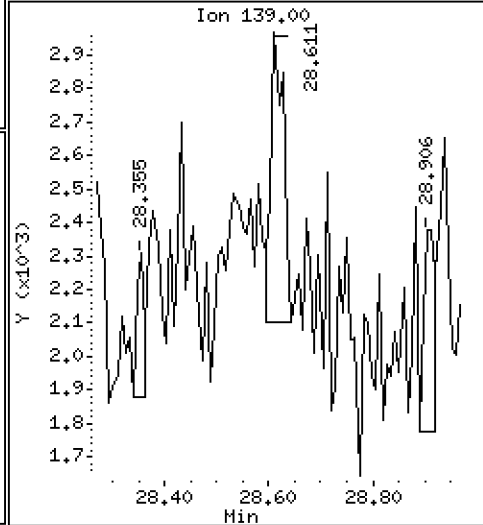
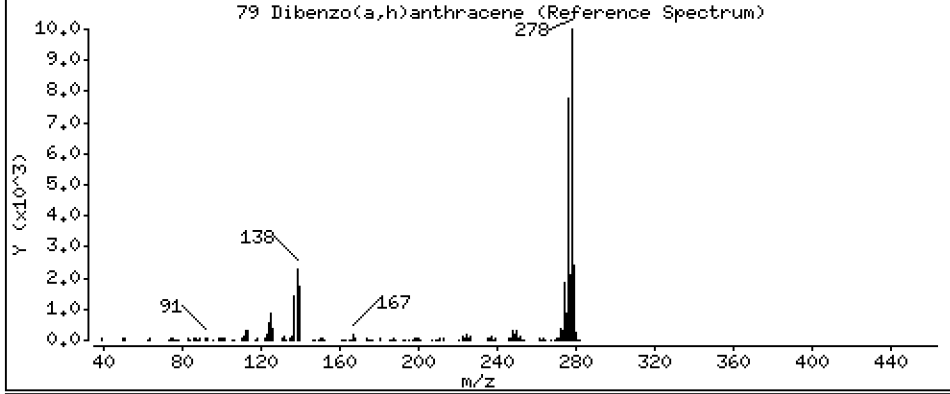
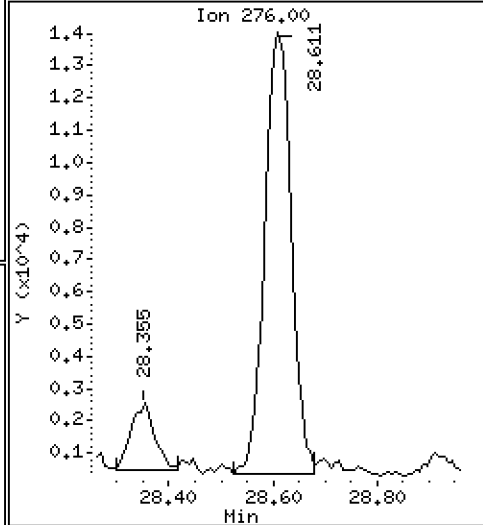
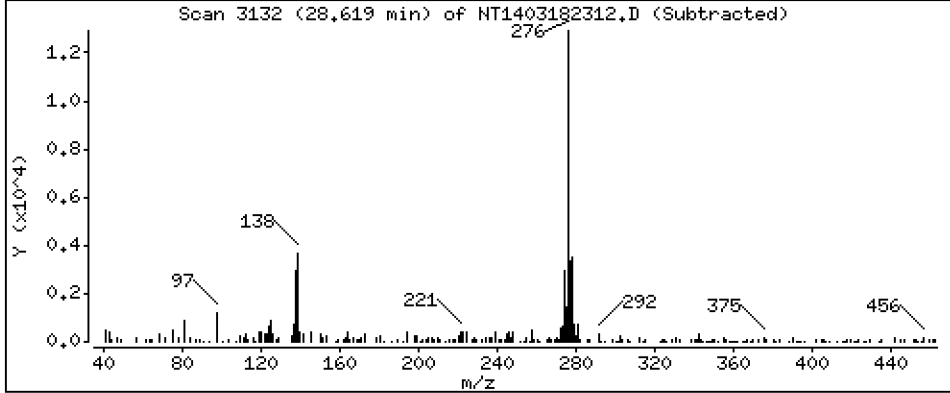
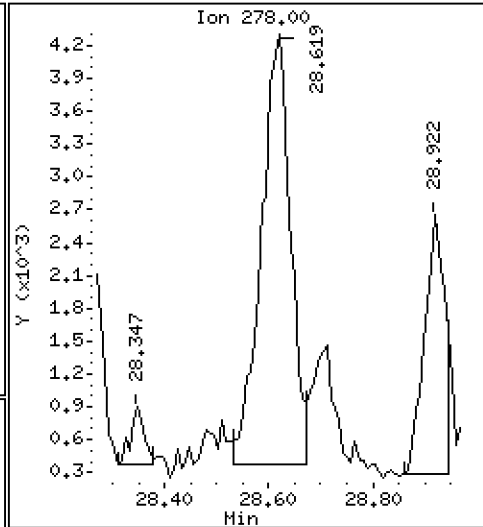
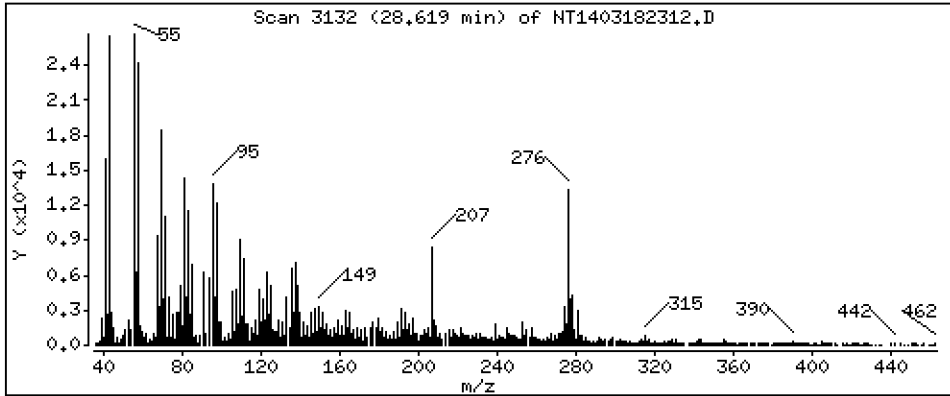
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,4180 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

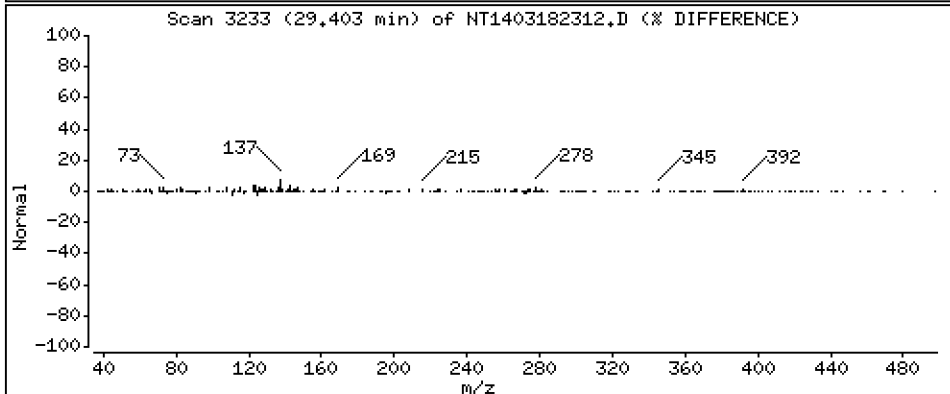
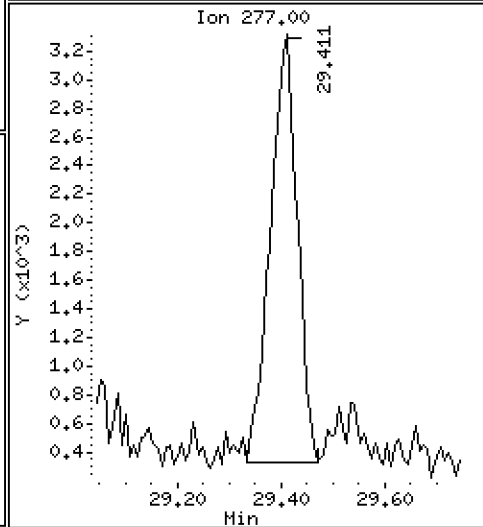
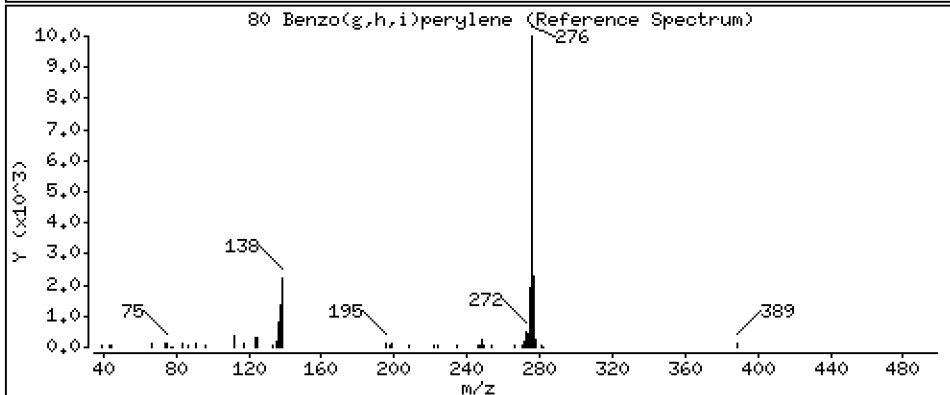
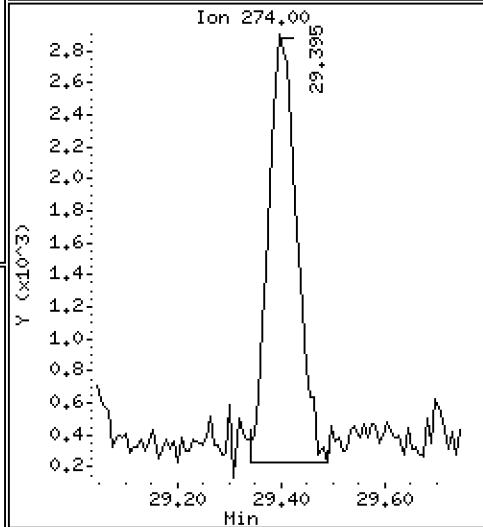
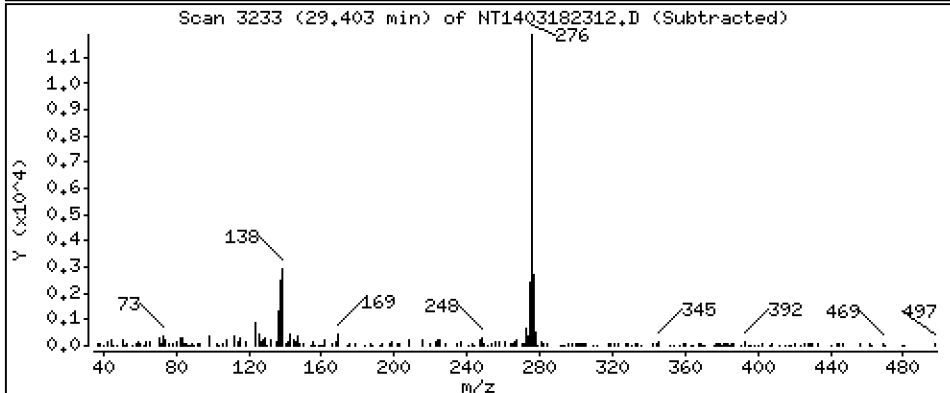
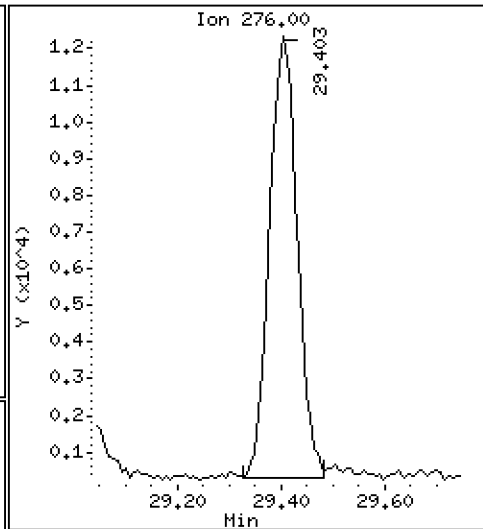
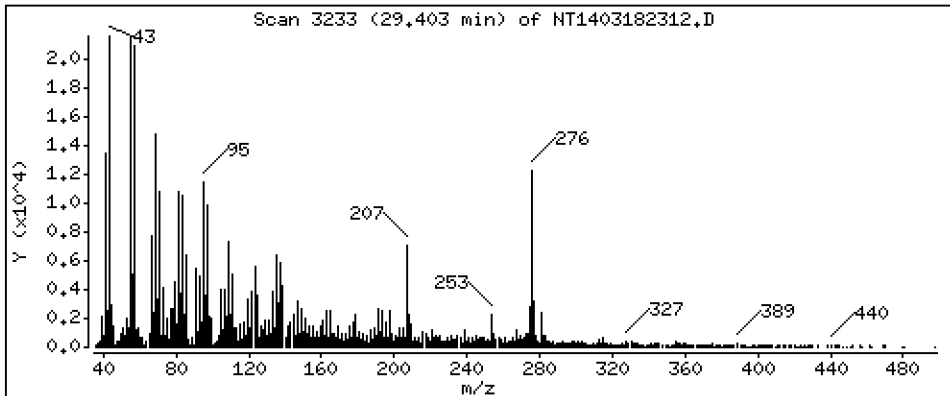
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 1,245 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

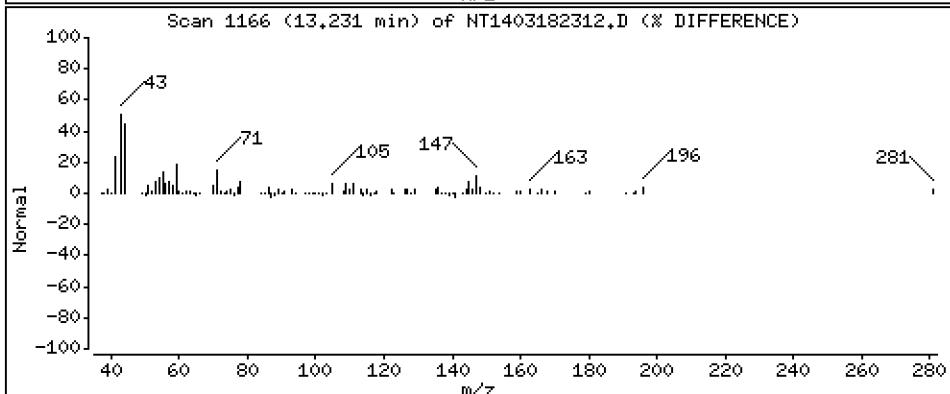
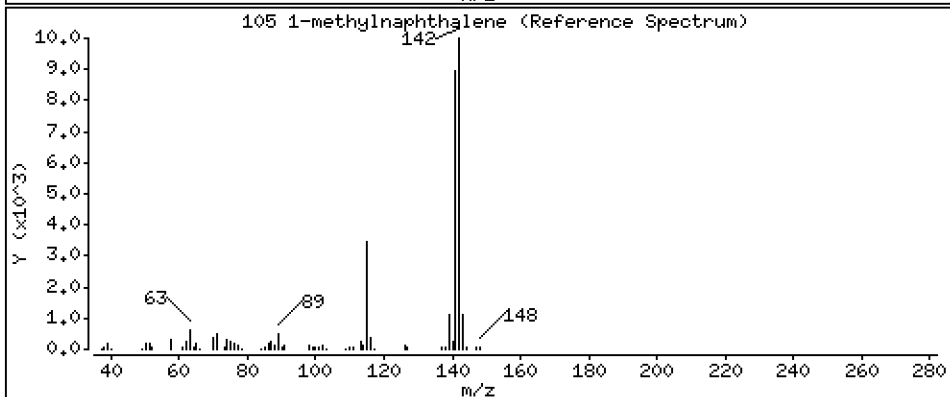
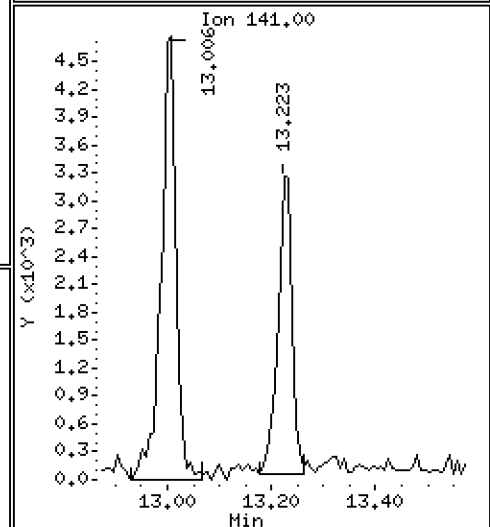
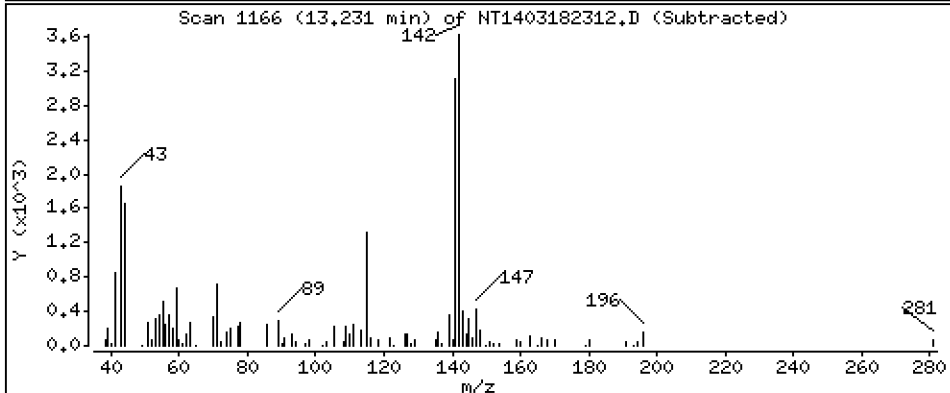
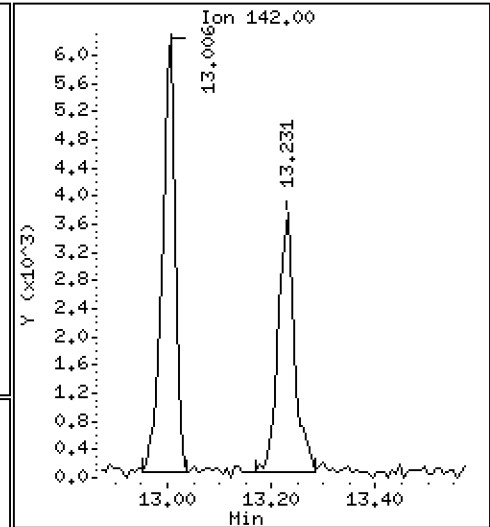
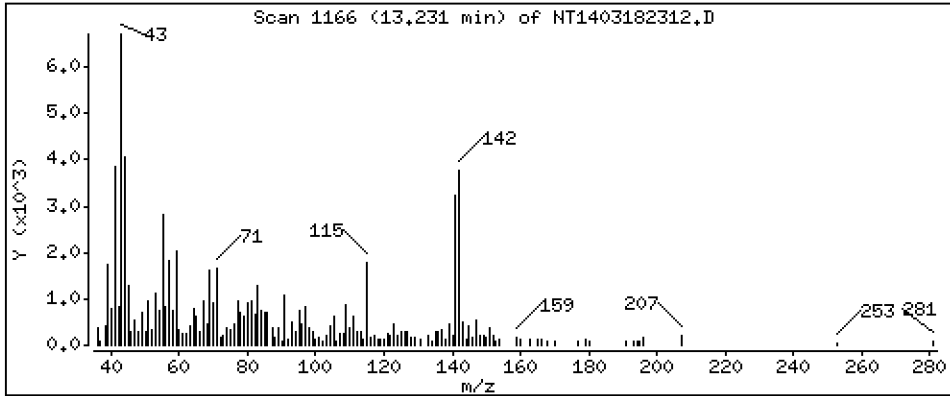
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1632 ug/mL



Date : 18-MAR-2023 23:40

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05RE1,4

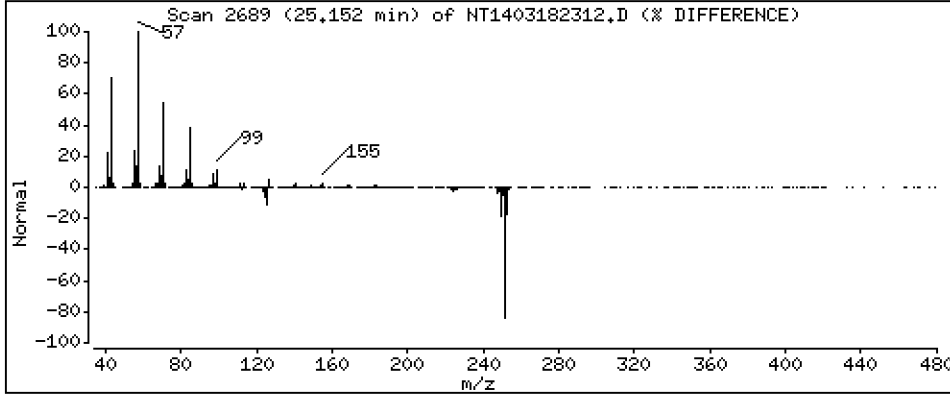
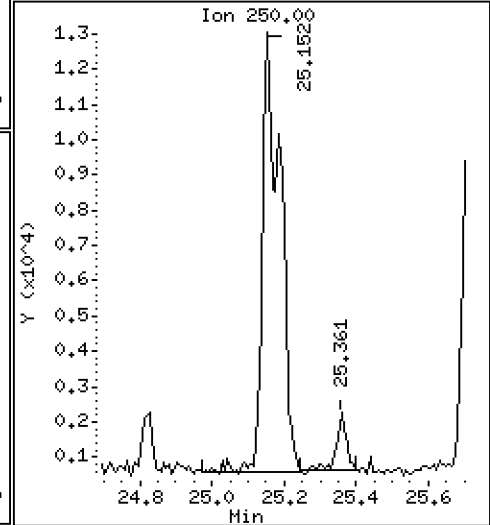
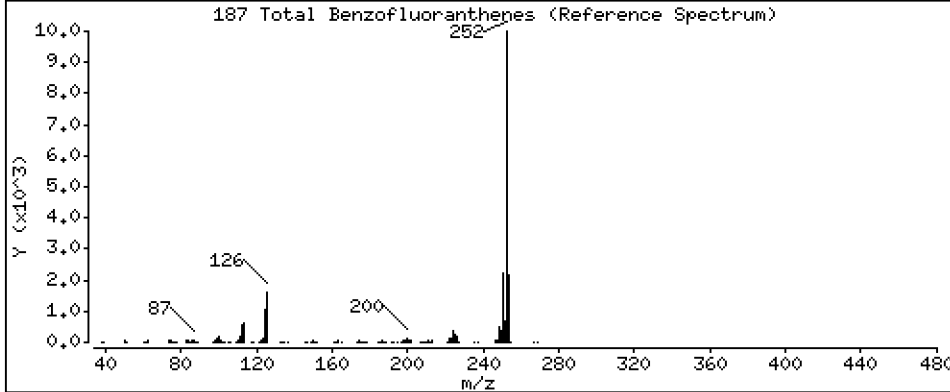
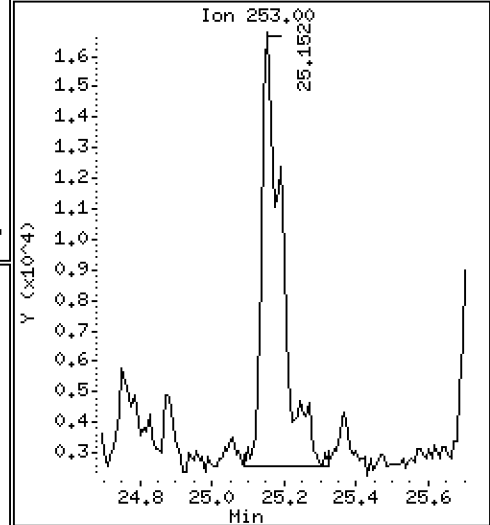
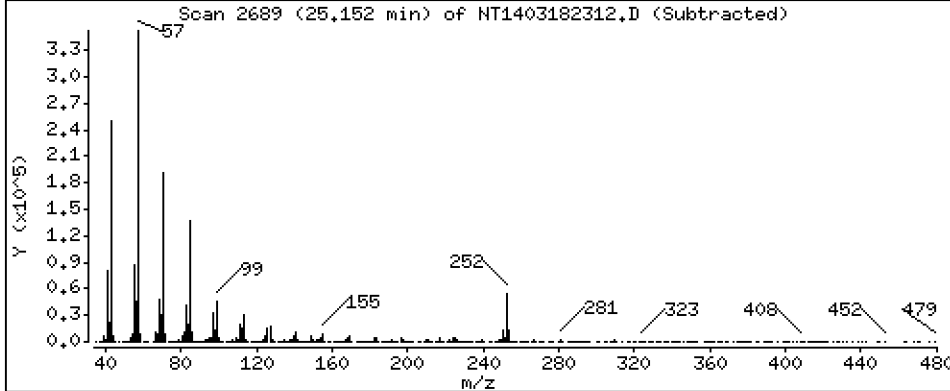
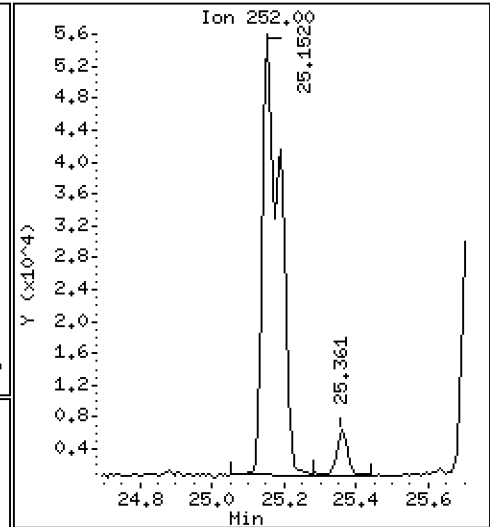
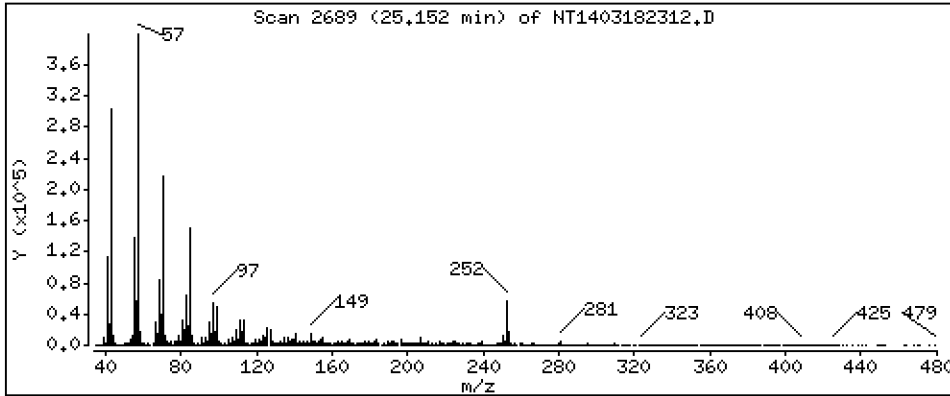
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 4,229 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182312.D
 Lab Smp Id: 23B0229-05RE1
 Inj Date : 18-MAR-2023 23:40 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-05RE1,4
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 10:18 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 4.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112		6.836	6.829	(1.000)	118552	1.18655	4.746
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	157842	1.19993	4.800
3 Phenol	94		8.443	8.435	(1.000)	9223	0.06597	0.2639
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	137356	1.32449	5.298
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	294135	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	62170	0.89733	3.589
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.349	9.333	(1.000)	10521	0.16166	0.6466
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
\$ 18 Nitrobenzene-d5	82		10.156	10.156	(0.879)	112461	0.92920	3.717
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		10.994	11.110	(0.951)	23143	0.28557	1.142 (M)
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.560	11.559	(1.000)	1143681	4.00000	
28 Naphthalene	128		11.598	11.598	(1.003)	24321	0.07960	0.3184
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	10844	0.05089	0.2036
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.788	13.787	(0.908)	207525	1.02118	4.085
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.685	14.693	(0.967)	5548	0.02965	0.1186
40 Acenaphthylene	152		14.879	14.879	(0.980)	10948	0.03742	0.1497
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.188	15.188	(1.000)	561150	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.258	15.258	(1.005)	8951	0.05240	0.2096
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.583	15.583	(1.026)	18032	0.07395	0.2958
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.147	16.155	(1.063)	158430	0.81891	3.276
49 Fluorene	166		16.302	16.301	(1.073)	28765	0.12444	0.4978
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.834	16.833	(1.108)	26771	1.21340	4.854
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.240	18.232	(1.000)	917402	4.00000	
60 Phenanthrene	178		18.286	18.286	(1.003)	143535	0.54761	2.190
61 Anthracene	178		18.379	18.379	(1.008)	73501	0.29106	1.164
62 Carbazole	167		18.704	18.704	(1.025)	14252	0.06343	0.2537
63 Di-n-butylphthalate	149		19.509	19.501	(1.070)	11187	0.03928	0.1571
64 Fluoranthene	202		20.669	20.669	(0.888)	219348	1.14821	4.593
65 Pyrene	202		21.095	21.095	(0.906)	193843	0.98946	3.958
\$ 66 Terphenyl-d14	244		21.381	21.381	(0.918)	164777	1.24244	4.970
67 Butylbenzylphthalate	149		22.302	22.302	(0.958)	5354	0.06238	0.2495
68 Benzo(a)anthracene	228		23.263	23.263	(0.999)	92312	0.53318	2.133
* 69 Chrysene-d12	240		23.286	23.294	(1.000)	469557	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.332	23.332	(1.002)	169059	1.07891	4.316
72 bis(2-Ethylhexyl)phthalate	149		23.325	23.324	(0.959)	88078	0.63775	2.551
* 134 Di-n-octylphthalate-d4	153		24.316	24.315	(1.000)	1049117	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.152	25.152	(0.970)	113265	0.60543	2.422
75 Benzo(k)fluoranthene	252		25.190	25.198	(0.971)	83243	0.44886	1.795 (M)
76 Benzo(a)pyrene	252		25.810	25.810	(0.995)	58428	0.36522	1.461
* 77 Perylene-d12	264		25.934	25.926	(1.000)	529419	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.610	28.610	(1.103)	48246	0.27708	1.108
79 Dibenzo(a,h)anthracene	278		28.618	28.618	(1.104)	15336	0.10451	0.4180
80 Benzo(g,h,i)perylene	276		29.403	29.395	(1.134)	44650	0.31115	1.245
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.230	13.223	(1.145)	7877	0.04080	0.1632
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.152	25.198	(0.970)	187536	1.05716	4.229
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 18-MAR-2023
 Lab File ID: NT1403182312.D Calibration Time: 17:38
 Lab Smp Id: 23B0229-05RE1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	247621	123811	495242	294135	18.78
27 Naphthalene-d8	955275	477638	1910550	1143681	19.72
42 Acenaphthene-d10	510589	255295	1021178	561150	9.90
59 Phenanthrene-d10	920812	460406	1841624	917402	-0.37
69 Chrysene-d12	546688	273344	1093376	469557	-14.11
134 Di-n-octylphthala	1067789	533895	2135578	1049117	-1.75
77 Perylene-d12	445520	222760	891040	529419	18.83

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.23	17.73	18.73	18.24	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.03

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

REVIEW SUMMARY FOR FILE - NT1403182312.D

Lab ID: 23B0229-05RE1
nt14.i, ABN.m, 18-MAR-2023 23:40

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.951	0.961	-0.0101	Benzoic acid

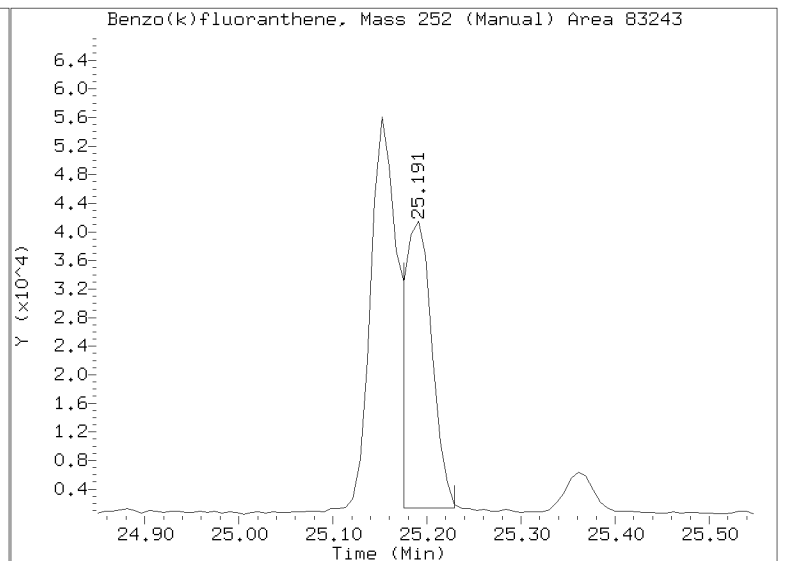
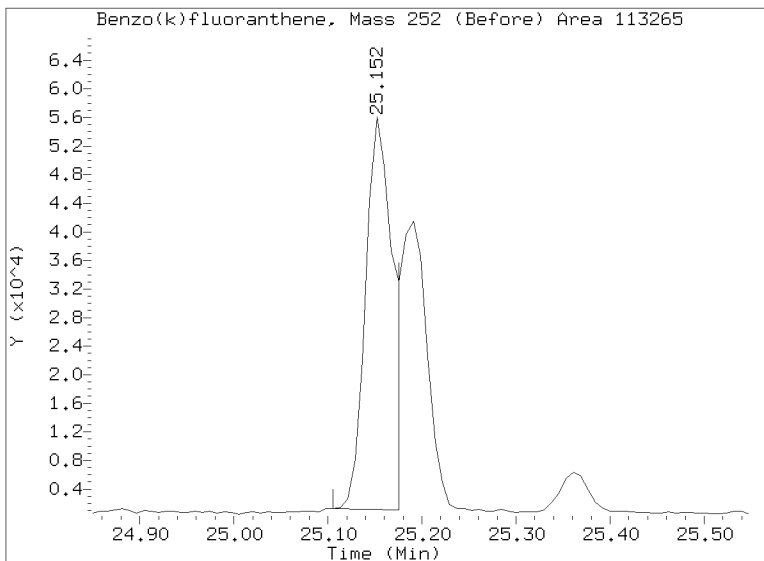
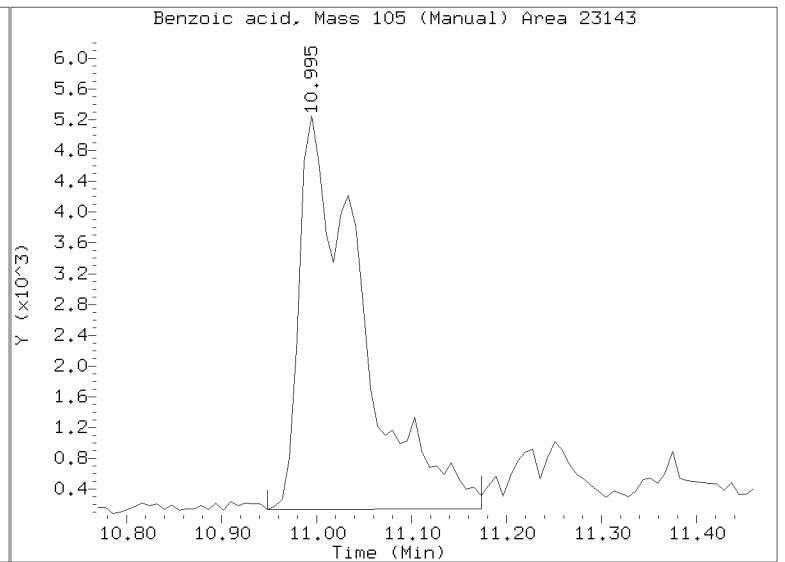
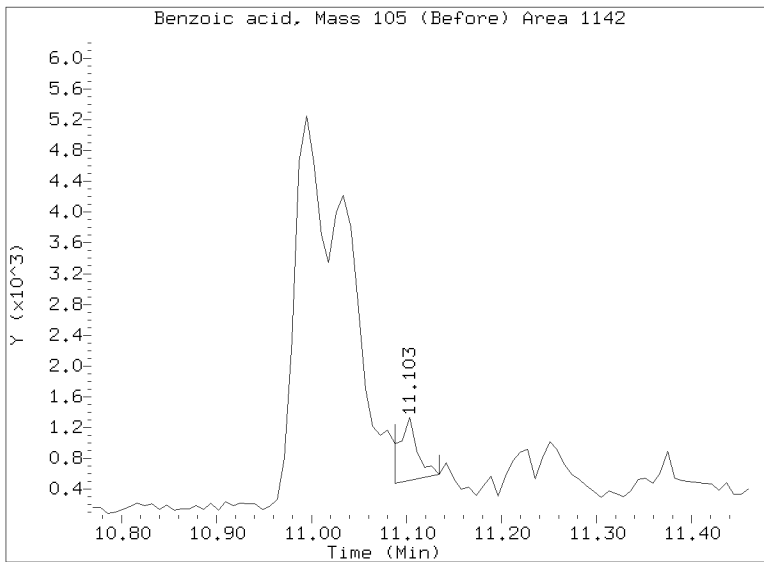
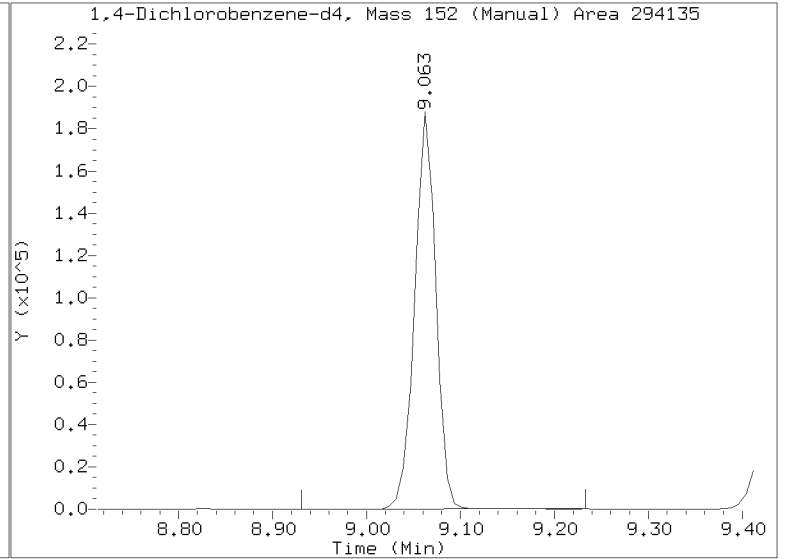
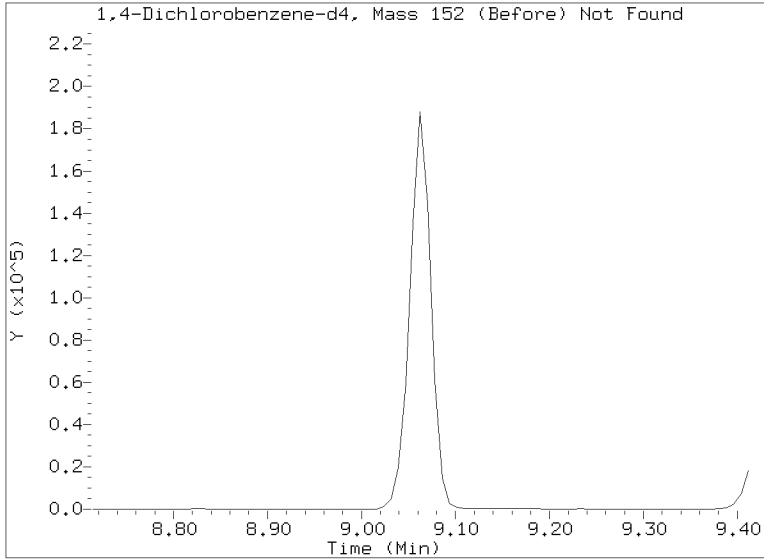
RRT check based on Ccal File: NT1403182302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182312.D
Injection Date: 18-MAR-2023 23:40
Lab ID: 23B0229-05RE1 Client ID:
Report Date: 03/23/2023 11:34





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-06 A

SDG: 23B0229

Sampled: 02/08/23 13:30

Prepared: 02/17/23 15:00

File ID: NT1403172325.D

% Solids: 48.62

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 04:54

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	25.0		4.3	19.8
106-44-5	4-Methylphenol	1	8.0	J	7.3	19.8
91-20-3	Naphthalene	1	20.7		4.2	19.8
91-57-6	2-Methylnaphthalene	1	15.4	J	4.5	19.8
208-96-8	Acenaphthylene	1	7.6	J	6.2	19.8
131-11-3	Dimethylphthalate	1	7.5	J	4.3	19.8
83-32-9	Acenaphthene	1	12.0	J	5.2	19.8
132-64-9	Dibenzofuran	1	16.9	J	14.0	19.8
86-73-7	Fluorene	1	19.0	J	14.4	19.8
85-01-8	Phenanthrene	1	91.7		8.6	19.8
120-12-7	Anthracene	1	43.4		7.1	19.8
206-44-0	Fluoranthene	1	409	Q	6.0	19.8
129-00-0	Pyrene	1	398		5.6	19.8
85-68-7	Butylbenzylphthalate	1	21.9	Q	9.3	19.8
56-55-3	Benzo(a)anthracene	1	123		5.9	19.8
218-01-9	Chrysene	1	181		6.0	19.8
117-81-7	bis(2-Ethylhexyl)phthalate	1	238		5.4	49.5
	Benzo(a)fluoranthene, Total	1	365		9.9	39.6
50-32-8	Benzo(a)pyrene	1	129		4.2	19.8
193-39-5	Indeno(1,2,3-cd)pyrene	1	70.8		14.5	19.8
53-70-3	Dibenzo(a,h)anthracene	1	21.8	Q	17.1	19.8
191-24-2	Benzo(g,h,i)perylene	1	77.7	Q	13.5	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	742.34	478	64.4	27 - 120	
Phenol-d5	742.34	484	65.2	29 - 120	
2-Chlorophenol-d4	742.34	541	72.9	31 - 120	
1,2-Dichlorobenzene-d4	494.89	338	68.2	32 - 120	
Nitrobenzene-d5	494.89	367	74.2	30 - 120	
2-Fluorobiphenyl	494.89	405	81.7	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-06 A

SDG: 23B0229

Sampled: 02/08/23 13:30

Prepared: 02/17/23 15:00

File ID: NT1403172325.D

% Solids: 48.62

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 04:54

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	742.34	604	81.4	24 - 134	
p-Terphenyl-d14	494.89	650	131	37 - 120	*,Q

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172325.D

Date: 18-MAR-2023 04:54

Client ID:

Sample Info: 23B0229-06

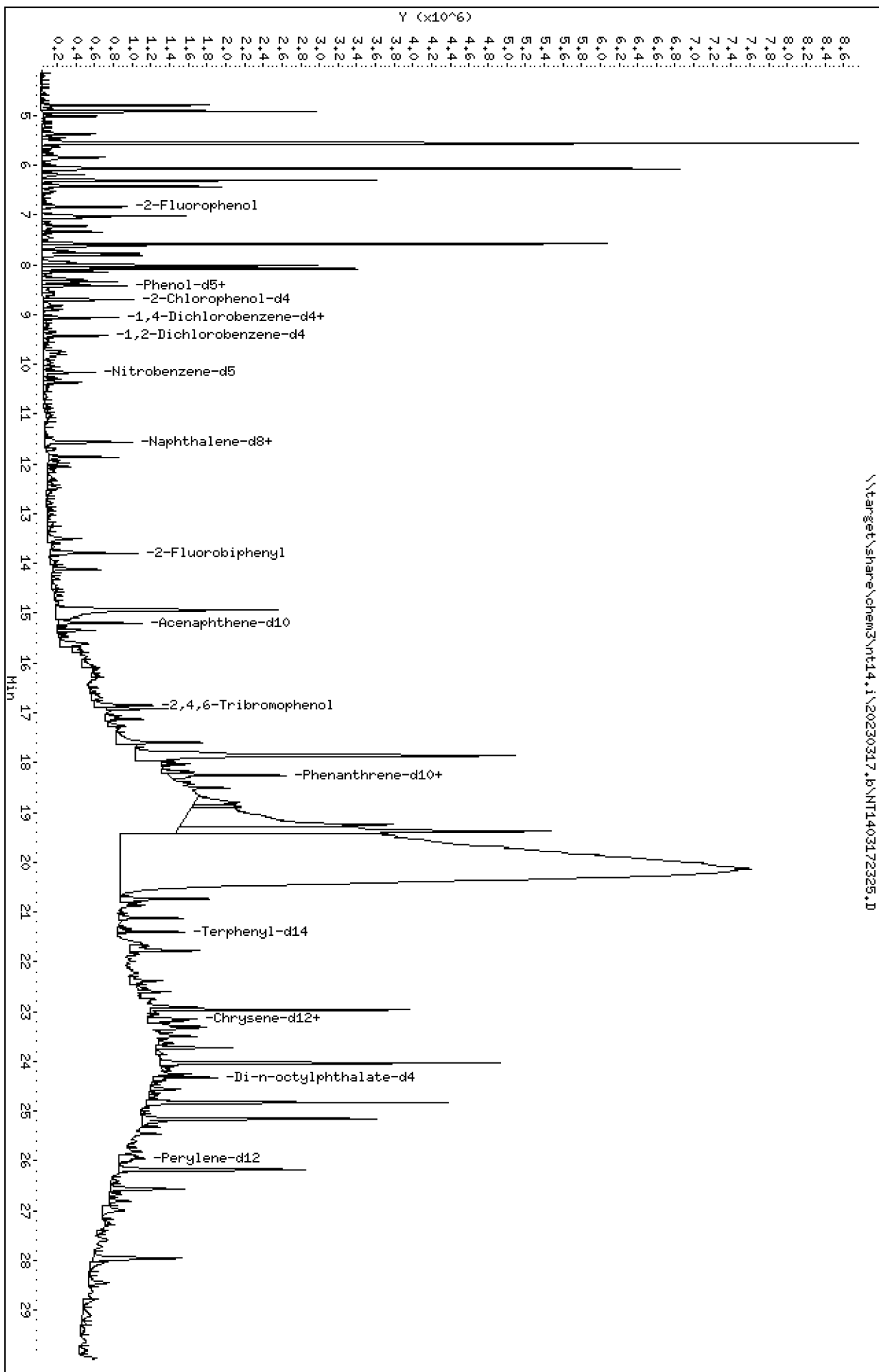
Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-Smsi

\\target\share\chem3\nt14,1\20230317,6\NT1403172325.D



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

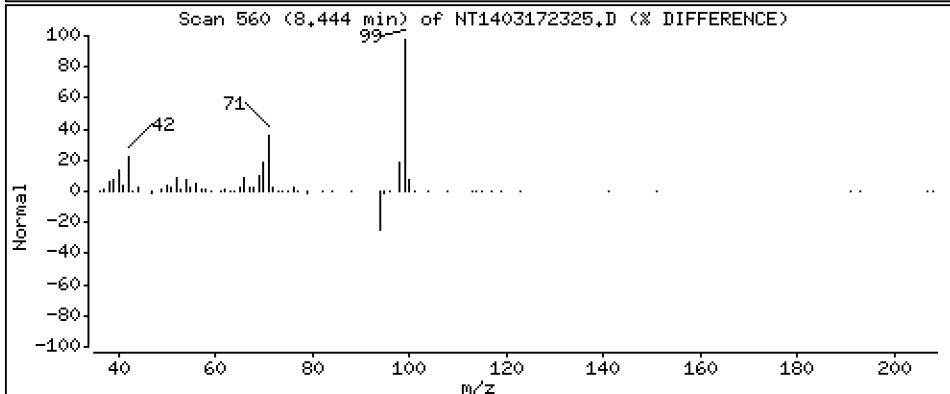
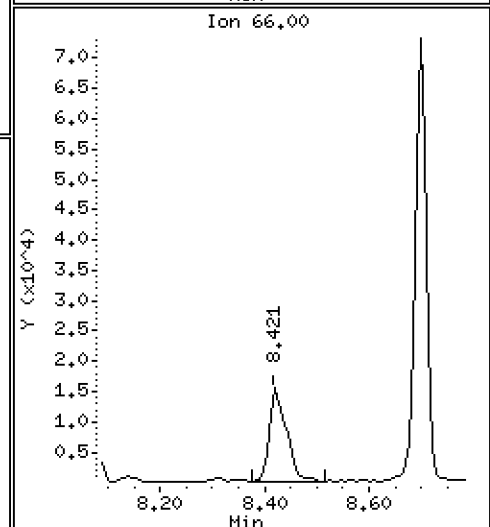
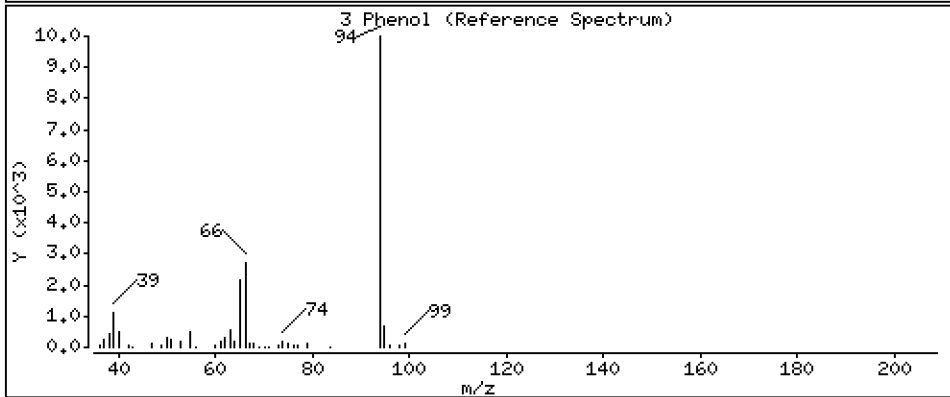
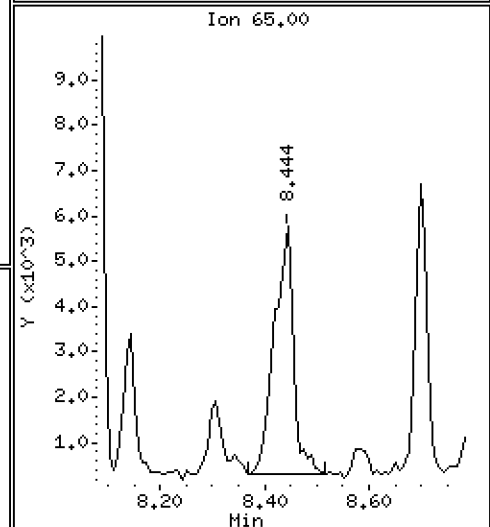
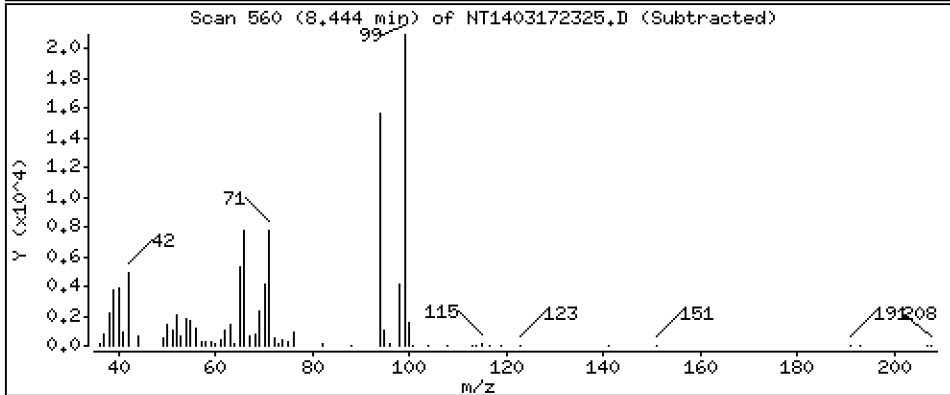
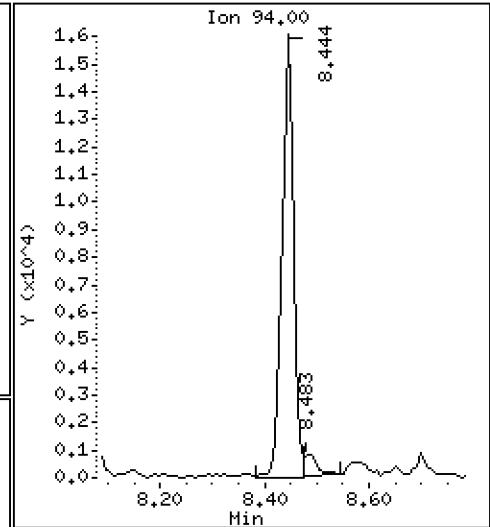
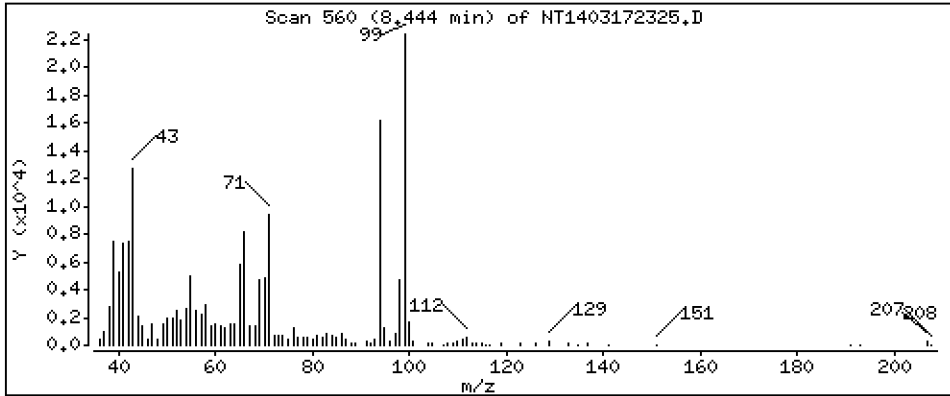
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,2524 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

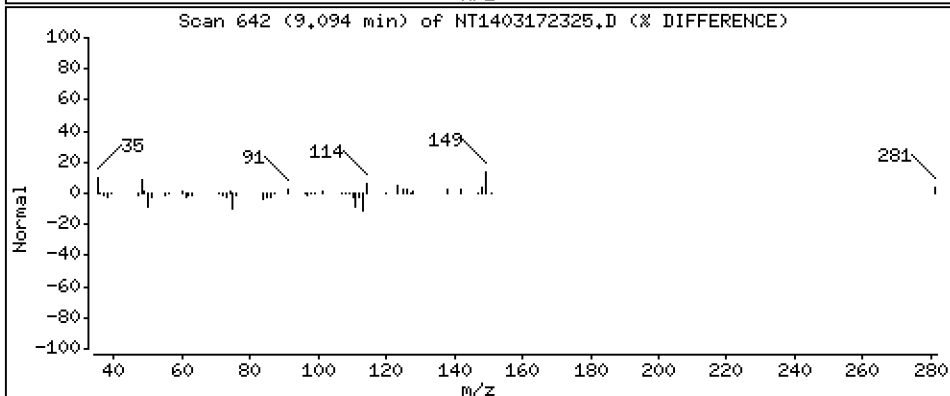
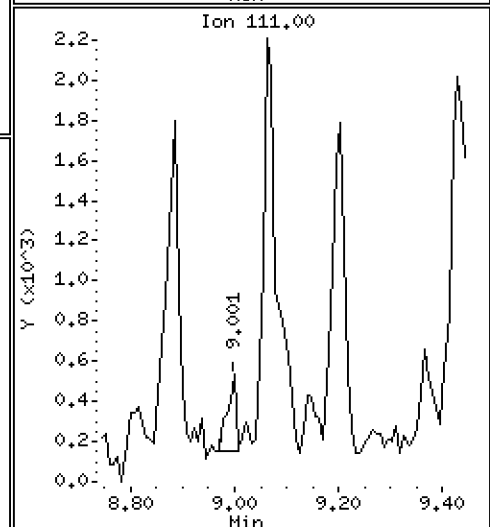
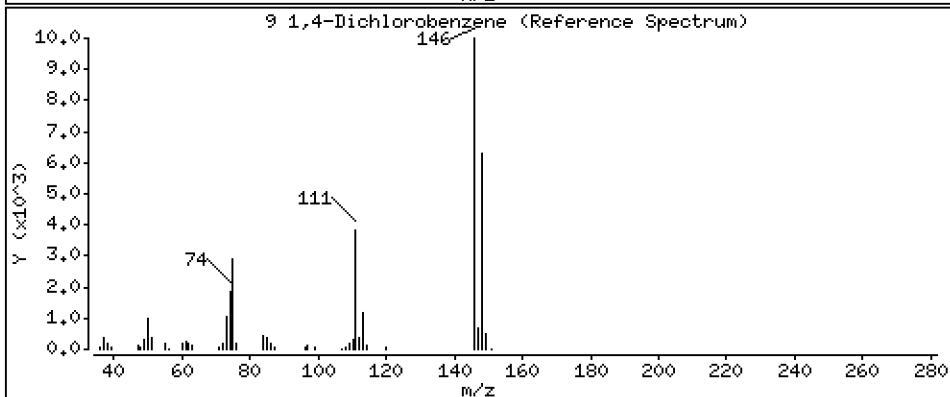
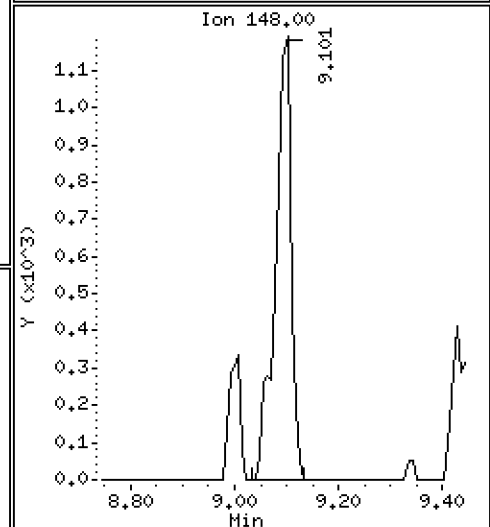
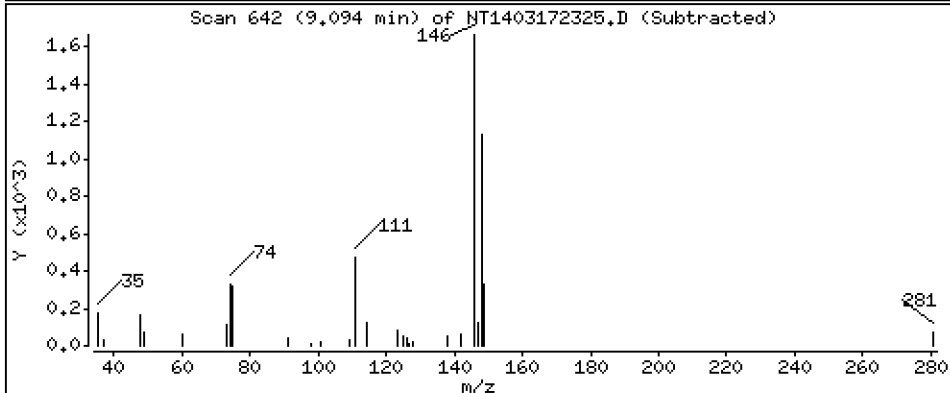
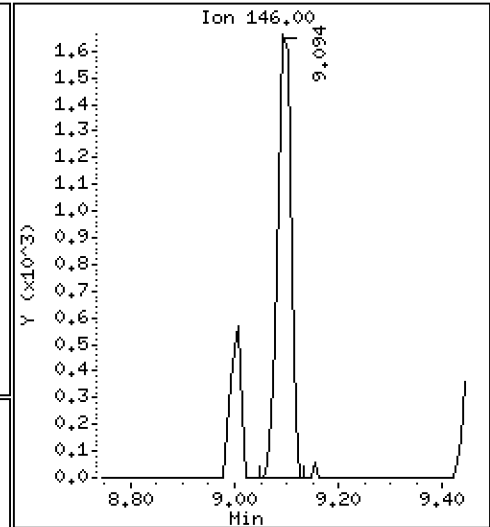
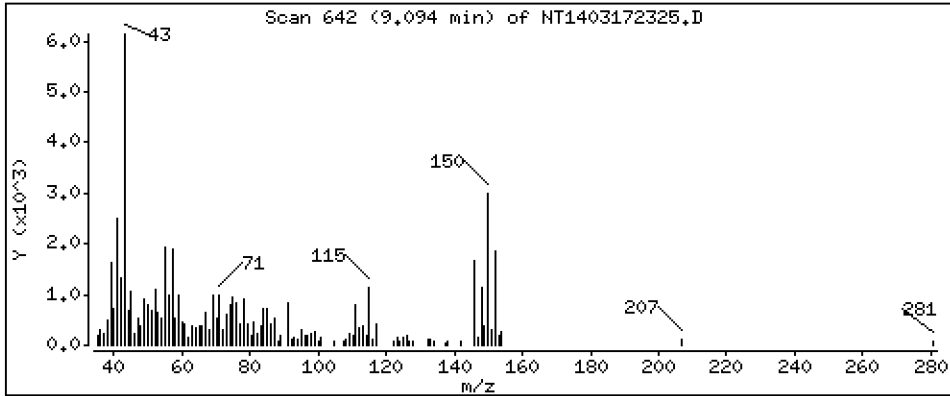
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,03837 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

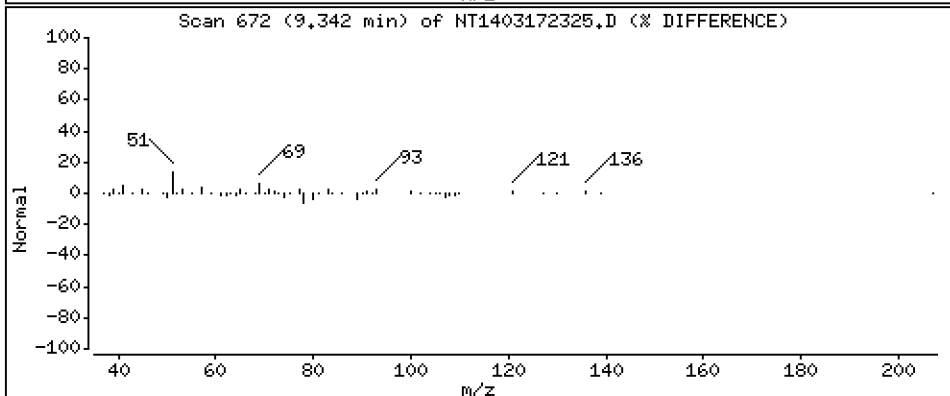
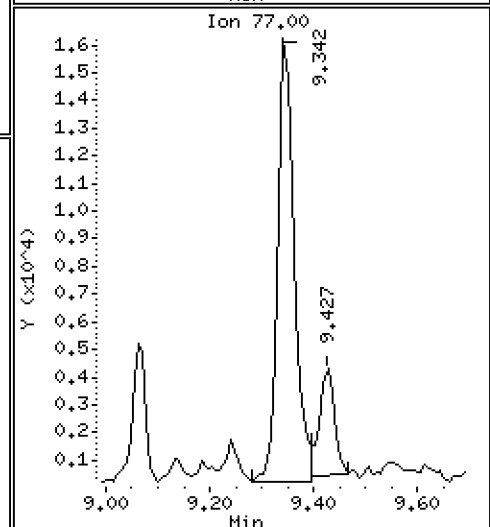
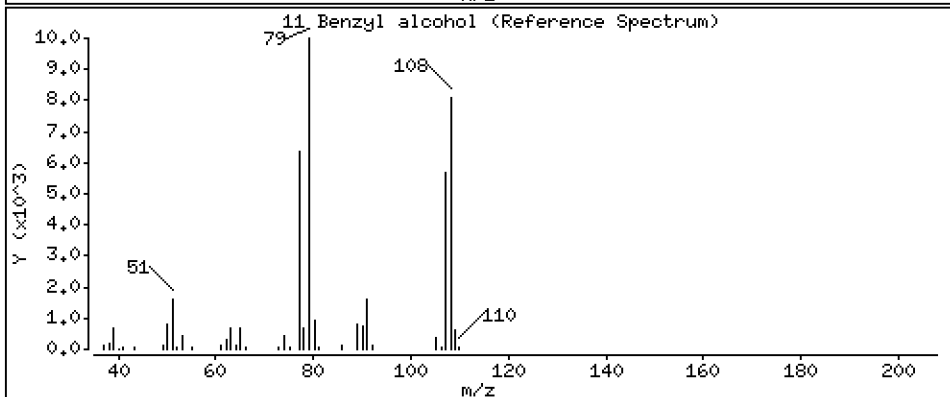
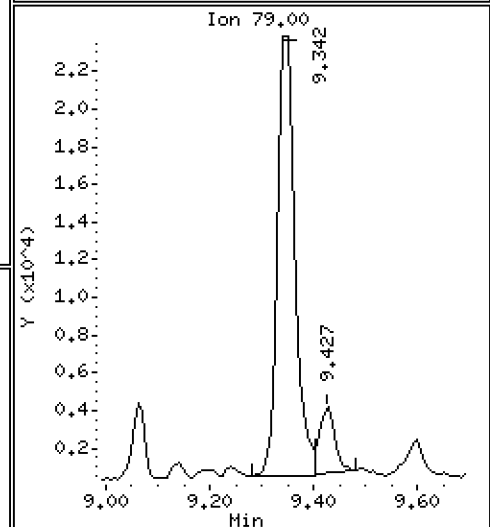
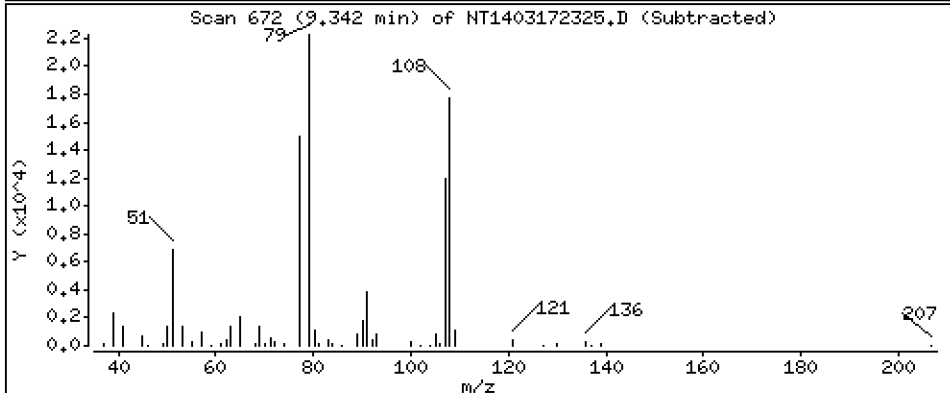
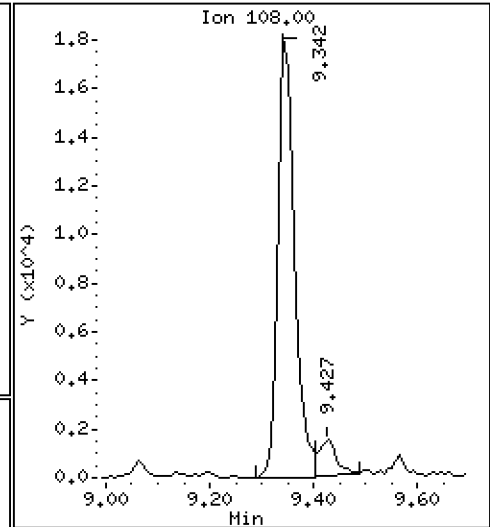
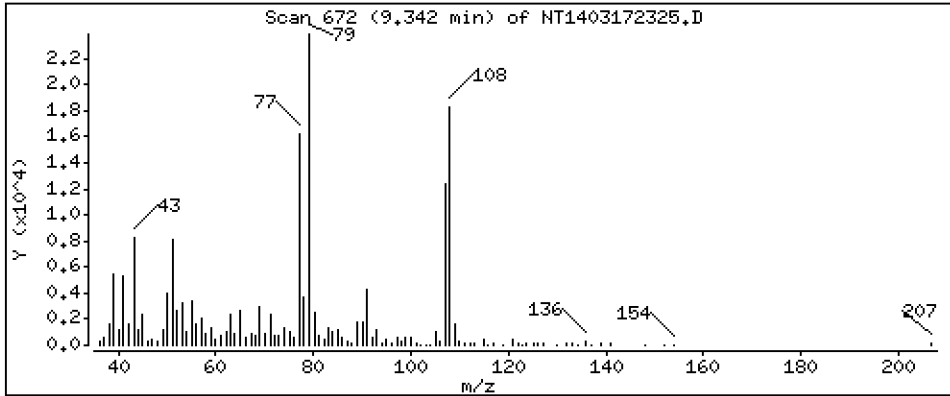
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,8672 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

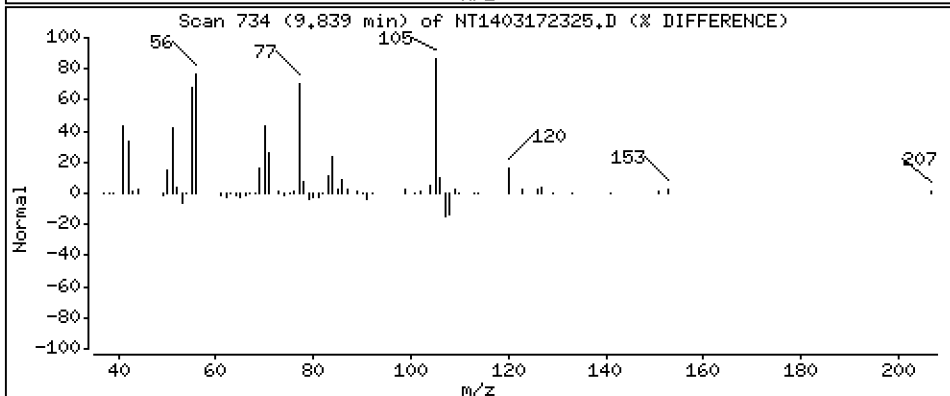
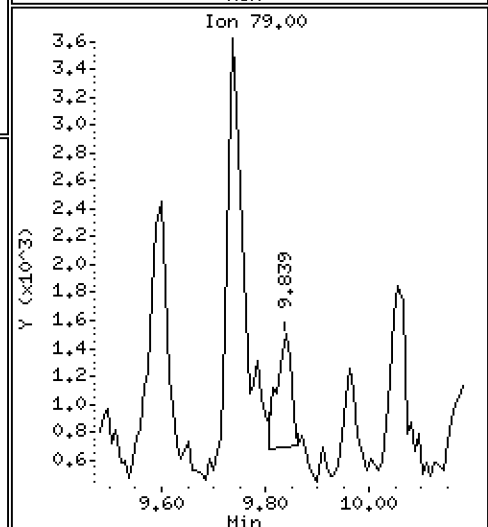
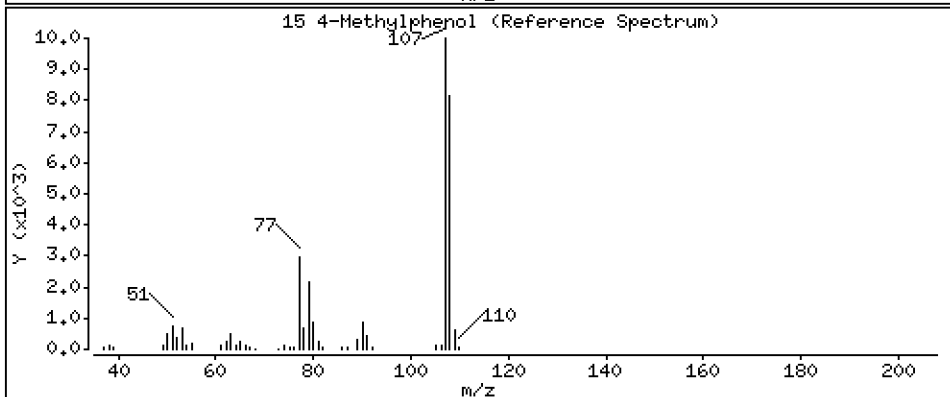
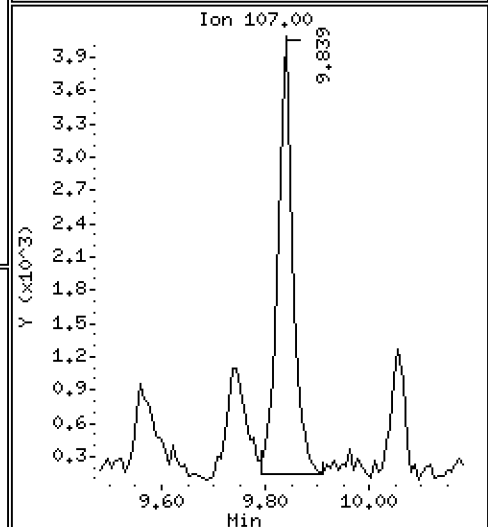
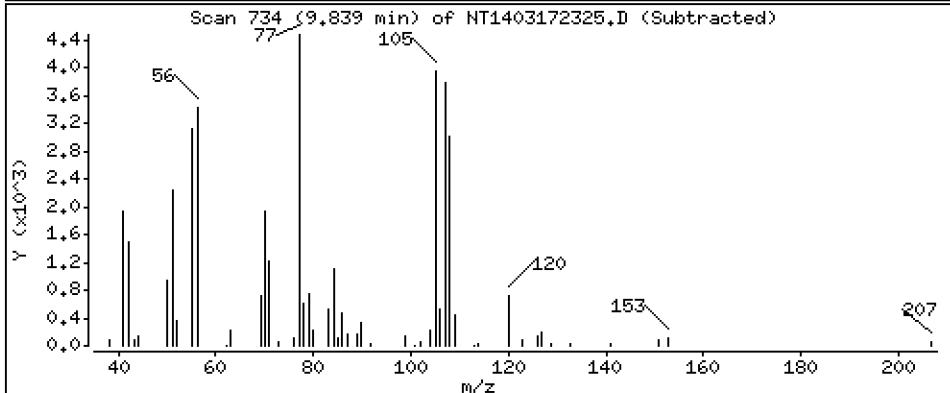
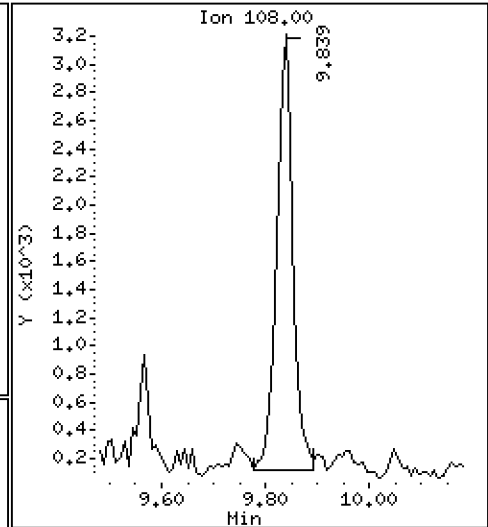
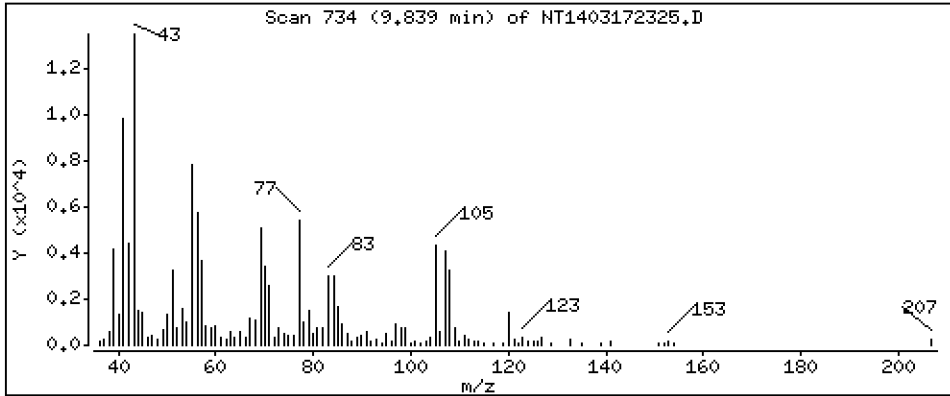
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.08077 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

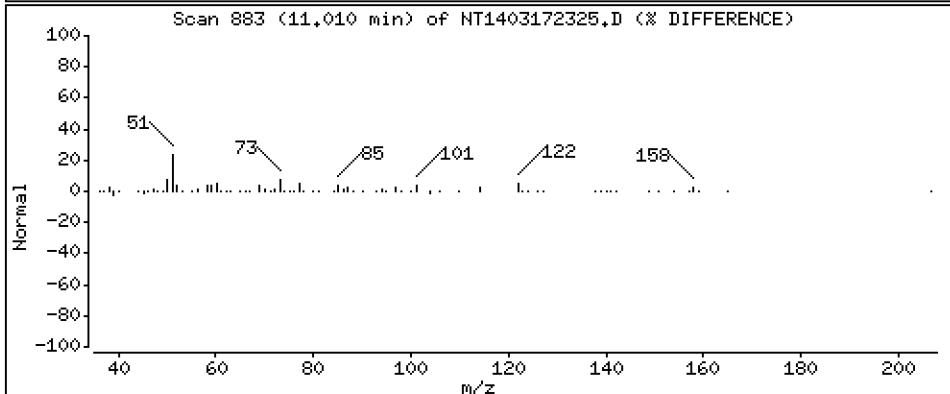
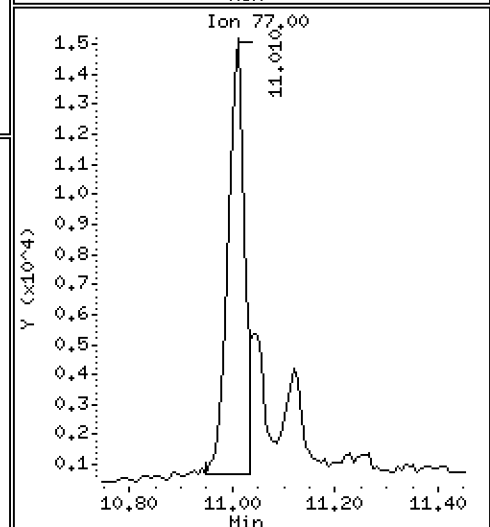
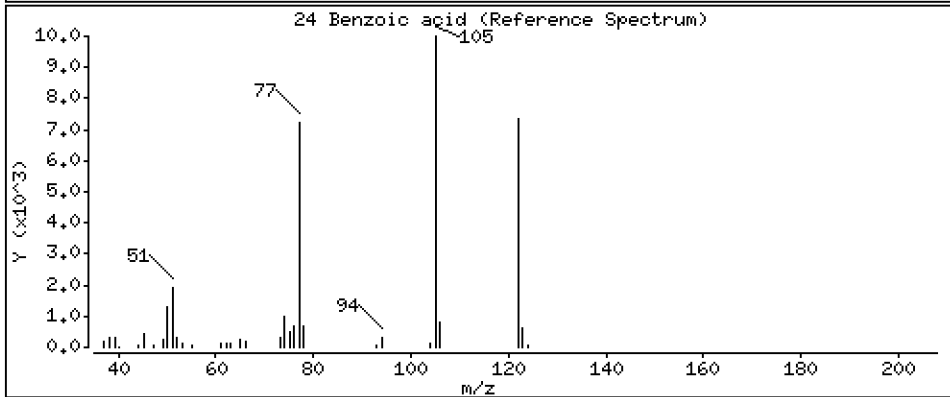
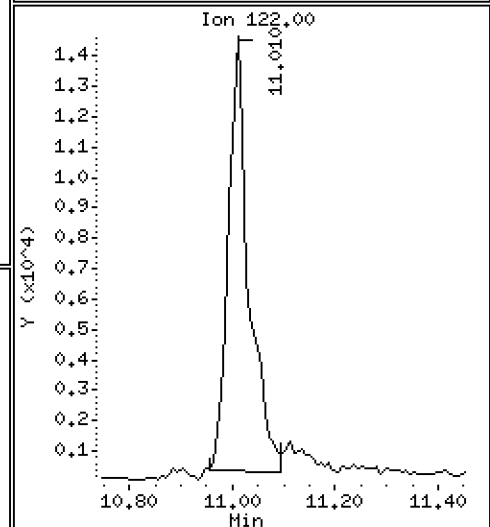
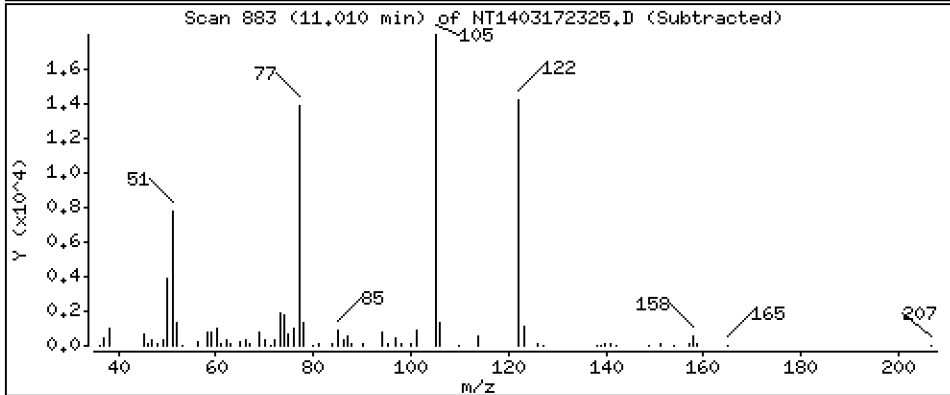
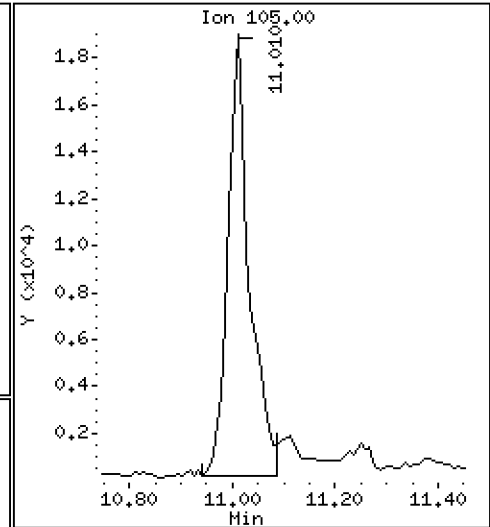
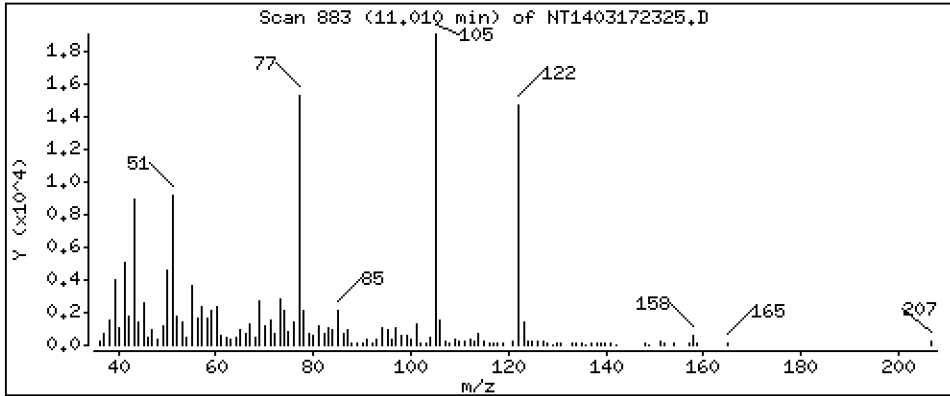
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.9223 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

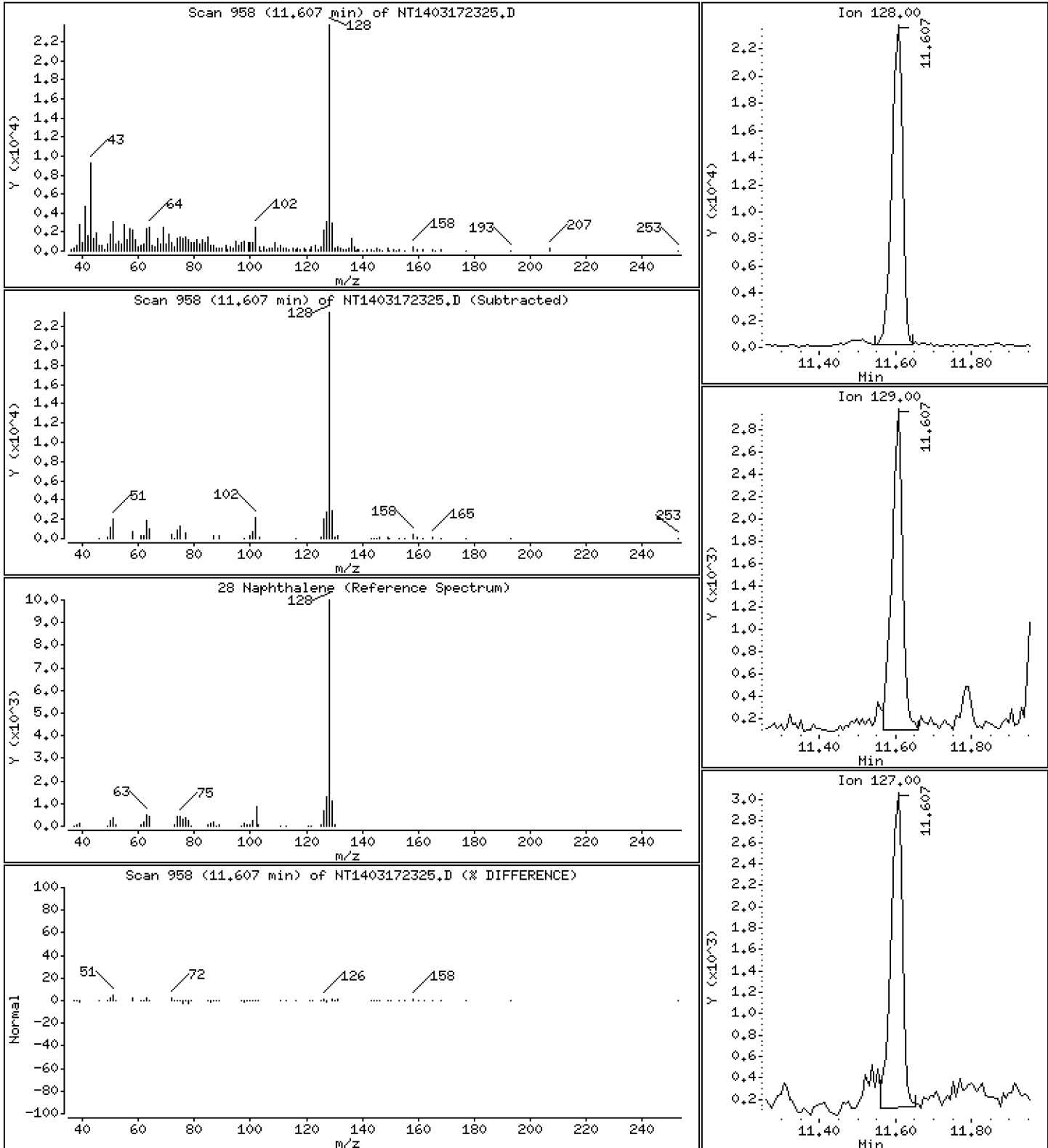
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2088 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

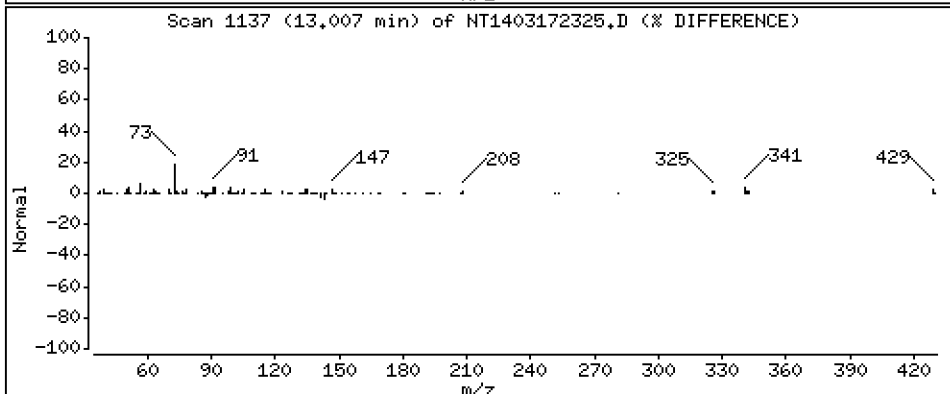
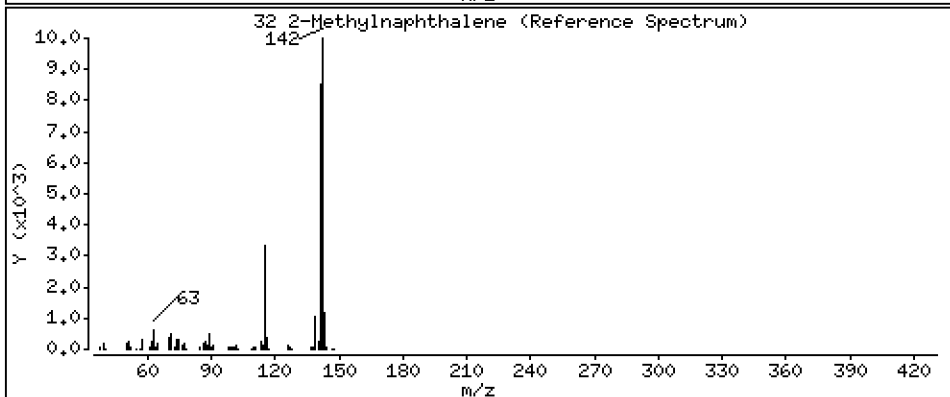
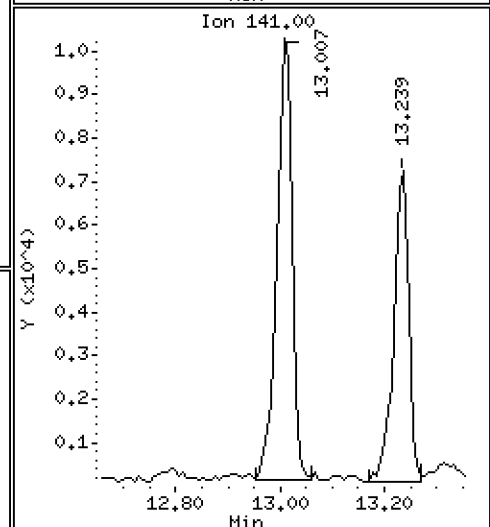
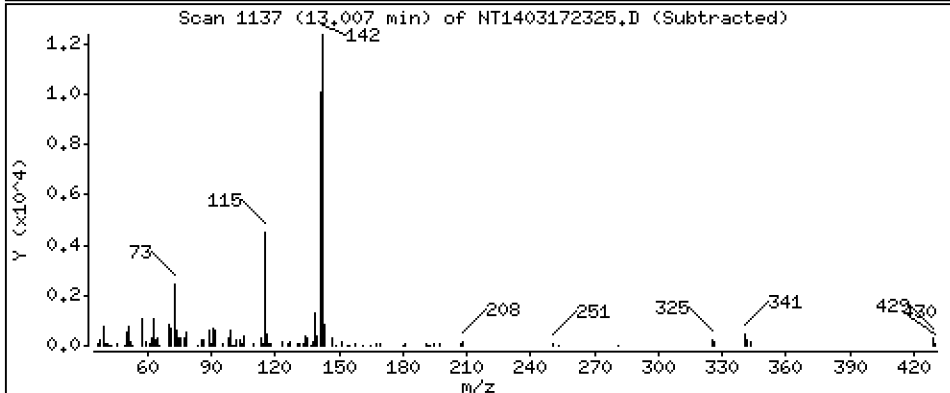
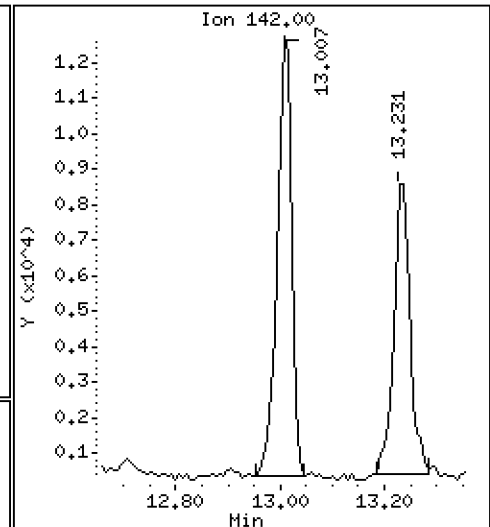
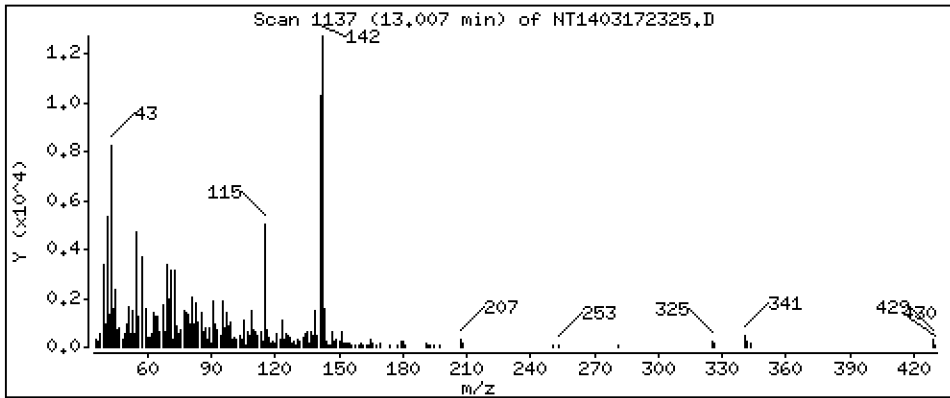
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1557 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

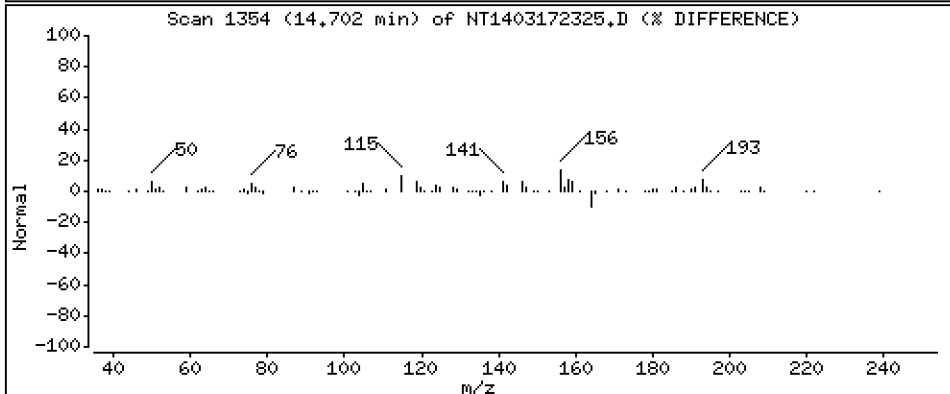
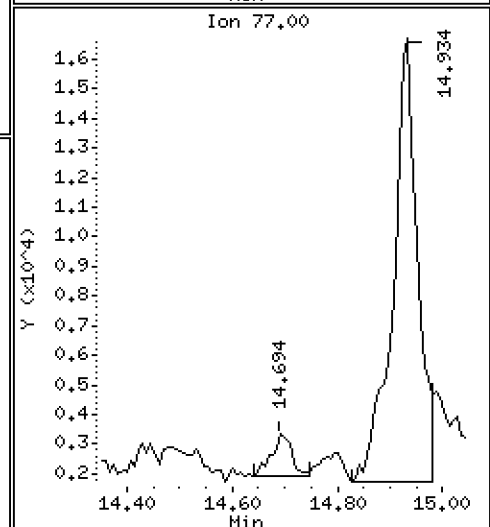
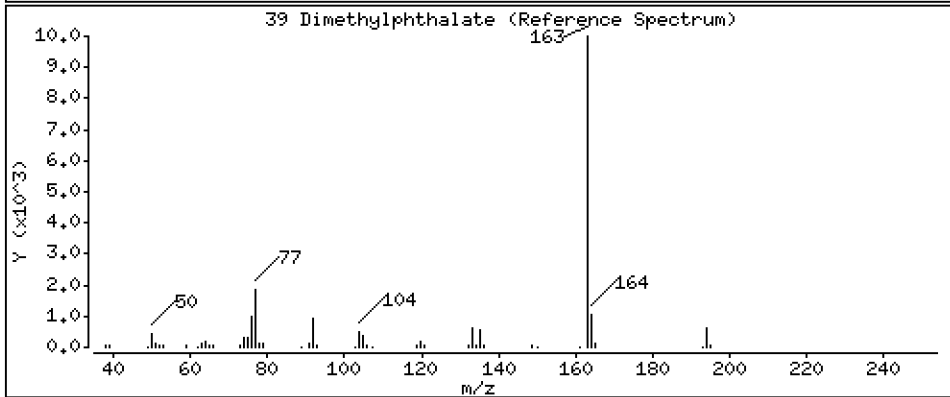
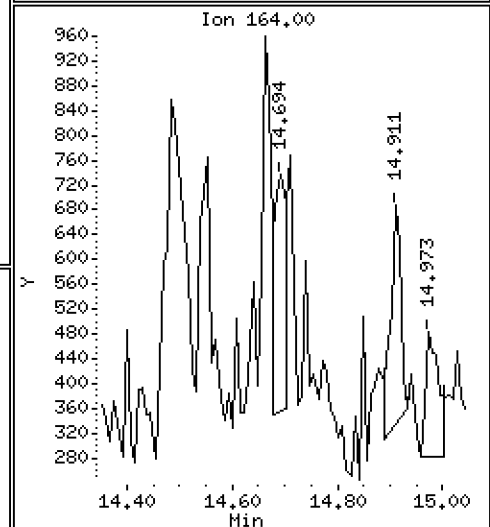
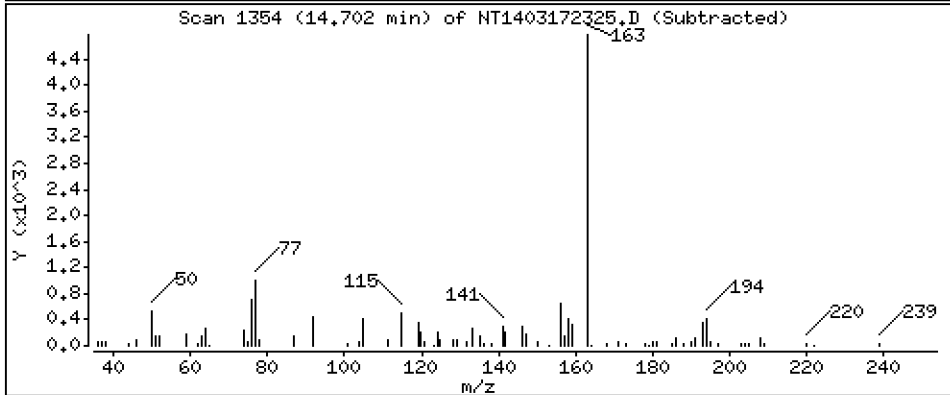
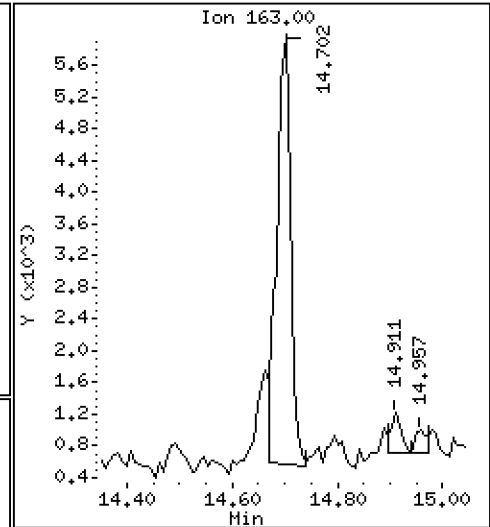
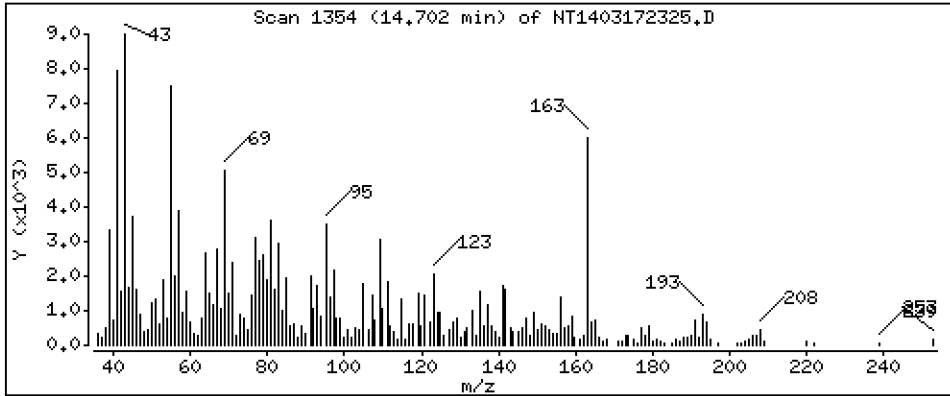
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.07543 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

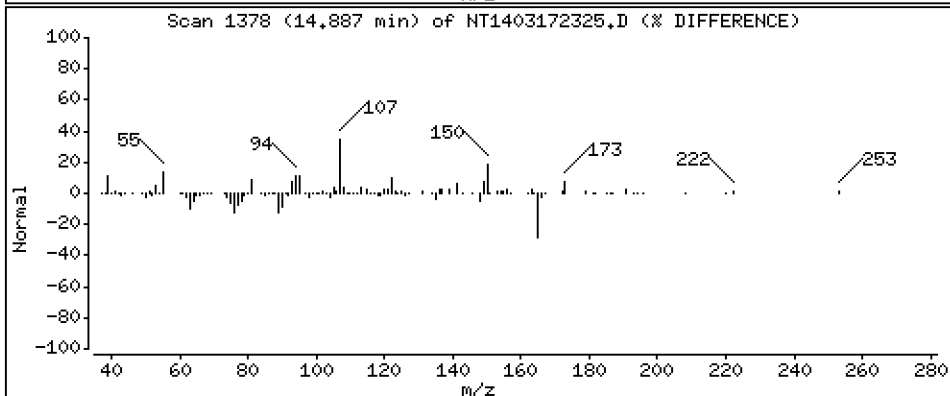
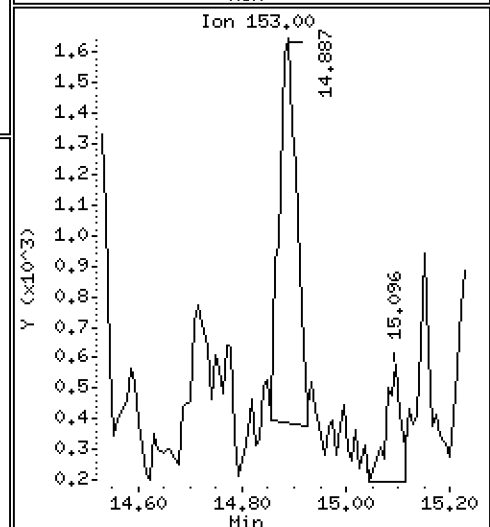
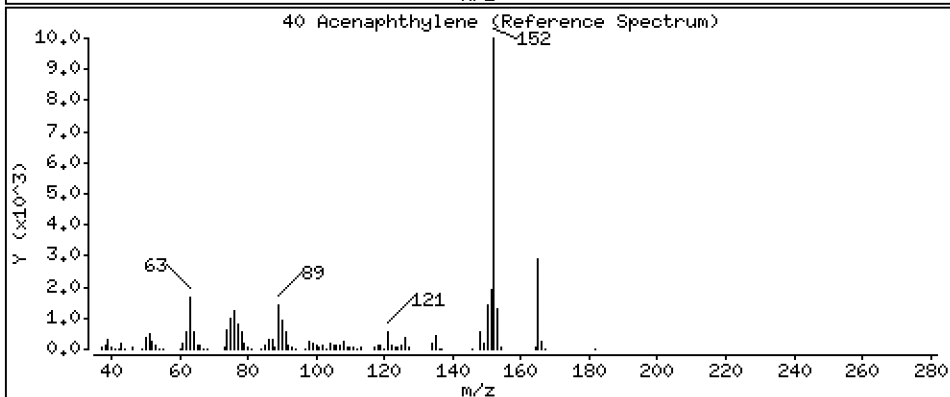
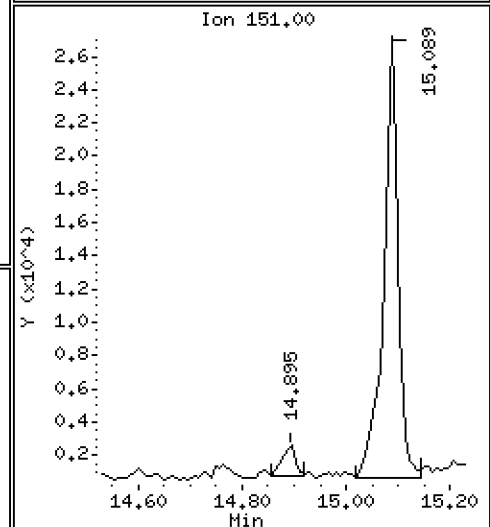
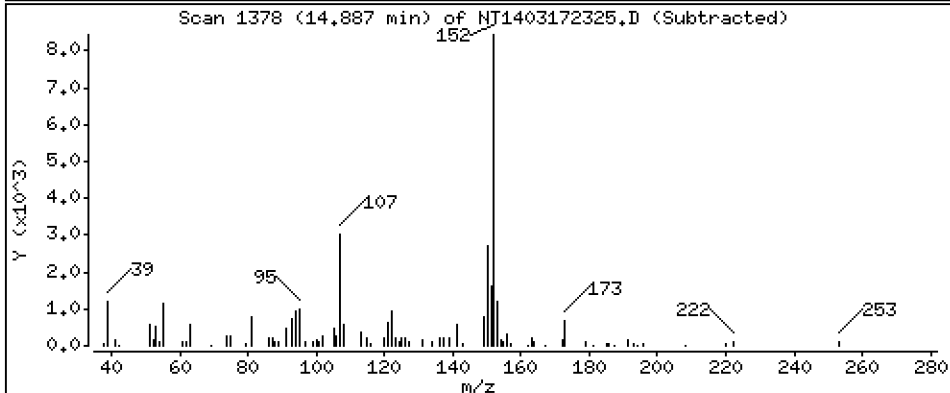
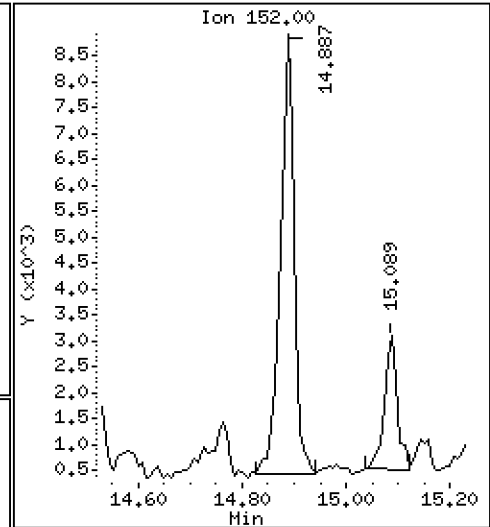
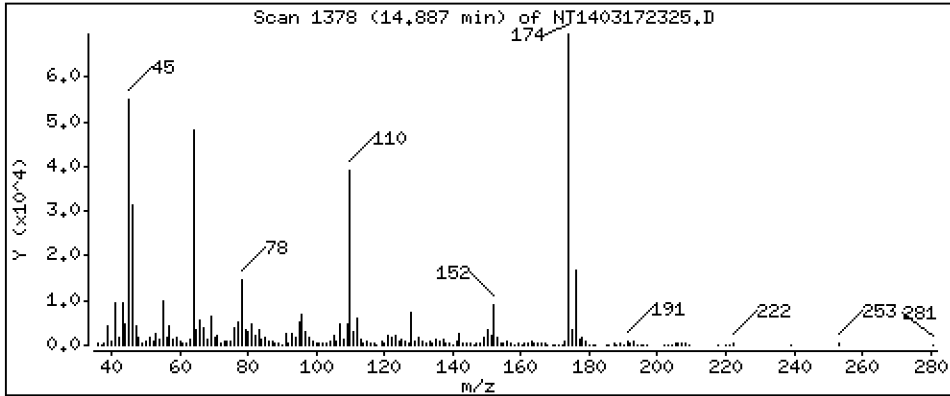
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.07663 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

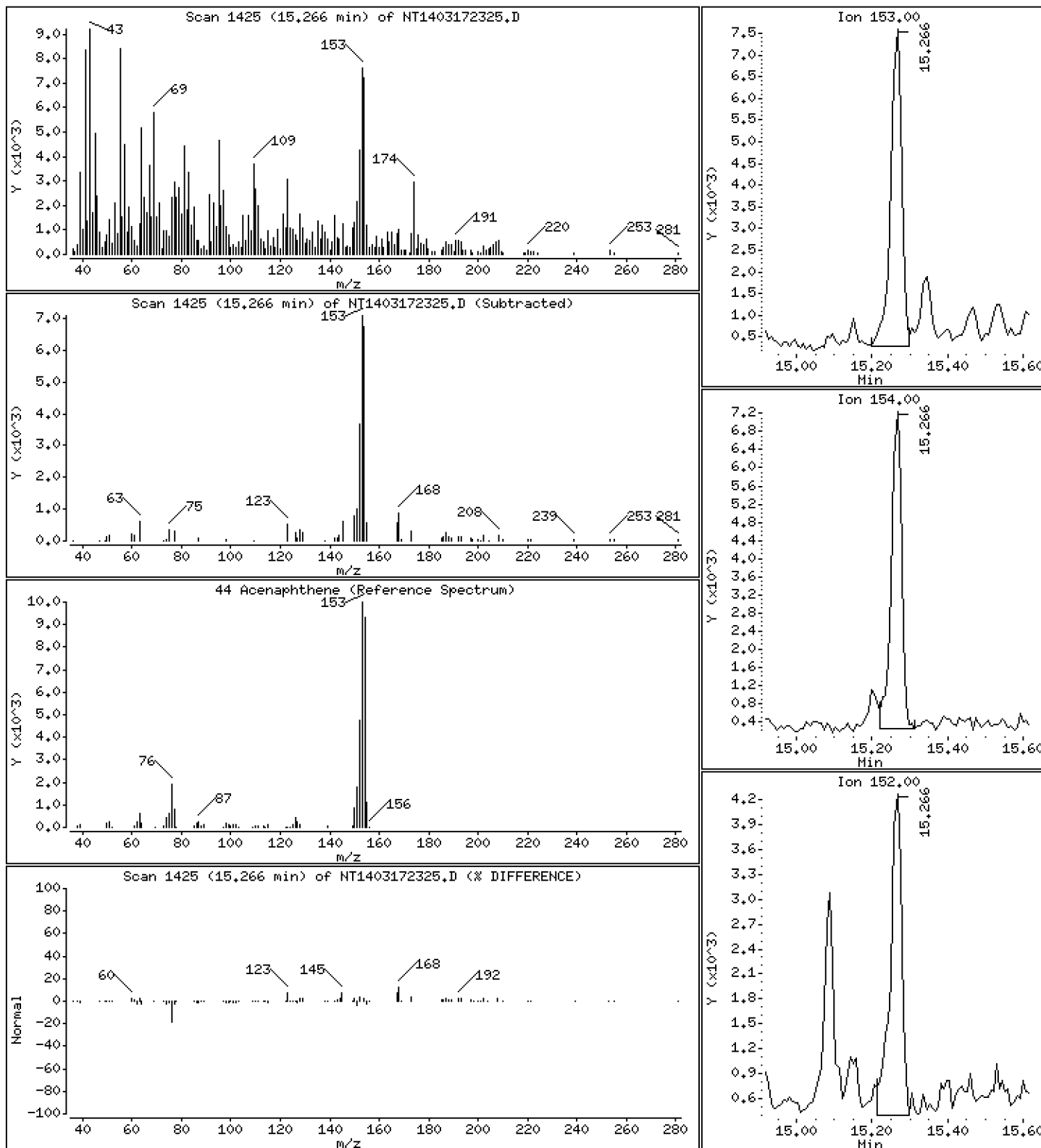
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1216 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

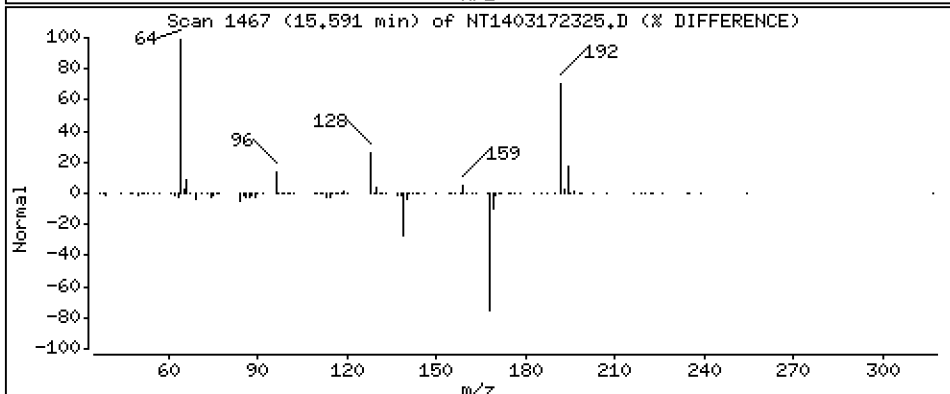
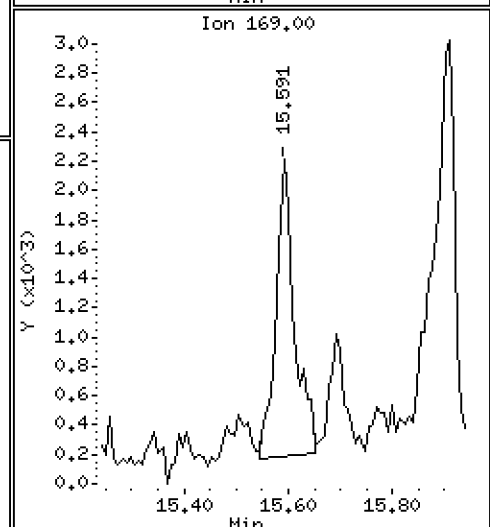
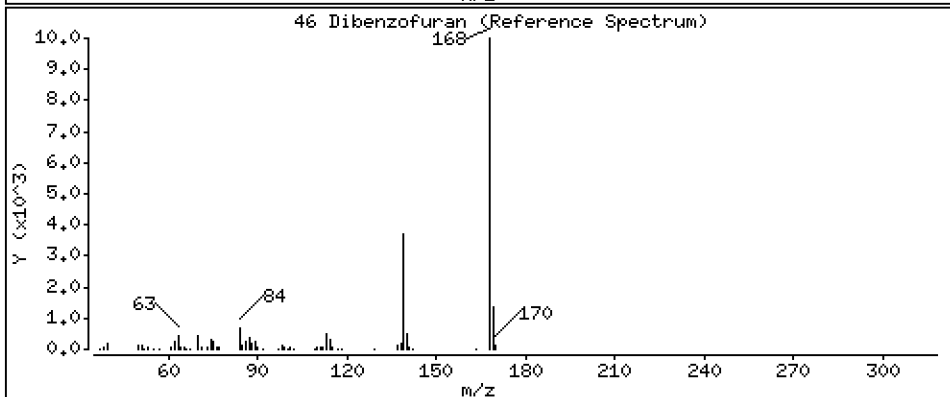
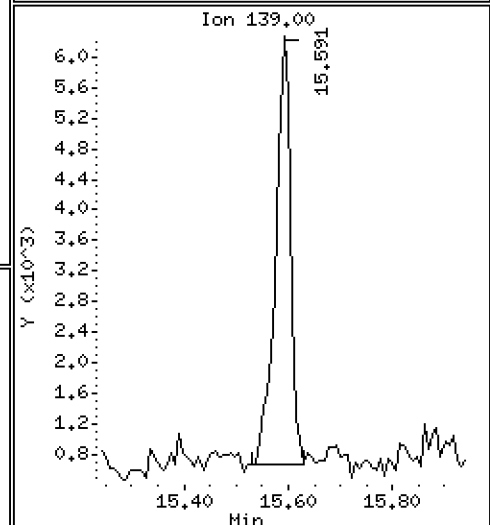
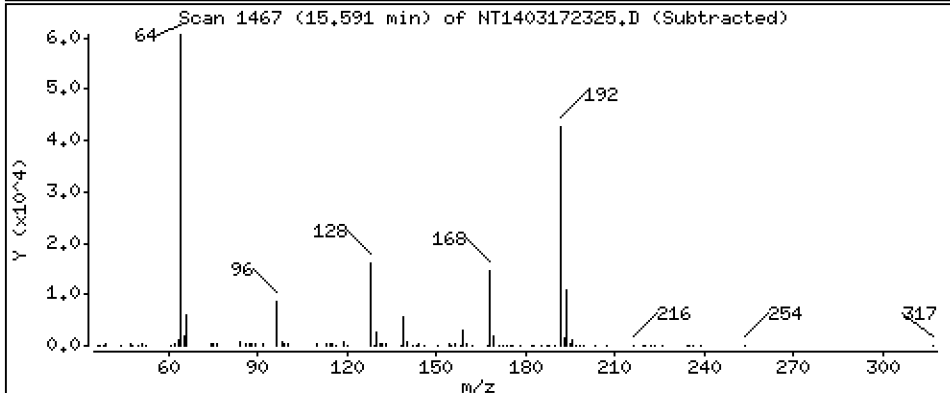
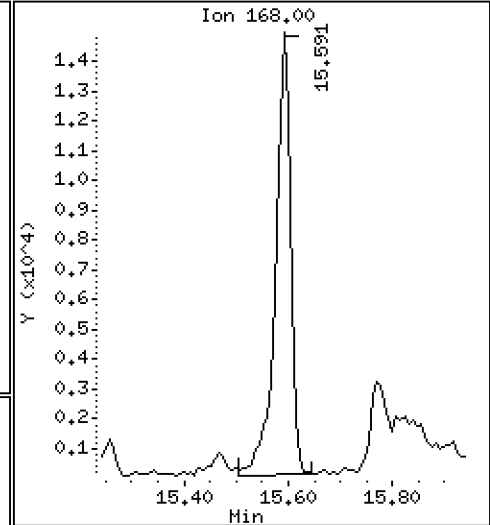
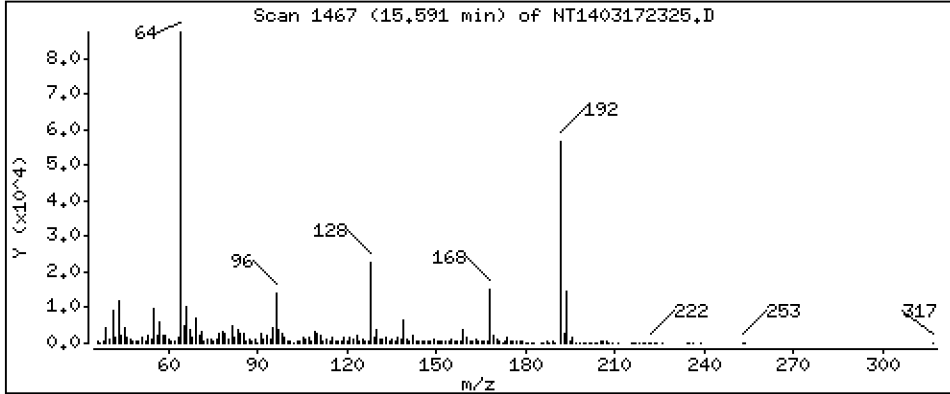
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1707 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

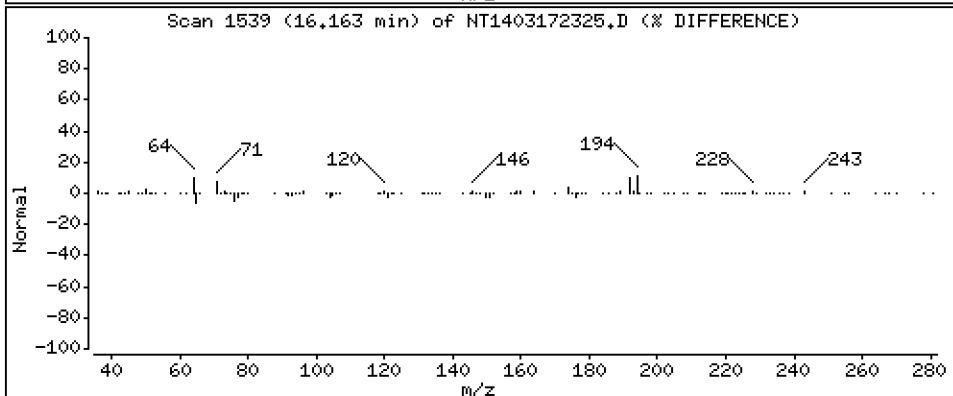
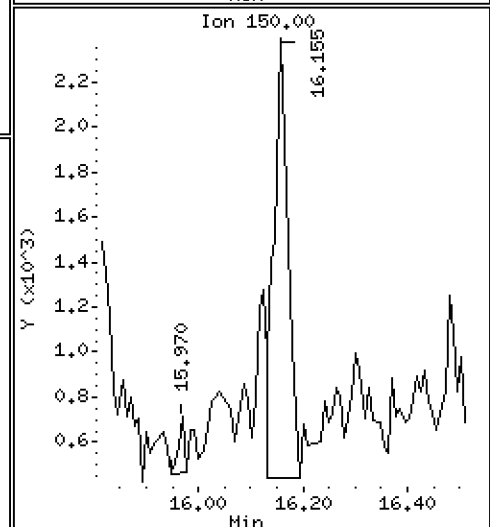
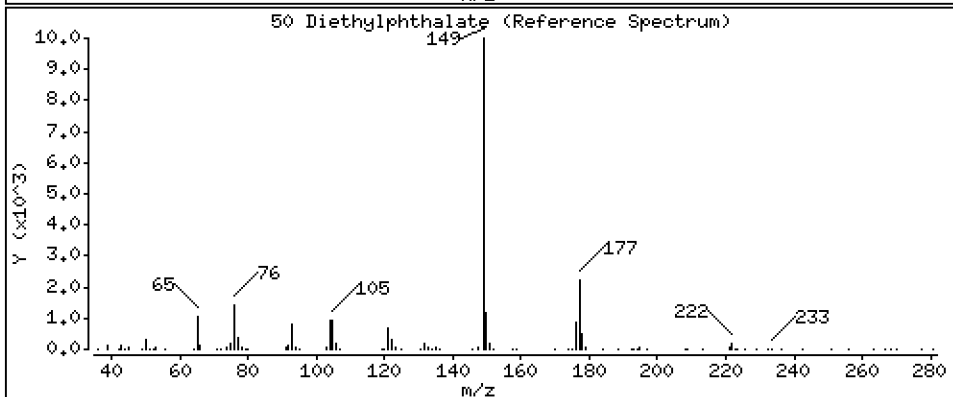
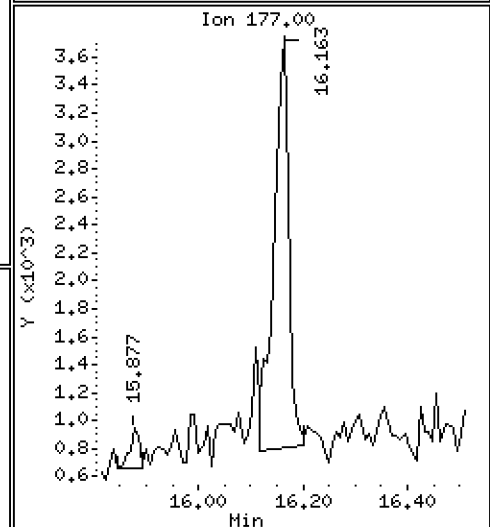
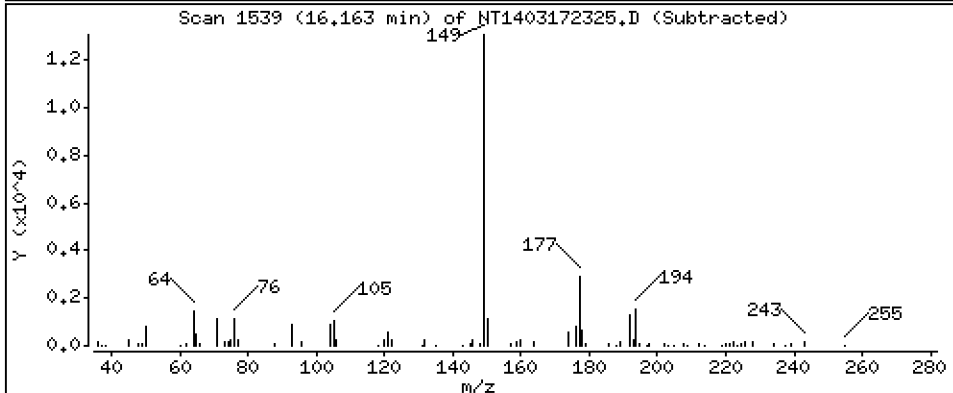
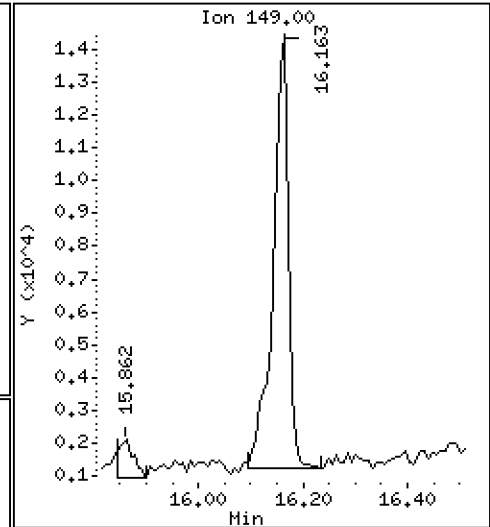
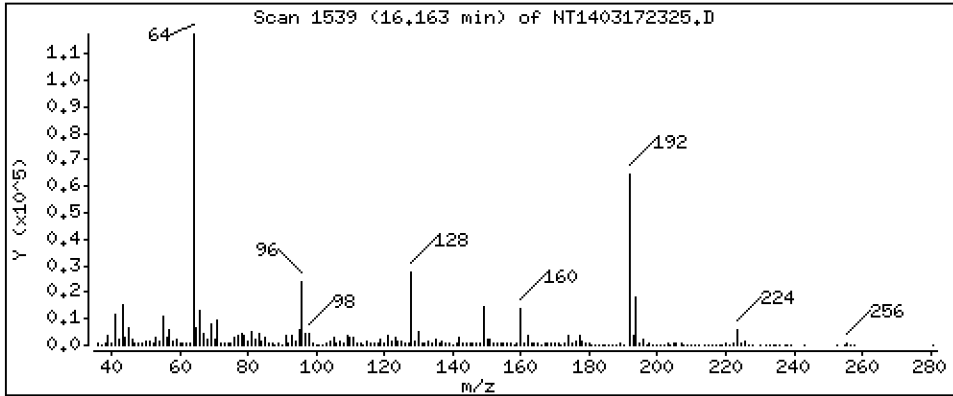
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.2197 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

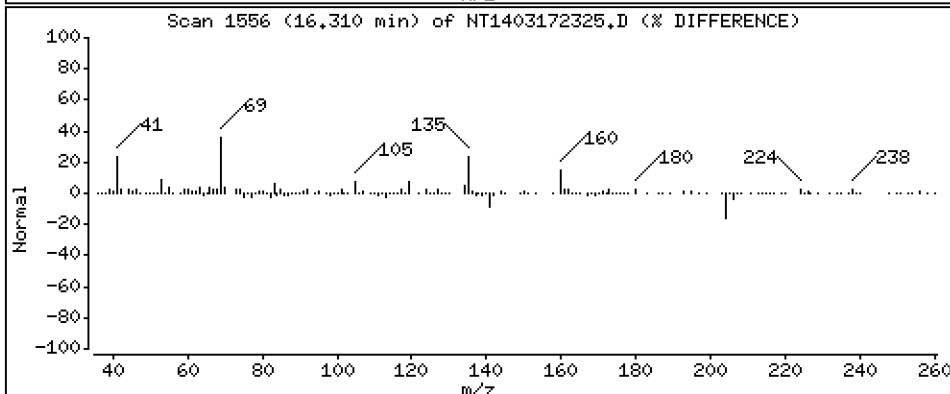
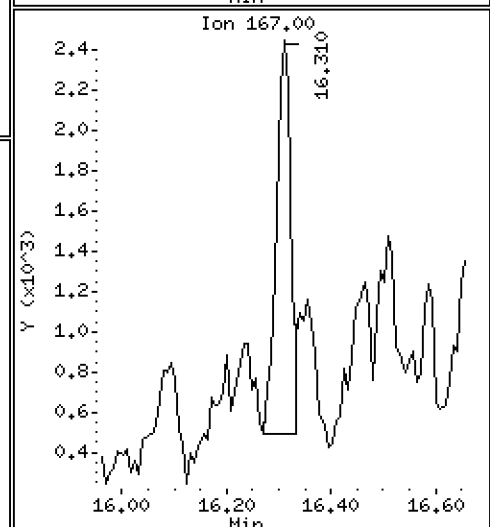
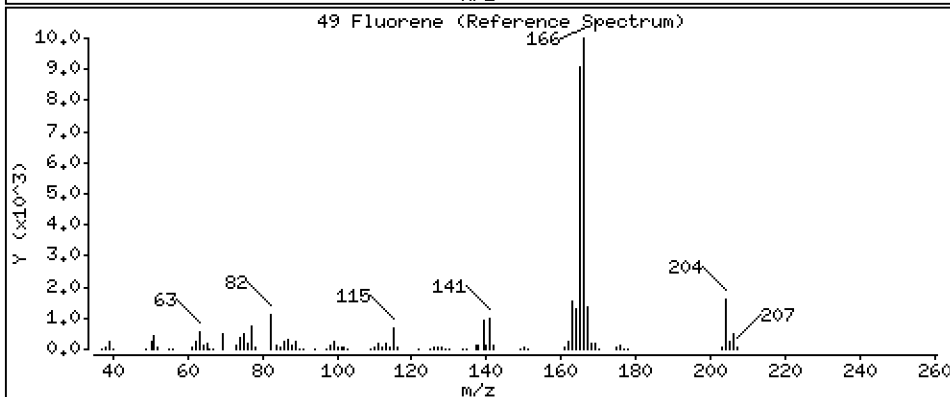
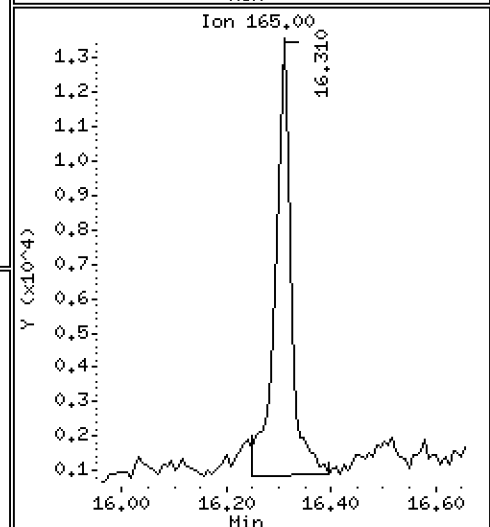
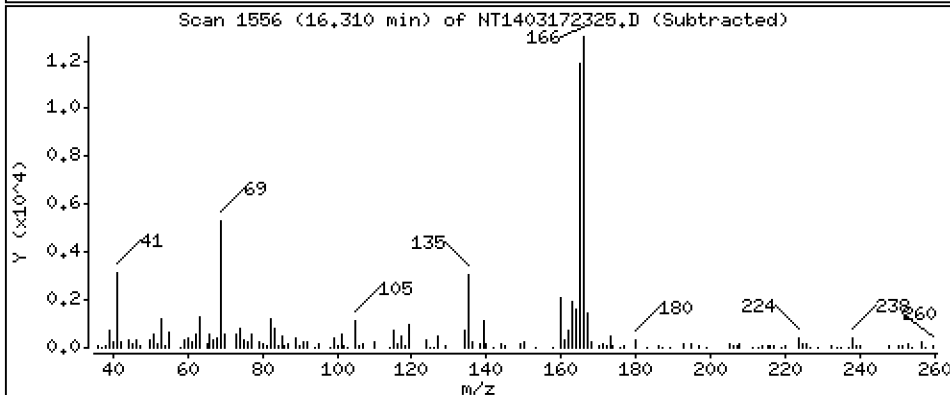
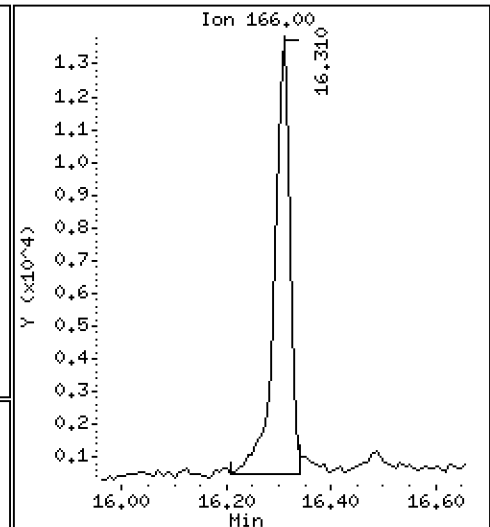
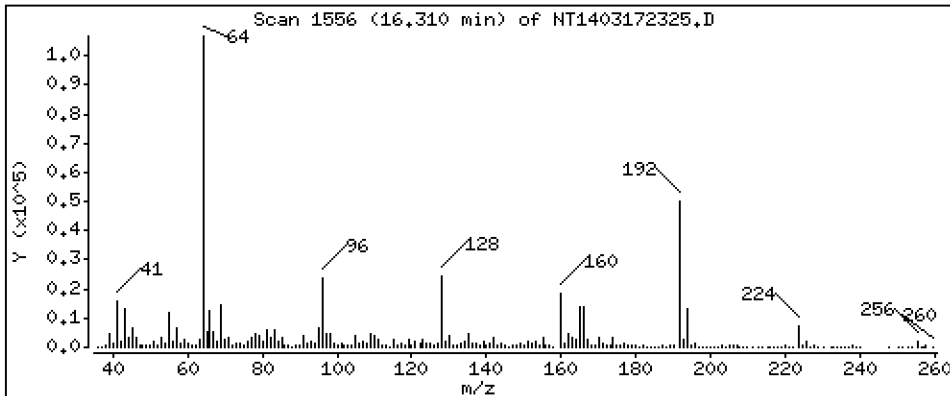
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1922 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

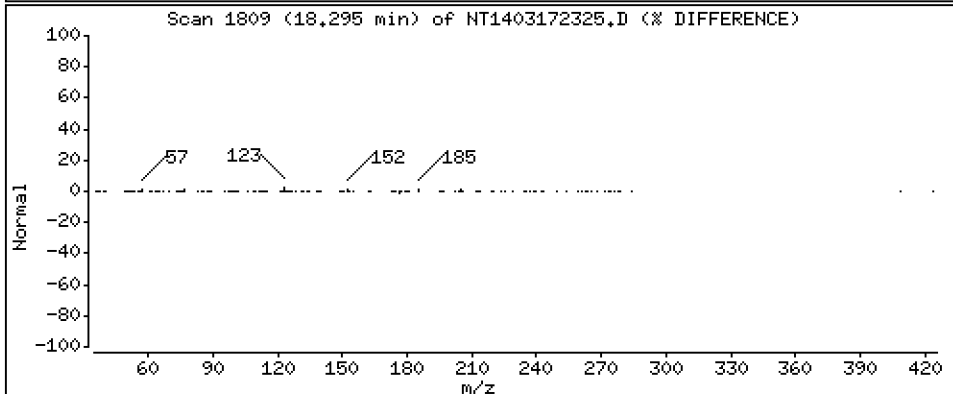
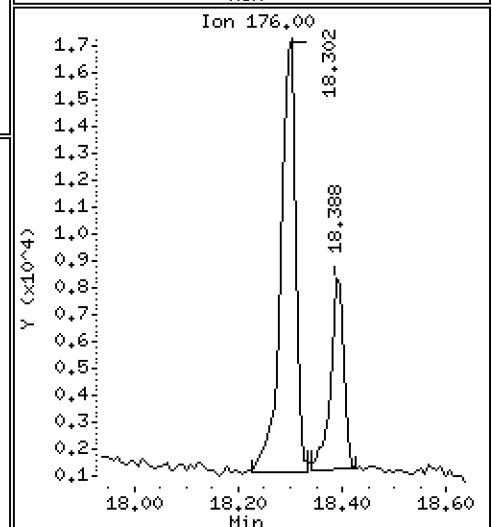
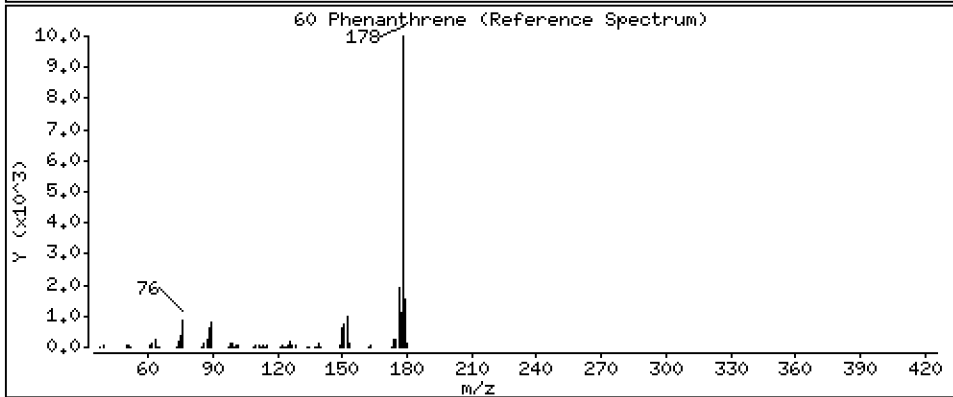
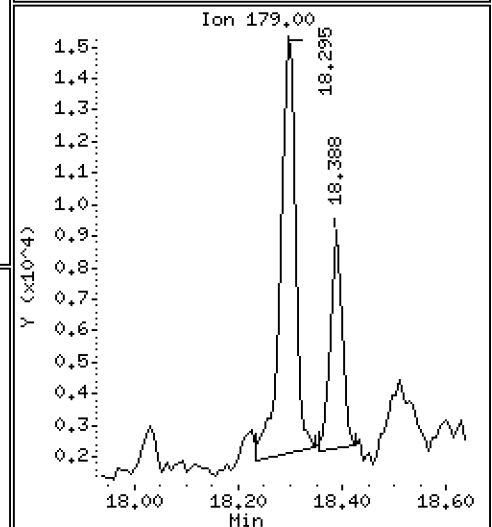
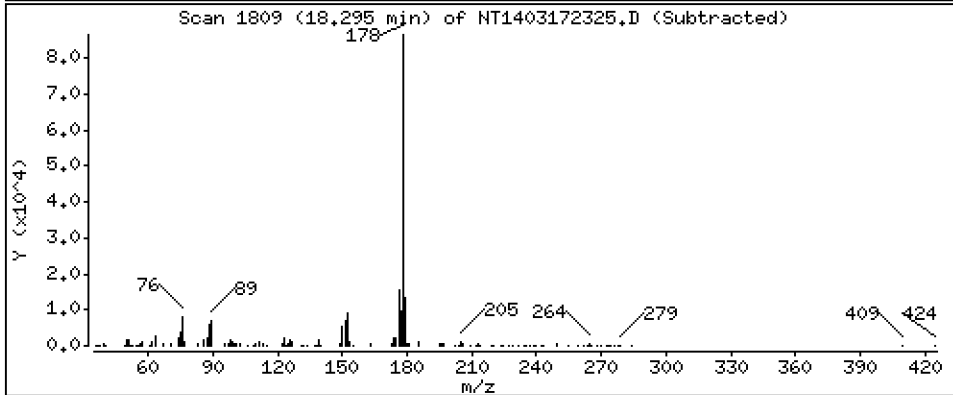
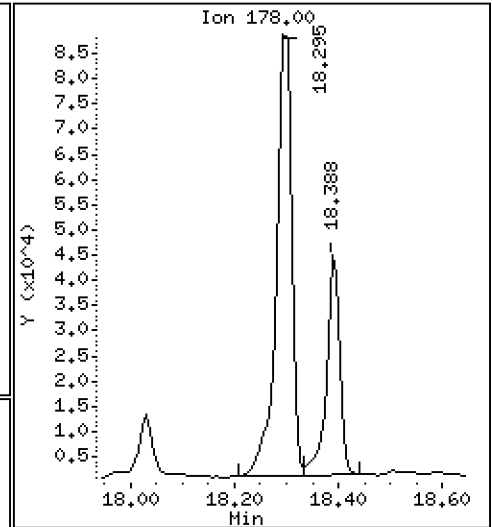
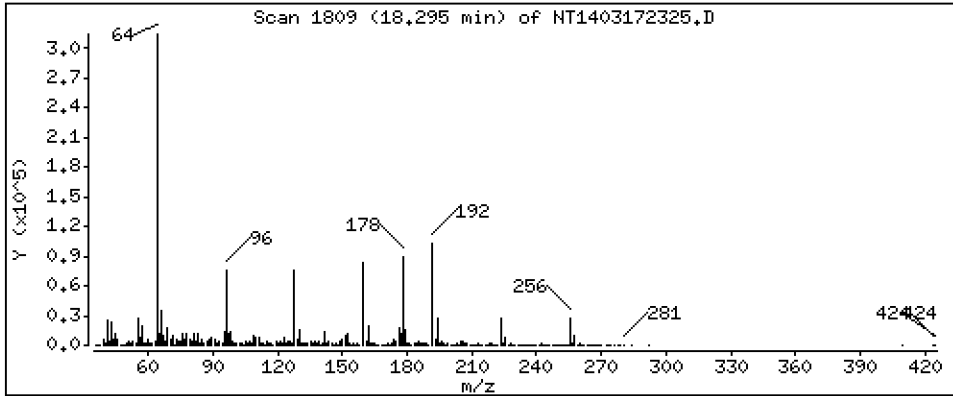
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,9267 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

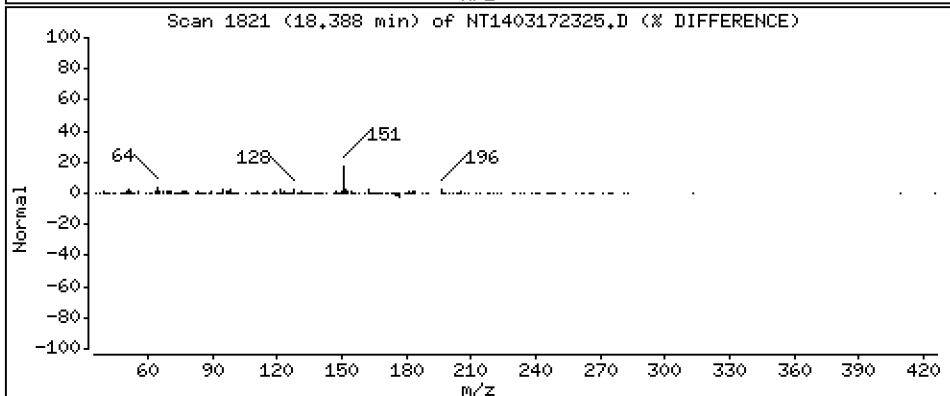
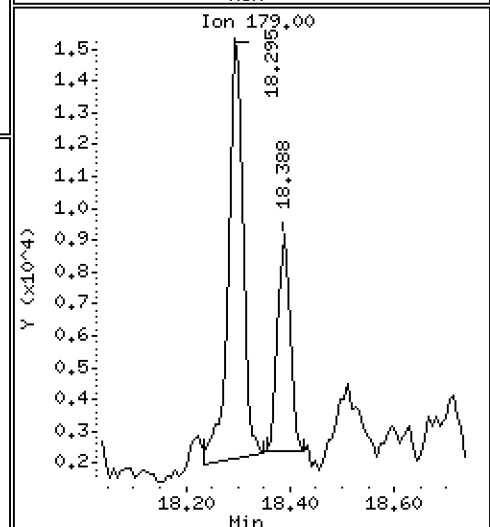
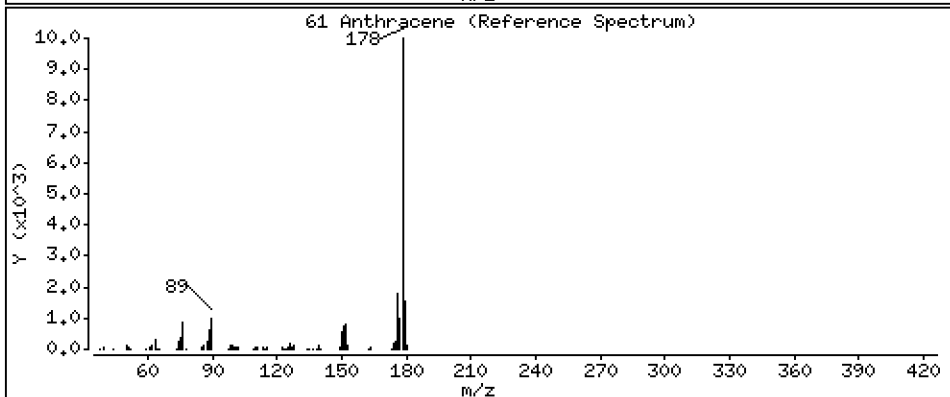
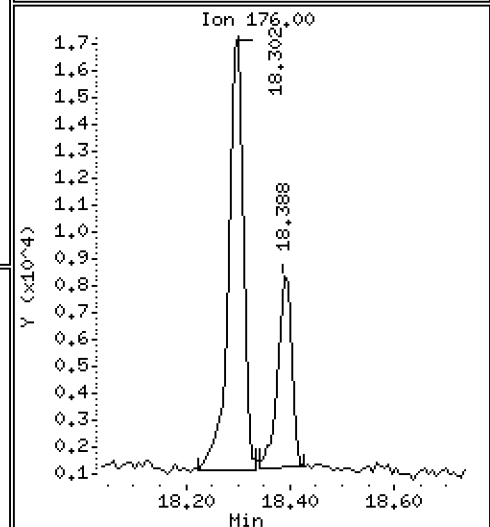
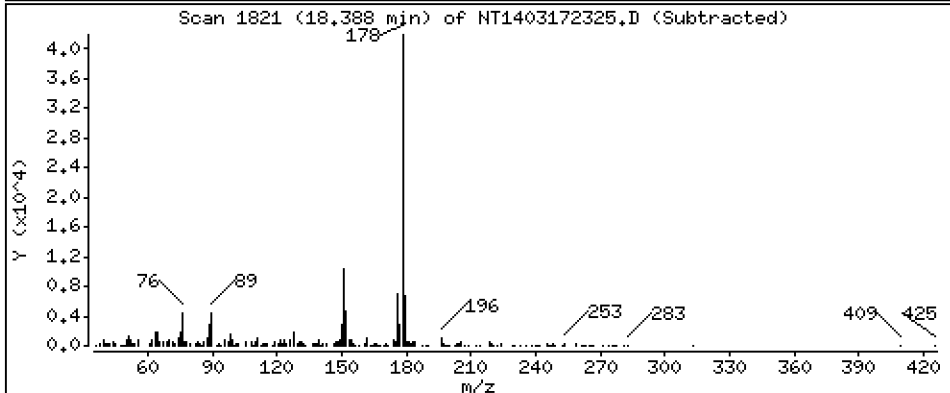
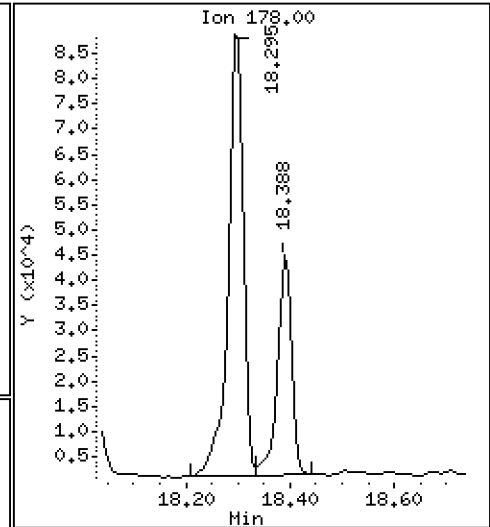
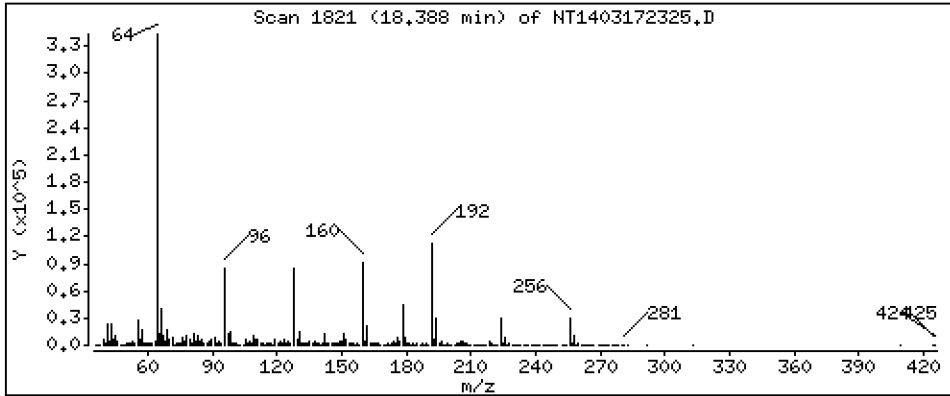
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,4380 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

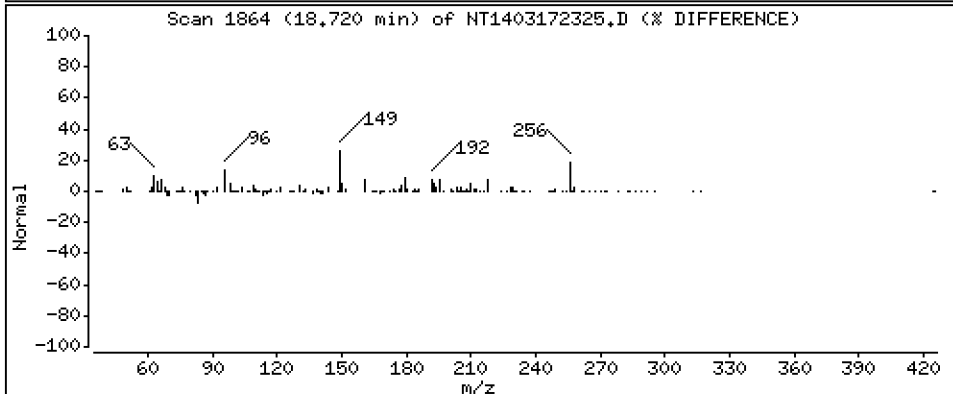
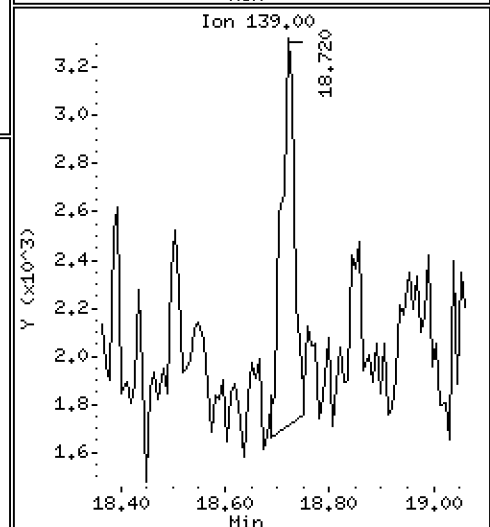
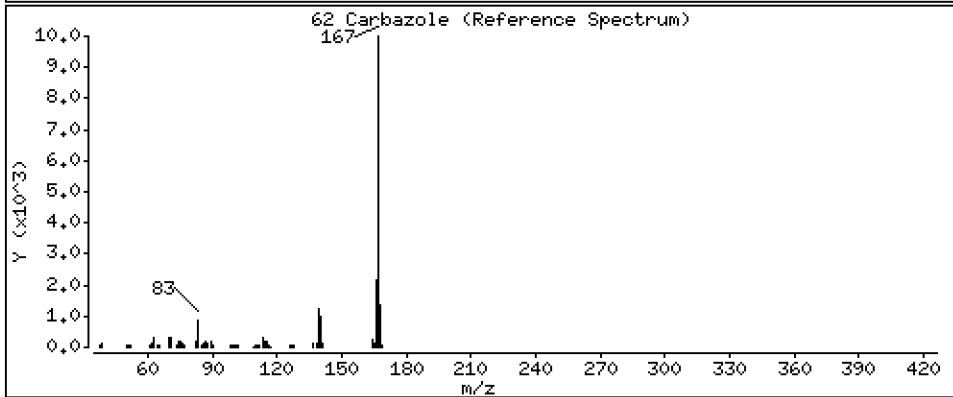
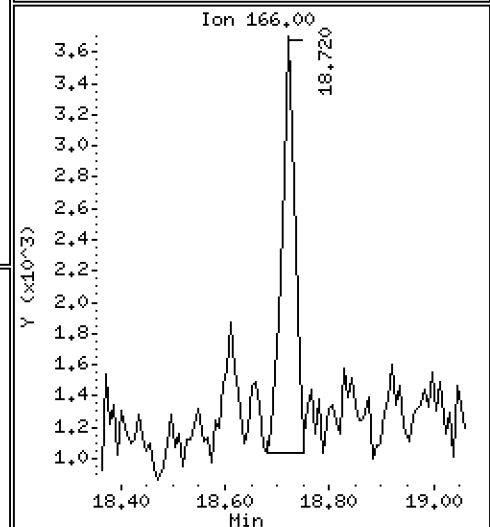
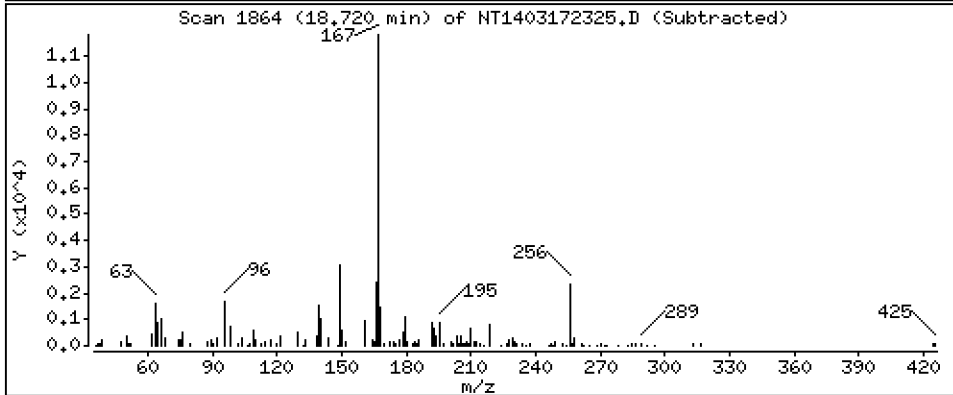
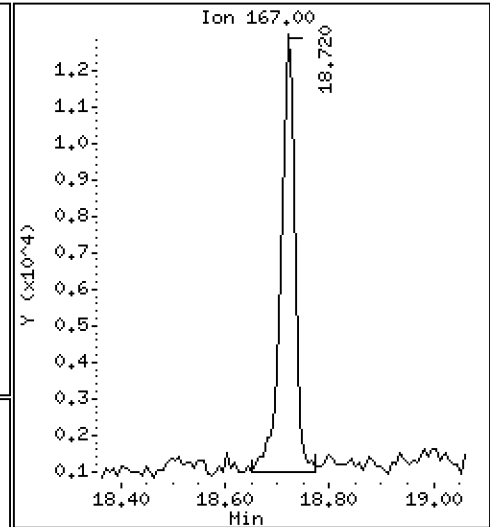
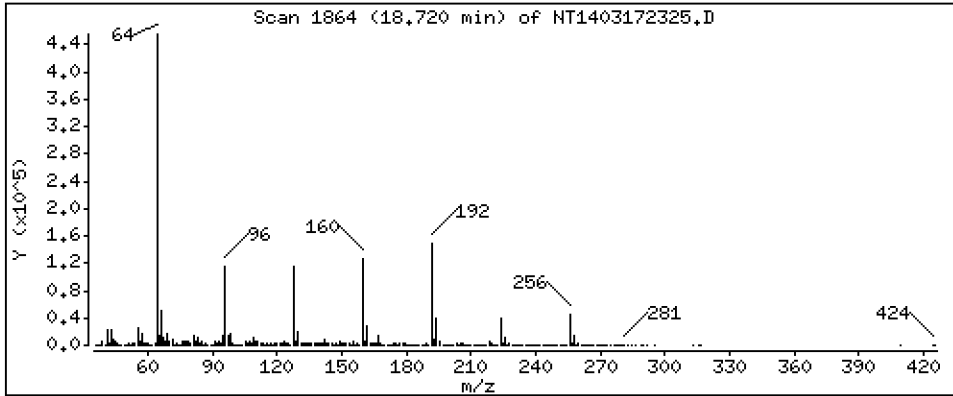
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1397 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

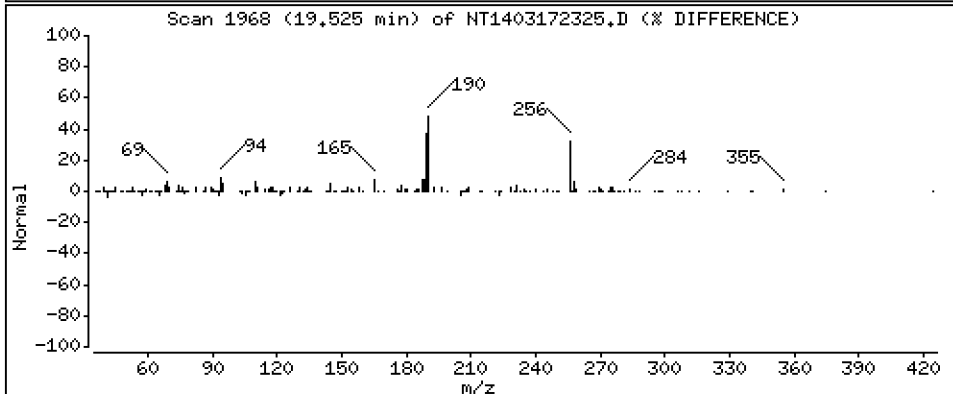
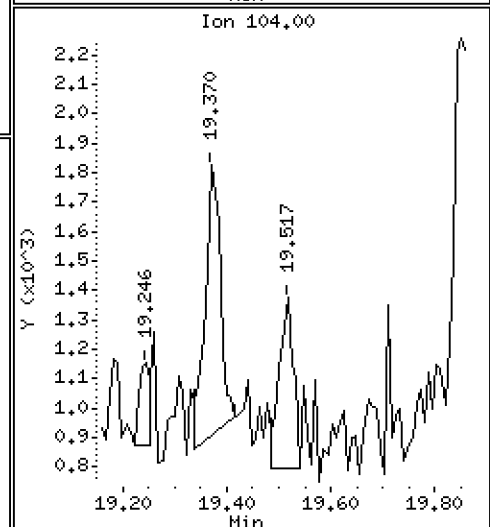
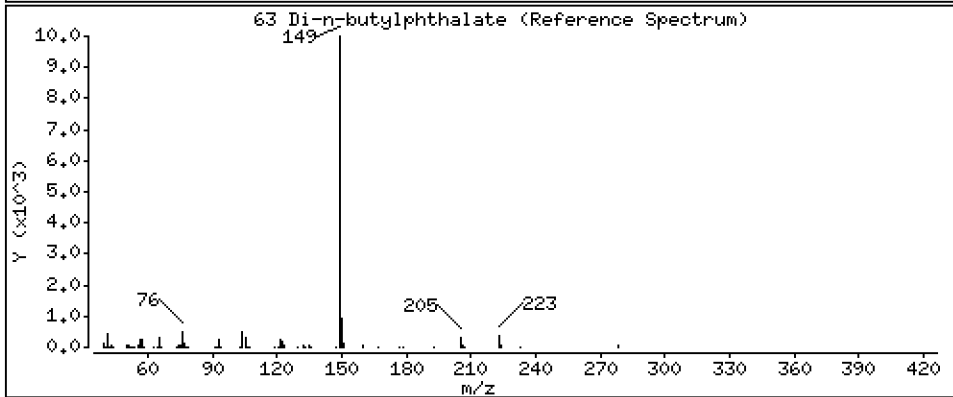
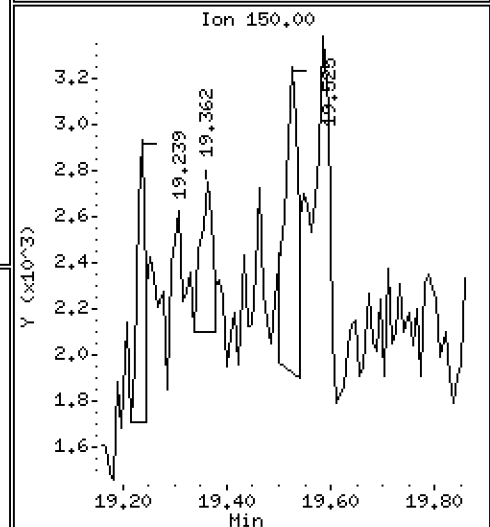
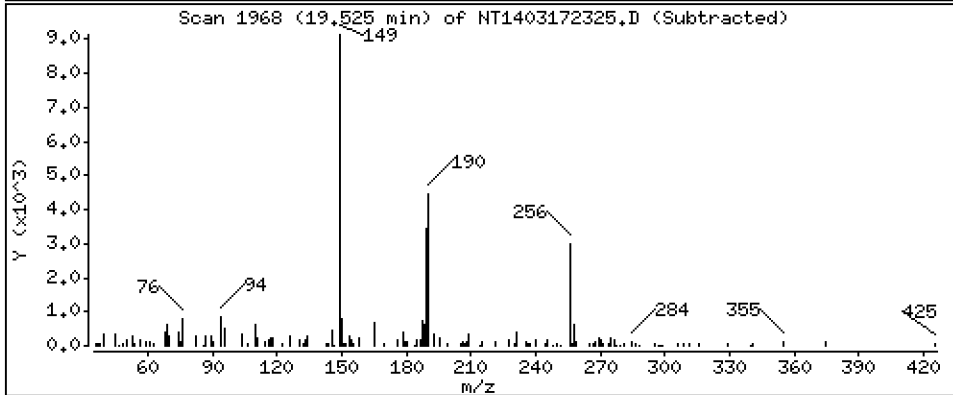
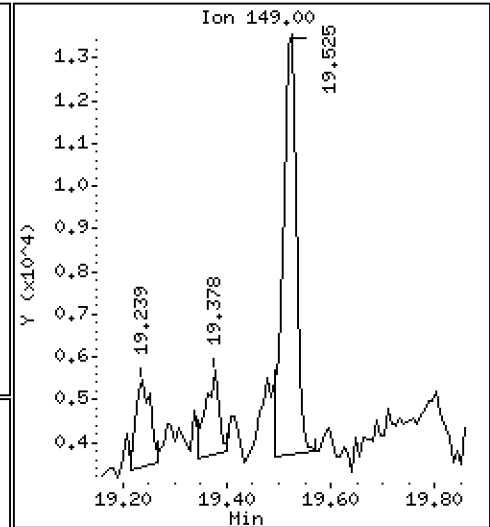
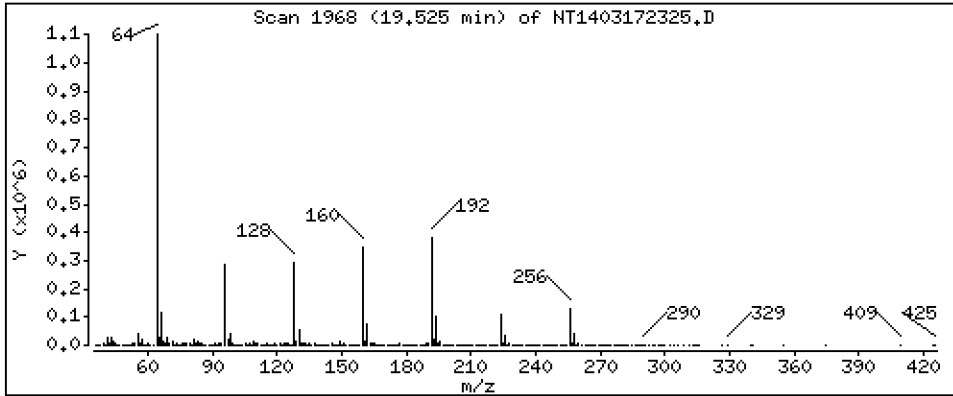
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,08814 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

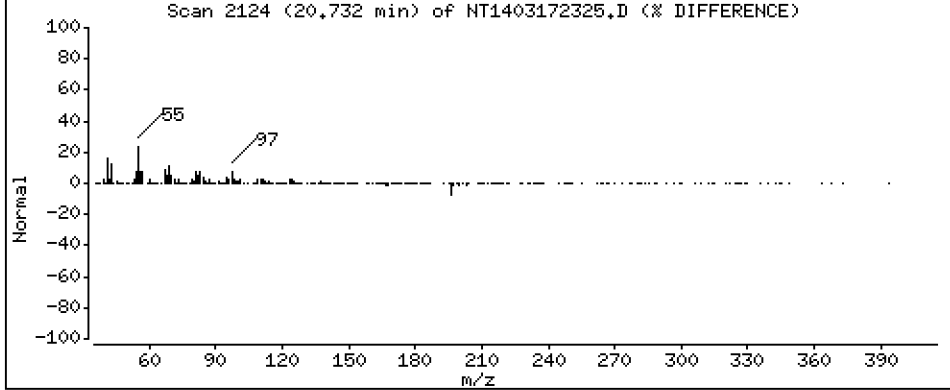
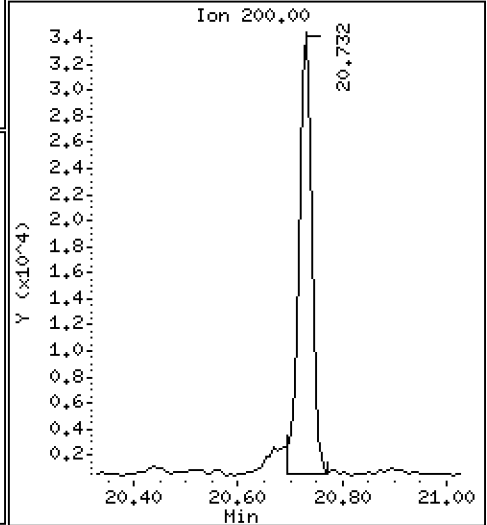
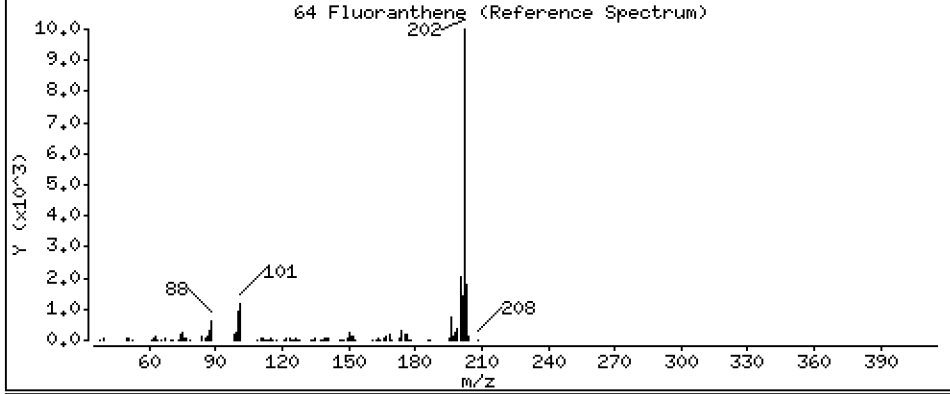
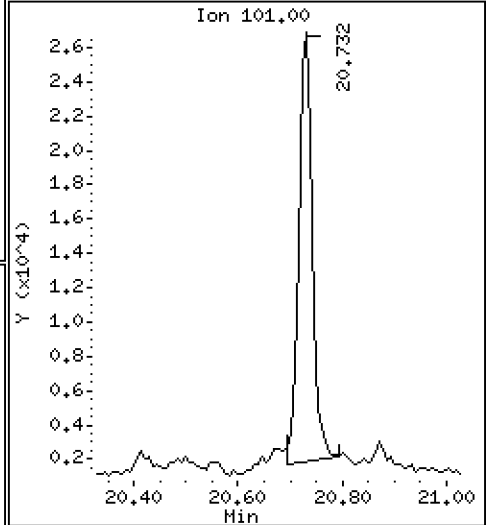
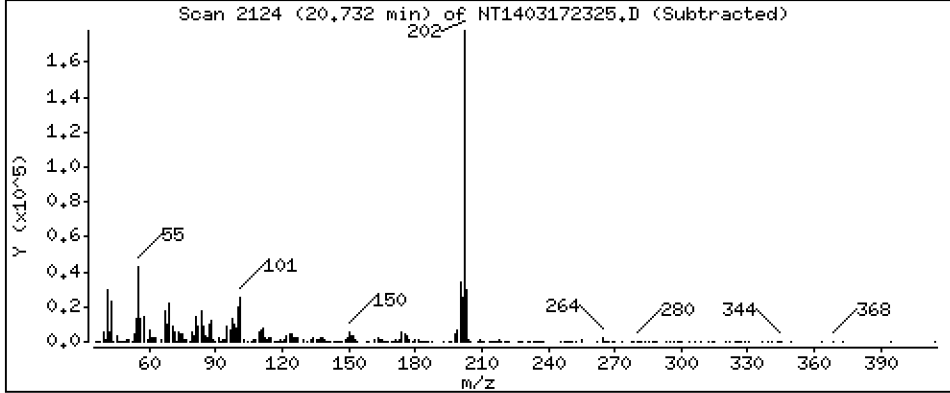
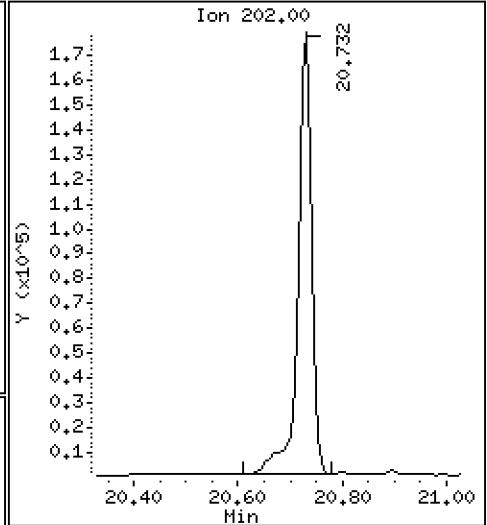
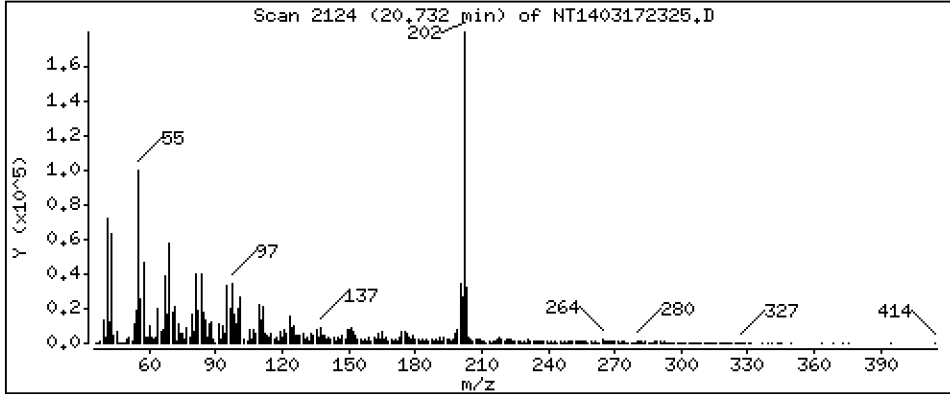
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,131 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

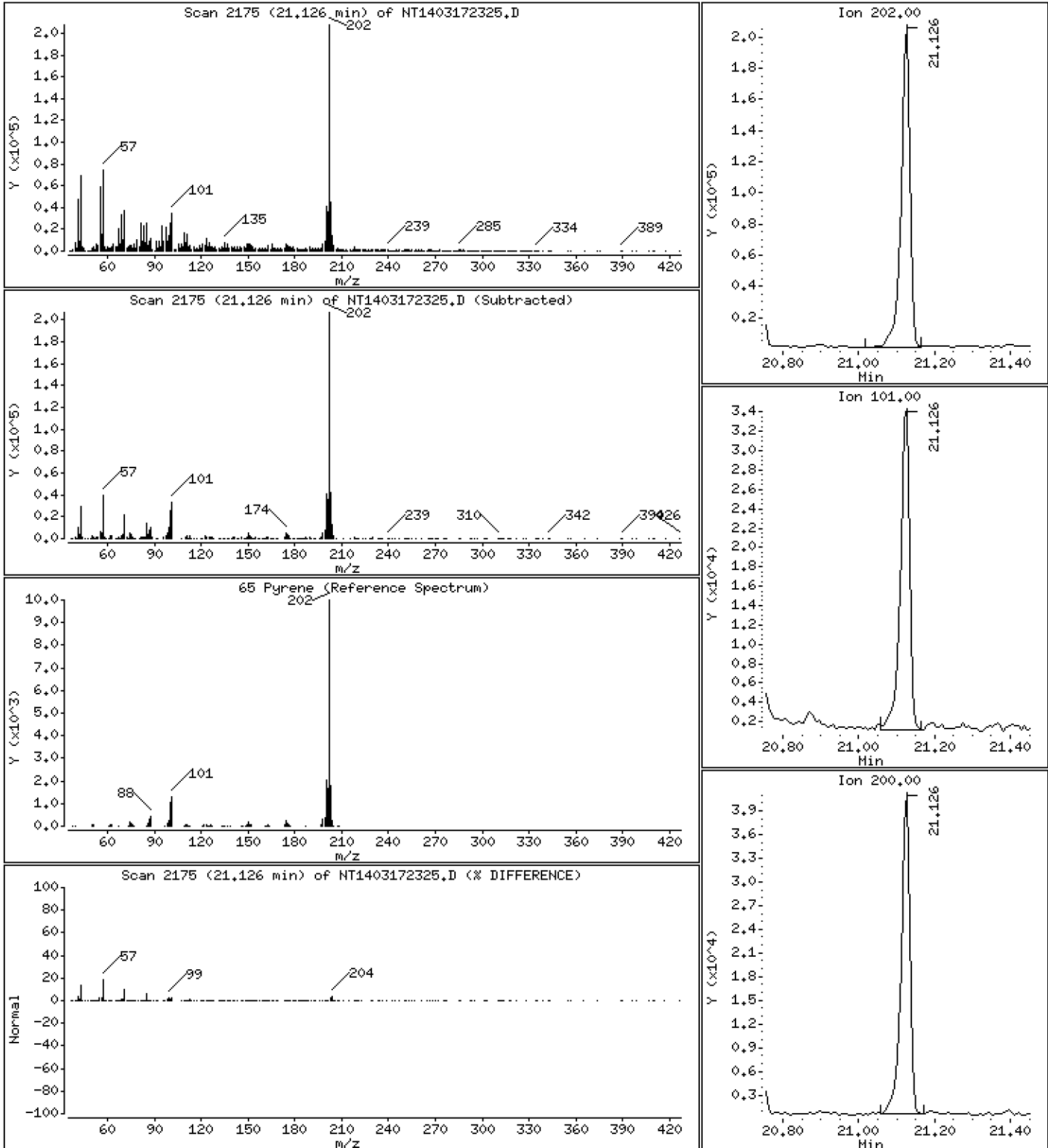
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,021 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

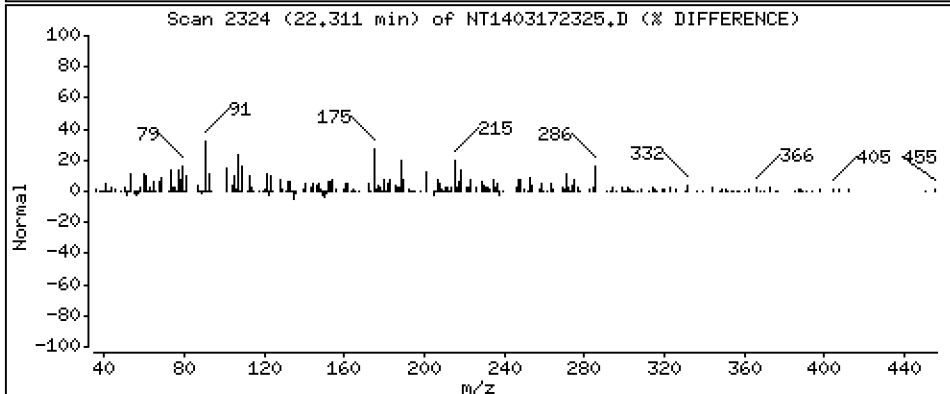
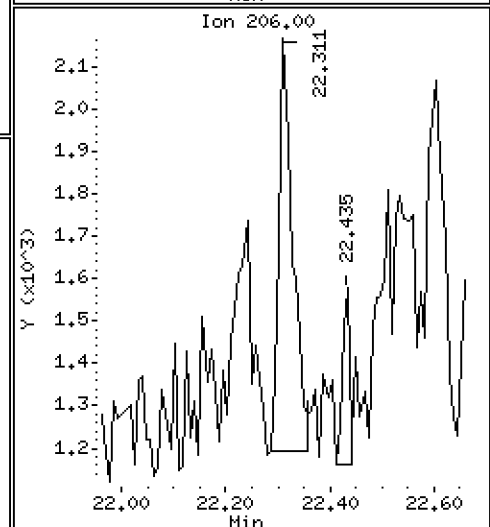
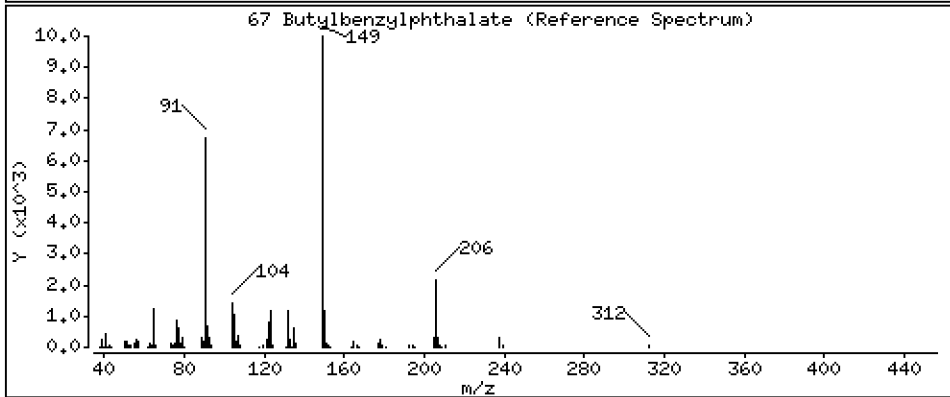
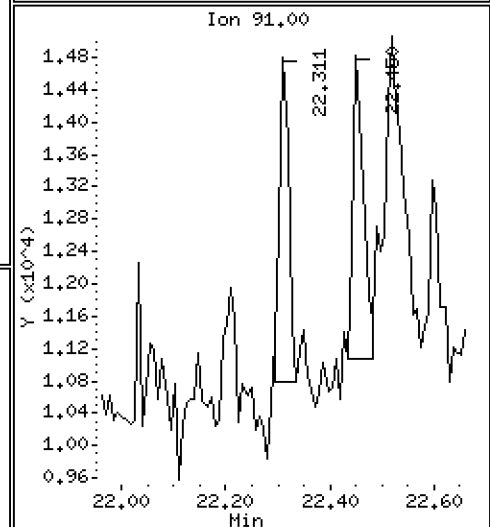
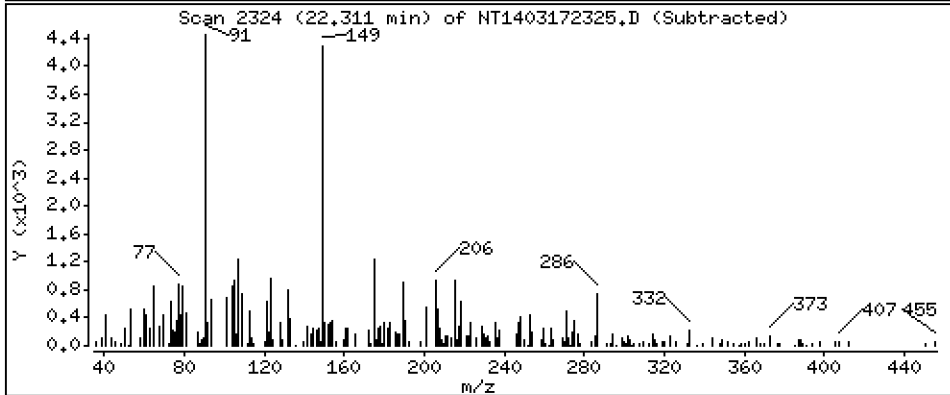
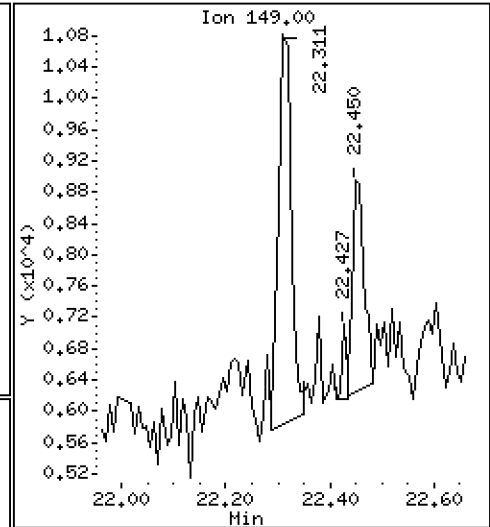
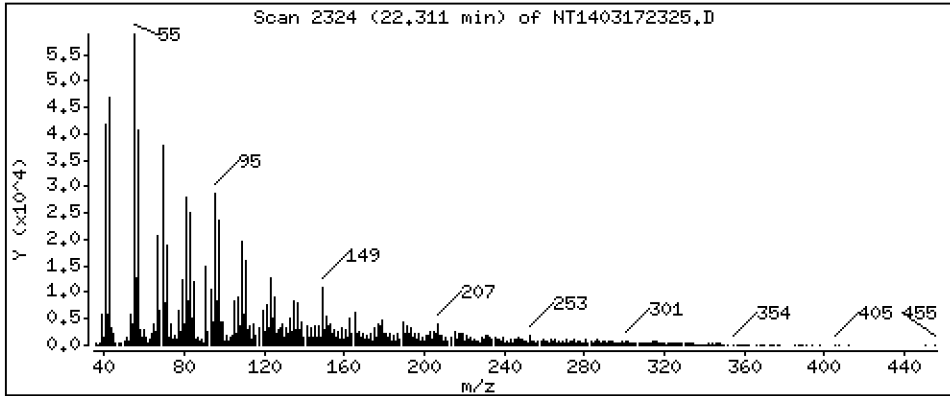
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2214 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

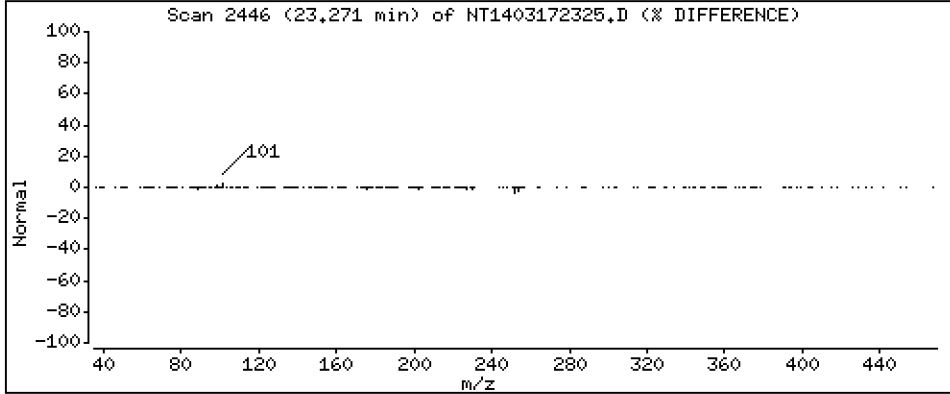
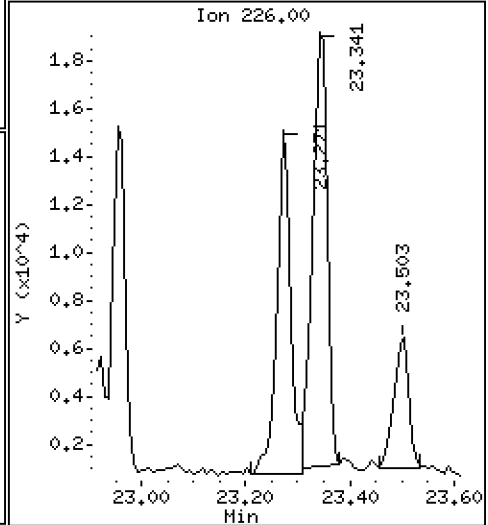
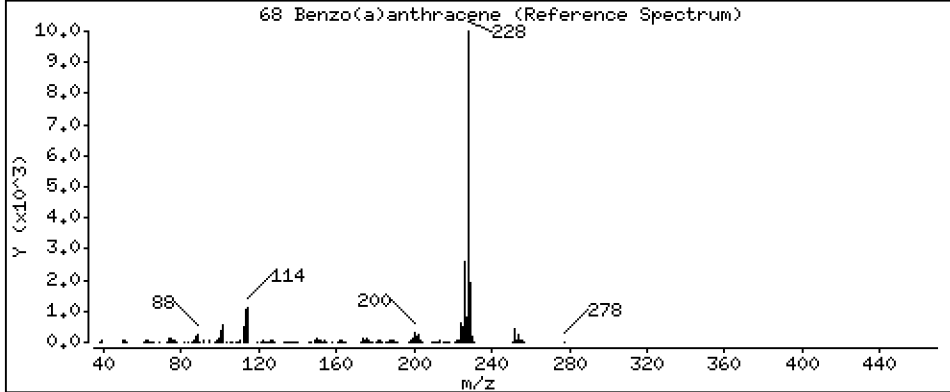
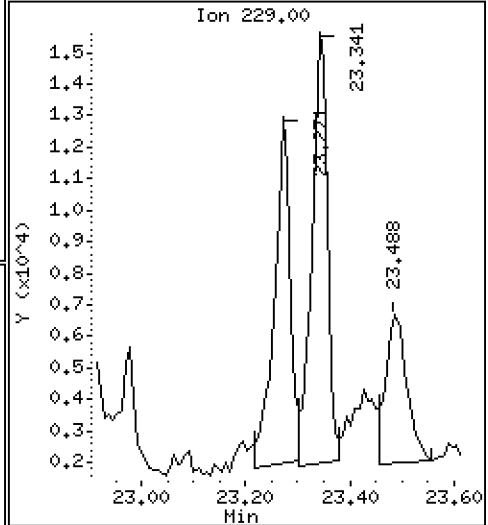
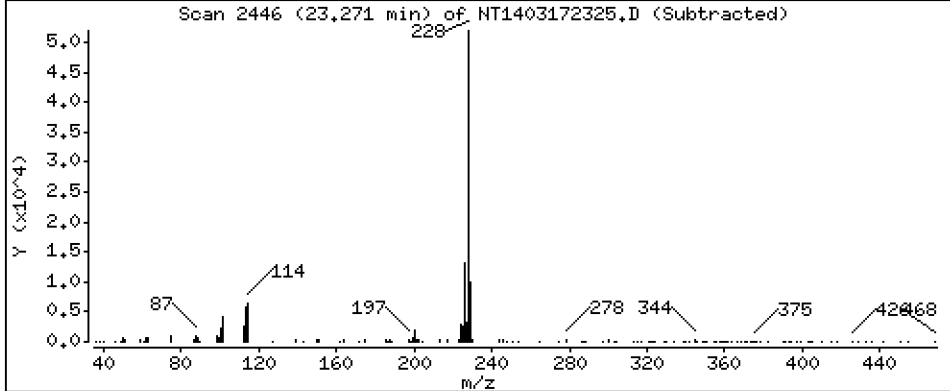
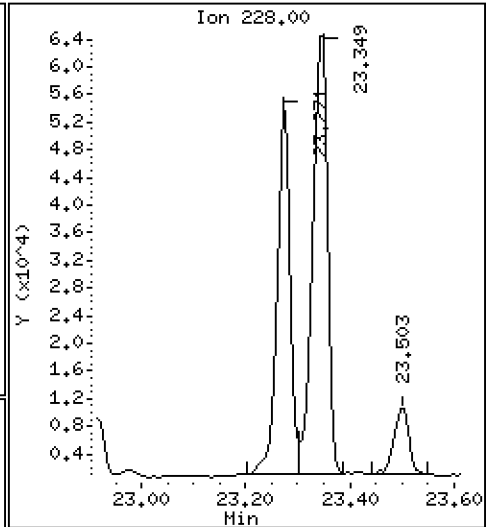
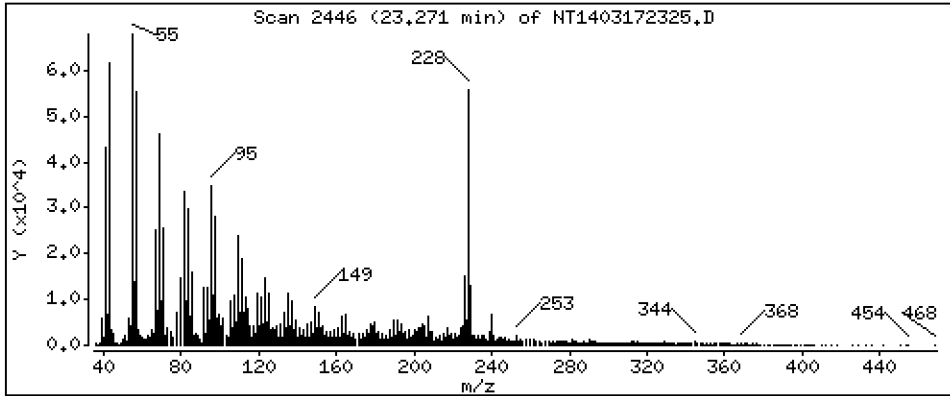
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 1,246 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

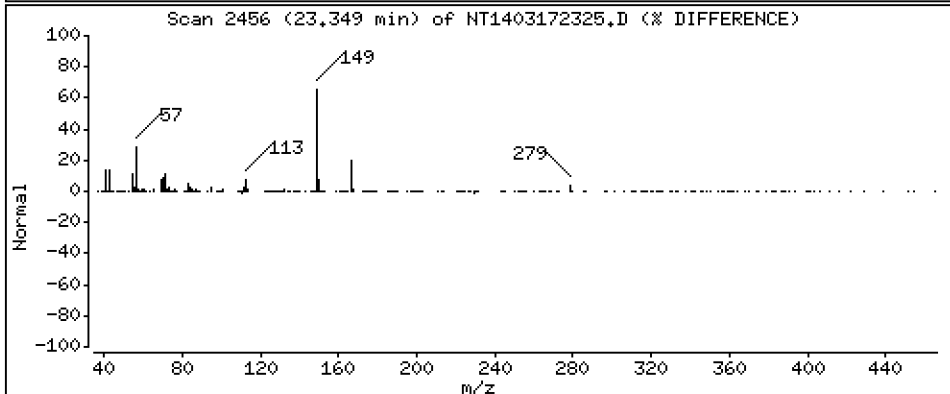
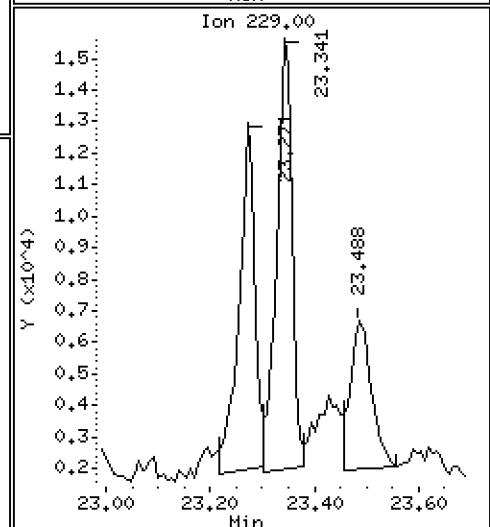
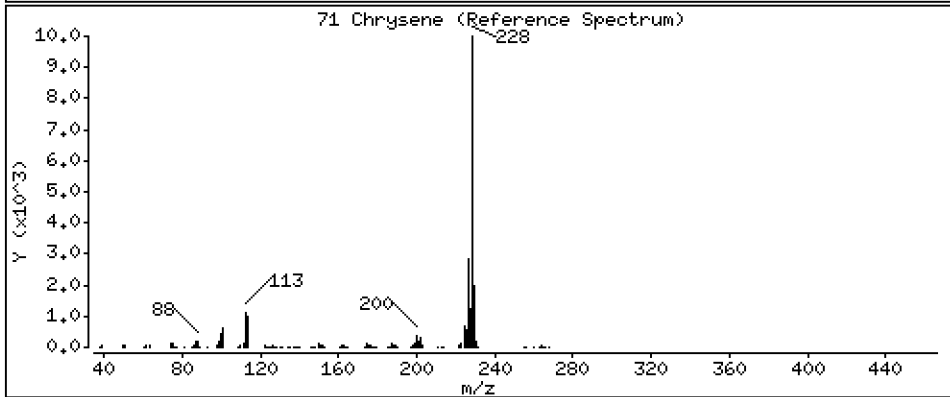
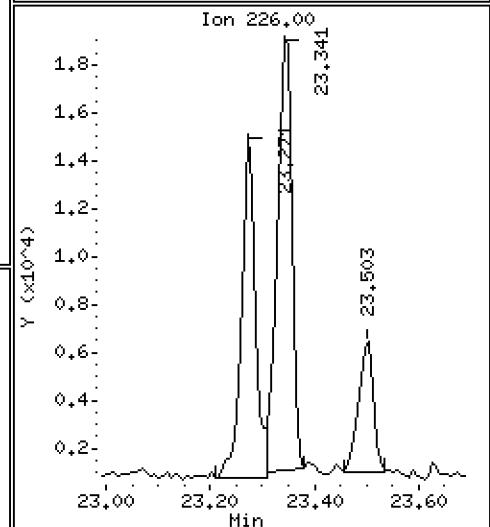
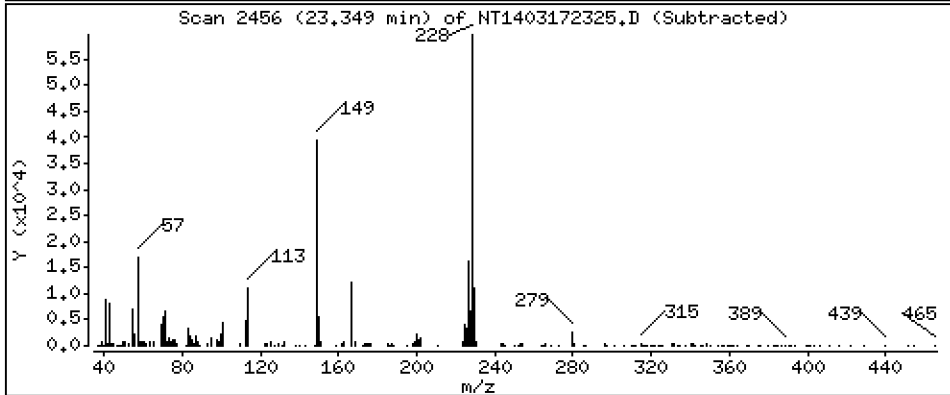
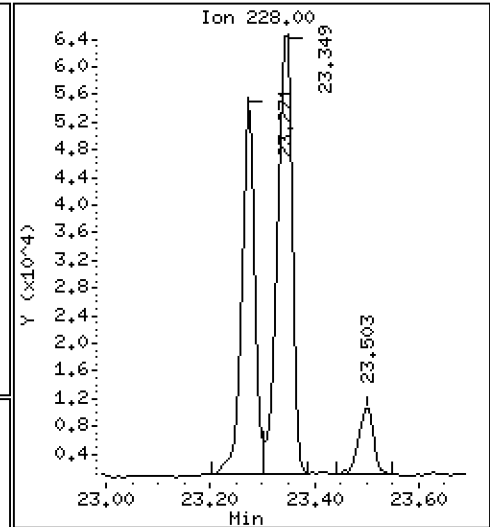
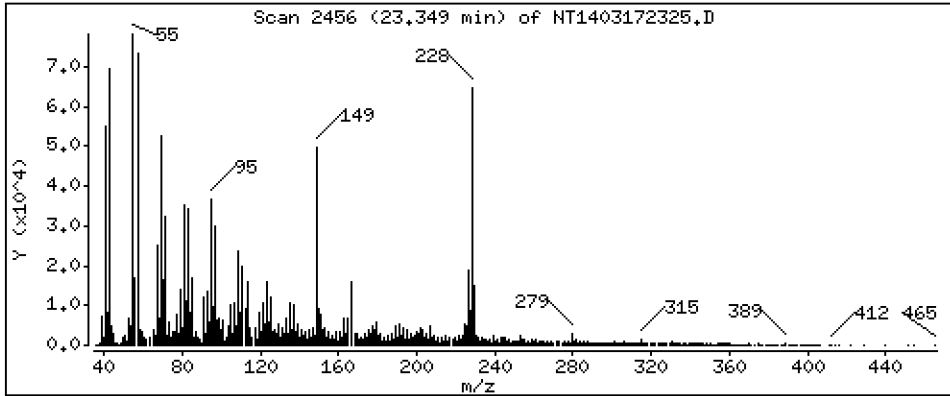
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,825 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

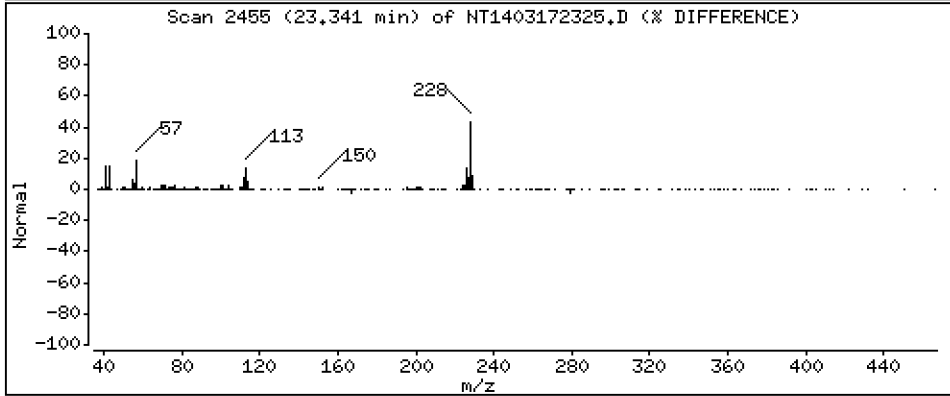
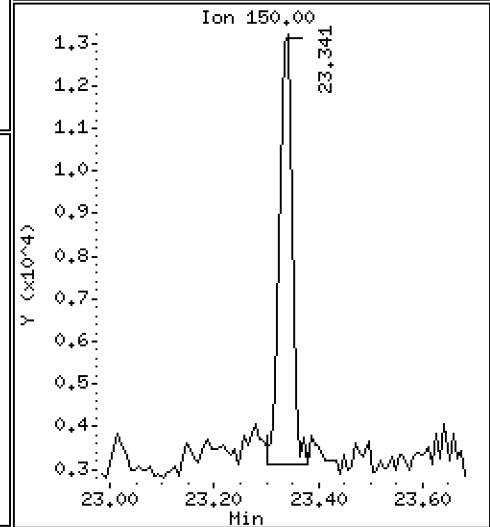
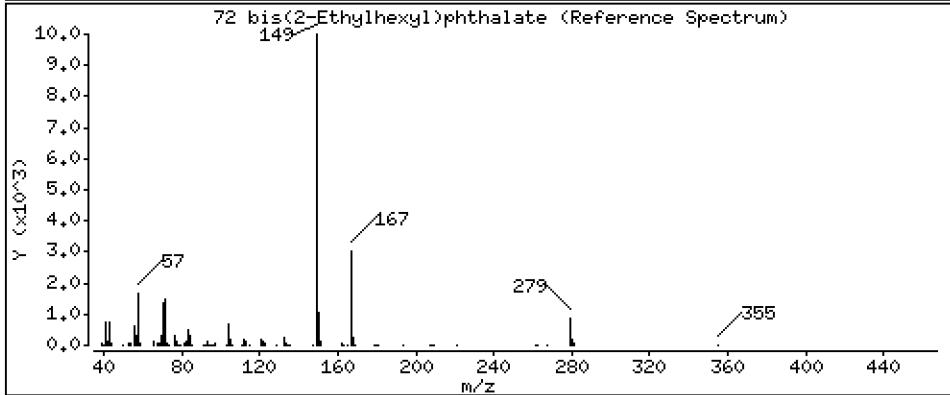
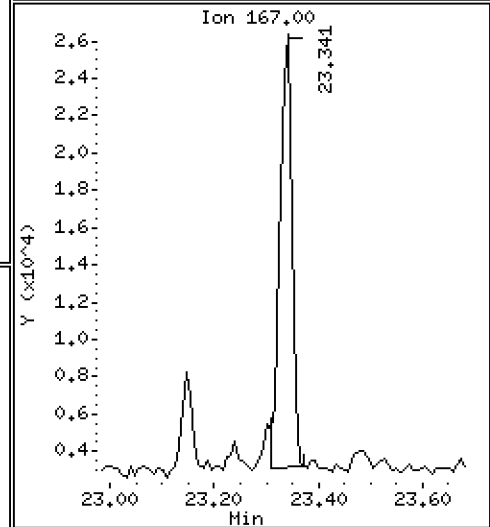
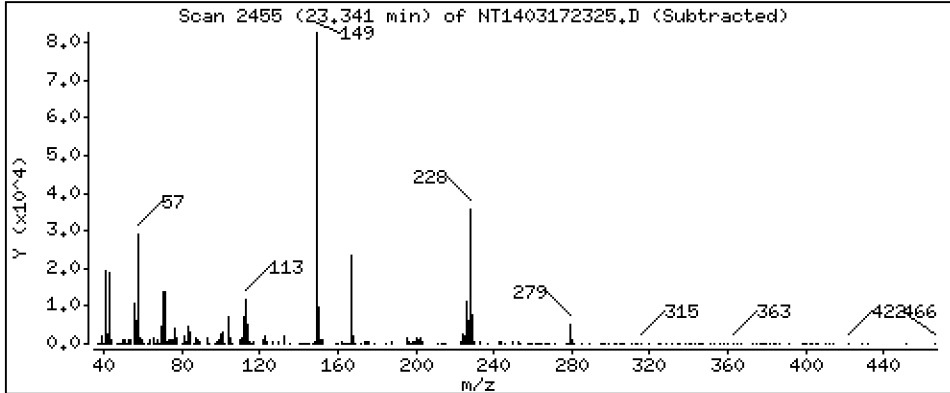
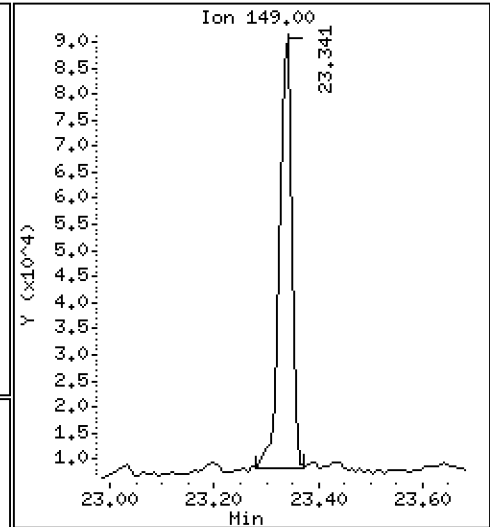
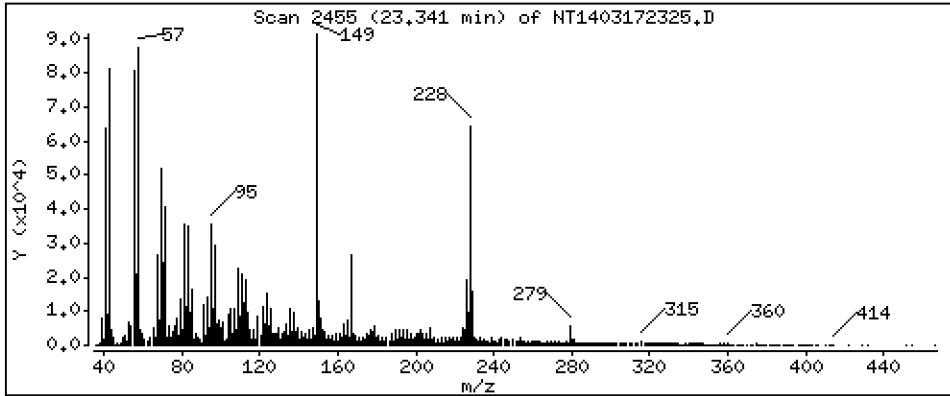
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 2,404 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

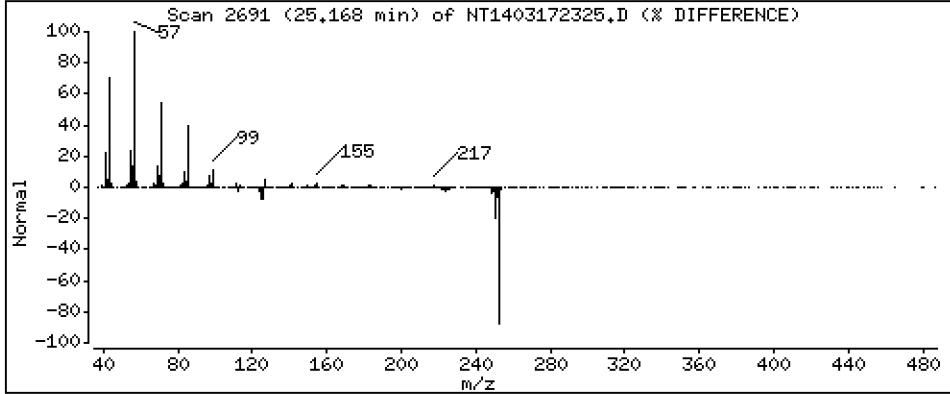
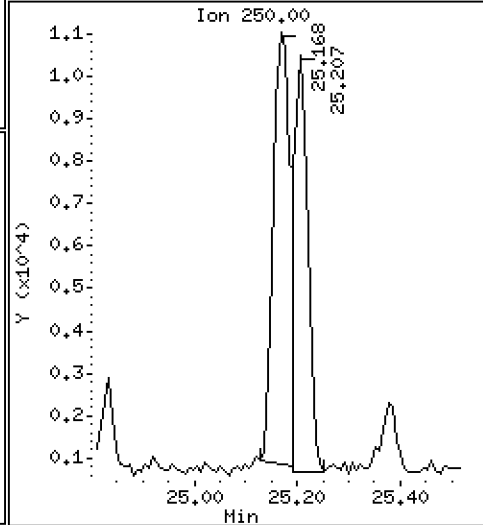
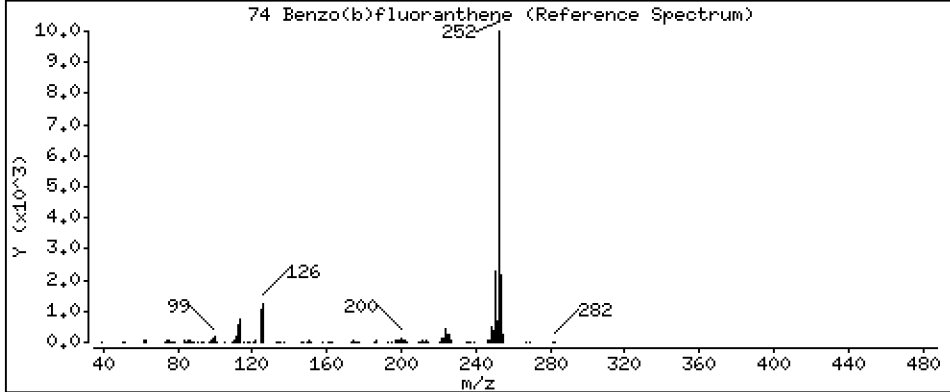
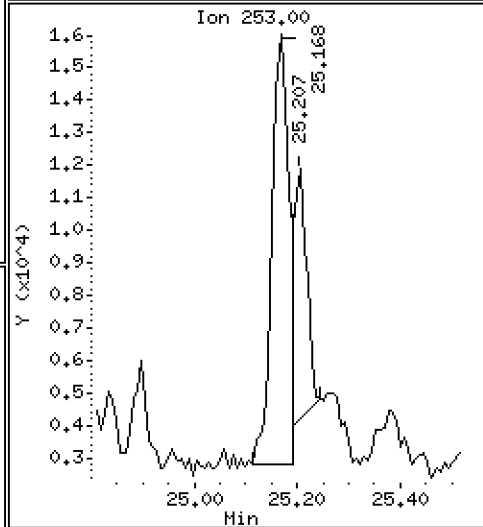
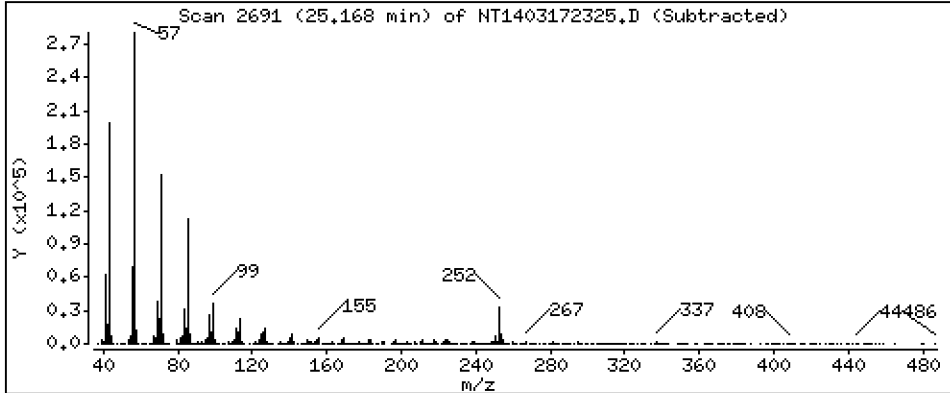
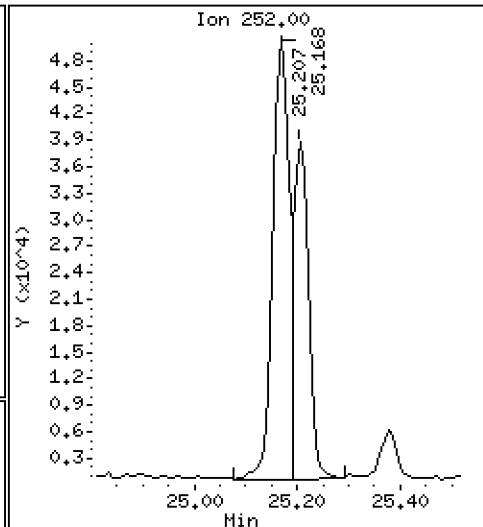
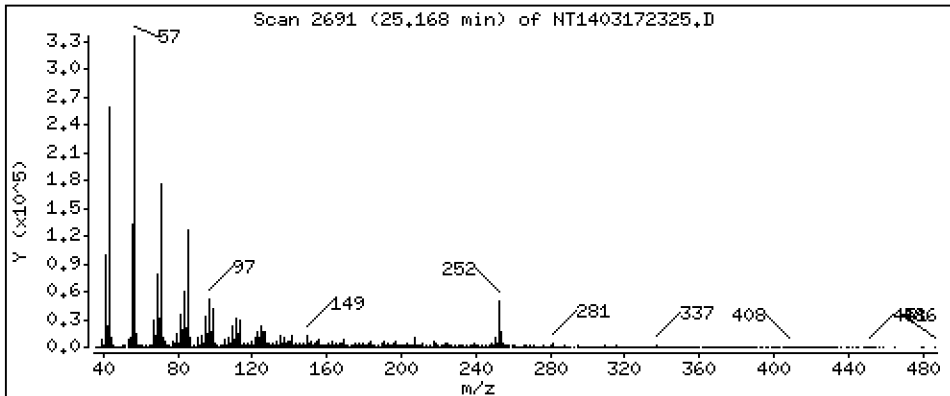
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,177 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

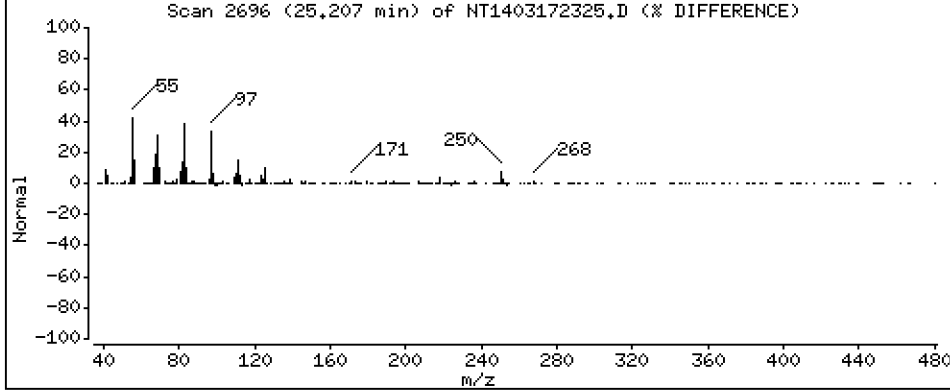
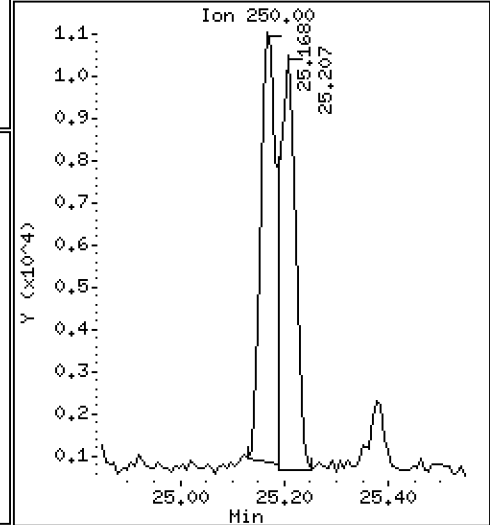
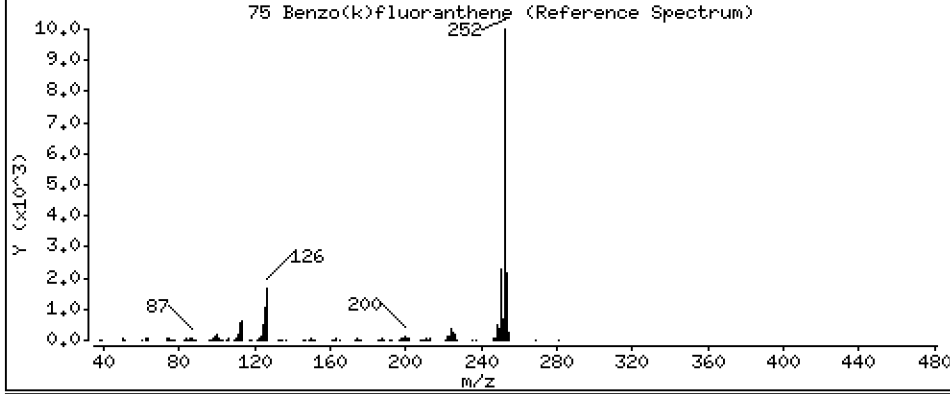
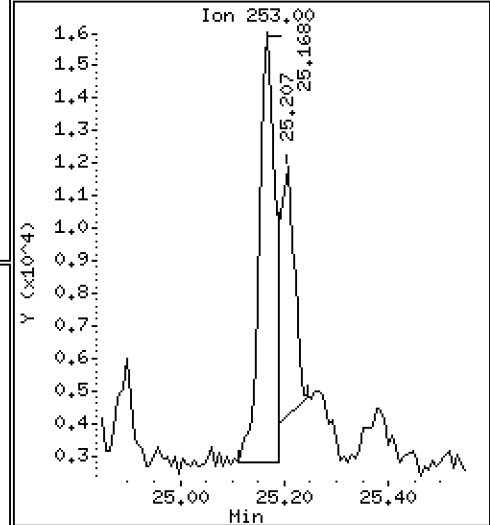
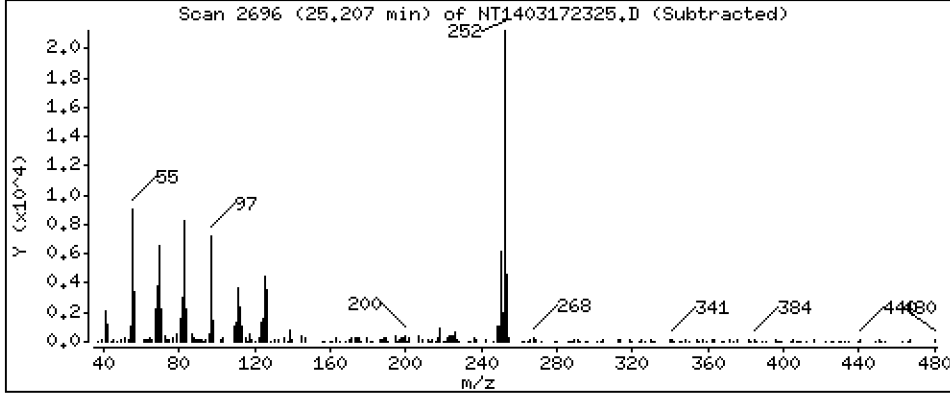
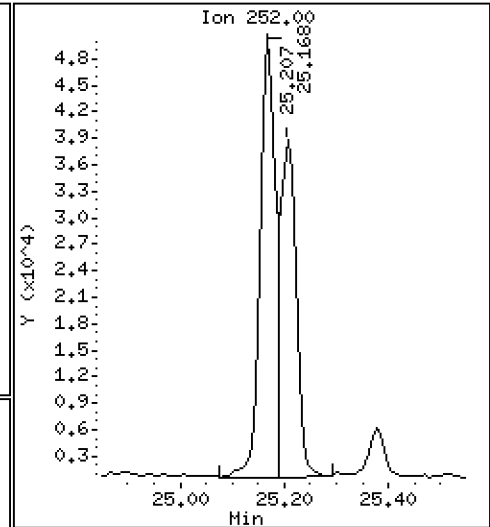
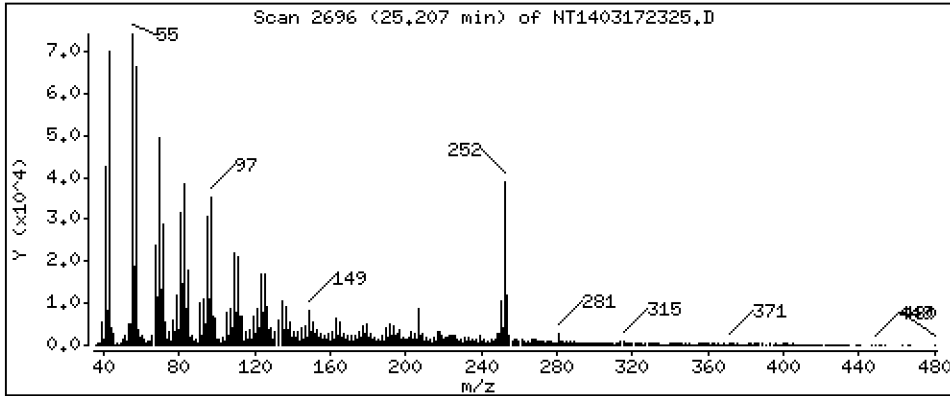
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,634 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

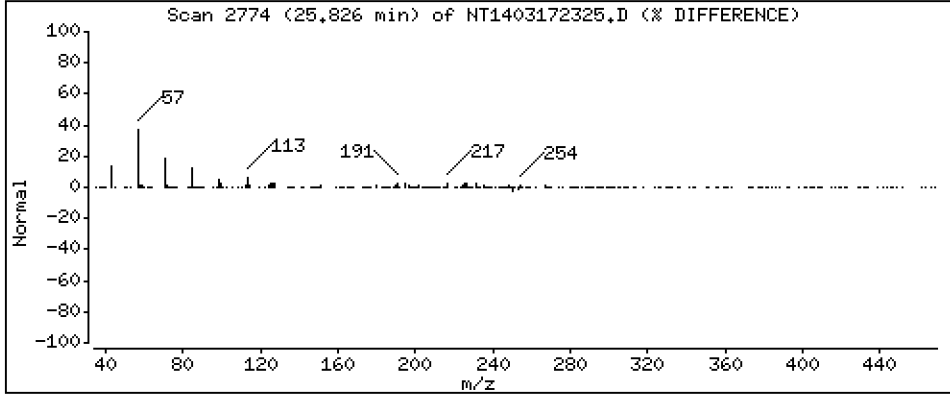
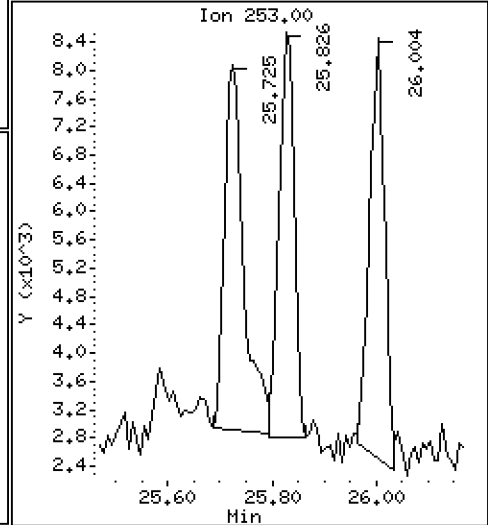
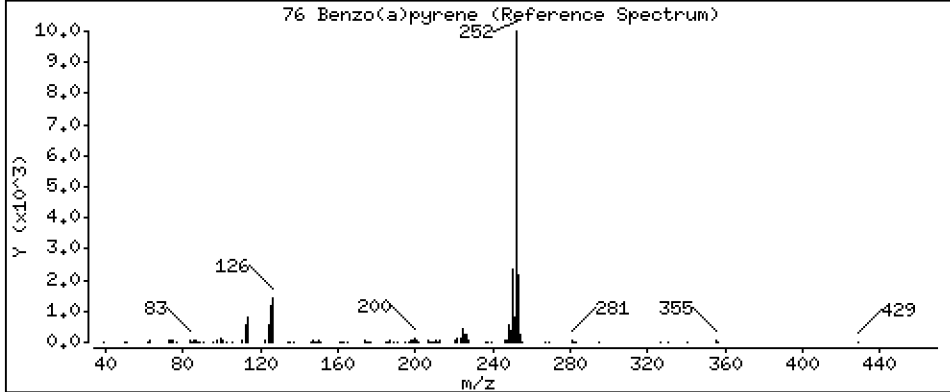
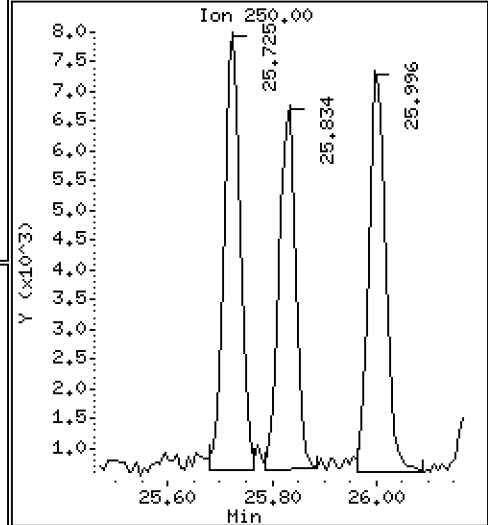
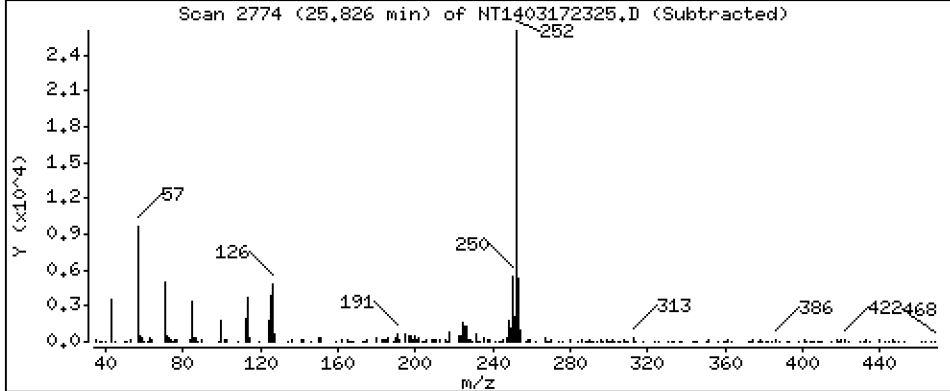
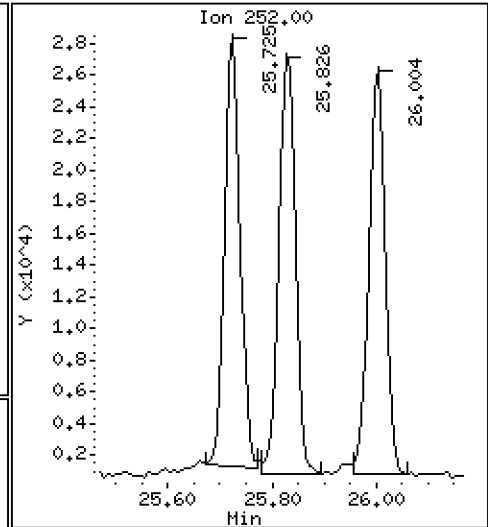
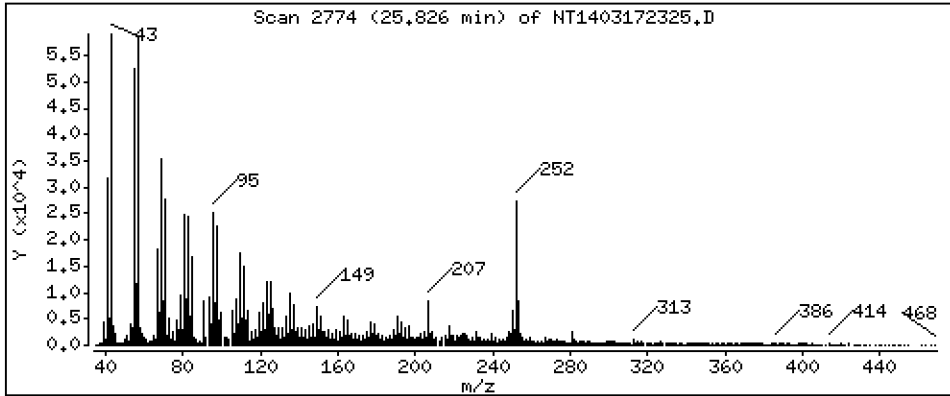
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,306 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

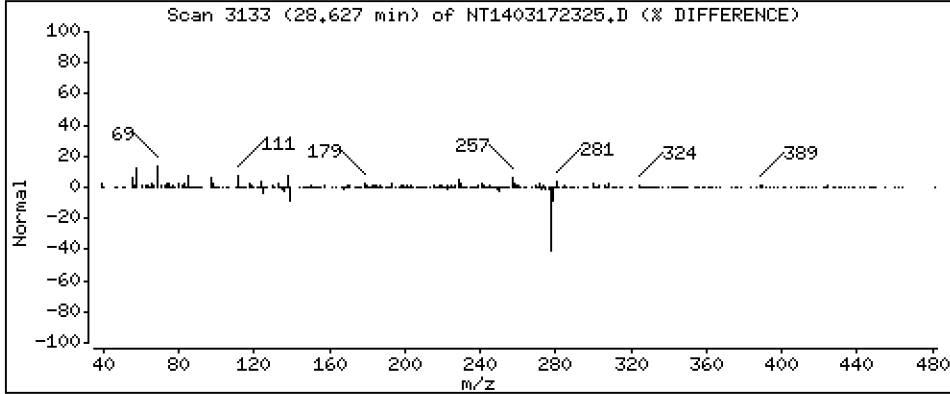
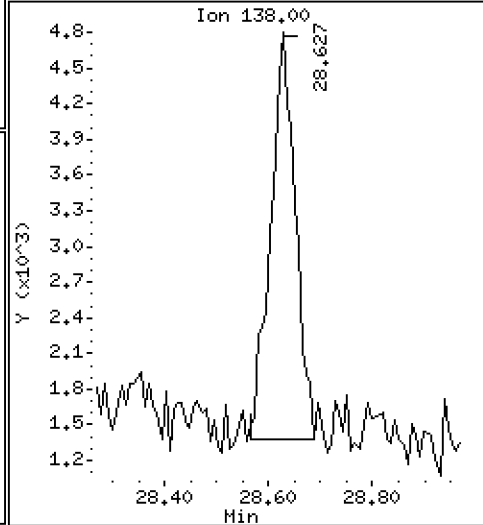
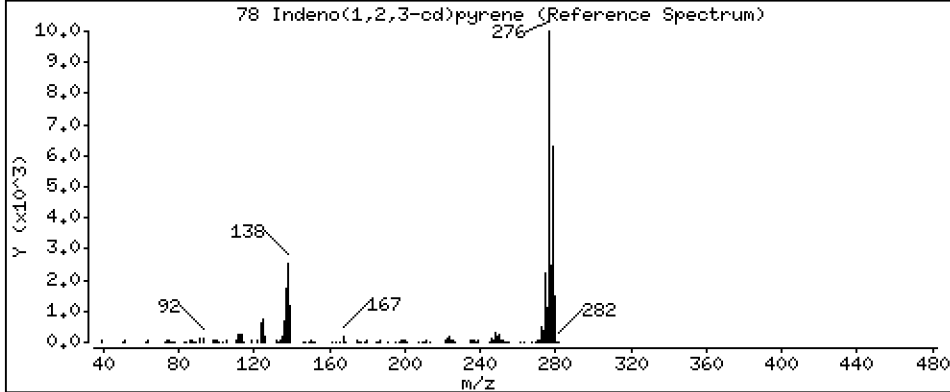
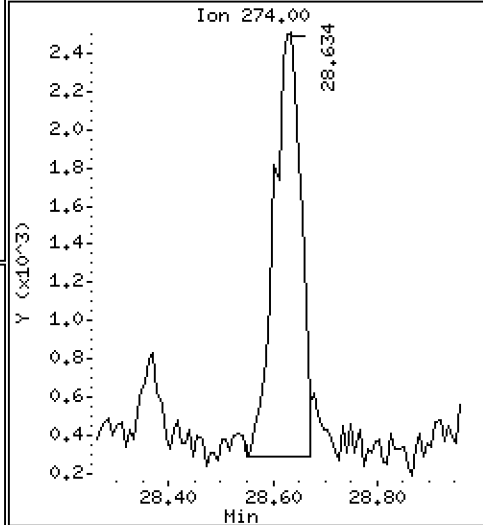
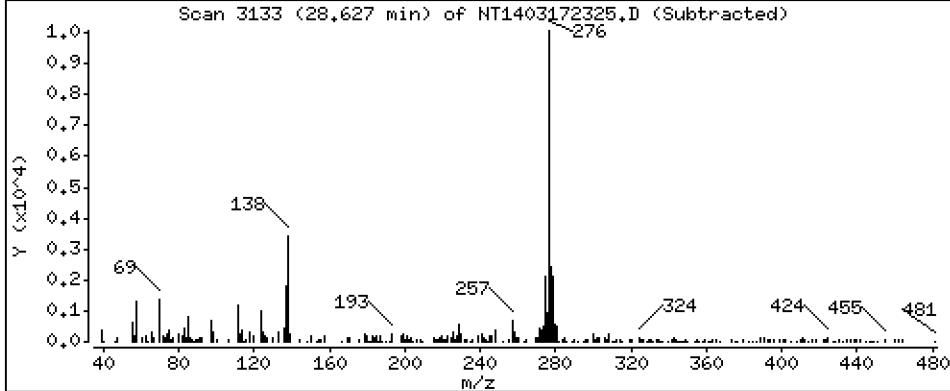
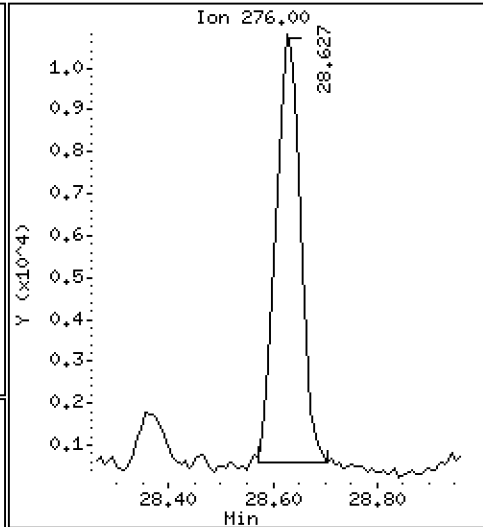
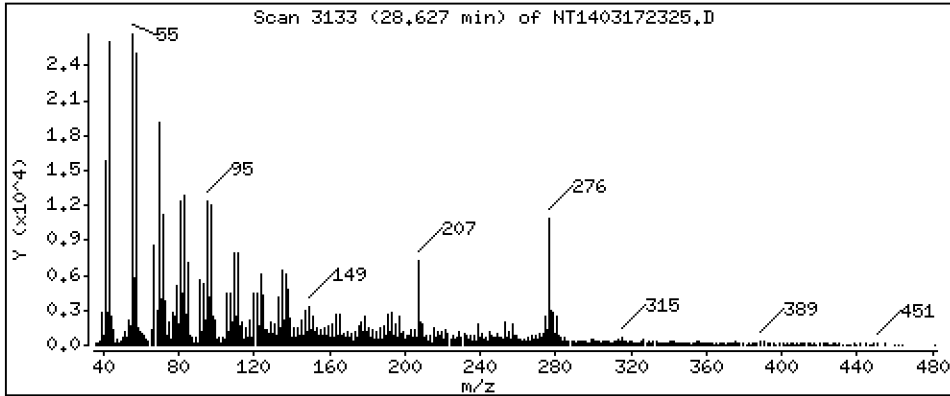
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,7157 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

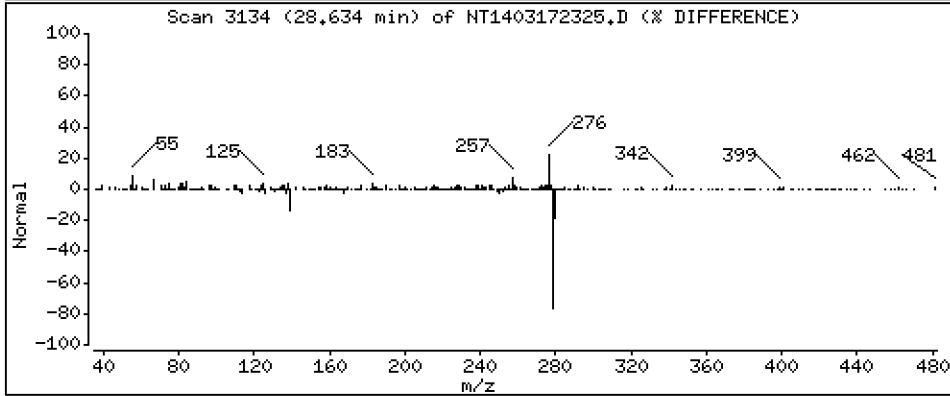
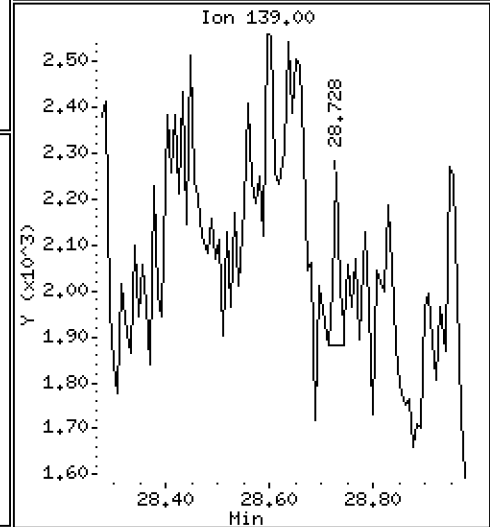
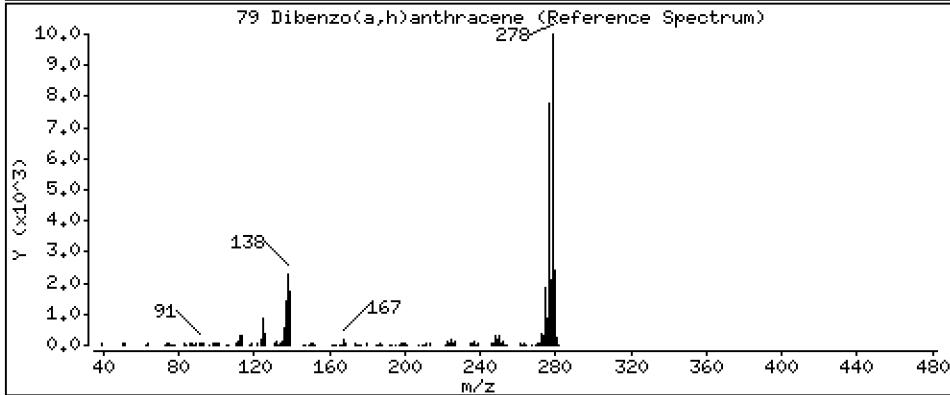
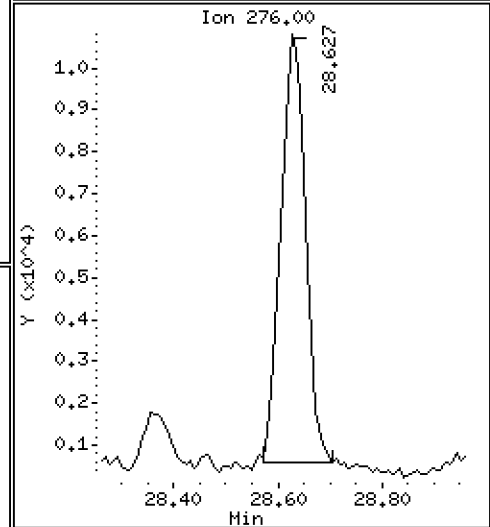
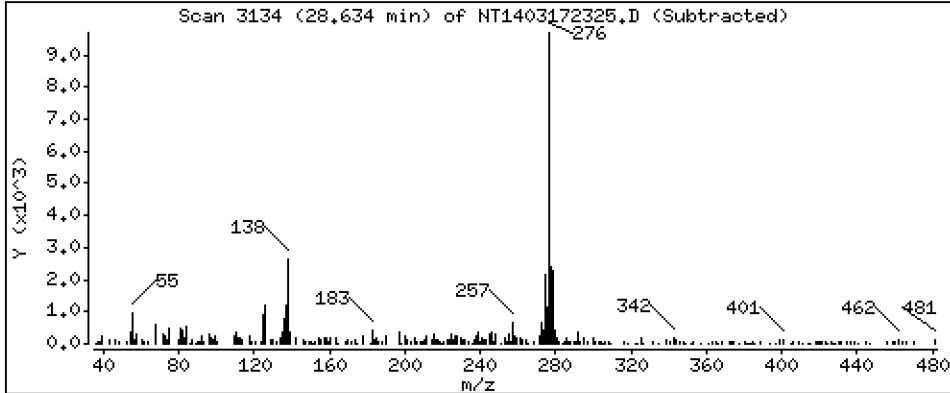
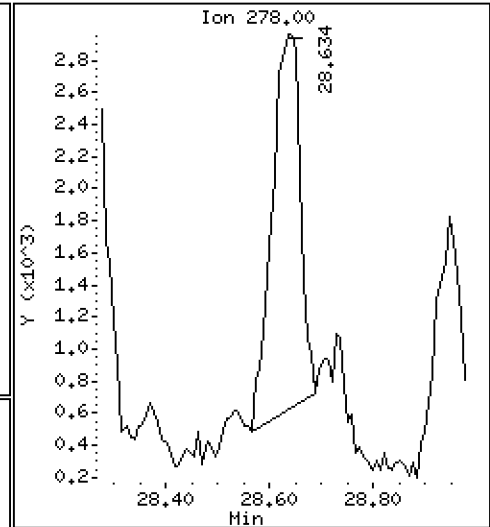
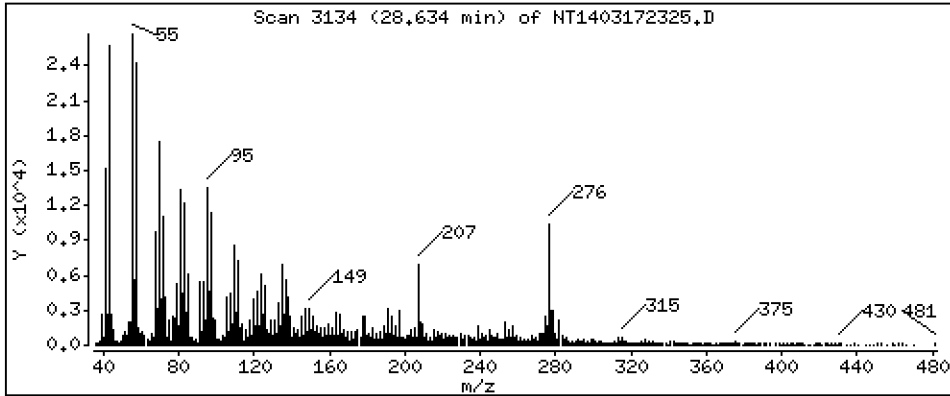
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2207 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

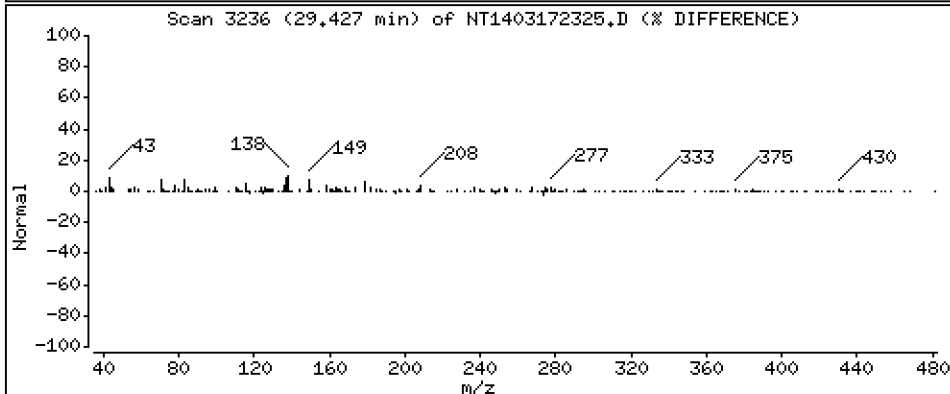
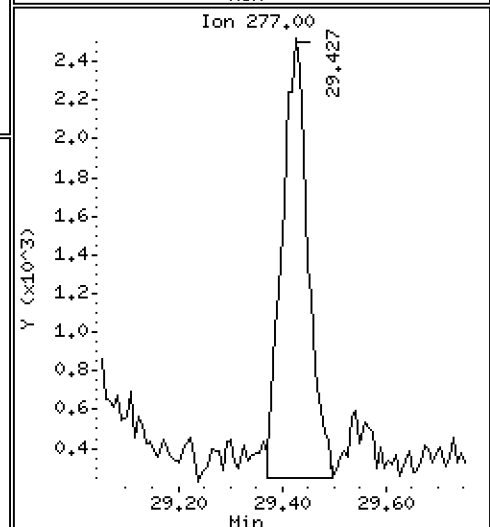
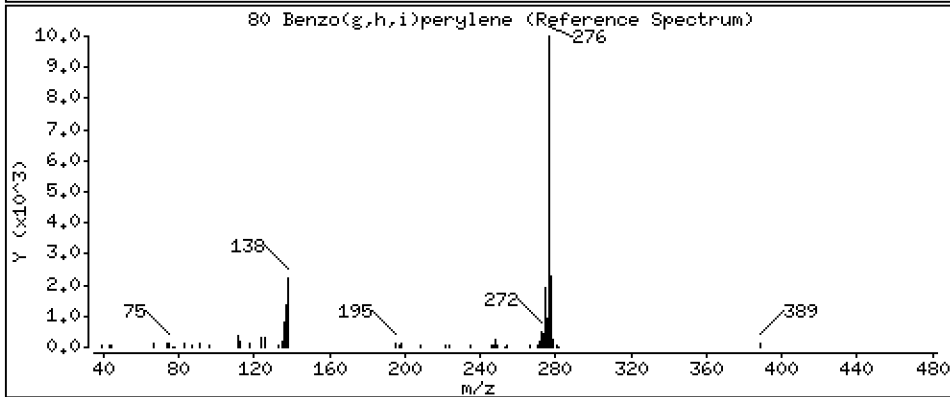
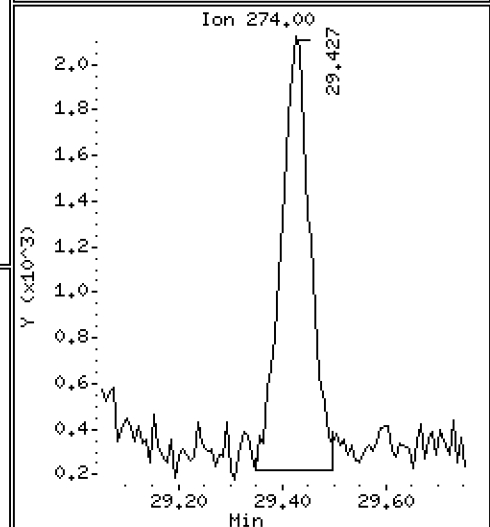
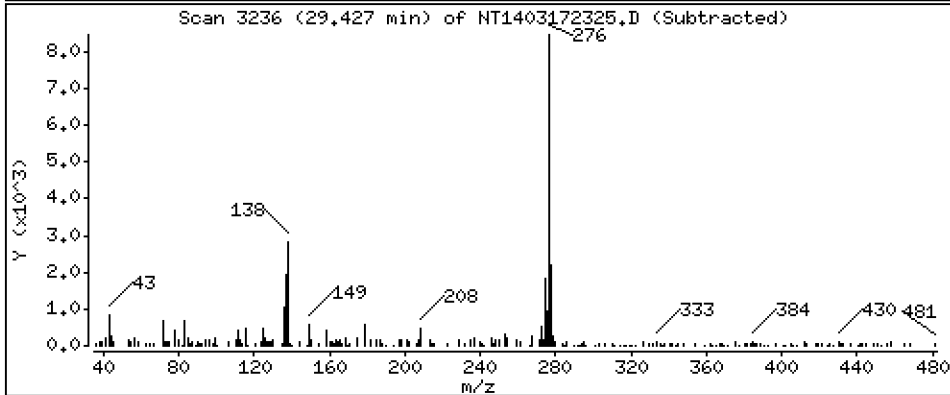
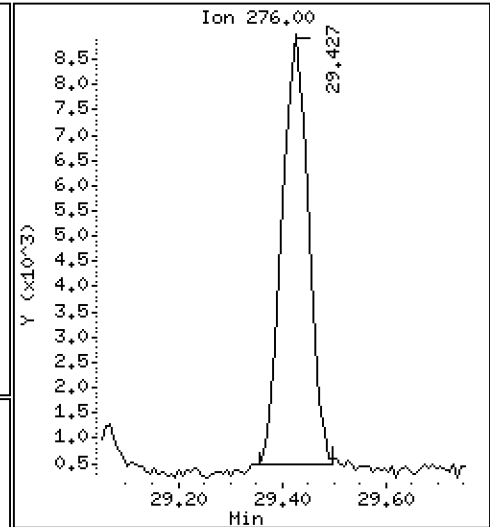
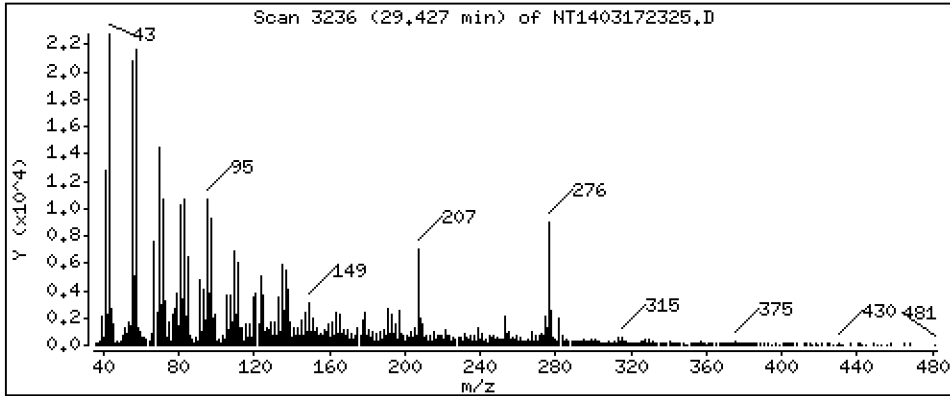
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,7848 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

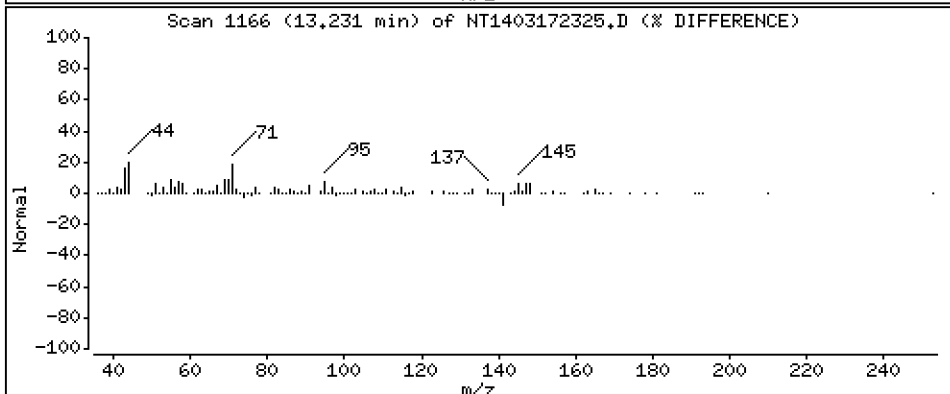
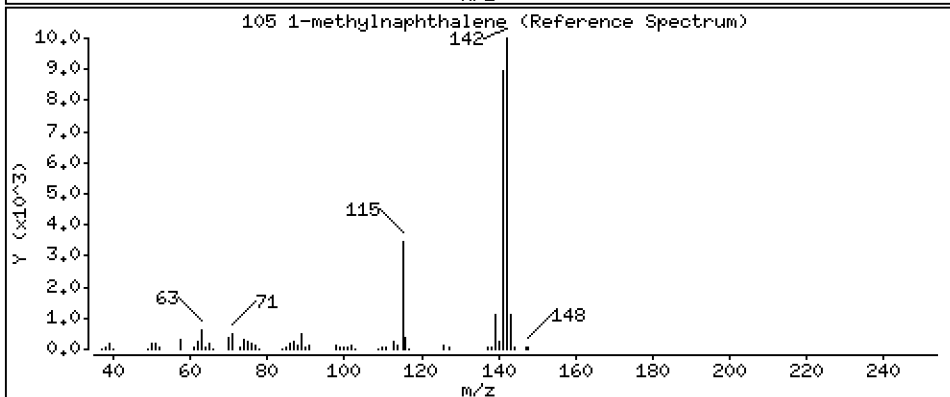
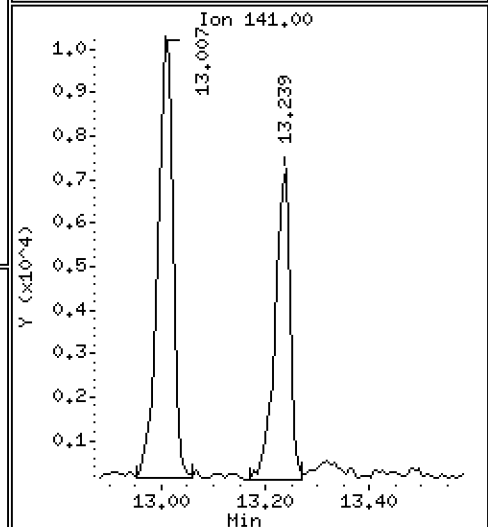
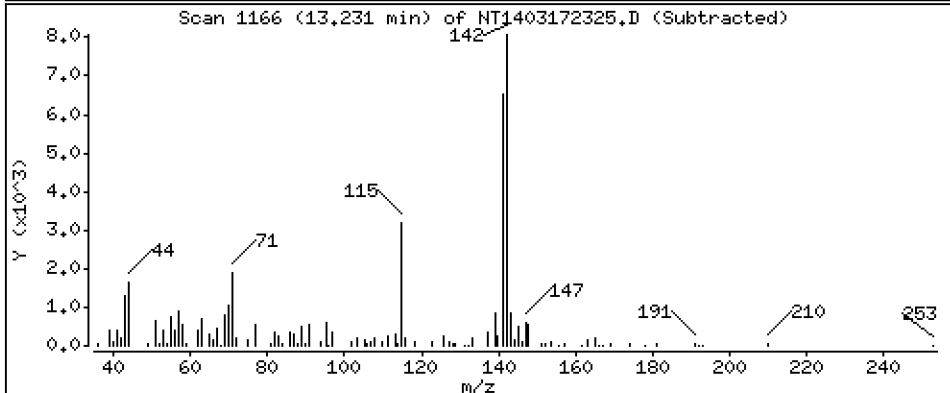
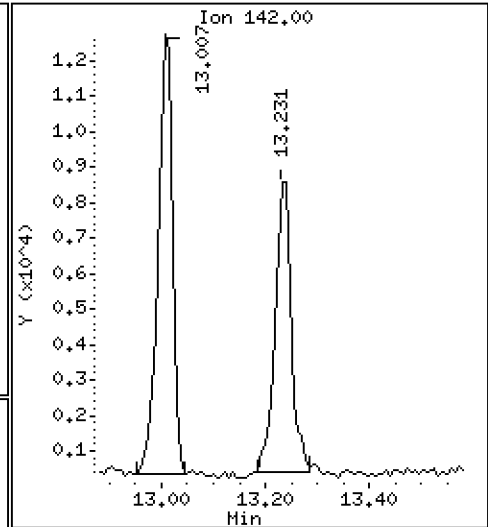
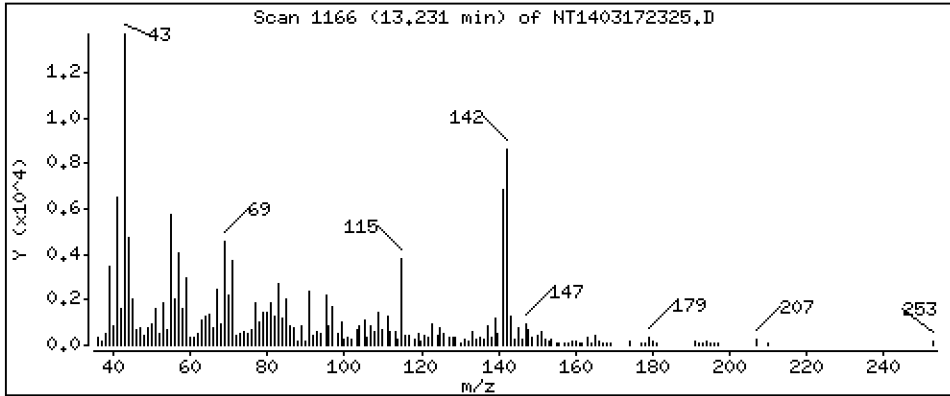
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1286 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

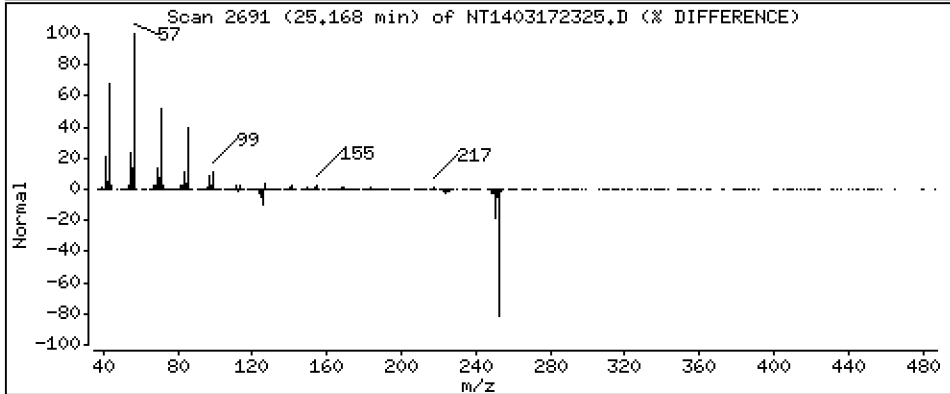
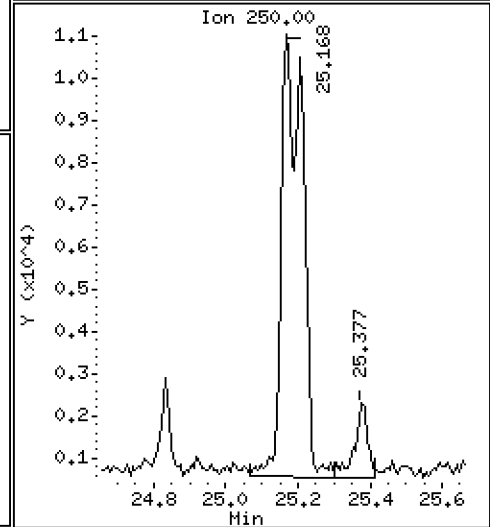
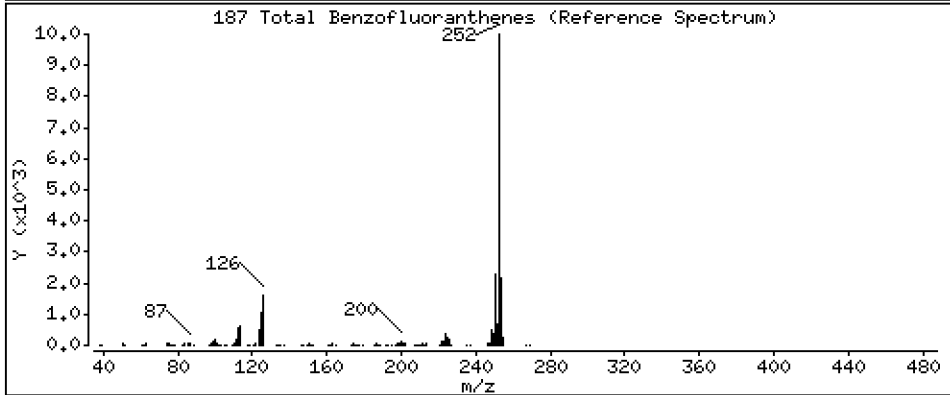
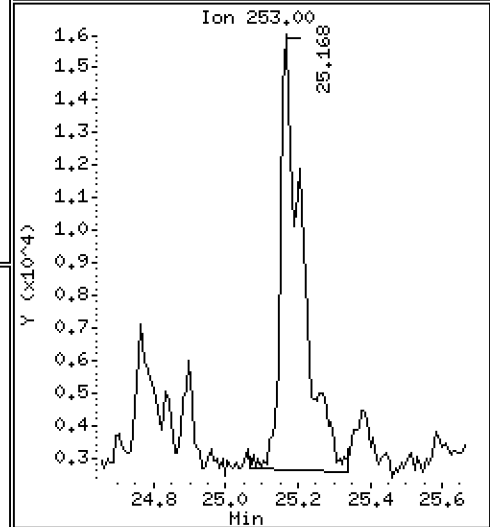
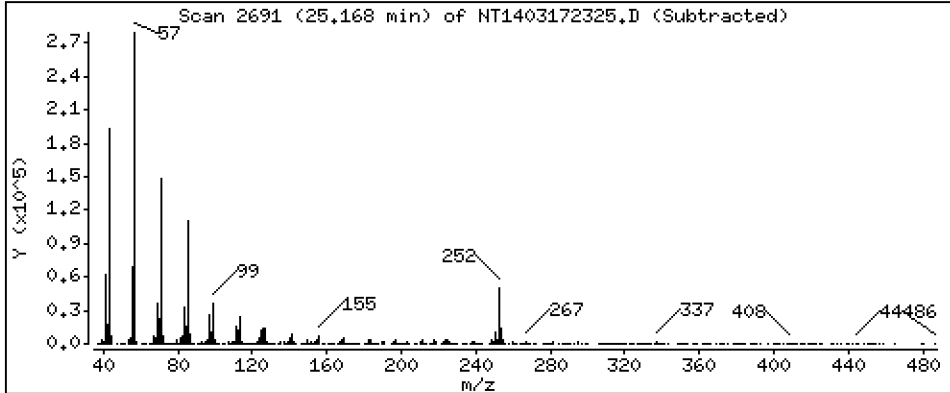
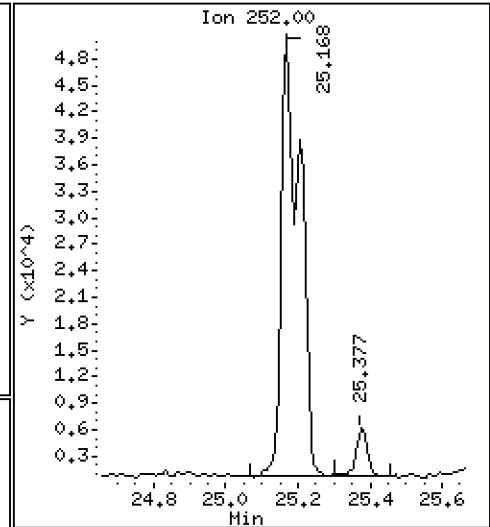
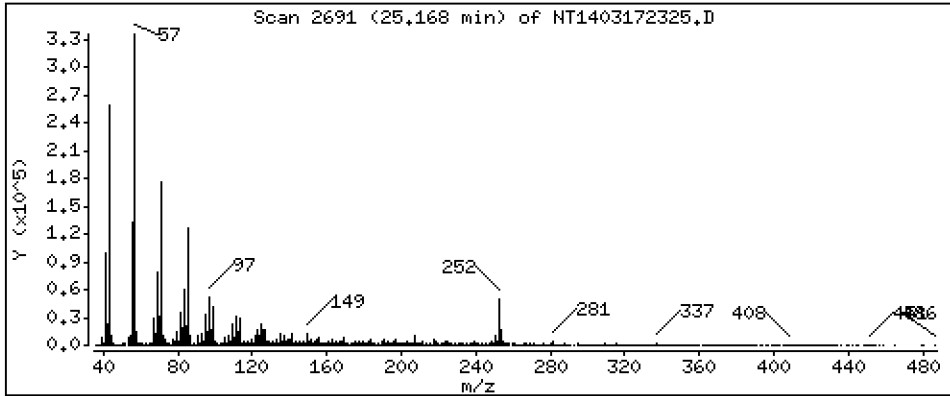
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 3,684 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172325.D
 Lab Smp Id: 23B0229-06
 Inj Date : 18-MAR-2023 04:54 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-06
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.821	(1.000)	333717	4.82785	4.828
\$ 2 Phenol-d5	99		8.420	8.412	(1.000)	445002	4.88982	4.890
3 Phenol	94		8.444	8.436	(1.000)	24412	0.25241	0.2524
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	392372	5.46884	5.469
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	203493	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.003)	2848	0.03837	0.03837 (M)
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	163443	3.40985	3.410
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.342	9.341	(1.000)	39048	0.86723	0.8672
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.838	9.830	(1.000)	6539	0.08077	0.08077
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	309887	3.71121	3.711
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.010	11.103	(0.952)	53464	0.92234	0.9223
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	789039	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	44024	0.20885	0.2088
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	22886	0.15568	0.1557
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.796	13.795	(0.907)	569128	4.08733	4.087
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.701	14.701	(0.967)	9671	0.07543	0.07543
40 Acenaphthylene	152		14.887	14.879	(0.979)	15360	0.07663	0.07663
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.204	15.196	(1.000)	384488	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.266	15.266	(1.004)	14236	0.12164	0.1216
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.591	15.590	(1.025)	28529	0.17075	0.1707
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.163	16.163	(1.063)	29118	0.21966	0.2197
49 Fluorene	166		16.309	16.309	(1.073)	30437	0.19218	0.1922
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.849	16.841	(1.108)	89128	6.10572	6.106
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.248	18.240	(1.000)	650423	4.00000	
60 Phenanthrene	178		18.294	18.294	(1.003)	172210	0.92669	0.9267
61 Anthracene	178		18.387	18.387	(1.008)	78419	0.43800	0.4380
62 Carbazole	167		18.720	18.712	(1.026)	22251	0.13968	0.1397
63 Di-n-butylphthalate	149		19.524	19.509	(1.070)	17797	0.08814	0.08814
64 Fluoranthene	202		20.731	20.677	(0.890)	337004	4.13068	4.131
65 Pyrene	202		21.126	21.103	(0.907)	336448	4.02128	4.021
\$ 66 Terphenyl-d14	244		21.397	21.389	(0.918)	372142	6.57032	6.570
67 Butylbenzylphthalate	149		22.310	22.310	(0.957)	8116	0.22141	0.2214
68 Benzo(a)anthracene	228		23.271	23.263	(0.999)	92104	1.24564	1.246
* 69 Chrysene-d12	240		23.302	23.294	(1.000)	200534	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.348	23.340	(1.002)	122155	1.82540	1.825
72 bis(2-Ethylhexyl)phthalate	149		23.340	23.332	(0.960)	130137	2.40427	2.404
* 134 Di-n-octylphthalate-d4	153		24.323	24.316	(1.000)	411174	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.167	25.159	(0.970)	110934	2.17706	2.177
75 Benzo(k)fluoranthene	252		25.206	25.198	(0.971)	82526	1.63378	1.634
76 Benzo(a)pyrene	252		25.825	25.818	(0.995)	56902	1.30587	1.306
* 77 Perylene-d12	264		25.949	25.934	(1.000)	144200	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.626	28.610	(1.103)	33945	0.71574	0.7157
79 Dibenzo(a,h)anthracene	278		28.634	28.626	(1.103)	8820	0.22066	0.2207 (M)
80 Benzo(g,h,i)perylene	276		29.426	29.403	(1.134)	30673	0.78476	0.7848
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.231	13.230	(1.144)	17127	0.12859	0.1286
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.167	25.159	(0.970)	178296	3.68424	3.684
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172325.D Calibration Time: 23:31
 Lab Smp Id: 23B0229-06
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	203493	-11.91
27 Naphthalene-d8	843789	421895	1687578	789039	-6.49
42 Acenaphthene-d10	432455	216228	864910	384488	-11.09
59 Phenanthrene-d10	793780	396890	1587560	650423	-18.06
69 Chrysene-d12	411057	205529	822114	200534	-51.22
134 Di-n-octylphthala	799010	399505	1598020	411174	-48.54
77 Perylene-d12	254782	127391	509564	144200	-43.40

<-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.05
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172325.D

Lab ID: 23B0229-06
nt14.i, ABN.m, 18-MAR-2023 04:54

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.960	-0.0080	Benzoic acid

RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

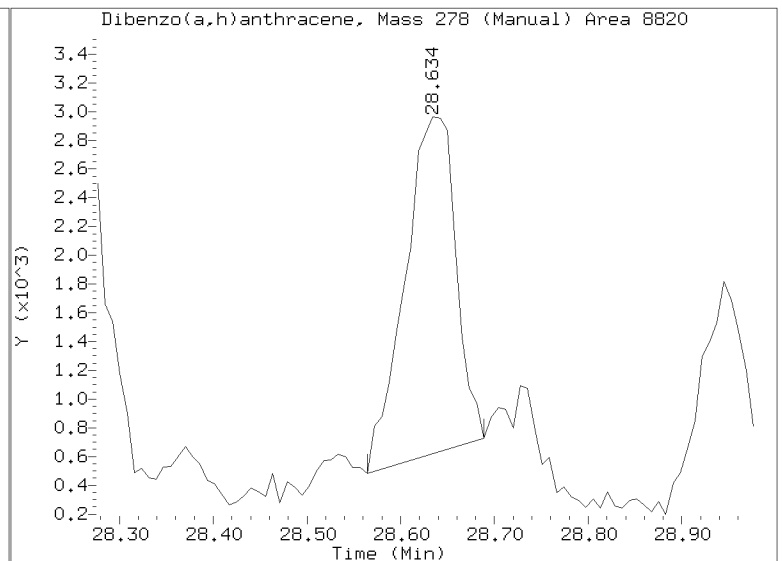
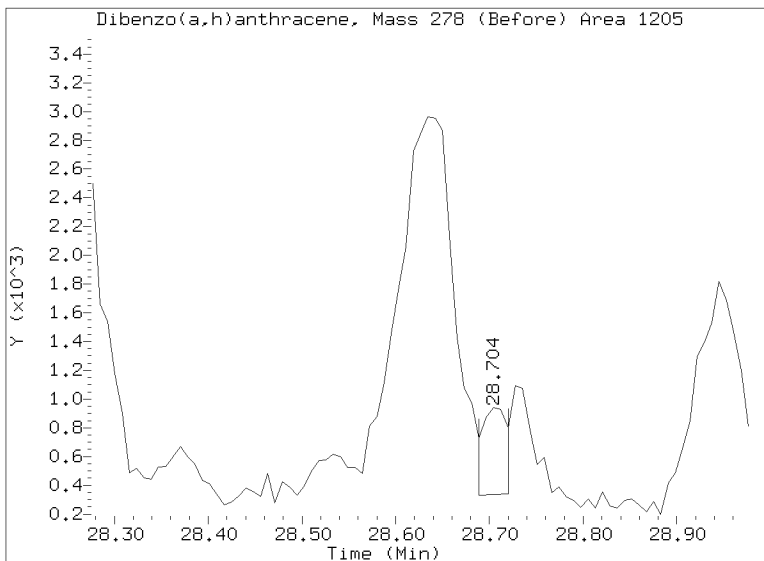
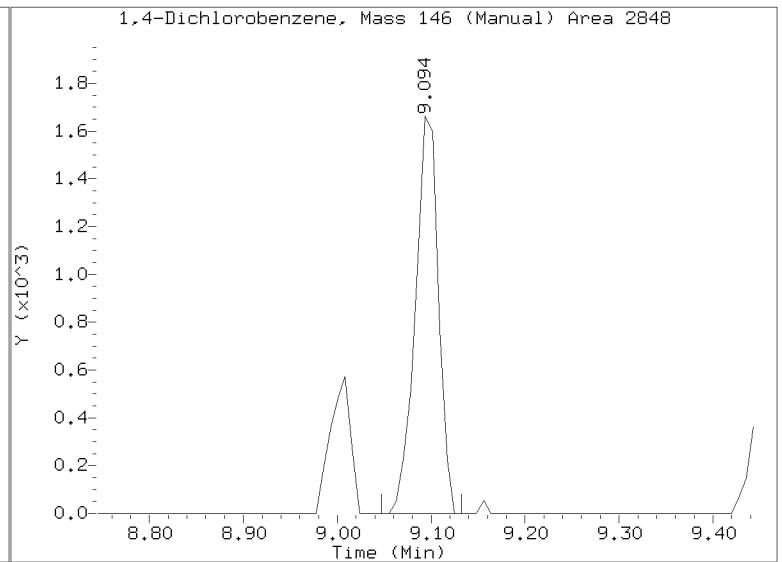
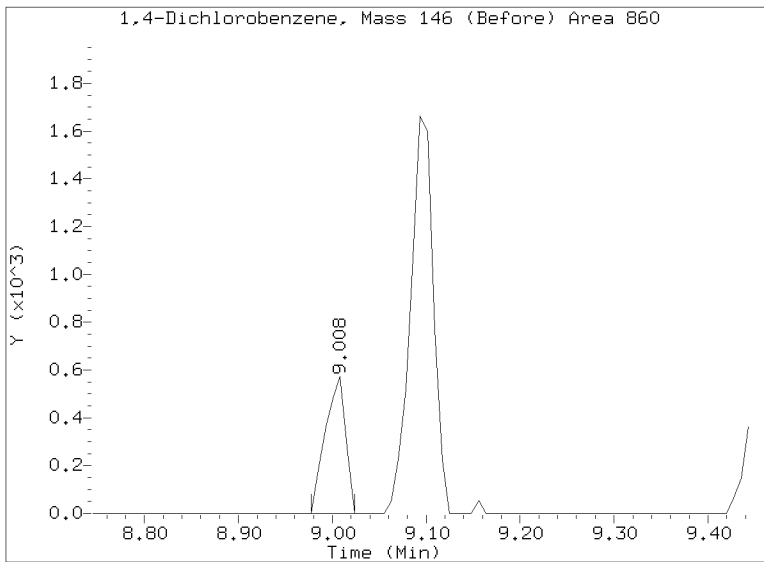
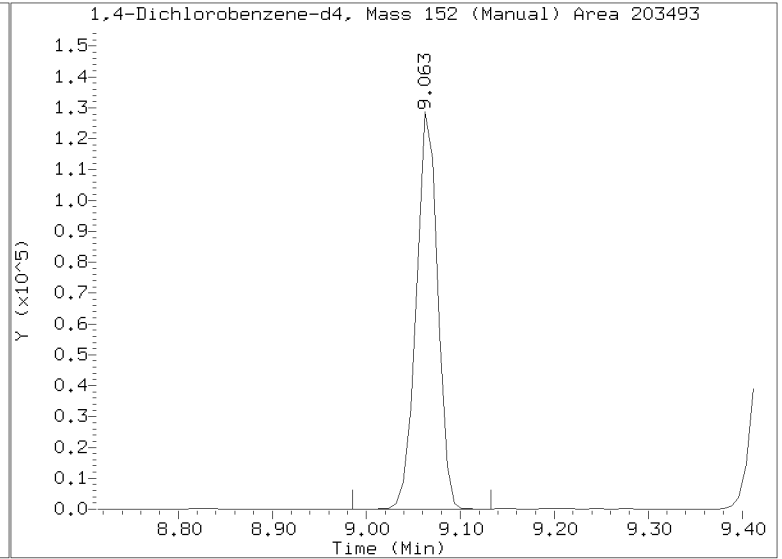
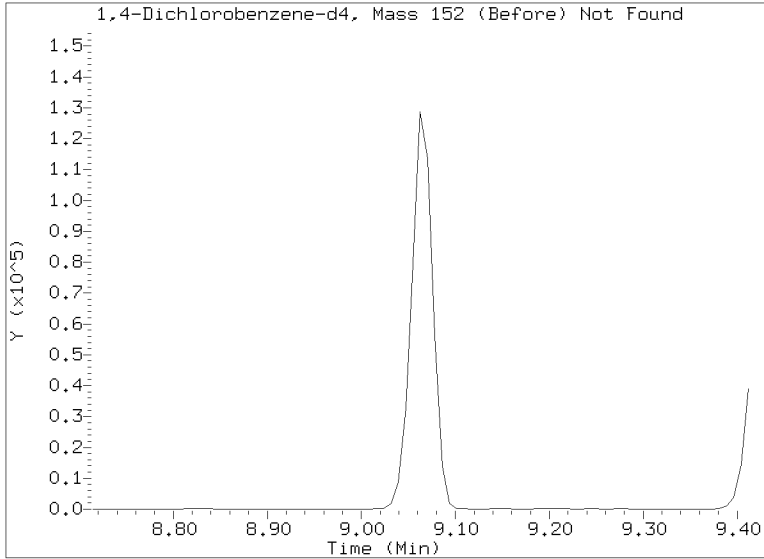
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172325.D

Injection Date: 18-MAR-2023 04:54

Lab ID:23B0229-06 Client ID:

Report Date: 03/22/2023 09:50





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-06RE1 A

SDG: 23B0229

Sampled: 02/08/23 13:30

Prepared: 02/17/23 15:00

File ID: NT1403182313.D

% Solids: 48.62

Preparation: EPA 3546 (Microwave)

Analyzed: 03/19/23 00:16

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	4	25.4	J, D	17.4	79.2
106-44-5	4-Methylphenol	4	79.2	U	29.3	79.2
91-20-3	Naphthalene	4	21.9	J, D	16.8	79.2
91-57-6	2-Methylnaphthalene	4	79.2	U	17.9	79.2
208-96-8	Acenaphthylene	4	79.2	U	24.7	79.2
131-11-3	Dimethylphthalate	4	79.2	U	17.4	79.2
83-32-9	Acenaphthene	4	79.2	U	20.7	79.2
132-64-9	Dibenzofuran	4	79.2	U	55.9	79.2
86-73-7	Fluorene	4	79.2	U	57.7	79.2
85-01-8	Phenanthrene	4	93.0	D	34.5	79.2
120-12-7	Anthracene	4	48.0	J, D	28.5	79.2
206-44-0	Fluoranthene	4	323	D	24.1	79.2
129-00-0	Pyrene	4	338	D	22.5	79.2
85-68-7	Butylbenzylphthalate	4	79.2	U	37.3	79.2
56-55-3	Benzo(a)anthracene	4	125	D	23.6	79.2
218-01-9	Chrysene	4	188	D	24.0	79.2
117-81-7	bis(2-Ethylhexyl)phthalate	4	196	J, D	21.6	198
	Benzo(a)fluoranthenes, Total	4	333	D	39.6	158
50-32-8	Benzo(a)pyrene	4	130	D	16.7	79.2
193-39-5	Indeno(1,2,3-cd)pyrene	4	91.0	D	58.0	79.2
53-70-3	Dibenzo(a,h)anthracene	4	79.2	U	68.2	79.2
191-24-2	Benzo(g,h,i)perylene	4	104	D	53.8	79.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	742.34	493	66.4	27 - 120	
Phenol-d5	742.34	496	66.9	29 - 120	
2-Chlorophenol-d4	742.34	546	73.6	31 - 120	
1,2-Dichlorobenzene-d4	494.89	347	70.1	32 - 120	
Nitrobenzene-d5	494.89	365	73.7	30 - 120	
2-Fluorobiphenyl	494.89	393	79.5	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-06RE1 A

SDG: 23B0229

Sampled: 02/08/23 13:30

Prepared: 02/17/23 15:00

File ID: NT1403182313.D

% Solids: 48.62

Preparation: EPA 3546 (Microwave)

Analyzed: 03/19/23 00:16

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	742.34	587	79.0	24 - 134	
p-Terphenyl-d14	494.89	525	106	37 - 120	

Data File: \\target\share\chem3\nt14,1\20230318,16\NT1403182313.D

Date: 18-MAR-2023 00:16

Client ID:

Sample Info: 23B0229-06REL/4

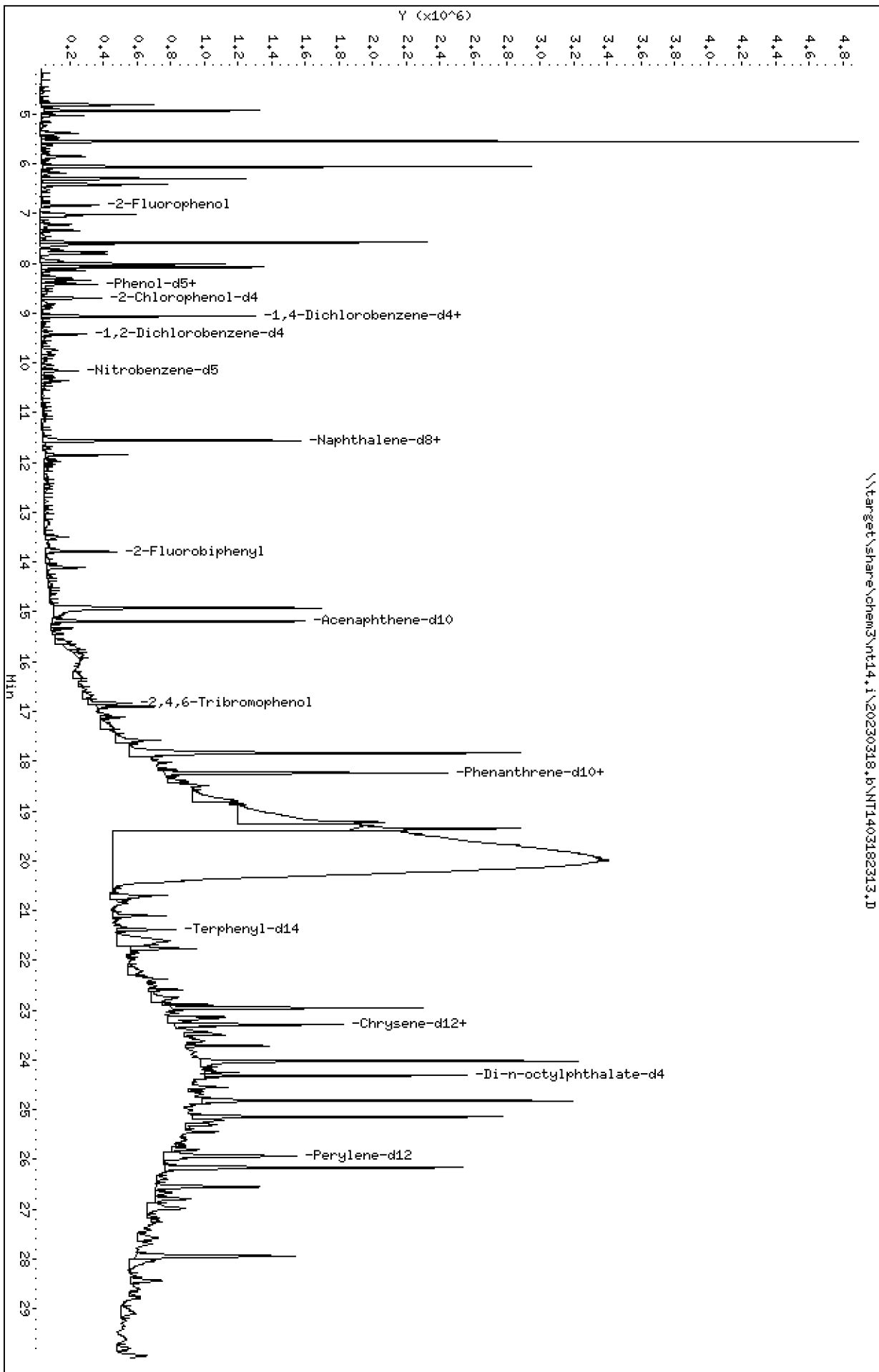
Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14,1\20230318,16\NT1403182313.D



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

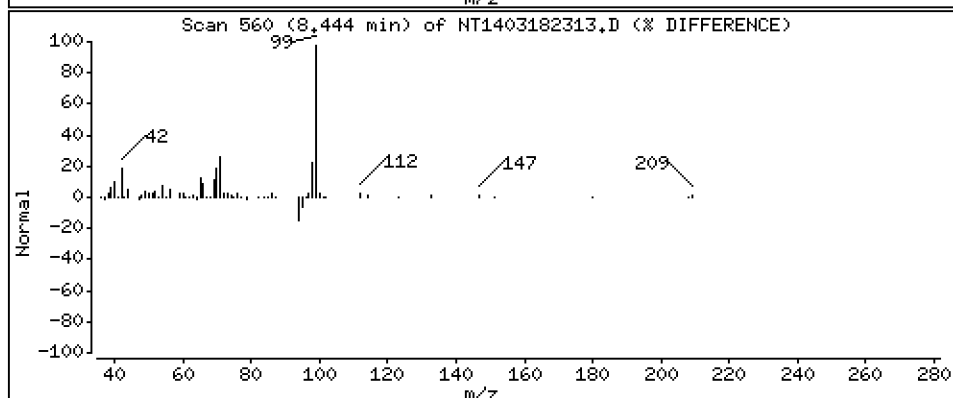
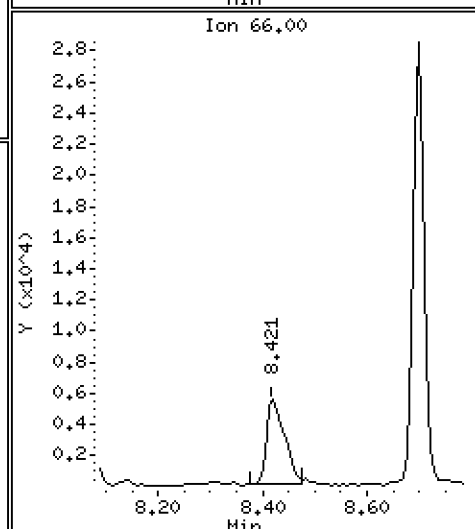
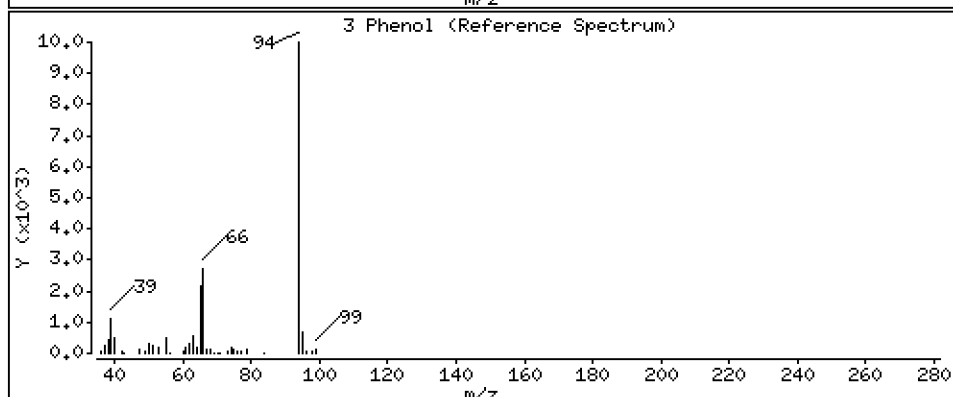
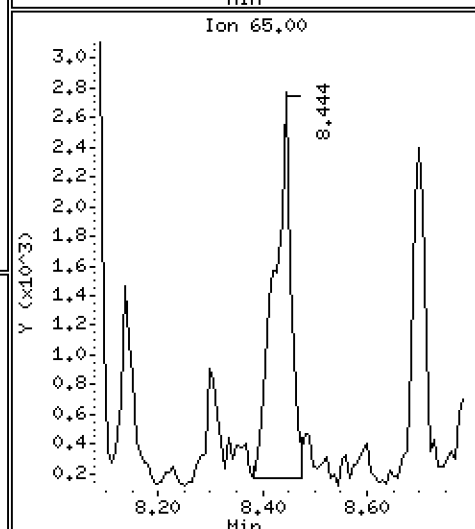
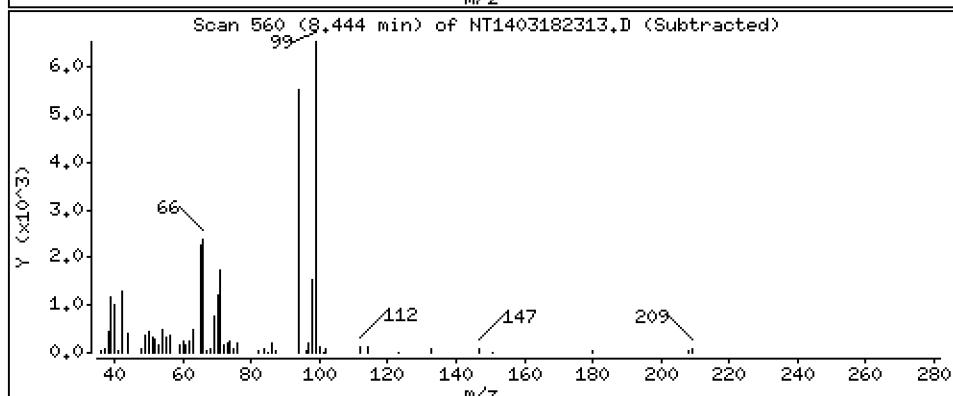
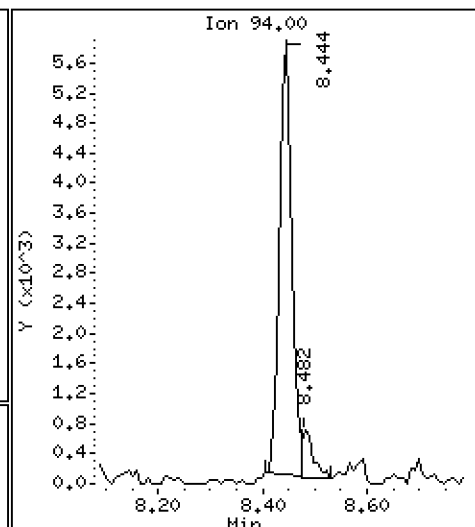
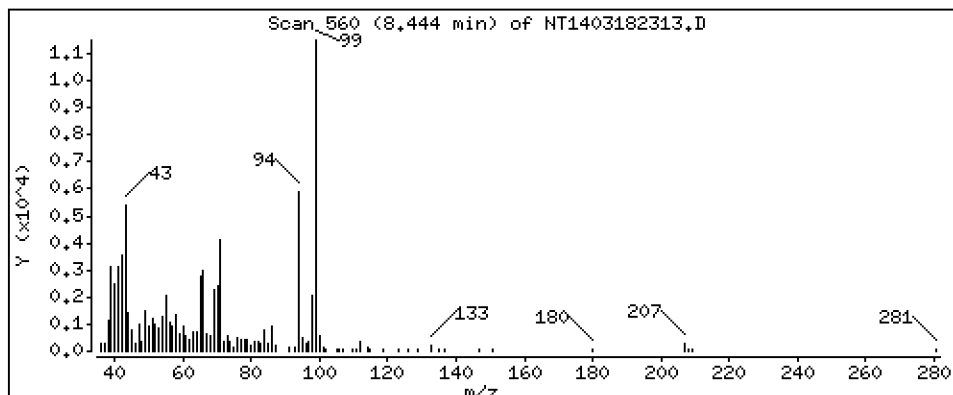
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,2571 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

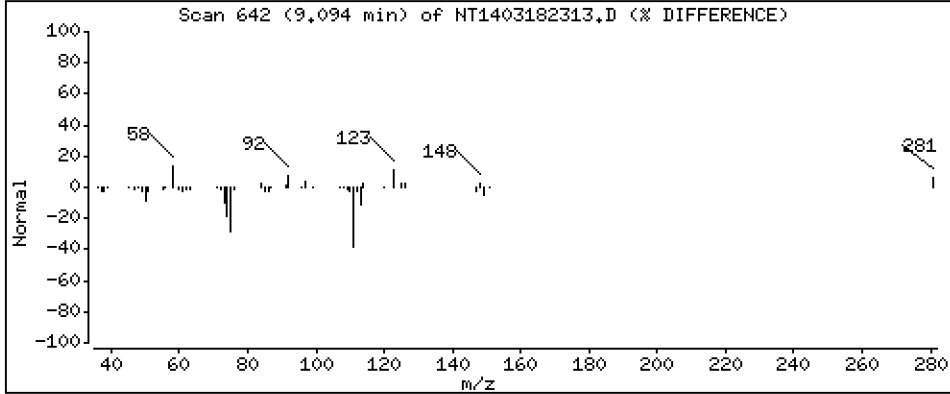
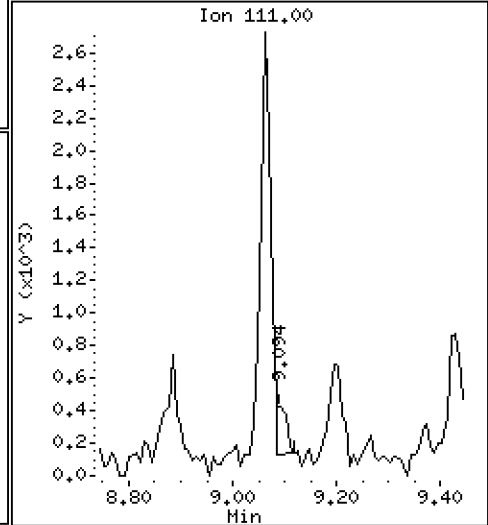
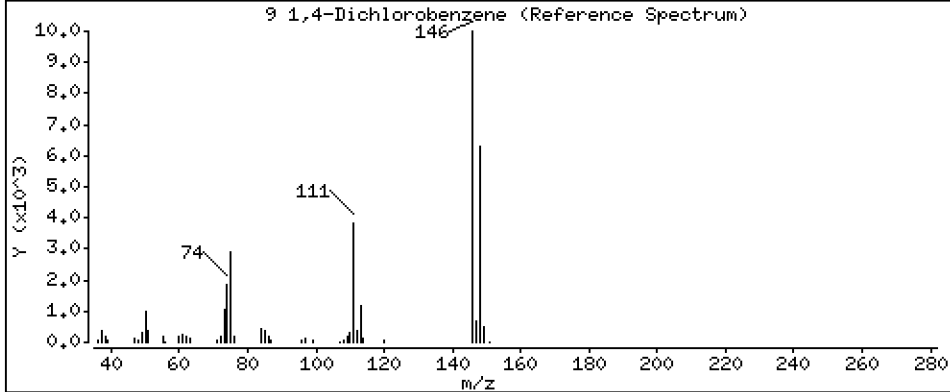
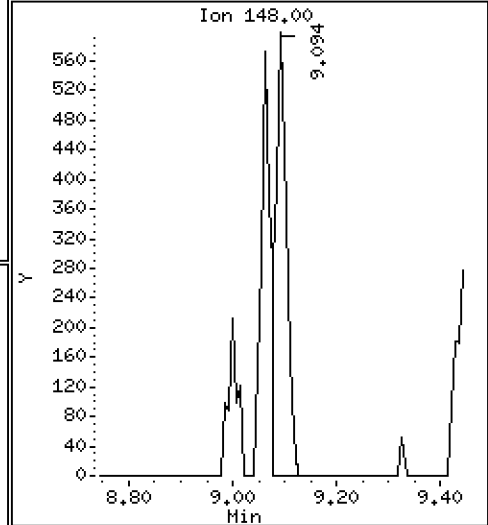
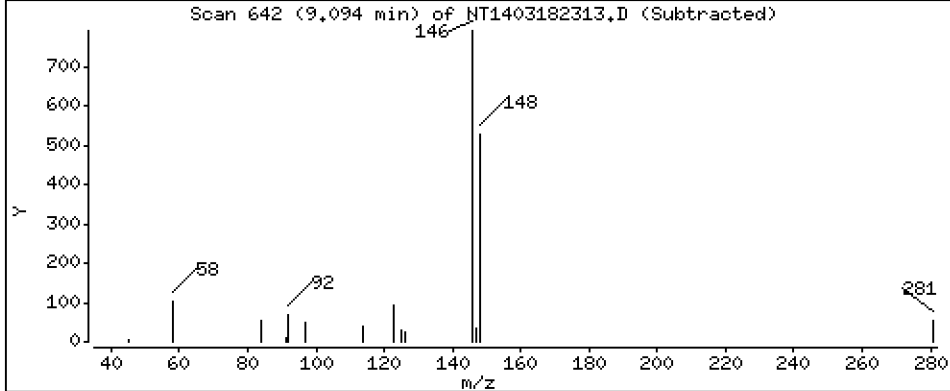
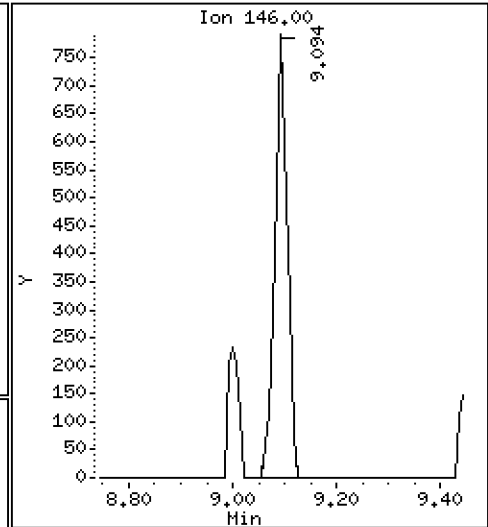
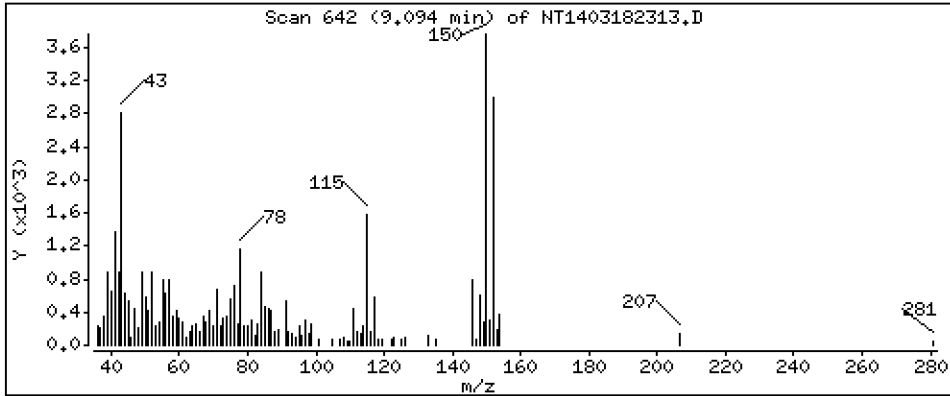
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,04431 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

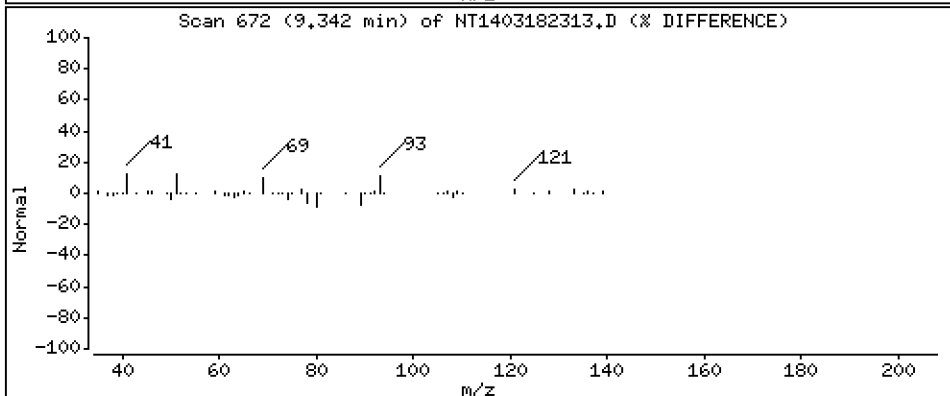
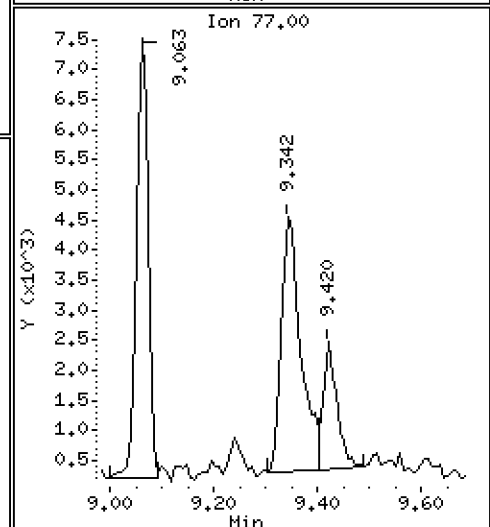
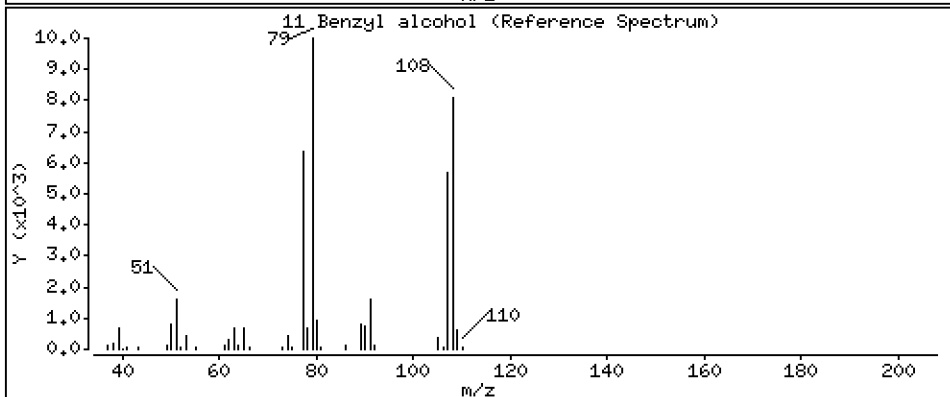
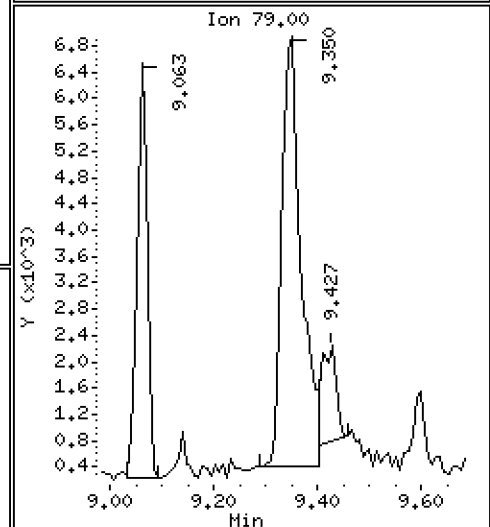
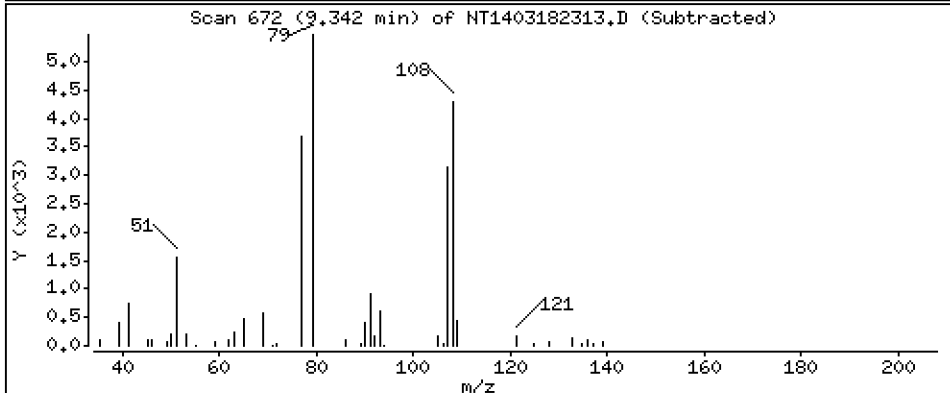
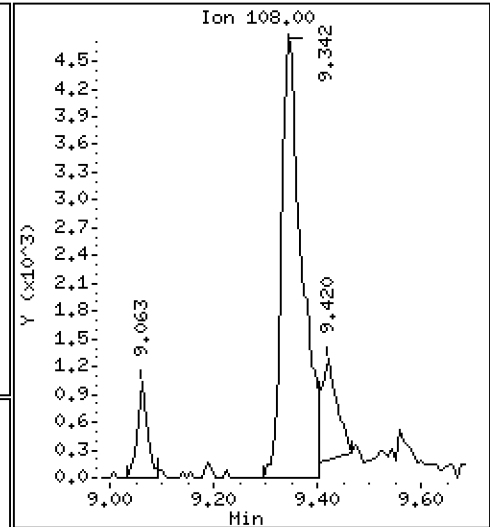
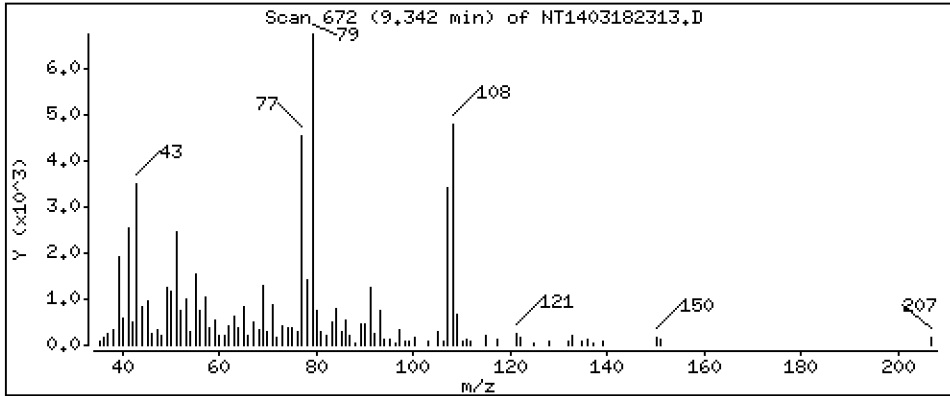
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,7598 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

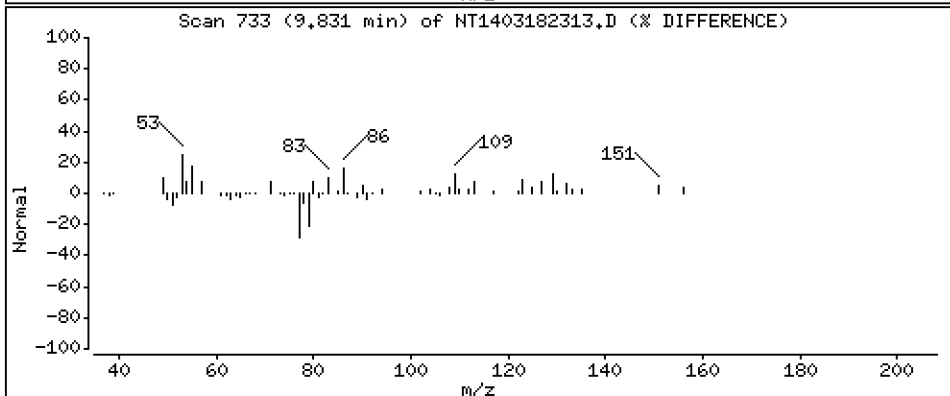
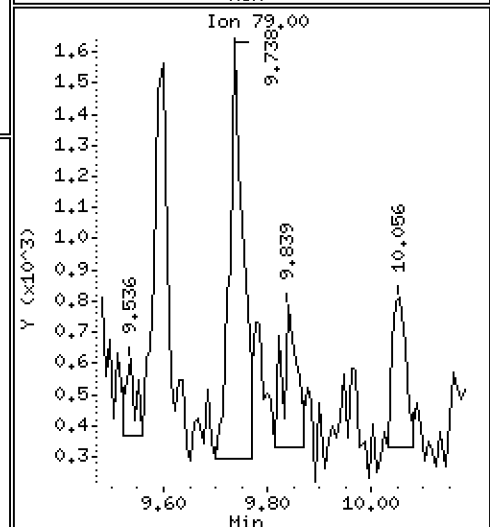
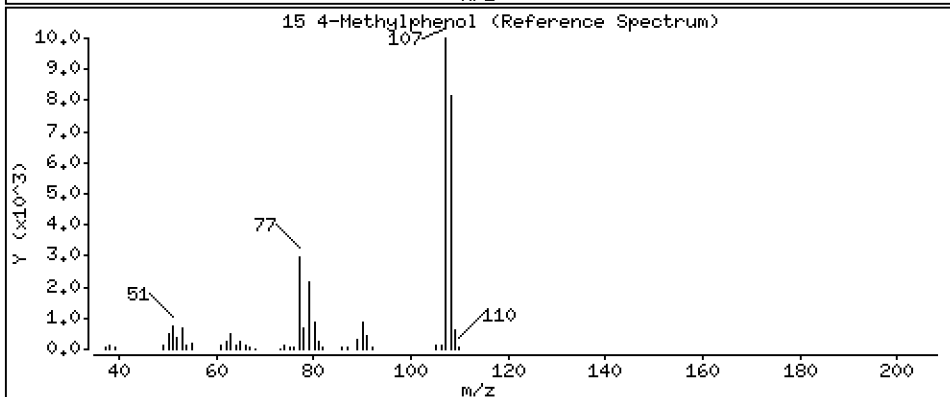
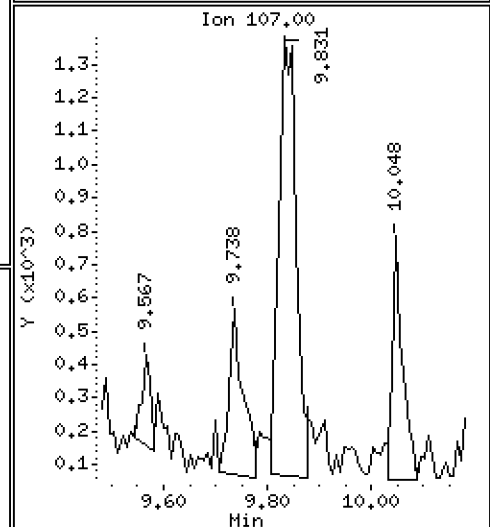
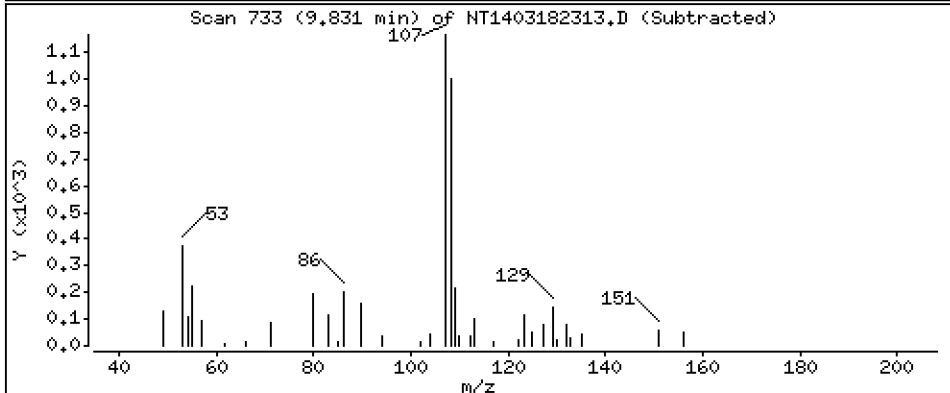
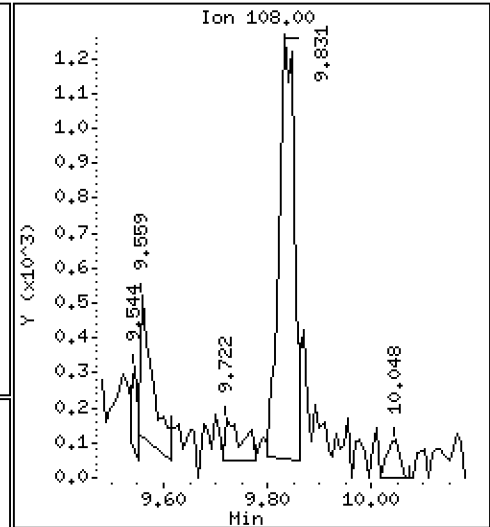
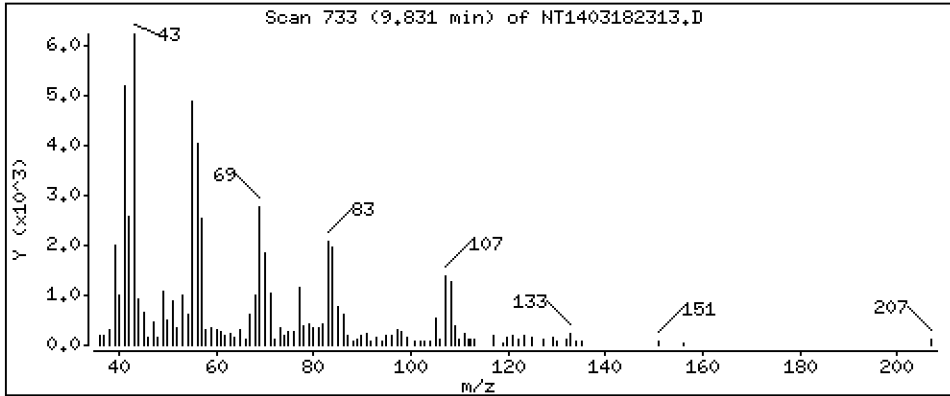
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.08138 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

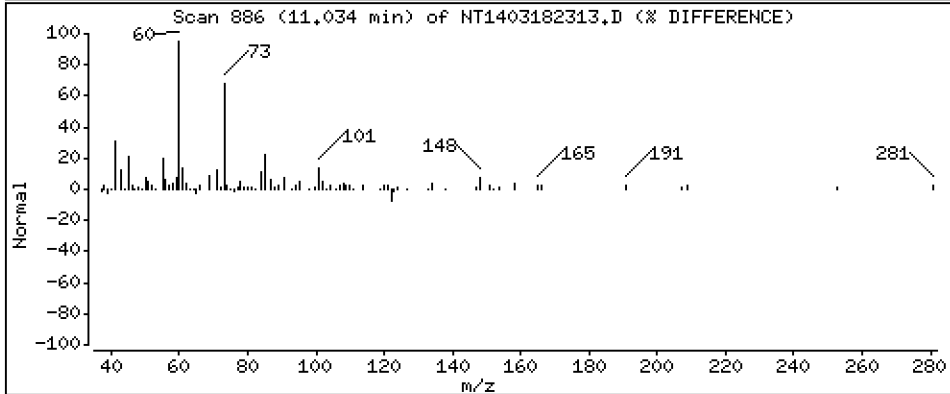
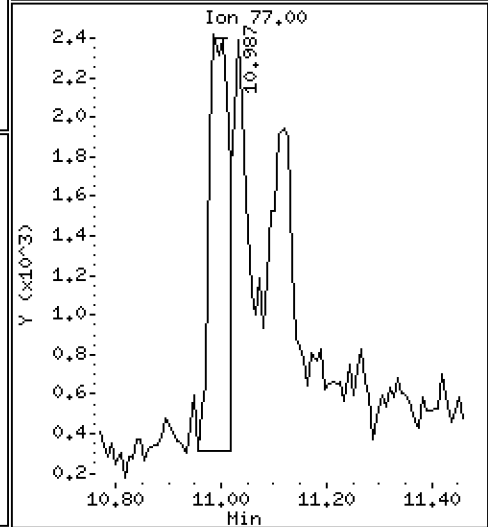
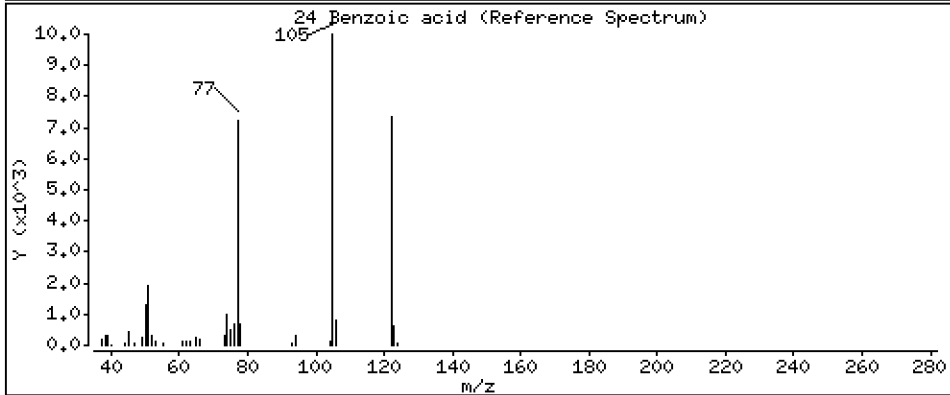
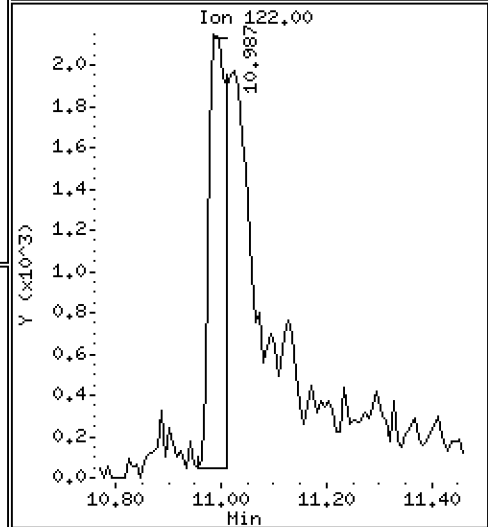
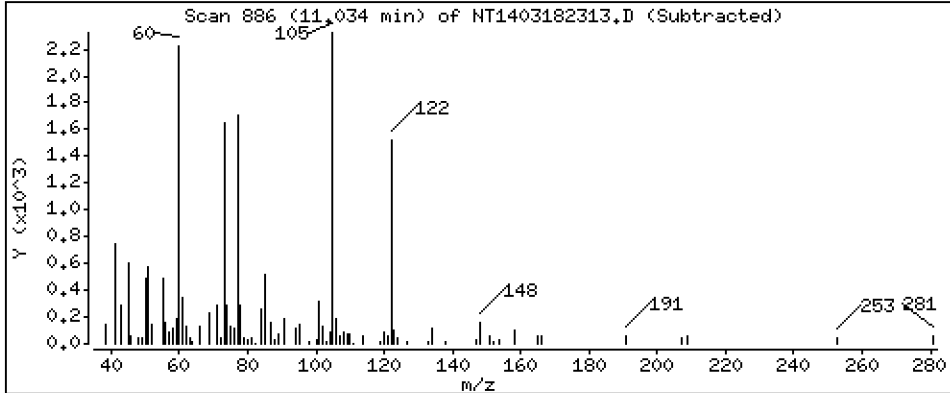
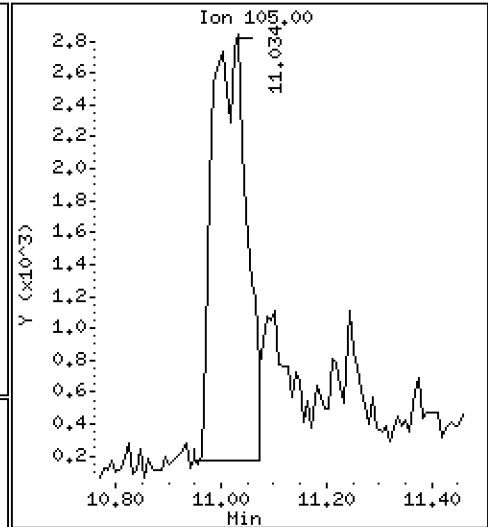
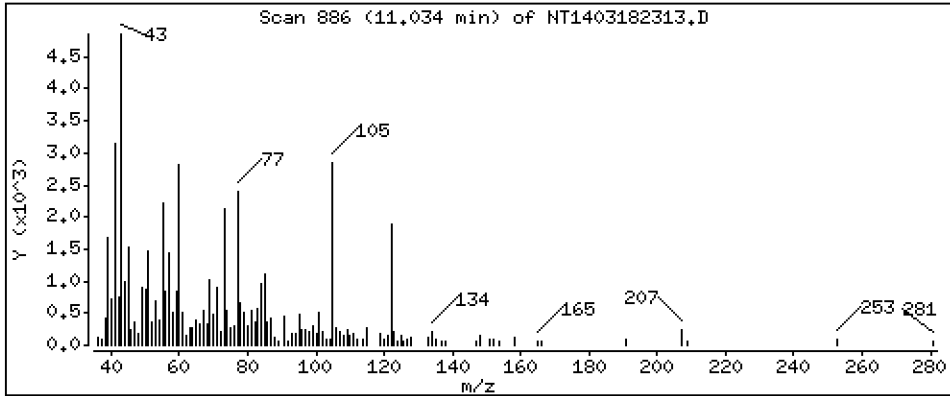
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,5648 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

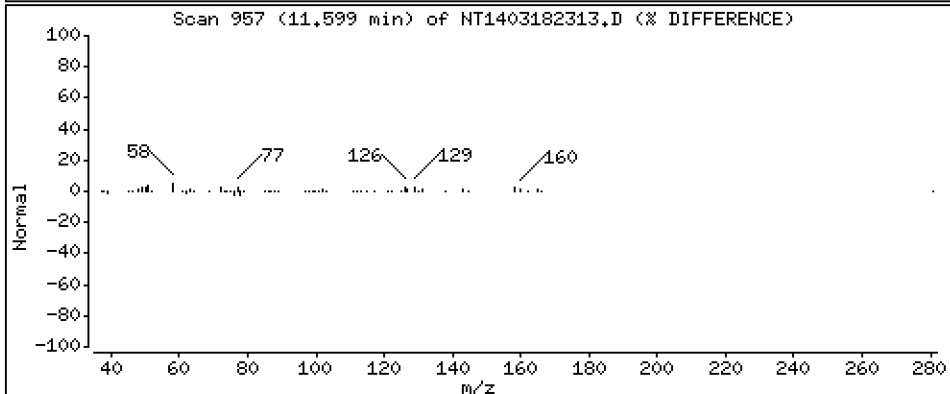
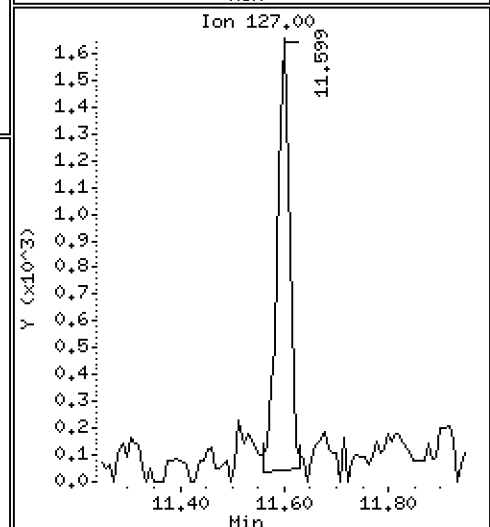
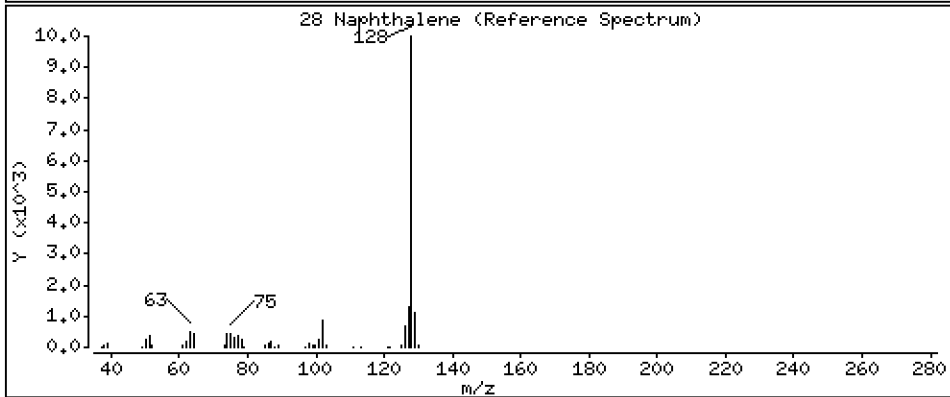
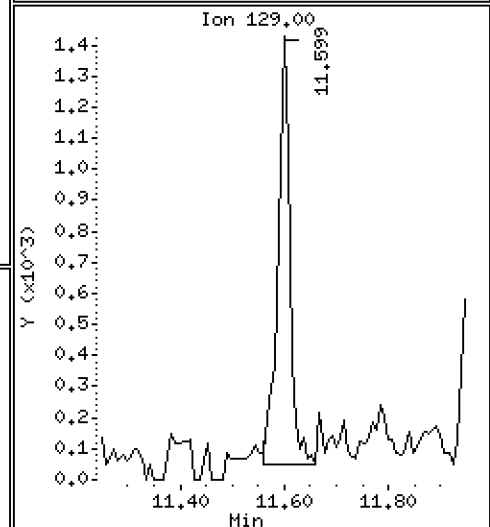
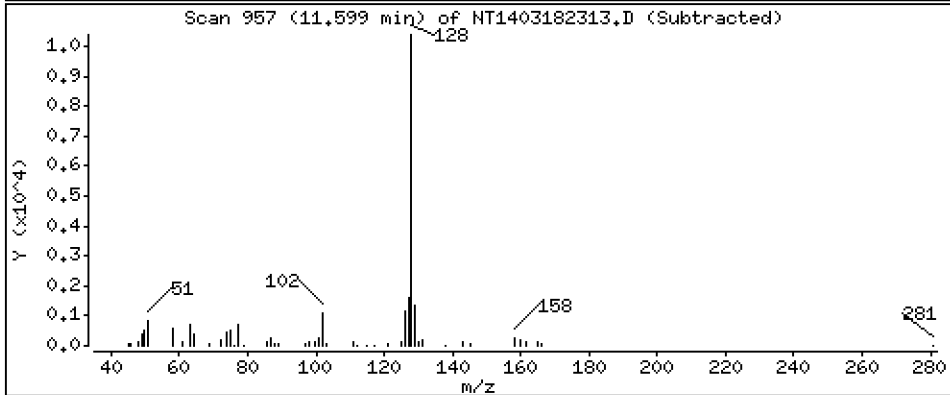
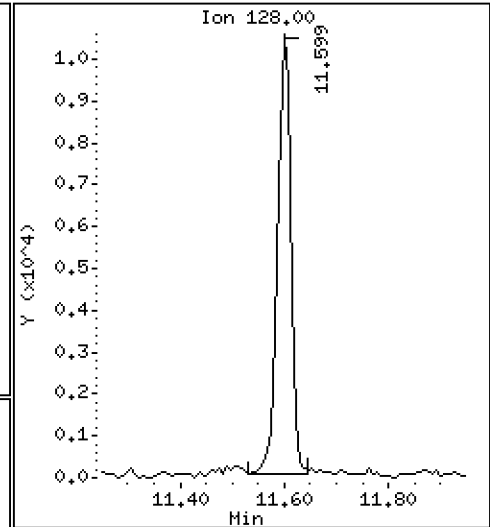
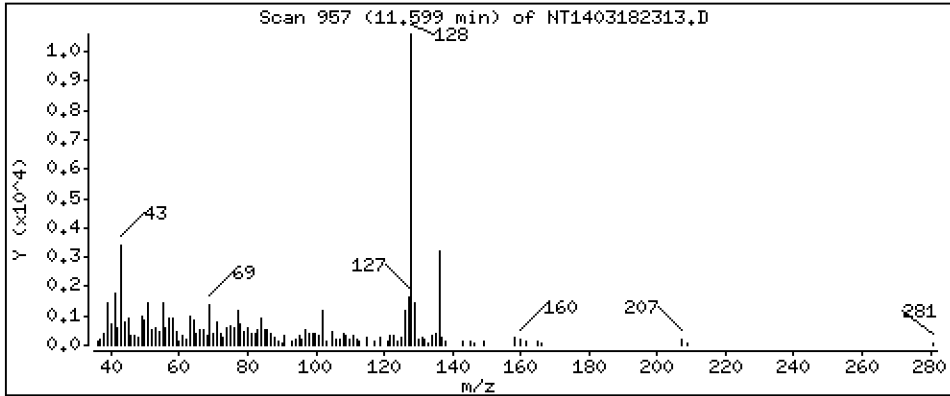
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2214 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

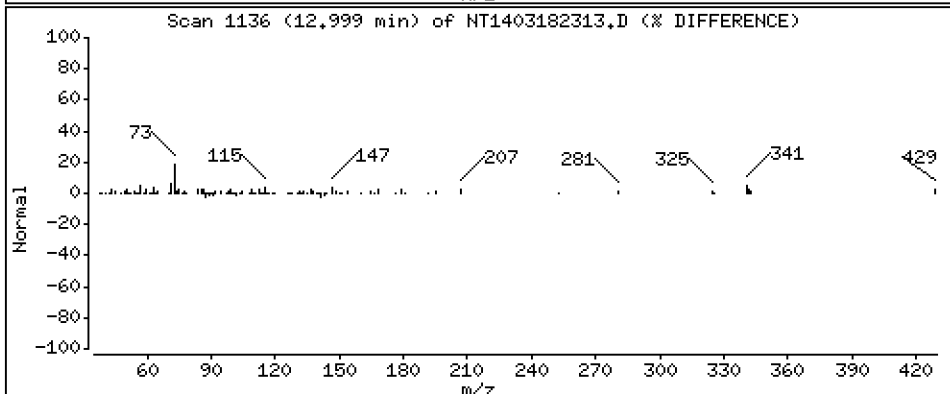
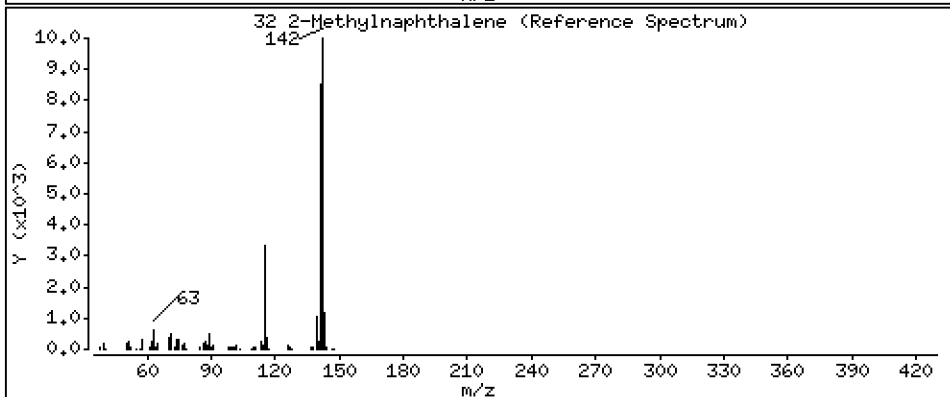
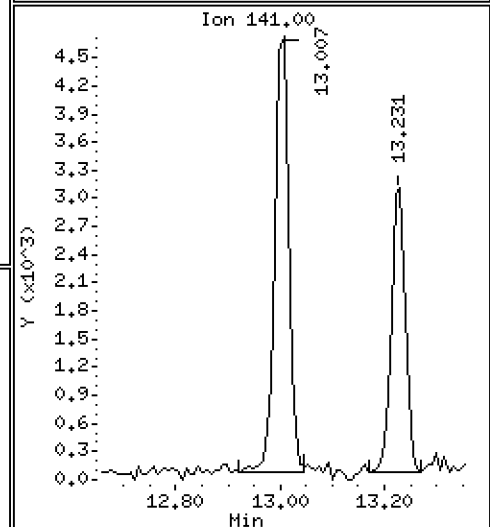
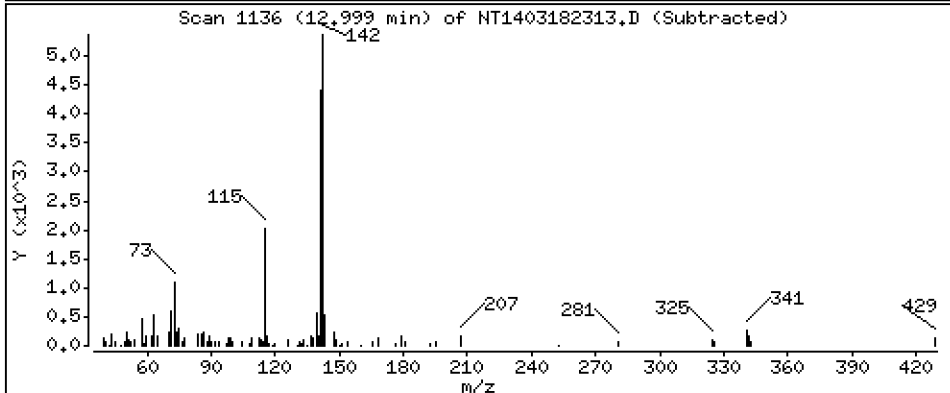
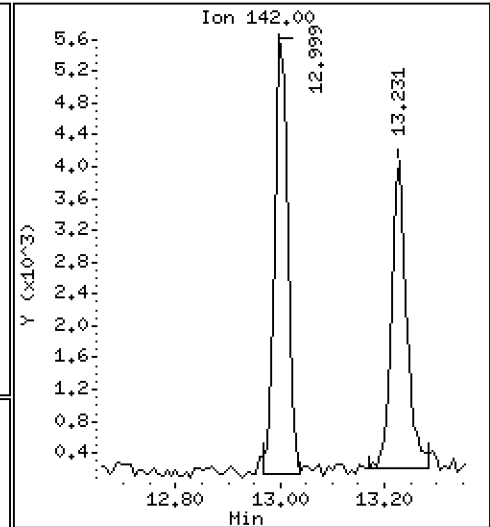
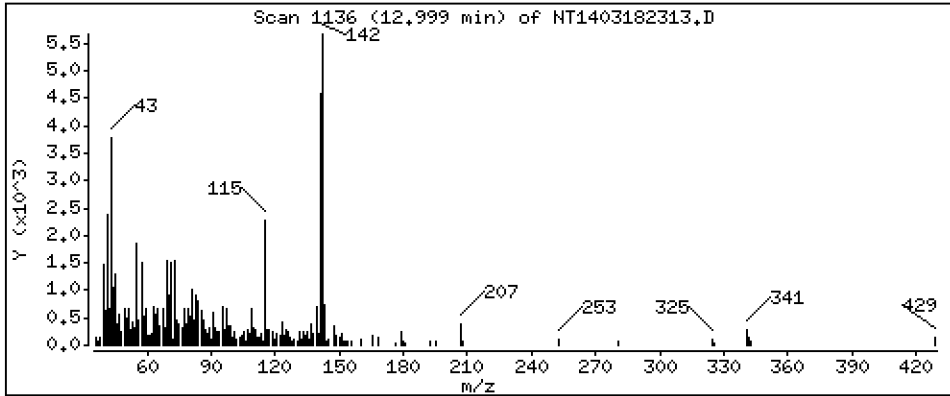
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1613 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

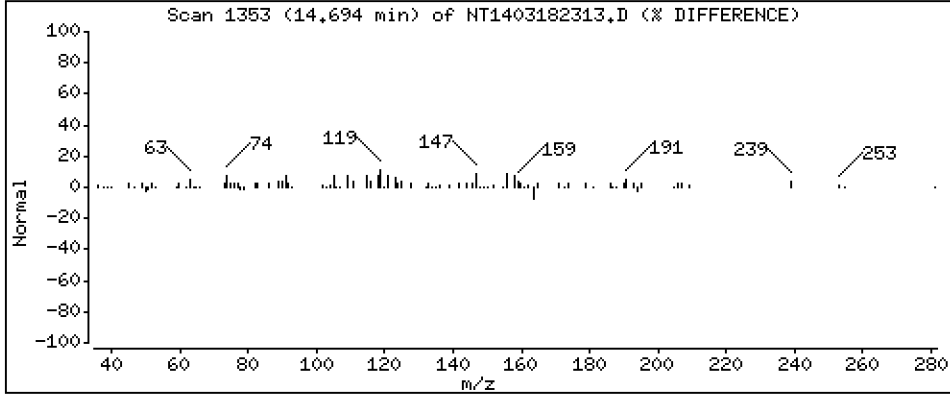
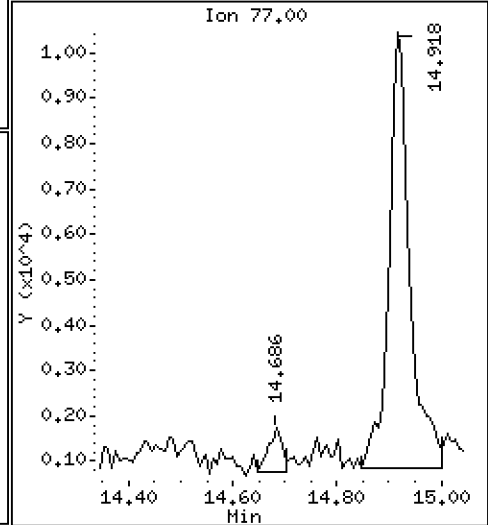
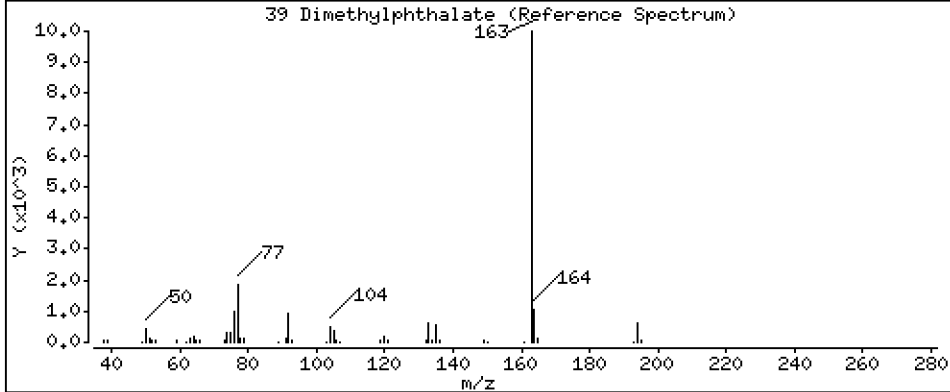
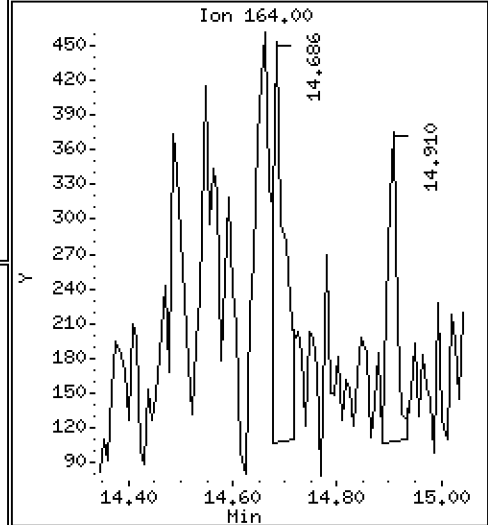
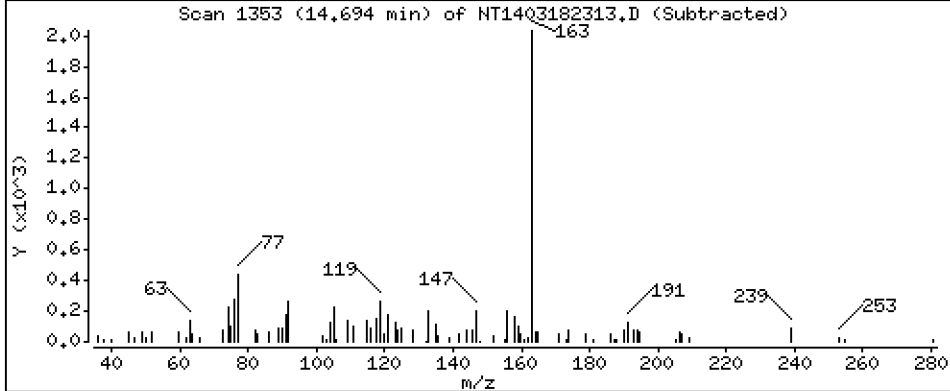
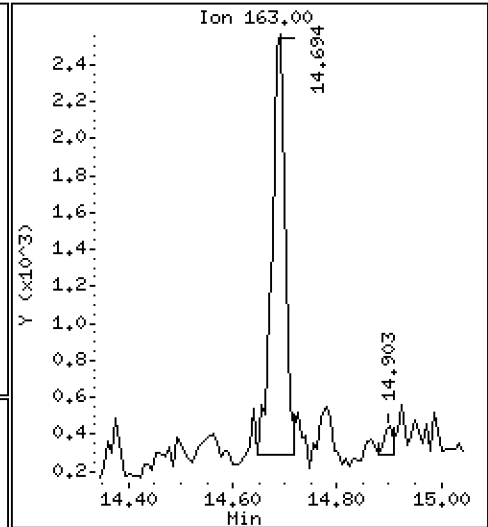
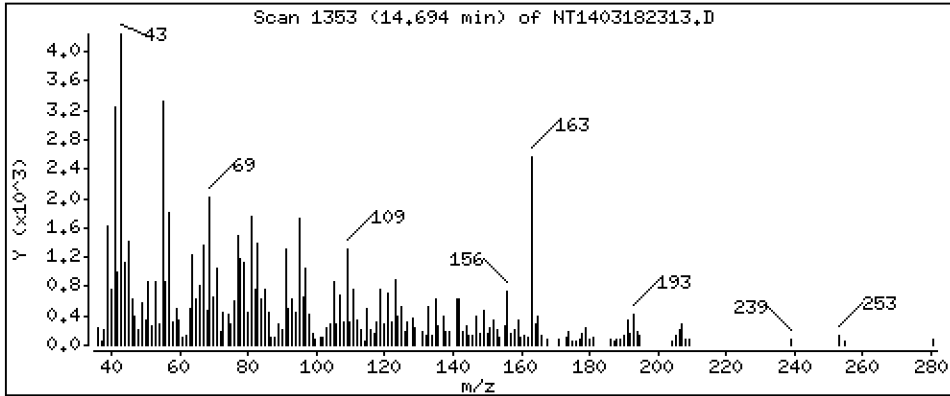
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.07573 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

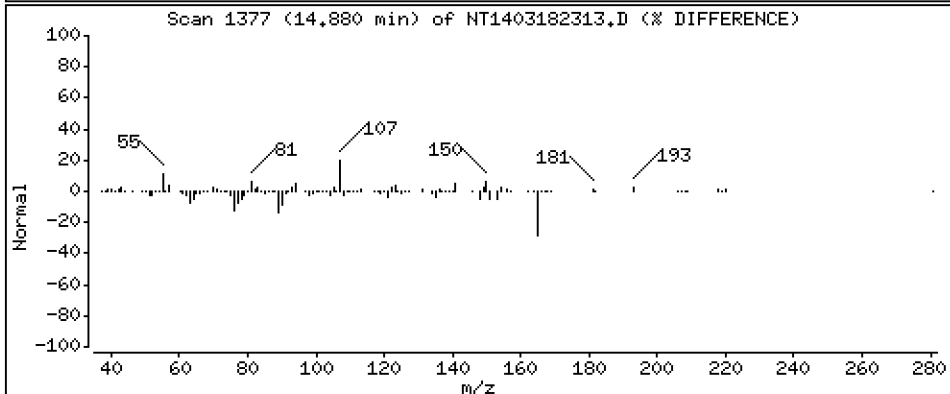
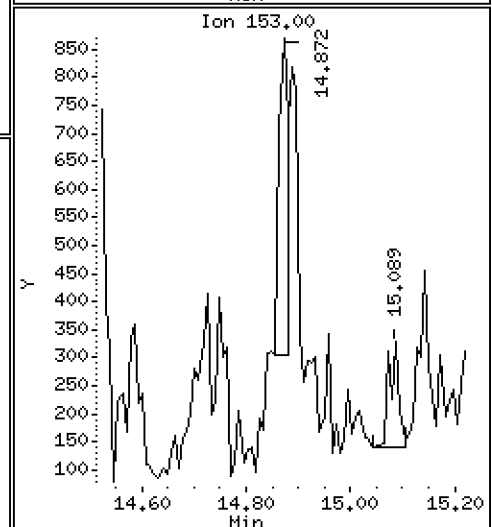
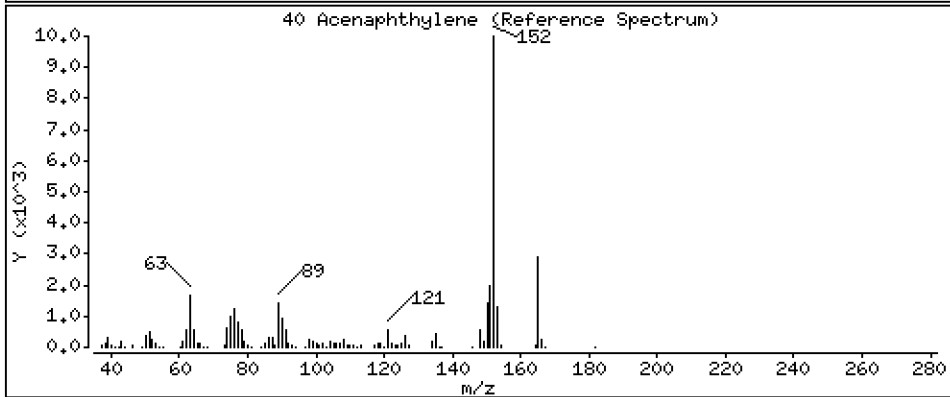
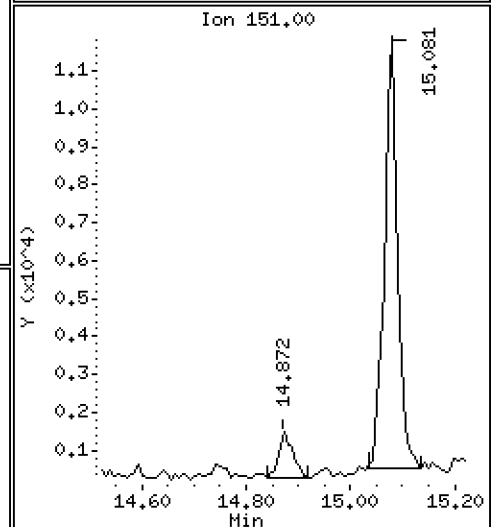
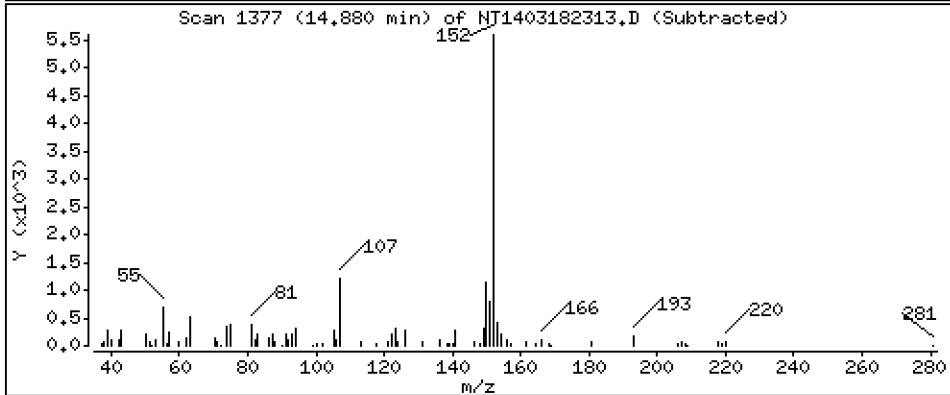
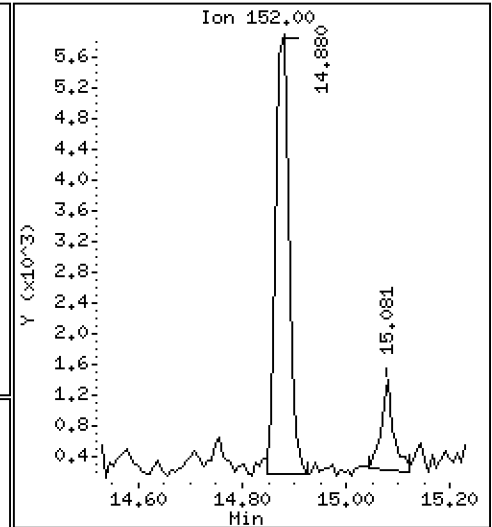
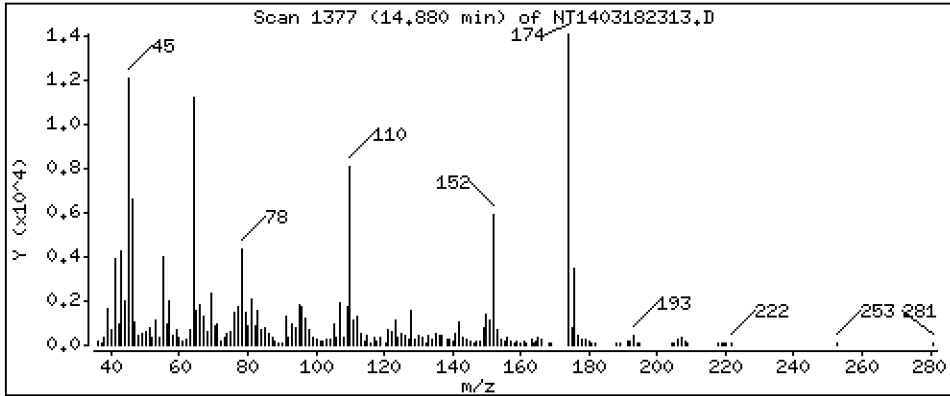
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.1206 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

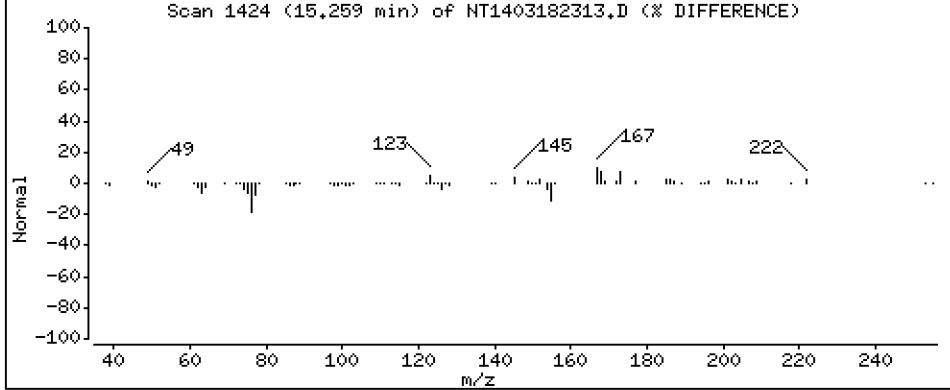
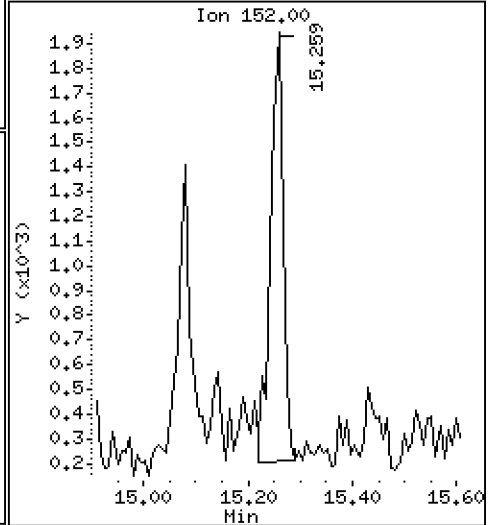
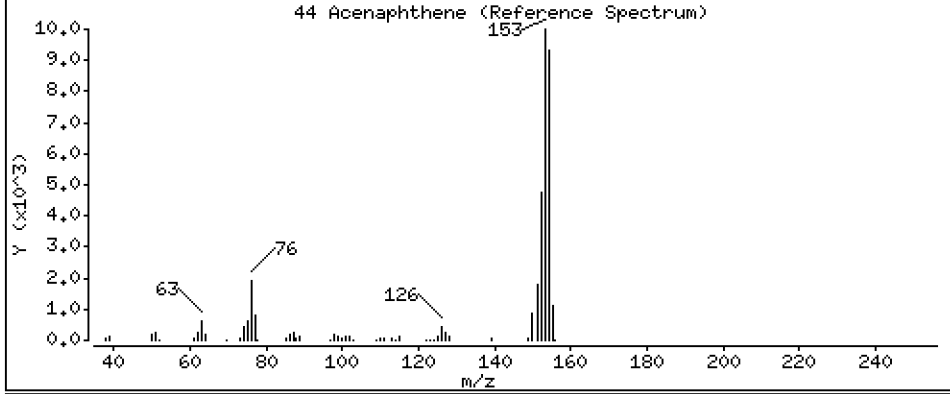
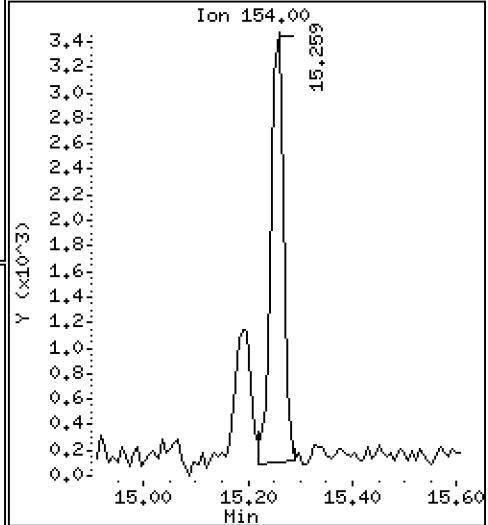
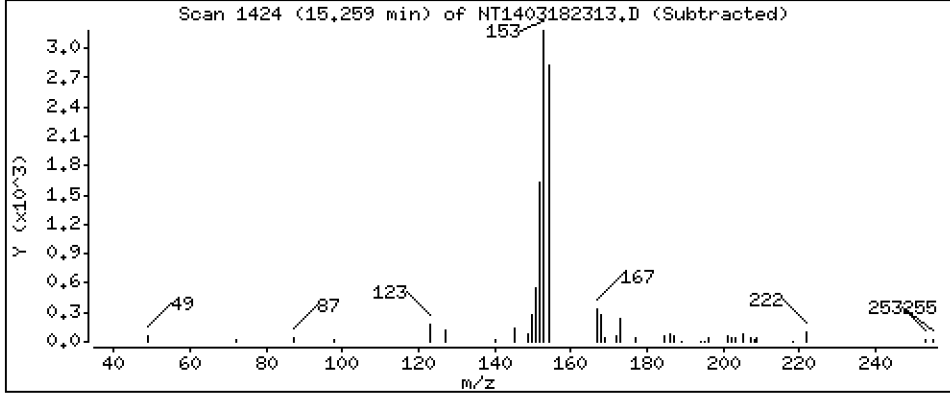
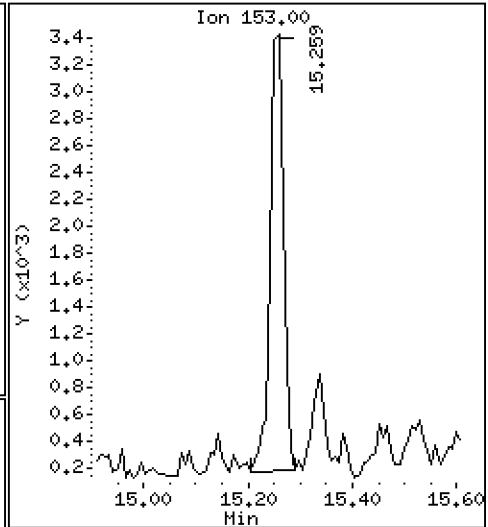
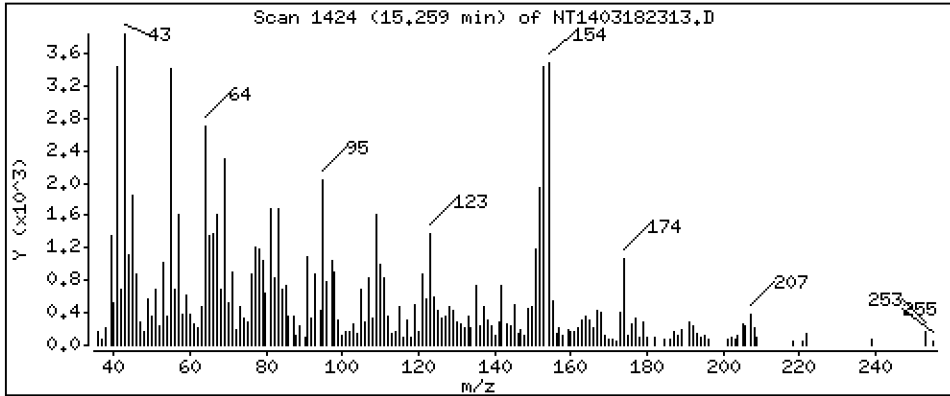
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1179 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

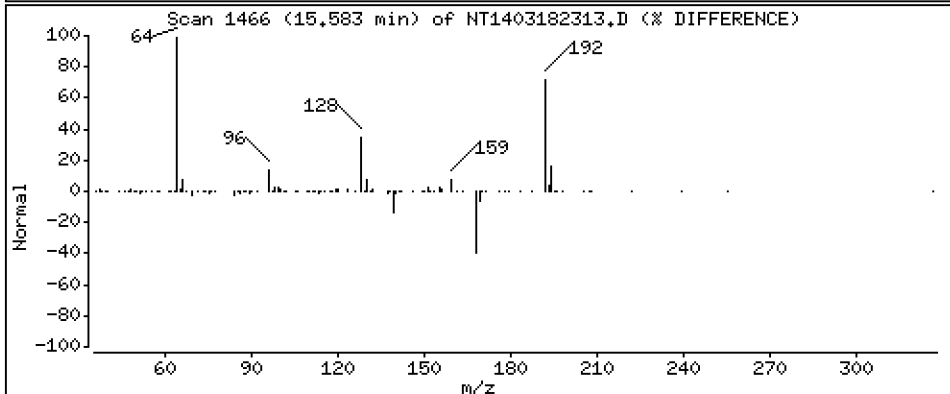
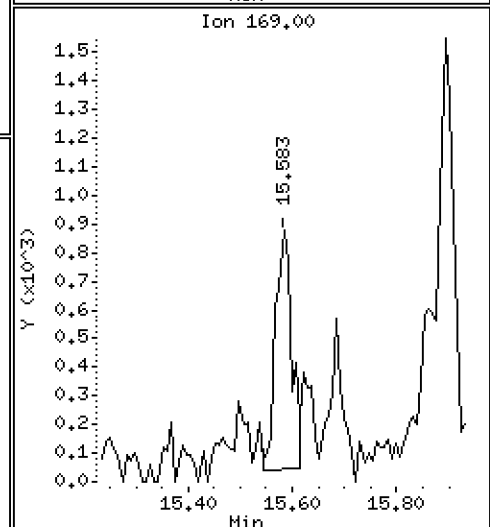
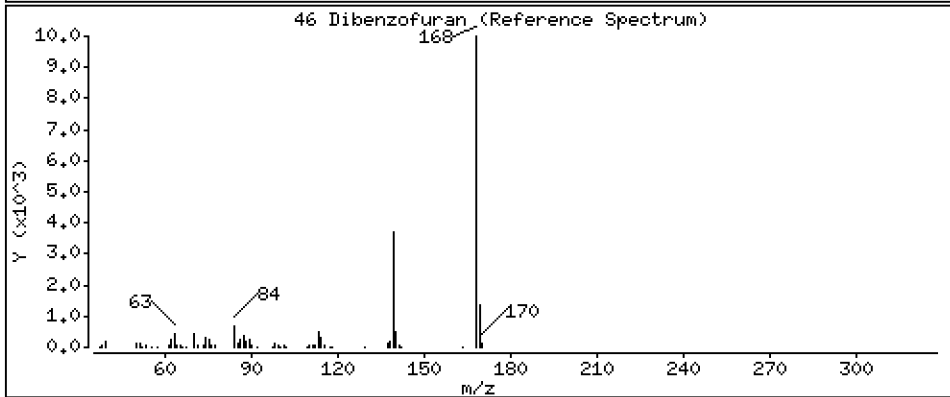
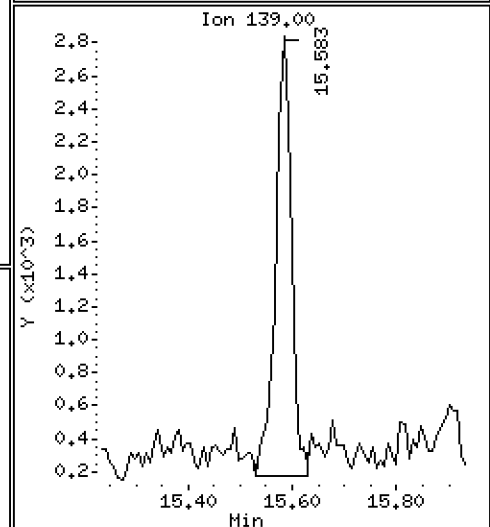
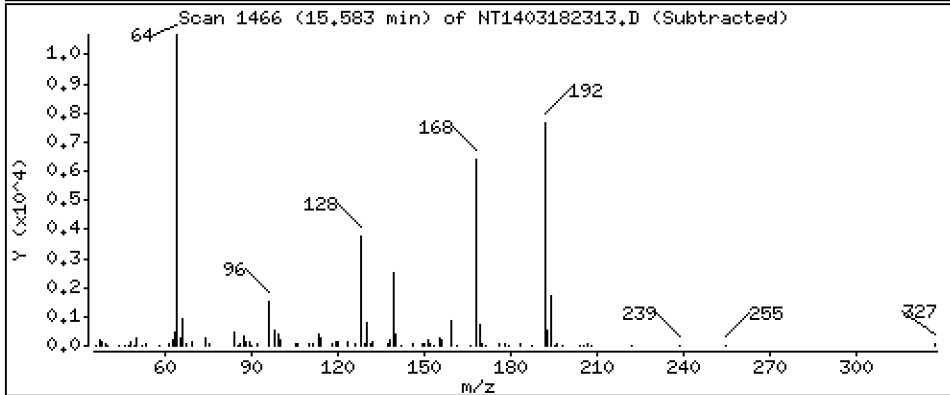
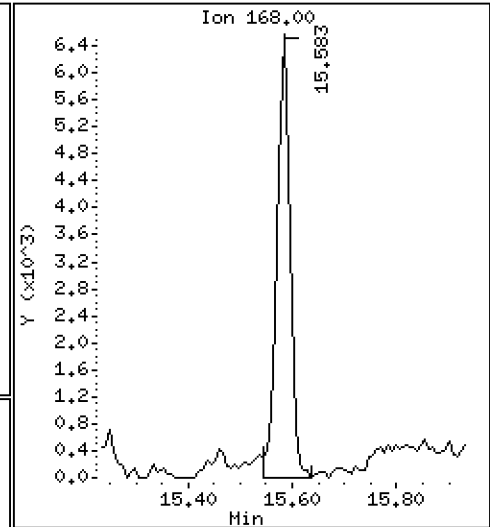
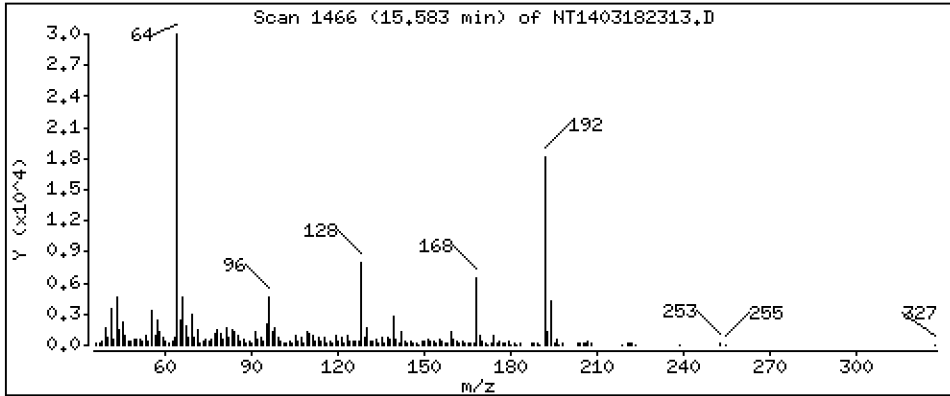
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1633 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

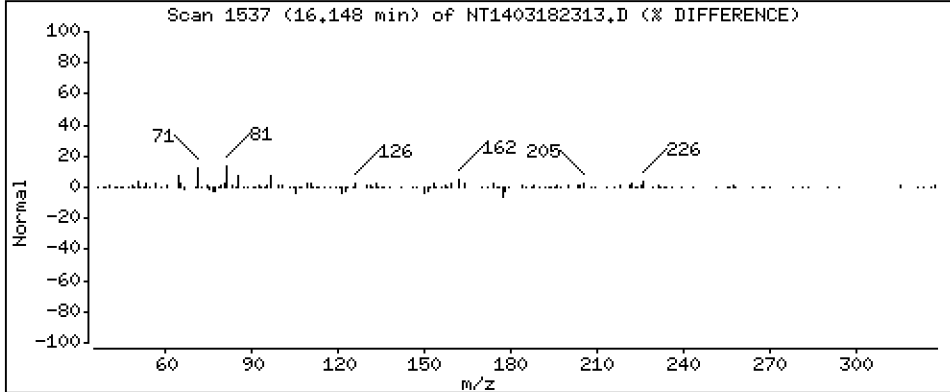
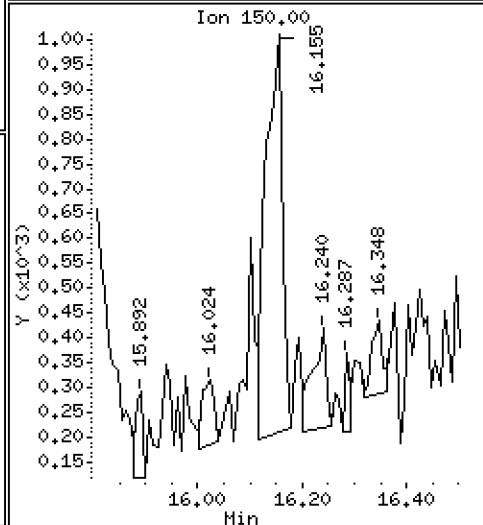
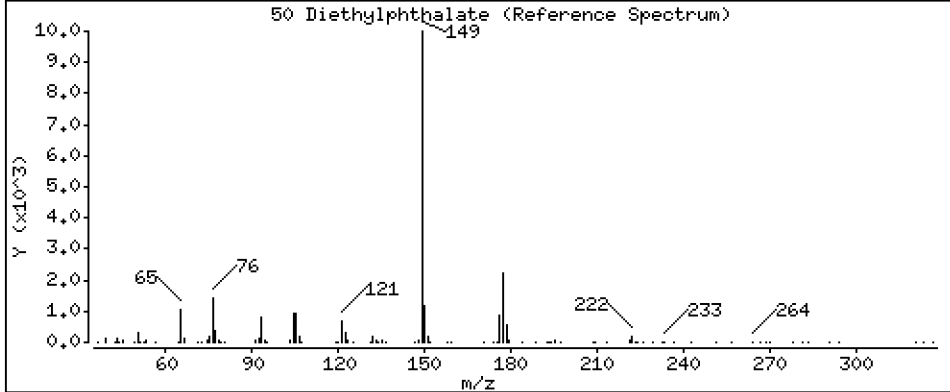
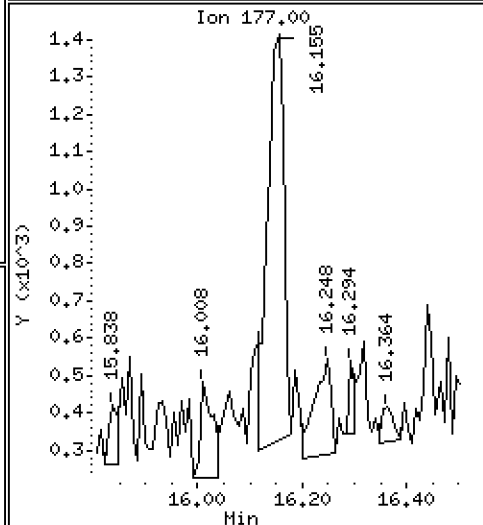
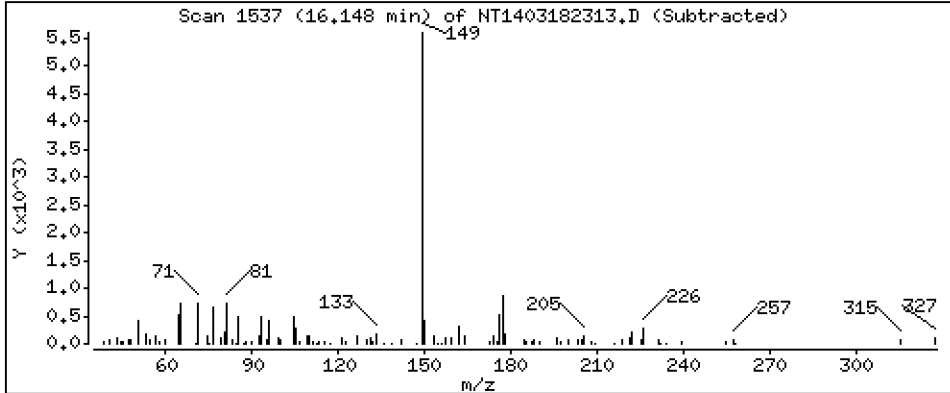
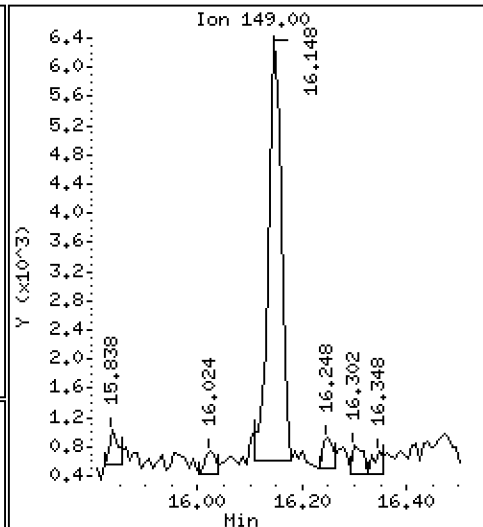
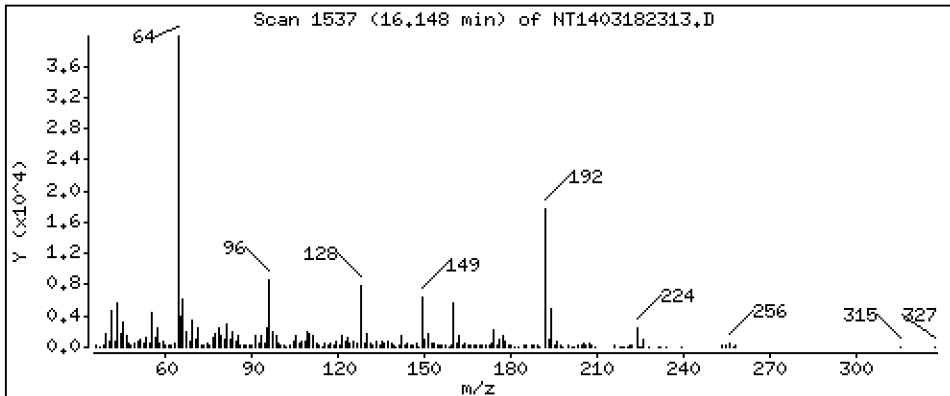
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1790 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

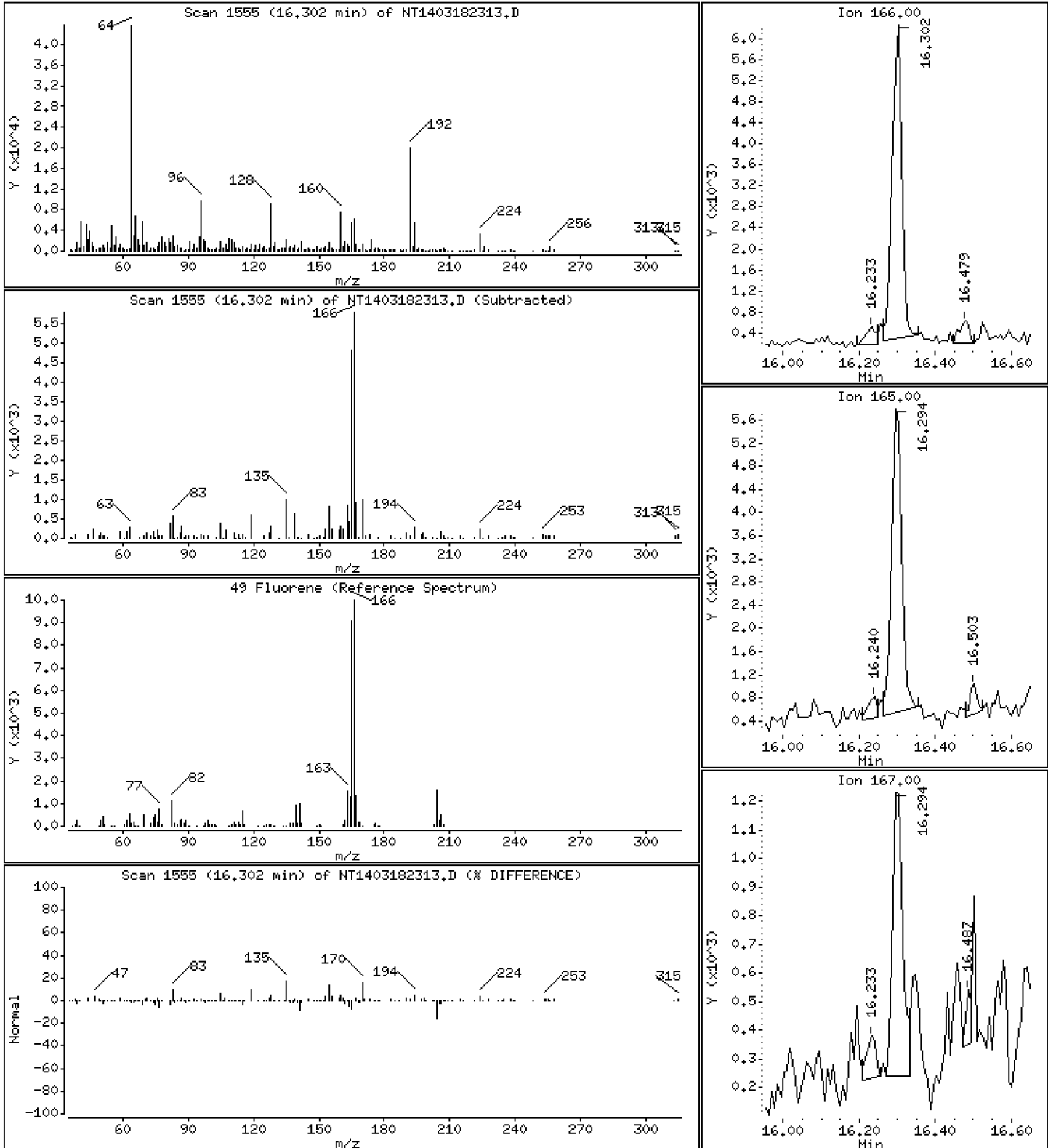
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1602 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

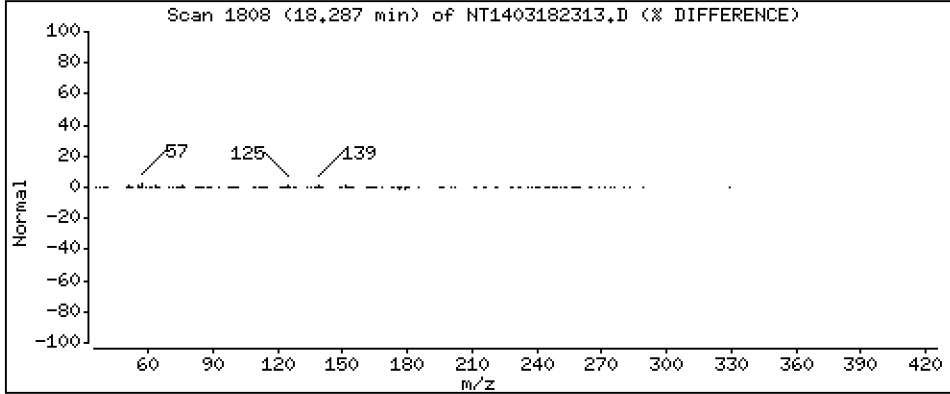
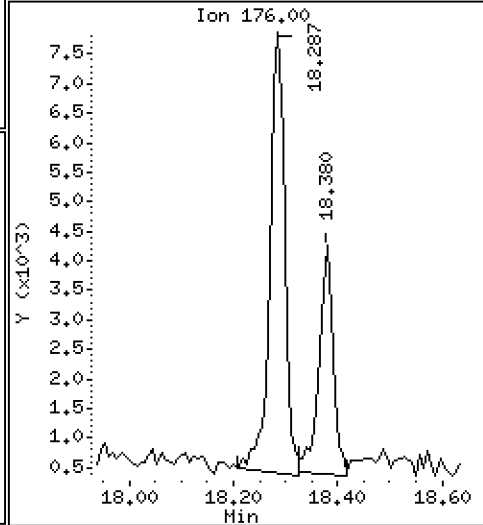
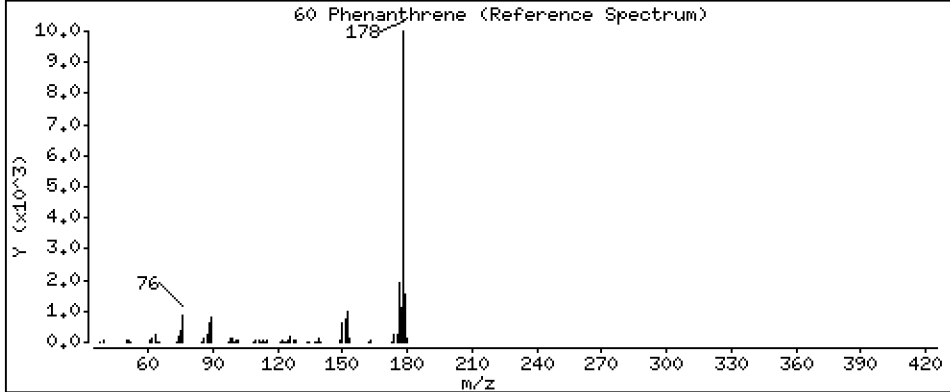
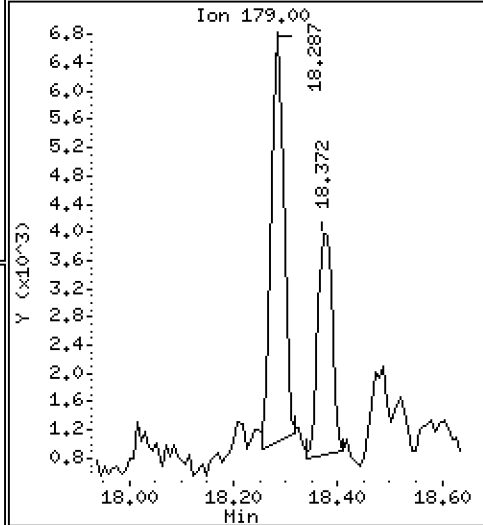
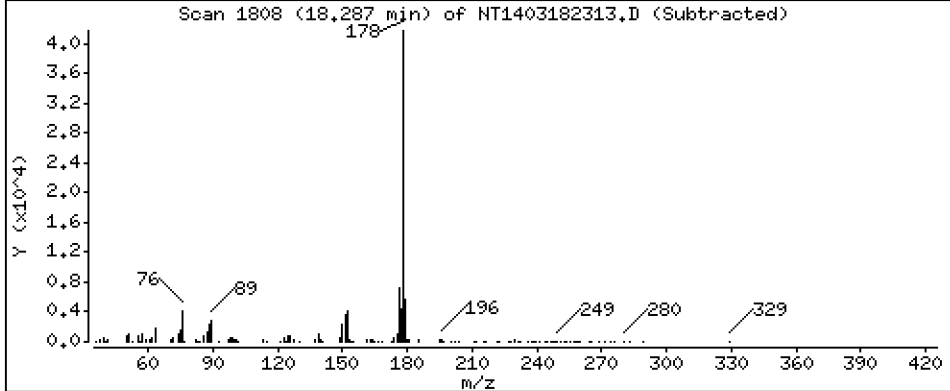
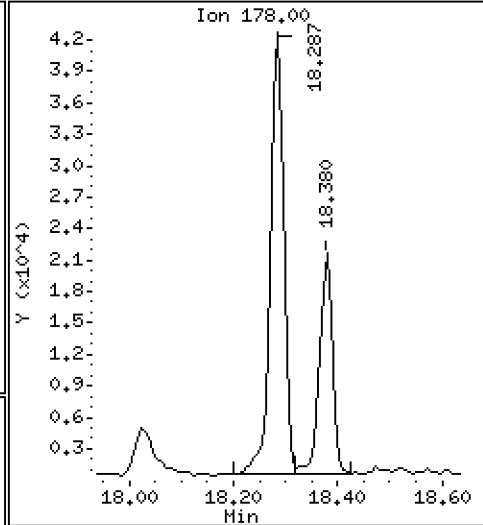
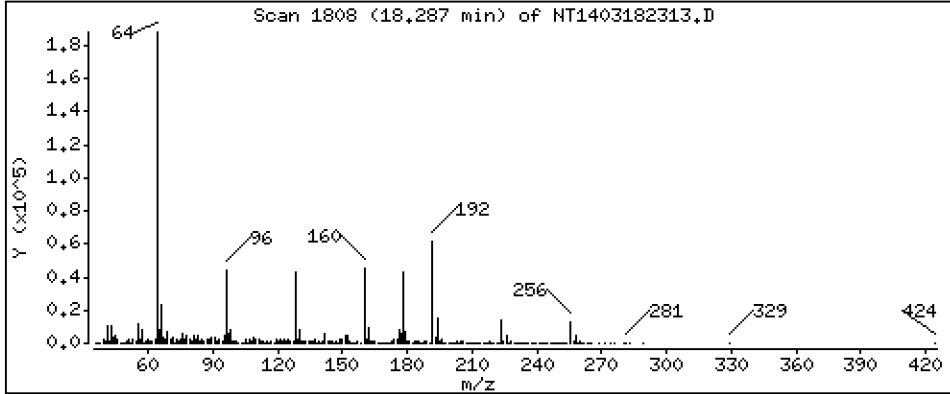
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,9398 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

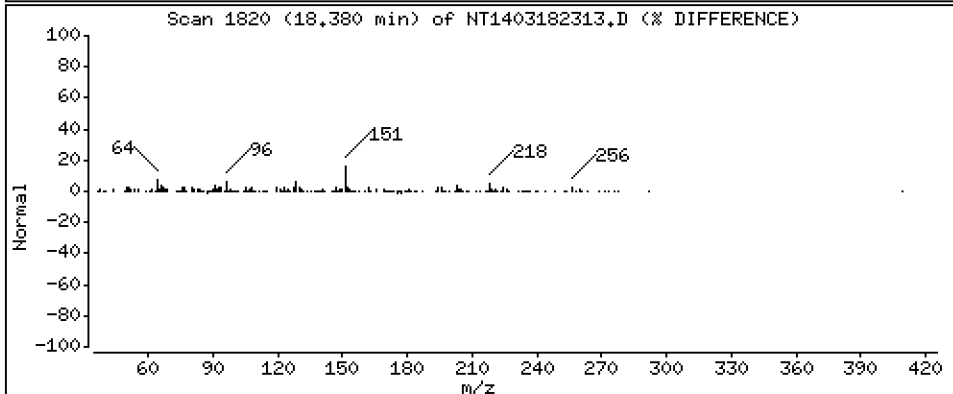
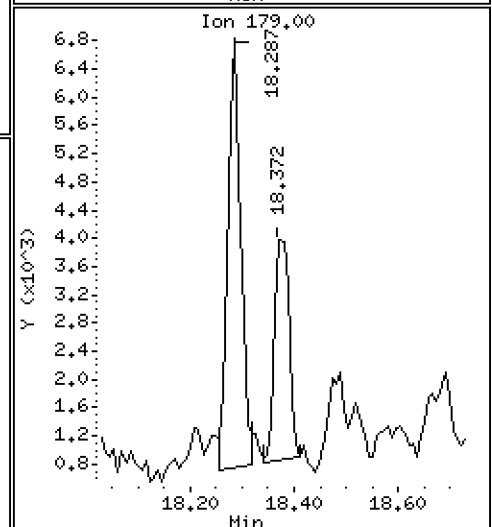
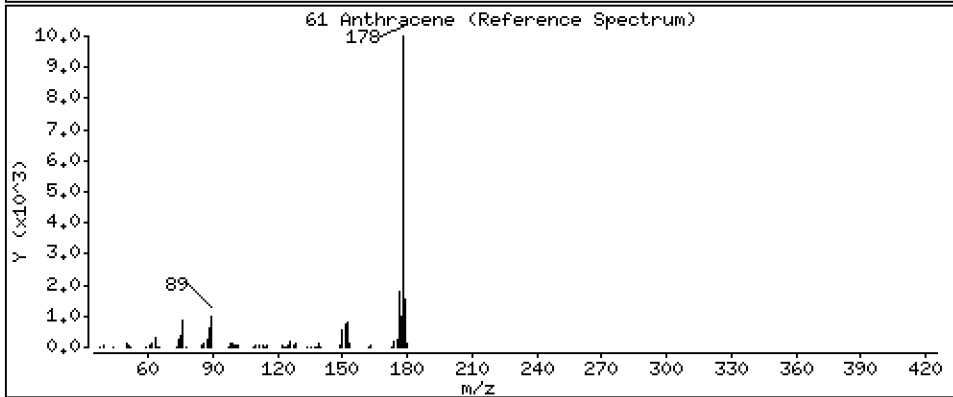
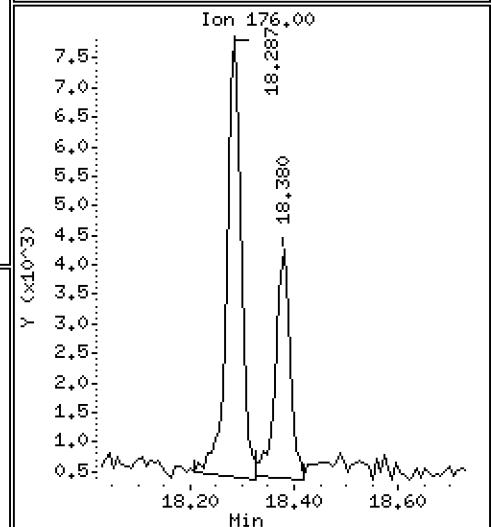
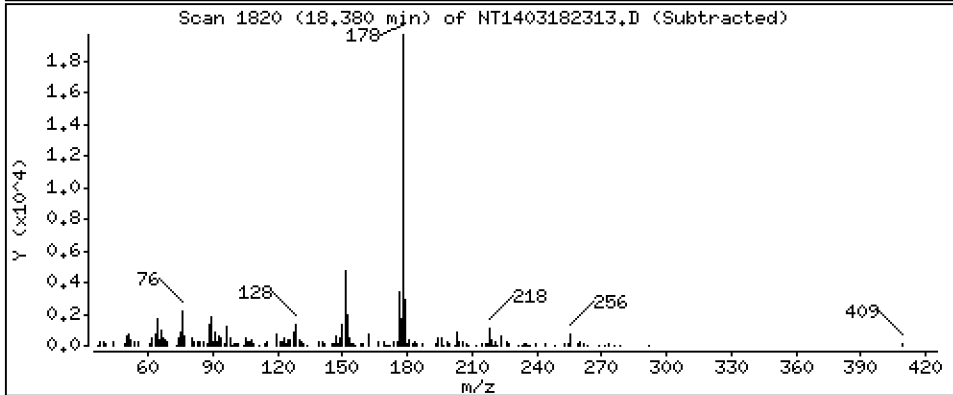
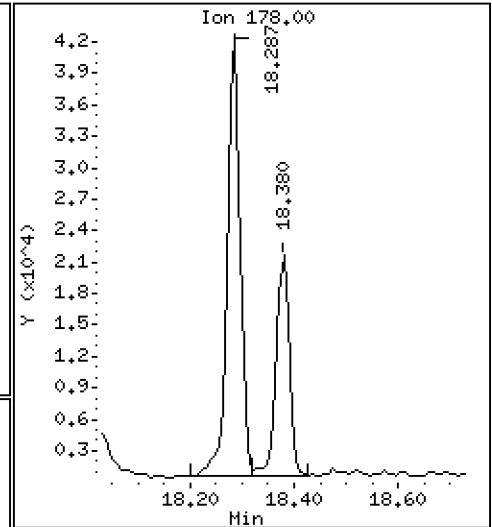
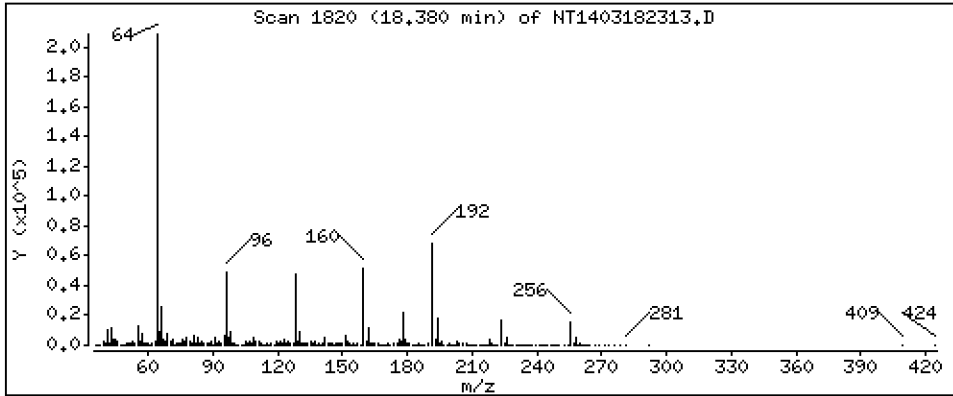
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,4854 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

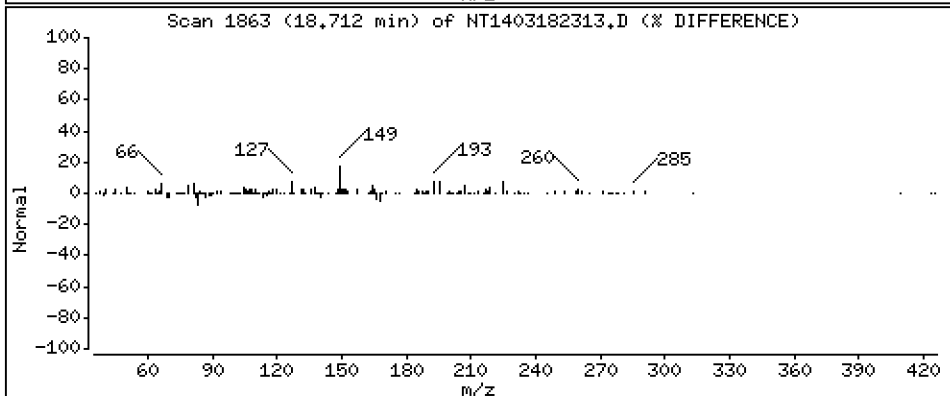
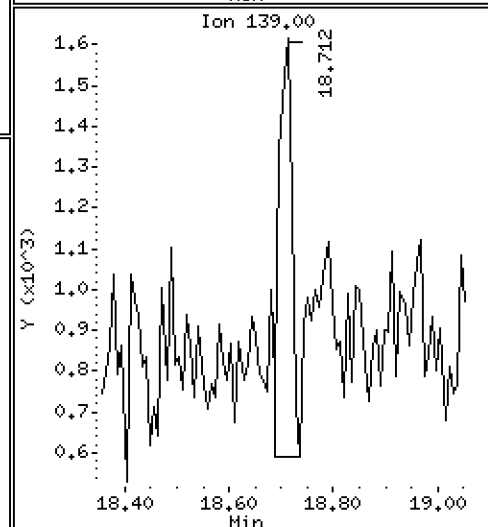
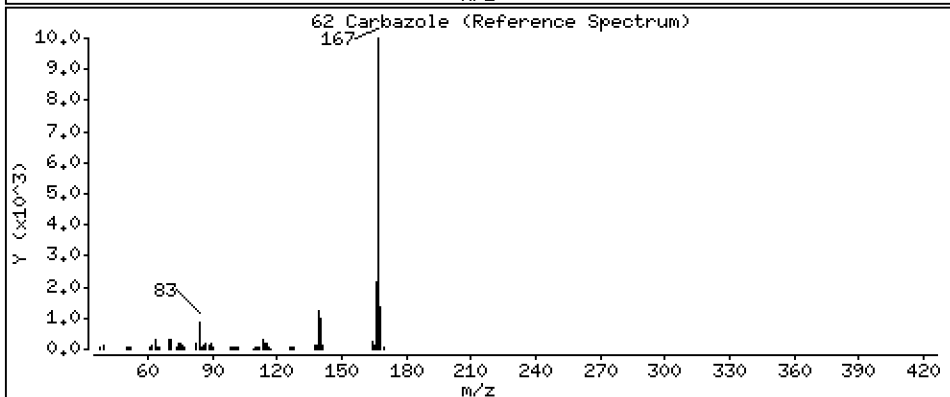
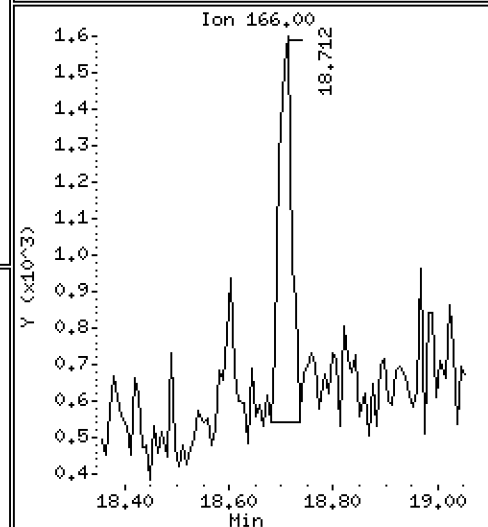
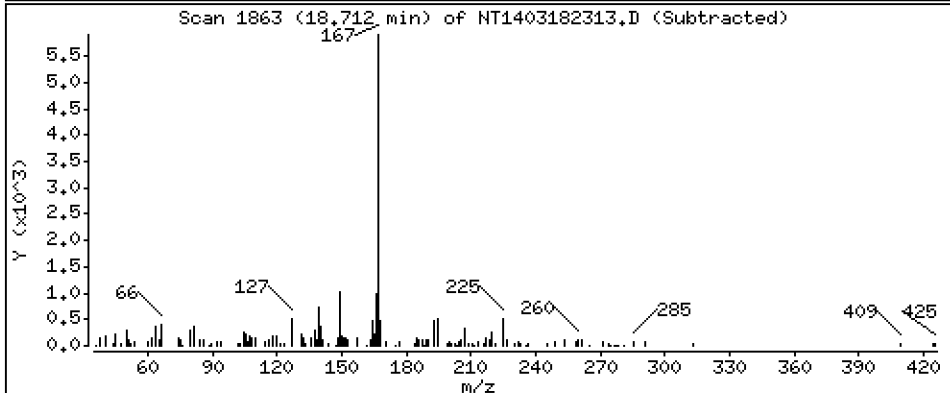
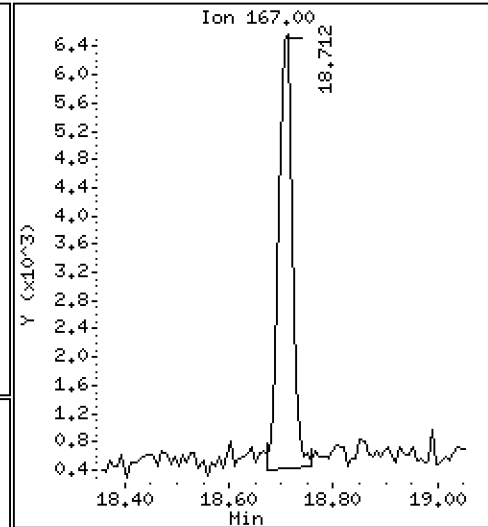
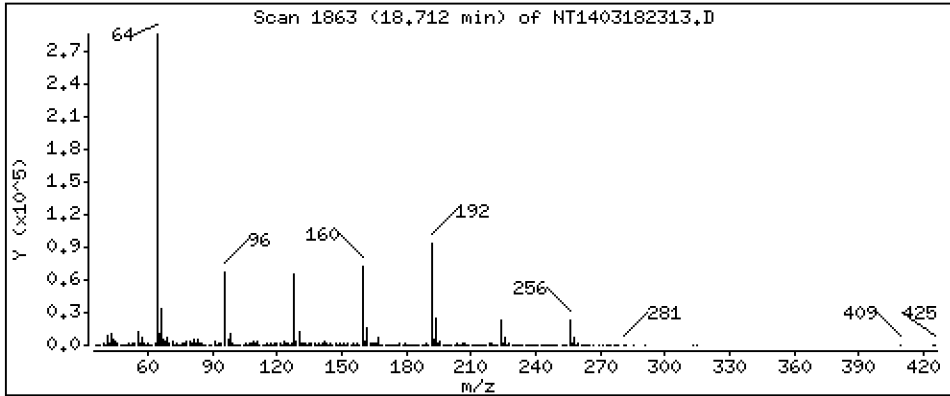
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1672 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

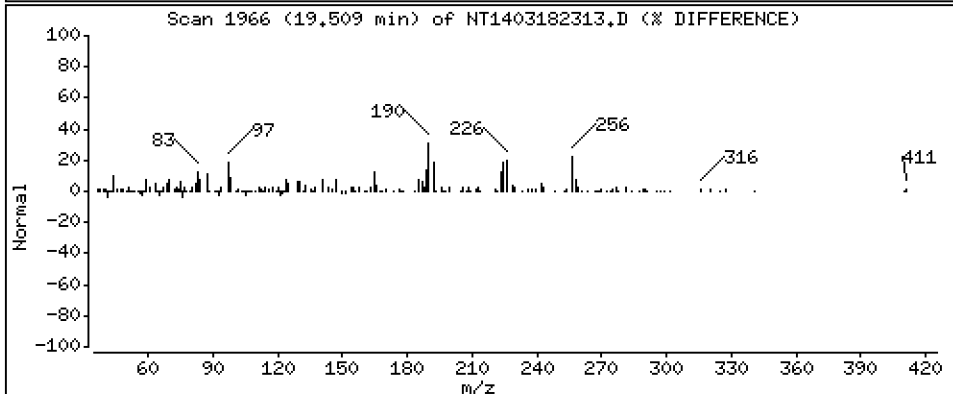
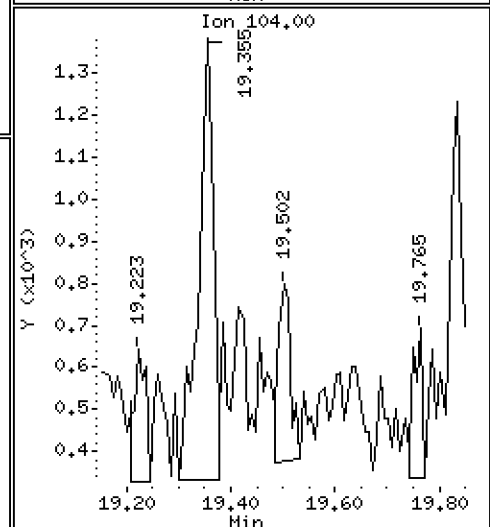
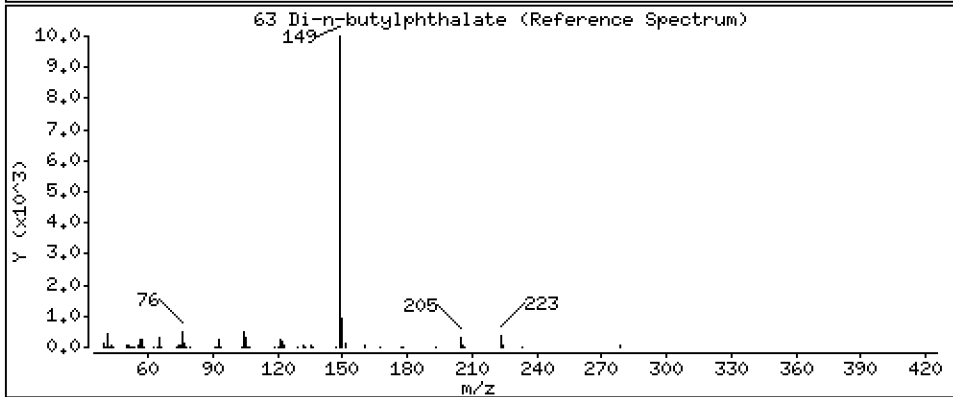
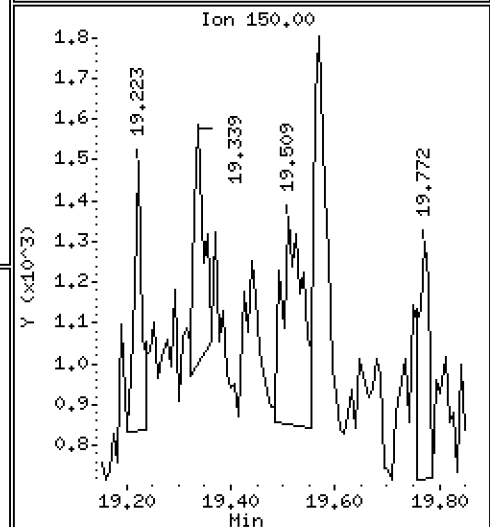
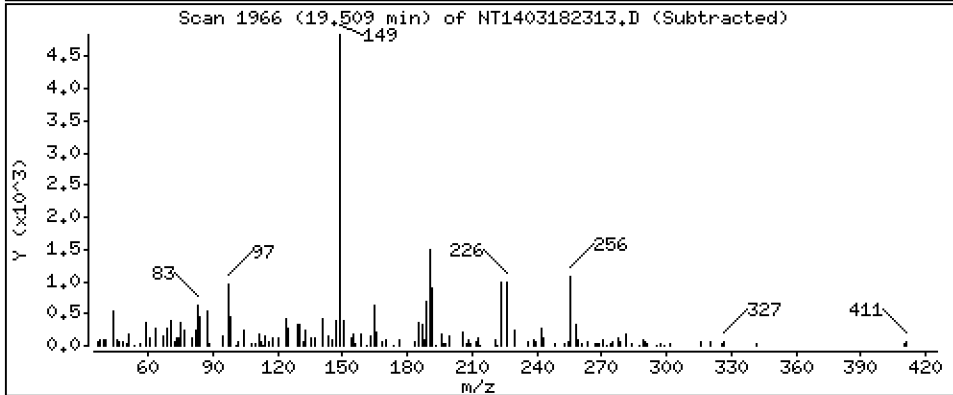
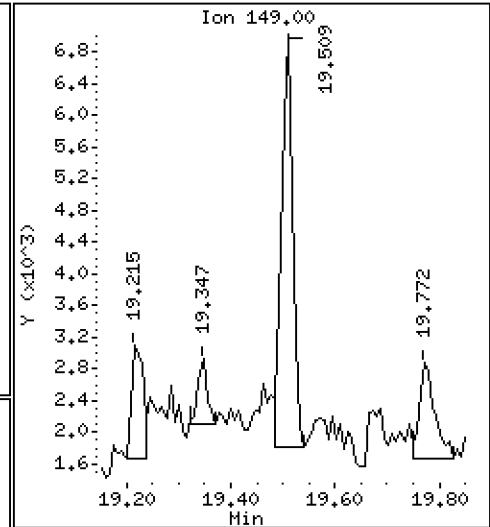
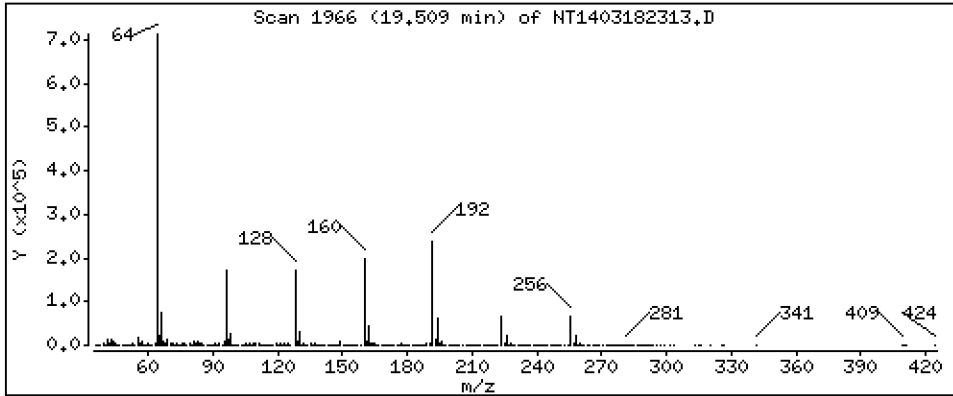
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,09341 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

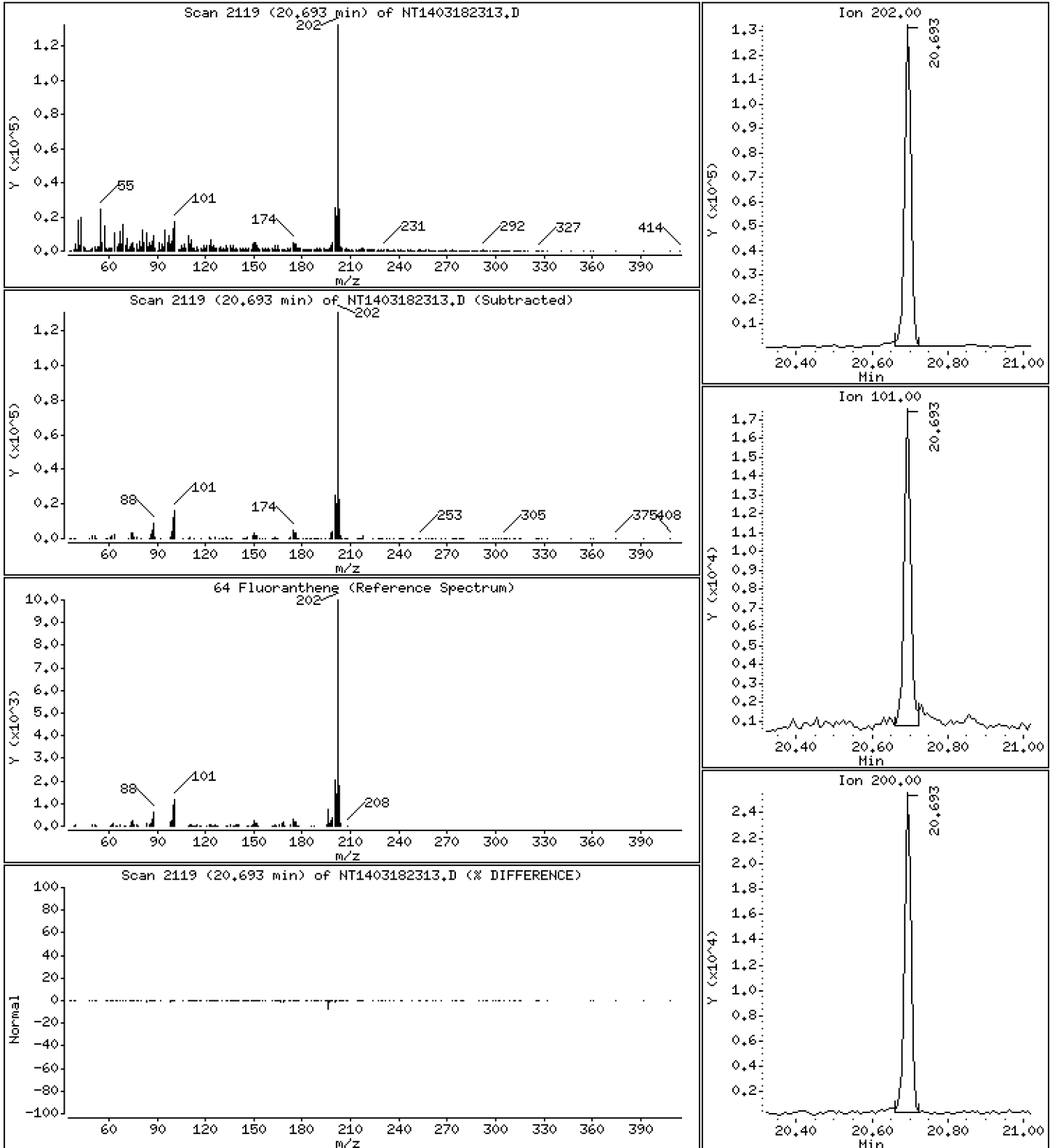
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 3,267 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

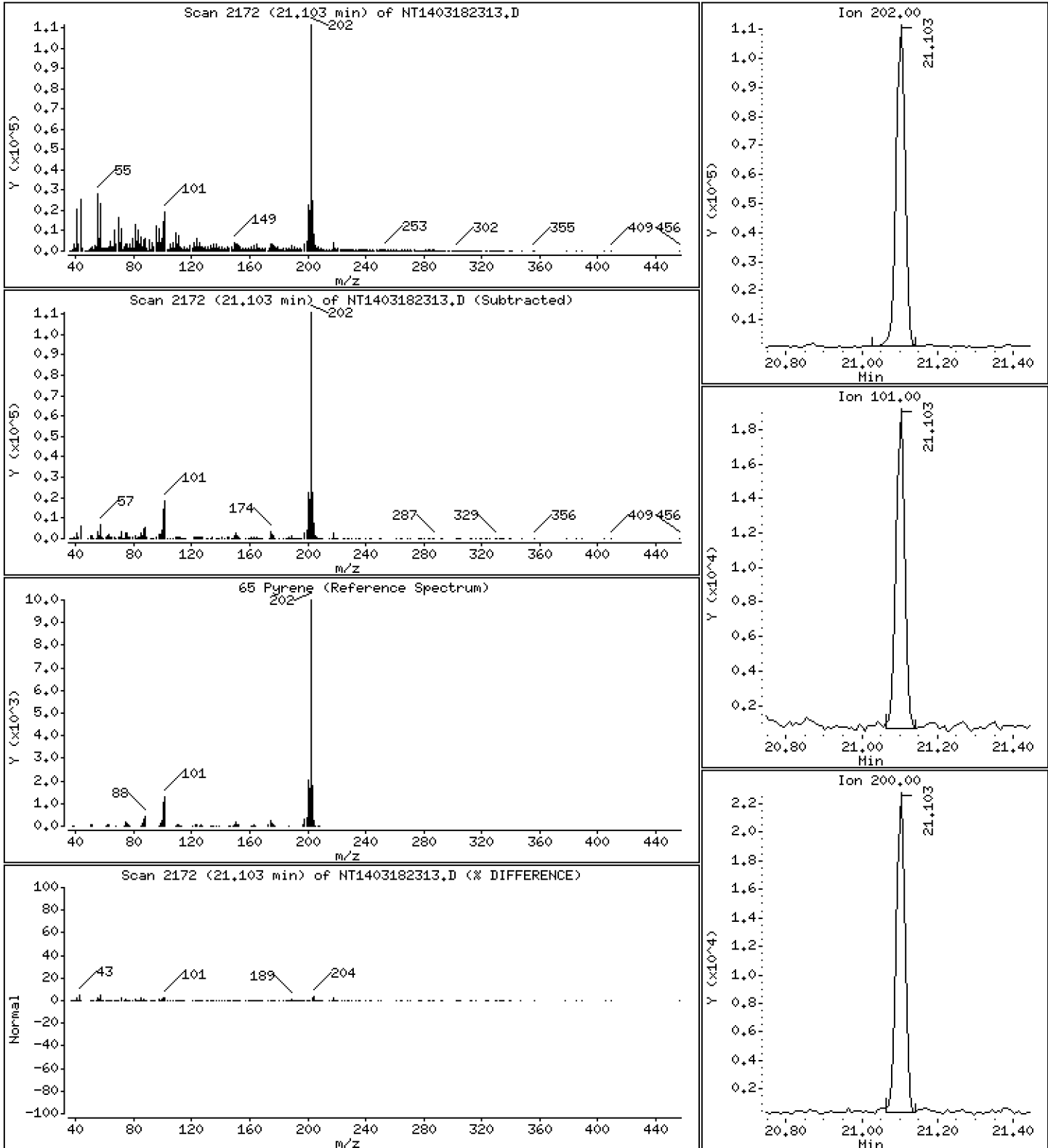
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 3,416 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

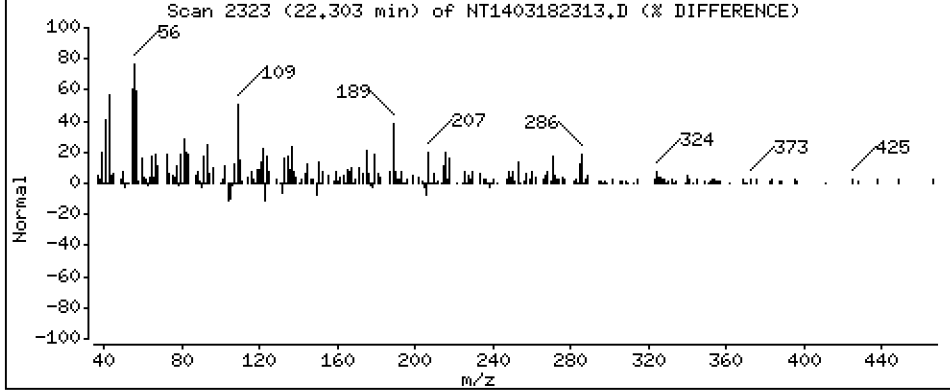
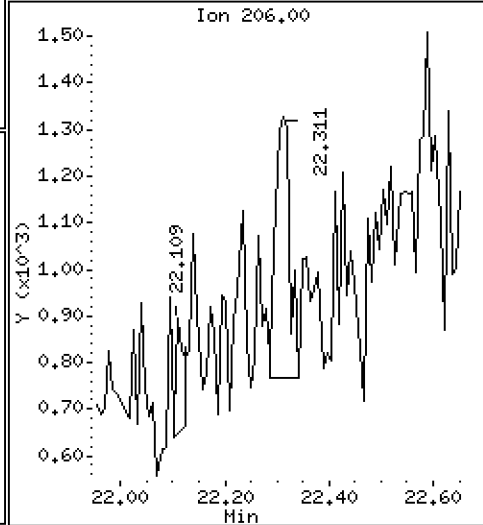
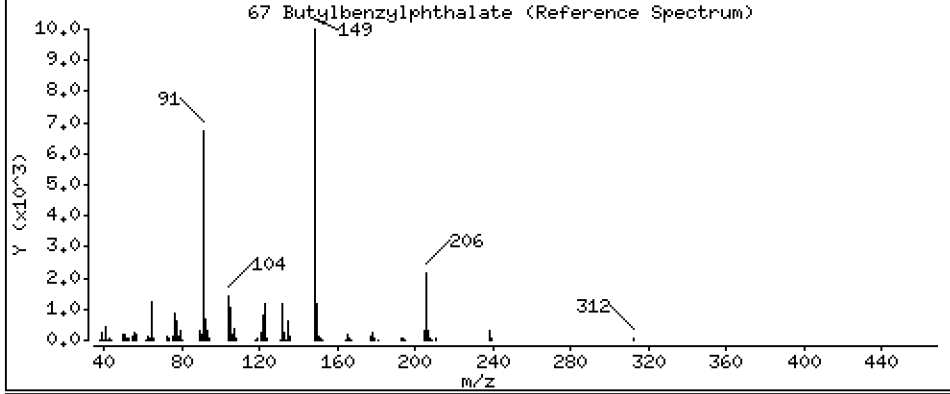
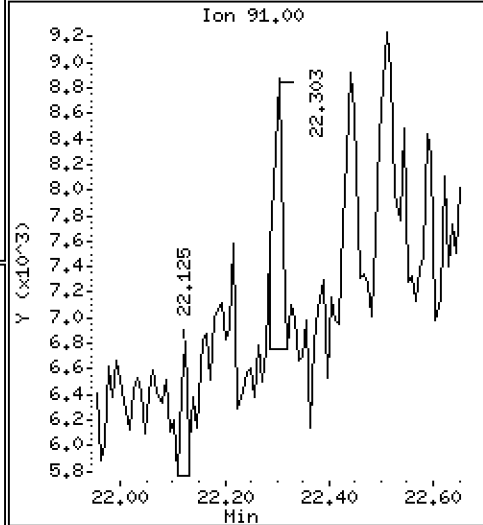
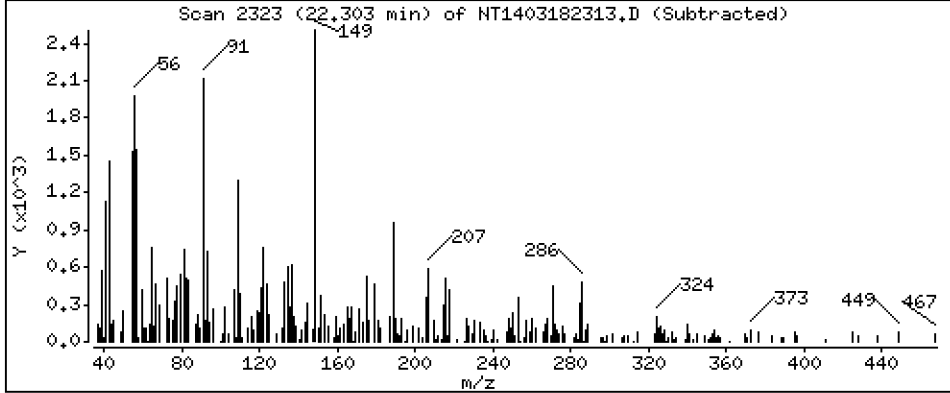
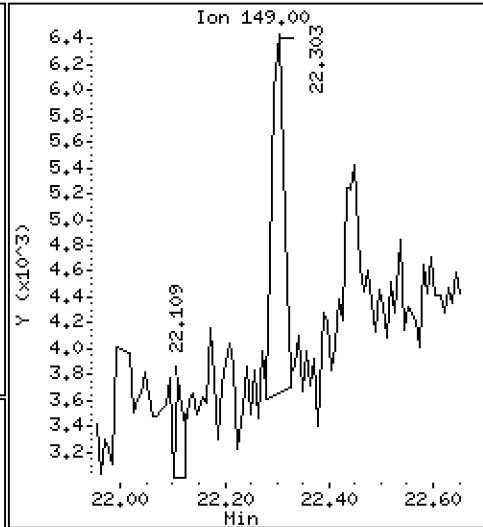
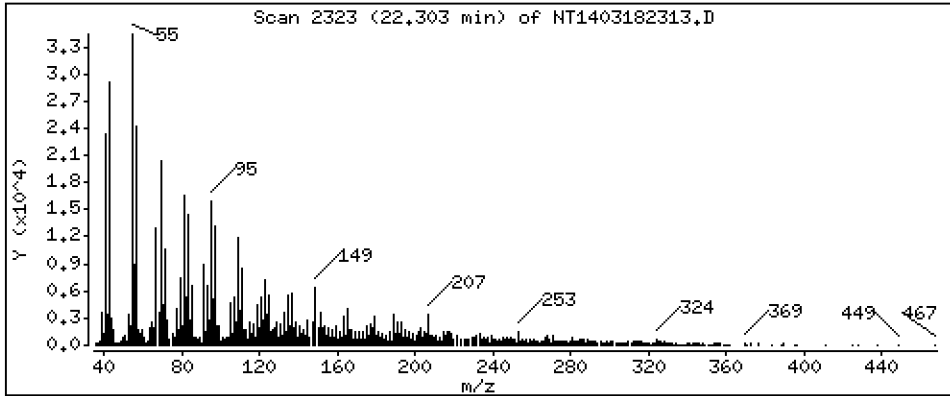
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1898 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

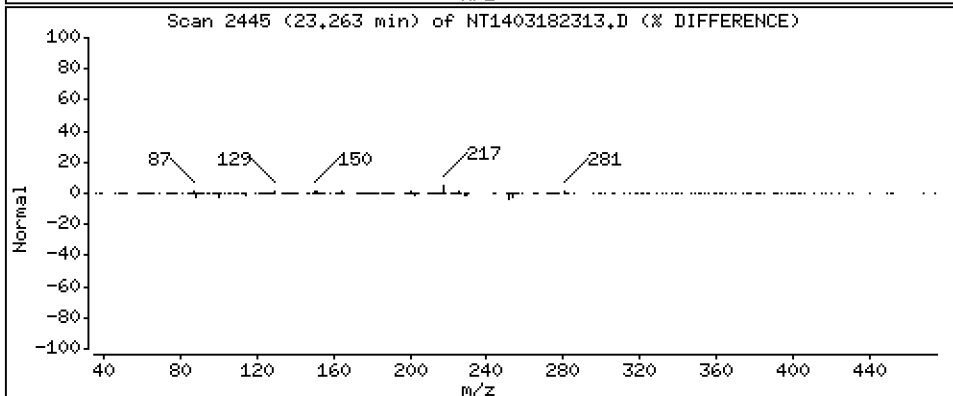
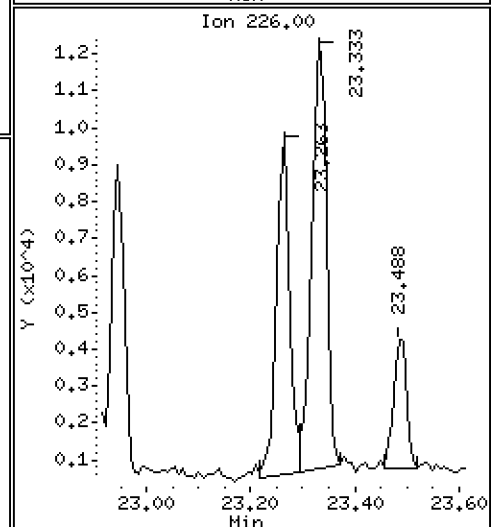
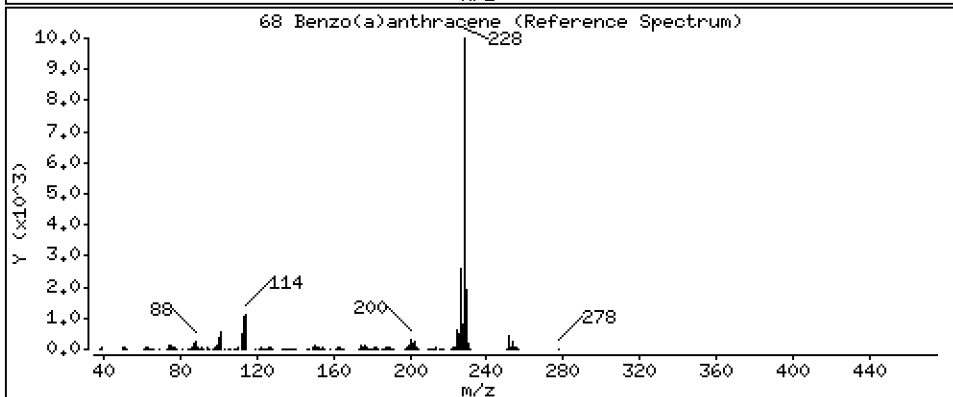
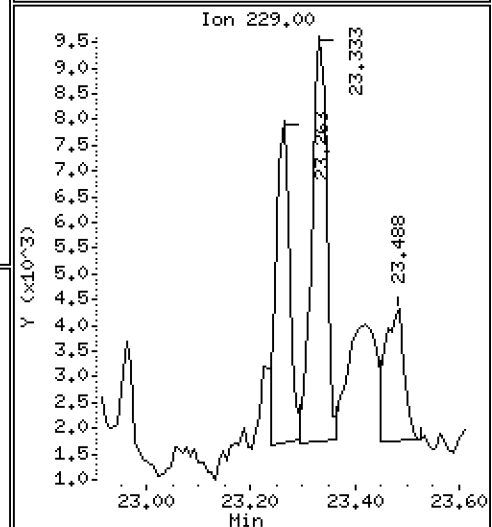
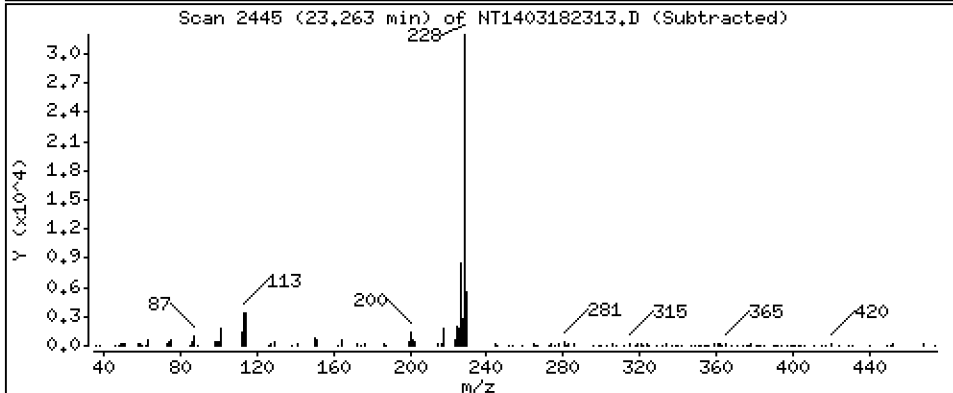
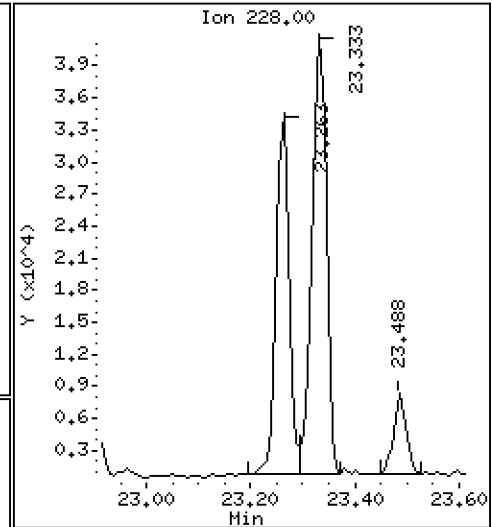
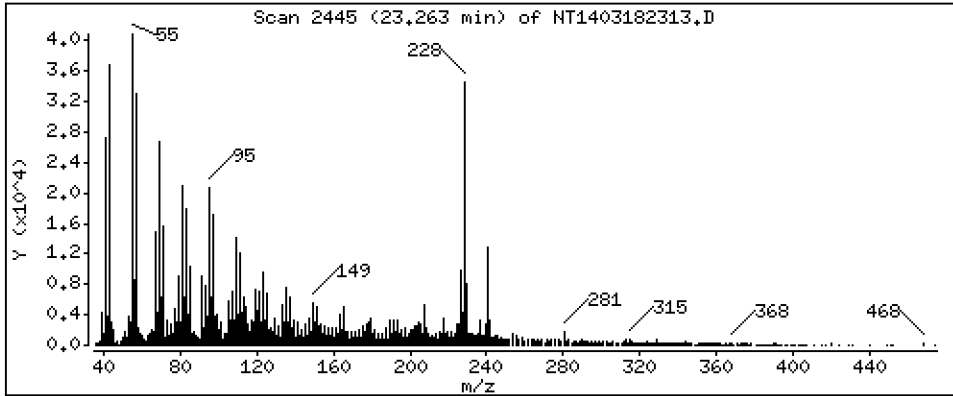
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 1,268 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

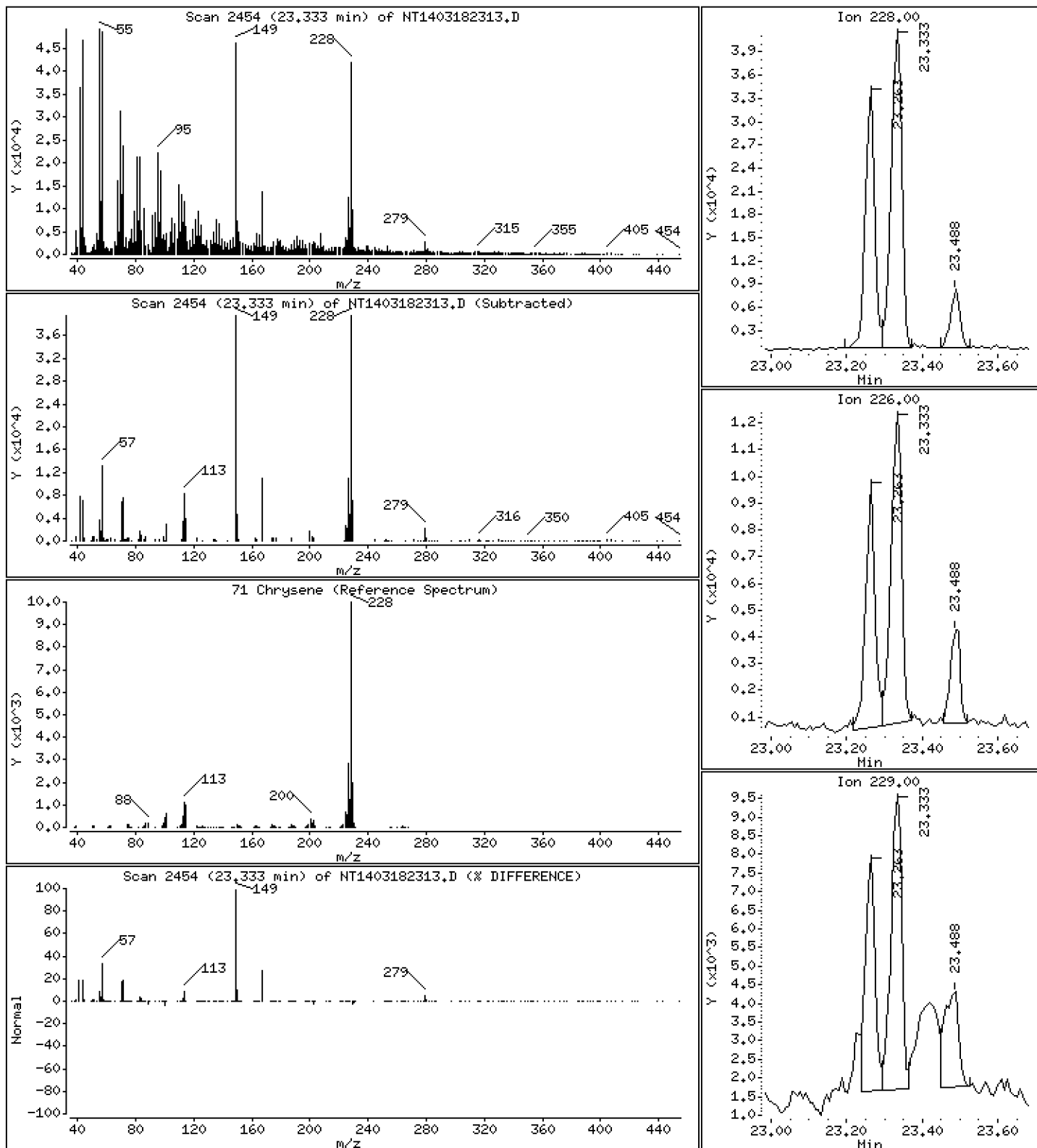
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,898 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

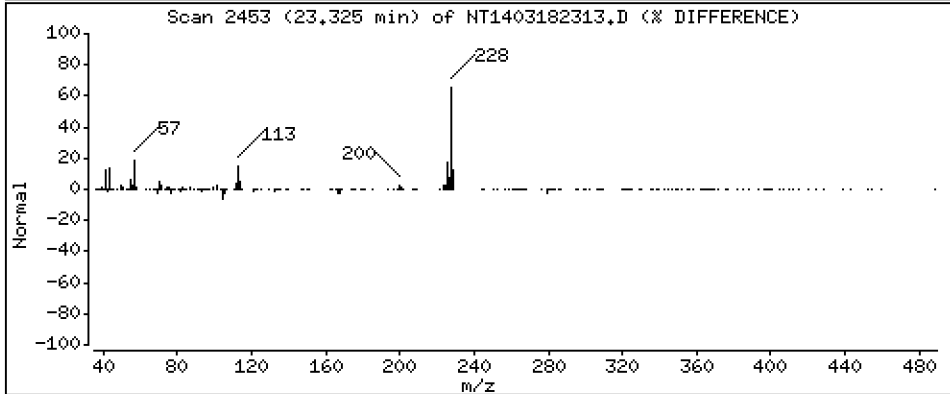
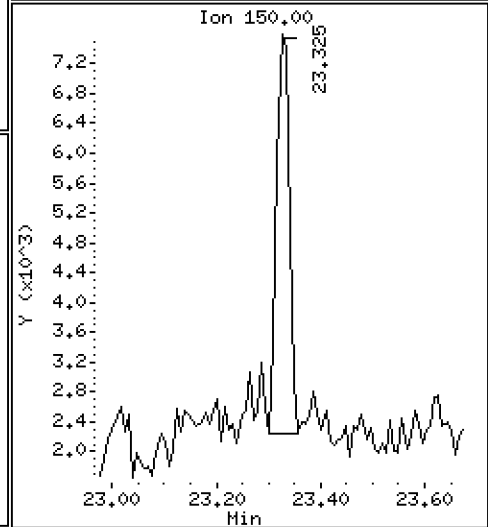
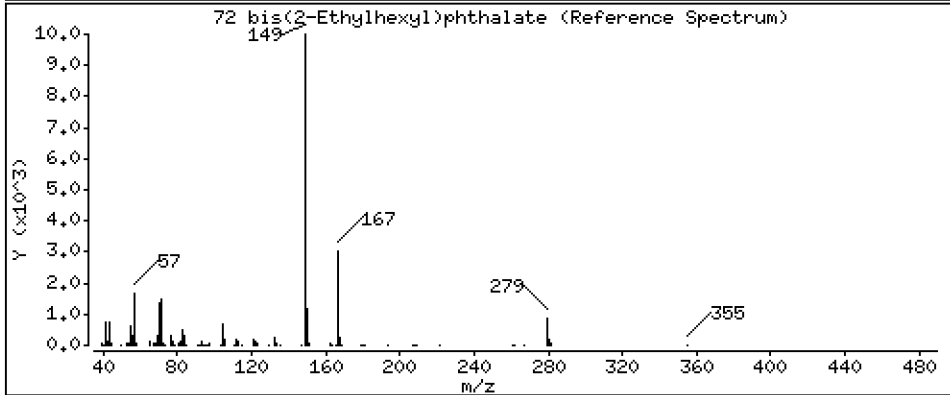
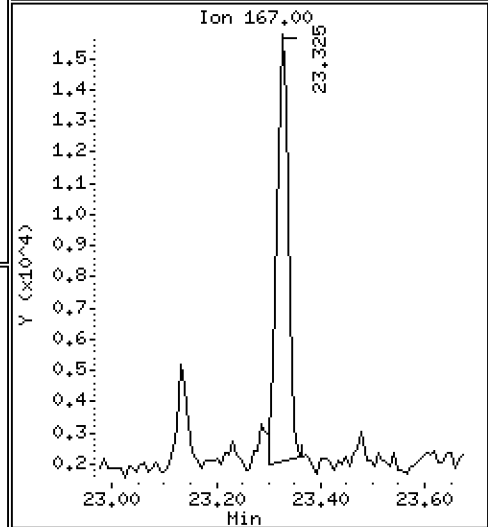
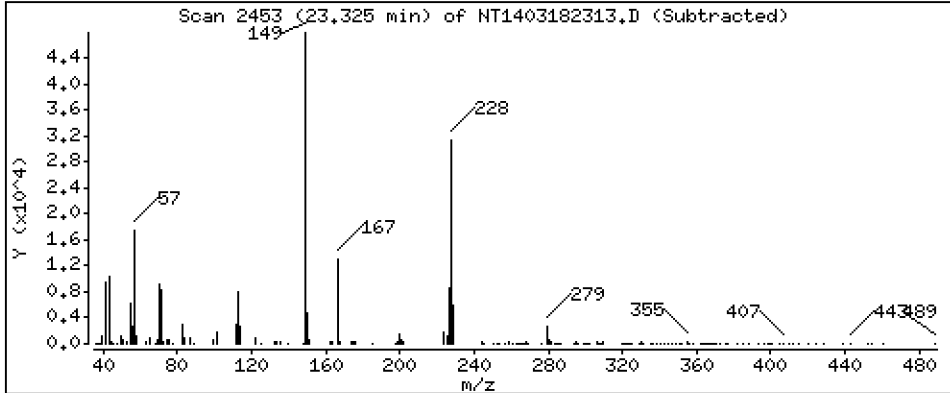
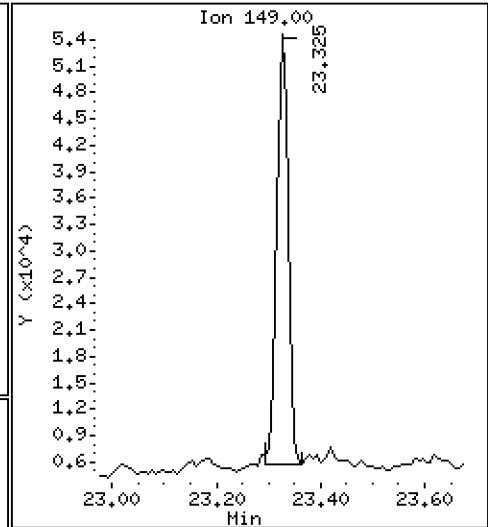
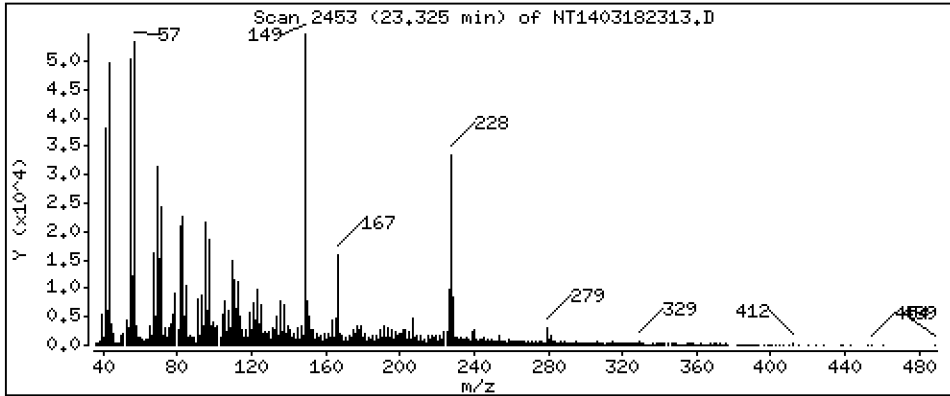
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,979 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

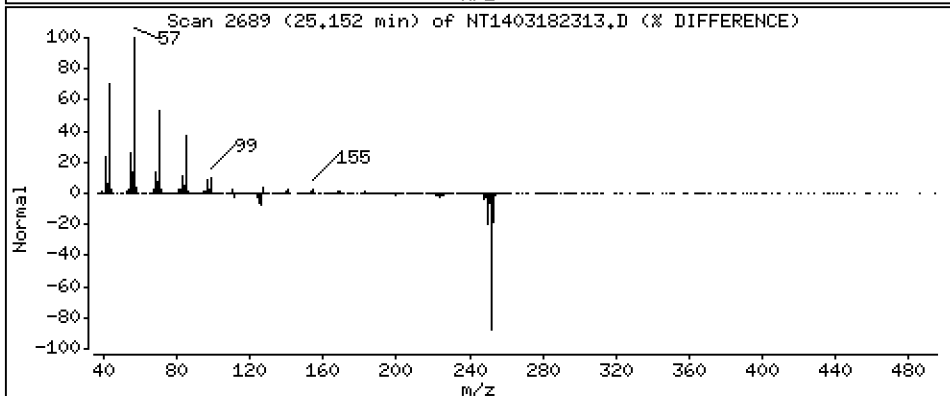
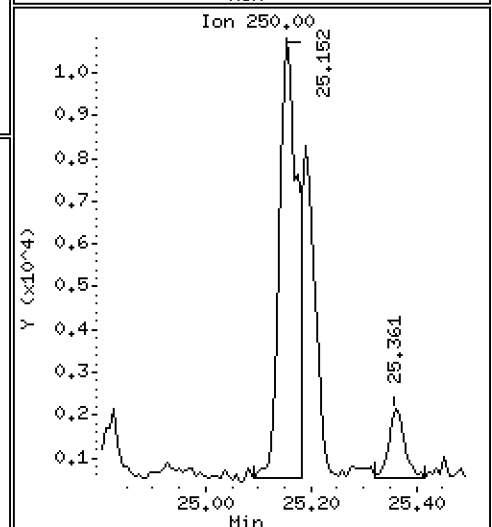
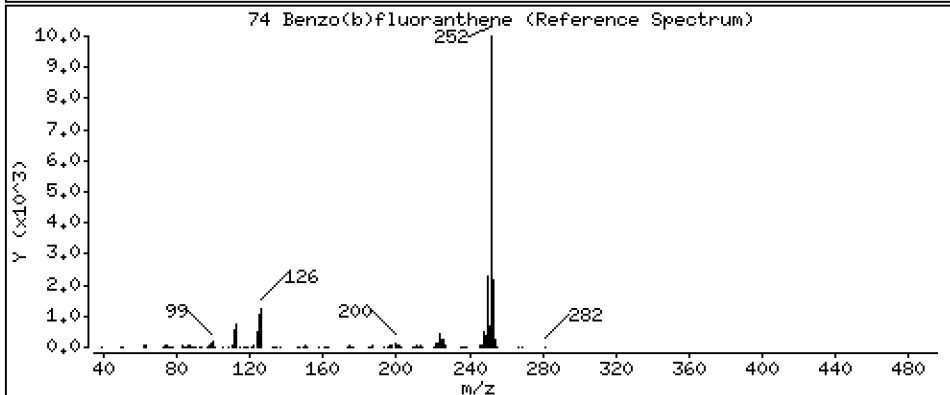
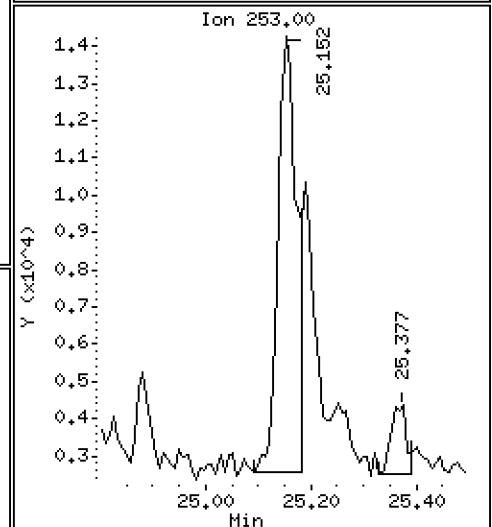
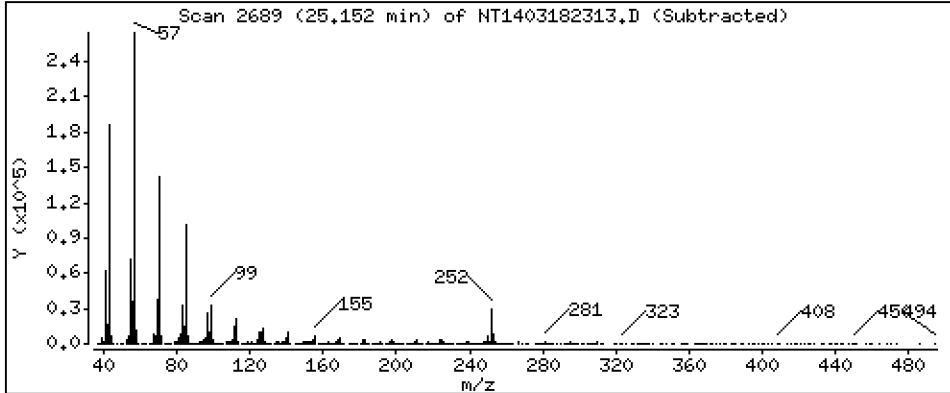
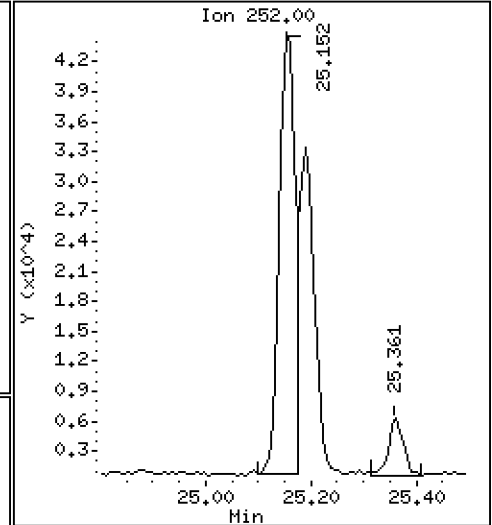
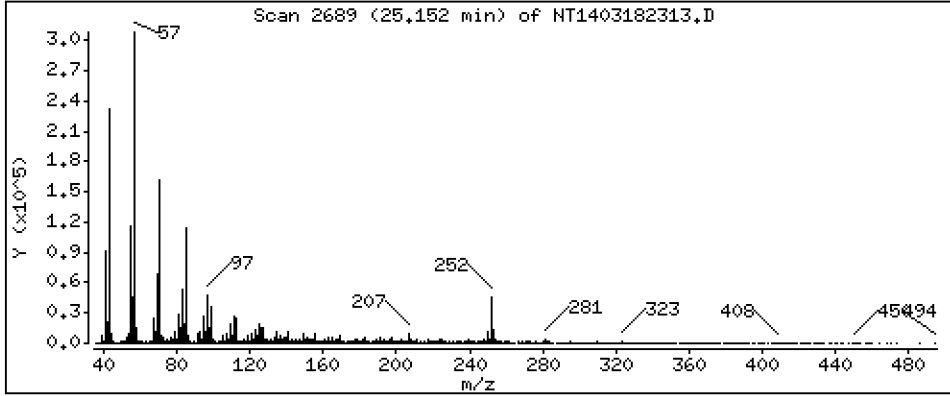
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,929 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

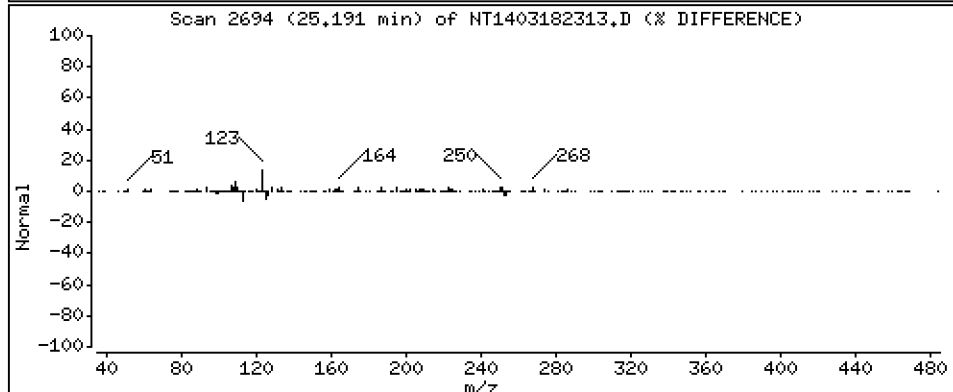
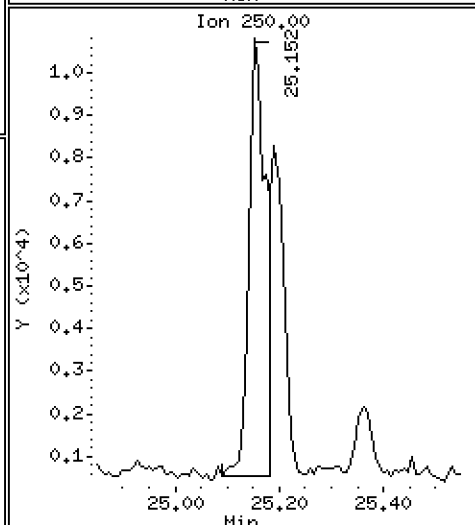
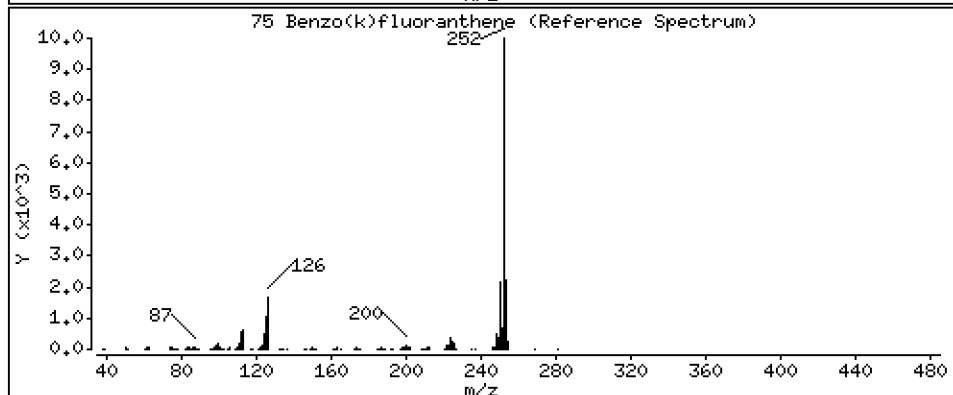
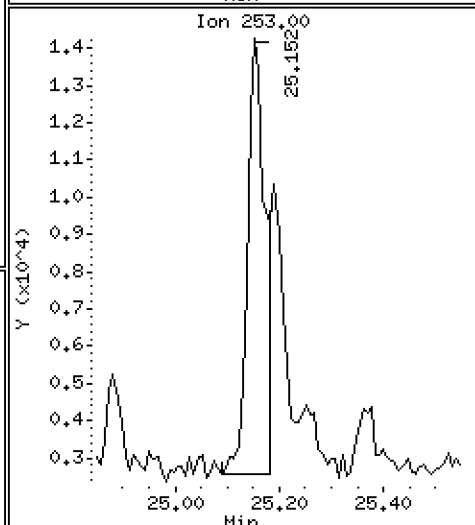
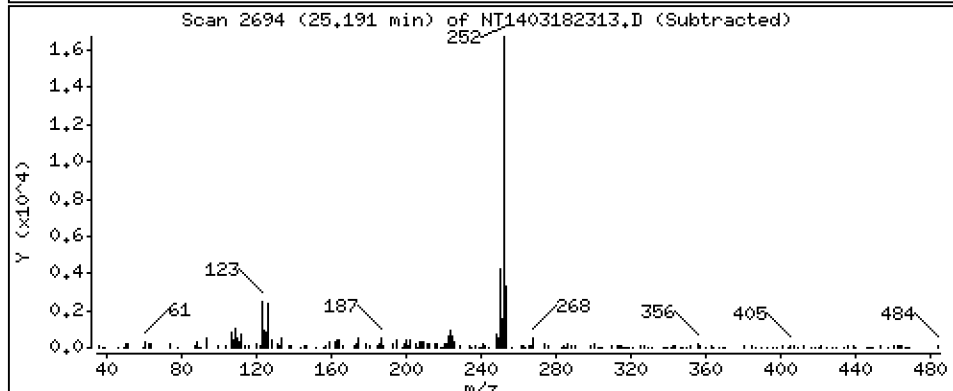
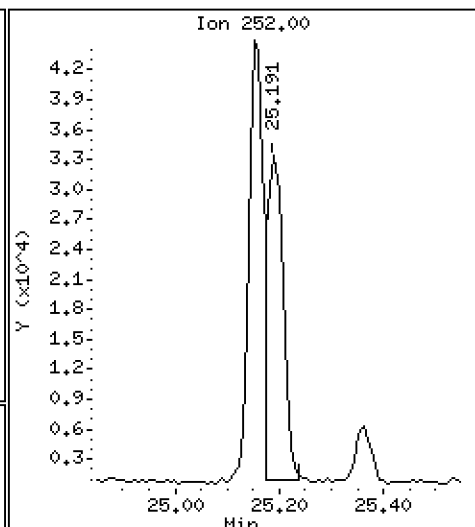
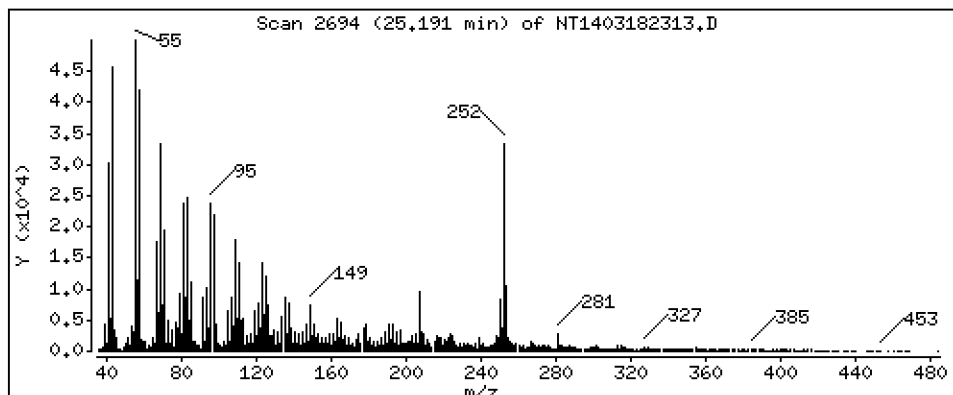
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,469 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

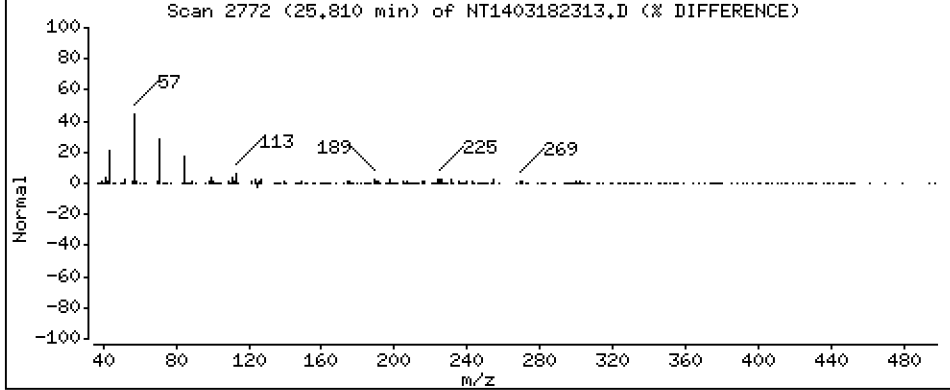
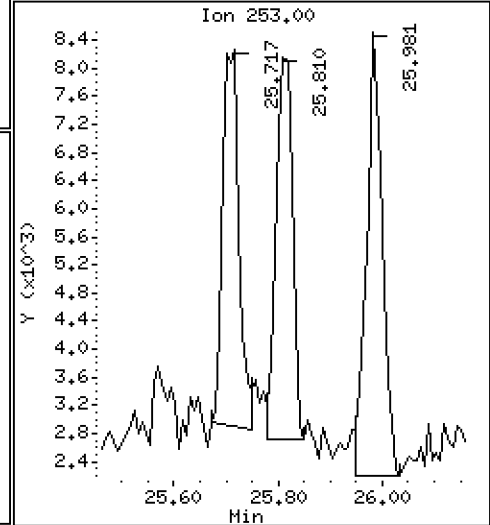
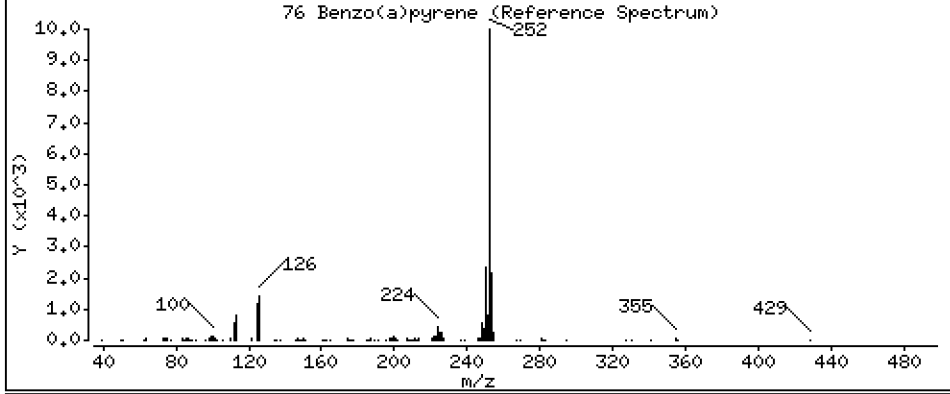
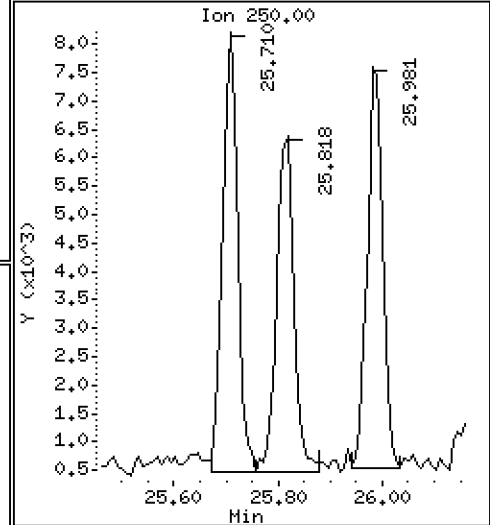
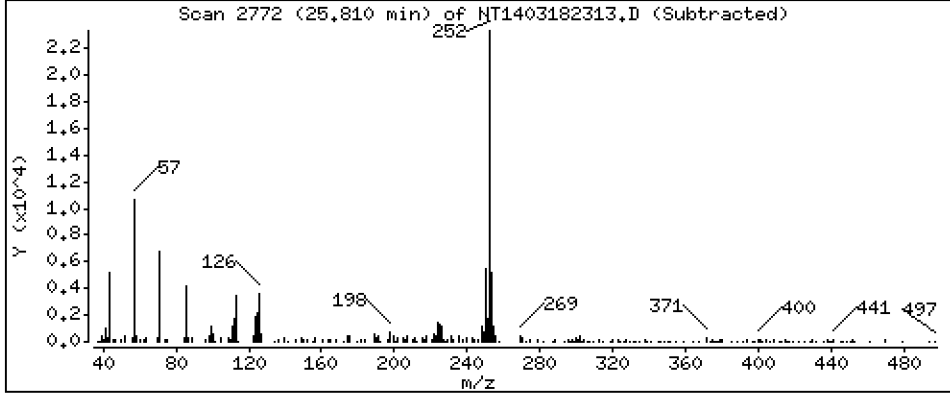
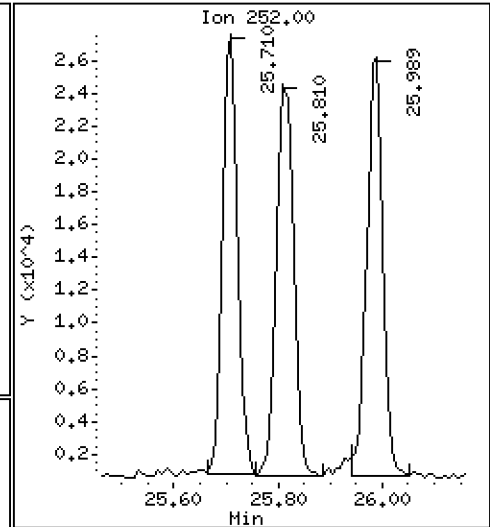
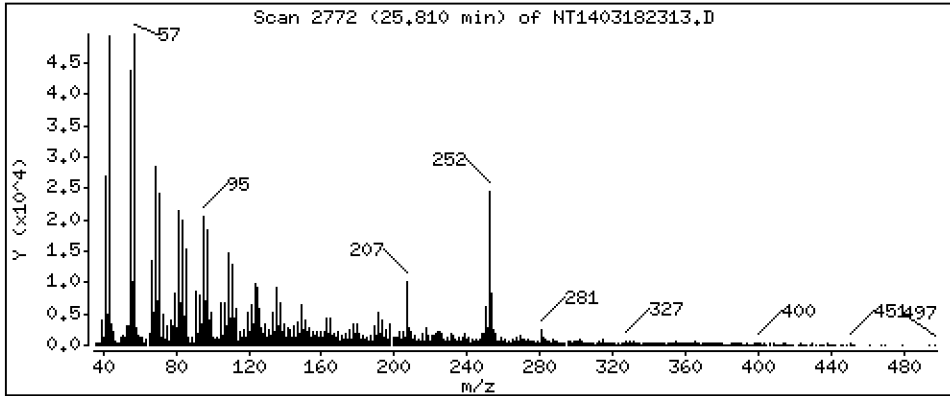
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,309 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

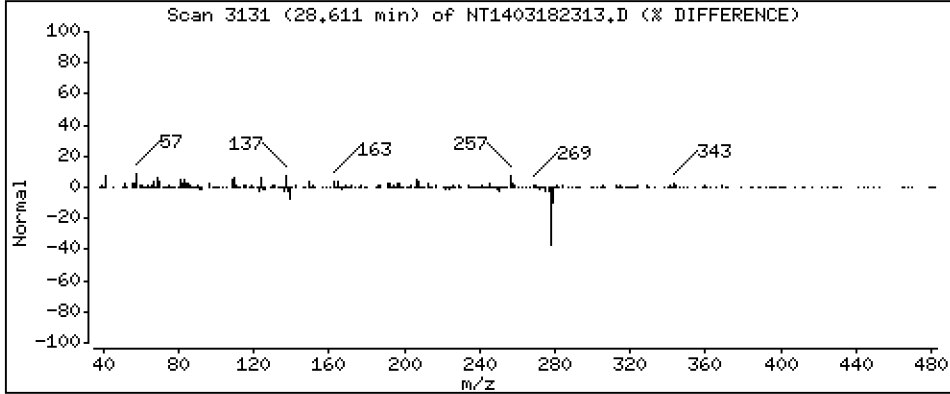
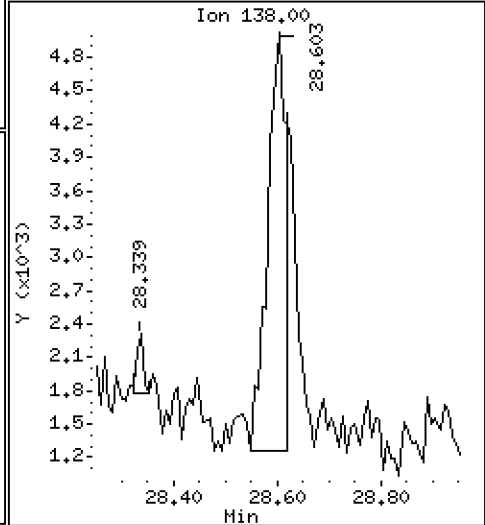
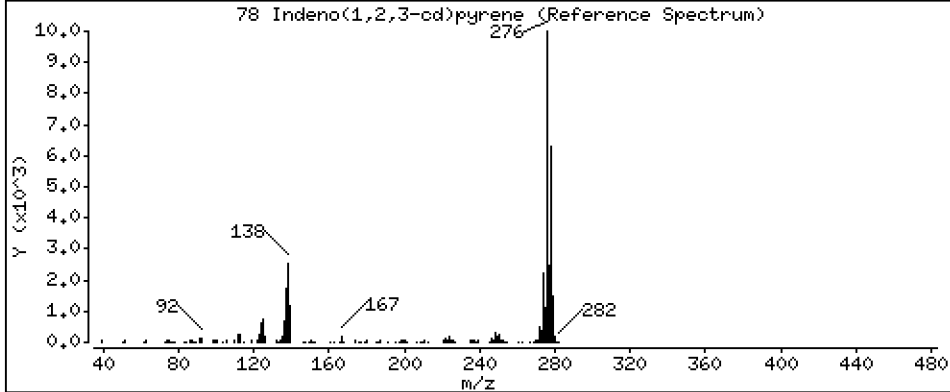
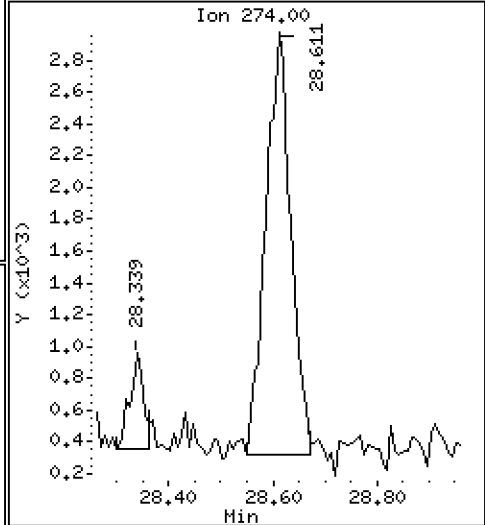
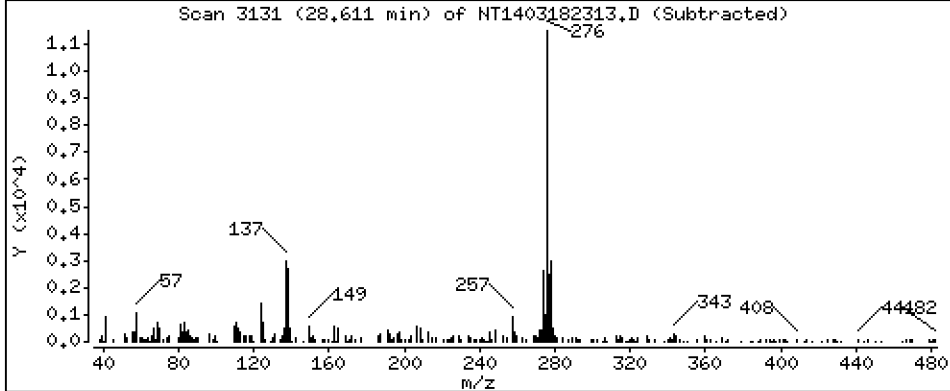
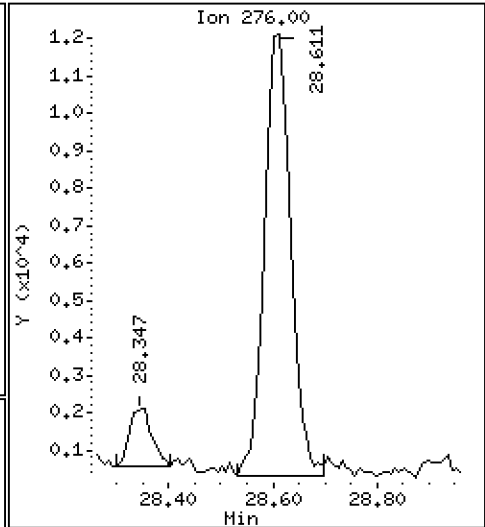
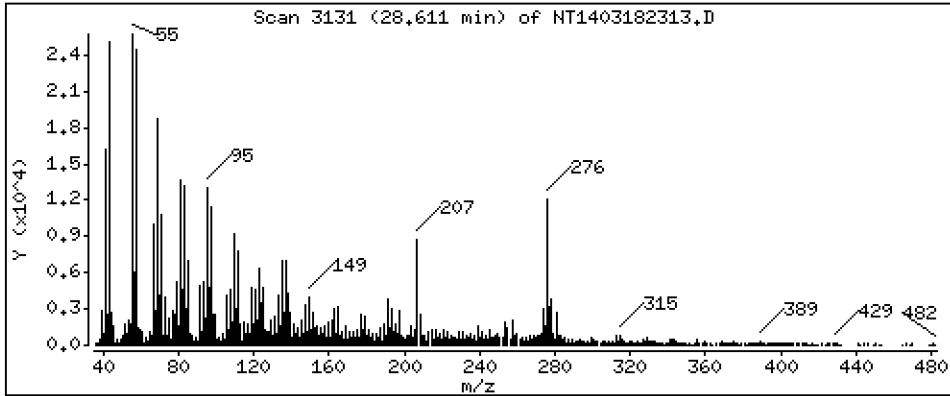
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,9197 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

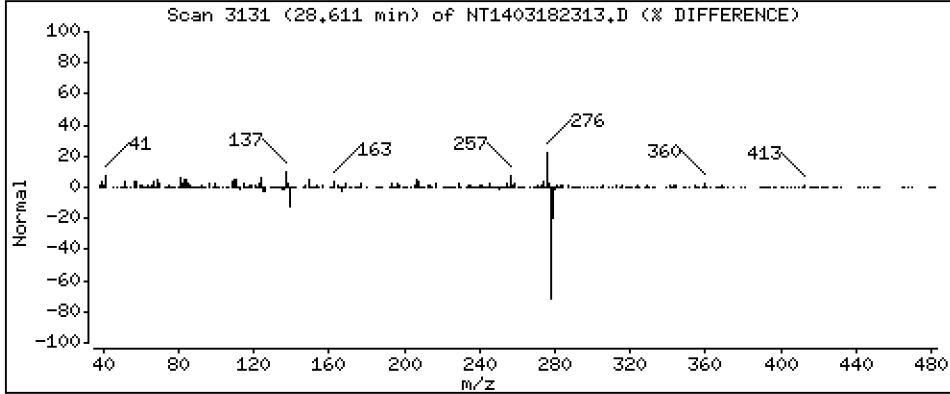
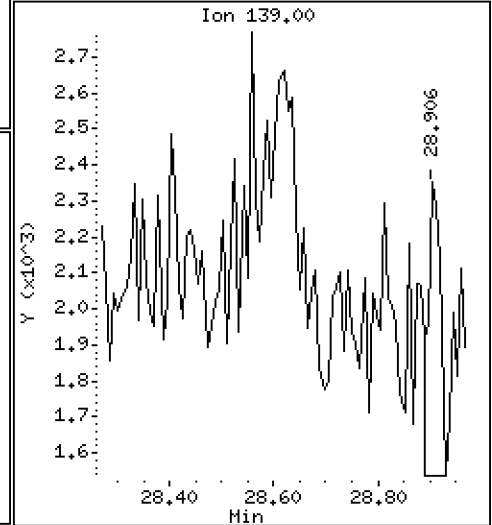
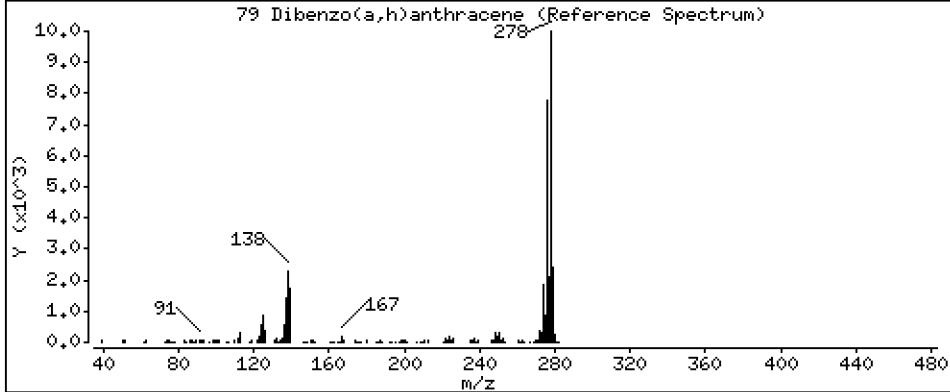
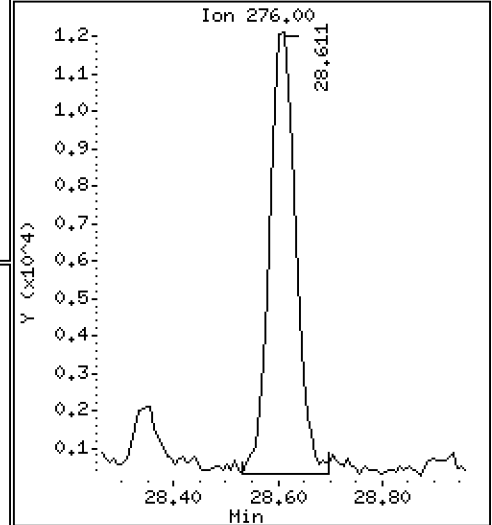
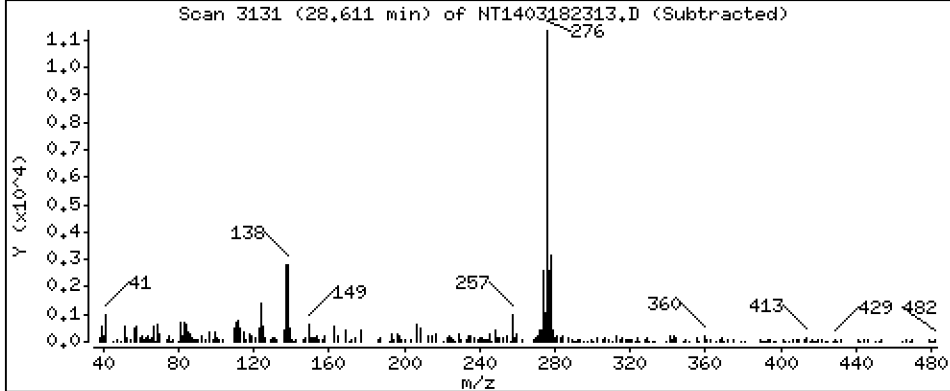
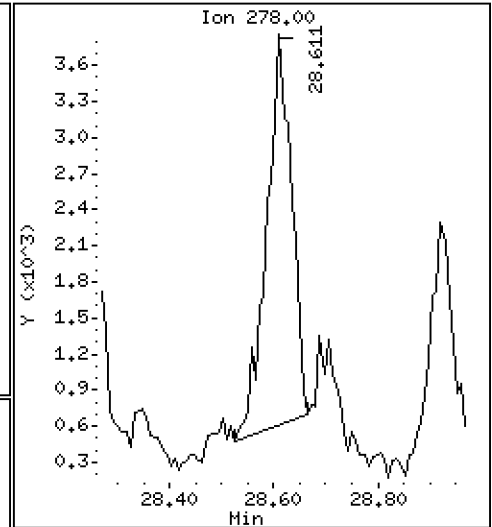
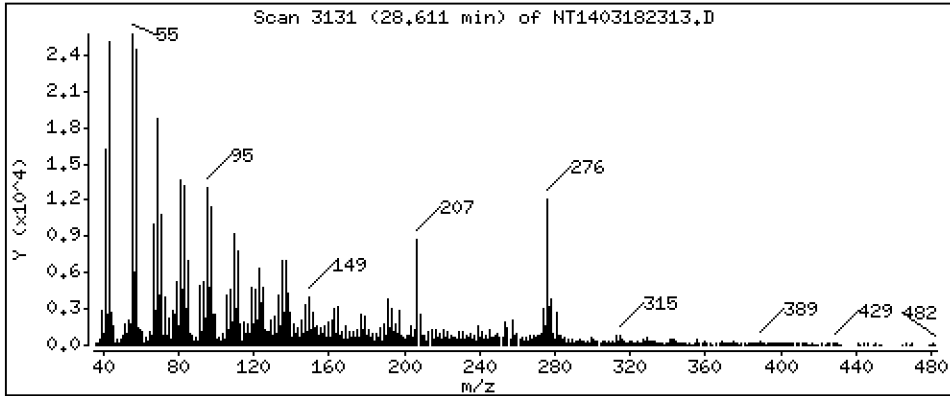
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2828 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

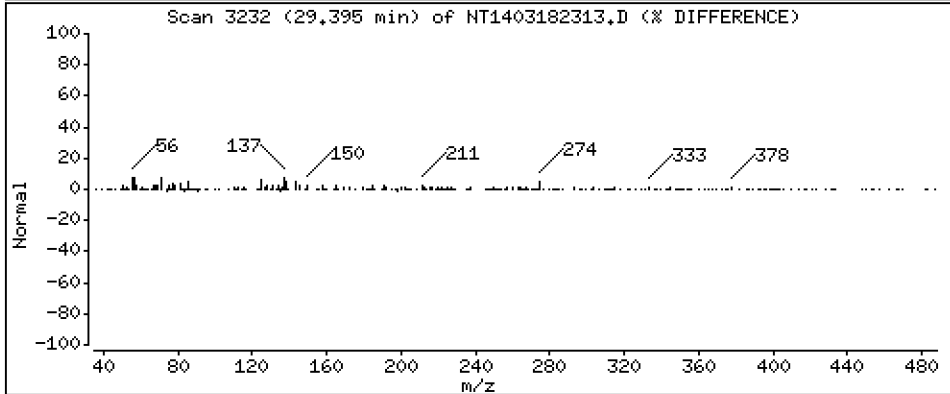
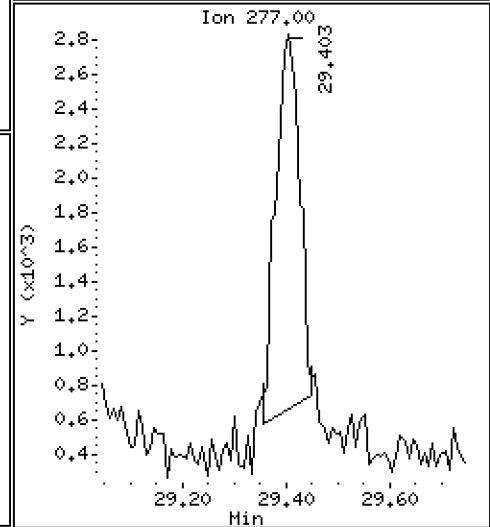
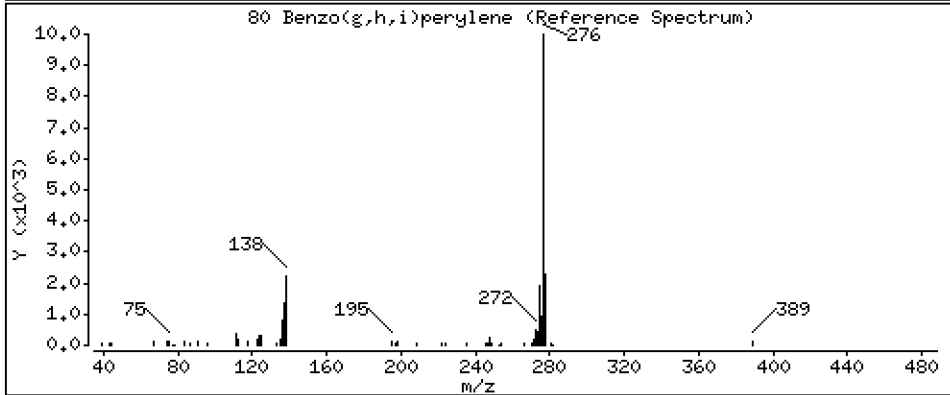
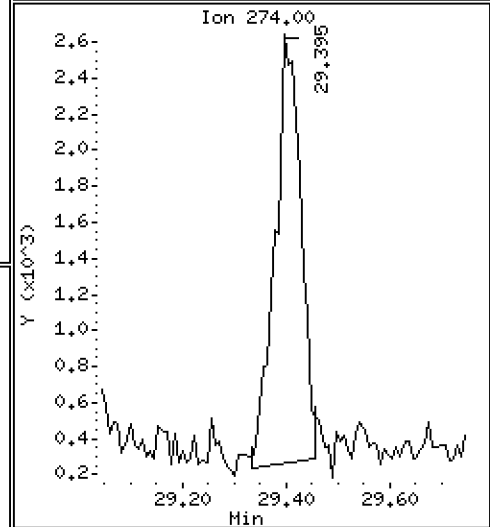
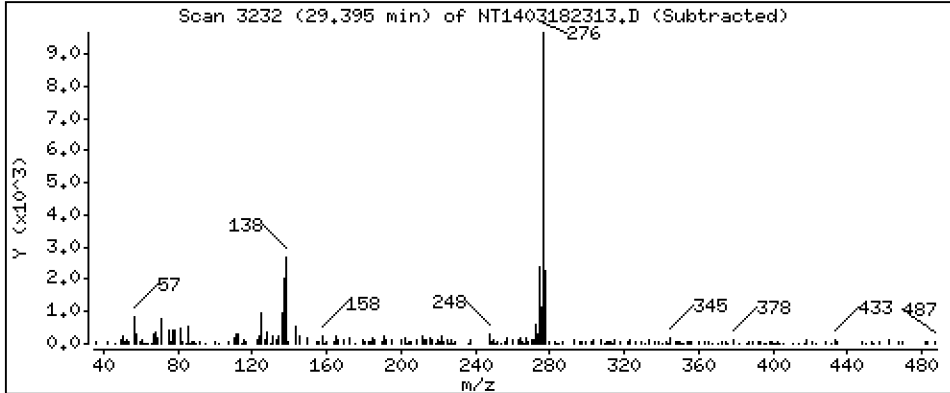
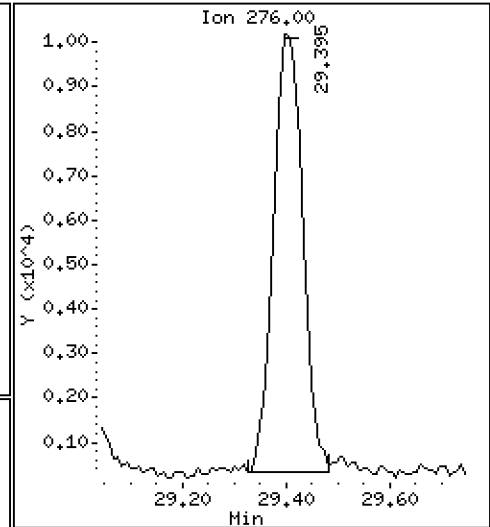
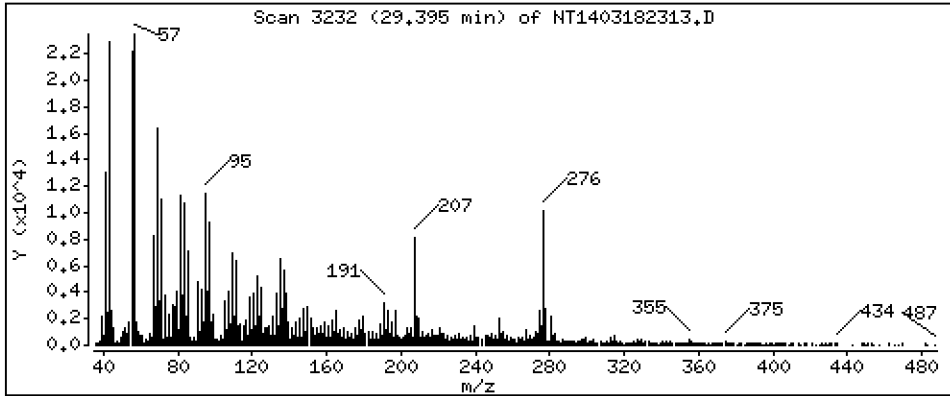
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 1,046 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

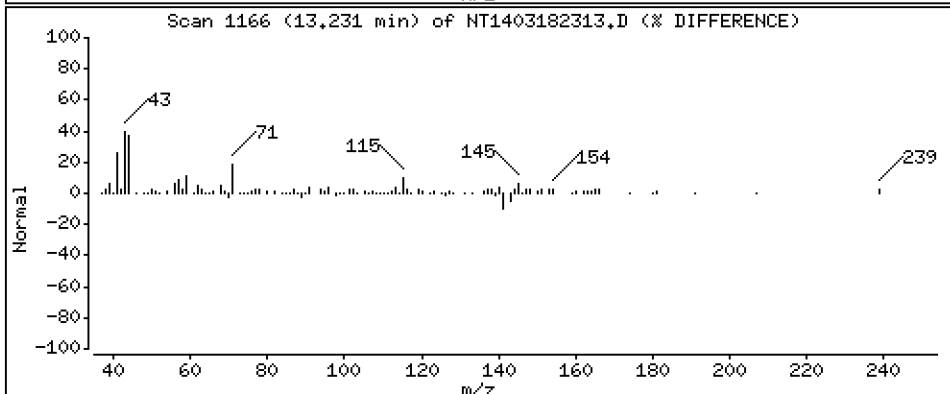
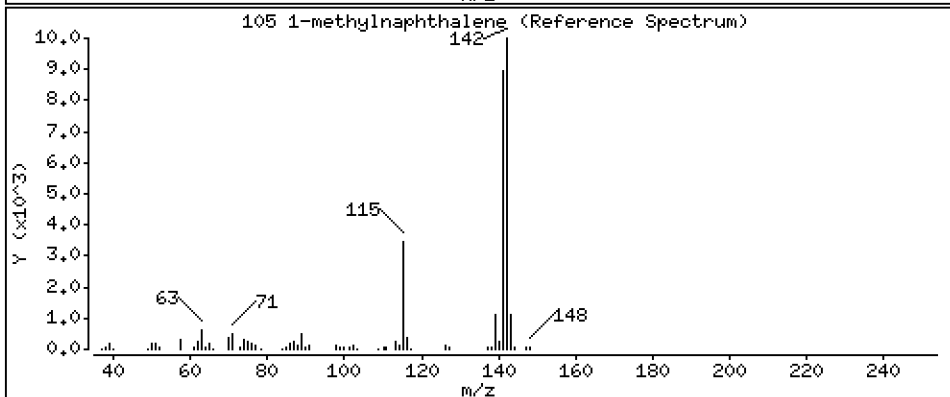
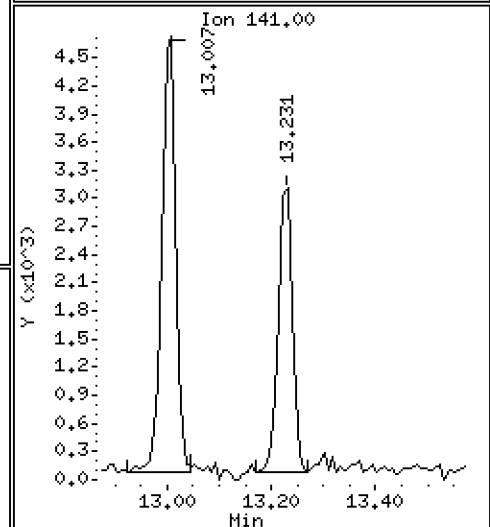
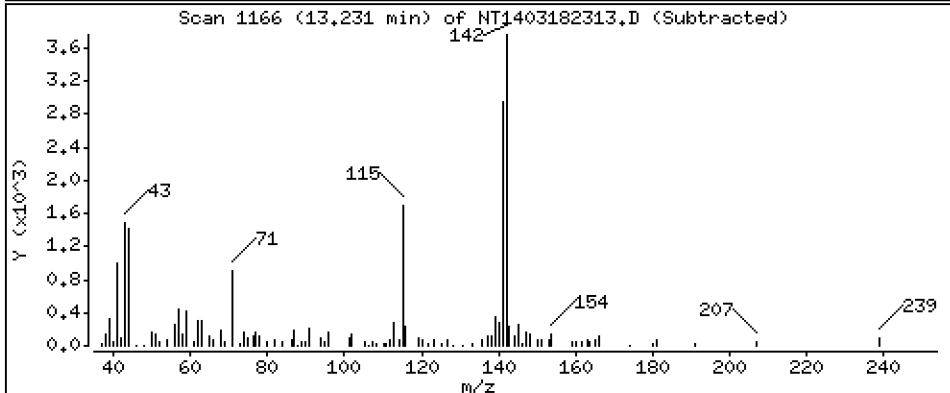
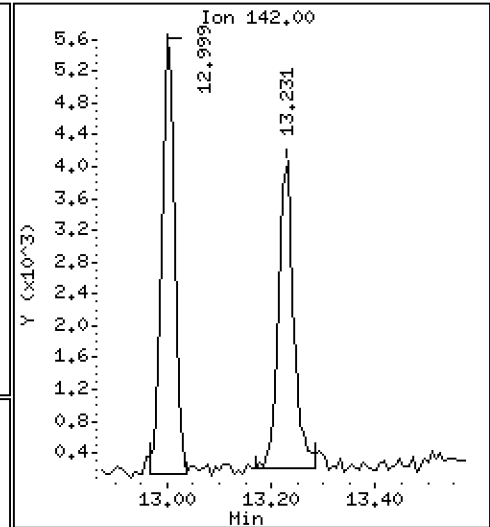
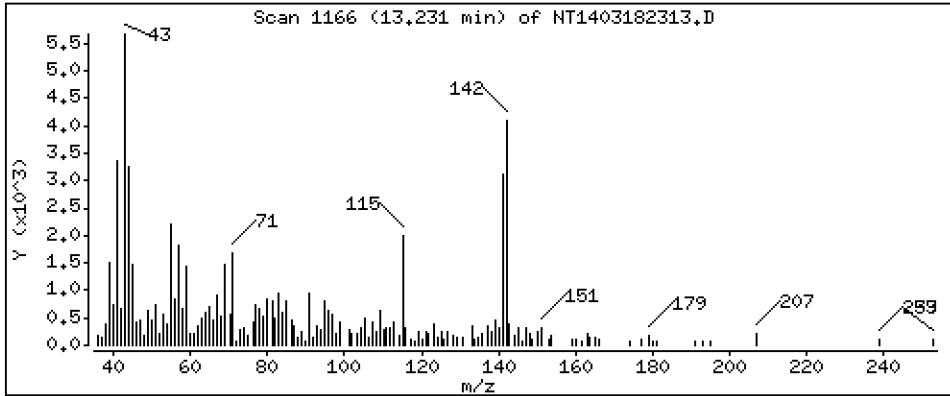
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1486 ug/mL



Date : 19-MAR-2023 00:16

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06RE1,4

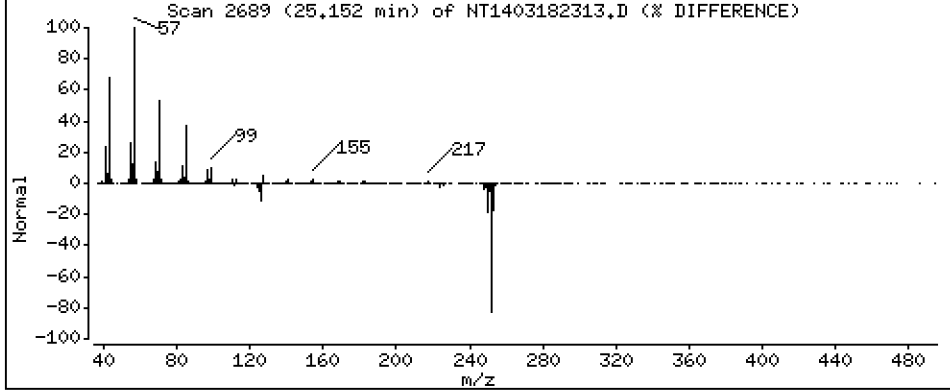
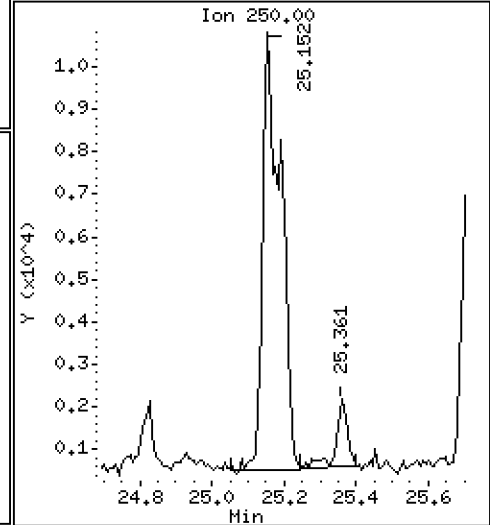
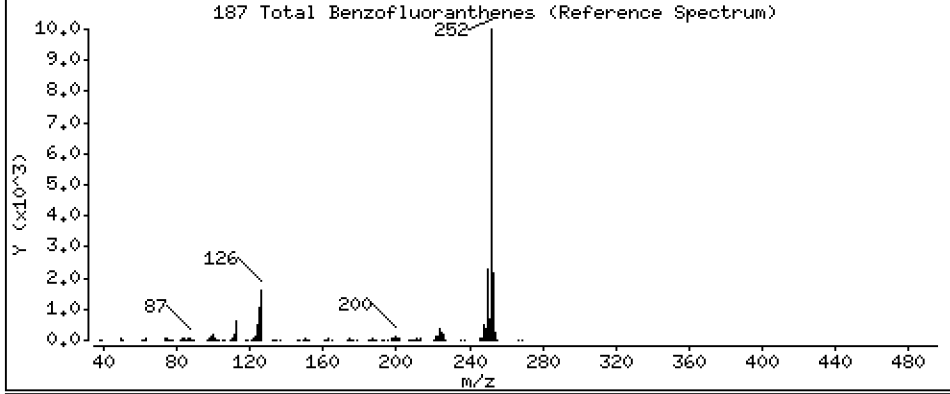
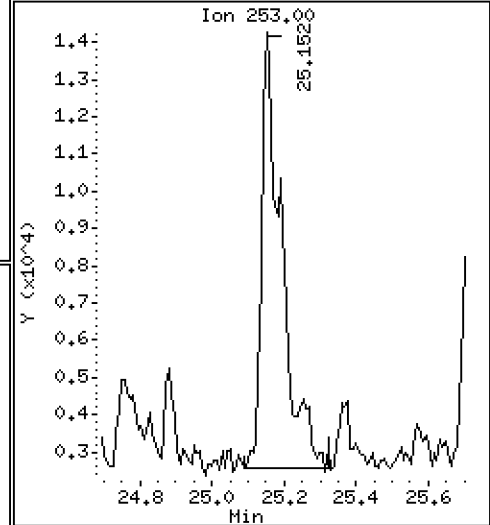
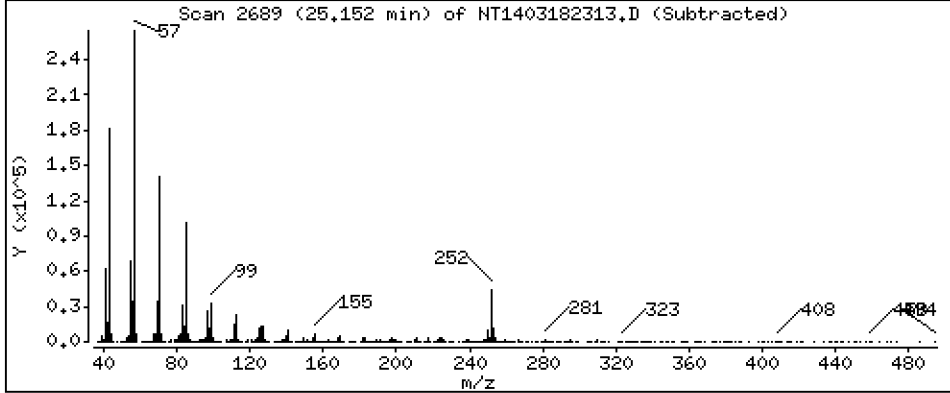
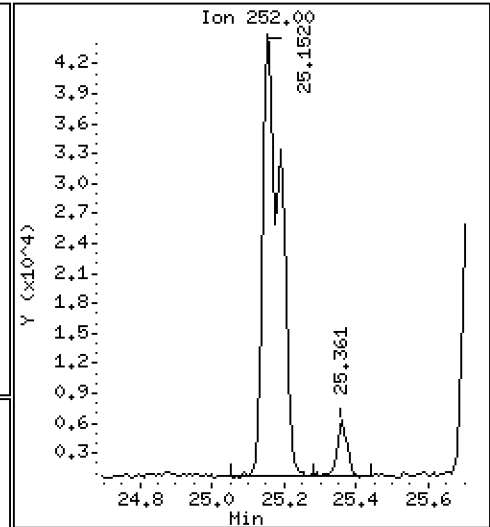
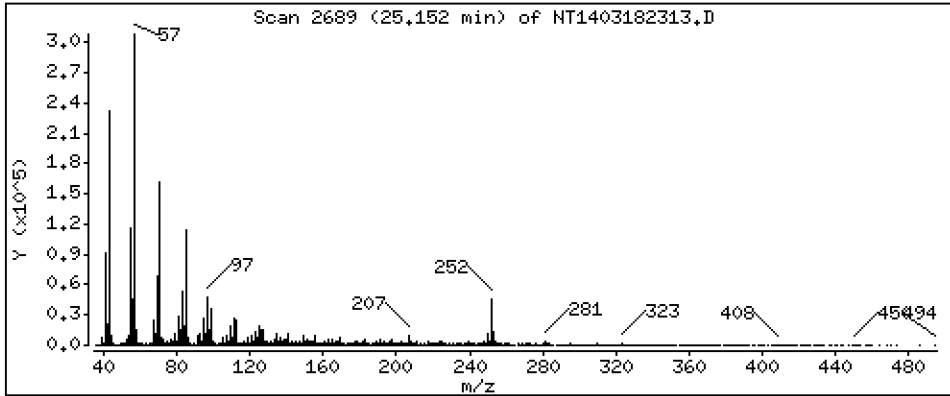
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 3,365 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182313.D
 Lab Smp Id: 23B0229-06RE1
 Inj Date : 19-MAR-2023 00:16 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-06RE1,4
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 10:18 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 12
 Dil Factor: 4.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.836	6.829	(1.000)	129305	1.24540	4.982
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	171388	1.25381	5.015
3 Phenol	94		8.443	8.435	(1.000)	9337	0.06427	0.2571
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	148619	1.37909	5.516
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	305654	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	1235	0.01108	0.04431
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	63083	0.87620	3.505
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.341	9.333	(1.000)	12847	0.18996	0.7598
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.831	9.830	(1.000)	2474	0.02034	0.08138
\$ 18 Nitrobenzene-d5	82		10.156	10.156	(0.879)	117236	0.92174	3.687
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.033	11.110	(0.954)	12024	0.14119	0.5648 (MH)
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.560	11.559	(1.000)	1201889	4.00000	
28 Naphthalene	128		11.598	11.598	(1.003)	17772	0.05535	0.2214
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		12.998	13.006	(1.124)	9032	0.04033	0.1613
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.788	13.787	(0.908)	220370	0.99341	3.974
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163		14.693	14.693	(0.967)	3867	0.01893	0.07573
40 Acenaphthylene	152		14.879	14.879	(0.980)	9632	0.03016	0.1206
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.189	15.188	(1.000)	612542	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153		15.258	15.258	(1.005)	5498	0.02949	0.1179
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168		15.583	15.583	(1.026)	10867	0.04082	0.1633
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.147	16.155	(1.063)	9450	0.04475	0.1790
49 Fluorene	166		16.302	16.301	(1.073)	10106	0.04005	0.1602
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.834	16.833	(1.108)	35692	1.48202	5.928
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.240	18.232	(1.000)	1063558	4.00000	
60 Phenanthrene	178		18.286	18.286	(1.003)	71393	0.23494	0.9398
61 Anthracene	178		18.379	18.379	(1.008)	35526	0.12135	0.4854
62 Carbazole	167		18.712	18.704	(1.026)	10888	0.04180	0.1672
63 Di-n-butylphthalate	149		19.509	19.501	(1.070)	7710	0.02335	0.09341
64 Fluoranthene	202		20.693	20.669	(0.888)	159718	0.81663	3.267
65 Pyrene	202		21.103	21.095	(0.906)	171302	0.85407	3.416
\$ 66 Terphenyl-d14	244		21.381	21.381	(0.918)	180177	1.32698	5.308
67 Butylbenzylphthalate	149		22.303	22.302	(0.957)	4170	0.04746	0.1898
68 Benzo(a)anthracene	228		23.263	23.263	(0.999)	56173	0.31690	1.268
* 69 Chrysene-d12	240		23.294	23.294	(1.000)	480731	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228		23.332	23.332	(1.002)	76122	0.47451	1.898
72 bis(2-Ethylhexyl)phthalate	149		23.325	23.324	(0.959)	70660	0.49464	1.979
* 134 Di-n-octylphthalate-d4	153		24.316	24.315	(1.000)	1085158	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252		25.152	25.152	(0.970)	92464	0.48214	1.929
75 Benzo(k)fluoranthene	252		25.190	25.198	(0.971)	69812	0.36722	1.469 (M)
76 Benzo(a)pyrene	252		25.810	25.810	(0.995)	53679	0.32732	1.309
* 77 Perylene-d12	264		25.934	25.926	(1.000)	542713	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.610	28.610	(1.103)	41038	0.22991	0.9197
79 Dibenzo(a,h)anthracene	278		28.610	28.618	(1.103)	10635	0.07070	0.2828 (M)
80 Benzo(g,h,i)perylene	276		29.395	29.395	(1.133)	38462	0.26146	1.046
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.230	13.223	(1.145)	7535	0.03714	0.1486
111 Azobenzene (1,2-DP-Hydrazine)	77							

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.152	25.198	(0.970)	152996	0.84133	3.365
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 18-MAR-2023
 Lab File ID: NT1403182313.D Calibration Time: 17:38
 Lab Smp Id: 23B0229-06RE1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	247621	123811	495242	305654	23.44
27 Naphthalene-d8	955275	477638	1910550	1201889	25.82
42 Acenaphthene-d10	510589	255295	1021178	612542	19.97
59 Phenanthrene-d10	920812	460406	1841624	1063558	15.50
69 Chrysene-d12	546688	273344	1093376	480731	-12.06
134 Di-n-octylphthala	1067789	533895	2135578	1085158	1.63
77 Perylene-d12	445520	222760	891040	542713	21.82

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.23	17.73	18.73	18.24	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.03

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

REVIEW SUMMARY FOR FILE - NT1403182313.D

Lab ID: 23B0229-06RE1
nt14.i, ABN.m, 19-MAR-2023 00:16

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.954	0.961	-0.0067	Benzoic acid

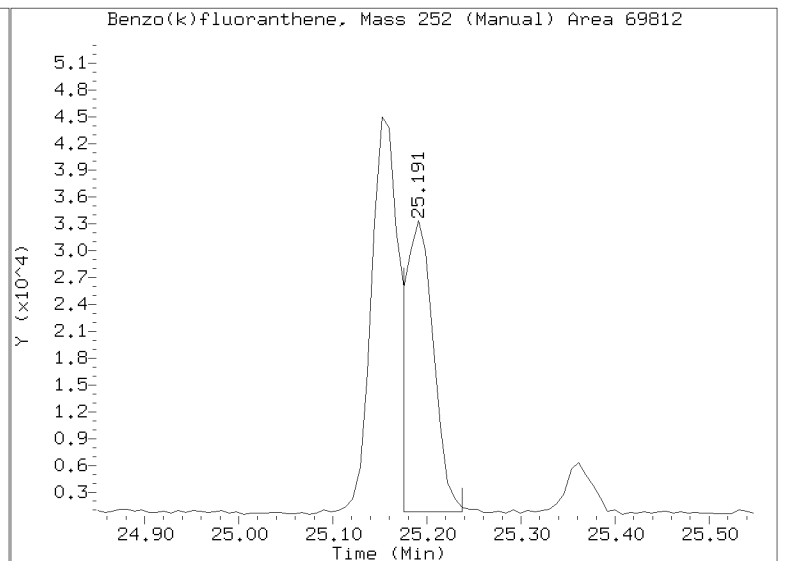
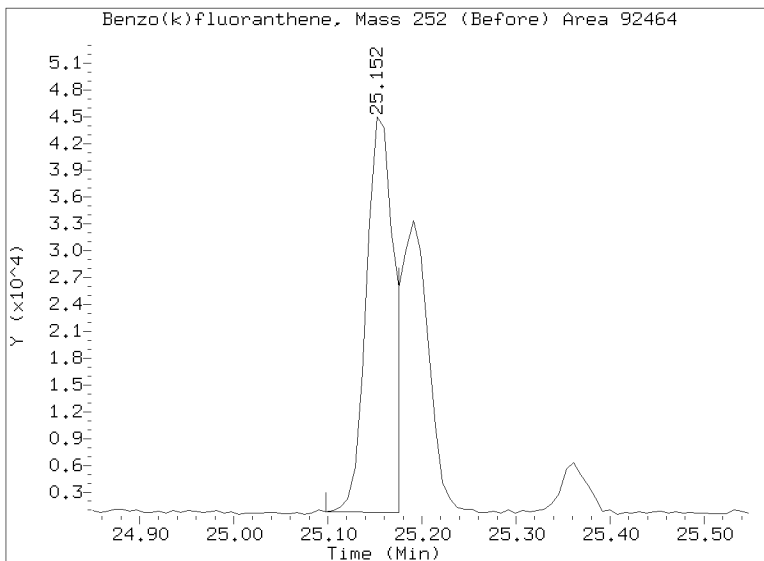
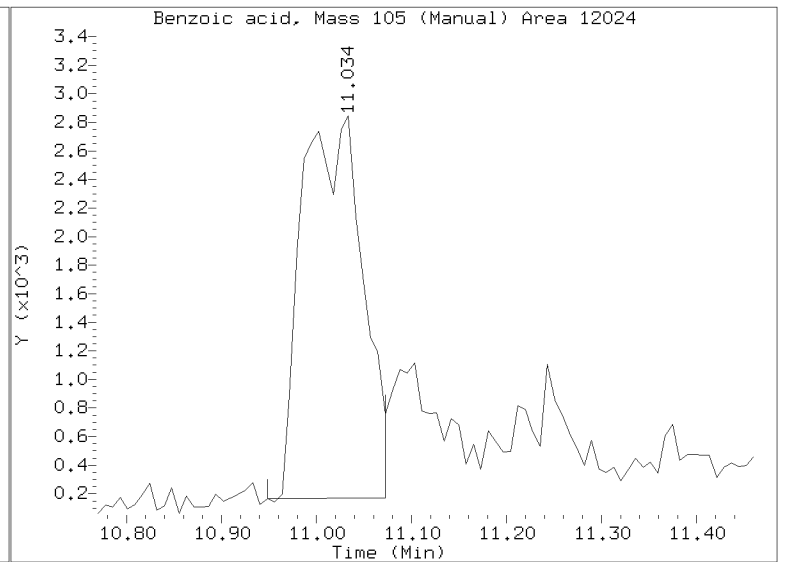
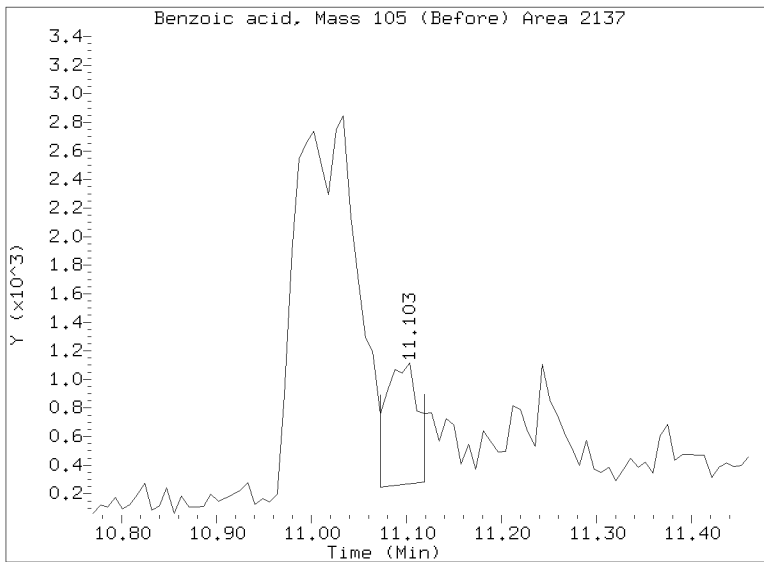
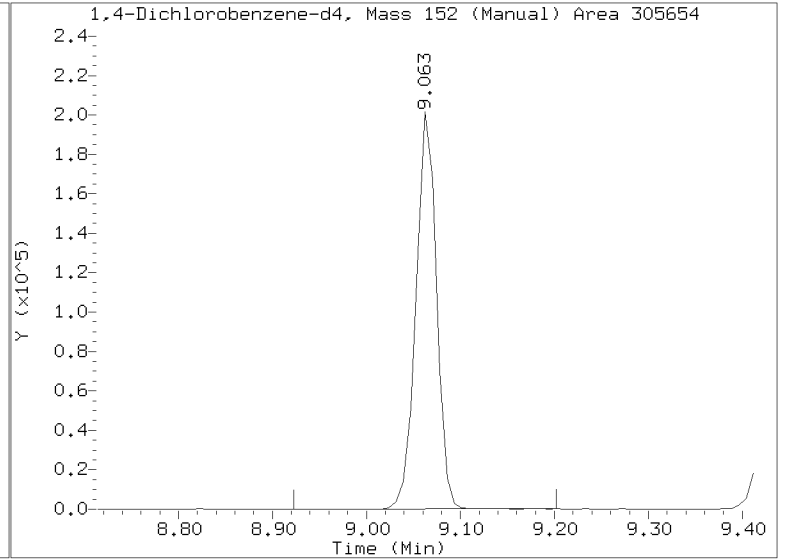
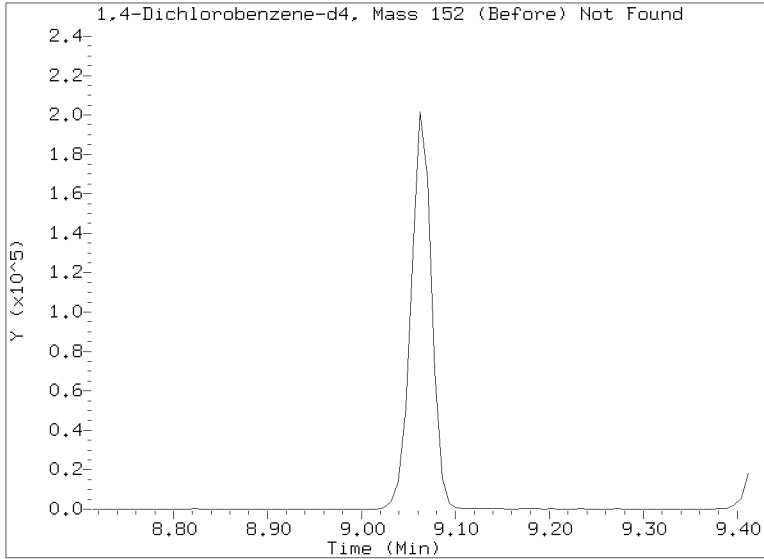
RRT check based on Ccal File: NT1403182302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

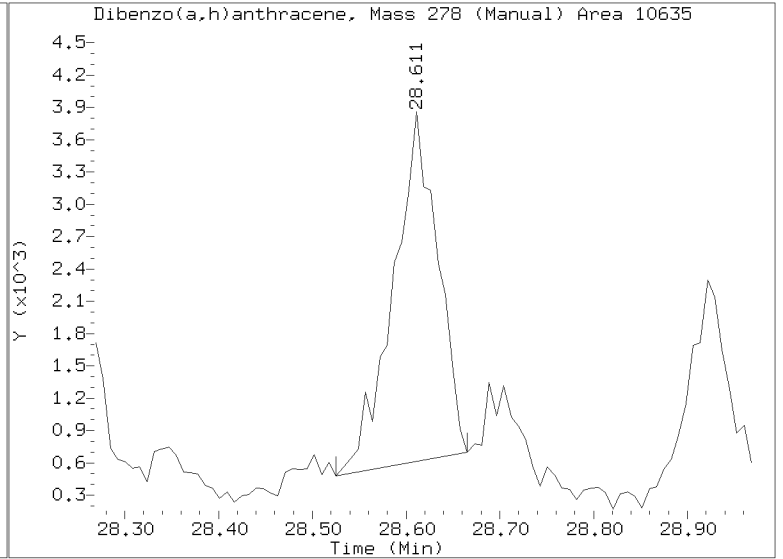
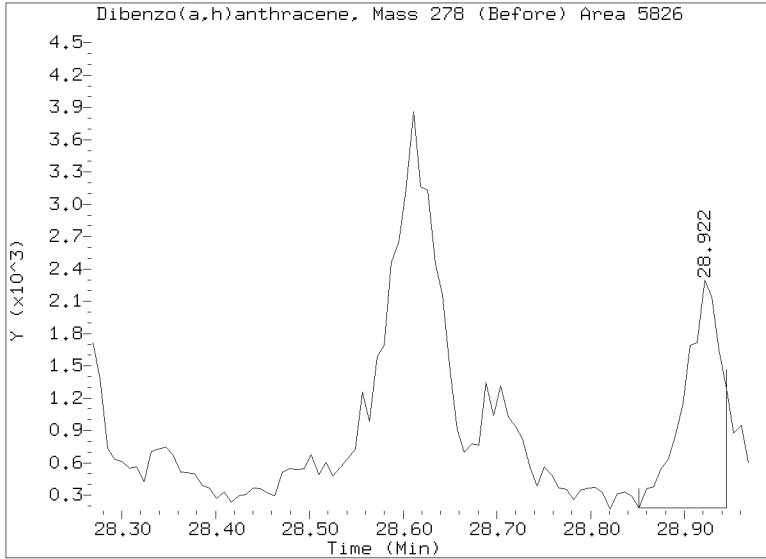
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182313.D
Injection Date: 19-MAR-2023 00:16
Lab ID:23B0229-06RE1 Client ID:
Report Date: 03/23/2023 11:34



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182313.D
Injection Date: 19-MAR-2023 00:16
Lab ID:23B0229-06RE1 Client ID:
Report Date: 03/23/2023 11:34





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-08 A

SDG: 23B0229

Sampled: 02/08/23 15:25

Prepared: 02/17/23 15:00

File ID: NT1403172326.D

% Solids: 49.68

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 05:30

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	60.8		4.3	19.4
106-44-5	4-Methylphenol	1	28.0		7.2	19.4
91-20-3	Naphthalene	1	20.4		4.1	19.4
91-57-6	2-Methylnaphthalene	1	15.9	J	4.4	19.4
208-96-8	Acenaphthylene	1	7.6	J	6.0	19.4
131-11-3	Dimethylphthalate	1	19.4	U	4.3	19.4
83-32-9	Acenaphthene	1	13.3	J	5.1	19.4
132-64-9	Dibenzofuran	1	17.0	J	13.7	19.4
86-73-7	Fluorene	1	17.6	J	14.1	19.4
85-01-8	Phenanthrene	1	93.9		8.4	19.4
120-12-7	Anthracene	1	37.1		7.0	19.4
206-44-0	Fluoranthene	1	427	Q	5.9	19.4
129-00-0	Pyrene	1	406		5.5	19.4
85-68-7	Butylbenzylphthalate	1	30.9	Q	9.1	19.4
56-55-3	Benzo(a)anthracene	1	115		5.8	19.4
218-01-9	Chrysene	1	162		5.9	19.4
117-81-7	bis(2-Ethylhexyl)phthalate	1	251		5.3	48.4
	Benzo(a)fluoranthene, Total	1	373		9.7	38.7
50-32-8	Benzo(a)pyrene	1	121		4.1	19.4
193-39-5	Indeno(1,2,3-cd)pyrene	1	72.5		14.2	19.4
53-70-3	Dibenzo(a,h)anthracene	1	24.8	Q	16.7	19.4
191-24-2	Benzo(g,h,i)perylene	1	77.1	Q	13.2	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	726.50	529	72.8	27 - 120	
Phenol-d5	726.50	550	75.7	29 - 120	
2-Chlorophenol-d4	726.50	597	82.1	31 - 120	
1,2-Dichlorobenzene-d4	484.33	369	76.1	32 - 120	
Nitrobenzene-d5	484.33	407	84.1	30 - 120	
2-Fluorobiphenyl	484.33	448	92.5	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-08 A

SDG: 23B0229

Sampled: 02/08/23 15:25

Prepared: 02/17/23 15:00

File ID: NT1403172326.D

% Solids: 49.68

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 05:30

Batch: BLB0424

Sequence: SLC0335

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	726.50	647	89.1	24 - 134	
p-Terphenyl-d14	484.33	721	149	37 - 120	*,Q

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172326.D

Date: 18-MAR-2023 05:30

Client ID:

Sample Info: 23B0229-08

Page 1

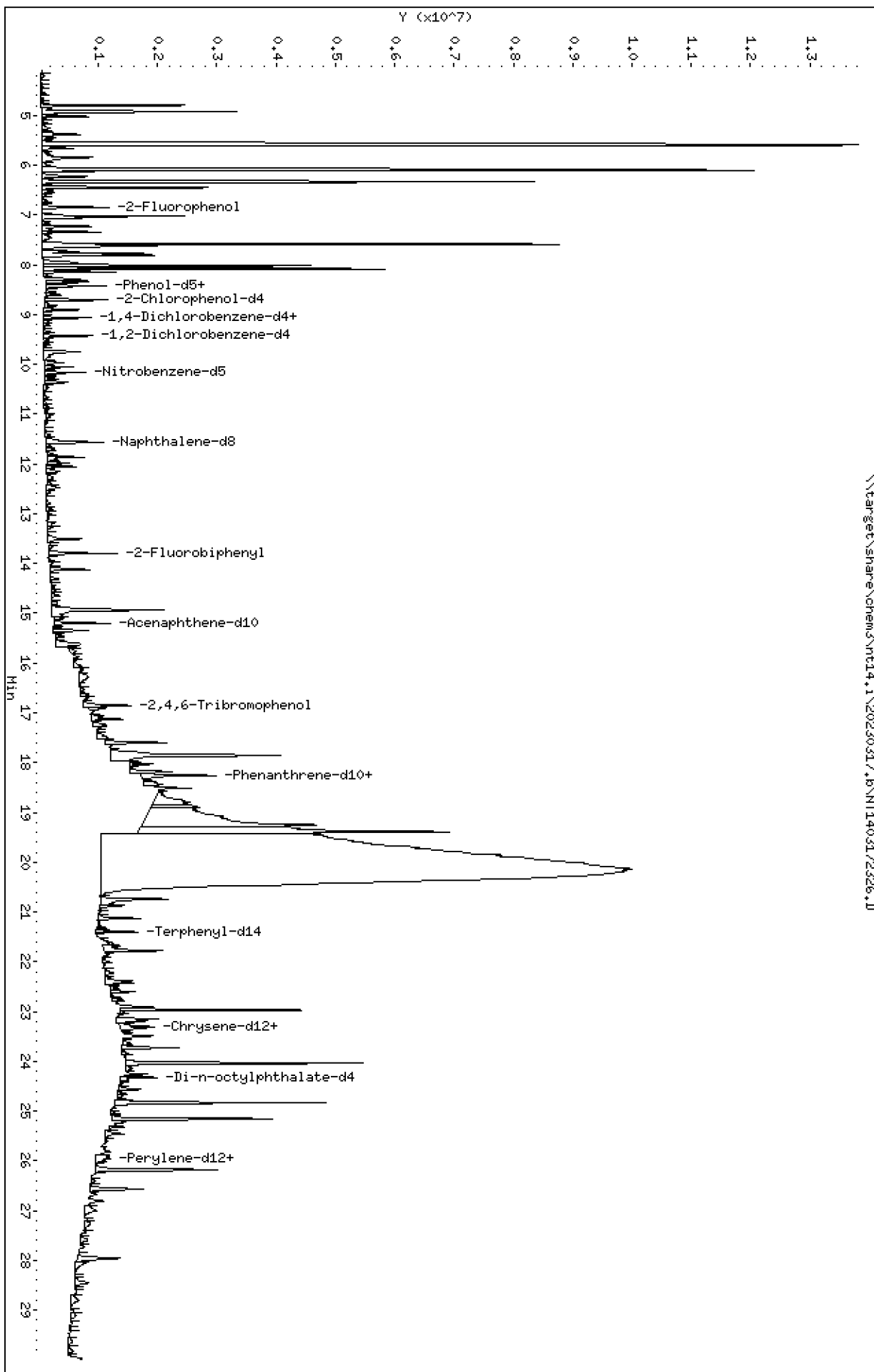
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172326.D



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

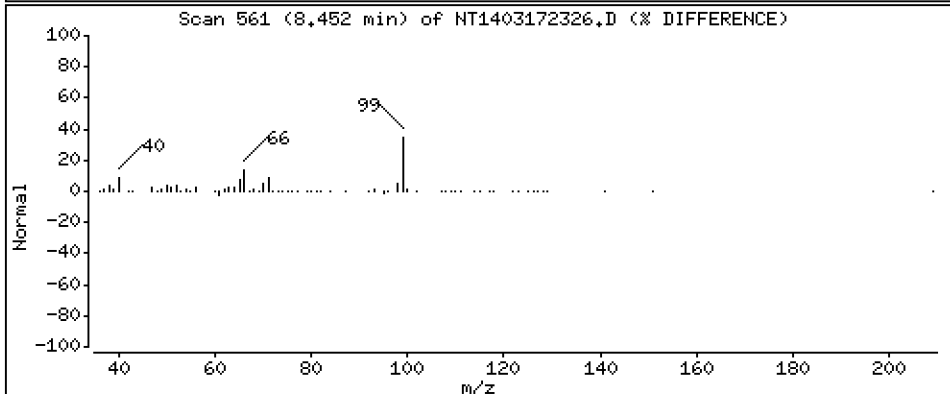
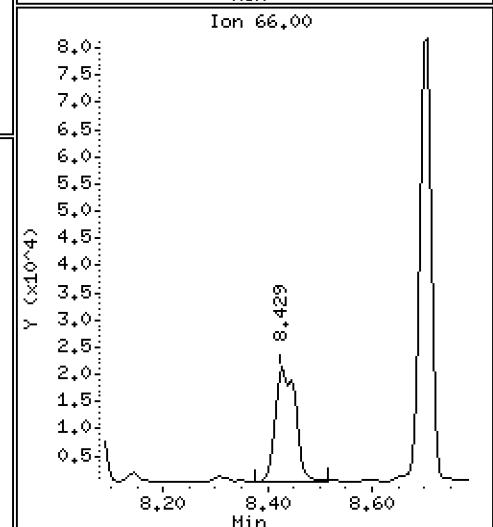
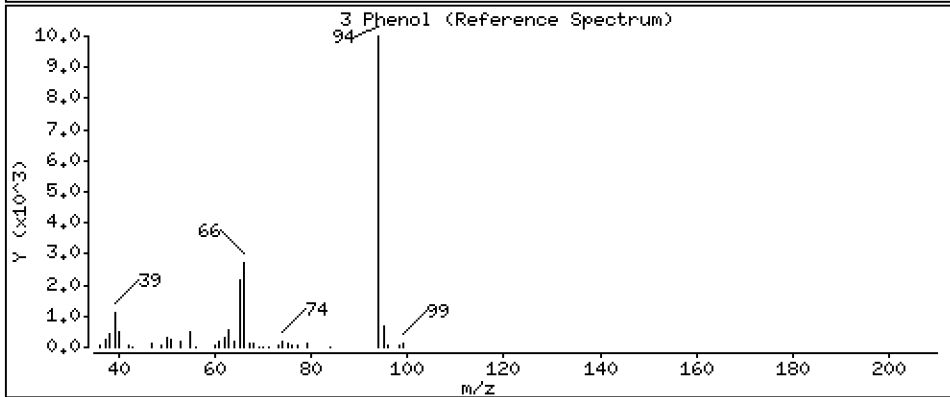
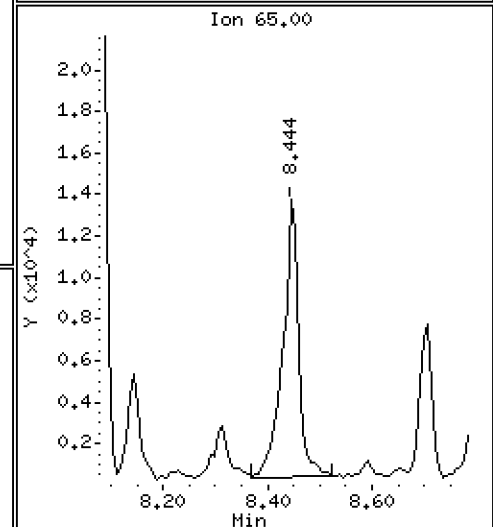
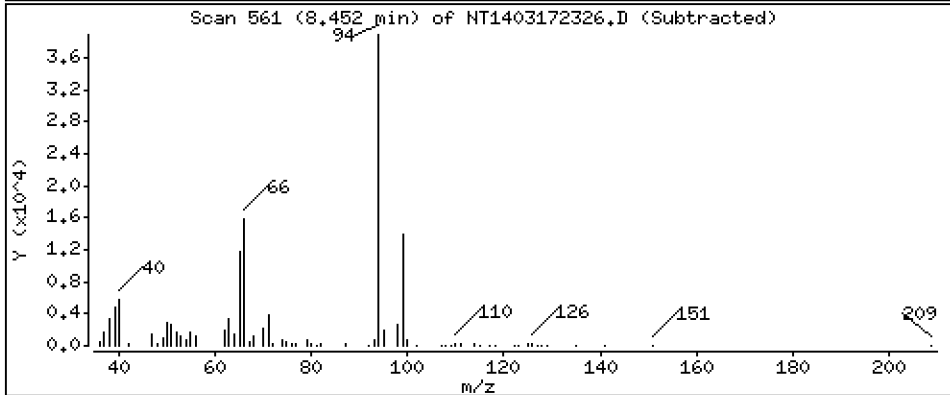
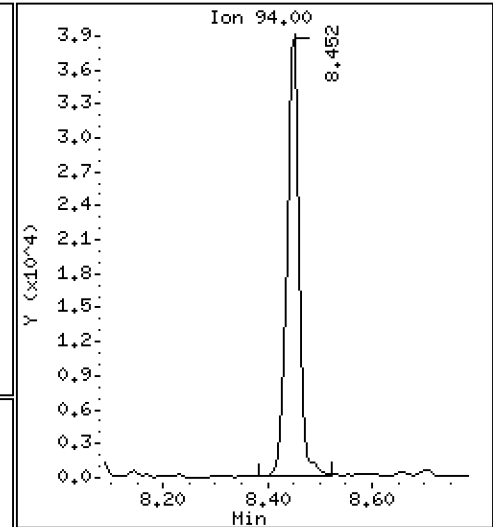
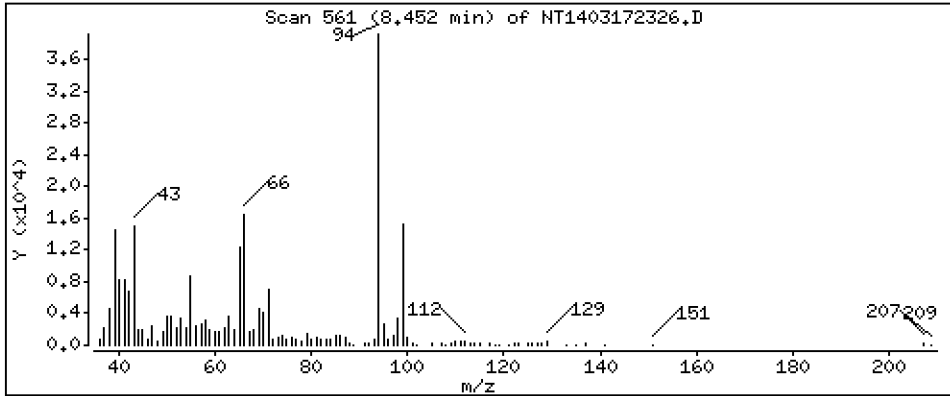
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.6281 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

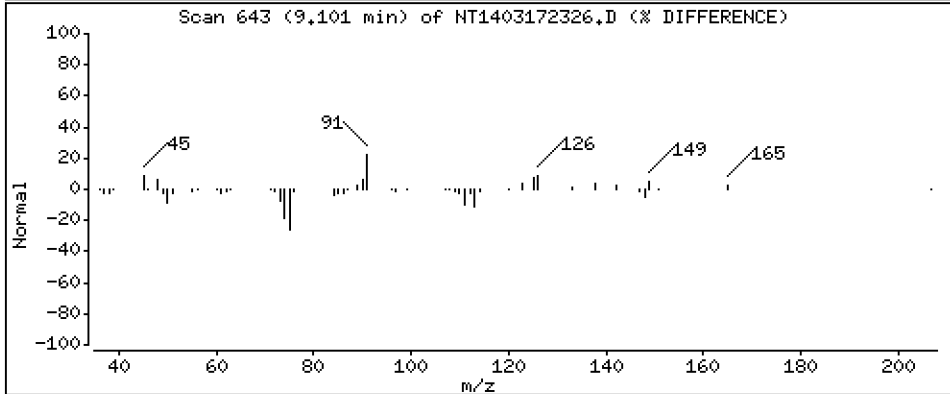
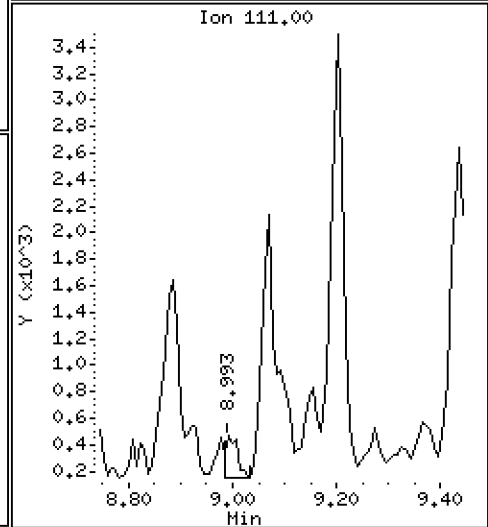
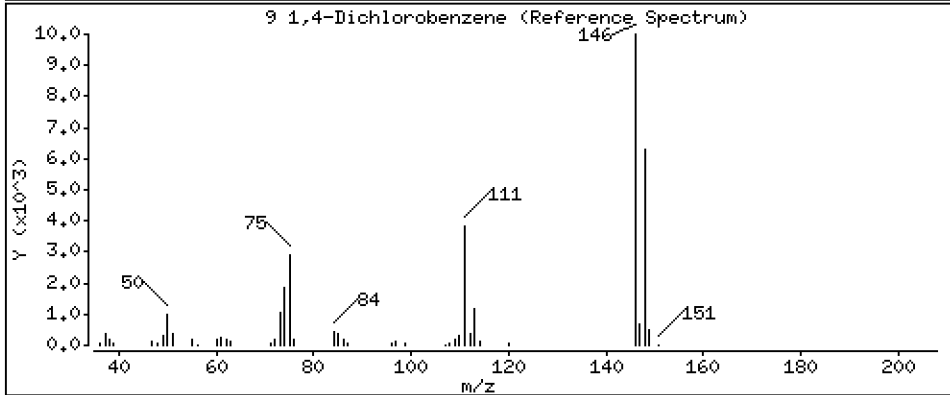
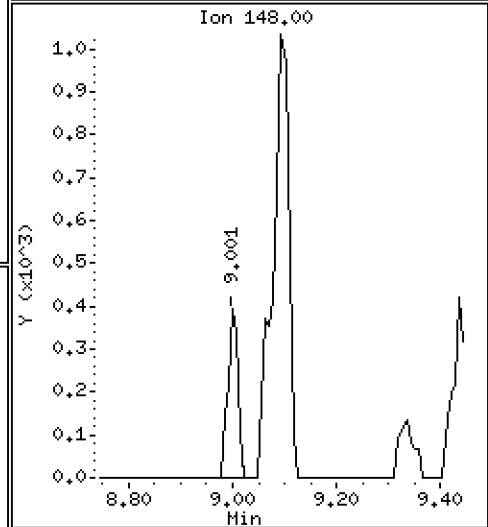
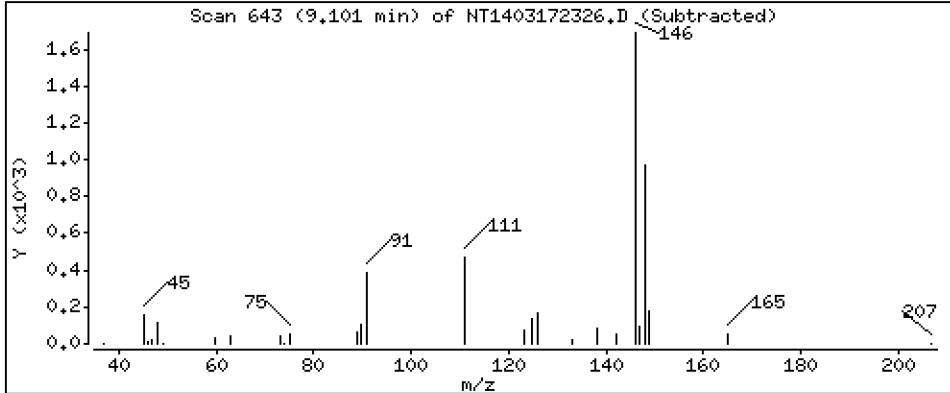
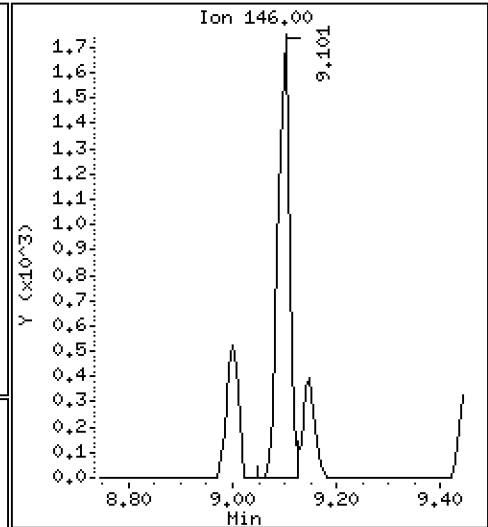
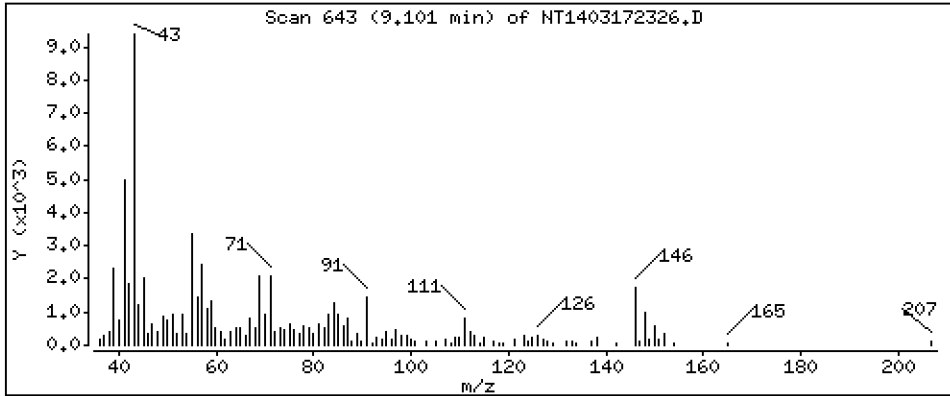
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.03212 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

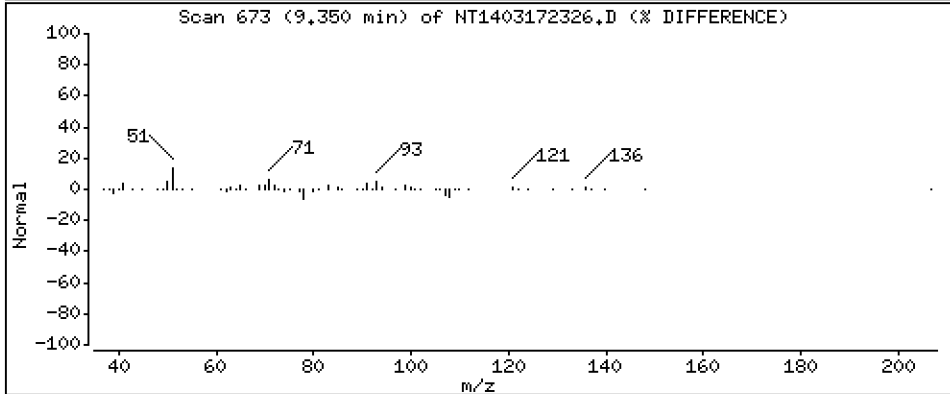
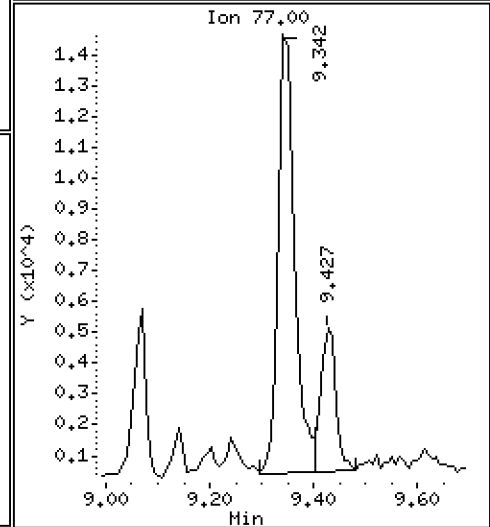
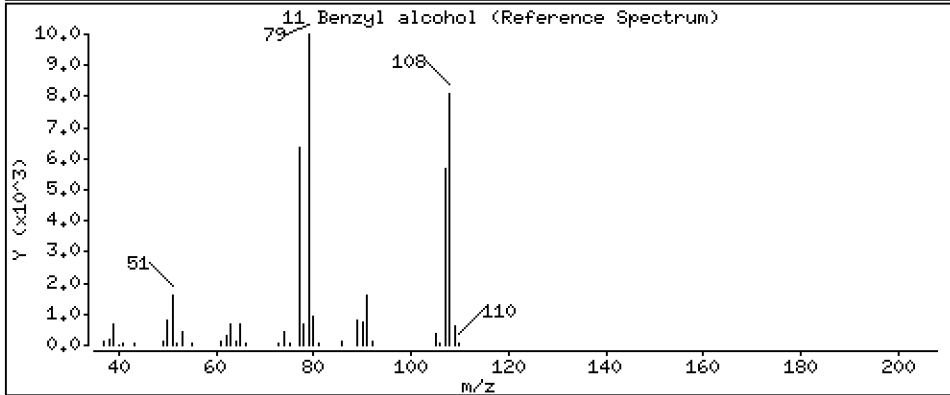
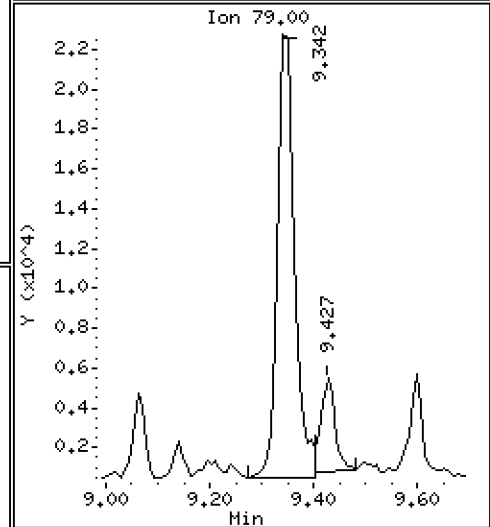
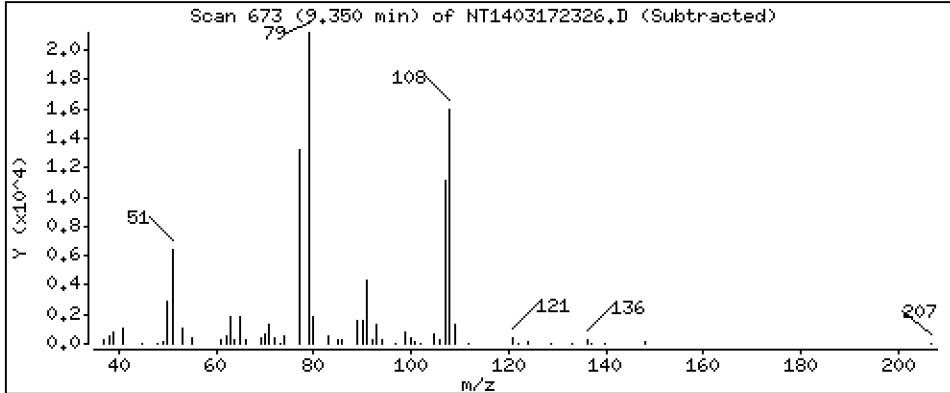
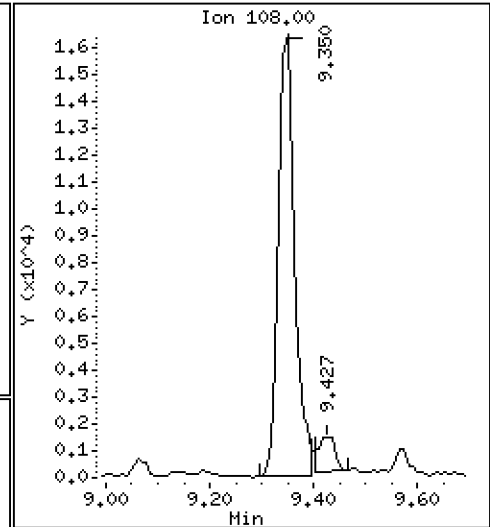
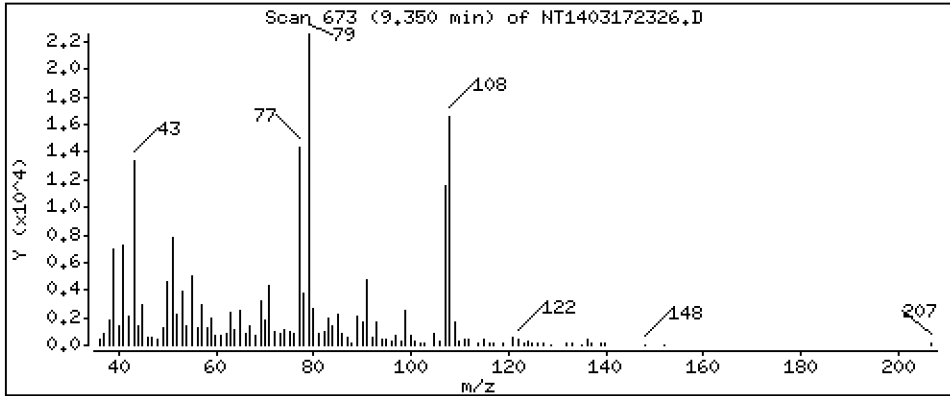
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.7265 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

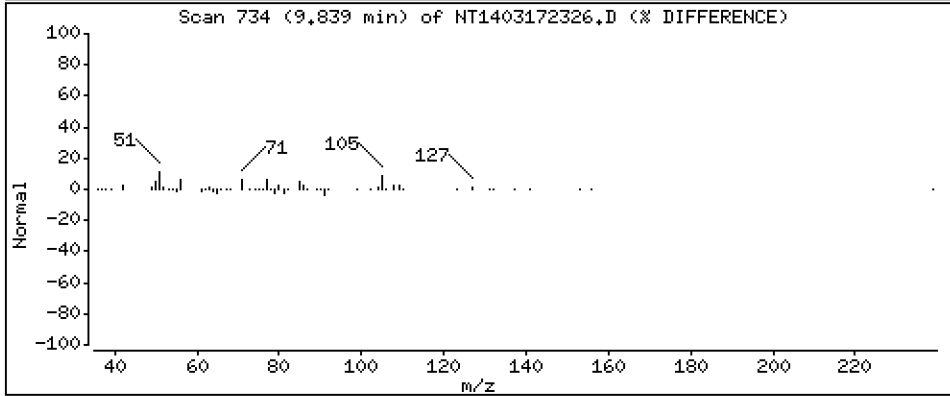
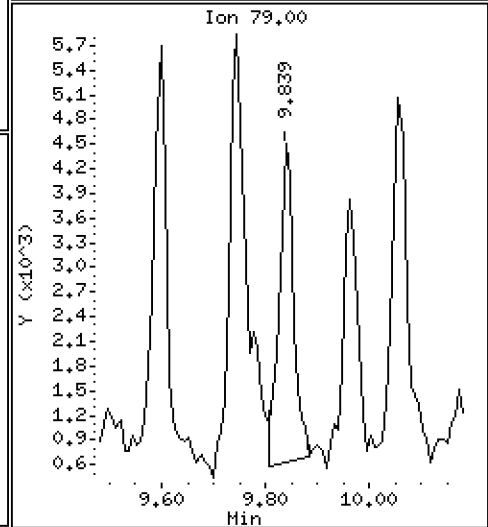
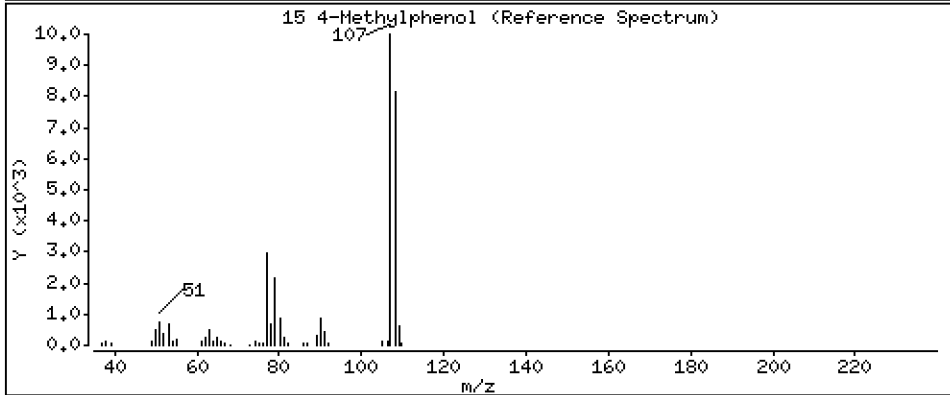
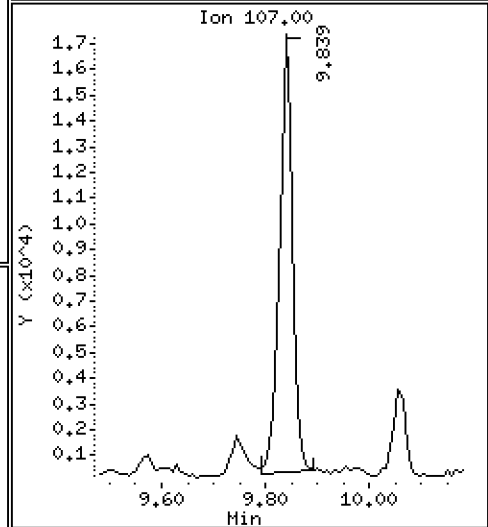
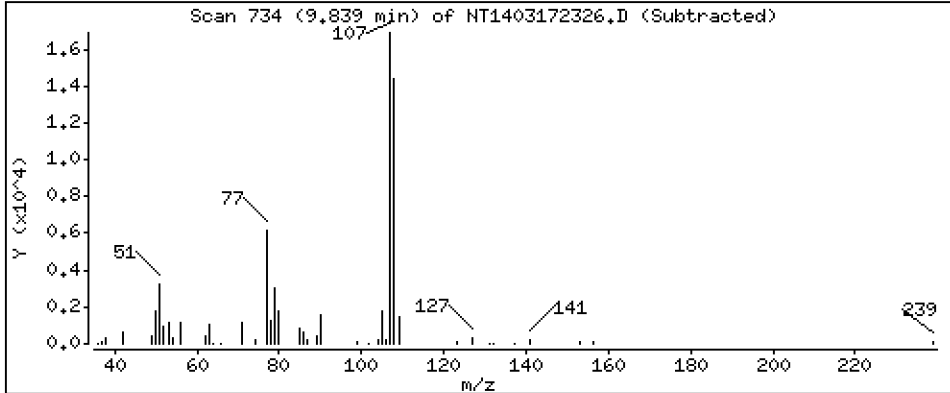
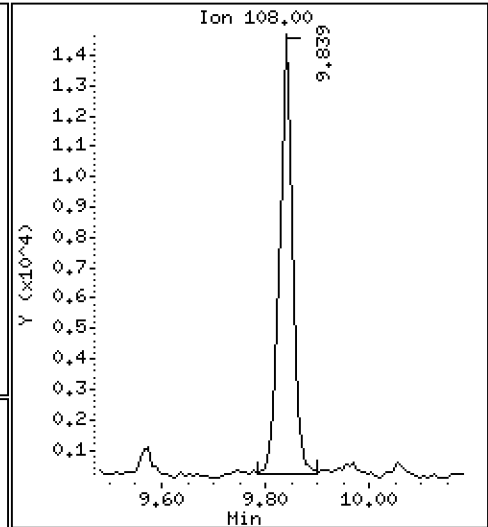
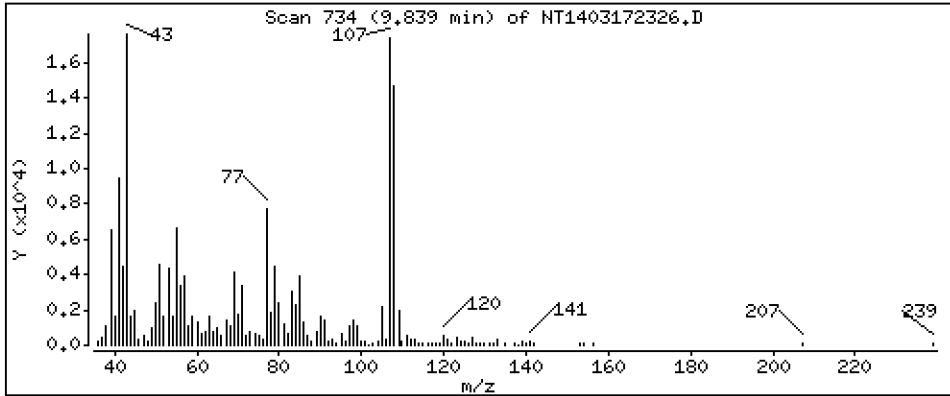
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.2891 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

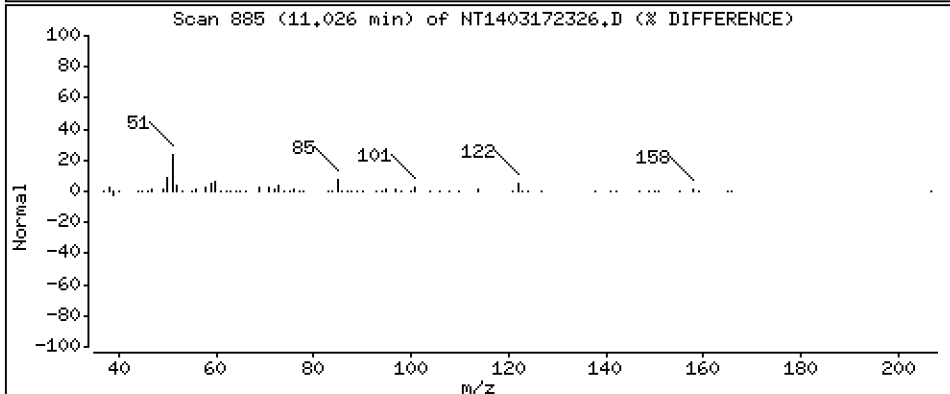
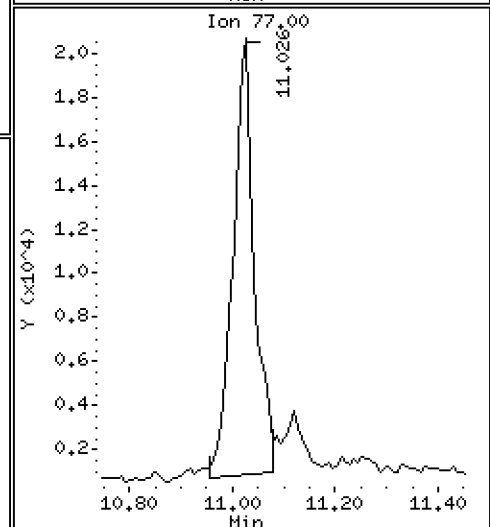
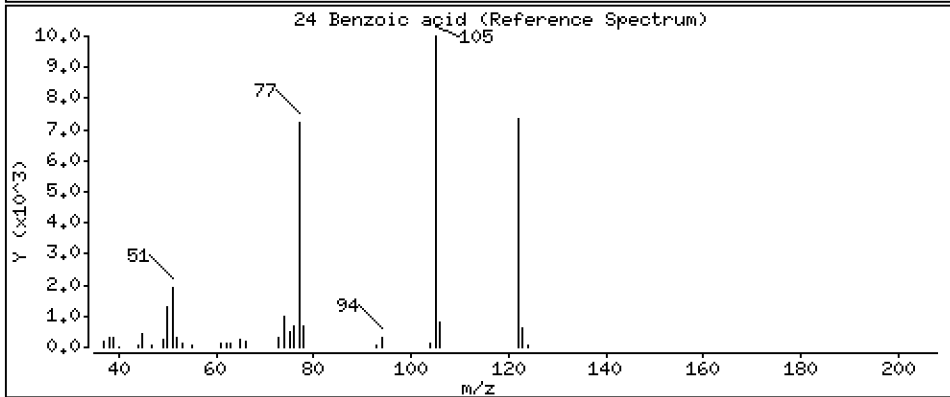
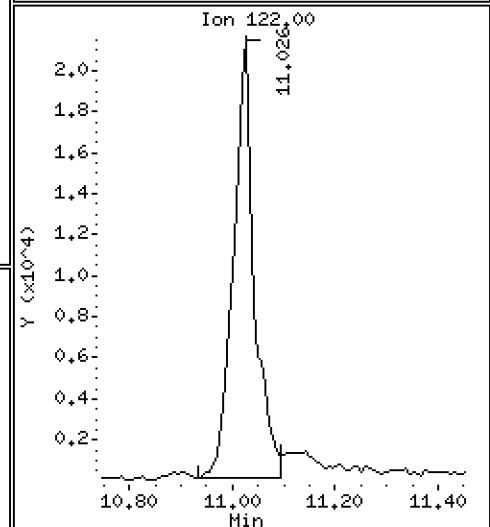
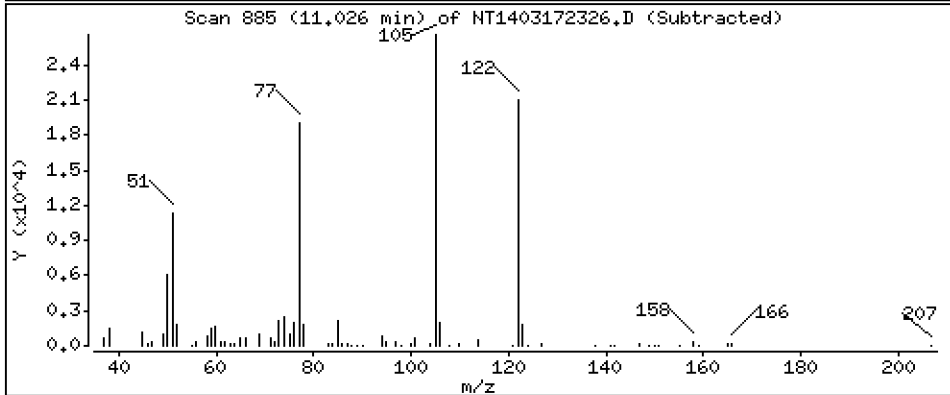
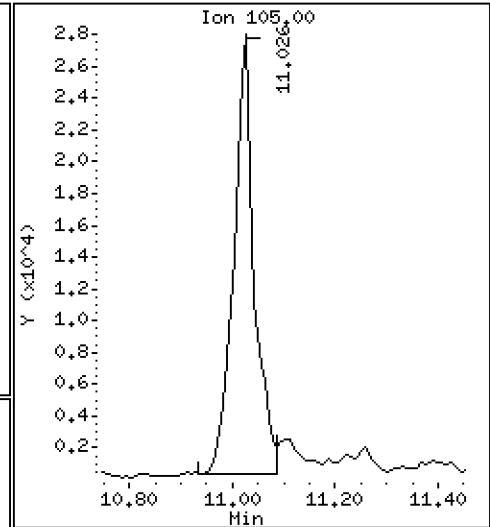
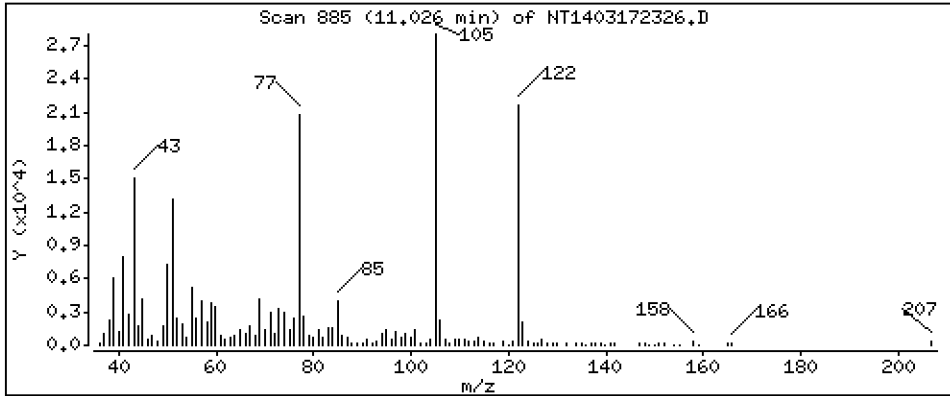
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 1.266 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

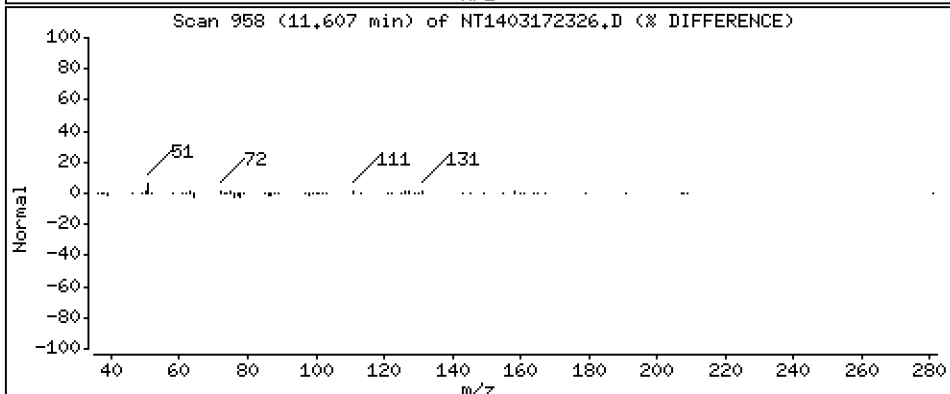
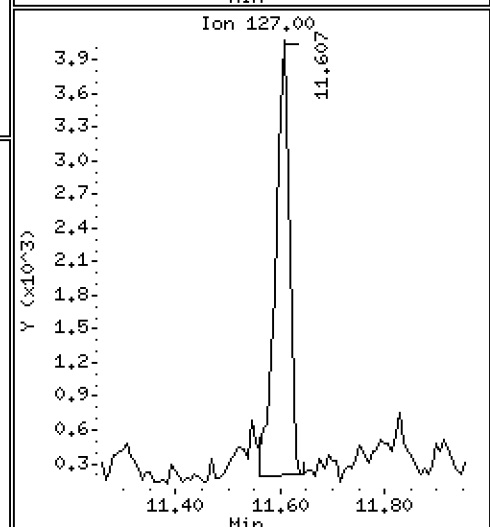
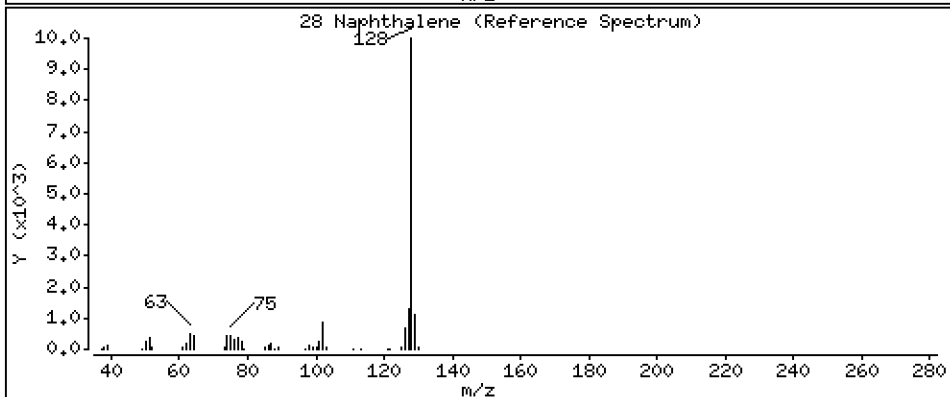
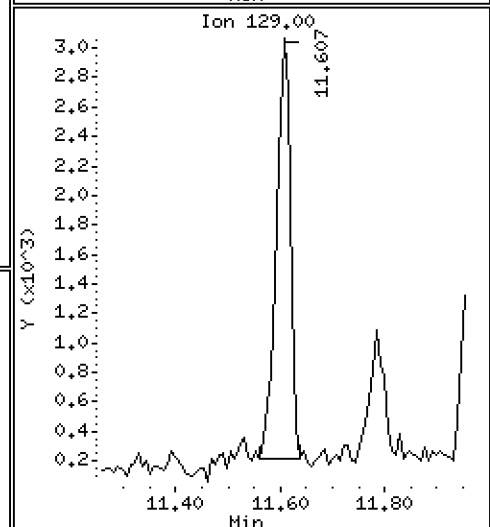
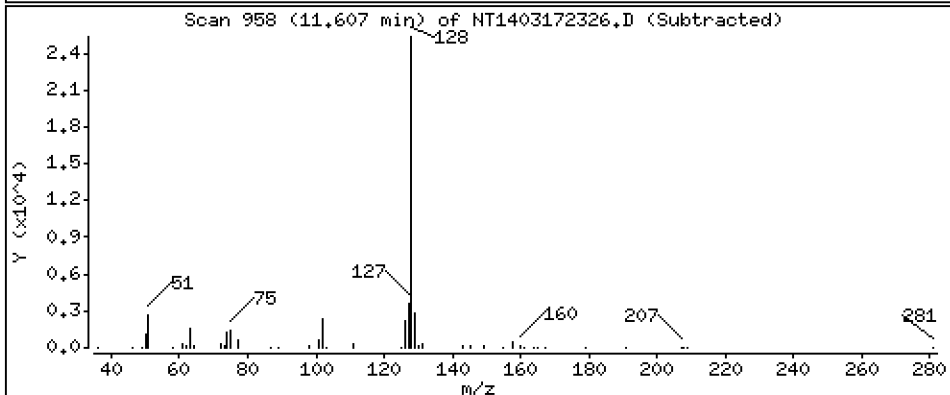
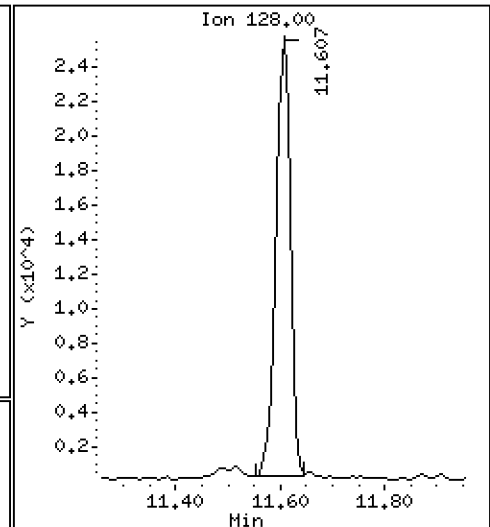
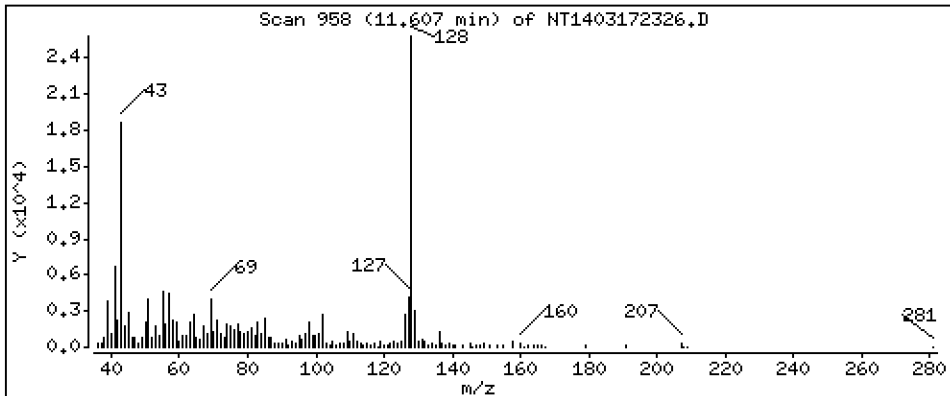
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2102 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

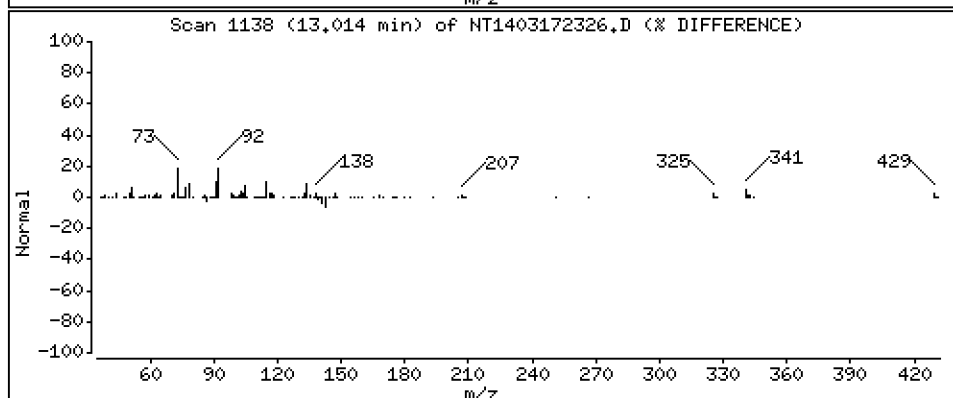
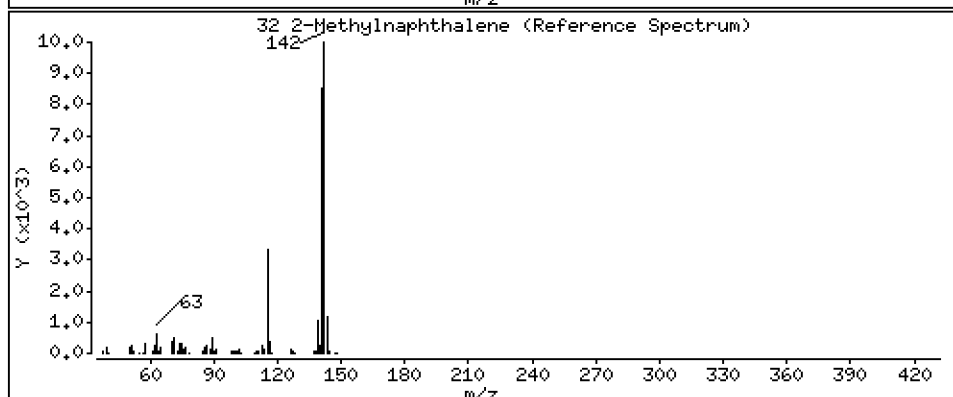
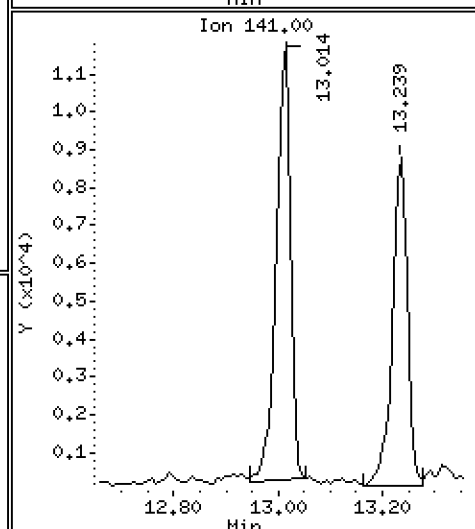
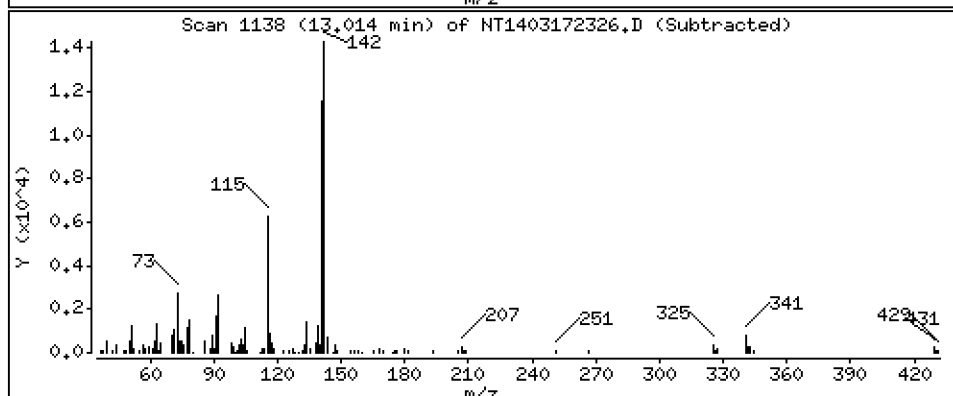
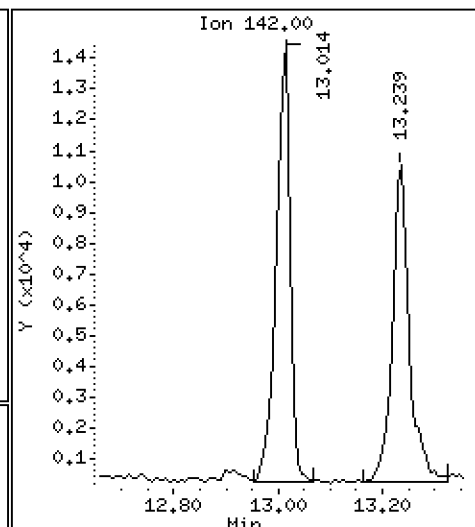
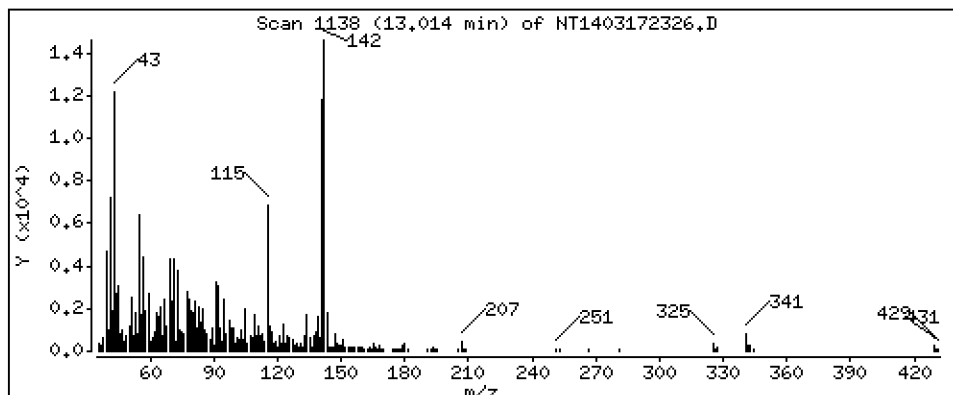
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1640 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

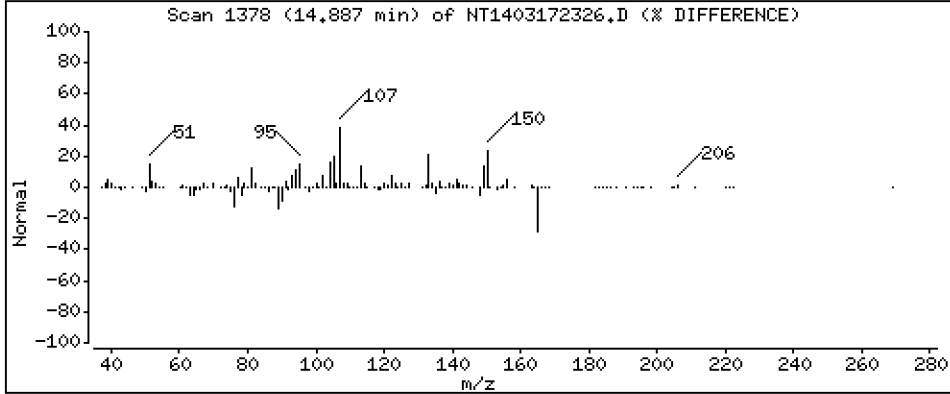
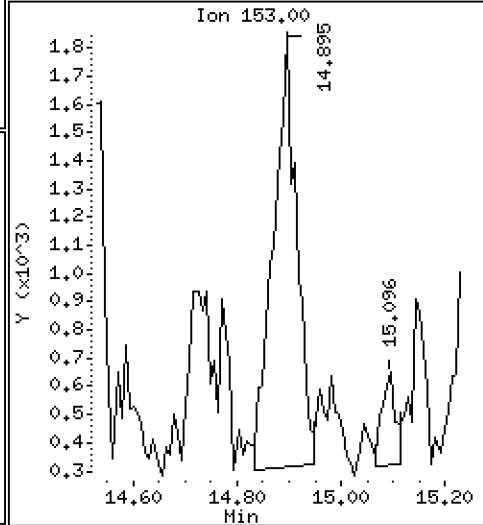
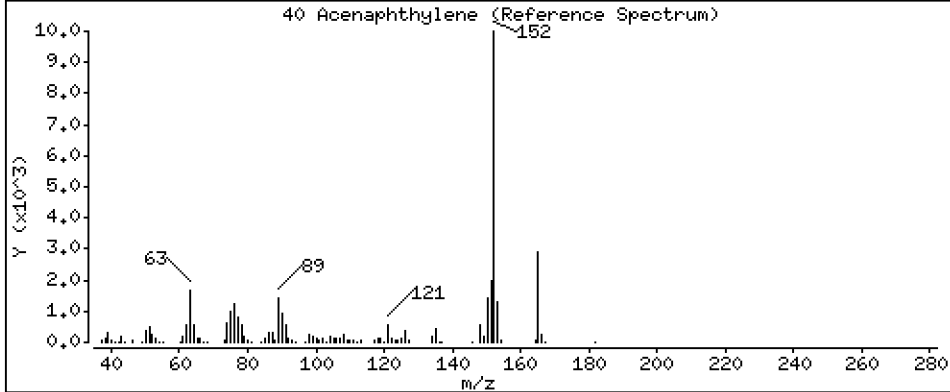
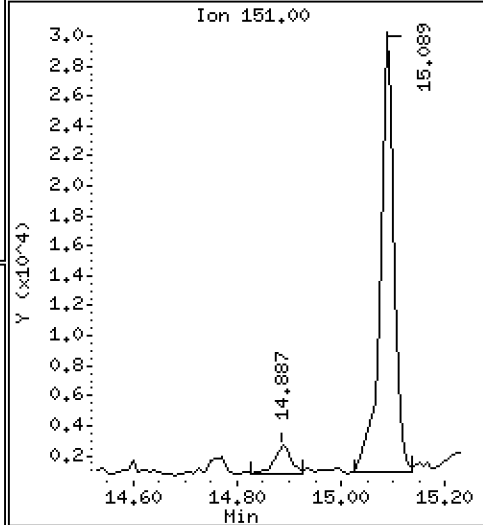
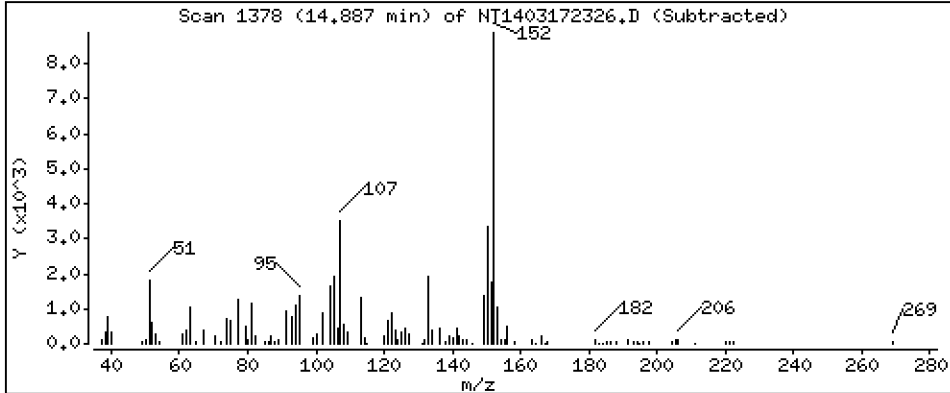
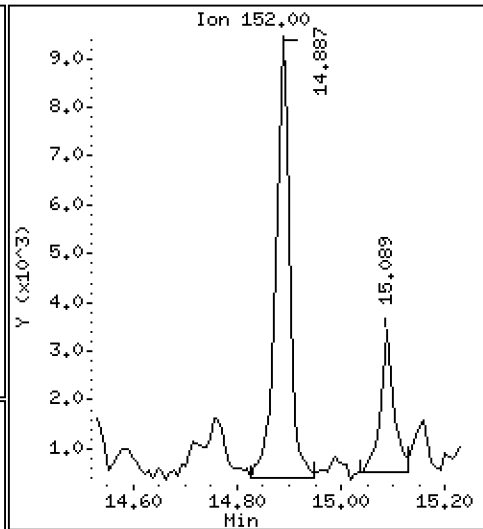
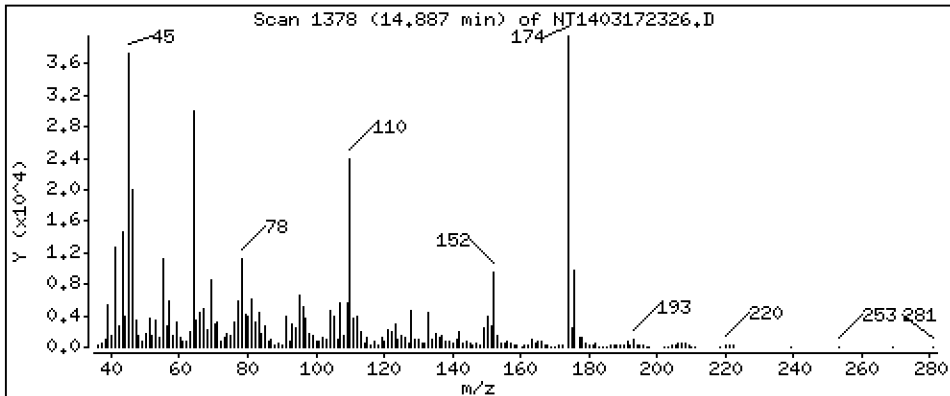
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.07819 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

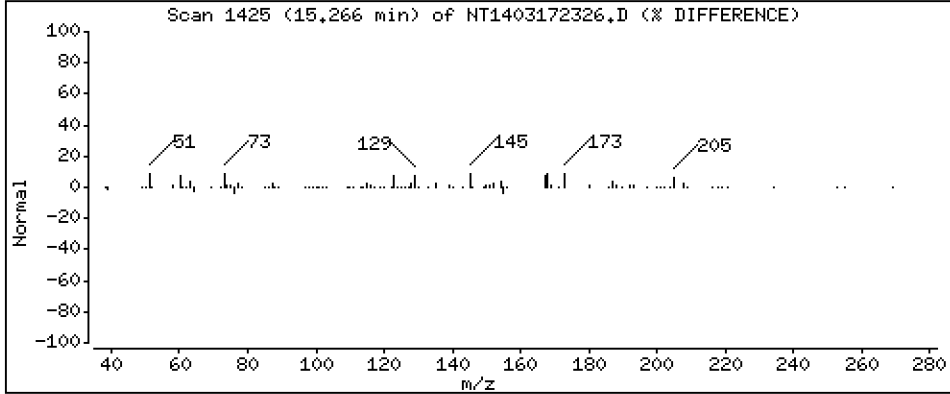
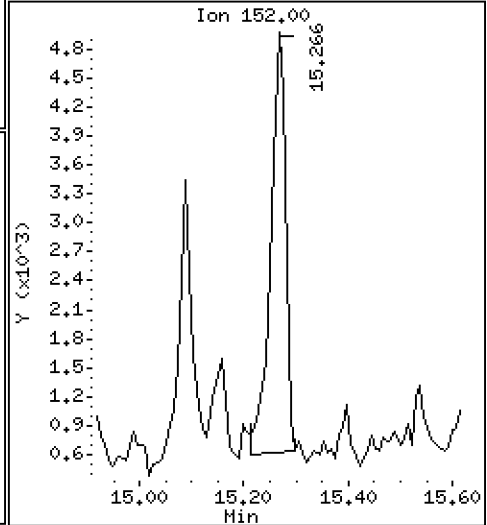
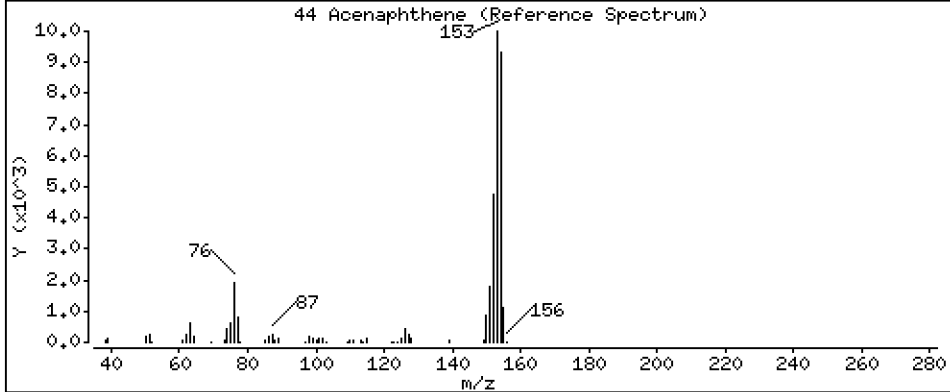
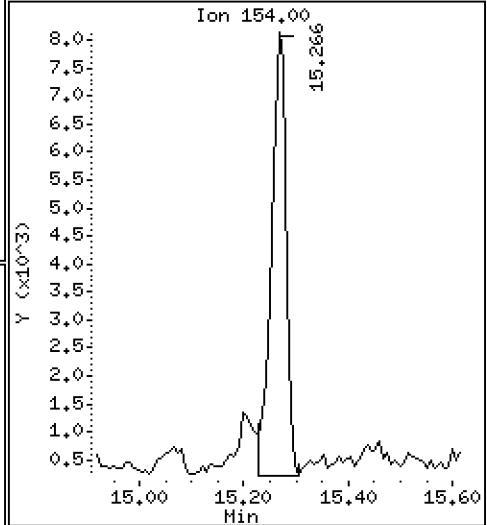
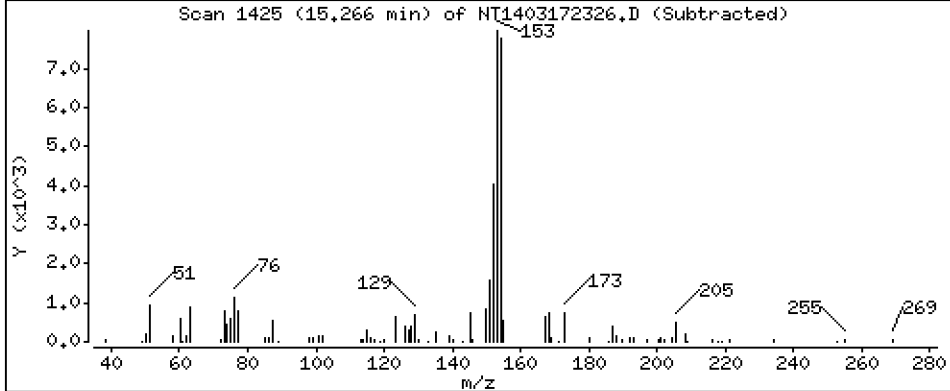
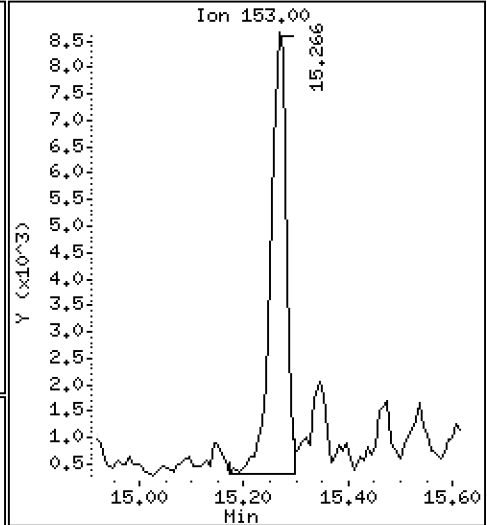
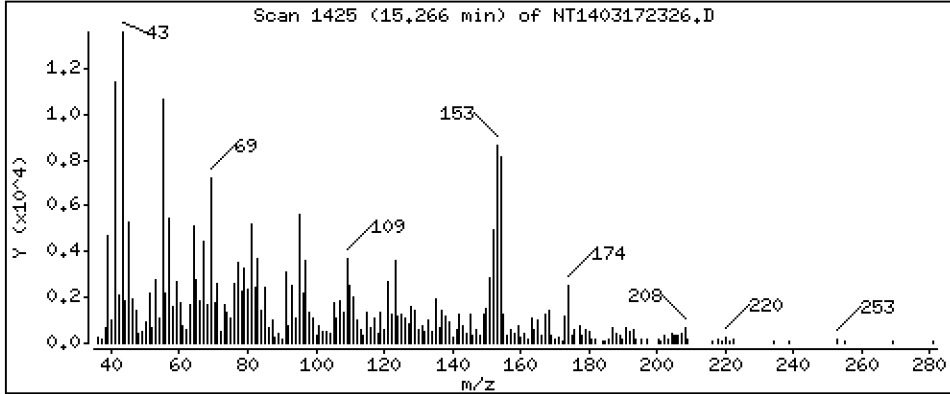
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.1372 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

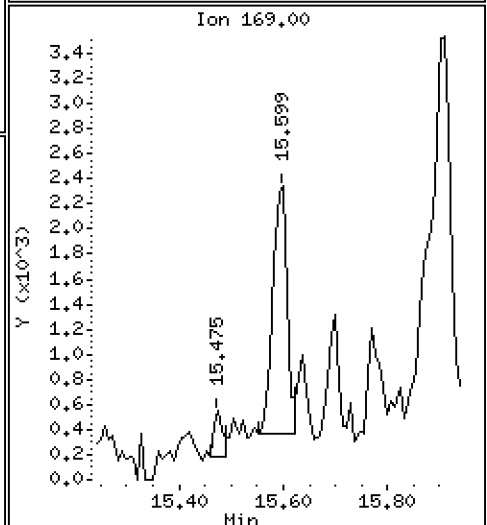
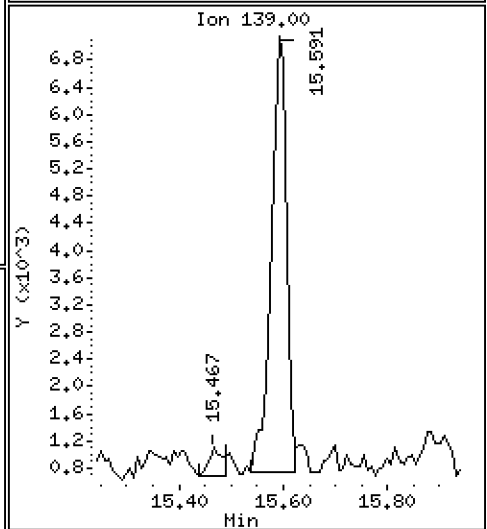
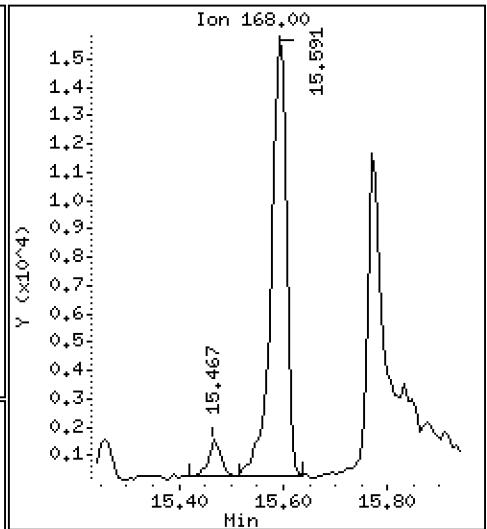
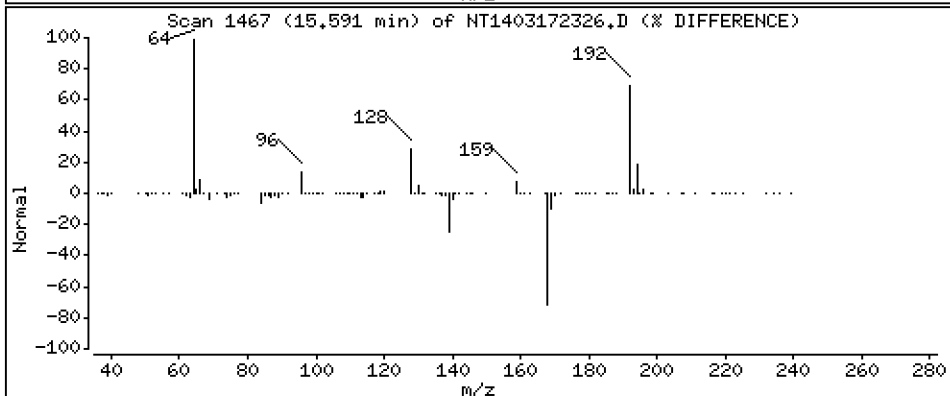
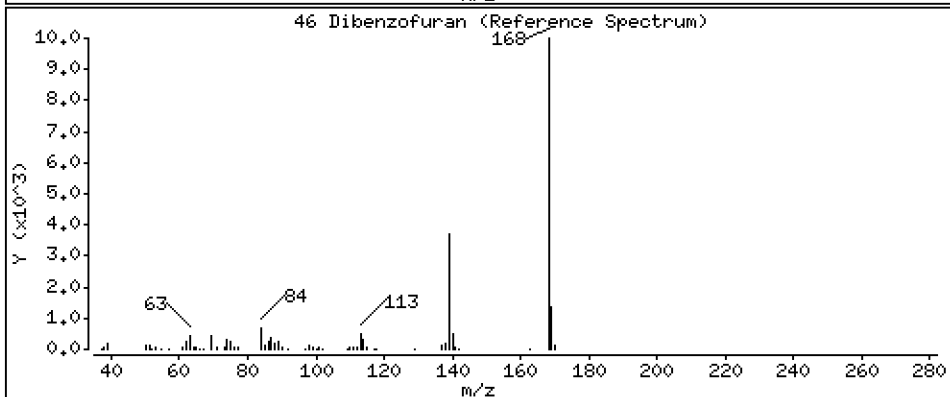
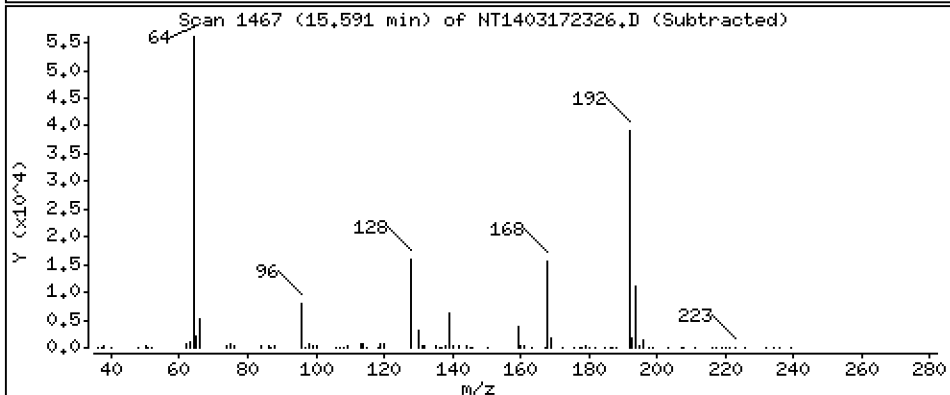
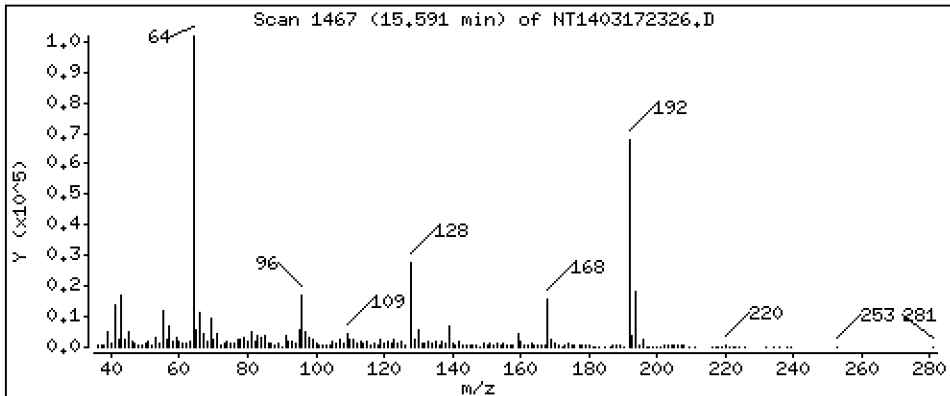
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1755 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

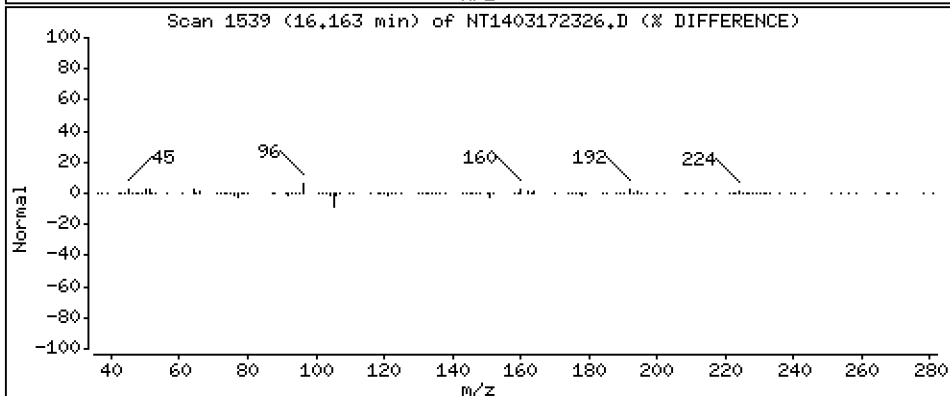
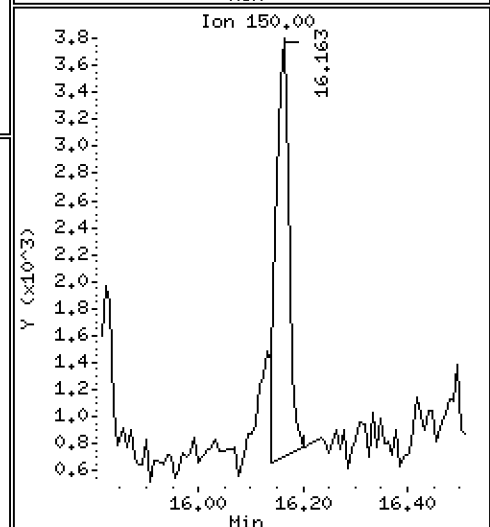
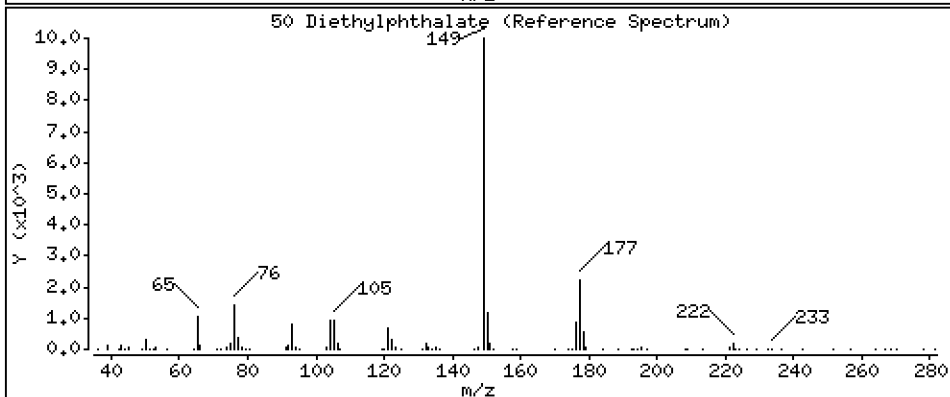
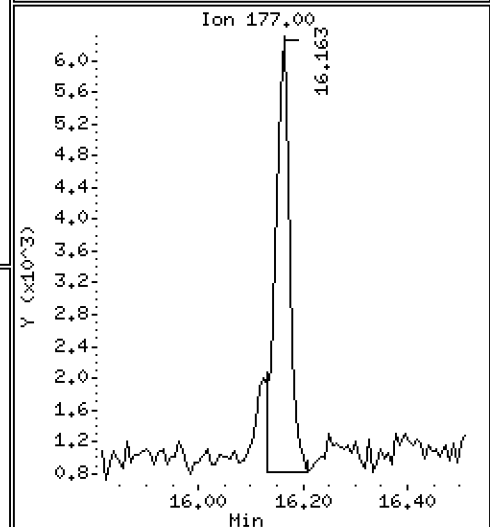
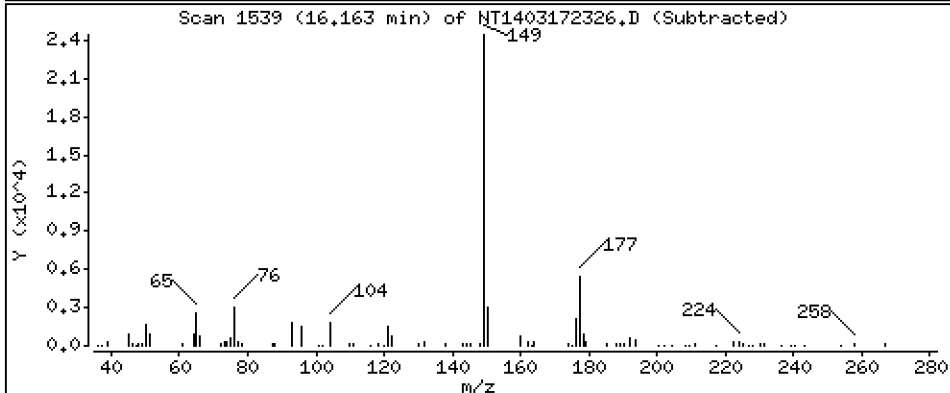
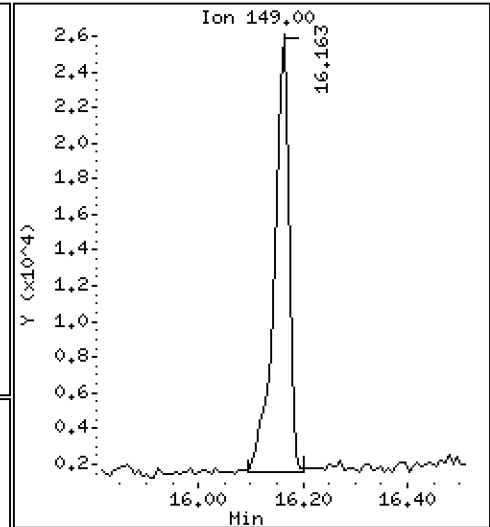
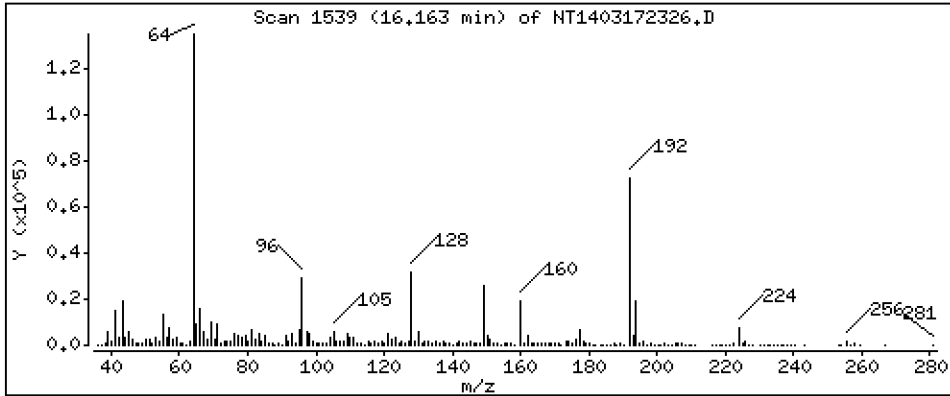
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3397 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

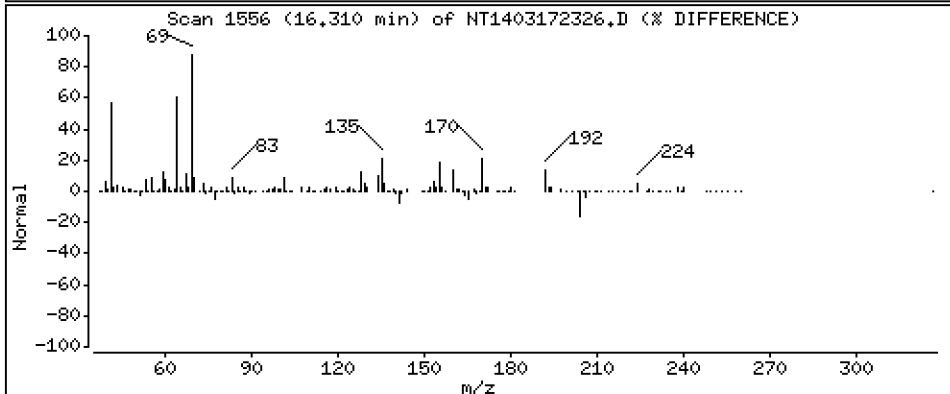
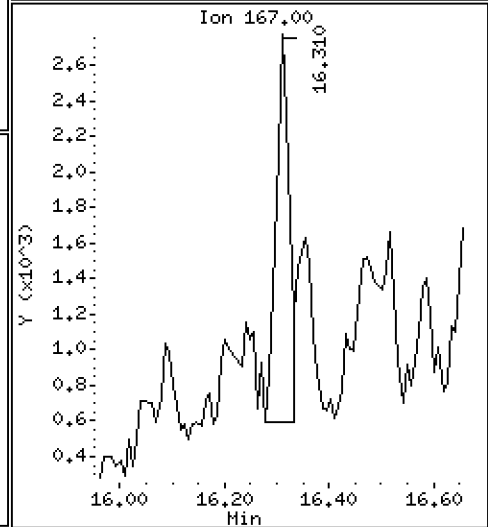
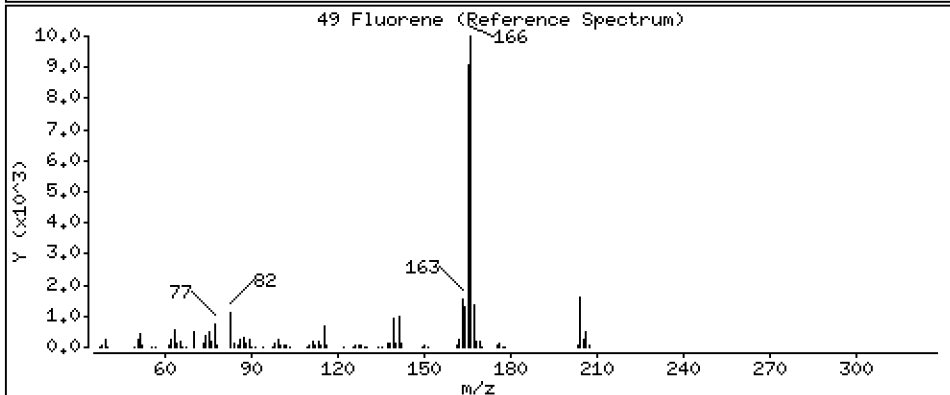
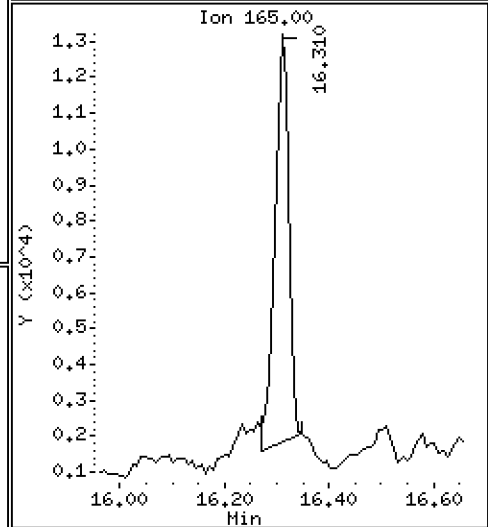
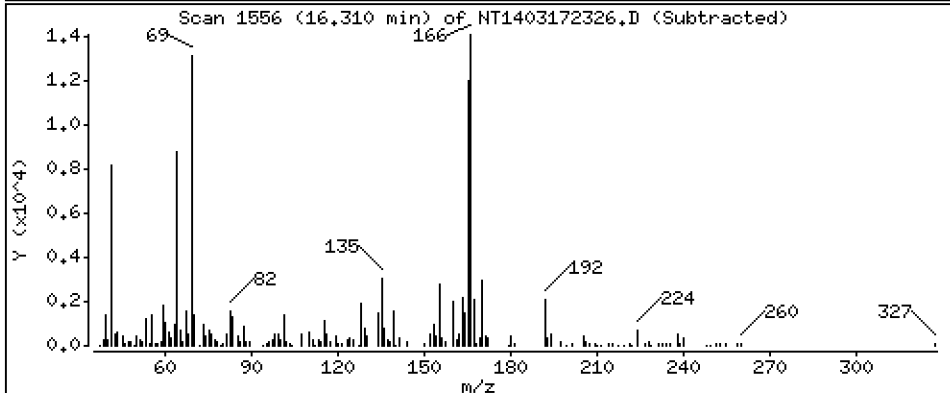
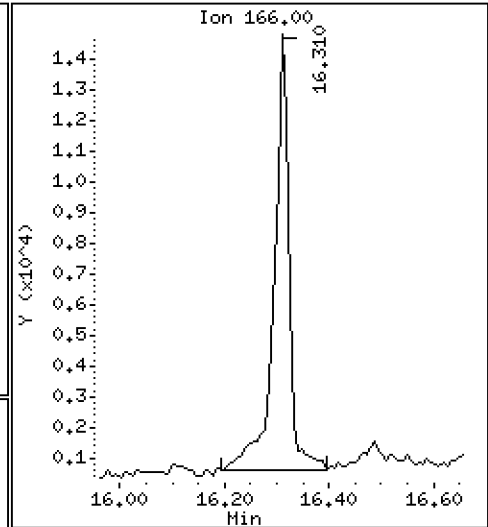
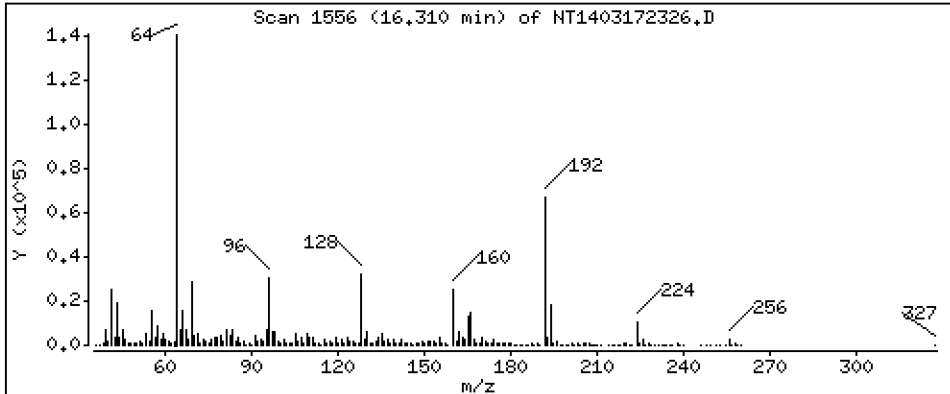
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1822 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

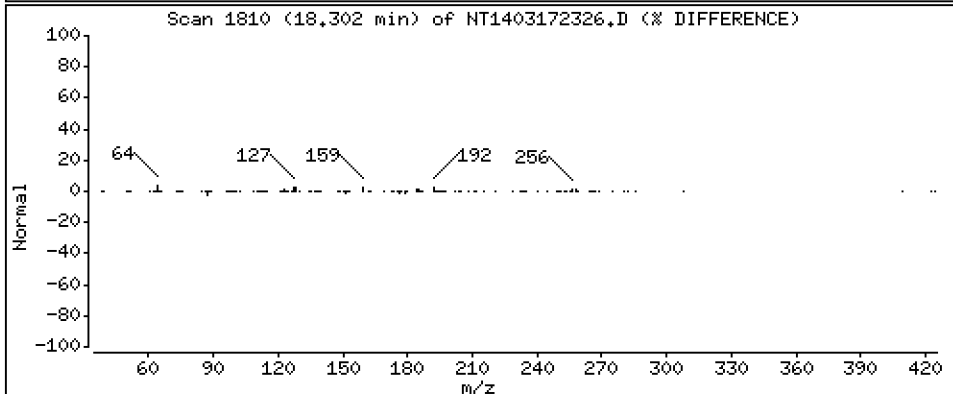
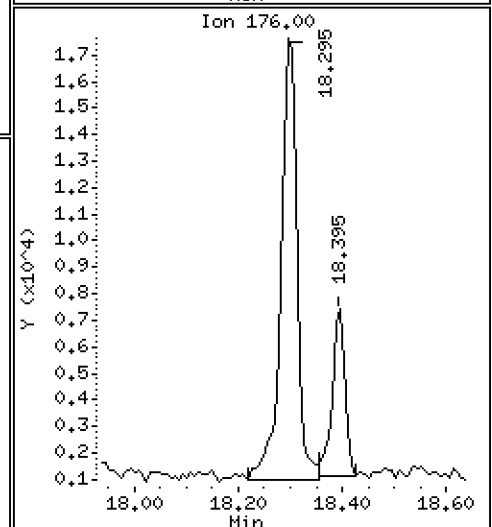
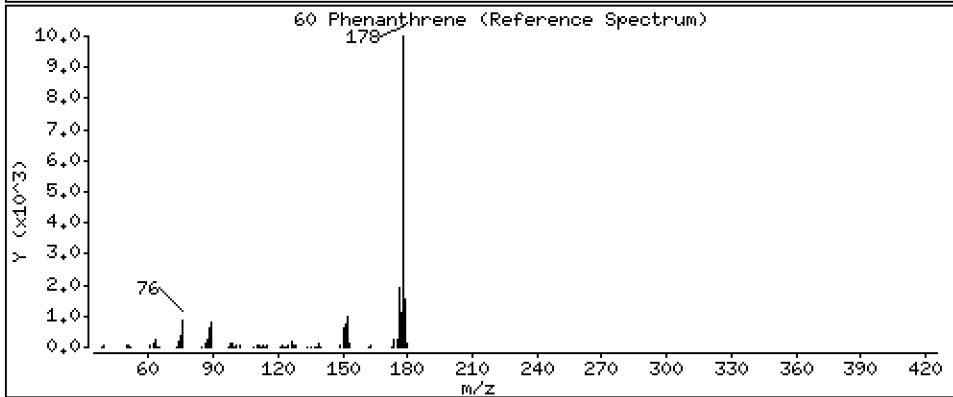
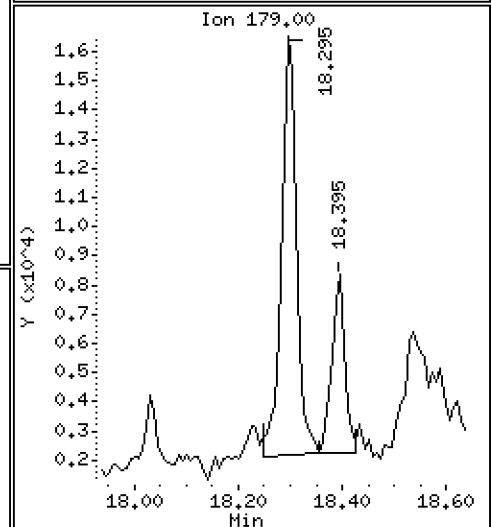
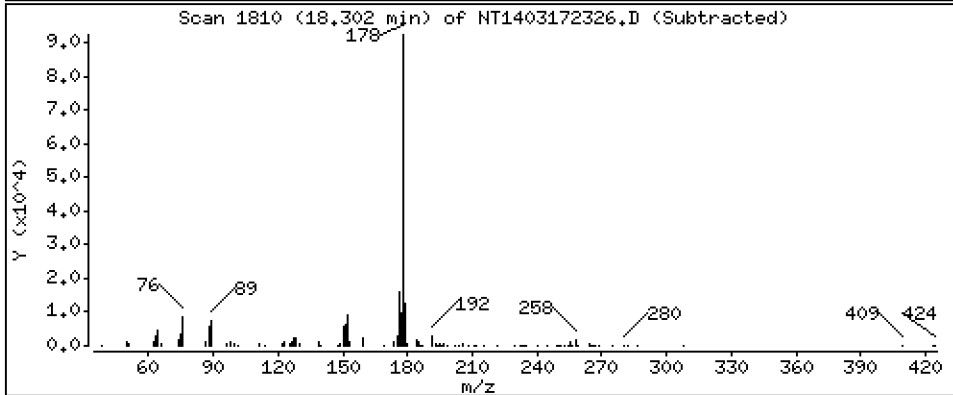
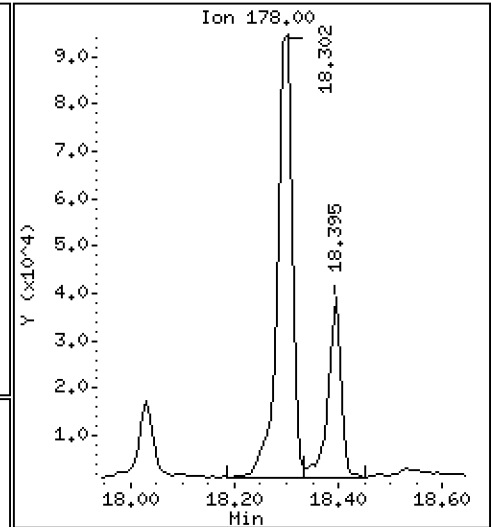
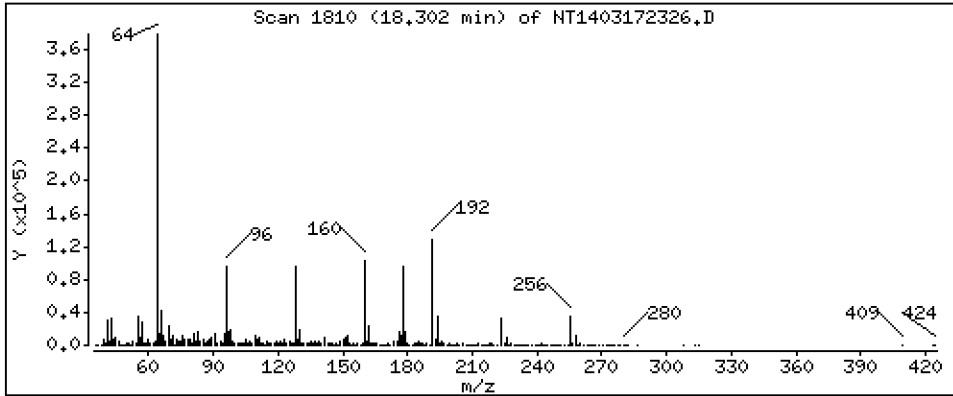
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,9698 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

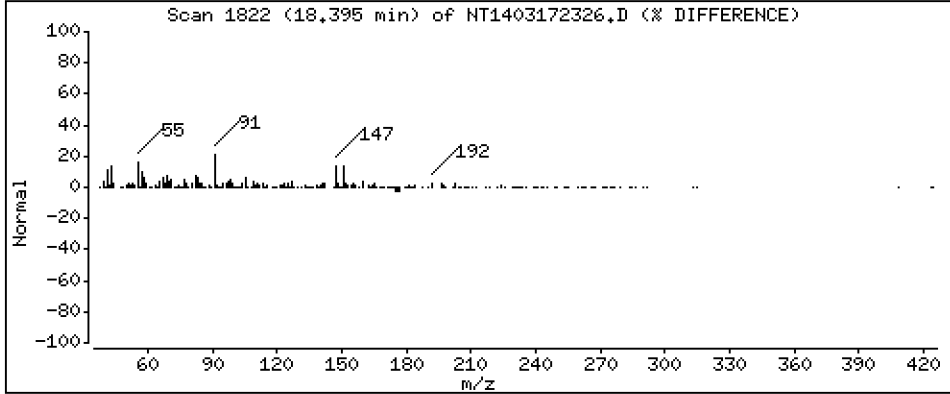
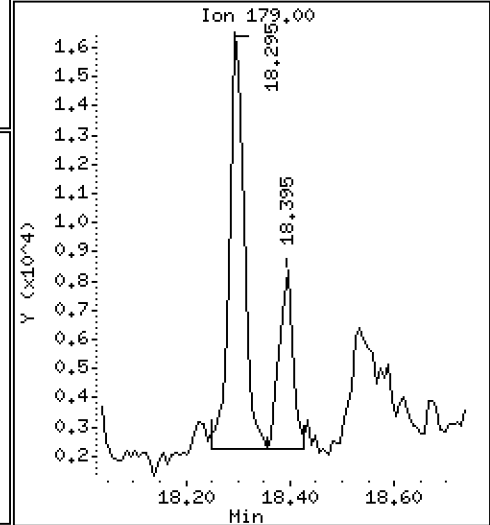
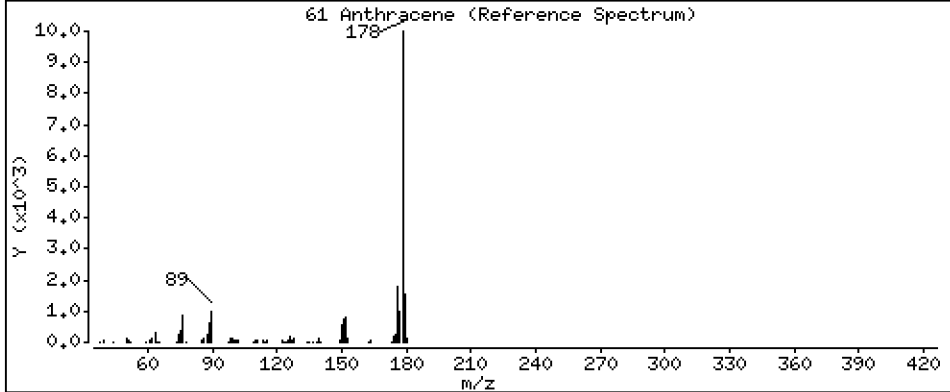
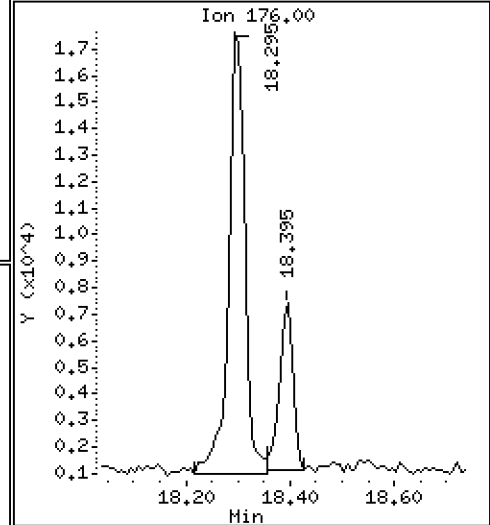
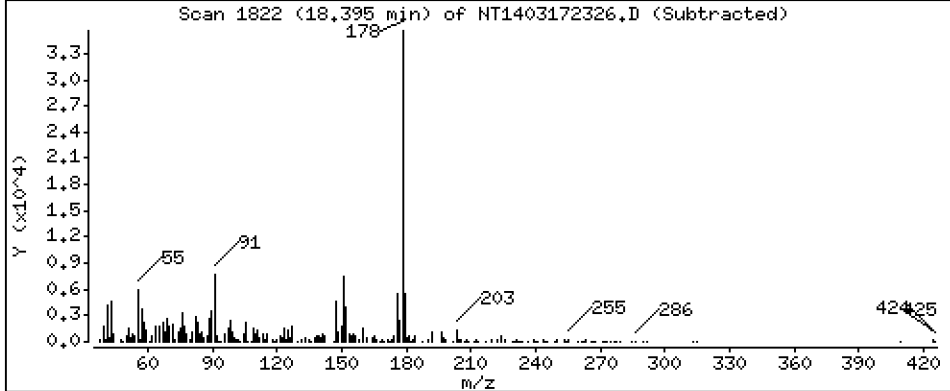
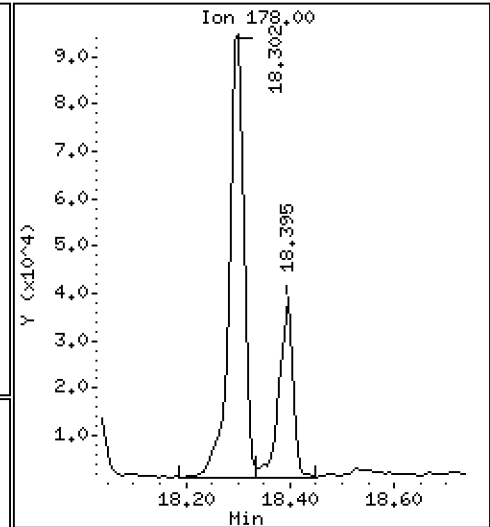
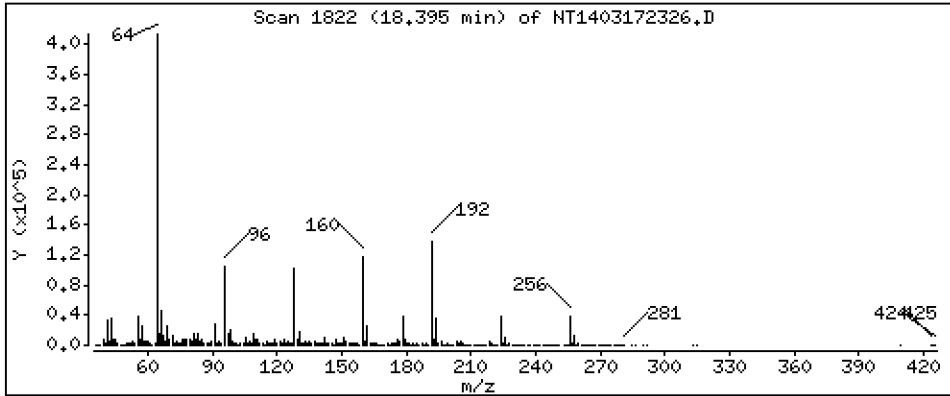
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 0.3833 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

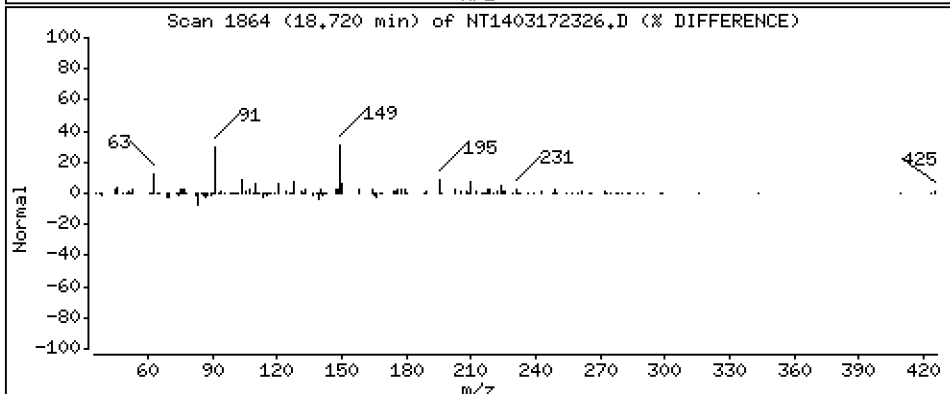
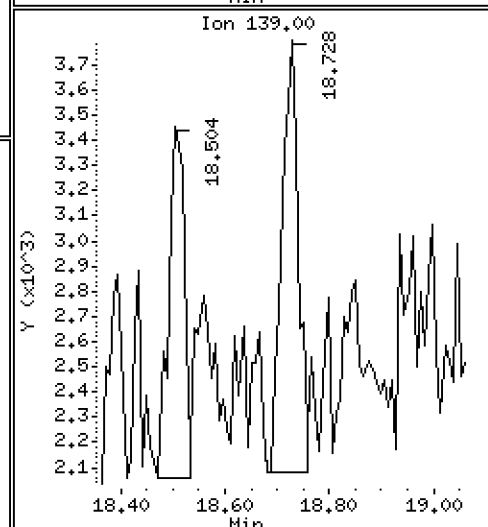
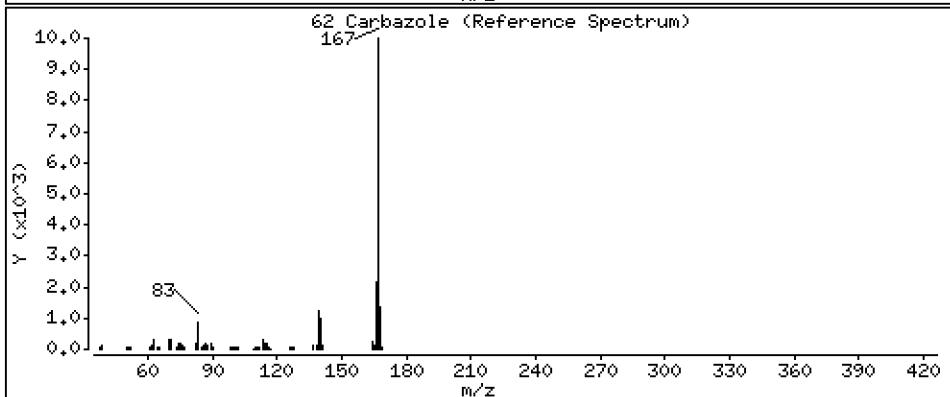
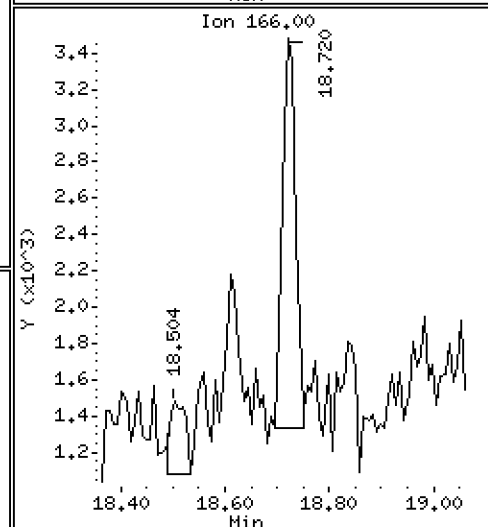
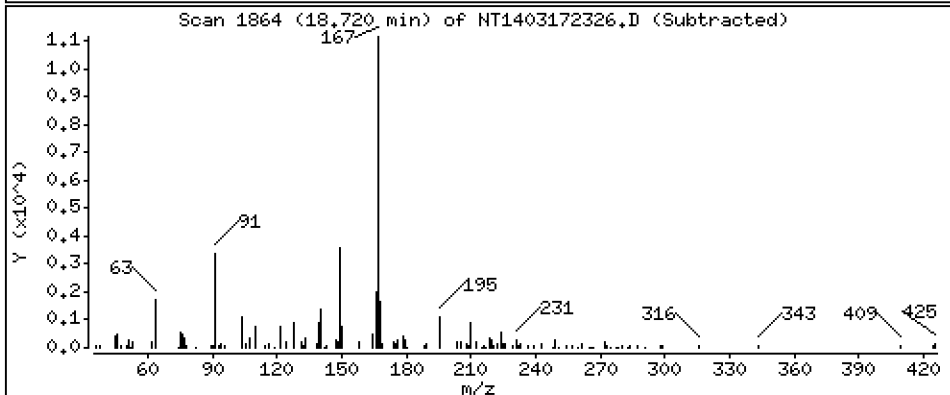
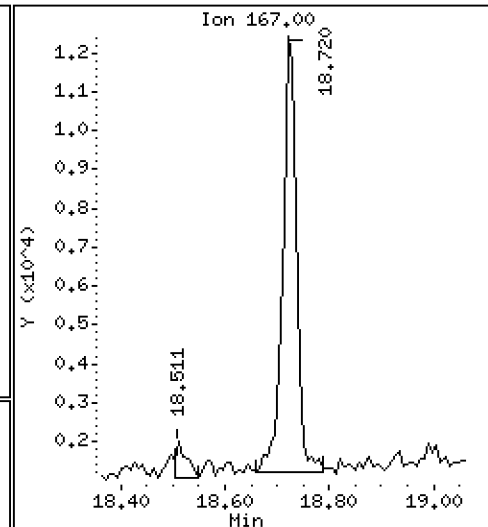
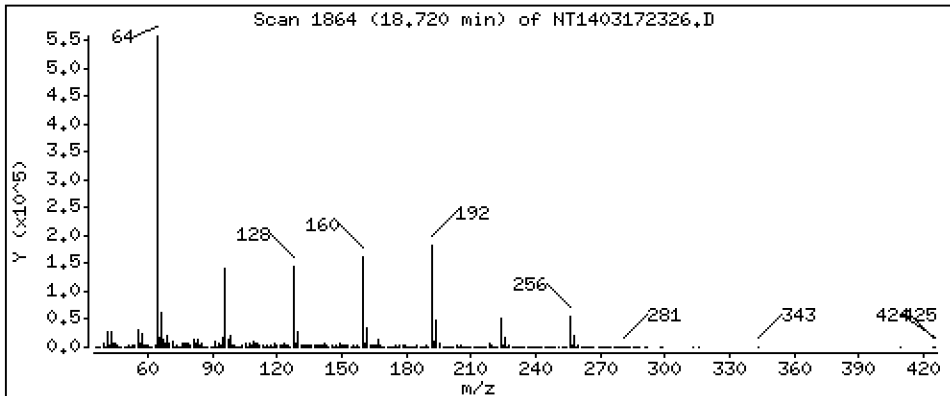
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.1314 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

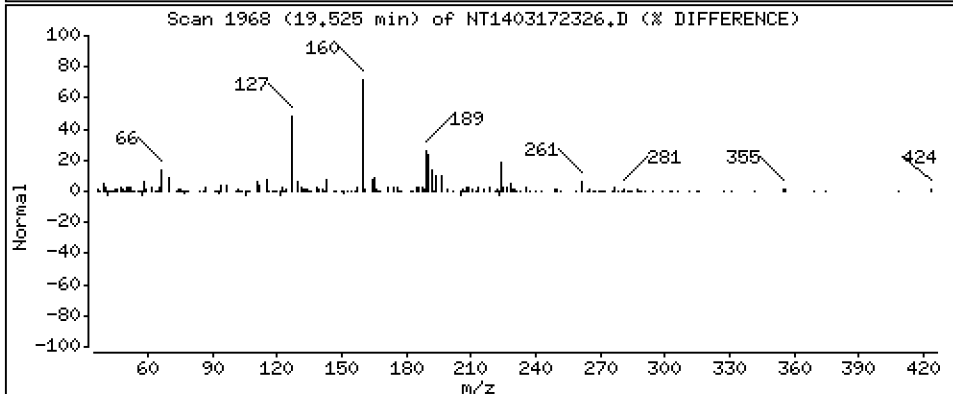
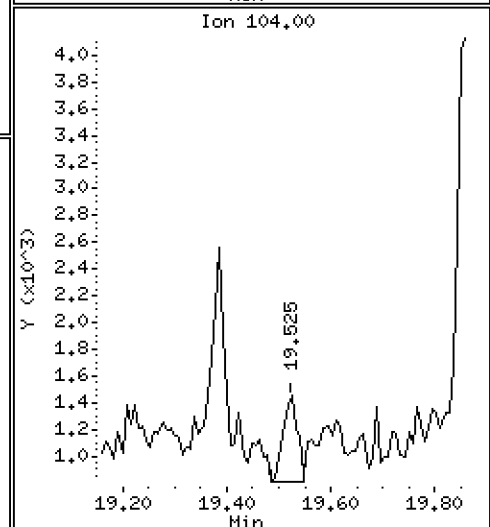
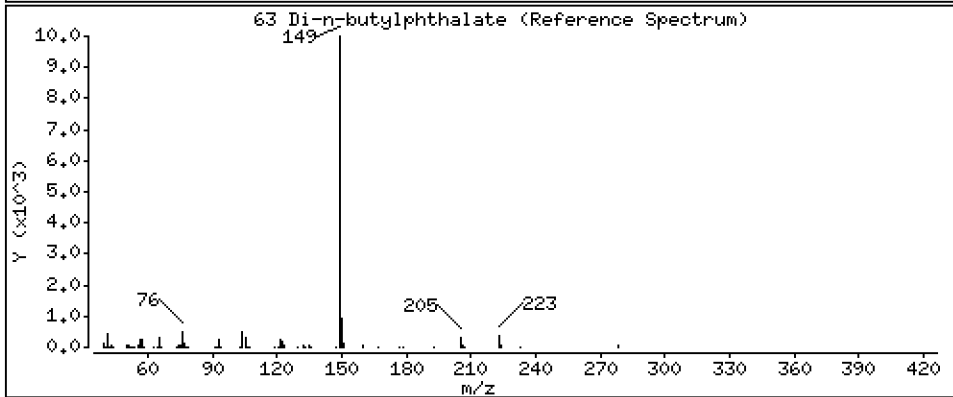
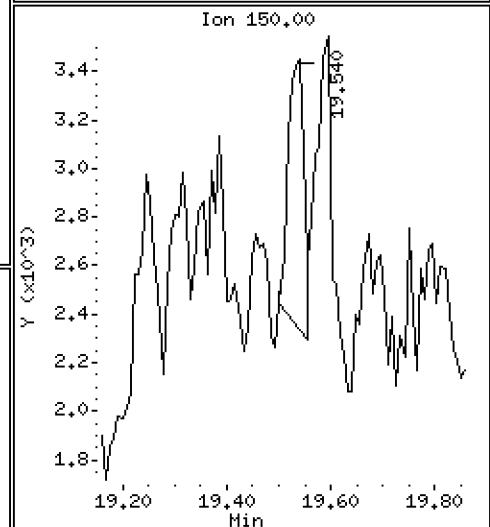
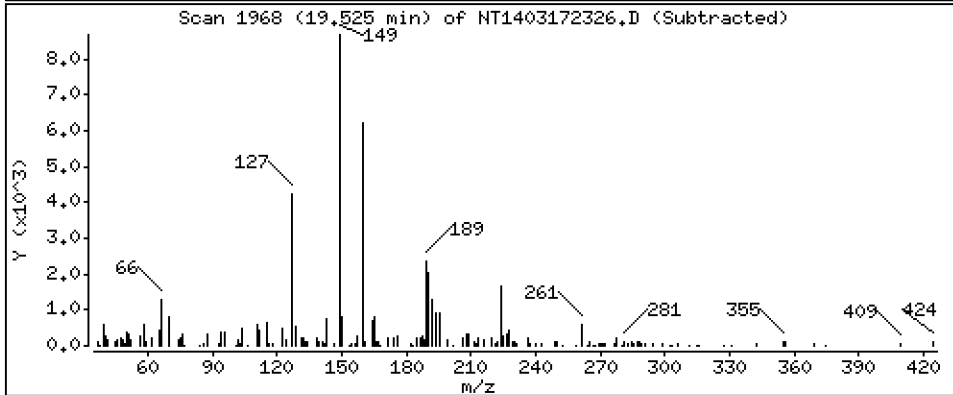
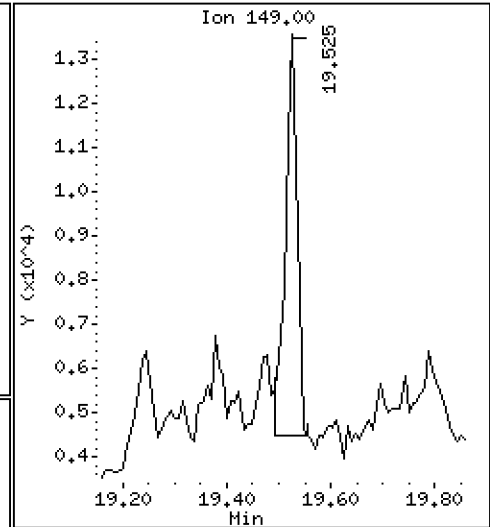
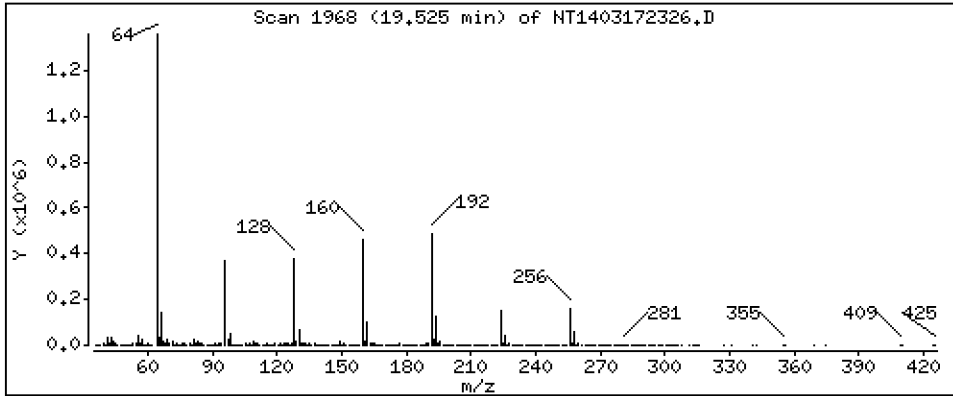
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.07330 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

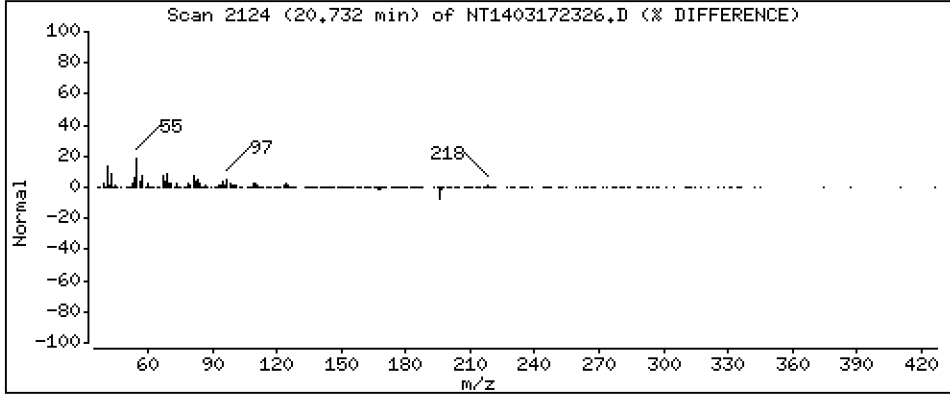
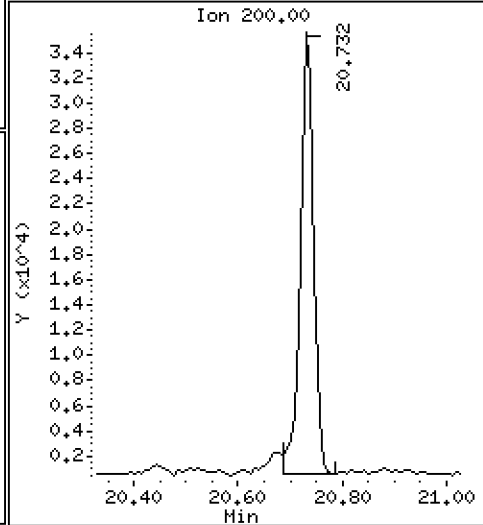
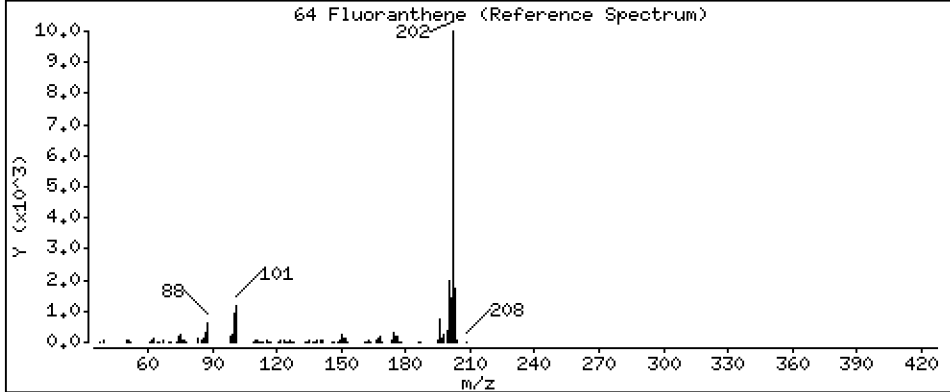
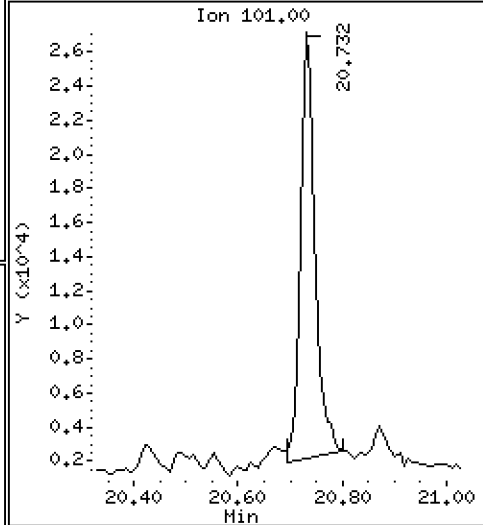
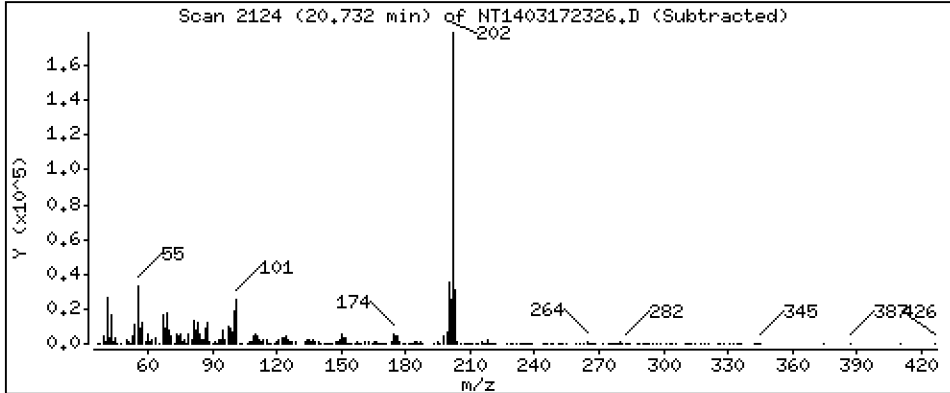
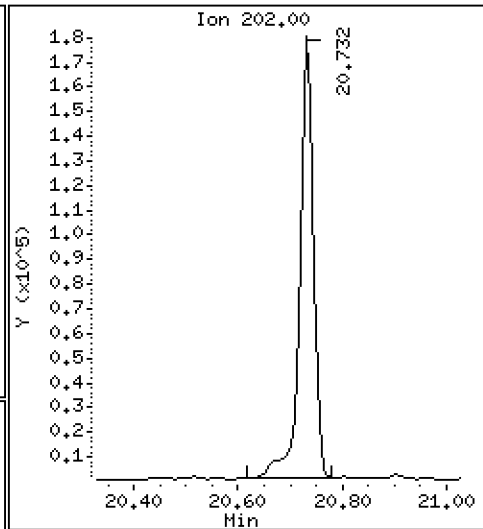
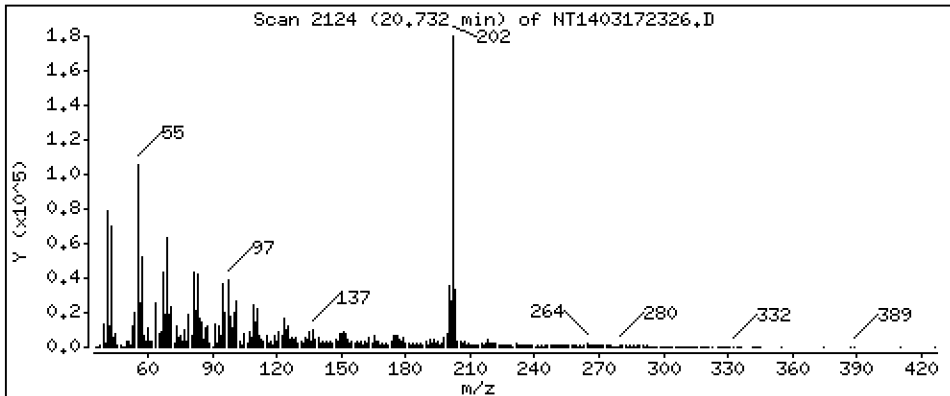
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,405 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

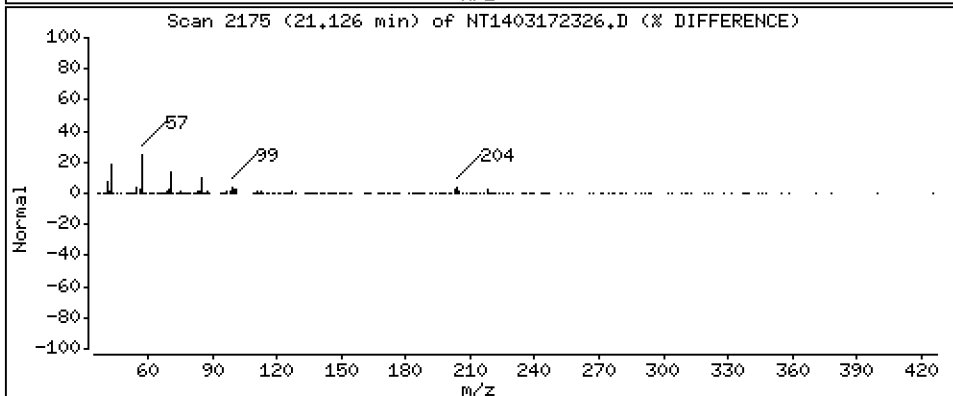
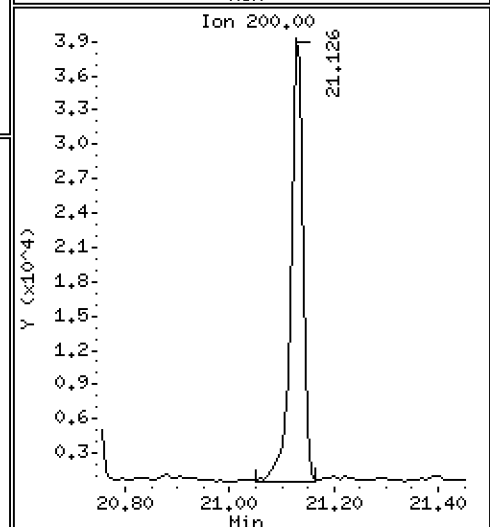
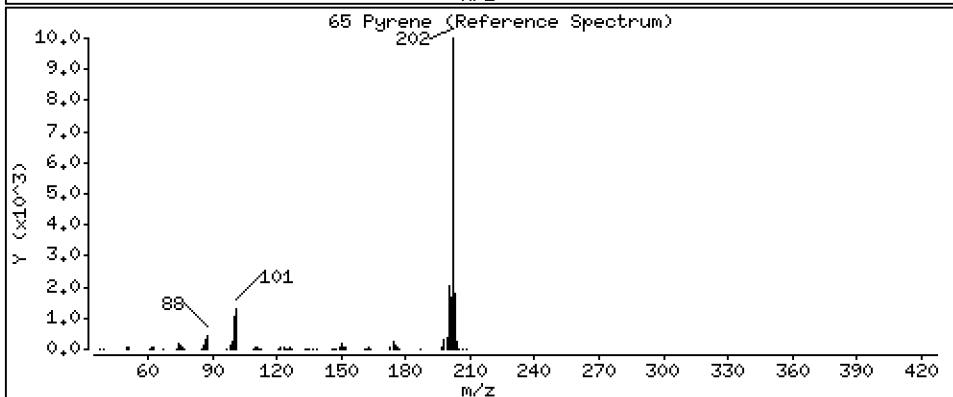
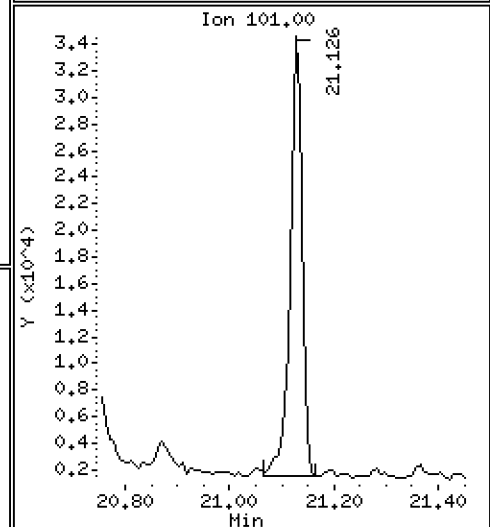
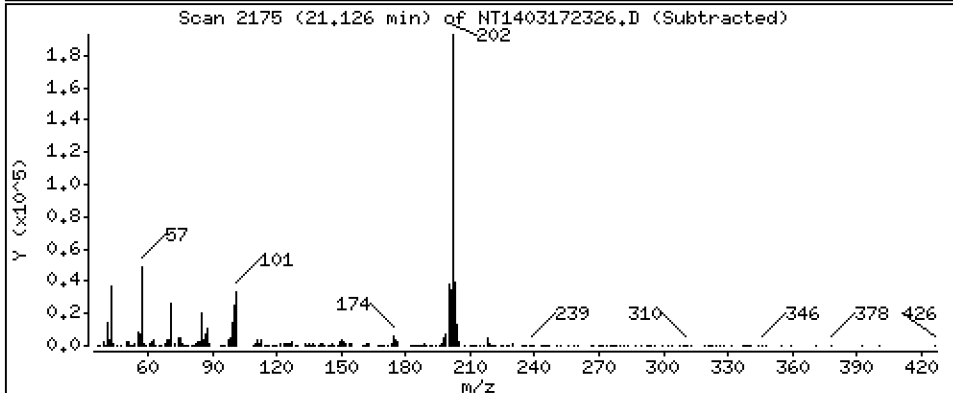
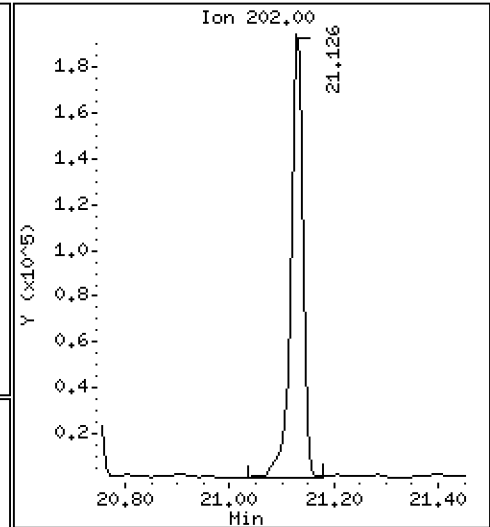
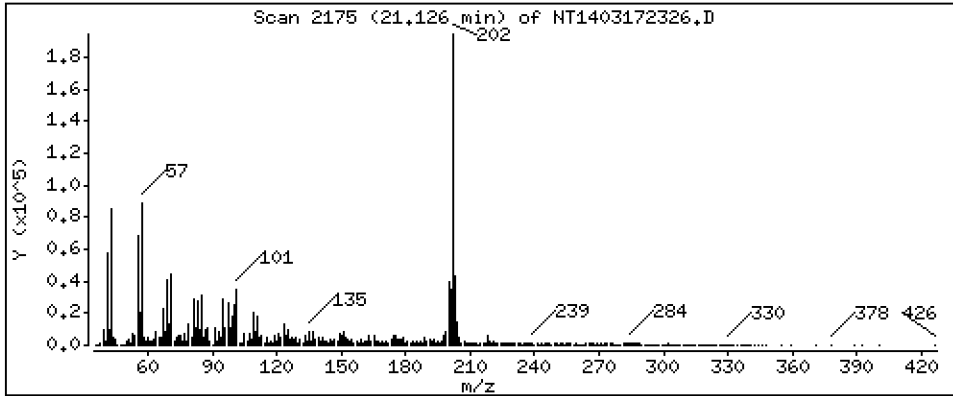
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,192 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

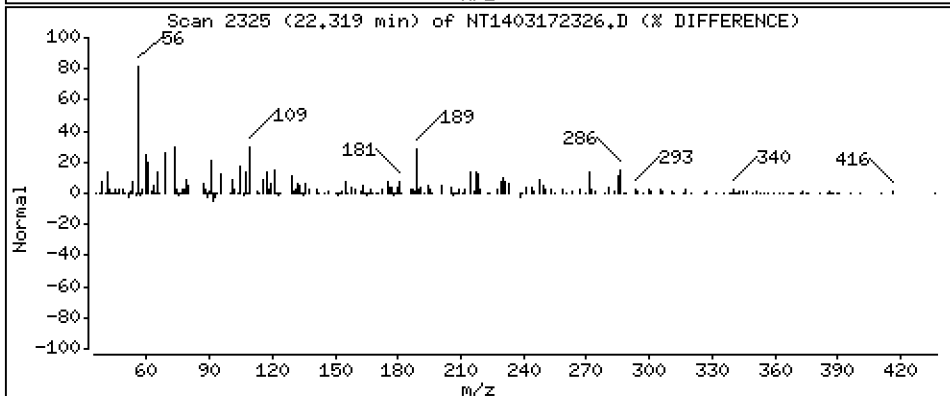
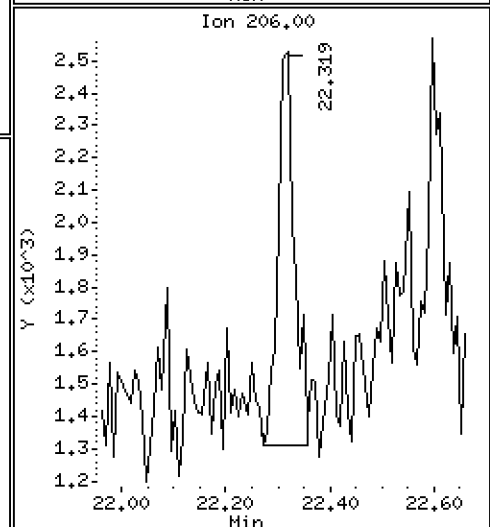
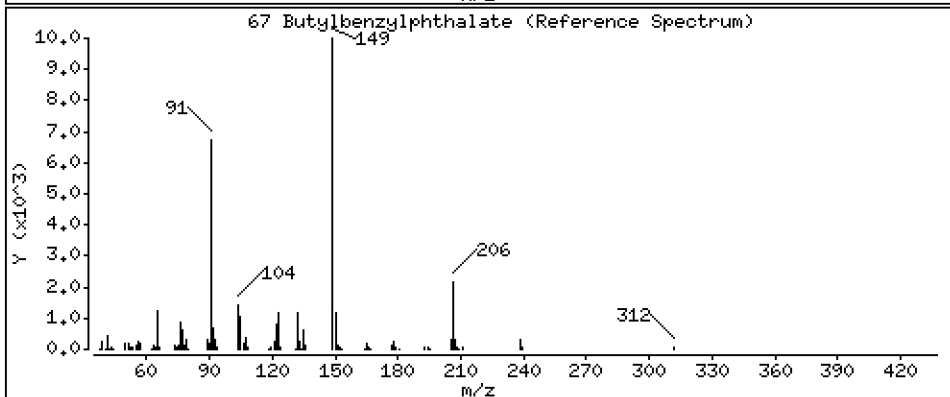
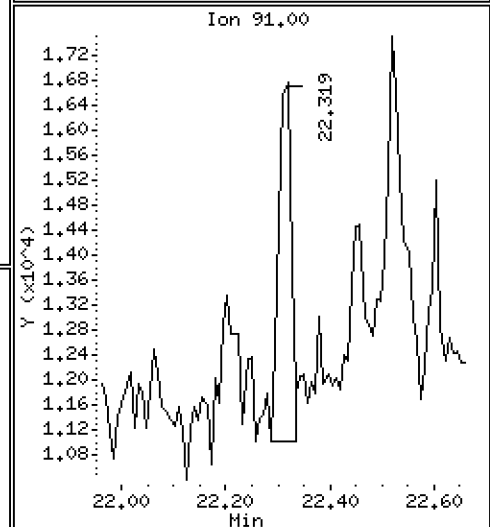
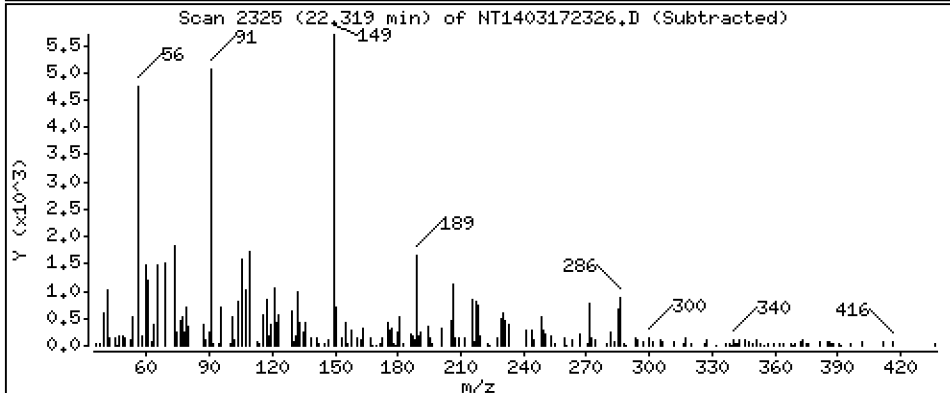
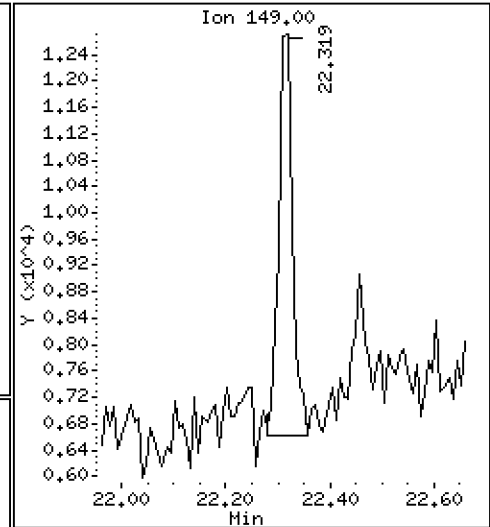
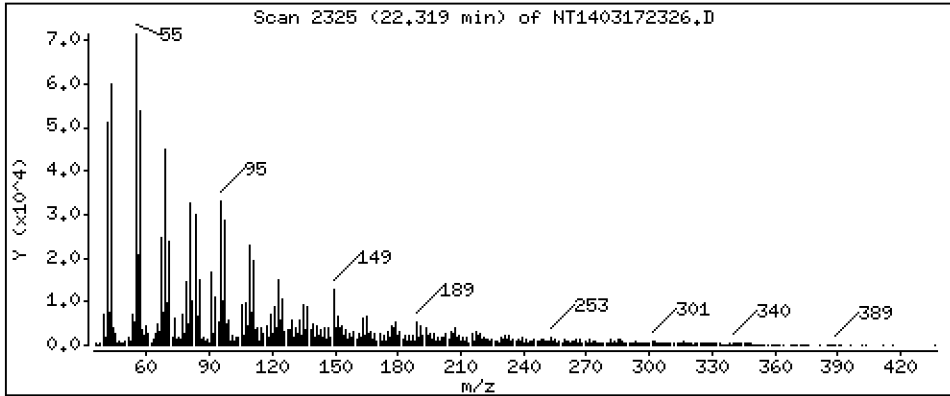
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.3186 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

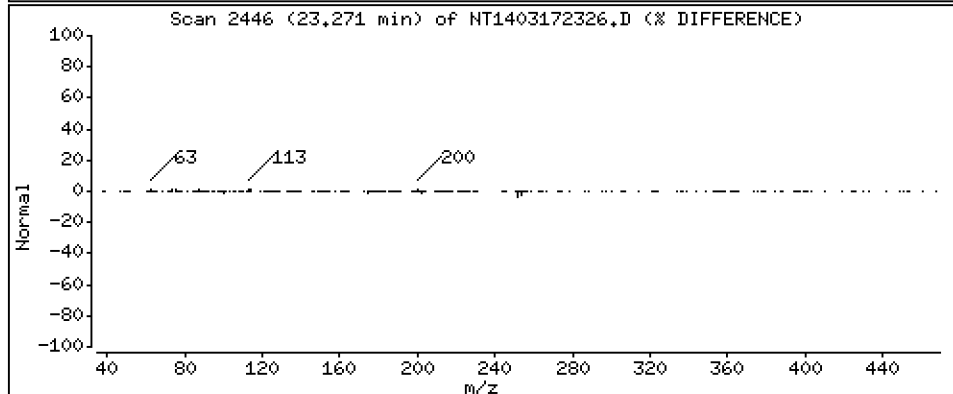
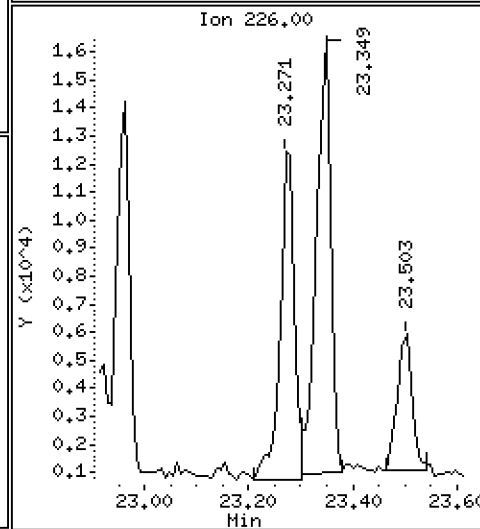
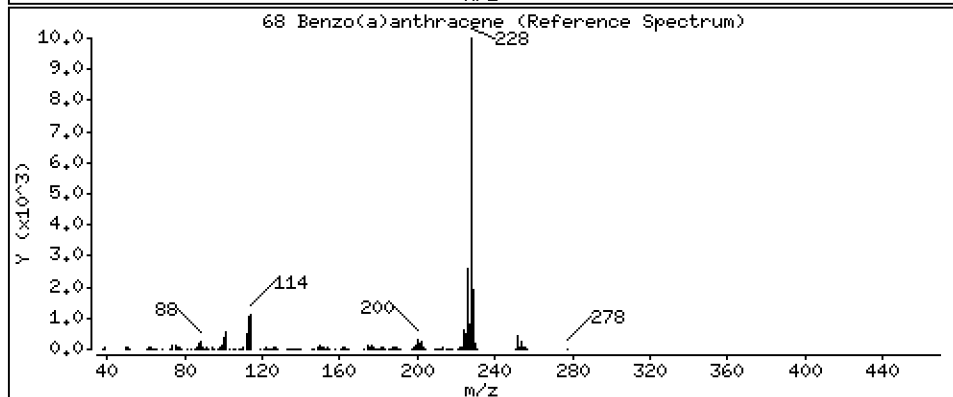
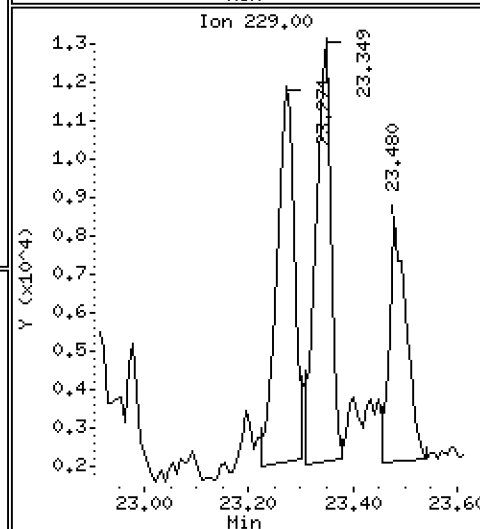
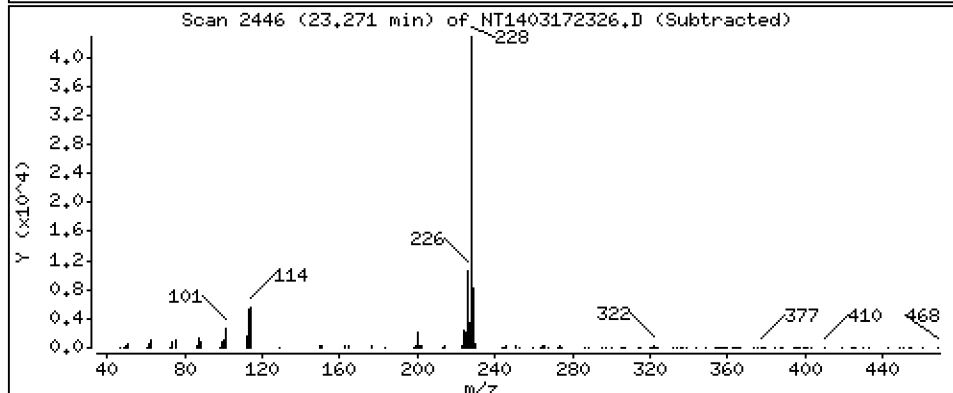
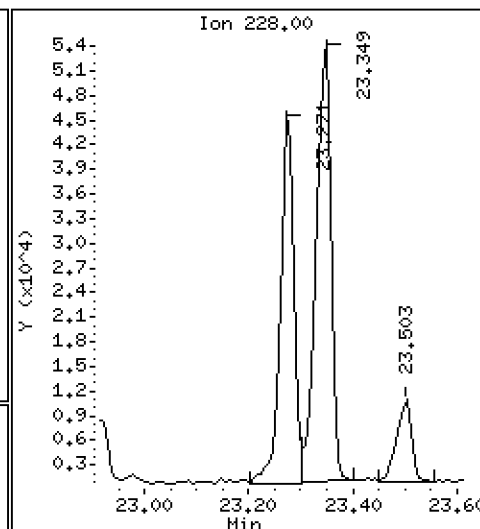
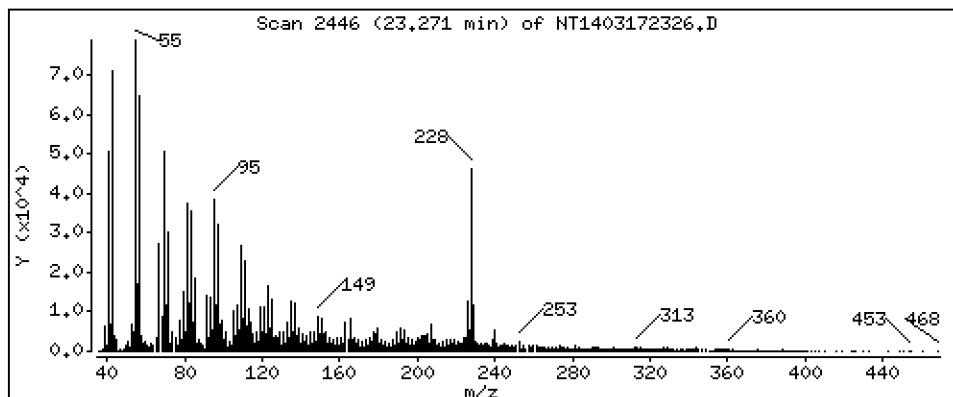
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 1,187 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

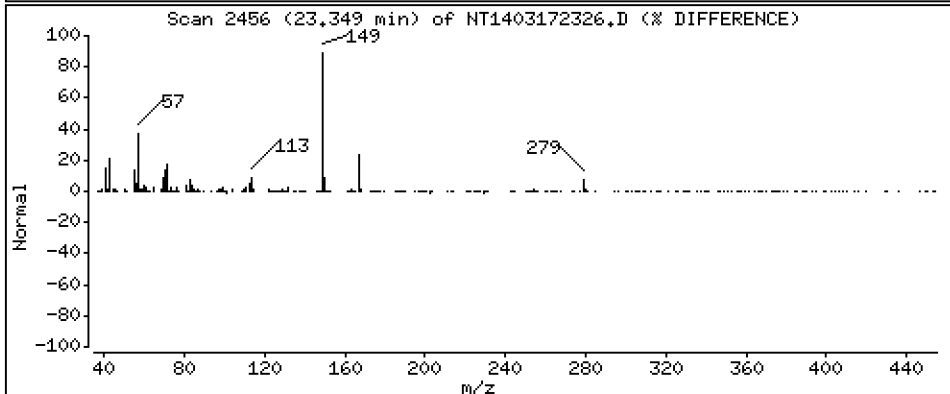
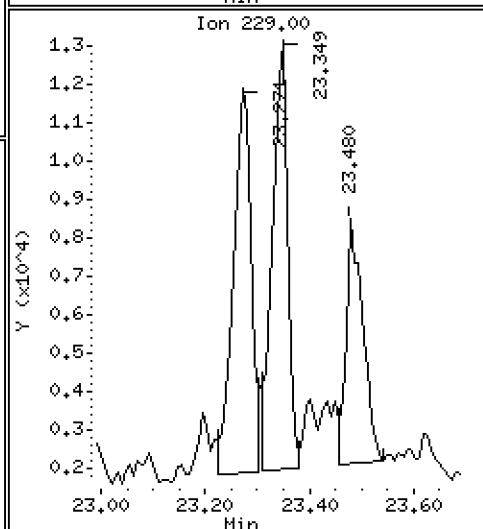
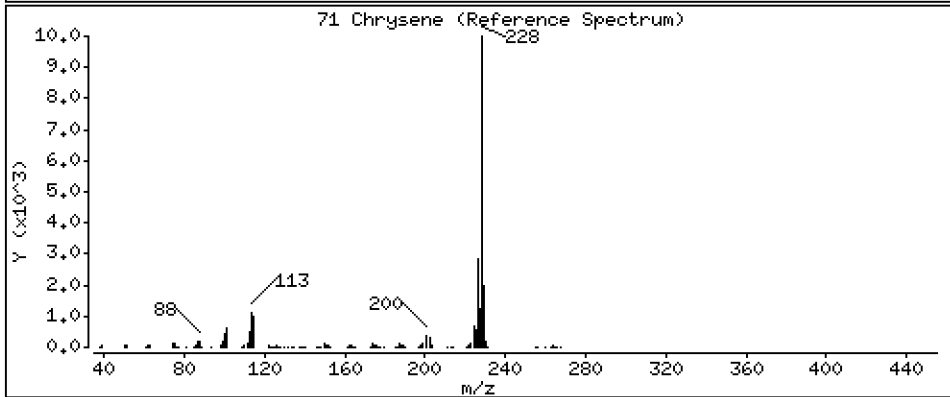
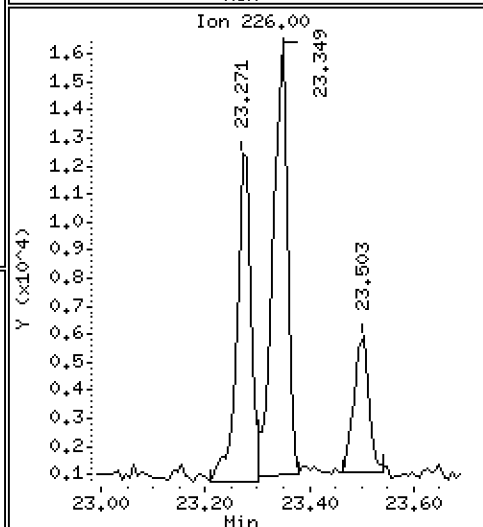
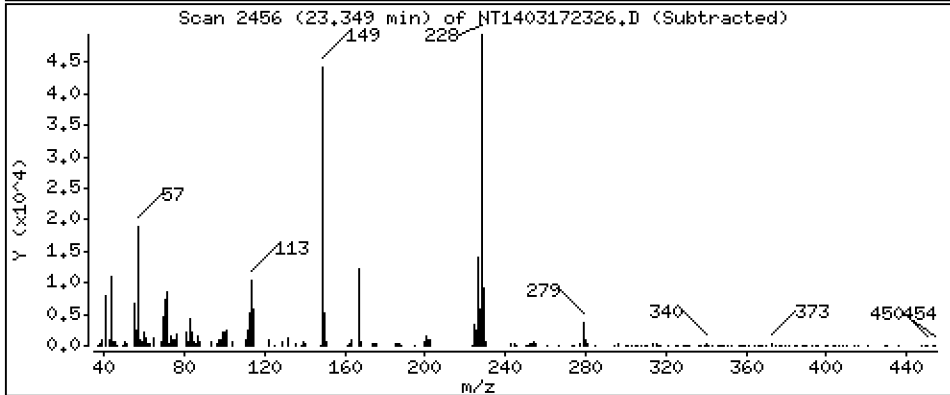
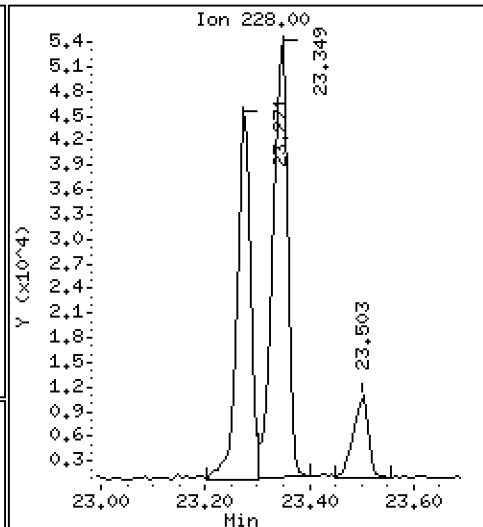
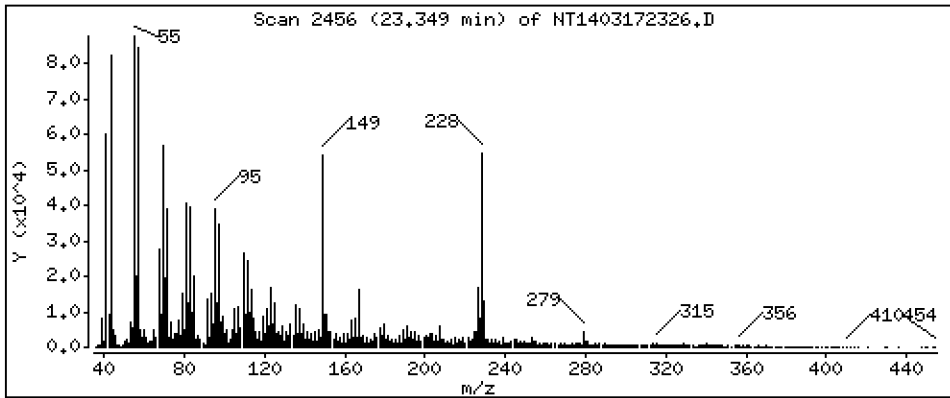
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,670 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

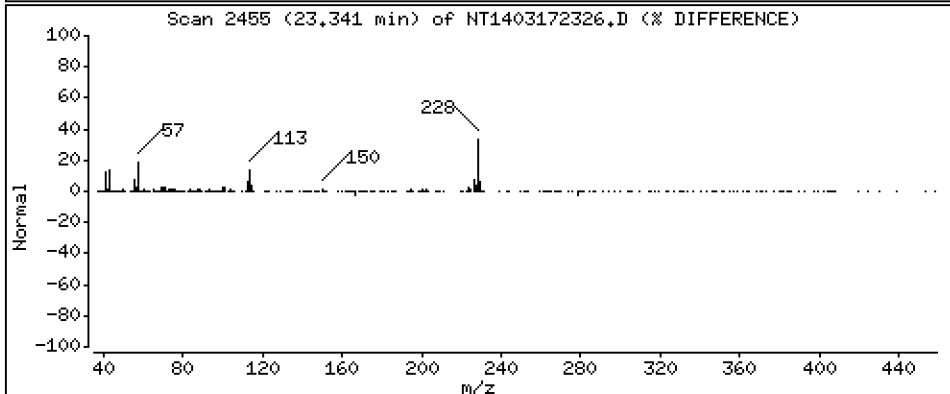
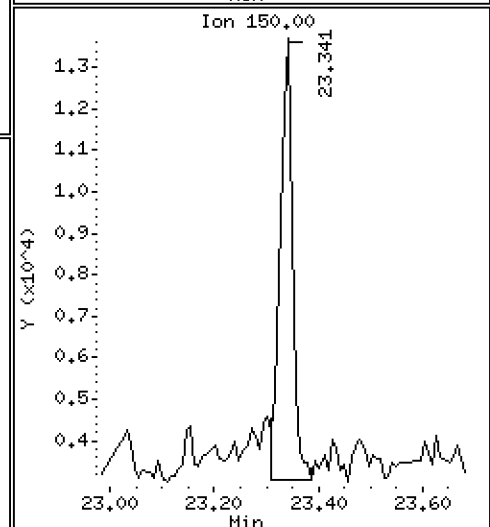
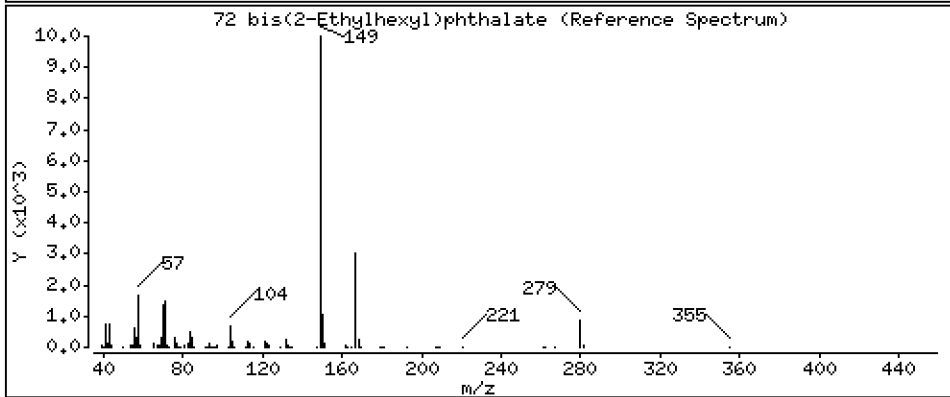
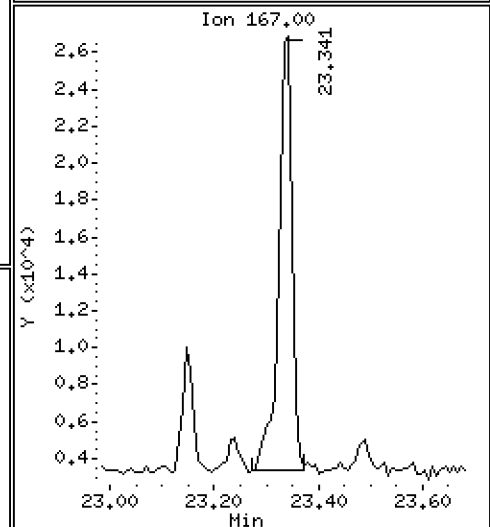
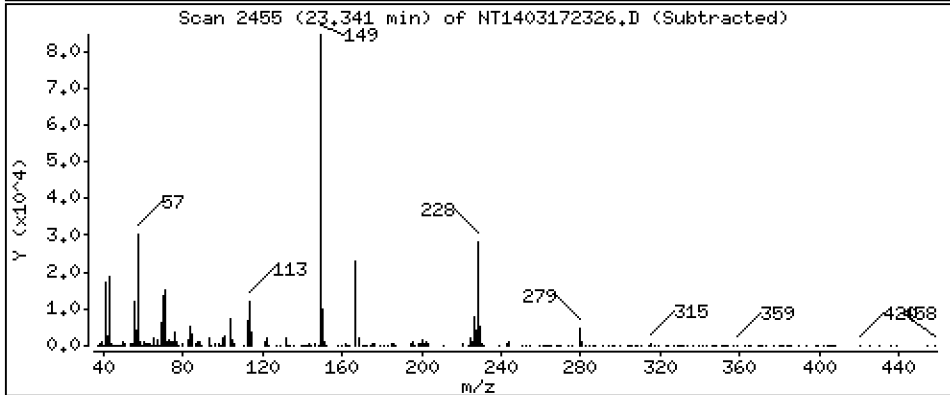
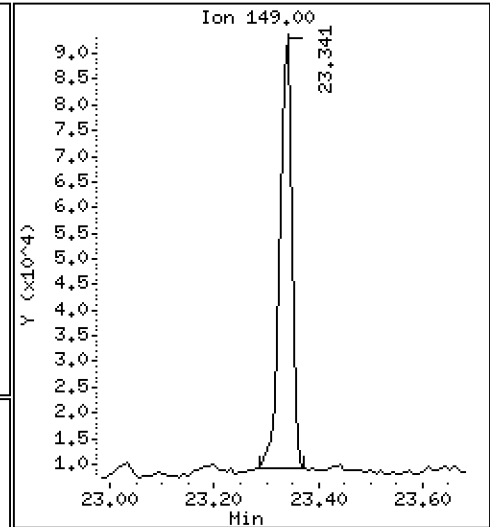
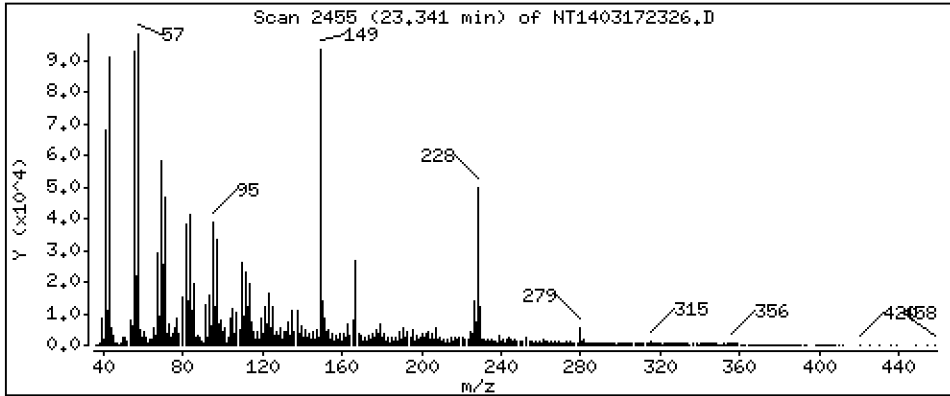
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 2,596 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

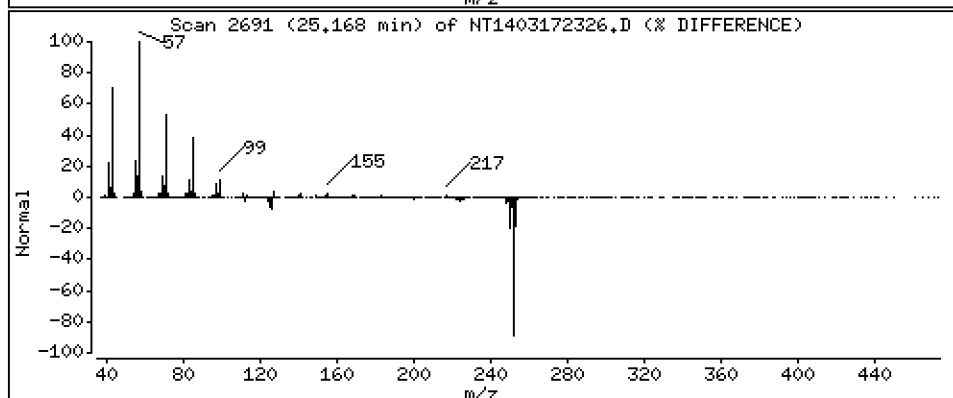
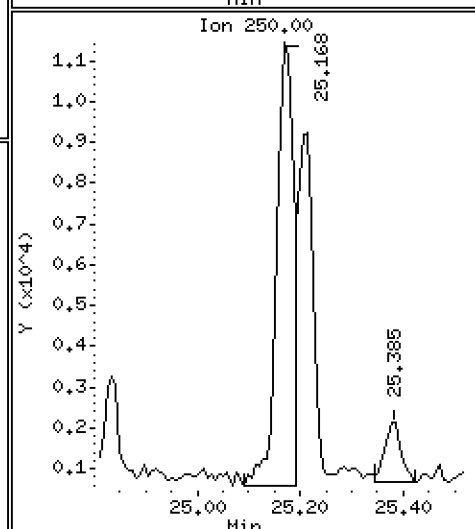
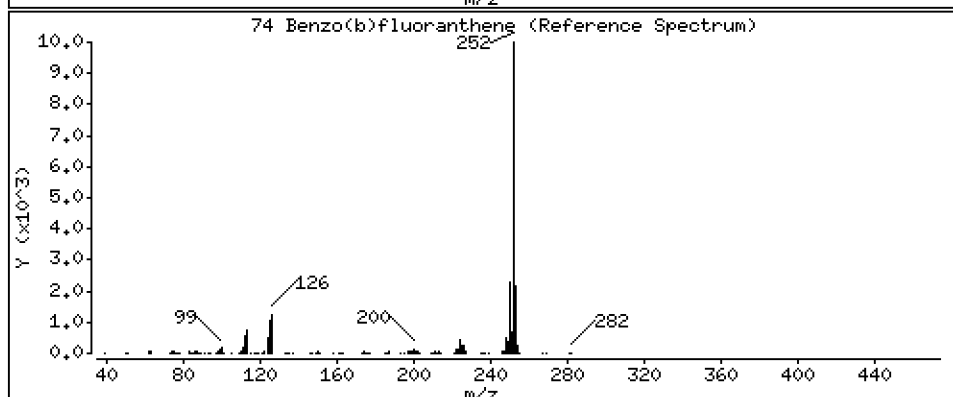
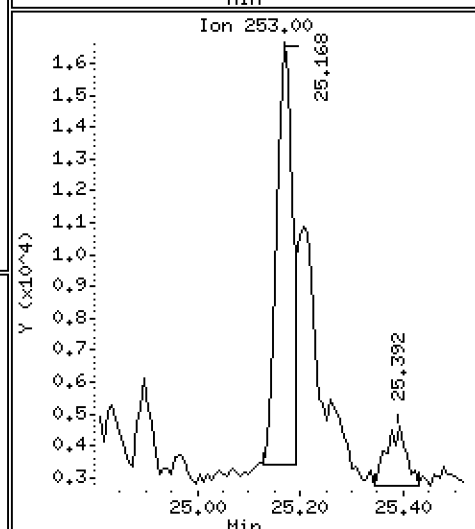
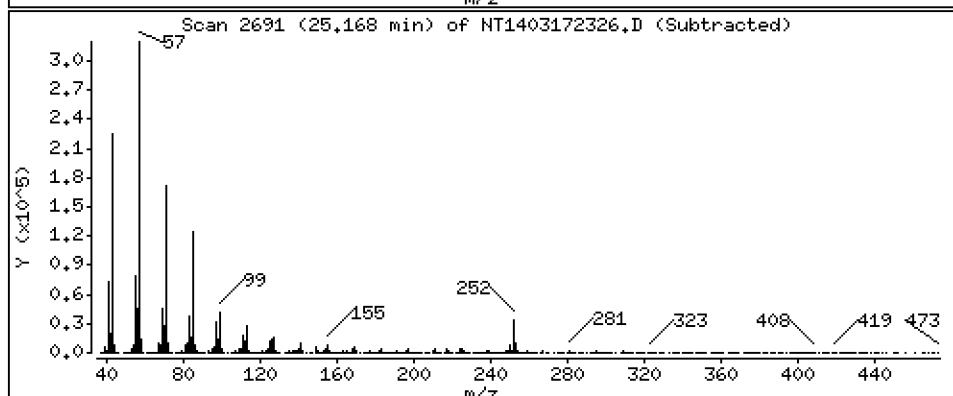
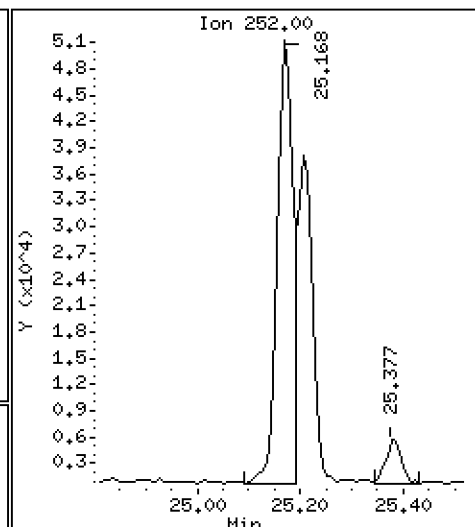
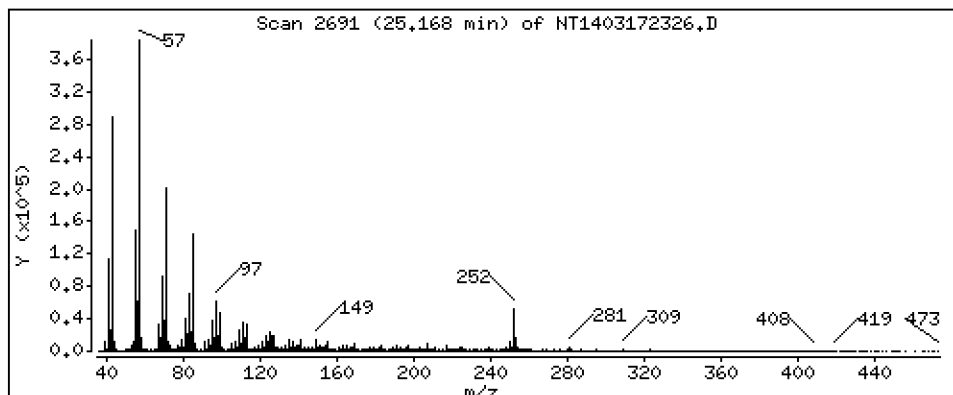
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,198 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

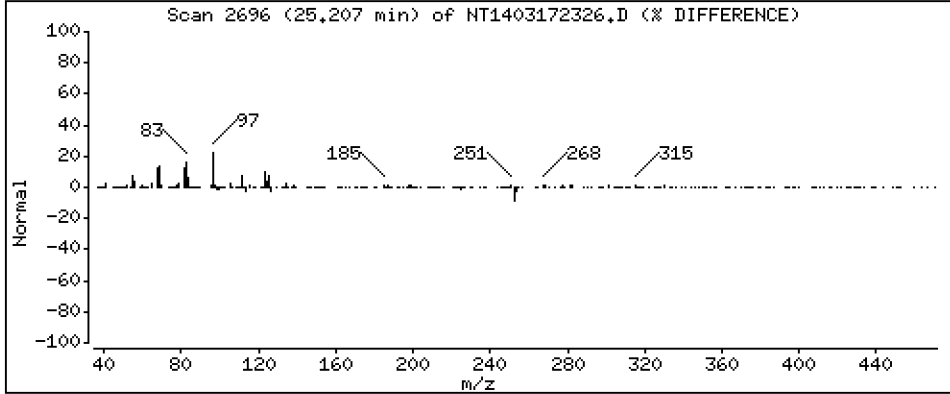
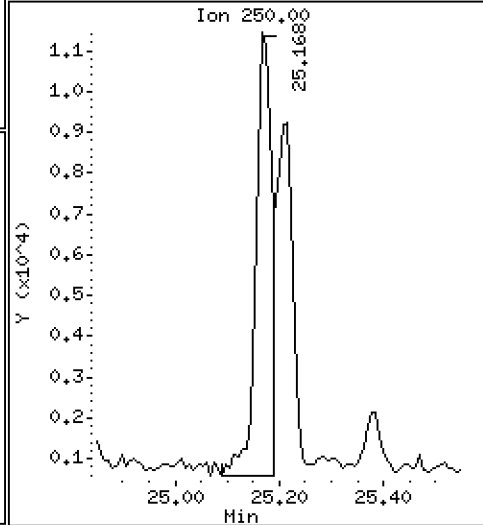
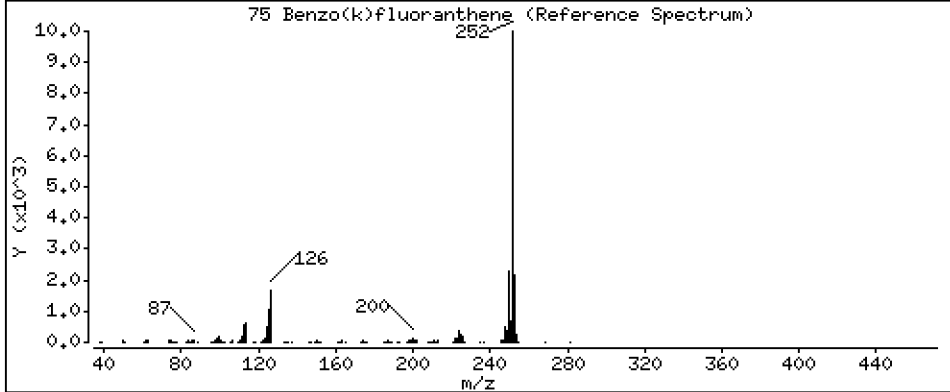
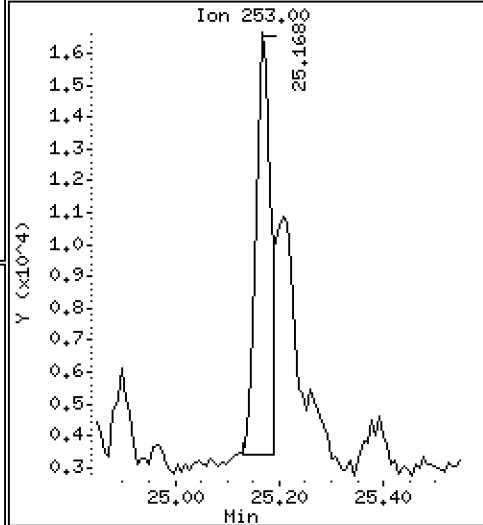
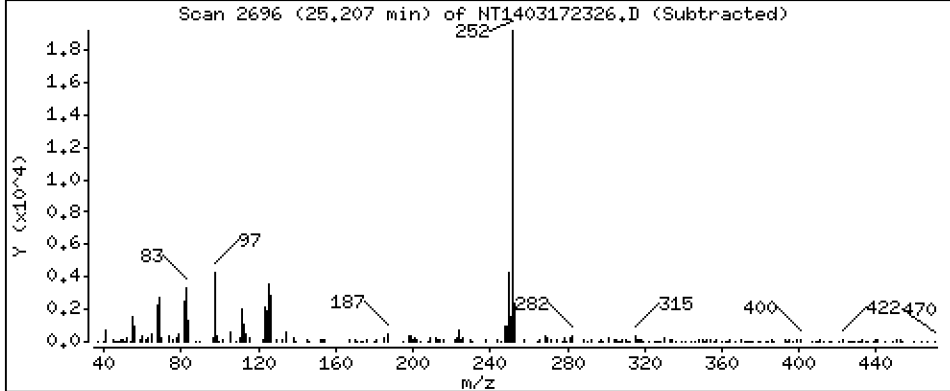
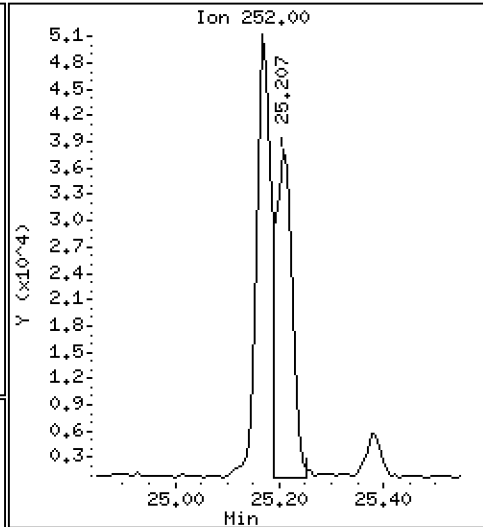
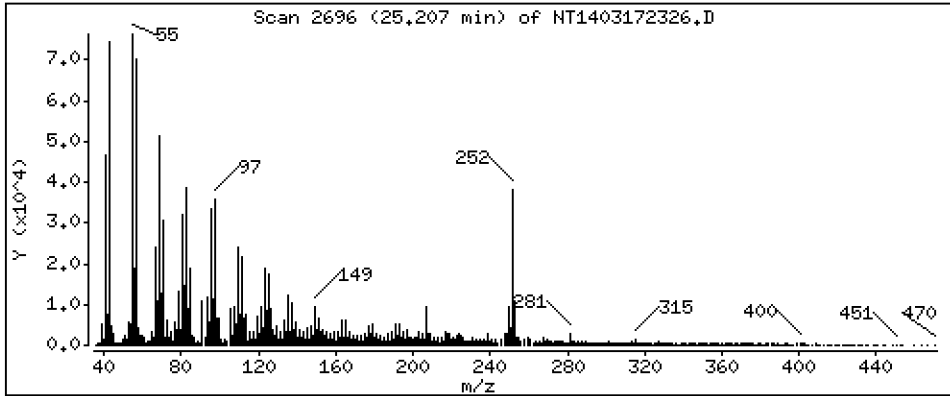
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,772 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

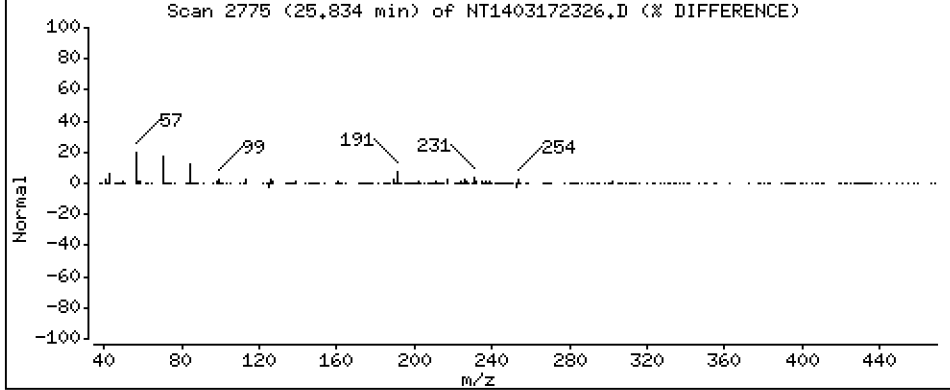
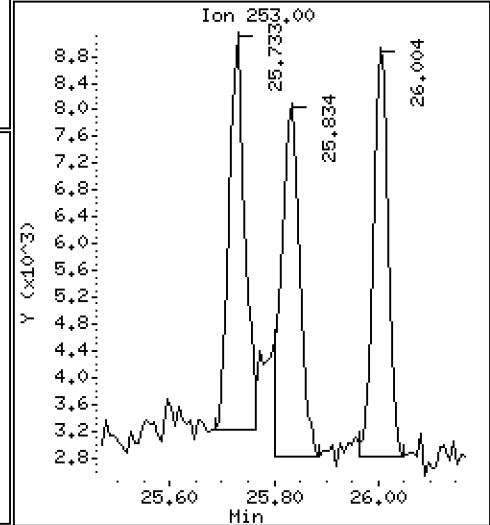
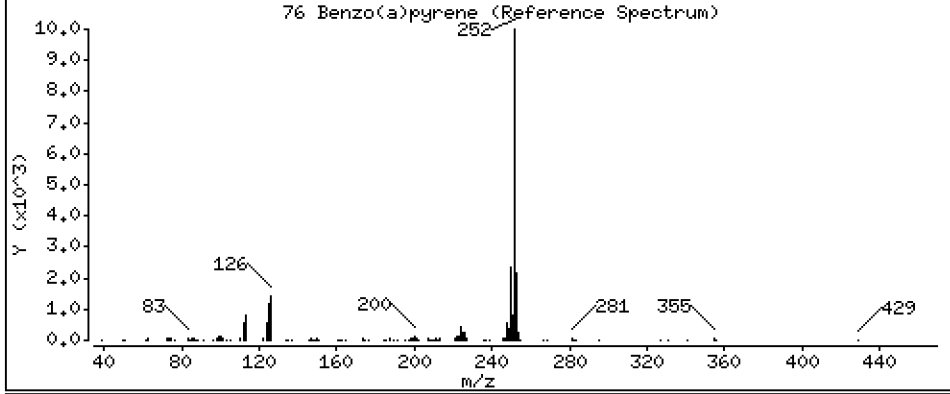
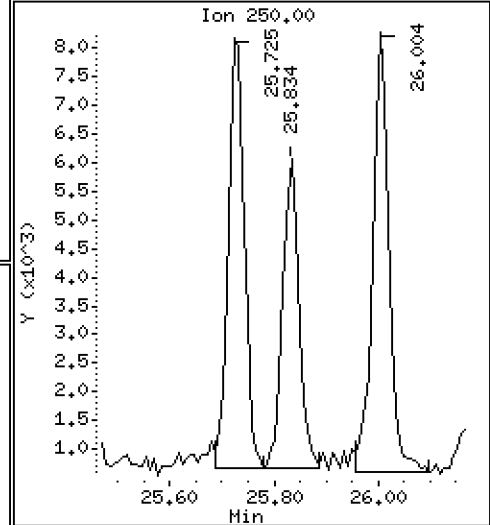
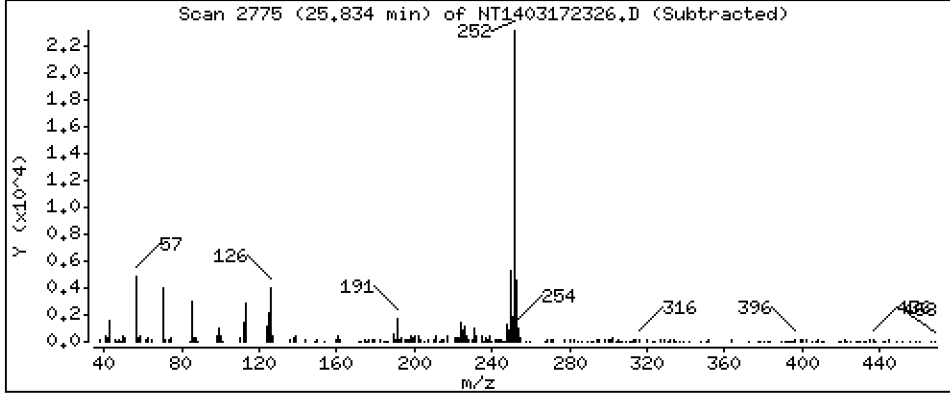
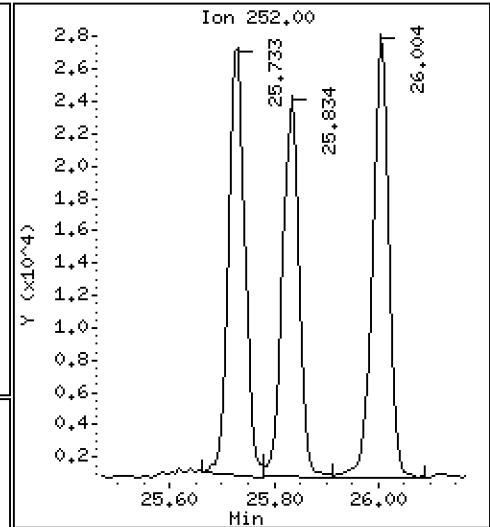
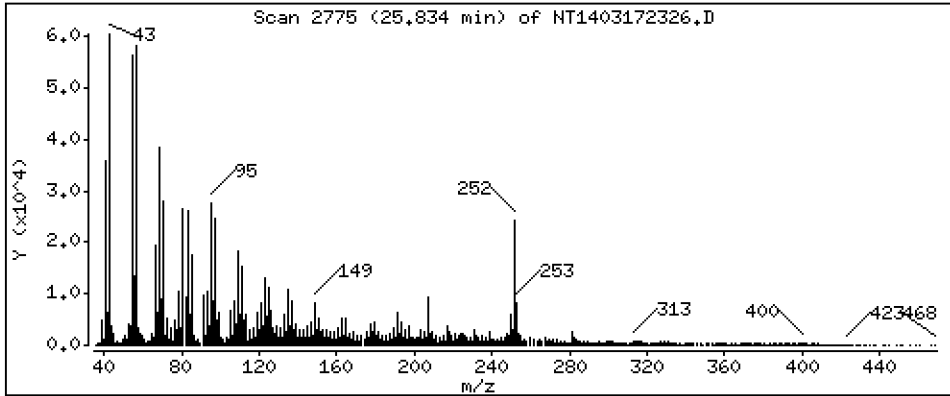
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,246 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

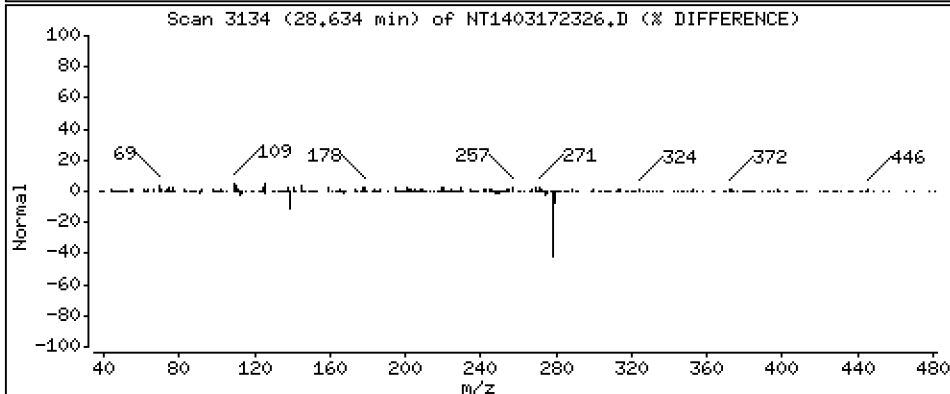
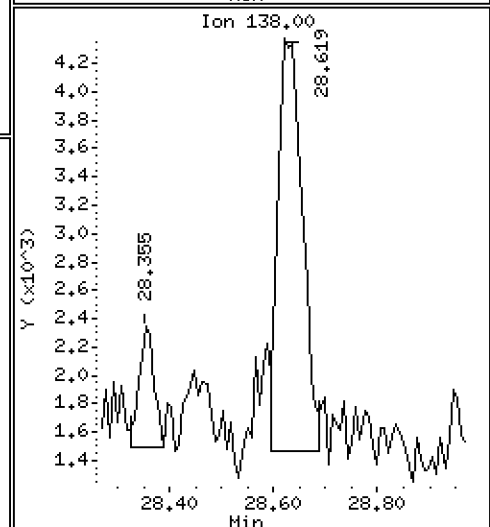
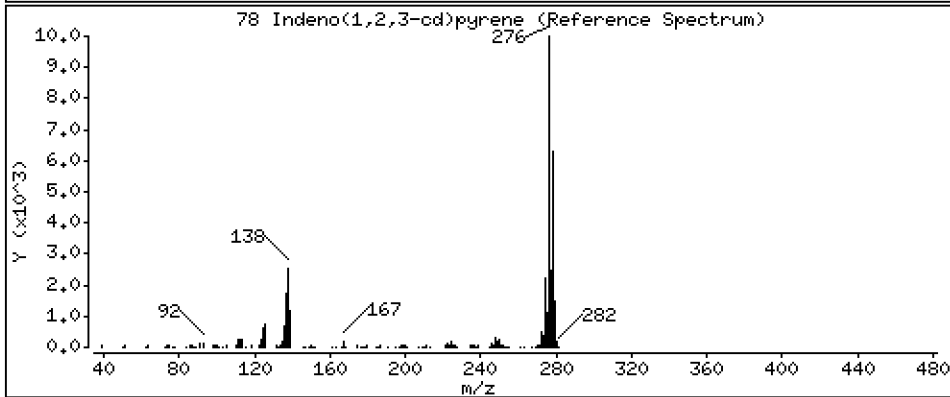
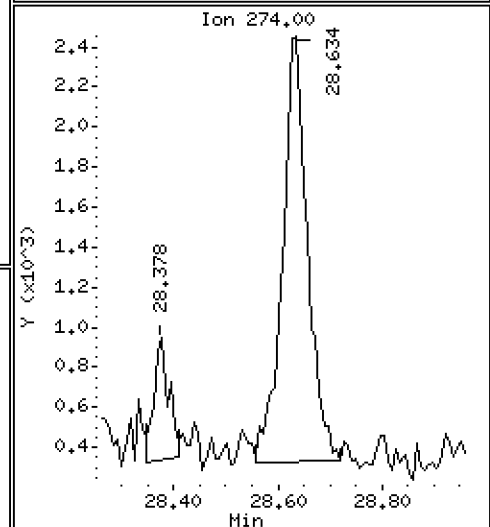
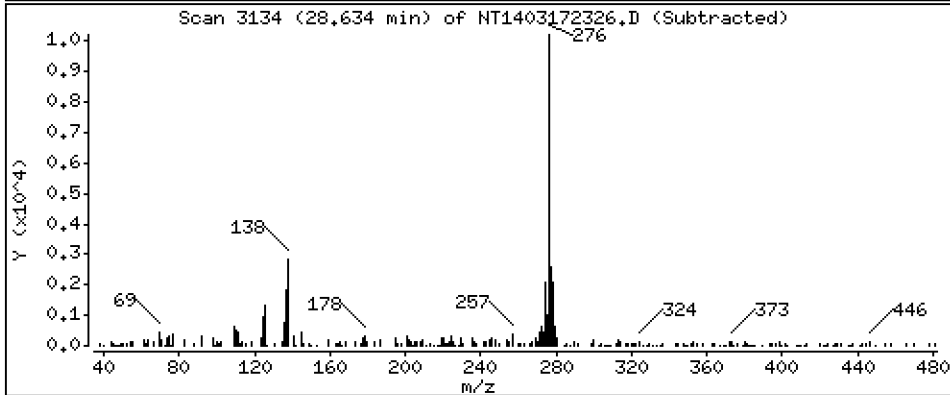
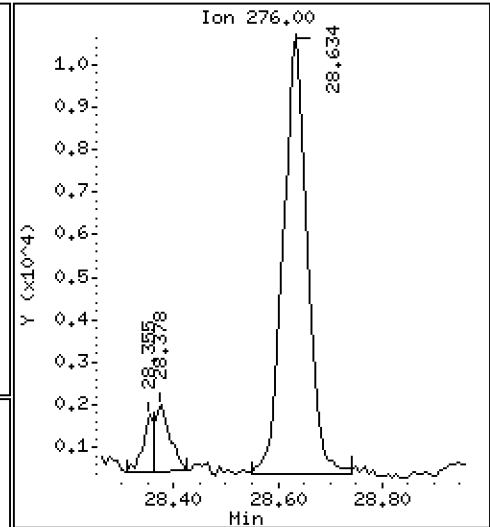
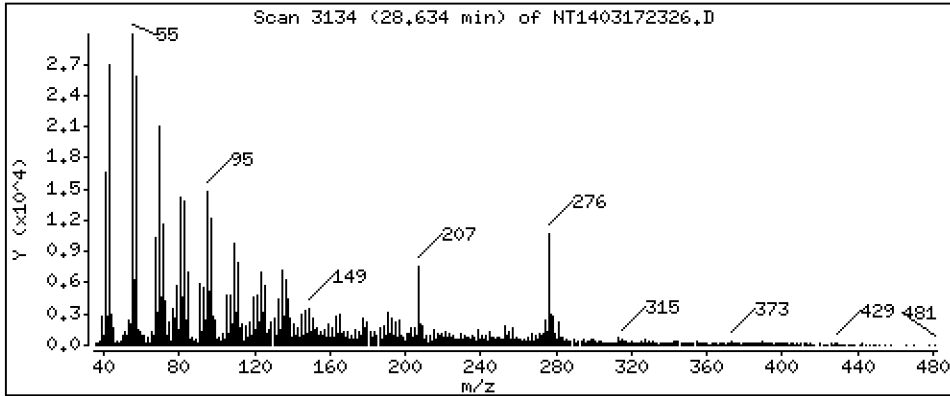
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,7485 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

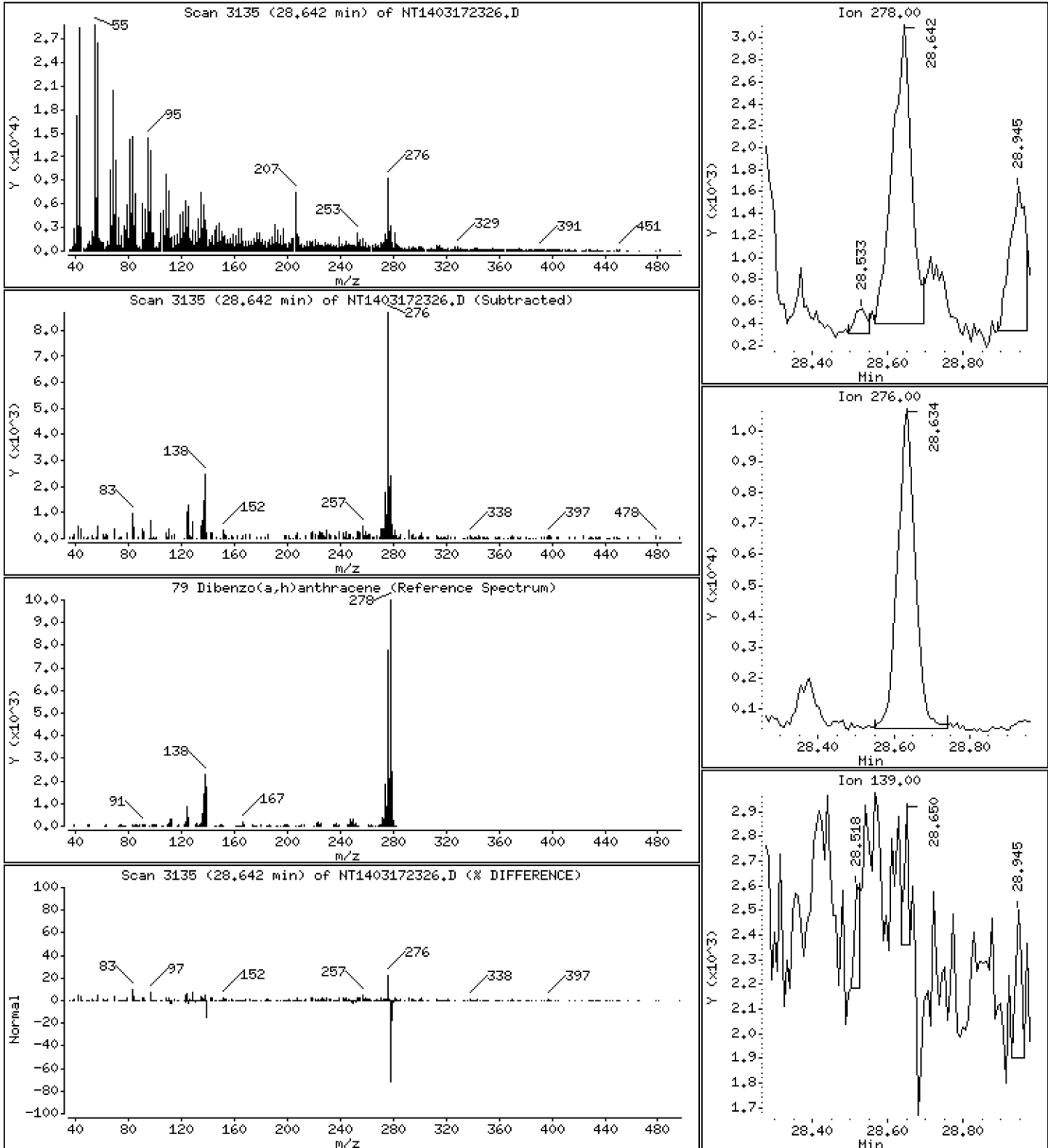
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2555 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

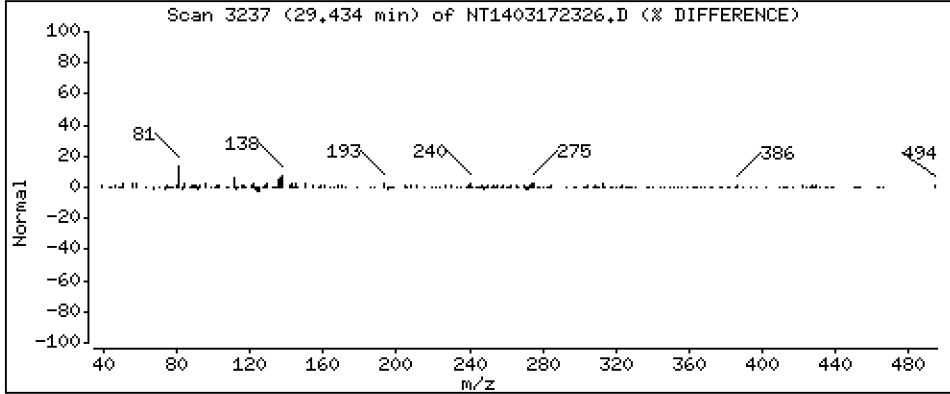
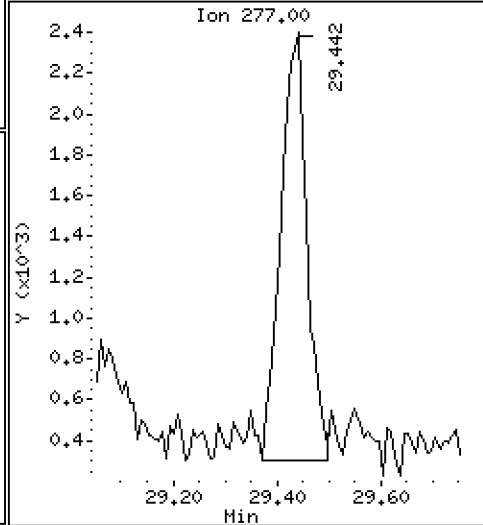
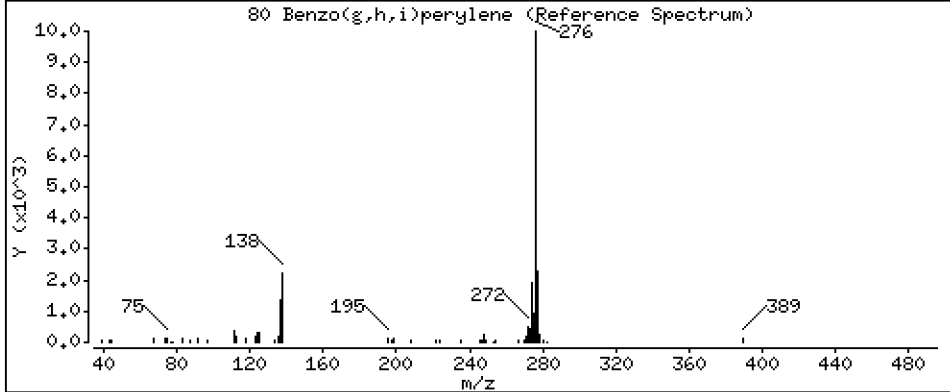
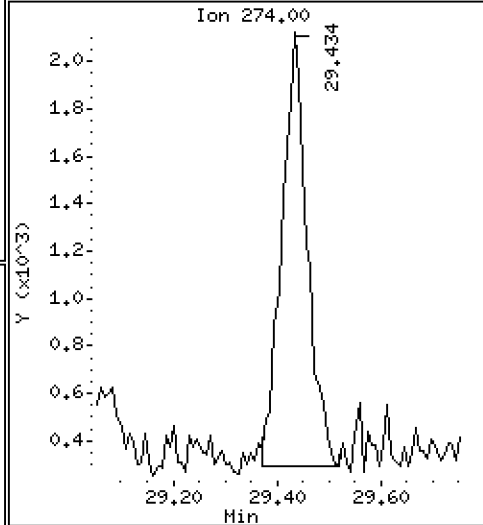
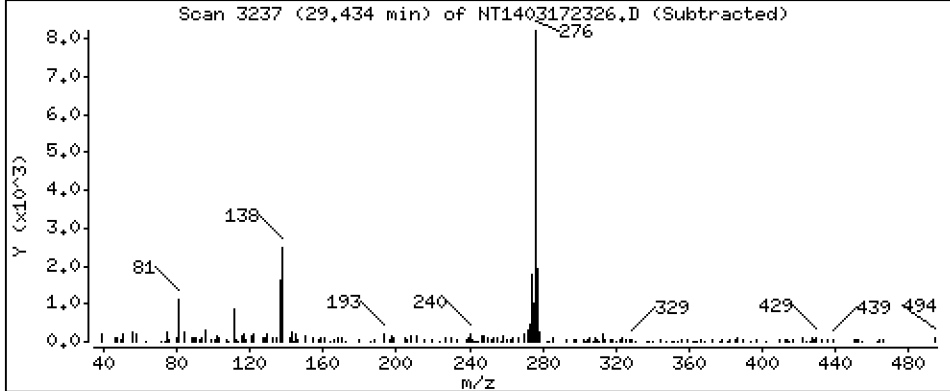
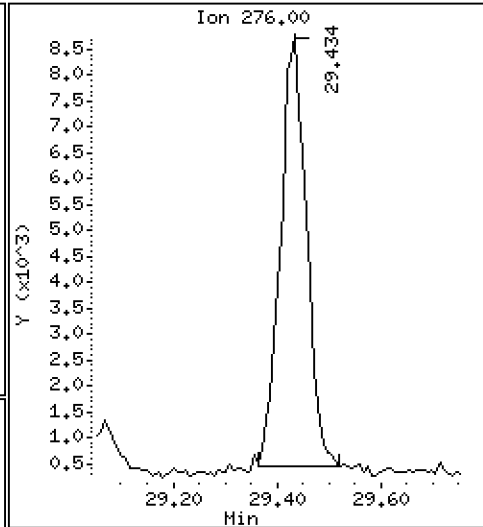
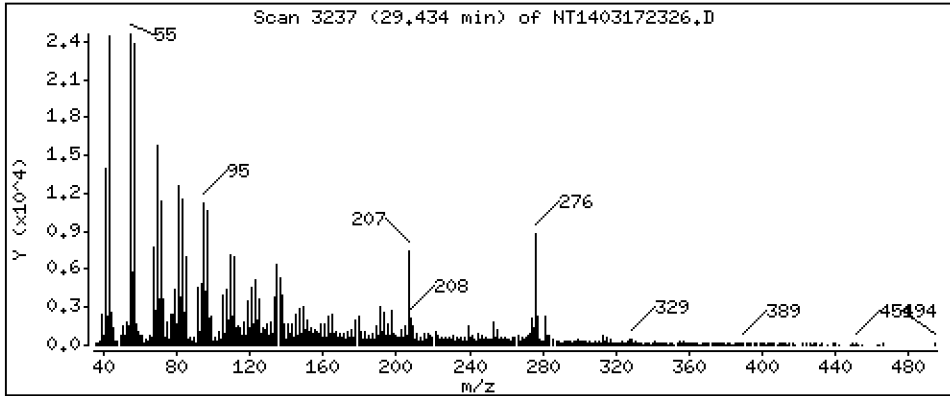
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,7962 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

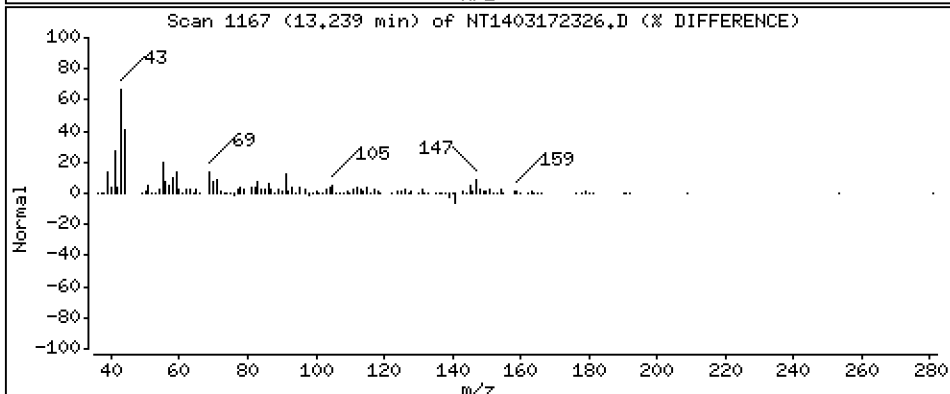
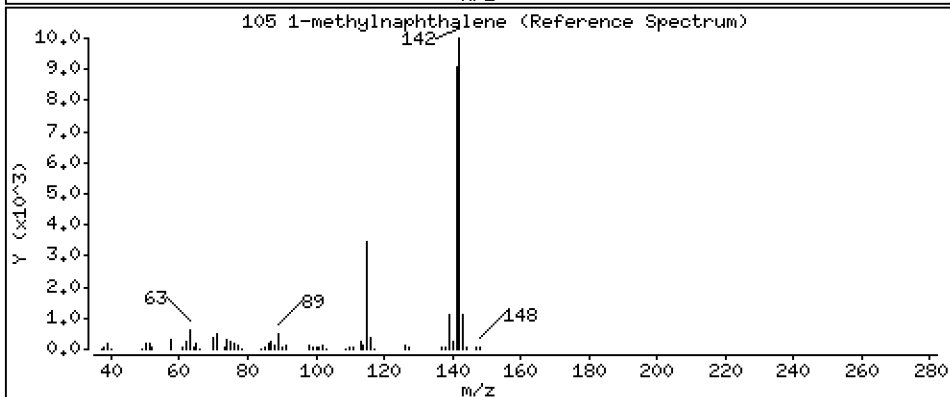
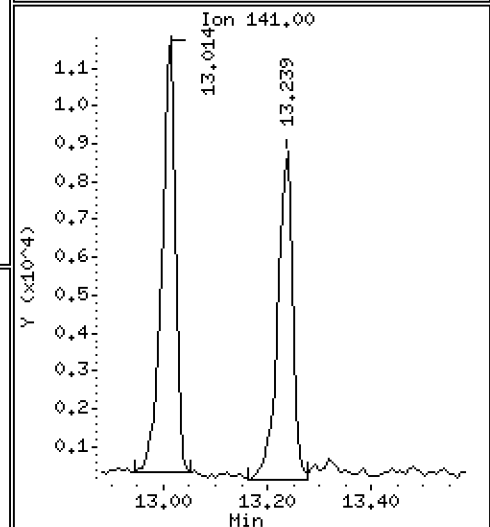
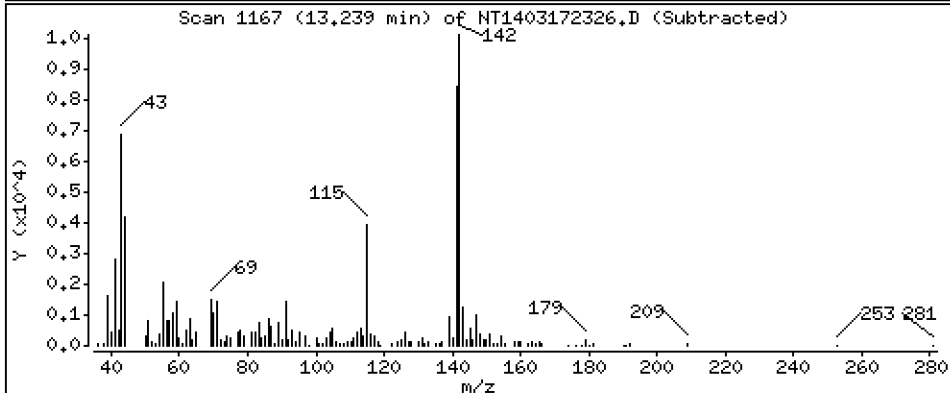
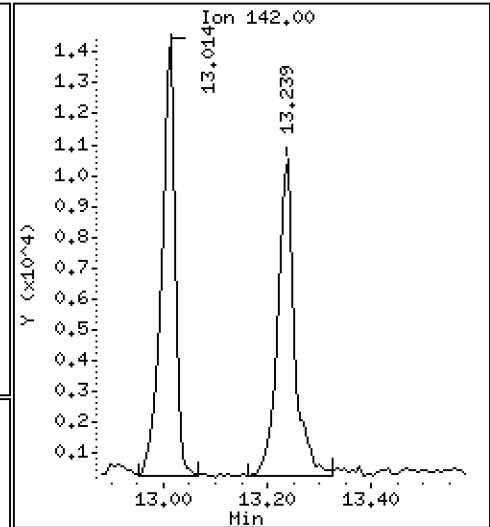
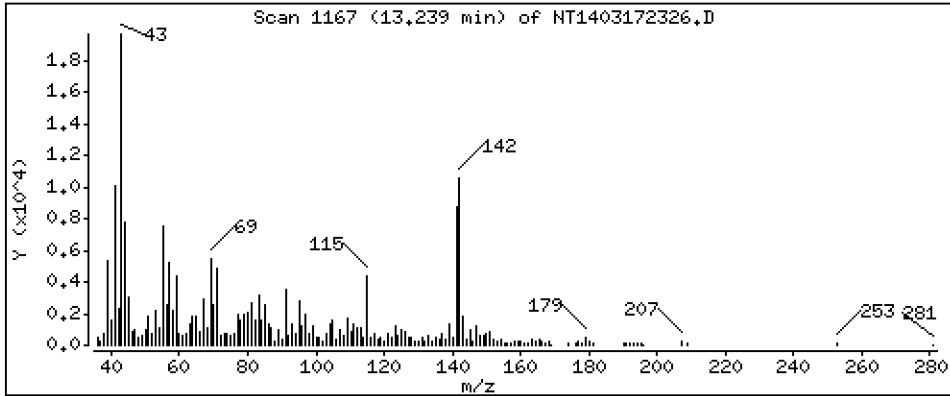
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1599 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

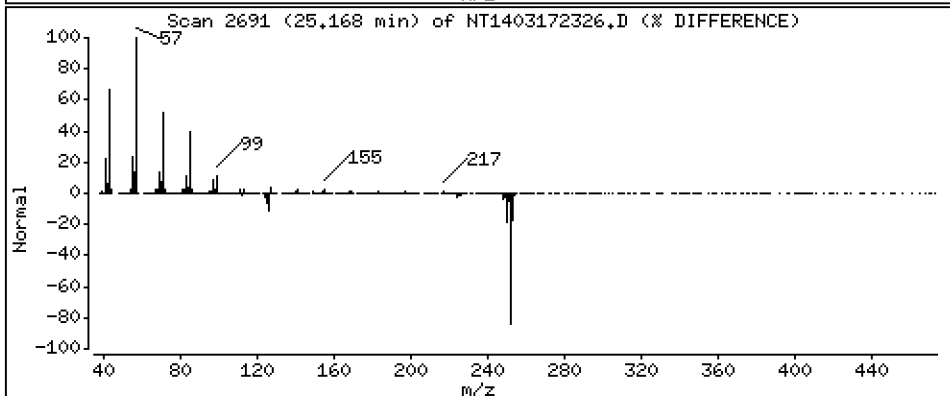
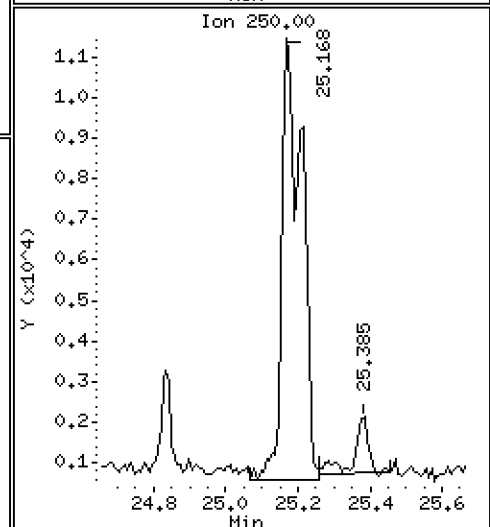
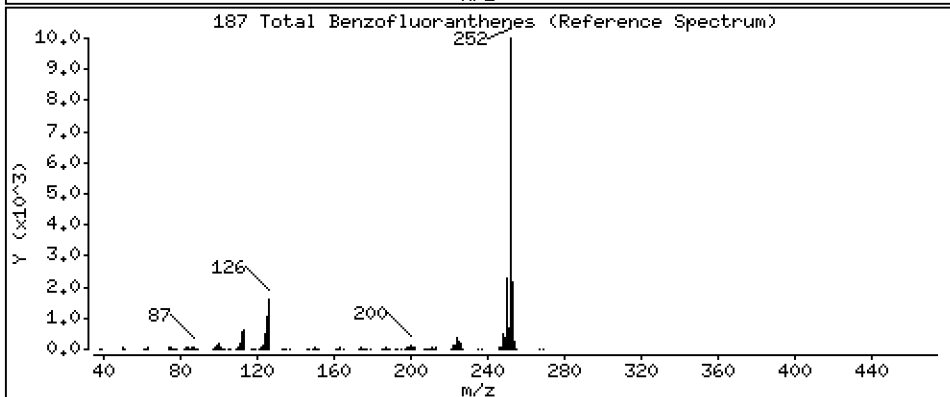
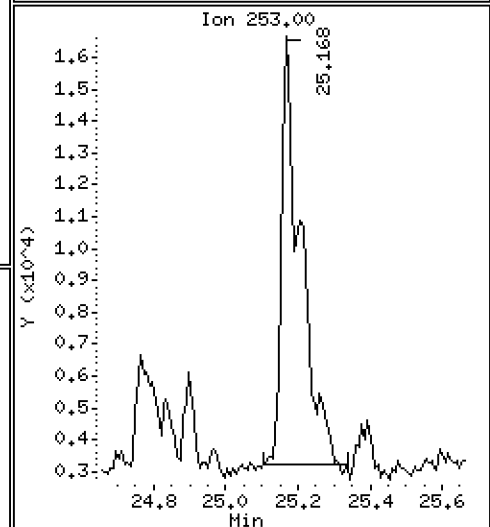
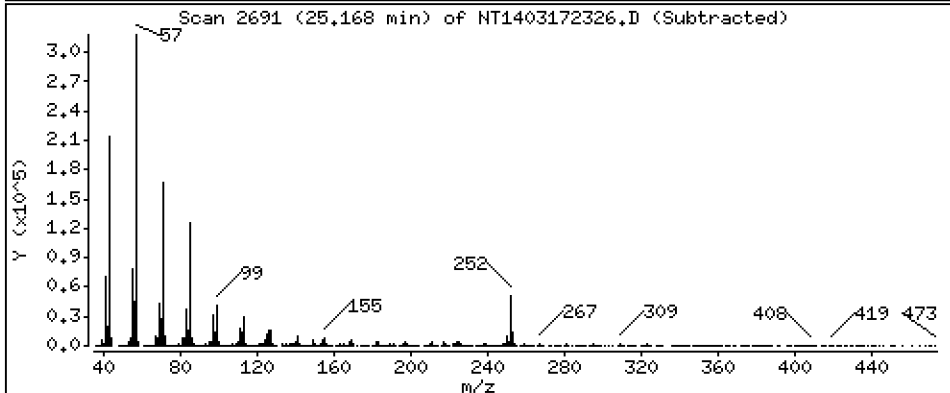
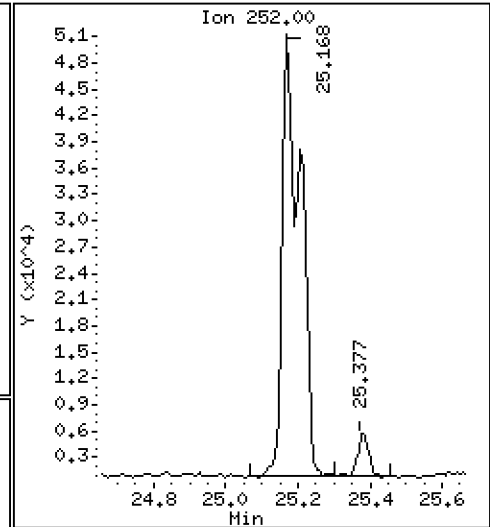
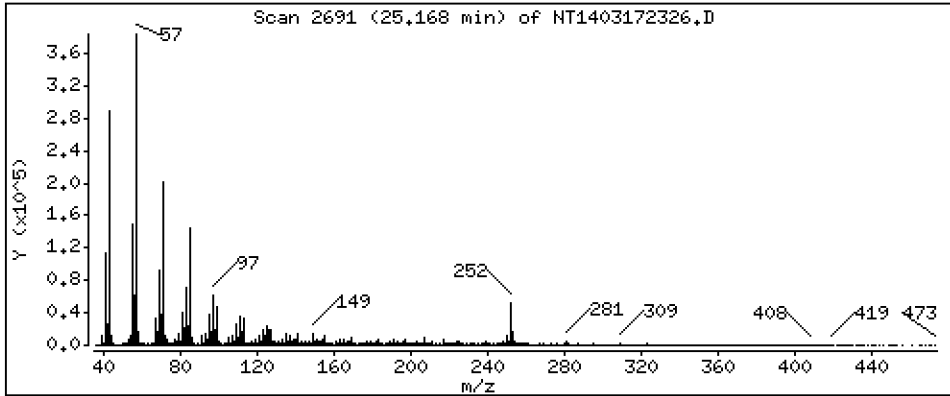
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 3,850 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172326.D
 Lab Smp Id: 23B0229-08
 Inj Date : 18-MAR-2023 05:30 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-08
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.844	6.821	(1.000)	397673	5.45961	5.460
\$ 2 Phenol-d5	99		8.428	8.412	(1.000)	544133	5.67409	5.674
3 Phenol	94		8.451	8.436	(1.000)	64013	0.62809	0.6281
\$ 5 2-Chlorophenol-d4	132		8.706	8.698	(1.000)	465676	6.15944	6.159
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	214432	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.003)	2512	0.03212	0.03212 (M)
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	192168	3.80461	3.805
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.349	9.341	(1.000)	34468	0.72646	0.7265
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.838	9.830	(1.000)	24662	0.28907	0.2891
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	369467	4.20666	4.207
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.025	11.103	(0.953)	77250	1.26637	1.266
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	829944	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	46601	0.21018	0.2102
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.014	13.006	(1.125)	25356	0.16398	0.1640
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.796	13.795	(0.907)	675245	4.62340	4.623
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163					Compound Not Detected.		
40 Acenaphthylene	152		14.887	14.879	(0.979)	16440	0.07819	0.07819
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.204	15.196	(1.000)	403286	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.266	15.266	(1.004)	16841	0.13719	0.1372
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.591	15.590	(1.025)	30760	0.17552	0.1755
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.163	16.163	(1.063)	47229	0.33968	0.3397
49 Fluorene	166		16.309	16.309	(1.073)	30266	0.18219	0.1822
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.849	16.841	(1.108)	102338	6.68389	6.684
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.256	18.240	(1.000)	642247	4.00000	
60 Phenanthrene	178		18.302	18.294	(1.003)	177957	0.96980	0.9698
61 Anthracene	178		18.395	18.387	(1.008)	67767	0.38332	0.3833
62 Carbazole	167		18.720	18.712	(1.025)	20670	0.13141	0.1314
63 Di-n-butylphthalate	149		19.524	19.509	(1.070)	14614	0.07330	0.07330
64 Fluoranthene	202		20.731	20.677	(0.890)	330519	4.40460	4.405
65 Pyrene	202		21.126	21.103	(0.907)	322614	4.19231	4.192
\$ 66 Terphenyl-d14	244		21.397	21.389	(0.918)	387630	7.44078	7.441
67 Butylbenzylphthalate	149		22.318	22.310	(0.958)	10742	0.31862	0.3186
68 Benzo(a)anthracene	228		23.271	23.263	(0.999)	80755	1.18743	1.187
* 69 Chrysene-d12	240		23.302	23.294	(1.000)	184444	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.348	23.340	(1.002)	102775	1.66977	1.670
72 bis(2-Ethylhexyl)phthalate	149		23.340	23.332	(0.960)	129132	2.59620	2.596
* 134 Di-n-octylphthalate-d4	153		24.323	24.316	(1.000)	377837	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.167	25.159	(0.970)	105345	2.19818	2.198
75 Benzo(k)fluoranthene	252		25.206	25.198	(0.971)	84192	1.77222	1.772 (M)
76 Benzo(a)pyrene	252		25.833	25.818	(0.996)	51063	1.24601	1.246
* 77 Perylene-d12	264		25.949	25.934	(1.000)	135619	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.634	28.610	(1.103)	33388	0.74854	0.7485
79 Dibenzo(a,h)anthracene	278		28.642	28.626	(1.104)	9606	0.25554	0.2555
80 Benzo(g,h,i)perylene	276		29.434	29.403	(1.134)	29269	0.79622	0.7962
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.238	13.230	(1.144)	22407	0.15994	0.1599
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.167	25.159	(0.970)	175250	3.85043	3.850
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172326.D Calibration Time: 23:31
 Lab Smp Id: 23B0229-08
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	214432	-7.18
27 Naphthalene-d8	843789	421895	1687578	829944	-1.64
42 Acenaphthene-d10	432455	216228	864910	403286	-6.74
59 Phenanthrene-d10	793780	396890	1587560	642247	-19.09
69 Chrysene-d12	411057	205529	822114	184444	-55.13
134 Di-n-octylphthala	799010	399505	1598020	377837	-52.71
77 Perylene-d12	254782	127391	509564	135619	-46.77

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.07	0.09
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.05
59 Phenanthrene-d10	18.24	17.74	18.74	18.26	0.09
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172326.D

Lab ID: 23B0229-08
nt14.i, ABN.m, 18-MAR-2023 05:30

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.960	-0.0067	Benzoic acid

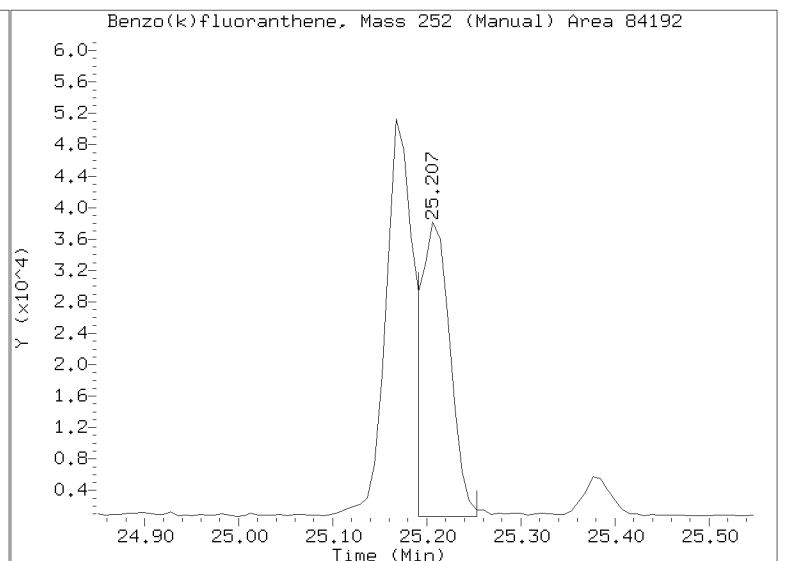
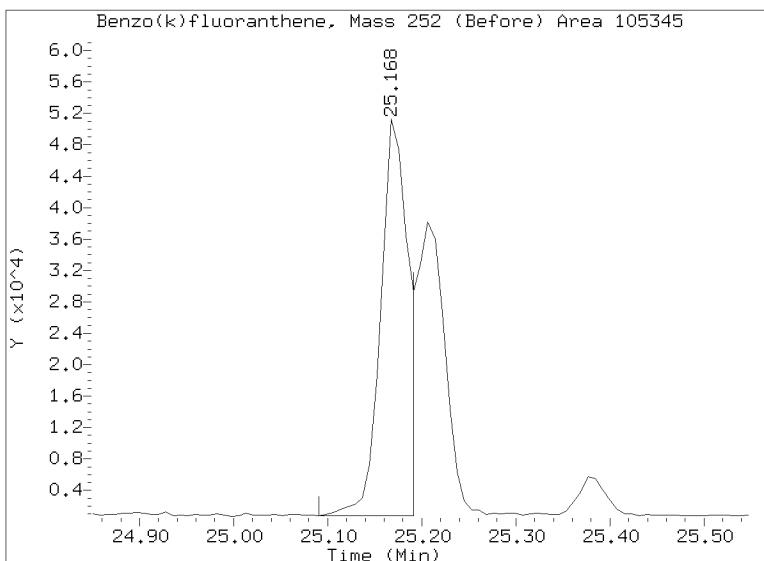
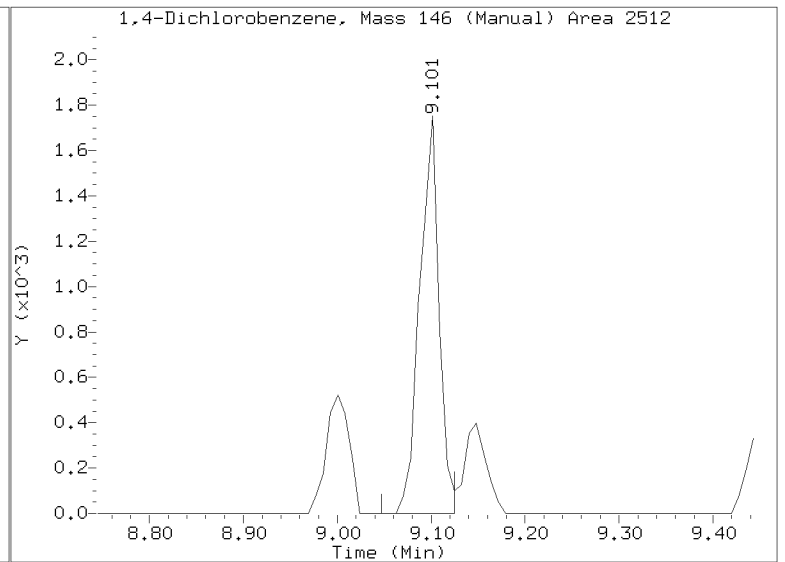
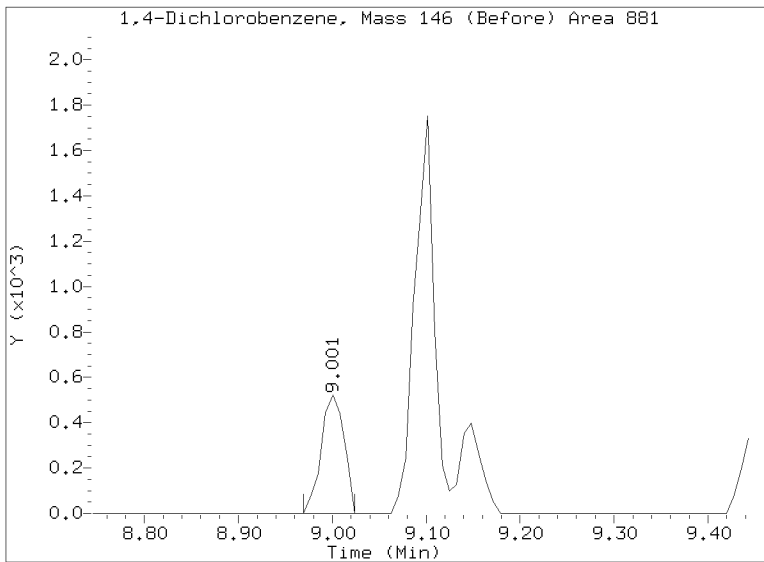
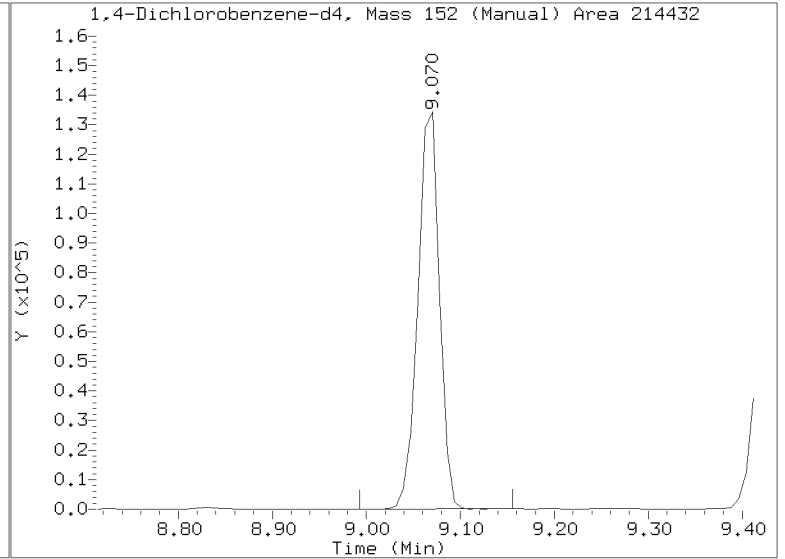
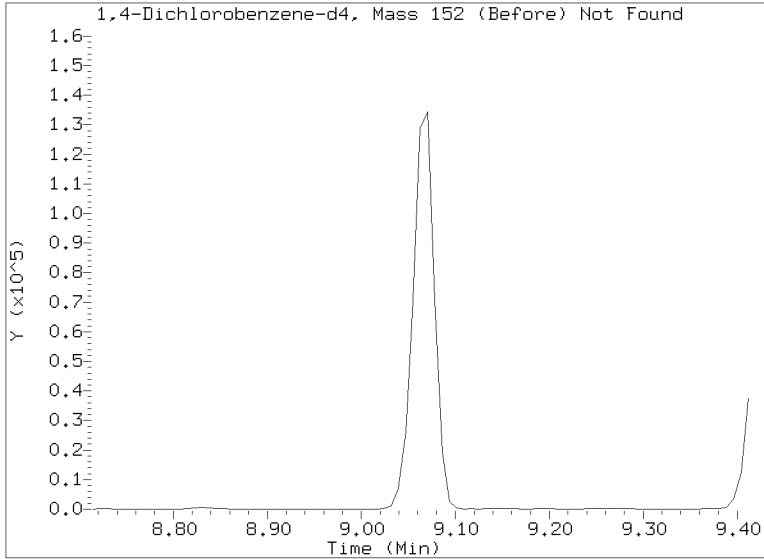
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172326.D
Injection Date: 18-MAR-2023 05:30
Lab ID:23B0229-08 Client ID:
Report Date: 03/22/2023 09:50





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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-08RE1 A

SDG: 23B0229

Sampled: 02/08/23 15:25

Prepared: 02/17/23 15:00

File ID: NT1403182314.D

% Solids: 49.68

Preparation: EPA 3546 (Microwave)

Analyzed: 03/19/23 00:52

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	4	66.4	J, D	17.0	77.5
106-44-5	4-Methylphenol	4	77.5	U	28.6	77.5
91-20-3	Naphthalene	4	19.7	J, D	16.4	77.5
91-57-6	2-Methylnaphthalene	4	77.5	U	17.5	77.5
208-96-8	Acenaphthylene	4	77.5	U	24.2	77.5
131-11-3	Dimethylphthalate	4	77.5	U	17.0	77.5
83-32-9	Acenaphthene	4	77.5	U	20.2	77.5
132-64-9	Dibenzofuran	4	77.5	U	54.7	77.5
86-73-7	Fluorene	4	77.5	U	56.5	77.5
85-01-8	Phenanthrene	4	95.6	D	33.8	77.5
120-12-7	Anthracene	4	41.6	J, D	27.9	77.5
206-44-0	Fluoranthene	4	318	D	23.6	77.5
129-00-0	Pyrene	4	329	D	22.0	77.5
85-68-7	Butylbenzylphthalate	4	36.7	J, D	36.5	77.5
56-55-3	Benzo(a)anthracene	4	115	D	23.1	77.5
218-01-9	Chrysene	4	158	D	23.5	77.5
117-81-7	bis(2-Ethylhexyl)phthalate	4	207	D	21.2	194
	Benzo(a)fluoranthenes, Total	4	330	D	38.7	155
50-32-8	Benzo(a)pyrene	4	110	D	16.4	77.5
193-39-5	Indeno(1,2,3-cd)pyrene	4	80.1	D	56.8	77.5
53-70-3	Dibenzo(a,h)anthracene	4	77.5	U	66.8	77.5
191-24-2	Benzo(g,h,i)perylene	4	88.0	D	52.7	77.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	726.50	545	74.9	27 - 120	
Phenol-d5	726.50	547	75.2	29 - 120	
2-Chlorophenol-d4	726.50	601	82.8	31 - 120	
1,2-Dichlorobenzene-d4	484.33	374	77.2	32 - 120	
Nitrobenzene-d5	484.33	403	83.2	30 - 120	
2-Fluorobiphenyl	484.33	442	91.3	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-08RE1 A

SDG: 23B0229

Sampled: 02/08/23 15:25

Prepared: 02/17/23 15:00

File ID: NT1403182314.D

% Solids: 49.68

Preparation: EPA 3546 (Microwave)

Analyzed: 03/19/23 00:52

Batch: BLB0424

Sequence: SLC0355

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00048

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	726.50	655	90.2	24 - 134	
p-Terphenyl-d14	484.33	568	117	37 - 120	

Data File: \\target\share\chem3\nt14,1\20230318,16\NT1403182314.D

Date: 18-MAR-2023 00:52

Client ID:

Sample Info: 23B0229-08REL,4

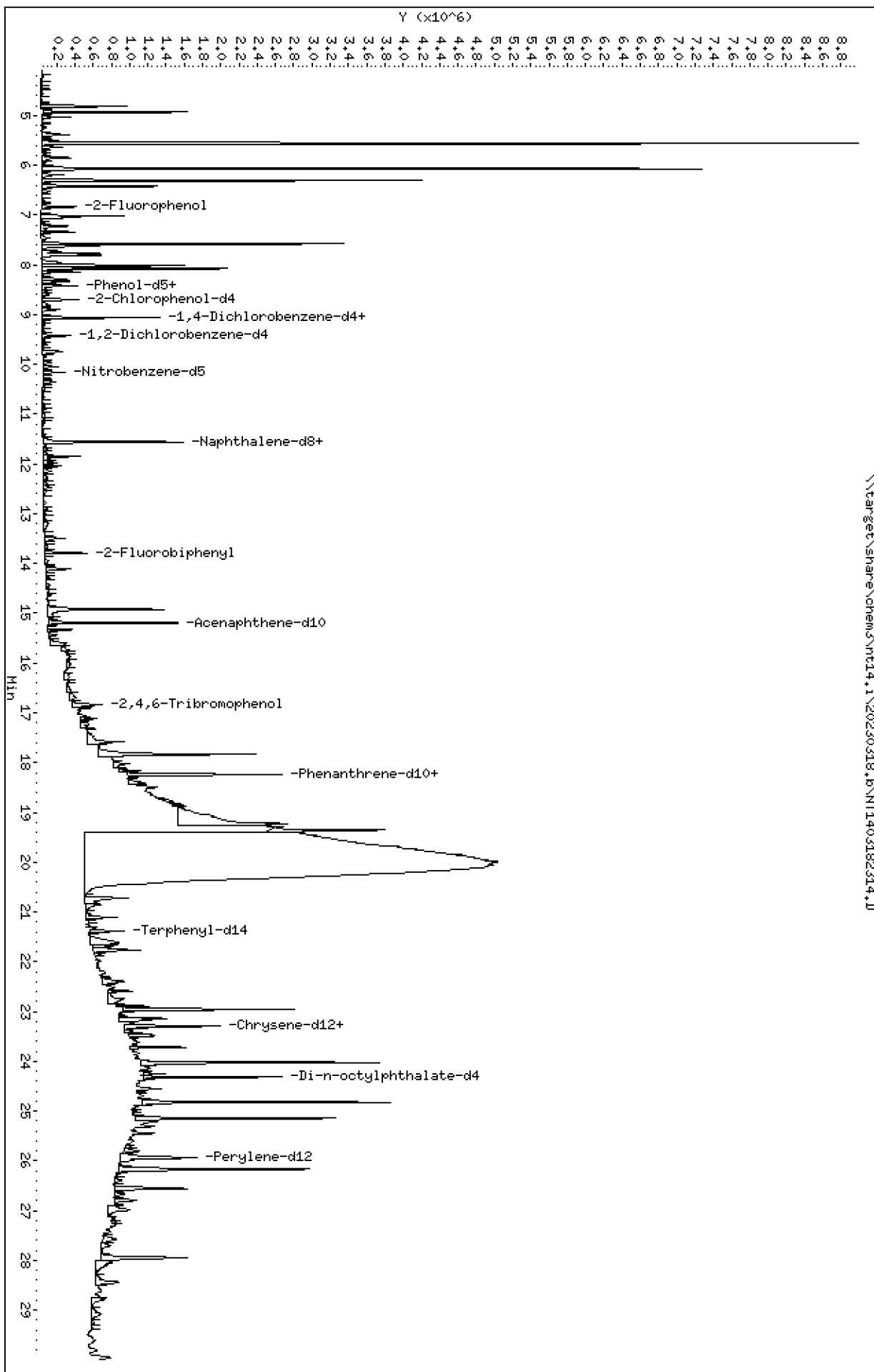
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230318,16\NT1403182314.D



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

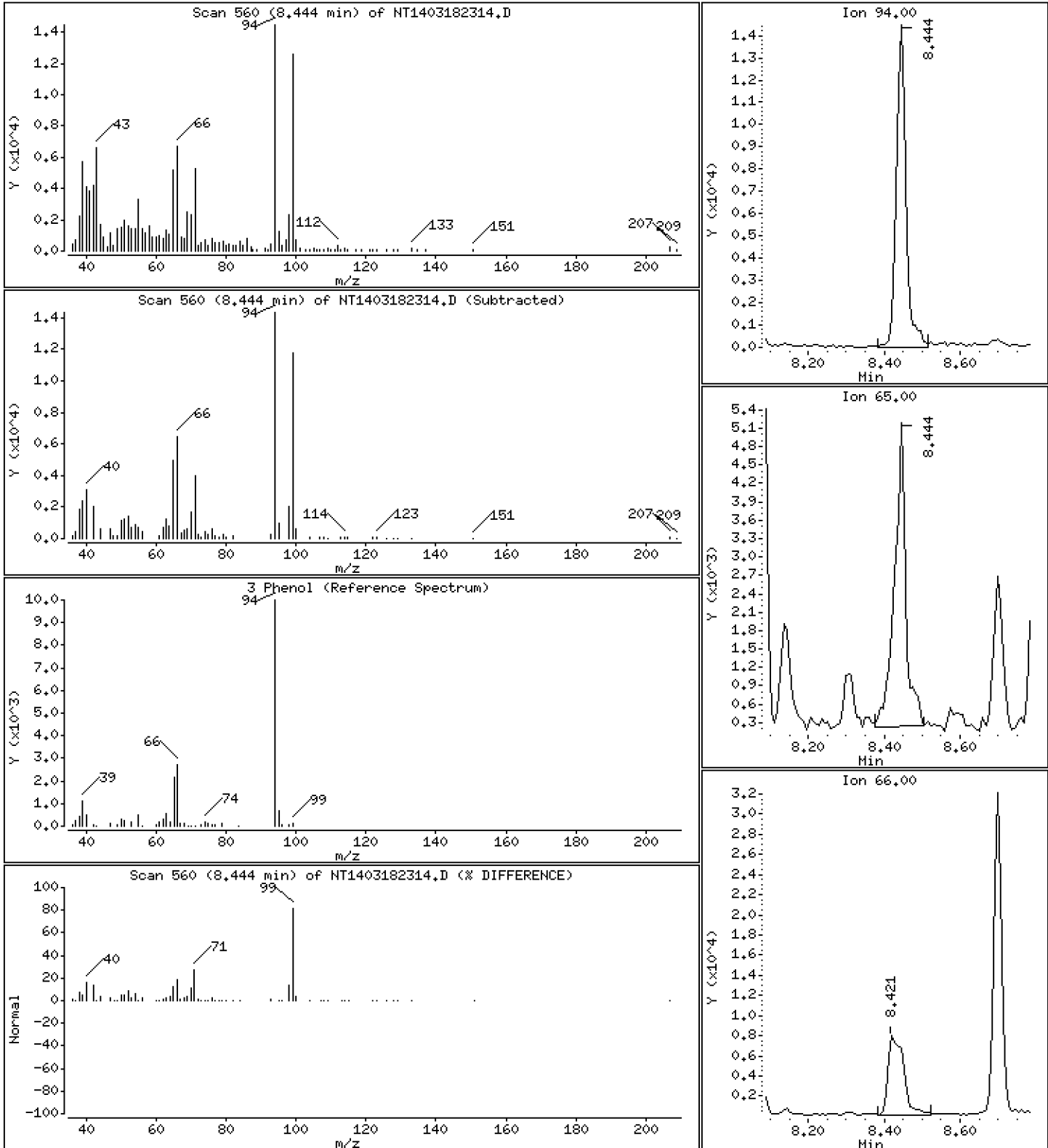
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,6852 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

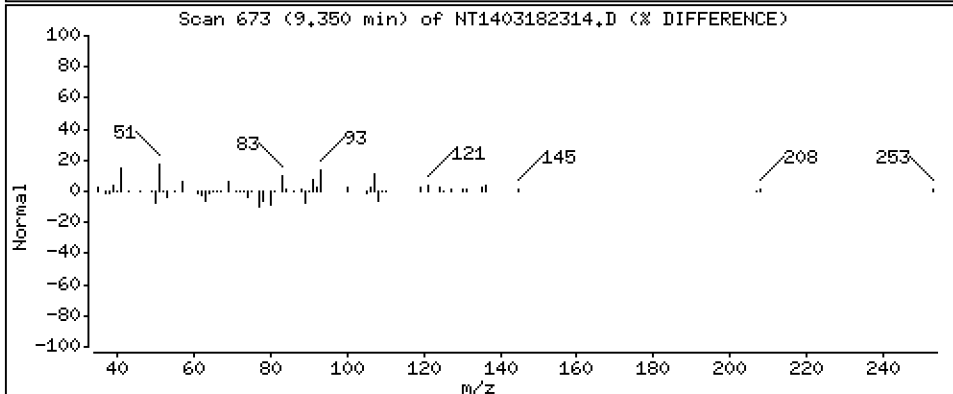
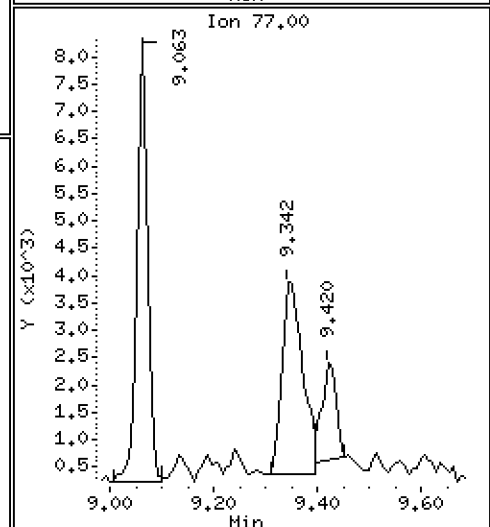
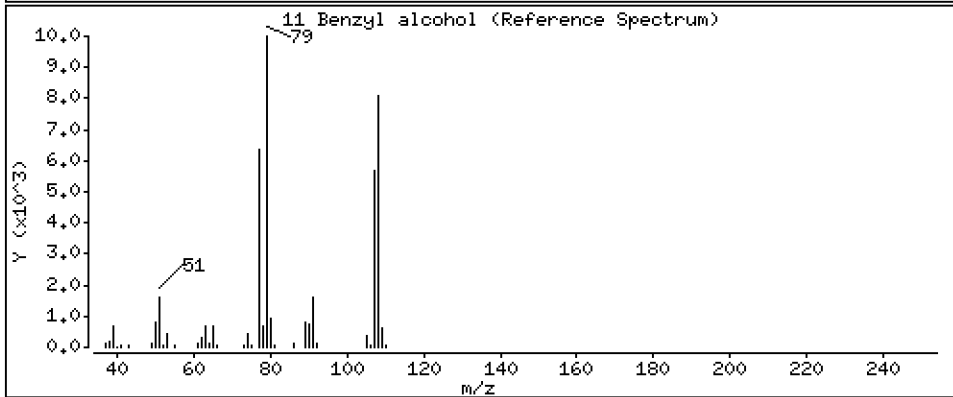
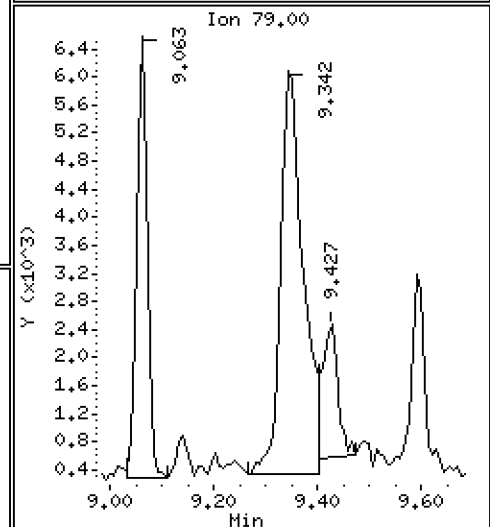
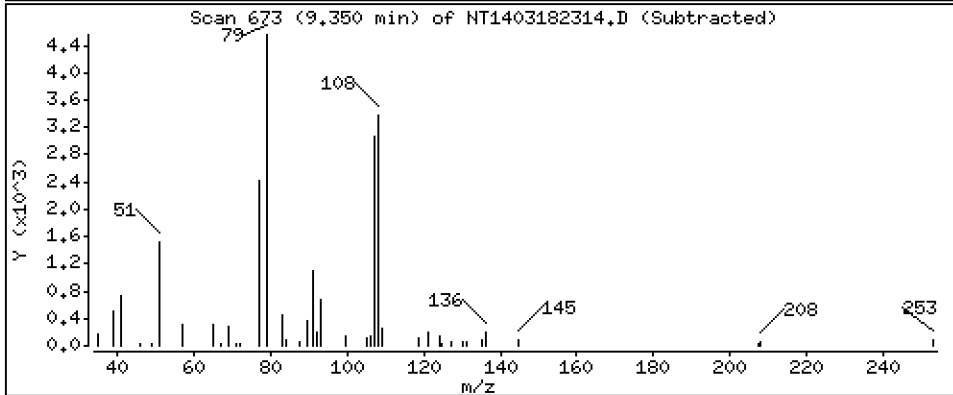
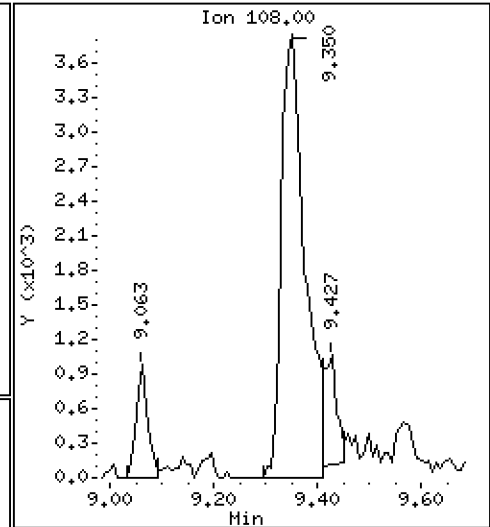
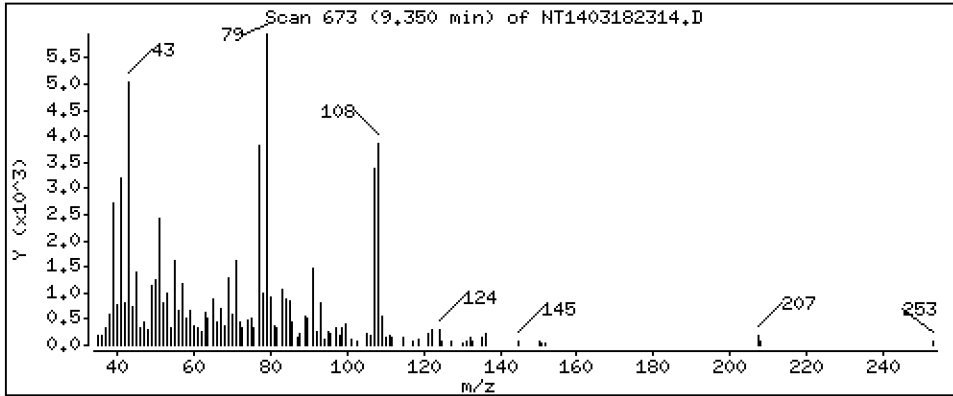
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,7173 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

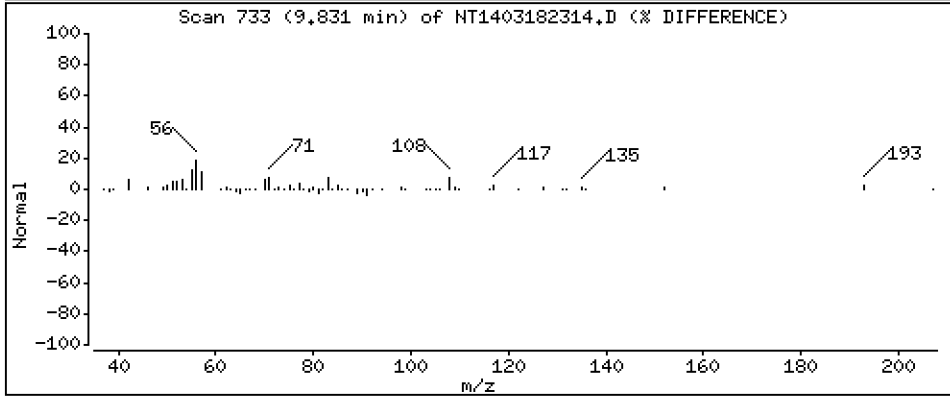
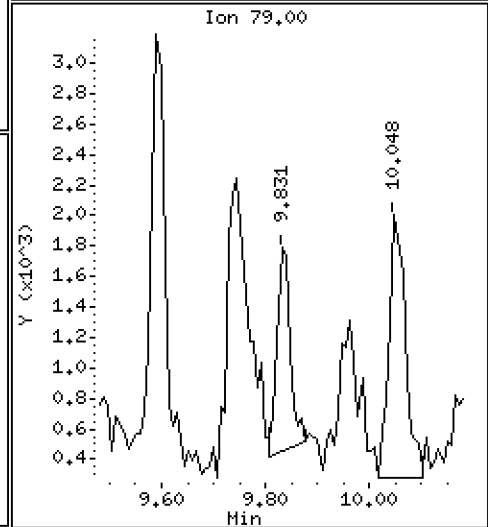
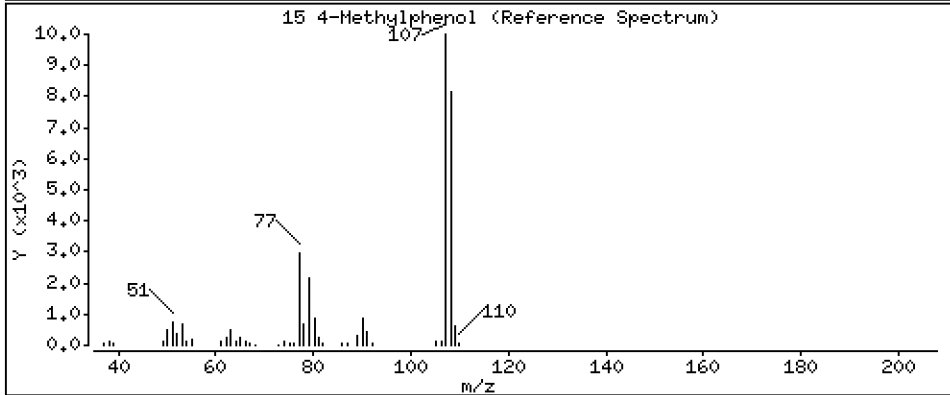
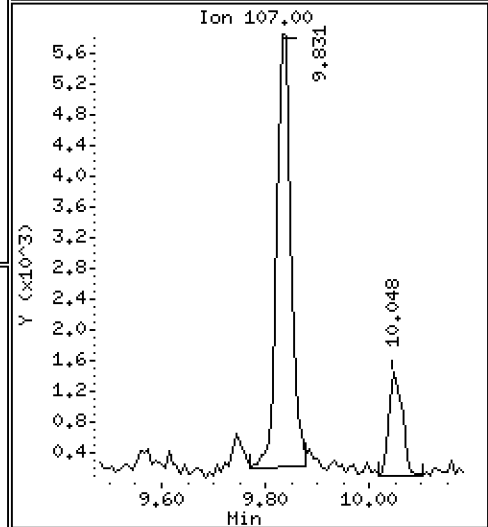
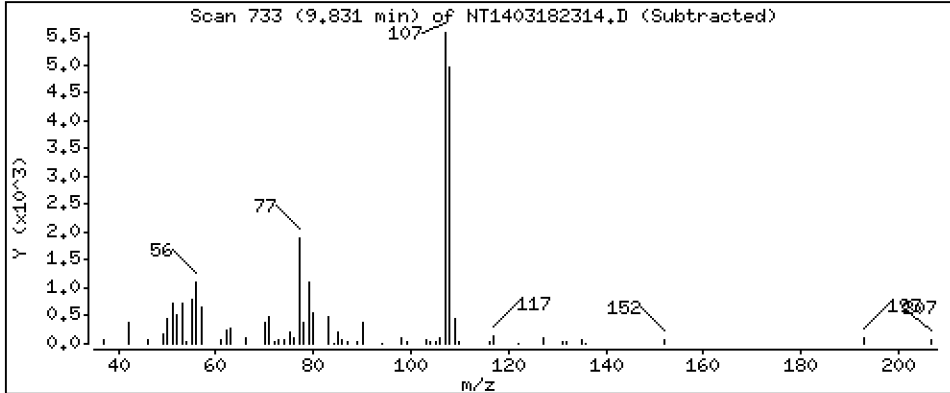
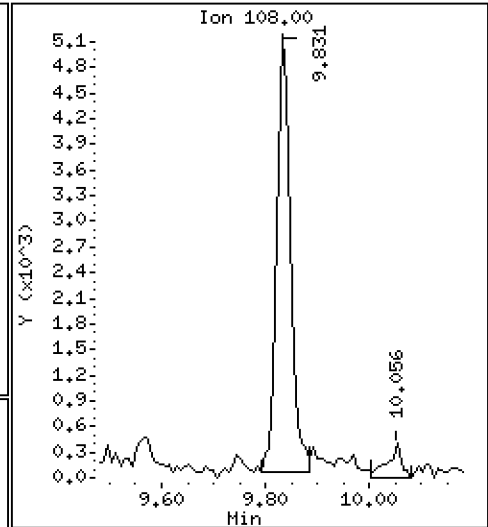
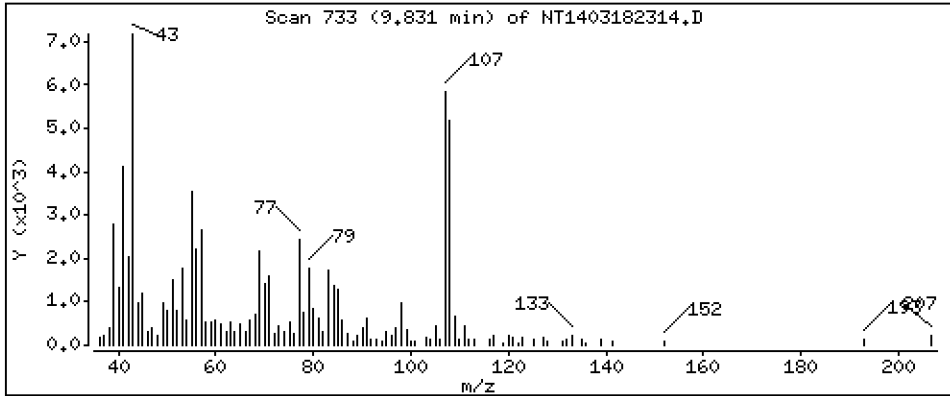
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,2947 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

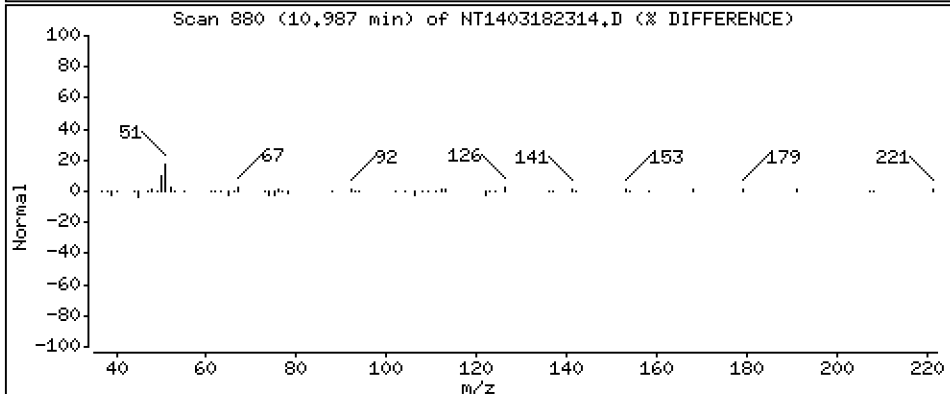
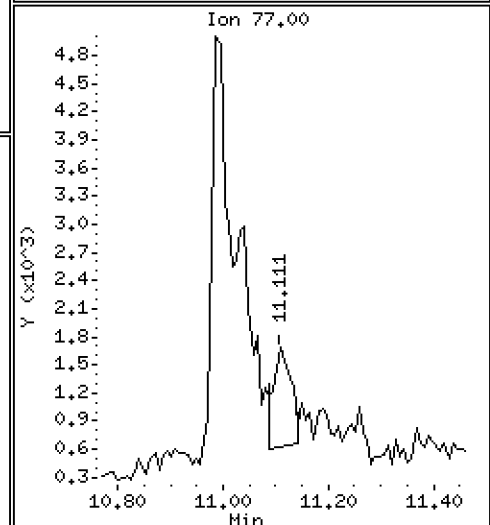
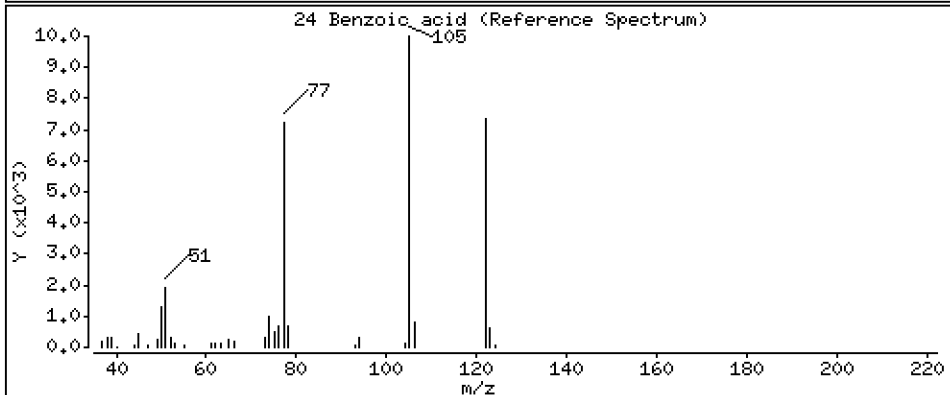
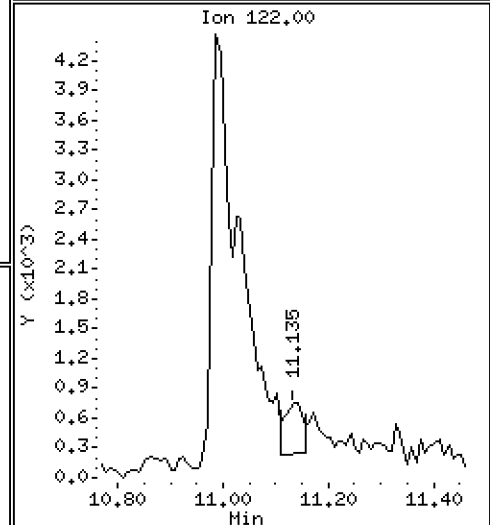
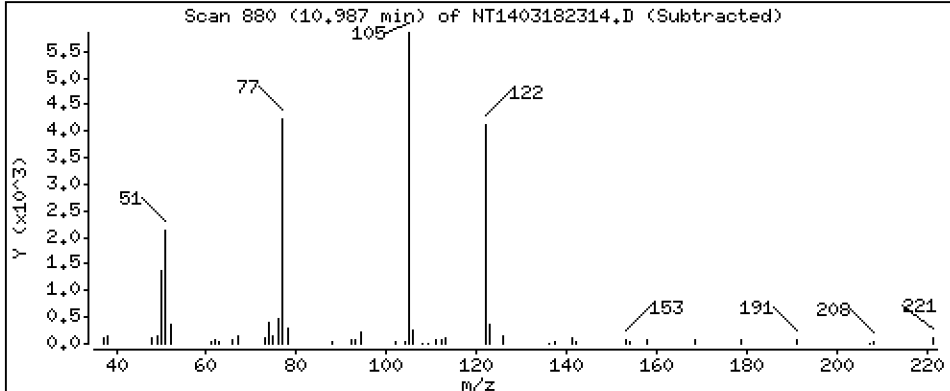
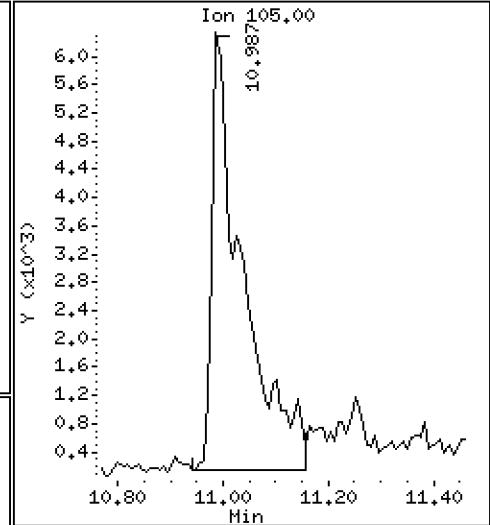
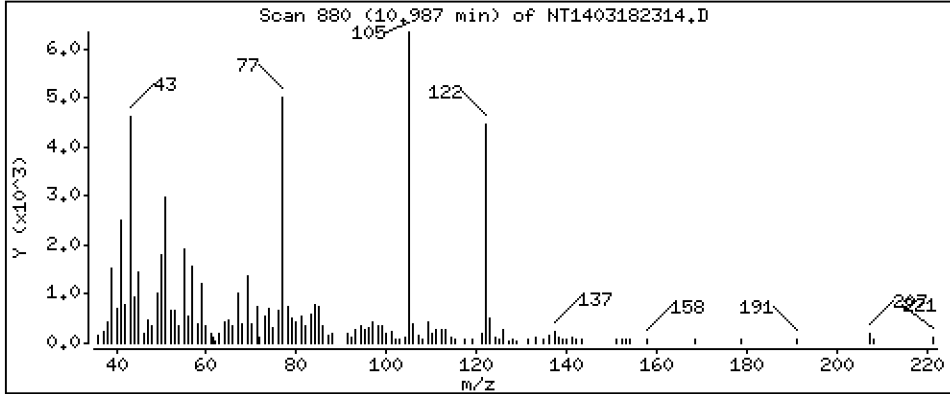
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,164 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

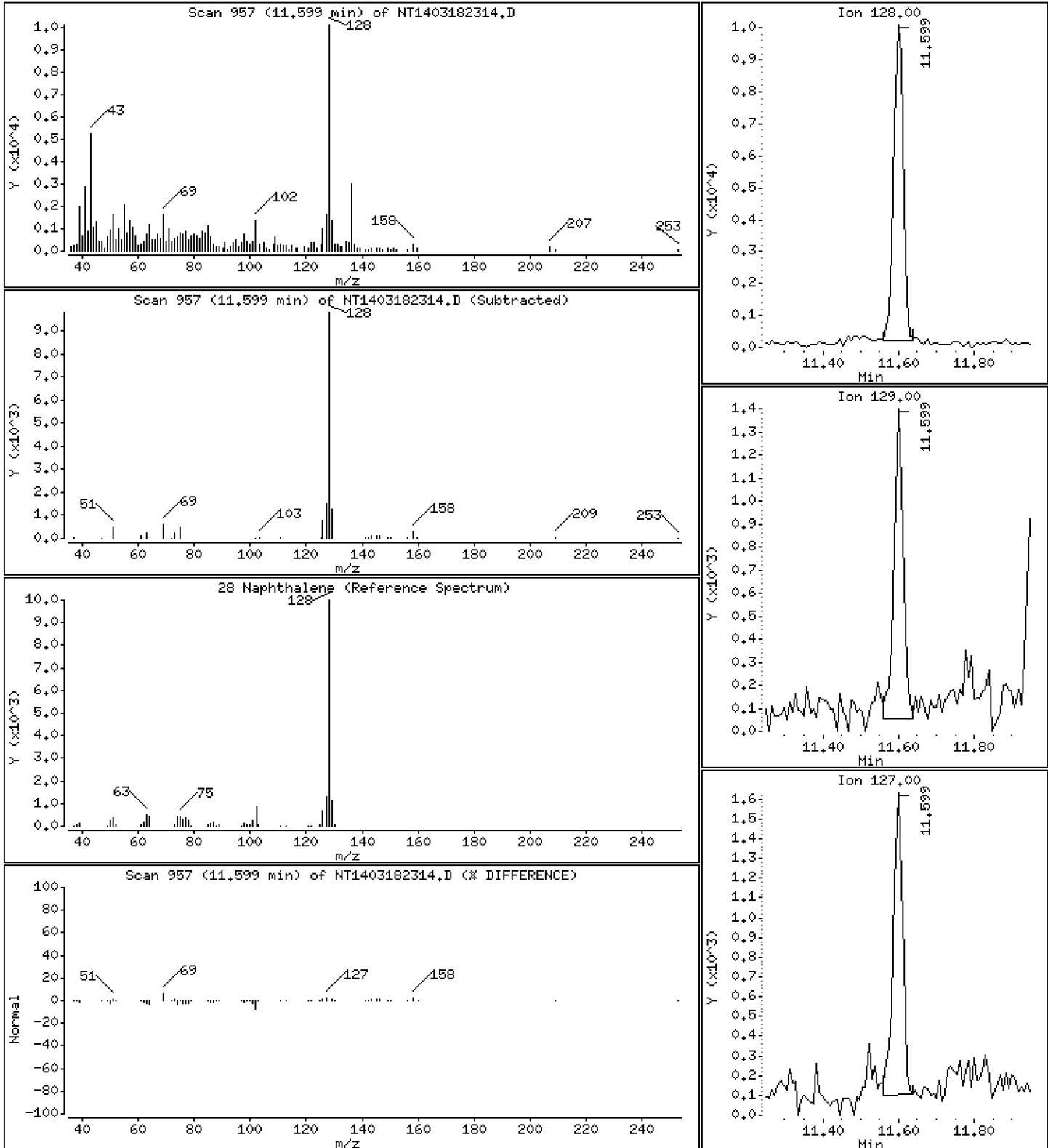
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2038 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

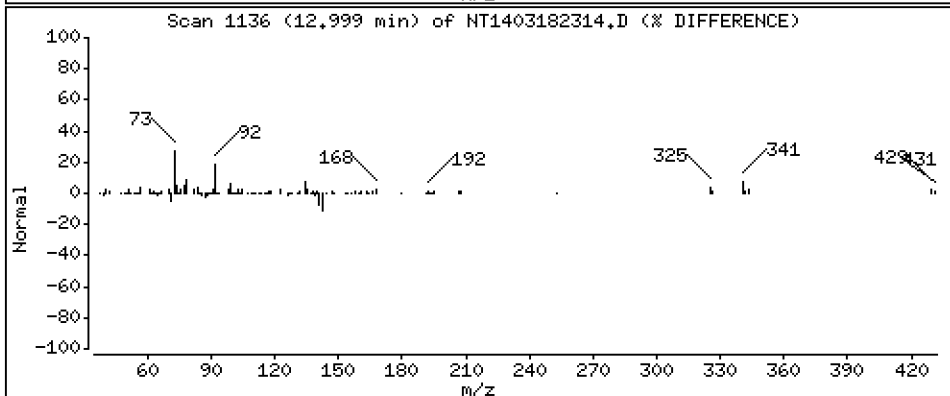
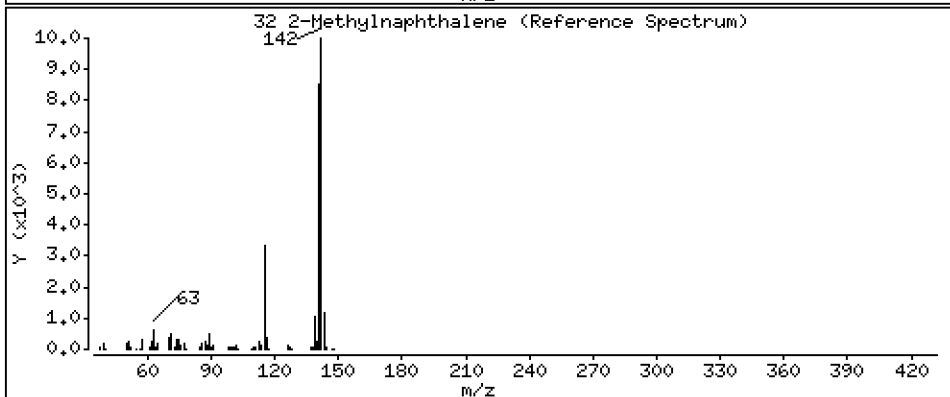
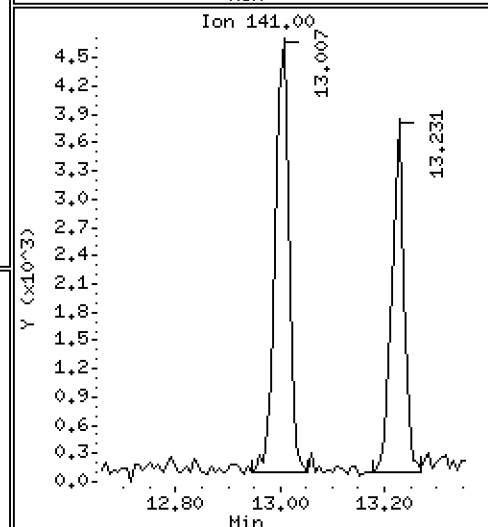
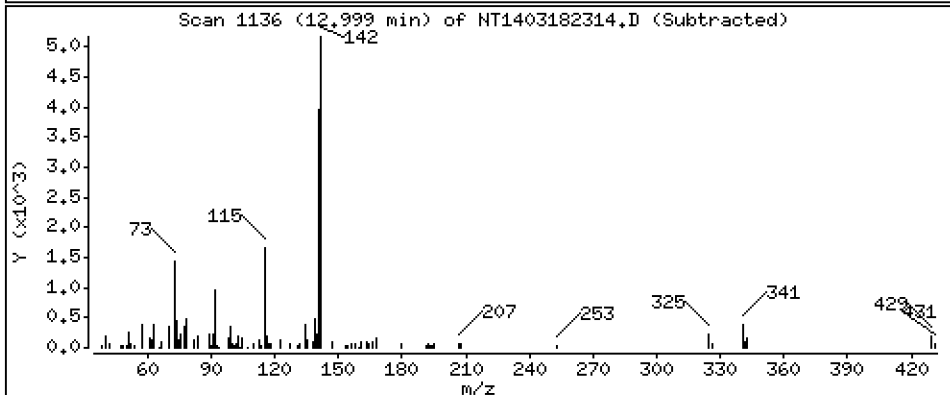
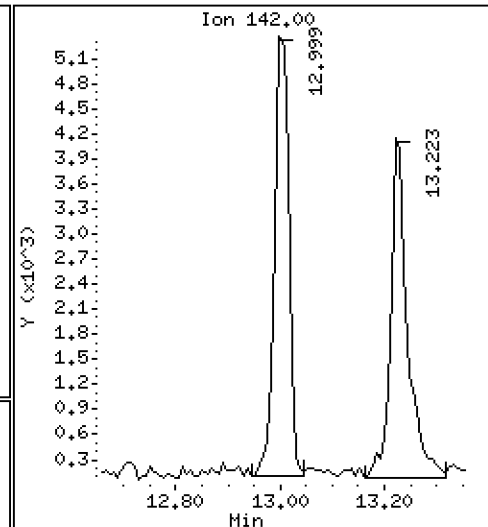
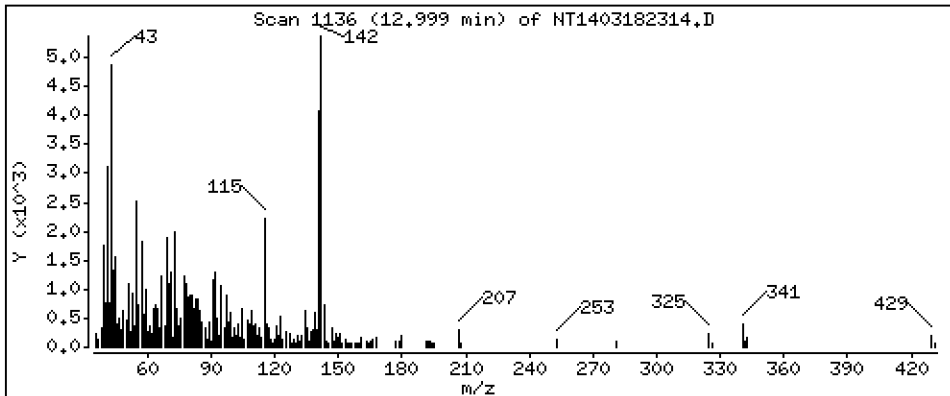
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1717 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

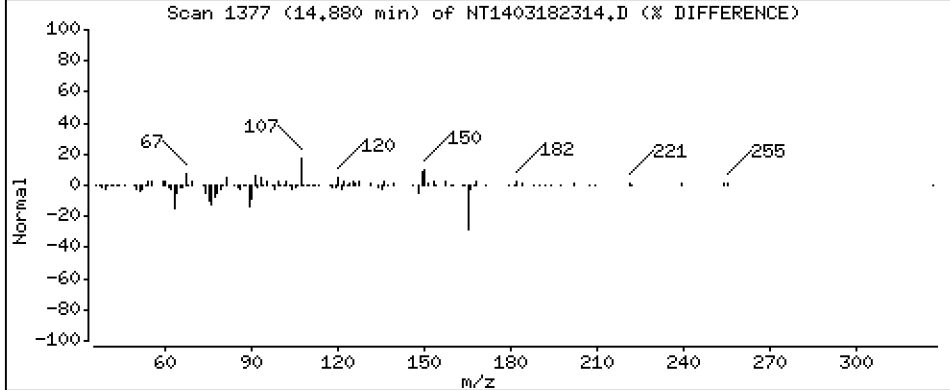
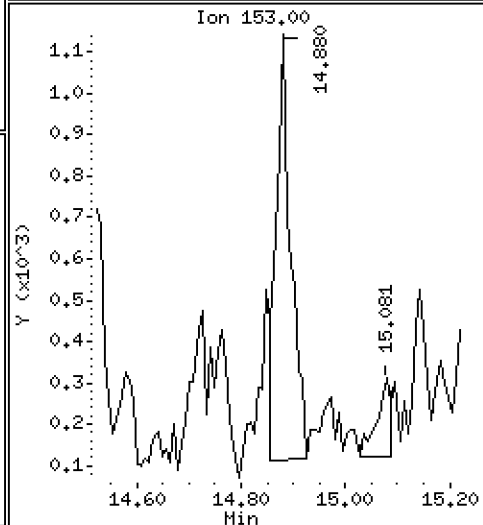
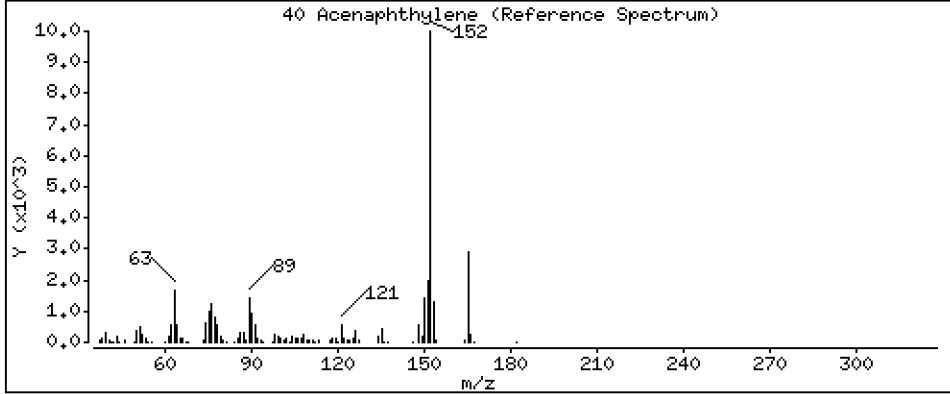
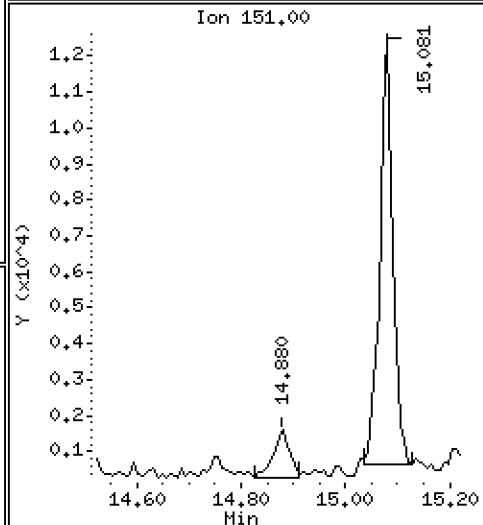
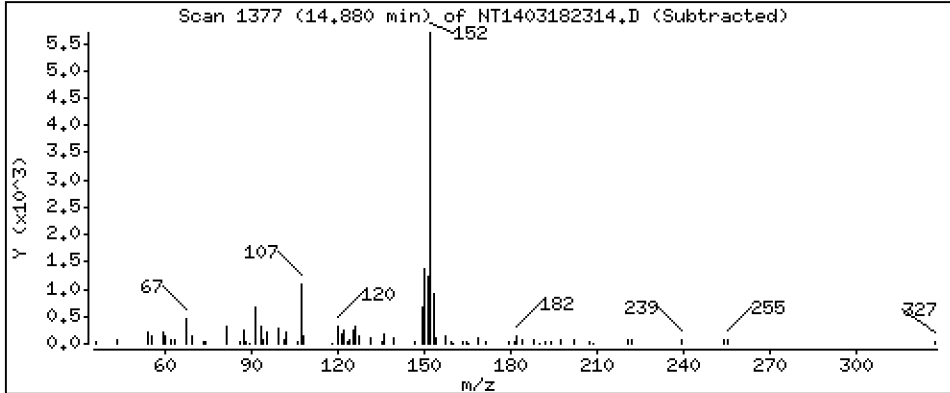
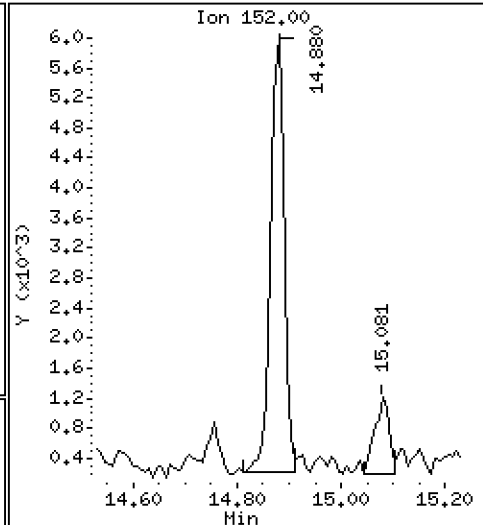
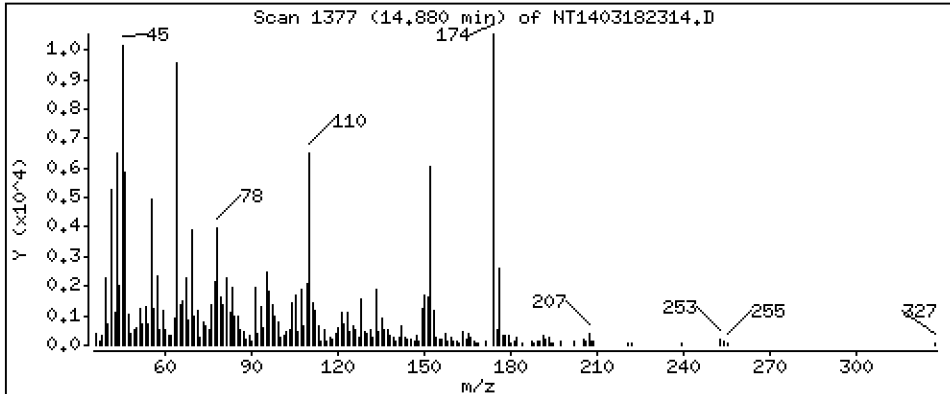
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1282 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

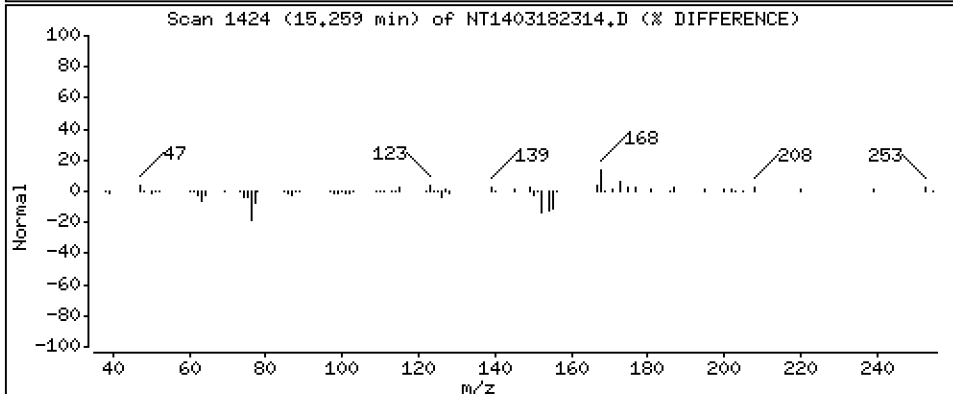
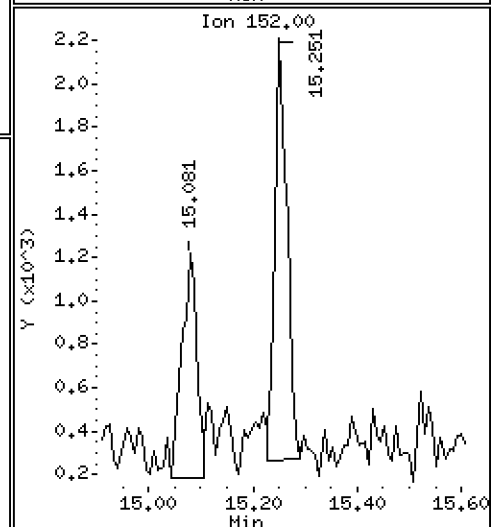
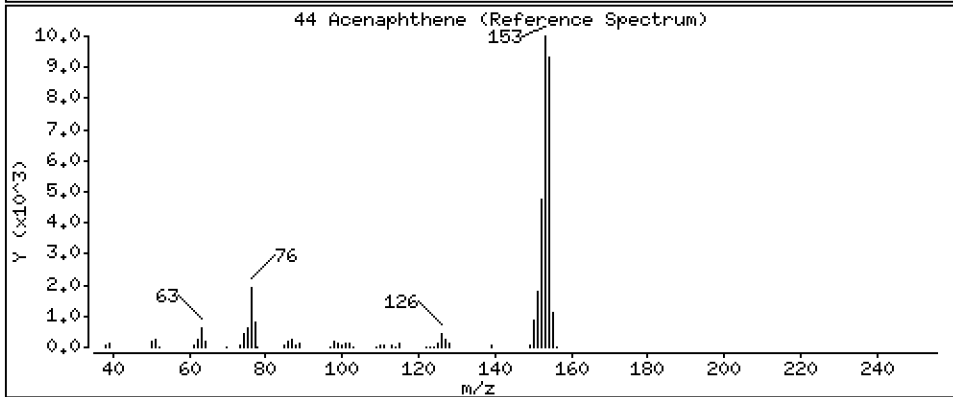
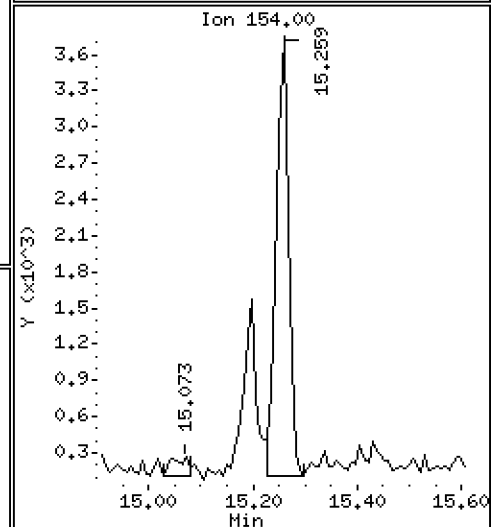
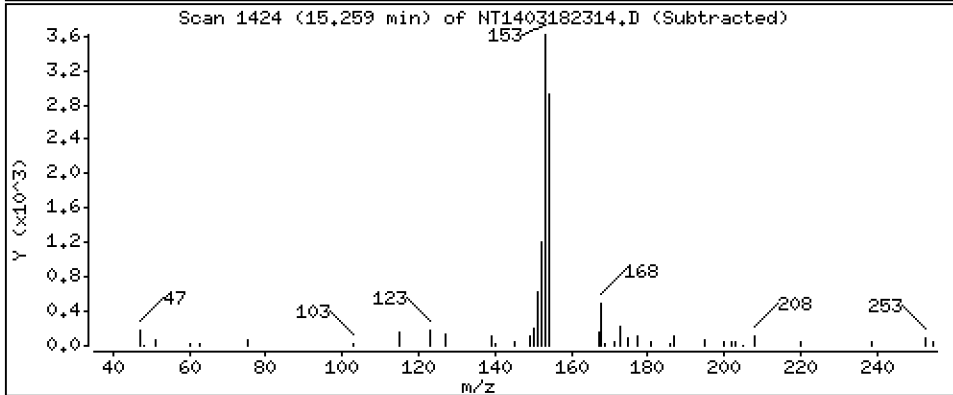
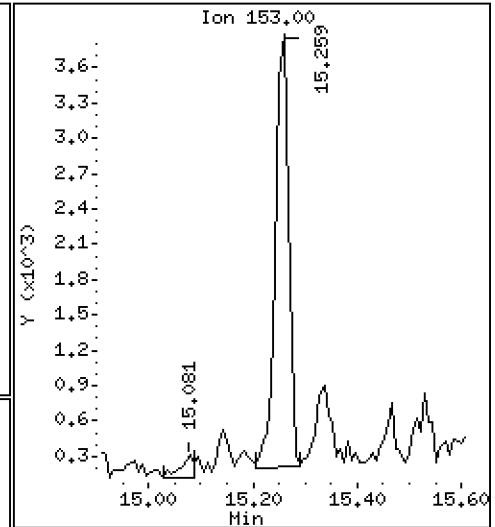
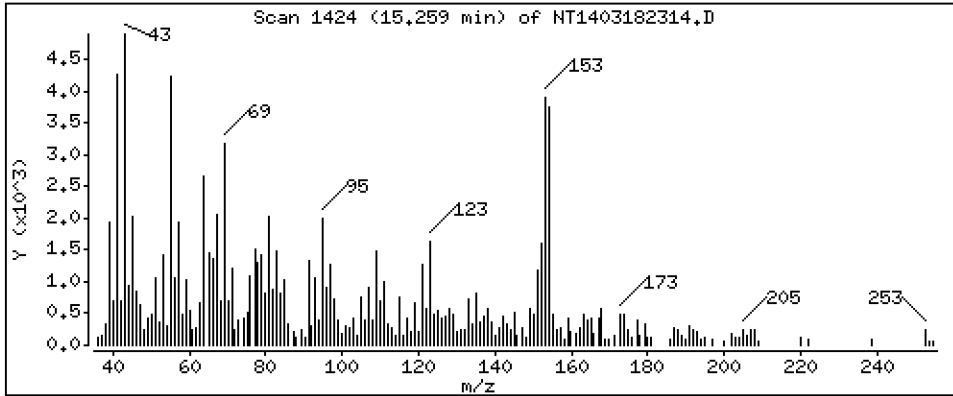
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1349 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

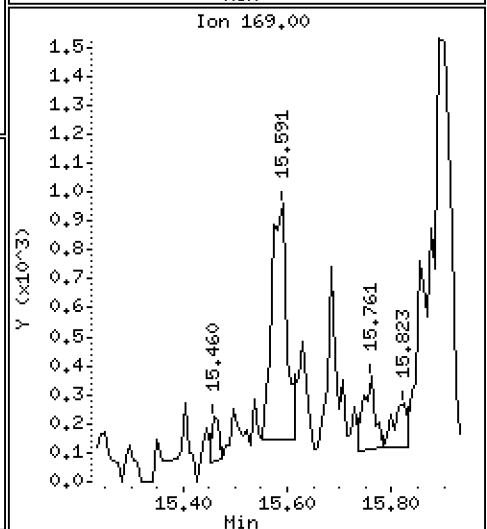
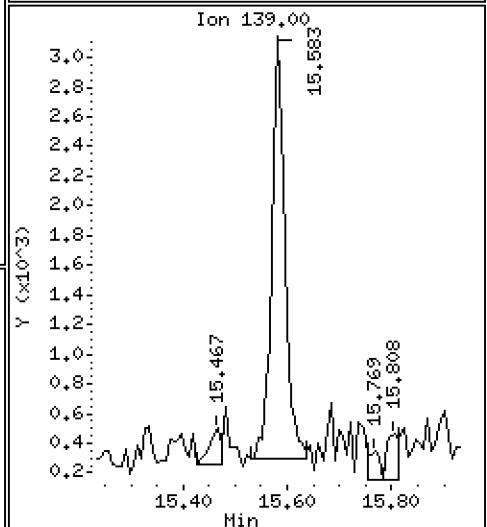
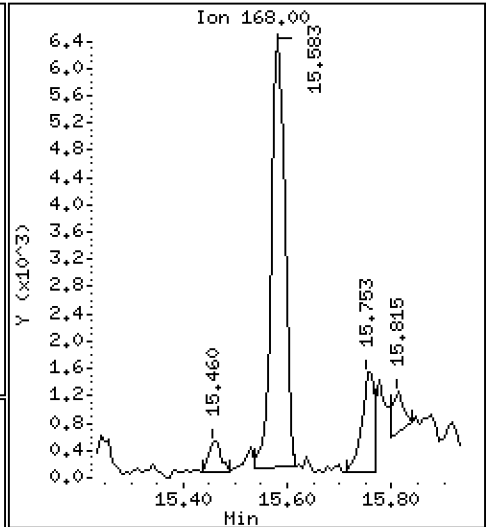
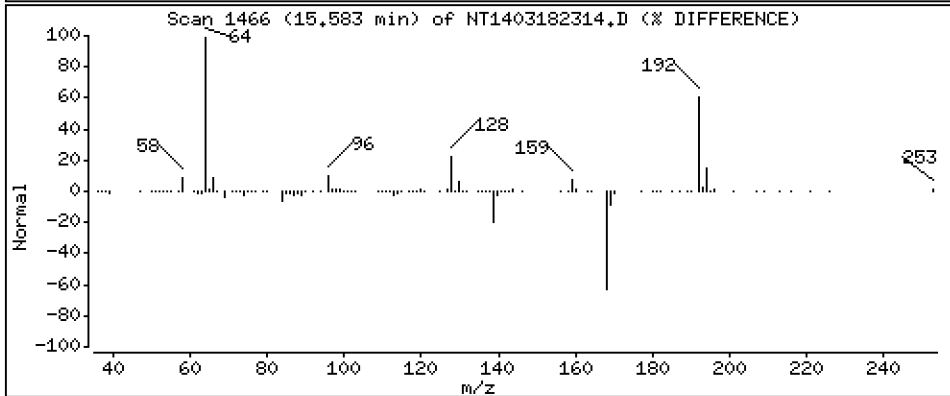
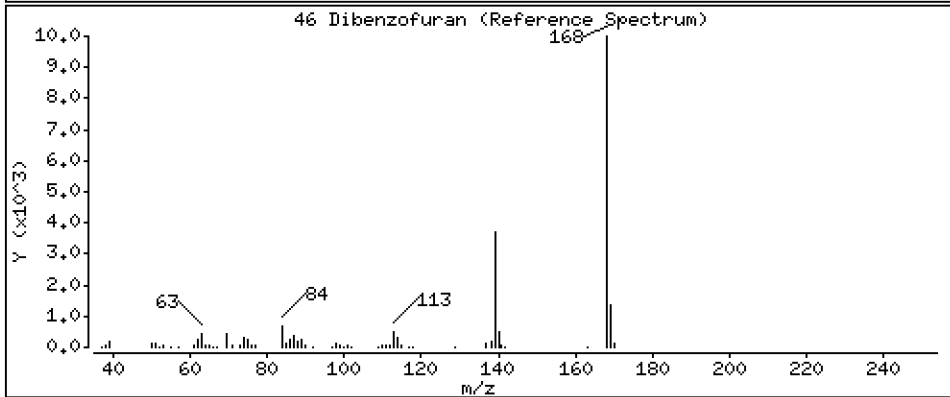
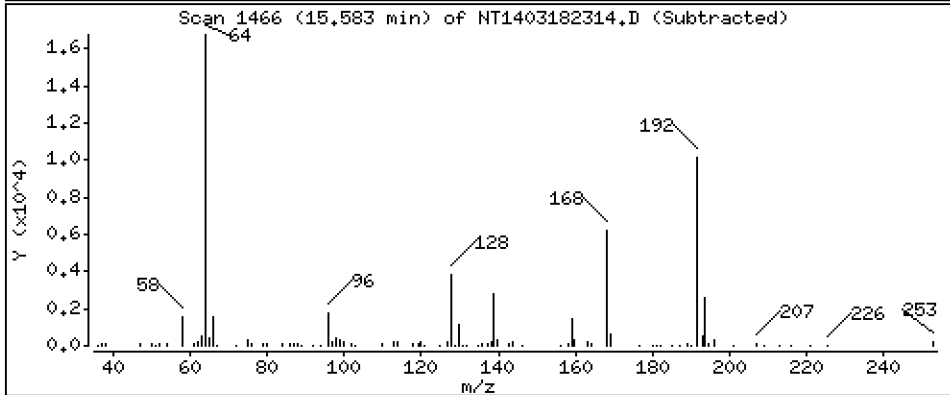
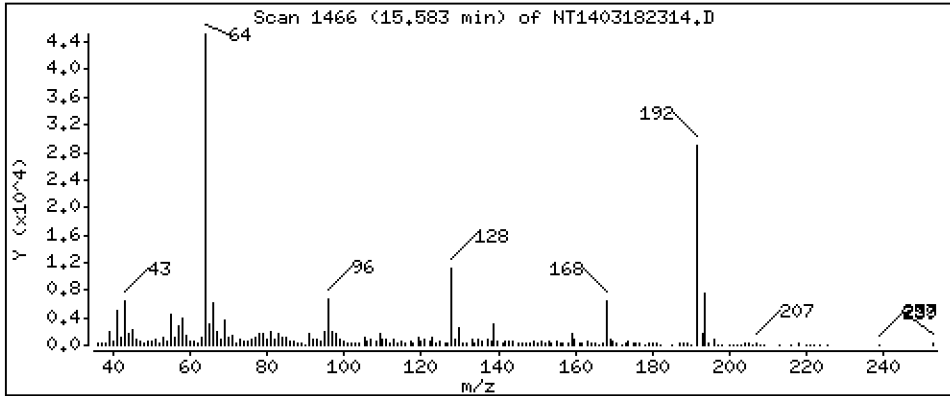
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1637 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

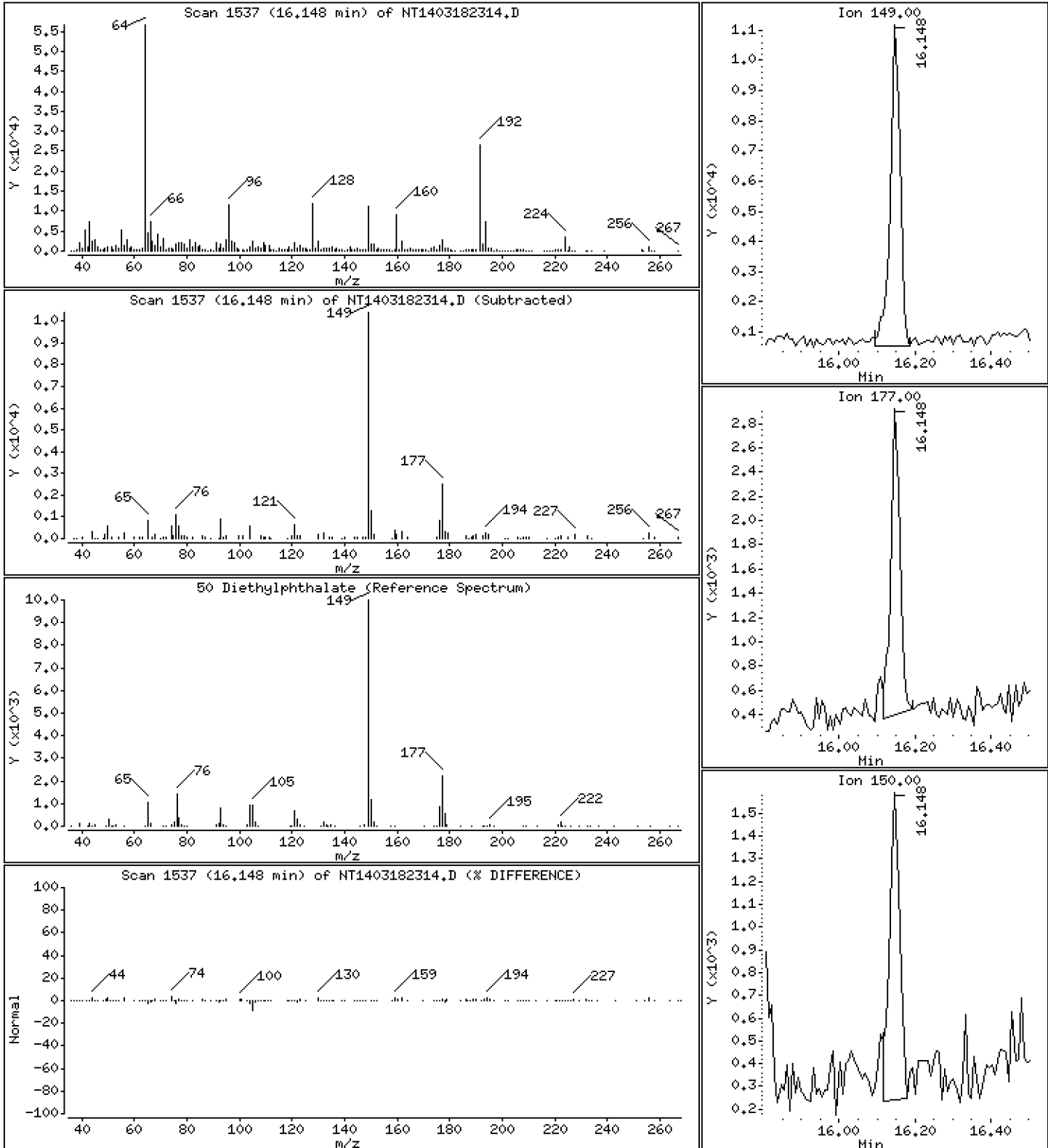
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3509 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

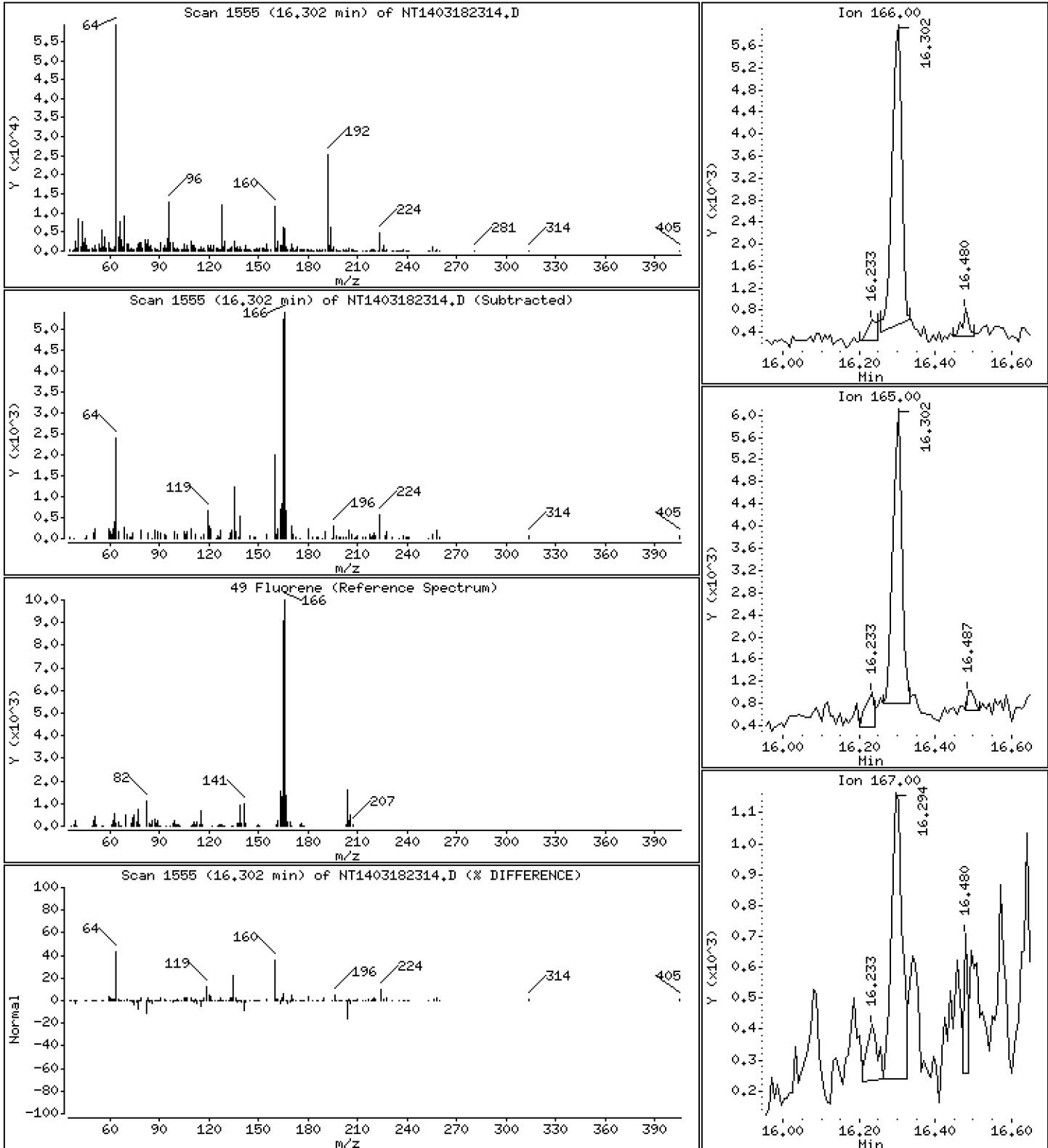
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1514 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

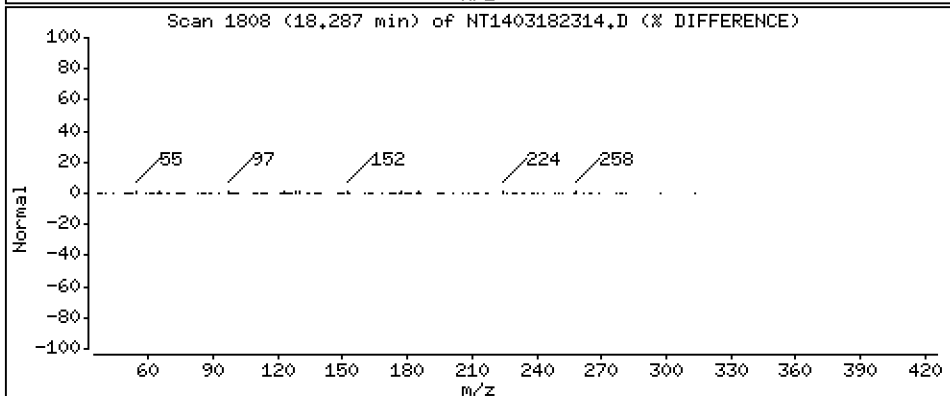
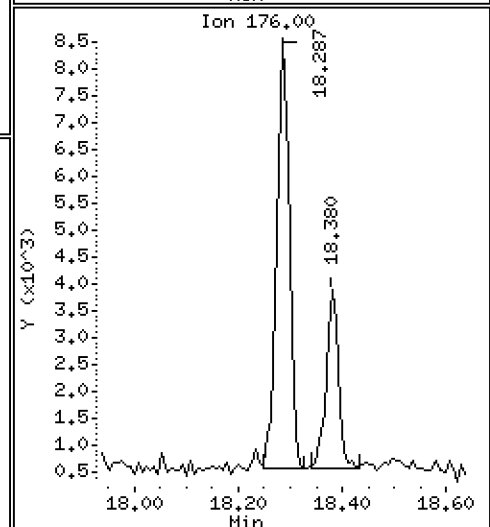
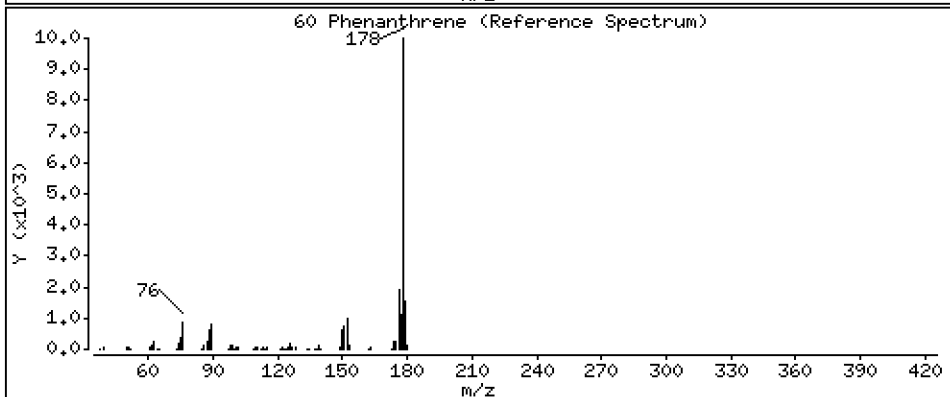
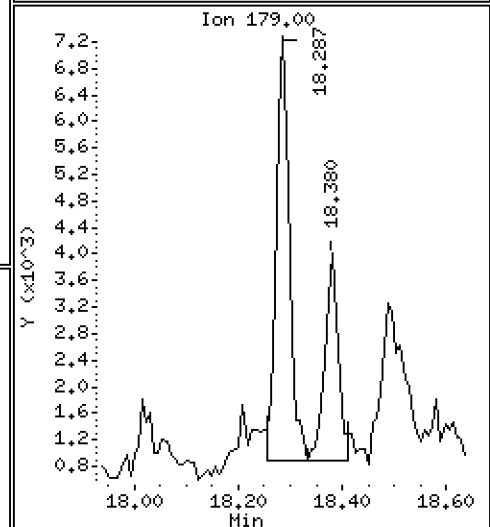
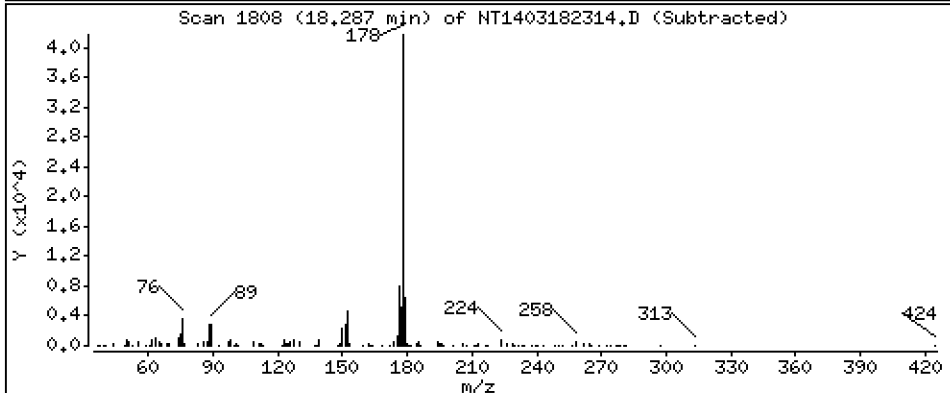
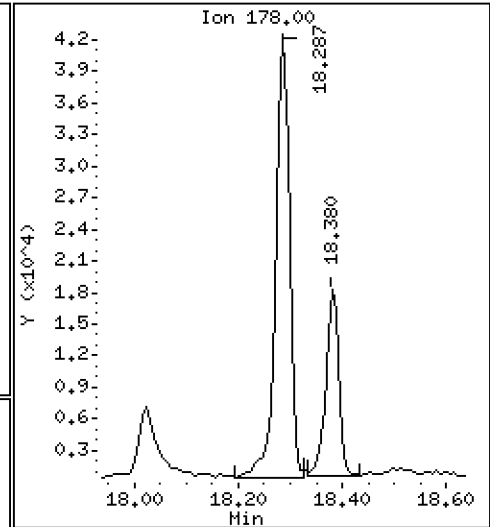
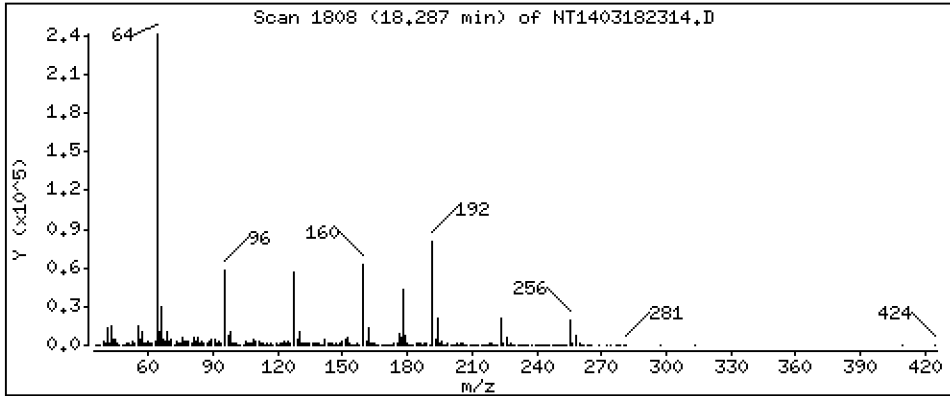
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,9872 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

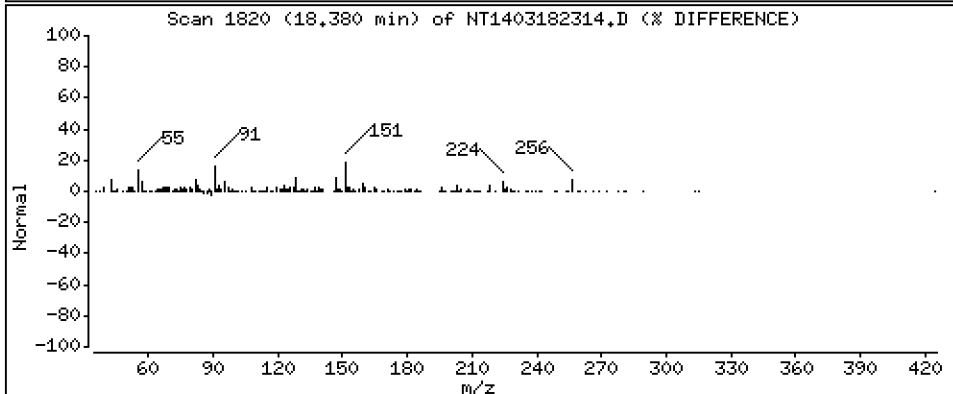
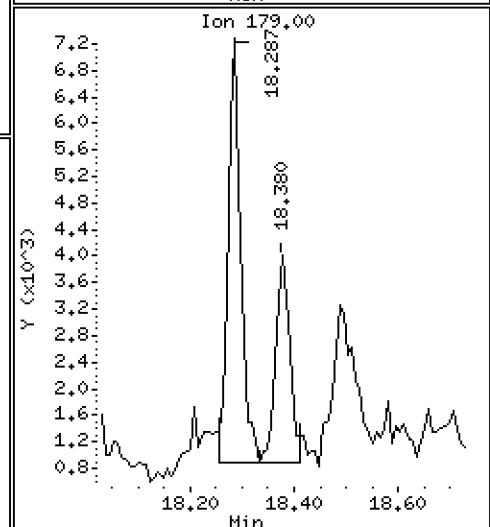
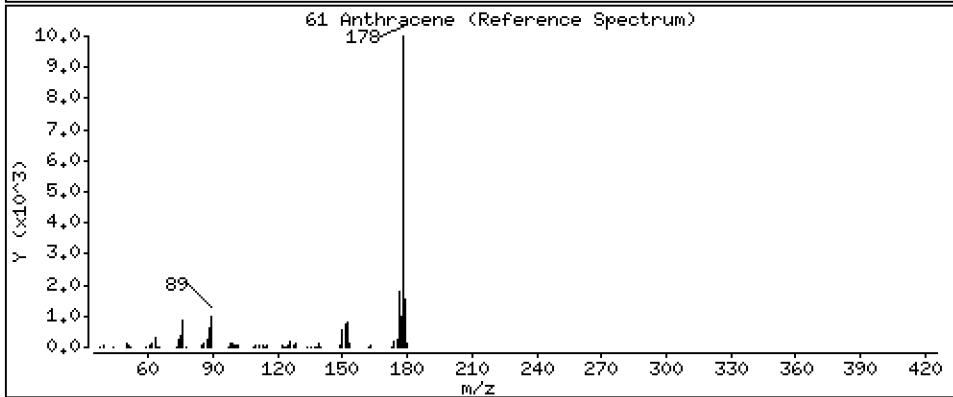
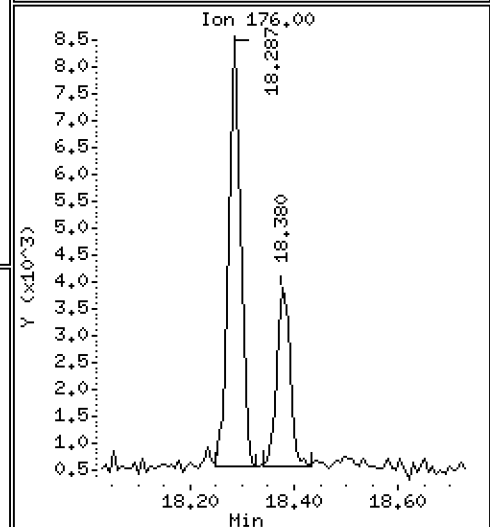
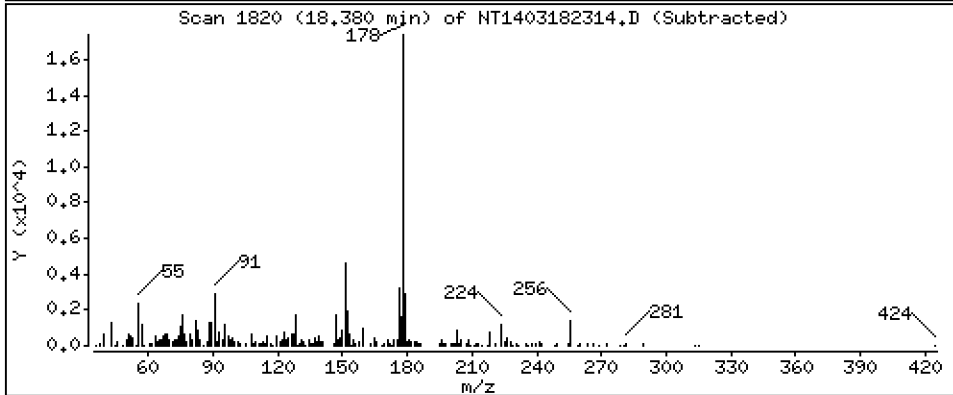
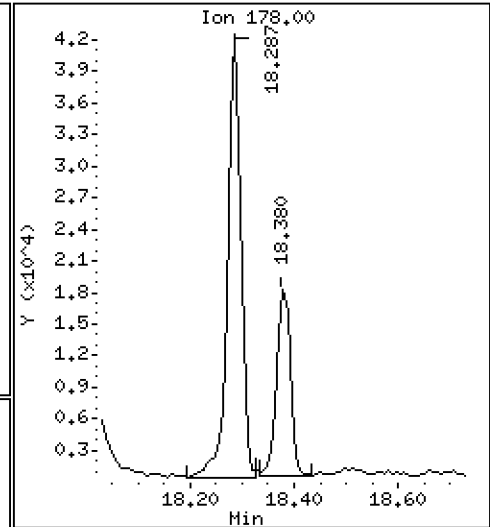
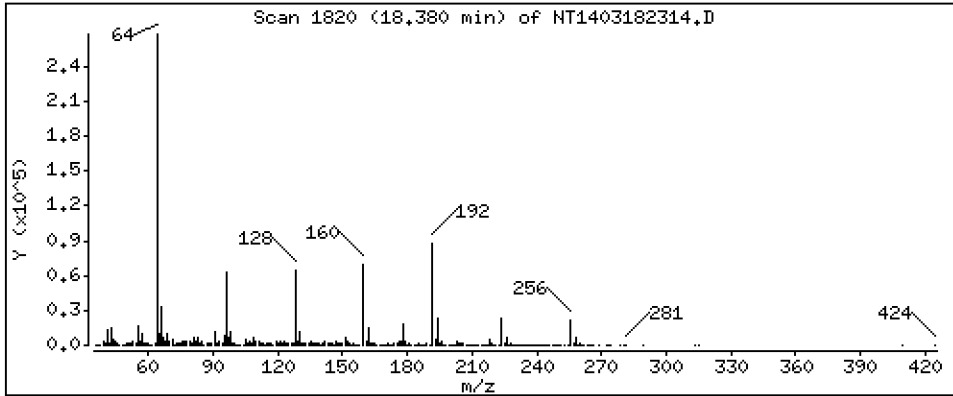
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,4290 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

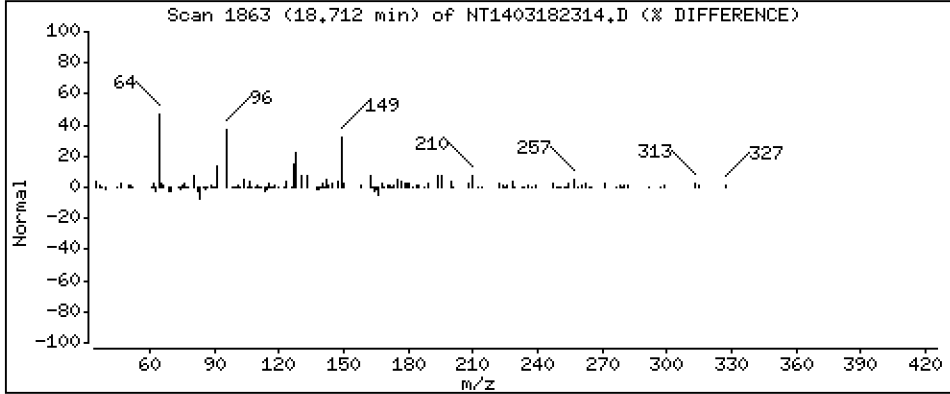
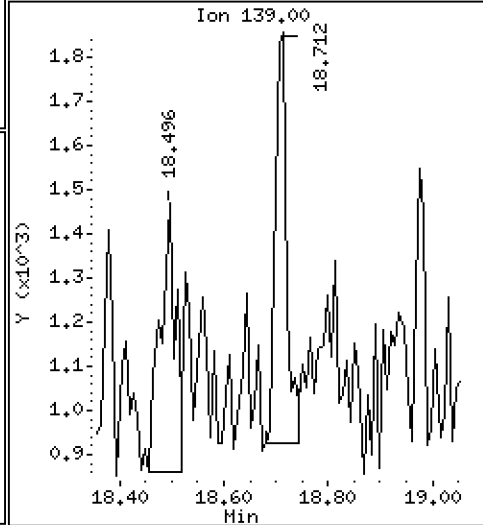
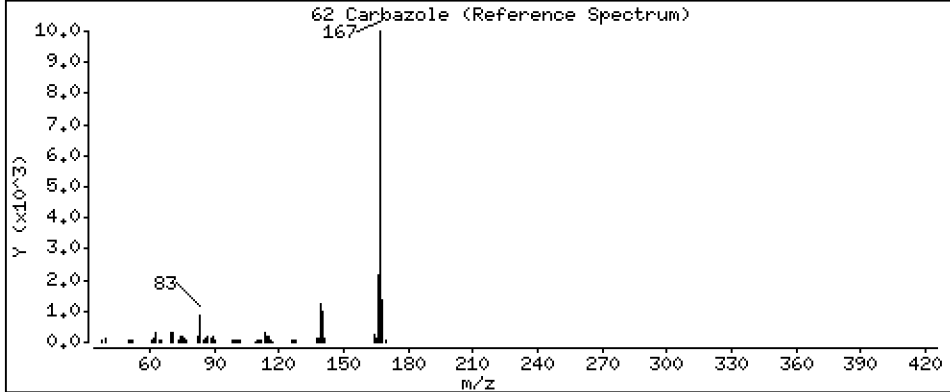
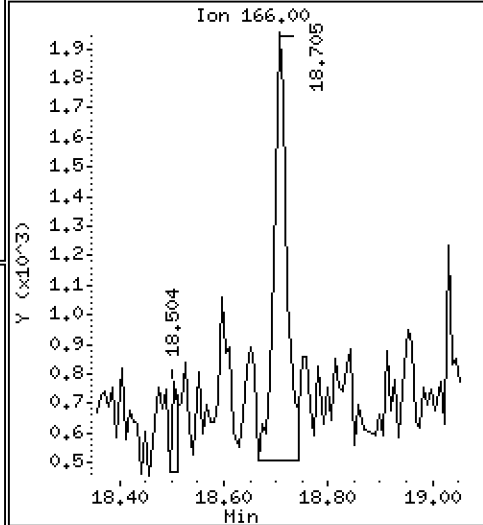
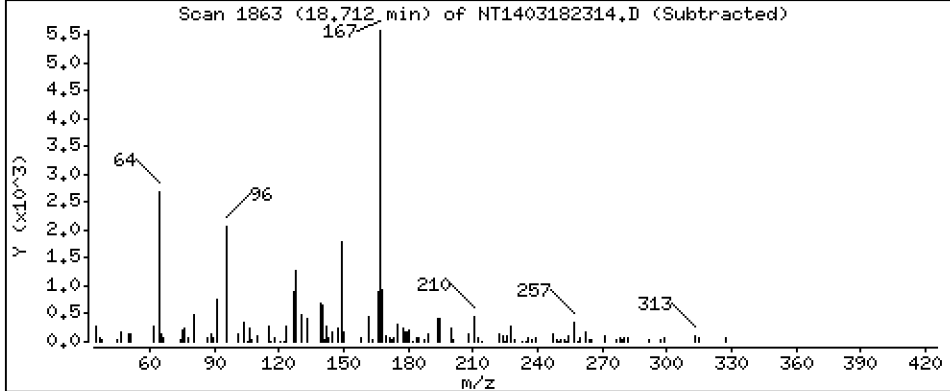
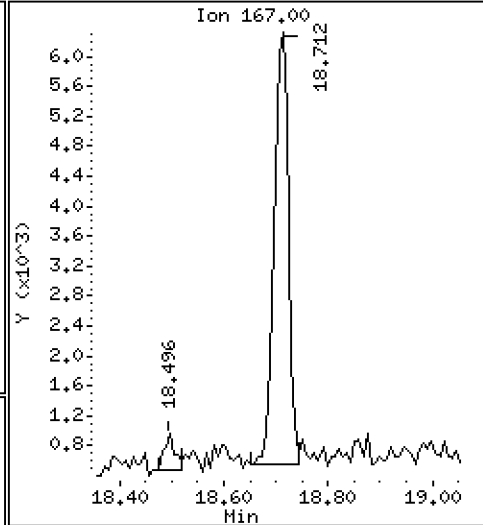
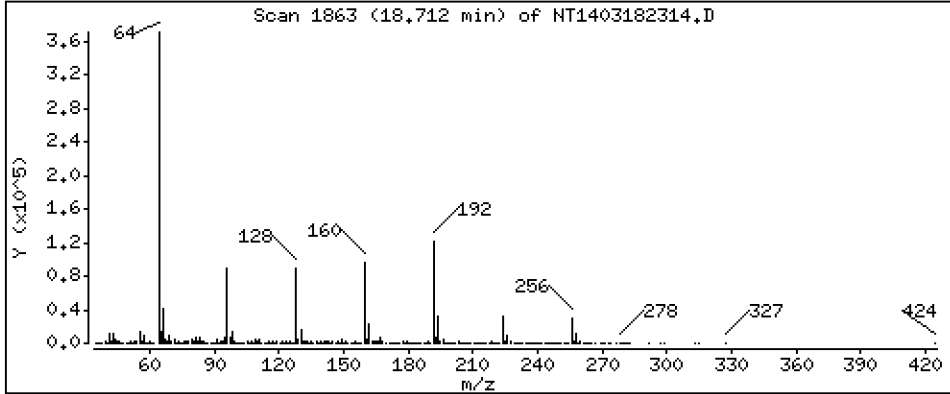
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1675 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

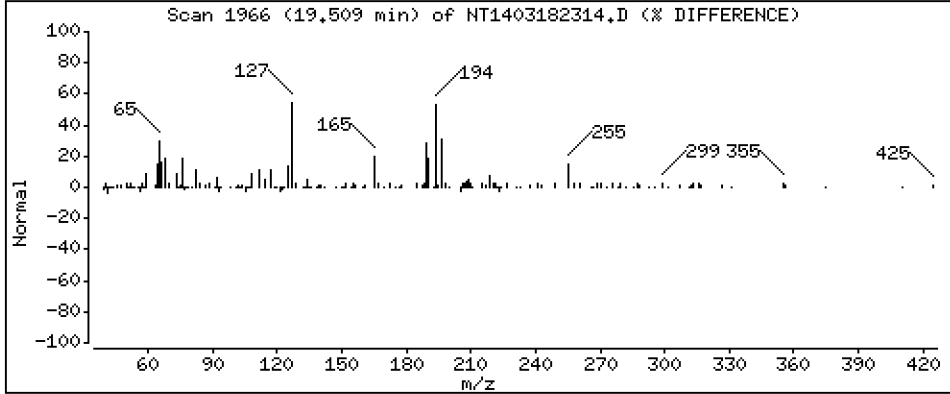
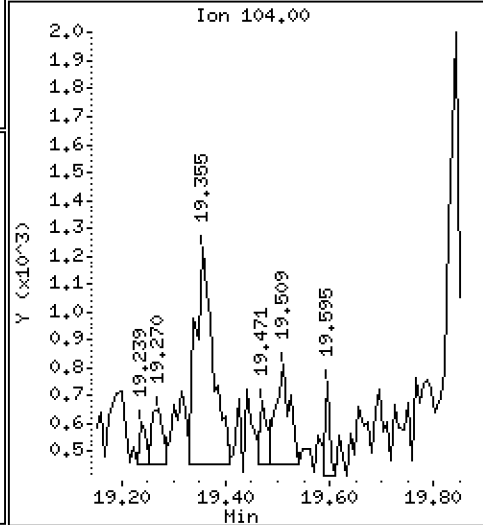
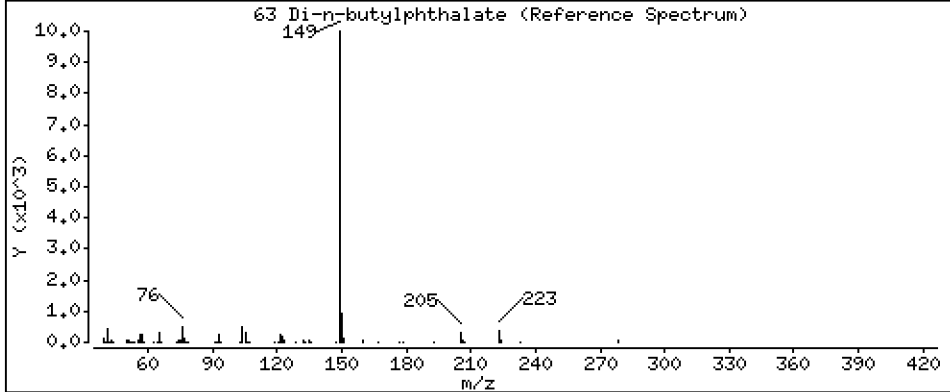
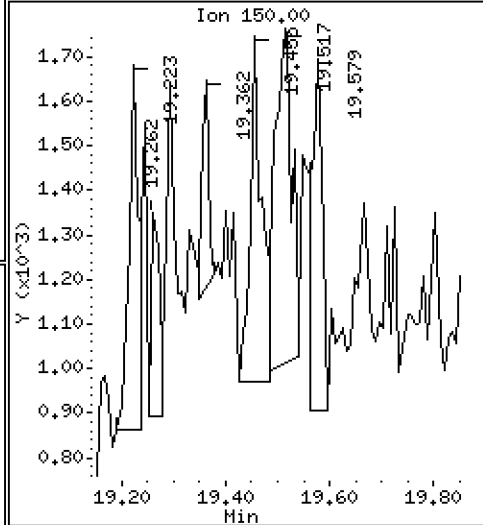
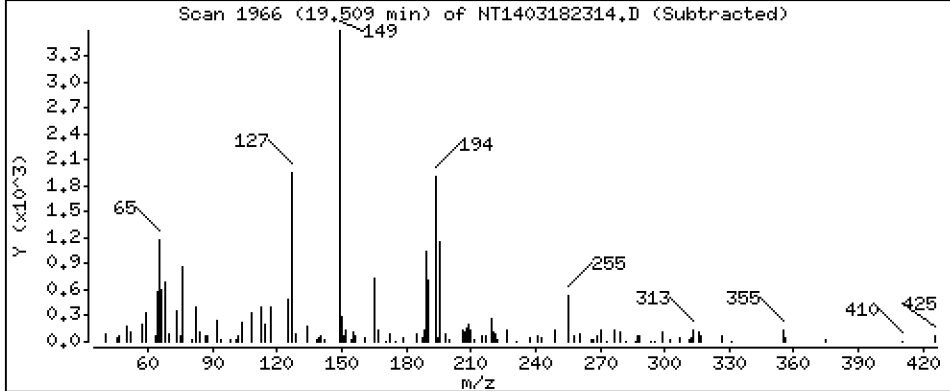
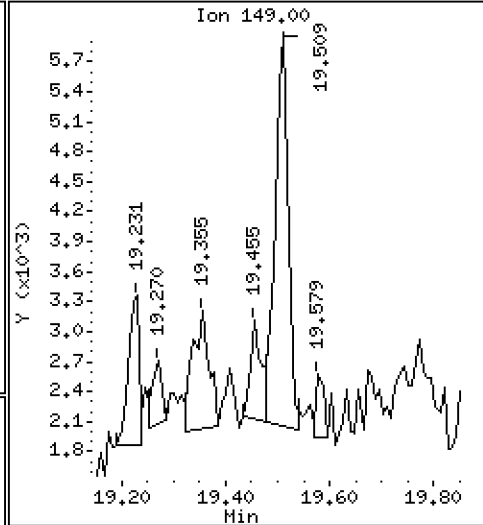
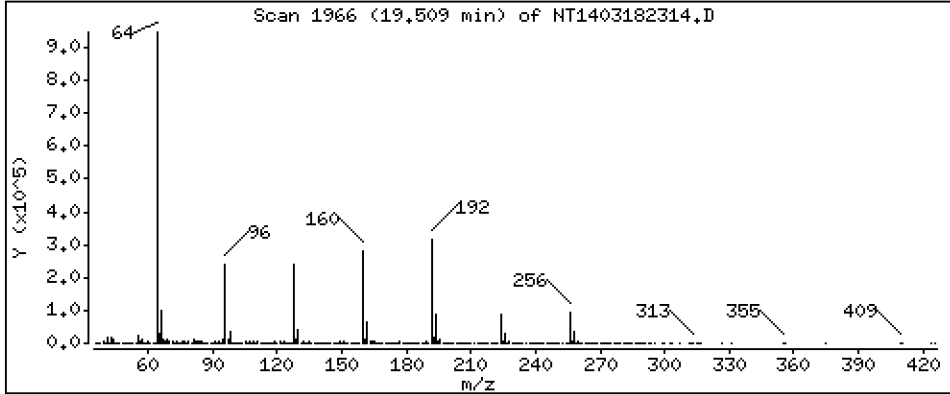
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,08370 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

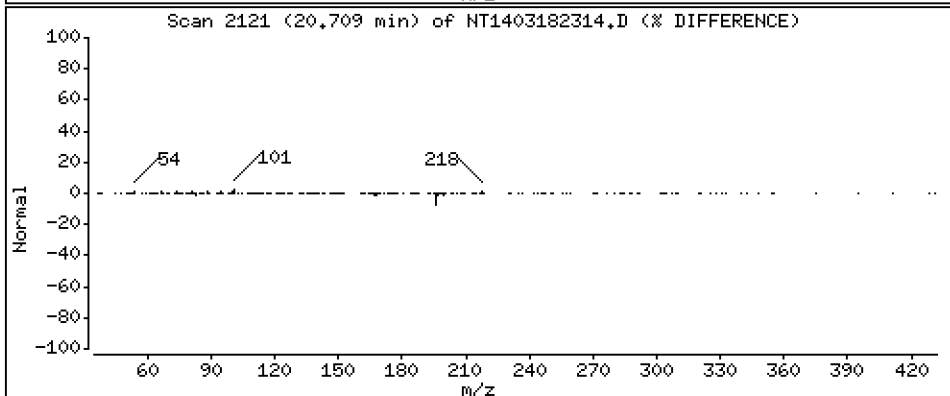
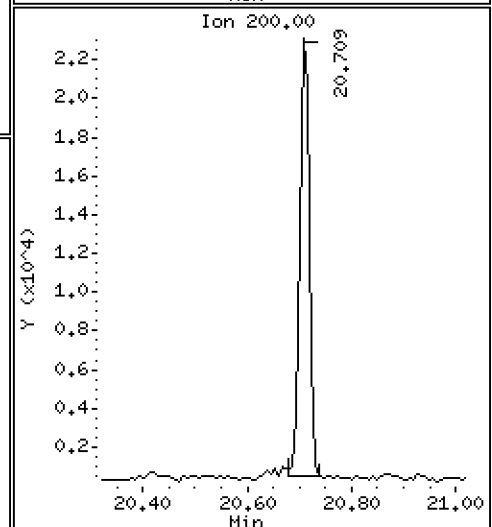
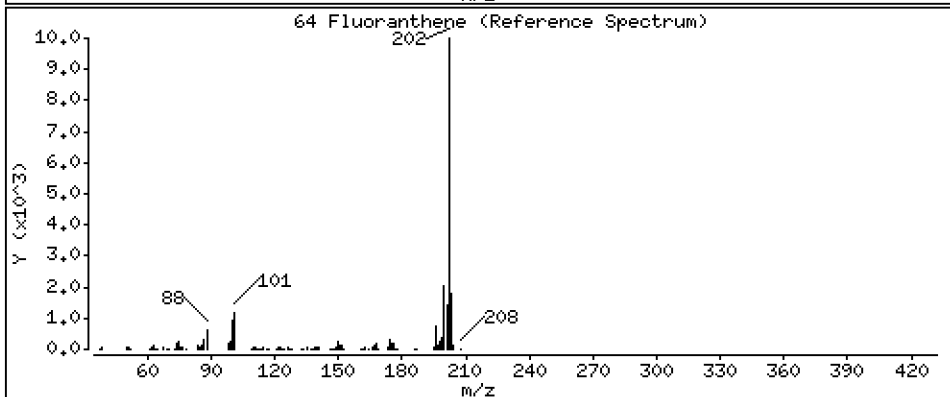
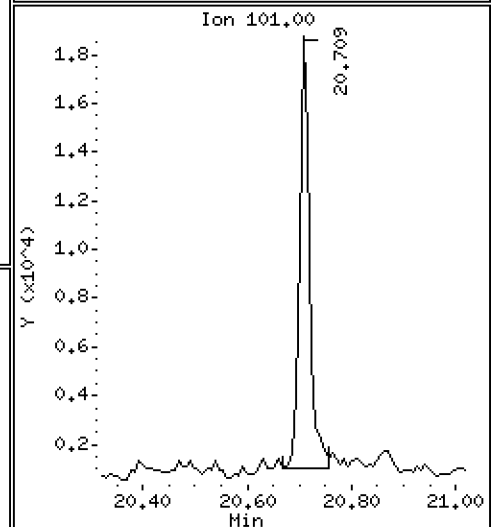
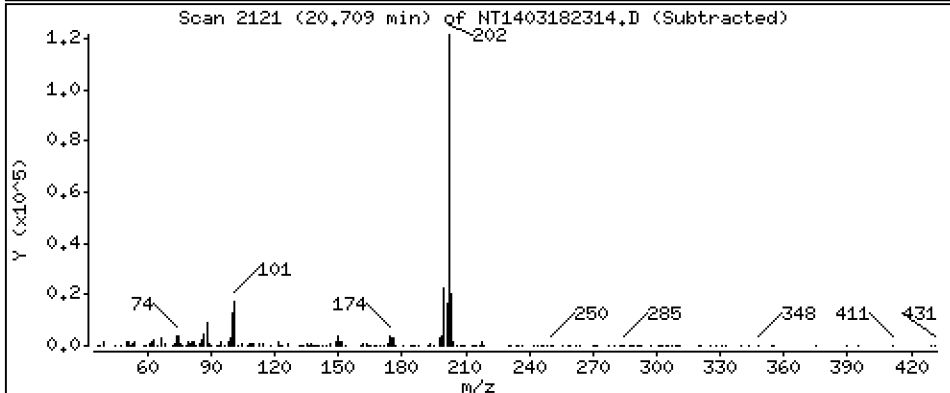
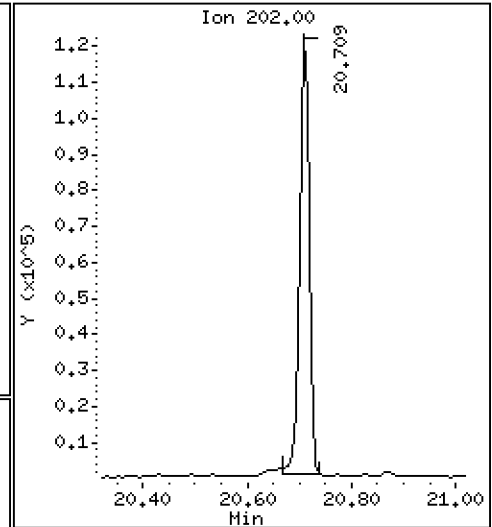
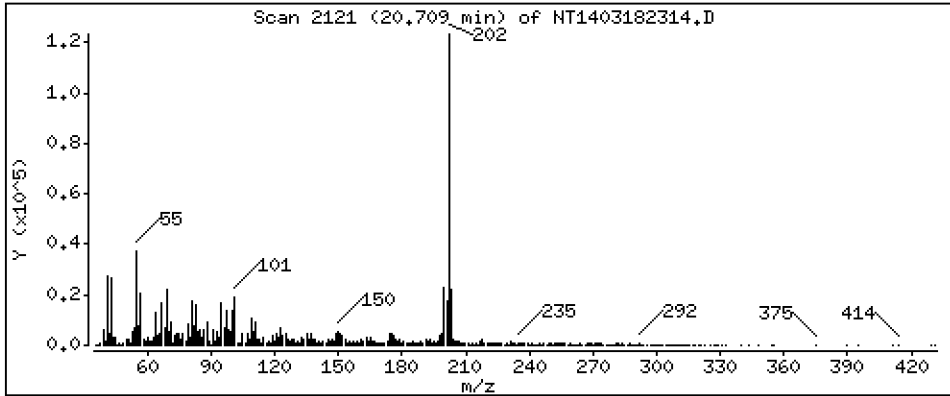
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 3,288 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

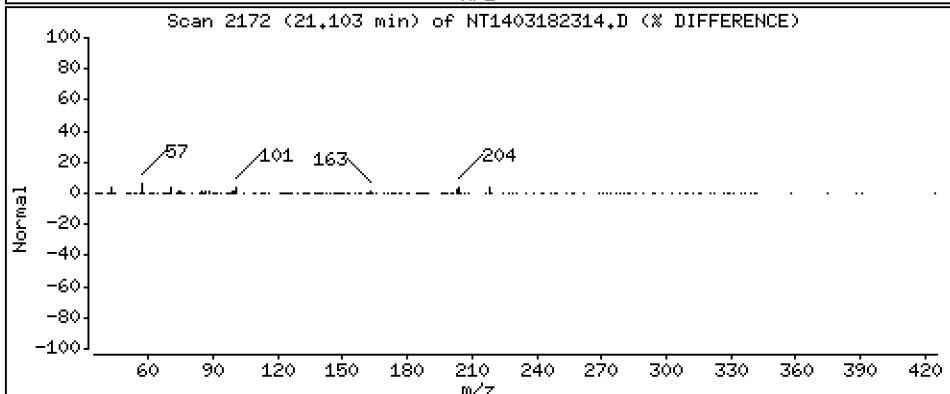
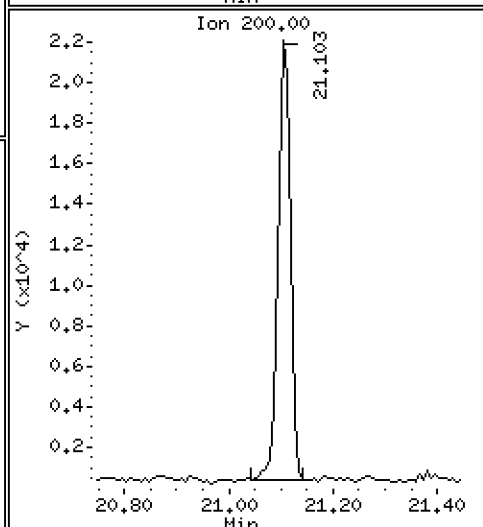
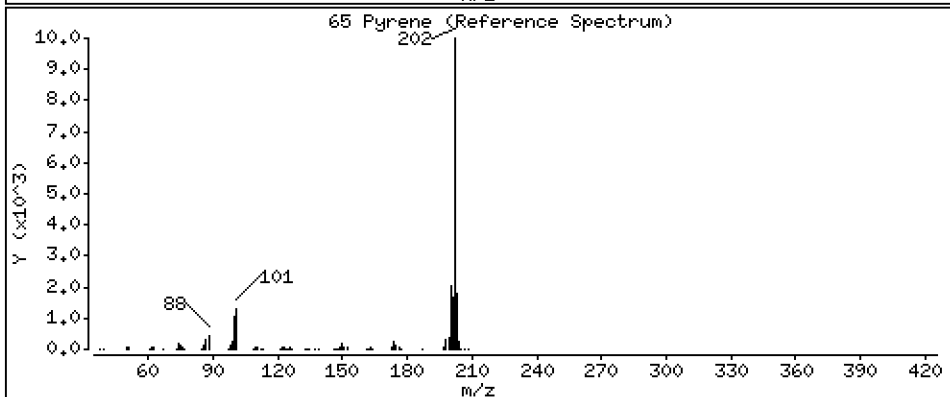
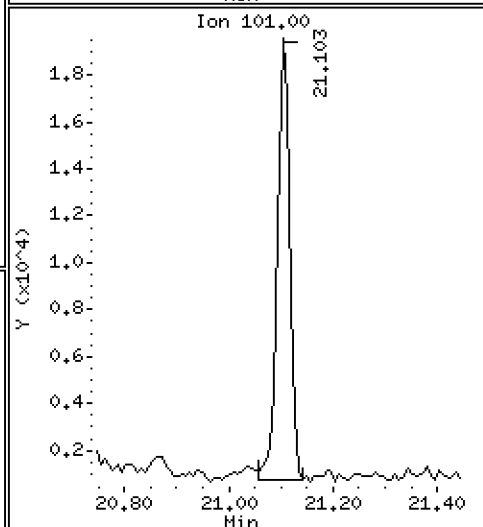
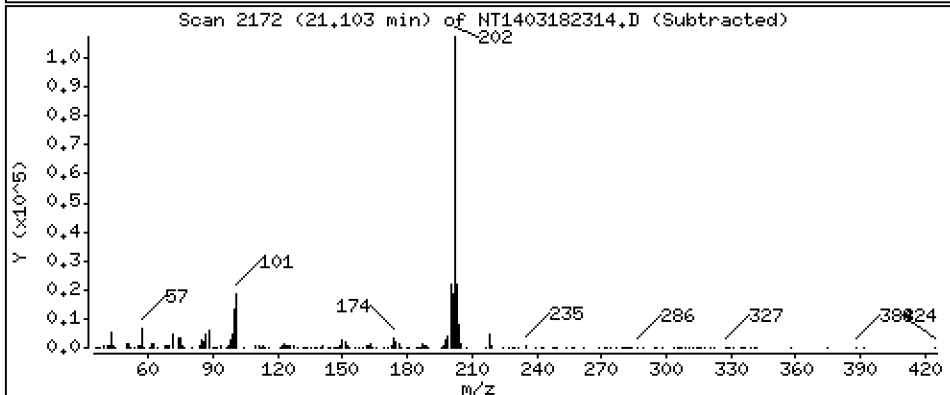
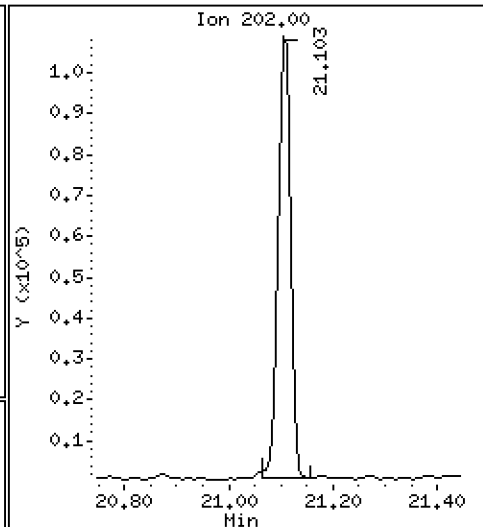
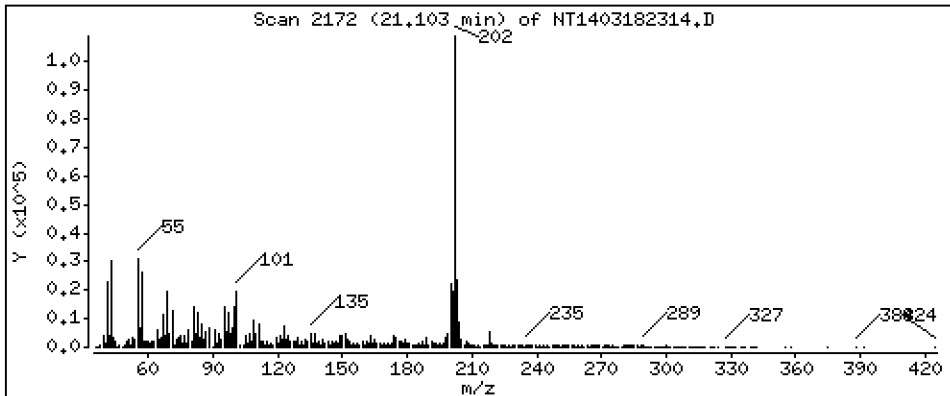
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 3,396 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

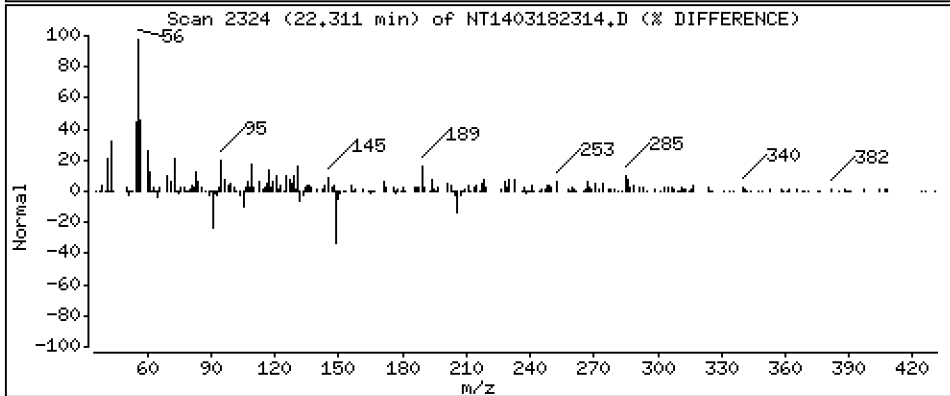
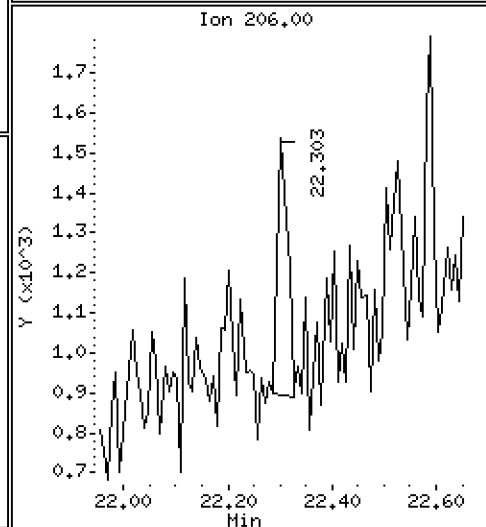
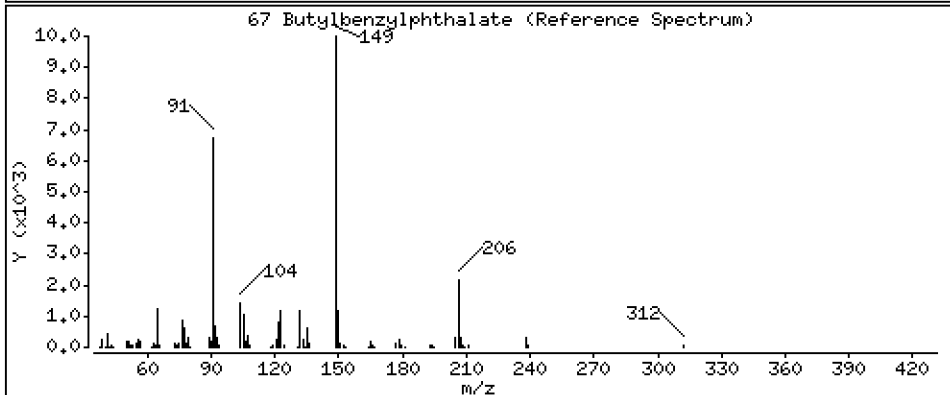
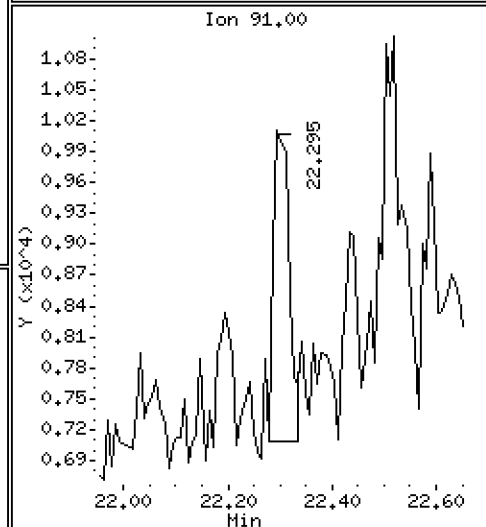
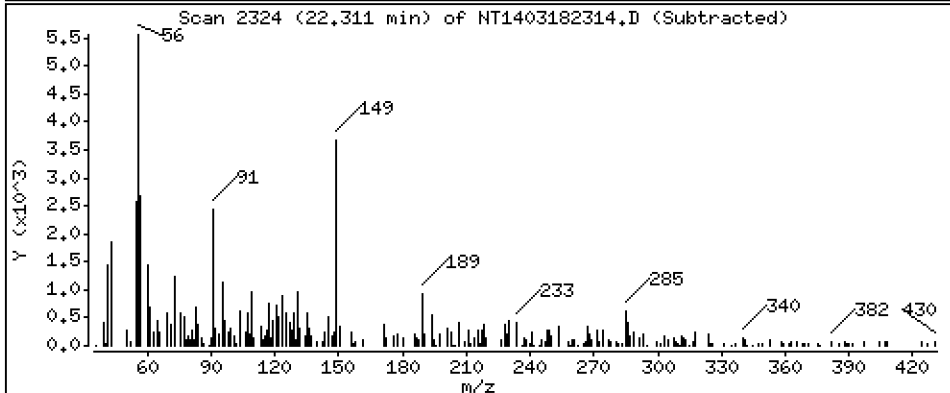
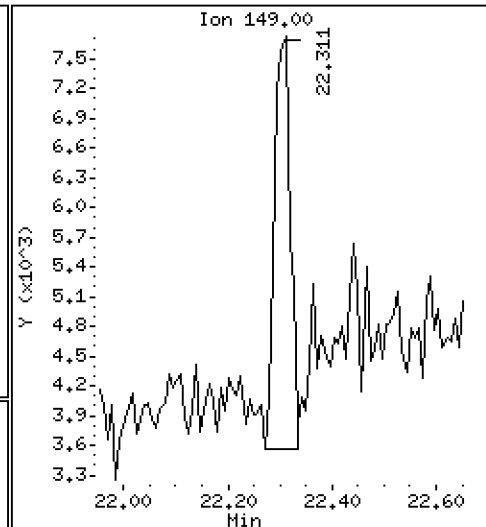
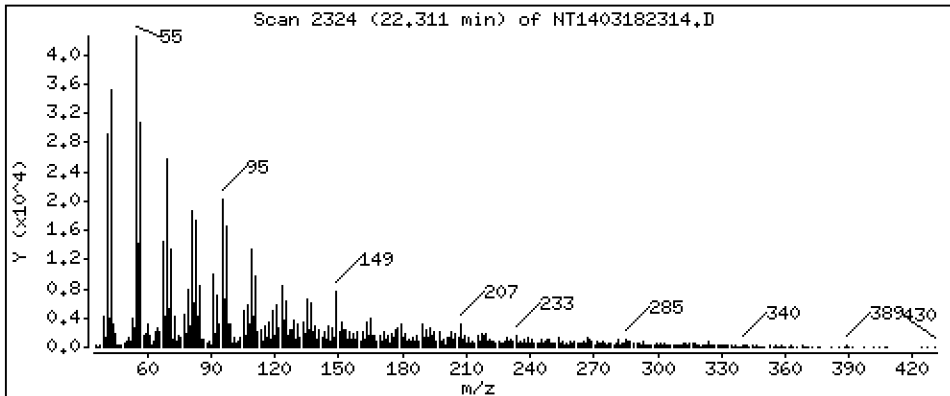
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,3785 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

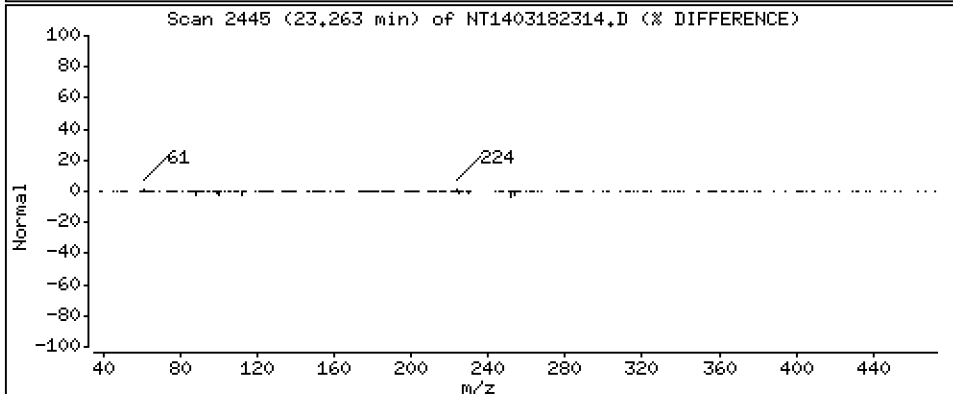
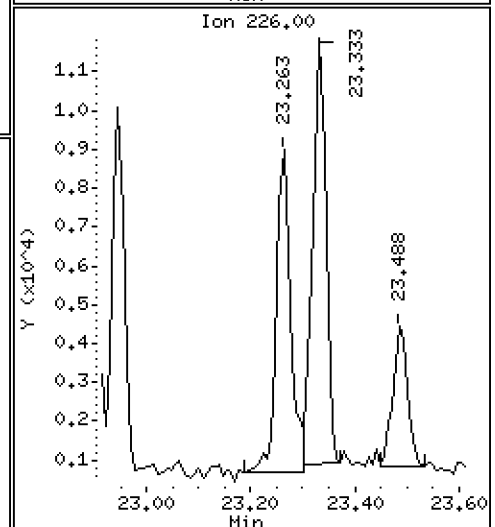
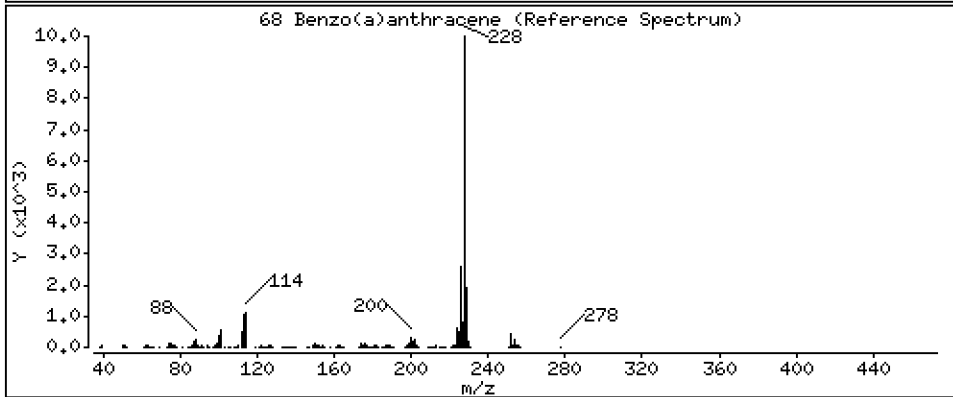
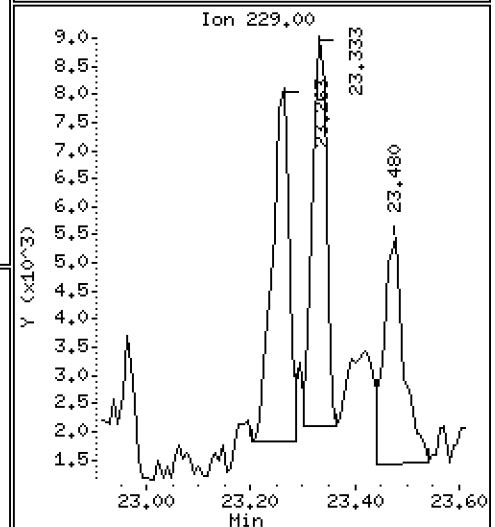
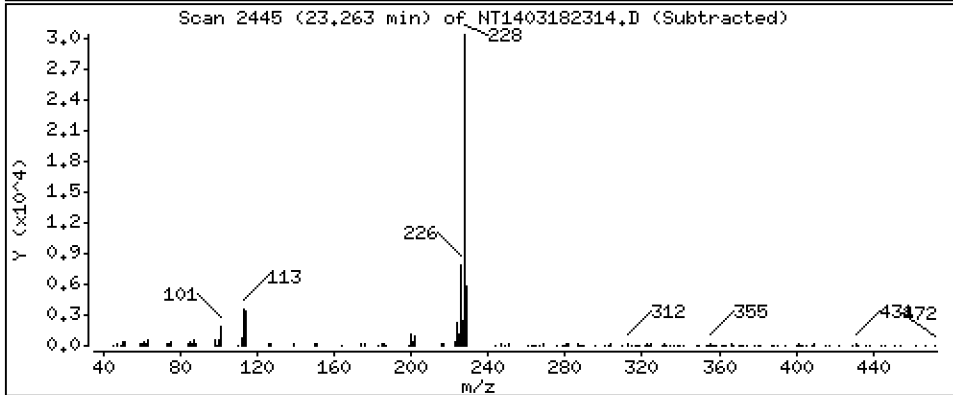
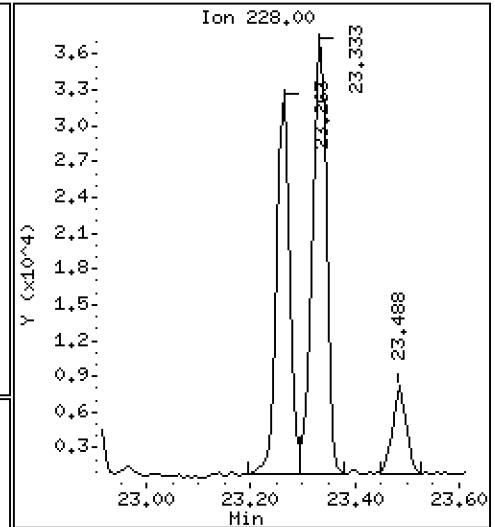
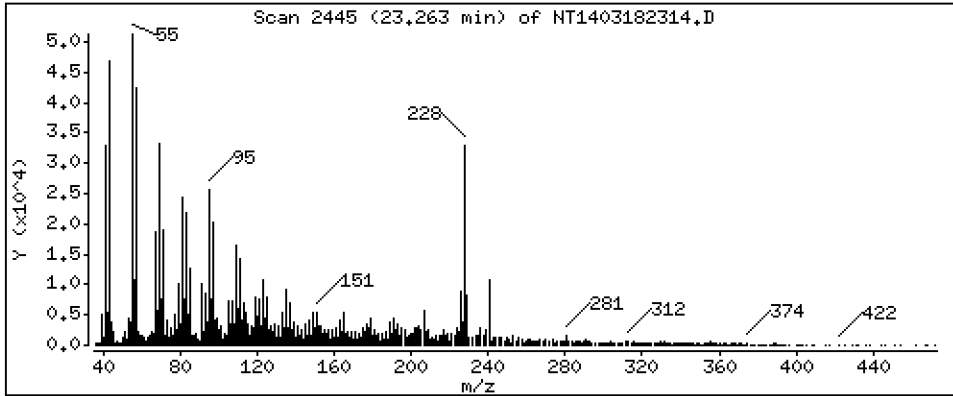
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 1,184 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

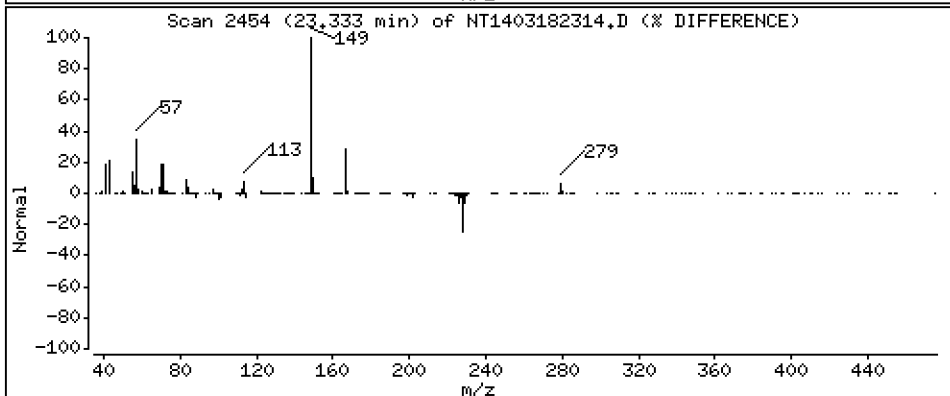
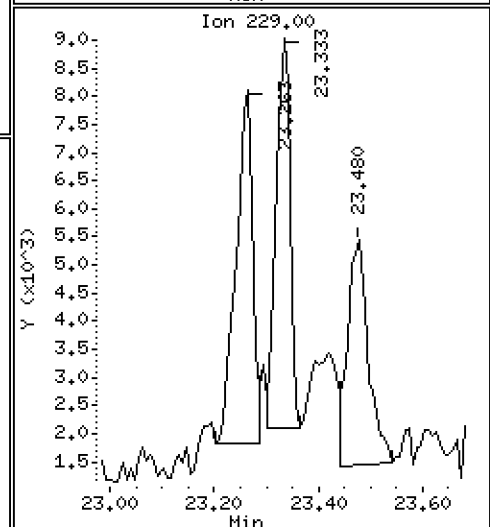
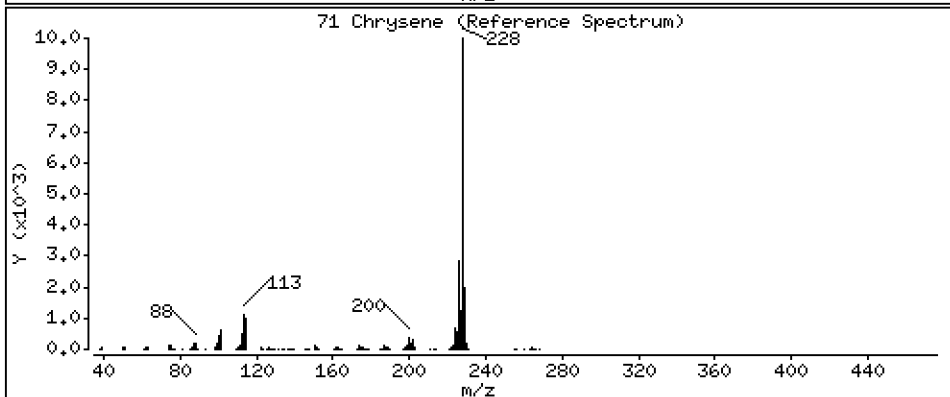
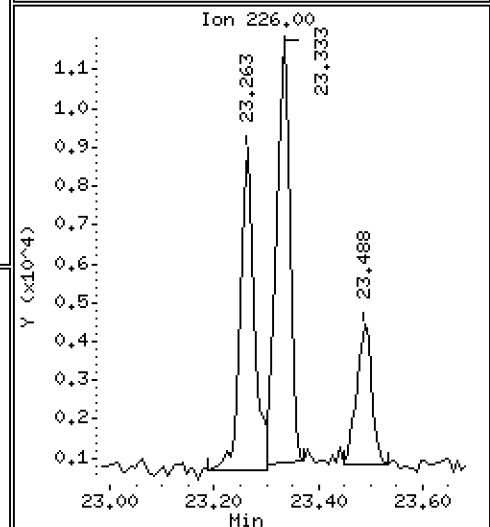
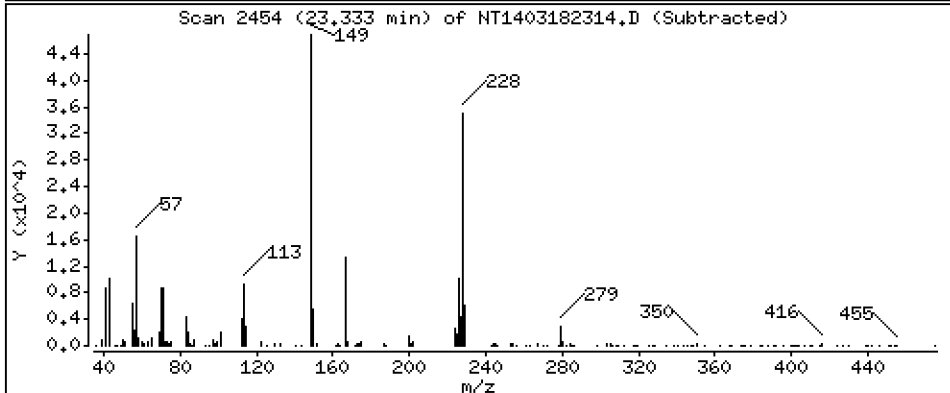
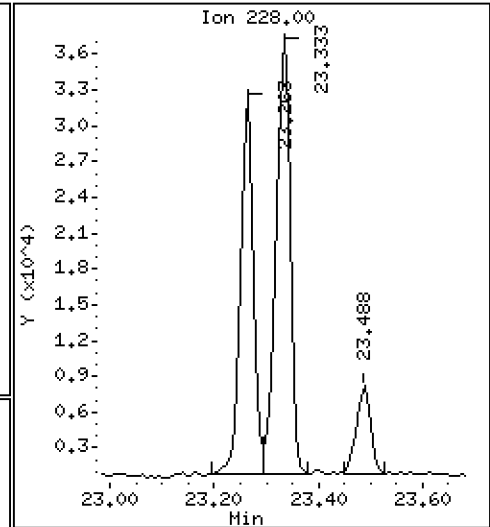
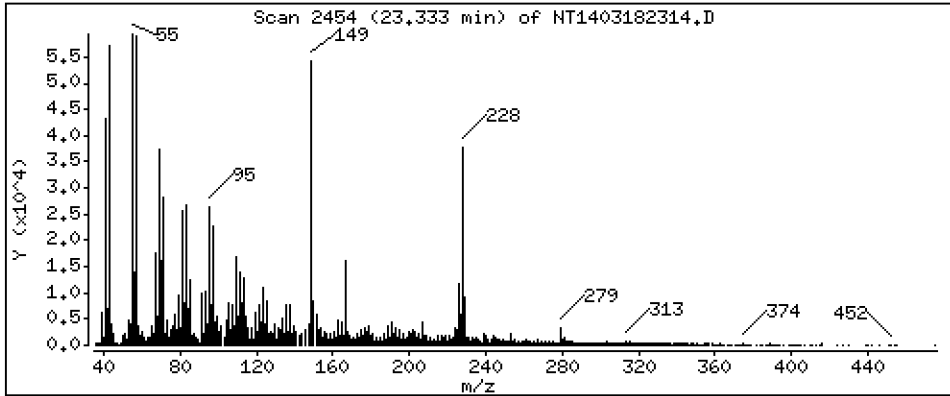
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,632 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

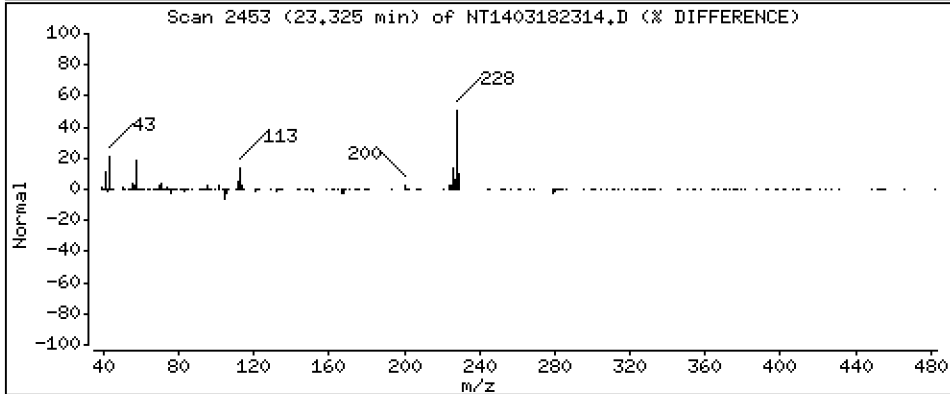
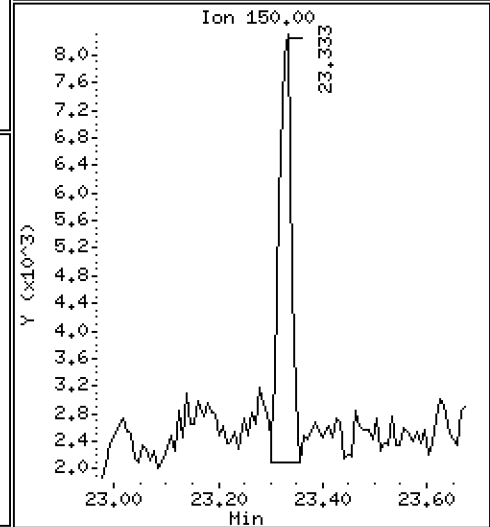
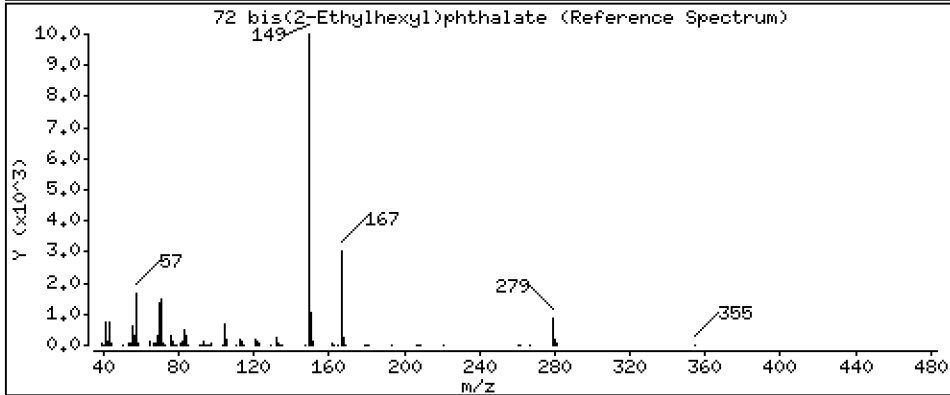
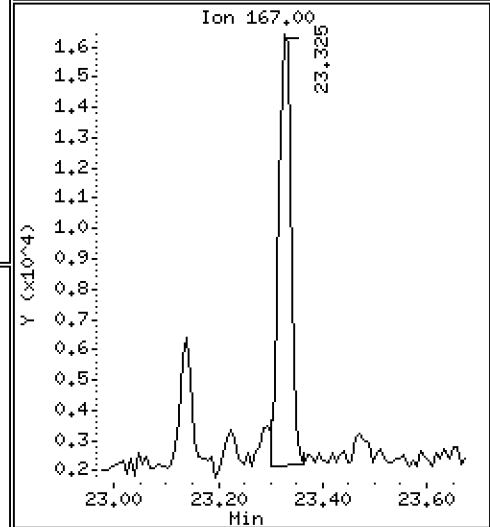
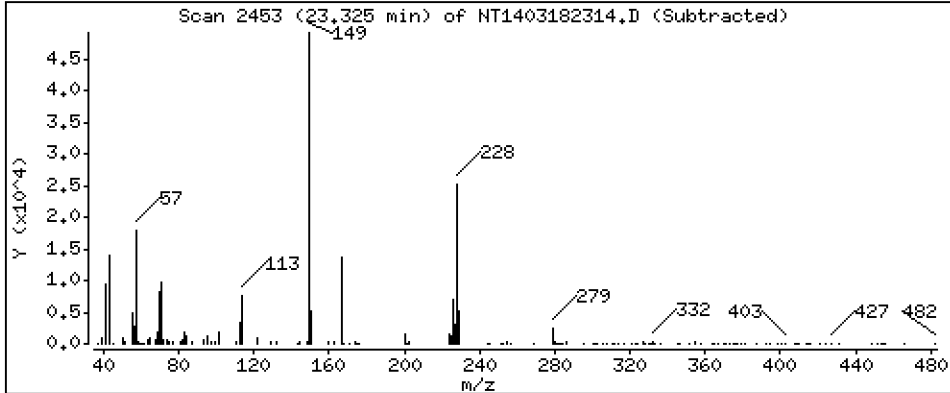
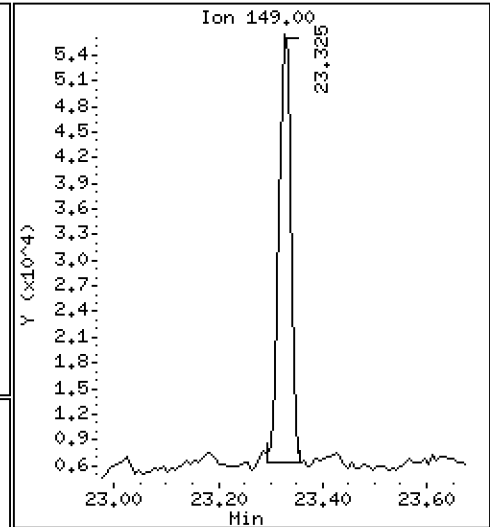
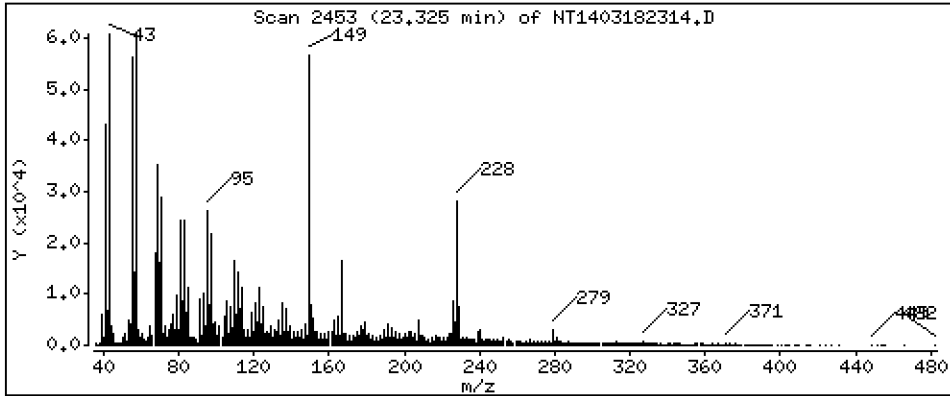
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 2,135 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

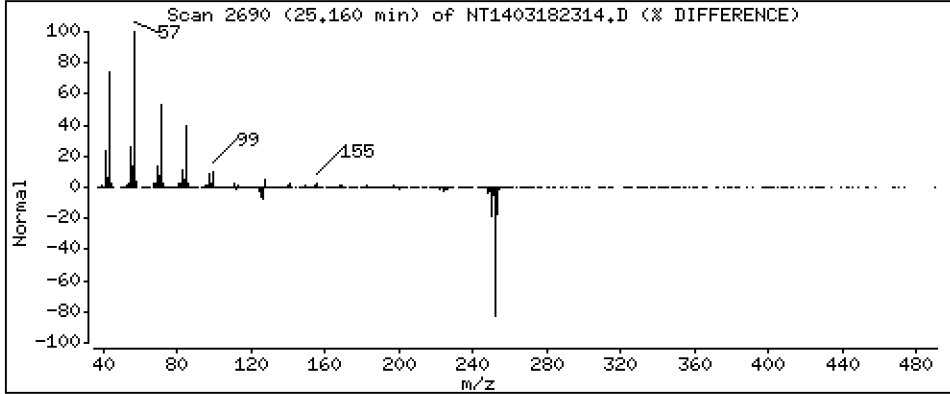
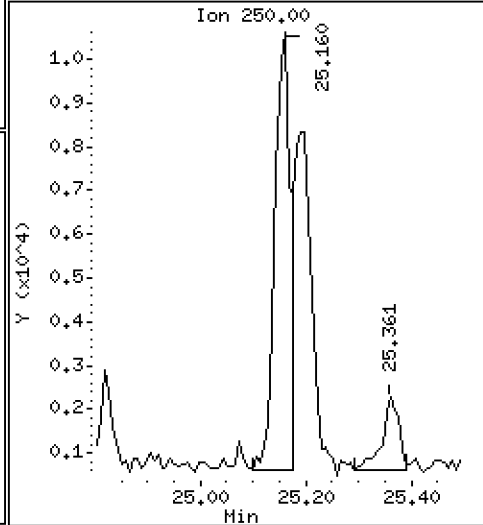
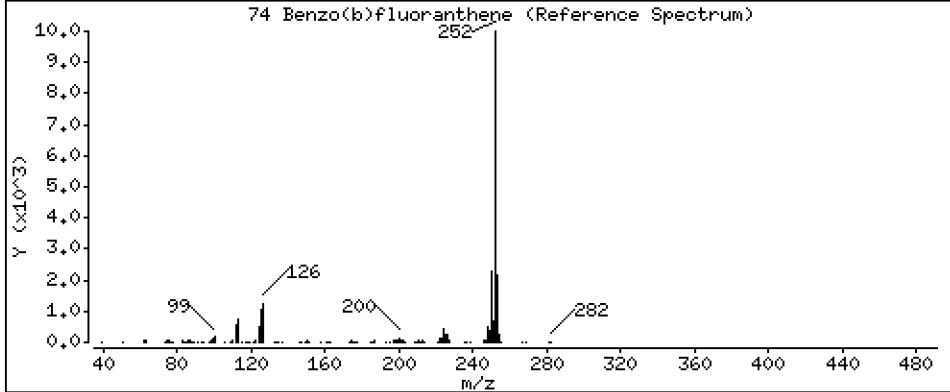
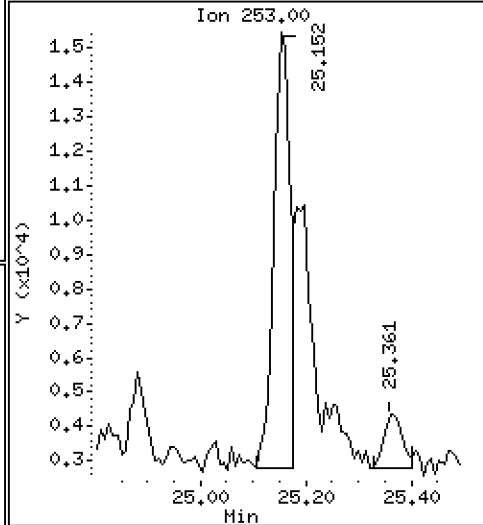
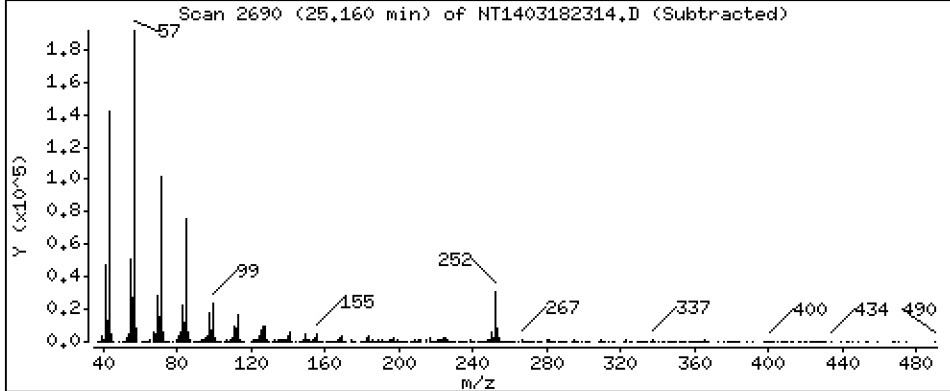
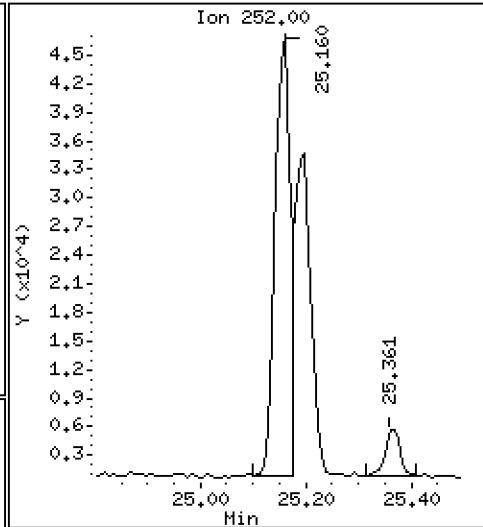
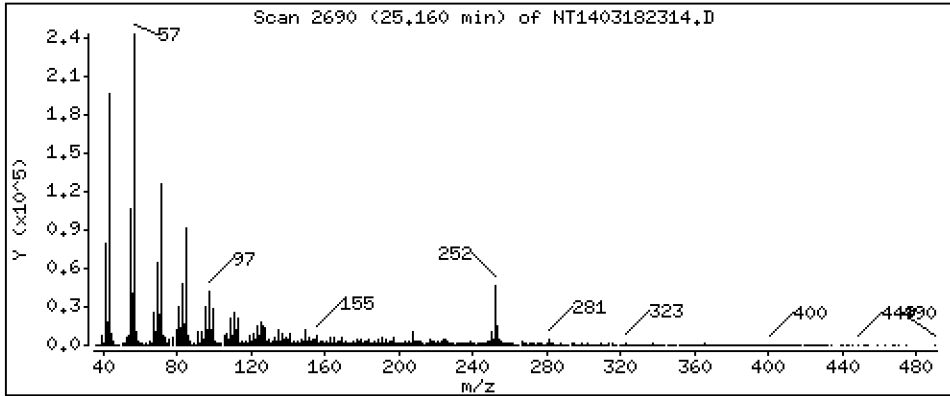
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,869 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

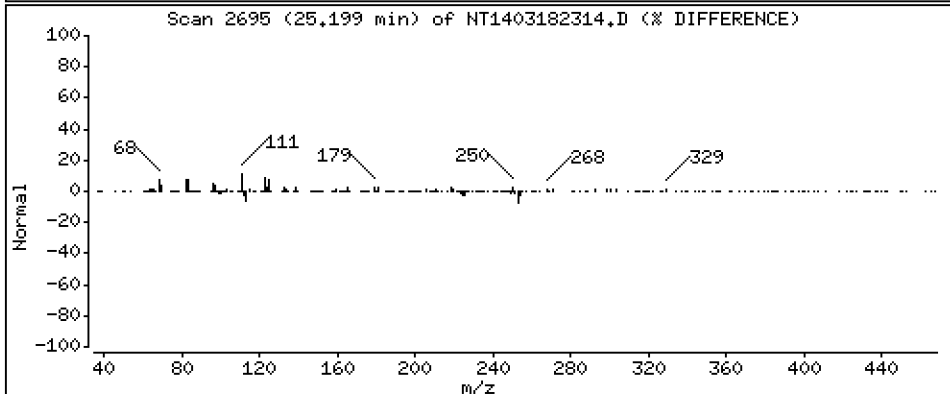
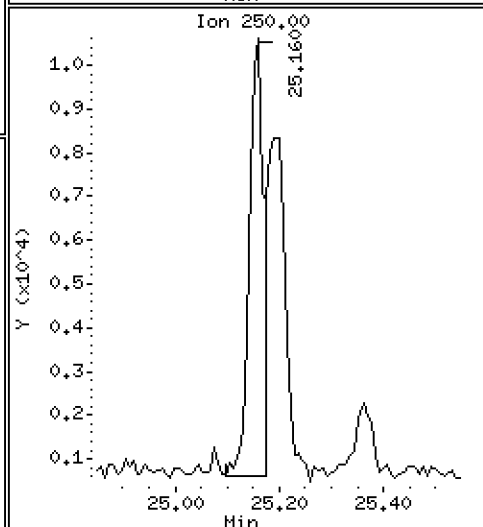
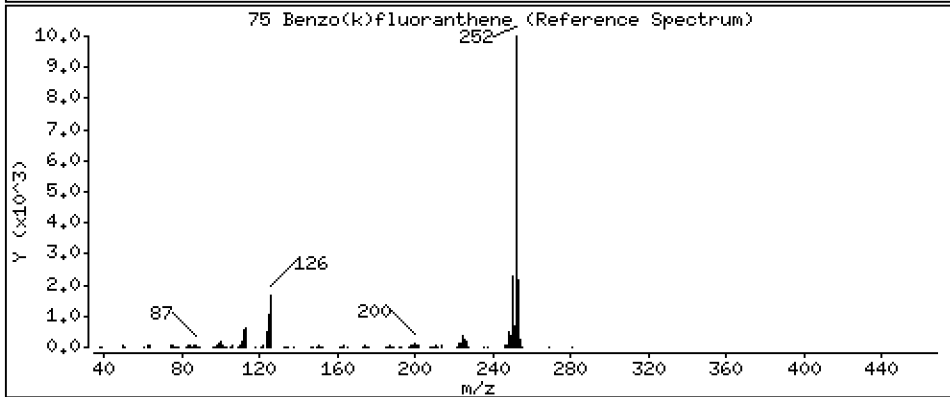
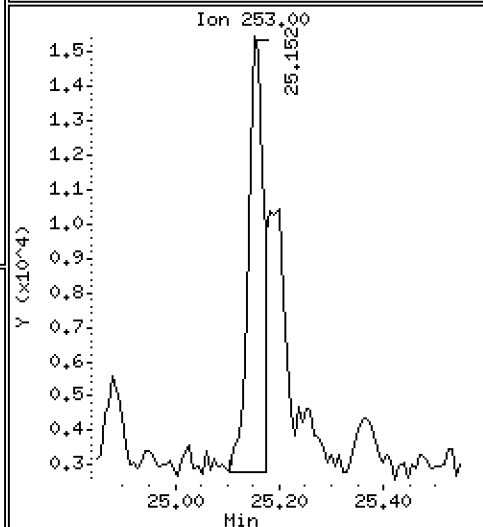
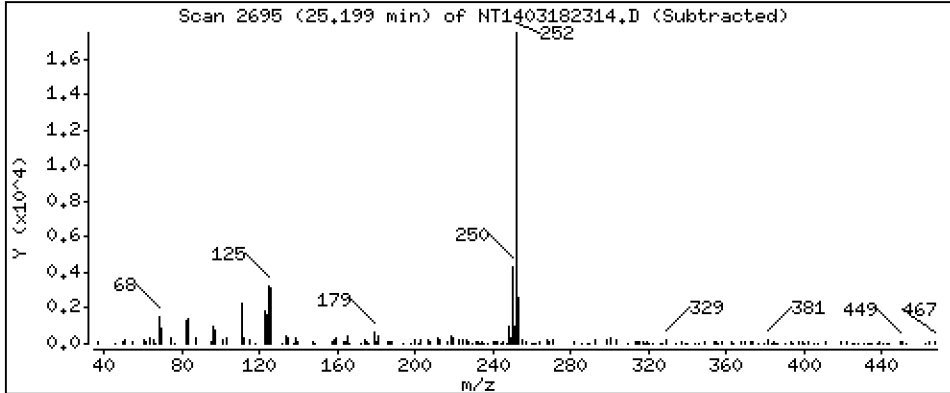
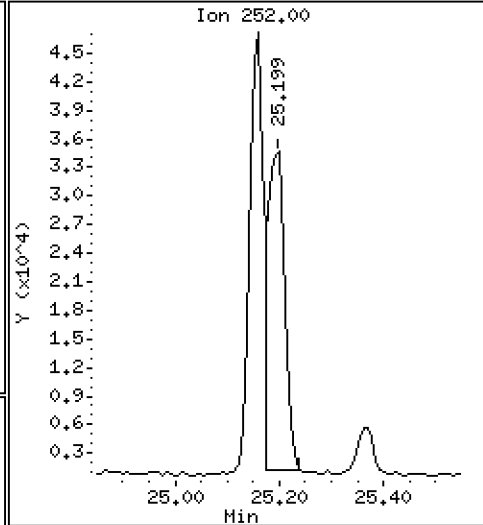
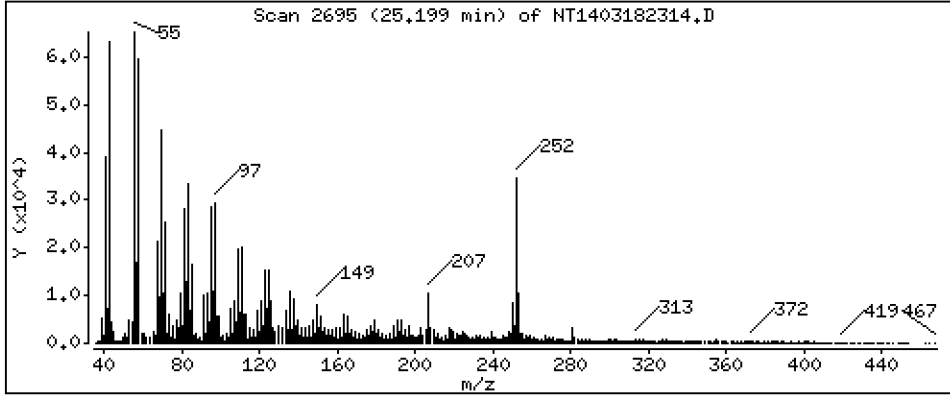
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,533 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

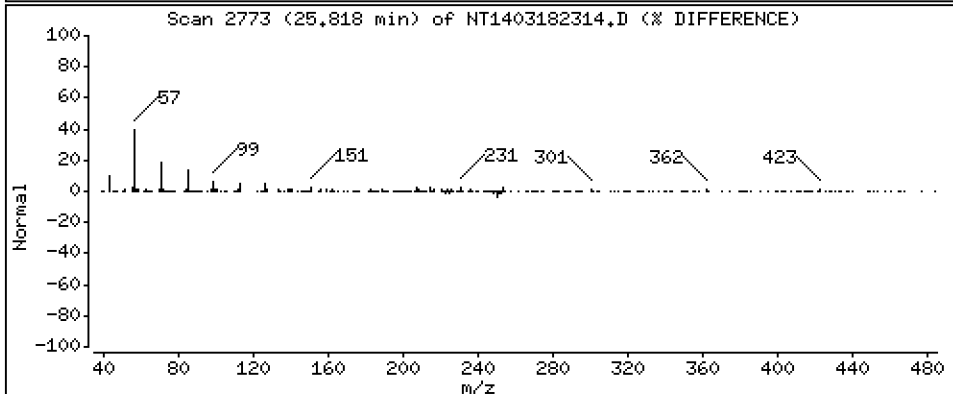
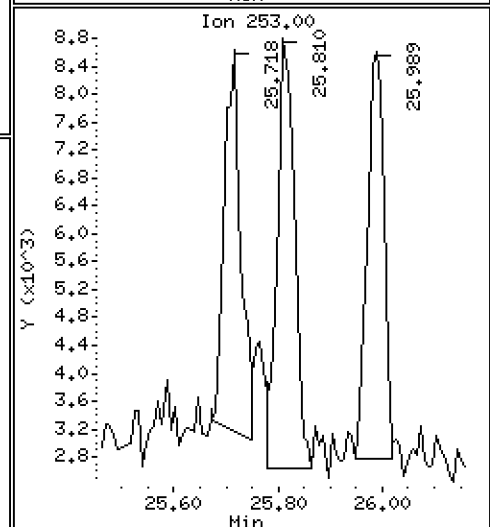
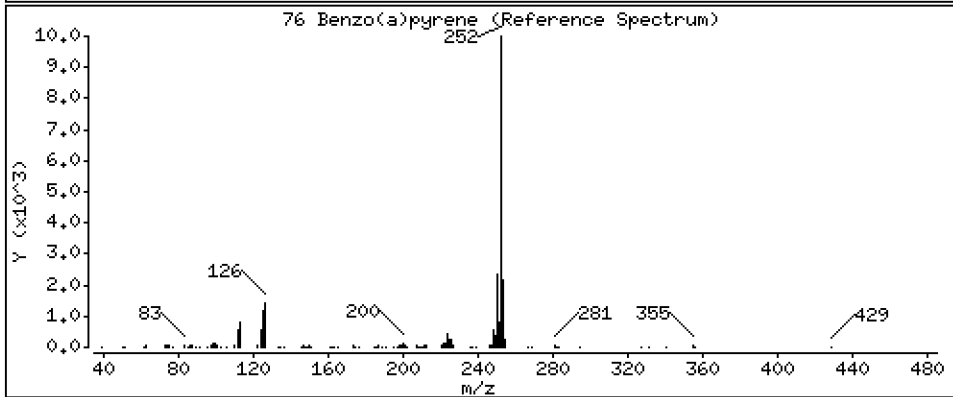
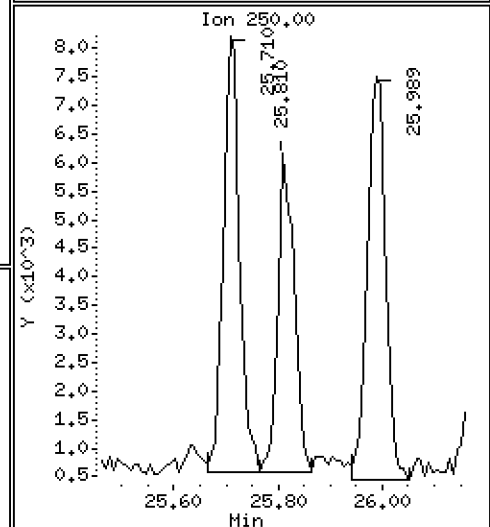
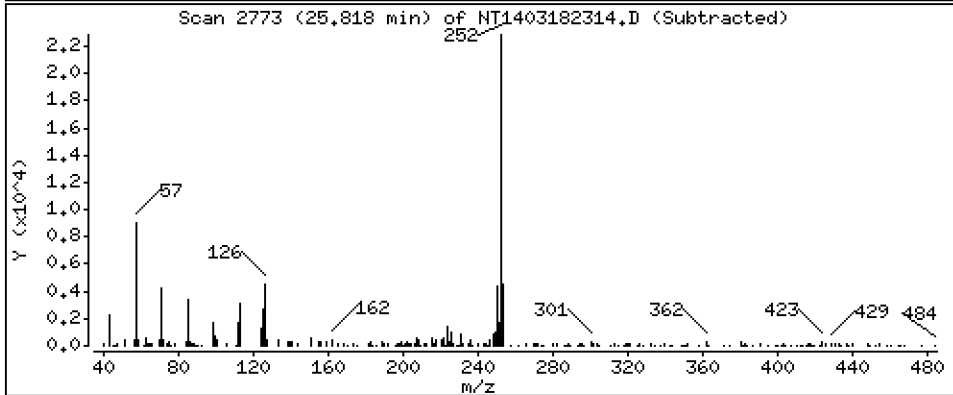
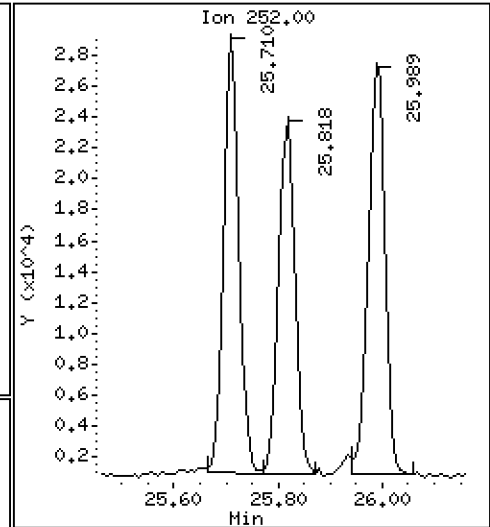
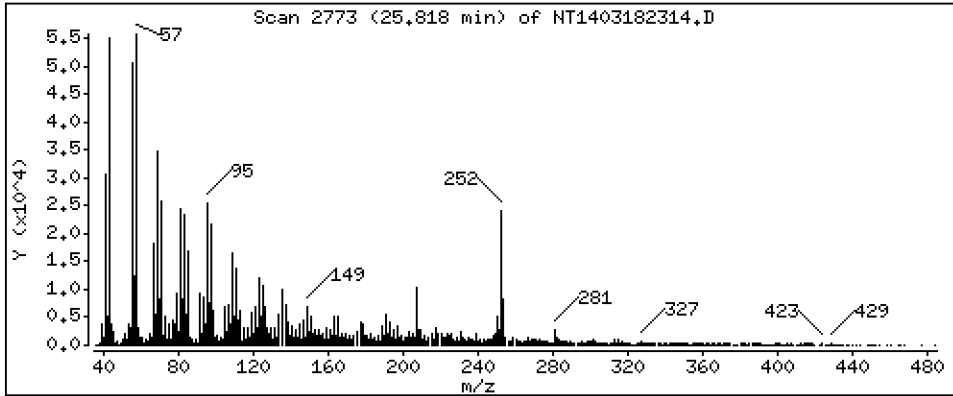
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,138 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

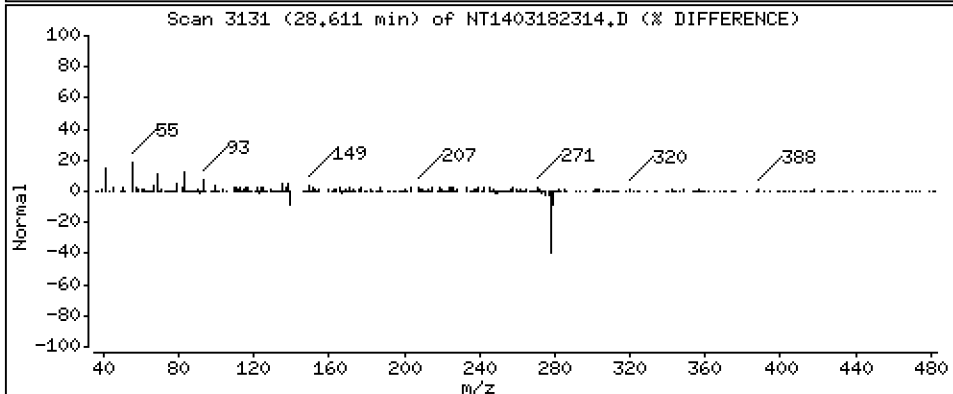
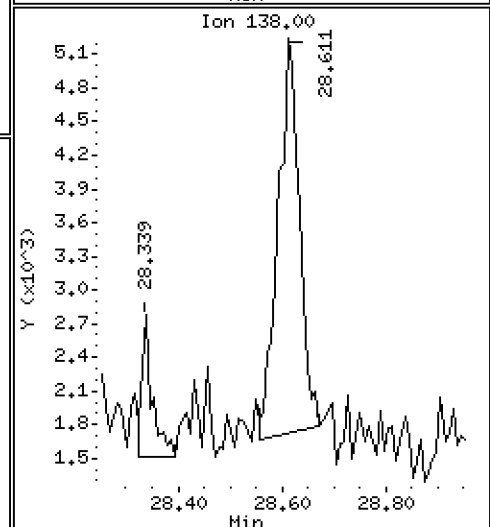
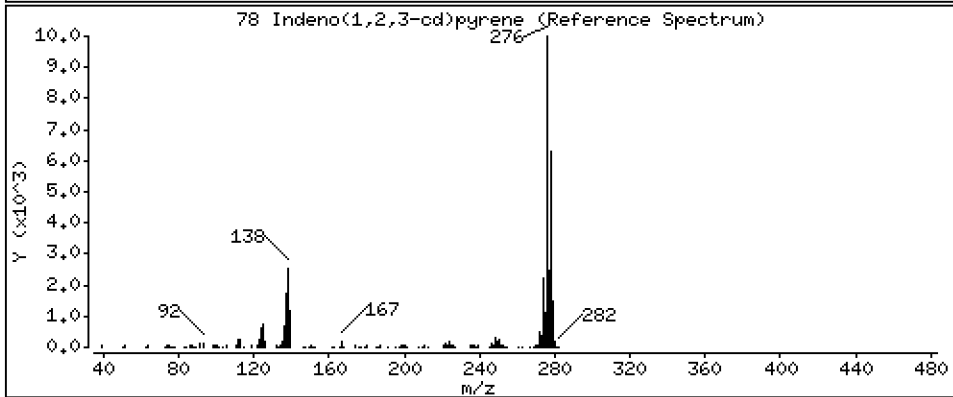
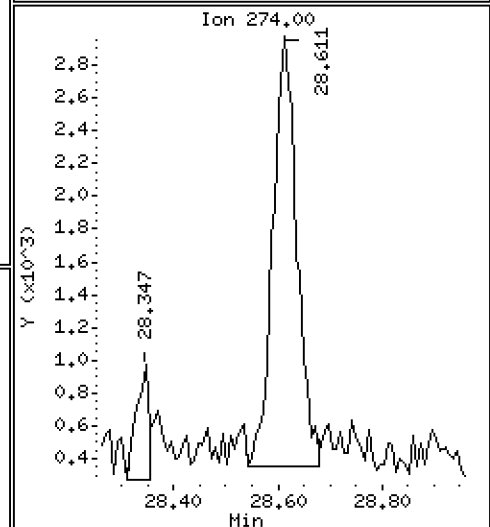
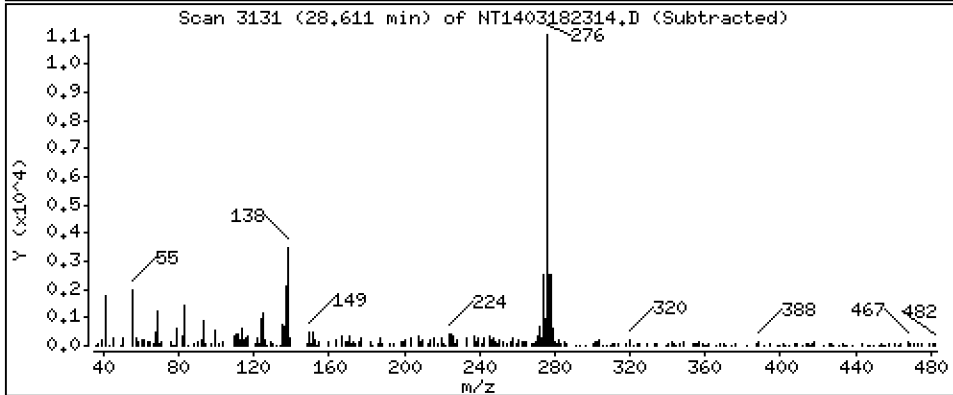
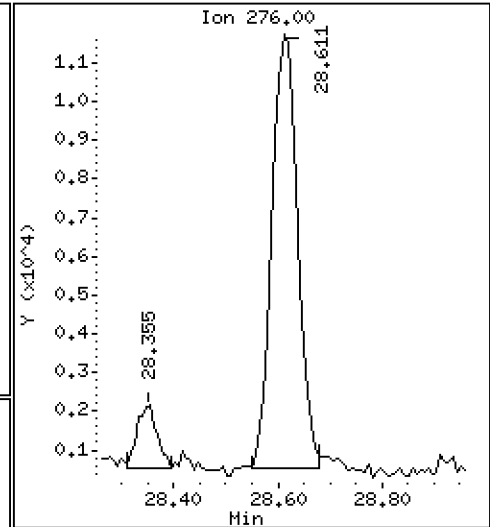
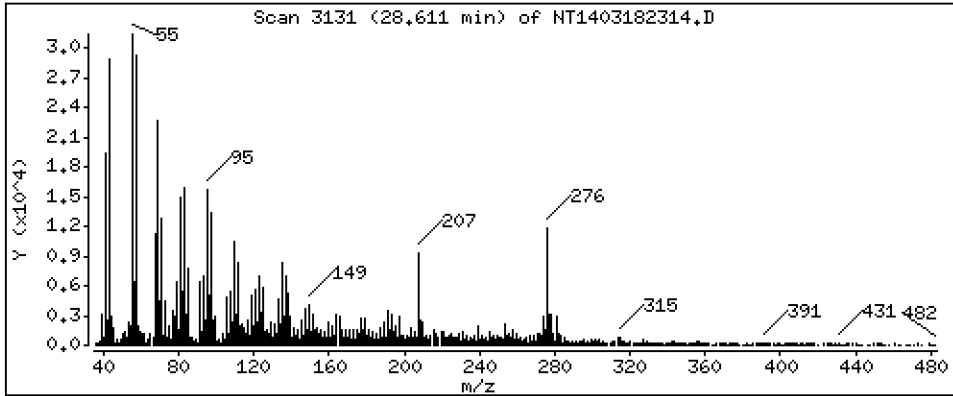
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,8269 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

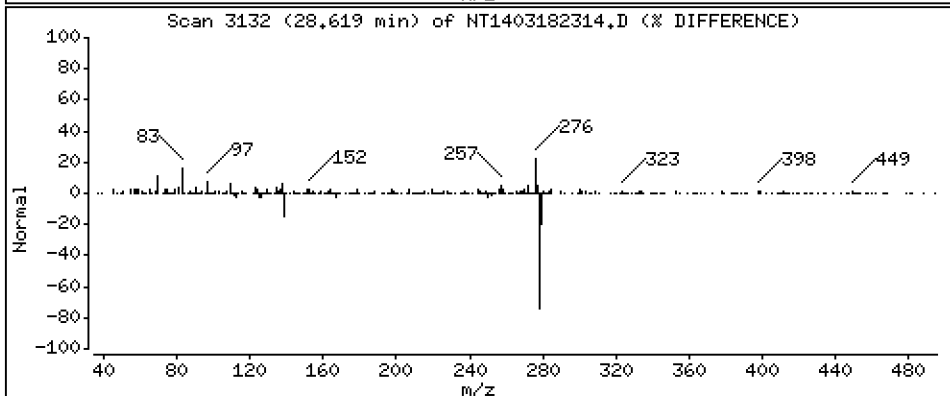
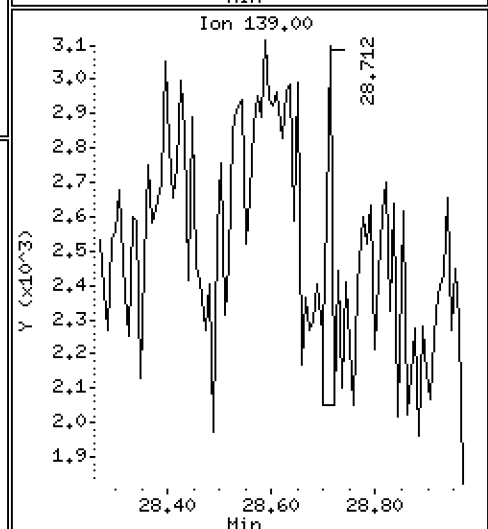
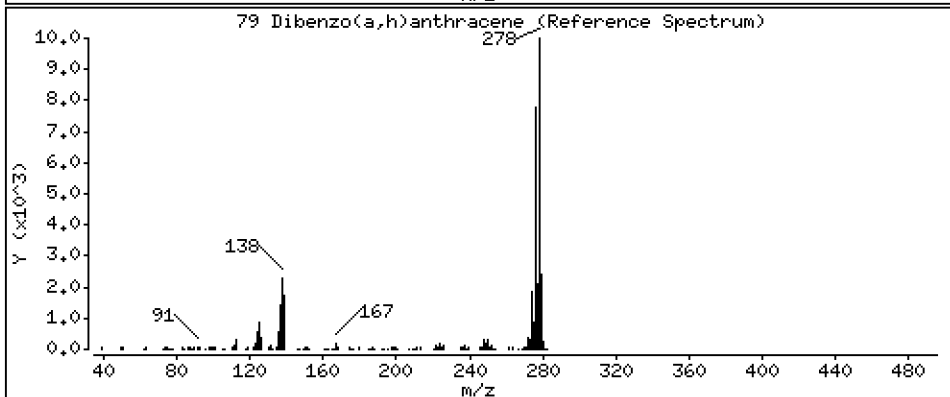
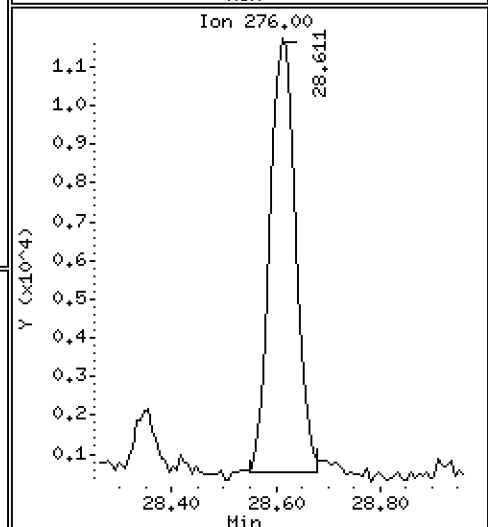
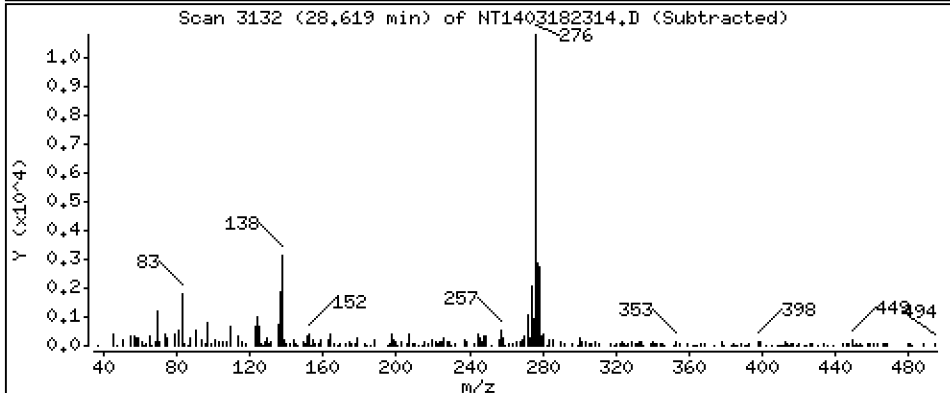
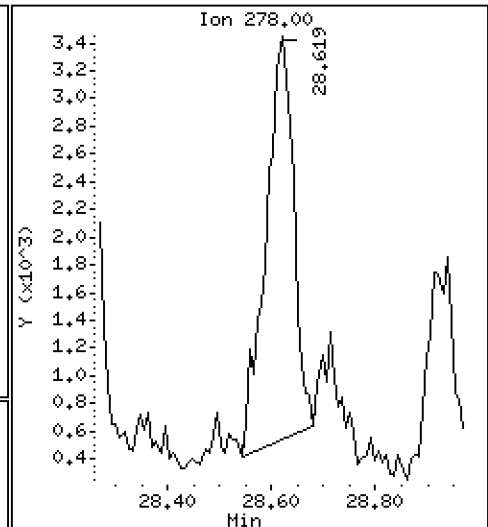
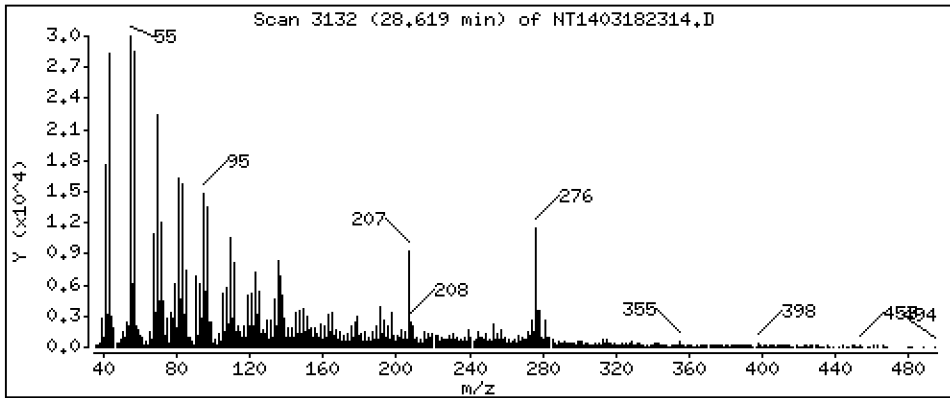
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2722 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

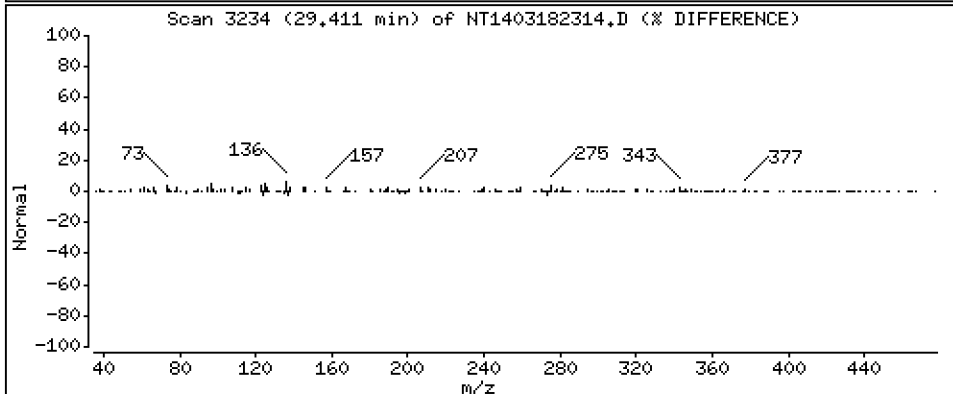
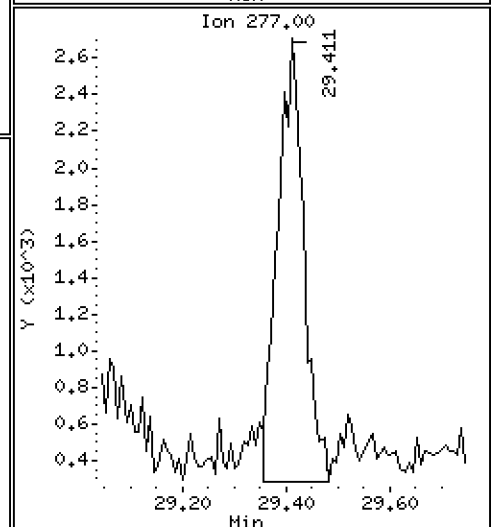
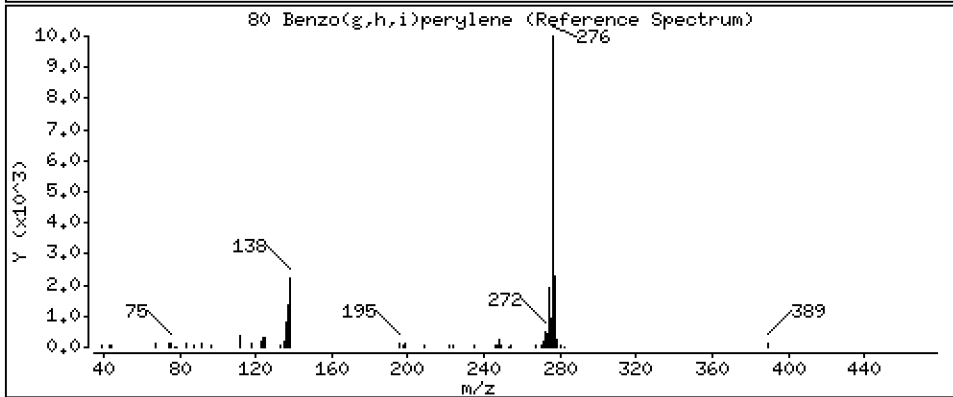
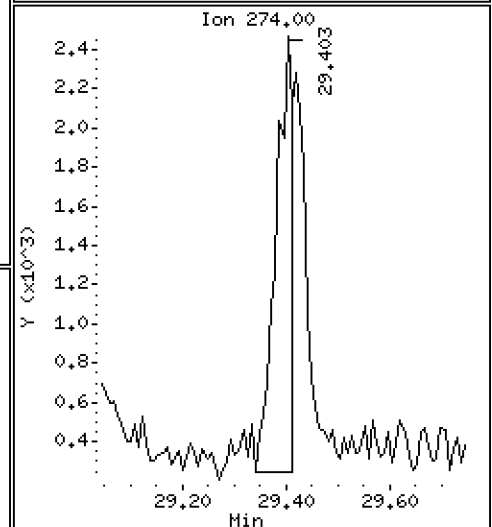
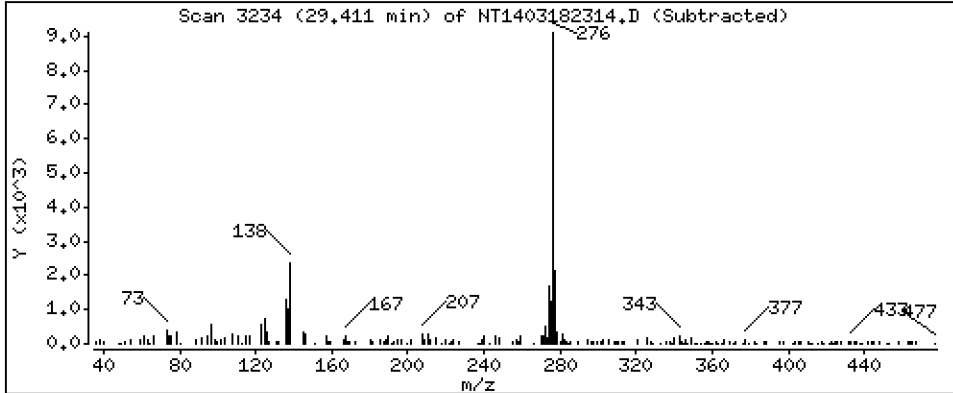
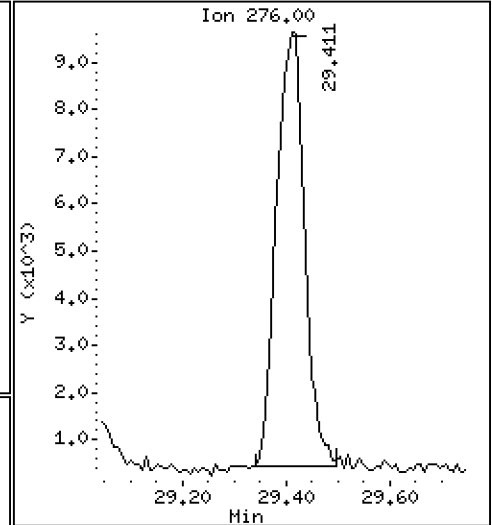
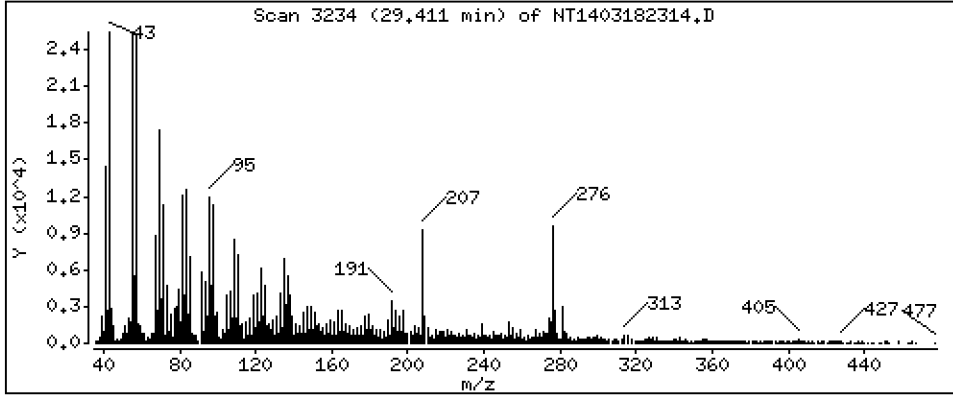
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,9087 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

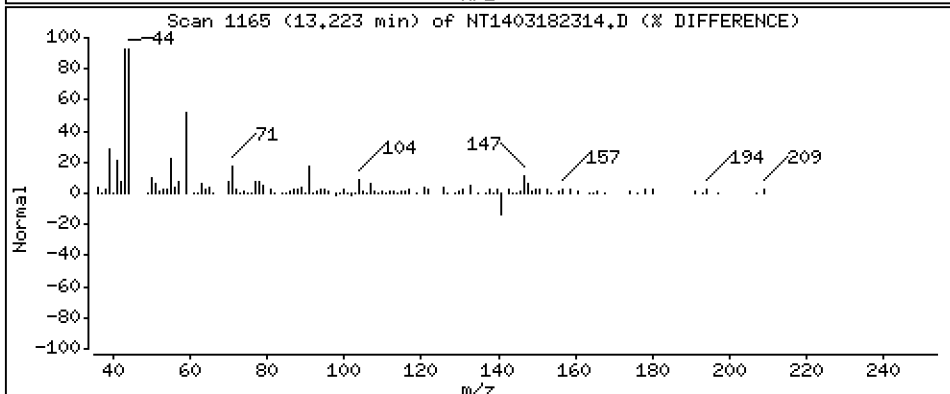
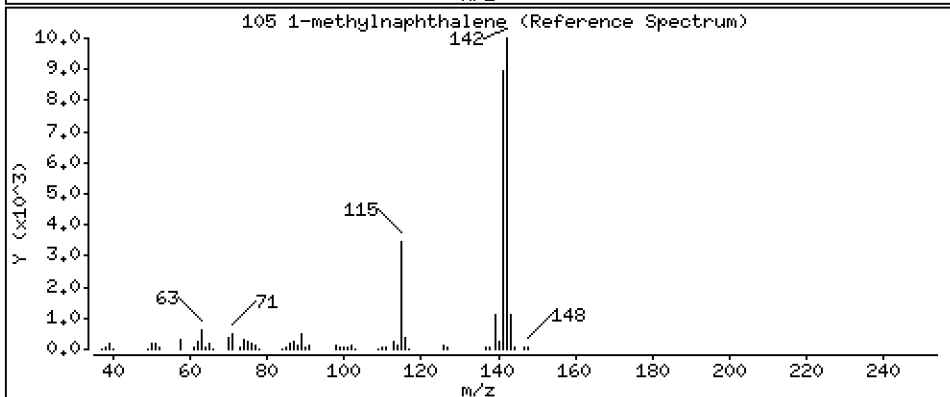
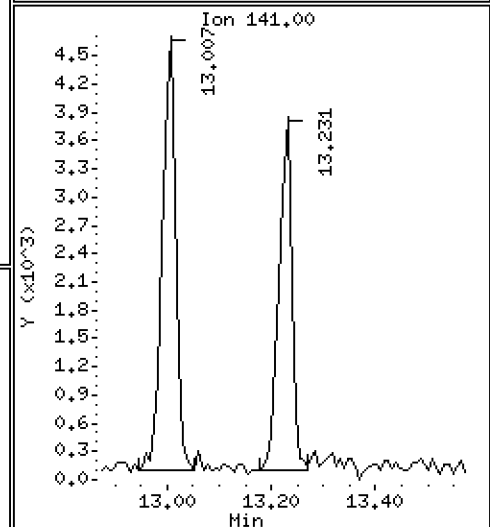
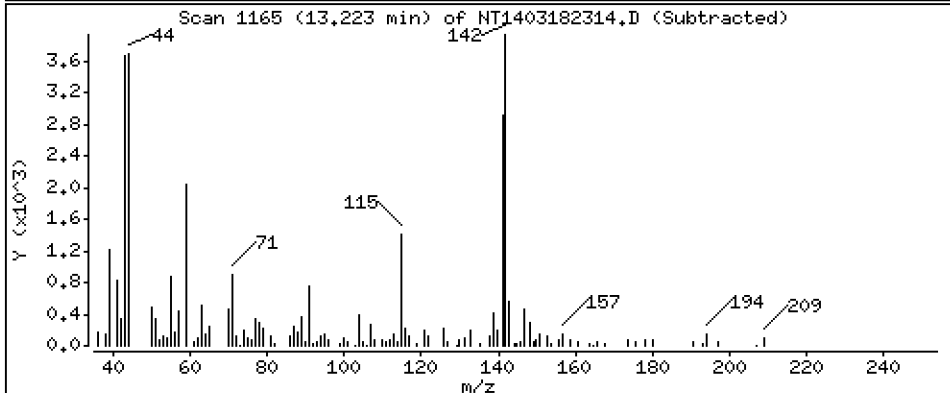
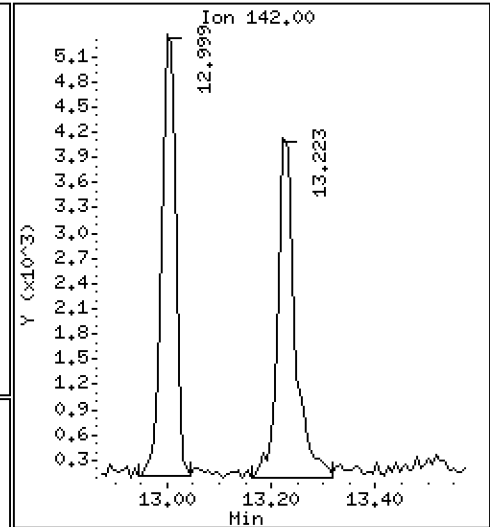
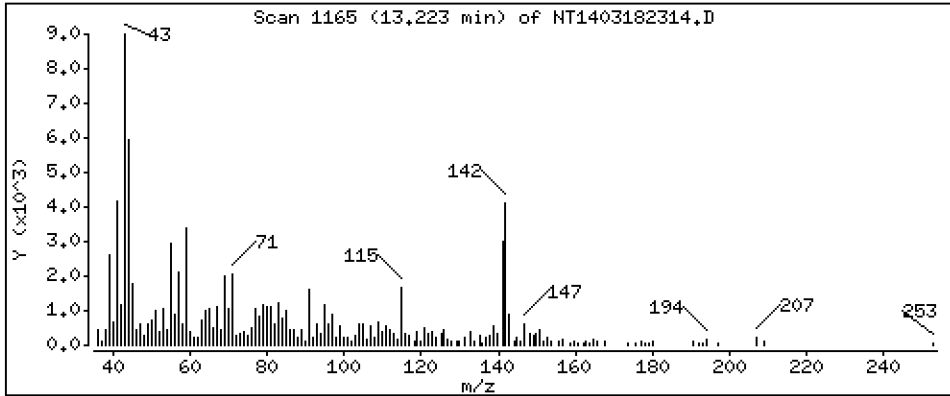
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1787 ug/mL



Date : 19-MAR-2023 00:52

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08RE1,4

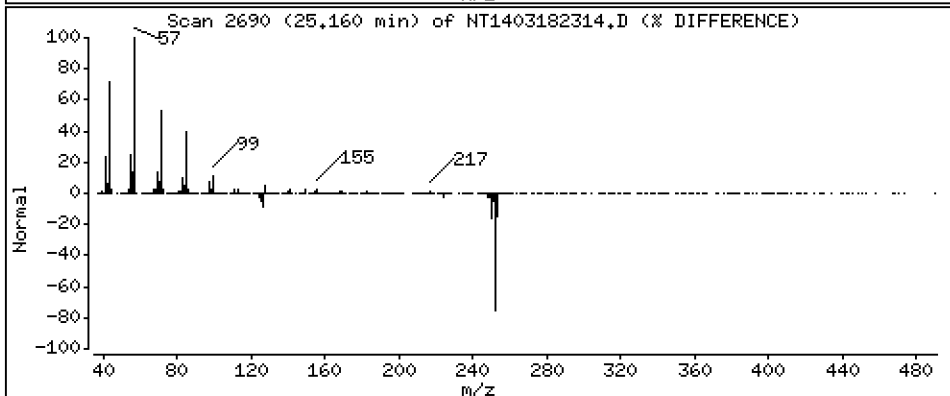
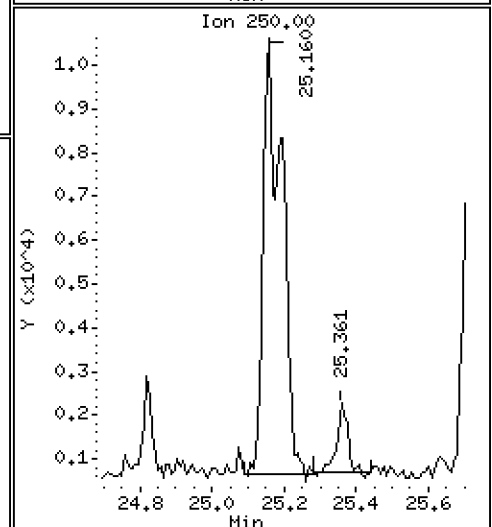
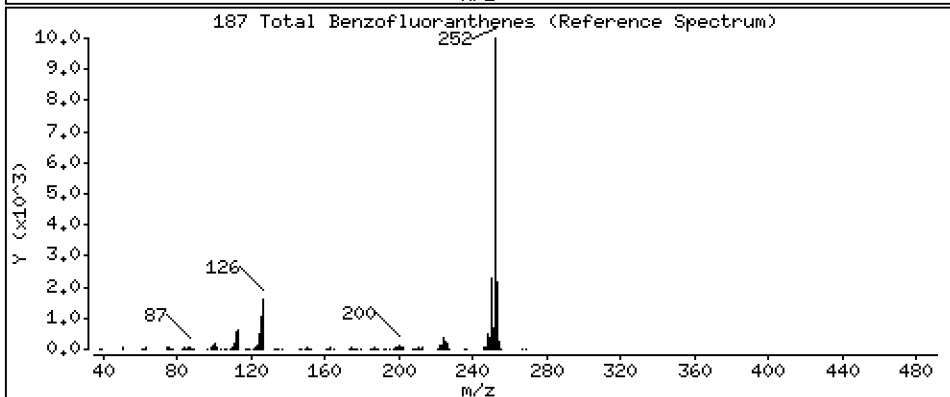
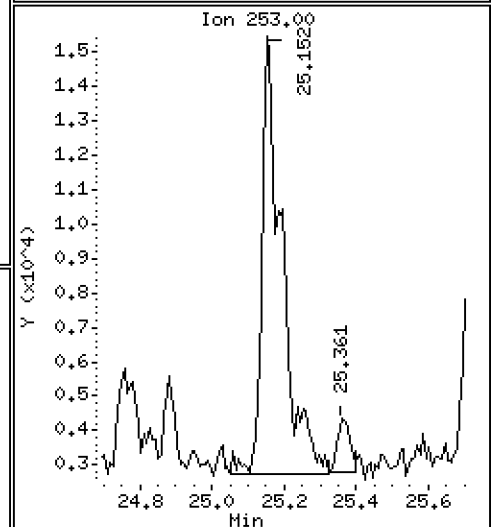
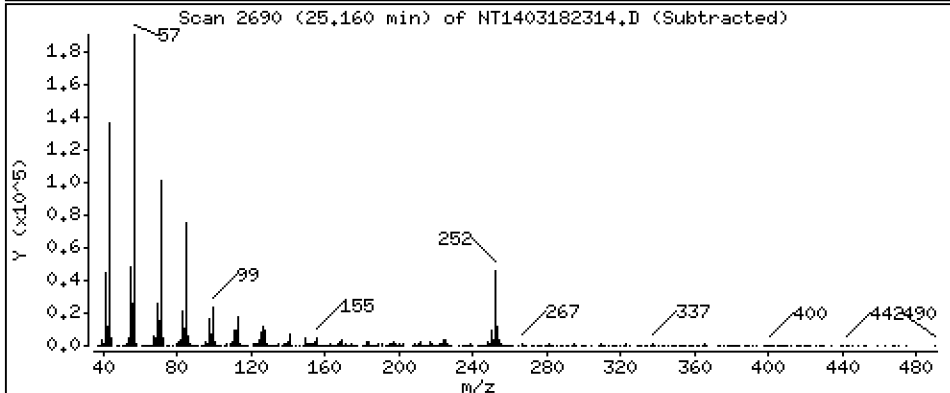
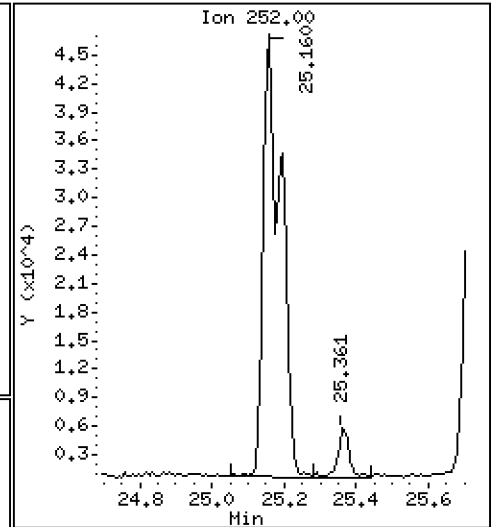
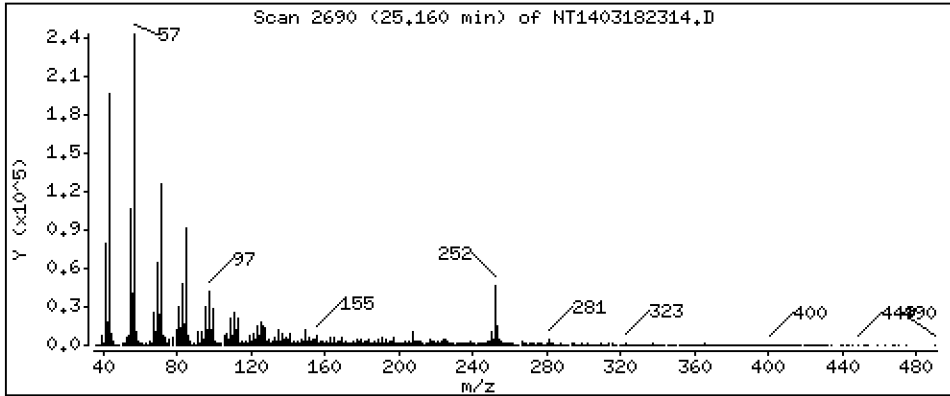
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 3,406 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182314.D
 Lab Smp Id: 23B0229-08RE1
 Inj Date : 19-MAR-2023 00:52 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-08RE1,4
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 10:18 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 13
 Dil Factor: 4.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.829	(1.000)	147596	1.40529	5.621
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	195071	1.41072	5.643
3 Phenol	94		8.444	8.435	(1.000)	25173	0.17130	0.6852
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	169208	1.55215	6.209
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	309196	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	70246	0.96451	3.858
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.349	9.333	(1.000)	12268	0.17932	0.7173
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.831	9.830	(1.000)	9062	0.07366	0.2947
\$ 18 Nitrobenzene-d5	82		10.157	10.156	(0.879)	131849	1.03956	4.158
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		10.987	11.110	(0.950)	24718	0.29105	1.164 (M)
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.560	11.559	(1.000)	1198501	4.00000	
28 Naphthalene	128		11.598	11.598	(1.003)	16312	0.05095	0.2038
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		12.998	13.006	(1.124)	9586	0.04293	0.1717
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.788	13.787	(0.907)	248276	1.14138	4.566
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163							
40 Acenaphthylene	152		14.879	14.879	(0.979)	10035	0.03205	0.1282
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.196	15.188	(1.000)	600645	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153		15.258	15.258	(1.004)	6165	0.03372	0.1349
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168		15.583	15.583	(1.025)	10680	0.04092	0.1637
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.147	16.155	(1.063)	18167	0.08773	0.3509
49 Fluorene	166		16.302	16.301	(1.073)	9368	0.03786	0.1514
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.834	16.833	(1.108)	39926	1.69066	6.763
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.240	18.232	(1.000)	1046836	4.00000	
60 Phenanthrene	178		18.286	18.286	(1.003)	73813	0.24679	0.9872
61 Anthracene	178		18.379	18.379	(1.008)	30902	0.10724	0.4290
62 Carbazole	167		18.712	18.704	(1.026)	10734	0.04187	0.1675
63 Di-n-butylphthalate	149		19.509	19.501	(1.070)	6800	0.02092	0.08370
64 Fluoranthene	202		20.708	20.669	(0.889)	163206	0.82196	3.288
65 Pyrene	202		21.103	21.095	(0.906)	172863	0.84894	3.396
\$ 66 Terphenyl-d14	244		21.381	21.381	(0.918)	202186	1.46675	5.867
67 Butylbenzylphthalate	149		22.310	22.302	(0.958)	8441	0.09462	0.3785
68 Benzo(a)anthracene	228		23.263	23.263	(0.999)	53272	0.29603	1.184
* 69 Chrysene-d12	240		23.294	23.294	(1.000)	488047	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228		23.333	23.332	(1.002)	66456	0.40804	1.632
72 bis(2-Ethylhexyl)phthalate	149		23.325	23.324	(0.959)	75657	0.53380	2.135
* 134 Di-n-octylphthalate-d4	153		24.316	24.315	(1.000)	1076657	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252		25.160	25.152	(0.970)	93416	0.46735	1.869
75 Benzo(k)fluoranthene	252		25.198	25.198	(0.972)	75945	0.38328	1.533 (M)
76 Benzo(a)pyrene	252		25.818	25.810	(0.996)	48641	0.28457	1.138
* 77 Perylene-d12	264		25.934	25.926	(1.000)	565653	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		28.611	28.610	(1.103)	38459	0.20673	0.8269
79 Dibenzo(a,h)anthracene	278		28.618	28.618	(1.104)	10671	0.06806	0.2722 (M)
80 Benzo(g,h,i)perylene	276		29.411	29.395	(1.134)	34830	0.22717	0.9087
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.223	13.223	(1.144)	9040	0.04468	0.1787
111 Azobenzene (1,2-DP-Hydrazine)	77							

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.160	25.198	(0.970)	161367	0.85138	3.406
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 18-MAR-2023
 Lab File ID: NT1403182314.D Calibration Time: 17:38
 Lab Smp Id: 23B0229-08RE1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	247621	123811	495242	309196	24.87
27 Naphthalene-d8	955275	477638	1910550	1198501	25.46
42 Acenaphthene-d10	510589	255295	1021178	600645	17.64
59 Phenanthrene-d10	920812	460406	1841624	1046836	13.69
69 Chrysene-d12	546688	273344	1093376	488047	-10.73
134 Di-n-octylphthala	1067789	533895	2135578	1076657	0.83
77 Perylene-d12	445520	222760	891040	565653	26.96

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.20	0.05
59 Phenanthrene-d10	18.23	17.73	18.73	18.24	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.03

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

REVIEW SUMMARY FOR FILE - NT1403182314.D

Lab ID: 23B0229-08RE1
nt14.i, ABN.m, 19-MAR-2023 00:52

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.961	-0.0107	Benzoic acid

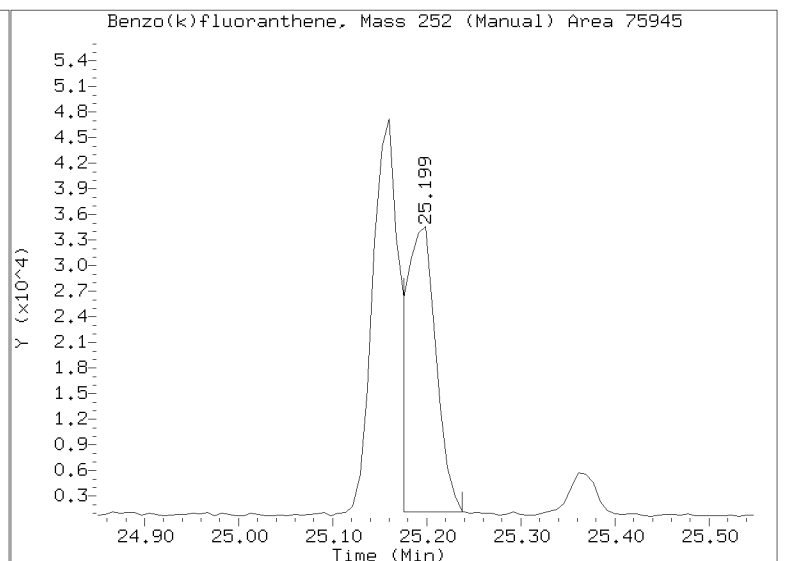
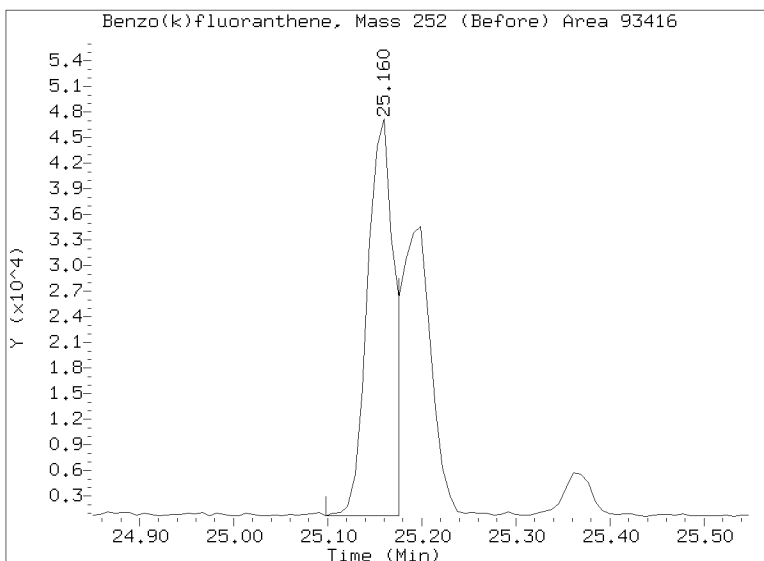
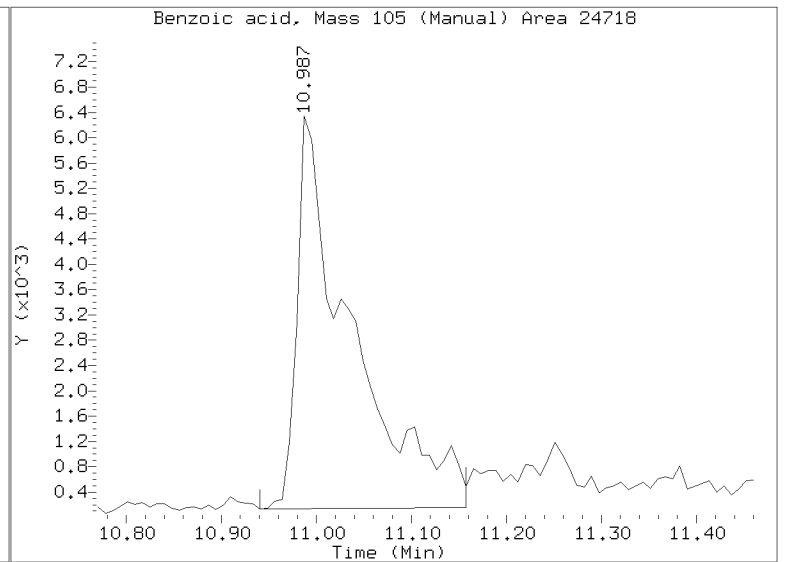
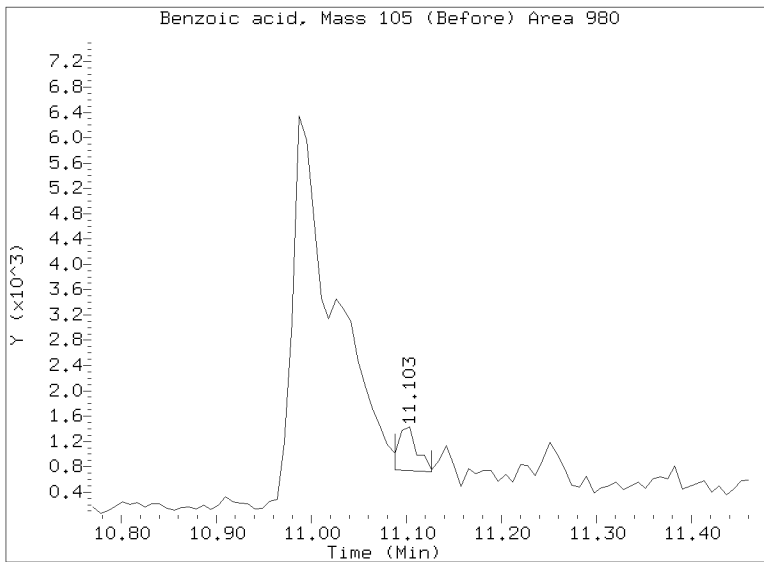
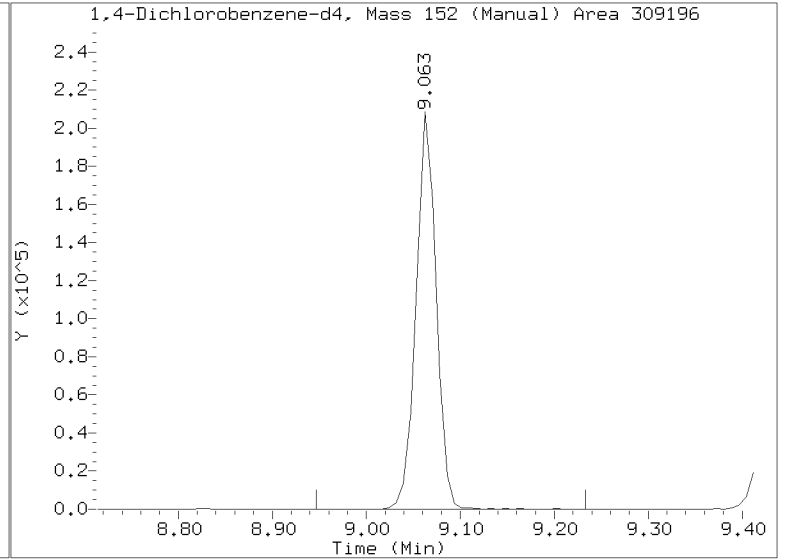
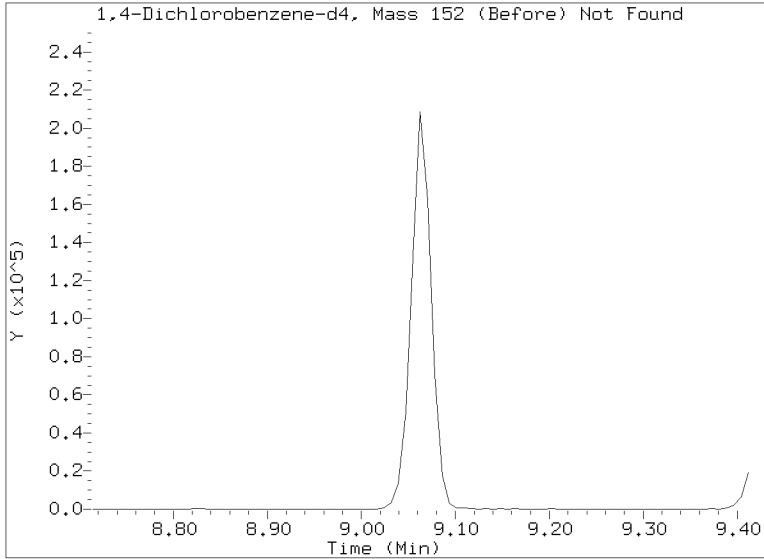
RRT check based on Ccal File: NT1403182302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

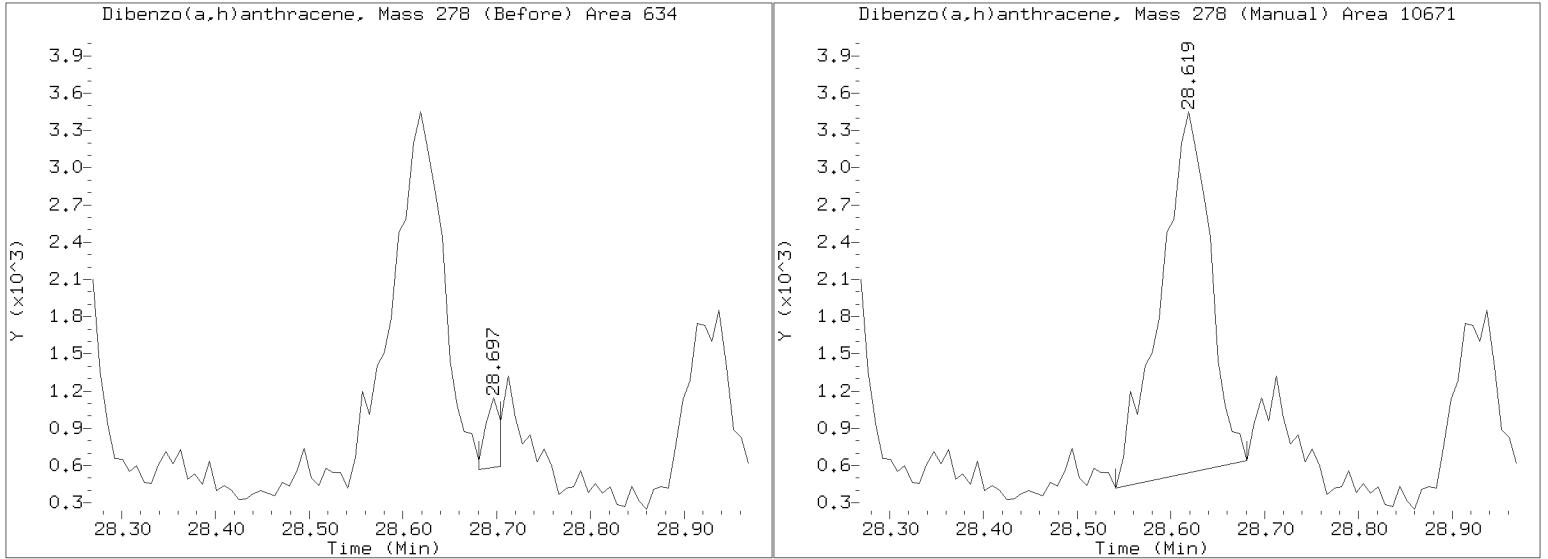
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182314.D
Injection Date: 19-MAR-2023 00:52
Lab ID:23B0229-08RE1 Client ID:
Report Date: 03/23/2023 11:34



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182314.D
Injection Date: 19-MAR-2023 00:52
Lab ID:23B0229-08RE1 Client ID:
Report Date: 03/23/2023 11:34





PREPARATION BATCH SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLB0424 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1236	23B0229-02	NT1403172321.D	02/17/23 15:00	
LDW23-SS1237	23B0229-03	NT1403172322.D	02/17/23 15:00	
LDW23-SS1150	23B0229-04	NT1403172323.D	02/17/23 15:00	
LDW23-SS1150	23B0229-04RE1	NT1403182311.D	02/17/23 15:00	Added 3/22/2023 by VTS
LDW23-SS1008	23B0229-05	NT1403172324.D	02/17/23 15:00	
LDW23-SS1008	23B0229-05RE1	NT1403182312.D	02/17/23 15:00	Added 3/22/2023 by VTS
LDW23-SC1008	23B0229-06	NT1403172325.D	02/17/23 15:00	
LDW23-SC1008	23B0229-06RE1	NT1403182313.D	02/17/23 15:00	Added 3/22/2023 by VTS
LDW23-SC1013	23B0229-08	NT1403172326.D	02/17/23 15:00	
LDW23-SC1013	23B0229-08RE1	NT1403182314.D	02/17/23 15:00	Added 3/22/2023 by VTS
Blank	BLB0424-BLK1	NT1403172312.D	02/17/23 15:00	
Blank	BLB0424-BLK3	NT1403182306.D	02/17/23 15:00	Added for full scan
LCS	BLB0424-BS1	NT1403172313.D	02/17/23 15:00	
LCS Dup	BLB0424-BSD1	NT1403172314.D	02/17/23 15:00	
Reference	BLB0424-SRM1	NT1403172315.D	02/17/23 15:00	



Batch: BLB0424

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid

Date Prepared: 2/17/23

Balance ID: B139298002 Set Up By: CTO 2/16/23

WO Comments
 23A0099: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23B0229: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g)		(REQ) GPC C/U (1:1) <u>1 2 3</u>	Water Wash mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 10 (Wet)	Actual					
23A0099-04 A	54.8	(18.26)	<u>18.71</u>	(1:1)	1 mL	1	0.5	From BLA0288 by CTO on 16-Feb-2023
23B0229-02 A	56.0	(17.86)	<u>17.89</u>	(1:1)	1 mL	1	0.5	
23B0229-03 A	54.8	(18.25)	<u>18.45</u>	(1:1)	1 mL	1	0.5	
23B0229-04 A	52.2	(19.17)	<u>19.43</u>	(1:1)	1 mL	1	0.5	
23B0229-05 A	44.9	(22.26)	<u>22.74</u>	(1:1)	1 mL	1	0.5	
23B0229-06 A	48.6	(20.57)	<u>20.78</u>	(1:1)	1 mL	1	0.5	
23B0229-08 A	49.7	(20.13)	<u>20.78</u>	(1:1)	1 mL	1	0.5	
23B0276-01 A	63.6	(15.72)	<u>15.72</u>	(1:1)	1 mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g)		(REQ) GPC C/U (1:1) <u>1 2 3</u>	Water Wash mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 10 (Wet)	Actual					
BLB0424-BLK1	100.0	(10.00)	<u>10.00</u>	(1:1)	1 mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0424-BS1	100.0	(10.00)	<u>10.00</u>	(1:1)	1 mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0424-BSD1	100.0	(10.00)	<u>10.00</u>	(1:1)	1 mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0424-MS1	63.6	(15.72)	<u>15.72</u>	(1:1)	1 mL	1	0.5	Use 23B0276-01
BLB0424-MSD1	63.6	(15.72)	<u>15.72</u>	(1:1)	1 mL	1	0.5	Use 23B0276-01
BLB0424-SRM1	100.0	(10.00) ^(1.00)	<u>1.00</u>	(1:1)	1 mL	1	0.5	Use K003477

+1g DI WATER

OR
Client ID verified By

2/17/23
Date

MRS
Preparation Reviewed By

2/20/23
Date

2/17/23 15:00
Extraction Date and Time



Batch: BLB0424

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0099: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Please push this to front of LDW line of samples

Prep Steps

Reagents Used

Surrogates & Spike Standards Used

Microwave	Station/Reagent	Standard ID
① 2 3 R 2/17 Analyst/Date	Microwave	
	Analyst: R/CR Date: 2/17/23	
Pre-GPC KD 100°C Exchange to Hexane (add 10 mL to KD)	Anhydrous Sodium Sulfate	L0001285
	1:1 Methylene Chloride/Acetone	L0001416
	Methylene Chloride	L0008088
④ 2 4 ⑤ 6 NRBS 2/18/23 Analyst/Date	Pre-Deactivated Glass Wool	L0008252
	Pre GPC KD	
TurboVap Pre GPC 1 2 3 ④ 5 TWC 2/18/23 Analyst/Date	Analyst: NRBS Date: 2/18/23	
	Pre-Deactivated Glass Wool	N/A
	Anhydrous Sodium Sulfate	L000980
Post GPC KD 80-85°C ⑦ ② 4 5 ⑥ LO 2-20 Analyst/Date	Methylene Chloride	L0005941
	Methylene Chloride	L0005941
	Hexane	L0005941
TurboVap 1 2 3 ④ 5 NRBS 2/20/23 Analyst/Date	GPC Filter Prep	
	Analyst: TWC Date: 2/18/23 TWC	
Water Wash NRBS 2/20/23 Analyst/Date	Methylene Chloride	K005941
	GPC Filter	
TurboVap 1 2 3 ④ 5 NRBS 2/20/23 Analyst/Date	GPC	
	Analyst: TWC Date: 2/18/23	
	Methylene Chloride	K005941
Water Wash NRBS 2/20/23 Analyst/Date	GPC Calibration File	CLB0132-GPC2
	Post GPC KD	
Water Wash NRBS 2/20/23 Analyst/Date	Analyst: LO Date: 2-20-23	
	Methylene Chloride	K005941
Water Wash NRBS 2/20/23 Analyst/Date	Vialing	
	Analyst: NRBS Date: 2/20/23	
	Methylene Chloride	L0005941

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	A K010466	50µL		
100/150µg/mL	Exp Date: 8/1/23		CT	Y
Full List Spike (Freezer)	7 K011369 (V)	50µL		
100µg/mL	Exp Date: K011297 8/31/23		CT	Y
Base Spike	56 K011369 (V)	50µL		
200µg/mL	Exp Date: K003759 7/19/23		CT	Y
Acid Spike	38 K011369 (V)	50µL		
100/200µg/mL	Exp Date: K003760 4/19/23		CT	Y

MANUALLY ENTER EXPIRATION DATES!

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

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



WO Comments

23A0099: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

Prep Instructions

SPECIAL INSTRUCTIONS:

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

A. Need Total Solids Y N

B. Archive/Freeze Y N



Extraction Parameter: SLOA Extraction Batch RLB0424

Total Solids Batch: RLB0338 Work Order(s): 23B0261, 276

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= ^{of} $\phi 1, \phi 4, \phi 14, 13, 16, 19, 22, 276 = \phi 1$	<u>Y</u> $\phi 2/14/23$
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= ^{23B0261} $\phi 1, \phi 4, \phi 7, \phi 13, 16, 19, 22, 25, 28, 31, 34$	<u>Y</u> $\phi 2/14/23$
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors= ²⁷⁶ $\phi 1$	<u>Y</u> $\phi 2/14/23$
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input checked="" type="checkbox"/> Other (Details)= <u>shell pieces = 10.0% = 25, 28, 31, 34.</u>	<u>Y</u> $\phi 2/14/23$
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/N	<u>Y</u> $\phi 2/14/23$
<input checked="" type="checkbox"/> Multiple Jars Y/N	<u>Y</u> $\phi 2/14/23$
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Extraction Parameter: SWA Extraction Batch BLB0340

Total Solids Batch: BLB0340 Work Order(s): 23B0229 01-08

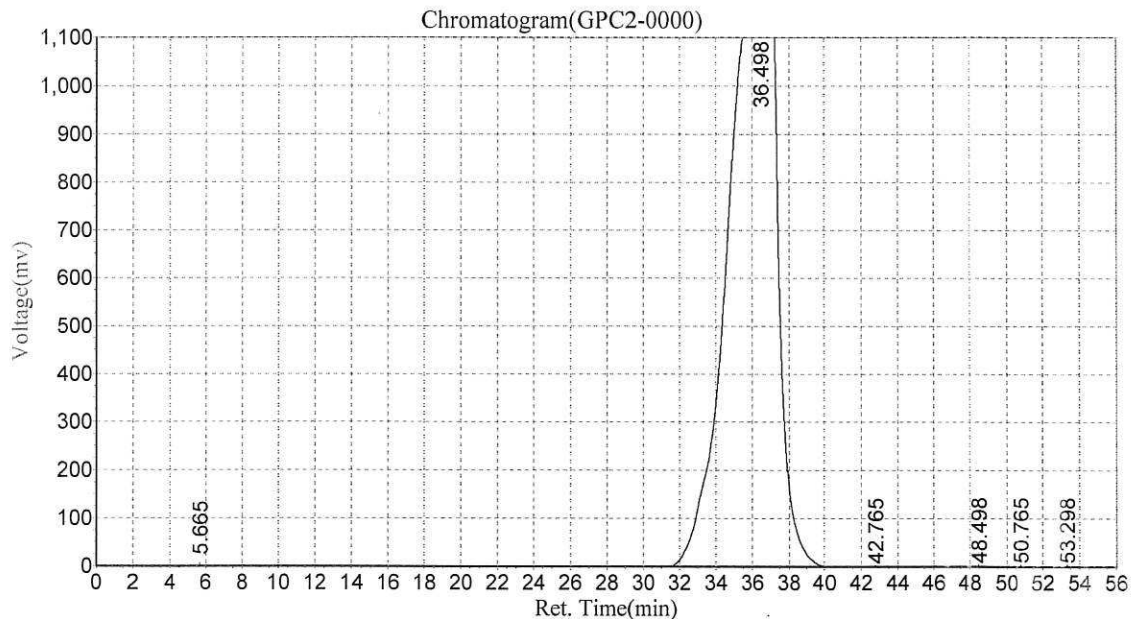
Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>01-08</u>	<u>UR 2/15/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>01-08</u>	<u>UR 2/15/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input checked="" type="checkbox"/> Previously Frozen = <u>01-08</u>	<u>UR 2/15/23</u>
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input checked="" type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions). <u>- lost 5% when transferring to KD 229 08</u>	<u>MKB 2/18/23</u>
<input checked="" type="checkbox"/> Share Samples Y / (N)	<u>UR 2/15/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y / (N)	<u>UR 2/15/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	

- BLK1

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,2:39:32 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0000
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-18,2:39:33 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		5.665	1631.788	107198.344	0.0444
2		36.498	1230302.750	240853856.000	99.7231
3		42.765	2088.653	154681.250	0.0640
4		48.498	1457.462	110338.313	0.0457
5		50.765	2106.192	187223.906	0.0775
6		53.298	1412.538	109227.227	0.0452
Total			1238999.383	241522525.039	100.000

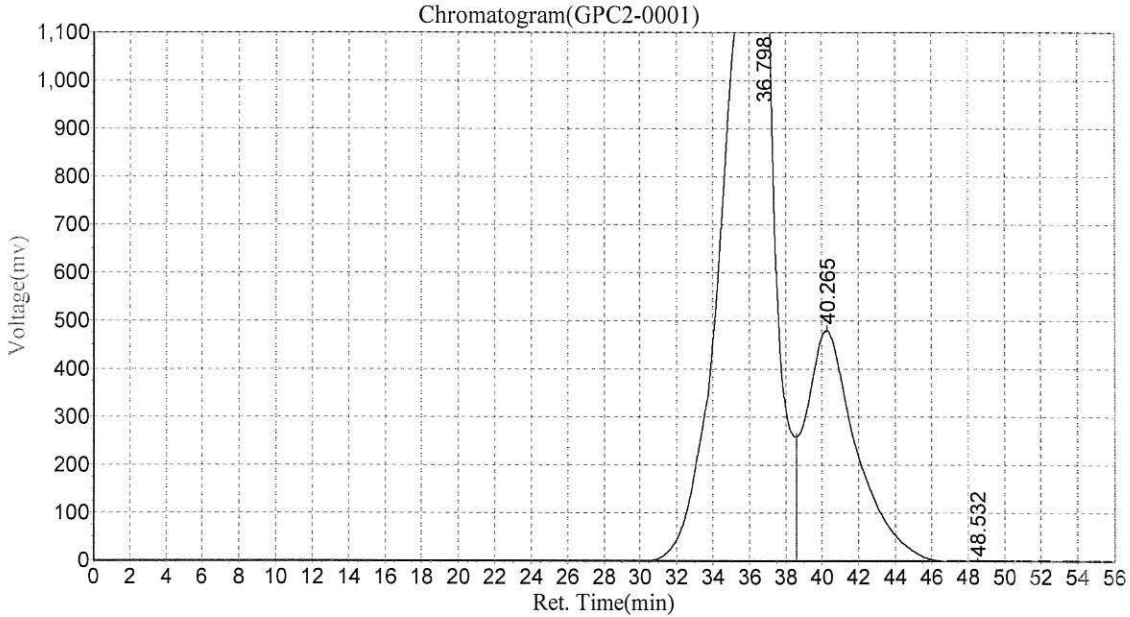
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,3:37:17 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0001
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,3:37:17 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		36.798	1253720.750	266495296.000	73.7152
2		40.265	484494.875	94906336.000	26.2520
3		48.532	1706.172	118466.180	0.0328
Total			1739921.797	361520098.180	100.000

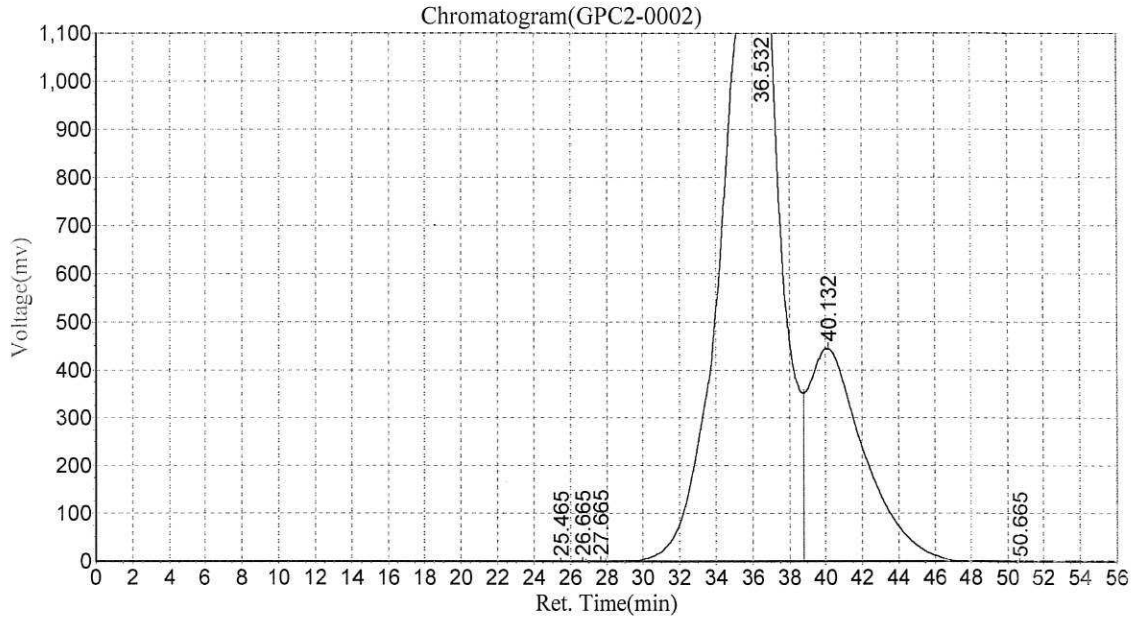
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,4:34:58 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0002
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,4:34:59 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		25.465	2937.737	160704.563	0.0408
2		26.665	4304.507	230034.438	0.0584
3		27.665	5633.149	315938.625	0.0802
4		36.532	1254572.500	294632704.000	74.7901
5		40.132	451142.813	98411416.000	24.9809
6		50.665	2140.918	195131.297	0.0495
Total			1720731.624	393945928.922	100.000

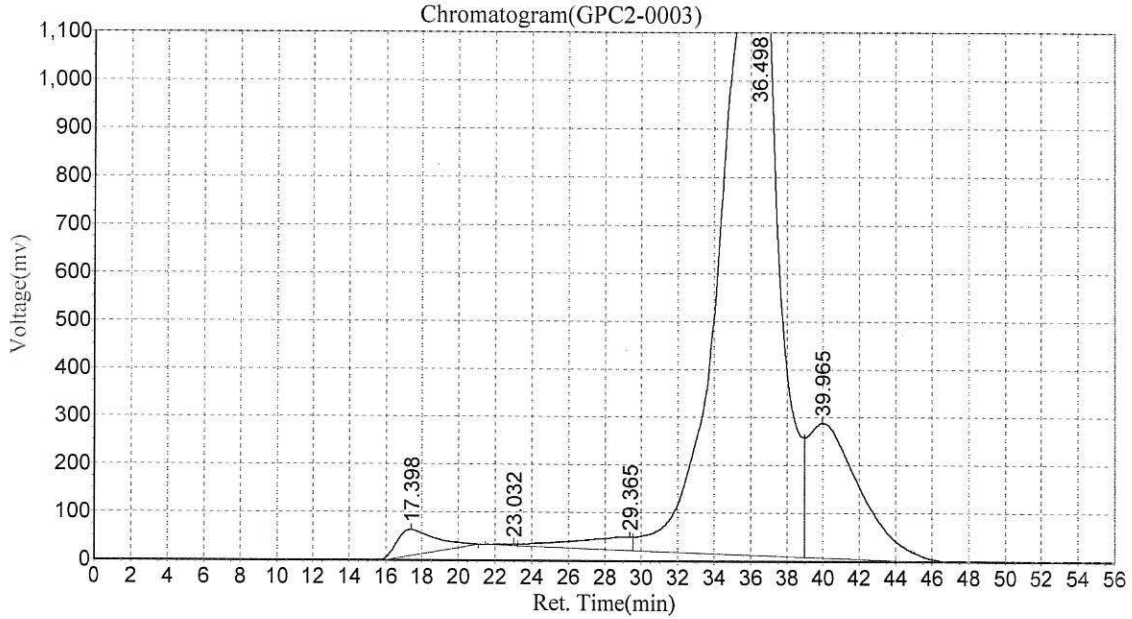
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,5:32:42 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0003
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,5:32:43 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	53985.484	7958088.000	2.2576
2		23.032	3286.524	187231.641	0.0531
3		29.365	27916.904	5955562.500	1.6895
4		36.498	1211286.375	281602848.000	79.8879
5		39.965	281303.063	56793604.000	16.1118
Total			1577778.350	352497334.141	100.000

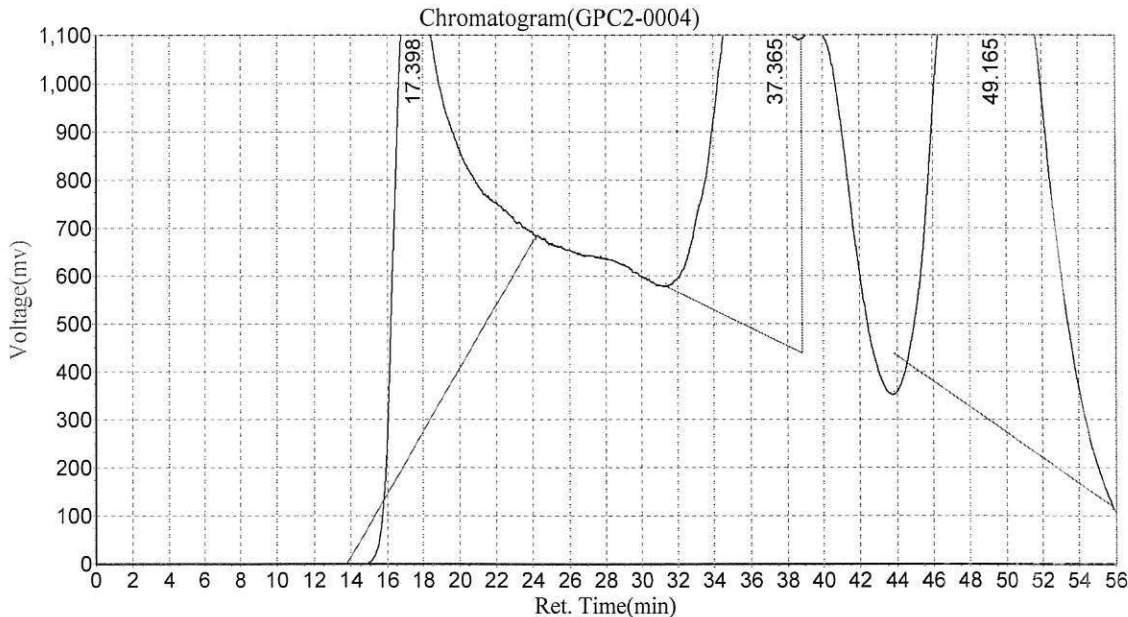
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,6:30:23 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0004
 Method File:E:\GPC2_InHouse.mtd

Analyst:TW
 Date/Time:2023-02-18,6:30:24 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	1016836.250	225737472.000	25.5168
2		37.365	783191.938	222387792.000	25.1382
3		49.165	1003920.063	436537216.000	49.3451
Total			2803948.250	884662480.000	100.000

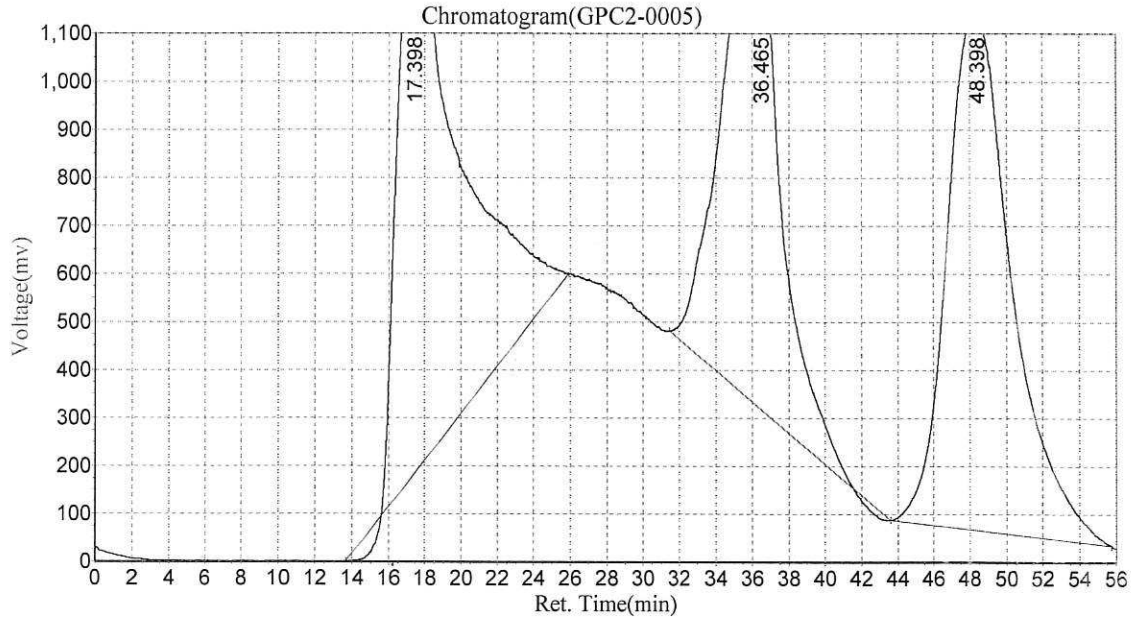
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,7:28:06 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0005
 Method File:E:\GPC2_InHouse.mtd

Analyst:TWTC
 Date/Time:2023-02-18,7:28:07 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	1071547.750	277728192.000	36.1965
2		36.465	929063.625	223717056.000	29.1572
3		48.398	1069004.500	265834128.000	34.6463
Total			3069615.875	767279376.000	100.000

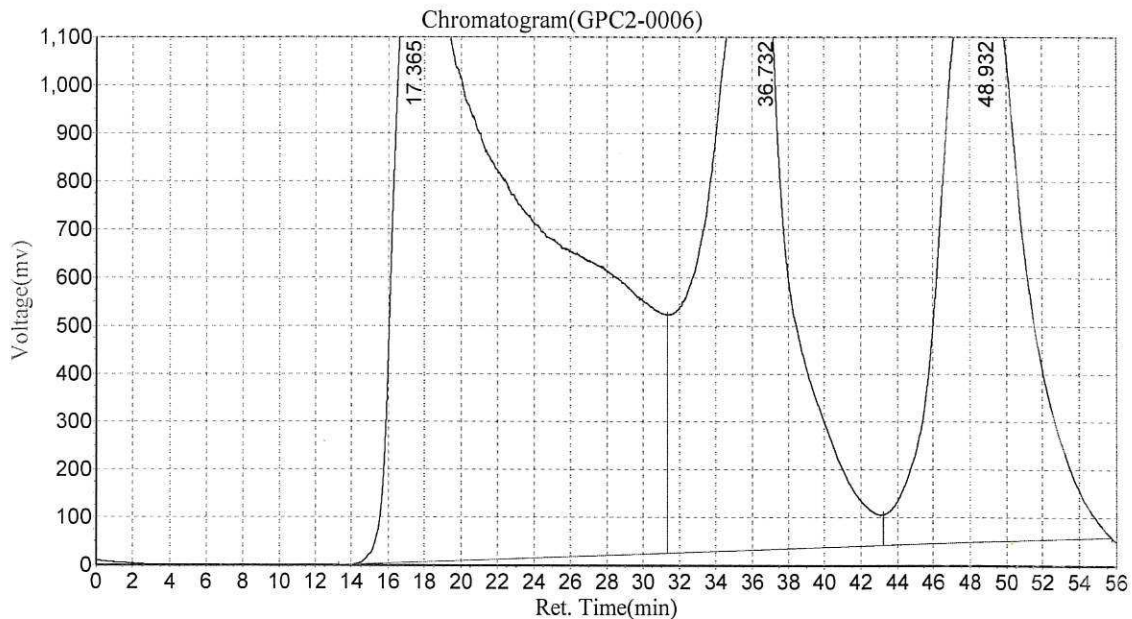
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,8:25:52 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0006
 Method File:E:\GPC2_InHouse.mtd

Analyst:TW
 Date/Time:2023-02-18,8:25:53 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1248008.875	738091264.000	47.7380
2		36.732	1214440.000	424203680.000	27.4365
3		48.932	1192651.500	383834848.000	24.8255
Total			3655100.375	1546129792.000	100.000

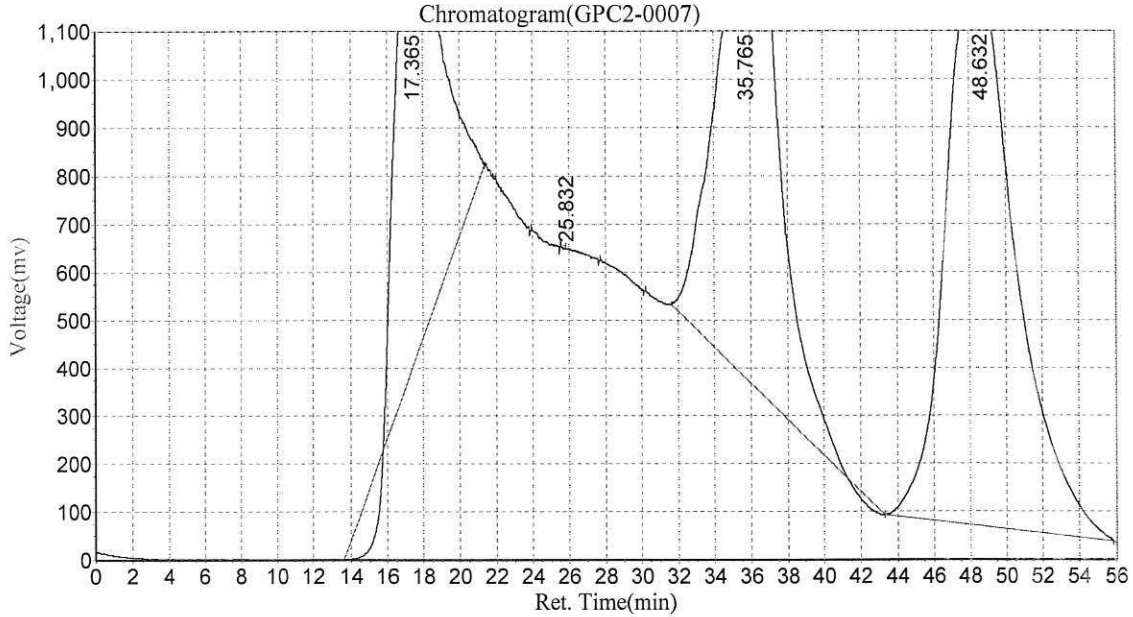
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,9:23:35 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0007
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-18,9:23:36 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	857413.500	153276576.000	22.1687
2		25.832	1384.370	176419.594	0.0255
3		35.765	869755.750	231706384.000	33.5122
4		48.632	1129357.875	306249568.000	44.2936
Total			2857911.495	691408947.594	100.000

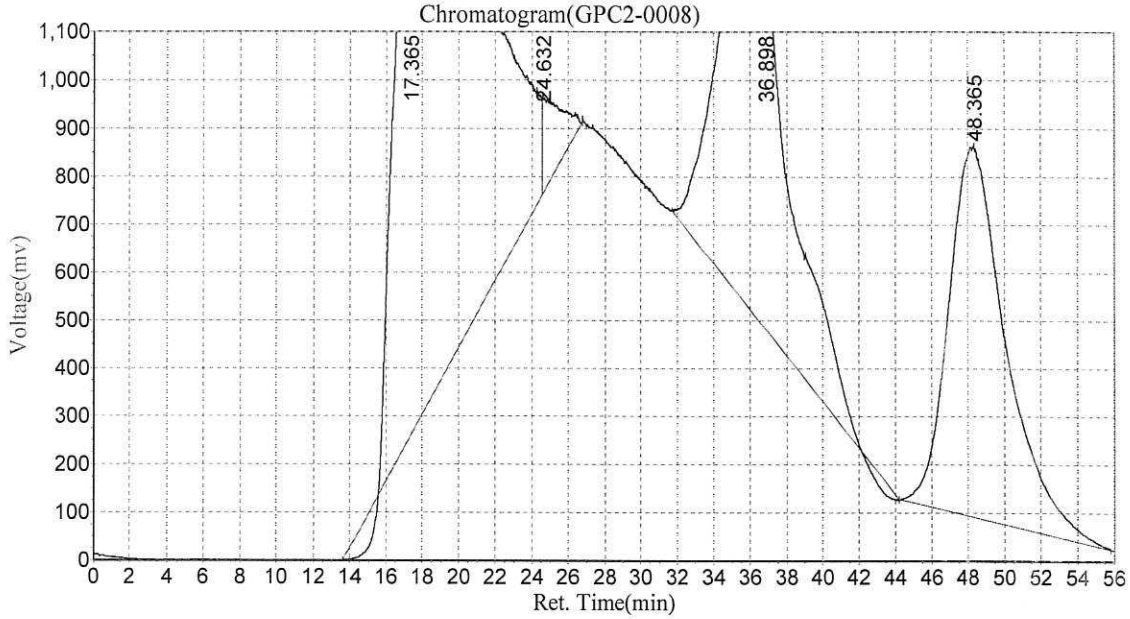
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,10:21:16 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0008
 Method File:E:\GPC2_InHouse.mtd

Analyst:ETWC
 Date/Time:2023-02-18,10:21:17 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	994261.438	351921824.000	47.0272
2		24.632	200525.750	13799422.000	1.8440
3		36.898	769164.750	213070368.000	28.4725
4		48.365	768088.563	169545696.000	22.6563
Total			2732040.500	748337310.000	100.000

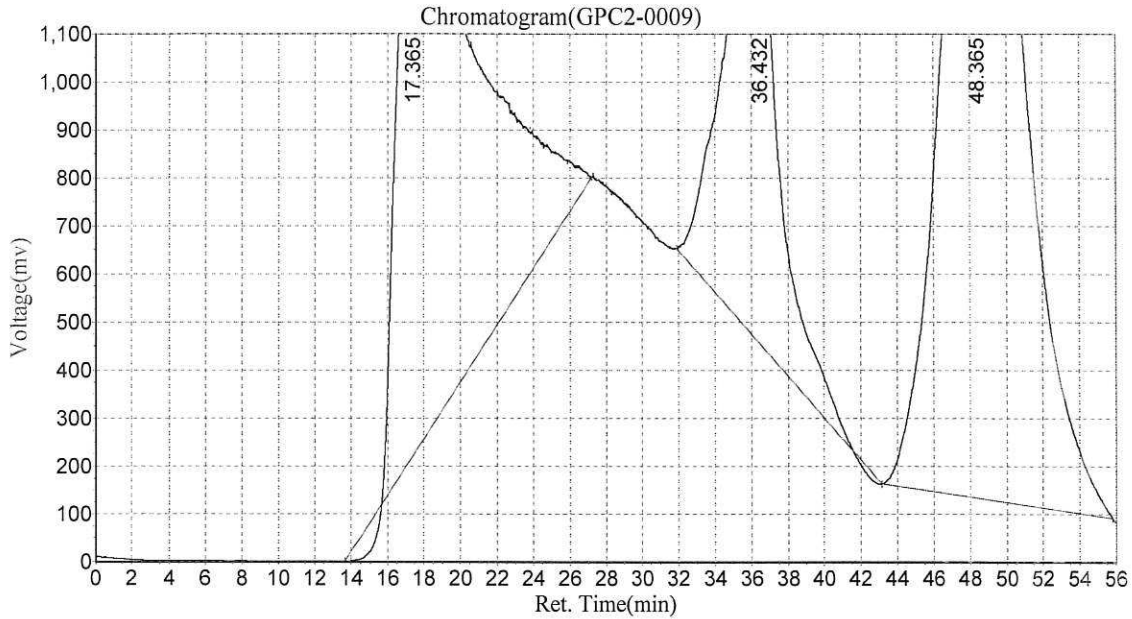
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,11:19:04 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0009
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-18,11:19:05 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1033673.438	358779936.000	36.5983
2		36.432	791781.375	188223424.000	19.2002
3		48.365	1114773.125	433315712.000	44.2015
Total			2940227.938	980319072.000	100.000

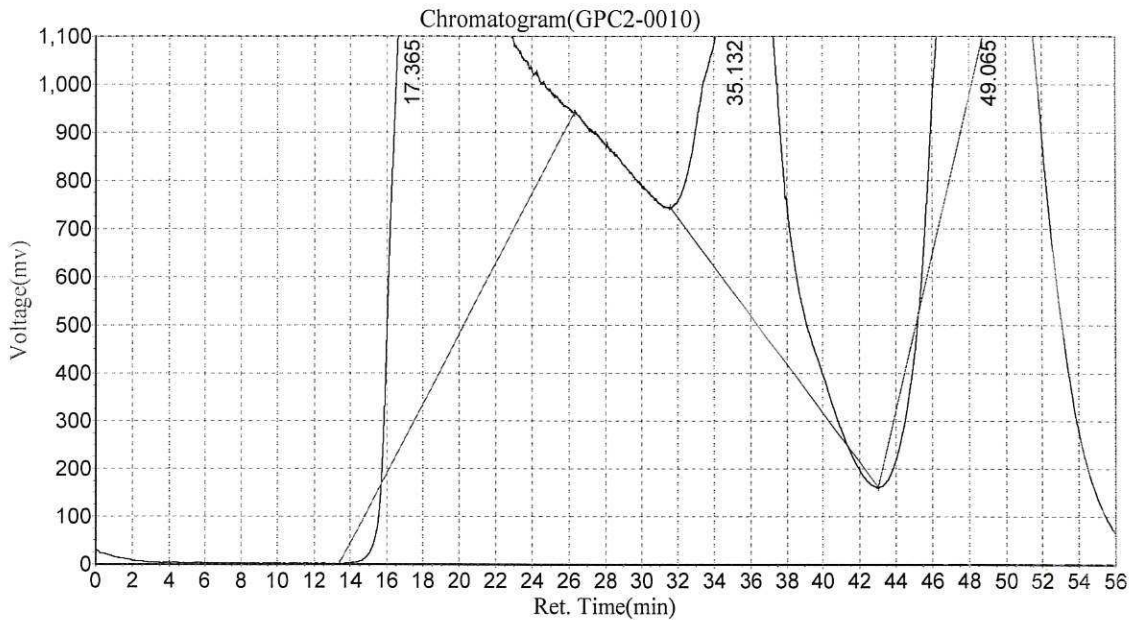
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-19,12:16:45 AM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0010
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-19,12:16:46 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	965013.063	341510112.000	56.3145
2		35.132	683606.250	205736944.000	33.9257
3		49.065	109773.992	59186188.000	9.7597
Total			1758393.305	606433244.000	100.000

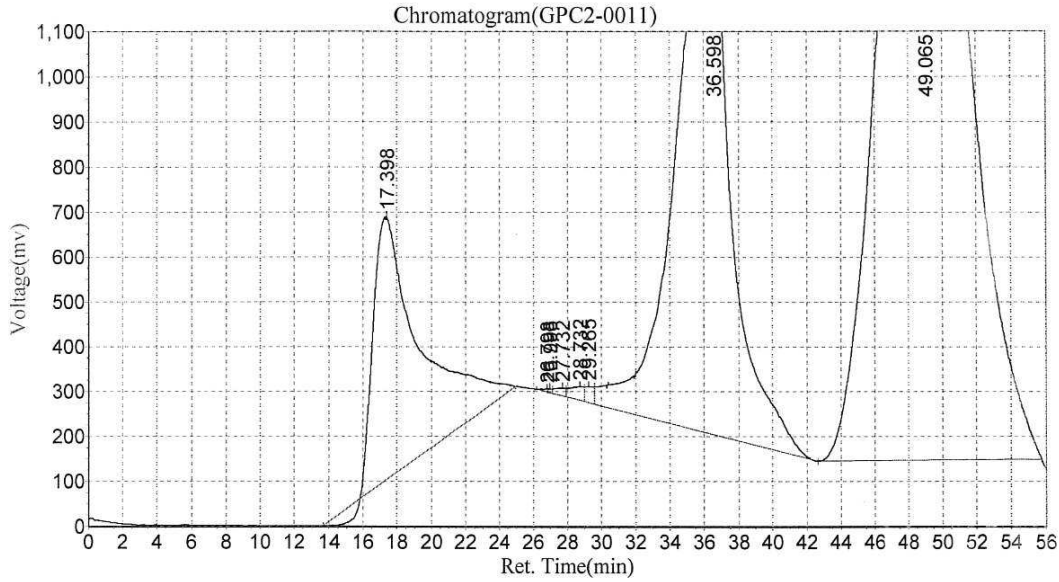
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-19,1:14:29 AM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0011
 Method File:E:\GPC2_InHouse.mtd

AnalystE*TWC
 Date/Time2023-02-19,1:14:30 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	585885.438	109560784.000	12.7080
2		26.798	6820.461	147395.281	0.0171
3		26.998	8978.615	139675.344	0.0162
4		27.732	17683.846	729162.625	0.0846
5		28.732	31140.615	1715067.375	0.1989
6		29.265	36273.691	1307129.250	0.1516
7		36.598	1034882.000	256462240.000	29.7471
8		49.065	1100757.625	492080384.000	57.0765
Total			2822422.292	862141837.875	100.000

Ingredient Table

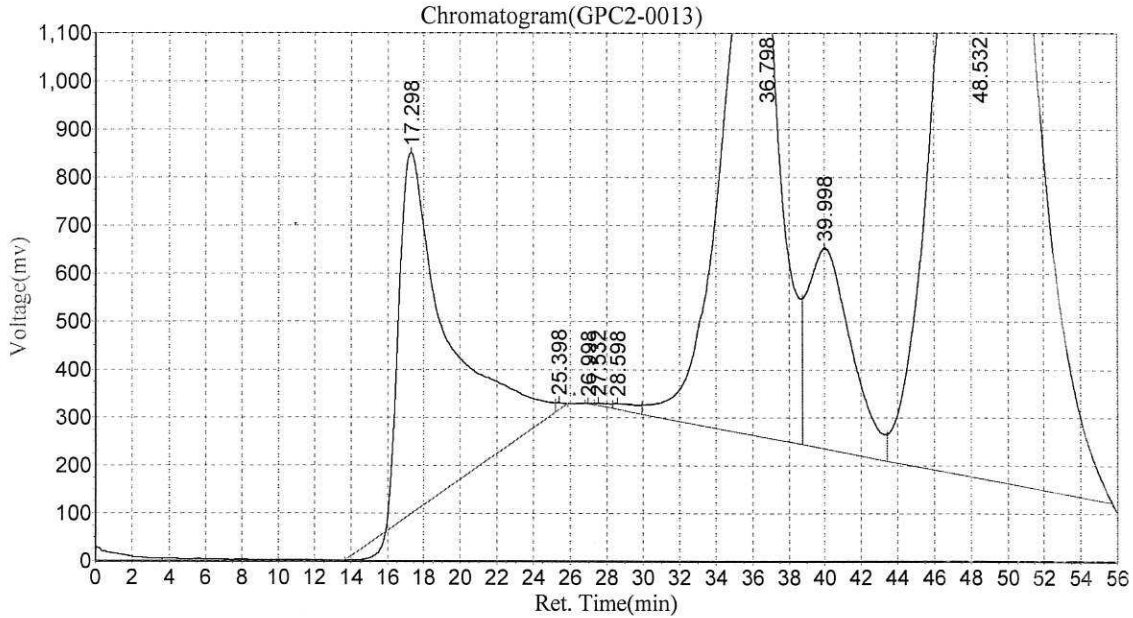
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

MSDI

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-19,3:09:58 AM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0013
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-19,3:09:59 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.298	751568.625	142783888.000	15.4520
2		25.398	14418.507	396625.563	0.0429
3		26.998	5714.335	188218.094	0.0204
4		27.532	9444.761	654233.875	0.0708
5		28.598	16321.611	1752119.750	0.1896
6		36.798	991074.875	236902912.000	25.6374
7		39.998	416866.469	70516224.000	7.6312
8		48.532	1076129.250	470856704.000	50.9557
Total			3281538.433	924050925.281	100.000

Ingredient Table

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



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0176

Cleanup Type: GPC

Cleanup Method: EPA 3640A GPC Cleanup 1:1

Analysis: EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLB0424-BSD1	NT1403172314.D	02/20/2023	
LCS	BLB0424-BS1	NT1403172313.D	02/20/2023	
Blank	BLB0424-BLK1	NT1403172312.D	02/20/2023	
Reference	BLB0424-SRM1	NT1403172315.D	02/20/2023	
LDW23-SC1008	23B0229-06	NT1403172325.D	02/20/2023	
LDW23-SS1237	23B0229-03	NT1403172322.D	02/20/2023	
LDW23-SS1236	23B0229-02	NT1403172321.D	02/20/2023	
LDW23-SS1150	23B0229-04	NT1403172323.D	02/20/2023	
LDW23-SS1008	23B0229-05	NT1403172324.D	02/20/2023	
LDW23-SC1013	23B0229-08	NT1403172326.D	02/20/2023	



CLEANUP BENCH SHEET

CLB0176

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLB0150-GPC1 Printed: 2/20/2023 3:54:24PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0099-04	A	LDW23-SC1186	A 05	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0229-02	A	LDW23-SS1236	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0229-03	A	LDW23-SS1237	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0229-04	A	LDW23-SS1150	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0229-05	A	LDW23-SS1008	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0229-06	A	LDW23-SC1008	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0229-08	A	LDW23-SC1013	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
23B0276-01	A	LDW23-SC1150B	A 03	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/20/2023	NRB	
BLB0424-BLK1	-	Blank	-	1	1	-	2/20/2023	NRB	
BLB0424-BS1	-	LCS	-	1	1	-	2/20/2023	NRB	
BLB0424-BSD1	-	LCS Dup	-	1	1	-	2/20/2023	NRB	
BLB0424-MS1	-	Matrix Spike	-	1	1	-	2/20/2023	NRB	
BLB0424-MSD1	-	Matrix Spike Dup	-	1	1	-	2/20/2023	NRB	
BLB0424-SRM1	-	Reference	-	1	1	-	2/20/2023	NRB	



Form I
METHOD BLANK DATA SHEET
EPA 8270E

Blank

Laboratory: Analytical Resources, LLC SDG: 23B0229
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: BLB0424-BLK1 File ID: NT1403172312.D
 Sampled: N/A Prepared: 02/17/23 15:00 Analyzed: 03/17/23 21:06
 Solids: Preparation: EPA 3546 (Microwave) Initial/Final: 10 g / 1 mL
 Batch: BLB0424 Sequence: SLC0335 Calibration: GC00048
 Instrument: NT14 Column: ZB-5MS Cleanups: GPC

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

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	409	54.5	27 - 120	
Phenol-d5	750.00	452	60.3	29 - 120	
2-Chlorophenol-d4	750.00	505	67.3	31 - 120	
1,2-Dichlorobenzene-d4	500.00	388	77.5	32 - 120	
Nitrobenzene-d5	500.00	396	79.2	30 - 120	
2-Fluorobiphenyl	500.00	403	80.6	35 - 120	
2,4,6-Tribromophenol	750.00	344	45.9	24 - 134	
p-Terphenyl-d14	500.00	571	114	37 - 120	

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172312.D

Date: 17-MAR-2023 21:06

Client ID:

Sample Info: BLB0424-BLK1

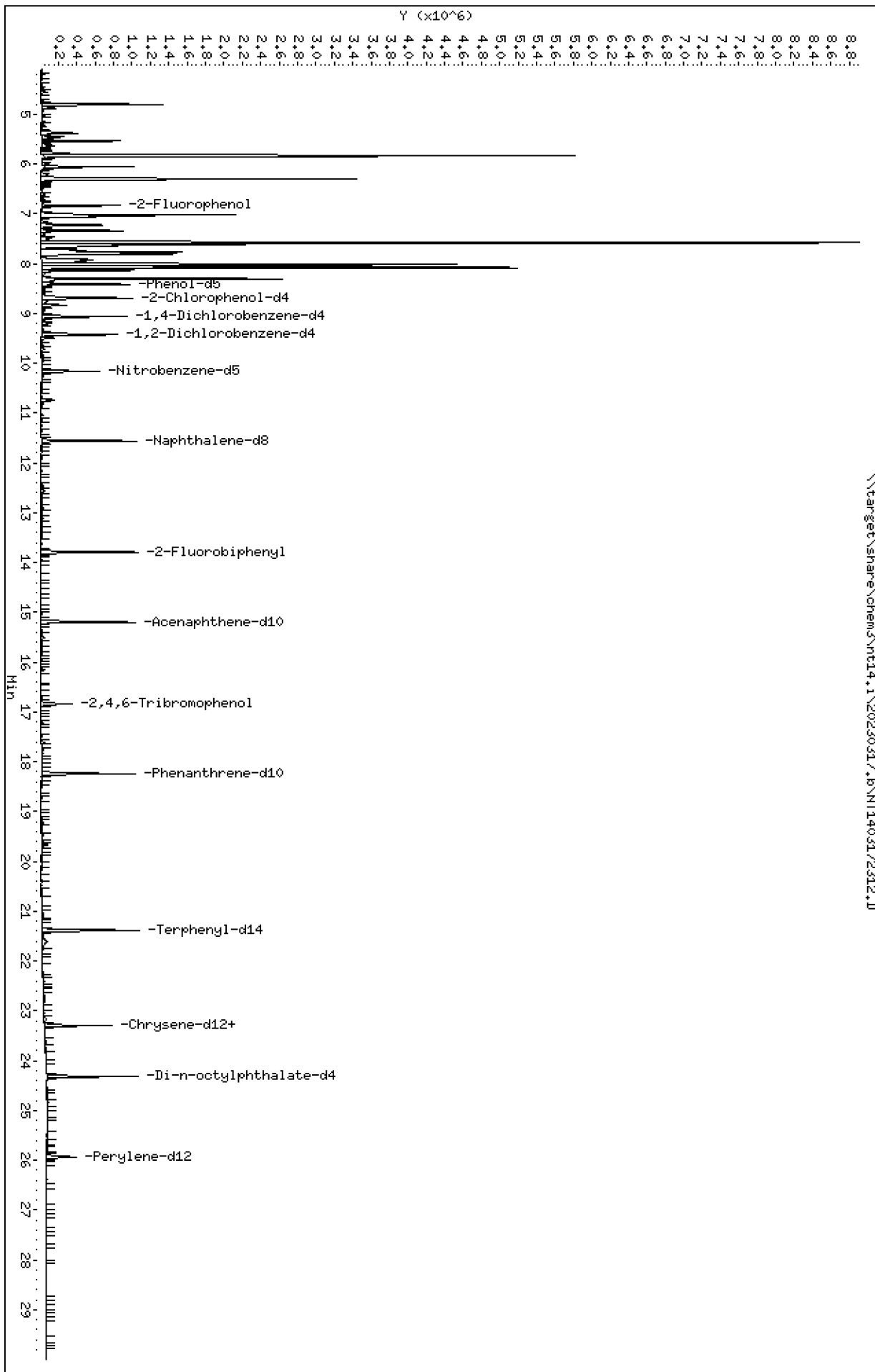
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172312.D



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK1

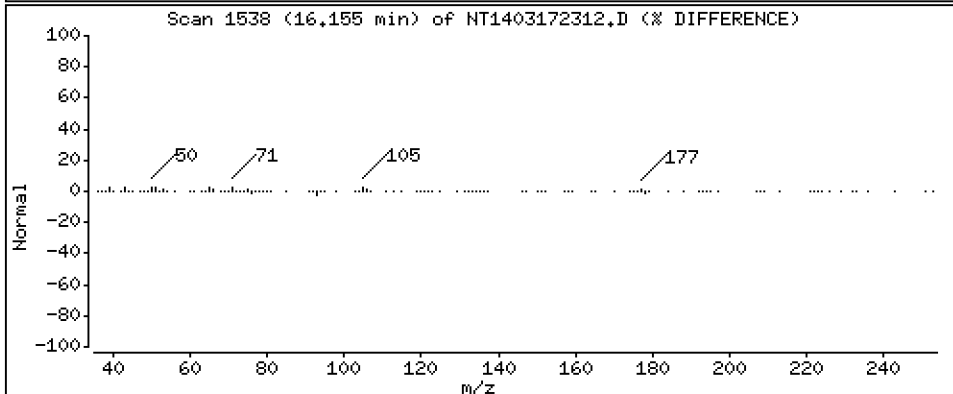
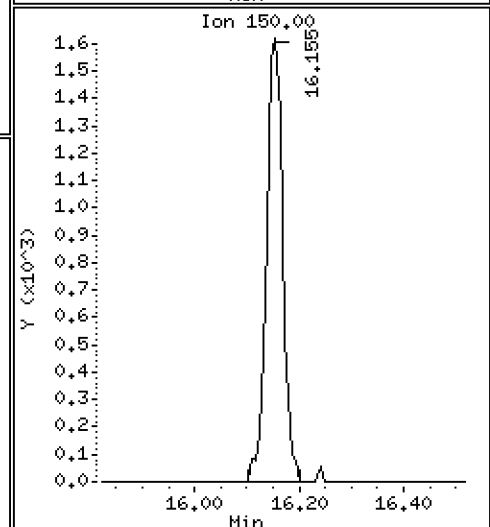
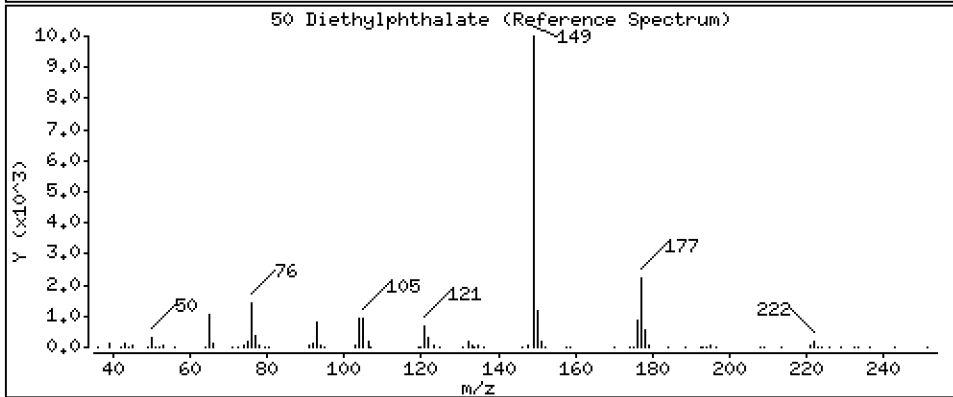
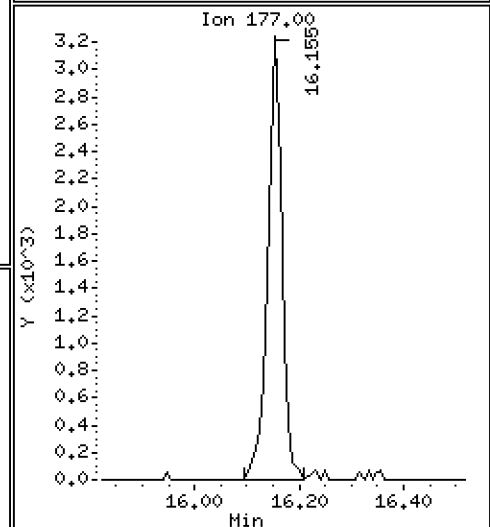
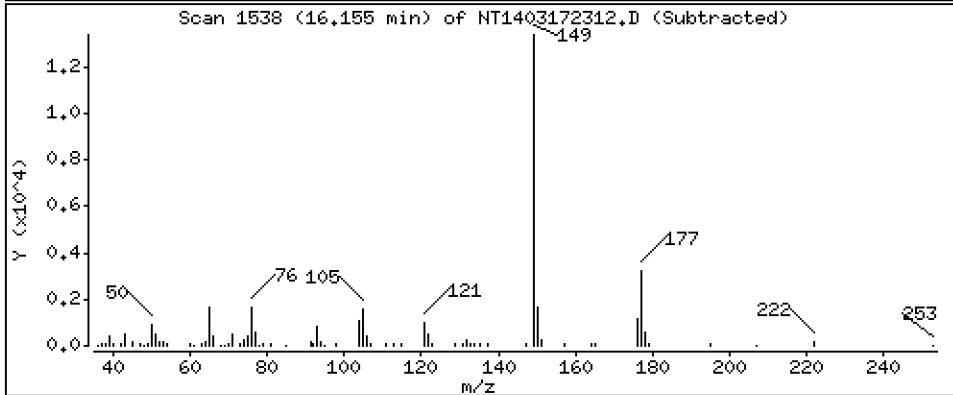
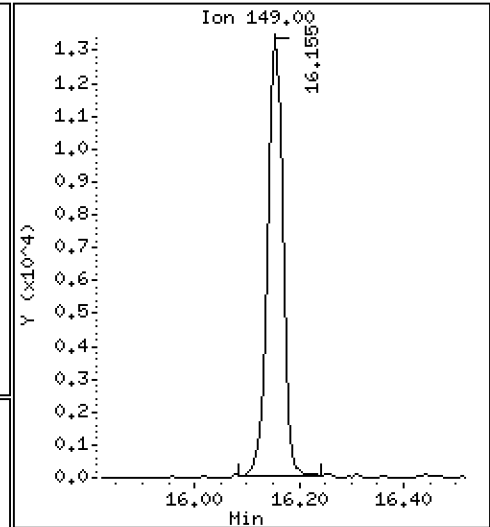
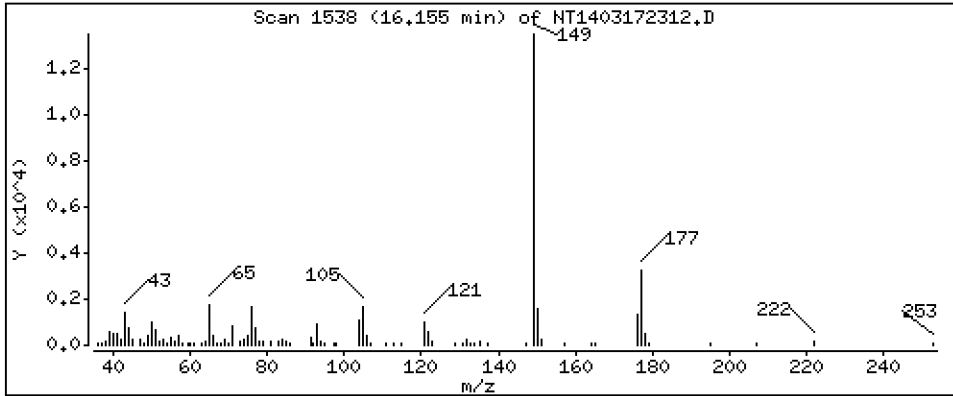
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1898 ug/mL



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK1

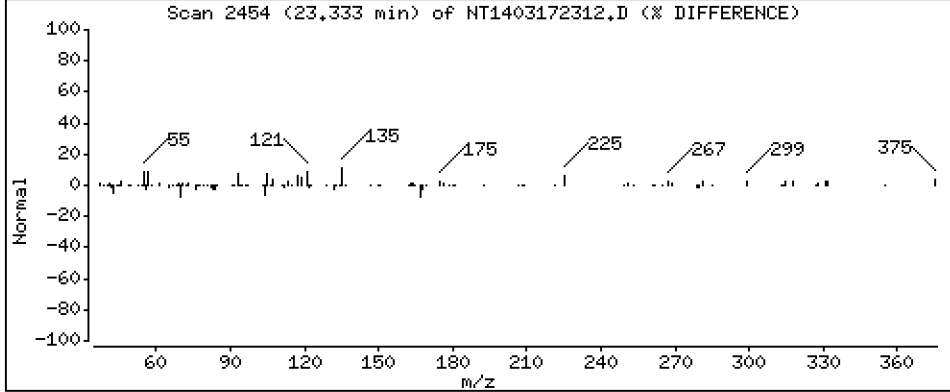
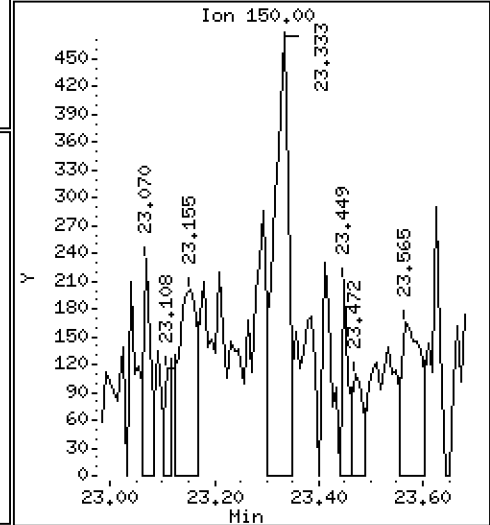
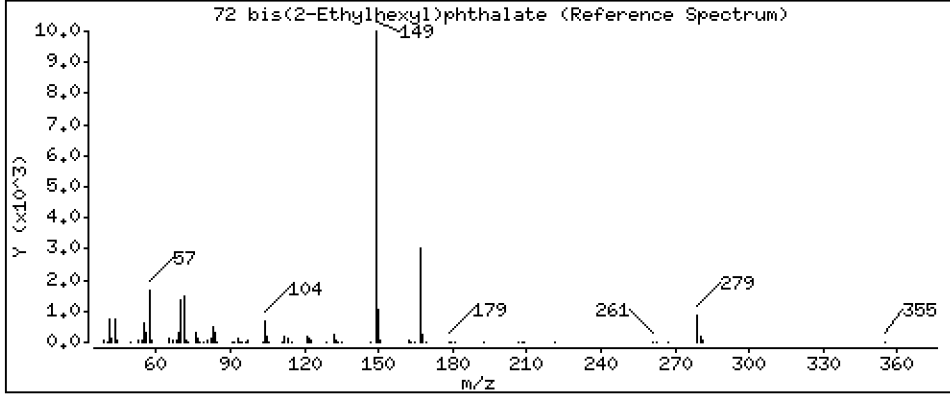
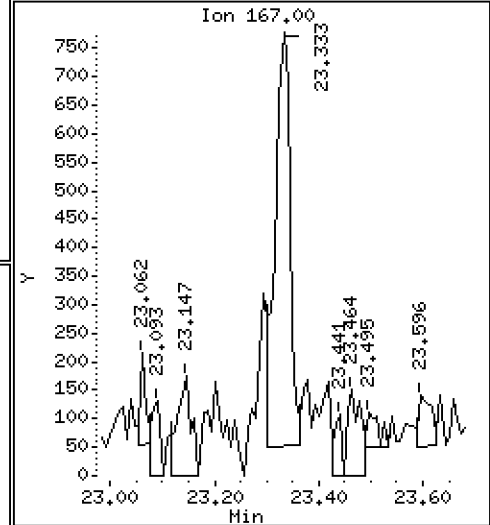
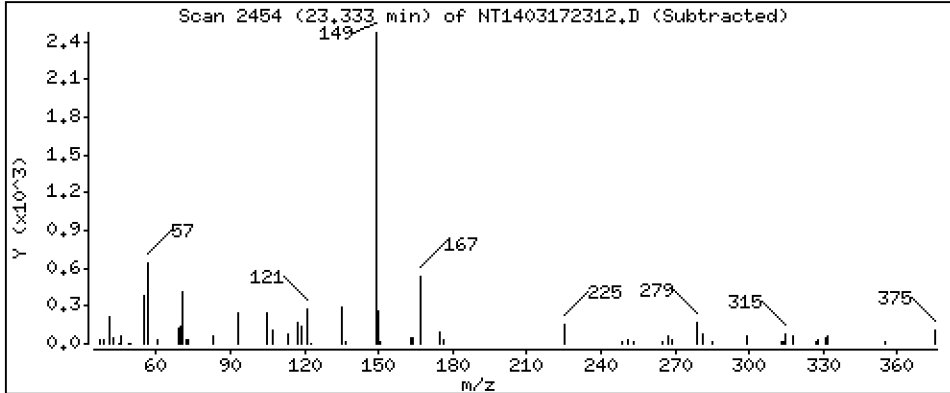
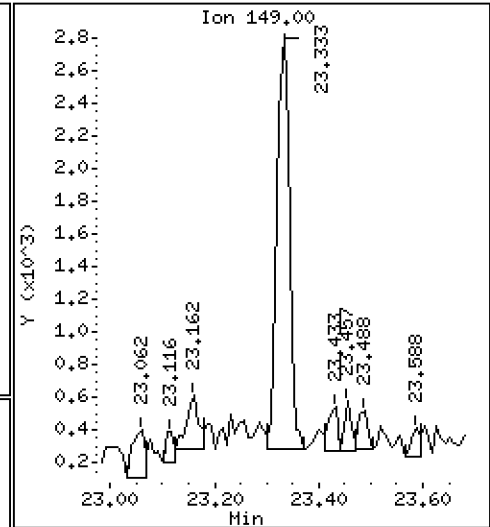
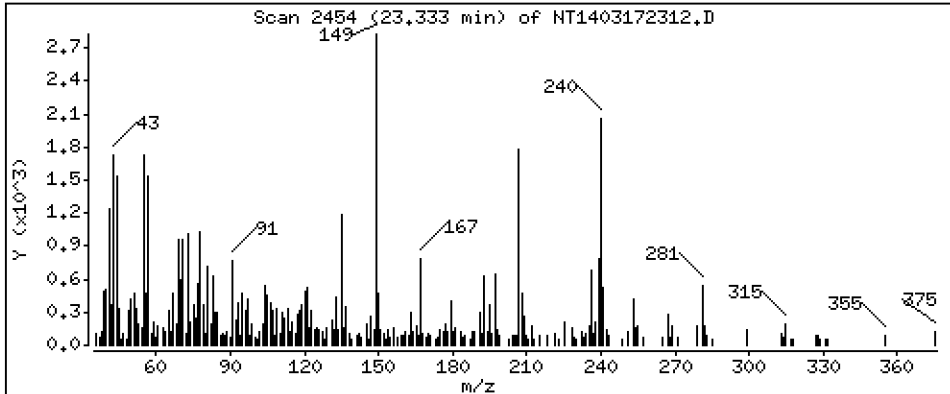
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0.04098 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172312.D
 Lab Smp Id: BLB0424-BLK1
 Inj Date : 17-MAR-2023 21:06 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BLK1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.836	6.821	(1.000)	306577	4.09080	4.091
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	446343	4.52369	4.524
3 Phenol	94		Compound Not Detected.					
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	392913	5.05111	5.051
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	220626	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.426	(1.000)	201487	3.87712	3.877
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	372079	3.96112	3.961
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.559	11.567	(1.000)	887622	4.00000	
28 Naphthalene	128		Compound Not Detected.					
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	646034	4.02995	4.030
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163					Compound Not Detected.		
40 Acenaphthylene	152					Compound Not Detected.		
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	442658	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153					Compound Not Detected.		
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168					Compound Not Detected.		
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.155	16.170	(1.063)	28970	0.18983	0.1898
49 Fluorene	166					Compound Not Detected.		
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	57889	3.44456	3.445
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.240	18.247	(1.000)	744696	4.00000	
60 Phenanthrene	178					Compound Not Detected.		
61 Anthracene	178					Compound Not Detected.		
62 Carbazole	167					Compound Not Detected.		
63 Di-n-butylphthalate	149					Compound Not Detected.		
64 Fluoranthene	202					Compound Not Detected.		
65 Pyrene	202					Compound Not Detected.		
\$ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	617908	5.70923	5.709
67 Butylbenzylphthalate	149					Compound Not Detected.		
68 Benzo(a)anthracene	228					Compound Not Detected.		
* 69 Chrysene-d12	240		23.294	23.293	(1.000)	383188	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228					Compound Not Detected.		
72 bis(2-Ethylhexyl)phthalate	149		23.332	23.332	(0.960)	3993	0.04098	0.04098
* 134 Di-n-octylphthalate-d4	153		24.315	24.323	(1.000)	740264	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252					Compound Not Detected.		
75 Benzo(k)fluoranthene	252					Compound Not Detected.		
76 Benzo(a)pyrene	252					Compound Not Detected.		
* 77 Perylene-d12	264		25.934	25.933	(1.000)	251086	4.00000	
78 Indeno(1,2,3-cd)pyrene	276					Compound Not Detected.		
79 Dibenzo(a,h)anthracene	278					Compound Not Detected.		
80 Benzo(g,h,i)perylene	276					Compound Not Detected.		
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142					Compound Not Detected.		
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172312.D Calibration Time: 15:03
 Lab Smp Id: BLB0424-BLK1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	220626	-0.27
27 Naphthalene-d8	809500	404750	1619000	887622	9.65
42 Acenaphthene-d10	420689	210345	841378	442658	5.22
59 Phenanthrene-d10	757520	378760	1515040	744696	-1.69
69 Chrysene-d12	450500	225250	901000	383188	-14.94
134 Di-n-octylphthala	828388	414194	1656776	740264	-10.64
77 Perylene-d12	339914	169957	679828	251086	-26.13

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172312.D

Lab ID: BLB0424-BLK1
nt14.i, ABN.m, 17-MAR-2023 21:06

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

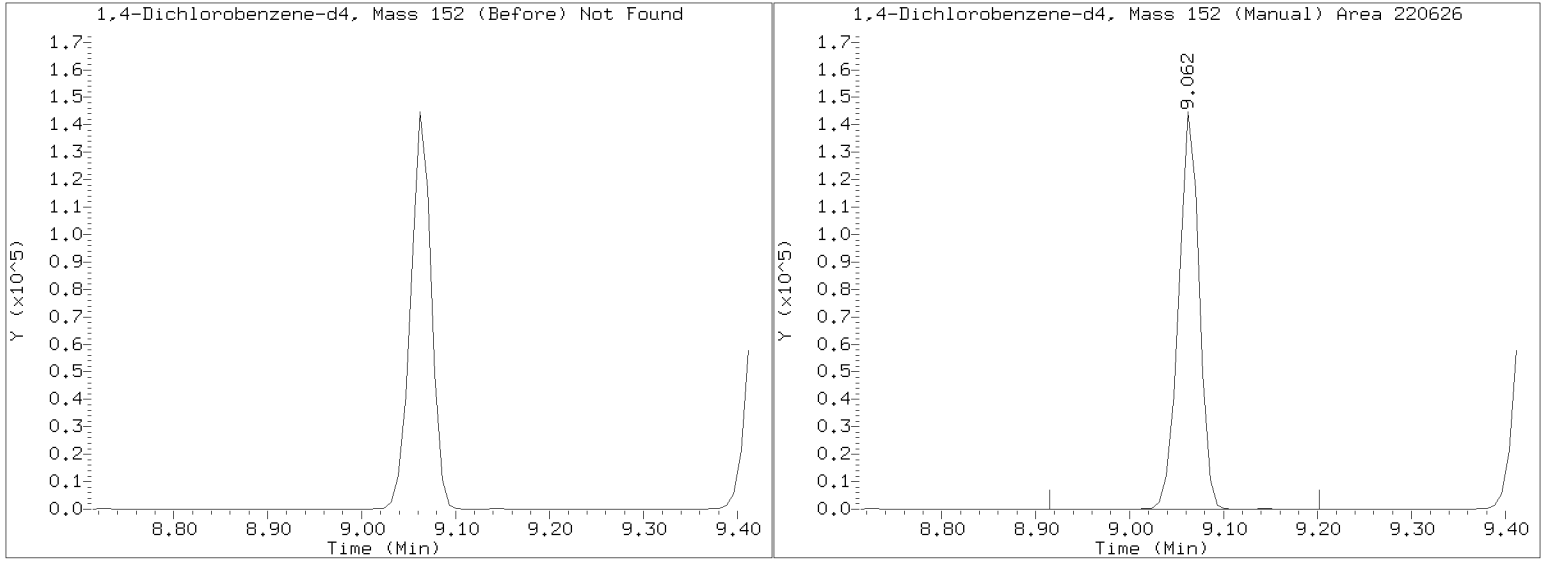
RRT check based on Ccal File: NT1403172302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172312.D
Injection Date: 17-MAR-2023 21:06
Lab ID:BLB0424-BLK1 Client ID:
Report Date: 03/22/2023 08:12





Form I
METHOD BLANK DATA SHEET
EPA 8270E

Blank

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23B0229</u>	
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>BLB0424-BLK3</u>	File ID: <u>NT1403182306.D</u>
Sampled: <u>N/A</u>	Prepared: <u>02/17/23 15:00</u>	Analyzed: <u>03/18/23 20:03</u>
Solids:	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>10 g / 1 mL</u>
Batch: <u>BLB0424</u>	Sequence: <u>SLC0355</u>	Calibration: <u>GC00048</u>
Instrument: <u>NT14</u>	Column: <u>ZB-5MS</u>	

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

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	413	55.1	27 - 120	
Phenol-d5	750.00	453	60.4	29 - 120	
2-Chlorophenol-d4	750.00	500	66.7	31 - 120	
1,2-Dichlorobenzene-d4	500.00	390	78.0	32 - 120	
Nitrobenzene-d5	500.00	393	78.5	30 - 120	
2-Fluorobiphenyl	500.00	401	80.2	35 - 120	
2,4,6-Tribromophenol	750.00	352	46.9	24 - 134	
p-Terphenyl-d14	500.00	490	98.1	37 - 120	

Data File: \\target\share\chem3\nt14,1\20230318,18\NT1403182306.D

Date: 18-MAR-2023 20:03

Client ID:

Sample Info: BLB0424-BLK3

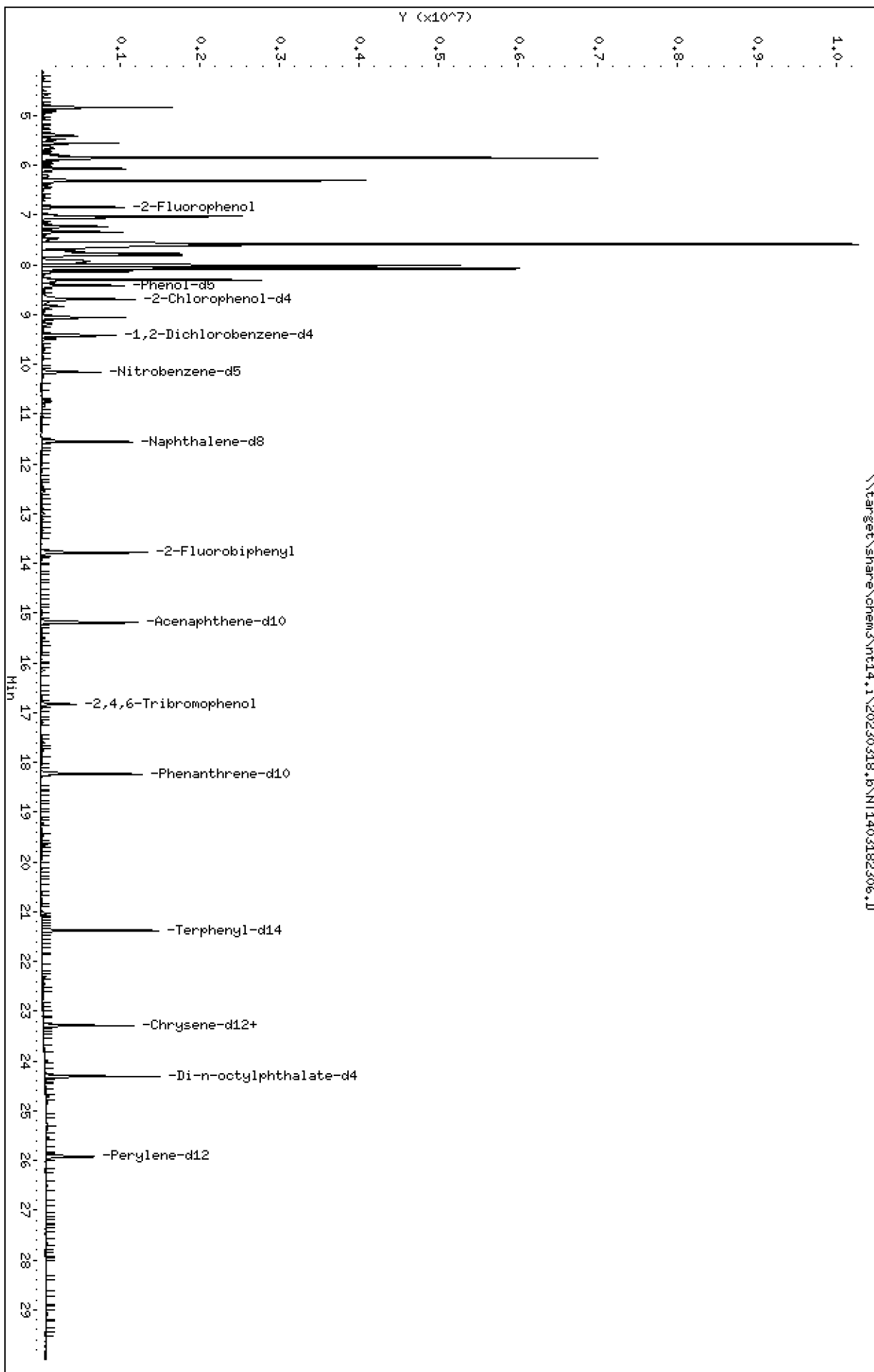
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230318,18\NT1403182306.D



Date : 18-MAR-2023 20:03

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK3

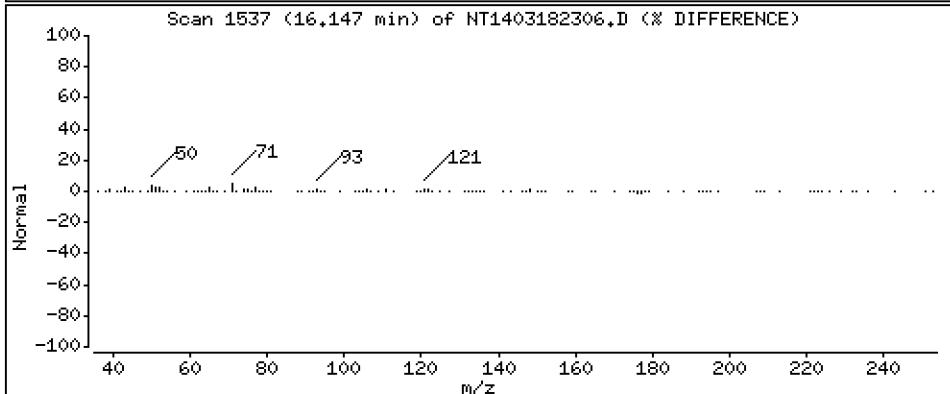
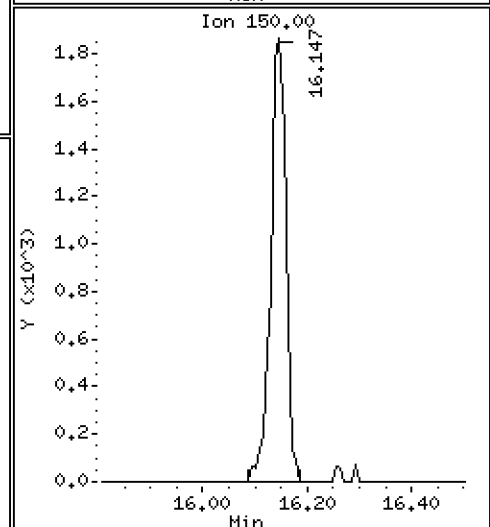
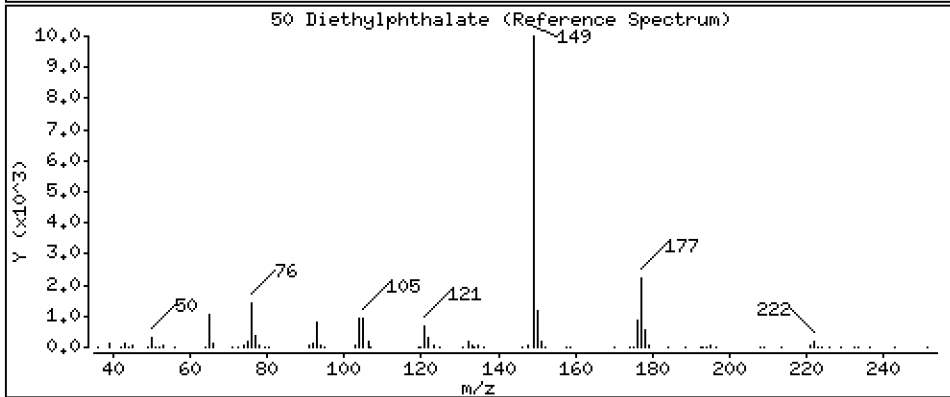
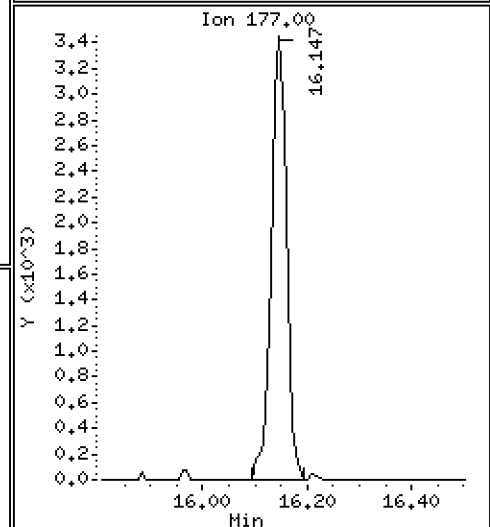
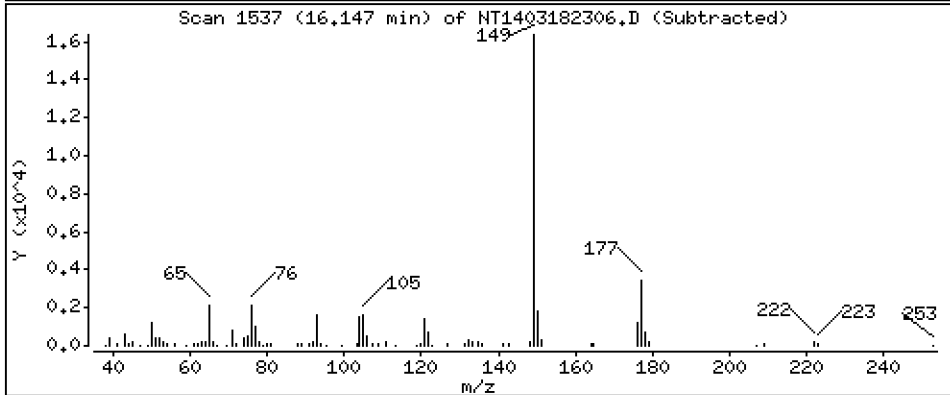
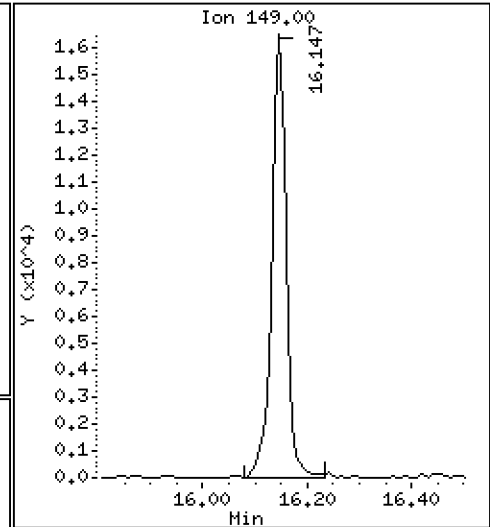
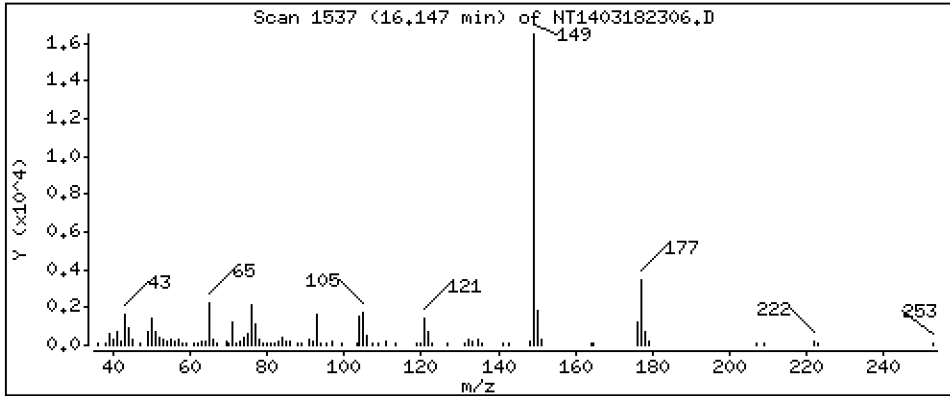
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1794 ug/mL



Date : 18-MAR-2023 20:03

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK3

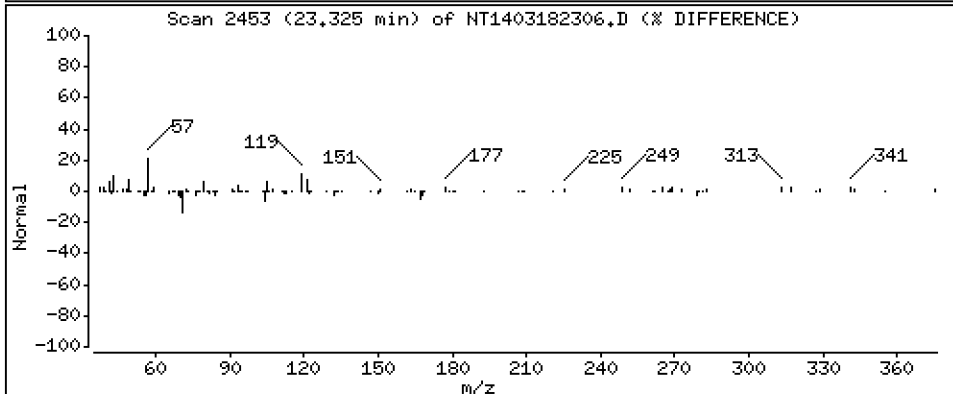
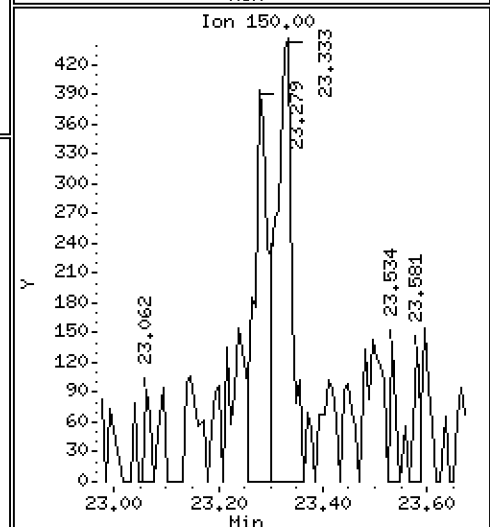
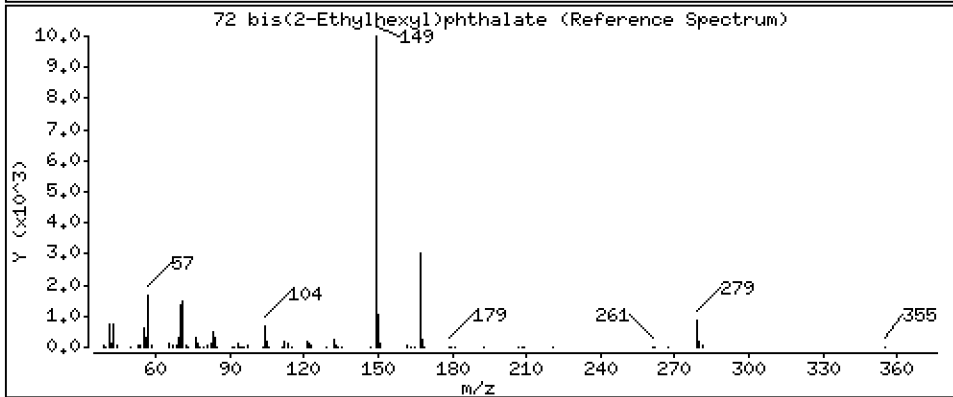
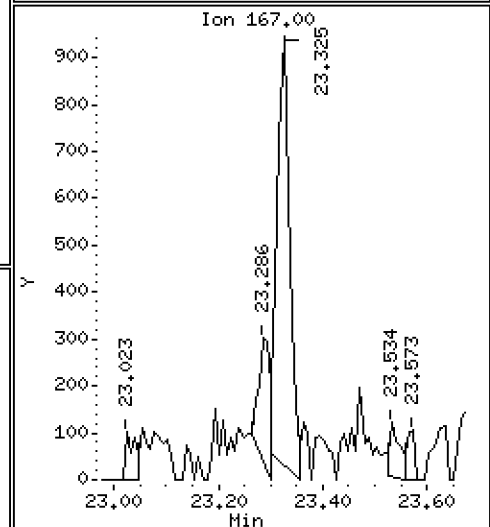
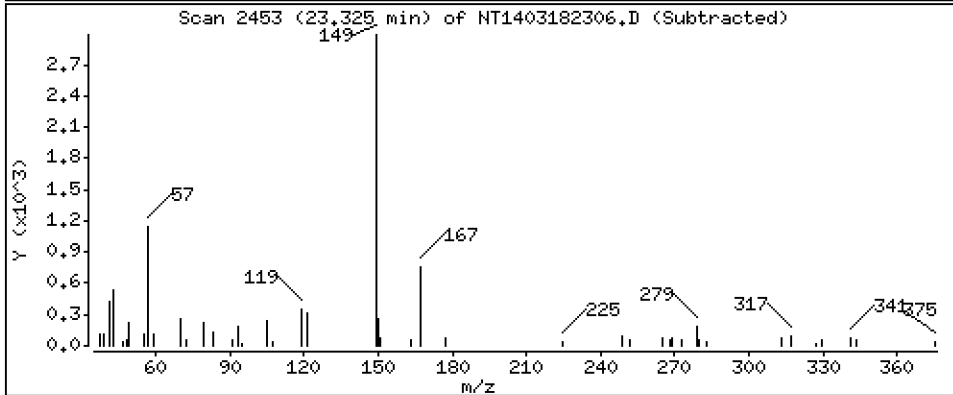
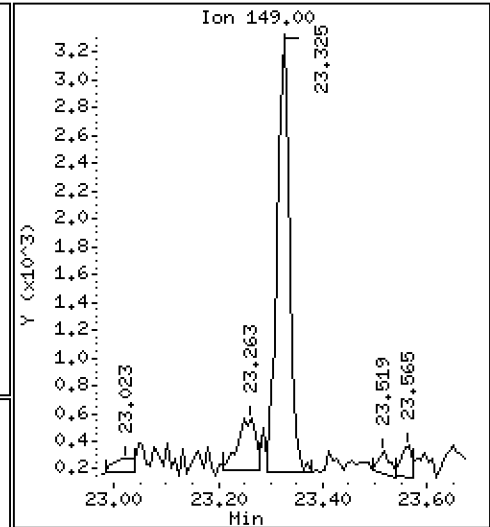
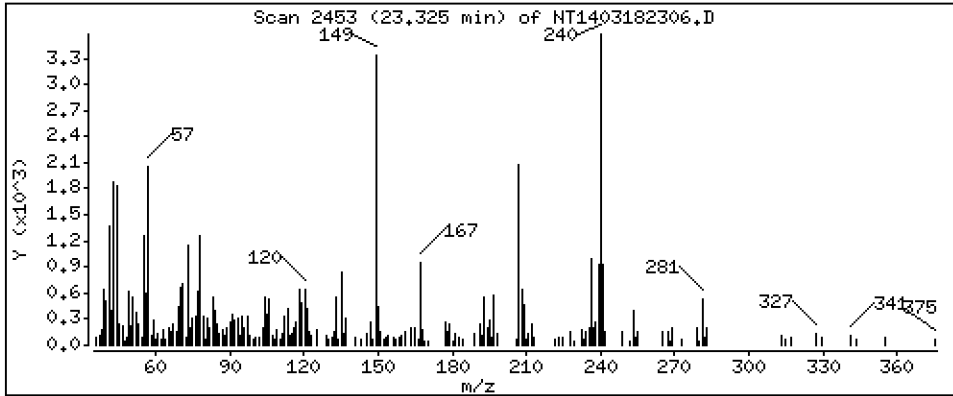
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0.03586 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182306.D
 Lab Smp Id: BLB0424-BLK3
 Inj Date : 18-MAR-2023 20:03 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BLK3
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 10:18 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.844	6.829	(1.000)	371191	4.13448	4.134
\$ 2 Phenol-d5	99		8.412	8.420	(1.000)	535881	4.53364	4.534
3 Phenol	94		Compound Not Detected.					
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	466172	5.00255	5.003
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	264303	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.419	9.427	(1.000)	242788	3.89982	3.900
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
\$ 18 Nitrobenzene-d5	82		10.156	10.156	(0.879)	439218	3.92529	3.925
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.559	11.559	(1.000)	1057352	4.00000	
28 Naphthalene	128		Compound Not Detected.					
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.788	13.787	(0.908)	783067	4.01030	4.010
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163					Compound Not Detected.		
40 Acenaphthylene	152					Compound Not Detected.		
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.188	15.188	(1.000)	539181	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153					Compound Not Detected.		
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168					Compound Not Detected.		
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.147	16.155	(1.063)	33348	0.17940	0.1794
49 Fluorene	166					Compound Not Detected.		
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.834	16.833	(1.108)	74616	3.51978	3.520
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.232	18.232	(1.000)	935636	4.00000	
60 Phenanthrene	178					Compound Not Detected.		
61 Anthracene	178					Compound Not Detected.		
62 Carbazole	167					Compound Not Detected.		
63 Di-n-butylphthalate	149					Compound Not Detected.		
64 Fluoranthene	202					Compound Not Detected.		
65 Pyrene	202					Compound Not Detected.		
\$ 66 Terphenyl-d14	244		21.381	21.381	(0.918)	819908	4.90410	4.904
67 Butylbenzylphthalate	149					Compound Not Detected.		
68 Benzo(a)anthracene	228					Compound Not Detected.		
* 69 Chrysene-d12	240		23.286	23.294	(1.000)	591932	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228					Compound Not Detected.		
72 bis(2-Ethylhexyl)phthalate	149		23.325	23.324	(0.960)	4884	0.03586	0.03586
* 134 Di-n-octylphthalate-d4	153		24.308	24.315	(1.000)	1034580	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252					Compound Not Detected.		
75 Benzo(k)fluoranthene	252					Compound Not Detected.		
76 Benzo(a)pyrene	252					Compound Not Detected.		
* 77 Perylene-d12	264		25.918	25.926	(1.000)	463088	4.00000	
78 Indeno(1,2,3-cd)pyrene	276					Compound Not Detected.		
79 Dibenzo(a,h)anthracene	278					Compound Not Detected.		
80 Benzo(g,h,i)perylene	276					Compound Not Detected.		
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142					Compound Not Detected.		
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 18-MAR-2023
 Lab File ID: NT1403182306.D Calibration Time: 17:38
 Lab Smp Id: BLB0424-BLK3
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	247621	123811	495242	264303	6.74
27 Naphthalene-d8	955275	477638	1910550	1057352	10.69
42 Acenaphthene-d10	510589	255295	1021178	539181	5.60
59 Phenanthrene-d10	920812	460406	1841624	935636	1.61
69 Chrysene-d12	546688	273344	1093376	591932	8.28
134 Di-n-octylphthala	1067789	533895	2135578	1034580	-3.11
77 Perylene-d12	445520	222760	891040	463088	3.94

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.23	17.73	18.73	18.23	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.31	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.92	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403182306.D

Lab ID: BLB0424-BLK3
nt14.i, ABN.m, 18-MAR-2023 20:03

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

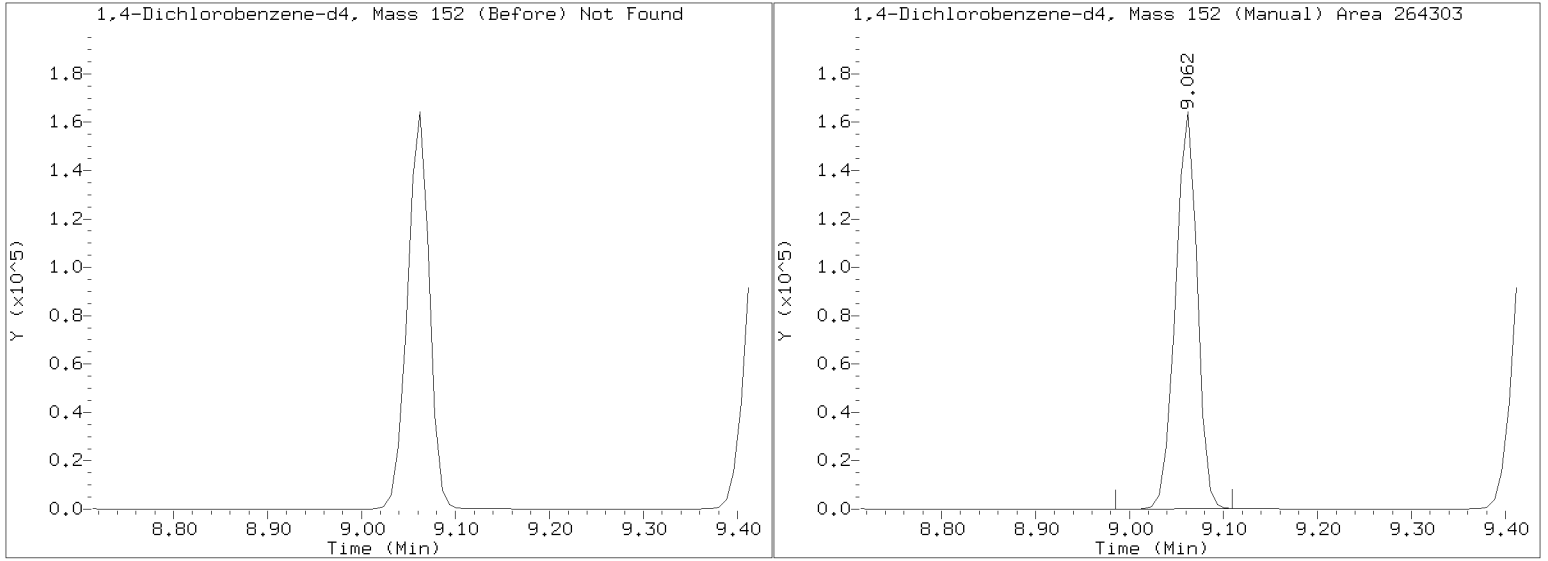
RRT check based on Ccal File: NT1403182302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182306.D
Injection Date: 18-MAR-2023 20:03
Lab ID:BLB0424-BLK3 Client ID:
Report Date: 03/23/2023 11:34





LCS / LCS DUPLICATE RECOVERY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/17/23 21:42

Batch: BLB0424

Laboratory ID: BLB0424-BS1

Preparation: EPA 3546 (Microwave)

Sequence Name: LCS

Initial/Final: 10 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	371		74.1	34 - 120
4-Methylphenol	500	346		69.3	29 - 120
Naphthalene	500	403		80.7	43 - 120
2-Methylnaphthalene	500	407		81.4	43 - 120
Acenaphthylene	500	402		80.5	42 - 120
Dimethylphthalate	500	469		93.8	43 - 120
Acenaphthene	500	420		84.0	45 - 120
Dibenzofuran	500	432		86.4	43 - 120
Fluorene	500	422		84.4	45 - 120
Phenanthrene	500	446		89.2	49 - 120
Anthracene	500	379		75.8	45 - 120
Fluoranthene	500	627		125	53 - 145
Pyrene	500	598		120	52 - 134
Butylbenzylphthalate	500	668	*	134	* 45 - 132
Benzo(a)anthracene	500	456		91.3	49 - 120
Chrysene	500	462		92.4	47 - 120
bis(2-Ethylhexyl)phthalate	500	608		122	34 - 130
Benzo(a)anthracenes, Total	1000	1040		104	30 - 160
Benzo(a)pyrene	500	446		89.2	42 - 120
Indeno(1,2,3-cd)pyrene	500	397		79.3	42 - 163
Dibenzo(a,h)anthracene	500	405		81.1	30 - 133
Benzo(g,h,i)perylene	500	373	Q	74.5	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Phenol	500	400		79.9	7.51	30	34 - 120
4-Methylphenol	500	365		73.0	5.25	30	29 - 120
Naphthalene	500	423		84.6	4.71	30	43 - 120
2-Methylnaphthalene	500	423		84.6	3.87	30	43 - 120
Acenaphthylene	500	419		83.8	4.06	30	42 - 120
Dimethylphthalate	500	479		95.7	2.04	30	43 - 120
Acenaphthene	500	439		87.8	4.35	30	45 - 120

* Indicates values outside of QC limits



LCS / LCS DUPLICATE RECOVERY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/17/23 22:19

Batch: BLB0424

Laboratory ID: BLB0424-BSD1

Preparation: EPA 3546 (Microwave)

Sequence Name: LCS Dup

Initial/Final: 10 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Dibenzofuran	500	452		90.3	4.52	30	43 - 120
Fluorene	500	436		87.2	3.23	30	45 - 120
Phenanthrene	500	452		90.4	1.34	30	49 - 120
Anthracene	500	386		77.2	1.80	30	45 - 120
Fluoranthene	500	631		126	0.738	30	53 - 145
Pyrene	500	598		120	0.0380	30	52 - 134
Butylbenzylphthalate	500	673	*	135 *	0.795	30	45 - 132
Benzo(a)anthracene	500	463		92.5	1.40	30	49 - 120
Chrysene	500	464		92.8	0.478	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	605		121	0.407	30	34 - 130
Benzo(a)fluoranthene, Total	1000	1060		106	1.58	30	30 - 160
Benzo(a)pyrene	500	449		89.7	0.551	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	397		79.3	0.0151	30	42 - 163
Dibenzo(a,h)anthracene	500	406		81.2	0.192	30	30 - 133
Benzo(g,h,i)perylene	500	361	Q	72.2	3.09	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172313.D

Date: 17-MAR-2023 21:42

Client ID:

Sample Info: BLB0424-BS1

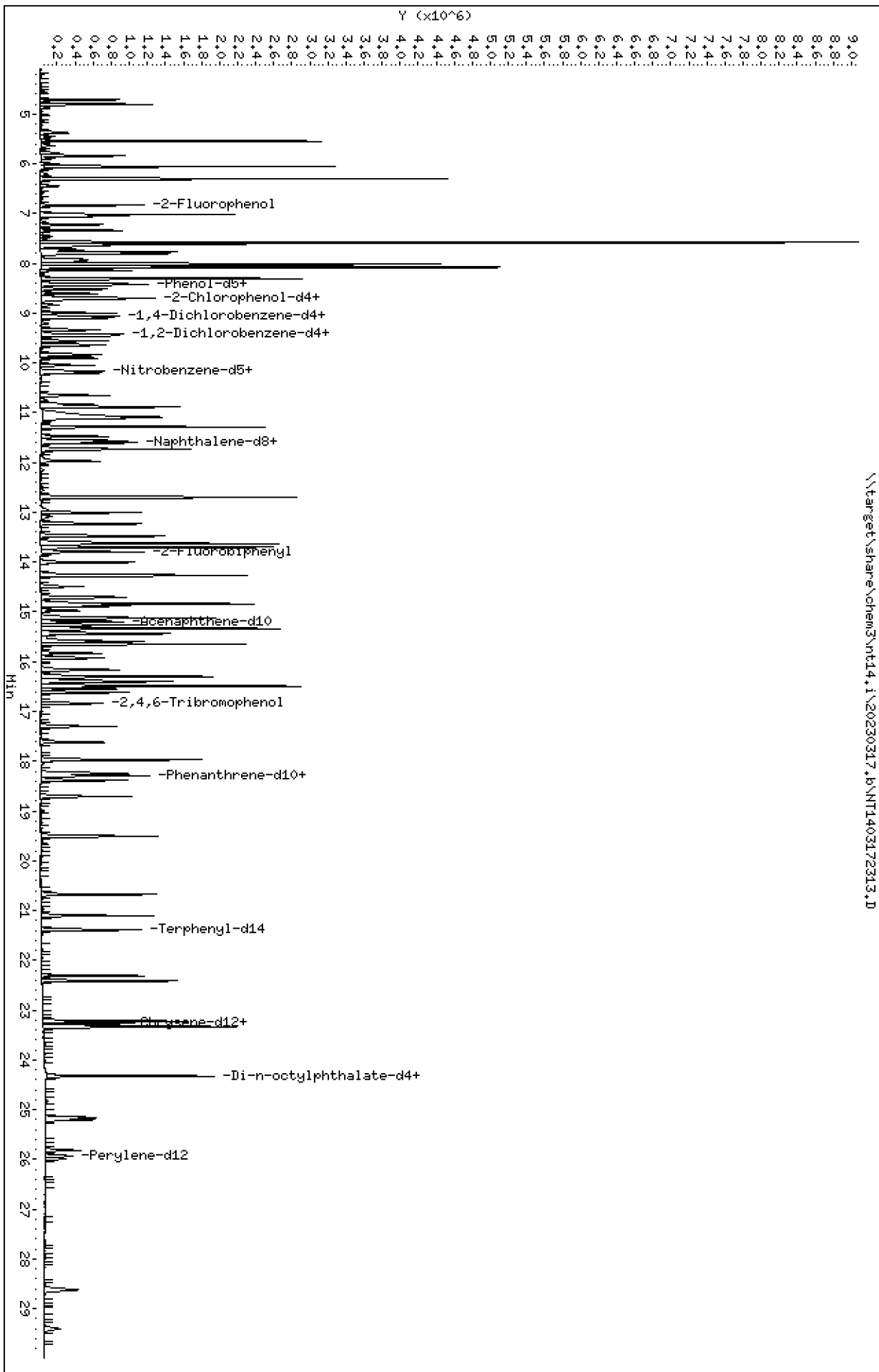
Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14,1\20230317,6\NT1403172313.D



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

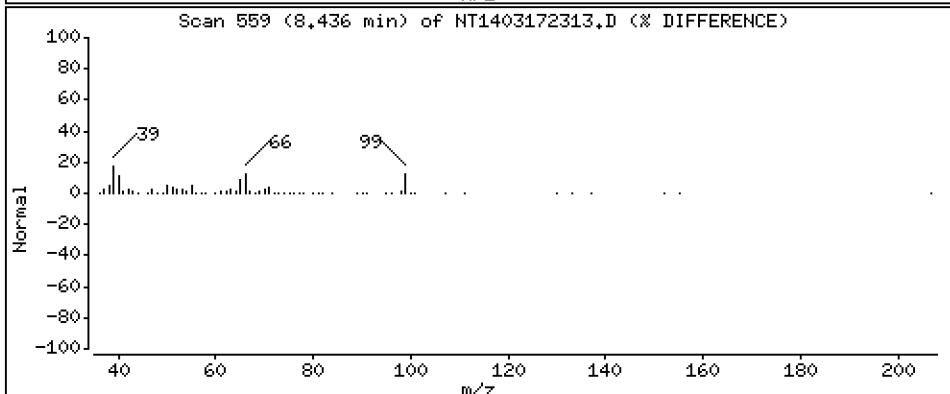
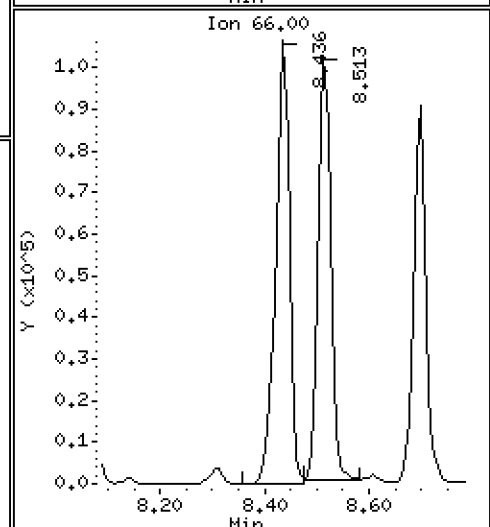
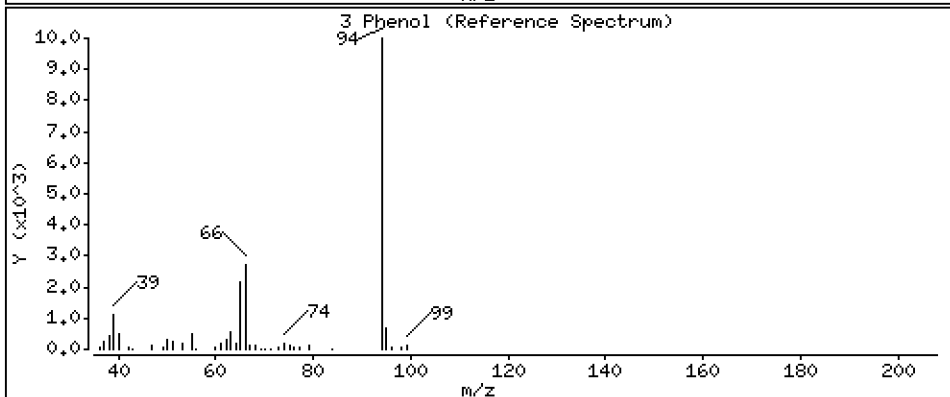
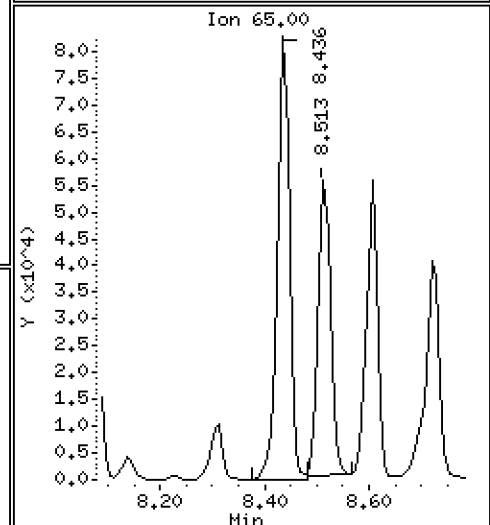
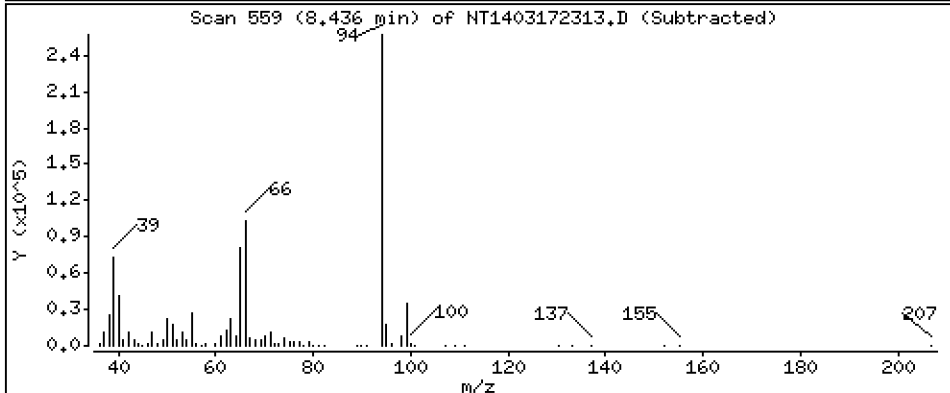
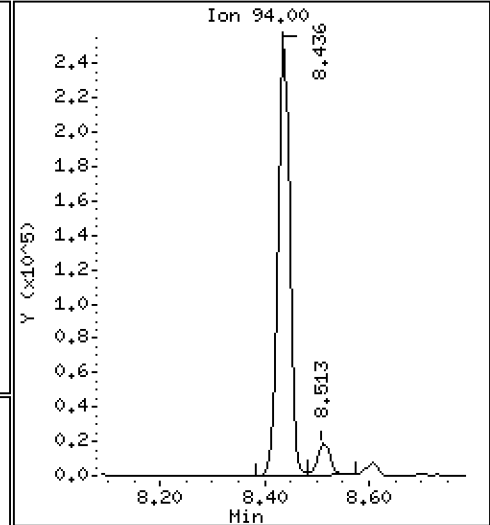
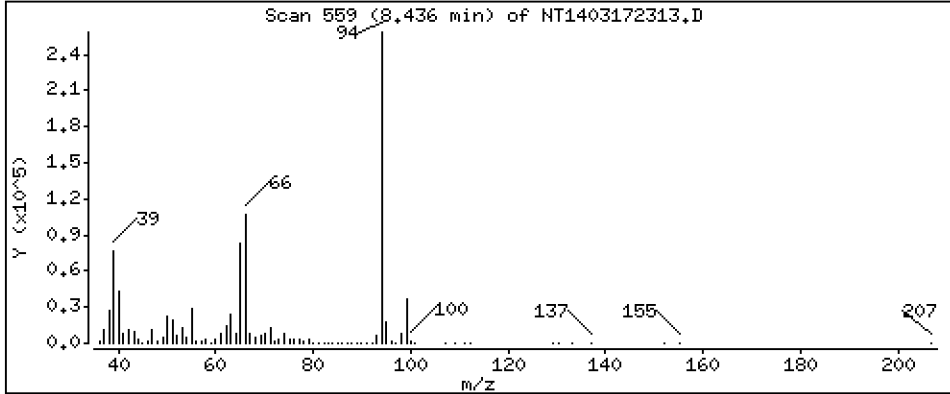
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 3,707 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

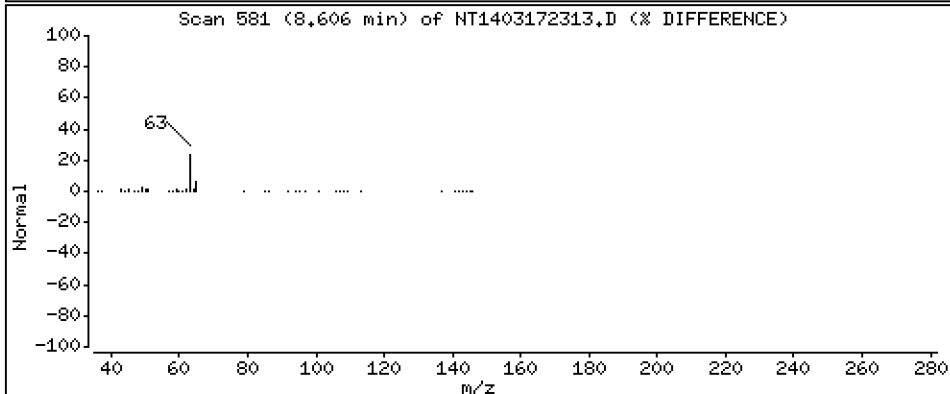
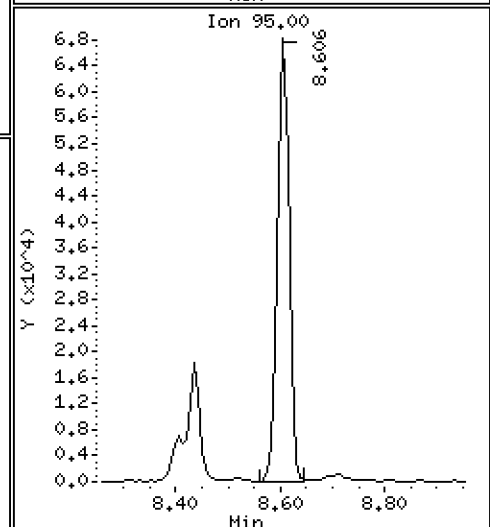
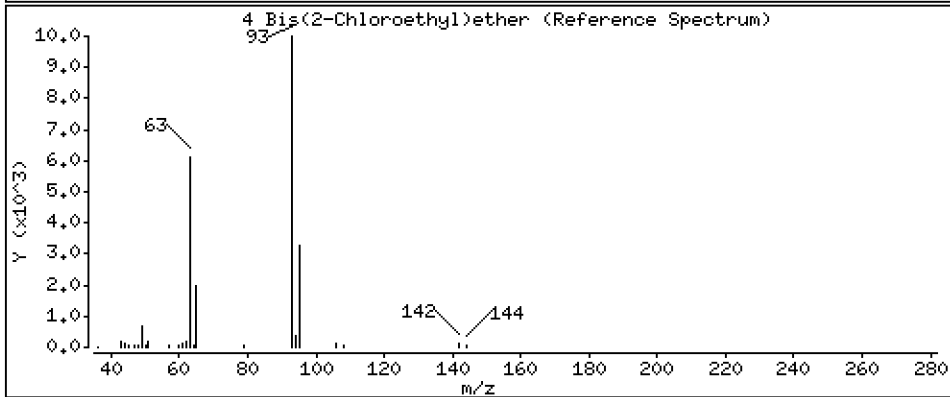
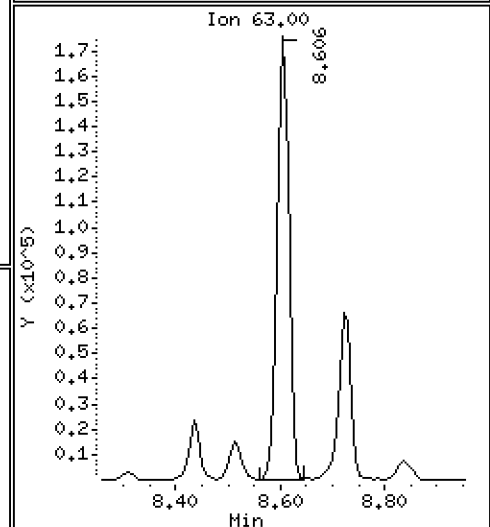
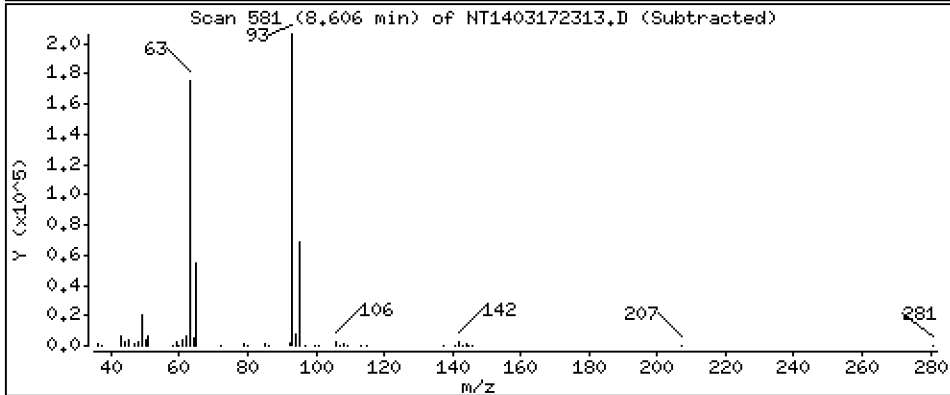
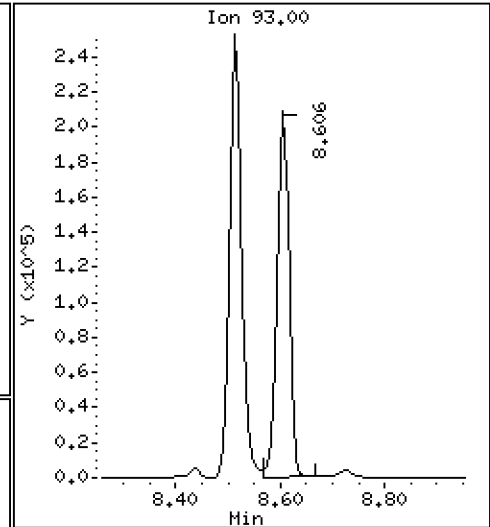
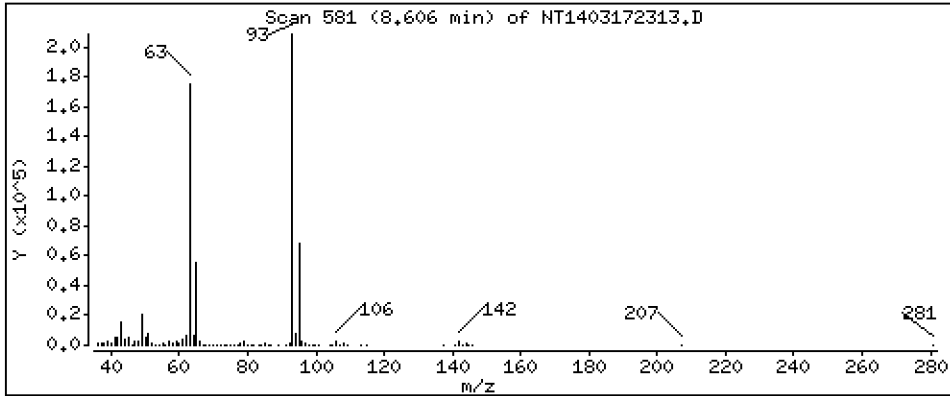
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 4,316 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

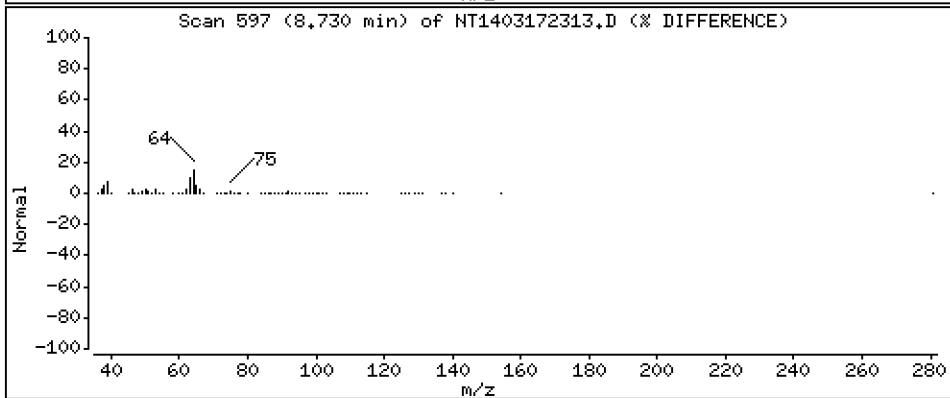
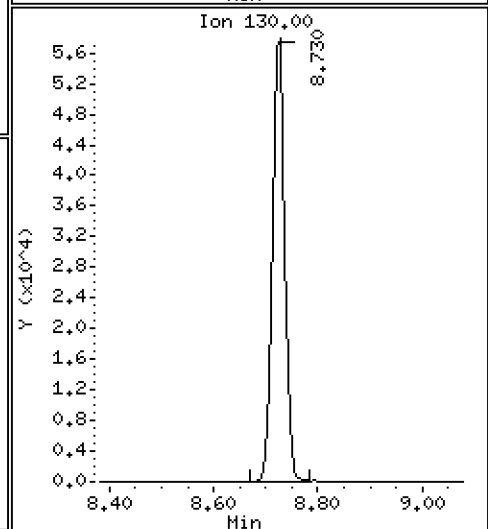
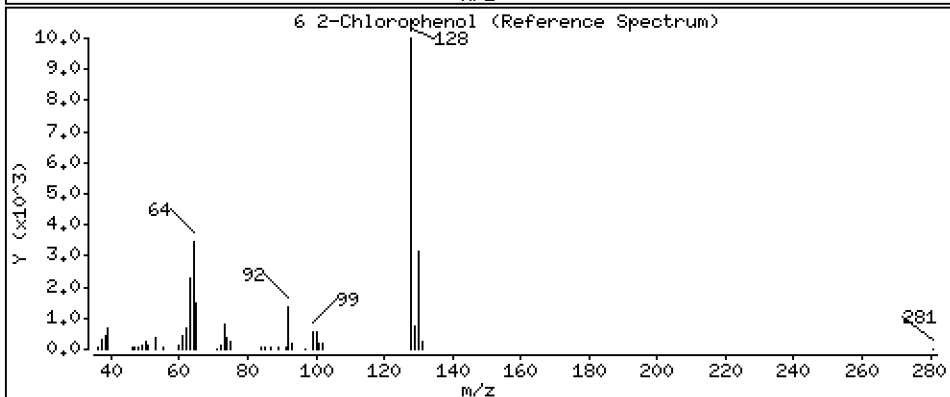
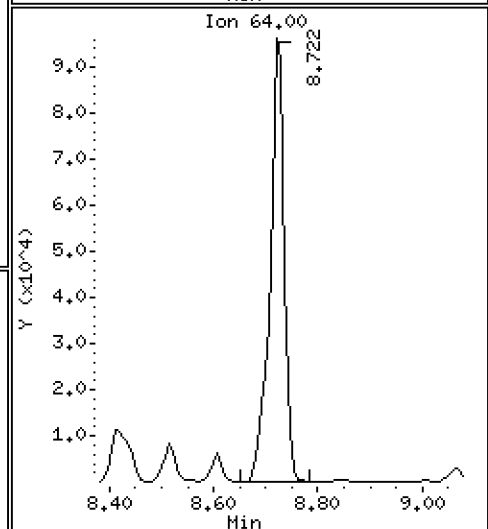
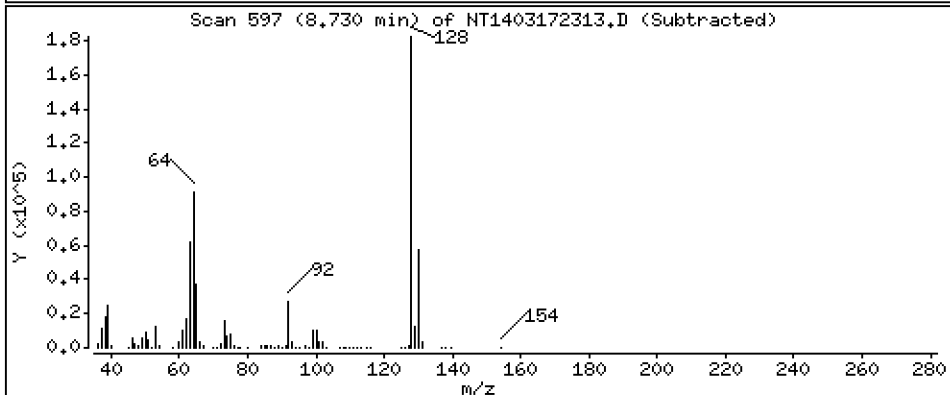
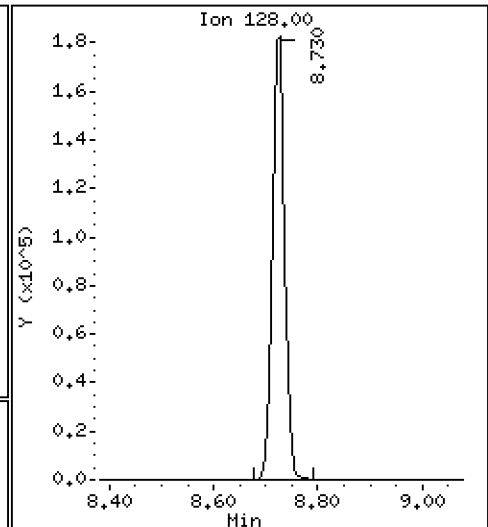
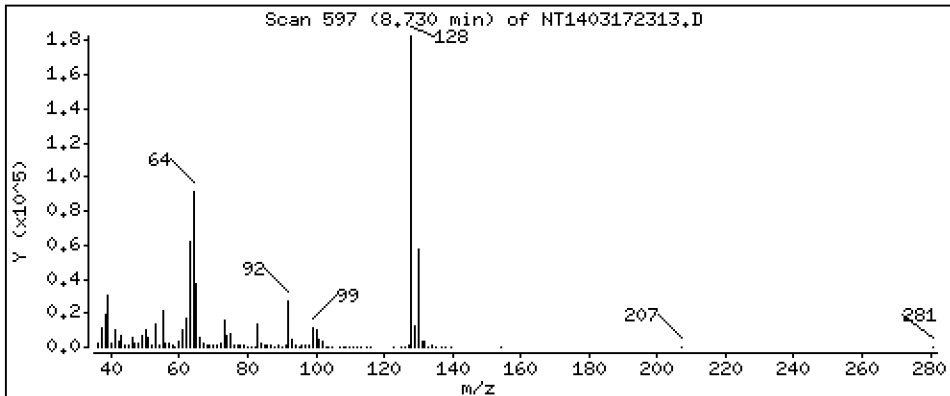
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 3,775 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

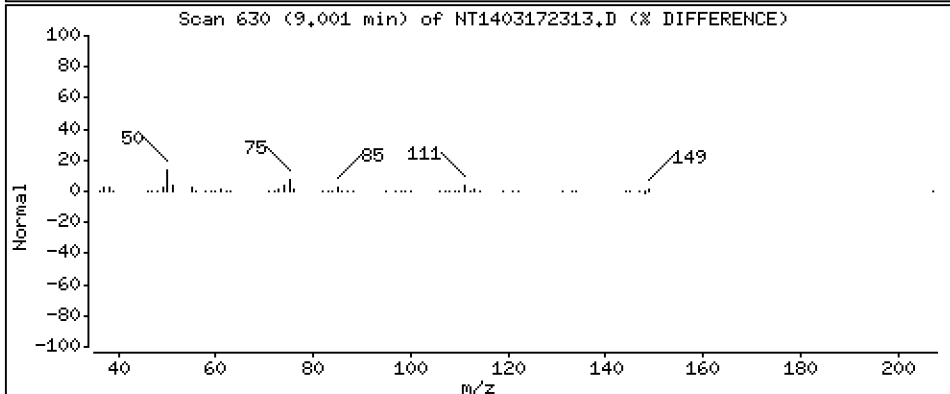
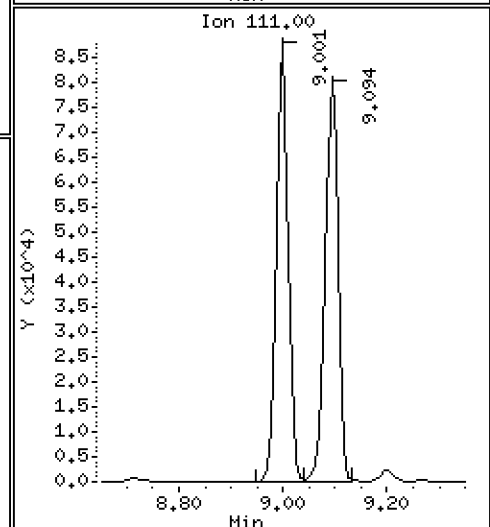
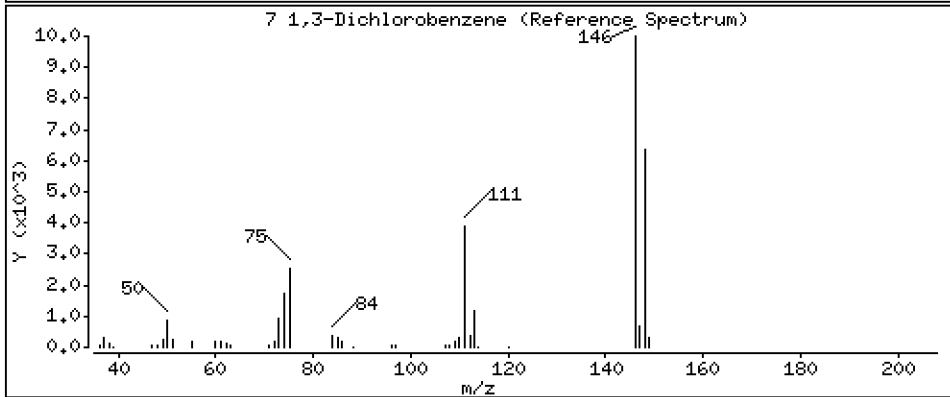
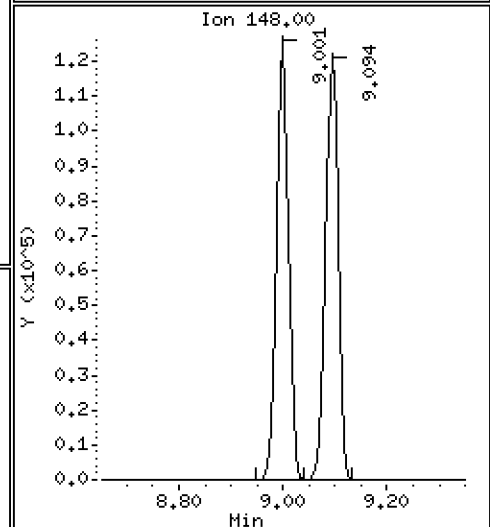
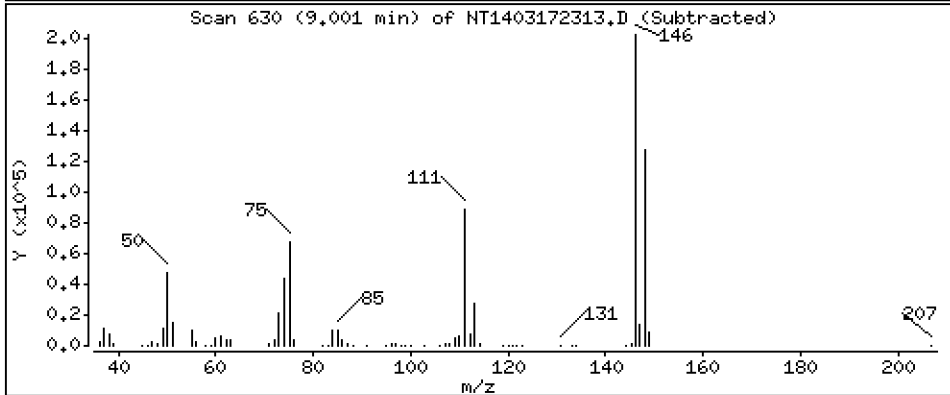
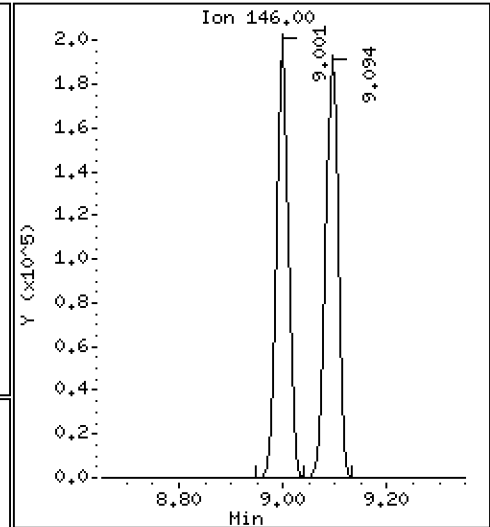
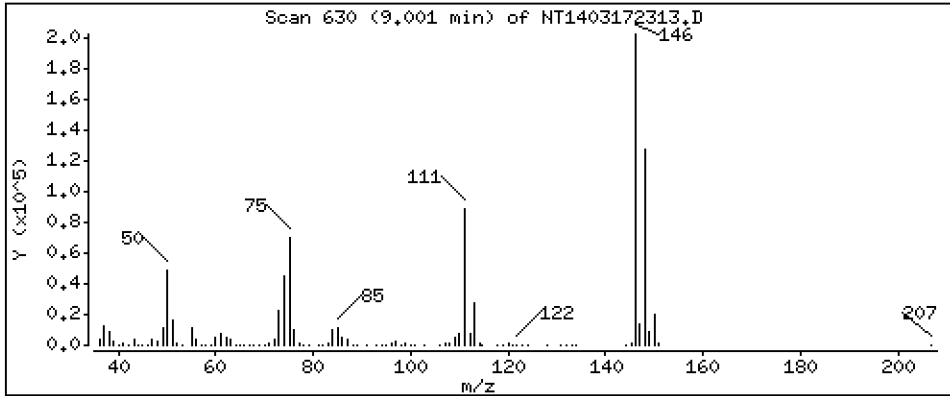
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 3,893 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

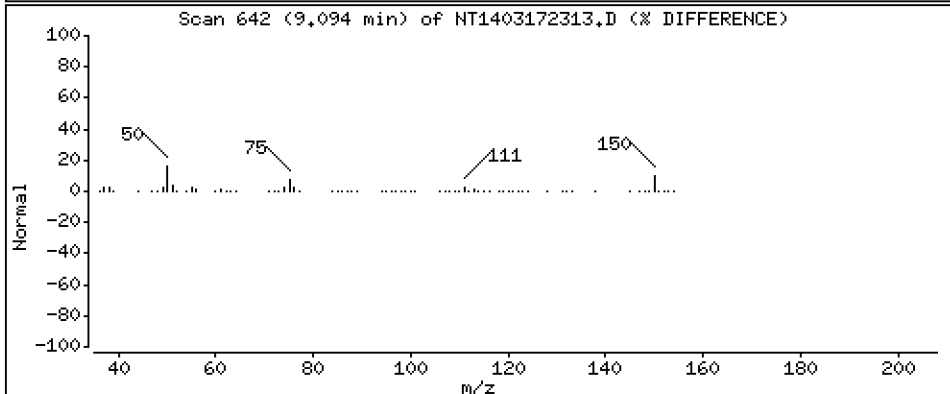
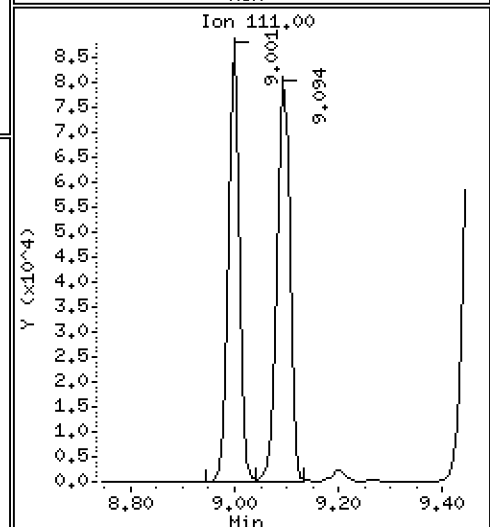
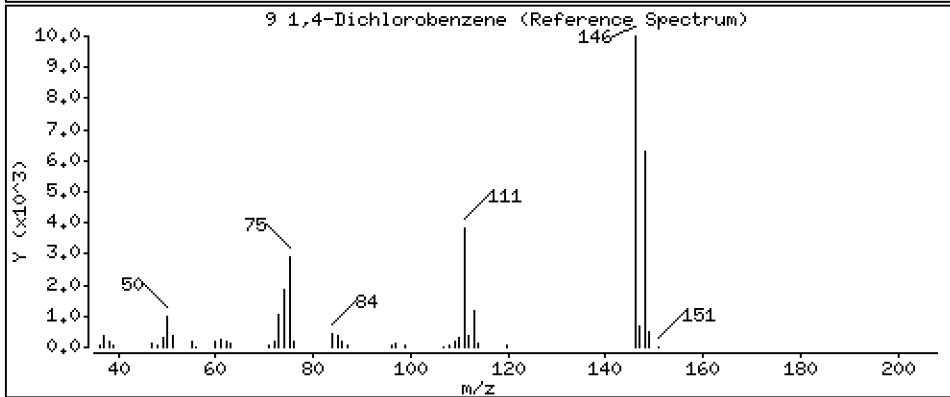
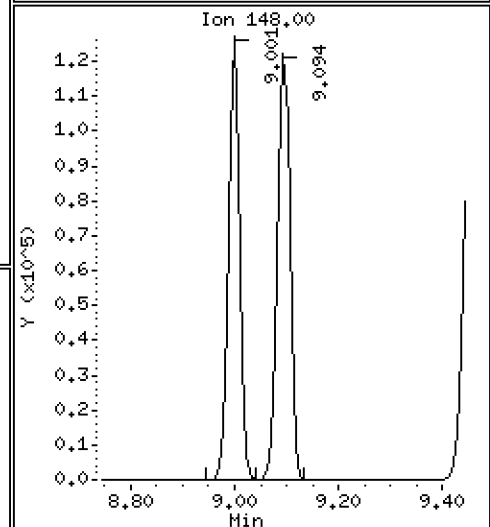
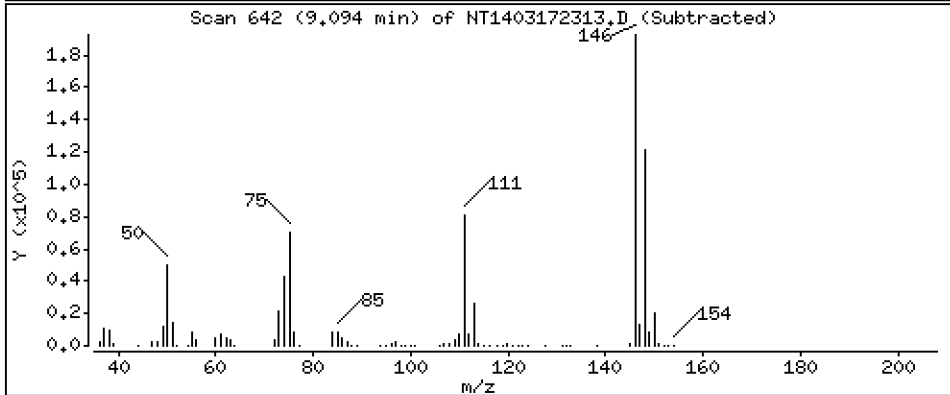
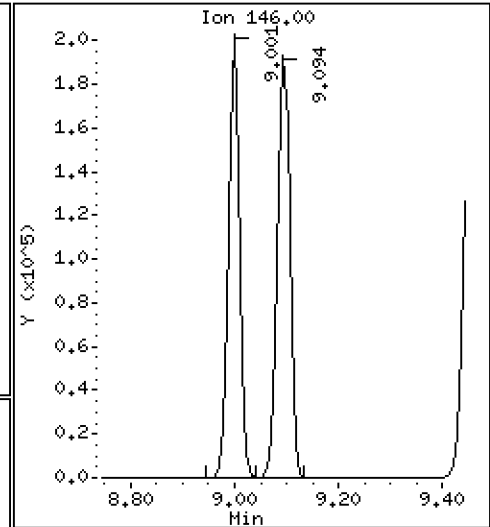
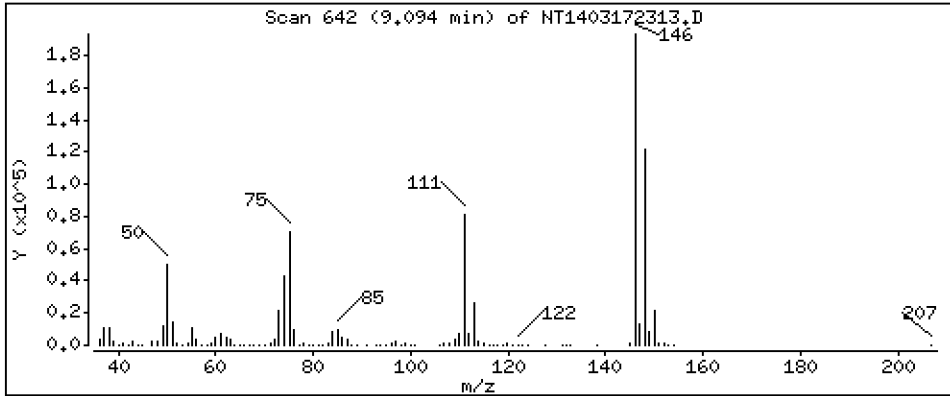
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 3,988 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

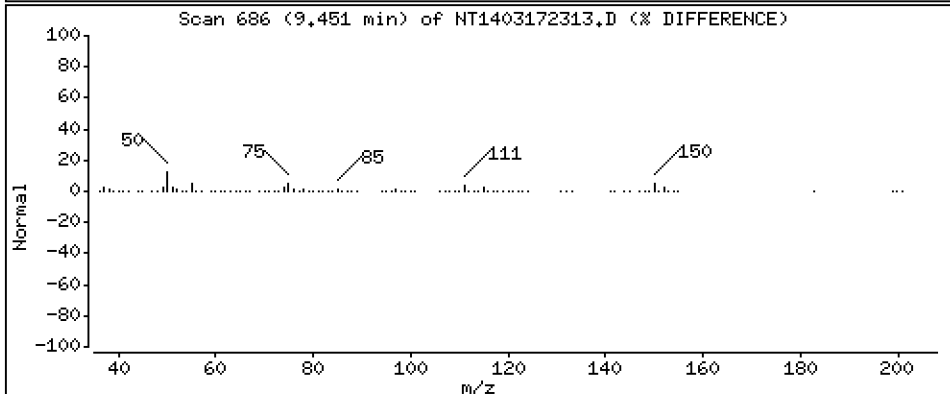
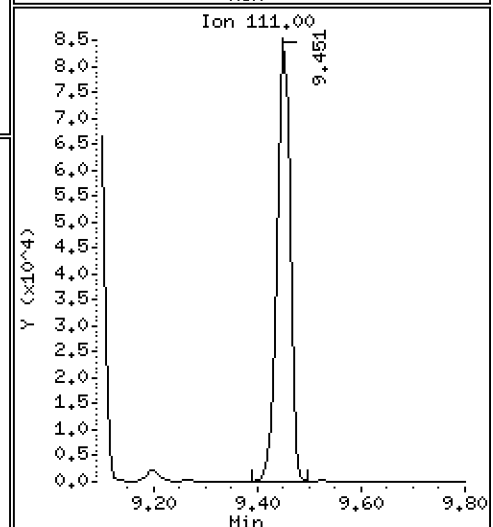
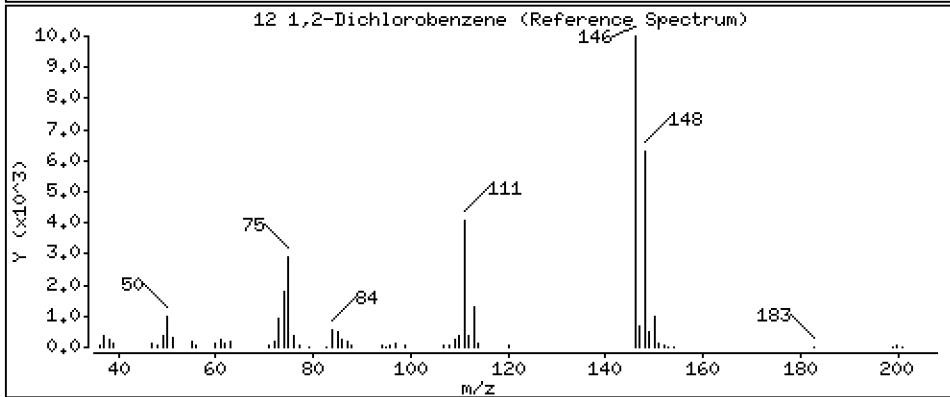
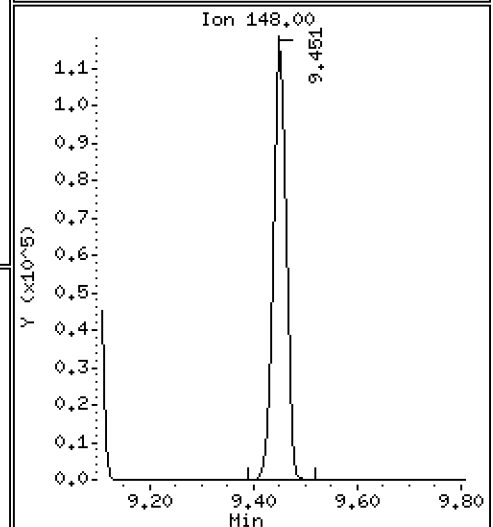
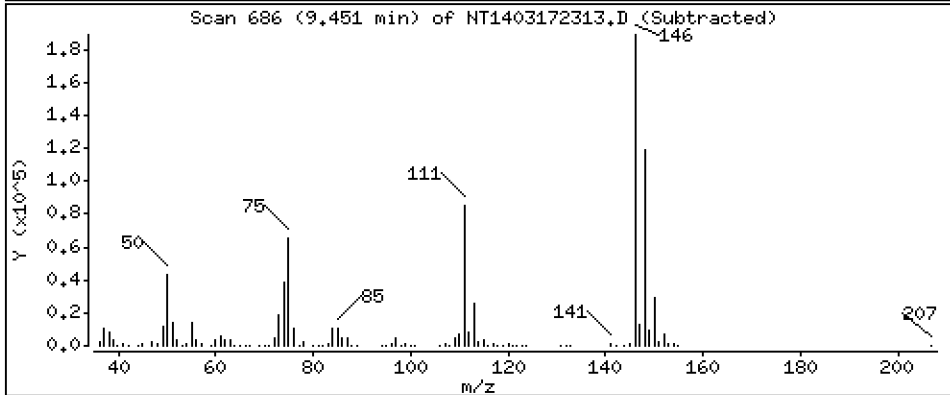
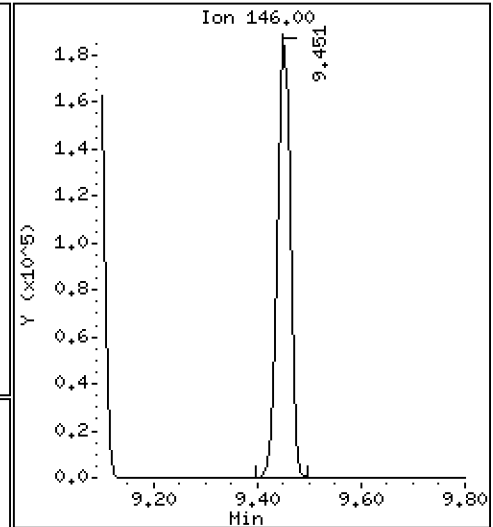
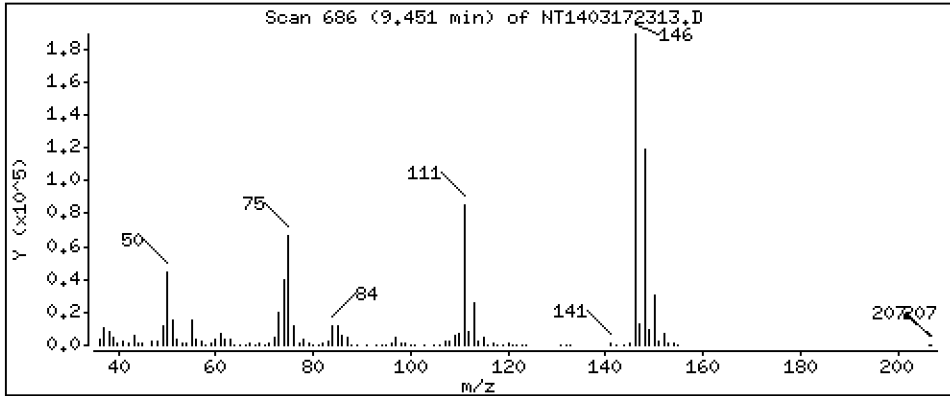
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,040 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

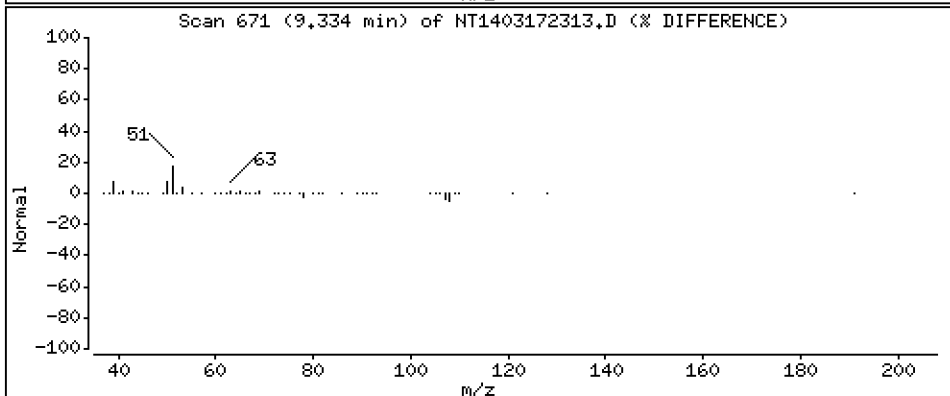
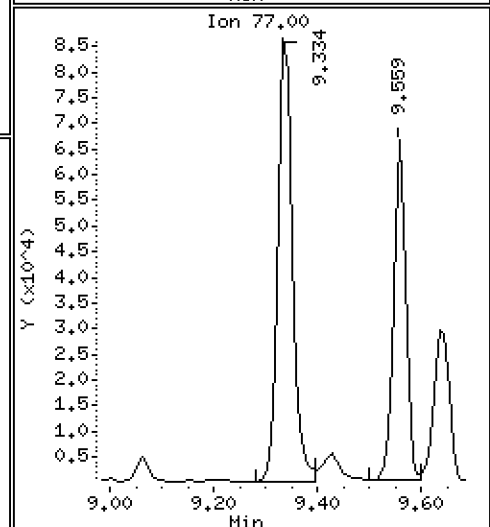
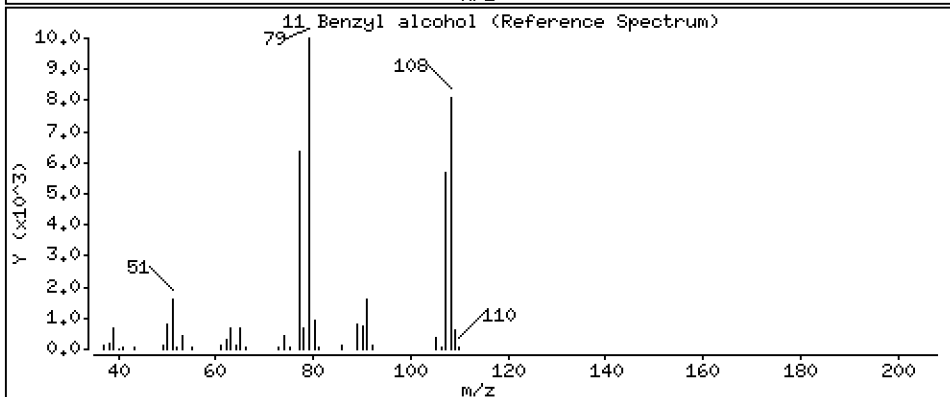
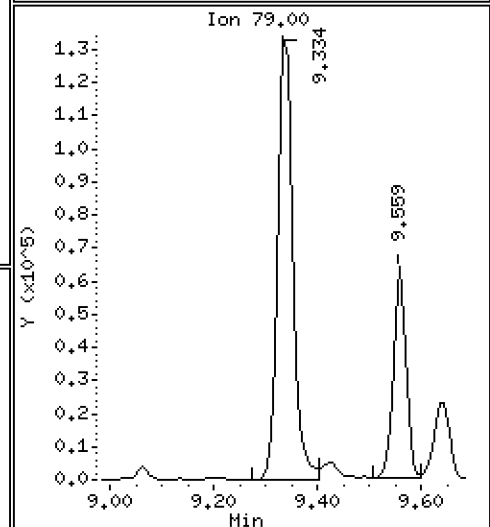
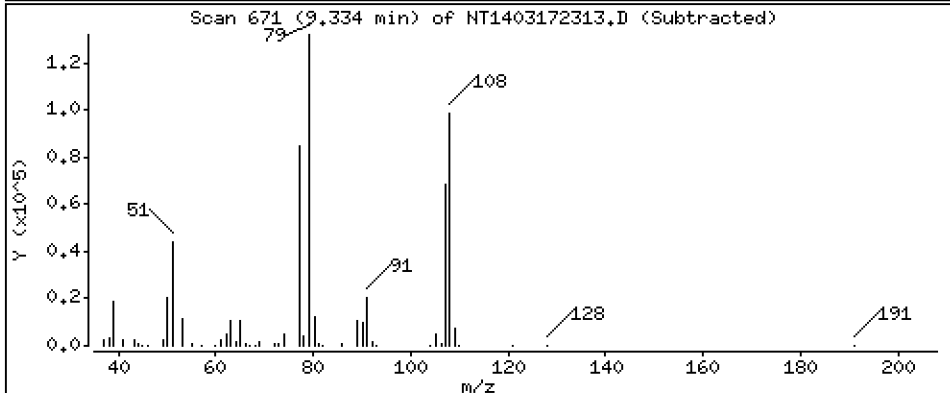
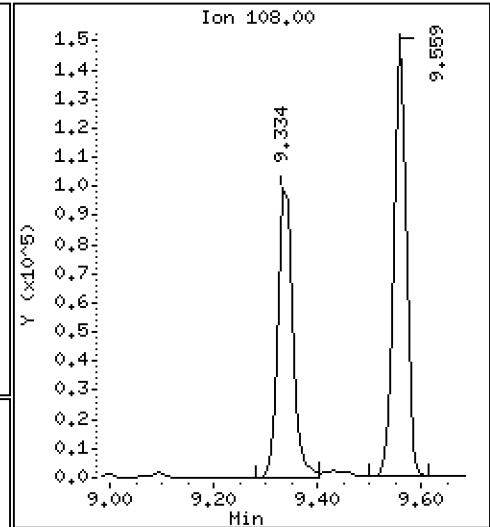
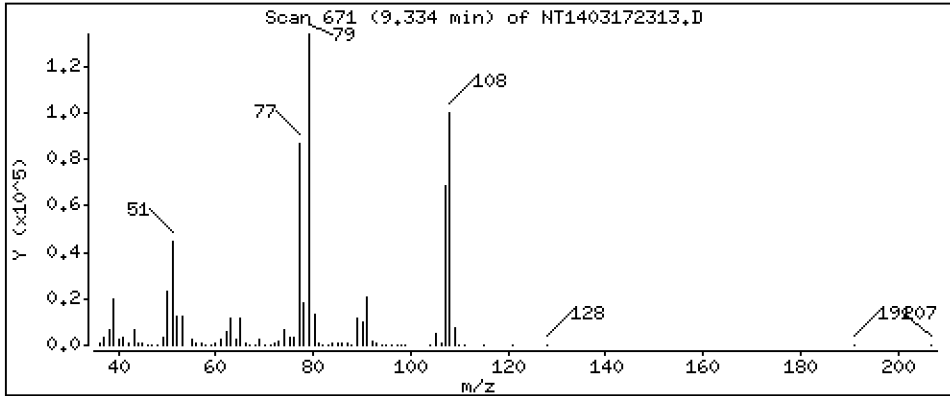
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.067 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

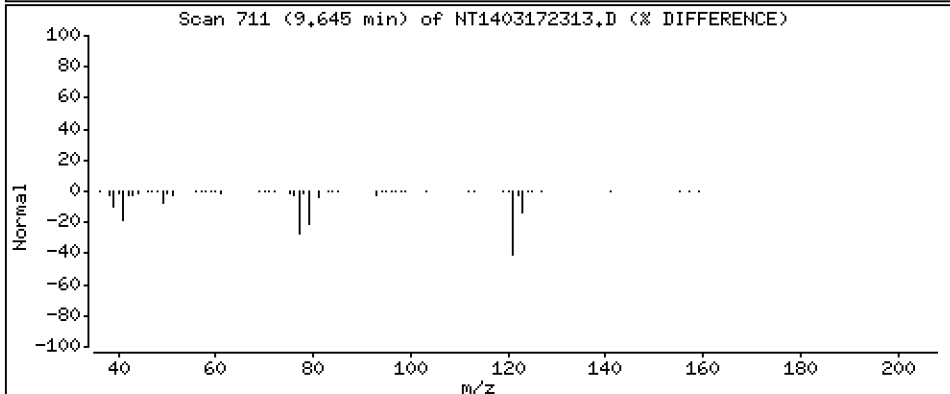
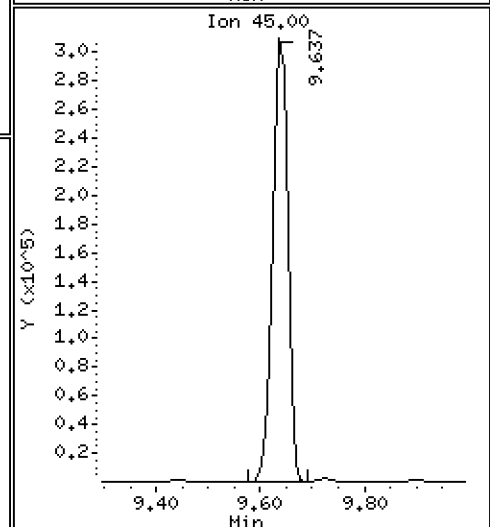
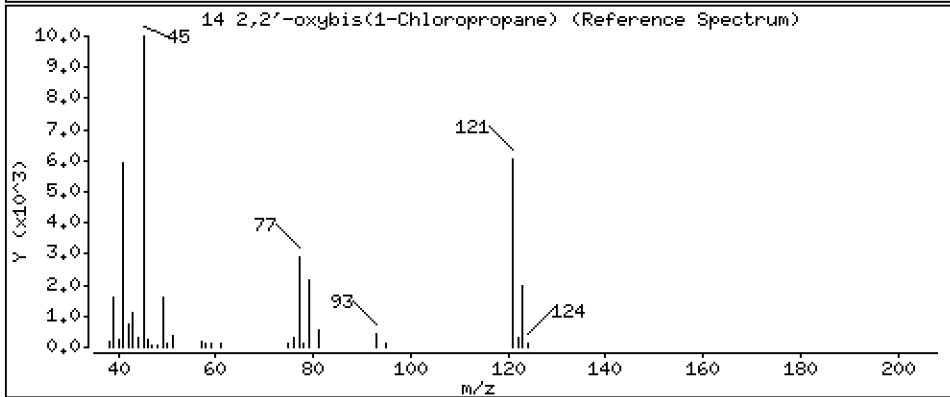
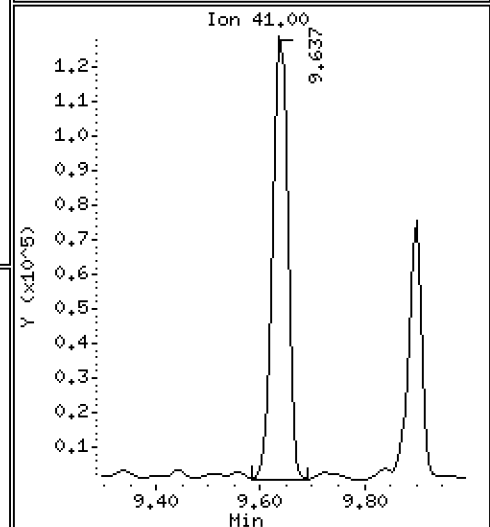
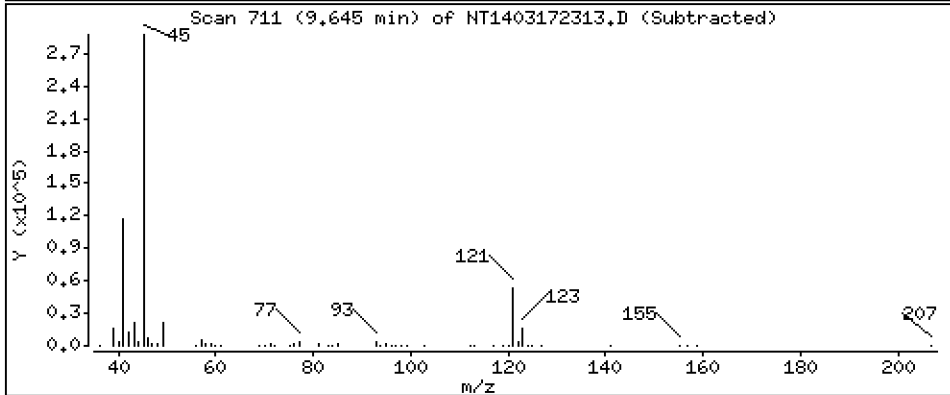
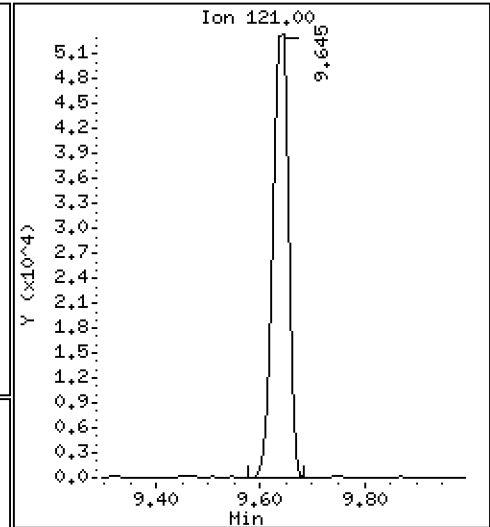
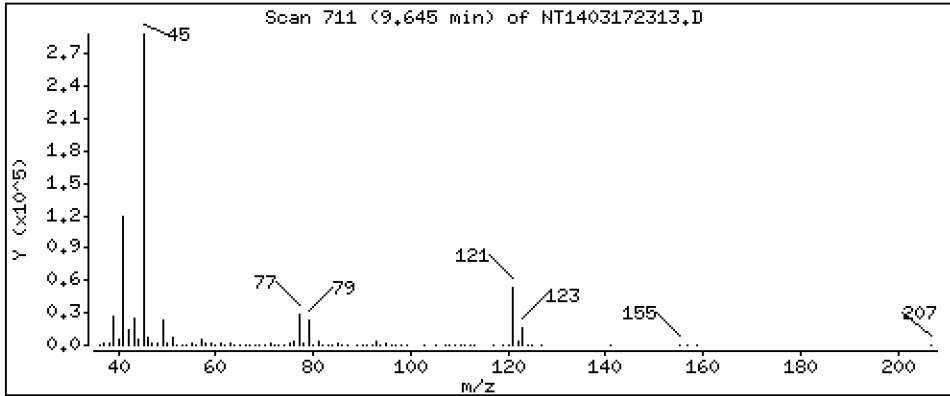
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 4.701 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

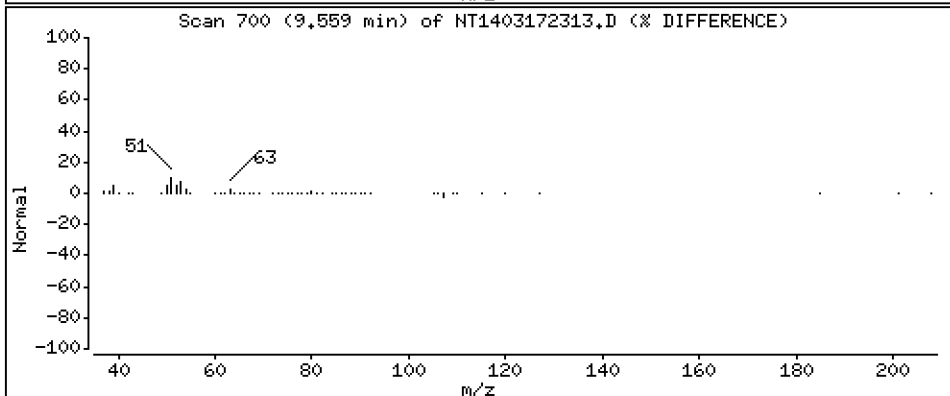
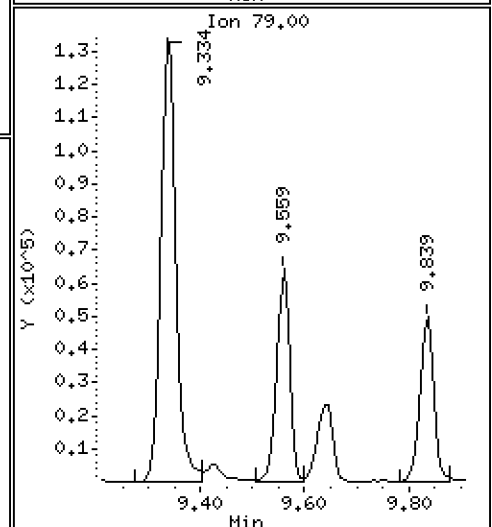
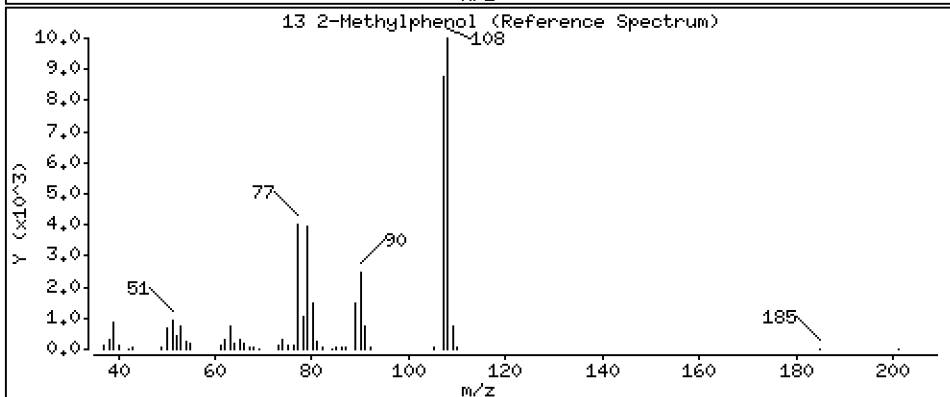
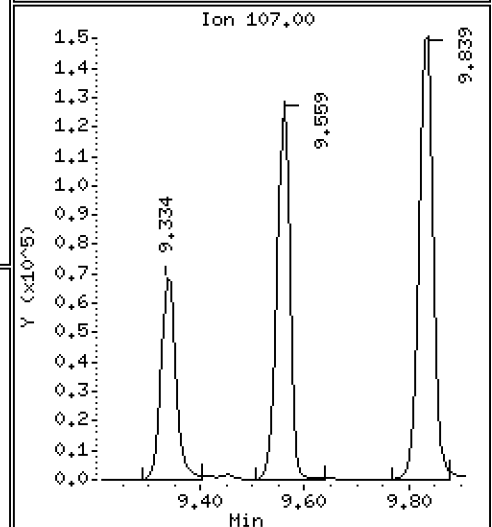
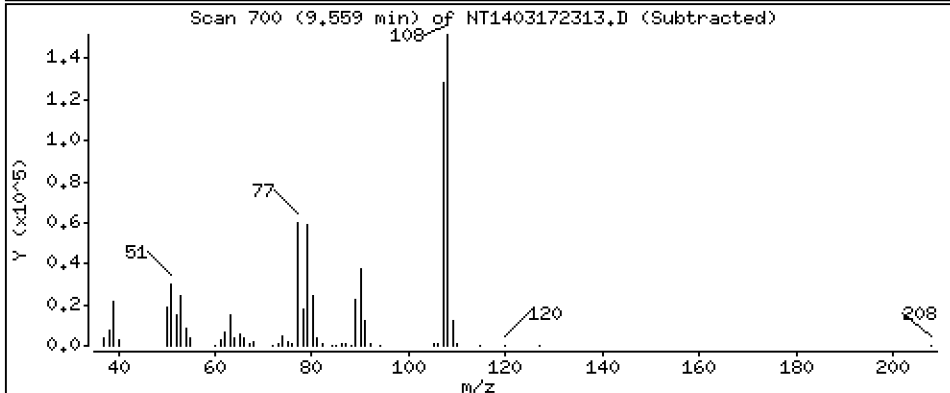
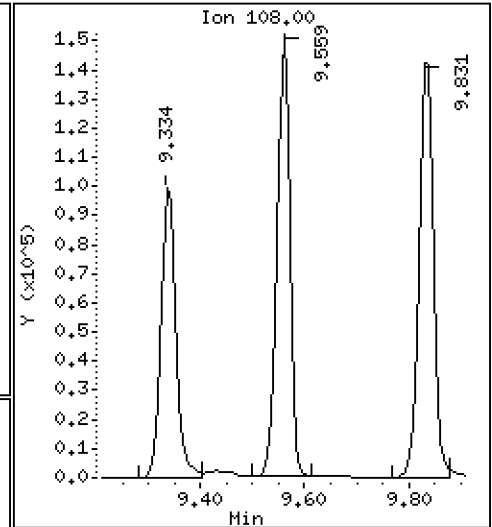
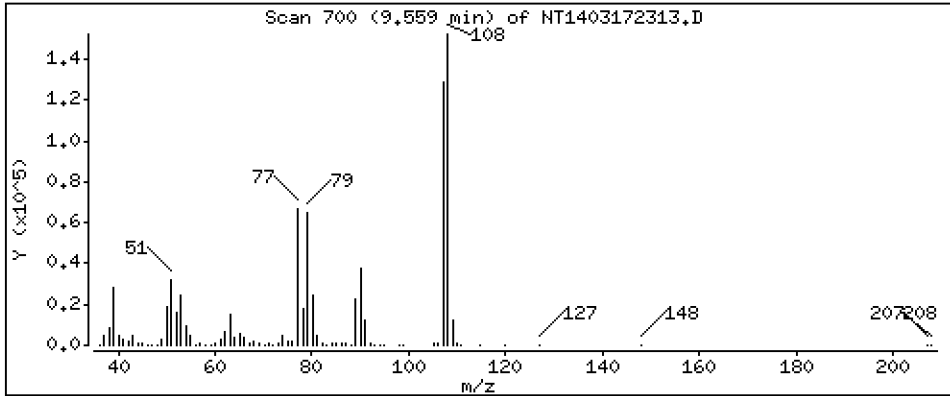
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.456 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

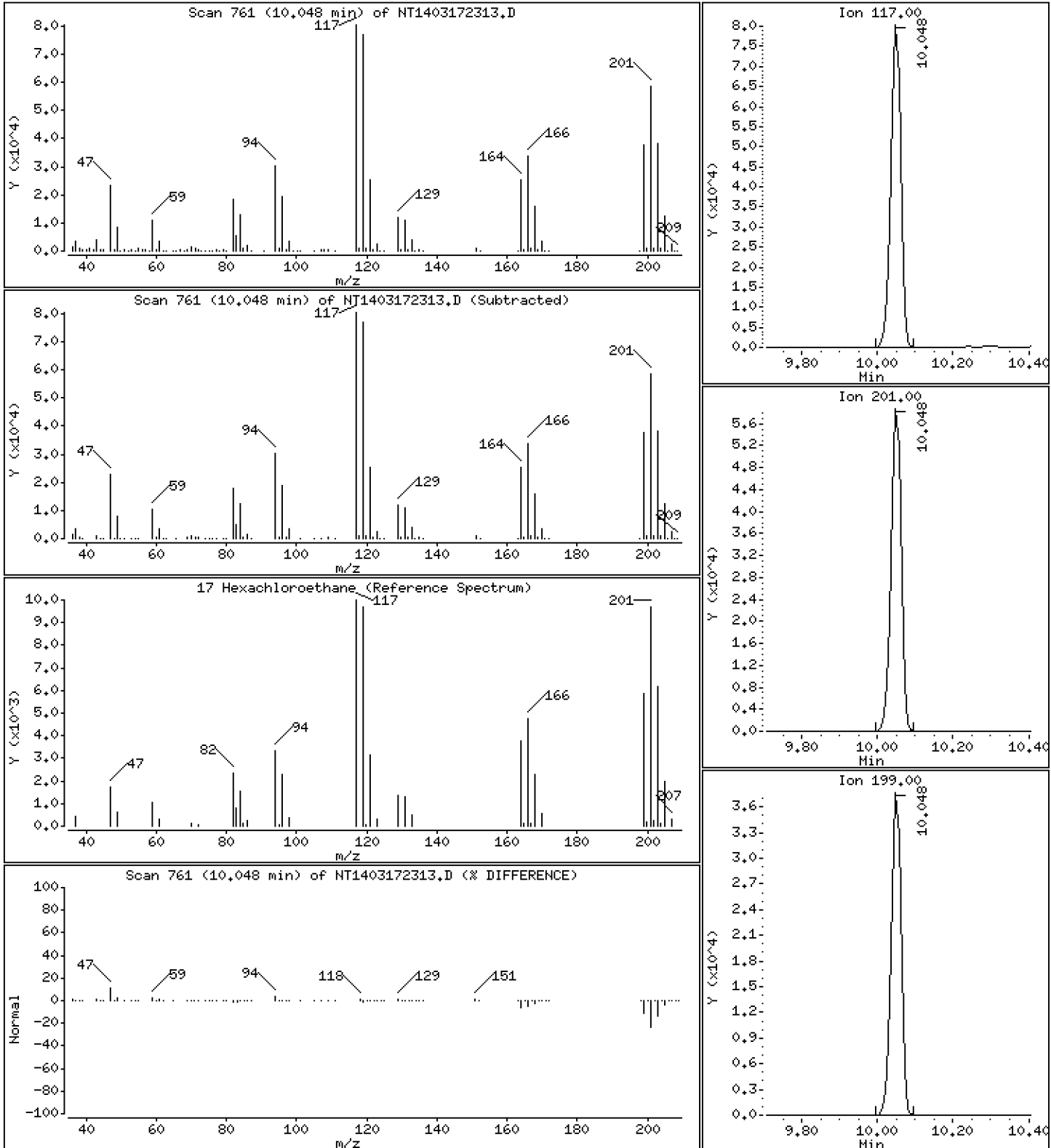
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,232 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

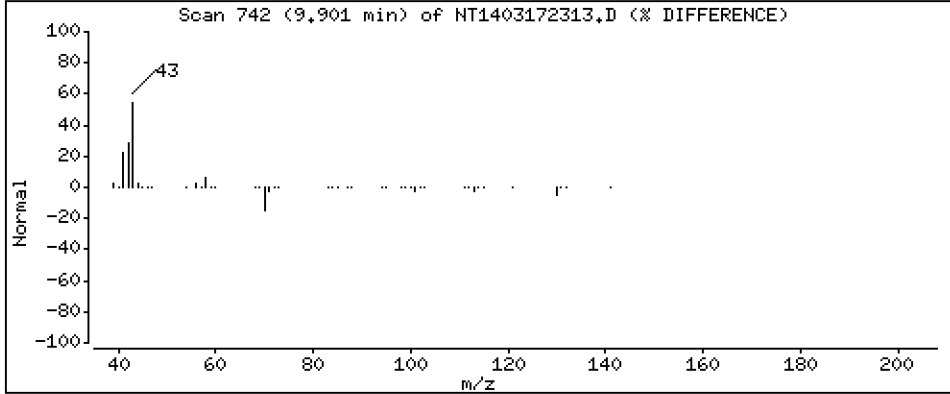
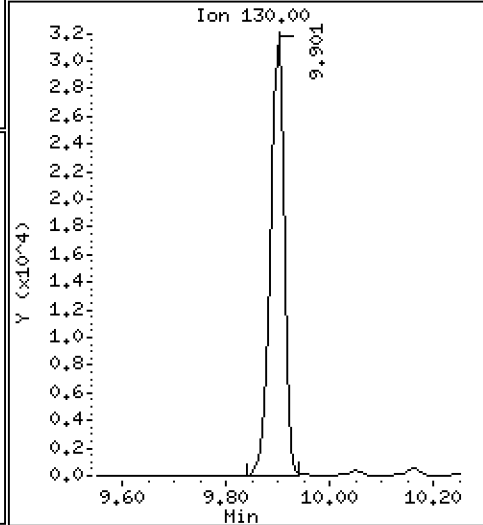
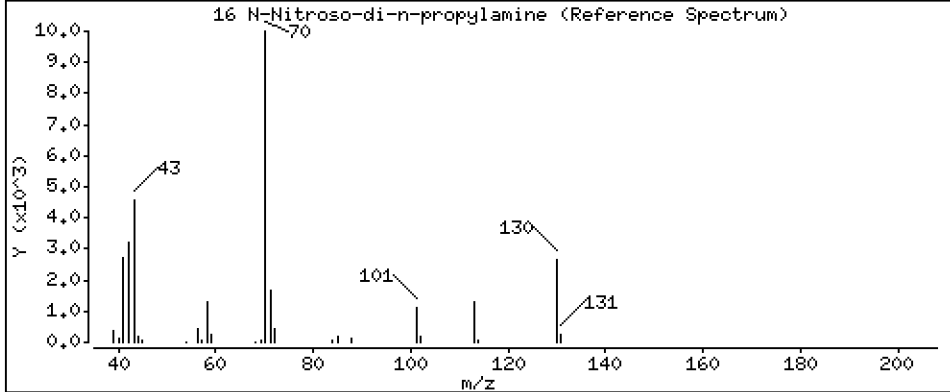
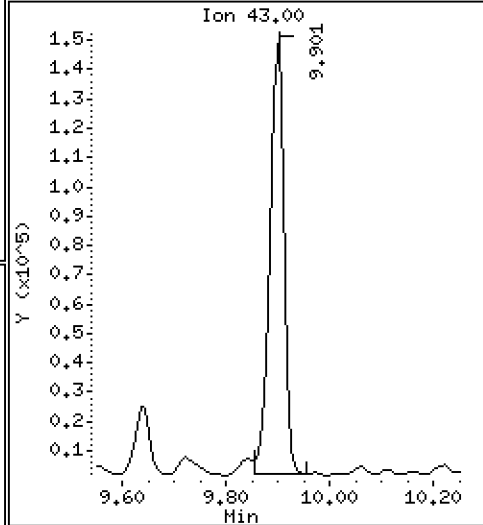
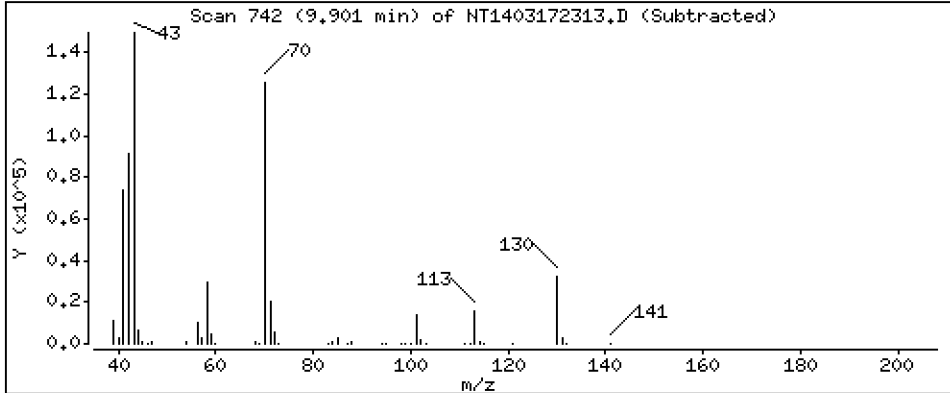
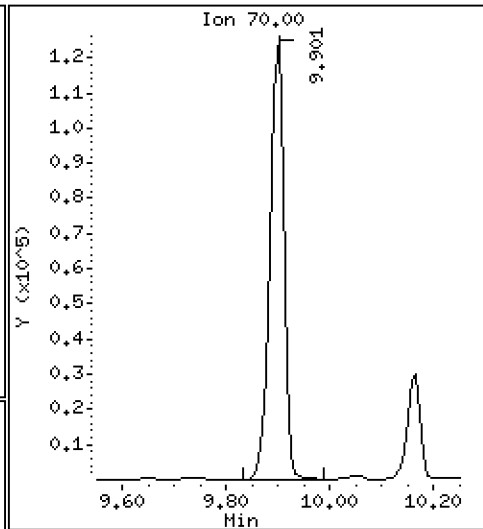
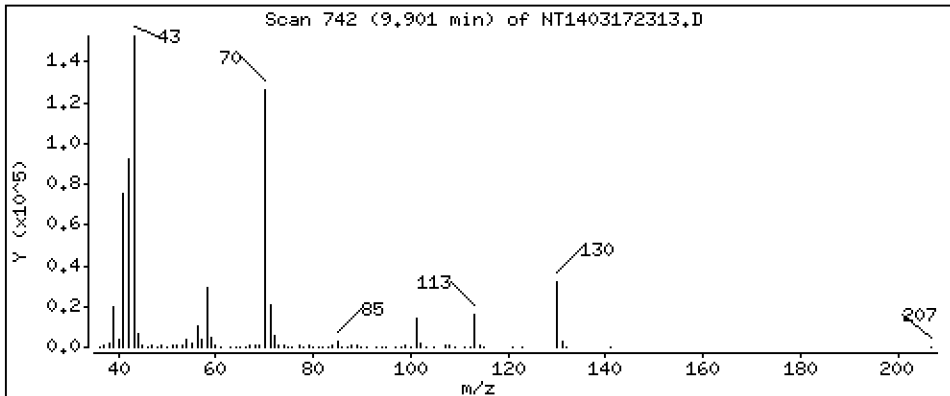
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 3,970 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

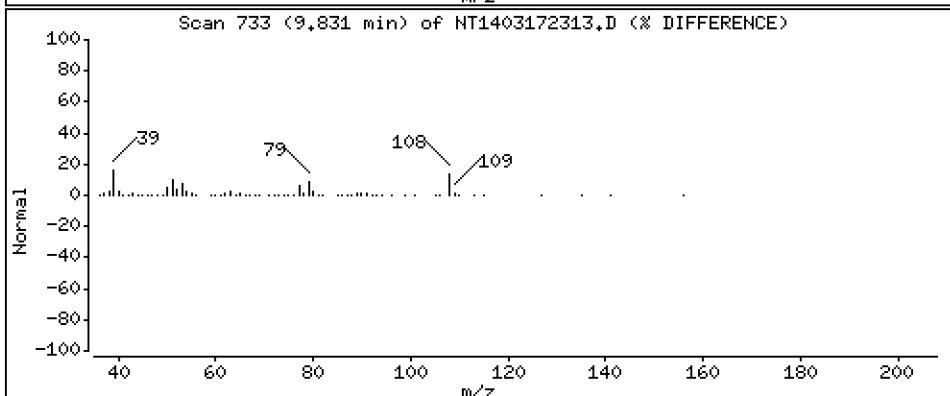
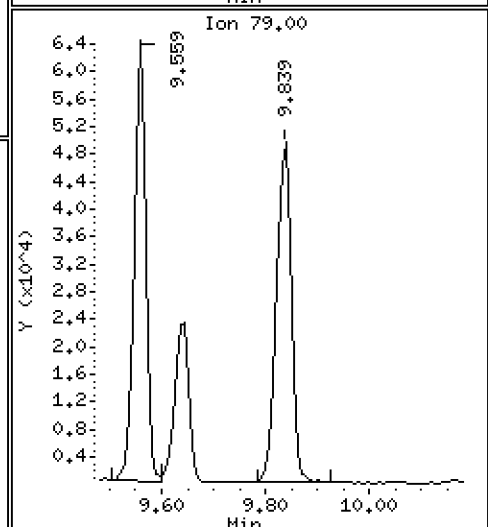
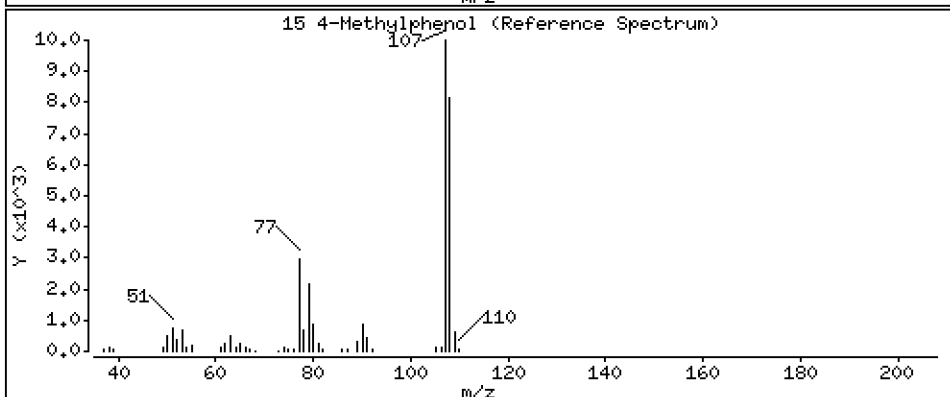
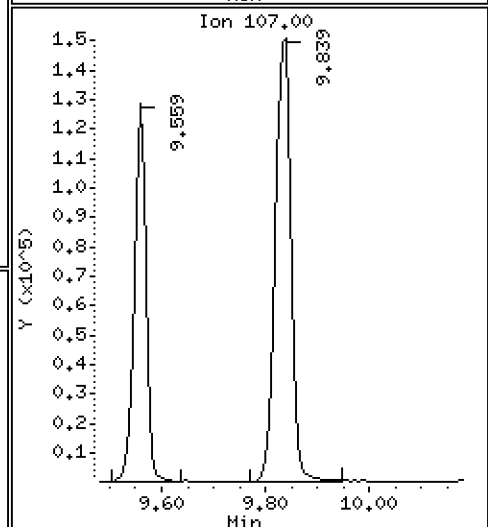
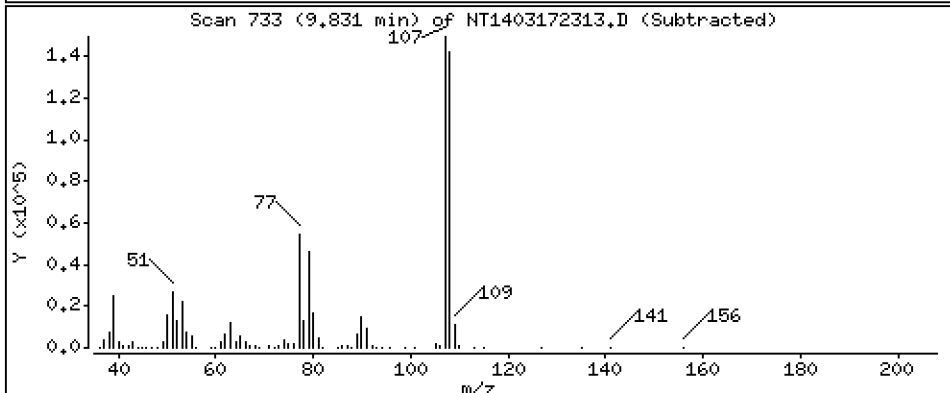
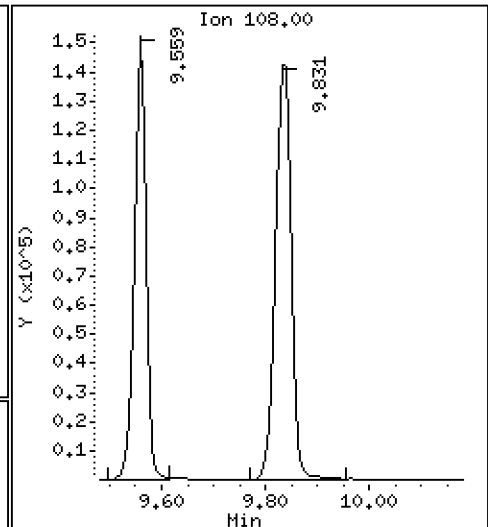
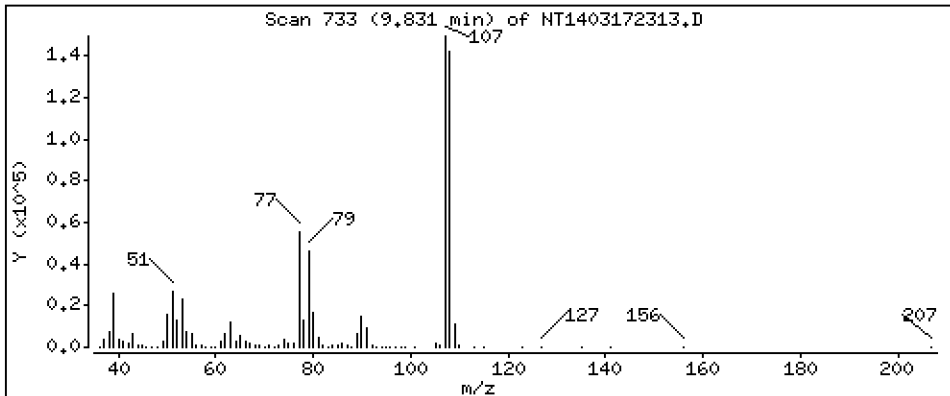
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 3,464 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

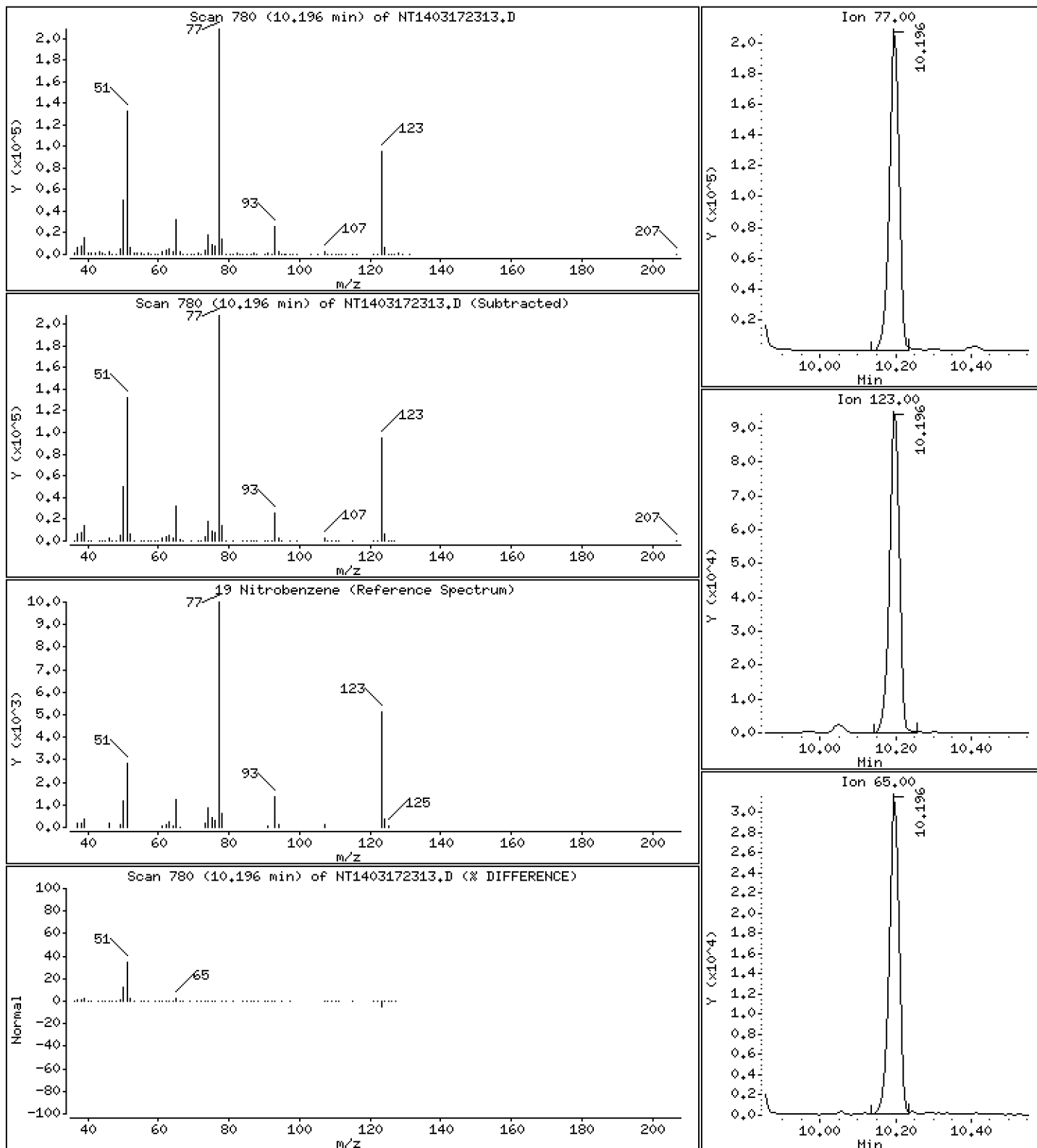
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 4,265 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

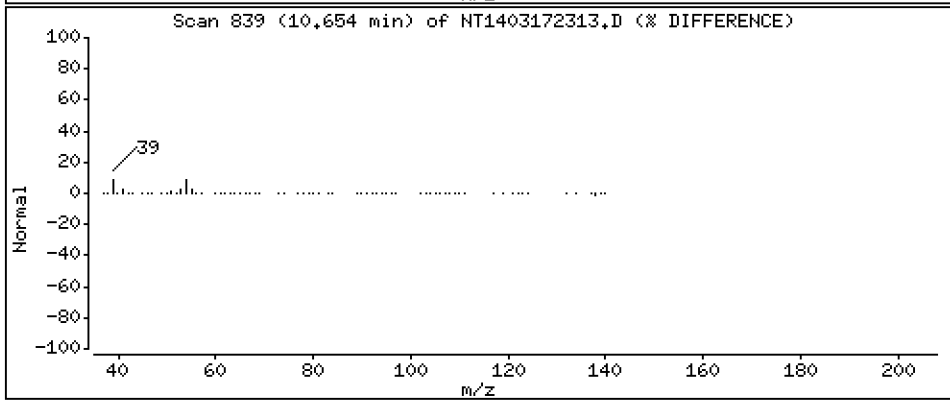
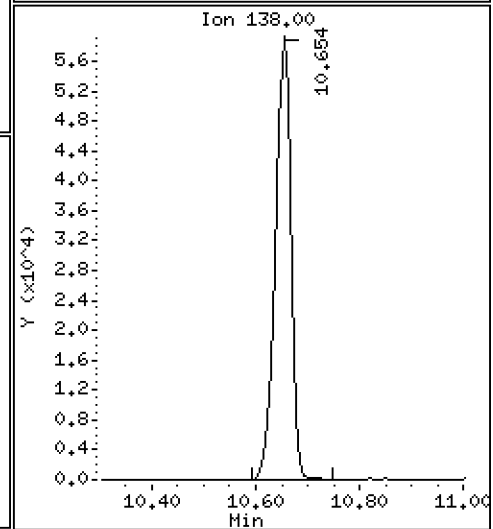
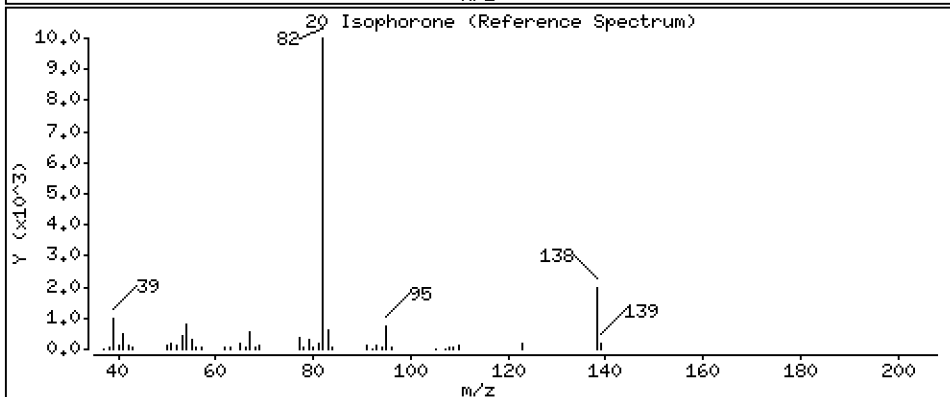
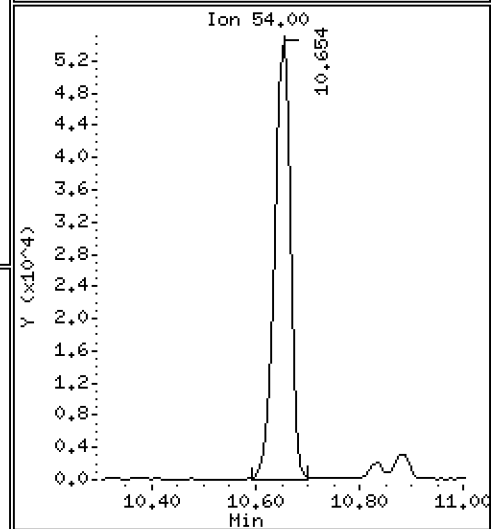
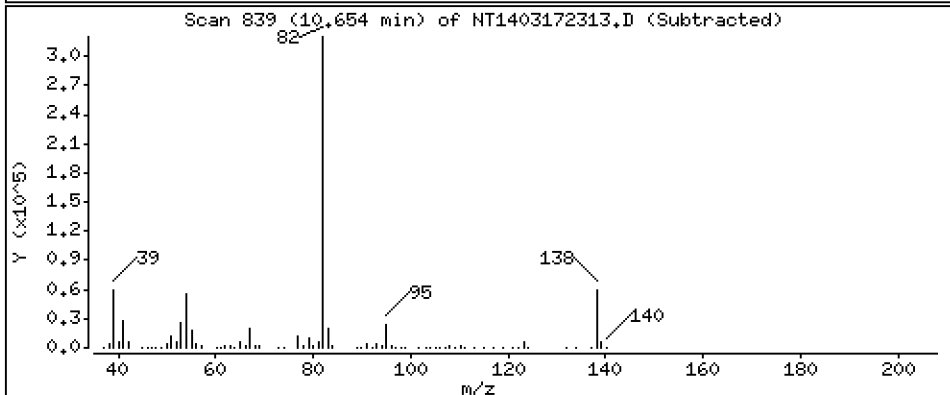
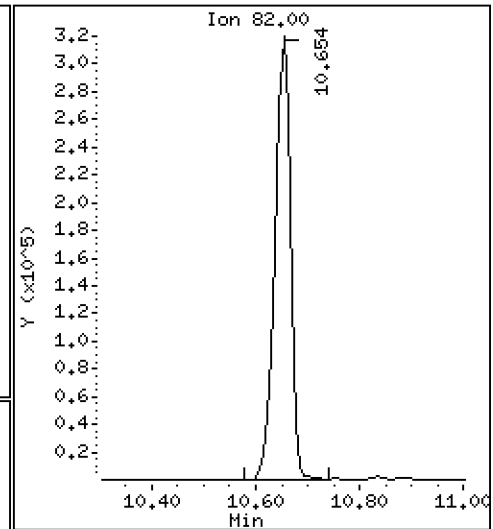
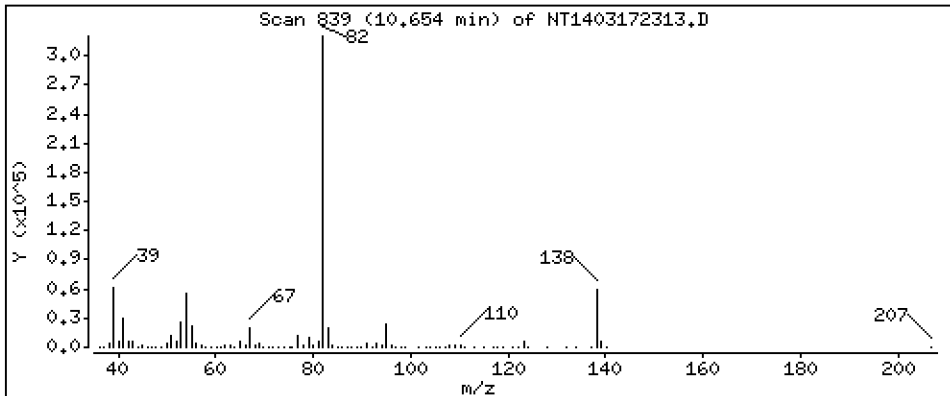
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 5,606 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

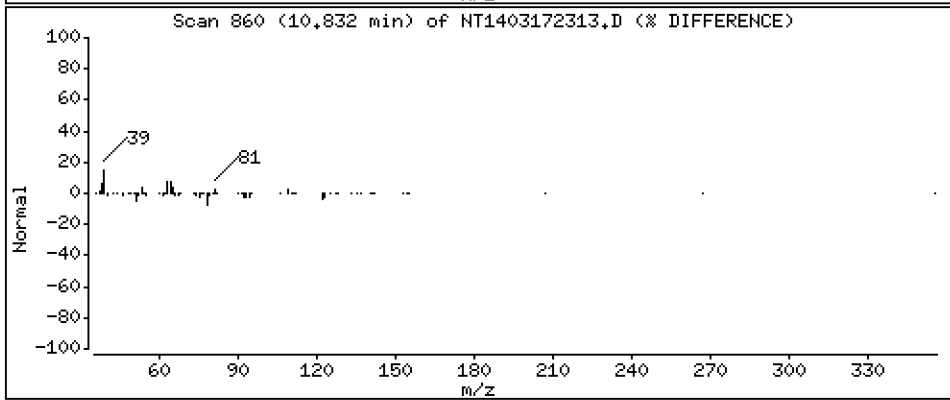
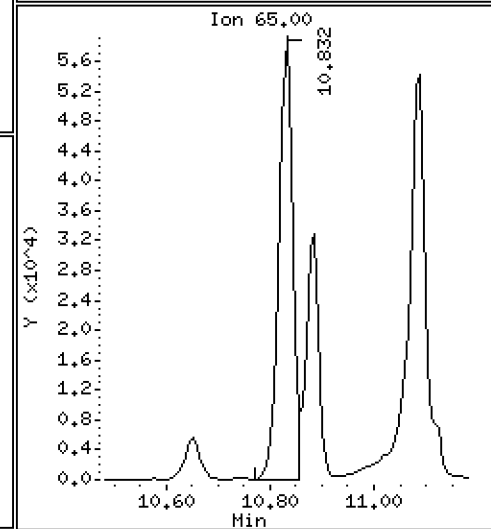
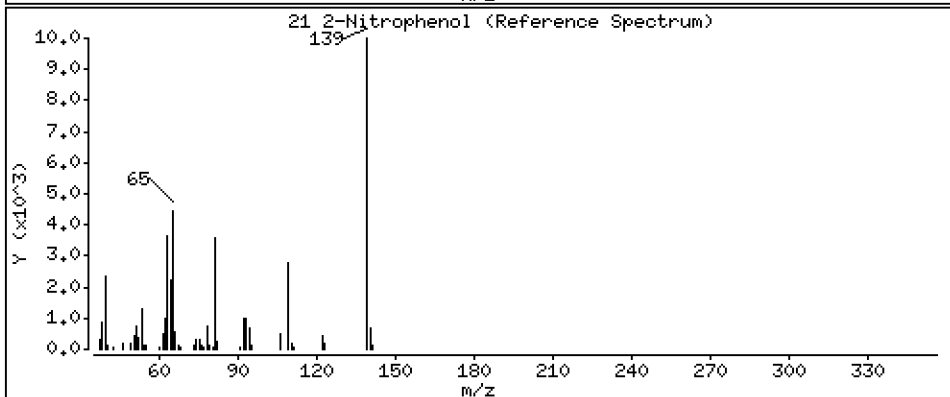
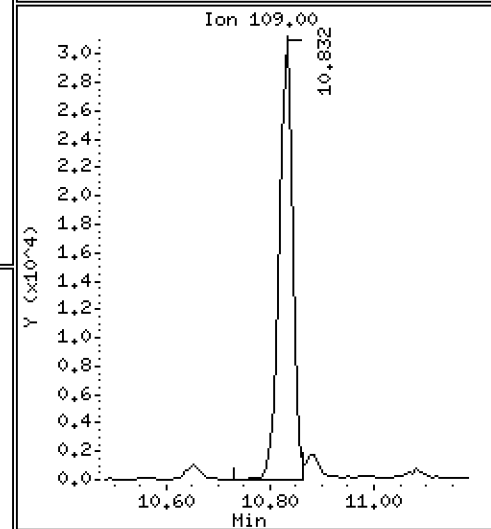
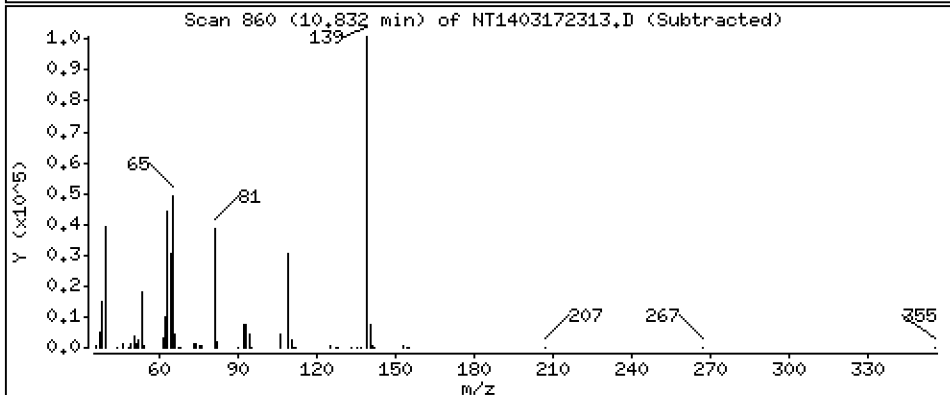
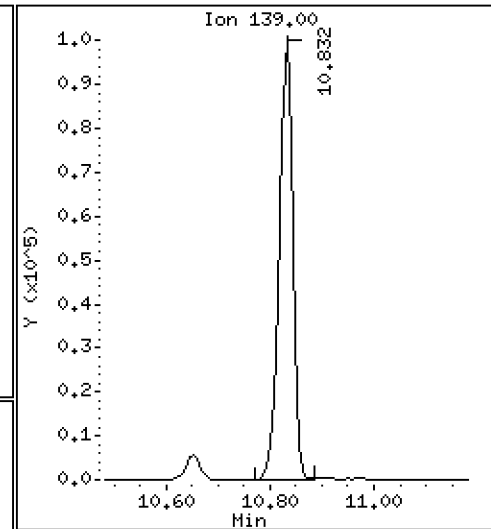
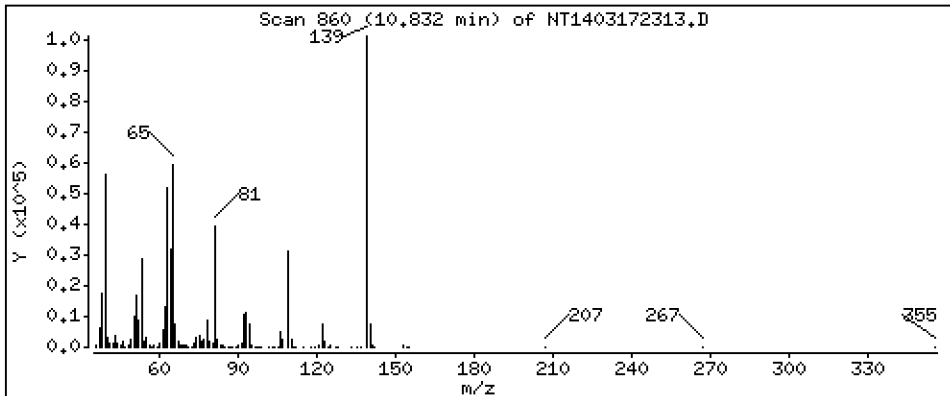
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,591 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

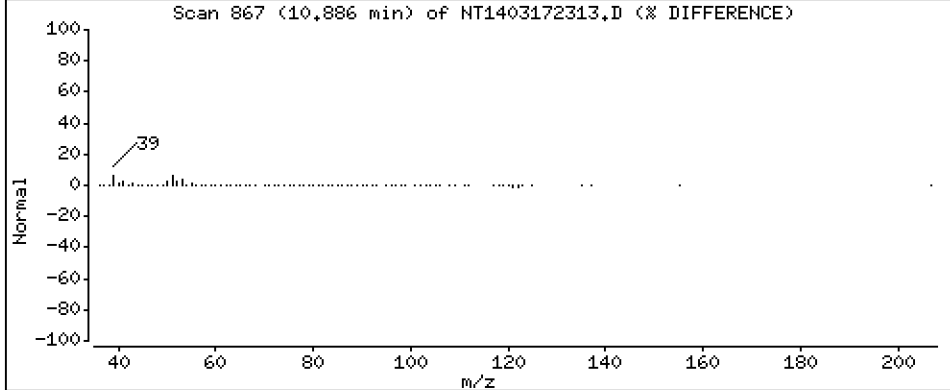
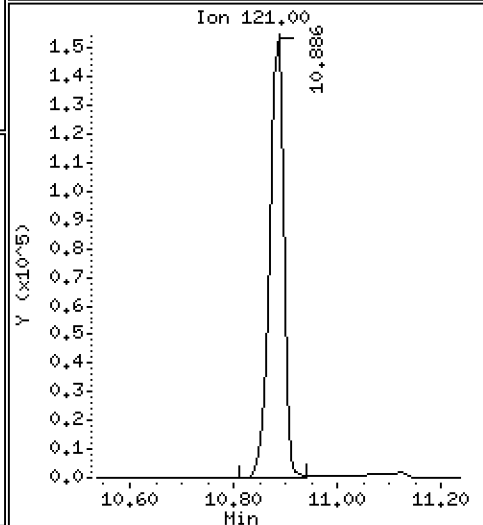
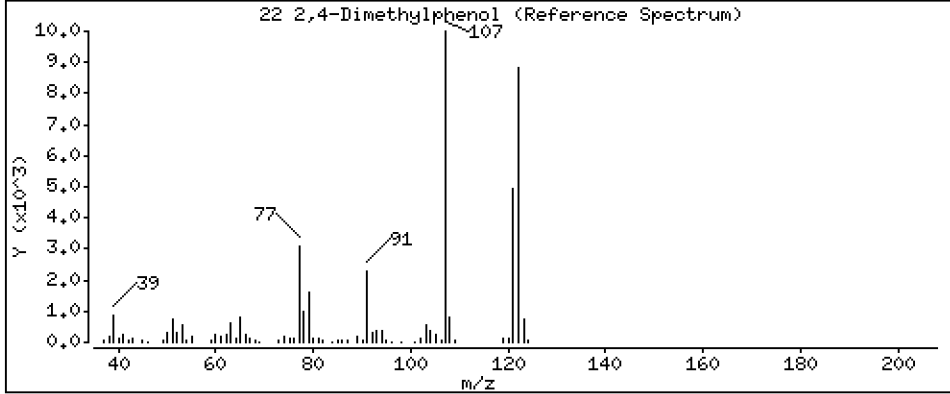
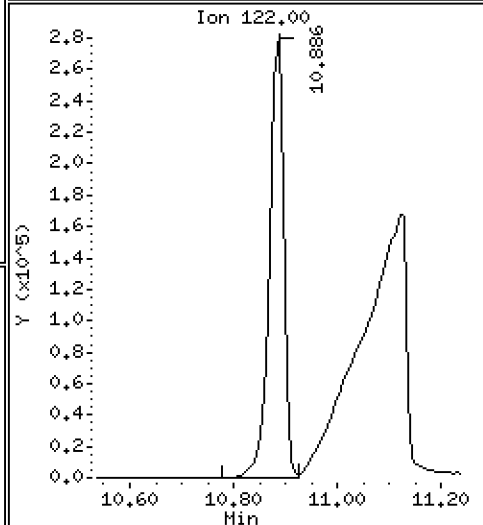
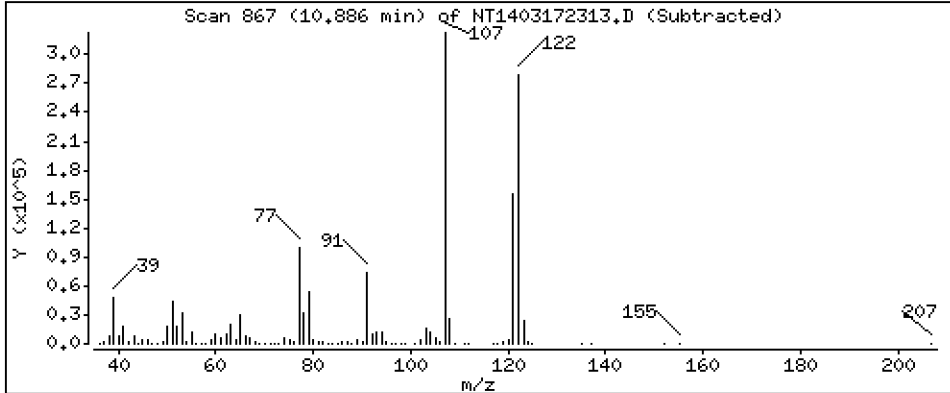
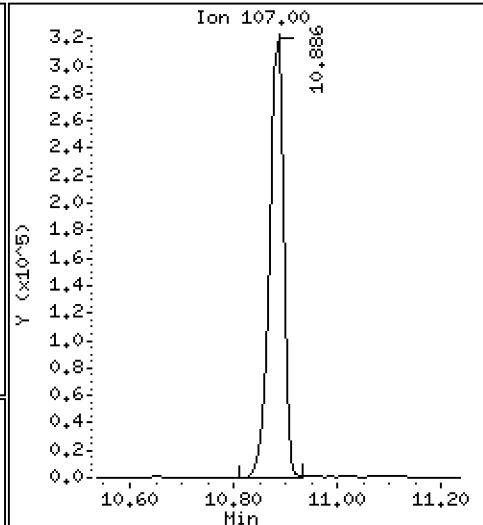
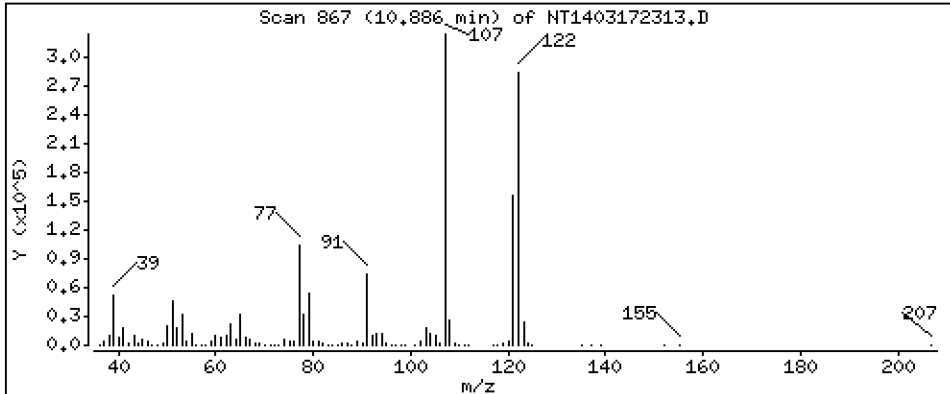
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 8,023 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

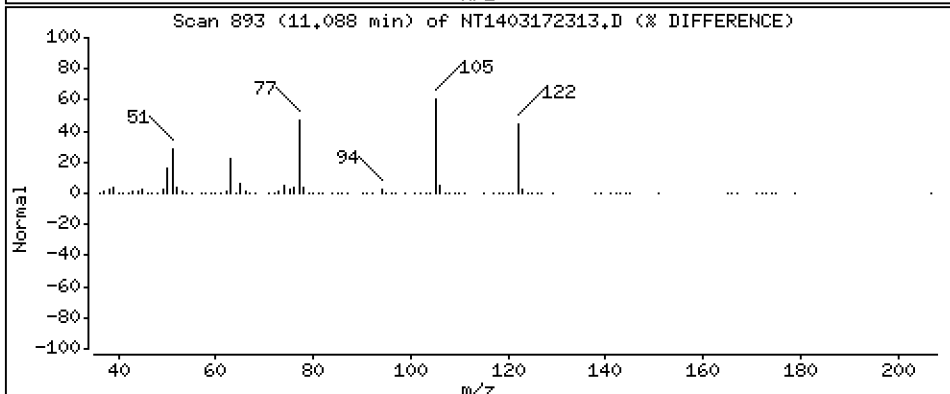
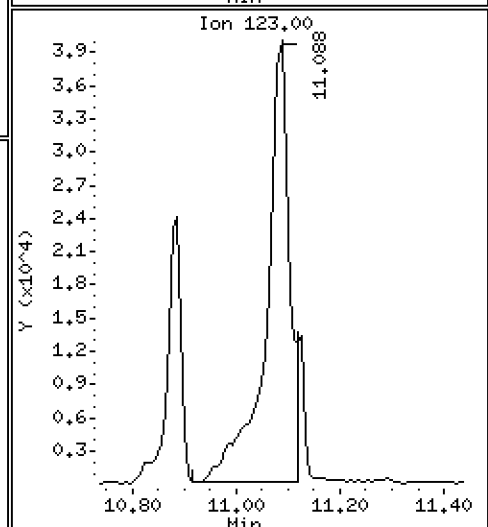
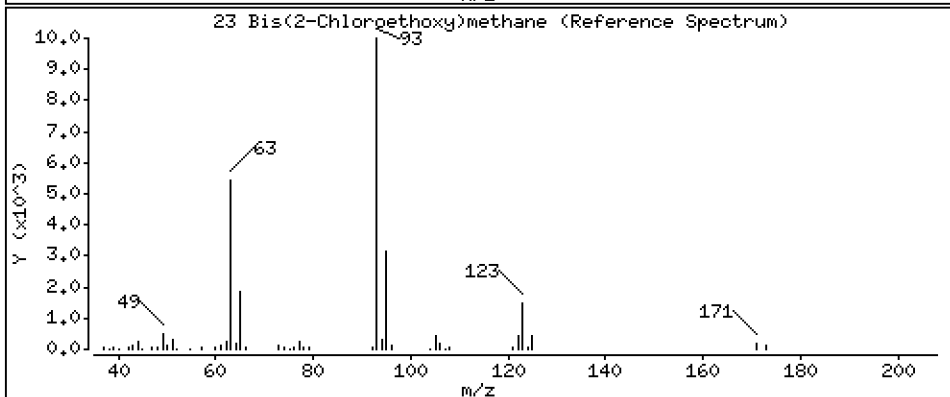
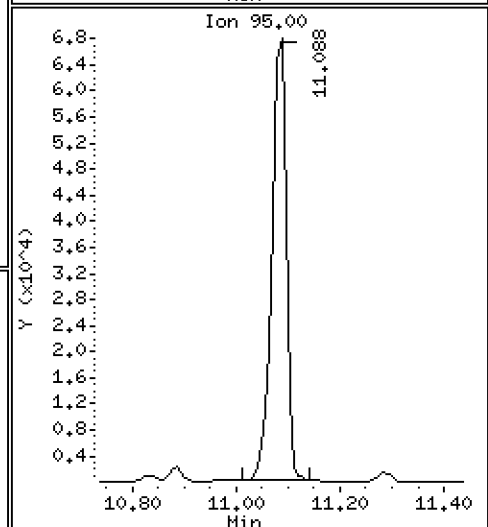
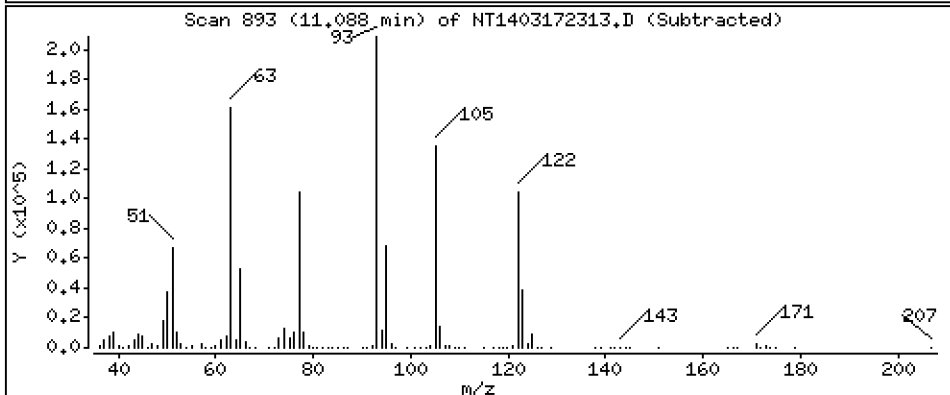
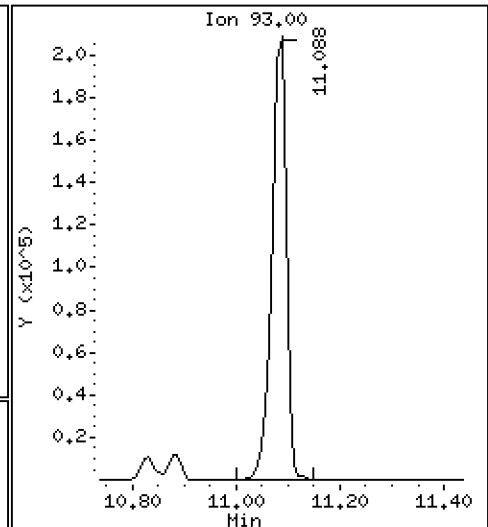
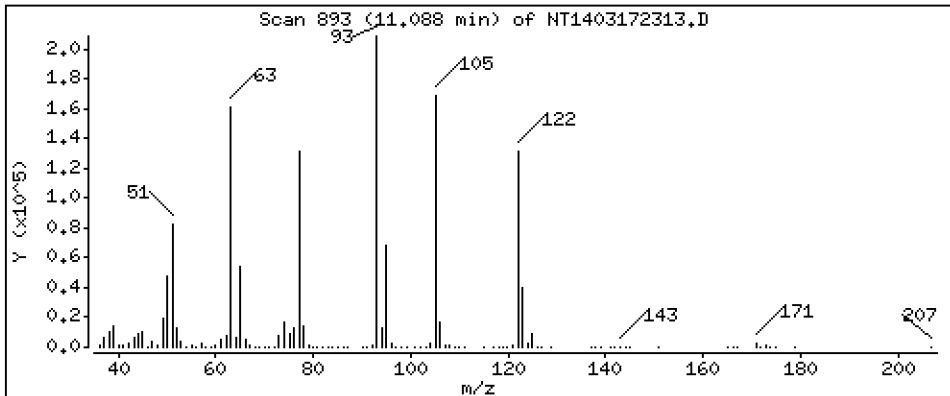
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 4,977 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

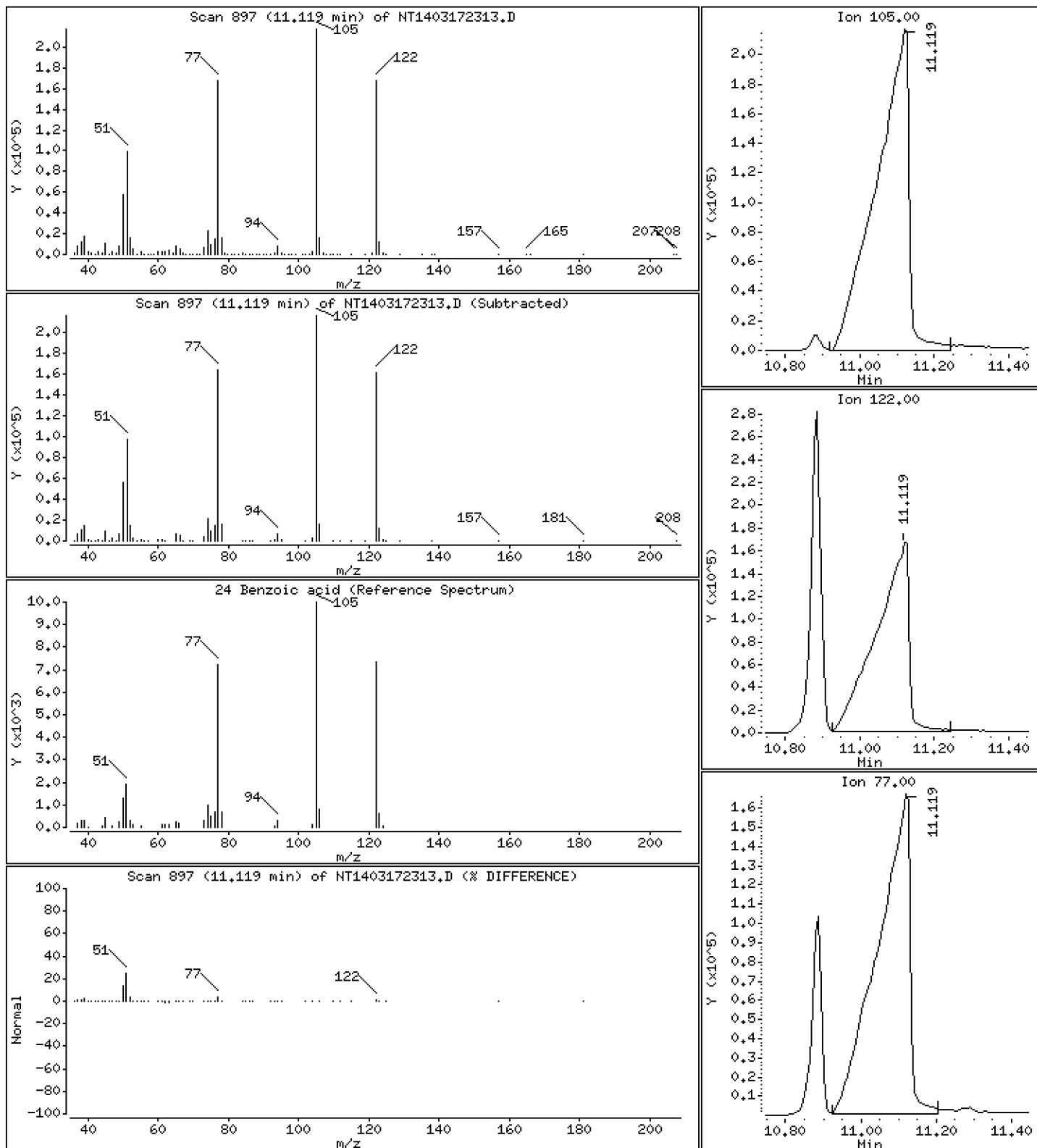
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 21.24 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

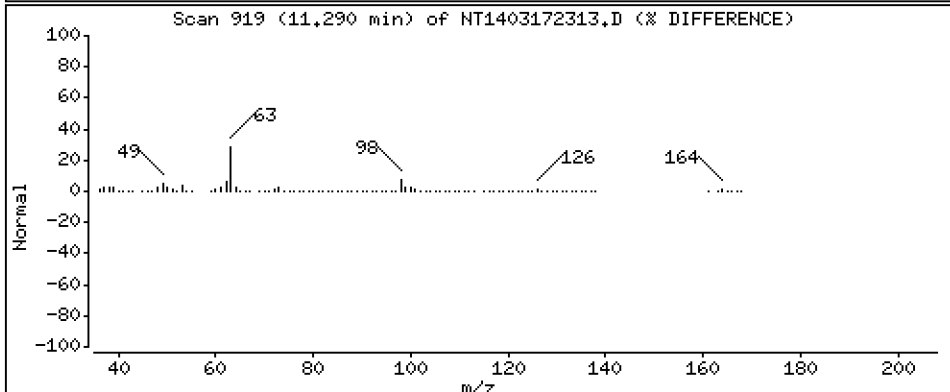
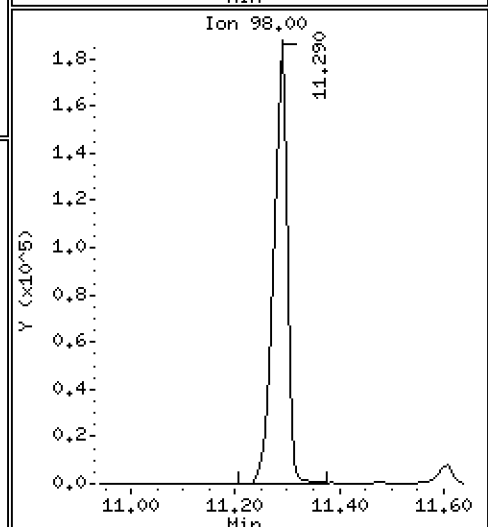
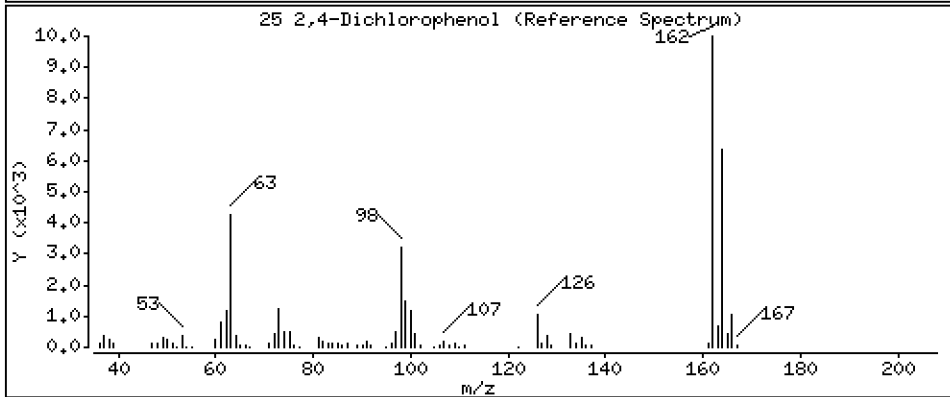
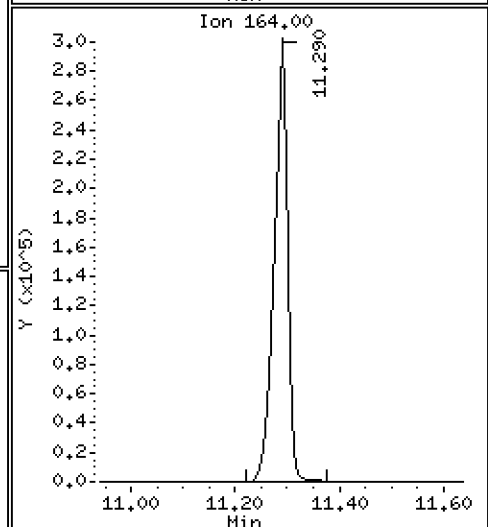
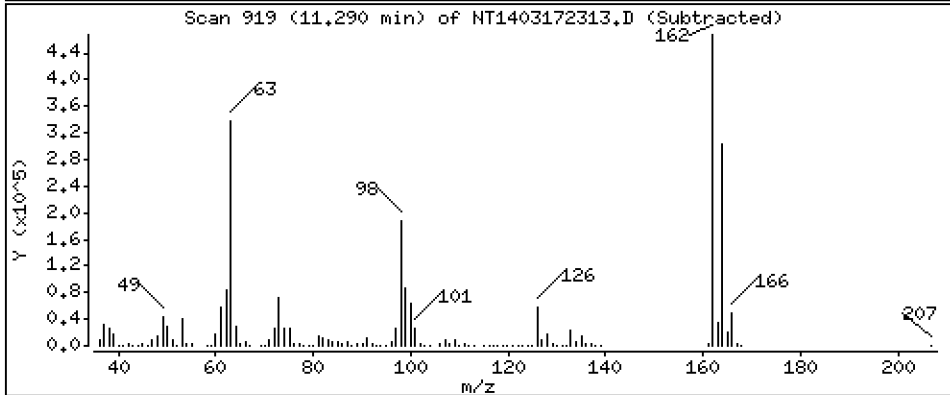
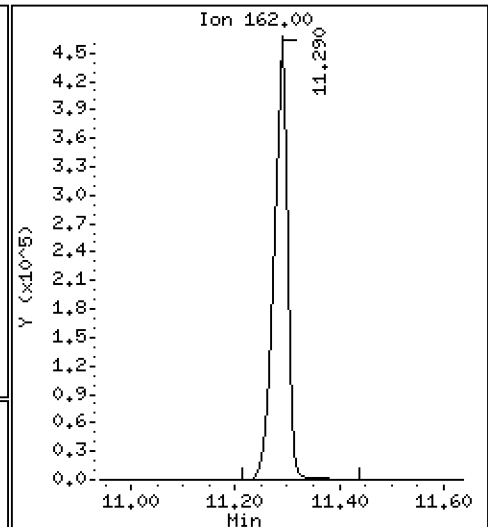
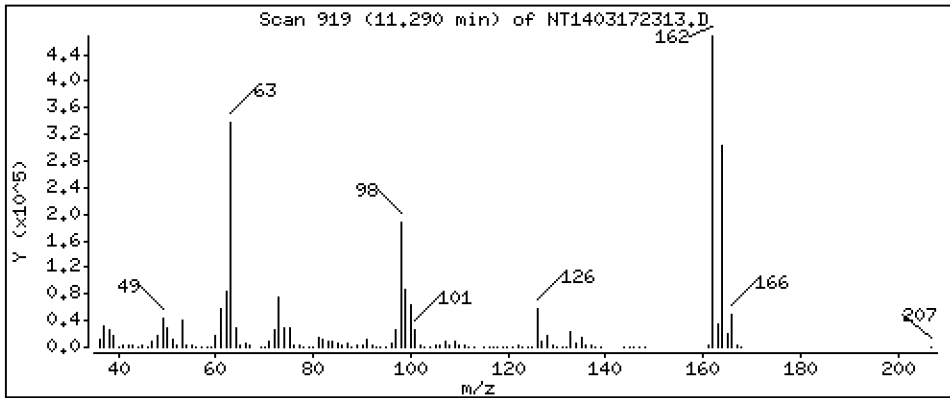
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 15,42 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

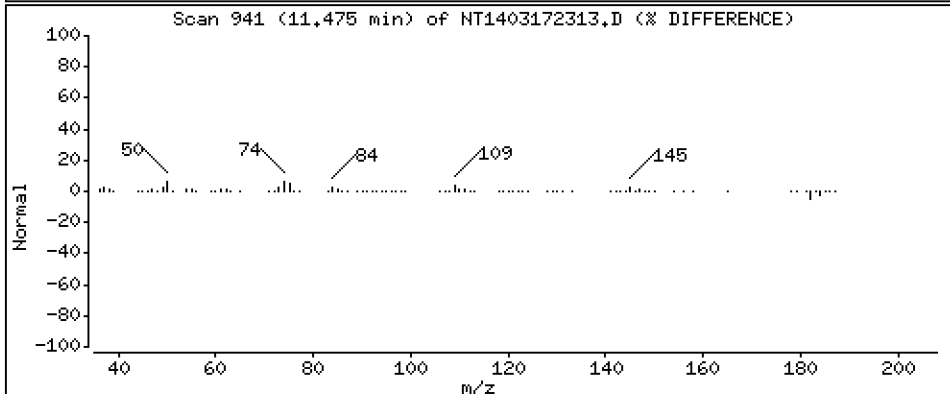
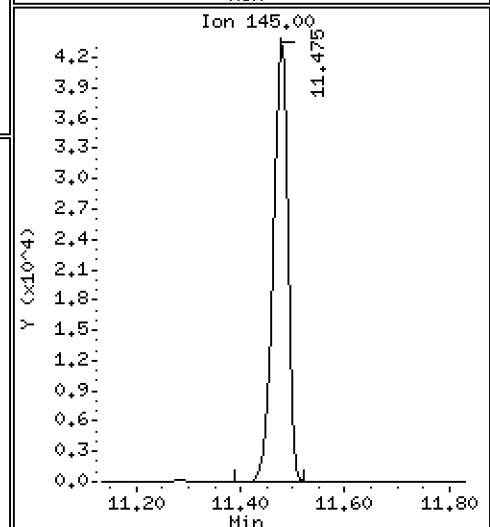
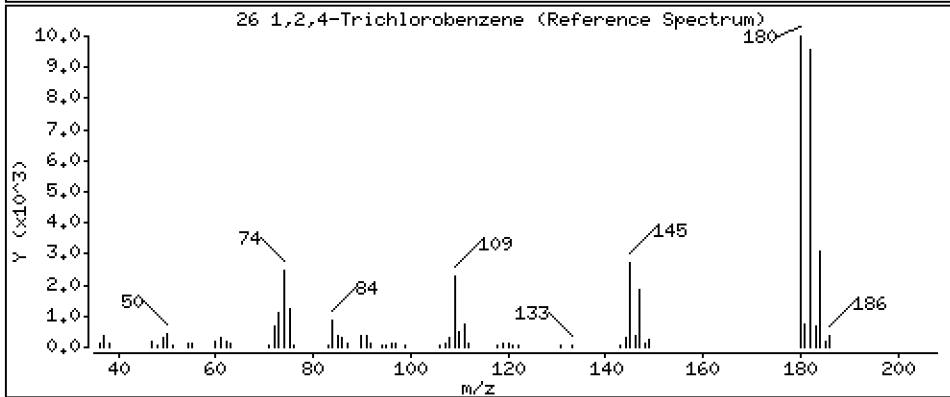
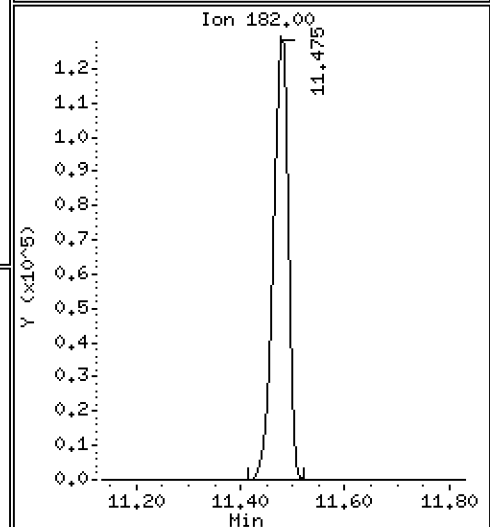
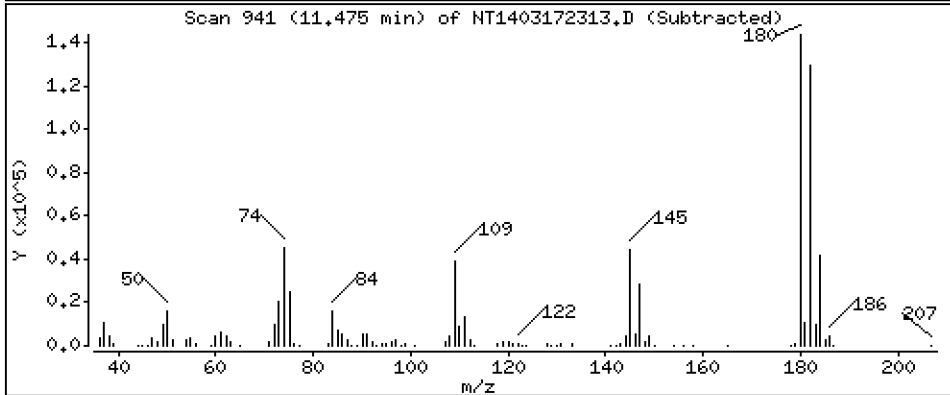
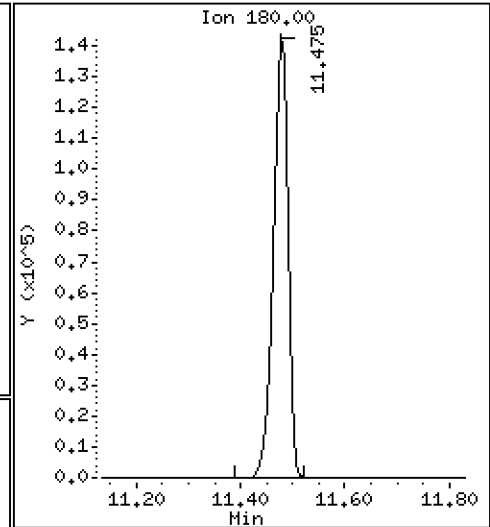
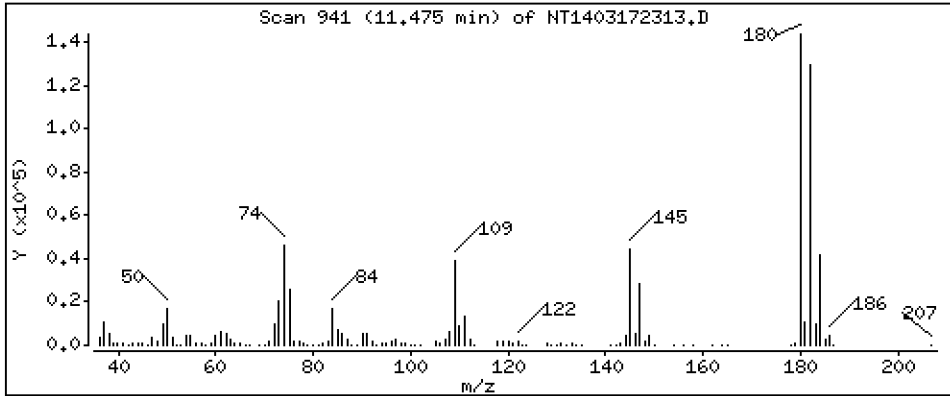
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,300 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

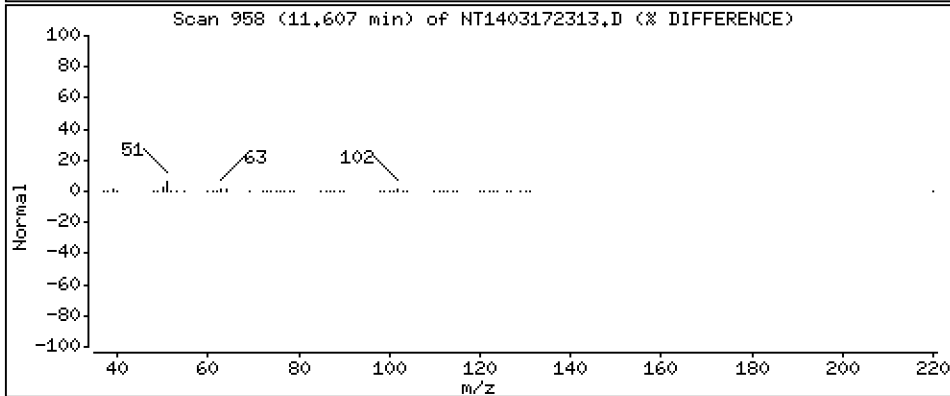
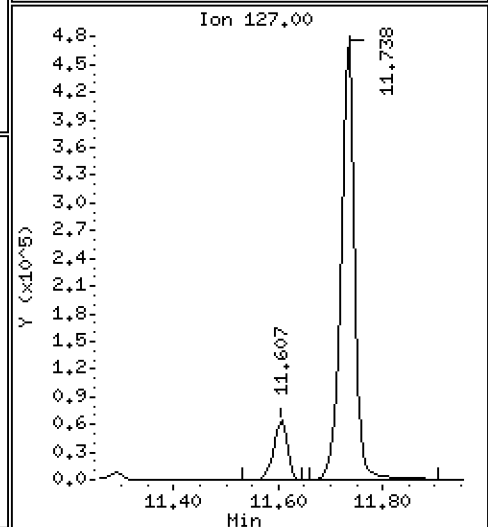
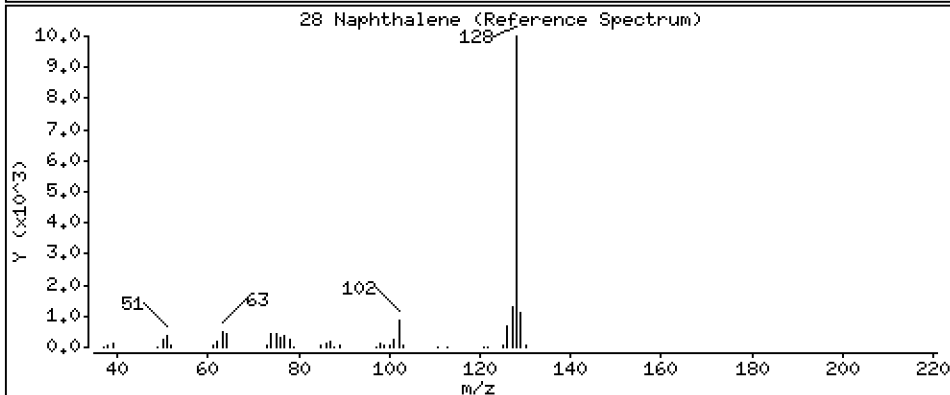
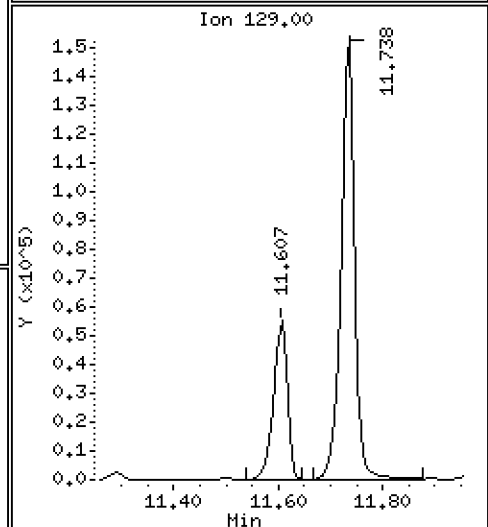
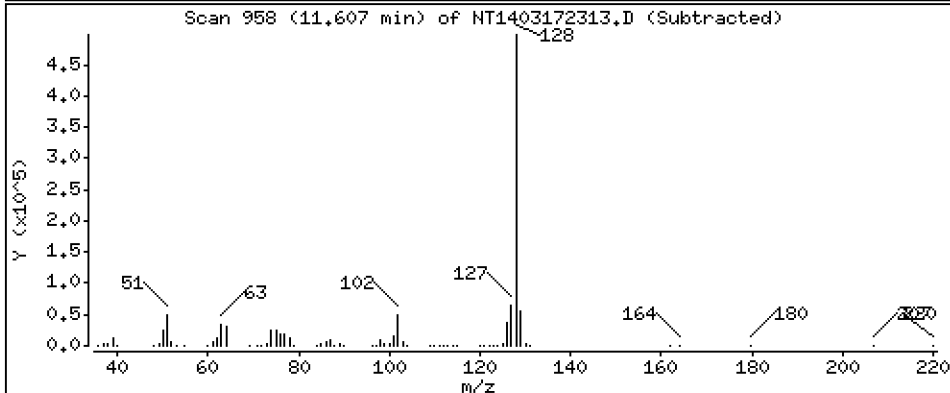
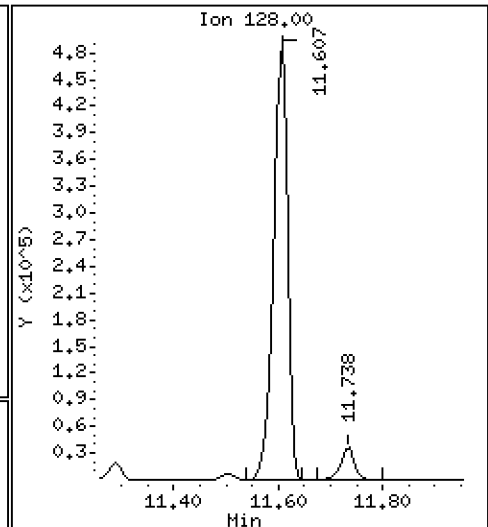
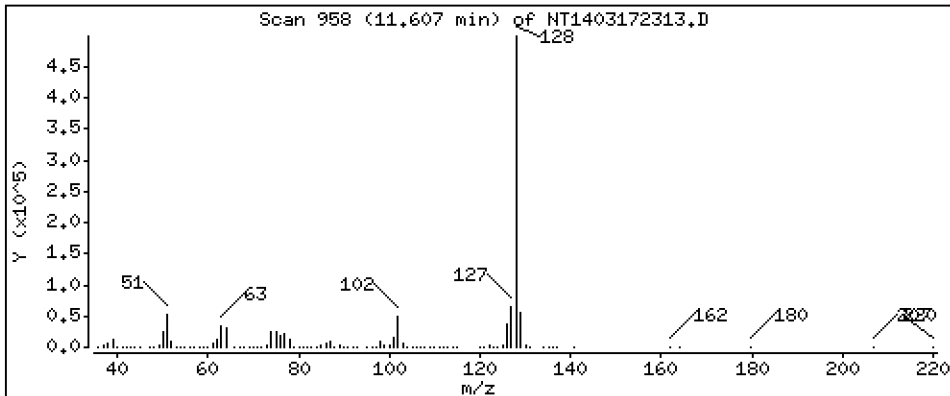
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,034 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

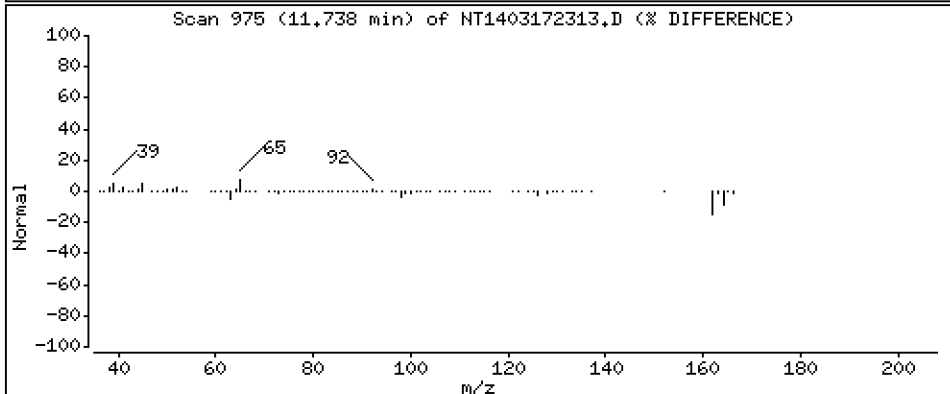
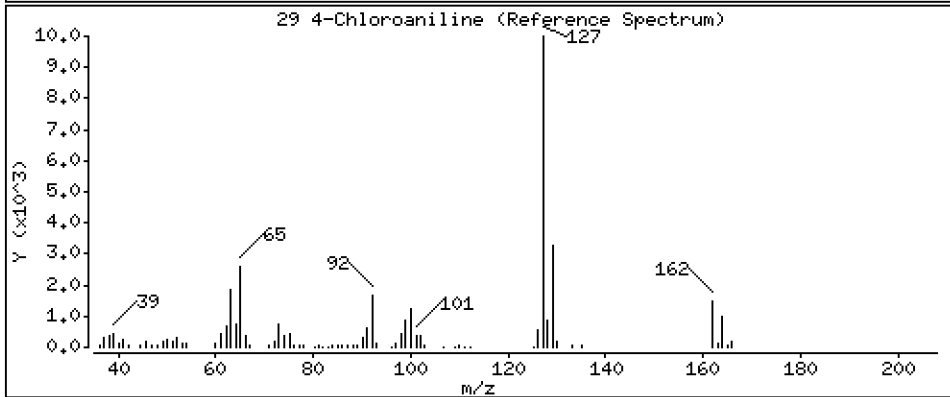
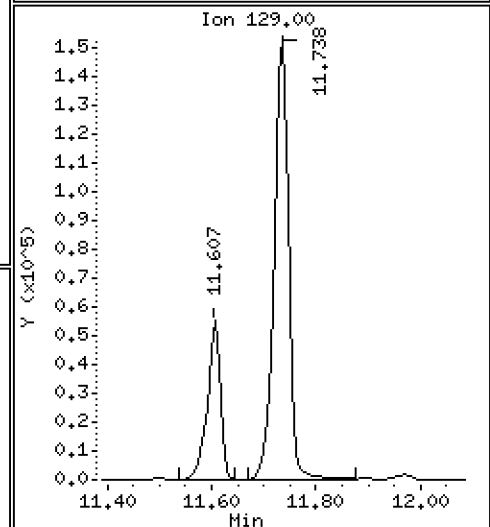
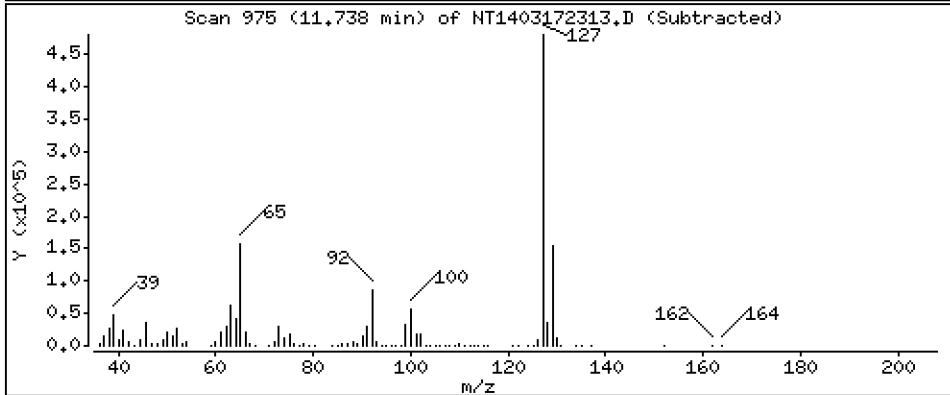
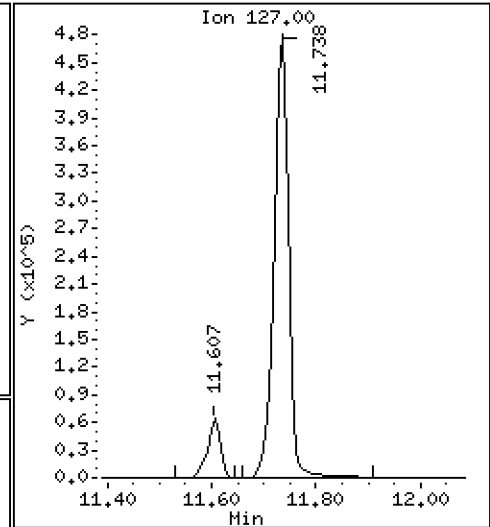
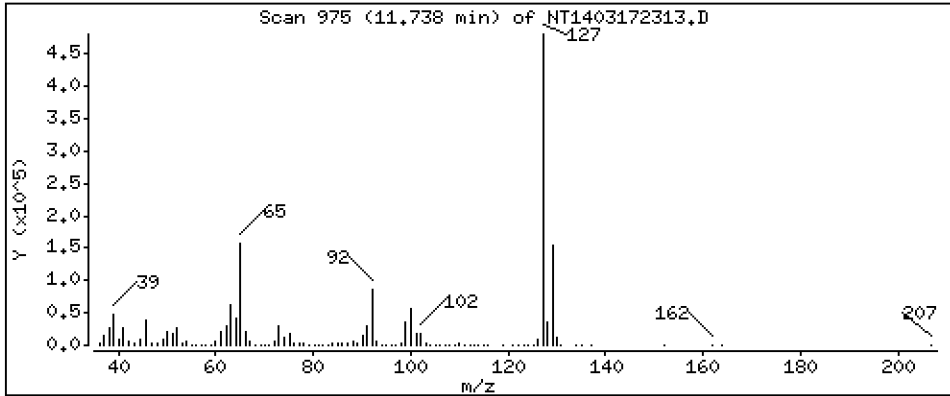
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 10,37 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

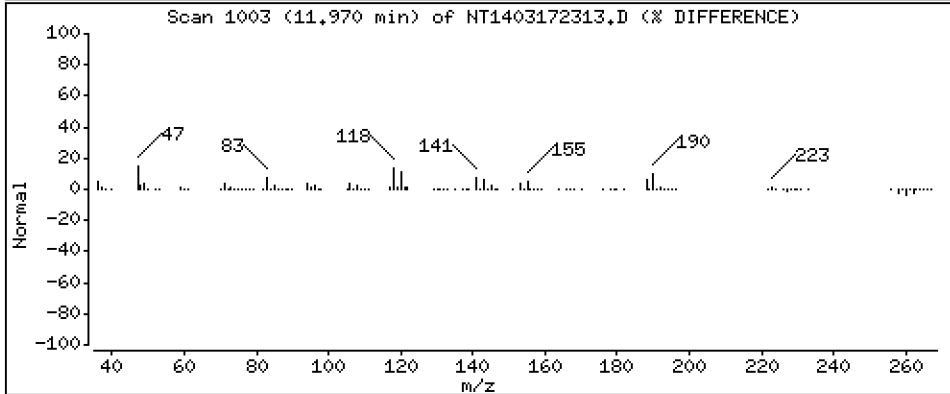
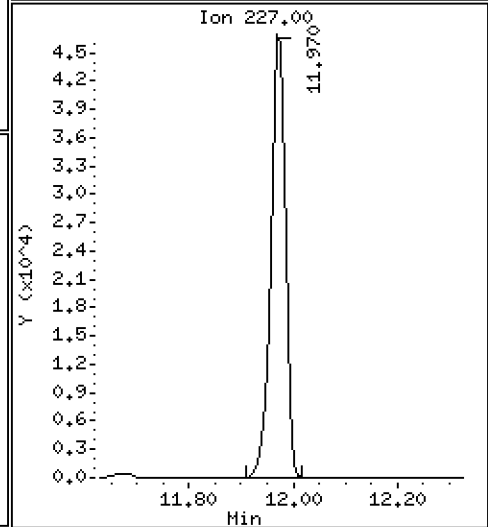
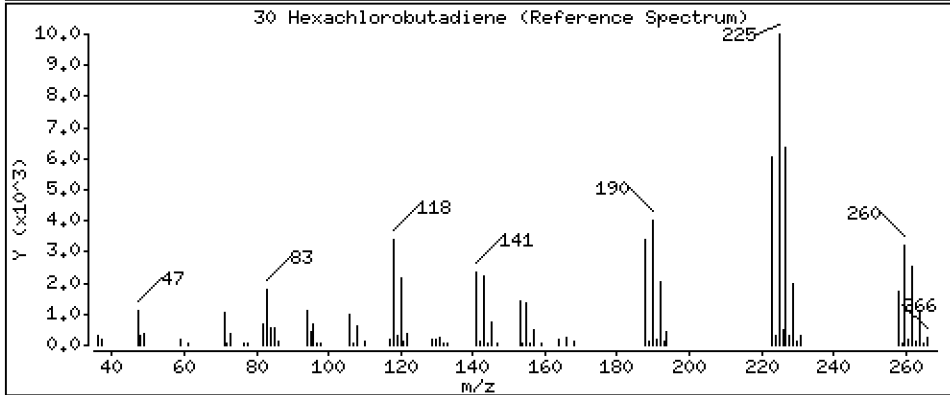
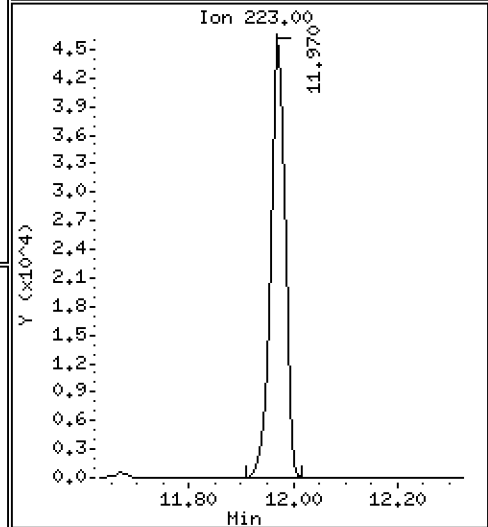
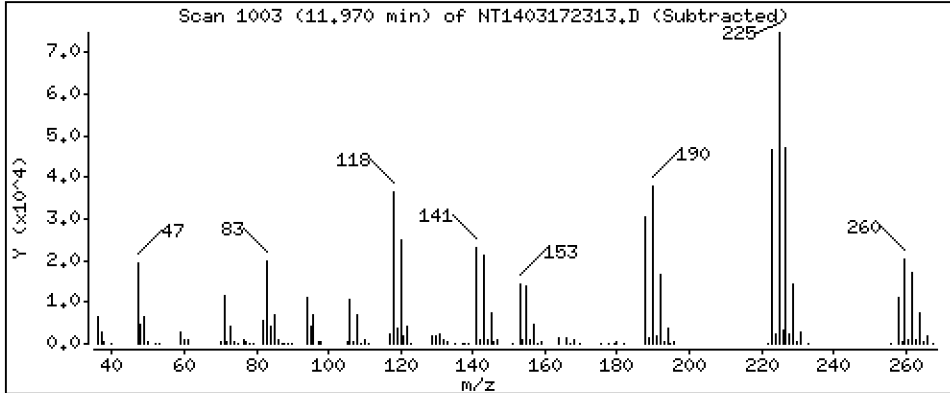
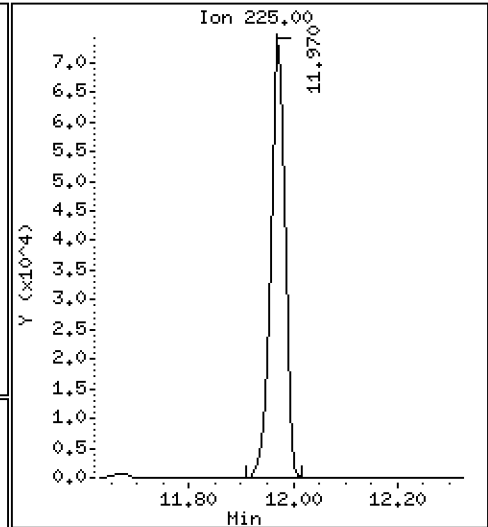
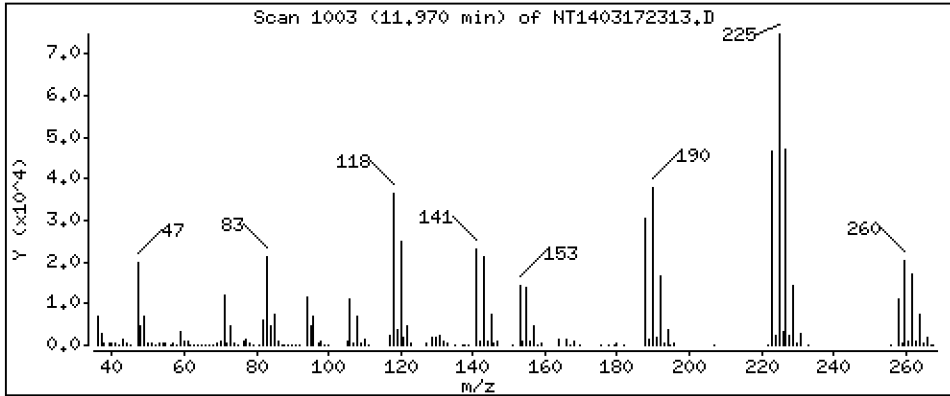
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,307 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

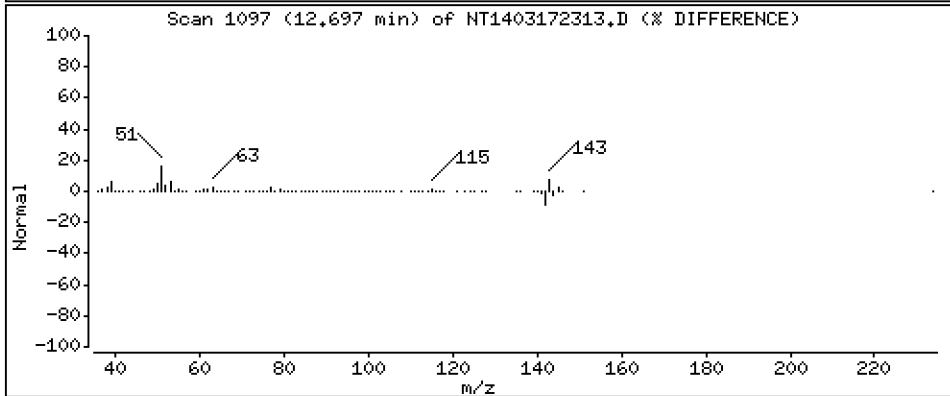
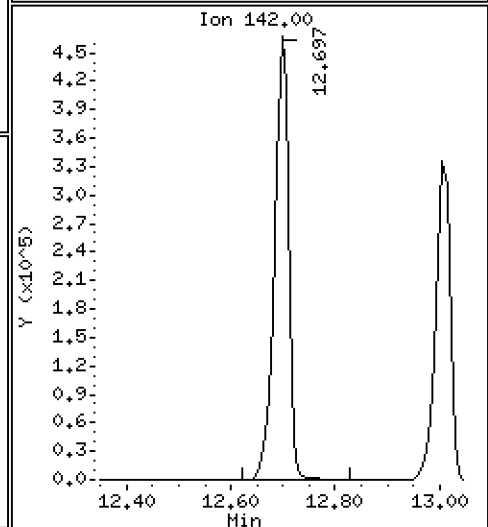
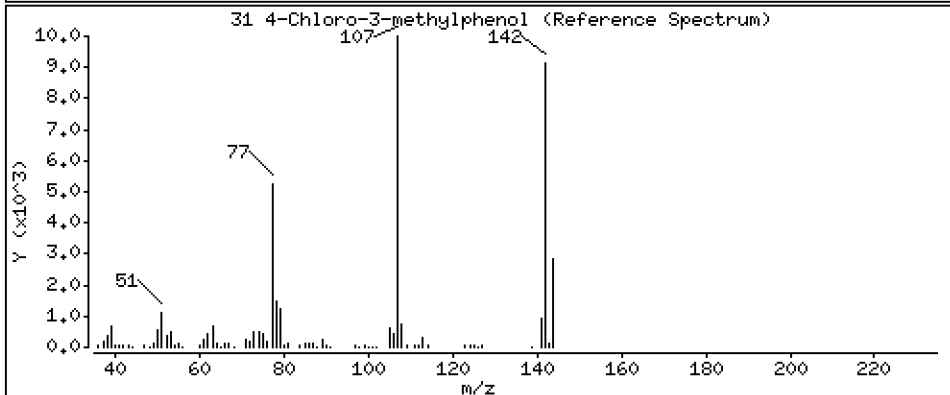
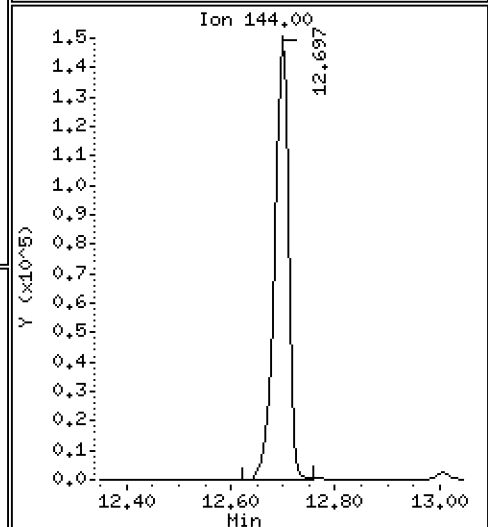
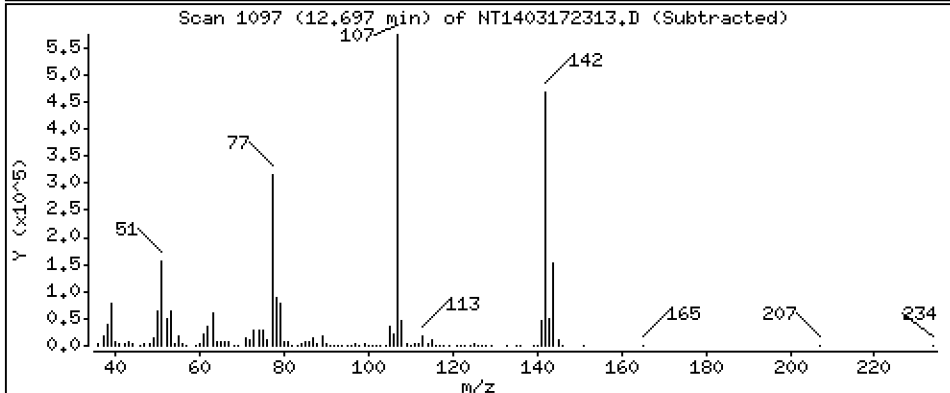
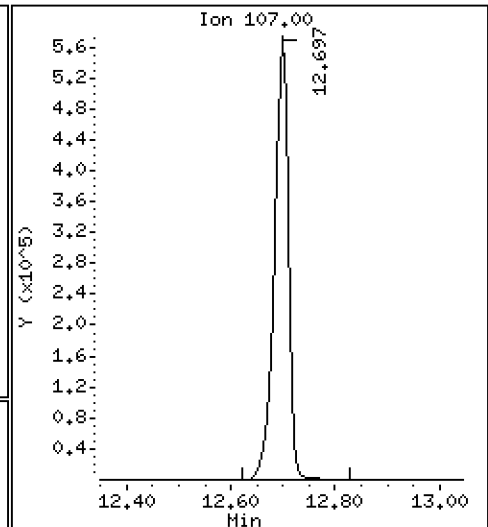
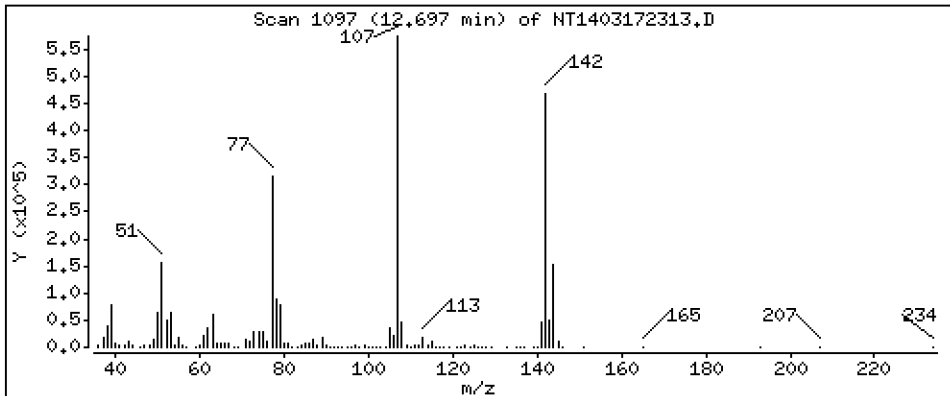
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 14,79 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

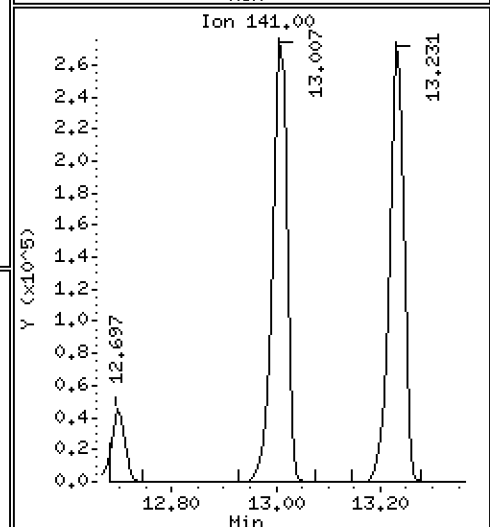
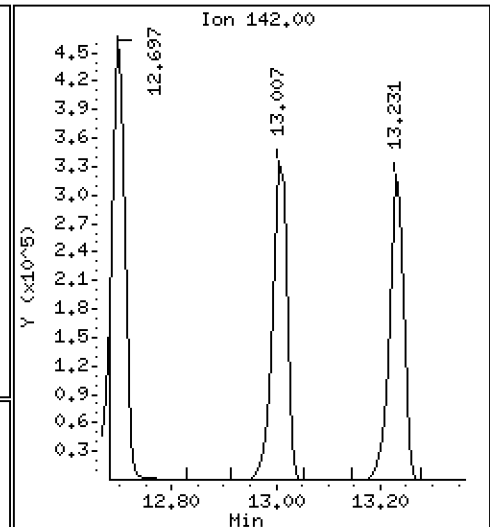
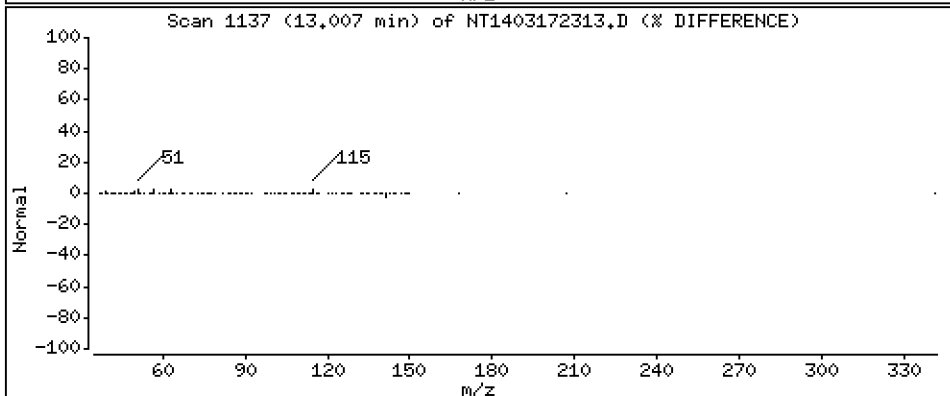
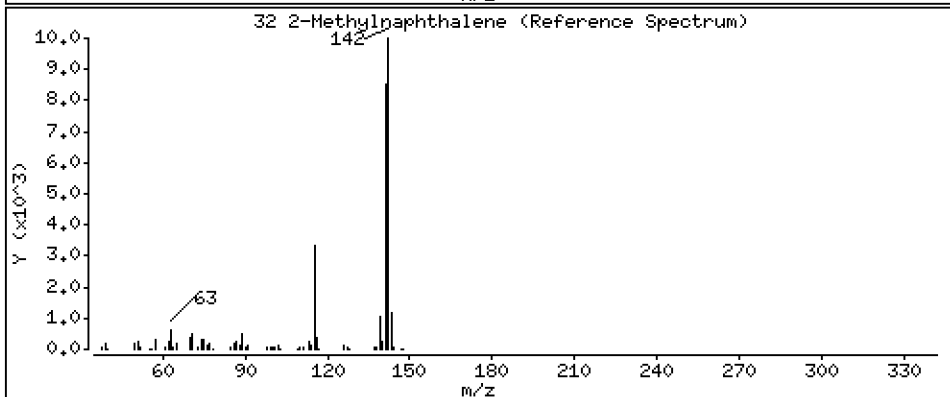
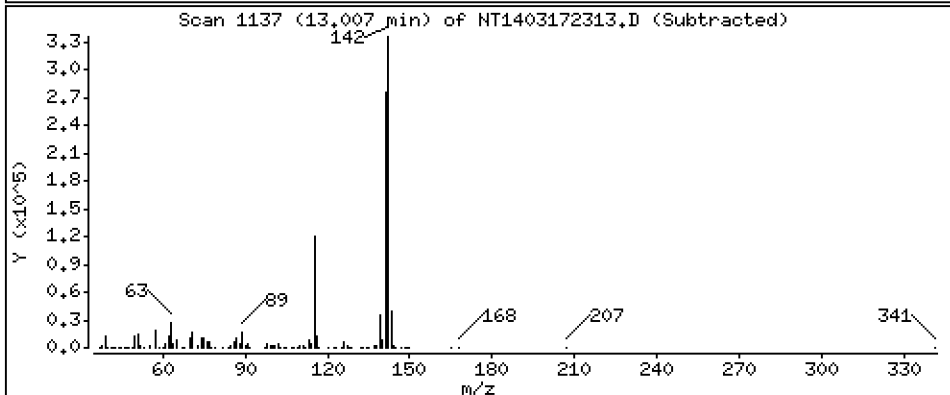
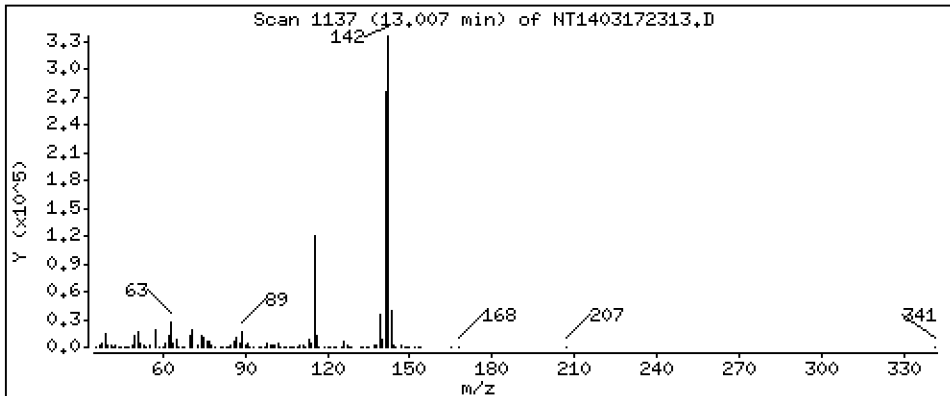
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,068 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

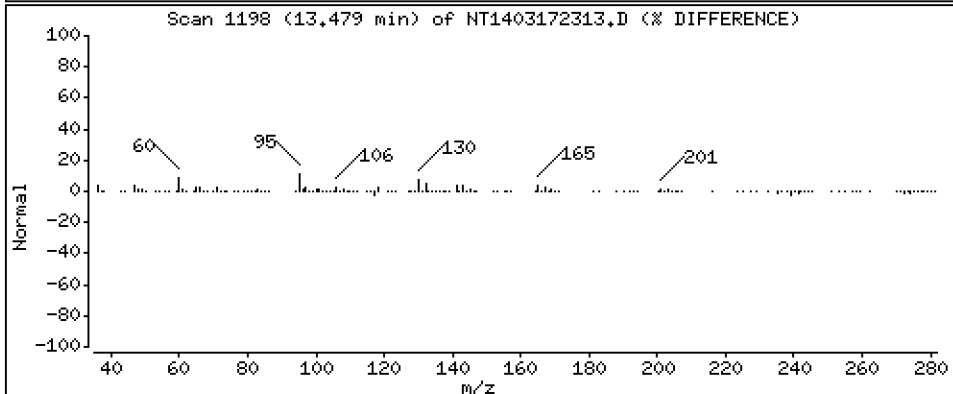
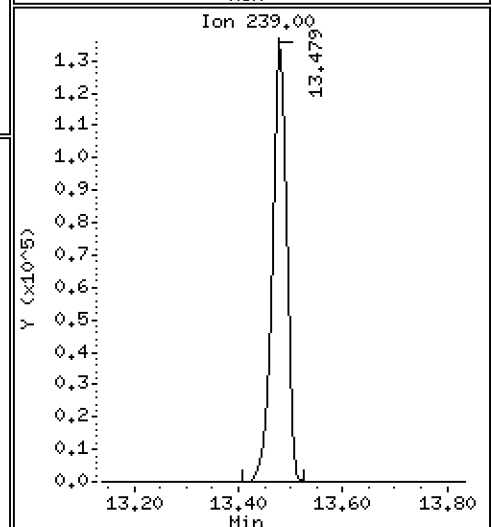
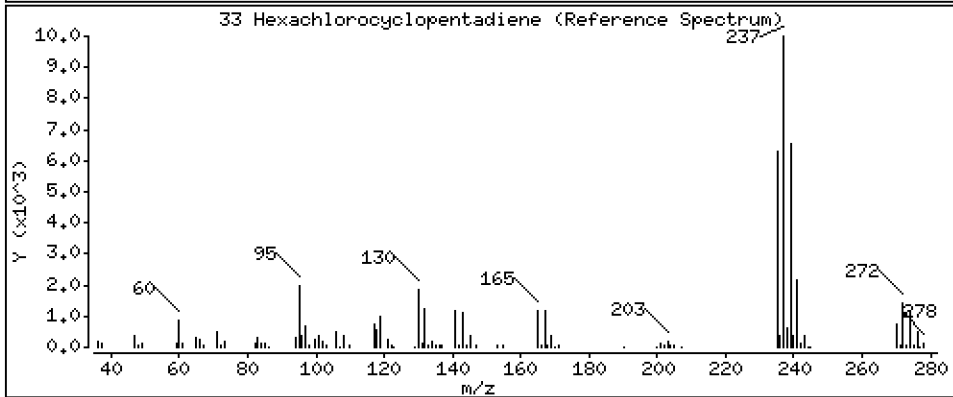
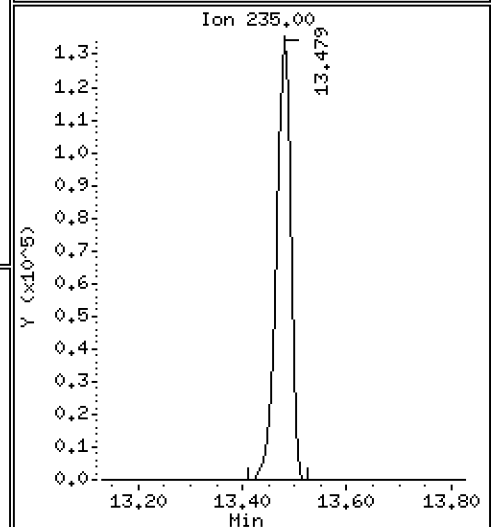
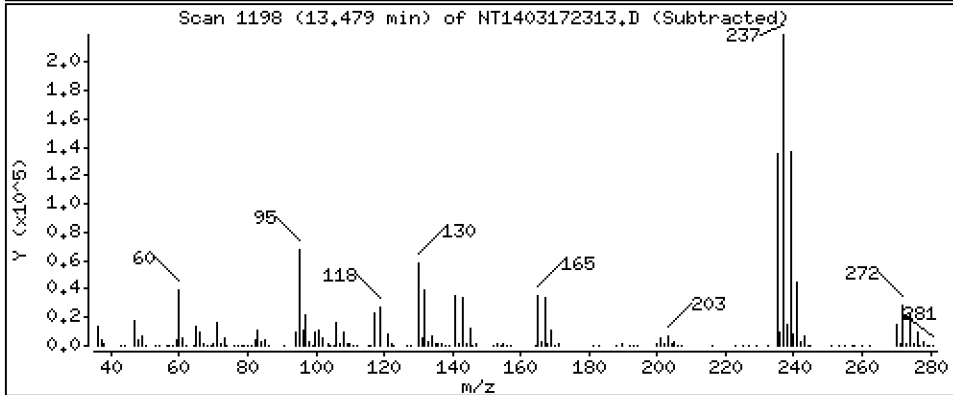
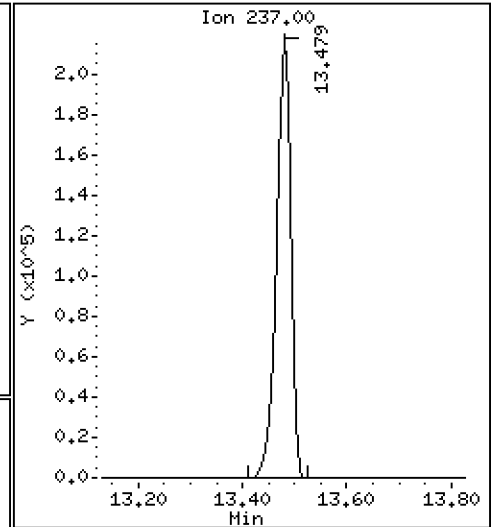
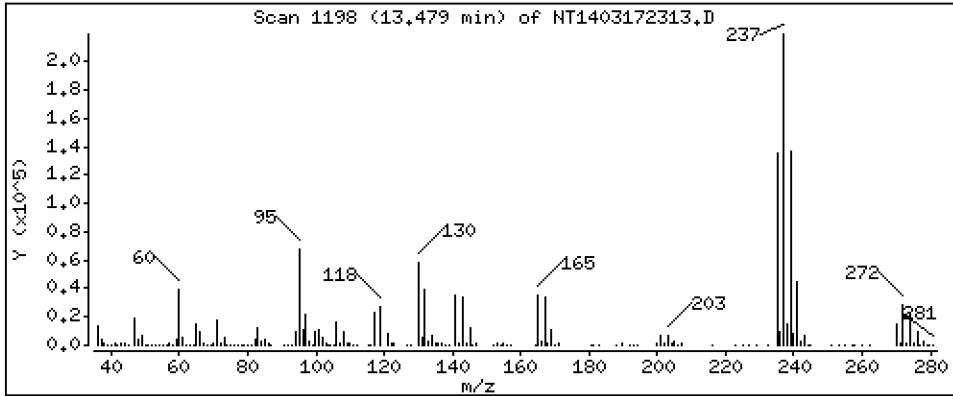
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 11,28 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

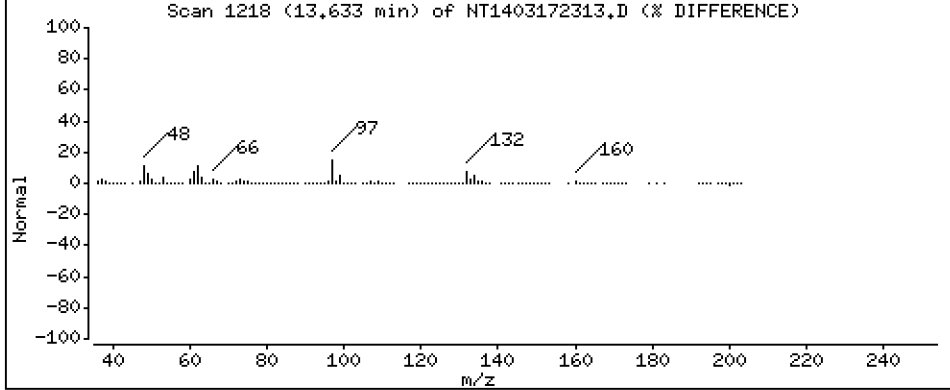
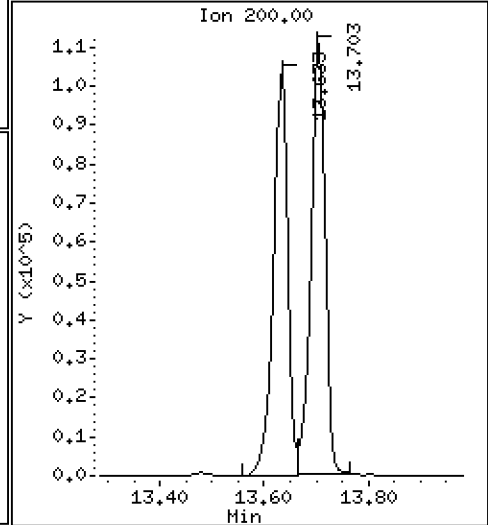
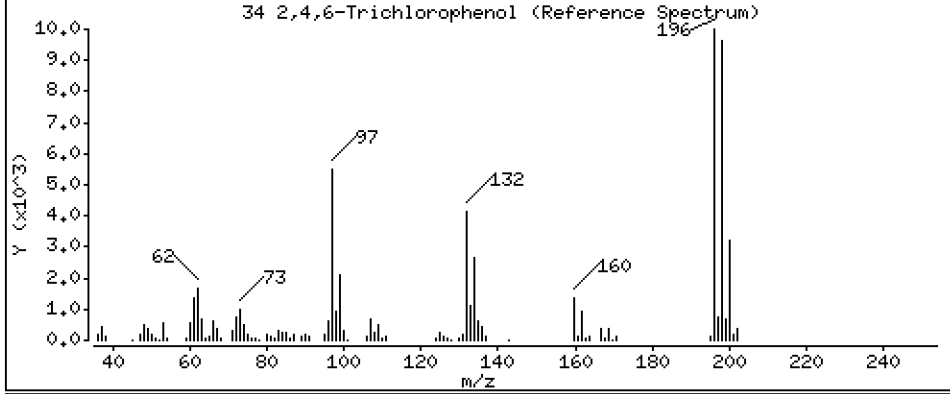
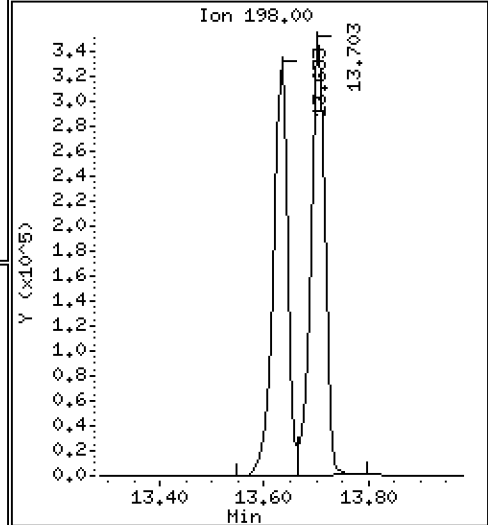
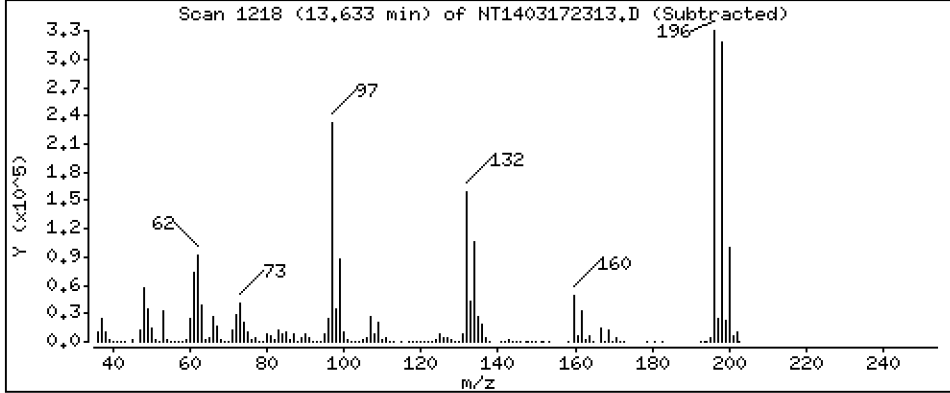
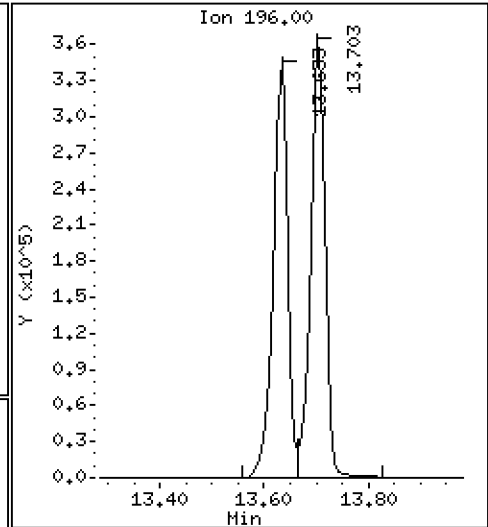
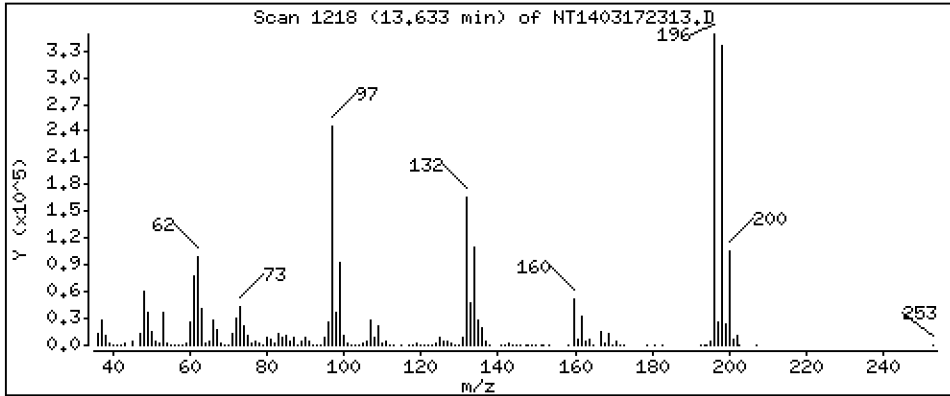
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 14,85 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

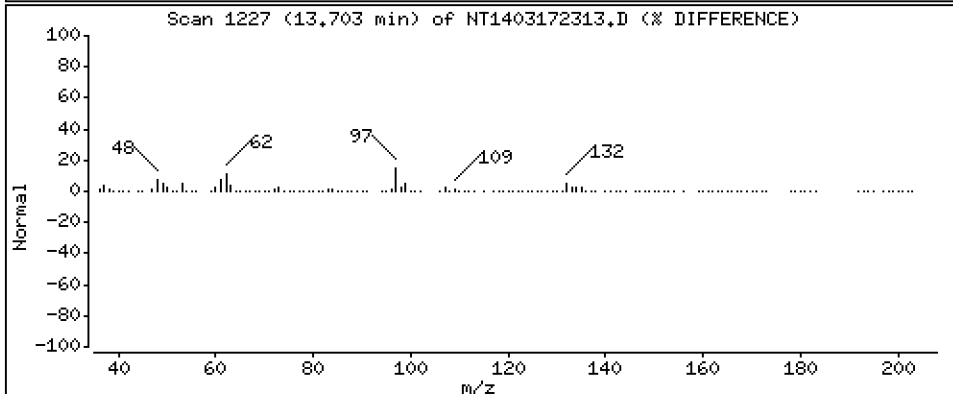
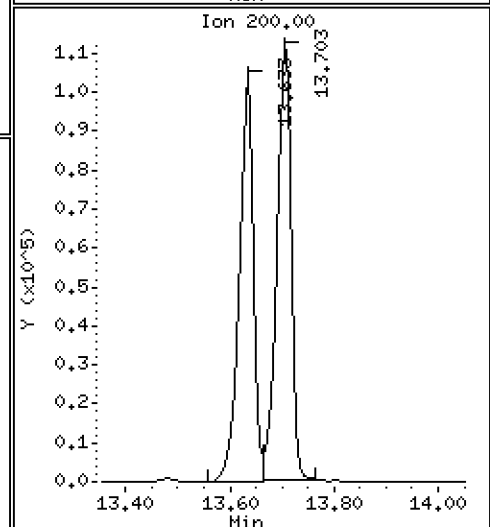
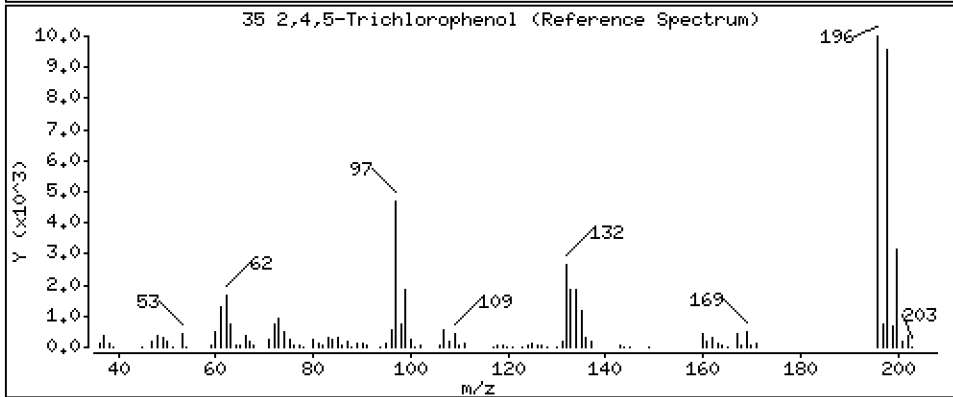
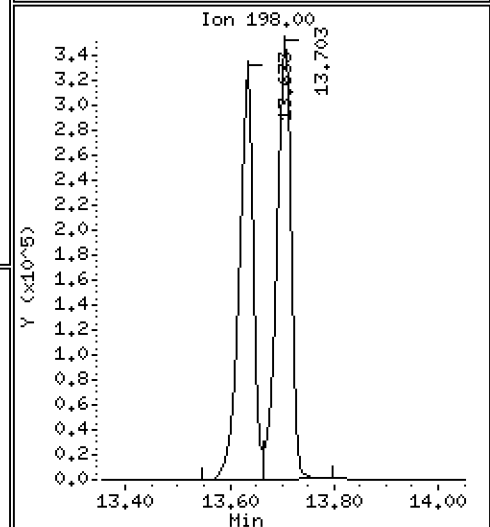
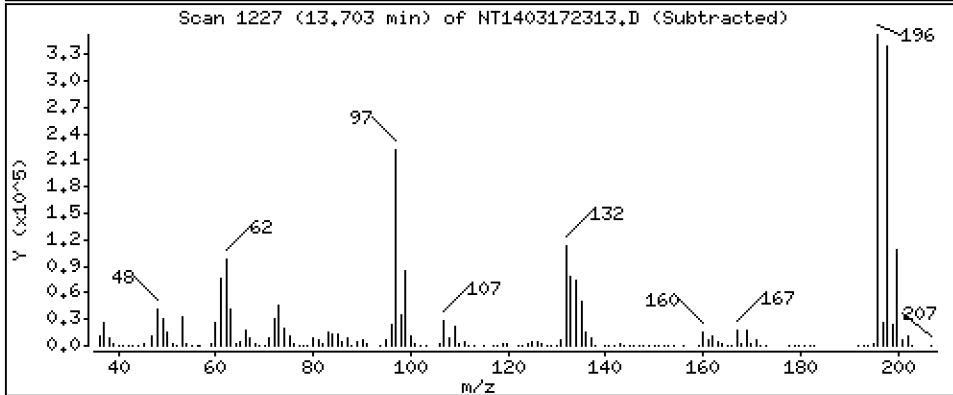
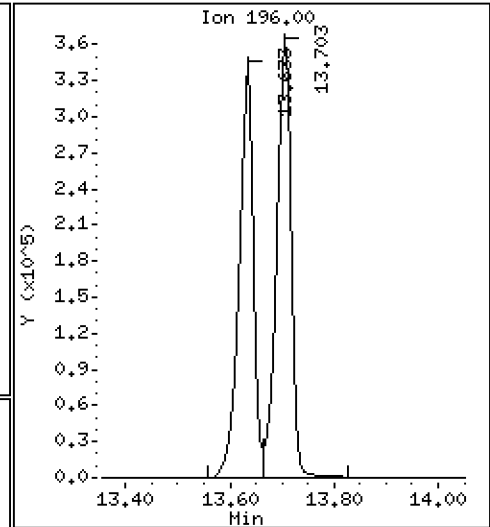
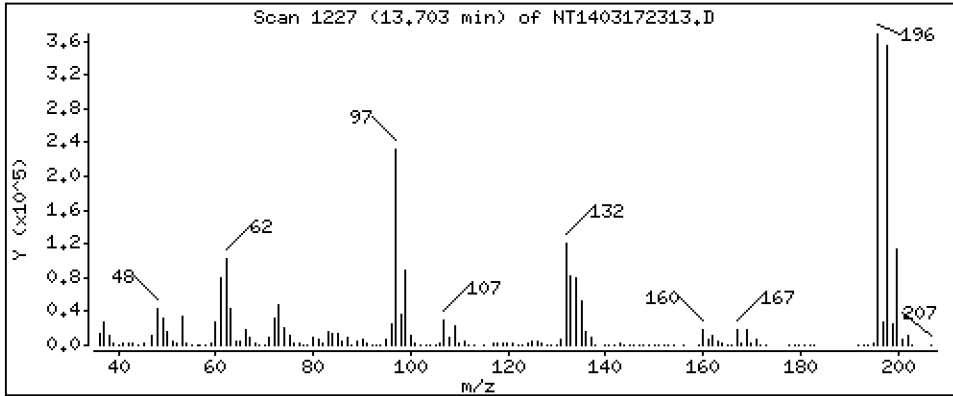
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 15,19 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

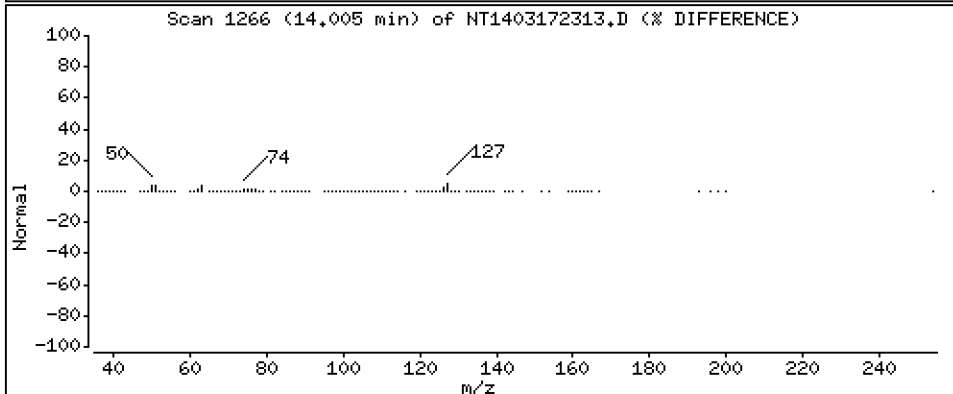
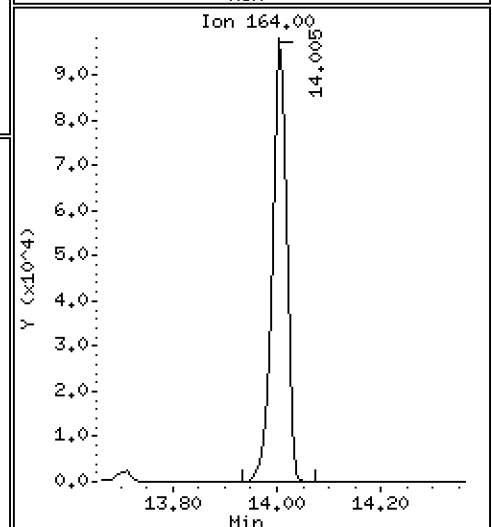
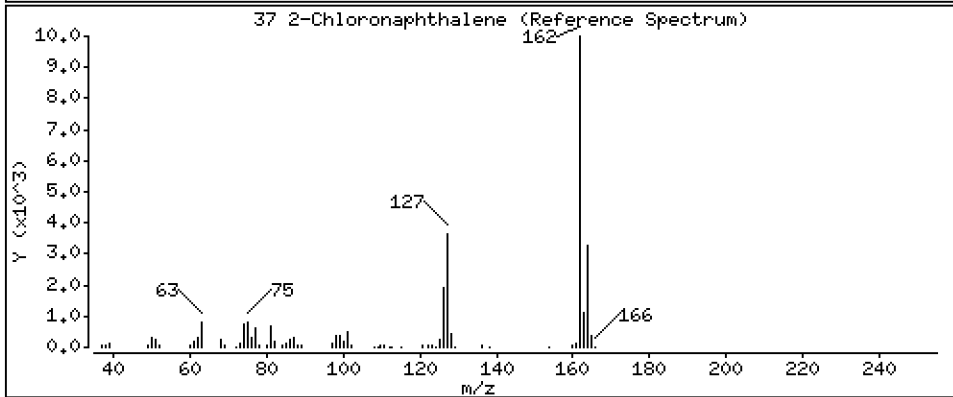
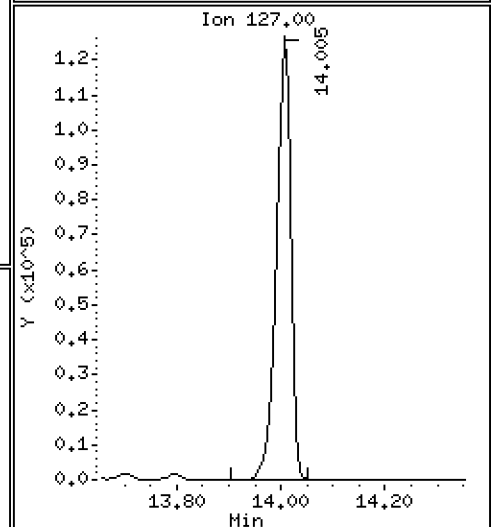
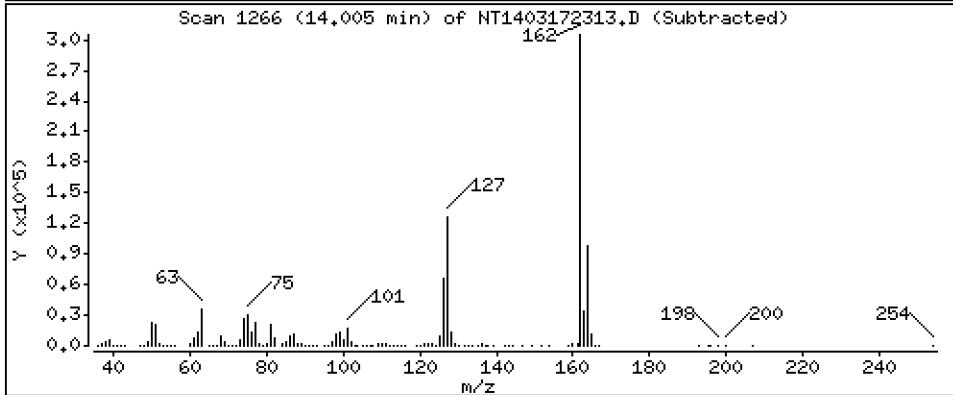
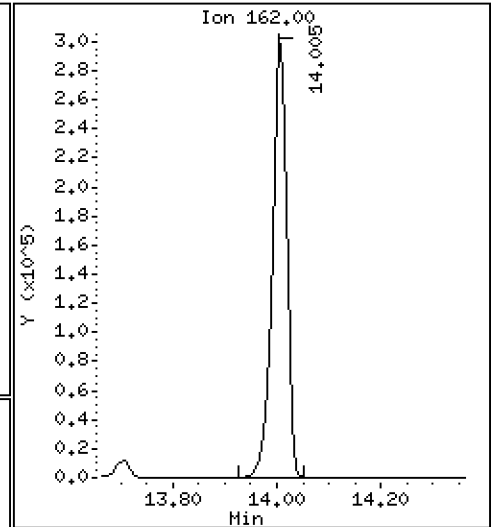
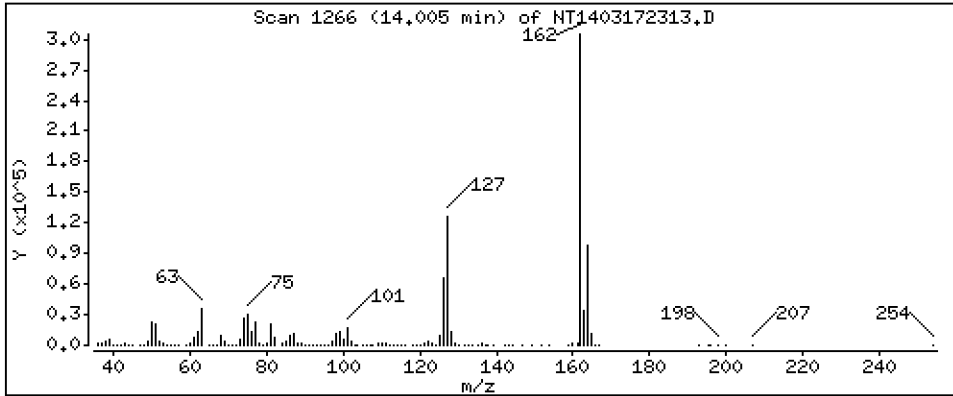
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 4,300 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

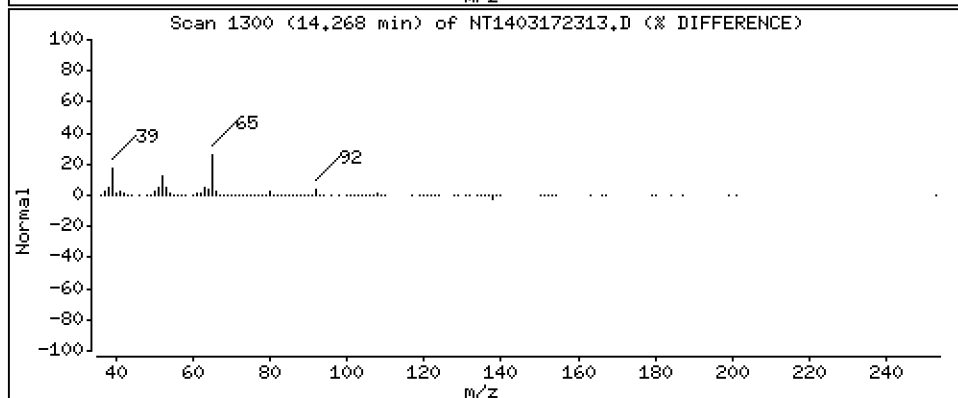
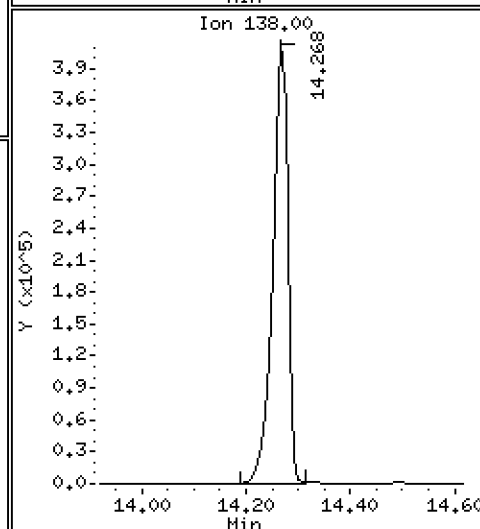
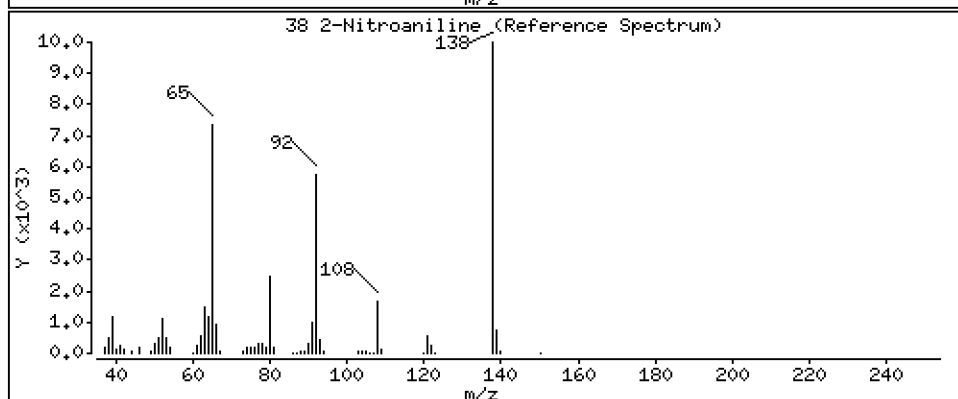
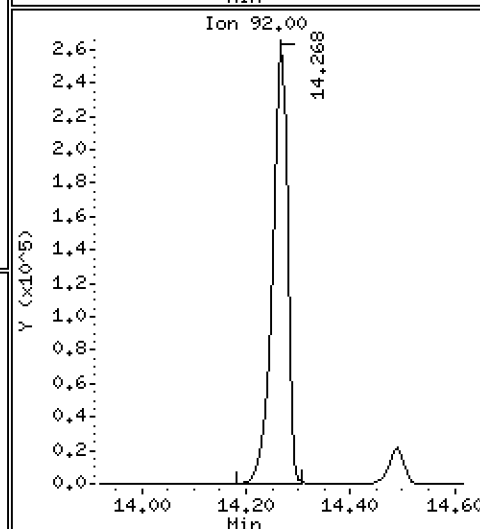
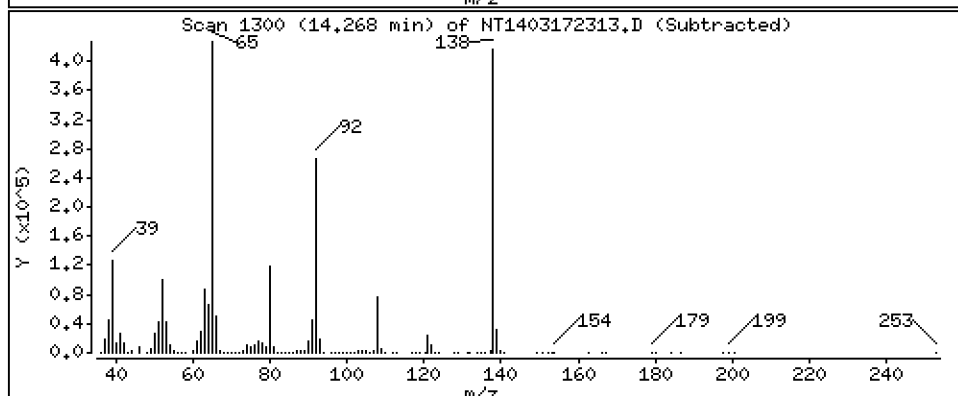
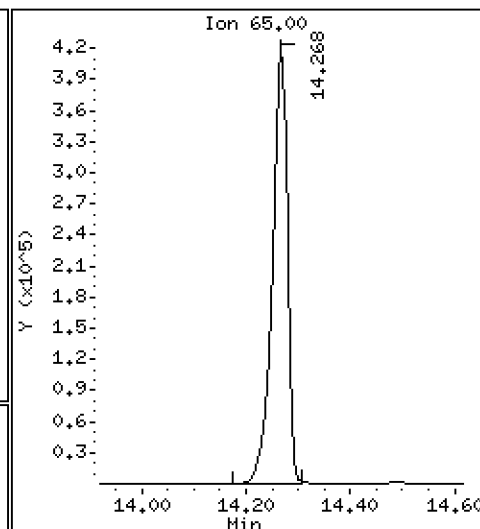
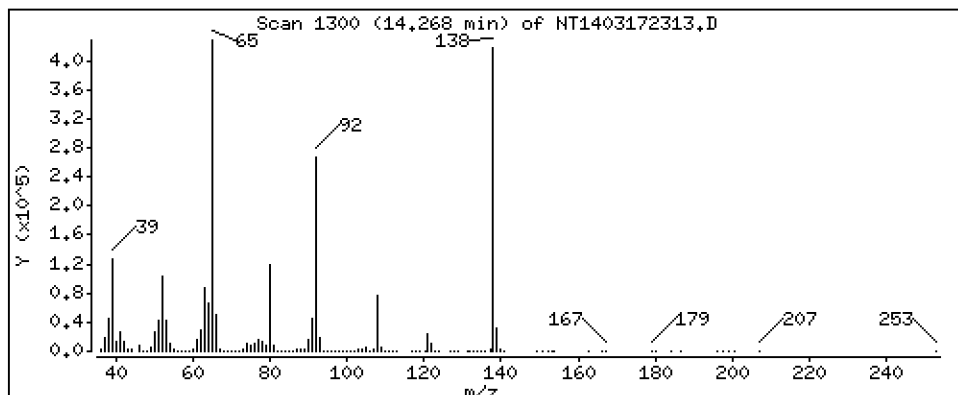
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 15,87 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

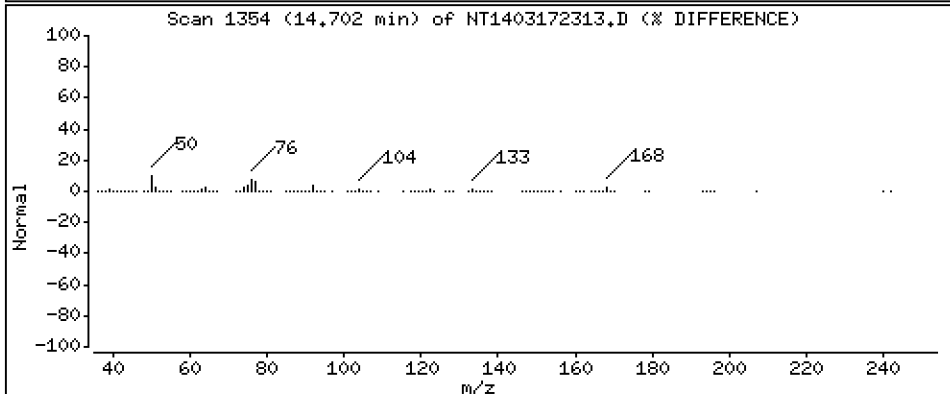
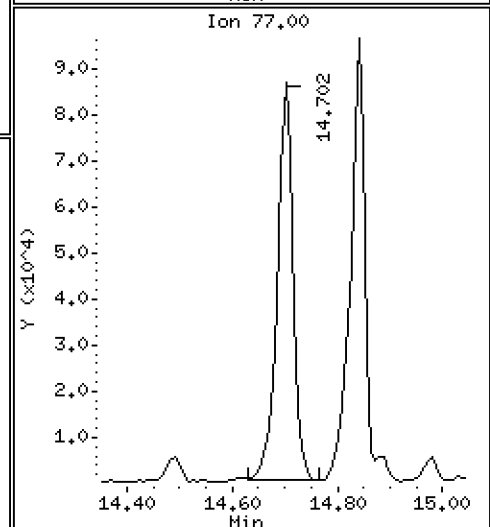
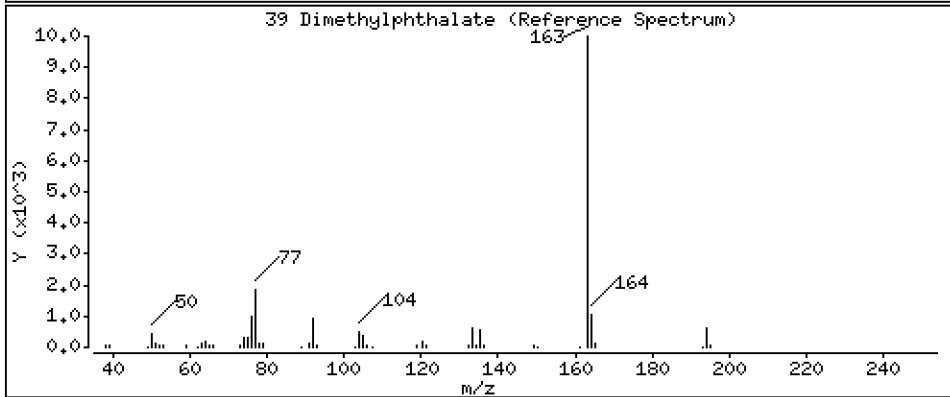
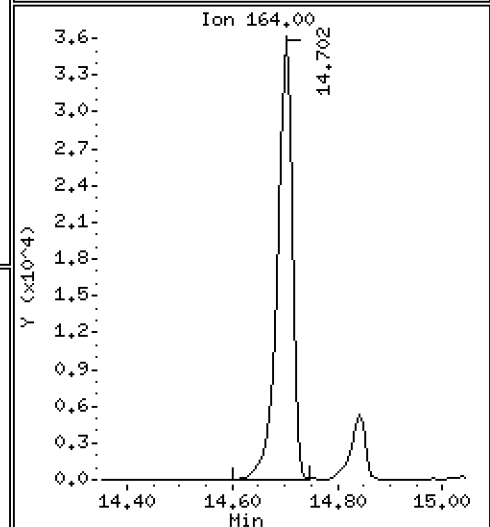
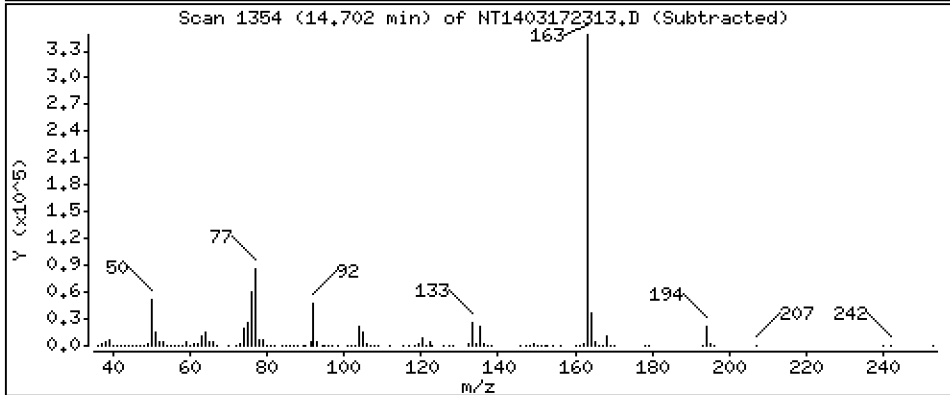
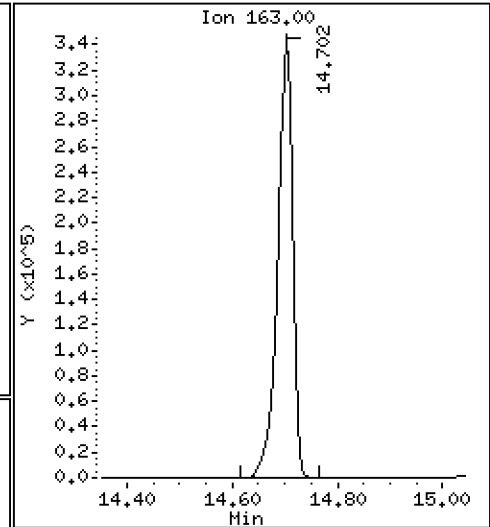
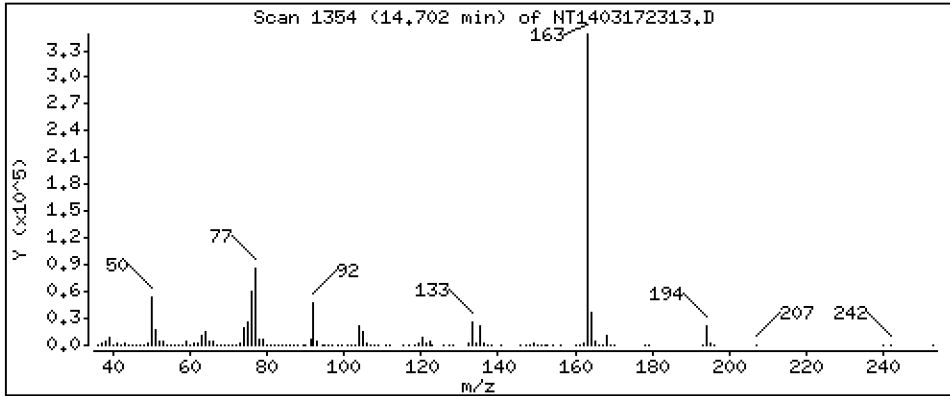
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,689 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

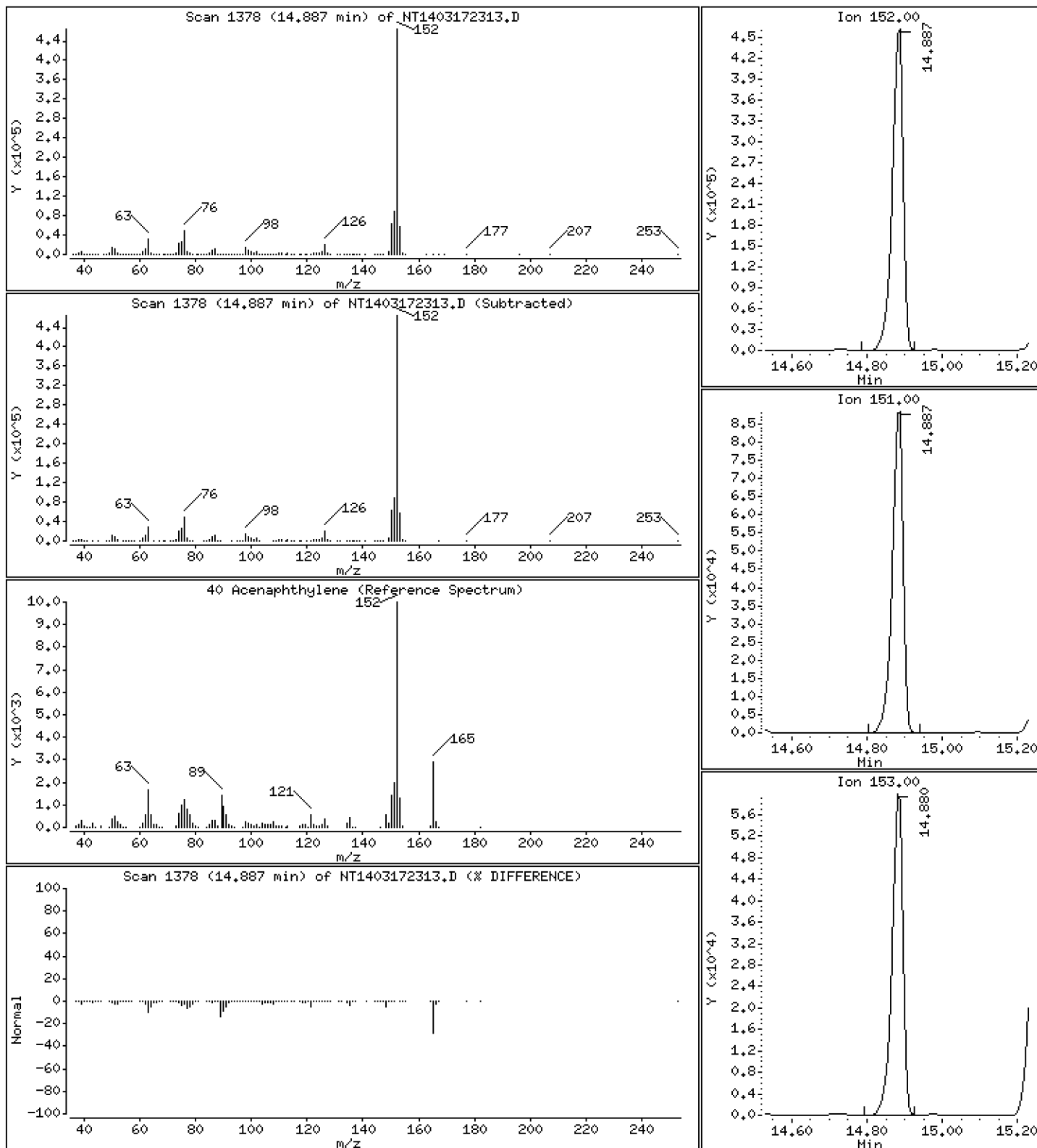
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,025 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

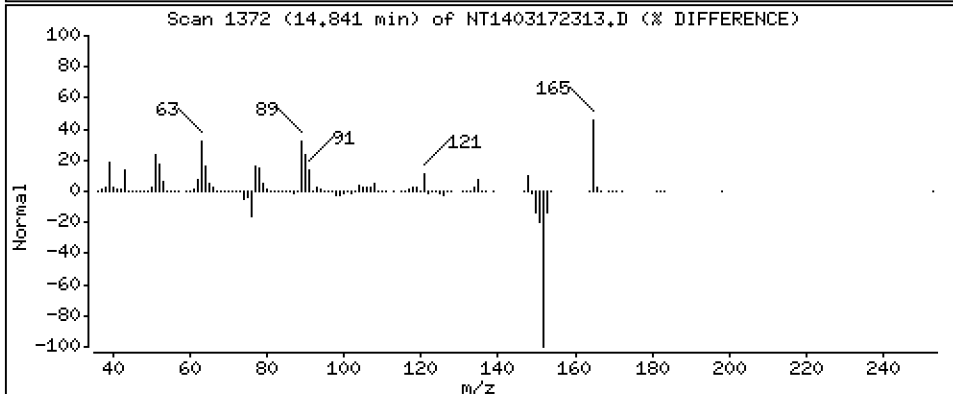
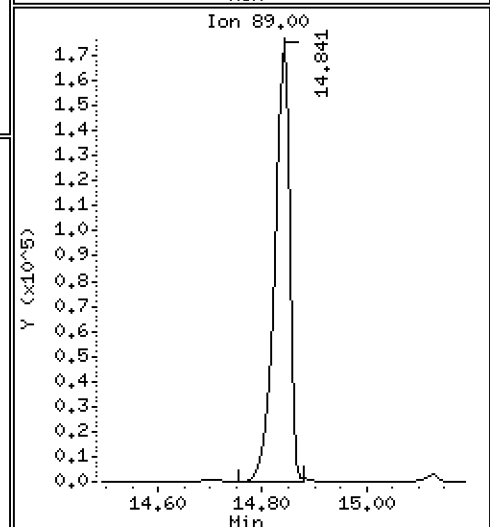
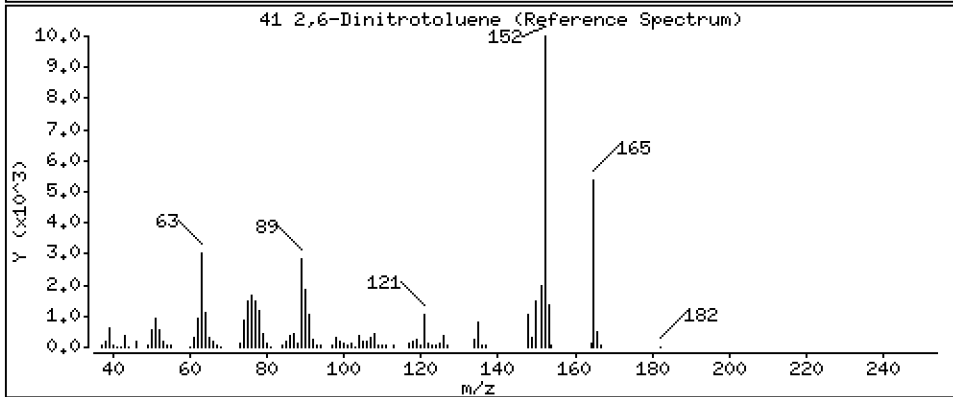
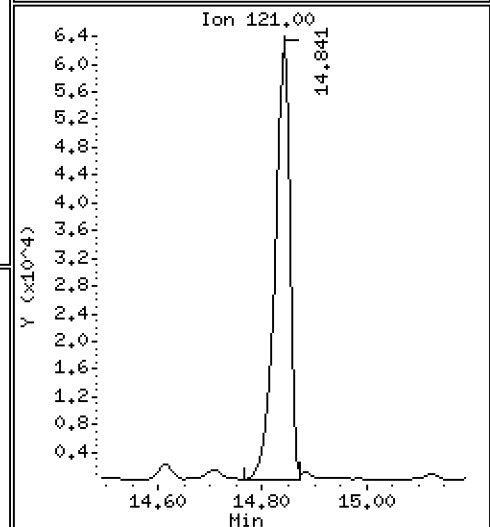
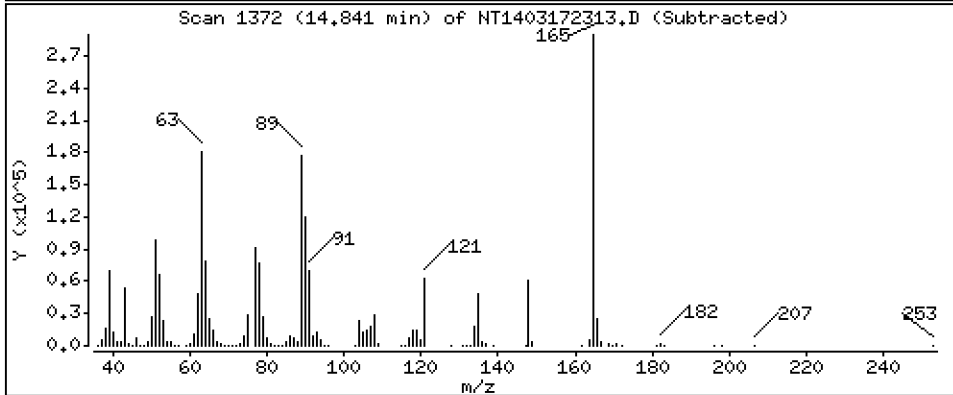
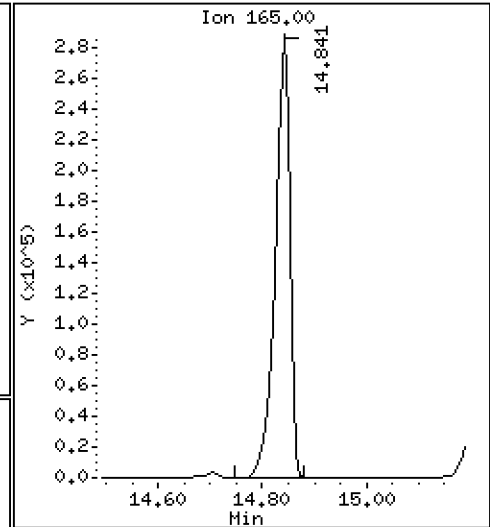
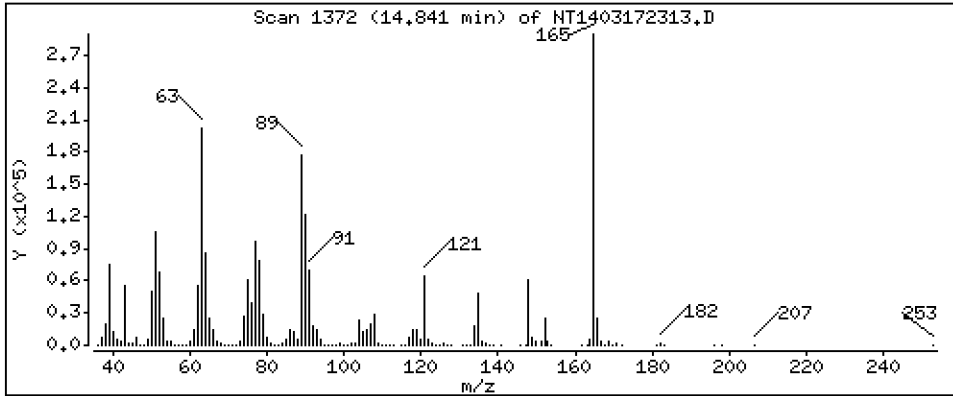
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 16,50 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

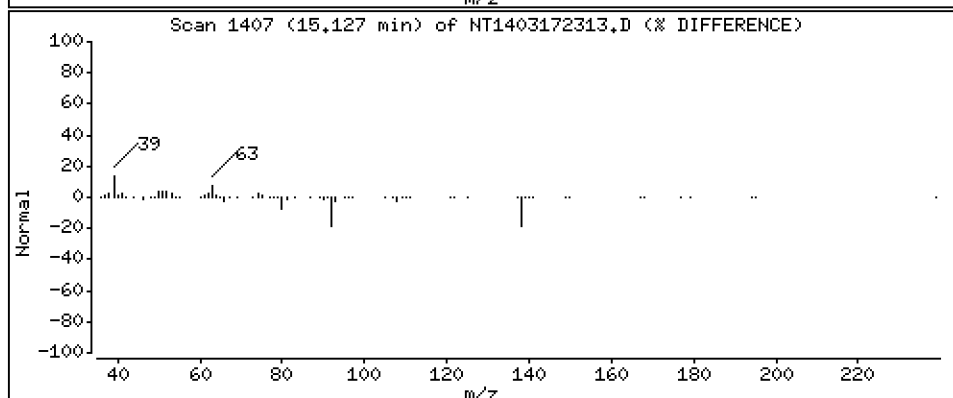
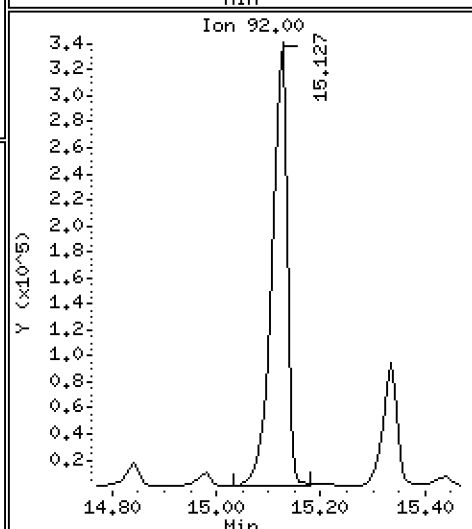
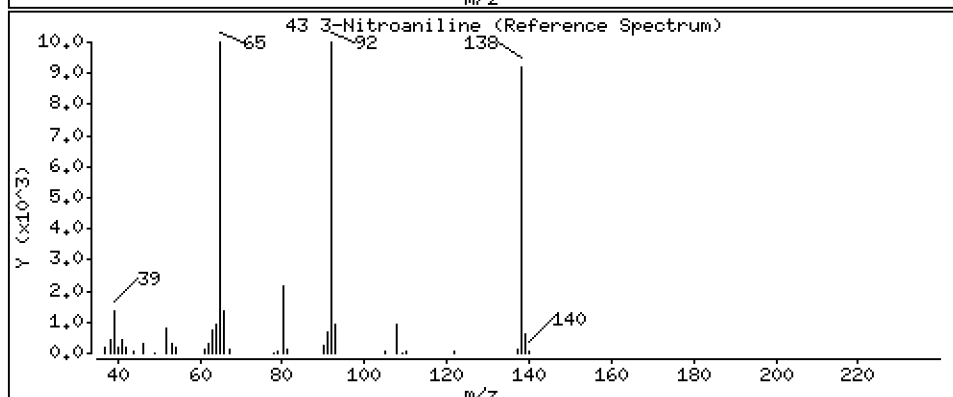
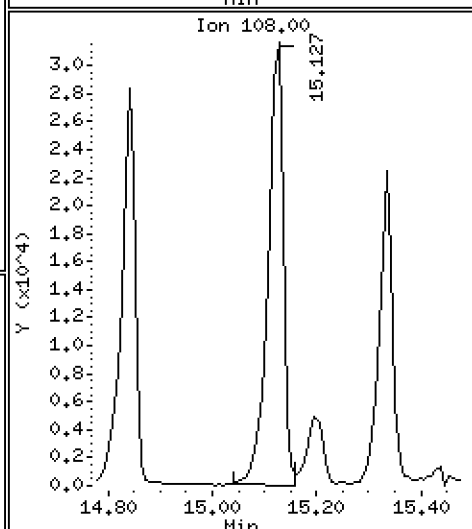
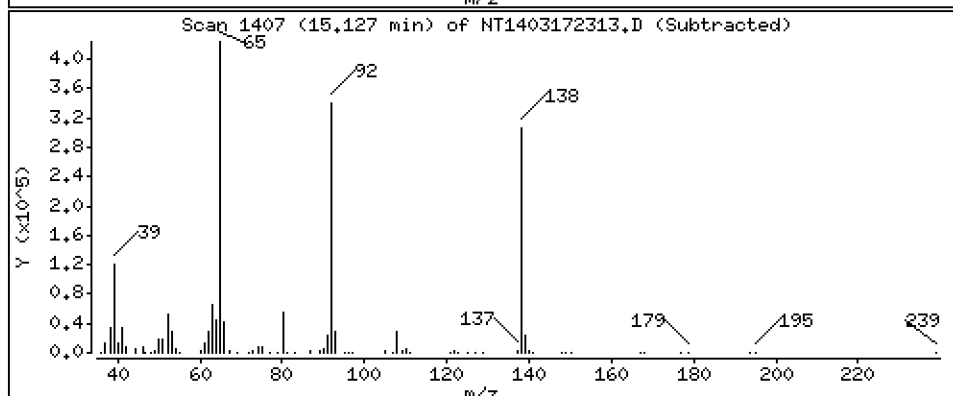
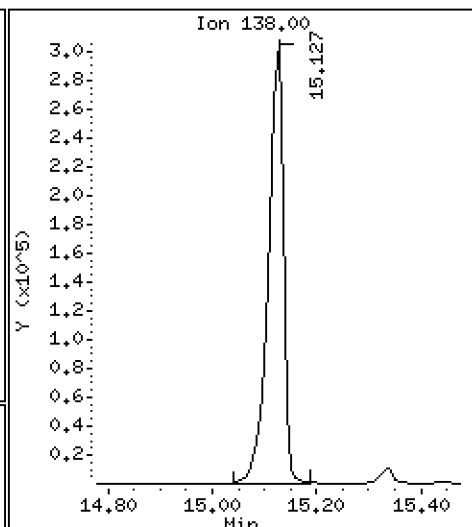
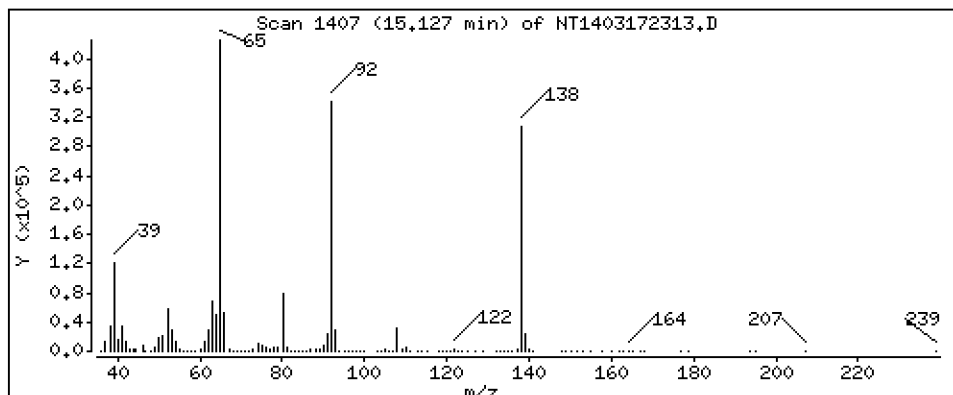
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 14,58 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

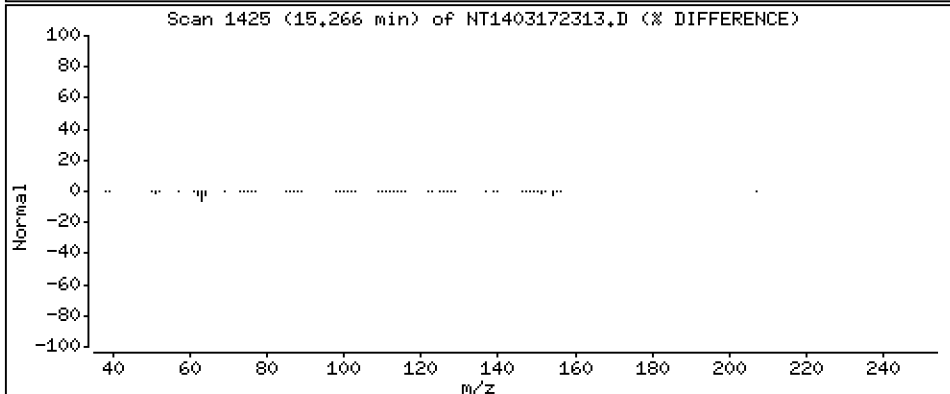
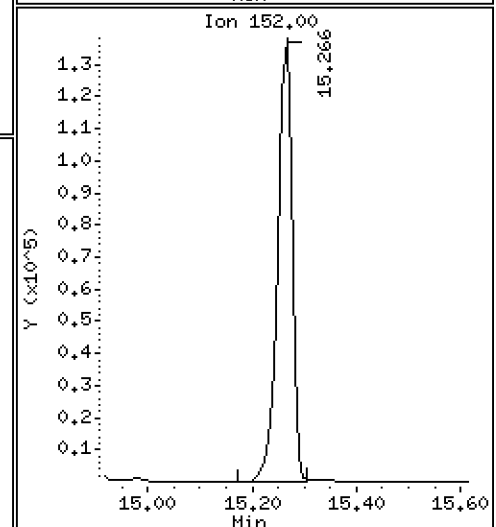
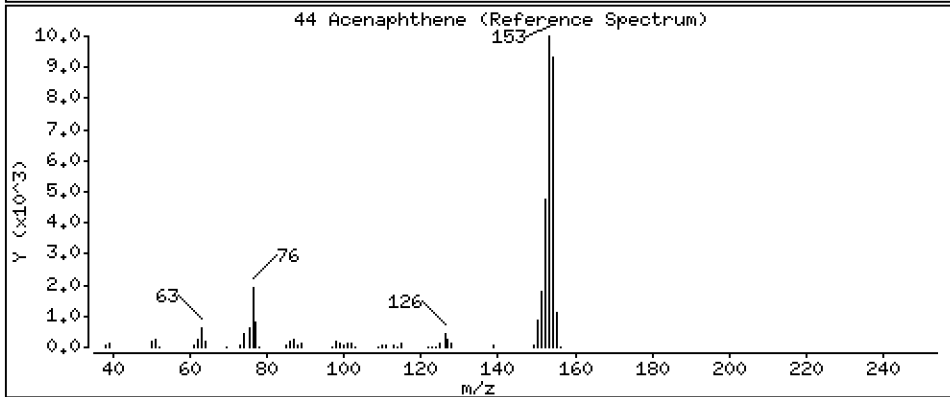
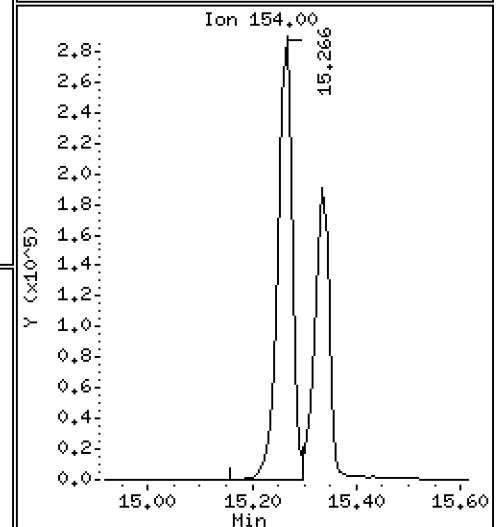
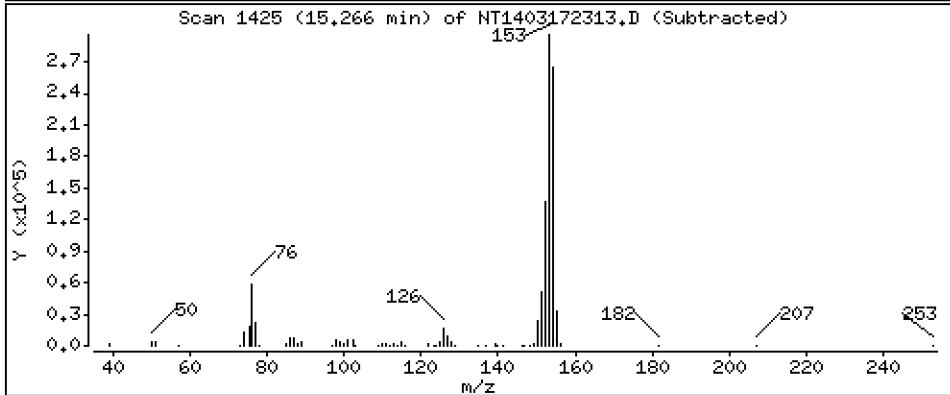
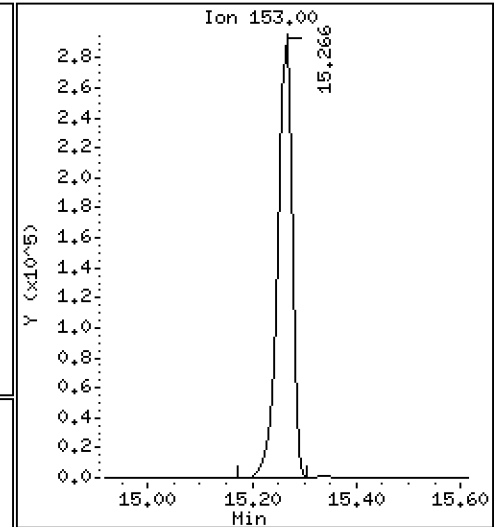
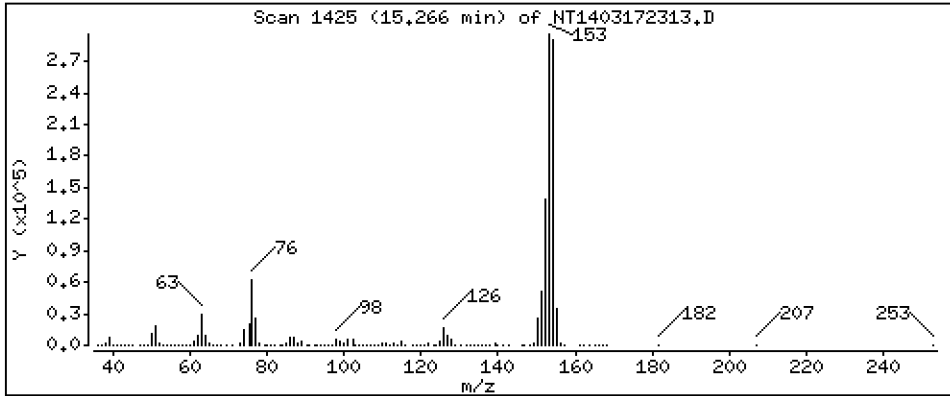
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,202 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

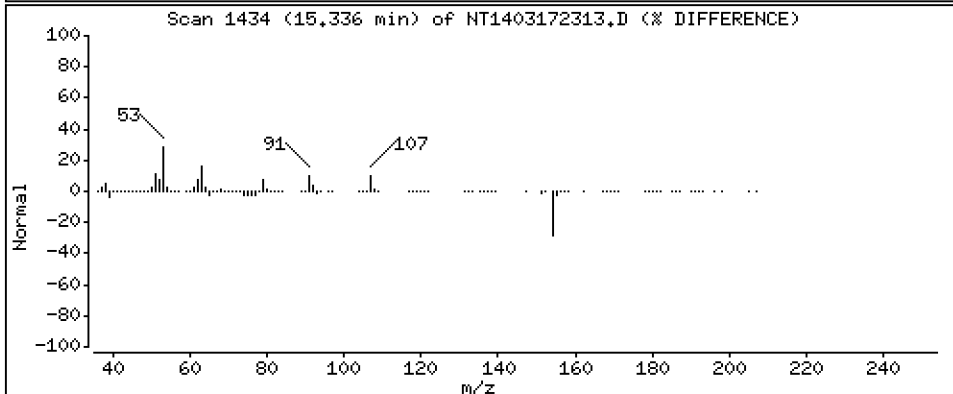
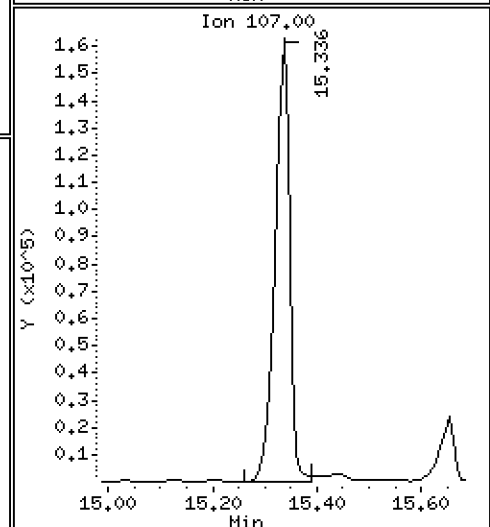
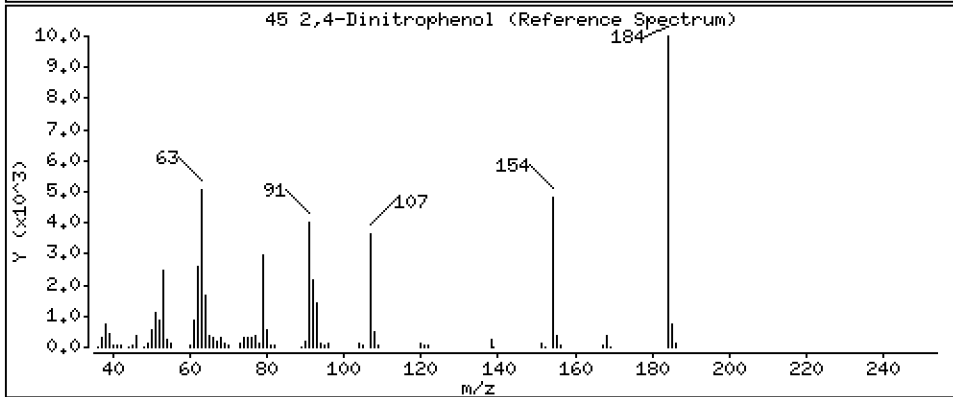
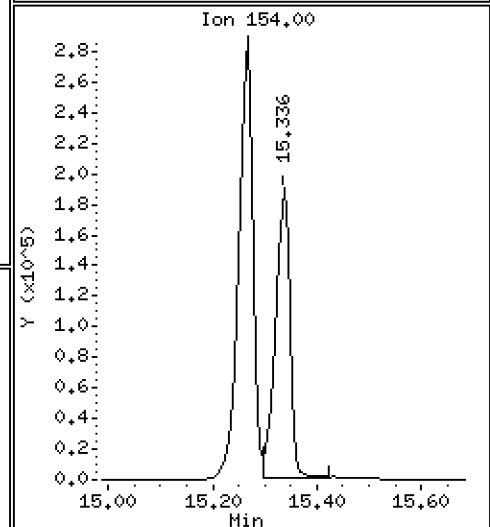
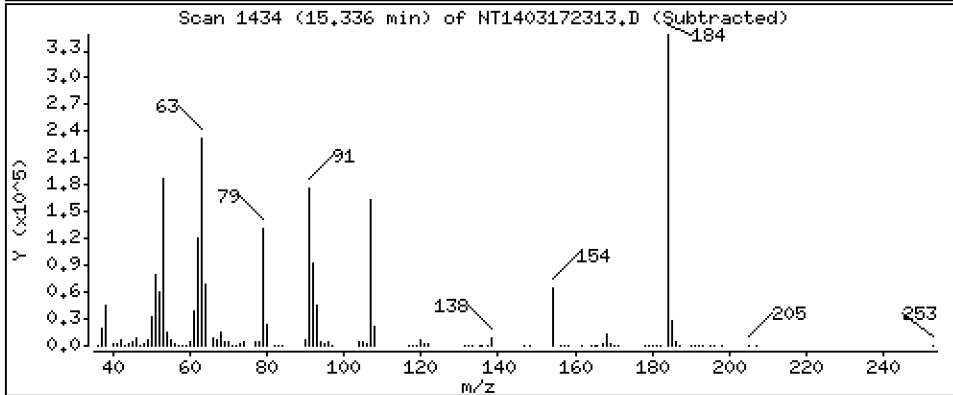
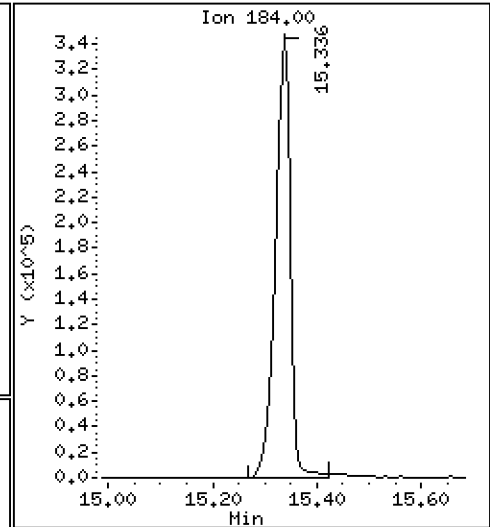
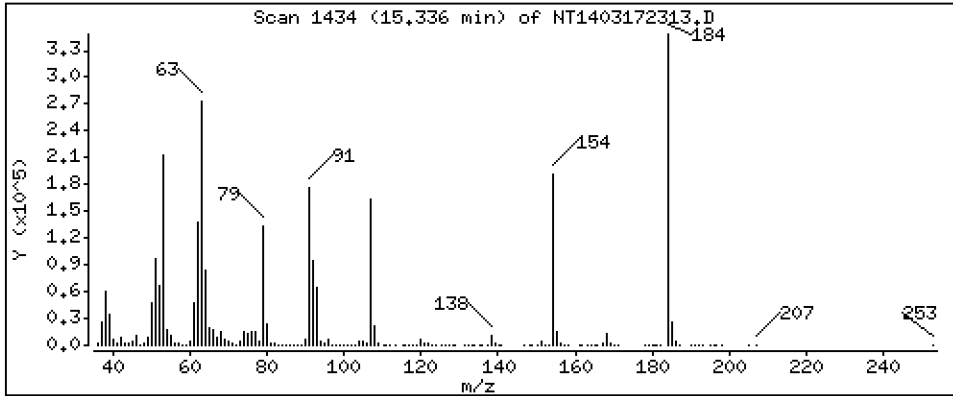
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 25,01 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

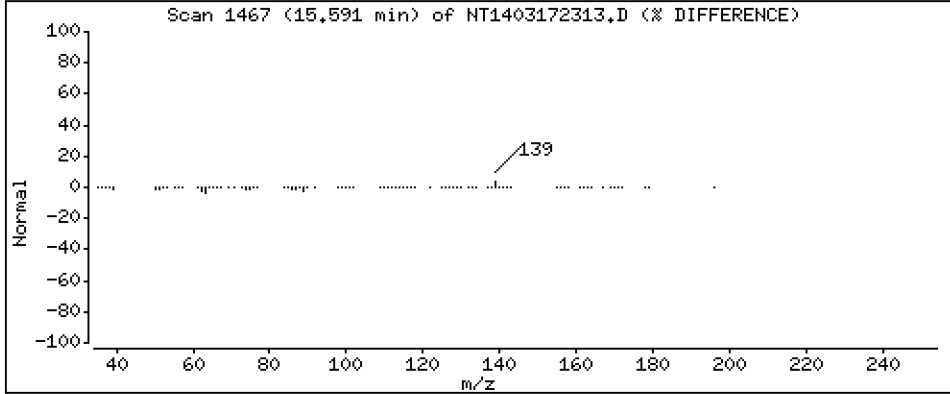
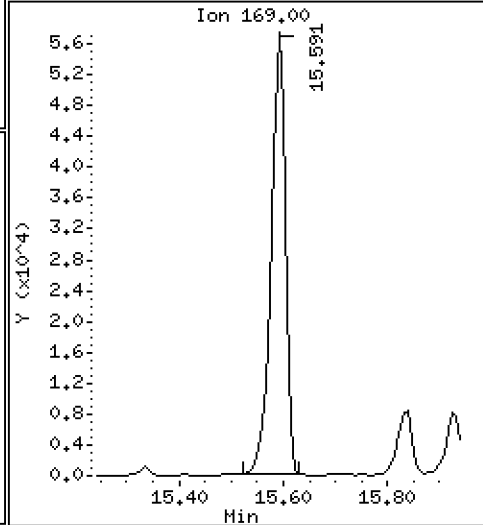
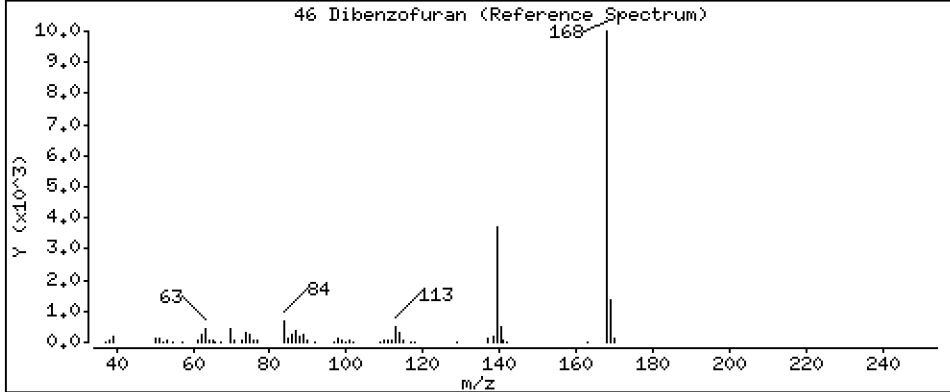
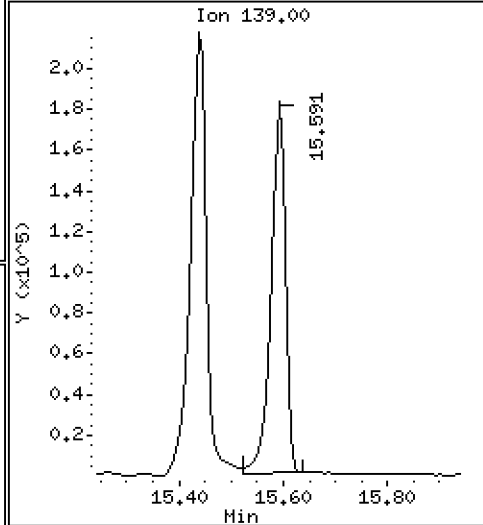
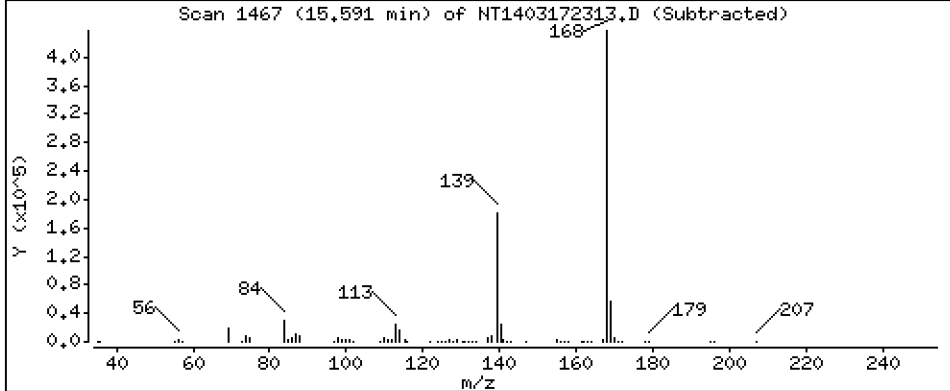
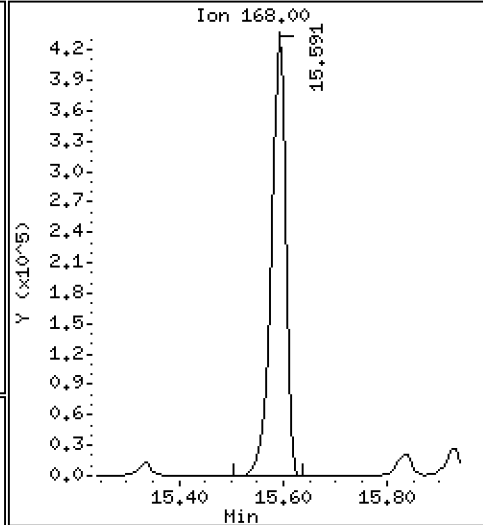
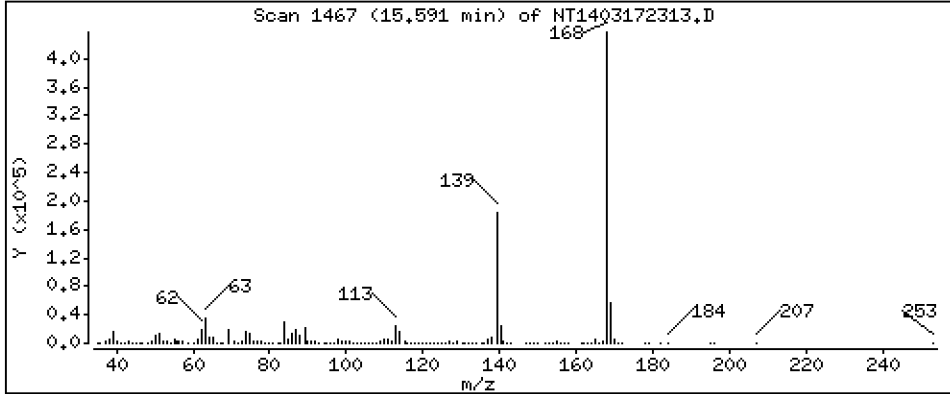
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,318 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

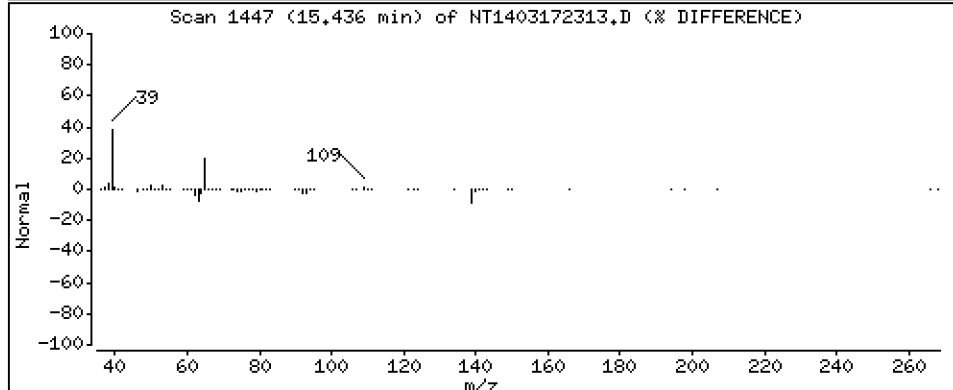
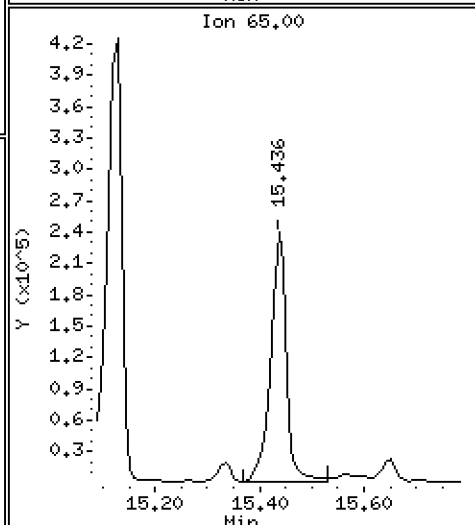
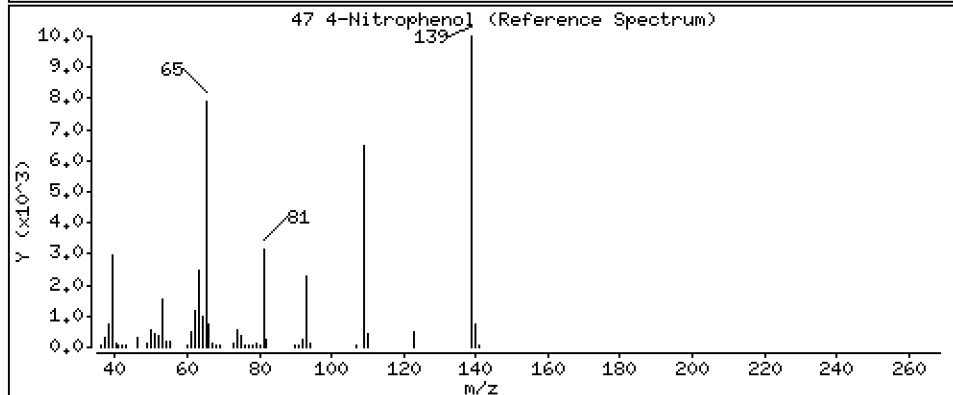
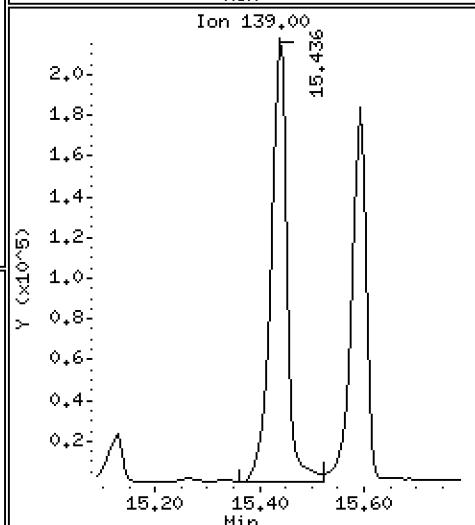
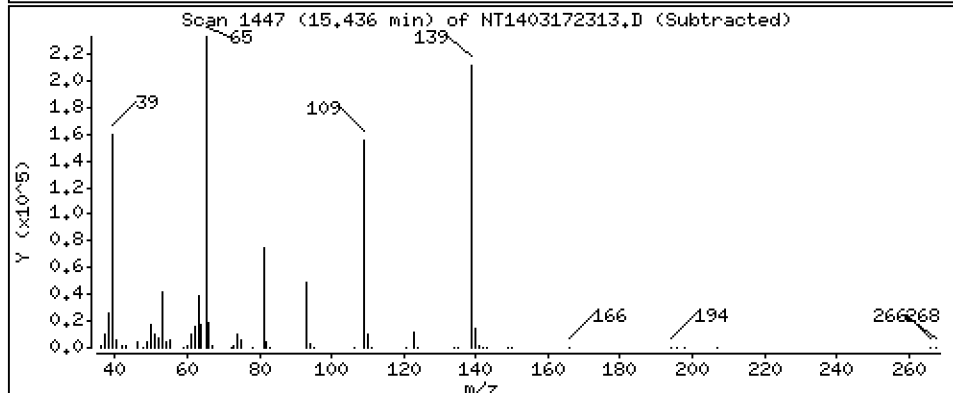
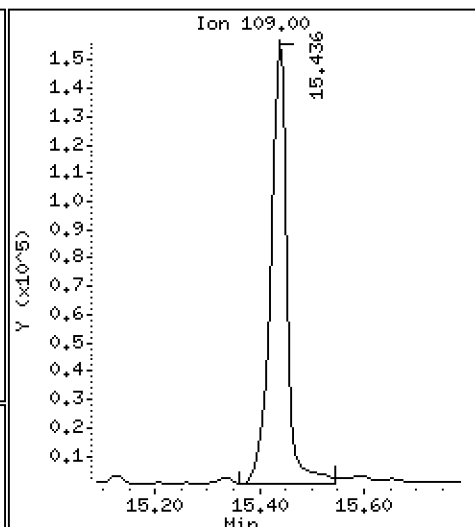
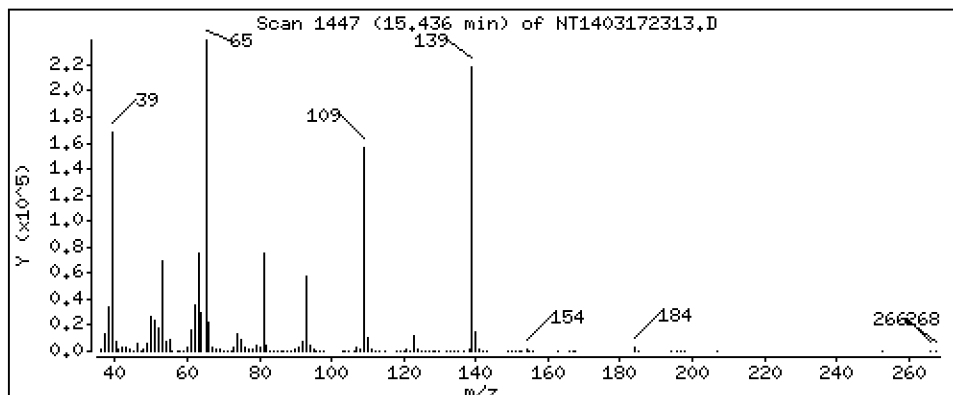
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 13,78 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

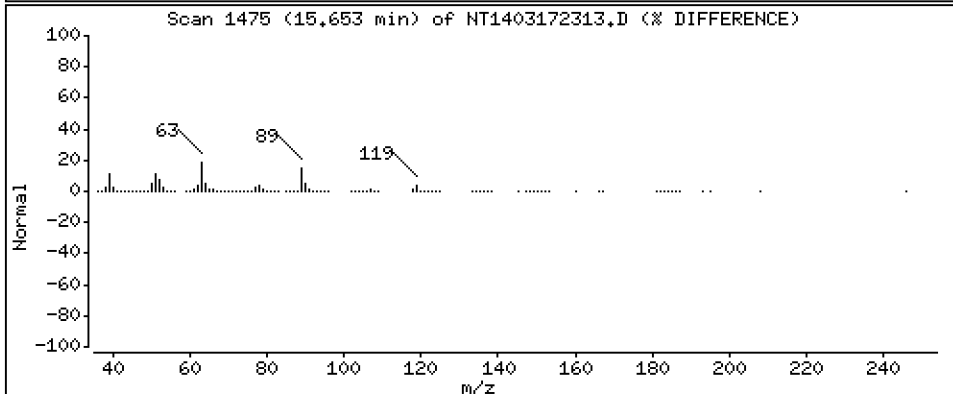
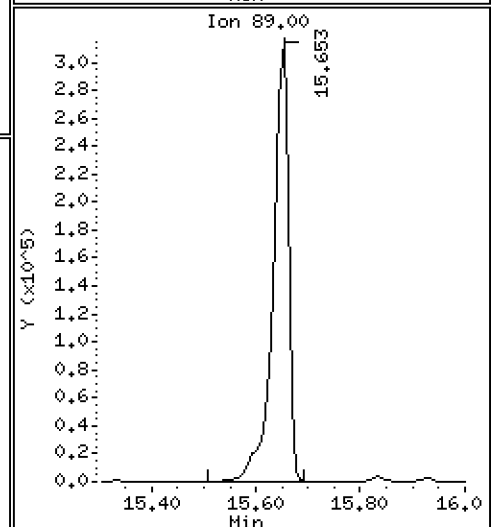
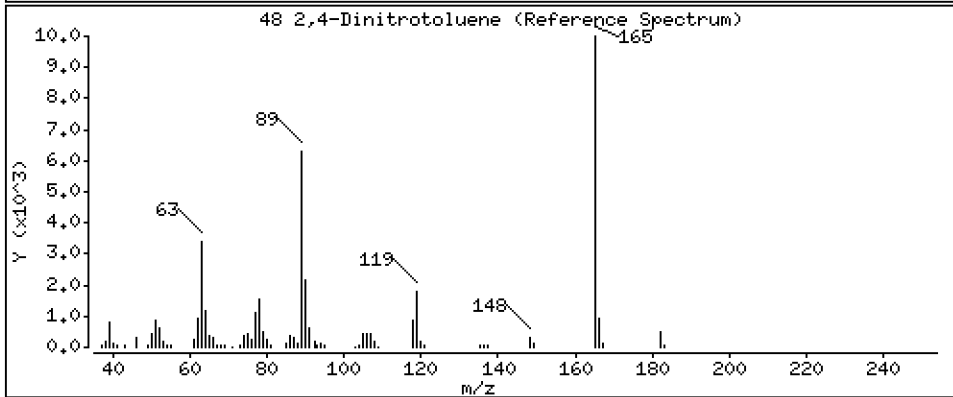
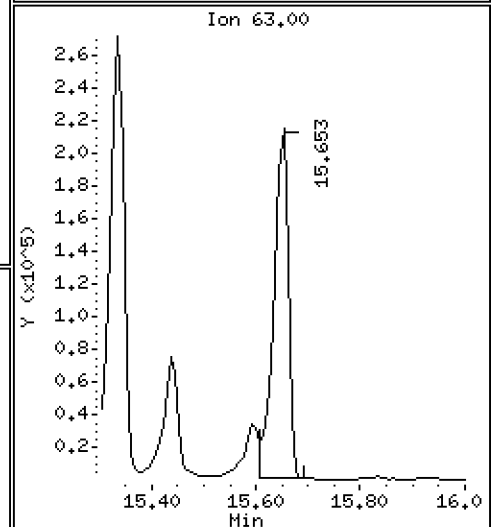
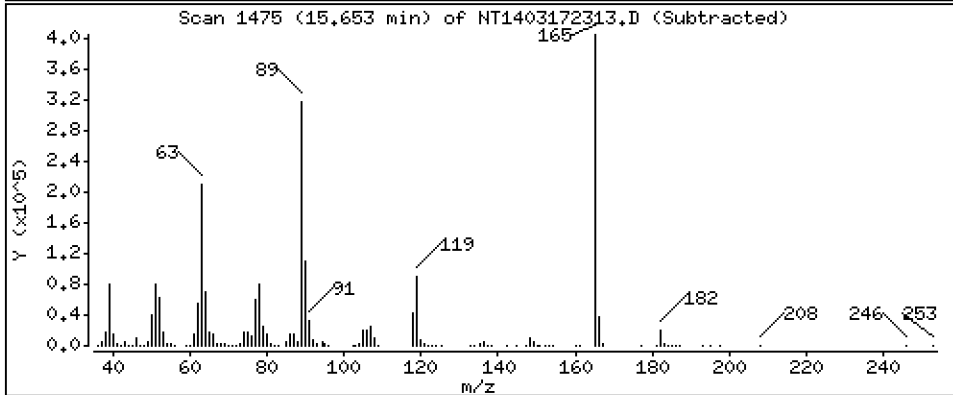
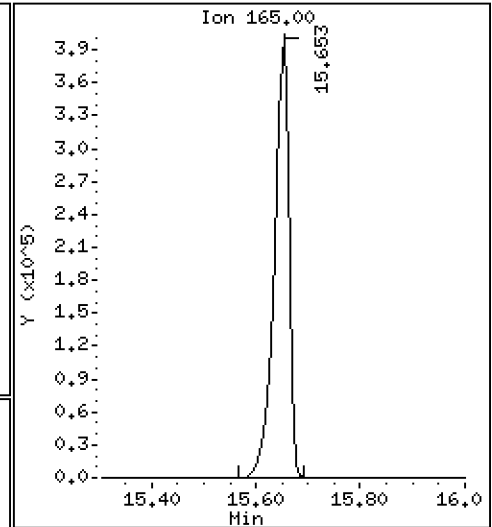
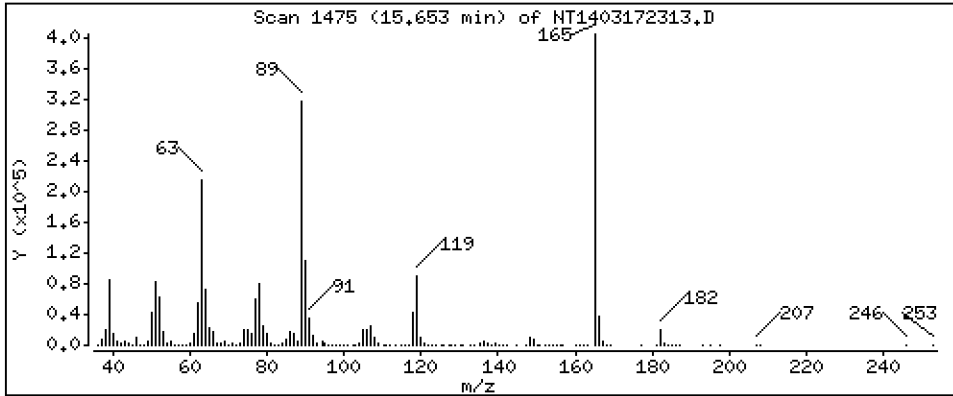
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 16,14 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

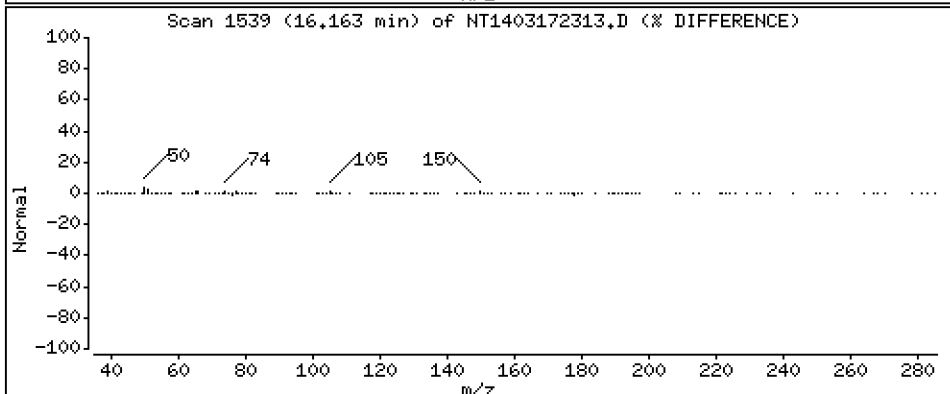
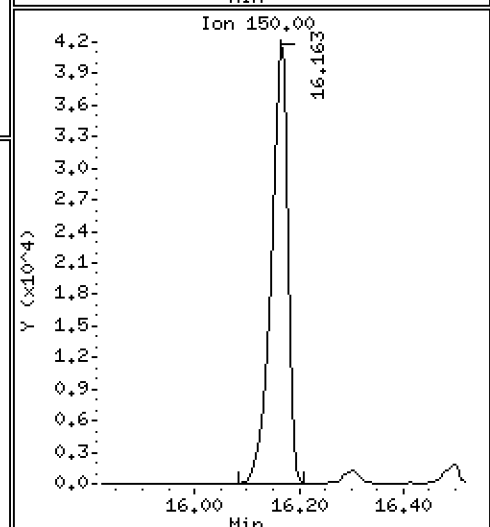
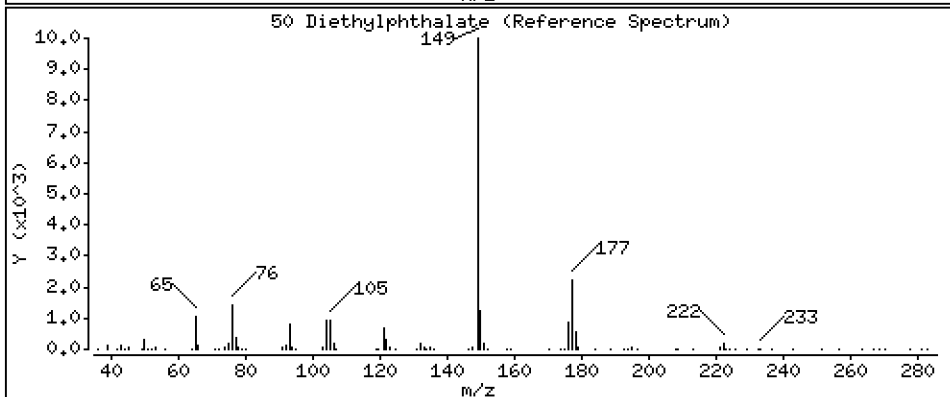
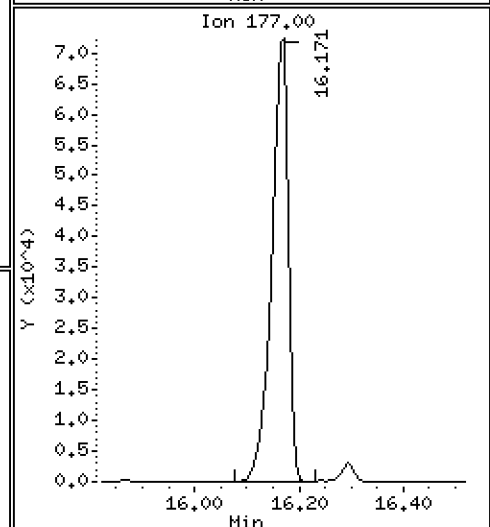
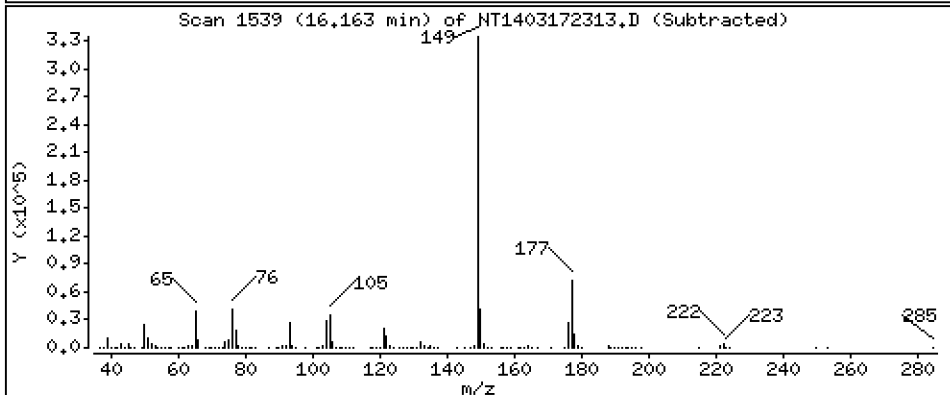
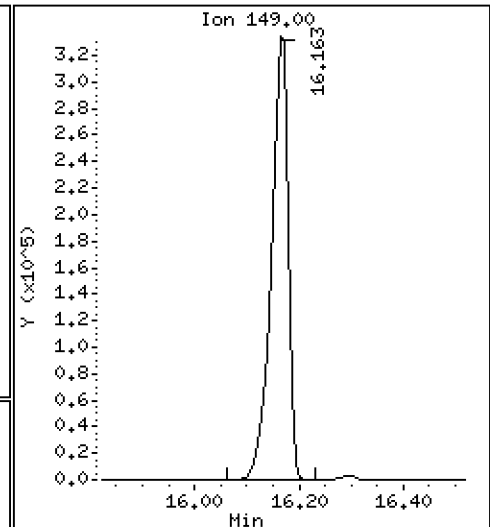
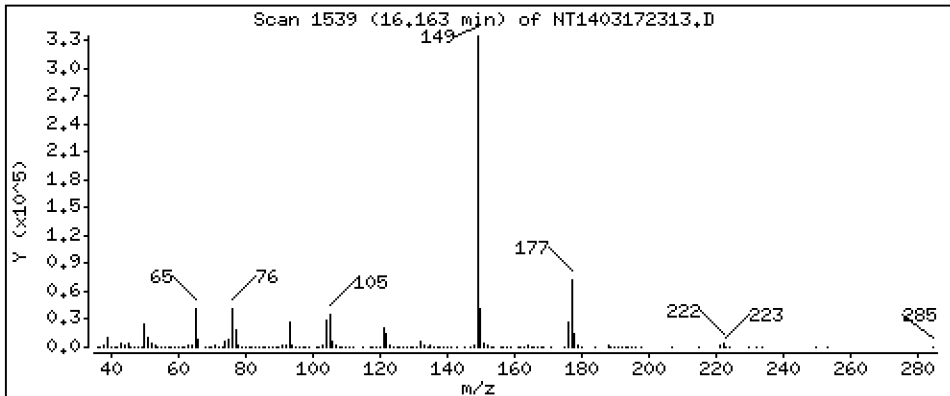
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,494 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

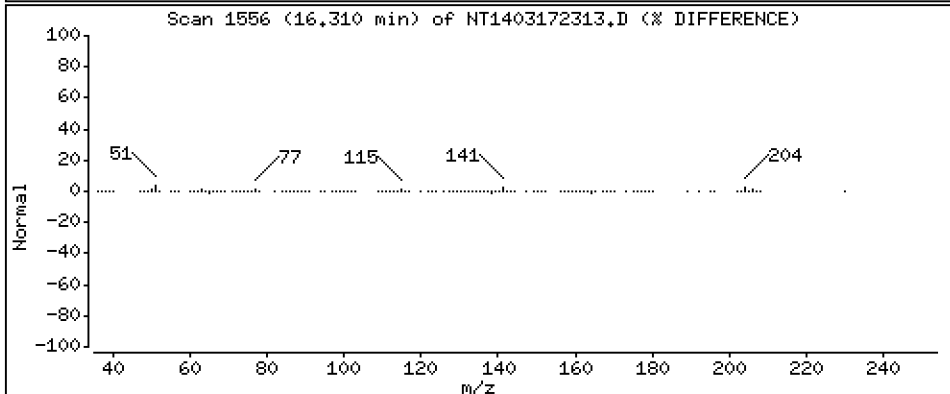
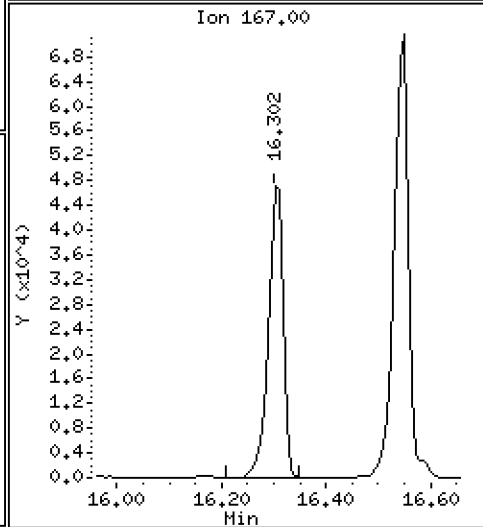
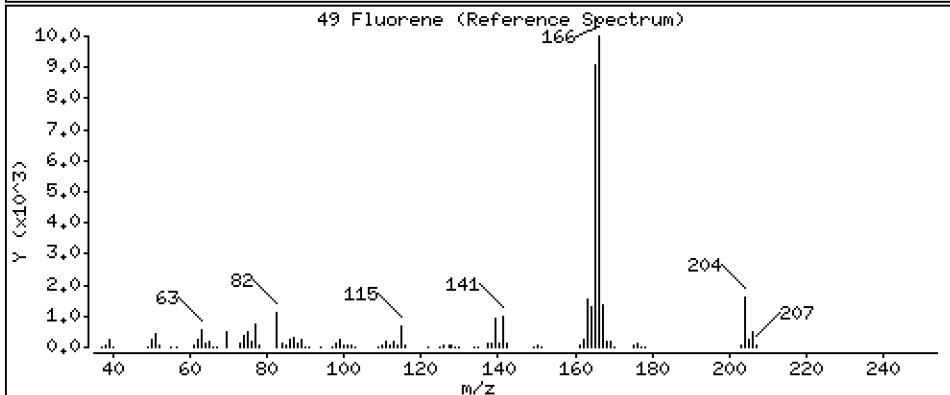
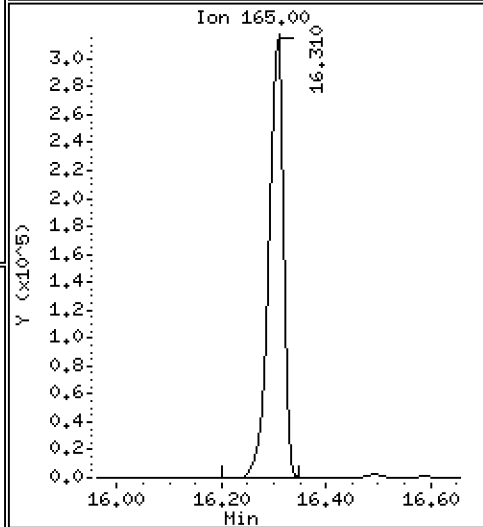
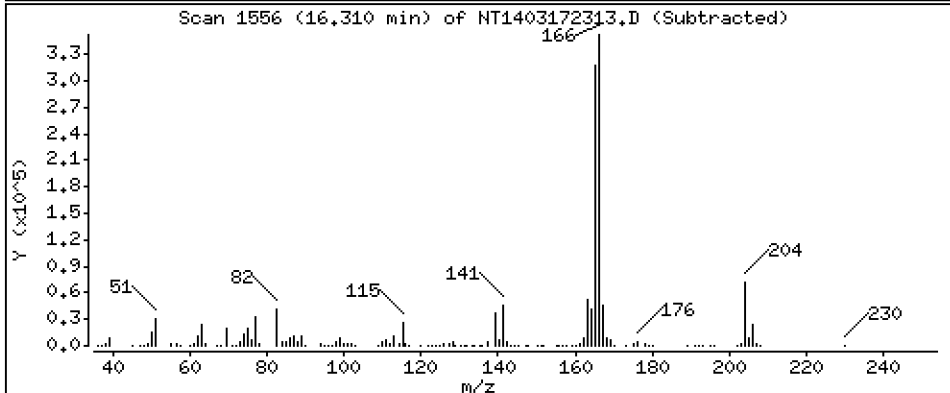
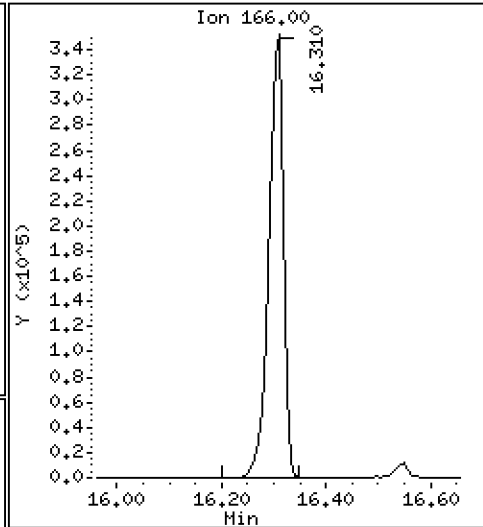
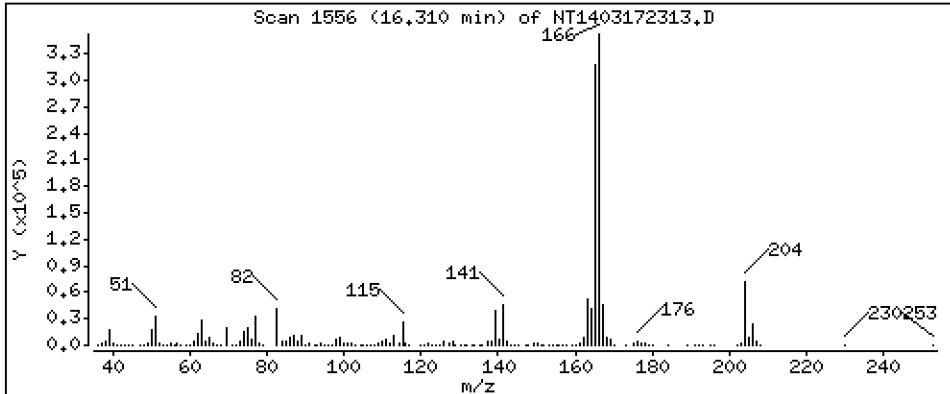
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,221 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

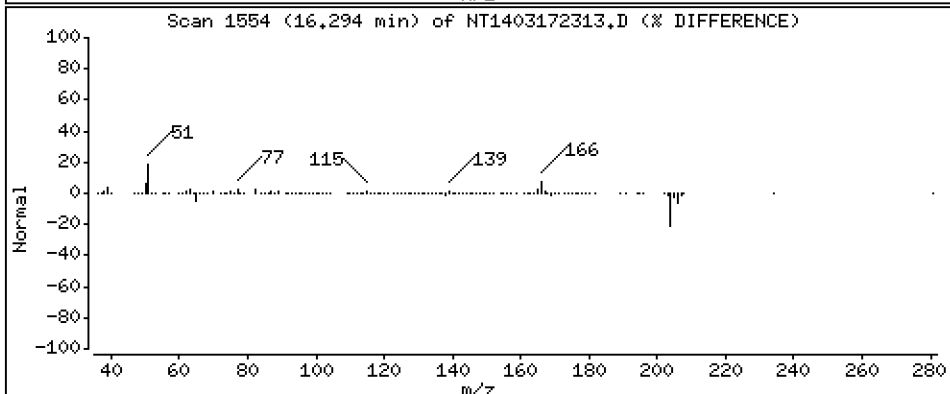
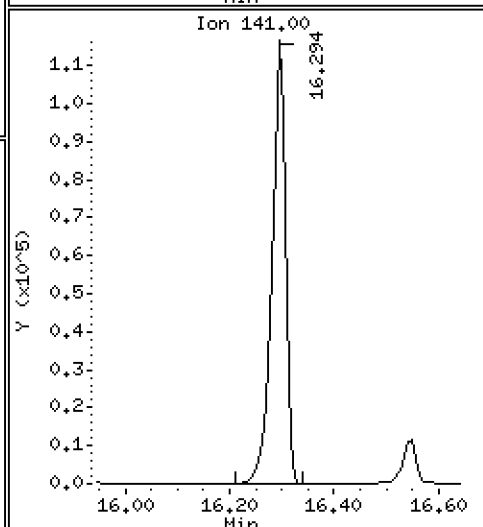
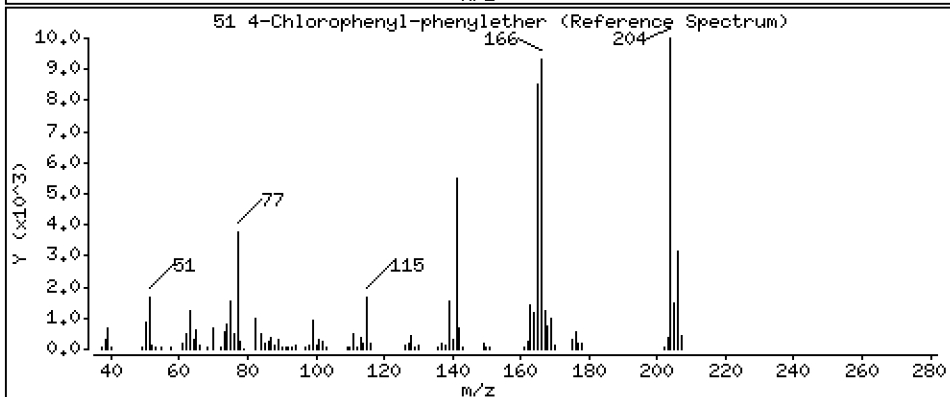
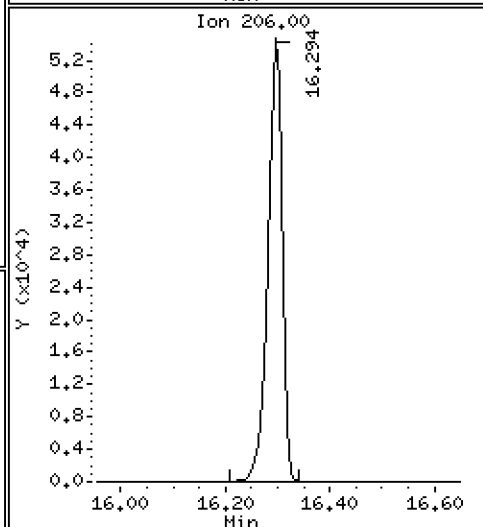
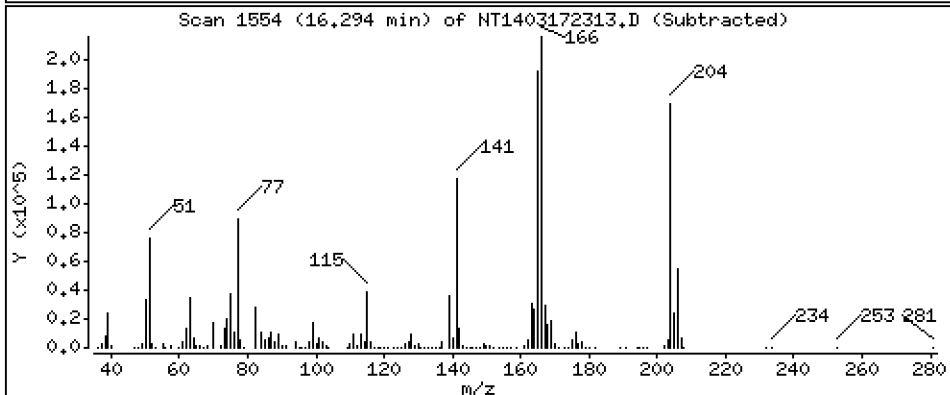
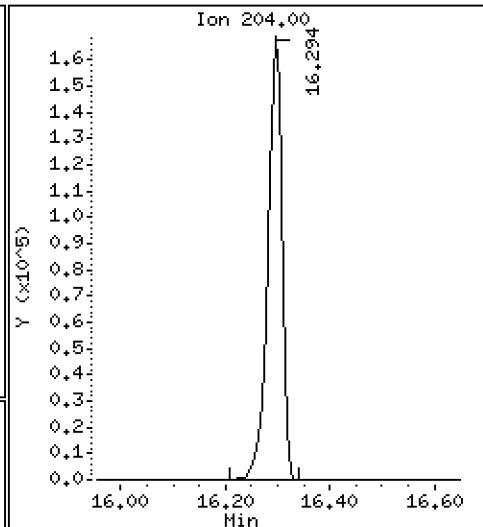
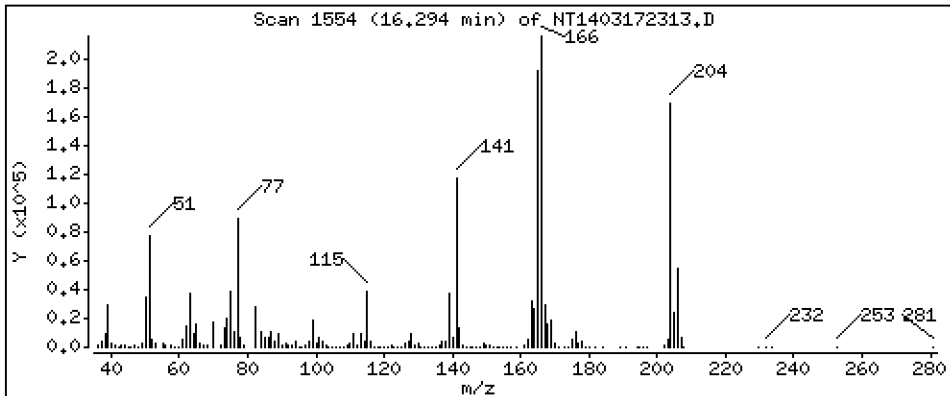
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,575 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

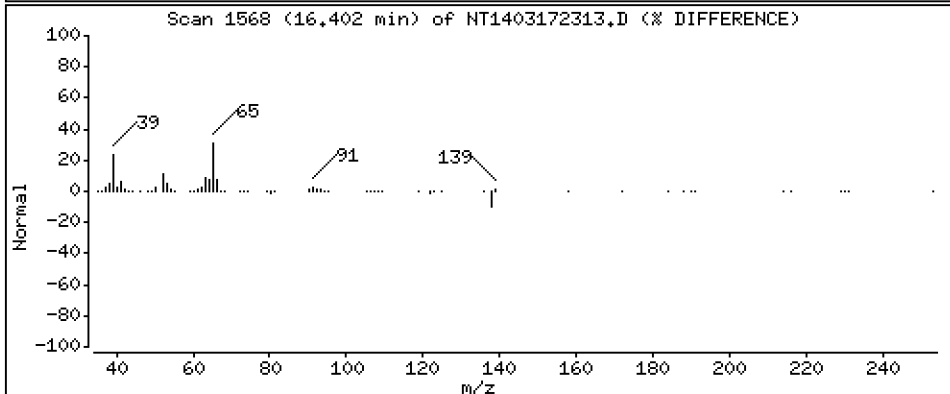
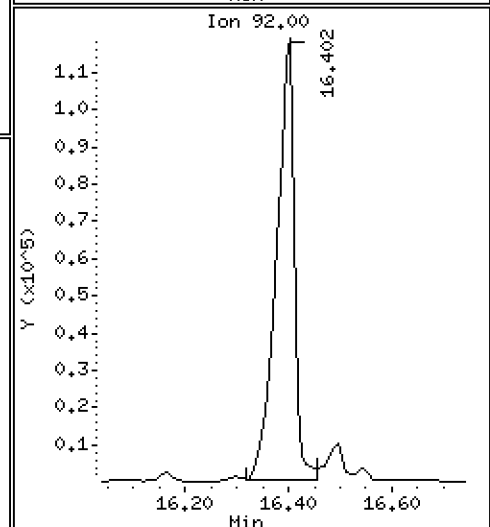
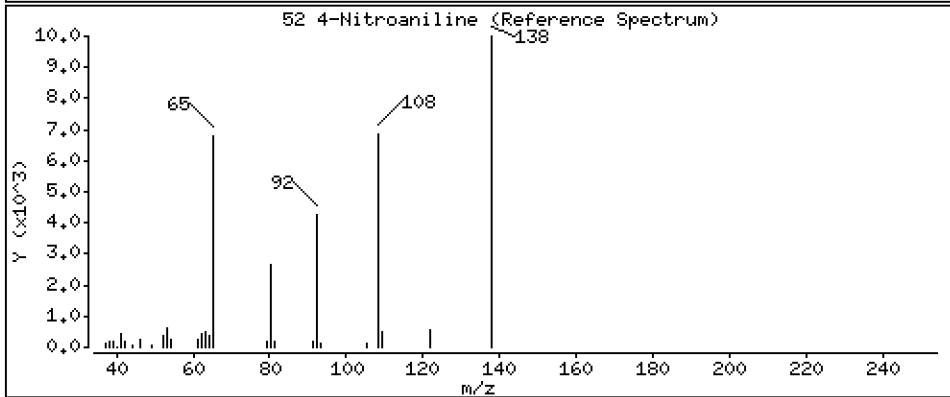
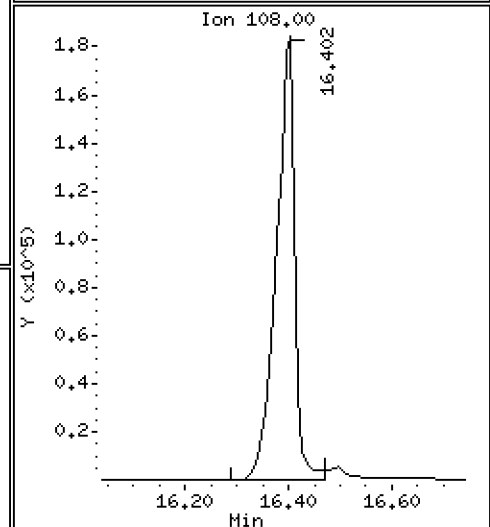
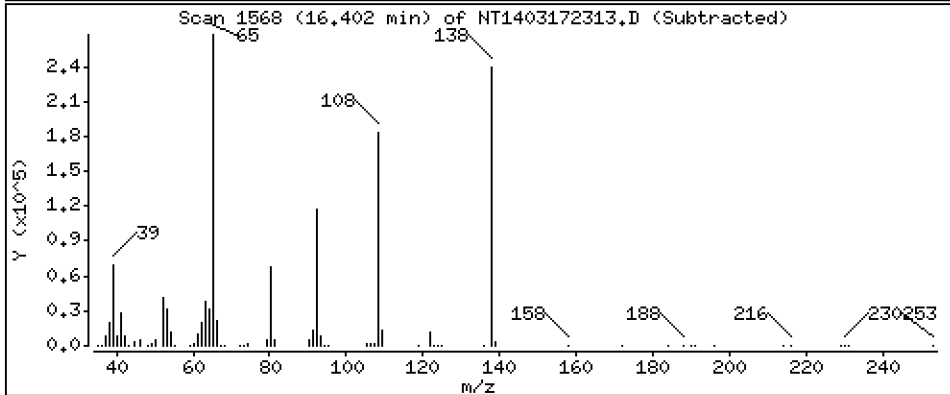
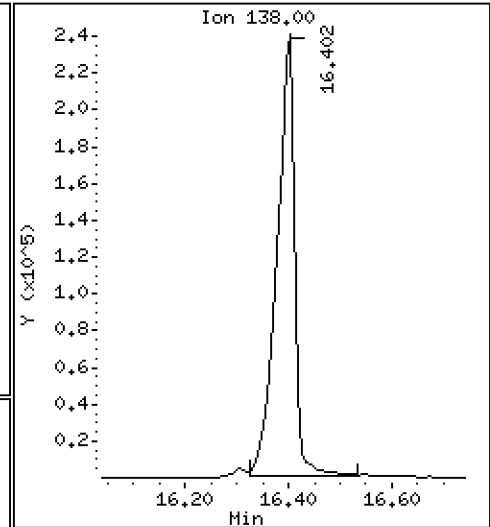
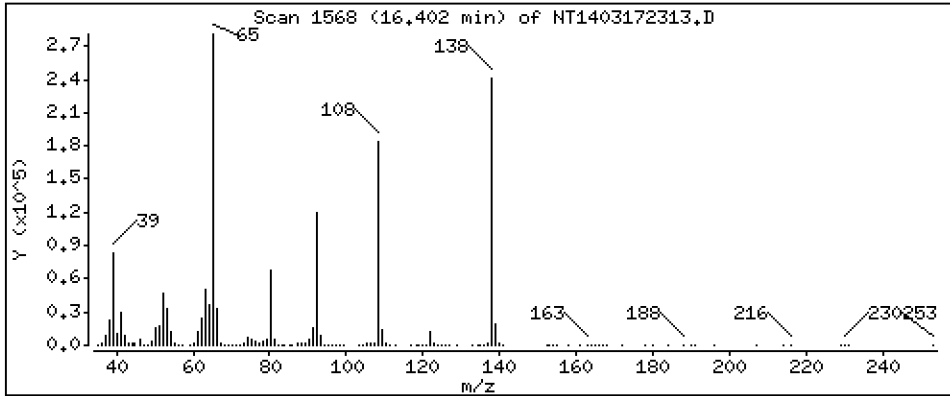
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 14,28 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

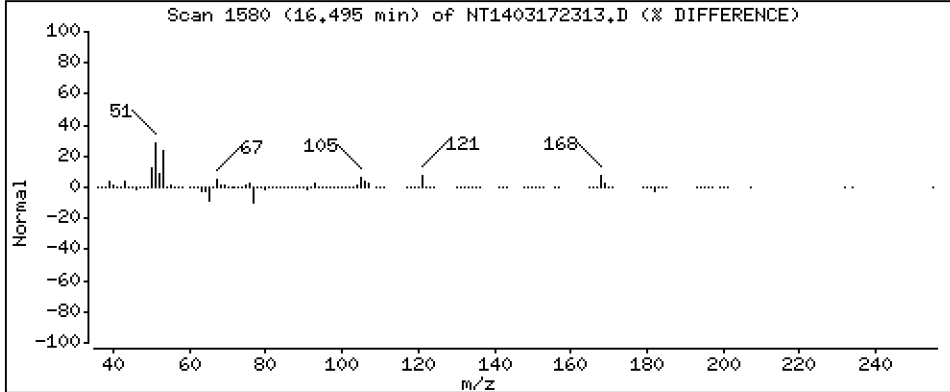
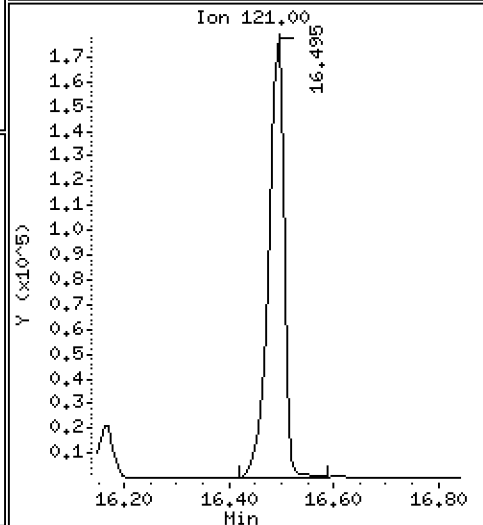
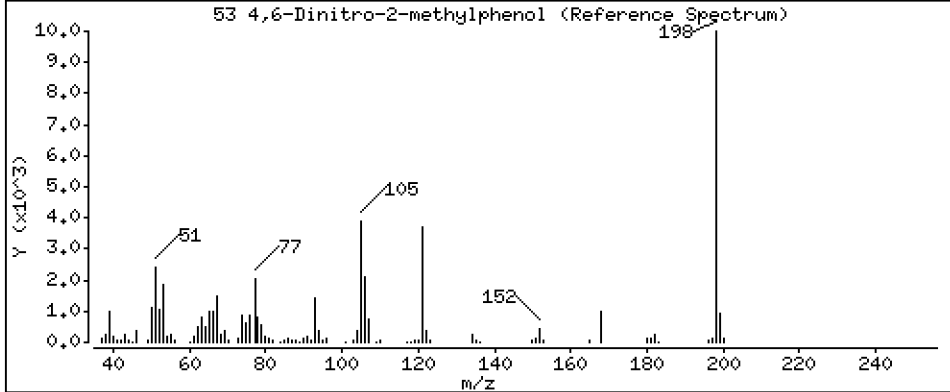
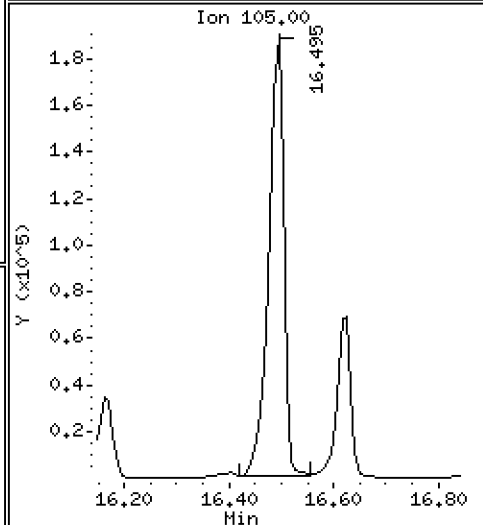
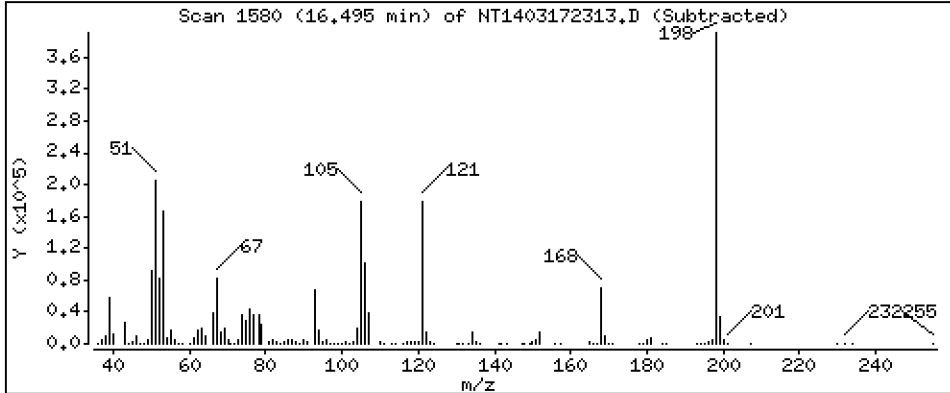
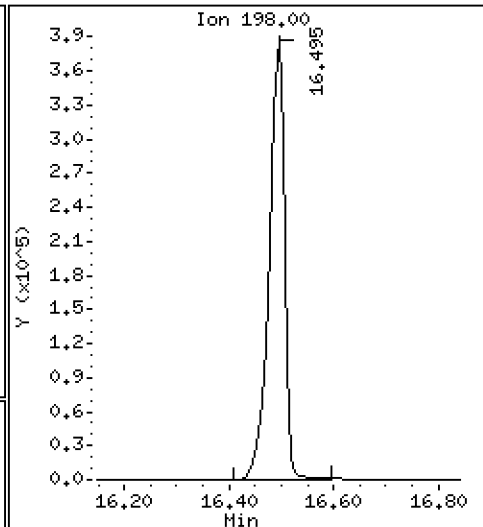
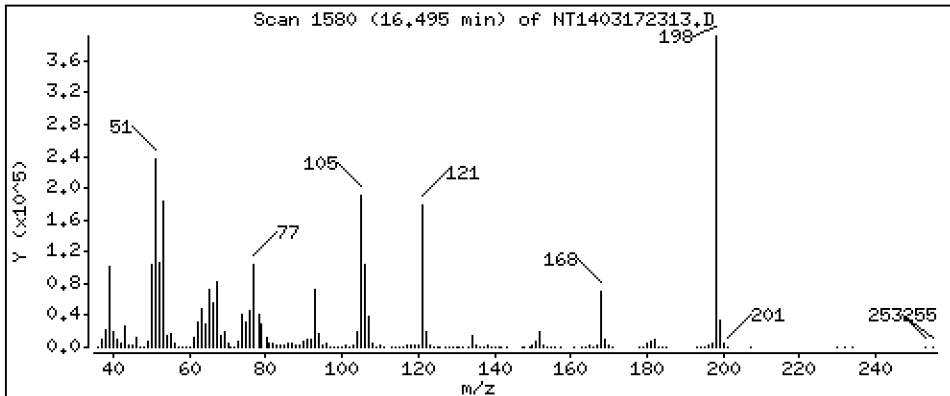
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 29,72 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

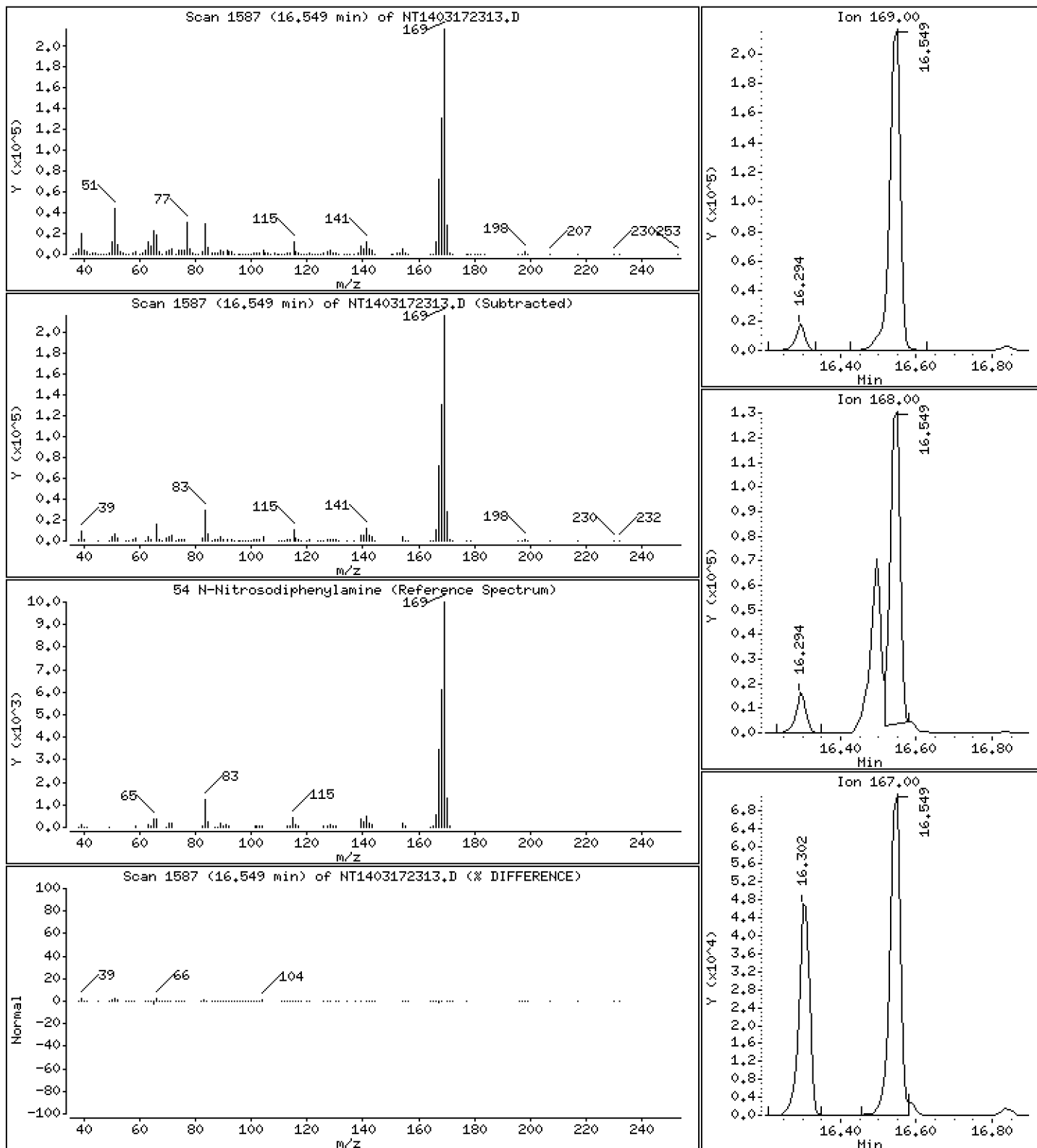
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,204 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

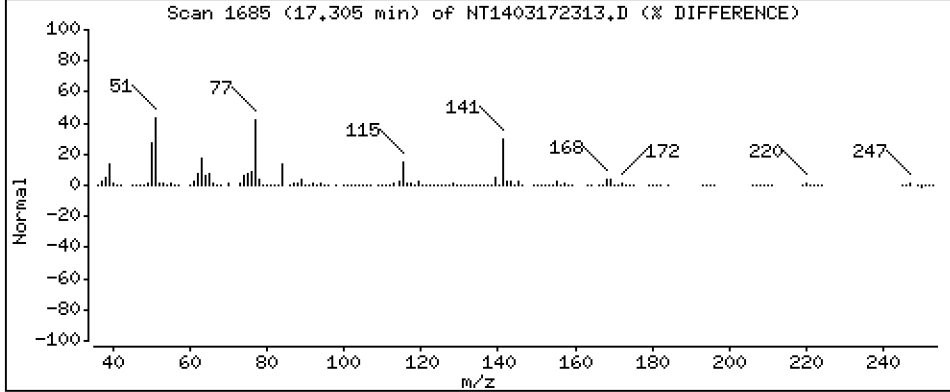
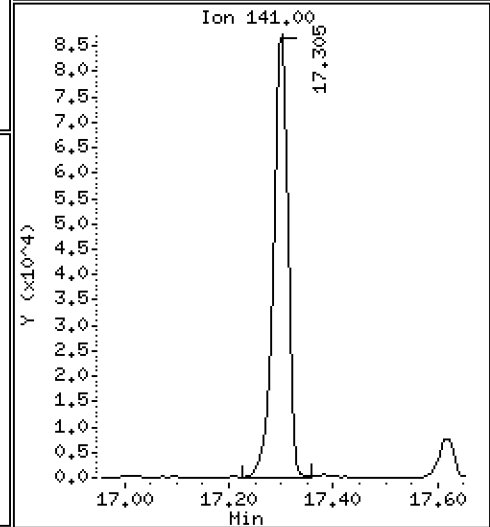
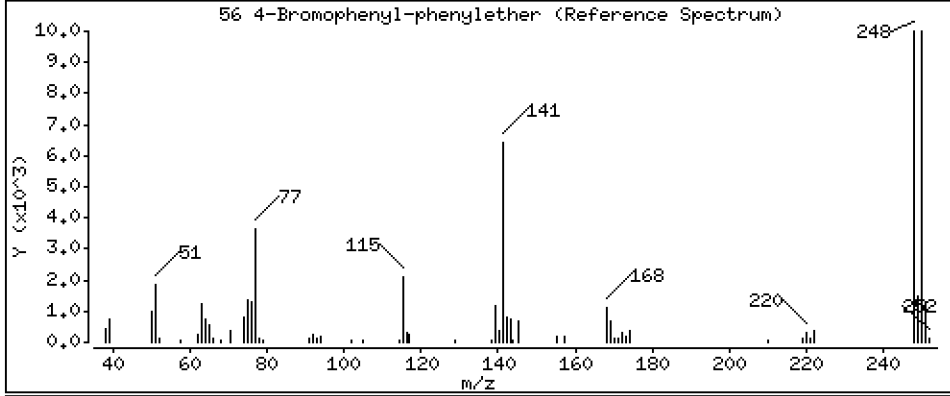
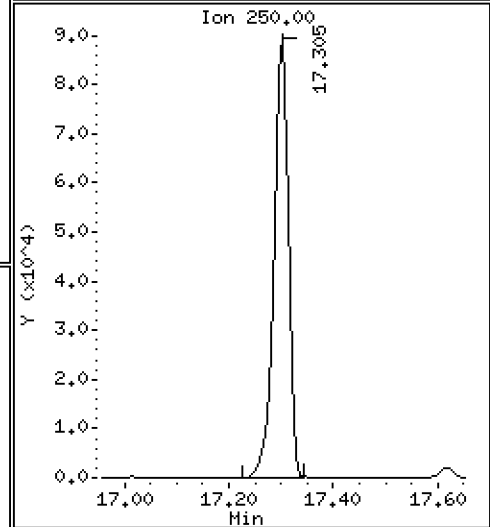
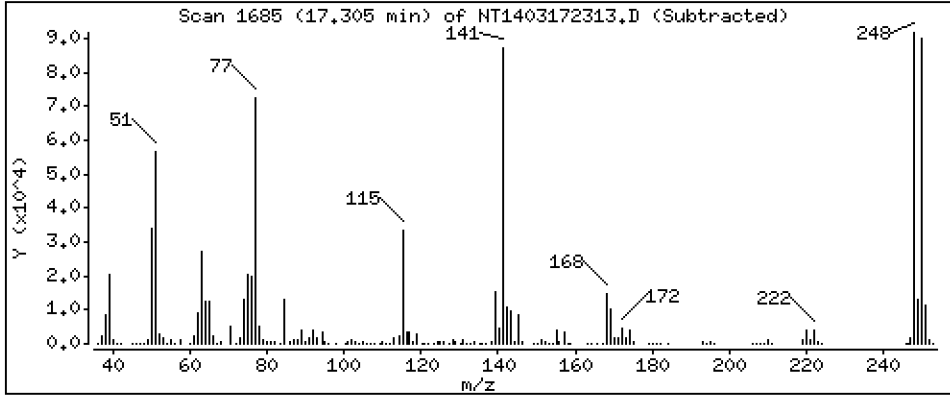
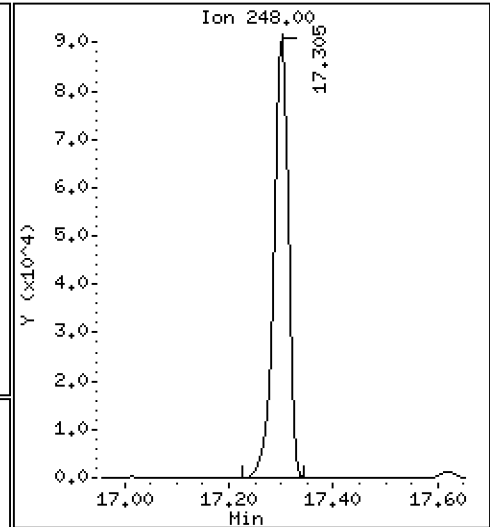
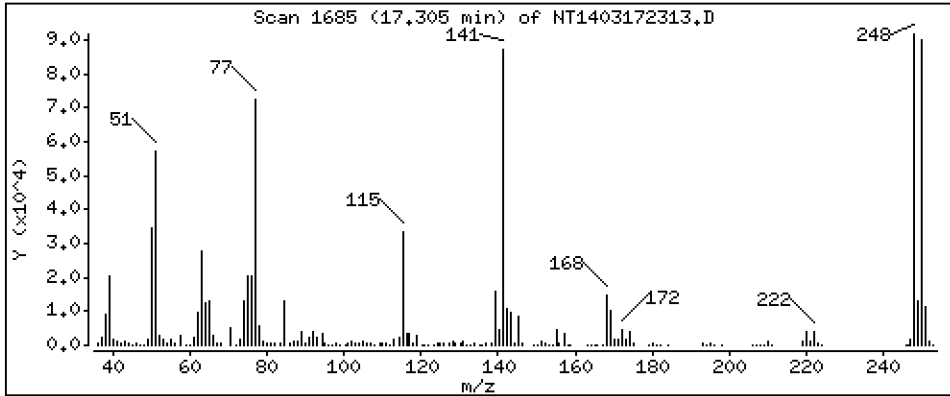
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,236 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

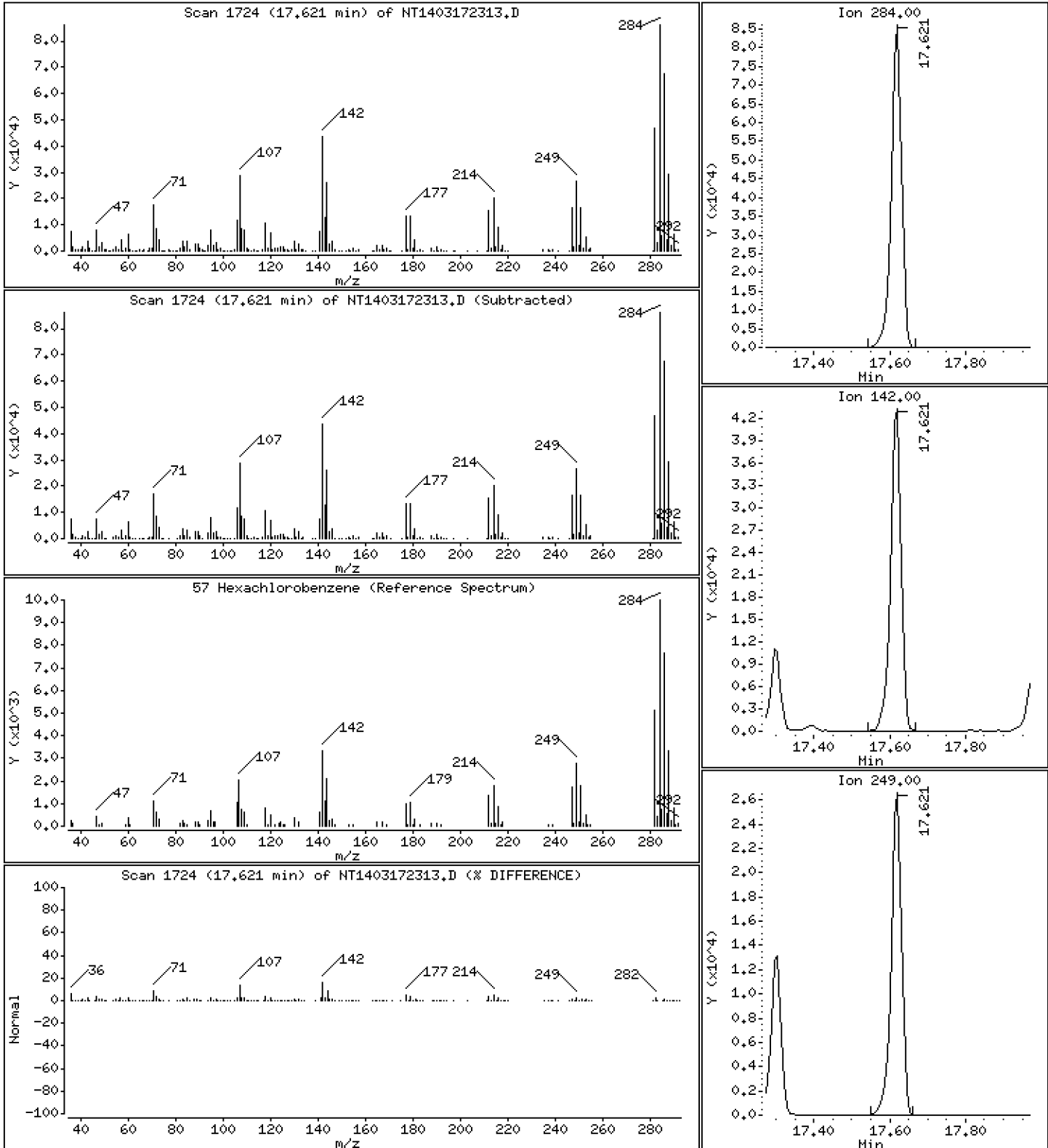
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,679 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

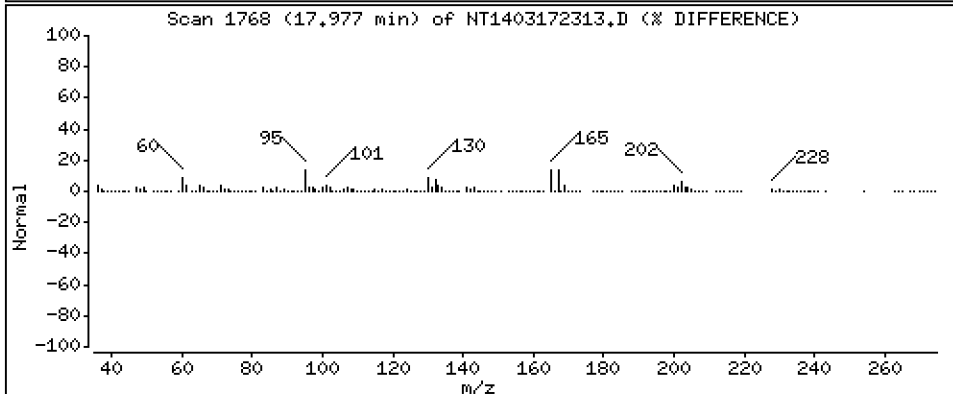
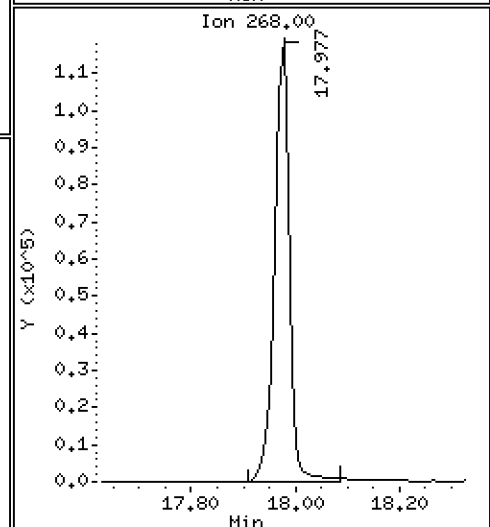
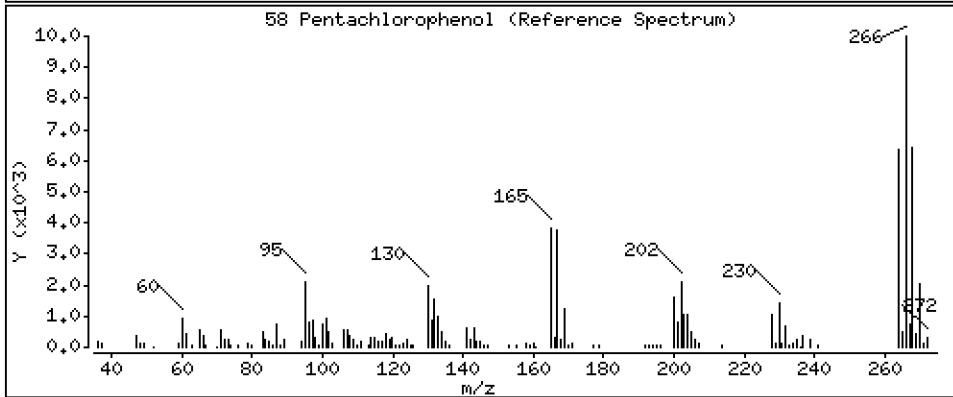
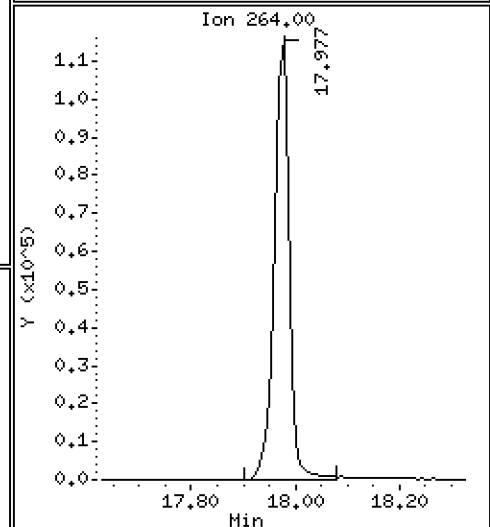
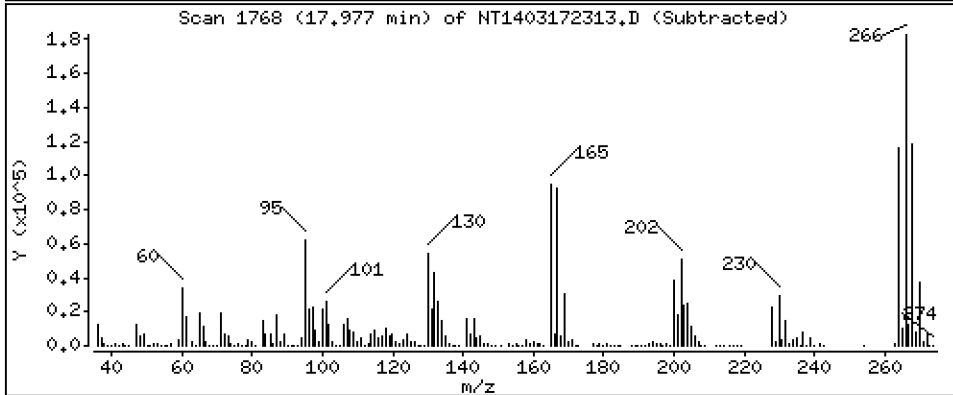
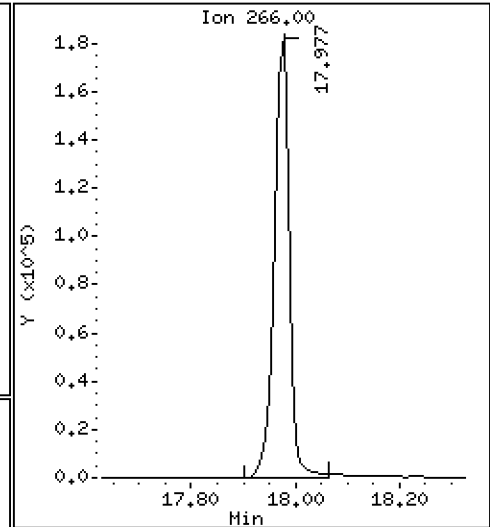
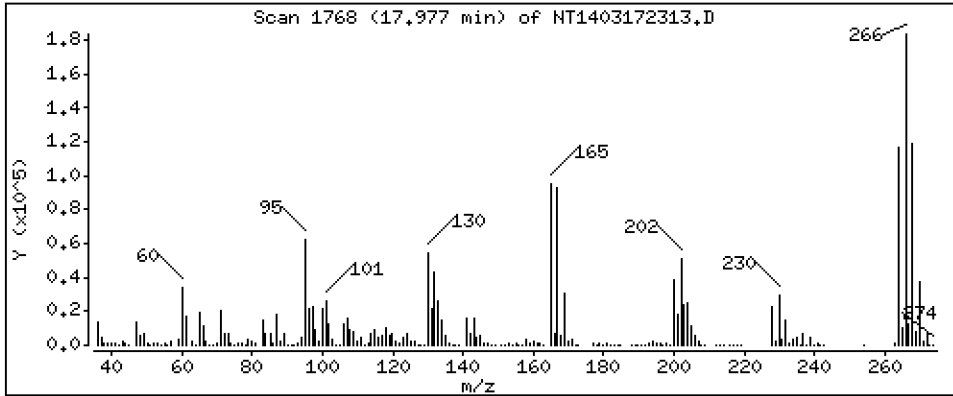
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 14,25 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

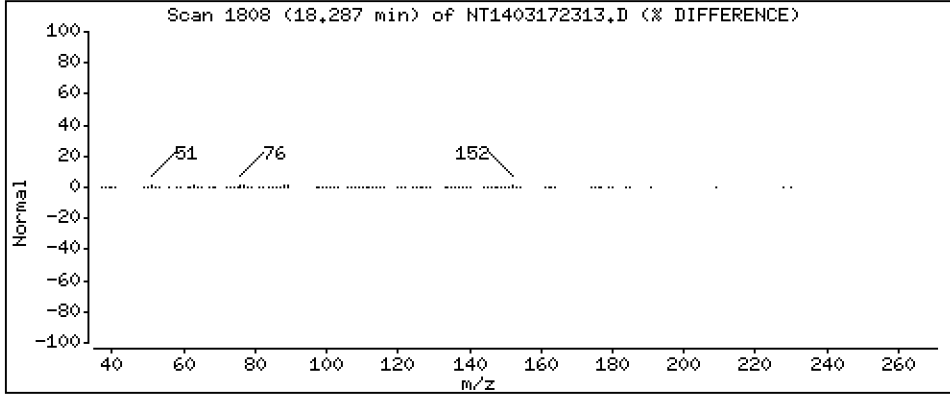
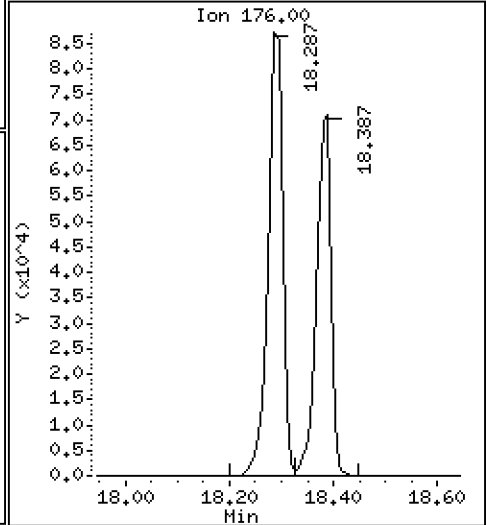
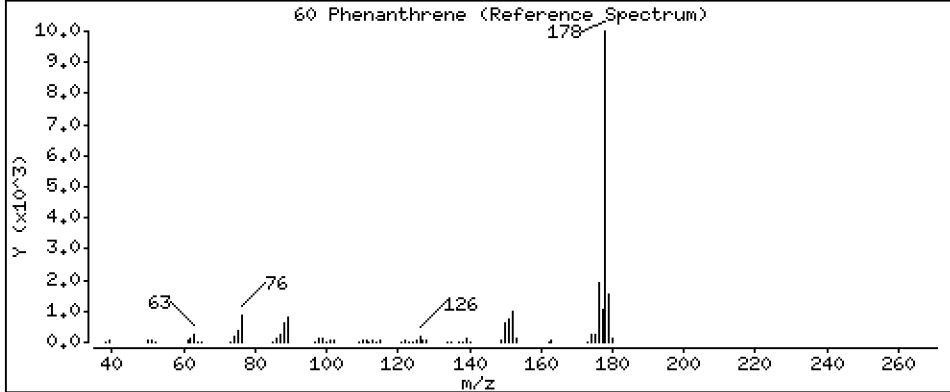
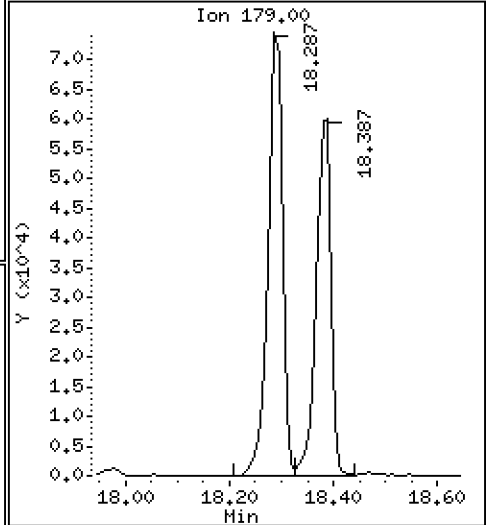
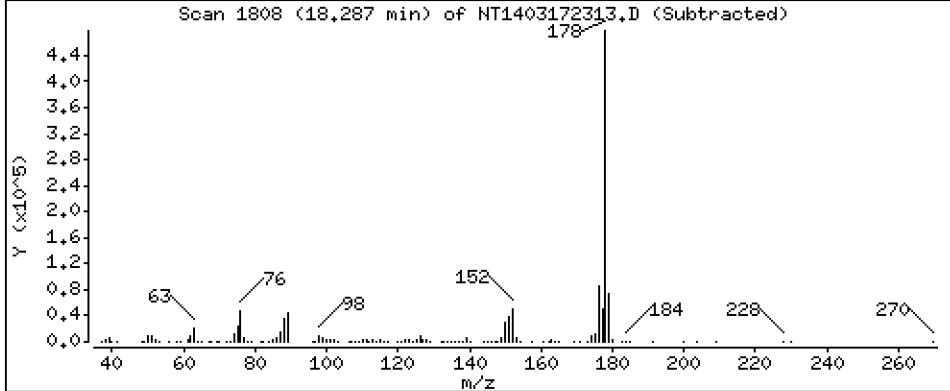
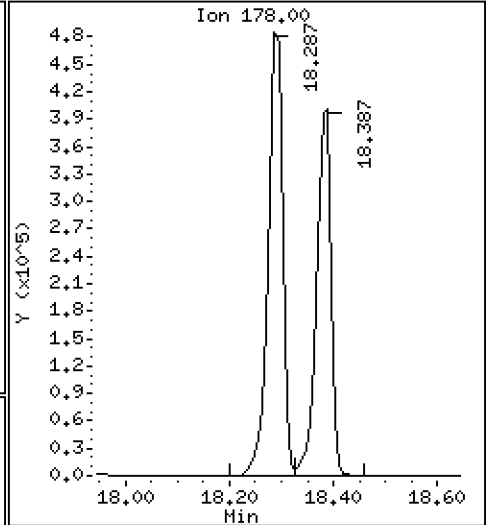
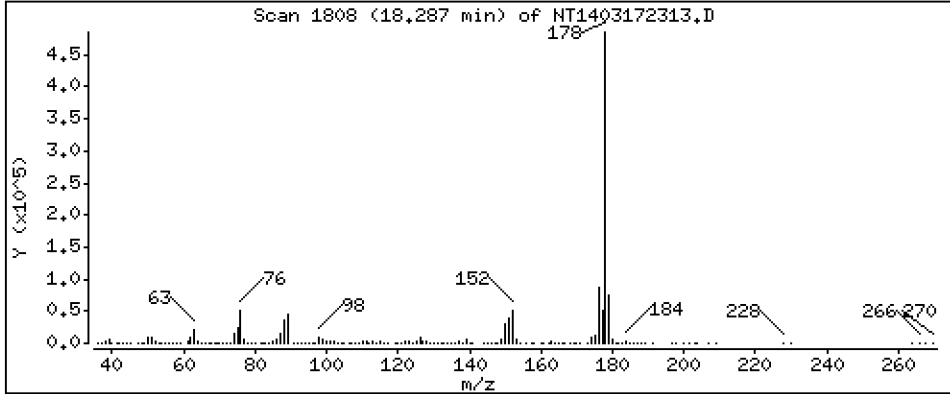
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,458 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

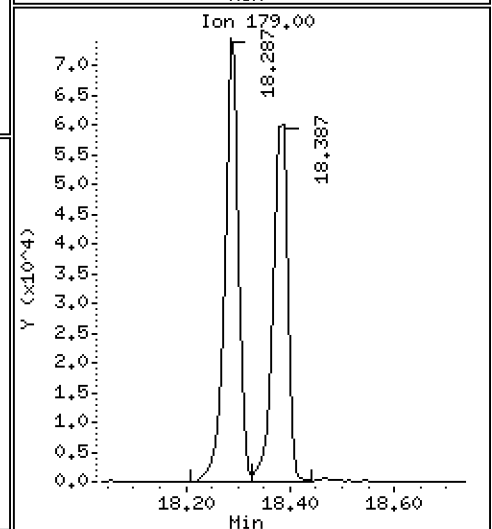
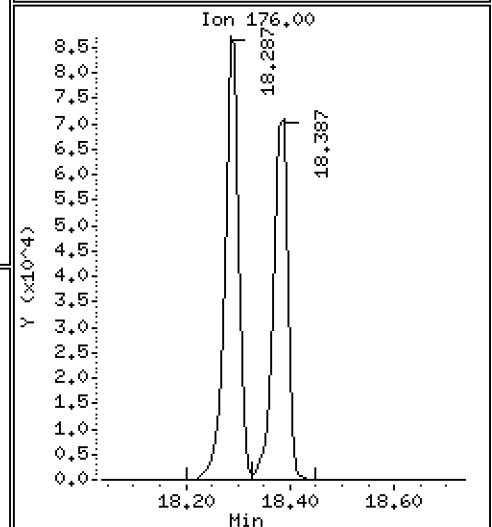
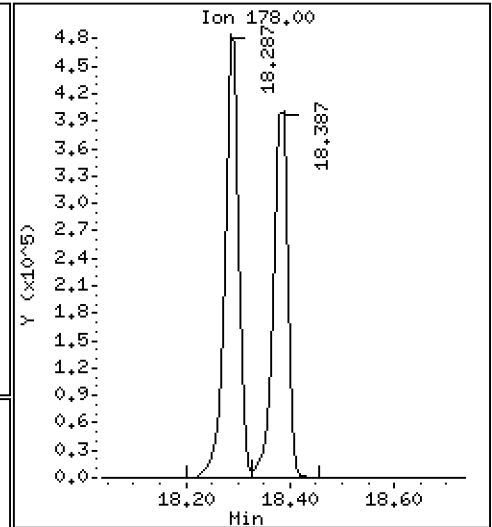
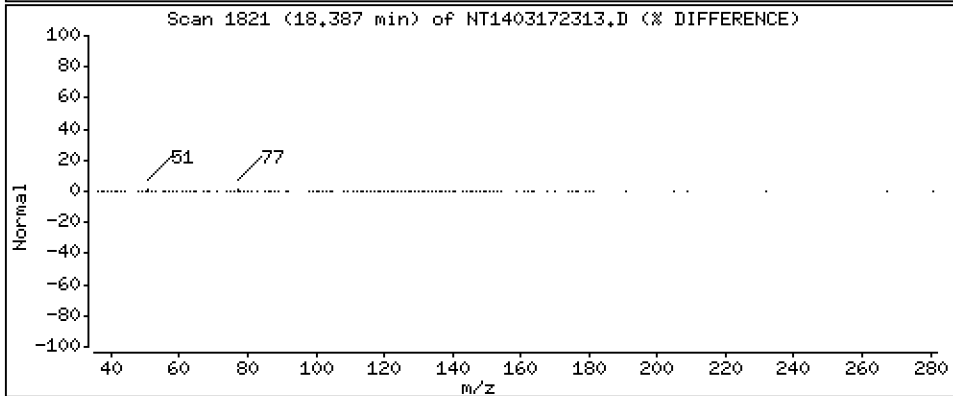
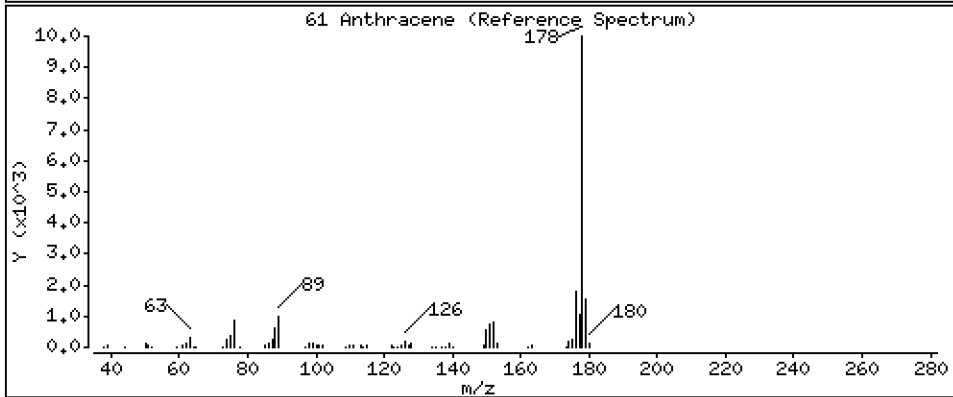
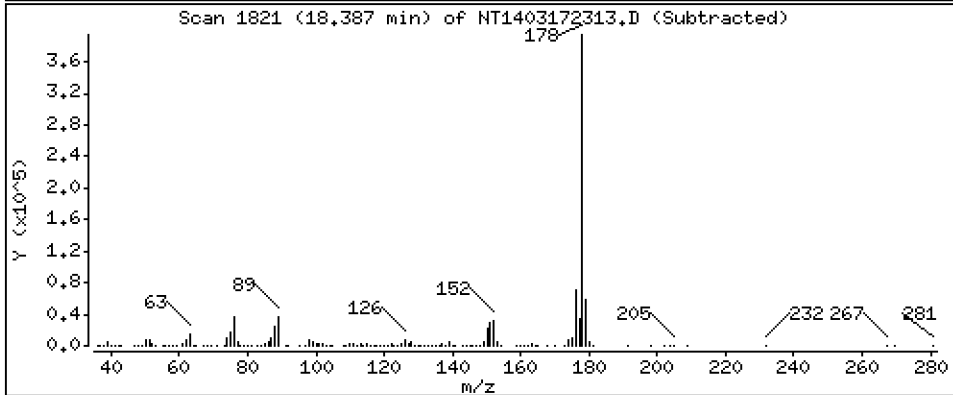
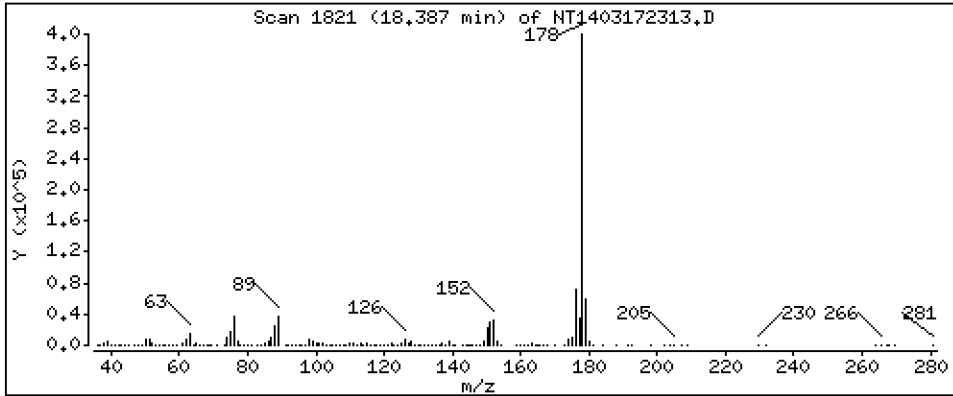
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 3,789 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

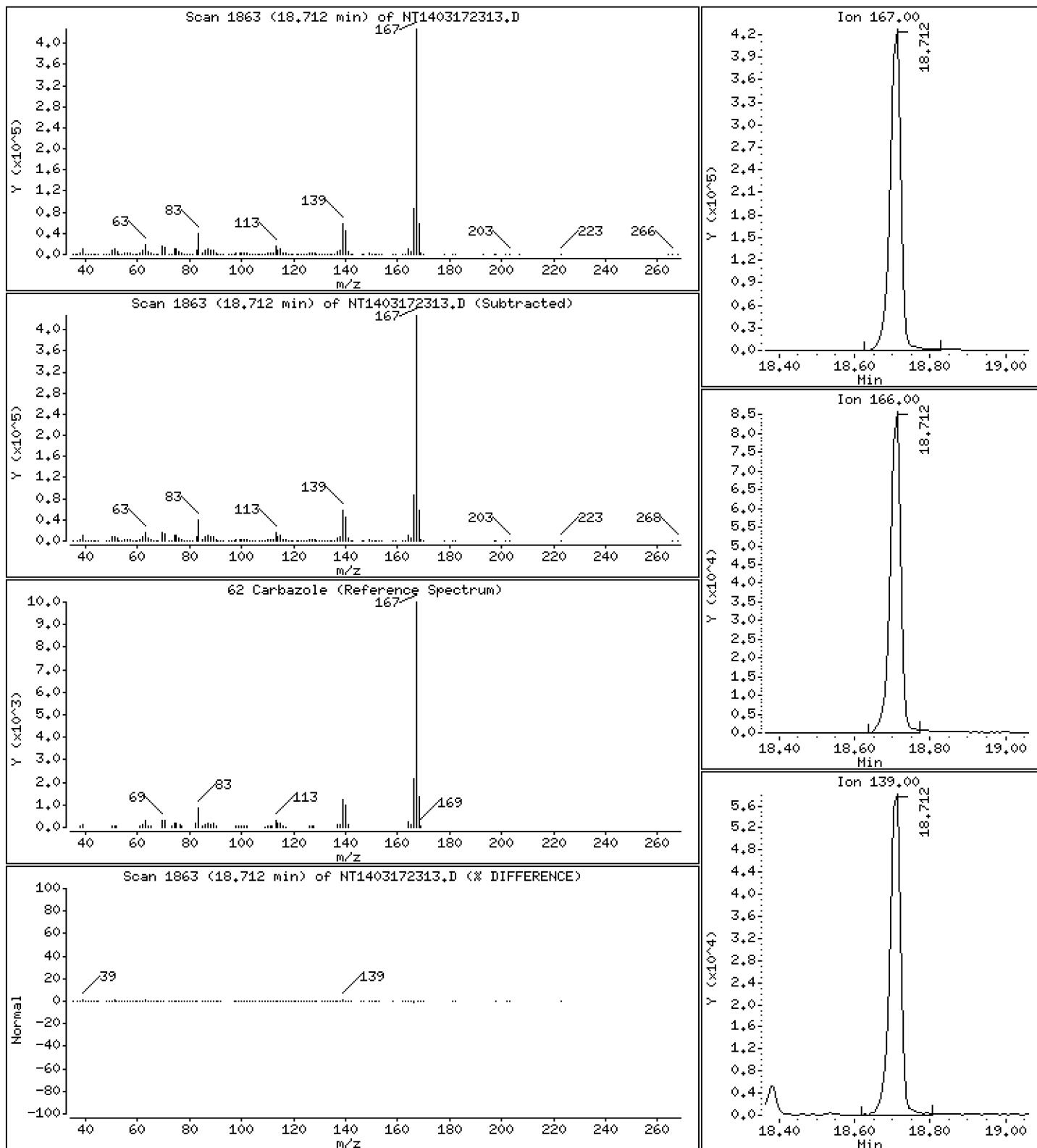
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,646 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

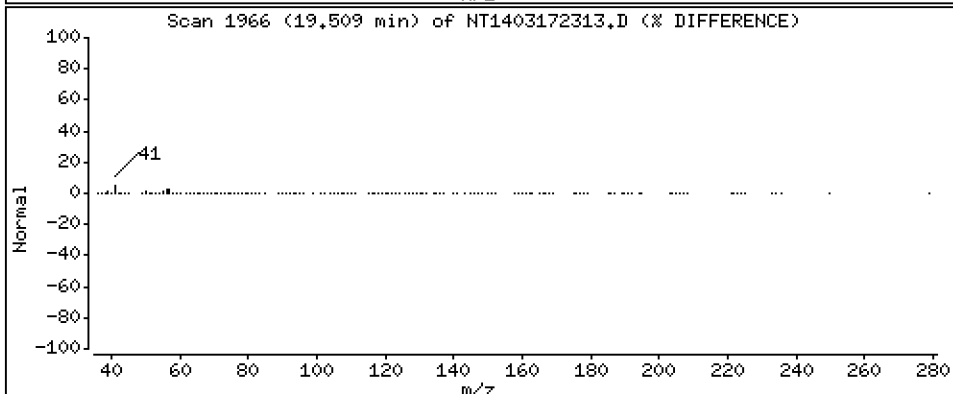
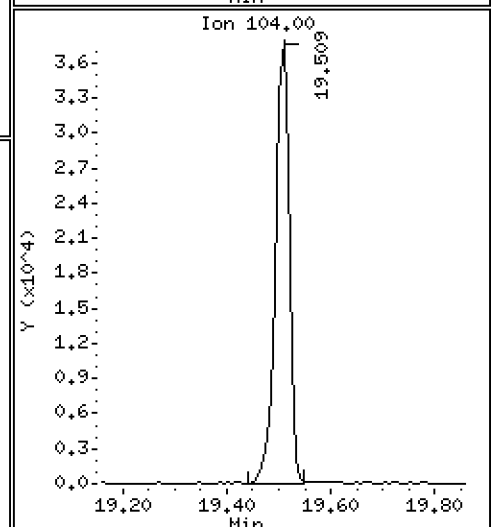
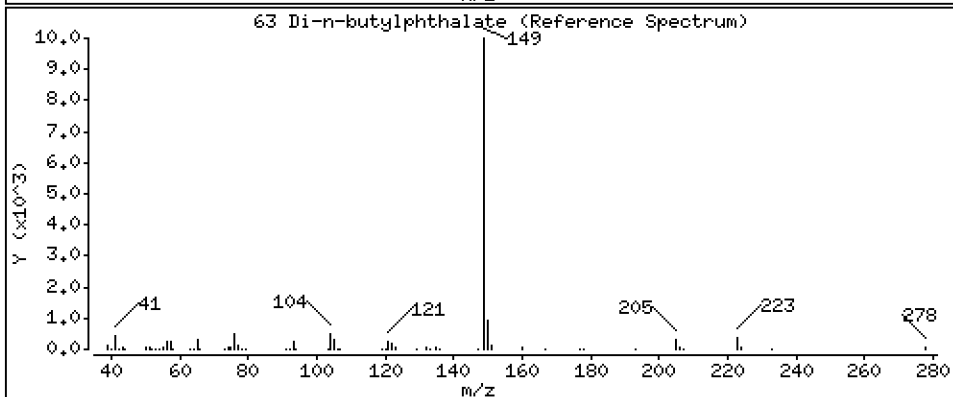
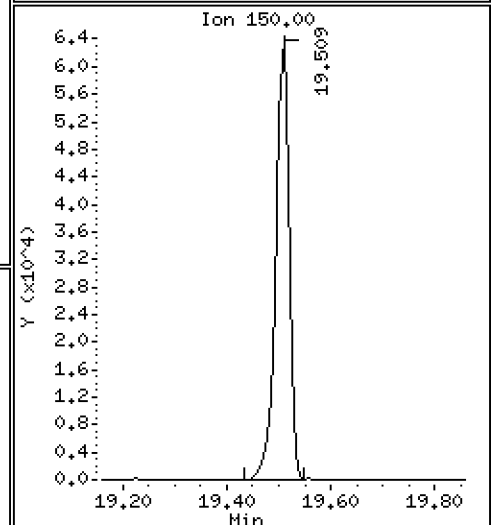
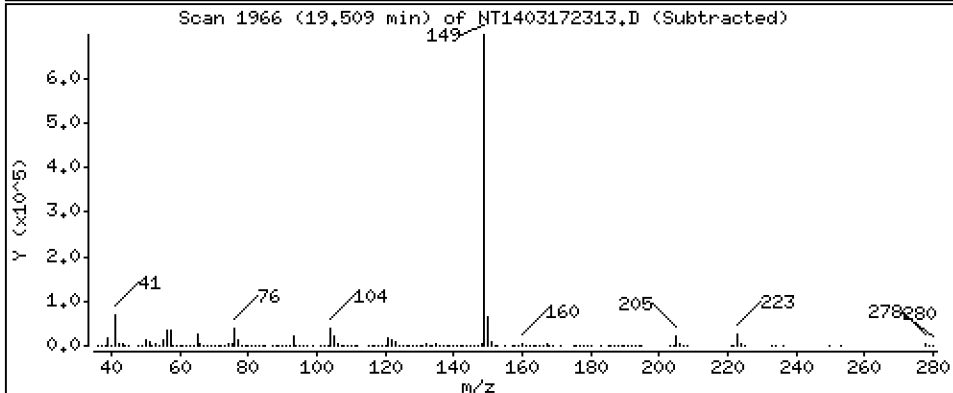
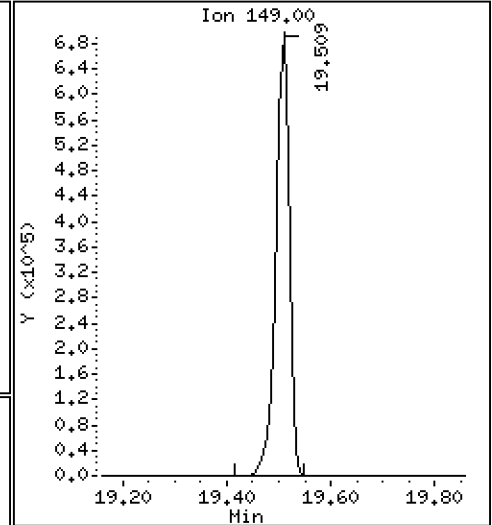
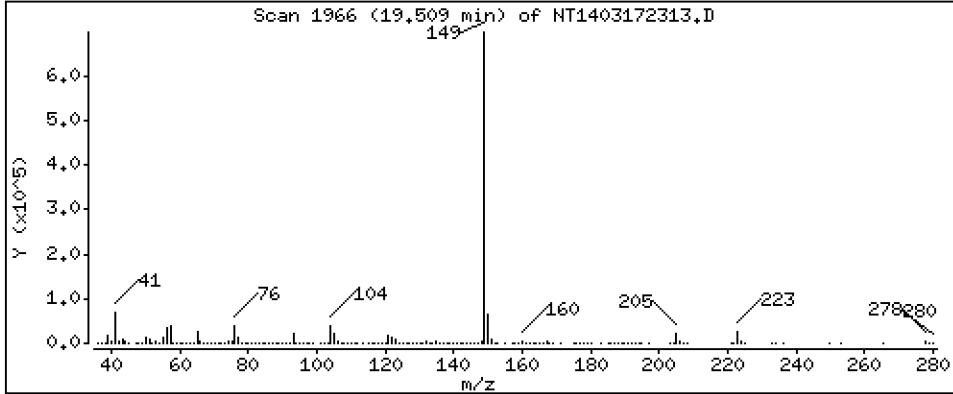
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 5.397 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

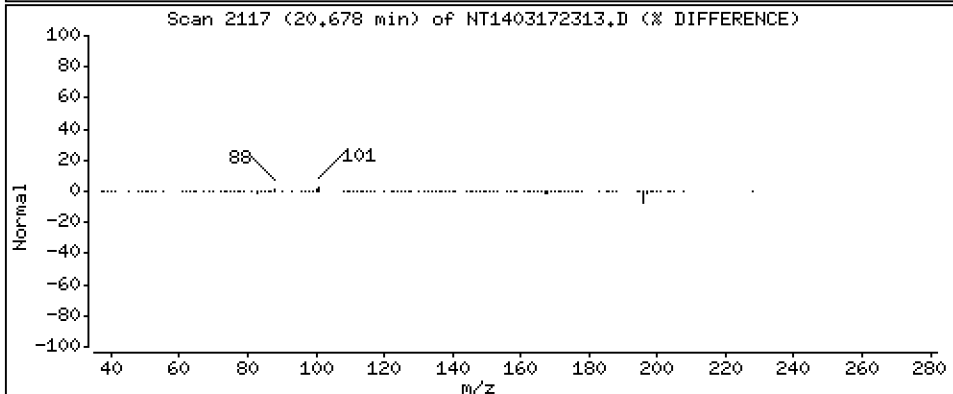
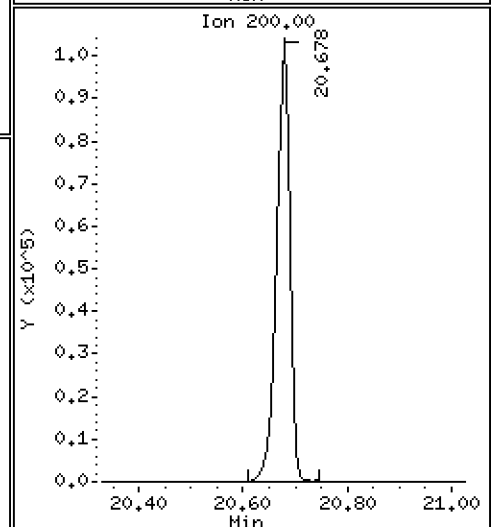
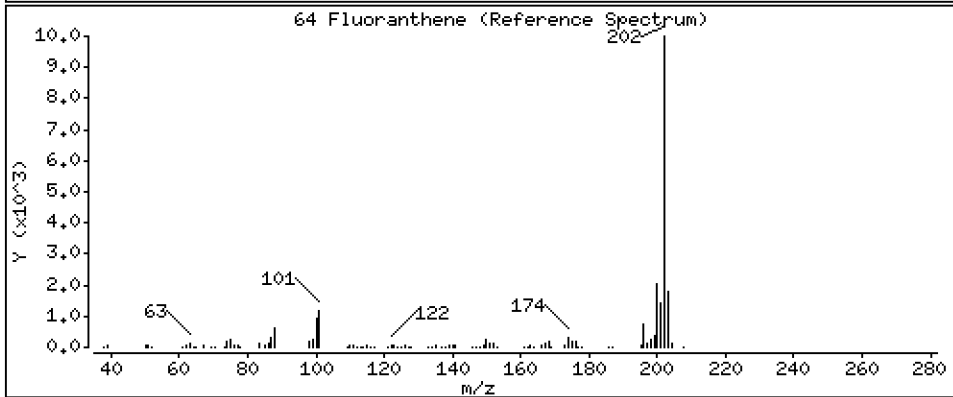
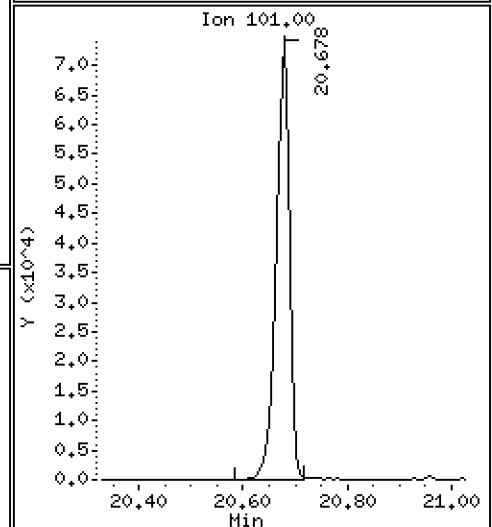
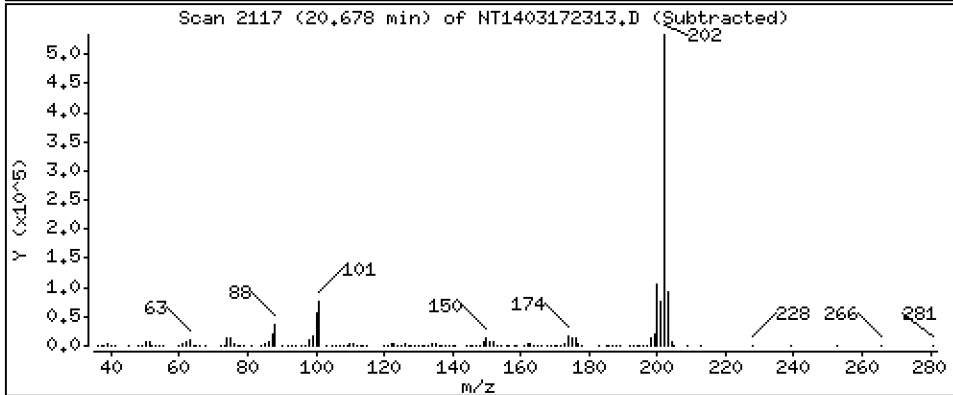
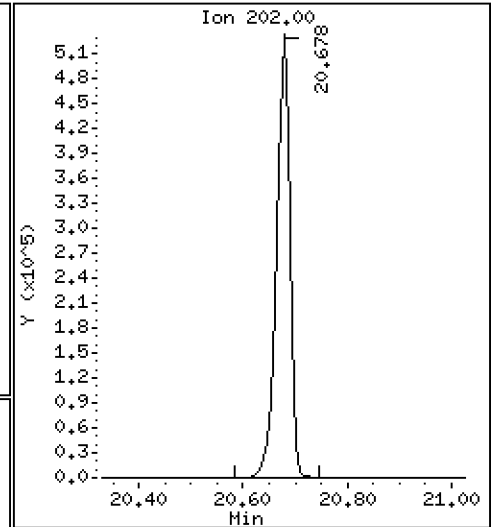
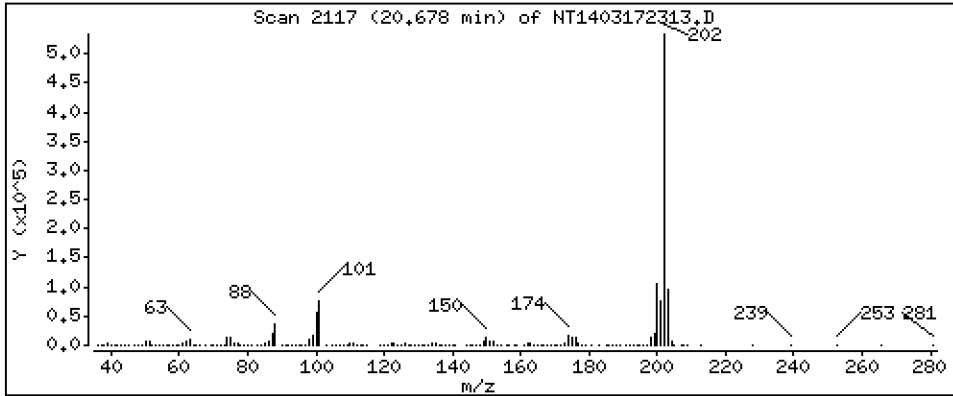
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 6,268 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

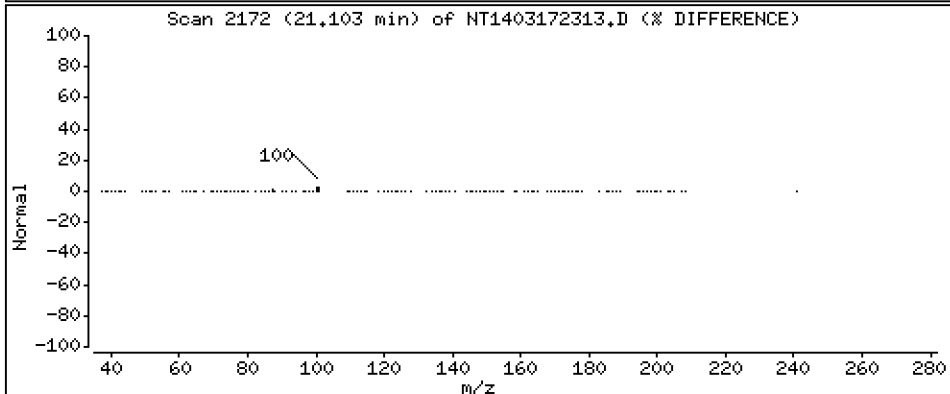
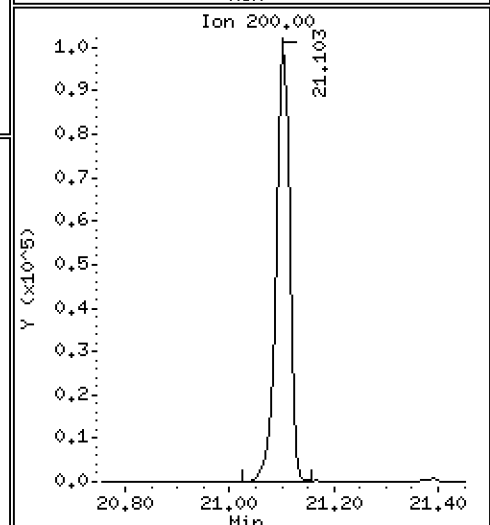
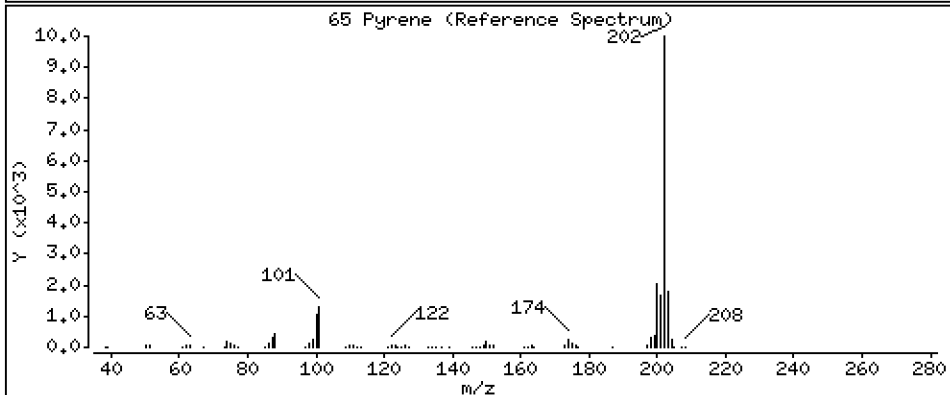
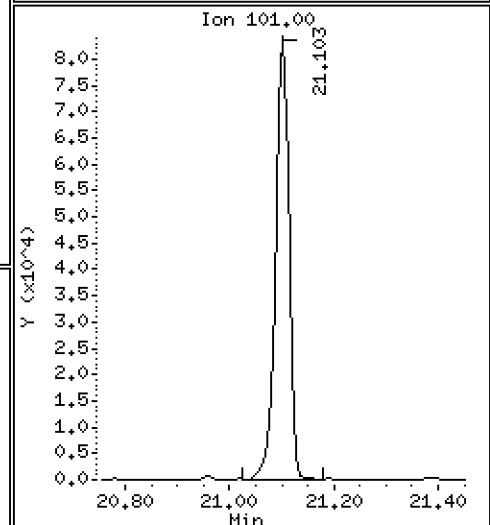
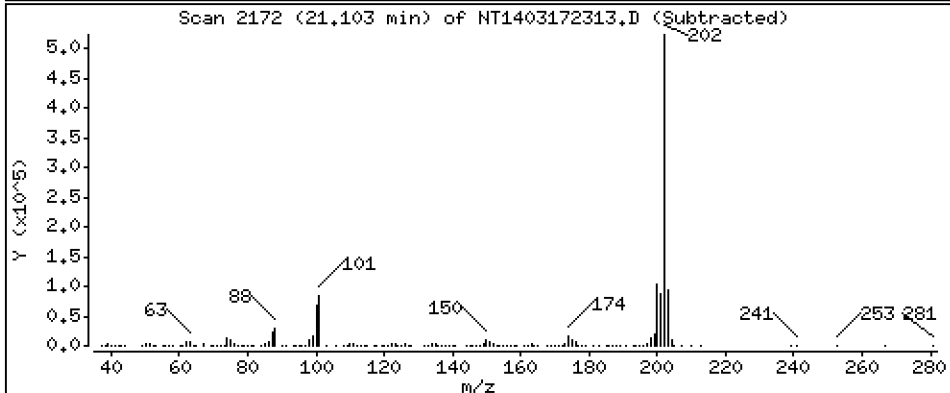
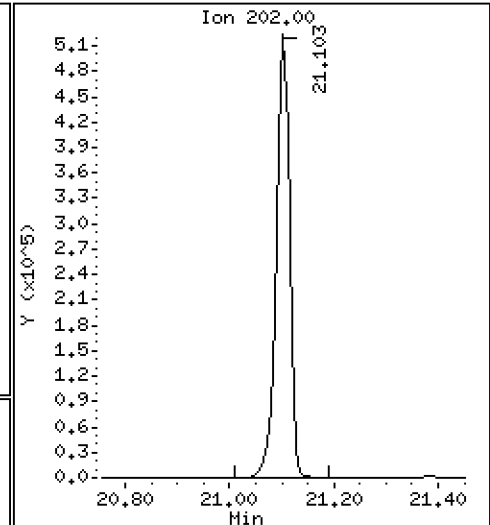
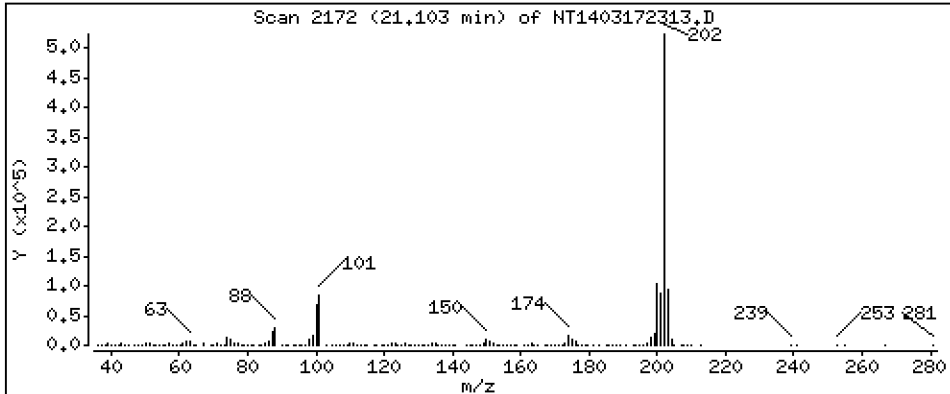
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 5,979 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

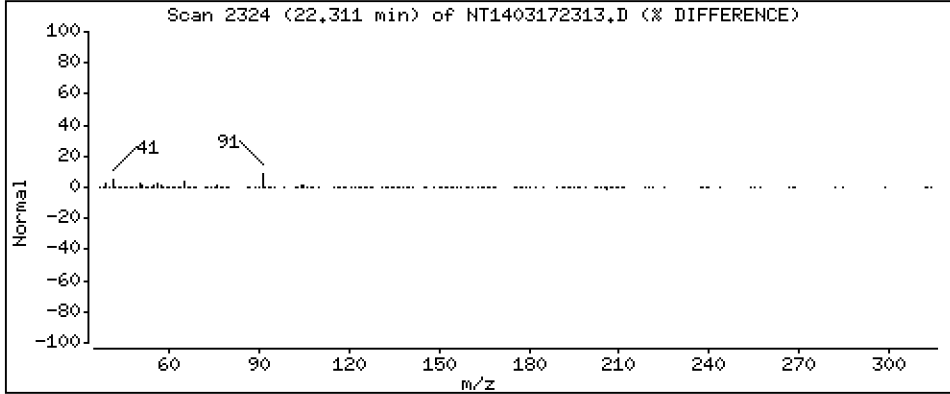
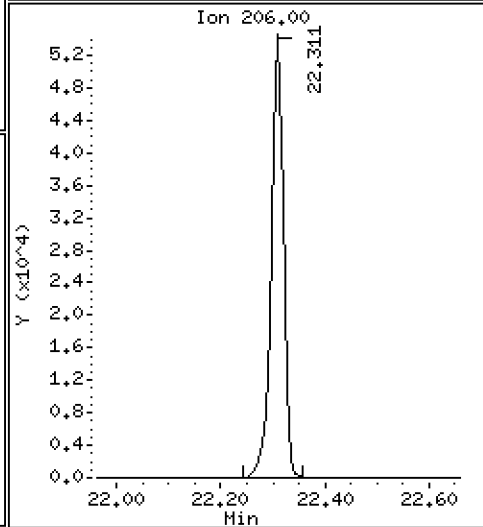
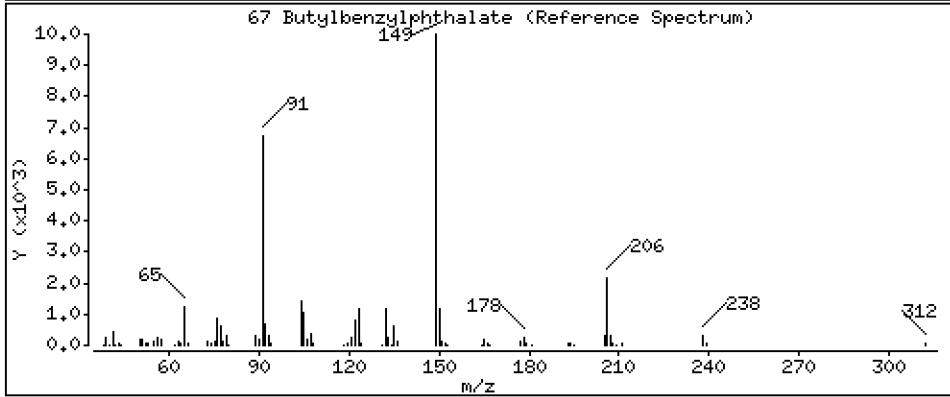
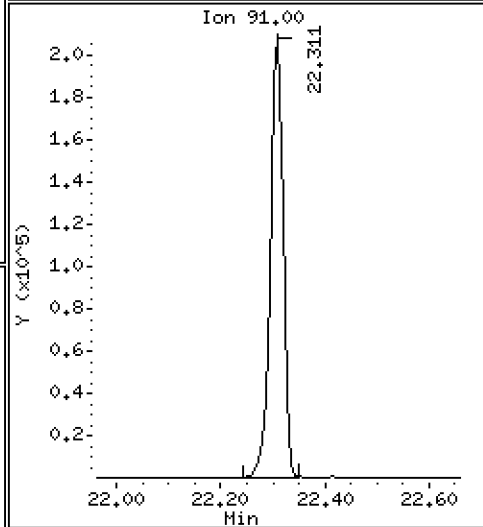
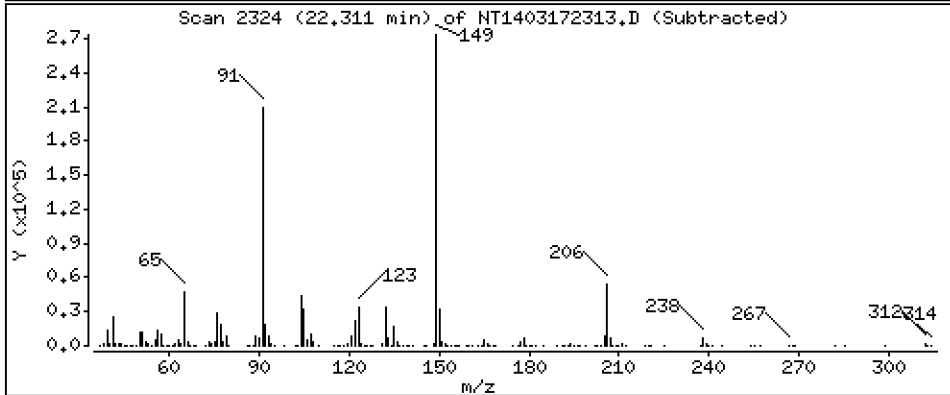
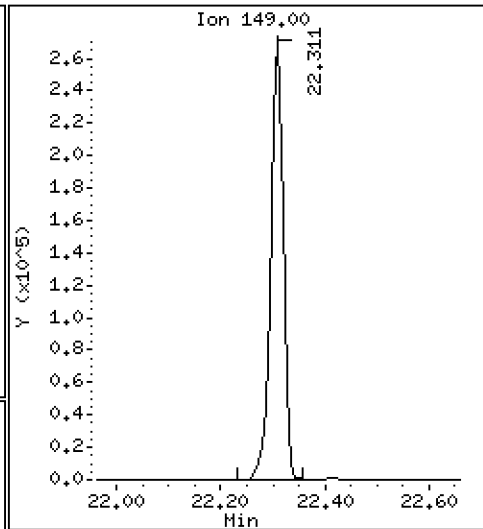
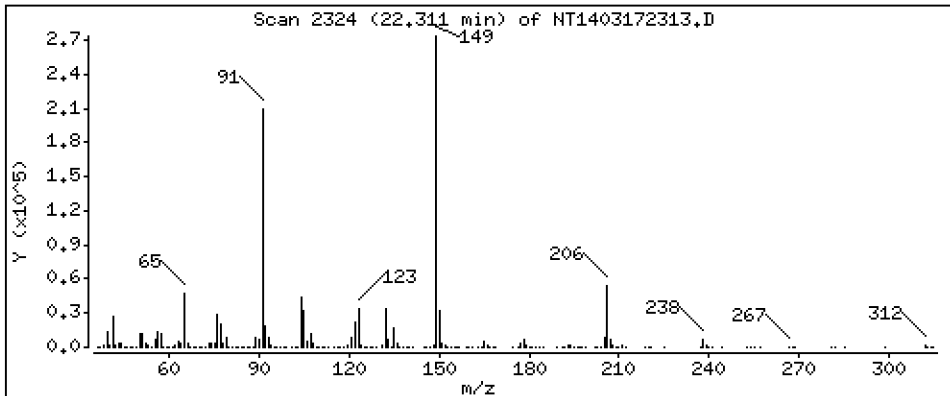
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 6,676 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

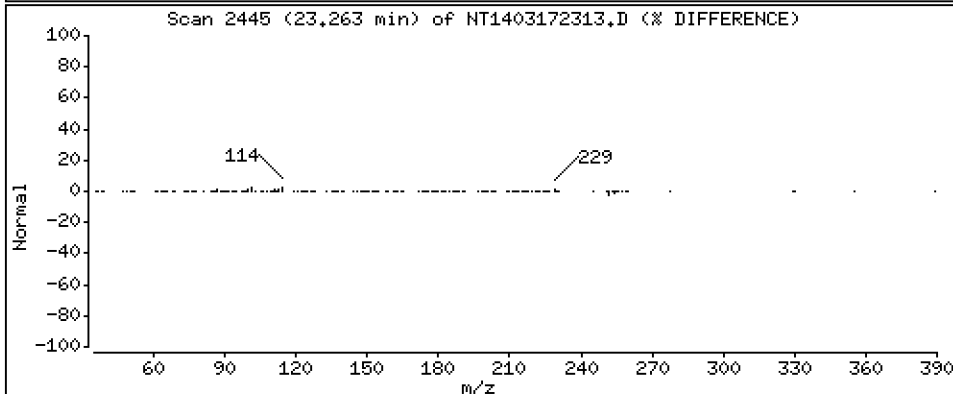
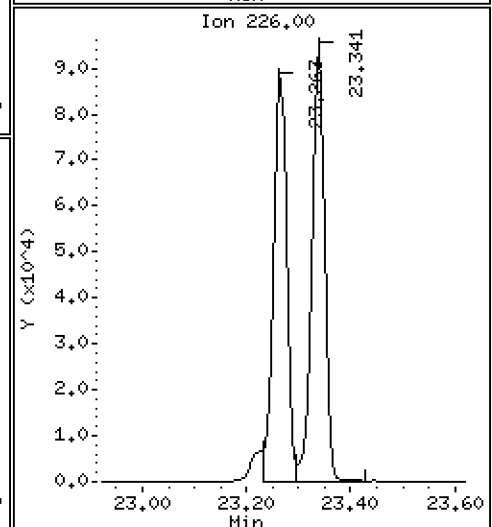
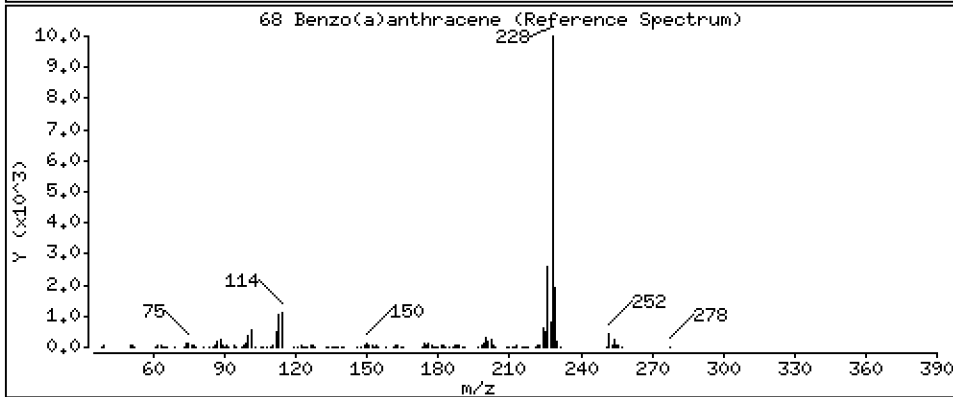
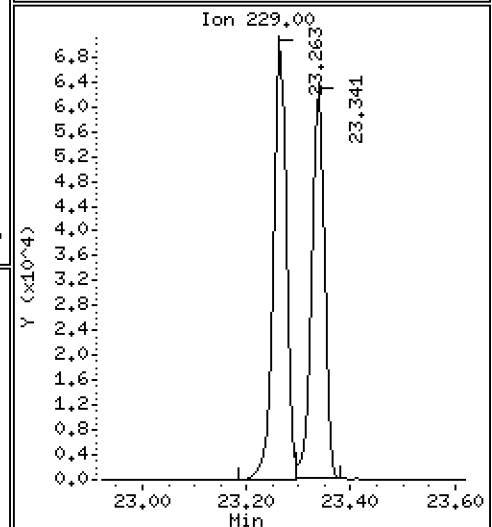
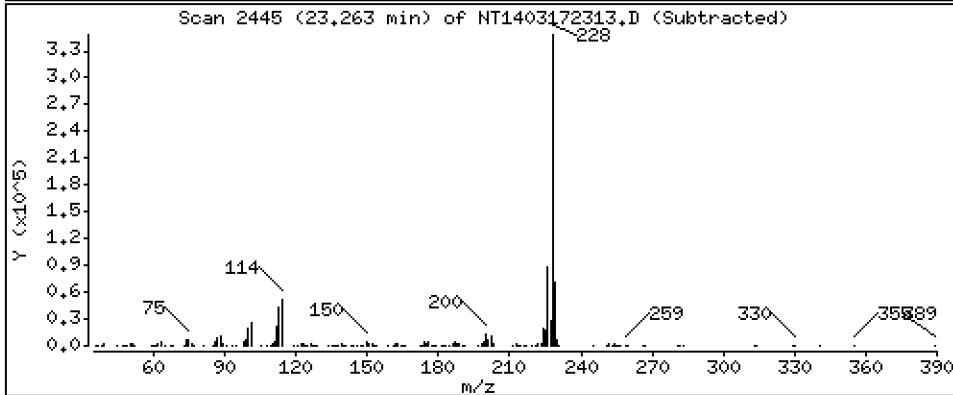
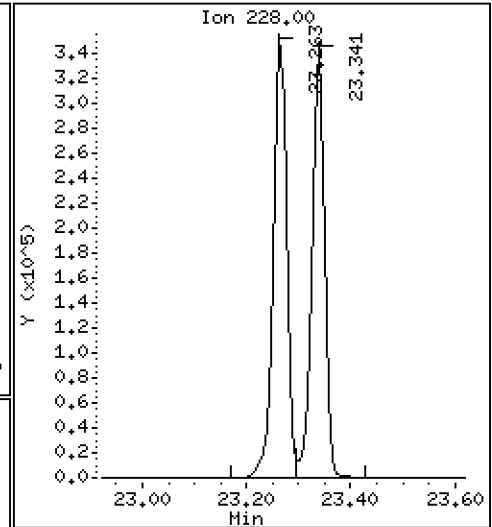
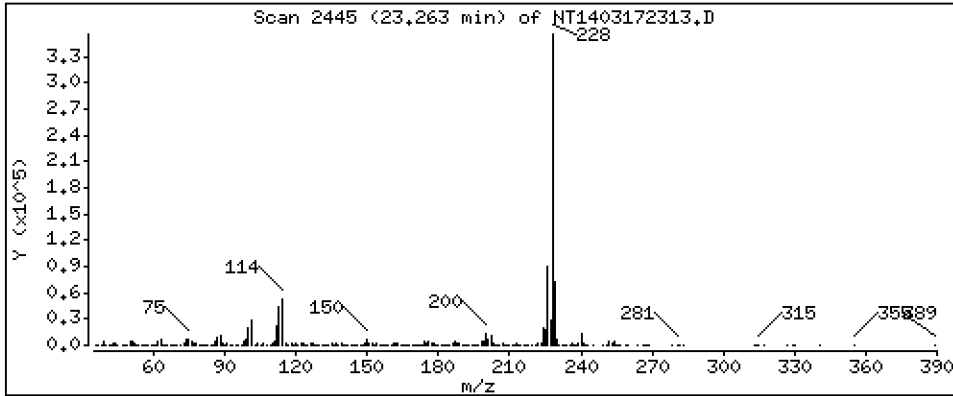
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,563 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

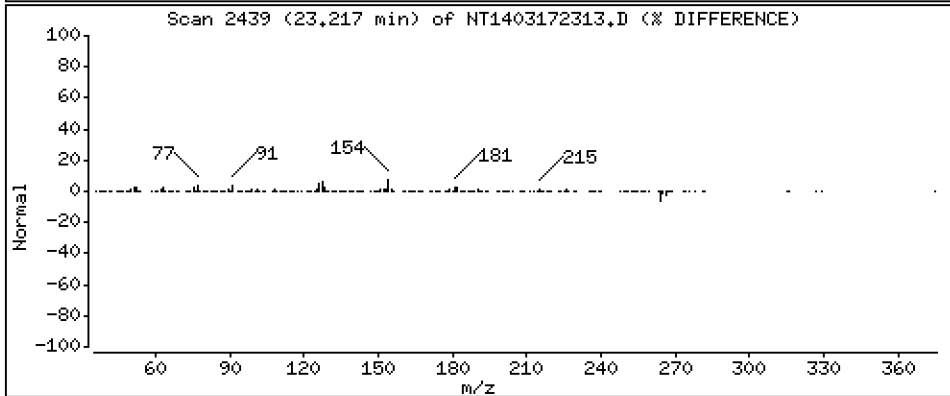
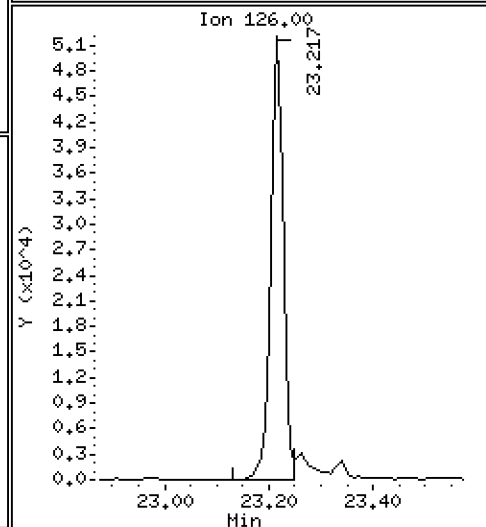
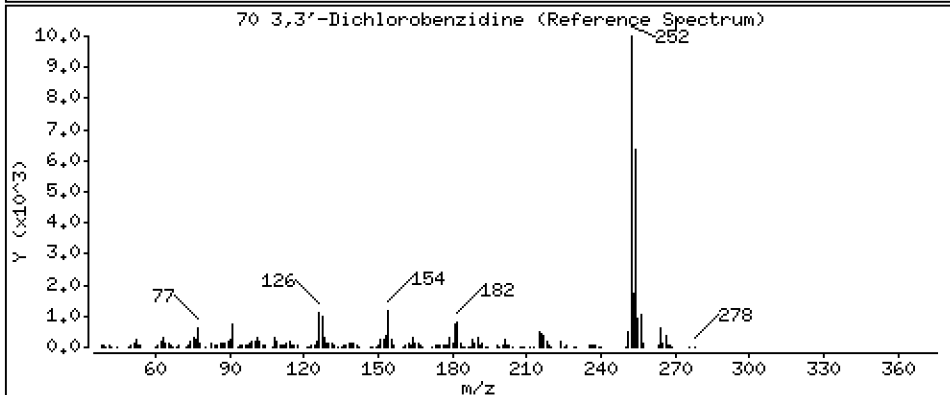
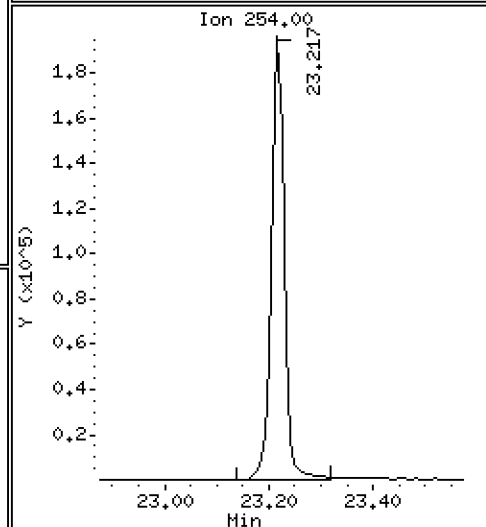
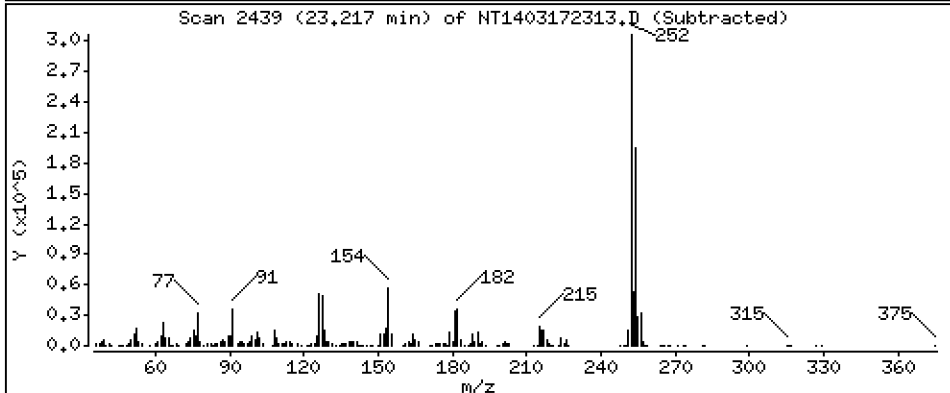
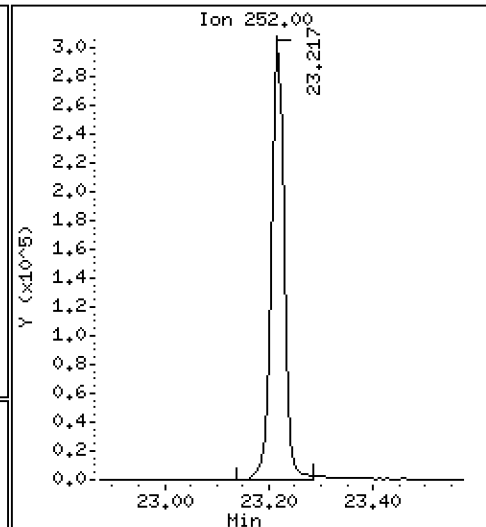
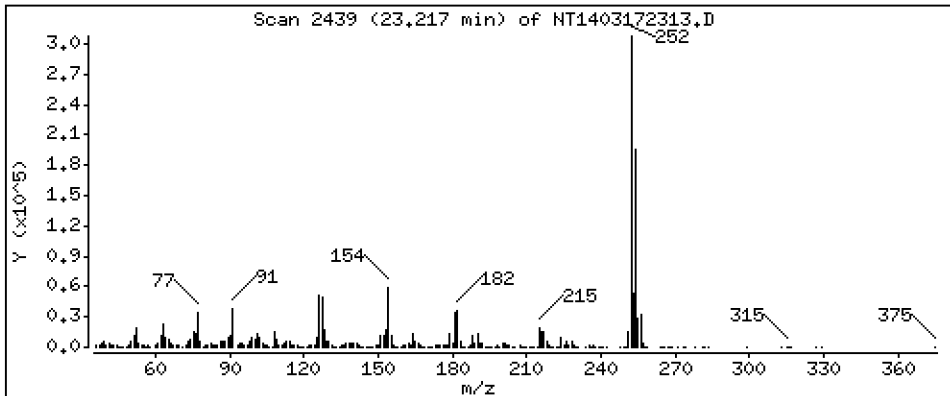
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 12,65 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

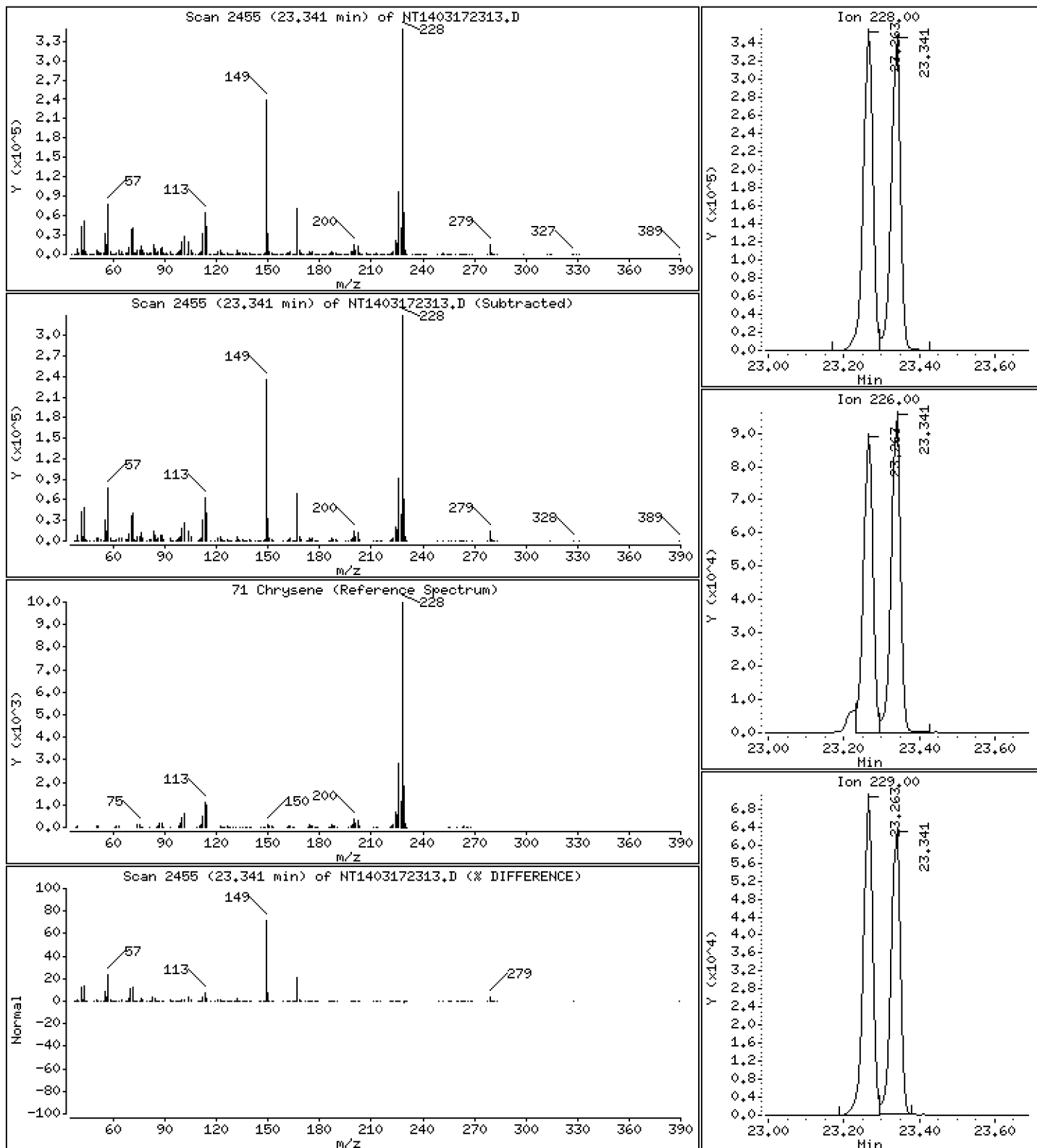
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,620 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

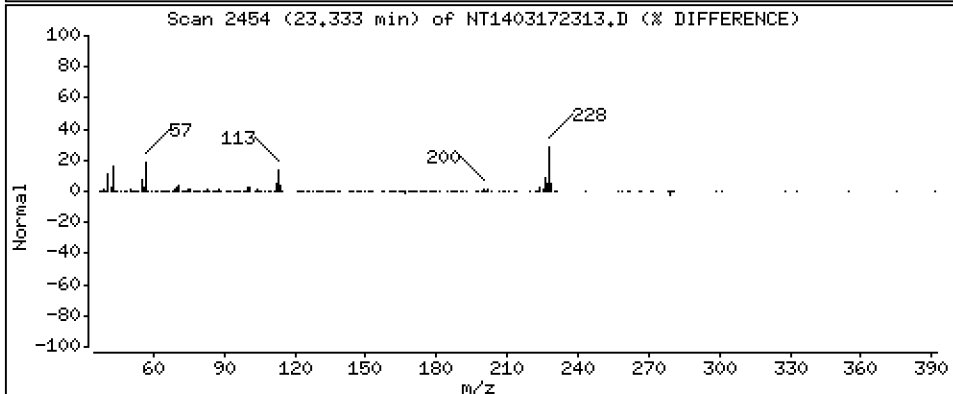
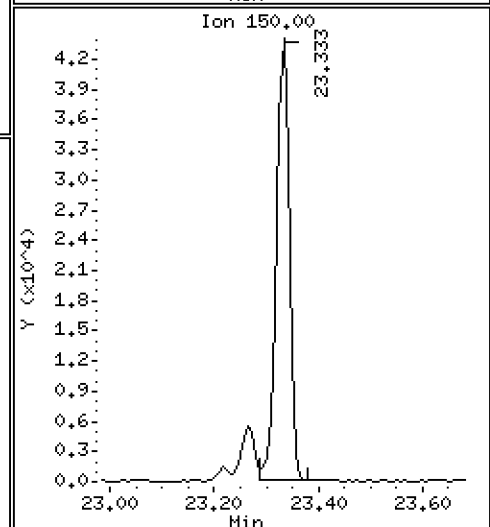
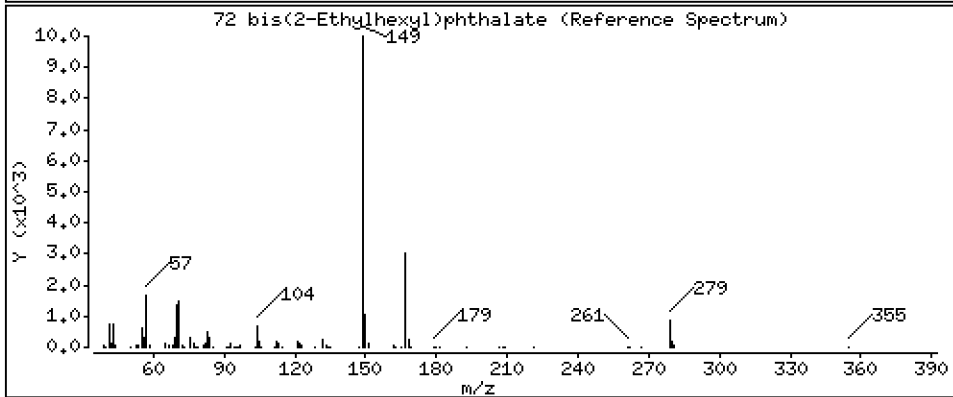
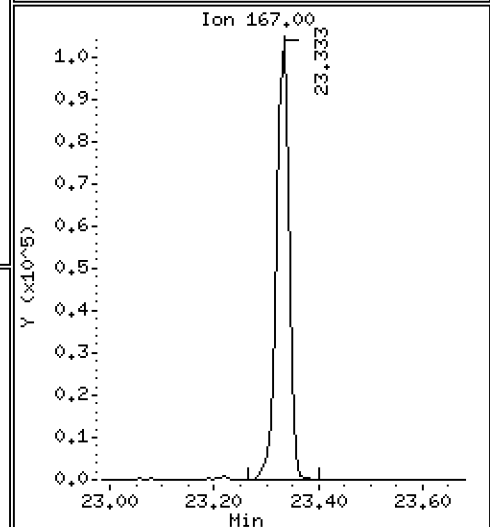
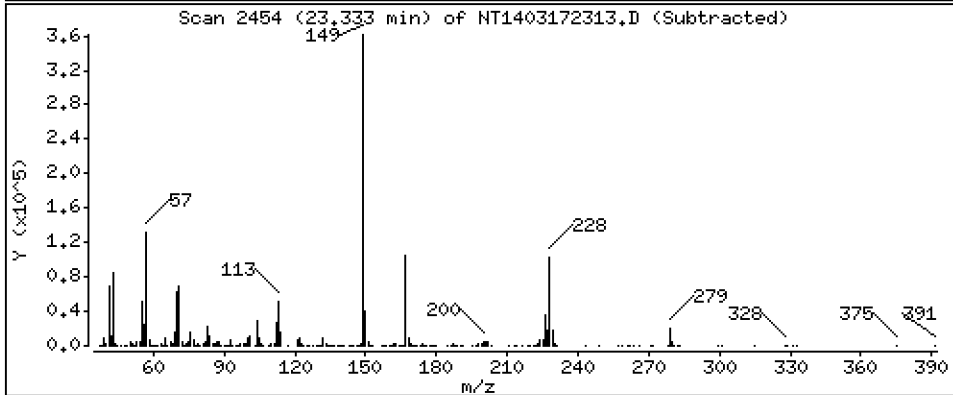
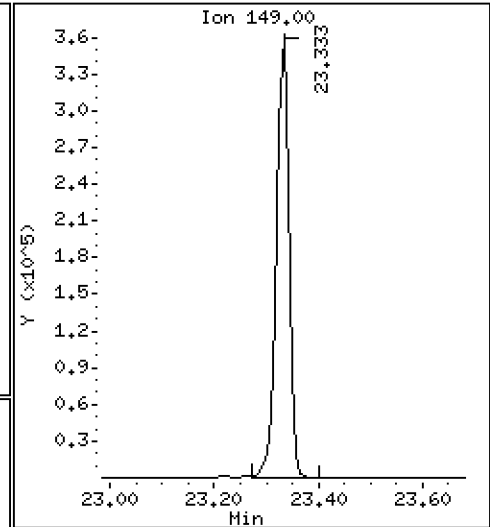
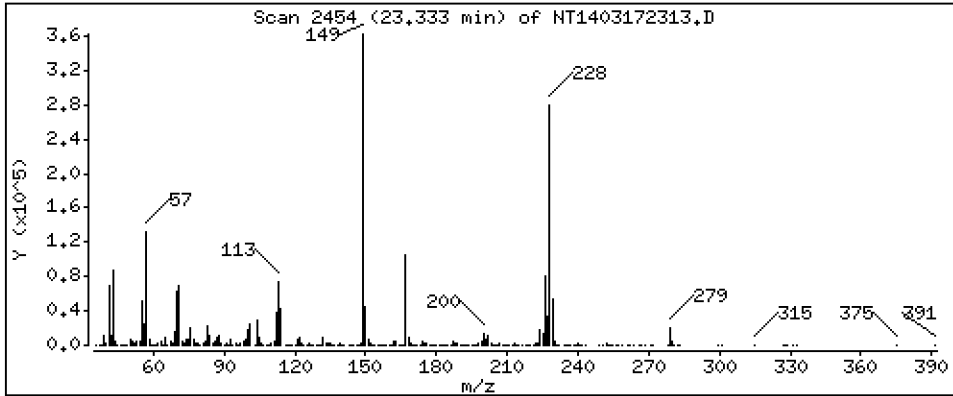
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 6,076 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

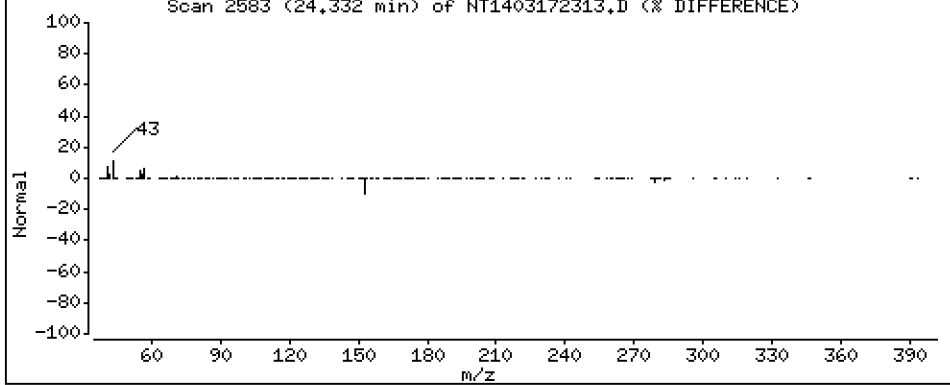
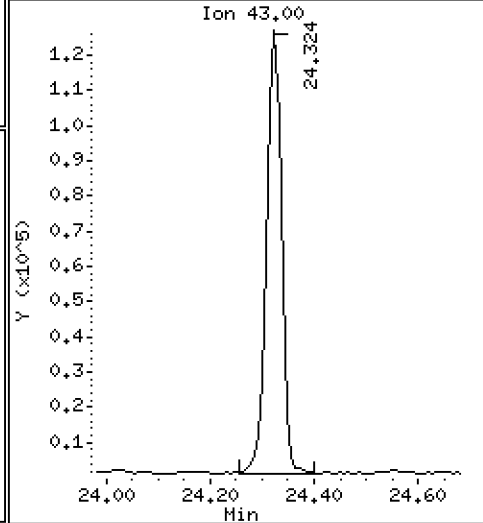
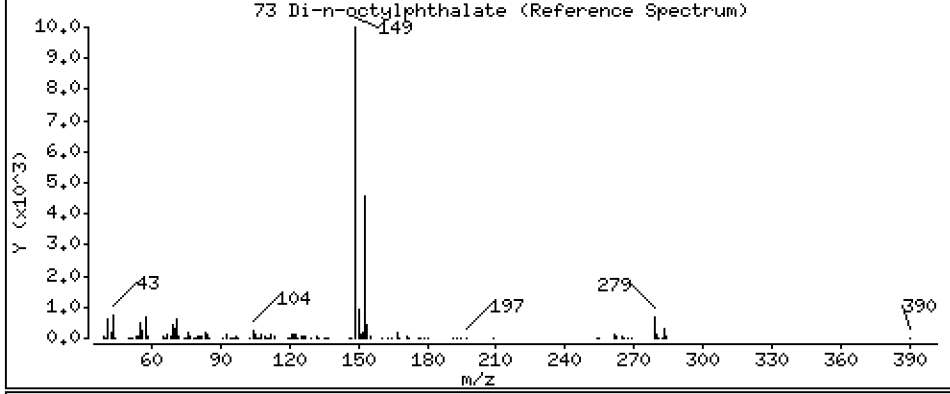
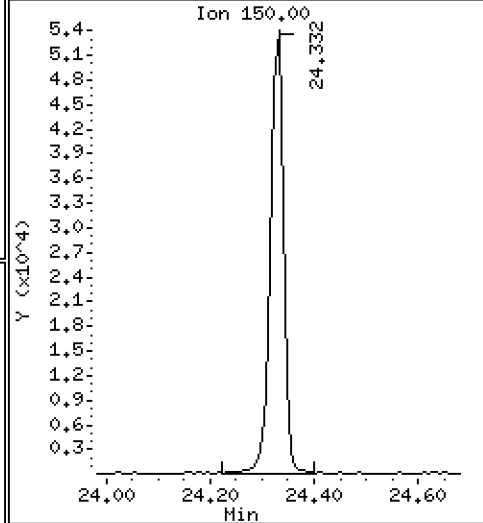
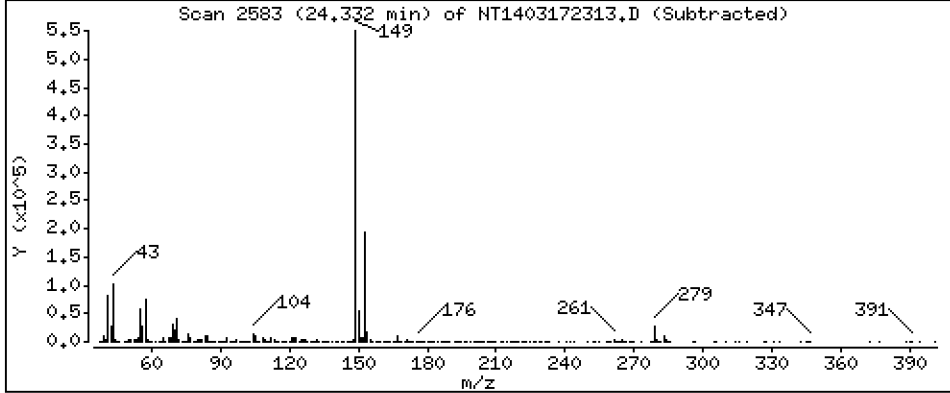
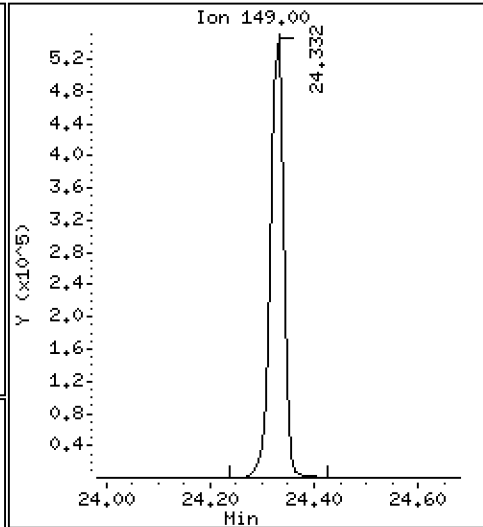
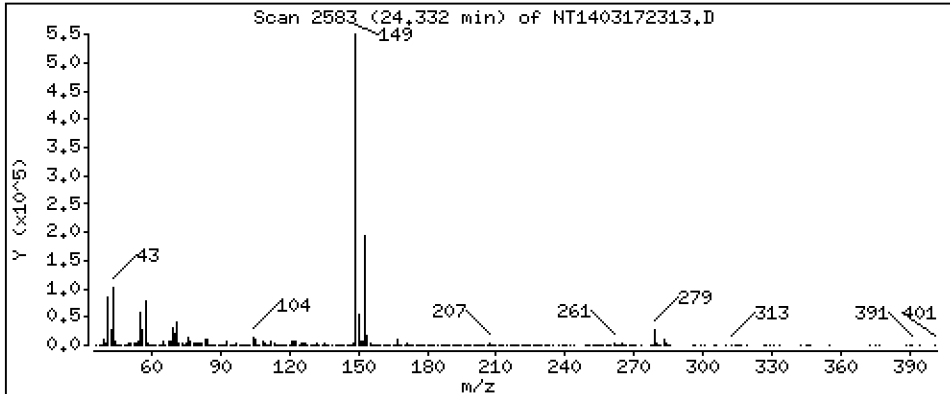
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,044 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

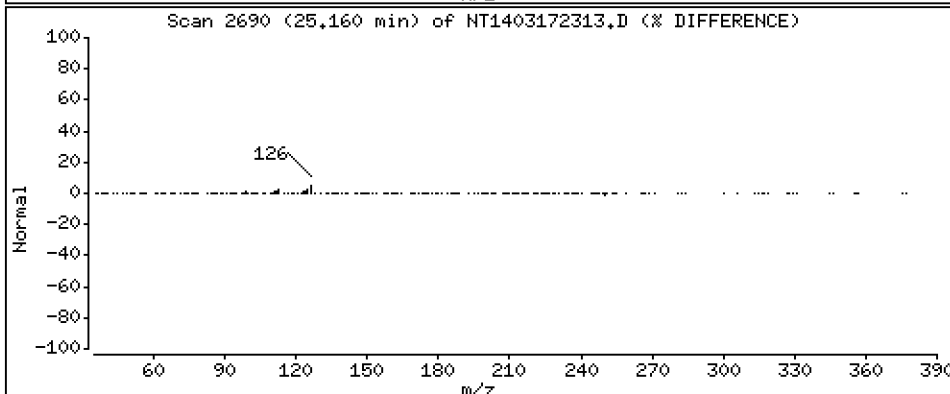
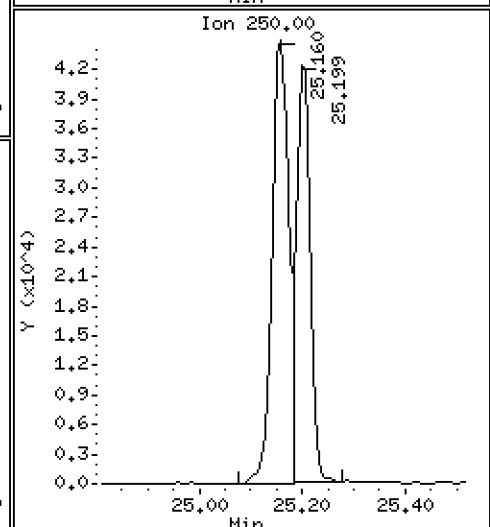
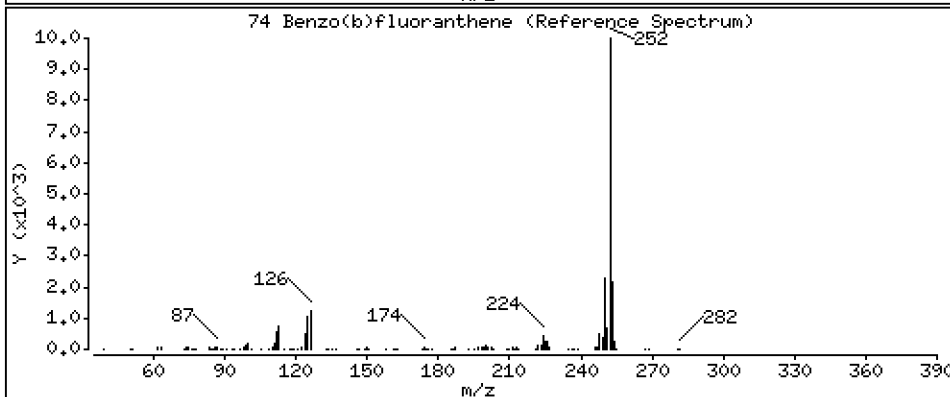
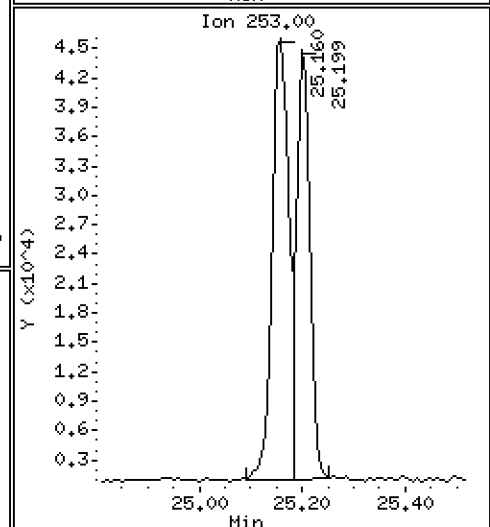
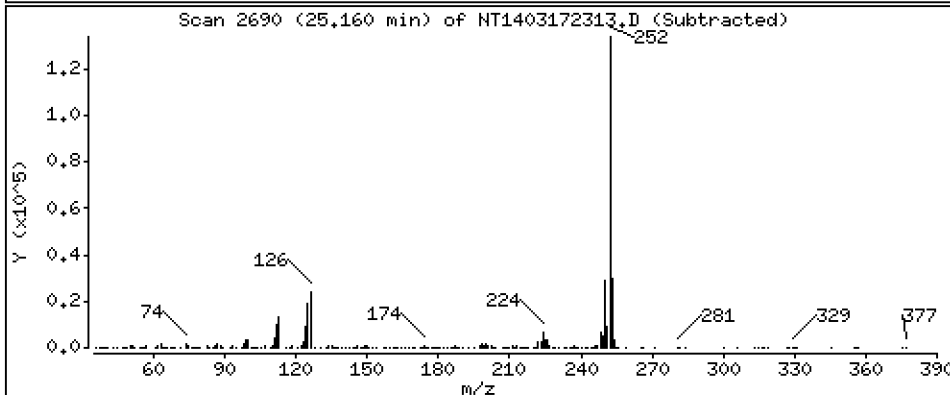
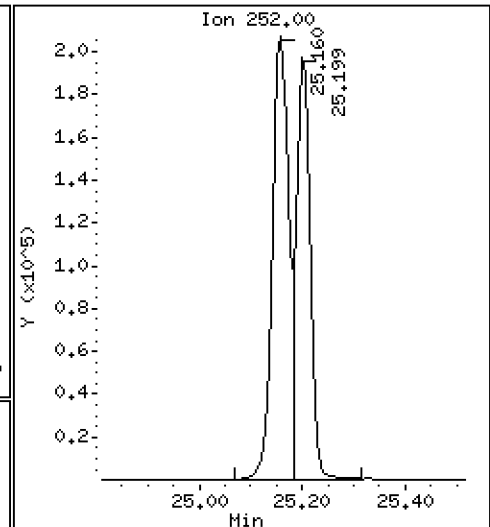
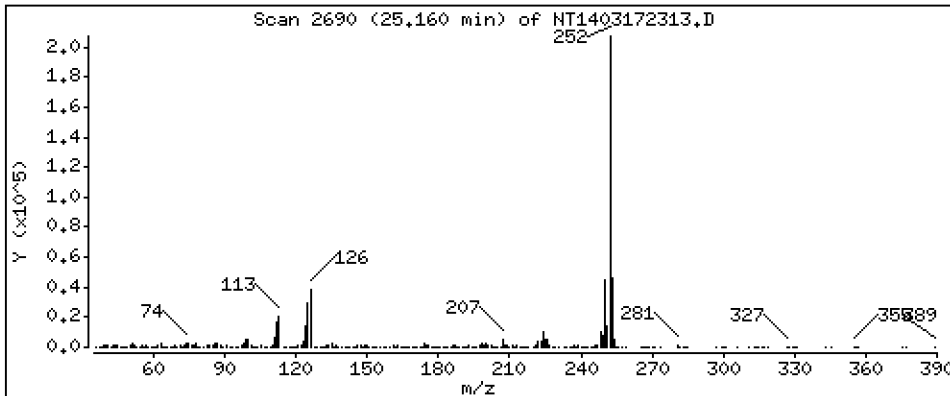
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 5,652 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

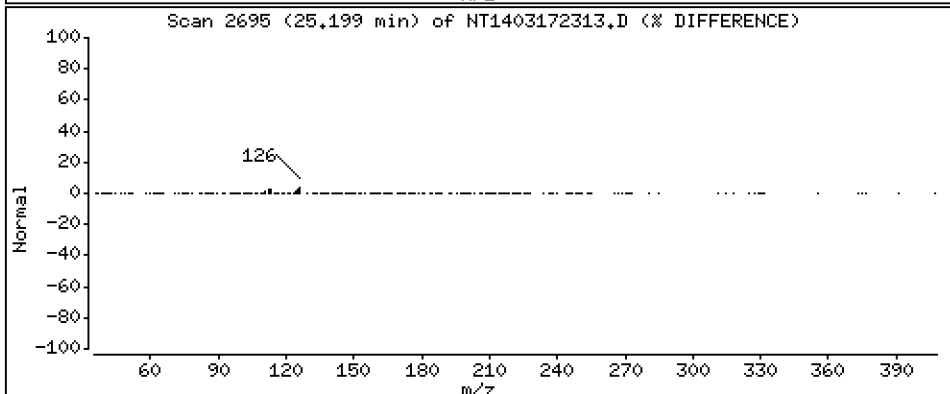
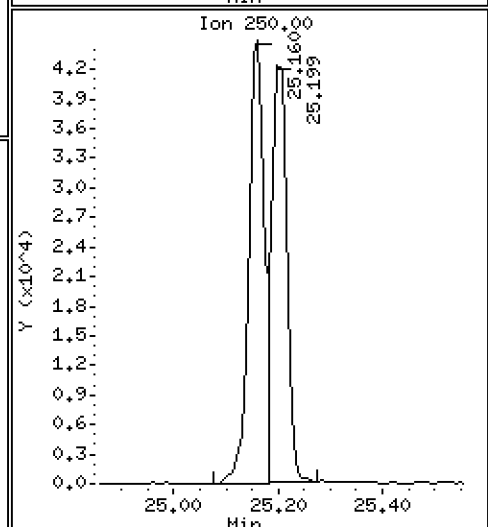
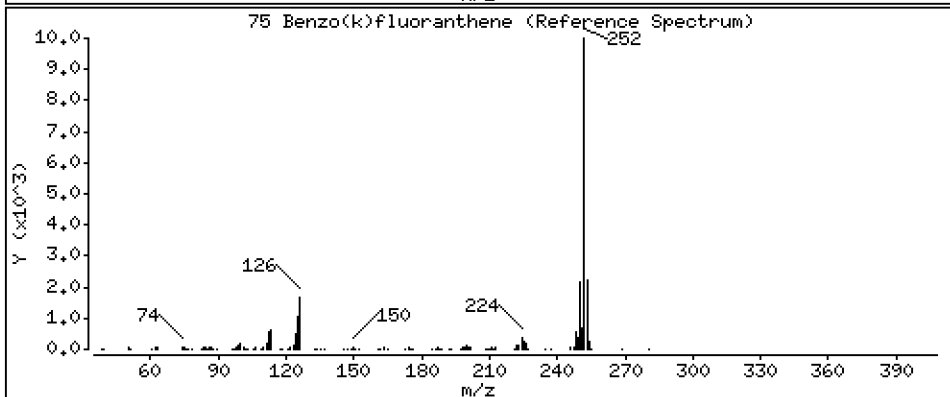
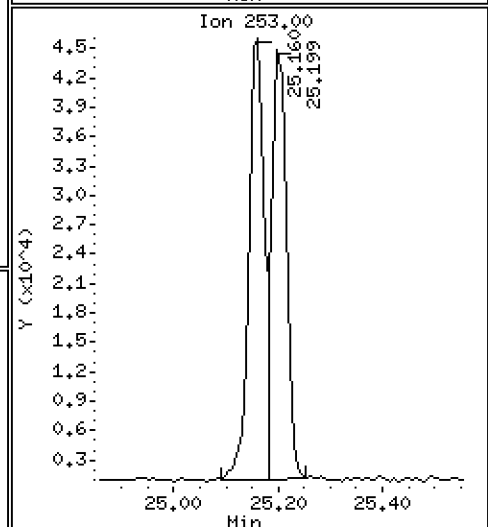
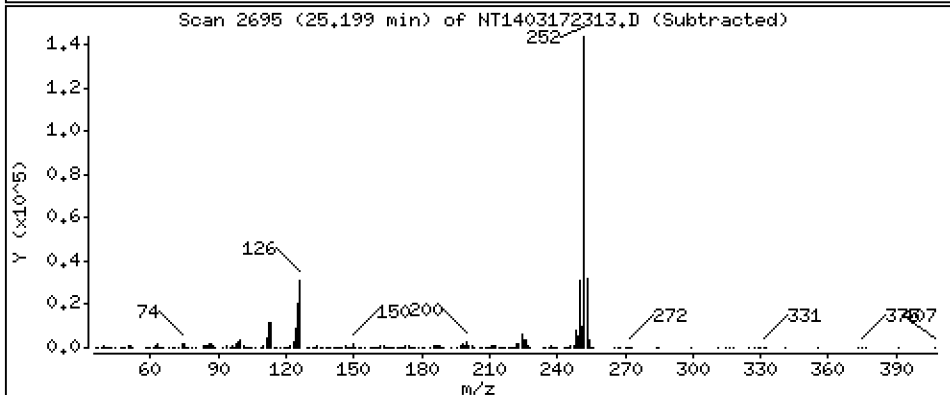
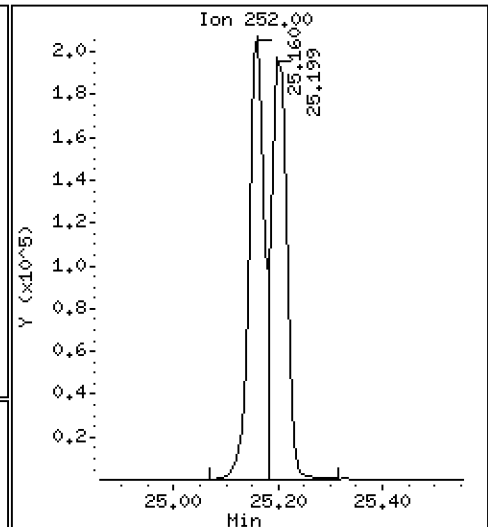
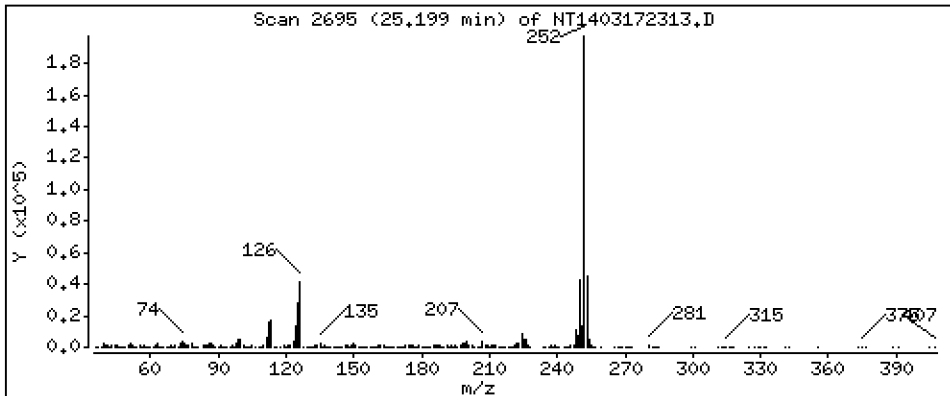
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,848 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

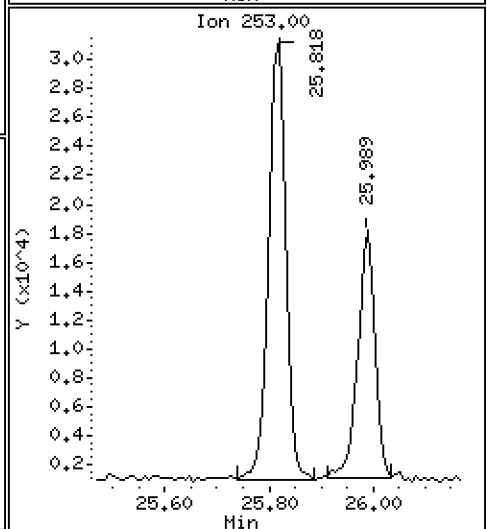
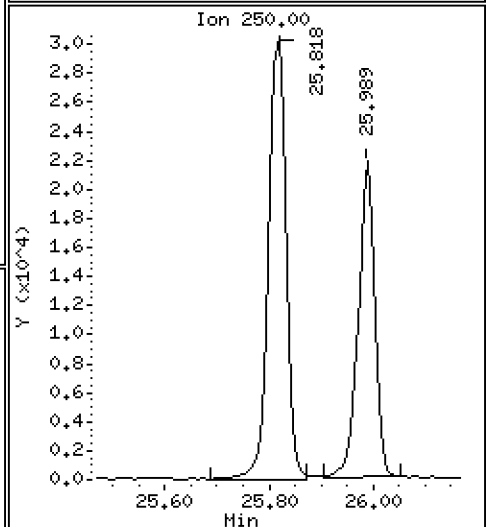
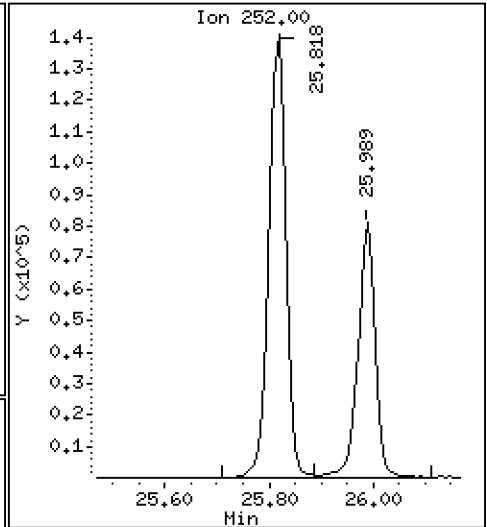
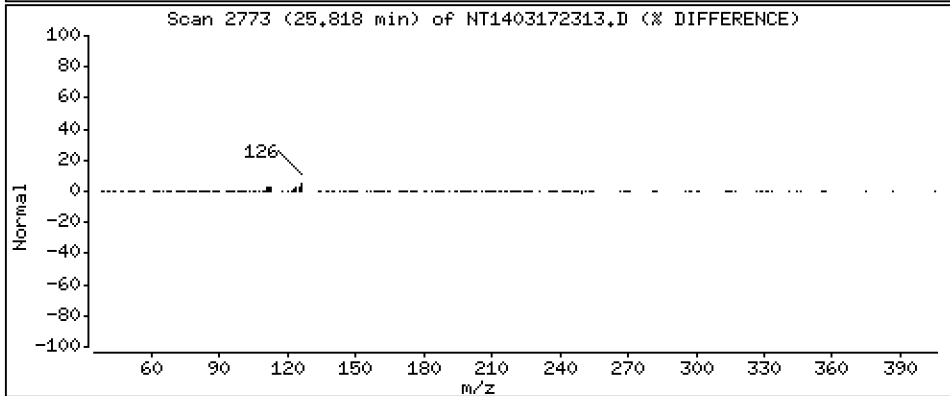
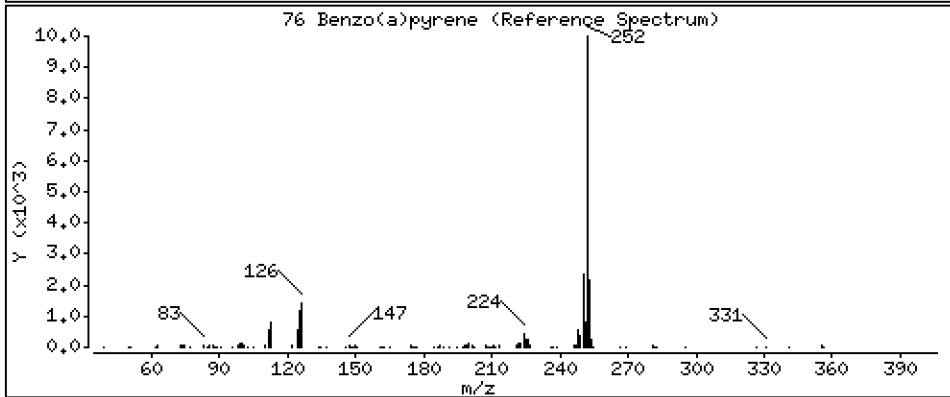
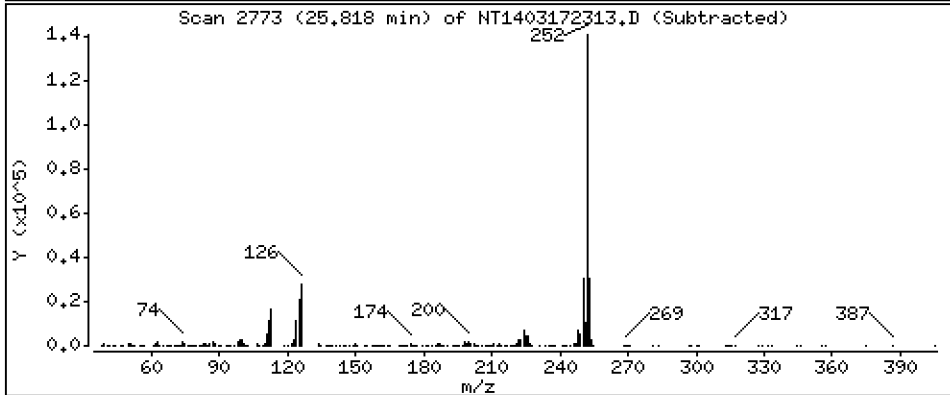
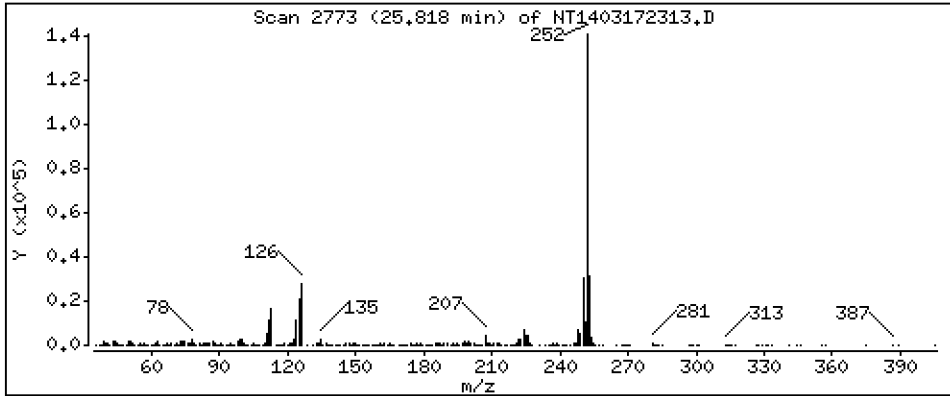
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,462 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

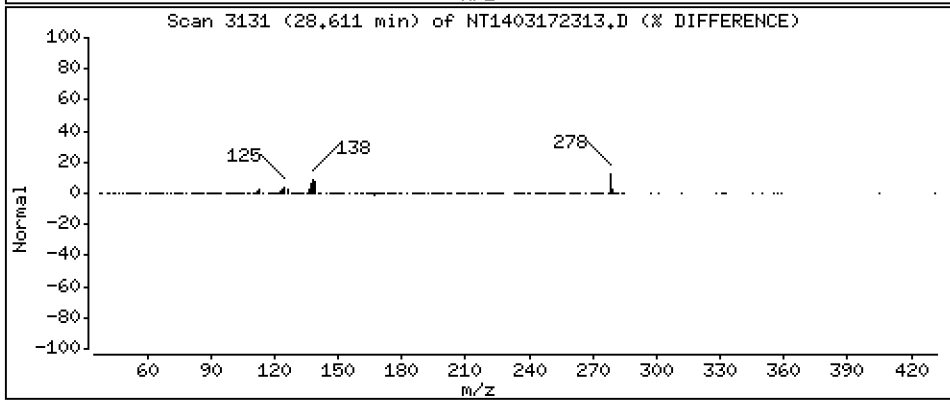
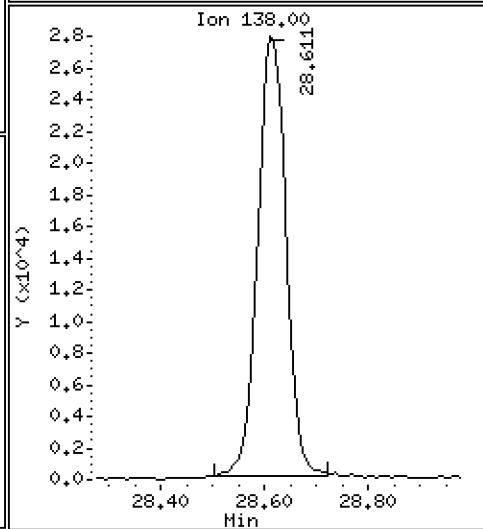
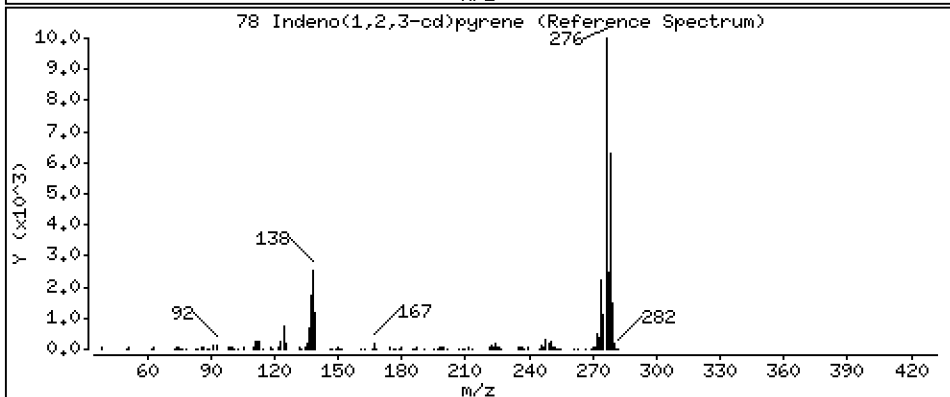
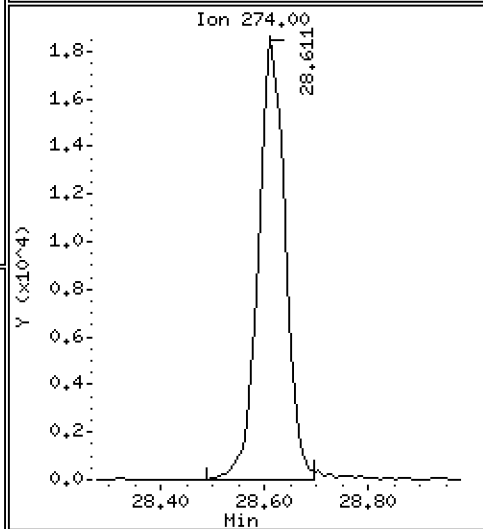
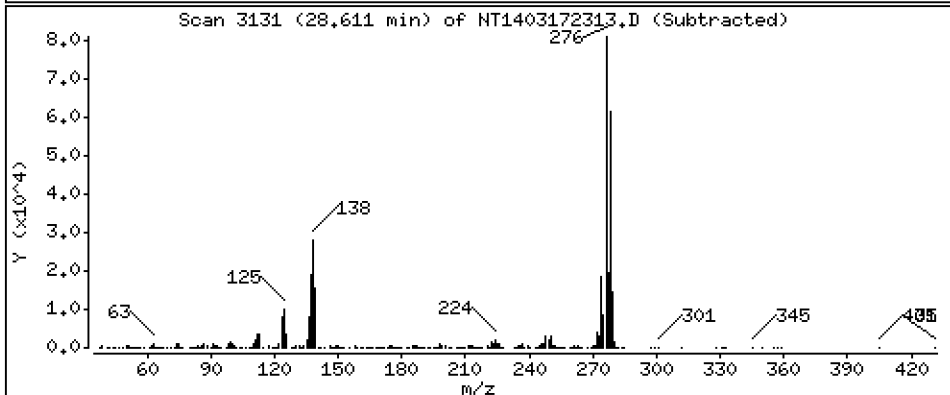
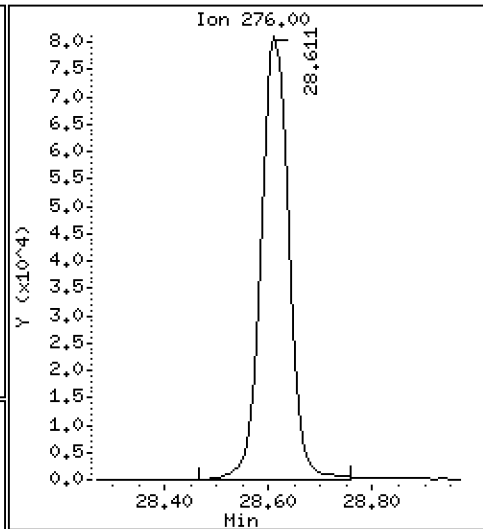
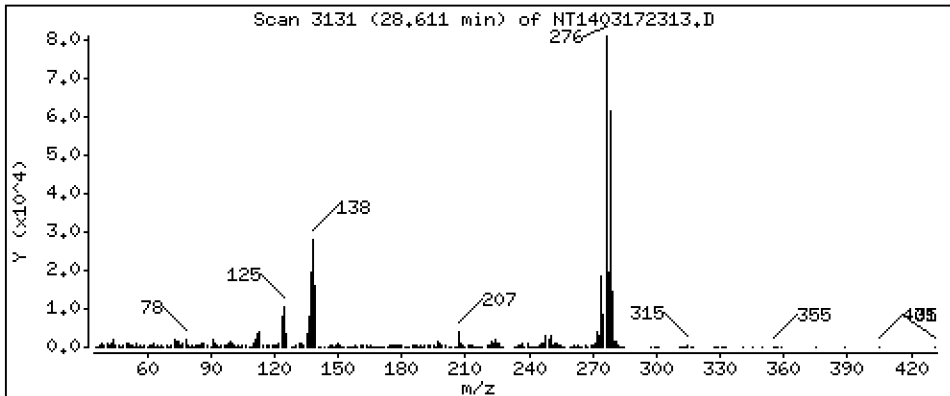
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 3,967 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

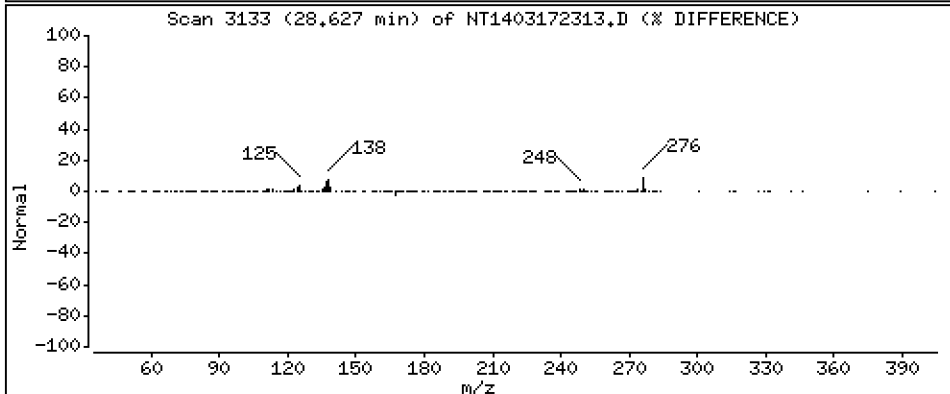
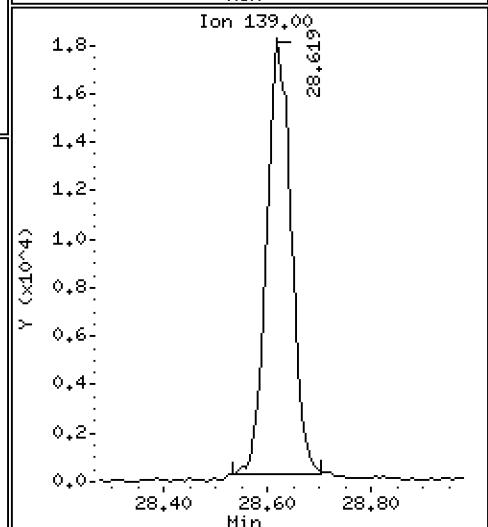
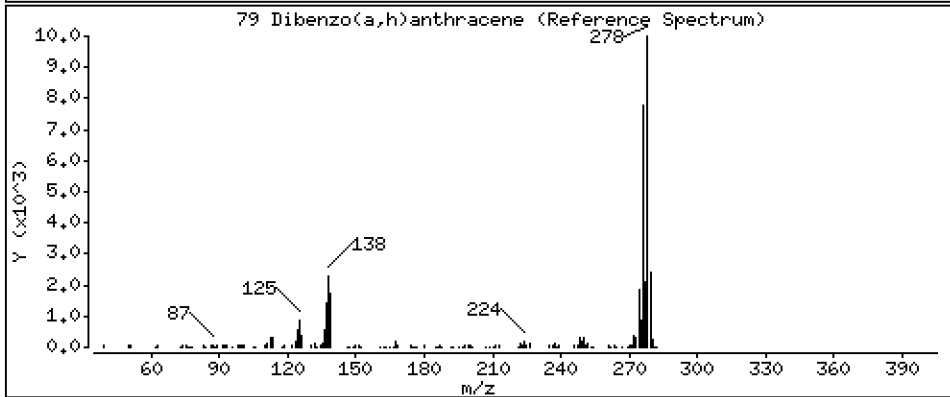
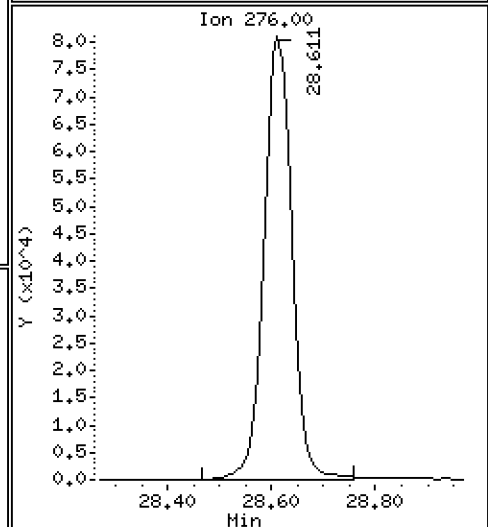
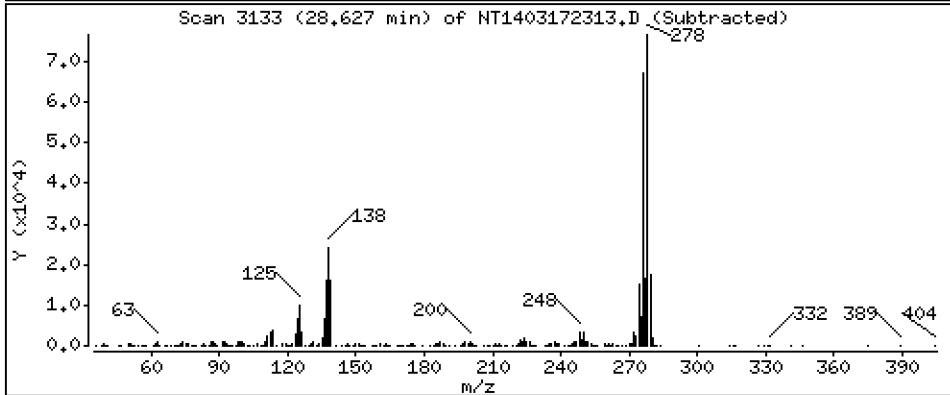
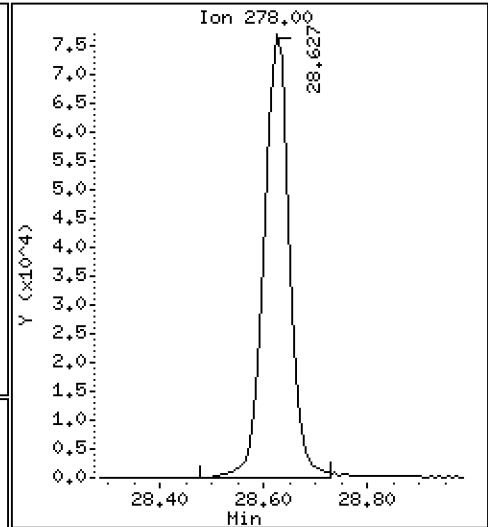
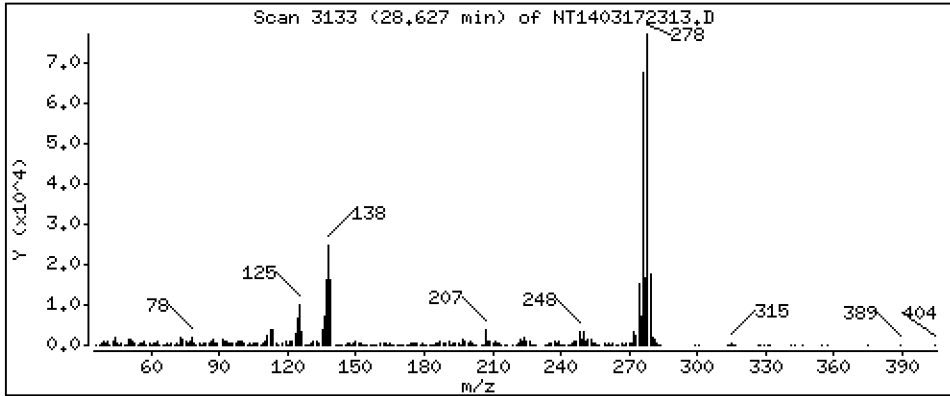
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,053 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

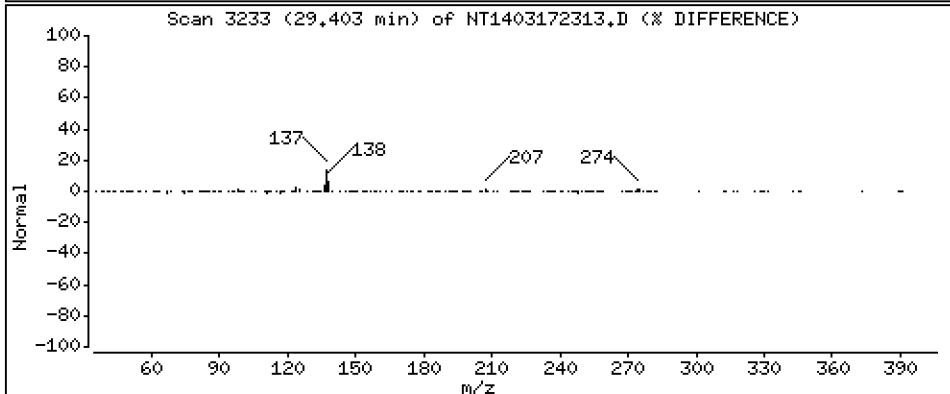
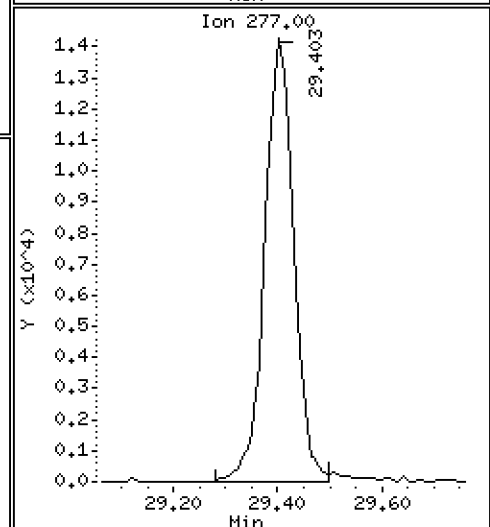
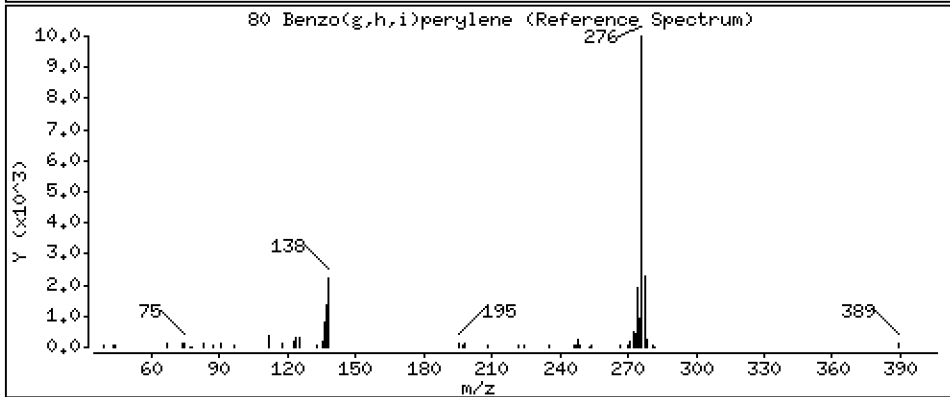
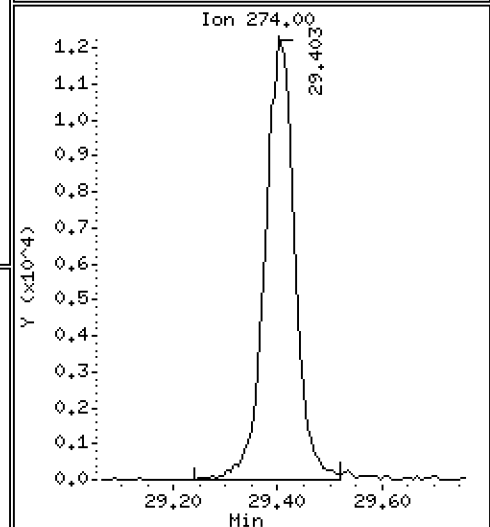
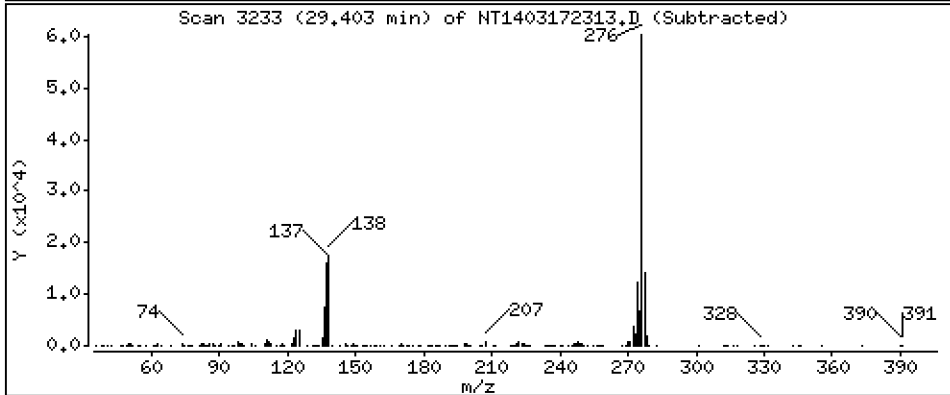
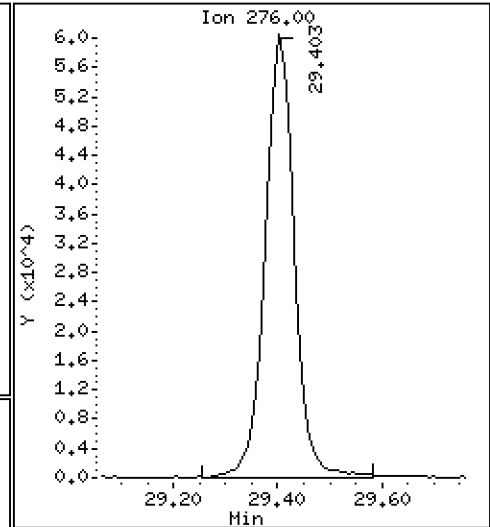
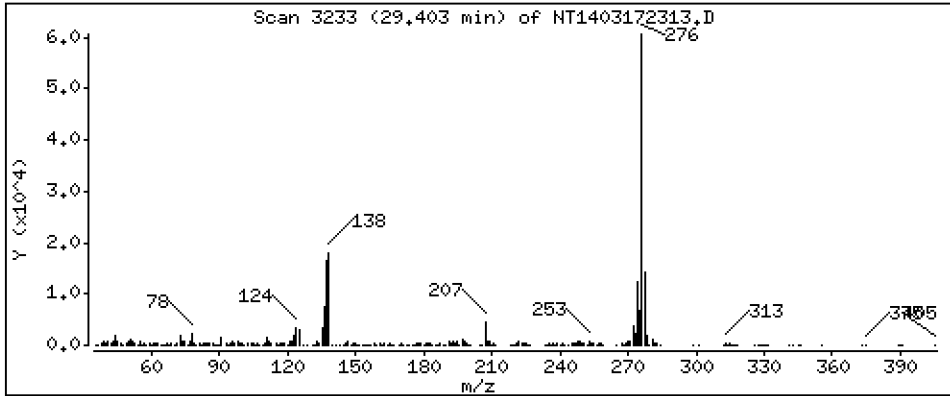
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 3,726 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

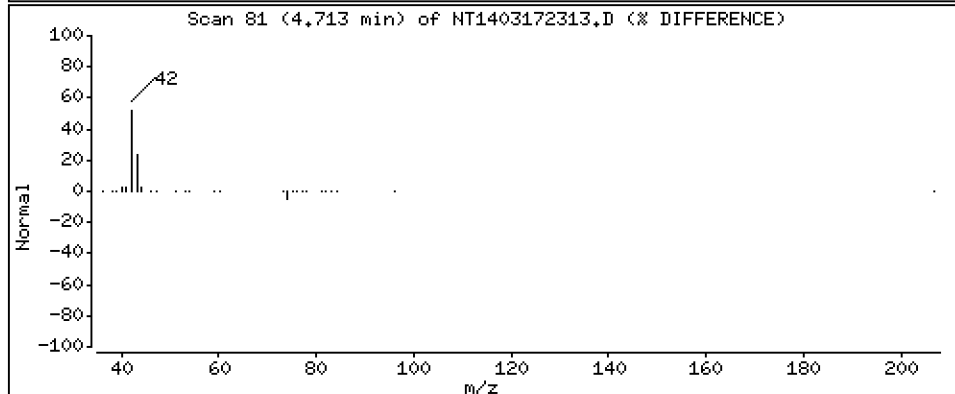
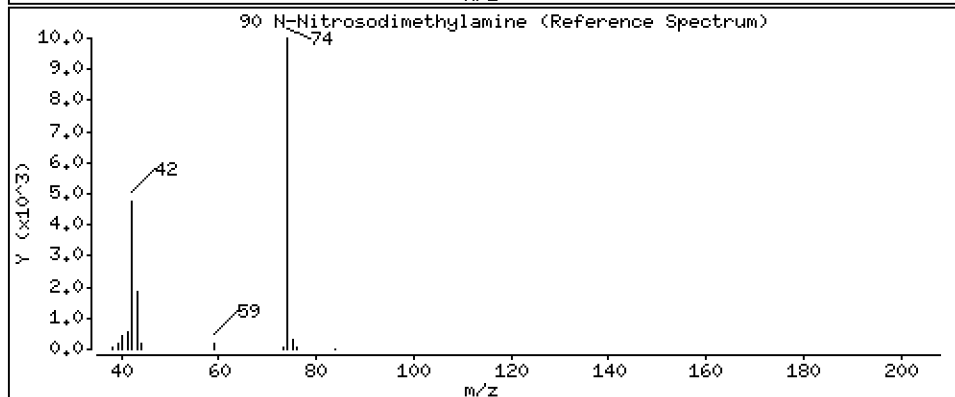
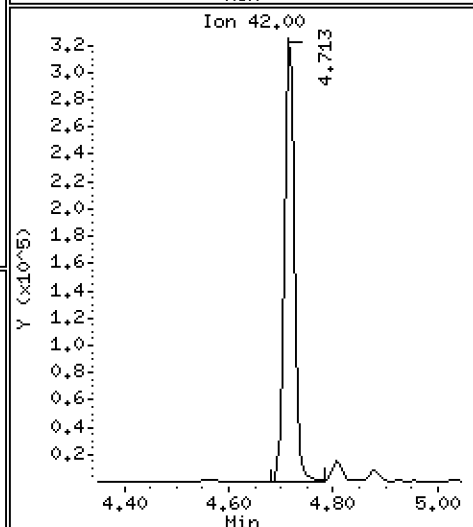
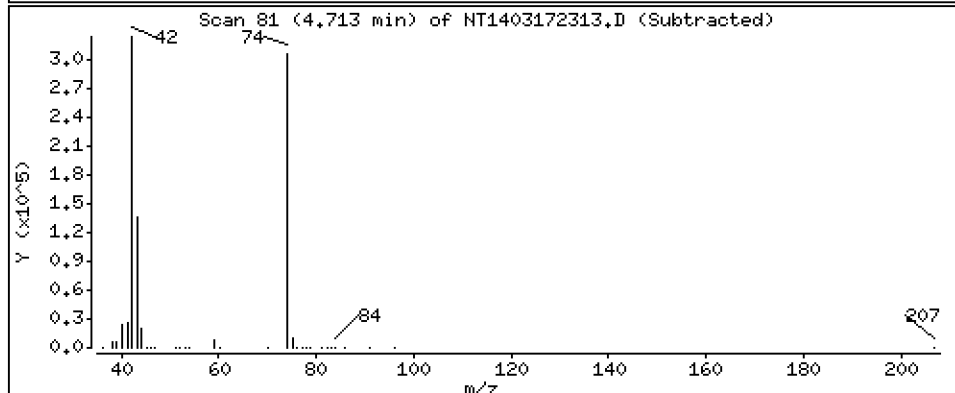
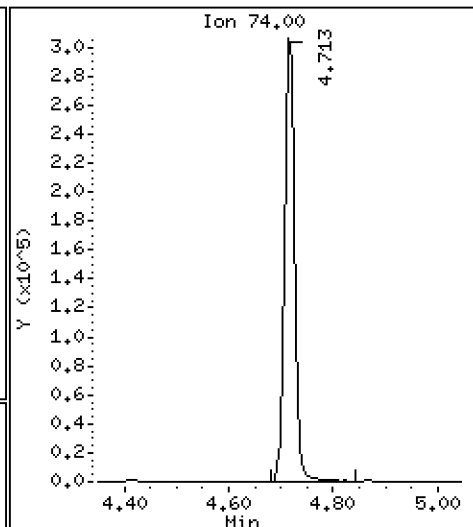
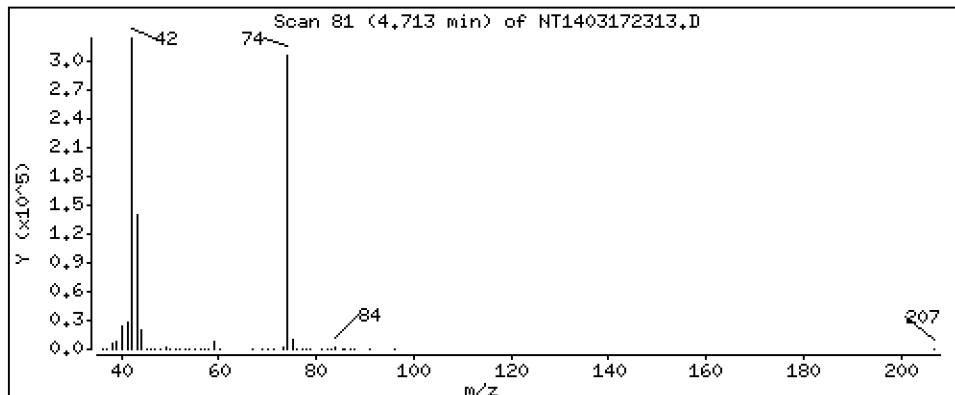
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 9,491 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

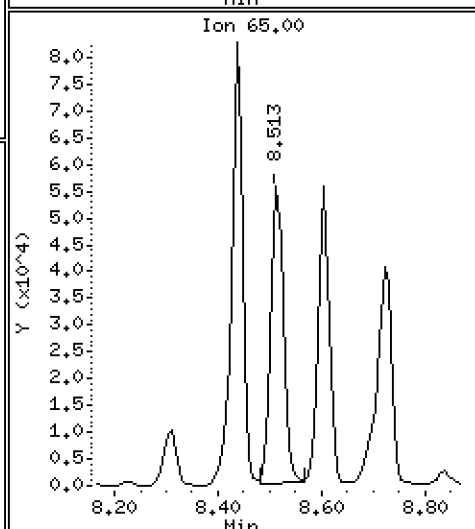
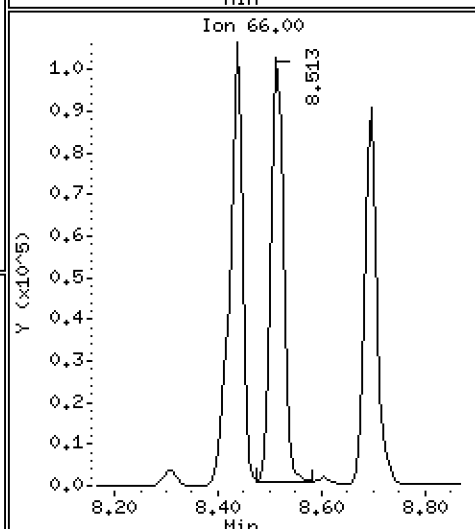
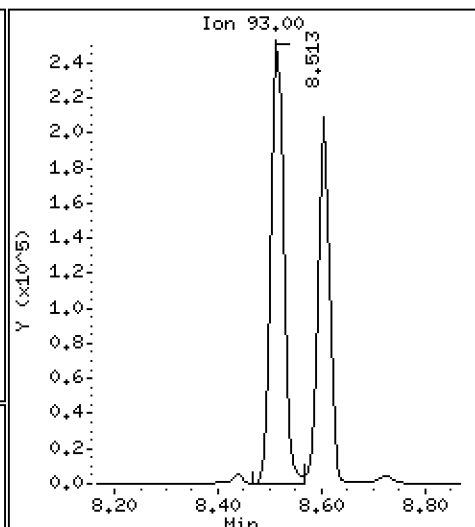
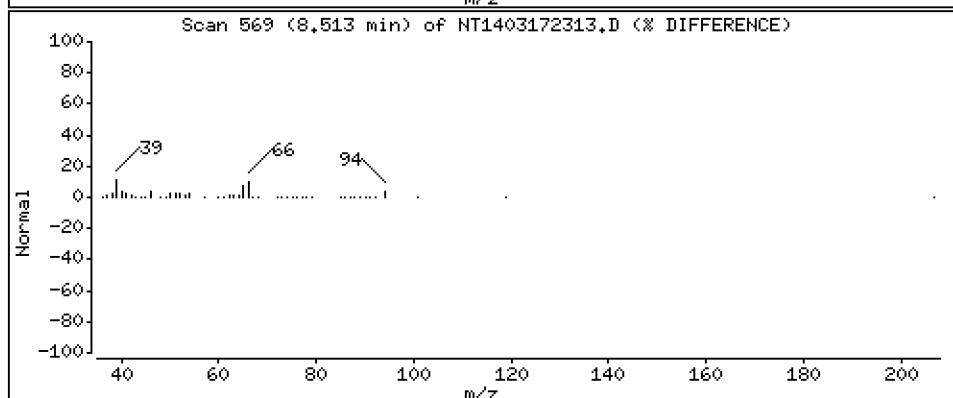
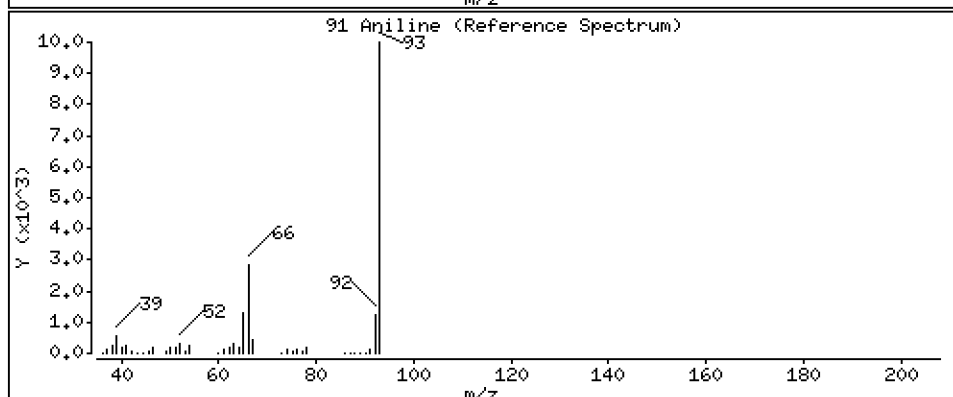
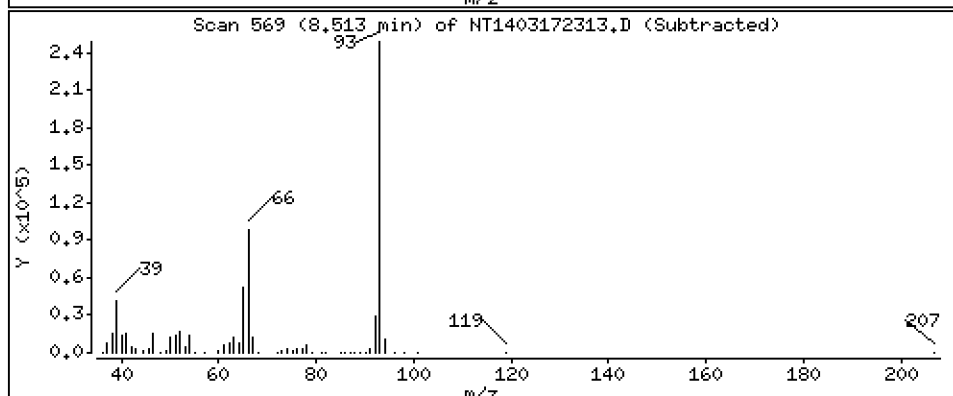
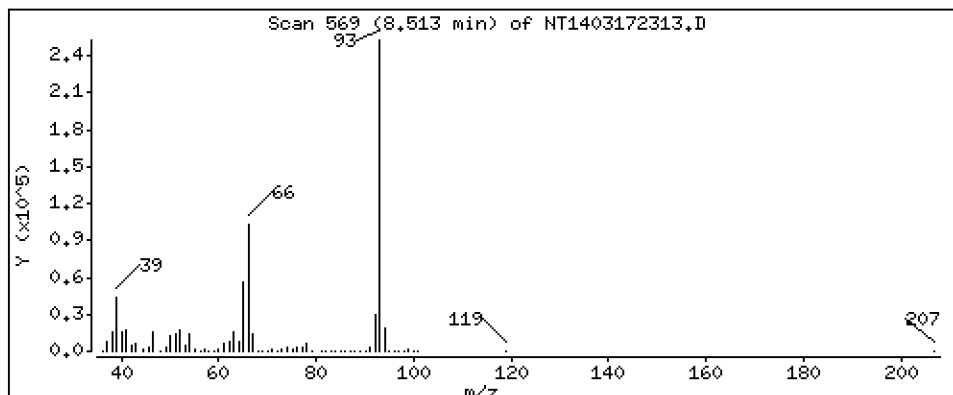
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 4.052 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

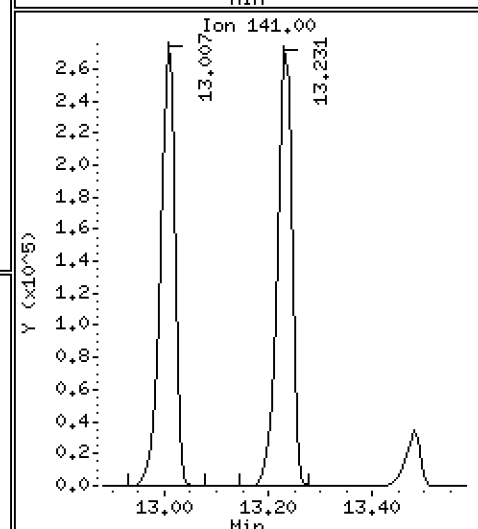
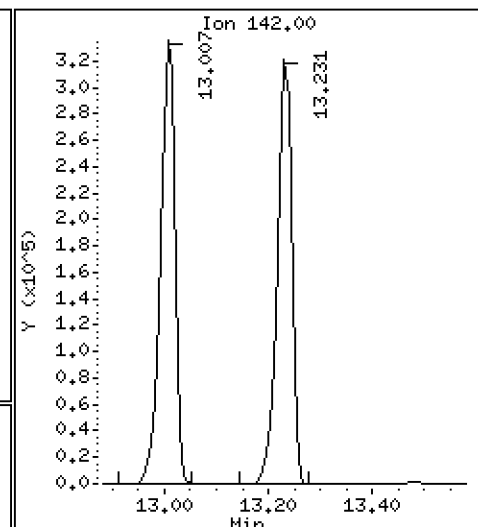
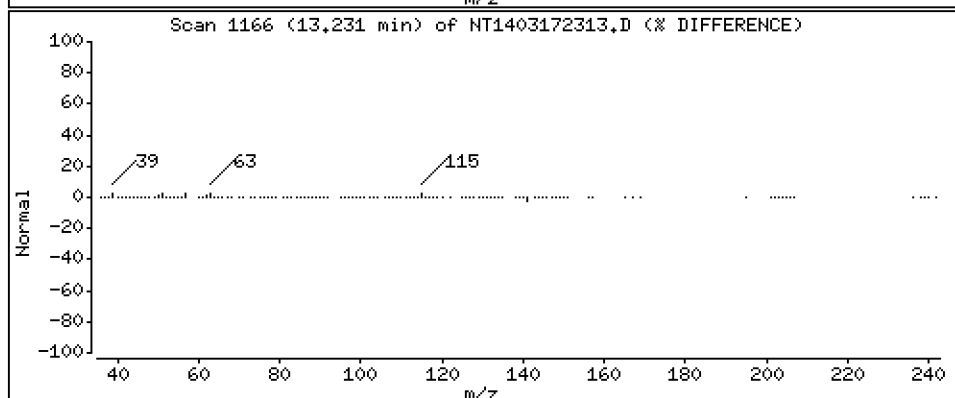
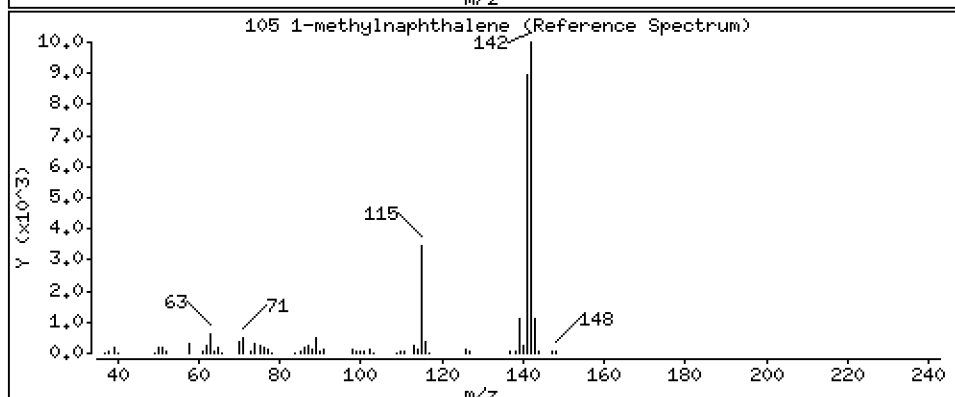
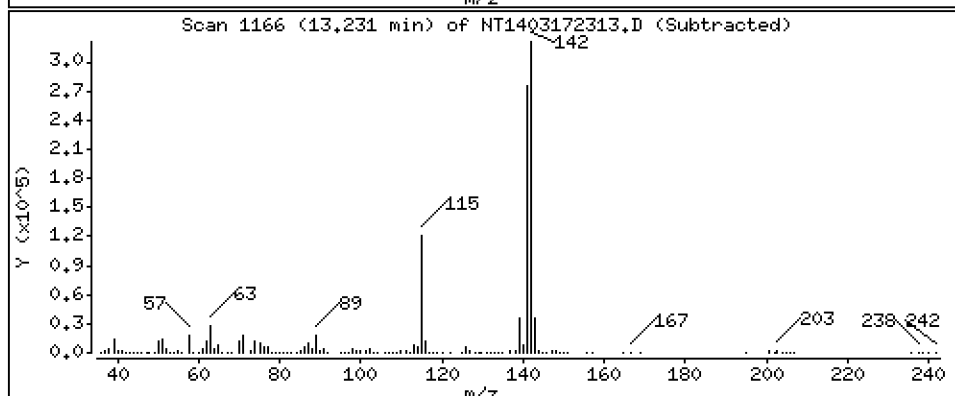
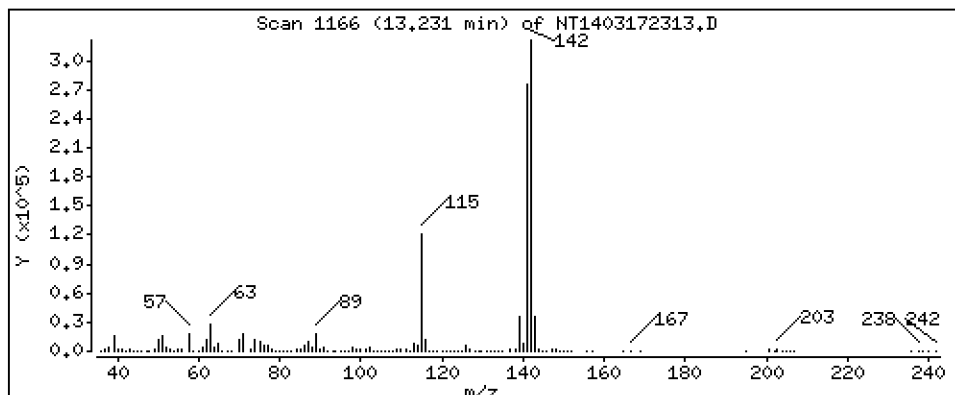
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,308 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

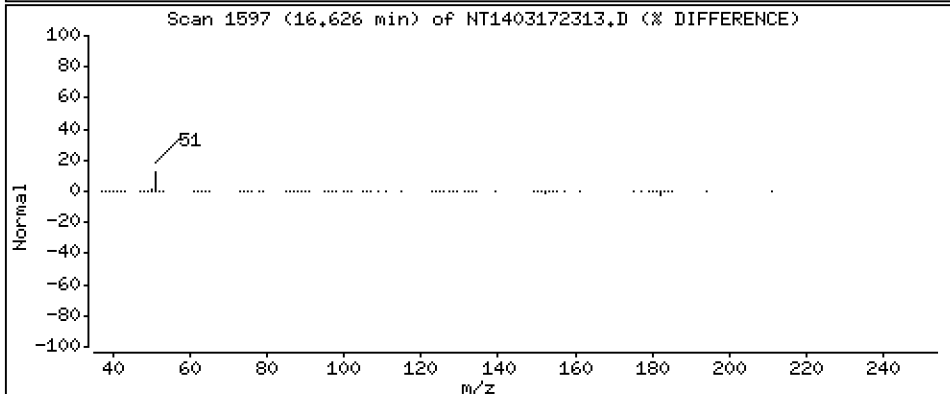
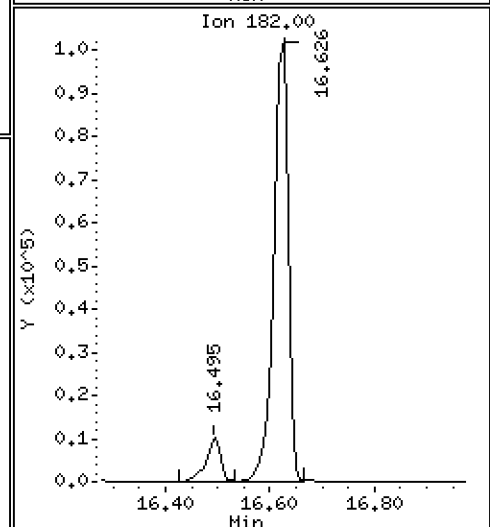
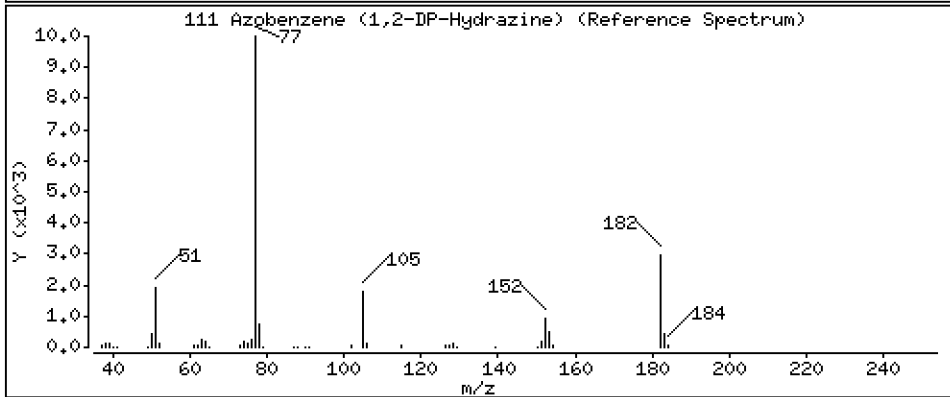
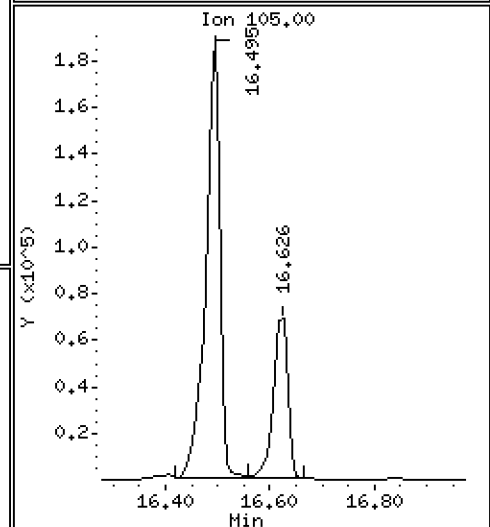
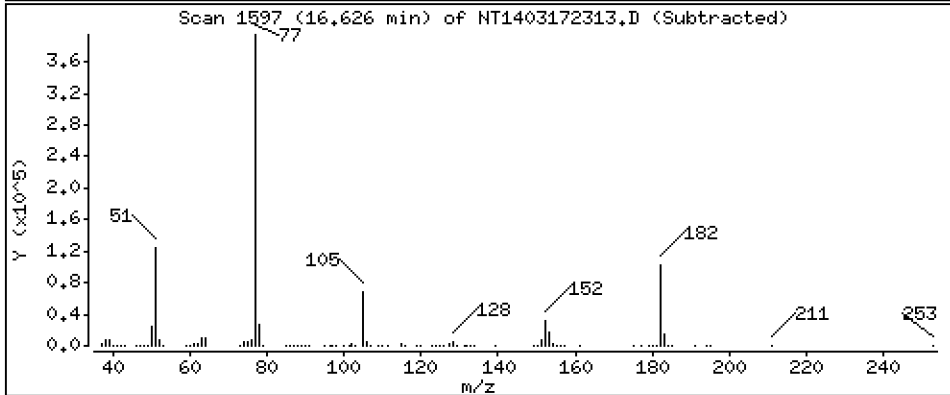
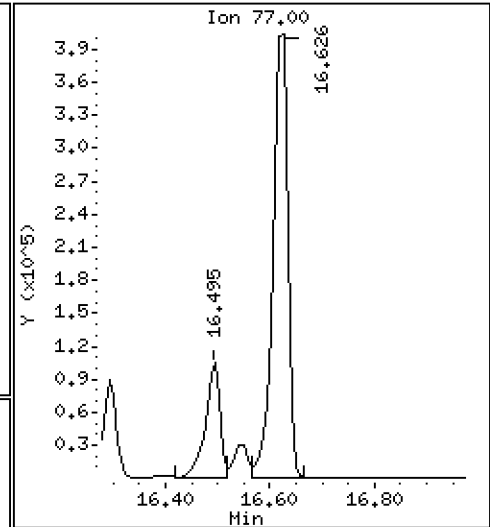
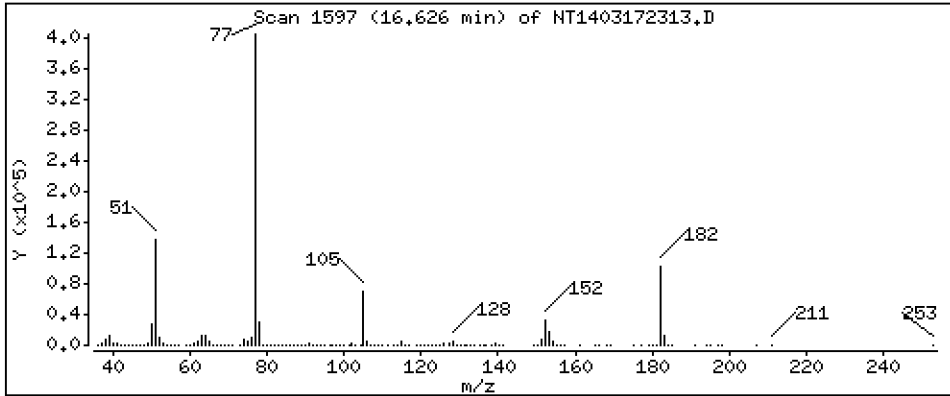
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,380 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

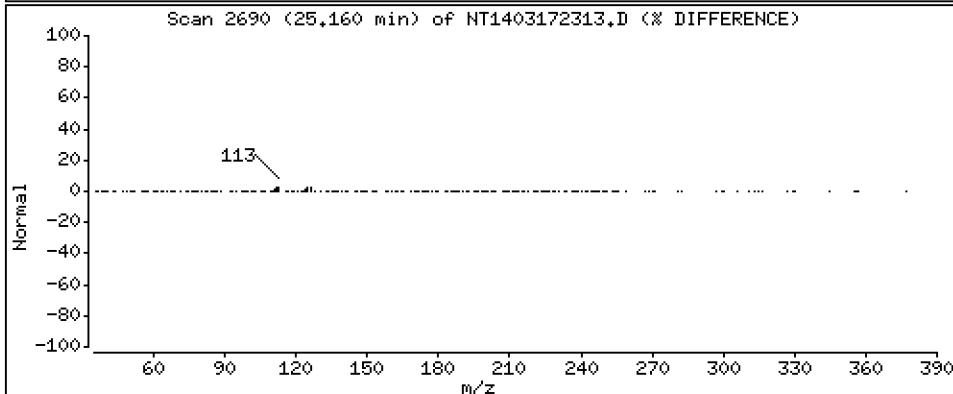
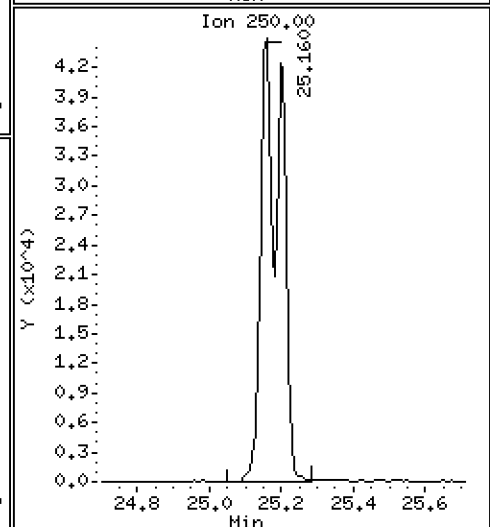
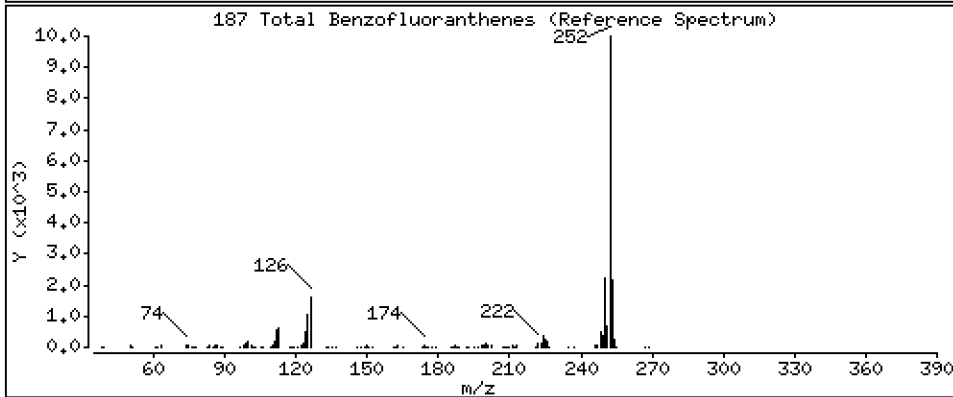
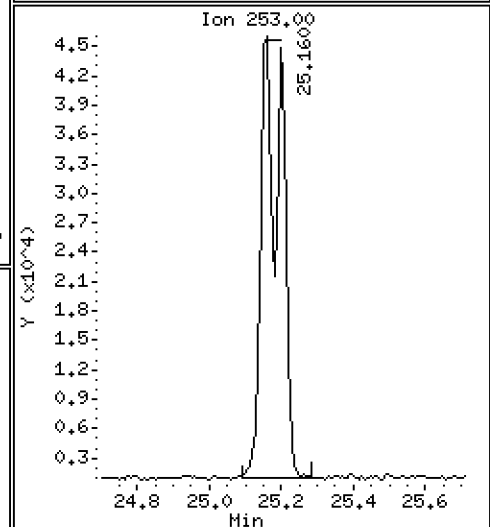
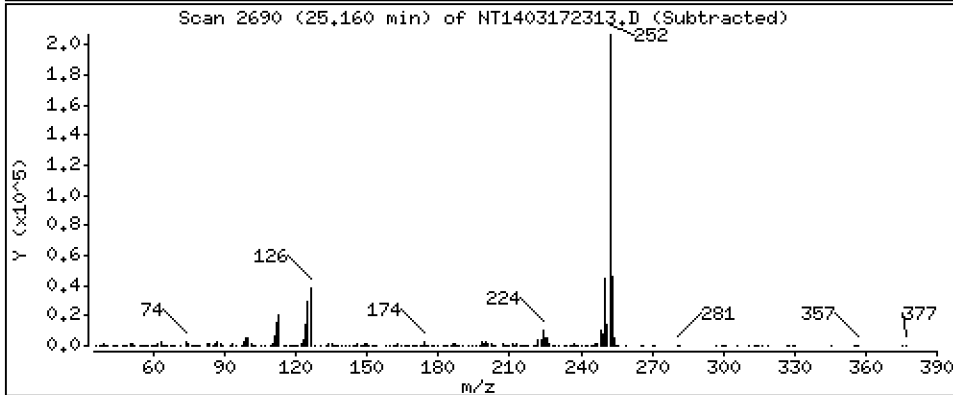
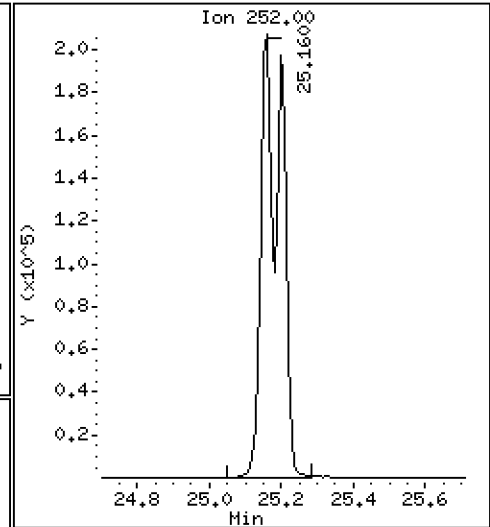
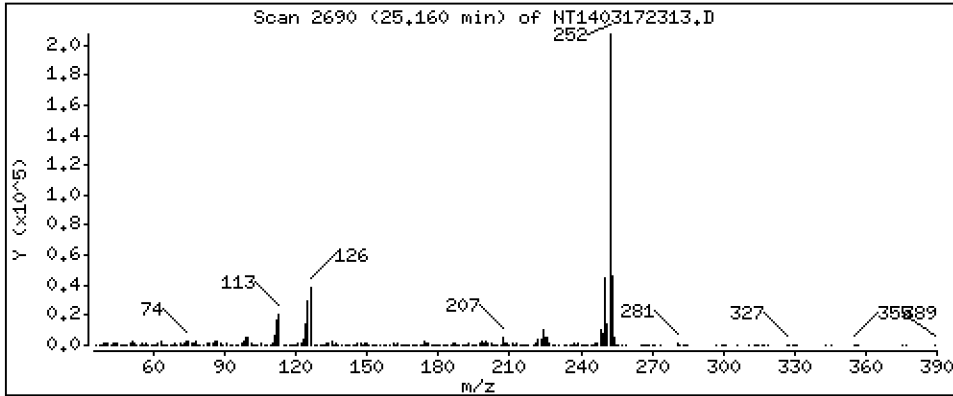
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 10,45 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS1

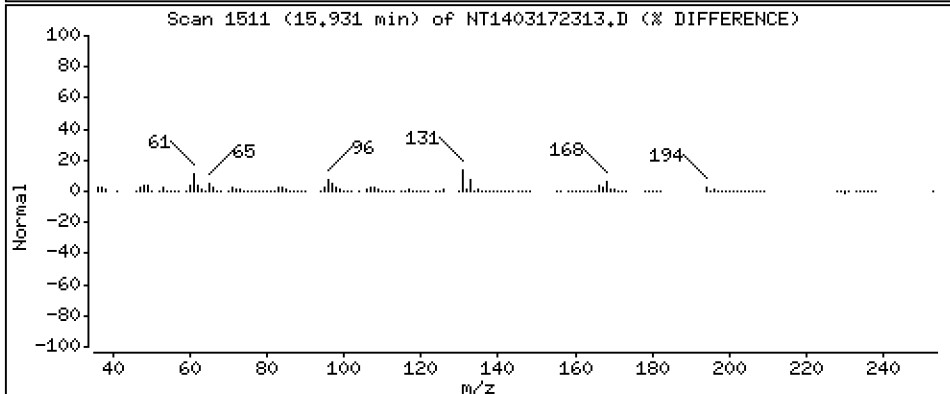
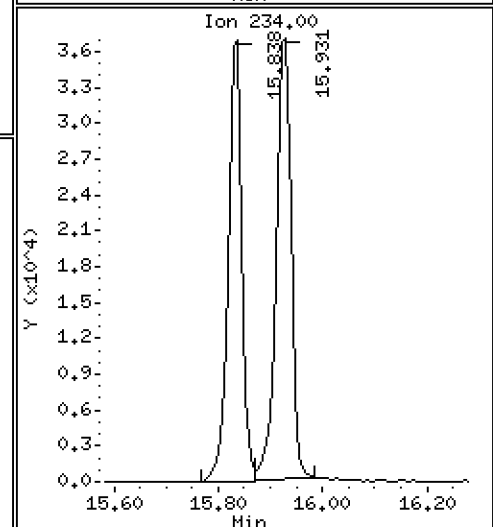
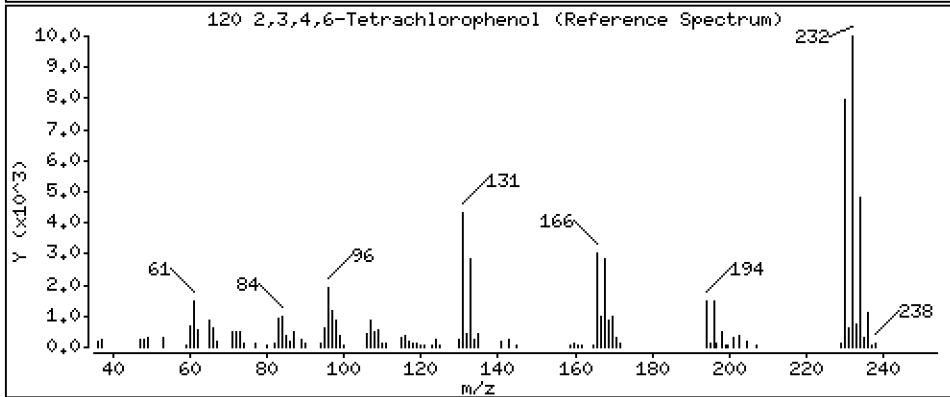
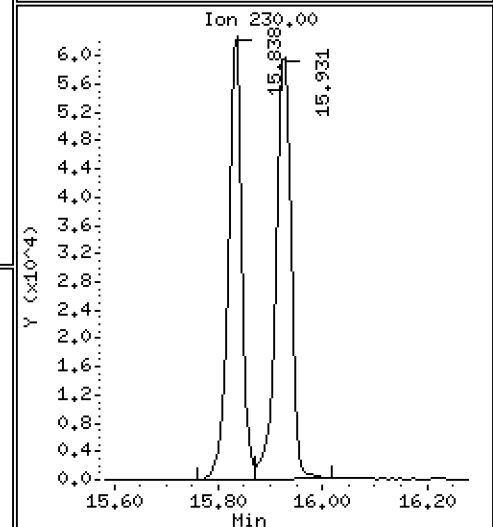
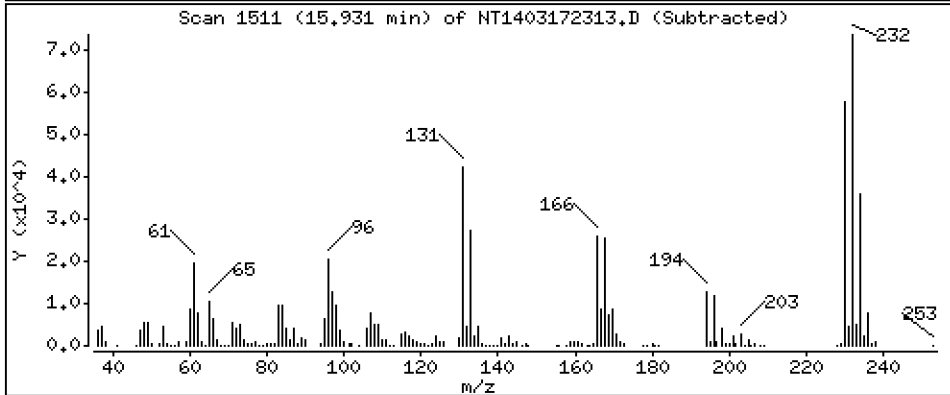
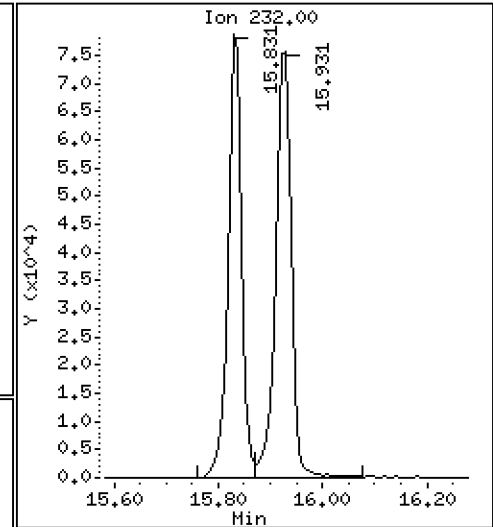
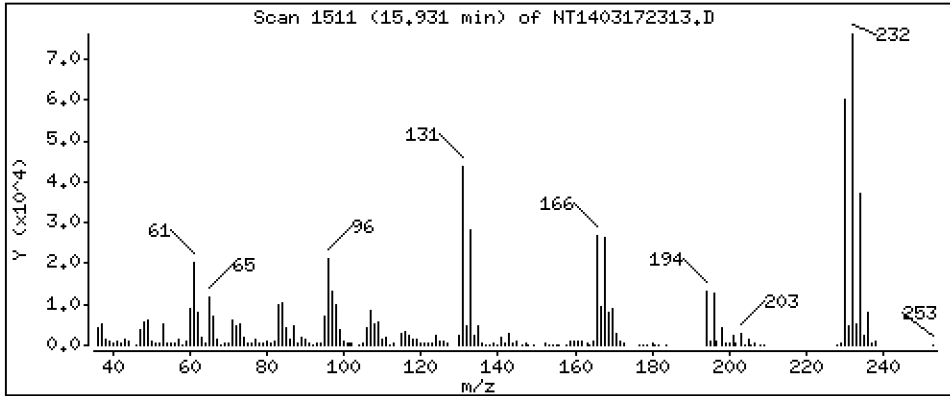
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,779 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172313.D
 Lab Smp Id: BLB0424-BS1
 Inj Date : 17-MAR-2023 21:42 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BS1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.821	(1.000)	437850	6.11494	6.115
\$ 2 Phenol-d5	99		8.413	8.412	(1.000)	560021	5.94055	5.941
3 Phenol	94		8.436	8.435	(1.000)	371418	3.70723	3.707
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	481517	6.47889	6.479
4 Bis(2-Chloroethyl)ether	93		8.606	8.605	(1.000)	311400	4.31637	4.316
6 2-Chlorophenol	128		8.729	8.729	(1.000)	297681	3.77505	3.775
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	310763	3.89314	3.893
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	210794	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	306571	3.98753	3.988
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.426	(1.000)	206757	4.16410	4.164
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	306998	4.03982	4.040
11 Benzyl alcohol	108		9.334	9.333	(1.000)	189673	4.06661	4.067
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	107794	4.70086	4.701
13 2-Methylphenol	108		9.559	9.558	(1.000)	244801	3.45602	3.456
17 Hexachloroethane	117		10.048	10.055	(1.000)	139166	4.23228	4.232
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	221411	3.97020	3.970
15 4-Methylphenol	108		9.831	9.830	(1.000)	290502	3.46387	3.464
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	381804	4.43831	4.438
19 Nitrobenzene	77		10.195	10.203	(0.881)	357121	4.26475	4.265
20 Isophorone	82		10.653	10.653	(0.921)	640964	5.60603	5.606
21 2-Nitrophenol	139		10.832	10.831	(0.936)	172221	3.59093	3.591
22 2,4-Dimethylphenol	107		10.886	10.885	(0.941)	574647	8.02340	8.023
23 Bis(2-Chloroethoxy)methane	93		11.087	11.087	(0.959)	383095	4.97697	4.977
24 Benzoic acid	105		11.118	11.103	(0.961)	1308732	21.2378	21.24
25 2,4-Dichlorophenol	162		11.289	11.289	(0.976)	878093	15.4163	15.42
26 1,2,4-Trichlorobenzene	180		11.475	11.482	(0.992)	301082	4.29991	4.300
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	812894	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	876120	4.03428	4.034
29 4-Chloroaniline	127		11.737	11.737	(1.015)	942915	10.3716	10.37
30 Hexachlorobutadiene	225		11.969	11.976	(1.035)	136157	4.30683	4.307
31 4-Chloro-3-methylphenol	107		12.697	12.696	(1.098)	1018084	14.7916	14.79
32 2-Methylnaphthalene	142		13.006	13.013	(1.124)	616101	4.06794	4.068
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	395147	11.2794	11.28

Compounds	QUANT SIG					CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	635082	14.8538	14.85	
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	676685	15.1882	15.19	
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	665357	4.35918	4.359	
37 2-Chloronaphthalene	162	14.004	14.012	(0.922)	562470	4.29955	4.300	
38 2-Nitroaniline	65	14.268	14.267	(0.939)	801878	15.8741	15.87	
39 Dimethylphthalate	163	14.701	14.701	(0.967)	659036	4.68923	4.689	
40 Acenaphthylene	152	14.887	14.879	(0.980)	884377	4.02478	4.025	
41 2,6-Dinitrotoluene	165	14.840	14.840	(0.977)	535593	16.4968	16.50	
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	421466	4.00000		
43 3-Nitroaniline	138	15.127	15.126	(0.995)	652952	14.5781	14.58	
44 Acenaphthene	153	15.266	15.265	(1.005)	539080	4.20201	4.202	
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	656970	25.0126	25.01	
46 Dibenzofuran	168	15.591	15.590	(1.026)	790831	4.31785	4.318	
47 4-Nitrophenol	109	15.436	15.435	(1.016)	326648	13.7780	13.78	
48 2,4-Dinitrotoluene	165	15.652	15.652	(1.030)	742584	16.1352	16.14	
50 Diethylphthalate	149	16.163	16.170	(1.064)	798353	5.49429	5.494	
49 Fluorene	166	16.309	16.309	(1.073)	732759	4.22063	4.221	
51 4-Chlorophenyl-phenylether	204	16.294	16.301	(1.072)	340916	4.57456	4.575	
52 4-Nitroaniline	138	16.402	16.394	(1.079)	556256	14.2789	14.28	
53 4,6-Dinitro-2-methylphenol	198	16.494	16.494	(0.904)	755914	29.7240	29.72	
54 N-Nitrosodiphenylamine	169	16.548	16.548	(0.907)	402868	4.20383	4.204	
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	114761	7.17195	7.172	
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	169160	5.23557	5.236	
57 Hexachlorobenzene	284	17.621	17.620	(0.966)	159532	4.67949	4.679	
58 Pentachlorophenol	266	17.977	17.976	(0.986)	348747	14.2506	14.25	
* 59 Phenanthrene-d10	188	18.240	18.247	(1.000)	705582	4.00000		
60 Phenanthrene	178	18.286	18.294	(1.003)	898725	4.45810	4.458	
61 Anthracene	178	18.387	18.387	(1.008)	735933	3.78913	3.789	
62 Carbazole	167	18.712	18.711	(1.026)	802835	4.64592	4.646	
63 Di-n-butylphthalate	149	19.509	19.508	(1.070)	1182085	5.39669	5.397	
64 Fluoranthene	202	20.677	20.677	(0.888)	897485	6.26762	6.268	
65 Pyrene	202	21.103	21.102	(0.906)	878033	5.97924	5.979	
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	638570	6.42355	6.424	
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	429507	6.67604	6.676	
68 Benzo(a)anthracene	228	23.263	23.270	(0.999)	592200	4.56322	4.563	
* 69 Chrysene-d12	240	23.294	23.293	(1.000)	351965	4.00000		
70 3,3'-Dichlorobenzidine	252	23.216	23.224	(0.997)	489256	12.6493	12.65	
71 Chrysene	228	23.340	23.340	(1.002)	542595	4.61967	4.620	
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.960)	566153	6.07579	6.076	
* 134 Di-n-octylphthalate-d4	153	24.316	24.323	(1.000)	707847	4.00000		
73 Di-n-octylphthalate	149	24.331	24.331	(1.001)	917814	5.04391	5.044	
74 Benzo(b)fluoranthene	252	25.160	25.159	(0.970)	459704	5.65195	5.652	
75 Benzo(k)fluoranthene	252	25.198	25.205	(0.972)	390865	4.84778	4.848	
76 Benzo(a)pyrene	252	25.818	25.817	(0.996)	310339	4.46192	4.462	
* 77 Perylene-d12	264	25.934	25.933	(1.000)	230171	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	28.611	28.618	(1.103)	300281	3.96666	3.967	
79 Dibenzo(a,h)anthracene	278	28.626	28.633	(1.104)	258576	4.05291	4.053	
80 Benzo(g,h,i)perylene	276	29.403	29.410	(1.134)	232435	3.72562	3.726	
90 N-Nitrosodimethylamine	74	4.712	4.697	(1.000)	430431	9.49134	9.491	
91 Aniline	93	8.513	8.513	(1.000)	408299	4.05190	4.052	
93 Benzidine	184	Compound Not Detected.						
103 Pyridine	79	Compound Not Detected.						
105 1-methylnaphthalene	142	13.231	13.230	(1.144)	591140	4.30812	4.308	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.626	16.625	(1.094)	759987	4.37995	4.380	

Compounds	QUANT SIG	CONCENTRATIONS					
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.160	25.205	(0.970)	807123	10.4487	10.45
120 2,3,4,6-Tetrachlorophenol	232	15.931	15.930	(1.048)	164904	3.77863	3.779

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172313.D Calibration Time: 15:03
 Lab Smp Id: BLB0424-BS1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	210794	-4.71
27 Naphthalene-d8	809500	404750	1619000	812894	0.42
42 Acenaphthene-d10	420689	210345	841378	421466	0.18
59 Phenanthrene-d10	757520	378760	1515040	705582	-6.86
69 Chrysene-d12	450500	225250	901000	351965	-21.87
134 Di-n-octylphthala	828388	414194	1656776	707847	-14.55
77 Perylene-d12	339914	169957	679828	230171	-32.29

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172313.D

Lab ID: BLB0424-BS1
nt14.i, ABN.m, 17-MAR-2023 21:42

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: NT1403172302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

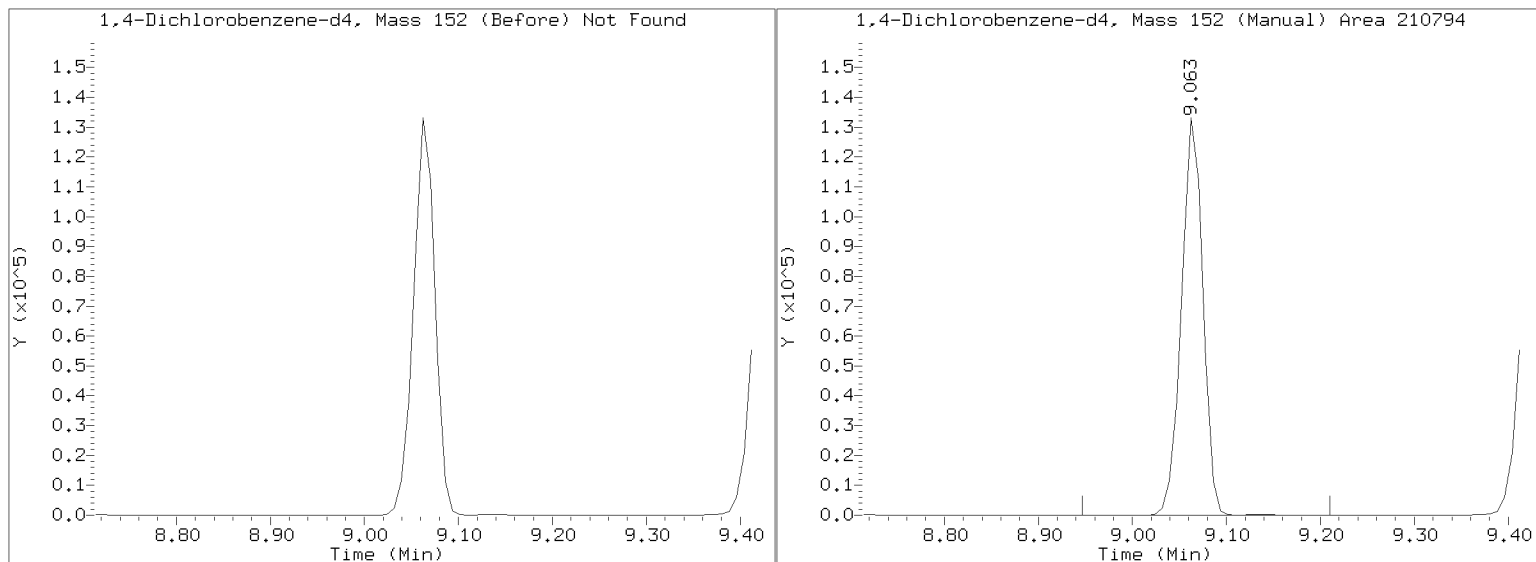
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172313.D

Injection Date: 17-MAR-2023 21:42

Lab ID: BLB0424-BS1 Client ID:

Report Date: 03/22/2023 08:12



Data File: \\target\share\chem3\nt14.1\20230317.6\NT1403172314.D

Date: 17-MAR-2023 22:19

Client ID:

Sample Info: BLB0424-BSM1

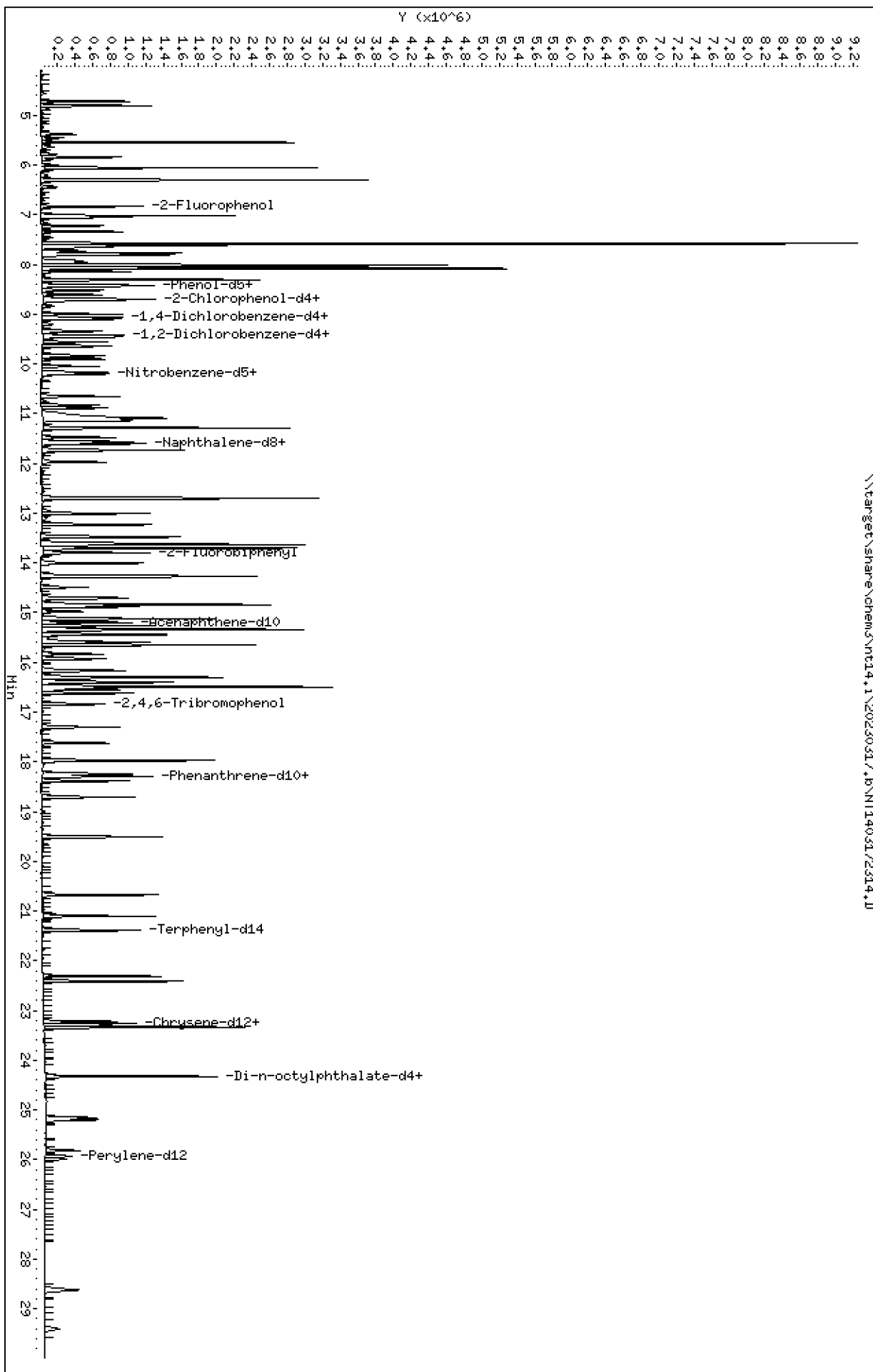
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

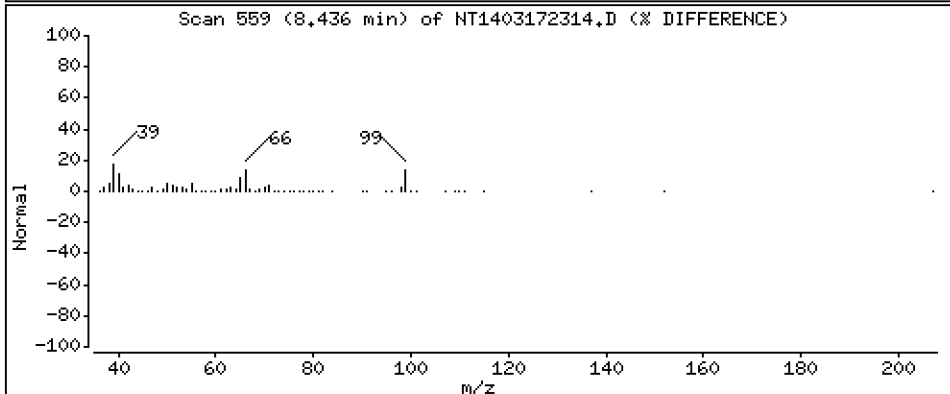
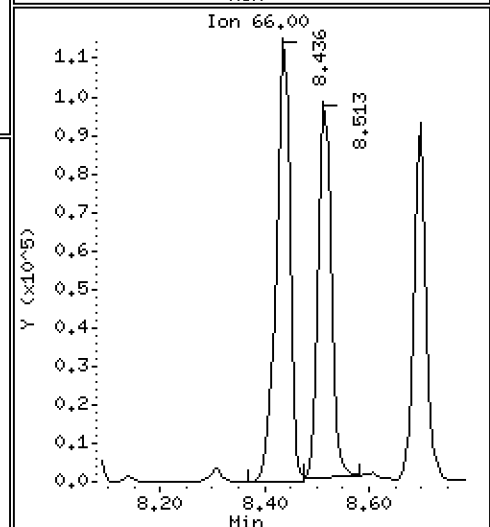
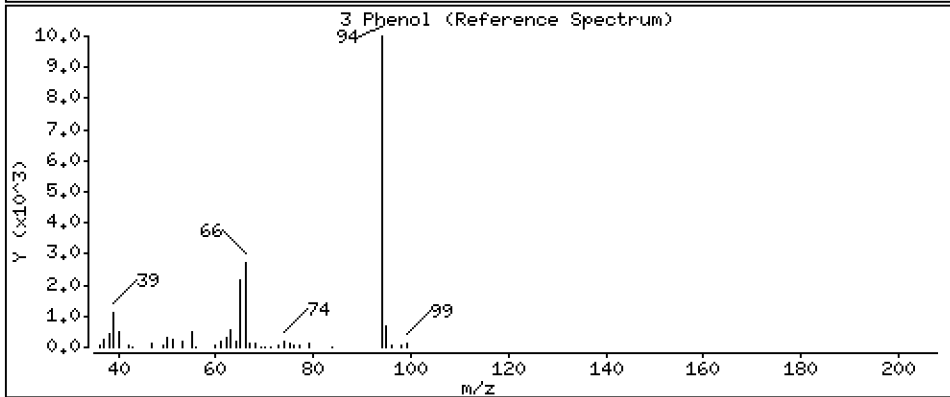
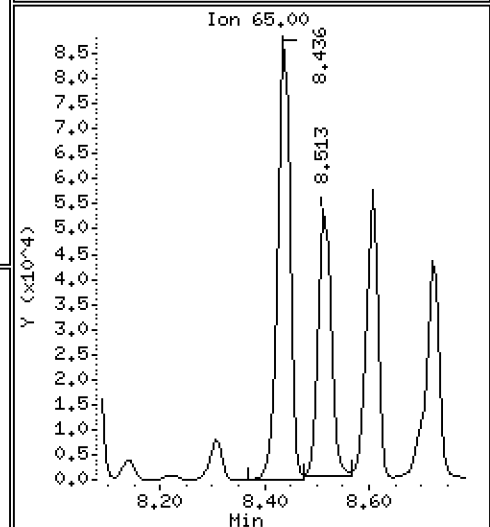
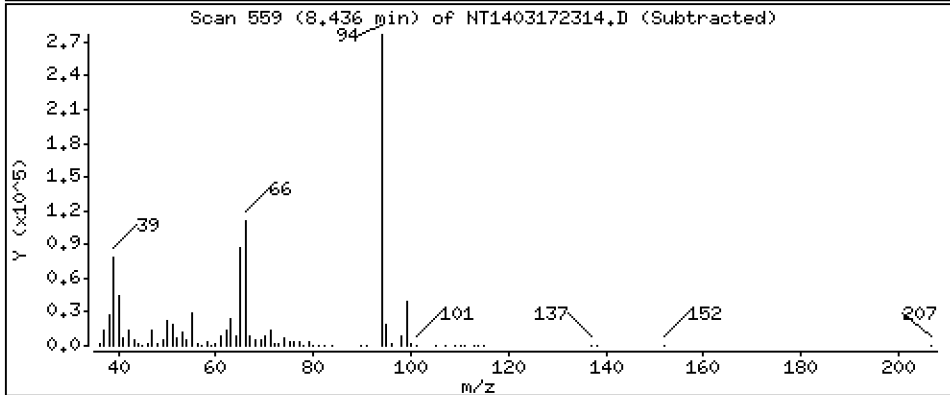
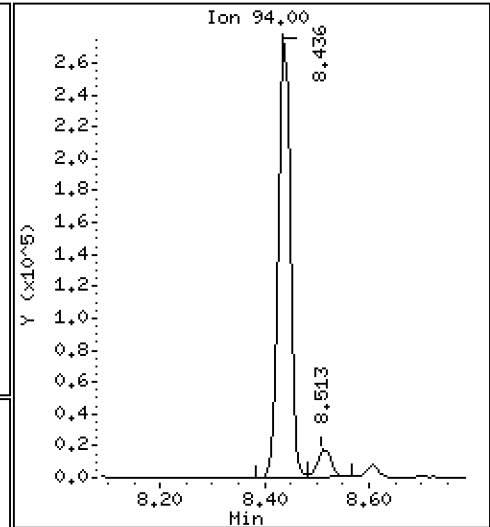
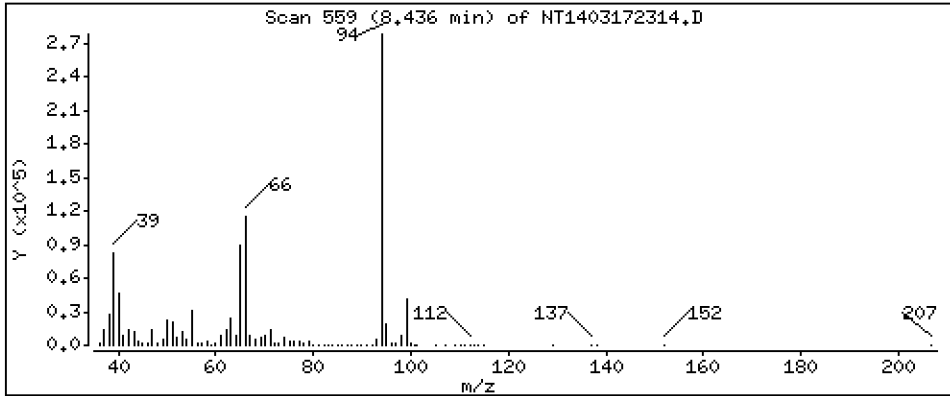
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 3,996 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

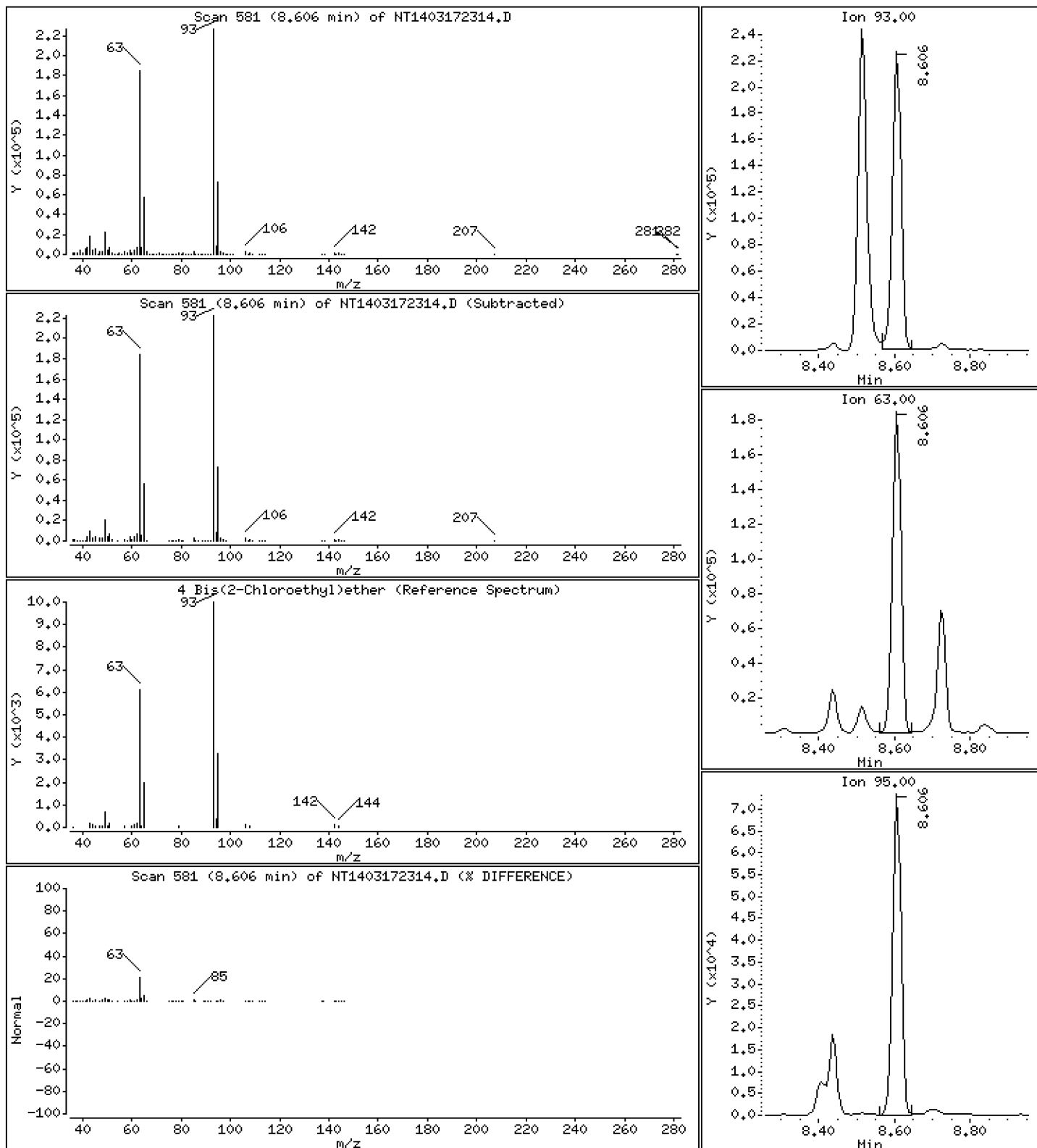
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 4,510 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

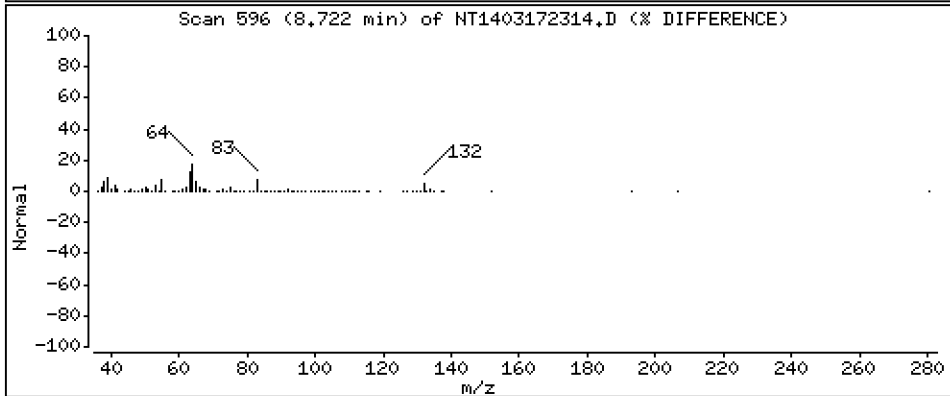
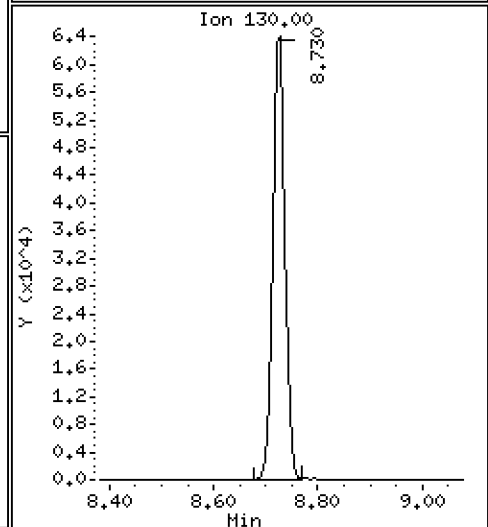
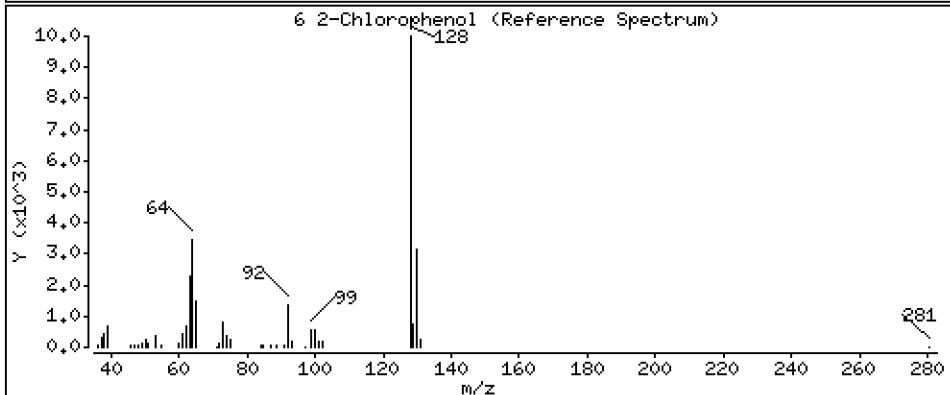
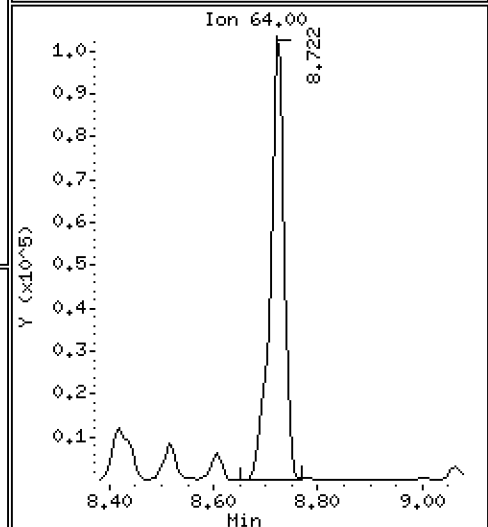
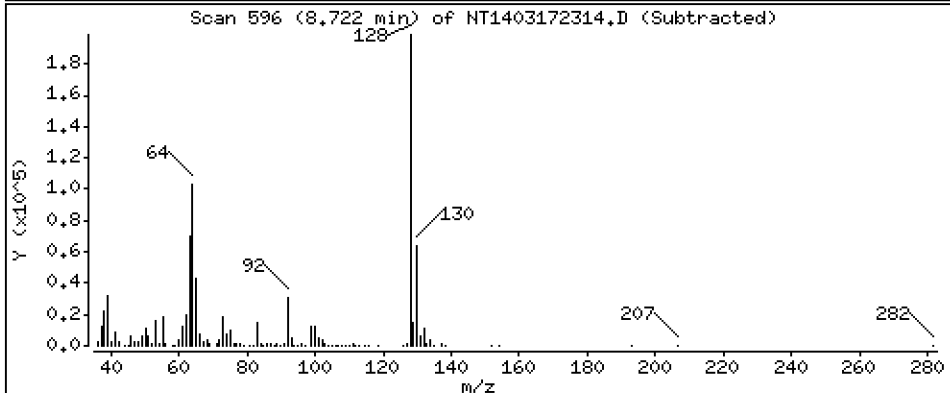
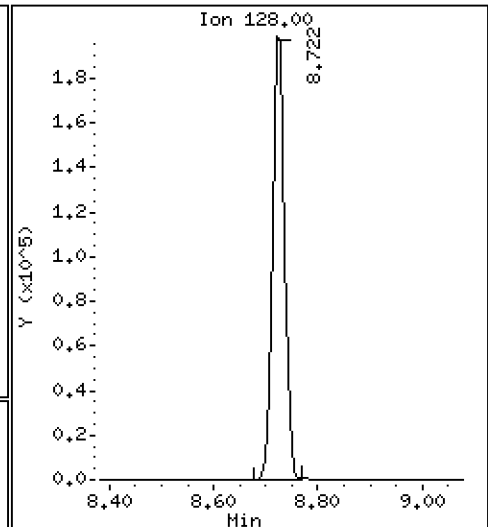
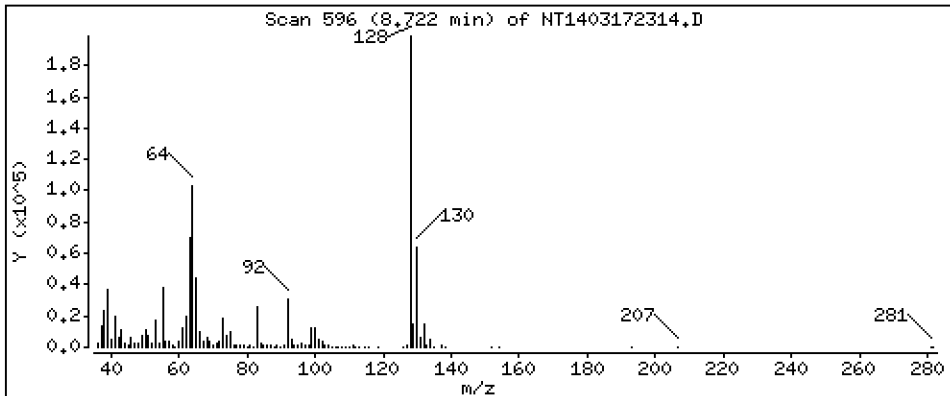
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 3,948 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

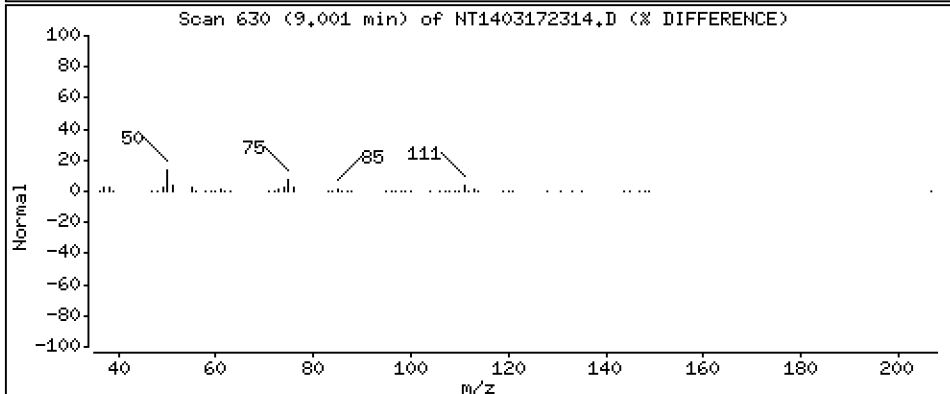
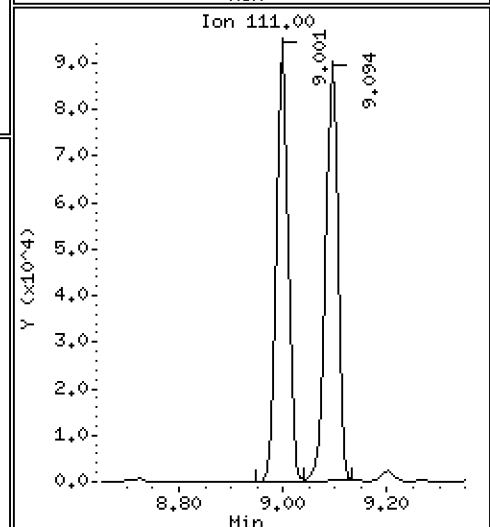
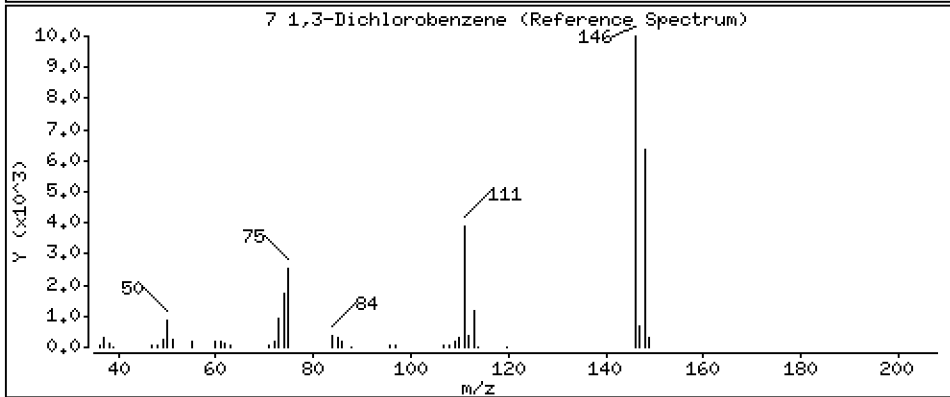
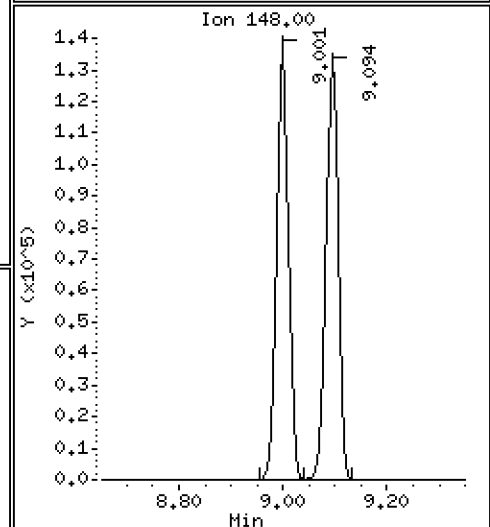
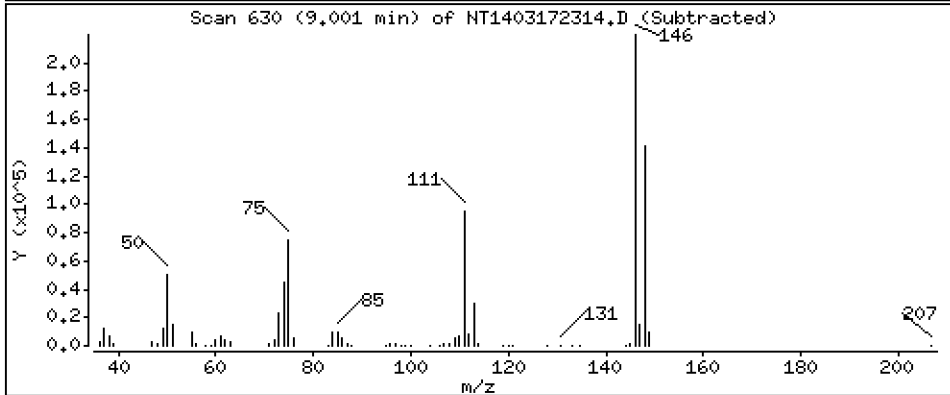
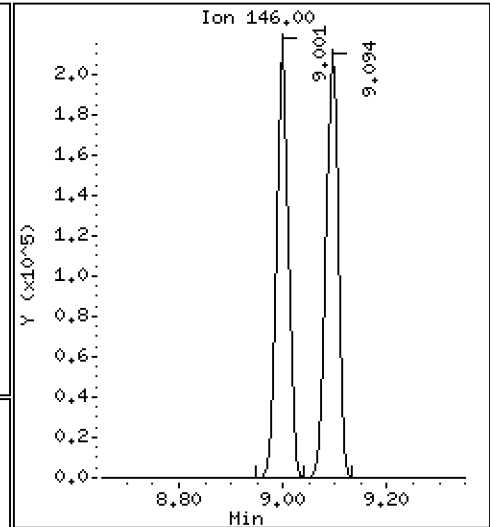
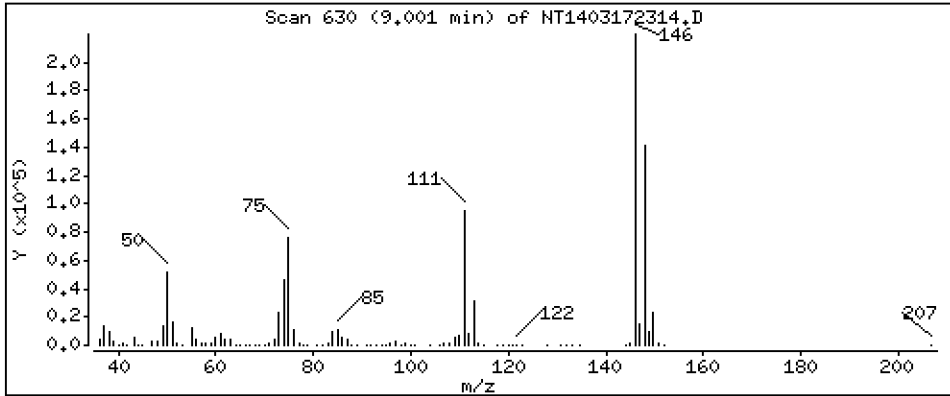
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.031 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

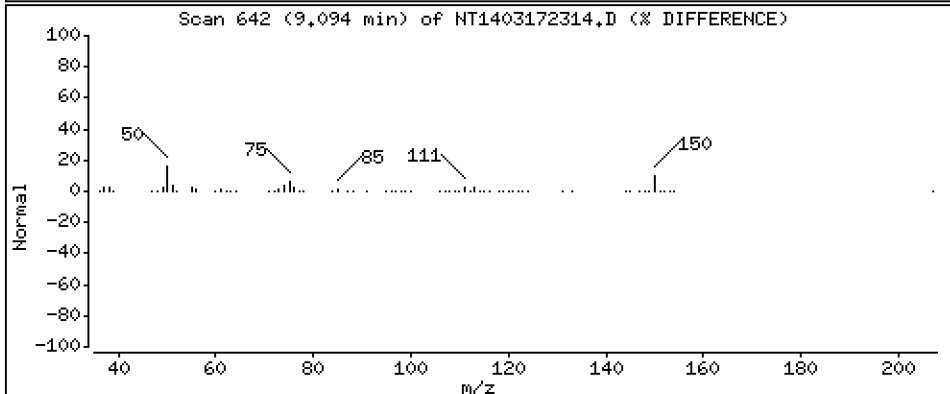
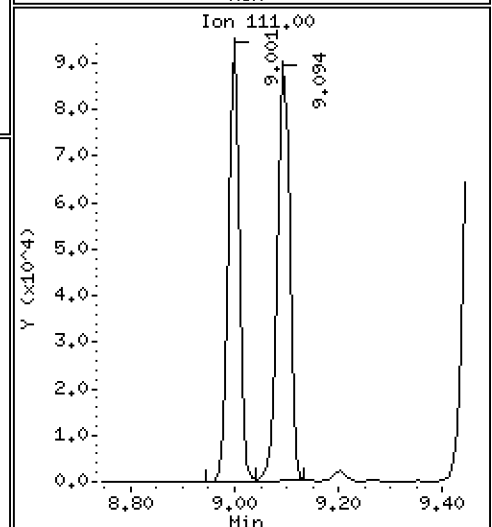
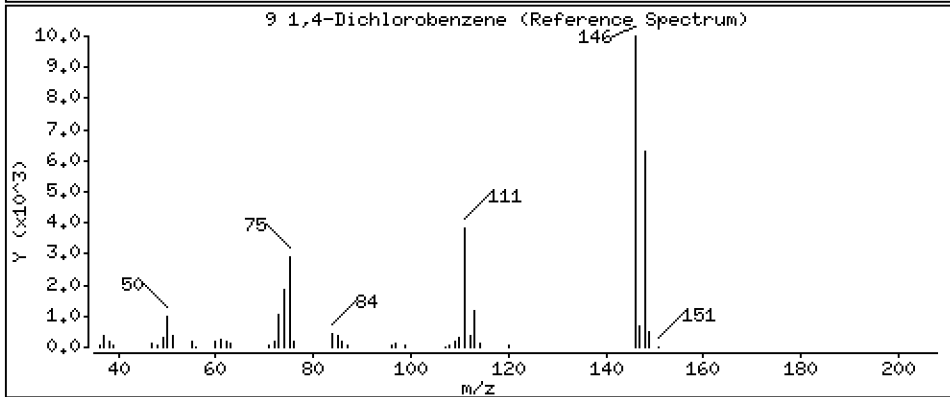
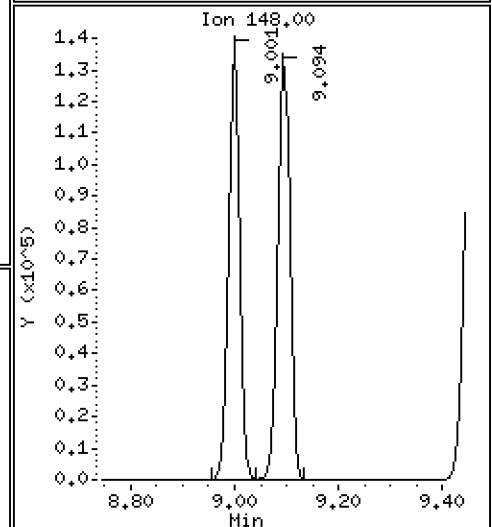
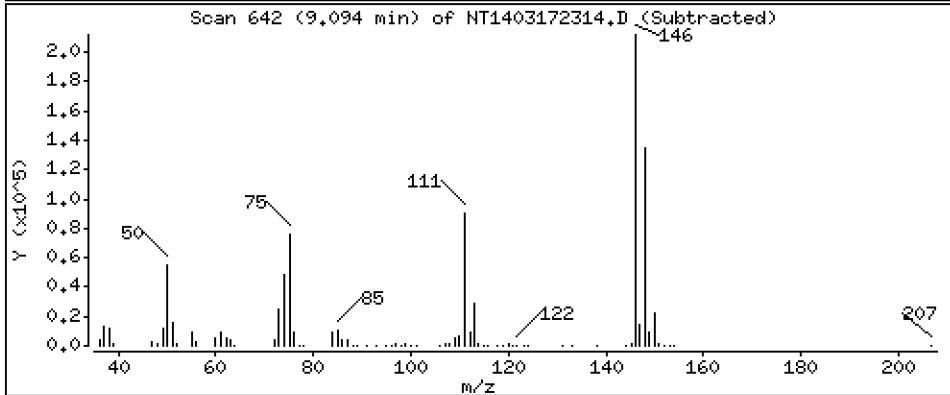
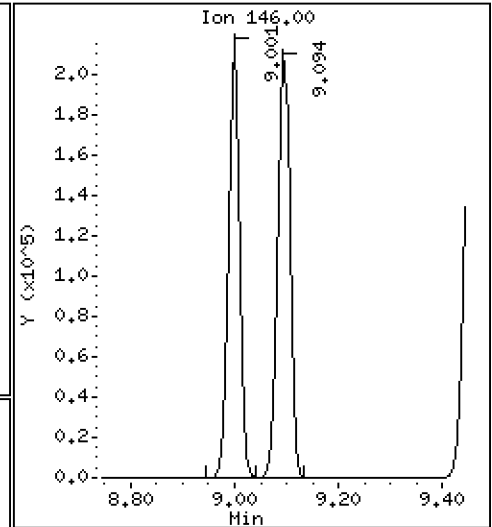
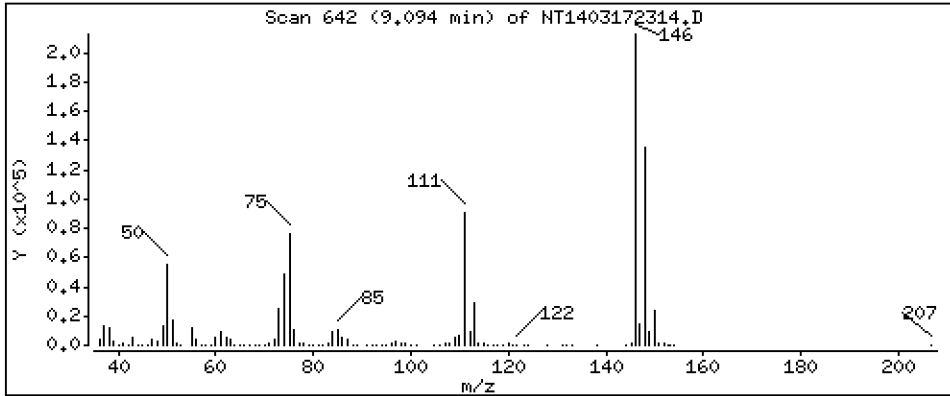
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.126 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

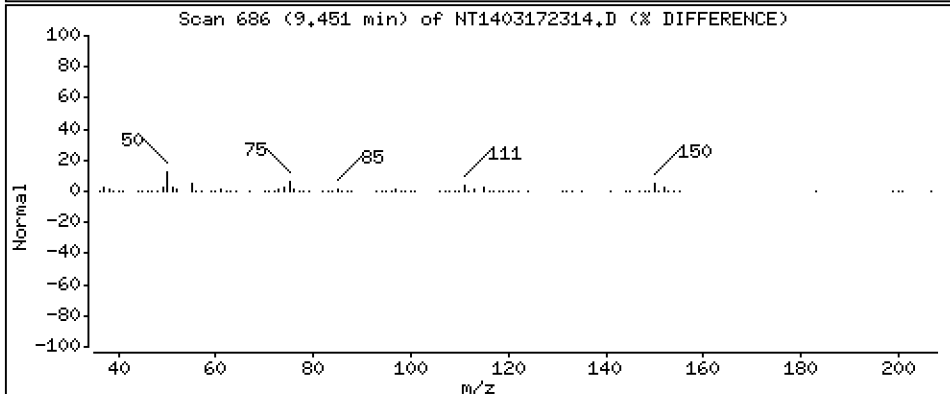
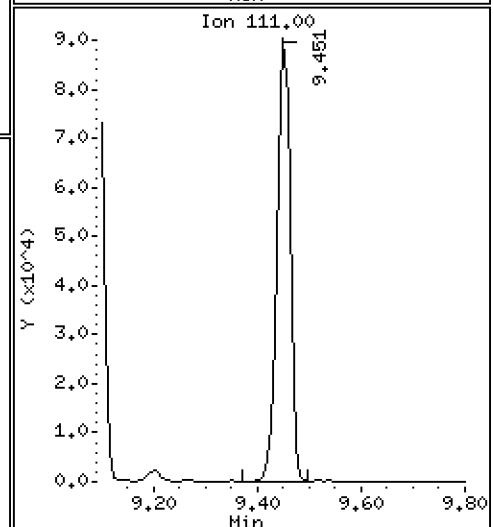
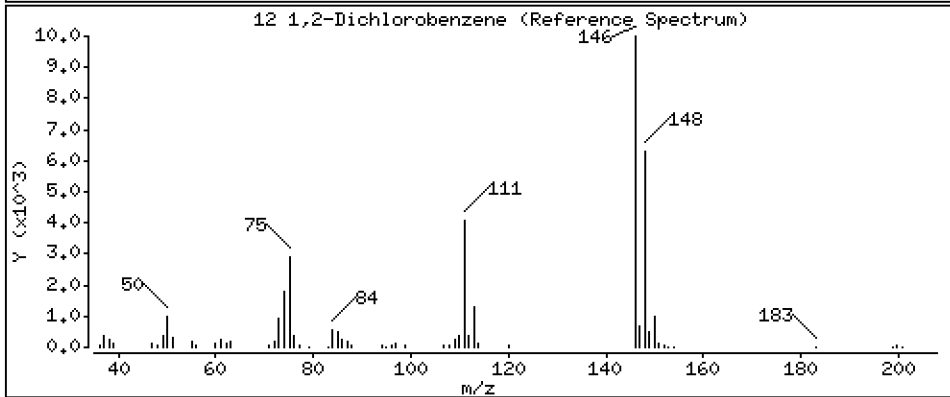
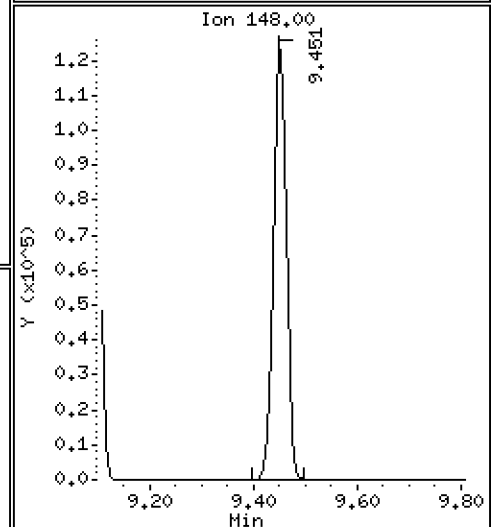
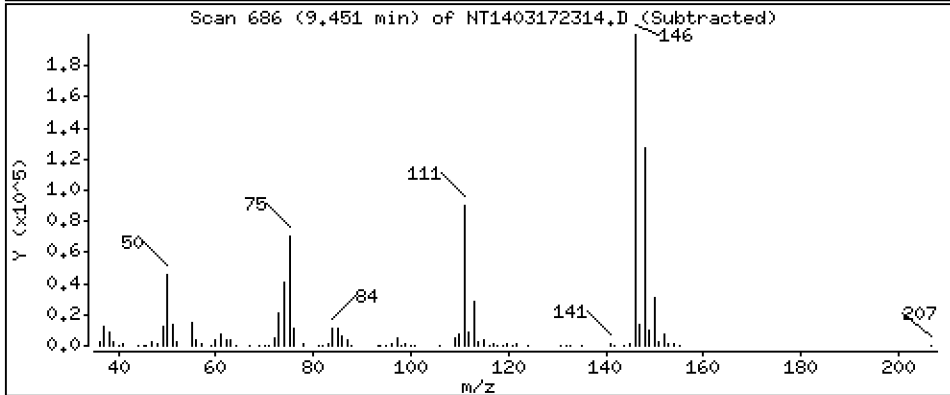
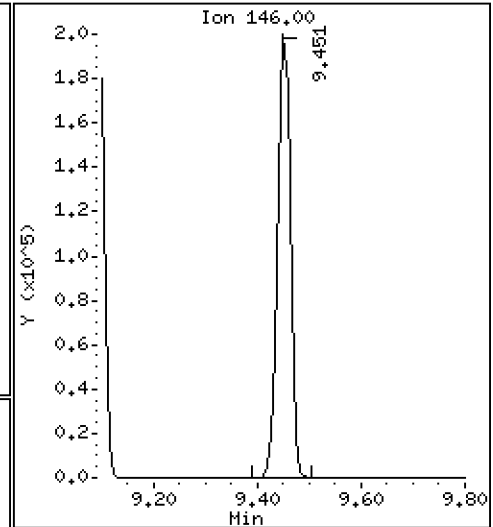
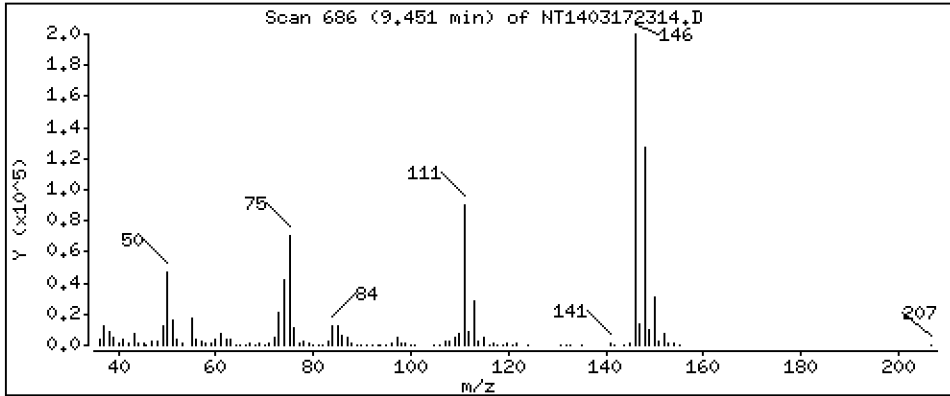
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4,141 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

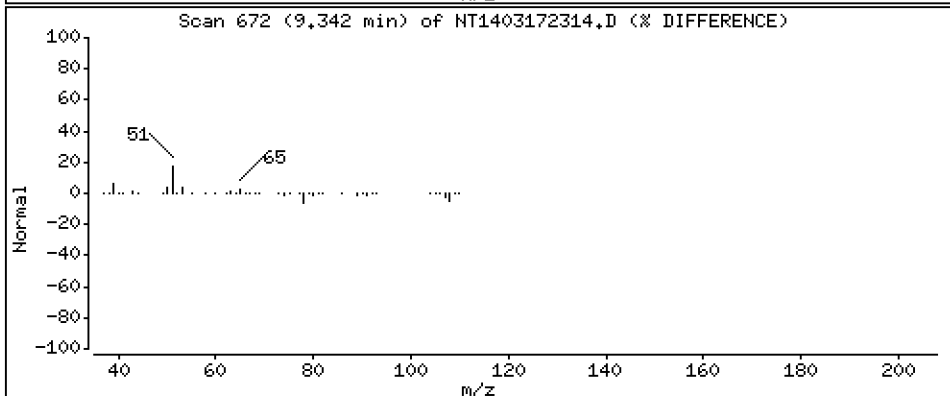
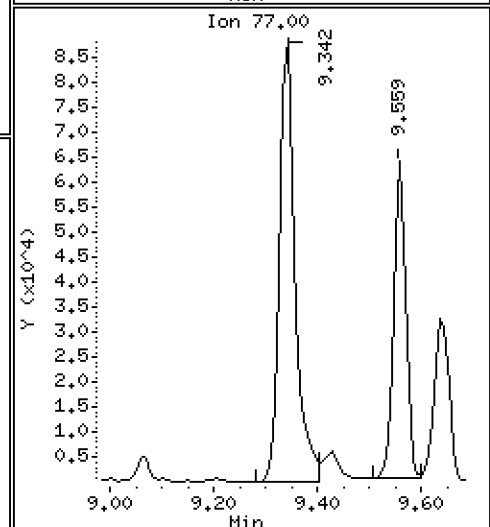
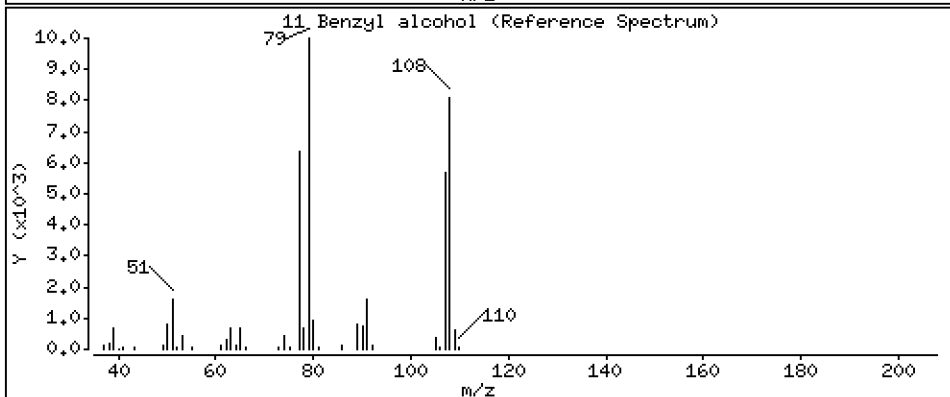
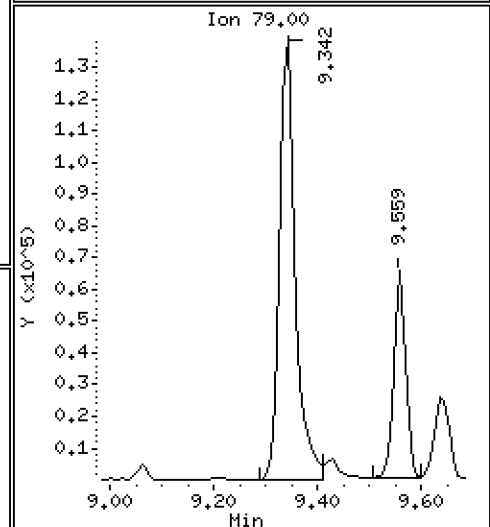
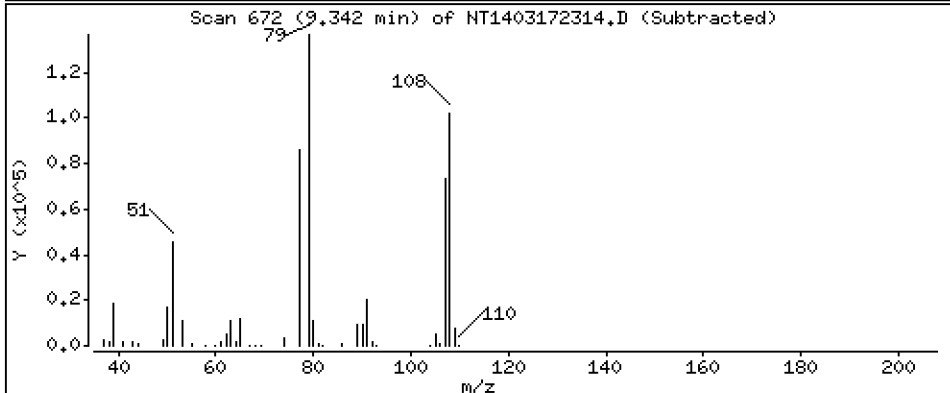
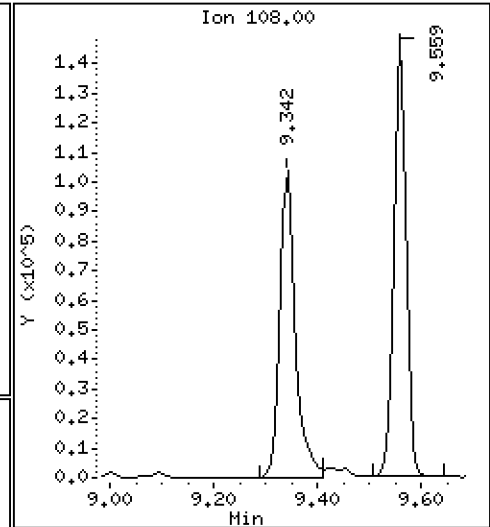
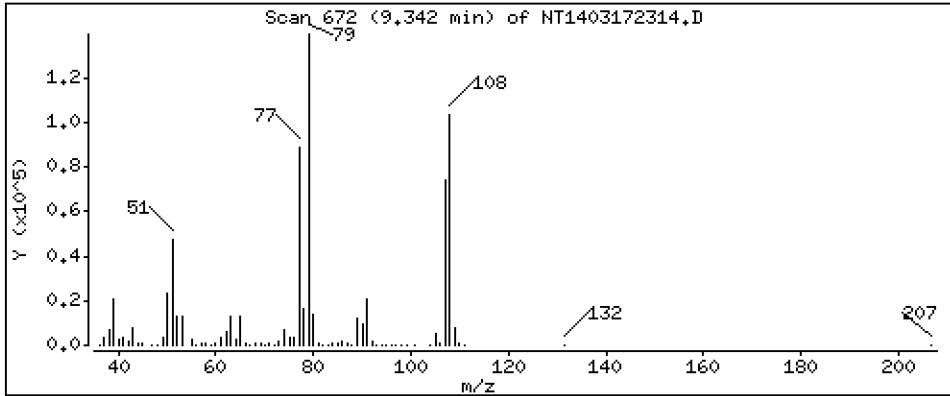
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,313 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

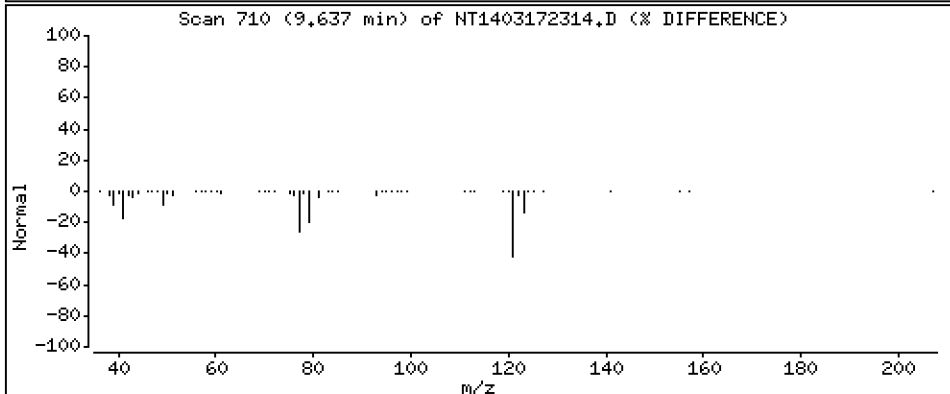
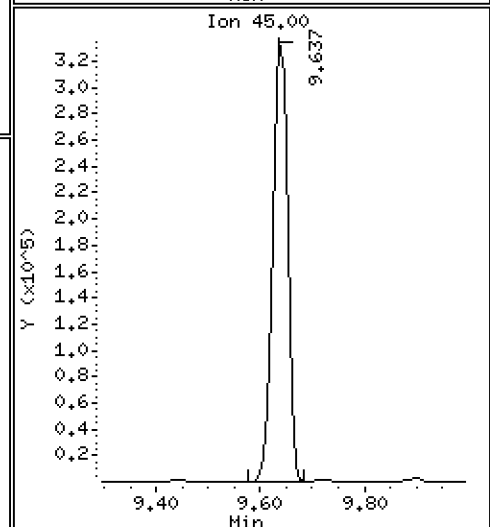
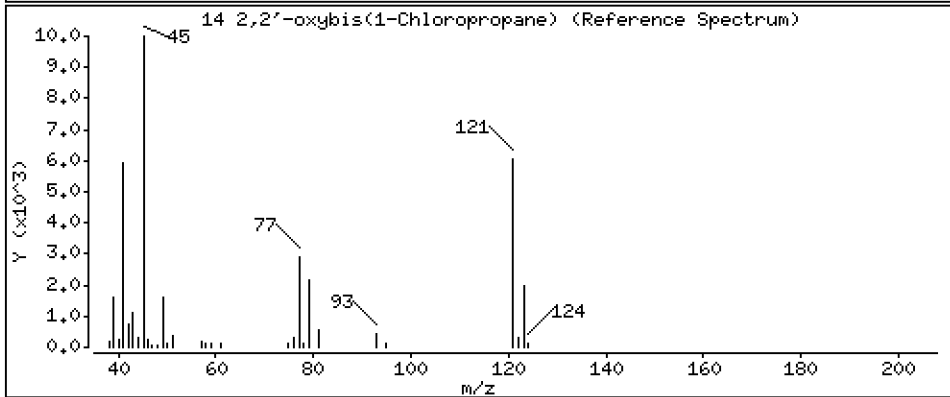
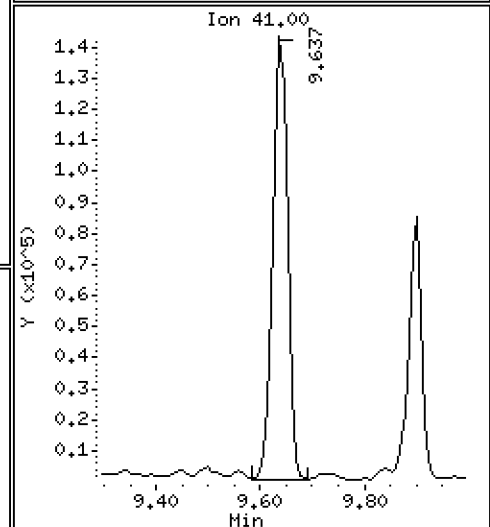
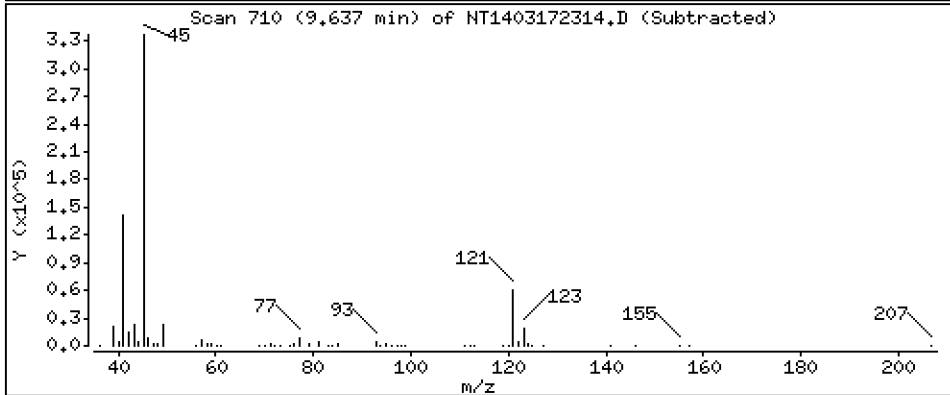
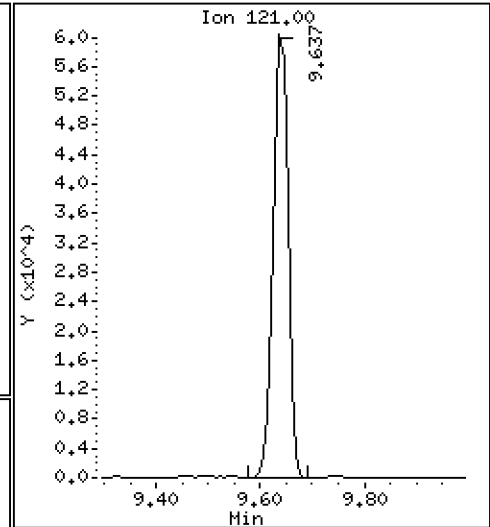
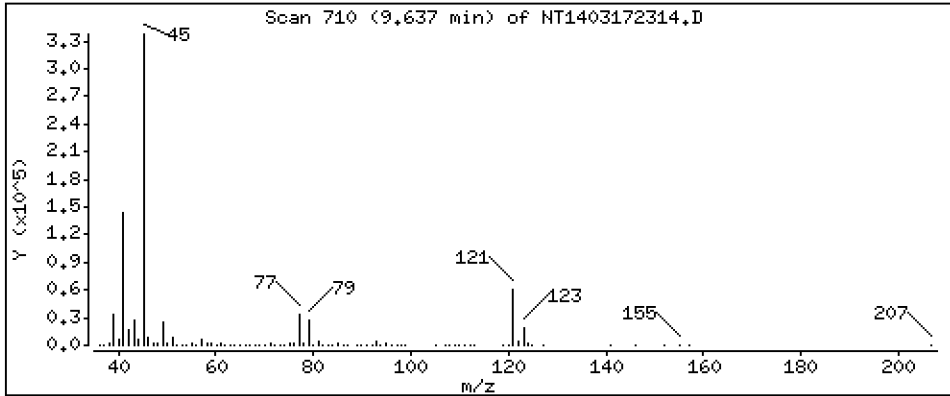
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,916 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

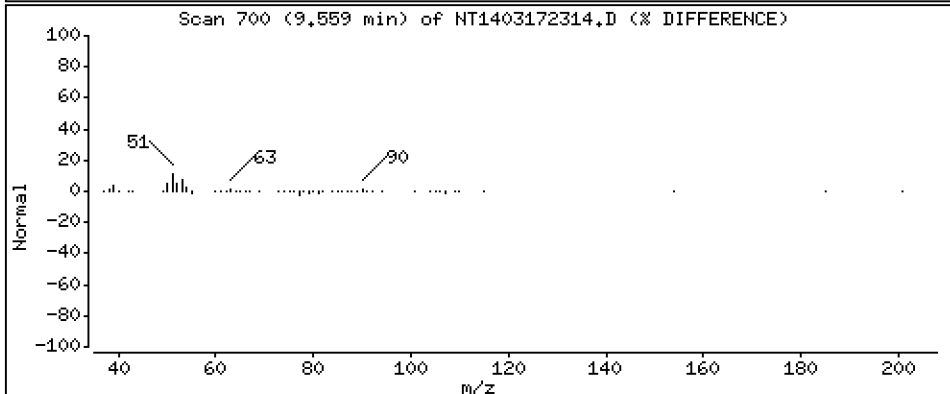
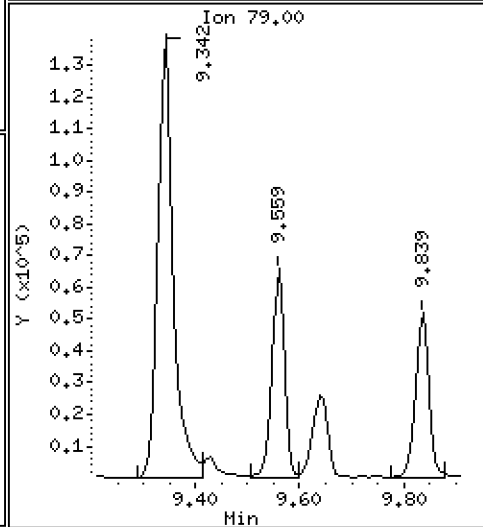
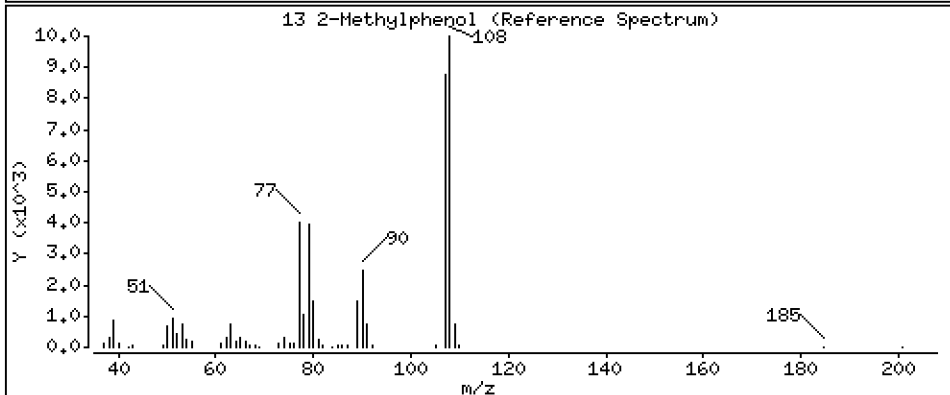
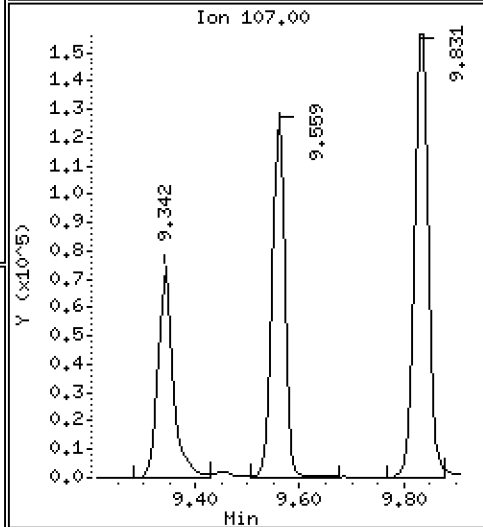
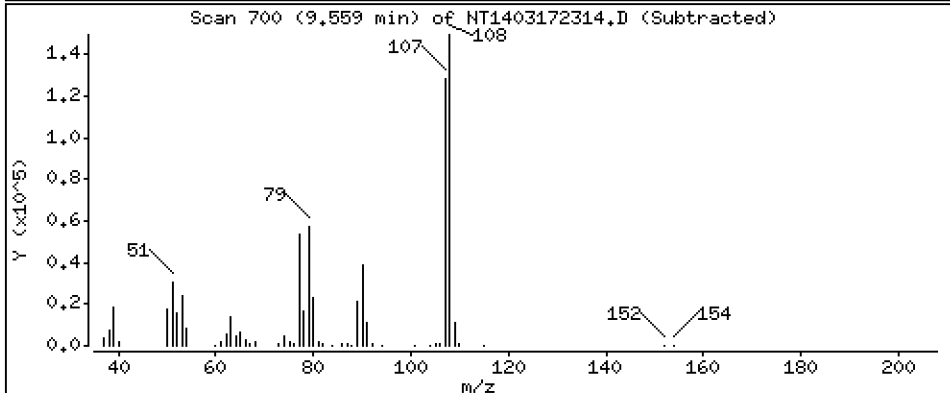
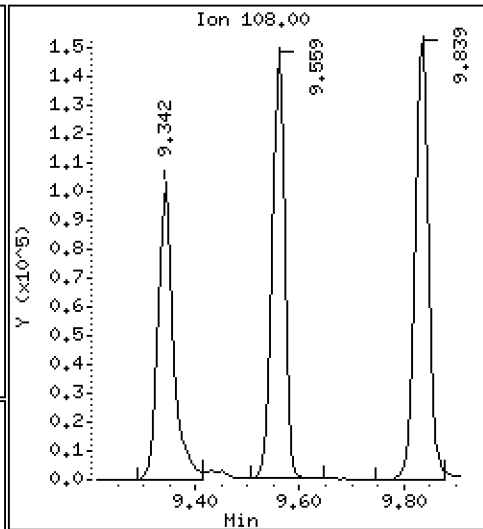
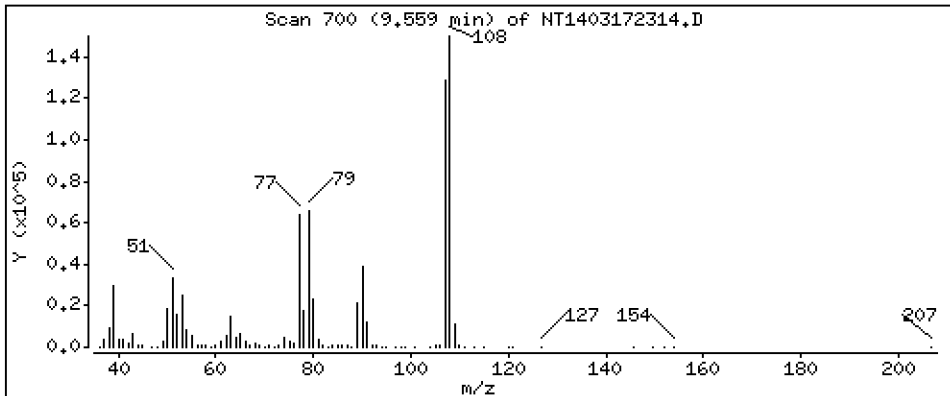
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3,230 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

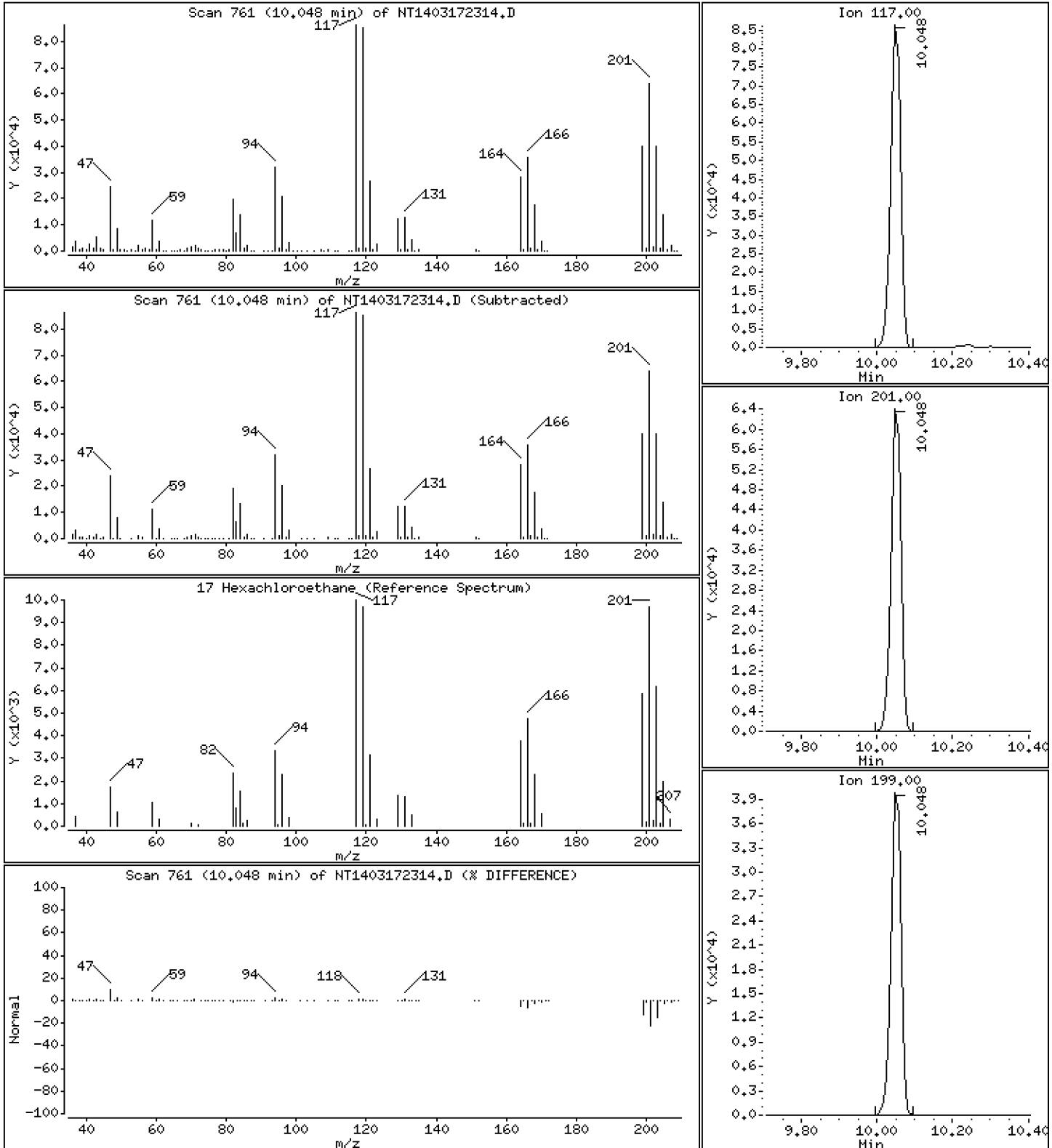
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 4.407 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

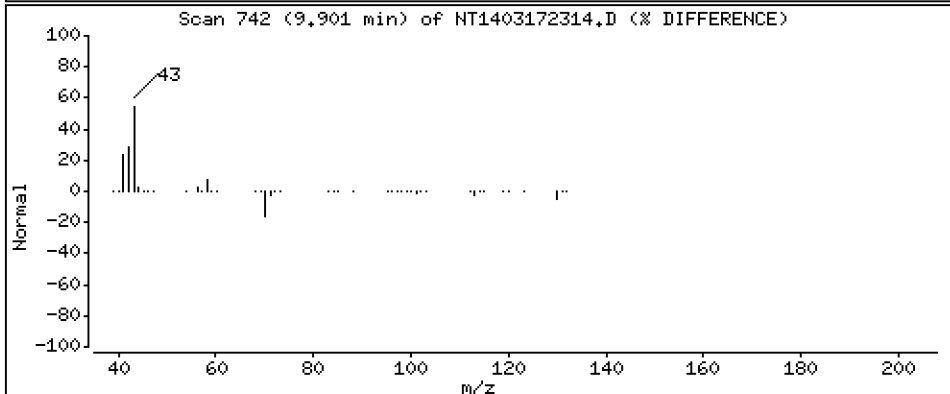
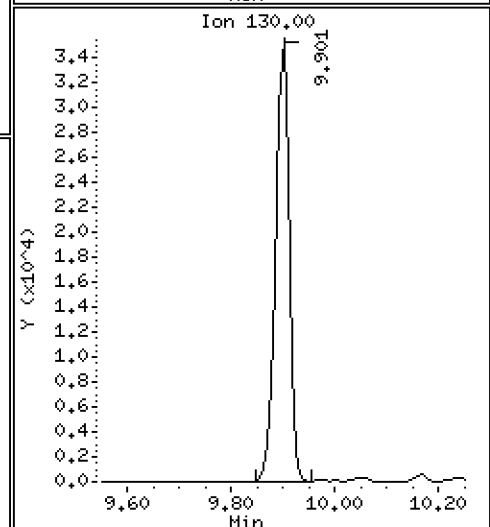
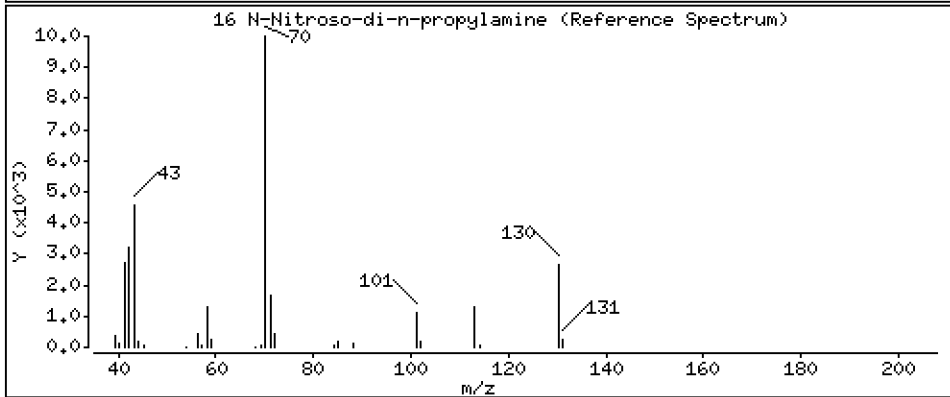
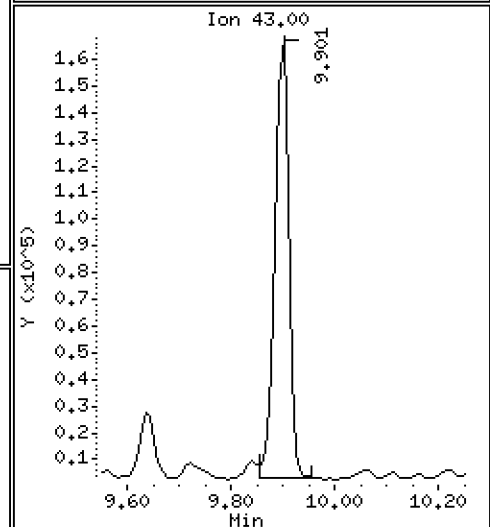
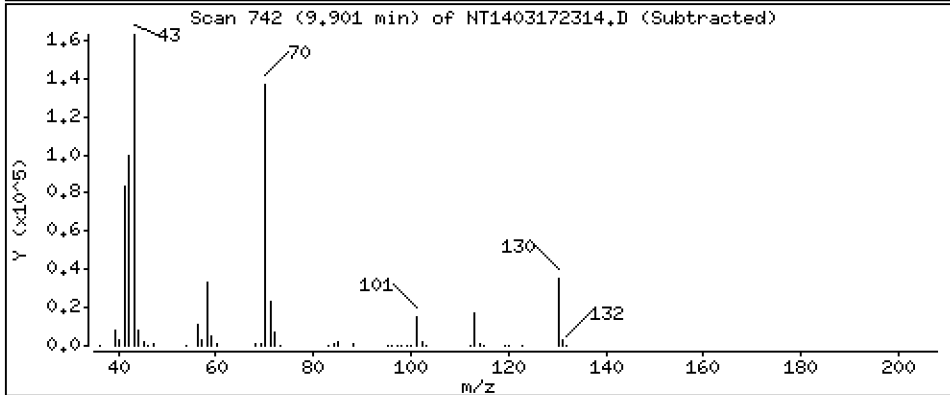
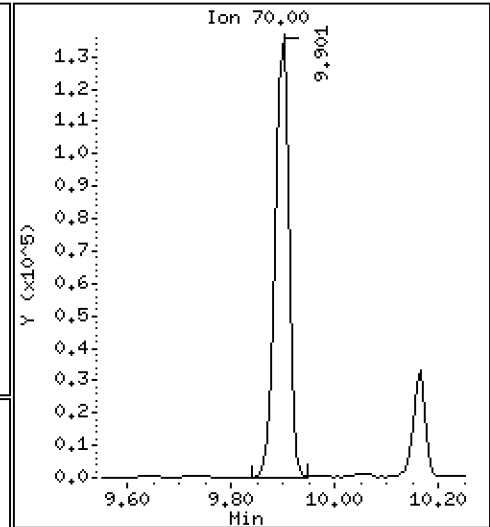
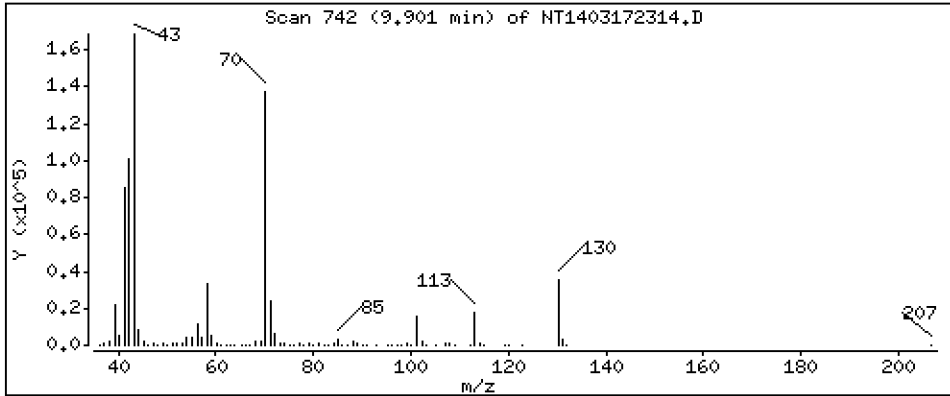
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,148 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

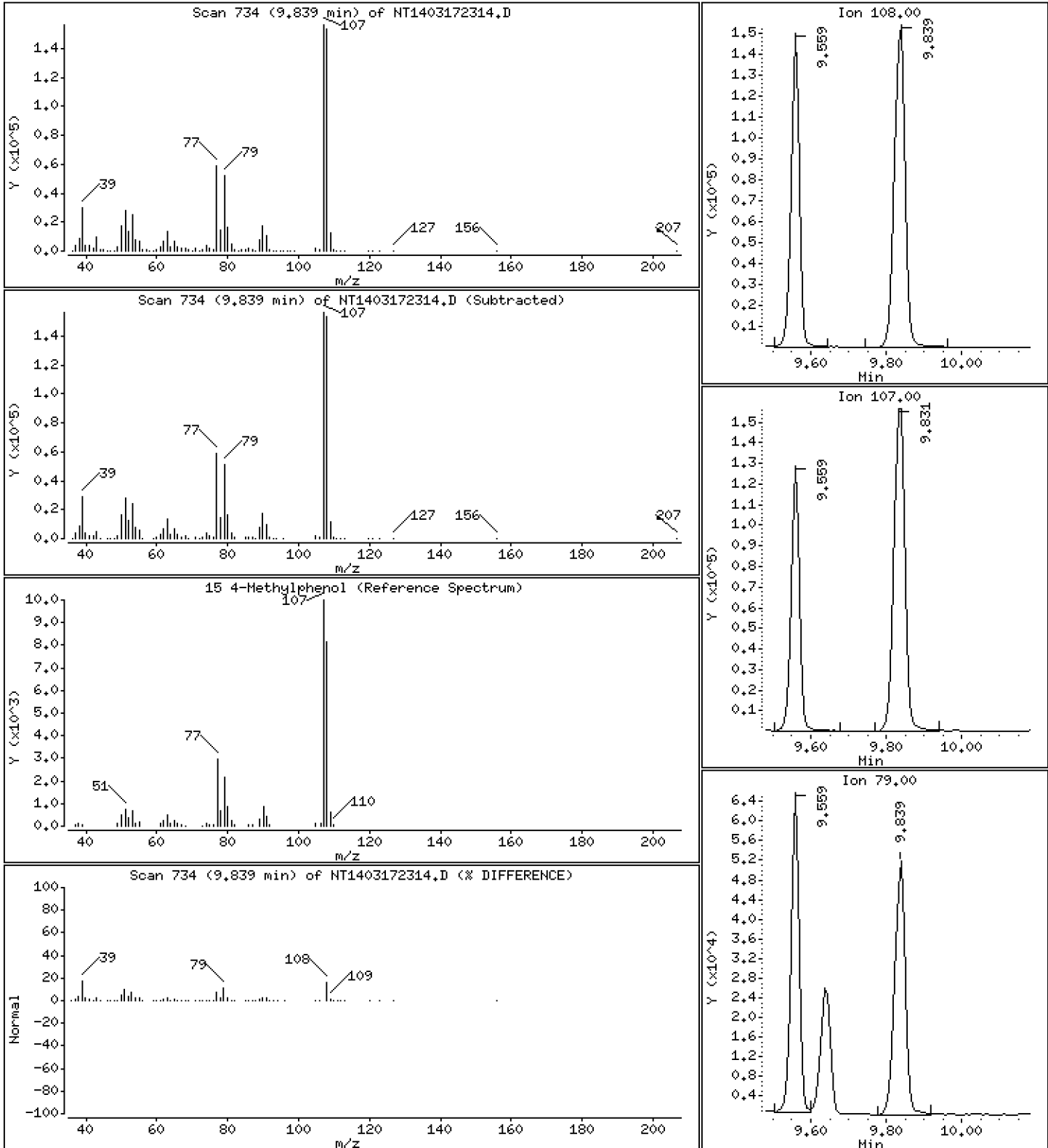
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 3,650 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

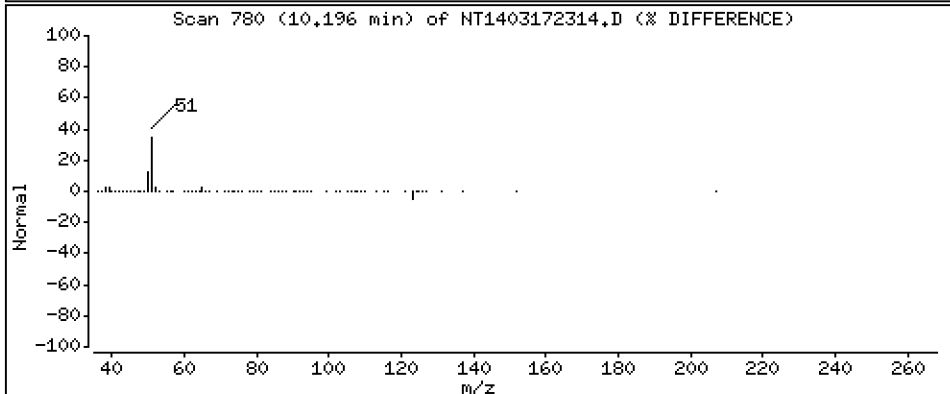
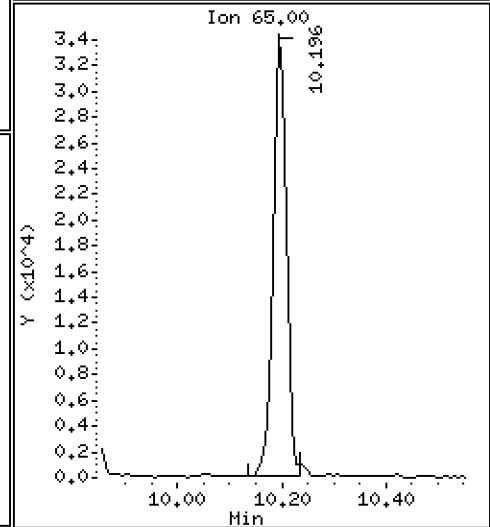
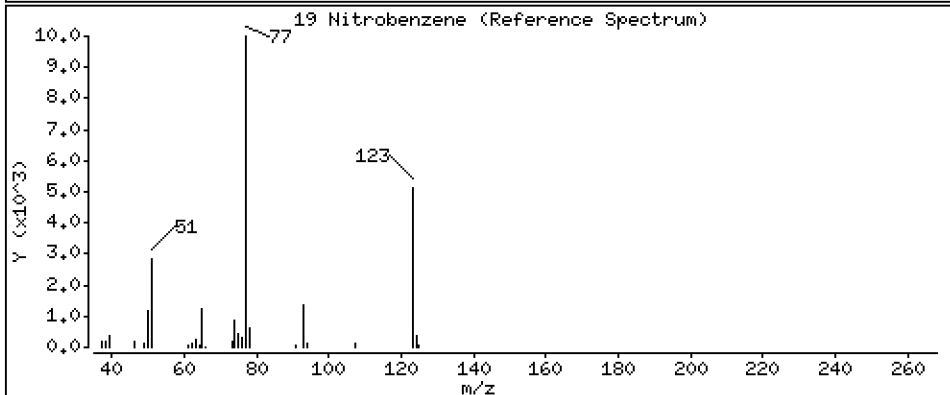
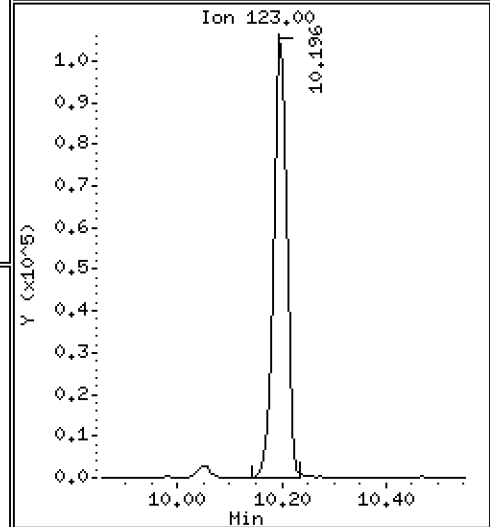
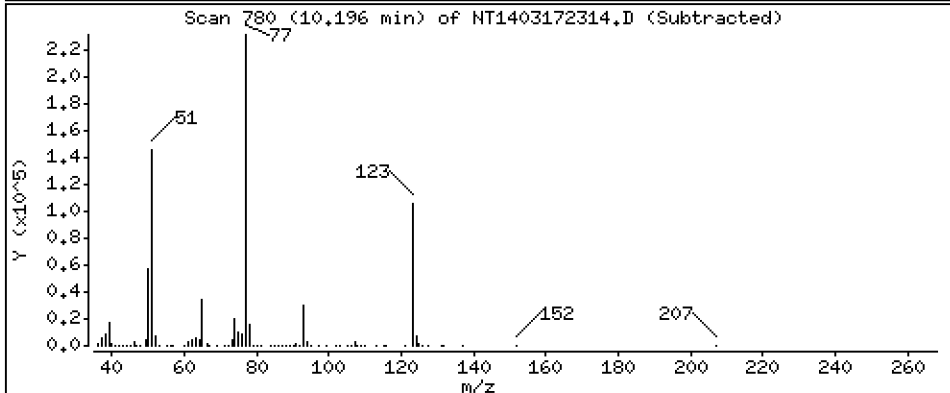
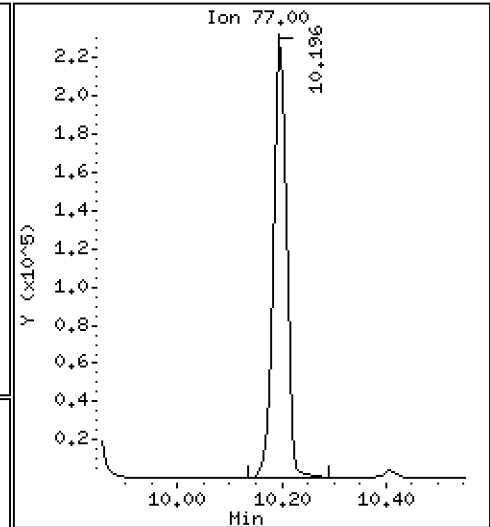
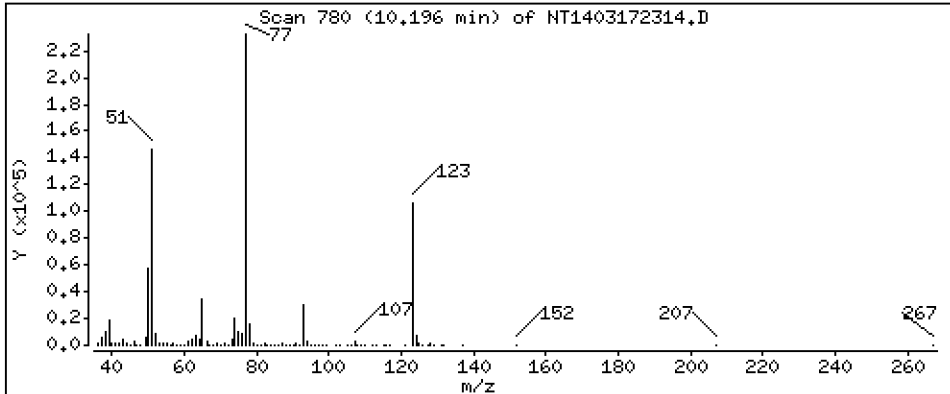
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 4,540 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

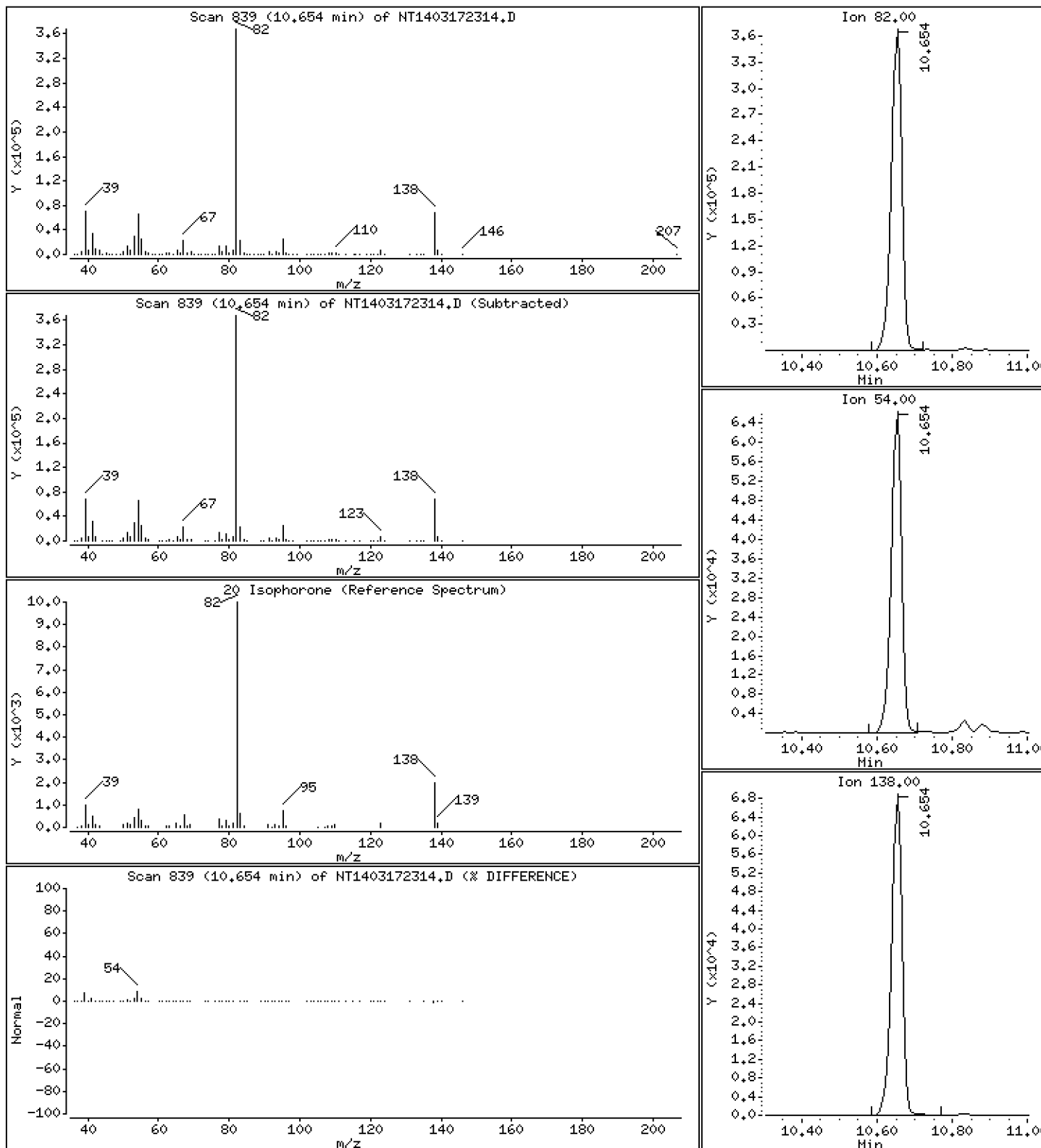
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 5,830 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

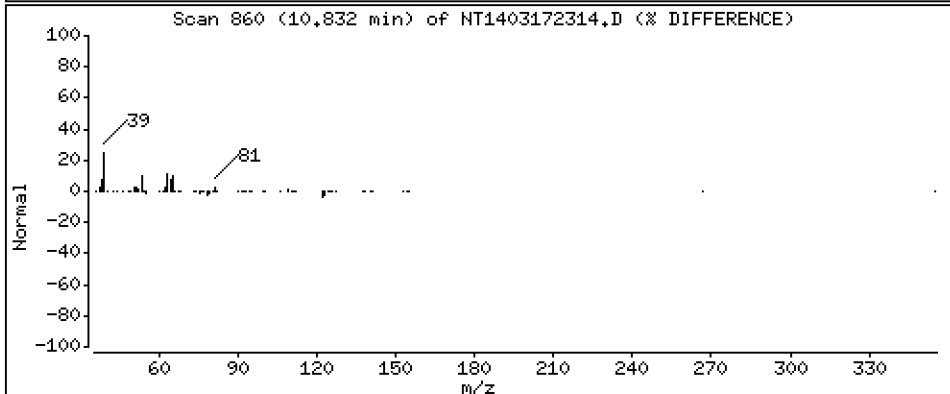
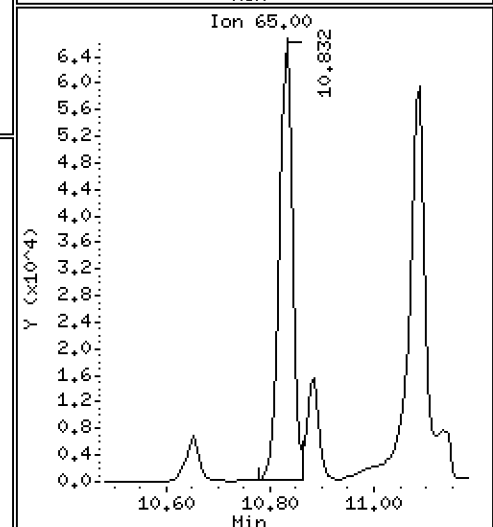
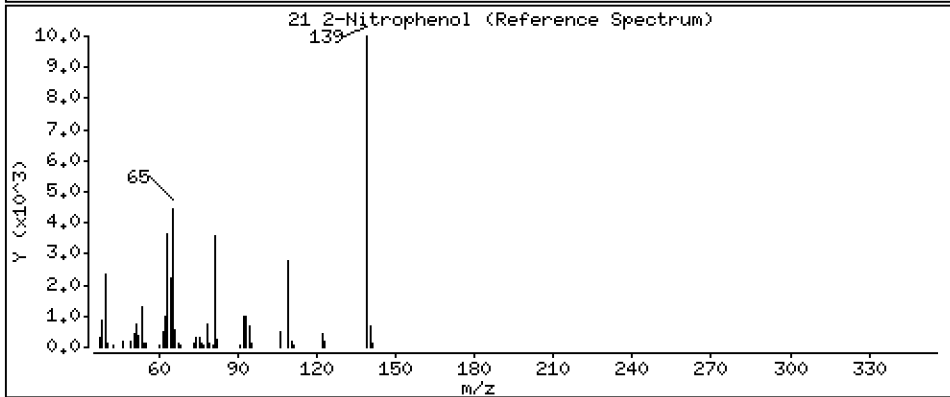
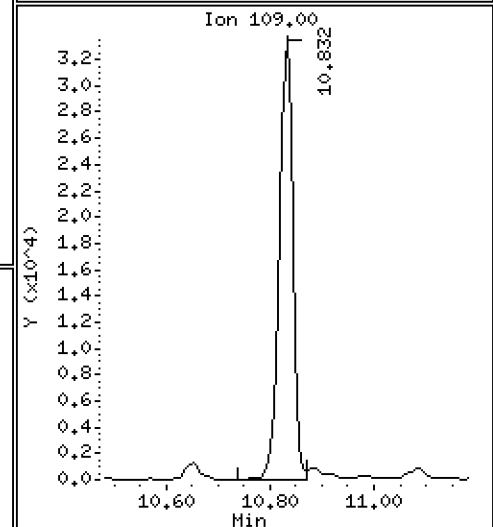
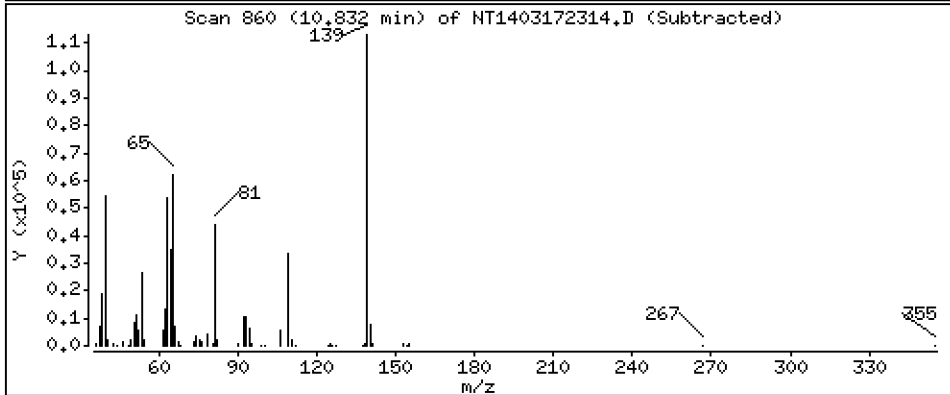
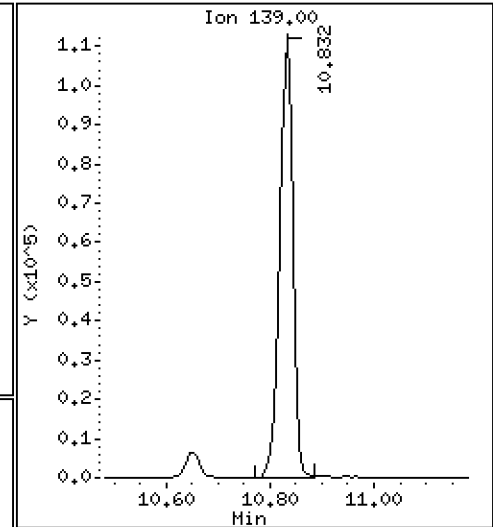
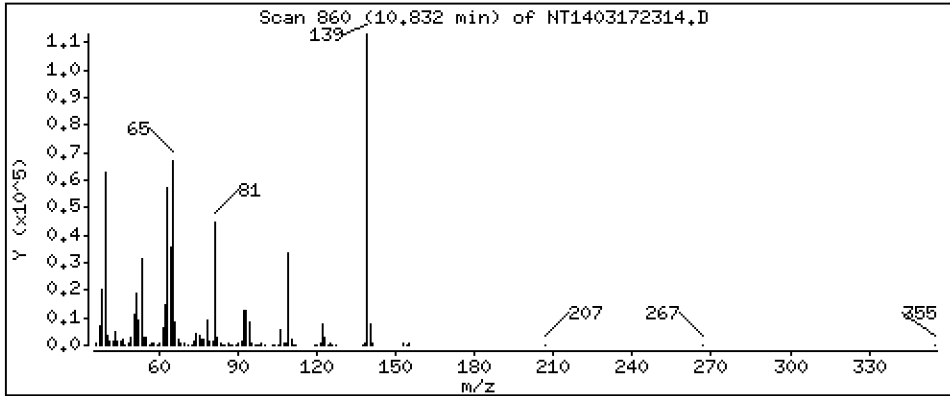
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,767 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

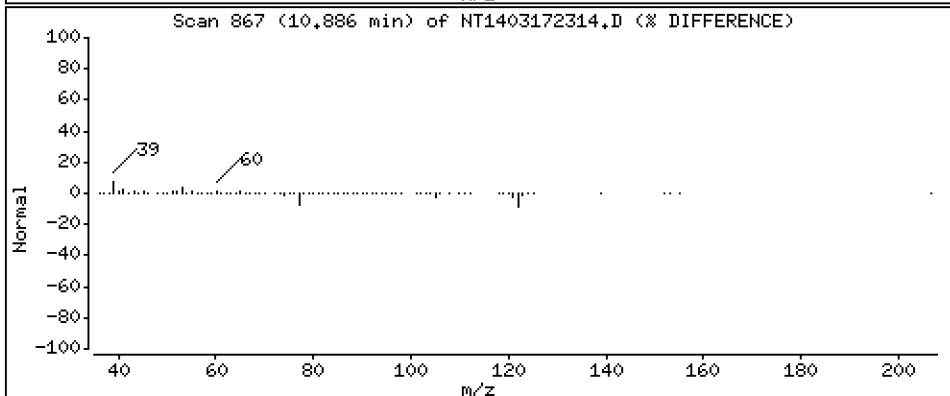
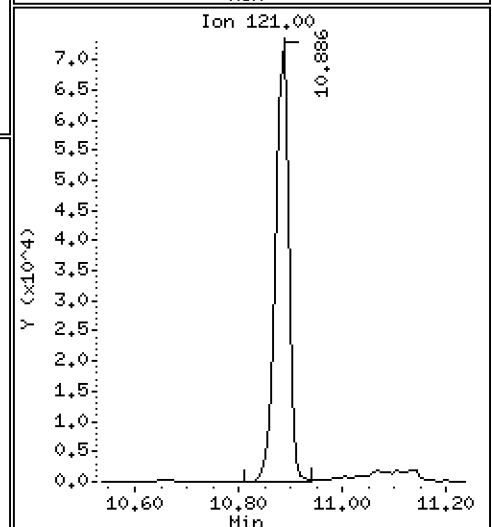
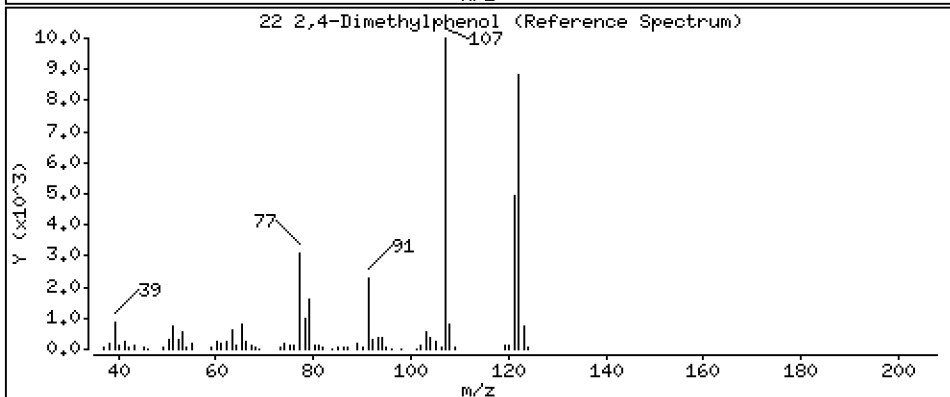
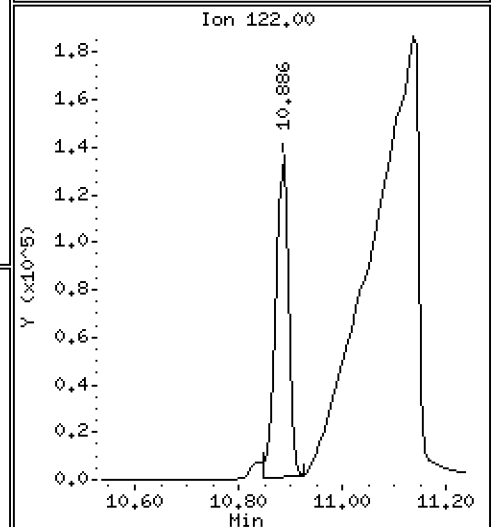
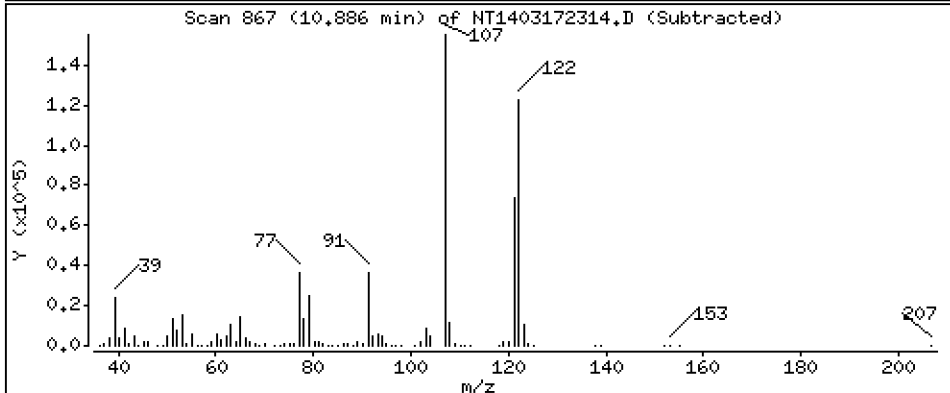
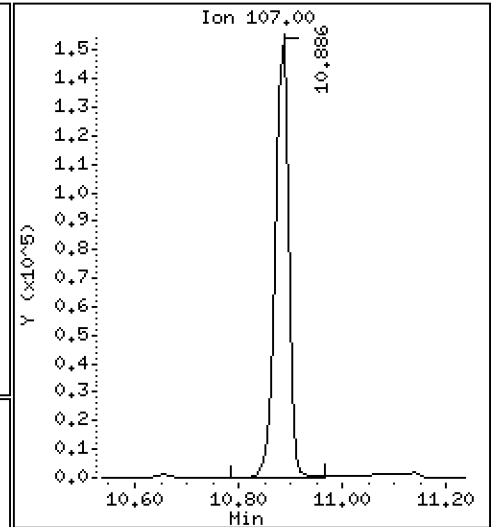
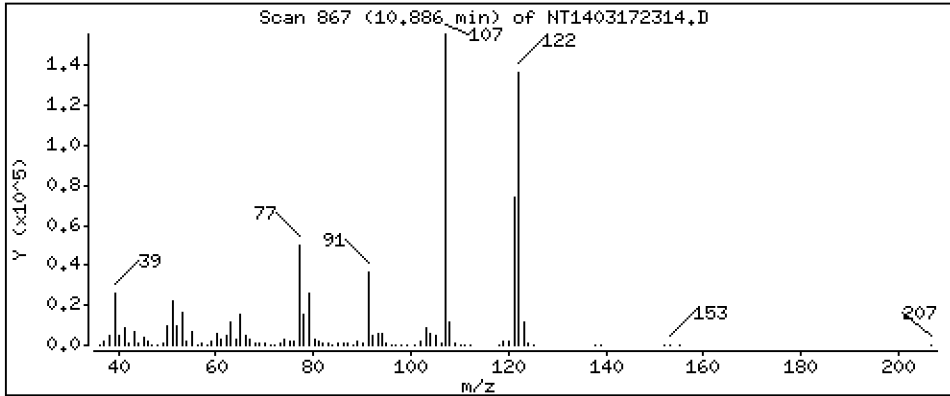
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,545 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

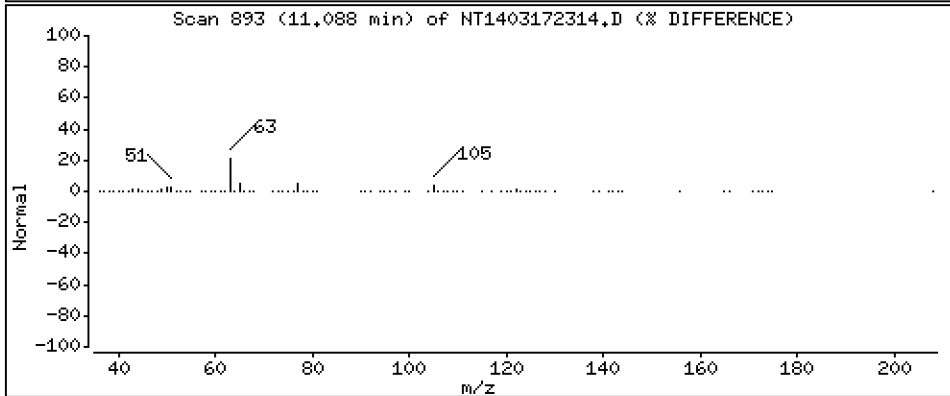
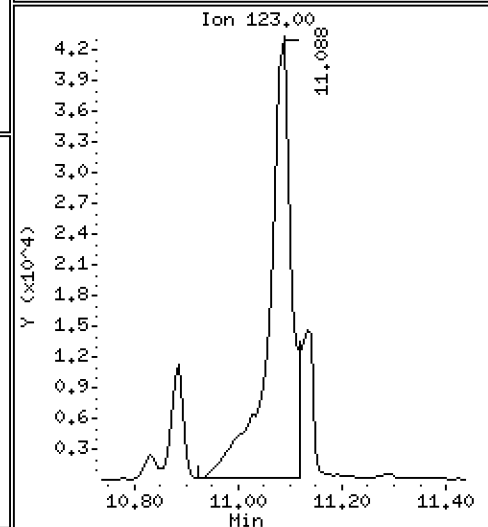
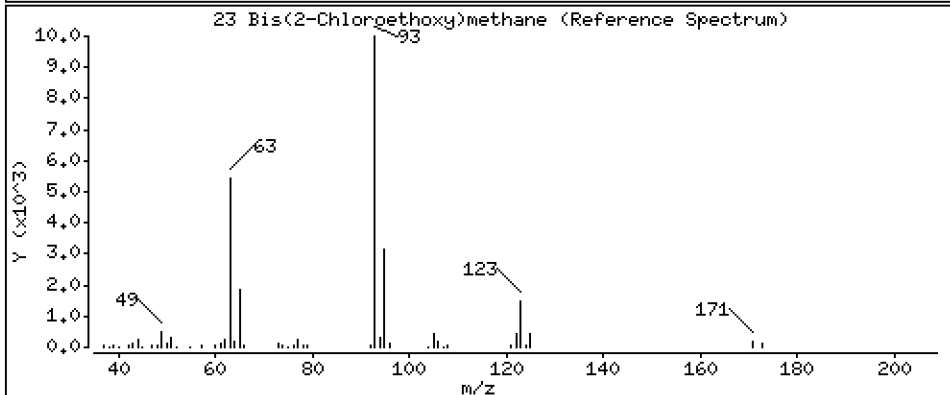
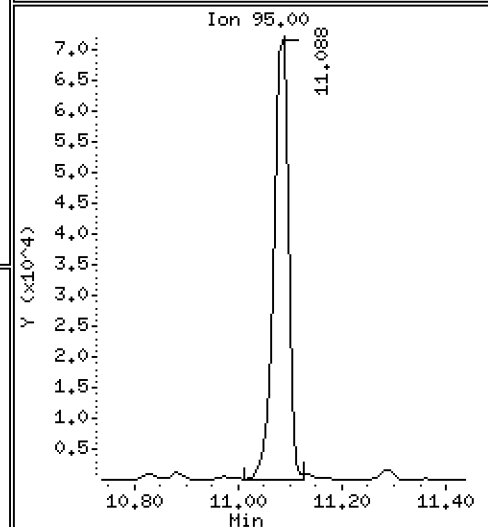
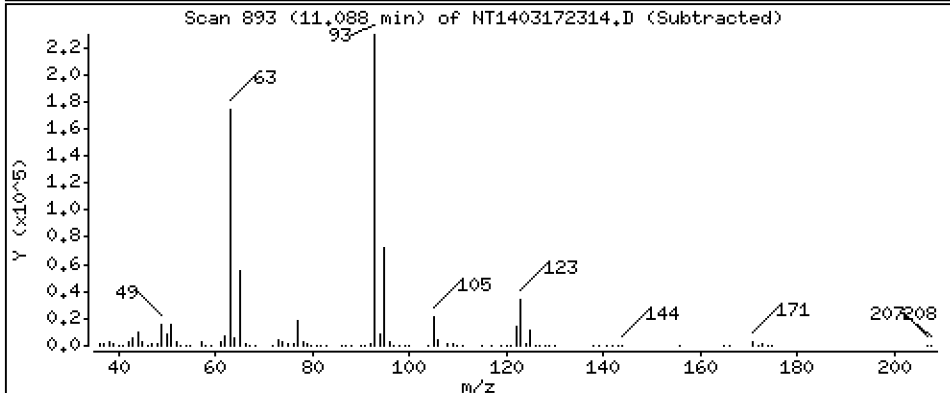
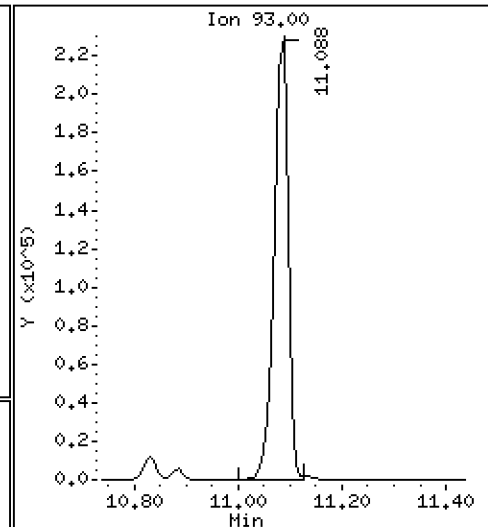
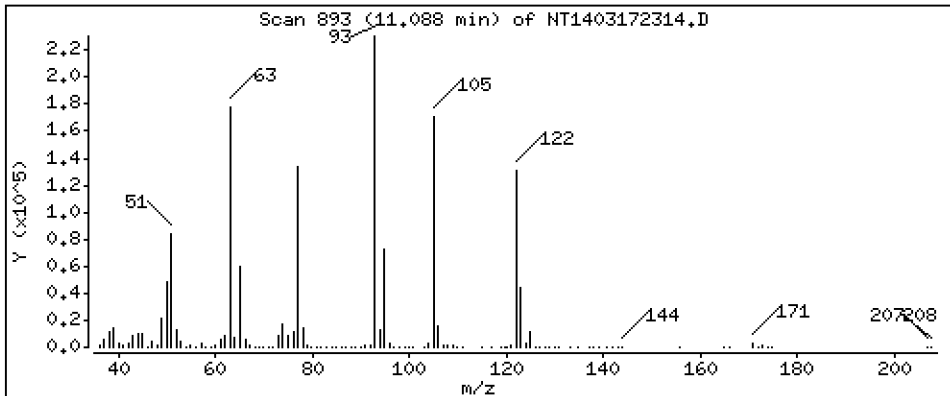
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,141 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

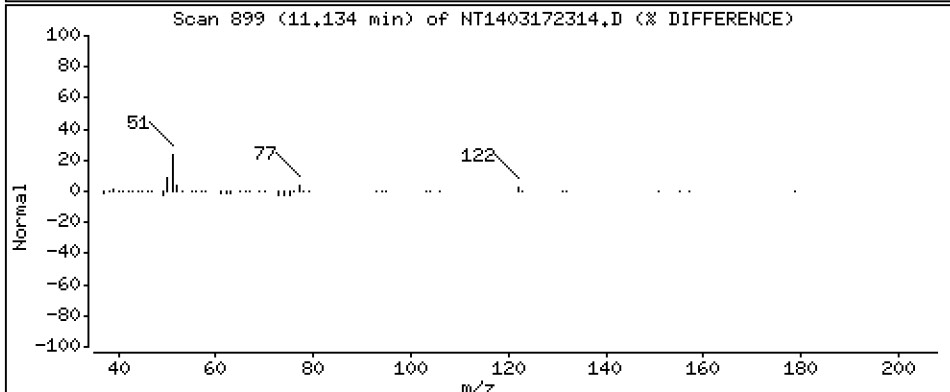
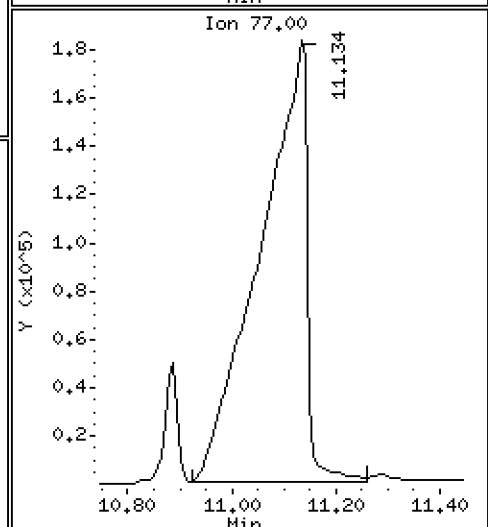
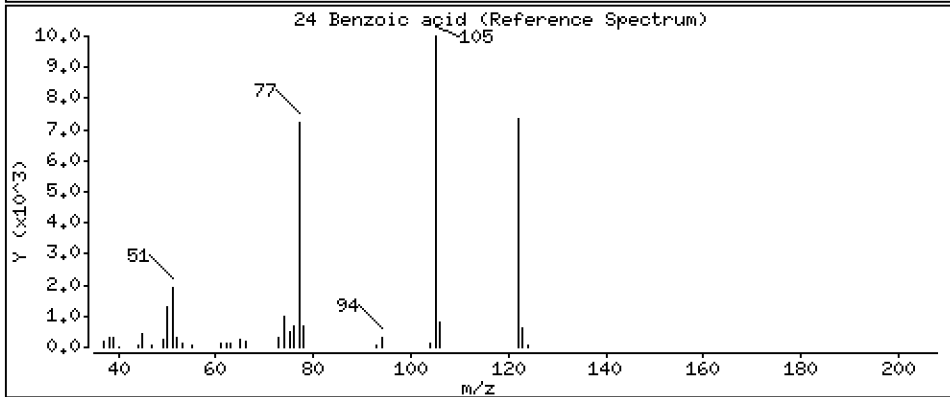
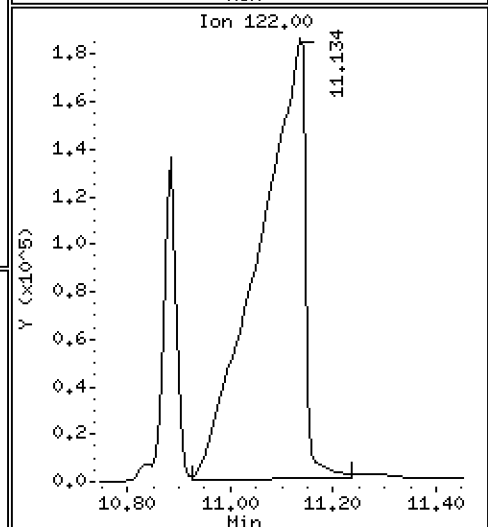
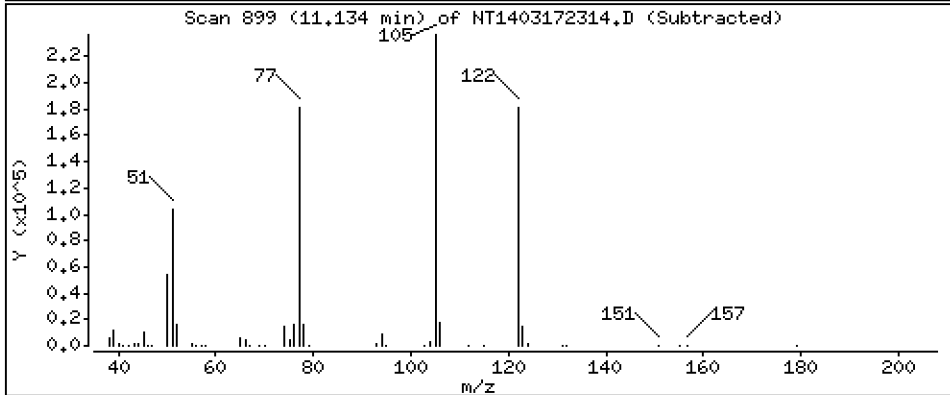
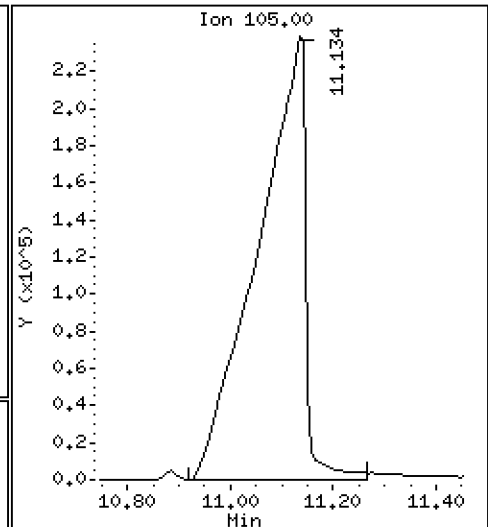
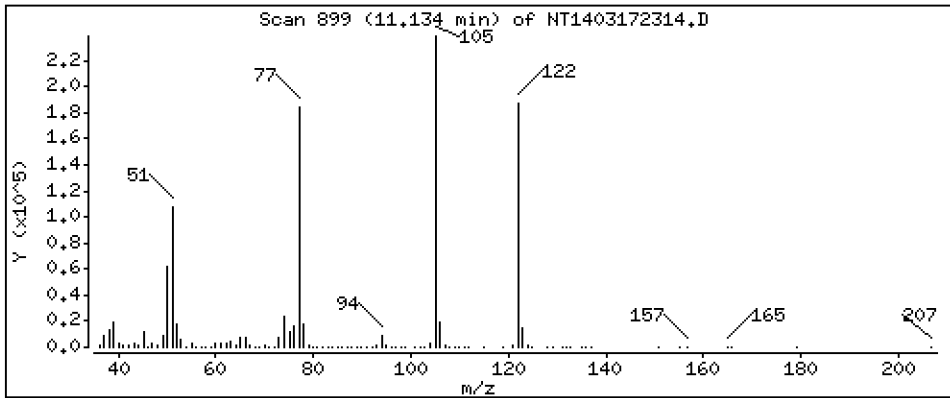
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 23,99 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

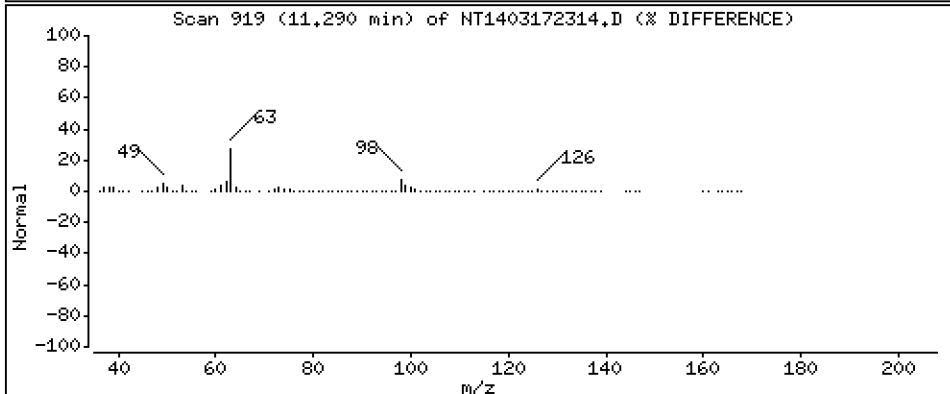
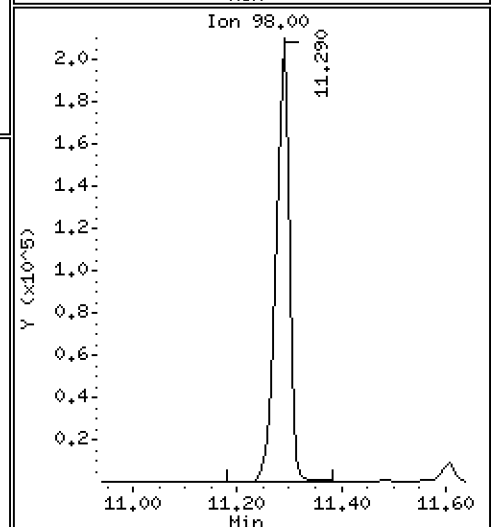
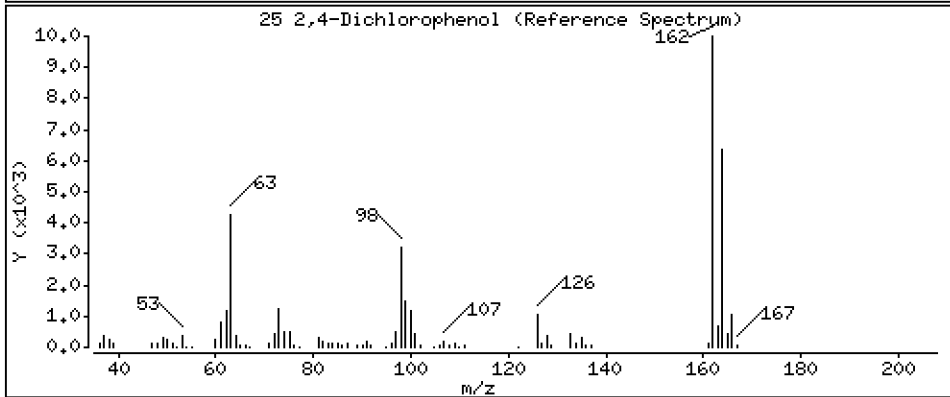
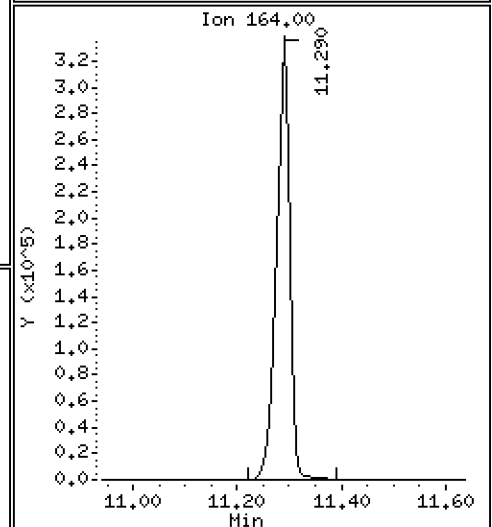
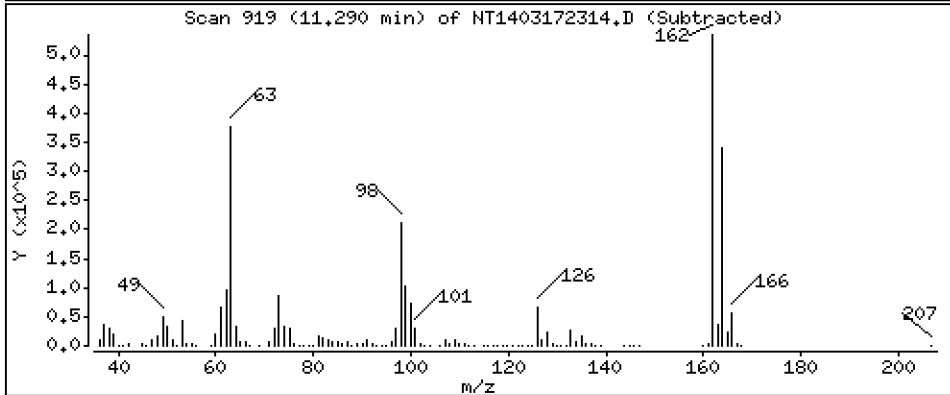
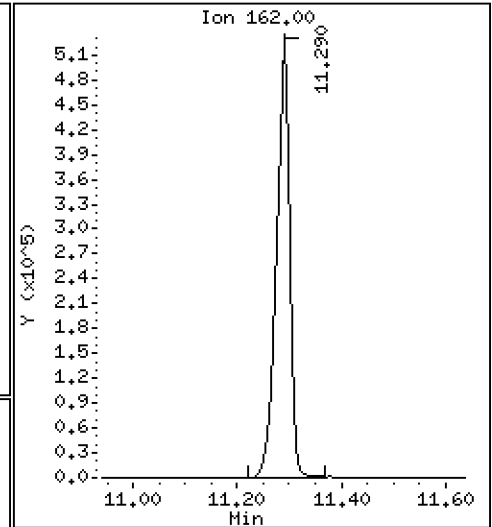
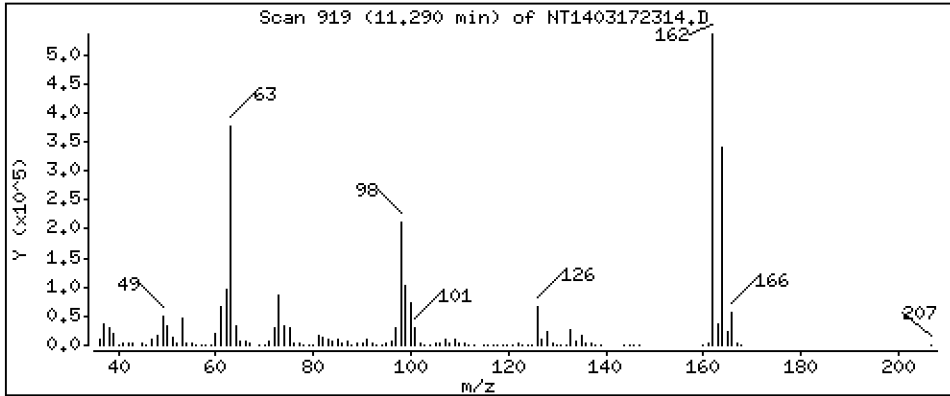
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 15,50 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

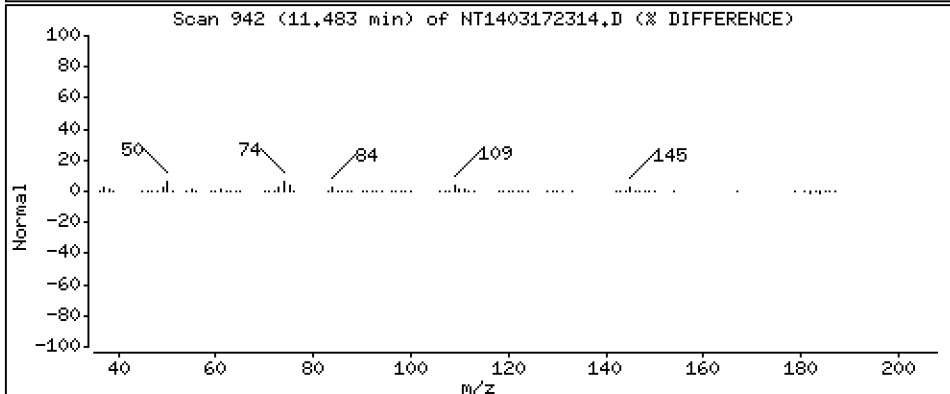
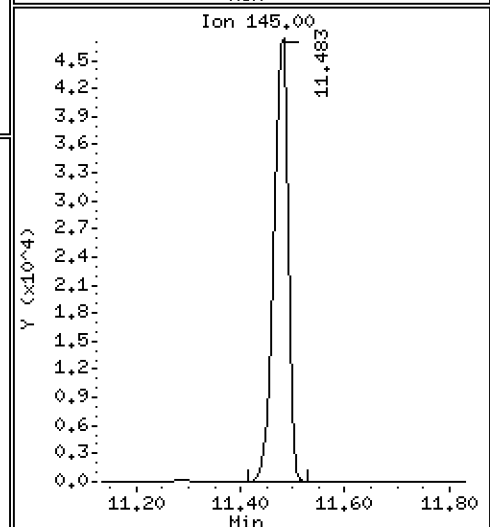
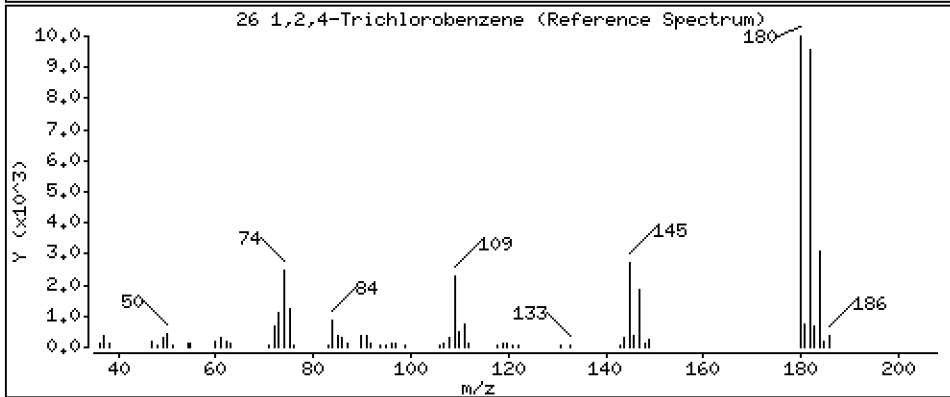
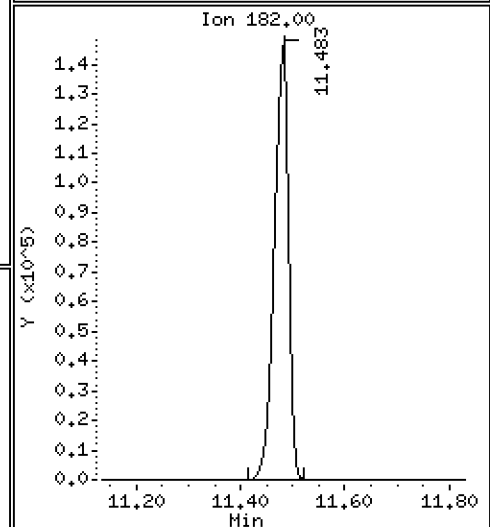
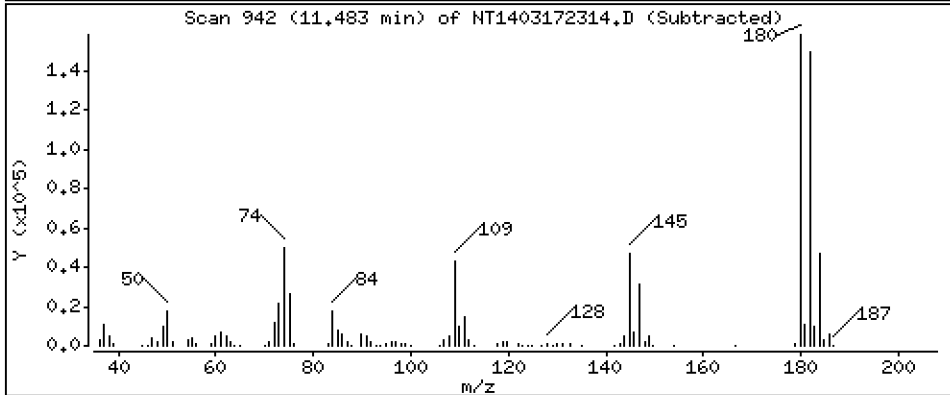
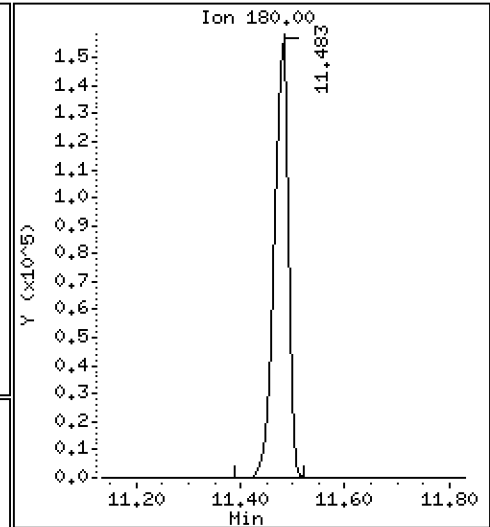
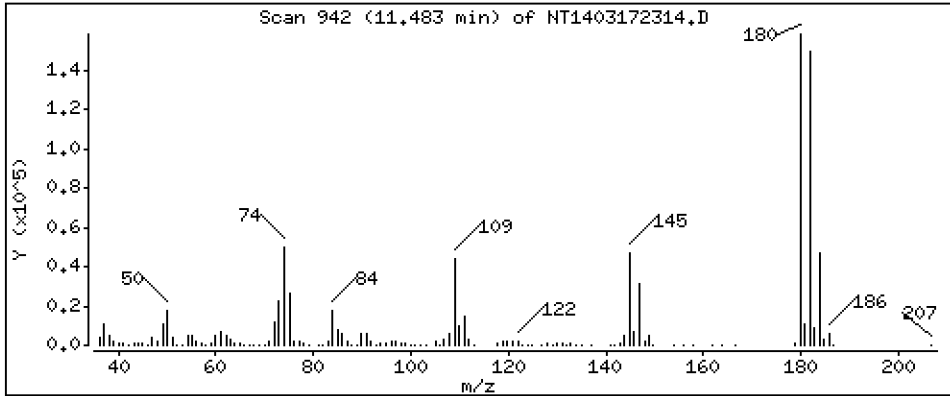
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,433 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

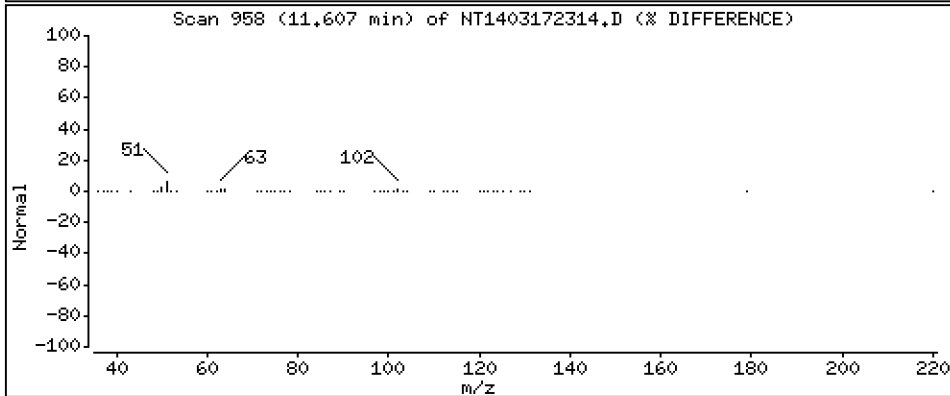
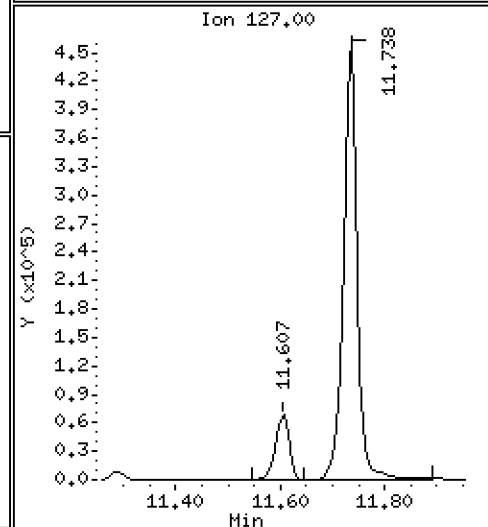
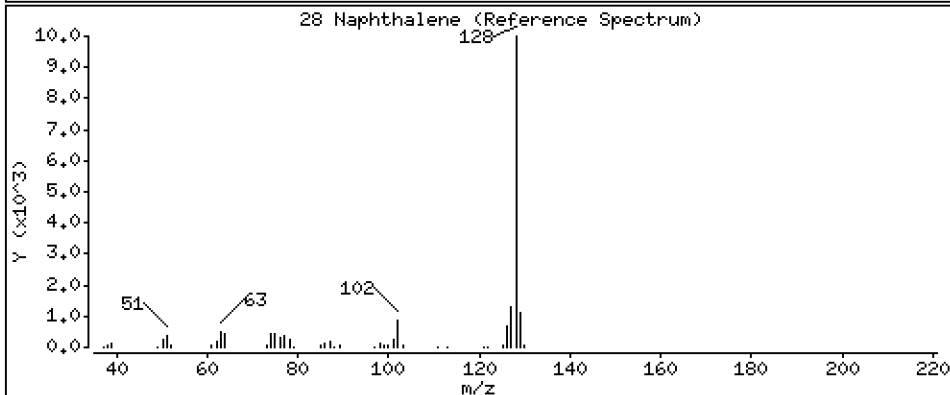
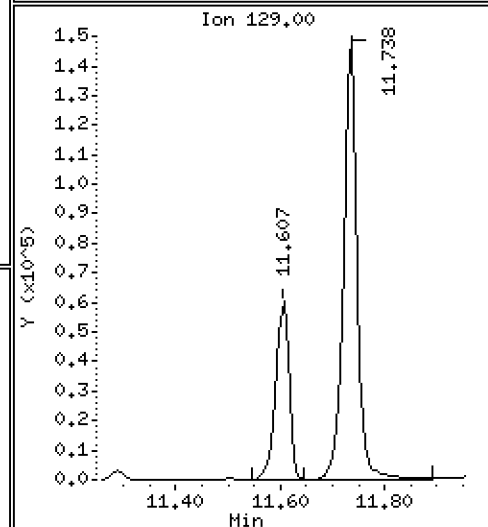
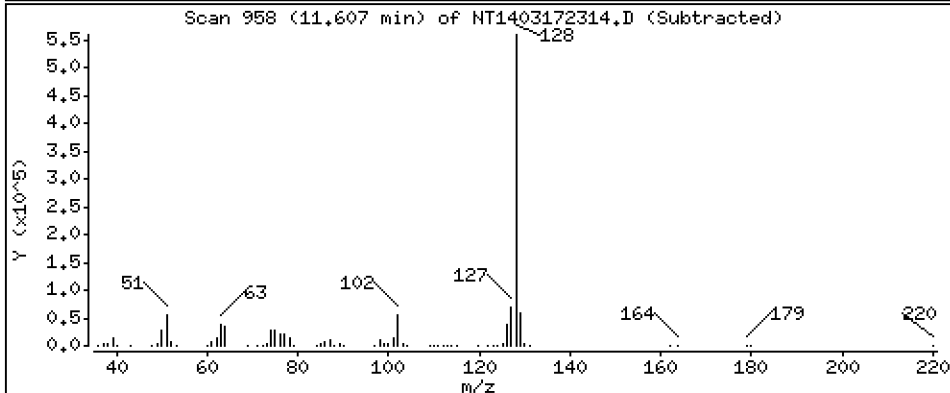
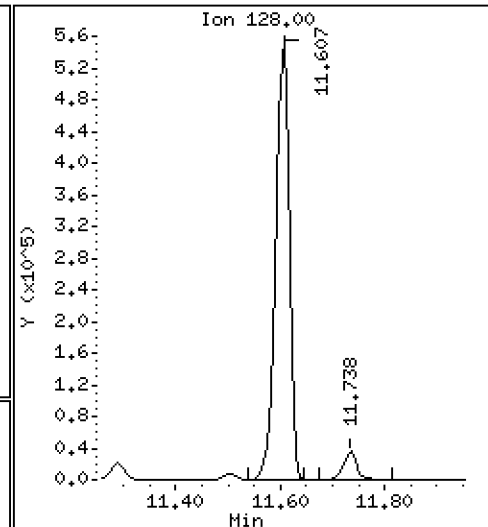
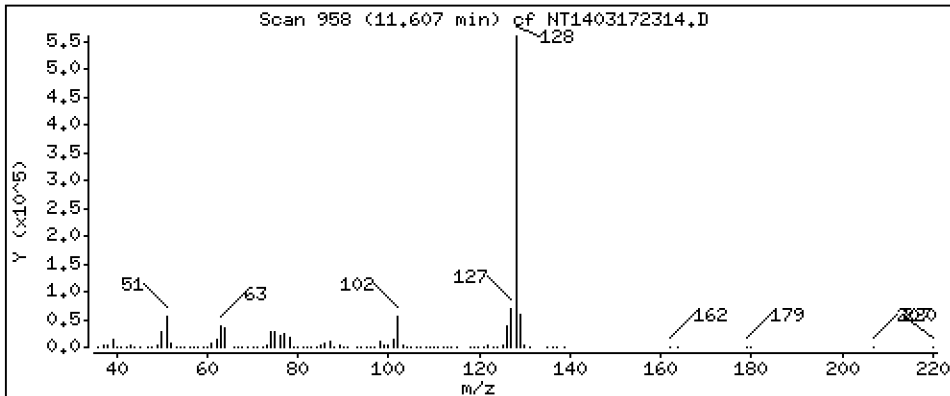
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,229 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

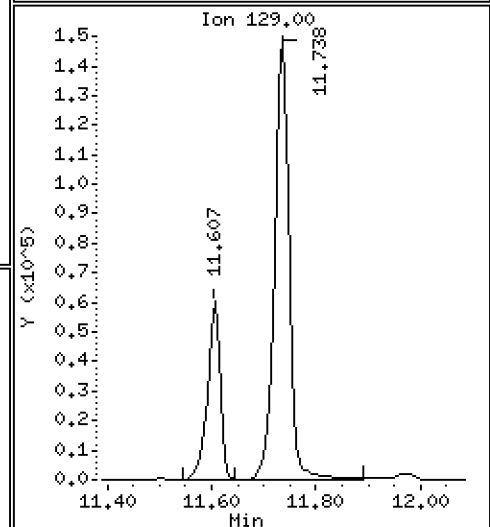
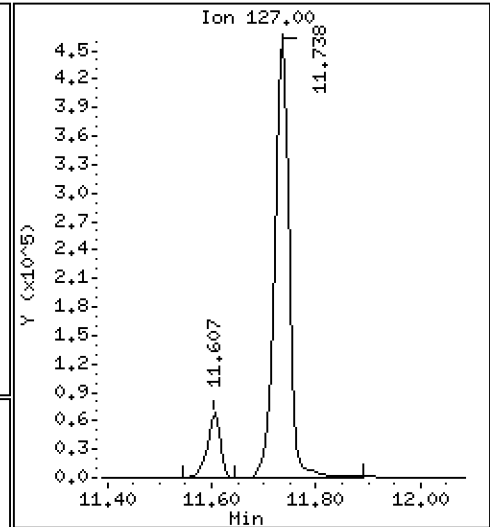
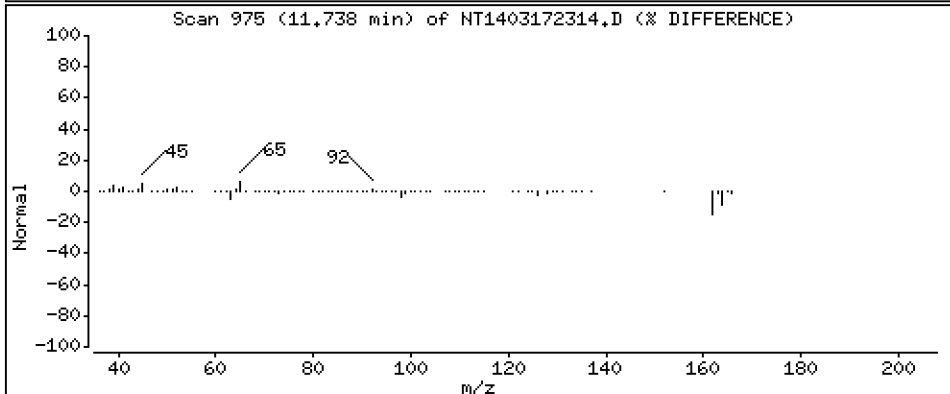
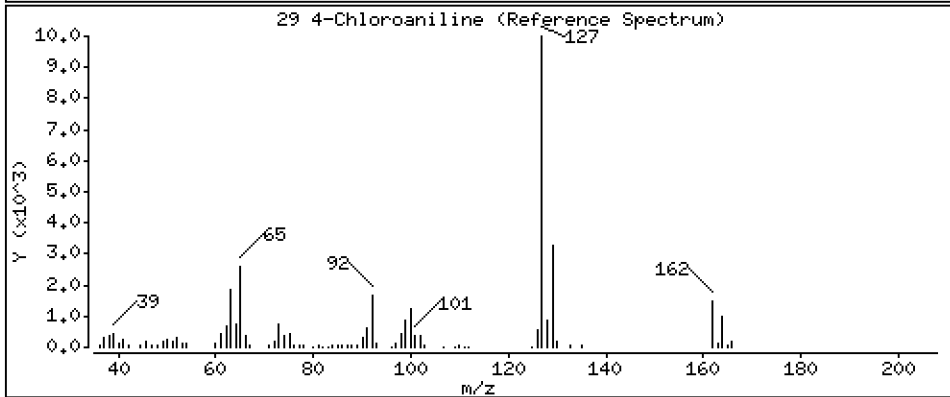
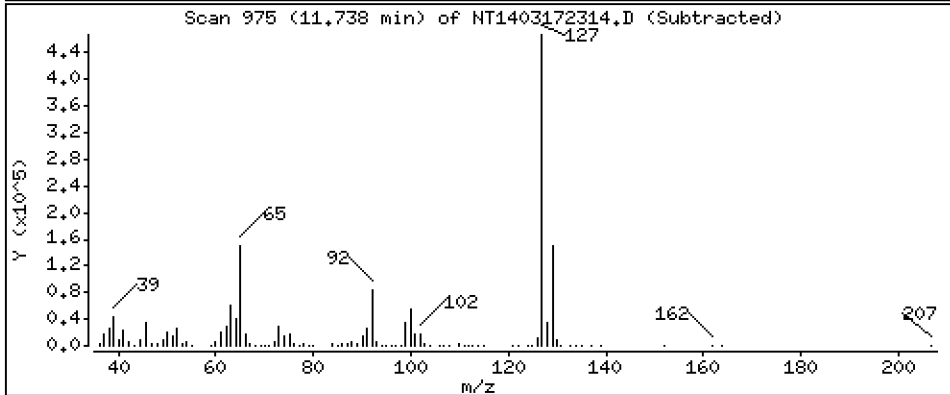
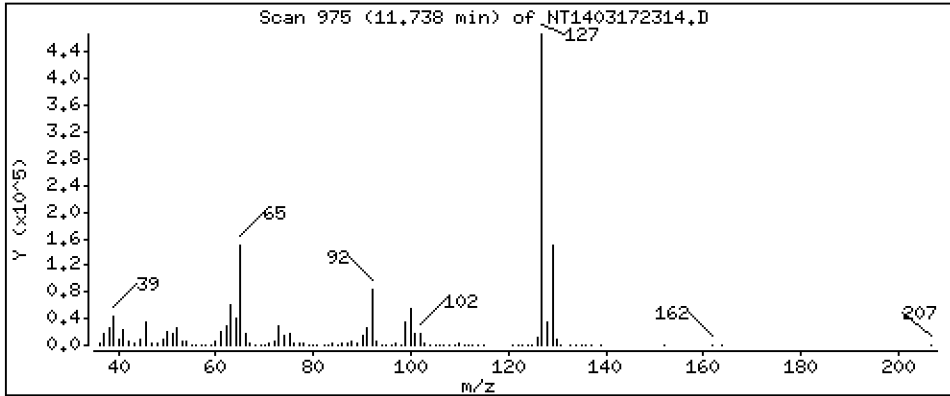
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 9,714 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

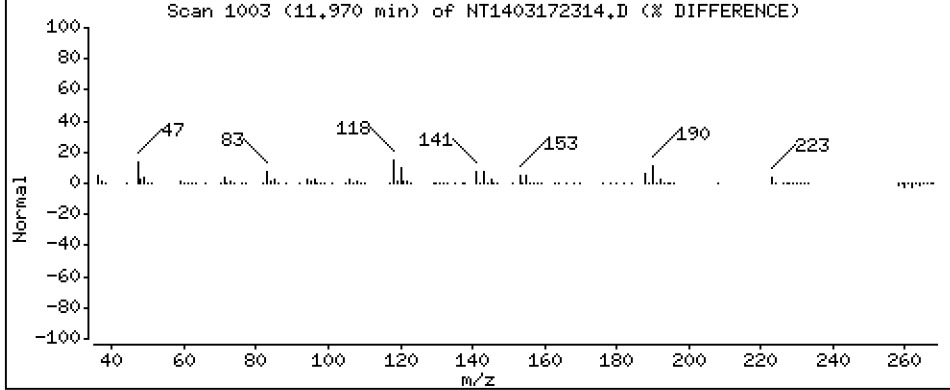
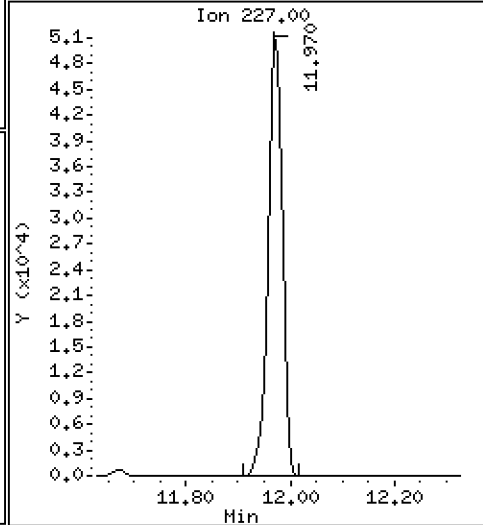
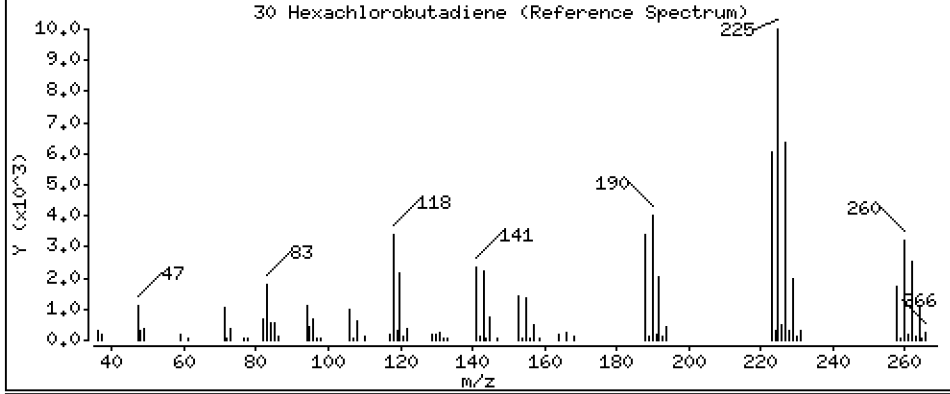
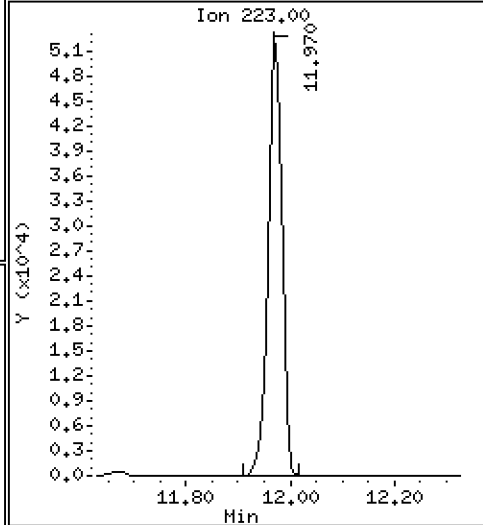
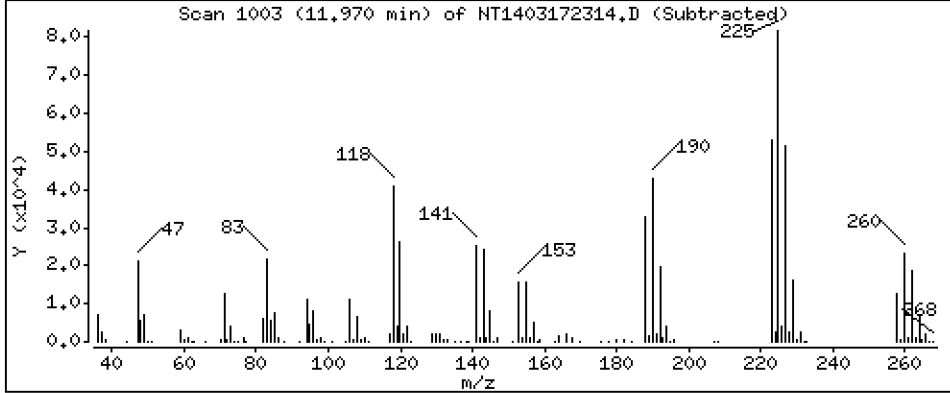
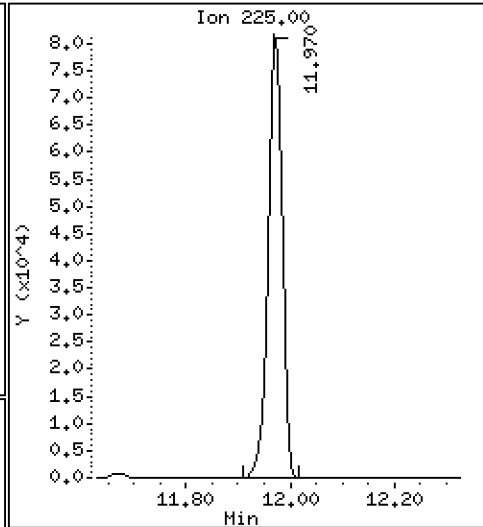
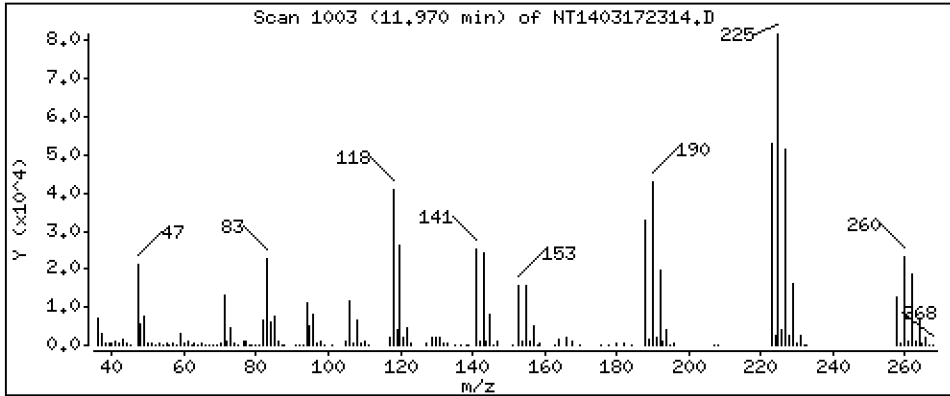
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,540 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

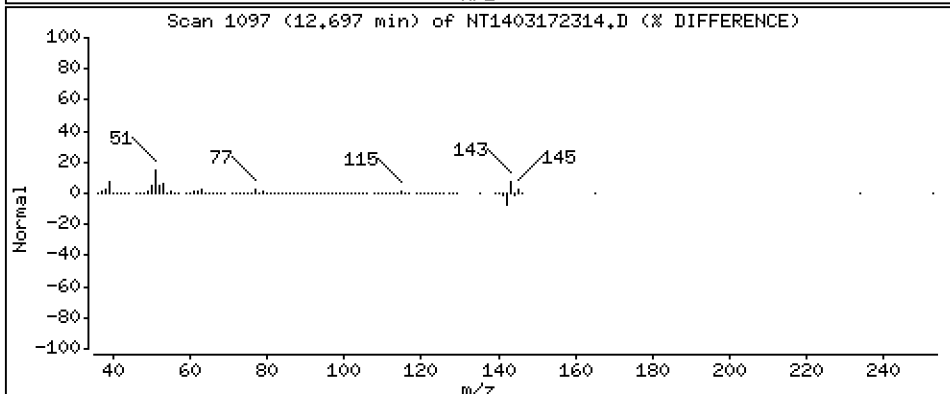
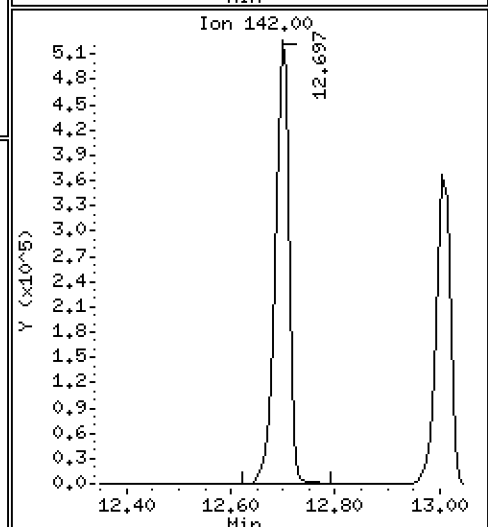
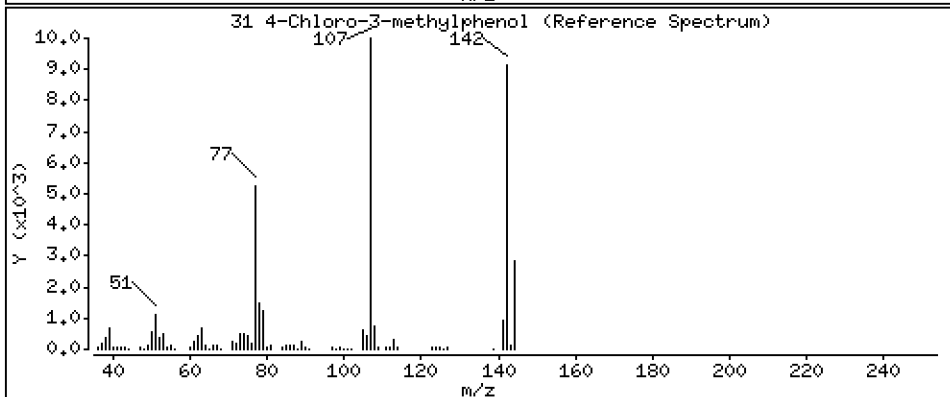
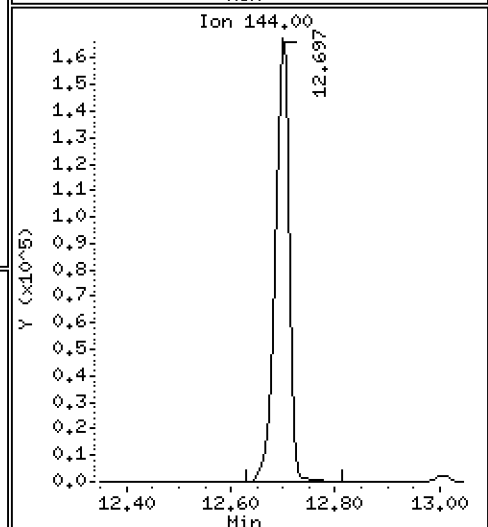
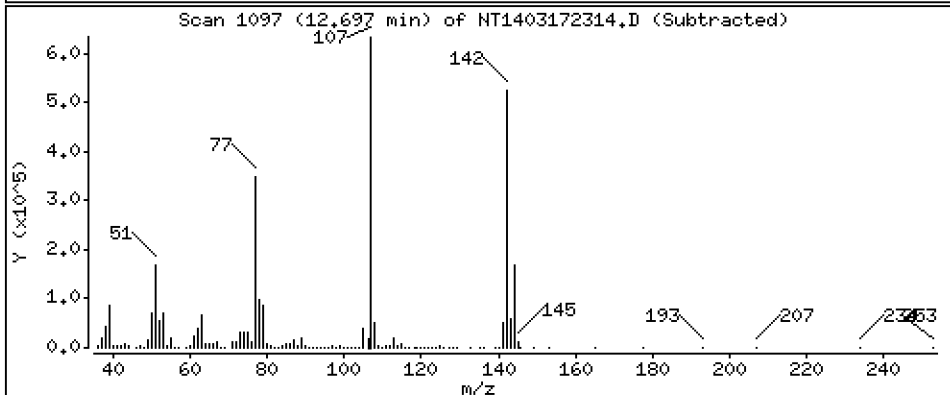
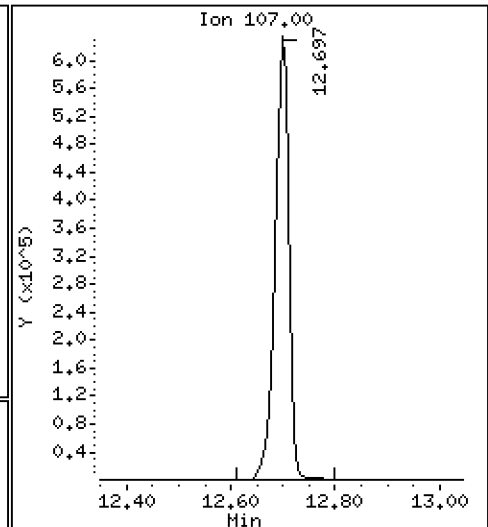
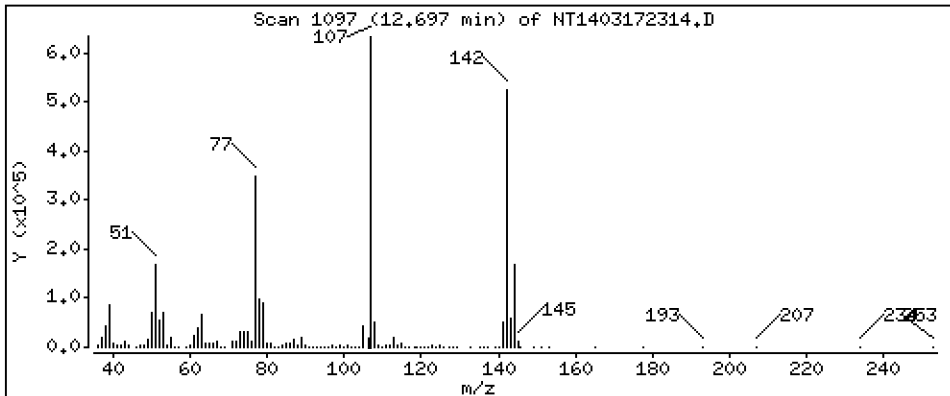
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 15,68 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

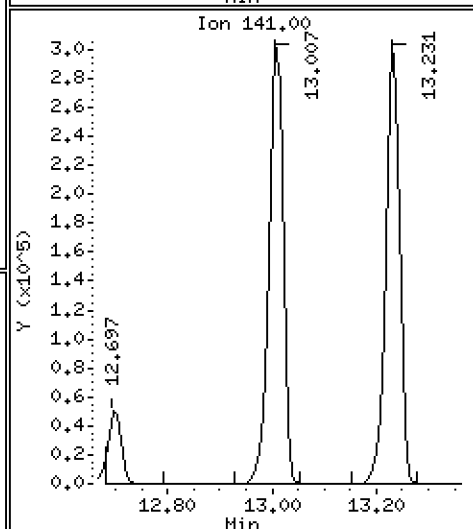
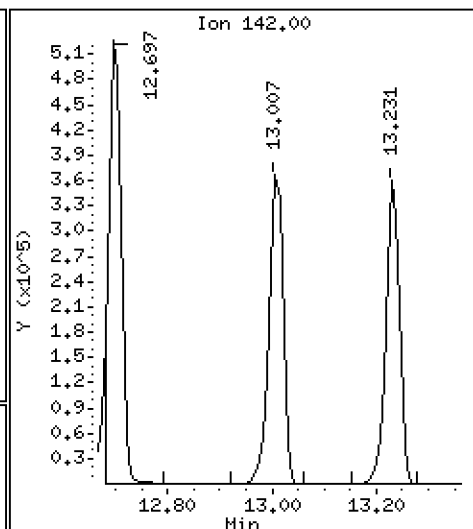
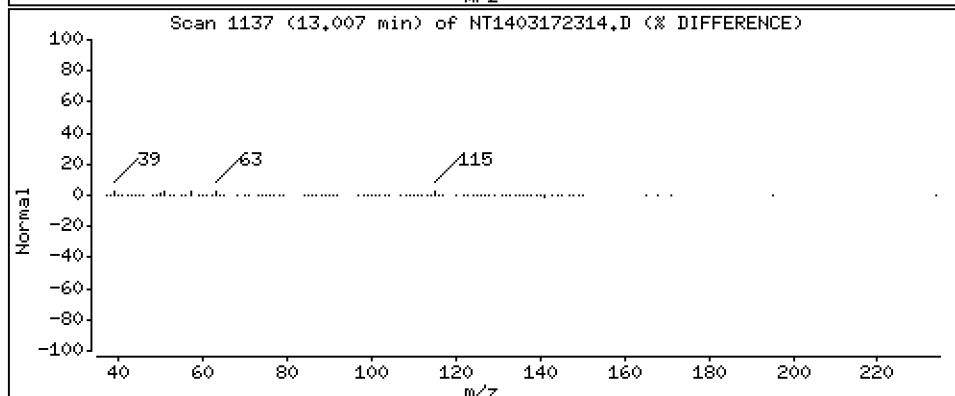
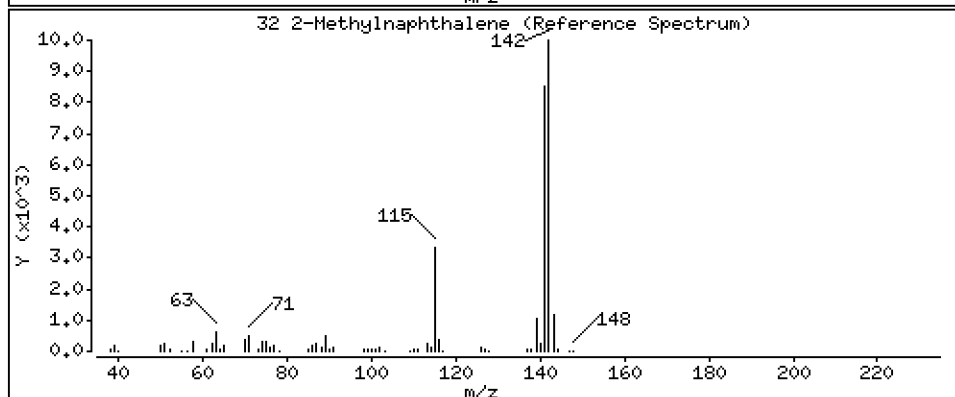
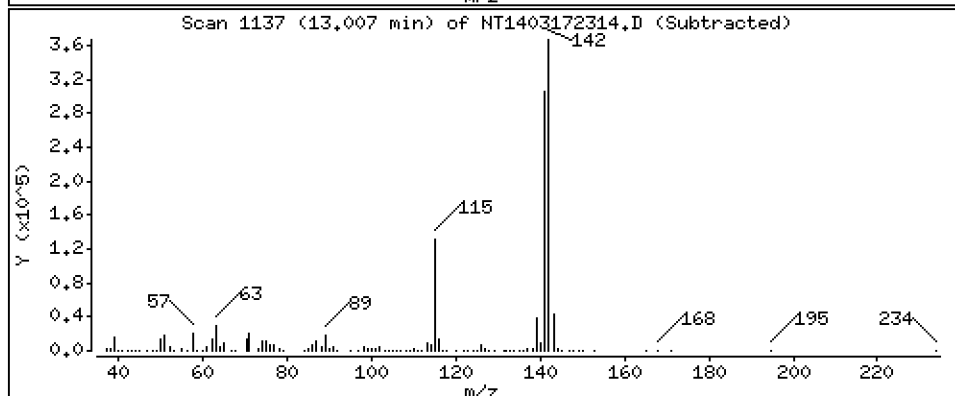
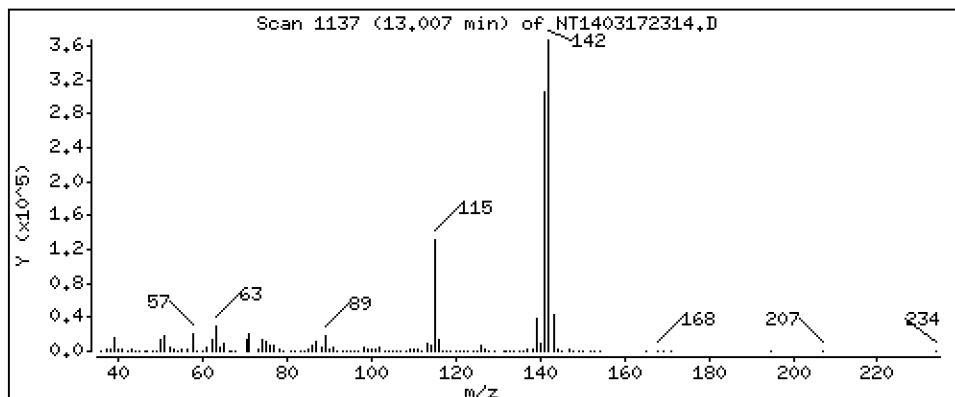
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,229 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

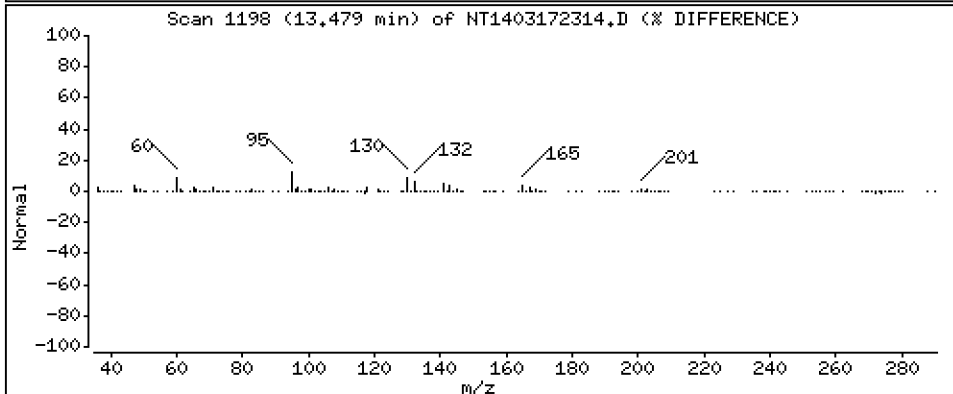
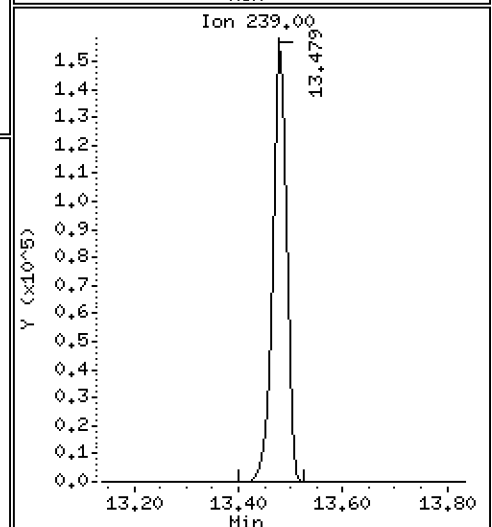
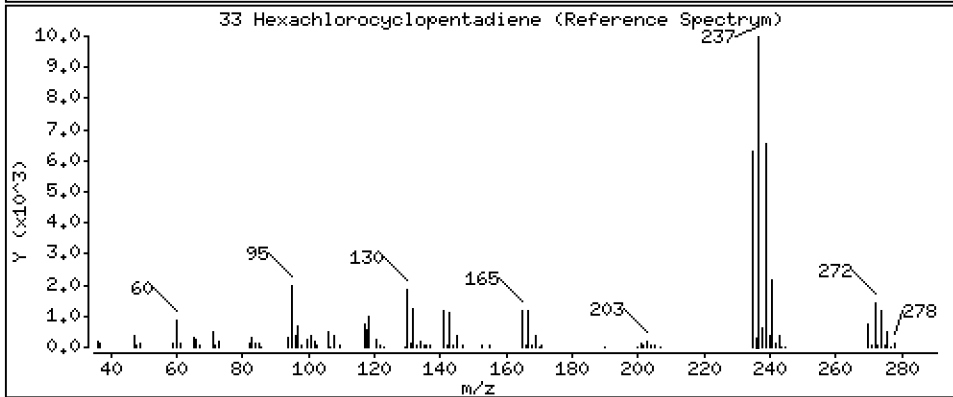
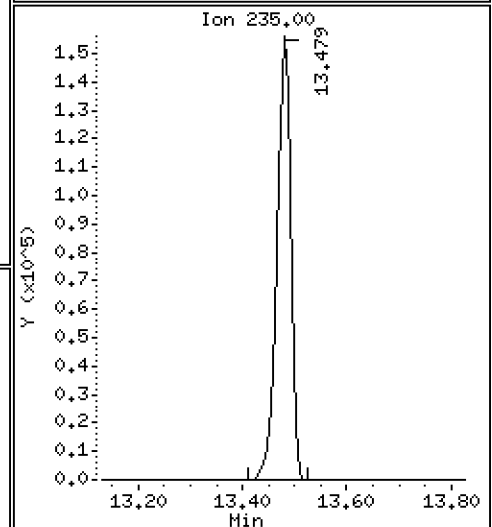
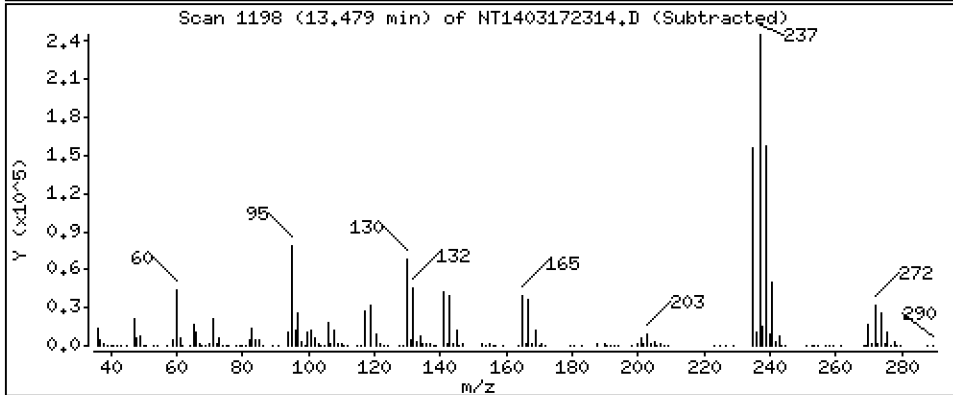
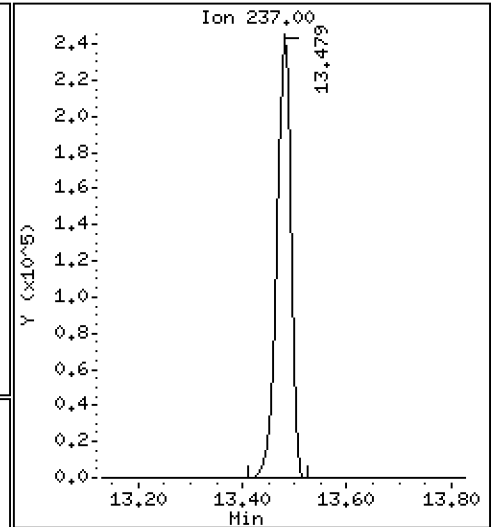
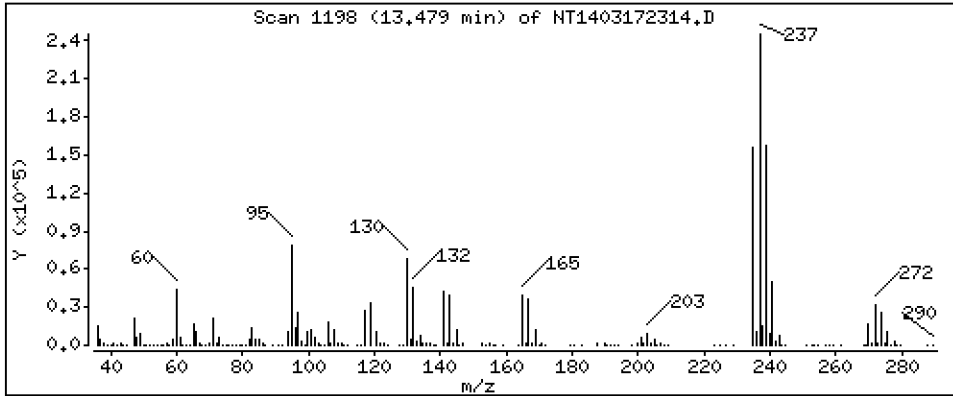
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 12,28 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

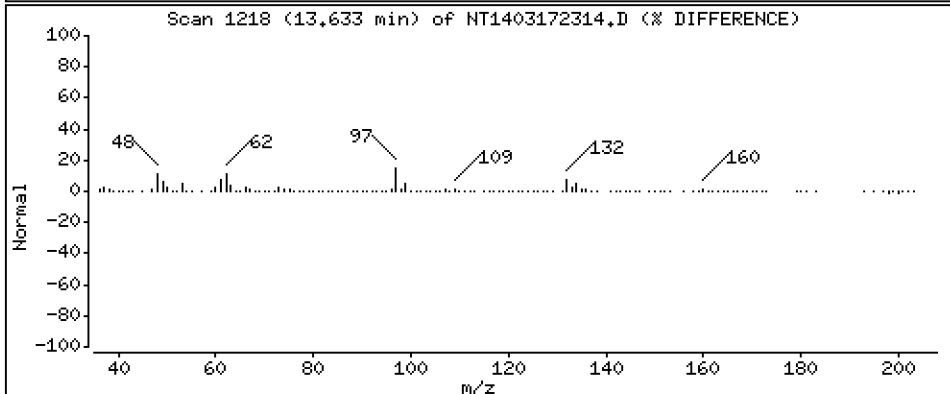
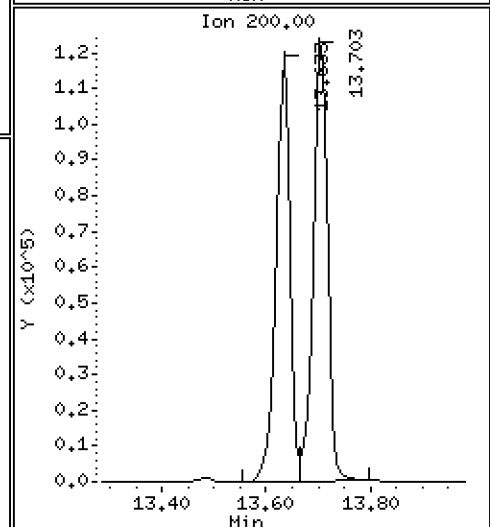
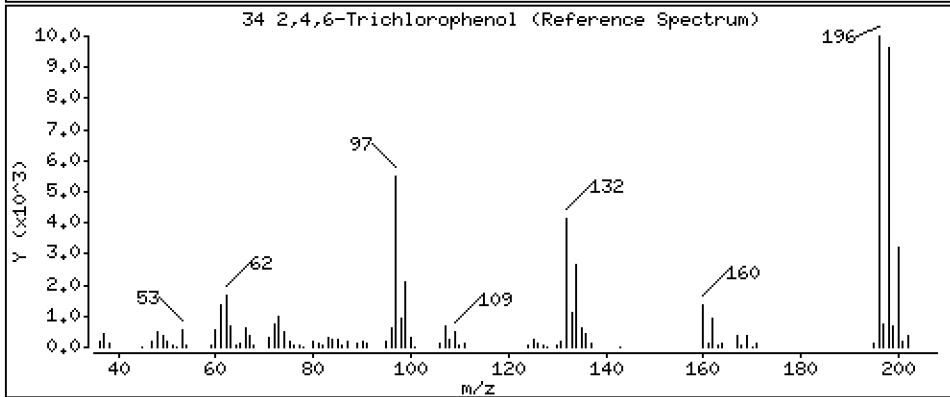
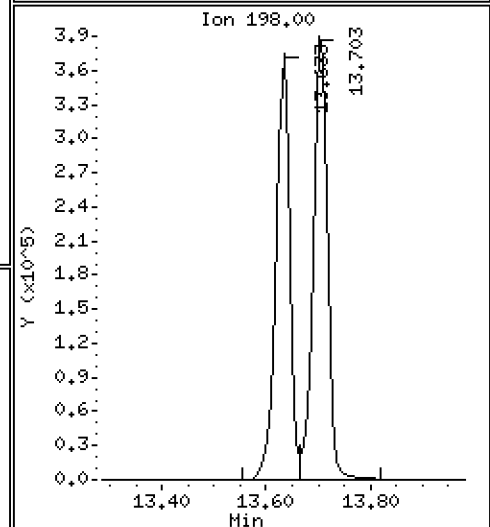
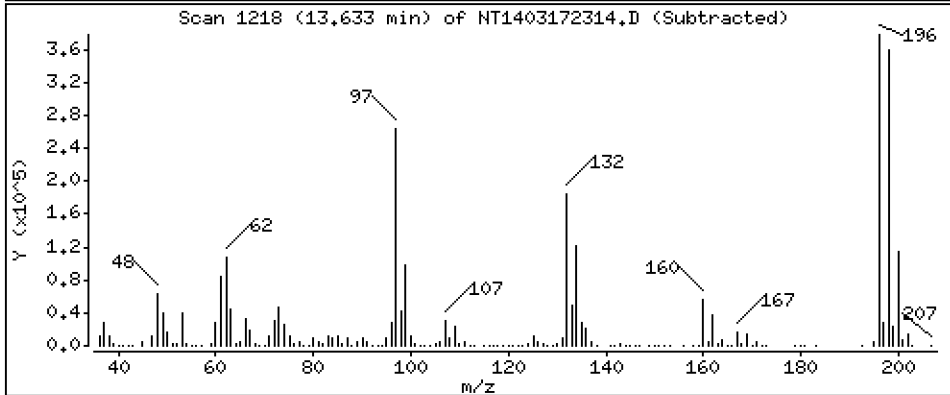
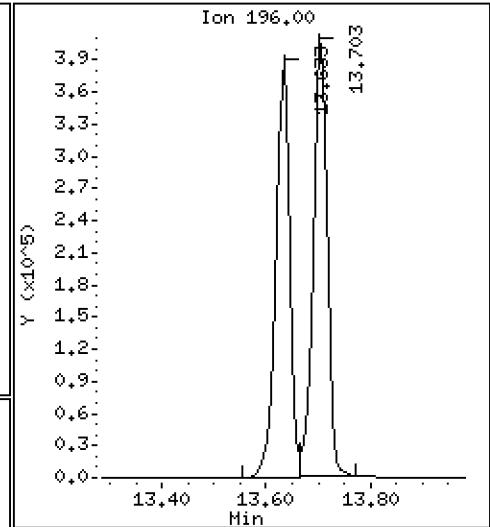
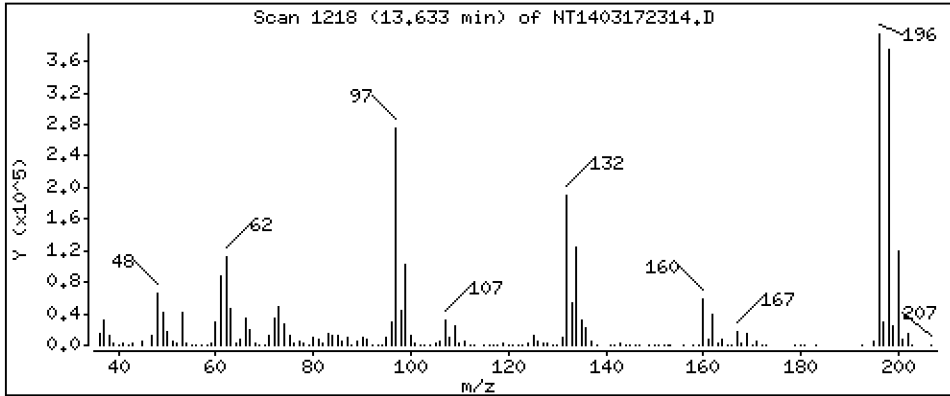
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 15,73 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

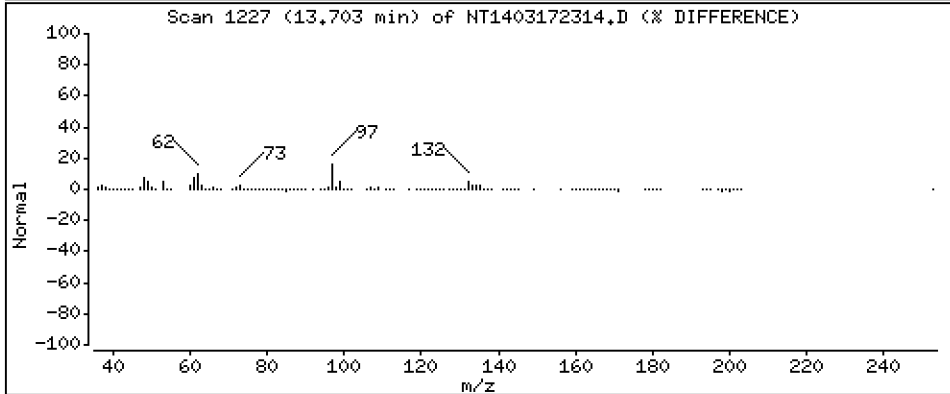
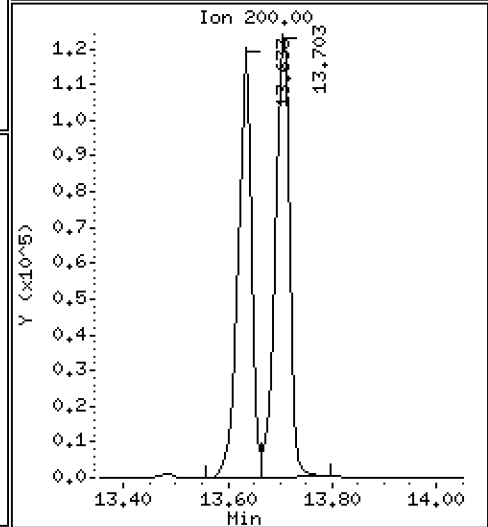
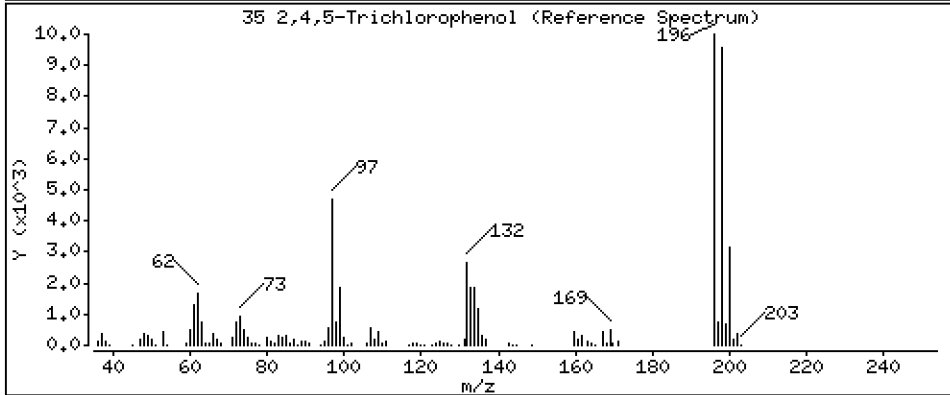
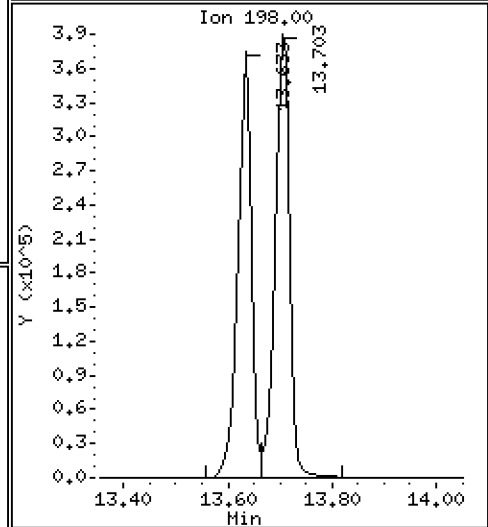
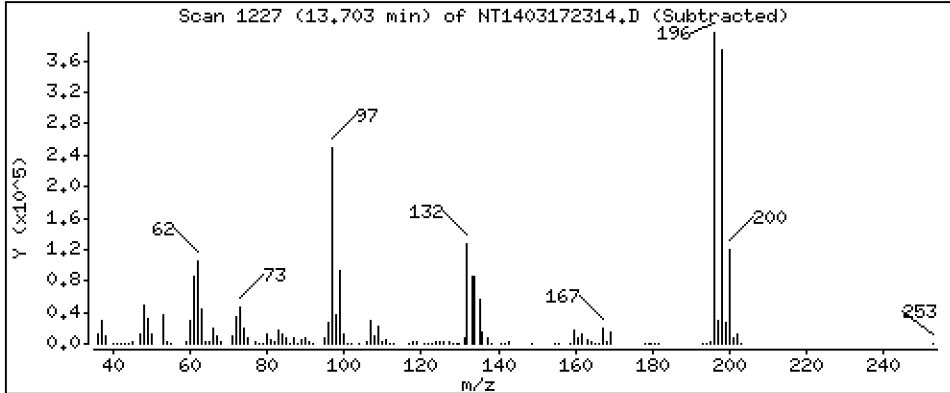
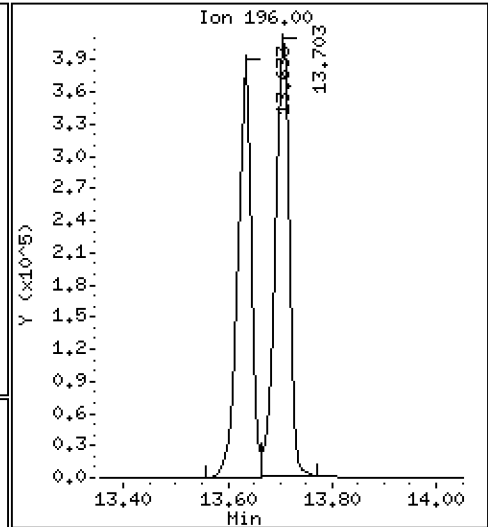
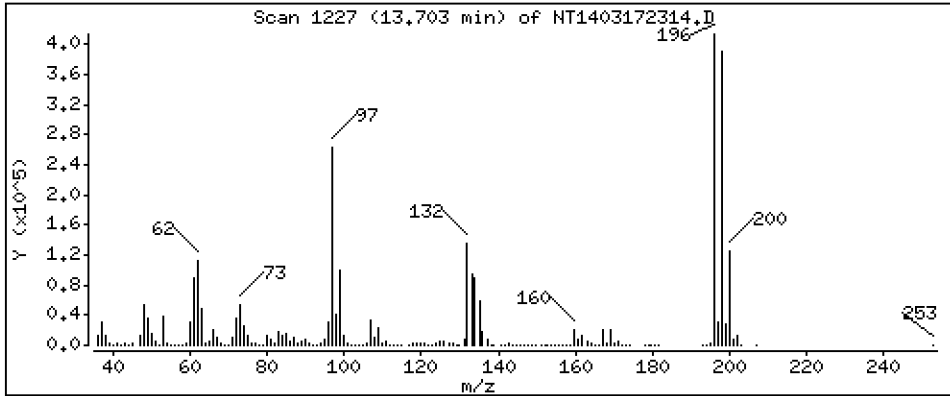
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 16,30 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

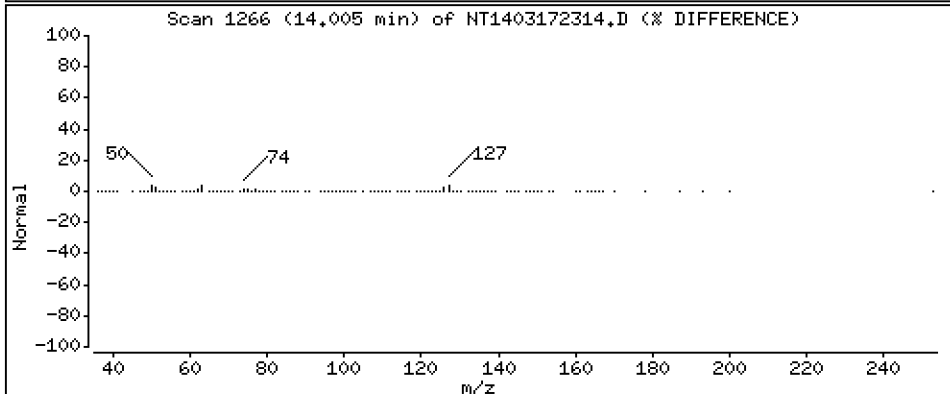
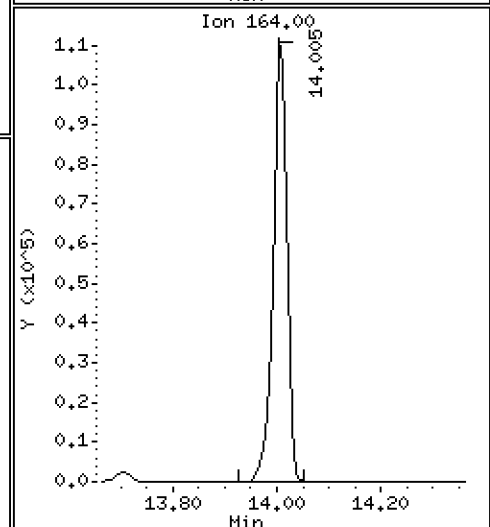
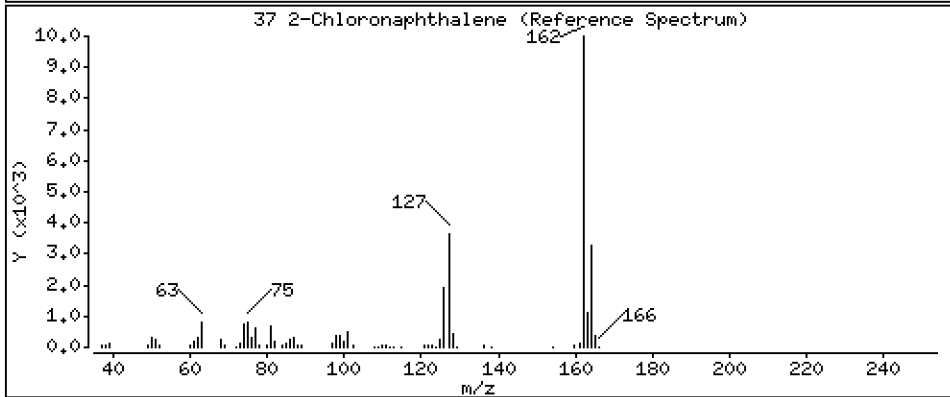
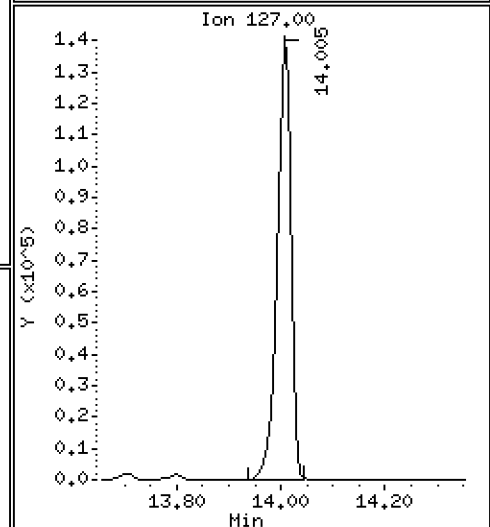
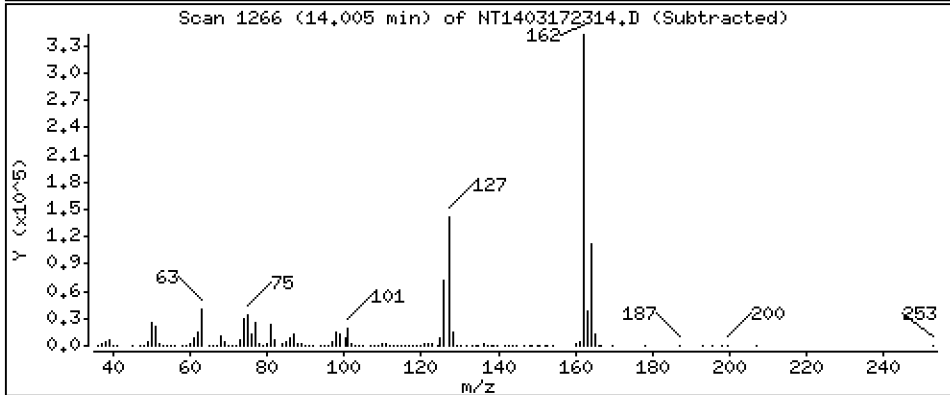
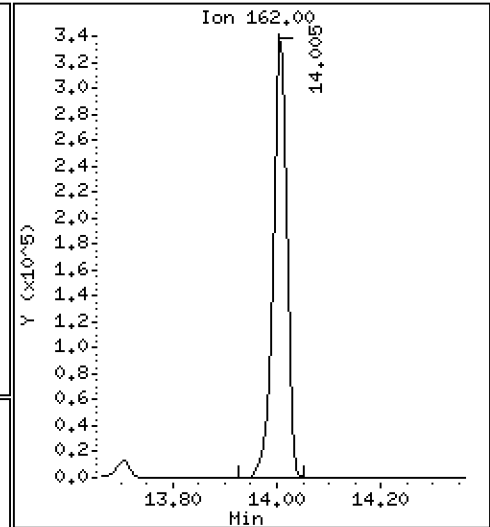
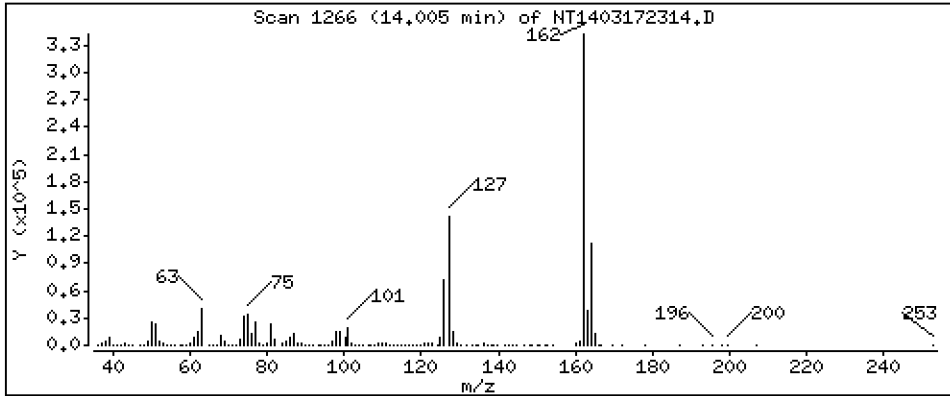
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 4,484 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

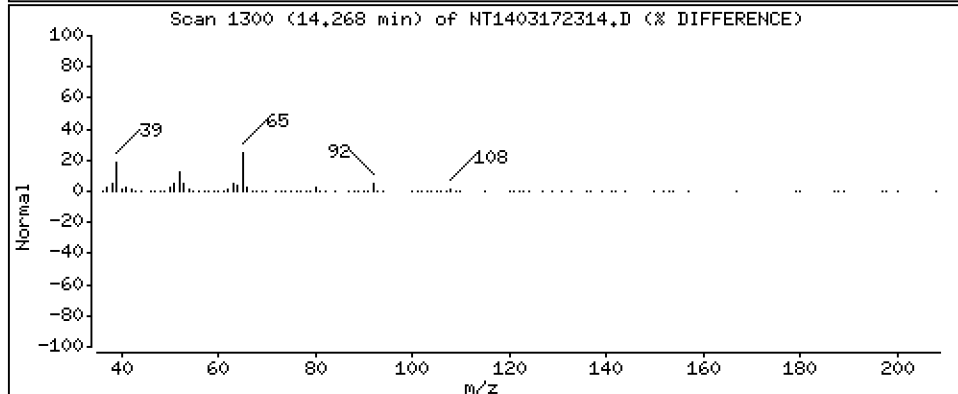
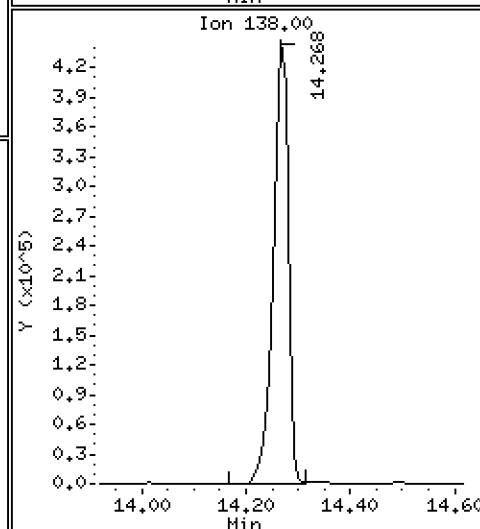
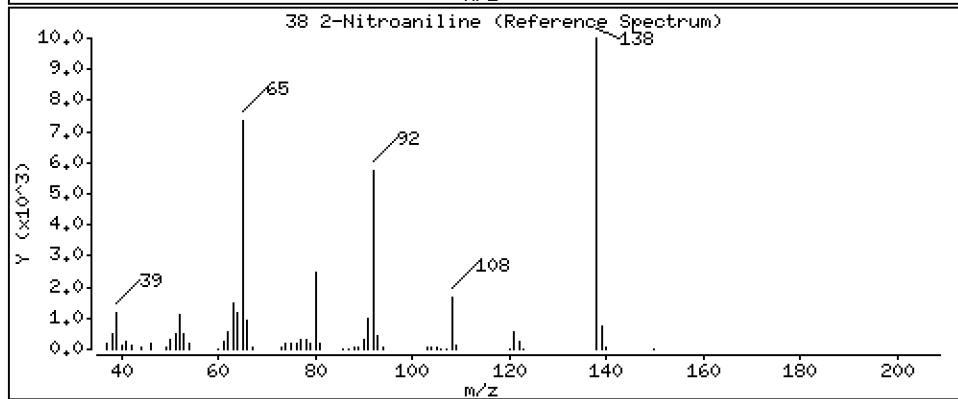
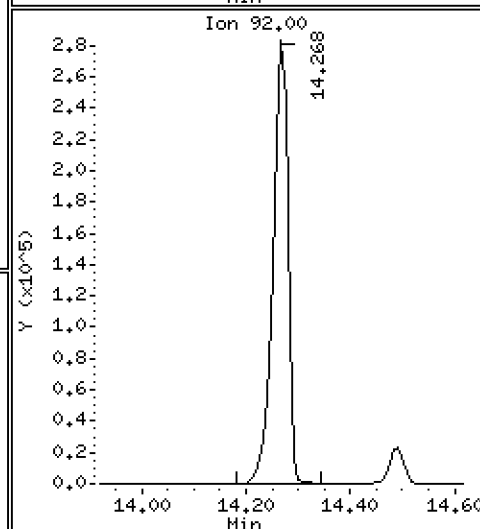
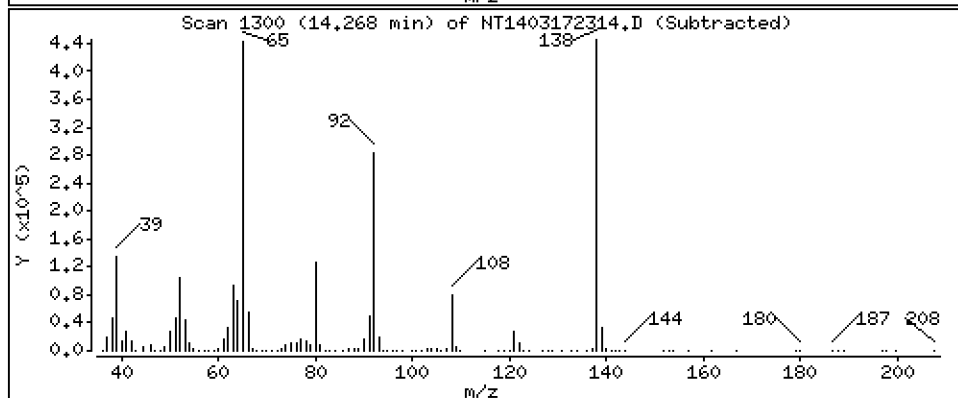
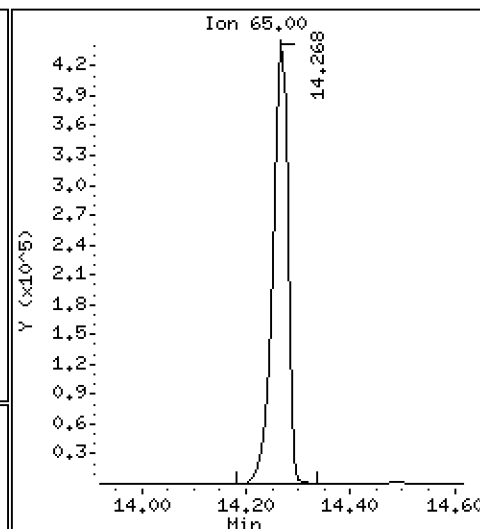
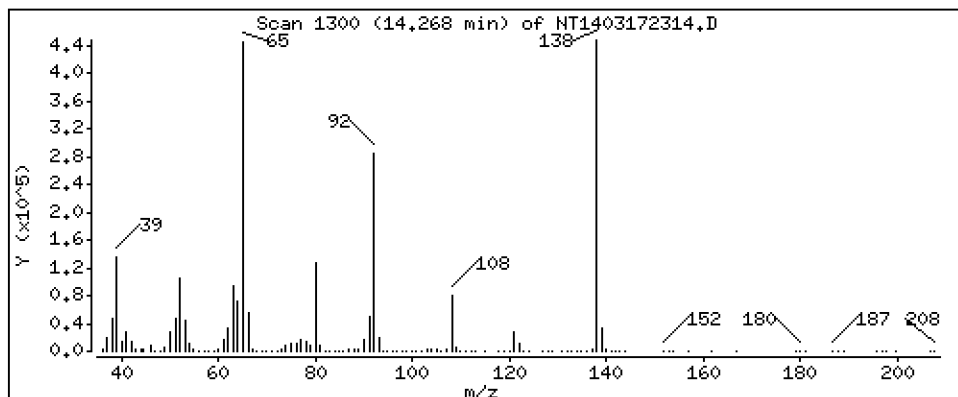
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 16,43 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

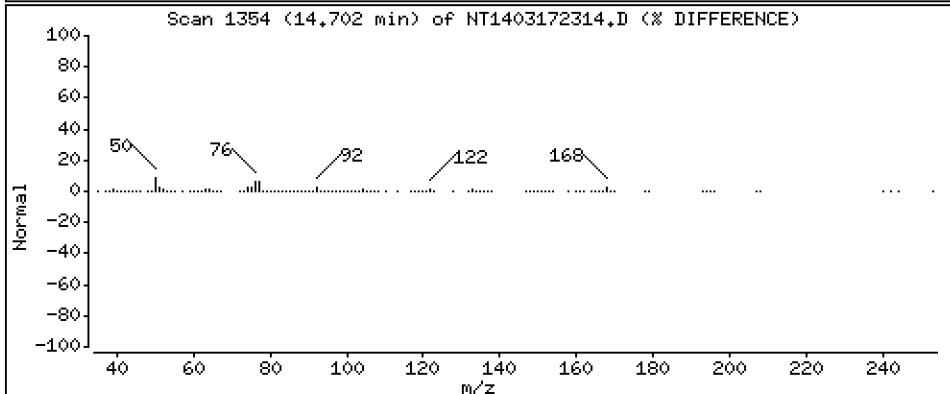
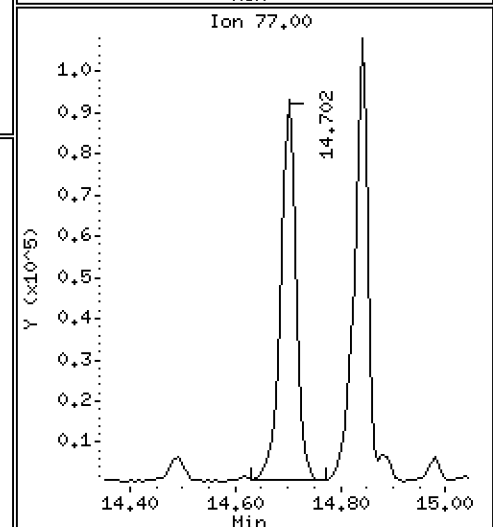
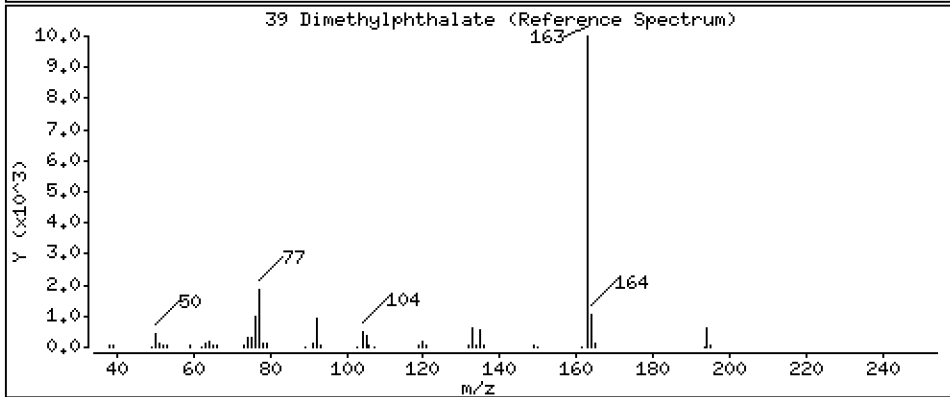
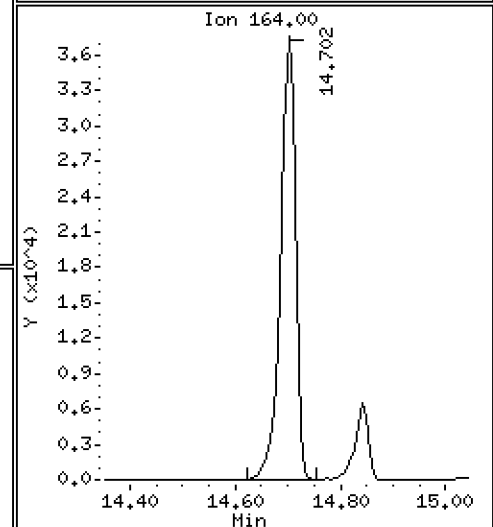
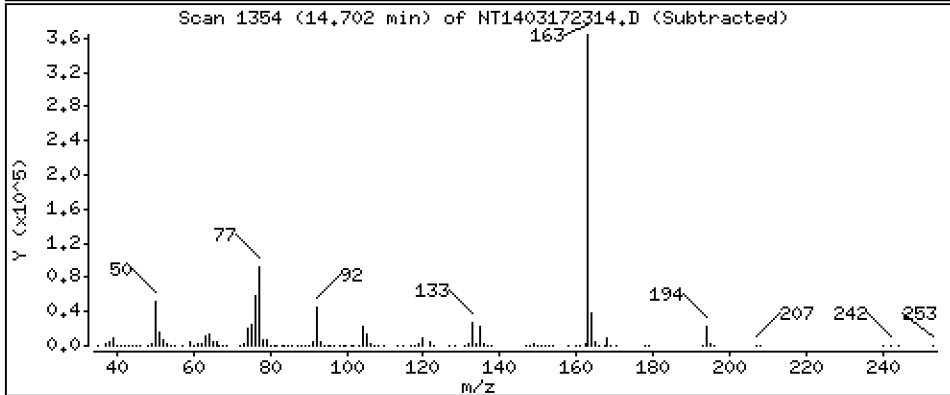
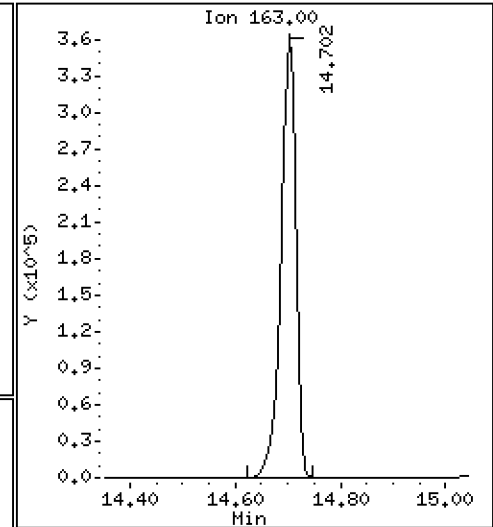
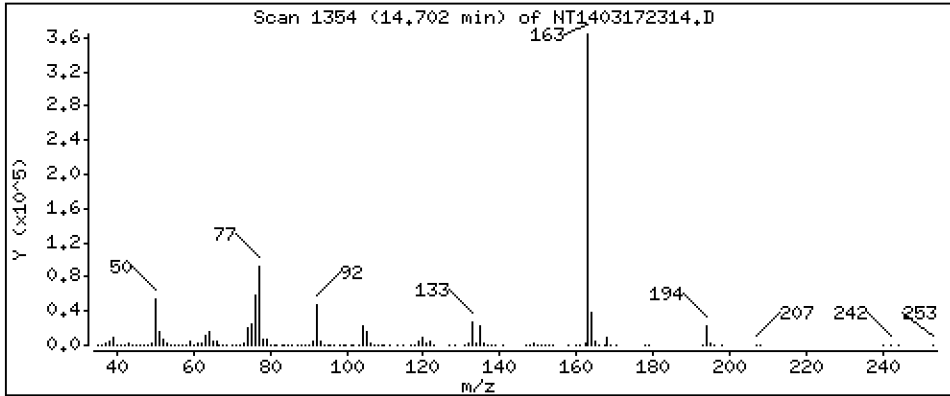
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,786 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

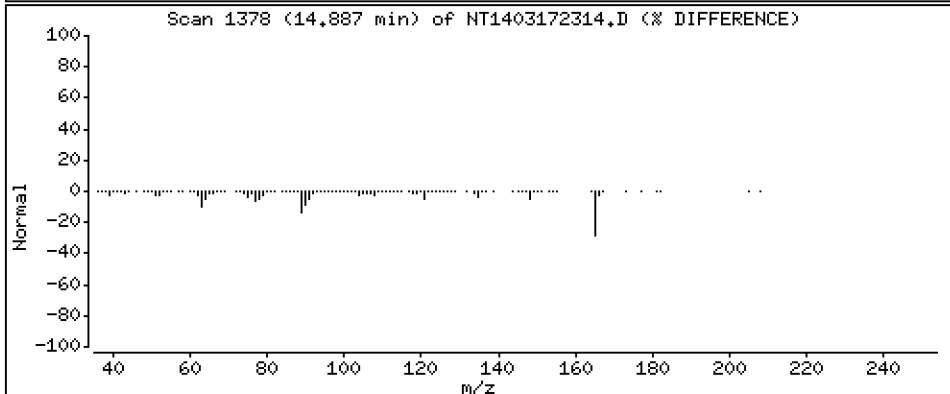
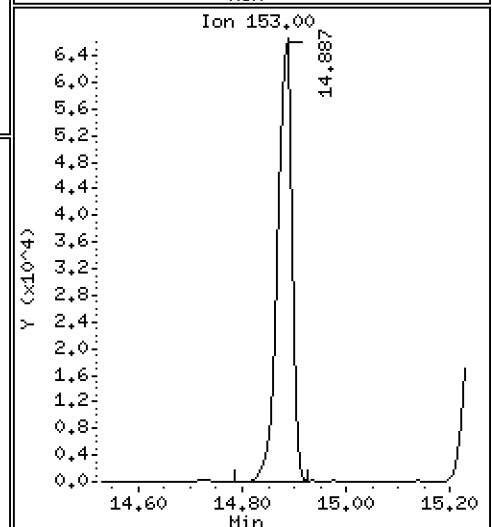
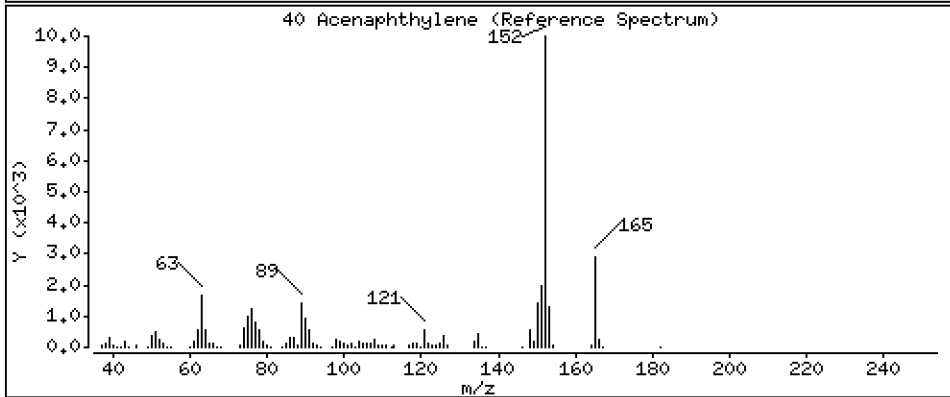
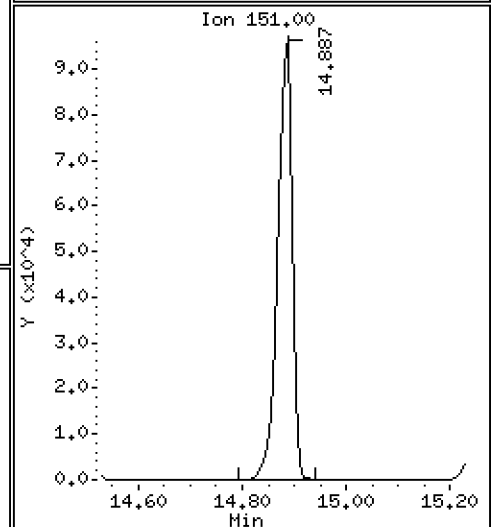
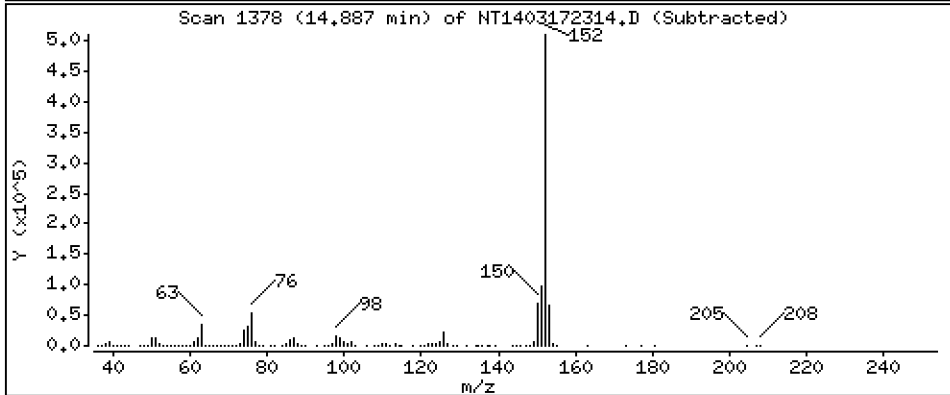
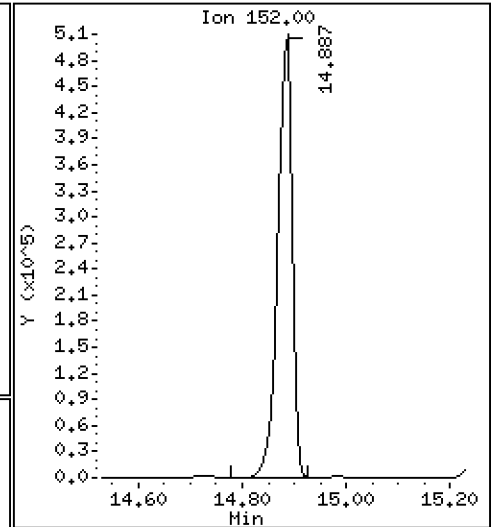
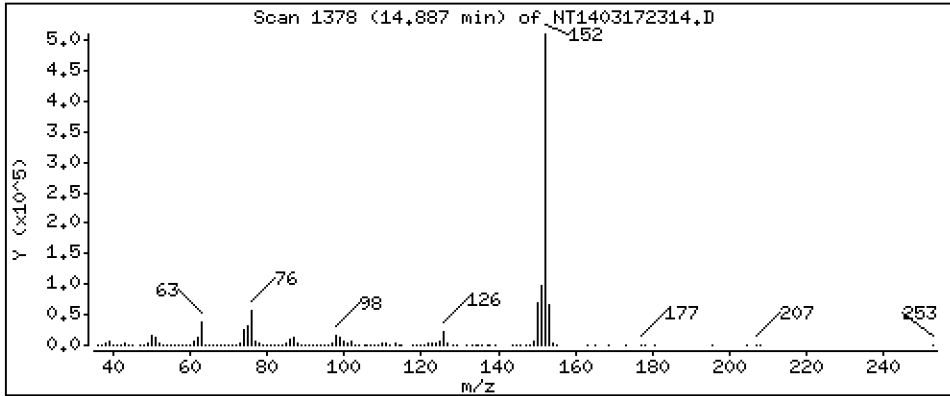
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,191 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

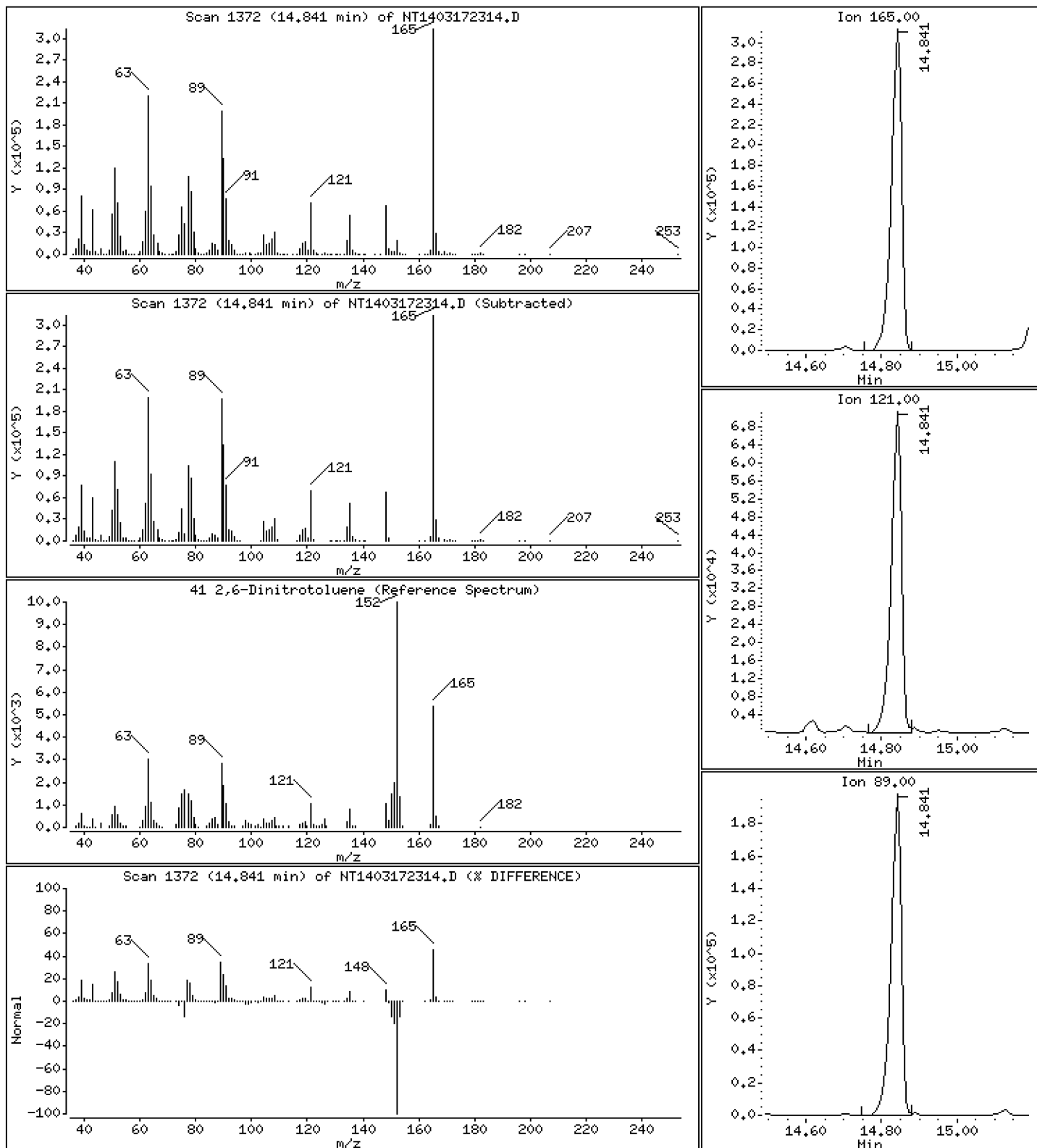
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 17,10 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

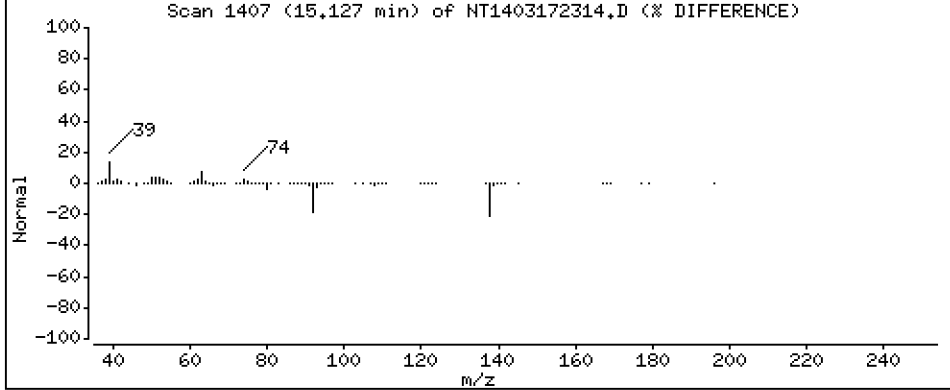
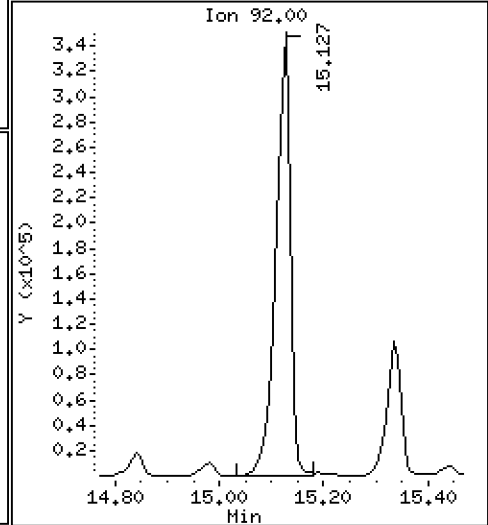
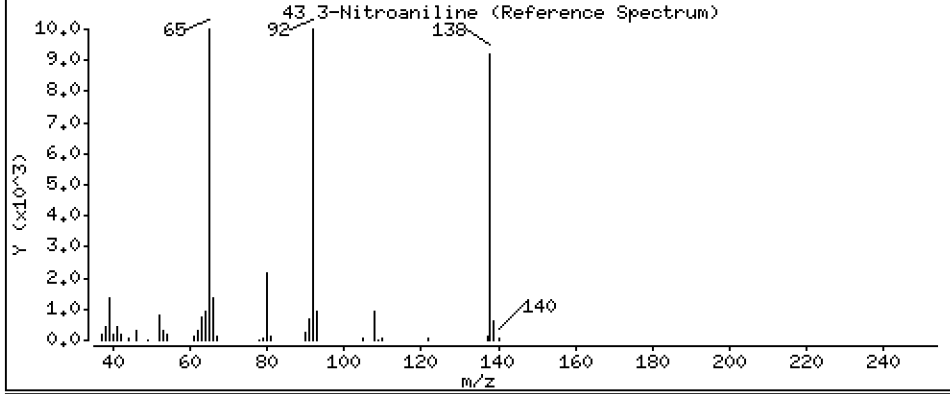
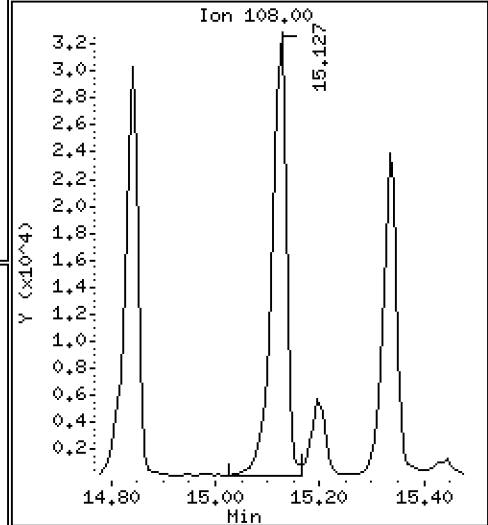
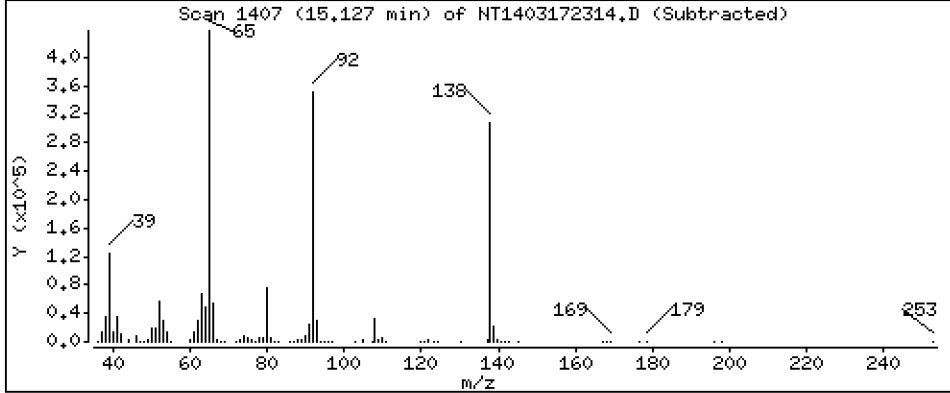
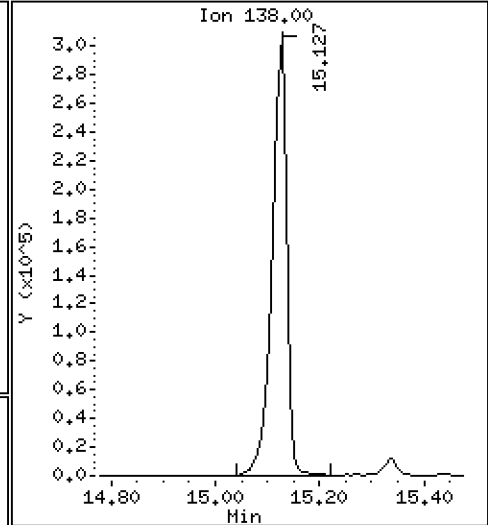
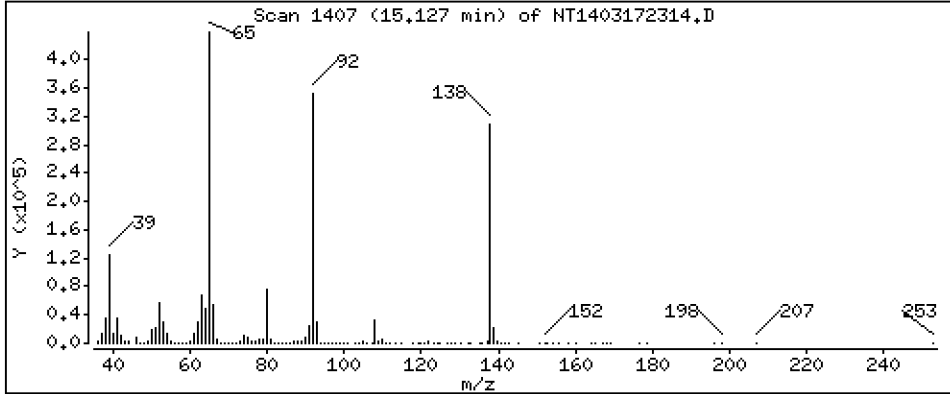
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 13,54 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

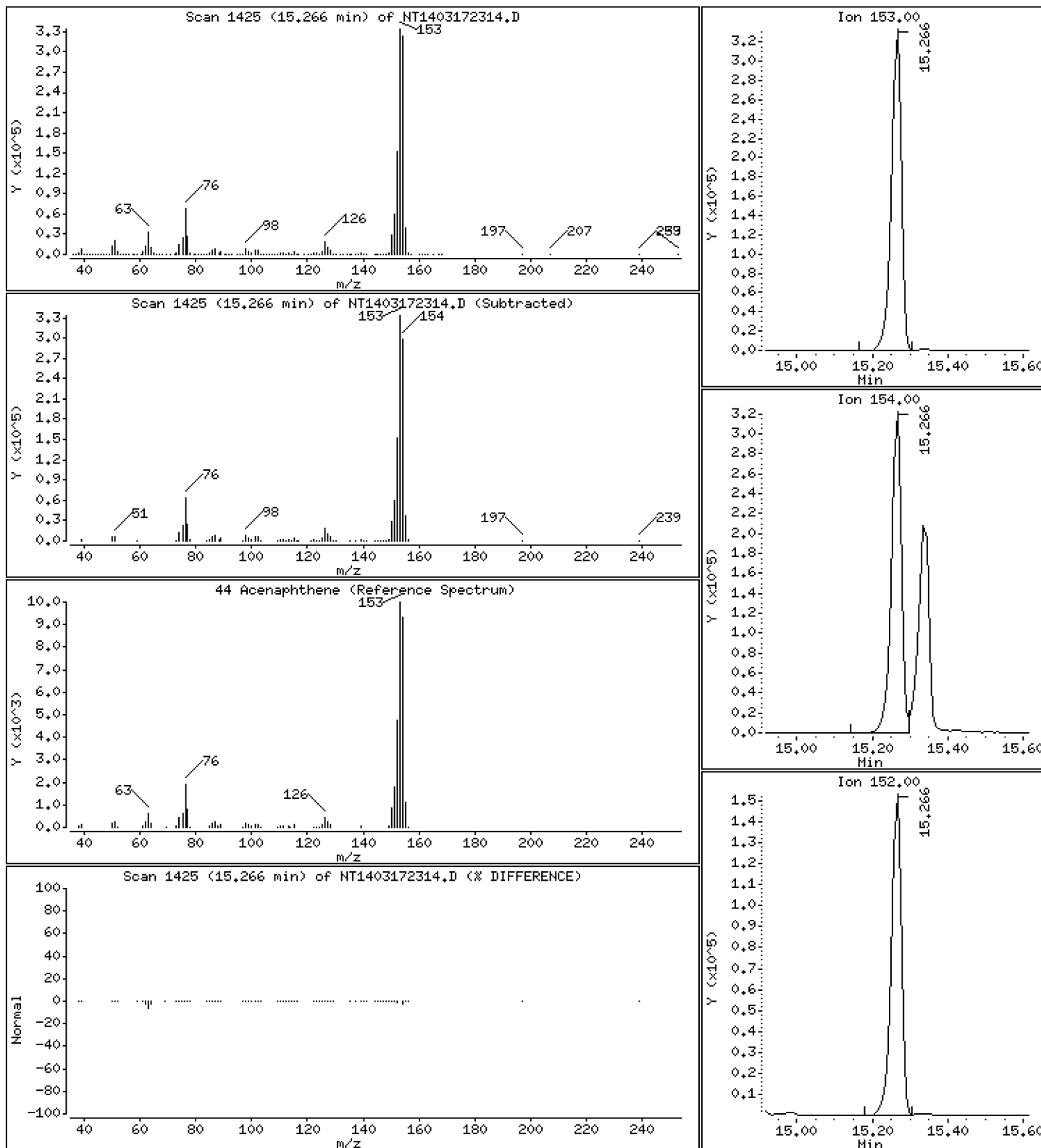
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,389 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

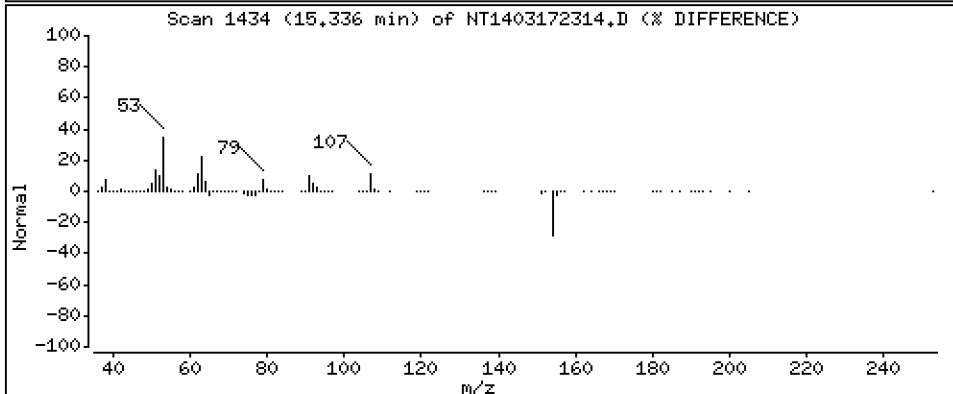
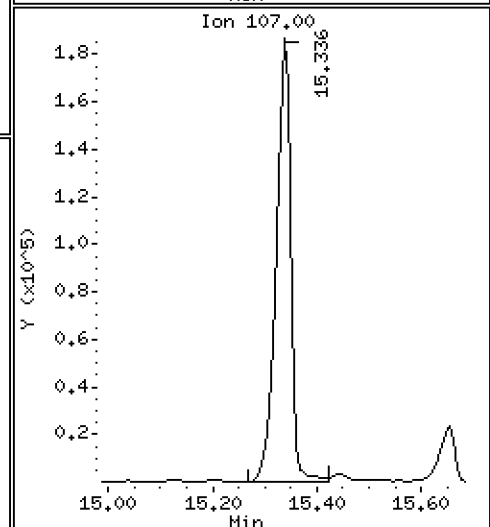
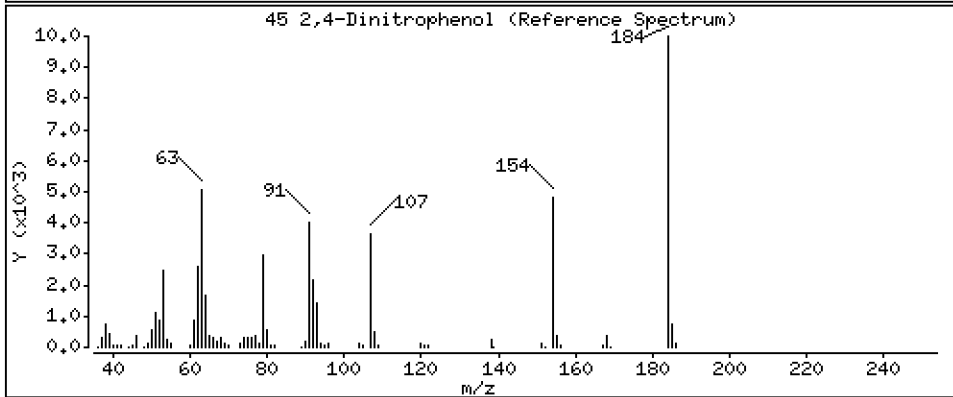
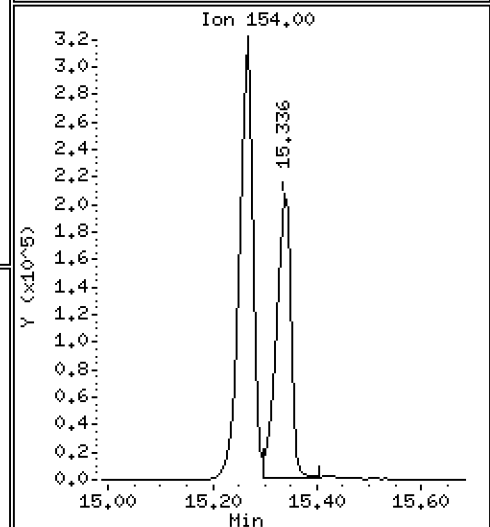
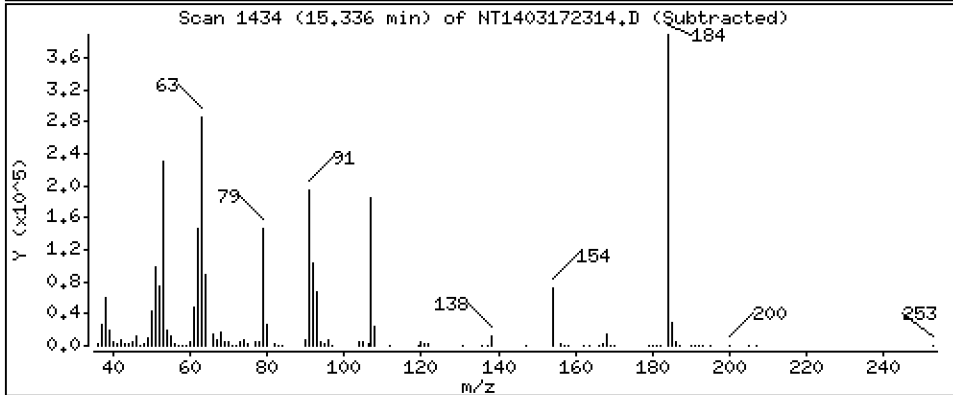
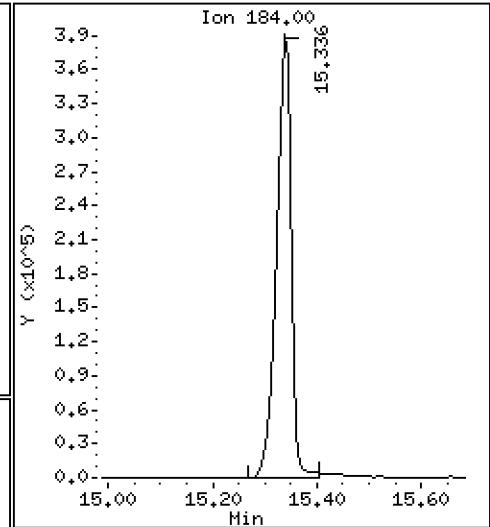
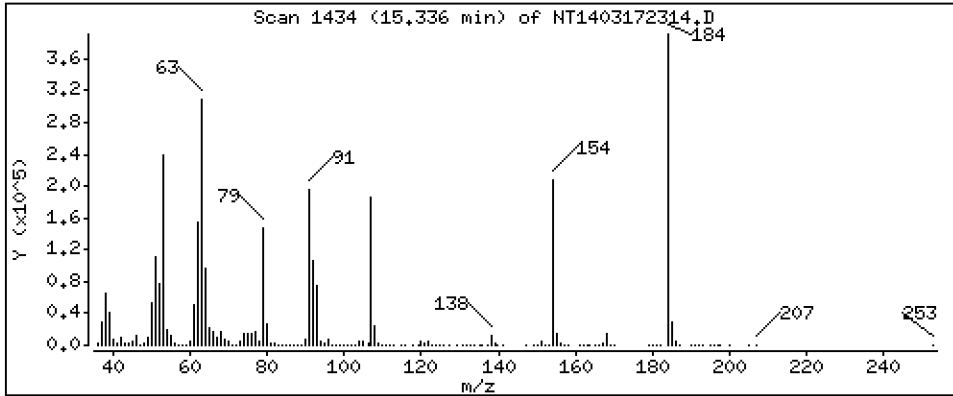
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 27,18 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

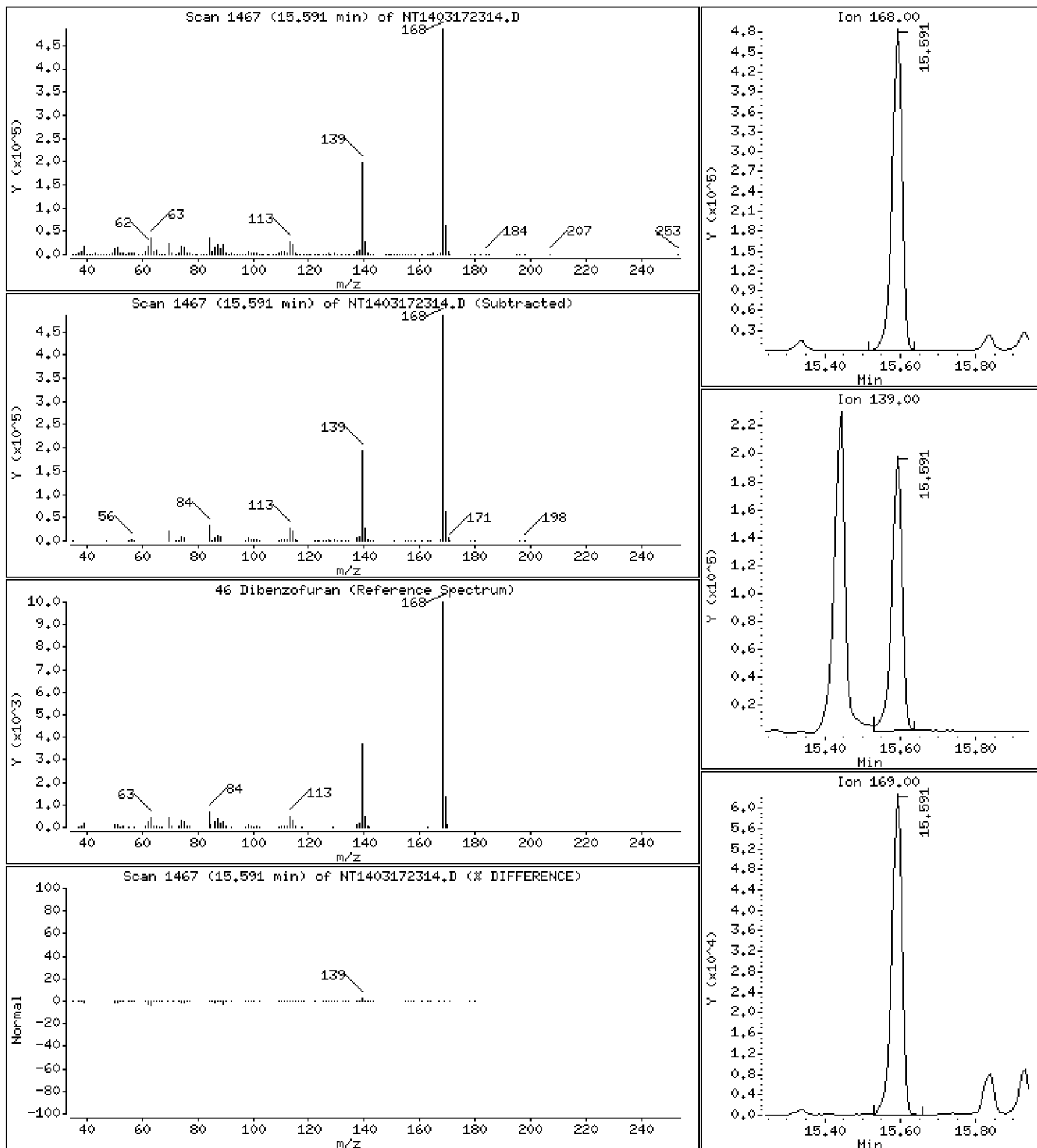
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,517 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

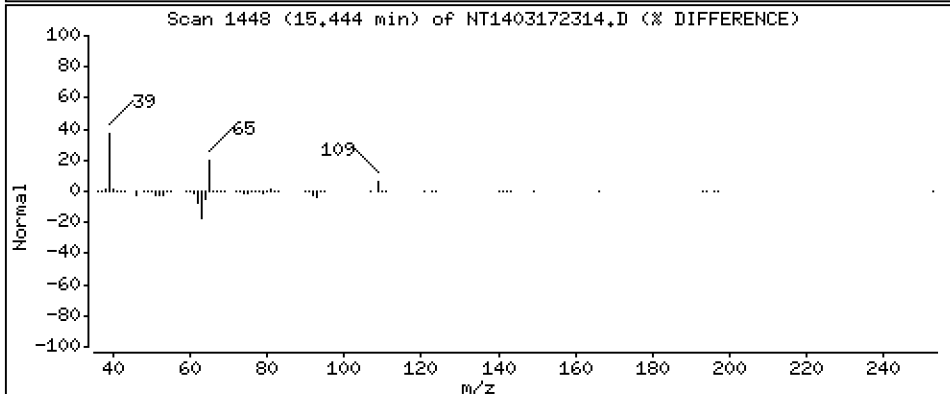
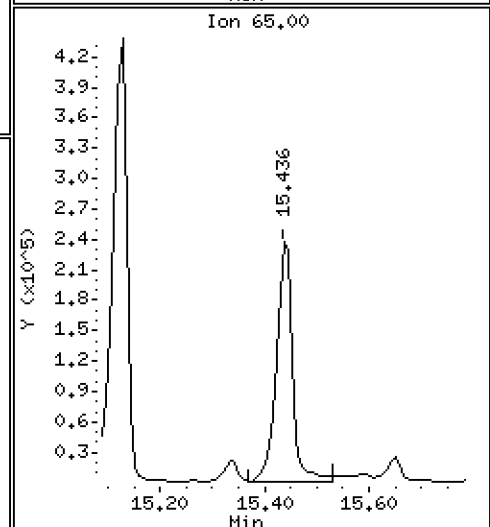
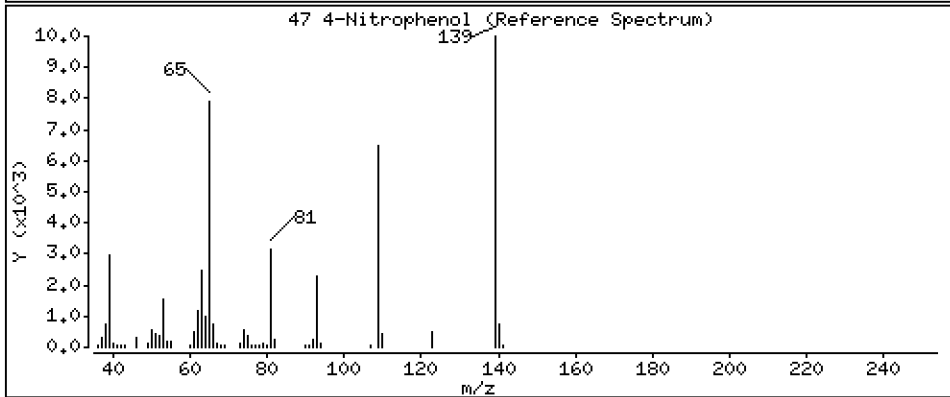
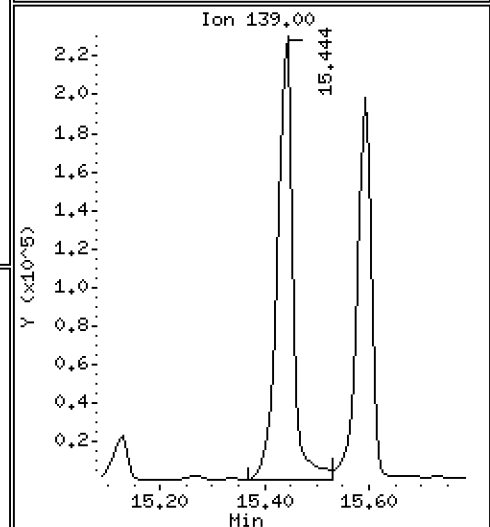
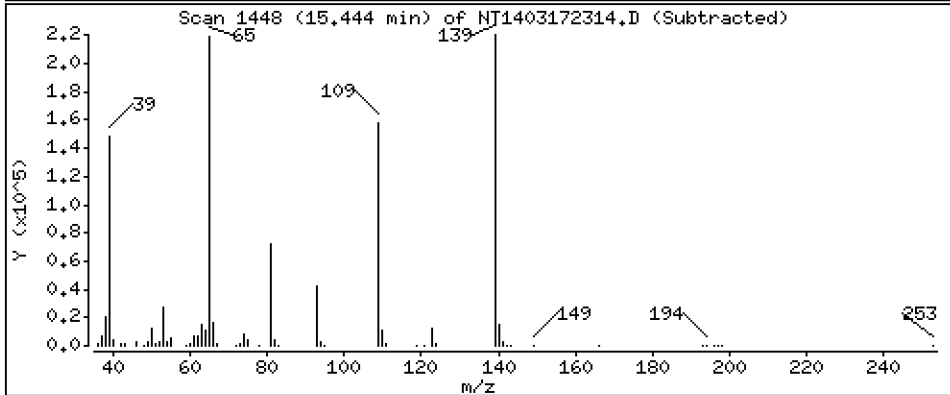
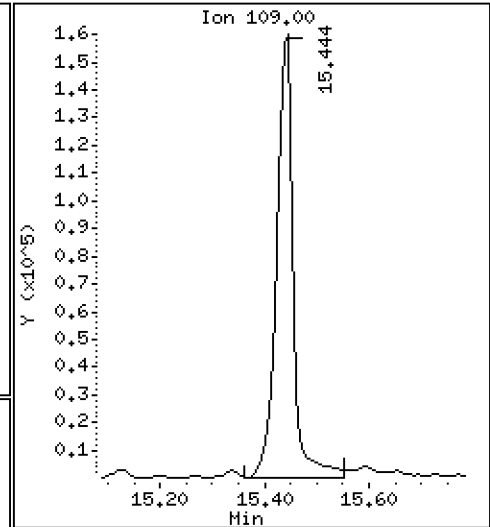
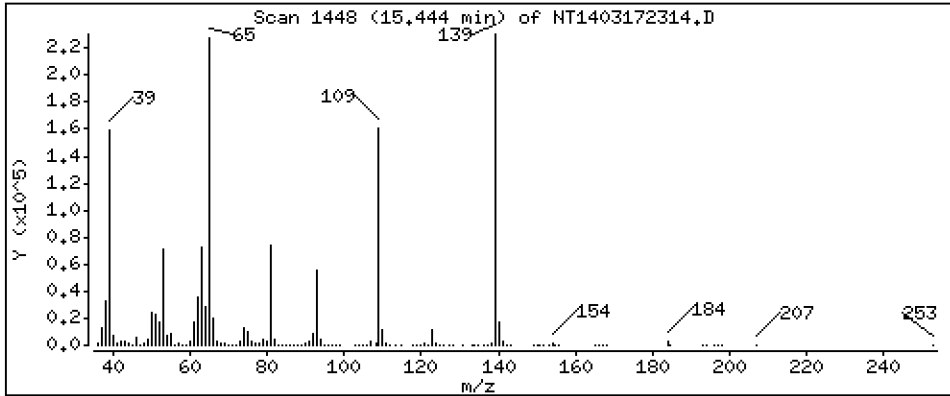
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 13,97 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

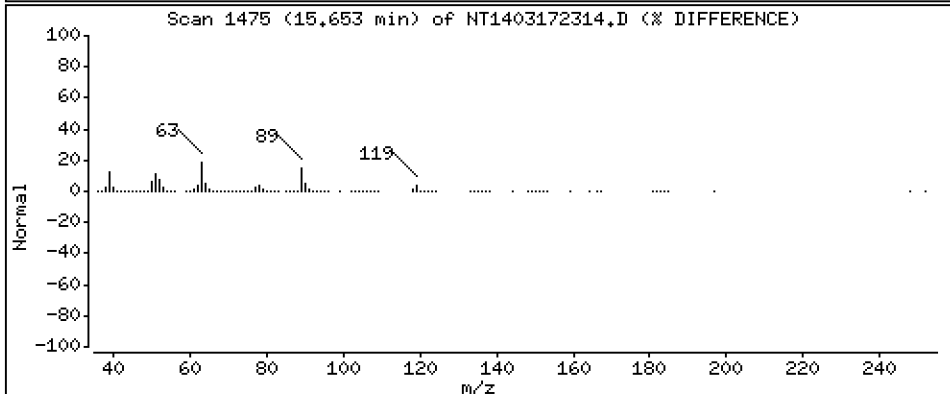
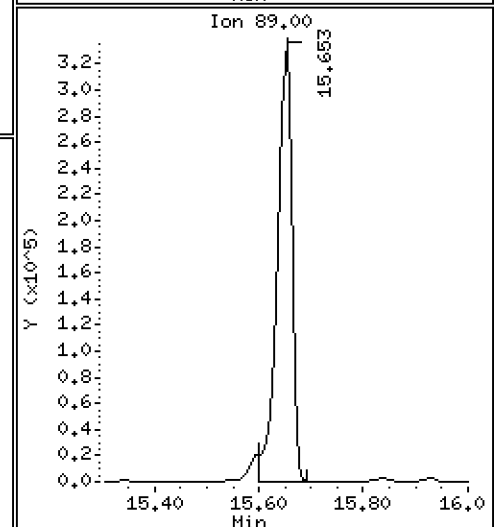
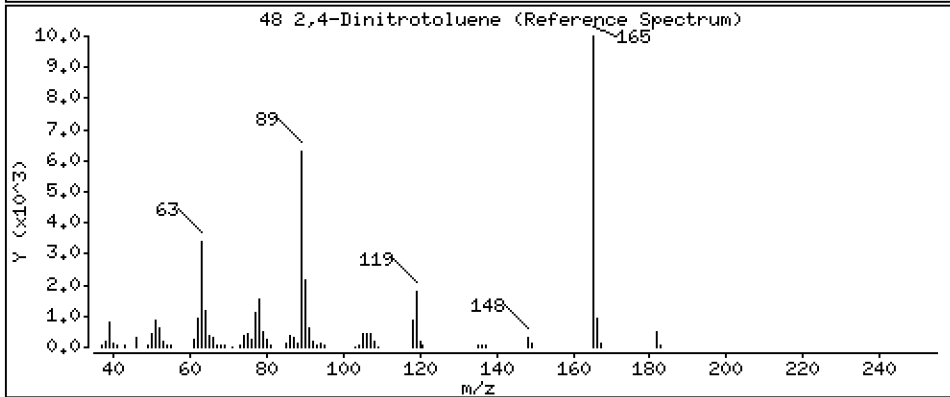
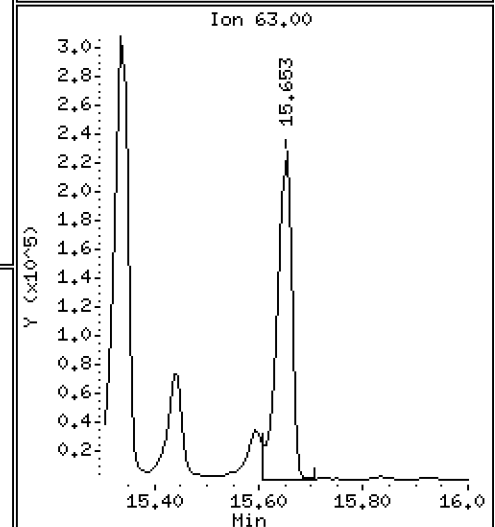
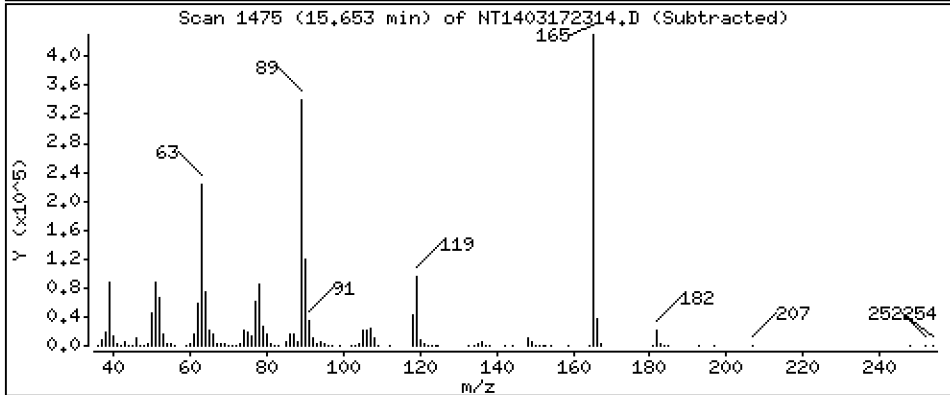
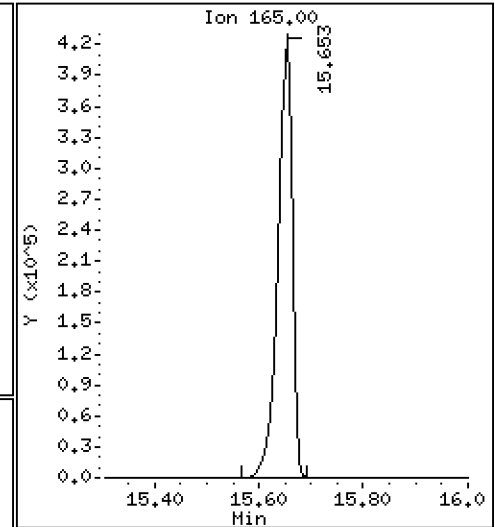
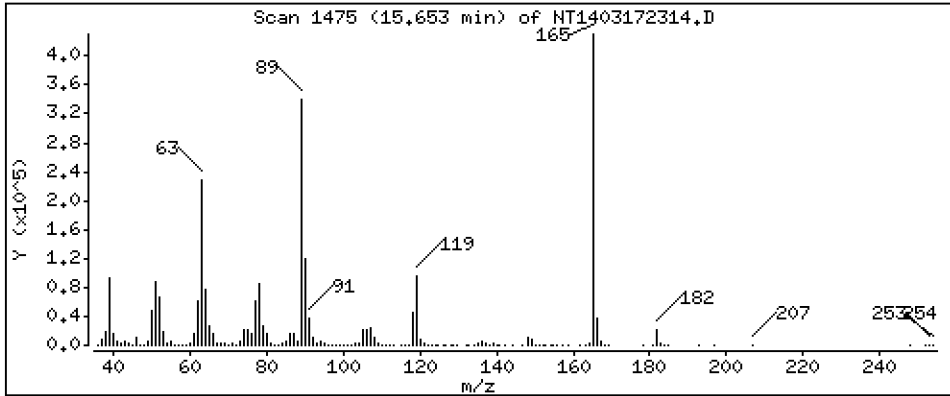
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 16,46 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

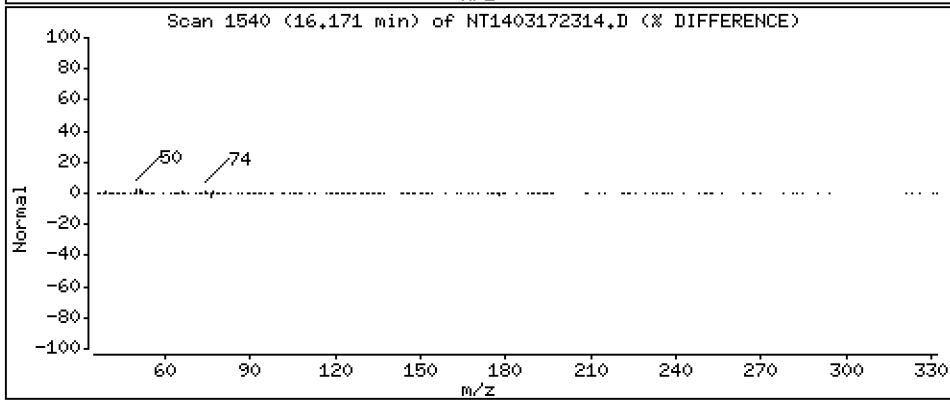
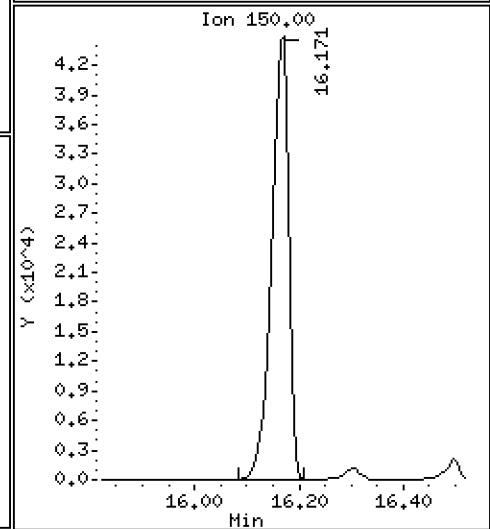
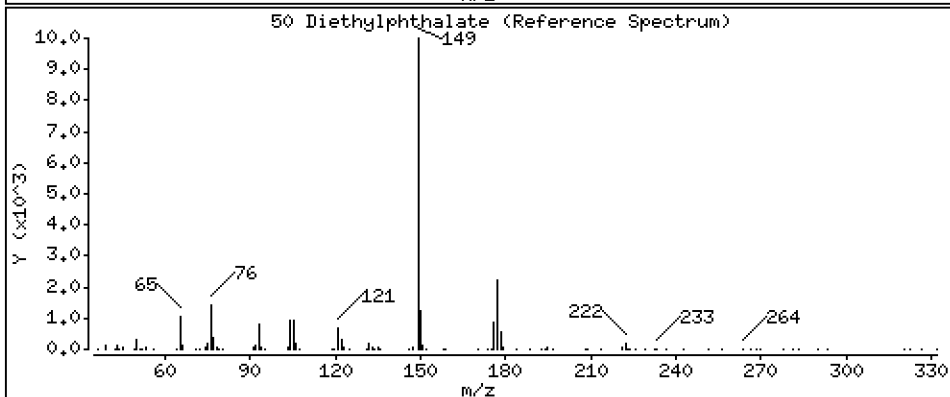
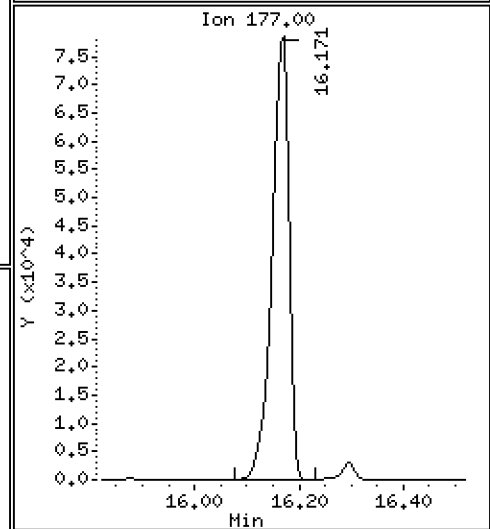
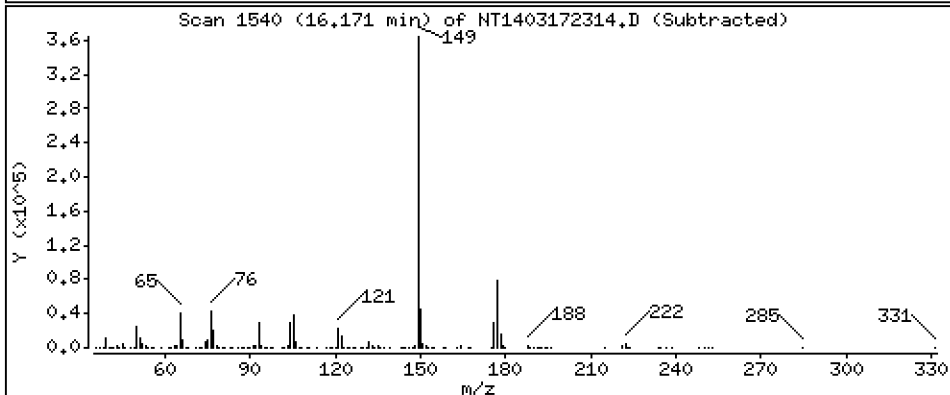
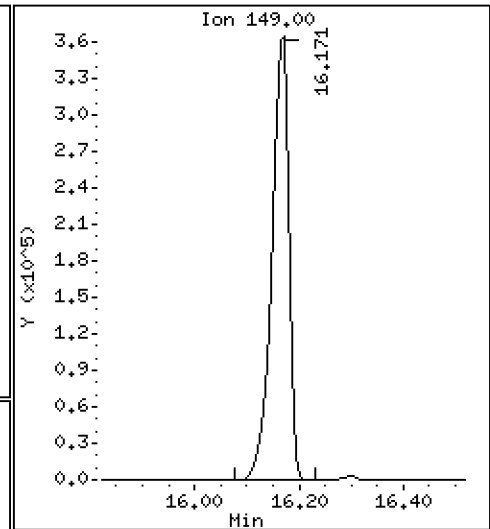
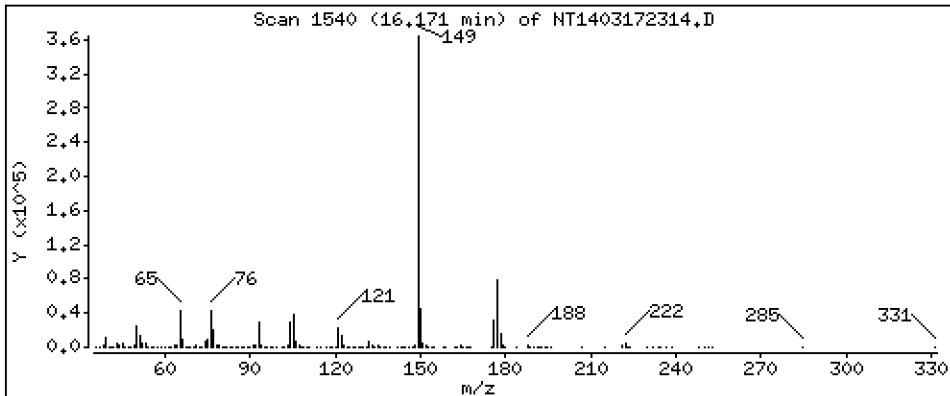
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,974 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

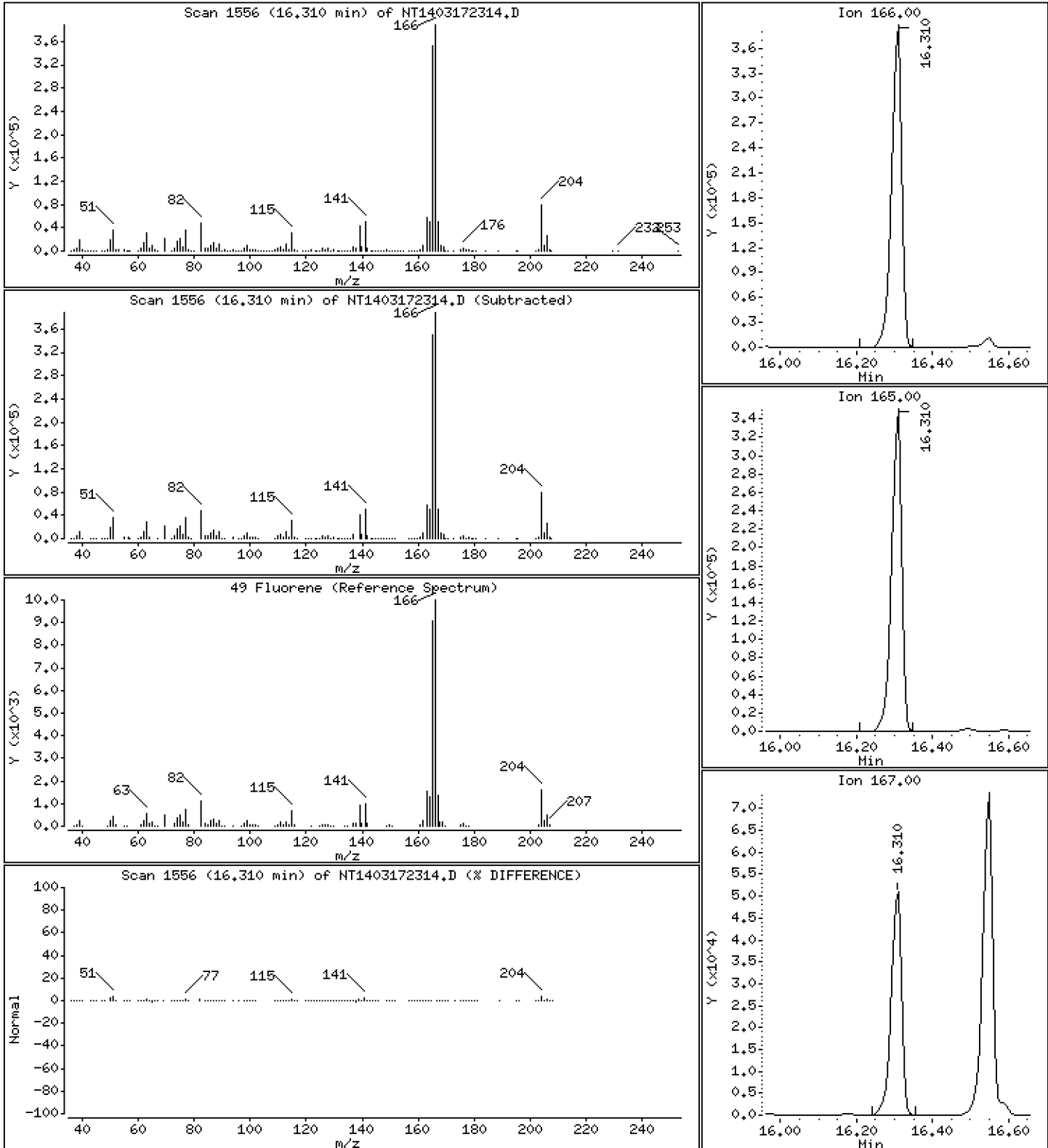
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,359 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

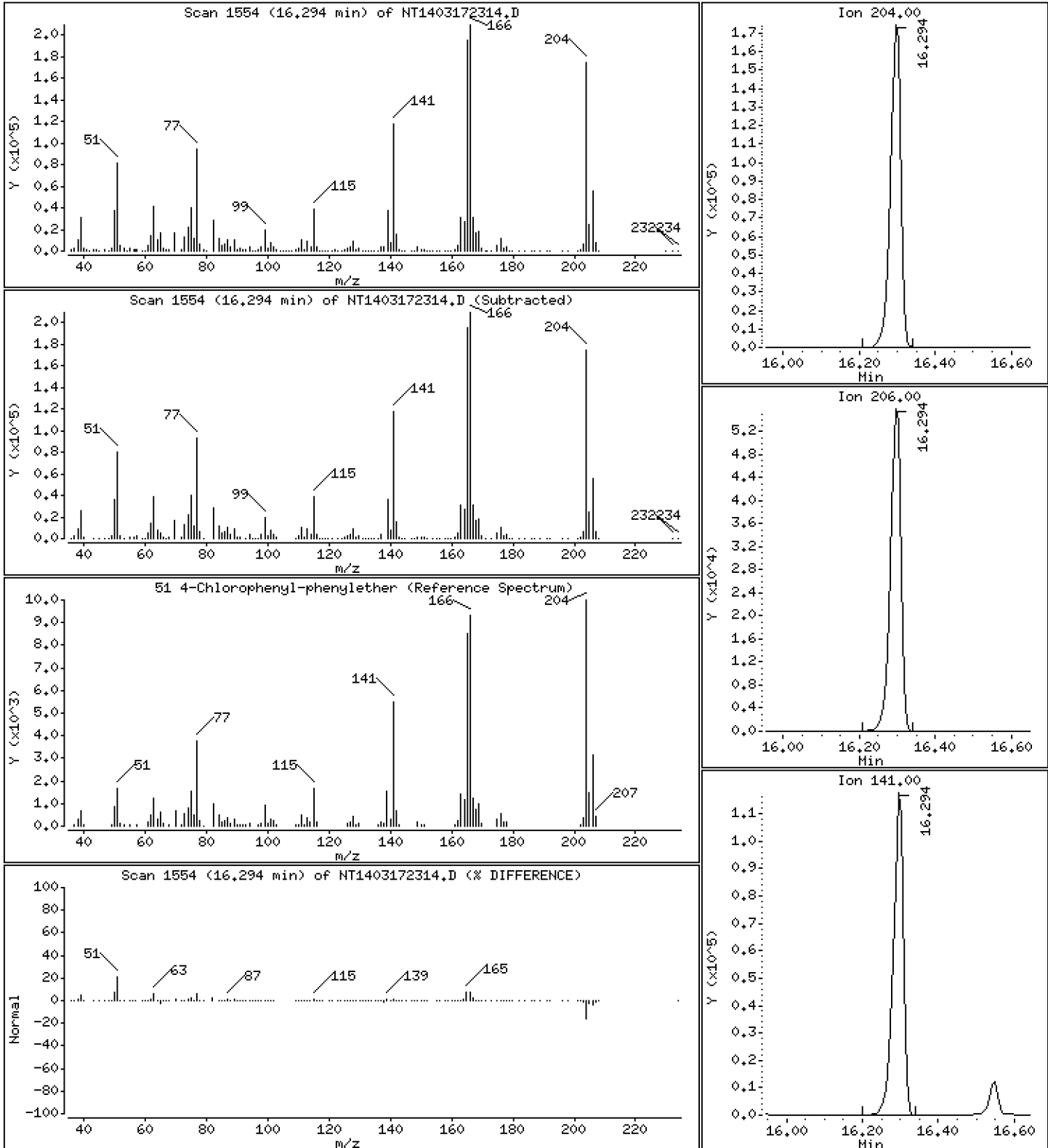
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,677 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

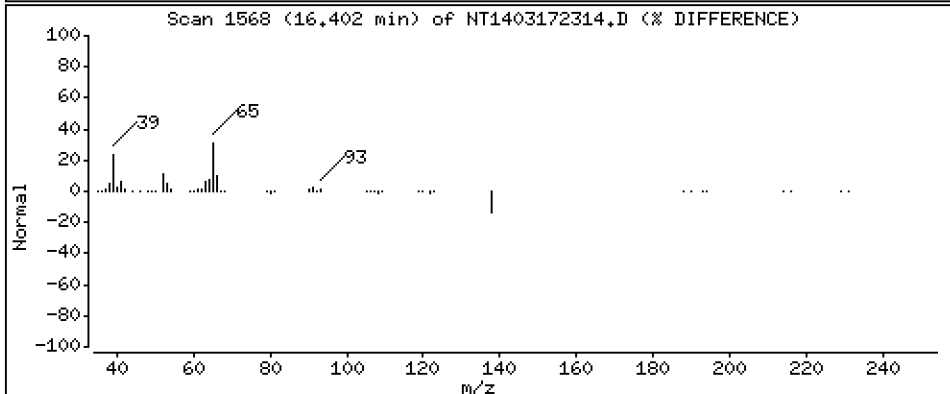
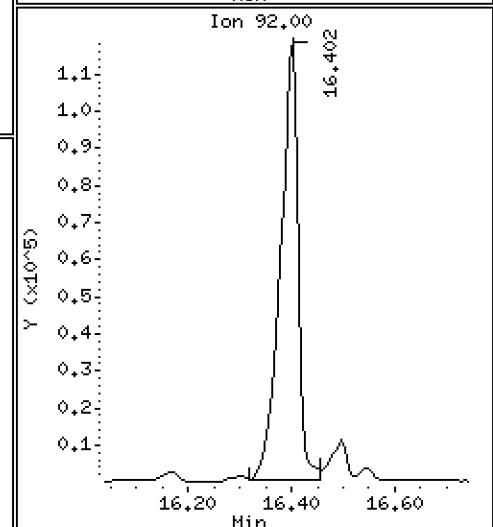
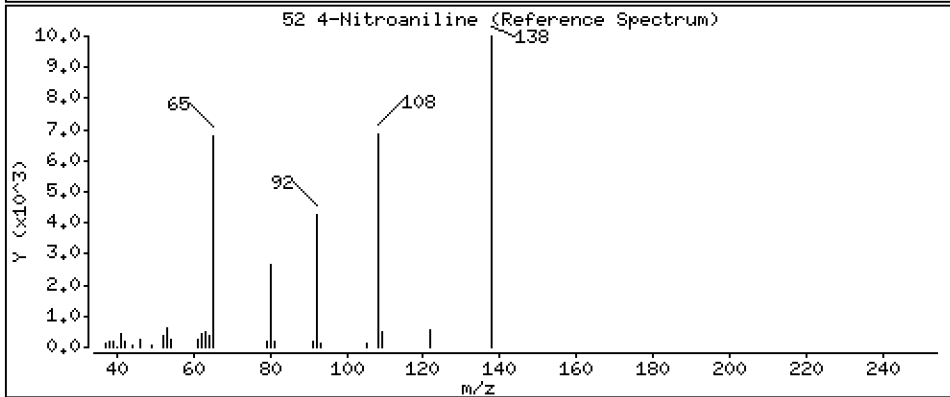
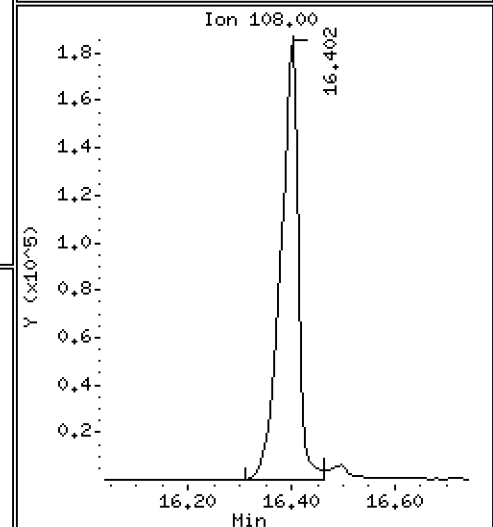
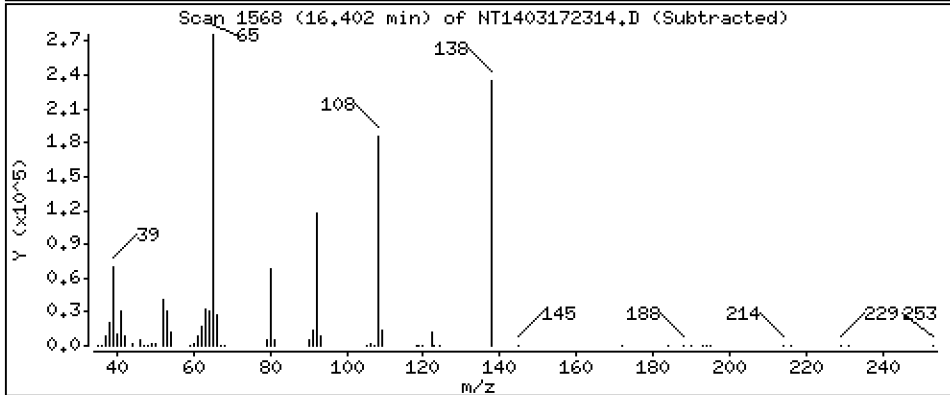
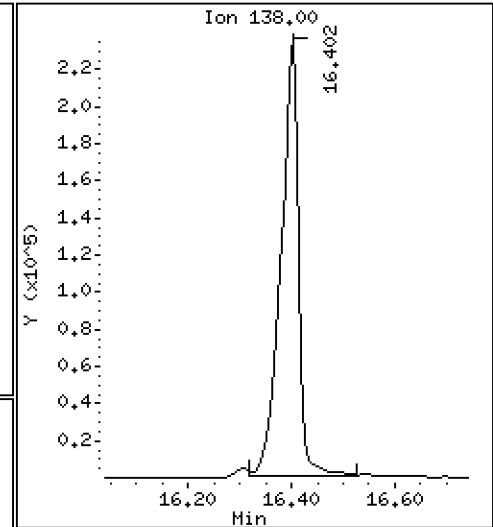
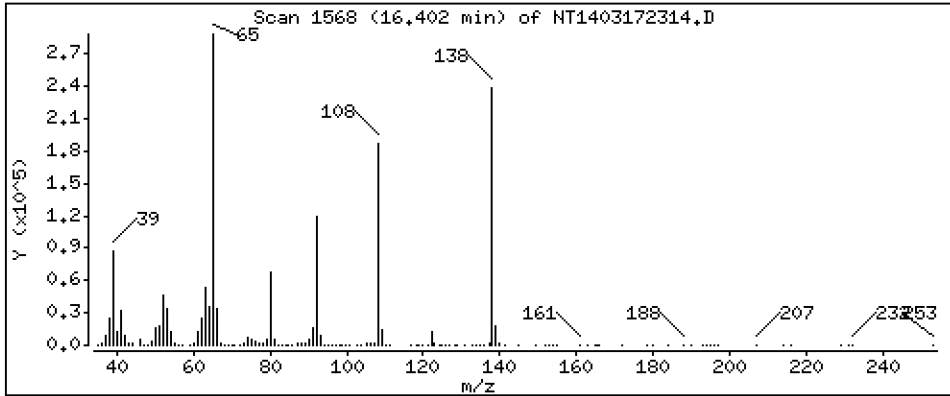
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 13,69 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

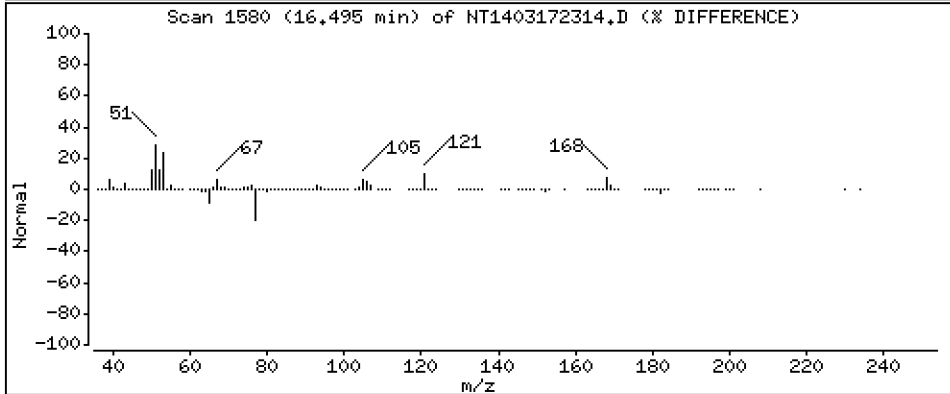
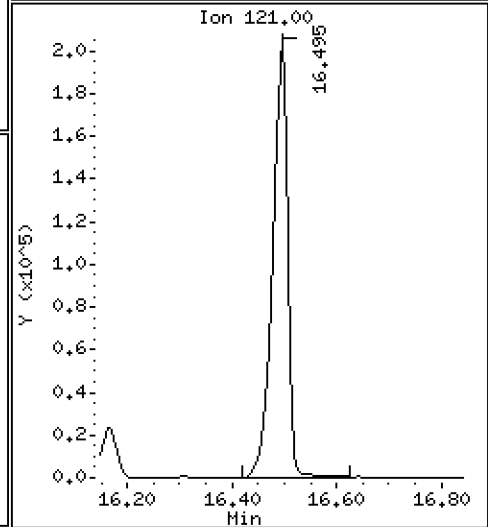
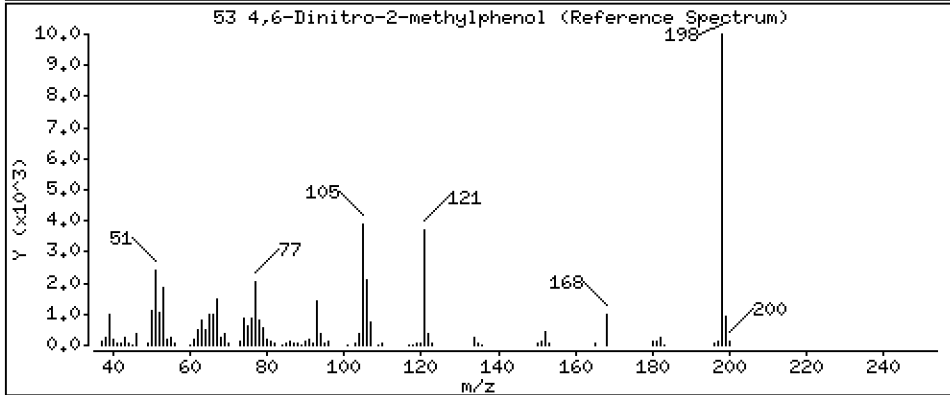
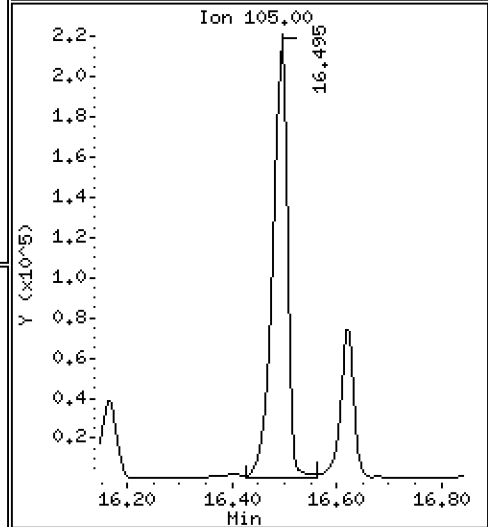
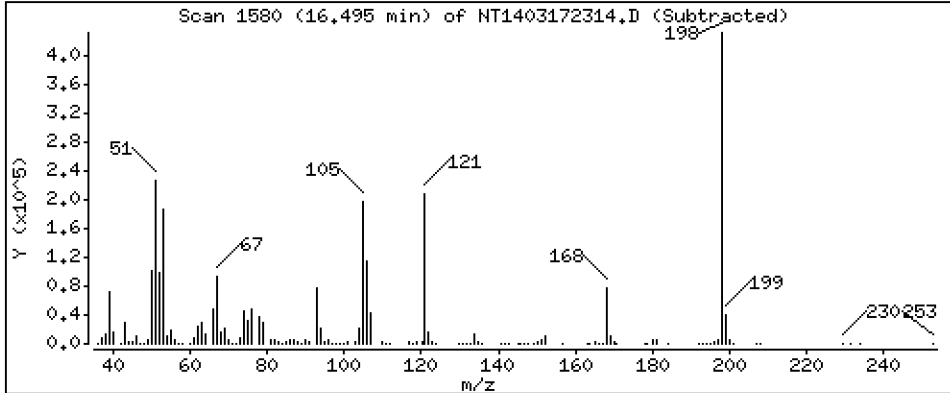
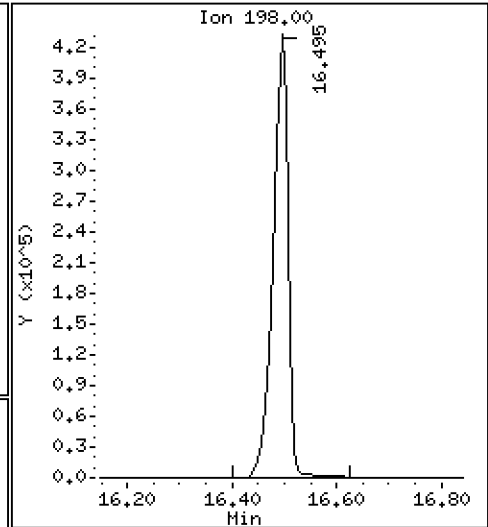
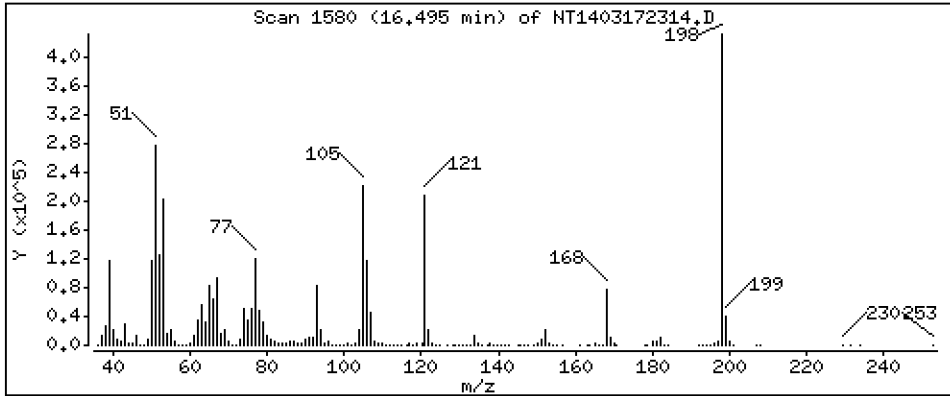
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 31,70 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

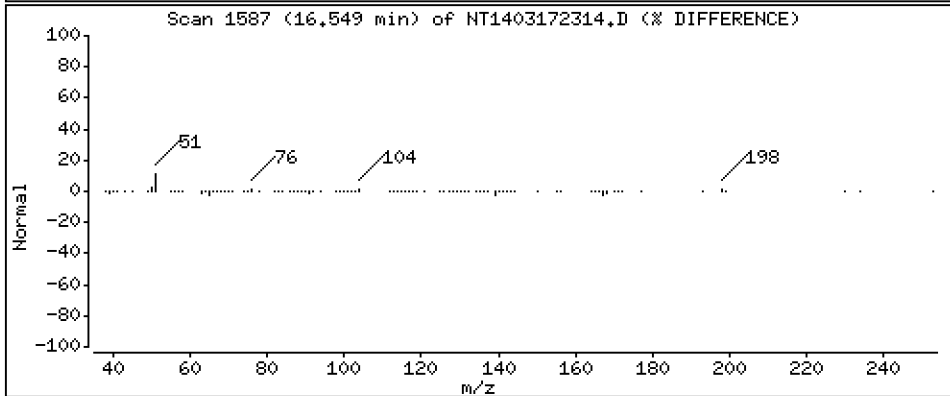
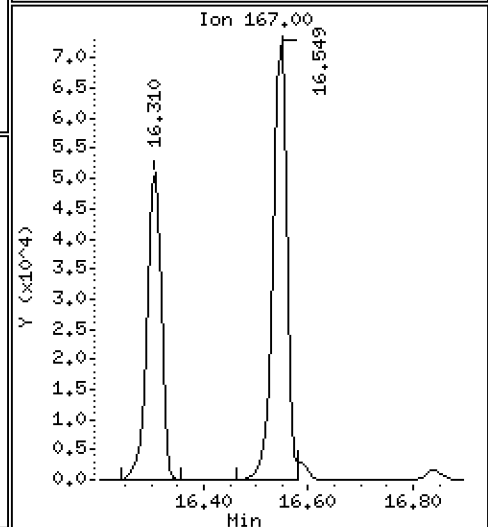
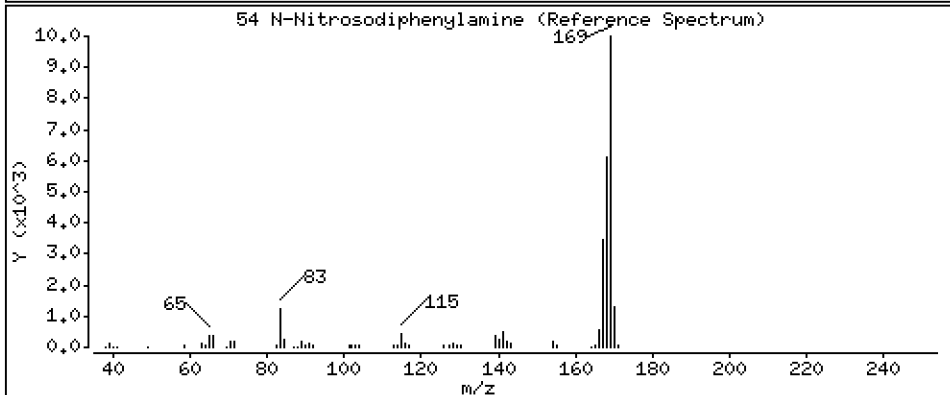
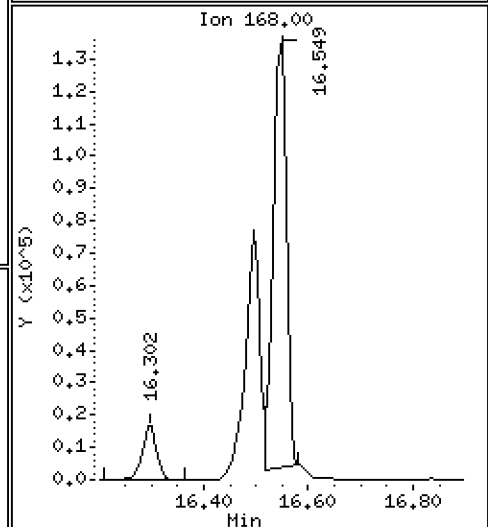
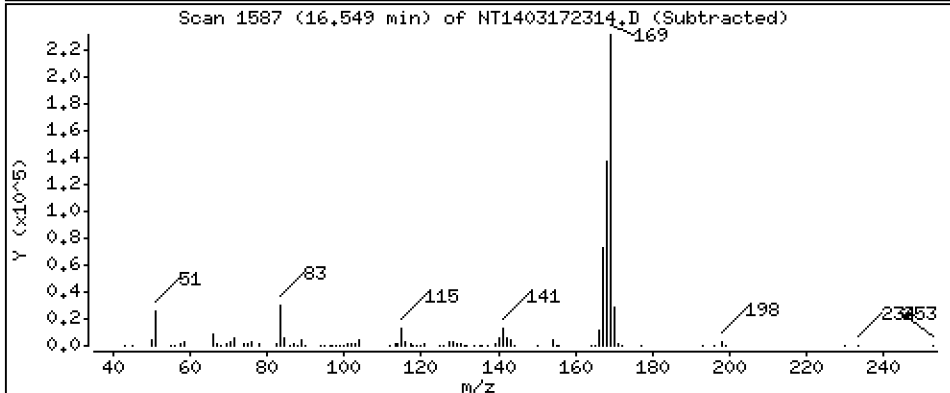
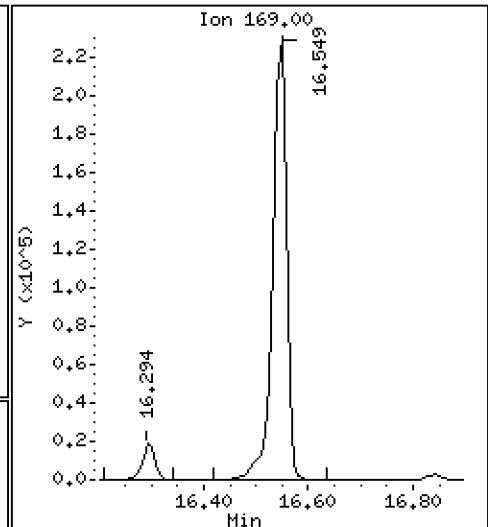
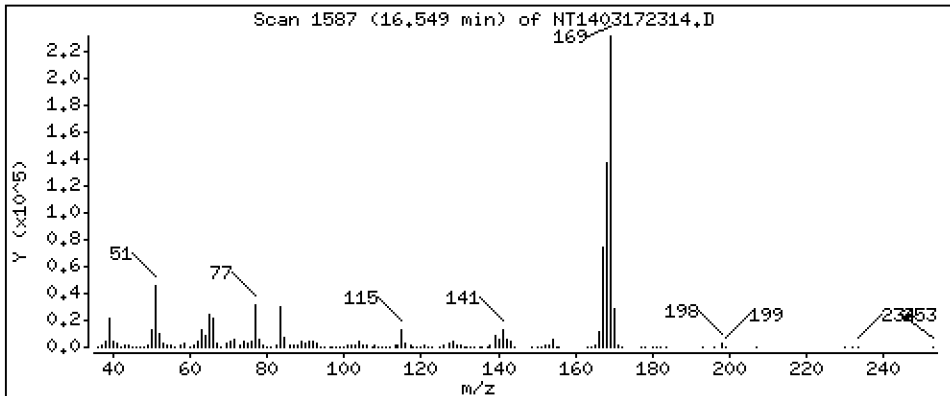
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.151 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

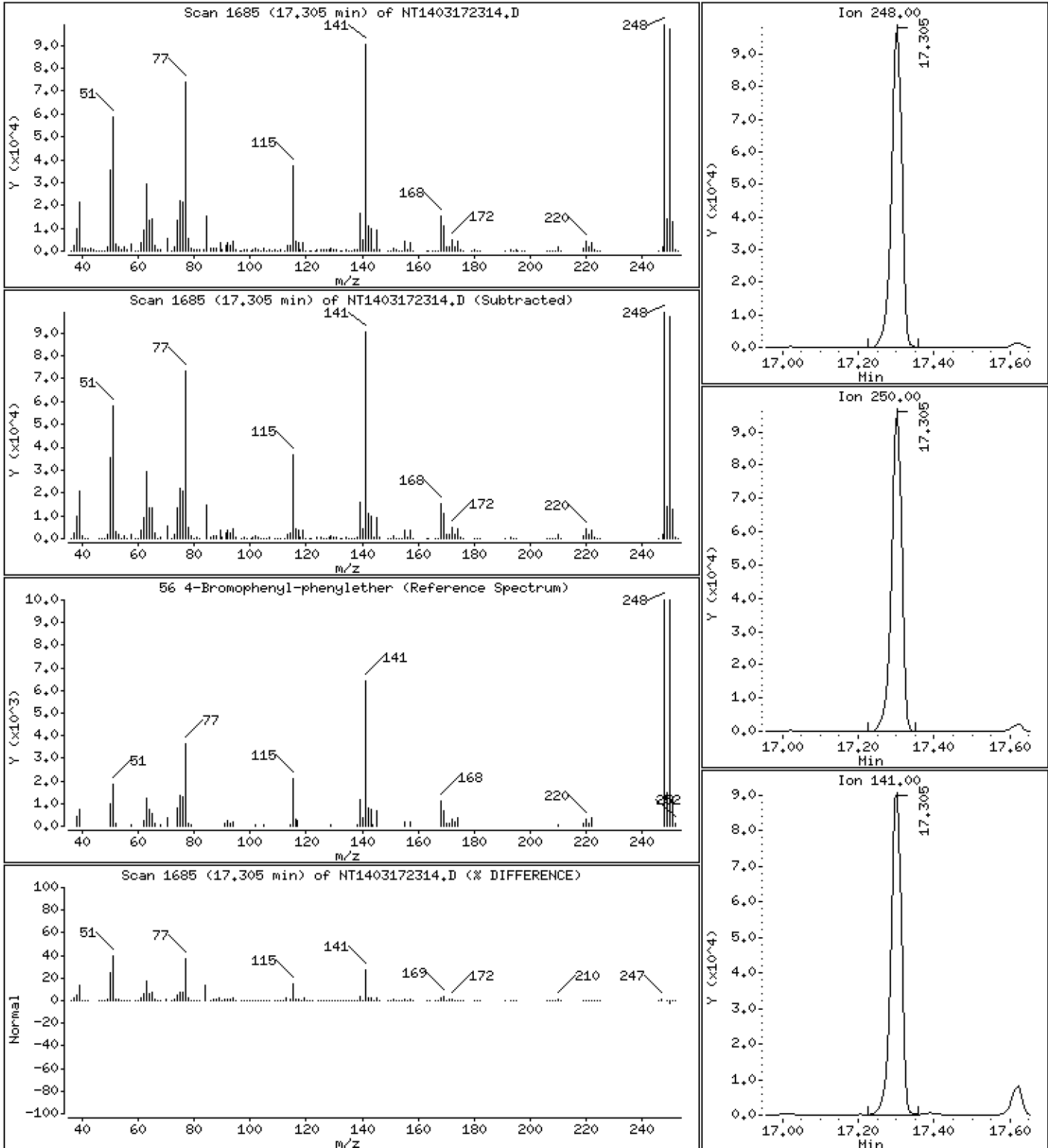
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,347 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

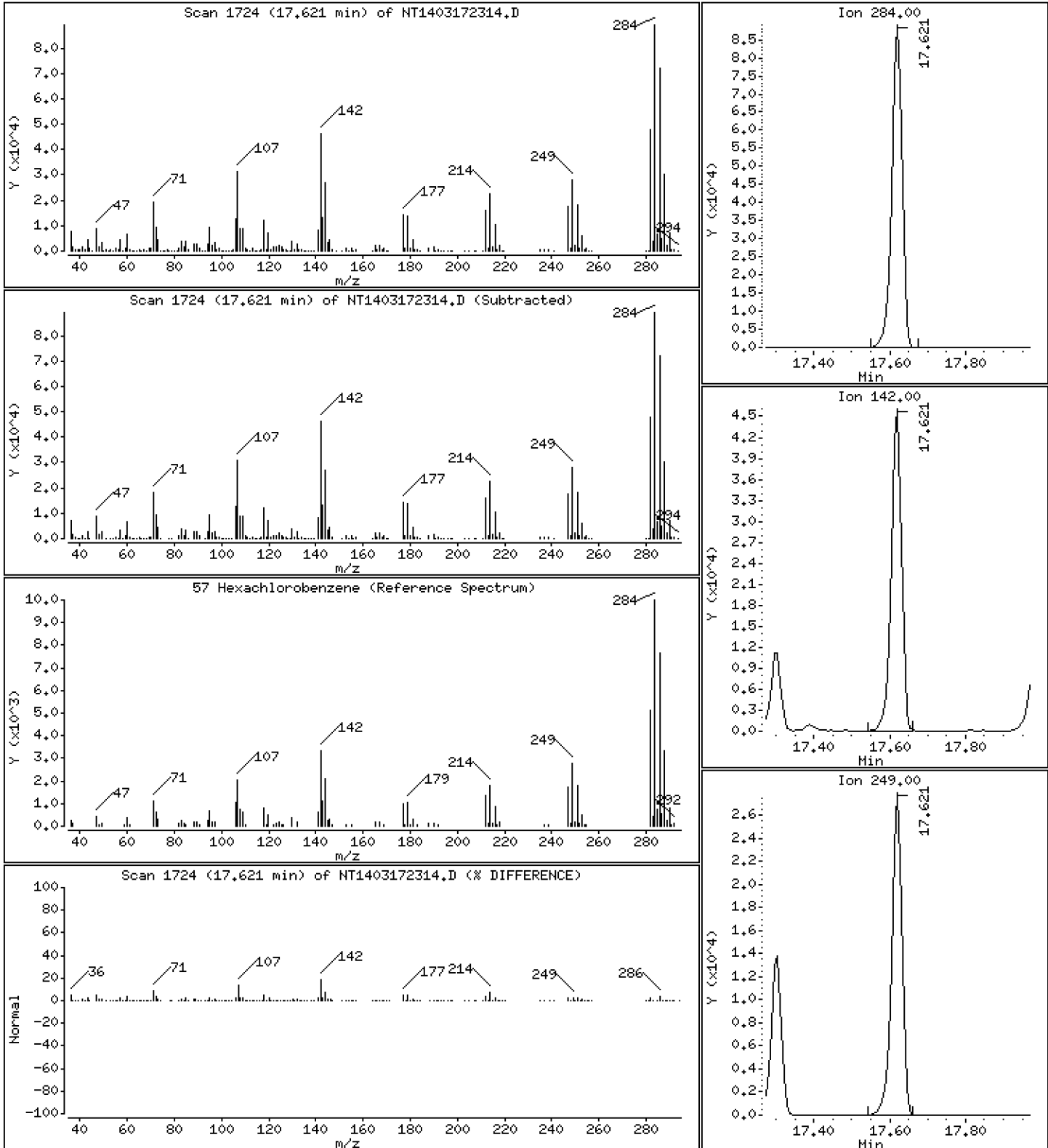
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,764 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

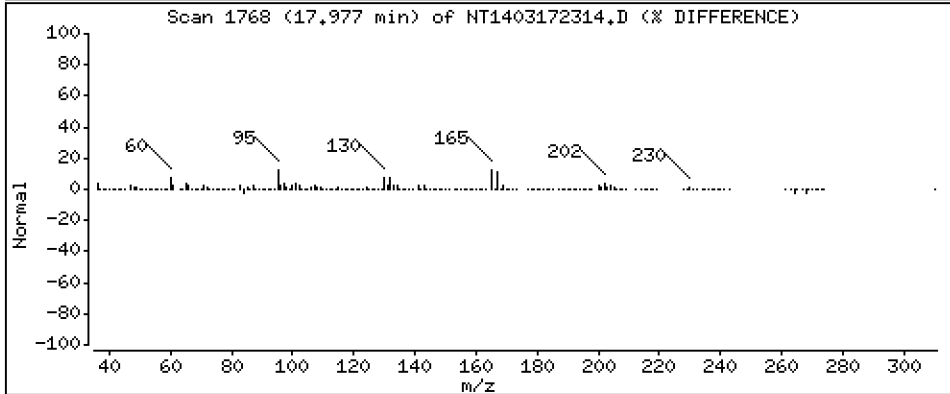
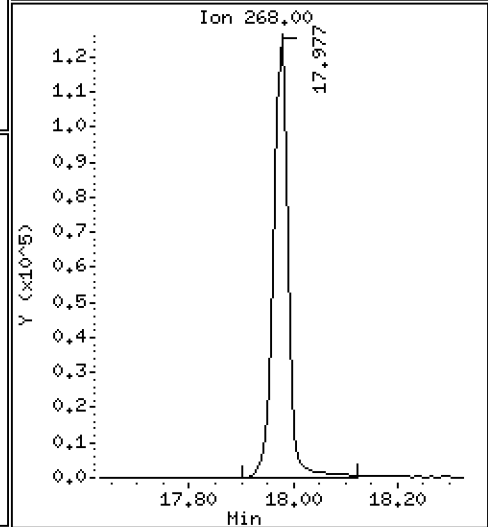
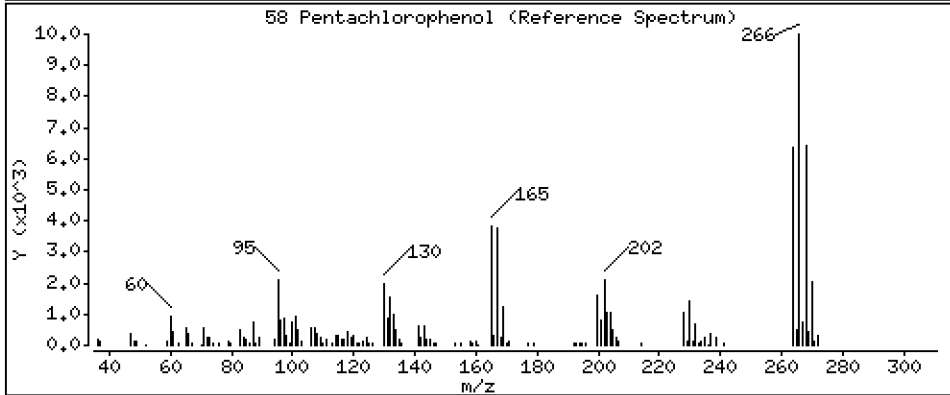
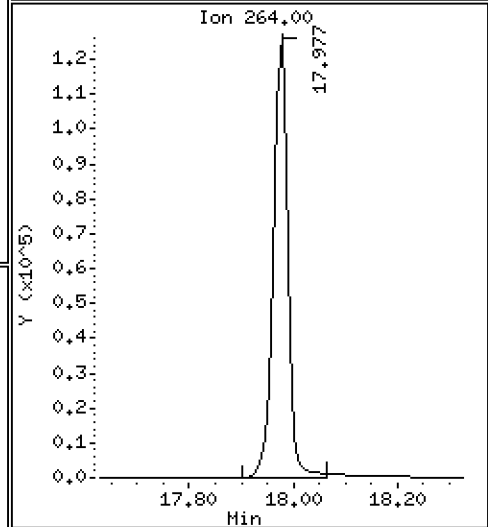
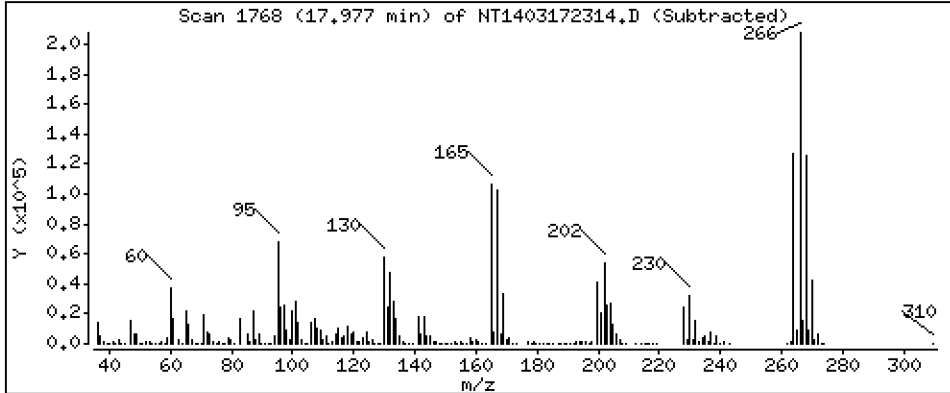
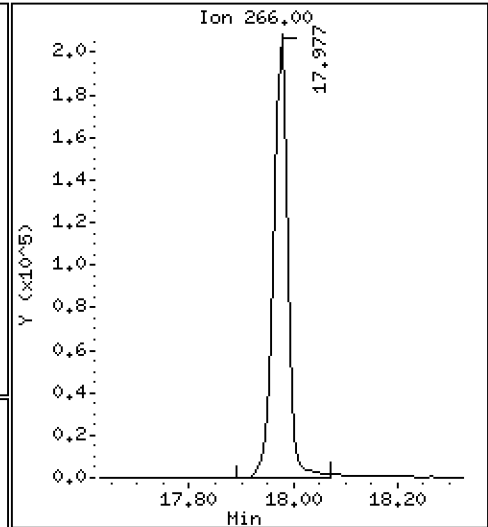
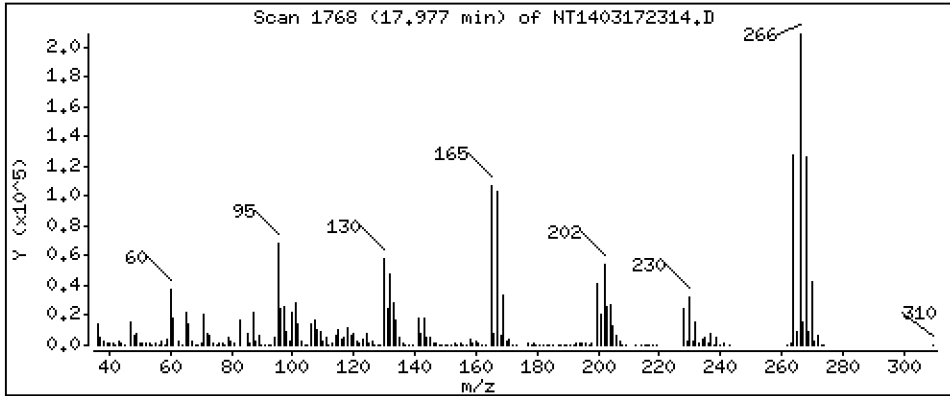
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 15,05 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

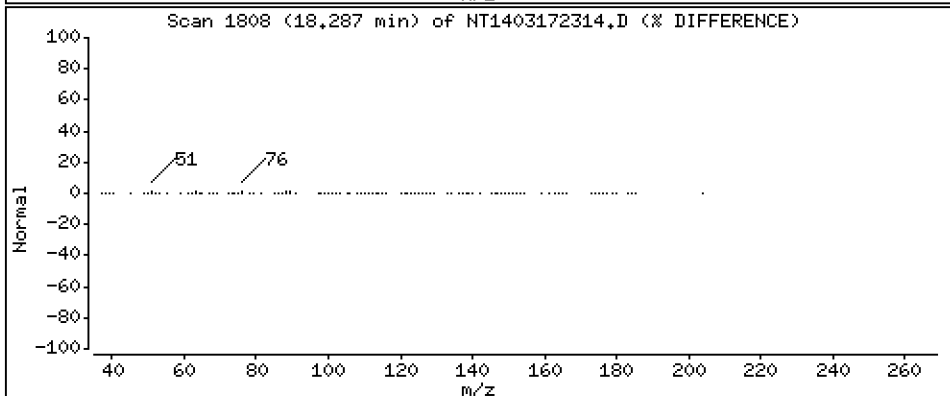
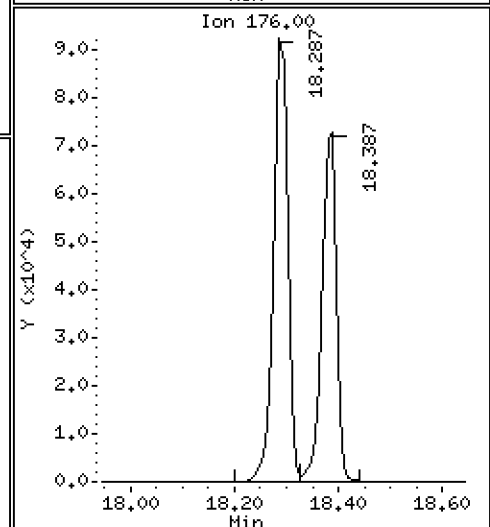
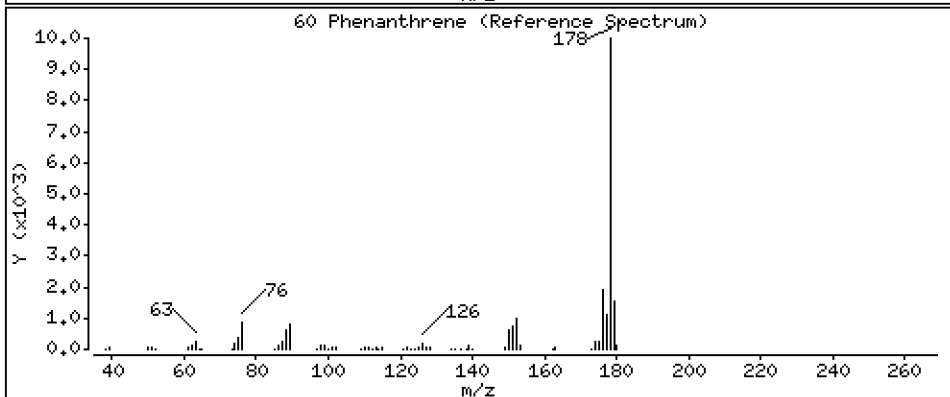
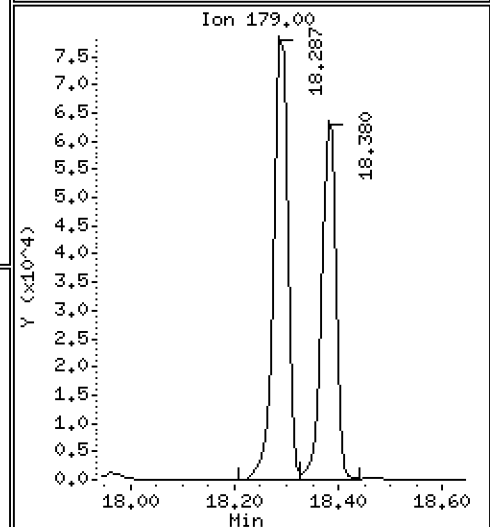
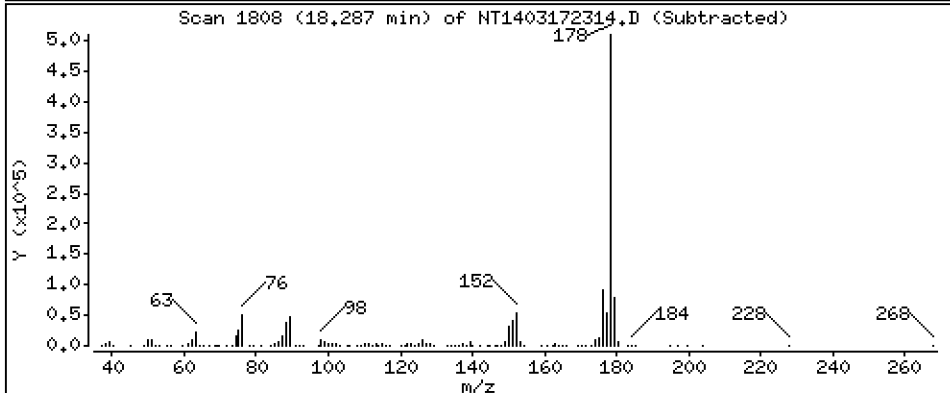
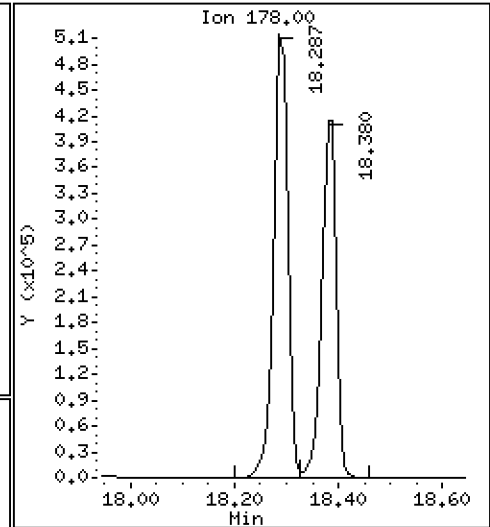
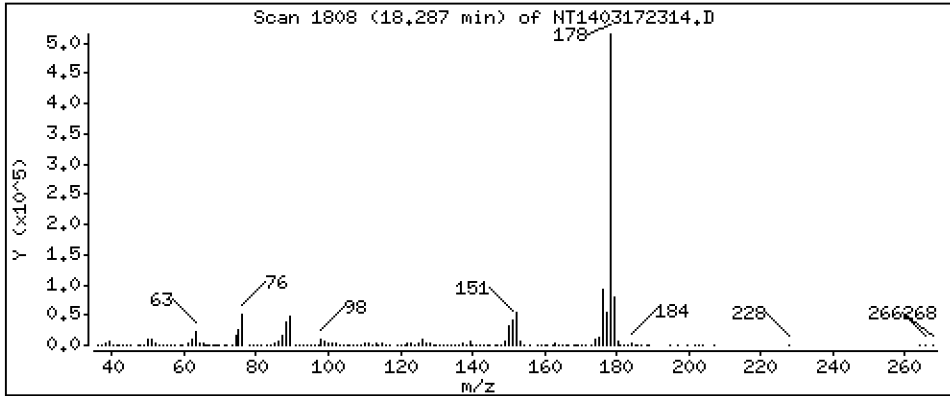
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,518 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

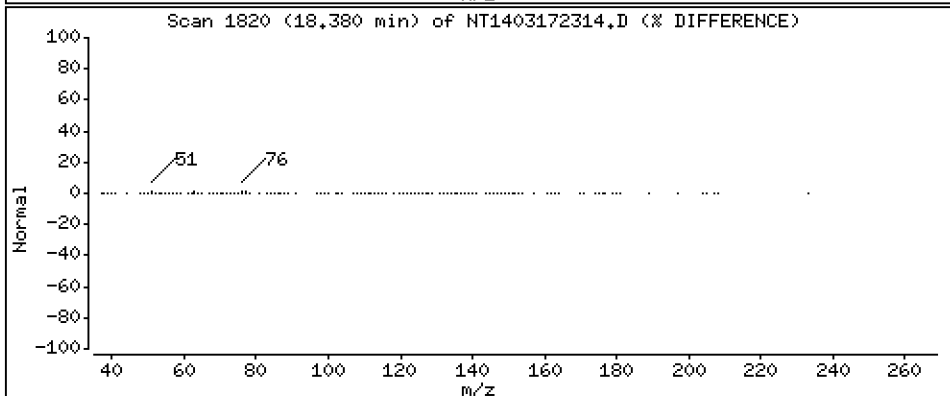
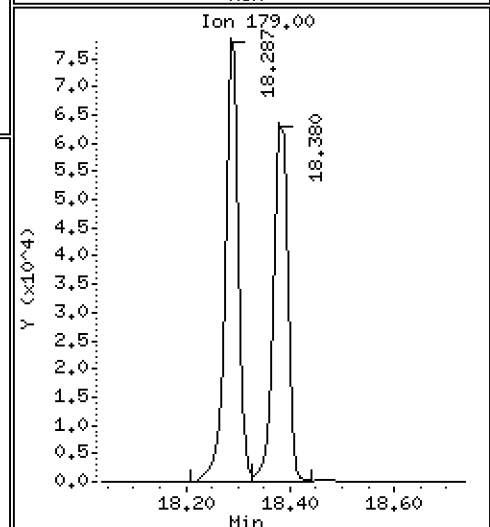
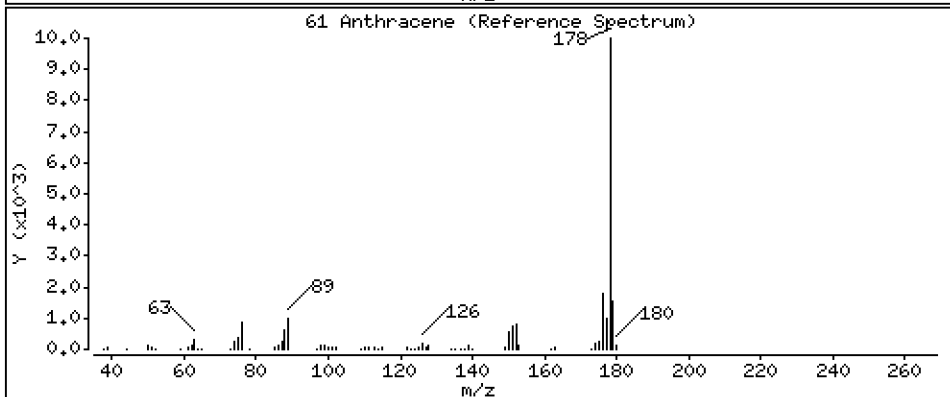
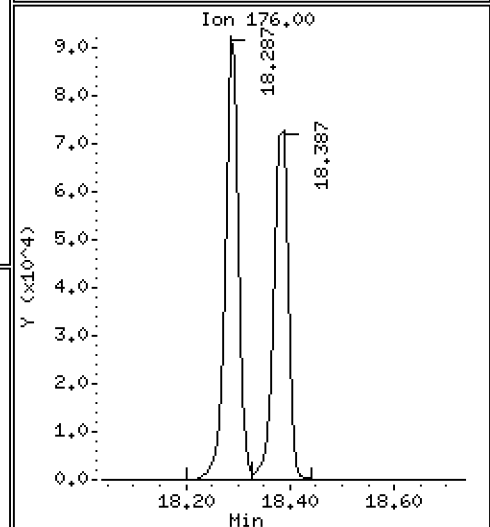
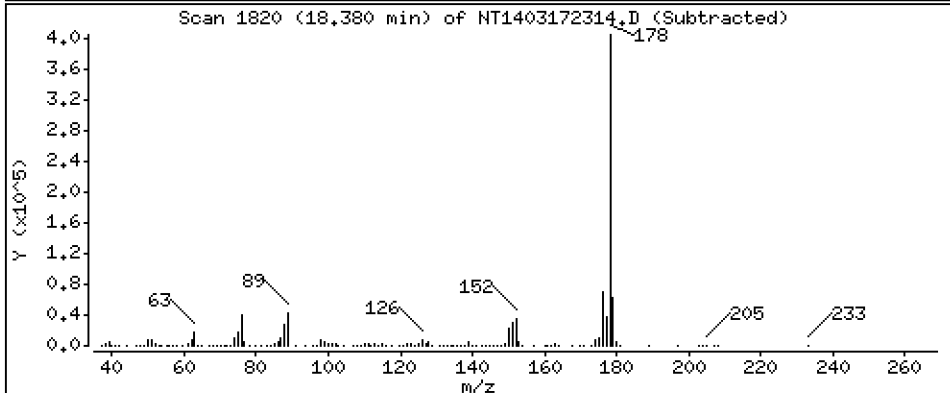
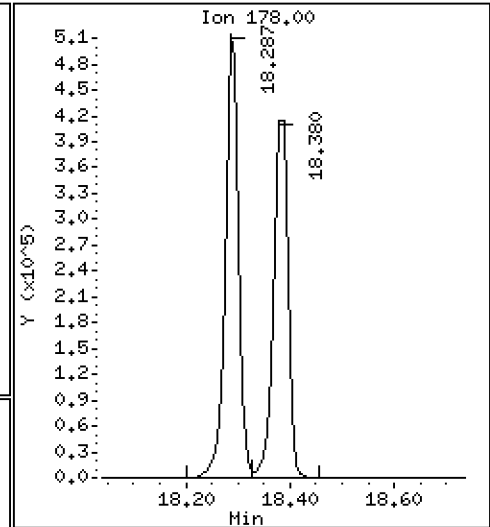
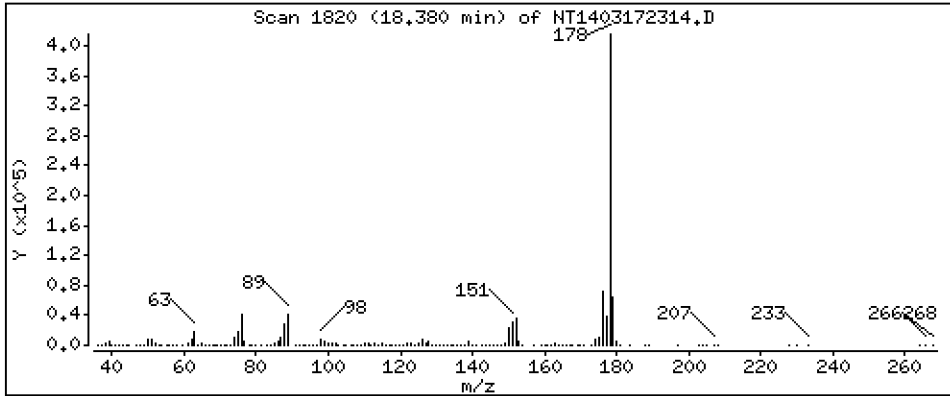
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 3,858 ug/mL

61 Anthracene



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

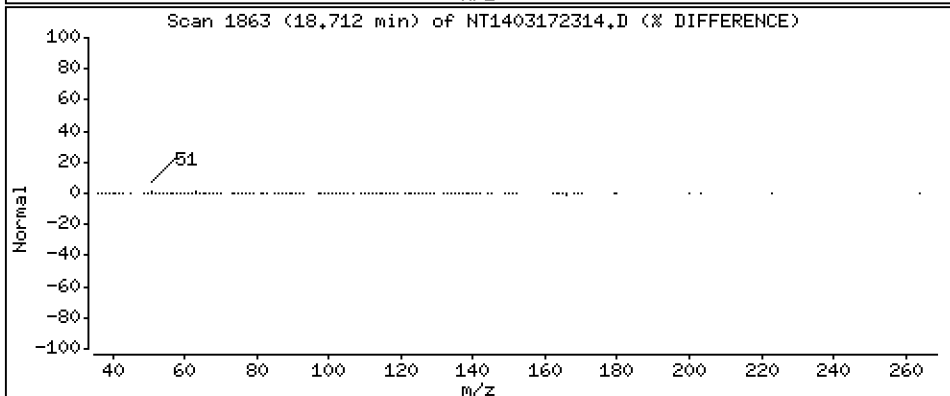
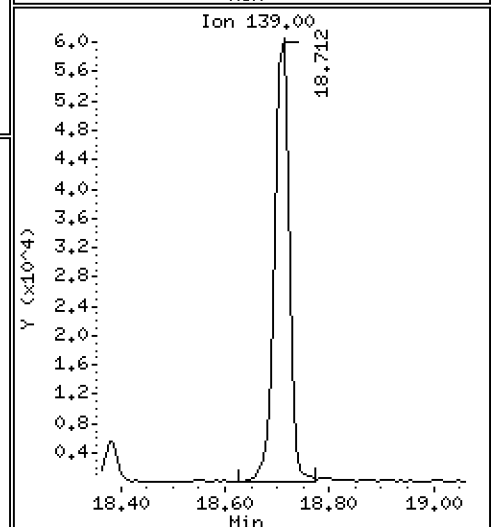
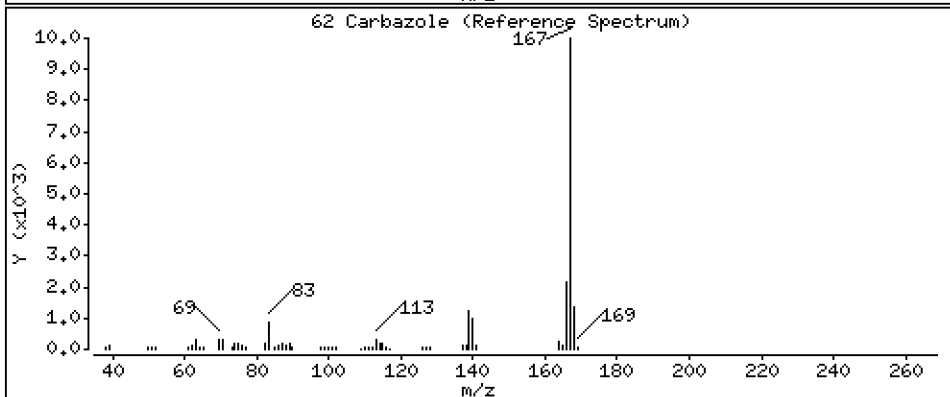
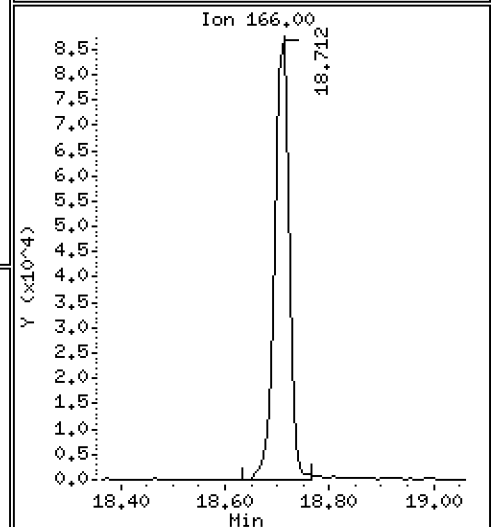
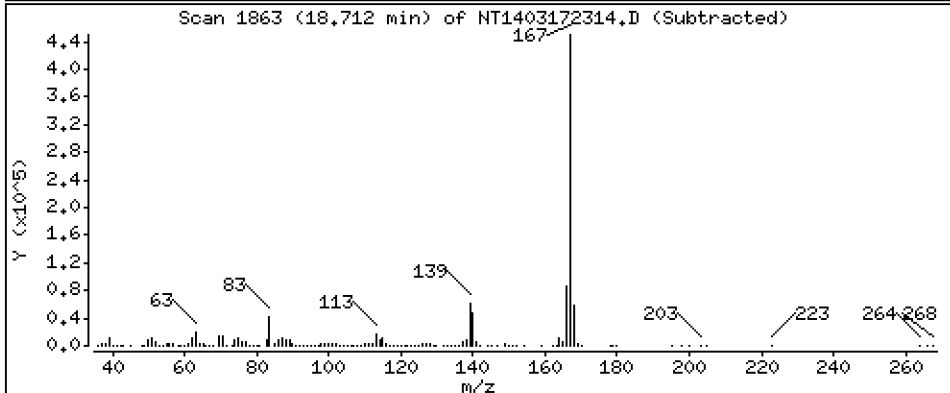
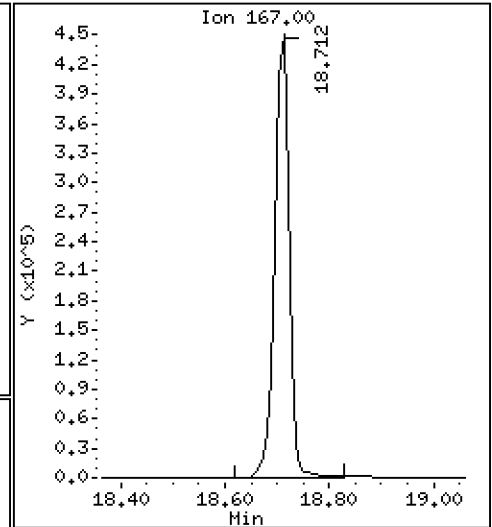
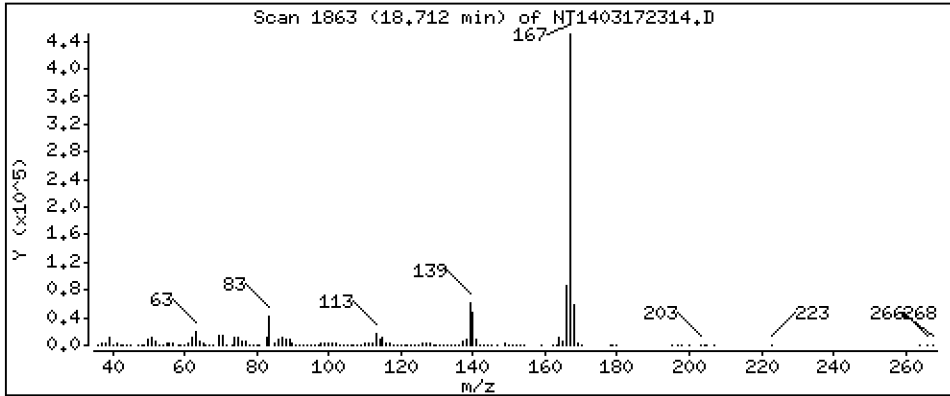
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,706 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

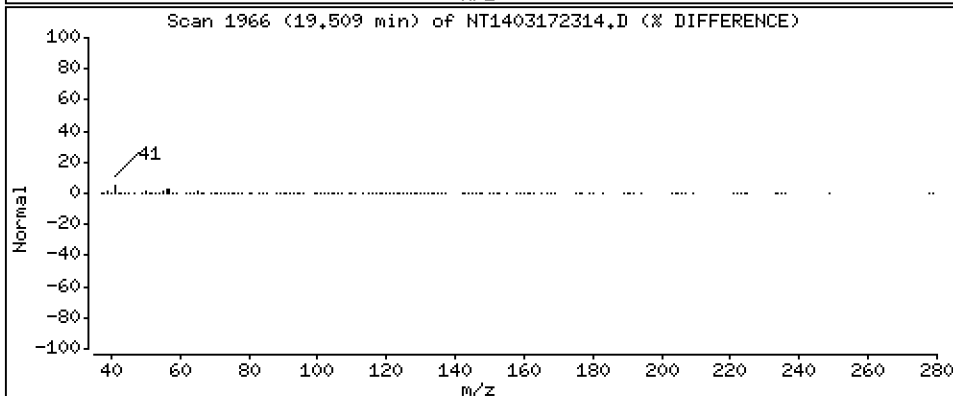
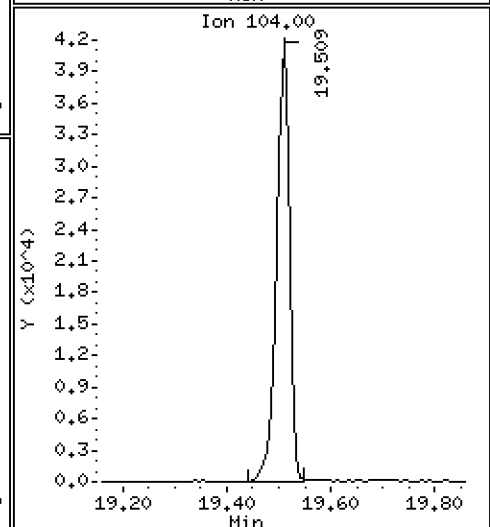
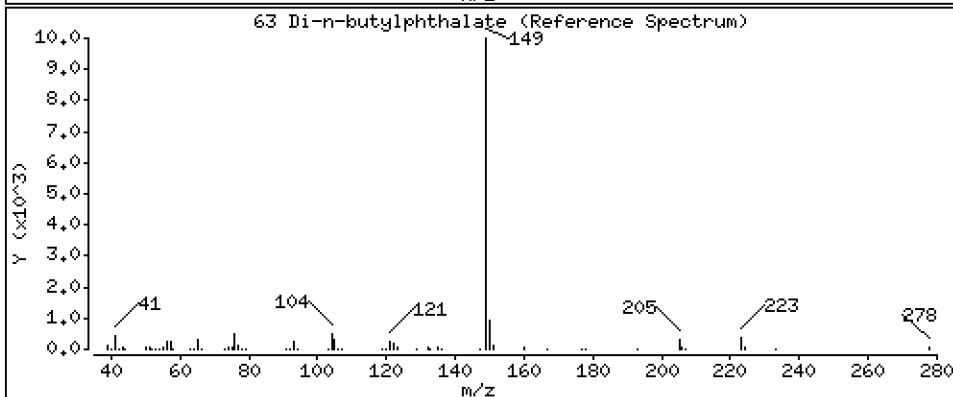
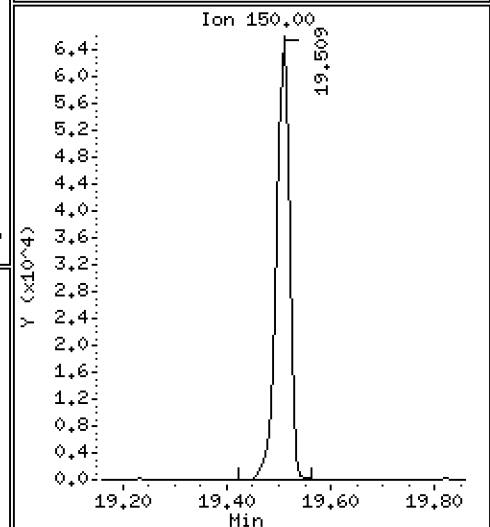
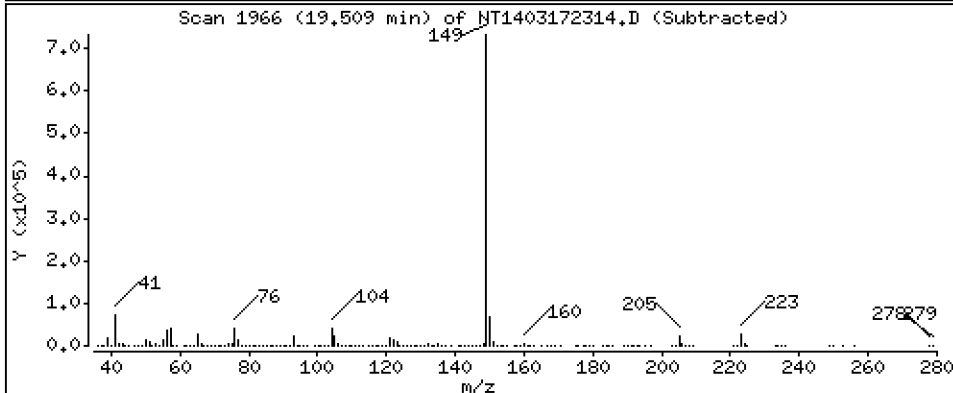
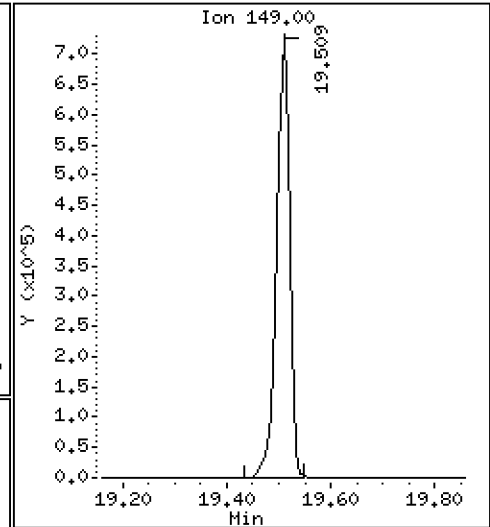
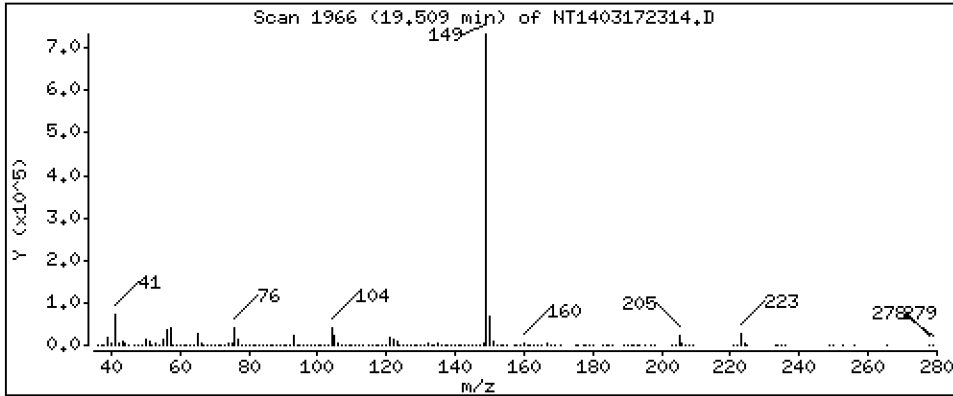
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,370 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

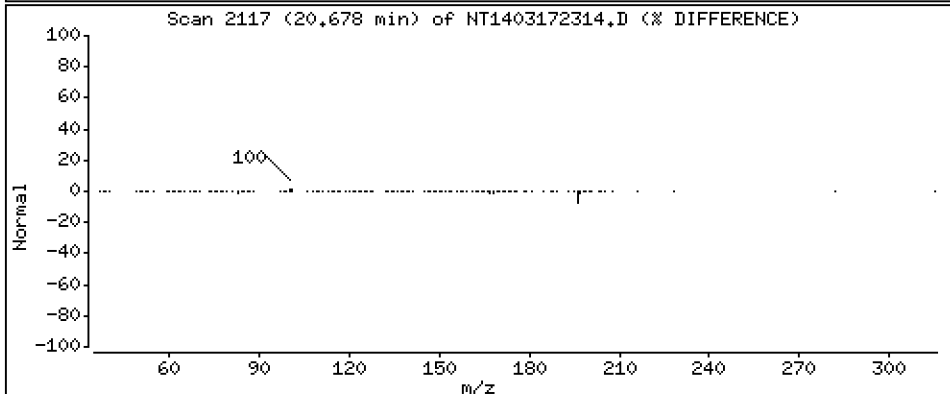
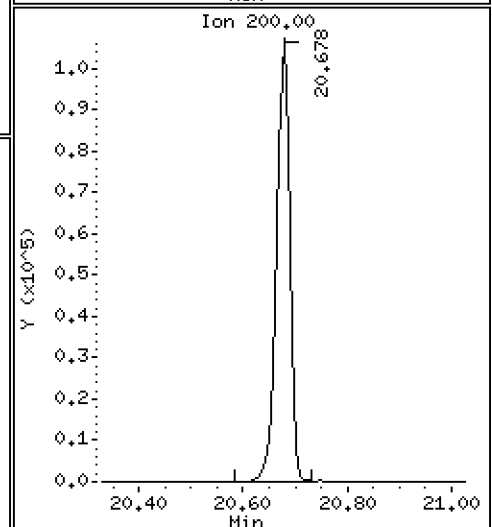
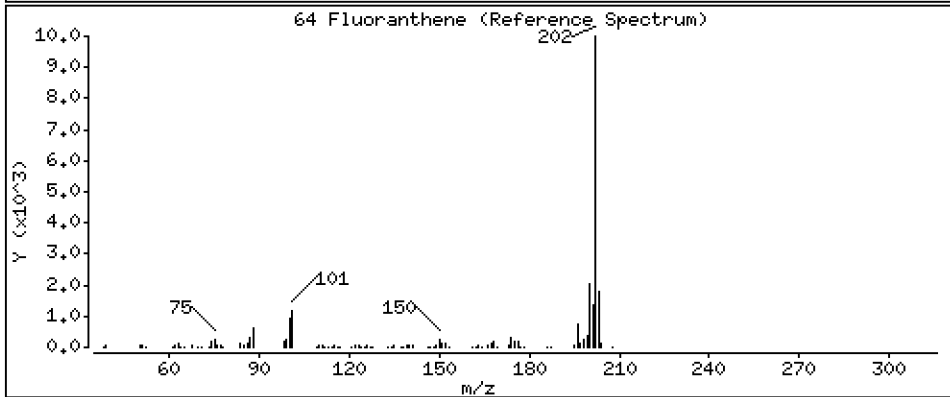
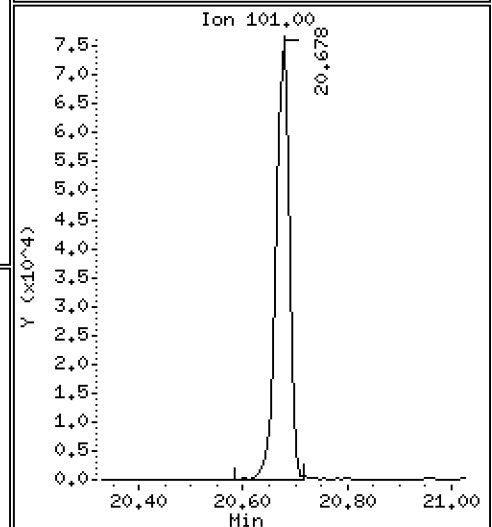
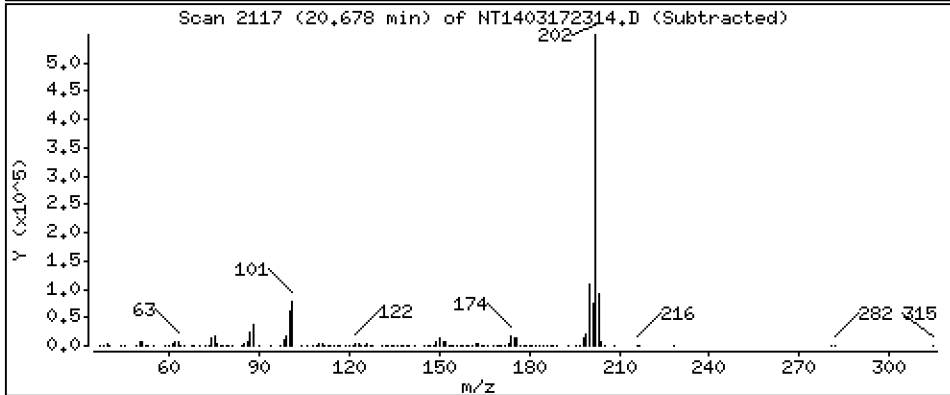
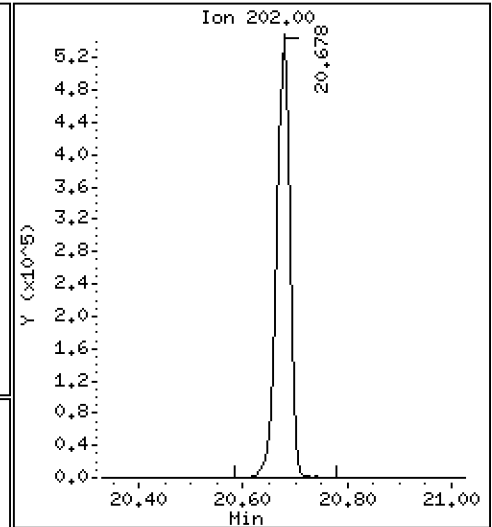
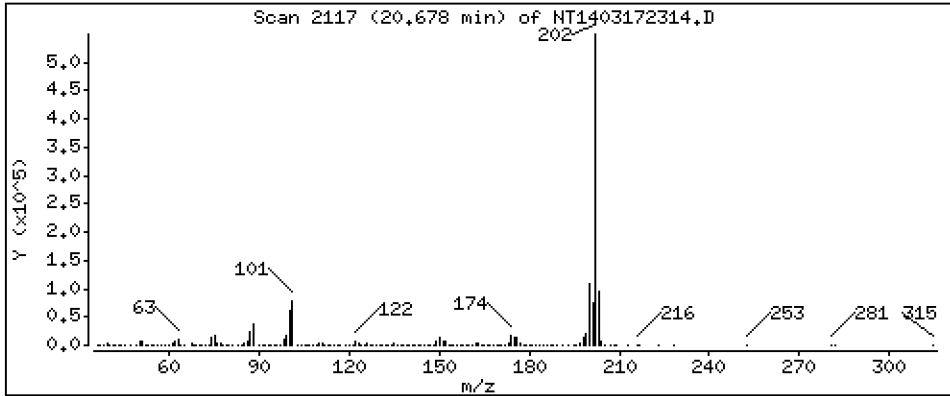
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 6,314 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

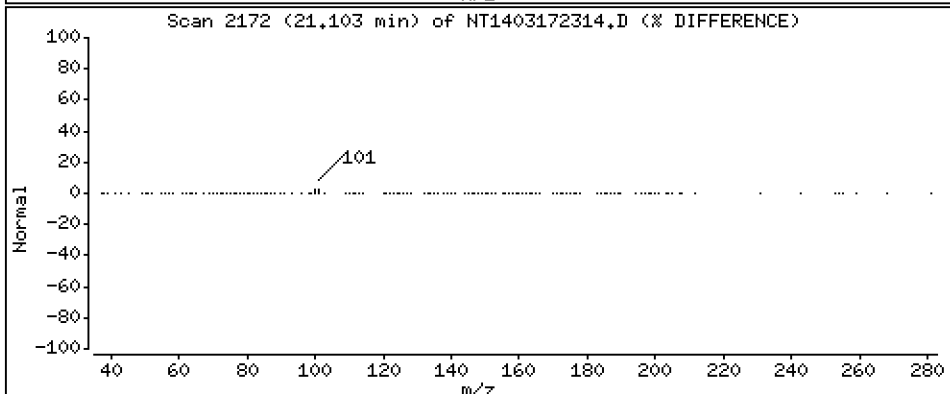
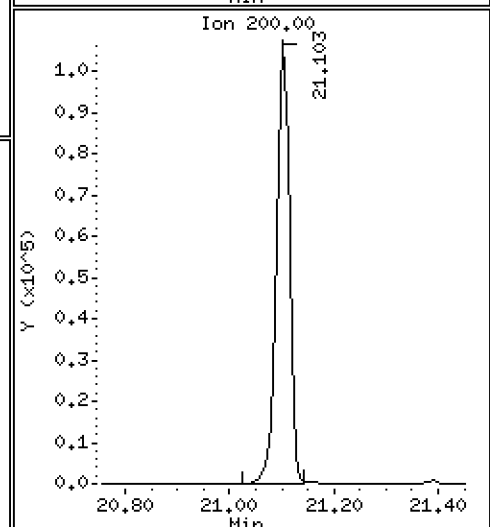
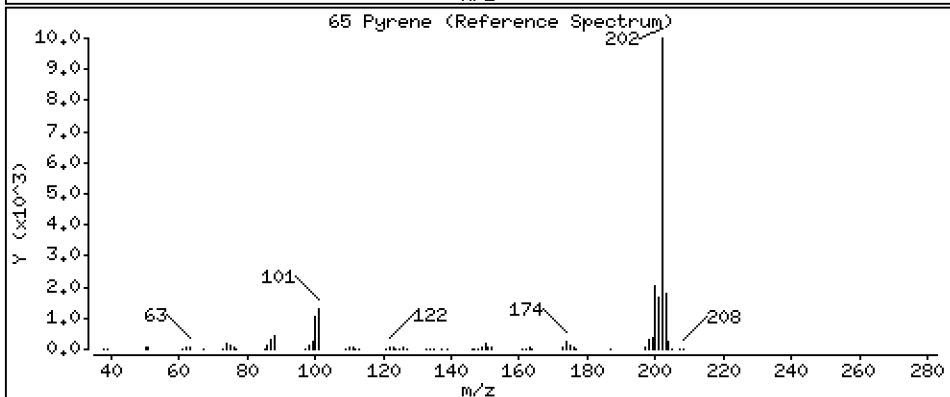
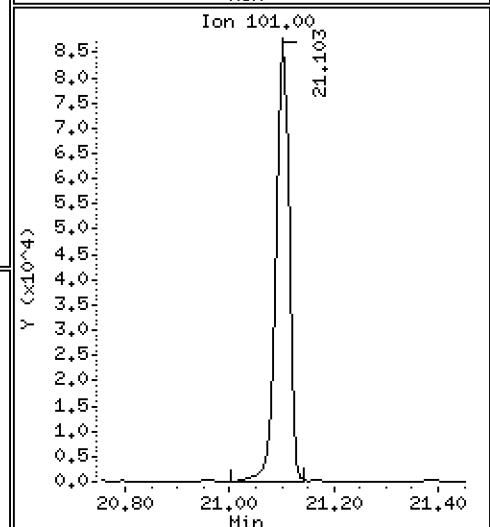
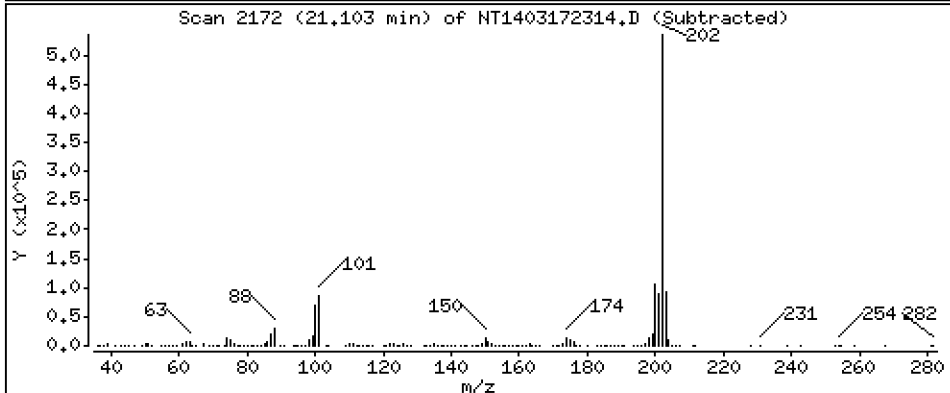
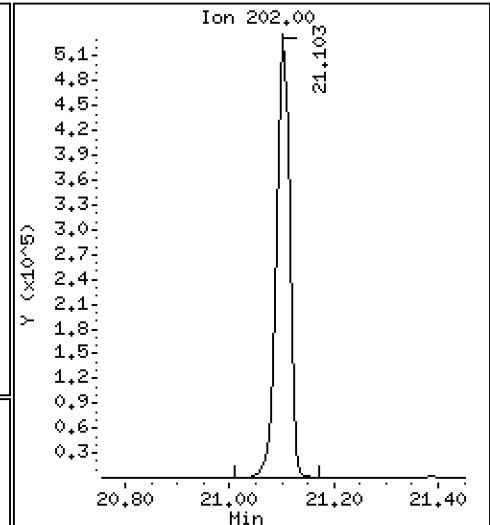
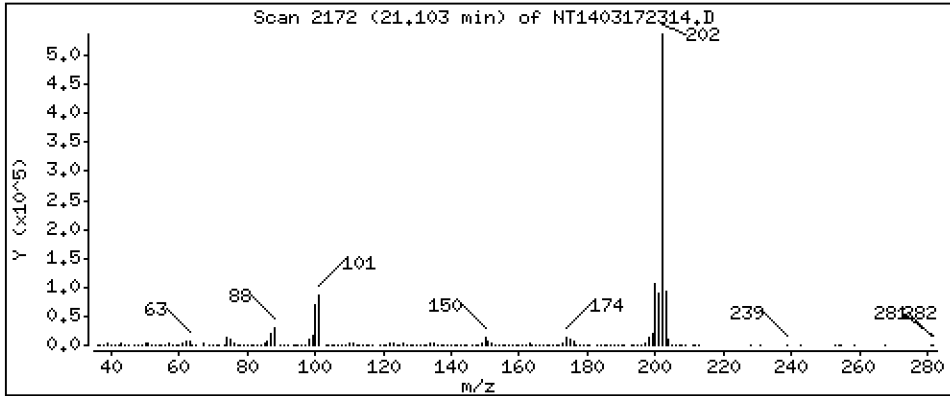
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 5,977 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

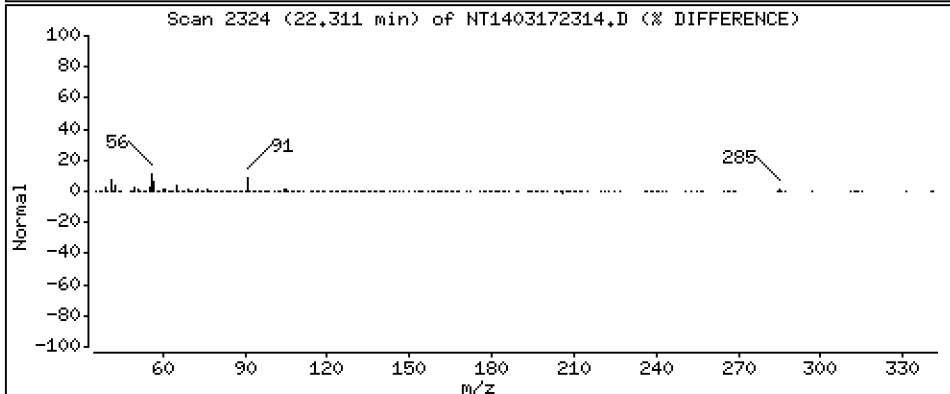
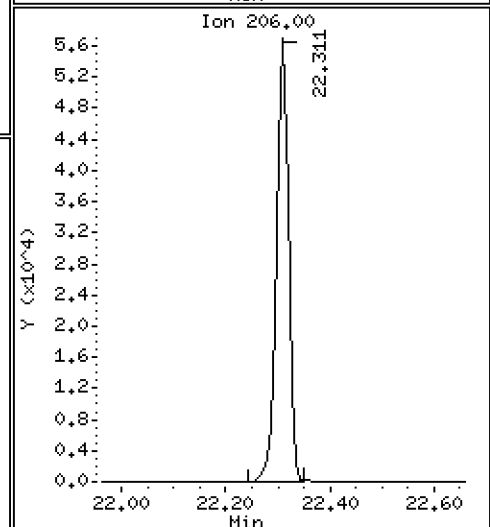
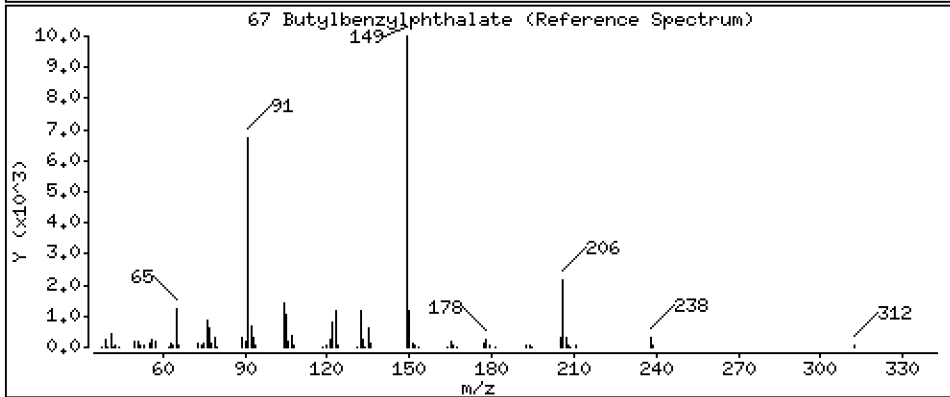
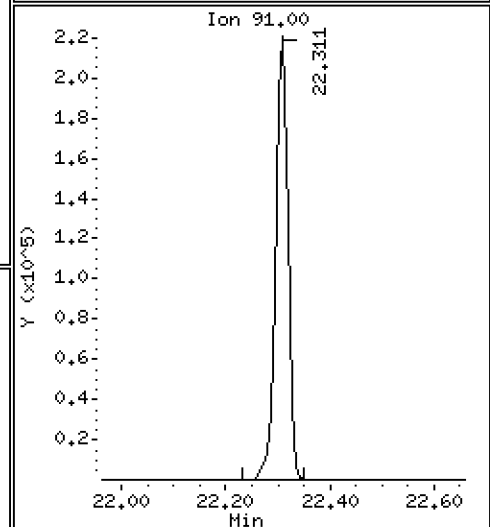
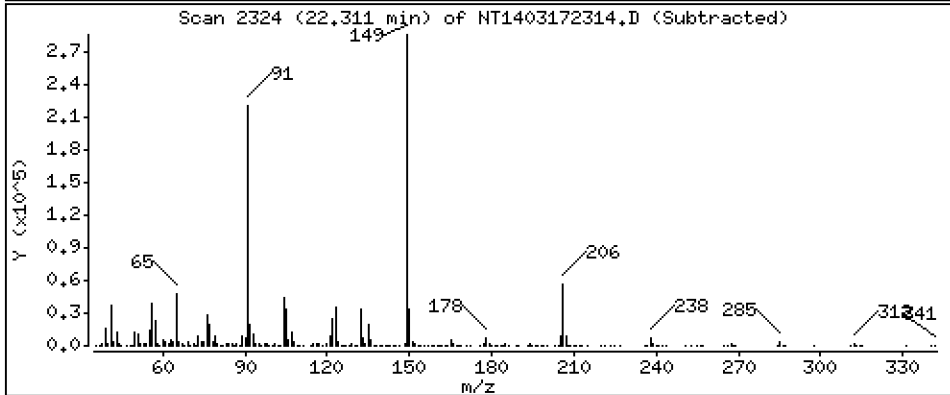
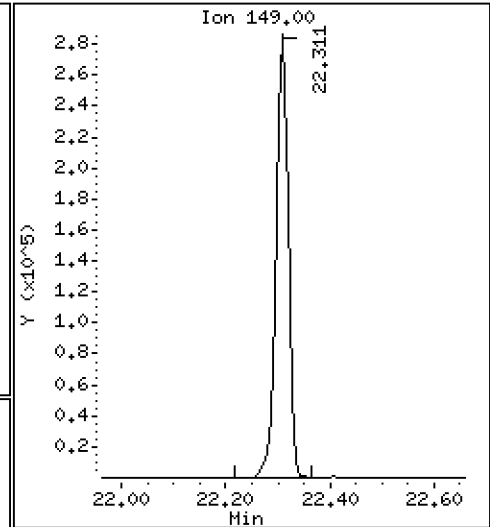
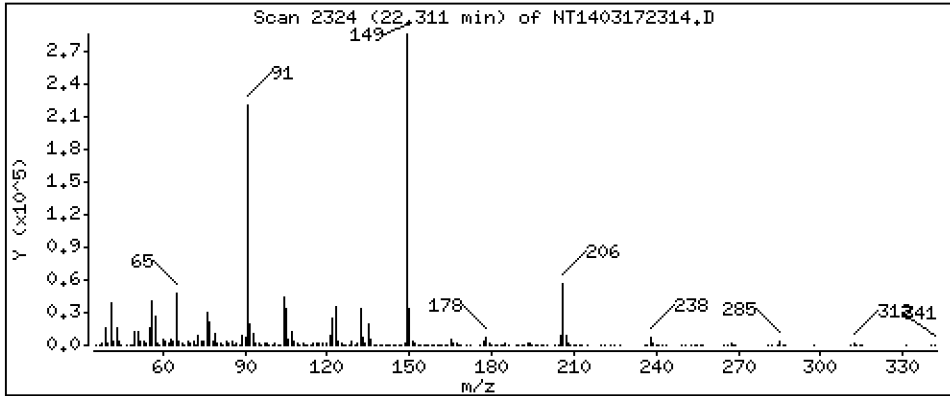
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 6,729 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

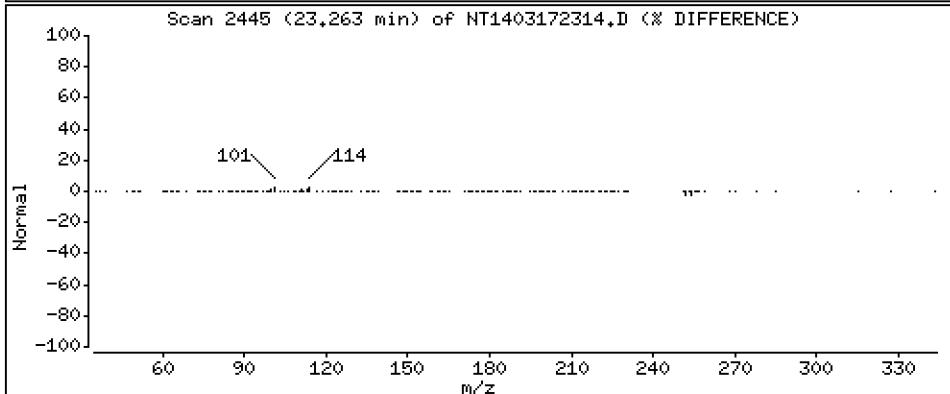
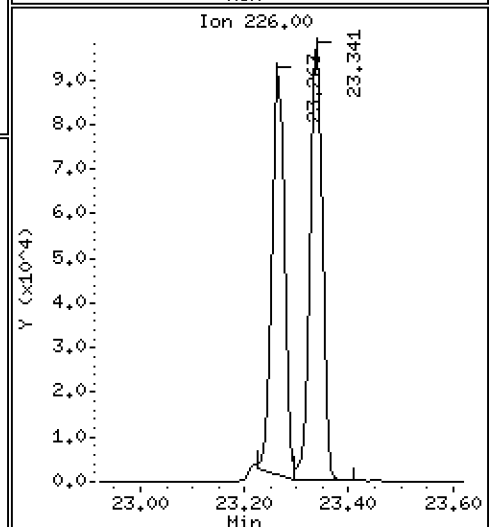
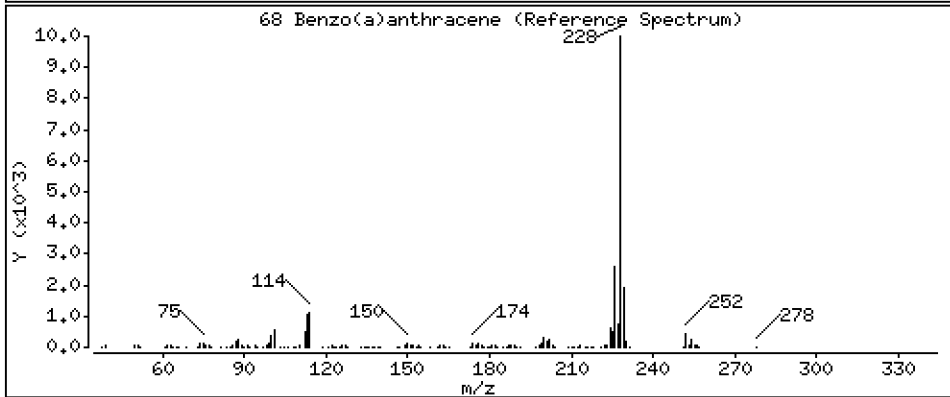
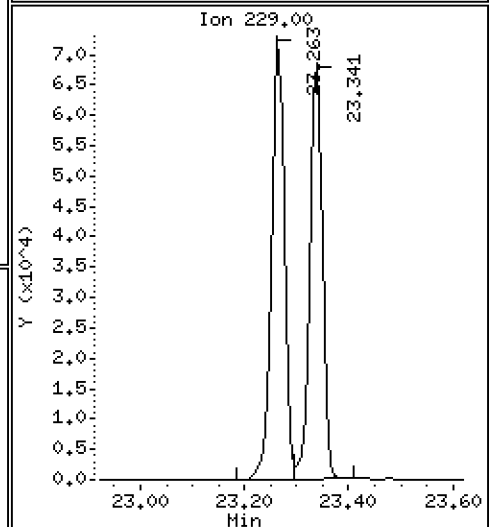
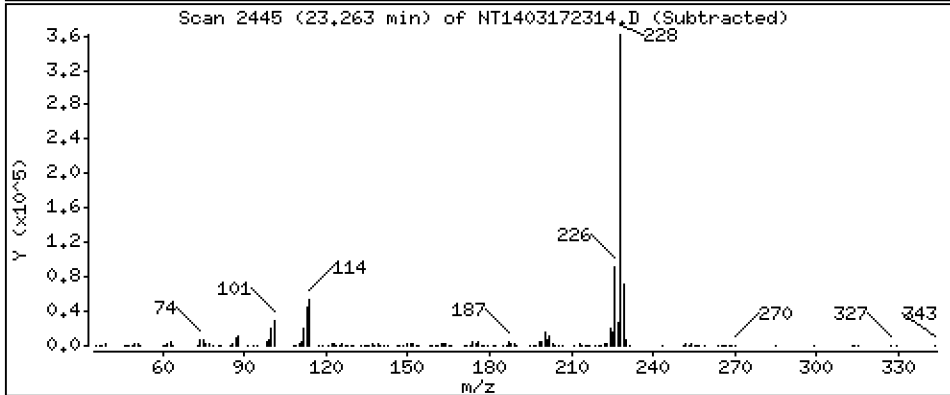
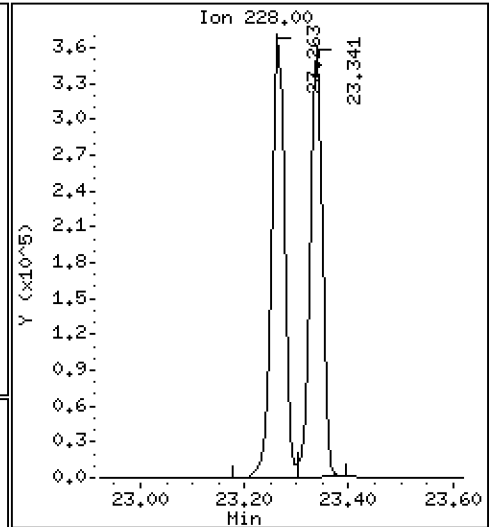
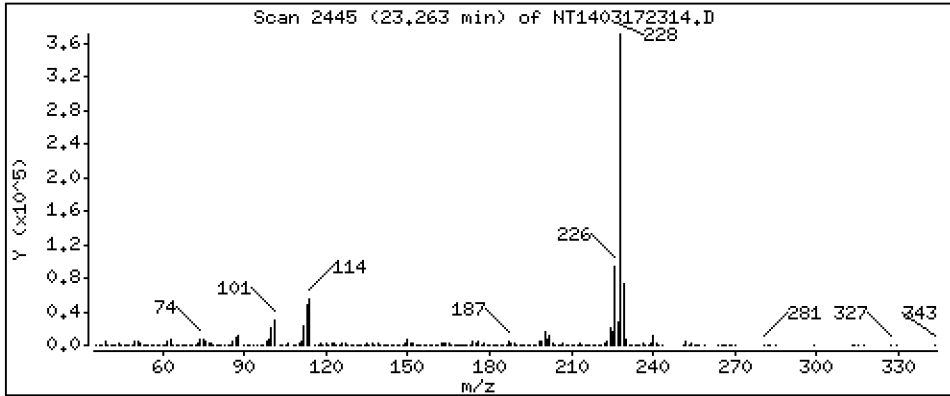
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,627 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

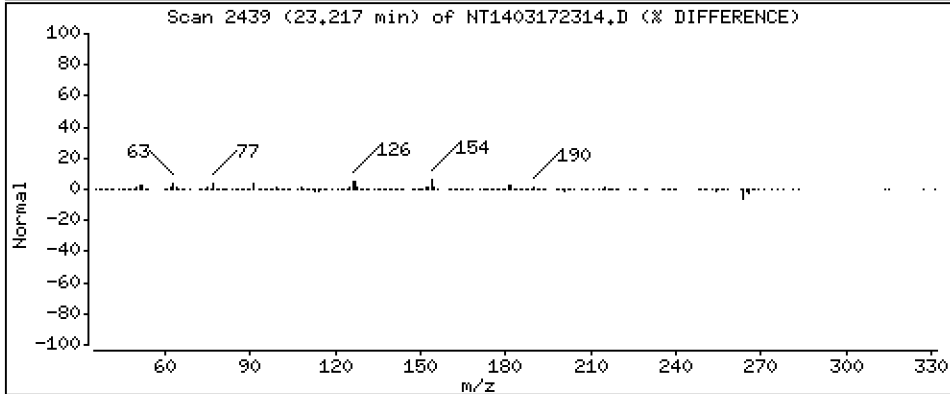
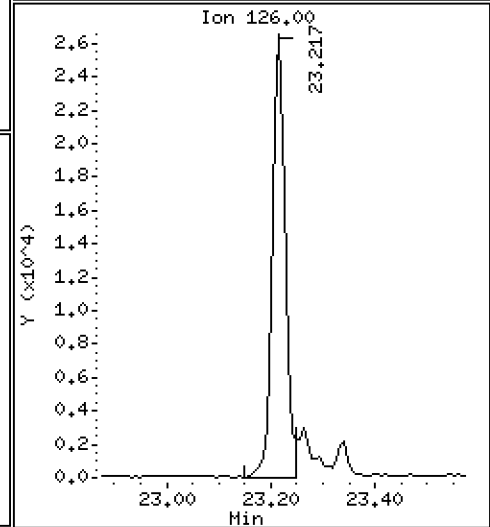
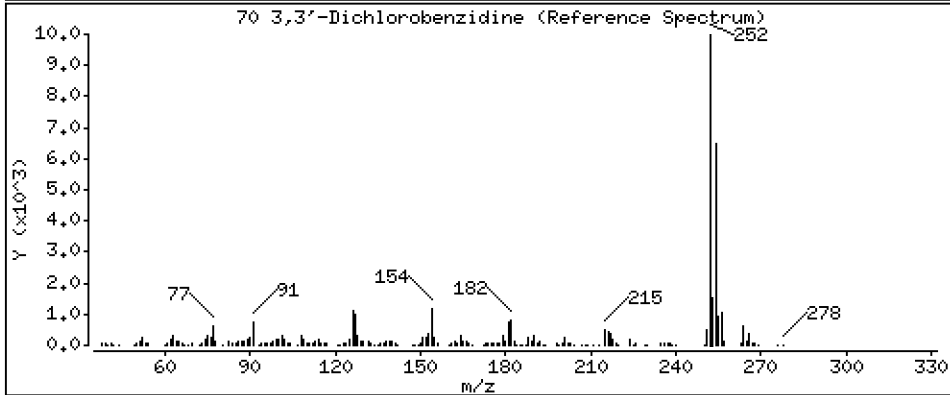
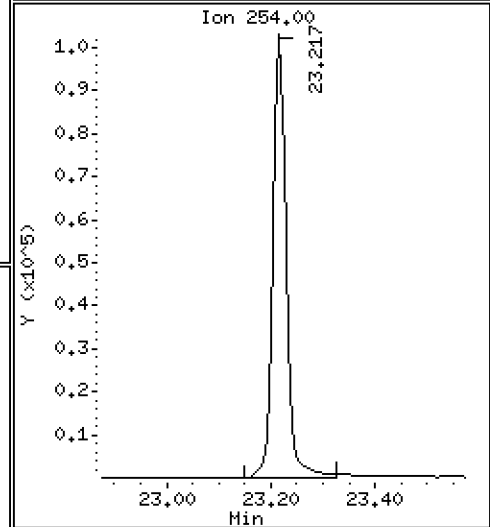
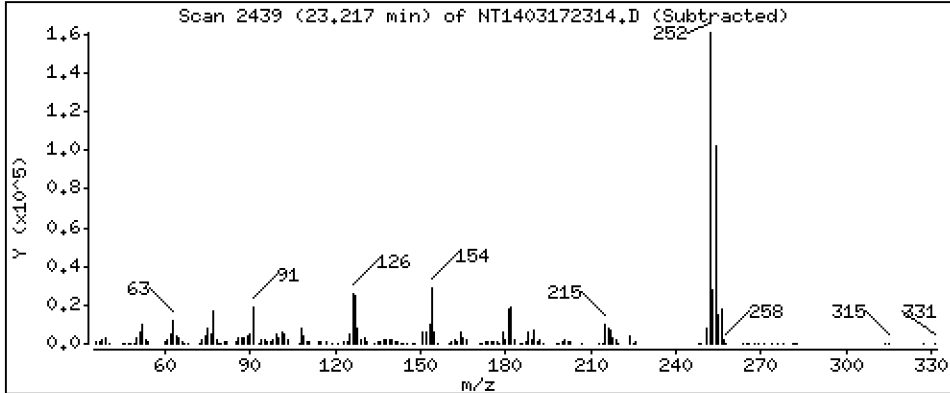
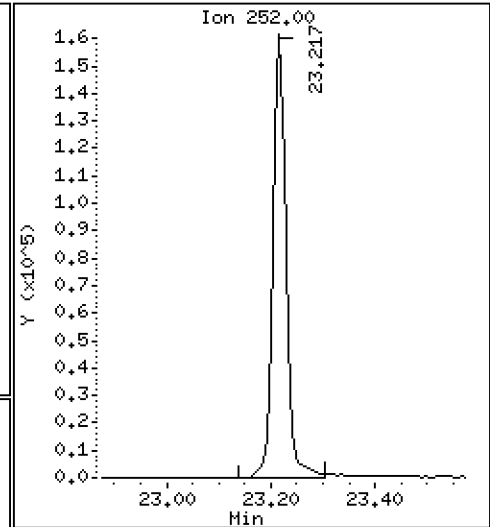
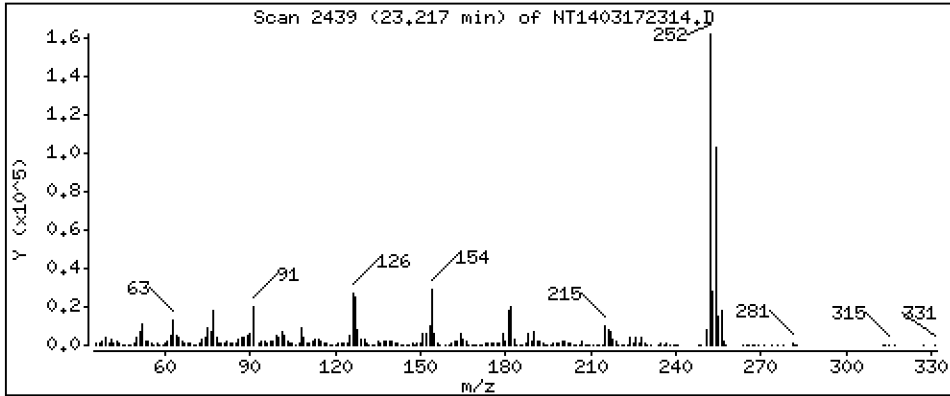
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 6,936 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

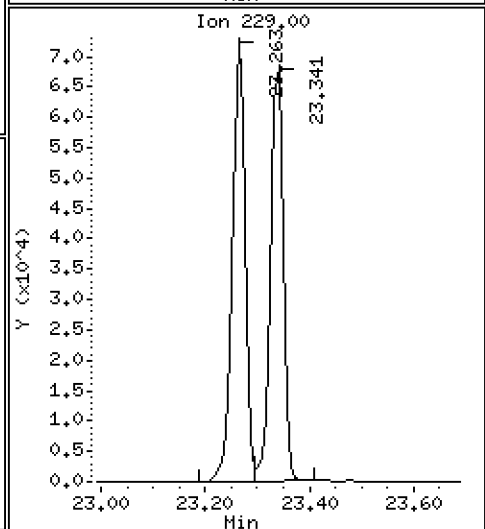
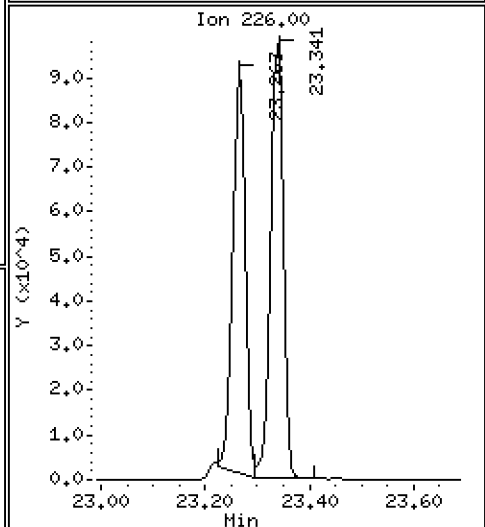
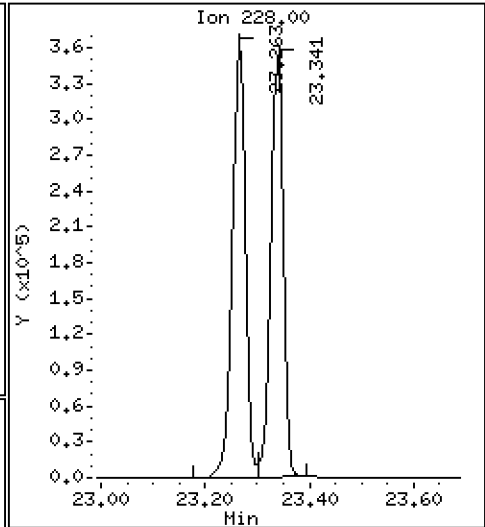
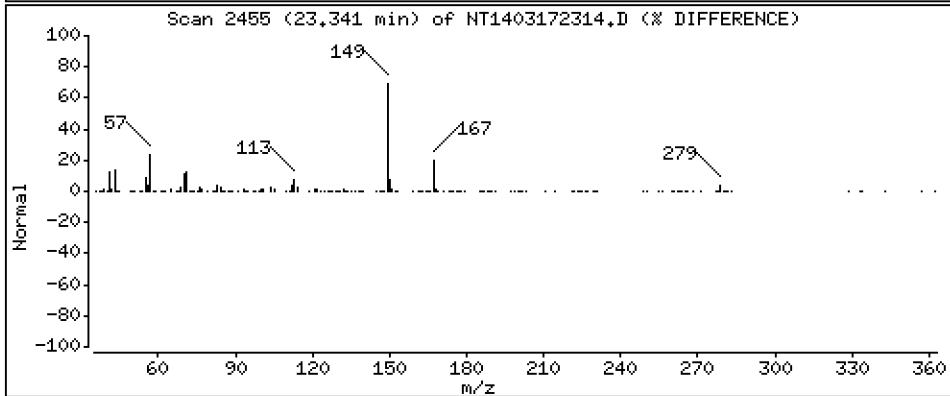
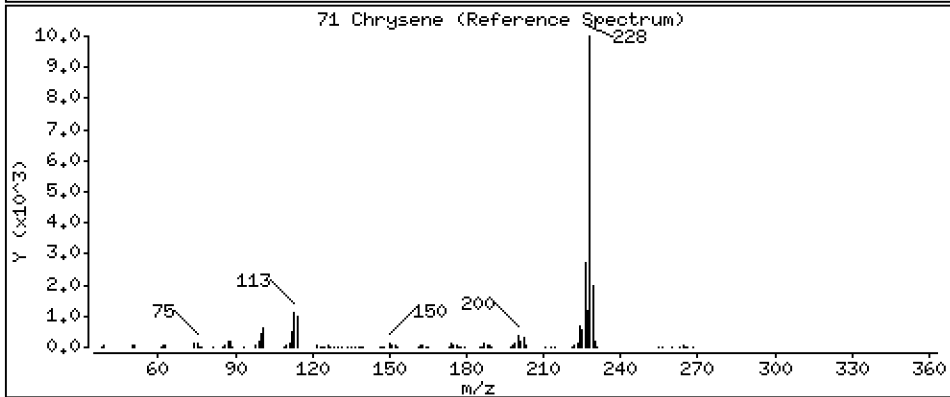
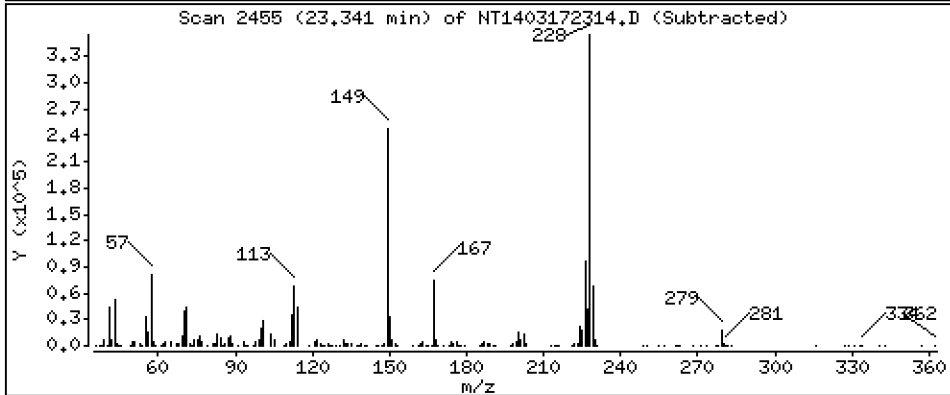
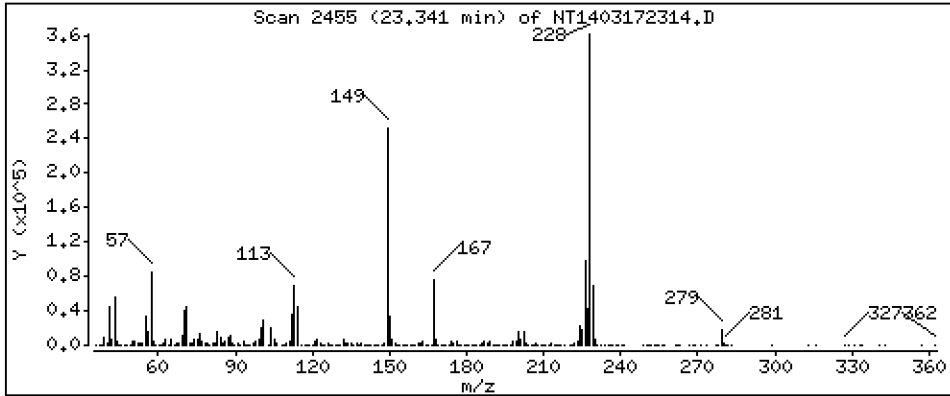
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,642 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

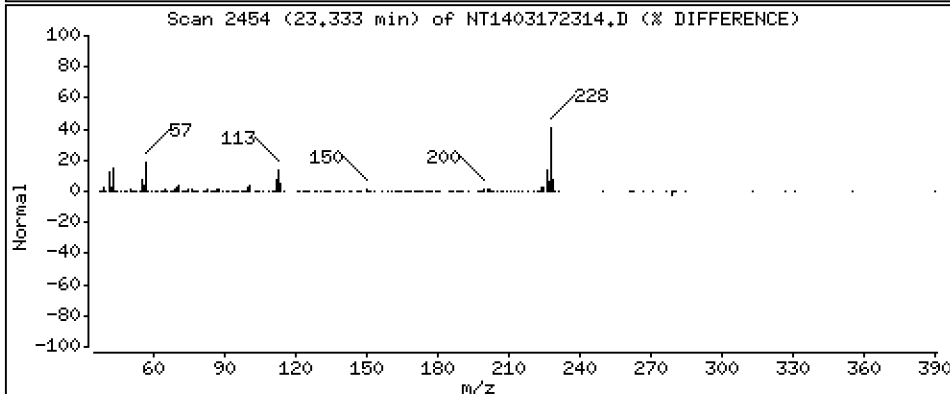
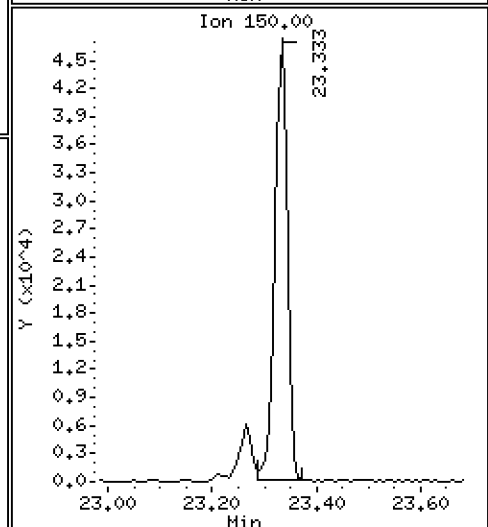
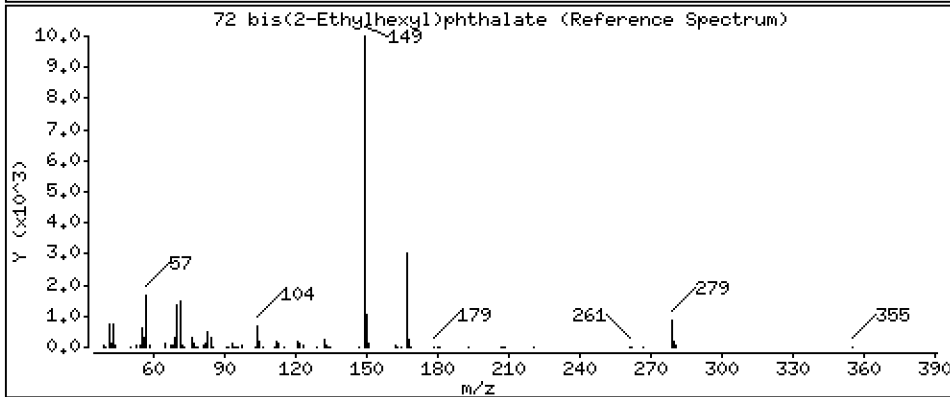
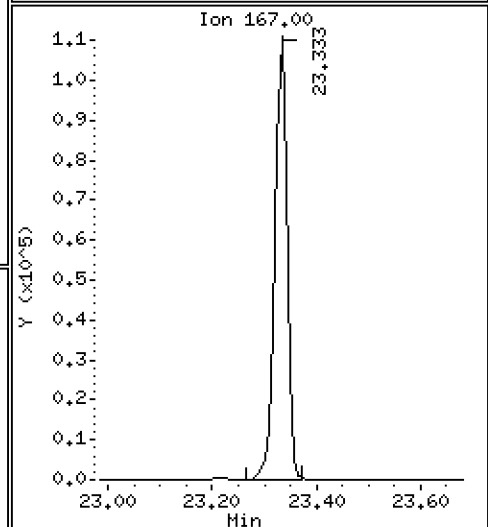
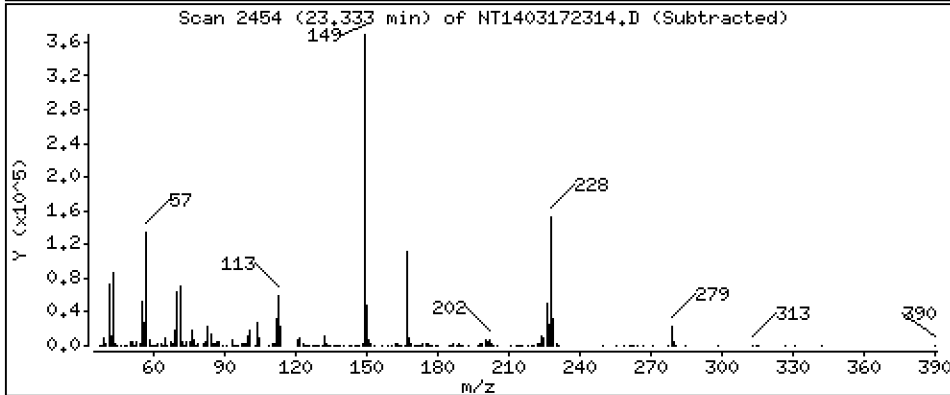
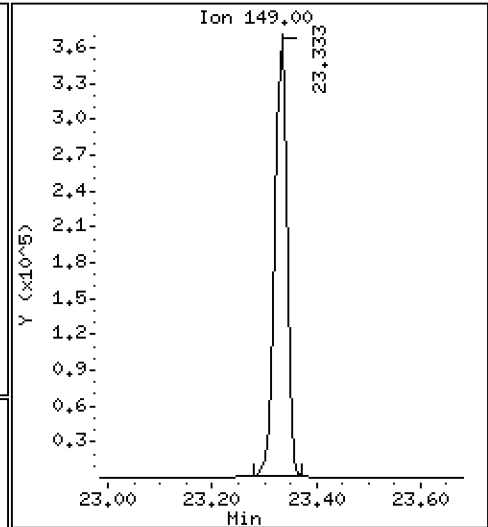
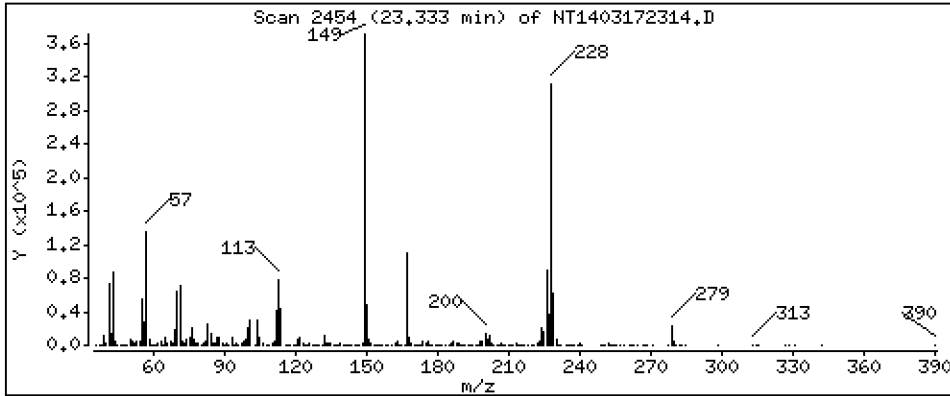
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 6,051 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

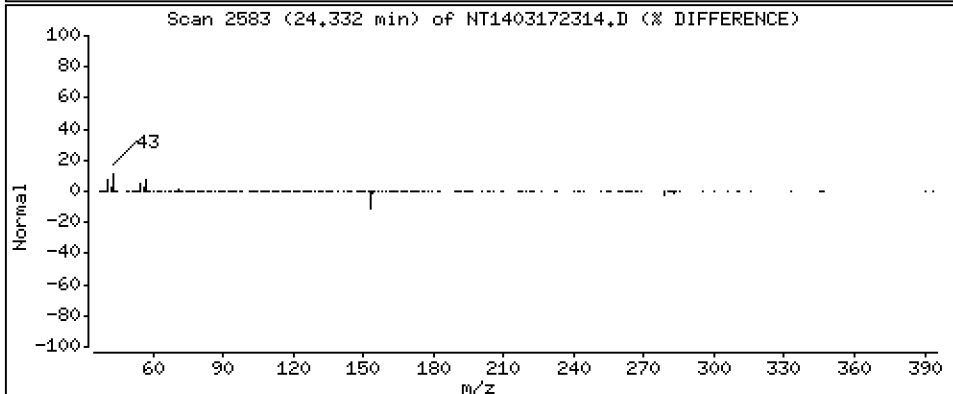
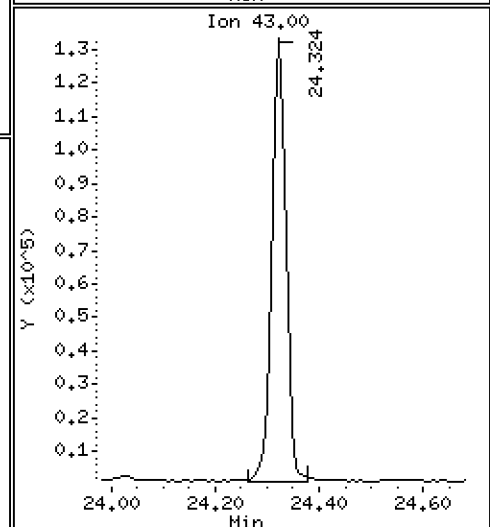
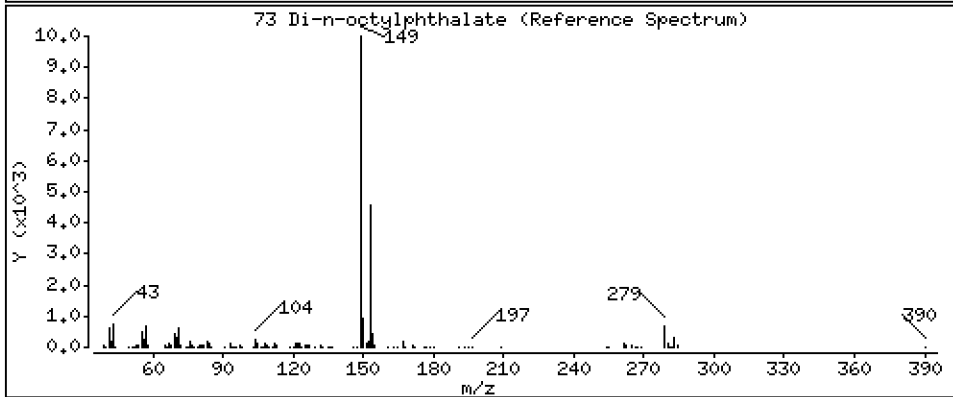
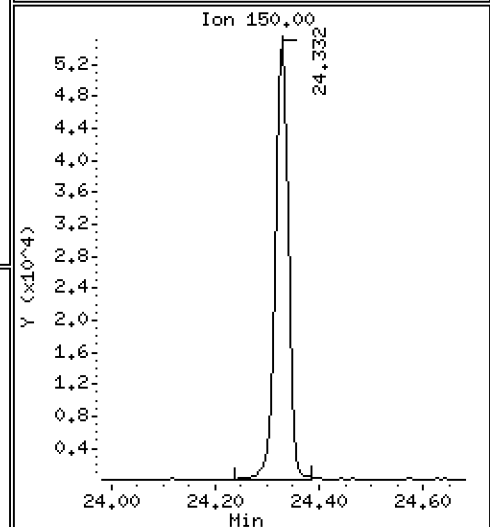
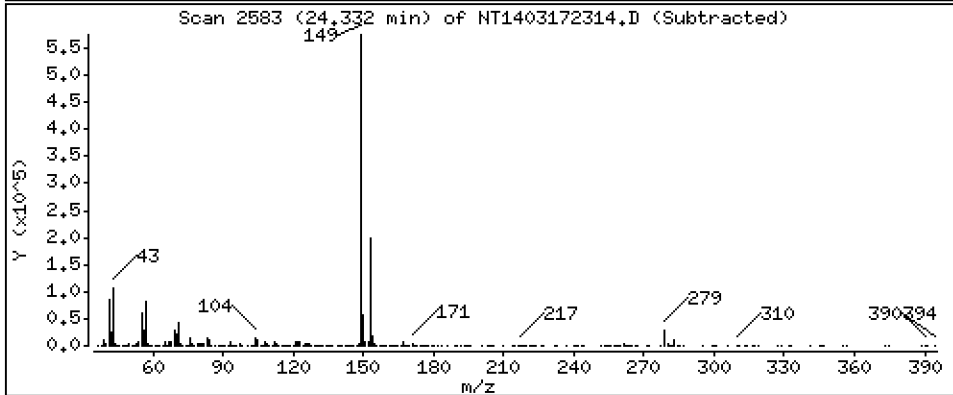
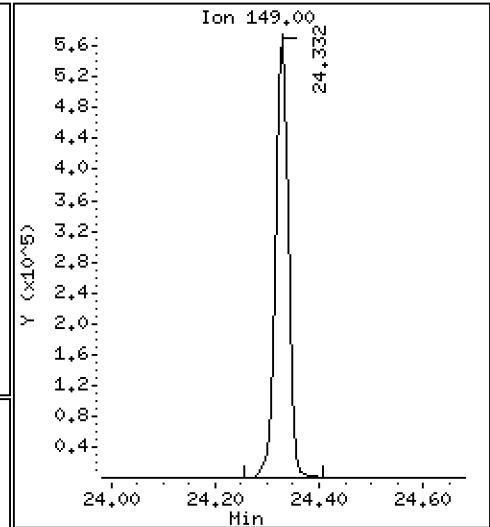
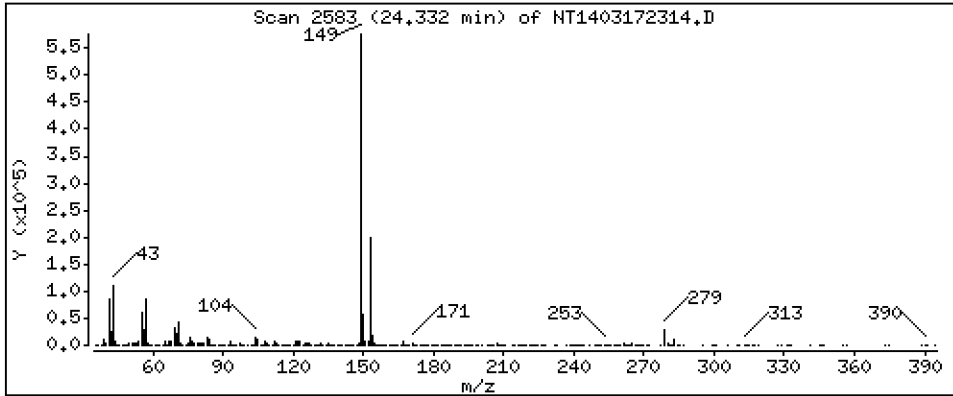
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,102 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

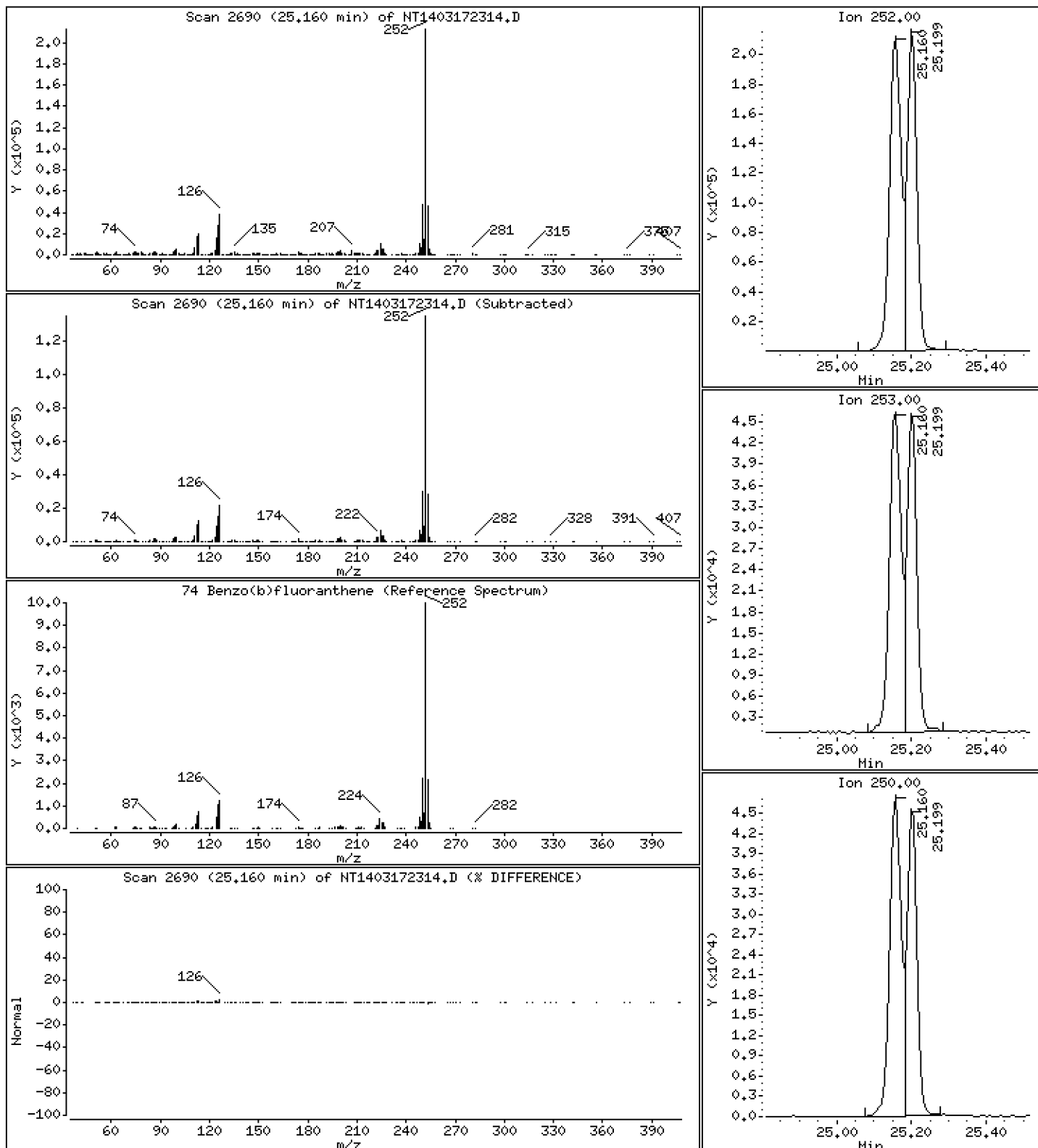
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 5,664 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

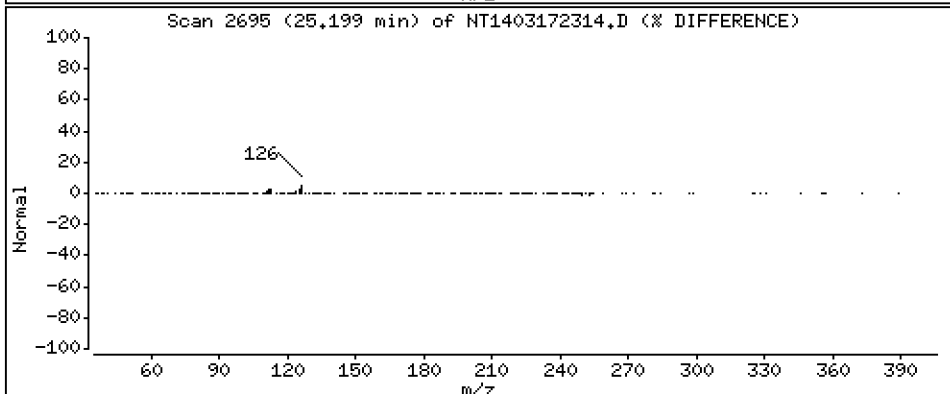
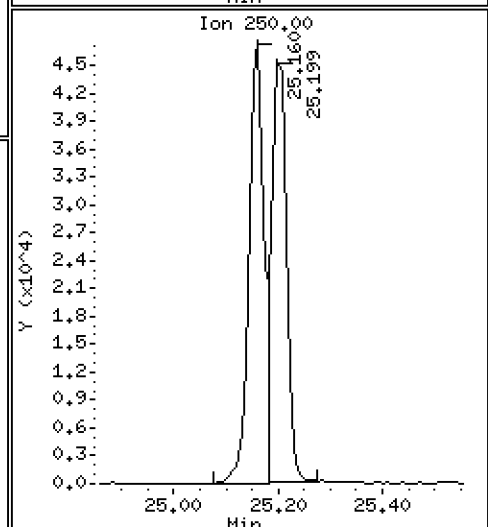
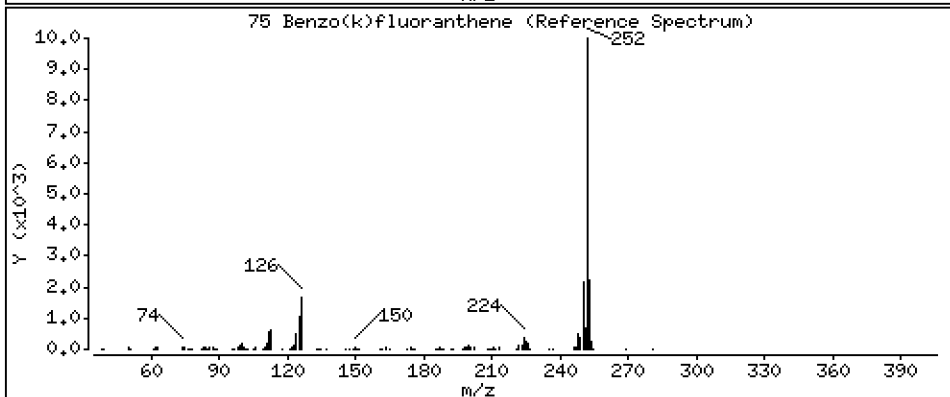
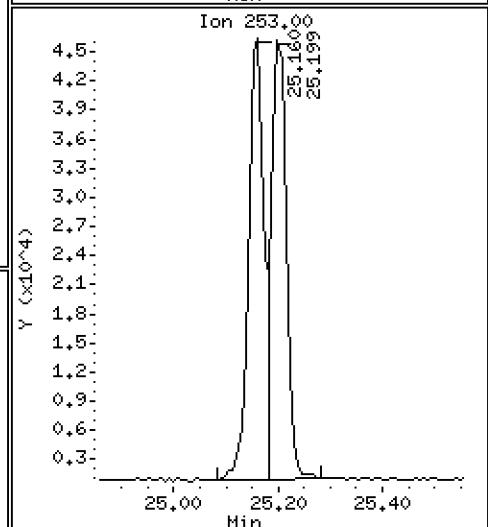
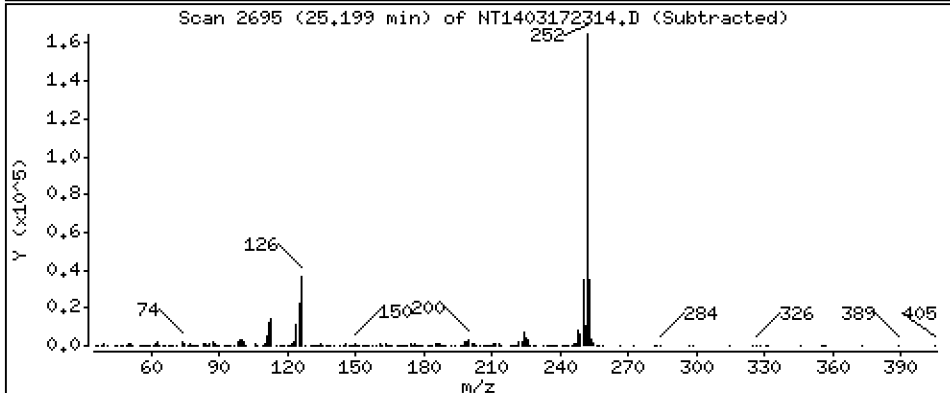
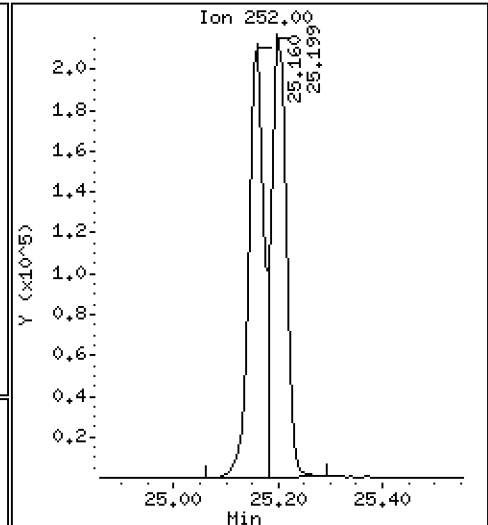
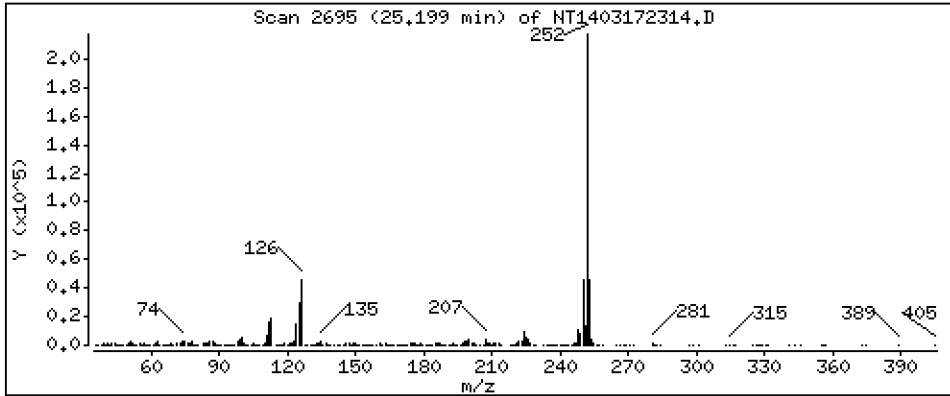
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,001 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

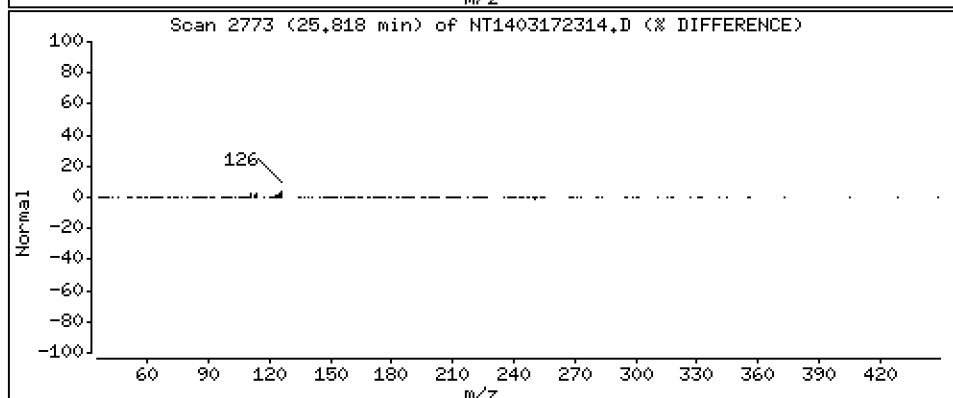
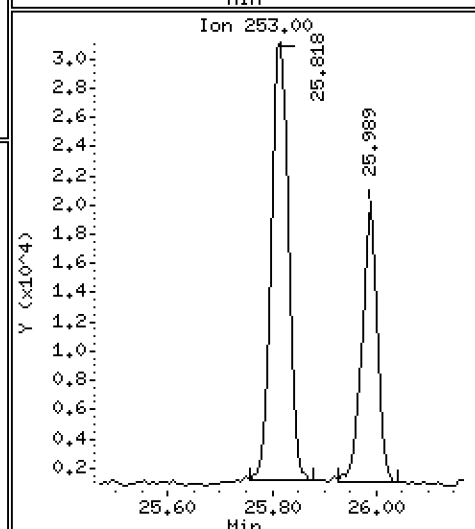
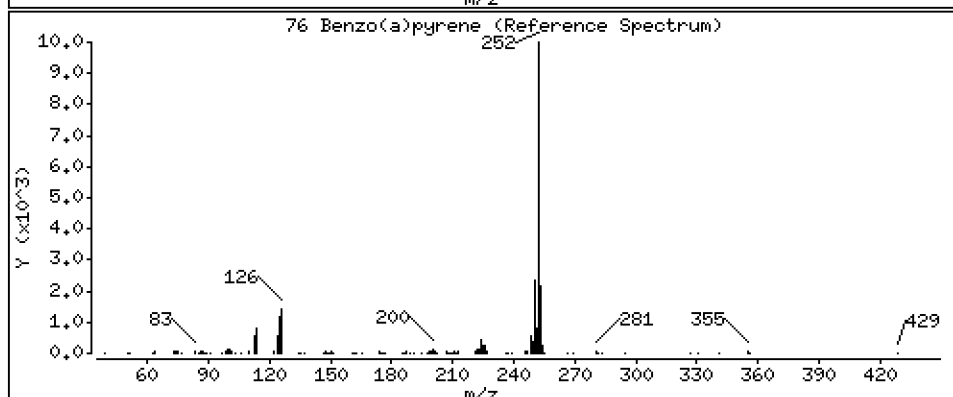
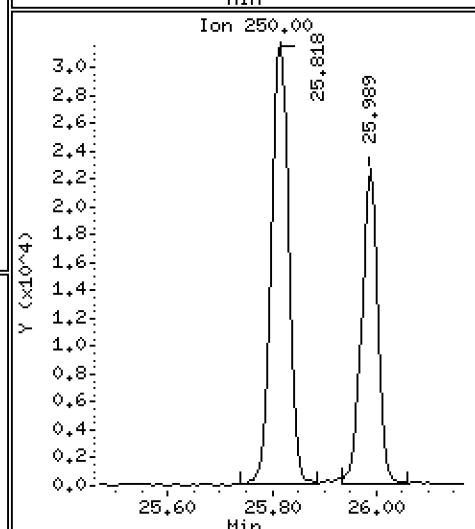
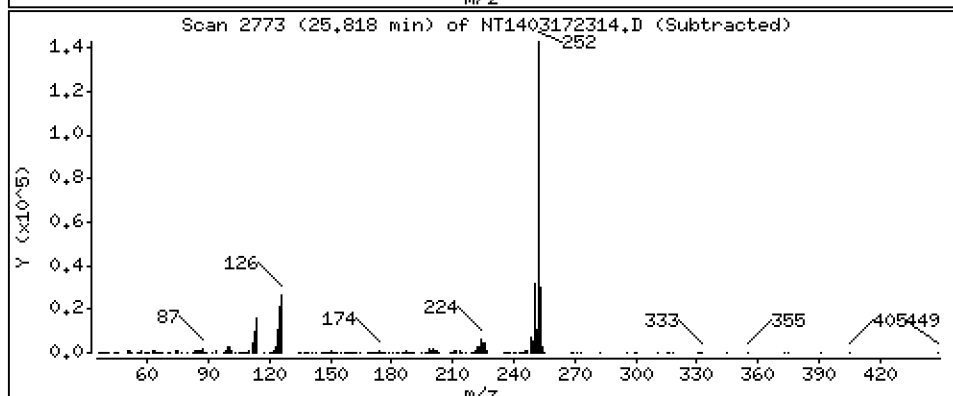
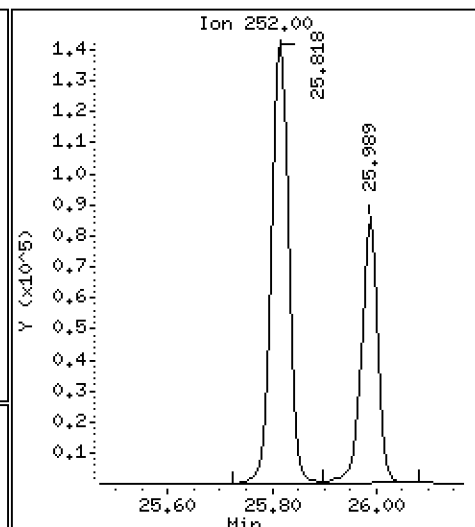
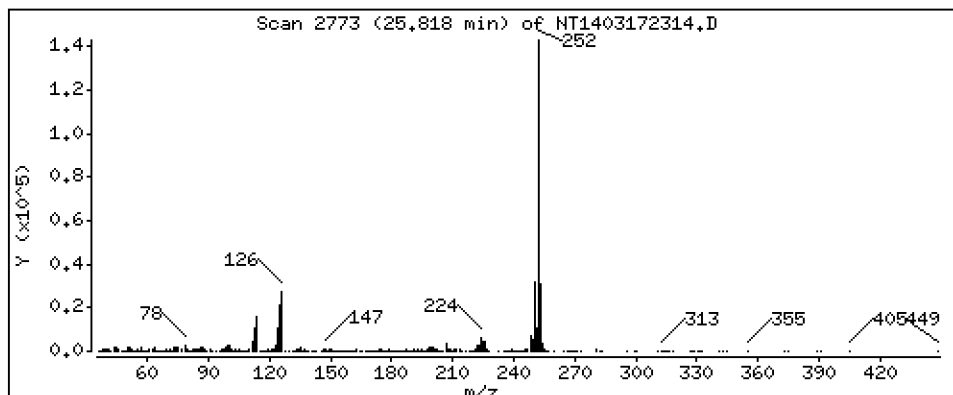
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,487 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

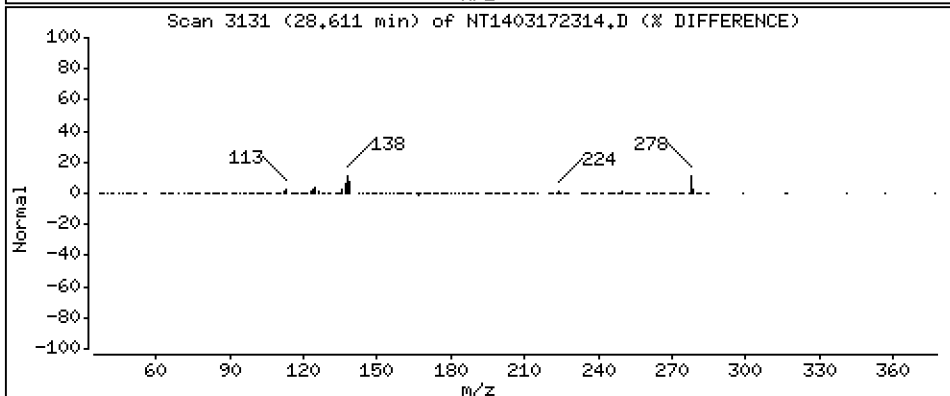
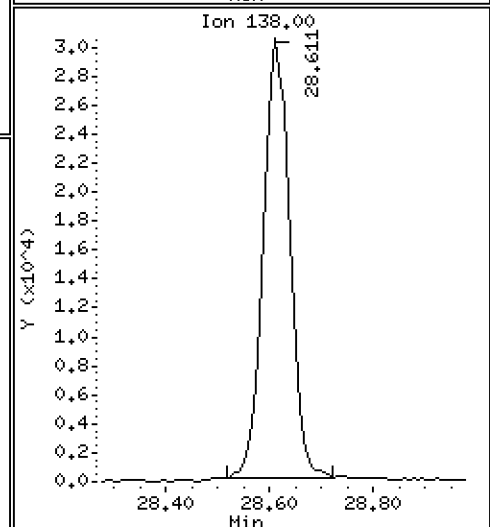
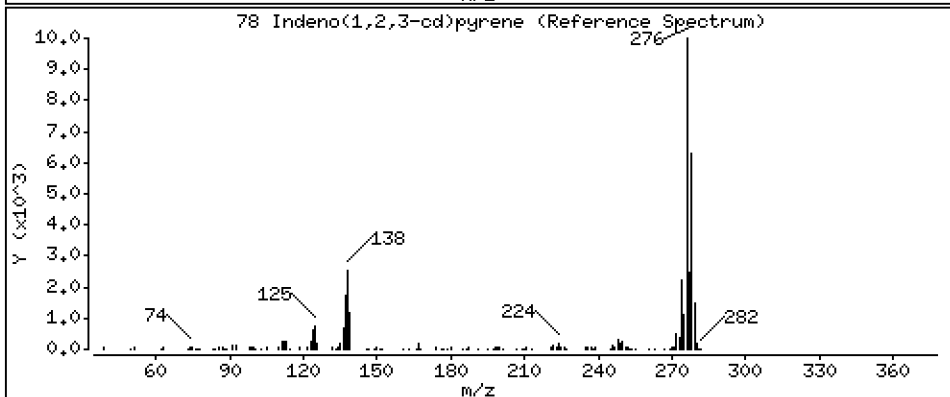
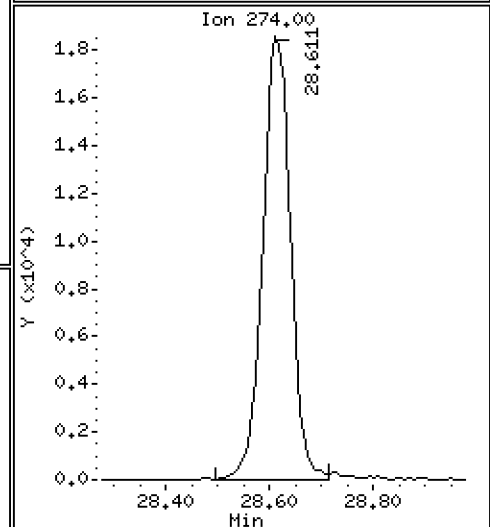
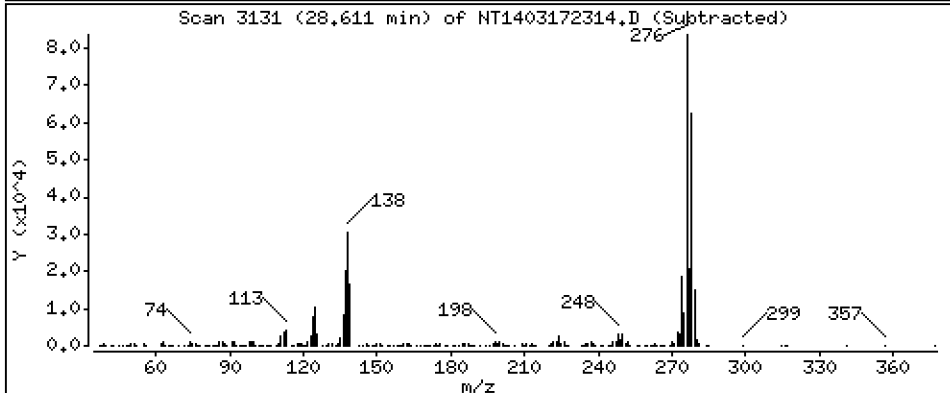
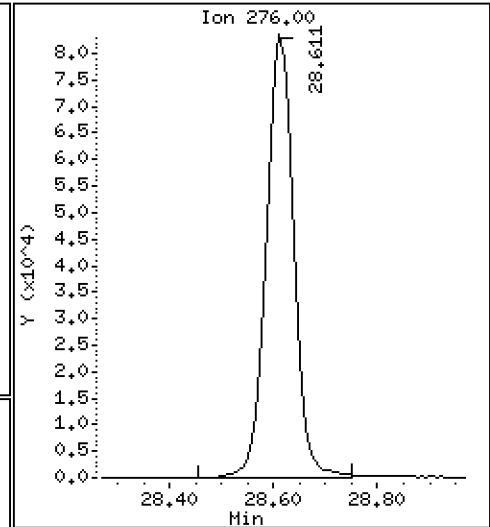
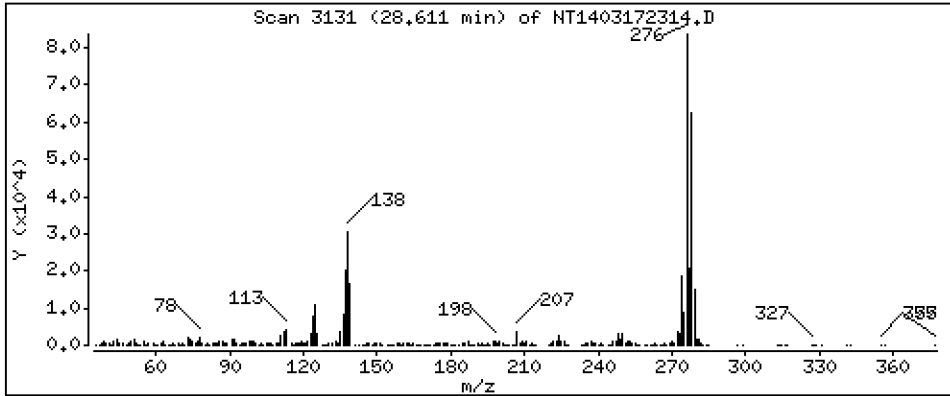
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 3,966 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

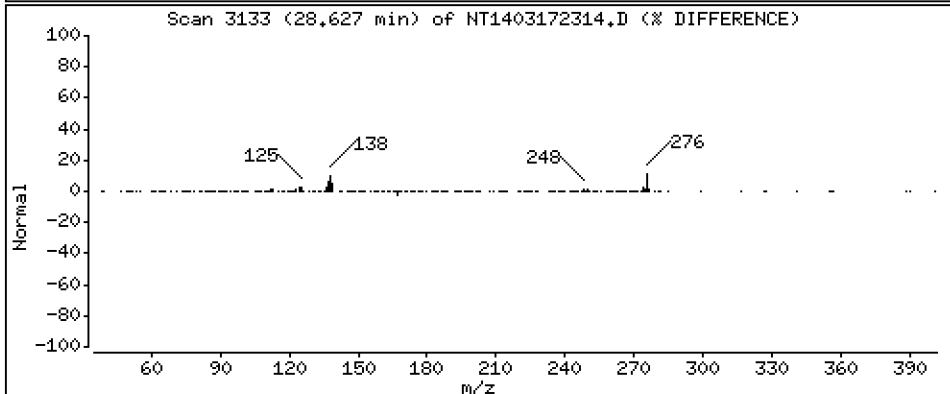
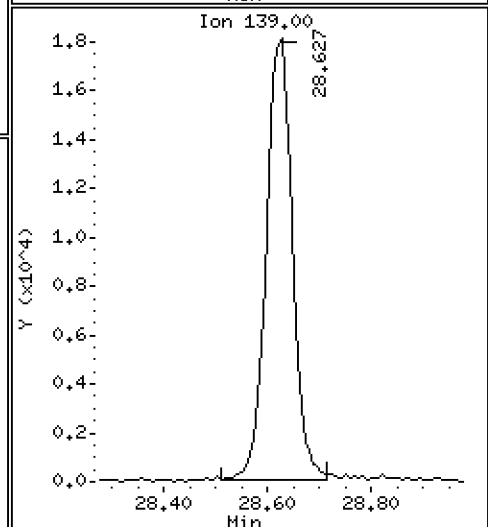
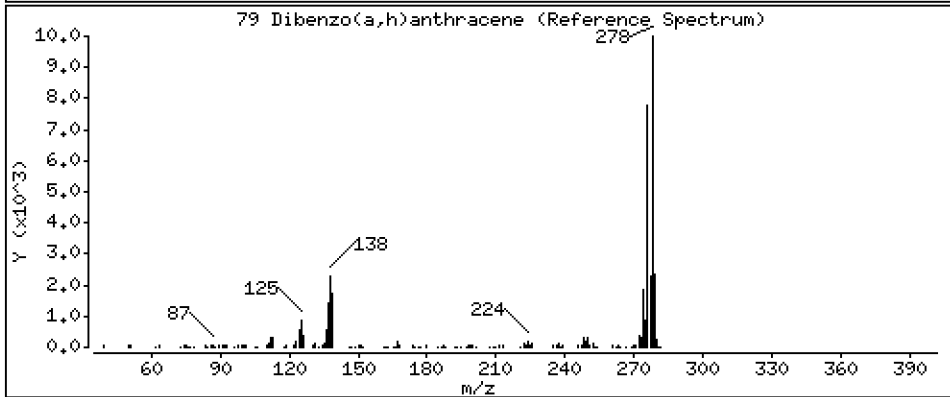
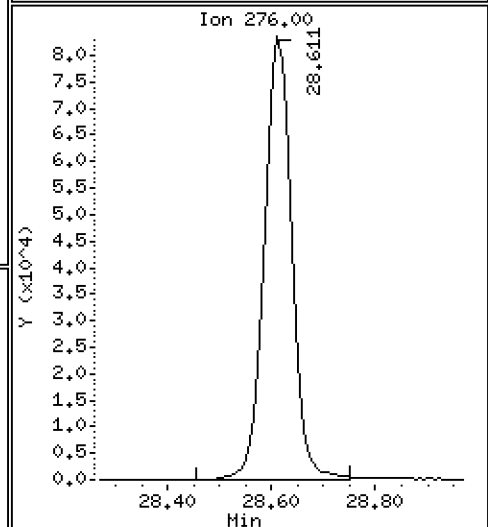
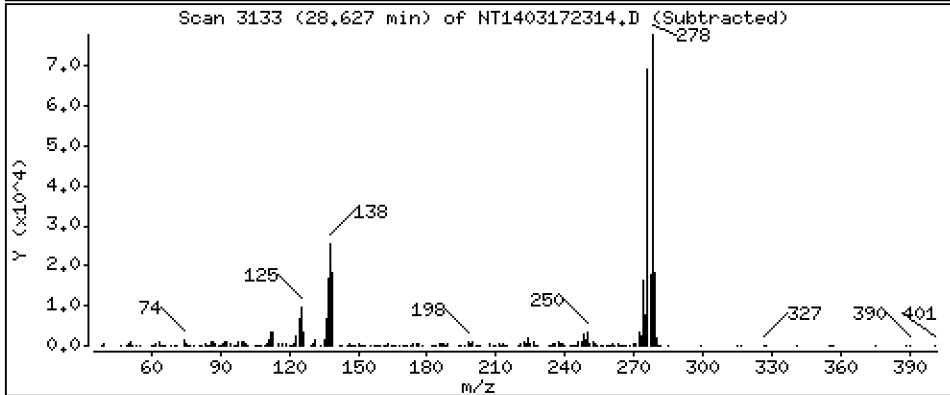
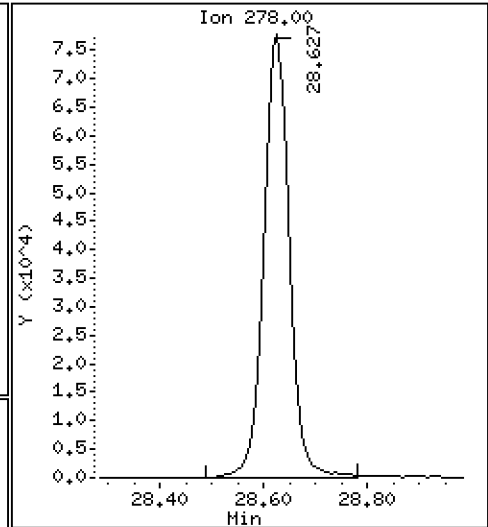
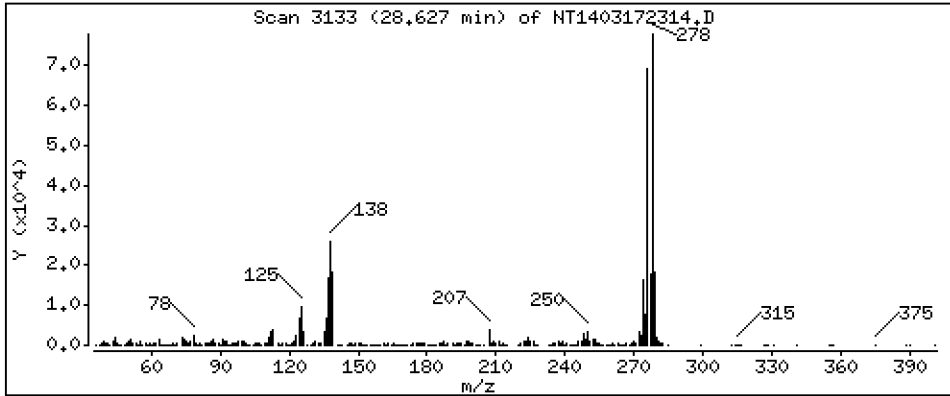
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,061 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

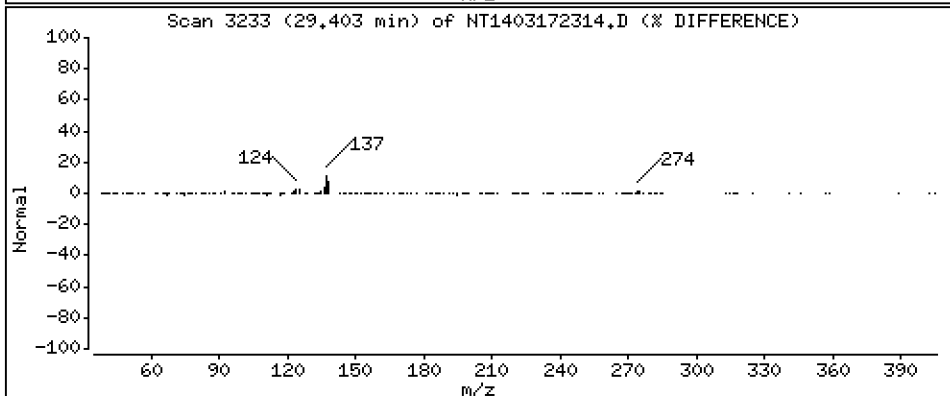
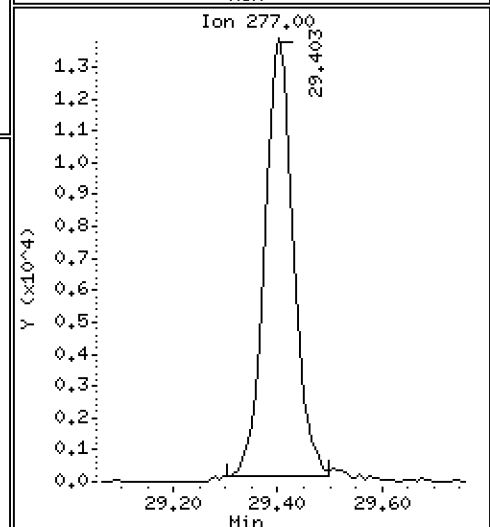
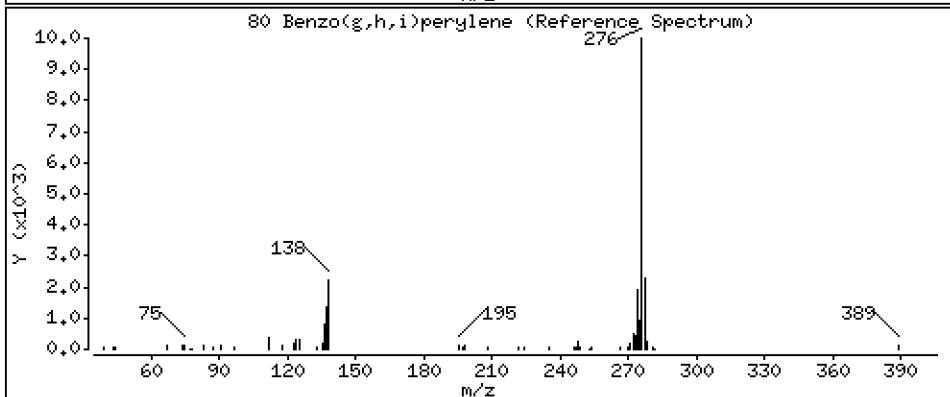
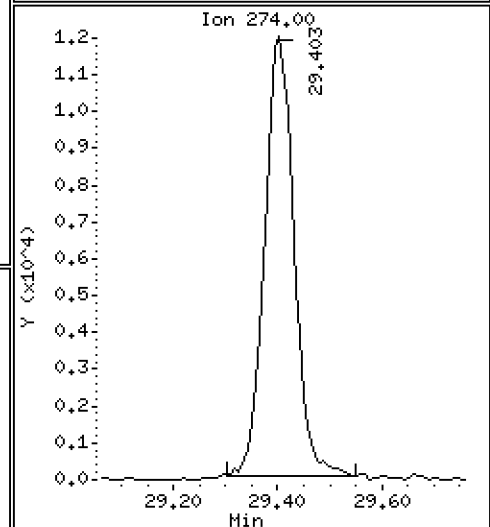
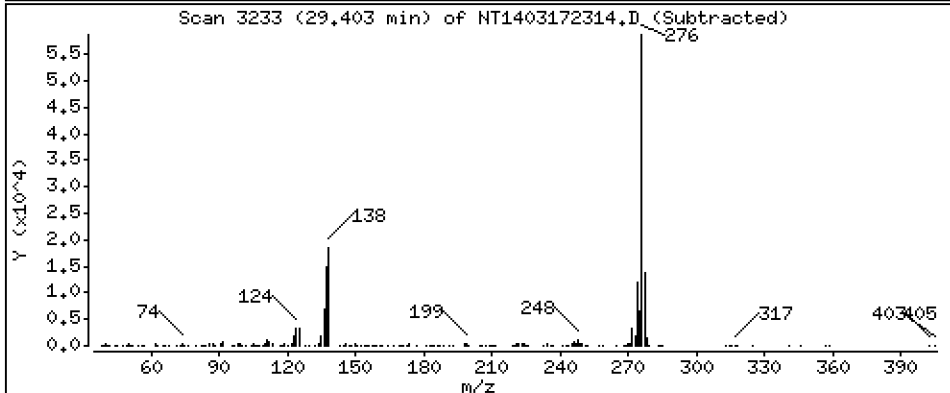
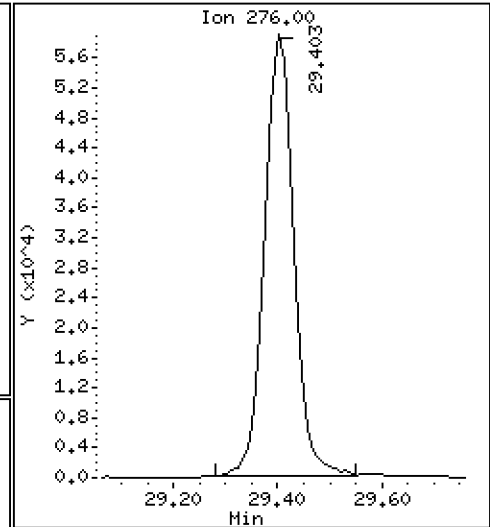
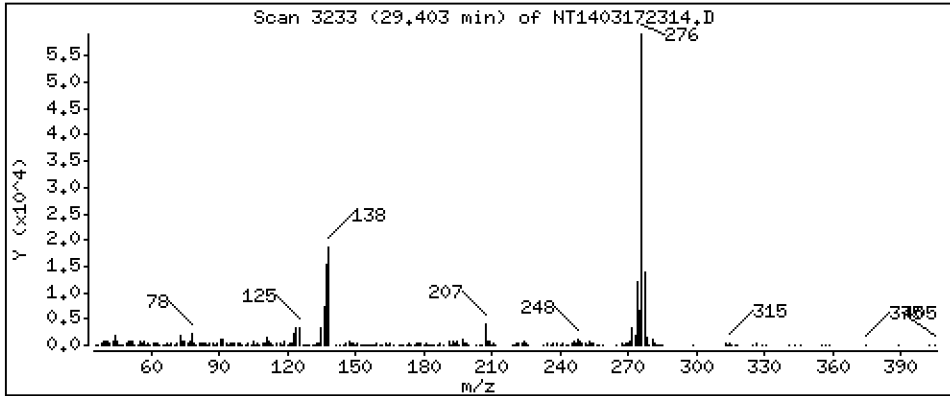
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 3,612 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

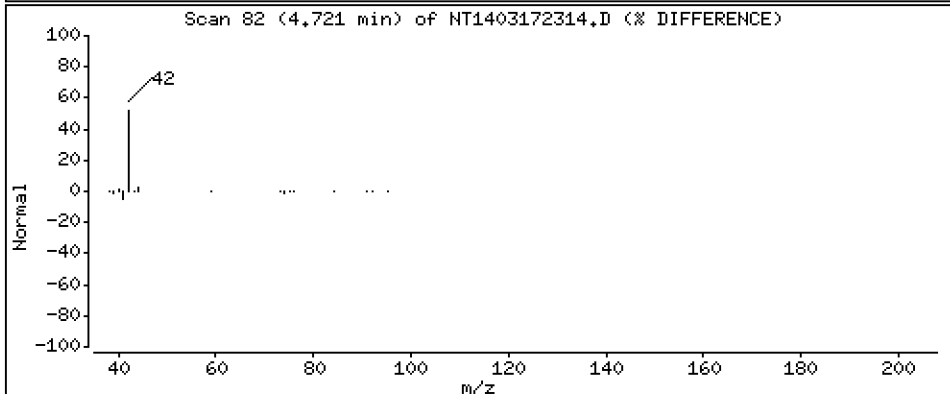
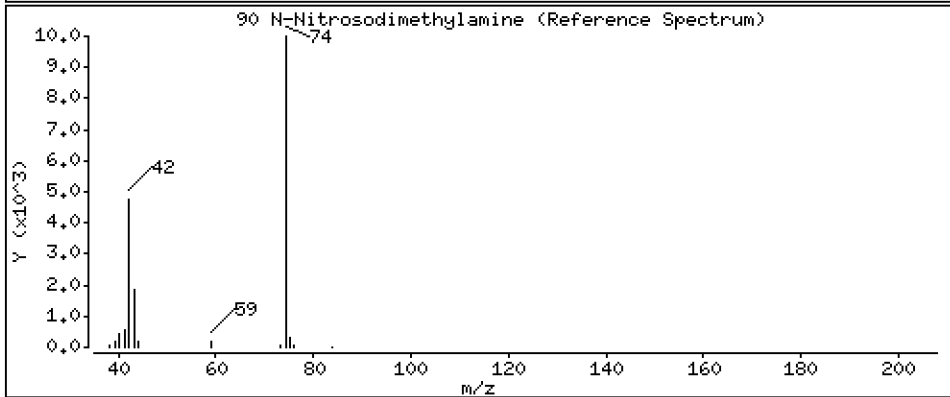
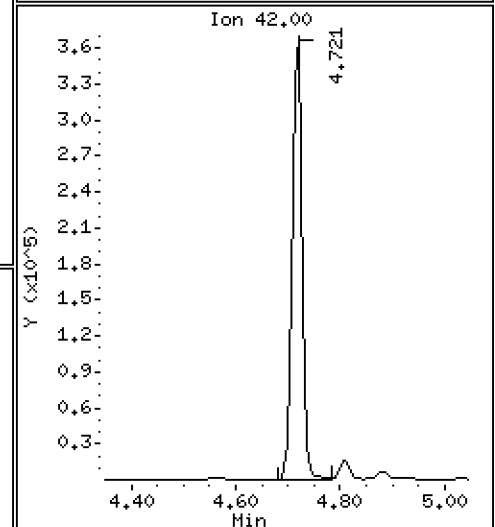
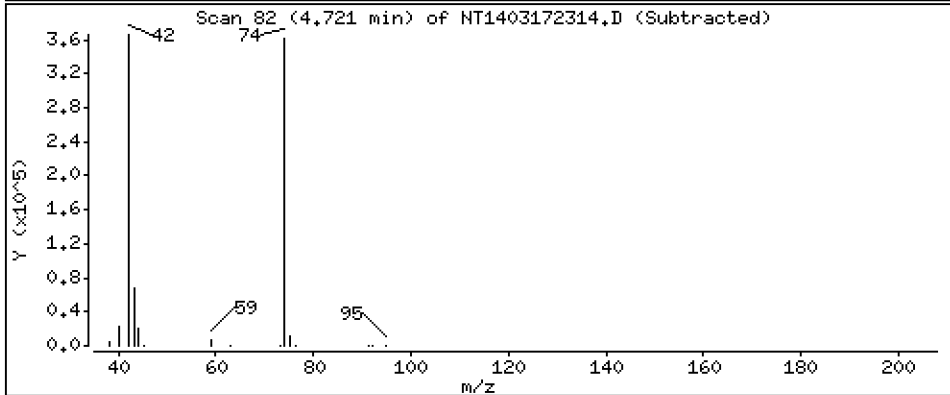
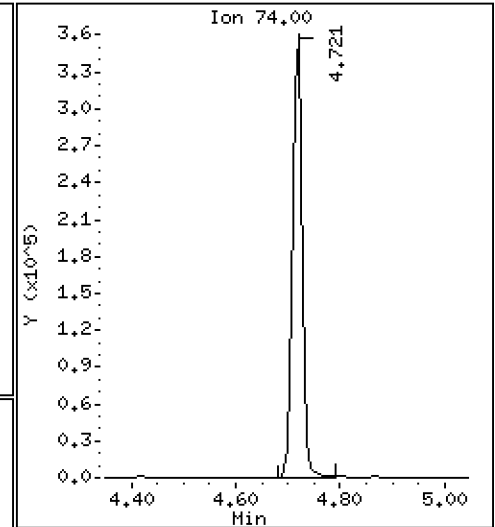
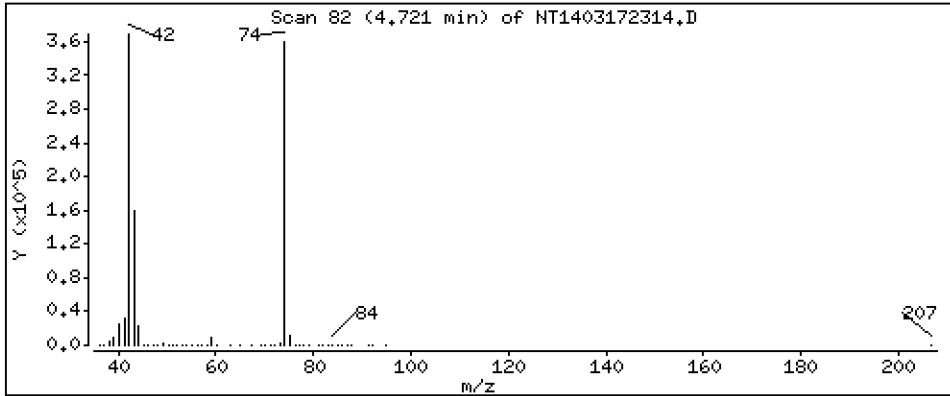
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 10,37 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

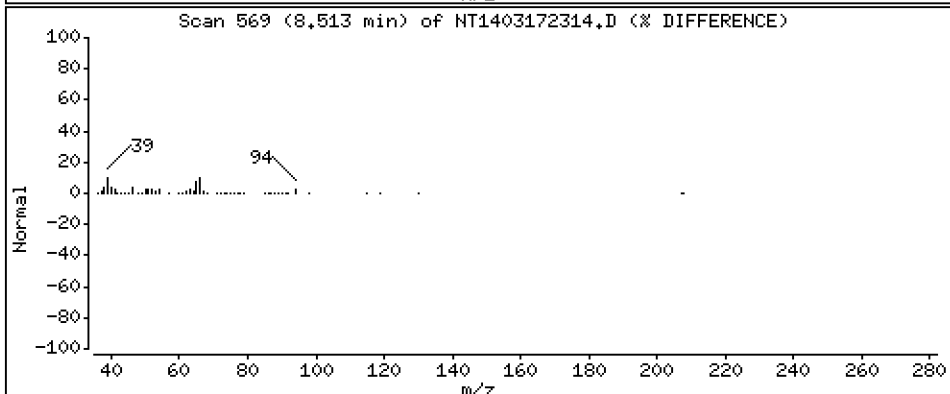
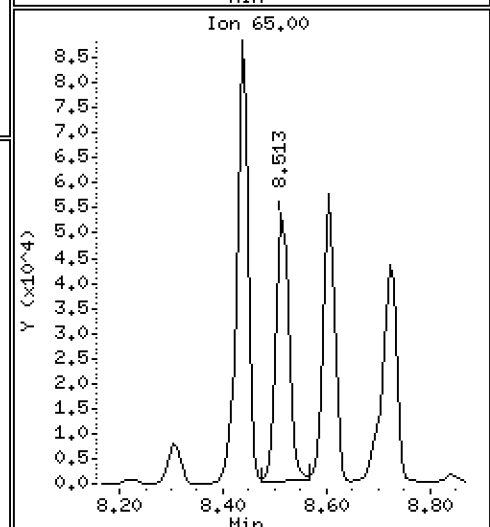
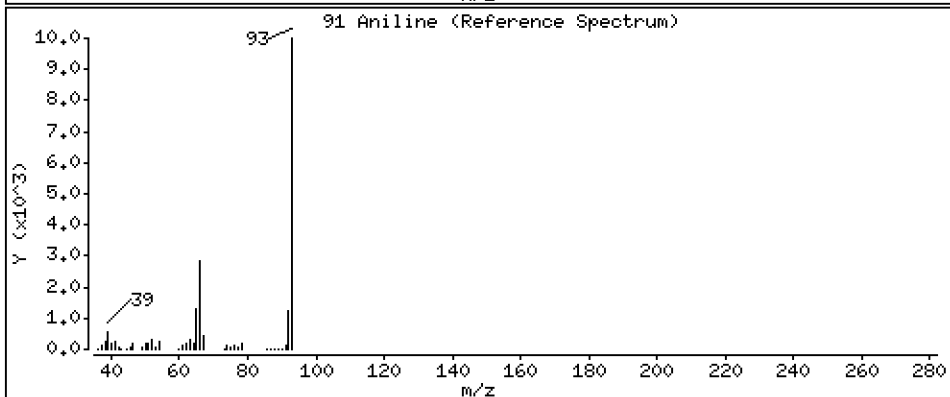
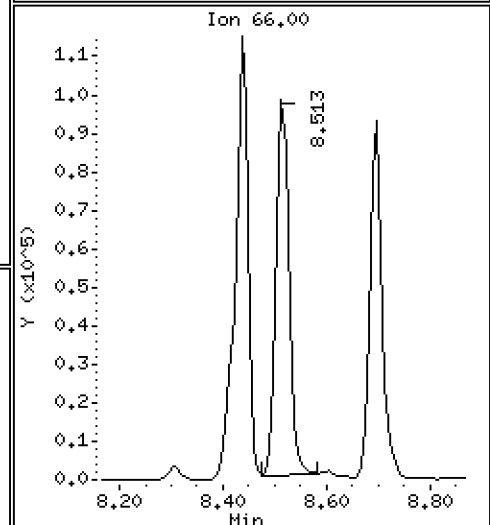
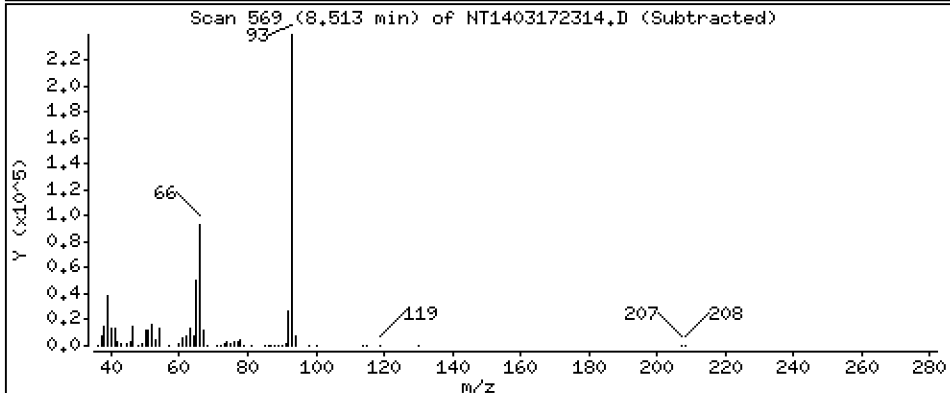
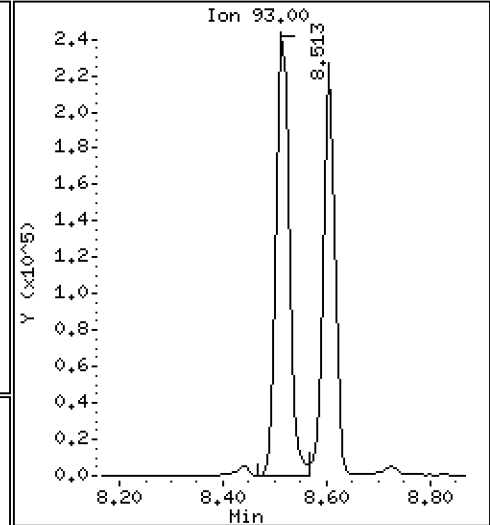
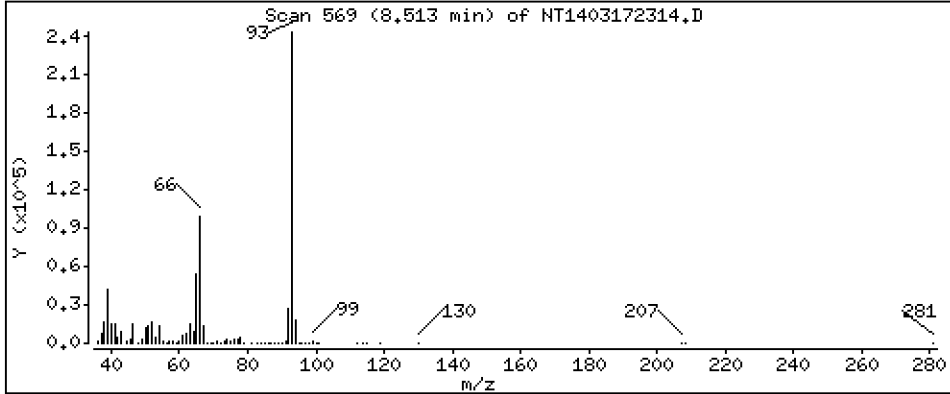
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 3,937 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

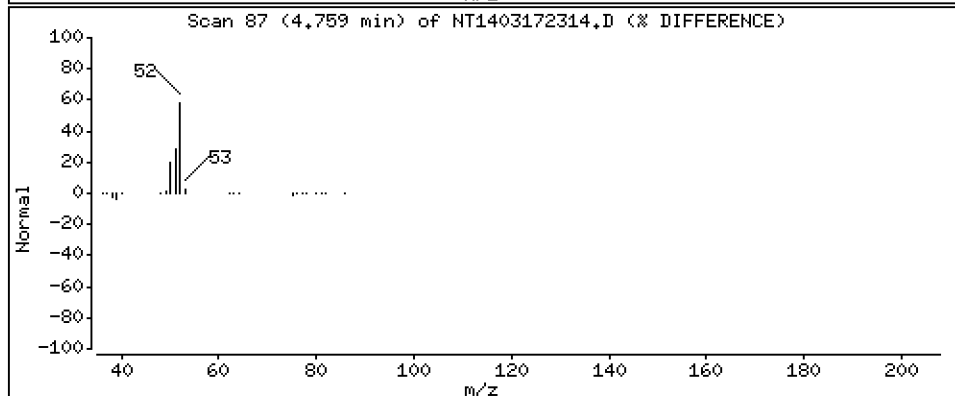
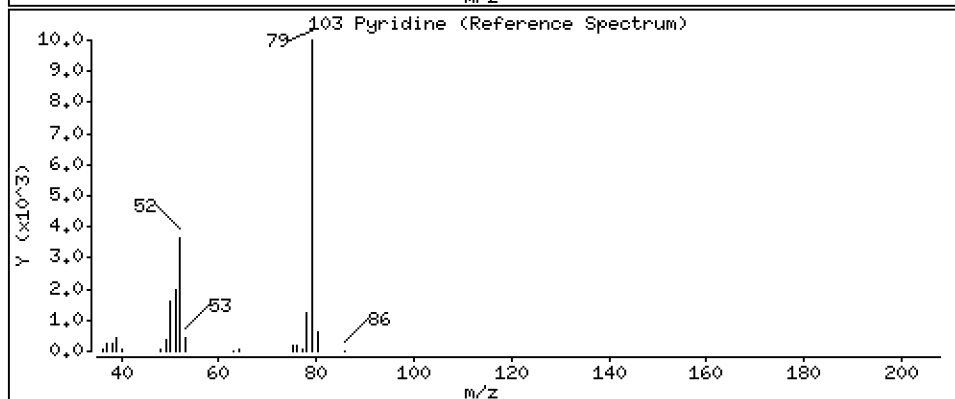
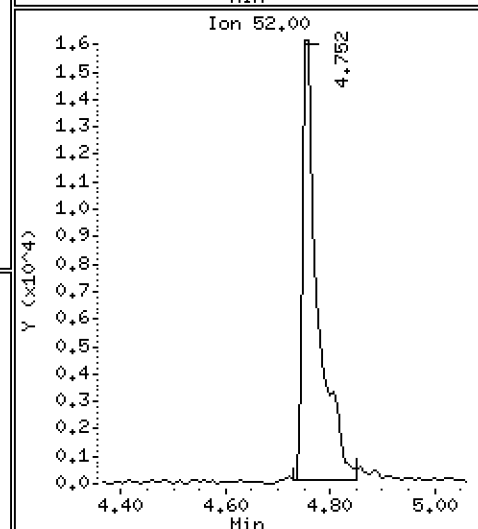
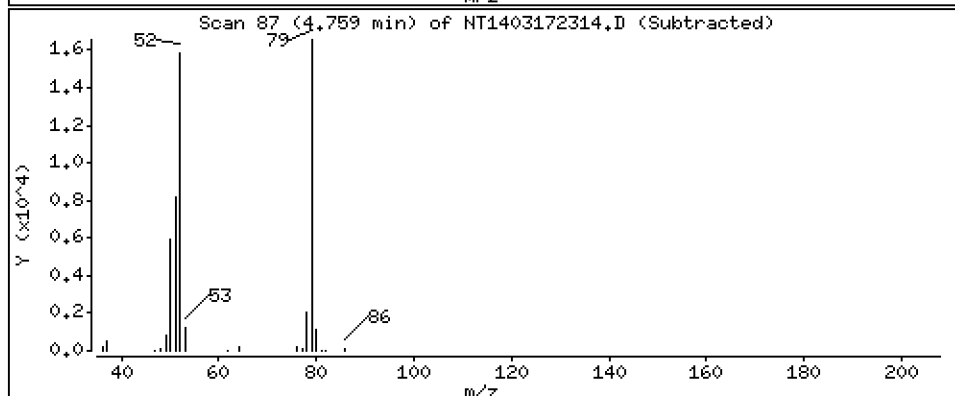
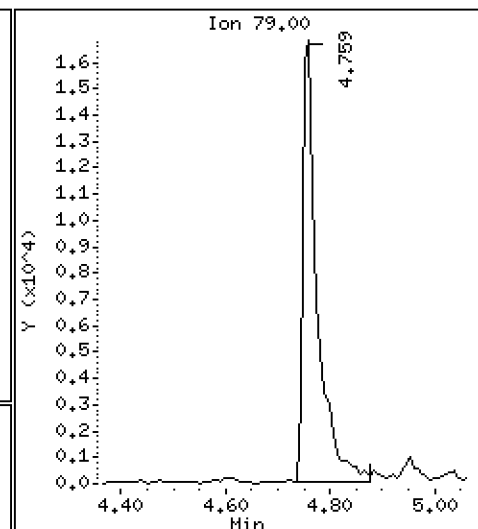
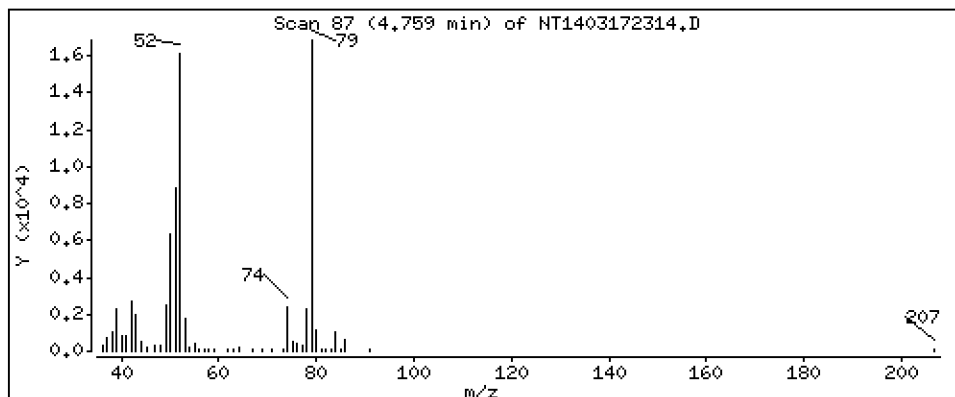
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,2330 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

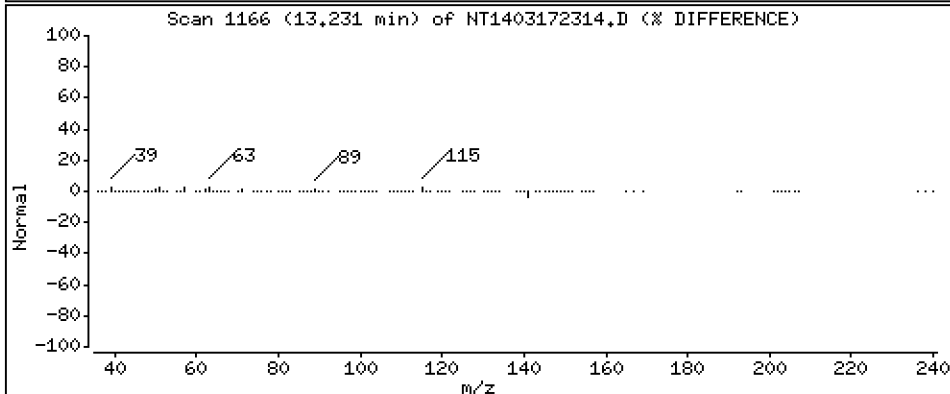
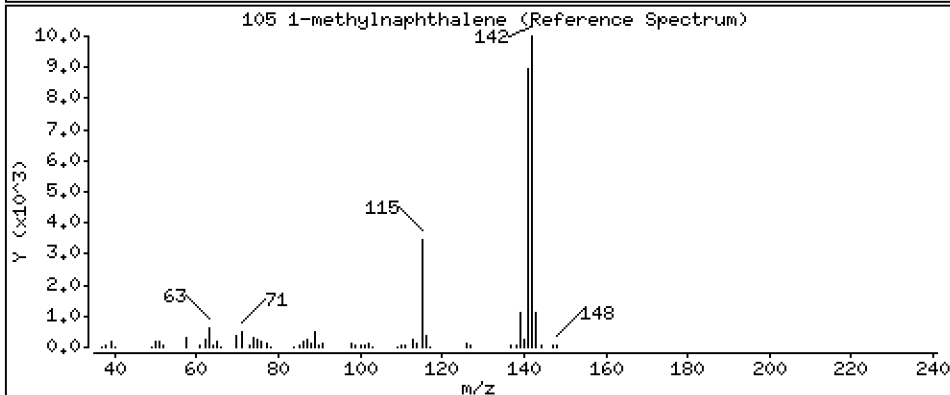
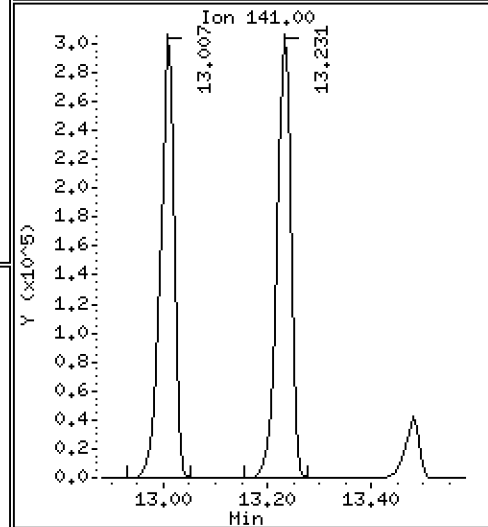
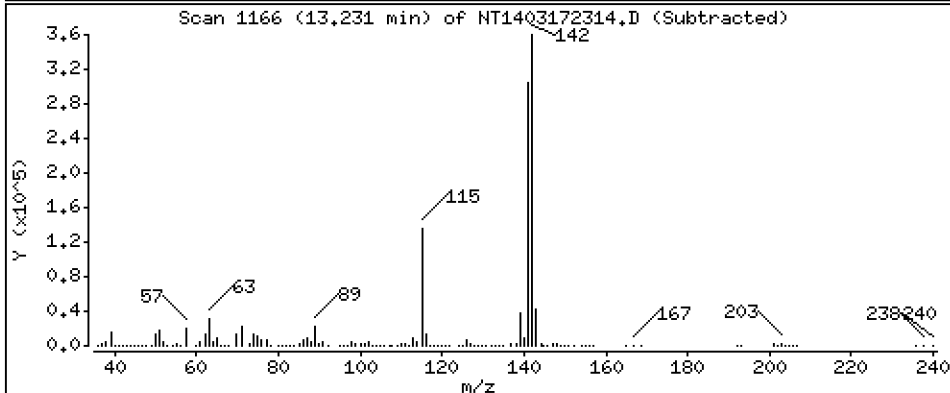
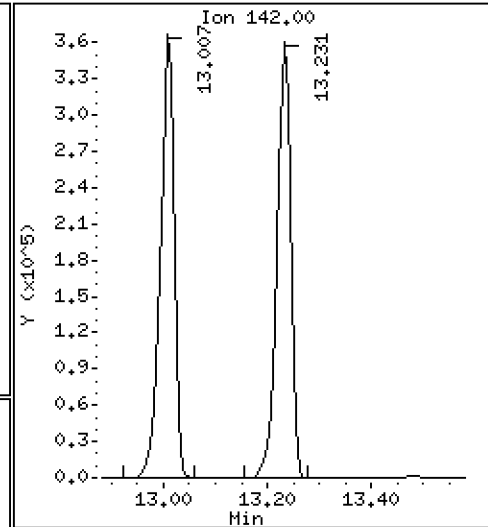
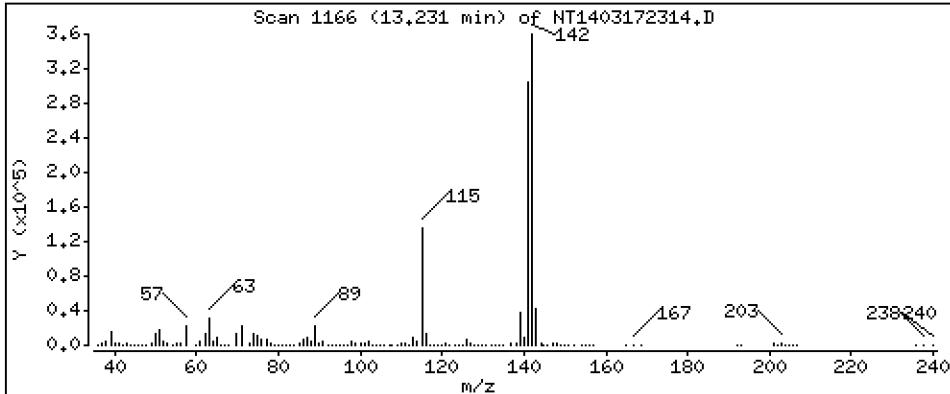
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,463 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

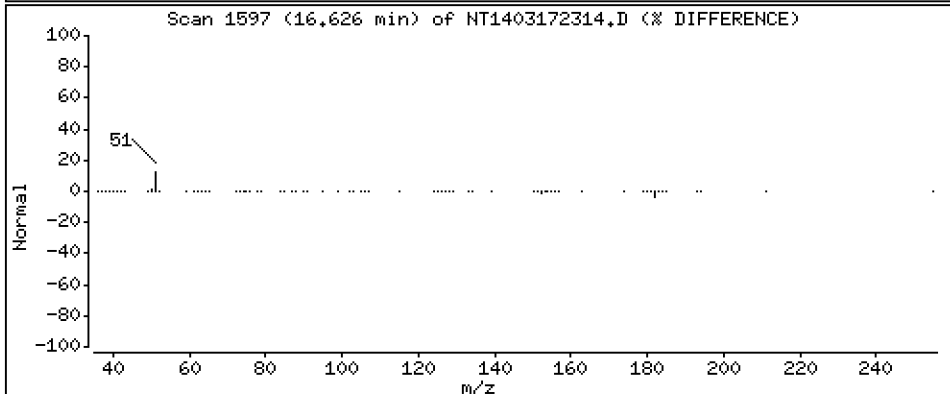
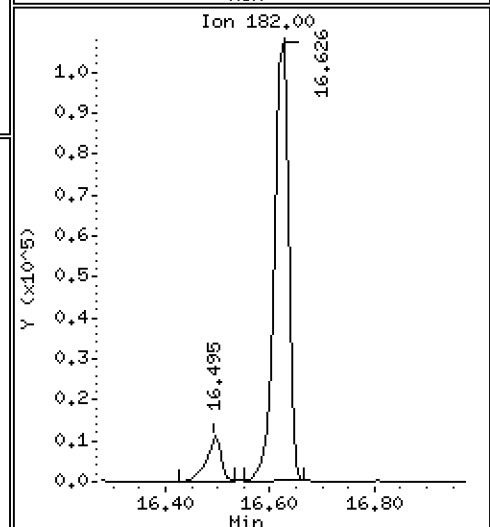
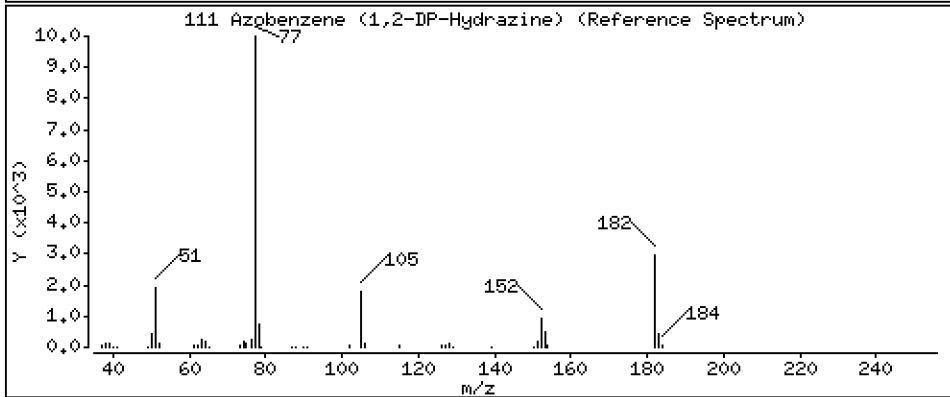
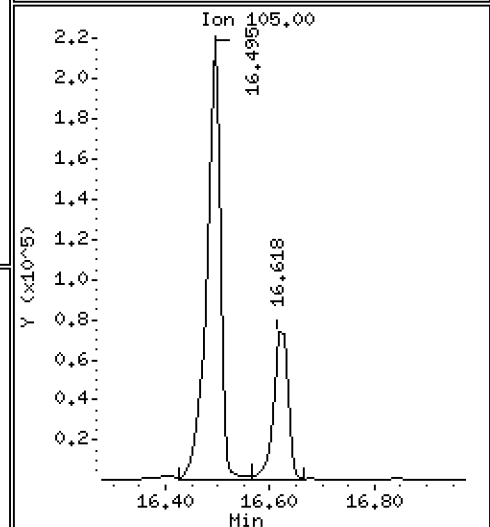
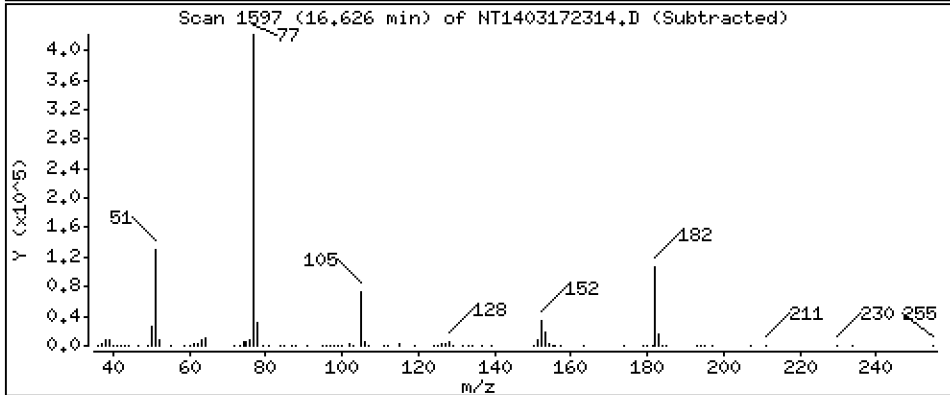
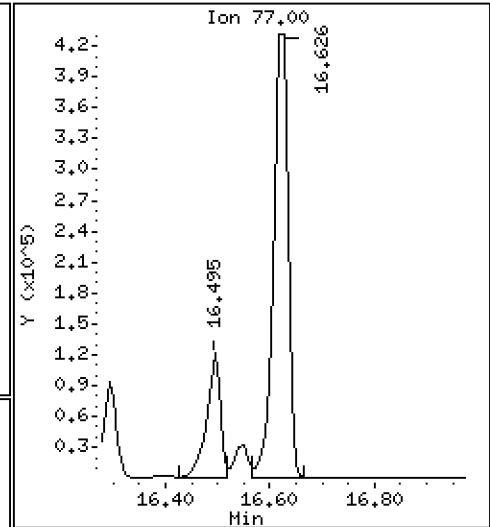
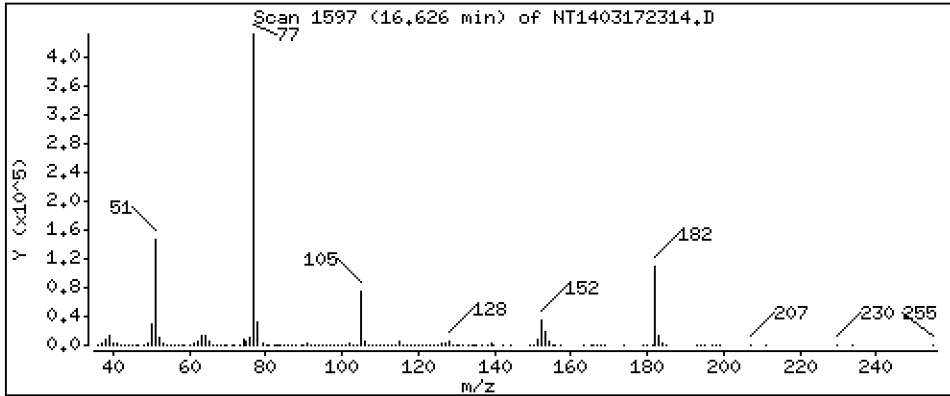
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,517 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

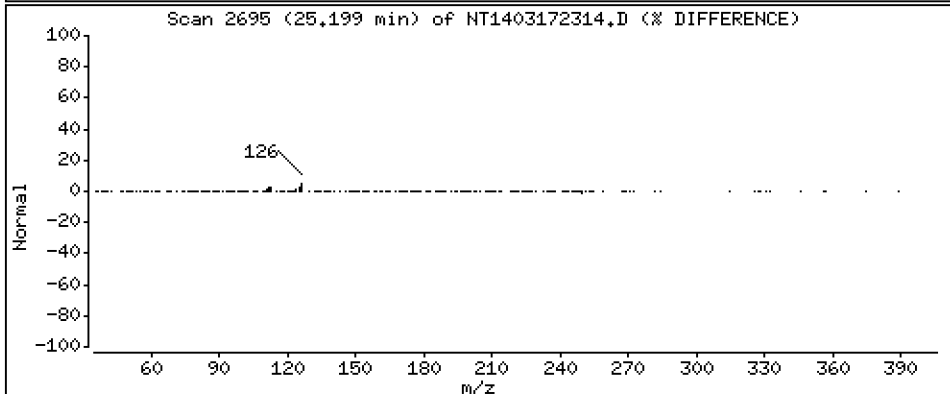
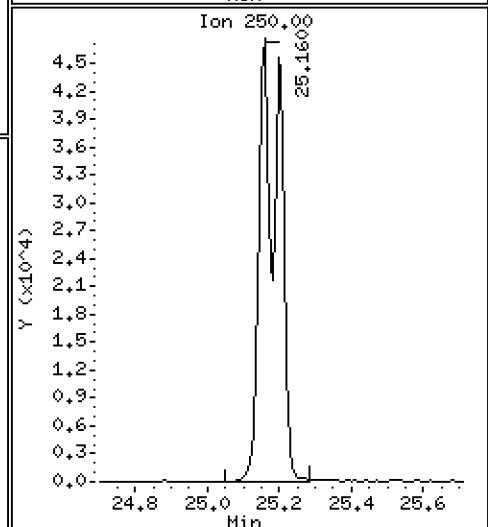
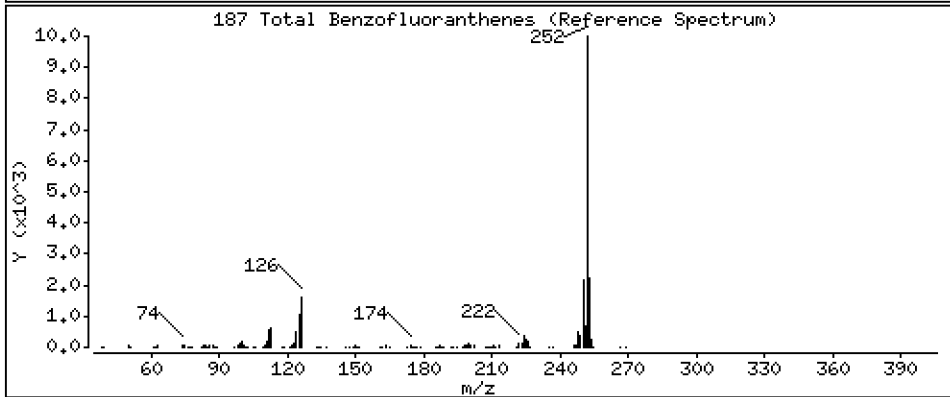
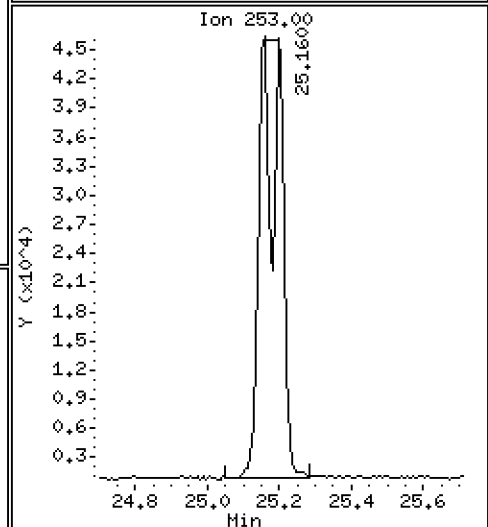
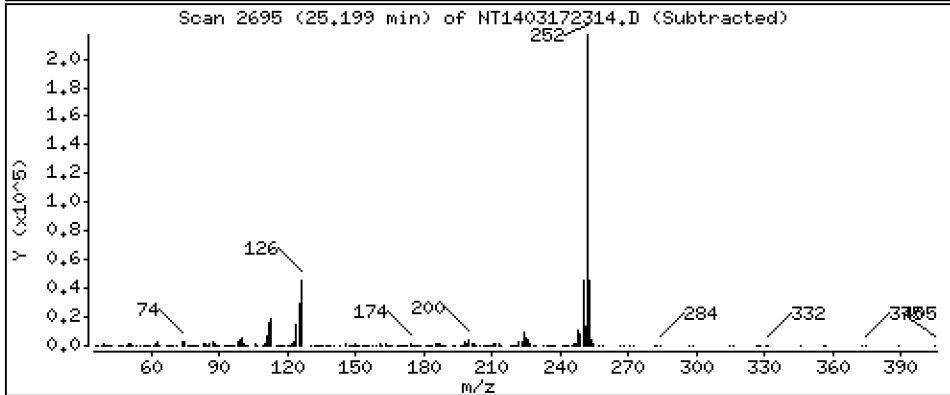
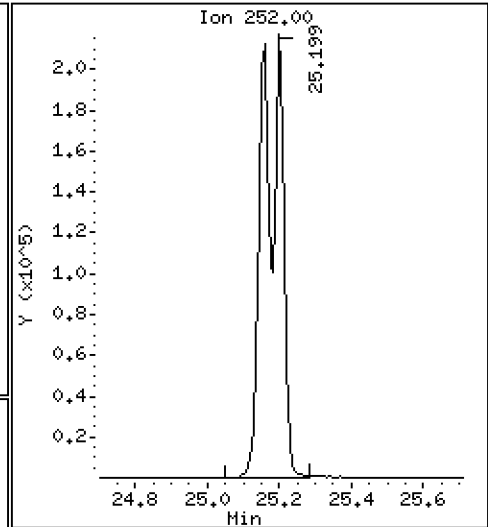
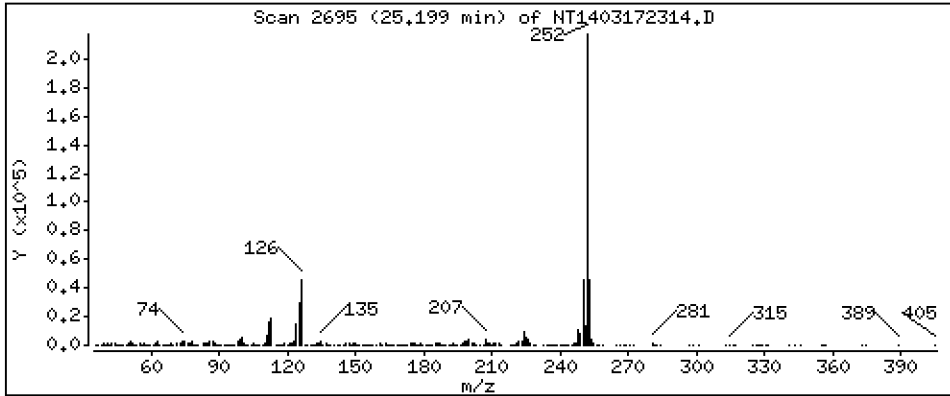
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 10,61 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD1

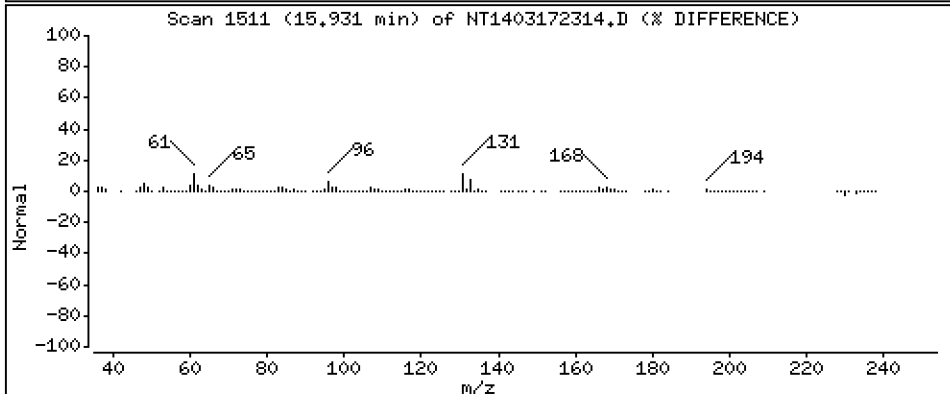
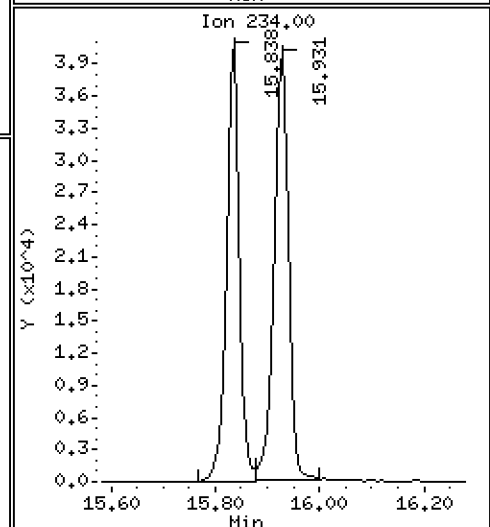
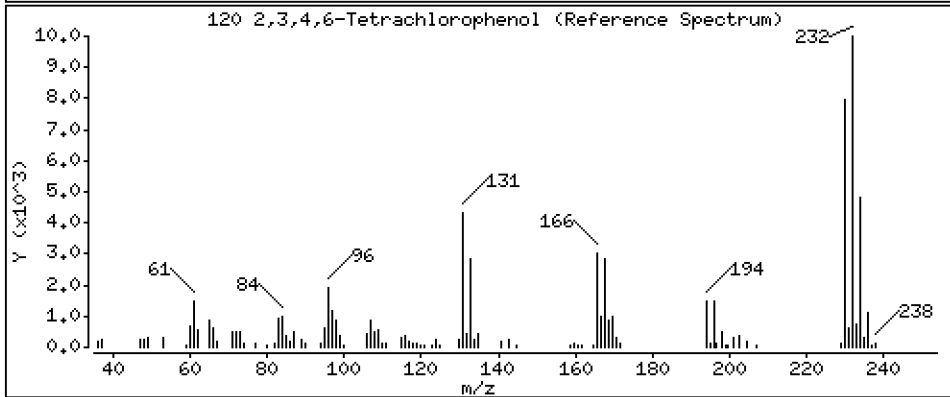
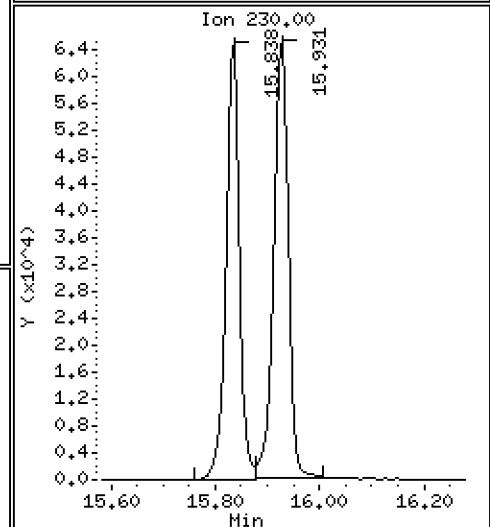
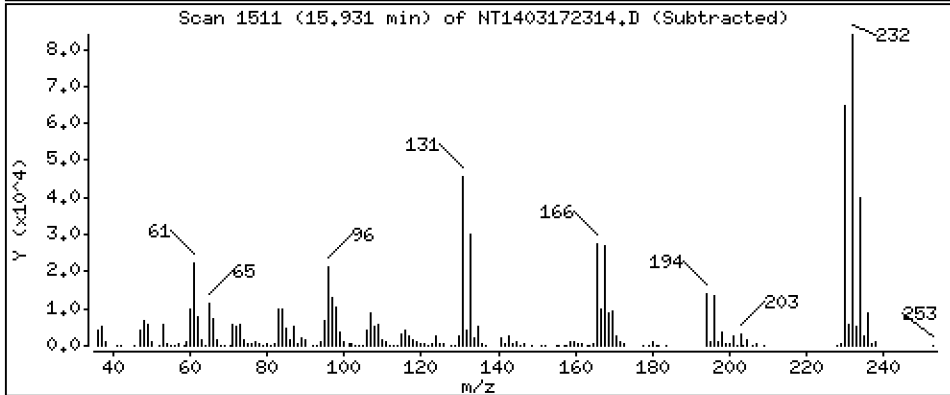
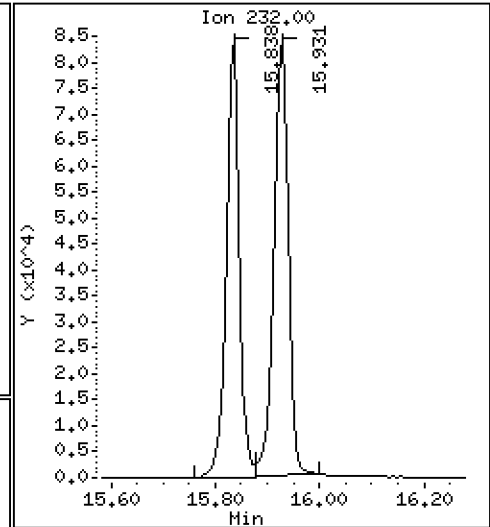
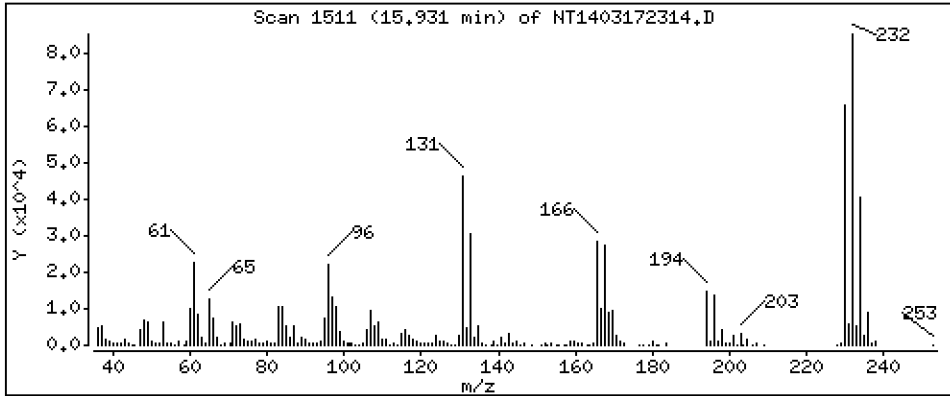
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,484 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172314.D
 Lab Smp Id: BLB0424-BSD1
 Inj Date : 17-MAR-2023 22:19 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BSD1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.821	(1.000)	446158	6.05026	6.050
\$ 2 Phenol-d5	99		8.413	8.412	(1.000)	584369	6.01905	6.019
3 Phenol	94		8.436	8.435	(1.000)	412347	3.99639	3.996
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	493626	6.44919	6.449
4 Bis(2-Chloroethyl)ether	93		8.606	8.605	(1.000)	335090	4.51004	4.510
6 2-Chlorophenol	128		8.722	8.729	(1.000)	320579	3.94752	3.948
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	331373	4.03094	4.031
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	217090	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	326655	4.12553	4.126
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.426	(1.000)	208153	4.07063	4.071
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	324115	4.14137	4.141
11 Benzyl alcohol	108		9.341	9.333	(1.000)	207158	4.31268	4.313
14 2,2'-oxybis(1-Chloropropane)	121		9.637	9.644	(1.000)	116084	4.91556	4.916
13 2-Methylphenol	108		9.559	9.558	(1.000)	235613	3.22984	3.230
17 Hexachloroethane	117		10.048	10.055	(1.000)	149229	4.40669	4.407
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	238250	4.14824	4.148
15 4-Methylphenol	108		9.838	9.830	(1.000)	315298	3.65050	3.650
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	390025	4.39471	4.395
19 Nitrobenzene	77		10.195	10.203	(0.881)	392185	4.53972	4.540
20 Isophorone	82		10.653	10.653	(0.921)	687638	5.82965	5.830
21 2-Nitrophenol	139		10.832	10.831	(0.936)	186521	3.76692	3.767
22 2,4-Dimethylphenol	107		10.886	10.885	(0.941)	261941	3.54504	3.545
23 Bis(2-Chloroethoxy)methane	93		11.087	11.087	(0.959)	408276	5.14130	5.141
24 Benzoic acid	105		11.134	11.103	(0.963)	1531820	23.9871	23.99
25 2,4-Dichlorophenol	162		11.289	11.289	(0.976)	910582	15.4960	15.50
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	320218	4.43283	4.433
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	838636	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	947419	4.22868	4.229
29 4-Chloroaniline	127		11.737	11.737	(1.015)	911121	9.71423	9.714
30 Hexachlorobutadiene	225		11.969	11.976	(1.035)	148075	4.54004	4.540
31 4-Chloro-3-methylphenol	107		12.697	12.696	(1.098)	1113506	15.6813	15.68
32 2-Methylnaphthalene	142		13.006	13.013	(1.124)	660708	4.22856	4.229
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	439456	12.2752	12.28

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.633	13.633	(0.897)	687209	15.7283	15.73	
35 2,4,5-Trichlorophenol	196		13.703	13.702	(0.902)	742131	16.3000	16.30	
§ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	677476	4.34339	4.343	
37 2-Chloronaphthalene	162		14.004	14.012	(0.922)	599511	4.48442	4.484	
38 2-Nitroaniline	65		14.268	14.267	(0.939)	847965	16.4265	16.43	
39 Dimethylphthalate	163		14.701	14.701	(0.967)	687365	4.78591	4.786	
40 Acenaphthylene	152		14.887	14.879	(0.980)	941194	4.19149	4.191	
41 2,6-Dinitrotoluene	165		14.840	14.840	(0.977)	567271	17.0978	17.10	
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	430703	4.00000		
43 3-Nitroaniline	138		15.127	15.126	(0.995)	619898	13.5433	13.54	
44 Acenaphthene	153		15.266	15.265	(1.005)	575372	4.38871	4.389	
45 2,4-Dinitrophenol	184		15.335	15.335	(1.009)	732537	27.1792	27.18	
46 Dibenzofuran	168		15.591	15.590	(1.026)	845522	4.51745	4.517	
47 4-Nitrophenol	109		15.444	15.435	(1.016)	338553	13.9739	13.97	
48 2,4-Dinitrotoluene	165		15.652	15.652	(1.030)	774262	16.4627	16.46	
50 Diethylphthalate	149		16.170	16.170	(1.064)	887084	5.97401	5.974	
49 Fluorene	166		16.309	16.309	(1.073)	773421	4.35930	4.359	
51 4-Chlorophenyl-phenylether	204		16.294	16.301	(1.072)	356154	4.67654	4.677	
52 4-Nitroaniline	138		16.402	16.394	(1.079)	544984	13.6895	13.69	
53 4,6-Dinitro-2-methylphenol	198		16.494	16.494	(0.904)	824793	31.6963	31.70	
54 N-Nitrosodiphenylamine	169		16.548	16.548	(0.907)	405886	4.15134	4.151	
§ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	111328	6.80819	6.808	
56 4-Bromophenyl-phenylether	248		17.304	17.304	(0.949)	176244	5.34666	5.347	
57 Hexachlorobenzene	284		17.621	17.620	(0.966)	165714	4.76444	4.764	
58 Pentachlorophenol	266		17.977	17.976	(0.986)	376751	15.0520	15.05	
* 59 Phenanthrene-d10	188		18.240	18.247	(1.000)	719856	4.00000		
60 Phenanthrene	178		18.286	18.294	(1.003)	929301	4.51836	4.518	
61 Anthracene	178		18.379	18.387	(1.008)	764472	3.85802	3.858	
62 Carbazole	167		18.712	18.711	(1.026)	829745	4.70644	4.706	
63 Di-n-butylphthalate	149		19.509	19.508	(1.070)	1200053	5.37008	5.370	
64 Fluoranthene	202		20.677	20.677	(0.888)	917821	6.31403	6.314	
65 Pyrene	202		21.103	21.102	(0.906)	890988	5.97697	5.977	
§ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	626428	6.20742	6.207	
67 Butylbenzylphthalate	149		22.310	22.310	(0.958)	439490	6.72933	6.729	
68 Benzo(a)anthracene	228		23.263	23.270	(0.999)	609612	4.62733	4.627	
* 69 Chrysene-d12	240		23.294	23.293	(1.000)	357294	4.00000		
70 3,3'-Dichlorobenzidine	252		23.216	23.224	(0.997)	267289	6.93590	6.936	
71 Chrysene	228		23.340	23.340	(1.002)	553448	4.64179	4.642	
72 bis(2-Ethylhexyl)phthalate	149		23.332	23.332	(0.960)	563044	6.05111	6.051	
* 134 Di-n-octylphthalate-d4	153		24.316	24.323	(1.000)	706831	4.00000		
73 Di-n-octylphthalate	149		24.331	24.331	(1.001)	927087	5.10219	5.102	
74 Benzo(b)fluoranthene	252		25.160	25.159	(0.970)	467904	5.66362	5.664	
75 Benzo(k)fluoranthene	252		25.198	25.205	(0.972)	409528	5.00054	5.001	
76 Benzo(a)pyrene	252		25.818	25.817	(0.996)	316965	4.48657	4.487	
* 77 Perylene-d12	264		25.934	25.933	(1.000)	233794	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		28.611	28.618	(1.103)	304962	3.96606	3.966	
79 Dibenzo(a,h)anthracene	278		28.626	28.633	(1.104)	263151	4.06070	4.061	
80 Benzo(g,h,i)perylene	276		29.403	29.410	(1.134)	228899	3.61208	3.612	
90 N-Nitrosodimethylamine	74		4.720	4.697	(1.000)	484529	10.3744	10.37	
91 Aniline	93		8.513	8.513	(1.000)	408569	3.93699	3.937	
93 Benzidine	184		Compound Not Detected.						
103 Pyridine	79		4.759	4.712	(1.000)	33702	0.23302	0.2330	
105 1-methylnaphthalene	142		13.231	13.230	(1.144)	631829	4.46331	4.463	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.626	16.625	(1.094)	800988	4.51724	4.517	

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.198	25.205	(0.972)	832849	10.6146	10.61
120 2,3,4,6-Tetrachlorophenol	232		15.931	15.930	(1.048)	155081	3.48363	3.484

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172314.D Calibration Time: 15:03
 Lab Smp Id: BLB0424-BSD1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	217090	-1.87
27 Naphthalene-d8	809500	404750	1619000	838636	3.60
42 Acenaphthene-d10	420689	210345	841378	430703	2.38
59 Phenanthrene-d10	757520	378760	1515040	719856	-4.97
69 Chrysene-d12	450500	225250	901000	357294	-20.69
134 Di-n-octylphthala	828388	414194	1656776	706831	-14.67
77 Perylene-d12	339914	169957	679828	233794	-31.22

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172314.D

Lab ID: BLB0424-BSD1
nt14.i, ABN.m, 17-MAR-2023 22:19

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

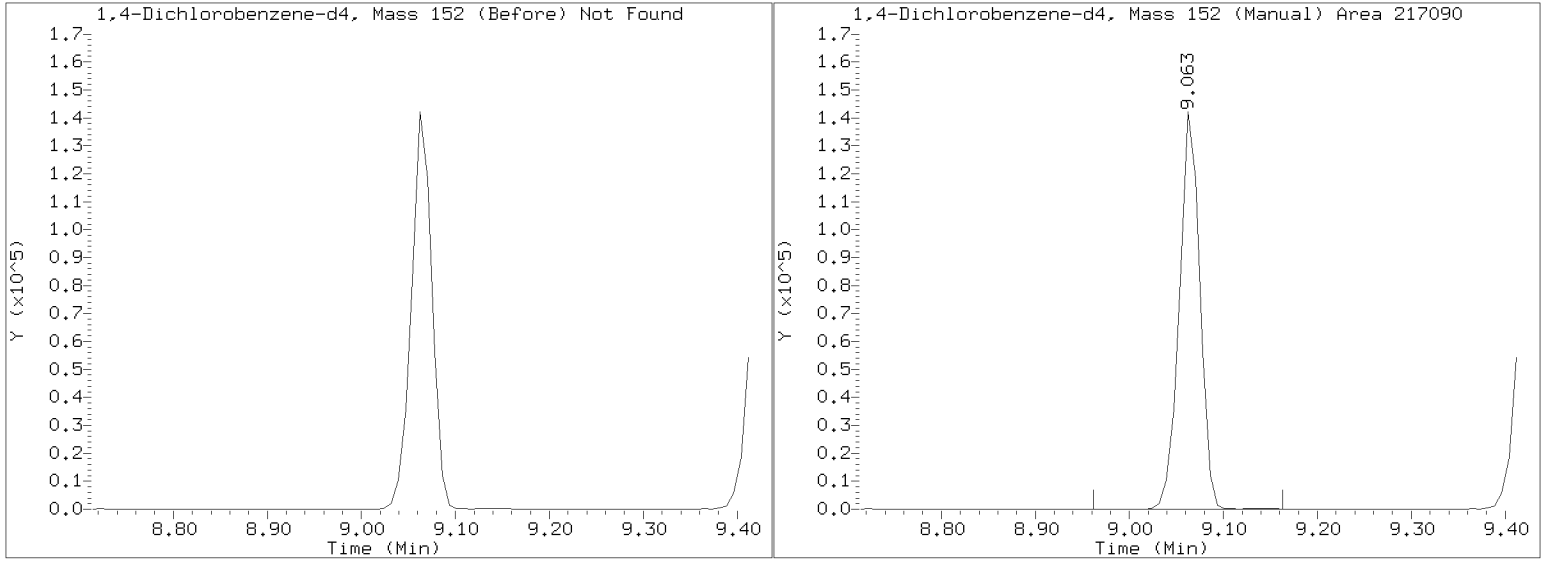
RRT check based on Ccal File: NT1403172302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172314.D
Injection Date: 17-MAR-2023 22:19
Lab ID:BLB0424-BSD1 Client ID:
Report Date: 03/22/2023 08:12





STANDARD REFERENCE MATERIAL RECOVERY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLB0424-SRM1

Batch: BLB0424

Initial/Final: 1 g / 1 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 03/17/2023 22:55

Standard ID: K003477

Expires: 01/31/2024

Standard Lot#: CRM 143 (LRAC8918)

Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	1720	43.9	200		64.8	26 - 174
4-Methylphenol	6617.0	4470	73.9	200		67.5	40 - 160
Naphthalene	4458.0	1630	42.4	200		36.6	25 - 175
Acenaphthylene	1948.0	1110	62.4	200		57.2	37 - 167
Dimethylphthalate	4537.0	4100	43.9	200		90.4	41 - 159
Acenaphthene	5489.0	3670	52.2	200		66.9	41 - 159
Dibenzofuran	6130.0	4620	141	200		75.4	45 - 155
Fluorene	3724.0	2780	146	200		74.7	44 - 156
Phenanthrene	5052.0	4260	87.2	200		84.4	46 - 154
Anthracene	2866.0	1960	71.9	200		68.3	42 - 158
Fluoranthene	2497.0	2920	60.9	200		117	39 - 161
Pyrene	2964.0	3510	56.8	200		118	38 - 162
Butylbenzylphthalate	3511.0	4380	94.1	200		125	36 - 164
Benzo(a)anthracene	5751.0	5070	59.6	200		88.2	49 - 151
Chrysene	1477.0	1250	60.6	200		84.5	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	2720	54.6	500		93.7	26 - 174
Benzofluoranthenes, Total	6534.0	5290	100	400		81.0	40 - 160
Benzo(a)pyrene	5902.0	4110	42.3	200		69.7	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	2830	147	200		72.4	22 - 178
Dibenzo(a,h)anthracene	3420.0	2560	172	200		74.7	37 - 163
Benzo(g,h,i)perylene	1380.0	975	136	200	Q	70.7	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172315.D

Date: 17-MAR-2023 22:55

Client ID:

Sample Info: BLB0424-SRM1

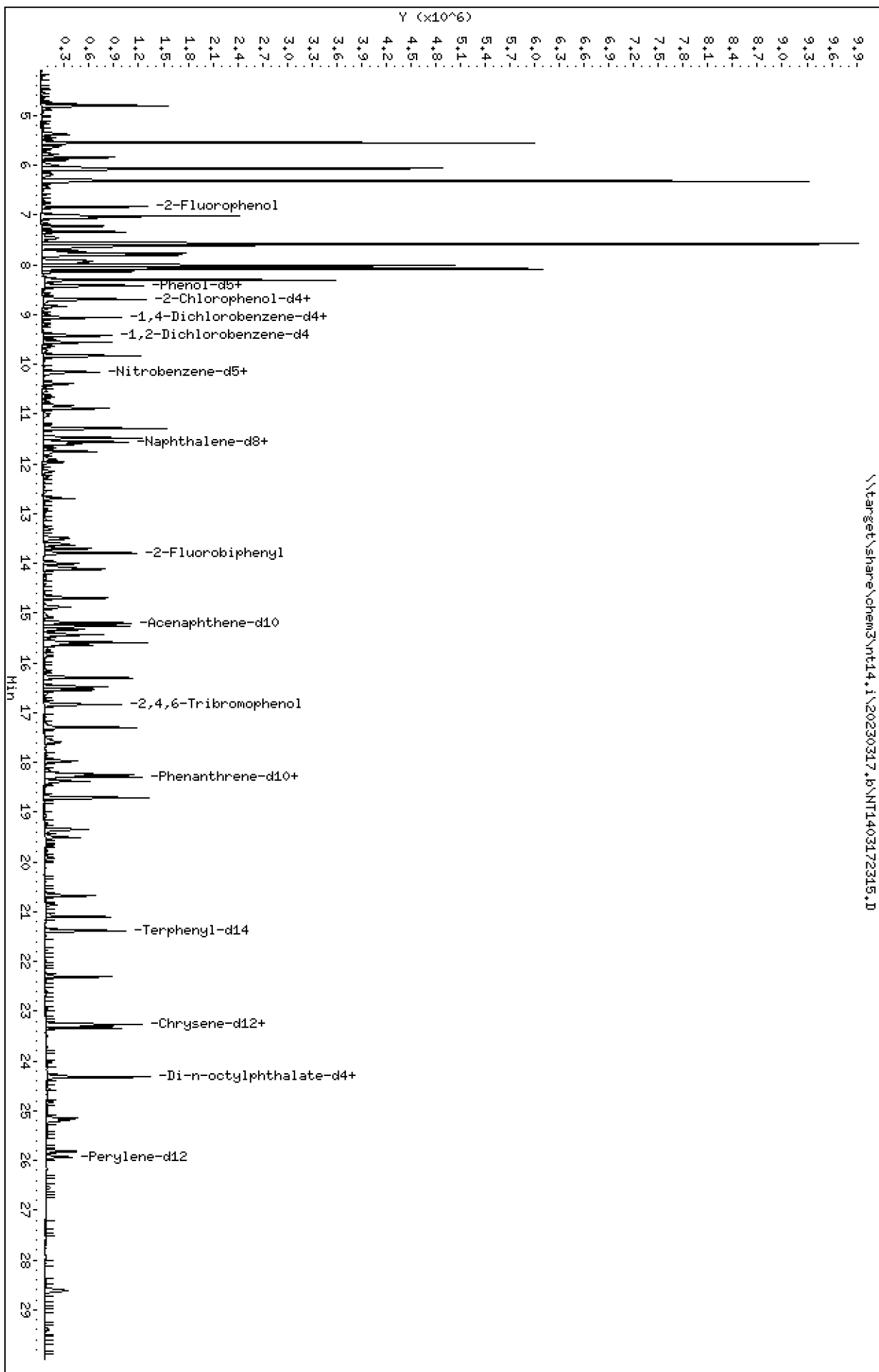
Page 1

Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

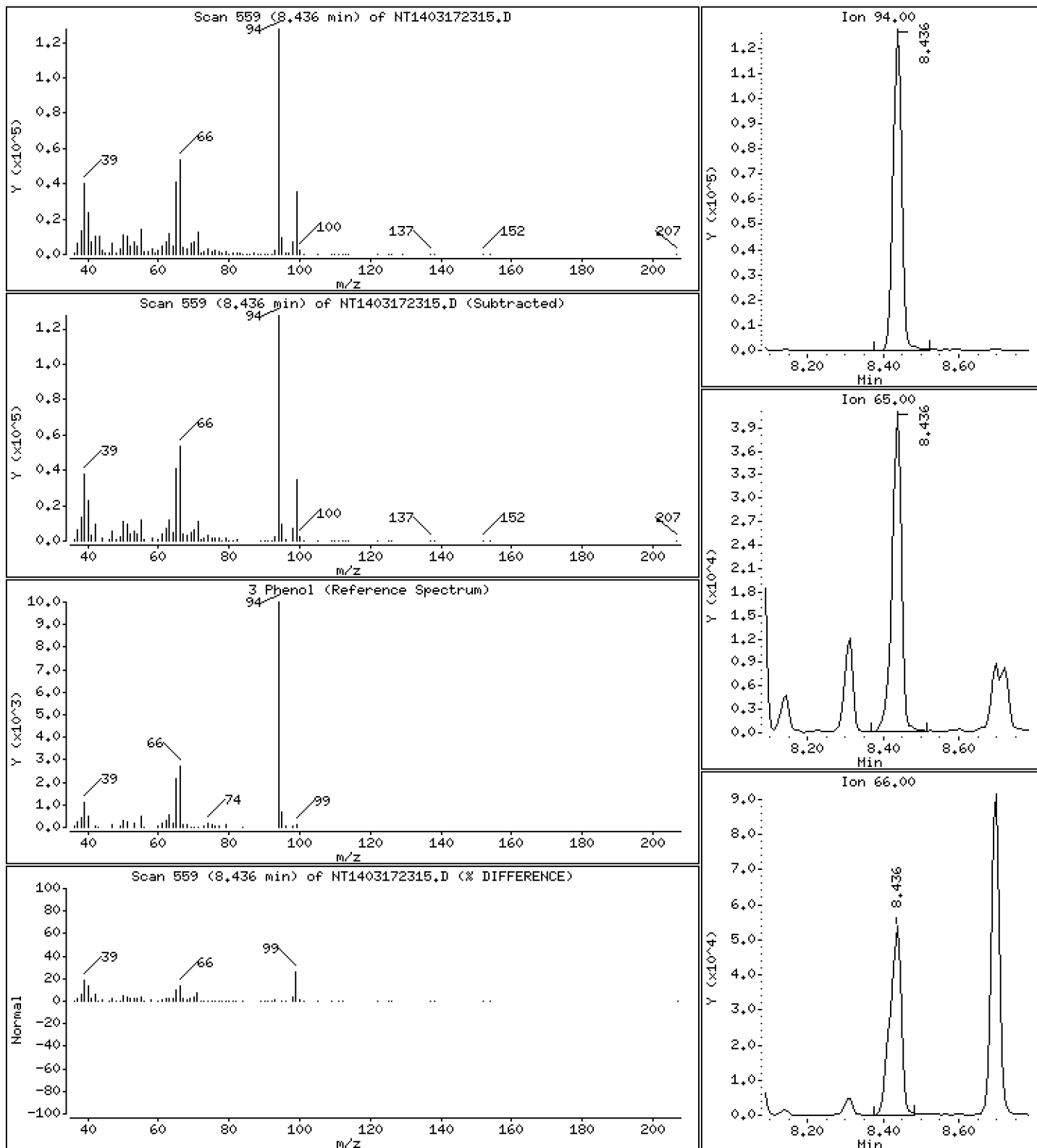
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 1,725 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

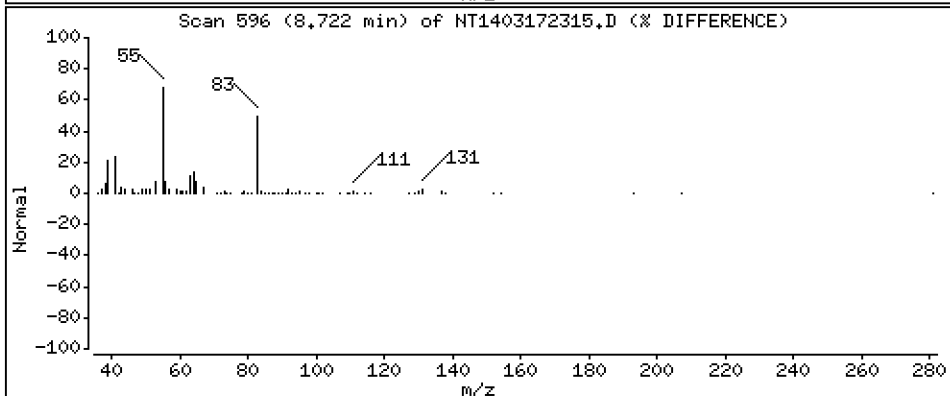
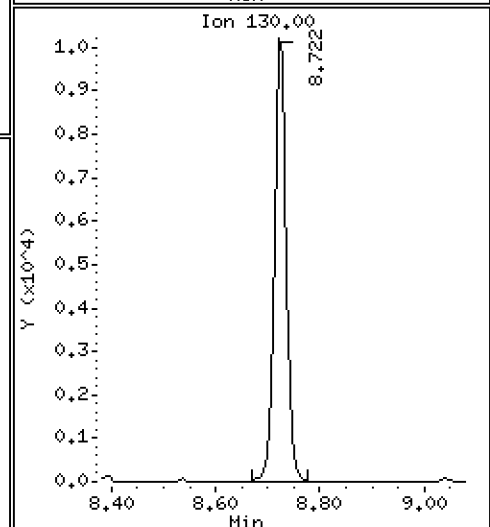
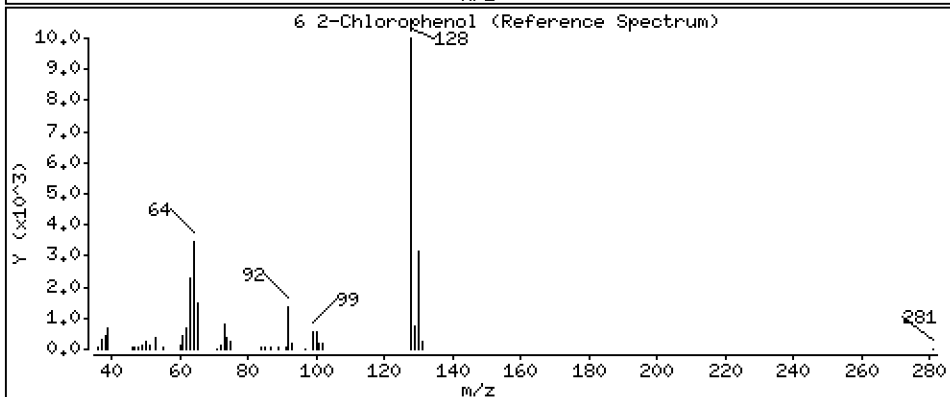
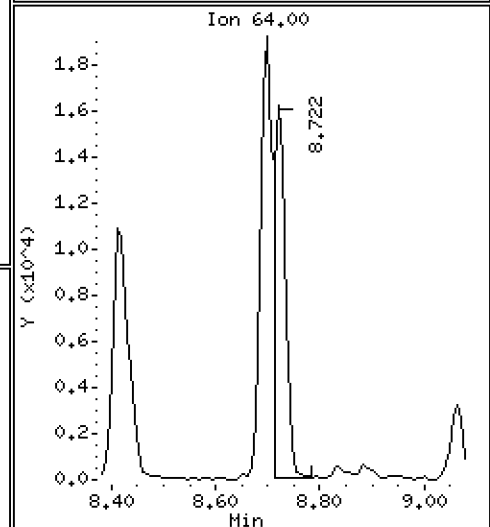
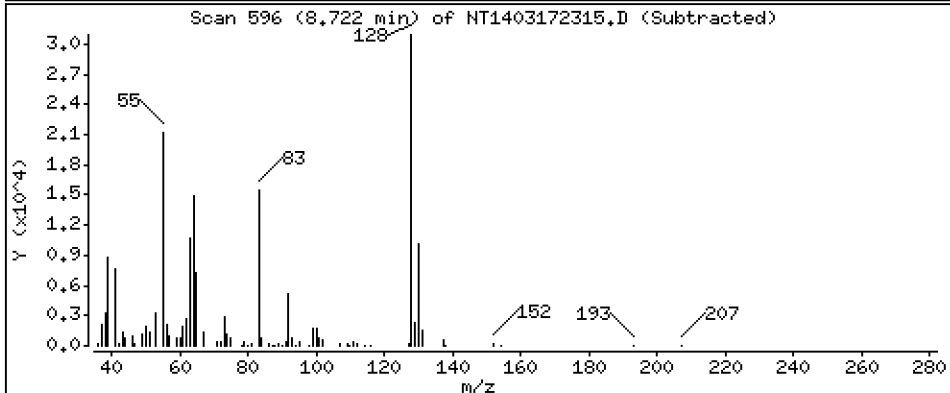
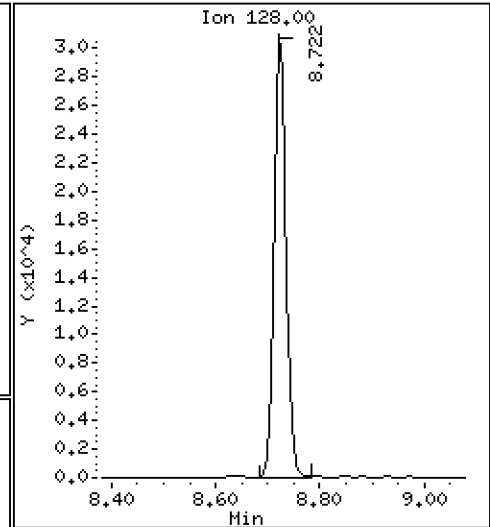
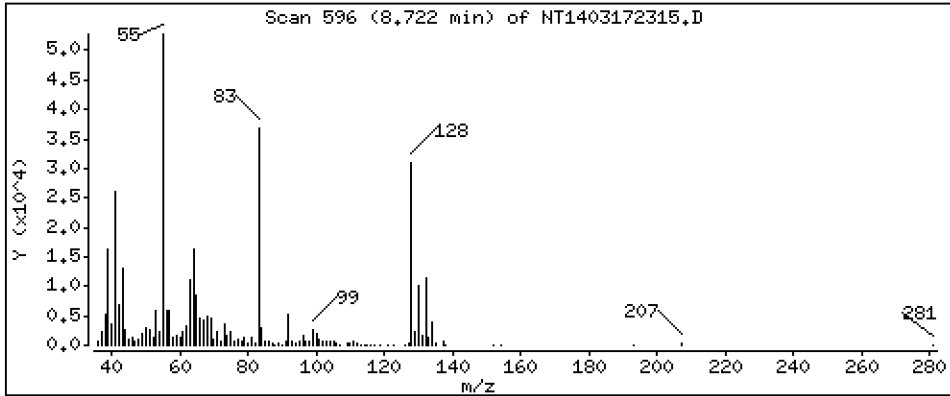
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,5623 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

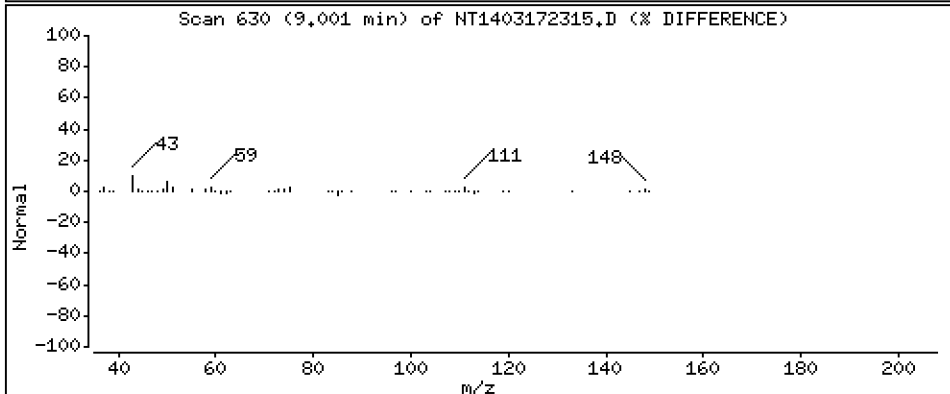
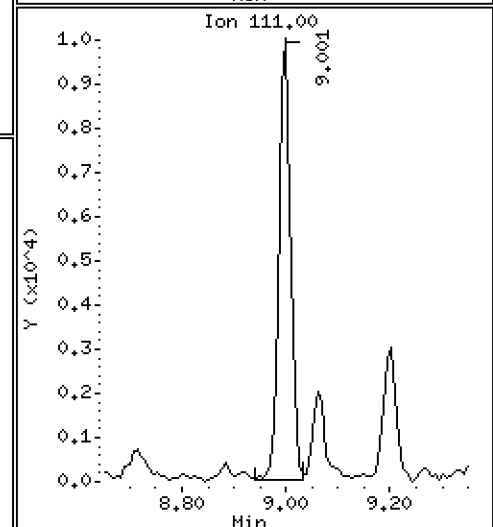
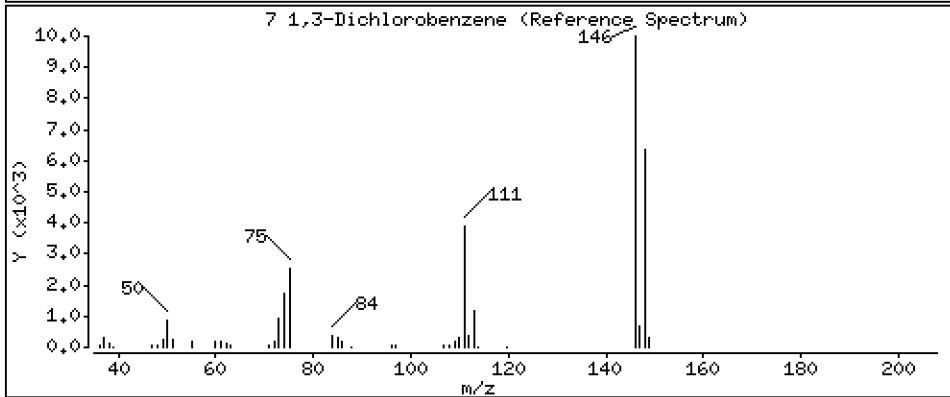
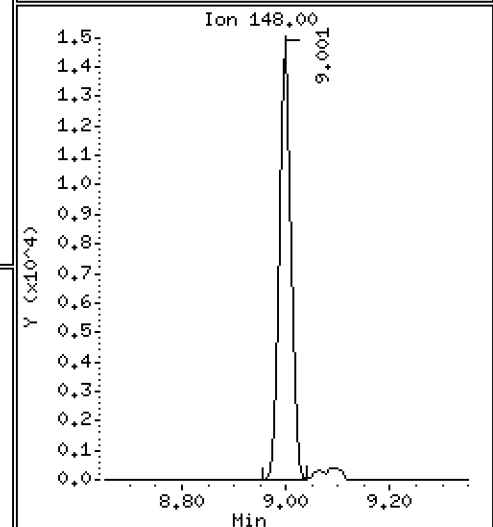
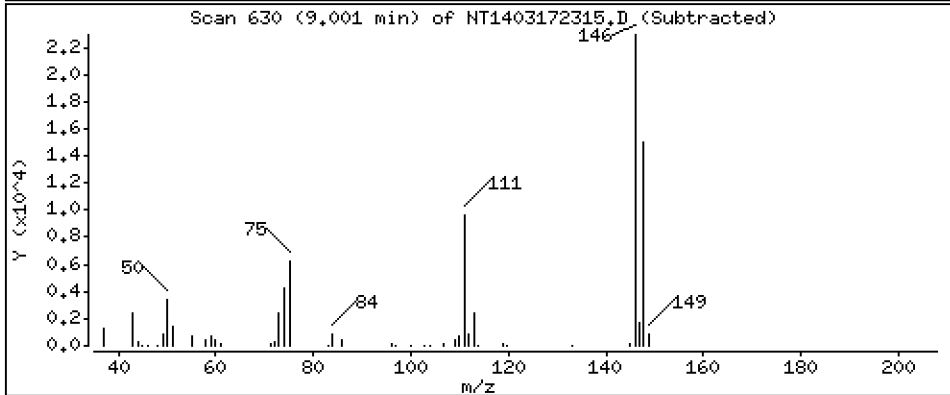
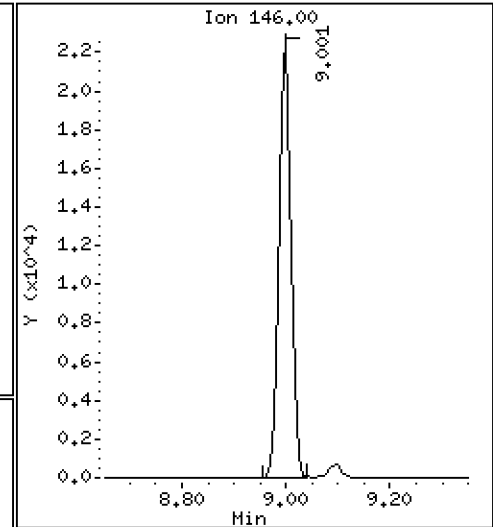
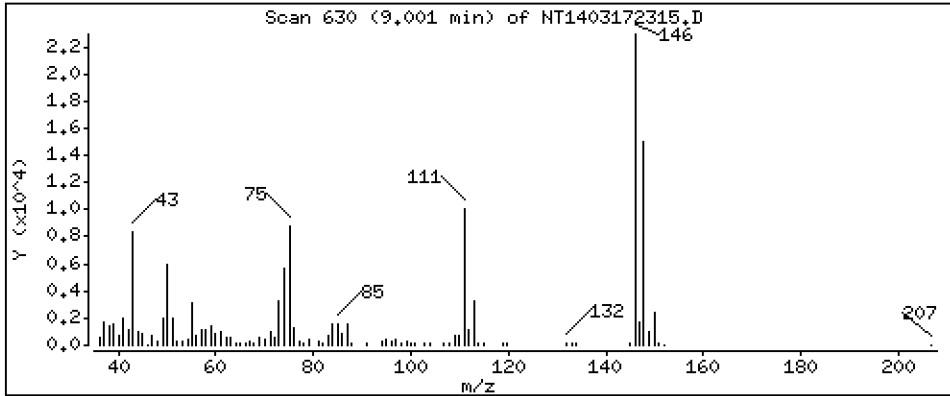
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.4048 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

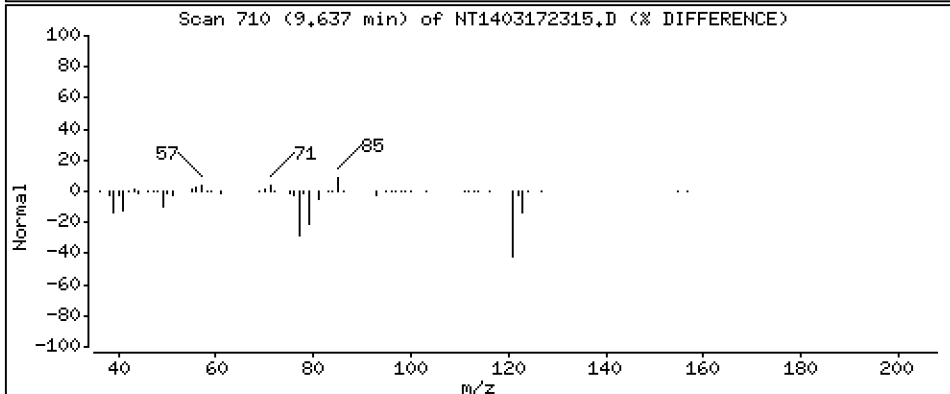
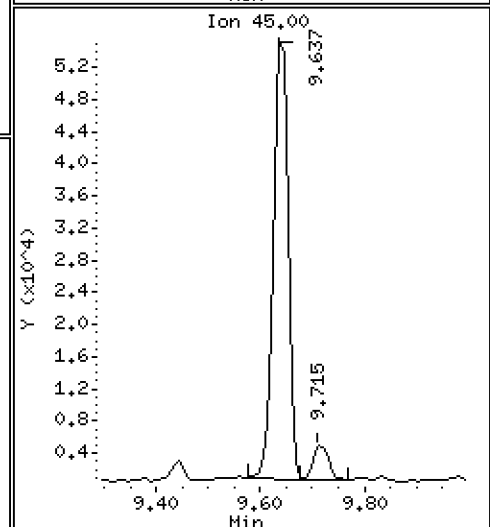
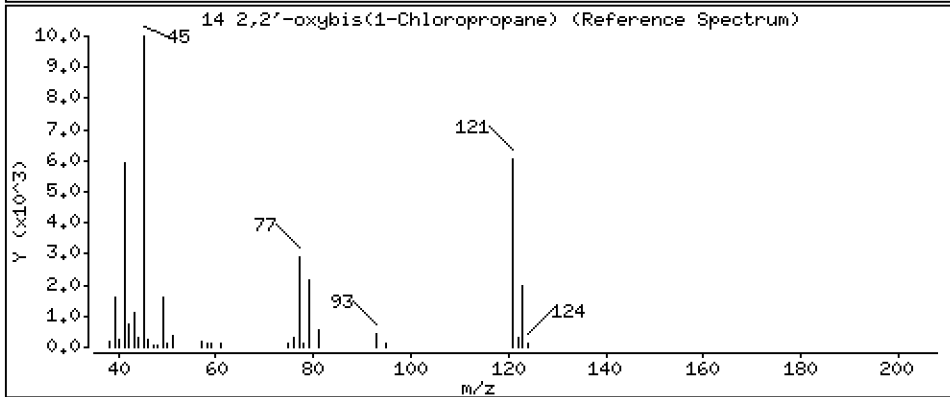
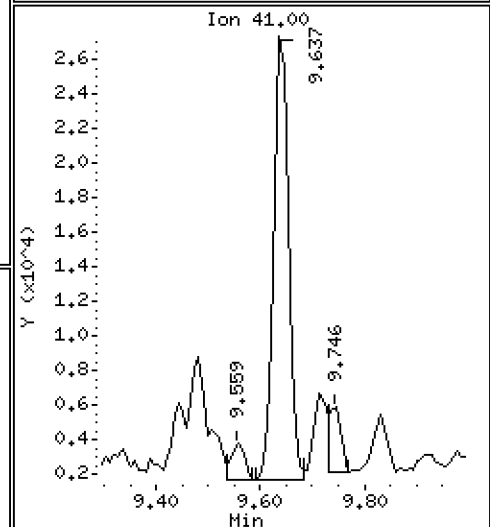
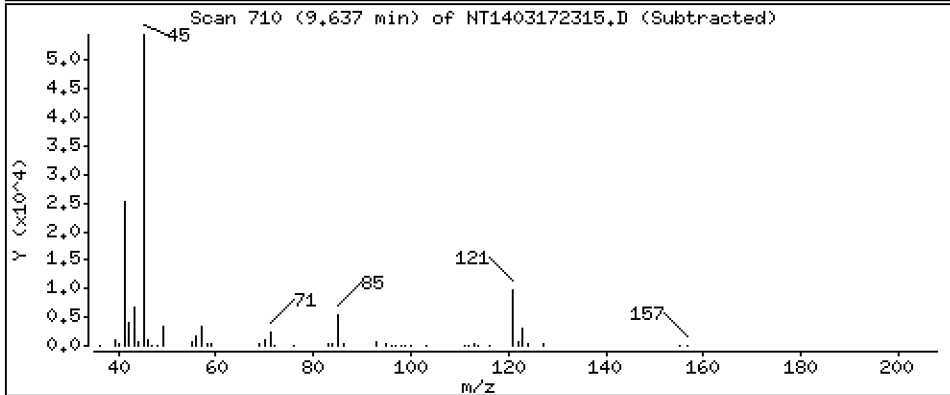
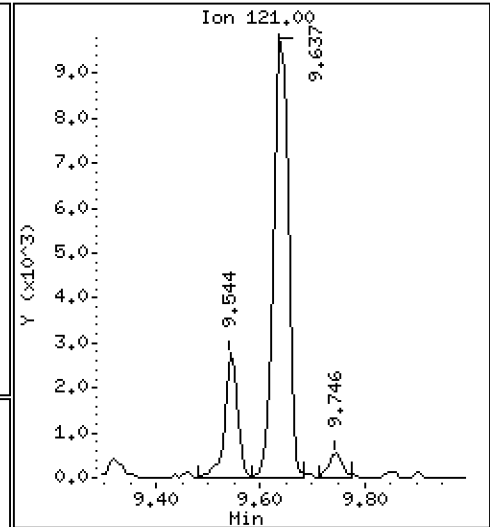
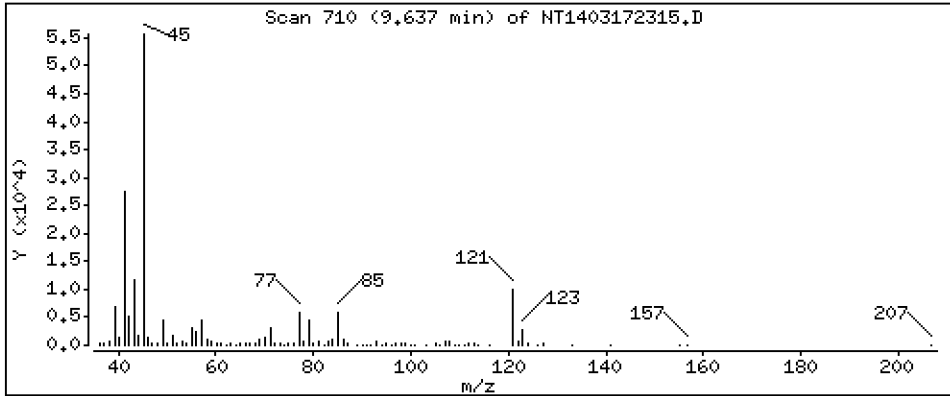
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,7326 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

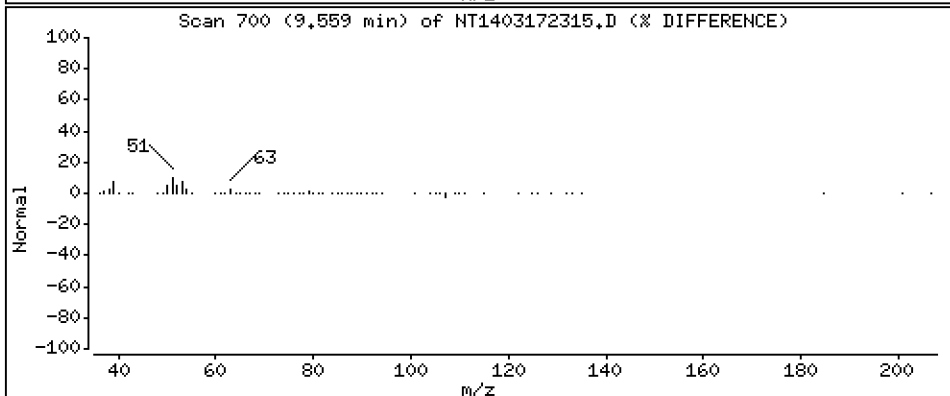
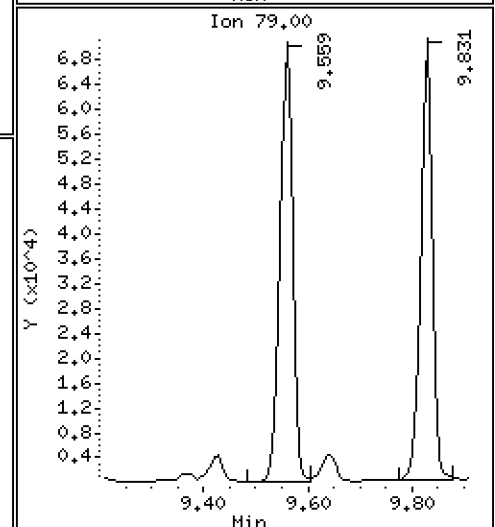
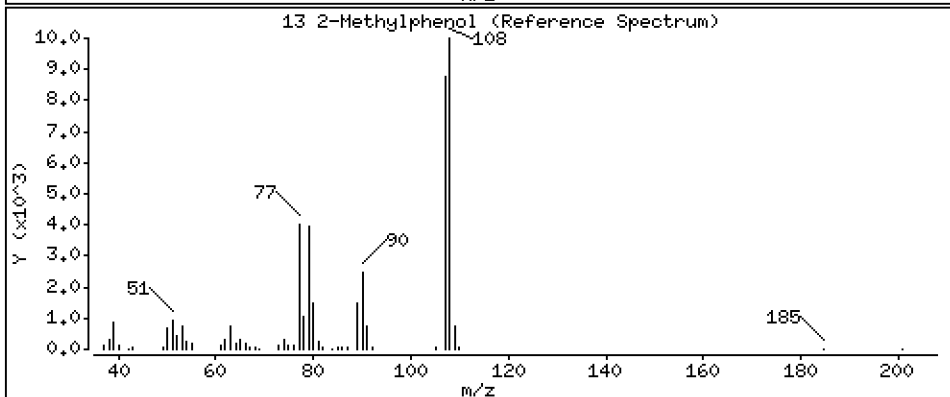
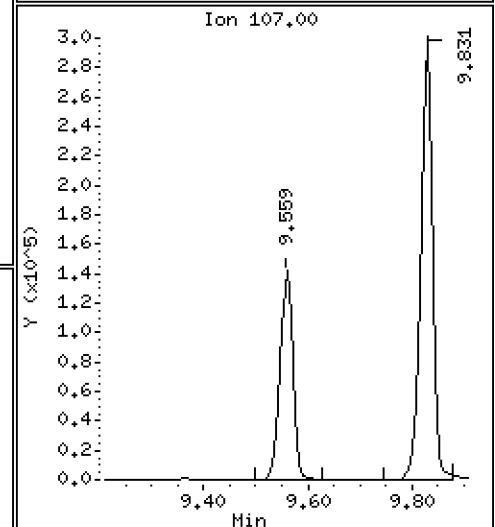
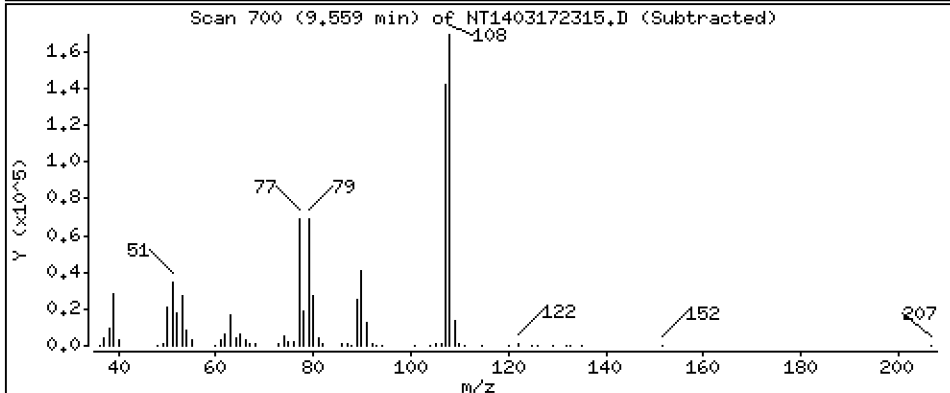
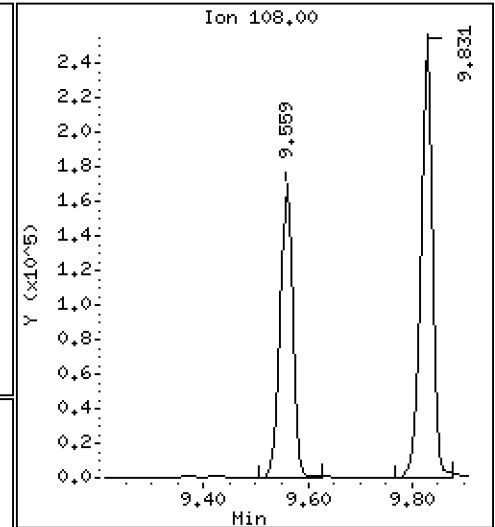
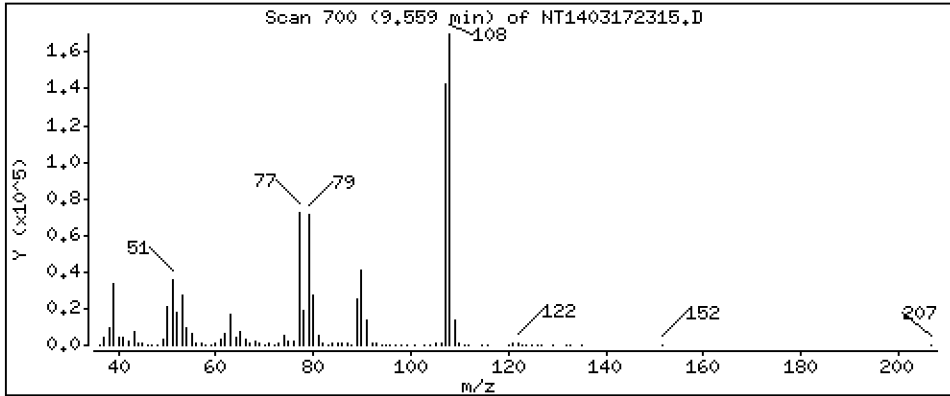
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.492 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

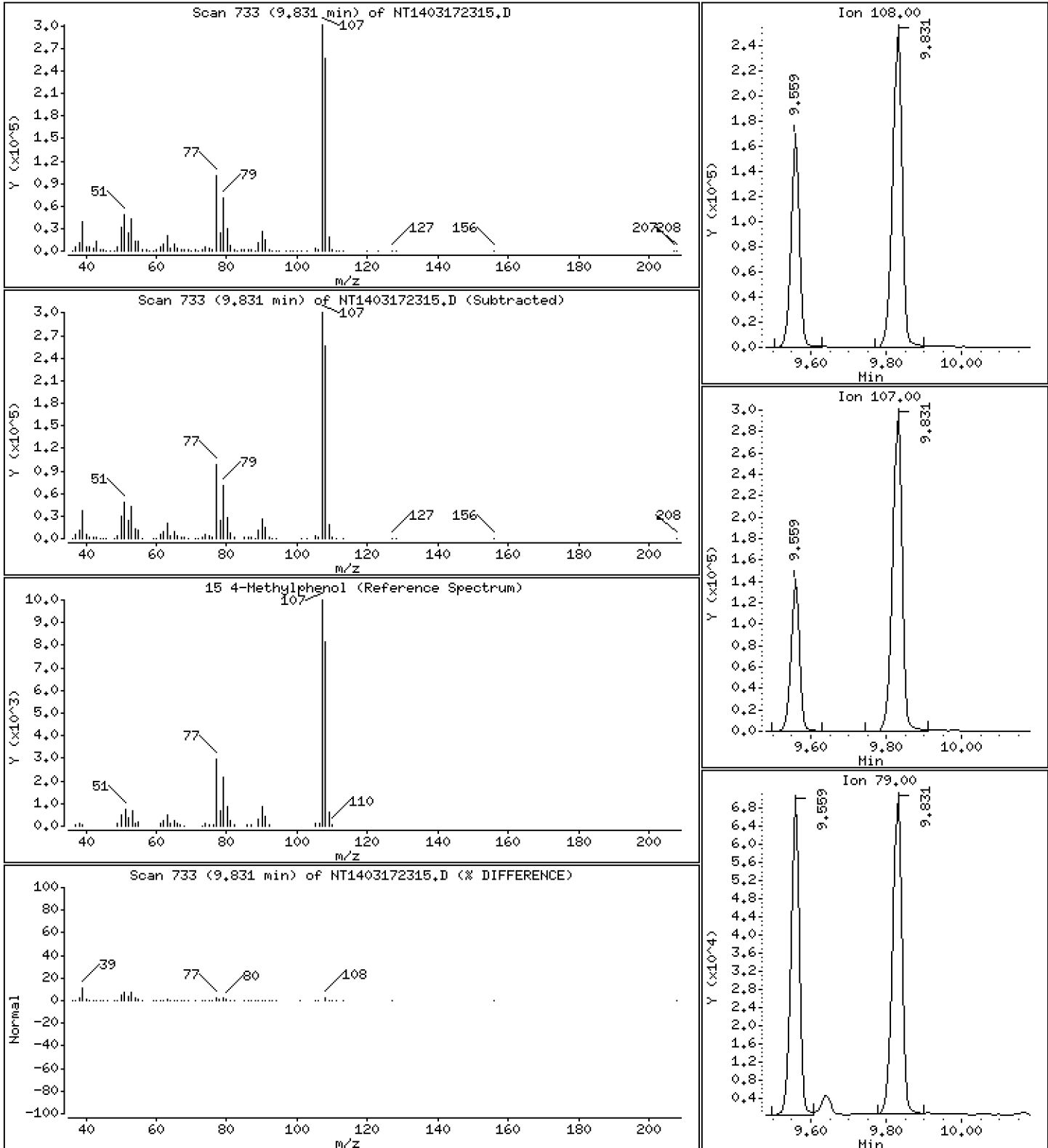
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.470 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

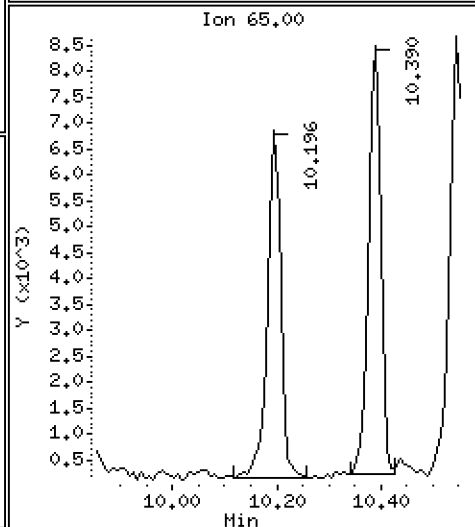
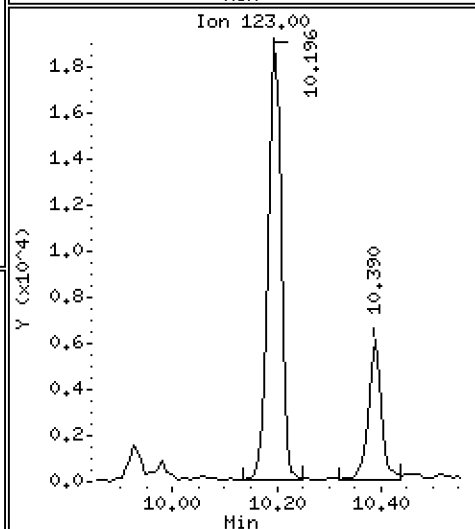
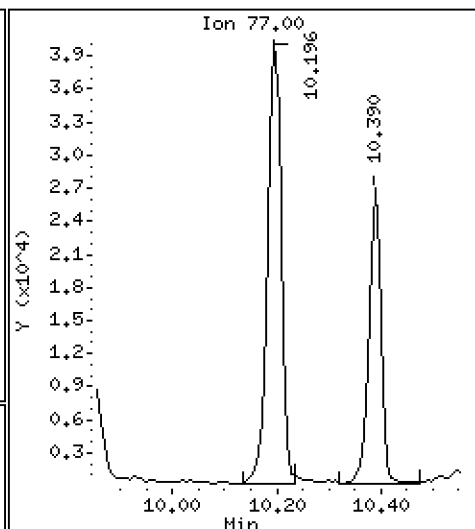
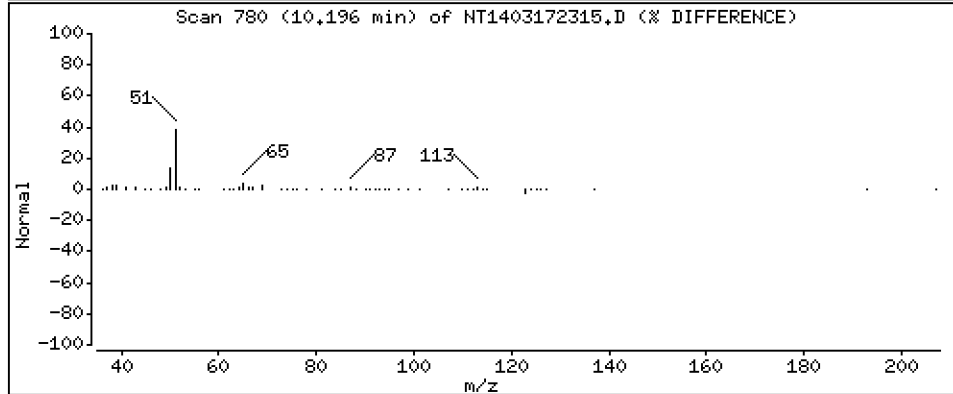
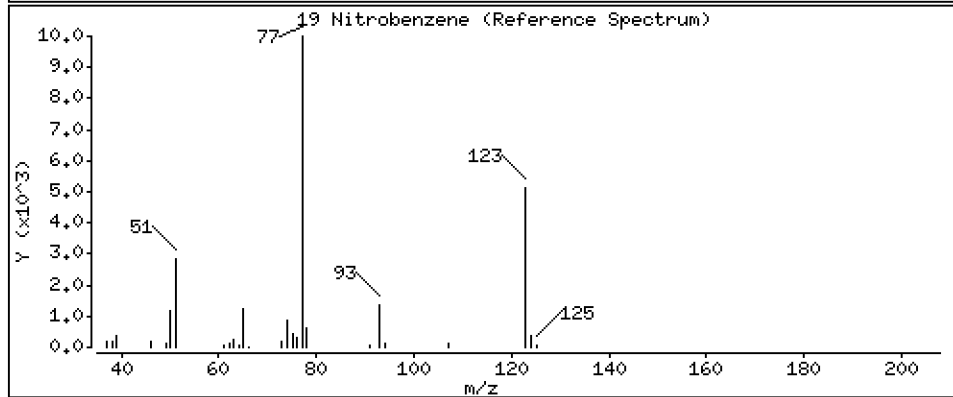
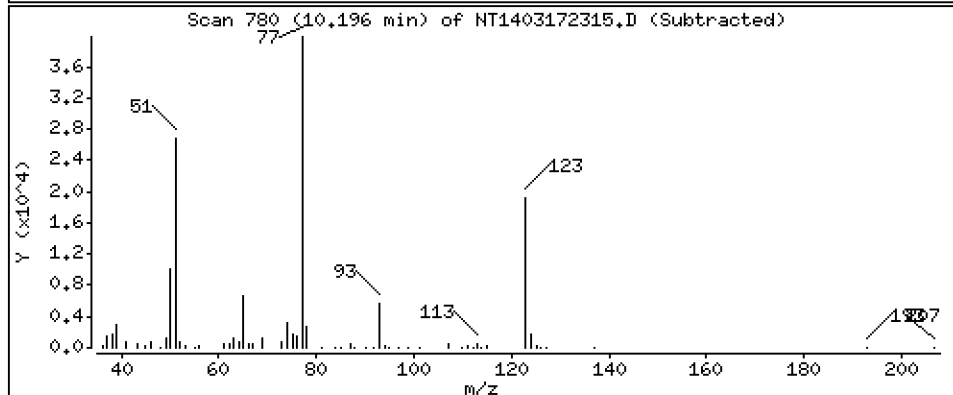
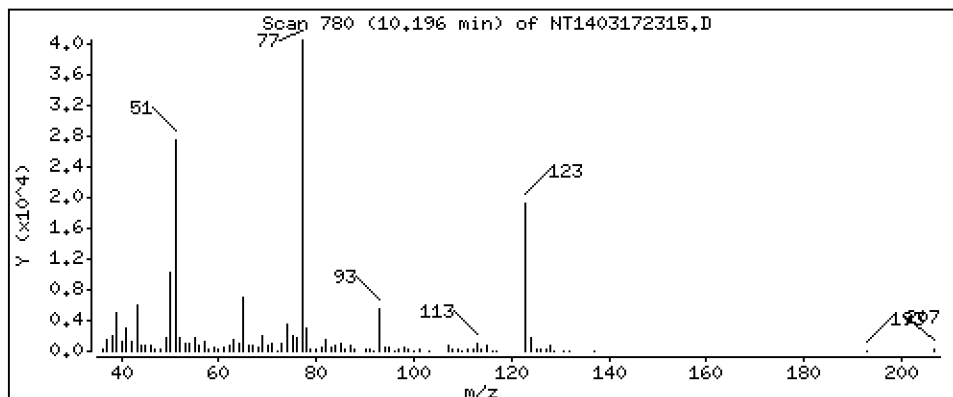
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,7528 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

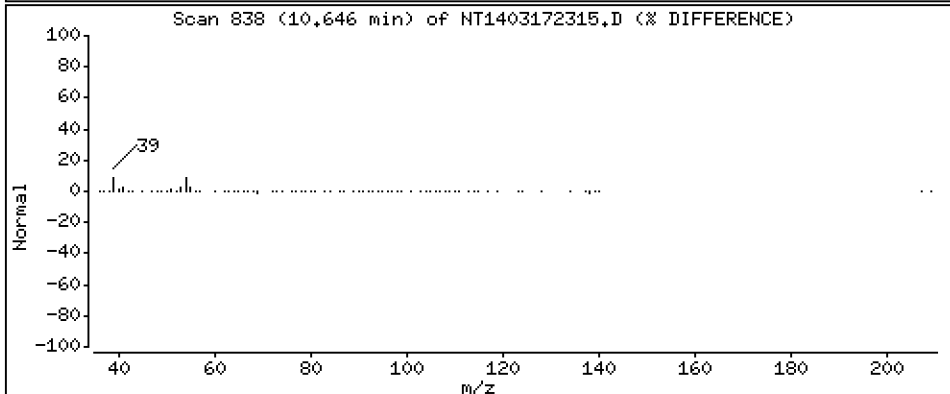
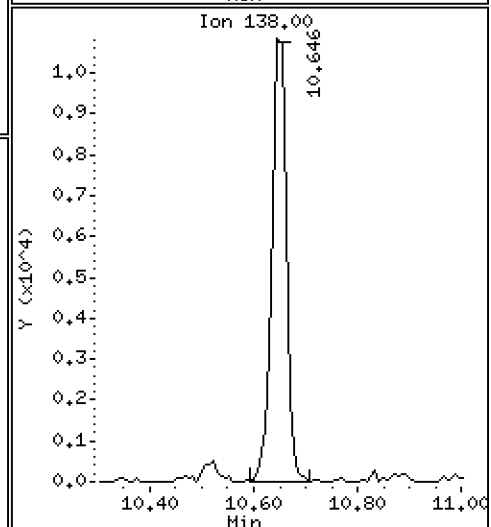
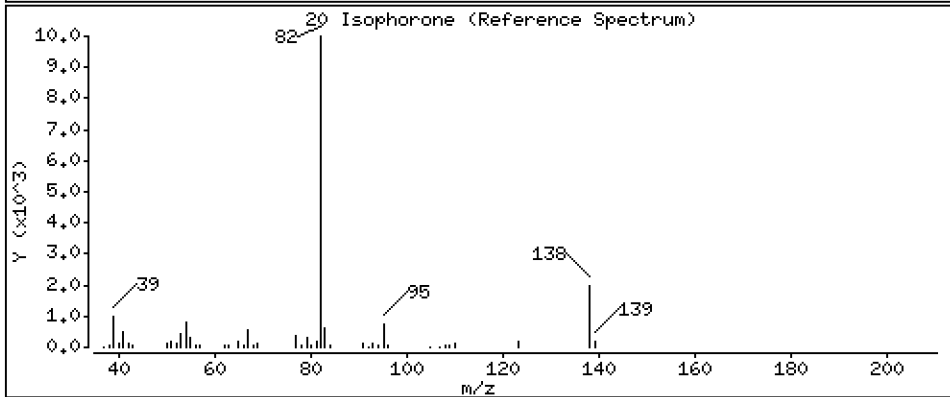
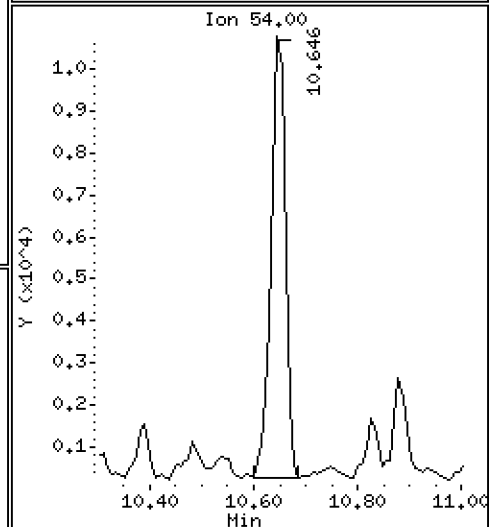
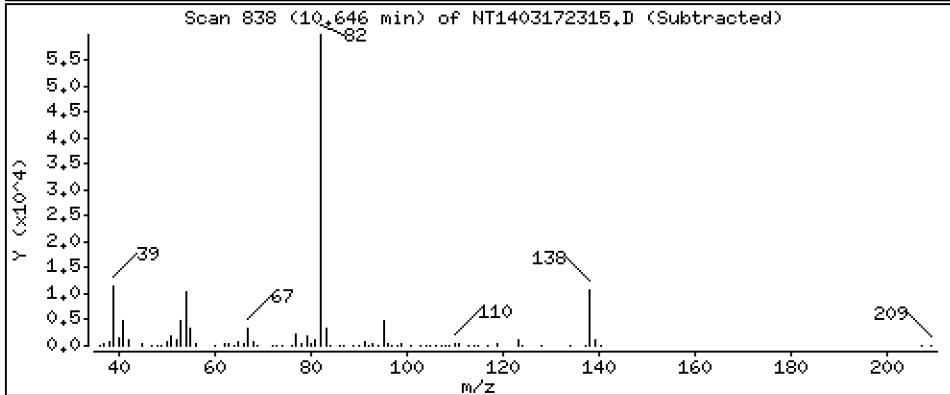
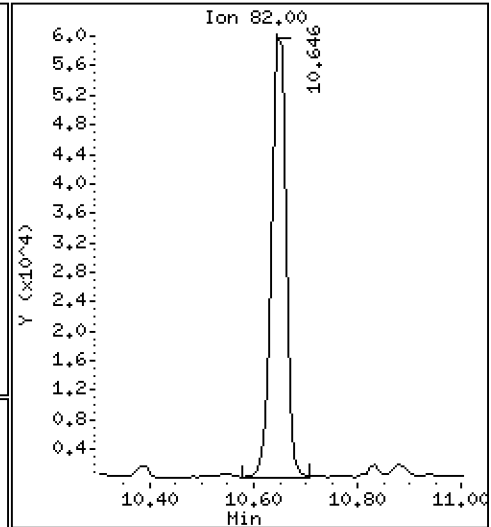
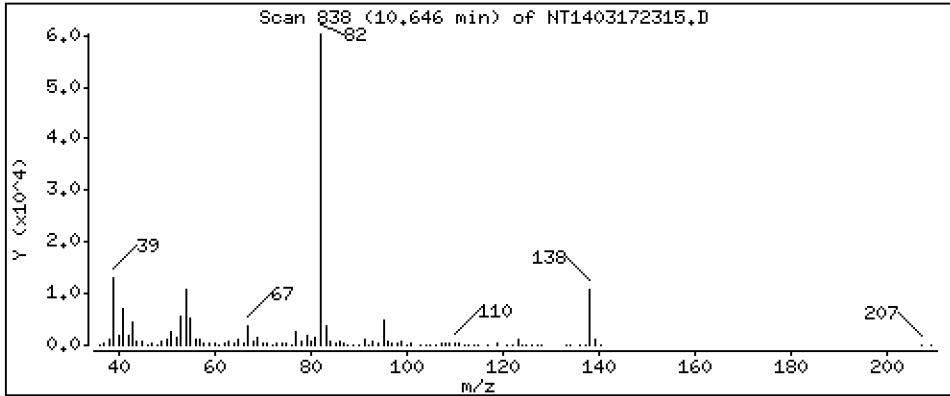
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,8871 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

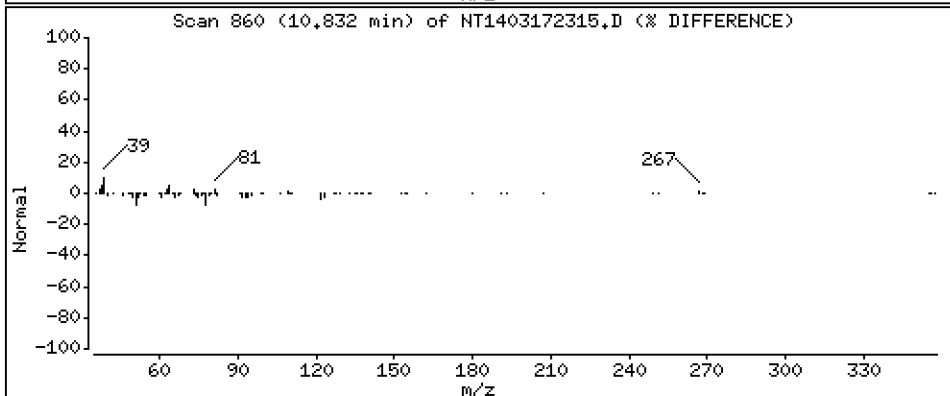
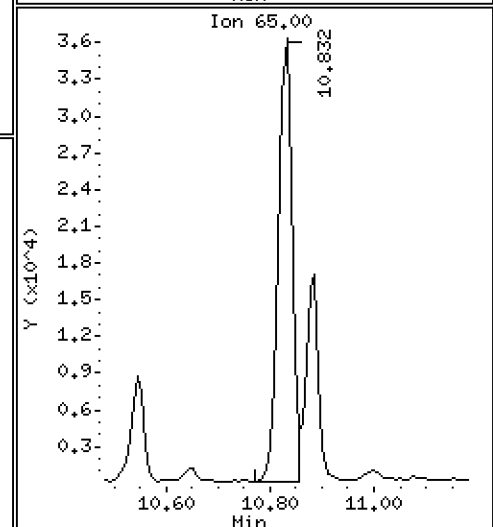
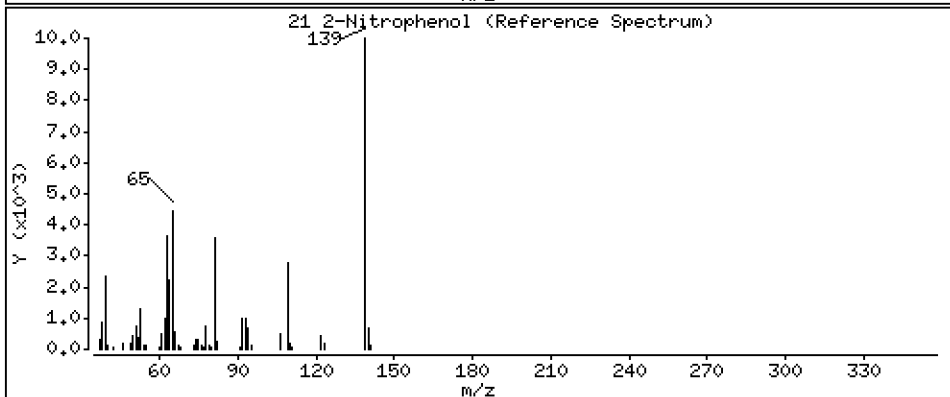
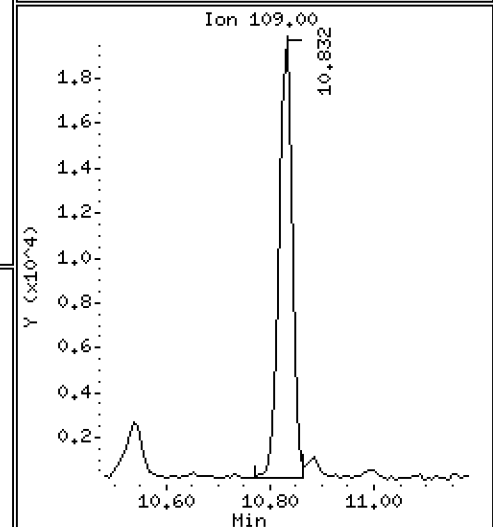
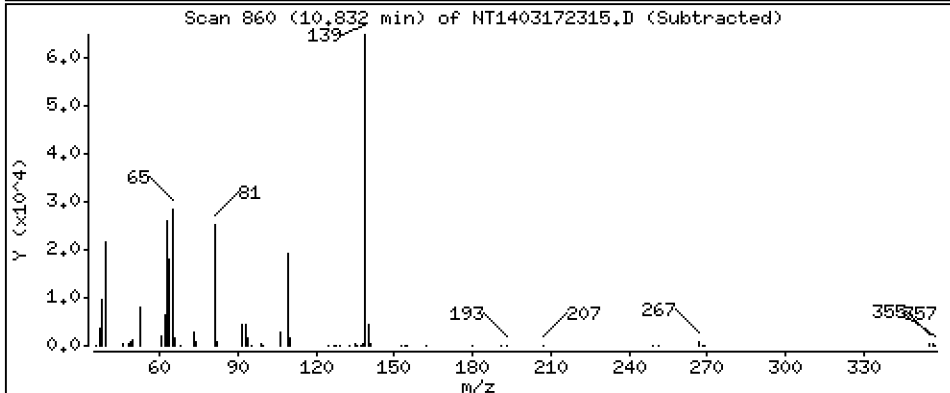
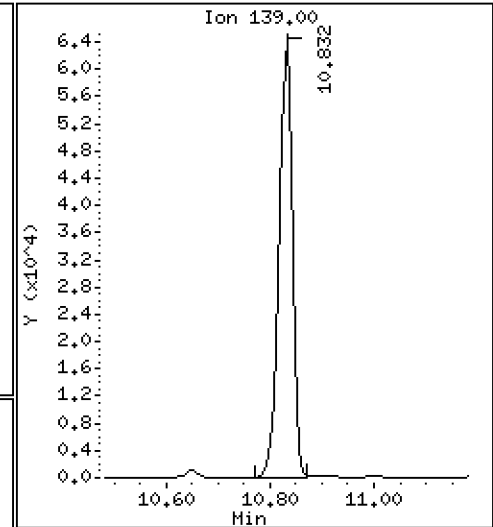
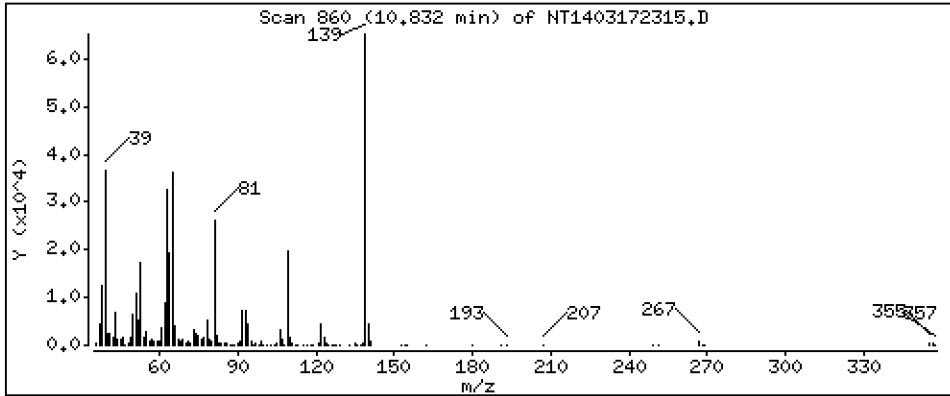
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 2,077 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

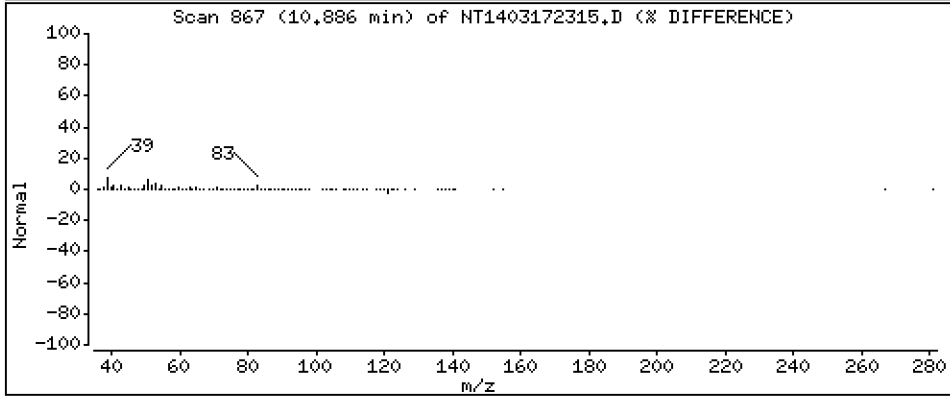
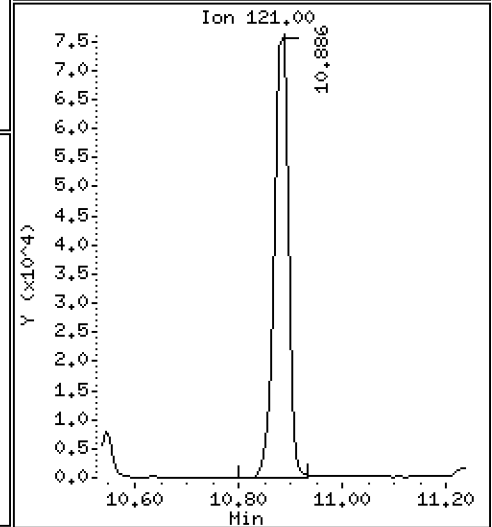
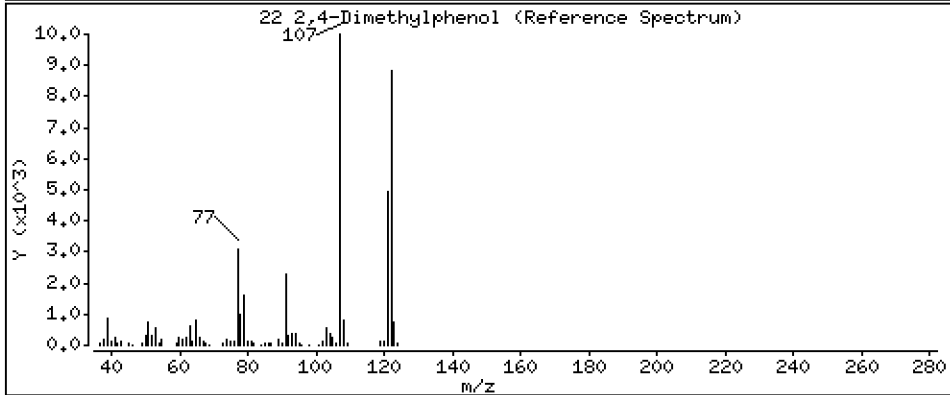
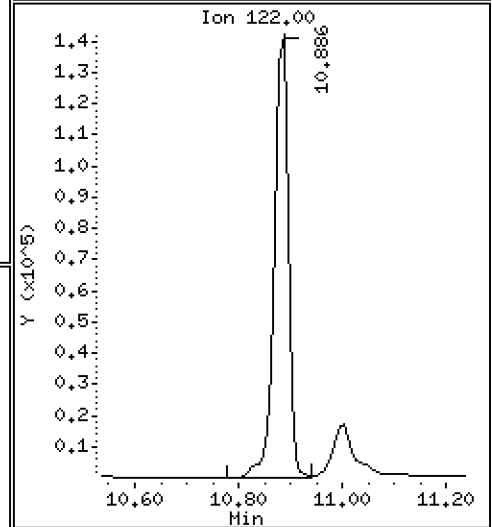
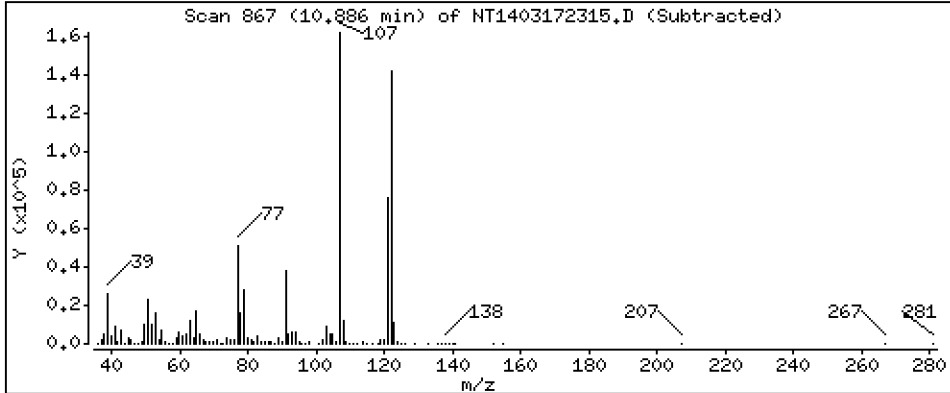
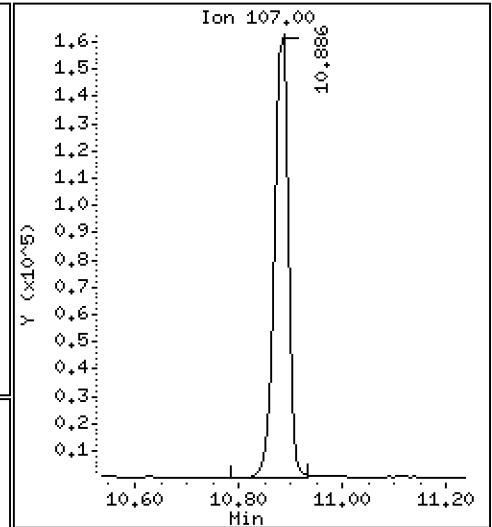
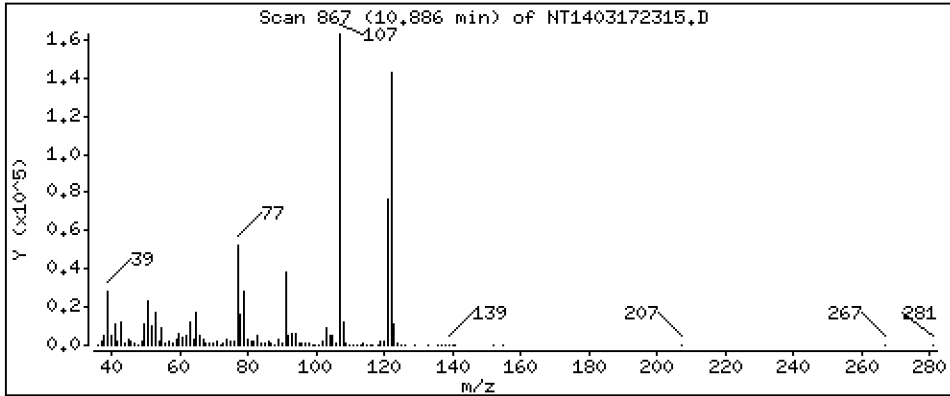
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,638 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

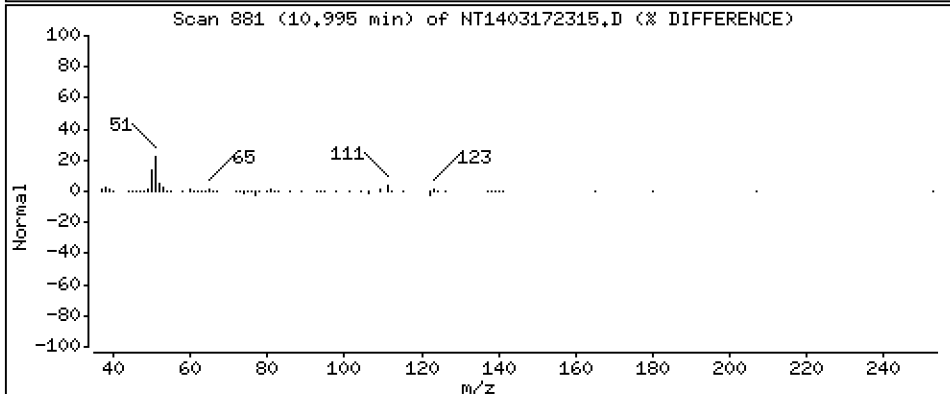
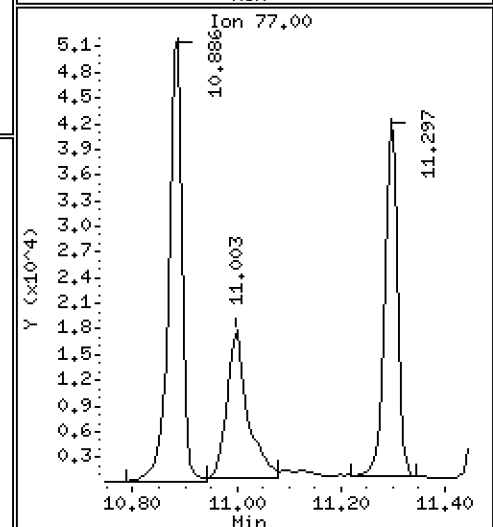
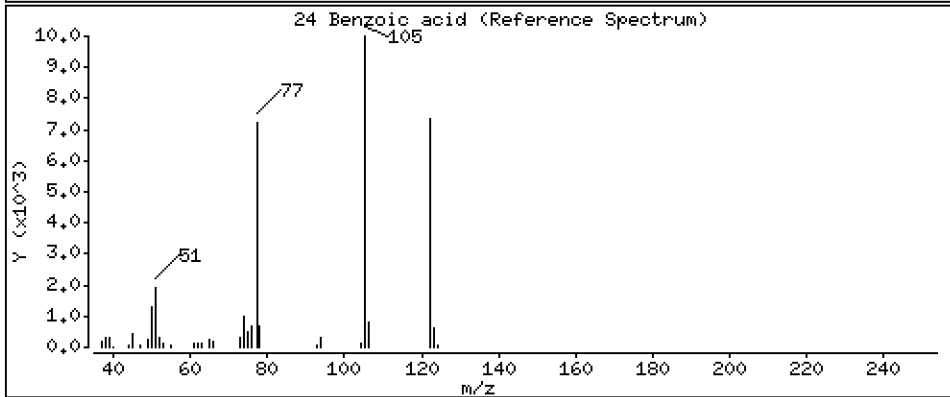
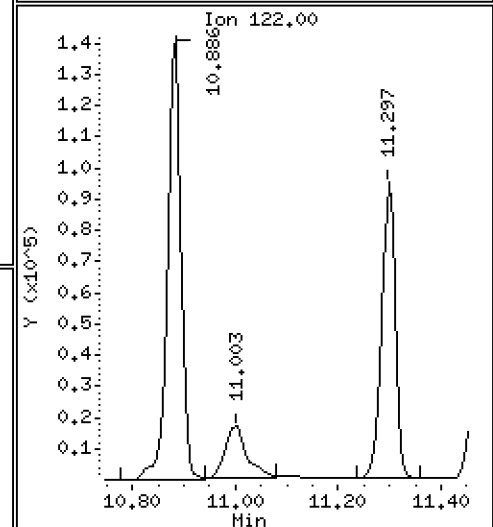
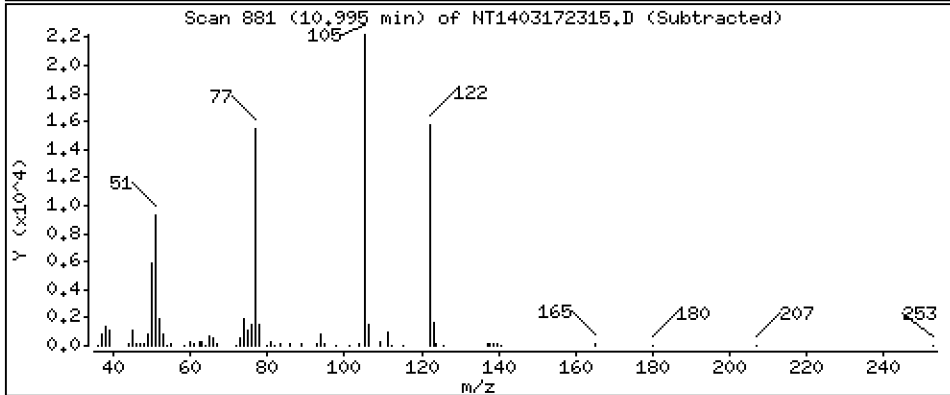
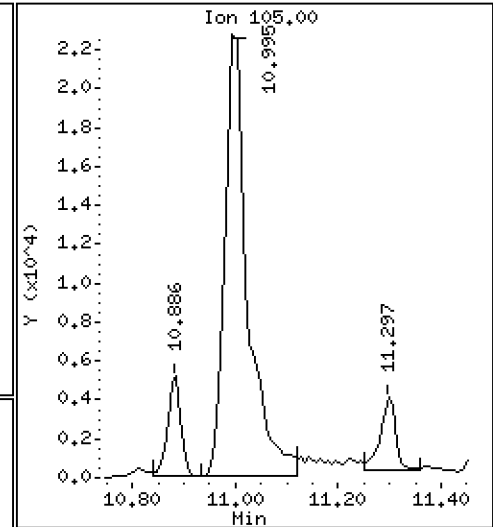
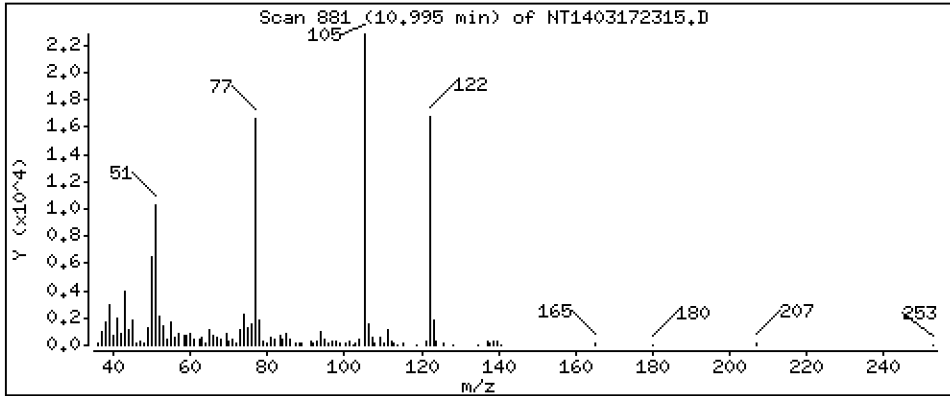
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,040 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

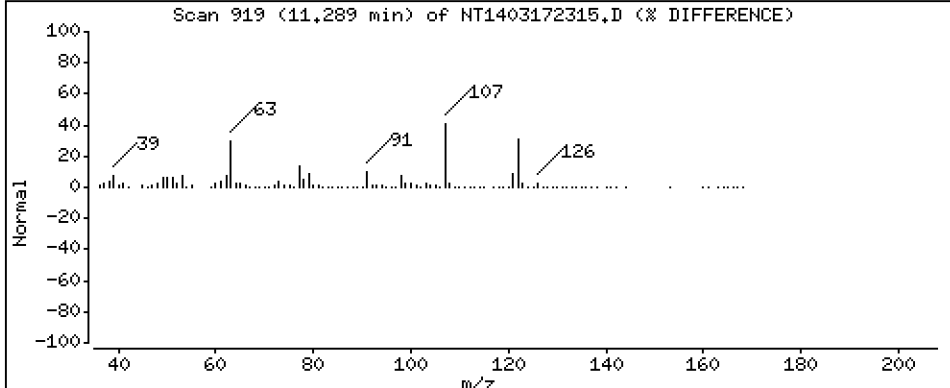
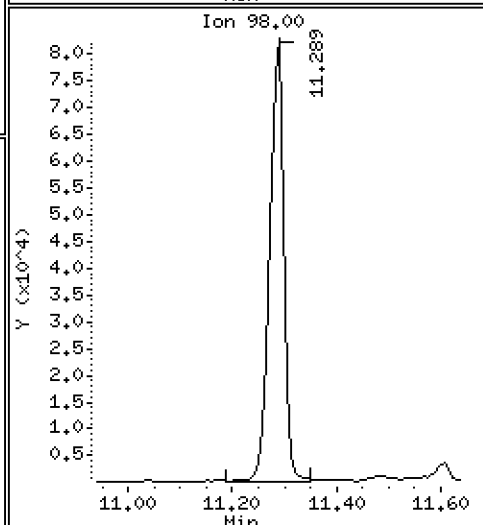
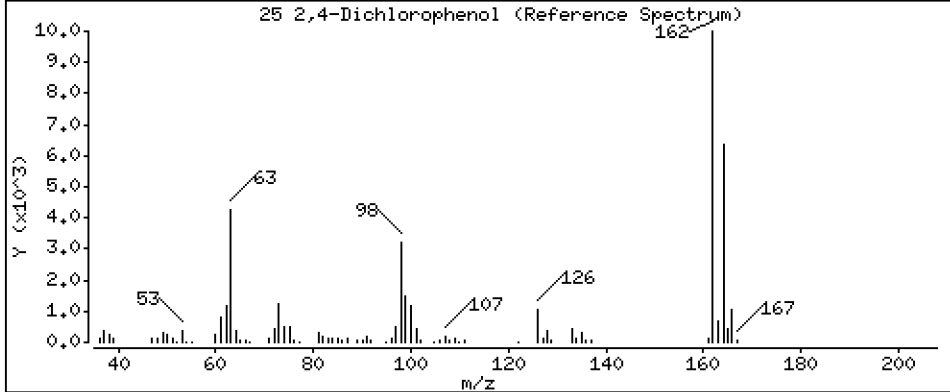
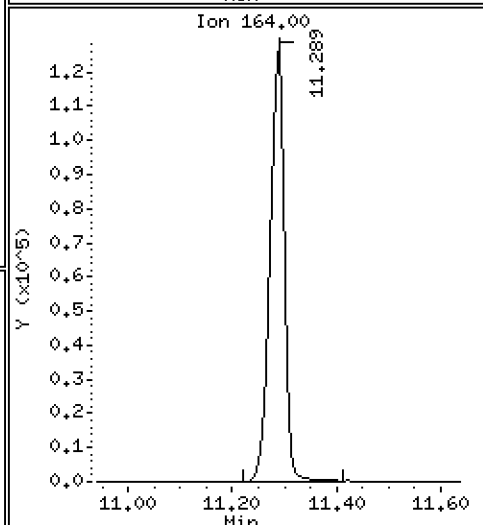
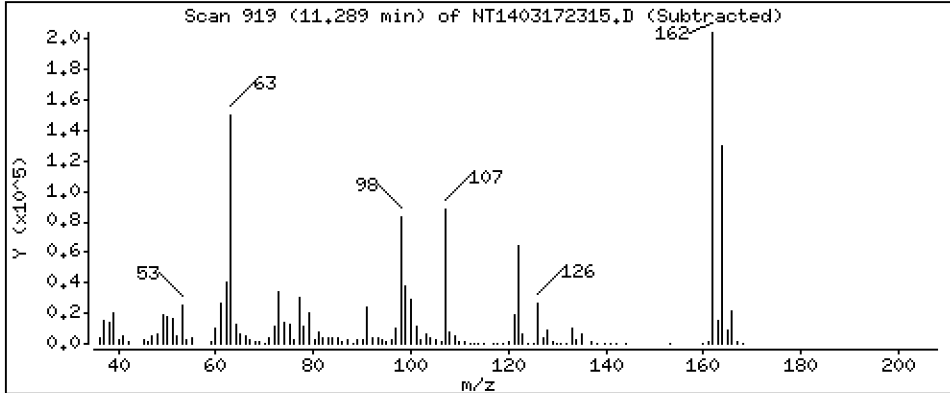
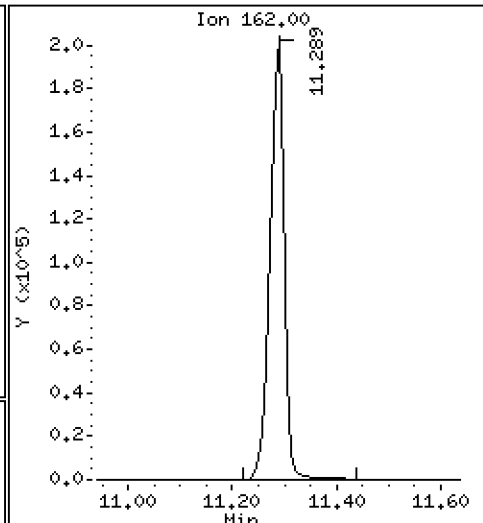
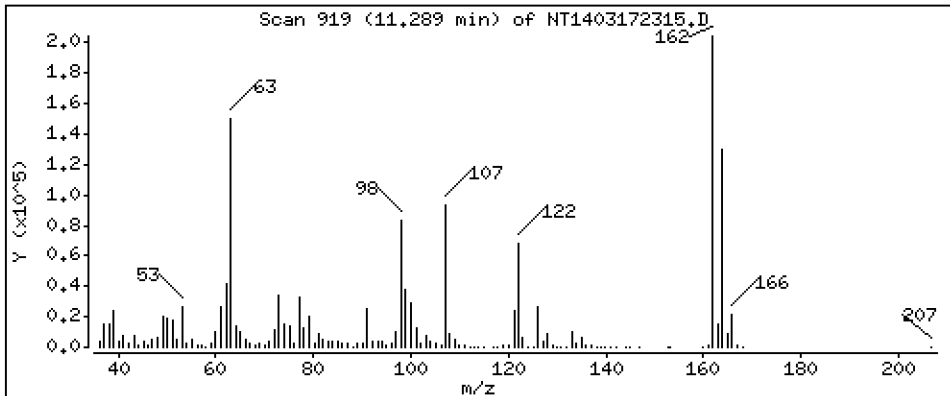
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 6,376 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

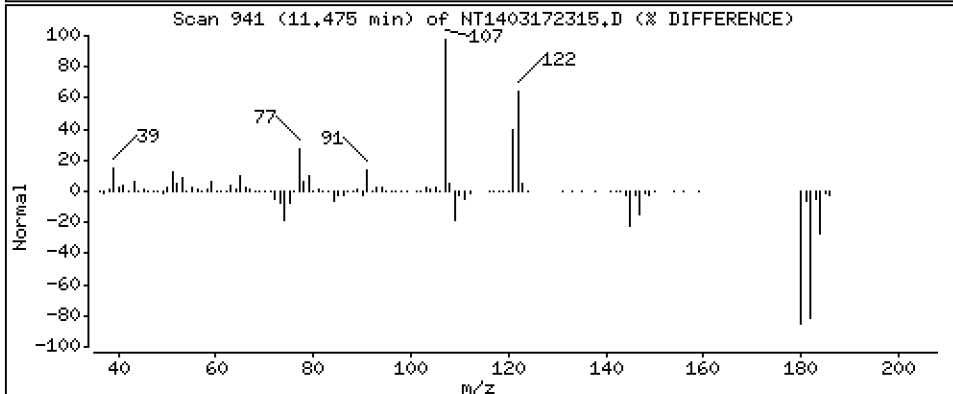
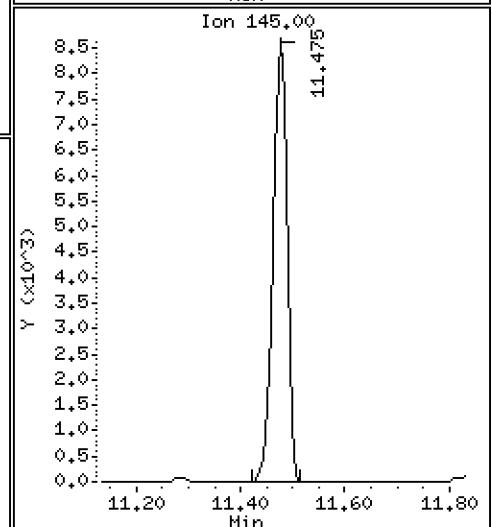
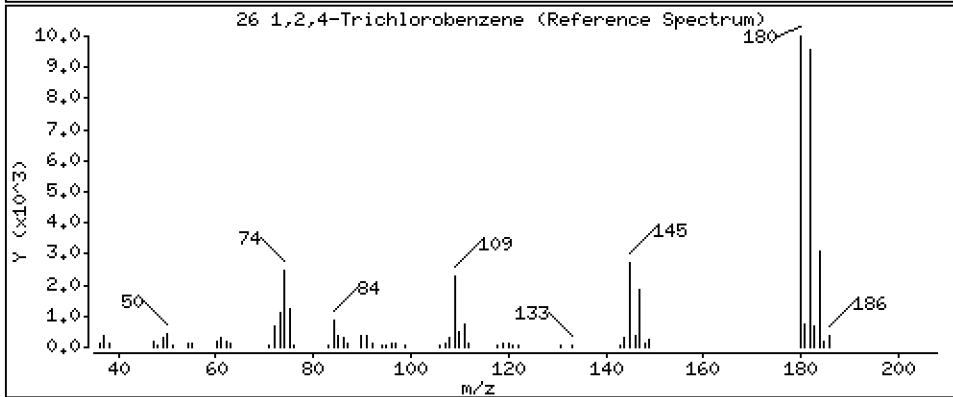
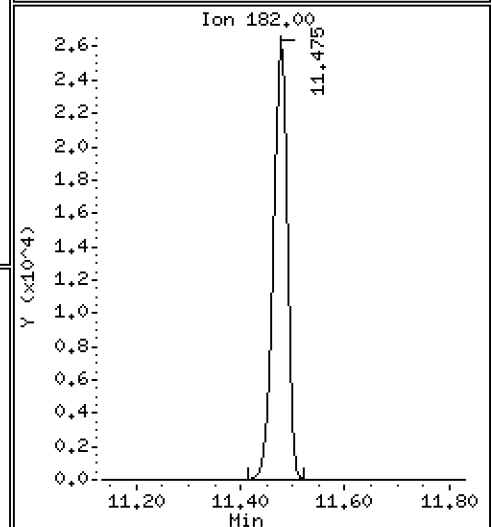
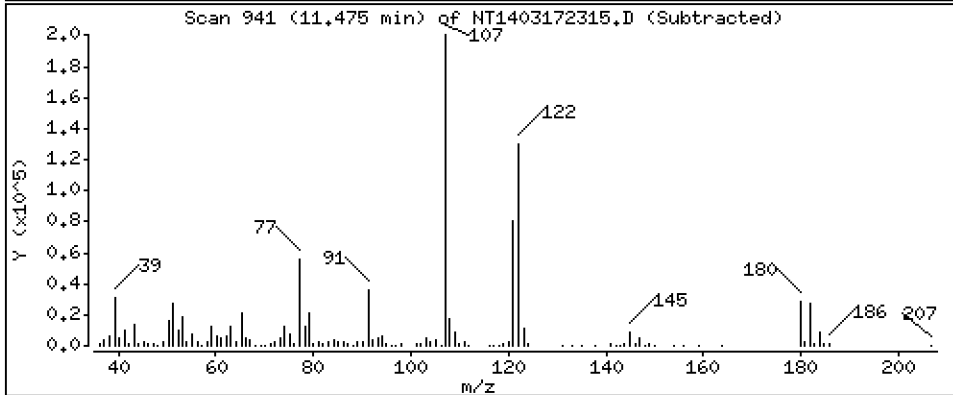
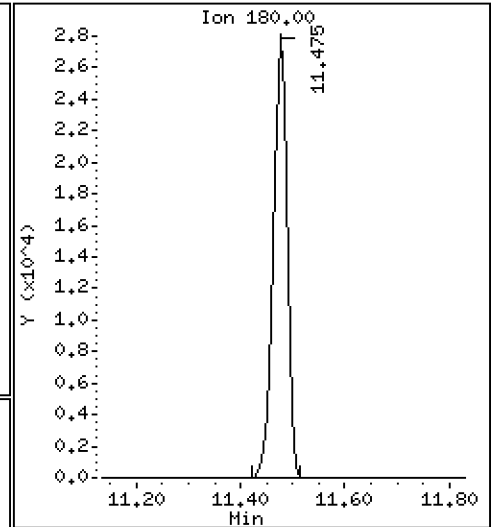
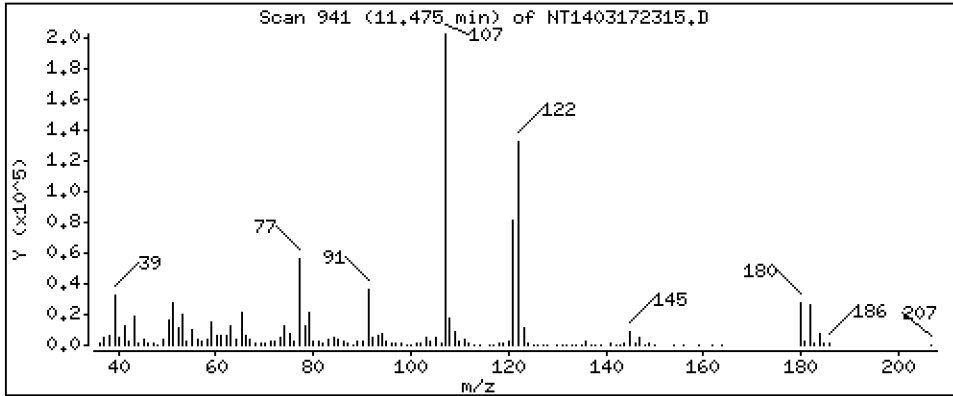
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 0.6398 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

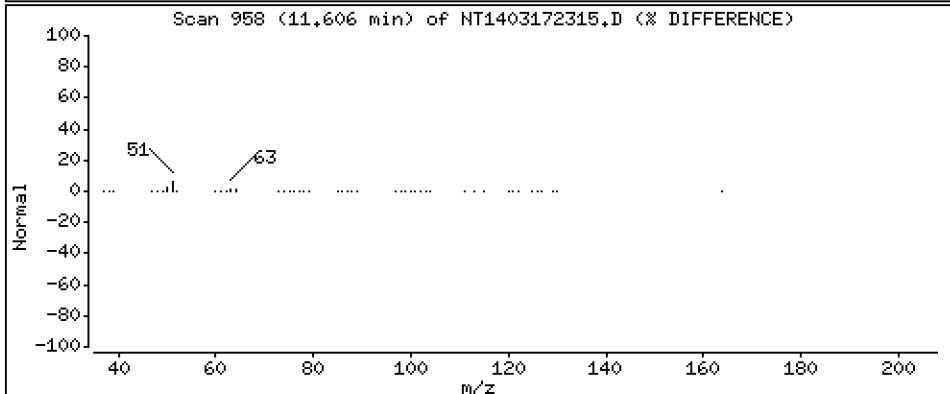
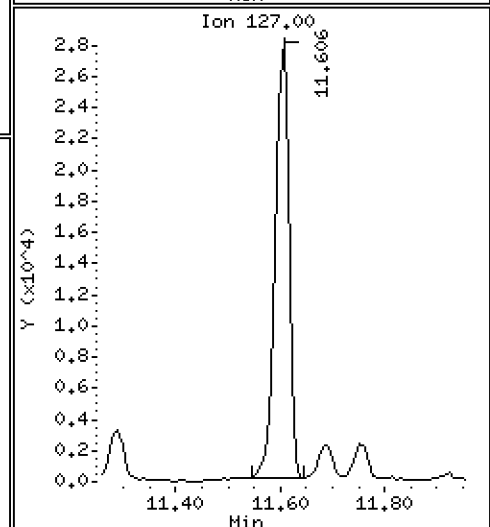
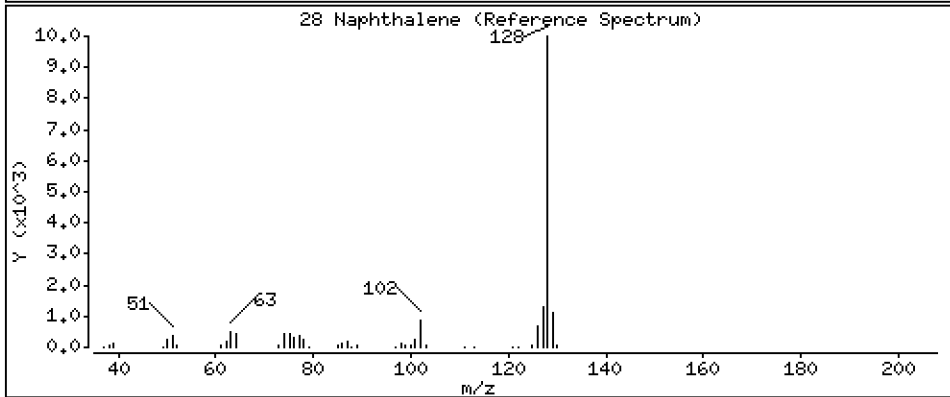
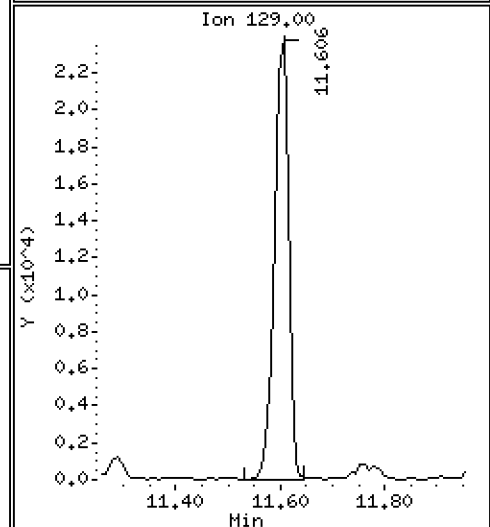
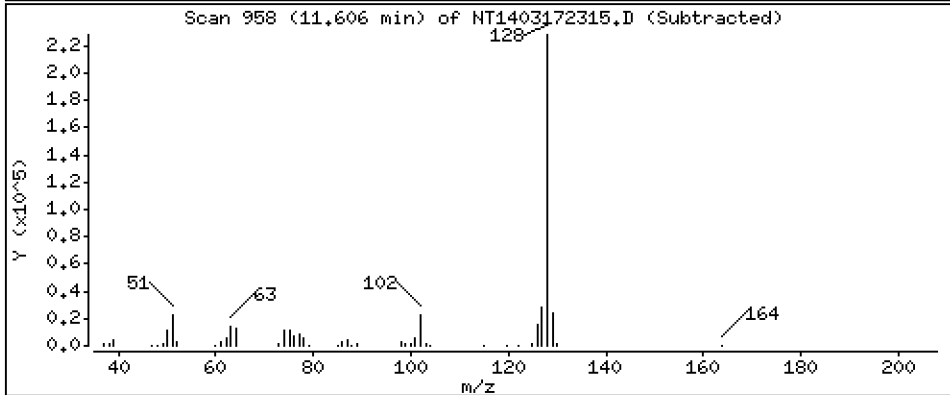
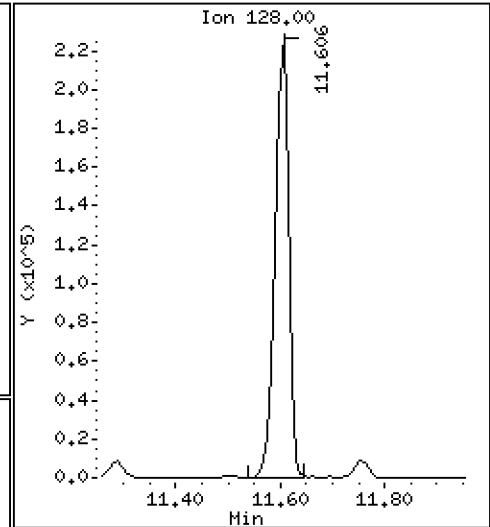
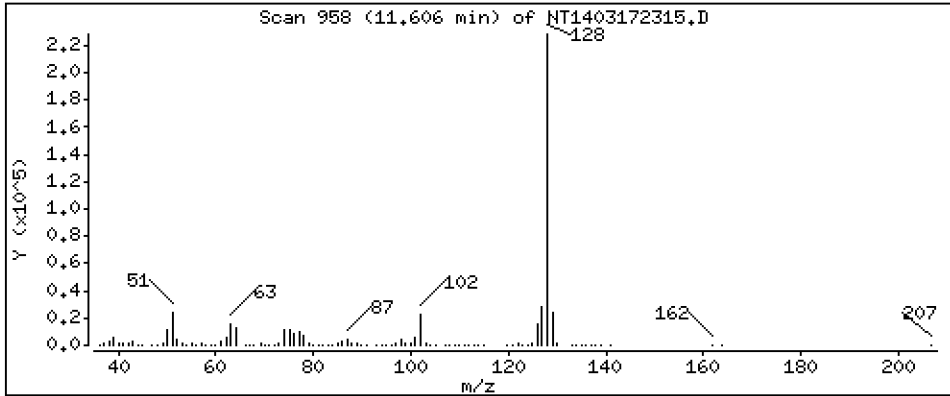
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 1.633 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

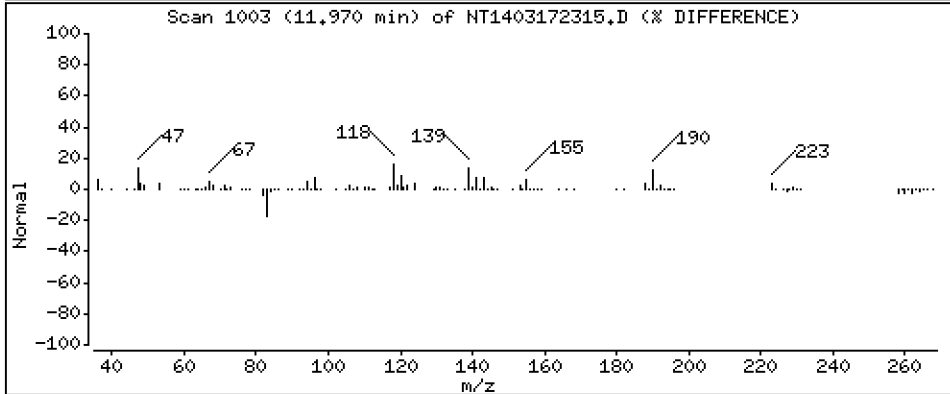
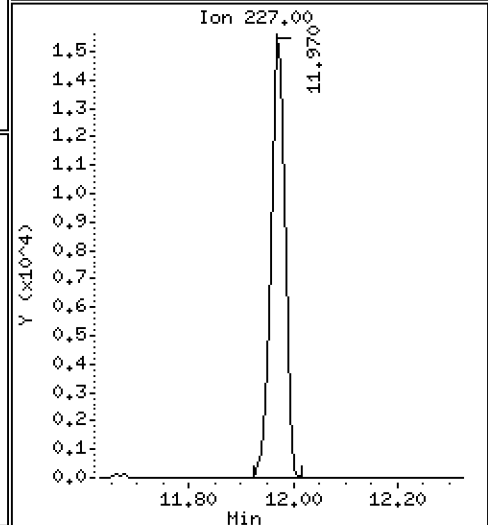
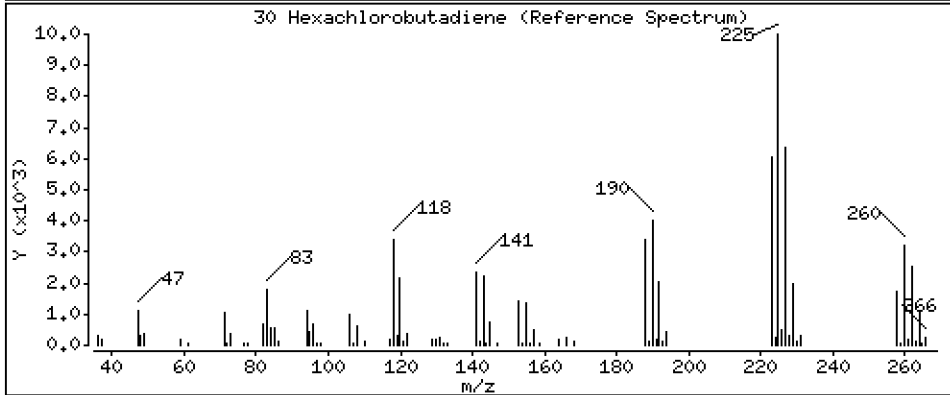
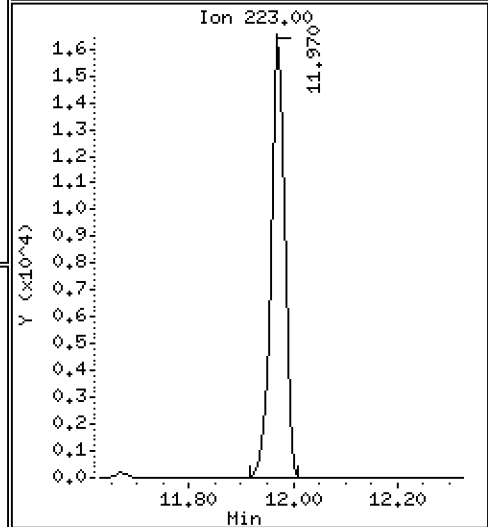
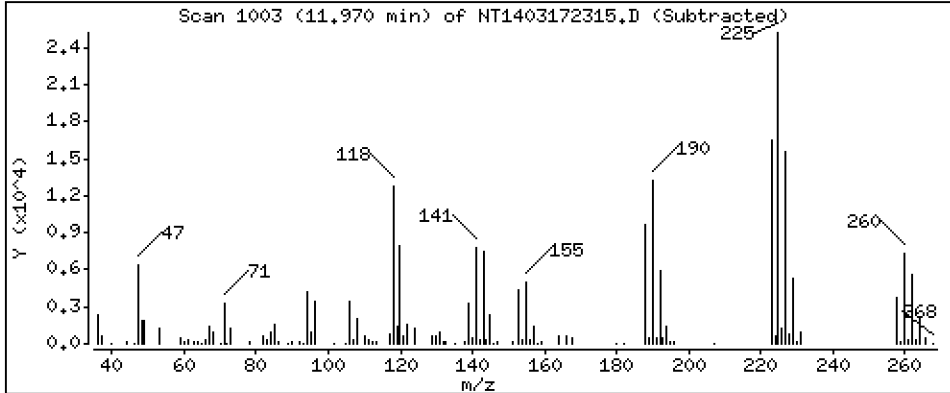
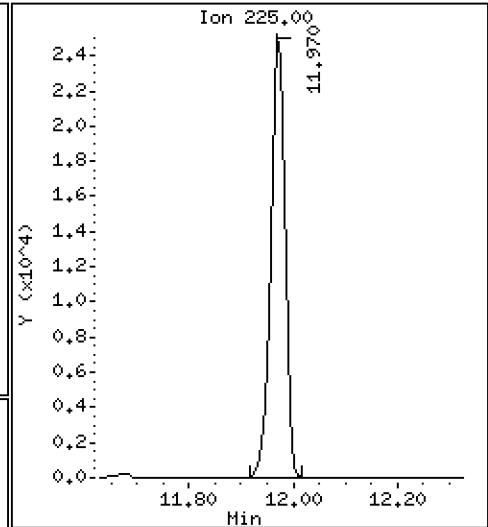
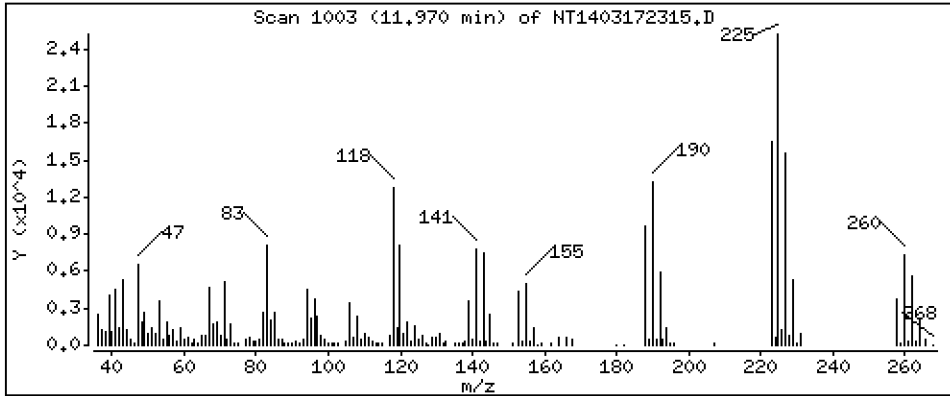
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

30 Hexachlorobutadiene

Concentration: 1,332 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

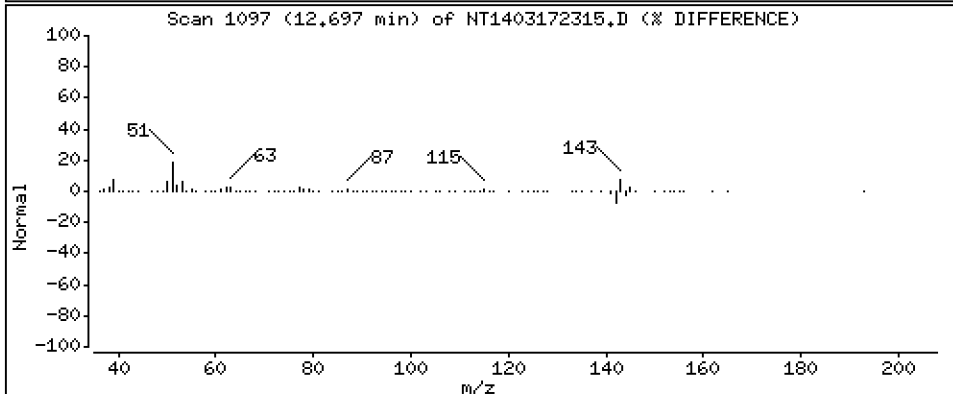
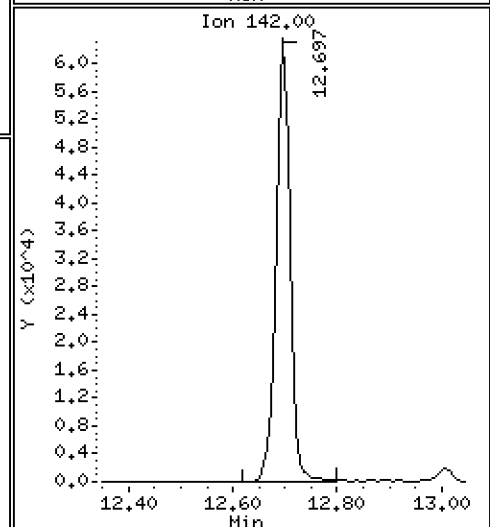
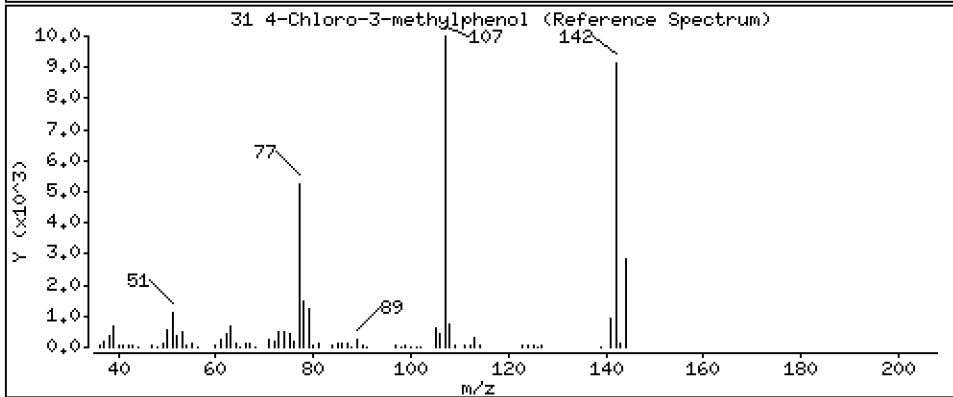
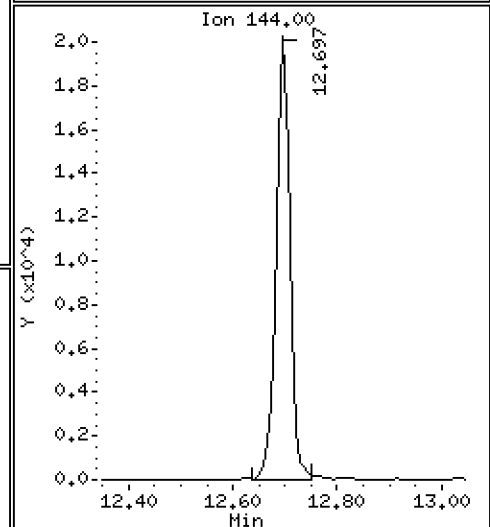
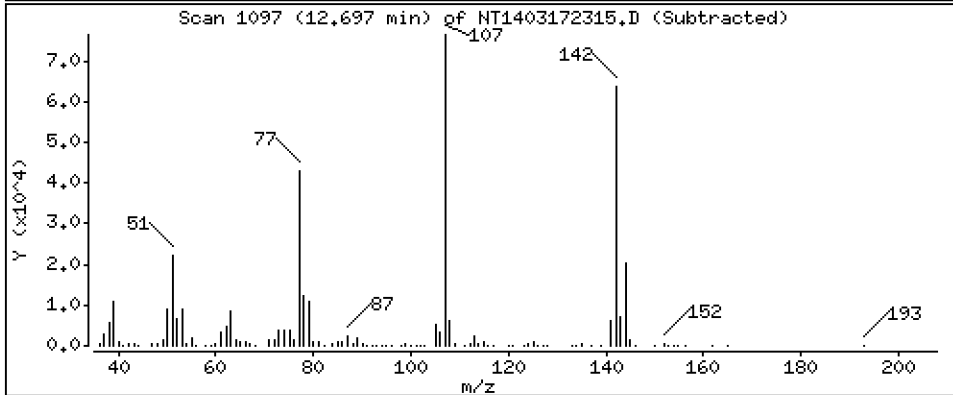
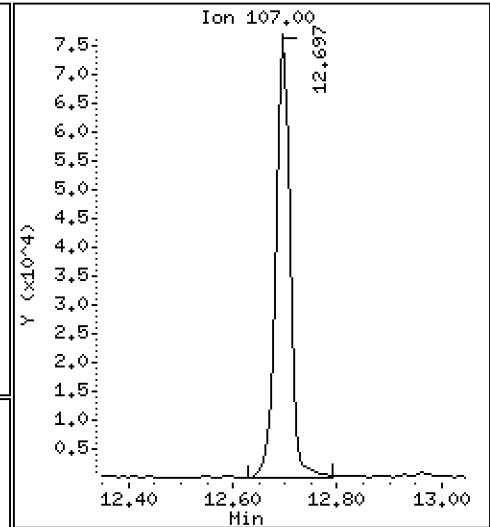
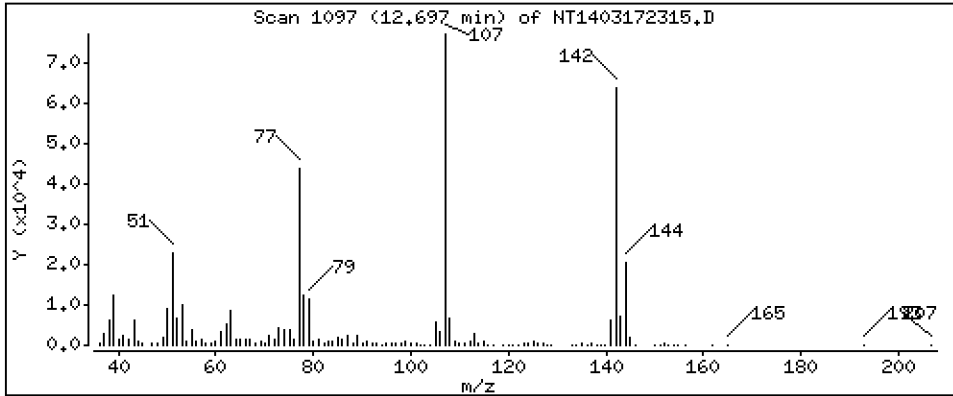
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 1.838 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

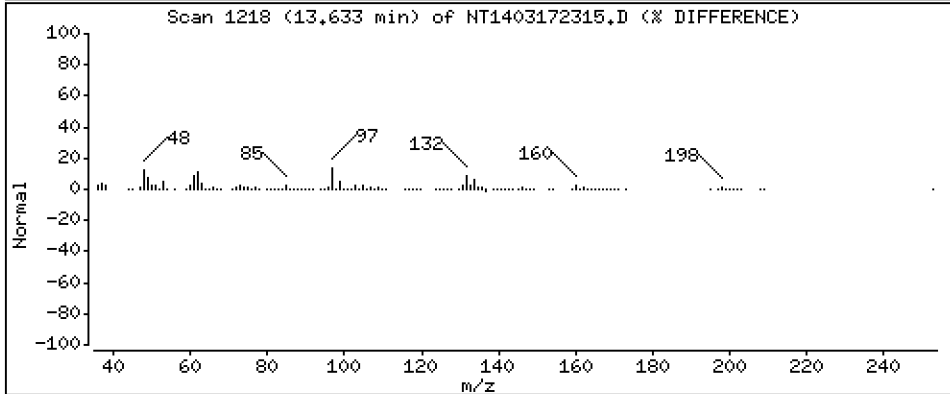
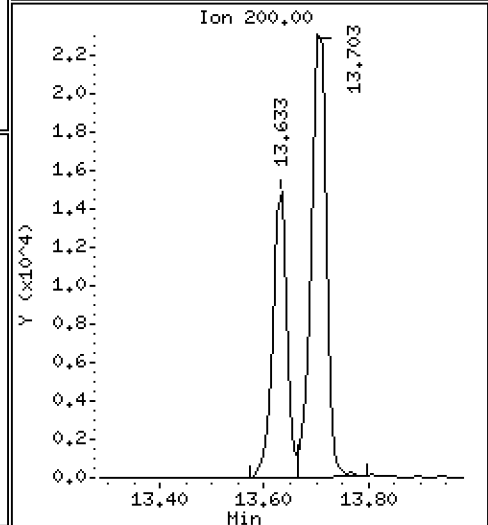
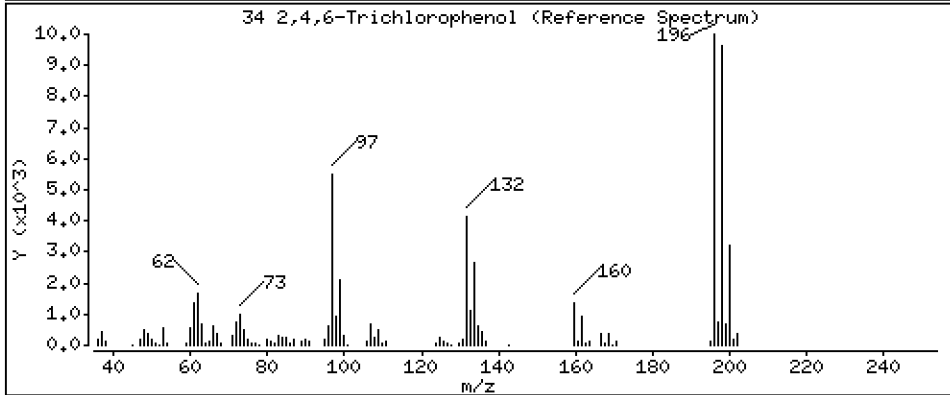
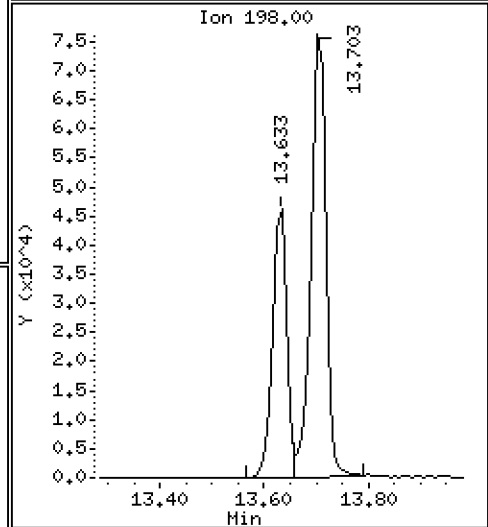
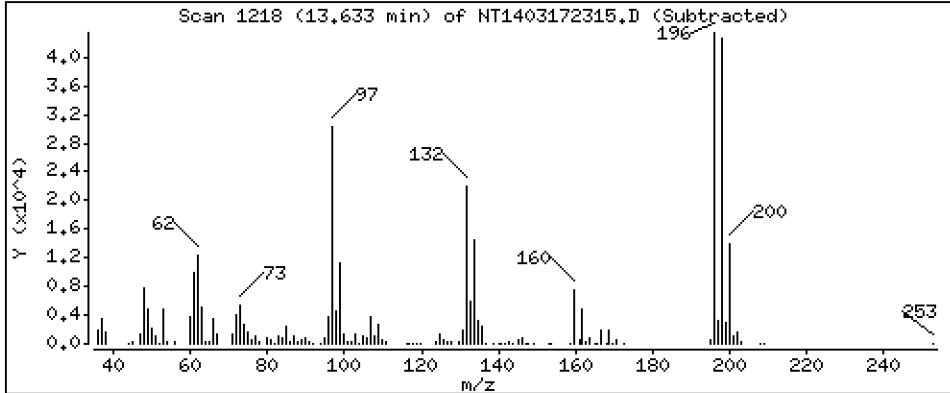
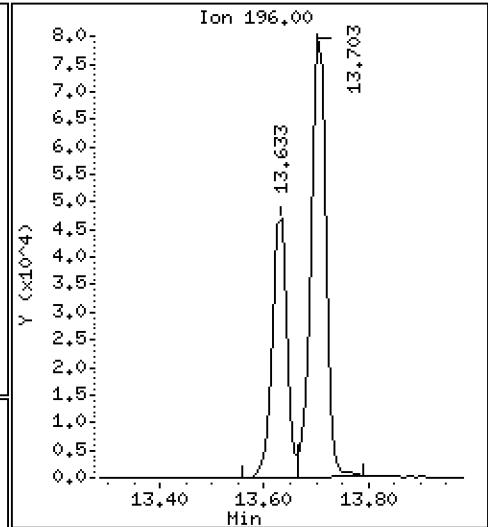
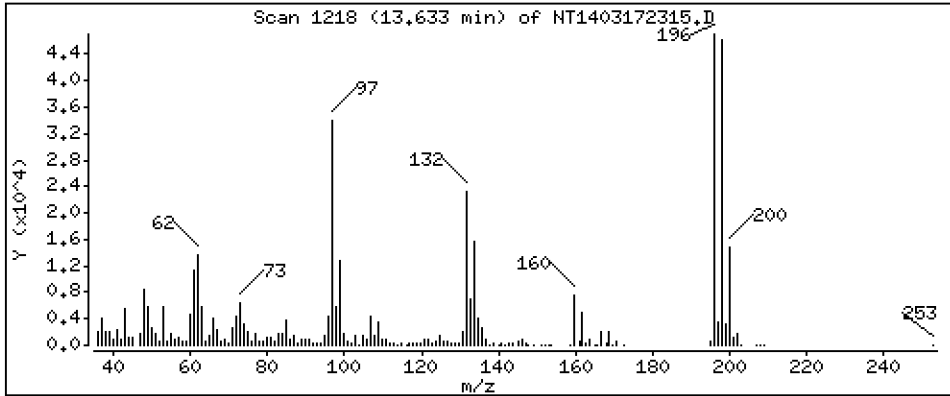
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 1,986 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

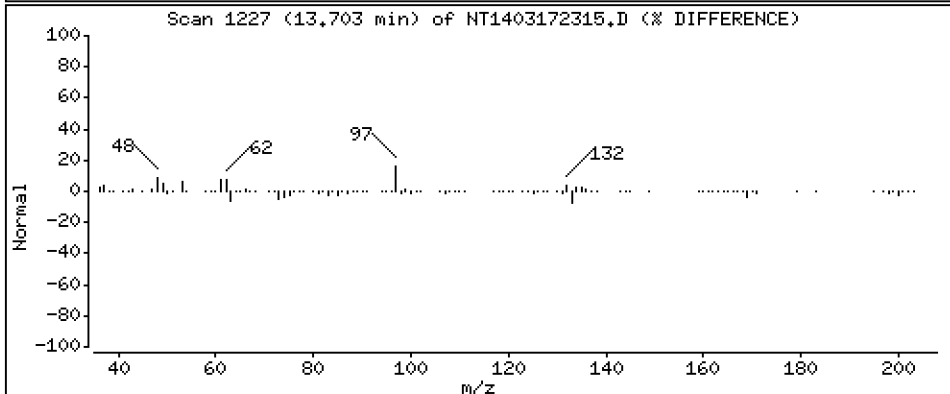
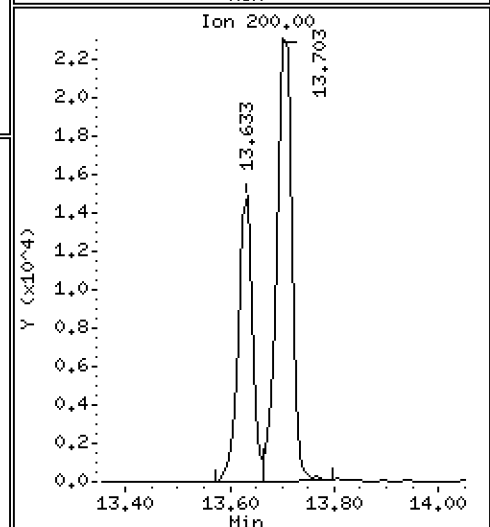
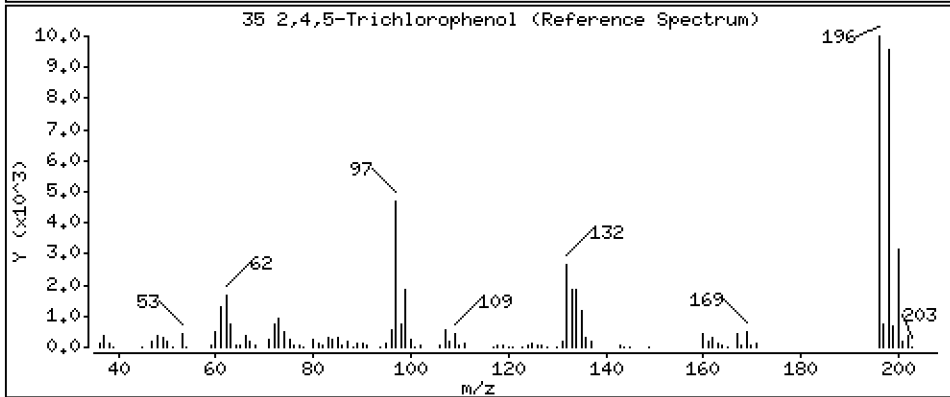
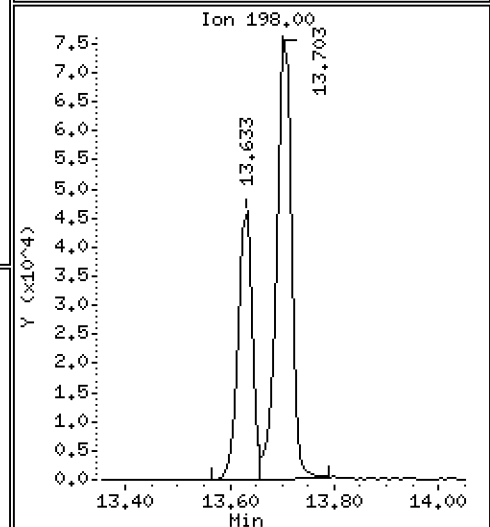
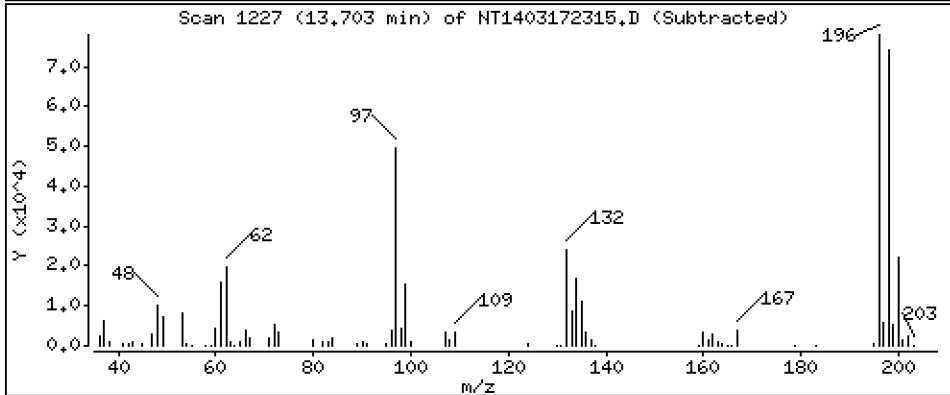
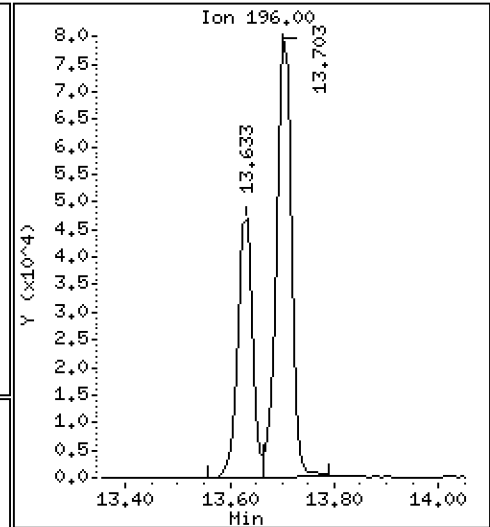
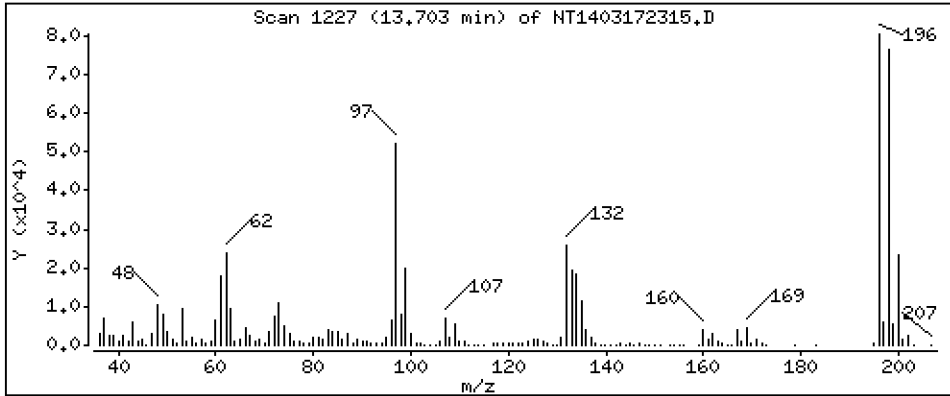
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 3,240 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

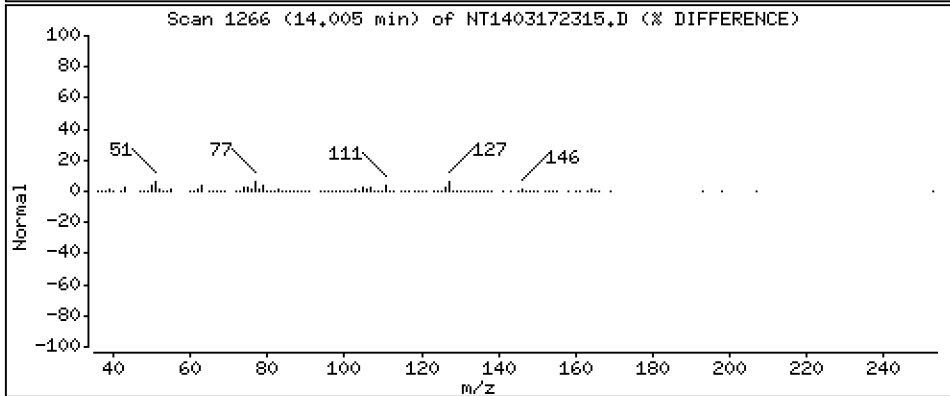
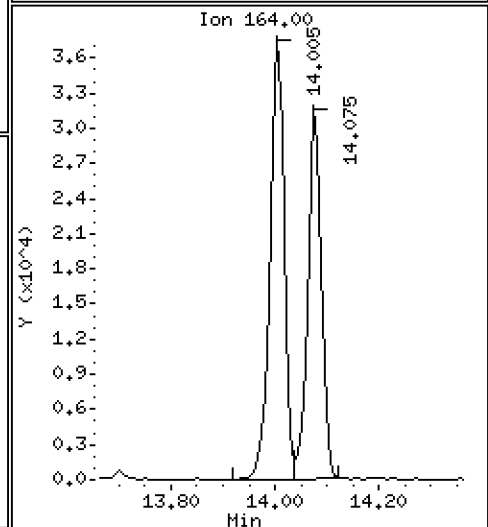
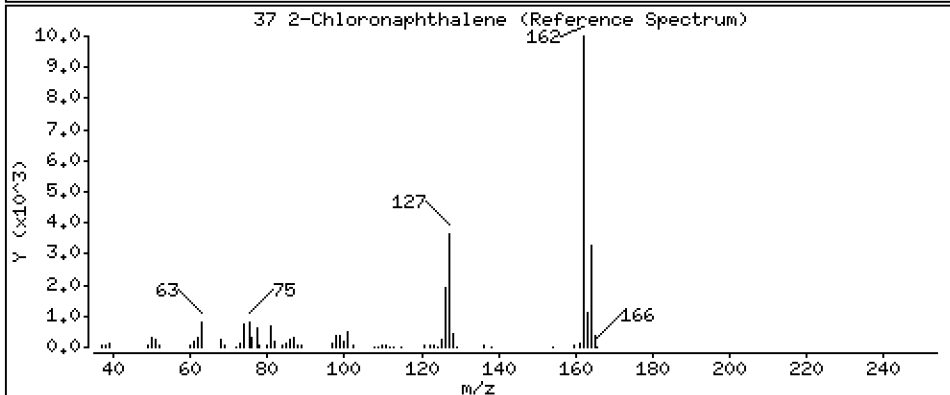
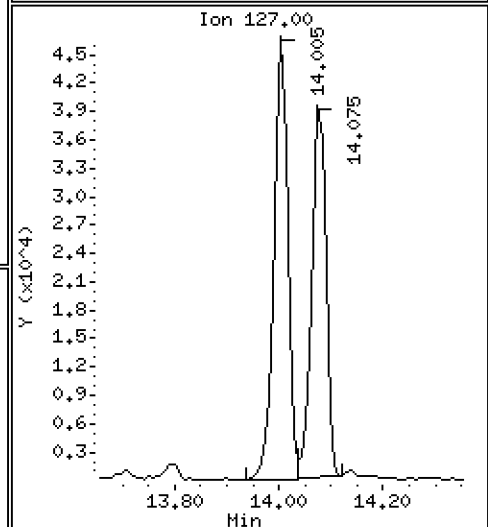
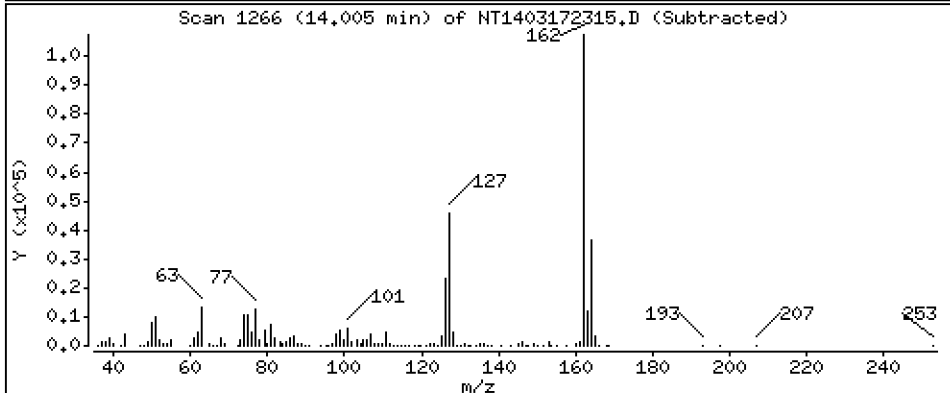
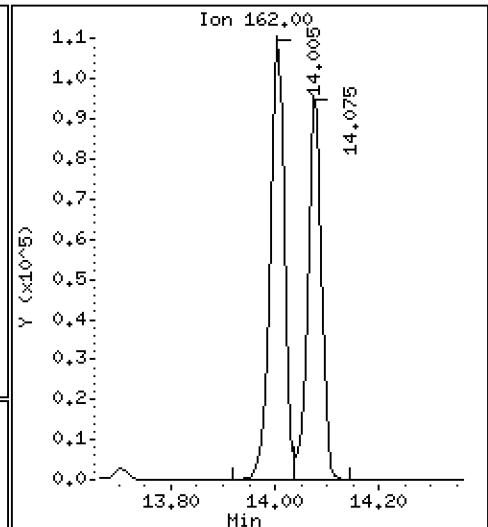
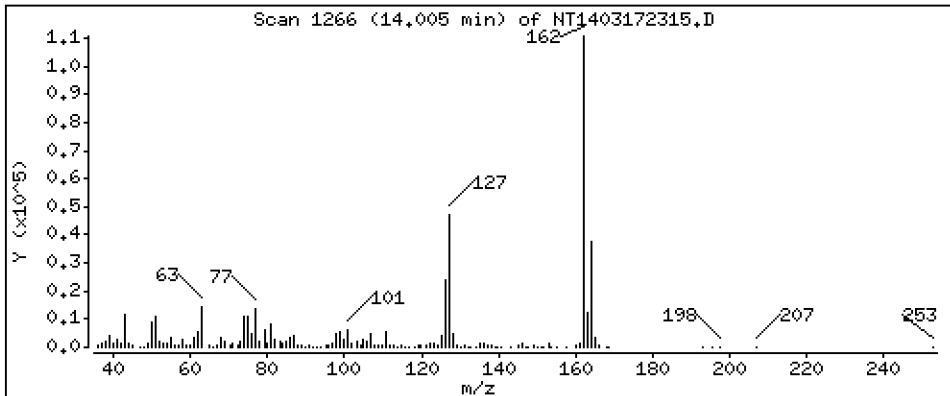
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 1,436 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

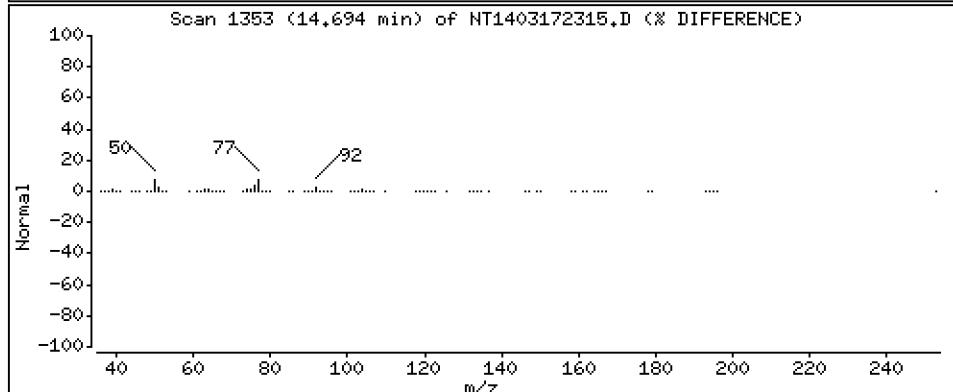
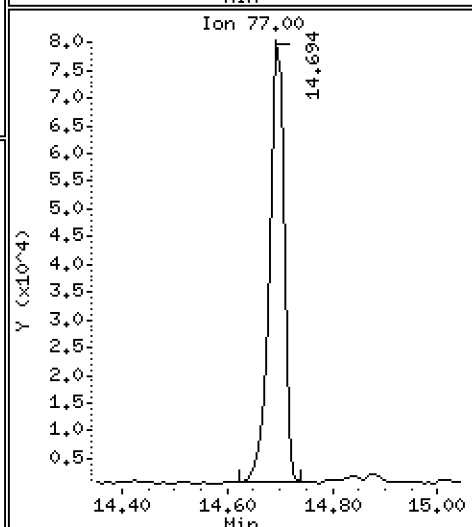
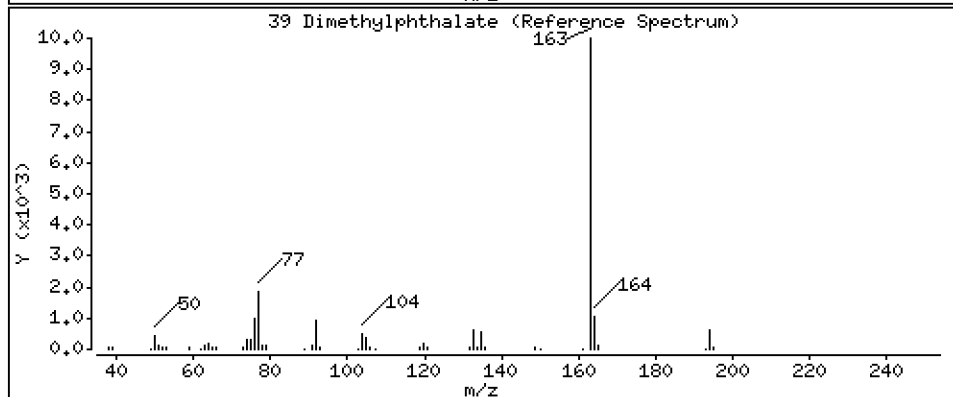
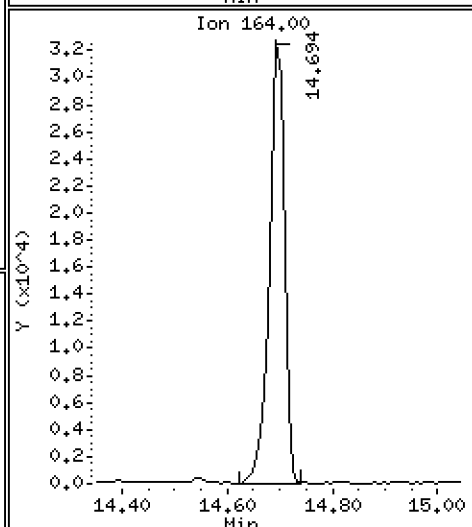
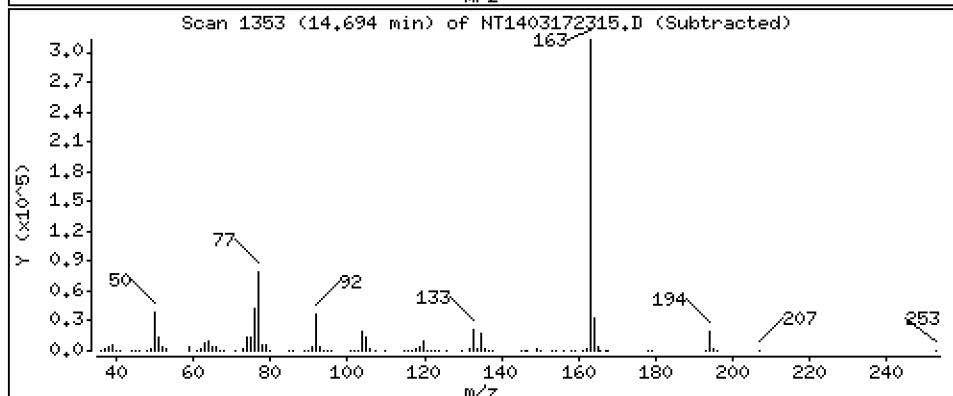
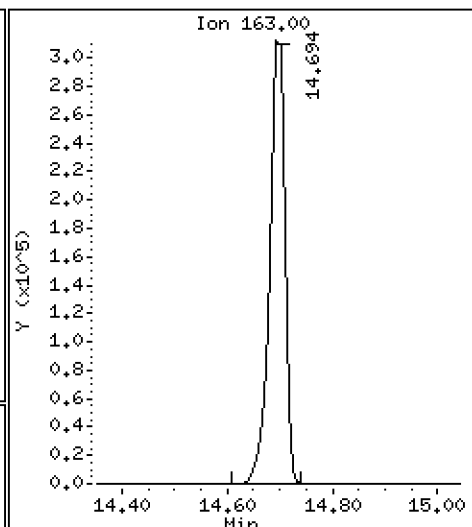
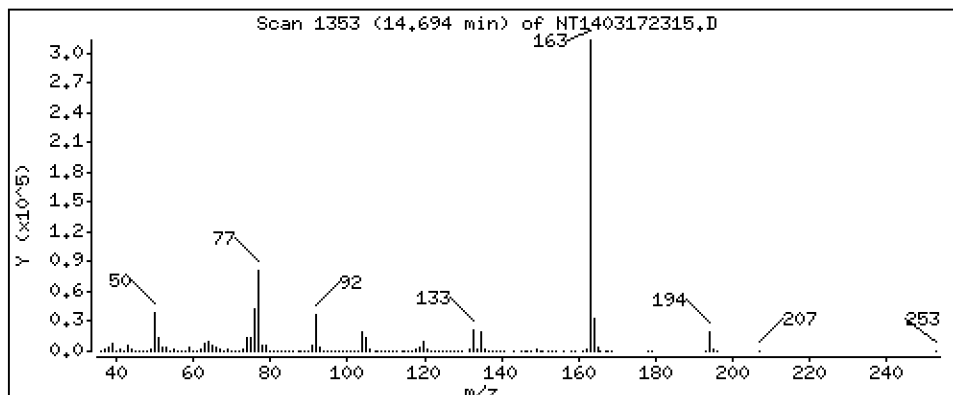
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 4.099 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

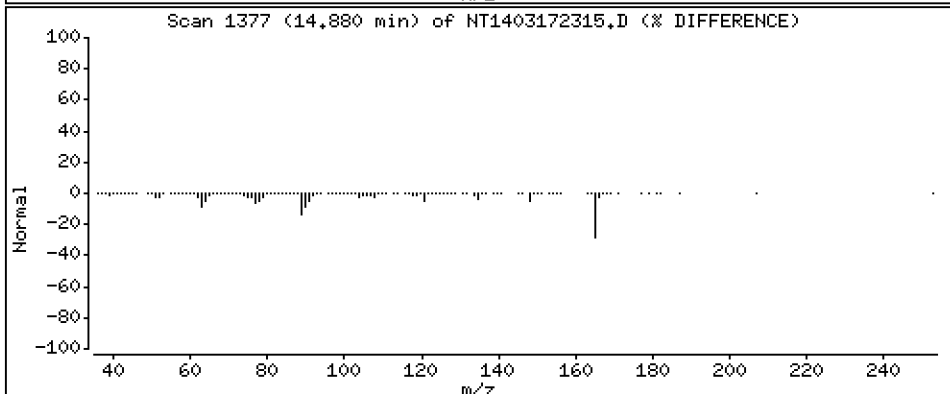
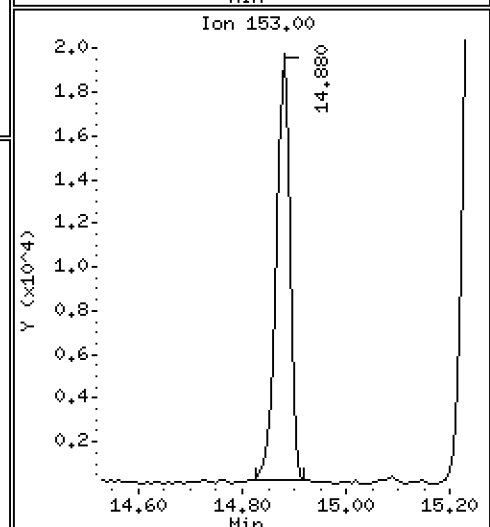
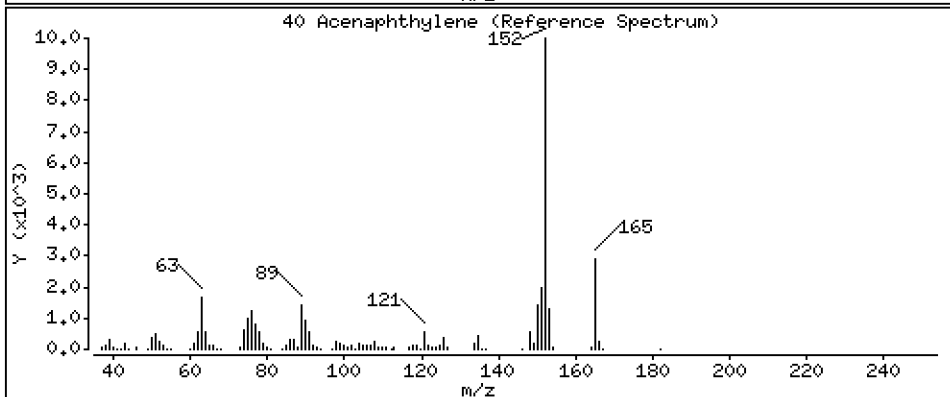
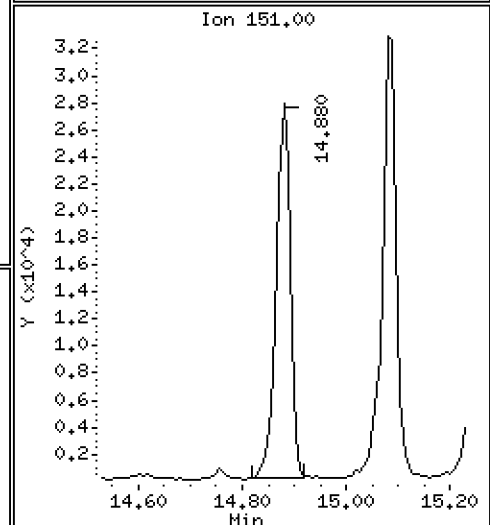
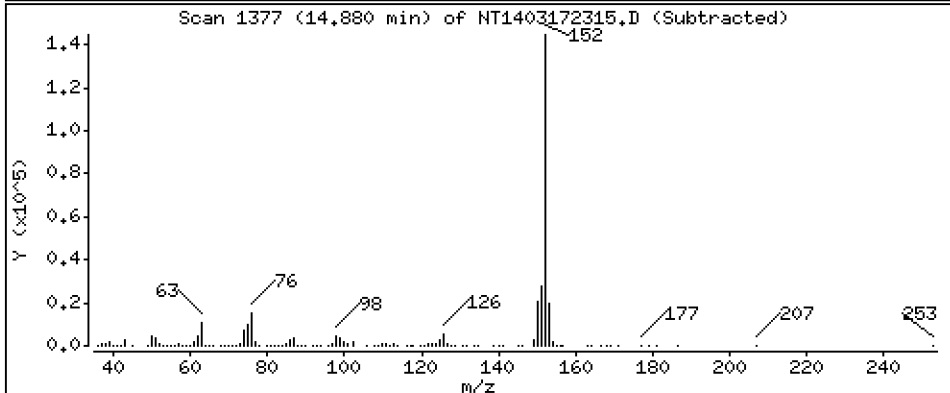
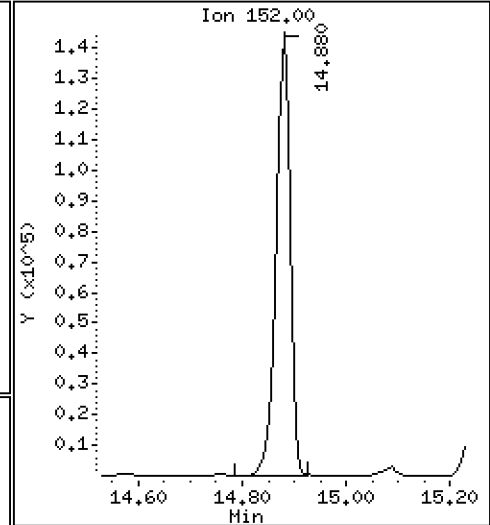
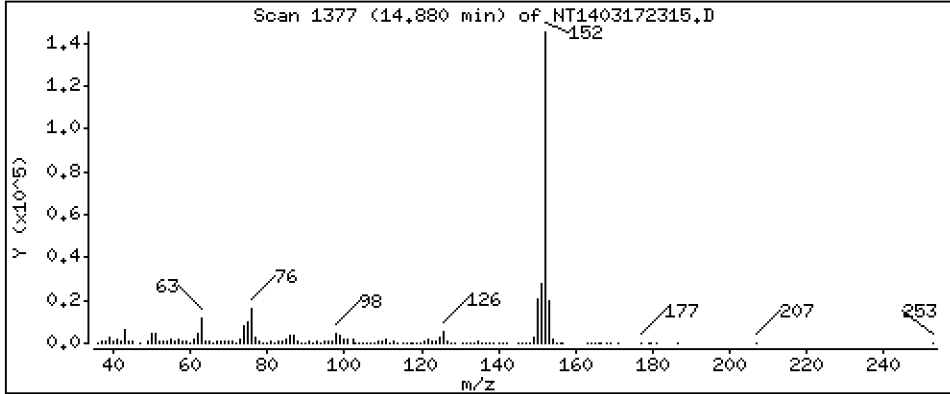
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 1.114 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

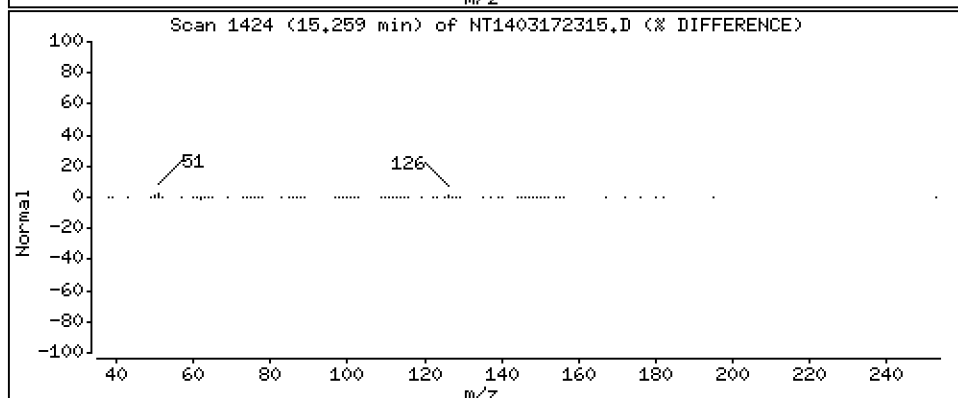
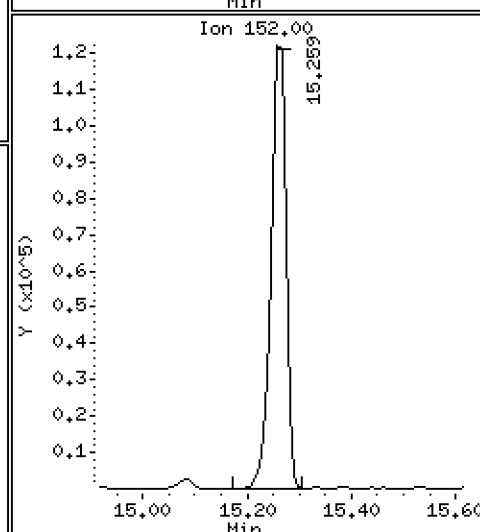
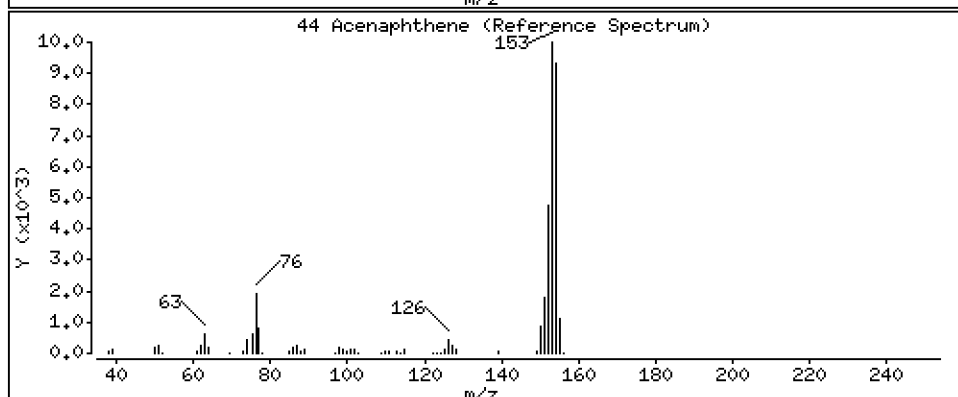
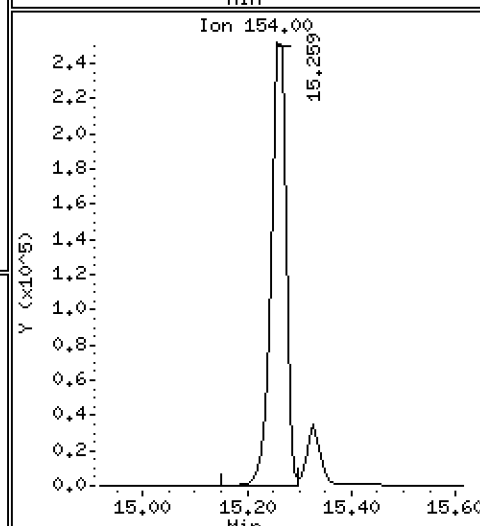
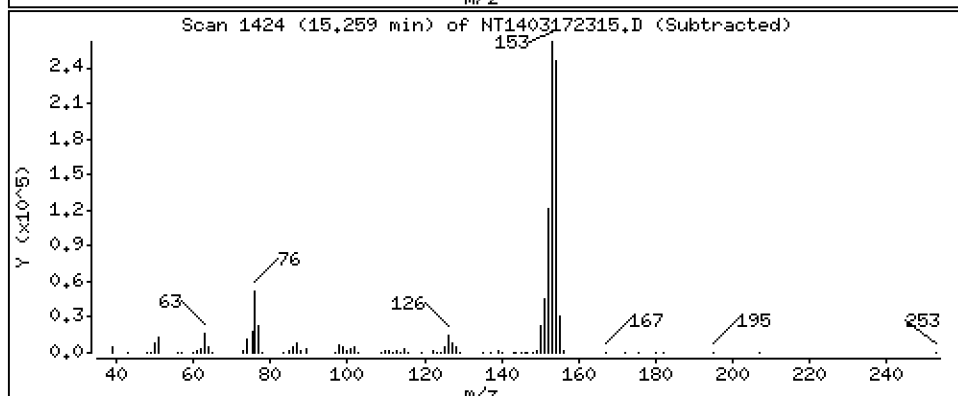
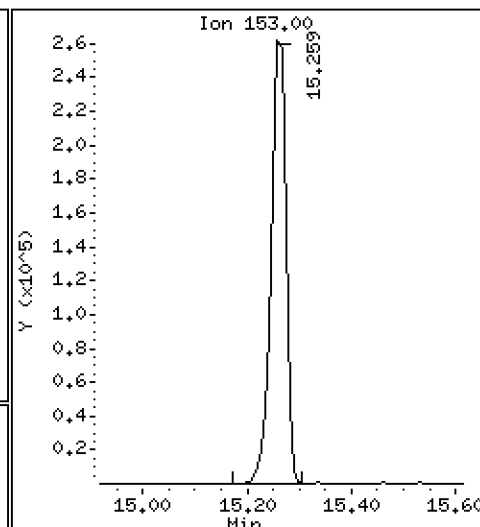
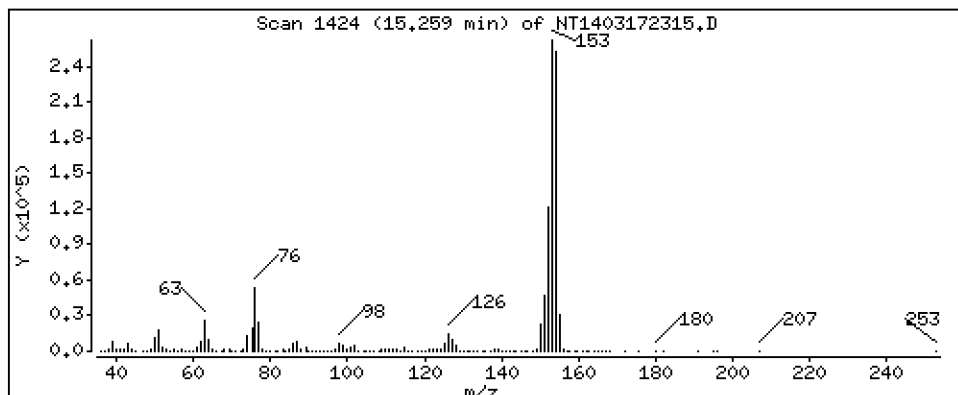
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 3,672 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

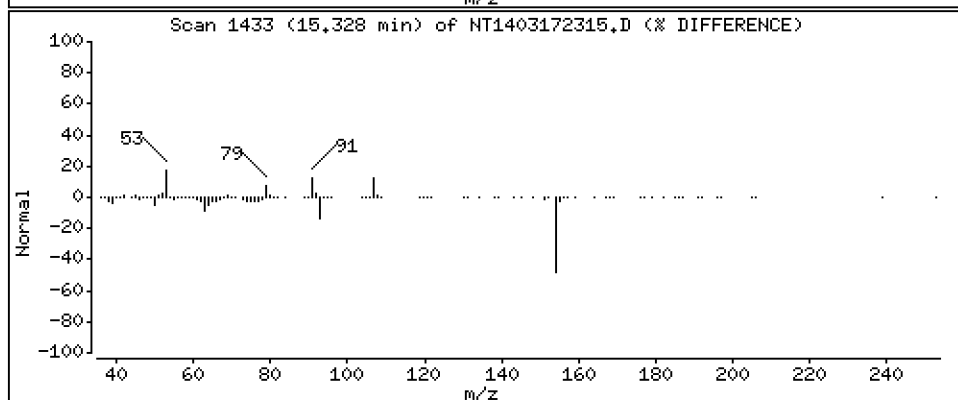
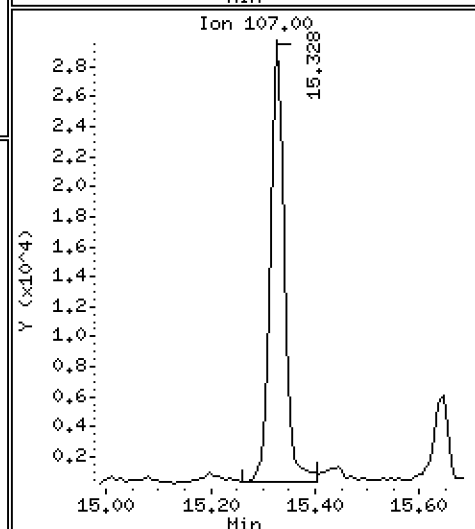
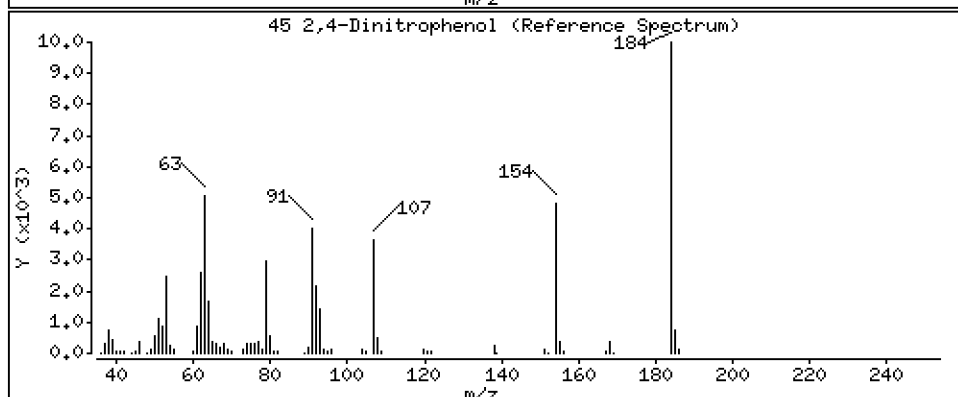
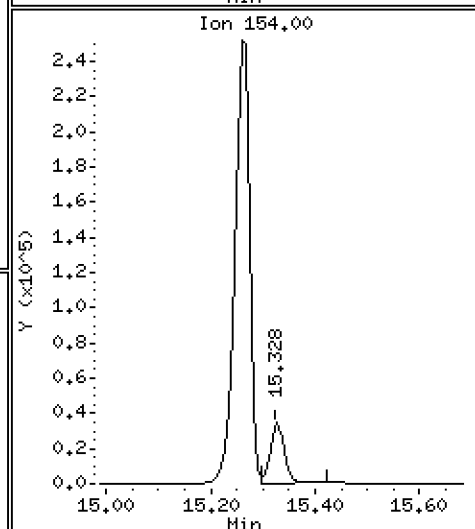
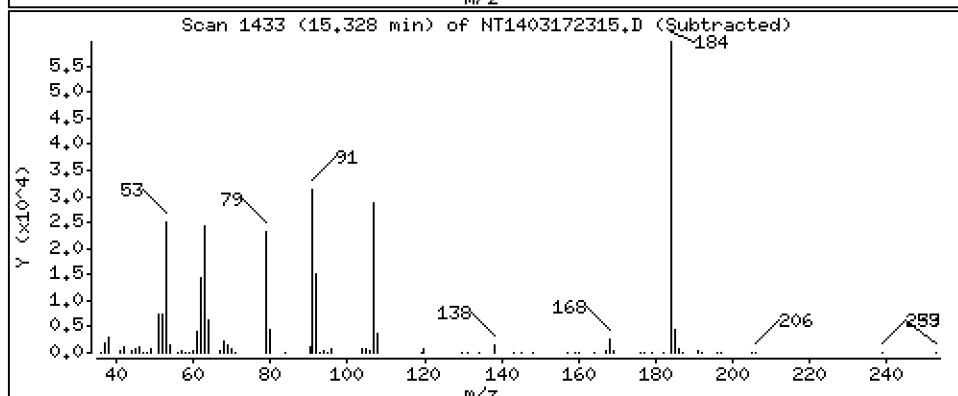
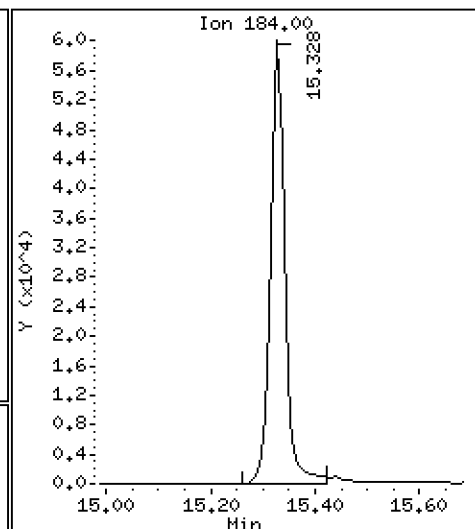
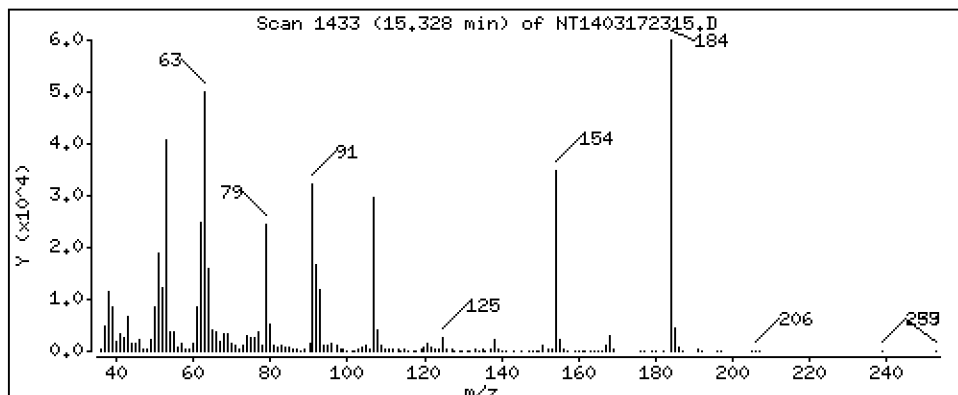
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 4,103 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

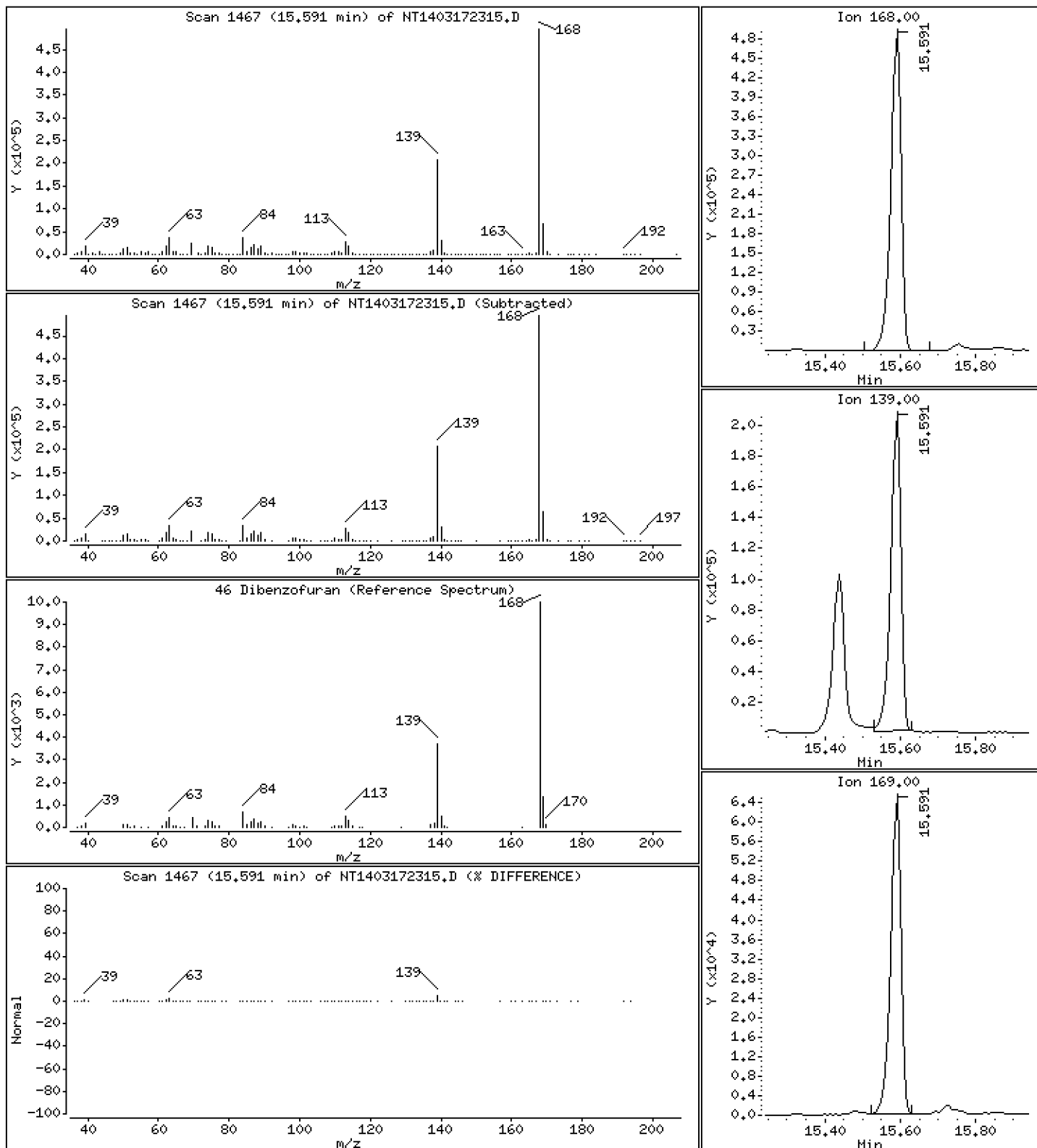
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,622 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

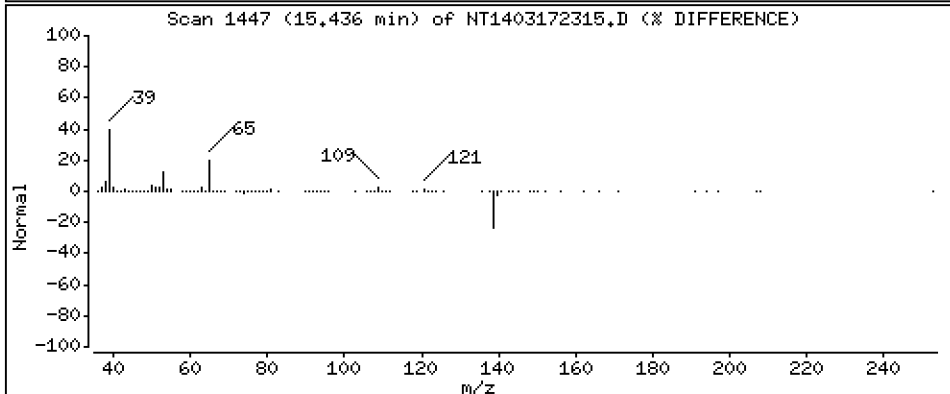
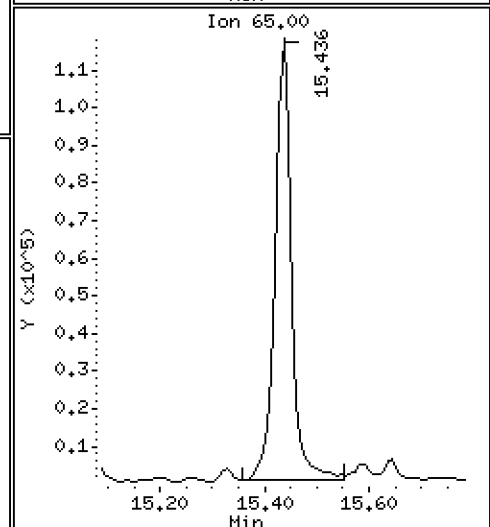
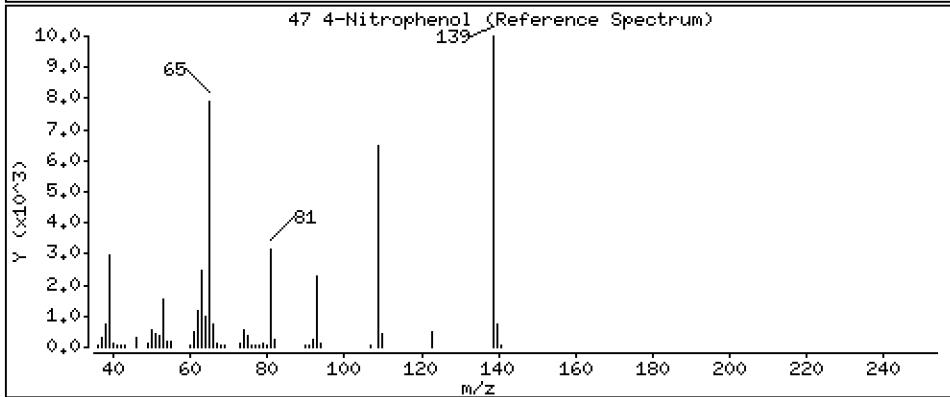
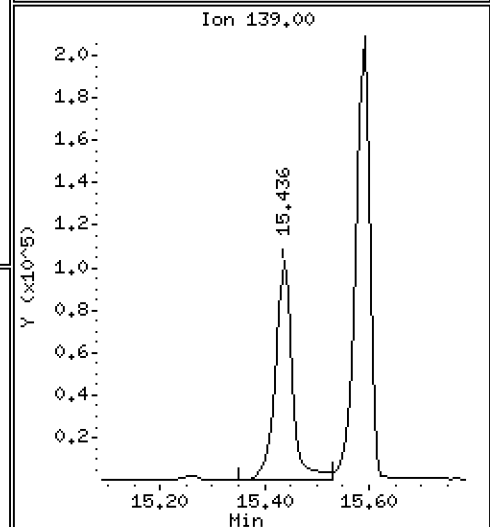
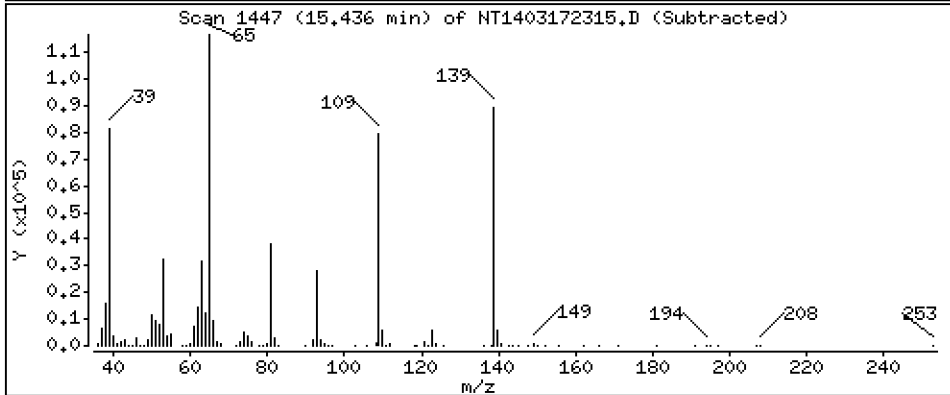
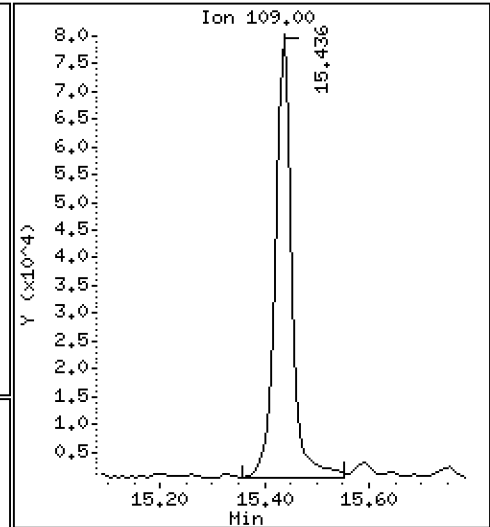
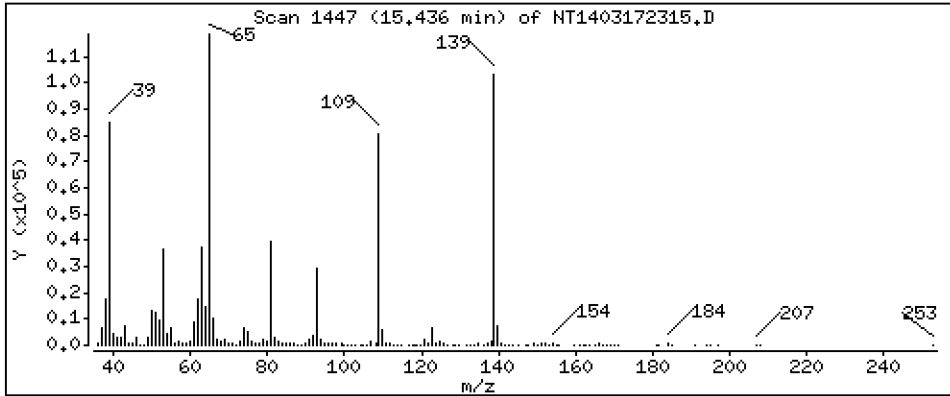
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 6,753 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

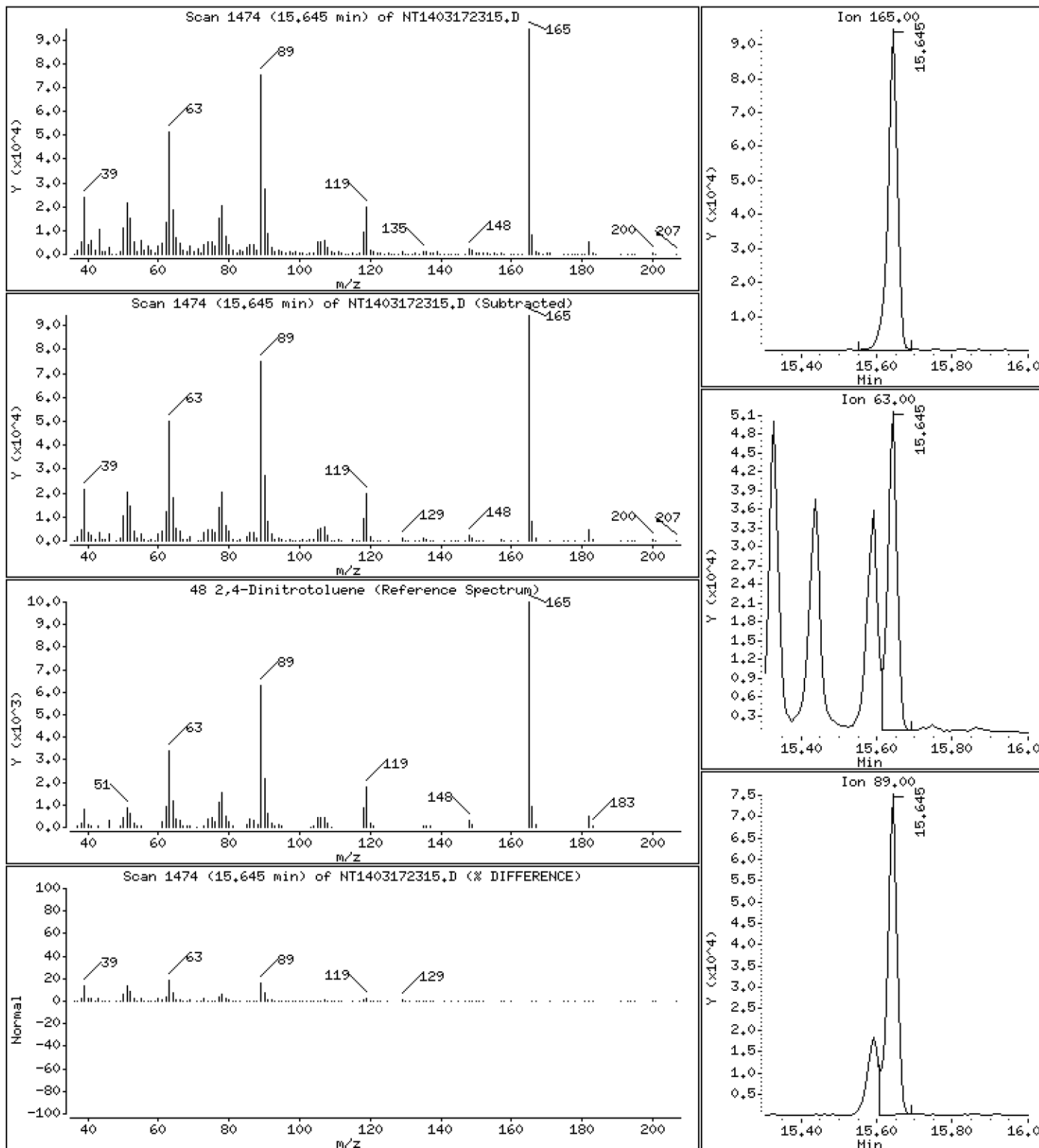
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 3,345 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

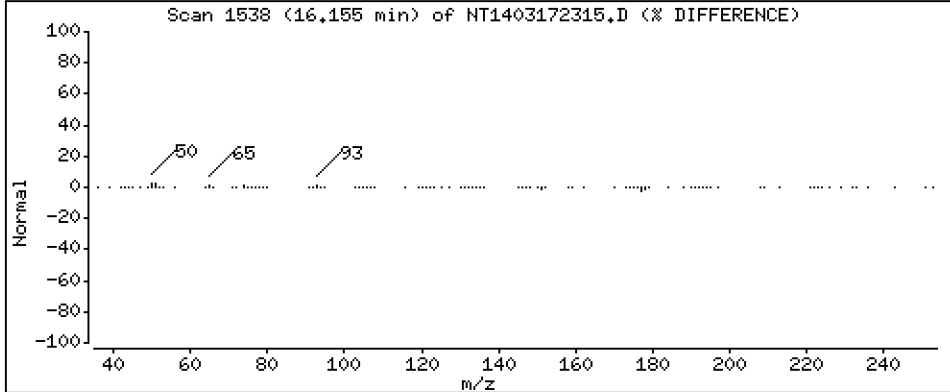
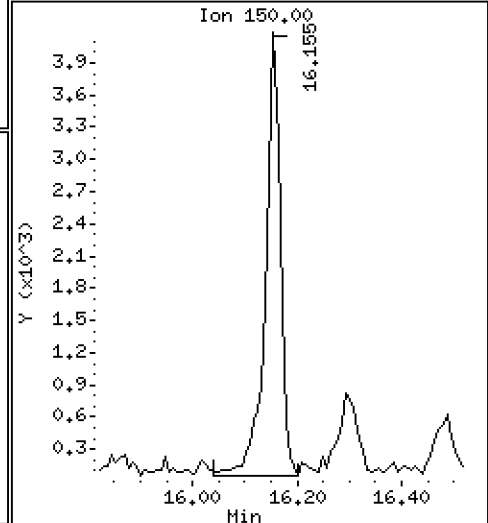
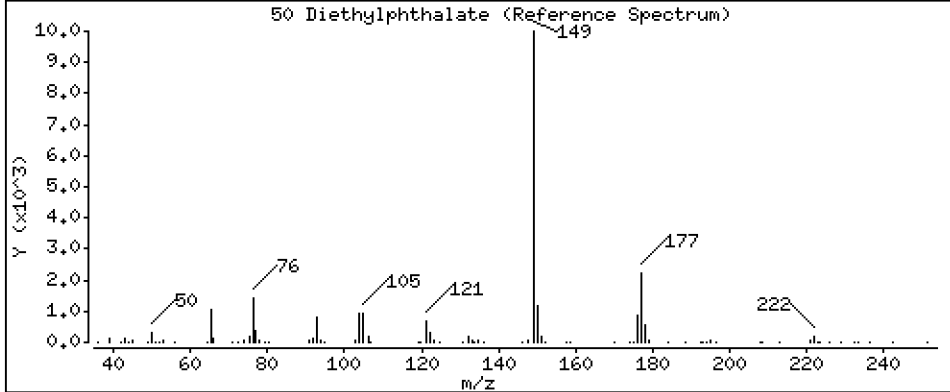
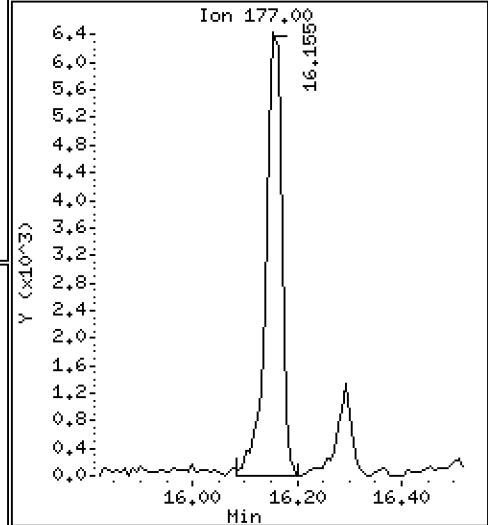
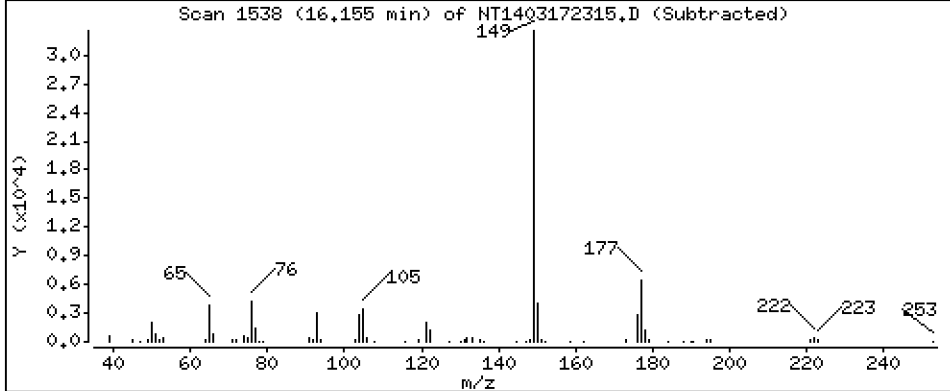
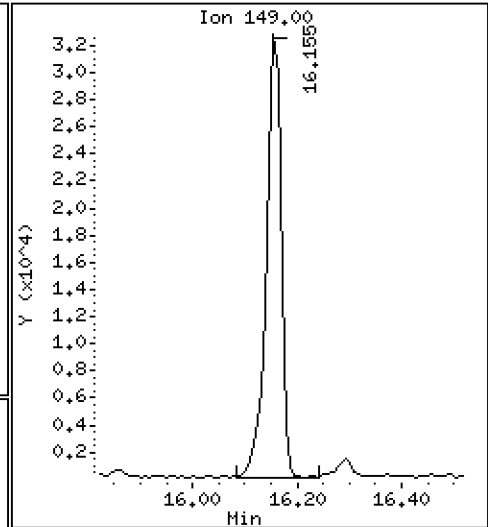
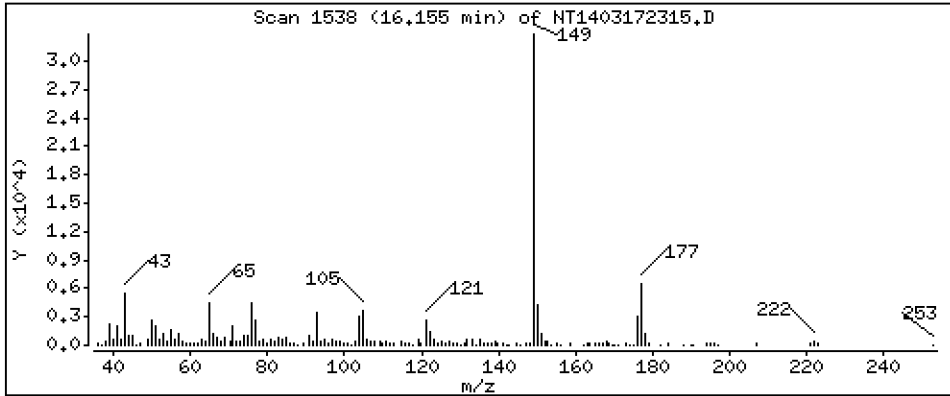
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,4485 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

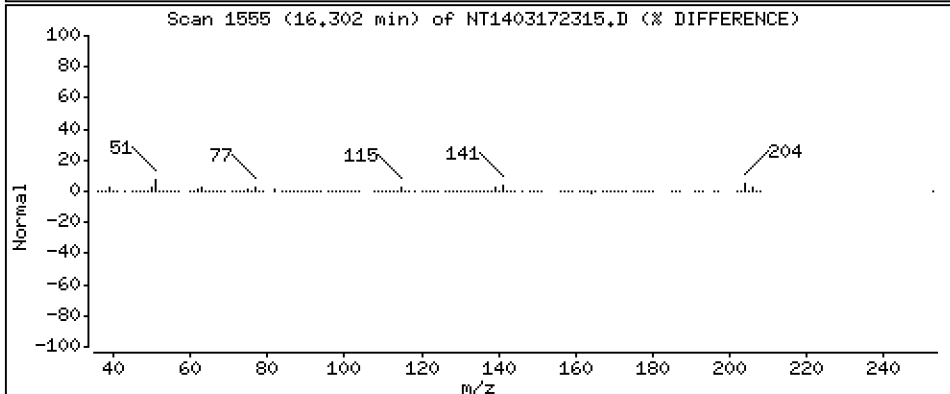
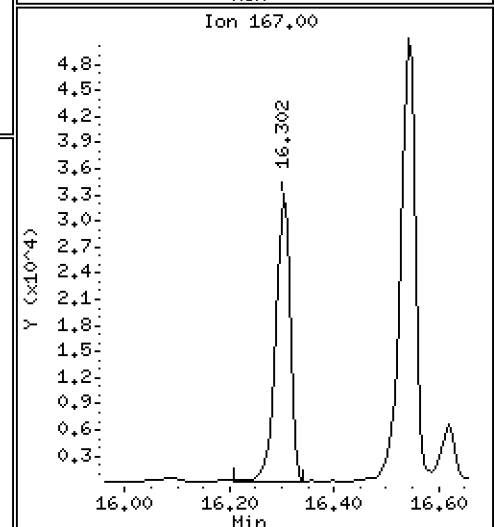
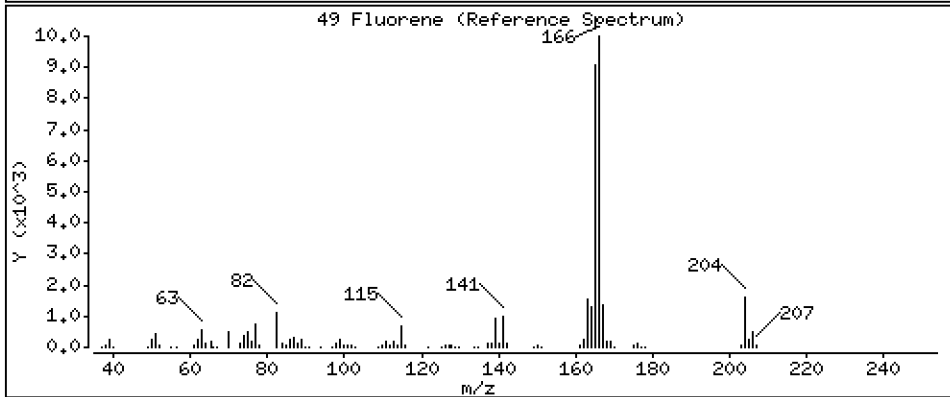
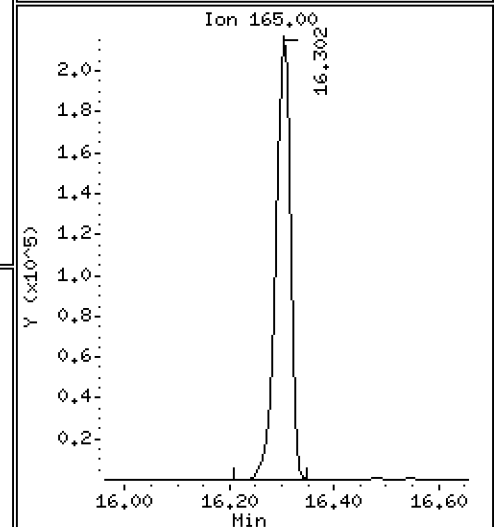
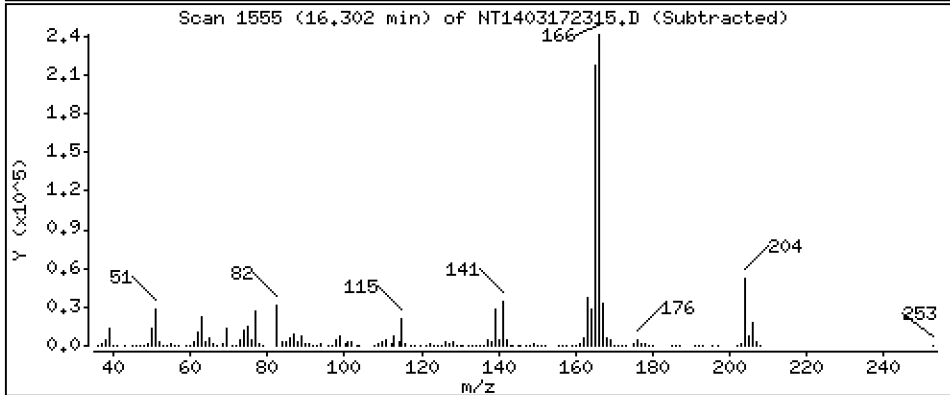
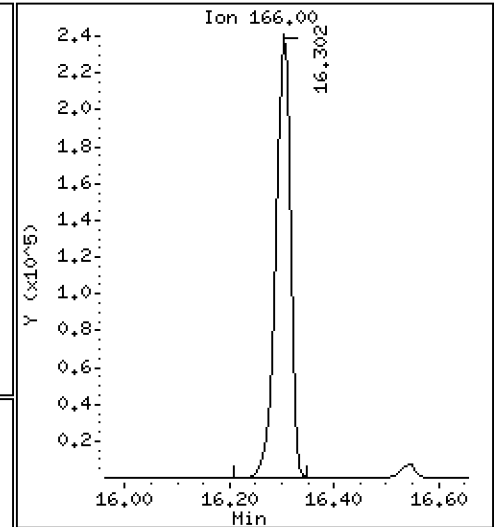
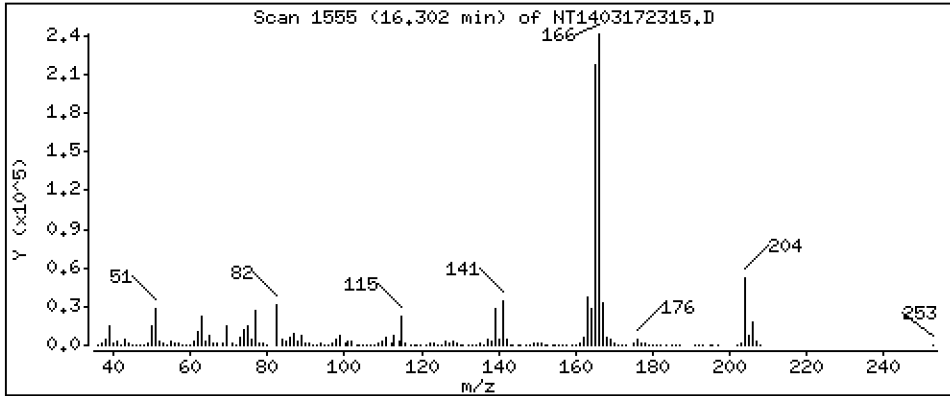
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 2,781 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

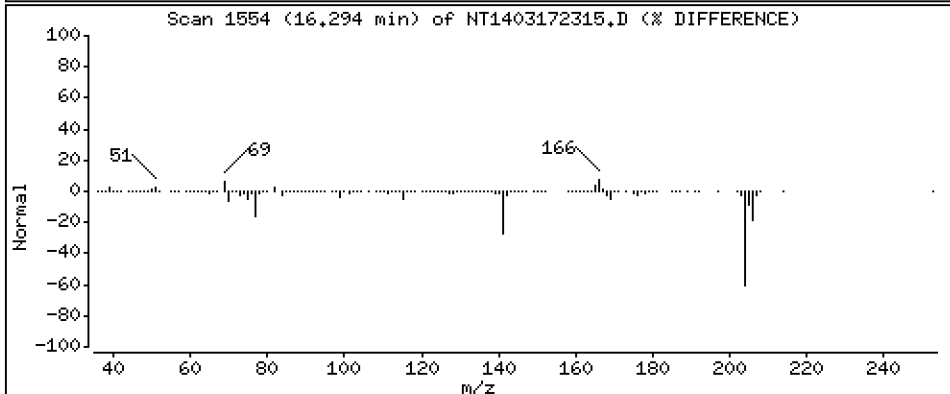
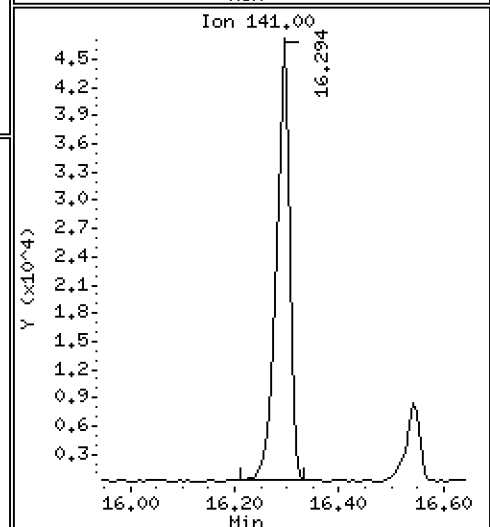
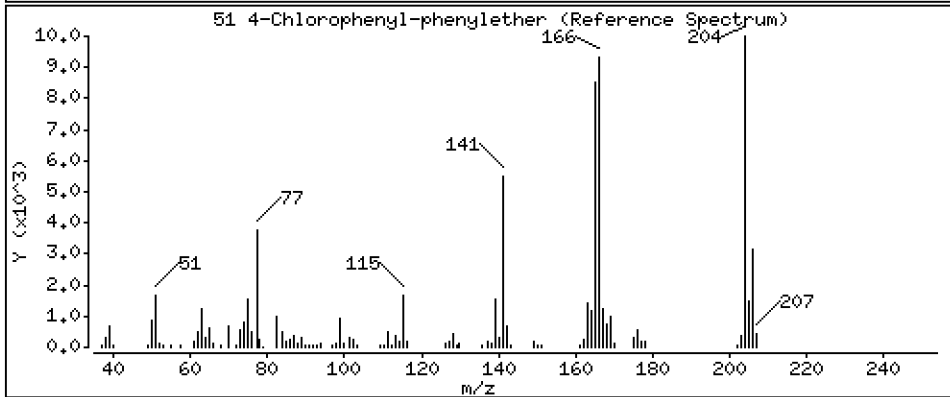
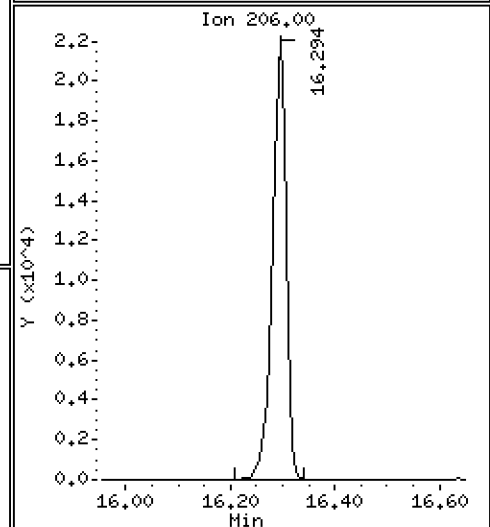
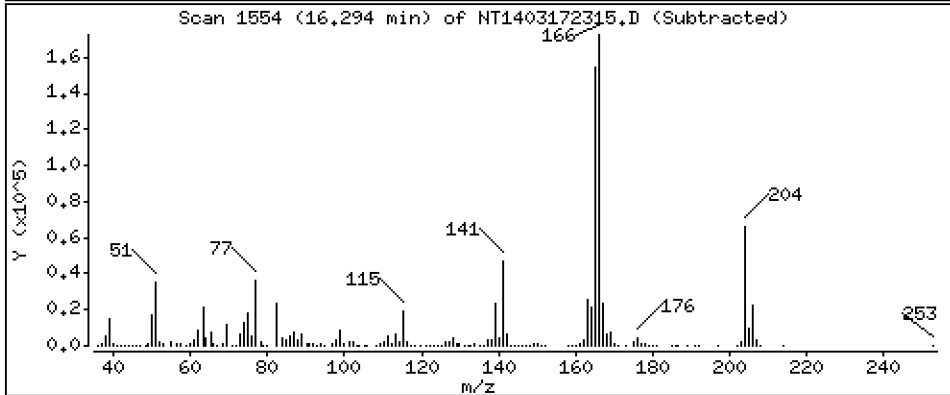
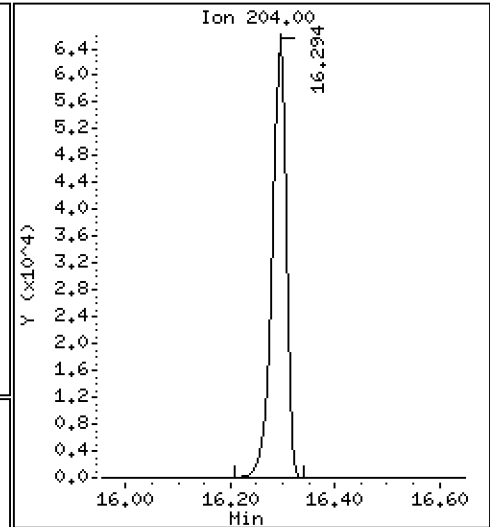
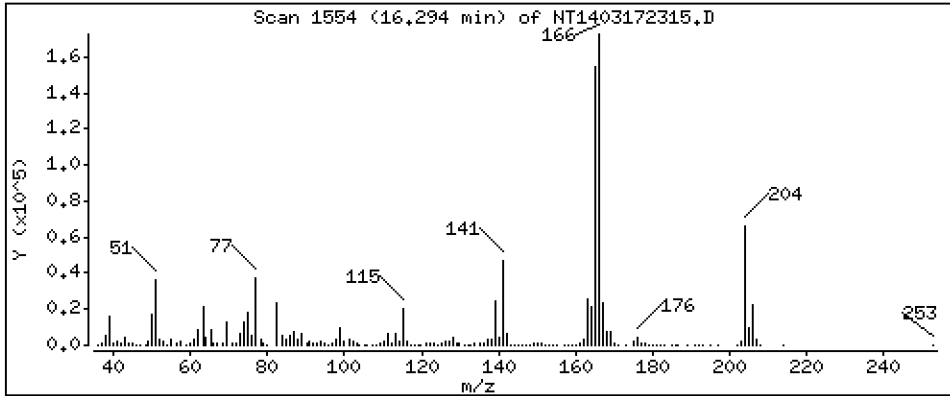
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 1,691 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

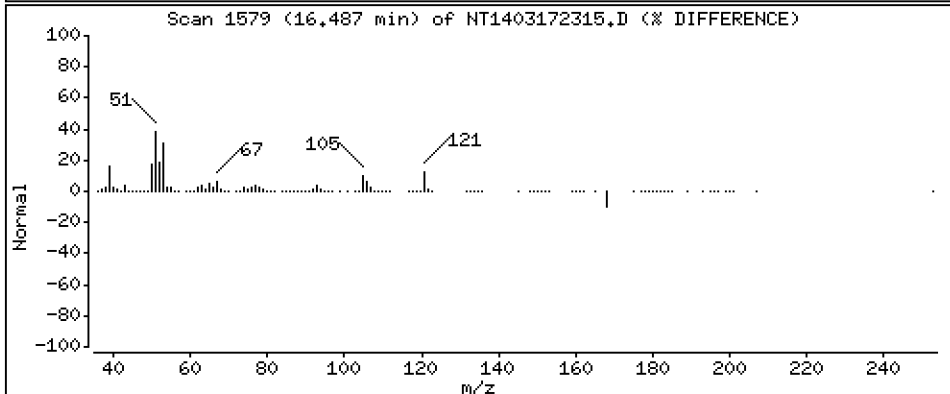
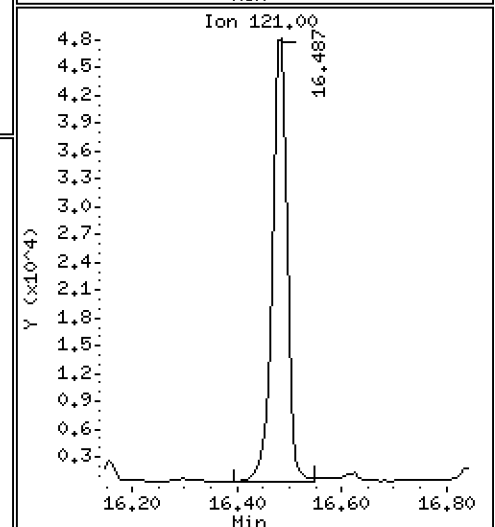
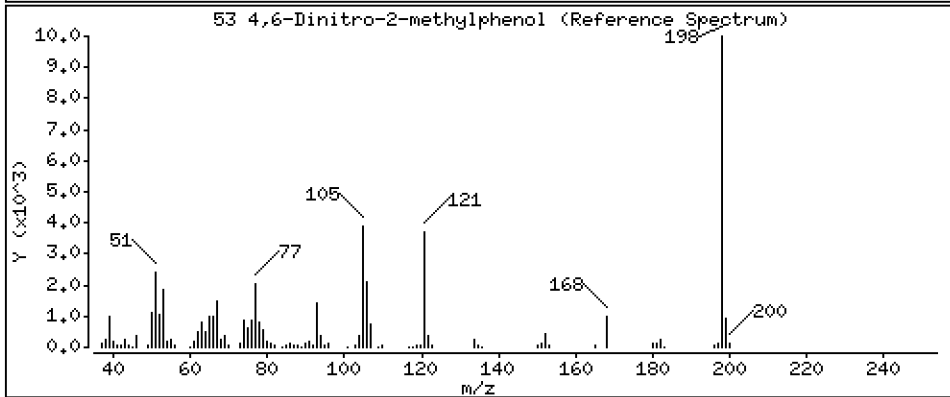
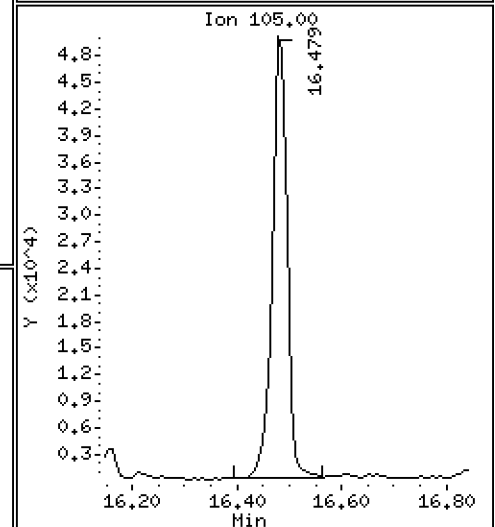
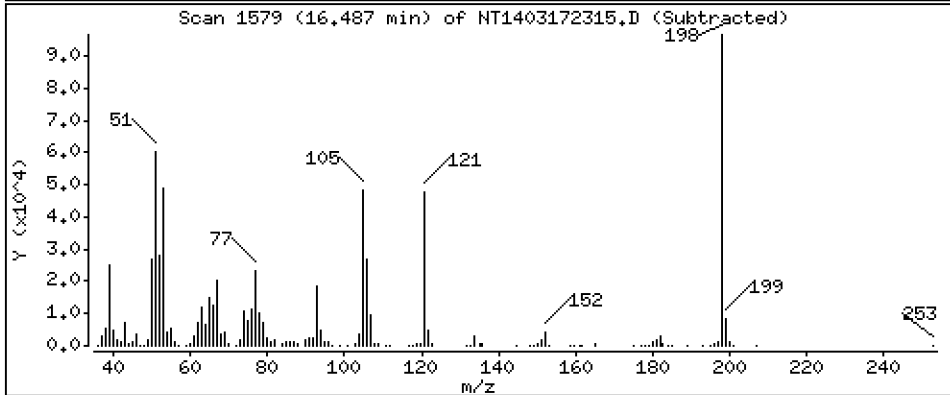
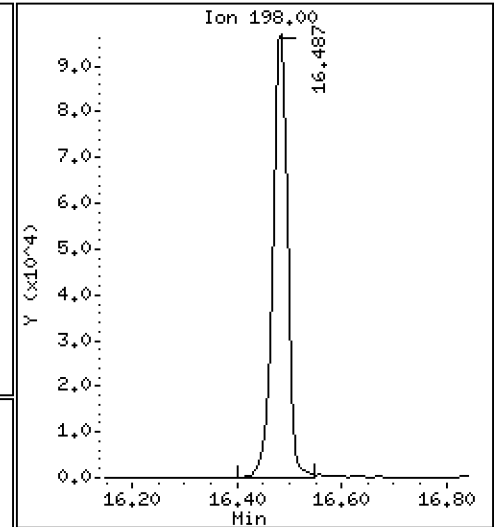
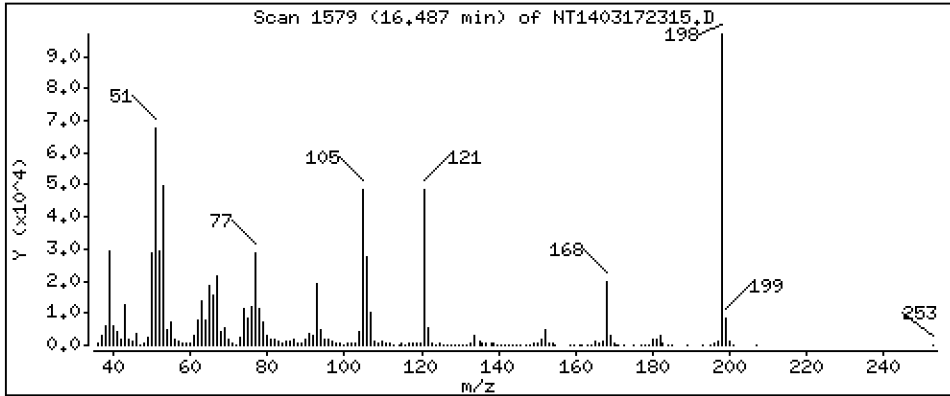
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 7,039 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

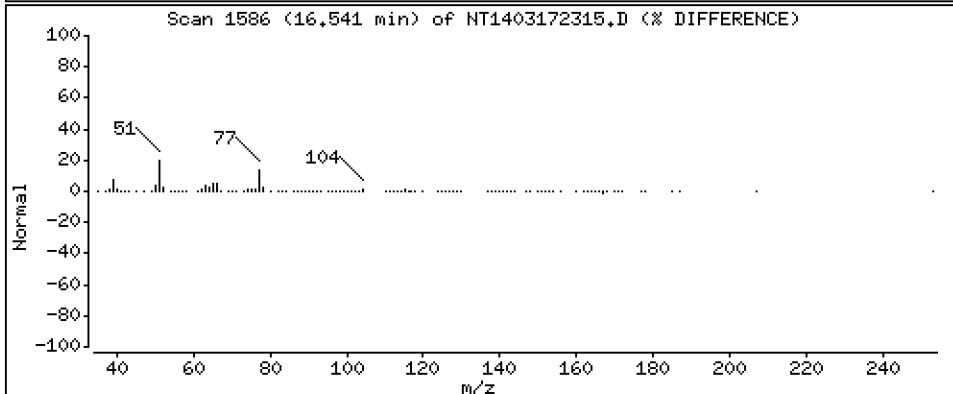
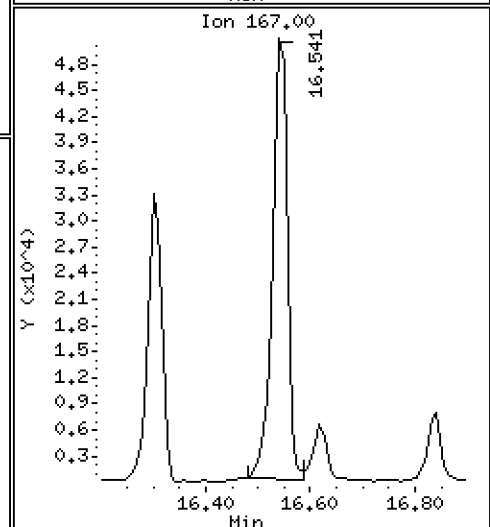
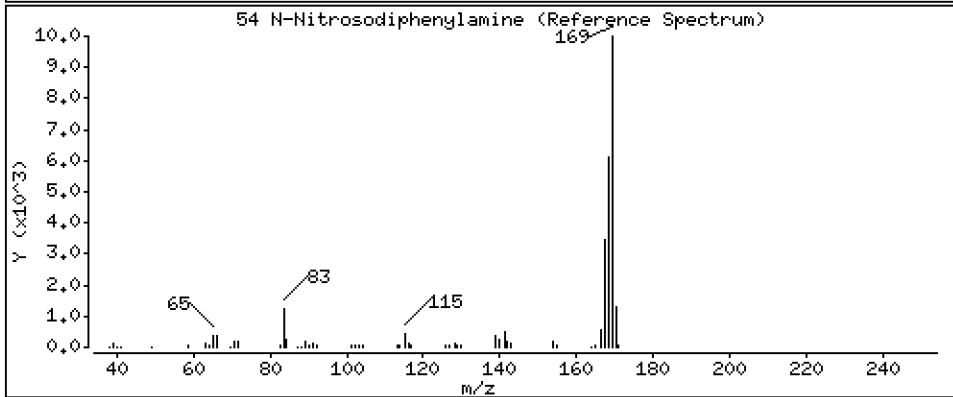
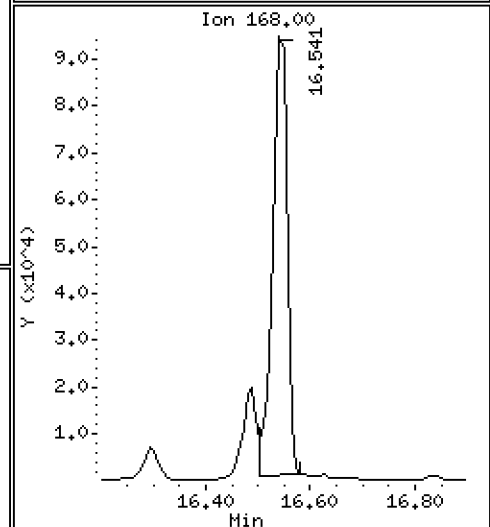
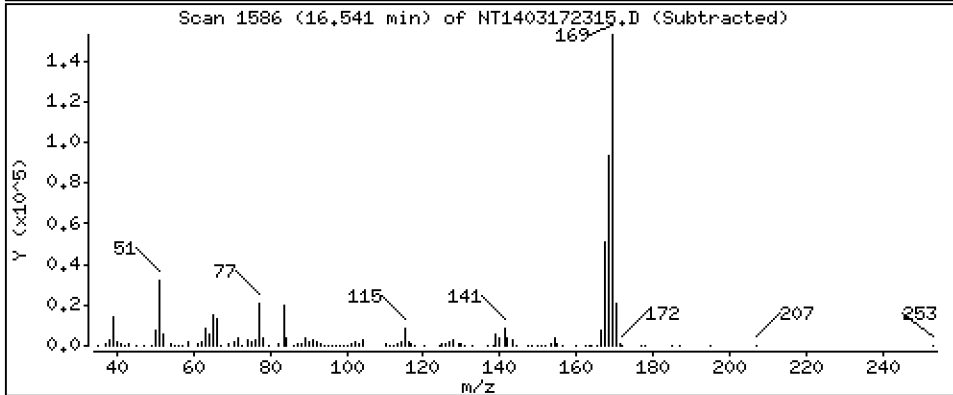
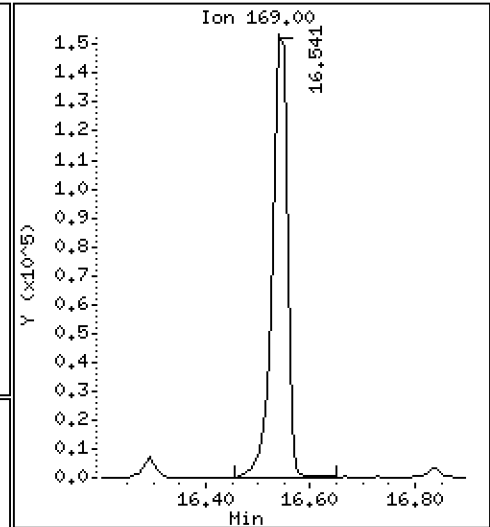
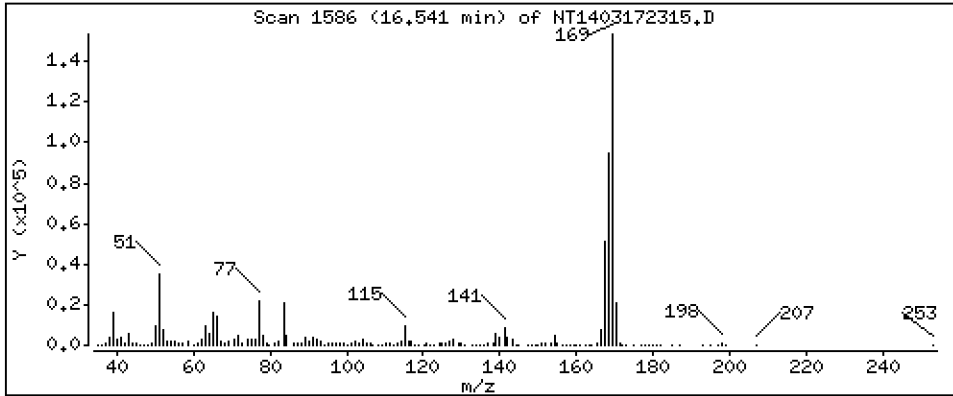
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 2,883 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

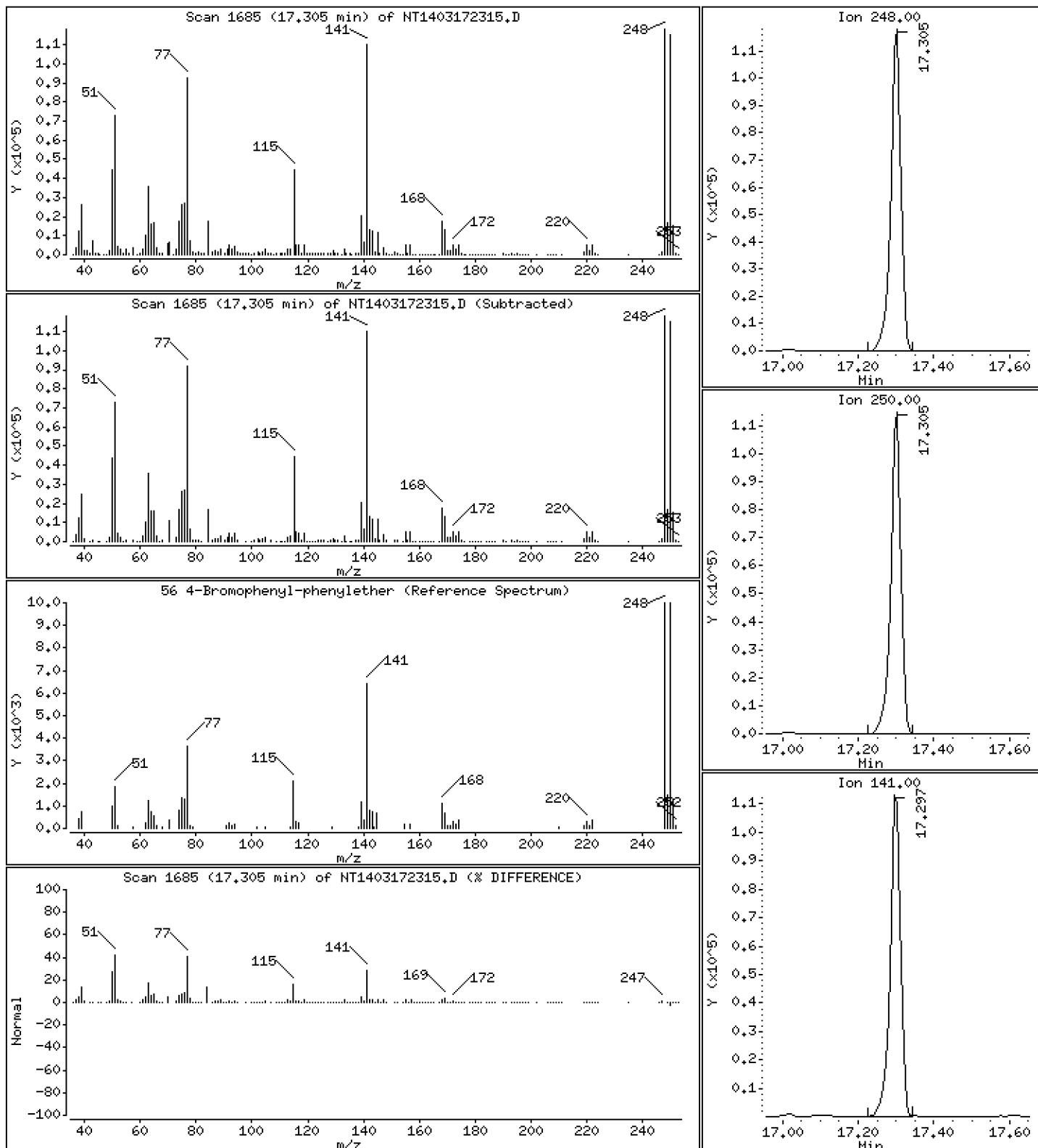
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 6,326 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

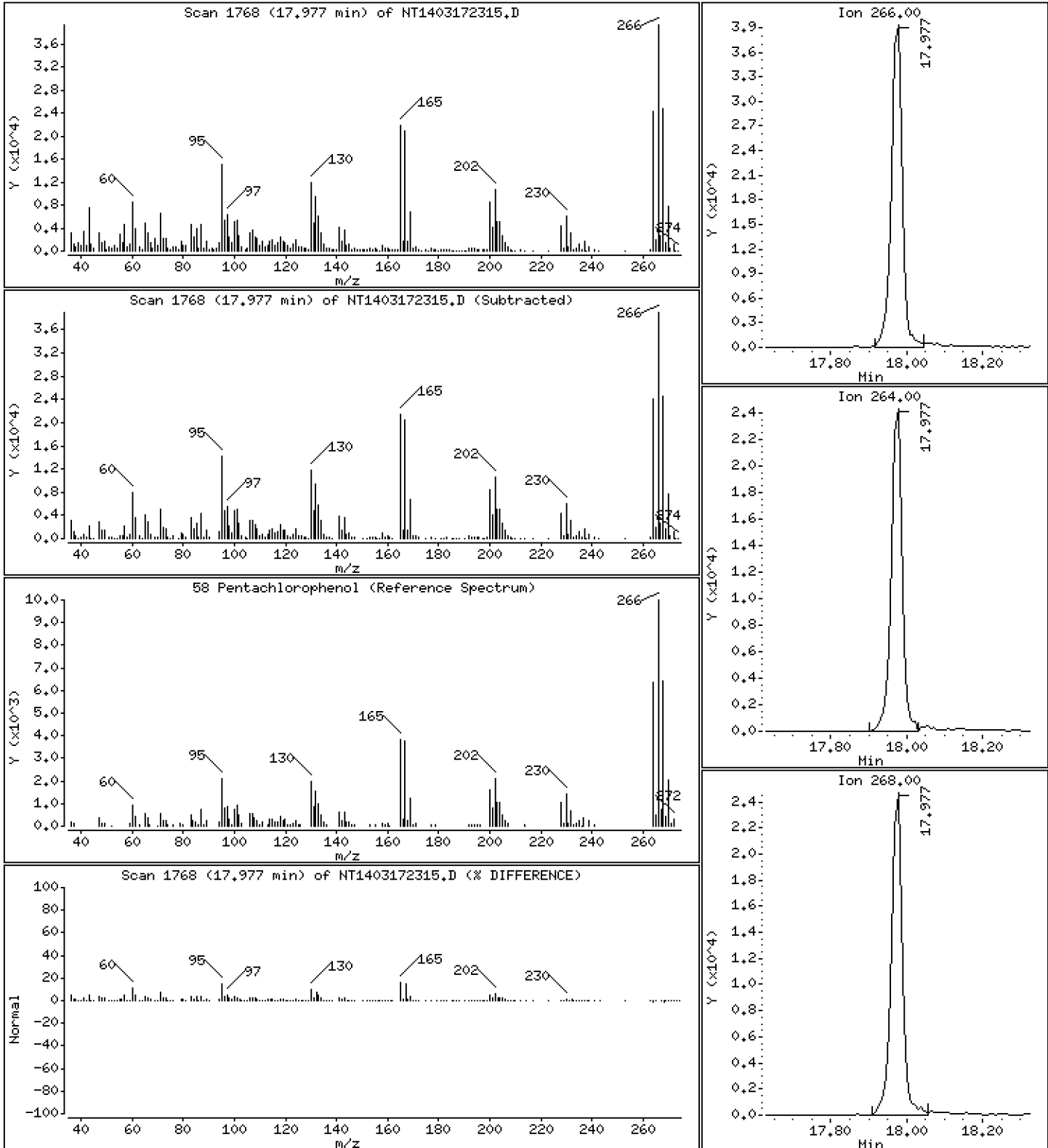
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 2,999 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

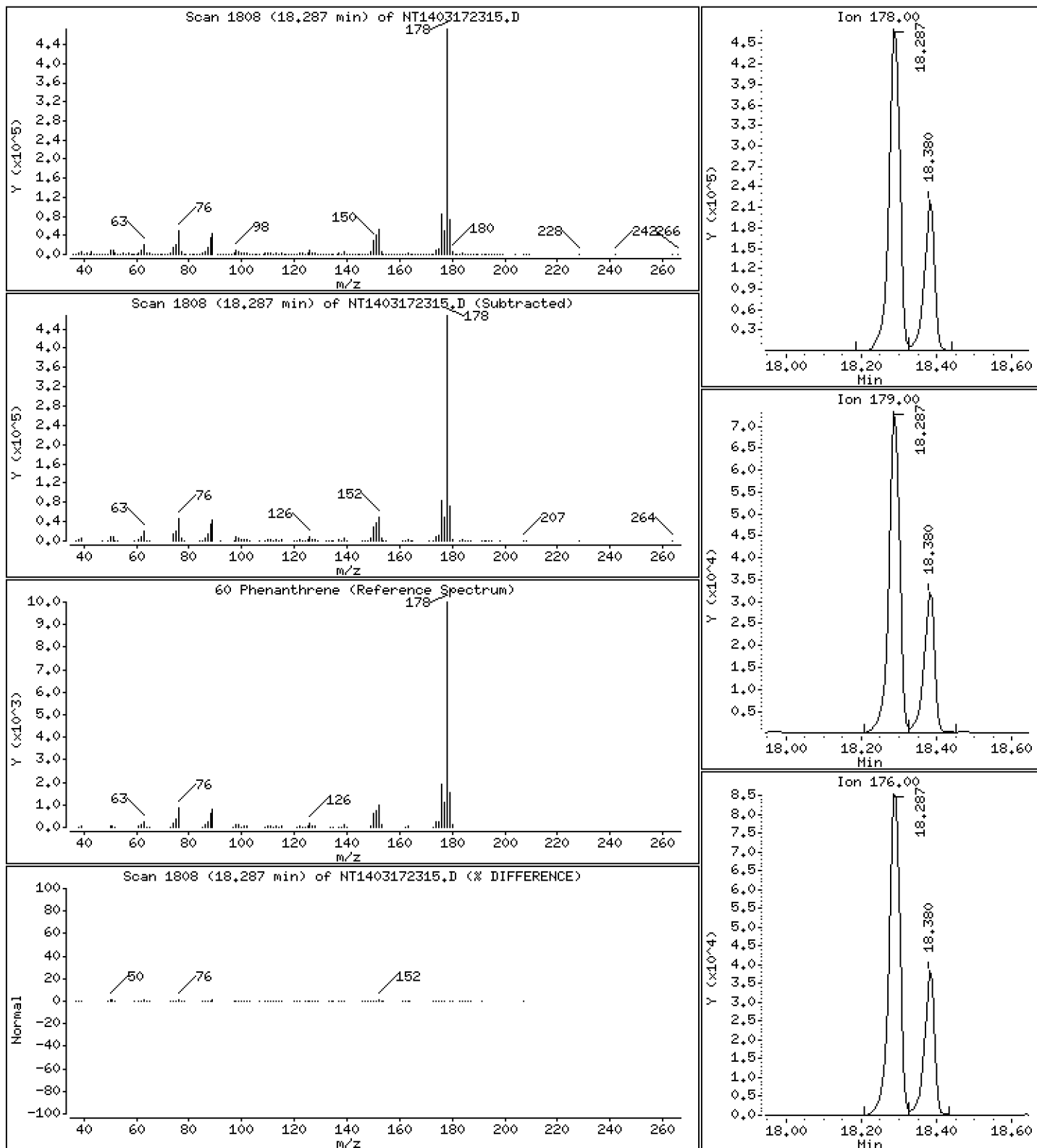
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,264 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

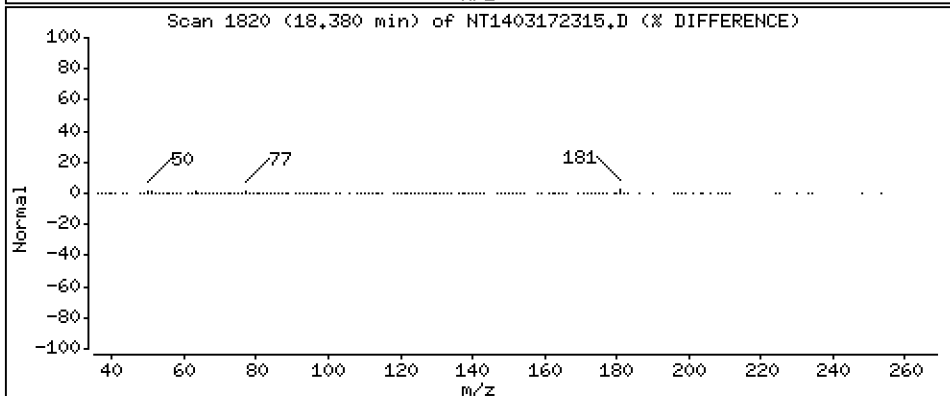
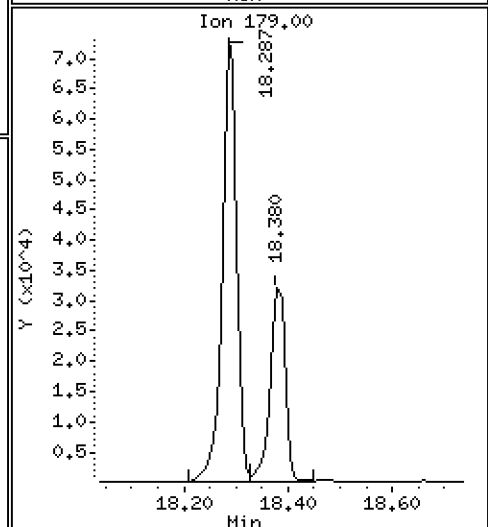
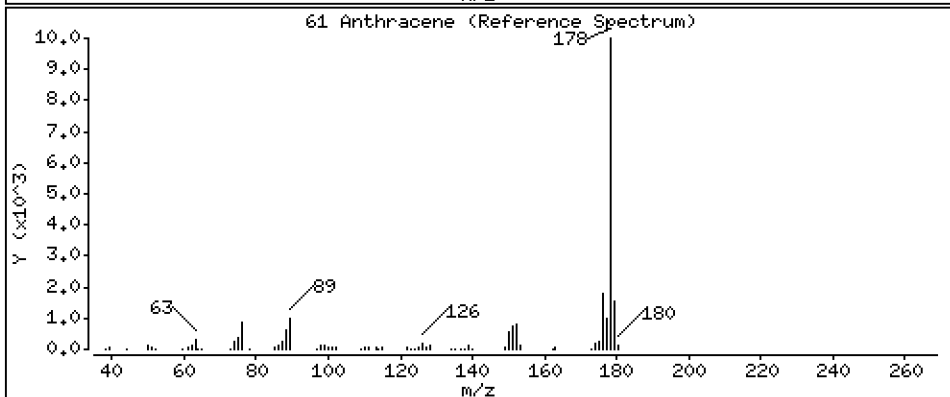
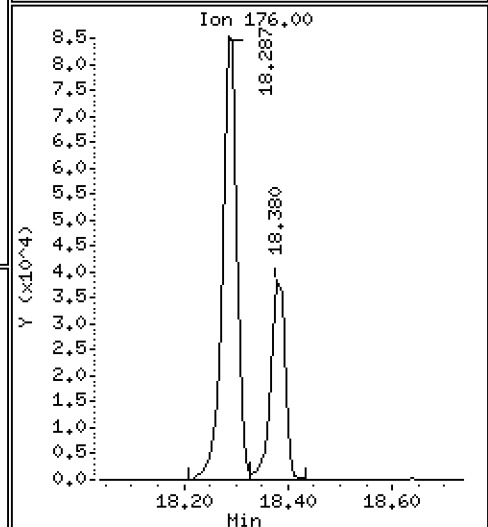
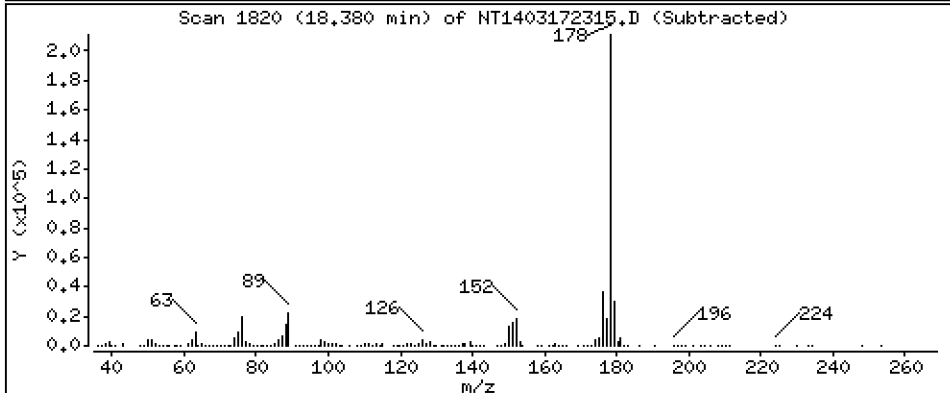
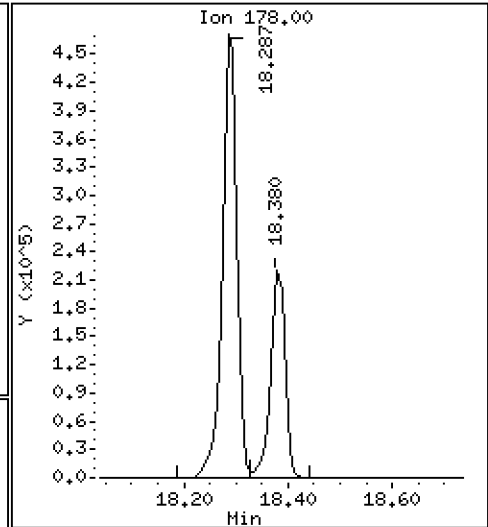
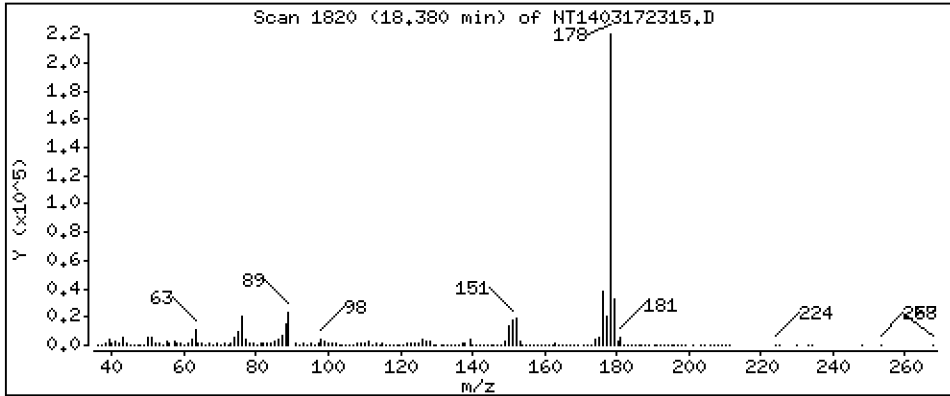
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 1.957 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

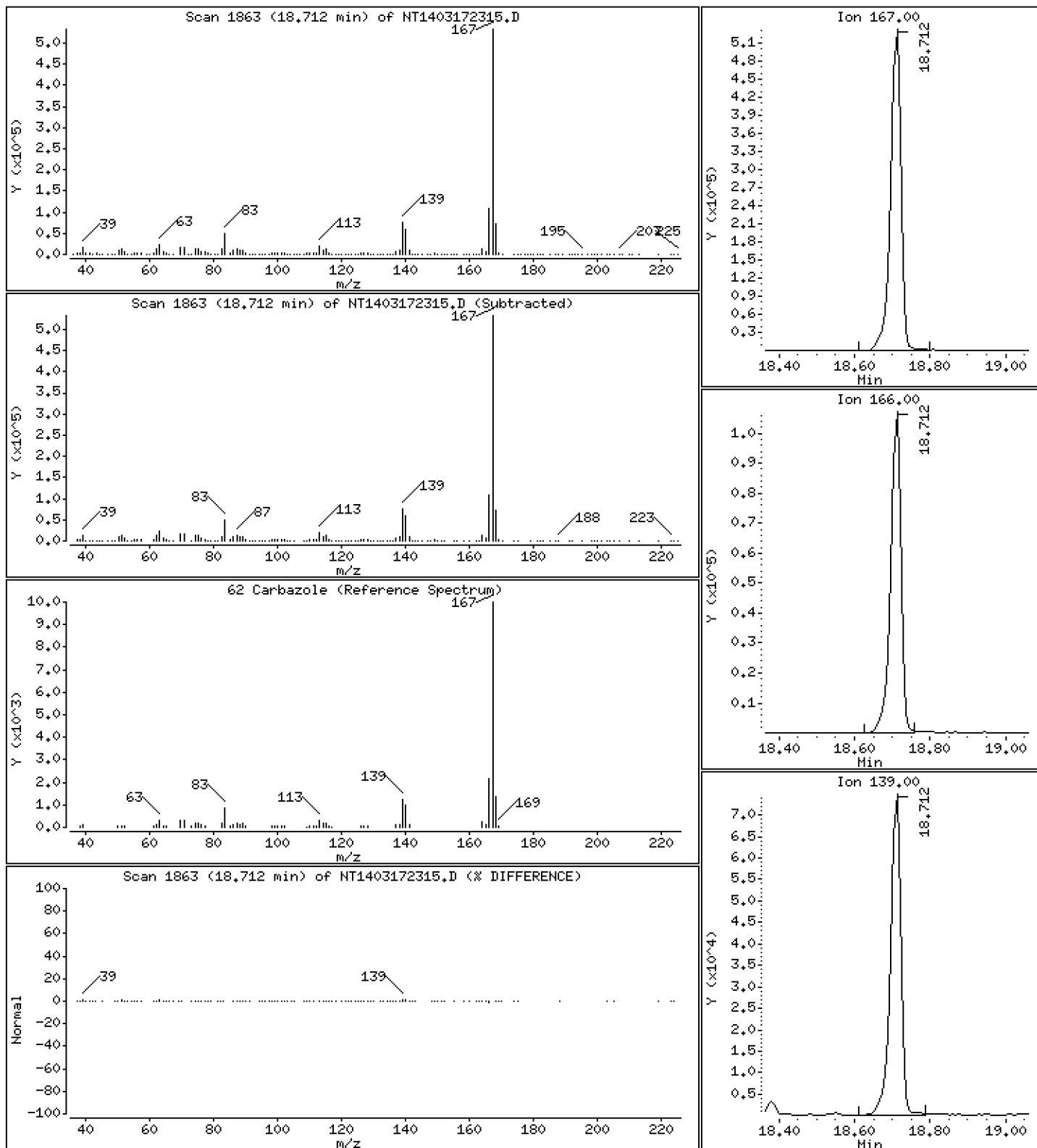
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,302 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

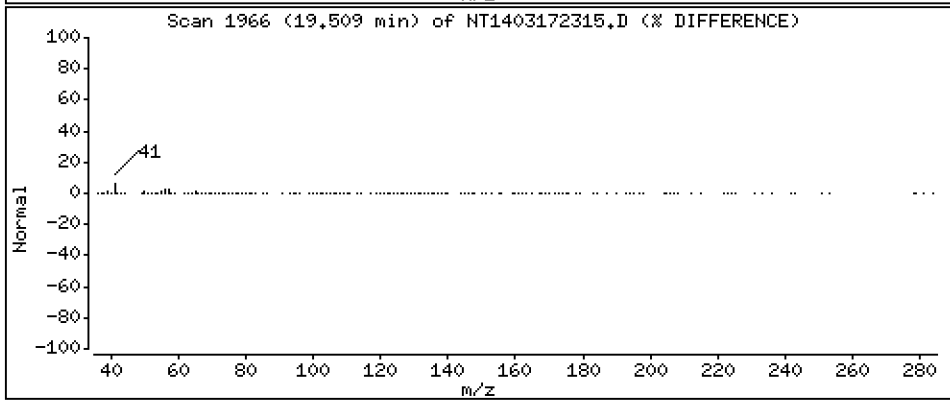
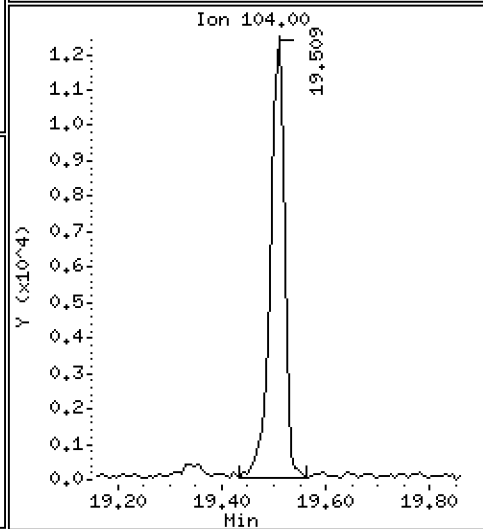
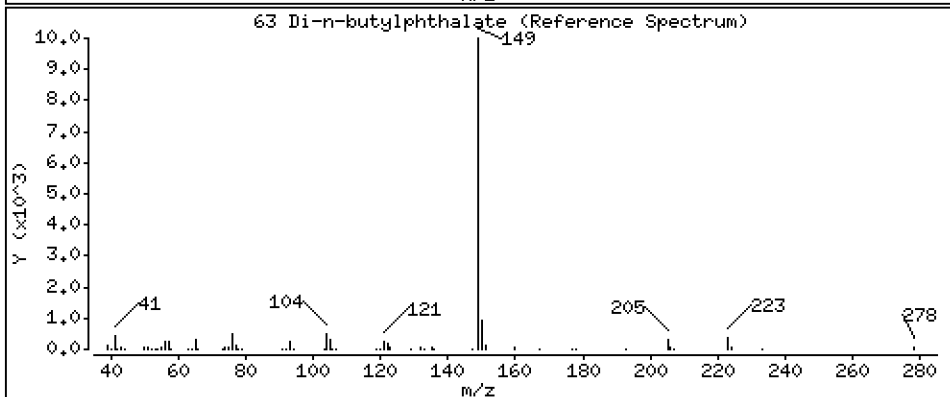
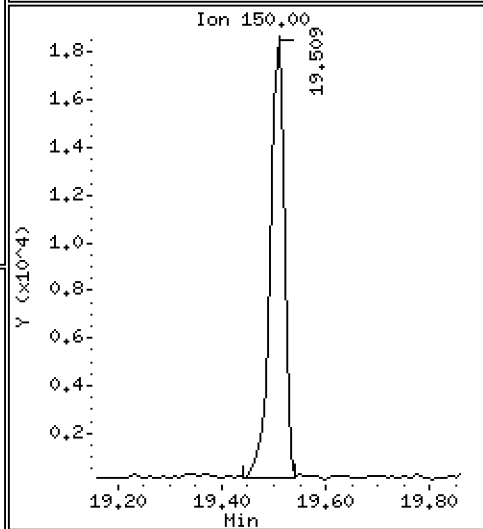
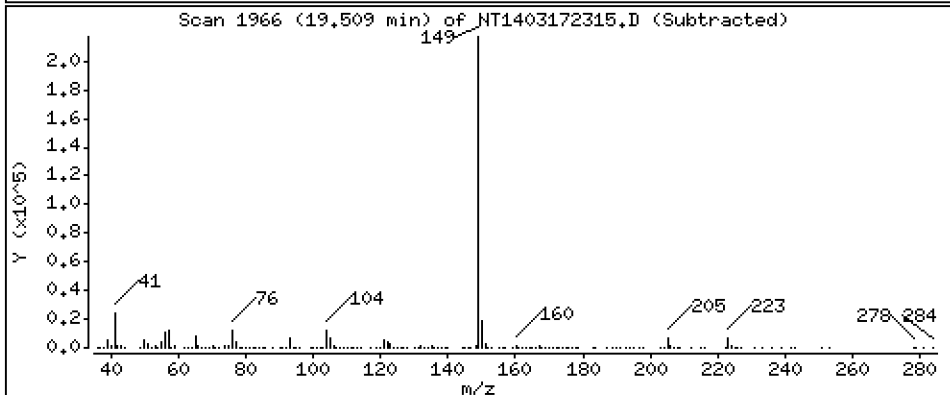
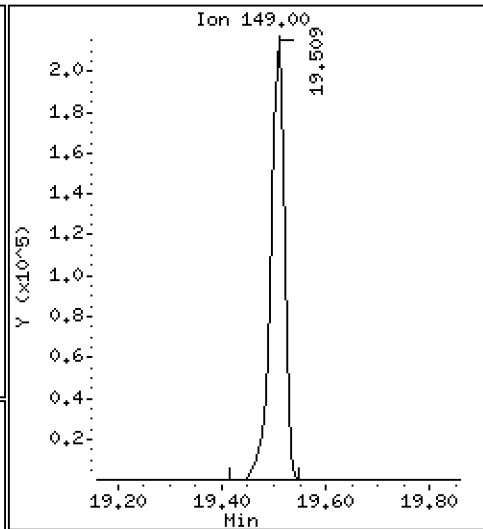
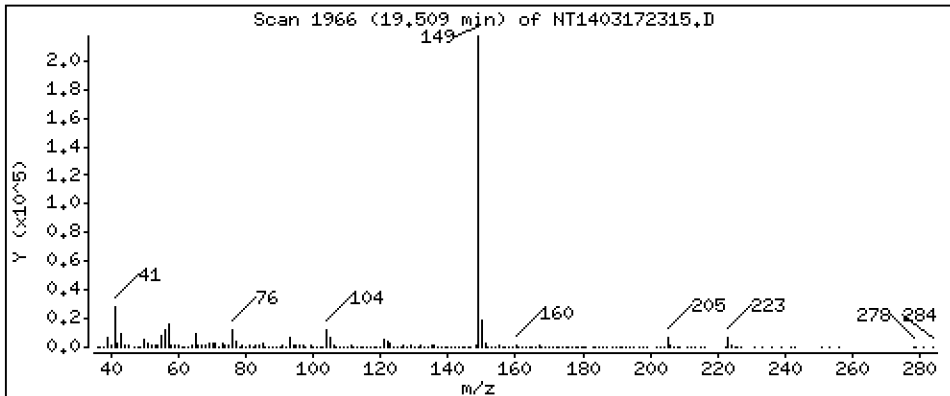
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 1,613 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

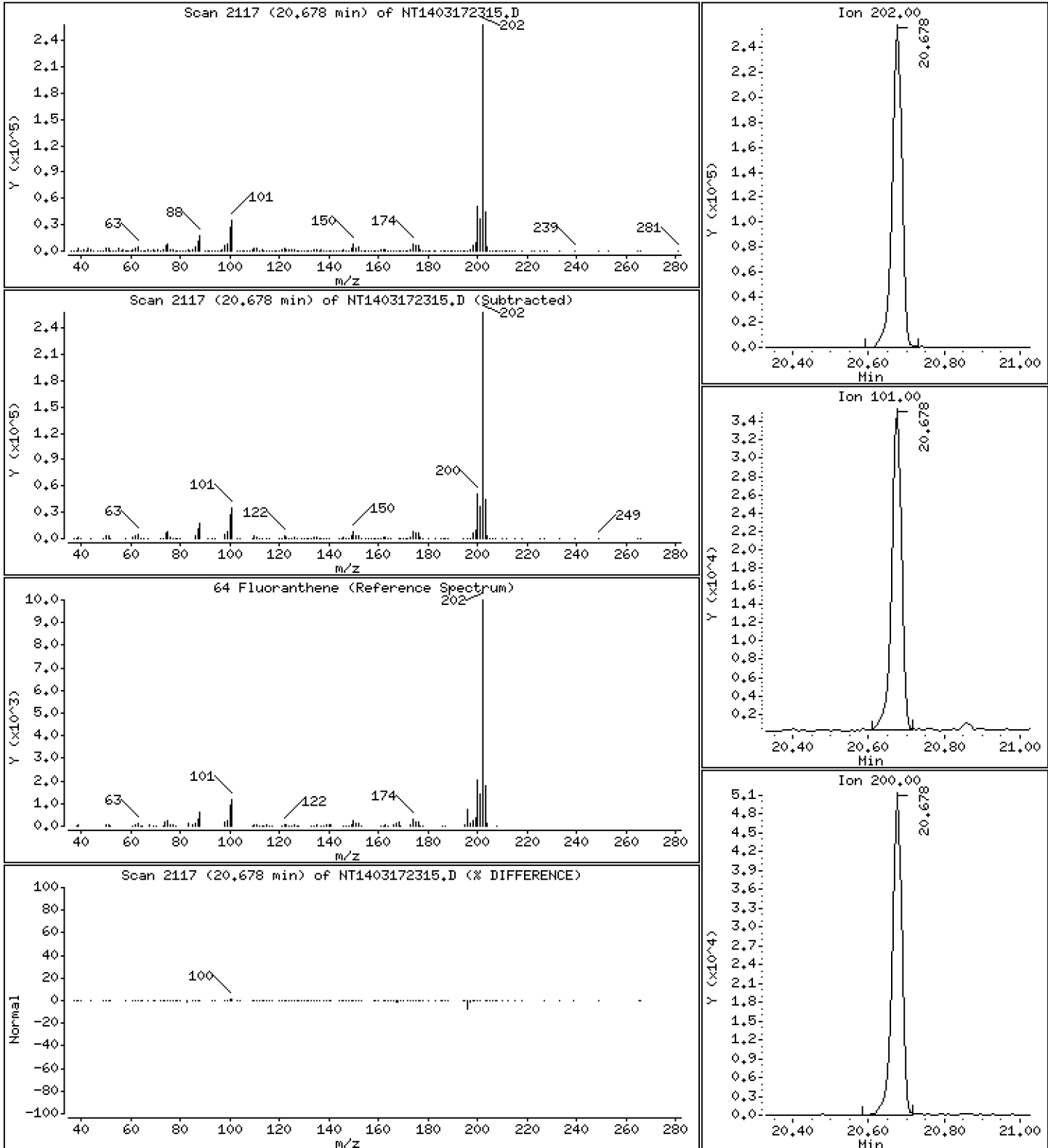
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 2,919 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

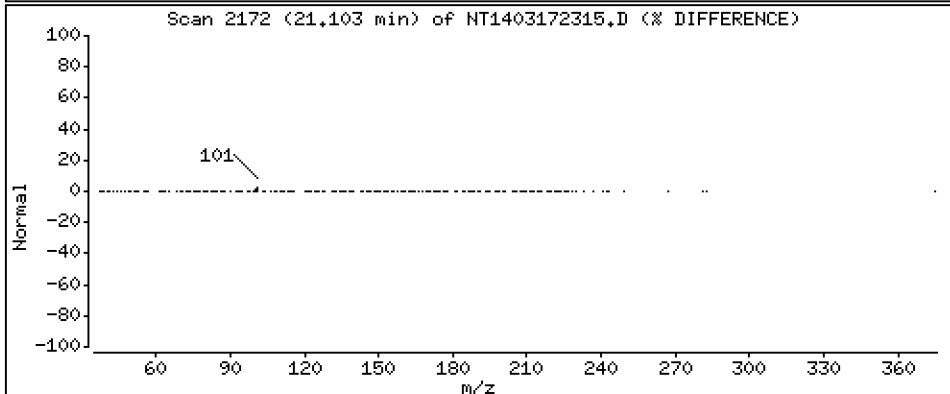
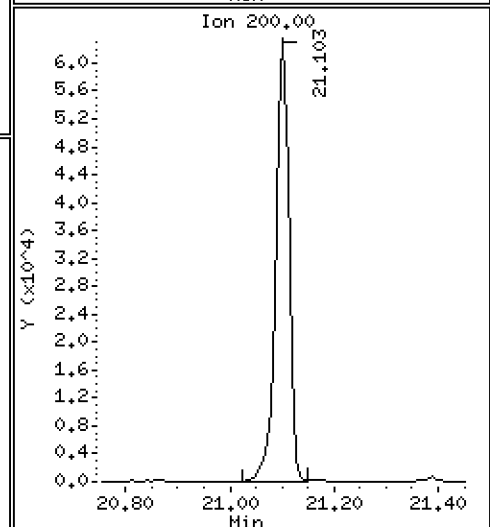
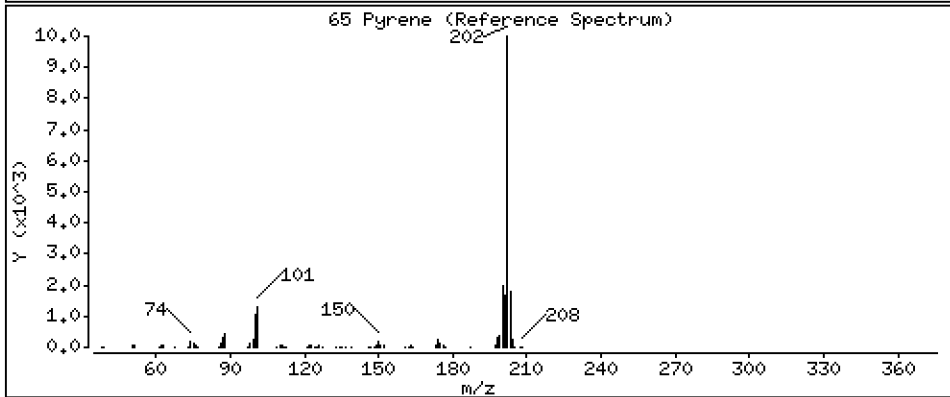
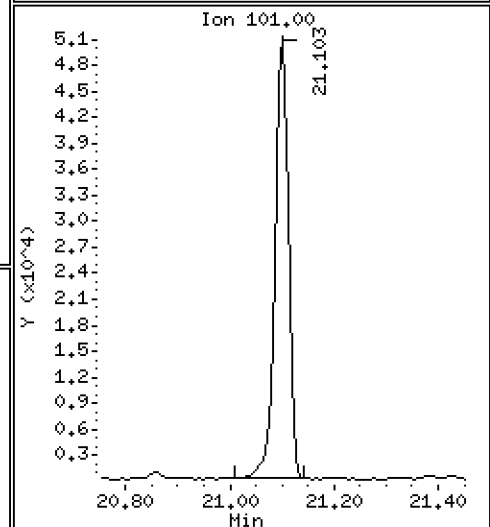
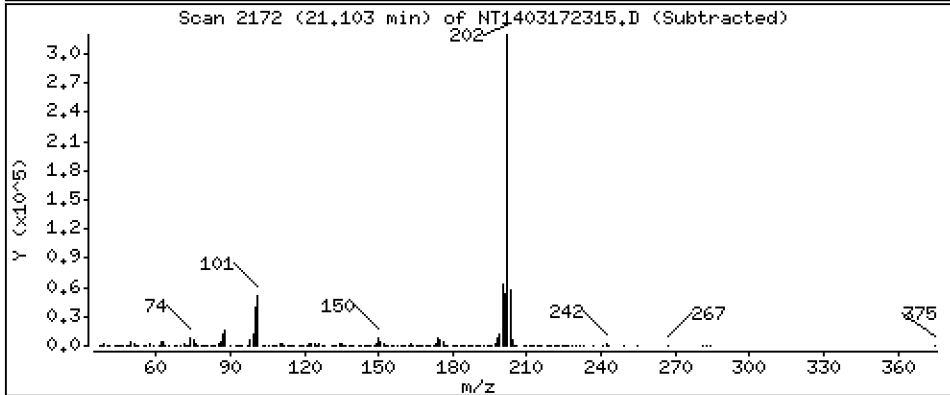
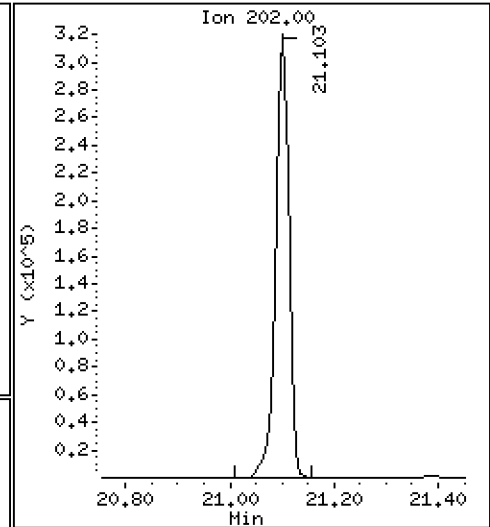
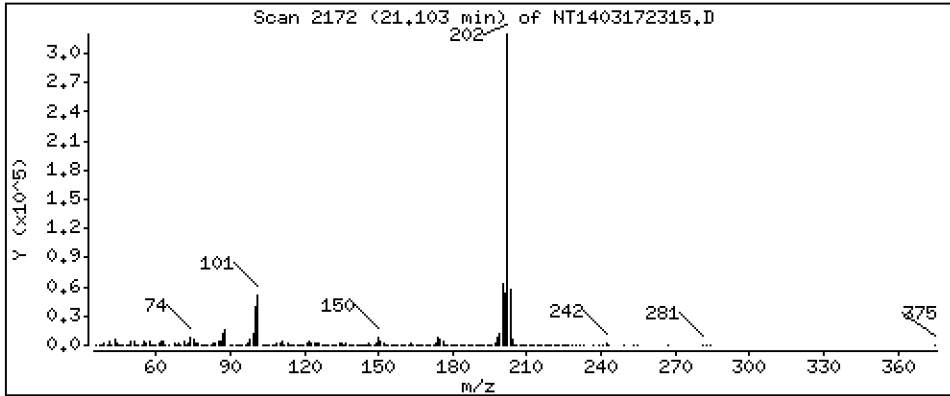
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 3,512 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

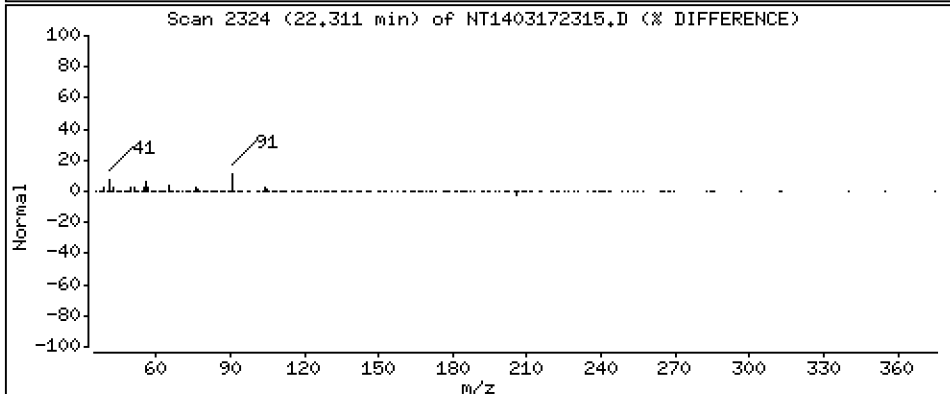
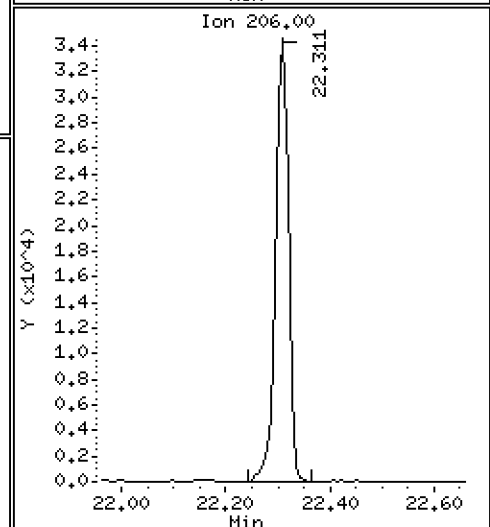
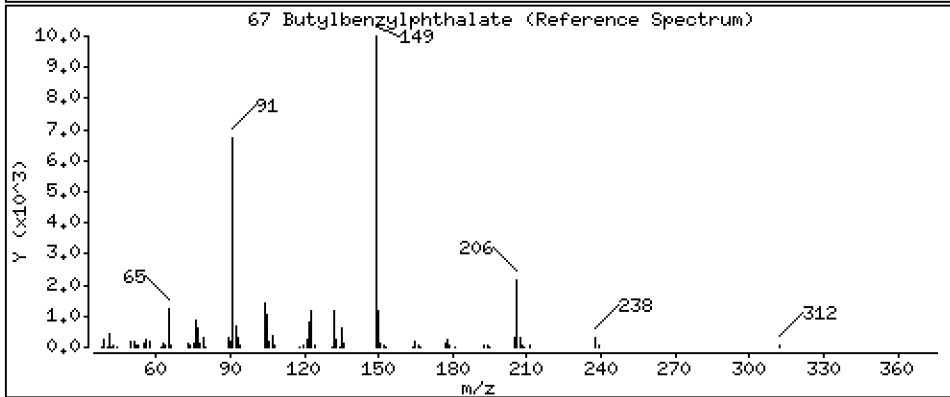
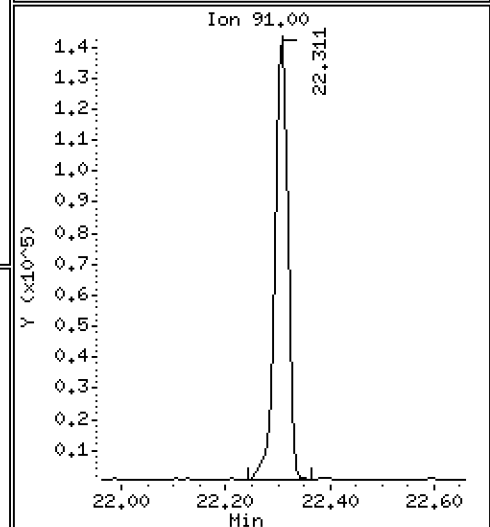
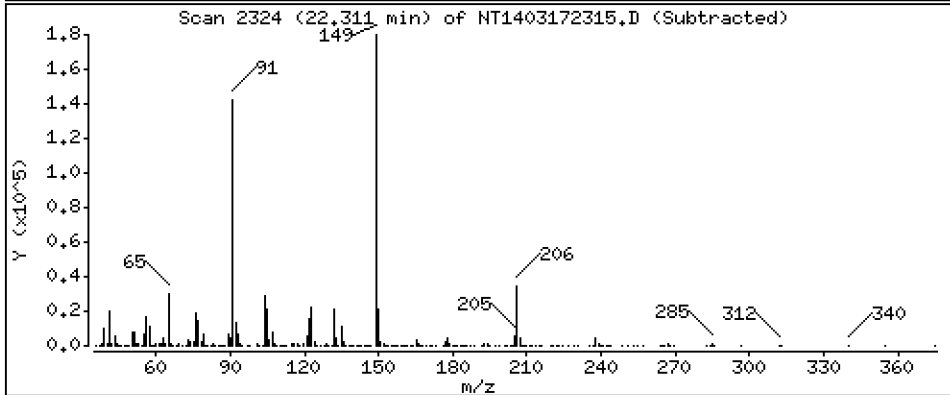
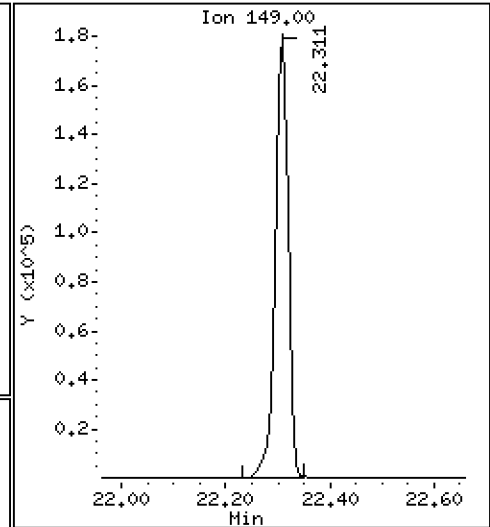
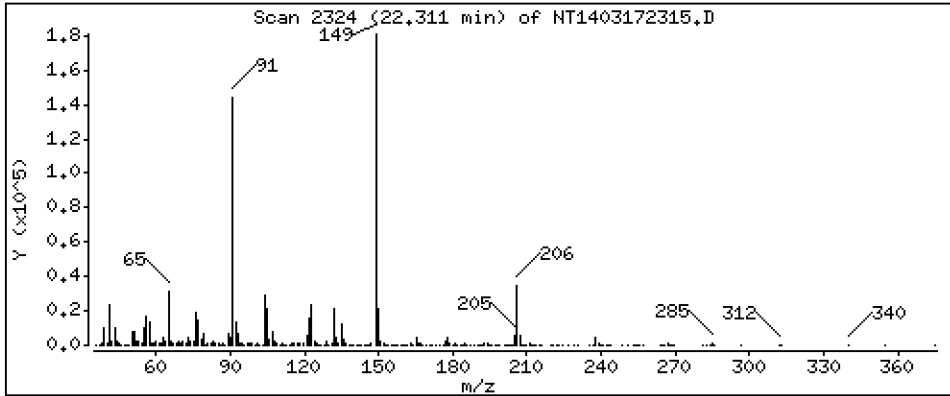
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,381 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

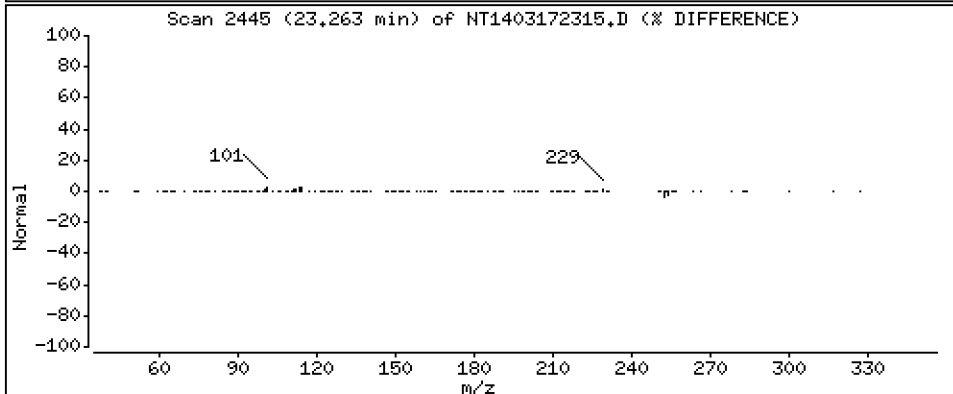
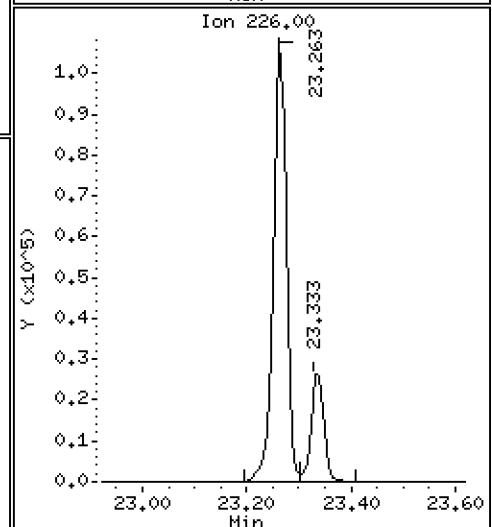
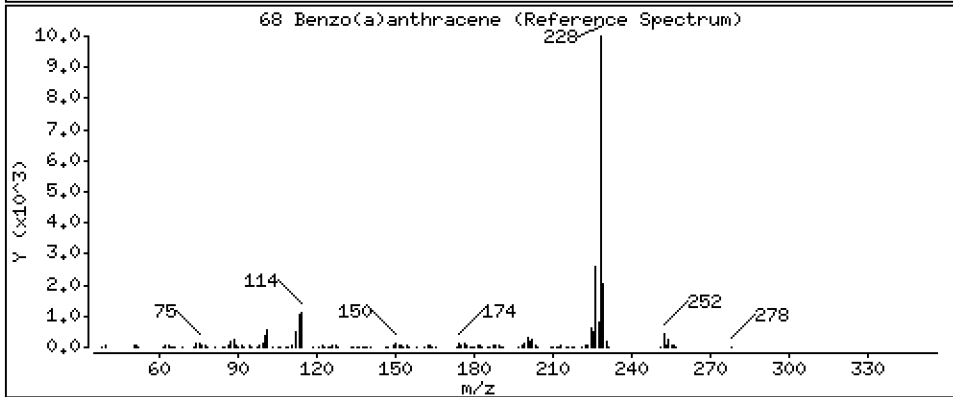
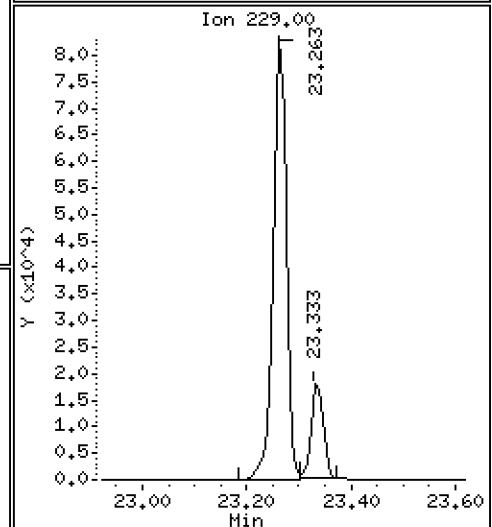
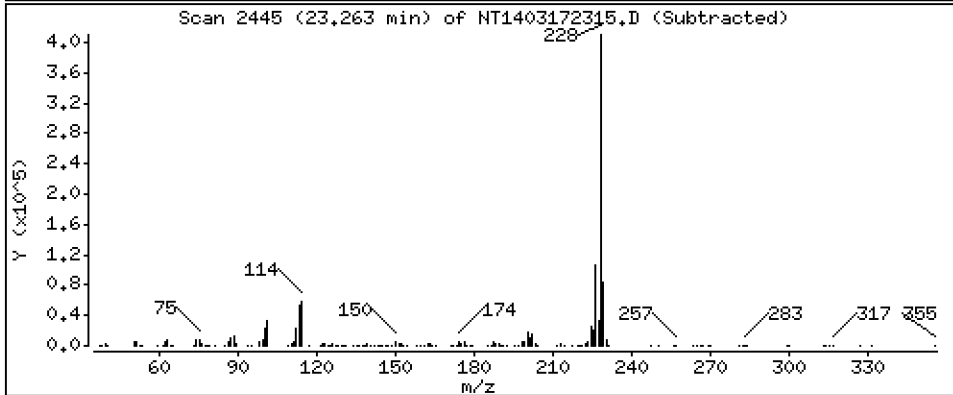
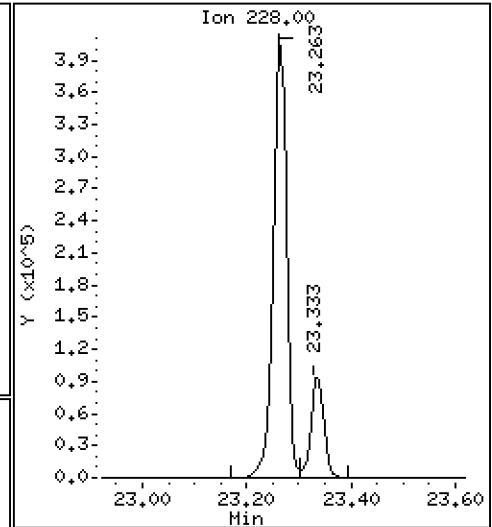
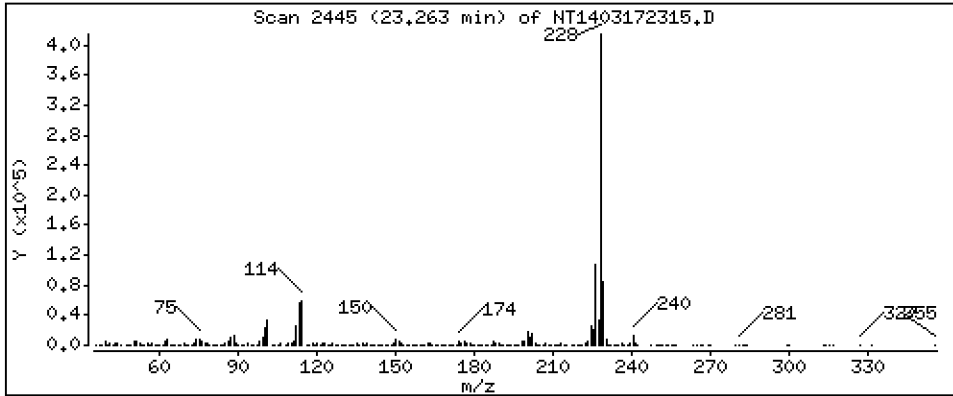
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 5,070 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

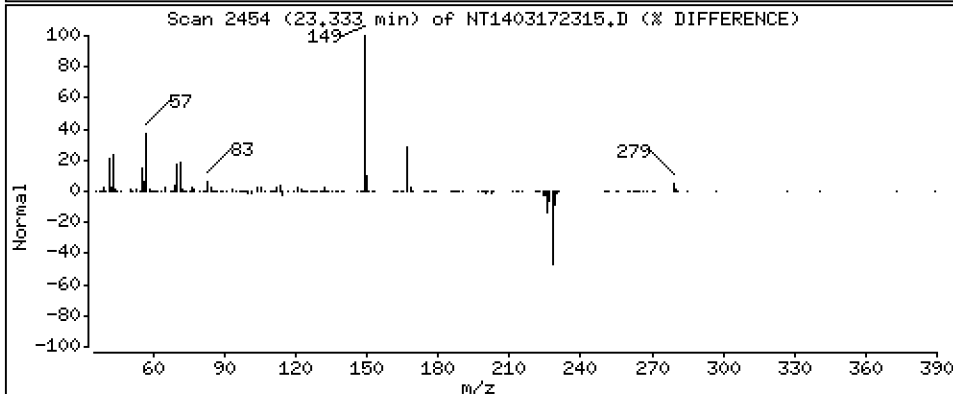
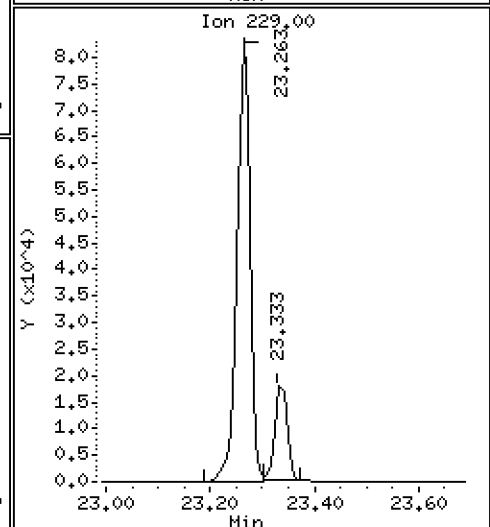
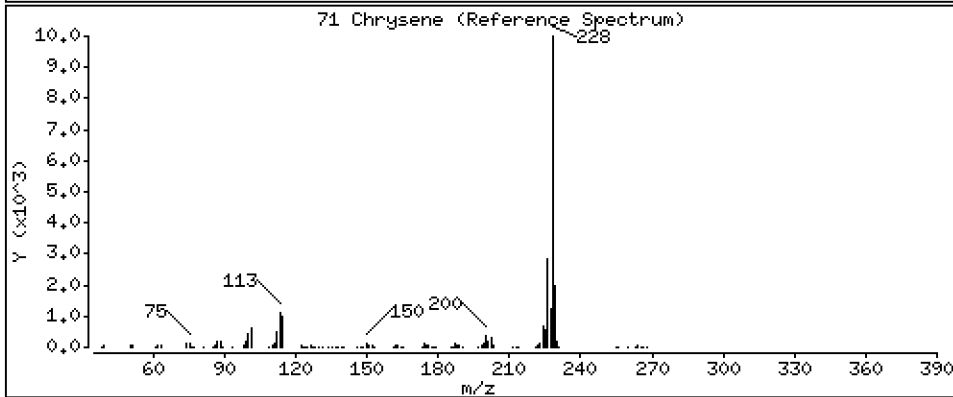
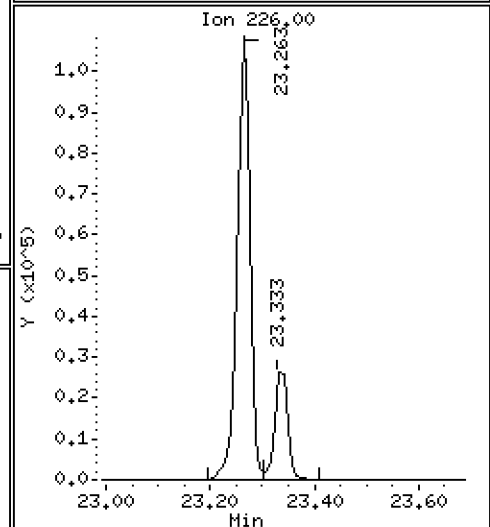
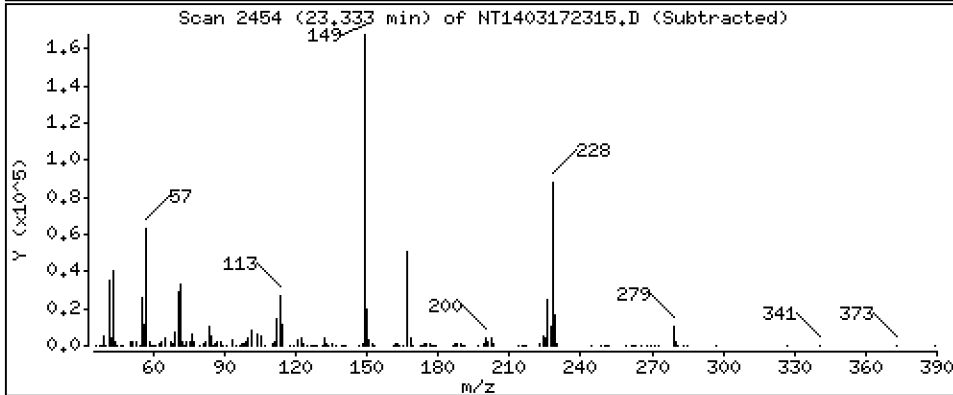
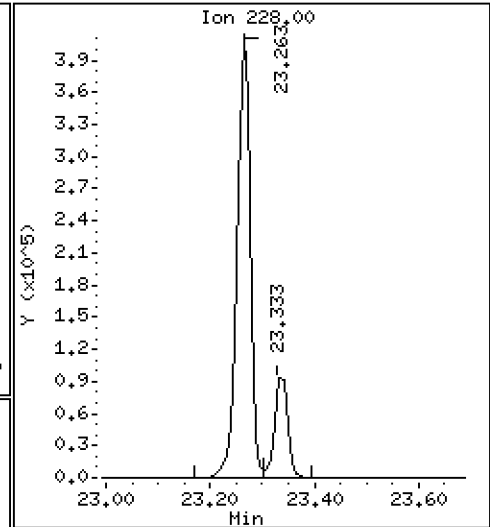
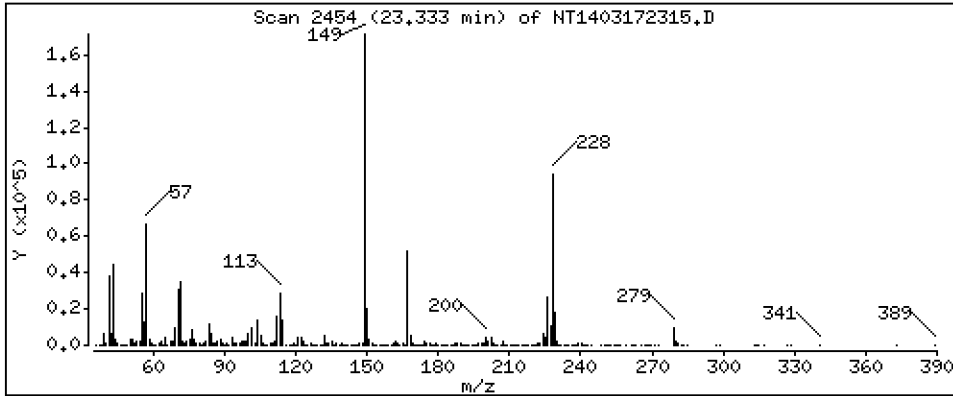
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,248 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

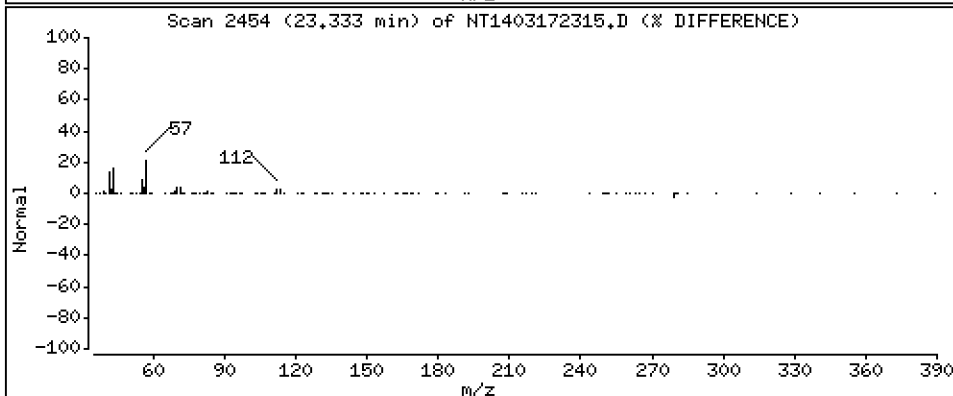
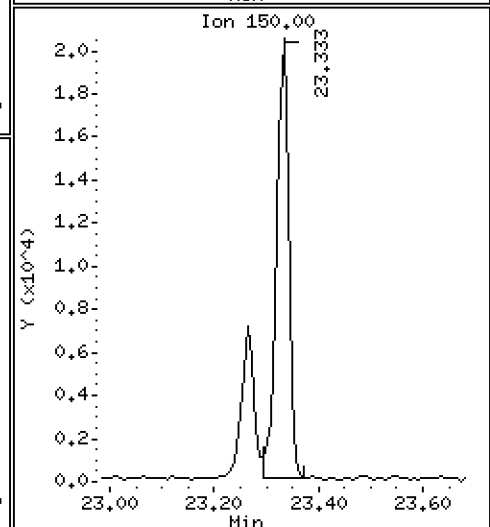
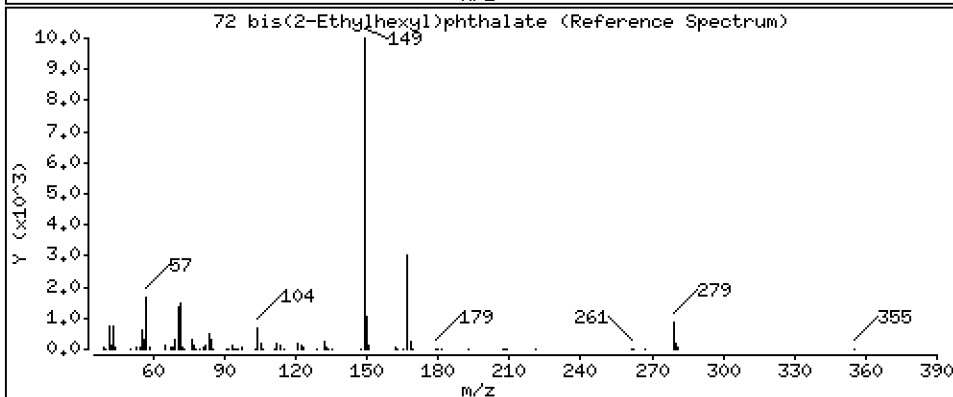
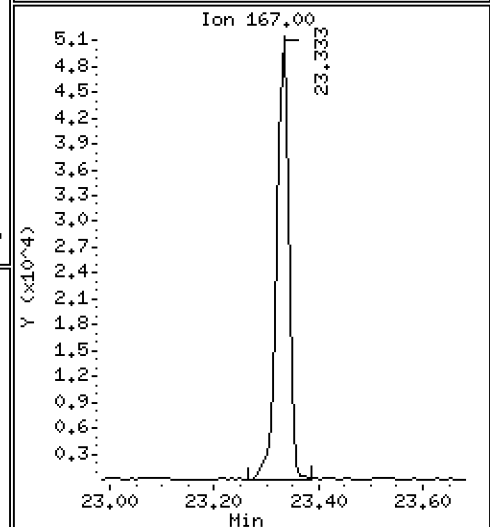
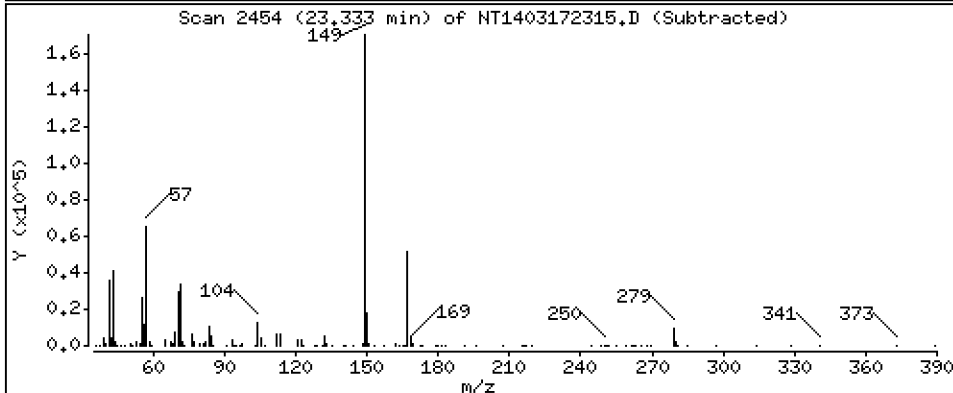
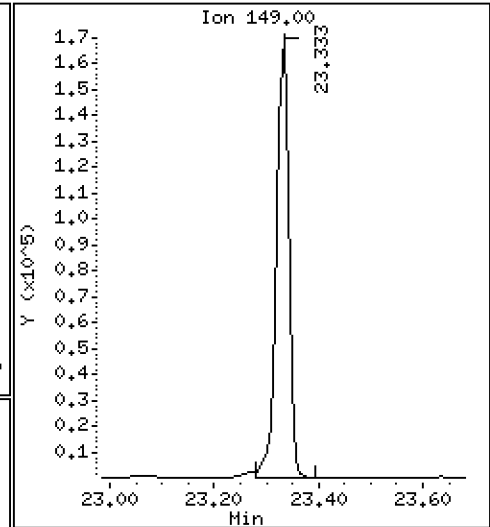
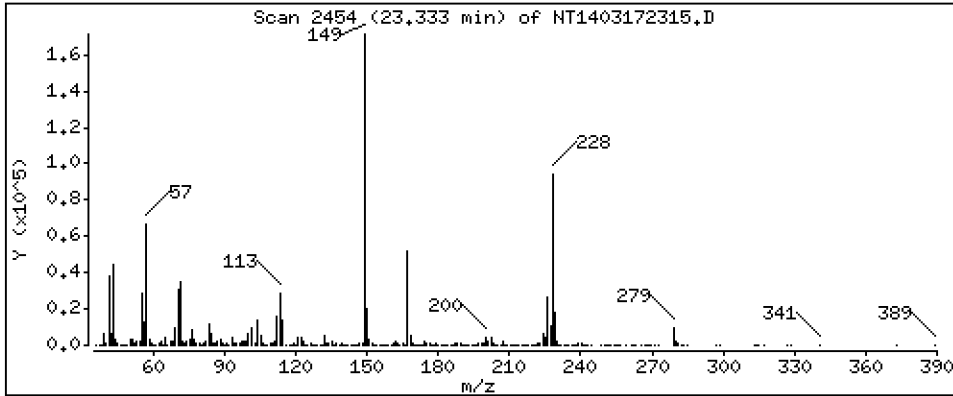
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 2,723 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

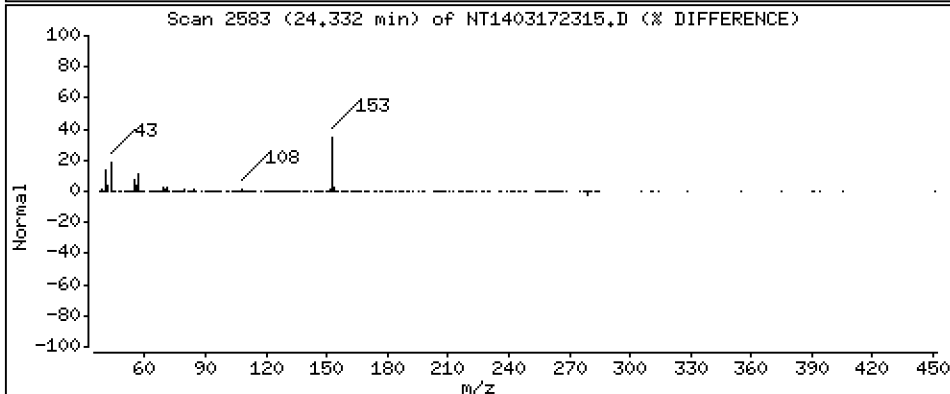
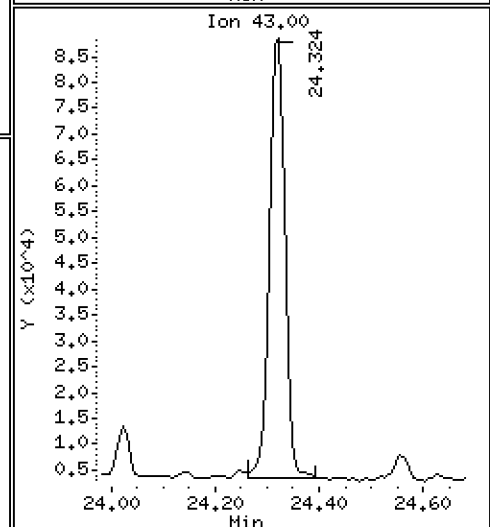
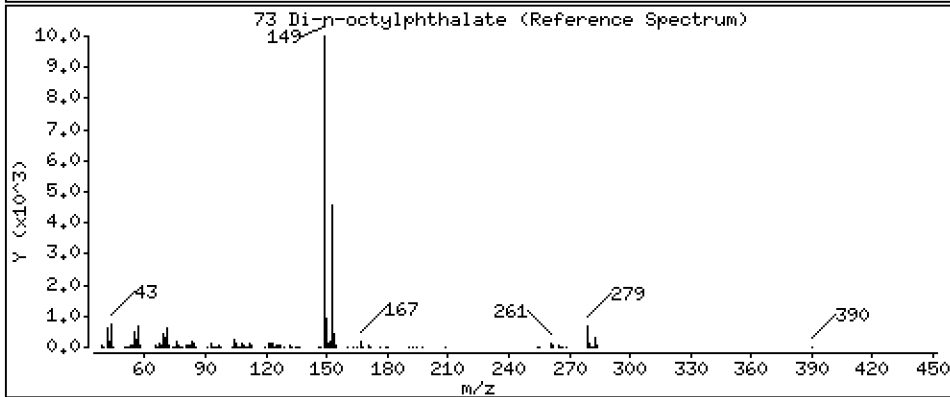
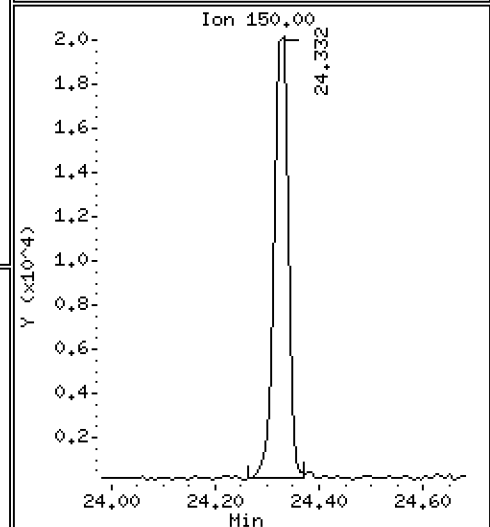
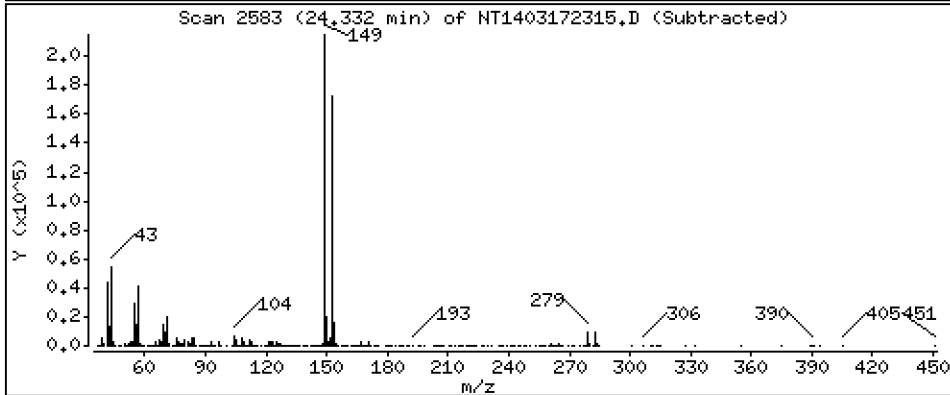
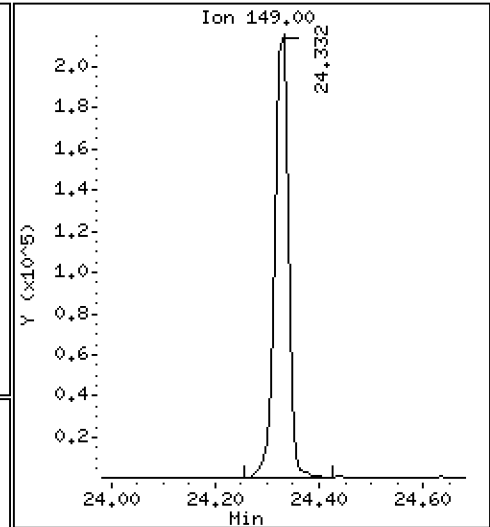
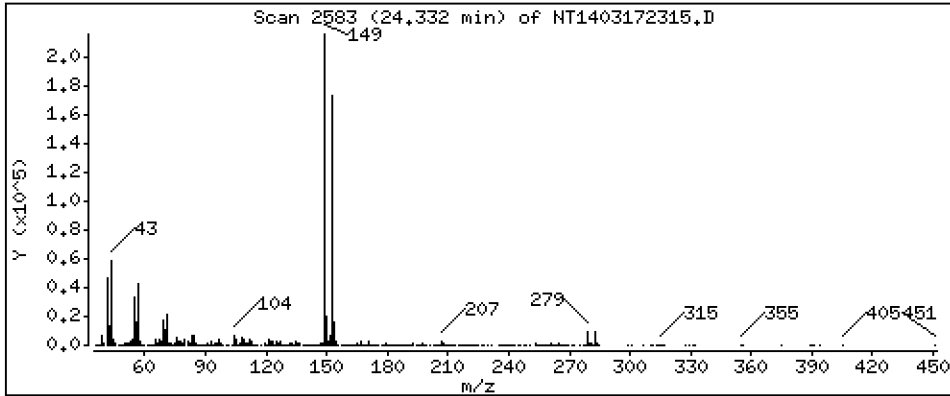
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 1,973 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

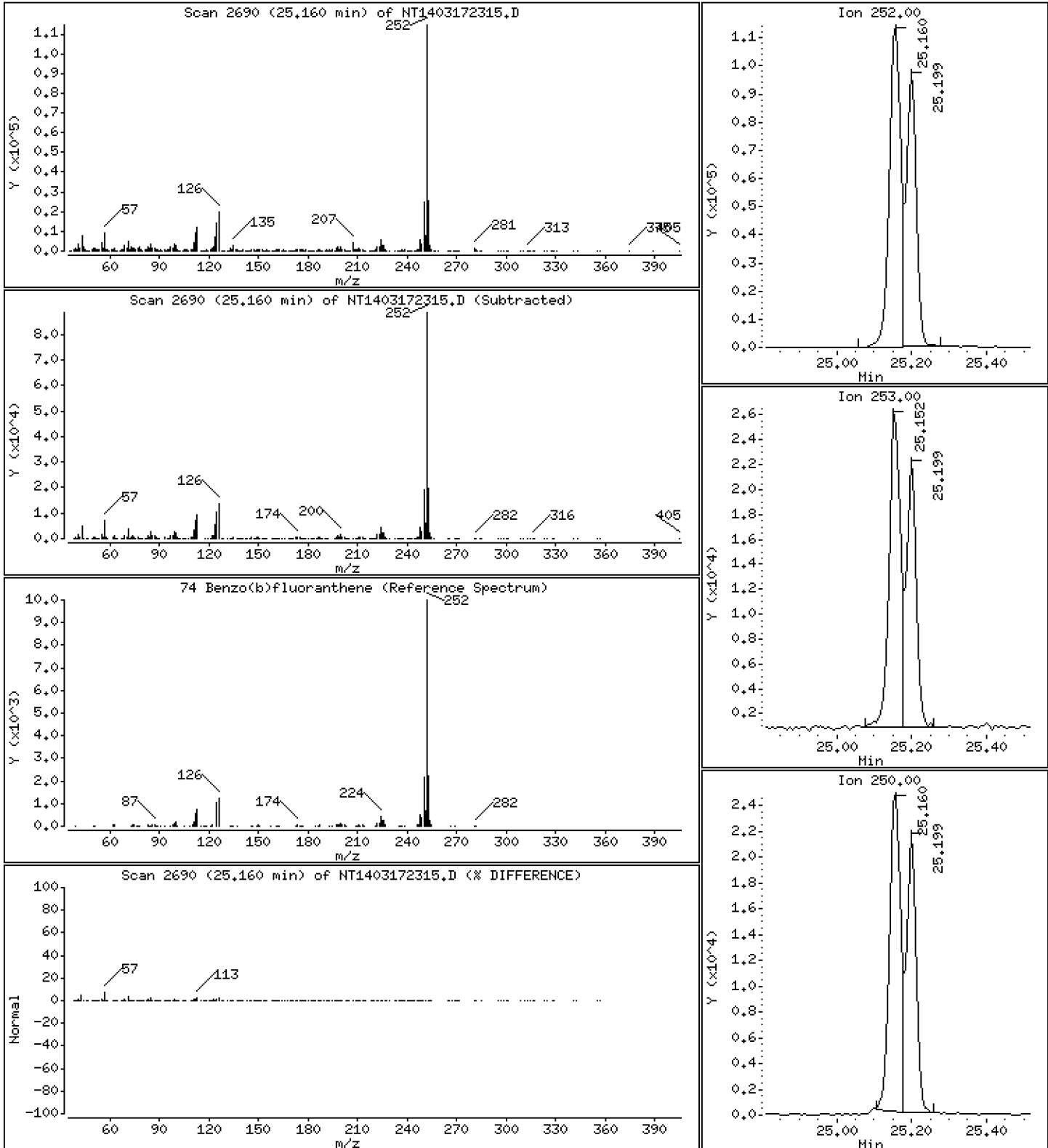
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,807 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

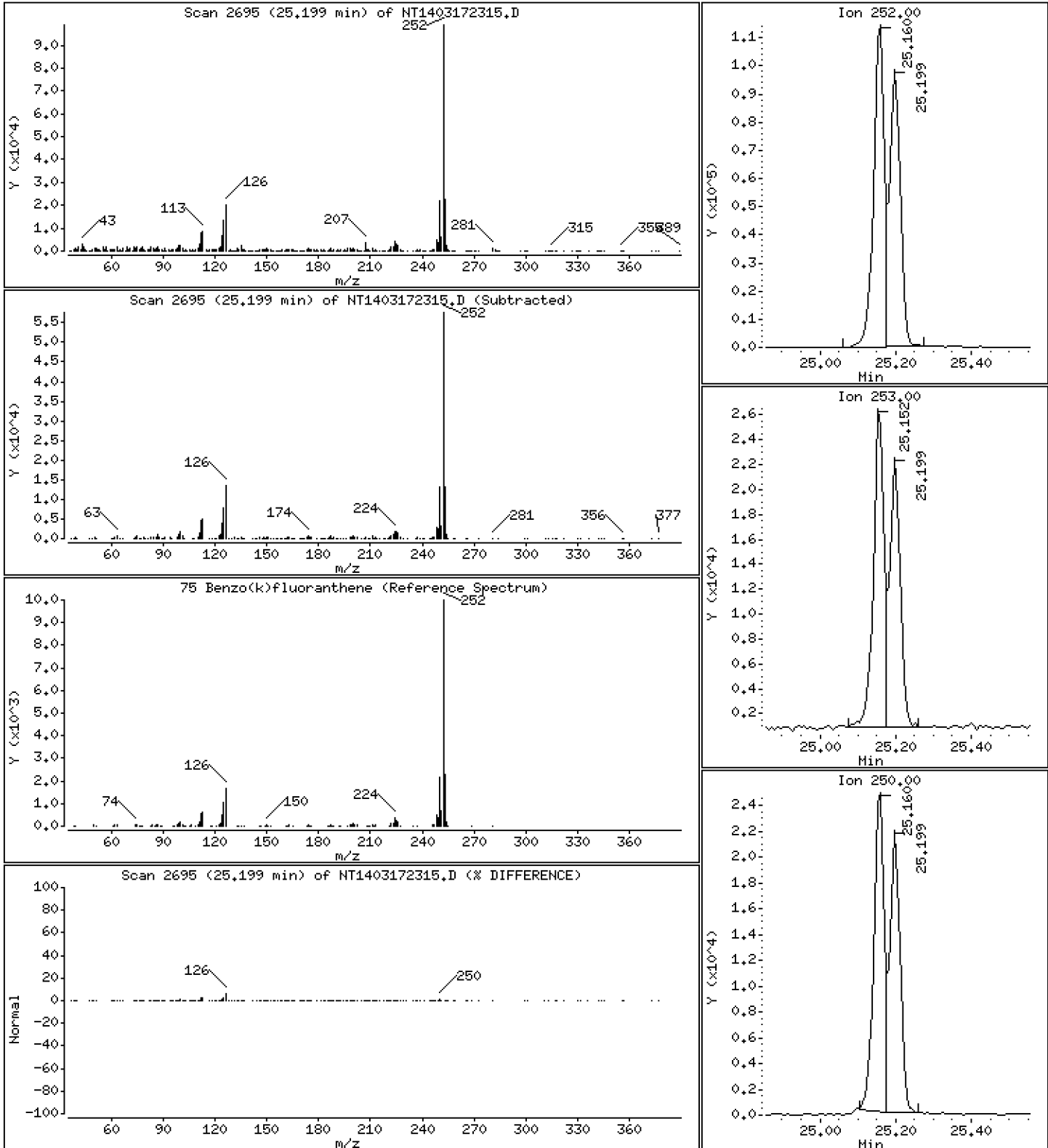
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 2,507 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

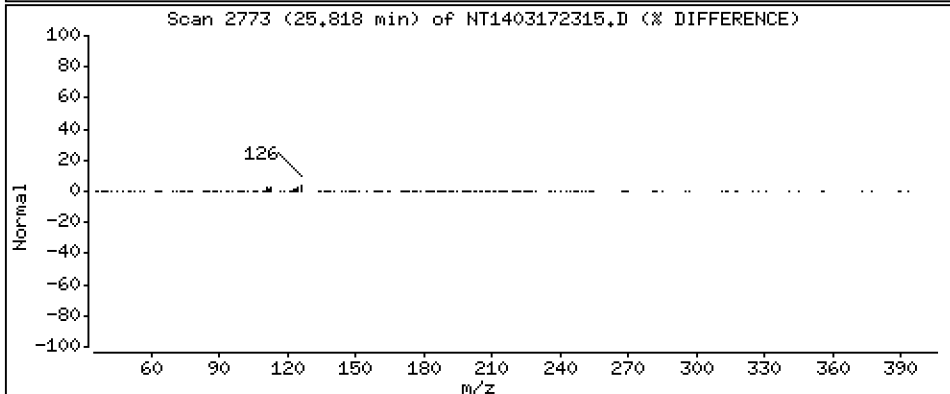
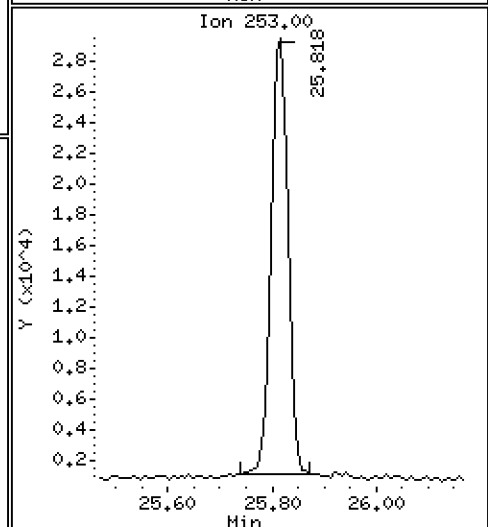
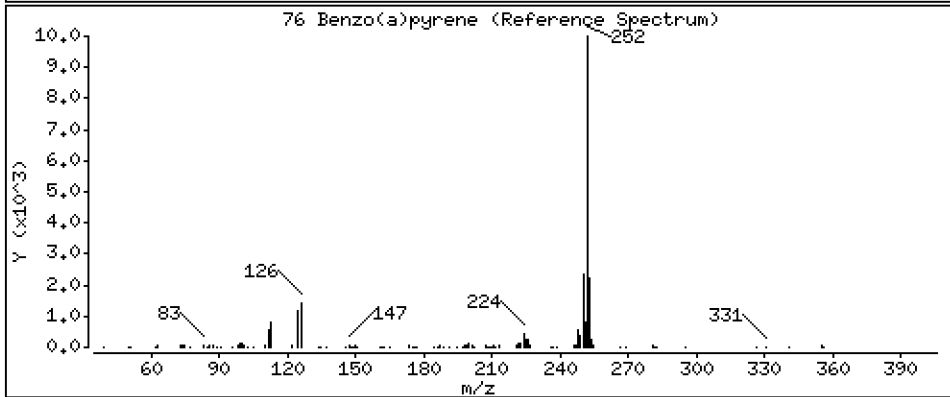
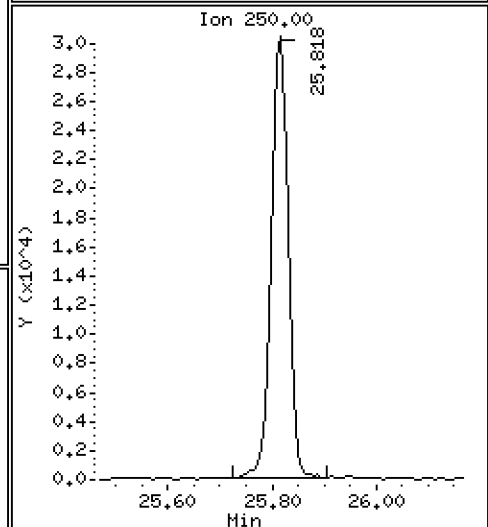
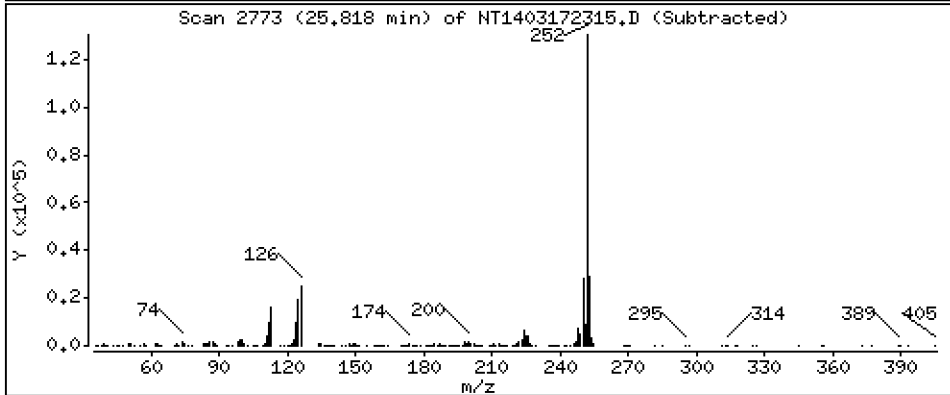
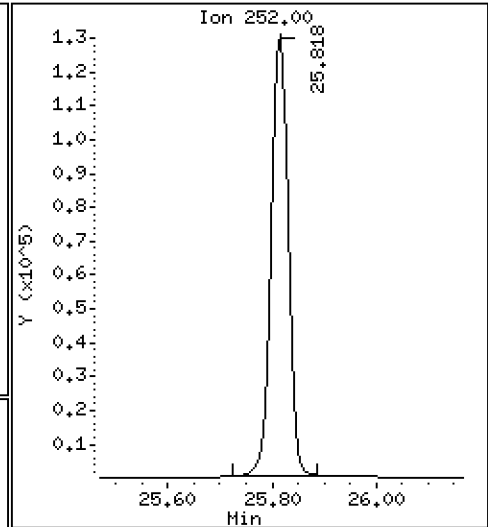
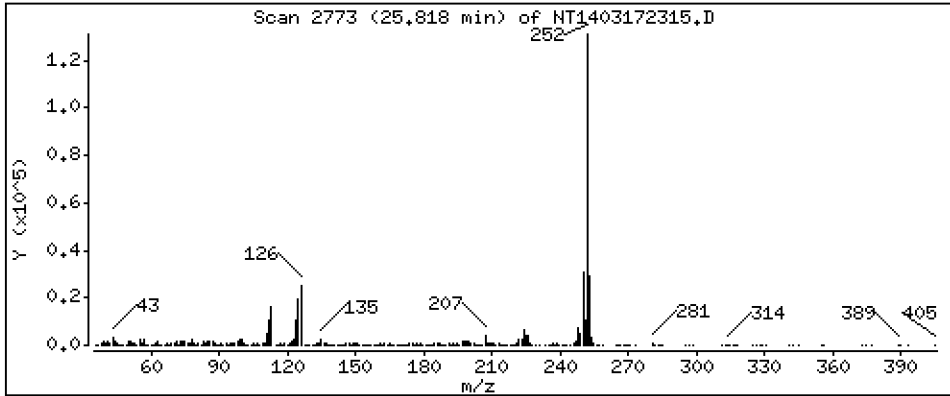
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,113 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

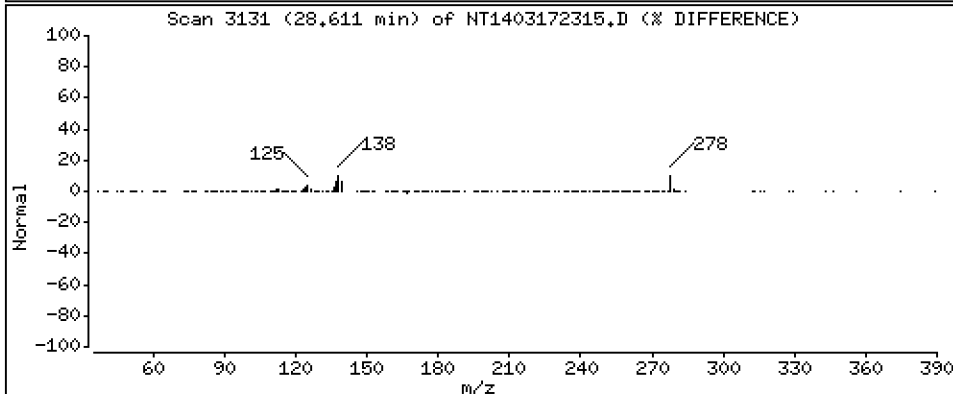
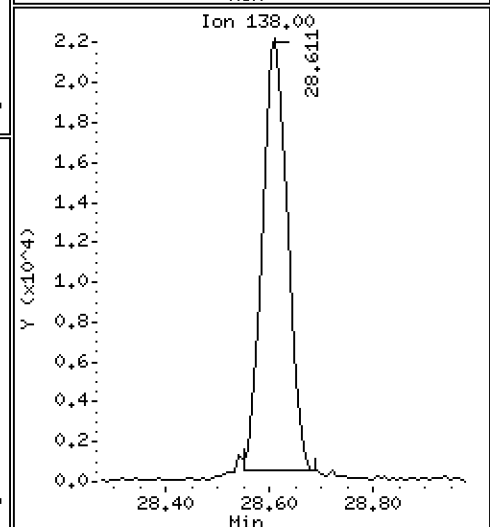
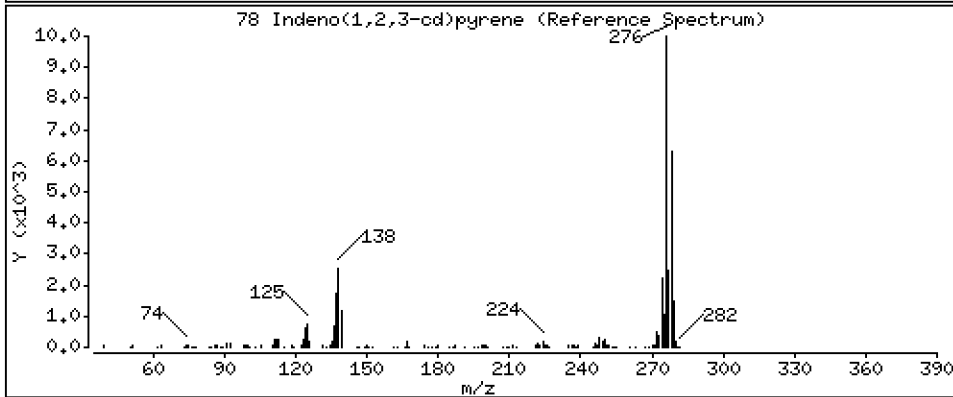
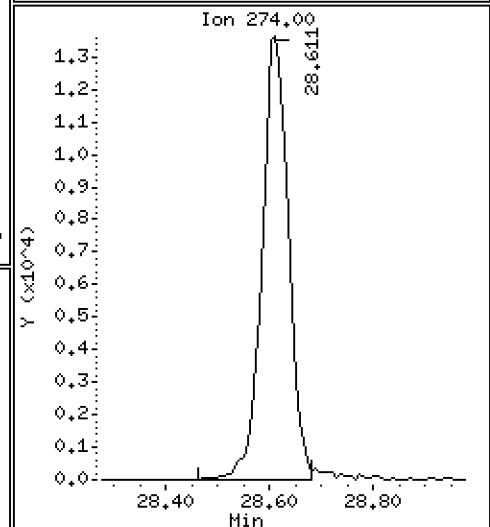
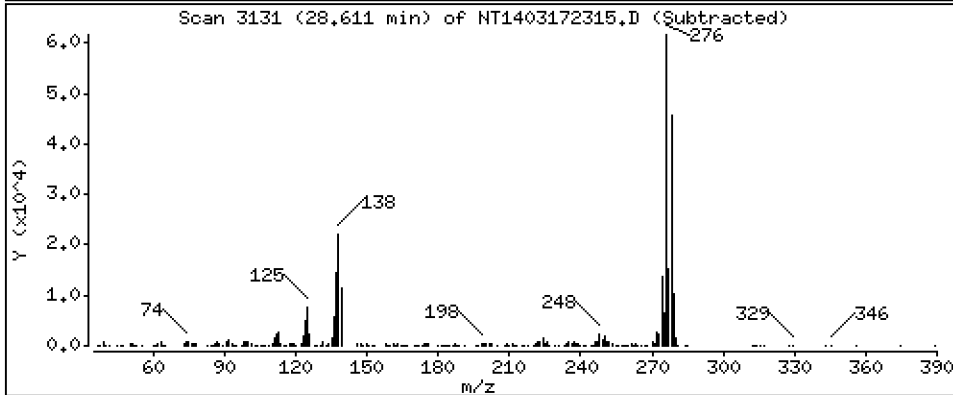
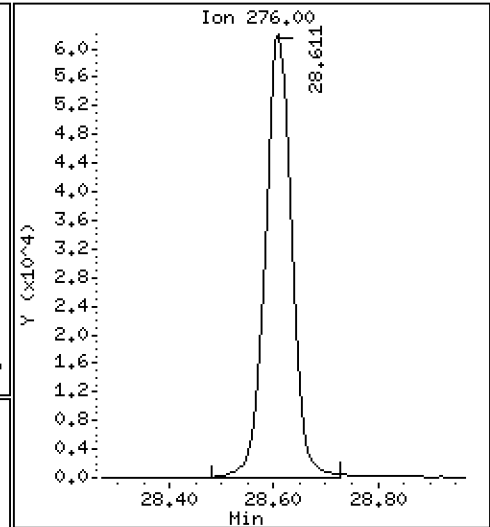
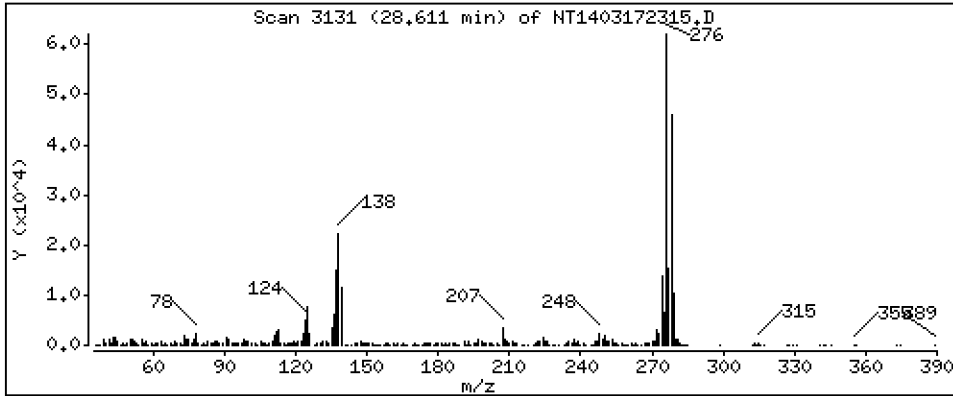
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 2,834 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

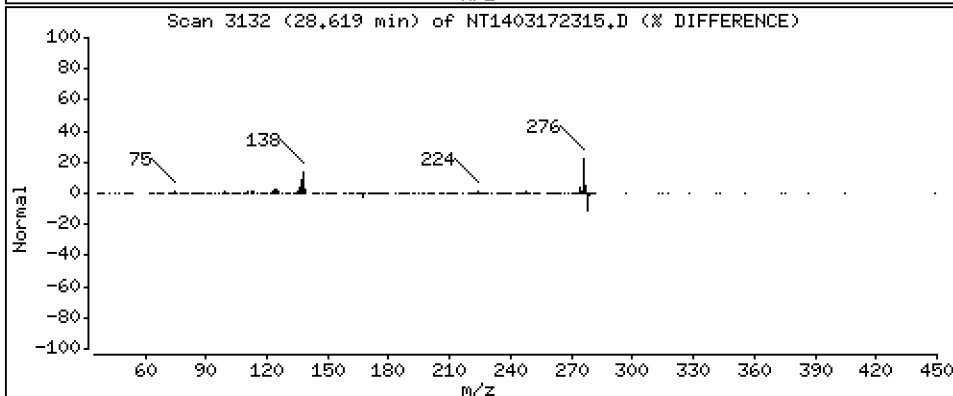
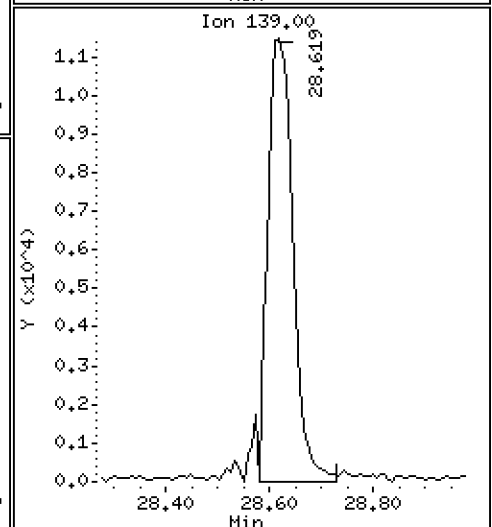
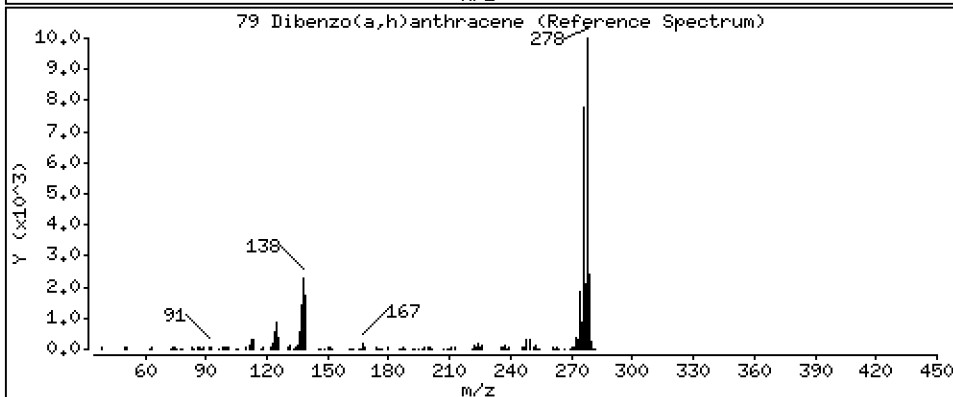
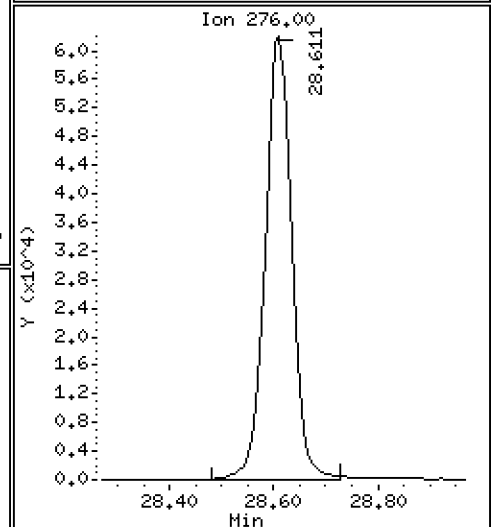
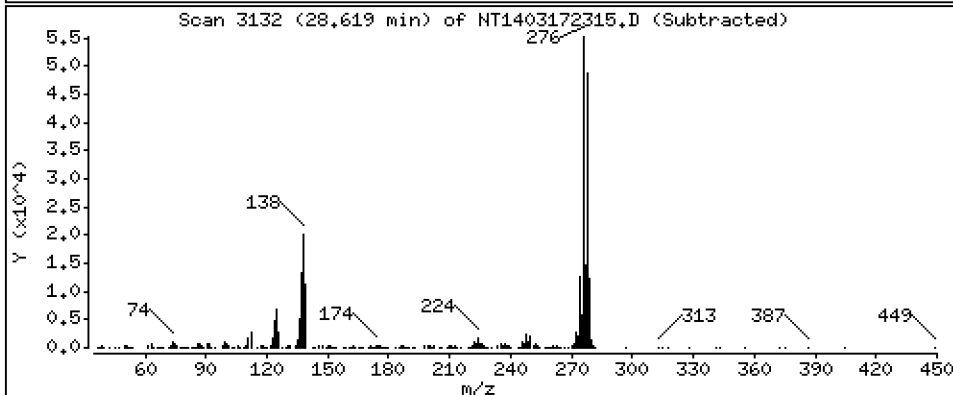
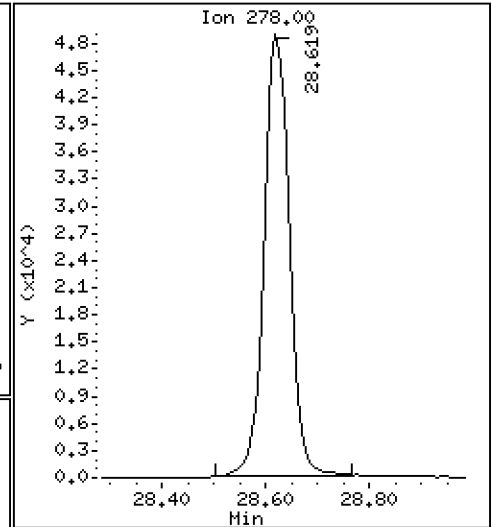
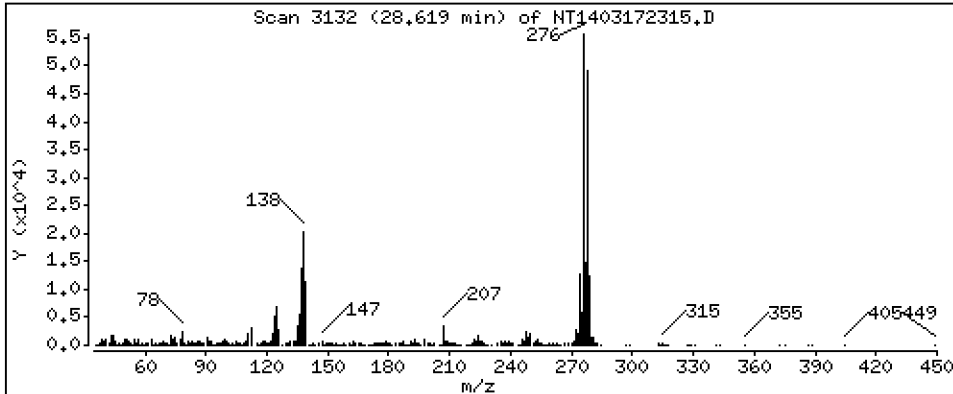
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 2,556 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

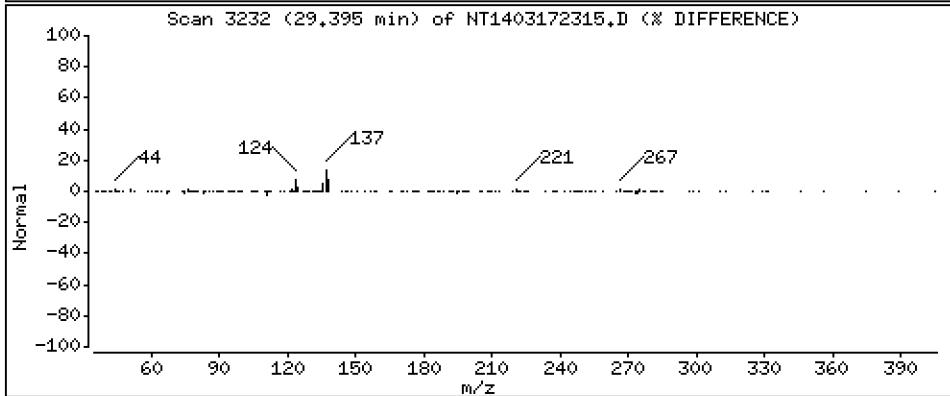
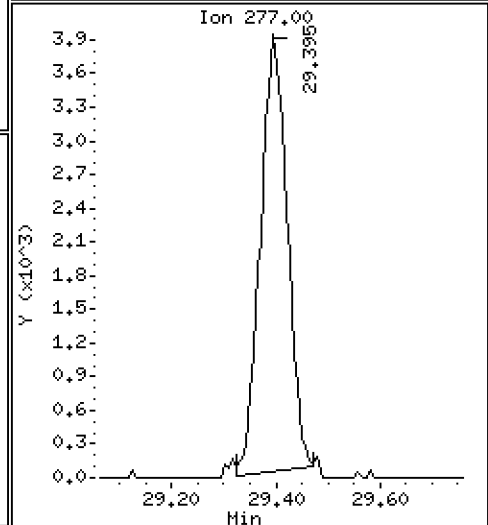
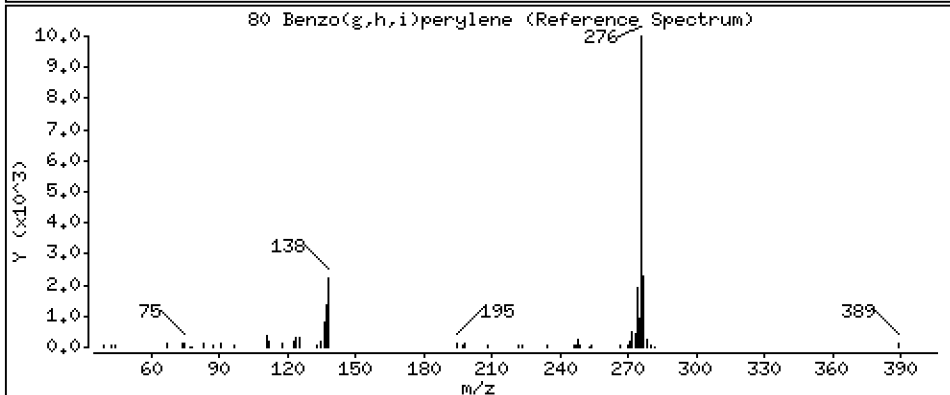
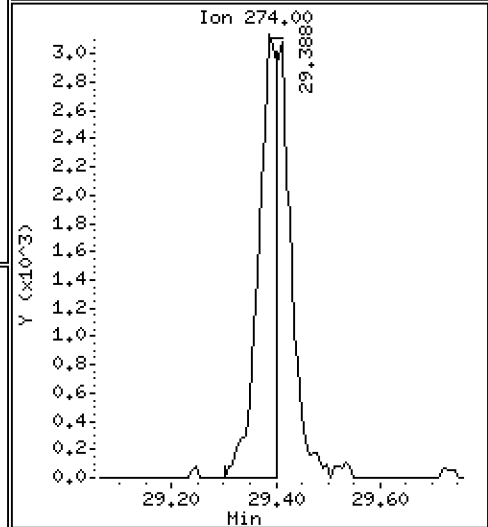
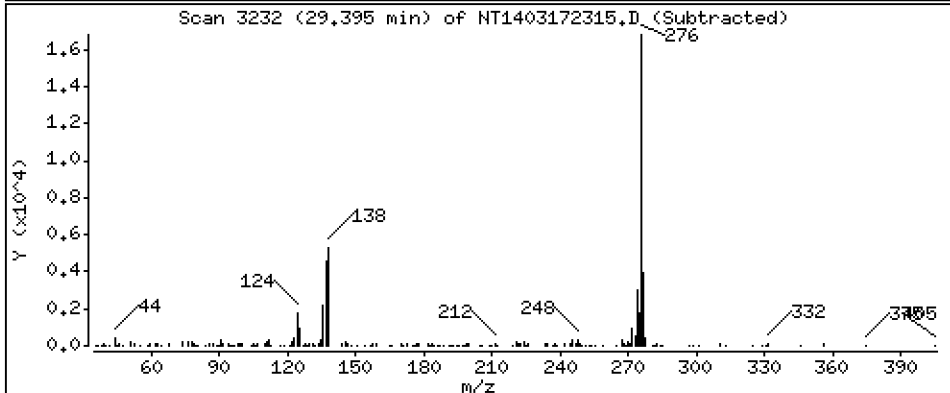
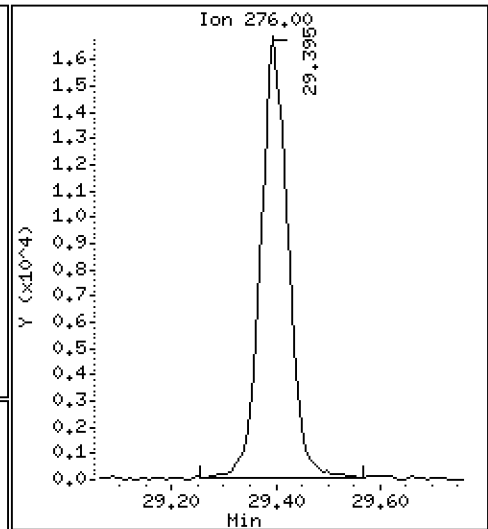
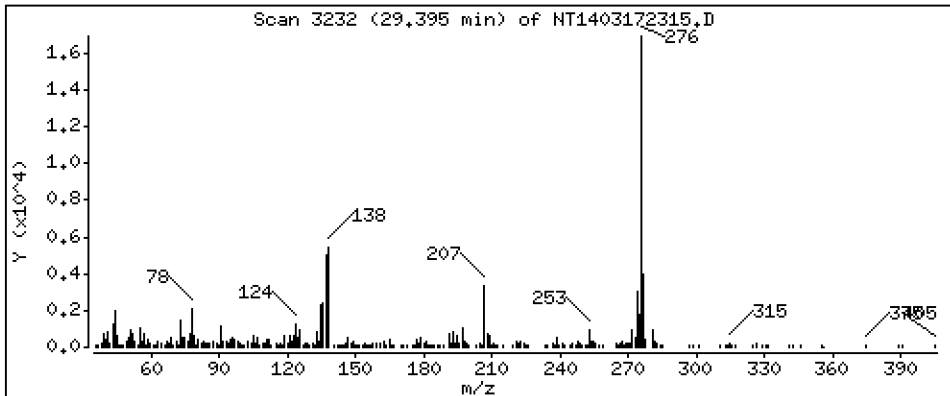
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,9751 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

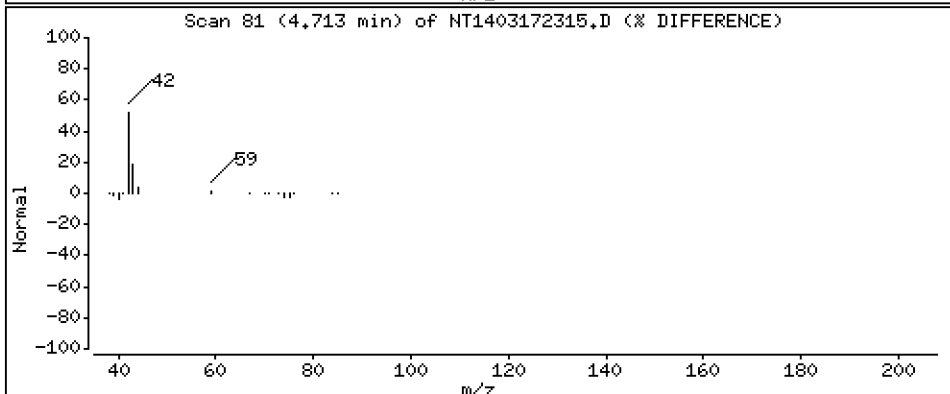
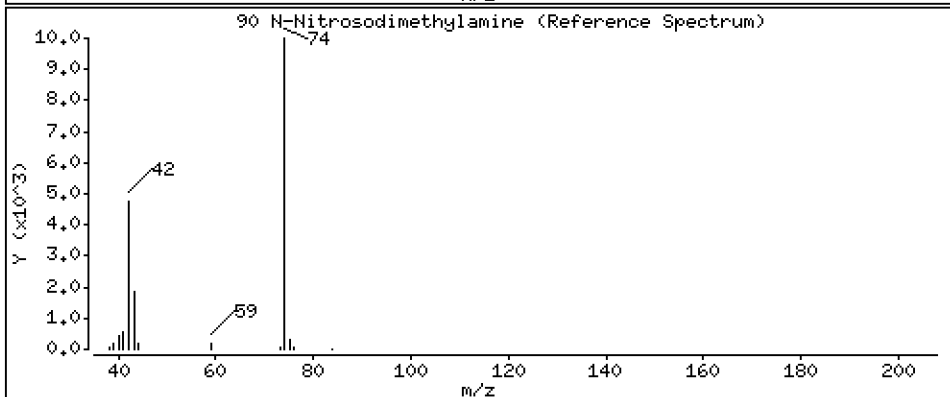
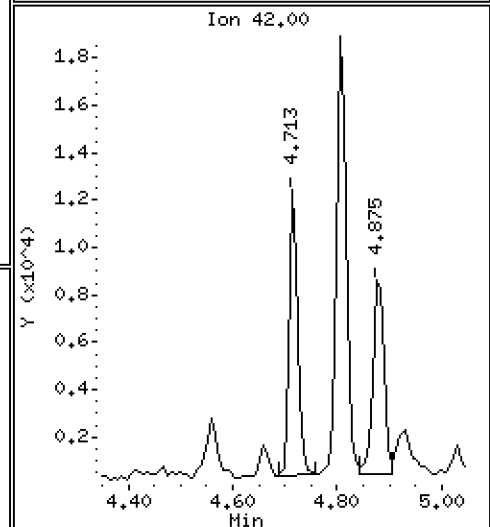
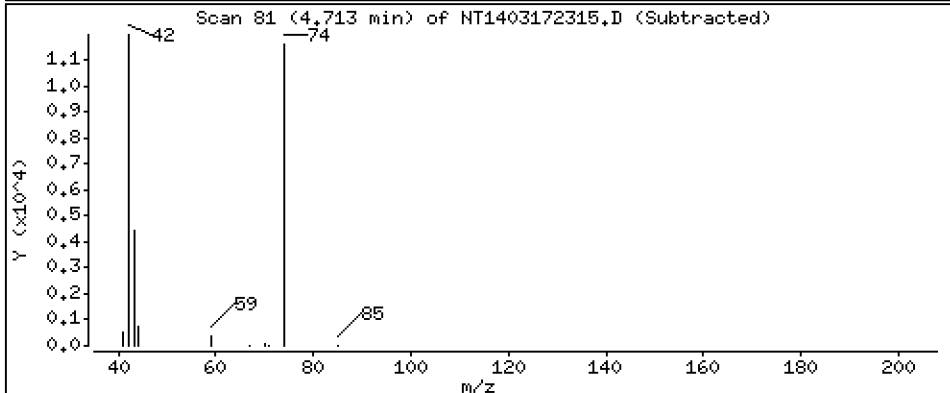
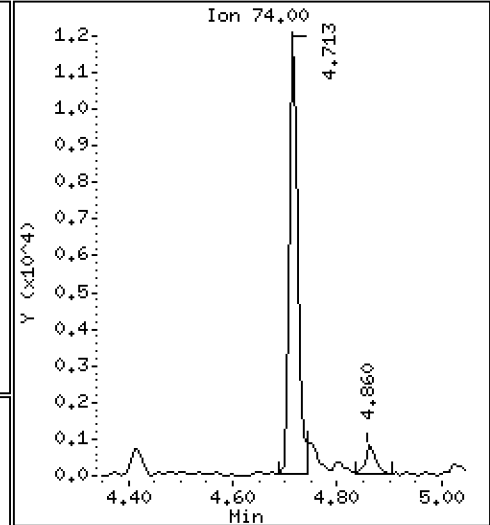
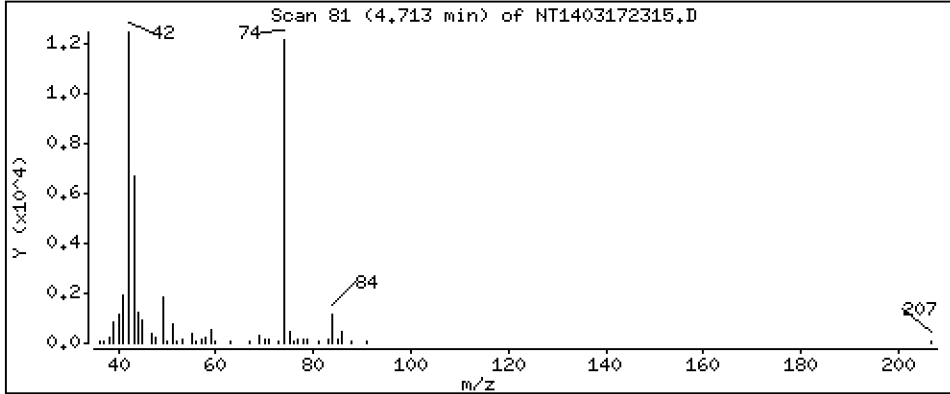
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 0.2841 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

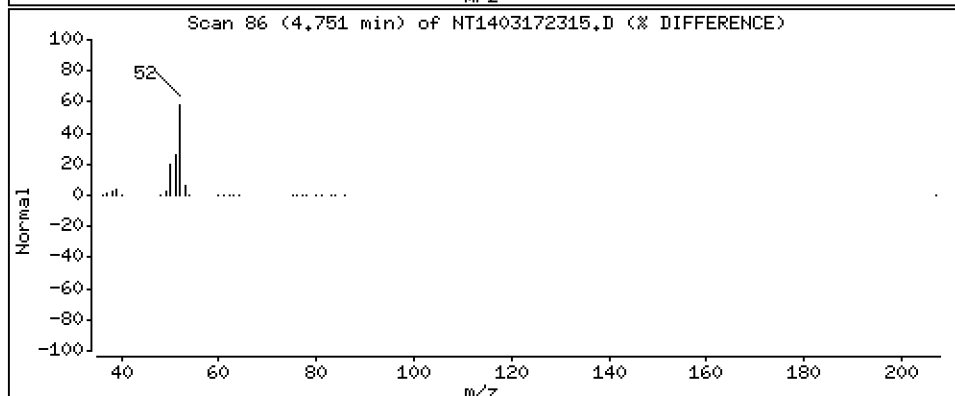
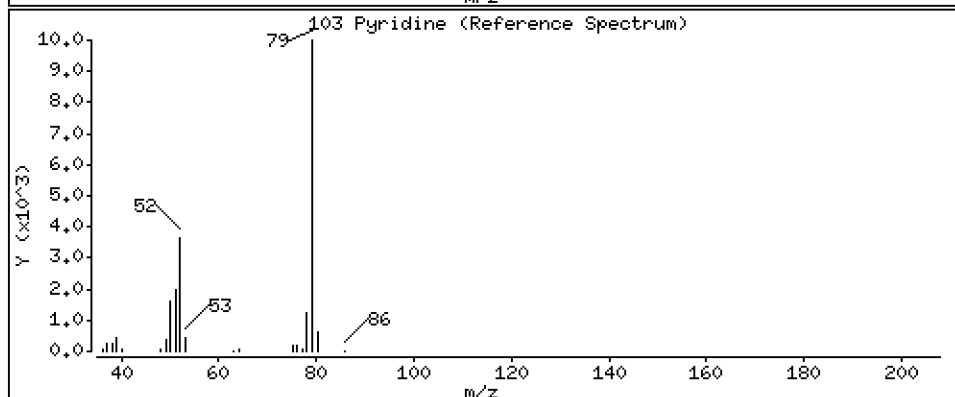
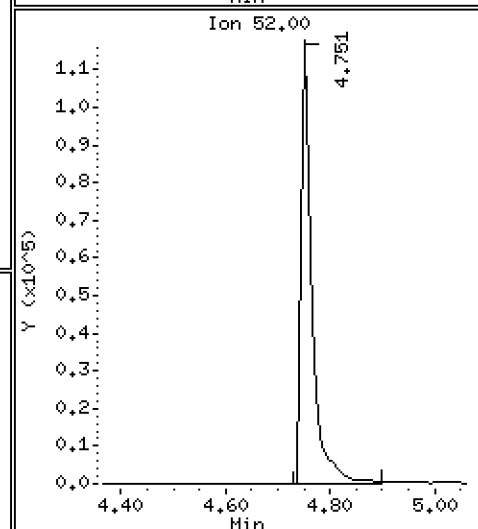
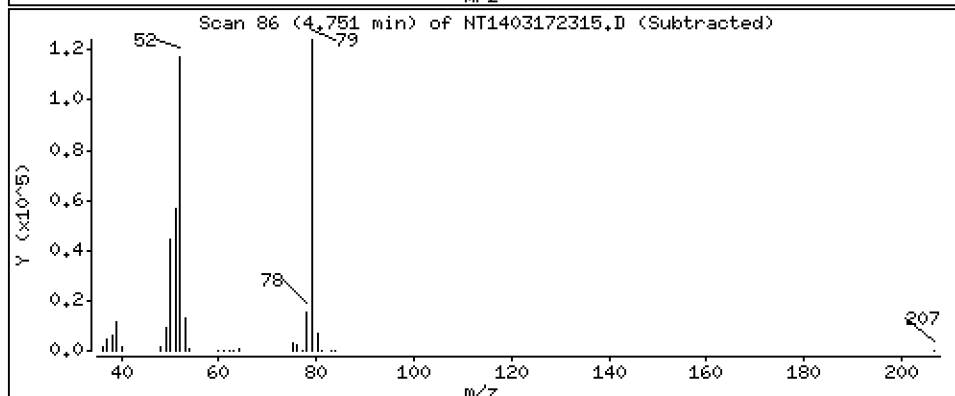
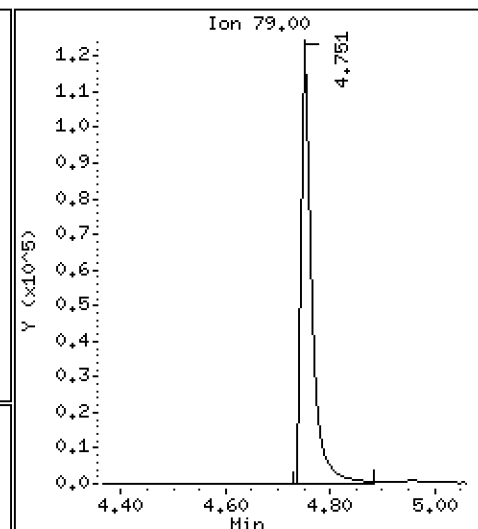
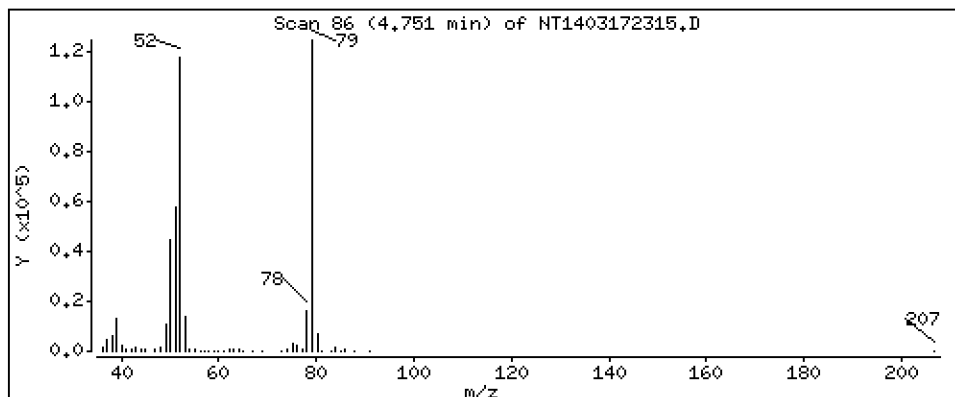
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 1,161 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

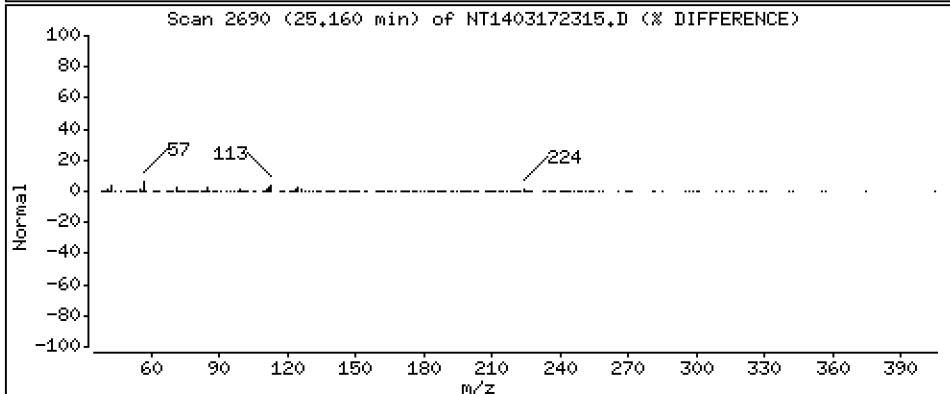
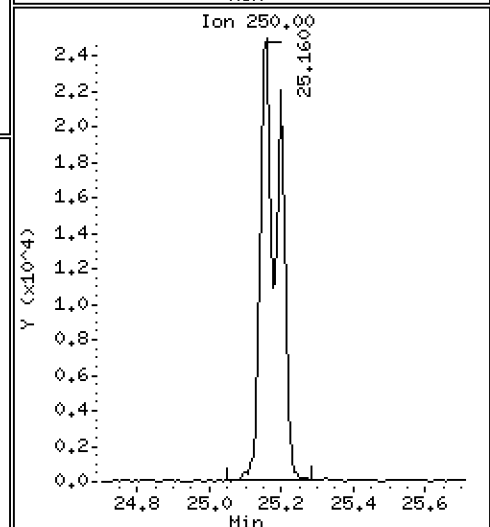
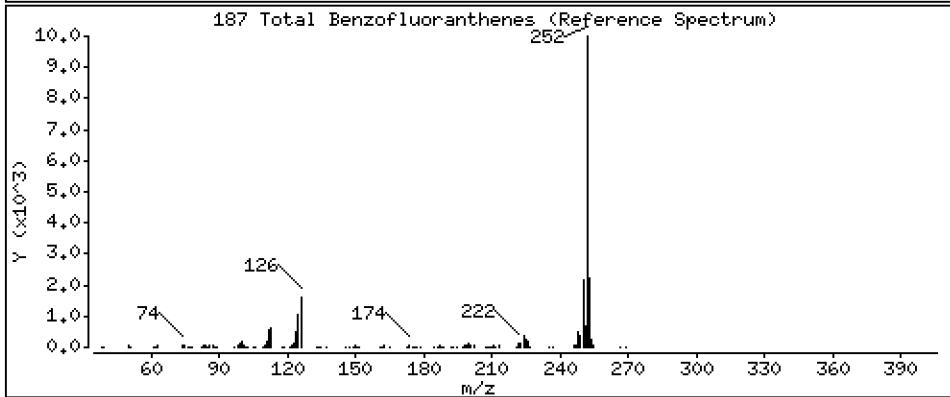
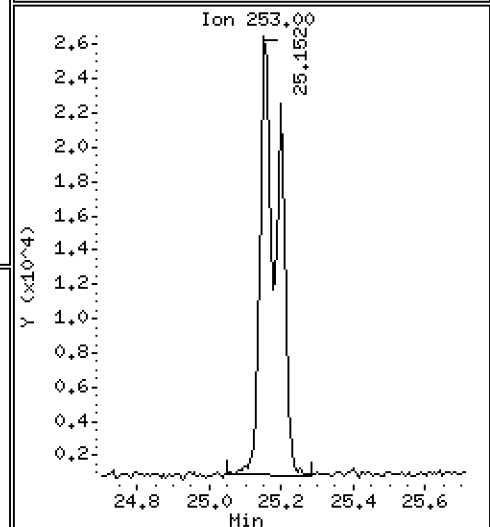
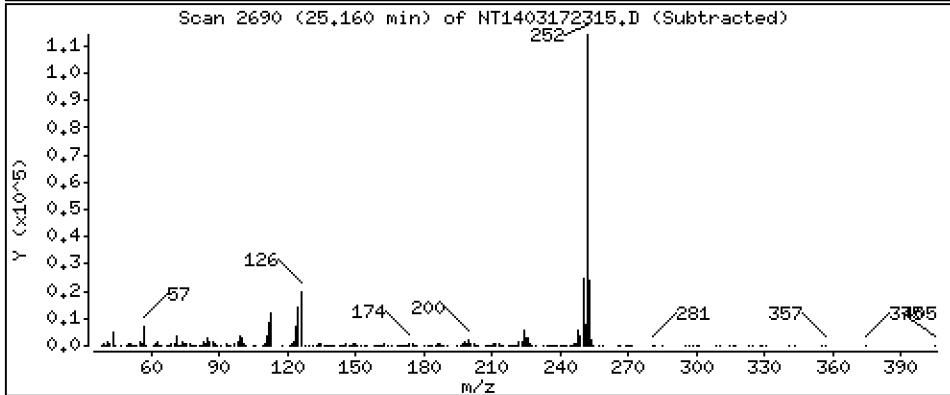
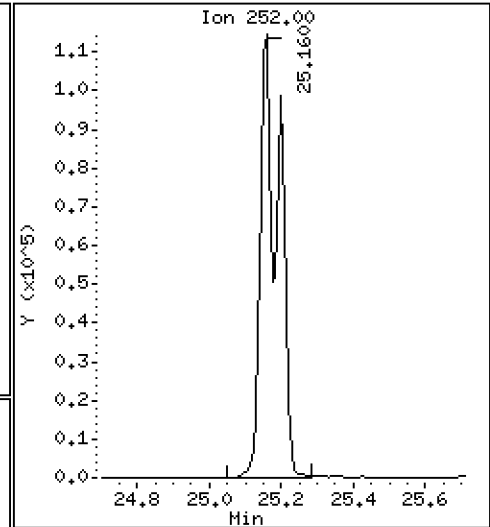
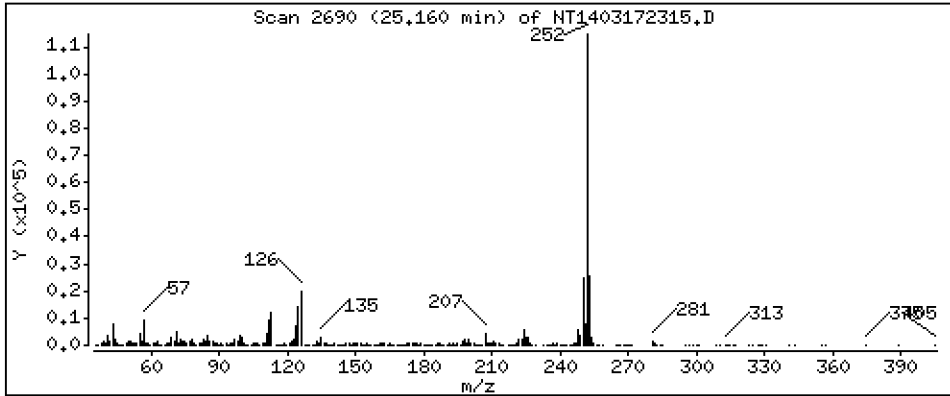
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 5,289 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM1

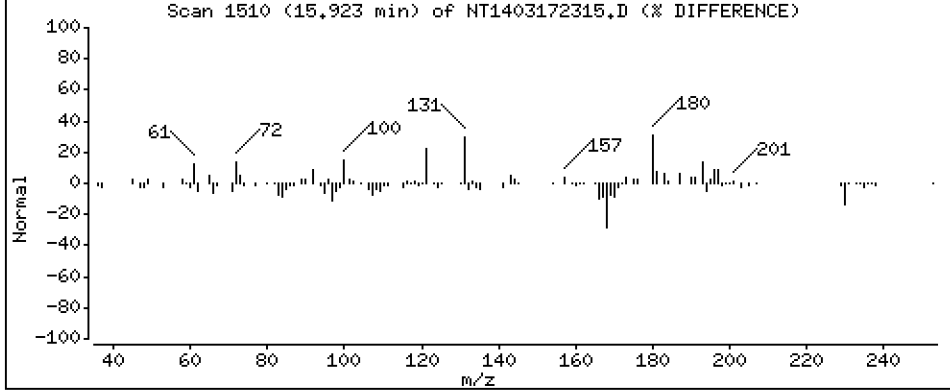
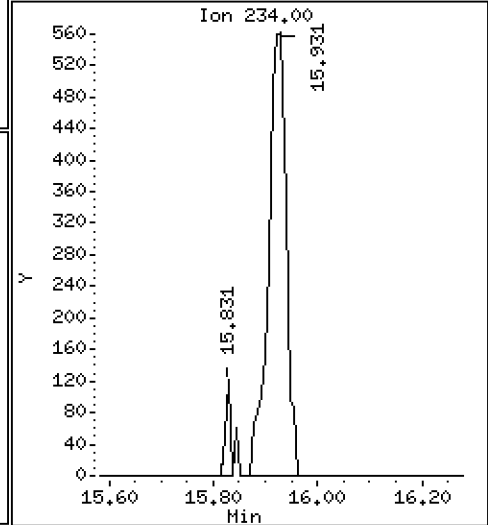
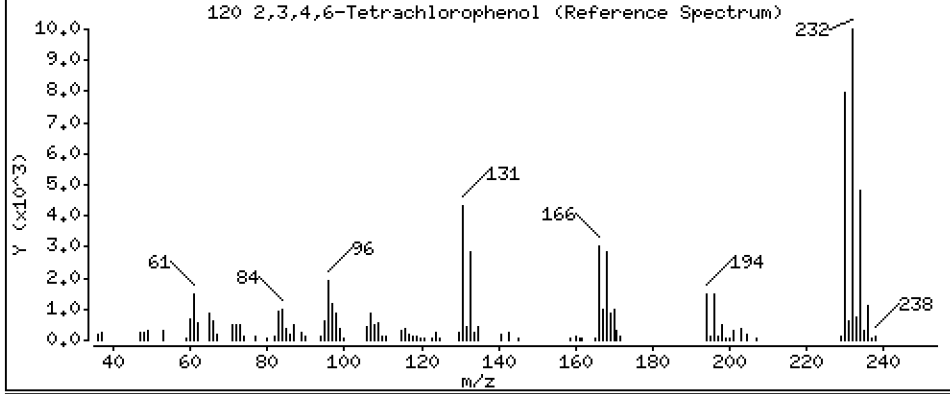
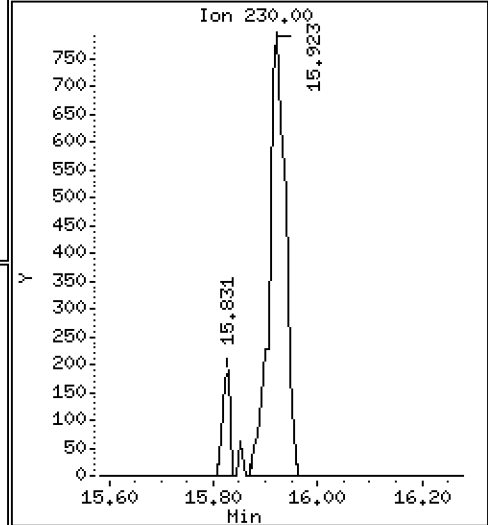
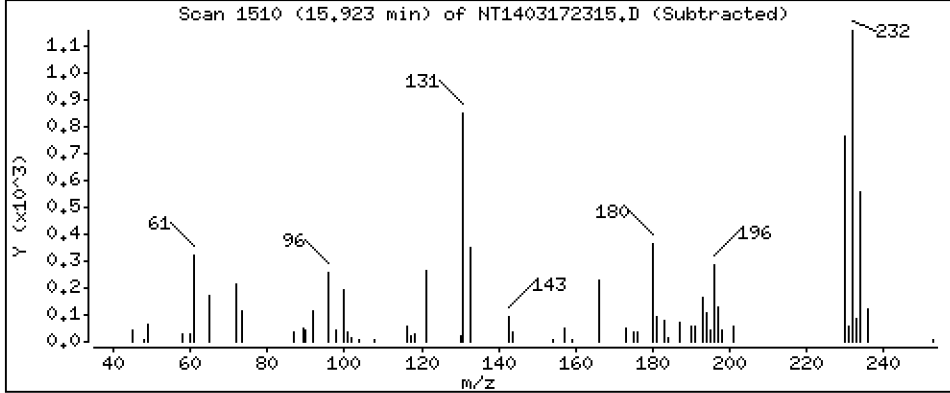
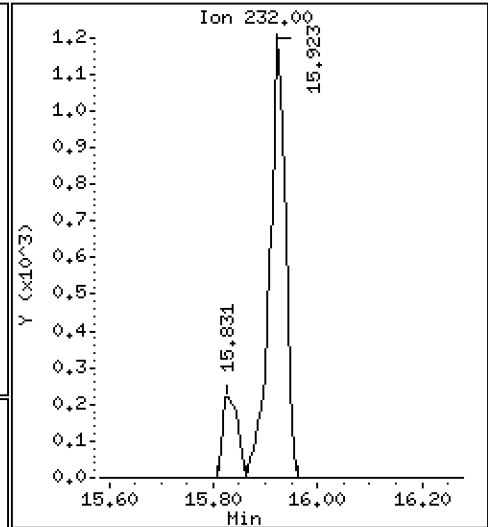
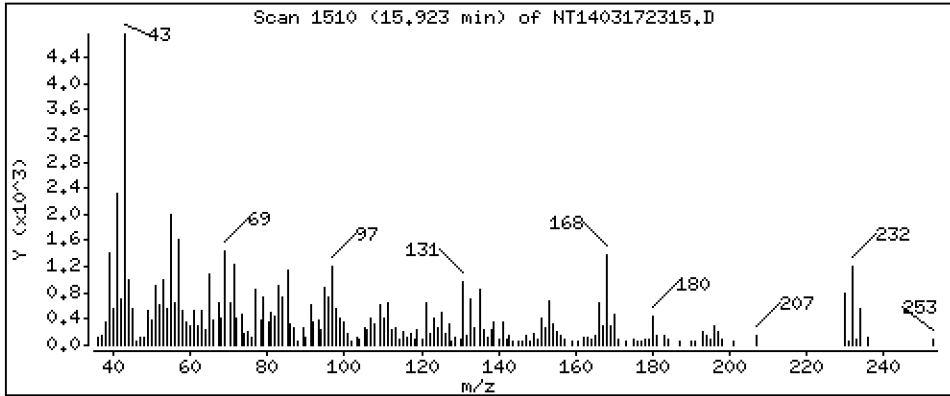
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,05498 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172315.D
 Lab Smp Id: BLB0424-SRM1
 Inj Date : 17-MAR-2023 22:55 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-SRM1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.836	6.821	(1.000)	447818	5.66869	5.669
\$ 2 Phenol-d5	99		8.413	8.412	(1.000)	576573	5.54359	5.544
3 Phenol	94		8.436	8.435	(1.000)	190626	1.72458	1.725
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	484443	5.90807	5.908
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		8.721	8.729	(1.000)	48918	0.56228	0.5623
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	35650	0.40480	0.4048
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	232565	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.426	(1.000)	205991	3.76030	3.760
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.636	9.644	(1.000)	18533	0.73256	0.7326
13 2-Methylphenol	108		9.559	9.558	(1.000)	272898	3.49203	3.492
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.831	9.830	(1.000)	413564	4.46960	4.470
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	380368	4.03953	4.040
19 Nitrobenzene	77		10.195	10.203	(0.882)	68997	0.75276	0.7528
20 Isophorone	82		10.645	10.653	(0.921)	111016	0.88707	0.8871
21 2-Nitrophenol	139		10.832	10.831	(0.937)	108340	2.07684	2.077
22 2,4-Dimethylphenol	107		10.886	10.885	(0.942)	285242	3.63848	3.638
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		10.994	11.103	(0.951)	67993	1.04000	1.040
25 2,4-Dichlorophenol	162		11.289	11.289	(0.977)	397527	6.37612	6.376
26 1,2,4-Trichlorobenzene	180		11.475	11.482	(0.993)	49035	0.63978	0.6398
* 27 Naphthalene-d8	136		11.560	11.567	(1.000)	889784	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	388252	1.63330	1.633
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		11.969	11.976	(1.035)	46093	1.33199	1.332
31 4-Chloro-3-methylphenol	107		12.696	12.696	(1.098)	138449	1.83768	1.838
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.633	13.633	(0.897)	89192	1.98619	1.986	
35 2,4,5-Trichlorophenol	196		13.703	13.702	(0.902)	151628	3.24033	3.240	
§ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	667718	4.16516	4.165	
37 2-Chloronaphthalene	162		14.004	14.012	(0.922)	197297	1.43593	1.436	
38 2-Nitroaniline	65		Compound Not Detected.						
39 Dimethylphthalate	163		14.693	14.701	(0.967)	605099	4.09927	4.099	
40 Acenaphthylene	152		14.879	14.879	(0.979)	257092	1.11399	1.114	
41 2,6-Dinitrotoluene	165		Compound Not Detected.						
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	442664	4.00000		
43 3-Nitroaniline	138		Compound Not Detected.						
44 Acenaphthene	153		15.258	15.265	(1.004)	494824	3.67234	3.672	
45 2,4-Dinitrophenol	184		15.328	15.335	(1.009)	109035	4.10265	4.103	
46 Dibenzofuran	168		15.590	15.590	(1.026)	889190	4.62239	4.622	
47 4-Nitrophenol	109		15.436	15.435	(1.016)	168158	6.75322	6.753	
48 2,4-Dinitrotoluene	165		15.645	15.652	(1.030)	161679	3.34481	3.345	
50 Diethylphthalate	149		16.155	16.170	(1.063)	68451	0.44852	0.4485	
49 Fluorene	166		16.302	16.309	(1.073)	507018	2.78053	2.781	
51 4-Chlorophenyl-phenylether	204		16.294	16.301	(1.072)	132320	1.69050	1.691	
52 4-Nitroaniline	138		Compound Not Detected.						
53 4,6-Dinitro-2-methylphenol	198		16.487	16.494	(0.904)	183713	7.03926	7.039	
54 N-Nitrosodiphenylamine	169		16.541	16.548	(0.907)	292767	2.88323	2.883	
§ 55 2,4,6-Tribromophenol	330		16.841	16.841	(1.108)	108515	6.45685	6.457	
56 4-Bromophenyl-phenylether	248		17.304	17.304	(0.949)	216577	6.32636	6.326	
57 Hexachlorobenzene	284		Compound Not Detected.						
58 Pentachlorophenol	266		17.977	17.976	(0.986)	75224	2.99887	2.999	
* 59 Phenanthrene-d10	188		18.240	18.247	(1.000)	747605	4.00000		
60 Phenanthrene	178		18.286	18.294	(1.003)	910740	4.26376	4.264	
61 Anthracene	178		18.379	18.387	(1.008)	402703	1.95687	1.957	
62 Carbazole	167		18.712	18.711	(1.026)	970727	5.30174	5.302	
63 Di-n-butylphthalate	149		19.509	19.508	(1.070)	374314	1.61284	1.613	
64 Fluoranthene	202		20.677	20.677	(0.888)	434927	2.91857	2.919	
65 Pyrene	202		21.103	21.102	(0.906)	536651	3.51160	3.512	
§ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	568431	5.49442	5.494	
67 Butylbenzylphthalate	149		22.310	22.310	(0.958)	293351	4.38141	4.381	
68 Benzo(a)anthracene	228		23.263	23.270	(0.999)	684787	5.07033	5.070	
* 69 Chrysene-d12	240		23.294	23.293	(1.000)	366287	4.00000		
70 3,3'-Dichlorobenzidine	252		Compound Not Detected.						
71 Chrysene	228		23.332	23.340	(1.002)	152558	1.24810	1.248	
72 bis(2-Ethylhexyl)phthalate	149		23.332	23.332	(0.960)	263965	2.72273	2.723	
* 134 Di-n-octylphthalate-d4	153		24.316	24.323	(1.000)	736461	4.00000		
73 Di-n-octylphthalate	149		24.331	24.331	(1.001)	373463	1.97265	1.973	
74 Benzo(b)fluoranthene	252		25.159	25.159	(0.970)	230663	2.80653	2.807	
75 Benzo(k)fluoranthene	252		25.198	25.205	(0.972)	204254	2.50703	2.507	
76 Benzo(a)pyrene	252		25.818	25.817	(0.996)	289070	4.11302	4.113	
* 77 Perylene-d12	264		25.934	25.933	(1.000)	232583	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		28.610	28.618	(1.103)	216748	2.83351	2.834	
79 Dibenzo(a,h)anthracene	278		28.618	28.633	(1.104)	164782	2.55600	2.556	
80 Benzo(g,h,i)perylene	276		29.395	29.410	(1.133)	61474	0.97513	0.9751	
90 N-Nitrosodimethylamine	74		4.712	4.697	(1.000)	14215	0.28411	0.2841	
91 Aniline	93		Compound Not Detected.						
93 Benzidine	184		Compound Not Detected.						
103 Pyridine	79		4.751	4.712	(1.000)	179941	1.16133	1.161	
105 1-methylnaphthalene	142		Compound Not Detected.						
111 Azobenzene (1,2-DP-Hydrazine)	77		Compound Not Detected.						

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.159	25.205	(0.970)	412860	5.28928	5.289
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.930	(1.048)	2465	0.05498	0.05498

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172315.D Calibration Time: 15:03
 Lab Smp Id: BLB0424-SRM1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	232565	5.13
27 Naphthalene-d8	809500	404750	1619000	889784	9.92
42 Acenaphthene-d10	420689	210345	841378	442664	5.22
59 Phenanthrene-d10	757520	378760	1515040	747605	-1.31
69 Chrysene-d12	450500	225250	901000	366287	-18.69
134 Di-n-octylphthala	828388	414194	1656776	736461	-11.10
77 Perylene-d12	339914	169957	679828	232583	-31.58

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.06
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172315.D

Lab ID: BLB0424-SRM1
nt14.i, ABN.m, 17-MAR-2023 22:55

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.951	0.960	-0.0087	Benzoic acid

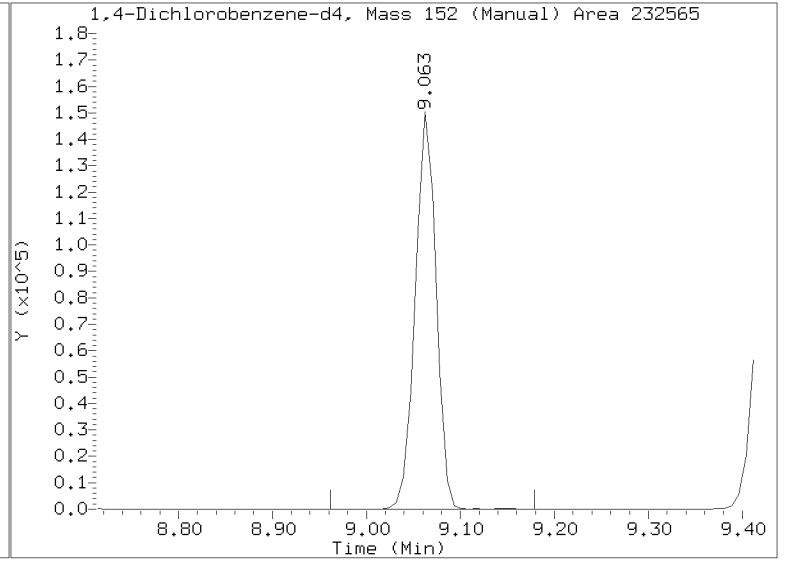
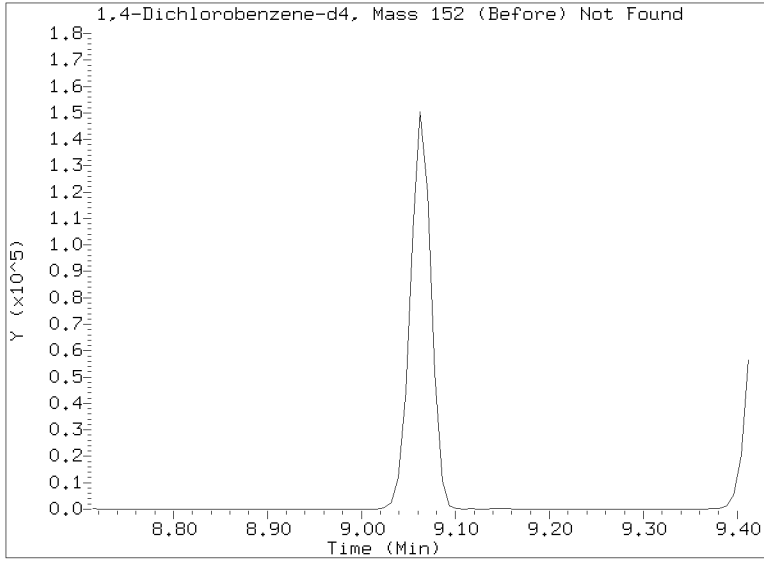
RRT check based on Ccal File: NT1403172302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172315.D
Injection Date: 17-MAR-2023 22:55
Lab ID: BLB0424-SRM1 Client ID:
Report Date: 03/22/2023 08:12





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

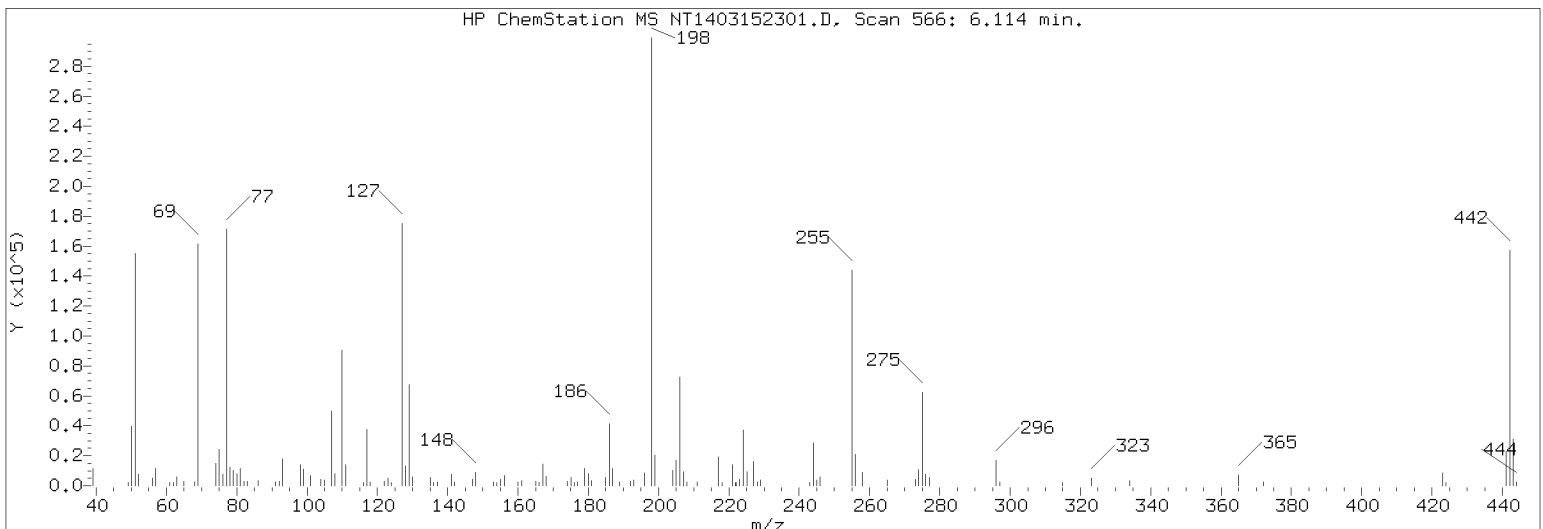
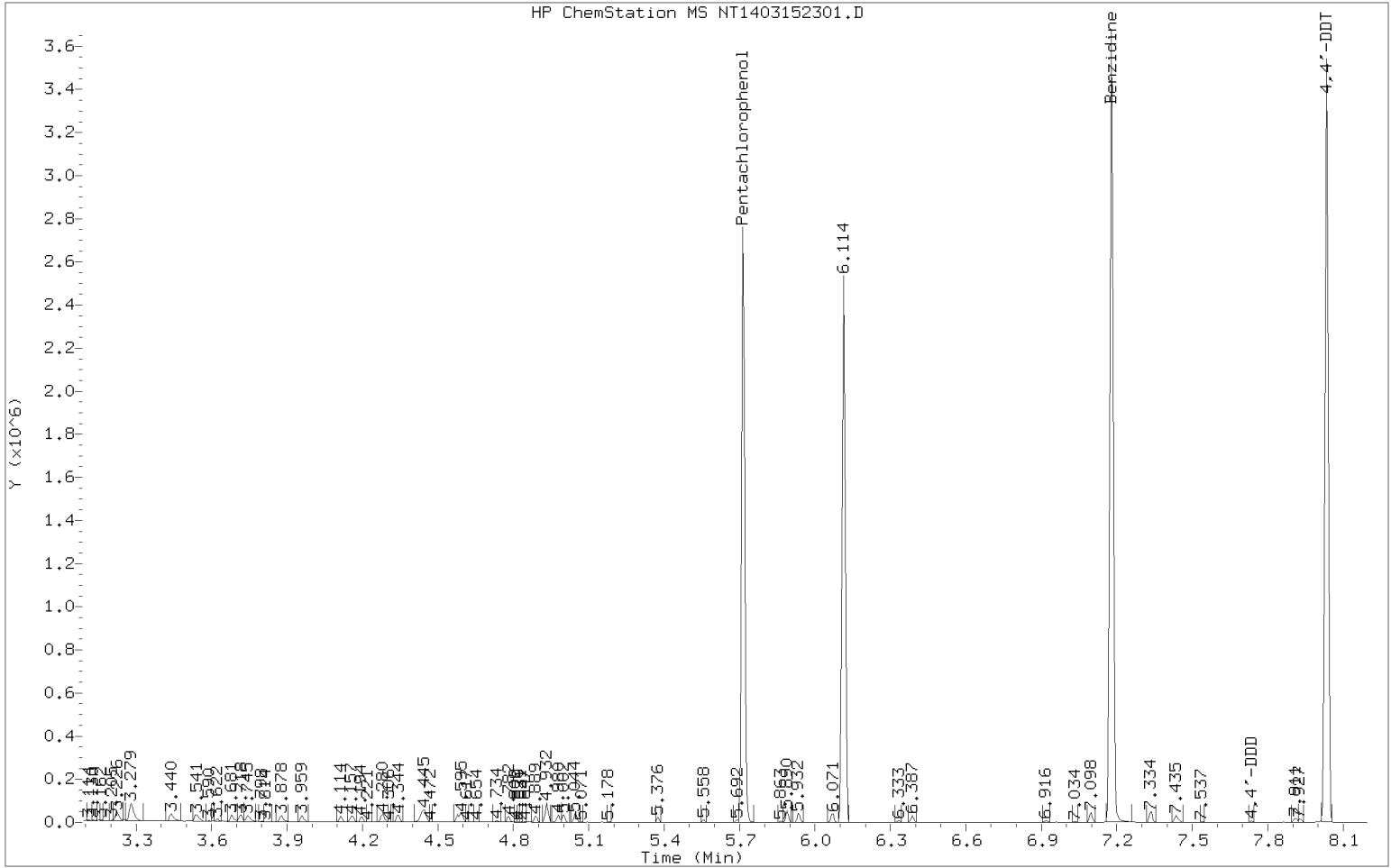
Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Lab File ID:	<u>NT1403152301.D</u>	Injection Date:	<u>03/15/23</u>
Instrument ID:	<u>NT14</u>	Injection Time:	<u>12:00</u>
Sequence:	<u>SLC0160</u>	Lab Sample ID:	<u>SLC0160-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.674	PASS
69	Less than 100% of 198	53.4	PASS
70	Less than 2% of 69	0	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.72	PASS
365	1 - 100% of 198	2.71	PASS
441	Less than 150% of 443	72.2	PASS
442	1 - 200% of 198	58.3	PASS
443	15 - 24% of 442	19.2	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

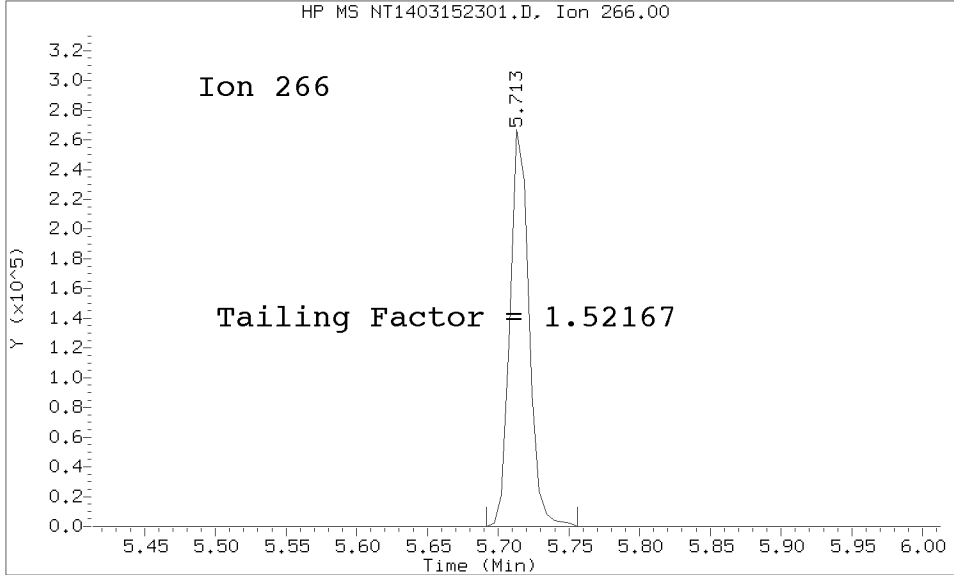
Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0160-TUN1	NT1403152301.D	03/15/2023	12:00
Cal Standard	SLC0160-CAL7	NT1403152302.D	03/15/2023	12:13
Cal Standard	SLC0160-CAL6	NT1403152303.D	03/15/2023	12:49
Cal Standard	SLC0160-CAL5	NT1403152304.D	03/15/2023	13:26
Cal Standard	SLC0160-CAL4	NT1403152305.D	03/15/2023	14:02
Cal Standard	SLC0160-CAL3	NT1403152306.D	03/15/2023	14:38
Cal Standard	SLC0160-CAL2	NT1403152307.D	03/15/2023	15:14
Cal Standard	SLC0160-CAL1	NT1403152308.D	03/15/2023	15:50
Secondary Cal Check	SLC0160-SCV1	NT1403152311.D	03/15/2023	17:39
Initial Cal Blank	SLC0160-ICB1	NT1403152312.D	03/15/2023	18:15

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/NT1403152301.D/NT1403152301.D
 Method Used: \20230315.b\DFTPP8270E.m Inst: nt14
 Injection Date: 15-MAR-2023 12:00 Operator: JGR
 Sample Info: SLC0160-TUN1 SLC0160-TUN1
 Report Date: 03/21/2023 12:49



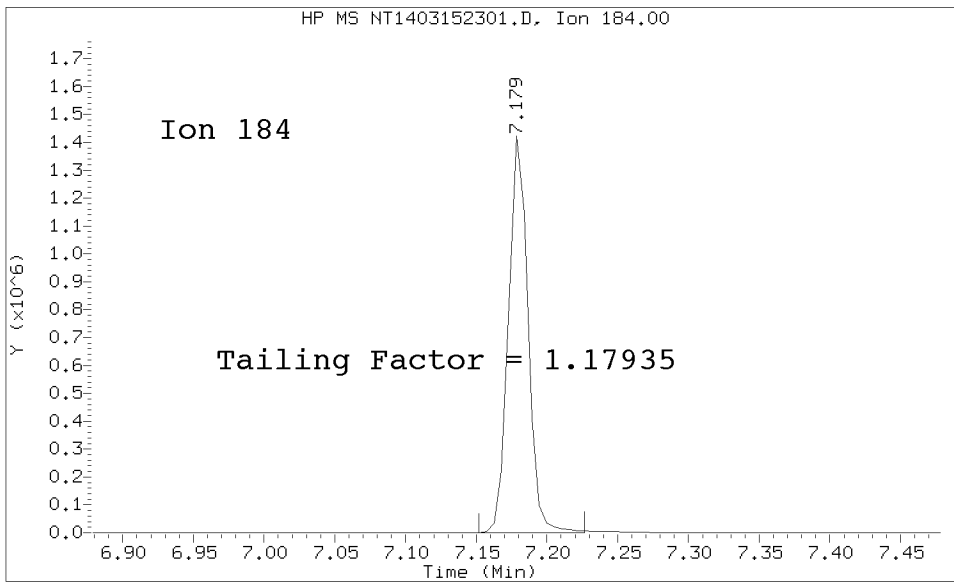
Datafile Analyzed: /20230315.b/NT1403152301.D/NT1403152301.D
Method Used: \20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 15-MAR-2023 12:00 Operator: JGR
Sample Info: SLC0160-TUN1
Report Date: 03/21/2023 12:49



Pentachlorophenol

=====
Exp. RT = 5.681
Found RT = 5.713

Tail Factor = 1.522 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.146
Found RT = 7.179

Tail Factor = 1.179 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.5216693	2.000	PASS
Benzidine	1.1793548	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	570011			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	2915	0.5	20.0	PASS
4,4-DDD + DDE	2915	0.5	20.0	PASS

Tuning Sample, nt14.i/20230315.b/NT1403152301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.36 (0.67)
69	Mass 69 relative abundance	53.44
70	Less than 2.00% of mass 69	0.00 (0.00)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
365	1.00 - 100.00% of mass 198	2.71
441	Less than 150.00% of mass 443	8.08 (72.22)
442	Less than 200.00% of mass 198	58.28
443	15.00 - 24.00% of mass 442	11.19 (19.20)

Data File: NT1403152301.D
 Spectrum: Avg. Scans 565-567 (6.11), Background Scan 560
 Location of Maximum: 198.00
 Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	9069	105.00	2863	168.00	5614	228.00	794
49.00	671	107.00	39032	174.00	2579	229.00	2862
50.00	30976	108.00	6346	175.00	4842	243.00	696
51.00	125768	110.00	71896	176.00	720	244.00	22688
52.00	6453	111.00	11106	177.00	2298	245.00	3011
56.00	4179	116.00	757	179.00	9119	246.00	4609
57.00	8934	117.00	29992	180.00	6294	255.00	114968
61.00	717	118.00	874	181.00	2818	256.00	16984
62.00	680	122.00	2529	185.00	4402	258.00	7242
63.00	4715	123.00	4032	186.00	32272	265.00	2218
65.00	1773	124.00	773	187.00	9241	273.00	3465
68.00	849	127.00	138368	189.00	1636	274.00	8836
69.00	126008	128.00	10413	192.00	2615	275.00	49816
74.00	11539	129.00	53960	193.00	3054	276.00	6361
75.00	19136	130.00	4541	196.00	6505	277.00	4187
76.00	6049	135.00	4342	198.00	235776	296.00	14150
77.00	134016	136.00	766	199.00	15852	297.00	810
78.00	9331	137.00	800	204.00	8038	315.00	707
79.00	8099	141.00	6361	205.00	13686	323.00	4245
80.00	6487	142.00	869	206.00	57704	334.00	2072
81.00	9538	147.00	3337	207.00	7569	365.00	6386
82.00	1806	148.00	7192	208.00	1530	372.00	1786
83.00	1759	153.00	830	211.00	1585	423.00	7390
86.00	2890	154.00	714	217.00	15135	424.00	1369
91.00	1612	155.00	3489	218.00	723	441.00	19048
92.00	1761	156.00	5350	221.00	10741	442.00	137408
93.00	14267	160.00	806	222.00	1546	443.00	26376
98.00	10738	161.00	2807	223.00	3284	444.00	1928
99.00	8546	165.00	1720	224.00	30088		
101.00	5073	166.00	753	225.00	7730		
104.00	3305	167.00	9750	227.00	12951		



INITIAL CALIBRATION DATA EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Instrument: NT14

Calibration Date: 03/15/2023

Column (1): ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	0.2	1.88891	0.5	1.904159	1	1.926926	2.5	1.933496	5	1.828031	10	1.873074
bis(2-chloroethyl) ether	0.2	1.420175	0.5	1.410168	1	1.412981	2.5	1.347341	5	1.271815	10	1.328625
2-Chlorophenol	0.2	1.484706	0.5	1.456512	1	1.496775	2.5	1.491332	5	1.436785	10	1.502912
1,3-Dichlorobenzene	0.2	1.615539	0.5	1.537286	1	1.520278	2.5	1.500631	5	1.422329	10	1.465085
1,4-Dichlorobenzene	0.2	1.558385	0.5	1.480223	1	1.45647	2.5	1.438177	5	1.372437	10	1.408767
1,2-Dichlorobenzene	0.2	1.579535	0.5	1.431535	1	1.420979	2.5	1.421769	5	1.352894	10	1.403985
Benzyl Alcohol	0.2	0.7662078	0.5	0.8510741	1	0.8727812	2.5	0.8921109	5	0.8967278	10	0.9239865
2,2'-Oxybis(1-chloropropane)	0.2	0.4616527	0.5	0.4286266	1	0.4245899	2.5	0.4382393	5	0.4320322	10	0.4138697
2-Methylphenol	0.2	1.290424	0.5	1.322433	1	1.321582	2.5	1.355874	5	1.318967	10	1.355112
Hexachloroethane	0.2	0.6162911	0.5	0.6158599	1	0.6057372	2.5	0.6235277	5	0.6000586	10	0.6302724
N-Nitroso-di-n-Propylamine	0.2	1.029841	0.5	1.047539	1	1.054577	2.5	1.062109	5	1.034846	10	1.062117
4-Methylphenol	0.2	1.414469	0.5	1.568852	1	1.58332	2.5	1.588676	5	1.551601	10	1.673489
Nitrobenzene	0.2	0.405315	0.5	0.401859	1	0.421201	2.5	0.4089856	5	0.4085726	10	0.4160657
Isophorone	0.2	0.5023024	0.5	0.5003246	1	0.5438807	2.5	0.5758134	5	0.5891546	10	0.6065499
2-Nitrophenol	0.2	0.1647012	0.5	0.173489	1	0.216579	2.5	0.2180036	5	0.2374477	10	0.2450178
2,4-Dimethylphenol	0.4	0.3718613	1	0.3544129	2	0.3692202	5	0.3486056	10	0.346171	20	0.3379494
Bis(2-Chloroethoxy)methane	0.2	0.4021161	0.5	0.3780456	1	0.3859032	2.5	0.3630401	5	0.3689065	10	0.3727306
2,4-Dichlorophenol	0.4	0.2675487	1	0.2691378	2	0.2877477	5	0.2749146	10	0.2814592	20	0.29223
1,2,4-Trichlorobenzene	0.2	0.3341873	0.5	0.3188198	1	0.3679757	2.5	0.3495679	5	0.3453553	10	0.3463569
Naphthalene	0.2	1.114898	0.5	1.055618	1	1.073305	2.5	1.027183	5	1.039016	10	1.062216
Benzoic acid			2	0.1587533	4	0.2330815	10	0.2659892	20	0.2972718	40	0.3194996
4-Chloroaniline			1	0.4205172	2	0.4444515	5	0.4339387	10	0.4491171	20	0.4596089
Hexachlorobutadiene	0.2	0.168814	0.5	0.1496756	1	0.1588532	2.5	0.149704	5	0.1507756	10	0.153445
4-Chloro-3-Methylphenol			1	0.305307	2	0.335504	5	0.3276445	10	0.3440166	20	0.3532499
2-Methylnaphthalene	0.2	0.7568944	0.5	0.7130632	1	0.7478712	2.5	0.7288447	5	0.739959	10	0.7544455
Hexachlorocyclopentadiene			1	0.2871018	2	0.3163656	5	0.3220206	10	0.3411352	20	0.3579241
2,4,6-Trichlorophenol			1	0.3666097	2	0.401553	5	0.3943579	10	0.4062128	20	0.4208331



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00048	Instrument:	NT14
Calibration Date:	03/15/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol	40	0.4454304										
2-Chloronaphthalene	20	1.244228										
2-Nitroaniline	40	0.50182										
Acenaphthylene	20	2.096978										
Dimethylphthalate	20	1.283899										
2,6-Dinitrotoluene	40	0.3213046										
Acenaphthene	20	1.260025										
3-Nitroaniline	40	0.455743										
2,4-Dinitrophenol	80	0.2819113										
Dibenzofuran	20	1.79153										
4-Nitrophenol	40	0.2607218										
2,4-Dinitrotoluene	40	0.4687321										
Fluorene	20	1.674704										
4-Chlorophenylphenyl ether	20	0.7136102										
Diethyl phthalate	20	1.427189										
4-Nitroaniline	40	0.4058877										
4,6-Dinitro-2-methylphenol	80	0.1566934										
N-Nitrosodiphenylamine	20	0.5532399										
4-Bromophenyl phenyl ether	20	0.200717										
Hexachlorobenzene	20	0.1934474										
Pentachlorophenol	40	0.1518916										
Phenanthrene	20	1.197219										
Anthracene	20	1.162435										
Carbazole	20	1.079497										
Di-n-Butylphthalate	20	1.383599										
Fluoranthene	20	1.700054										
Pyrene	20	1.721257										



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00048	Instrument:	NT14
Calibration Date:	03/15/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Butylbenzylphthalate	20	0.7557452										
Benzo(a)anthracene	20	1.540117										
3,3'-Dichlorobenzidine	60	0.5480792										
Chrysene	20	1.367712										
bis(2-Ethylhexyl)phthalate	20	0.5705747										
Di-n-Octylphthalate	20	1.01134										
Benzo(a)fluoranthene, Total	40	1.492031										
Benzo(a)pyrene	20	1.354431										
Indeno(1,2,3-cd)pyrene	20	1.481985										
Dibenzo(a,h)anthracene	20	1.256041										
Benzo(g,h,i)perylene	20	1.236583										
1-Methylnaphthalene	20	0.7009437										
2-Fluorophenol	30	1.388599										
Phenol-d5	30	1.909165										
2-Chlorophenol-d4	30	1.509238										
1,2-Dichlorobenzene-d4	20	0.9694562										
Nitrobenzene-d5	20	0.4444494										
2-Fluorobiphenyl	20	1.456177										
2,4,6-Tribromophenol	30	0.1833862										
p-Terphenyl-d14	20	1.103488										



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00048	Instrument:	NT14
Calibration Date:	03/15/2023	Column (1):	ZB-5MS

Calibration Comments: 625/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Benzofluoranthenes, Total	1.342419	6.7			RSD (15)	
Benzo(a)pyrene	1.208715	8.6			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.315566	9.2			RSD (15)	
Dibenzo(a,h)anthracene	1.108742	8.3			RSD (15)	
Benzo(g,h,i)perylene	1.084208	8.4			RSD (15)	
1-Methylnaphthalene	0.6751941	2.3			RSD (15)	
2-Fluorophenol	1.358735	2.6			RSD (15)	
Phenol-d5	1.788872	3.6			RSD (15)	
2-Chlorophenol-d4	1.410305	3.6			RSD (15)	
1,2-Dichlorobenzene-d4	0.9421955	3.6			RSD (15)	
Nitrobenzene-d5	0.4233007	3.3			RSD (15)	
2-Fluorobiphenyl	1.448596	2.6			RSD (15)	
2,4,6-Tribromophenol	0.1518639	14.9			RSD (15)	
p-Terphenyl-d14	1.129781	1.9			RSD (15)	



ANALYSIS SEQUENCE

SLC0160

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00048 GCMS Column ID: L002738
MS EM Level: 1847 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0160-TUN1	MS Tune	QC		1	K004775		03/15/2023 12:00	NT1403152301.D	JGR	
SLC0160-CAL7	CAL 20	QC		2	K011111	K010831	03/15/2023 12:13	NT1403152302.D	JGR	
SLC0160-CAL6	CAL 10	QC		3	K011110	K010831	03/15/2023 12:49	NT1403152303.D	JGR	
SLC0160-CAL5	CAL 5	QC		4	K011109	K010831	03/15/2023 13:26	NT1403152304.D	JGR	
SLC0160-CAL4	CAL 2.5	QC		5	K011108	K010831	03/15/2023 14:02	NT1403152305.D	JGR	
SLC0160-CAL3	CAL 1.0	QC		6	K011107	K010831	03/15/2023 14:38	NT1403152306.D	JGR	
SLC0160-CAL2	CAL 0.5	QC		7	K011106	K010831	03/15/2023 15:14	NT1403152307.D	JGR	
SLC0160-CAL1	CAL 0.2	QC		8	K011105	K010831	03/15/2023 15:50	NT1403152308.D	JGR	
SLC0160-SCV1	SCV 5.0	QC		9	L002833	K010831	03/15/2023 17:39	NT1403152311.D	JGR	
SLC0160-ICB1	Initial Cal Blank	QC		10	K005156	K010831	03/15/2023 18:15	NT1403152312.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b

Time	Filename	LabID	ClientId	DF															
1	1200	NT1403152301.D	SLC0160-TUN1	1	|NO	ISTDS	FOUND|	|											
2	1213	NT1403152302.D	SLC0160-CAL7	1	|	9.07	167425|	|11.58	667689|	|15.21	359561|	|18.26	655798|	|23.31	488521|	|25.95	451011|	|24.33	951548|
3	1249	NT1403152303.D	SLC0160-CAL6	1	|	9.07	180739|	|11.57	689021|	|15.20	362269|	|18.25	660604|	|23.30	480922|	|25.94	459466|	|24.32	940570|
4	1326	NT1403152304.D	SLC0160-CAL5	1	|	9.07	194517|	|11.57	721321|	|15.20	379602|	|18.25	703194|	|23.30	504769|	|25.94	484073|	|24.32	978492|
5	1402	NT1403152305.D	SLC0160-CAL4	1	|	9.07	192012|	|11.57	744883|	|15.20	388723|	|18.25	720279|	|23.29	512149|	|25.94	495048|	|24.32	952832|
6	1438	NT1403152306.D	SLC0160-CAL3	1	|	9.07	203547|	|11.57	753702|	|15.20	389189|	|18.24	718213|	|23.29	516735|	|25.94	493304|	|24.32	933762|
7	1514	NT1403152307.D	SLC0160-CAL2	1	|	9.07	214919|	|11.57	819372|	|15.20	418625|	|18.24	774369|	|23.29	554225|	|25.93	529322|	|24.32	988092|
8	1550	NT1403152308.D	SLC0160-CAL1	1	|	9.06	203313|	|11.57	744014|	|15.20	379787|	|18.24	697726|	|23.29	506894|	|25.93	478496|	|24.32	862800|
9	1626	NT1403152309.D	SLC0160-SIM2	1	|23.29		249|												
10	1703	NT1403152310.D	SLC0160-SIM1	1	|23.29		226|												
11	1739	NT1403152311.D	SLC0160-SCV1	1	|	9.07	197462|	|11.57	726125|	|15.20	382881|	|18.24	706616|	|23.30	504808|	|25.94	496785|	|24.32	988248|
12	1815	NT1403152312.D	SLC0160-ICB1	1	|	9.06	189234|	|11.56	727843|	|15.20	367416|	|18.24	678407|	|23.29	476533|	|25.93	452165|	|24.32	798655|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b

Instrument: nt14.i Date: 15-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1200	NT1403152301.D	SLC0160-TUN1	1	NO MANUAL INTEGRATION
1213	NT1403152302.D	SLC0160-CAL7	1	1,4-Dichlorobenzene-d4, Benzoic acid, Total Benzofluoranthenes,
1249	NT1403152303.D	SLC0160-CAL6	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Benzoic acid, Total Benzofluoranthenes,
1326	NT1403152304.D	SLC0160-CAL5	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Total Benzofluoranthenes,
1402	NT1403152305.D	SLC0160-CAL4	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Total Benzofluoranthenes,
1438	NT1403152306.D	SLC0160-CAL3	1	1,4-Dichlorobenzene-d4, Total Benzofluoranthenes,
1514	NT1403152307.D	SLC0160-CAL2	1	1,4-Dichlorobenzene-d4, Benzoic acid, Total Benzofluoranthenes,
1550	NT1403152308.D	SLC0160-CAL1	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Benzoic acid, Total Benzofluoranthenes,
1626	NT1403152309.D	SLC0160-SIM2	1	NO MANUAL INTEGRATION
1703	NT1403152310.D	SLC0160-SIM1	1	NO MANUAL INTEGRATION
1739	NT1403152311.D	SLC0160-SCV1	1	1,4-Dichlorobenzene-d4,
1815	NT1403152312.D	SLC0160-ICB1	1	1,4-Dichlorobenzene-d4, Di-n-octylphthalate-d4,

Security Status Report

Date: 21-Mar-2023 13:13

NT1403152301.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152302.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152303.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152304.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152305.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152306.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152307.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152308.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152309.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152310.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152311.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152312.D	Data Locked	van, 21-Mar-2023 13:12

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Calibration File Names:

Level 1: \\target\share\chem3\nt14.i\20230315.b\NT1403152308.D
 Level 2: \\target\share\chem3\nt14.i\20230315.b\NT1403152307.D
 Level 3: \\target\share\chem3\nt14.i\20230315.b\NT1403152306.D
 Level 4: \\target\share\chem3\nt14.i\20230315.b\NT1403152305.D
 Level 5: \\target\share\chem3\nt14.i\20230315.b\NT1403152304.D
 Level 6: \\target\share\chem3\nt14.i\20230315.b\NT1403152303.D
 Level 7: \\target\share\chem3\nt14.i\20230315.b\NT1403152302.D

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
143 1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++						AVRG	0.000e+000			0.000e+000<-
121 Quinoline	++++	++++	++++	++++	++++	++++					
	++++						AVRG	0.000e+000			0.000e+000
120 2,3,4,6-Tetrachlorophenol	5019	16437	35870	89351	186734	403311					
	836591						QUAD	0.000e+000	2.46921	-0.14013	0.99940
178 2-Benzyl-4-Chlorophenol	++++	++++	++++	++++	++++	++++					
	++++						AVRG	0.000e+000			0.000e+000<-
119 7,12-Dimethylbenz(a)anthracen	++++	++++	++++	++++	++++	++++					
	++++						AVRG	0.000e+000			0.000e+000
118 Triphenyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++						AVRG	0.000e+000			0.000e+000<-
117 Butyl Diphenyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++						AVRG	0.000e+000			0.000e+000<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
111 Azobenzene (1,2-DP-Hydrazine)	1.65730|	1.64606|	1.72160|	1.63395|	1.61767|	1.63150|					
	1.61936|						|AVRG|		|1.64678|		|2.17629|
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
105 1-methylnaphthalene	0.68200|	0.65819|	0.68168|	0.65486|	0.66913|	0.67955|					
	0.70094|						|AVRG|		|0.67519|		|2.34931|
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
163 1,2,3,5,8-Pentachloronaphthal	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
164 1,2,3,4,6,7-Hexachloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
165 1,2,3,4,5,6,7-Heptachloronaph	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
3 Phenol	1.88891|	1.90416|	1.92693|	1.93350|	1.82803|	1.87307|					
	1.95341|						|AVRG|		1.90114|		2.22497|
4 Bis(2-Chloroethyl)ether	1.42017|	1.41017|	1.41298|	1.34734|	1.27181|	1.32863|					
	1.39185|						|AVRG|		1.36899|		4.03571|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
6 2-Chlorophenol	1.48471|	1.45651|	1.49677|	1.49133|	1.43679|	1.50291|					
	1.60536|						AVRG		1.49634|		3.58051|
7 1,3-Dichlorobenzene	1.61554|	1.53729|	1.52028|	1.50063|	1.42233|	1.46509|					
	1.54185|						AVRG		1.51471|		4.05527|
9 1,4-Dichlorobenzene	1.55839|	1.48022|	1.45647|	1.43818|	1.37244|	1.40877|					
	1.49793|						AVRG		1.45891|		4.17875|
11 Benzyl alcohol	0.76621|	0.85107|	0.87278|	0.89211|	0.89673|	0.92399|					
	0.99256|						AVRG		0.88506|		7.81289|
12 1,2-Dichlorobenzene	1.57954|	1.43153|	1.42098|	1.42177|	1.35289|	1.40398|					
	1.48354|						AVRG		1.44203|		4.98354|
13 2-Methylphenol	1.29042|	1.32243|	1.32158|	1.35587|	1.31897|	1.35511|					
	1.44446|						AVRG		1.34412|		3.69760|
14 2,2'-oxybis(1-Chloropropane)	0.46165|	0.42863|	0.42459|	0.43824|	0.43203|	0.41387|					
	0.44690|						AVRG		0.43513|		3.59314|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
15 4-Methylphenol	1.41447| 1.75966|	1.56885|	1.58332|	1.58868|	1.55160|	1.67349|					
							|AVRG|		1.59144|		6.71488|
16 N-Nitroso-di-n-propylamine	1.02984| 1.11673|	1.04754|	1.05458|	1.06211|	1.03485|	1.06212|					
							|AVRG|		1.05825|		2.70955|
17 Hexachloroethane	0.61629| 0.67601|	0.61586|	0.60574|	0.62353|	0.60006|	0.63027|					
							|AVRG|		0.62397|		4.02124|
19 Nitrobenzene	0.40531| 0.42234|	0.40186|	0.42120|	0.40899|	0.40857|	0.41607|					
							|AVRG|		0.41205|		1.92236|
20 Isophorone	0.50230| 0.62021|	0.50032|	0.54388|	0.57581|	0.58915|	0.60655|					
							|AVRG|		0.56261|		8.58435|
21 2-Nitrophenol	6127| 850721|	17769|	40809|	101492|	214095|	422056|					
							|QUAD|	0.000e+000|	4.30052|	-0.29816|	0.99989|
22 2,4-Dimethylphenol	0.37186| 0.33877|	0.35441|	0.36922|	0.34861|	0.34617|	0.33795|					
							|AVRG|		0.35243|		3.86568|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
23 Bis(2-Chloroethoxy)methane	0.40212| 0.38060|	0.37805|	0.38590|	0.36304|	0.36891|	0.37273|	|	|	|	|	|
							|AVRG|	|	0.37876|	|	3.37589|
24 Benzoic acid	++++| 4525852|	65039|	175674|	495327|	1072142|	2201419|	|	|	|	|	|
							|QUAD|	0.000e+000|	3.40769|	-0.06821|	0.99969|
25 2,4-Dichlorophenol	0.26755| 0.28889|	0.26914|	0.28775|	0.27491|	0.28146|	0.29223|	|	|	|	|	|
							|AVRG|	|	0.28028|	|	3.53556|
26 1,2,4-Trichlorobenzene	0.33419| 0.34958|	0.31882|	0.36798|	0.34957|	0.34536|	0.34636|	|	|	|	|	|
							|AVRG|	|	0.34455|	|	4.38980|
28 Naphthalene	1.11490| 1.10811|	1.05562|	1.07330|	1.02718|	1.03902|	1.06222|	|	|	|	|	|
							|AVRG|	|	1.06862|	|	3.08628|
29 4-Chloroaniline	++++| 0.47651|	0.42052|	0.44445|	0.43394|	0.44912|	0.45961|	|	|	|	|	|
							|AVRG|	|	0.44736|	|	4.37117|
30 Hexachlorobutadiene	0.16881| 0.15768|	0.14968|	0.15885|	0.14970|	0.15078|	0.15344|	|	|	|	|	|
							|AVRG|	|	0.15556|	|	4.44809|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
31 4-Chloro-3-methylphenol	++++	0.30531	0.33550	0.32764	0.34402	0.35325					
	0.36639						AVRG		0.33868		6.26912
32 2-Methylnaphthalene	0.75689	0.71306	0.74787	0.72884	0.73996	0.75445					
	0.77569						AVRG		0.74525		2.73167
33 Hexachlorocyclopentadiene	++++	0.28710	0.31637	0.32202	0.34114	0.35792					
	0.37035						AVRG		0.33248		9.10739
34 2,4,6-Trichlorophenol	++++	0.36661	0.40155	0.39436	0.40621	0.42083					
	0.44511						AVRG		0.40578		6.47949
35 2,4,5-Trichlorophenol	++++	0.37338	0.42079	0.41254	0.43398	0.45092					
	0.44543						AVRG		0.42284		6.67151
37 2-Chloronaphthalene	1.26976	1.22372	1.26844	1.21087	1.22731	1.24670					
	1.24423						AVRG		1.24158		1.80548
38 2-Nitroaniline	++++	0.44024	0.47688	0.47528	0.48844	0.49386					
	0.50182						AVRG		0.47942		4.52226

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
39 Dimethylphthalate	1.36039	1.35474	1.40153	1.32226	1.30848	1.30562					
	1.28390						AVRG		1.33384		3.02869
40 Acenaphthylene	2.10292	2.08838	2.16511	2.02923	2.04389	2.07140					
	2.09698						AVRG		2.08541		2.13346
41 2,6-Dinitrotoluene	++++	0.28078	0.30812	0.30454	0.31450	0.31954					
	0.32130						AVRG		0.30813		4.82540
43 3-Nitroaniline	++++	0.38931	0.42010	0.39604	0.43721	0.45211					
	0.45574						AVRG		0.42509		6.62458
44 Acenaphthene	1.25713	1.18225	1.23139	1.16665	1.19038	1.23516					
	1.26003						AVRG		1.21757		3.08168
45 2,4-Dinitrophenol	++++	22714	63106	196265	452889	959641					
	2027286						QUAD	0.000e+000	4.19263	-0.11615	0.99929
46 Dibenzofuran	1.77378	1.67033	1.77292	1.67439	1.72258	1.76226					
	1.79153						AVRG		1.73825		2.85888

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
47 4-Nitrophenol	++++ 0.26072	0.18018	0.21906	0.22207	0.23314	0.23486					
							AVRG		0.22501		11.74575
48 2,4-Dinitrotoluene	++++ 0.46873	0.38410	0.43064	0.42894	0.44966	0.45845					
							AVRG		0.43679		6.89012
49 Fluorene	1.66551 1.67470	1.65104	1.66439	1.62426	1.61196	1.64212					
							AVRG		1.64771		1.40044
50 Diethylphthalate	1.29041 1.42719	1.34595	1.39757	1.34374	1.36175	1.48675					
							AVRG		1.37905		4.65821
51 4-Chlorophenyl-phenylether	0.74447 0.71361	0.71333	0.72180	0.68543	0.68323	0.68914					
							AVRG		0.70729		3.19051
52 4-Nitroaniline	++++ 0.40589	0.32470	0.35917	0.34454	0.38956	0.39449					
							AVRG		0.36972		8.62720
53 4,6-Dinitro-2-methylphenol	++++ 2055185	37731	85861	231789	495154	981338					
							QUAD	0.000e+000	7.22845	-0.27277	0.99983

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
54 N-Nitrosodiphenylamine	0.54322|	0.54193|	0.57185|	0.52321|	0.52846|	0.54111|					
	0.55324|						|AVRG|		0.54329|		2.95303|
56 4-Bromophenyl-phenylether	0.17004|	0.17300|	0.18203|	0.17953|	0.18314|	0.19371|					
	0.20072|						|AVRG|		0.18317|		5.93582|
57 Hexachlorobenzene	0.20598|	0.19067|	0.19488|	0.18707|	0.18796|	0.19287|					
	0.19345|						|AVRG|		0.19327|		3.25769|
58 Pentachlorophenol	++++|	18385|	41232|	112387|	238054|	473512|					
	996102|						|QUAD|	0.000e+000|	7.51309|	-0.61742|	0.99984|
60 Phenanthrene	1.16908|	1.11684|	1.16790|	1.08476|	1.11301|	1.15114|					
	1.19722|						|AVRG|		1.14285|		3.44159|
61 Anthracene	1.03169|	1.05398|	1.12538|	1.08405|	1.10640|	1.14349|					
	1.16244|						|AVRG|		1.10106|		4.30884|
62 Carbazole	0.93312|	0.96534|	1.00928|	0.88468|	0.96094|	1.02463|					
	1.07950|						|AVRG|		0.97964|		6.53761|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
63 Di-n-butylphthalate	1.00039| 1.38360|	1.12337|	1.25836|	1.24734|	1.32585|	1.35333|	|	|	|	|	|
							|AVRG|	|	1.24175|	|	11.01338|
64 Fluoranthene	1.50931| 1.70005|	1.55554|	1.64210|	1.61575|	1.67398|	1.69482|	|	|	|	|	|
							|AVRG|	|	1.62737|	|	4.44923|
65 Pyrene	1.66354| 1.72126|	1.62805|	1.68602|	1.62970|	1.64746|	1.70614|	|	|	|	|	|
							|AVRG|	|	1.66888|	|	2.20373|
67 Butylbenzylphthalate	0.62246| 0.75575|	0.65689|	0.76953|	0.76391|	0.77745|	0.77213|	|	|	|	|	|
							|AVRG|	|	0.73116|	|	8.70449|
68 Benzo(a)anthracene	1.45900| 1.54012|	1.43162|	1.50345|	1.43490|	1.45463|	1.50047|	|	|	|	|	|
							|AVRG|	|	1.47488|	|	2.74840|
70 3,3'-Dichlorobenzidine	++++| 4016223|	89955|	164543|	340486|	747514|	1775828|	|	|	|	|	|
							|QUAD|	0.000e+000|	2.36788|	-0.06686|	0.99799|
71 Chrysene	1.39710| 1.36771|	1.31578|	1.33527|	1.28659|	1.29792|	1.34343|	|	|	|	|	|
							|AVRG|	|	1.33483|	|	2.91500|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
72 bis(2-Ethylhexyl)phthalate	0.44613	0.47465	0.54325	0.54241	0.55130	0.55764					
	0.57057						AVRG		0.52656		8.91050
73 Di-n-octylphthalate	1.09140	1.03778	1.06305	0.99847	0.98786	1.00800					
	1.01134						AVRG		1.02827		3.66121
74 Benzo(b)fluoranthene	1.19968	1.22415	1.43266	1.37341	1.52220	1.44295					
	1.69932						AVRG		1.41348		12.18296
75 Benzo(k)fluoranthene	1.37677	1.38136	1.36543	1.37280	1.34543	1.52694					
	1.43951						AVRG		1.40118		4.46324
187 Total Benzofluoranthenes	1.23913	1.24744	1.33127	1.30872	1.36135	1.41699					
	1.49203						AVRG		1.34242		6.74902
76 Benzo(a)pyrene	1.07119	1.09878	1.19164	1.18577	1.25385	1.30535					
	1.35443						AVRG		1.20871		8.57294
78 Indeno(1,2,3-cd)pyrene	1.12992	1.19918	1.32536	1.29663	1.36208	1.41382					
	1.48199						AVRG		1.31557		9.20455

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
79 Dibenzo(a,h)anthracene	0.98977| 1.25604|	1.01333|	1.10726|	1.08733|	1.12632|	1.18116|	|	|	|	|	|
							|AVRG|	|	|1.10874|	|	|8.31282|
80 Benzo(g,h,i)perylene	0.97050| 1.23658|	1.01247|	1.06027|	1.04807|	1.09698|	1.16459|	|	|	|	|	|
							|AVRG|	|	|1.08421|	|	|8.40278|
90 N-Nitrosodimethylamine	0.88307| 0.85764|	0.87125|	0.89079|	0.86831|	0.82667|	0.82615|	|	|	|	|	|
							|AVRG|	|	|0.86055|	|	|2.97641|
91 Aniline	1.93382| 1.95800|	1.93489|	1.90525|	1.91888|	1.83702|	1.89717|	|	|	|	|	|
							|AVRG|	|	|1.91215|	|	|2.03113|
92 1,2-Diphenylhydrazine	+++++| +++++|	+++++|	+++++|	+++++|	+++++|	+++++|	|	|	|	|	|
							|AVRG|	|	|0.000e+000|	|	|0.000e+000|
93 Benzidine	+++++| 0.61477|	0.71177|	0.67850|	0.60435|	0.68316|	0.63682|	|	|	|	|	|
							|AVRG|	|	|0.65490|	|	|6.50792|
96 p-Cymene	+++++| +++++|	+++++|	+++++|	+++++|	+++++|	+++++|	|	|	|	|	|
							|AVRG|	|	|0.000e+000|	|	|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
97 Caffeine	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	
98 Retene	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
99 Perylene	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
100 3-beta-Coprostanol	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
101 Cholesterol	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
102 beta-Sitosterol	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	
103 Pyridine	2.69083|	2.80753|	2.81818|	2.72120|	2.49907|	2.51747|					
	2.60049|						|AVRG|	2.66497|		4.86998|	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
188 2,6-Dichlorophenol	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
189 N-Nitrosomethylethylamine	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
\$ 1 2-Fluorophenol	1.32079|	1.38213|	1.38653|	1.38709|	1.31043|	1.33559|					
	1.38860|						|AVRG|	|1.35874|		|2.57146|	
\$ 137 d8-1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
\$ 2 Phenol-d5	1.70574|	1.76220|	1.78480|	1.79414|	1.75008|	1.81597|					
	1.90916|						|AVRG|	|1.78887|		|3.56306|	
\$ 5 2-Chlorophenol-d4	1.36361|	1.41724|	1.40994|	1.40754|	1.35092|	1.41364|					
	1.50924|						|AVRG|	|1.41030|		|3.61111|	
\$ 10 1,2-Dichlorobenzene-d4	0.98853|	0.94979|	0.95331|	0.91748|	0.88839|	0.92841|					
	0.96946|						|AVRG|	|0.94220|		|3.56422|	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
\$ 18 Nitrobenzene-d5	0.40784	0.40581	0.43035	0.41778	0.42262	0.43425					
	0.44445						AVRG		0.42330		3.33056
\$ 36 2-Fluorobiphenyl	1.51069	1.45723	1.47478	1.40256	1.40716	1.43157					
	1.45618						AVRG		1.44860		2.64358
\$ 55 2,4,6-Tribromophenol	++++	0.12869	0.14980	0.14925	0.16134	0.17114					
	0.18339						AVRG		0.15727		12.15843
\$ 66 Terphenyl-d14	1.12382	1.12373	1.17288	1.13146	1.12733	1.12575					
	1.10349						AVRG		1.12978		1.85877
\$ 85 p-Cresol-d4	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000
\$ 86 Anthracene-d10	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000
\$ 87 Fluoranthene-d10	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
 End Cal Date : 15-MAR-2023 15:50
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 12:13
End Cal Date : 15-MAR-2023 15:50
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230315.b\ABN.m
Last Edit : 21-Mar-2023 11:52 van

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	NT1403152302	NT1403152303	NT1403152304	NT1403152305	NT1403152306	NT1403152307	NT1403152308
INJ. DATE:	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023
INJ. TIME:	12:13	12:49	13:26	14:02	14:38	15:14	15:50

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
\$ 1 2-Fluorophenol	6.837	6.829	6.829	6.829	6.829	6.829	6.821	6.821	3.821-9.821	6.829	0.005
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.645	5.645-11.645	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.455	14.455-20.455	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.696	17.696-23.696	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.219	16.219-22.219	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.949	19.949-25.949	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.196	16.196-22.196	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.503	17.503-23.503	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.827	4.827-10.827	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
| 148 Dieldrin	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 47.281|	| 44.281-50.281 |	| +++++|	| +++++|
| 149 TCMX	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 43.387|	| 40.387-46.387 |	| +++++|	| +++++|
| 150 DCBP	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 50.989|	| 47.989-53.989 |	| +++++|	| +++++|
| 138 Chlorobenzilate	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 67.733|	| 64.733-70.733 |	| +++++|	| +++++|
| 139 Isodrin	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.067|	| 62.067-68.067 |	| +++++|	| +++++|
| 140 Diallate A	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.487|	| 62.487-68.487 |	| +++++|	| +++++|
| 141 Diallate B	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.487|	| 62.487-68.487 |	| +++++|	| +++++|
| 142 1,2-Dibromo-3-Chloropr	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 49.917|	| 46.917-52.917 |	| +++++|	| +++++|
| 135 2,3,5,6-Tetrachlorophe	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 16.383|	| 13.383-19.383 |	| +++++|	| +++++|
| 136 2,3,4,5-tetrachlorophe	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 39.317|	| 36.317-42.317 |	| +++++|	| +++++|
| \$ 137 d8-1,4-Dioxane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 2.445|	| 0.000-5.445 |	| +++++|	| +++++|
| * 134 Di-n-octylphthalate-d4	| 24.332|	| 24.324|	| 24.324|	| 24.324|	| 24.324|	| 24.324|	| 24.324|	| 24.324|	| 21.324-27.324 |	| 24.325|	| 0.003|
| 133 Butylatedhydroxytoluen	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 15.571|	| 12.571-18.571 |	| +++++|	| +++++|
| 132 3,6-Dimethylphenanthre	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.450|	| 62.450-68.450 |	| +++++|	| +++++|
| 131 1-Methylphenanthrene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 64.400|	| 61.400-67.400 |	| +++++|	| +++++|
| 130 Dibenzothiophene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 62.100|	| 59.100-65.100 |	| +++++|	| +++++|
| 129 1-Methylfluorene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 54.912|	| 51.912-57.912 |	| +++++|	| +++++|
| 128 N-Hexadecane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 54.212|	| 51.212-57.212 |	| +++++|	| +++++|
| 127 2-Isopropyl-naphthalene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 57.650|	| 54.650-60.650 |	| +++++|	| +++++|
| 126 N-Tetradecane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 56.750|	| 53.750-59.750 |	| +++++|	| +++++|
| 144 alpha-Terpineol	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 11.447|	| 8.447-14.447 |	| +++++|	| +++++|
| 125 Safrole	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 52.166|	| 49.166-55.166 |	| +++++|	| +++++|

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.252	7.252-13.252	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	15.939	15.931	15.923	15.923	15.923	15.923	15.923	15.923	12.923-18.923	15.927	0.006
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.761	13.761-19.761	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.923	13.923-19.923	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.085	11.085-17.085	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	16.641	16.634	16.626	16.618	16.618	16.618	16.618	16.618	13.618-19.618	16.625	0.009
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.140	14.140-20.140	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.070	12.070-18.070	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.232	12.232-18.232	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.374	13.374-19.374	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.120	10.120-16.120	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.735	8.735-14.735	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.243	6.243-12.243	+++++	+++++
105 1-methylnaphthalene	13.247	13.239	13.239	13.231	13.231	13.231	13.231	13.231	10.231-16.231	13.235	0.006
151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.642	24.642-30.642	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.953	22.953-28.953	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.750	24.750-30.750	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.464	23.464-29.464	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.099	24.099-30.099	+++++	+++++
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.513	21.513-27.513	+++++	+++++
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.132	22.132-28.132	+++++	+++++
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.528	16.528-22.528	+++++	+++++
161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
2 Phenol-d5	8.436	8.428	8.421	8.413	8.413	8.413	8.413	8.413	5.413-11.413	8.420	0.009
3 Phenol	8.459	8.444	8.436	8.436	8.436	8.436	8.428	8.428	5.428-11.428	8.439	0.010
4 Bis(2-Chloroethyl)ethe	8.629	8.622	8.614	8.614	8.606	8.606	8.606	8.606	5.606-11.606	8.614	0.009
5 2-Chlorophenol-d4	8.714	8.706	8.699	8.699	8.698	8.699	8.699	8.699	5.699-11.699	8.702	0.006

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
6 2-Chlorophenol	8.745	8.730	8.730	8.730	8.729	8.722	8.722	8.722	5.722-11.722	8.730	0.008
7 1,3-Dichlorobenzene	9.008	9.008	9.008	9.001	9.000	9.001	9.000	9.000	6.000-12.000	9.004	0.004
* 8 1,4-Dichlorobenzene-d4	9.070	9.070	9.070	9.070	9.070	9.071	9.063	9.063	6.063-12.063	9.069	0.003
9 1,4-Dichlorobenzene	9.109	9.101	9.102	9.101	9.101	9.102	9.094	9.094	6.094-12.094	9.101	0.005
\$ 10 1,2-Dichlorobenzene-d4	9.435	9.435	9.435	9.427	9.427	9.427	9.427	9.427	6.427-12.427	9.431	0.004
11 Benzyl alcohol	9.358	9.342	9.334	9.334	9.334	9.334	9.334	9.334	6.334-12.334	9.339	0.009
12 1,2-Dichlorobenzene	9.466	9.458	9.459	9.458	9.458	9.451	9.458	9.458	6.458-12.458	9.458	0.004
13 2-Methylphenol	9.575	9.567	9.559	9.559	9.559	9.559	9.559	9.559	6.559-12.559	9.563	0.006
14 2,2'-oxybis(1-Chloropr	9.653	9.645	9.645	9.645	9.644	9.645	9.645	9.645	6.645-12.645	9.646	0.003
15 4-Methylphenol	9.854	9.839	9.831	9.831	9.823	9.823	9.823	9.823	6.823-12.823	9.832	0.011
16 N-Nitroso-di-n-propyla	9.940	9.916	9.909	9.901	9.901	9.901	9.893	9.893	6.893-12.893	9.909	0.016
17 Hexachloroethane	10.056	10.056	10.056	10.056	10.056	10.056	10.056	10.056	7.056-13.056	10.056	0.000
\$ 18 Nitrobenzene-d5	10.180	10.173	10.165	10.165	10.164	10.165	10.165	10.165	7.165-13.165	10.168	0.006
19 Nitrobenzene	10.219	10.211	10.204	10.204	10.196	10.196	10.196	10.196	7.196-13.196	10.204	0.009
20 Isophorone	10.693	10.669	10.654	10.654	10.653	10.646	10.646	10.646	7.646-13.646	10.659	0.017
21 2-Nitrophenol	10.848	10.840	10.832	10.832	10.832	10.832	10.832	10.832	7.832-13.832	10.835	0.006
22 2,4-Dimethylphenol	10.902	10.894	10.886	10.886	10.878	10.879	10.878	10.878	7.878-13.878	10.886	0.009
23 Bis(2-Chloroethoxy)met	11.103	11.096	11.088	11.088	11.088	11.080	11.080	11.080	8.080-14.080	11.089	0.008
24 Benzoic acid	11.297	11.196	11.119	11.065	11.018	10.987	10.964	10.964	7.964-13.964	11.092	0.121
25 2,4-Dichlorophenol	11.305	11.297	11.290	11.289	11.289	11.282	11.282	11.282	8.282-14.282	11.291	0.008
26 1,2,4-Trichlorobenzene	11.491	11.483	11.483	11.483	11.483	11.475	11.483	11.483	8.483-14.483	11.483	0.004
* 27 Naphthalene-d8	11.576	11.568	11.568	11.568	11.568	11.568	11.568	11.568	8.568-14.568	11.569	0.003
28 Naphthalene	11.622	11.614	11.607	11.606	11.606	11.607	11.606	11.606	8.606-14.606	11.610	0.006
29 4-Chloroaniline	11.753	11.745	11.738	11.738	11.730	11.730	11.730	11.730	8.730-14.730	11.738	0.009

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
30 Hexachlorobutadiene	11.977	11.977	11.977	11.977	11.977	11.977	11.977	11.977	8.977-14.977	11.977	0.000
31 4-Chloro-3-methylpheno	12.713	12.705	12.697	12.697	12.689	12.689	12.689	12.689	9.689-15.689	12.697	0.009
32 2-Methylnaphthalene	13.022	13.014	13.014	13.007	13.006	13.007	13.006	13.006	10.006-16.006	13.011	0.006
33 Hexachlorocyclopentadi	13.486	13.486	13.486	13.486	13.478	13.479	13.486	13.486	10.486-16.486	13.484	0.004
34 2,4,6-Trichlorophenol	13.649	13.641	13.634	13.633	13.625	13.626	13.626	13.626	10.626-16.626	13.633	0.009
35 2,4,5-Trichlorophenol	13.719	13.711	13.703	13.703	13.703	13.703	13.703	13.703	10.703-16.703	13.706	0.006
36 2-Fluorobiphenyl	13.811	13.804	13.796	13.796	13.796	13.796	13.796	13.796	10.796-16.796	13.799	0.006
37 2-Chloronaphthalene	14.020	14.013	14.005	14.005	14.005	14.005	14.005	14.005	11.005-17.005	14.008	0.006
38 2-Nitroaniline	14.291	14.276	14.268	14.260	14.260	14.260	14.260	14.260	11.260-17.260	14.268	0.012
39 Dimethylphthalate	14.733	14.717	14.702	14.701	14.693	14.694	14.694	14.694	11.694-17.694	14.705	0.015
40 Acenaphthylene	14.895	14.887	14.887	14.880	14.879	14.880	14.879	14.879	11.879-17.879	14.884	0.006
41 2,6-Dinitrotoluene	14.864	14.849	14.841	14.841	14.833	14.833	14.833	14.833	11.833-17.833	14.842	0.011
42 Acenaphthene-d10	15.212	15.204	15.205	15.197	15.196	15.197	15.197	15.197	12.197-18.197	15.201	0.006
43 3-Nitroaniline	15.158	15.135	15.127	15.119	15.111	15.112	15.112	15.112	12.112-18.112	15.125	0.017
44 Acenaphthene	15.282	15.274	15.266	15.266	15.266	15.266	15.259	15.259	12.259-18.259	15.269	0.007
45 2,4-Dinitrophenol	15.375	15.351	15.336	15.328	15.328	15.328	15.328	15.328	12.328-18.328	15.339	0.018
46 Dibenzofuran	15.614	15.599	15.599	15.591	15.591	15.591	15.591	15.591	12.591-18.591	15.596	0.009
47 4-Nitrophenol	15.467	15.444	15.429	15.429	15.421	15.421	15.421	15.421	12.421-18.421	15.433	0.017
48 2,4-Dinitrotoluene	15.684	15.661	15.653	15.645	15.645	15.645	15.645	15.645	12.645-18.645	15.654	0.014
49 Fluorene	16.325	16.318	16.310	16.310	16.302	16.302	16.302	16.302	13.302-19.302	16.310	0.009
50 Diethylphthalate	16.194	16.179	16.171	16.163	16.155	16.156	16.155	16.155	13.155-19.155	16.168	0.015
51 4-Chlorophenyl-phenyle	16.310	16.302	16.302	16.294	16.294	16.295	16.294	16.294	13.294-19.294	16.299	0.006
52 4-Nitroaniline	16.449	16.418	16.395	16.387	16.379	16.379	16.379	16.379	13.379-19.379	16.398	0.026
53 4,6-Dinitro-2-methylph	16.534	16.510	16.495	16.487	16.479	16.480	16.479	16.479	13.479-19.479	16.495	0.020

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
54 N-Nitrosodiphenylamine	16.572	16.557	16.549	16.549	16.541	16.541	16.541	16.541	13.541-19.541	16.550	0.011
55 2,4,6-Tribromophenol	16.857	16.850	16.842	16.842	16.842	16.834	16.842	16.842	13.842-19.842	16.844	0.007
56 4-Bromophenyl-phenylet	17.312	17.305	17.305	17.304	17.304	17.305	17.304	17.304	14.304-20.304	17.306	0.003
57 Hexachlorobenzene	17.637	17.629	17.621	17.621	17.621	17.621	17.621	17.621	14.621-20.621	17.625	0.006
58 Pentachlorophenol	17.993	17.977	17.977	17.977	17.969	17.978	17.977	17.977	14.977-20.977	17.978	0.007
59 Phenanthrene-d10	18.256	18.248	18.248	18.248	18.240	18.241	18.240	18.240	15.240-21.240	18.246	0.006
60 Phenanthrene	18.310	18.302	18.295	18.295	18.287	18.287	18.287	18.287	15.287-21.287	18.295	0.009
61 Anthracene	18.403	18.387	18.388	18.387	18.379	18.380	18.380	18.380	15.380-21.380	18.386	0.008
62 Carbazole	18.728	18.712	18.713	18.712	18.704	18.705	18.705	18.705	15.705-21.705	18.711	0.008
63 Di-n-butylphthalate	19.525	19.517	19.517	19.509	19.509	19.509	19.509	19.509	16.509-22.509	19.514	0.006
64 Fluoranthene	20.693	20.685	20.678	20.678	20.677	20.678	20.677	20.677	17.677-23.677	20.681	0.006
65 Pyrene	21.119	21.111	21.103	21.103	21.103	21.103	21.103	21.103	18.103-24.103	21.106	0.006
66 Terphenyl-d14	21.397	21.389	21.390	21.389	21.389	21.390	21.389	21.389	18.389-24.389	21.391	0.003
67 Butylbenzylphthalate	22.319	22.311	22.311	22.311	22.311	22.311	22.311	22.311	19.311-25.311	22.312	0.003
68 Benzo(a)anthracene	23.287	23.279	23.271	23.271	23.263	23.263	23.263	23.263	20.263-26.263	23.271	0.009
69 Chrysene-d12	23.310	23.302	23.302	23.294	23.294	23.294	23.294	23.294	20.294-26.294	23.299	0.006
70 3,3'-Dichlorobenzidine	23.248	23.232	23.225	23.217	23.217	23.217	23.217	23.217	20.217-26.217	23.225	0.012
71 Chrysene	23.364	23.348	23.349	23.341	23.340	23.341	23.341	23.341	20.341-26.341	23.346	0.009
72 bis(2-Ethylhexyl)phtha	23.341	23.341	23.333	23.341	23.333	23.333	23.333	23.333	20.333-26.333	23.336	0.004
73 Di-n-octylphthalate	24.347	24.339	24.332	24.332	24.331	24.332	24.332	24.332	21.332-27.332	24.335	0.006
74 Benzo(b)fluoranthene	25.191	25.175	25.168	25.160	25.160	25.160	25.152	25.152	22.152-28.152	25.167	0.013
75 Benzo(k)fluoranthene	25.237	25.222	25.214	25.206	25.206	25.199	25.199	25.199	22.199-28.199	25.212	0.014
187 Total Benzofluoranthen	25.237	25.222	25.214	25.206	25.160	25.199	25.199	25.199	22.199-28.199	25.205	0.024
76 Benzo(a)pyrene	25.849	25.834	25.826	25.818	25.818	25.818	25.818	25.818	22.818-28.818	25.826	0.012

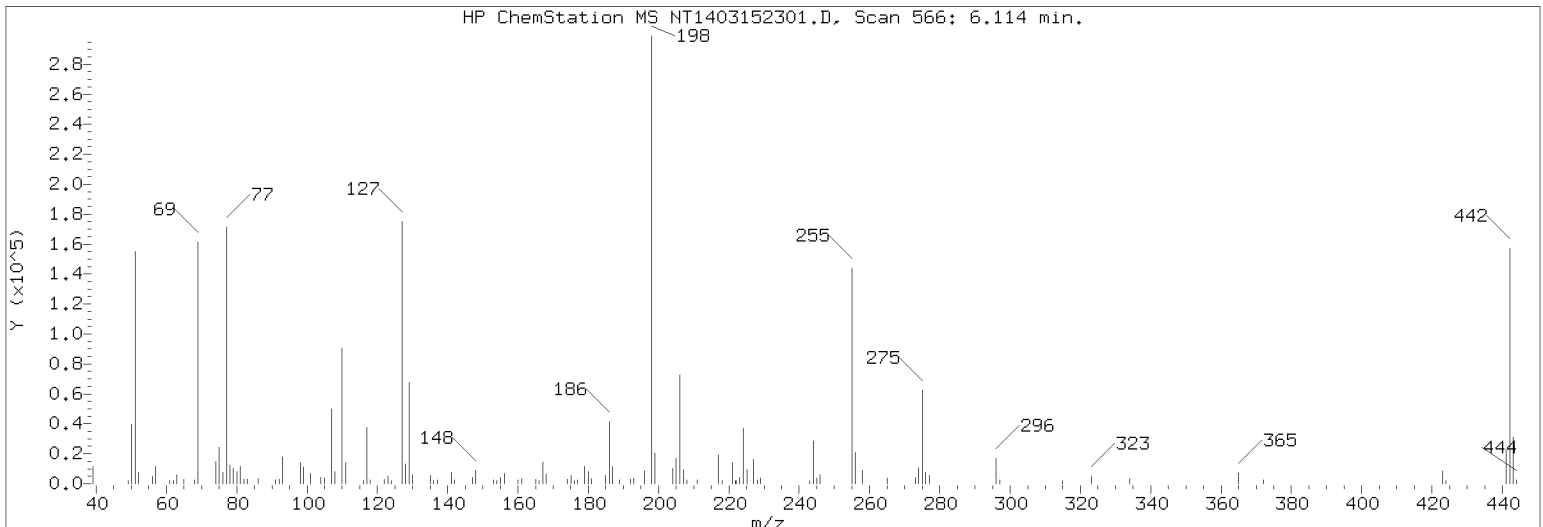
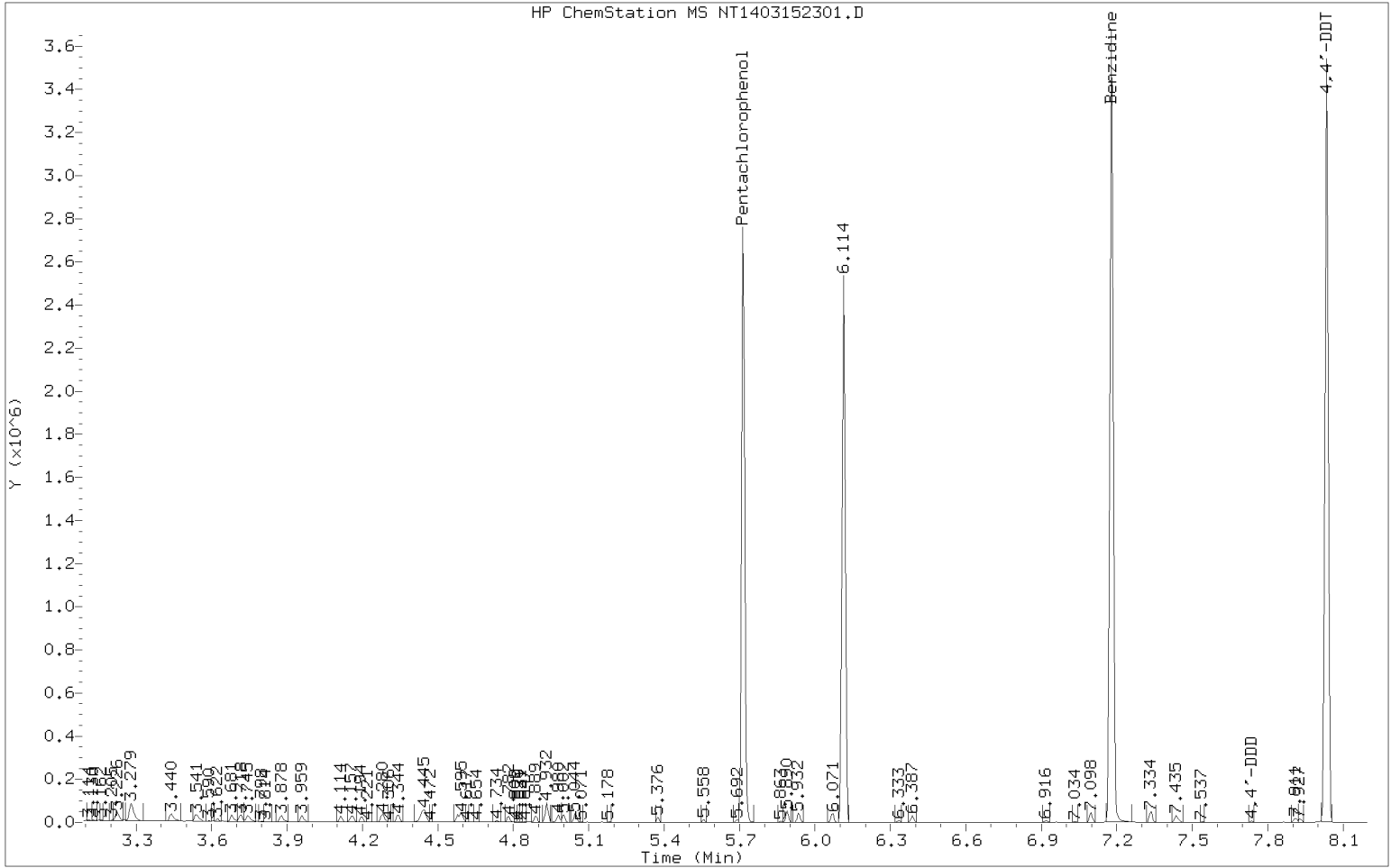
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt14.i\20230315.b
Inst ID: nt14.i

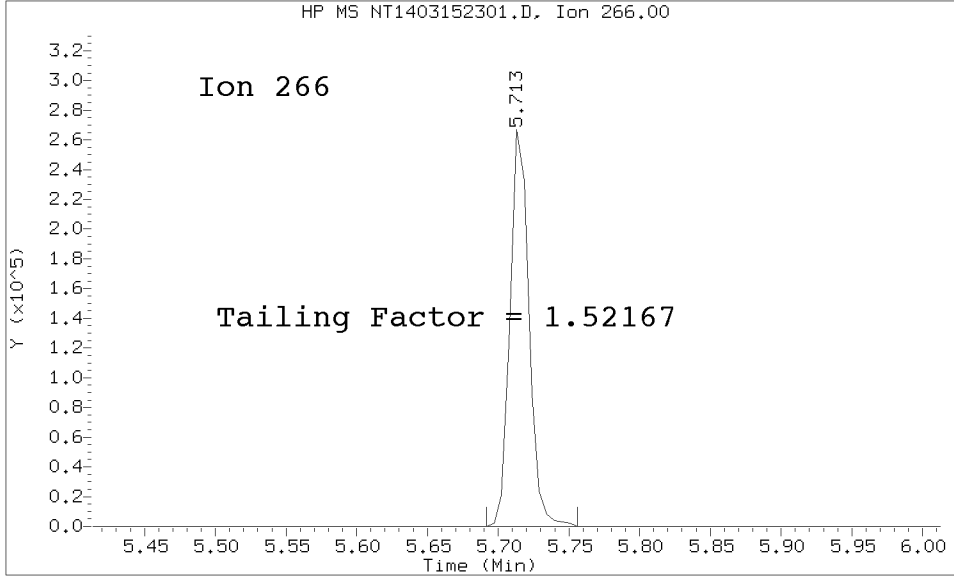
Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 77 Perylene-d12	25.950	25.942	25.942	25.942	25.942	25.934	25.934	25.934	22.934-28.934	25.941	0.005
78 Indeno(1,2,3-cd)pyrene	28.681	28.650	28.627	28.619	28.611	28.611	28.611	28.611	25.611-31.611	28.630	0.027
79 Dibenzo(a,h)anthracene	28.697	28.658	28.642	28.626	28.626	28.619	28.626	28.626	25.626-31.626	28.642	0.027
80 Benzo(g,h,i)perylene	29.489	29.442	29.419	29.403	29.403	29.396	29.403	29.403	26.403-32.403	29.422	0.033
\$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
\$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
\$ 88 Dibenzo(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
90 N-Nitrosodimethylamine	4.752	4.736	4.721	4.721	4.713	4.713	4.721	4.721	1.721-7.721	4.725	0.014
91 Aniline	8.544	8.529	8.521	8.521	8.513	8.514	8.513	8.513	5.513-11.513	8.522	0.011
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
93 Benzidine	20.925	20.917	20.910	20.910	20.909	20.910	20.910	20.910	17.910-23.910	20.913	0.006
\$ 95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.787	15.787-21.787	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.361	21.361-27.361	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
103 Pyridine	4.744	4.744	4.744	4.744	4.751	4.752	4.767	4.767	1.767-7.767	4.749	0.009
188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.874	8.874-14.874	+++++	+++++
189 N-Nitrosomethylethylam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.818	2.818-8.818	+++++	+++++

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/NT1403152301.D/NT1403152301.D
 Method Used: \20230315.b\DFTPP8270E.m Inst: nt14
 Injection Date: 15-MAR-2023 12:00 Operator: JGR
 Sample Info: SLC0160-TUN1 SLC0160-TUN1
 Report Date: 03/21/2023 12:49



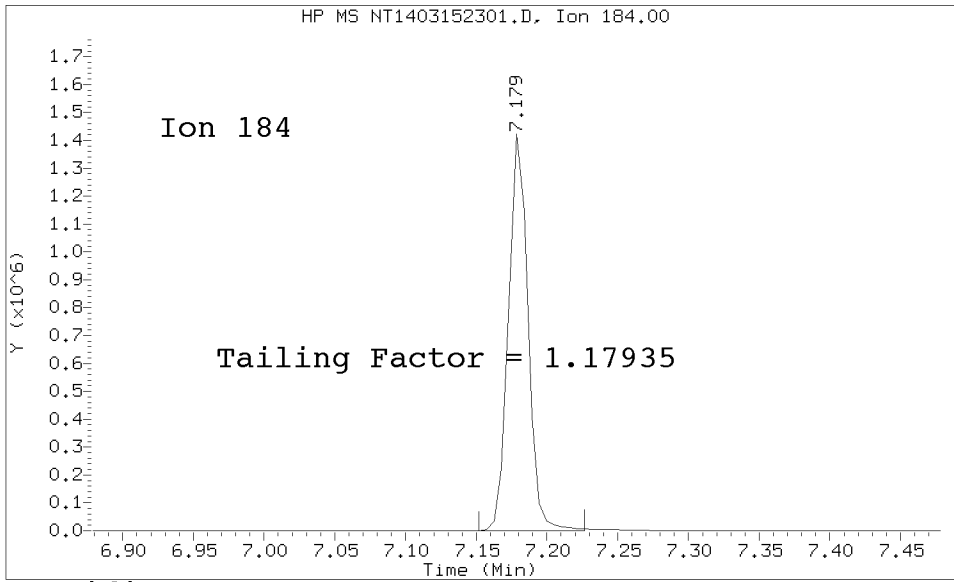
Datafile Analyzed: /20230315.b/NT1403152301.D/NT1403152301.D
Method Used: \20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 15-MAR-2023 12:00 Operator: JGR
Sample Info: SLC0160-TUN1
Report Date: 03/21/2023 12:49



Pentachlorophenol

=====
Exp. RT = 5.681
Found RT = 5.713

Tail Factor = 1.522 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.146
Found RT = 7.179

Tail Factor = 1.179 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.5216693	2.000	PASS
Benzidine	1.1793548	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	570011			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	2915	0.5	20.0	PASS
4,4-DDD + DDE	2915	0.5	20.0	PASS

Tuning Sample, nt14.i/20230315.b/NT1403152301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.36 (0.67)
69	Mass 69 relative abundance	53.44
70	Less than 2.00% of mass 69	0.00 (0.00)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
365	1.00 - 100.00% of mass 198	2.71
441	Less than 150.00% of mass 443	8.08 (72.22)
442	Less than 200.00% of mass 198	58.28
443	15.00 - 24.00% of mass 442	11.19 (19.20)

Data File: NT1403152301.D
 Spectrum: Avg. Scans 565-567 (6.11), Background Scan 560
 Location of Maximum: 198.00
 Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	9069	105.00	2863	168.00	5614	228.00	794
49.00	671	107.00	39032	174.00	2579	229.00	2862
50.00	30976	108.00	6346	175.00	4842	243.00	696
51.00	125768	110.00	71896	176.00	720	244.00	22688
52.00	6453	111.00	11106	177.00	2298	245.00	3011
56.00	4179	116.00	757	179.00	9119	246.00	4609
57.00	8934	117.00	29992	180.00	6294	255.00	114968
61.00	717	118.00	874	181.00	2818	256.00	16984
62.00	680	122.00	2529	185.00	4402	258.00	7242
63.00	4715	123.00	4032	186.00	32272	265.00	2218
65.00	1773	124.00	773	187.00	9241	273.00	3465
68.00	849	127.00	138368	189.00	1636	274.00	8836
69.00	126008	128.00	10413	192.00	2615	275.00	49816
74.00	11539	129.00	53960	193.00	3054	276.00	6361
75.00	19136	130.00	4541	196.00	6505	277.00	4187
76.00	6049	135.00	4342	198.00	235776	296.00	14150
77.00	134016	136.00	766	199.00	15852	297.00	810
78.00	9331	137.00	800	204.00	8038	315.00	707
79.00	8099	141.00	6361	205.00	13686	323.00	4245
80.00	6487	142.00	869	206.00	57704	334.00	2072
81.00	9538	147.00	3337	207.00	7569	365.00	6386
82.00	1806	148.00	7192	208.00	1530	372.00	1786
83.00	1759	153.00	830	211.00	1585	423.00	7390
86.00	2890	154.00	714	217.00	15135	424.00	1369
91.00	1612	155.00	3489	218.00	723	441.00	19048
92.00	1761	156.00	5350	221.00	10741	442.00	137408
93.00	14267	160.00	806	222.00	1546	443.00	26376
98.00	10738	161.00	2807	223.00	3284	444.00	1928
99.00	8546	165.00	1720	224.00	30088		
101.00	5073	166.00	753	225.00	7730		
104.00	3305	167.00	9750	227.00	12951		

Data File: \\target\share\chem3\nt14,1\20230315,b\NT1403152302.D

Date: 15-MAR-2023 12:13

Client ID:

Sample Info: SLC0160-CAL7

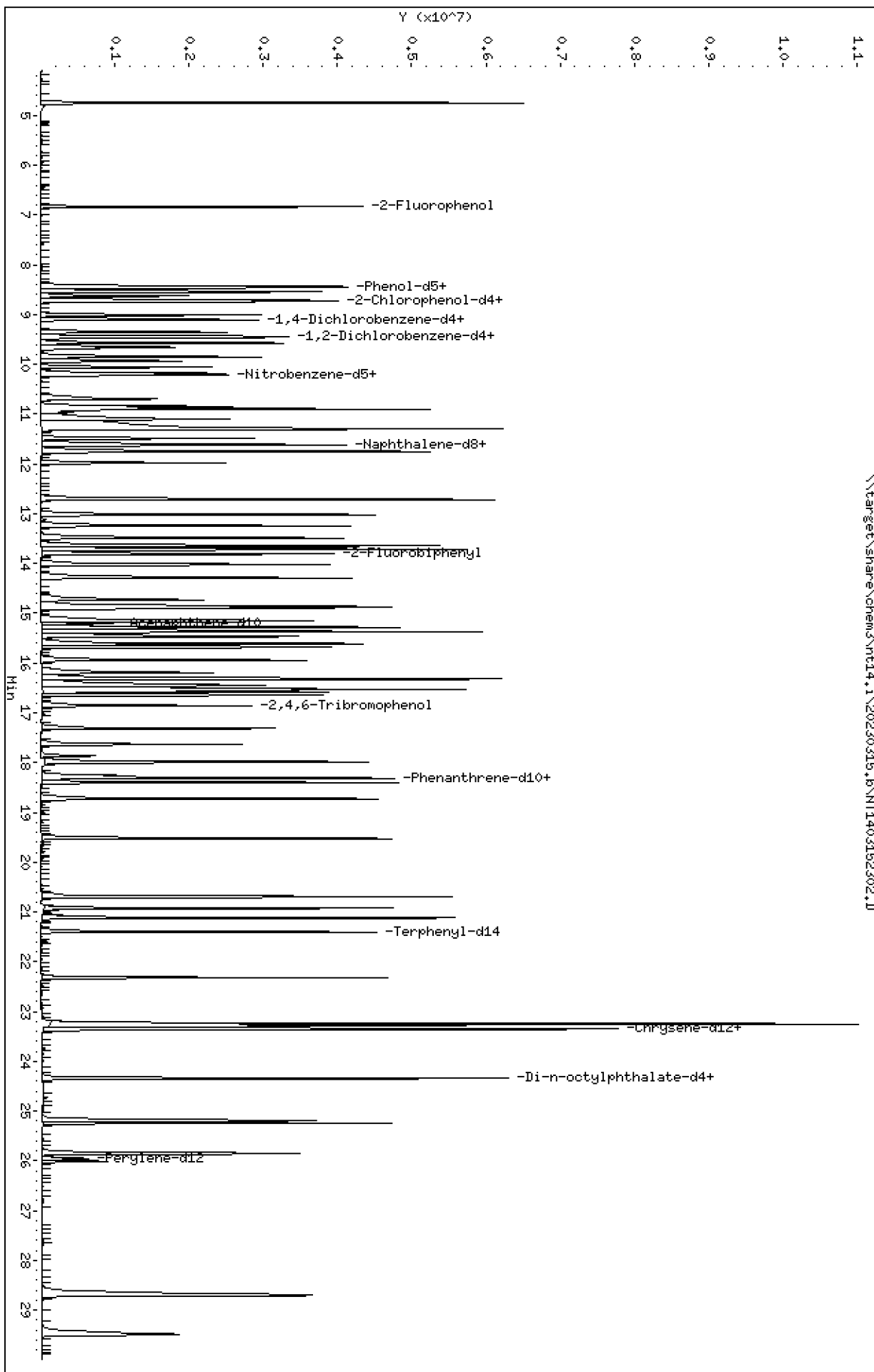
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152302.D
 Lab Smp Id: SLC0160-CAL7
 Inj Date : 15-MAR-2023 12:13 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL7
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.821	(1.000)	1743646	30.0000	30.66
\$ 2 Phenol-d5	99		8.436	8.412	(1.000)	2397314	30.0000	32.02
3 Phenol	94		8.459	8.428	(1.000)	1635252	20.0000	20.55
\$ 5 2-Chlorophenol-d4	132		8.714	8.698	(1.000)	1895131	30.0000	32.10
4 Bis(2-Chloroethyl)ether	93		8.629	8.606	(1.000)	1165154	20.0000	20.33
6 2-Chlorophenol	128		8.745	8.721	(1.000)	1343889	20.0000	21.46
7 1,3-Dichlorobenzene	146		9.008	9.000	(1.000)	1290721	20.0000	20.36
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	167425	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.109	9.093	(1.000)	1253956	20.0000	20.53
\$ 10 1,2-Dichlorobenzene-d4	152		9.435	9.427	(1.000)	811556	20.0000	20.58
12 1,2-Dichlorobenzene	146		9.466	9.458	(1.000)	1241905	20.0000	20.58
11 Benzyl alcohol	108		9.357	9.334	(1.000)	830899	20.0000	22.43
14 2,2'-oxybis(1-Chloropropane)	121		9.652	9.644	(1.000)	374113	20.0000	20.54
13 2-Methylphenol	108		9.574	9.559	(1.000)	1209191	20.0000	21.49
17 Hexachloroethane	117		10.056	10.056	(1.000)	565908	20.0000	21.67
16 N-Nitroso-di-n-propylamine	70		9.939	9.893	(1.000)	934845	20.0000	21.11
15 4-Methylphenol	108		9.854	9.823	(1.000)	1473052	20.0000	22.11
\$ 18 Nitrobenzene-d5	82		10.180	10.164	(0.879)	1483770	20.0000	21.00
19 Nitrobenzene	77		10.219	10.195	(0.883)	1409960	20.0000	20.50
20 Isophorone	82		10.692	10.645	(0.924)	2070547	20.0000	22.05
21 2-Nitrophenol	139		10.847	10.831	(0.937)	850721	20.0000	19.98
22 2,4-Dimethylphenol	107		10.901	10.878	(0.942)	2261899	40.0000	38.45
23 Bis(2-Chloroethoxy)methane	93		11.103	11.080	(0.959)	1270611	20.0000	20.10
24 Benzoic acid	105		11.297	10.963	(0.976)	4525852	80.0000	79.86 (M)
25 2,4-Dichlorophenol	162		11.305	11.281	(0.977)	1928908	40.0000	41.23
26 1,2,4-Trichlorobenzene	180		11.490	11.482	(0.993)	1167058	20.0000	20.29
* 27 Naphthalene-d8	136		11.575	11.567	(1.000)	667689	4.00000	
28 Naphthalene	128		11.621	11.606	(1.004)	3699353	20.0000	20.74
29 4-Chloroaniline	127		11.753	11.729	(1.015)	3181601	40.0000	42.61
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	526402	20.0000	20.27
31 4-Chloro-3-methylphenol	107		12.712	12.689	(1.098)	2446331	40.0000	43.27
32 2-Methylnaphthalene	142		13.022	13.006	(1.125)	2589594	20.0000	20.82
33 Hexachlorocyclopentadiene	237		13.486	13.486	(0.887)	1331626	40.0000	44.56

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.648	13.625	(0.897)	1600451	40.0000	43.88
35 2,4,5-Trichlorophenol	196	13.718	13.702	(0.902)	1601594	40.0000	42.14
§ 36 2-Fluorobiphenyl	172	13.811	13.795	(0.908)	2617922	20.0000	20.10
37 2-Chloronaphthalene	162	14.020	14.004	(0.922)	2236879	20.0000	20.04
38 2-Nitroaniline	65	14.291	14.260	(0.939)	1804349	40.0000	41.87
39 Dimethylphthalate	163	14.732	14.693	(0.968)	2308200	20.0000	19.25
40 Acenaphthylene	152	14.895	14.879	(0.979)	3769958	20.0000	20.11
41 2,6-Dinitrotoluene	165	14.864	14.833	(0.977)	1155286	40.0000	41.71
* 42 Acenaphthene-d10	164	15.212	15.196	(1.000)	359561	4.00000	
43 3-Nitroaniline	138	15.158	15.111	(0.996)	1638674	40.0000	42.88
44 Acenaphthene	153	15.281	15.258	(1.005)	2265280	20.0000	20.70
45 2,4-Dinitrophenol	184	15.374	15.328	(1.011)	2027286	80.0000	79.79
46 Dibenzofuran	168	15.614	15.590	(1.026)	3220821	20.0000	20.61
47 4-Nitrophenol	109	15.467	15.420	(1.017)	937454	40.0000	46.35
48 2,4-Dinitrotoluene	165	15.683	15.645	(1.031)	1685378	40.0000	42.93
50 Diethylphthalate	149	16.194	16.155	(1.065)	2565807	20.0000	20.70
49 Fluorene	166	16.325	16.302	(1.073)	3010791	20.0000	20.33
51 4-Chlorophenyl-phenylether	204	16.309	16.294	(1.072)	1282932	20.0000	20.18
52 4-Nitroaniline	138	16.448	16.379	(1.081)	1459414	40.0000	43.91
53 4,6-Dinitro-2-methylphenol	198	16.533	16.479	(0.906)	2055185	80.0000	79.90
54 N-Nitrosodiphenylamine	169	16.572	16.541	(0.908)	1814068	20.0000	20.37
§ 55 2,4,6-Tribromophenol	330	16.857	16.841	(1.108)	494539	30.0000	36.23
56 4-Bromophenyl-phenylether	248	17.312	17.304	(0.948)	658149	20.0000	21.92
57 Hexachlorobenzene	284	17.636	17.621	(0.966)	634312	20.0000	20.02
58 Pentachlorophenol	266	17.992	17.977	(0.986)	996102	40.0000	39.95
* 59 Phenanthrene-d10	188	18.255	18.240	(1.000)	655798	4.00000	
60 Phenanthrene	178	18.310	18.286	(1.003)	3925669	20.0000	20.95
61 Anthracene	178	18.402	18.379	(1.008)	3811614	20.0000	21.11
62 Carbazole	167	18.727	18.704	(1.026)	3539660	20.0000	22.04
63 Di-n-butylphthalate	149	19.524	19.509	(1.070)	4536808	20.0000	22.28
64 Fluoranthene	202	20.693	20.677	(0.888)	4152561	20.0000	20.89
65 Pyrene	202	21.118	21.103	(0.906)	4204352	20.0000	20.63
§ 66 Terphenyl-d14	244	21.397	21.389	(0.918)	2695385	20.0000	19.53
67 Butylbenzylphthalate	149	22.318	22.310	(0.957)	1845987	20.0000	20.67
68 Benzo(a)anthracene	228	23.286	23.263	(0.999)	3761897	20.0000	20.88
* 69 Chrysene-d12	240	23.309	23.294	(1.000)	488521	4.00000	
70 3,3'-Dichlorobenzidine	252	23.247	23.216	(0.997)	4016223	60.0000	59.79
71 Chrysene	228	23.363	23.340	(1.002)	3340780	20.0000	20.49
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.959)	2714646	20.0000	21.67
* 134 Di-n-octylphthalate-d4	153	24.331	24.323	(1.000)	951548	4.00000	
73 Di-n-octylphthalate	149	24.347	24.331	(1.001)	4811694	20.0000	19.67
74 Benzo(b)fluoranthene	252	25.190	25.152	(0.971)	3832060	20.0000	24.04
75 Benzo(k)fluoranthene	252	25.237	25.198	(0.973)	3246184	20.0000	20.55
76 Benzo(a)pyrene	252	25.849	25.818	(0.996)	3054317	20.0000	22.41
* 77 Perylene-d12	264	25.949	25.934	(1.000)	451011	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.680	28.610	(1.105)	3341958	20.0000	22.53
79 Dibenzo(a,h)anthracene	278	28.696	28.626	(1.106)	2832442	20.0000	22.66
80 Benzo(g,h,i)perylene	276	29.488	29.403	(1.136)	2788563	20.0000	22.81
90 N-Nitrosodimethylamine	74	4.751	4.720	(1.000)	1435899	40.0000	39.86
91 Aniline	93	8.544	8.513	(1.000)	3278182	40.0000	40.96
93 Benzidine	184	20.925	20.909	(0.898)	3003267	40.0000	37.55
103 Pyridine	79	4.743	4.766	(1.000)	2176938	20.0000	19.52
105 1-methylnaphthalene	142	13.246	13.230	(1.144)	2340062	20.0000	20.76
111 Azobenzene (1,2-DP-Hydrazine)	77	16.641	16.618	(1.094)	2911296	20.0000	19.67

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.237	25.199	(0.973)	6729222	40.0000	44.46 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.938	15.923	(1.048)	836591	20.0000	19.95

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152302.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL7
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	167425	-13.93
27 Naphthalene-d8	721321	360661	1442642	667689	-7.44
42 Acenaphthene-d10	379602	189801	759204	359561	-5.28
59 Phenanthrene-d10	703194	351597	1406388	655798	-6.74
69 Chrysene-d12	504769	252385	1009538	488521	-3.22
134 Di-n-octylphthala	978492	489246	1956984	951548	-2.75
77 Perylene-d12	484073	242037	968146	451011	-6.83

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.58	0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.21	0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.26	0.04
69 Chrysene-d12	23.30	22.80	23.80	23.31	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.33	0.03
77 Perylene-d12	25.94	25.44	26.44	25.95	0.03

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

REVIEW SUMMARY FOR FILE - NT1403152302.D

Lab ID: SLC0160-CAL7
nt14.i, ABN.m, 15-MAR-2023 12:13

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)
0.976	0.948	0.0282	Benzoic acid

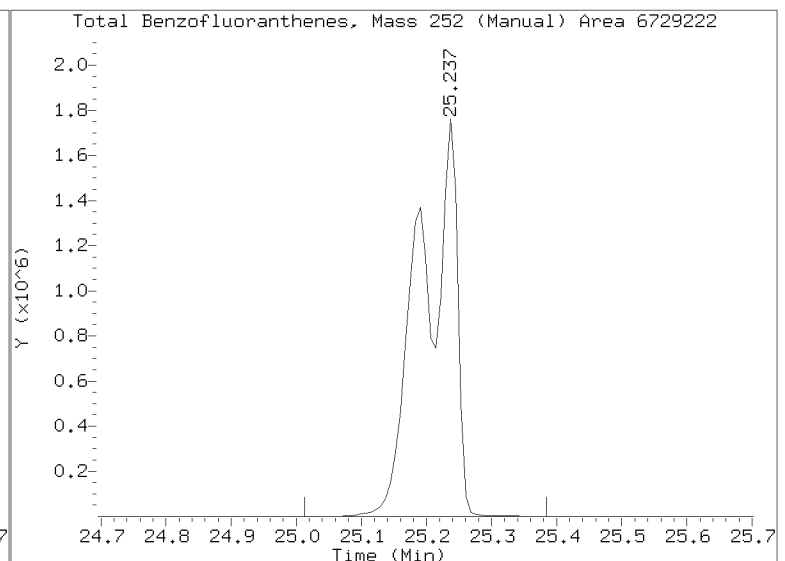
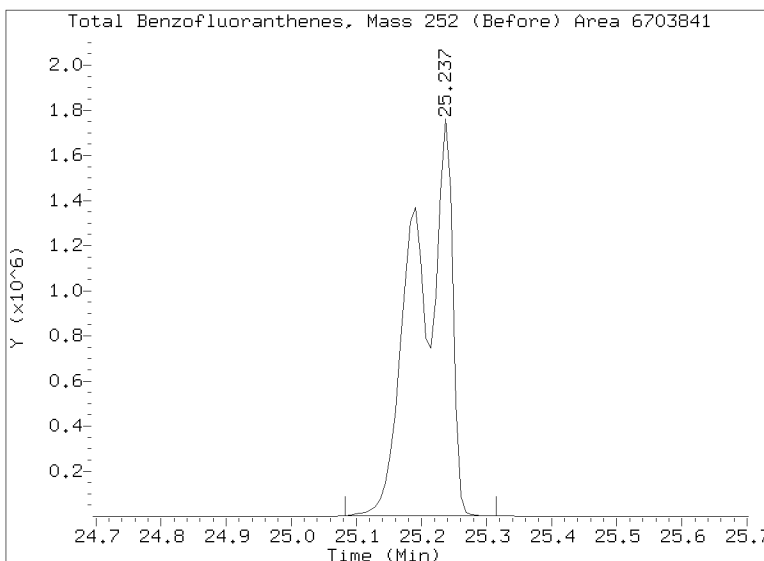
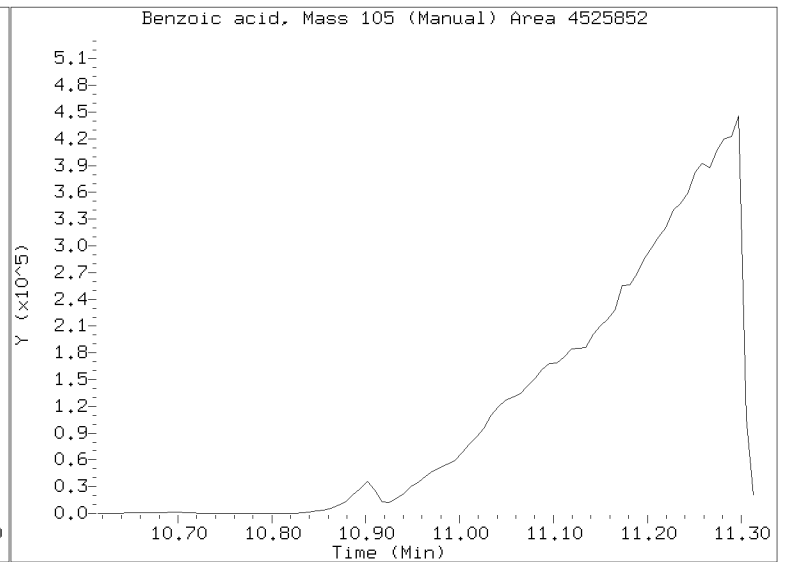
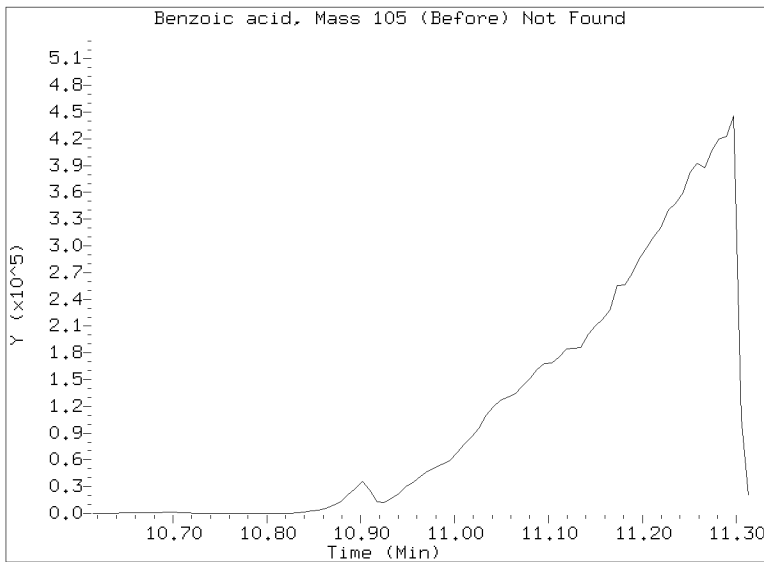
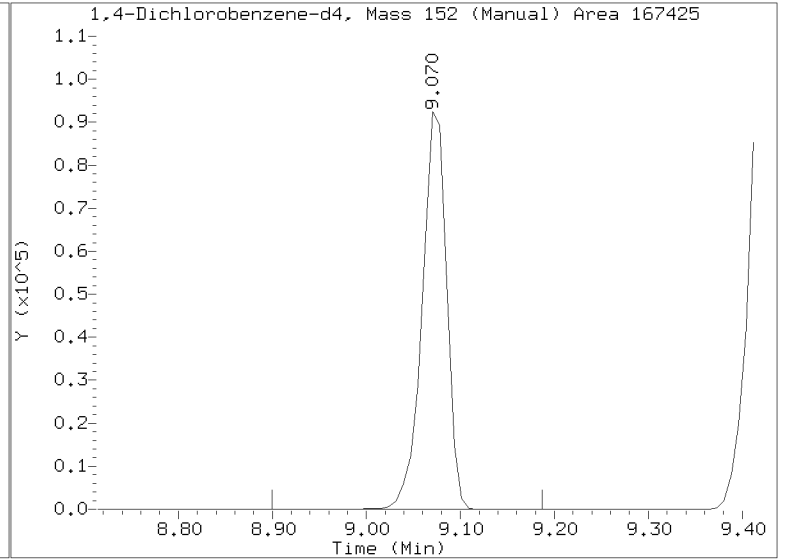
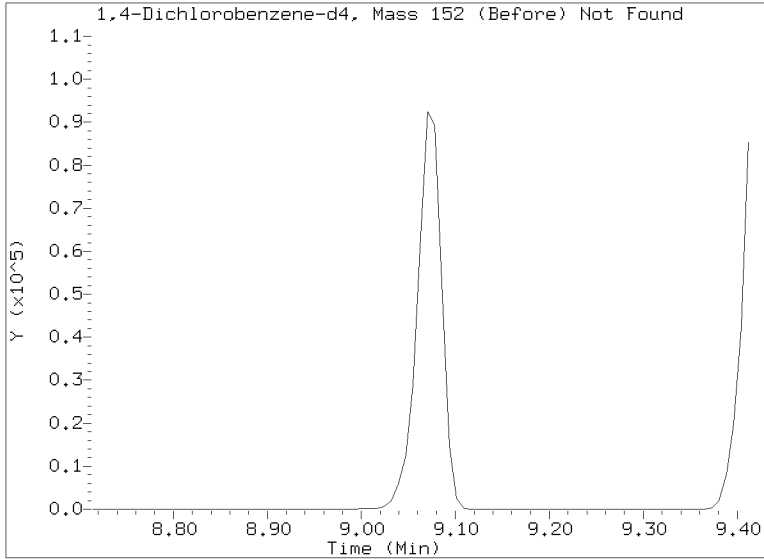
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152302.D
Injection Date: 15-MAR-2023 12:13
Lab ID: SLC0160-CAL7 Client ID:
Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152303.D

Date: 15-MAR-2023 12:49

Client ID:

Sample Info: SLC0160-CAL6

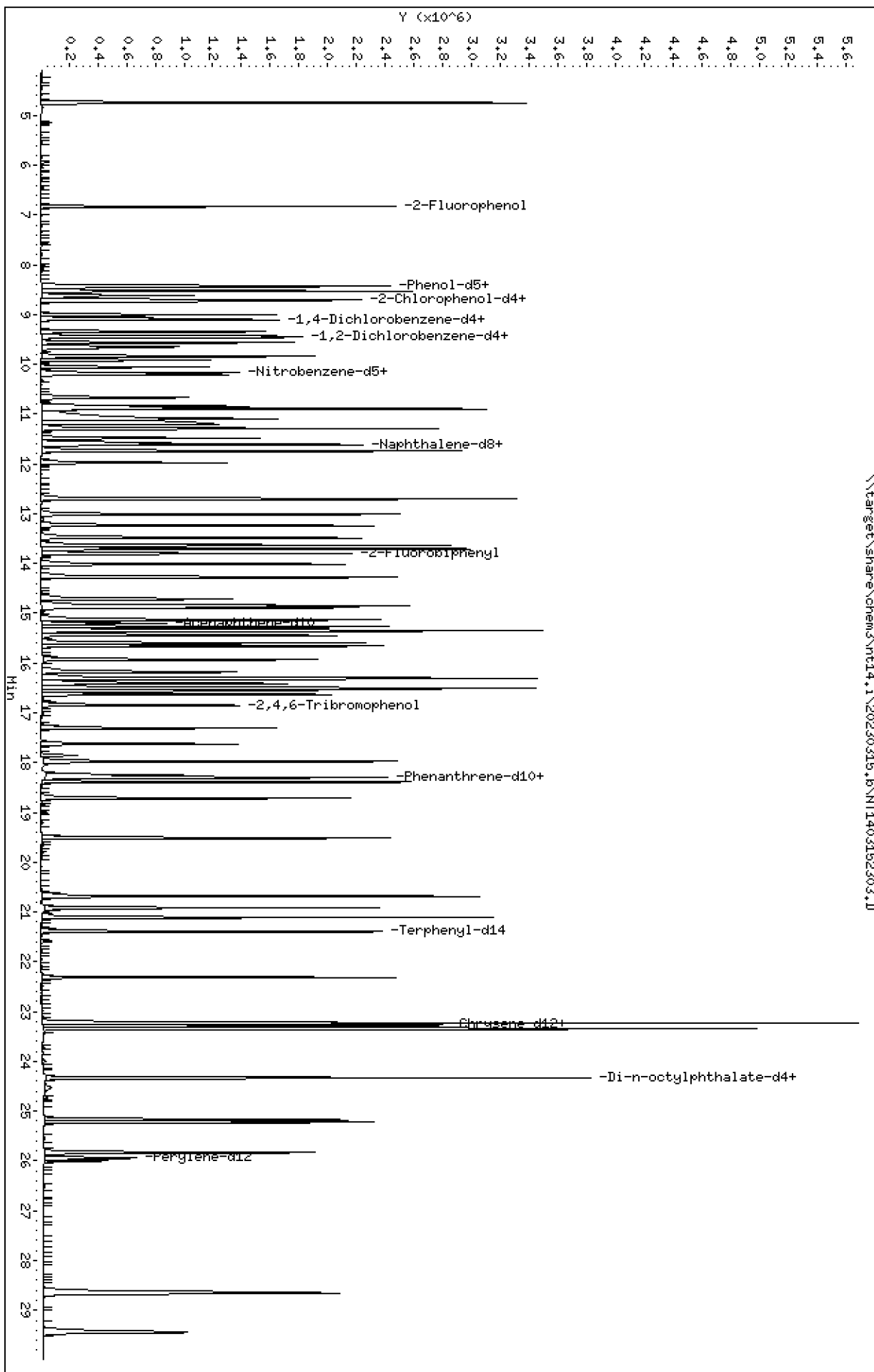
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152303.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152303.D
 Lab Smp Id: SLC0160-CAL6
 Inj Date : 15-MAR-2023 12:49 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL6
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 3 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.821	(1.000)	905223	15.0000	14.74
\$ 2 Phenol-d5	99		8.428	8.412	(1.000)	1230813	15.0000	15.23
3 Phenol	94		8.443	8.428	(1.000)	846344	10.0000	9.852
\$ 5 2-Chlorophenol-d4	132		8.706	8.698	(1.000)	958127	15.0000	15.04
4 Bis(2-Chloroethyl)ether	93		8.621	8.606	(1.000)	600336	10.0000	9.705
6 2-Chlorophenol	128		8.729	8.721	(1.000)	679087	10.0000	10.04
7 1,3-Dichlorobenzene	146		9.008	9.000	(1.000)	661995	10.0000	9.672
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	180739	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	636548	10.0000	9.656
\$ 10 1,2-Dichlorobenzene-d4	152		9.435	9.427	(1.000)	419499	10.0000	9.854
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	634387	10.0000	9.736
11 Benzyl alcohol	108		9.341	9.334	(1.000)	417501	10.0000	10.44
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.063)	187006	10.0000	9.511 (M)
13 2-Methylphenol	108		9.567	9.559	(1.000)	612304	10.0000	10.08
17 Hexachloroethane	117		10.056	10.056	(1.000)	284787	10.0000	10.10
16 N-Nitroso-di-n-propylamine	70		9.916	9.893	(1.000)	479915	10.0000	10.04
15 4-Methylphenol	108		9.838	9.823	(1.000)	756162	10.0000	10.52
\$ 18 Nitrobenzene-d5	82		10.172	10.164	(0.879)	748017	10.0000	10.26
19 Nitrobenzene	77		10.211	10.195	(0.883)	716695	10.0000	10.10
20 Isophorone	82		10.669	10.645	(0.922)	1044814	10.0000	10.78
21 2-Nitrophenol	139		10.839	10.831	(0.937)	422056	10.0000	10.09
22 2,4-Dimethylphenol	107		10.894	10.878	(0.942)	1164271	20.0000	19.18
23 Bis(2-Chloroethoxy)methane	93		11.095	11.080	(0.959)	642048	10.0000	9.841
24 Benzoic acid	105		11.196	10.963	(0.968)	2201419	40.0000	40.76 (M)
25 2,4-Dichlorophenol	162		11.297	11.281	(0.977)	1006763	20.0000	20.85
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	596618	10.0000	10.05
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	689021	4.00000	
28 Naphthalene	128		11.614	11.606	(1.004)	1829723	10.0000	9.940
29 4-Chloroaniline	127		11.745	11.729	(1.015)	1583401	20.0000	20.55
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	264317	10.0000	9.864
31 4-Chloro-3-methylphenol	107		12.704	12.689	(1.098)	1216983	20.0000	20.86
32 2-Methylnaphthalene	142		13.014	13.006	(1.125)	1299572	10.0000	10.12
33 Hexachlorocyclopentadiene	237		13.486	13.486	(0.887)	648324	20.0000	21.53

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.641	13.625	(0.897)	762274	20.0000	20.74
35 2,4,5-Trichlorophenol	196	13.710	13.702	(0.902)	816766	20.0000	21.33
§ 36 2-Fluorobiphenyl	172	13.803	13.795	(0.908)	1296537	10.0000	9.882
37 2-Chloronaphthalene	162	14.012	14.004	(0.922)	1129102	10.0000	10.04
38 2-Nitroaniline	65	14.275	14.260	(0.939)	894554	20.0000	20.60
39 Dimethylphthalate	163	14.716	14.693	(0.968)	1182461	10.0000	9.788
40 Acenaphthylene	152	14.887	14.879	(0.979)	1876009	10.0000	9.933
41 2,6-Dinitrotoluene	165	14.848	14.833	(0.977)	578792	20.0000	20.74
* 42 Acenaphthene-d10	164	15.204	15.196	(1.000)	362269	4.00000	
43 3-Nitroaniline	138	15.134	15.111	(0.995)	818924	20.0000	21.27
44 Acenaphthene	153	15.274	15.258	(1.005)	1118649	10.0000	10.14
45 2,4-Dinitrophenol	184	15.351	15.328	(1.010)	959641	40.0000	41.16
46 Dibenzofuran	168	15.598	15.590	(1.026)	1596031	10.0000	10.14
47 4-Nitrophenol	109	15.444	15.420	(1.016)	425414	20.0000	20.88
48 2,4-Dinitrotoluene	165	15.660	15.645	(1.030)	830406	20.0000	20.99
50 Diethylphthalate	149	16.178	16.155	(1.064)	1346512	10.0000	10.78
49 Fluorene	166	16.317	16.302	(1.073)	1487222	10.0000	9.966
51 4-Chlorophenyl-phenylether	204	16.302	16.294	(1.072)	624139	10.0000	9.743
52 4-Nitroaniline	138	16.417	16.379	(1.080)	714558	20.0000	21.34
53 4,6-Dinitro-2-methylphenol	198	16.510	16.479	(0.905)	981338	40.0000	40.54
54 N-Nitrosodiphenylamine	169	16.556	16.541	(0.907)	893652	10.0000	9.960
§ 55 2,4,6-Tribromophenol	330	16.849	16.841	(1.108)	232501	15.0000	16.90
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.948)	319909	10.0000	10.58
57 Hexachlorobenzene	284	17.628	17.621	(0.966)	318529	10.0000	9.979
58 Pentachlorophenol	266	17.977	17.977	(0.985)	473512	20.0000	20.27
* 59 Phenanthrene-d10	188	18.248	18.240	(1.000)	660604	4.00000	
60 Phenanthrene	178	18.302	18.286	(1.003)	1901122	10.0000	10.07
61 Anthracene	178	18.387	18.379	(1.008)	1888486	10.0000	10.39
62 Carbazole	167	18.712	18.704	(1.025)	1692192	10.0000	10.46
63 Di-n-butylphthalate	149	19.517	19.509	(1.070)	2235033	10.0000	10.90
64 Fluoranthene	202	20.685	20.677	(0.888)	2037696	10.0000	10.41
65 Pyrene	202	21.110	21.103	(0.906)	2051300	10.0000	10.22
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	1353492	10.0000	9.964
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	928335	10.0000	10.56
68 Benzo(a)anthracene	228	23.278	23.263	(0.999)	1804020	10.0000	10.17
* 69 Chrysene-d12	240	23.301	23.294	(1.000)	480922	4.00000	
70 3,3'-Dichlorobenzidine	252	23.232	23.216	(0.997)	1775828	30.0000	31.33
71 Chrysene	228	23.348	23.340	(1.002)	1615208	10.0000	10.06
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.960)	1311252	10.0000	10.59
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	940570	4.00000	
73 Di-n-octylphthalate	149	24.339	24.331	(1.001)	2370243	10.0000	9.803
74 Benzo(b)fluoranthene	252	25.175	25.152	(0.970)	1657464	10.0000	10.21
75 Benzo(k)fluoranthene	252	25.221	25.198	(0.972)	1753944	10.0000	10.90
76 Benzo(a)pyrene	252	25.833	25.818	(0.996)	1499407	10.0000	10.80
* 77 Perylene-d12	264	25.942	25.934	(1.000)	459466	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.649	28.610	(1.104)	1624009	10.0000	10.75
79 Dibenzo(a,h)anthracene	278	28.657	28.626	(1.105)	1356753	10.0000	10.65
80 Benzo(g,h,i)perylene	276	29.442	29.403	(1.135)	1337729	10.0000	10.74
90 N-Nitrosodimethylamine	74	4.736	4.720	(1.000)	746586	20.0000	19.20
91 Aniline	93	8.528	8.513	(1.000)	1714467	20.0000	19.84
93 Benzidine	184	20.917	20.909	(0.898)	1531307	20.0000	19.45
103 Pyridine	79	4.743	4.766	(1.000)	1137513	10.0000	9.447
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	1170562	10.0000	10.06
111 Azobenzene (1,2-DP-Hydrazine)	77	16.633	16.618	(1.094)	1477609	10.0000	9.907

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	
187 Total Benzofluoranthenes	252		25.221	25.199	(0.972)	3255283	20.0000	21.11 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.931	15.923	(1.048)	403311	10.0000	10.30

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152303.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL6
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	180739	-7.08
27 Naphthalene-d8	721321	360661	1442642	689021	-4.48
42 Acenaphthene-d10	379602	189801	759204	362269	-4.57
59 Phenanthrene-d10	703194	351597	1406388	660604	-6.06
69 Chrysene-d12	504769	252385	1009538	480922	-4.72
134 Di-n-octylphthala	978492	489246	1956984	940570	-3.88
77 Perylene-d12	484073	242037	968146	459466	-5.08

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152303.D

Lab ID: SLC0160-CAL6
nt14.i, ABN.m, 15-MAR-2023 12:49

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.968	0.948	0.0201	Benzoic acid

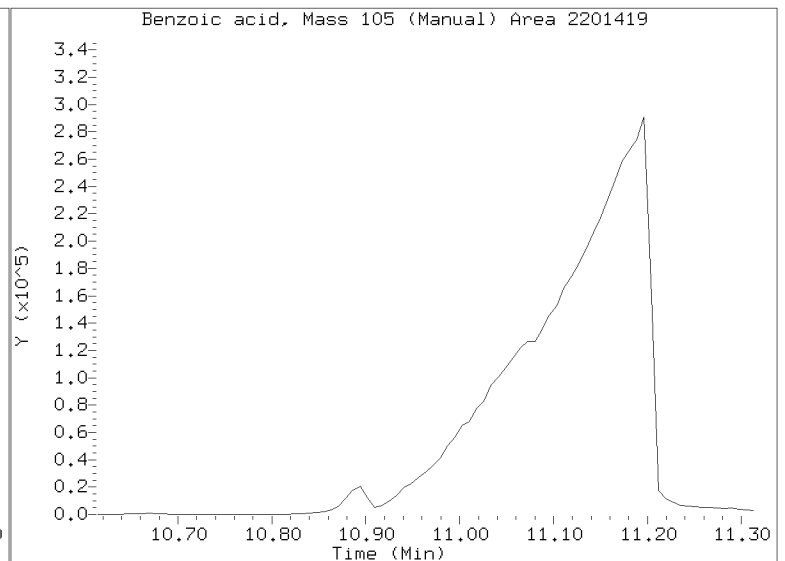
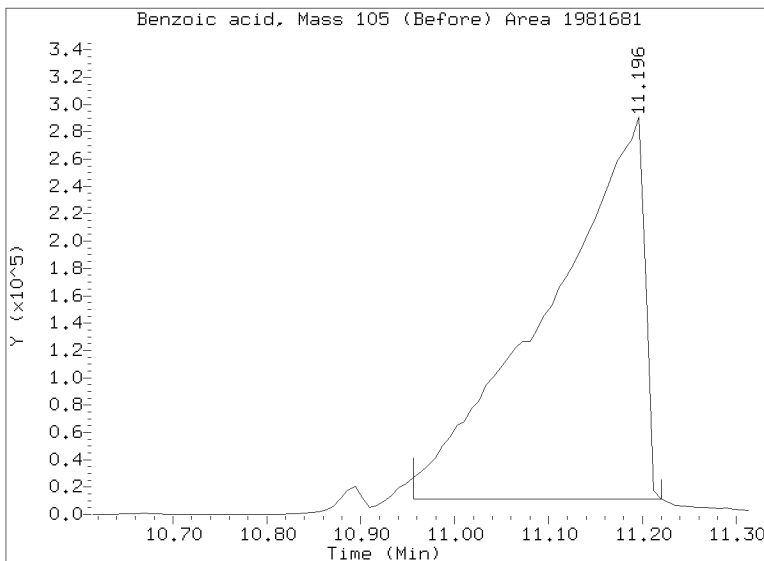
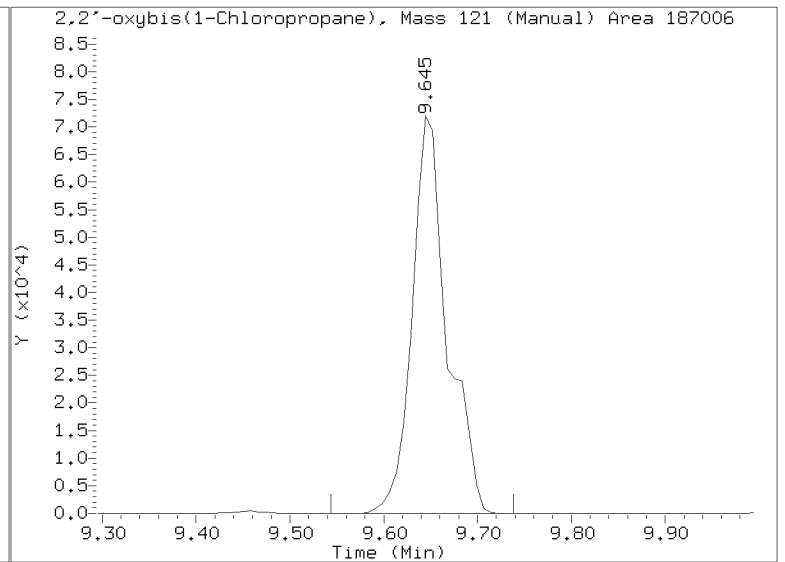
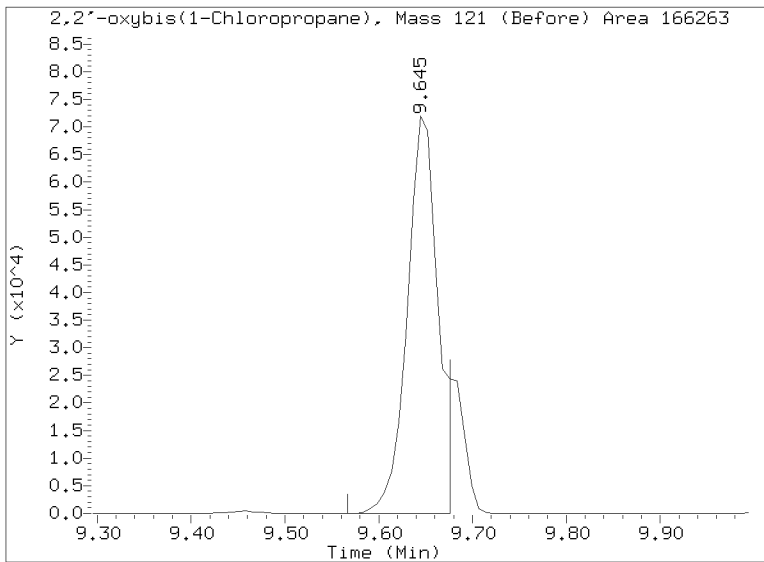
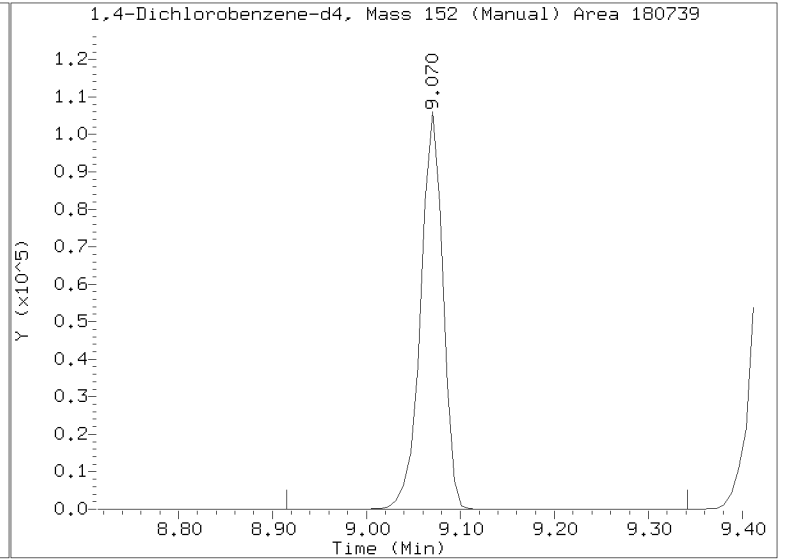
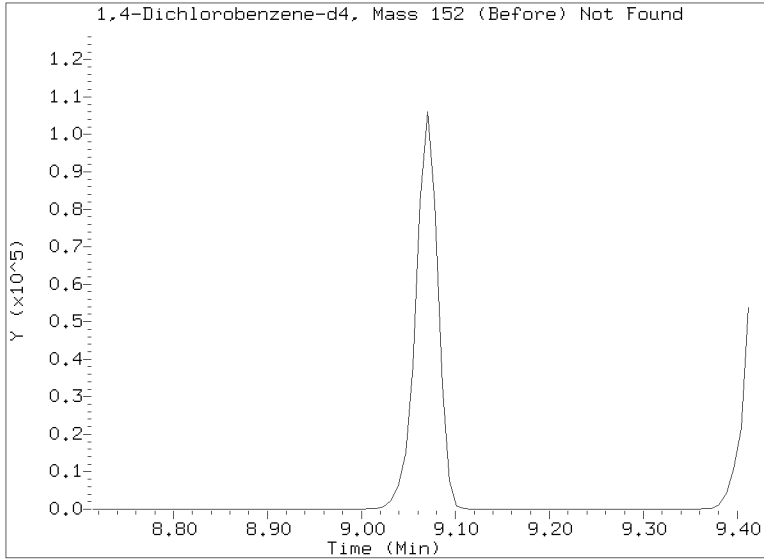
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

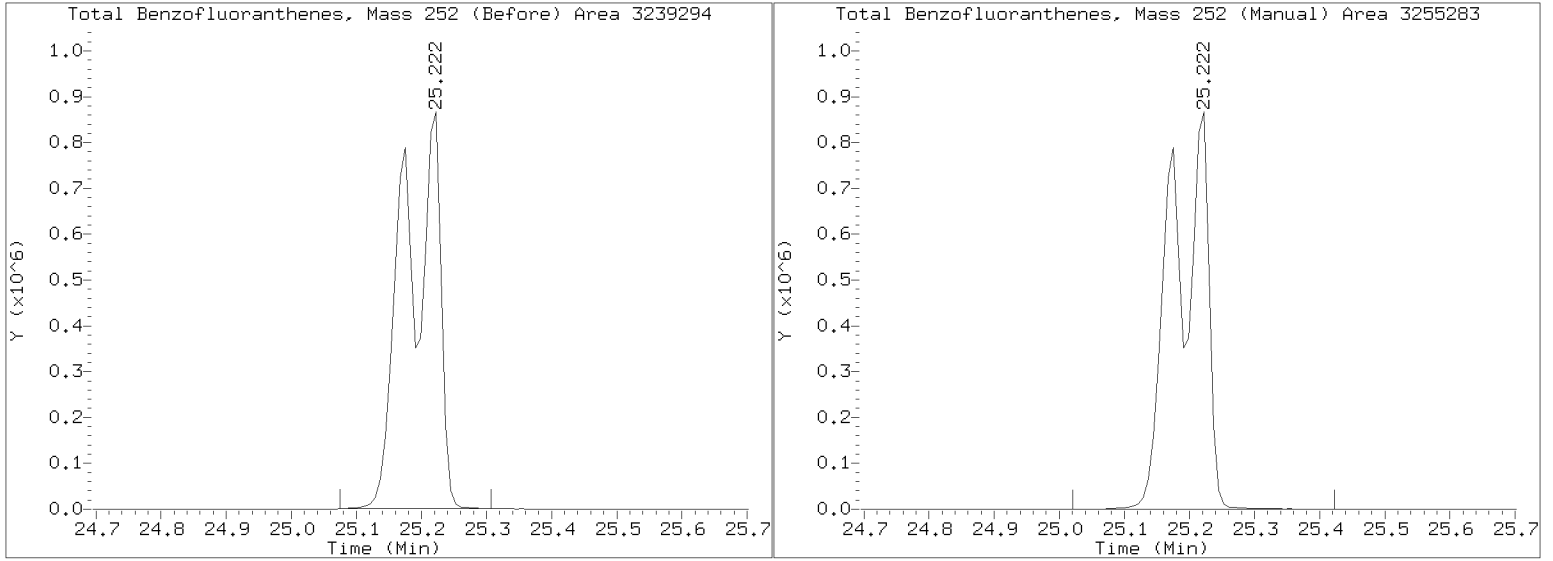
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152303.D
Injection Date: 15-MAR-2023 12:49
Lab ID: SLC0160-CAL6 Client ID:
Report Date: 03/21/2023 12:48



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152303.D
Injection Date: 15-MAR-2023 12:49
Lab ID:SLC0160-CAL6 Client ID:
Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152304.D

Date: 15-MAR-2023 13:26

Client ID:

Sample Info: SLC0160-CAL5

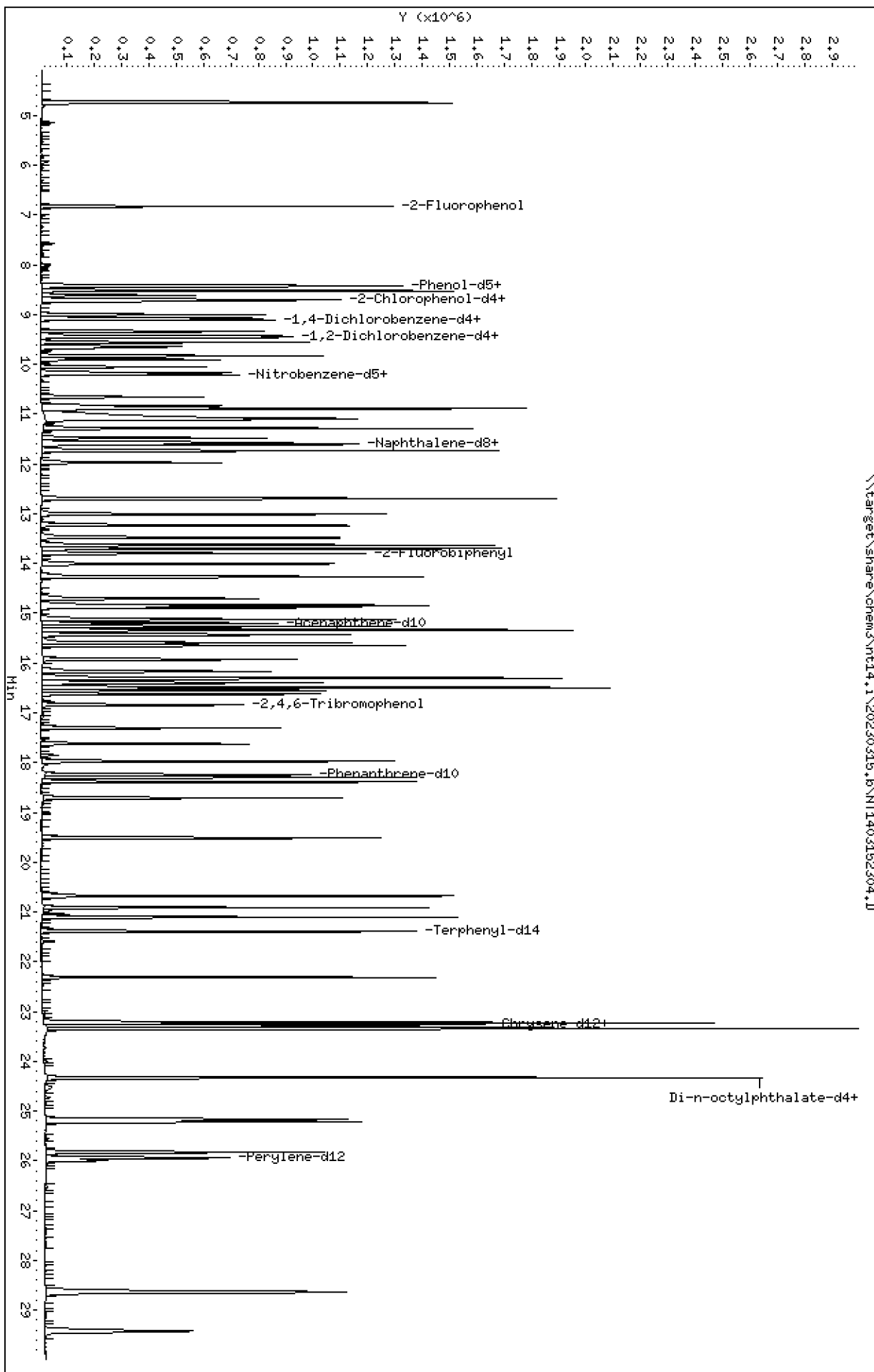
Column phase: ZB-Smsi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152304.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152304.D
 Lab Smp Id: SLC0160-CAL5
 Inj Date : 15-MAR-2023 13:26 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL5
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.821	(1.000)	477939	7.50000	7.233
\$ 2 Phenol-d5	99		8.420	8.412	(1.000)	638287	7.50000	7.337
3 Phenol	94		8.436	8.428	(1.000)	444479	5.00000	4.808
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	492706	7.50000	7.184
4 Bis(2-Chloroethyl)ether	93		8.613	8.606	(1.000)	309237	5.00000	4.645
6 2-Chlorophenol	128		8.729	8.721	(1.000)	349349	5.00000	4.801
7 1,3-Dichlorobenzene	146		9.008	9.000	(1.000)	345834	5.00000	4.695
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	194517	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	333703	5.00000	4.704
\$ 10 1,2-Dichlorobenzene-d4	152		9.435	9.427	(1.000)	216009	5.00000	4.714
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	328951	5.00000	4.691
11 Benzyl alcohol	108		9.334	9.334	(1.000)	218036	5.00000	5.066
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.063)	105047	5.00000	4.964 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	320702	5.00000	4.906
17 Hexachloroethane	117		10.056	10.056	(1.000)	145902	5.00000	4.808
16 N-Nitroso-di-n-propylamine	70		9.908	9.893	(1.000)	251619	5.00000	4.889
15 4-Methylphenol	108		9.831	9.823	(1.000)	377266	5.00000	4.875
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	381057	5.00000	4.992
19 Nitrobenzene	77		10.203	10.195	(0.882)	368390	5.00000	4.958
20 Isophorone	82		10.653	10.645	(0.921)	531212	5.00000	5.236
21 2-Nitrophenol	139		10.832	10.831	(0.936)	214095	5.00000	5.001
22 2,4-Dimethylphenol	107		10.886	10.878	(0.941)	624251	10.0000	9.823
23 Bis(2-Chloroethoxy)methane	93		11.088	11.080	(0.959)	332625	5.00000	4.870
24 Benzoic acid	105		11.119	10.963	(0.961)	1072142	20.0000	19.66
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	507556	10.0000	10.04
26 1,2,4-Trichlorobenzene	180		11.483	11.482	(0.993)	311390	5.00000	5.012
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	721321	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	936830	5.00000	4.861
29 4-Chloroaniline	127		11.737	11.729	(1.015)	809894	10.0000	10.04
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	135947	5.00000	4.846
31 4-Chloro-3-methylphenol	107		12.697	12.689	(1.098)	620366	10.0000	10.16
32 2-Methylnaphthalene	142		13.014	13.006	(1.125)	667185	5.00000	4.964
33 Hexachlorocyclopentadiene	237		13.486	13.486	(0.887)	323739	10.0000	10.26

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.625	(0.897)	385498	10.0000	10.01
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.901)	411850	10.0000	10.26
§ 36 2-Fluorobiphenyl	172	13.796	13.795	(0.907)	667701	5.00000	4.857
37 2-Chloronaphthalene	162	14.005	14.004	(0.921)	582361	5.00000	4.943
38 2-Nitroaniline	65	14.268	14.260	(0.938)	463530	10.0000	10.19
39 Dimethylphthalate	163	14.701	14.693	(0.967)	620875	5.00000	4.905
40 Acenaphthylene	152	14.887	14.879	(0.979)	969830	5.00000	4.900
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.976)	298459	10.0000	10.21
* 42 Acenaphthene-d10	164	15.204	15.196	(1.000)	379602	4.00000	
43 3-Nitroaniline	138	15.127	15.111	(0.995)	414911	10.0000	10.29
44 Acenaphthene	153	15.266	15.258	(1.004)	564840	5.00000	4.888
45 2,4-Dinitrophenol	184	15.336	15.328	(1.009)	452889	20.0000	19.35
46 Dibenzofuran	168	15.598	15.590	(1.026)	817367	5.00000	4.955
47 4-Nitrophenol	109	15.428	15.420	(1.015)	221255	10.0000	10.36
48 2,4-Dinitrotoluene	165	15.652	15.645	(1.029)	426726	10.0000	10.29
50 Diethylphthalate	149	16.170	16.155	(1.064)	646156	5.00000	4.937
49 Fluorene	166	16.309	16.302	(1.073)	764877	5.00000	4.891
51 4-Chlorophenyl-phenylether	204	16.302	16.294	(1.072)	324194	5.00000	4.830
52 4-Nitroaniline	138	16.394	16.379	(1.078)	369691	10.0000	10.54
53 4,6-Dinitro-2-methylphenol	198	16.495	16.479	(0.904)	495154	20.0000	19.82
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	464508	5.00000	4.863
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	114835	7.50000	7.968
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.948)	160976	5.00000	4.999
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	165212	5.00000	4.863
58 Pentachlorophenol	266	17.977	17.977	(0.985)	238054	10.0000	9.891
* 59 Phenanthrene-d10	188	18.248	18.240	(1.000)	703194	4.00000	
60 Phenanthrene	178	18.294	18.286	(1.003)	978325	5.00000	4.869
61 Anthracene	178	18.387	18.379	(1.008)	972515	5.00000	5.024
62 Carbazole	167	18.712	18.704	(1.025)	844662	5.00000	4.905
63 Di-n-butylphthalate	149	19.517	19.509	(1.070)	1165411	5.00000	5.339
64 Fluoranthene	202	20.677	20.677	(0.887)	1056216	5.00000	5.143
65 Pyrene	202	21.103	21.103	(0.906)	1039483	5.00000	4.936
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	711302	5.00000	4.989
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	490541	5.00000	5.317
68 Benzo(a)anthracene	228	23.271	23.263	(0.999)	917813	5.00000	4.931
* 69 Chrysene-d12	240	23.302	23.294	(1.000)	504769	4.00000	
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	747514	15.0000	13.44
71 Chrysene	228	23.348	23.340	(1.002)	818939	5.00000	4.862
72 bis(2-Ethylhexyl)phthalate	149	23.333	23.332	(0.959)	674302	5.00000	5.235
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	978492	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	1208267	5.00000	4.803
74 Benzo(b)fluoranthene	252	25.167	25.152	(0.970)	921068	5.00000	5.385
75 Benzo(k)fluoranthene	252	25.214	25.198	(0.972)	814106	5.00000	4.801
76 Benzo(a)pyrene	252	25.826	25.818	(0.996)	758694	5.00000	5.187
* 77 Perylene-d12	264	25.942	25.934	(1.000)	484073	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.103)	824181	5.00000	5.177
79 Dibenzo(a,h)anthracene	278	28.642	28.626	(1.104)	681524	5.00000	5.079
80 Benzo(g,h,i)perylene	276	29.418	29.403	(1.134)	663772	5.00000	5.059
90 N-Nitrosodimethylamine	74	4.720	4.720	(1.000)	402003	10.0000	9.606
91 Aniline	93	8.521	8.513	(1.000)	893329	10.0000	9.607
93 Benzidine	184	20.909	20.909	(0.897)	862096	10.0000	10.43
103 Pyridine	79	4.743	4.766	(1.000)	607640	5.00000	4.689
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	603326	5.00000	4.955
111 Azobenzene (1,2-DP-Hydrazine)	77	16.626	16.618	(1.093)	767588	5.00000	4.912

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.214	25.199	(0.972)	1647484	10.0000	10.14 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.047)	186734	5.00000	4.723

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152304.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL5
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	194517	0.00
27 Naphthalene-d8	721321	360661	1442642	721321	0.00
42 Acenaphthene-d10	379602	189801	759204	379602	0.00
59 Phenanthrene-d10	703194	351597	1406388	703194	0.00
69 Chrysene-d12	504769	252385	1009538	504769	0.00
134 Di-n-octylphthala	978492	489246	1956984	978492	0.00
77 Perylene-d12	484073	242037	968146	484073	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152304.D

Lab ID: SLC0160-CAL5
nt14.i, ABN.m, 15-MAR-2023 13:26

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.961	0.948	0.0134	Benzoic acid

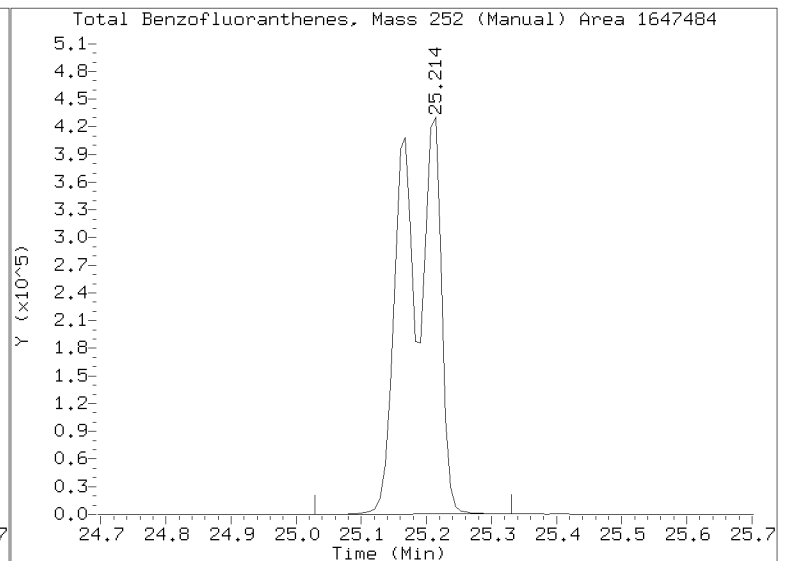
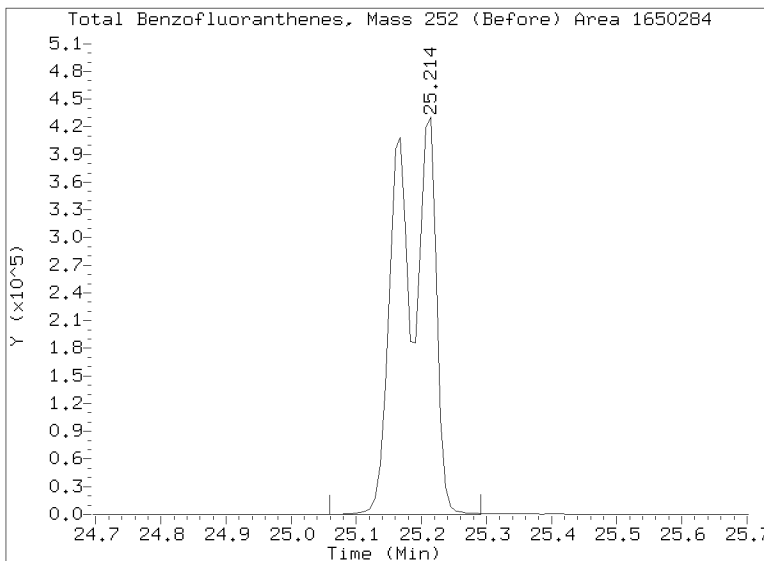
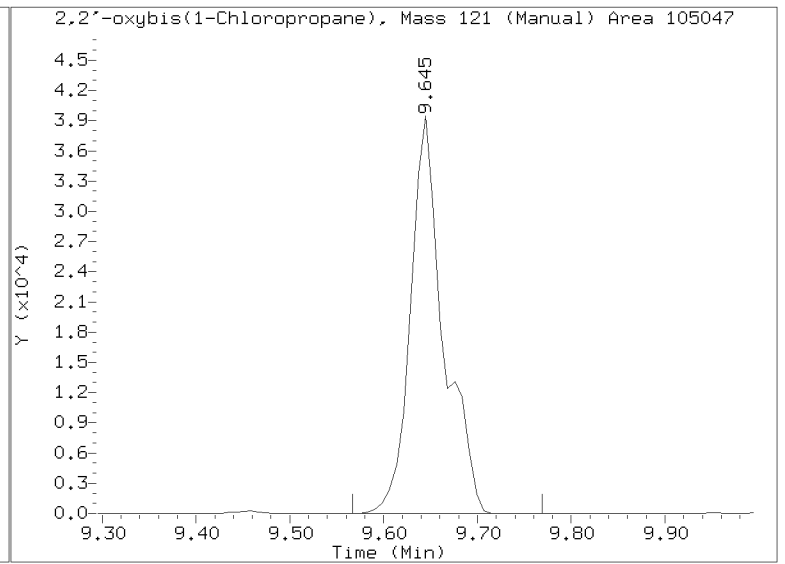
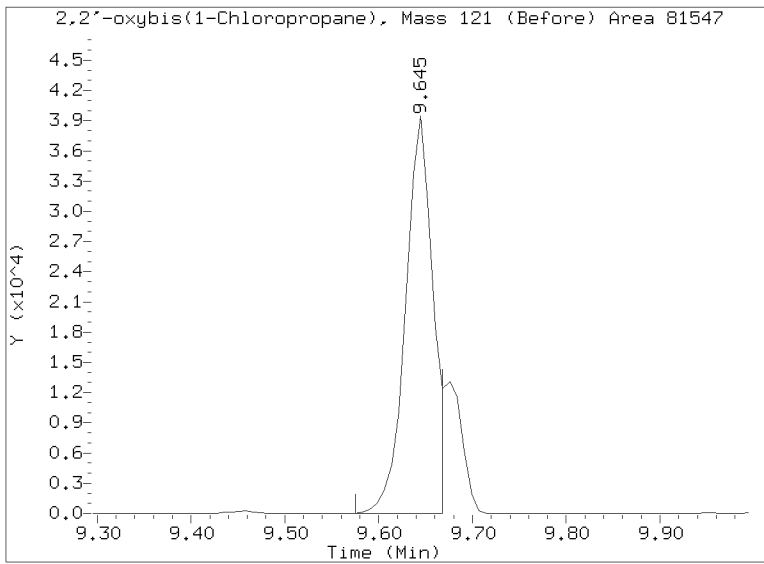
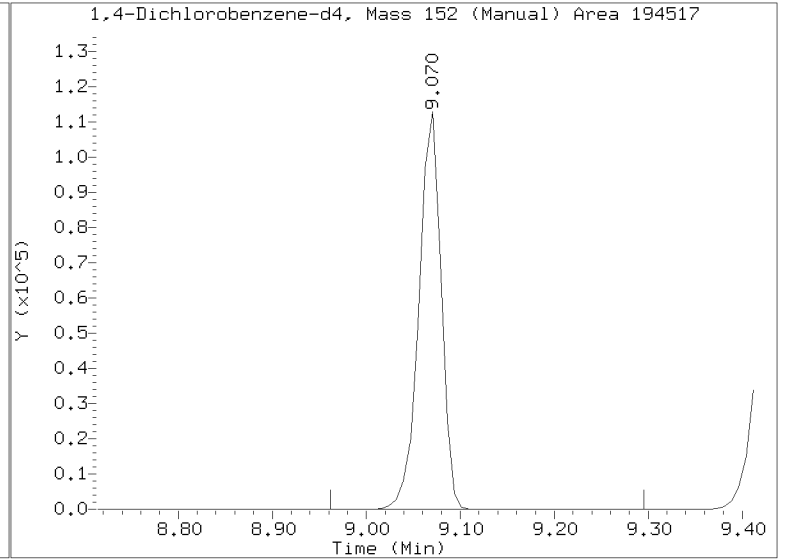
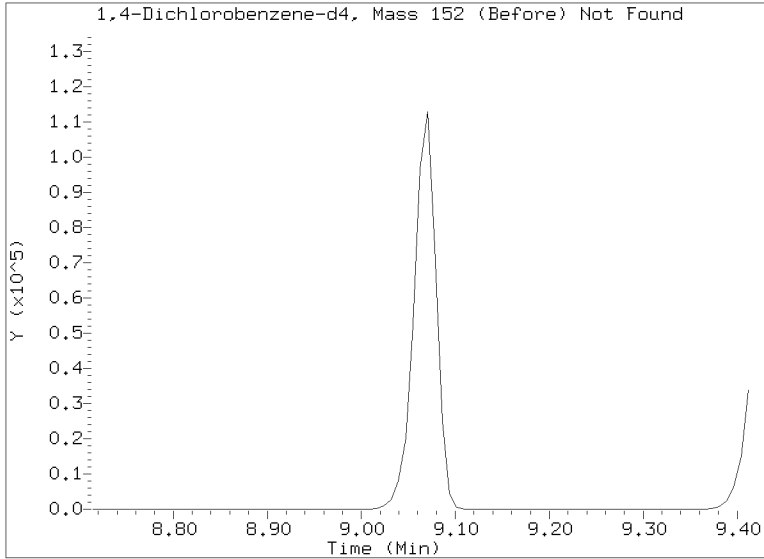
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152304.D
Injection Date: 15-MAR-2023 13:26
Lab ID: SLC0160-CAL5 Client ID:
Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152305.D

Date: 15-MAR-2023 14:02

Client ID:

Sample Info: SLC0160-CAL4

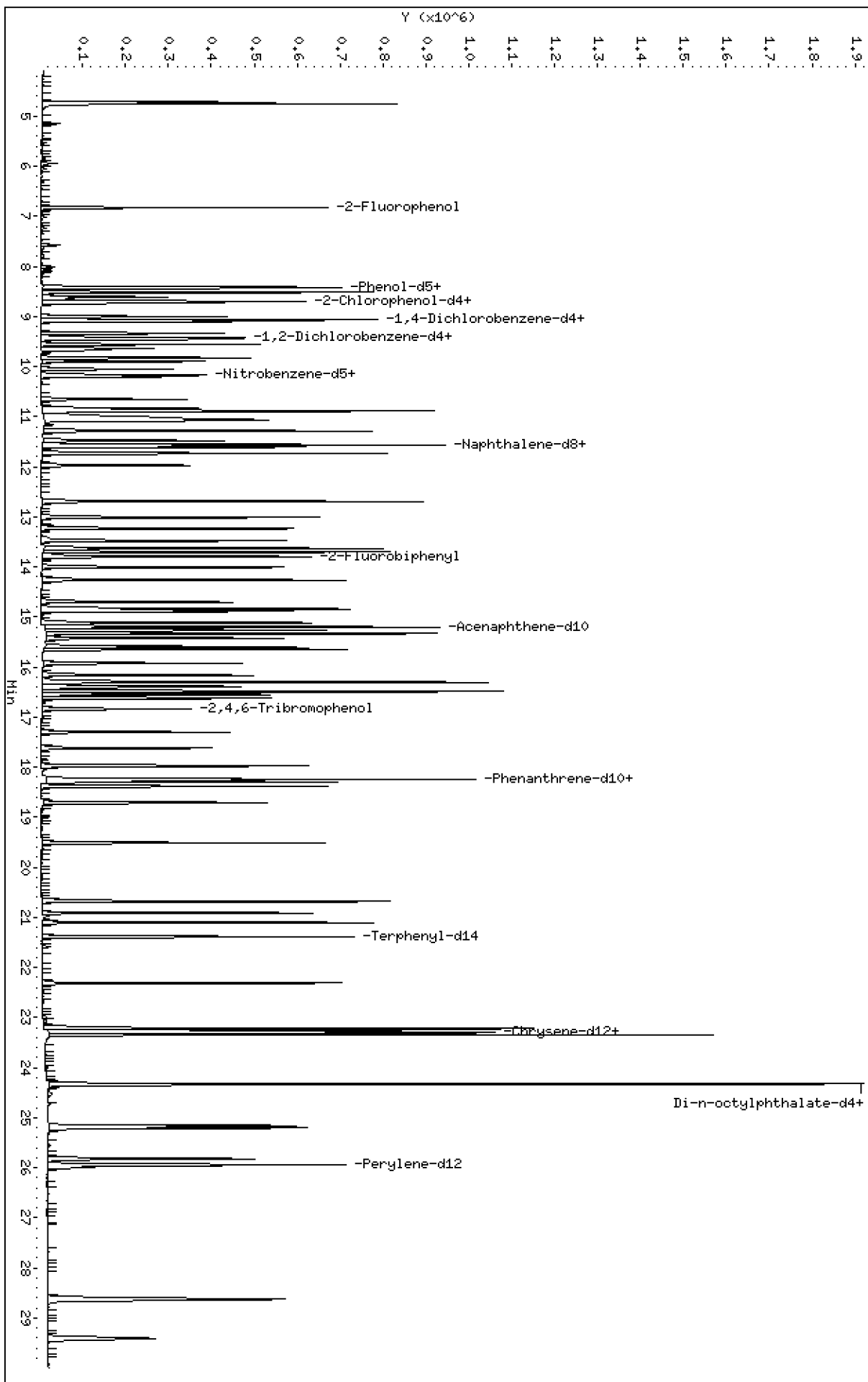
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152305.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152305.D
 Lab Smp Id: SLC0160-CAL4
 Inj Date : 15-MAR-2023 14:02 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL4
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 5 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.821	(1.000)	249691	3.75000	3.828
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	322966	3.75000	3.761
3 Phenol	94		8.436	8.428	(1.000)	232034	2.50000	2.543
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	253373	3.75000	3.743
4 Bis(2-Chloroethyl)ether	93		8.613	8.606	(1.000)	161691	2.50000	2.460
6 2-Chlorophenol	128		8.729	8.721	(1.000)	178971	2.50000	2.492
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	180087	2.50000	2.477
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	192012	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	172592	2.50000	2.464
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	110105	2.50000	2.434
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	170623	2.50000	2.465
11 Benzyl alcohol	108		9.334	9.334	(1.000)	107060	2.50000	2.520
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.063)	52592	2.50000	2.518 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	162715	2.50000	2.522
17 Hexachloroethane	117		10.056	10.056	(1.000)	74828	2.50000	2.498
16 N-Nitroso-di-n-propylamine	70		9.900	9.893	(1.000)	127461	2.50000	2.509
15 4-Methylphenol	108		9.831	9.823	(1.000)	190653	2.50000	2.496
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	194498	2.50000	2.467
19 Nitrobenzene	77		10.203	10.195	(0.882)	190404	2.50000	2.481
20 Isophorone	82		10.653	10.645	(0.921)	268071	2.50000	2.559
21 2-Nitrophenol	139		10.832	10.831	(0.936)	101492	2.50000	2.322
22 2,4-Dimethylphenol	107		10.886	10.878	(0.941)	324588	5.00000	4.946
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	169014	2.50000	2.396
24 Benzoic acid	105		11.064	10.963	(0.956)	495327	10.0000	8.943
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	255974	5.00000	4.904
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	162742	2.50000	2.536
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	744883	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	478207	2.50000	2.403
29 4-Chloroaniline	127		11.737	11.729	(1.015)	404042	5.00000	4.850
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	69695	2.50000	2.406
31 4-Chloro-3-methylphenol	107		12.696	12.689	(1.098)	305071	5.00000	4.837
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	339315	2.50000	2.445
33 Hexachlorocyclopentadiene	237		13.486	13.486	(0.887)	156471	5.00000	4.843

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.625	(0.897)	191620	5.00000	4.859
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	200453	5.00000	4.878
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	340755	2.50000	2.421
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	294183	2.50000	2.438
38 2-Nitroaniline	65	14.260	14.260	(0.938)	230939	5.00000	4.957
39 Dimethylphthalate	163	14.701	14.693	(0.967)	321245	2.50000	2.478
40 Acenaphthylene	152	14.879	14.879	(0.979)	493006	2.50000	2.433
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.977)	147976	5.00000	4.942
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	388723	4.00000	
43 3-Nitroaniline	138	15.119	15.111	(0.995)	192439	5.00000	4.658
44 Acenaphthene	153	15.266	15.258	(1.005)	283439	2.50000	2.395
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	196265	10.0000	8.349
46 Dibenzofuran	168	15.590	15.590	(1.026)	406796	2.50000	2.408
47 4-Nitrophenol	109	15.428	15.420	(1.015)	107904	5.00000	4.935
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	208425	5.00000	4.910
50 Diethylphthalate	149	16.163	16.155	(1.064)	326463	2.50000	2.436
49 Fluorene	166	16.309	16.302	(1.073)	394616	2.50000	2.464
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	166526	2.50000	2.423
52 4-Nitroaniline	138	16.386	16.379	(1.078)	167414	5.00000	4.659
53 4,6-Dinitro-2-methylphenol	198	16.487	16.479	(0.903)	231789	10.0000	9.192
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	235536	2.50000	2.408
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	54391	3.75000	3.685
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.948)	80822	2.50000	2.450
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	84215	2.50000	2.420
58 Pentachlorophenol	266	17.977	17.977	(0.985)	112387	5.00000	4.629
* 59 Phenanthrene-d10	188	18.248	18.240	(1.000)	720279	4.00000	
60 Phenanthrene	178	18.294	18.286	(1.003)	488331	2.50000	2.373
61 Anthracene	178	18.387	18.379	(1.008)	488011	2.50000	2.461
62 Carbazole	167	18.712	18.704	(1.025)	398259	2.50000	2.258
63 Di-n-butylphthalate	149	19.509	19.509	(1.069)	561520	2.50000	2.511
64 Fluoranthene	202	20.677	20.677	(0.888)	517191	2.50000	2.482
65 Pyrene	202	21.103	21.103	(0.906)	521655	2.50000	2.441
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	362174	2.50000	2.504
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	244522	2.50000	2.612
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	459301	2.50000	2.432
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	512149	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	340486	7.50000	6.179
71 Chrysene	228	23.340	23.340	(1.002)	411830	2.50000	2.410
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.960)	323014	2.50000	2.575
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	952832	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	594609	2.50000	2.428
74 Benzo(b)fluoranthene	252	25.159	25.152	(0.970)	424941	2.50000	2.429
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	424751	2.50000	2.449
76 Benzo(a)pyrene	252	25.818	25.818	(0.995)	366882	2.50000	2.453
* 77 Perylene-d12	264	25.942	25.934	(1.000)	495048	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.618	28.610	(1.103)	401183	2.50000	2.464
79 Dibenzo(a,h)anthracene	278	28.626	28.626	(1.103)	336425	2.50000	2.452
80 Benzo(g,h,i)perylene	276	29.403	29.403	(1.133)	324277	2.50000	2.417
90 N-Nitrosodimethylamine	74	4.720	4.720	(1.000)	208407	5.00000	5.045
91 Aniline	93	8.521	8.513	(1.000)	460561	5.00000	5.018
93 Benzidine	184	20.909	20.909	(0.898)	386898	5.00000	4.614
103 Pyridine	79	4.743	4.766	(1.000)	326564	2.50000	2.553
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	304871	2.50000	2.425
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	396971	2.50000	2.481

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.206	25.199	(0.972)	809848	5.00000	4.874 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	89351	2.50000	2.241

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152305.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL4
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	192012	-1.29
27 Naphthalene-d8	721321	360661	1442642	744883	3.27
42 Acenaphthene-d10	379602	189801	759204	388723	2.40
59 Phenanthrene-d10	703194	351597	1406388	720279	2.43
69 Chrysene-d12	504769	252385	1009538	512149	1.46
134 Di-n-octylphthala	978492	489246	1956984	952832	-2.62
77 Perylene-d12	484073	242037	968146	495048	2.27

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.30	22.80	23.80	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152305.D

Lab ID: SLC0160-CAL4
nt14.i, ABN.m, 15-MAR-2023 14:02

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.956	0.948	0.0087	Benzoic acid

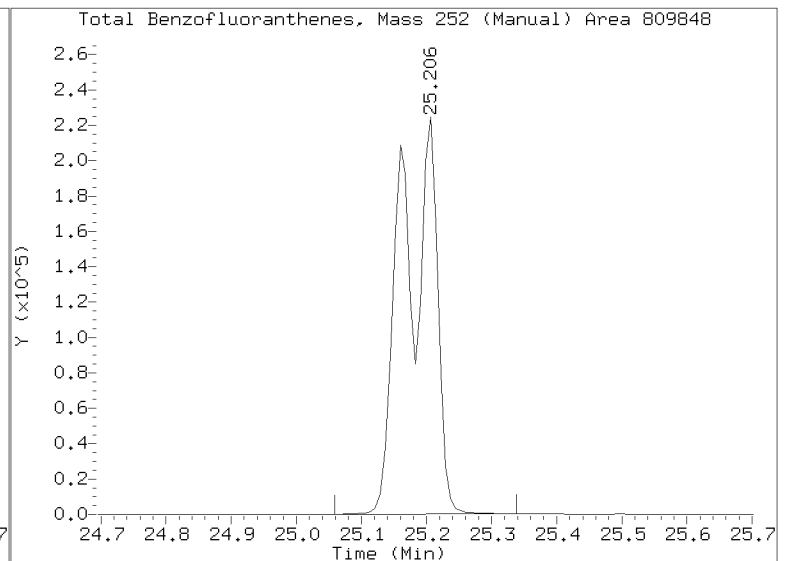
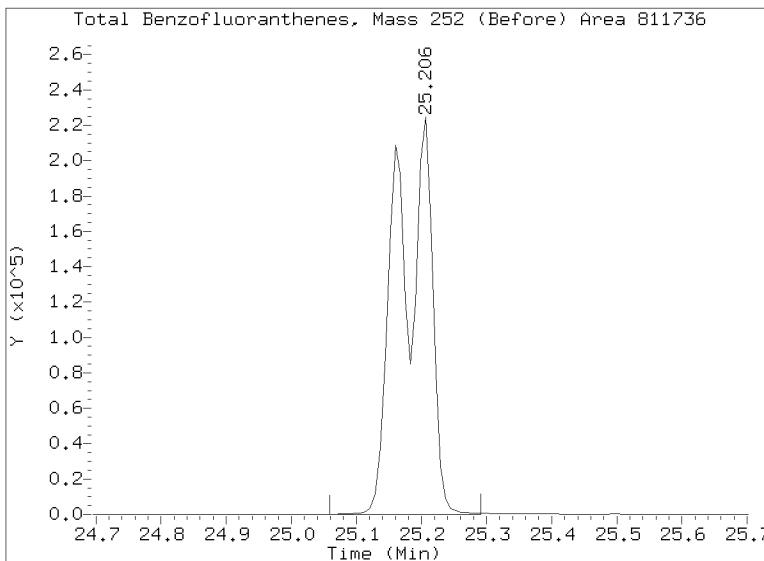
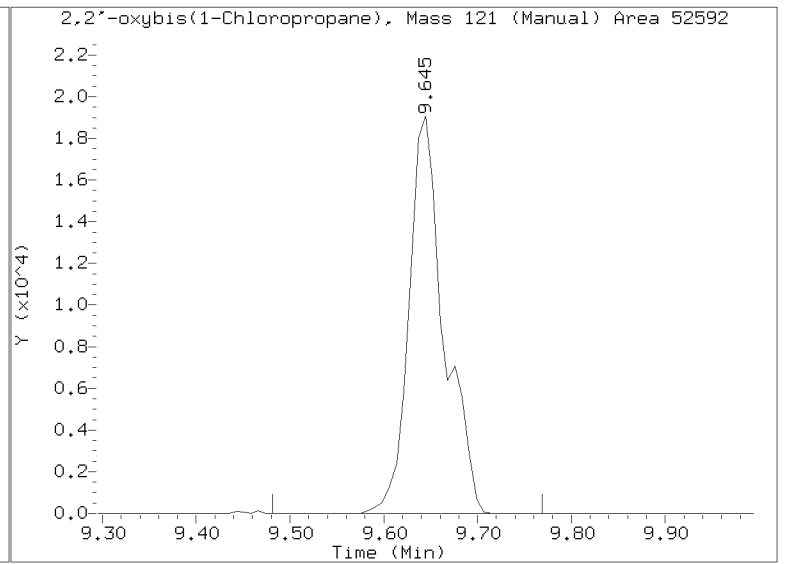
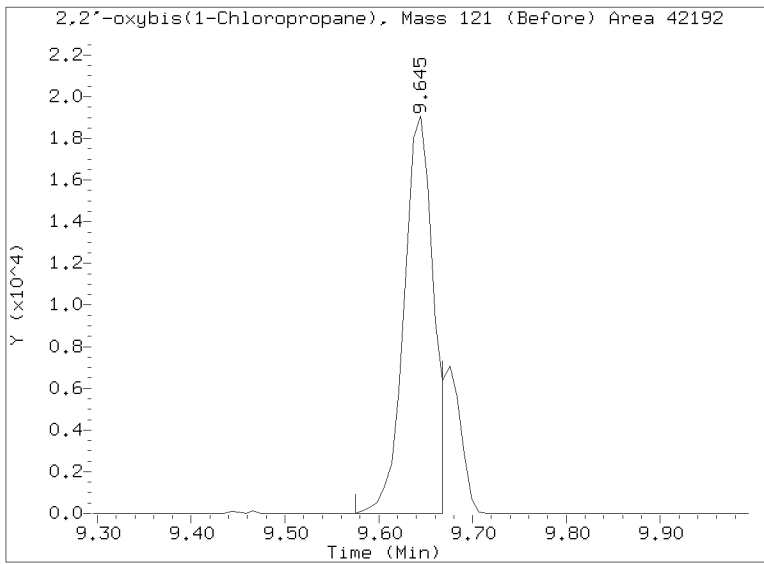
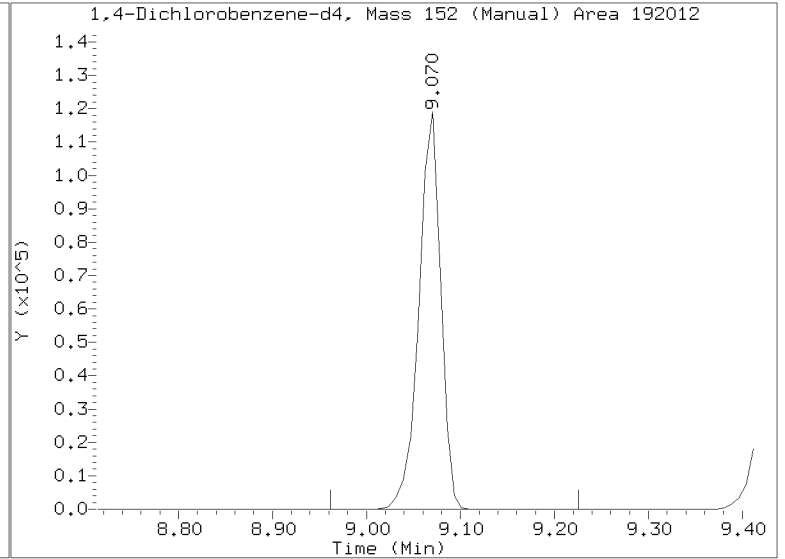
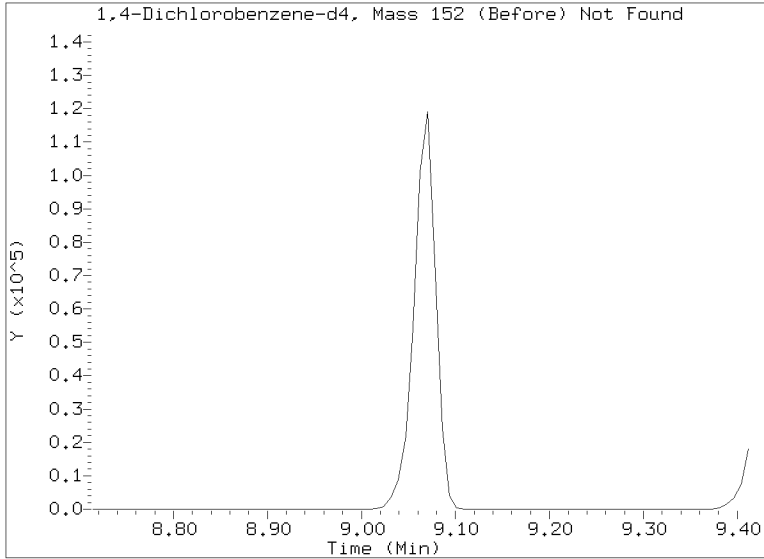
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152305.D
Injection Date: 15-MAR-2023 14:02
Lab ID: SLC0160-CAL4 Client ID:
Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152306.D

Date: 15-MAR-2023 14:38

Client ID:

Sample Info: SLC0160-CAL3

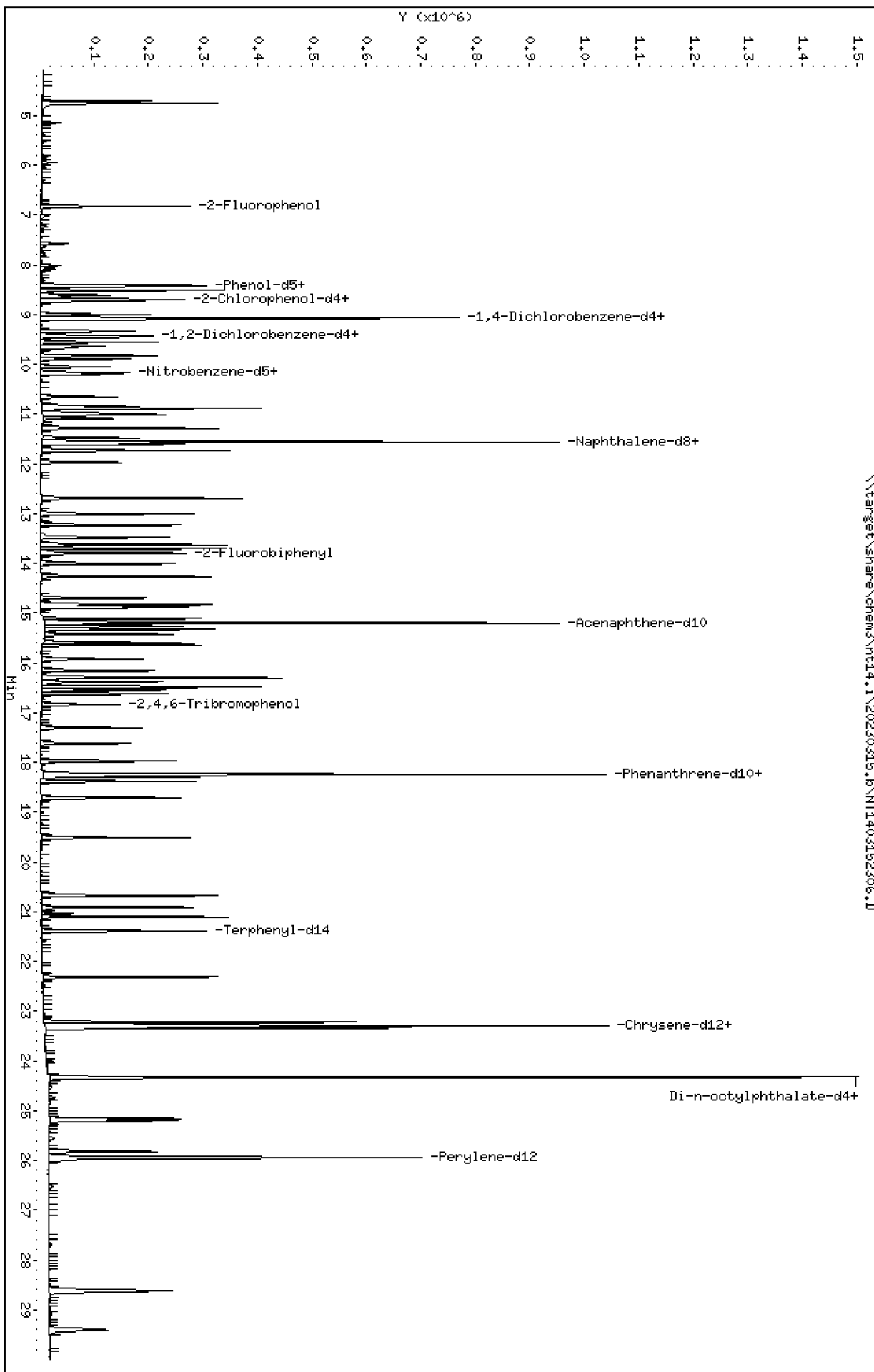
Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14,1\20230315,6\NT1403152306.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152306.D
 Lab Smp Id: SLC0160-CAL3
 Inj Date : 15-MAR-2023 14:38 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL3
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 6 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.828	6.821	(1.000)	105834	1.50000	1.531
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	136234	1.50000	1.497
3 Phenol	94		8.435	8.428	(1.000)	98055	1.00000	1.014
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	107621	1.50000	1.500
4 Bis(2-Chloroethyl)ether	93		8.605	8.606	(1.000)	71902	1.00000	1.032
6 2-Chlorophenol	128		8.729	8.721	(1.000)	76166	1.00000	1.000
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	77362	1.00000	1.004
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	203547	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	74115	1.00000	0.9983
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	48511	1.00000	1.012
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	72309	1.00000	0.9854
11 Benzyl alcohol	108		9.333	9.334	(1.000)	44413	1.00000	0.9861
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	21606	1.00000	0.9758
13 2-Methylphenol	108		9.559	9.559	(1.000)	67251	1.00000	0.9832
17 Hexachloroethane	117		10.055	10.056	(1.000)	30824	1.00000	0.9708
16 N-Nitroso-di-n-propylamine	70		9.900	9.893	(1.000)	53664	1.00000	0.9965
15 4-Methylphenol	108		9.823	9.823	(1.000)	80570	1.00000	0.9949
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	81089	1.00000	1.017
19 Nitrobenzene	77		10.195	10.195	(0.881)	79365	1.00000	1.022
20 Isophorone	82		10.653	10.645	(0.921)	102481	1.00000	0.9667
21 2-Nitrophenol	139		10.831	10.831	(0.936)	40809	1.00000	0.9279
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	139141	2.00000	2.095
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	72714	1.00000	1.019
24 Benzoic acid	105		11.017	10.963	(0.952)	175674	4.00000	3.162
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	108438	2.00000	2.053
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	69336	1.00000	1.068
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	753702	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	202238	1.00000	1.004
29 4-Chloroaniline	127		11.729	11.729	(1.014)	167492	2.00000	1.987
30 Hexachlorobutadiene	225		11.976	11.977	(1.035)	29932	1.00000	1.021
31 4-Chloro-3-methylphenol	107		12.688	12.689	(1.097)	126435	2.00000	1.981
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	140918	1.00000	1.004
33 Hexachlorocyclopentadiene	237		13.478	13.486	(0.887)	61563	2.00000	1.903

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.625	13.625	(0.897)	78140	2.00000	1.979
35 2,4,5-Trichlorophenol	196	13.702	13.702	(0.902)	81884	2.00000	1.990
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	143492	1.00000	1.018
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	123416	1.00000	1.022
38 2-Nitroaniline	65	14.259	14.260	(0.938)	92798	2.00000	1.989
39 Dimethylphthalate	163	14.693	14.693	(0.967)	136365	1.00000	1.051
40 Acenaphthylene	152	14.879	14.879	(0.979)	210659	1.00000	1.038
41 2,6-Dinitrotoluene	165	14.832	14.833	(0.976)	59959	2.00000	2.000
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	389189	4.00000	
43 3-Nitroaniline	138	15.111	15.111	(0.994)	81750	2.00000	1.977
44 Acenaphthene	153	15.266	15.258	(1.005)	119811	1.00000	1.011
45 2,4-Dinitrophenol	184	15.327	15.328	(1.009)	63106	4.00000	2.707
46 Dibenzofuran	168	15.590	15.590	(1.026)	172500	1.00000	1.020
47 4-Nitrophenol	109	15.420	15.420	(1.015)	42627	2.00000	1.947
48 2,4-Dinitrotoluene	165	15.644	15.645	(1.030)	83839	2.00000	1.973
50 Diethylphthalate	149	16.155	16.155	(1.063)	135980	1.00000	1.013
49 Fluorene	166	16.301	16.302	(1.073)	161941	1.00000	1.010
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	70229	1.00000	1.021
52 4-Nitroaniline	138	16.378	16.379	(1.078)	69893	2.00000	1.943
53 4,6-Dinitro-2-methylphenol	198	16.479	16.479	(0.903)	85861	4.00000	3.441
54 N-Nitrosodiphenylamine	169	16.540	16.541	(0.907)	102677	1.00000	1.053
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	21863	1.50000	1.480
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	32684	1.00000	0.9938
57 Hexachlorobenzene	284	17.620	17.621	(0.966)	34992	1.00000	1.008
58 Pentachlorophenol	266	17.969	17.977	(0.985)	41232	2.00000	1.717
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	718213	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	209701	1.00000	1.022
61 Anthracene	178	18.379	18.379	(1.008)	202066	1.00000	1.022
62 Carbazole	167	18.704	18.704	(1.025)	181219	1.00000	1.030
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	225943	1.00000	1.013
64 Fluoranthene	202	20.677	20.677	(0.888)	212133	1.00000	1.009
65 Pyrene	202	21.102	21.103	(0.906)	217807	1.00000	1.010
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	151517	1.00000	1.038
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	99411	1.00000	1.052
68 Benzo(a)anthracene	228	23.262	23.263	(0.999)	194221	1.00000	1.019
* 69 Chrysene-d12	240	23.293	23.294	(1.000)	516735	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	164543	3.00000	2.989
71 Chrysene	228	23.340	23.340	(1.002)	172495	1.00000	1.000
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.959)	126817	1.00000	1.032
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	933762	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	248159	1.00000	1.034
74 Benzo(b)fluoranthene	252	25.159	25.152	(0.970)	176684	1.00000	1.014
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	168393	1.00000	0.9745
76 Benzo(a)pyrene	252	25.817	25.818	(0.995)	146960	1.00000	0.9859
* 77 Perylene-d12	264	25.941	25.934	(1.000)	493304	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.610	28.610	(1.103)	163451	1.00000	1.007
79 Dibenzo(a,h)anthracene	278	28.626	28.626	(1.103)	136554	1.00000	0.9987
80 Benzo(g,h,i)perylene	276	29.402	29.403	(1.133)	130759	1.00000	0.9779
90 N-Nitrosodimethylamine	74	4.712	4.720	(1.000)	90659	2.00000	2.070
91 Aniline	93	8.513	8.513	(1.000)	193904	2.00000	1.993
93 Benzidine	184	20.909	20.909	(0.898)	175303	2.00000	2.072
103 Pyridine	79	4.751	4.766	(1.000)	143408	1.00000	1.057
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	128445	1.00000	1.010
111 Azobenzene (1,2-DP-Hydrazine)	77	16.617	16.618	(1.094)	167507	1.00000	1.045

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.159	25.199	(0.970)	328361	2.00000	1.983 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	35870	1.00000	0.9055

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152306.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL3
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	203547	4.64
27 Naphthalene-d8	721321	360661	1442642	753702	4.49
42 Acenaphthene-d10	379602	189801	759204	389189	2.53
59 Phenanthrene-d10	703194	351597	1406388	718213	2.14
69 Chrysene-d12	504769	252385	1009538	516735	2.37
134 Di-n-octylphthala	978492	489246	1956984	933762	-4.57
77 Perylene-d12	484073	242037	968146	493304	1.91

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152306.D

Lab ID: SLC0160-CAL3
nt14.i, ABN.m, 15-MAR-2023 14:38

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)

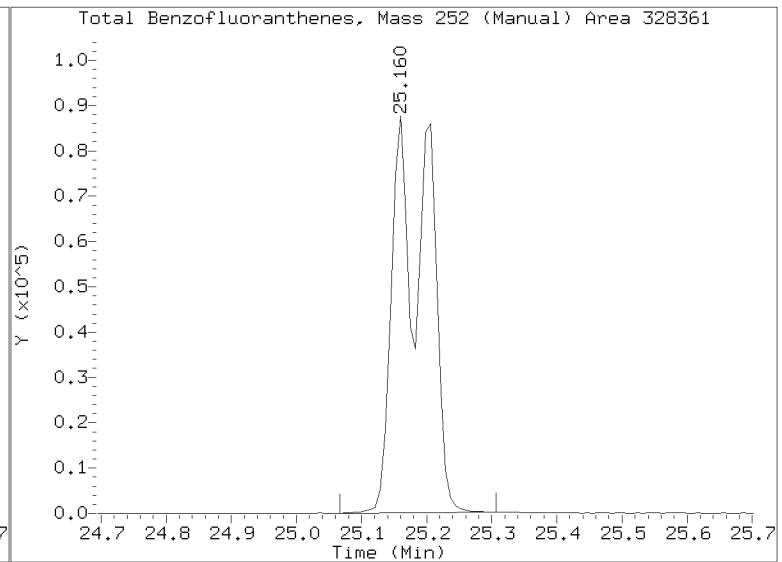
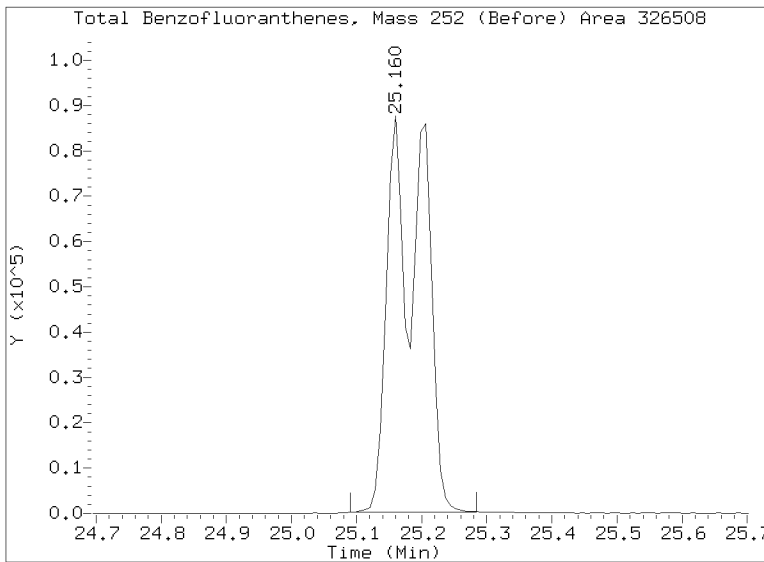
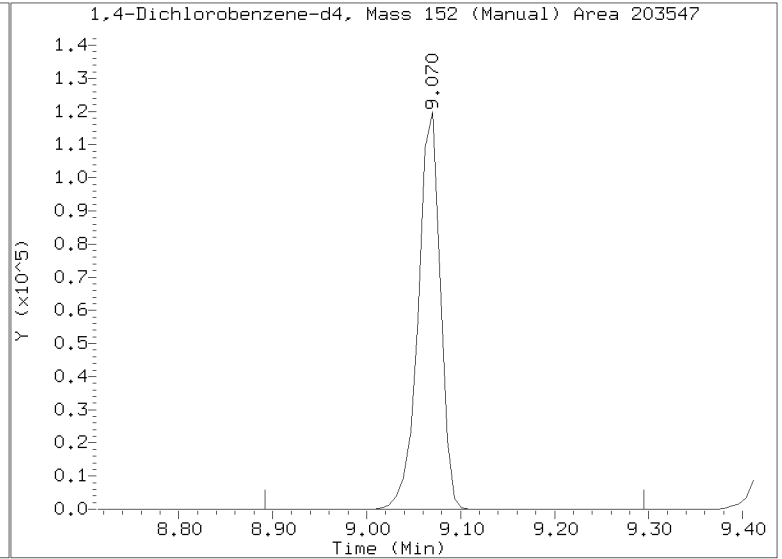
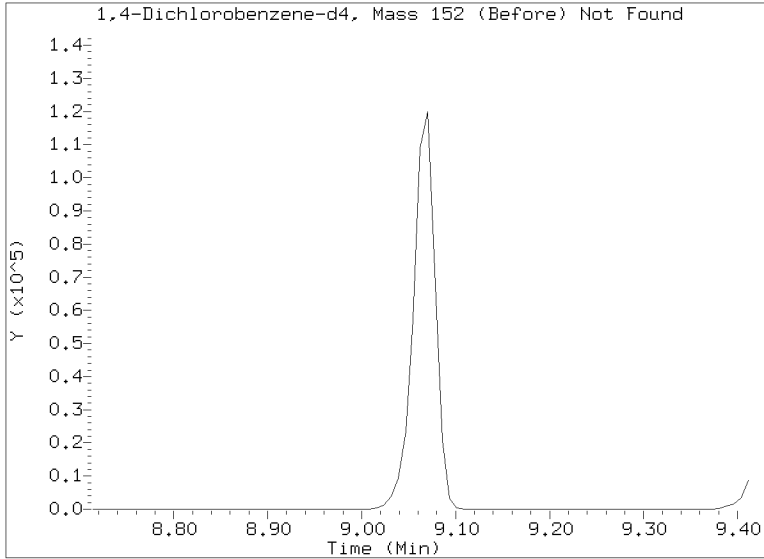
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

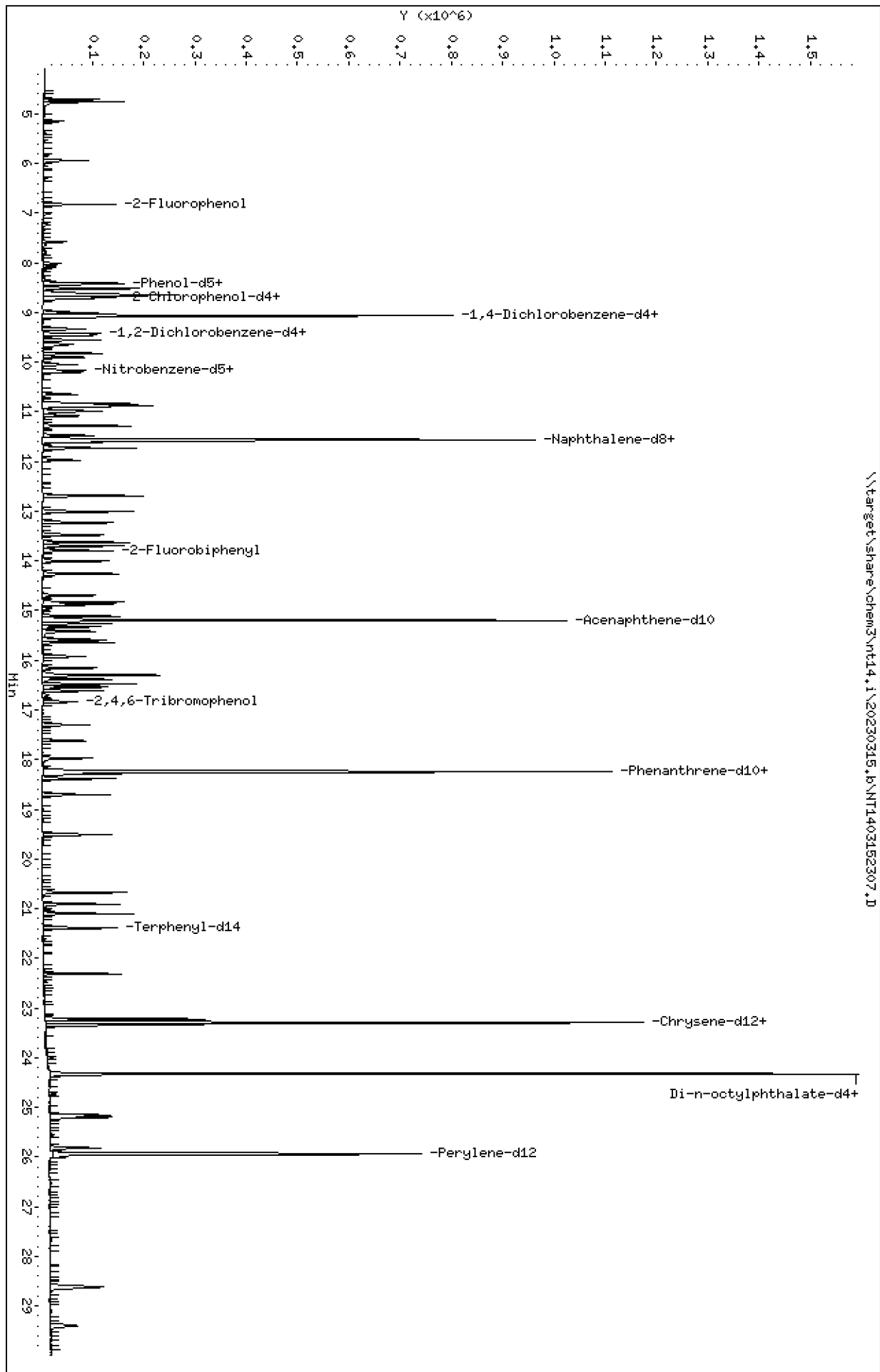
Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152306.D
Injection Date: 15-MAR-2023 14:38
Lab ID: SLC0160-CAL3 Client ID:
Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152307.D
Date: 15-MAR-2023 15:14
Client ID:
Sample Info: SLC0160-CAL2
Column phase: ZB-5msi

Instrument: nt14,1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152307.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152307.D
 Lab Smp Id: SLC0160-CAL2
 Inj Date : 15-MAR-2023 15:14 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 7 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.821	(1.000)	55696	0.75000	0.7629
\$ 2 Phenol-d5	99		8.413	8.412	(1.000)	71012	0.75000	0.7388
3 Phenol	94		8.436	8.428	(1.000)	51155	0.50000	0.5008
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	57111	0.75000	0.7537
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	37884	0.50000	0.5150
6 2-Chlorophenol	128		8.722	8.721	(1.000)	39129	0.50000	0.4867
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	41299	0.50000	0.5075
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	214919	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	39766	0.50000	0.5073
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	25516	0.50000	0.5040
12 1,2-Dichlorobenzene	146		9.450	9.458	(1.000)	38458	0.50000	0.4964
11 Benzyl alcohol	108		9.334	9.334	(1.000)	22864	0.50000	0.4808
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	11515	0.50000	0.4925
13 2-Methylphenol	108		9.559	9.559	(1.000)	35527	0.50000	0.4919
17 Hexachloroethane	117		10.056	10.056	(1.000)	16545	0.50000	0.4935
16 N-Nitroso-di-n-propylamine	70		9.901	9.893	(1.000)	28142	0.50000	0.4949
15 4-Methylphenol	108		9.823	9.823	(1.000)	42147	0.50000	0.4929
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	41564	0.50000	0.4793
19 Nitrobenzene	77		10.195	10.195	(0.881)	41159	0.50000	0.4876
20 Isophorone	82		10.646	10.645	(0.920)	51244	0.50000	0.4446
21 2-Nitrophenol	139		10.832	10.831	(0.936)	17769	0.50000	0.3725
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	72599	1.00000	1.006
23 Bis(2-Chloroethoxy)methane	93		11.080	11.080	(0.958)	38720	0.50000	0.4991
24 Benzoic acid	105		10.987	10.963	(0.950)	65039	2.00000	1.080 (M)
25 2,4-Dichlorophenol	162		11.281	11.281	(0.975)	55131	1.00000	0.9603
26 1,2,4-Trichlorobenzene	180		11.475	11.482	(0.992)	32654	0.50000	0.4627
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	819372	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	108118	0.50000	0.4939
29 4-Chloroaniline	127		11.730	11.729	(1.014)	86140	1.00000	0.9400
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	15330	0.50000	0.4811
31 4-Chloro-3-methylphenol	107		12.689	12.689	(1.097)	62540	1.00000	0.9014
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	73033	0.50000	0.4784
33 Hexachlorocyclopentadiene	237		13.478	13.486	(0.887)	30047	1.00000	0.8635

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.625	13.625	(0.897)	38368	1.00000	0.9035
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	39077	1.00000	0.8830
§ 36 2-Fluorobiphenyl	172	13.796	13.795	(0.908)	76254	0.50000	0.5030
37 2-Chloronaphthalene	162	14.005	14.004	(0.922)	64035	0.50000	0.4928
38 2-Nitroaniline	65	14.260	14.260	(0.938)	46074	1.00000	0.9183
39 Dimethylphthalate	163	14.693	14.693	(0.967)	70891	0.50000	0.5078
40 Acenaphthylene	152	14.879	14.879	(0.979)	109281	0.50000	0.5007
41 2,6-Dinitrotoluene	165	14.833	14.833	(0.976)	29385	1.00000	0.9112
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	418625	4.00000	
43 3-Nitroaniline	138	15.111	15.111	(0.994)	40744	1.00000	0.9158
44 Acenaphthene	153	15.266	15.258	(1.005)	61865	0.50000	0.4855
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	22714	2.00000	0.9086
46 Dibenzofuran	168	15.591	15.590	(1.026)	87405	0.50000	0.4805
47 4-Nitrophenol	109	15.421	15.420	(1.015)	18857	1.00000	0.8008
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	40198	1.00000	0.8794
50 Diethylphthalate	149	16.155	16.155	(1.063)	70431	0.50000	0.4880
49 Fluorene	166	16.302	16.302	(1.073)	86396	0.50000	0.5010
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	37327	0.50000	0.5043
52 4-Nitroaniline	138	16.379	16.379	(1.078)	33982	1.00000	0.8782
53 4,6-Dinitro-2-methylphenol	198	16.479	16.479	(0.903)	37731	2.00000	1.406
54 N-Nitrosodiphenylamine	169	16.541	16.541	(0.907)	52457	0.50000	0.4988
§ 55 2,4,6-Tribromophenol	330	16.834	16.841	(1.108)	10101	0.75000	0.6355
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	16746	0.50000	0.4723
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	18456	0.50000	0.4933
58 Pentachlorophenol	266	17.977	17.977	(0.986)	18385	1.00000	0.7121
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	774369	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	108106	0.50000	0.4886
61 Anthracene	178	18.379	18.379	(1.008)	102021	0.50000	0.4786
62 Carbazole	167	18.704	18.704	(1.025)	93441	0.50000	0.4927
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	108738	0.50000	0.4523
64 Fluoranthene	202	20.677	20.677	(0.888)	107765	0.50000	0.4779
65 Pyrene	202	21.103	21.103	(0.906)	112788	0.50000	0.4878
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	77850	0.50000	0.4973
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	45508	0.50000	0.4492
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	99180	0.50000	0.4853
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	554225	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	89955	1.50000	1.530
71 Chrysene	228	23.340	23.340	(1.002)	91155	0.50000	0.4929
72 bis(2-Ethylhexyl)phthalate	149	23.333	23.332	(0.959)	58625	0.50000	0.4507
* 134 Di-n-octylphthalate-d4	153	24.324	24.323	(1.000)	988092	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	128178	0.50000	0.5046
74 Benzo(b)fluoranthene	252	25.160	25.152	(0.970)	80996	0.50000	0.4330
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	91398	0.50000	0.4929
76 Benzo(a)pyrene	252	25.818	25.818	(0.996)	72701	0.50000	0.4545
* 77 Perylene-d12	264	25.934	25.934	(1.000)	529322	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.611	28.610	(1.103)	79344	0.50000	0.4558
79 Dibenzo(a,h)anthracene	278	28.618	28.626	(1.104)	67047	0.50000	0.4570
80 Benzo(g,h,i)perylene	276	29.395	29.403	(1.133)	66990	0.50000	0.4669
90 N-Nitrosodimethylamine	74	4.713	4.720	(1.000)	46812	1.00000	1.012
91 Aniline	93	8.513	8.513	(1.000)	103961	1.00000	1.012
93 Benzidine	184	20.909	20.909	(0.898)	98620	1.00000	1.087
103 Pyridine	79	4.751	4.766	(1.000)	75424	0.50000	0.5267
105 1-methylnaphthalene	142	13.231	13.230	(1.144)	67413	0.50000	0.4874
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	86135	0.50000	0.4998

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.198	25.199	(0.972)	165075	1.00000	0.9293 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	16437	0.50000	0.3869

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152307.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	214919	10.49
27 Naphthalene-d8	721321	360661	1442642	819372	13.59
42 Acenaphthene-d10	379602	189801	759204	418625	10.28
59 Phenanthrene-d10	703194	351597	1406388	774369	10.12
69 Chrysene-d12	504769	252385	1009538	554225	9.80
134 Di-n-octylphthala	978492	489246	1956984	988092	0.98
77 Perylene-d12	484073	242037	968146	529322	9.35

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.94	25.44	26.44	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403152307.D

Lab ID: SLC0160-CAL2
nt14.i, ABN.m, 15-MAR-2023 15:14

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)

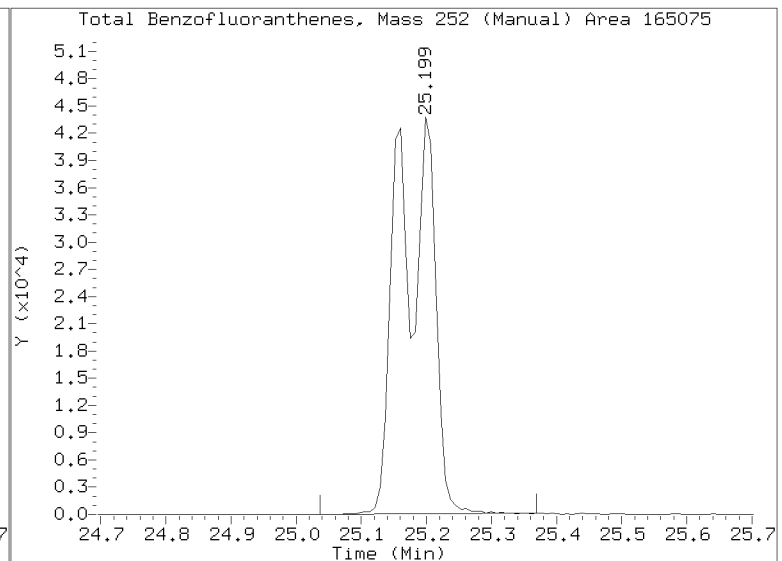
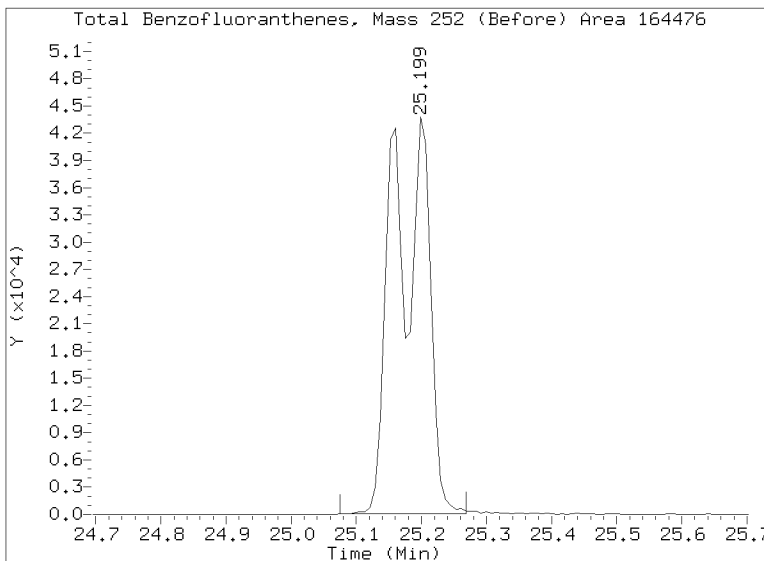
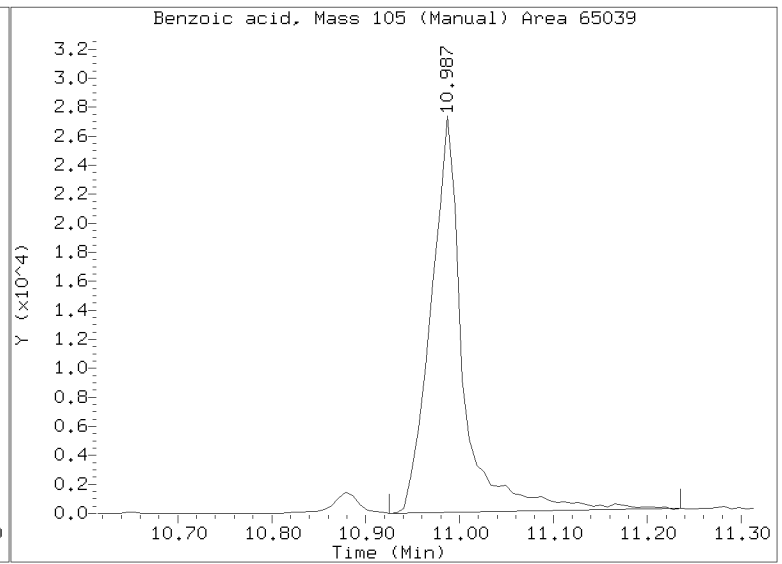
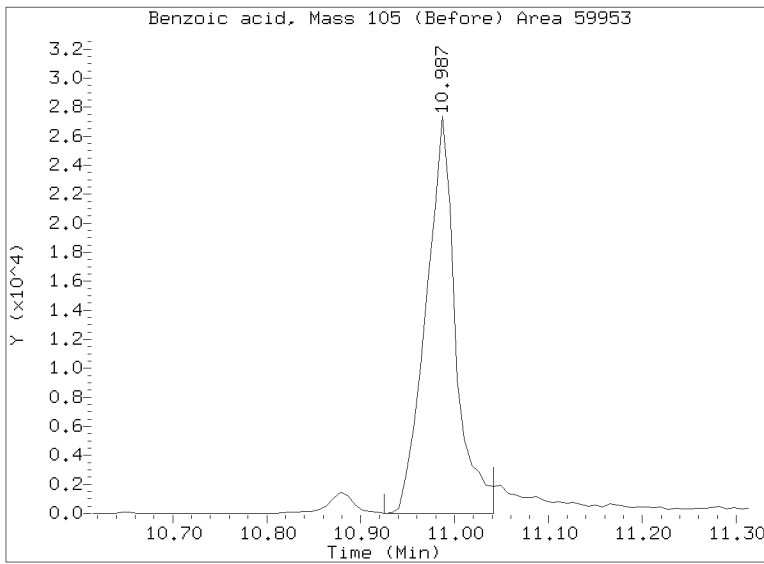
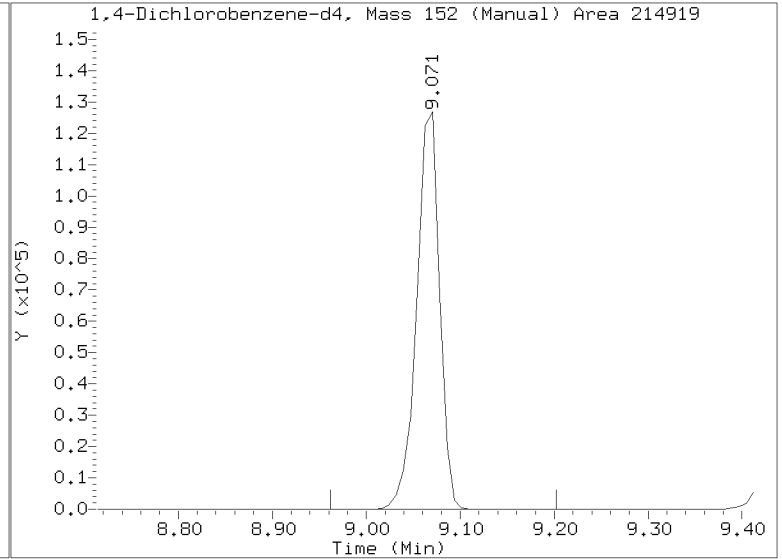
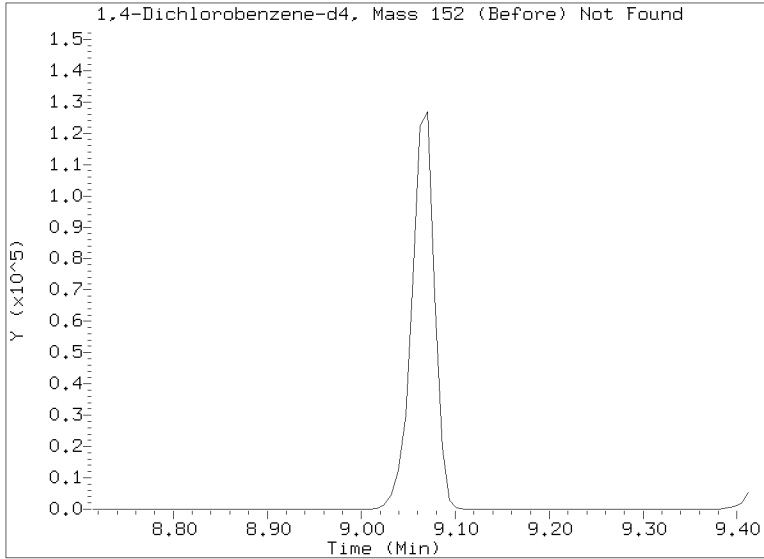
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

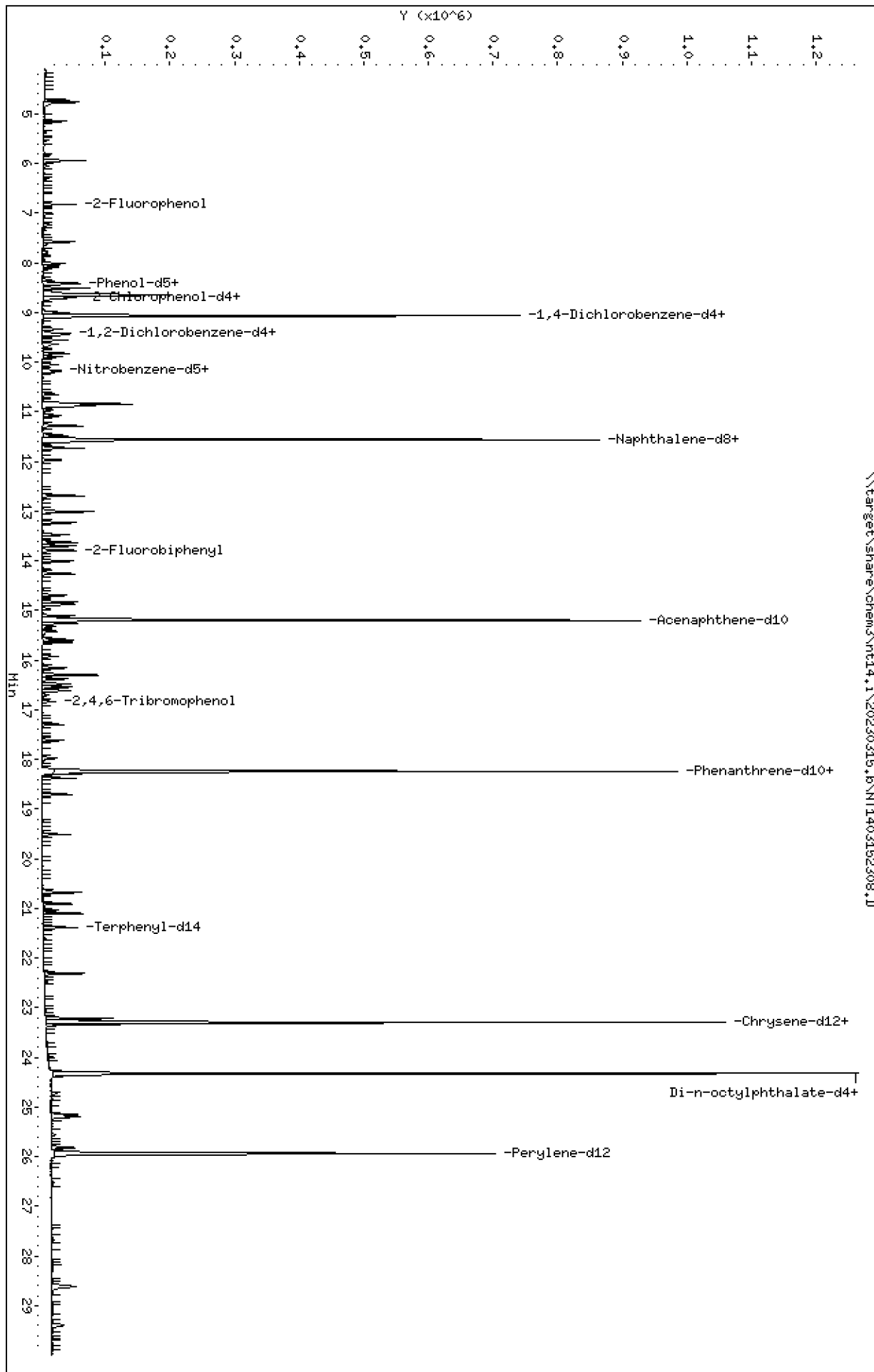
Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152307.D
Injection Date: 15-MAR-2023 15:14
Lab ID: SLC0160-CAL2 Client ID:
Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152308.D
Date: 15-MAR-2023 15:50
Client ID:
Sample Info: SLC0160-CALL
Column phase: ZB-5msi

Instrument: nt14,1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152308.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152308.D
 Lab Smp Id: SLC0160-CAL1
 Inj Date : 15-MAR-2023 15:50 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-CAL1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 8 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.821	6.821	(1.000)	20140	0.30000	0.2916
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	26010	0.30000	0.2861
3 Phenol	94		8.428	8.428	(1.000)	19202	0.20000	0.1987
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	20793	0.30000	0.2901
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	14437	0.20000	0.2075
6 2-Chlorophenol	128		8.721	8.721	(1.000)	15093	0.20000	0.1984
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	16423	0.20000	0.2133
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	203313	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	15842	0.20000	0.2136
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	10049	0.20000	0.2098
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	16057	0.20000	0.2191
11 Benzyl alcohol	108		9.334	9.334	(1.000)	7789	0.20000	0.1731
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.064)	4693	0.20000	0.2122 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	13118	0.20000	0.1920
17 Hexachloroethane	117		10.056	10.056	(1.000)	6265	0.20000	0.1975
16 N-Nitroso-di-n-propylamine	70		9.893	9.893	(1.000)	10469	0.20000	0.1946
15 4-Methylphenol	108		9.823	9.823	(1.000)	14379	0.20000	0.1778
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	15172	0.20000	0.1927
19 Nitrobenzene	77		10.195	10.195	(0.881)	15078	0.20000	0.1967
20 Isophorone	82		10.645	10.645	(0.920)	18686	0.20000	0.1786
21 2-Nitrophenol	139		10.831	10.831	(0.936)	6127	0.20000	0.1416
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	27667	0.40000	0.4221
23 Bis(2-Chloroethoxy)methane	93		11.080	11.080	(0.958)	14959	0.20000	0.2123
24 Benzoic acid	105		10.963	10.963	(0.948)	12742	0.80000	0.2334 (M)
25 2,4-Dichlorophenol	162		11.281	11.281	(0.975)	19906	0.40000	0.3818
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	12432	0.20000	0.1940
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	744014	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	41475	0.20000	0.2087
29 4-Chloroaniline	127		11.729	11.729	(1.014)	31645	0.40000	0.3803
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	6280	0.20000	0.2170
31 4-Chloro-3-methylphenol	107		12.689	12.689	(1.097)	21661	0.40000	0.3438
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	28157	0.20000	0.2031
33 Hexachlorocyclopentadiene	237		13.486	13.486	(0.887)	10435	0.40000	0.3306

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.625	13.625	(0.897)	12312	0.40000	0.3196
35 2,4,5-Trichlorophenol	196	13.702	13.702	(0.902)	14119	0.40000	0.3517
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	28687	0.20000	0.2086
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	24112	0.20000	0.2045
38 2-Nitroaniline	65	14.260	14.260	(0.938)	14085	0.40000	0.3094
39 Dimethylphthalate	163	14.693	14.693	(0.967)	25833	0.20000	0.2040
40 Acenaphthylene	152	14.879	14.879	(0.979)	39933	0.20000	0.2017
41 2,6-Dinitrotoluene	165	14.833	14.833	(0.976)	9438	0.40000	0.3226
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	379787	4.00000	
43 3-Nitroaniline	138	15.111	15.111	(0.994)	13233	0.40000	0.3279
44 Acenaphthene	153	15.258	15.258	(1.004)	23872	0.20000	0.2065
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	3869	0.80000	0.1708
46 Dibenzofuran	168	15.590	15.590	(1.026)	33683	0.20000	0.2041
47 4-Nitrophenol	109	15.420	15.420	(1.015)	4406	0.40000	0.2062
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	12886	0.40000	0.3107
50 Diethylphthalate	149	16.155	16.155	(1.063)	24504	0.20000	0.1871
49 Fluorene	166	16.302	16.302	(1.073)	31627	0.20000	0.2022
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	14137	0.20000	0.2105
52 4-Nitroaniline	138	16.379	16.379	(1.078)	11563	0.40000	0.3294
53 4,6-Dinitro-2-methylphenol	198	16.479	16.479	(0.903)	8367	0.80000	0.3466
54 N-Nitrosodiphenylamine	169	16.541	16.541	(0.907)	18951	0.20000	0.2000
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	3402	0.30000	0.2359
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	5932	0.20000	0.1857
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	7186	0.20000	0.2132
58 Pentachlorophenol	266	17.977	17.977	(0.986)	4555	0.40000	0.1961
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	697726	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	40785	0.20000	0.2046
61 Anthracene	178	18.379	18.379	(1.008)	35992	0.20000	0.1874
62 Carbazole	167	18.704	18.704	(1.025)	32553	0.20000	0.1905
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	34900	0.20000	0.1611
64 Fluoranthene	202	20.677	20.677	(0.888)	38253	0.20000	0.1855
65 Pyrene	202	21.103	21.103	(0.906)	42162	0.20000	0.1994
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	28483	0.20000	0.1989
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	15776	0.20000	0.1703
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	36978	0.20000	0.1978
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	506894	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	28716	0.60000	0.5357
71 Chrysene	228	23.340	23.340	(1.002)	35409	0.20000	0.2093
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.959)	19246	0.20000	0.1694
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	862800	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	47083	0.20000	0.2123
74 Benzo(b)fluoranthene	252	25.152	25.152	(0.970)	28702	0.20000	0.1697
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	32939	0.20000	0.1965
76 Benzo(a)pyrene	252	25.818	25.818	(0.996)	25628	0.20000	0.1772
* 77 Perylene-d12	264	25.934	25.934	(1.000)	478496	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.610	28.610	(1.103)	27033	0.20000	0.1718
79 Dibenzo(a,h)anthracene	278	28.626	28.626	(1.104)	23680	0.20000	0.1785
80 Benzo(g,h,i)perylene	276	29.403	29.403	(1.134)	23219	0.20000	0.1790
90 N-Nitrosodimethylamine	74	4.720	4.720	(1.000)	17954	0.40000	0.4105
91 Aniline	93	8.513	8.513	(1.000)	39317	0.40000	0.4045
93 Benzidine	184	20.909	20.909	(0.898)	31808	0.40000	0.3833
103 Pyridine	79	4.766	4.766	(1.000)	27354	0.20000	0.2019
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	25371	0.20000	0.2020
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	31471	0.20000	0.2013

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.198	25.199	(0.972)	59292	0.40000	0.3692 (M)
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	5019	0.20000	0.1304

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152308.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-CAL1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	203313	4.52
27 Naphthalene-d8	721321	360661	1442642	744014	3.15
42 Acenaphthene-d10	379602	189801	759204	379787	0.05
59 Phenanthrene-d10	703194	351597	1406388	697726	-0.78
69 Chrysene-d12	504769	252385	1009538	506894	0.42
134 Di-n-octylphthala	978492	489246	1956984	862800	-11.82
77 Perylene-d12	484073	242037	968146	478496	-1.15

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.06	-0.09
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403152308.D

Lab ID: SLC0160-CAL1
nt14.i, ABN.m, 15-MAR-2023 15:50

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

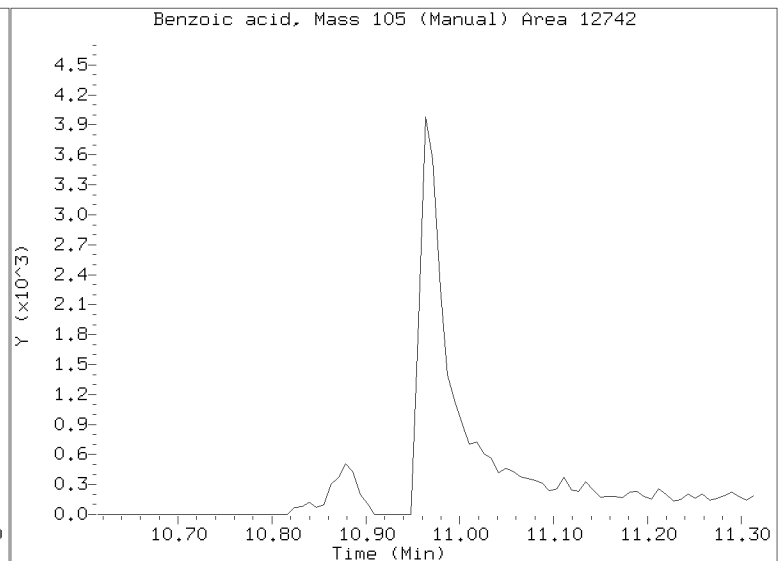
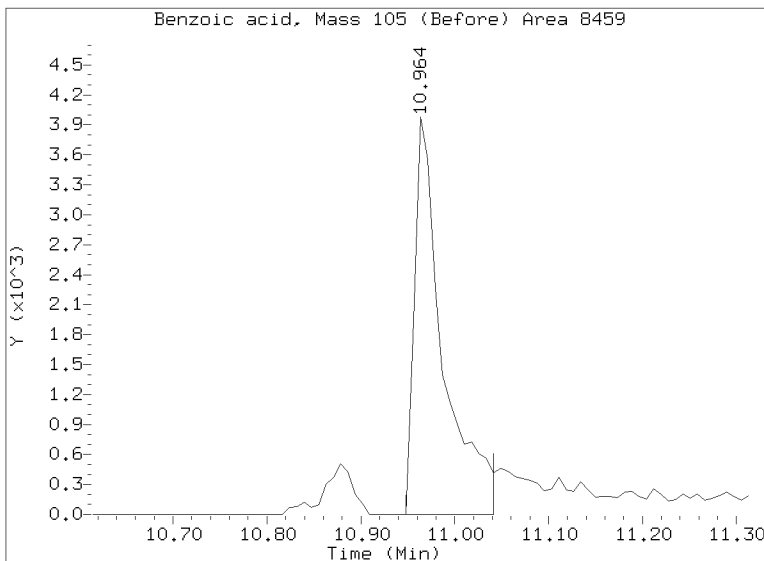
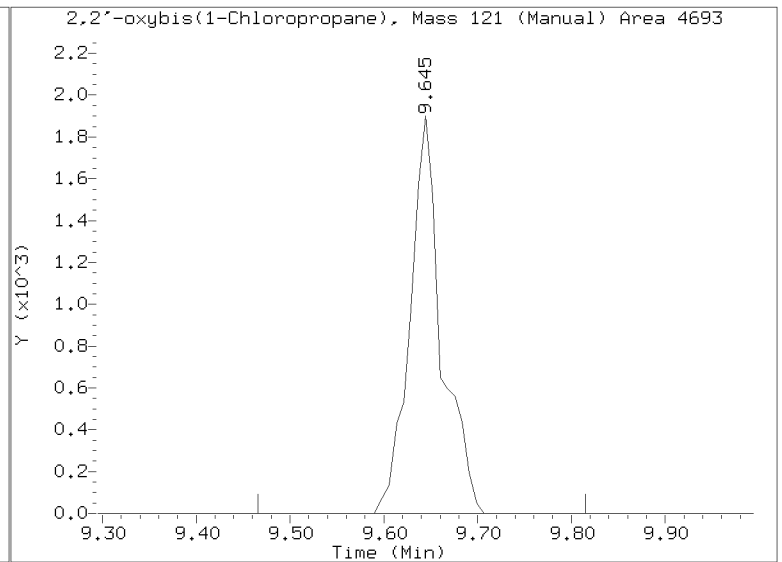
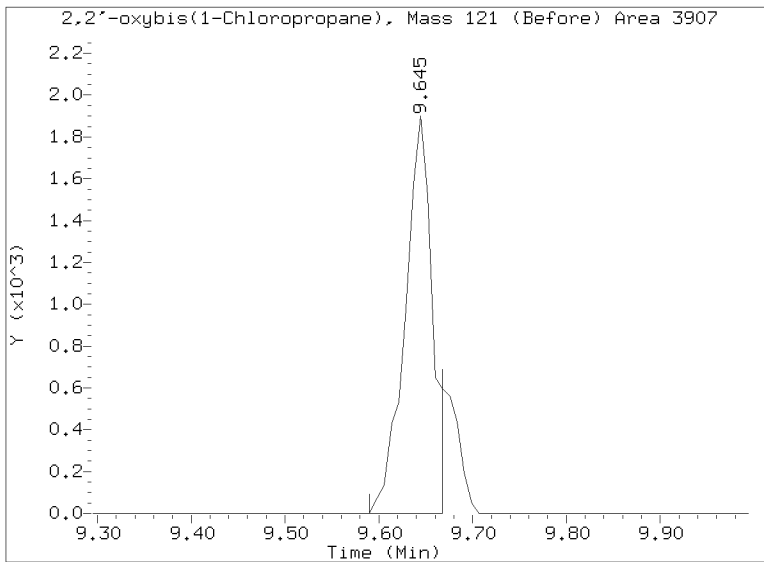
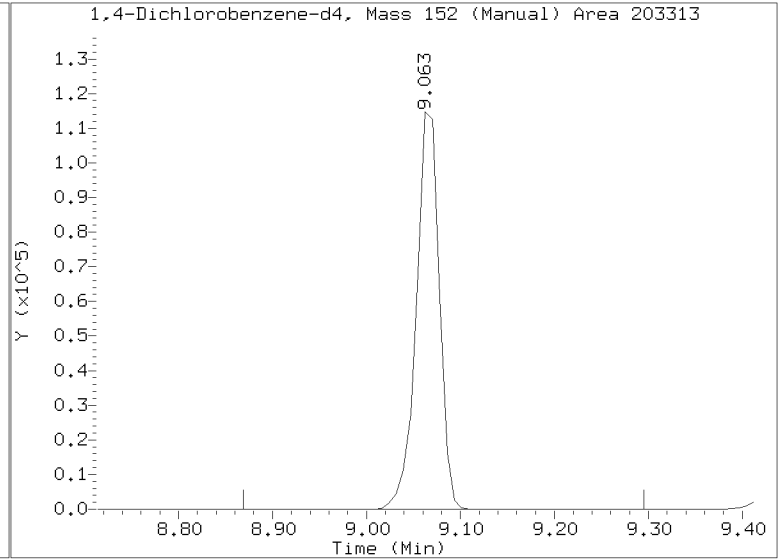
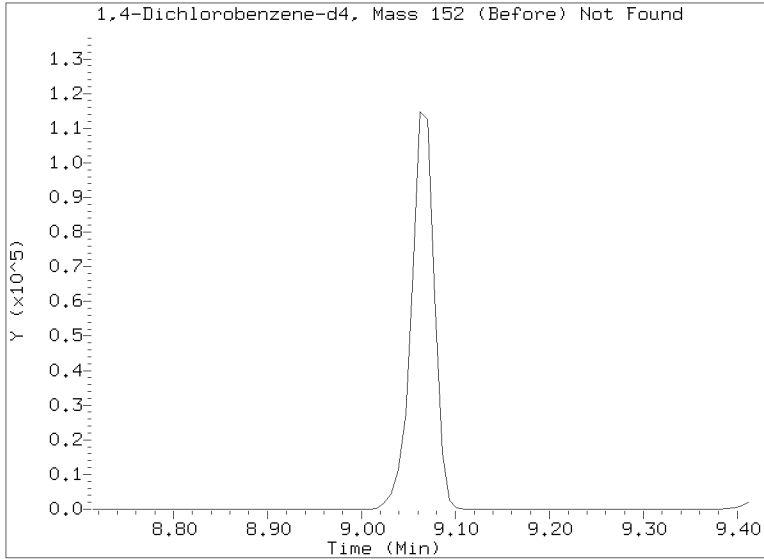
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152308.D
Injection Date: 15-MAR-2023 15:50
Lab ID: SLC0160-CAL1 Client ID:
Report Date: 03/21/2023 12:48



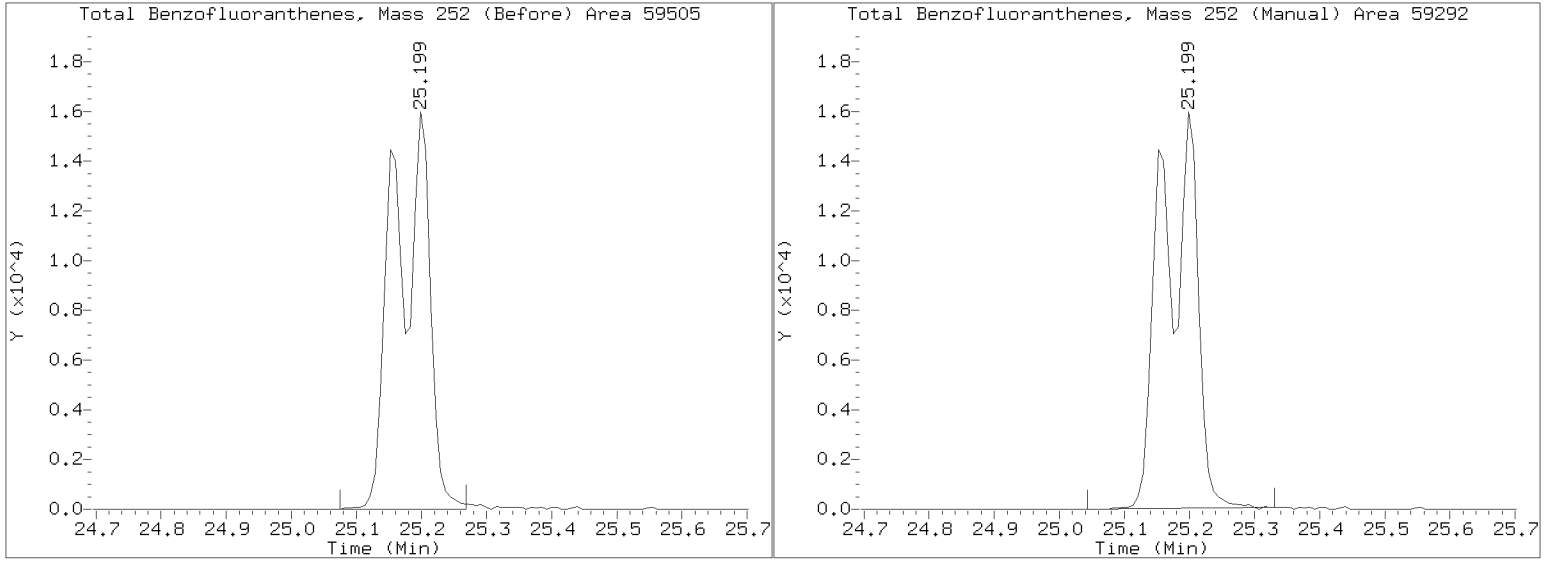
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152308.D

Injection Date: 15-MAR-2023 15:50

Lab ID:SLC0160-CAL1 Client ID:

Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152311.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0160-SCW1

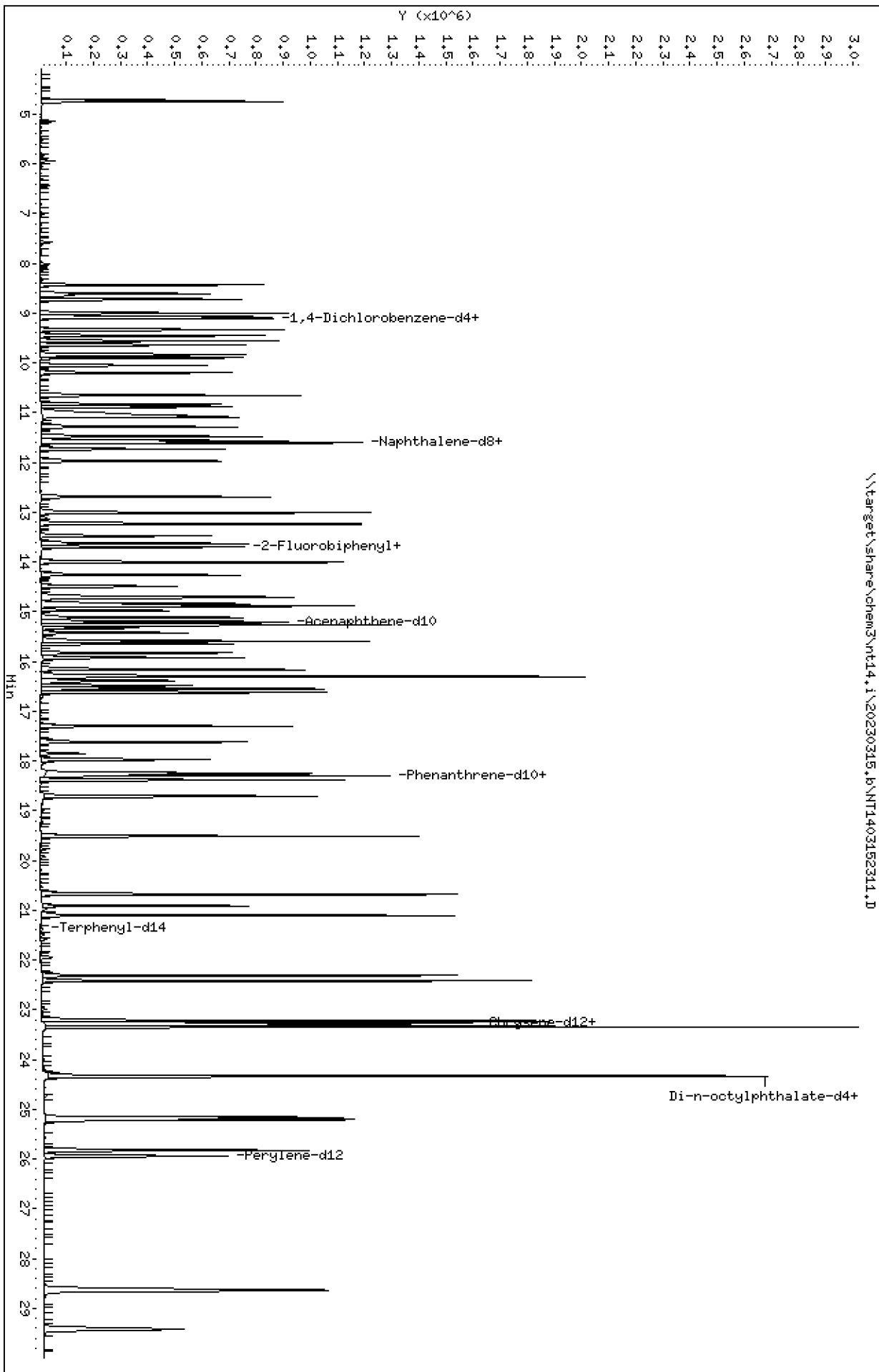
Column phase: ZB-Smsi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152311.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

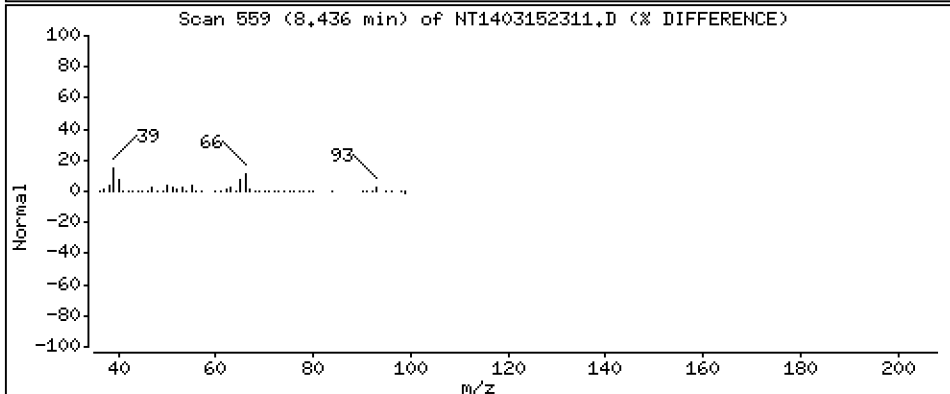
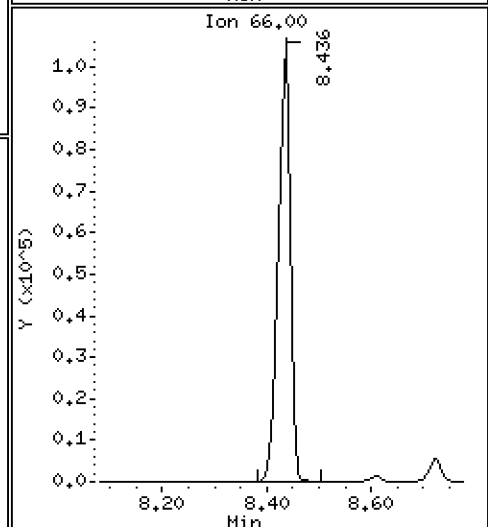
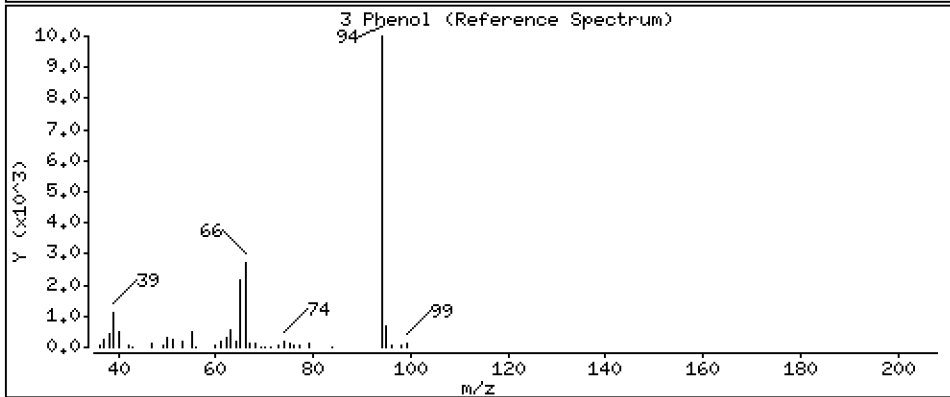
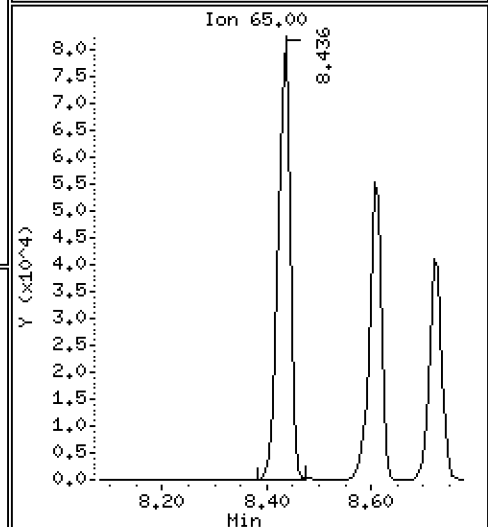
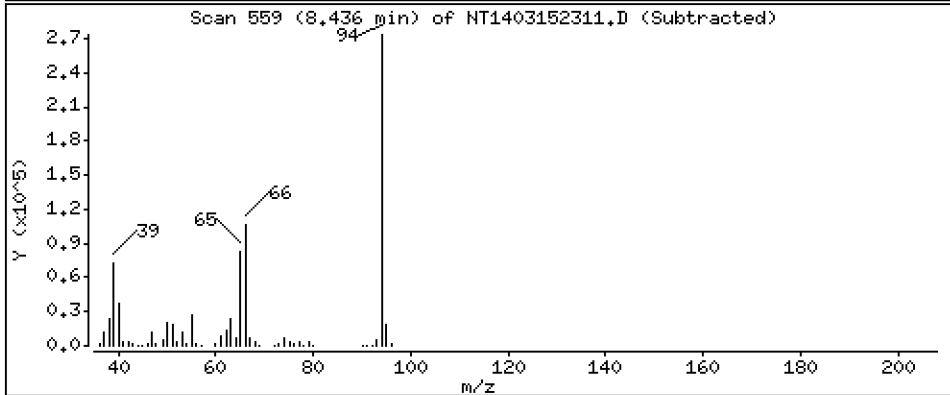
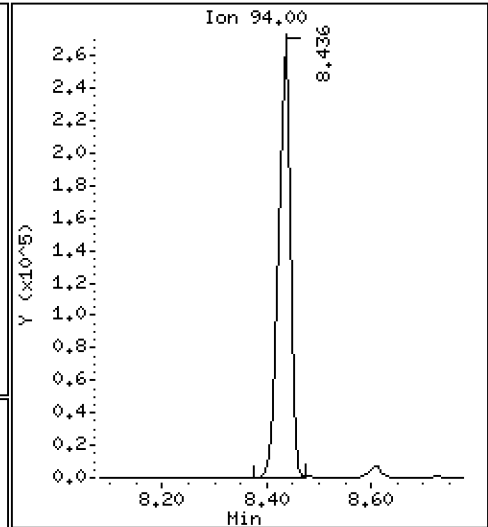
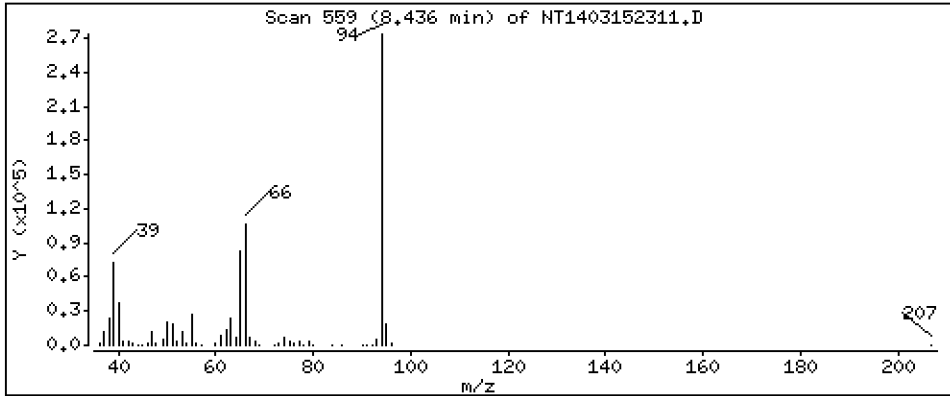
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,368 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

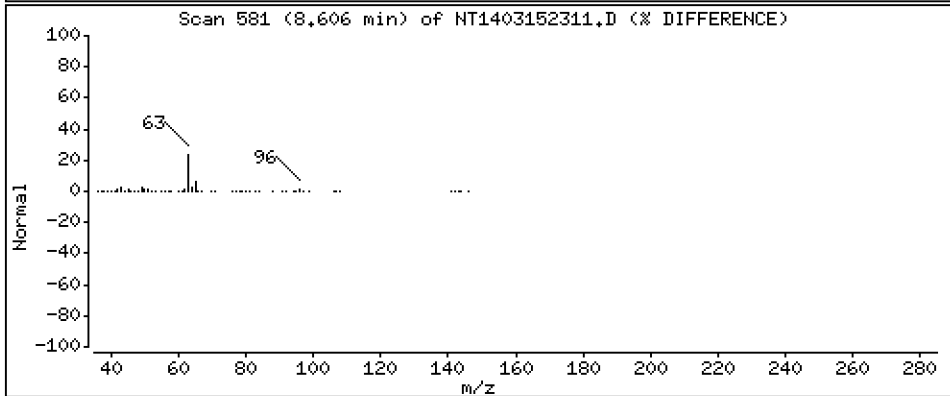
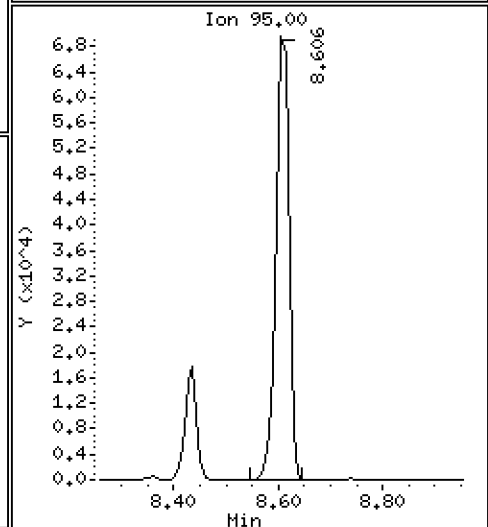
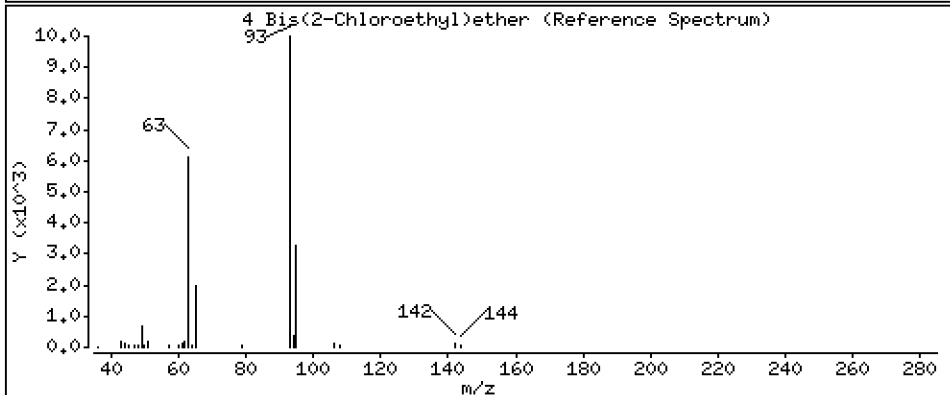
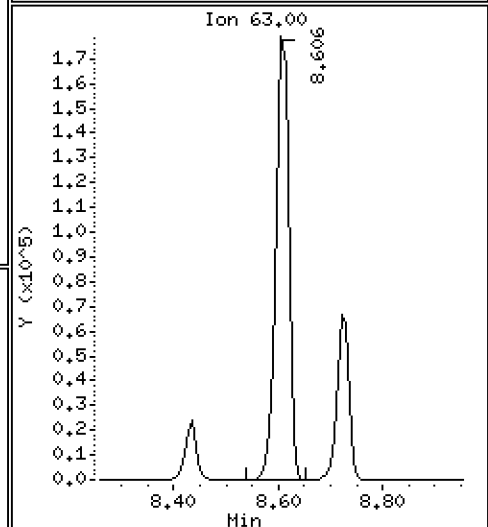
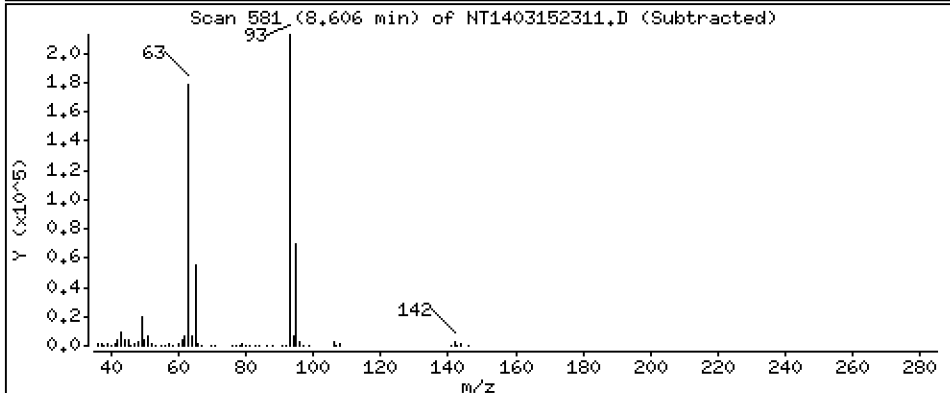
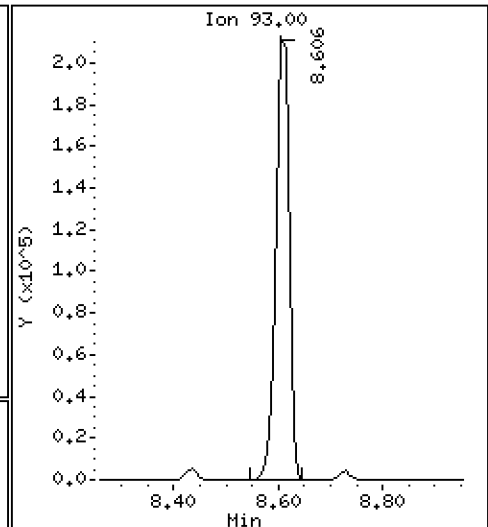
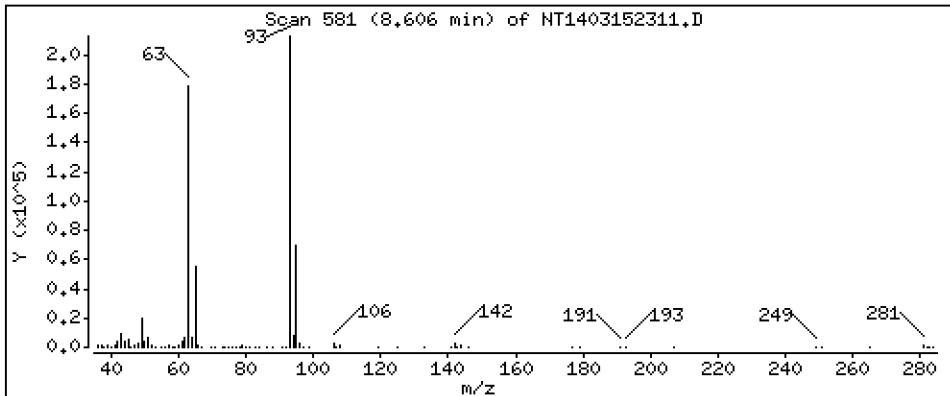
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,258 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

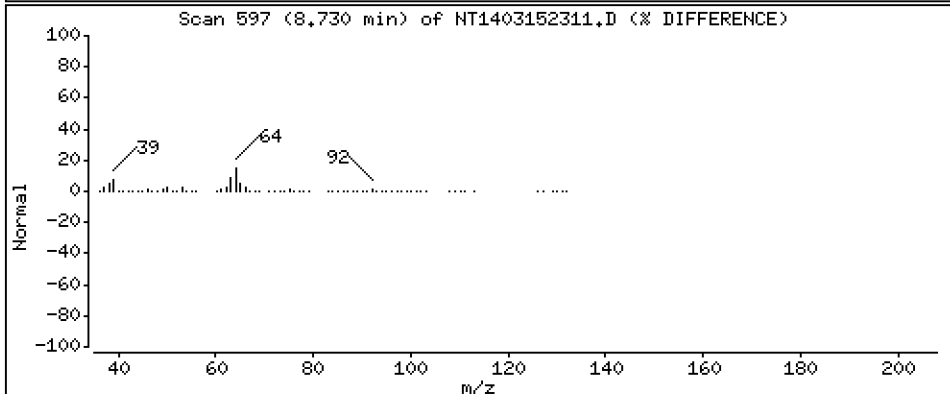
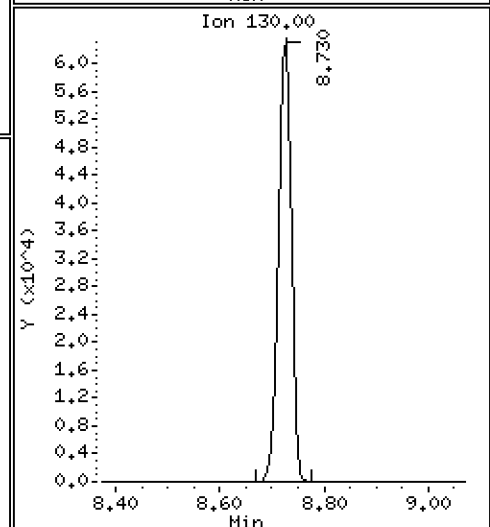
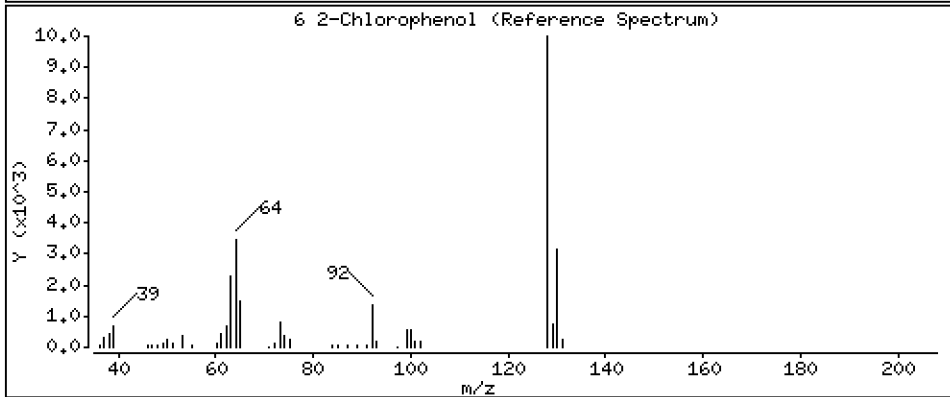
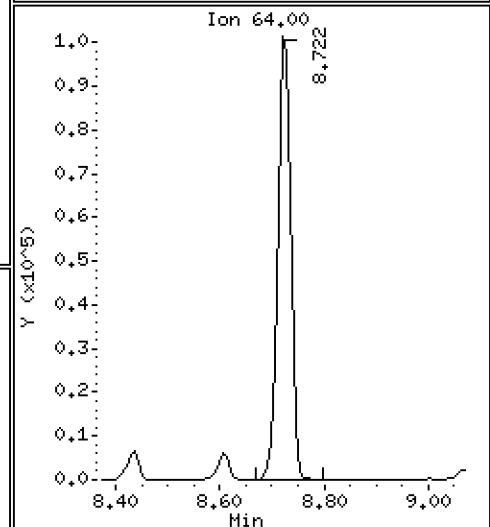
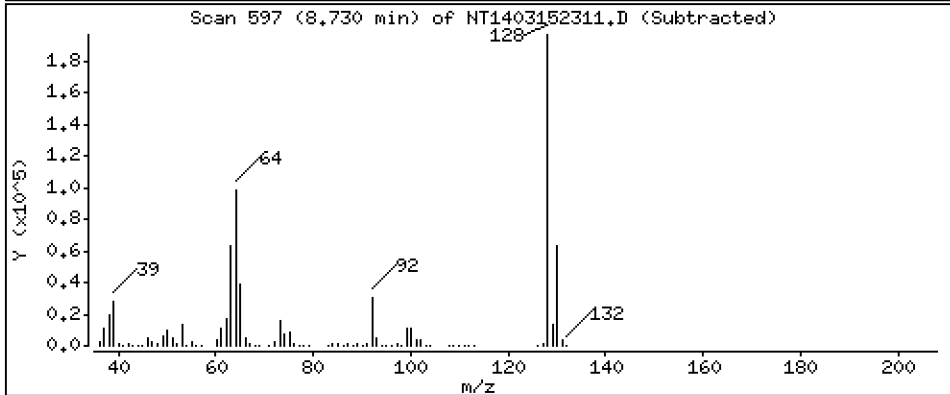
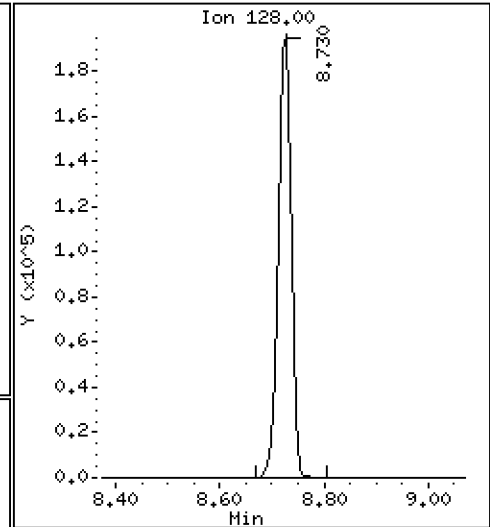
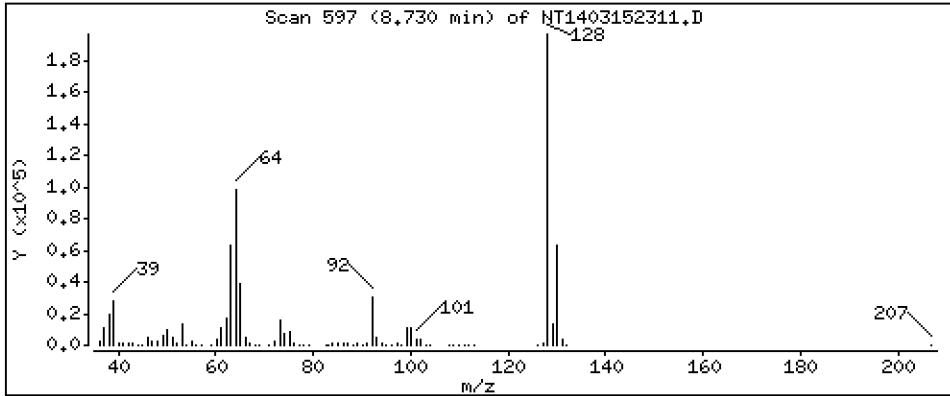
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,379 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

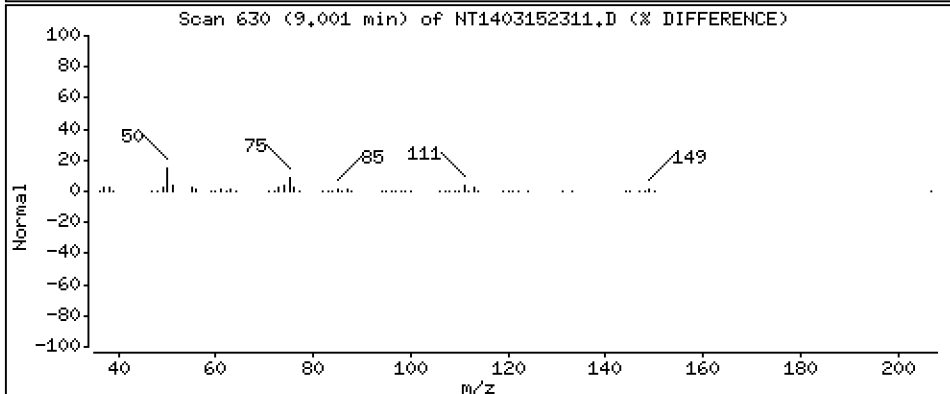
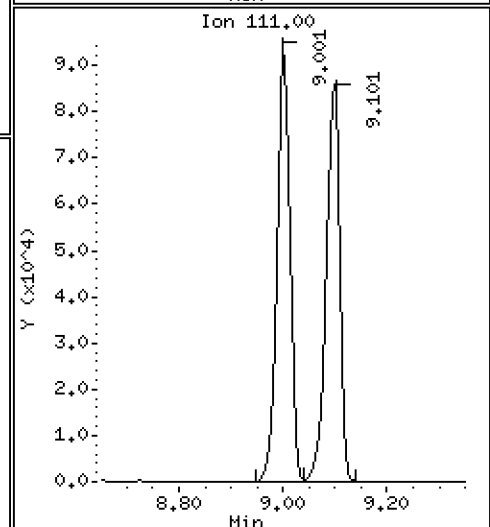
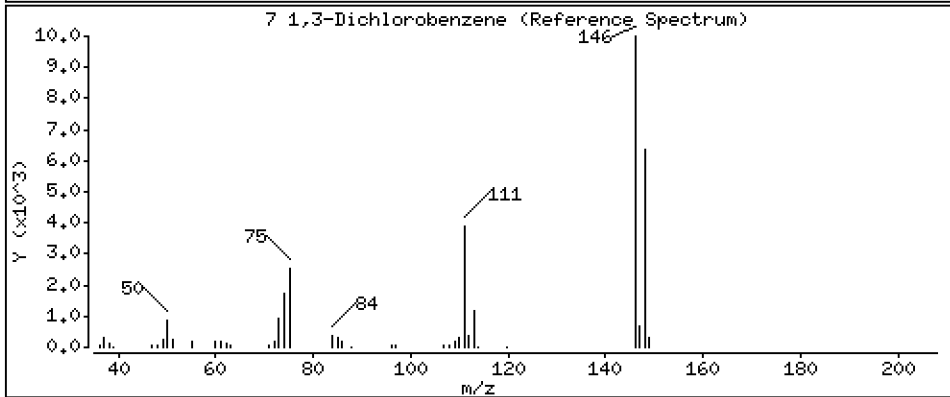
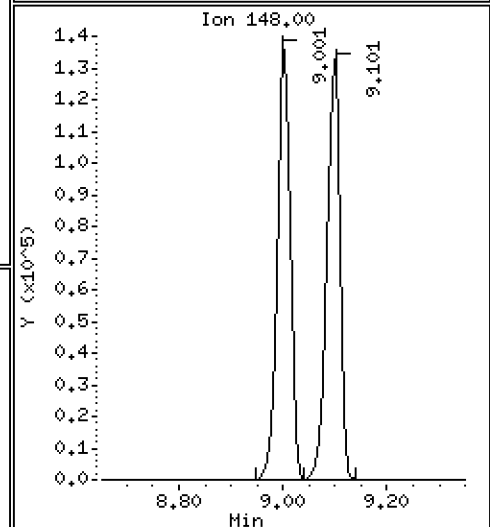
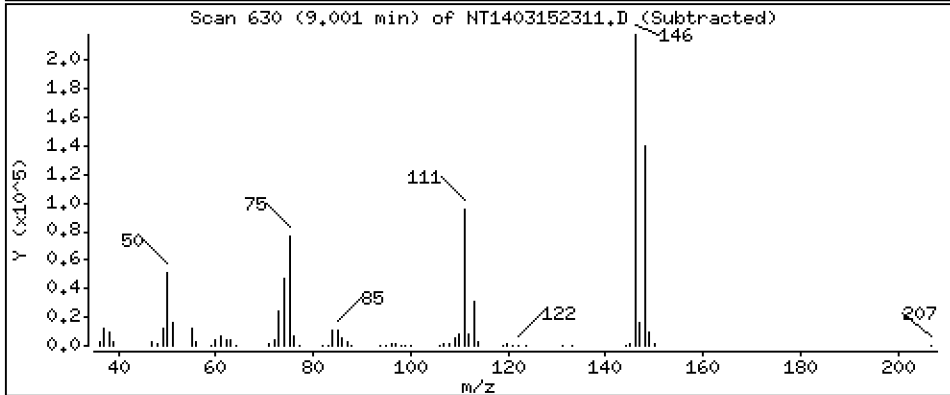
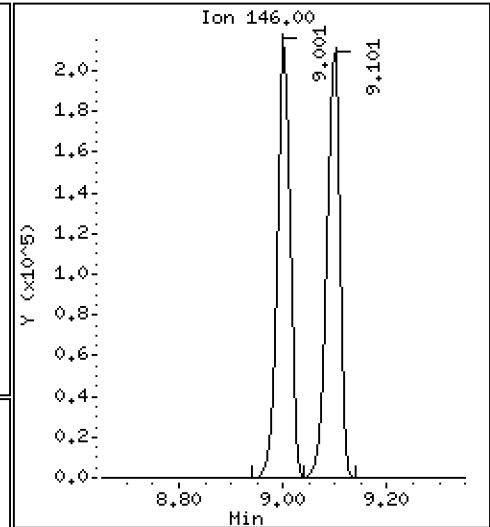
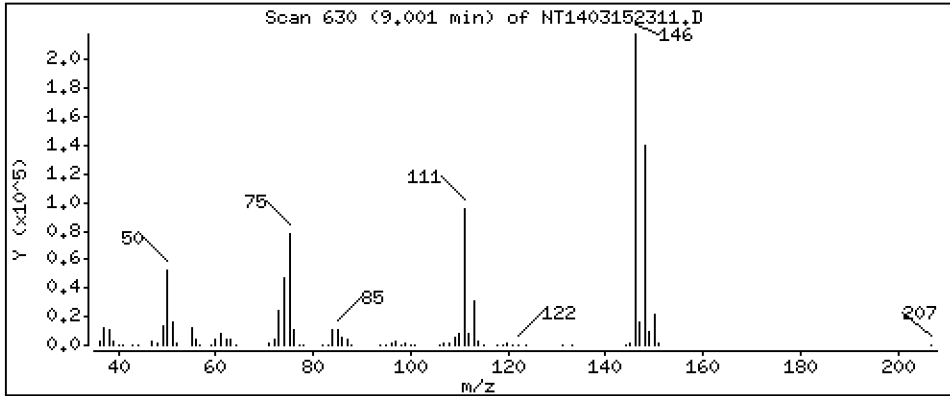
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.793 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

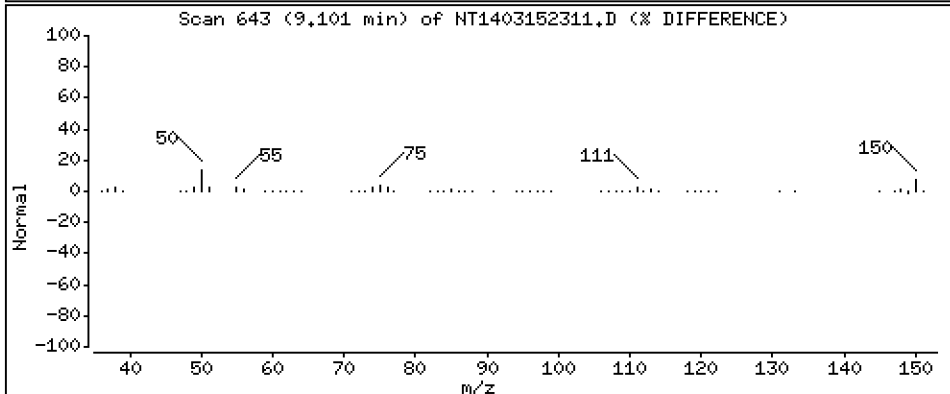
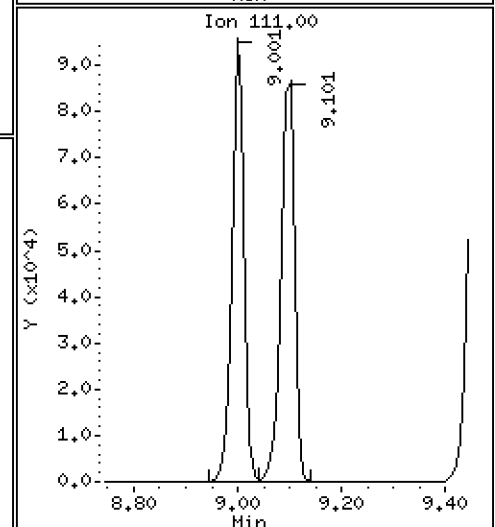
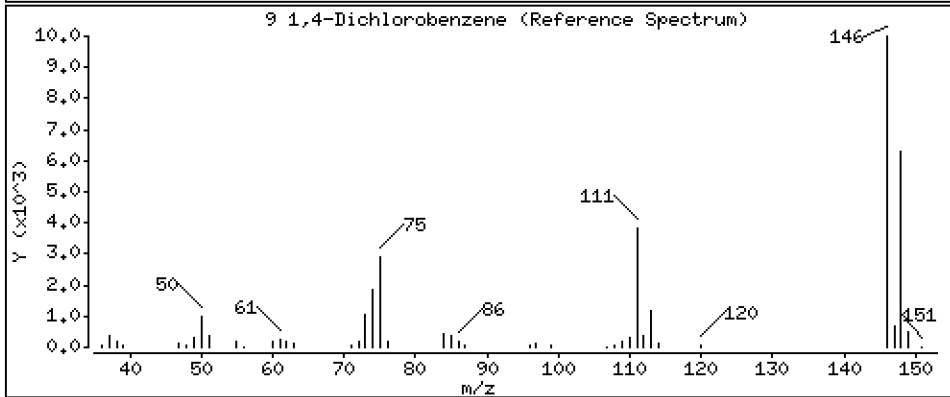
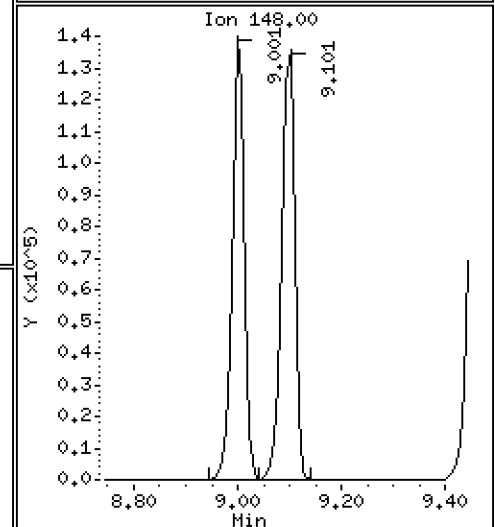
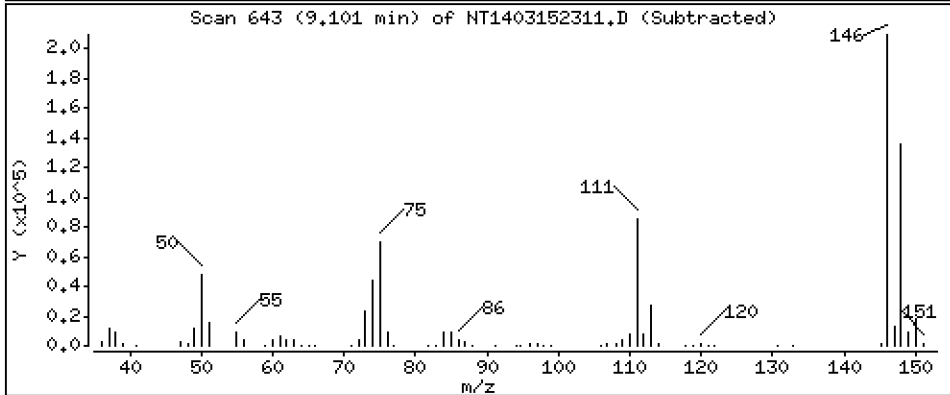
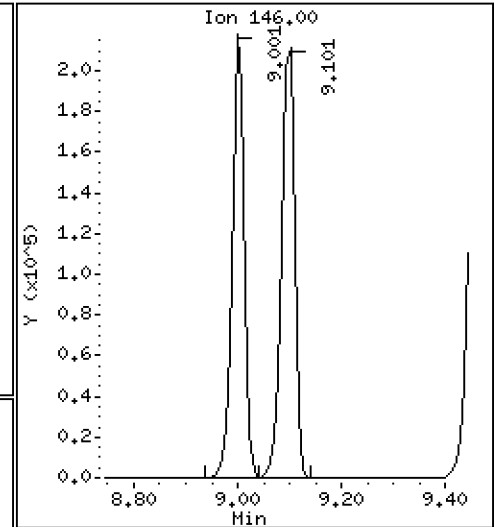
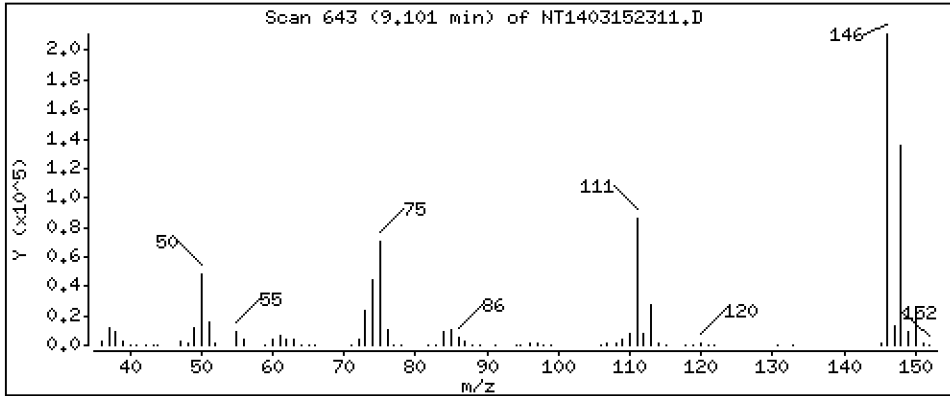
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,889 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

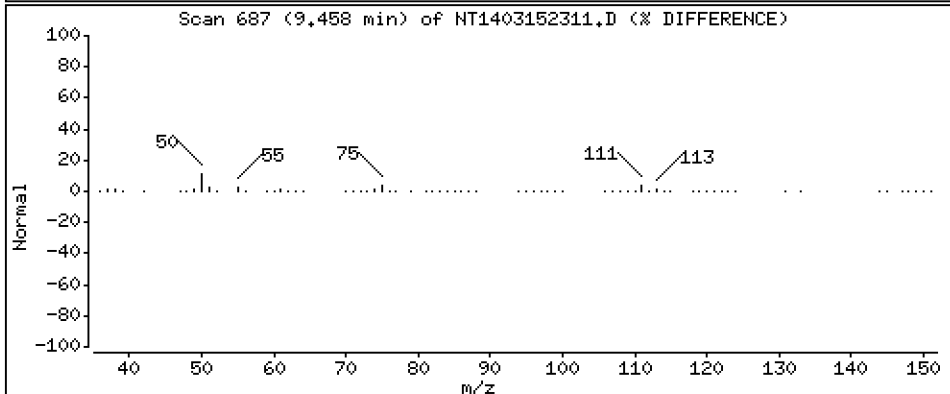
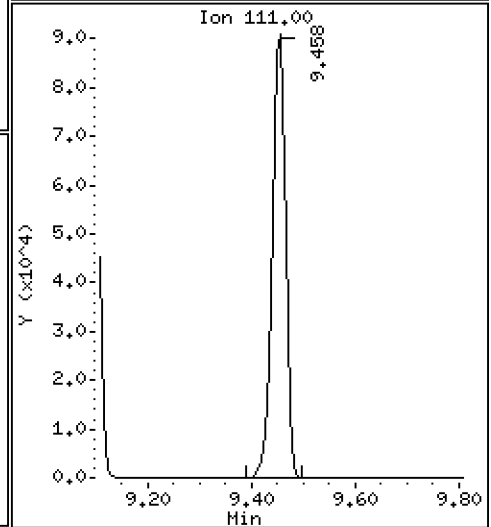
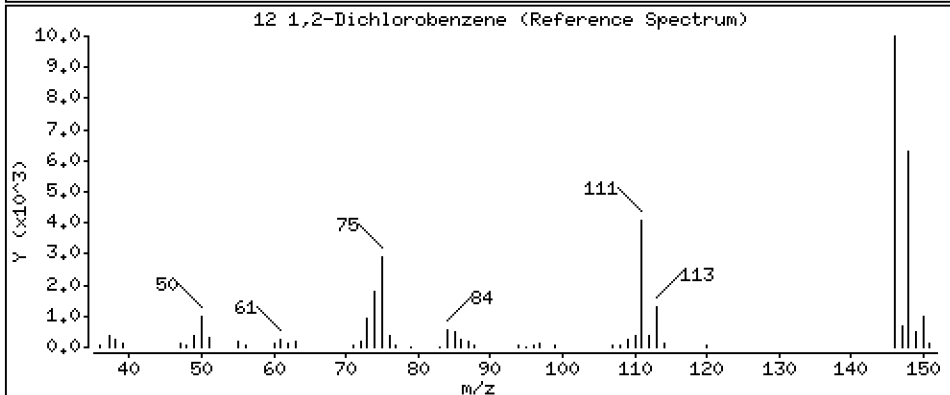
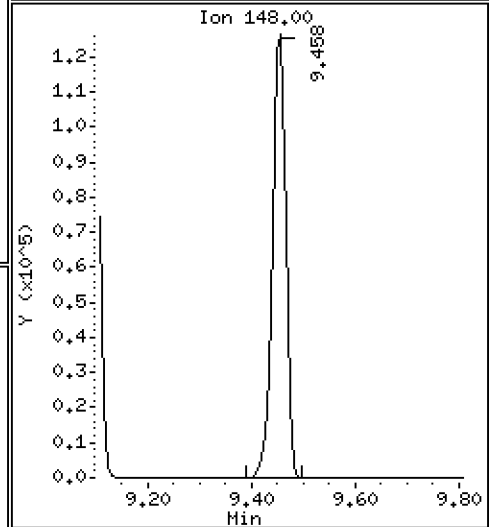
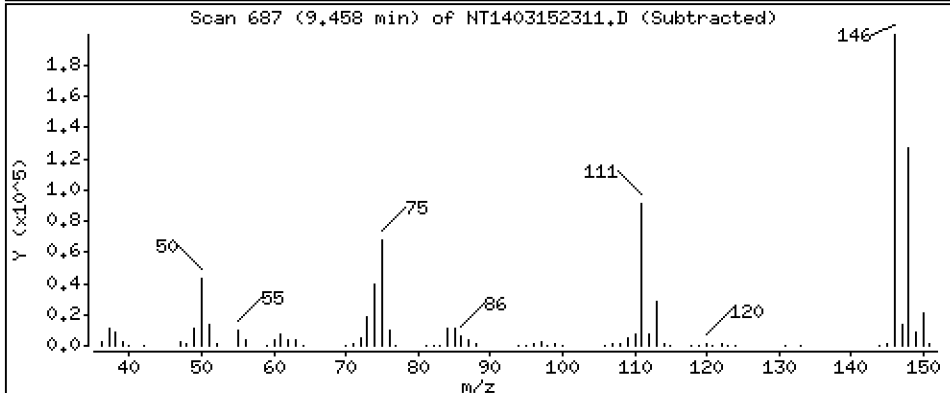
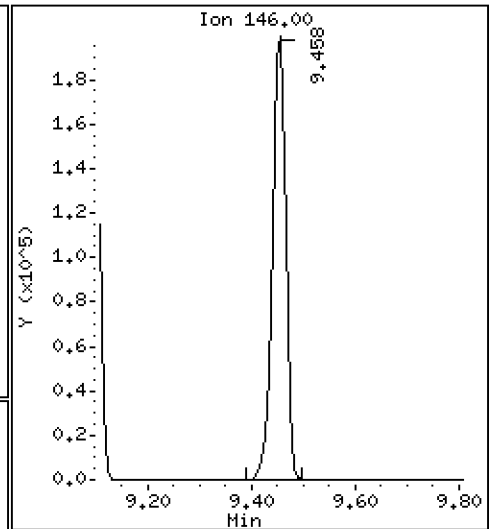
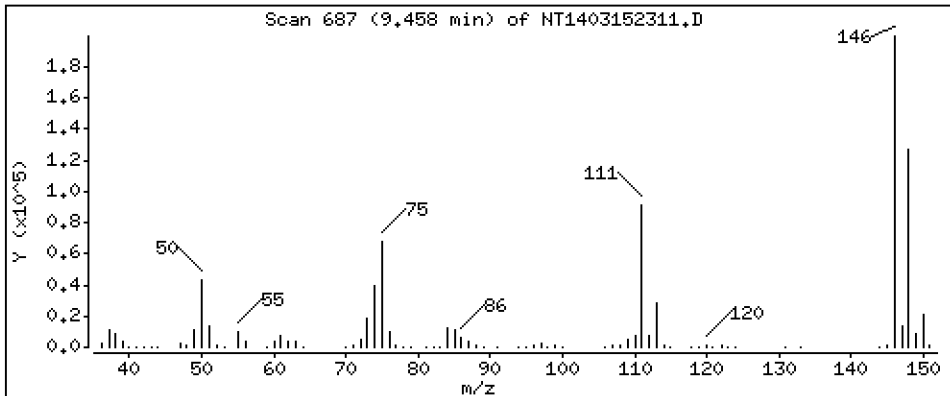
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,786 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

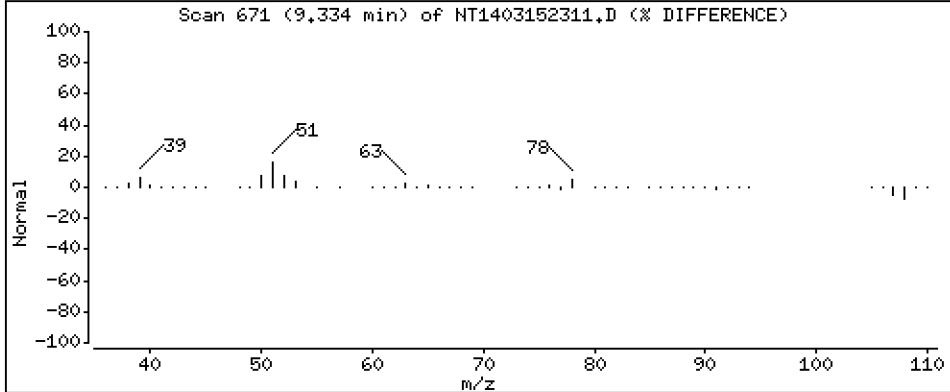
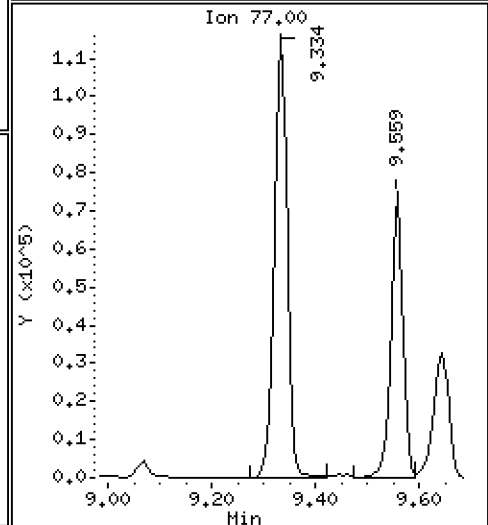
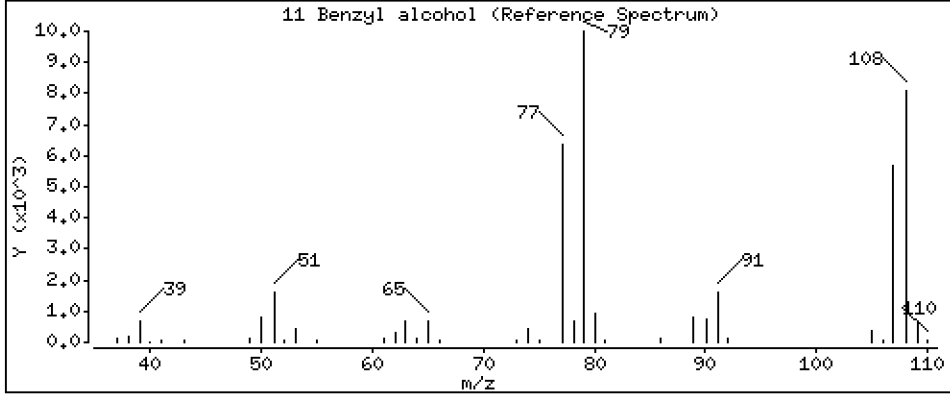
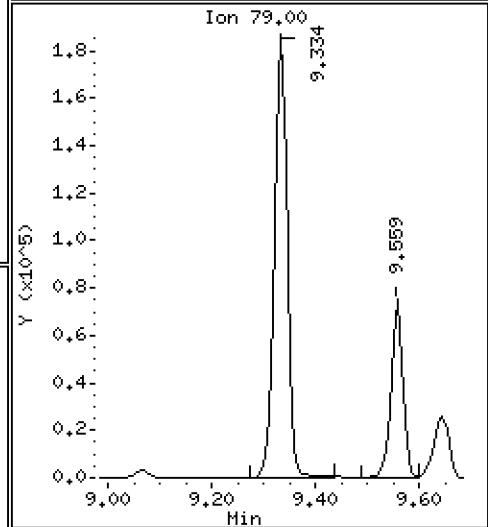
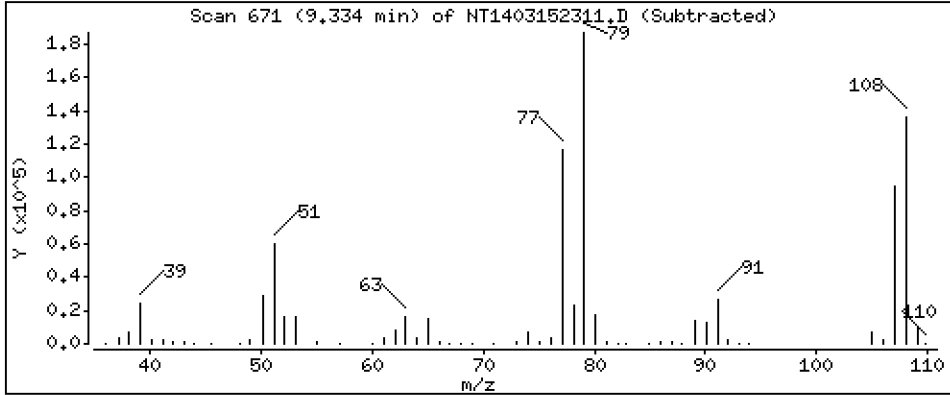
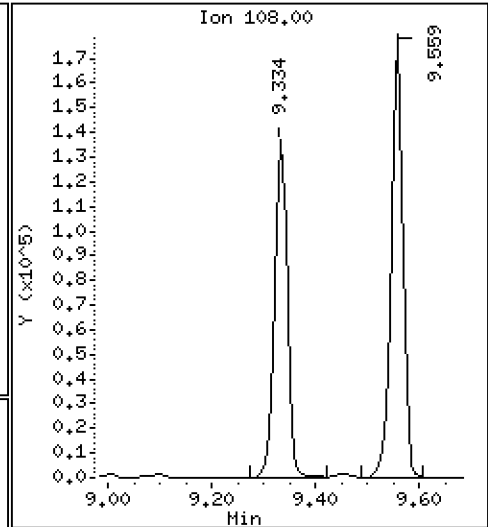
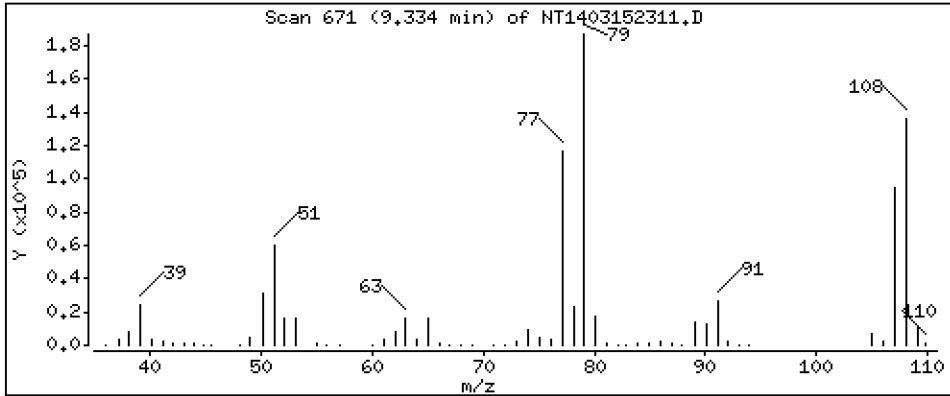
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5.051 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

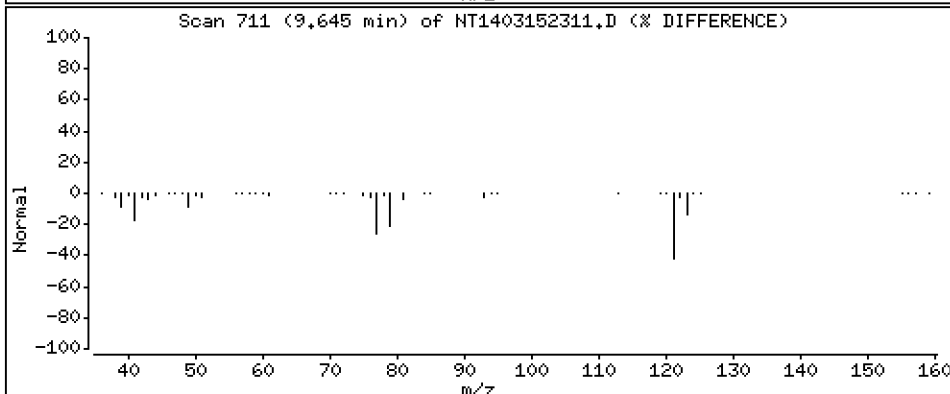
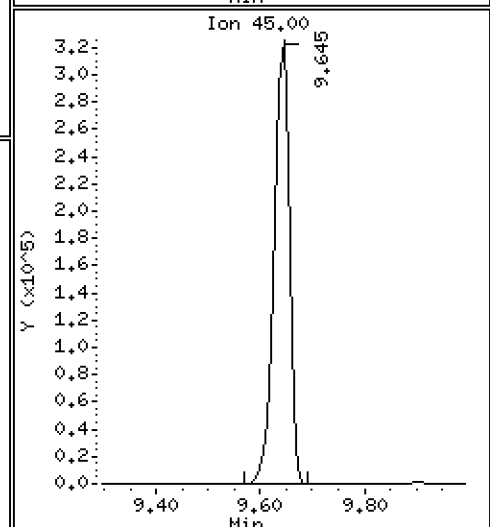
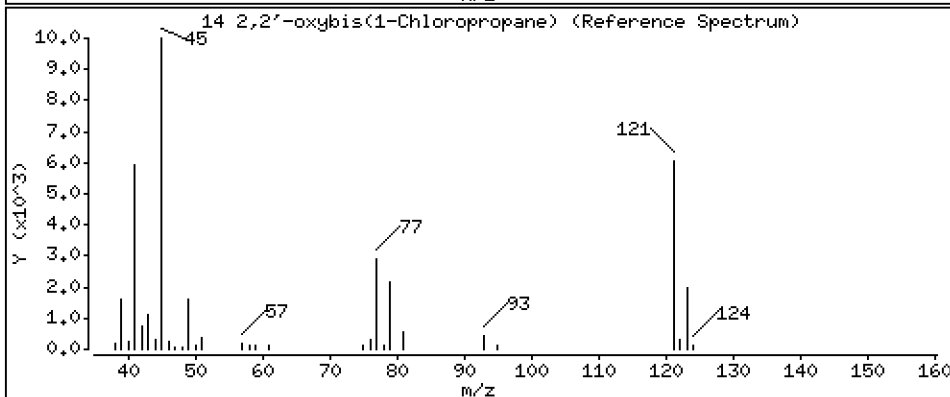
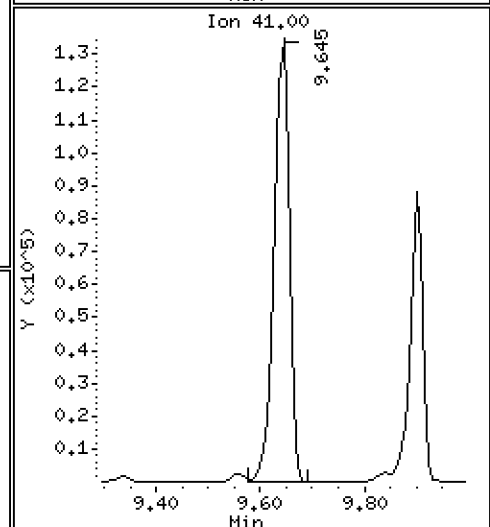
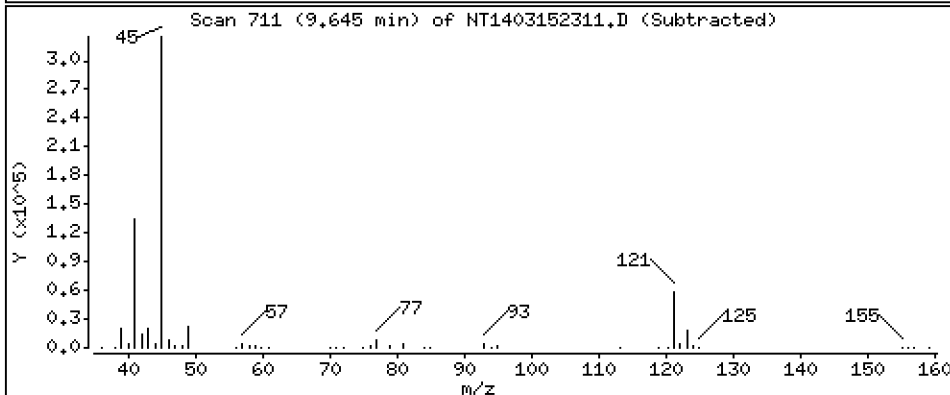
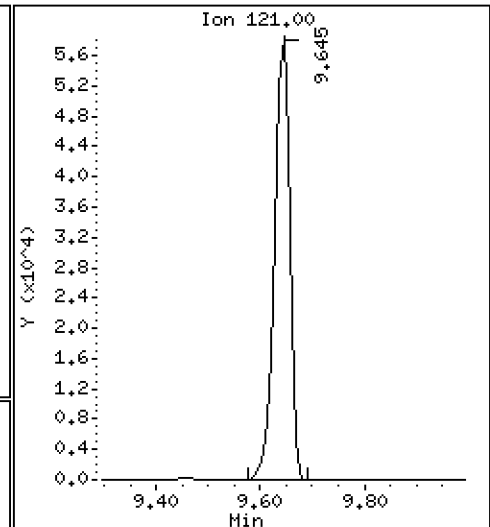
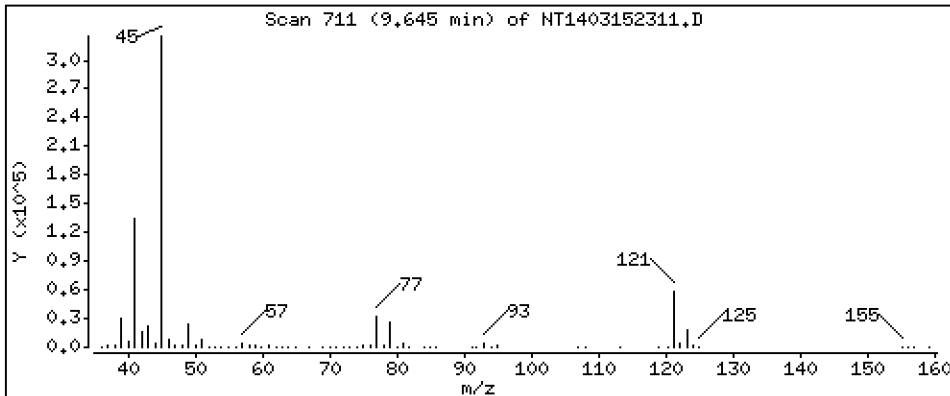
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 5,319 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

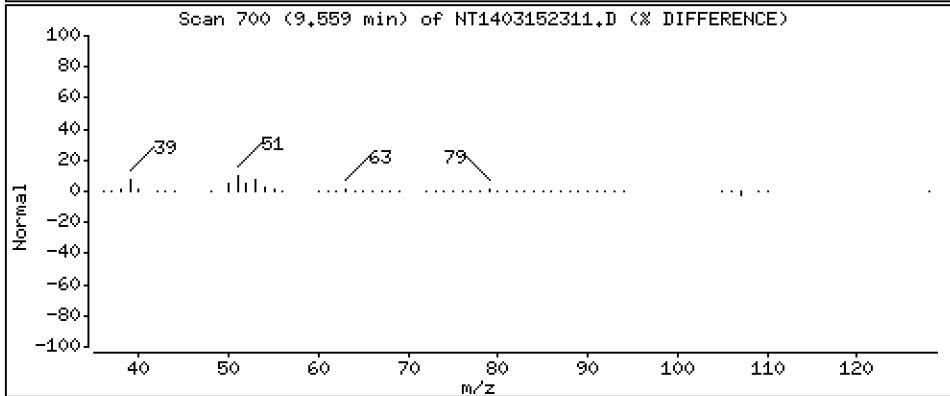
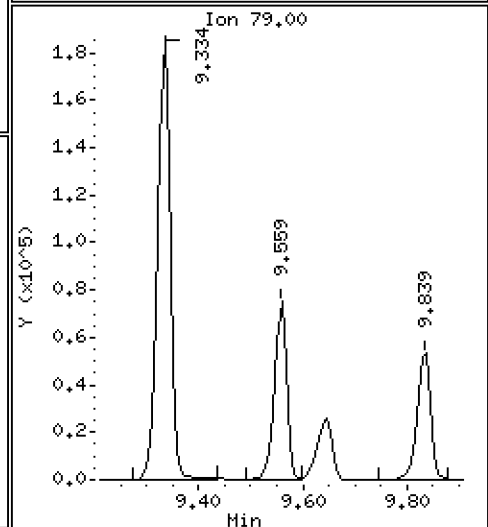
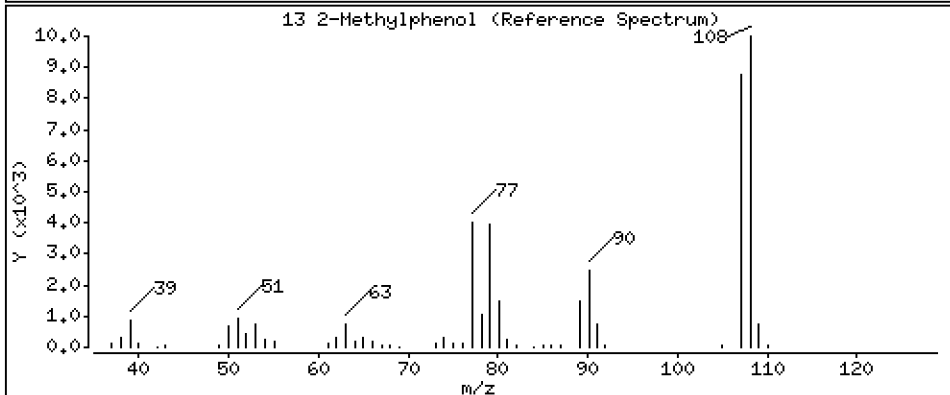
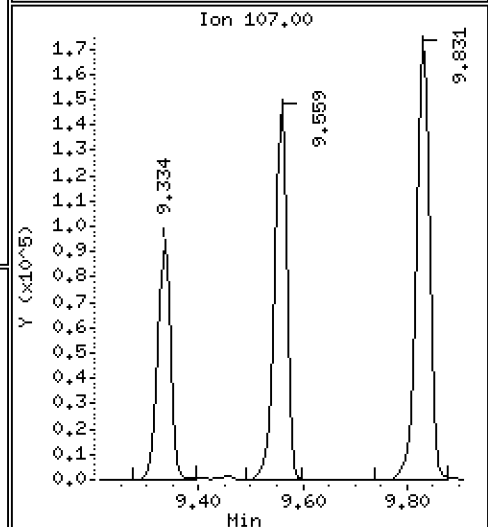
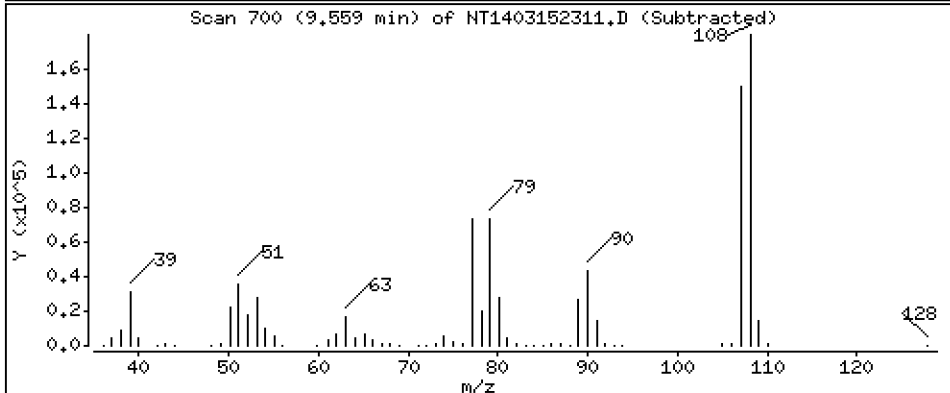
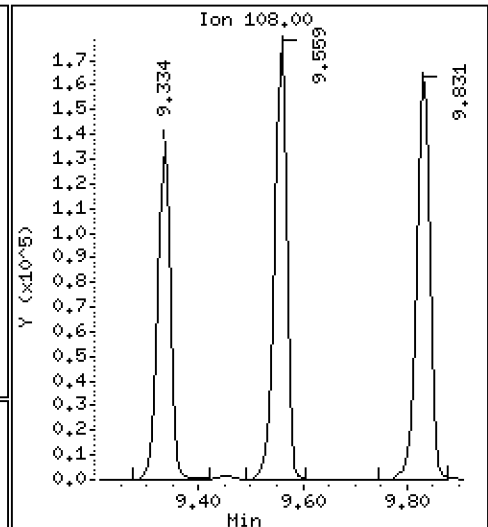
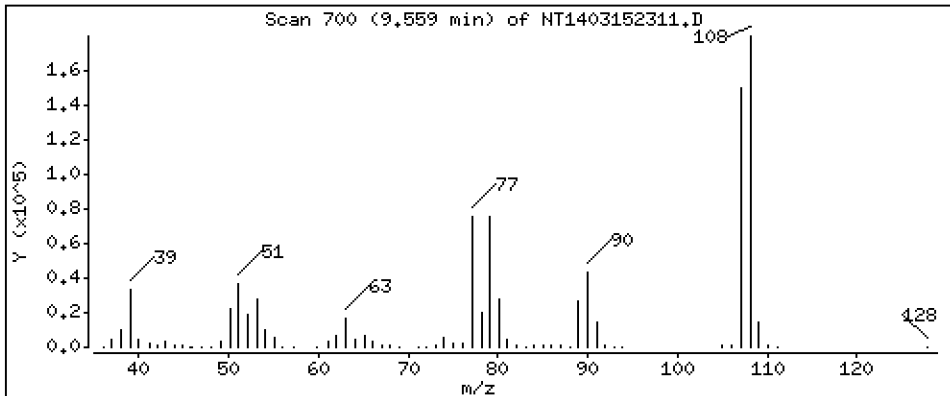
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.117 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

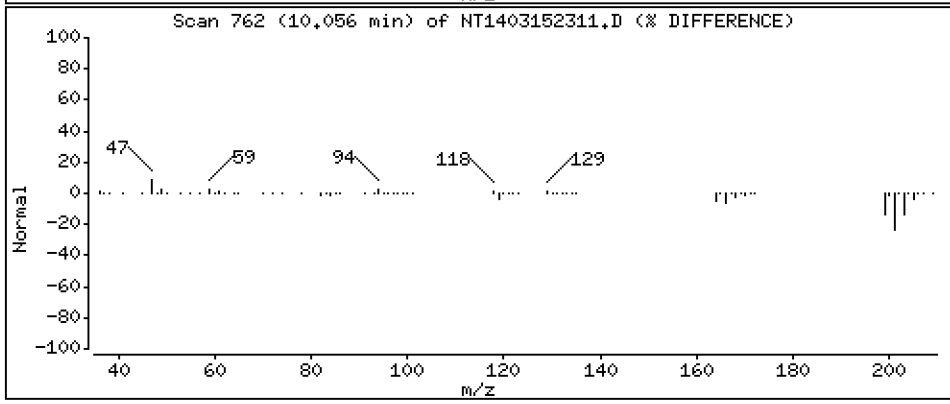
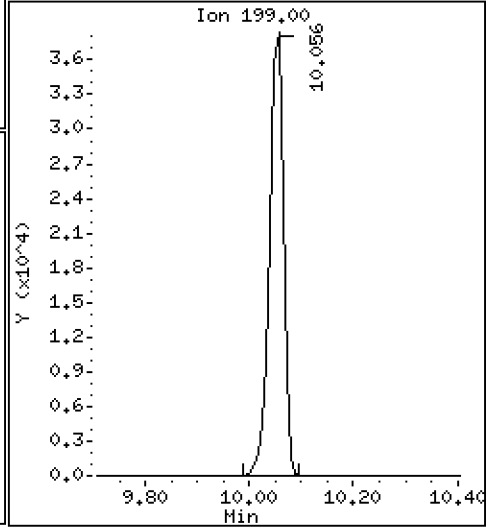
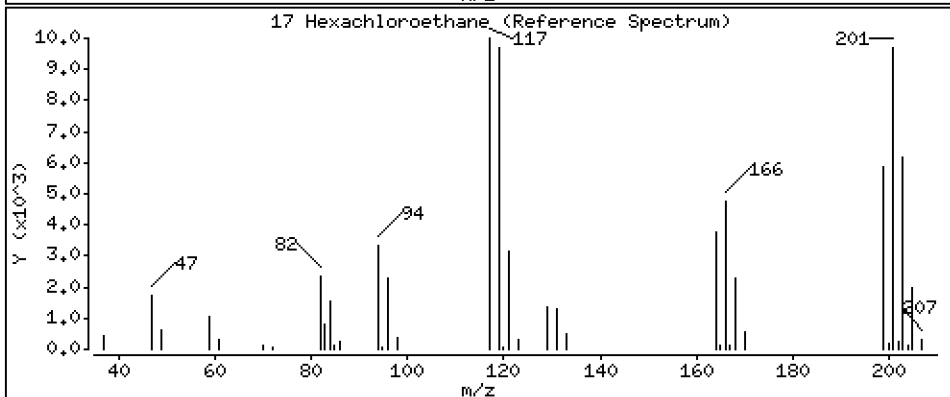
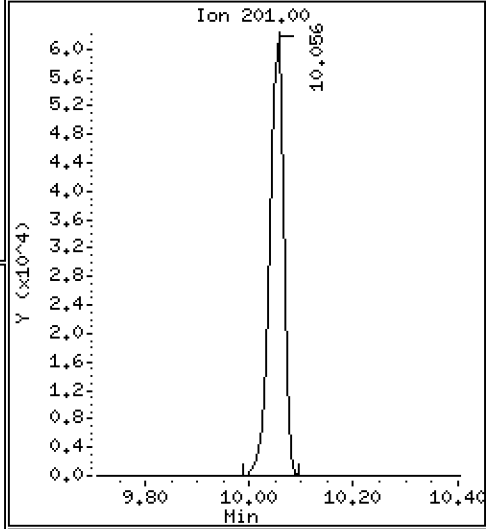
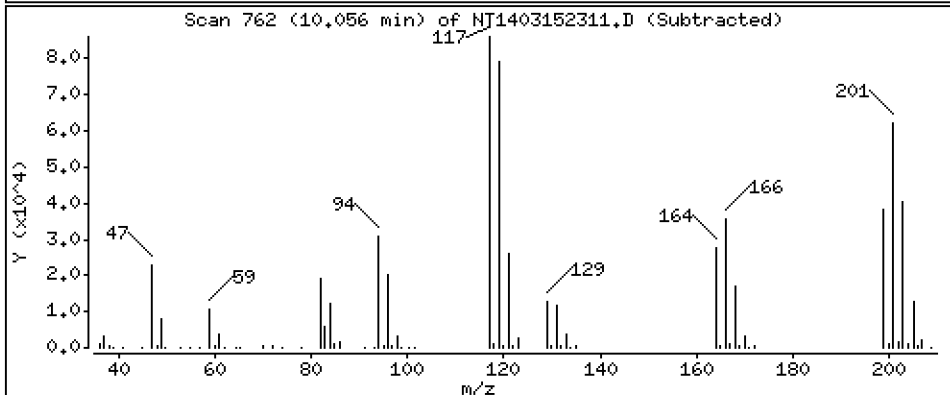
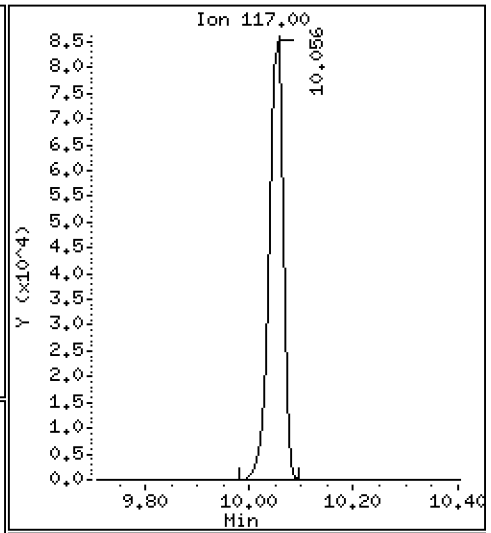
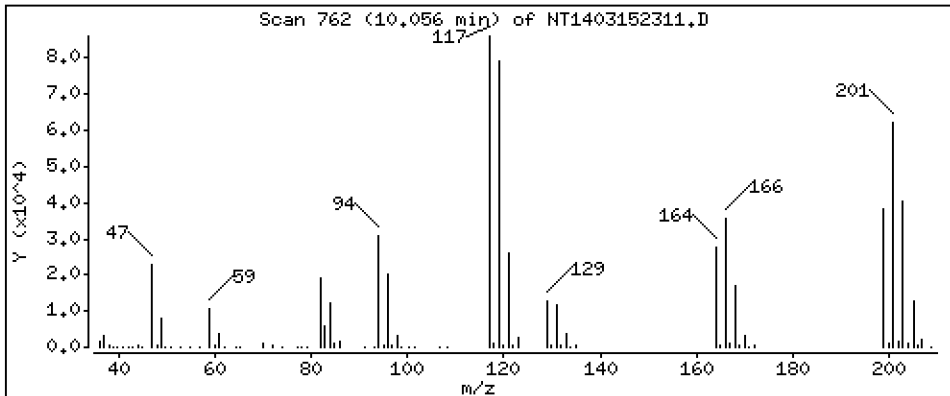
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 4.955 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

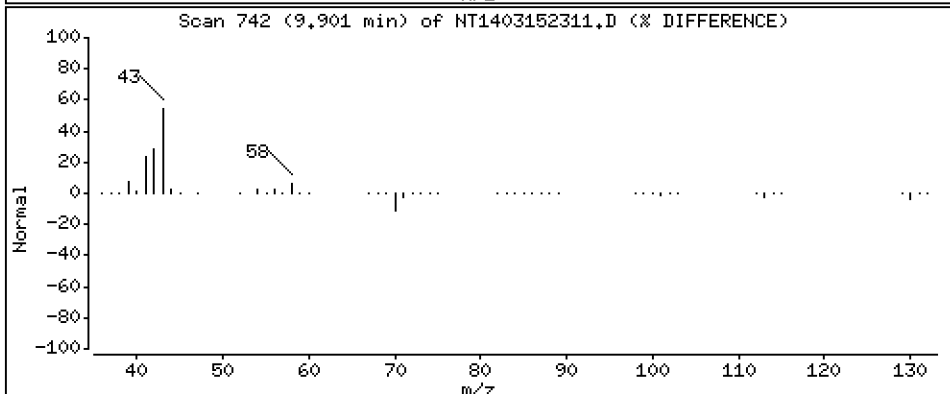
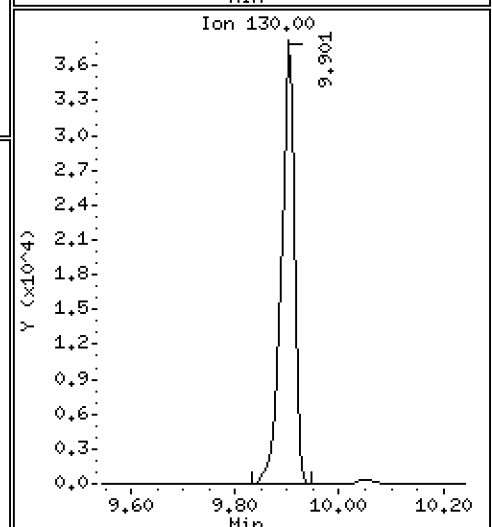
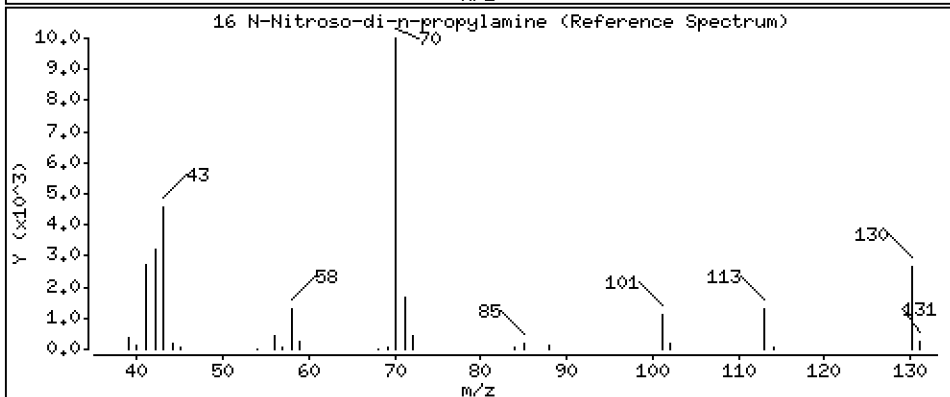
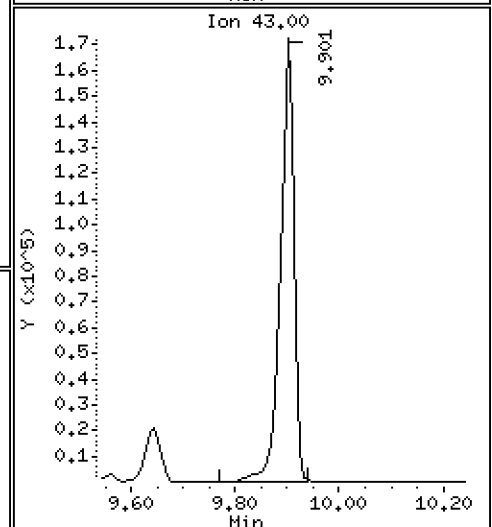
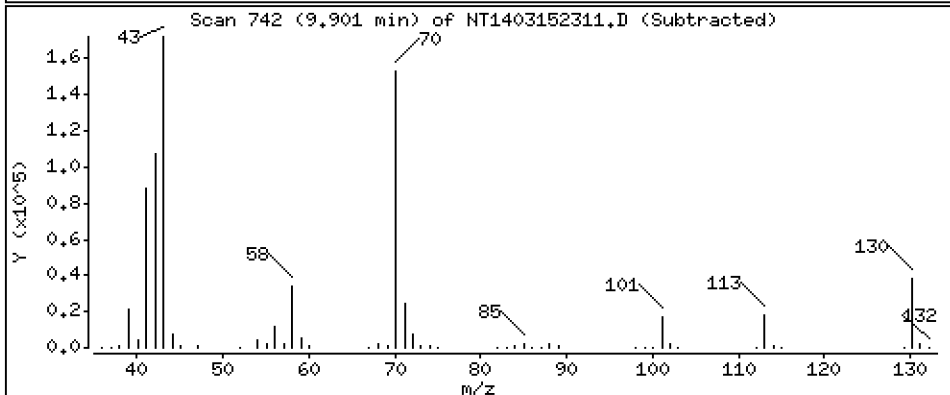
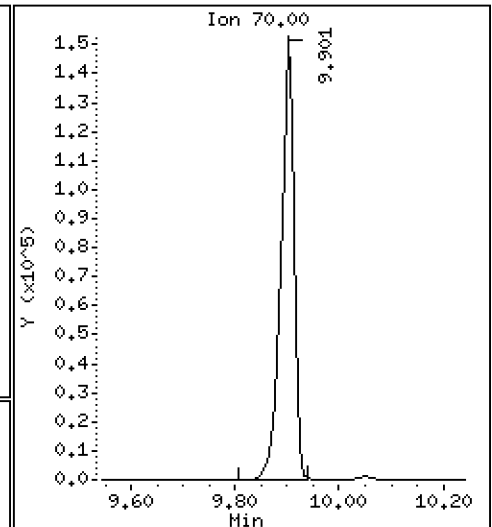
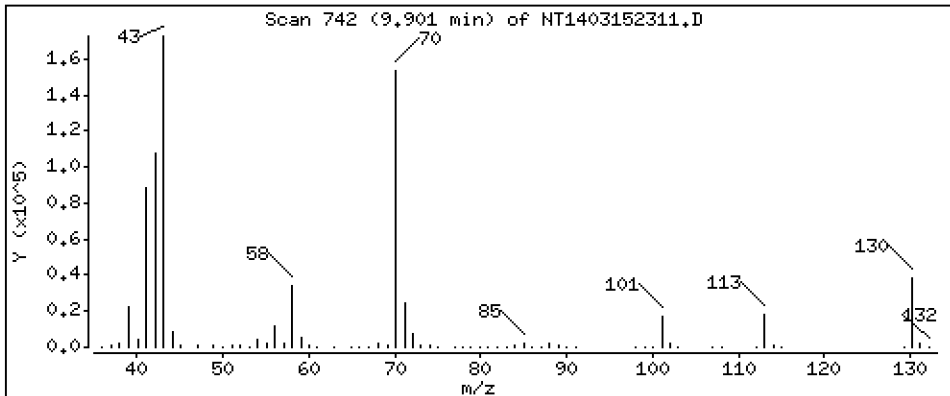
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,983 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

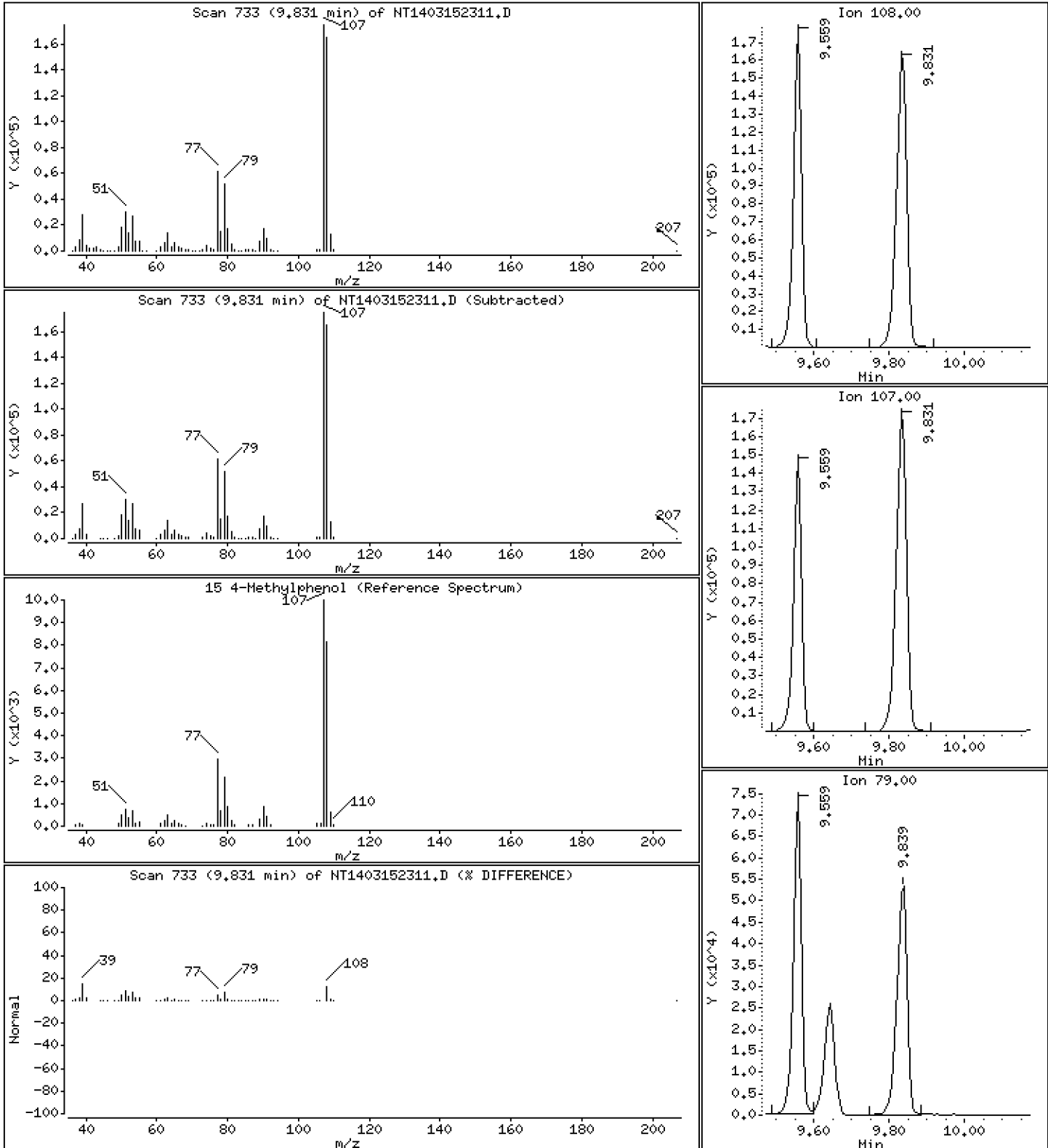
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,302 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

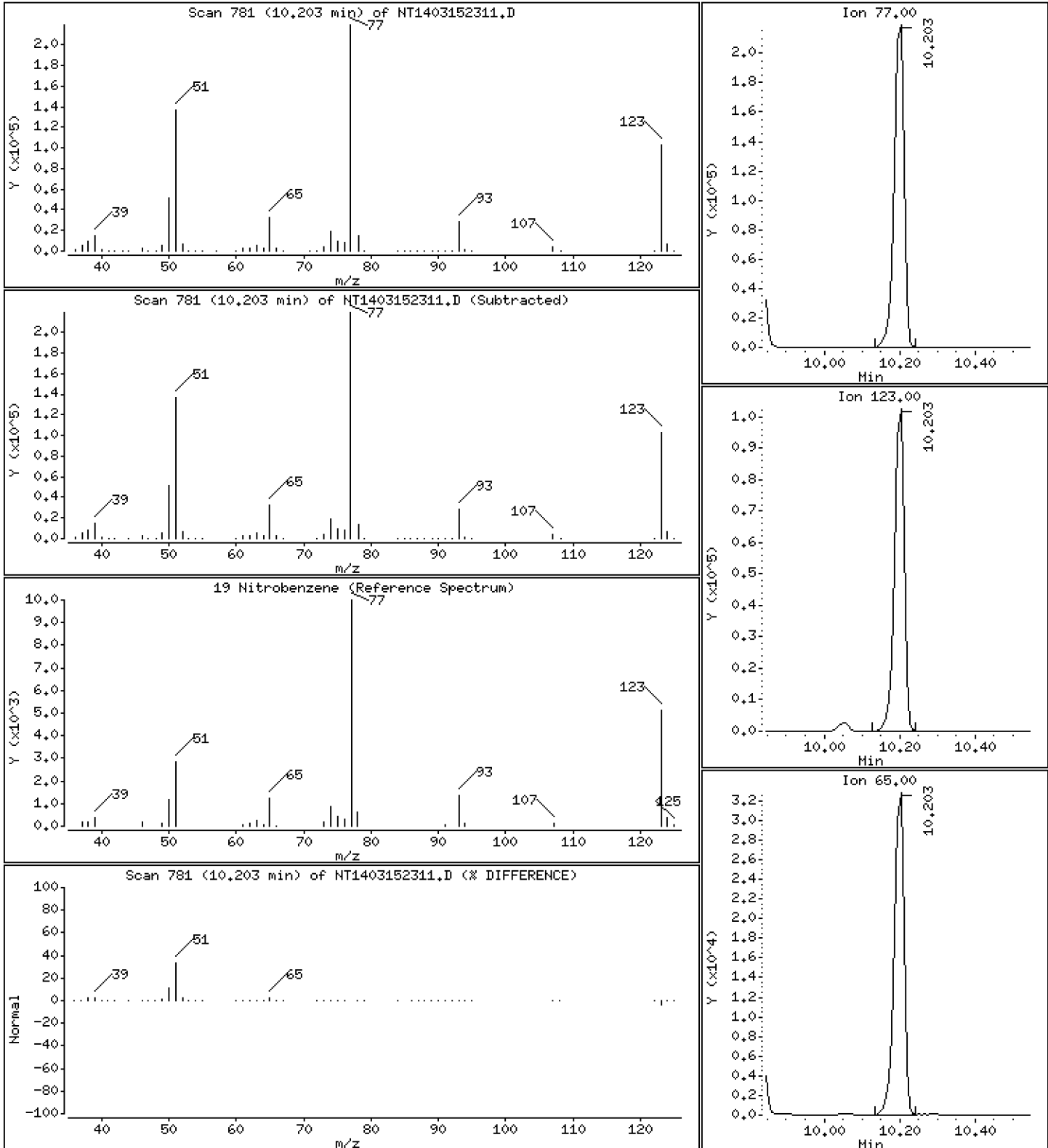
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,023 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

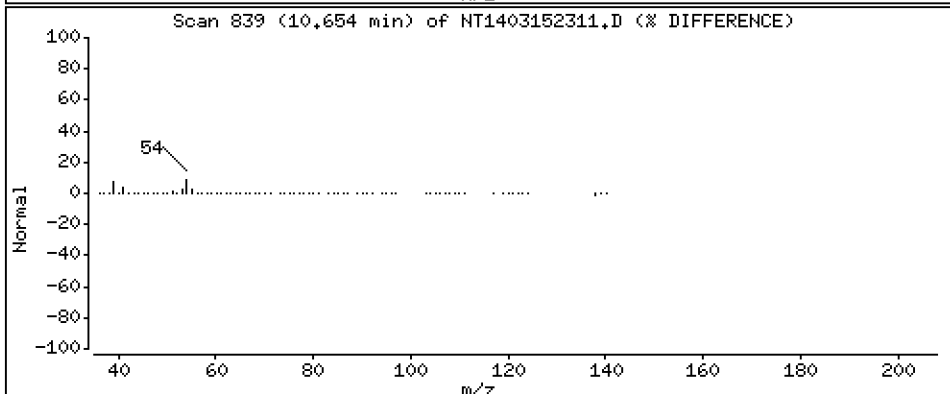
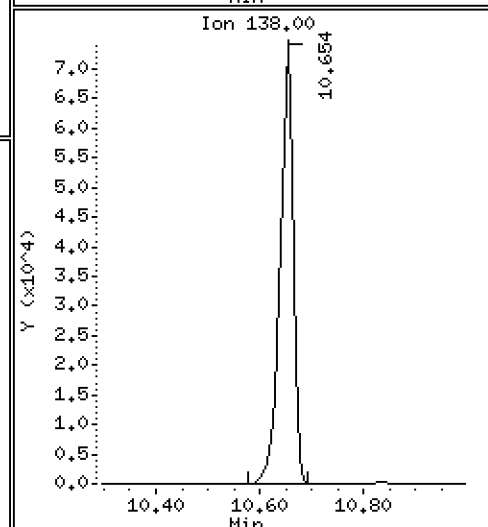
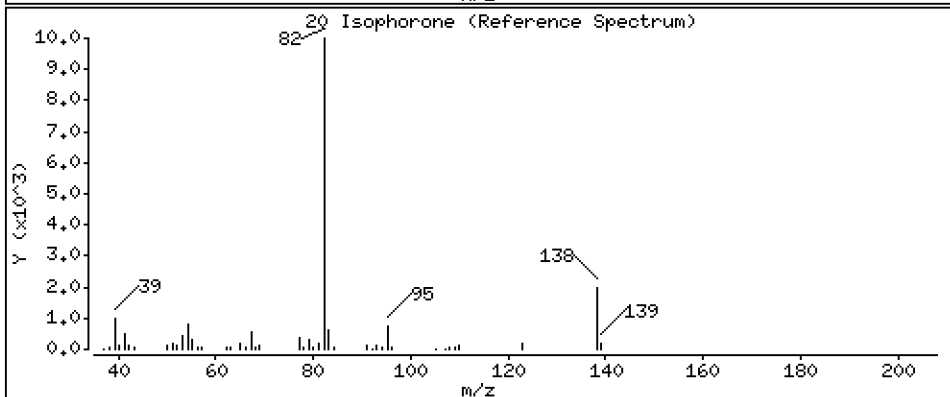
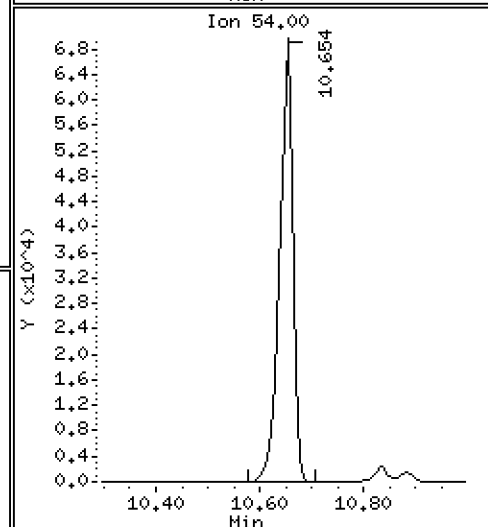
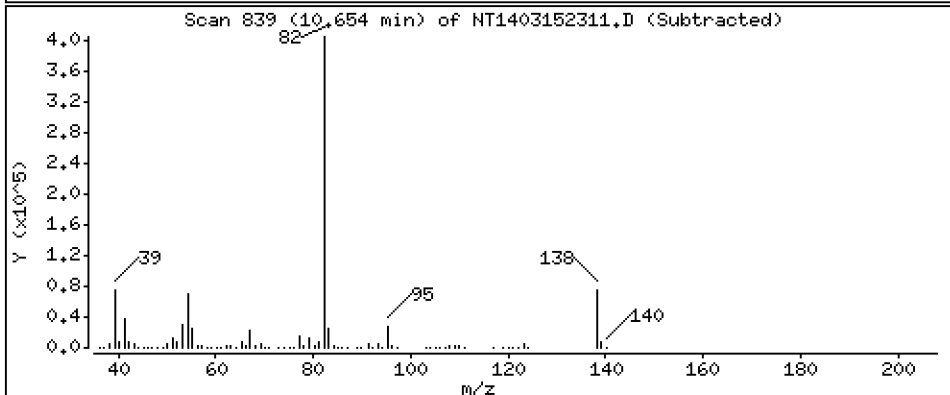
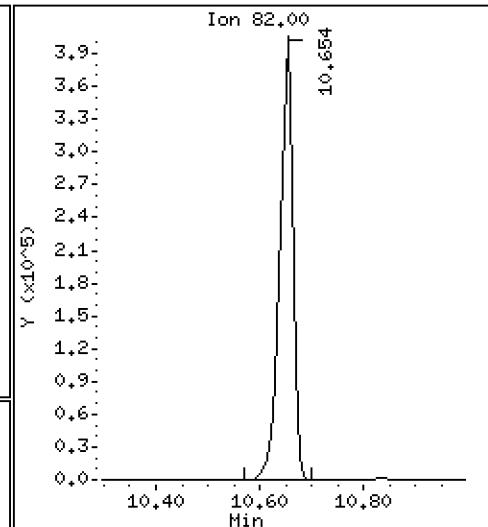
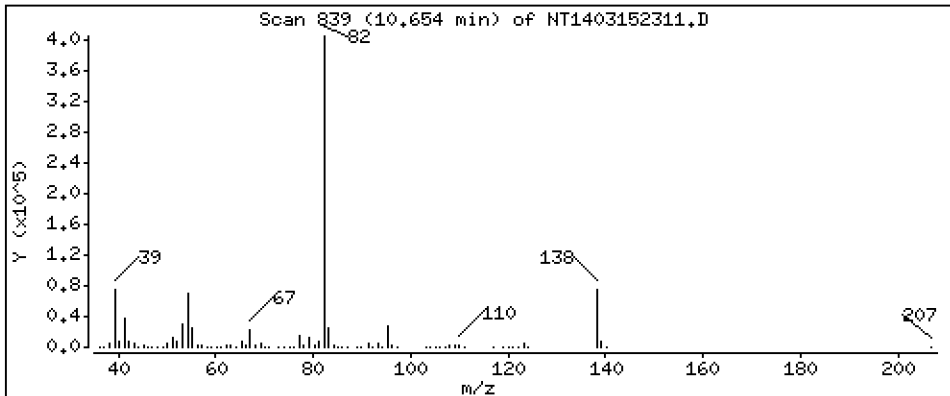
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 6,771 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

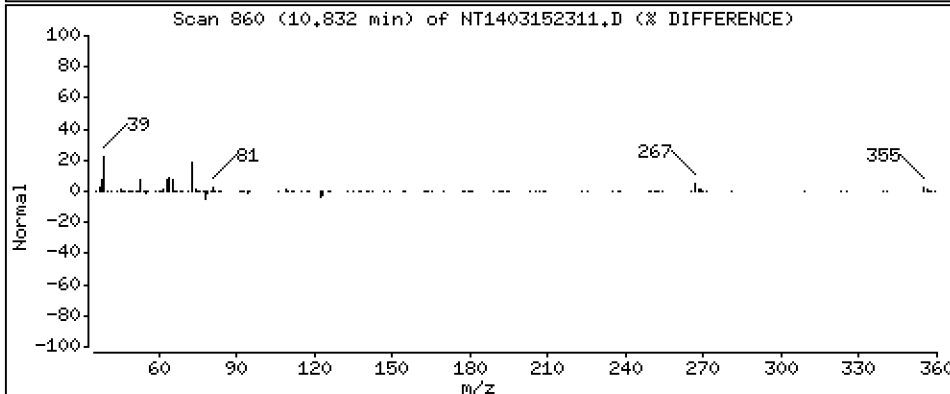
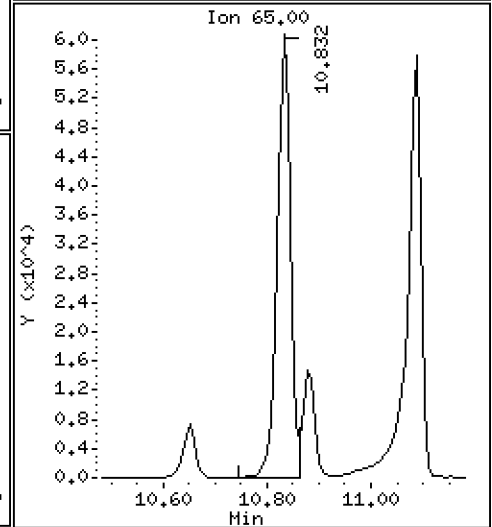
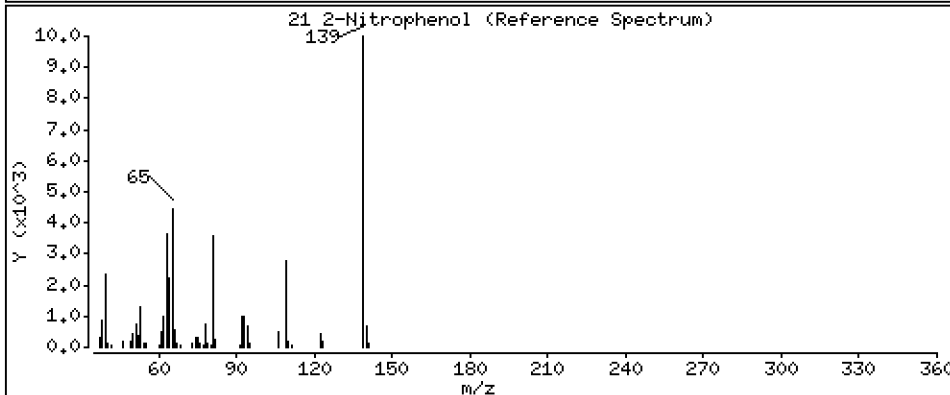
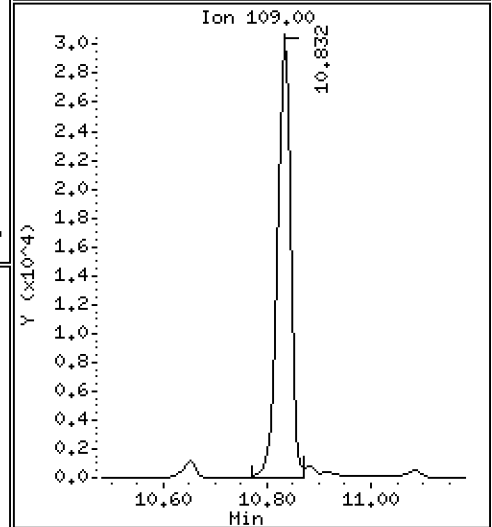
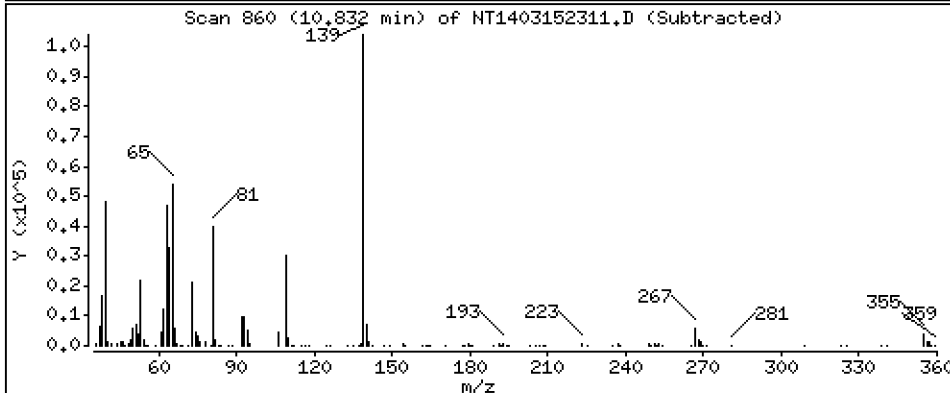
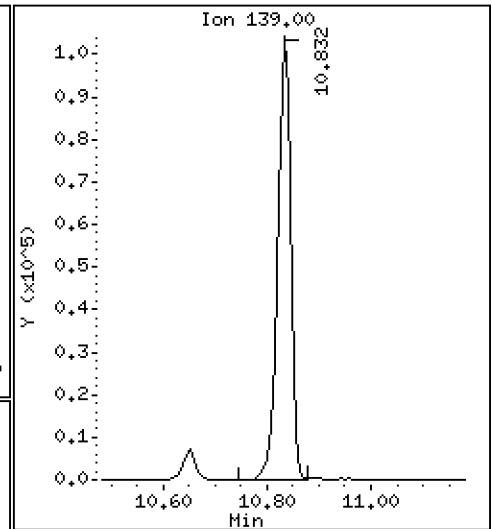
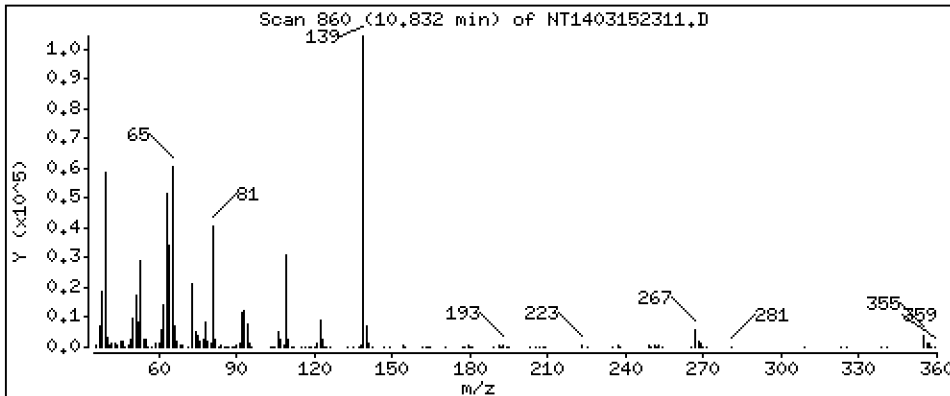
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,530 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

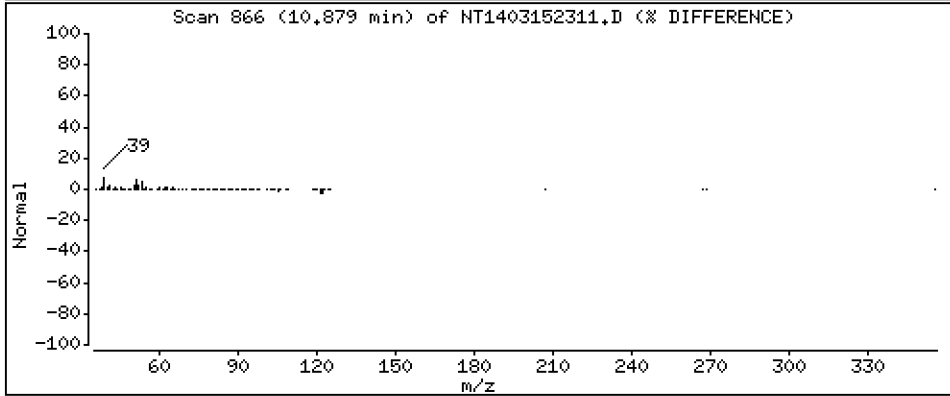
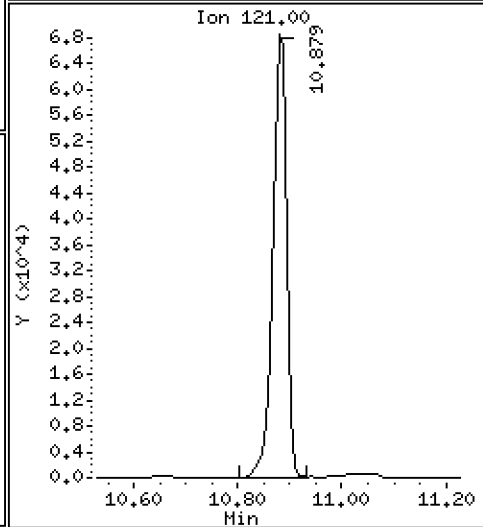
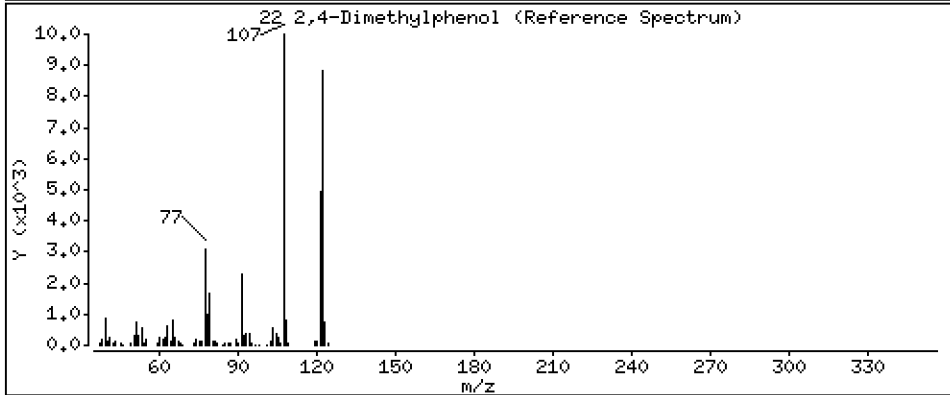
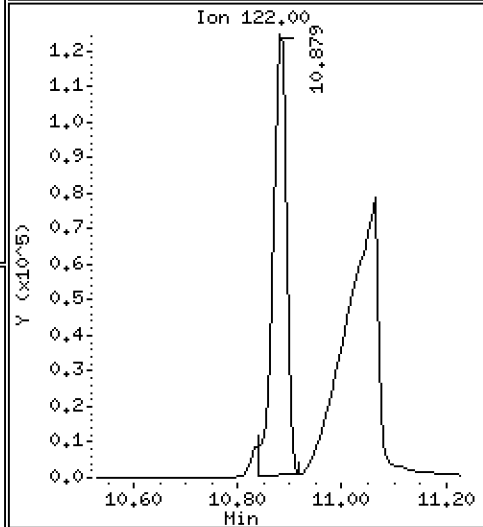
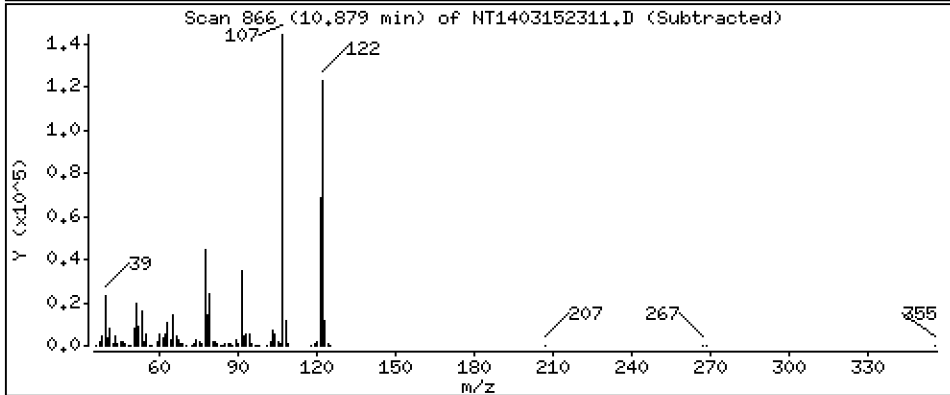
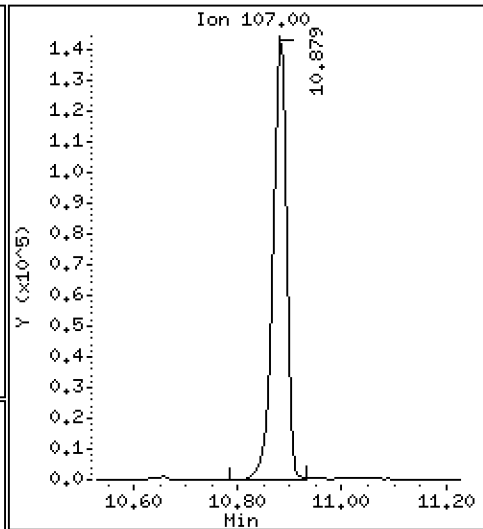
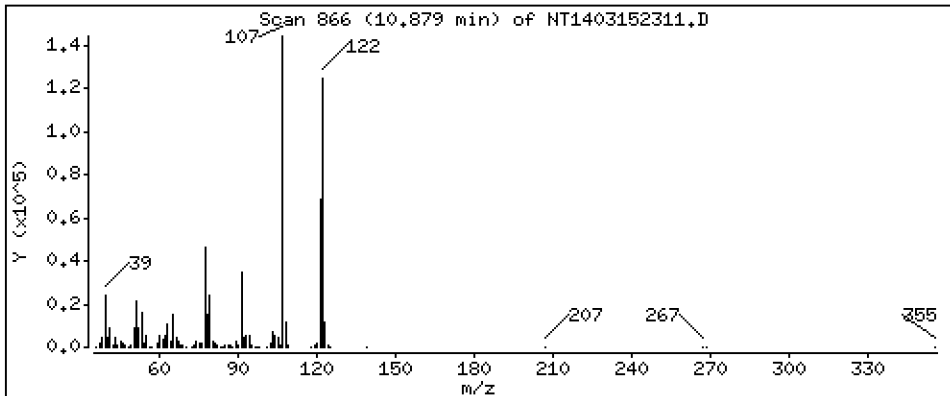
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,915 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

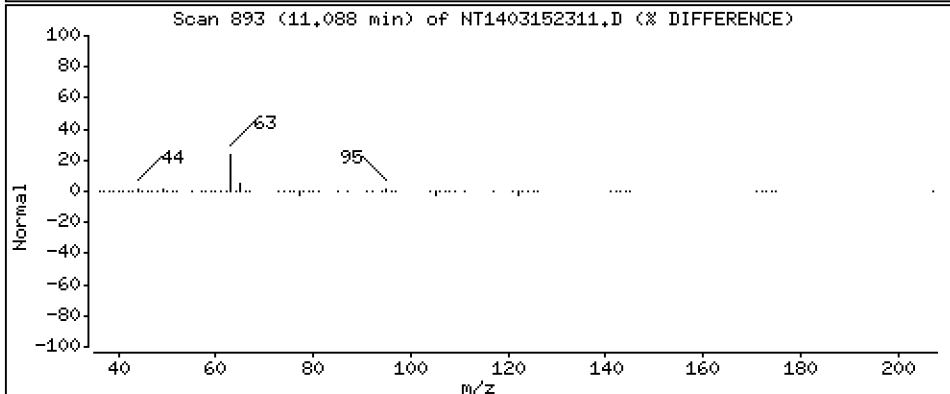
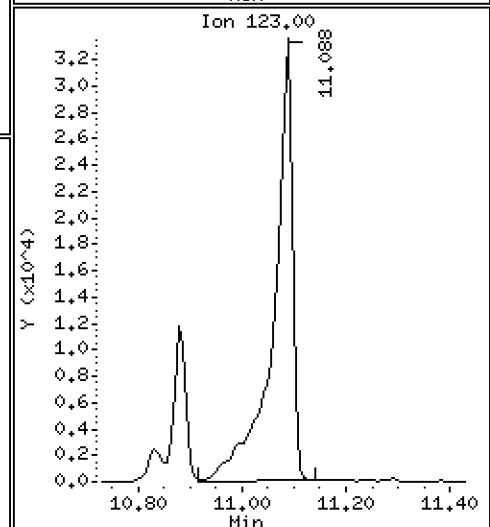
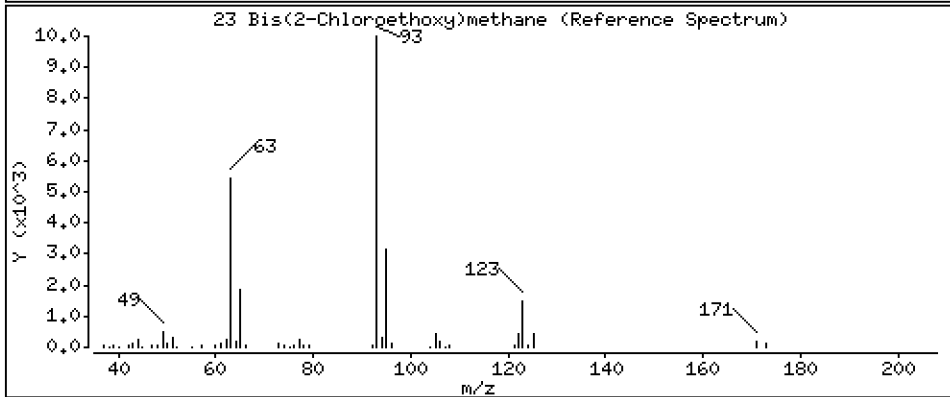
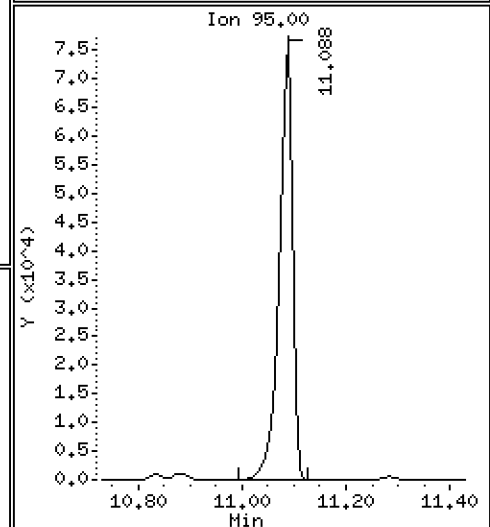
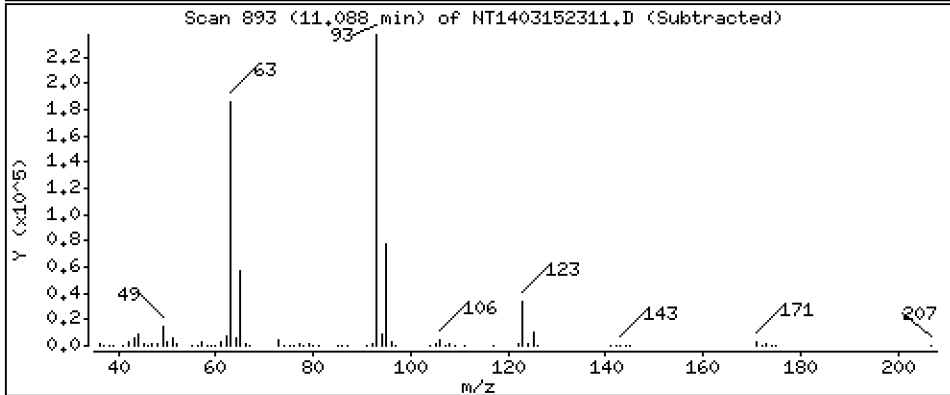
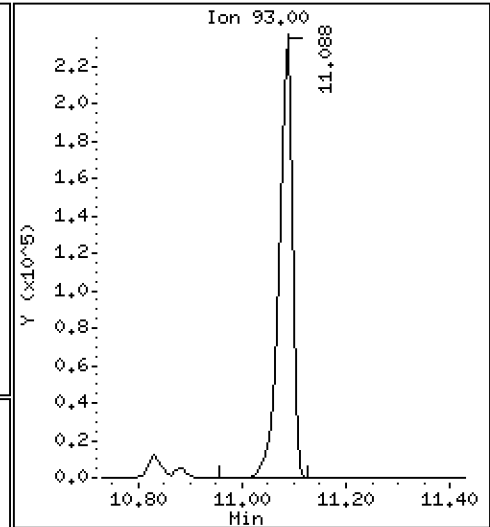
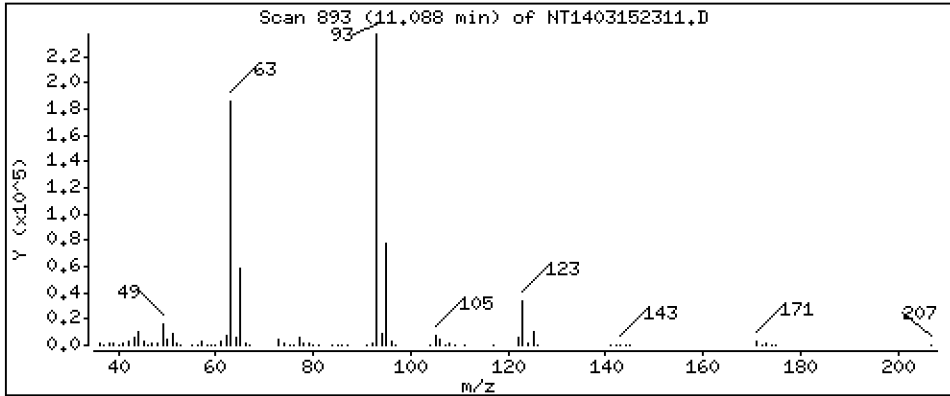
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,859 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

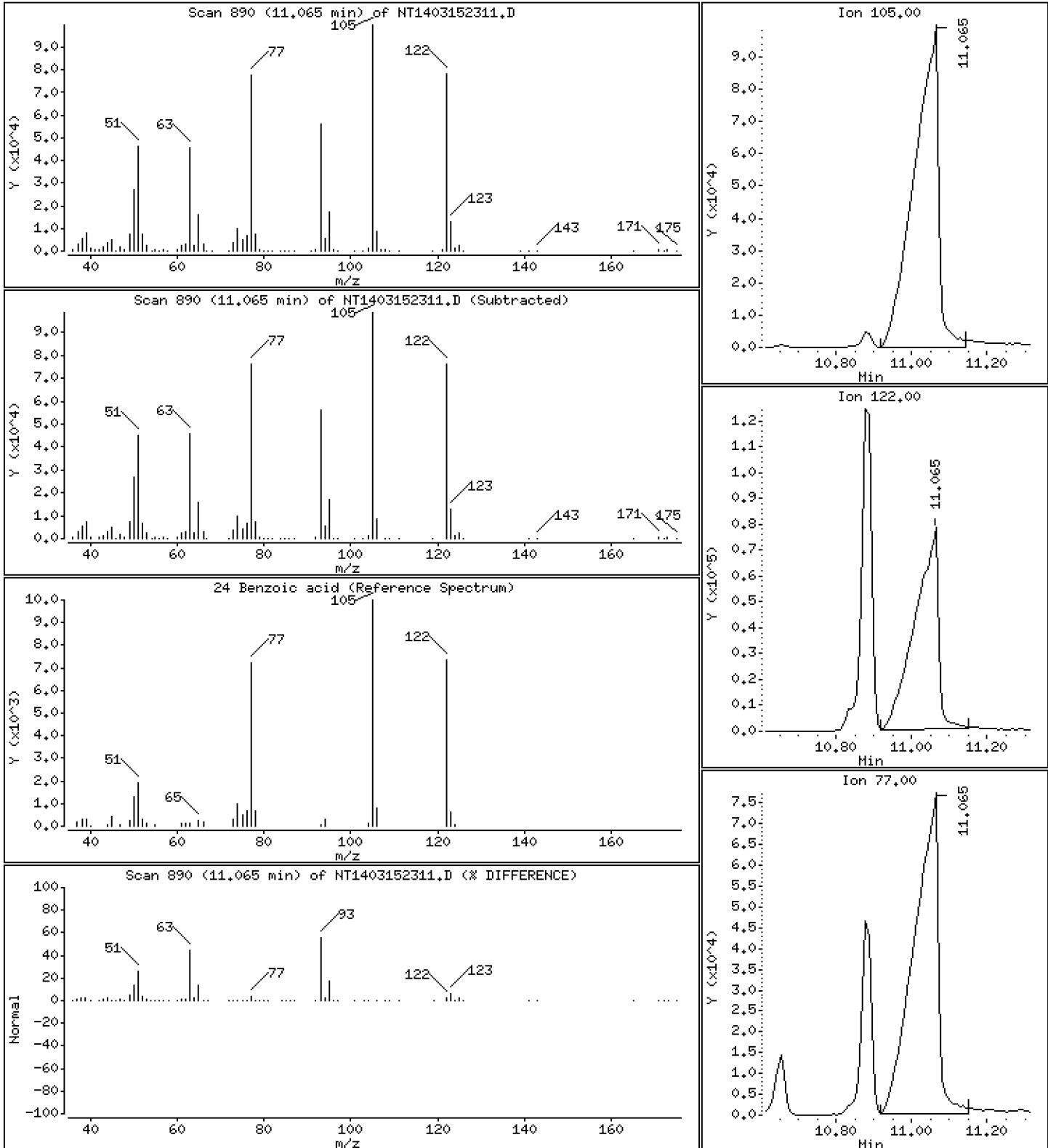
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 8,248 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

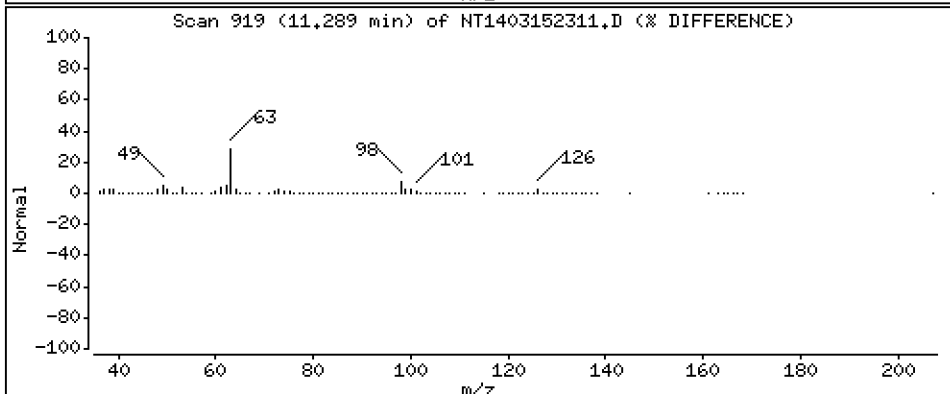
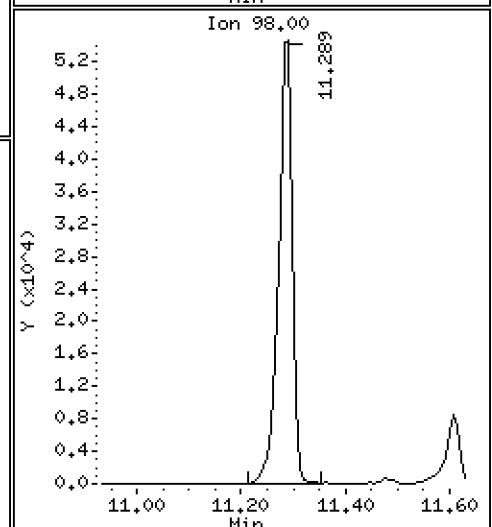
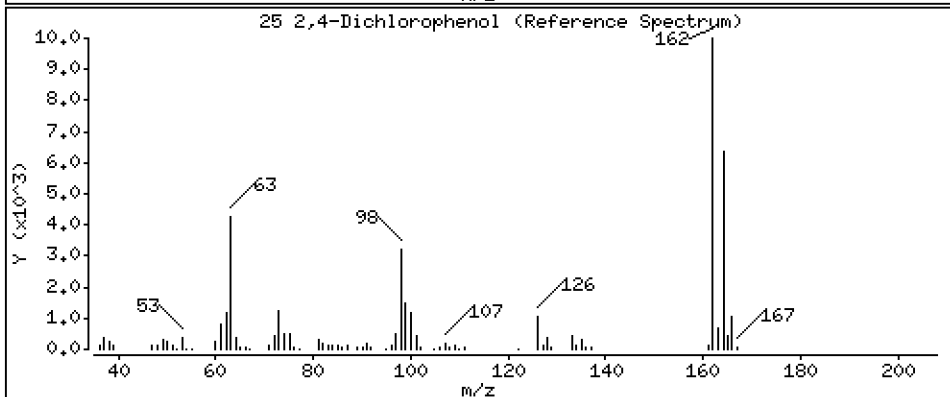
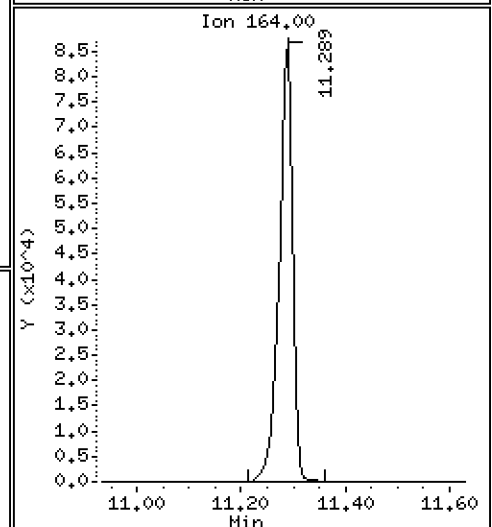
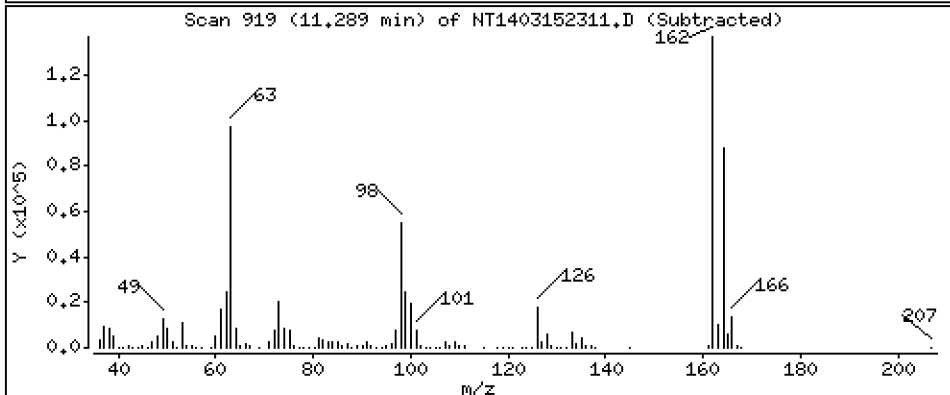
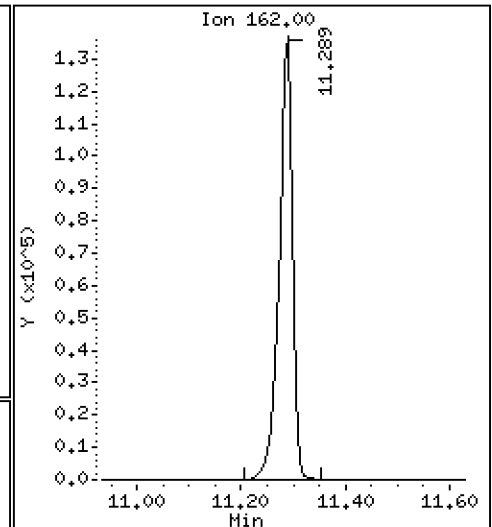
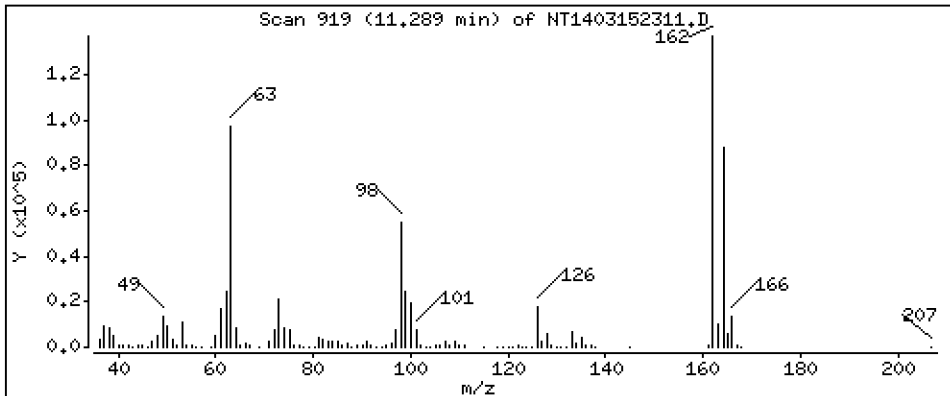
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,779 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

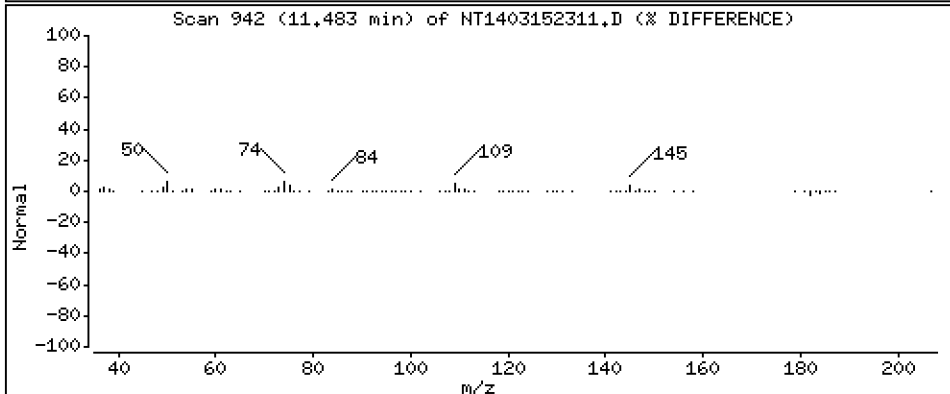
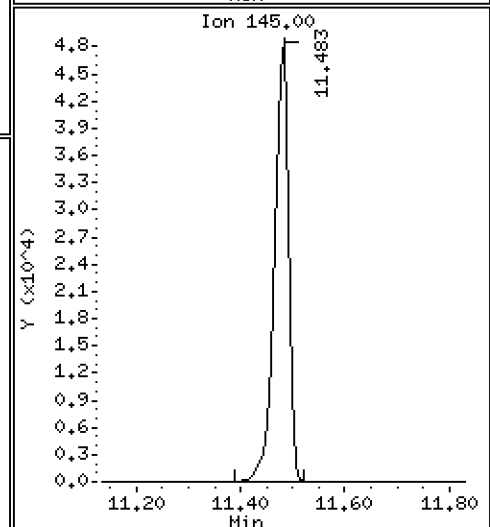
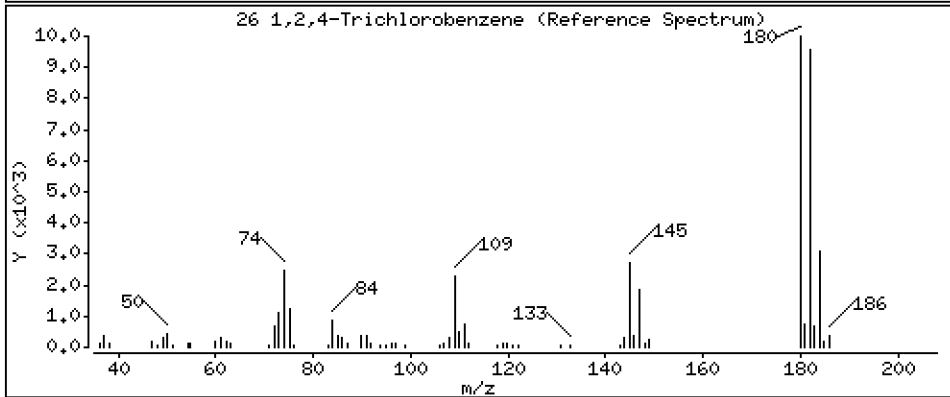
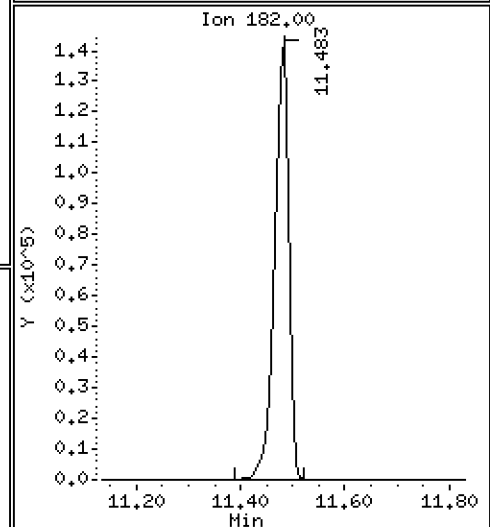
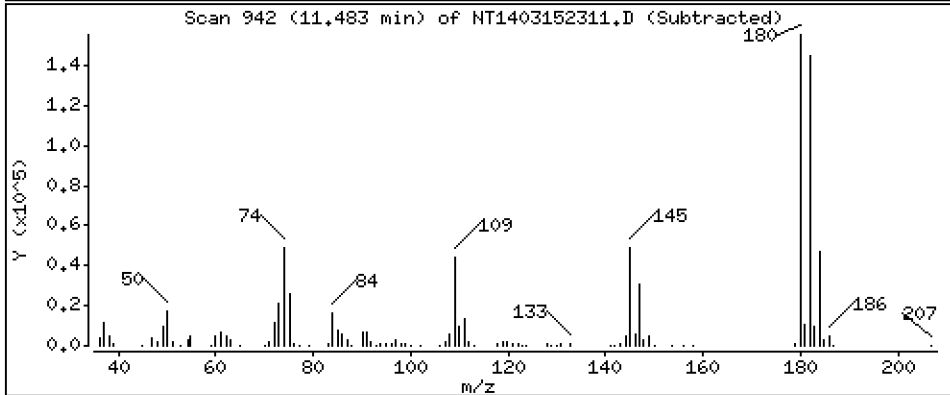
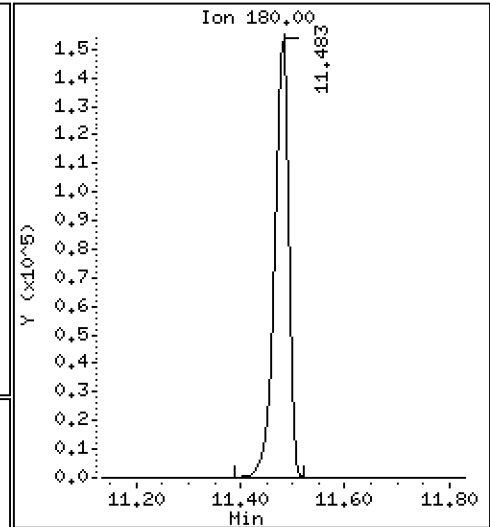
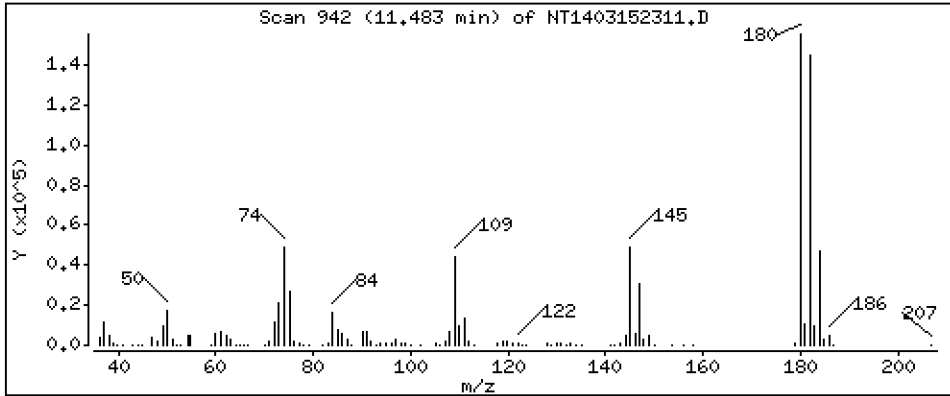
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,052 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

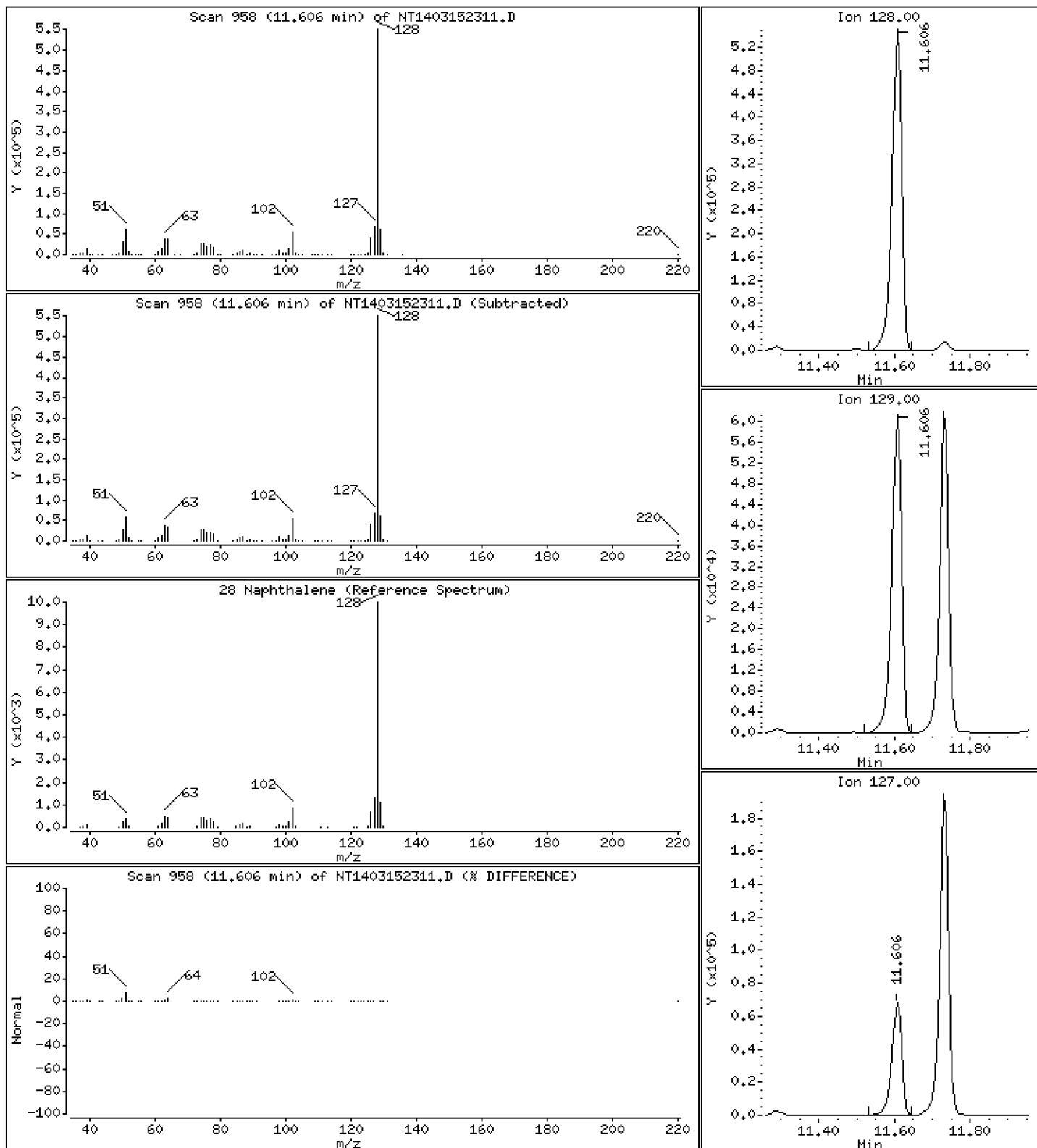
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,829 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

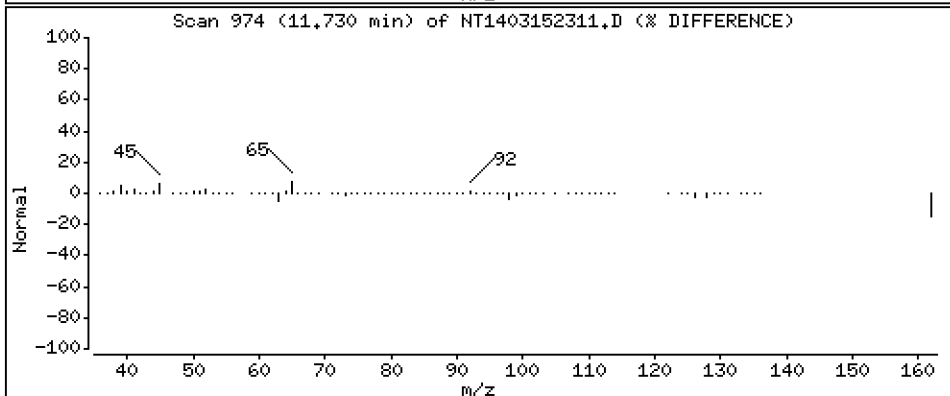
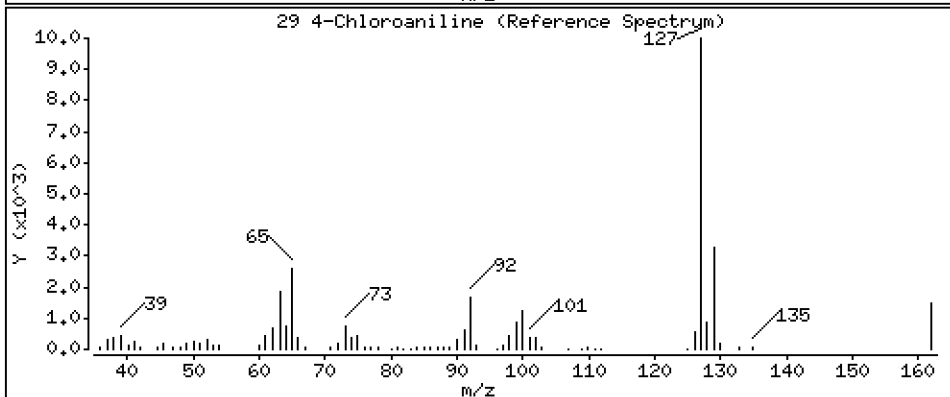
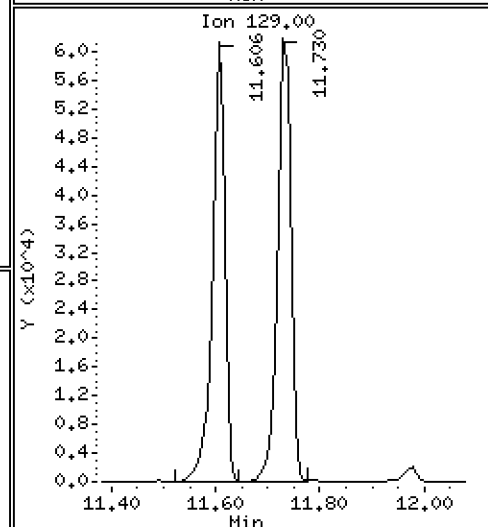
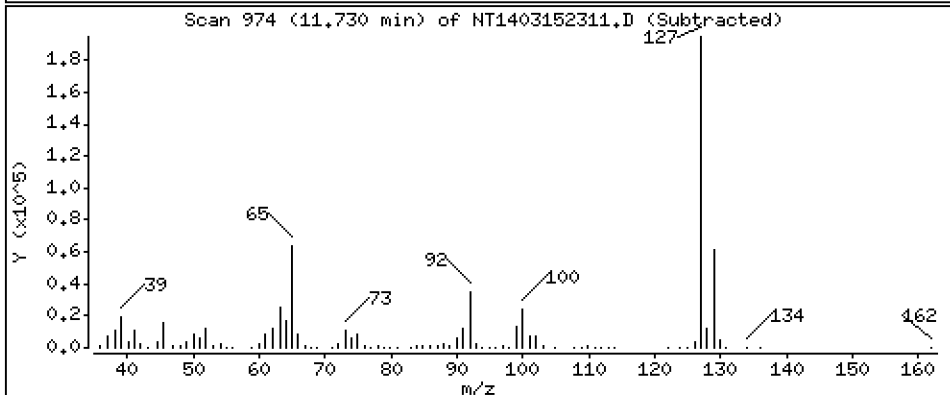
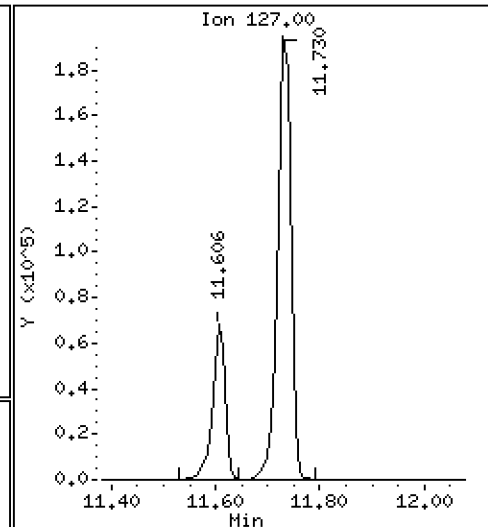
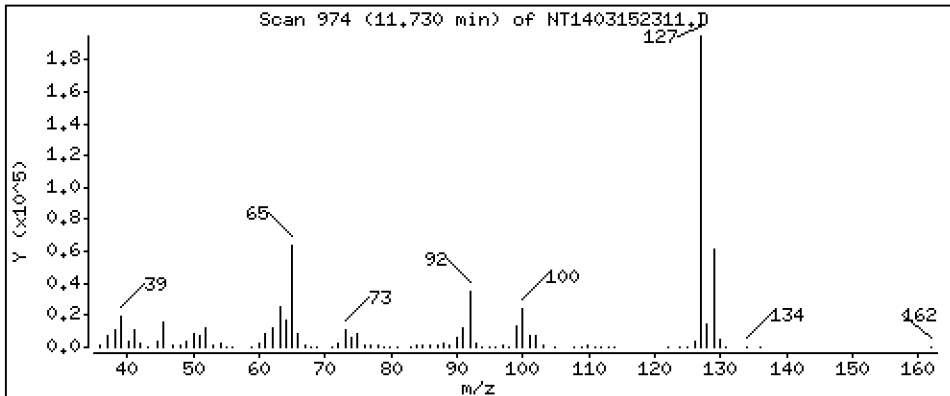
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 4,033 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

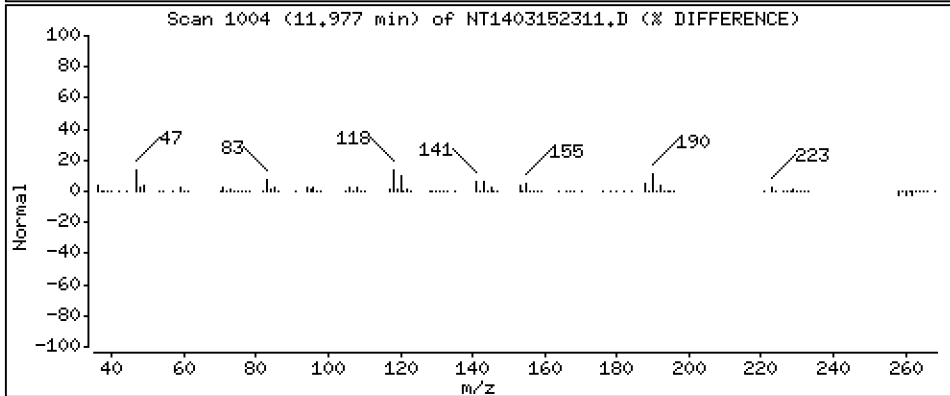
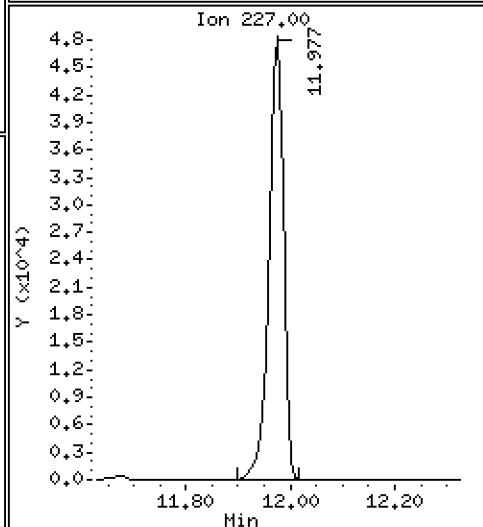
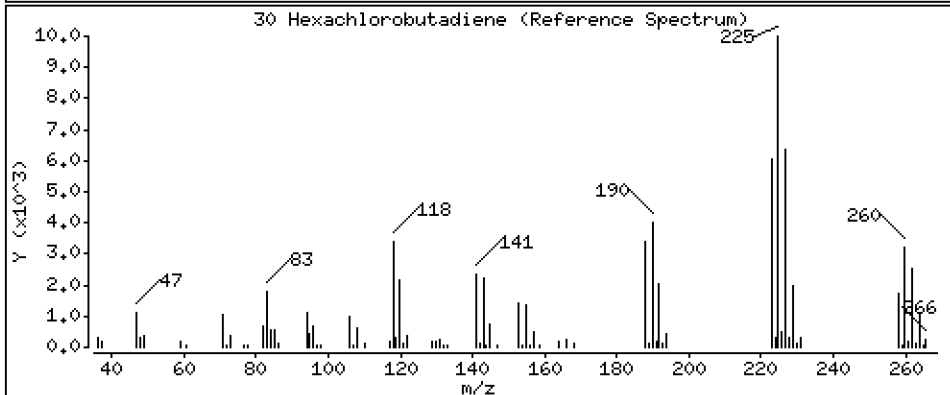
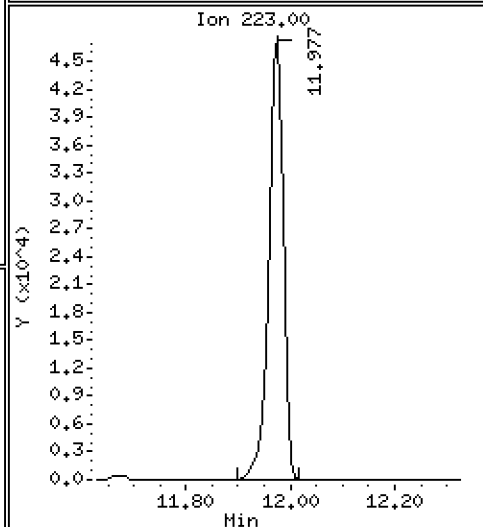
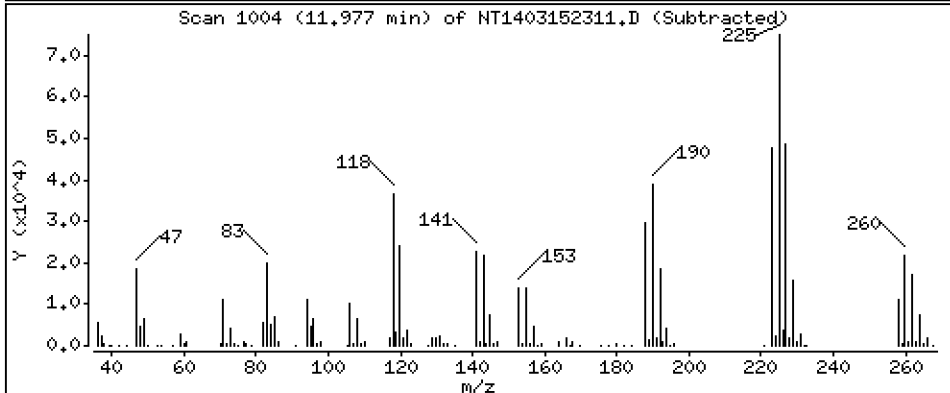
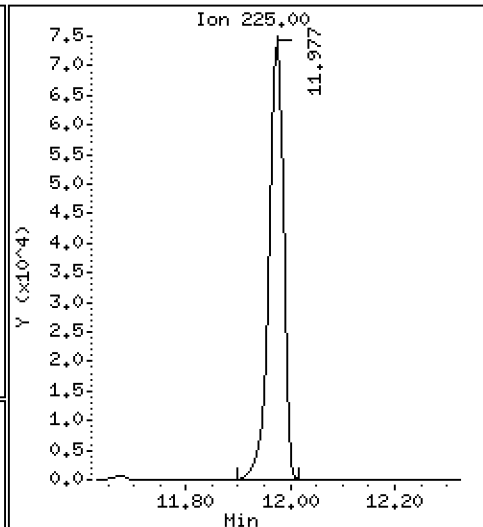
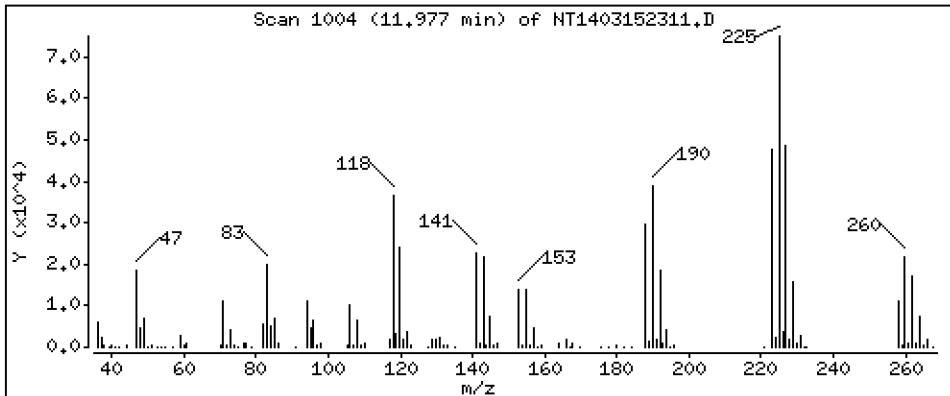
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,908 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

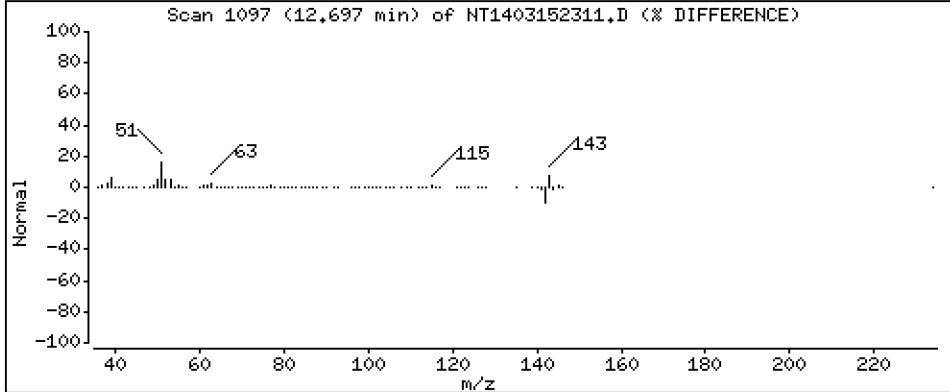
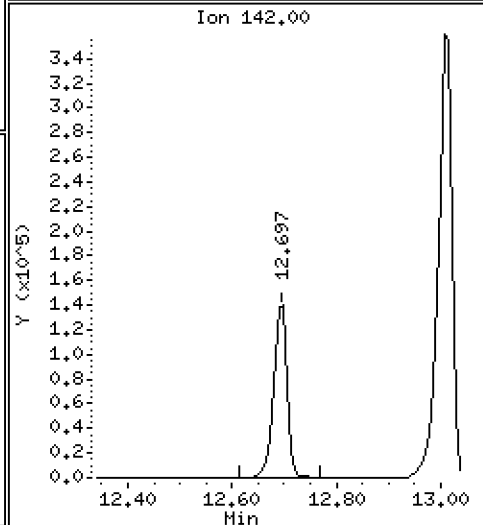
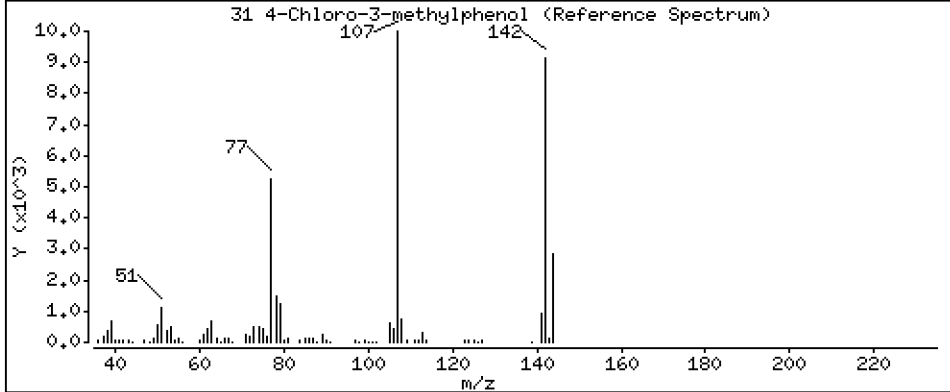
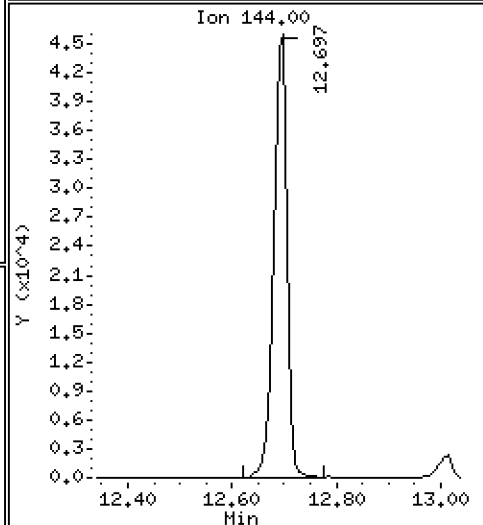
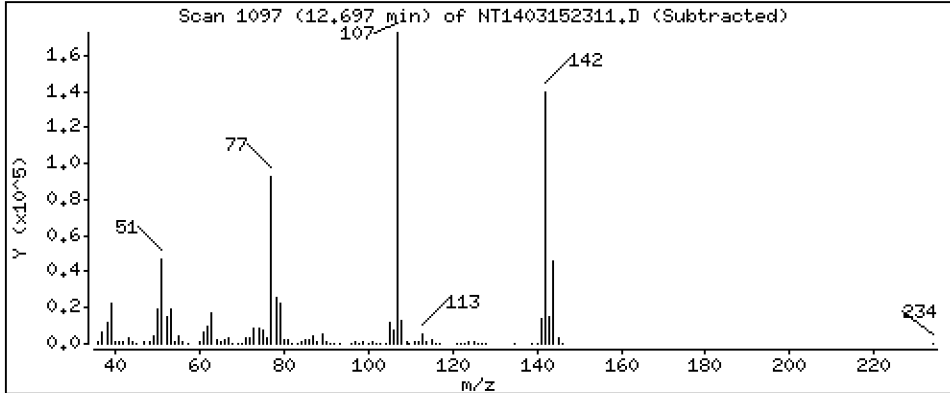
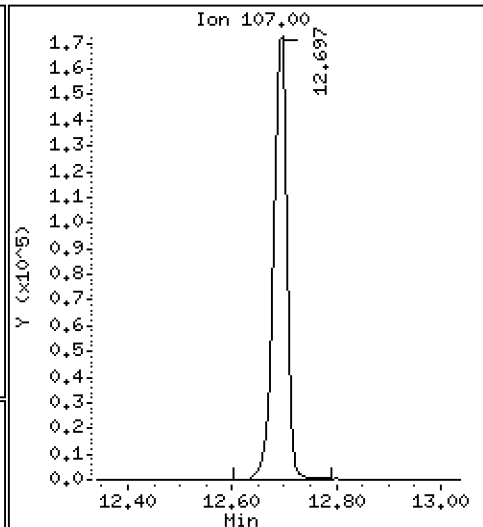
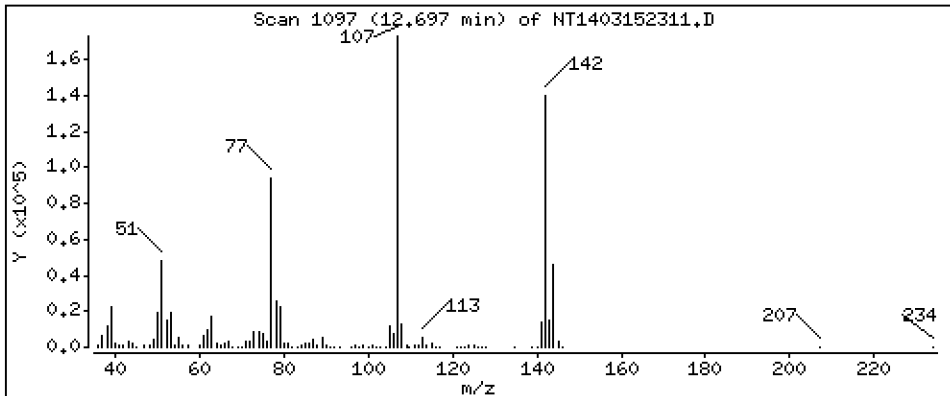
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,852 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

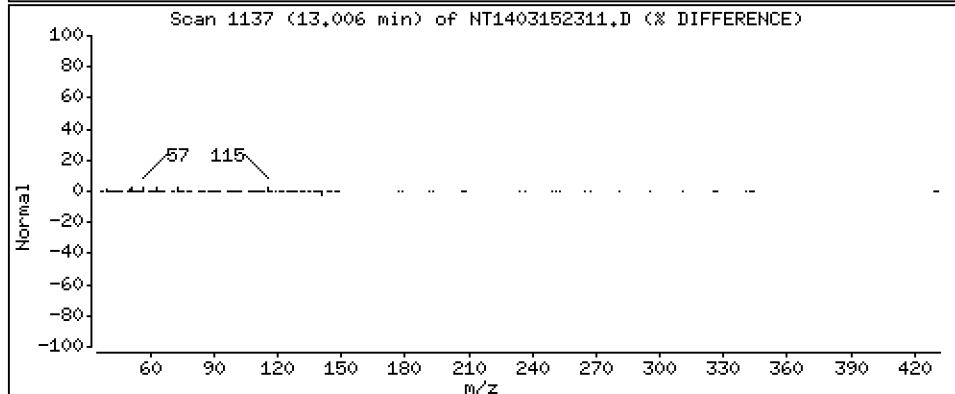
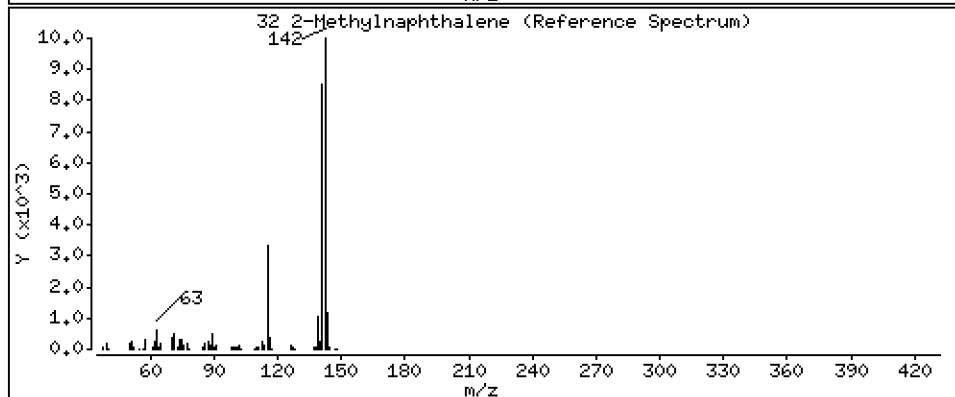
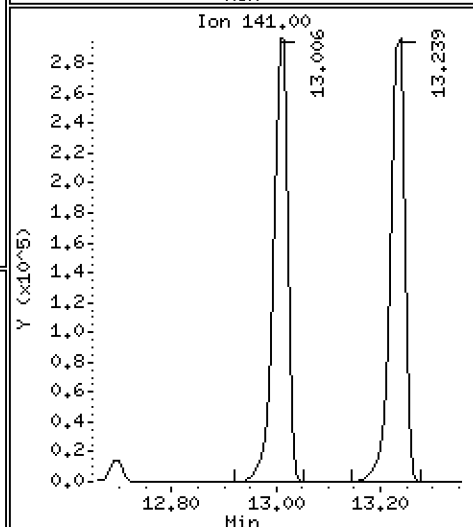
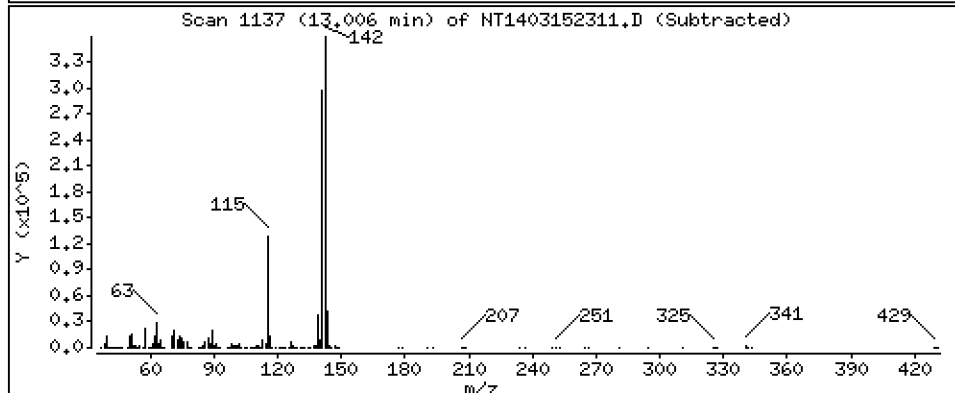
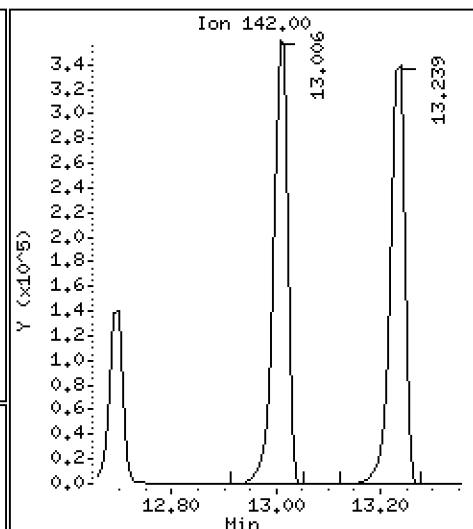
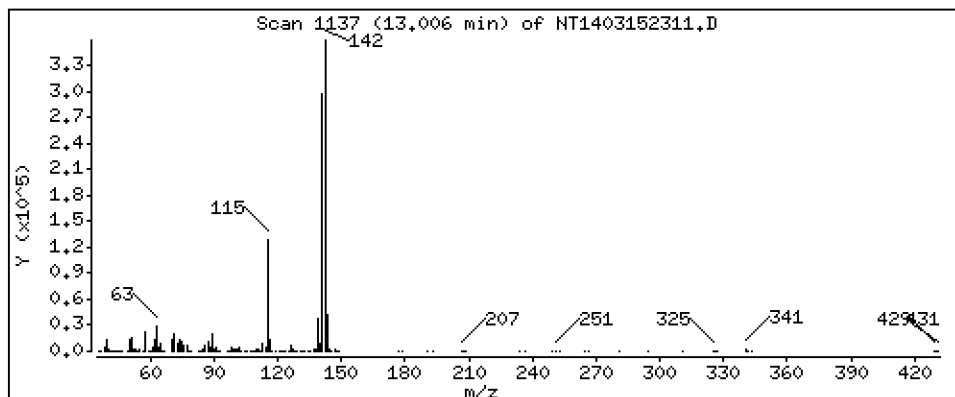
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 4.854 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

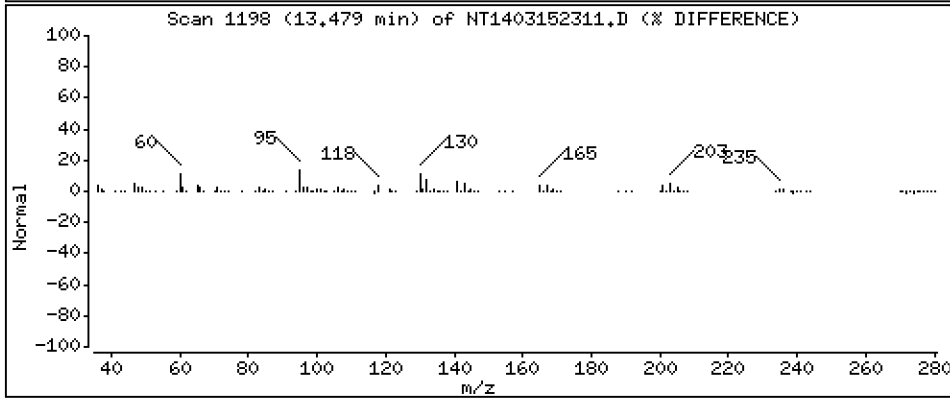
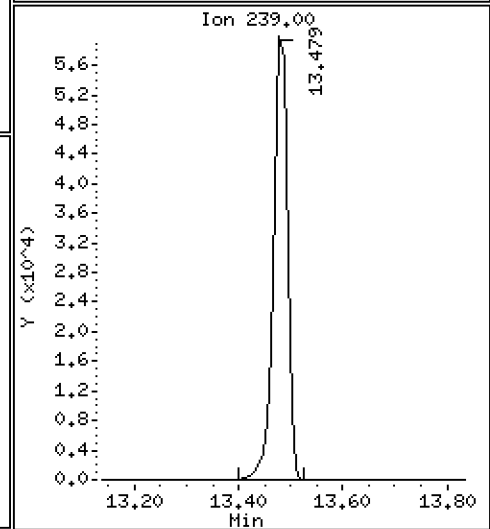
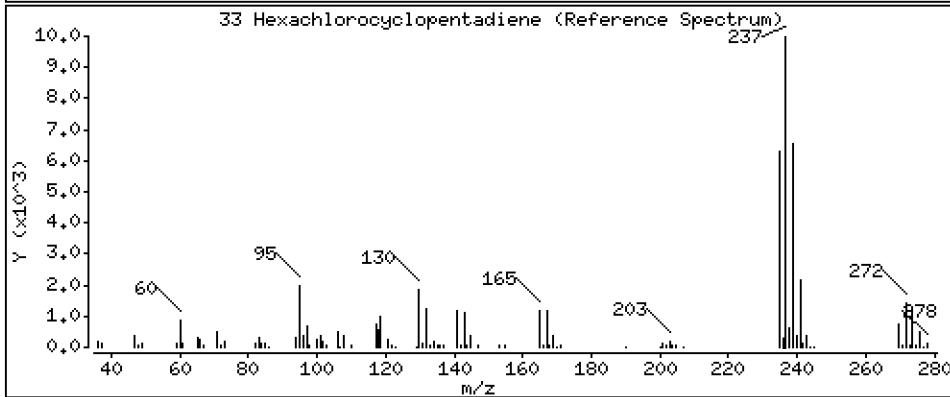
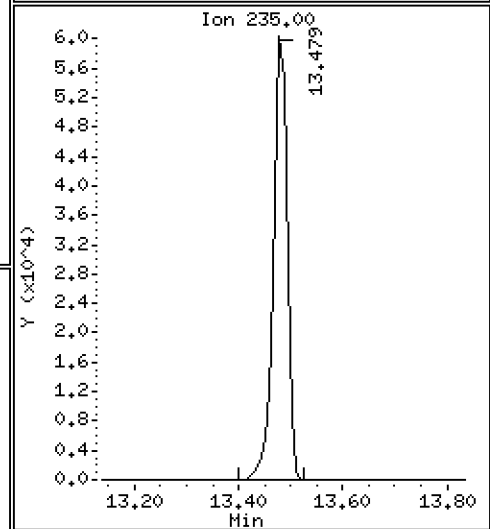
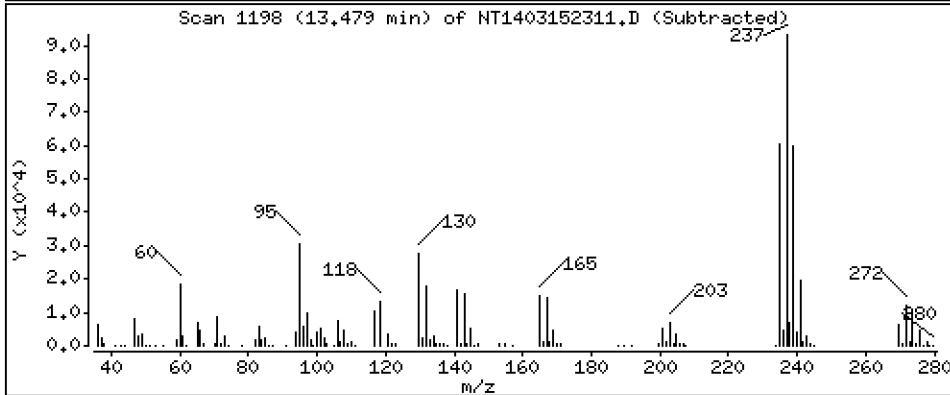
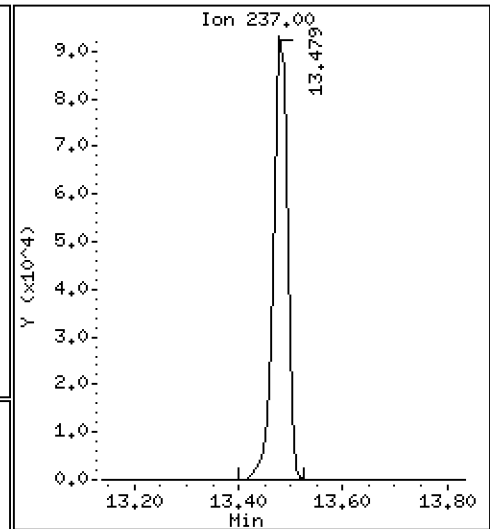
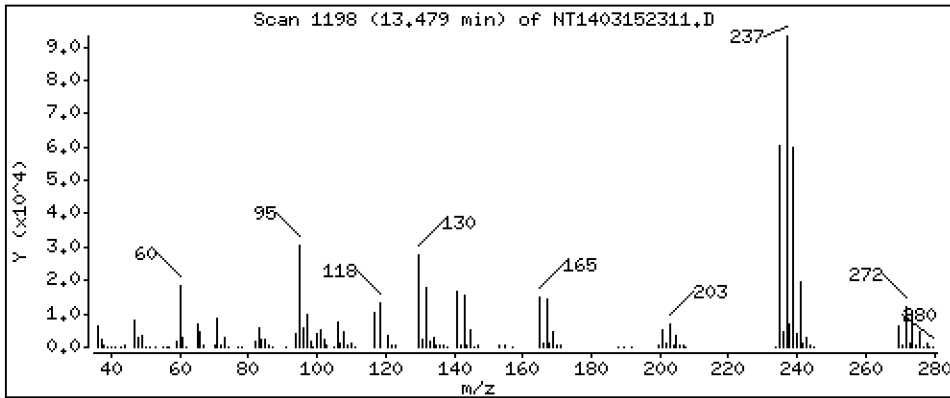
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 5,230 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

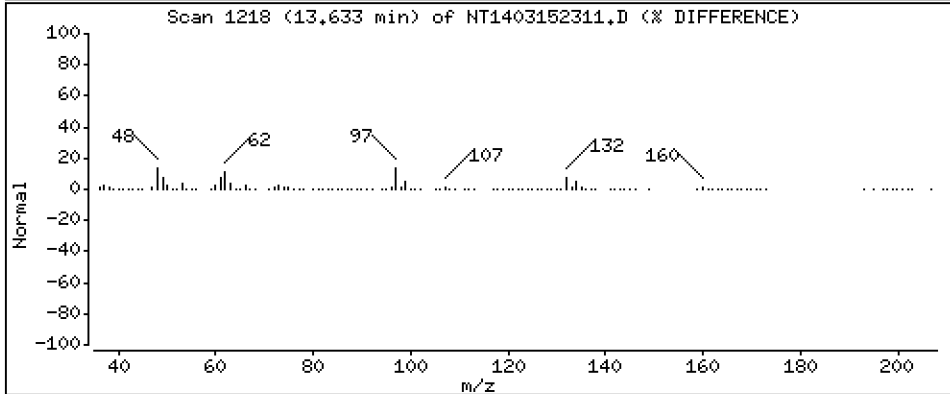
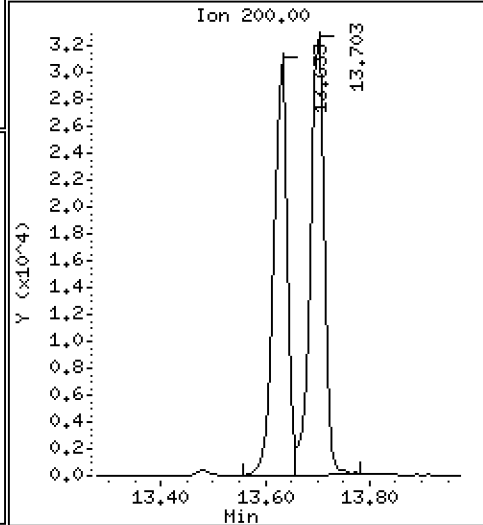
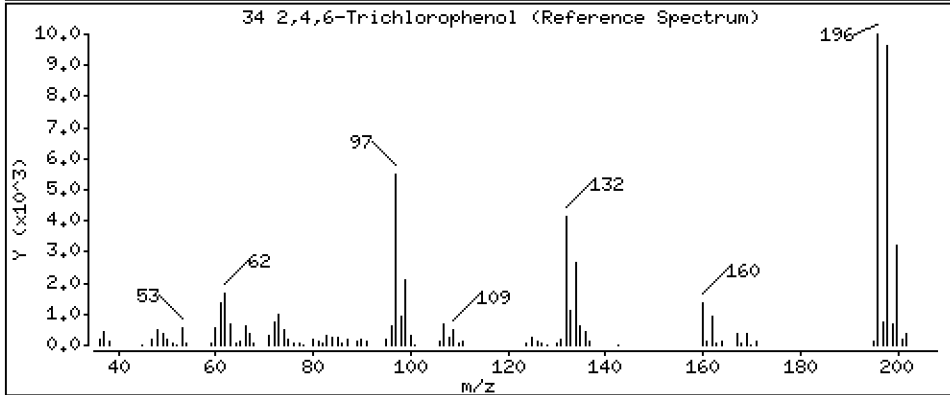
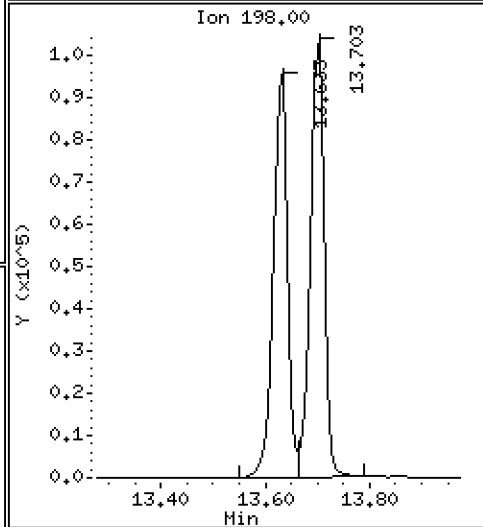
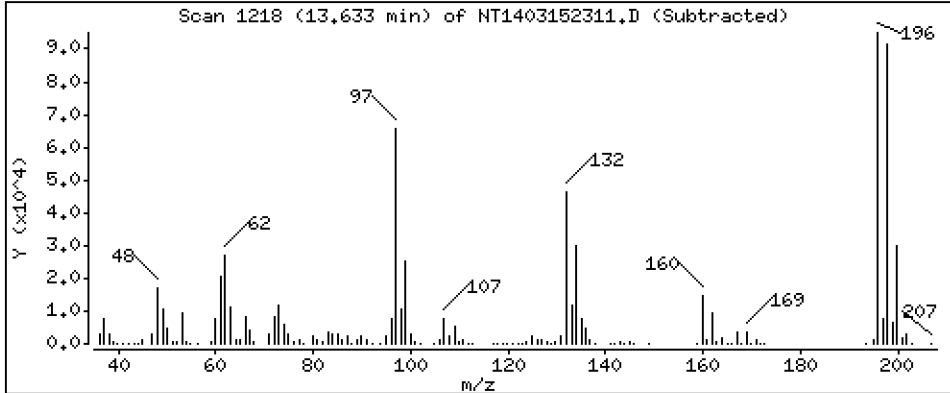
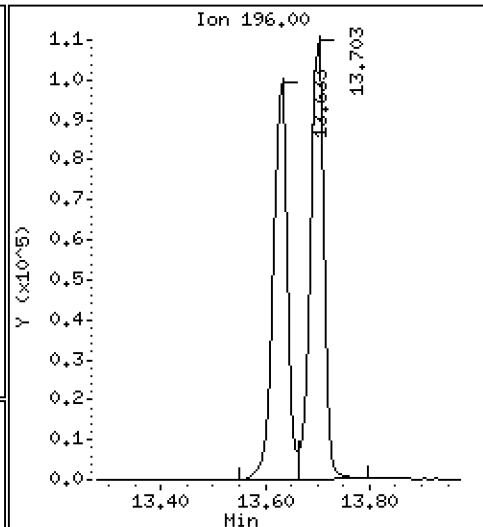
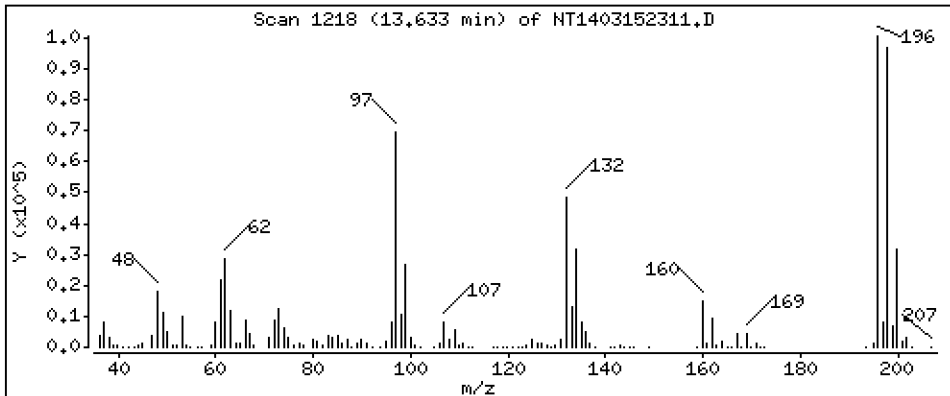
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,718 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

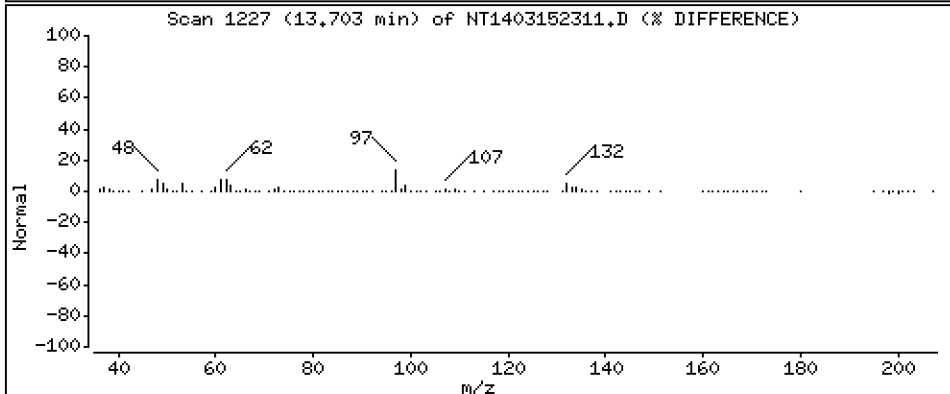
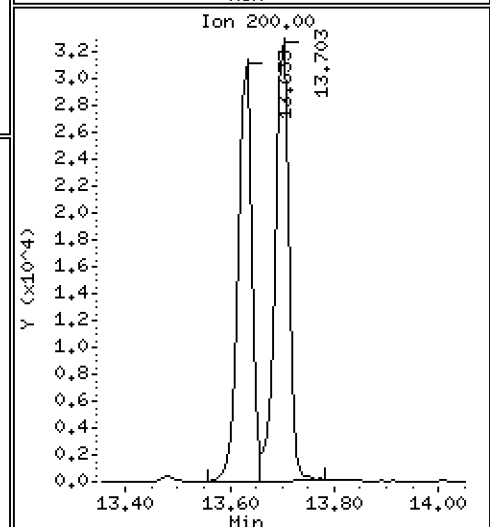
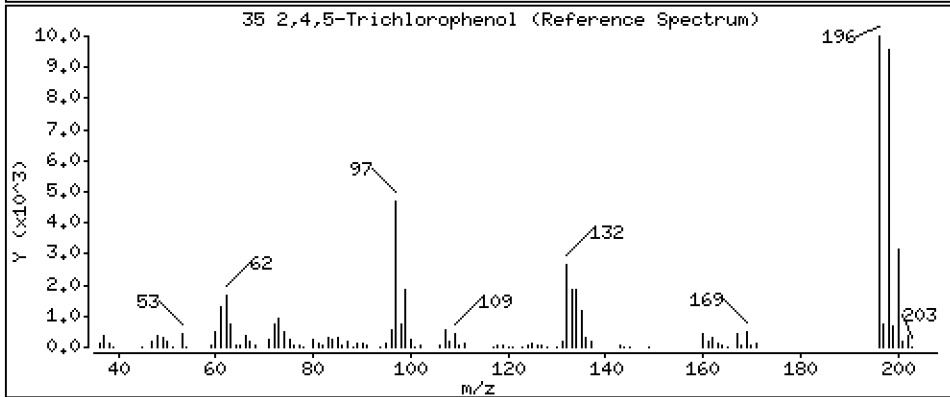
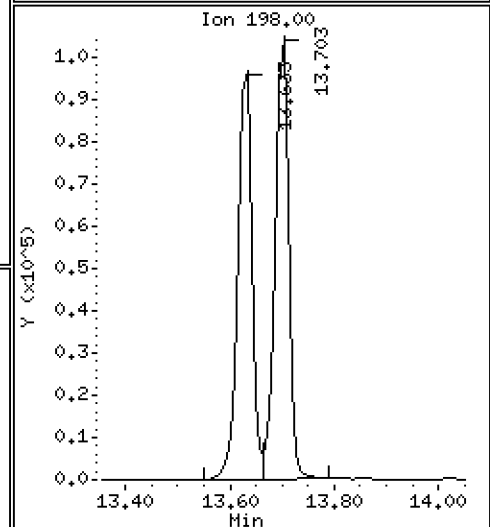
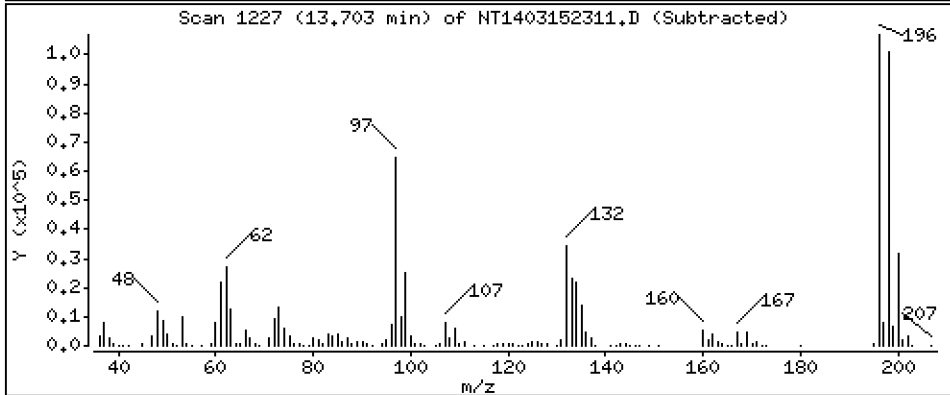
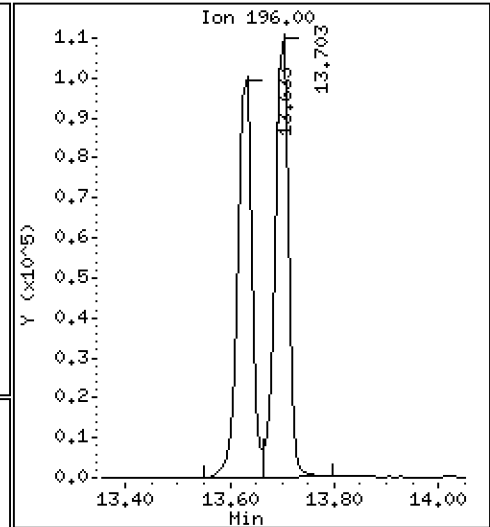
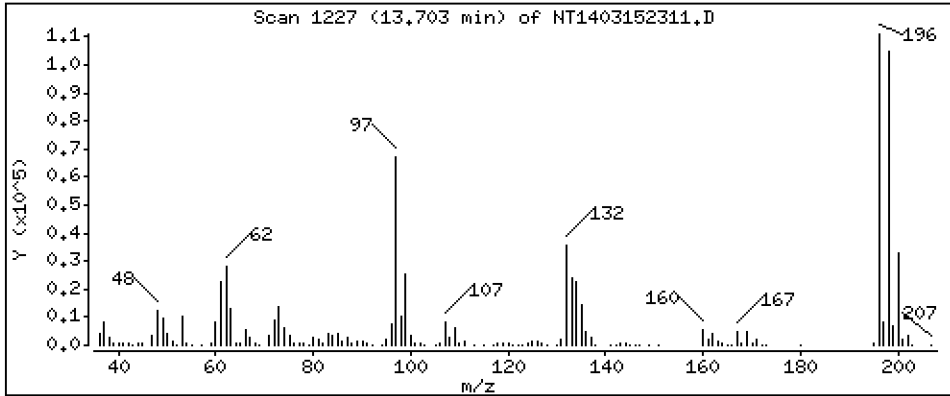
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,661 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

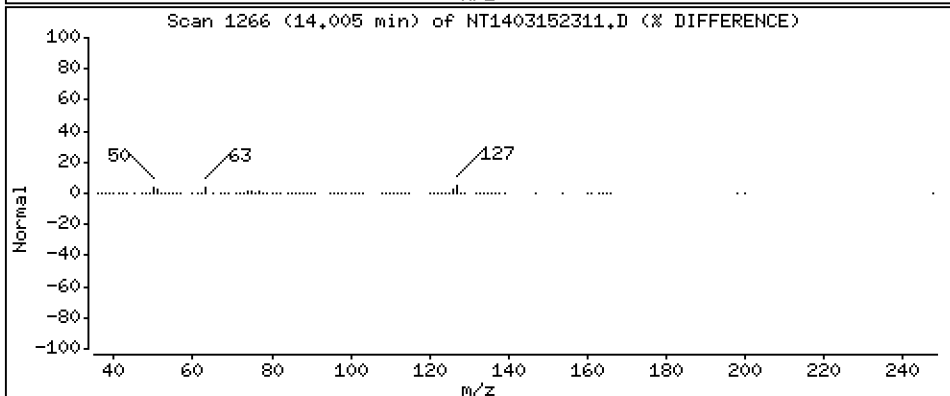
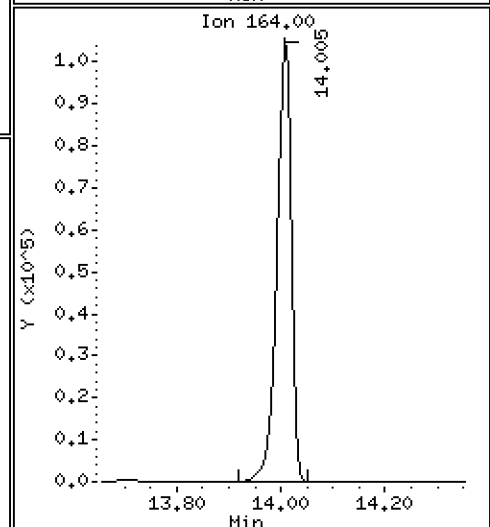
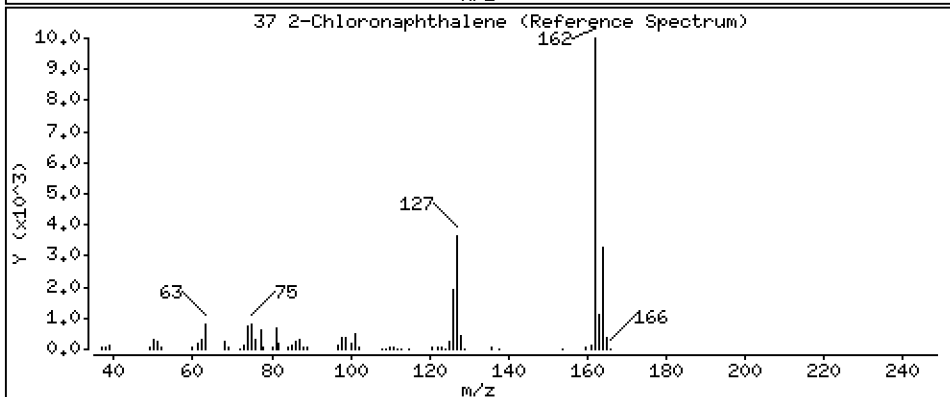
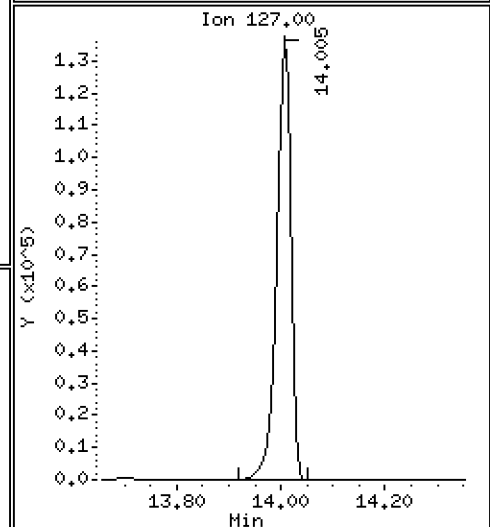
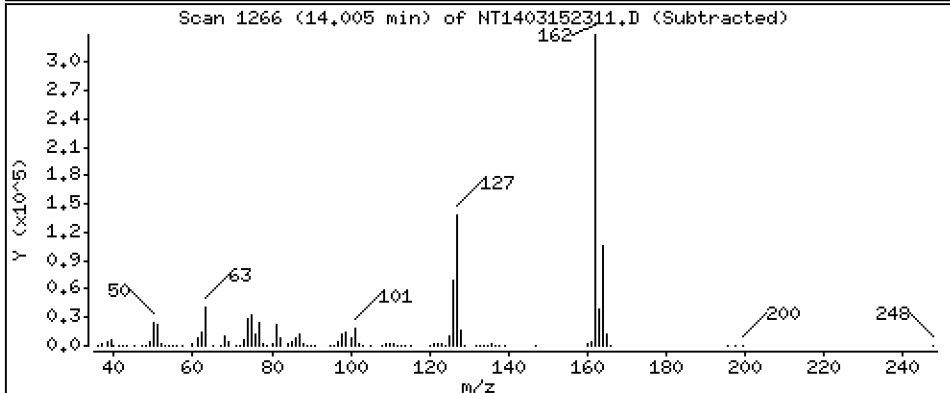
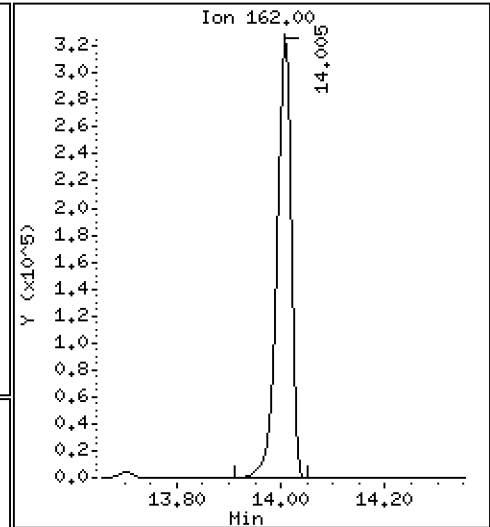
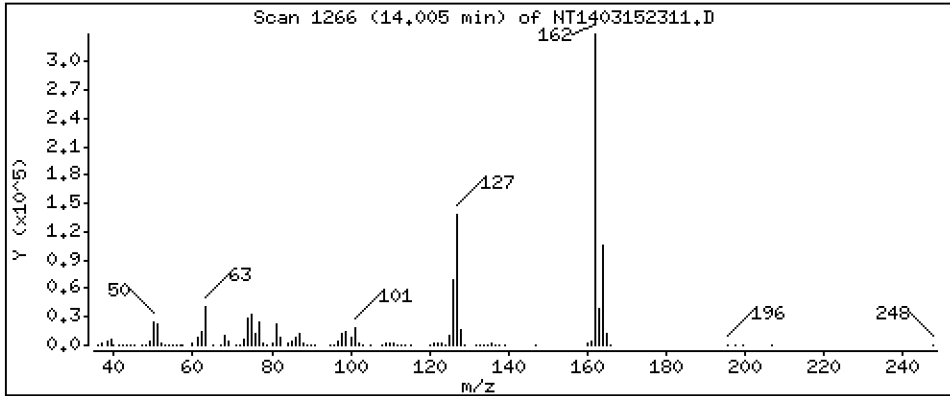
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 4,977 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

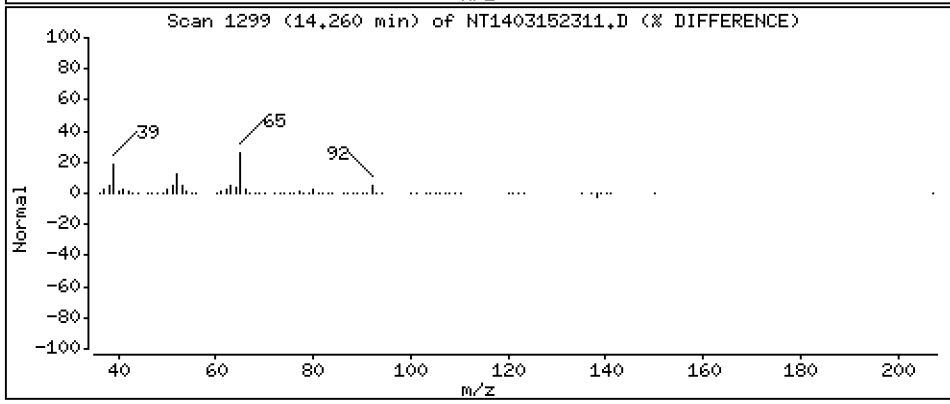
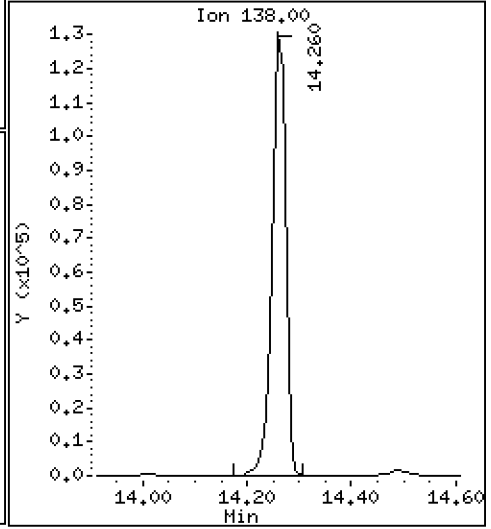
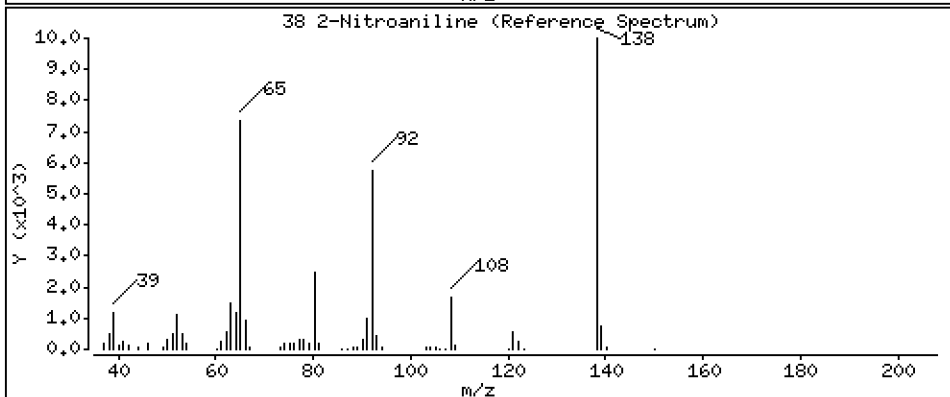
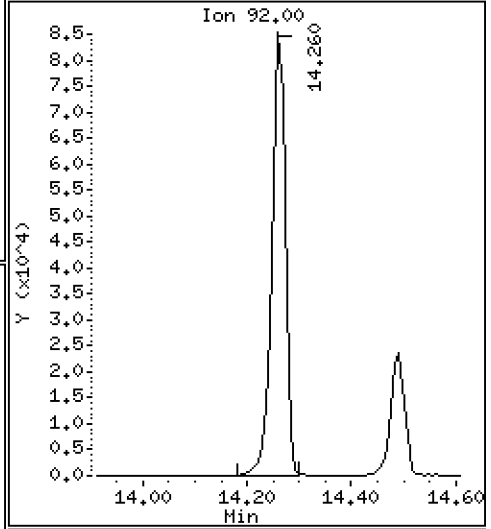
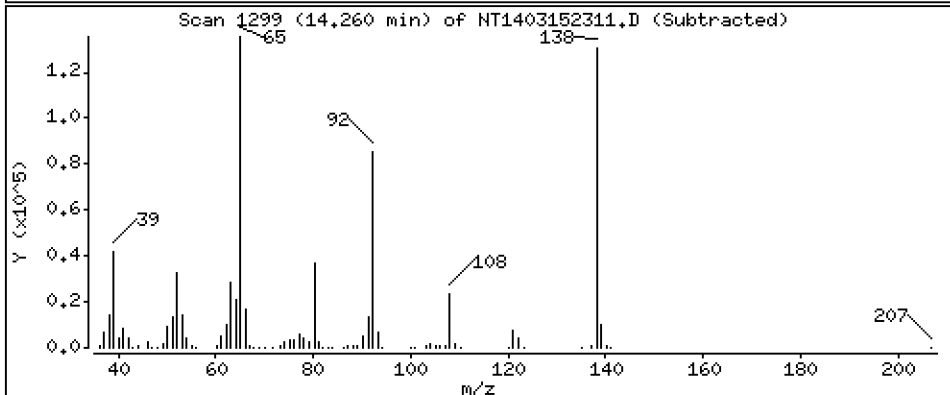
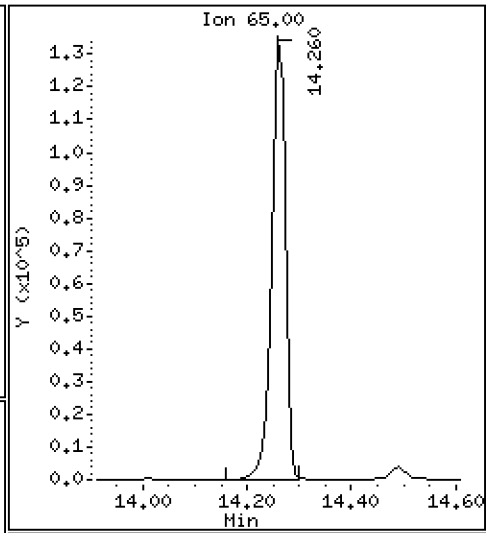
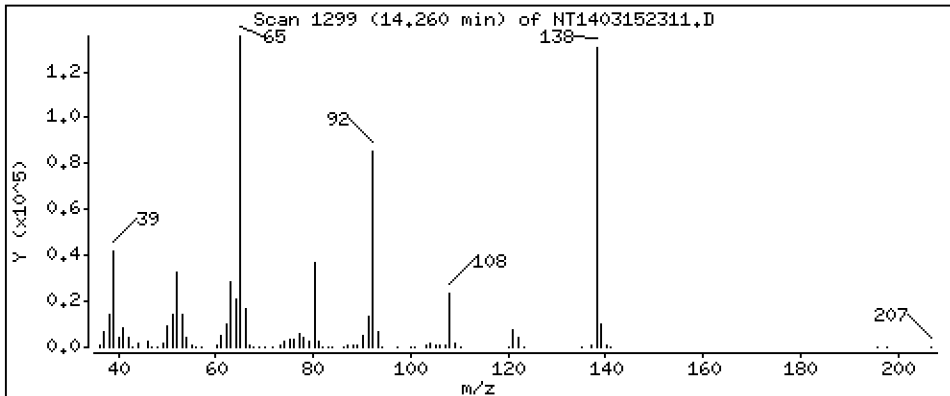
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

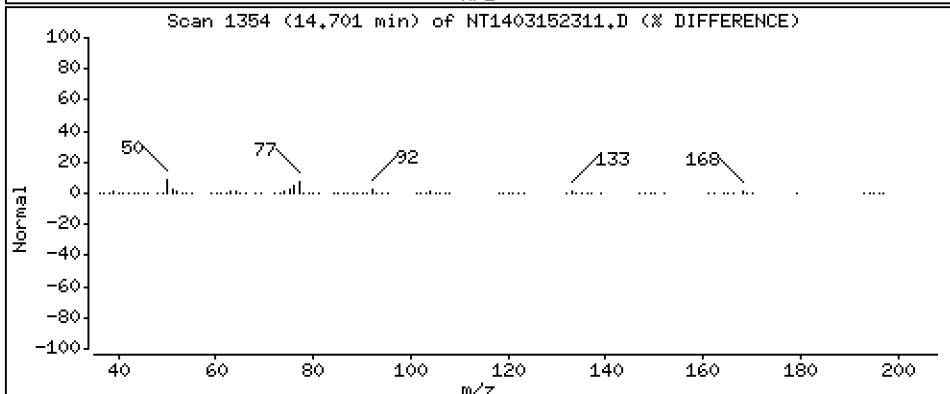
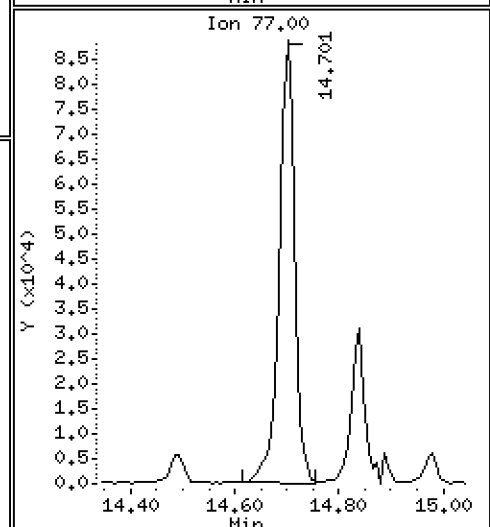
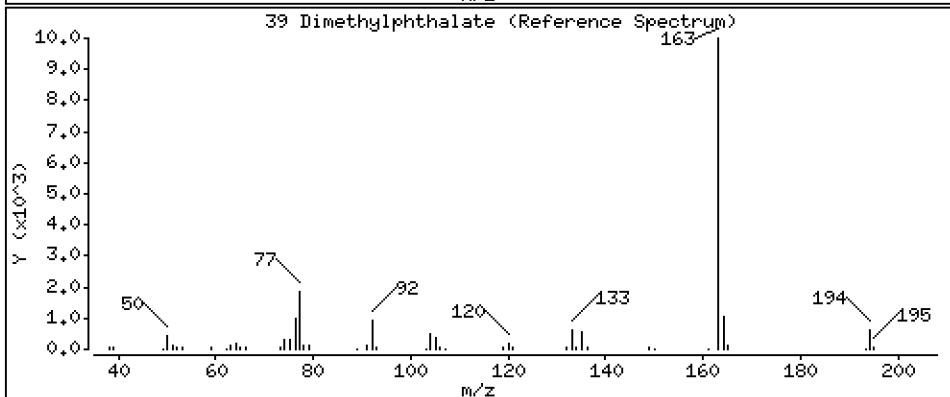
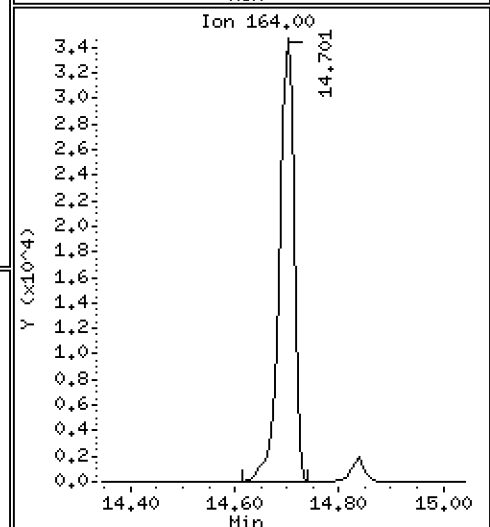
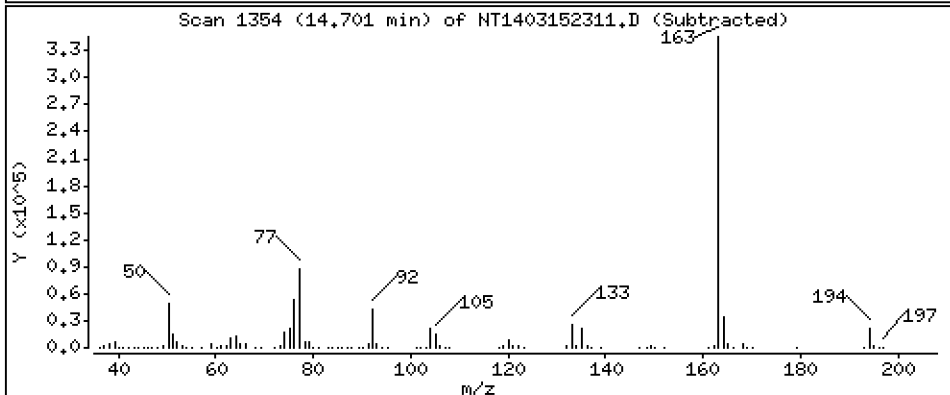
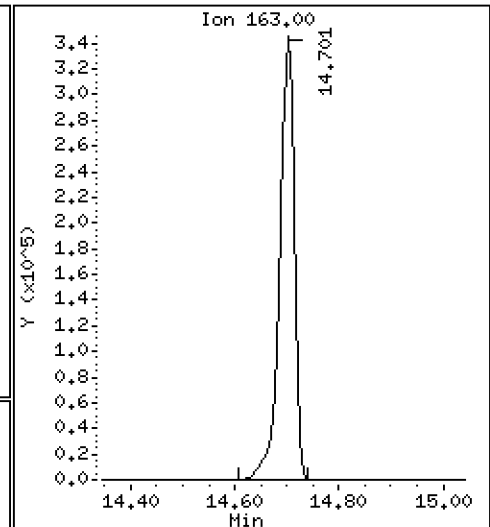
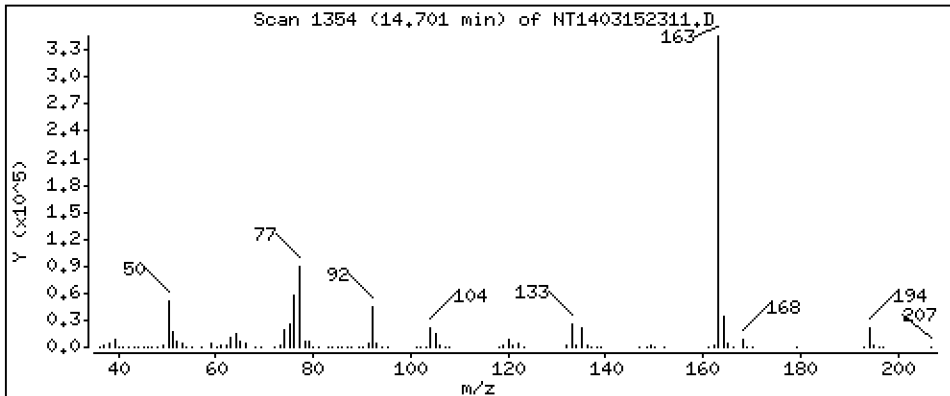
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 5.031 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

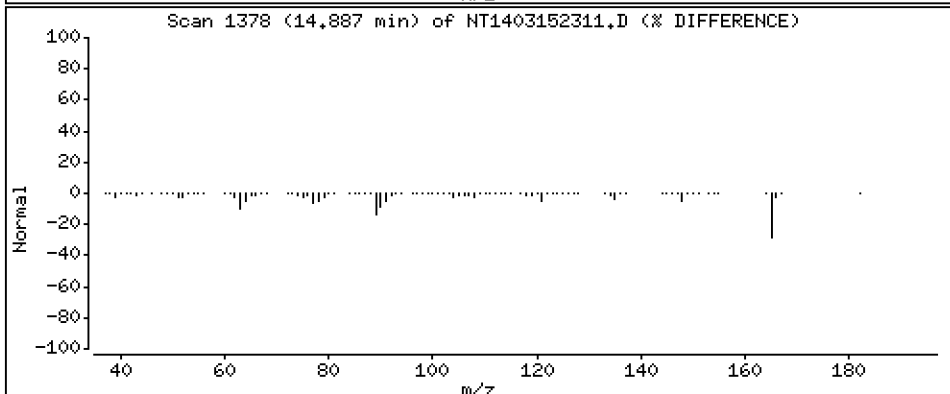
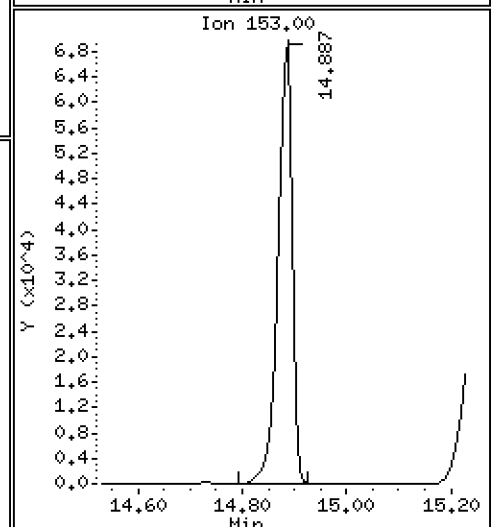
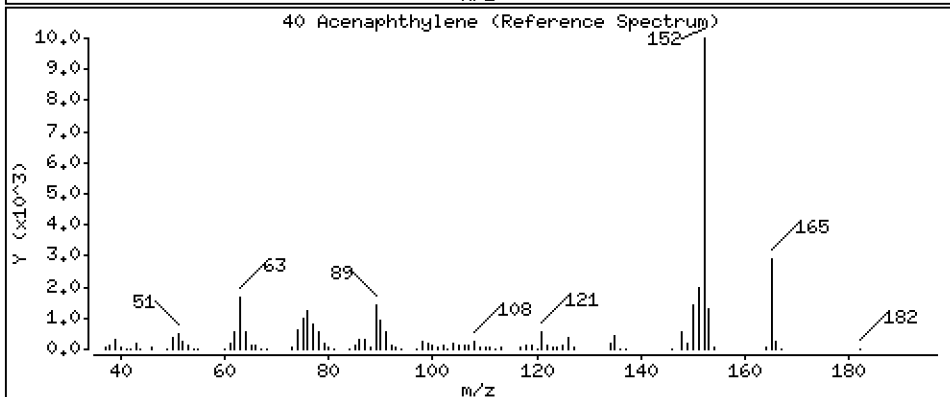
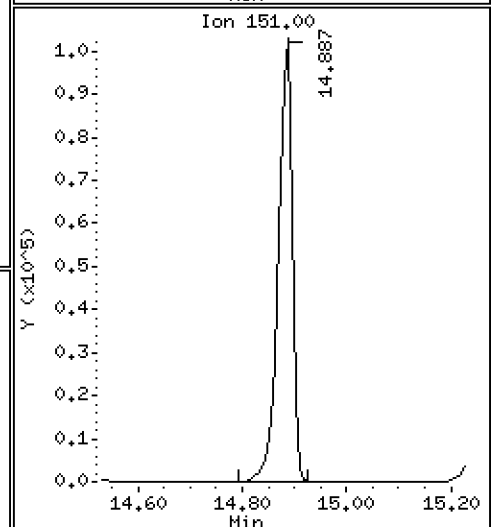
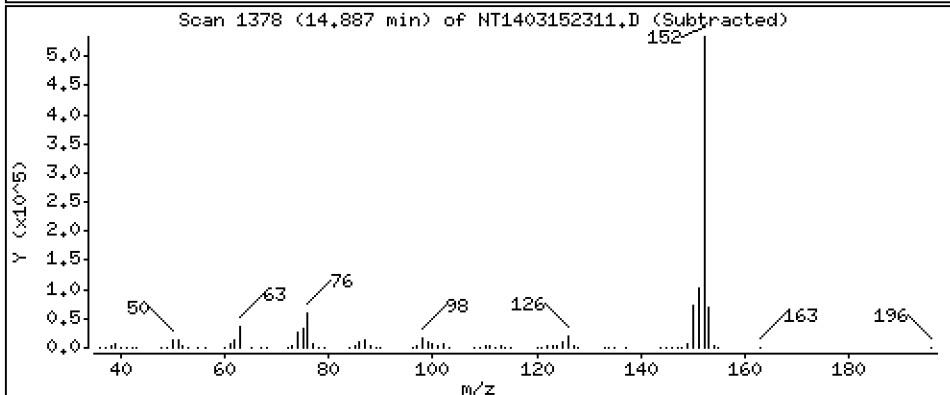
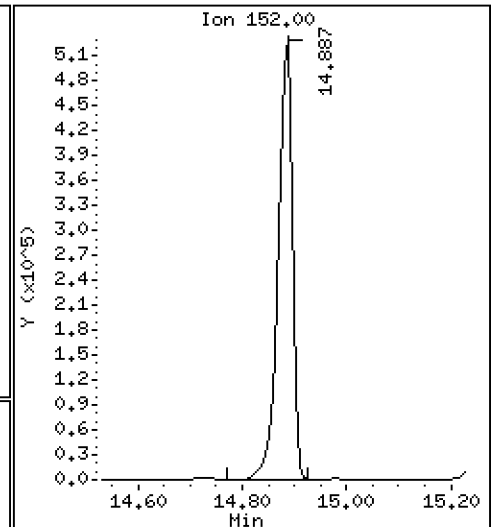
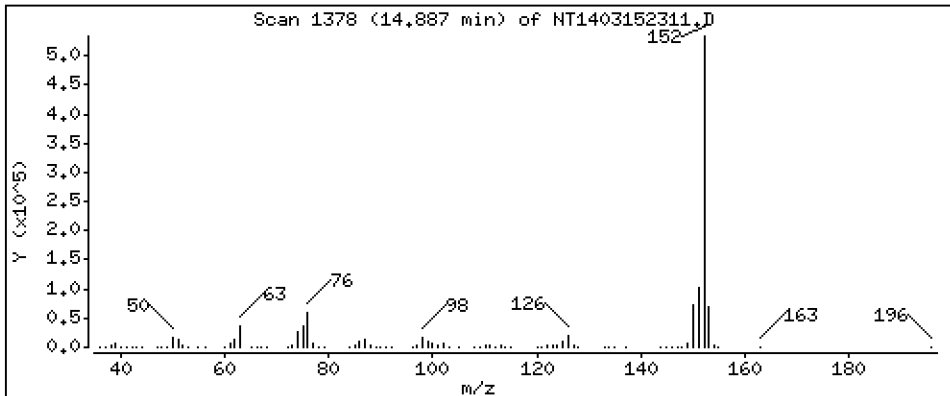
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,879 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

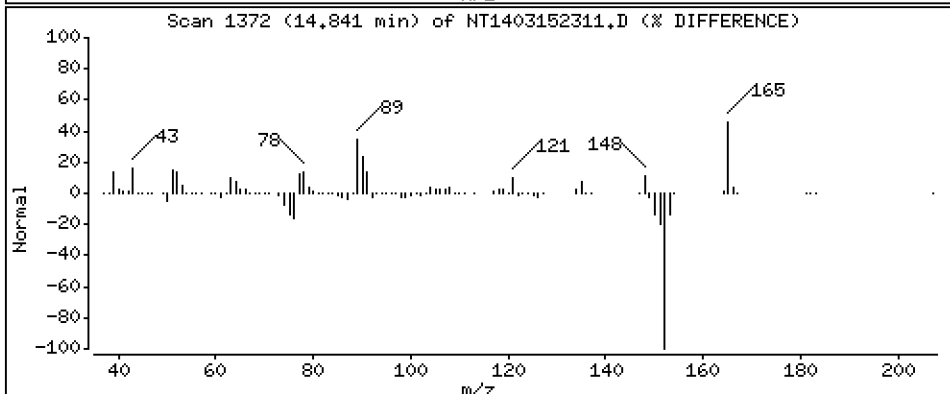
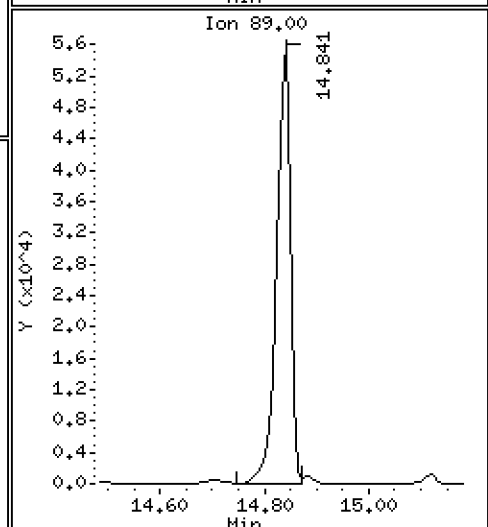
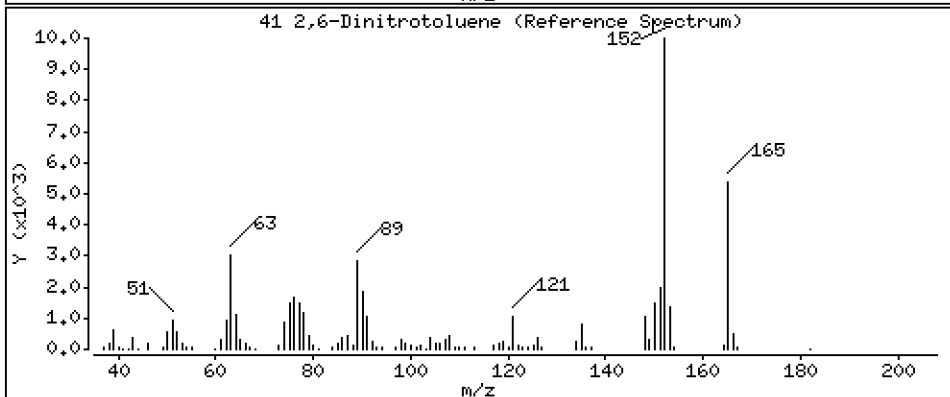
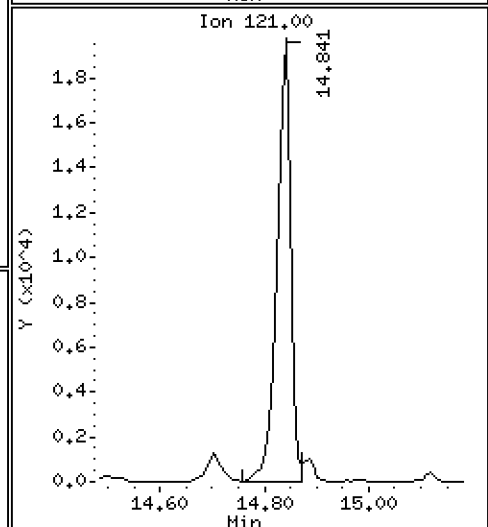
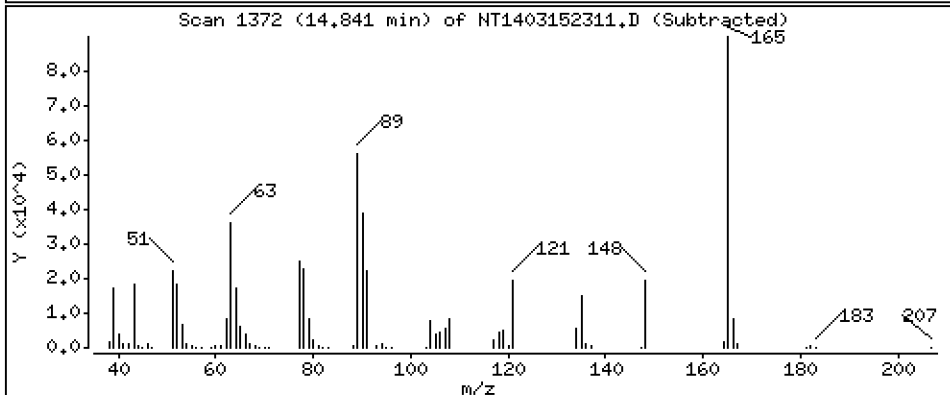
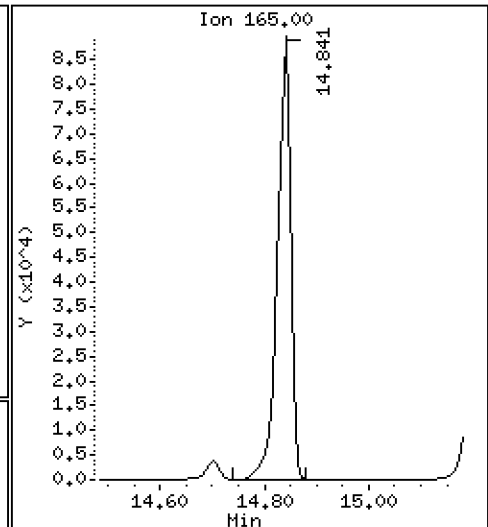
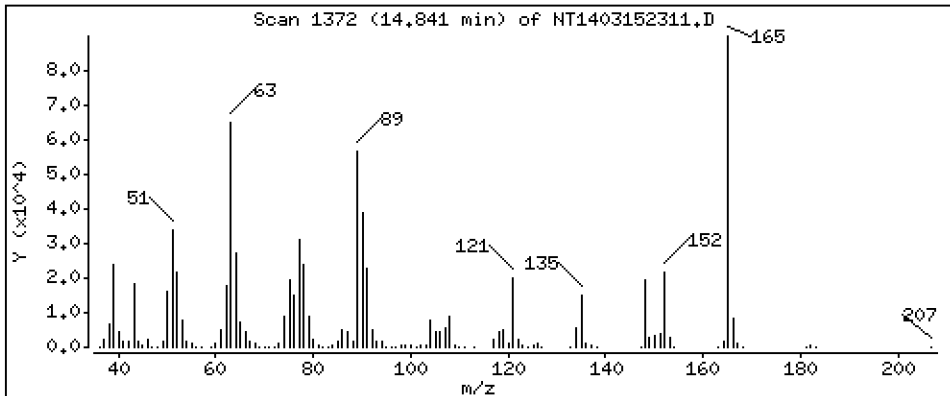
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 5,219 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

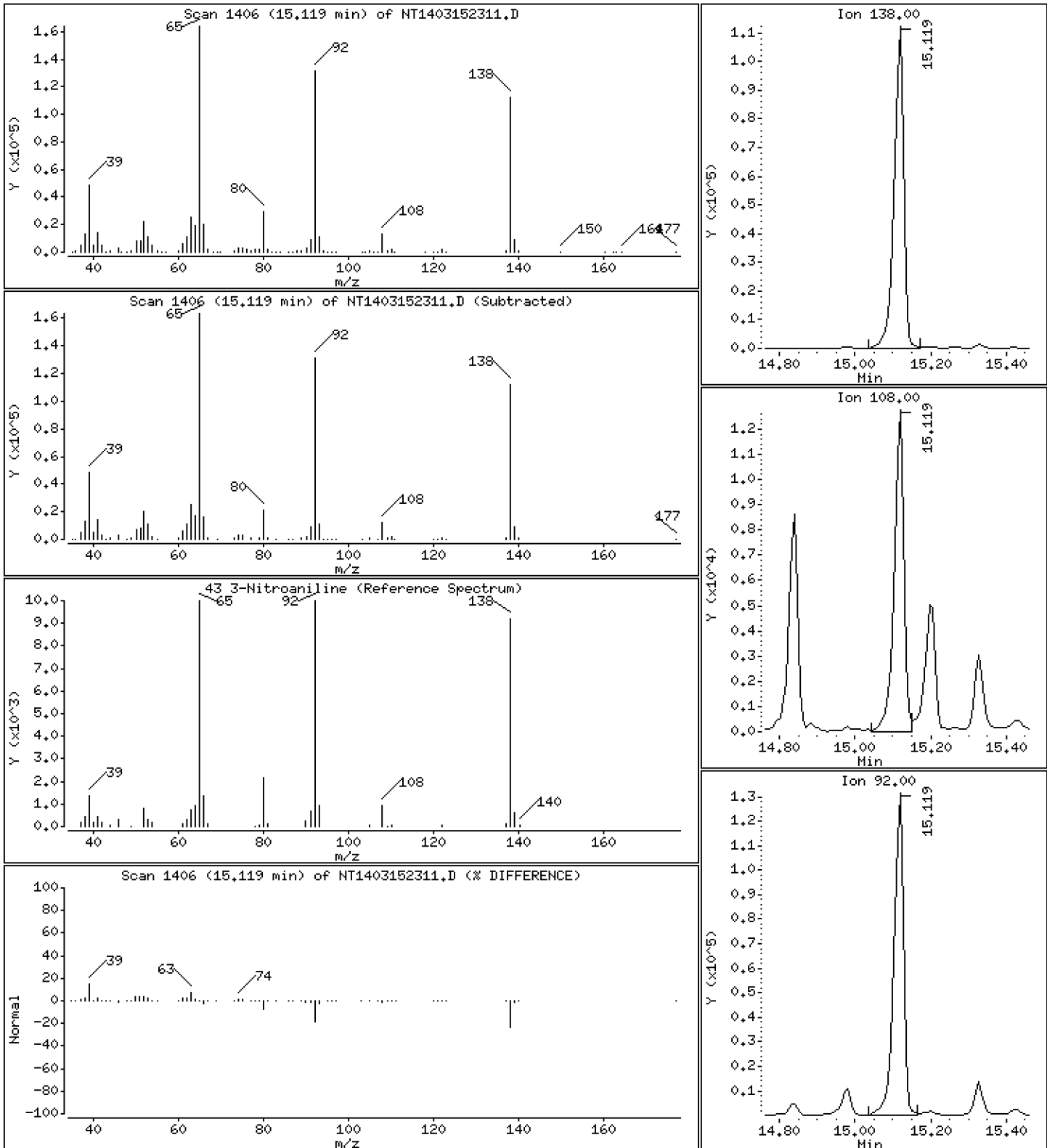
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,210 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

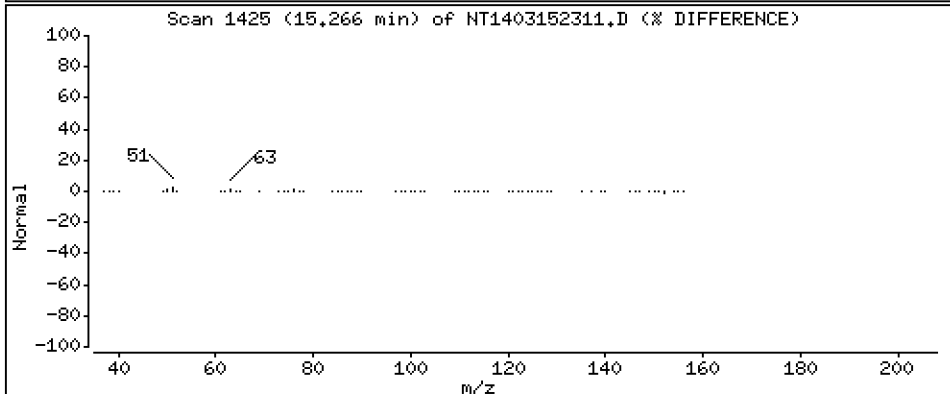
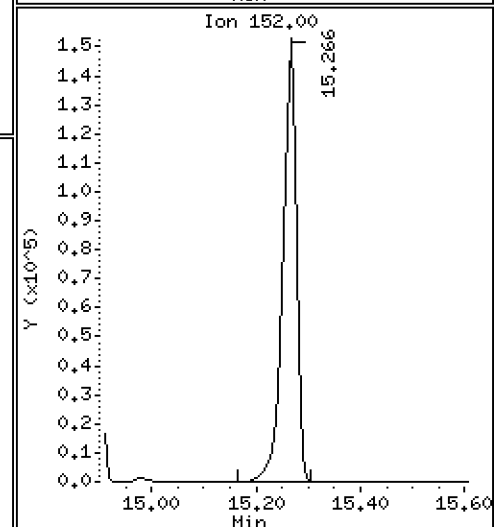
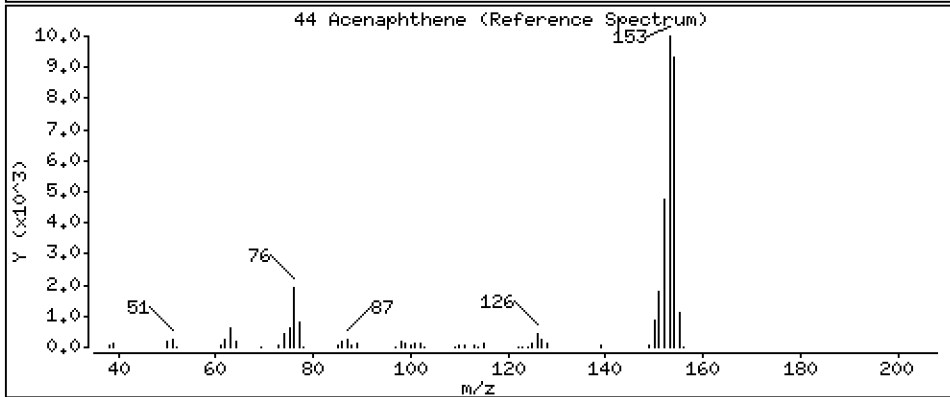
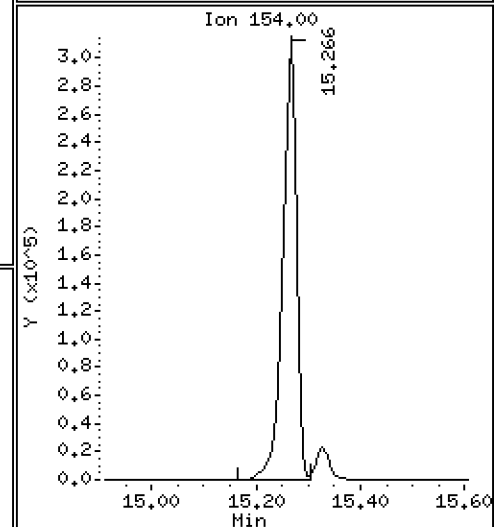
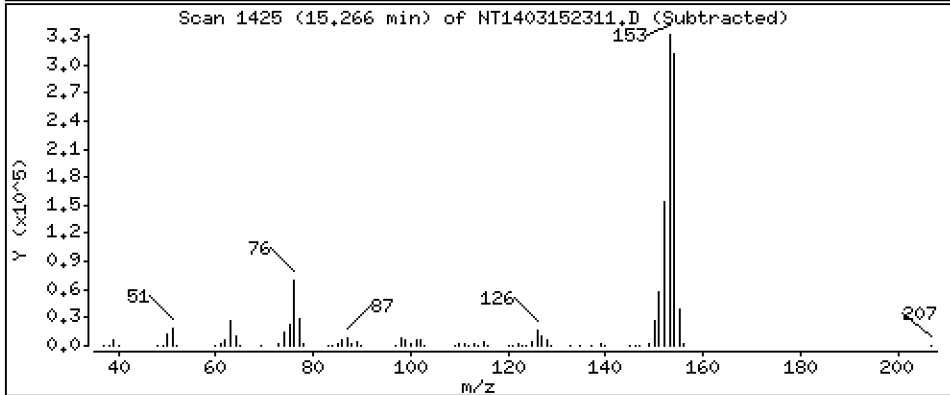
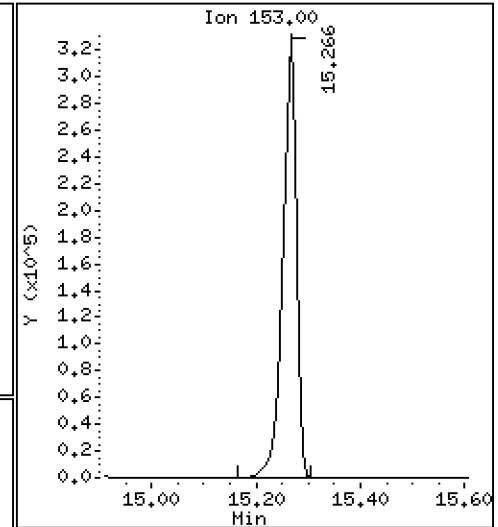
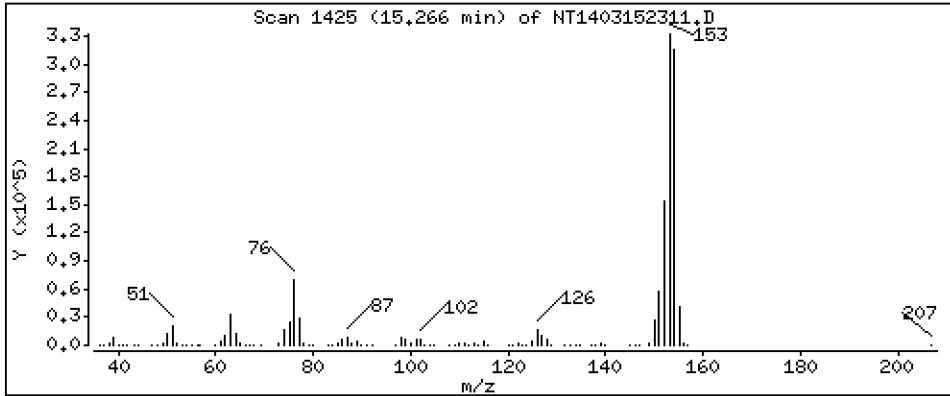
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,965 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

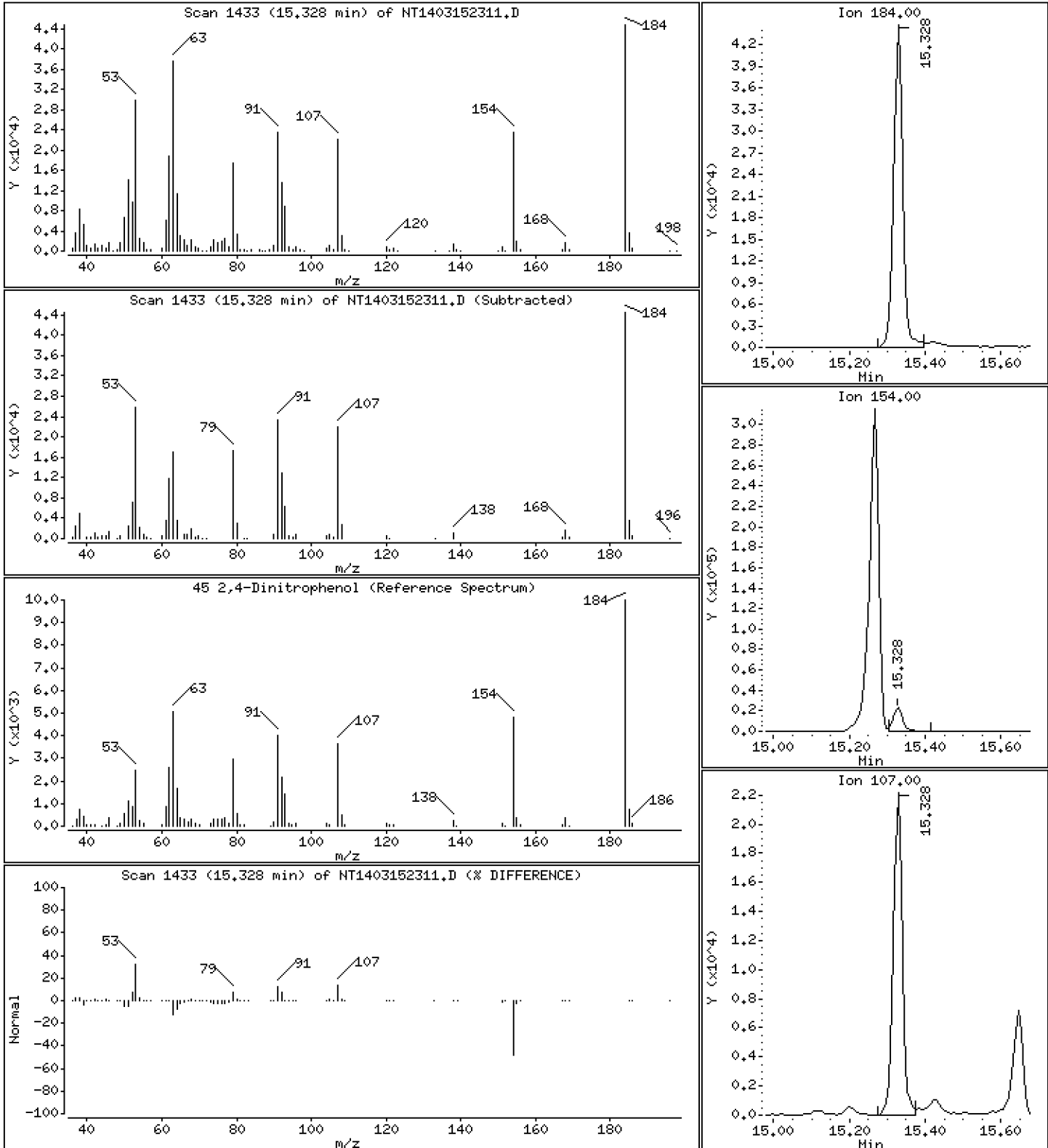
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 3,077 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

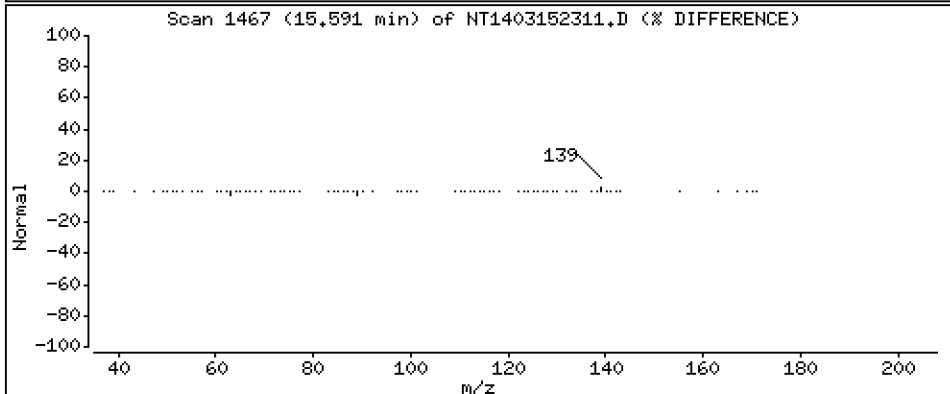
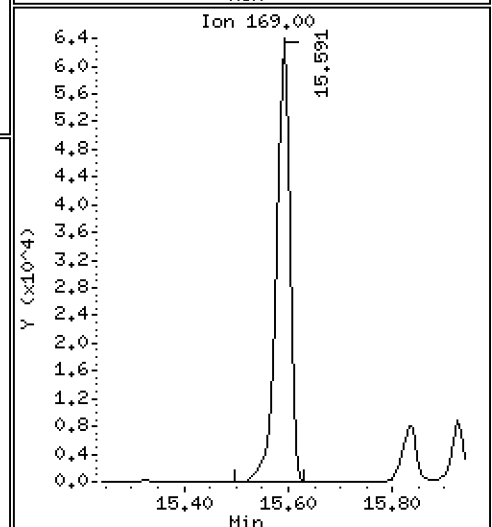
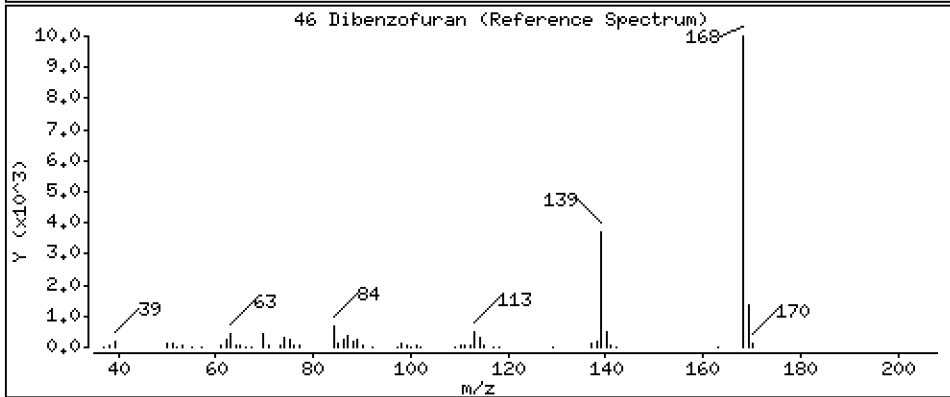
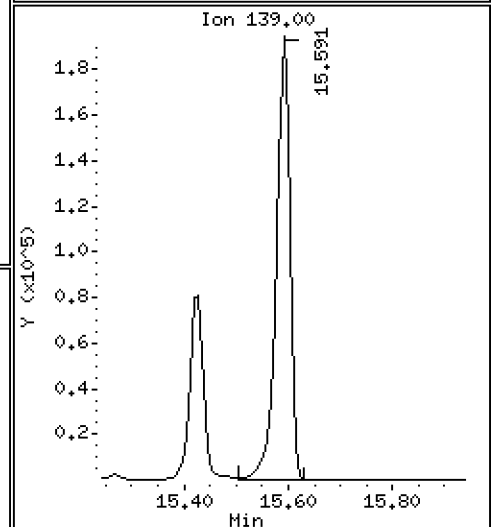
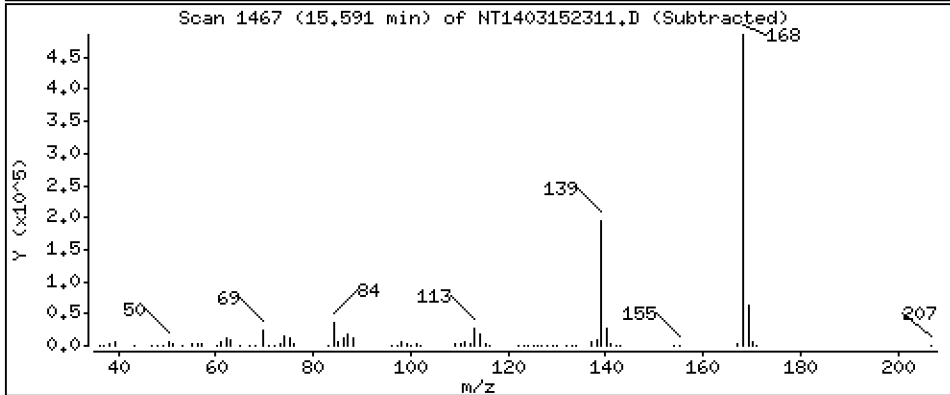
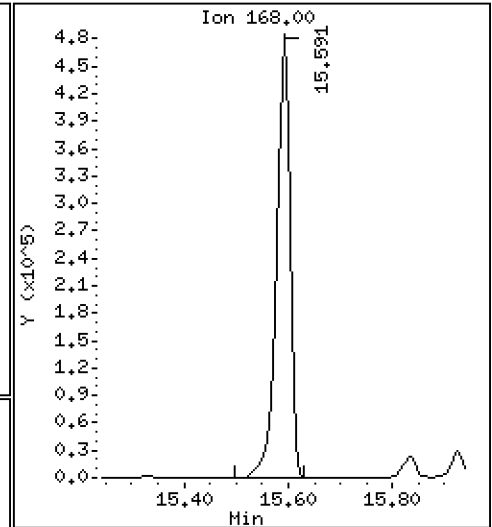
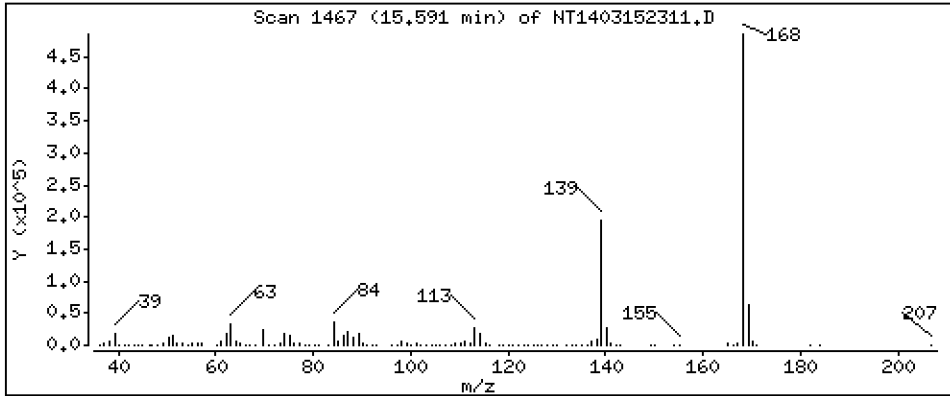
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,956 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

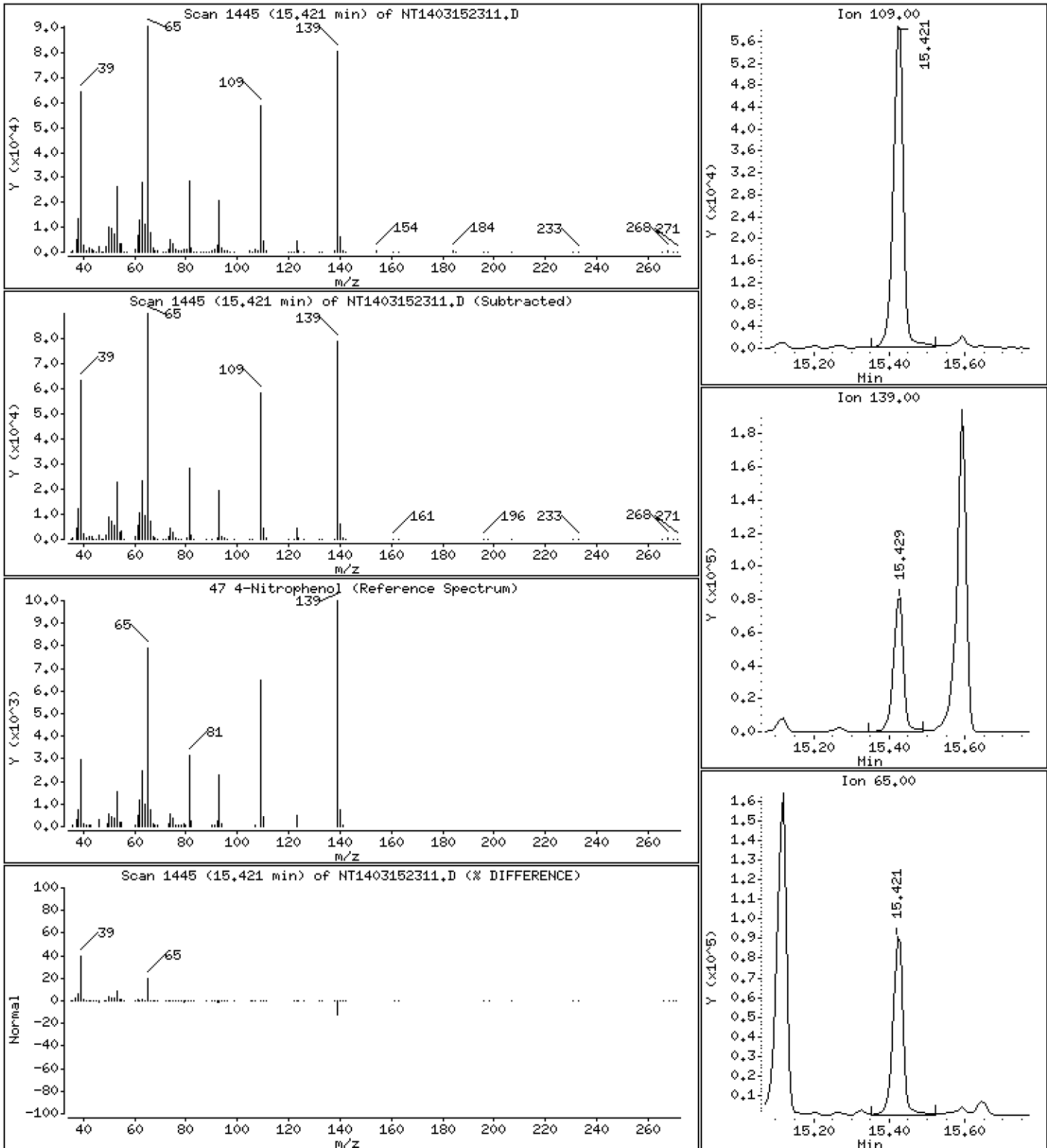
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 4,828 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

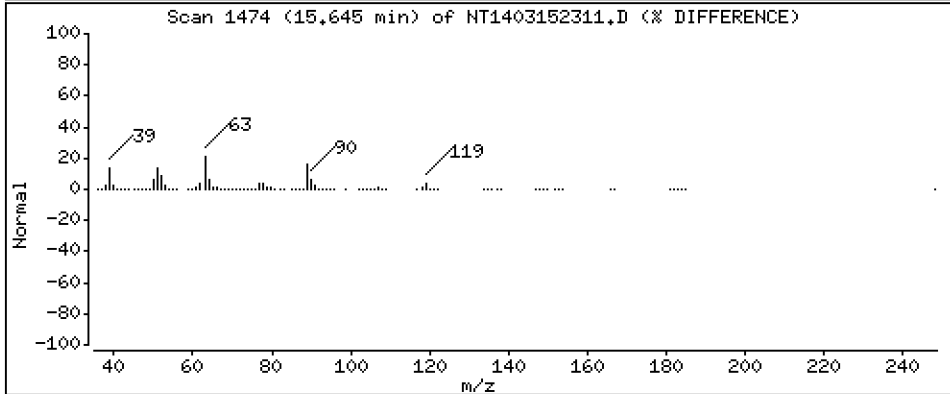
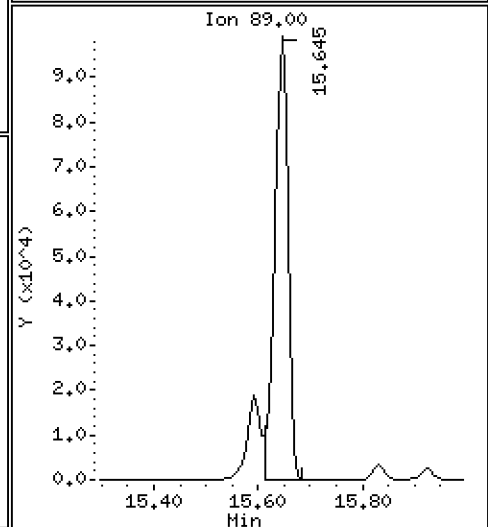
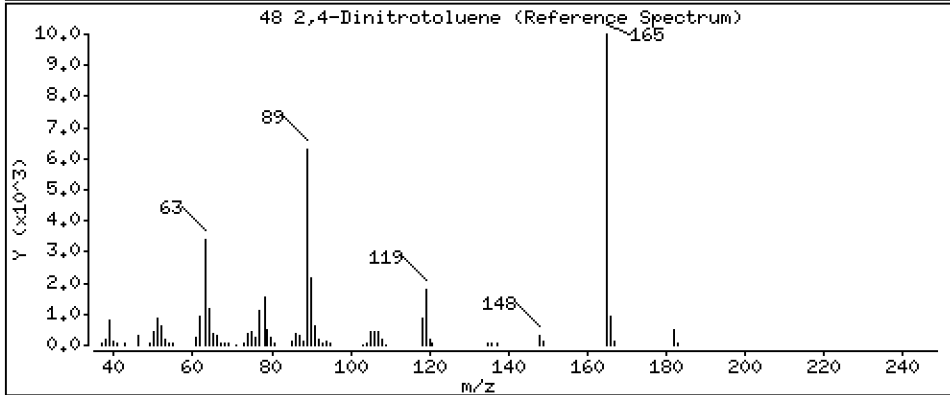
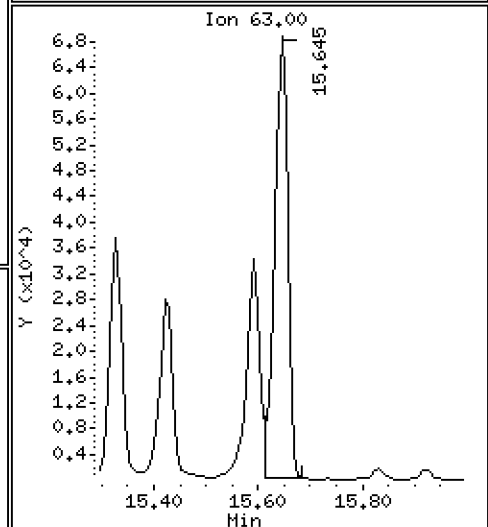
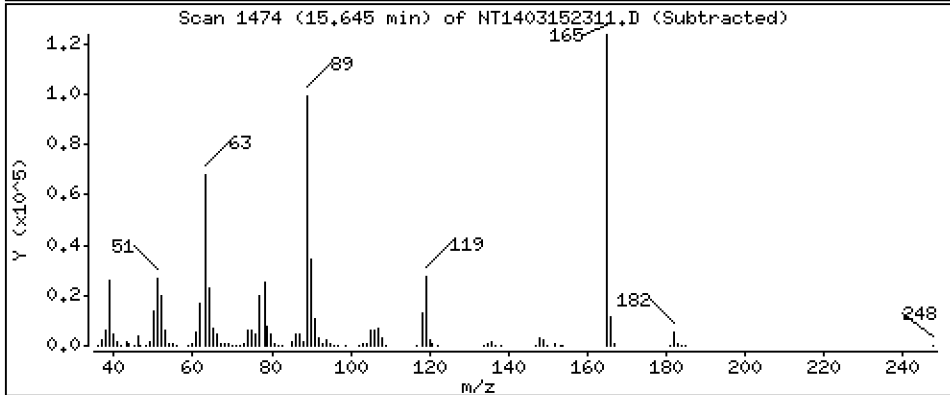
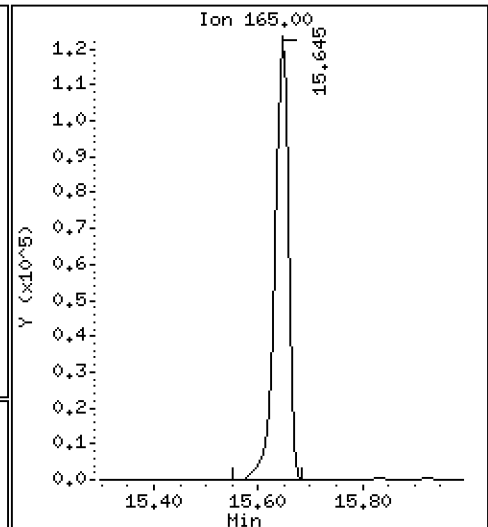
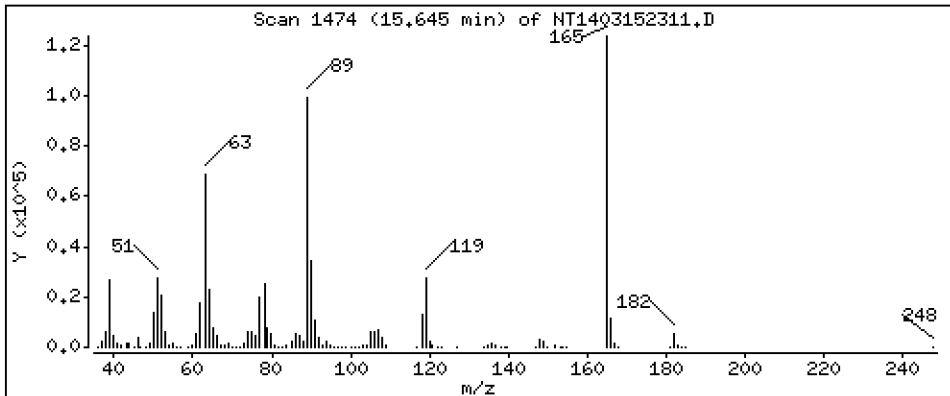
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 5,119 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

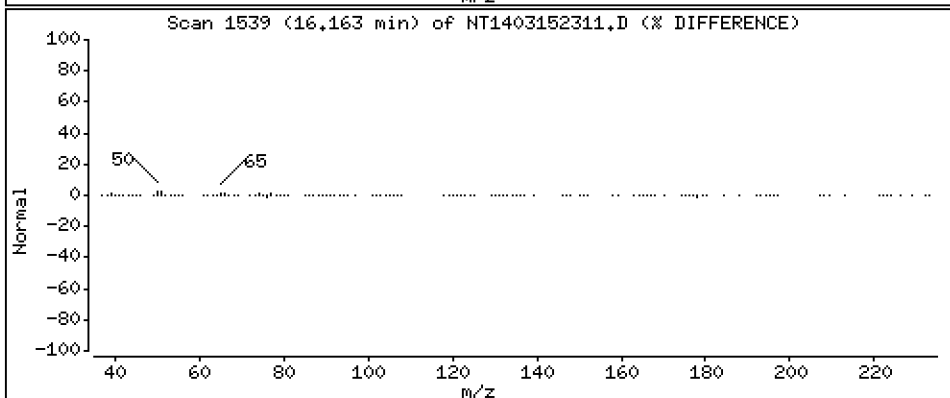
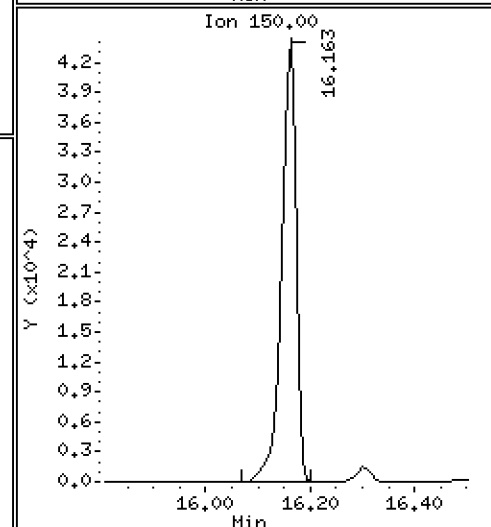
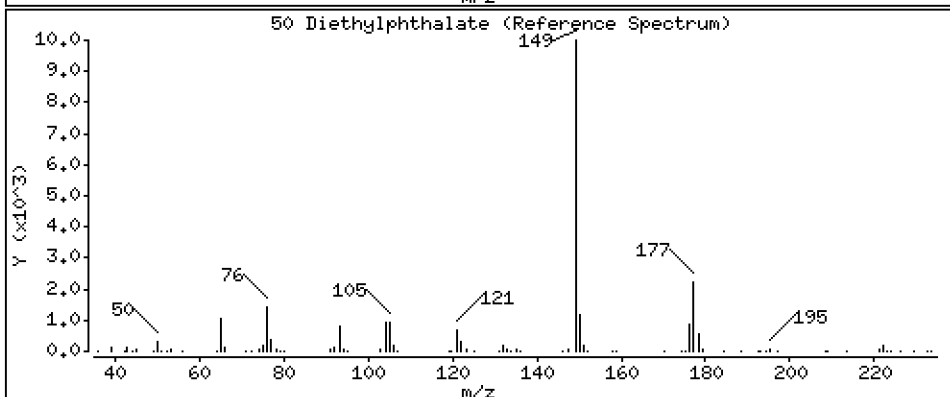
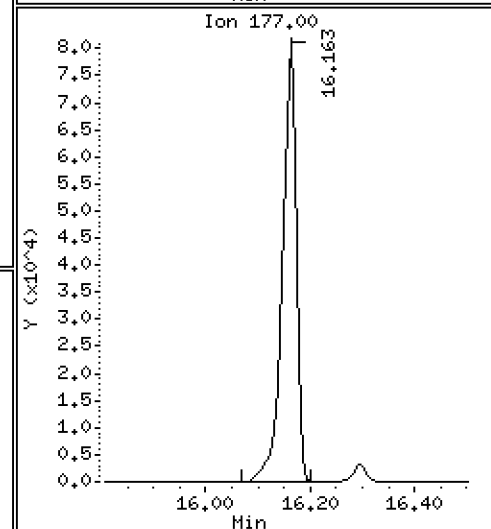
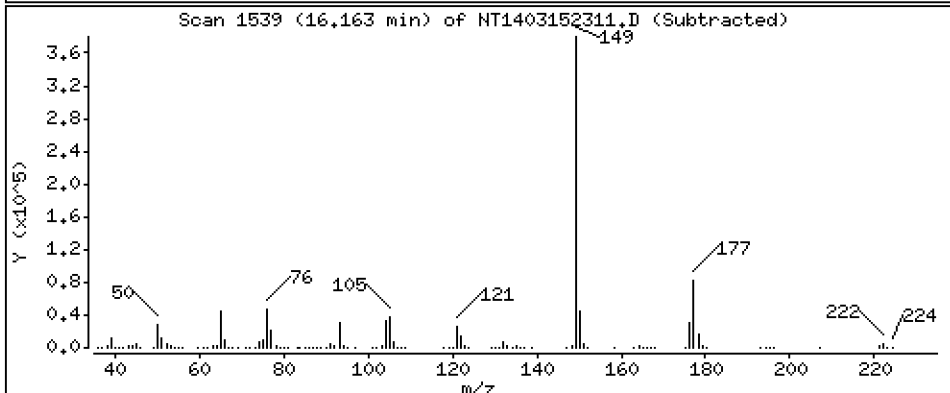
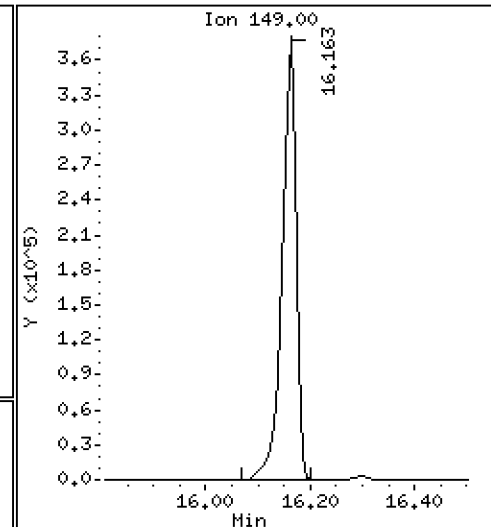
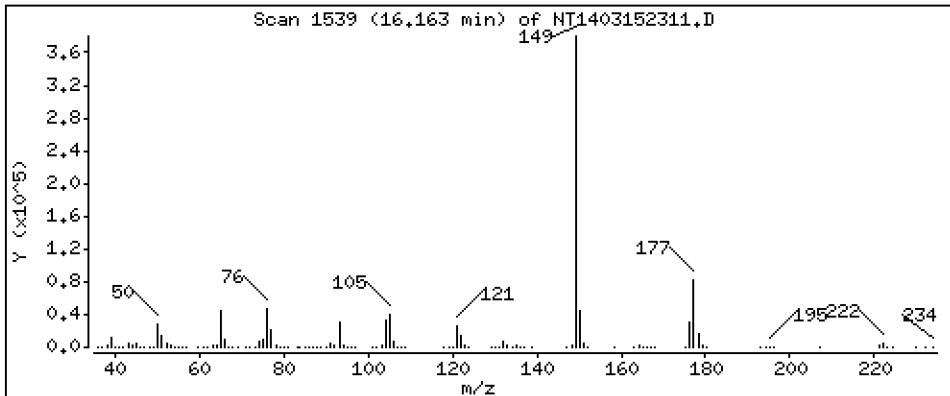
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,203 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

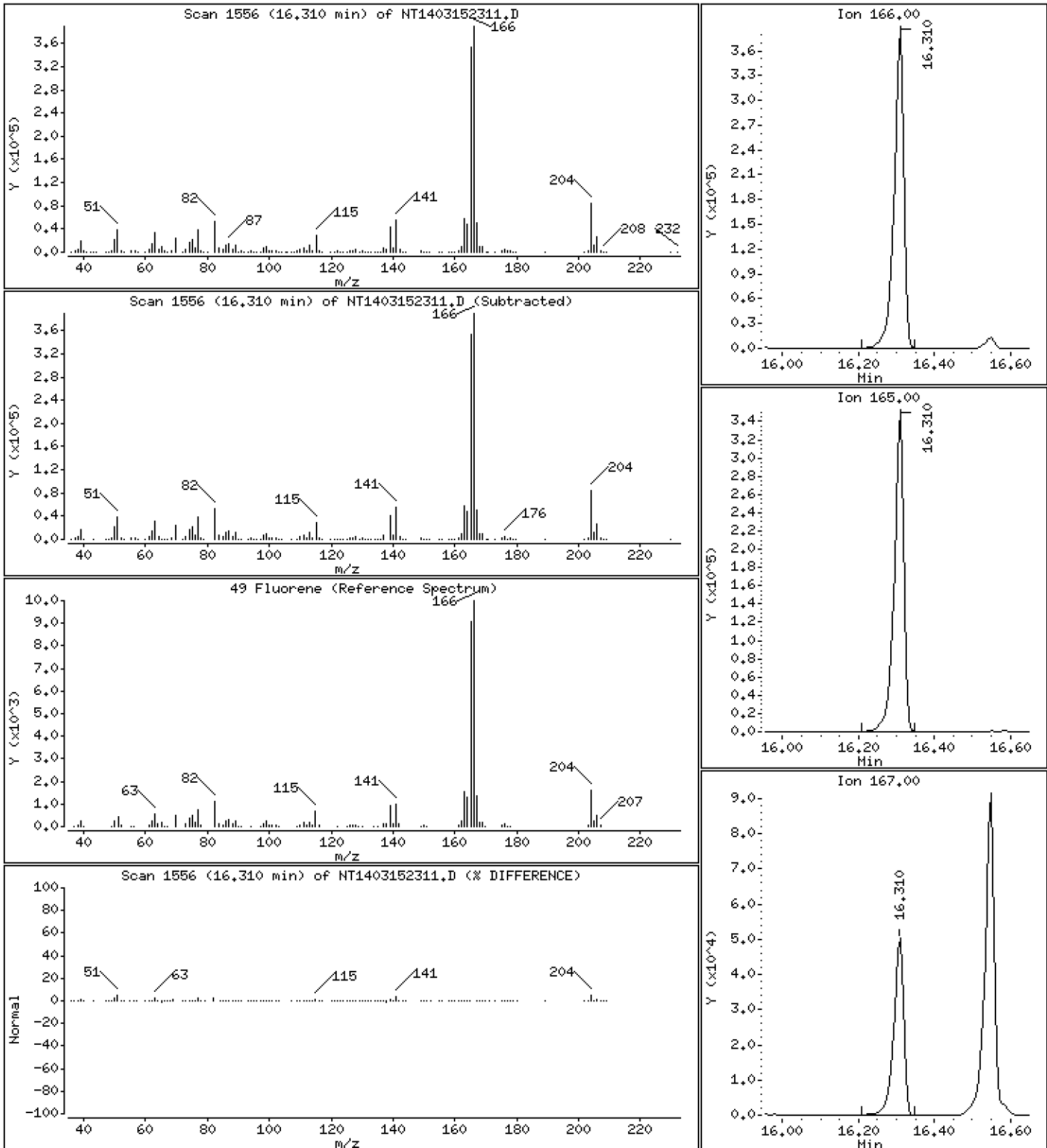
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,844 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

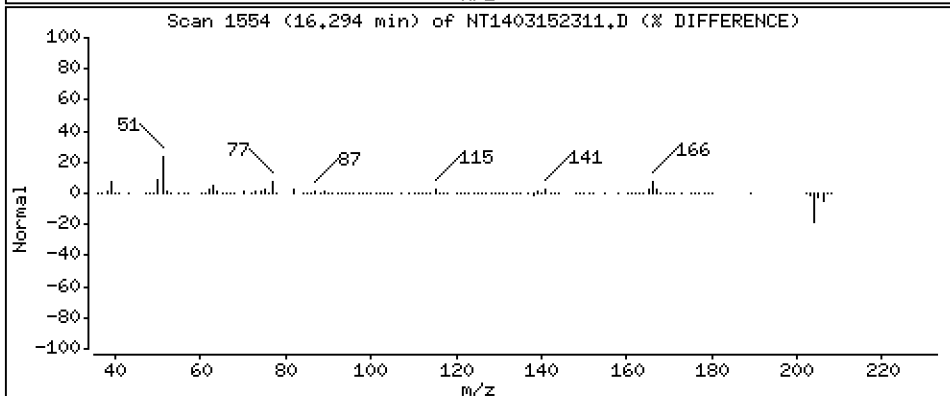
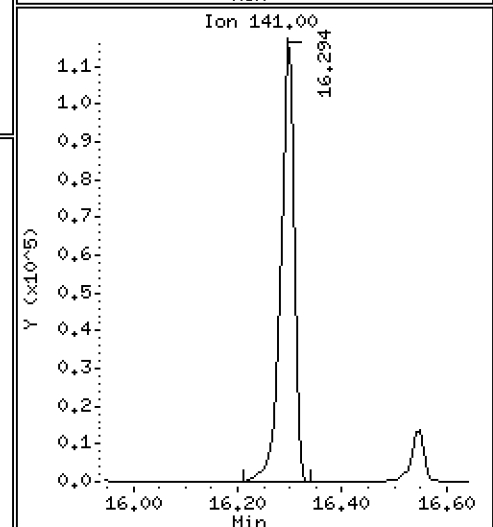
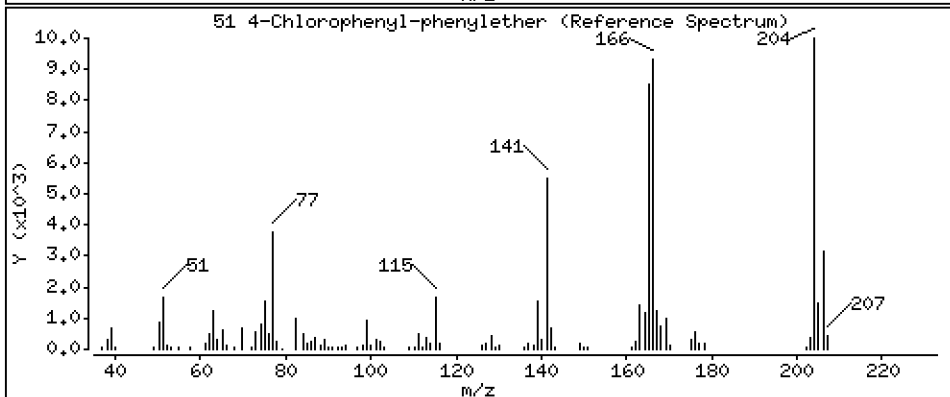
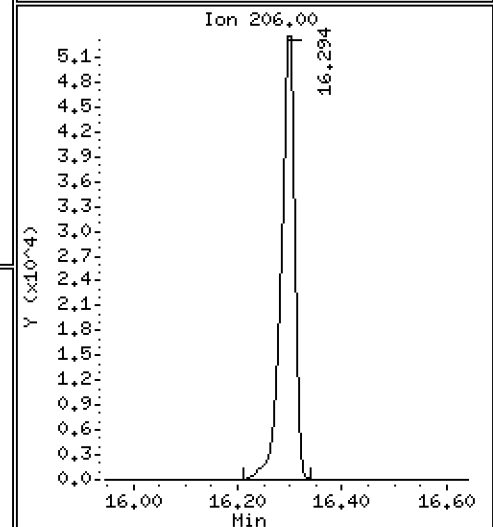
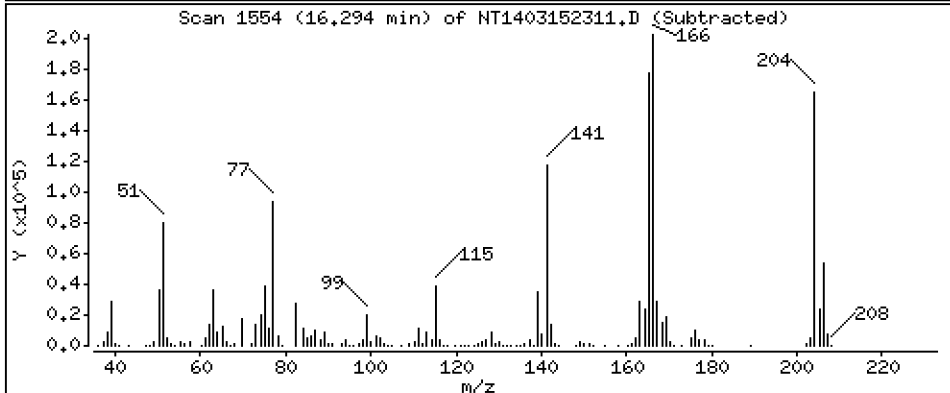
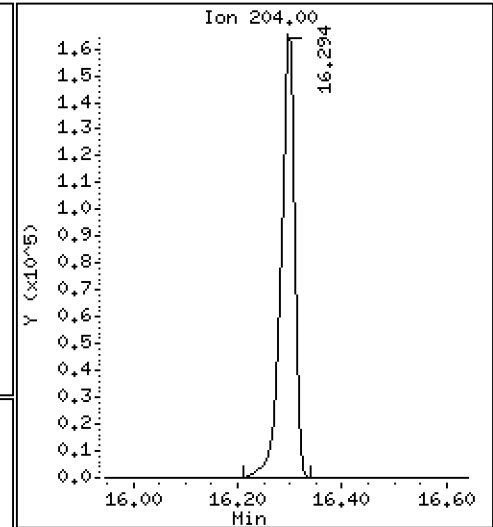
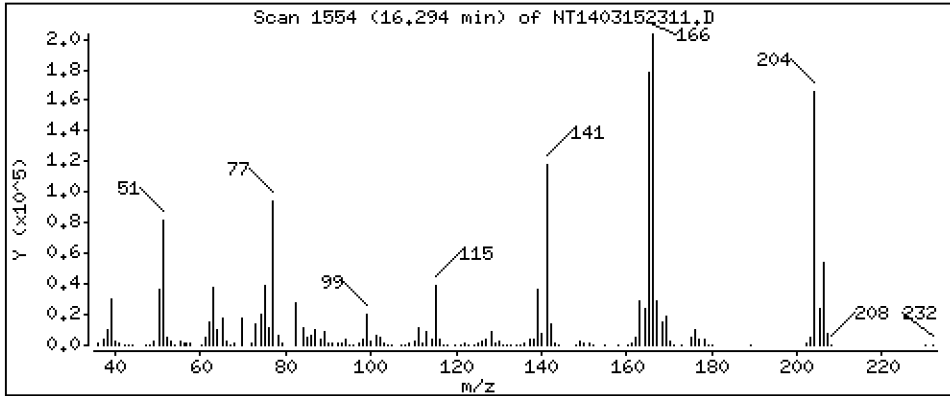
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,985 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

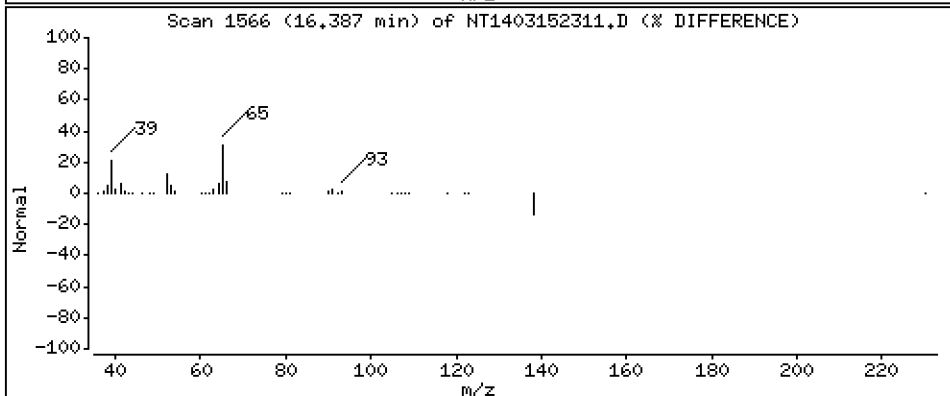
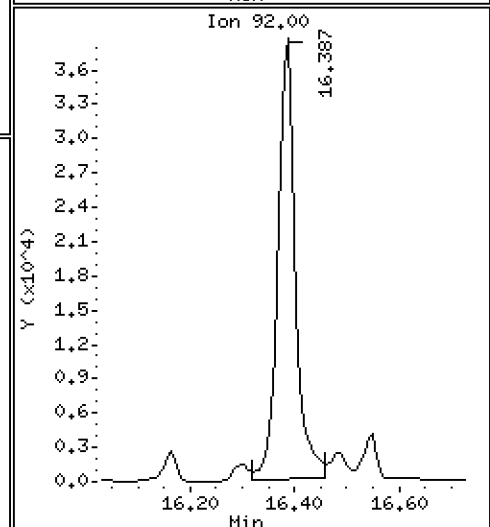
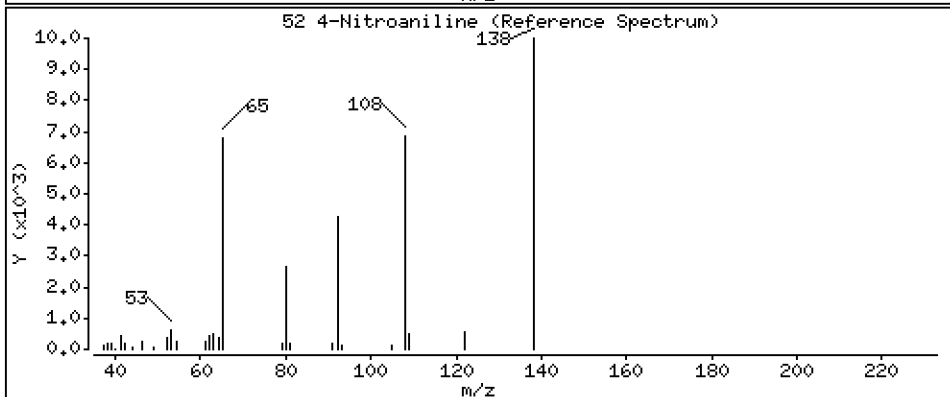
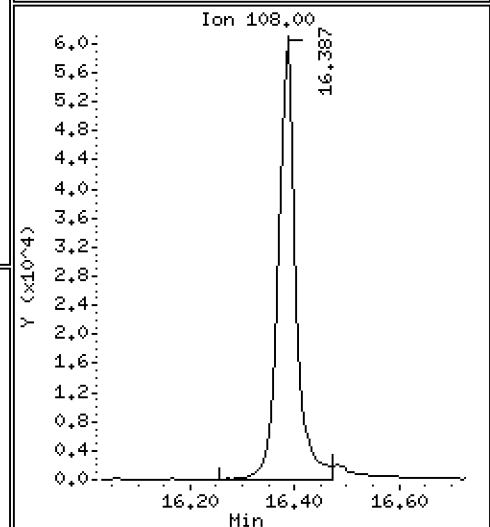
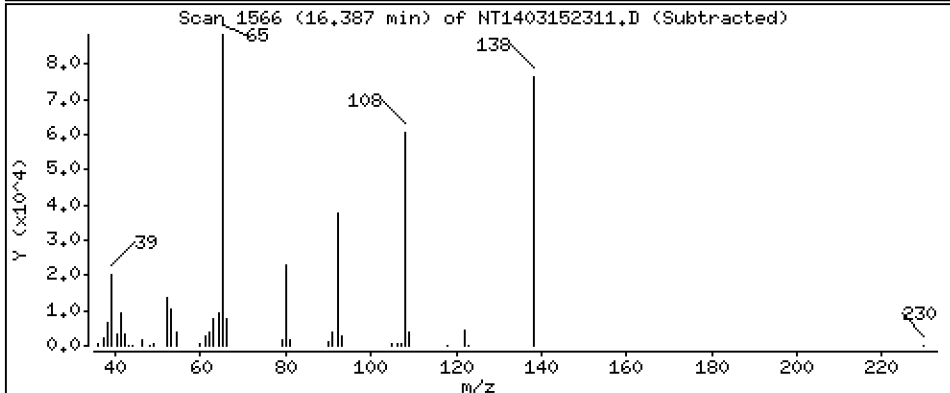
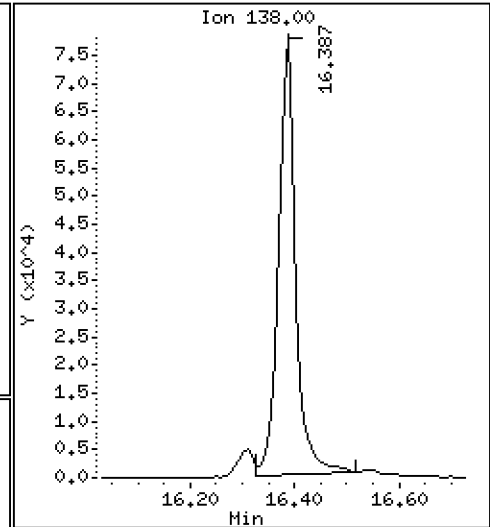
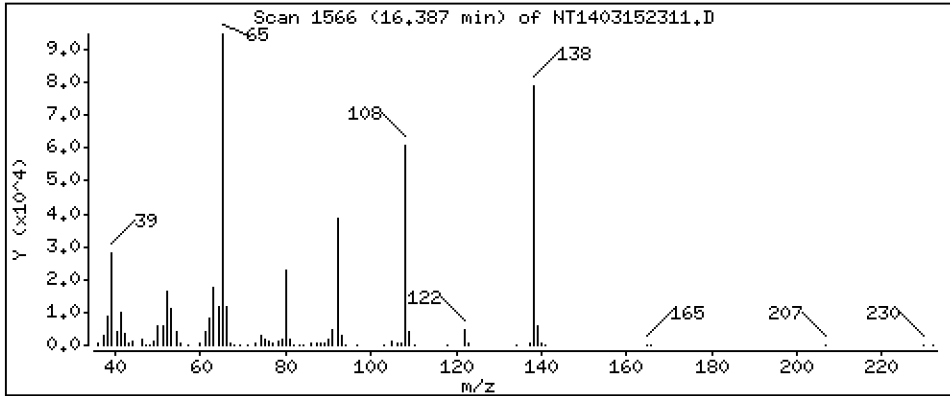
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 4,817 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

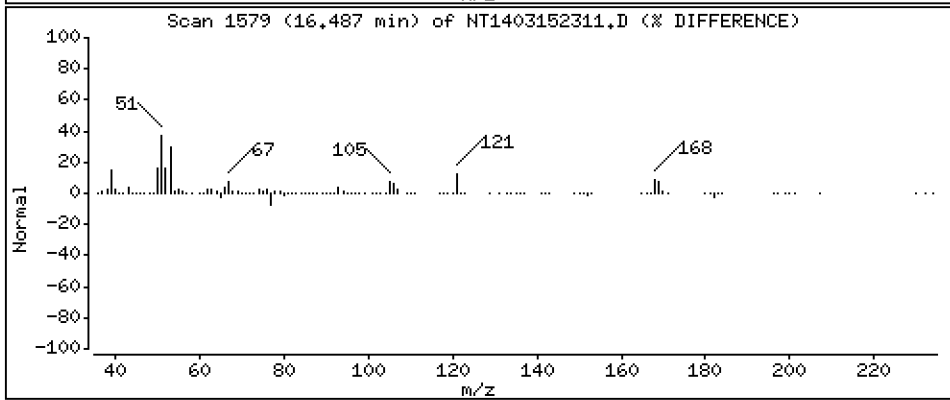
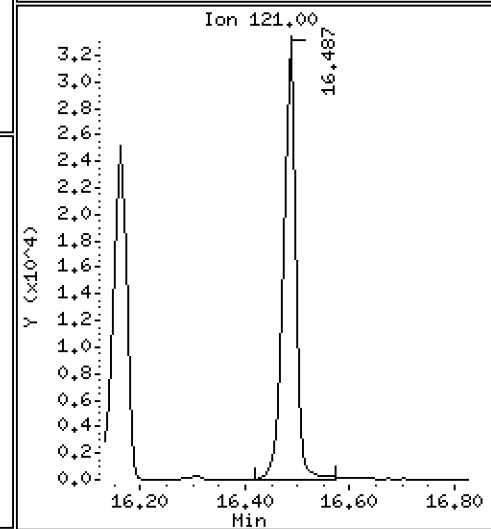
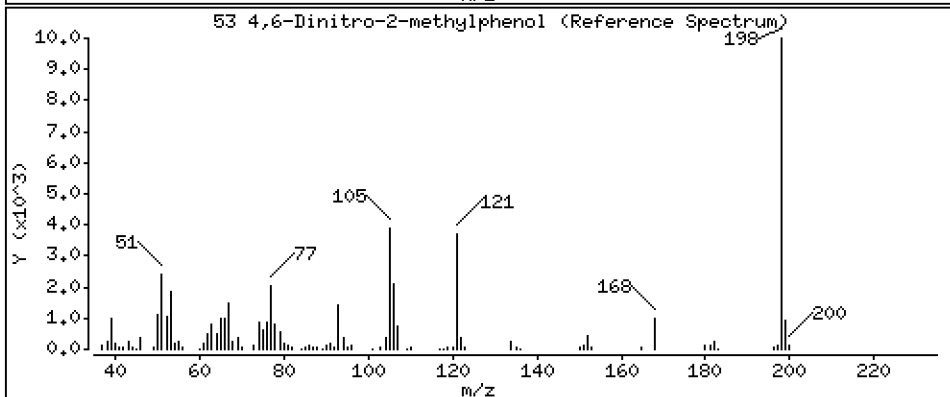
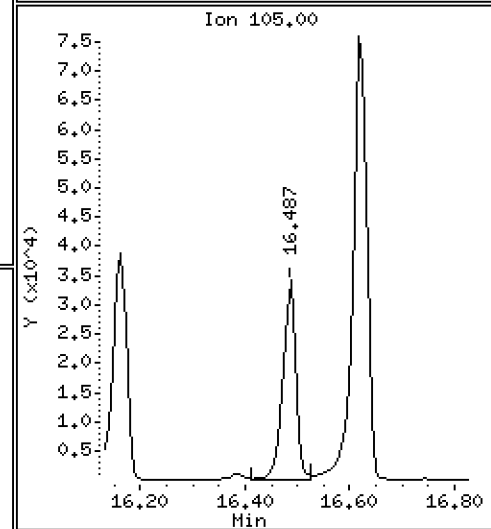
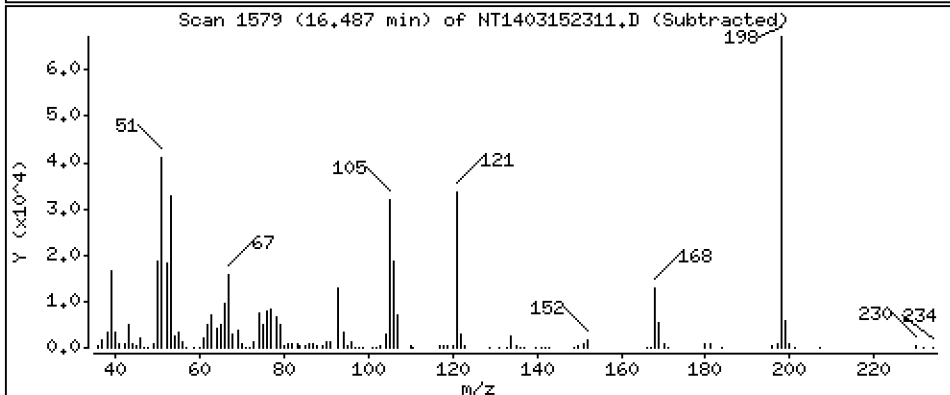
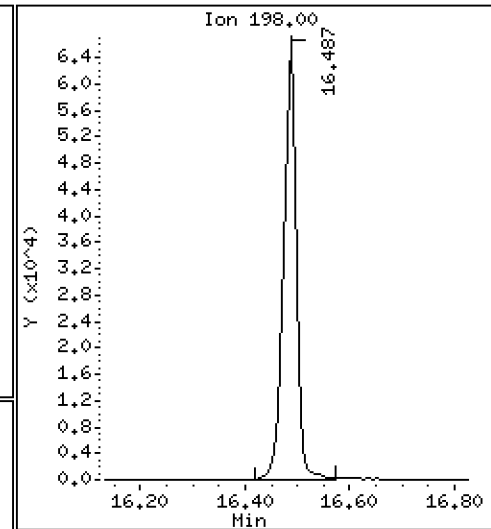
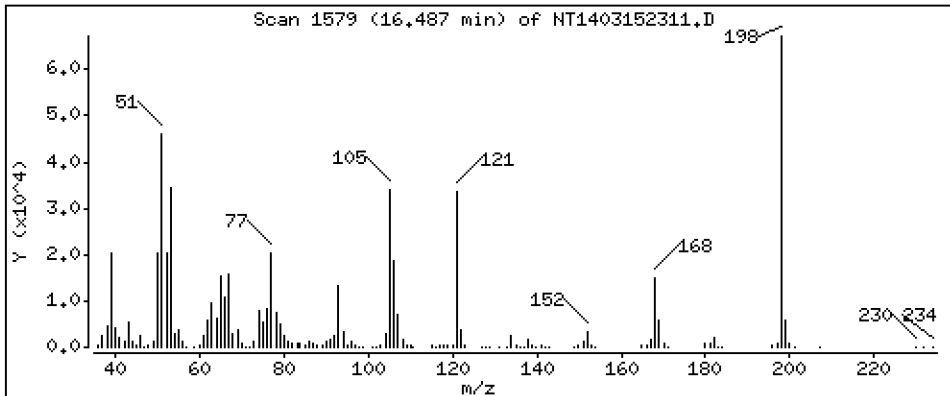
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 4,439 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

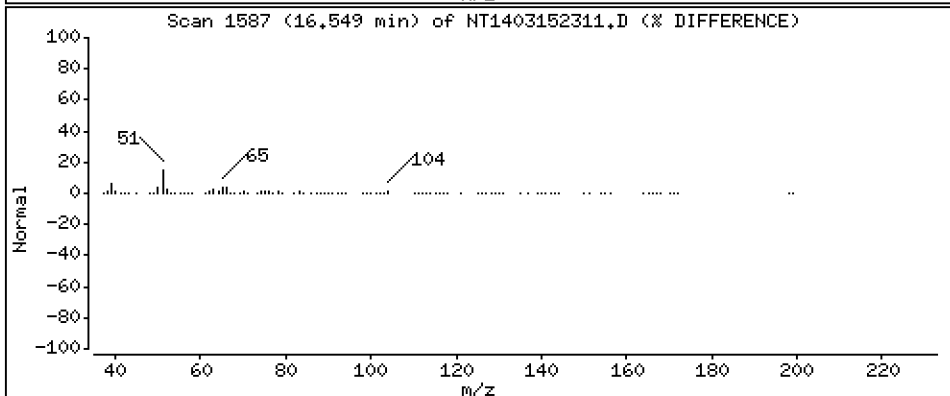
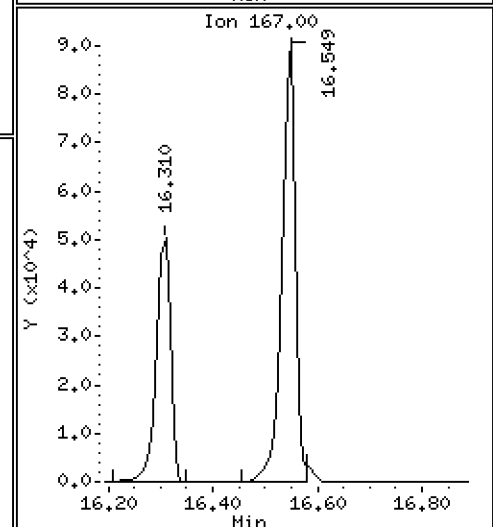
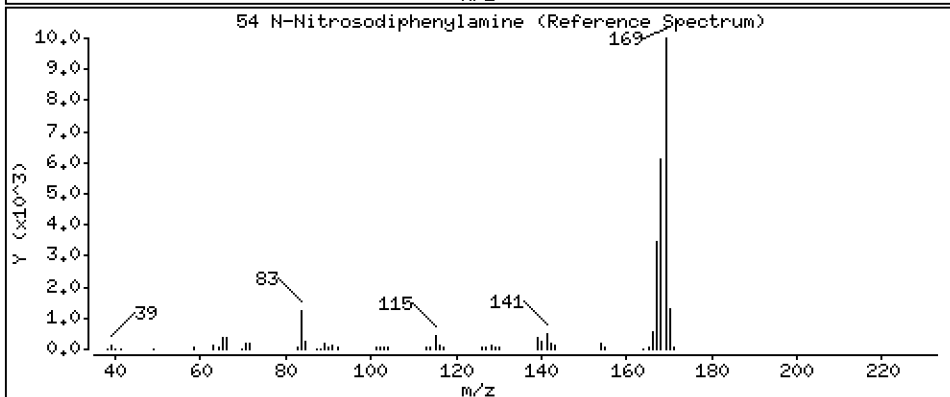
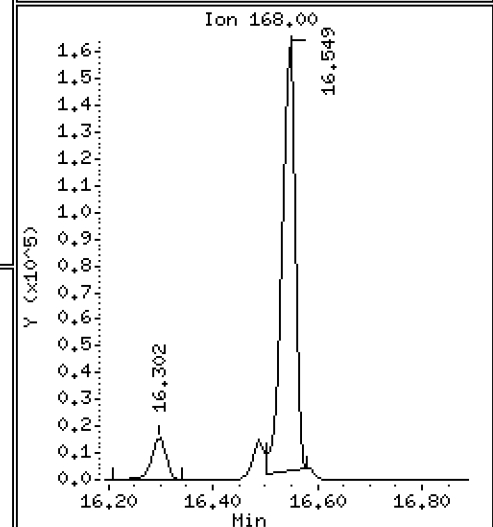
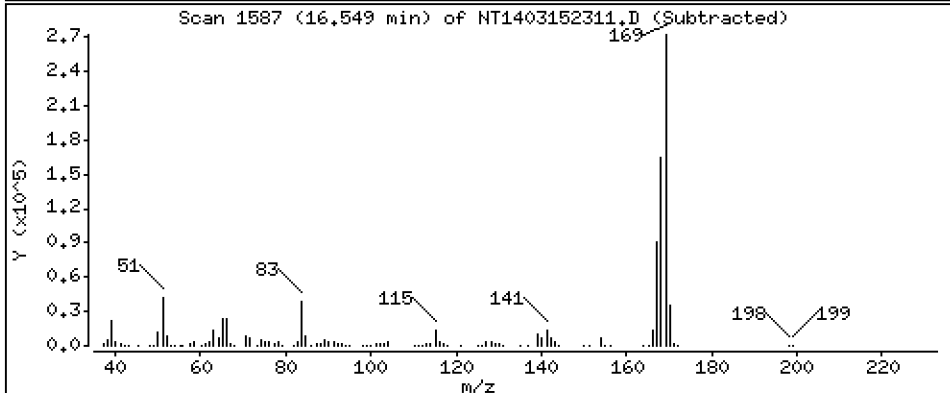
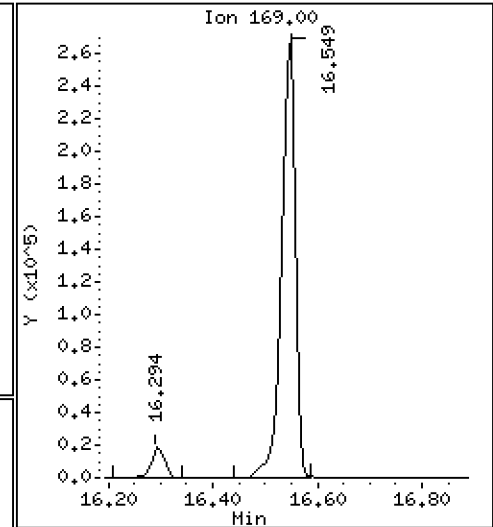
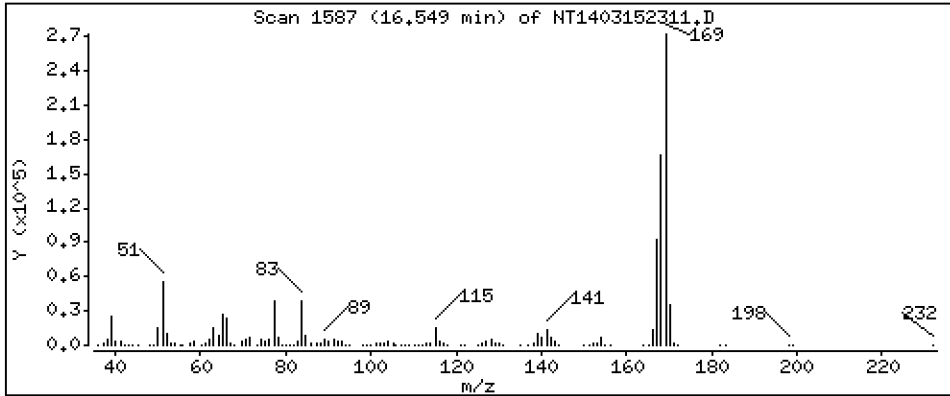
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.954 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

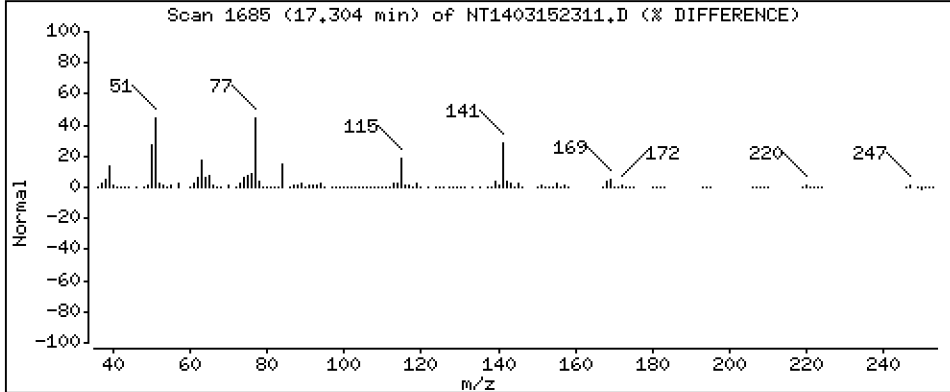
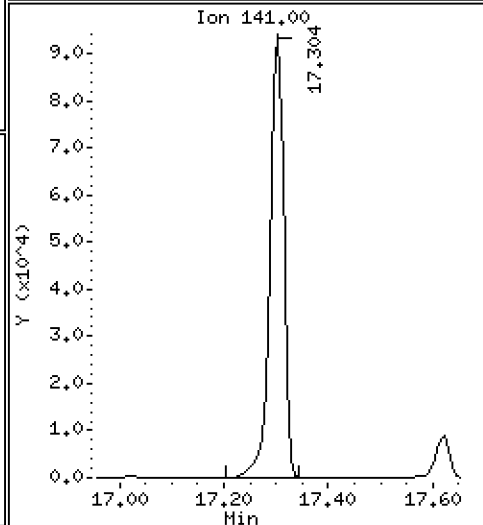
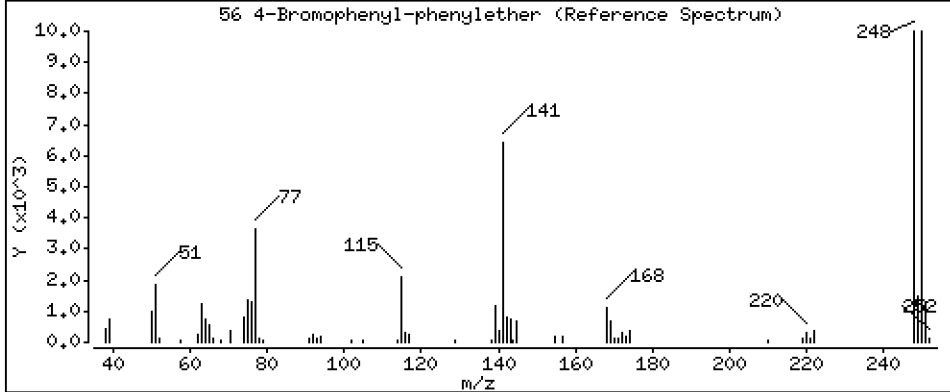
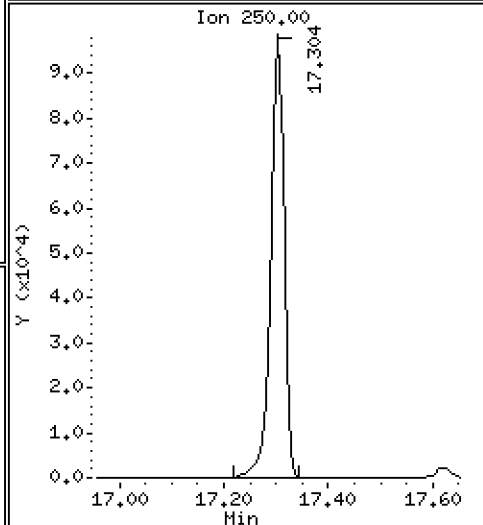
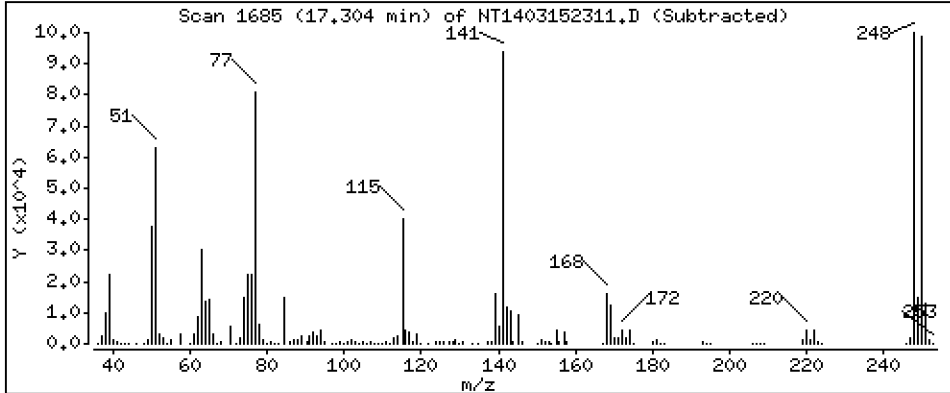
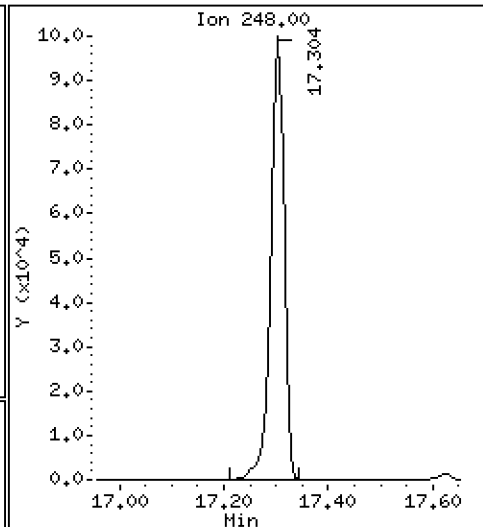
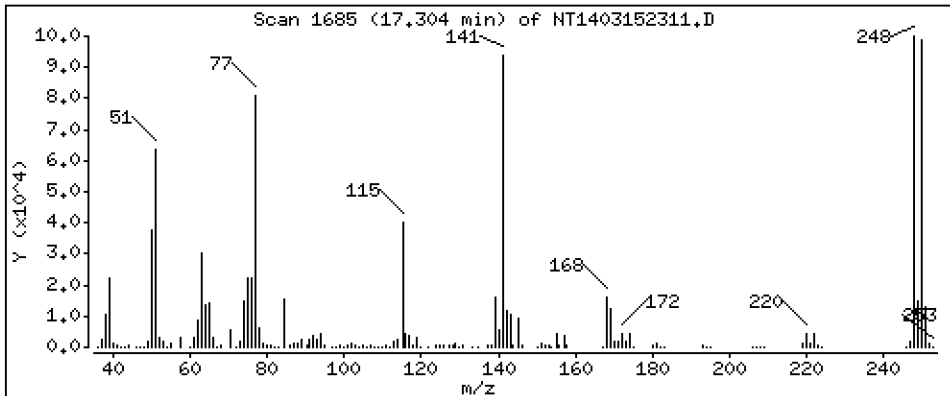
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,226 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

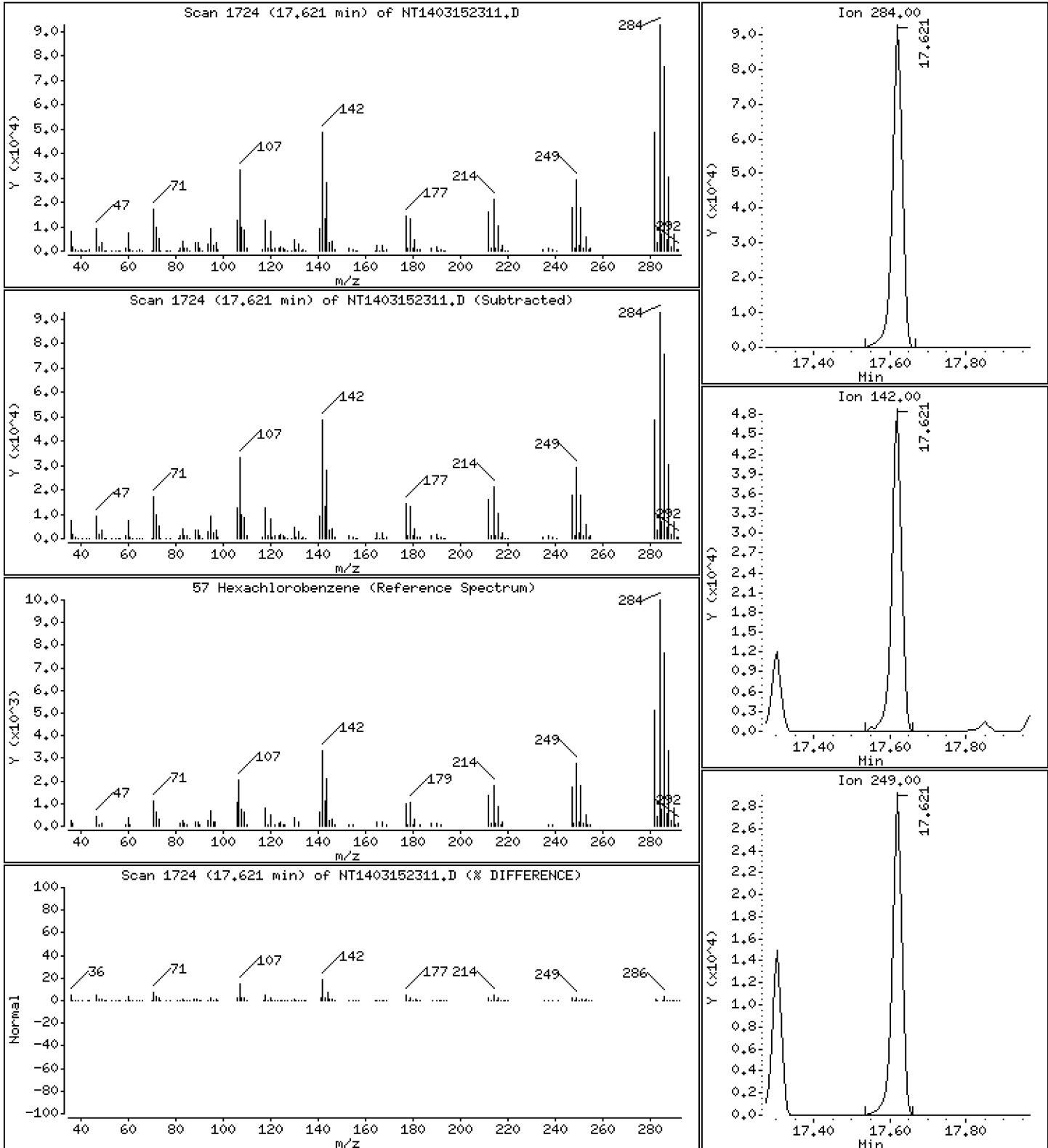
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,780 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

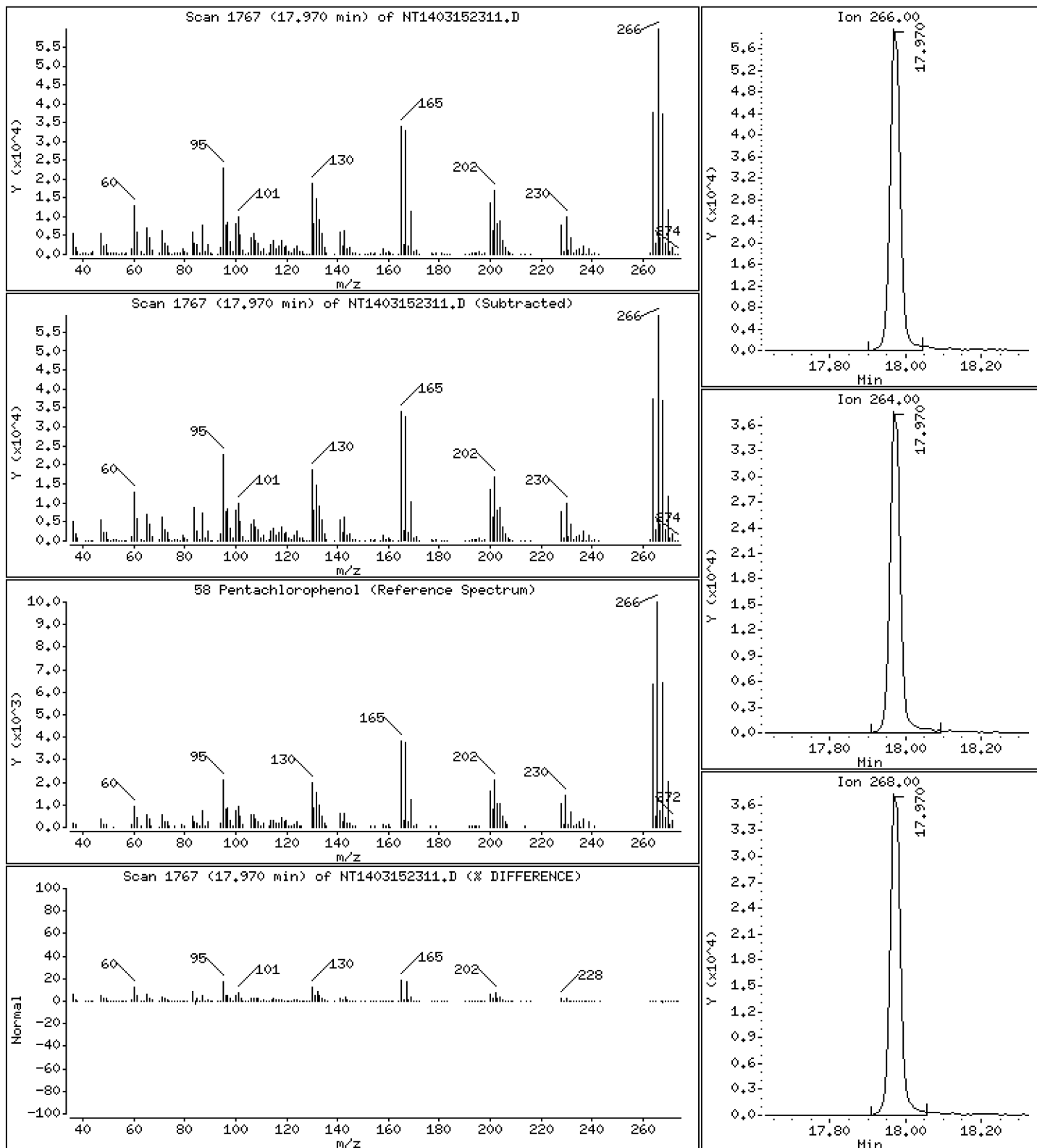
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,477 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

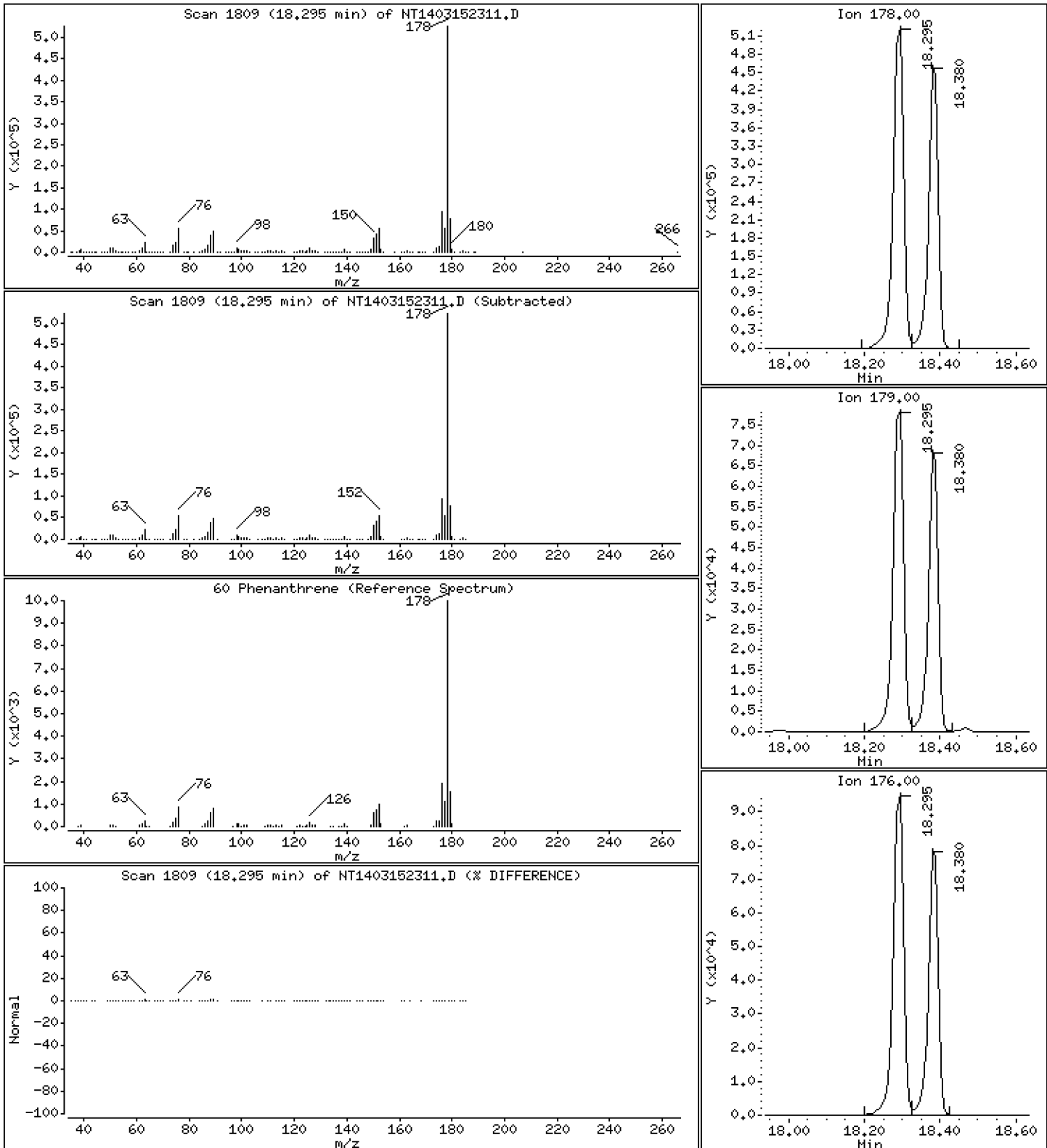
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,734 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

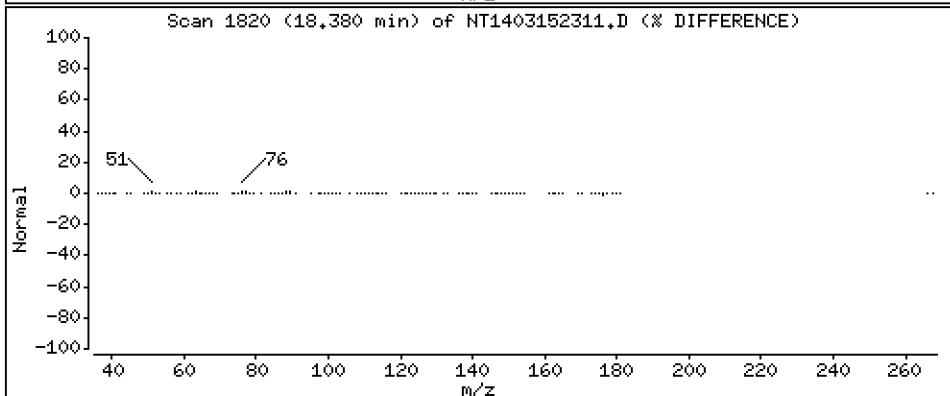
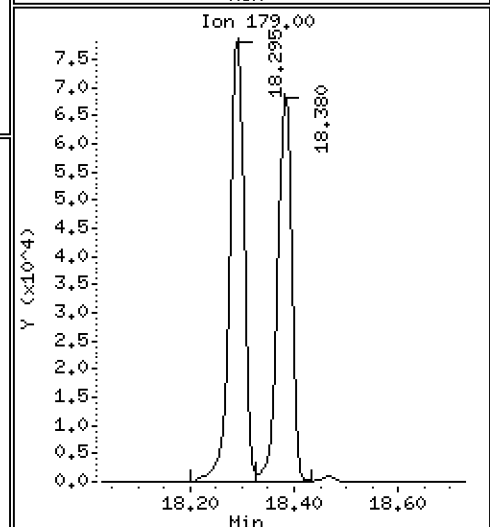
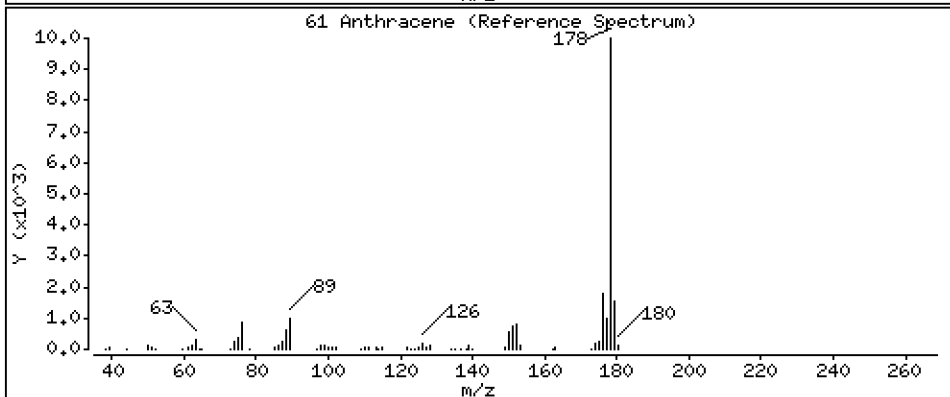
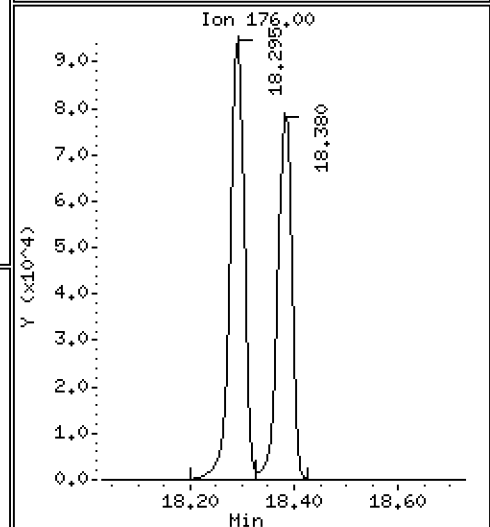
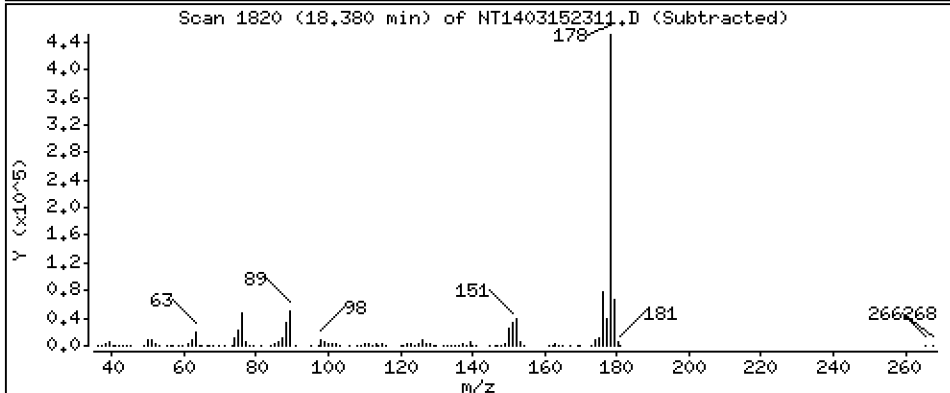
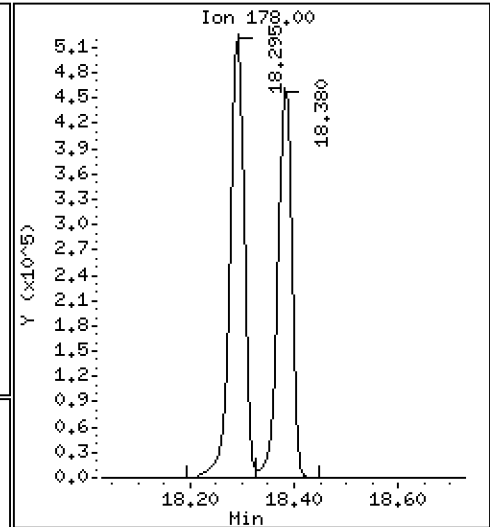
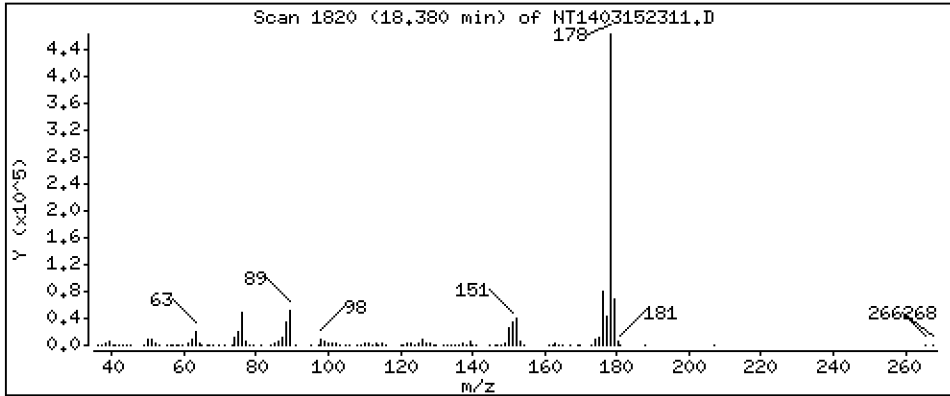
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,281 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

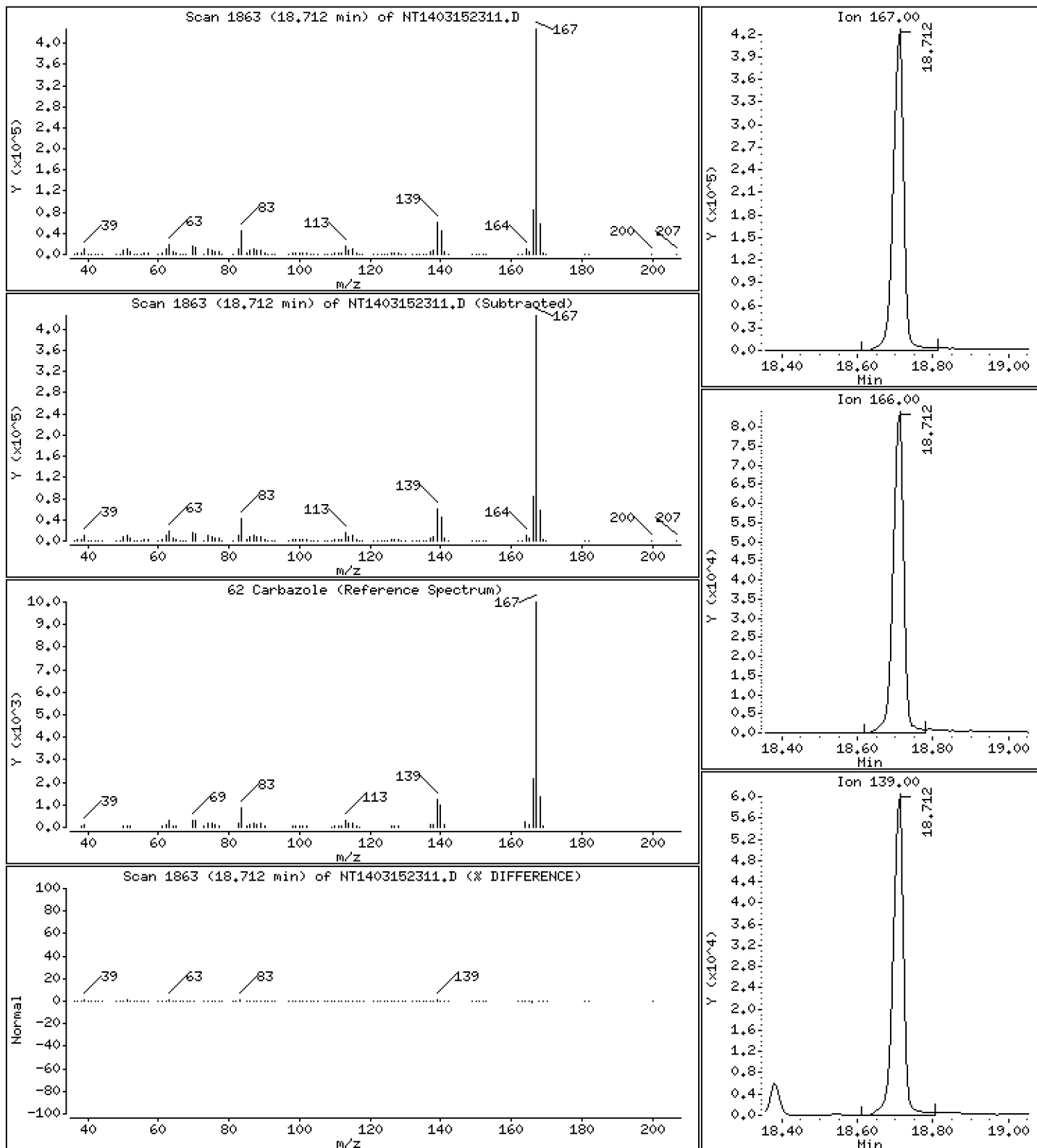
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,587 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

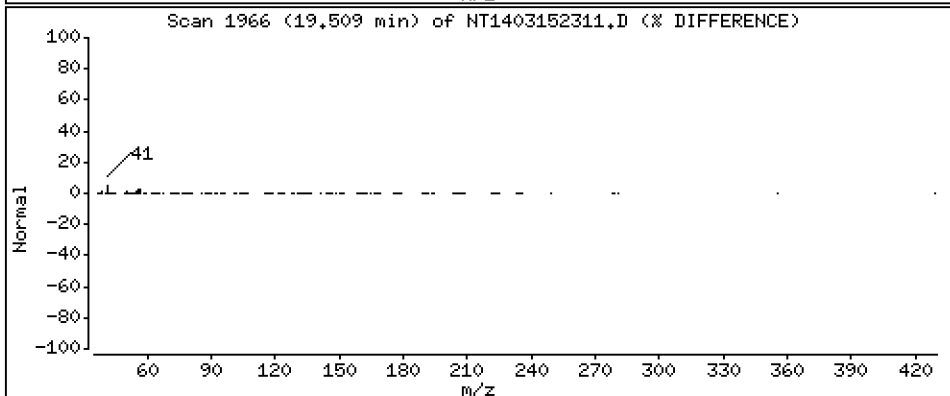
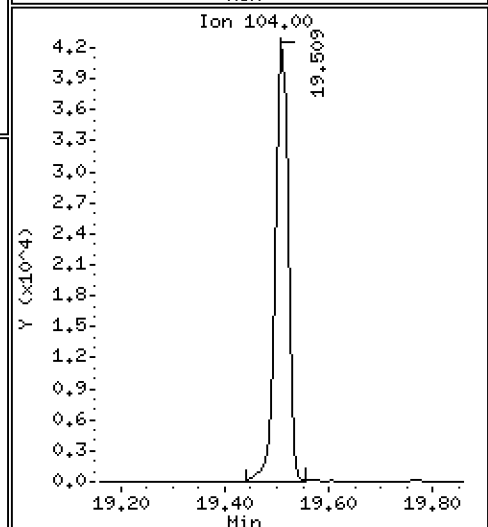
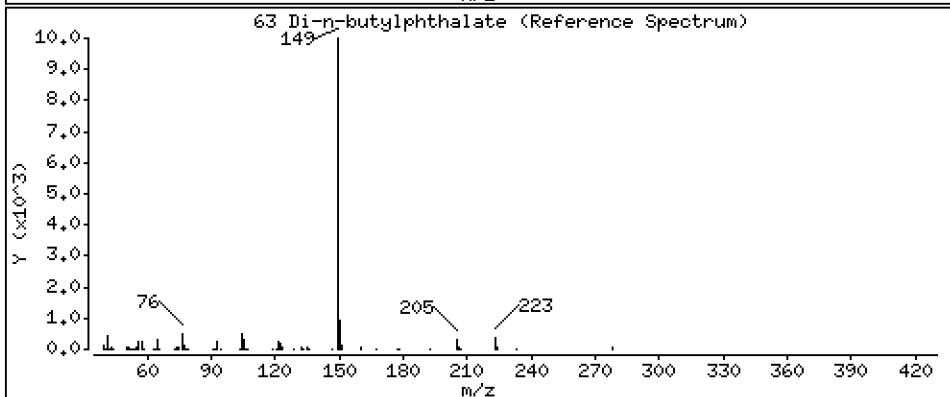
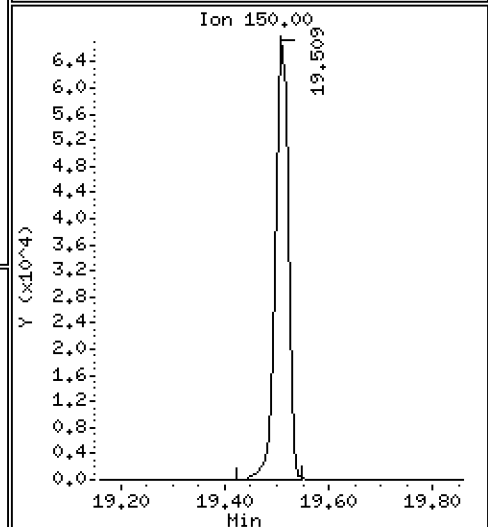
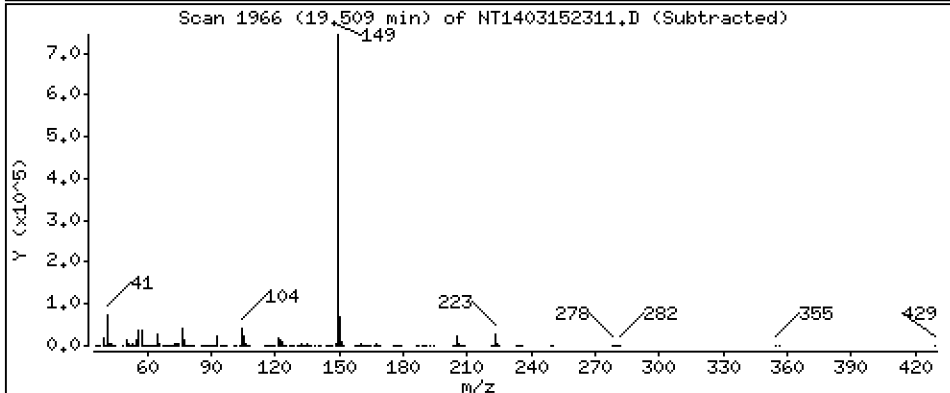
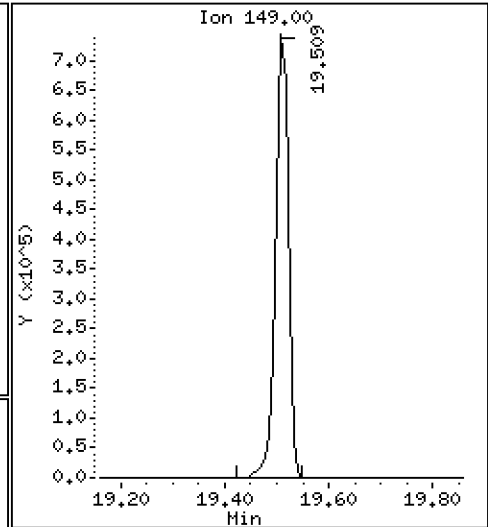
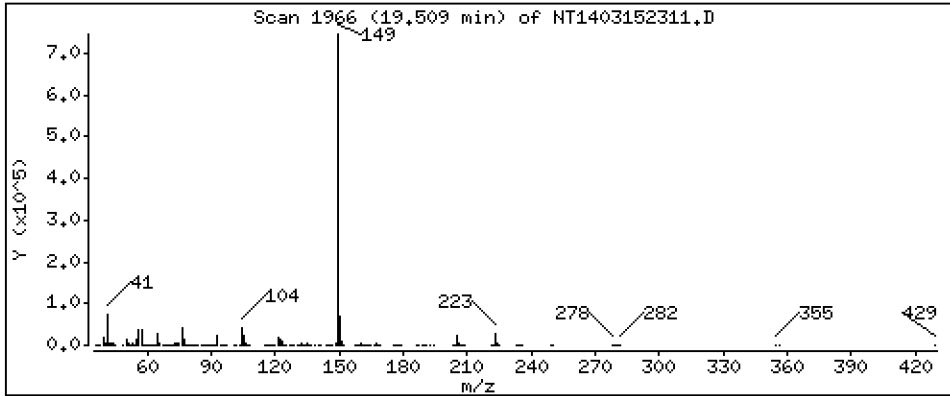
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,507 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

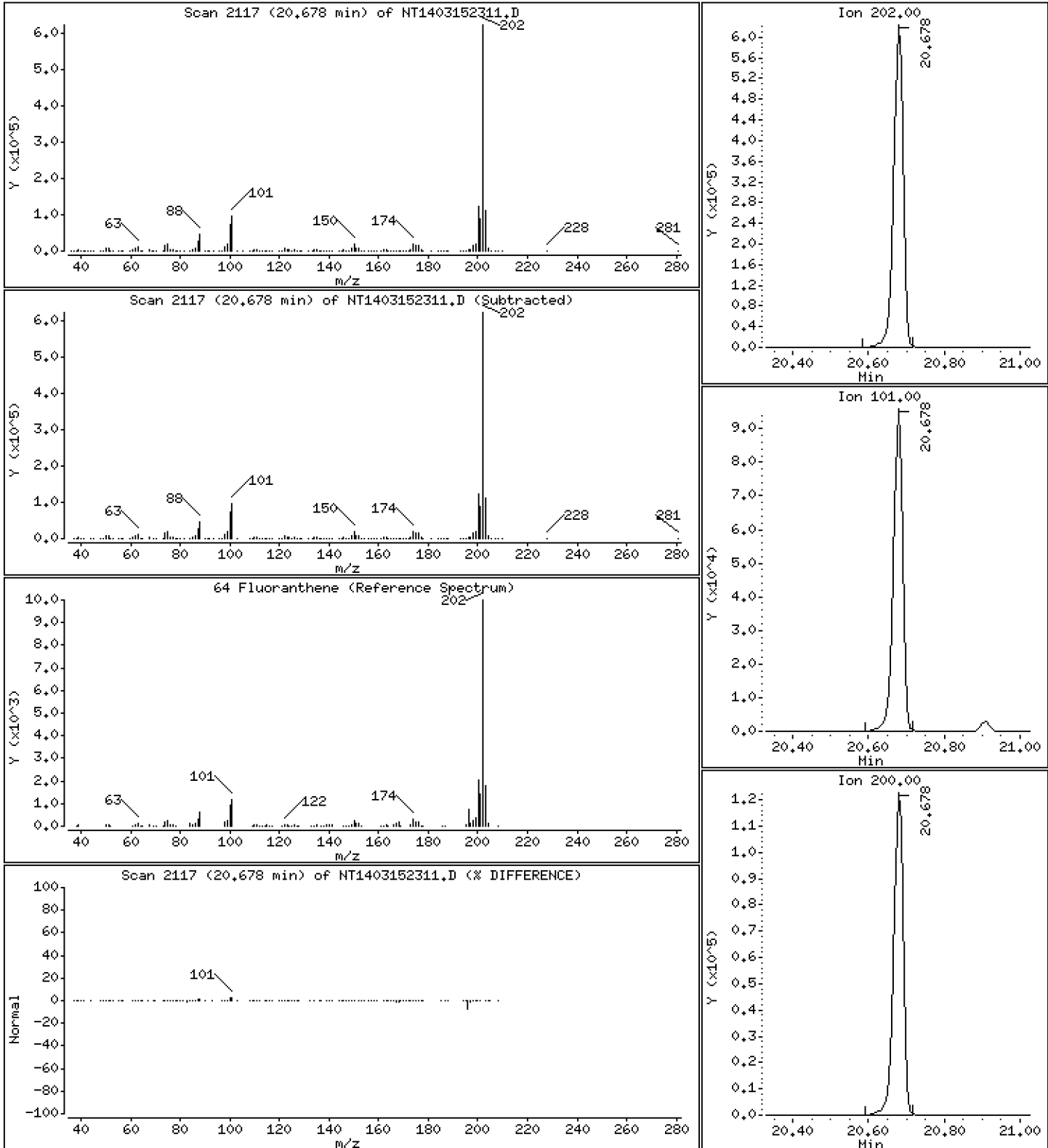
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 5,024 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

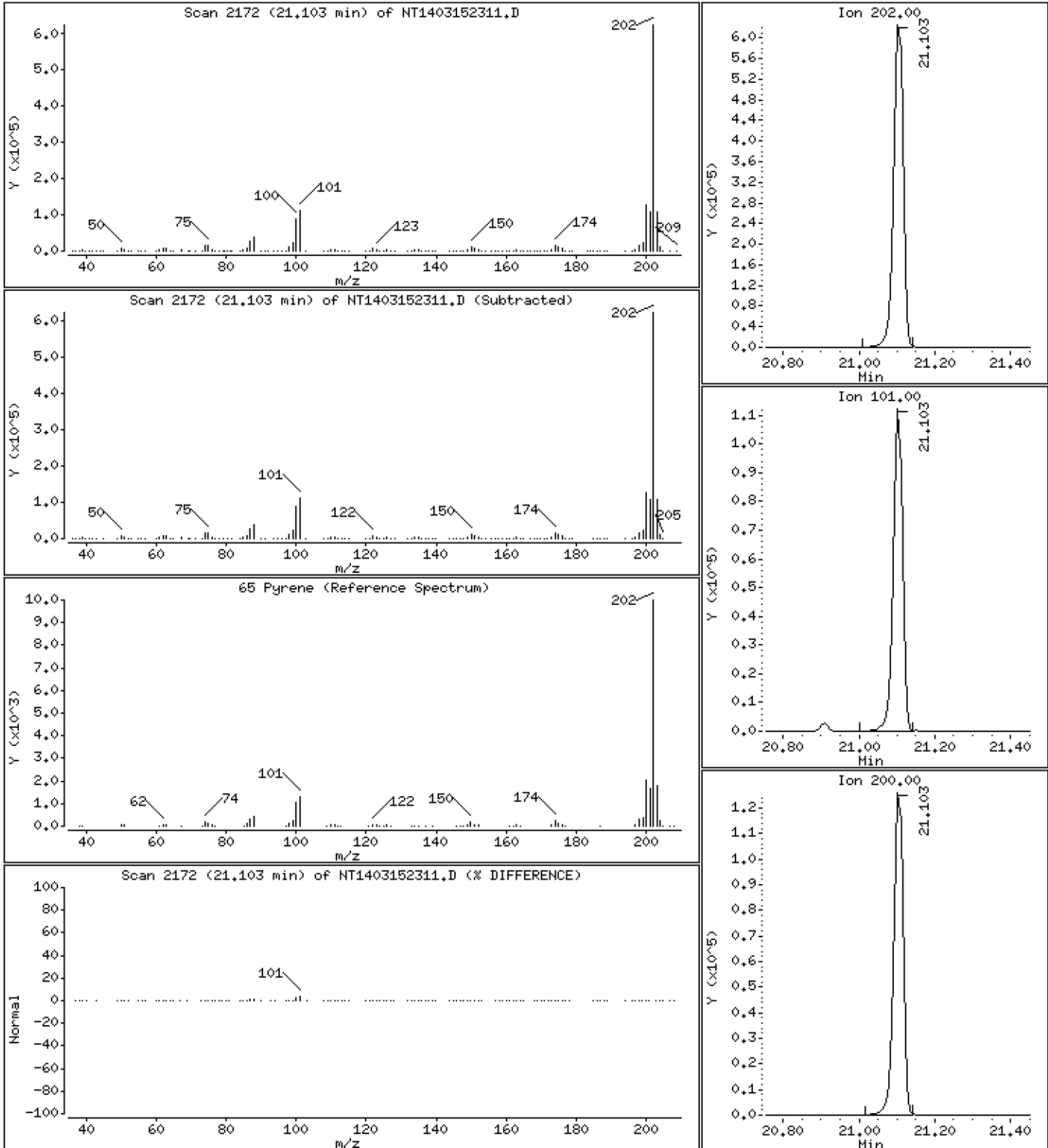
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,958 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

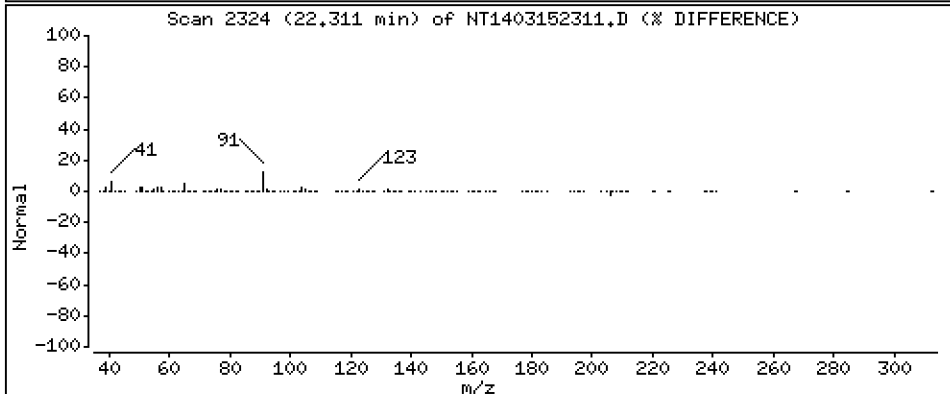
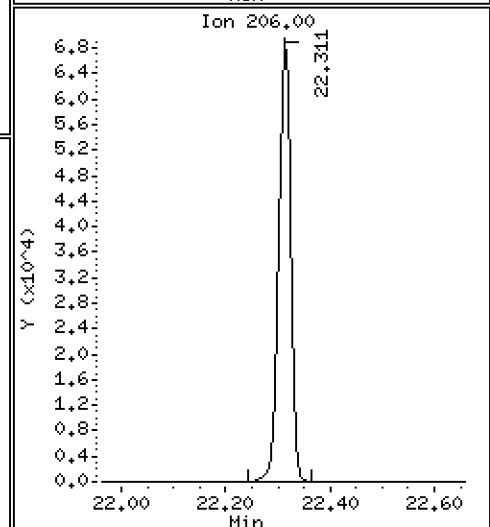
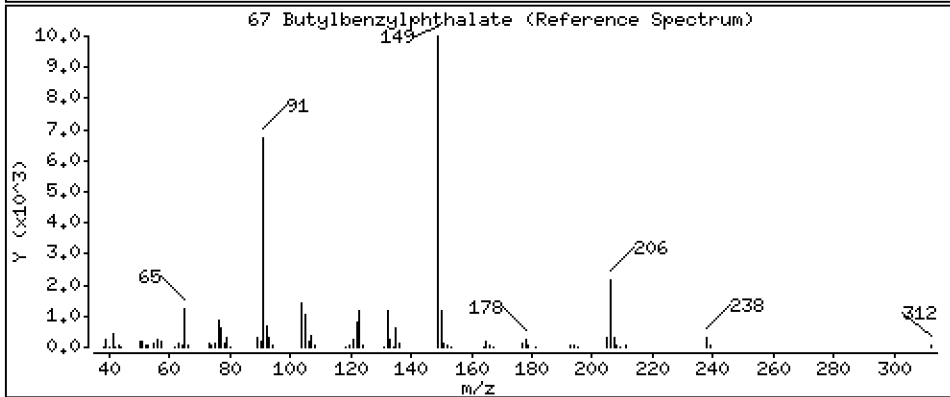
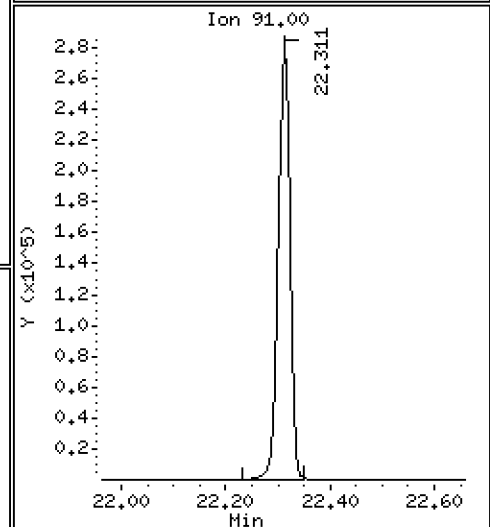
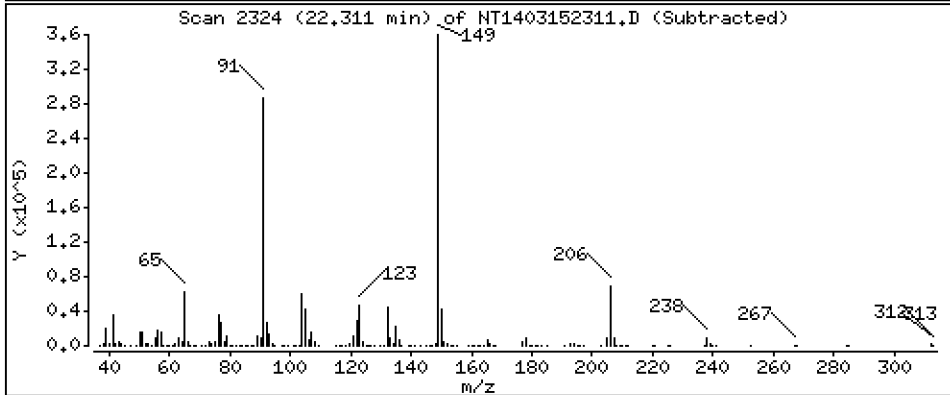
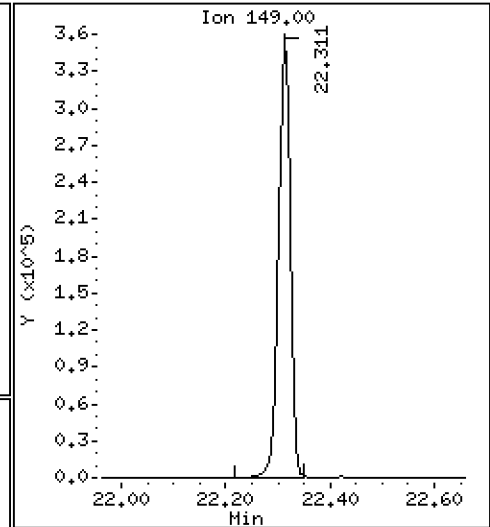
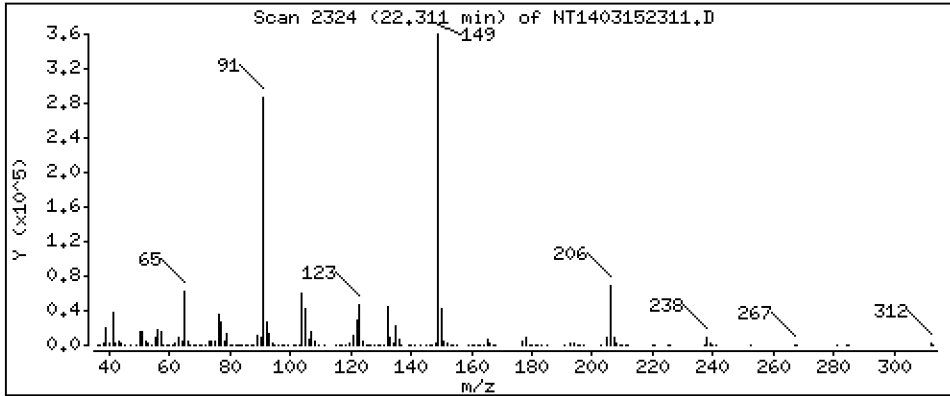
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,737 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

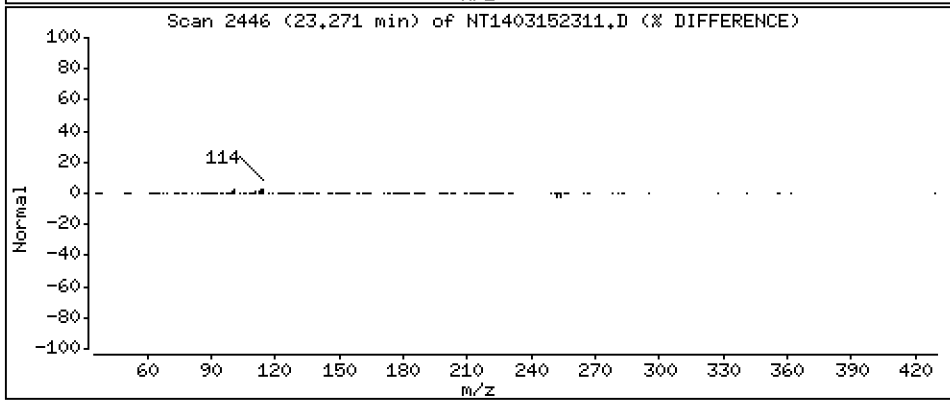
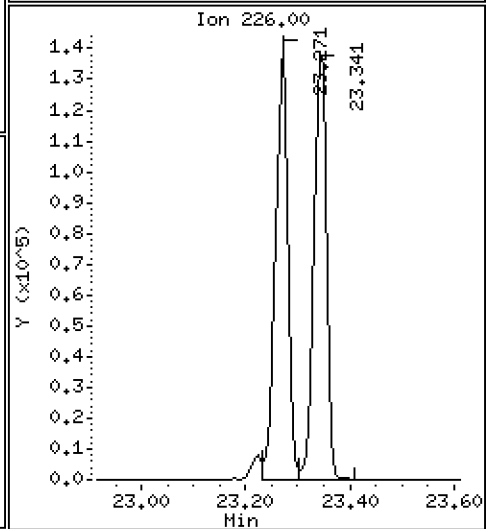
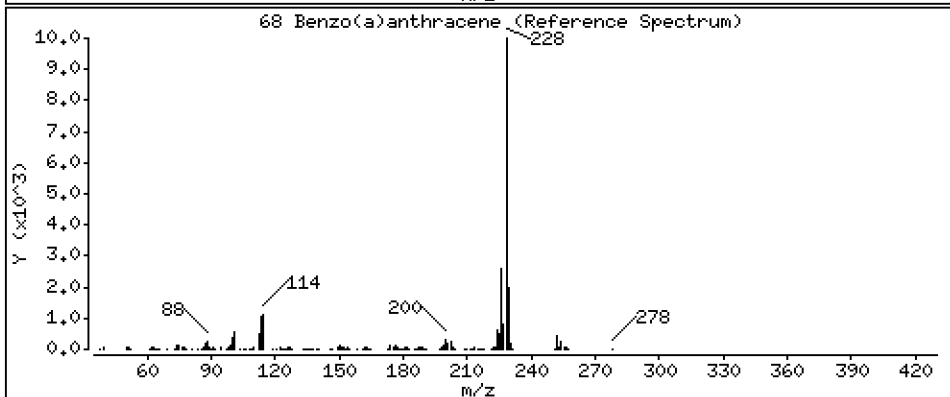
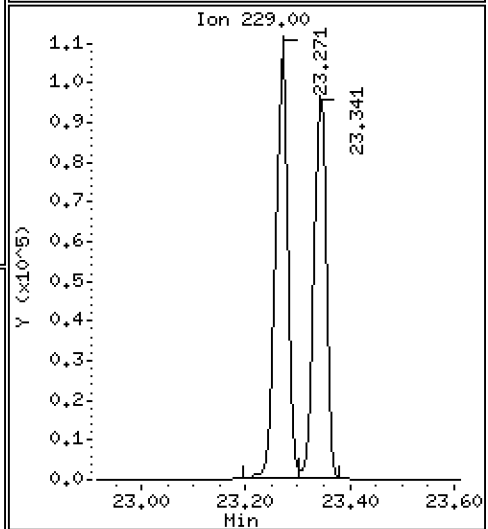
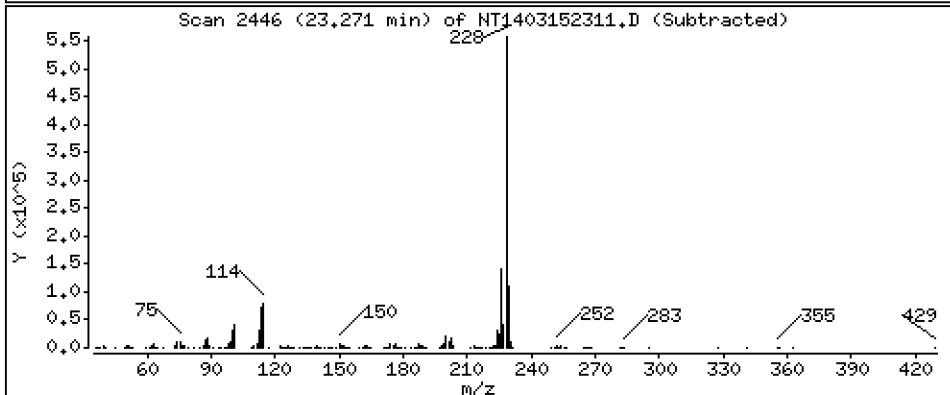
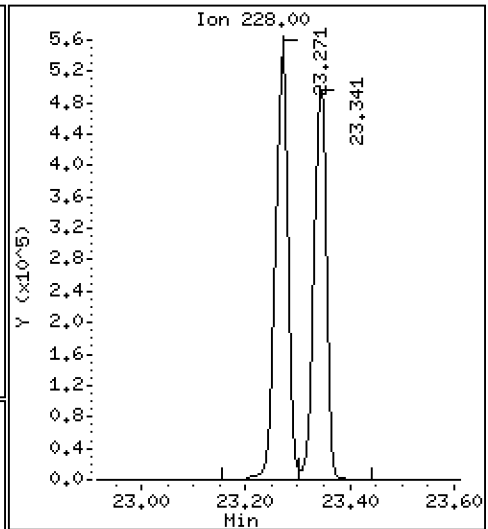
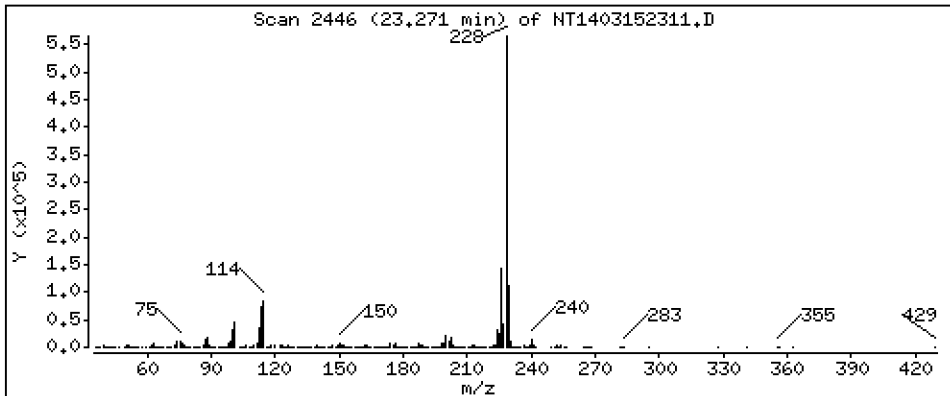
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,827 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

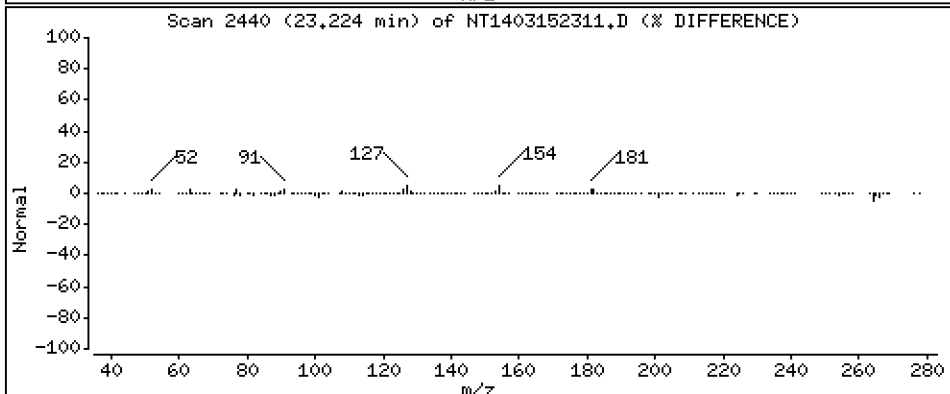
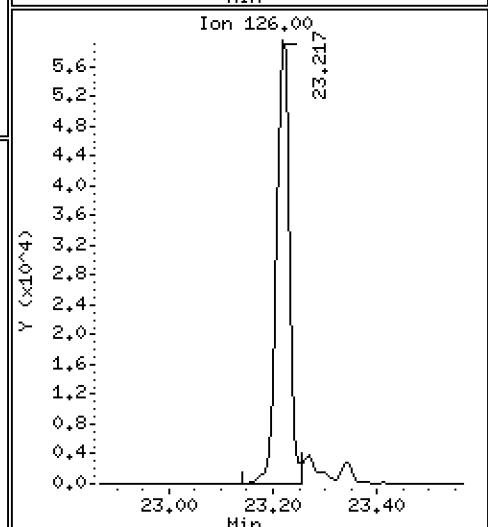
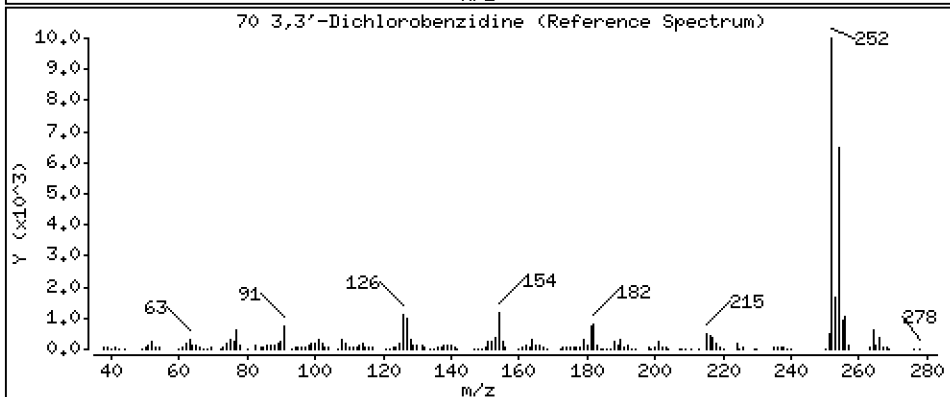
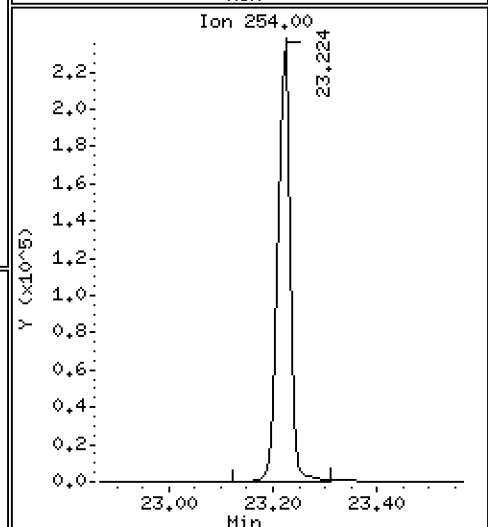
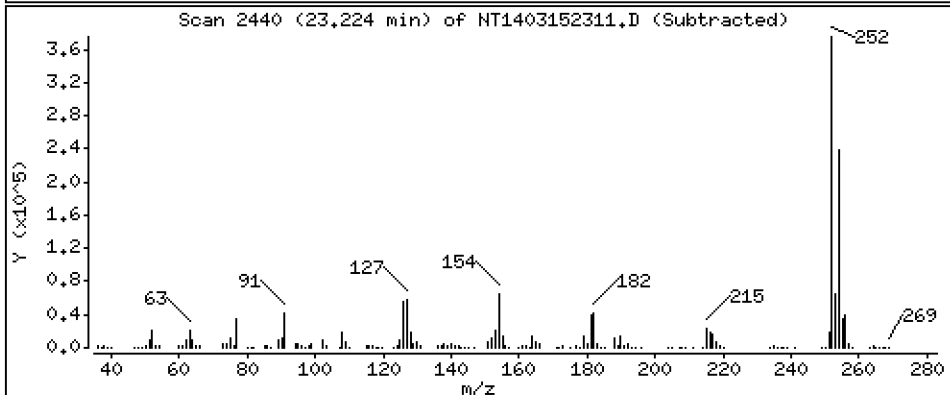
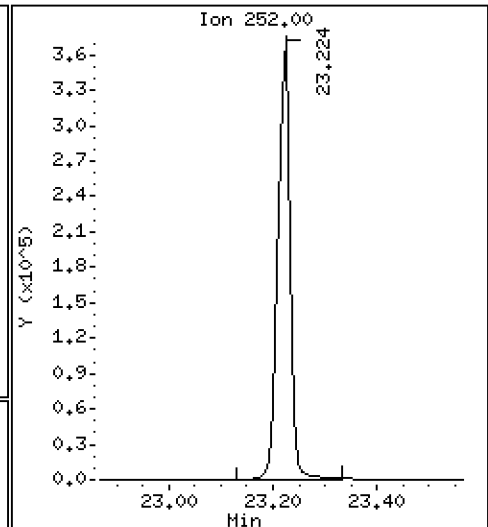
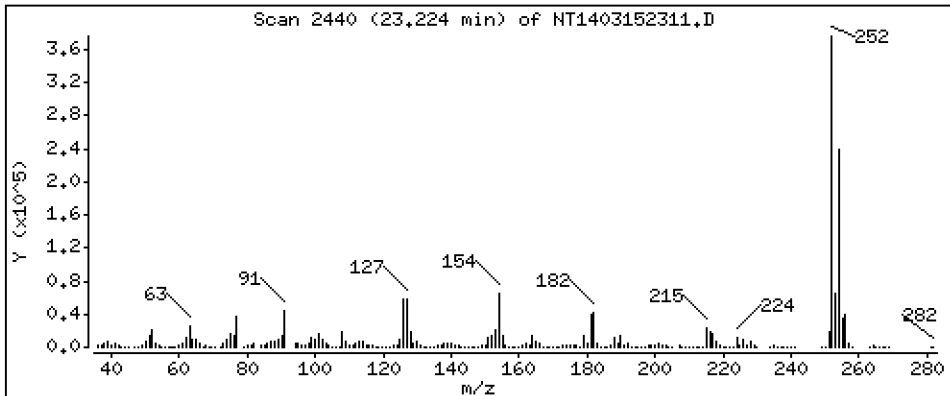
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 10,65 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

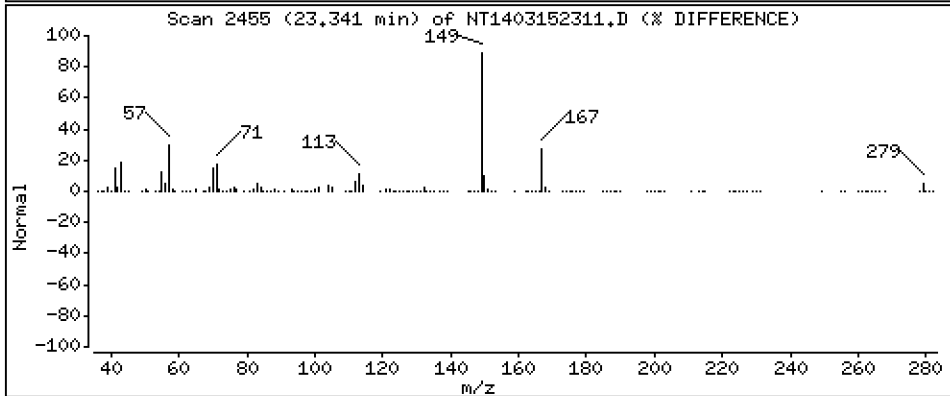
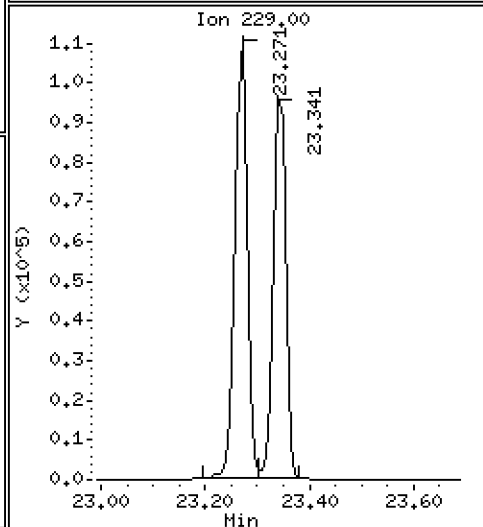
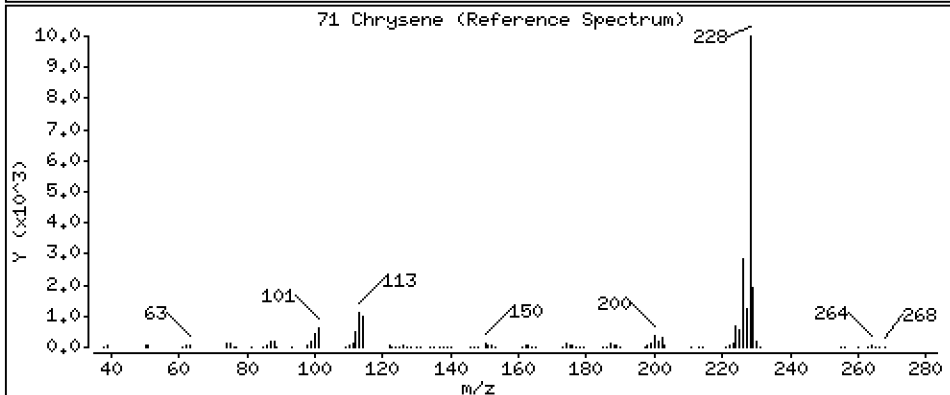
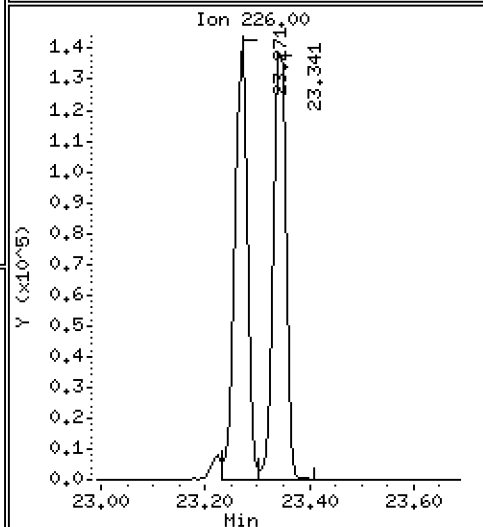
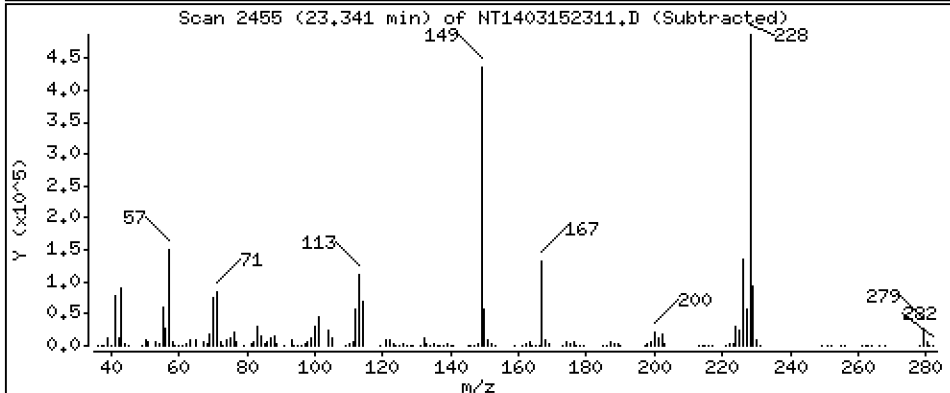
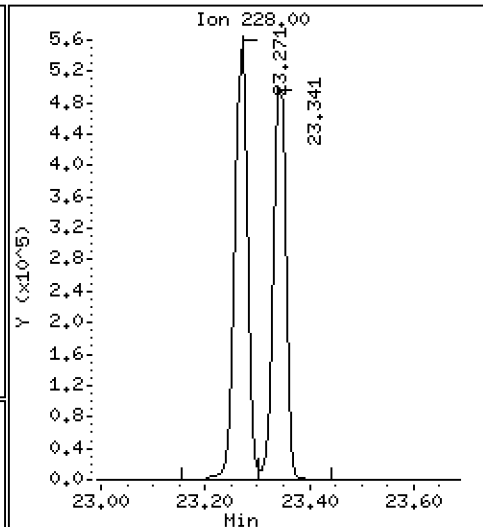
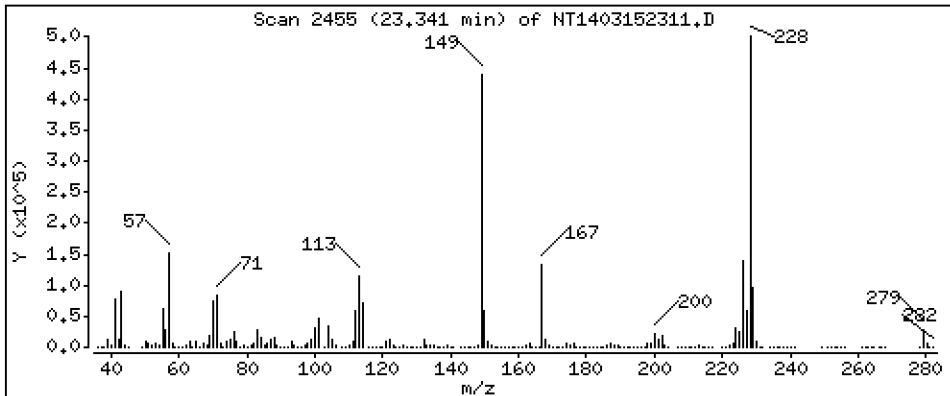
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,723 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

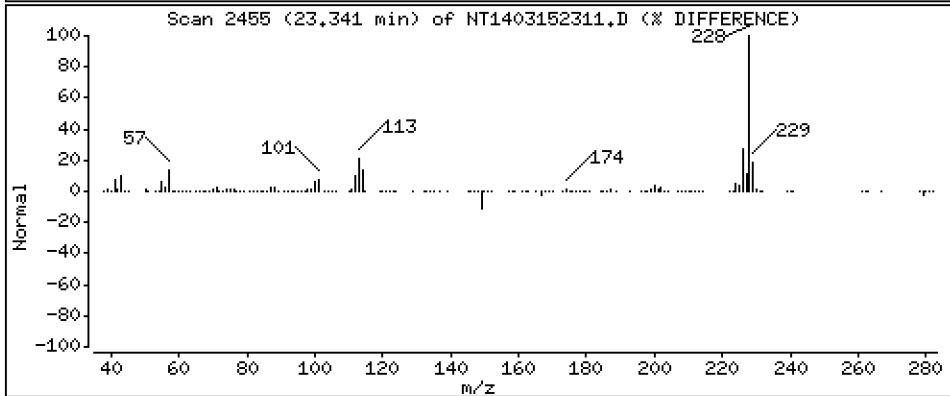
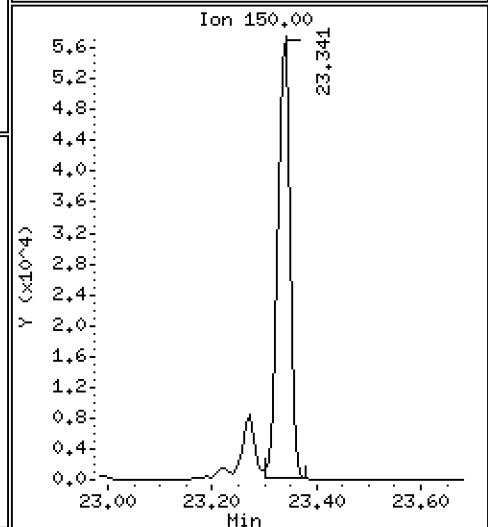
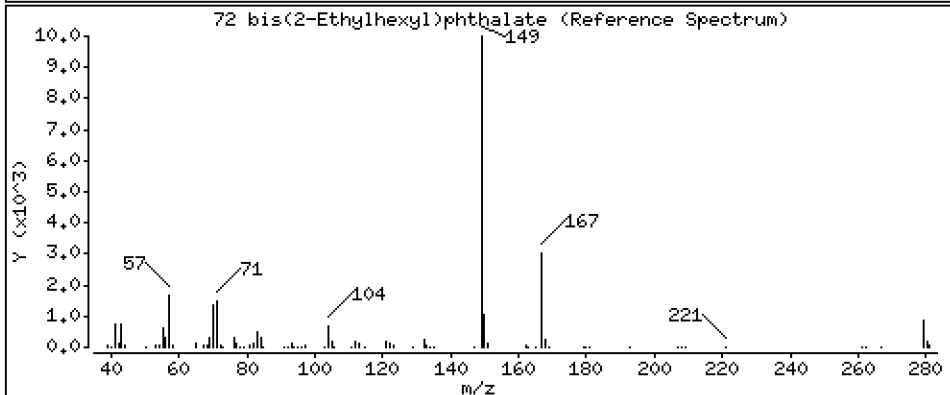
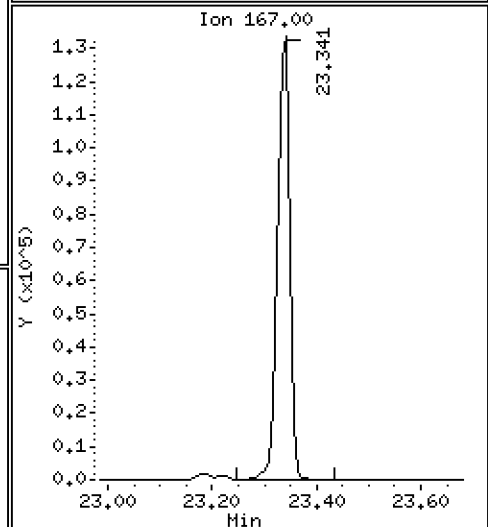
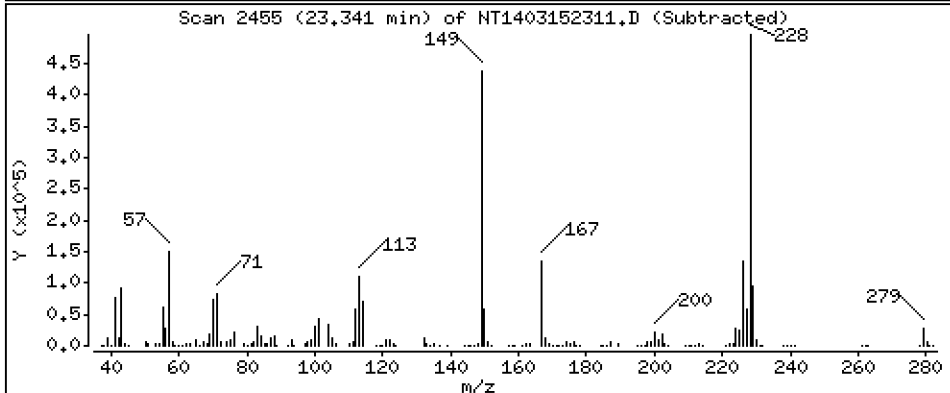
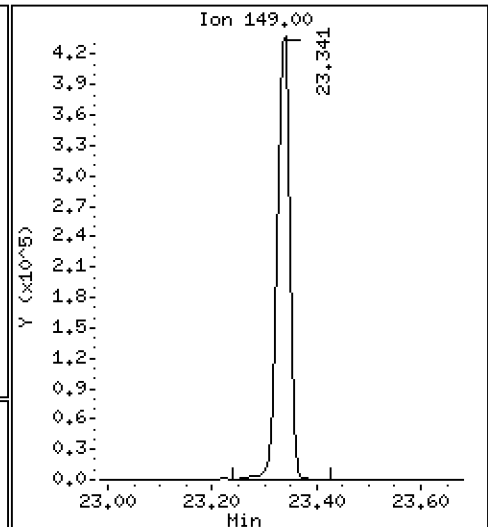
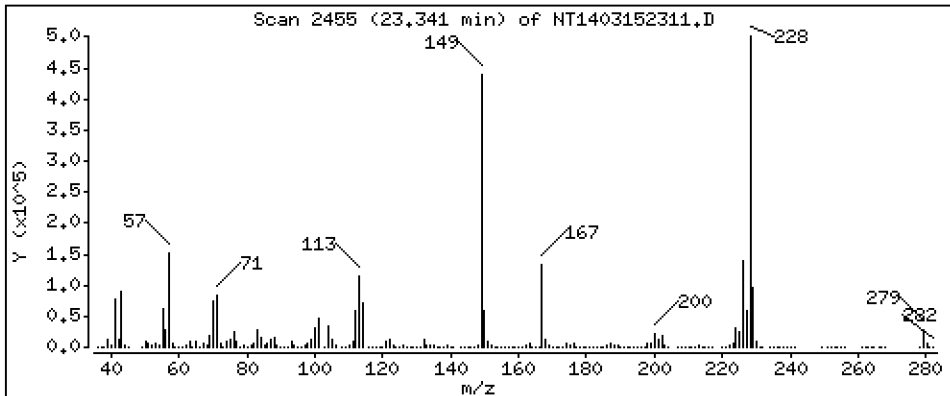
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 5,428 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

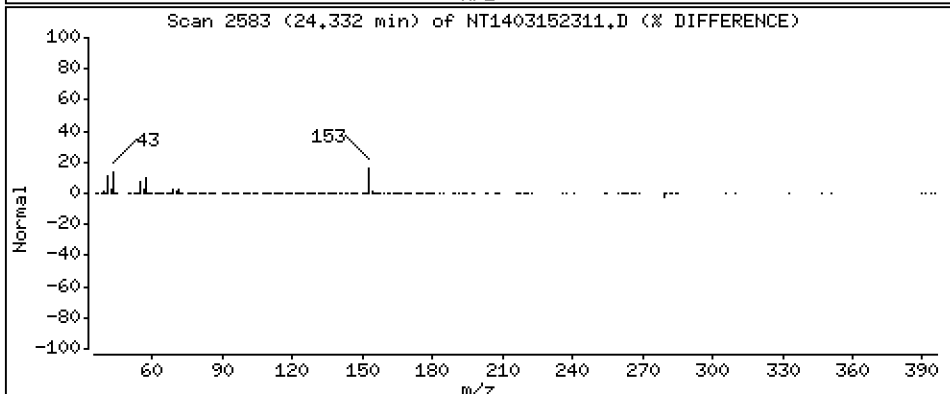
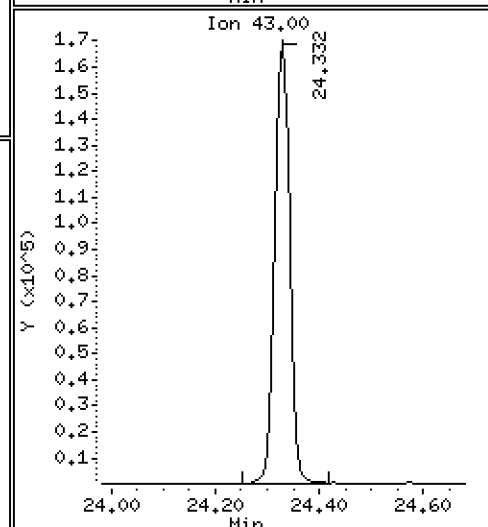
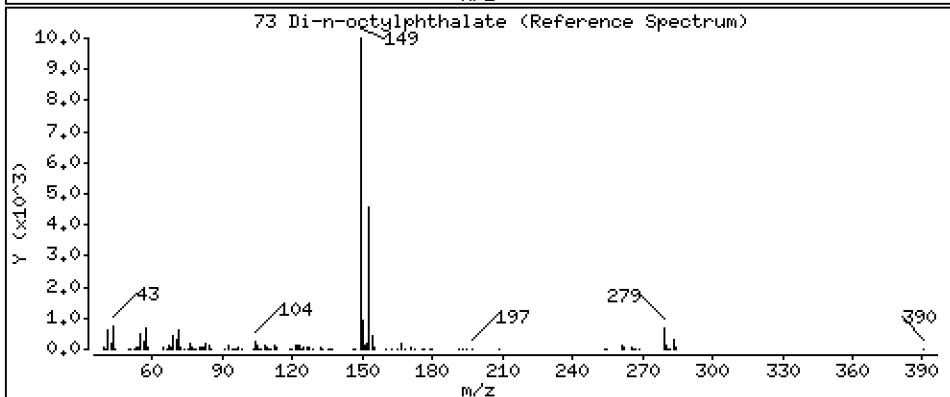
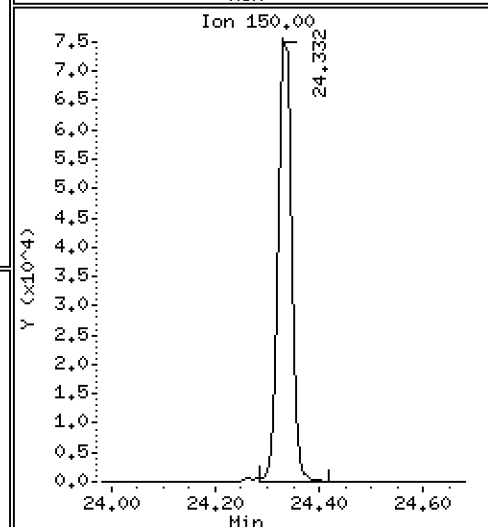
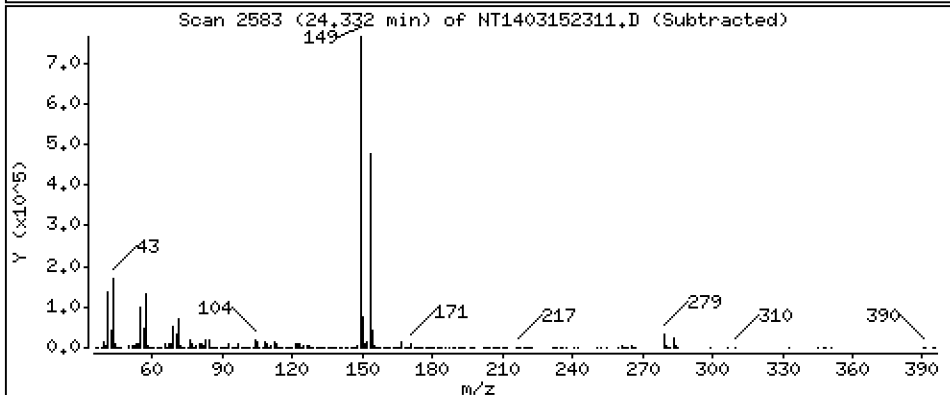
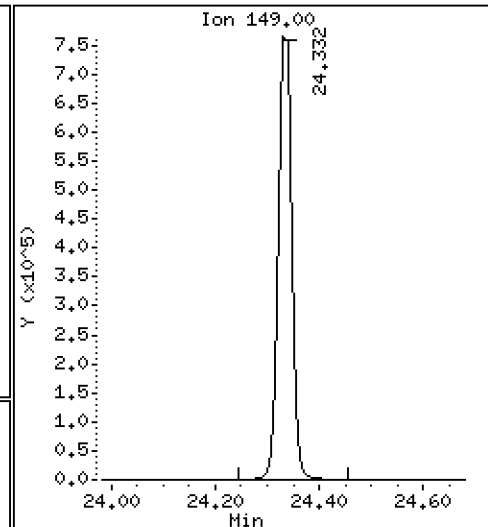
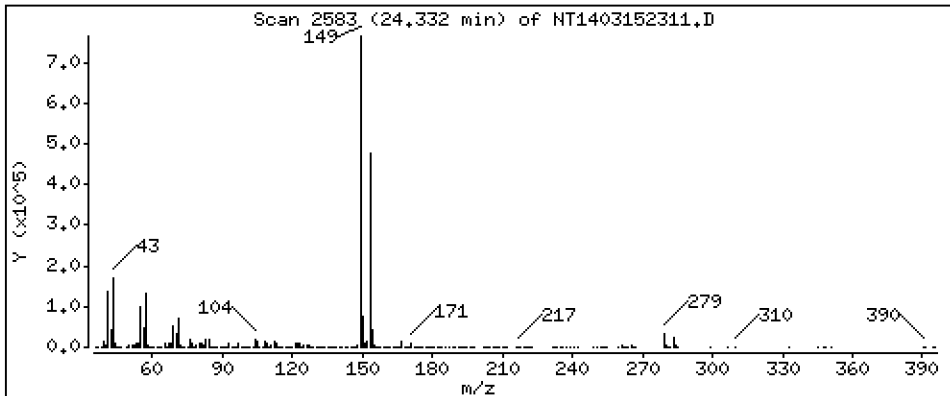
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,135 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

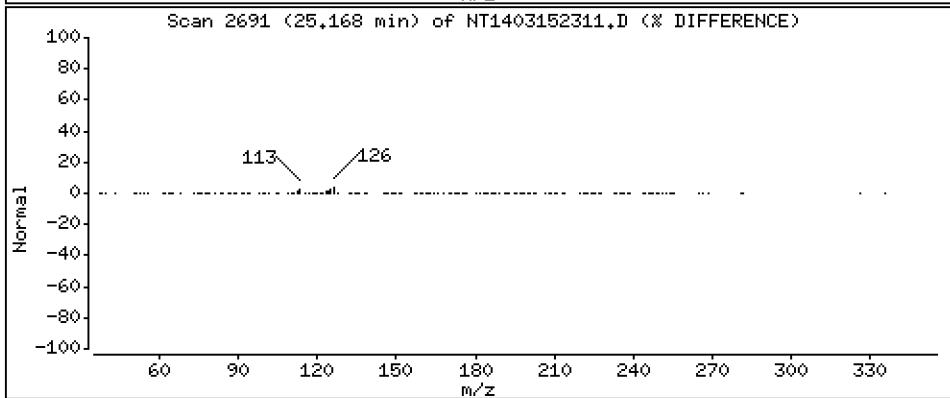
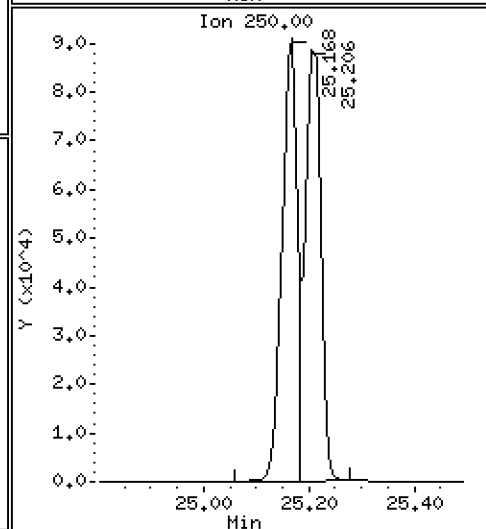
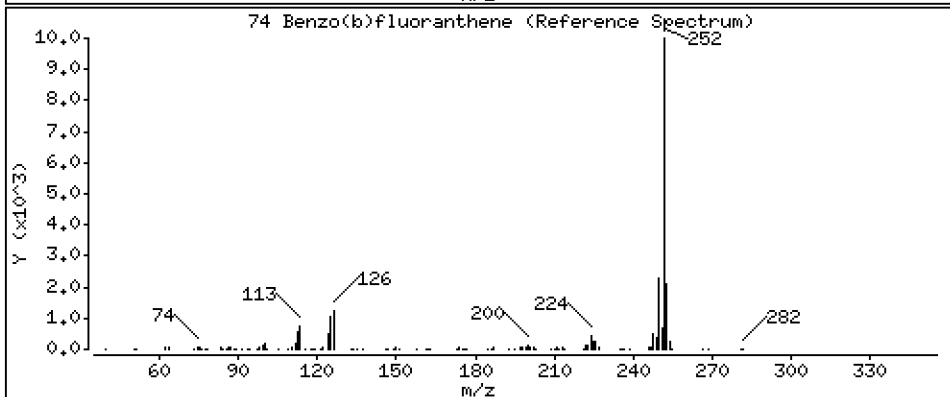
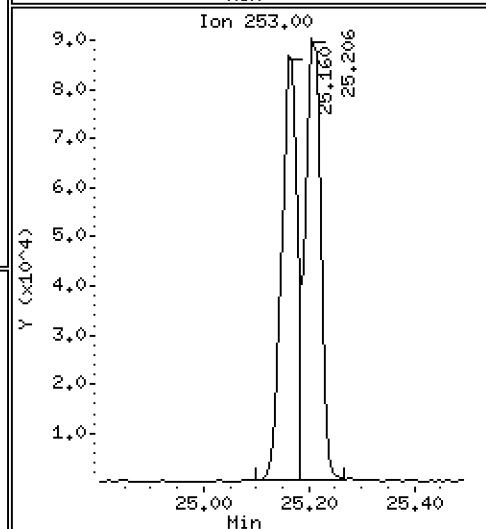
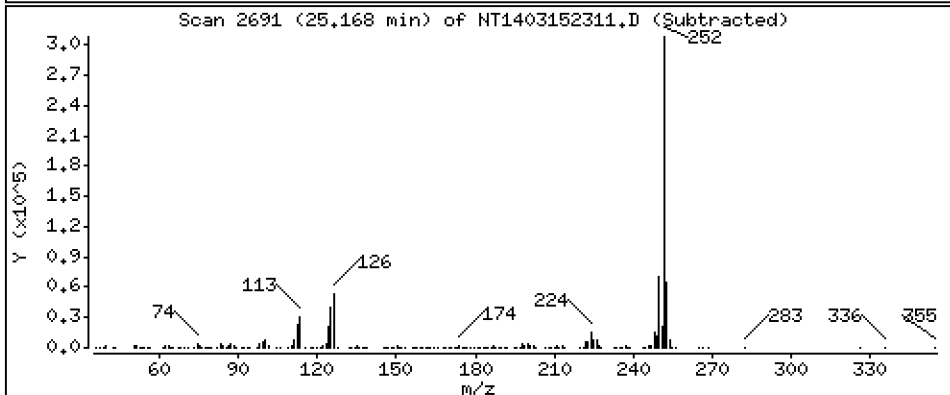
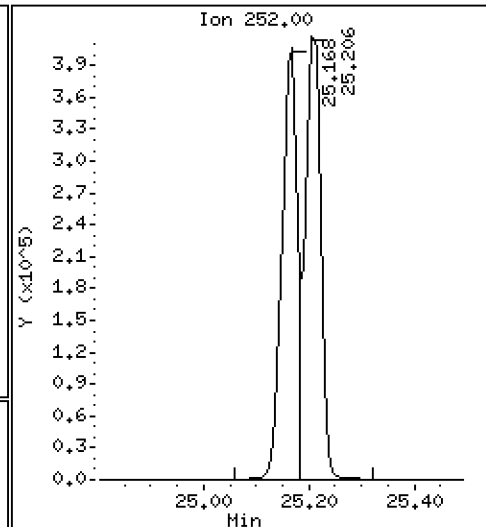
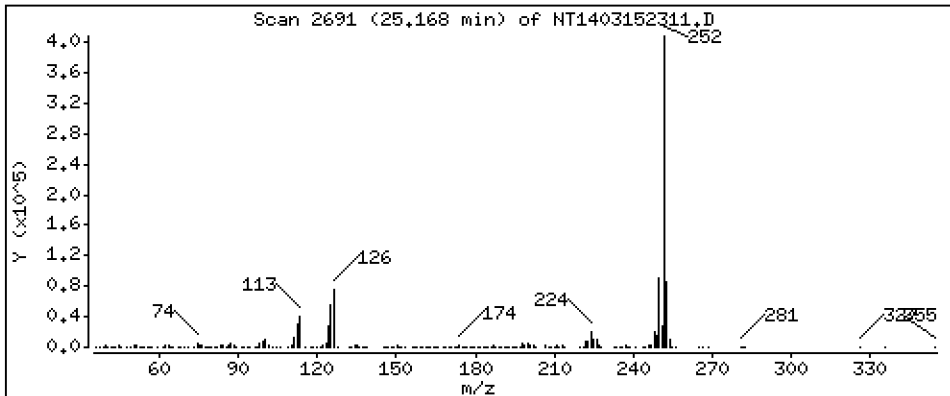
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,774 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

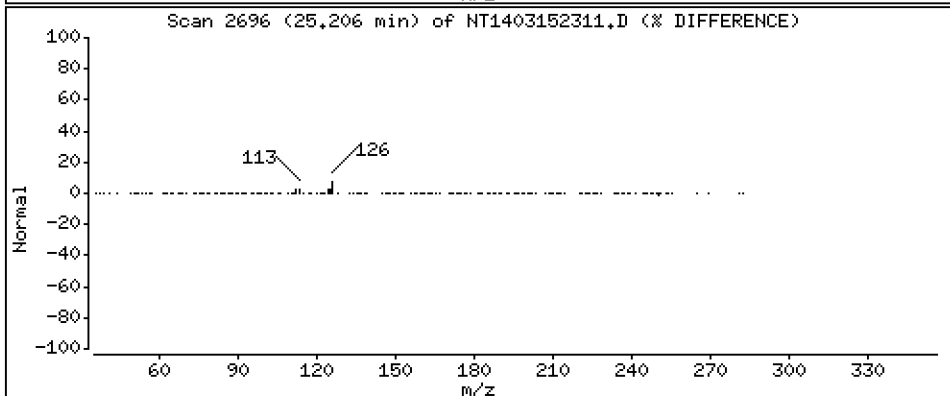
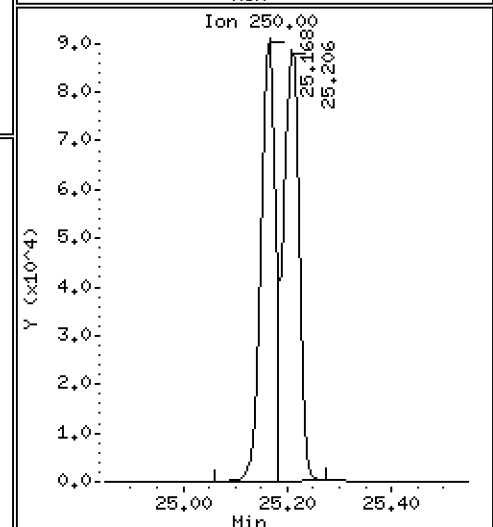
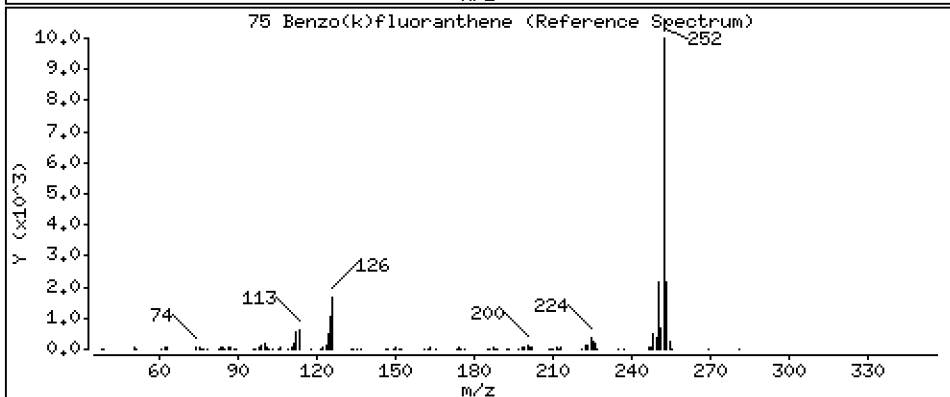
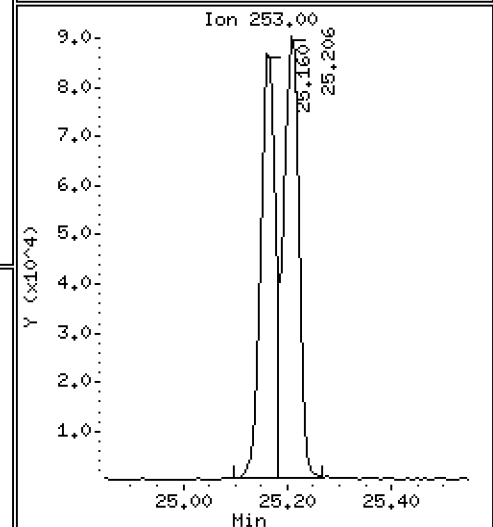
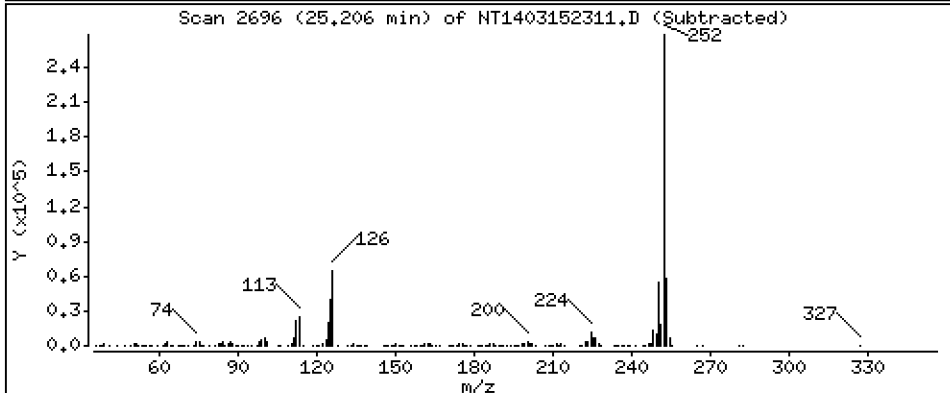
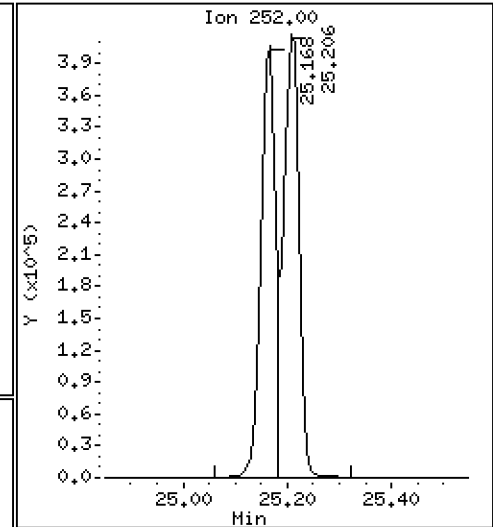
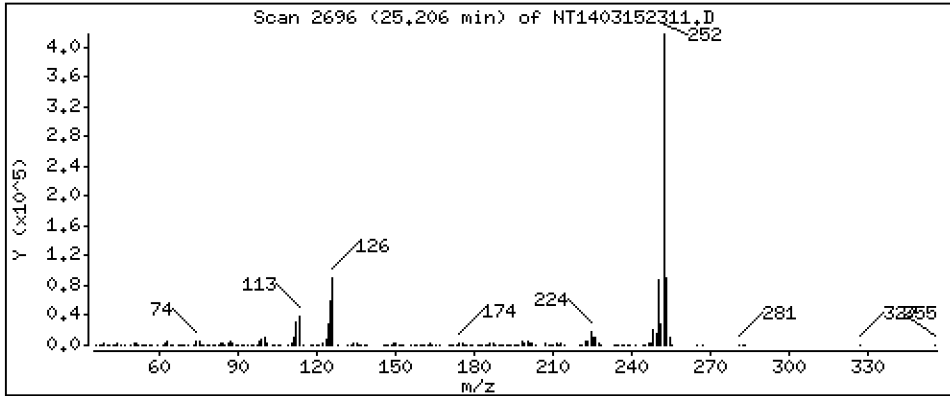
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

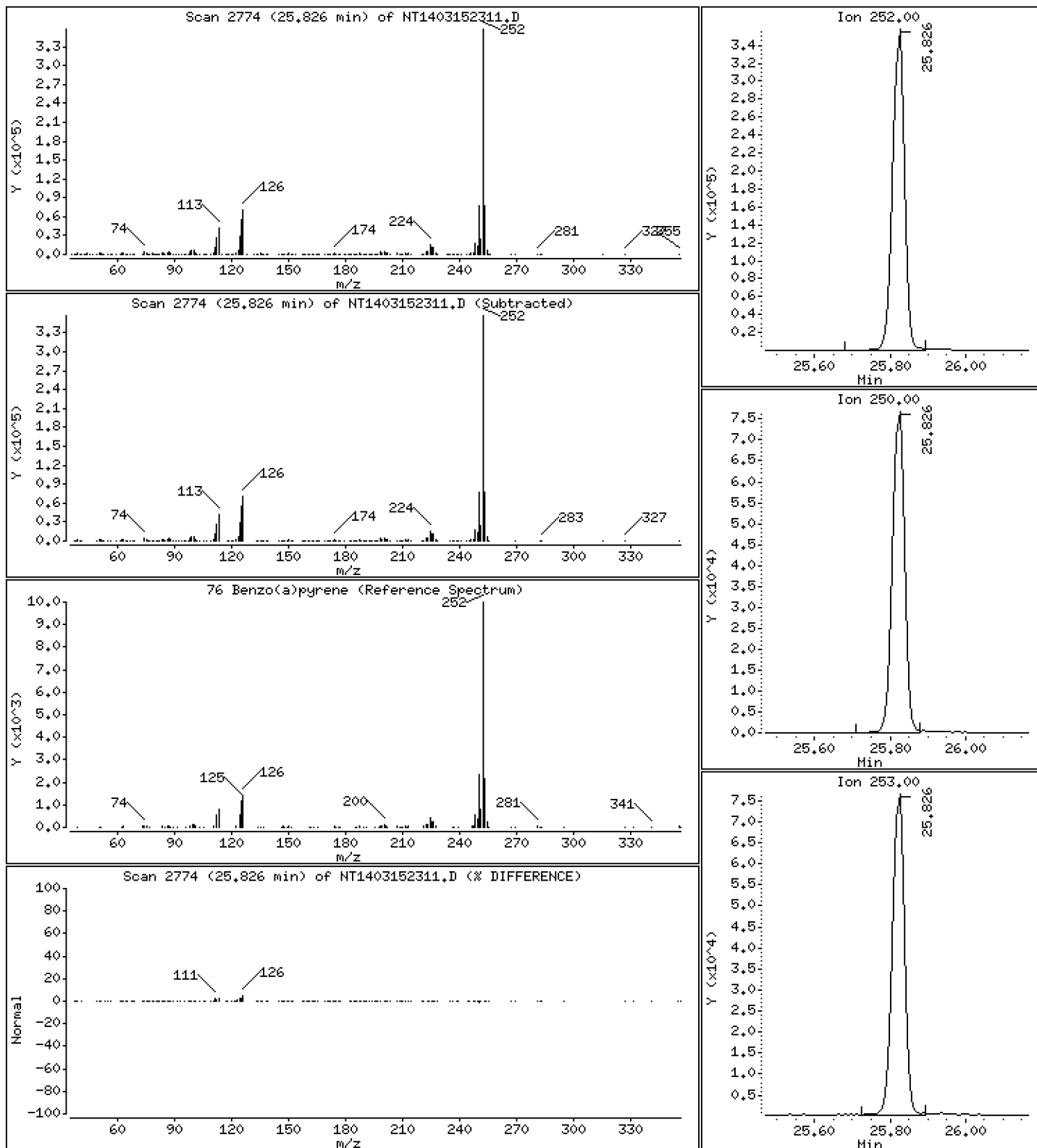
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,978 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

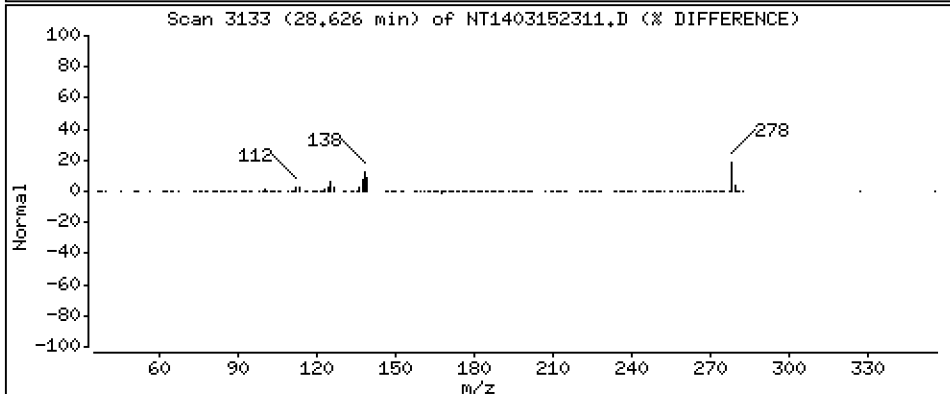
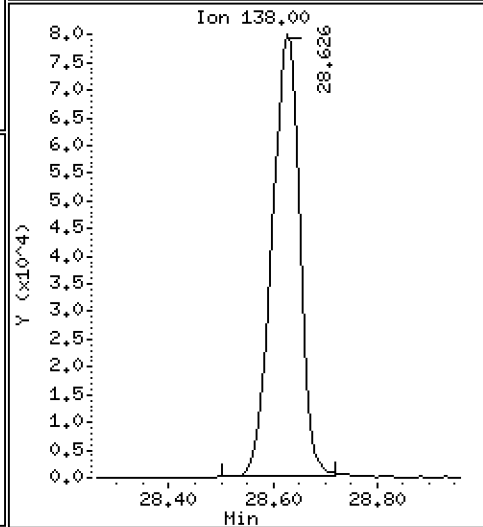
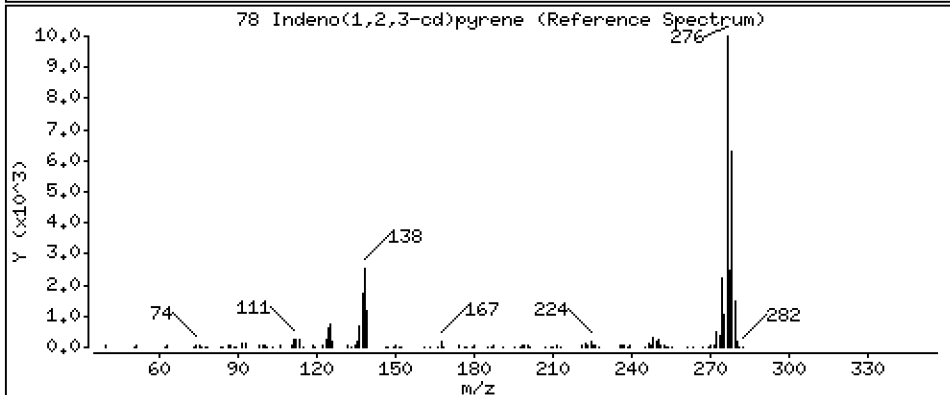
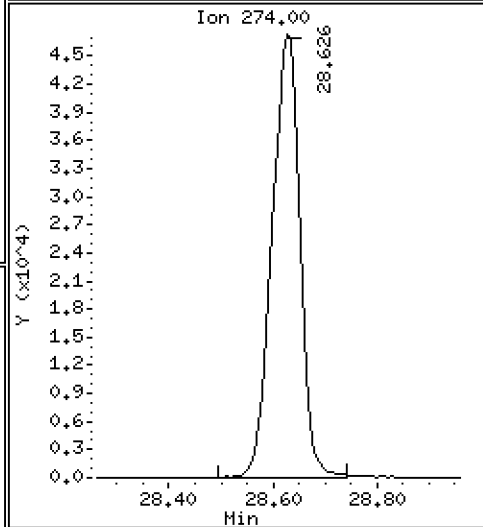
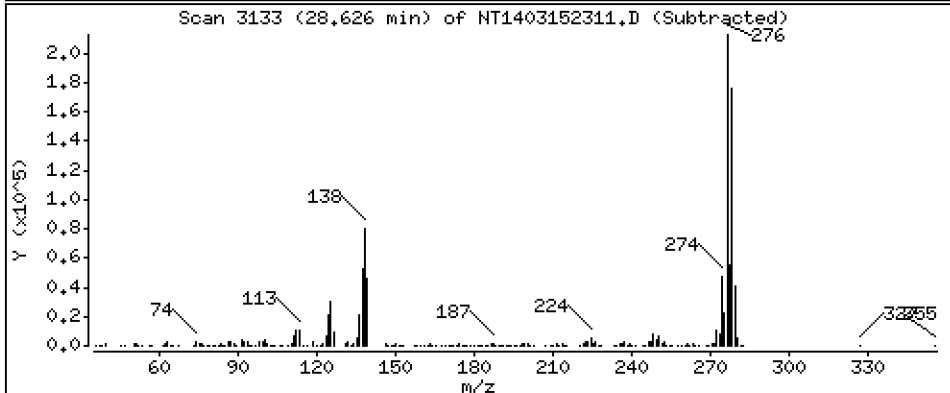
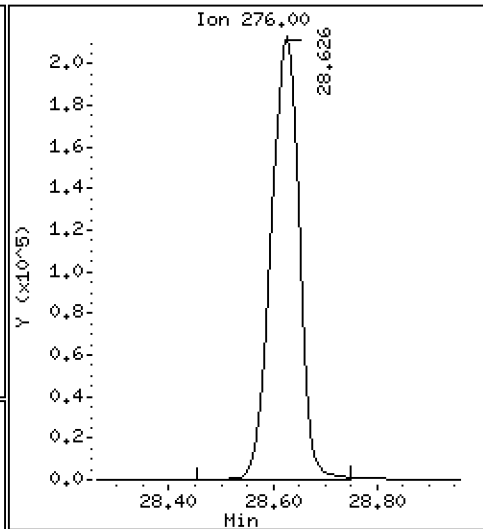
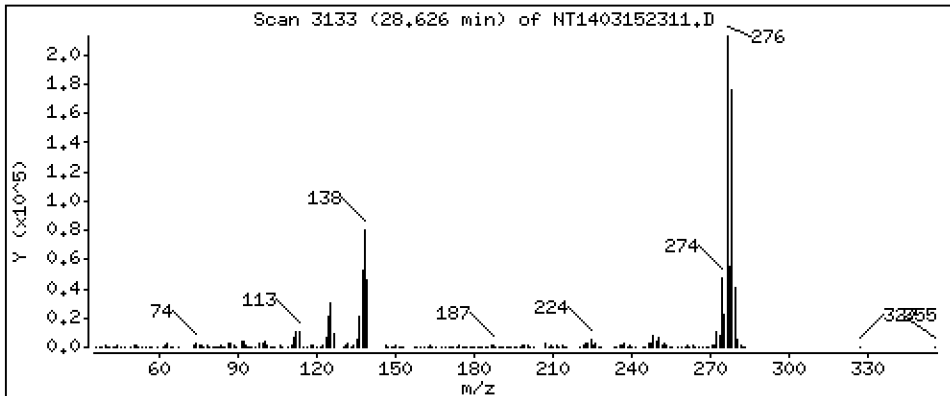
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,943 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

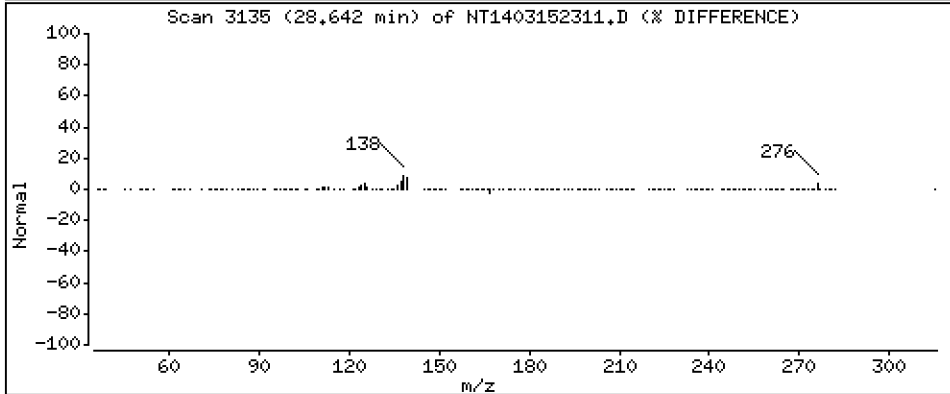
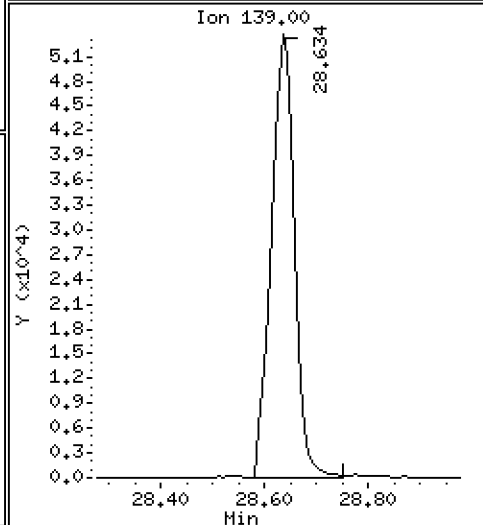
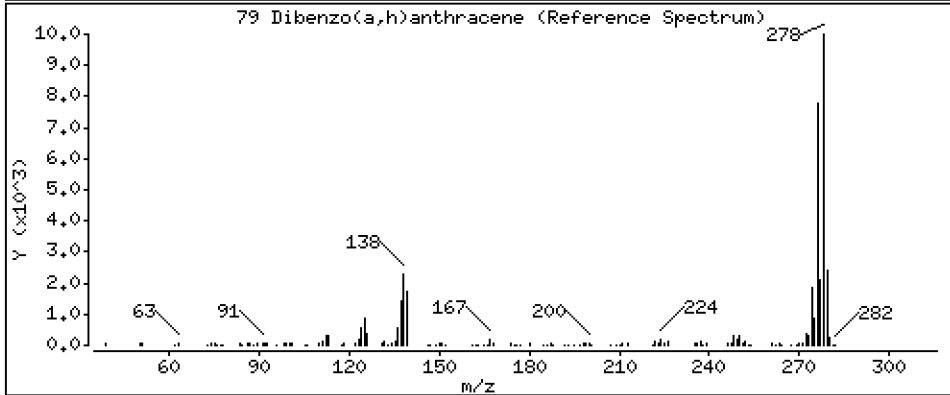
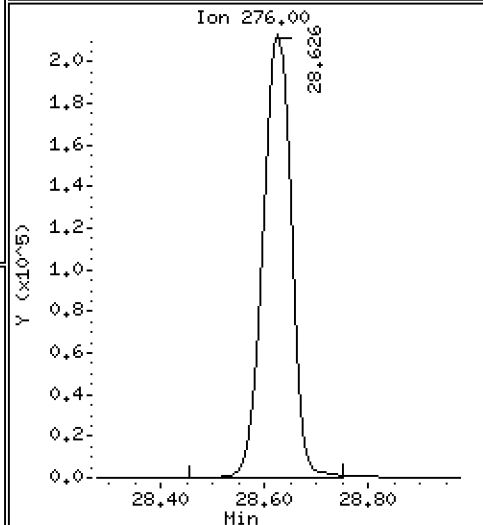
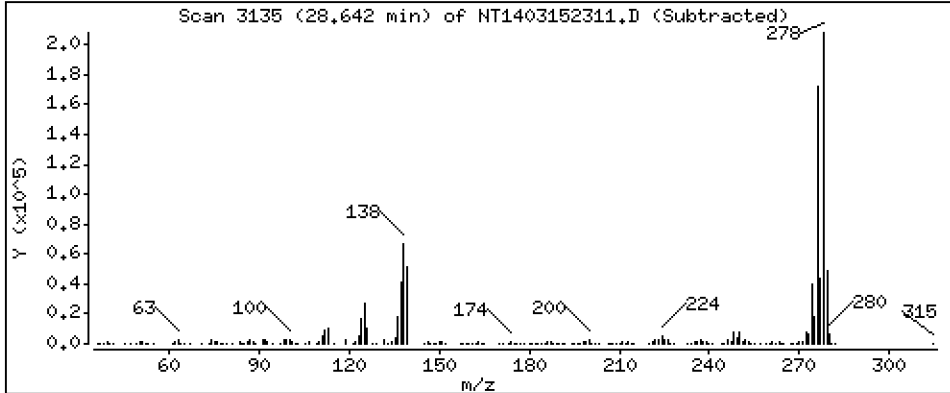
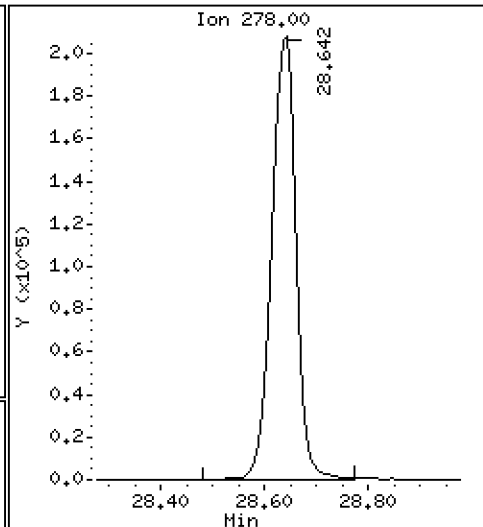
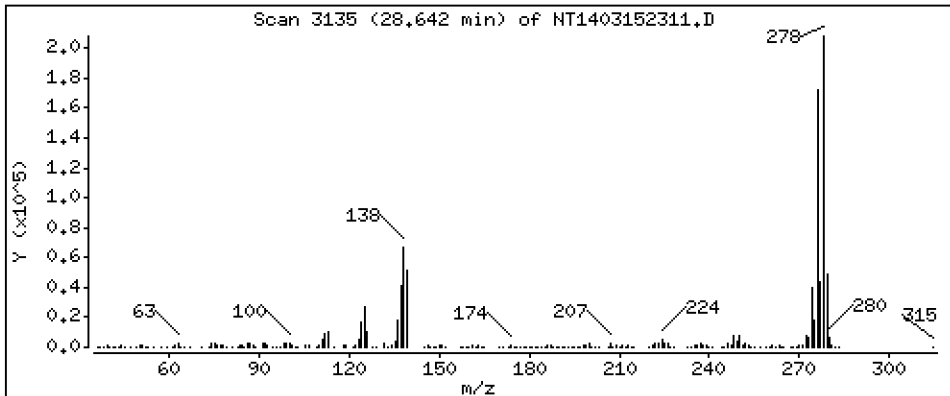
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,865 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

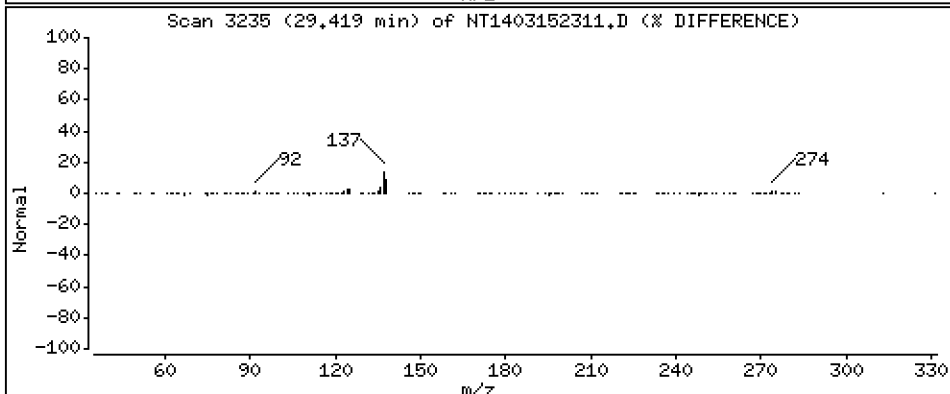
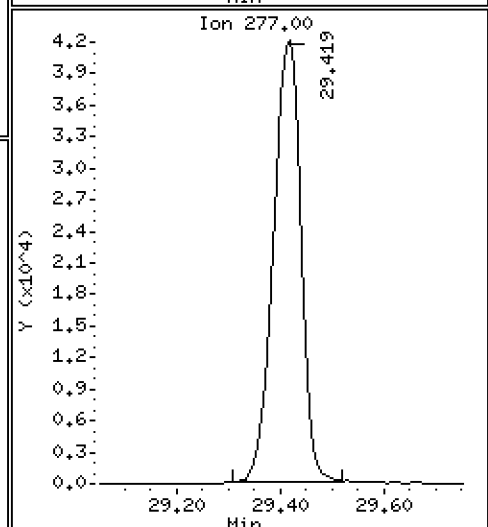
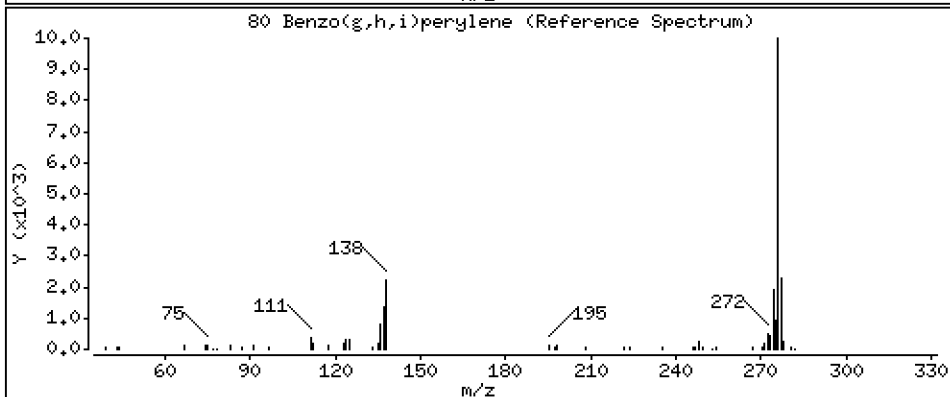
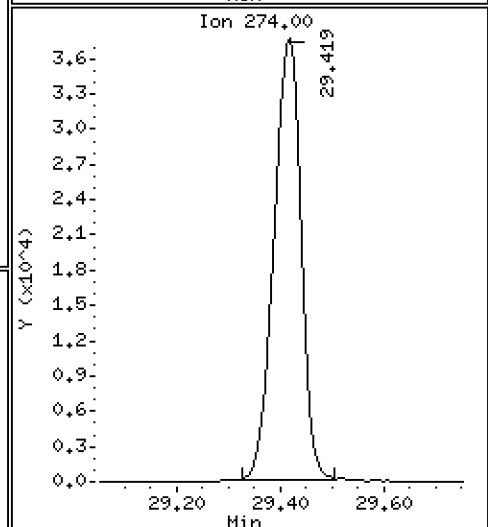
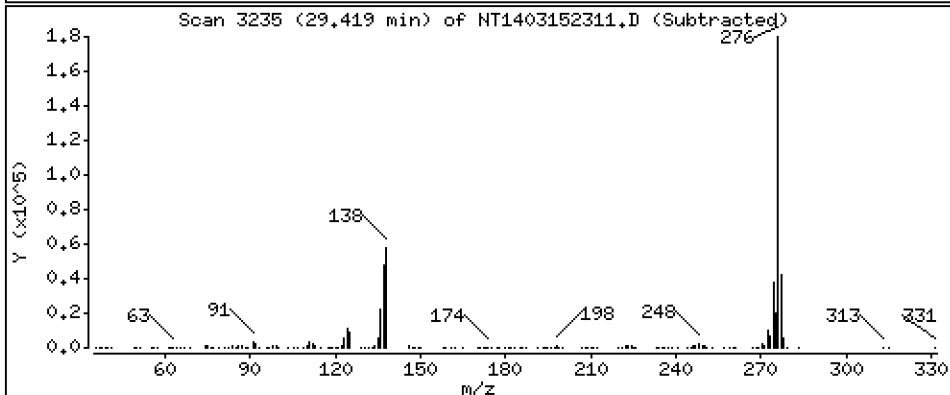
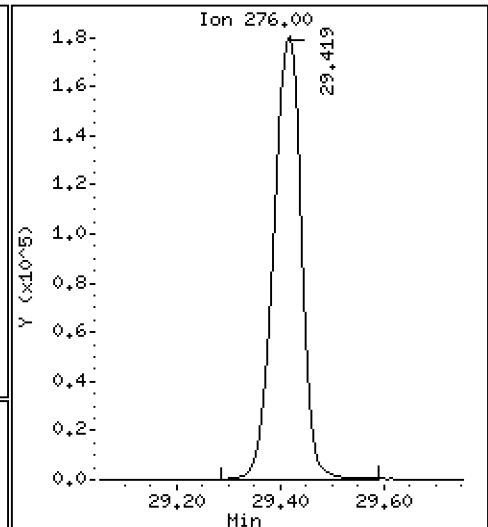
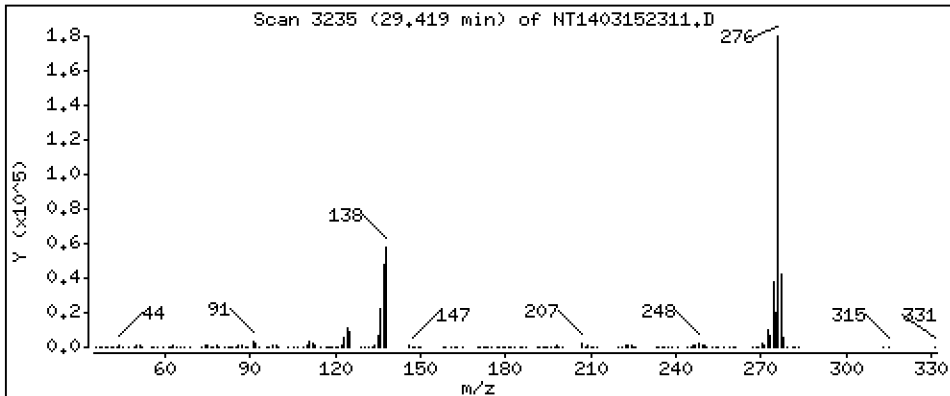
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,939 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

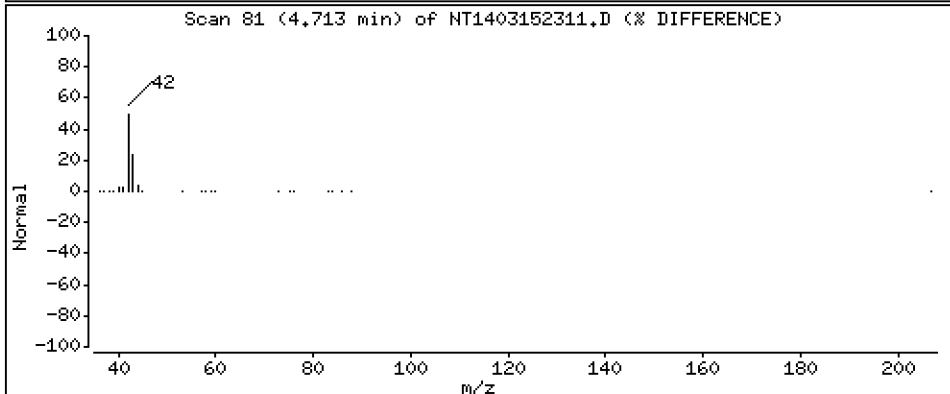
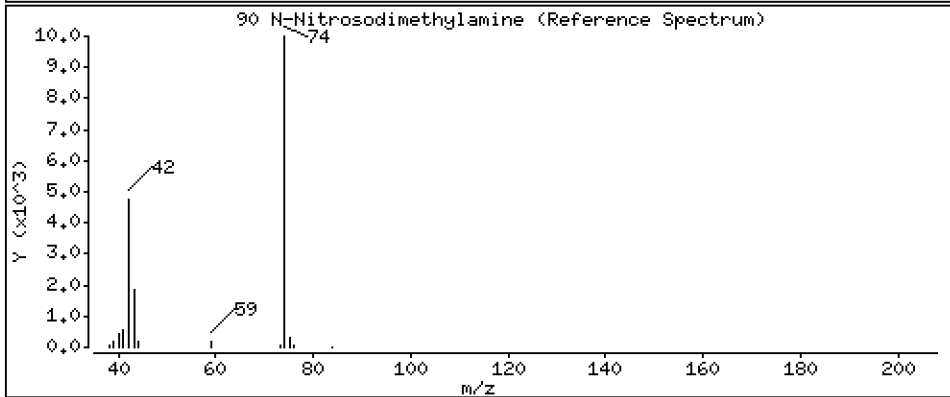
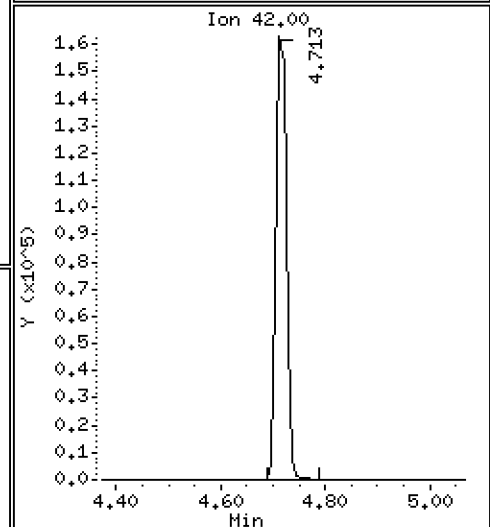
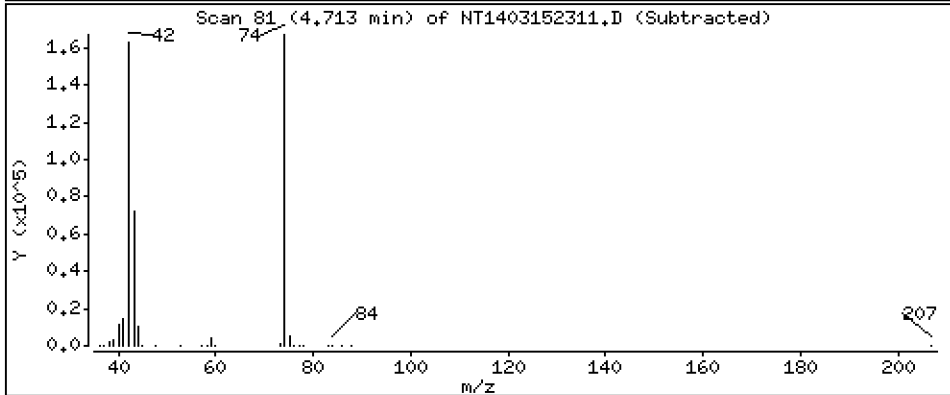
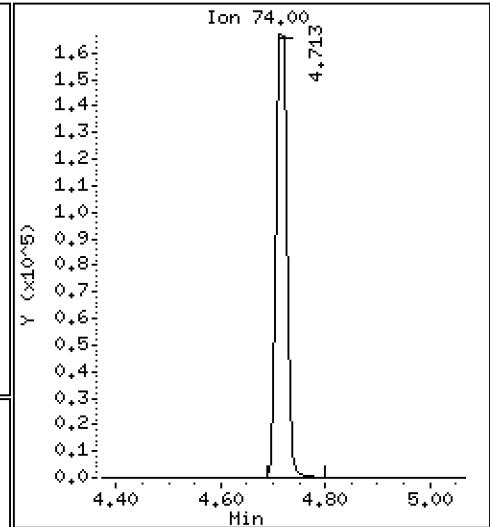
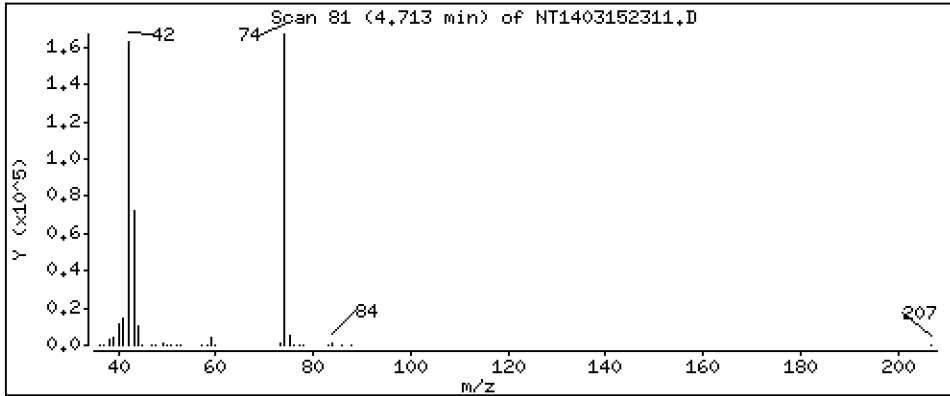
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5,200 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

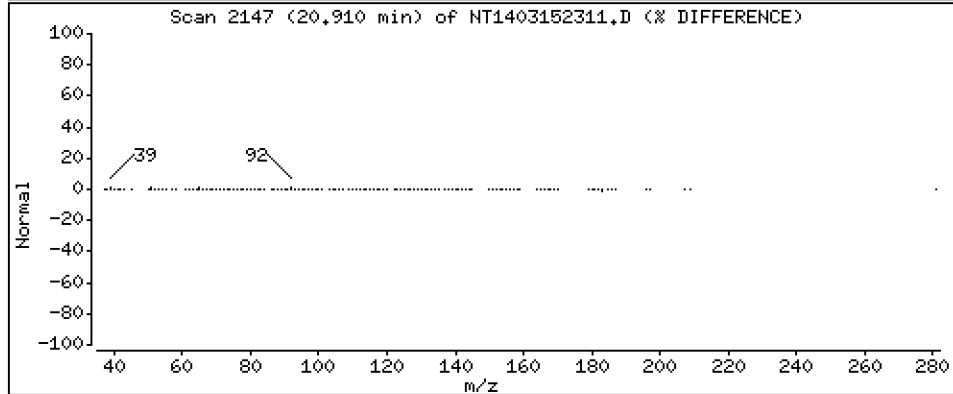
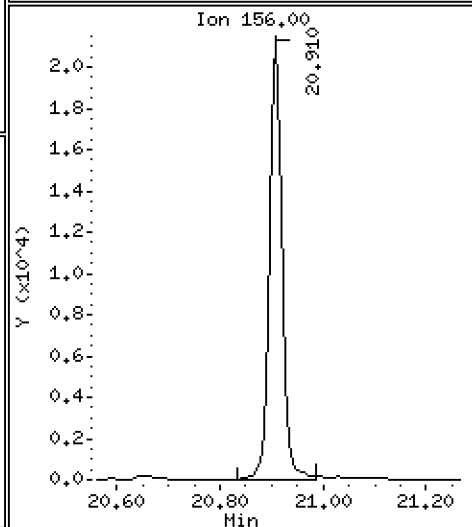
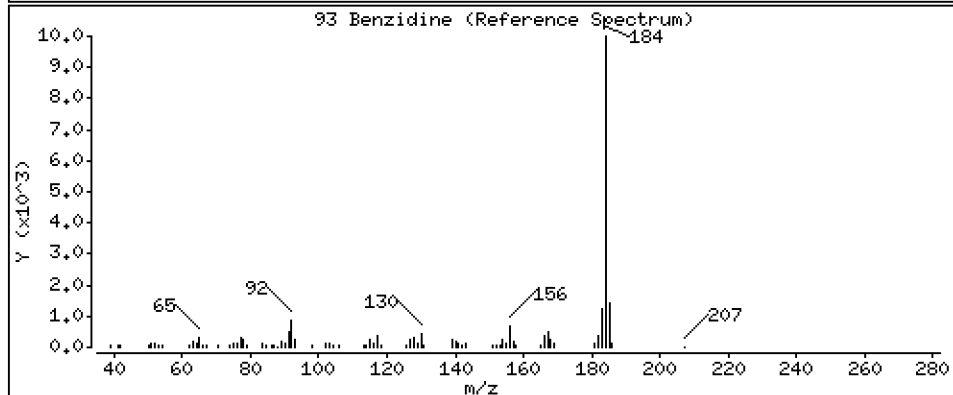
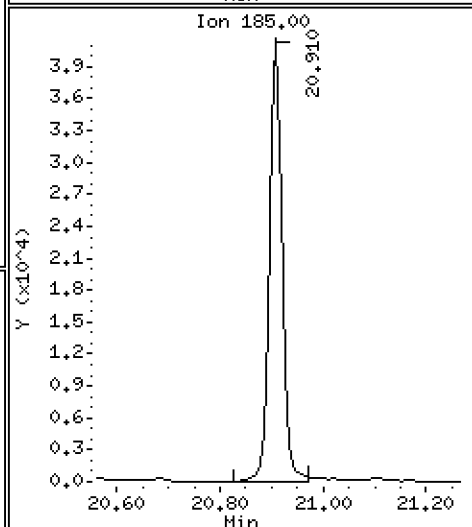
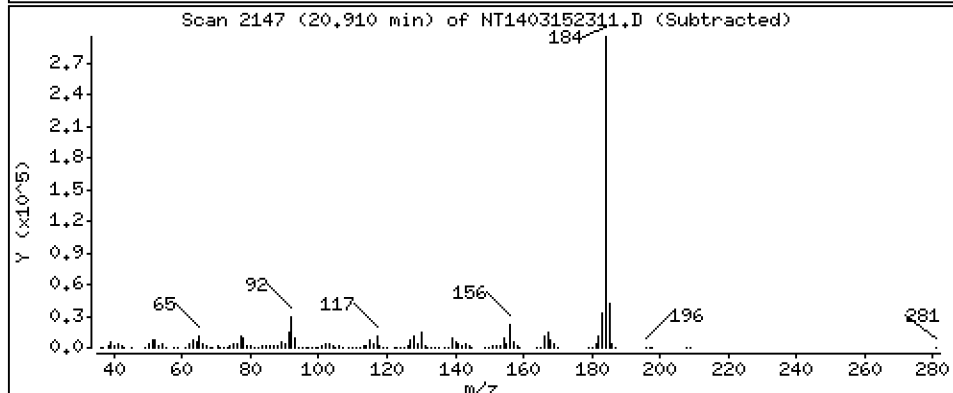
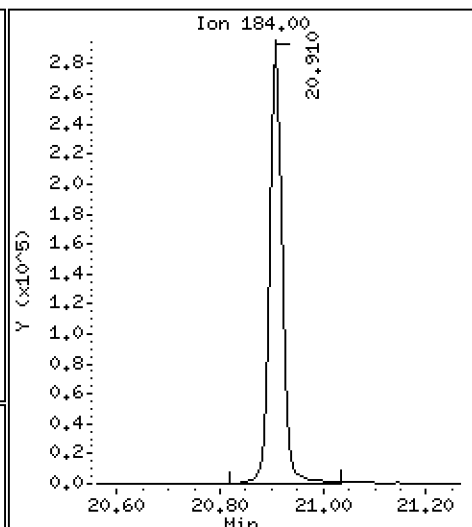
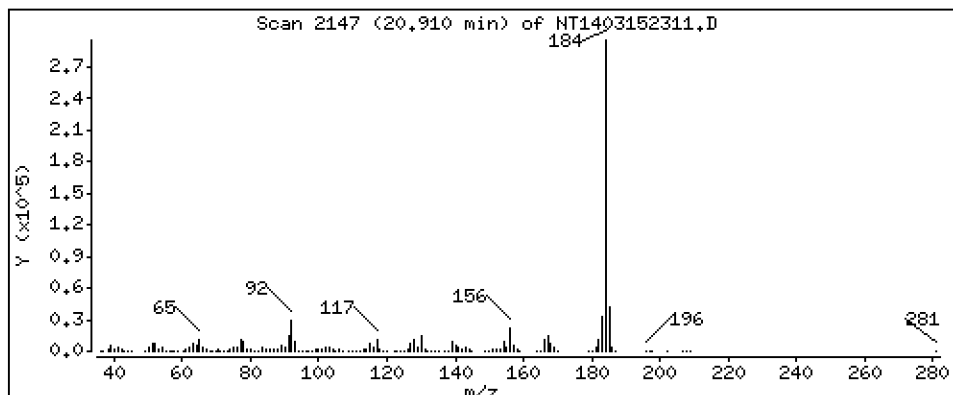
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,646 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

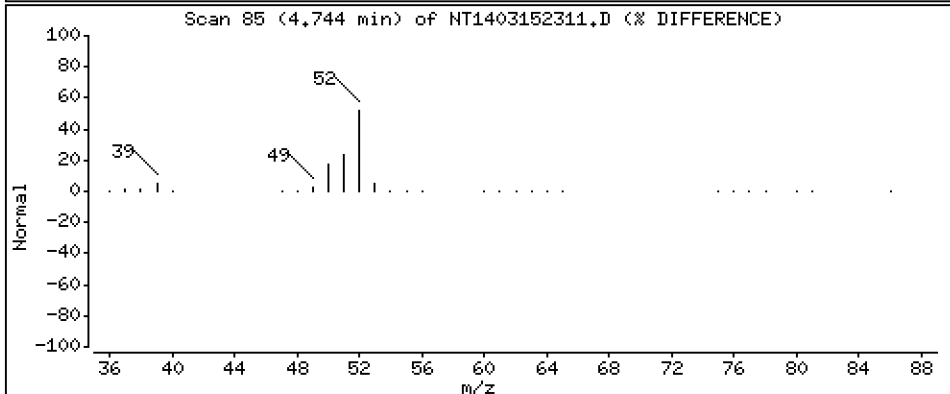
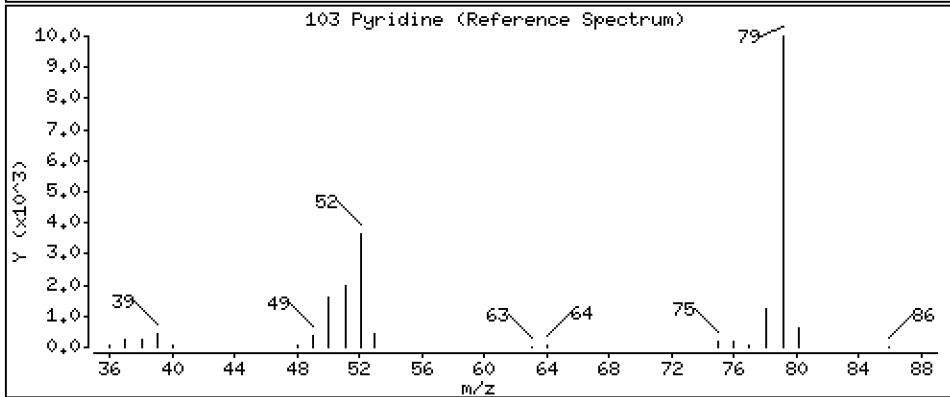
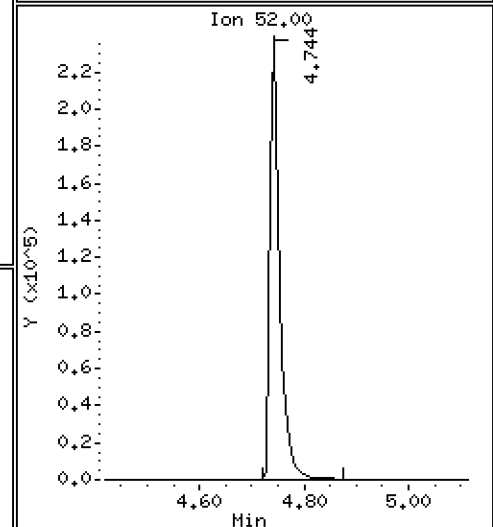
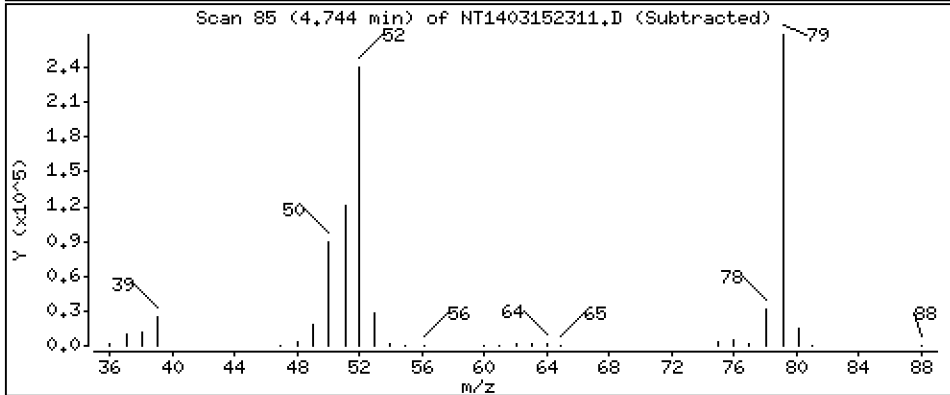
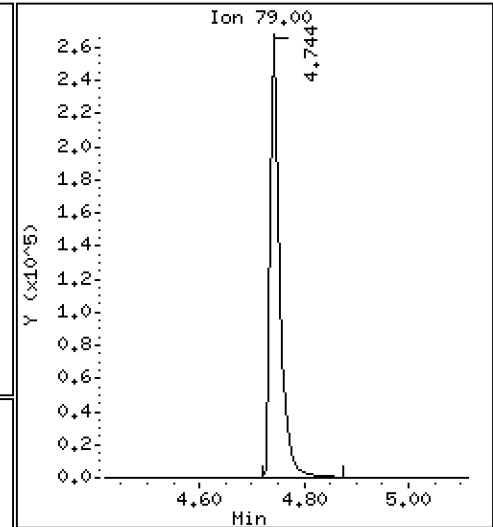
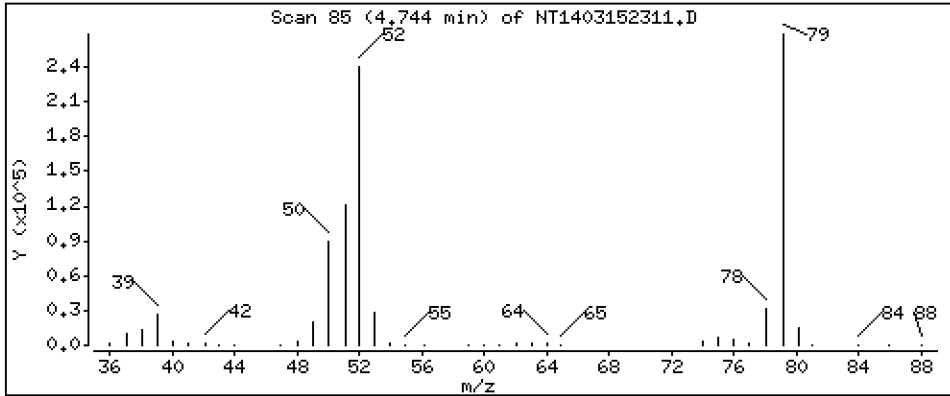
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

103 Pyridine

Concentration: 2,648 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

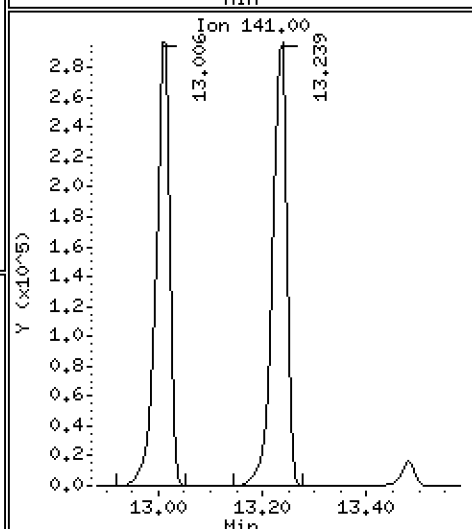
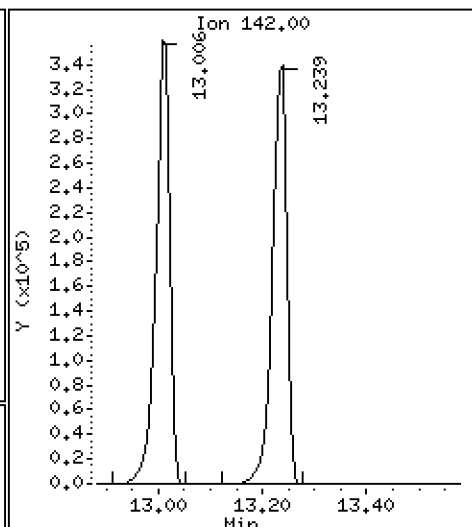
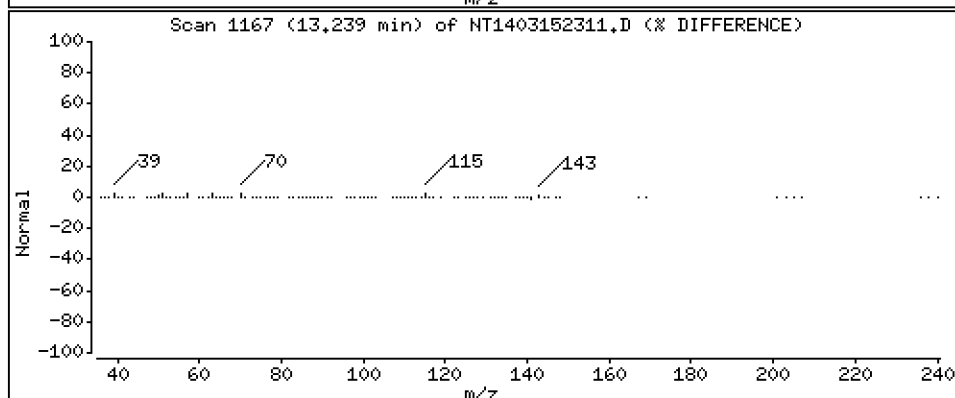
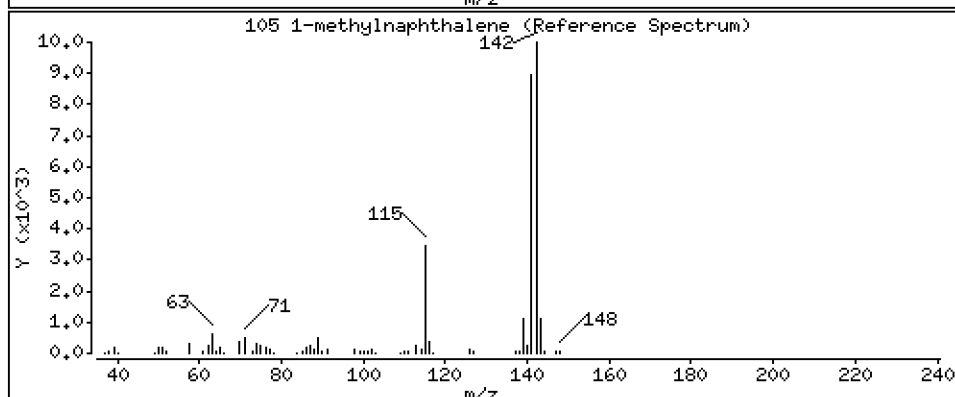
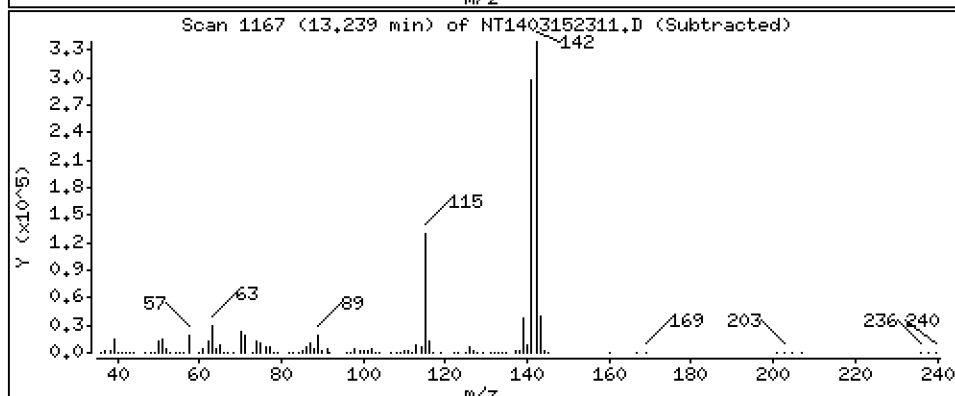
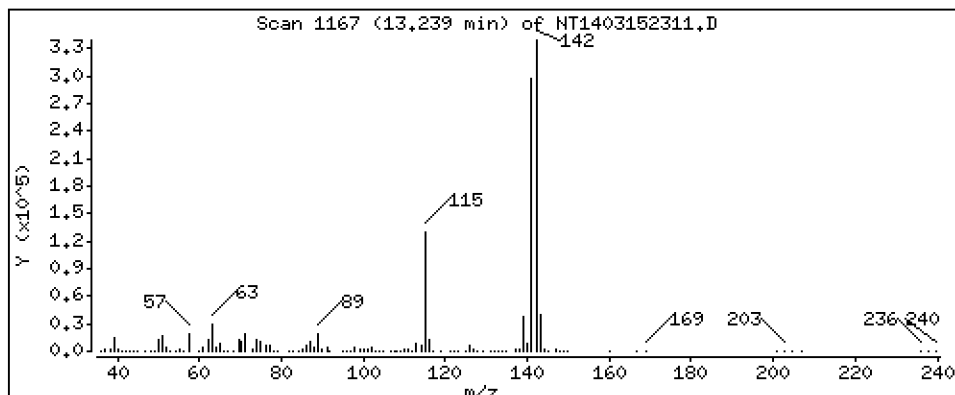
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,103 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

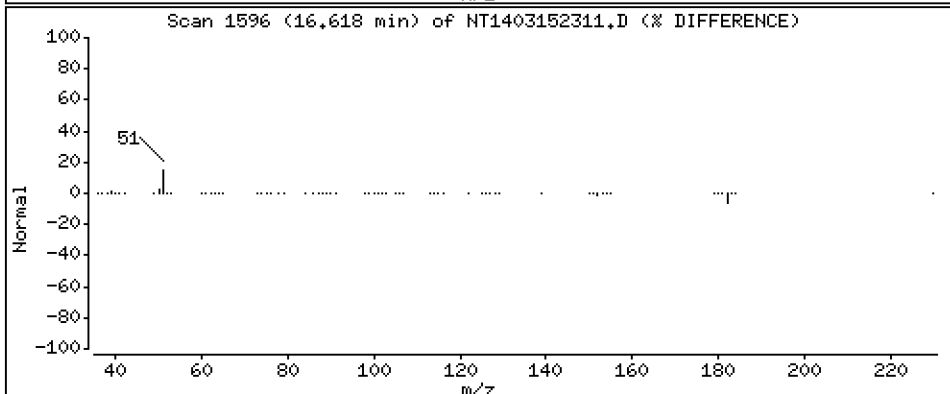
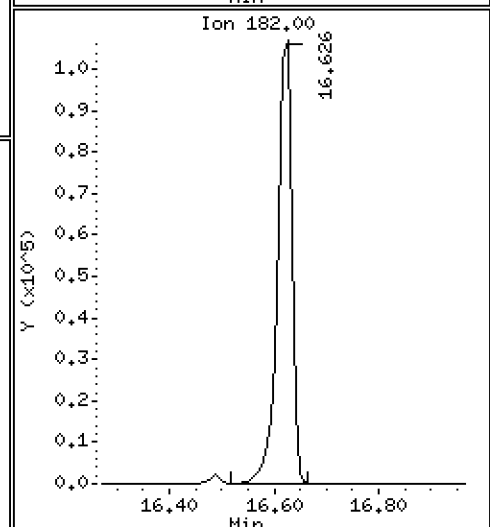
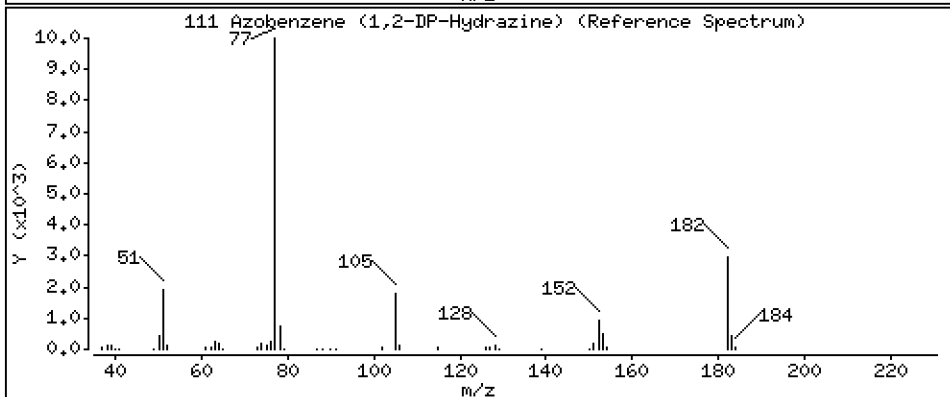
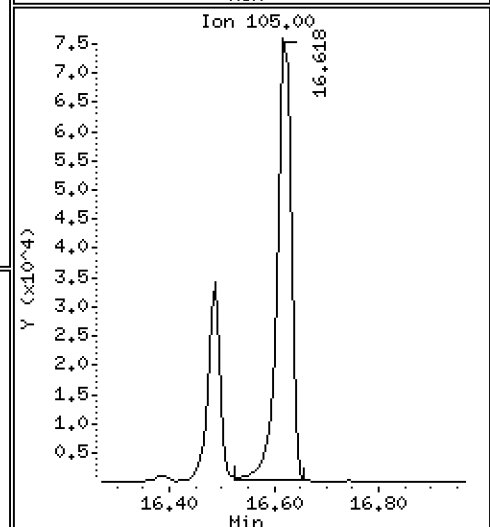
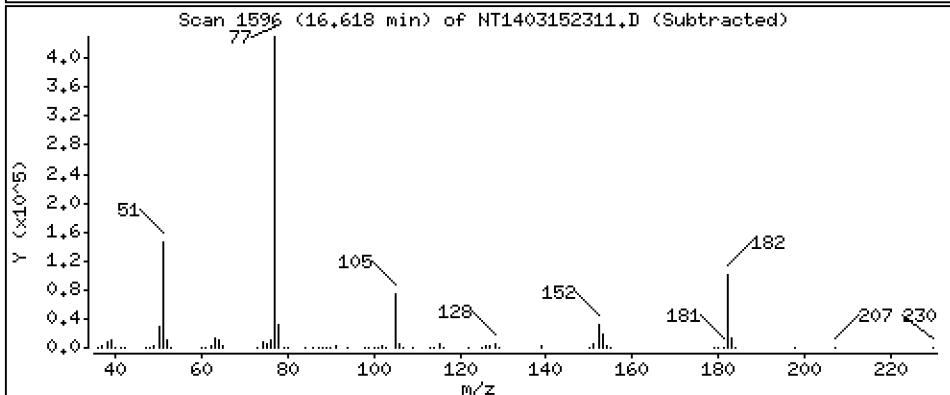
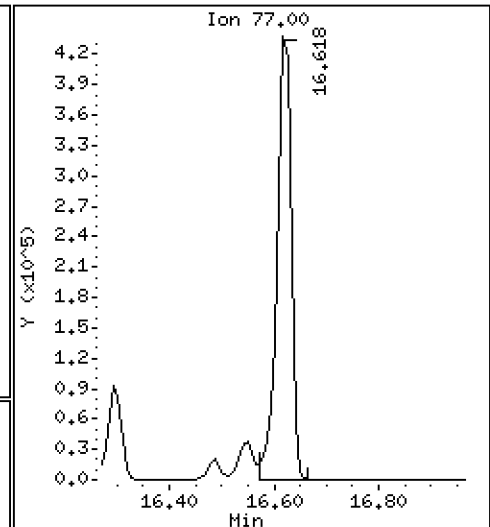
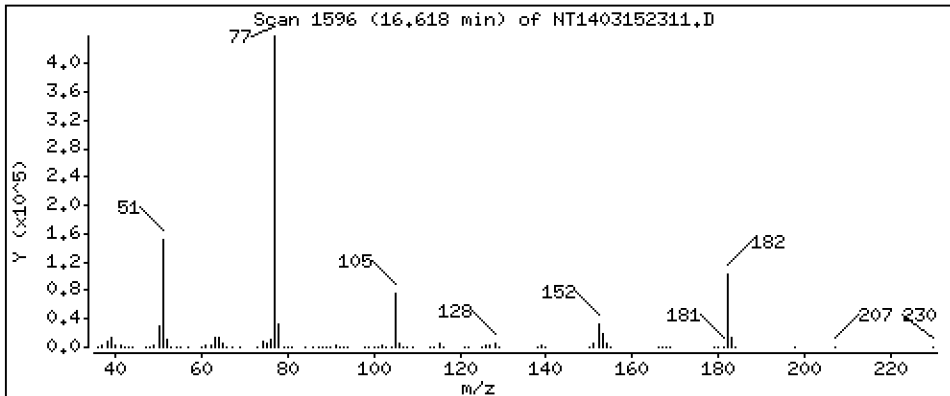
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,002 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

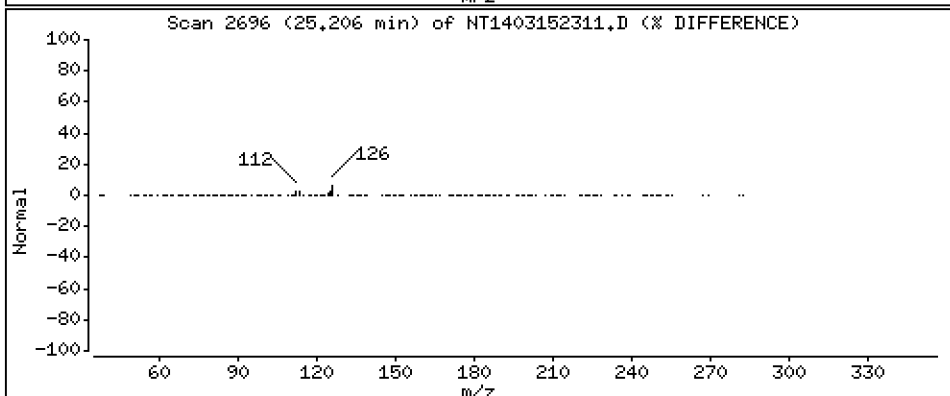
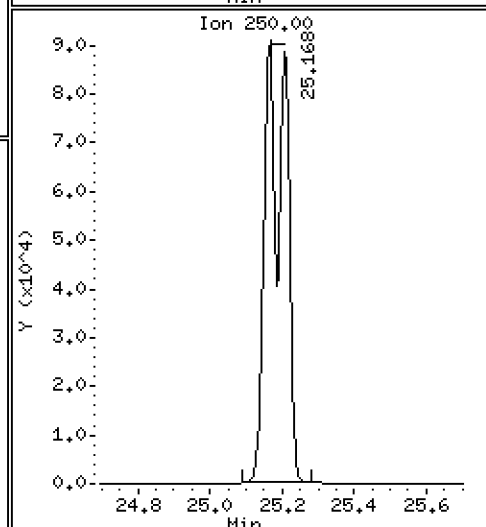
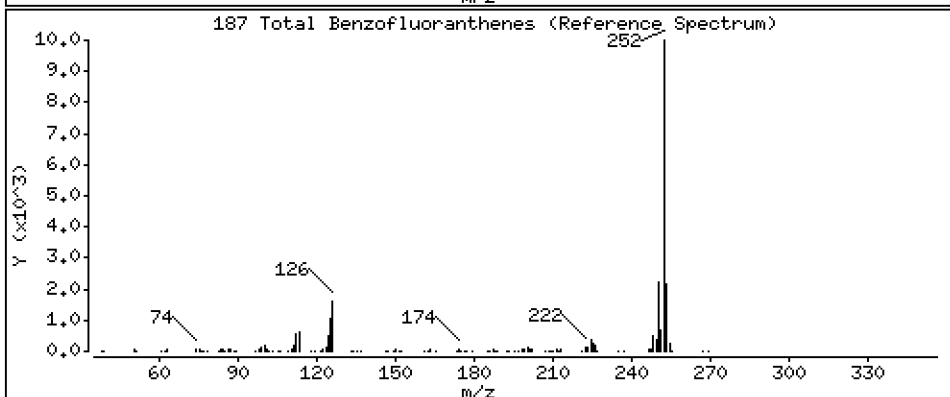
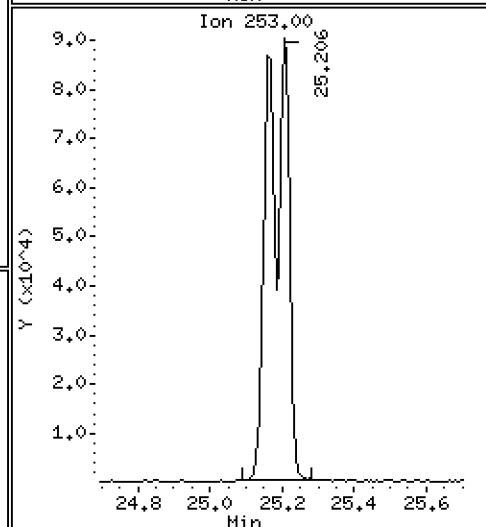
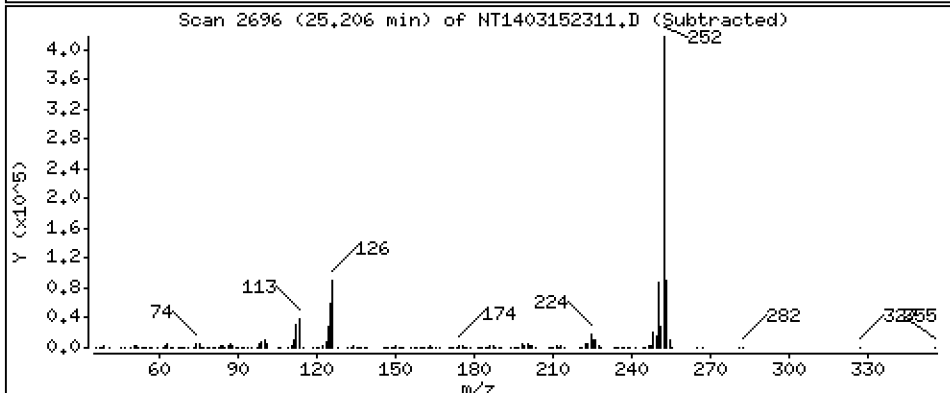
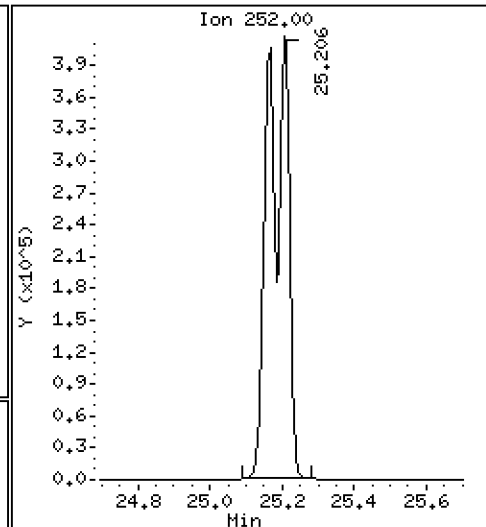
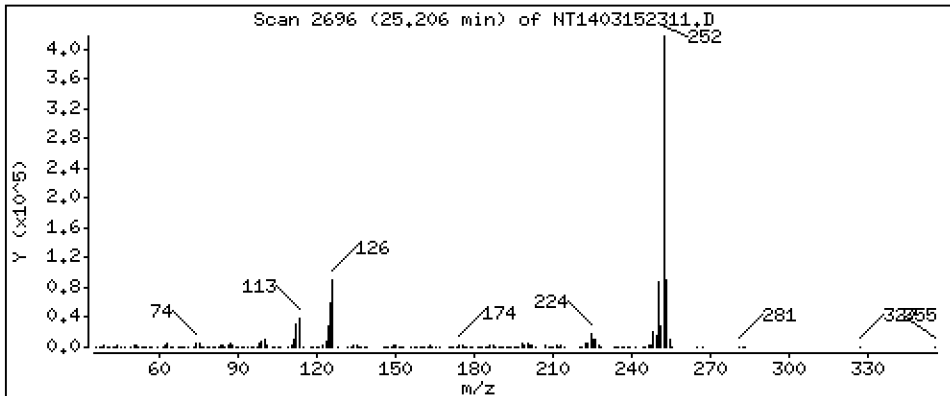
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 9,756 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

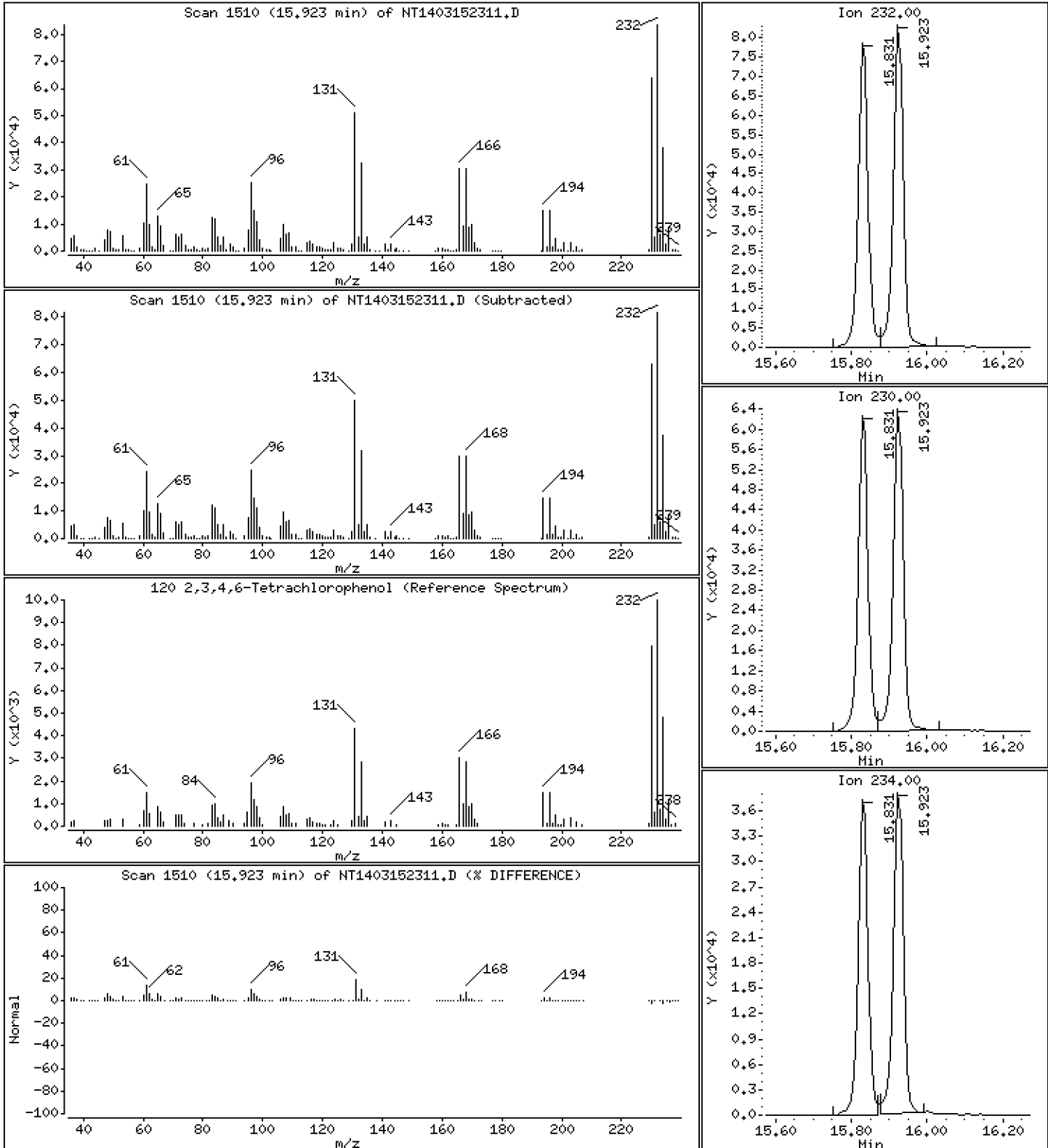
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,569 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152311.D
 Lab Smp Id: SLC0160-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112					Compound Not Detected.		
\$ 2 Phenol-d5	99					Compound Not Detected.		
3 Phenol	94		8.436	8.428	(1.000)	409924	4.36782	4.368
\$ 5 2-Chlorophenol-d4	132					Compound Not Detected.		
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	355357	5.25823	5.258
6 2-Chlorophenol	128		8.729	8.721	(1.000)	323438	4.37862	4.379
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	358409	4.79319	4.793
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	197462	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	352132	4.88937	4.889
\$ 10 1,2-Dichlorobenzene-d4	152					Compound Not Detected.		
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	340729	4.78641	4.786
11 Benzyl alcohol	108		9.334	9.334	(1.000)	220673	5.05069	5.051
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	114247	5.31866	5.319
13 2-Methylphenol	108		9.559	9.559	(1.000)	273187	4.11716	4.117
17 Hexachloroethane	117		10.056	10.056	(1.000)	152626	4.95501	4.955
16 N-Nitroso-di-n-propylamine	70		9.900	9.893	(1.000)	260326	4.98316	4.983
15 4-Methylphenol	108		9.830	9.823	(1.000)	337960	4.30182	4.302
\$ 18 Nitrobenzene-d5	82					Compound Not Detected.		
19 Nitrobenzene	77		10.203	10.195	(0.882)	375695	5.02268	5.023
20 Isophorone	82		10.653	10.645	(0.921)	691478	6.77053	6.771
21 2-Nitrophenol	139		10.831	10.831	(0.936)	194856	4.53030	4.530
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	250436	3.91450	3.915
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	402865	5.85923	5.859
24 Benzoic acid	105		11.064	10.963	(0.956)	444832	8.24795	8.248
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	243165	4.77930	4.779
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	315977	5.05188	5.052
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	726125	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	936737	4.82884	4.829
29 4-Chloroaniline	127		11.729	11.729	(1.014)	327500	4.03279	4.033
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	138599	4.90795	4.908
31 4-Chloro-3-methylphenol	107		12.696	12.689	(1.098)	298325	4.85224	4.852
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	656729	4.85435	4.854
33 Hexachlorocyclopentadiene	237		13.478	13.486	(0.887)	166439	5.22977	5.230

Compounds	QUANT SIG					CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.633	13.625	(0.897)	183263	4.71824	4.718	
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	188647	4.66090	4.661	
§ 36 2-Fluorobiphenyl	172	13.695	13.795	(0.901)	426	0.00307	0.003072	
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	591509	4.97719	4.977	
38 2-Nitroaniline	65	14.260	14.260	(0.938)	234033	5.09985	5.100	
39 Dimethylphthalate	163	14.701	14.693	(0.967)	642281	5.03056	5.031	
40 Acenaphthylene	152	14.887	14.879	(0.980)	974004	4.87938	4.879	
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.977)	153944	5.21947	5.219	
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	382881	4.00000		
43 3-Nitroaniline	138	15.119	15.111	(0.995)	211974	5.20957	5.210	
44 Acenaphthene	153	15.266	15.258	(1.005)	578656	4.96504	4.965	
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	70613	3.07711	3.077	
46 Dibenzofuran	168	15.590	15.590	(1.026)	824547	4.95562	4.956	
47 4-Nitrophenol	109	15.420	15.420	(1.015)	103988	4.82822	4.828	
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	214010	5.11873	5.119	
50 Diethylphthalate	149	16.163	16.155	(1.064)	686853	5.20331	5.203	
49 Fluorene	166	16.309	16.302	(1.073)	763926	4.84358	4.844	
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	337497	4.98506	4.985	
52 4-Nitroaniline	138	16.386	16.379	(1.078)	170484	4.81727	4.817	
53 4,6-Dinitro-2-methylphenol	198	16.487	16.479	(0.904)	109125	4.43923	4.439	
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	475466	4.95411	4.954	
§ 55 2,4,6-Tribromophenol	330	Compound Not Detected.						
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	169085	5.22559	5.226	
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	163199	4.78004	4.780	
58 Pentachlorophenol	266	17.969	17.977	(0.985)	106585	4.47687	4.477	
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	706616	4.00000		
60 Phenanthrene	178	18.294	18.286	(1.003)	955749	4.73403	4.734	
61 Anthracene	178	18.379	18.379	(1.008)	832701	4.28109	4.281	
62 Carbazole	167	18.712	18.704	(1.026)	793728	4.58650	4.587	
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	1207956	5.50673	5.507	
64 Fluoranthene	202	20.677	20.677	(0.887)	1031812	5.02399	5.024	
65 Pyrene	202	21.103	21.103	(0.906)	1044240	4.95802	4.958	
§ 66 Terphenyl-d14	244	21.381	21.389	(0.918)	662	0.00464	0.004643	
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	529418	5.73747	5.737	
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	898379	4.82654	4.827	
* 69 Chrysene-d12	240	23.301	23.294	(1.000)	504808	4.00000		
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	586696	10.6467	10.65	
71 Chrysene	228	23.340	23.340	(1.002)	795614	4.72292	4.723	
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.960)	706123	5.42778	5.428	
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	988248	4.00000		
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	1304643	5.13544	5.135	
74 Benzo(b)fluoranthene	252	25.167	25.152	(0.970)	838016	4.77369	4.774	
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	887530	5.10013	5.100	
76 Benzo(a)pyrene	252	25.825	25.818	(0.996)	747283	4.97798	4.978	
* 77 Perylene-d12	264	25.941	25.934	(1.000)	496785	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.103)	807644	4.94309	4.943	
79 Dibenzo(a,h)anthracene	278	28.641	28.626	(1.104)	669918	4.86500	4.865	
80 Benzo(g,h,i)perylene	276	29.418	29.403	(1.134)	665079	4.93915	4.939	
90 N-Nitrosodimethylamine	74	4.712	4.720	(1.000)	220898	5.19984	5.200	
91 Aniline	93	Compound Not Detected.						
93 Benzidine	184	20.909	20.909	(0.897)	466644	5.64609	5.646	
103 Pyridine	79	4.743	4.766	(1.000)	348414	2.64838	2.648	
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	625458	5.10291	5.103	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	788522	5.00236	5.002	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.206	25.199	(0.972)	1626530	9.75586	9.756
120 2,3,4,6-Tetrachlorophenol	232	15.923	15.923	(1.048)	141312	3.56895	3.569

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152311.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	197462	1.51
27 Naphthalene-d8	721321	360661	1442642	726125	0.67
42 Acenaphthene-d10	379602	189801	759204	382881	0.86
59 Phenanthrene-d10	703194	351597	1406388	706616	0.49
69 Chrysene-d12	504769	252385	1009538	504808	0.01
134 Di-n-octylphthala	978492	489246	1956984	988248	1.00
77 Perylene-d12	484073	242037	968146	496785	2.63

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.30	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311.D

Lab ID: SLC0160-SCV1
nt14.i, ABN.m, 15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)
0.956	0.948	0.0087	Benzoic acid
0.901	0.908	-0.0066	2-Fluorobiphenyl

RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

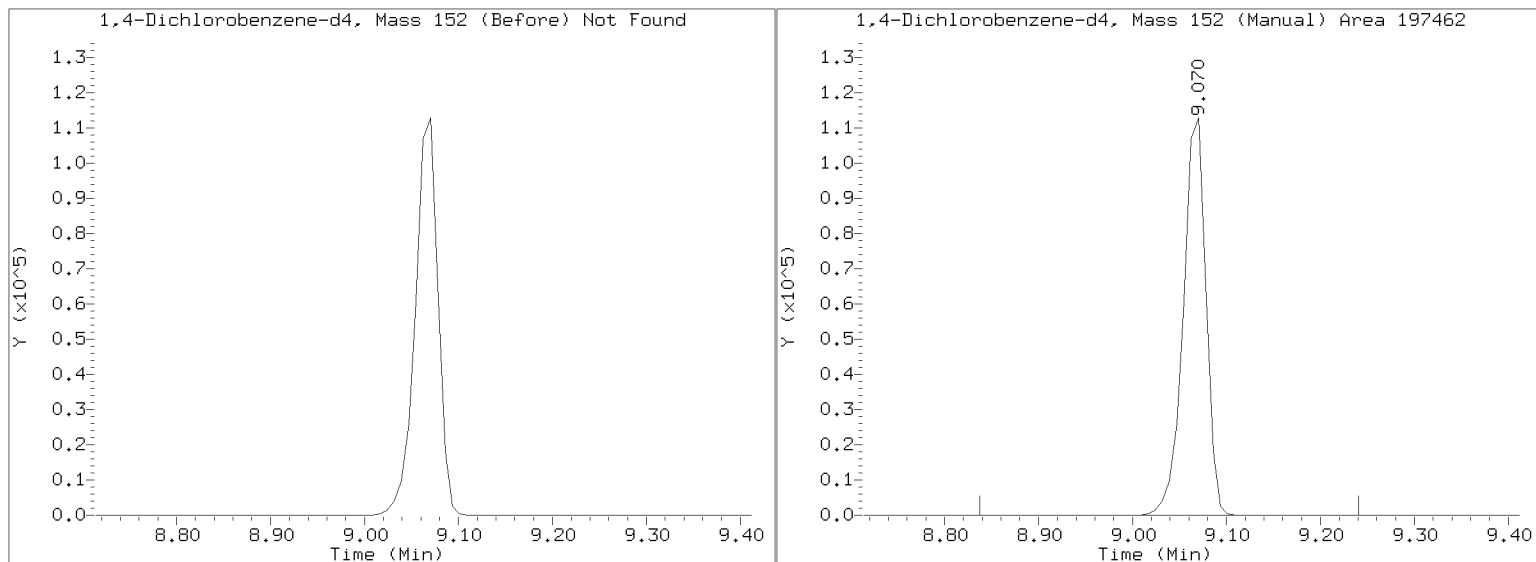
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152311.D

Injection Date: 15-MAR-2023 17:39

Lab ID: SLC0160-SCV1 Client ID:

Report Date: 03/21/2023 12:48



Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152312.D

Date: 15-MAR-2023 18:15

Client ID:

Sample Info: SLC0160-ICB1

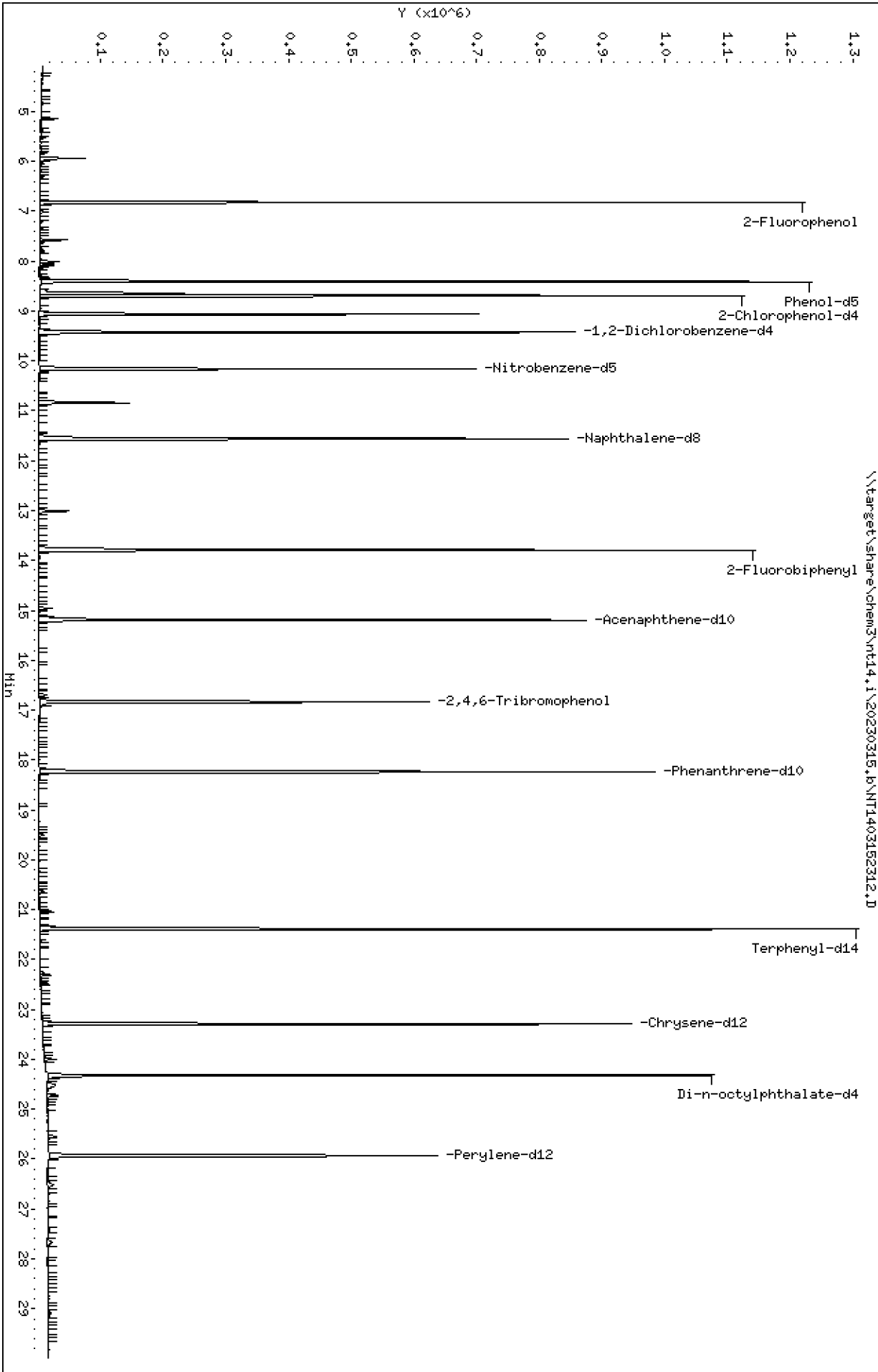
Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14,1\20230315,6\NT1403152312.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152312.D
 Lab Smp Id: SLC0160-ICB1
 Inj Date : 15-MAR-2023 18:15 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-ICB1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.821	(1.000)	475023	7.38994	7.390
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	625743	7.39397	7.394
3 Phenol	94		Compound Not Detected.					
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	504209	7.55716	7.557
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	189234	4.00000	(M)
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	222627	4.99456	4.995
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	384703	4.99458	4.995
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.559	11.567	(1.000)	727843	4.00000	
28 Naphthalene	128		Compound Not Detected.					
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.795	13.795	(0.908)	662673	4.98028	4.980
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163							
40 Acenaphthylene	152							
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.196	15.196	(1.000)	367416	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153							
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168							
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149							
49 Fluorene	166							
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.833	16.841	(1.108)	96459	6.91497	6.915
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.240	18.240	(1.000)	678407	4.00000	
60 Phenanthrene	178							
61 Anthracene	178							
62 Carbazole	167							
63 Di-n-butylphthalate	149							
64 Fluoranthene	202							
65 Pyrene	202							
\$ 66 Terphenyl-d14	244		21.389	21.389	(0.918)	690717	5.13184	5.132
67 Butylbenzylphthalate	149							
68 Benzo(a)anthracene	228							
* 69 Chrysene-d12	240		23.293	23.294	(1.000)	476533	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228							
72 bis(2-Ethylhexyl)phthalate	149							
* 134 Di-n-octylphthalate-d4	153		24.323	24.323	(1.000)	798655	4.00000	(M)
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252							
75 Benzo(k)fluoranthene	252							
76 Benzo(a)pyrene	252							
* 77 Perylene-d12	264		25.934	25.934	(1.000)	452165	4.00000	
78 Indeno(1,2,3-cd)pyrene	276							
79 Dibenzo(a,h)anthracene	278							
80 Benzo(g,h,i)perylene	276							
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142							
111 Azobenzene (1,2-DP-Hydrazine)	77							

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152312.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-ICB1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	189234	-2.72
27 Naphthalene-d8	721321	360661	1442642	727843	0.90
42 Acenaphthene-d10	379602	189801	759204	367416	-3.21
59 Phenanthrene-d10	703194	351597	1406388	678407	-3.52
69 Chrysene-d12	504769	252385	1009538	476533	-5.59
134 Di-n-octylphthala	978492	489246	1956984	798655	-18.38
77 Perylene-d12	484073	242037	968146	452165	-6.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.06	-0.09
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.29	-0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403152312.D

Lab ID: SLC0160-ICB1
nt14.i, ABN.m, 15-MAR-2023 18:15

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

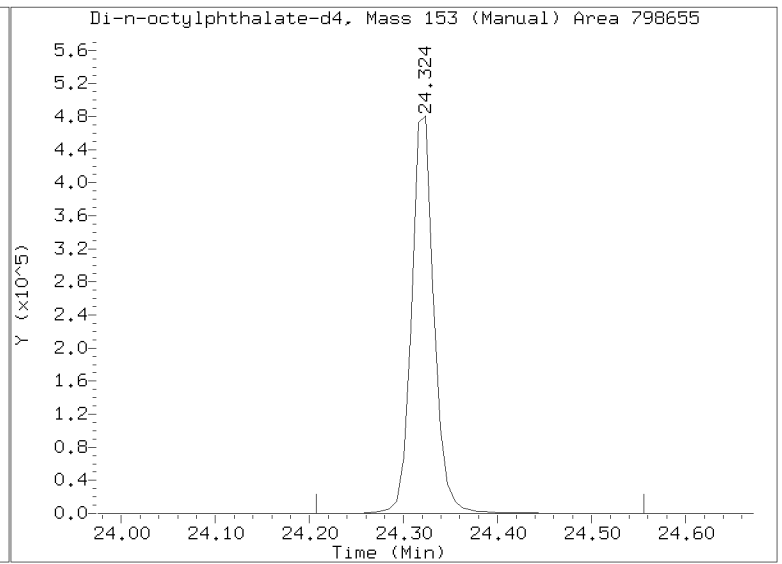
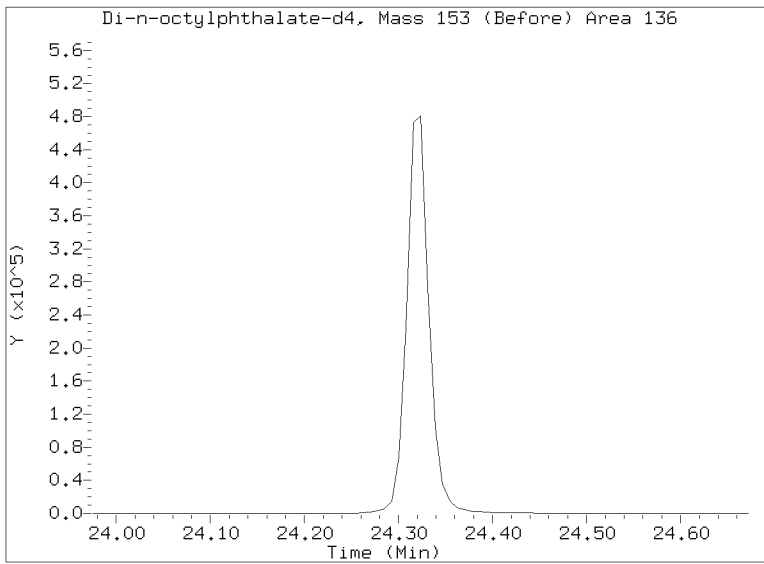
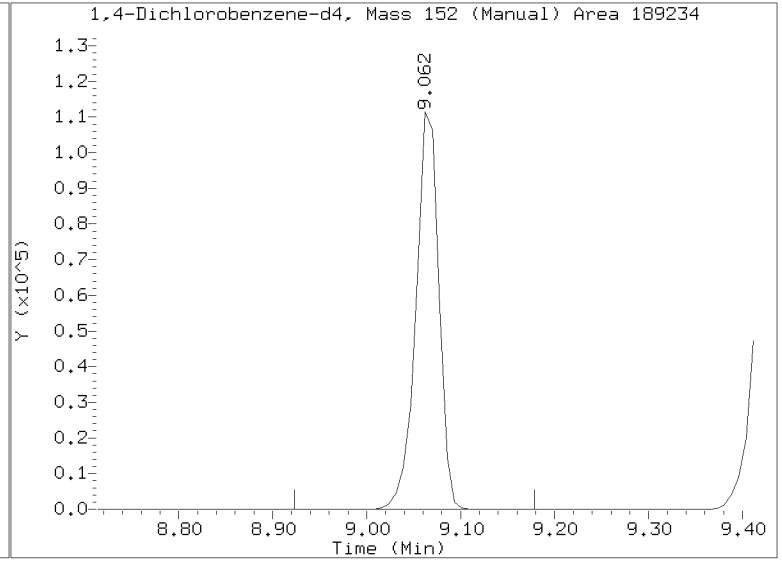
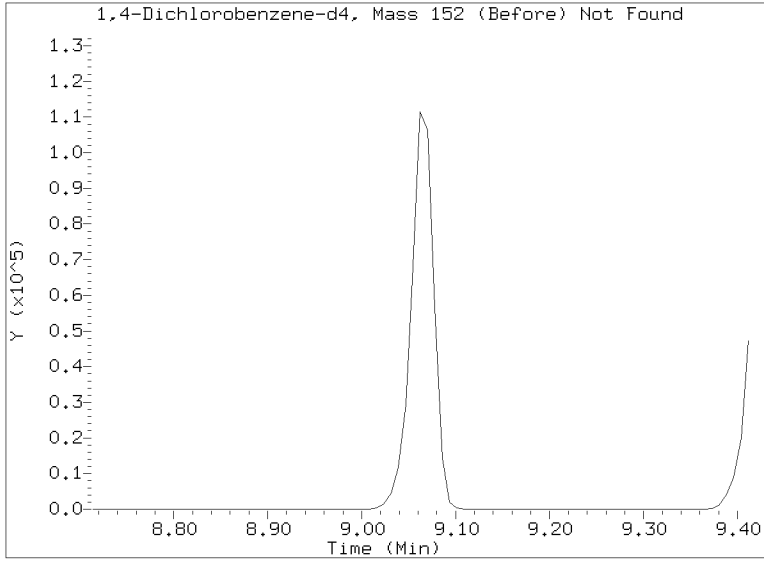
RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152312.D
Injection Date: 15-MAR-2023 18:15
Lab ID:SLC0160-ICB1 Client ID:
Report Date: 03/21/2023 12:48





SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0160-SCV1

Sequence: SLC0160

Sequence Name: SCV 5.0

Standard ID: L002833

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.4	-12.6	20.00
bis(2-chloroethyl) ether	5.0000	5.3	5.2	20.00
2-Chlorophenol	5.0000	4.4	-12.4	20.00
1,3-Dichlorobenzene	5.0000	4.8	-4.1	20.00
1,4-Dichlorobenzene	5.0000	4.9	-2.2	20.00
1,2-Dichlorobenzene	5.0000	4.8	-4.3	20.00
Benzyl Alcohol	5.0000	5.1	1.0	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	5.3	6.4	20.00
2-Methylphenol	5.0000	4.1	-17.7	20.00
Hexachloroethane	5.0000	5.0	-0.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.0	-0.3	20.00
4-Methylphenol	5.0000	4.3	-14.0	20.00
Nitrobenzene	5.0000	5.0	0.5	20.00
Isophorone	5.0000	6.8	35.4 *	20.00
2-Nitrophenol	5.0000	4.5	-9.4	20.00
2,4-Dimethylphenol	5.0000	3.9	-21.7 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	5.9	17.2	20.00
2,4-Dichlorophenol	5.0000	4.8	-4.4	20.00
1,2,4-Trichlorobenzene	5.0000	5.1	1.0	20.00
Naphthalene	5.0000	4.8	-3.4	20.00
Benzoic acid	10.0000	8.2	-17.5	20.00
4-Chloroaniline	5.0000	4.0	-19.3	20.00
Hexachlorobutadiene	5.0000	4.9	-1.8	20.00
4-Chloro-3-Methylphenol	5.0000	4.9	-3.0	20.00
2-Methylnaphthalene	5.0000	4.9	-2.9	20.00
Hexachlorocyclopentadiene	5.0000	5.2	4.6	20.00
2,4,6-Trichlorophenol	5.0000	4.7	-5.6	20.00
2,4,5-Trichlorophenol	5.0000	4.7	-6.8	20.00
2-Chloronaphthalene	5.0000	5.0	-0.5	20.00
2-Nitroaniline	5.0000	5.1	2.0	20.00
Acenaphthylene	5.0000	4.9	-2.4	20.00
Dimethylphthalate	5.0000	5.0	0.6	20.00
2,6-Dinitrotoluene	5.0000	5.2	4.4	20.00
Acenaphthene	5.0000	5.0	-0.7	20.00



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0160-SCV1

Sequence: SLC0160

Sequence Name: SCV 5.0

Standard ID: L002833

3-Nitroaniline	5.0000	5.2	4.2	20.00
2,4-Dinitrophenol	5.0000	3.1	-38.5 *	20.00
Dibenzofuran	5.0000	5.0	-0.9	20.00
4-Nitrophenol	5.0000	4.8	-3.4	20.00
2,4-Dinitrotoluene	5.0000	5.1	2.4	20.00
Fluorene	5.0000	4.8	-3.1	20.00
4-Chlorophenylphenyl ether	5.0000	5.0	-0.3	20.00
Diethyl phthalate	5.0000	5.2	4.1	20.00
4-Nitroaniline	5.0000	4.8	-3.7	20.00
4,6-Dinitro-2-methylphenol	5.0000	4.4	-11.2	20.00
N-Nitrosodiphenylamine	5.0000	5.0	-0.9	20.00
4-Bromophenyl phenyl ether	5.0000	5.2	4.5	20.00
Hexachlorobenzene	5.0000	4.8	-4.4	20.00
Pentachlorophenol	5.0000	4.5	-10.5	20.00
Phenanthrene	5.0000	4.7	-5.3	20.00
Anthracene	5.0000	4.3	-14.4	20.00
Carbazole	5.0000	4.6	-8.3	20.00
Di-n-Butylphthalate	5.0000	5.5	10.1	20.00
Fluoranthene	5.0000	5.0	0.5	20.00
Pyrene	5.0000	5.0	-0.8	20.00
Butylbenzylphthalate	5.0000	5.7	14.7	20.00
Benzo(a)anthracene	5.0000	4.8	-3.5	20.00
3,3'-Dichlorobenzidine	10.000	10.6	6.5	20.00
Chrysene	5.0000	4.7	-5.5	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.4	8.6	20.00
Di-n-Octylphthalate	5.0000	5.1	2.7	20.00
Benzo(a)fluoranthene, Total	10.000	9.8	-2.4	20.00
Benzo(a)pyrene	5.0000	5.0	-0.4	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.9	-1.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.9	-2.7	20.00
Benzo(g,h,i)perylene	5.0000	4.9	-1.2	20.00
1-Methylnaphthalene	5.0000	5.1	2.1	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152311.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0160-SCV1

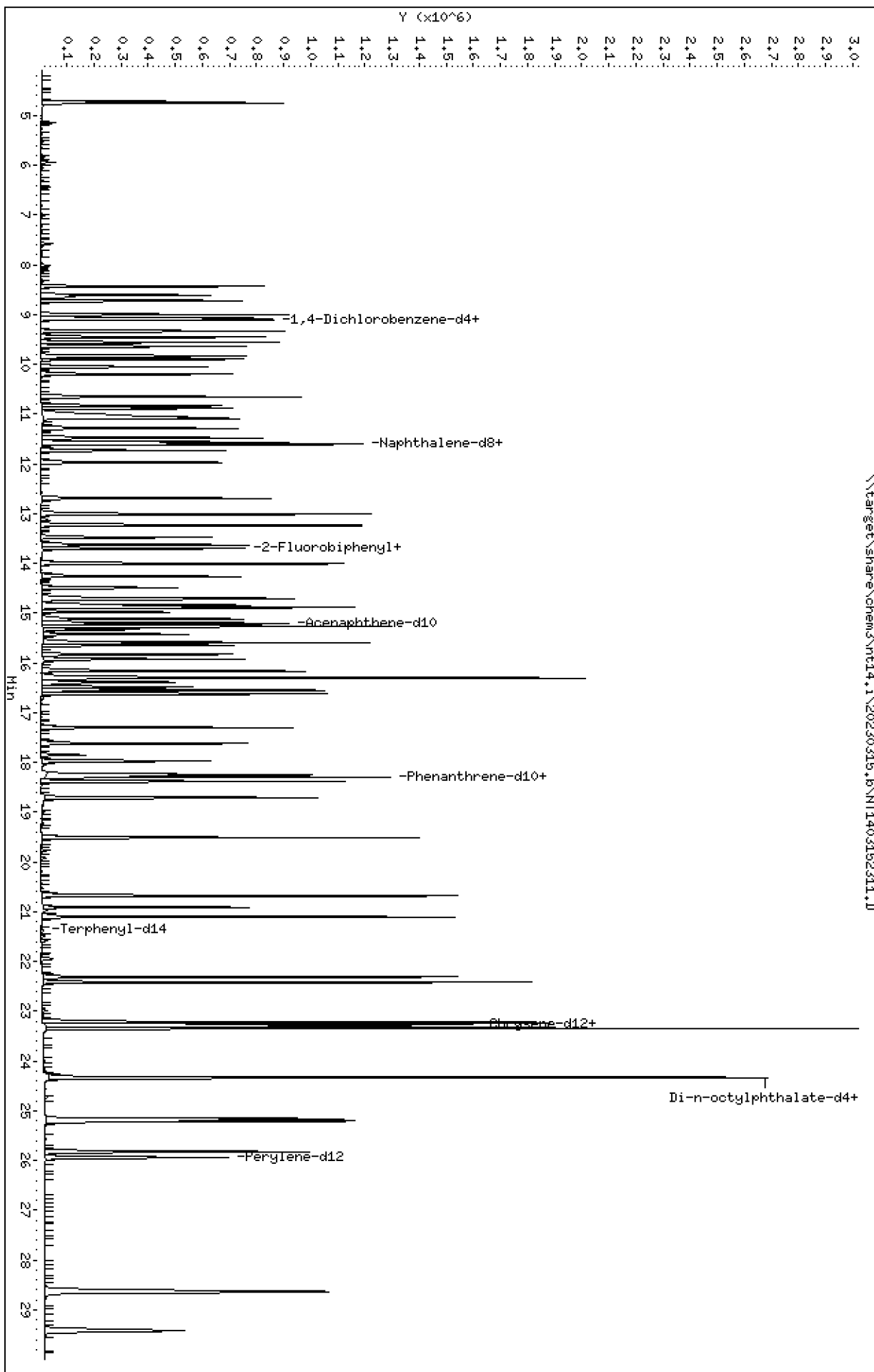
Column phase: ZB-Smsi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

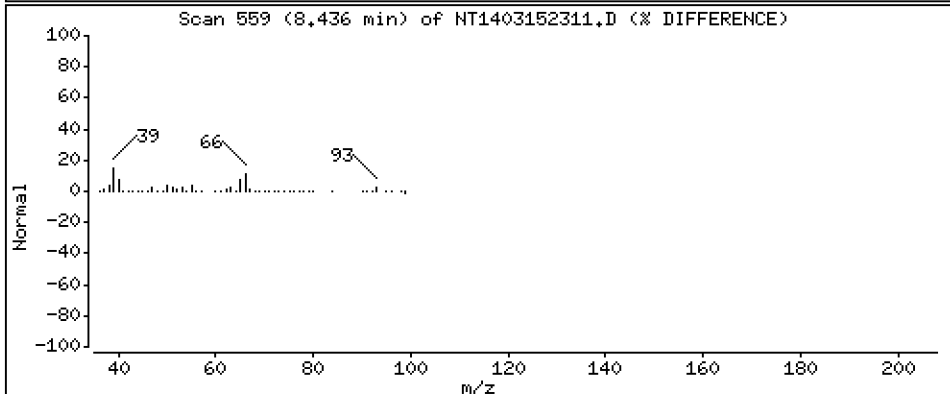
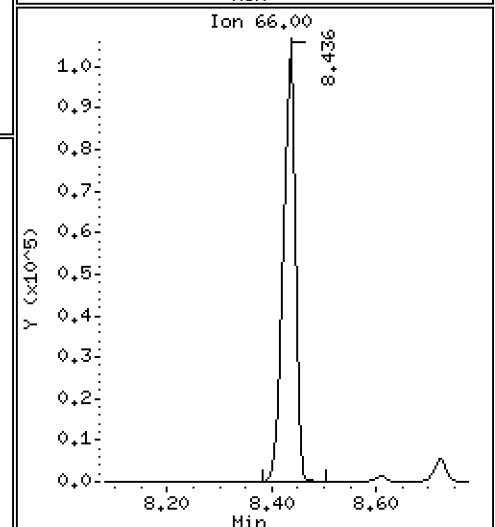
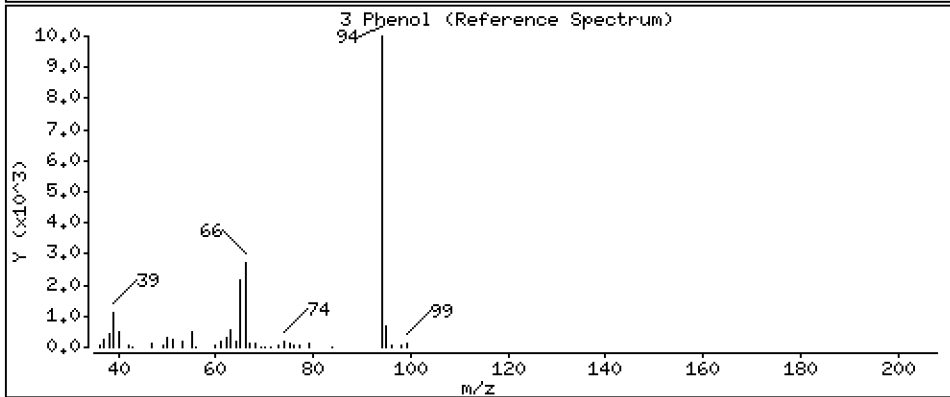
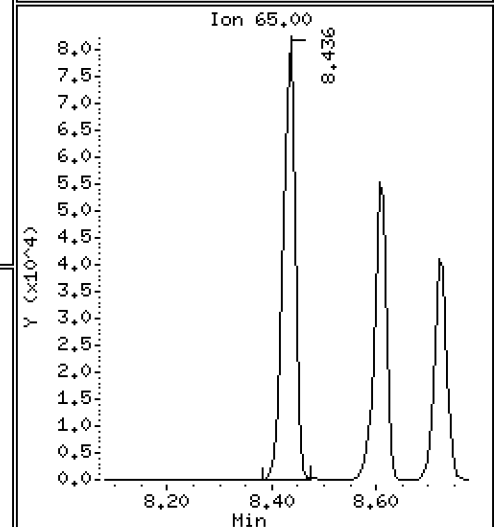
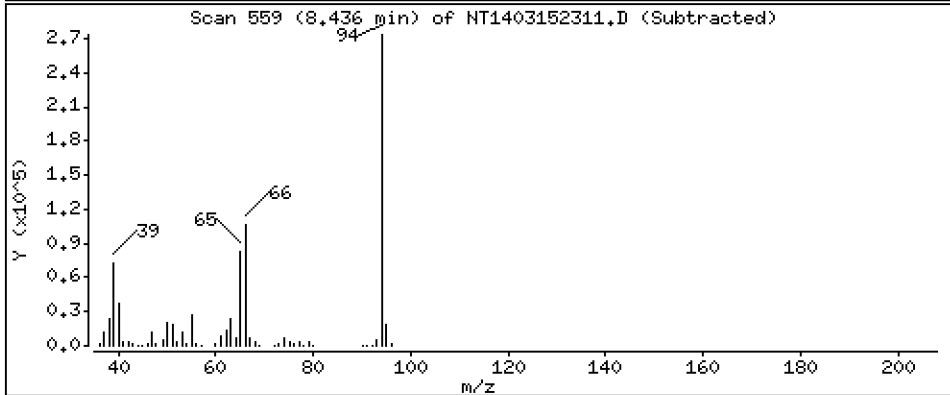
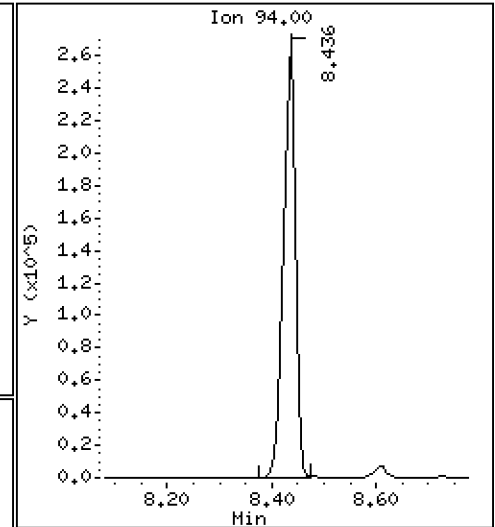
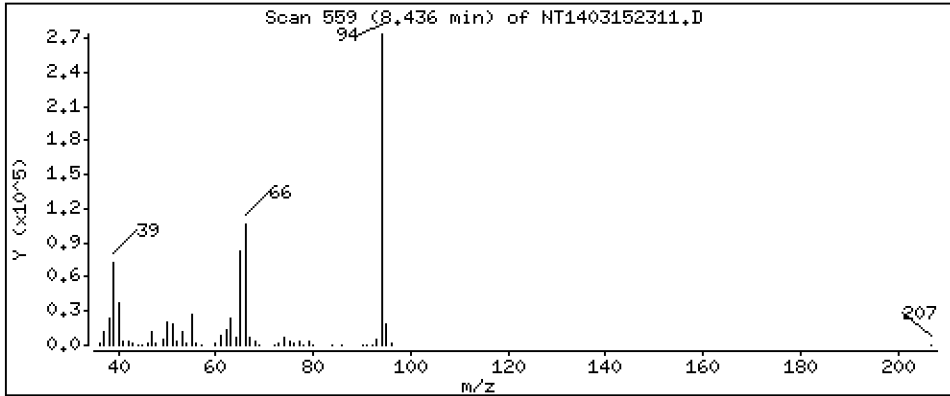
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,368 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

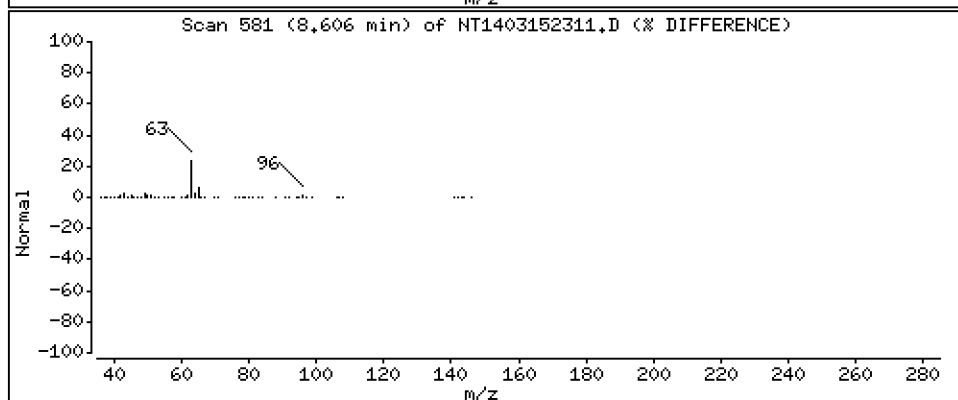
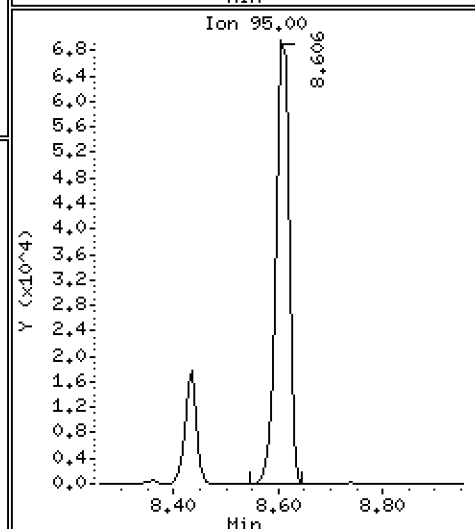
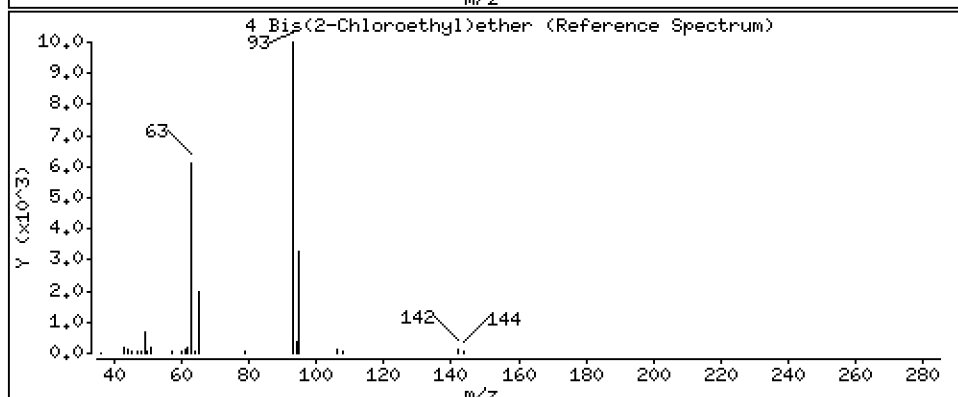
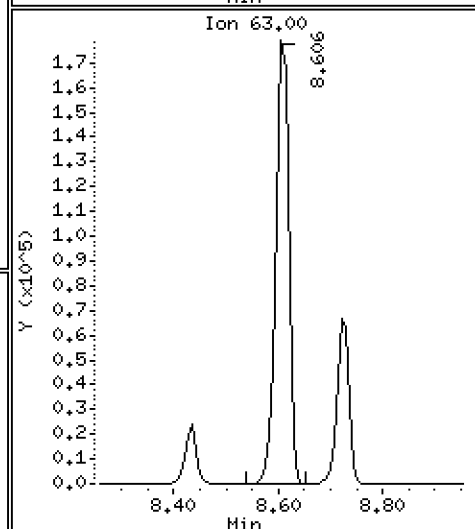
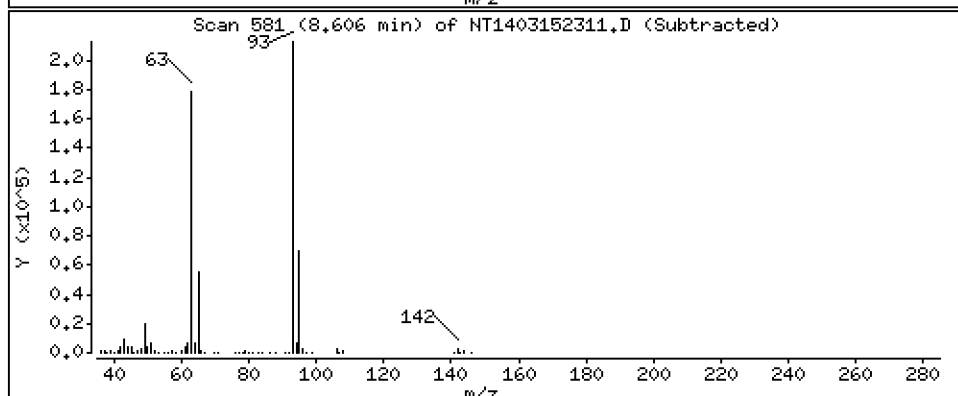
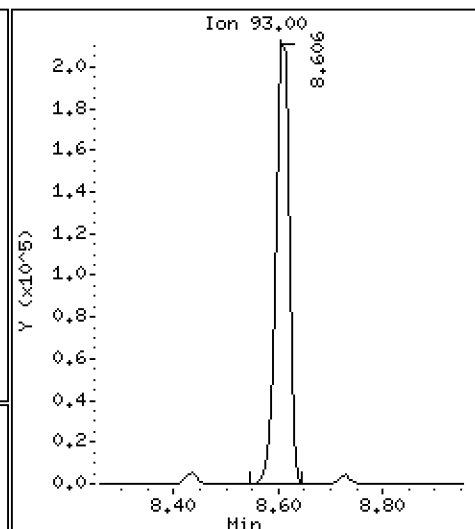
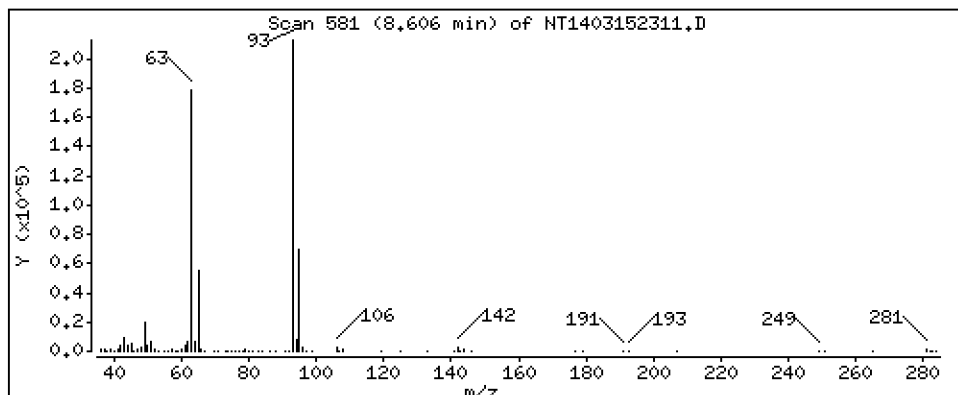
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,258 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

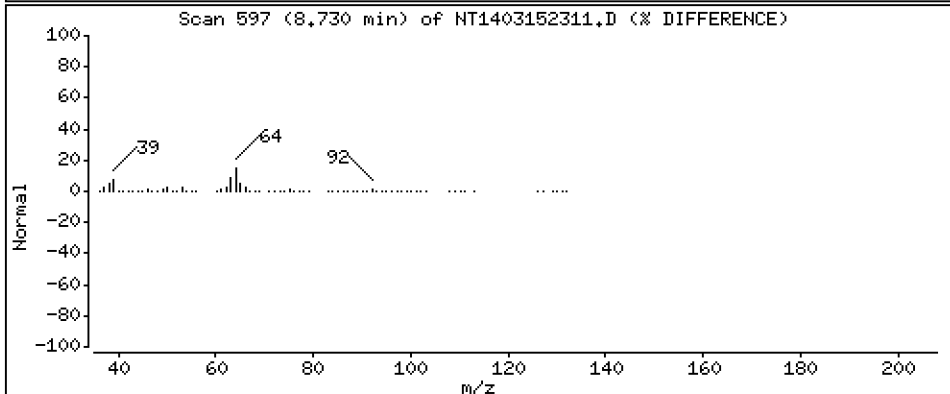
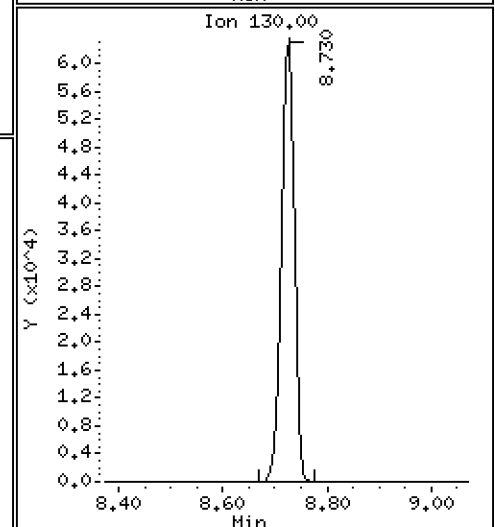
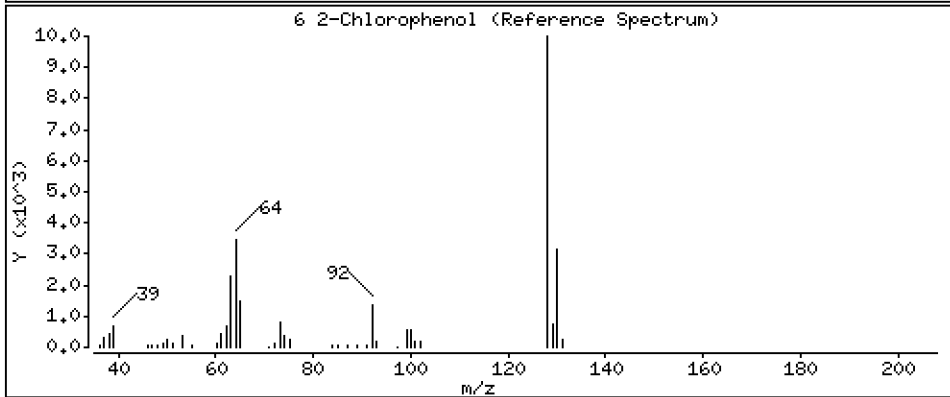
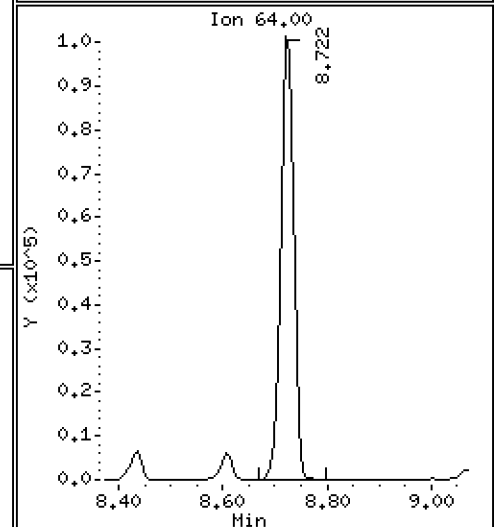
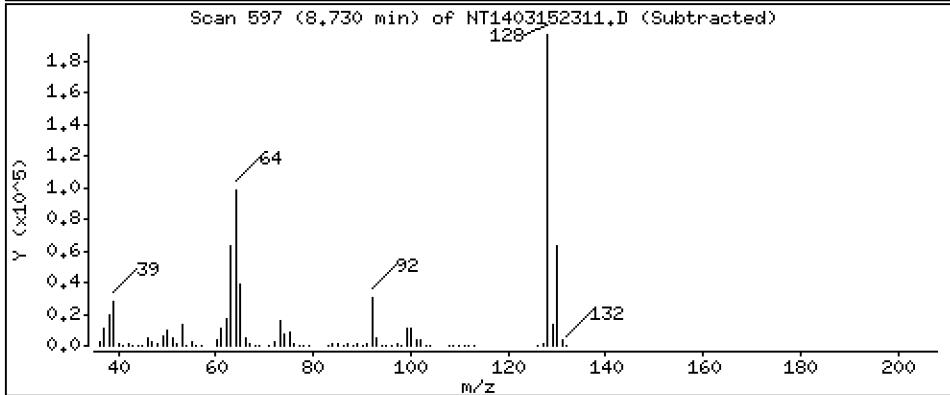
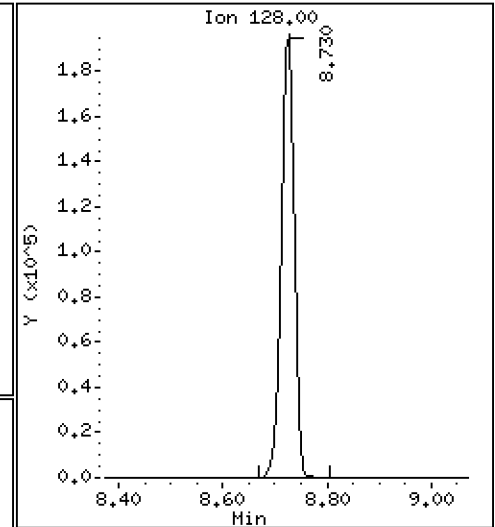
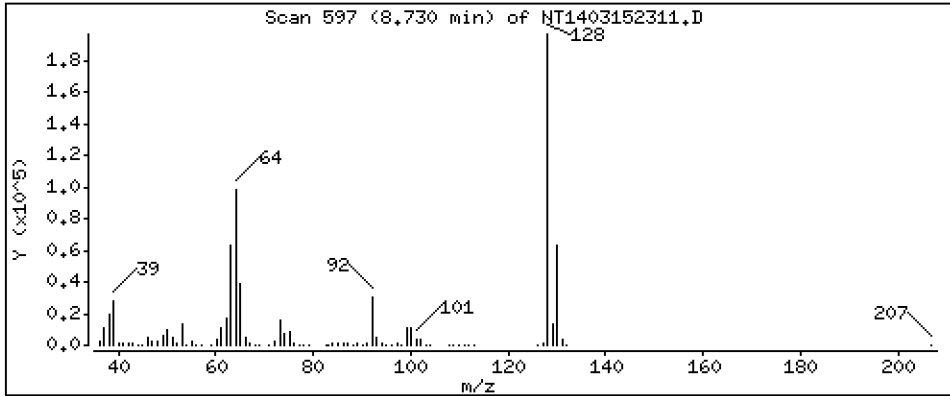
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,379 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

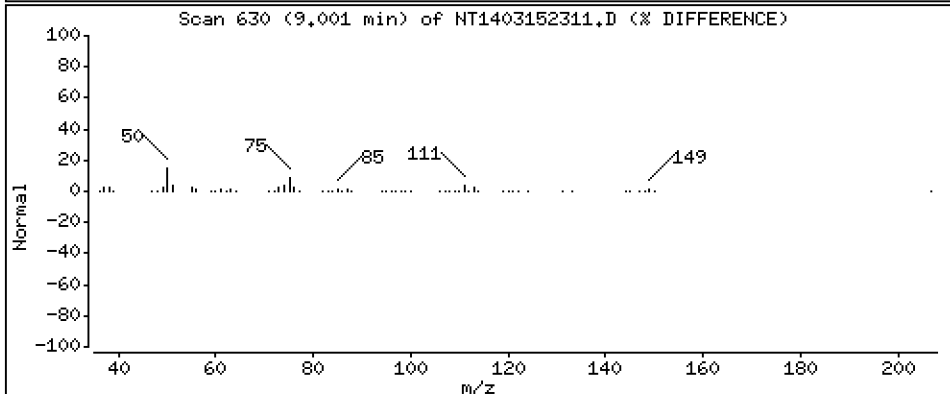
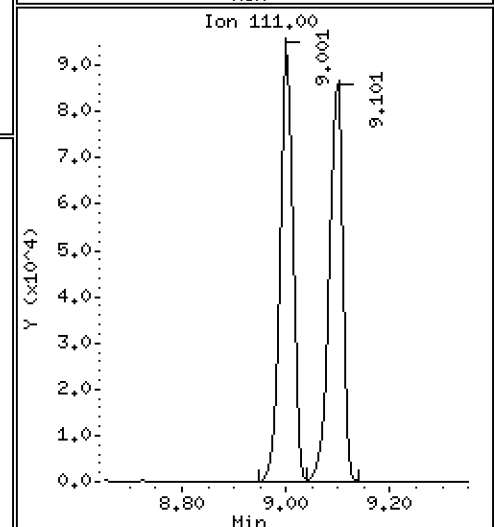
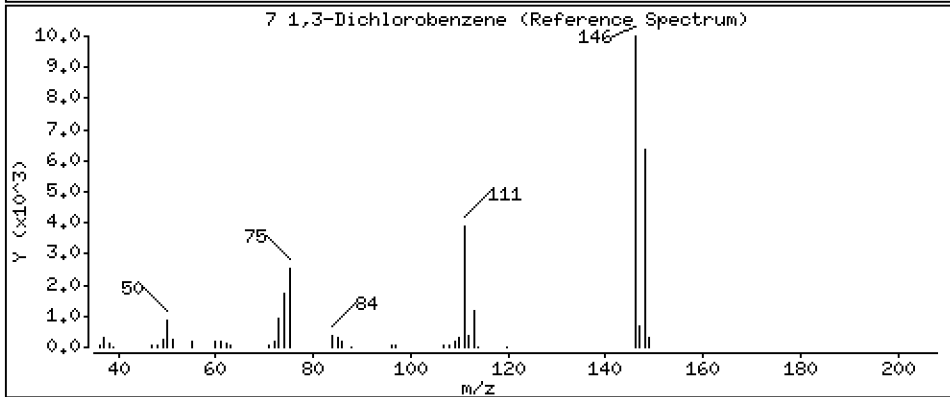
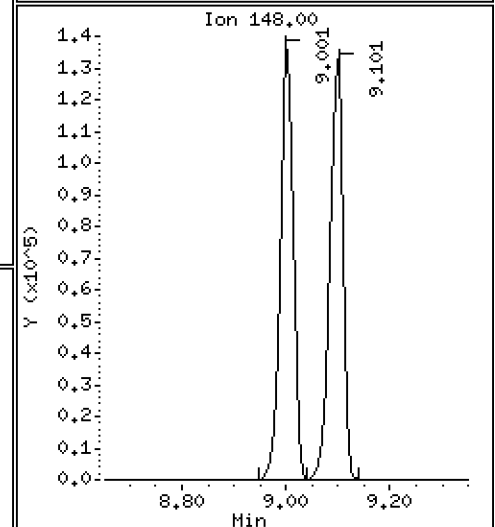
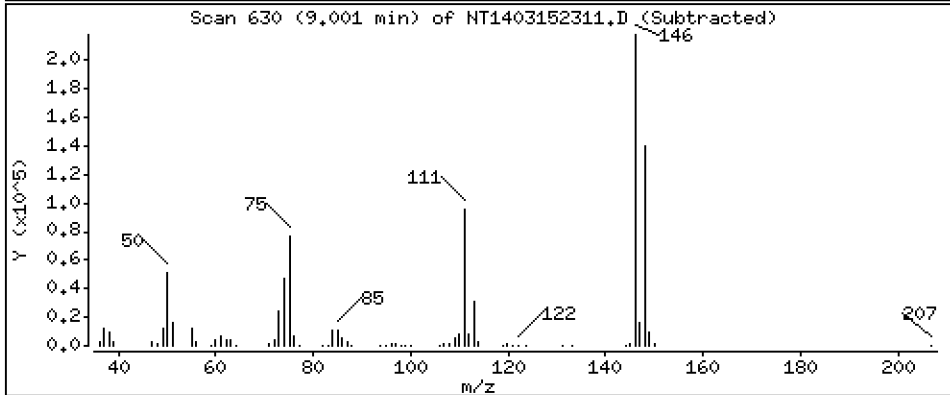
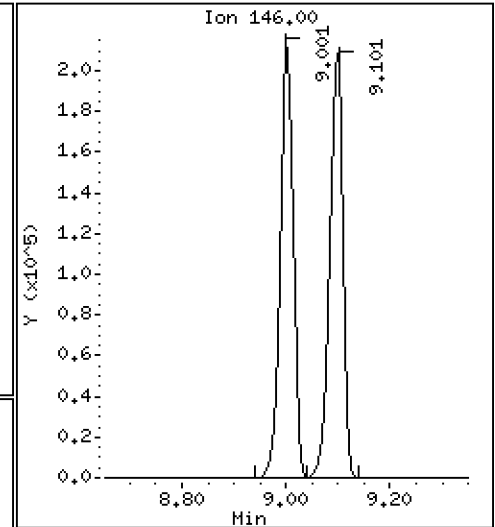
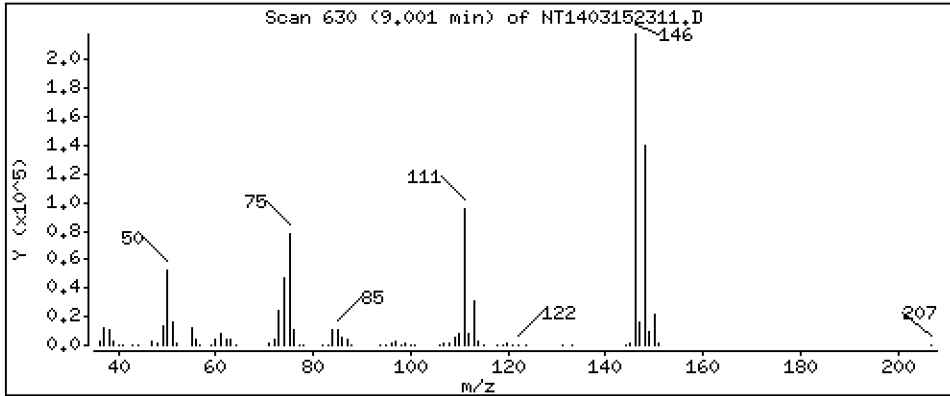
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.793 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

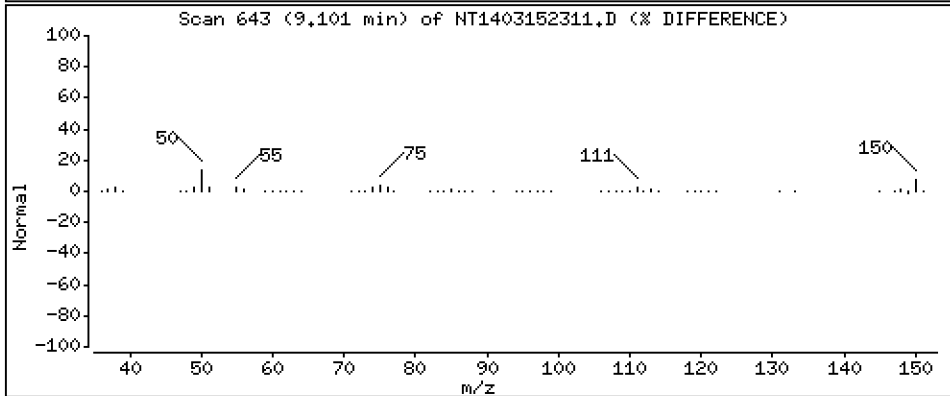
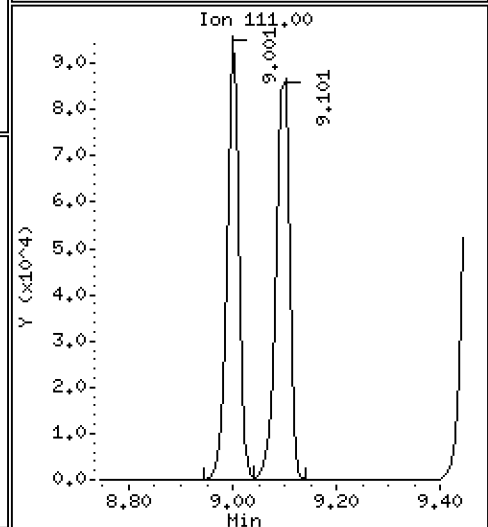
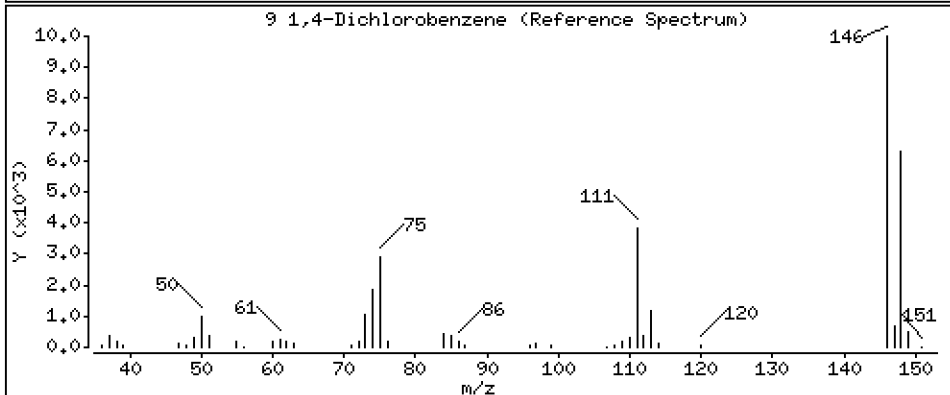
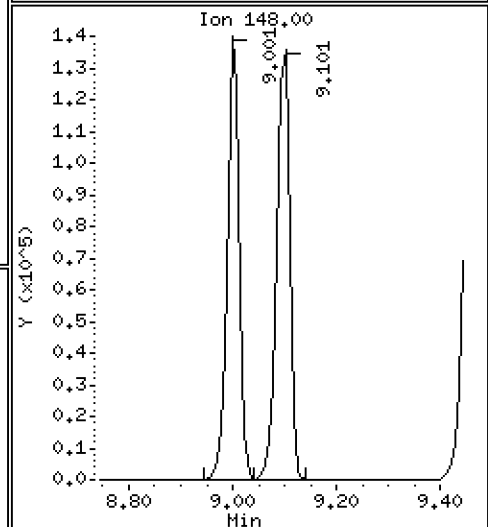
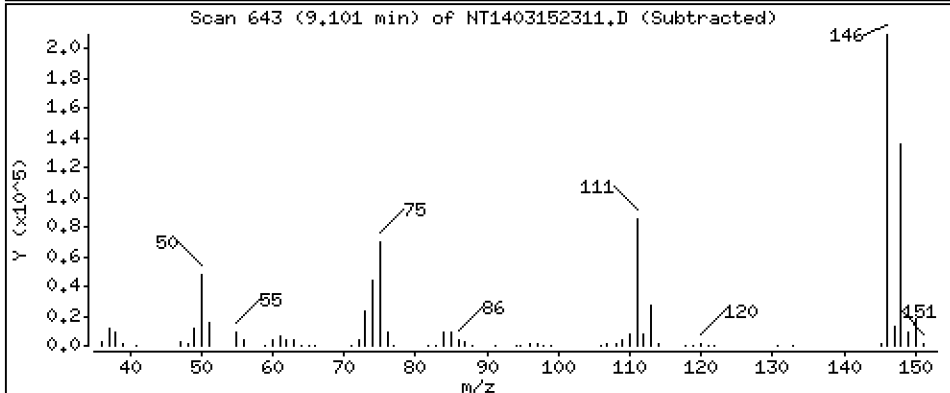
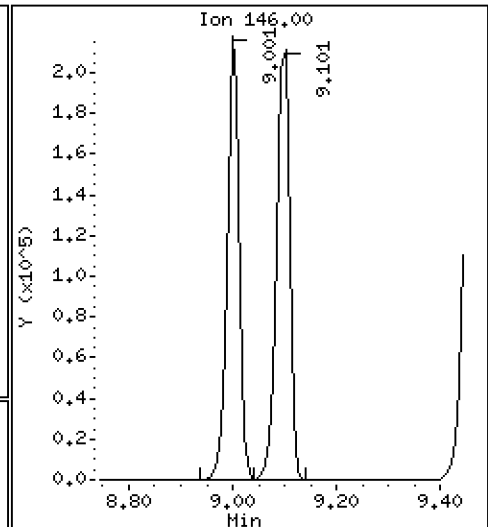
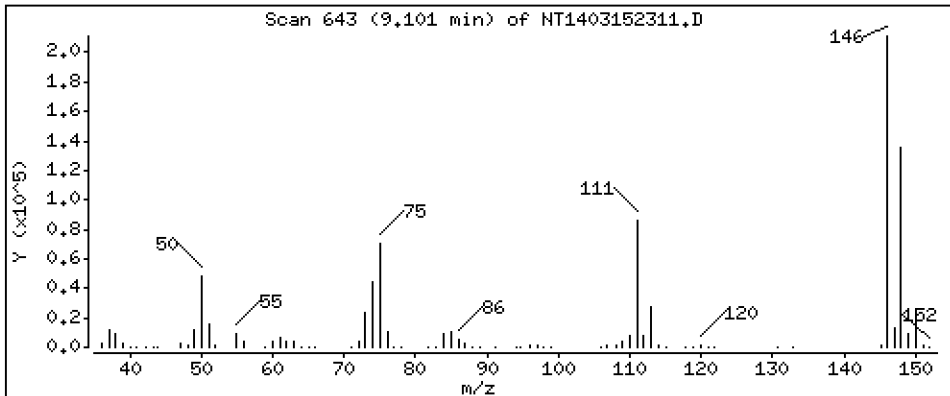
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,889 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

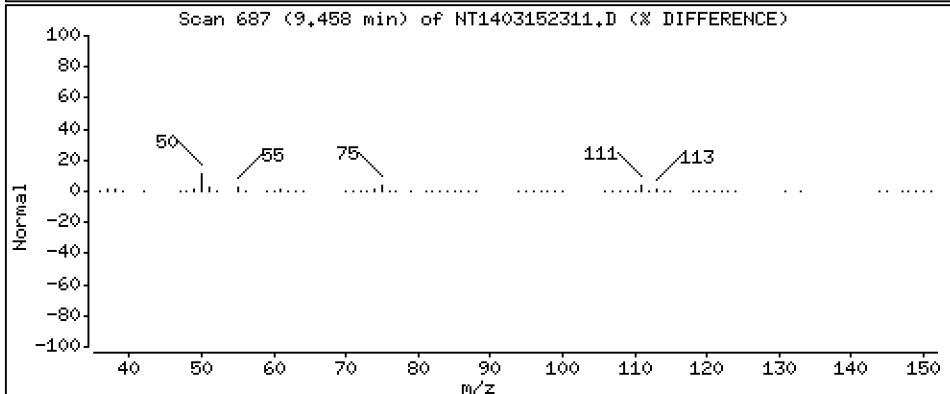
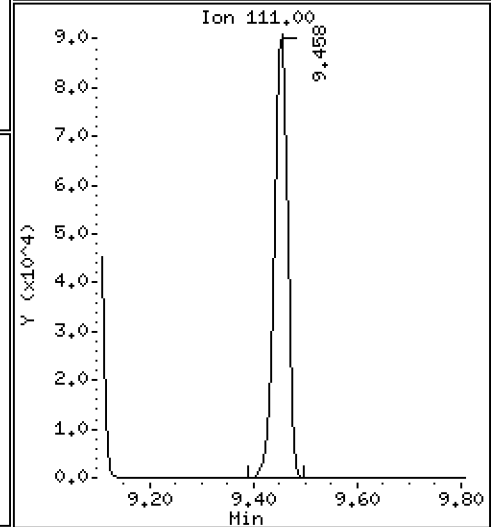
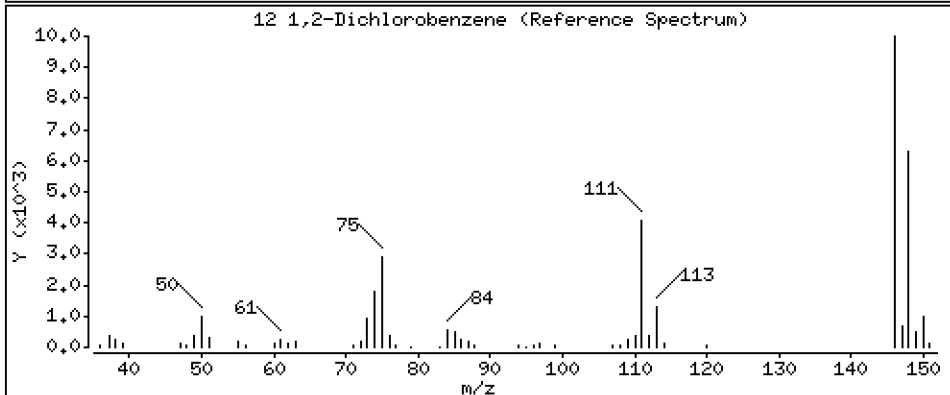
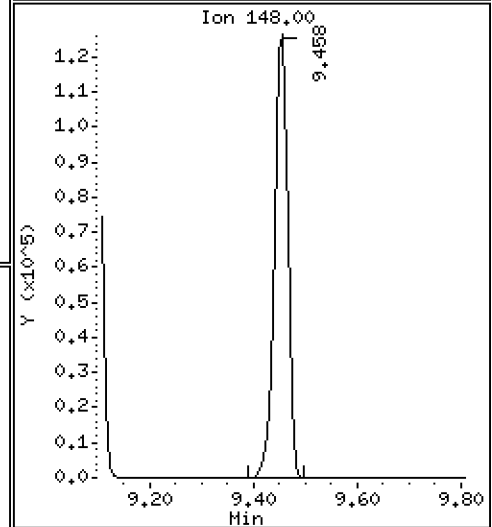
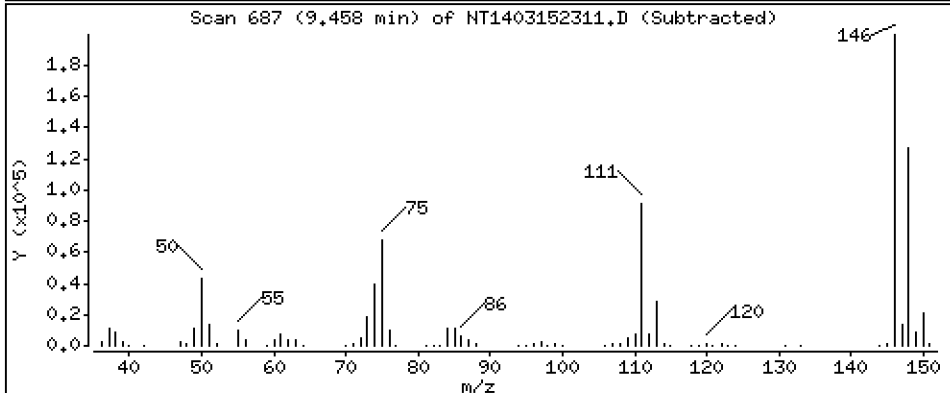
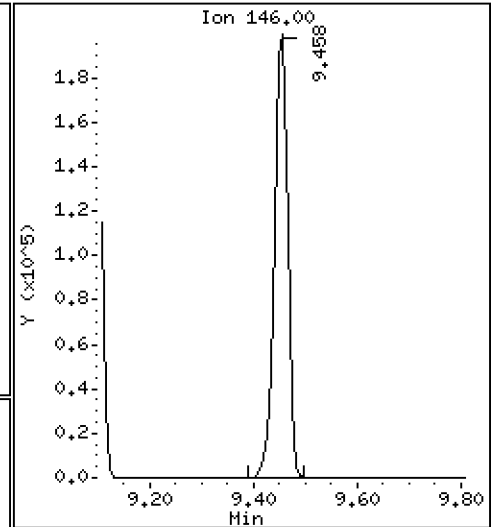
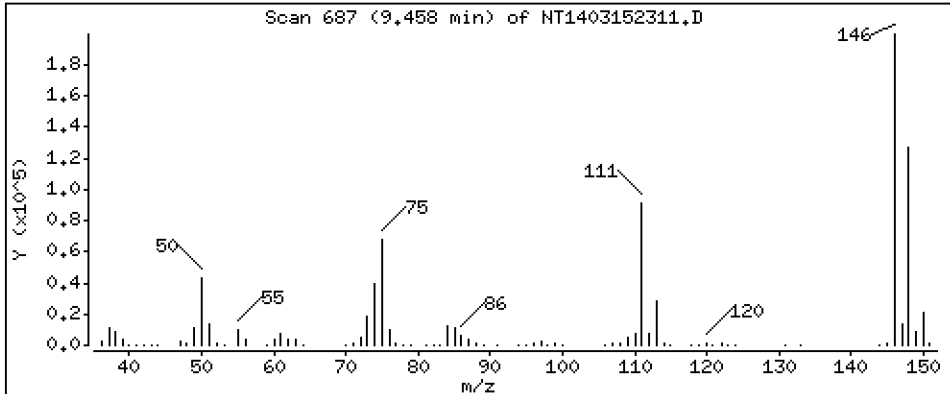
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,786 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

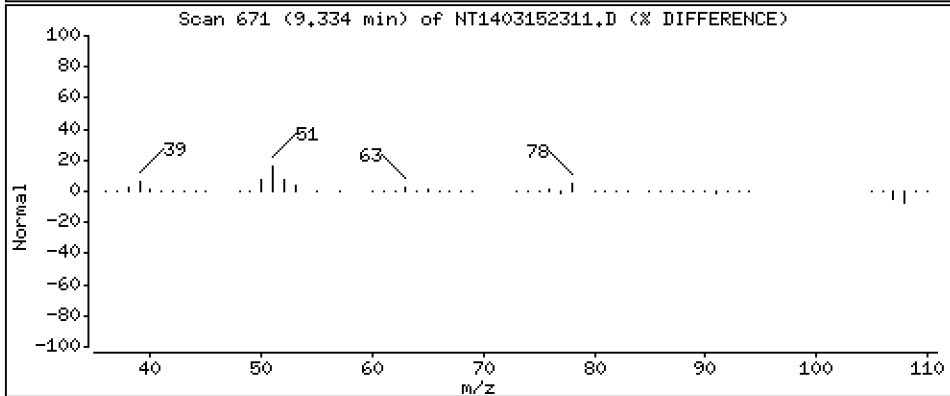
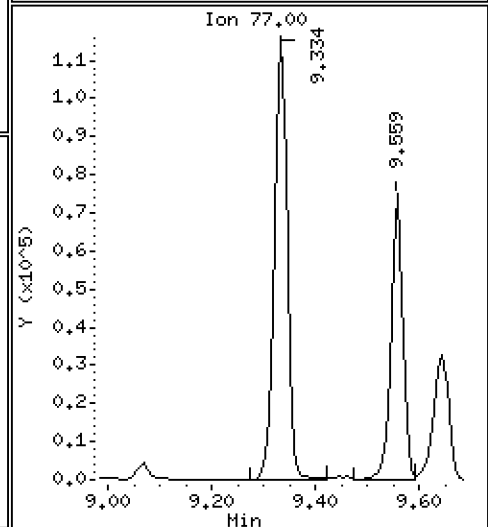
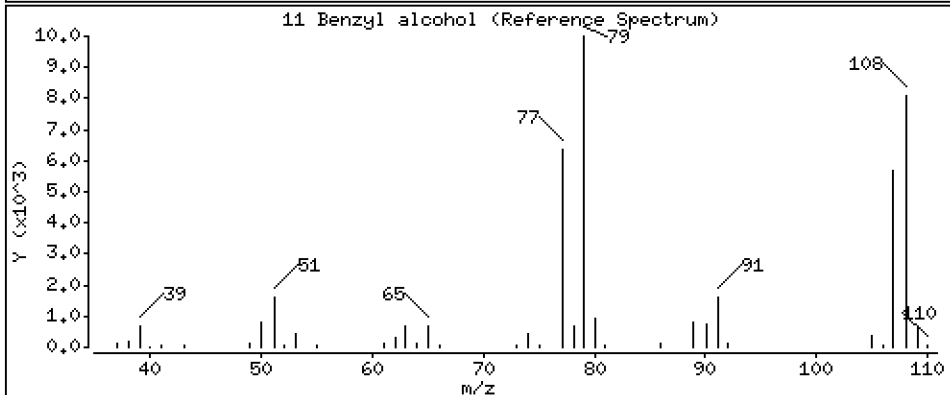
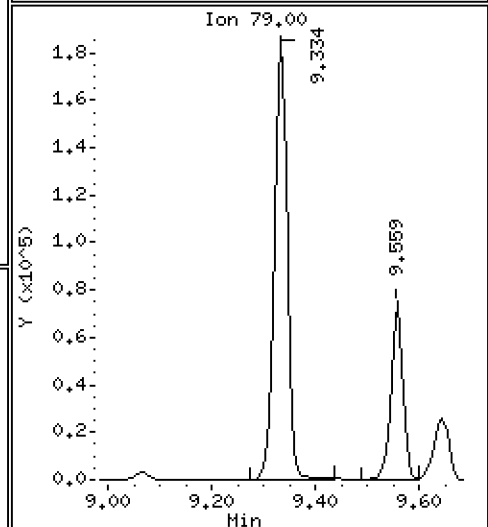
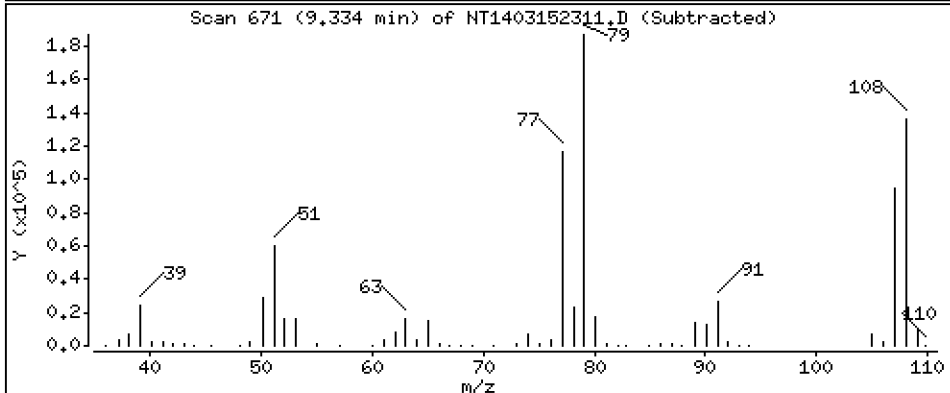
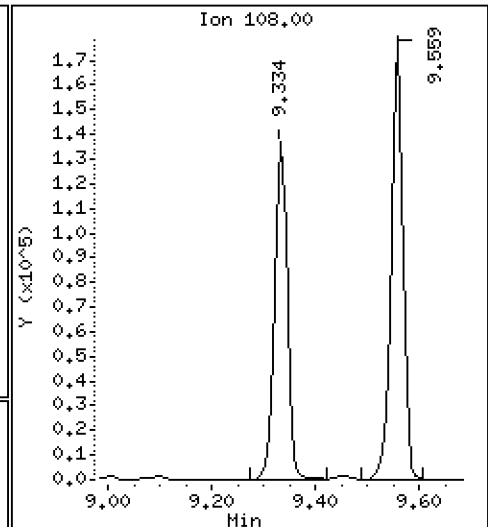
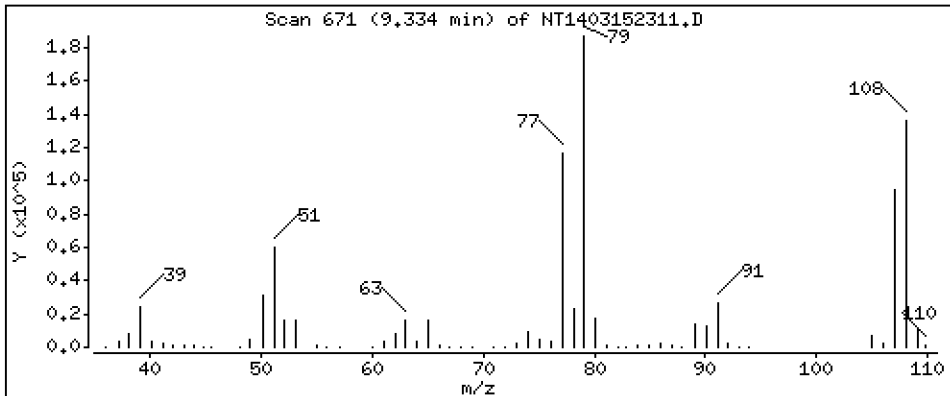
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5.051 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

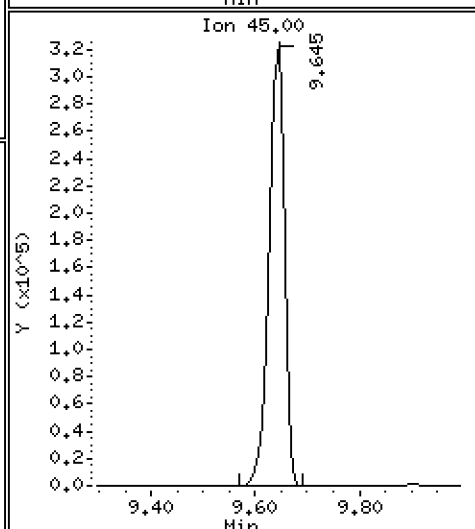
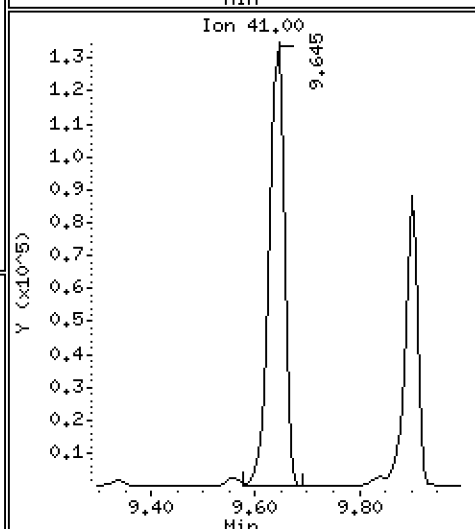
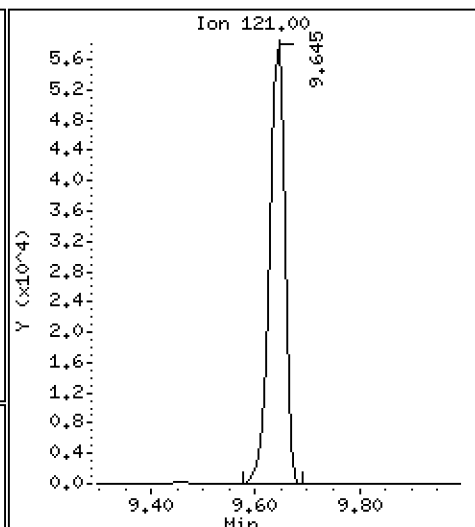
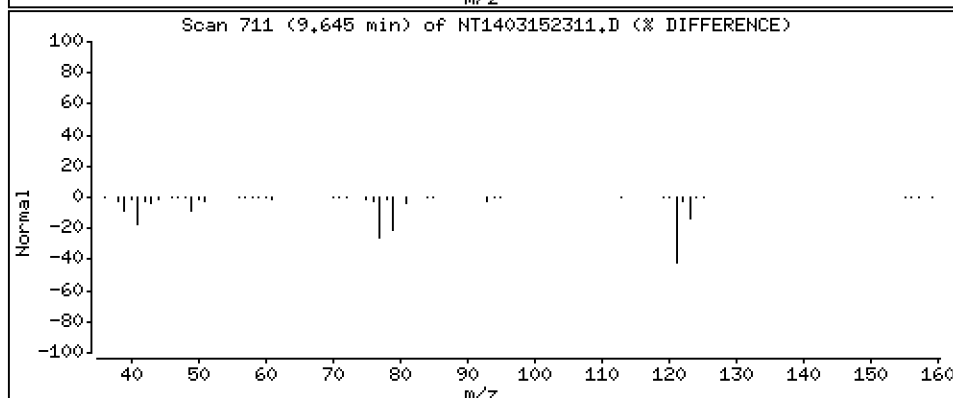
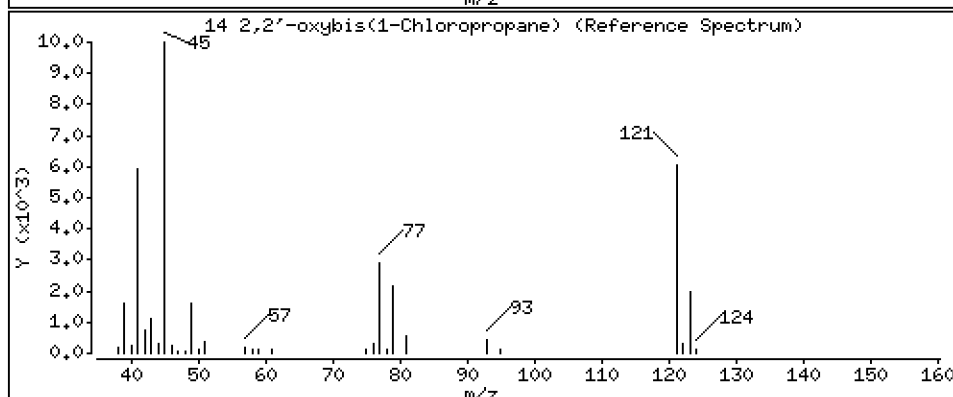
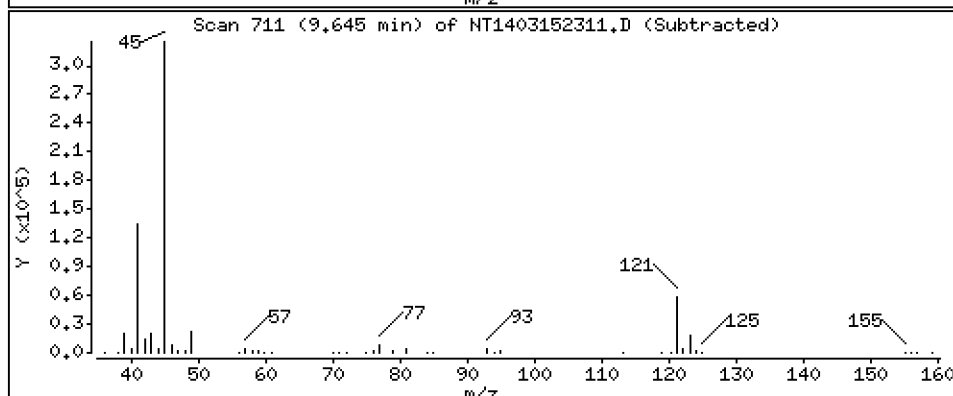
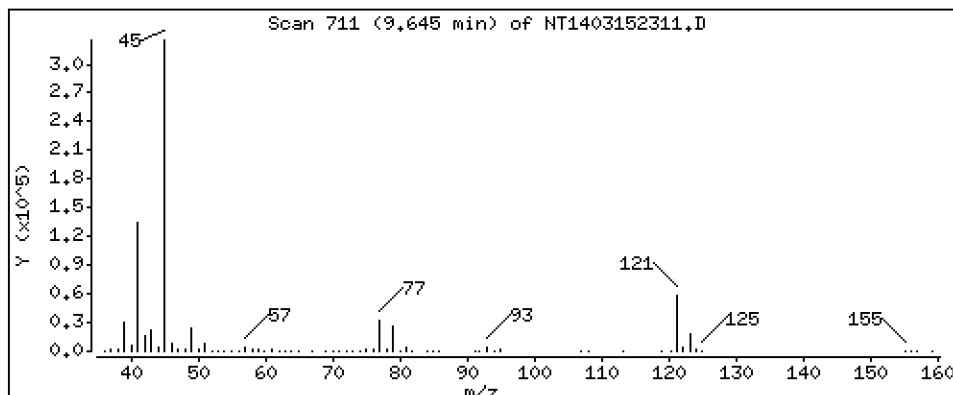
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 5,319 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

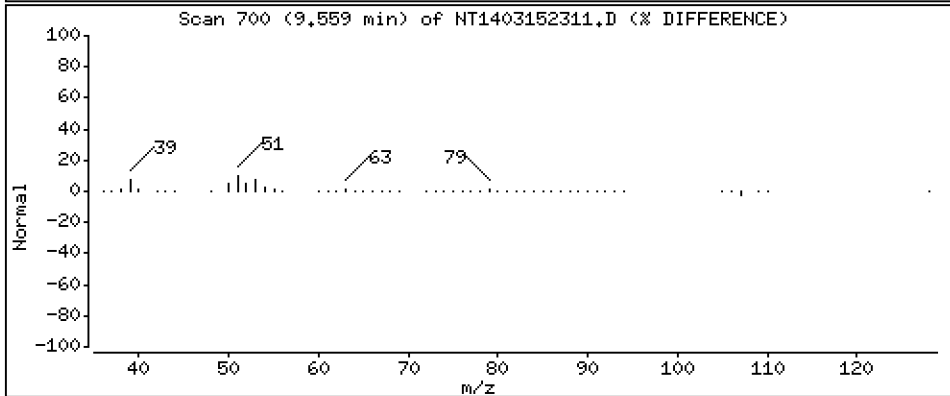
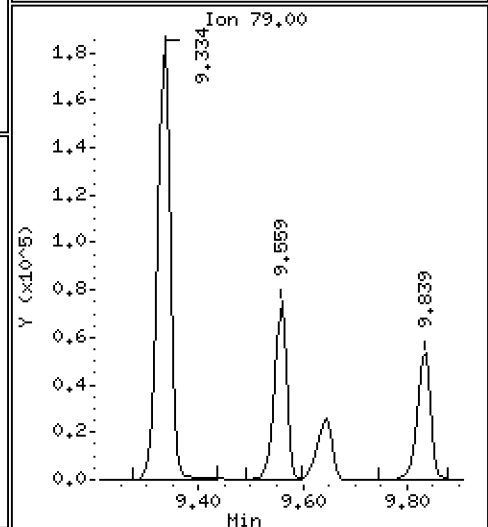
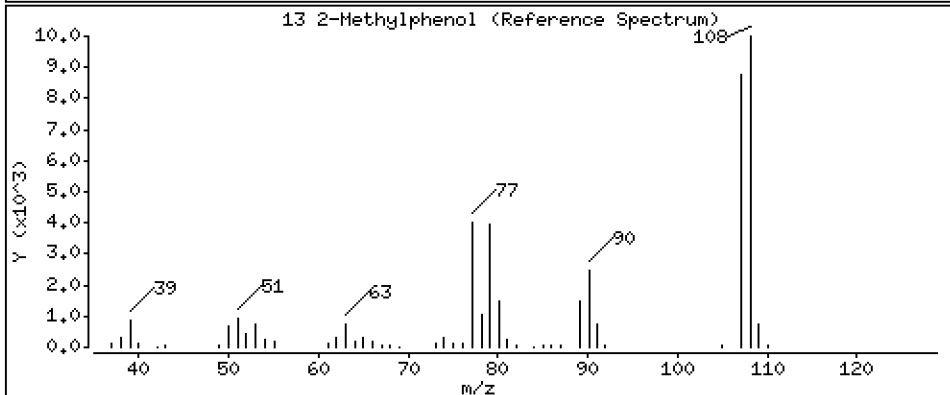
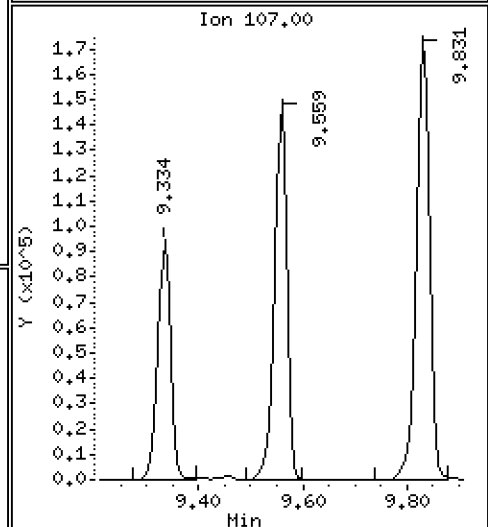
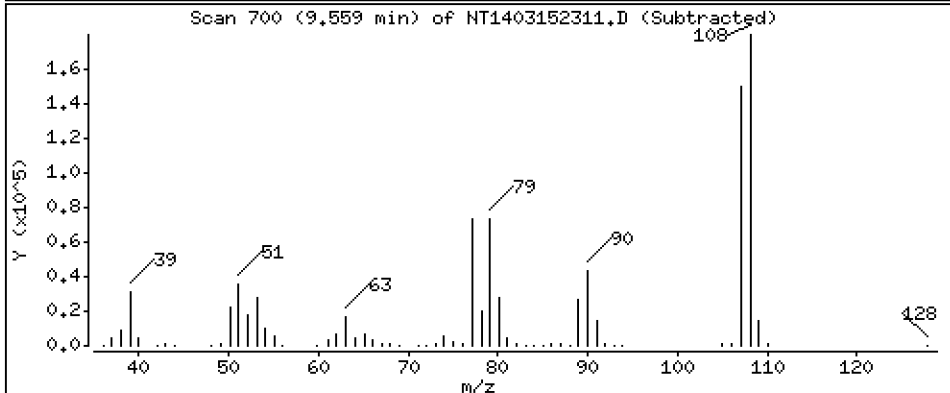
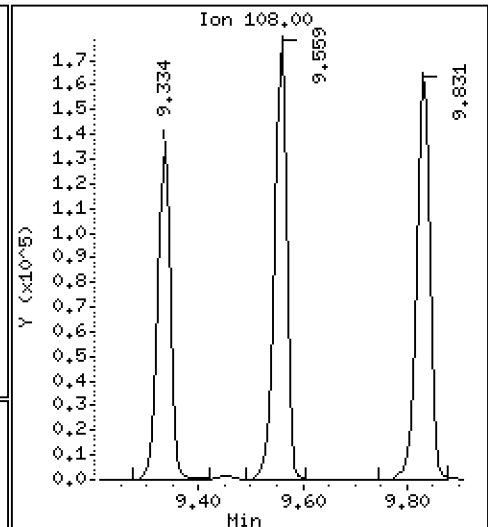
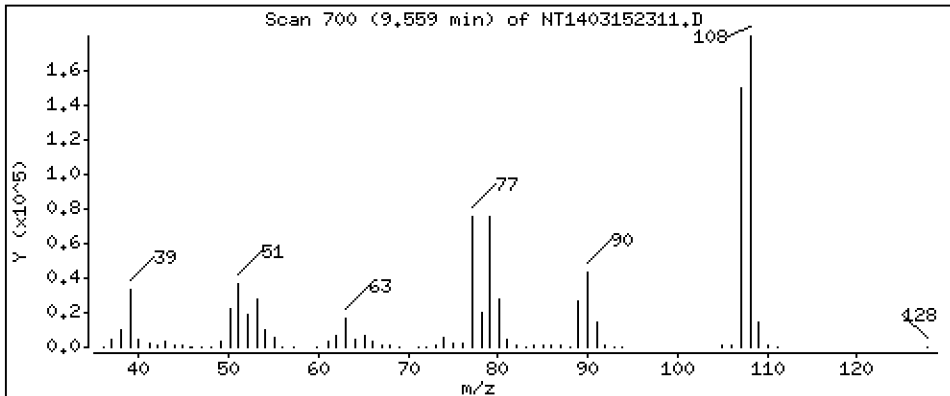
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.117 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

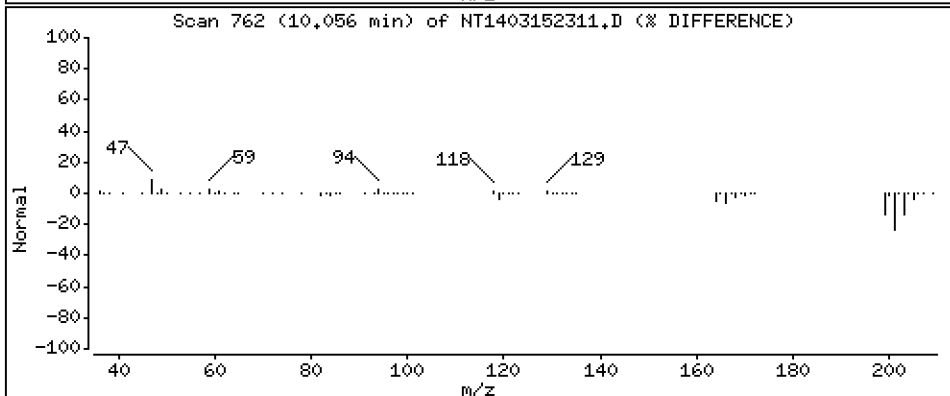
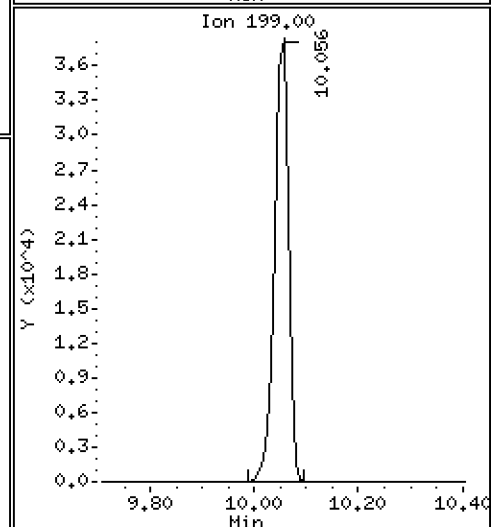
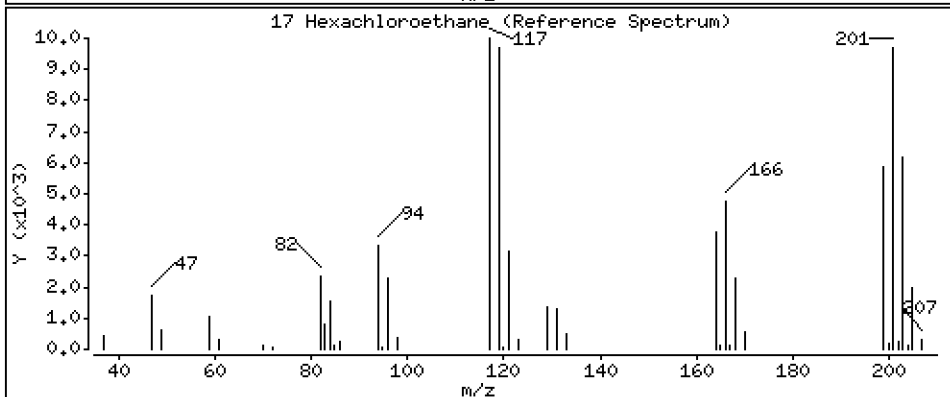
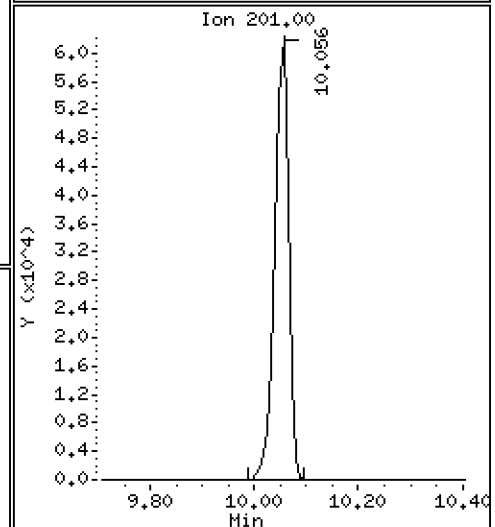
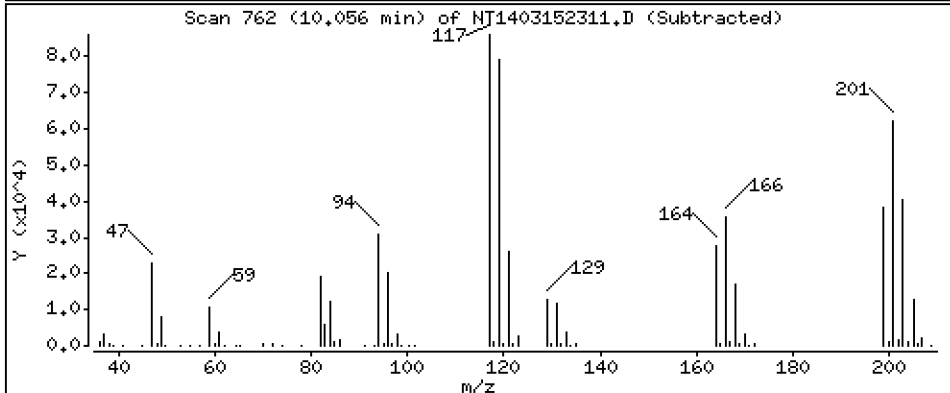
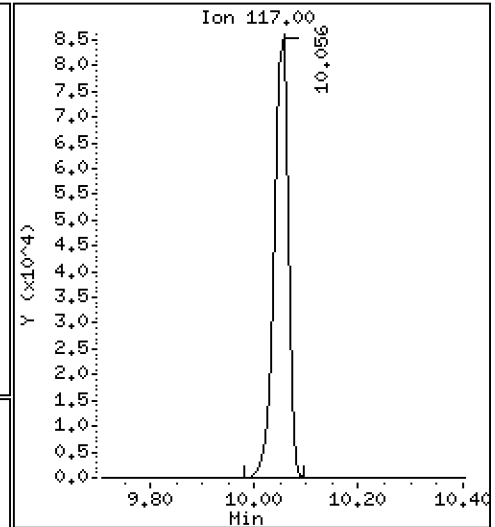
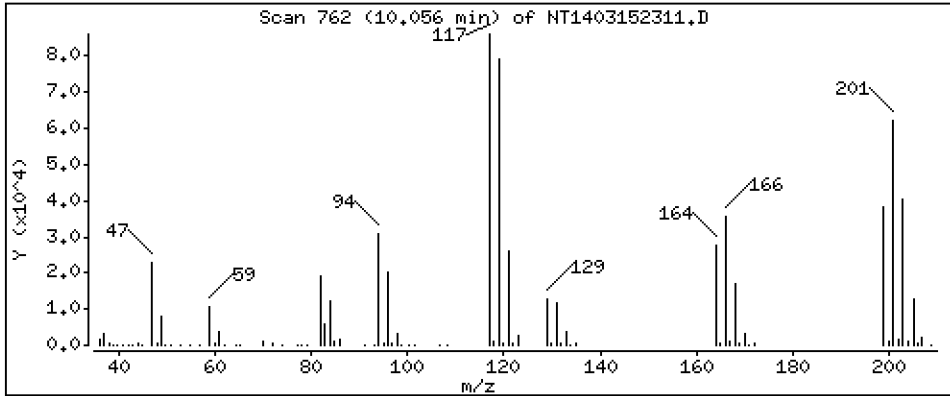
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 4.955 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

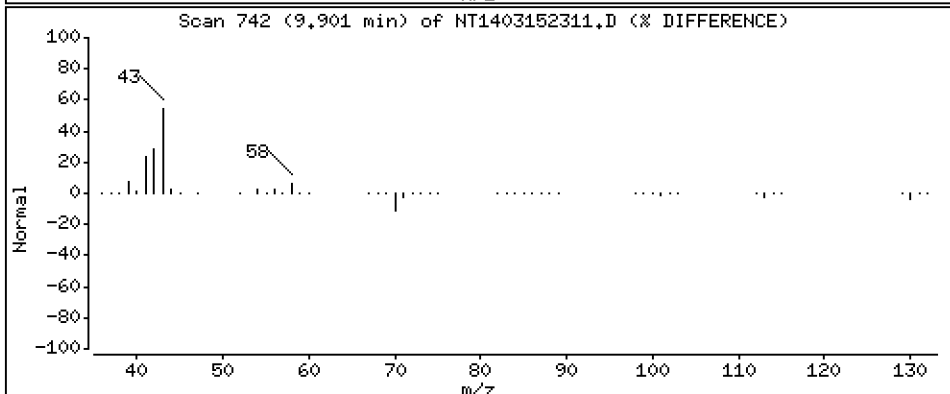
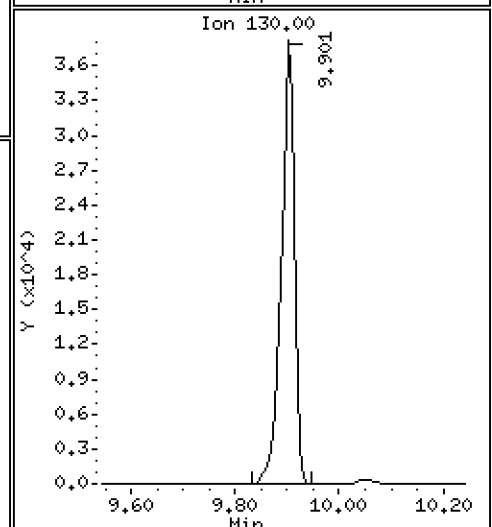
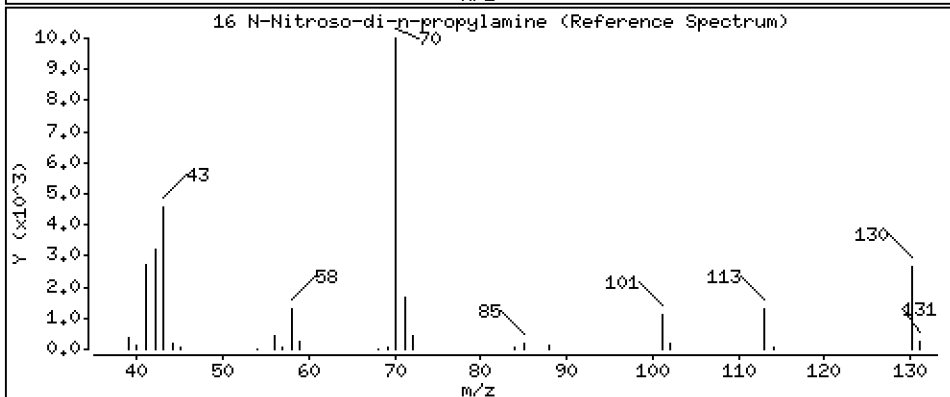
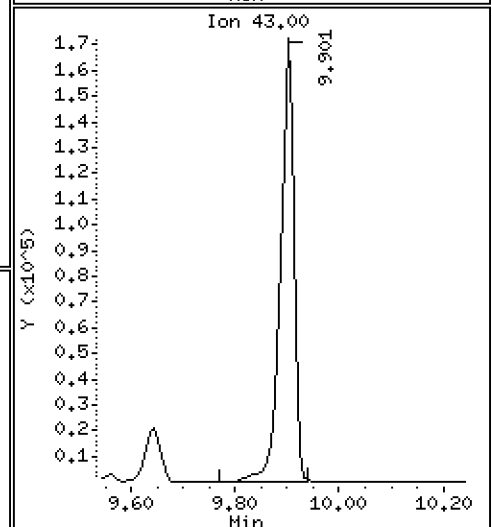
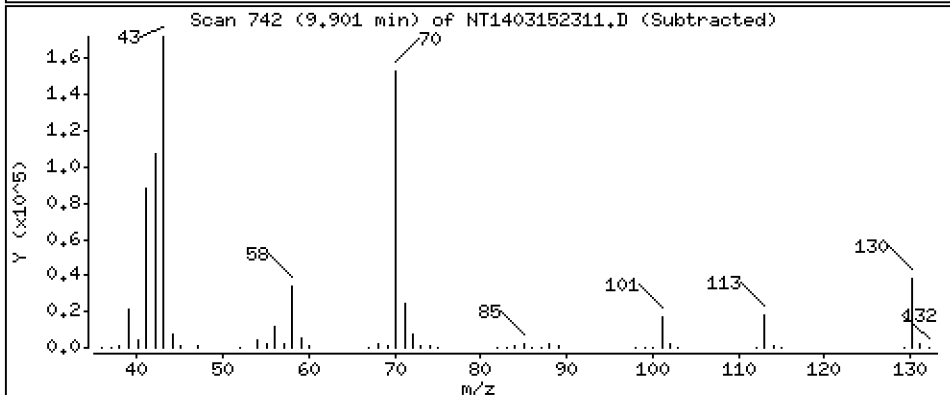
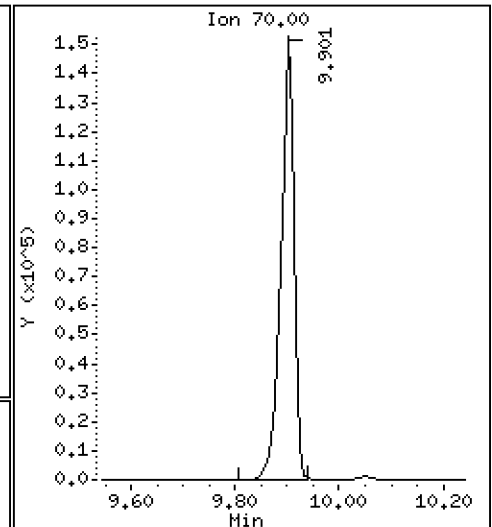
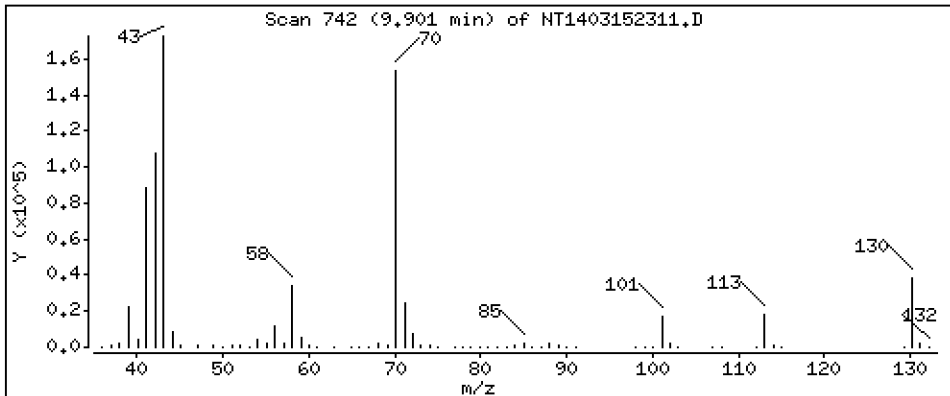
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 4.983 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

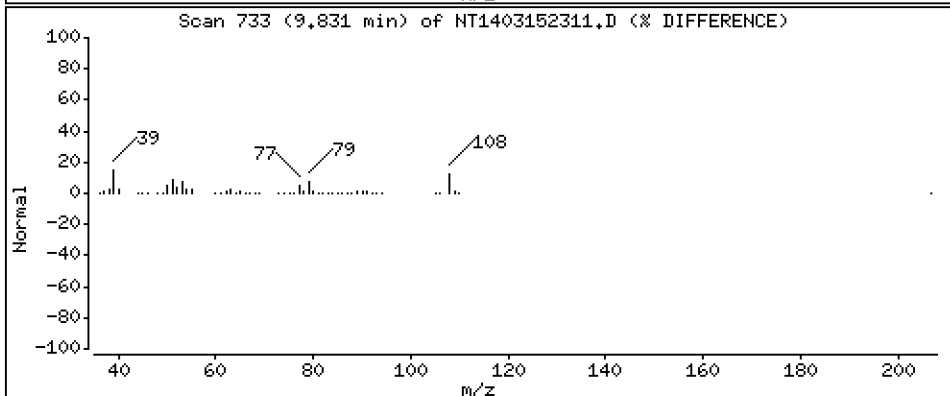
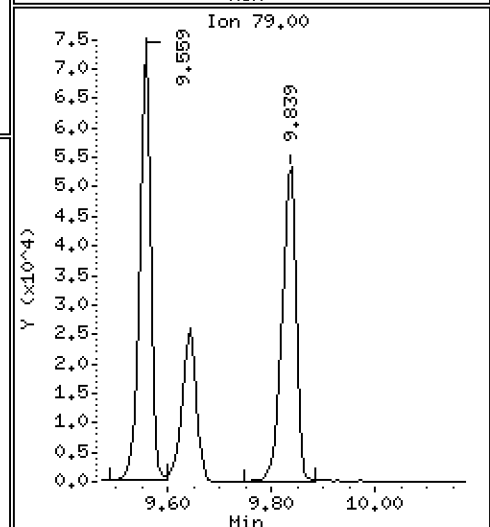
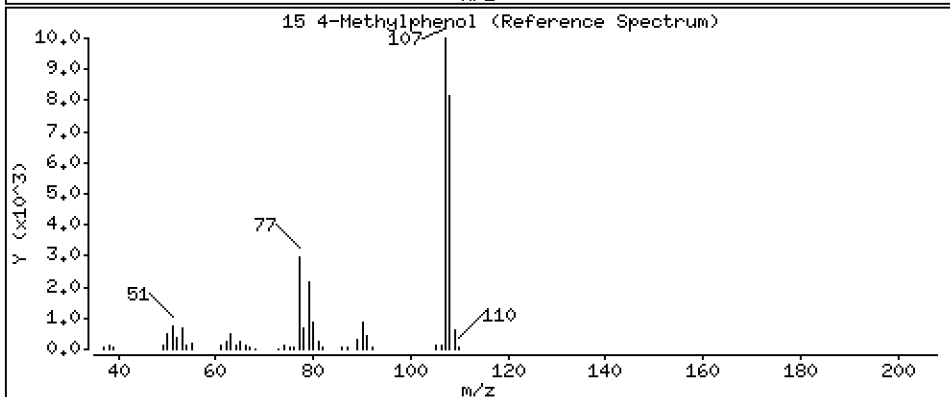
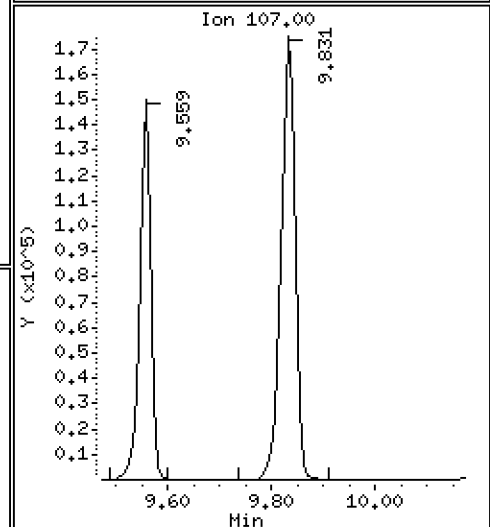
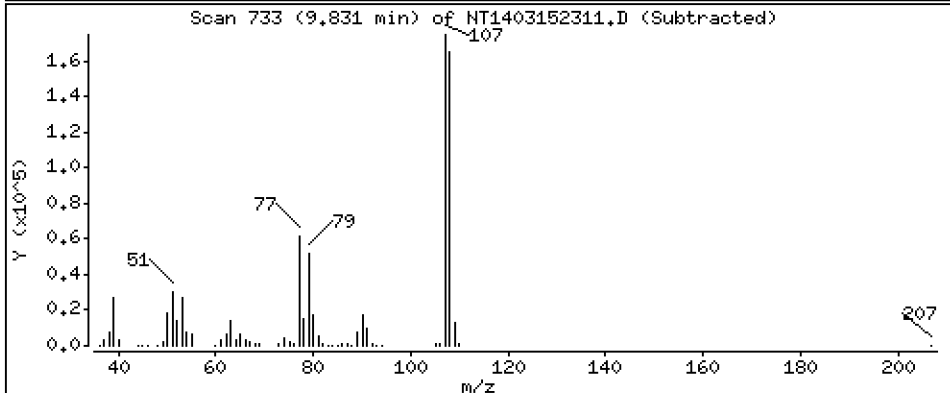
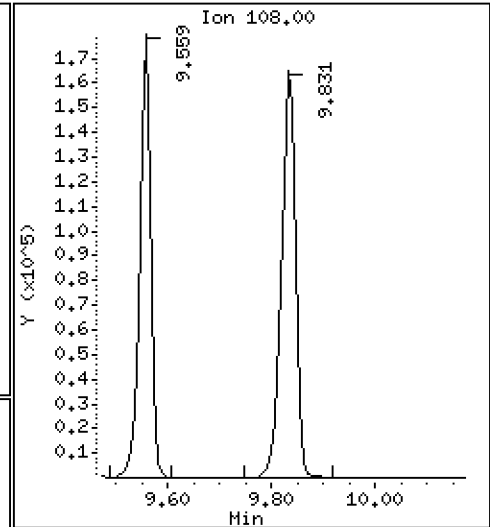
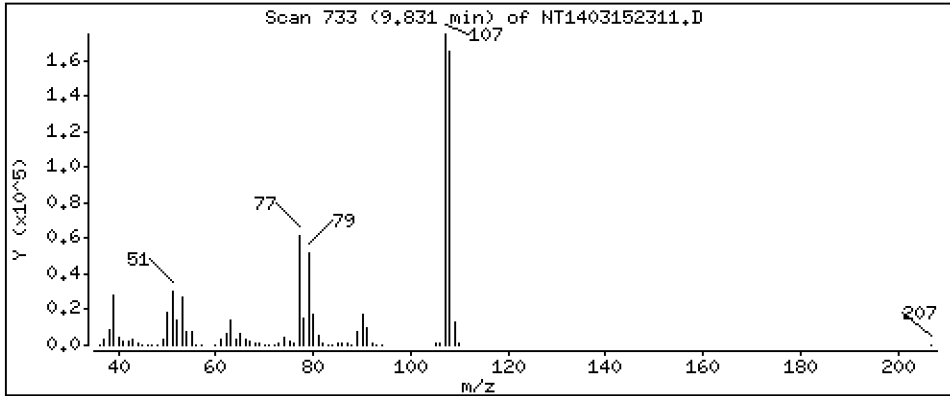
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,302 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

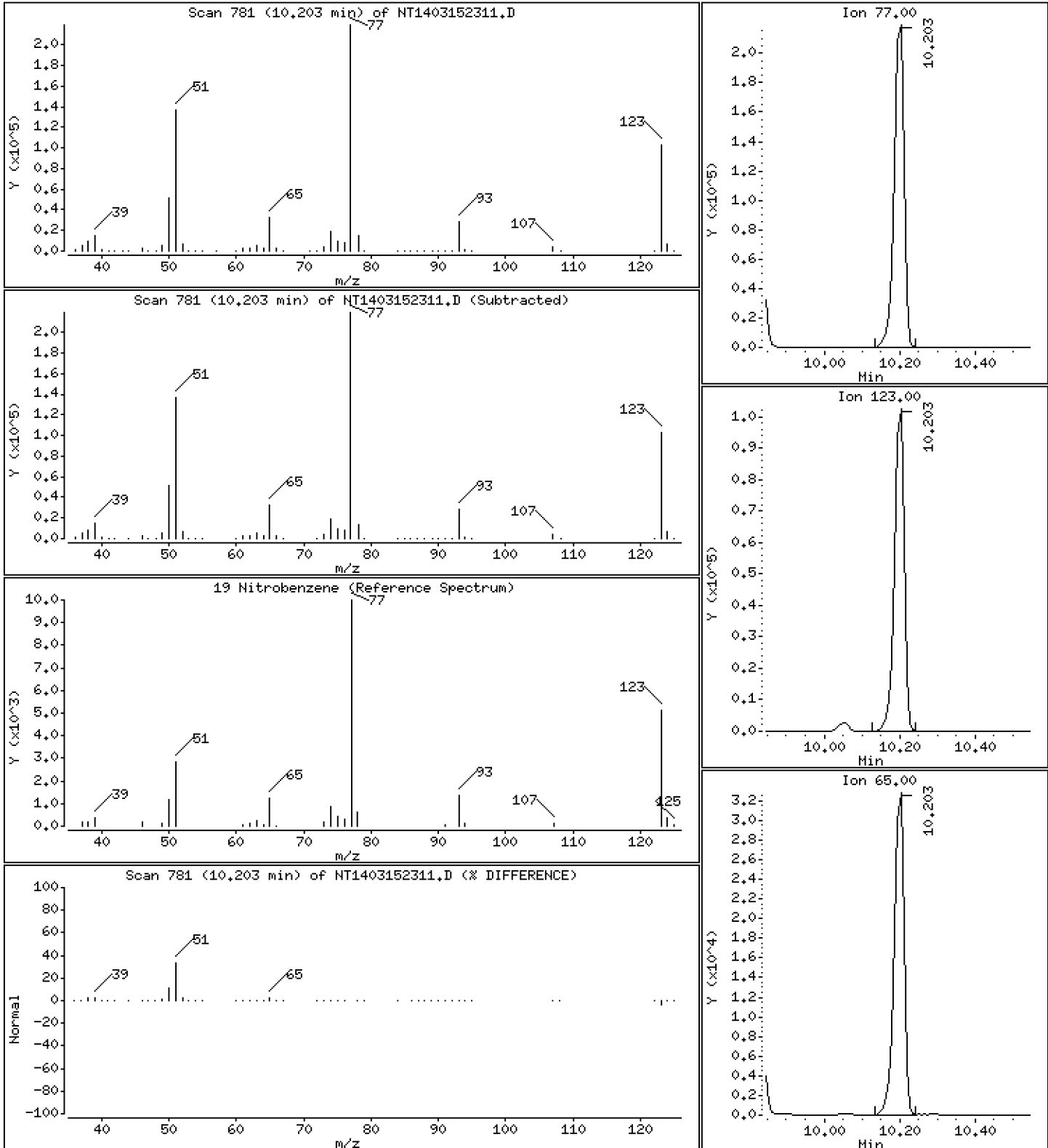
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,023 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

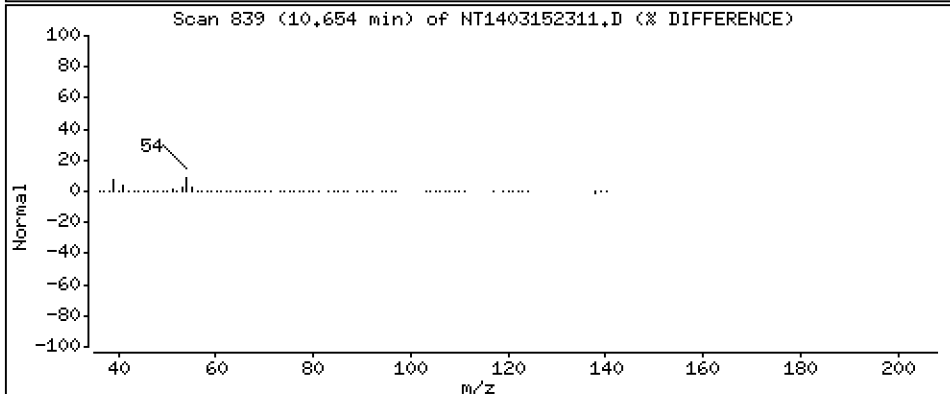
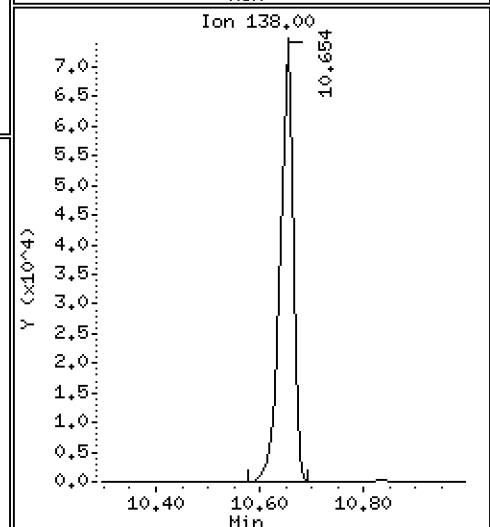
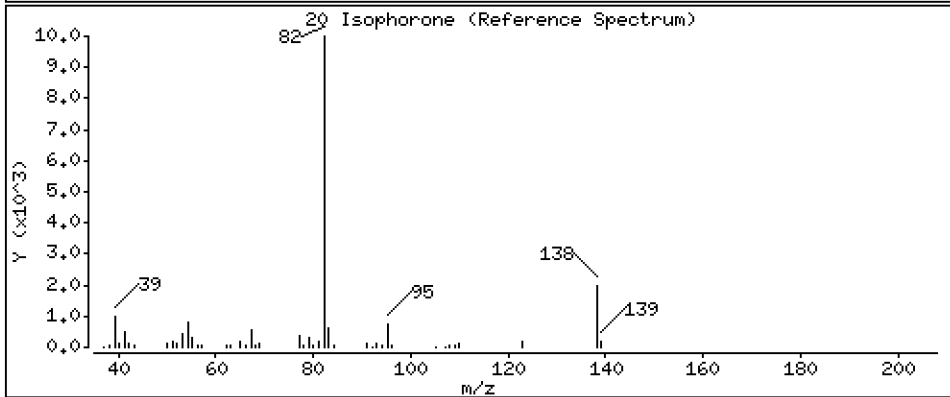
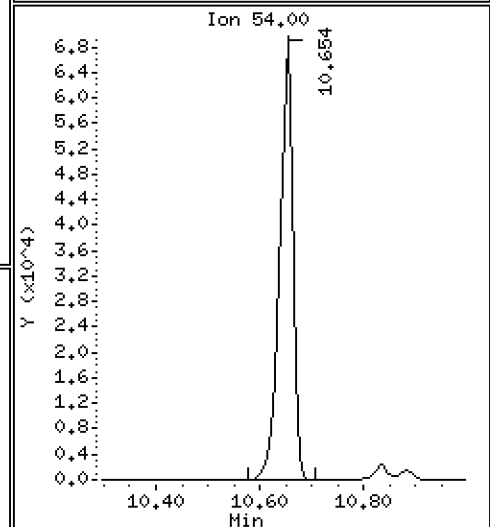
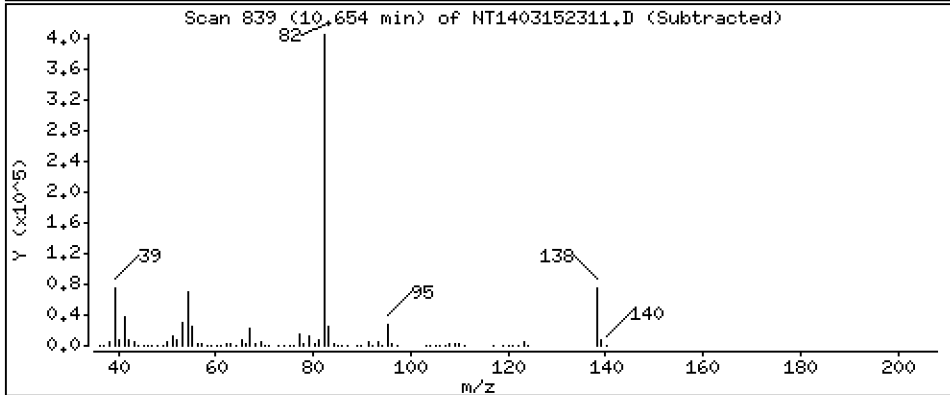
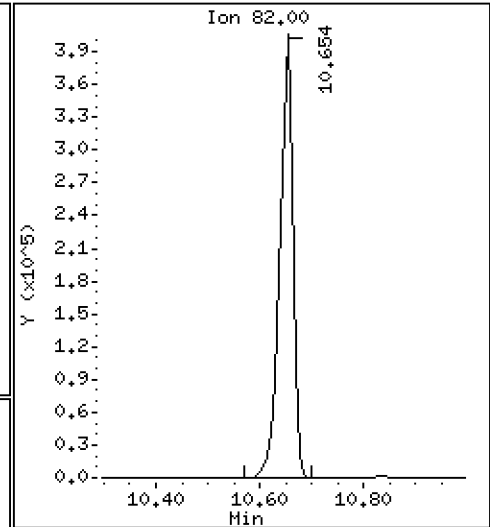
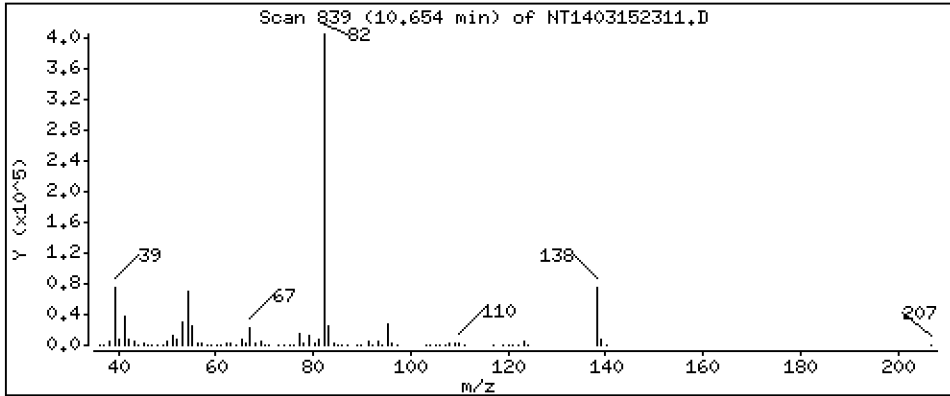
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 6,771 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

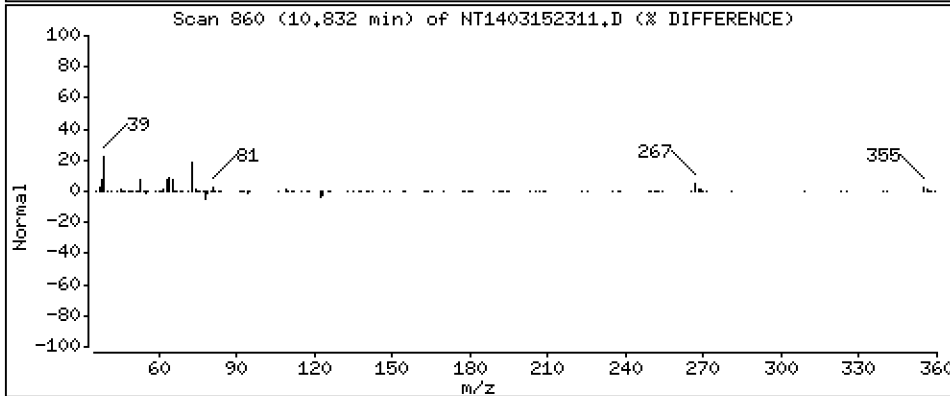
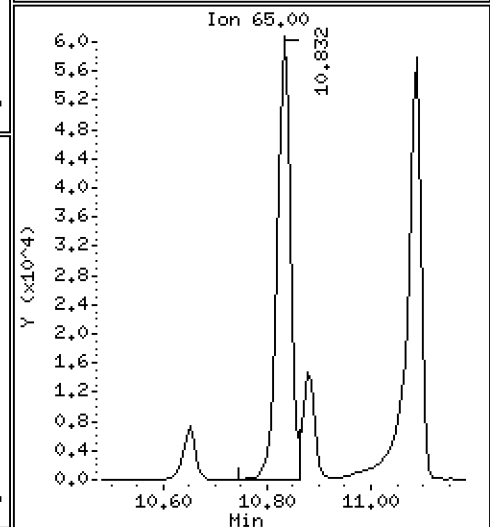
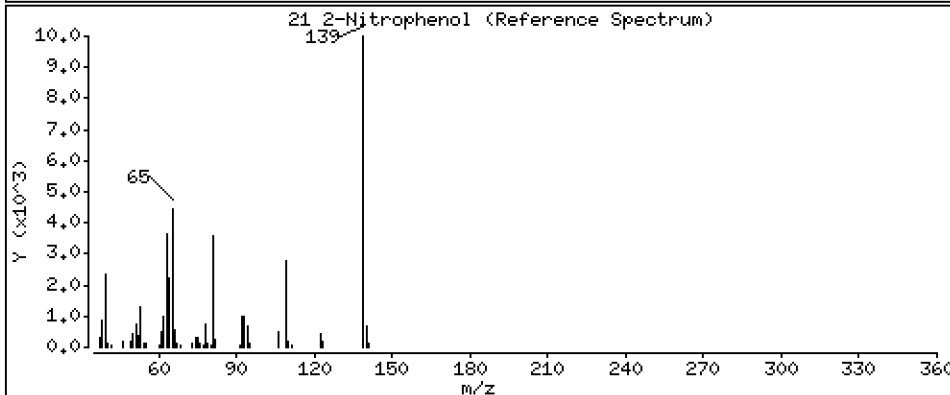
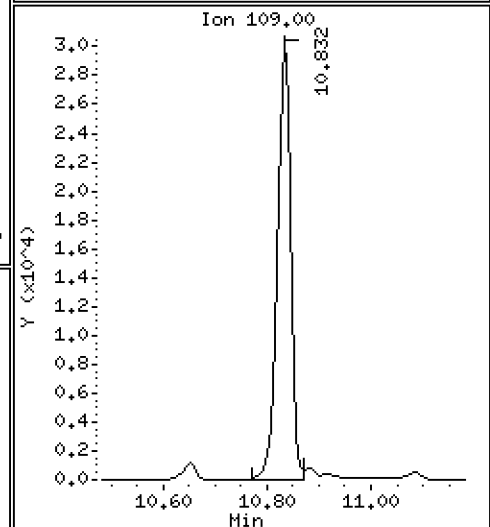
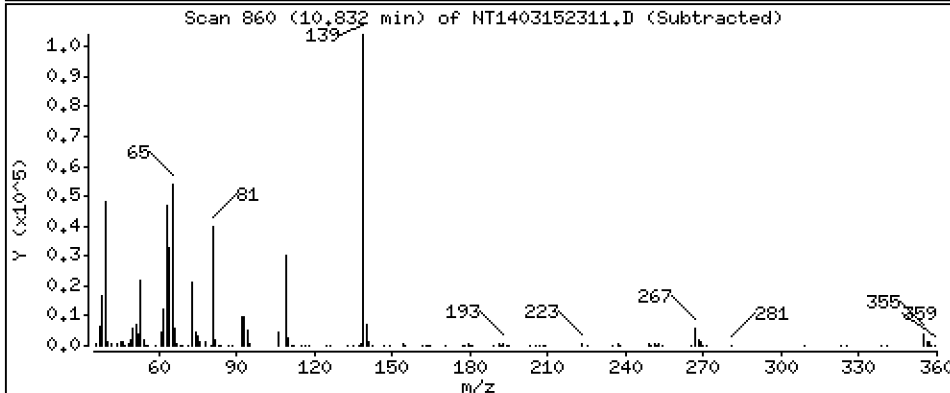
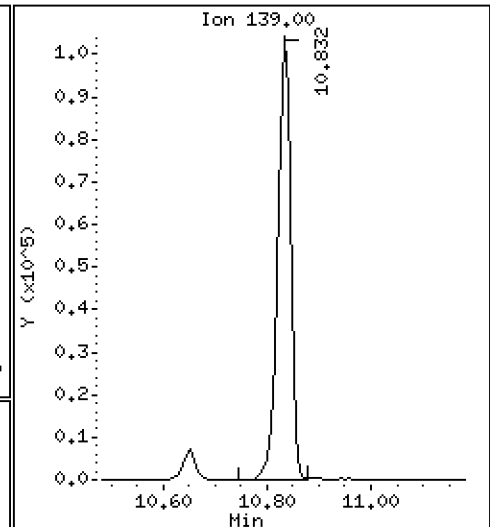
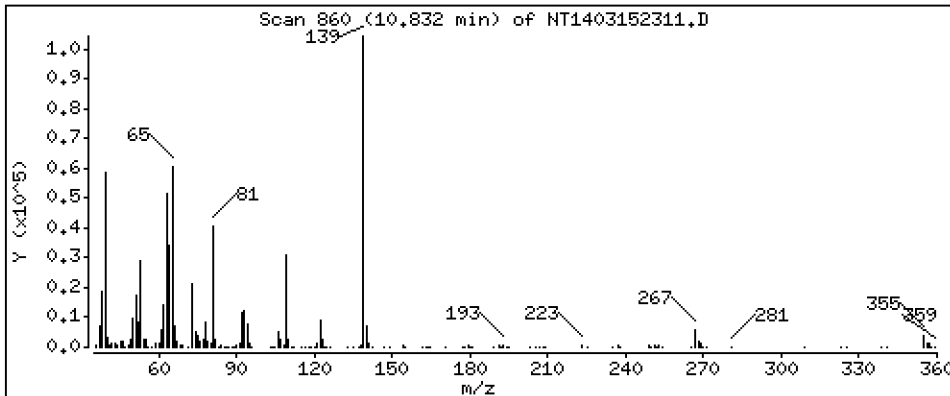
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,530 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

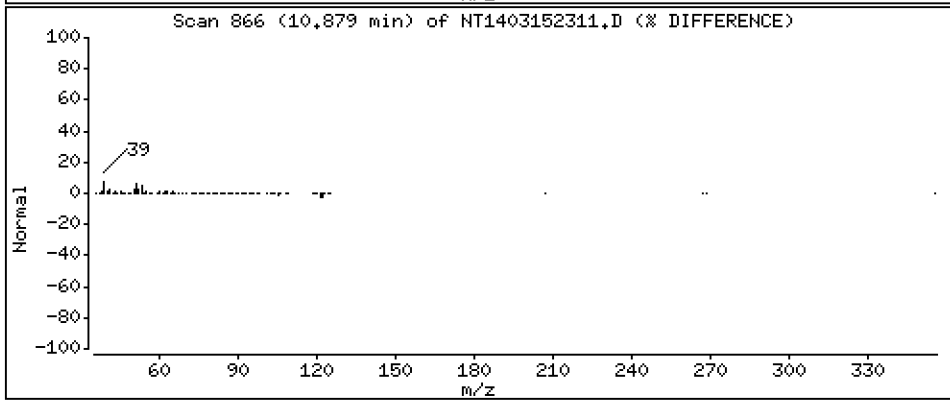
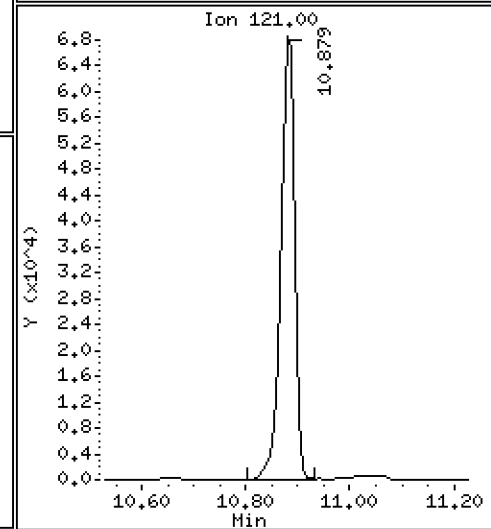
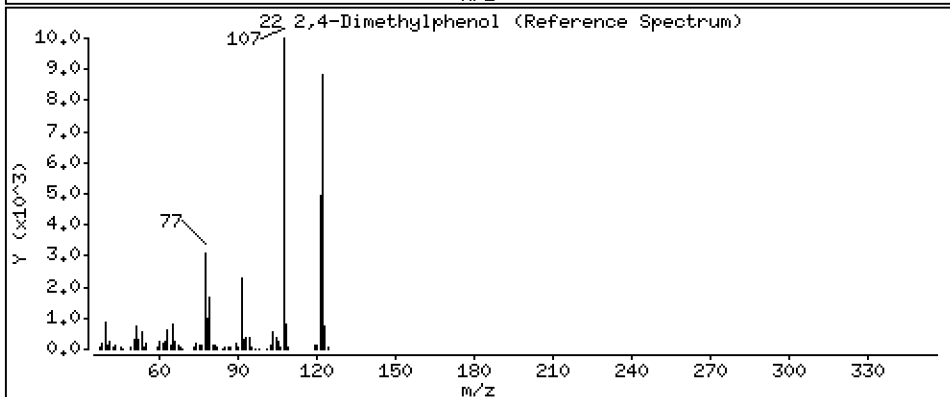
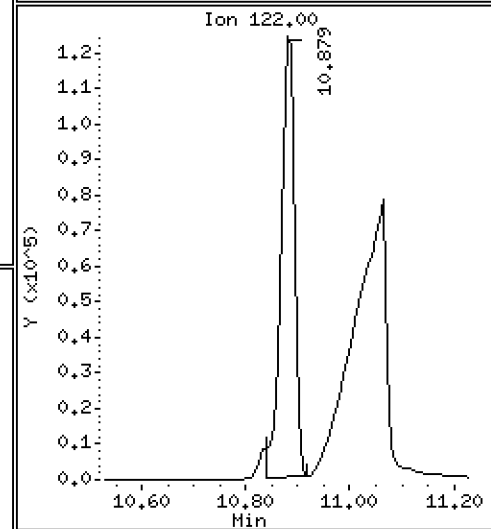
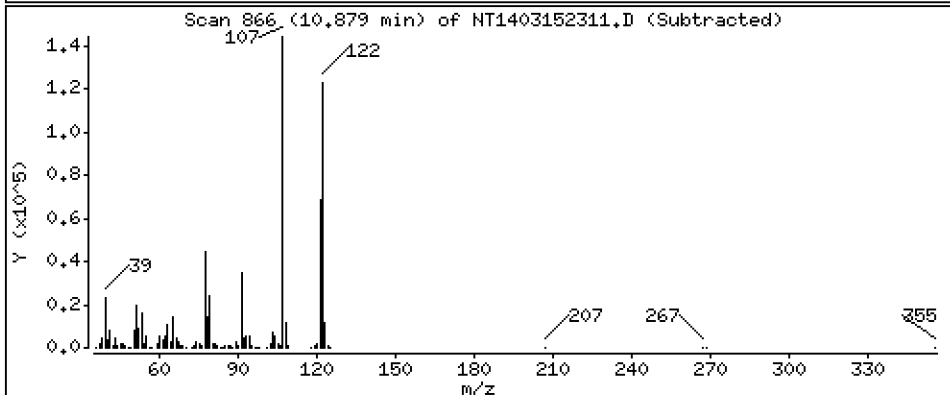
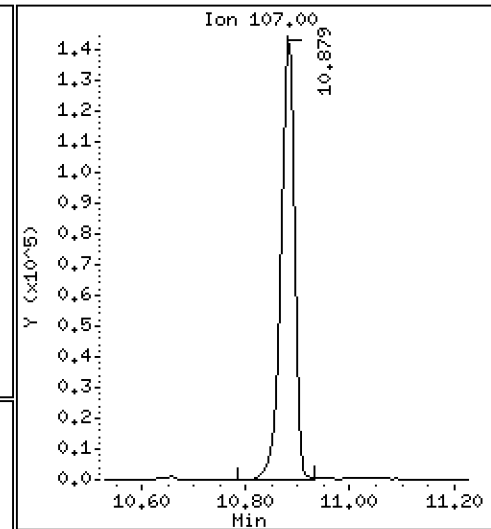
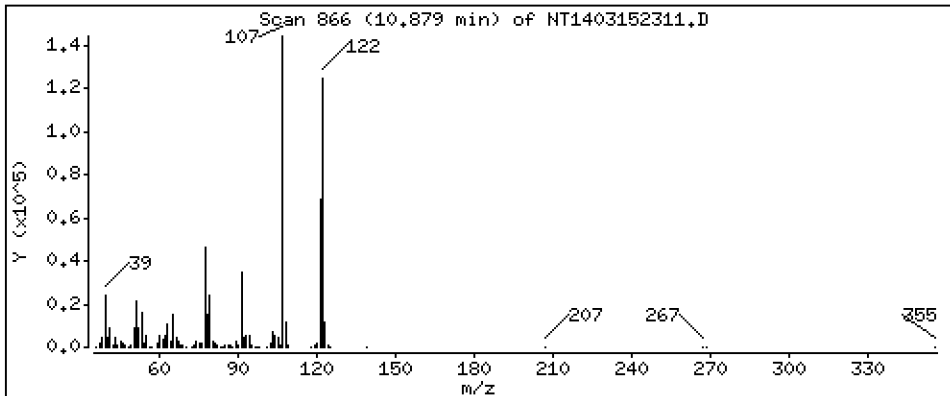
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,915 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

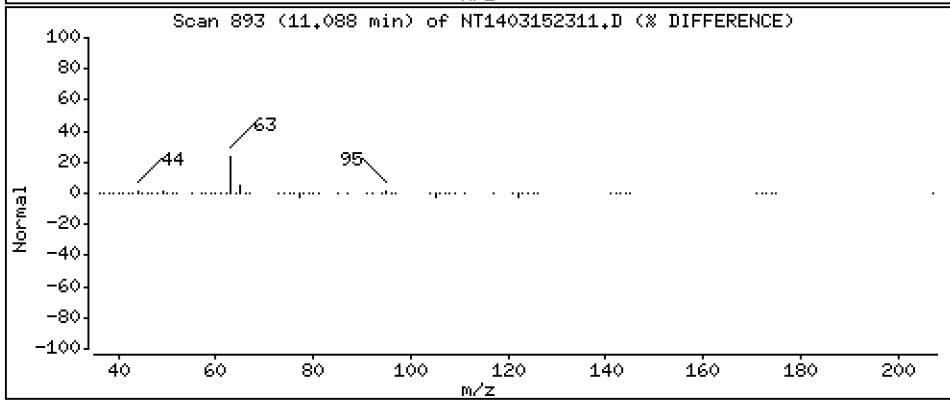
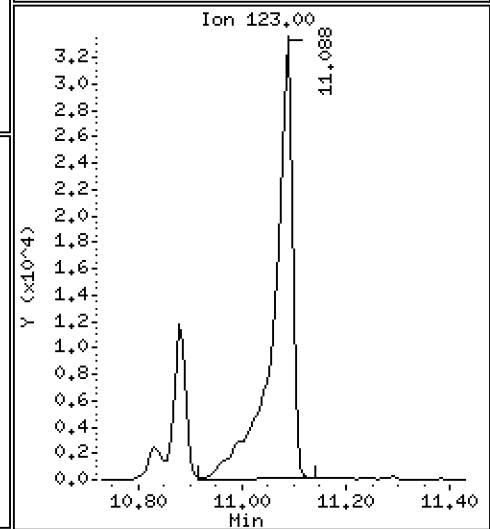
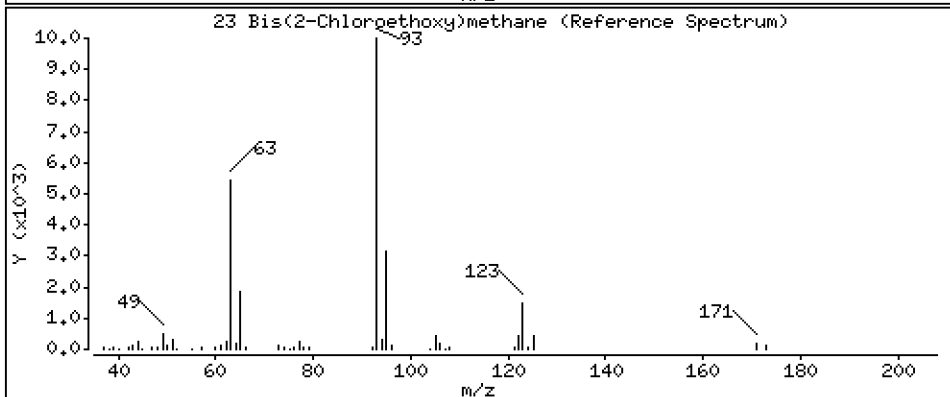
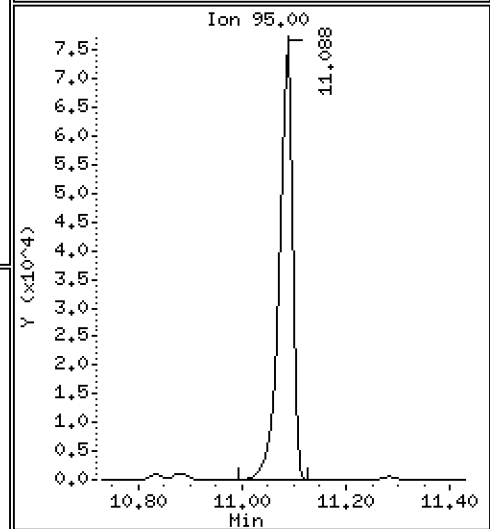
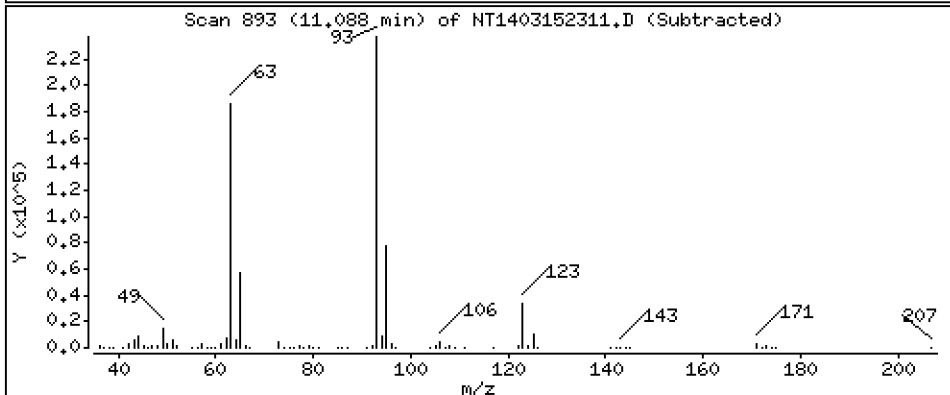
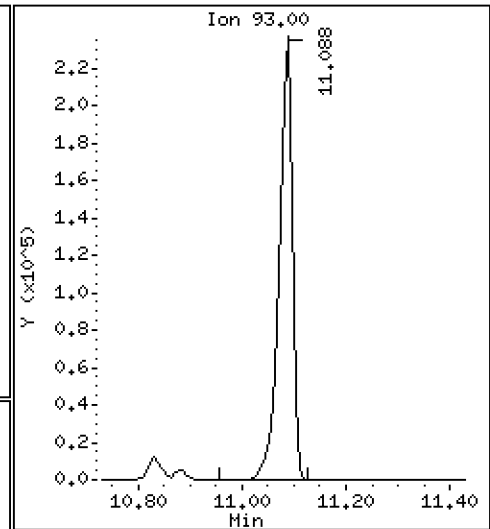
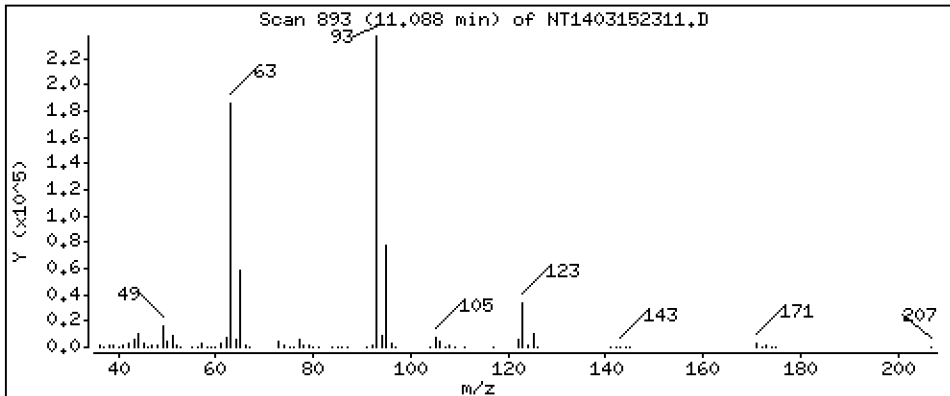
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,859 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

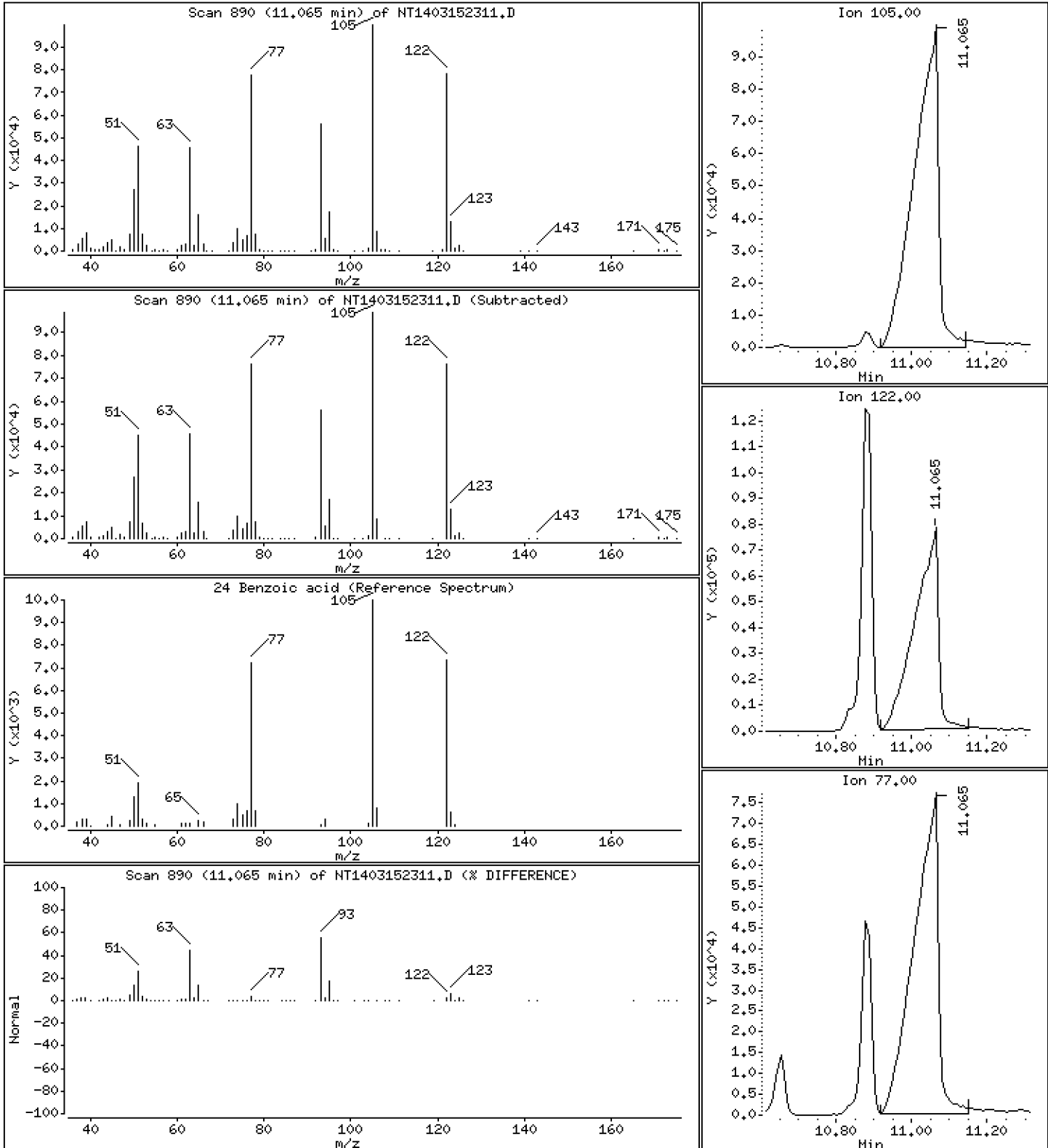
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 8,248 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

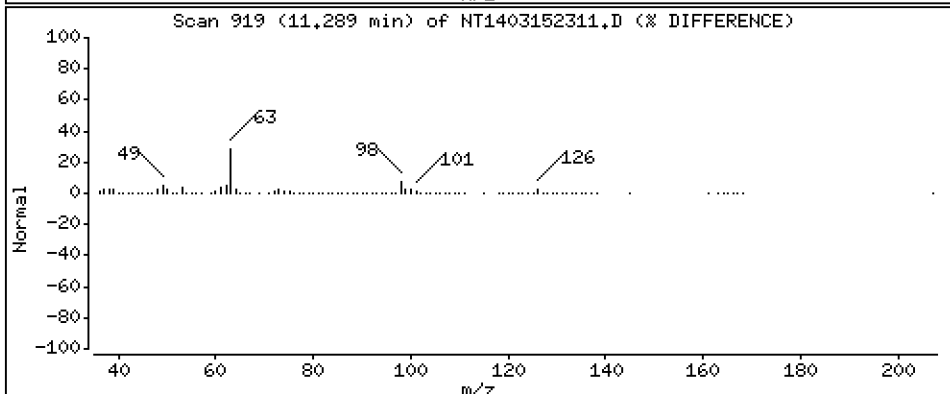
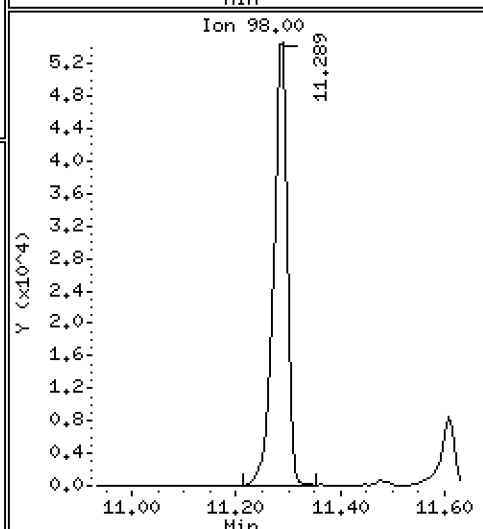
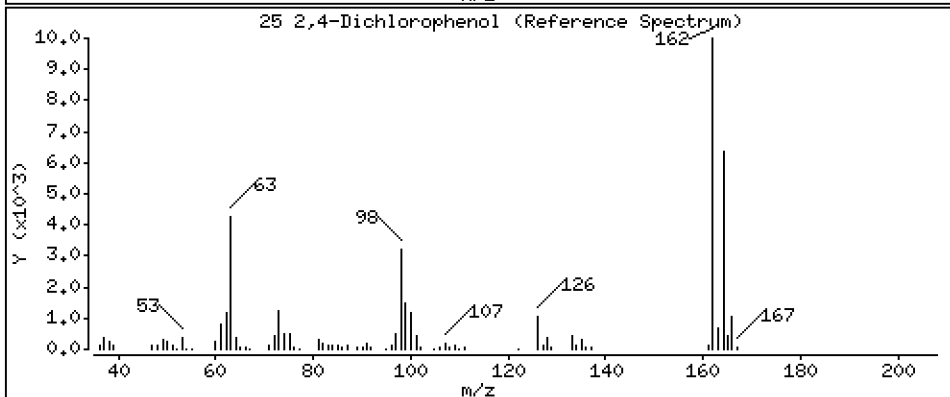
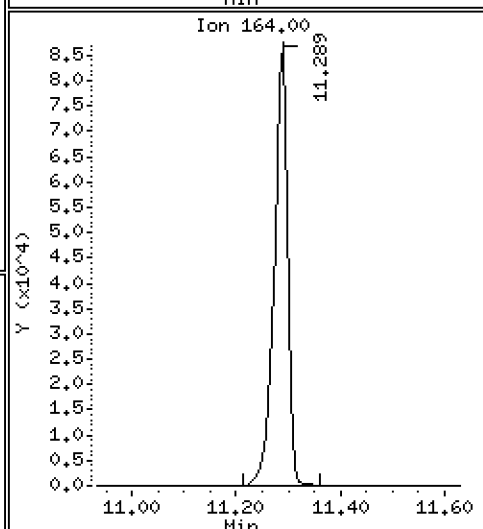
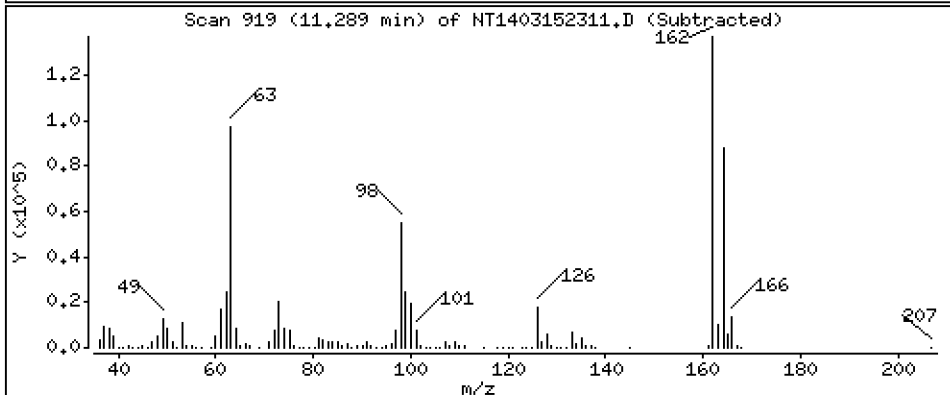
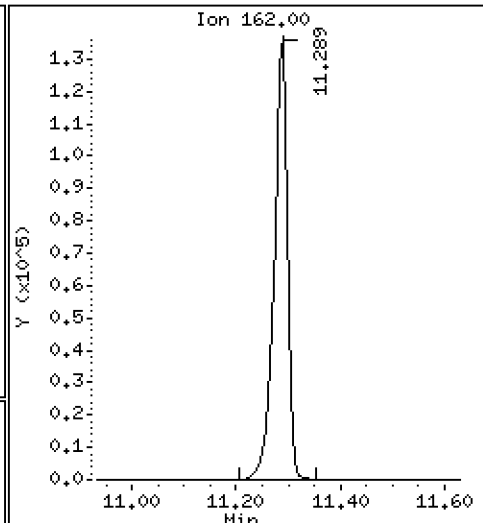
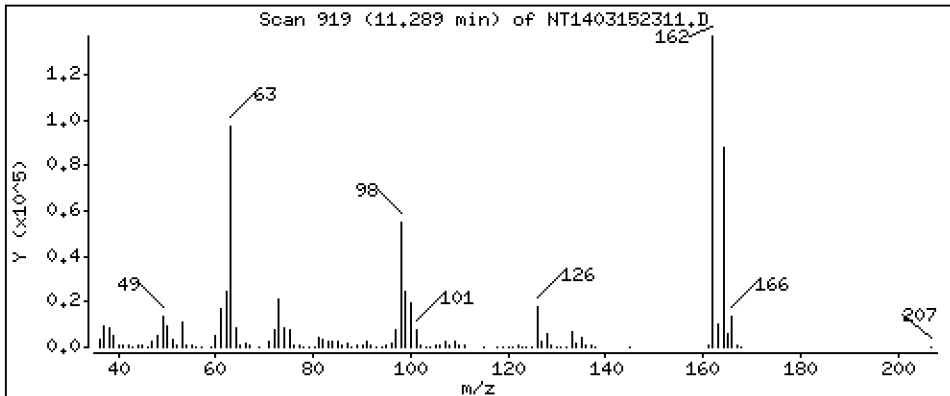
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,779 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

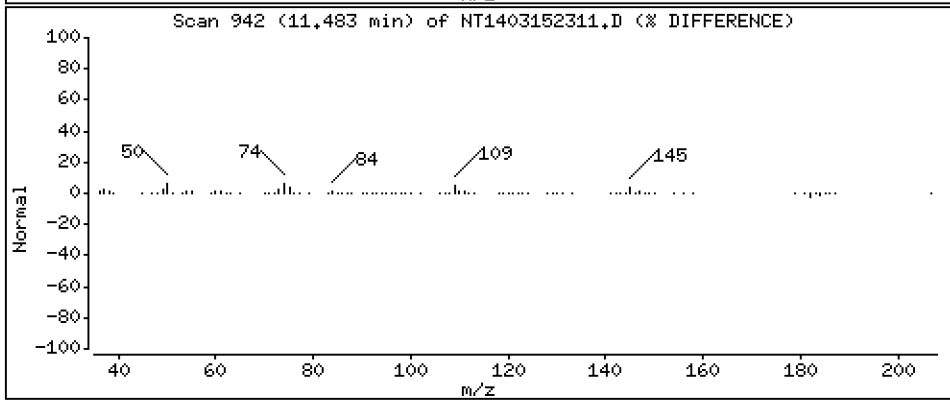
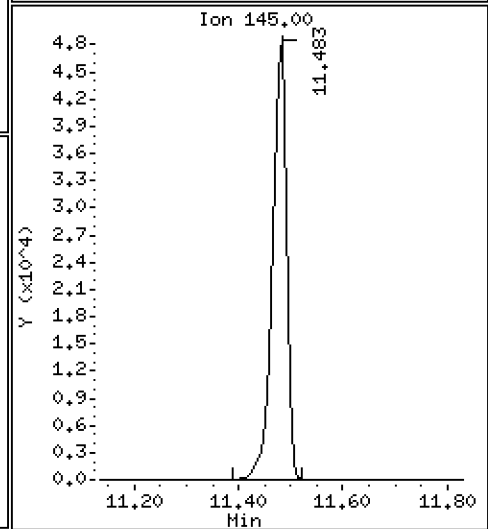
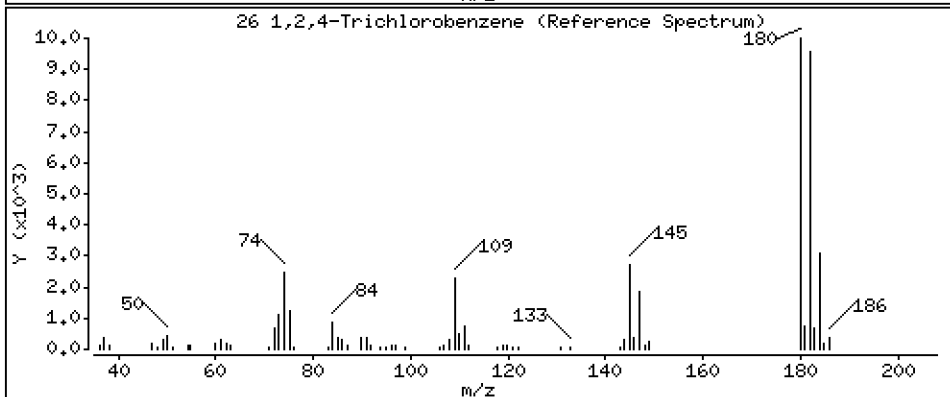
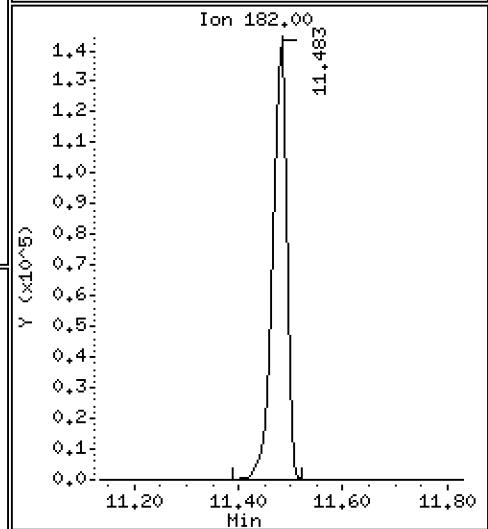
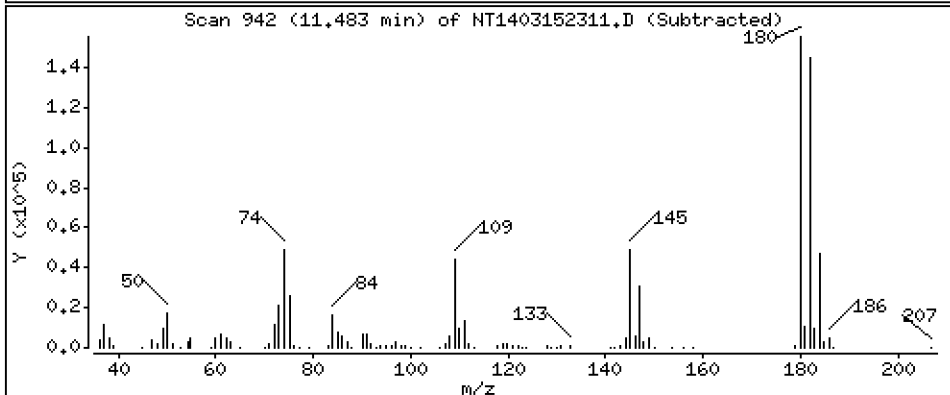
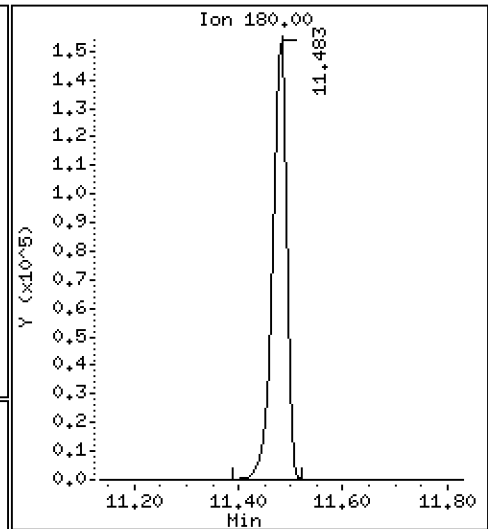
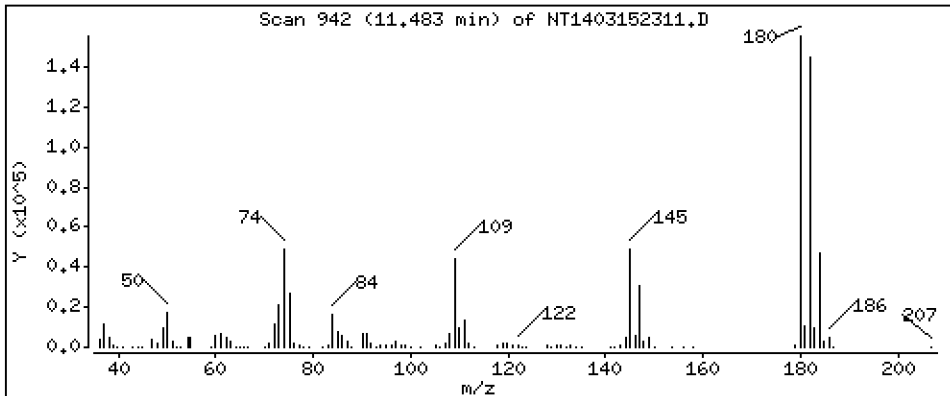
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,052 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

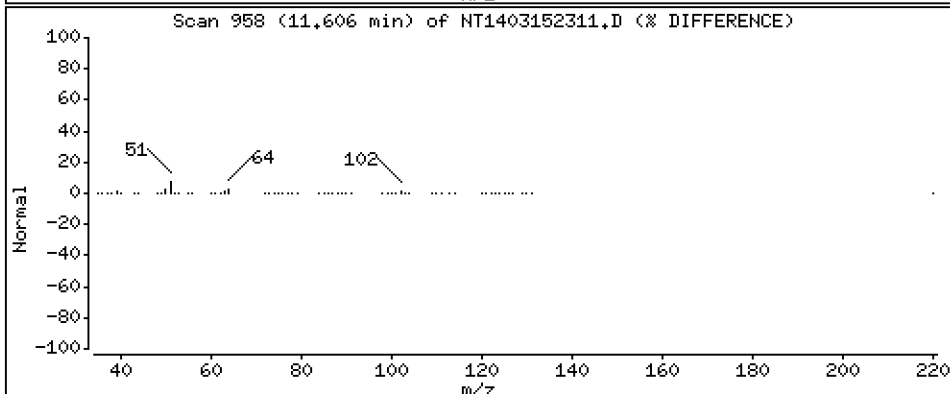
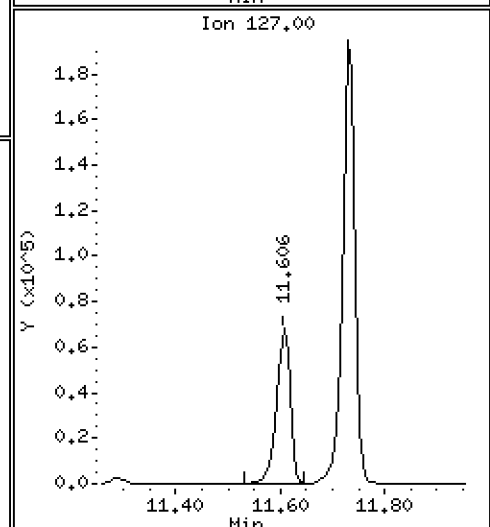
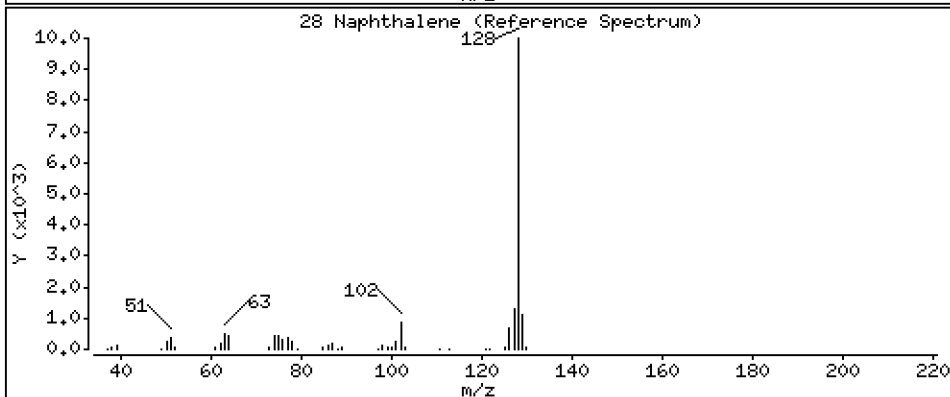
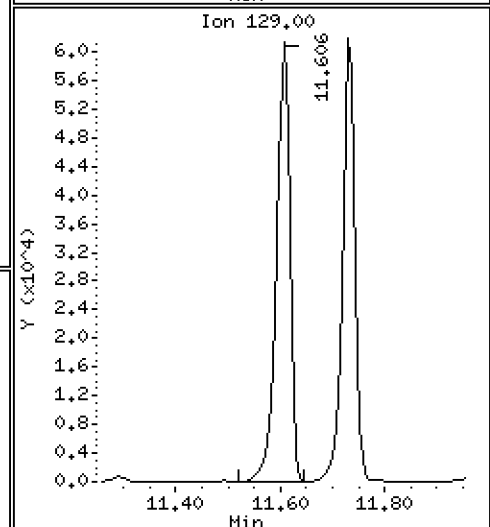
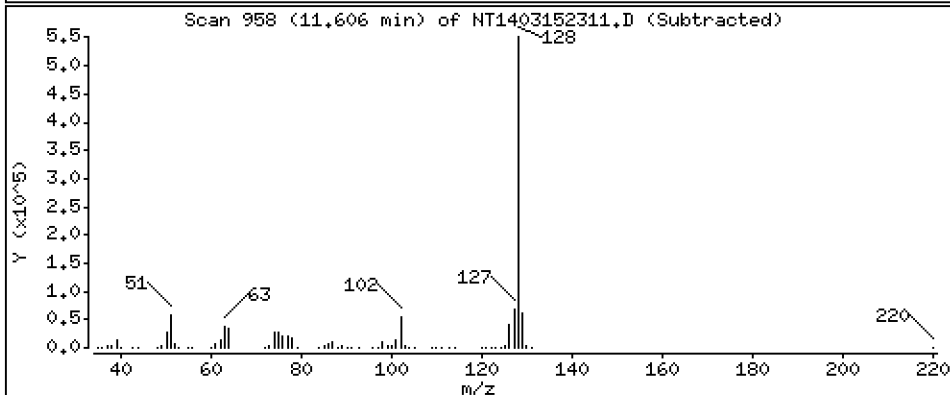
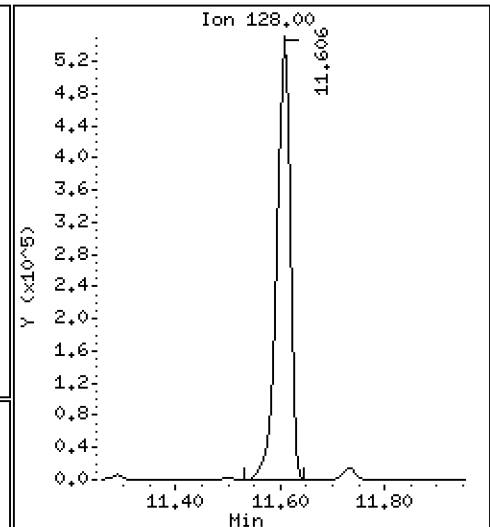
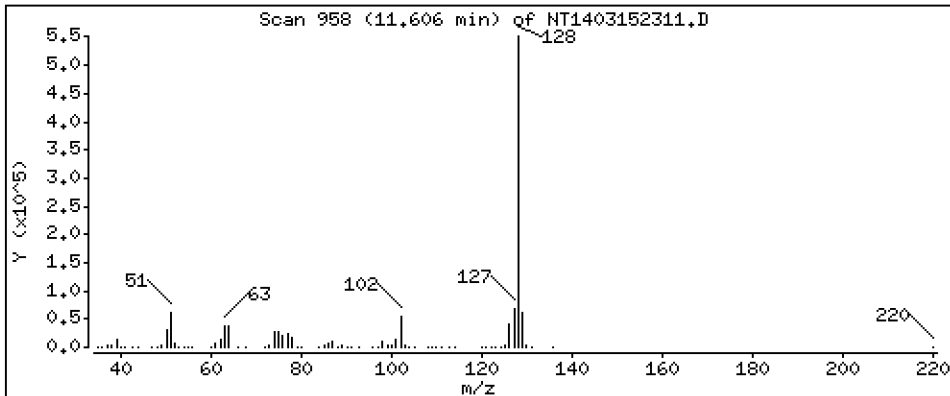
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,829 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

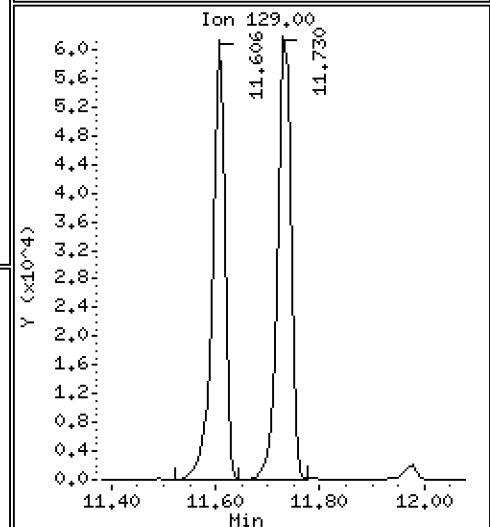
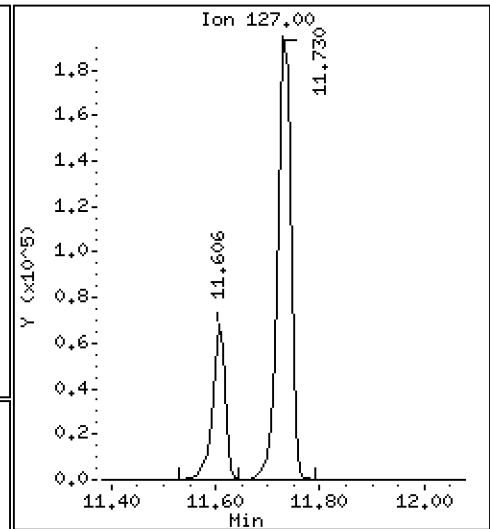
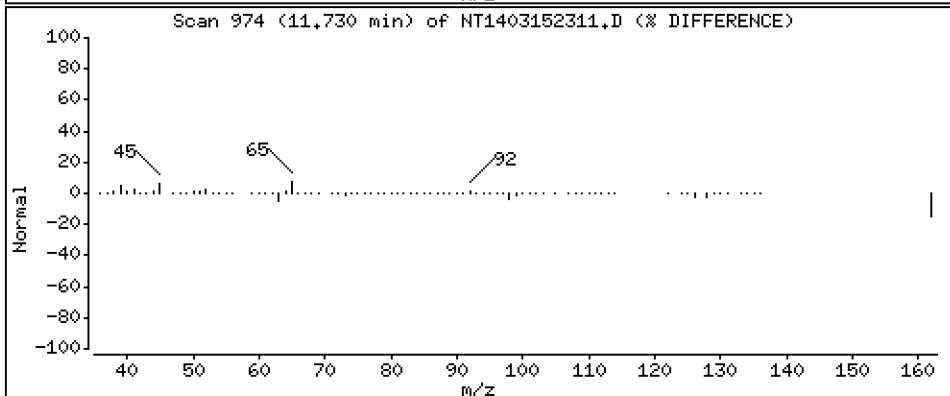
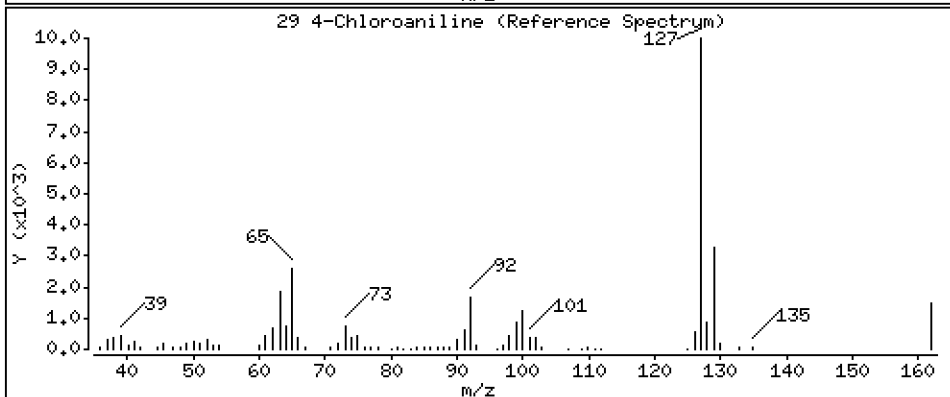
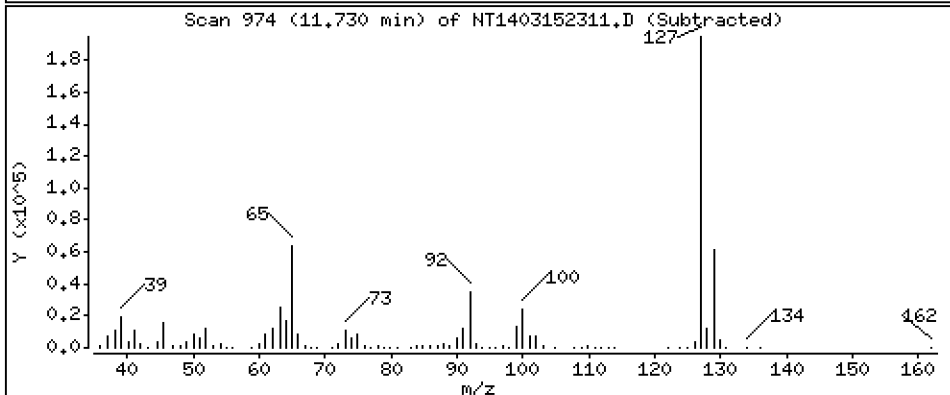
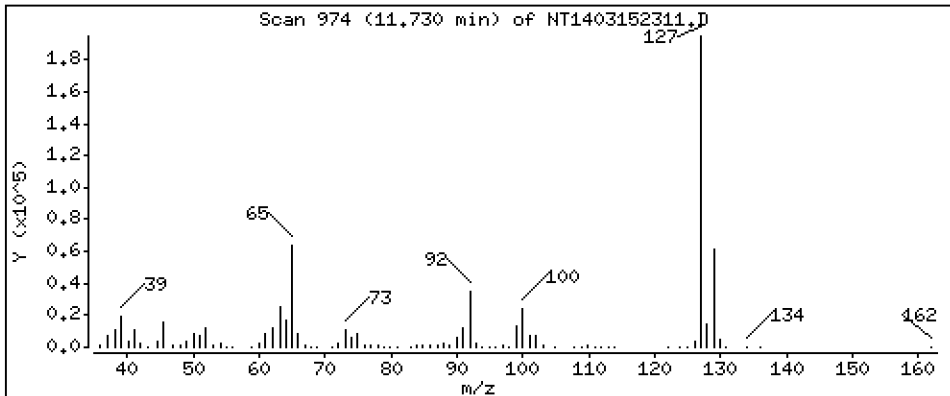
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 4,033 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

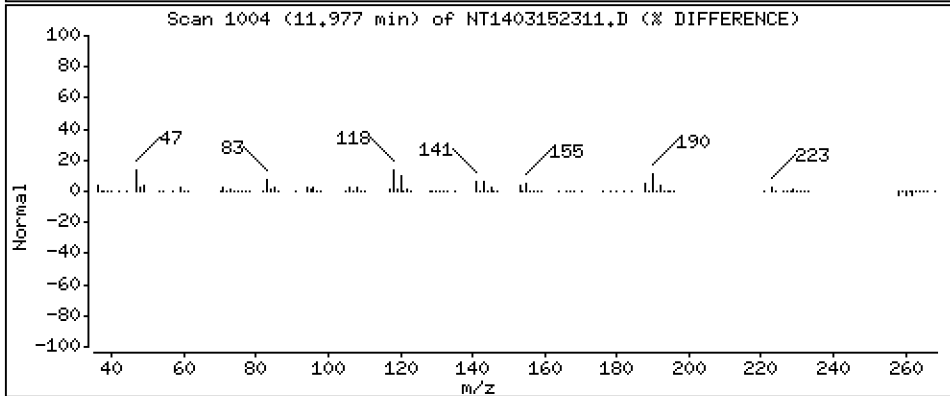
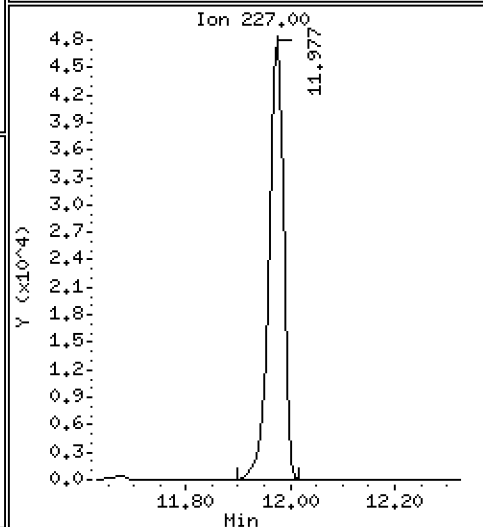
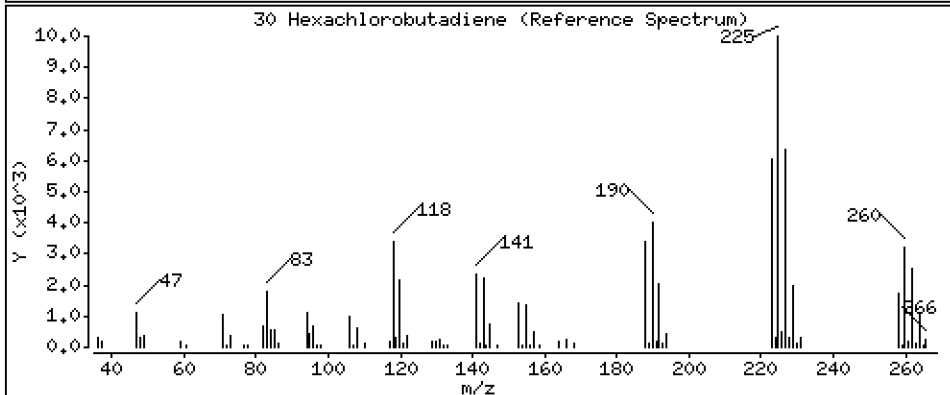
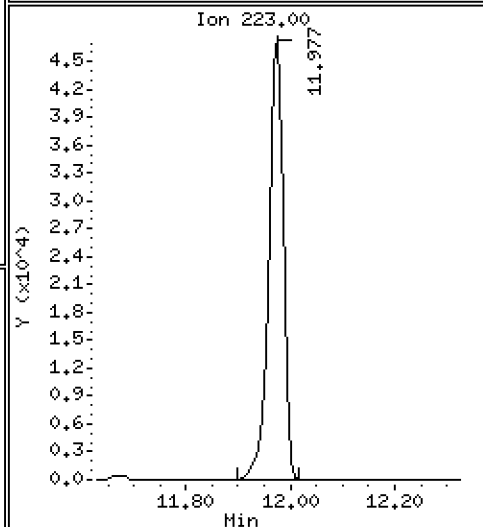
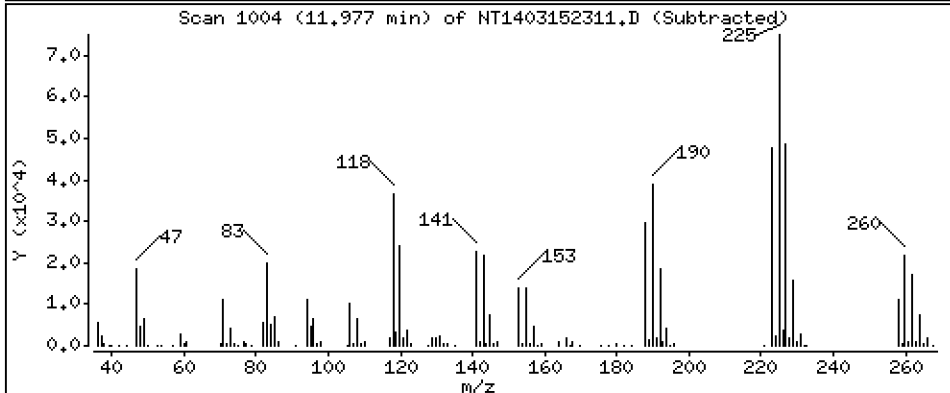
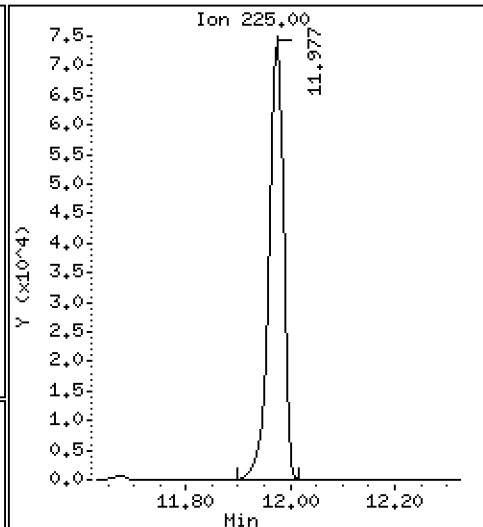
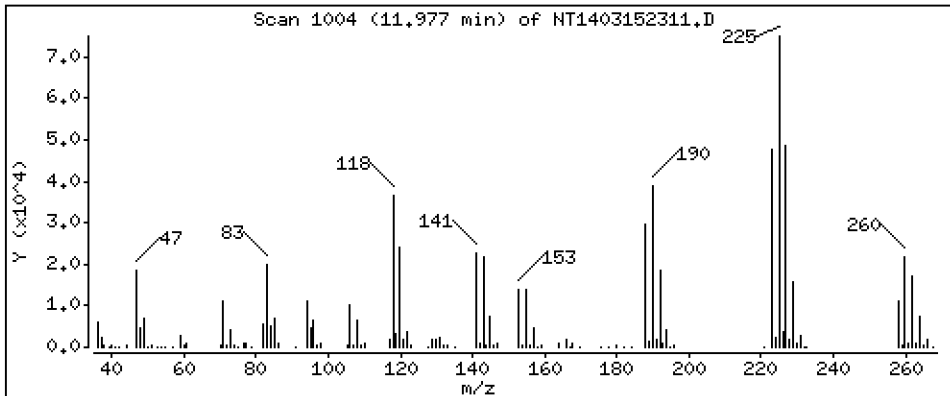
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,908 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

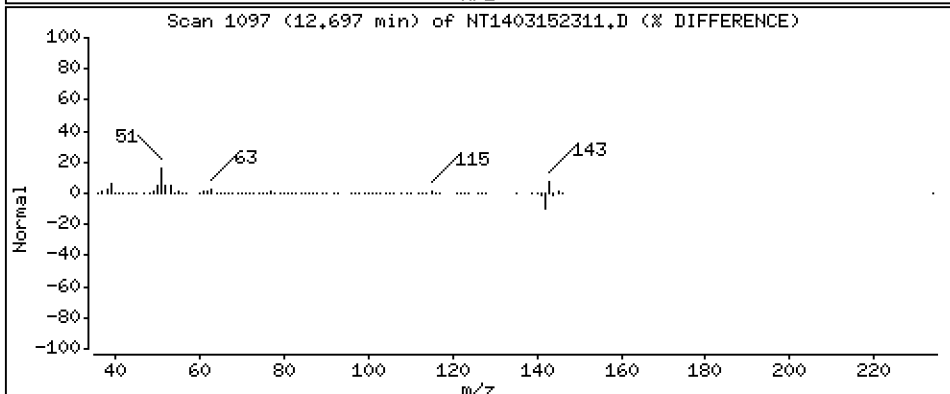
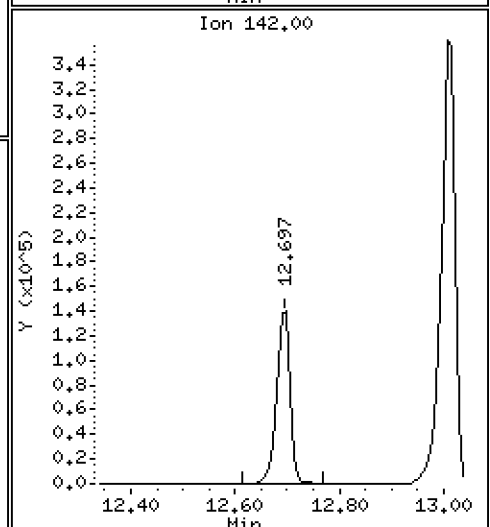
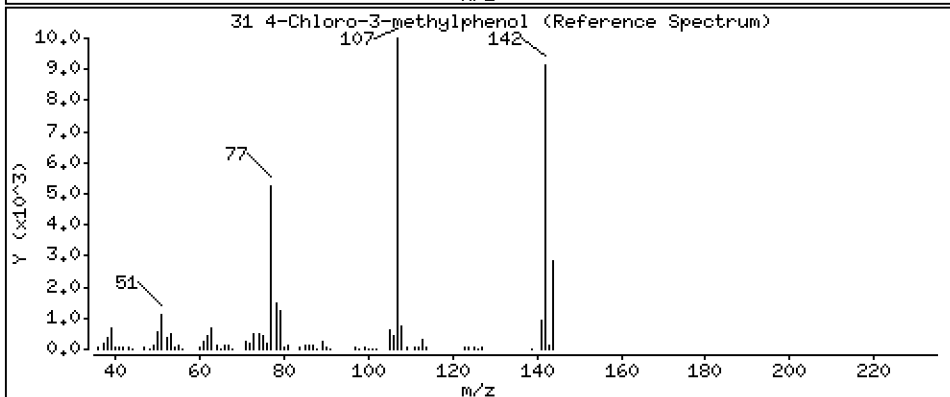
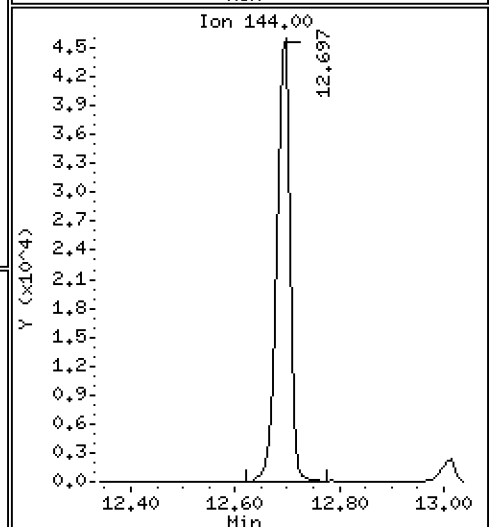
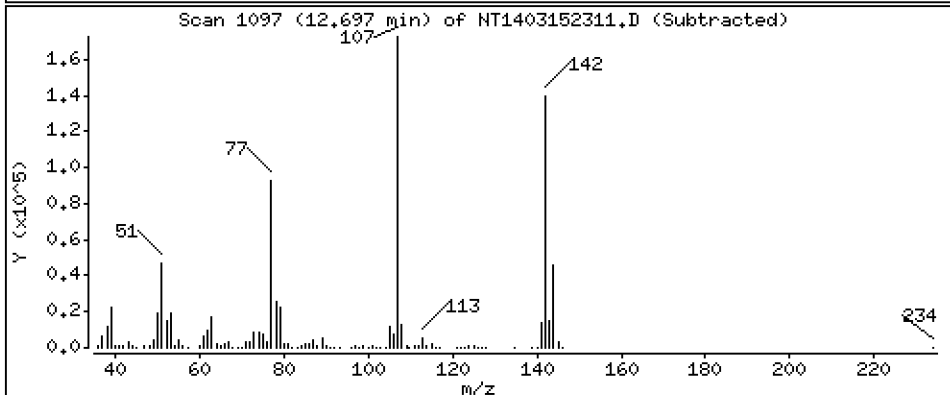
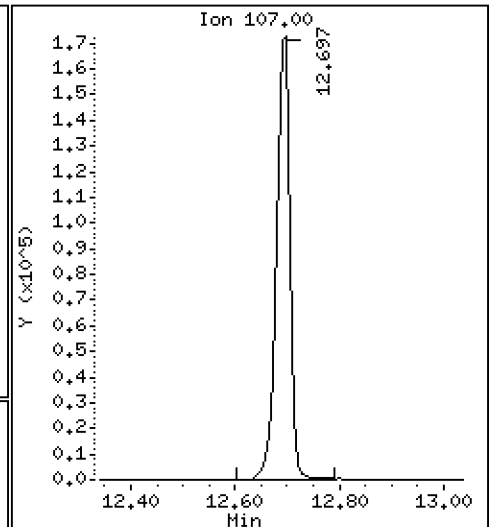
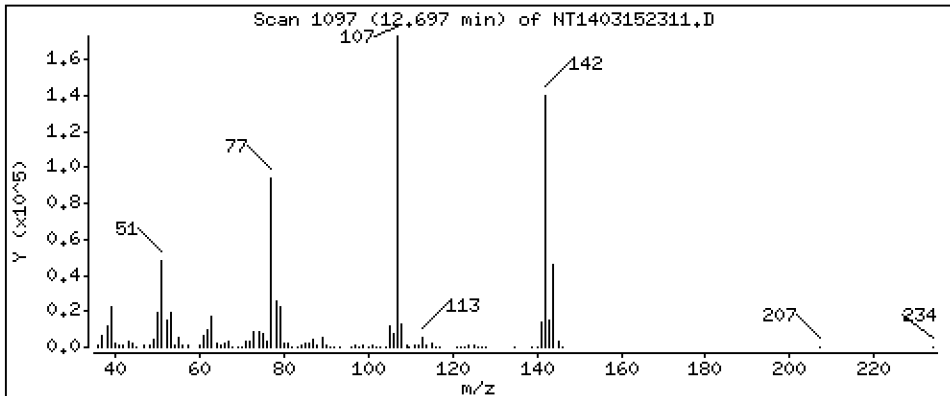
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,852 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

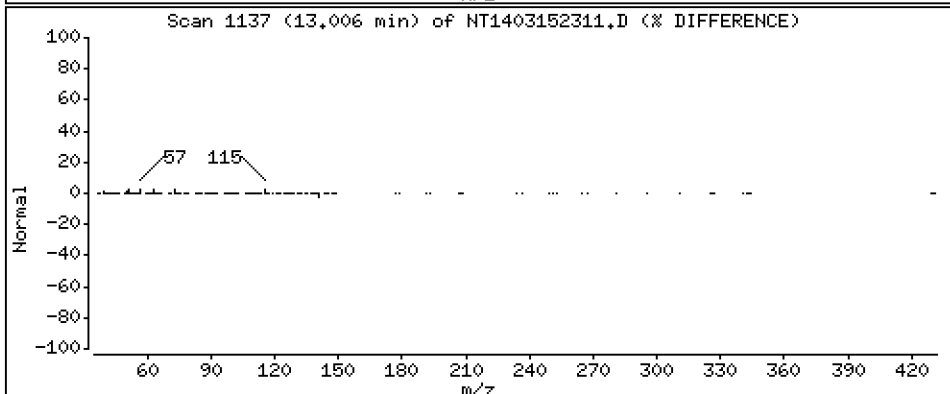
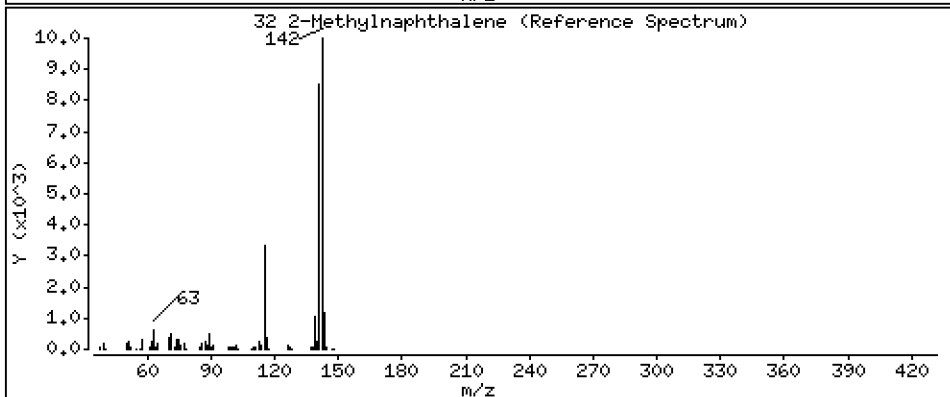
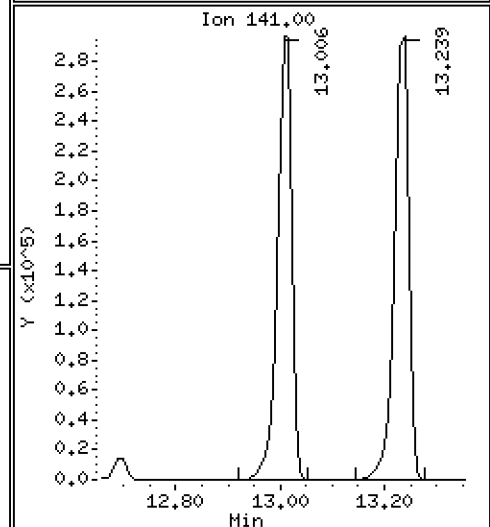
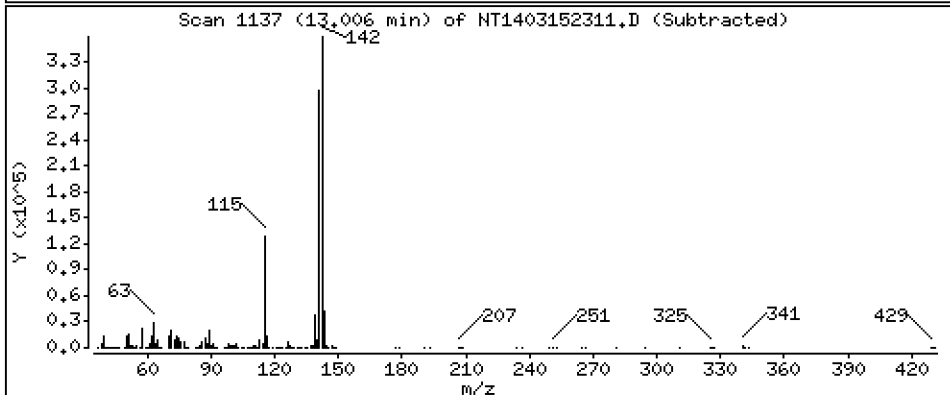
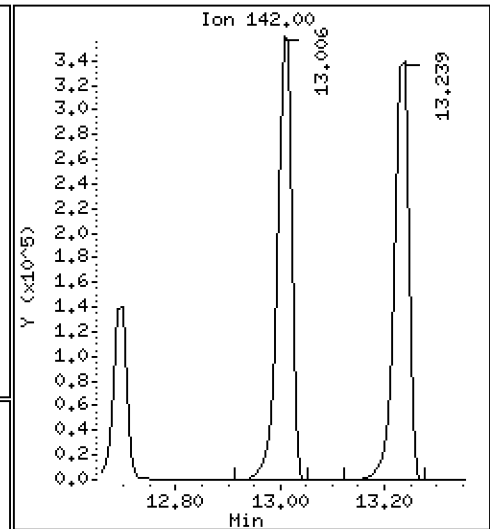
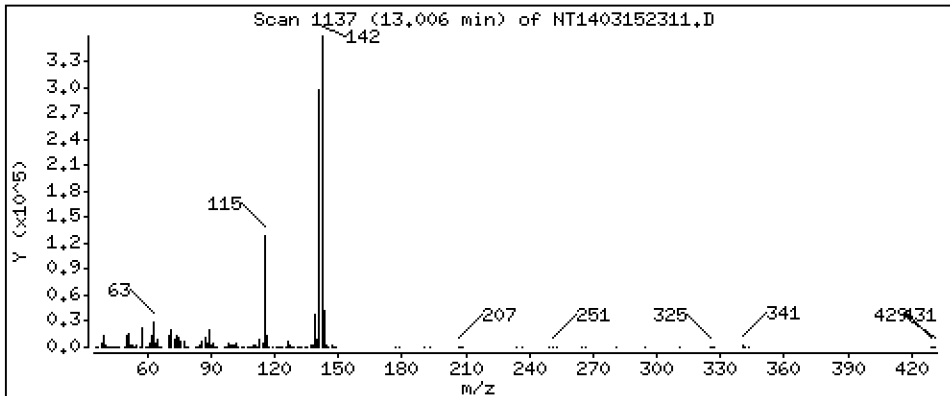
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 4.854 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

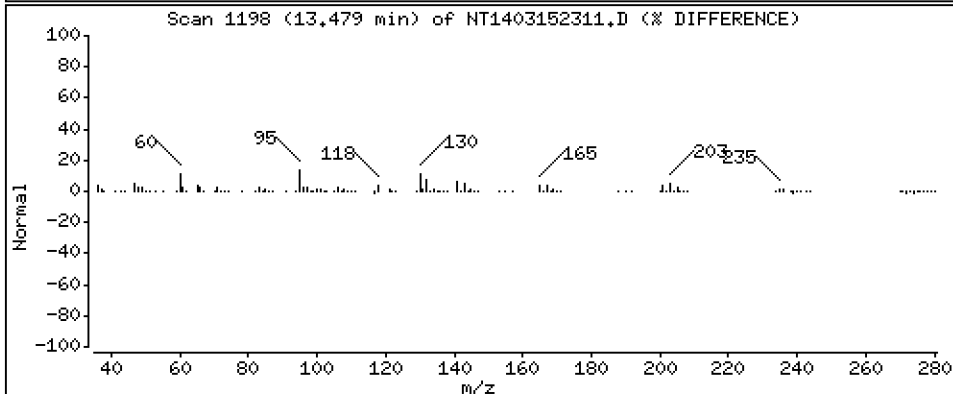
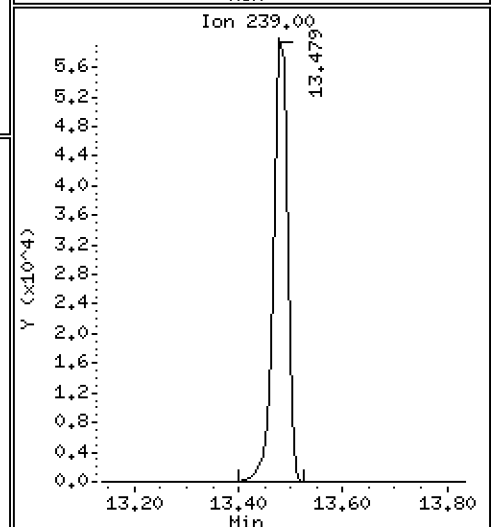
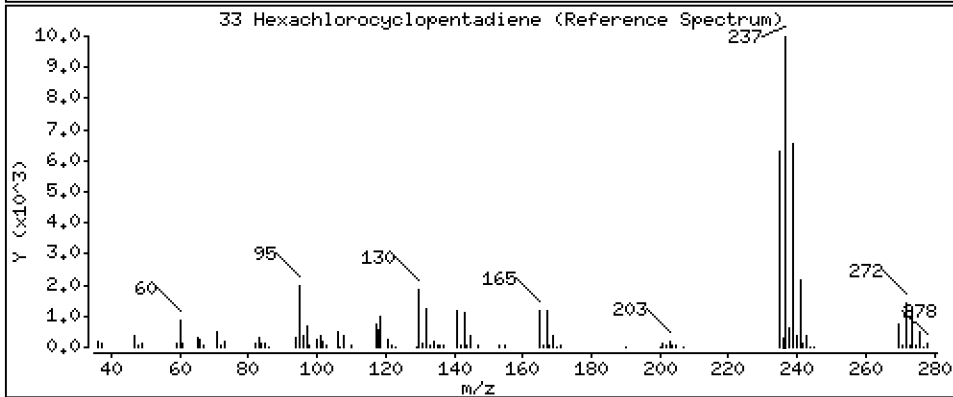
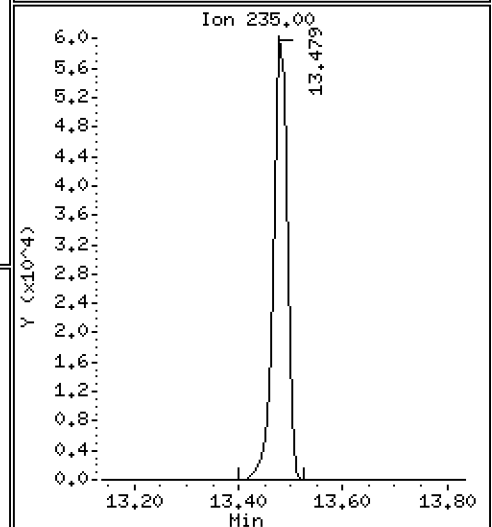
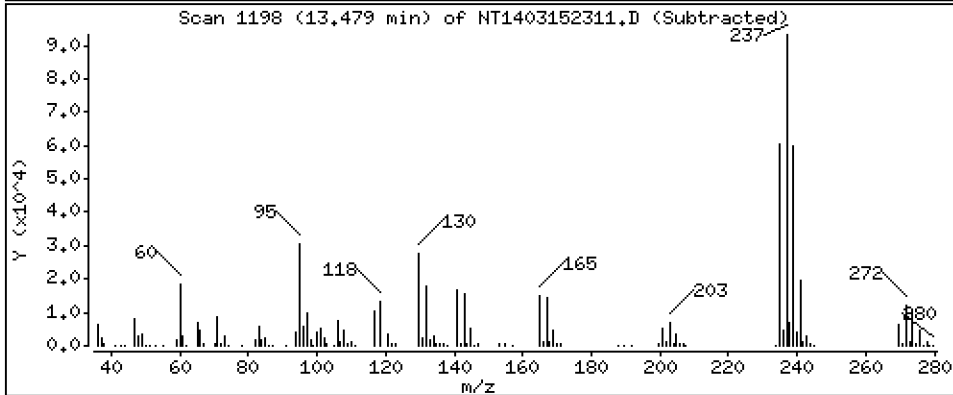
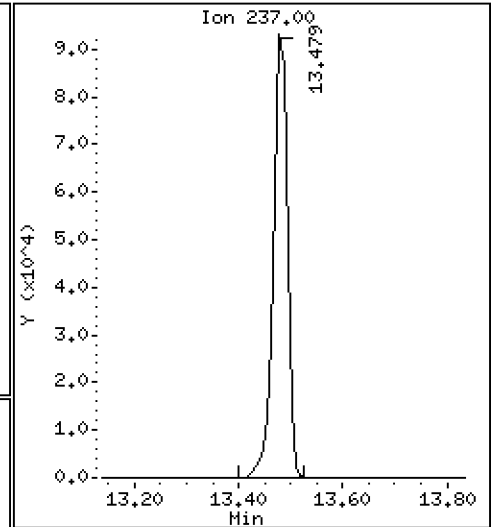
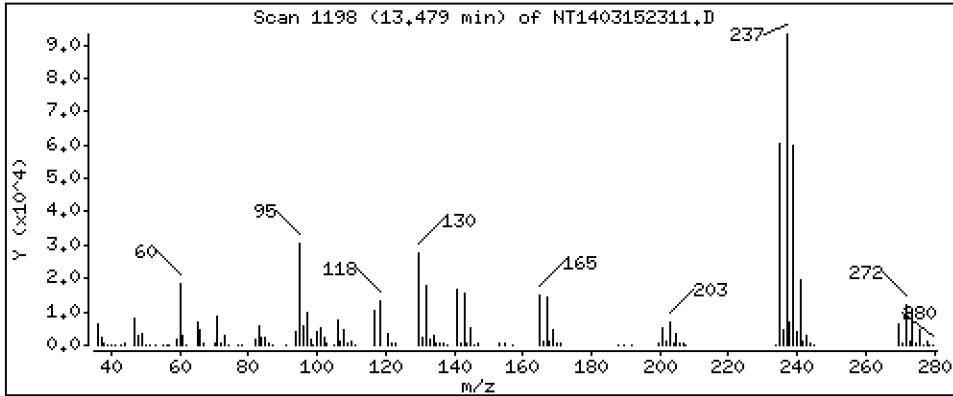
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 5,230 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

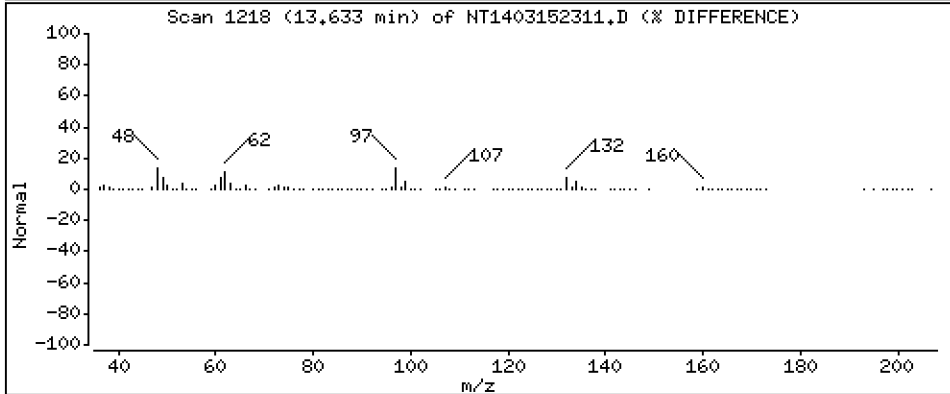
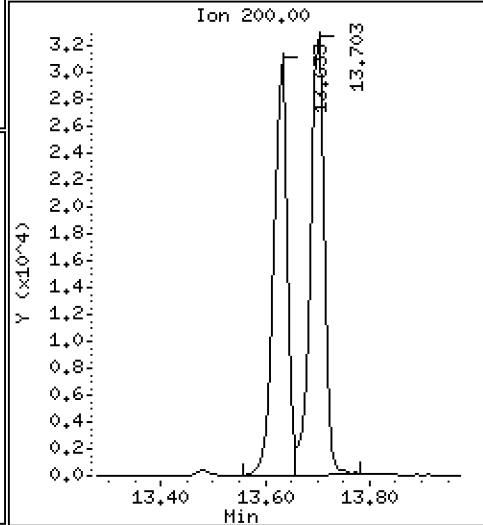
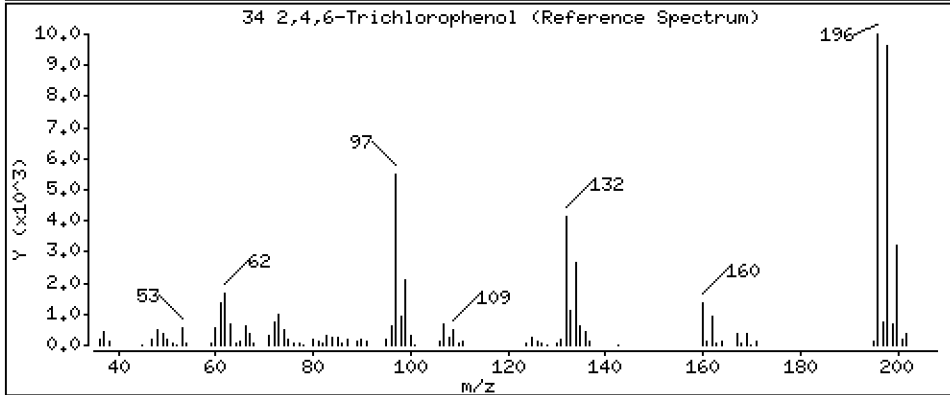
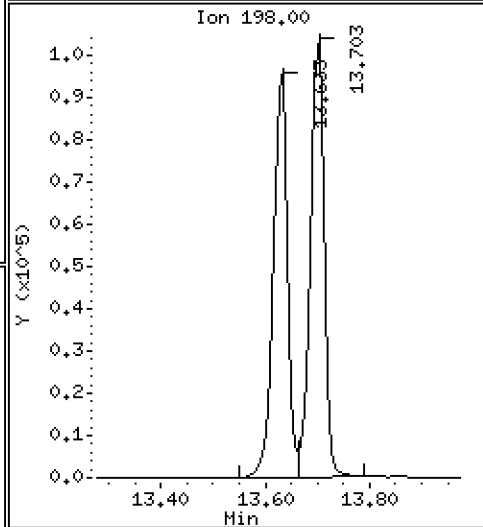
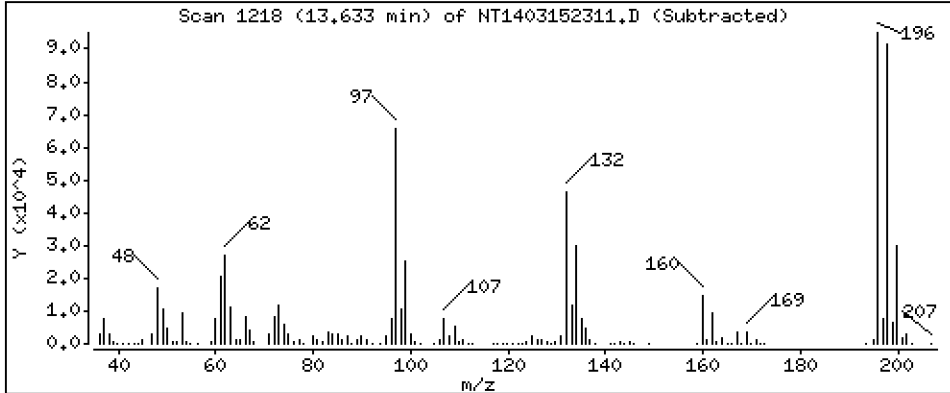
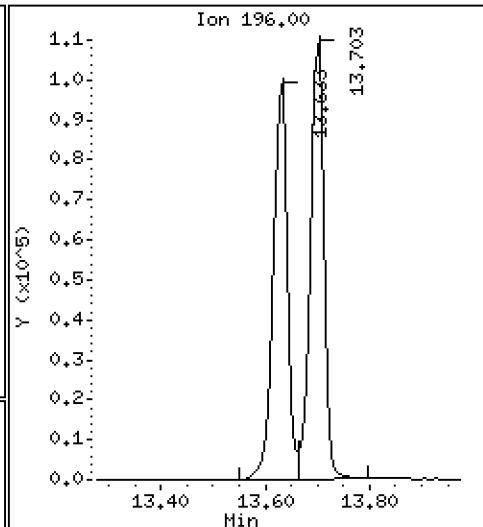
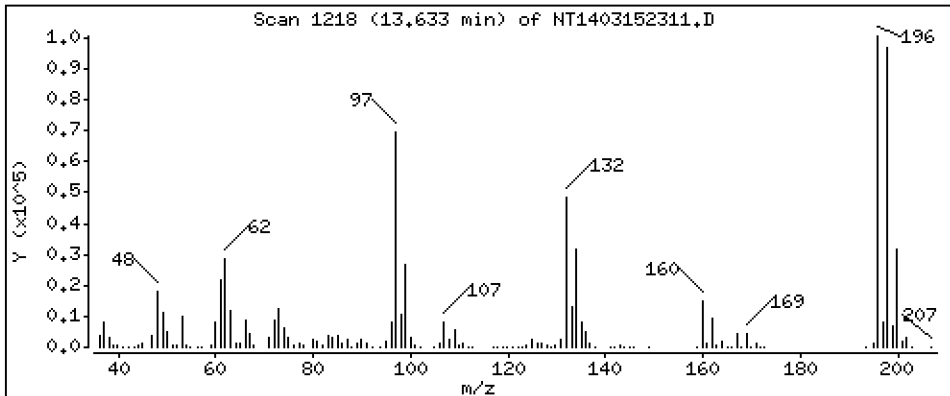
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,718 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

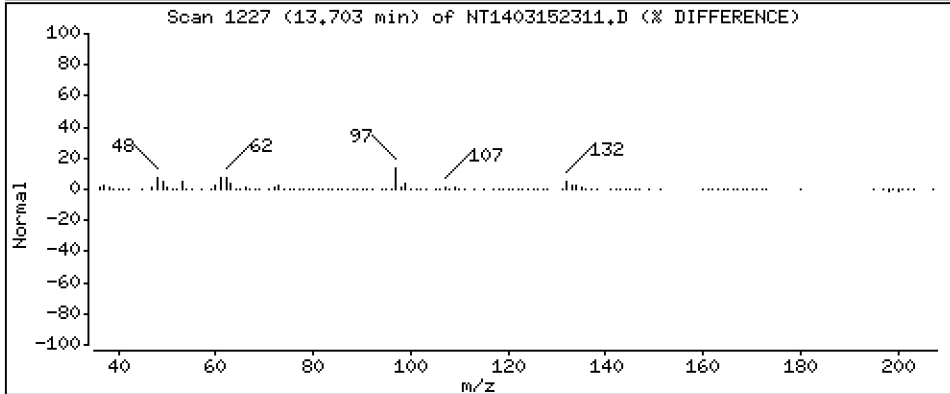
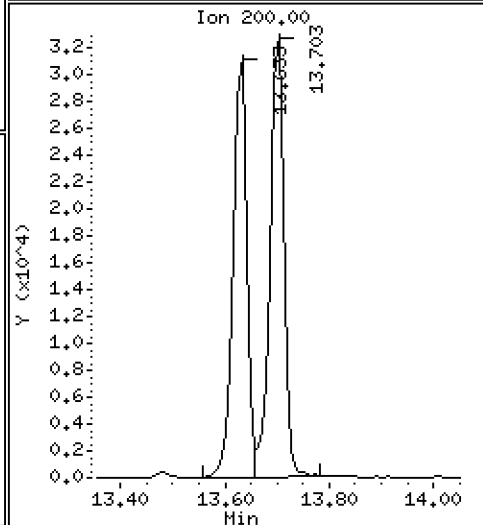
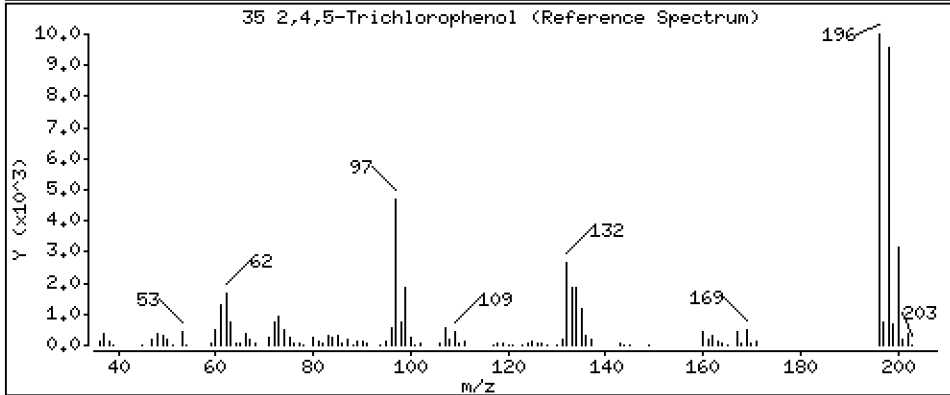
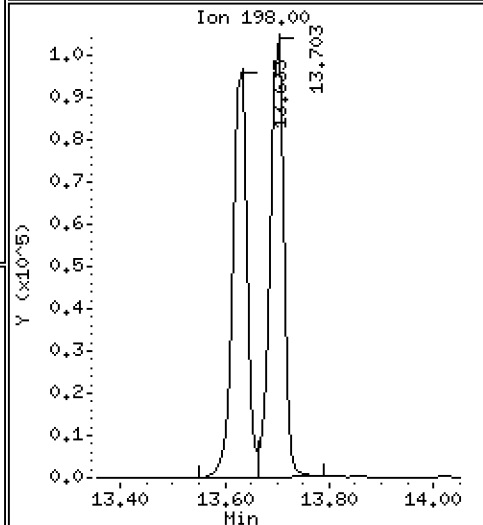
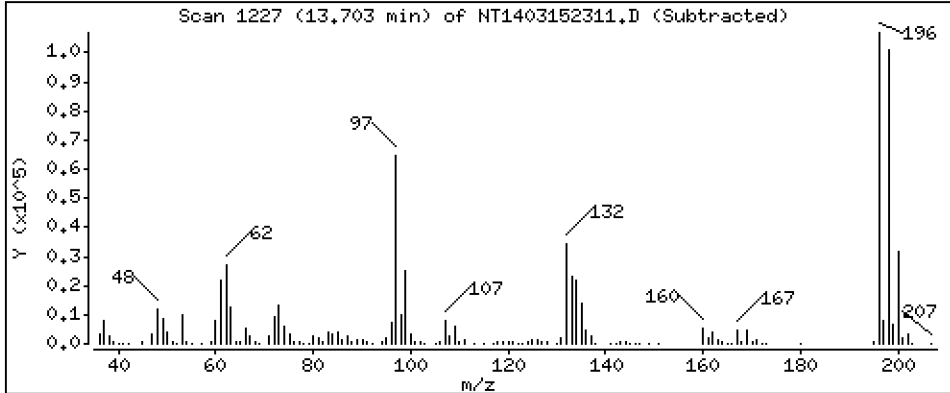
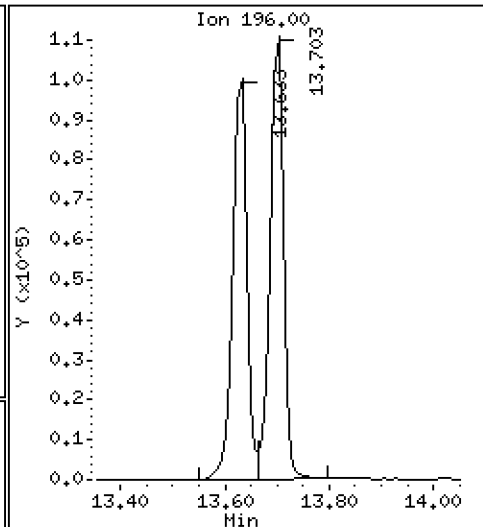
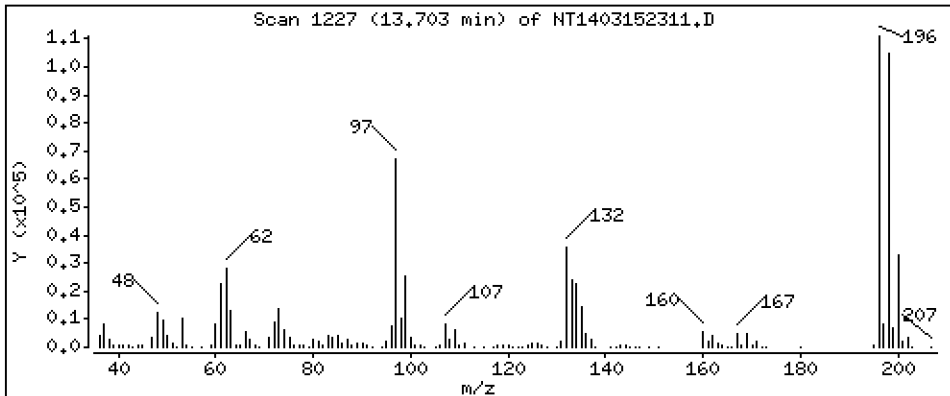
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,661 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

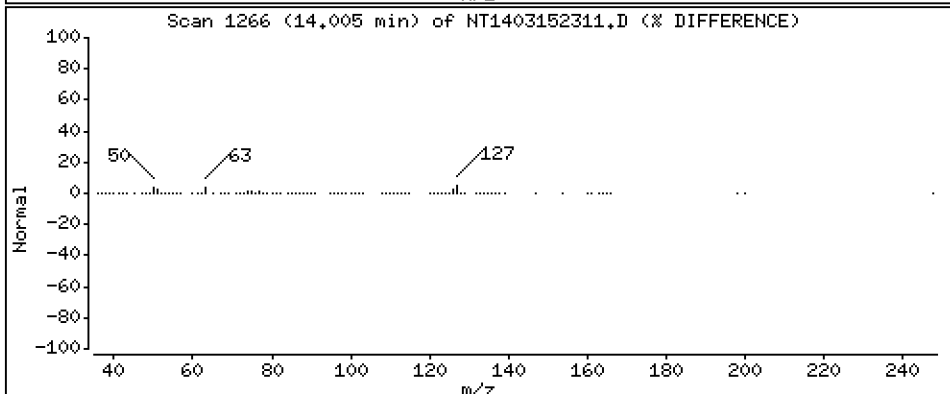
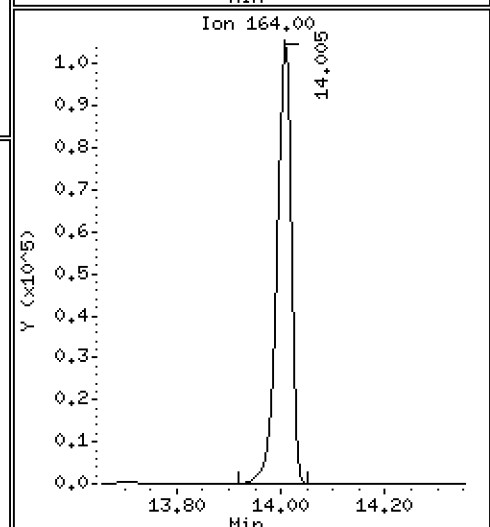
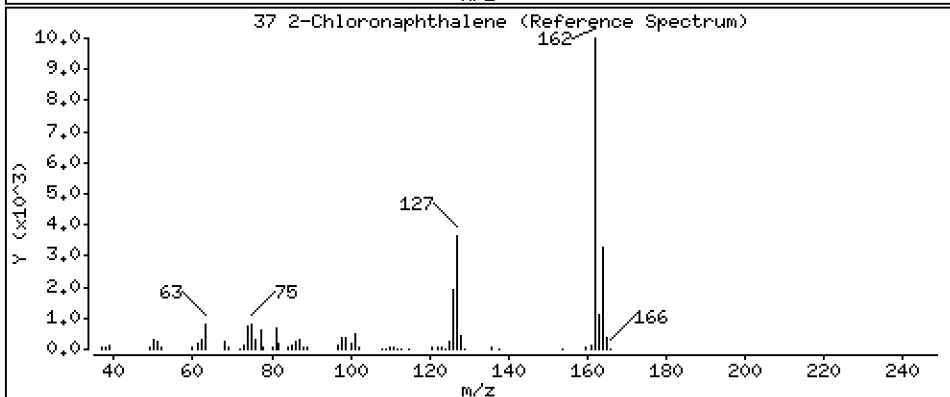
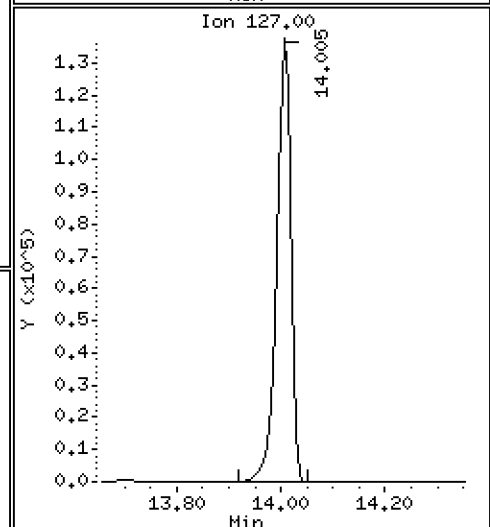
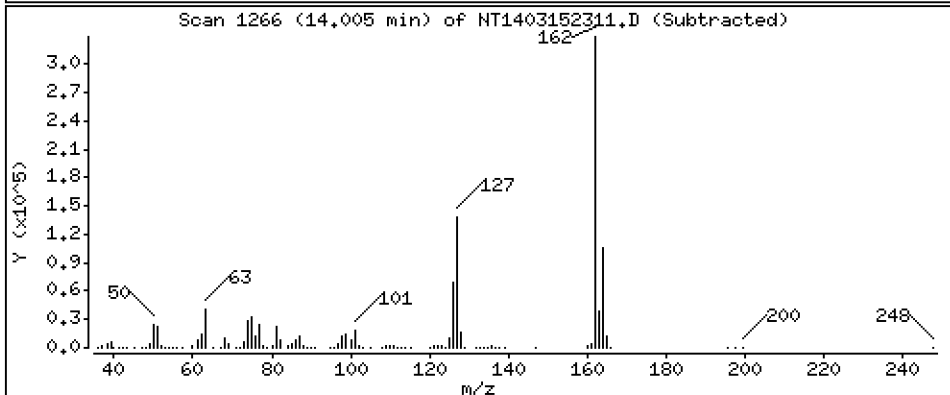
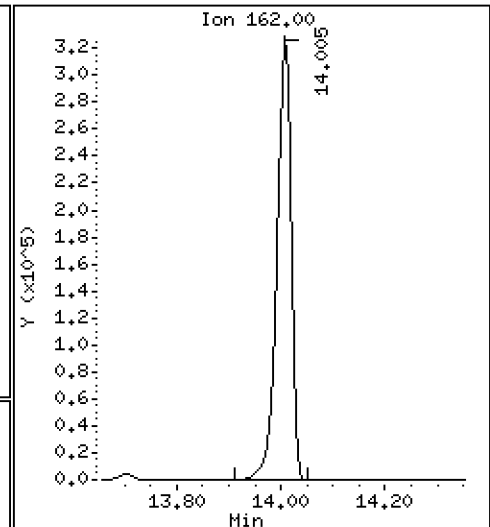
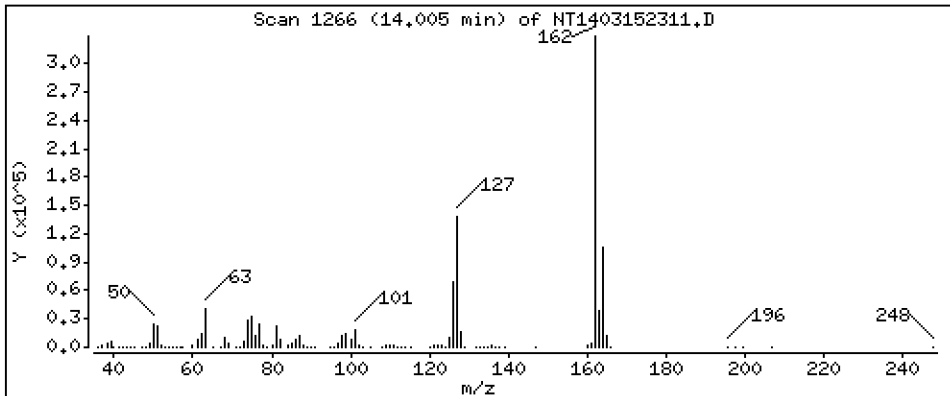
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 4,977 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

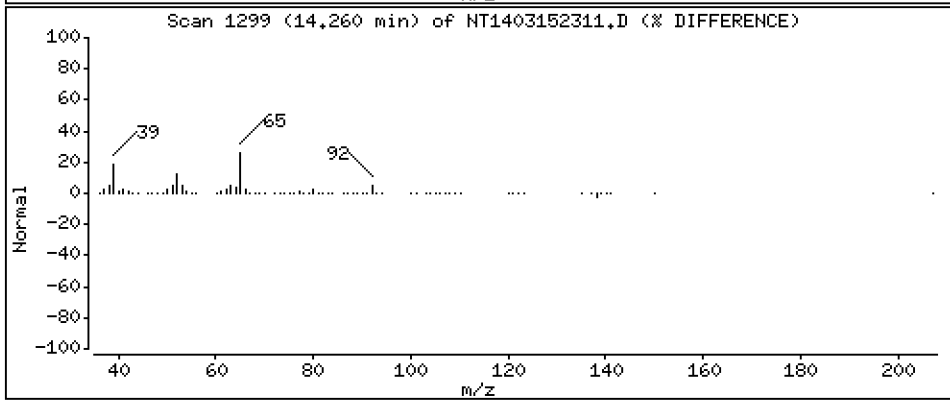
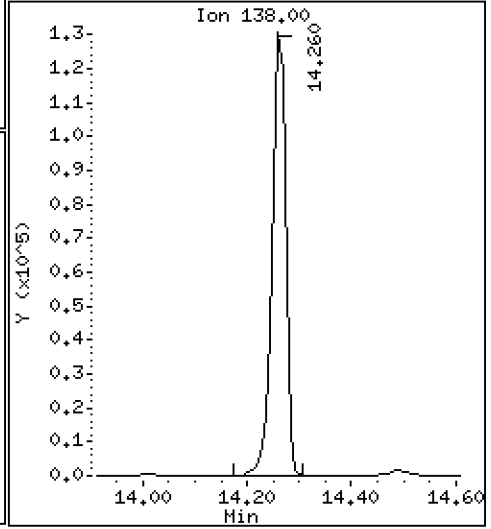
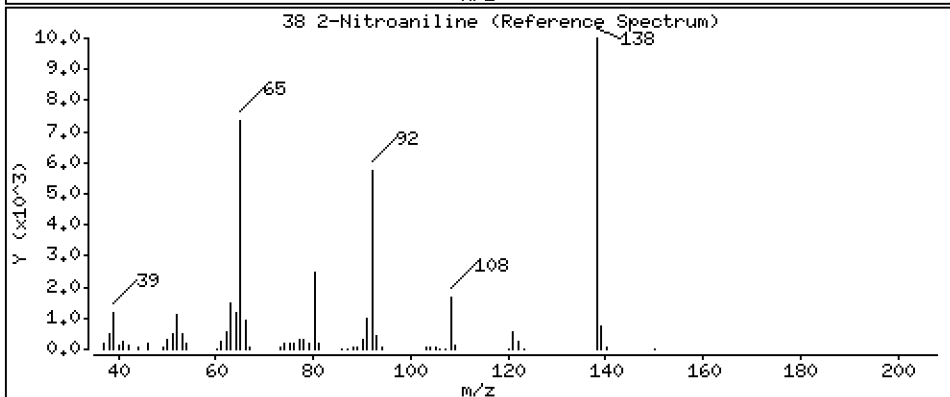
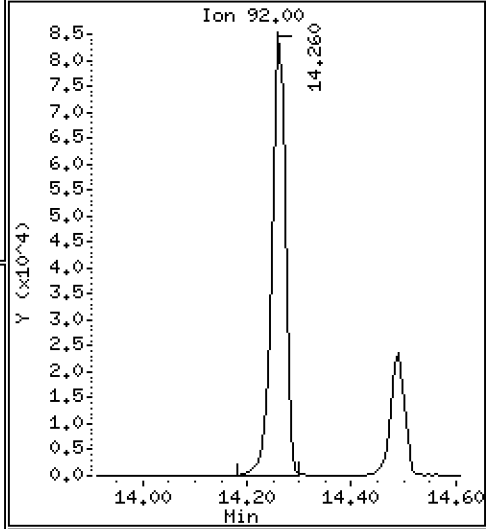
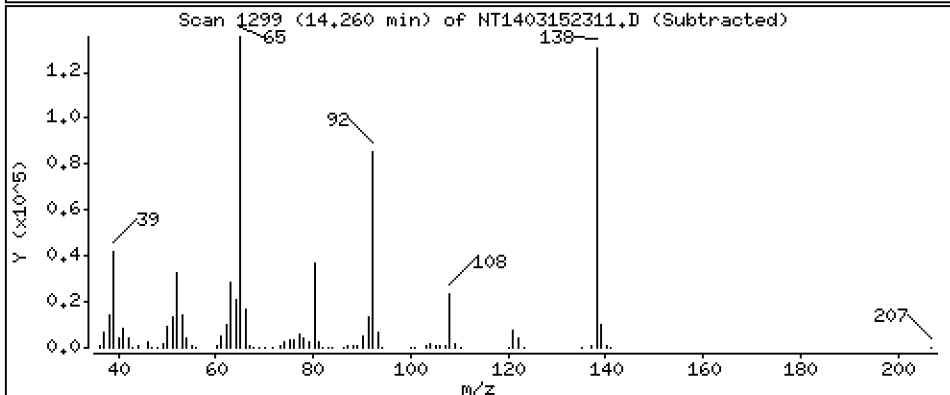
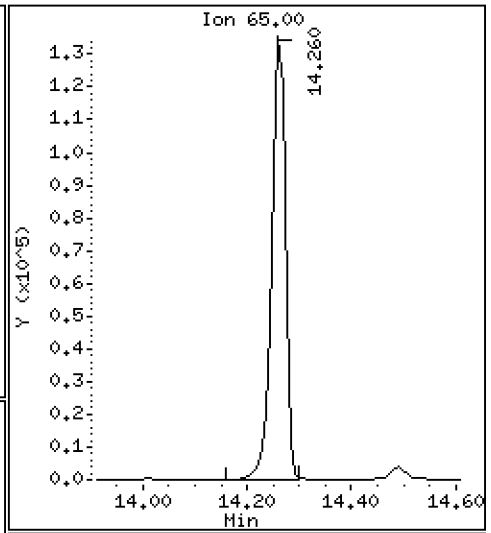
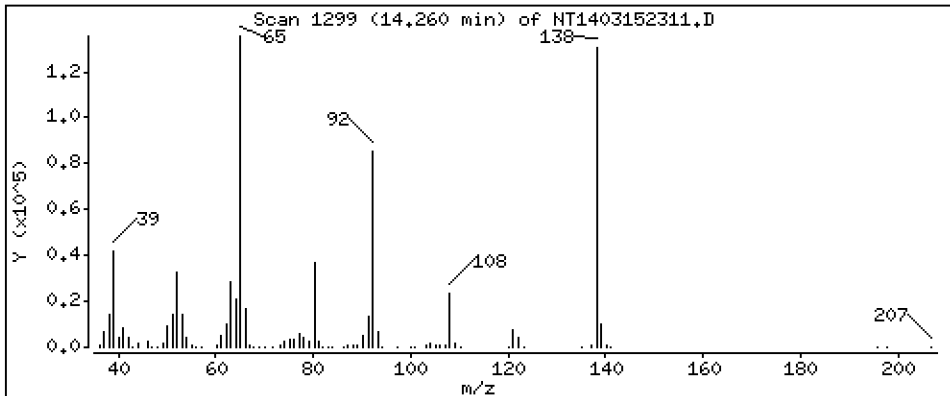
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

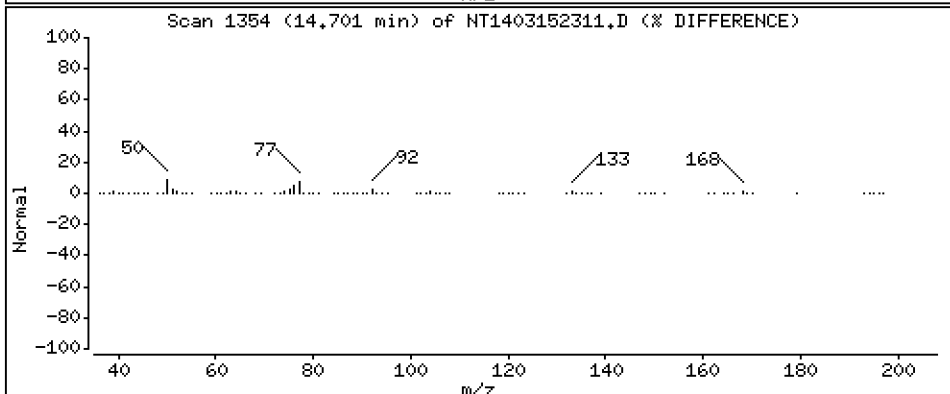
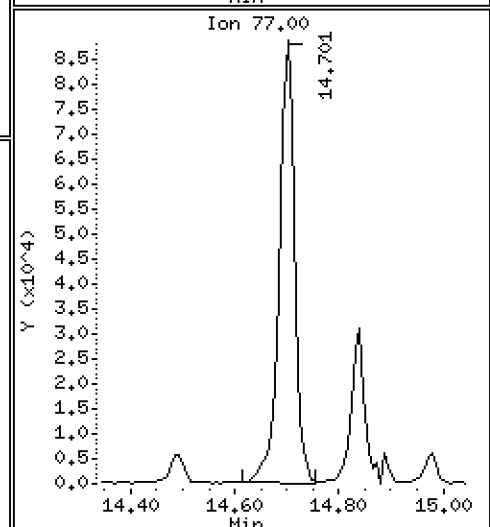
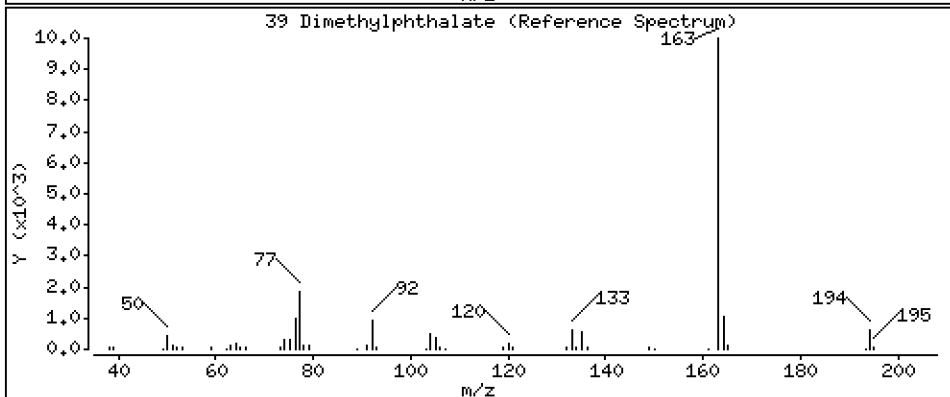
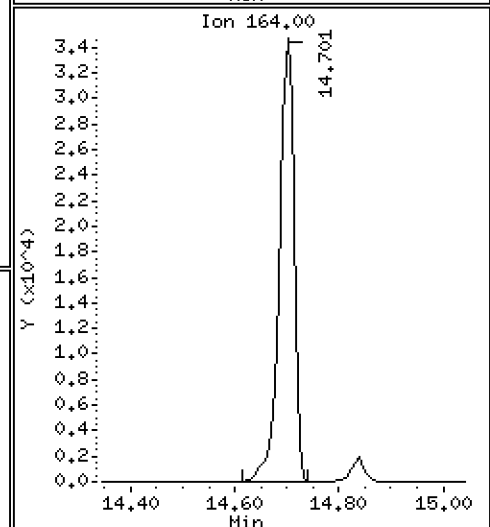
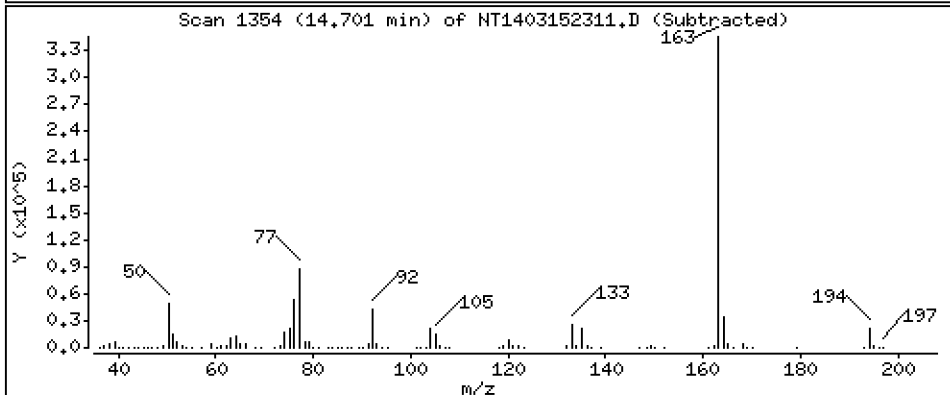
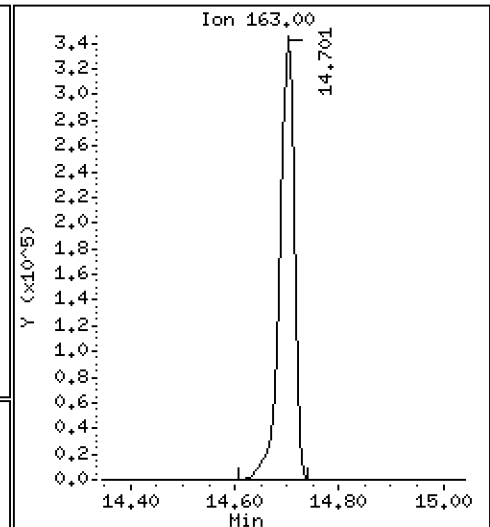
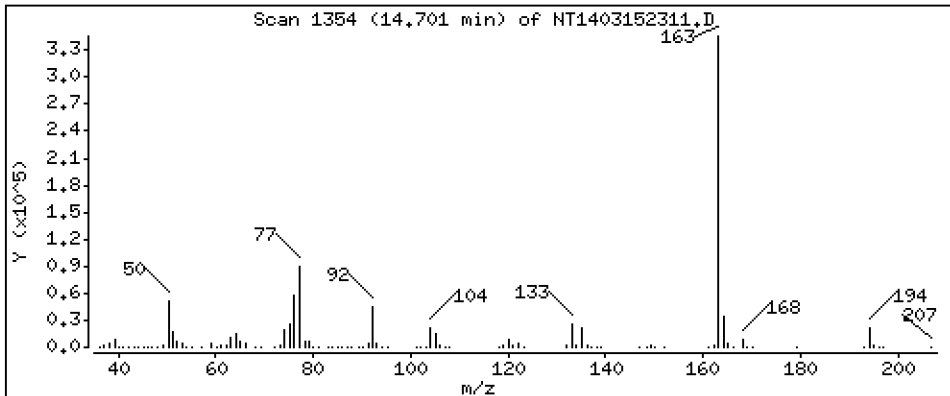
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,031 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

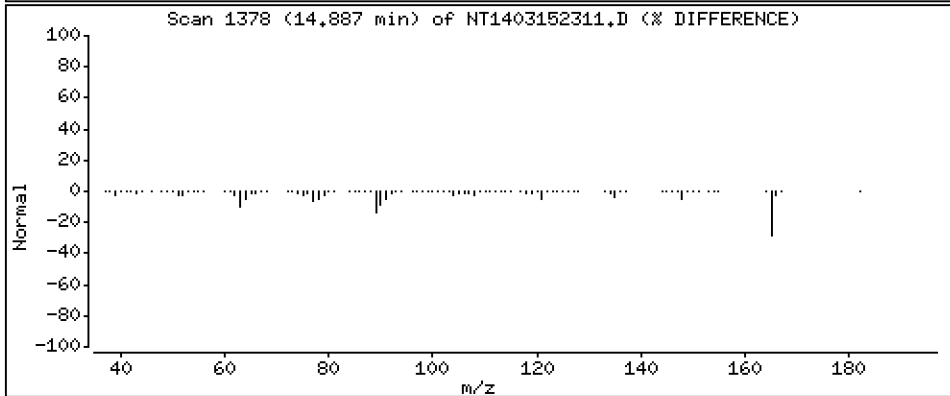
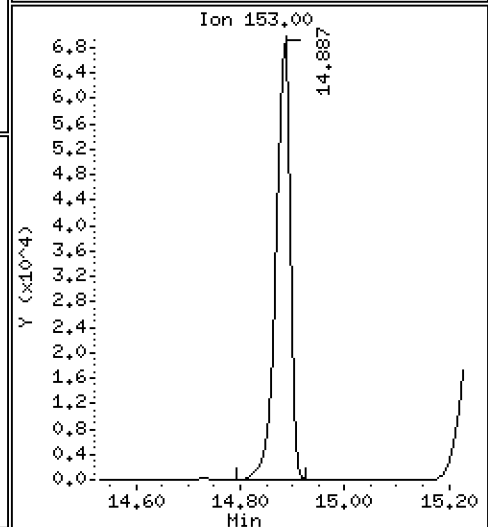
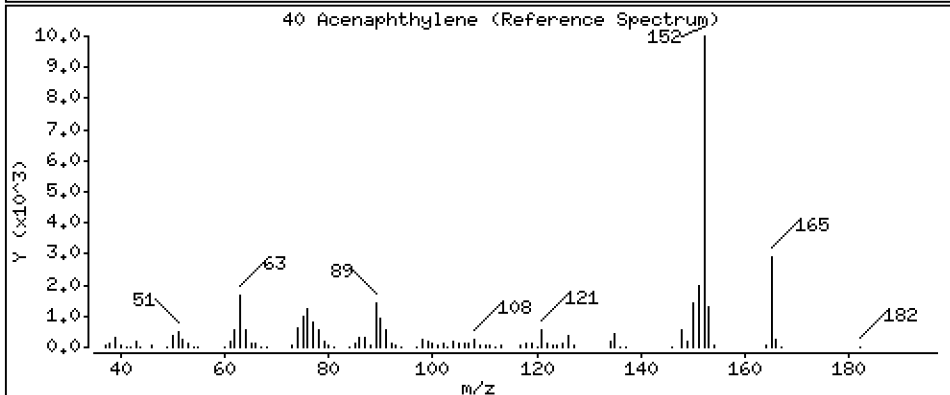
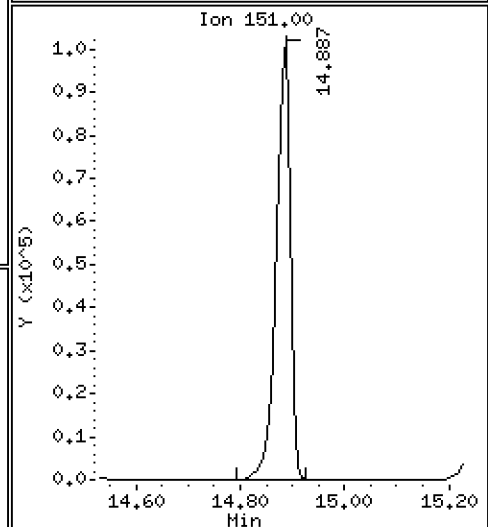
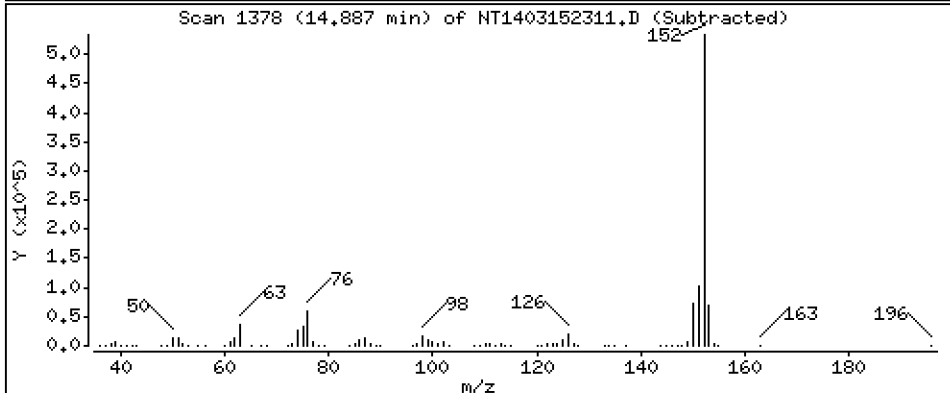
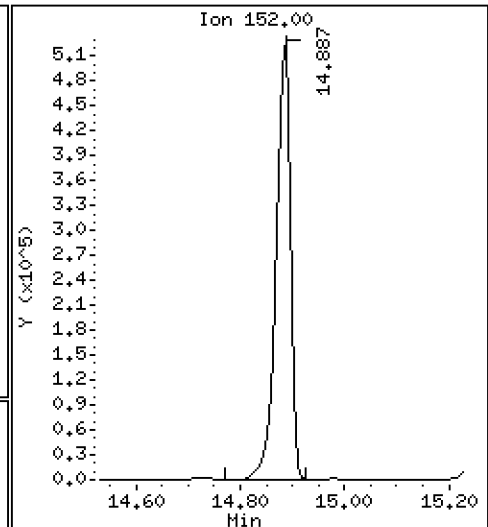
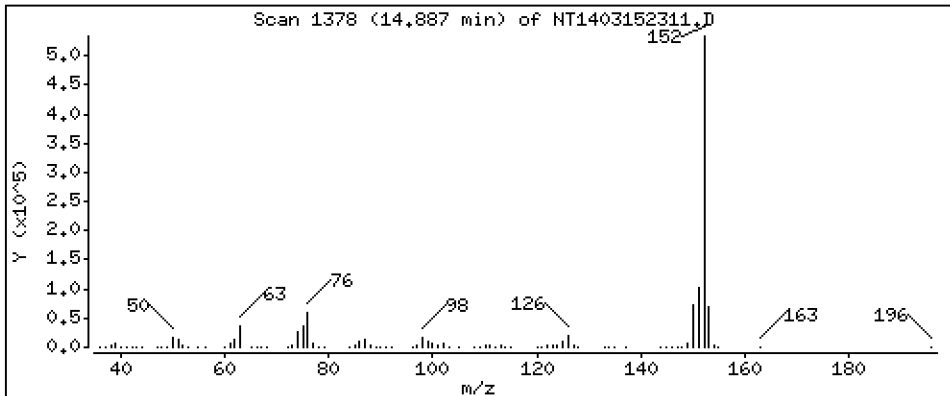
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,879 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

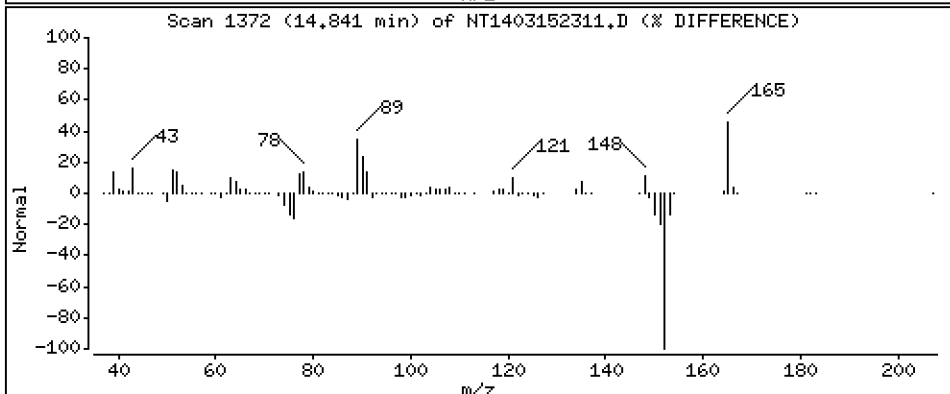
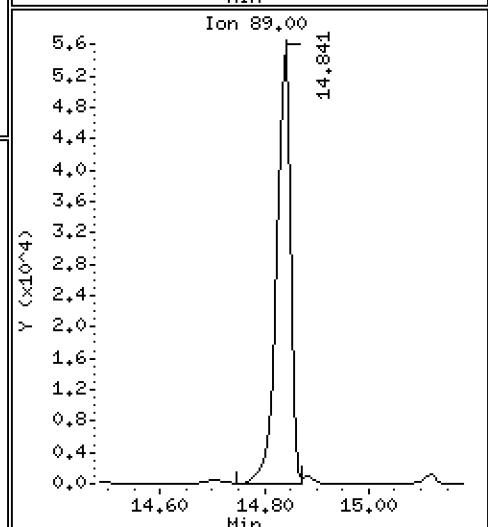
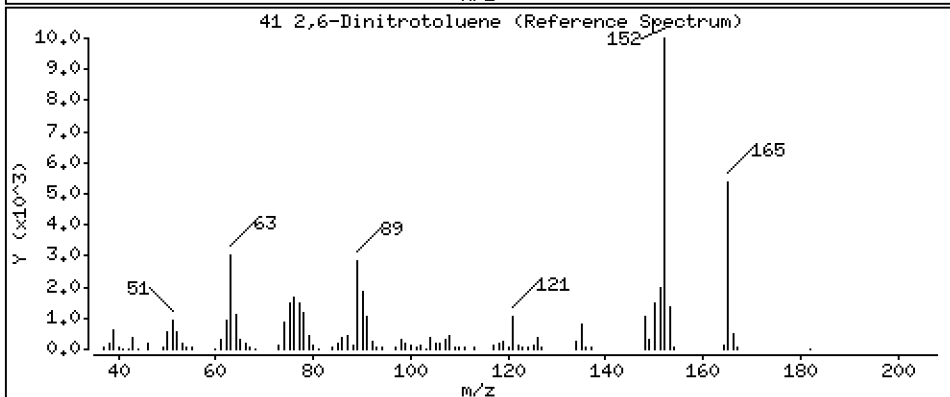
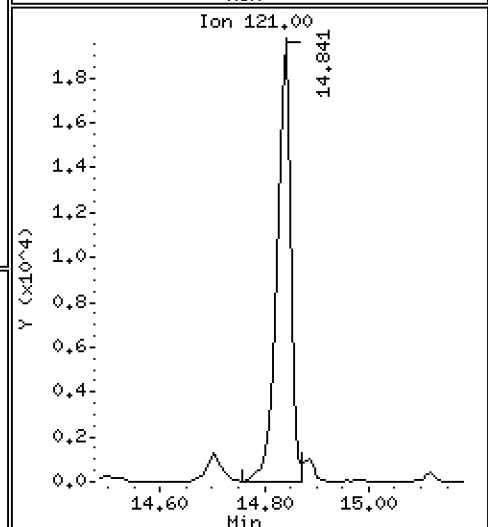
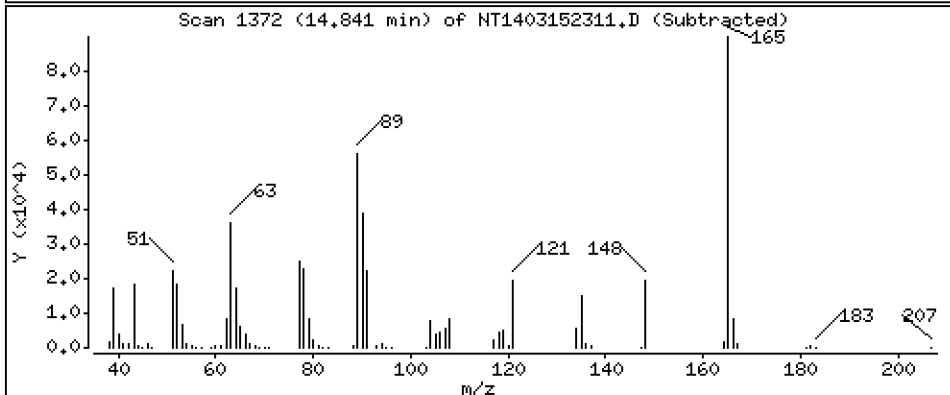
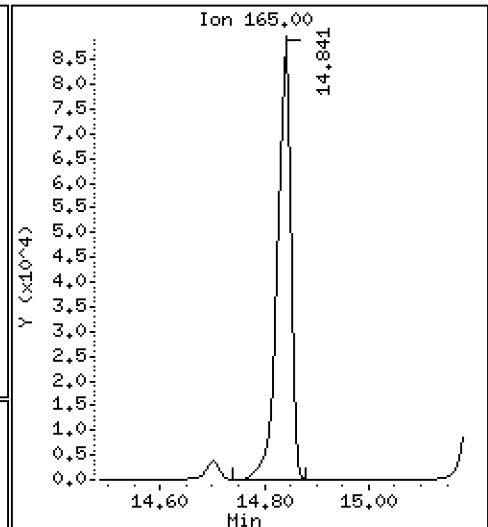
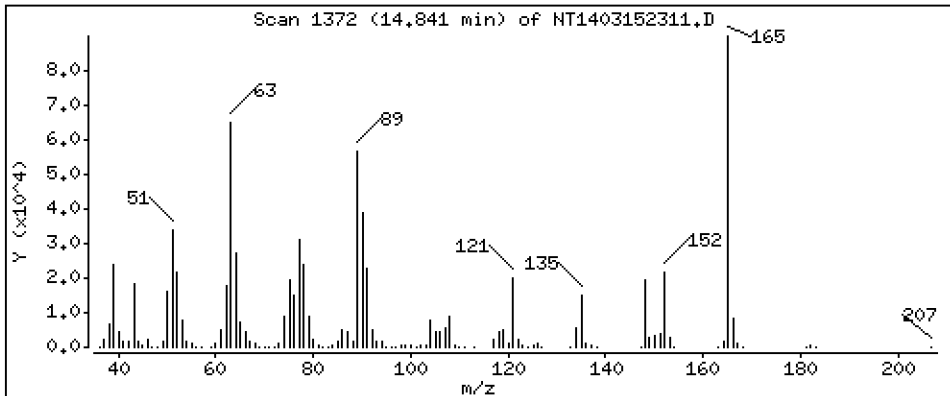
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 5,219 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

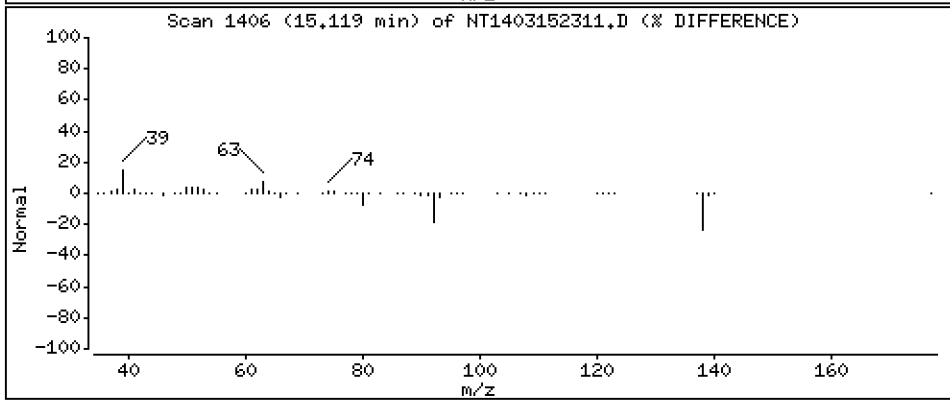
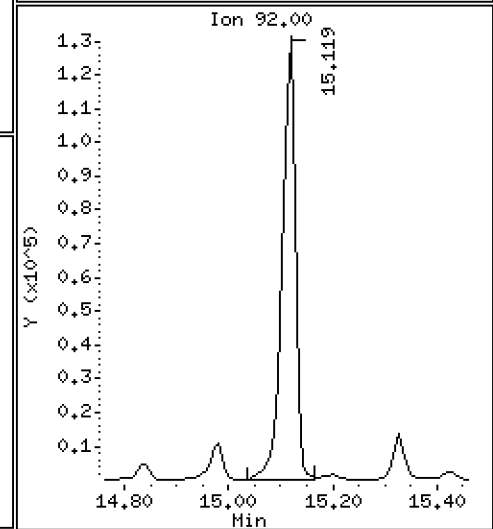
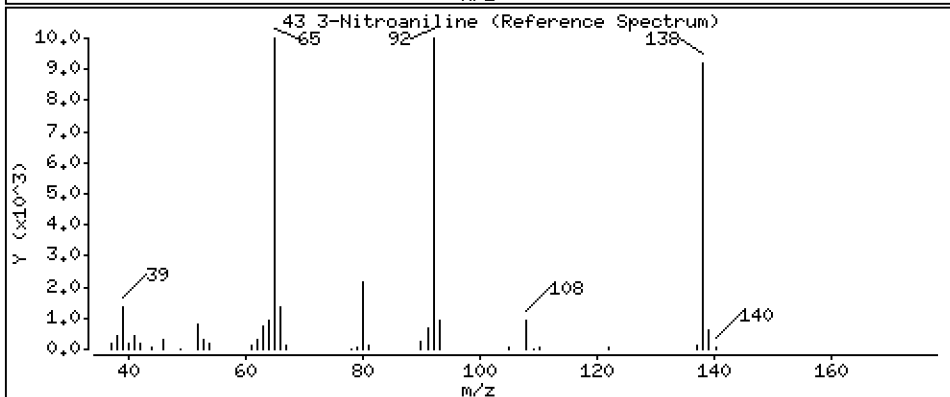
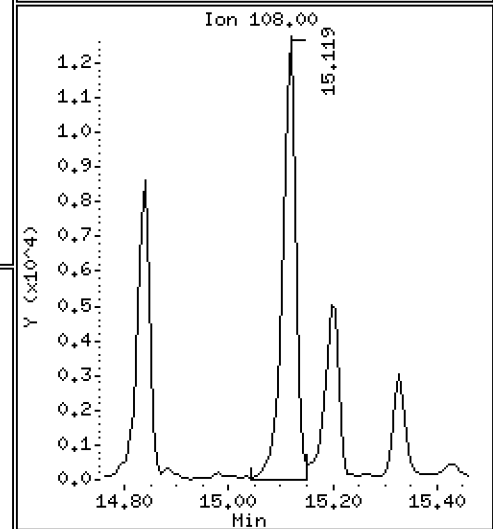
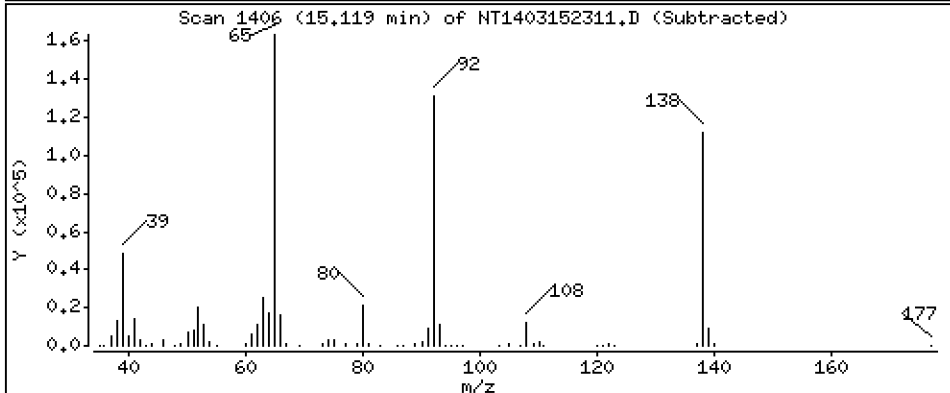
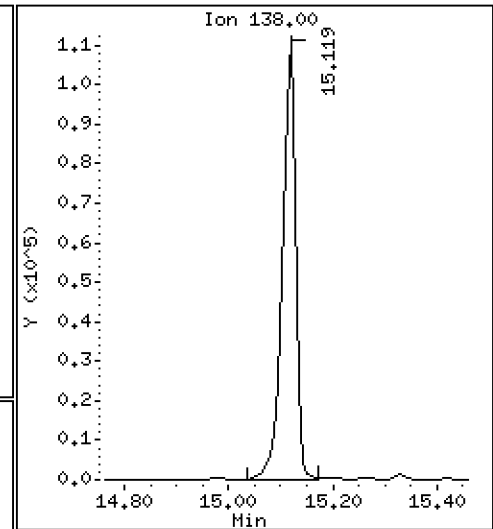
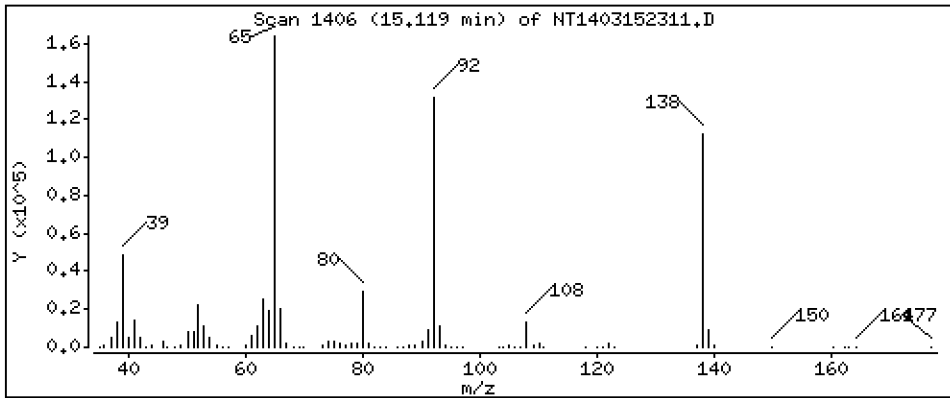
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,210 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

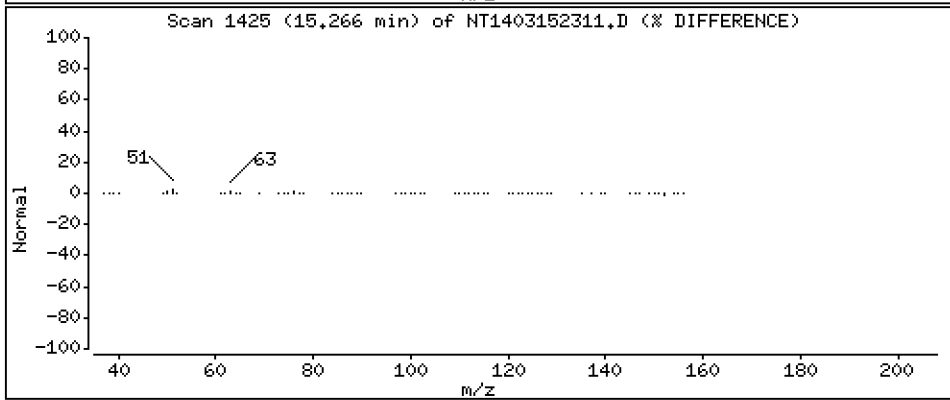
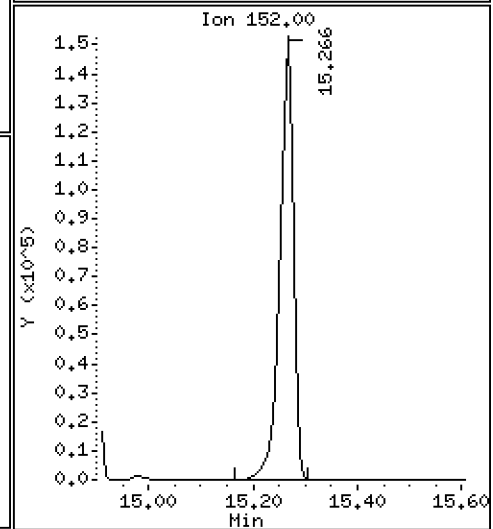
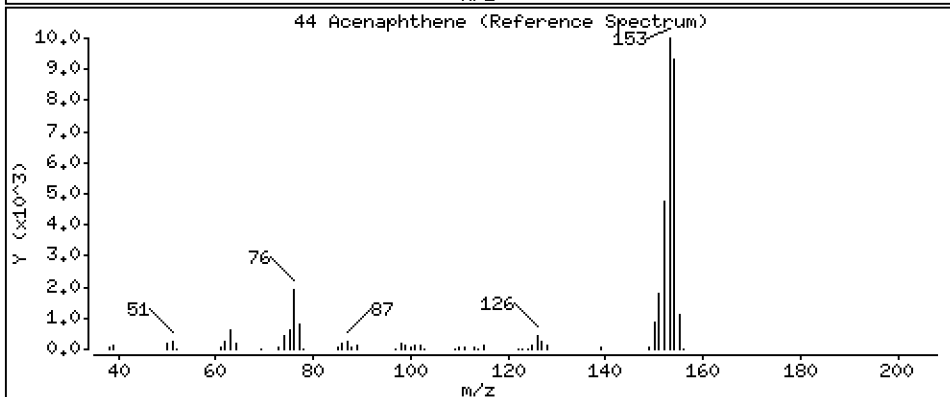
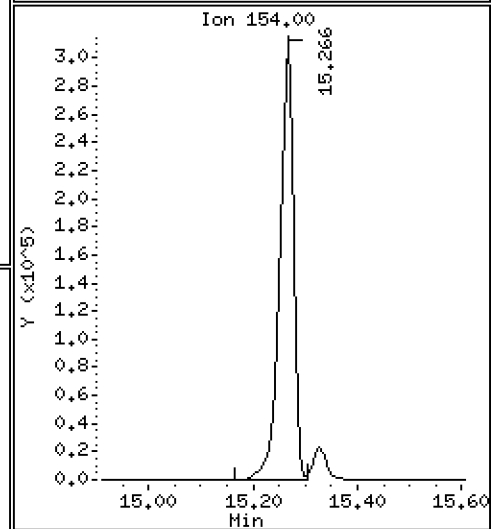
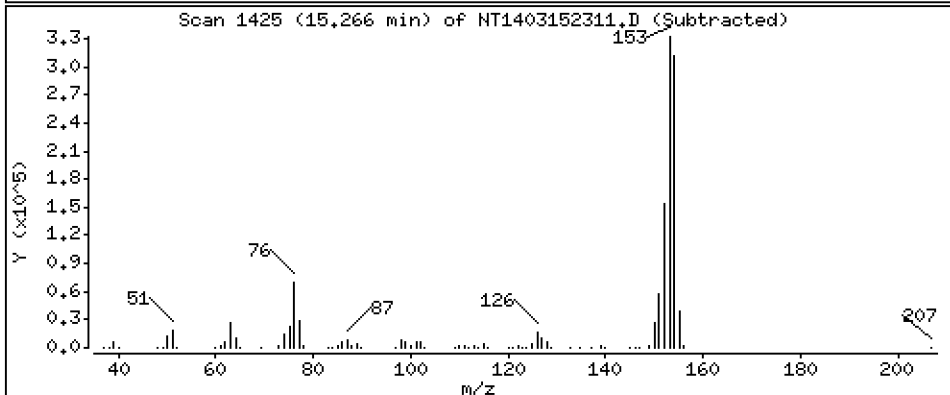
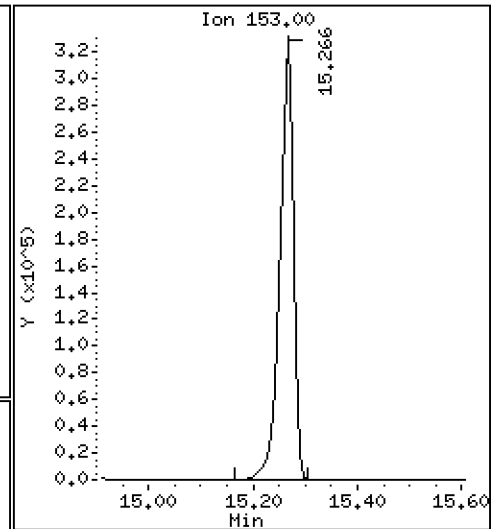
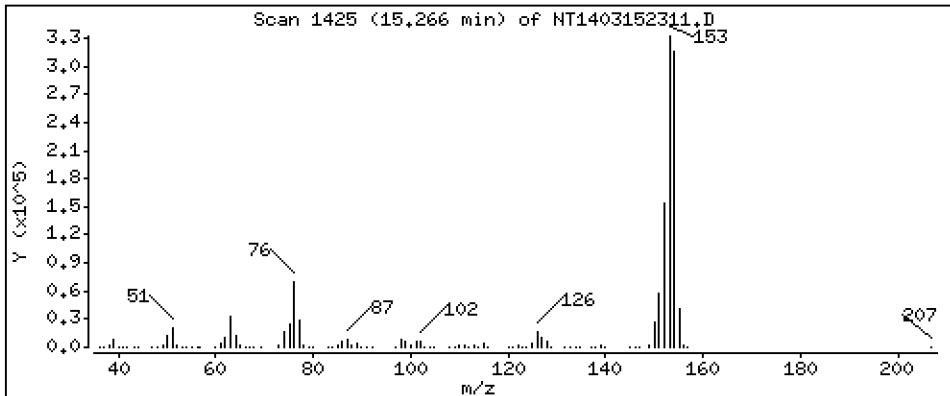
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,965 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

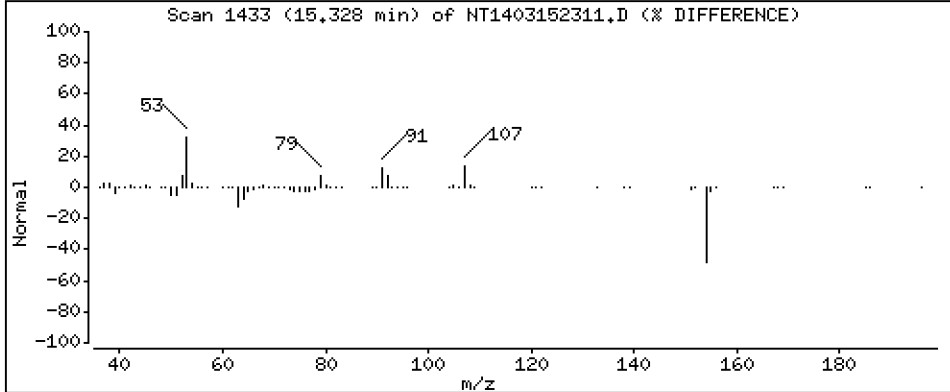
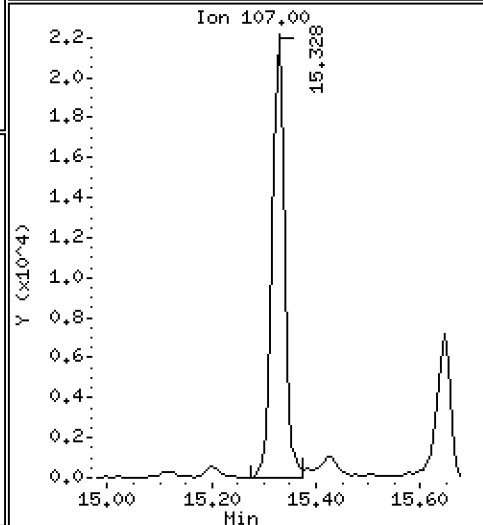
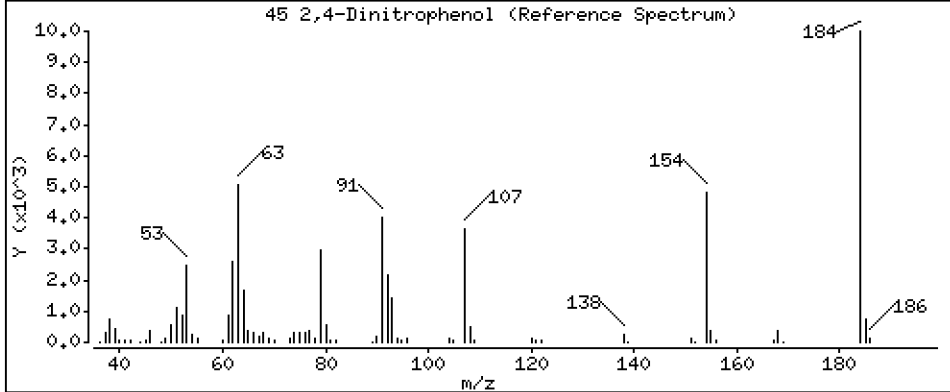
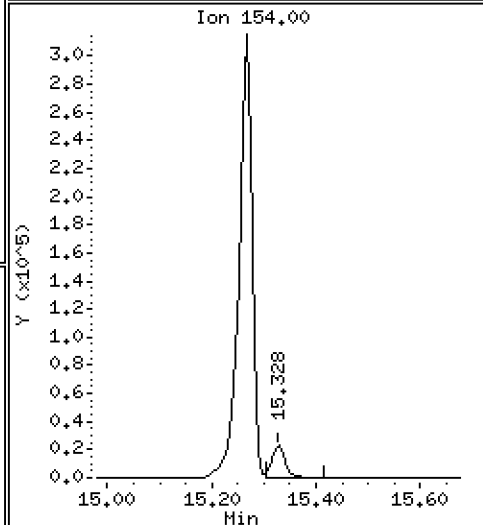
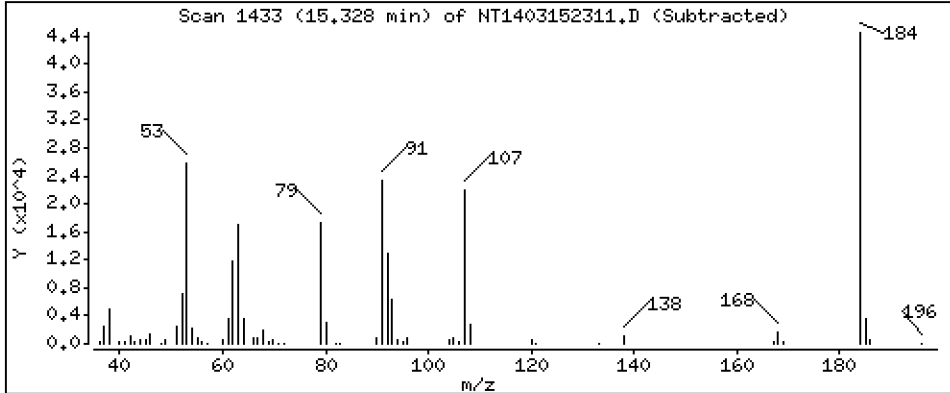
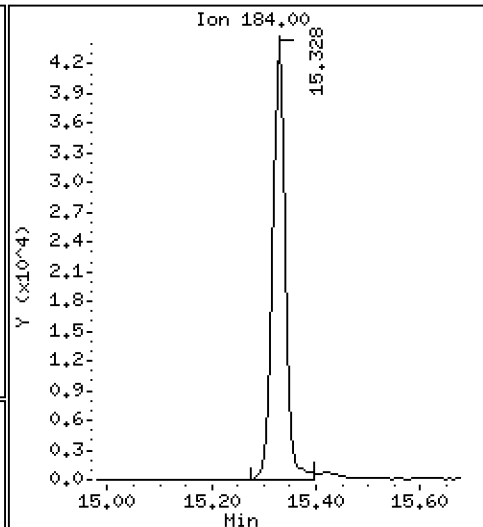
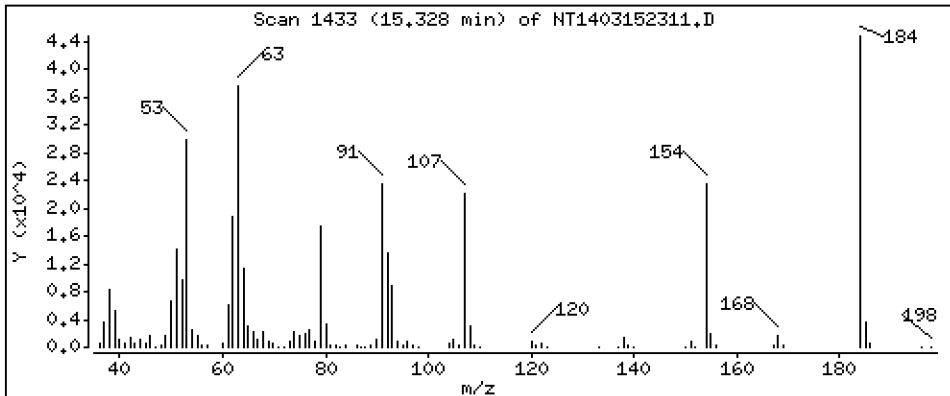
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 3,077 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

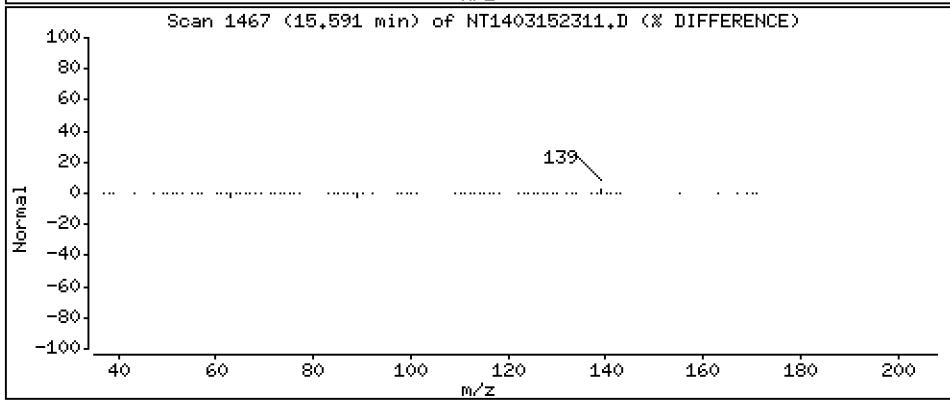
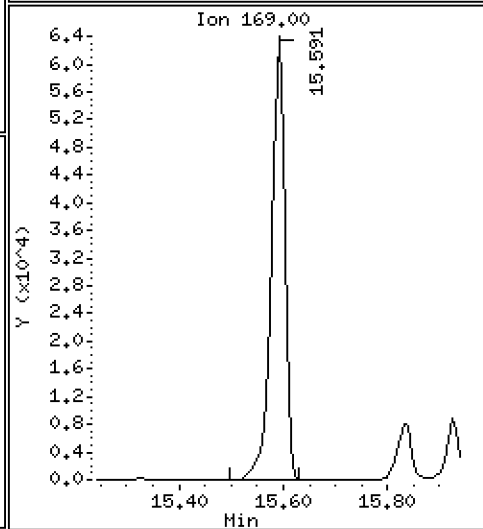
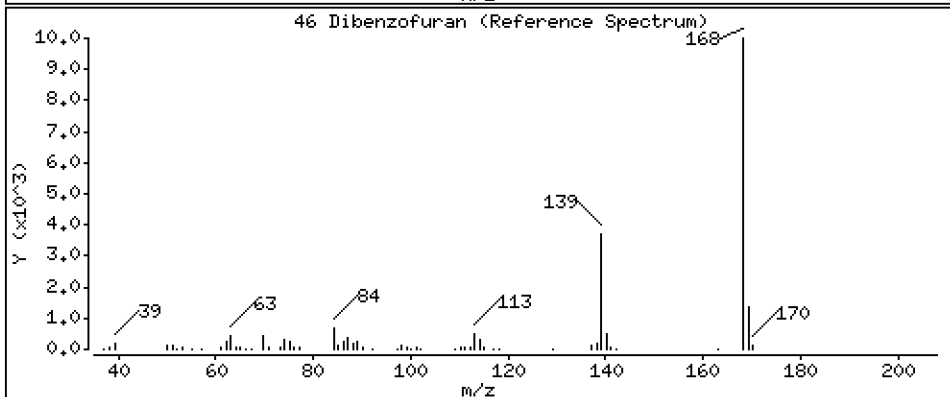
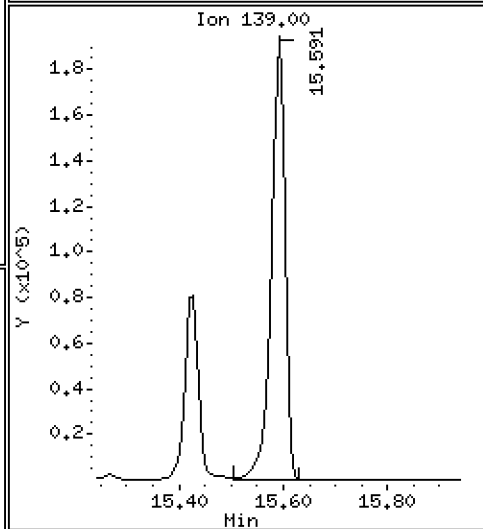
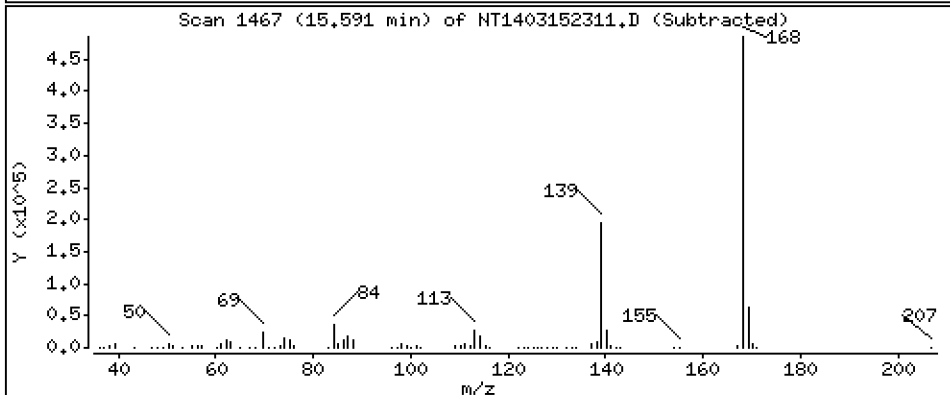
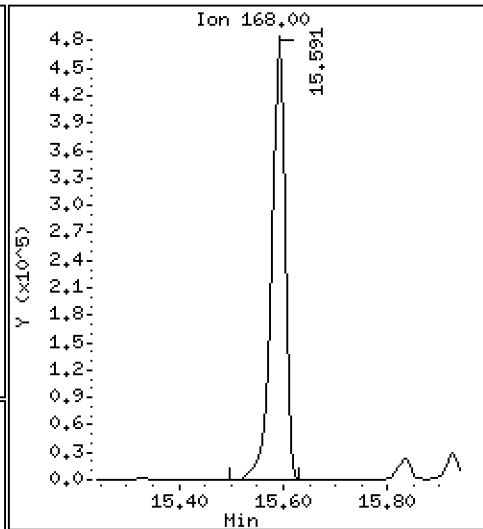
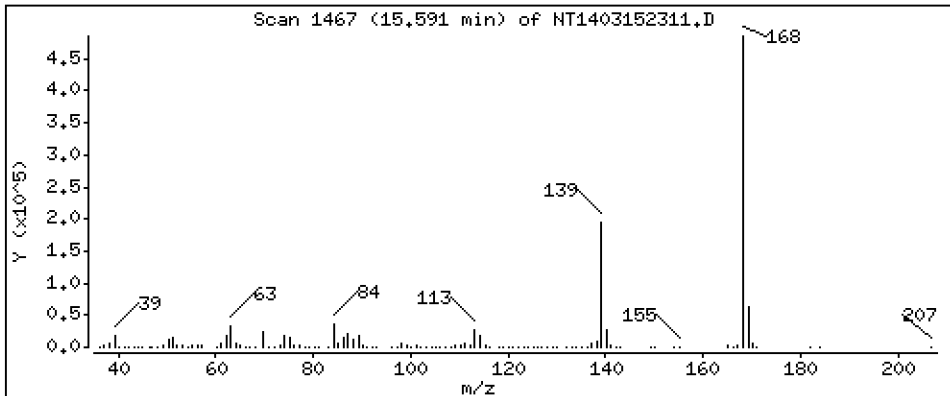
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,956 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

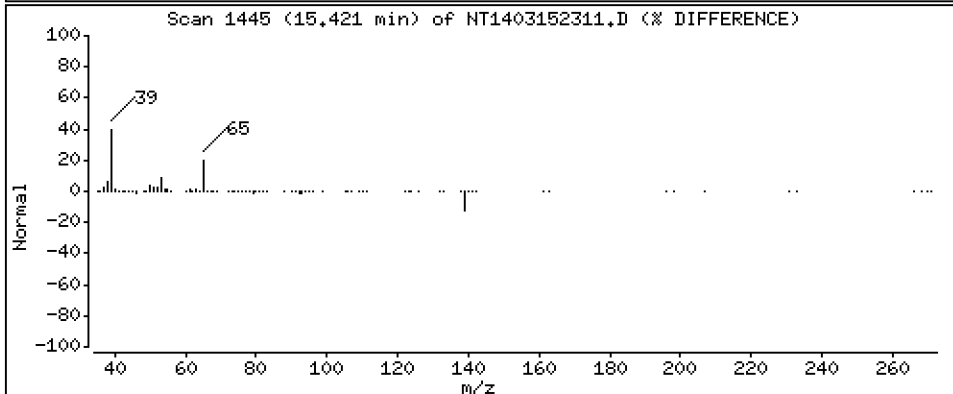
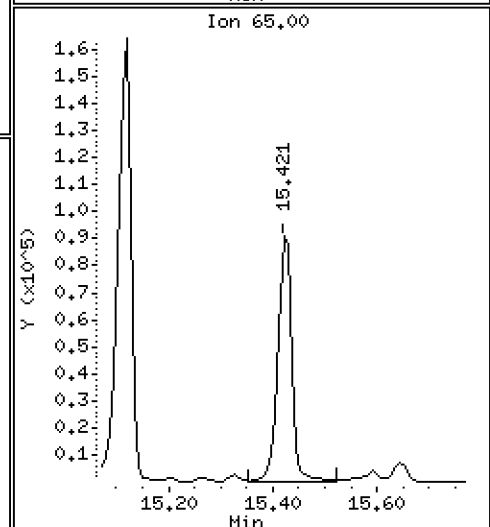
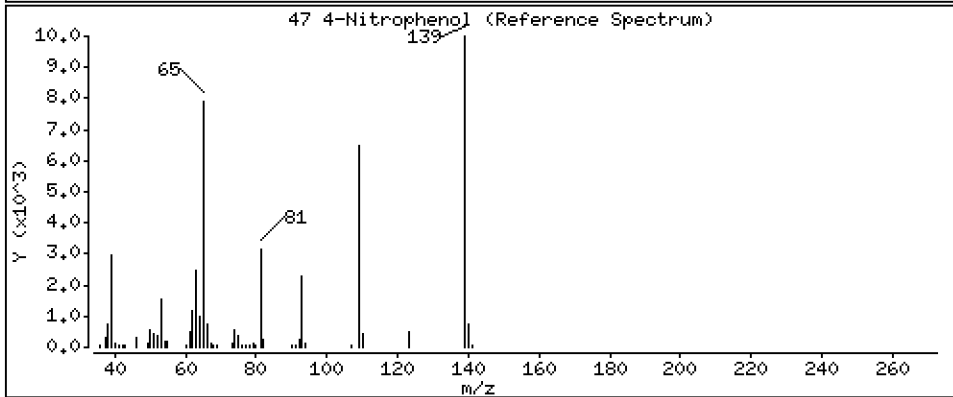
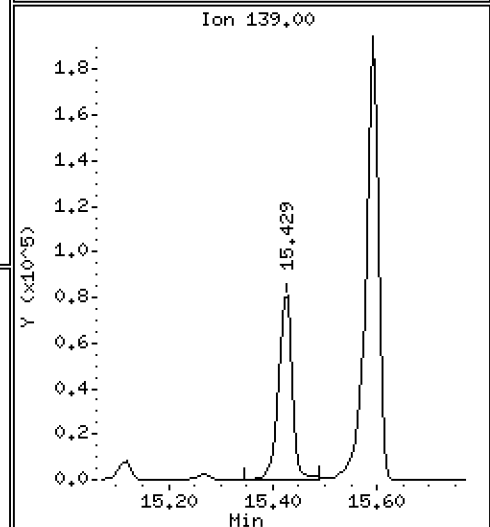
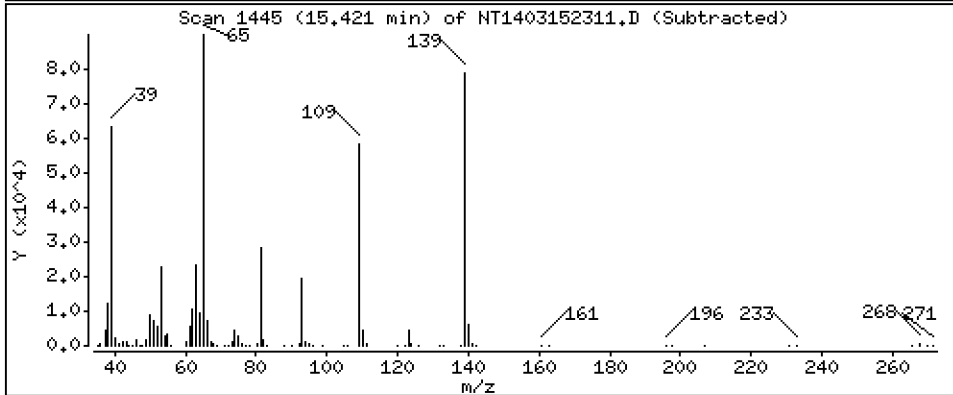
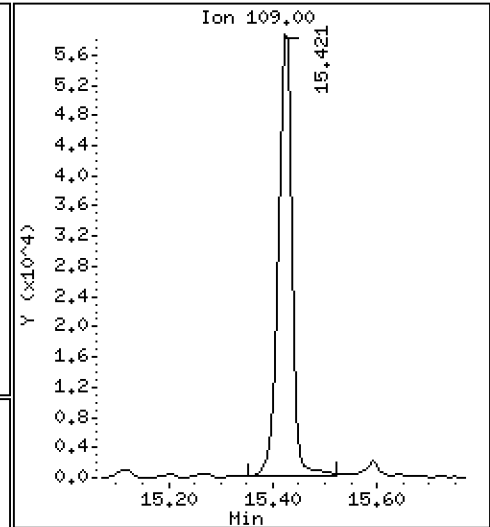
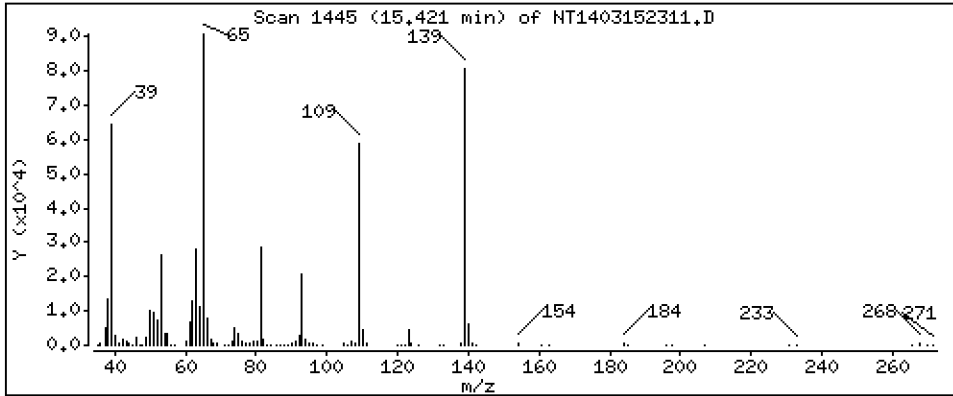
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 4,828 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

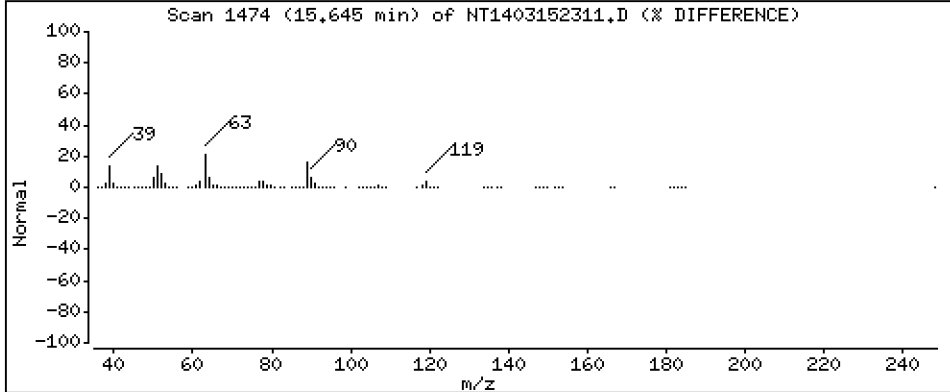
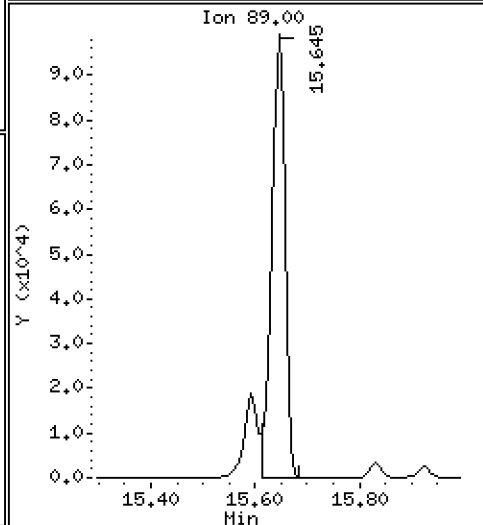
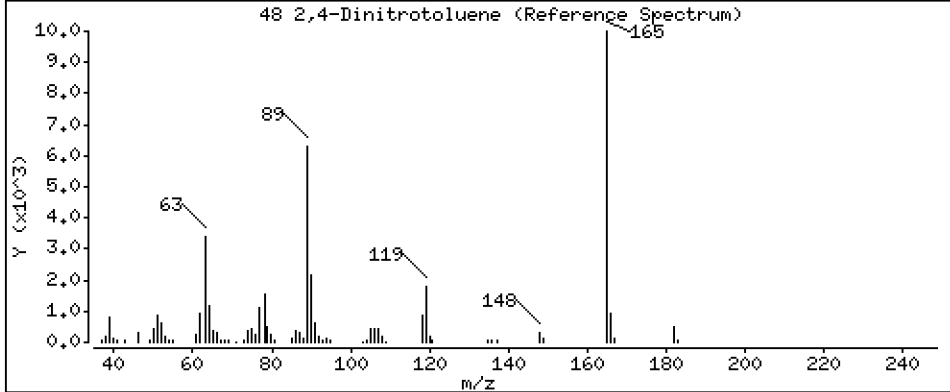
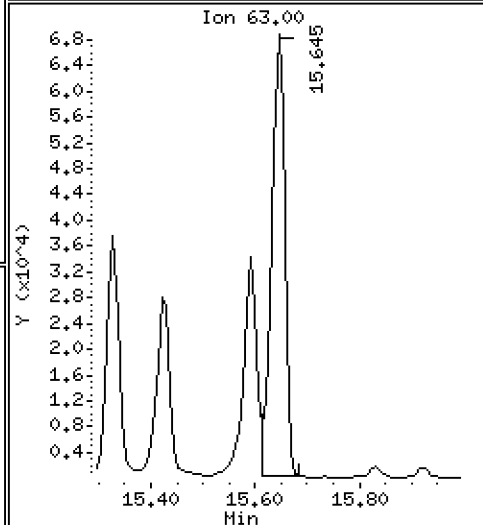
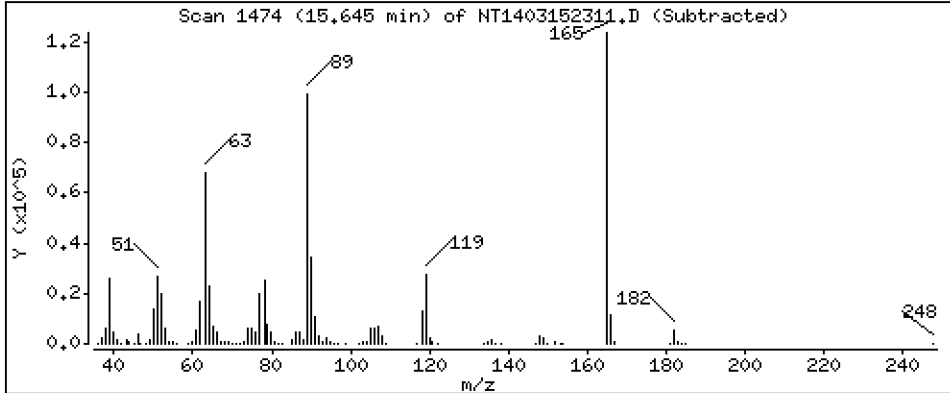
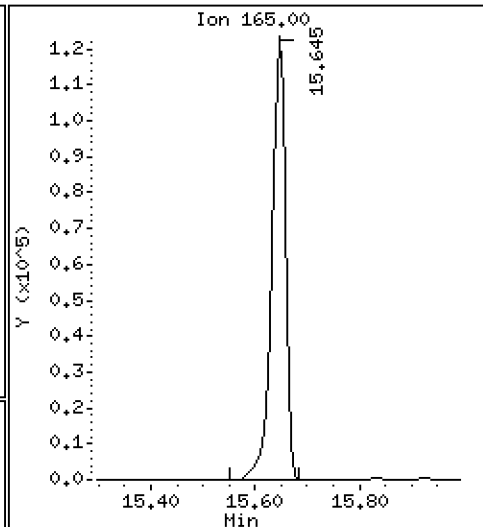
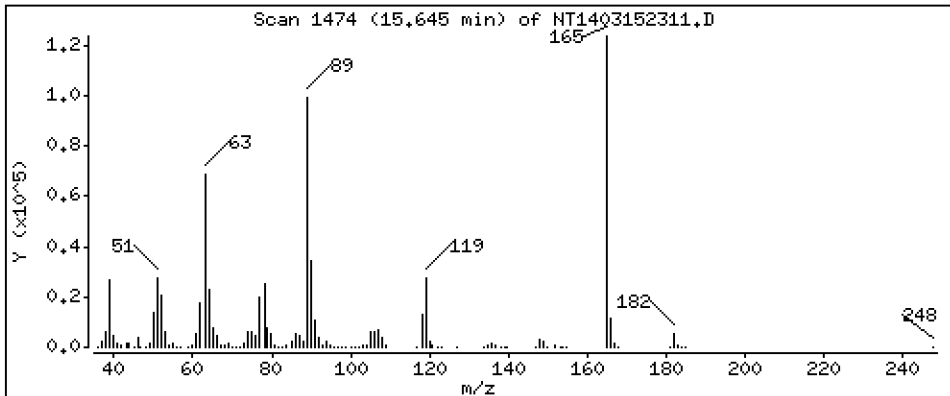
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 5,119 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

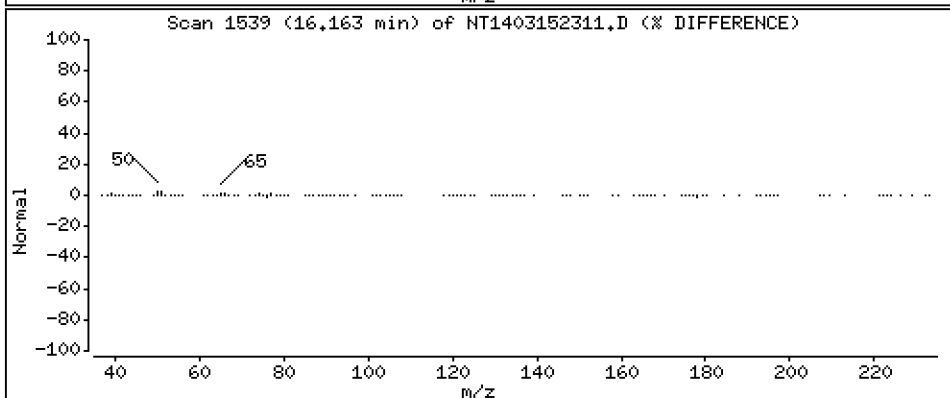
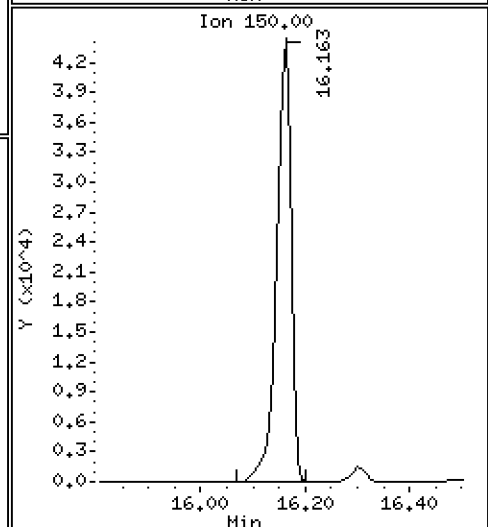
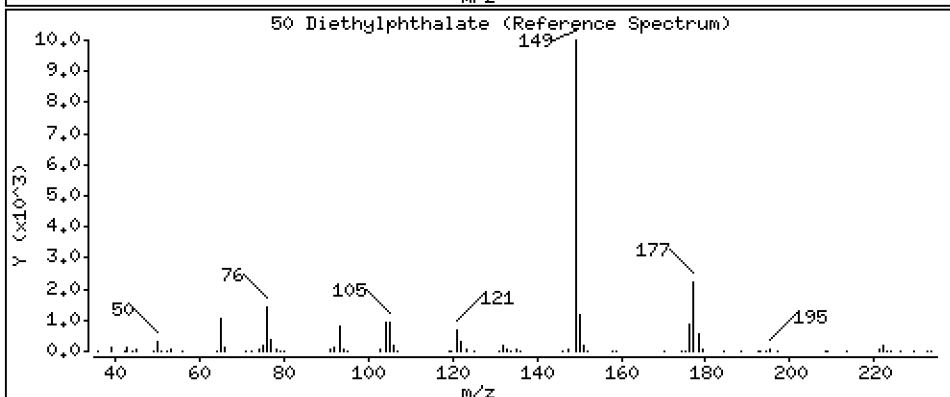
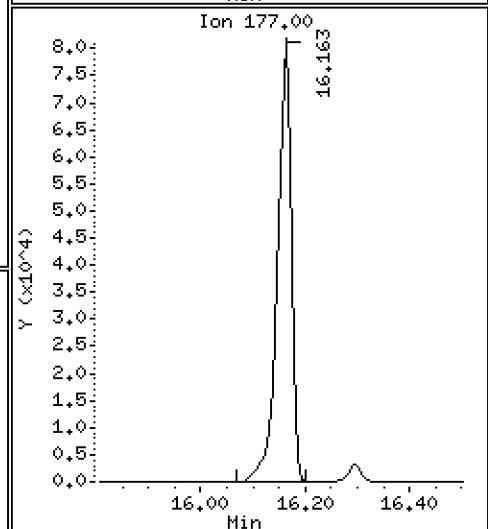
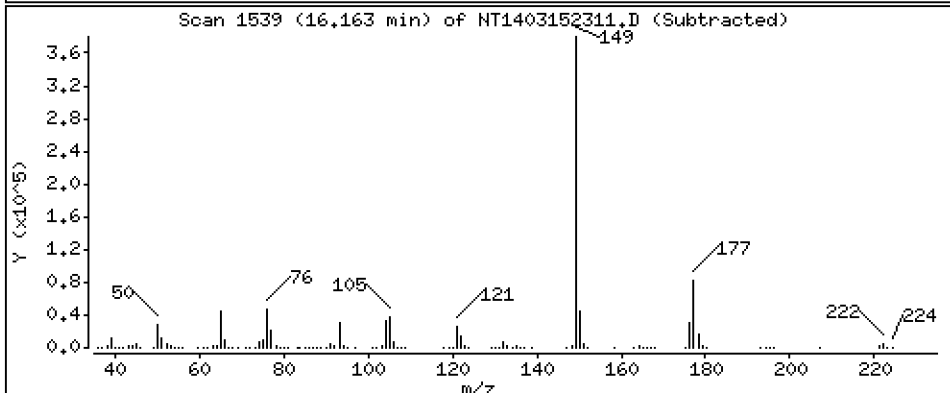
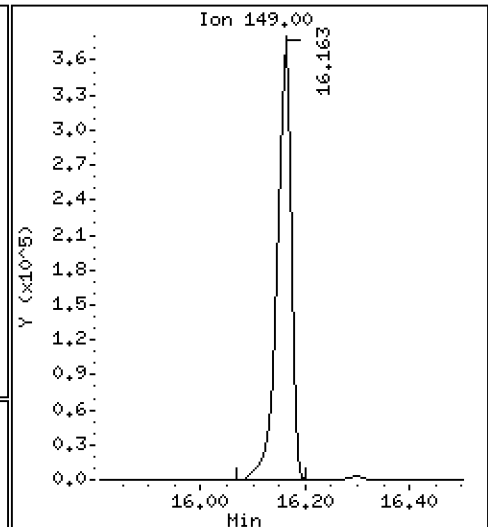
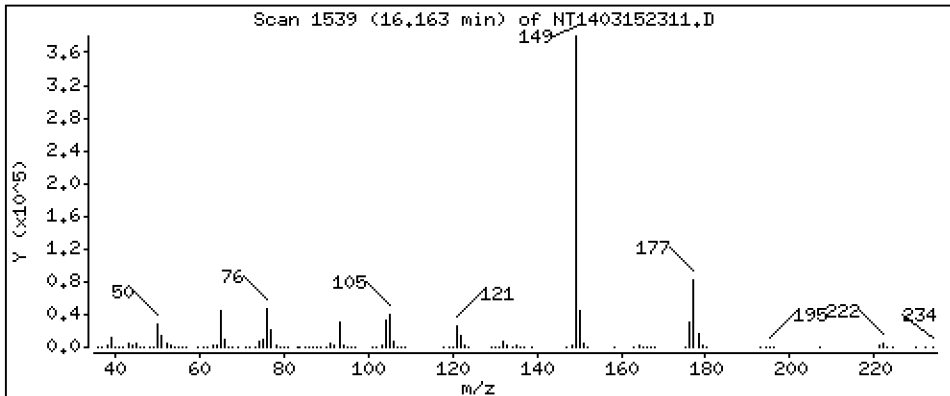
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,203 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

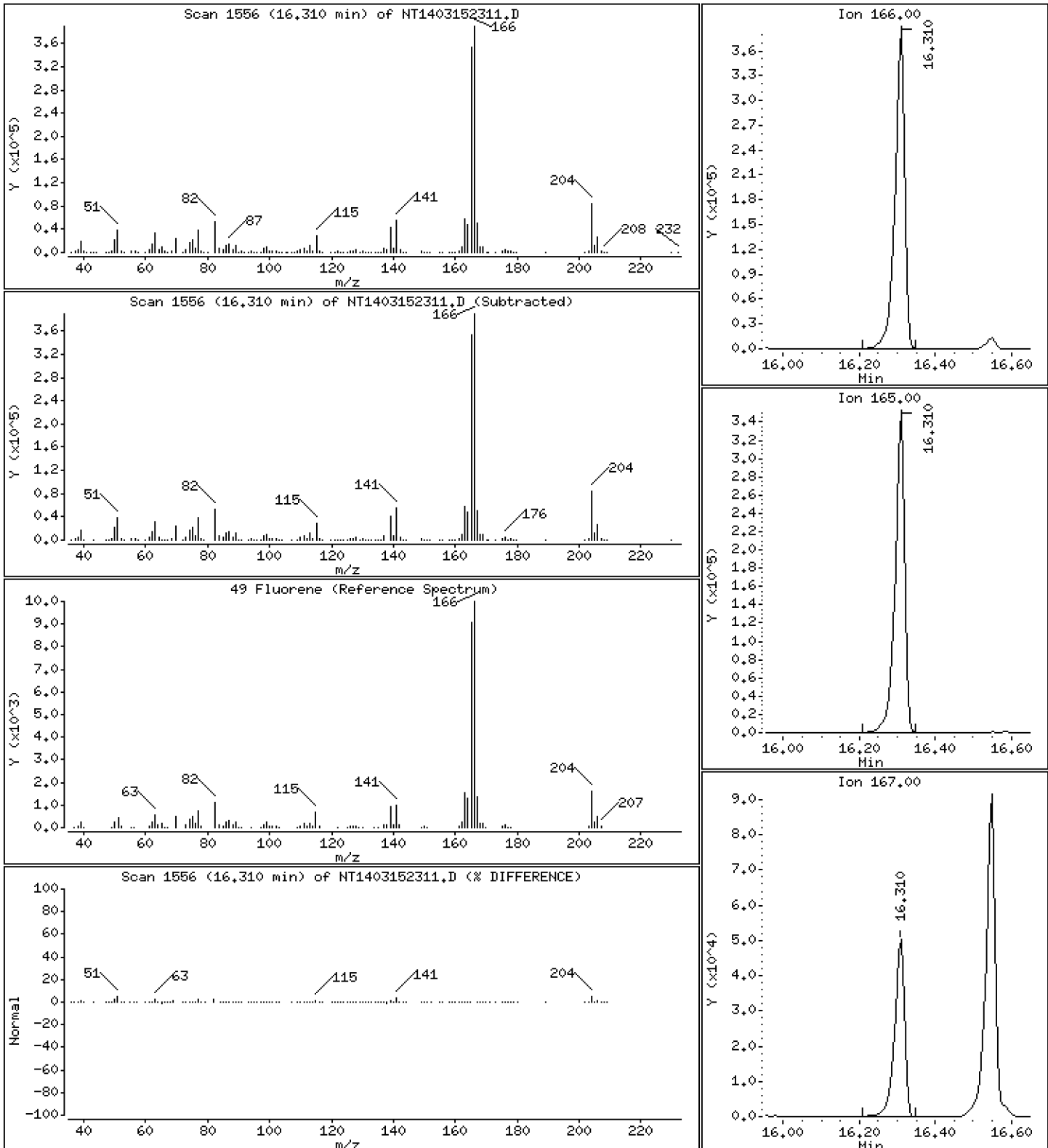
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,844 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

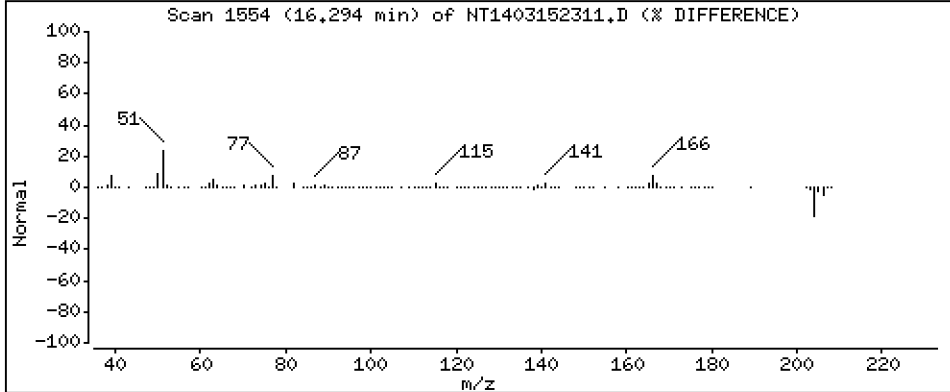
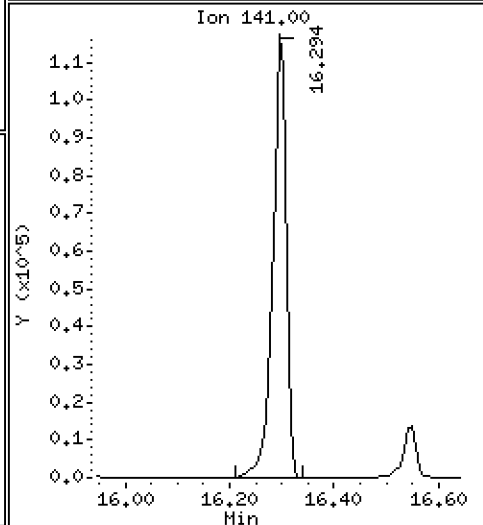
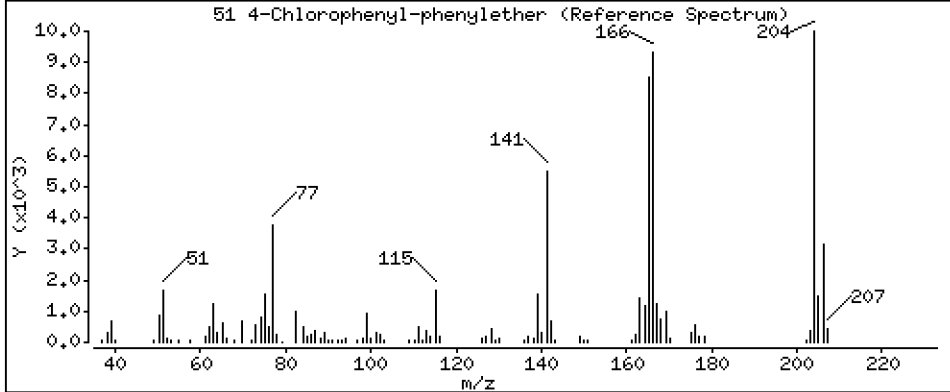
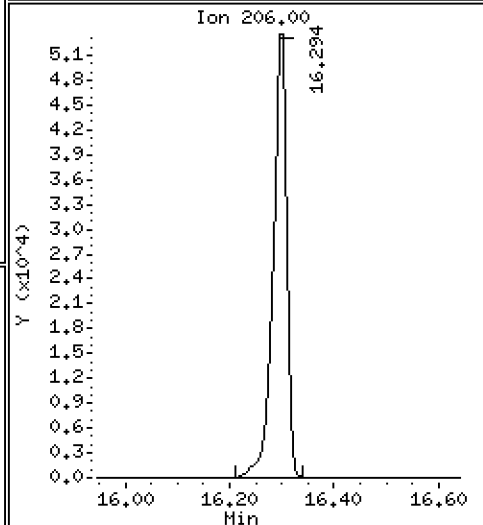
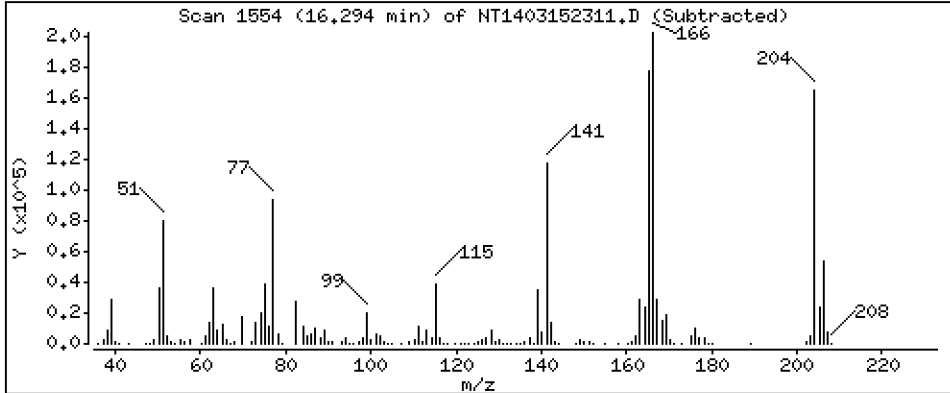
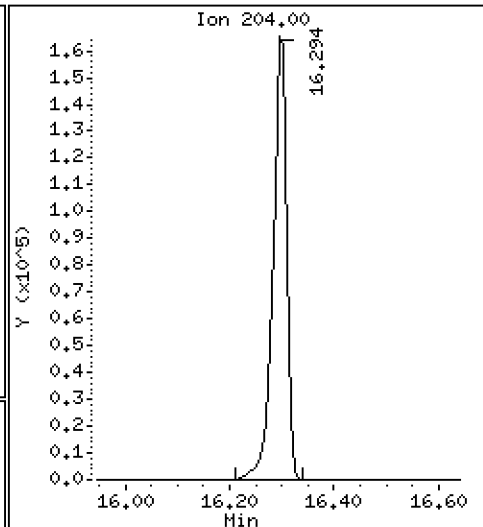
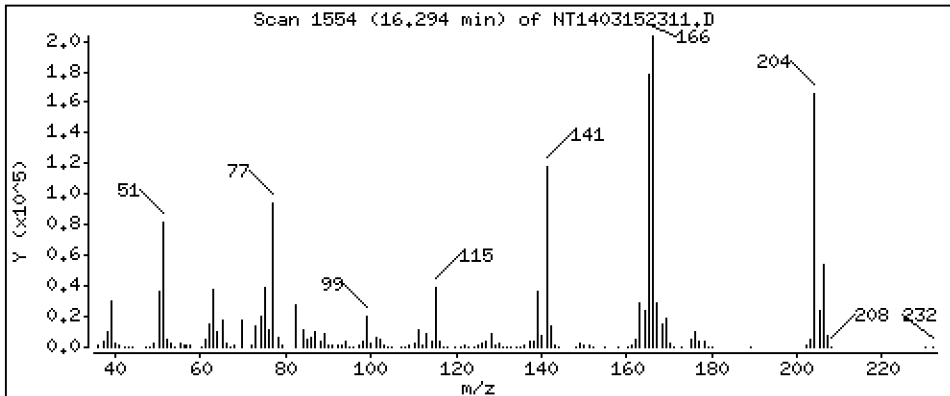
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,985 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

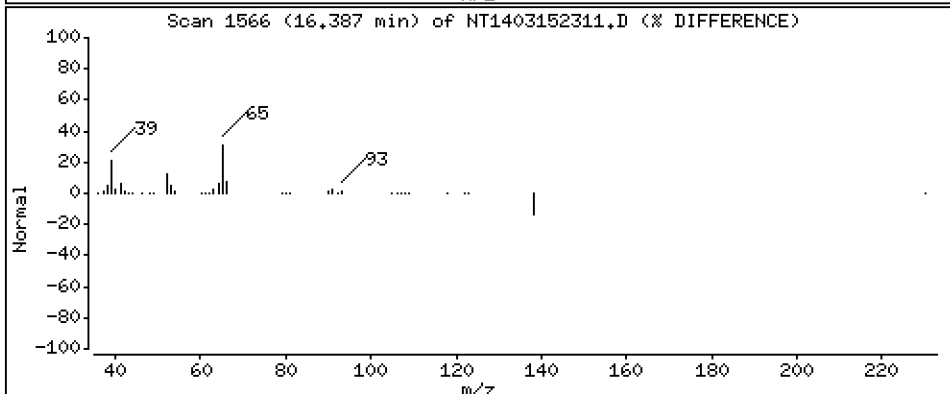
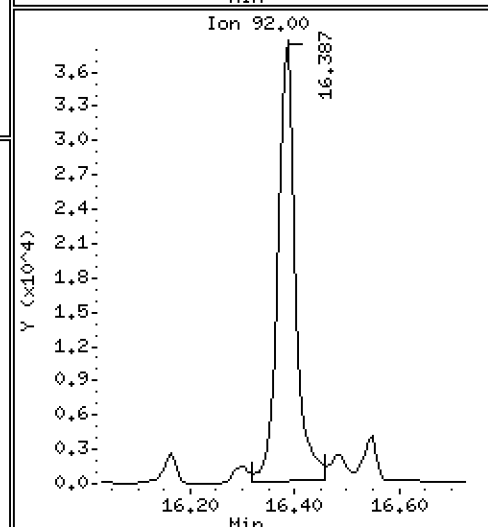
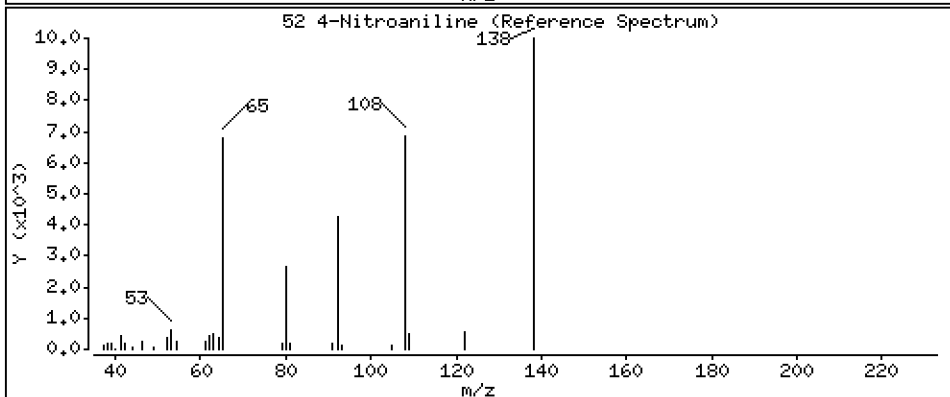
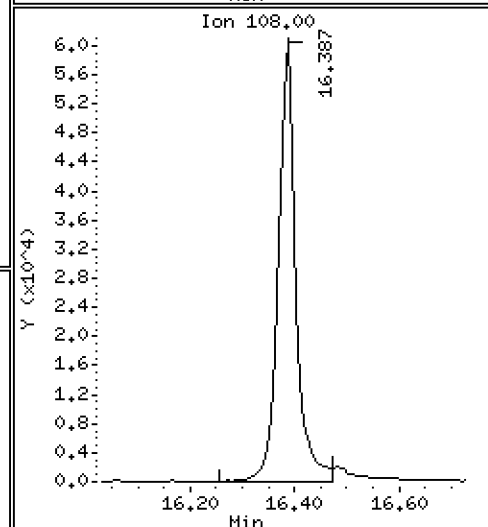
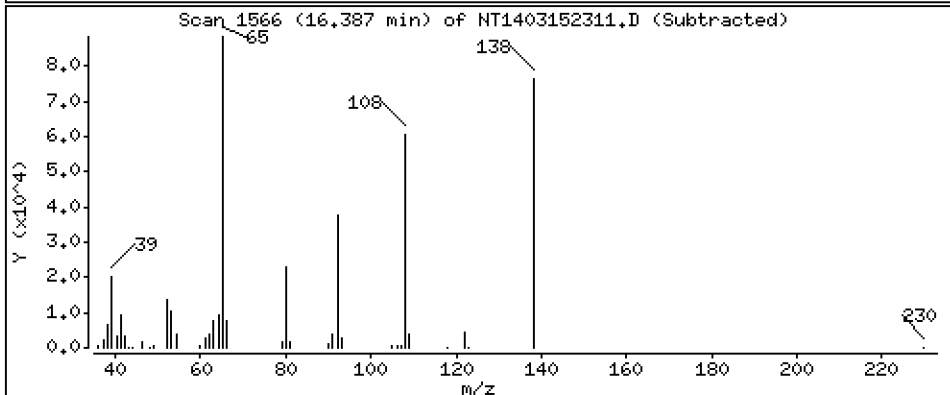
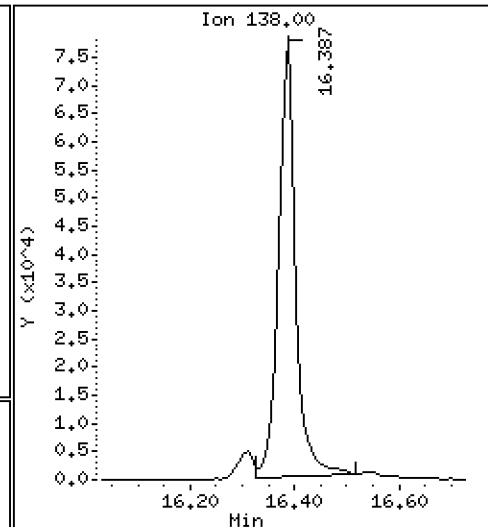
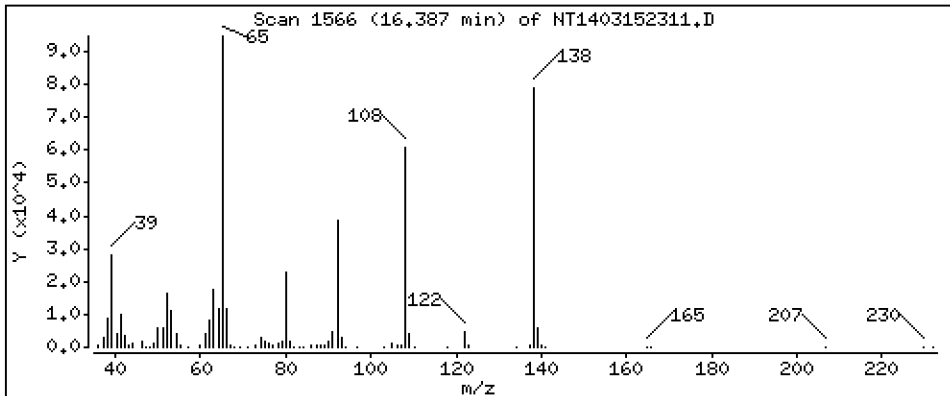
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 4,817 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

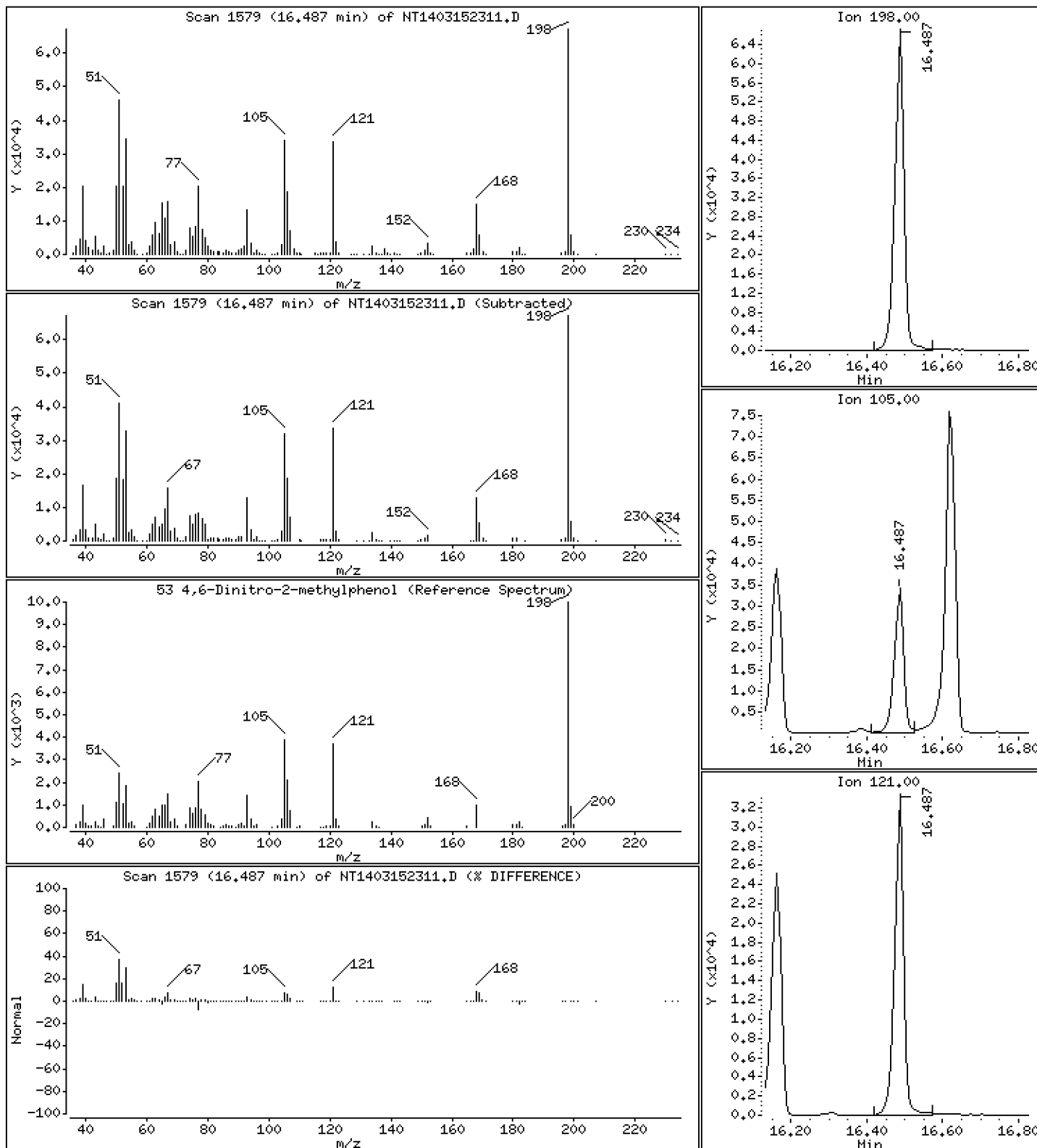
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 4,439 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

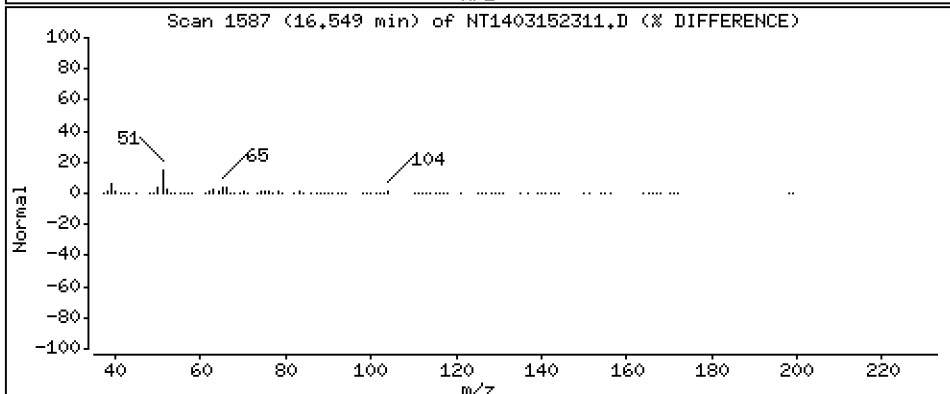
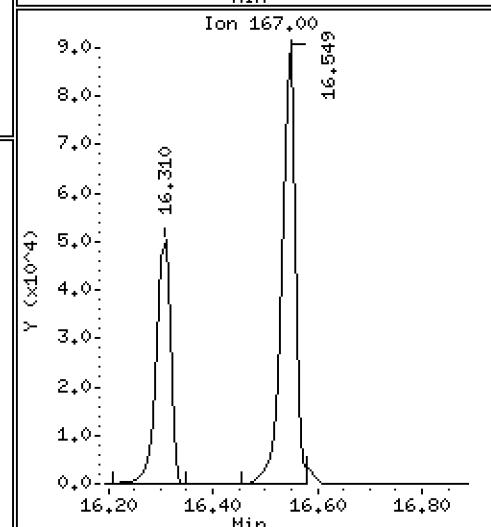
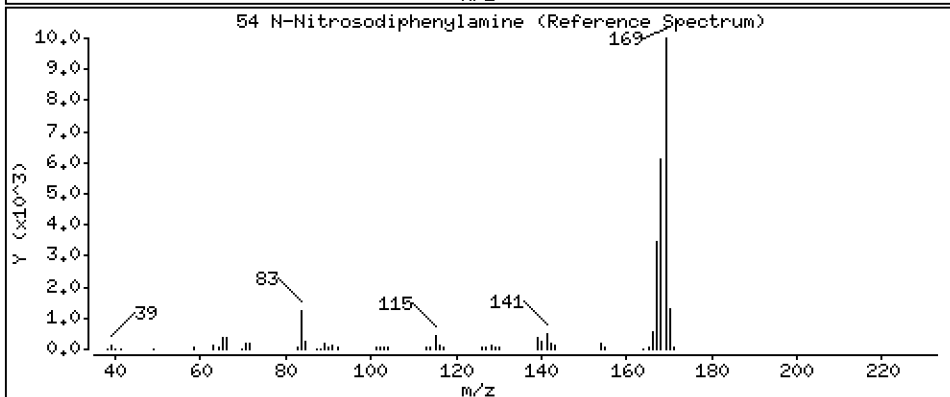
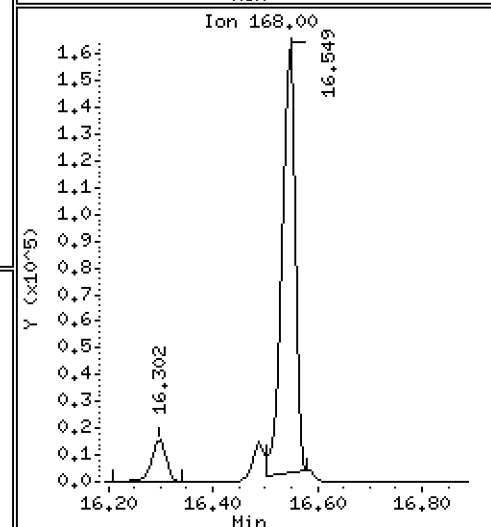
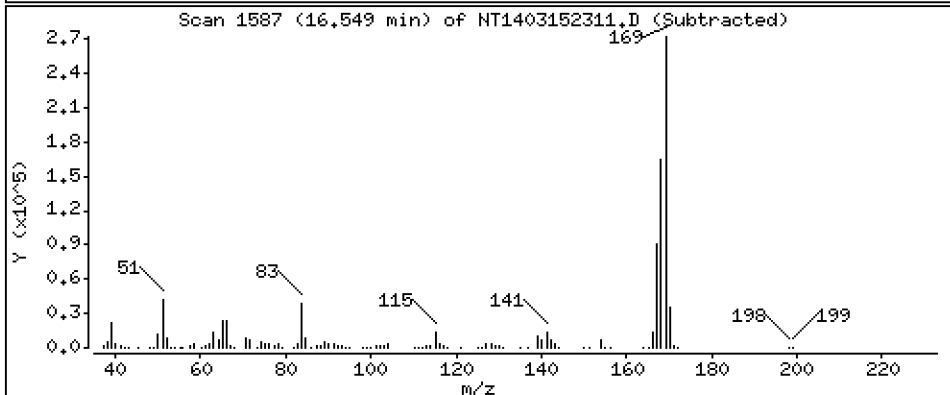
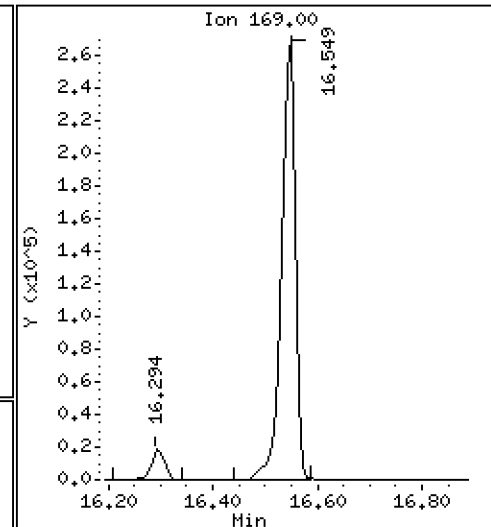
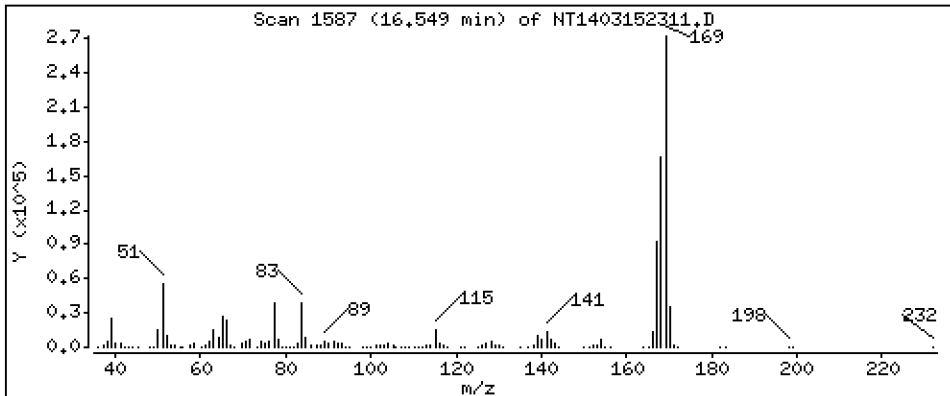
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.954 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

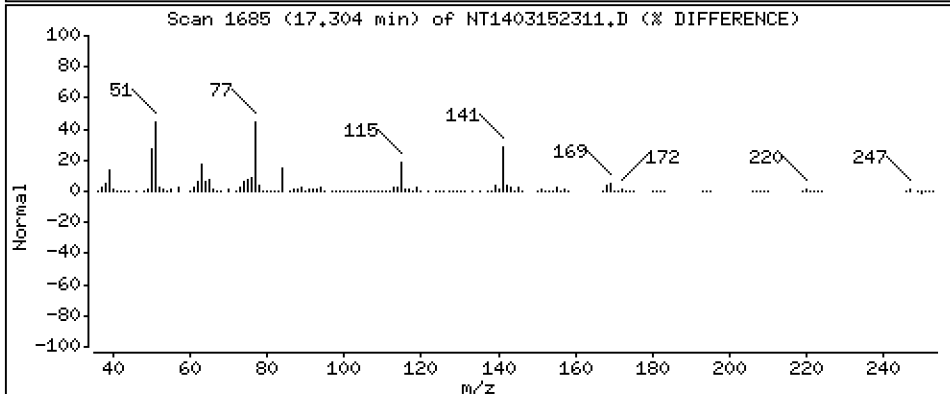
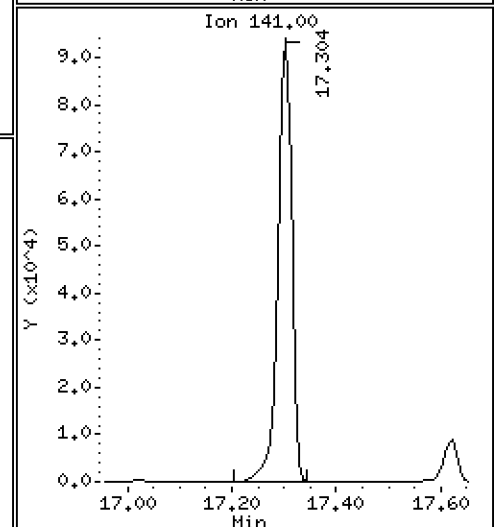
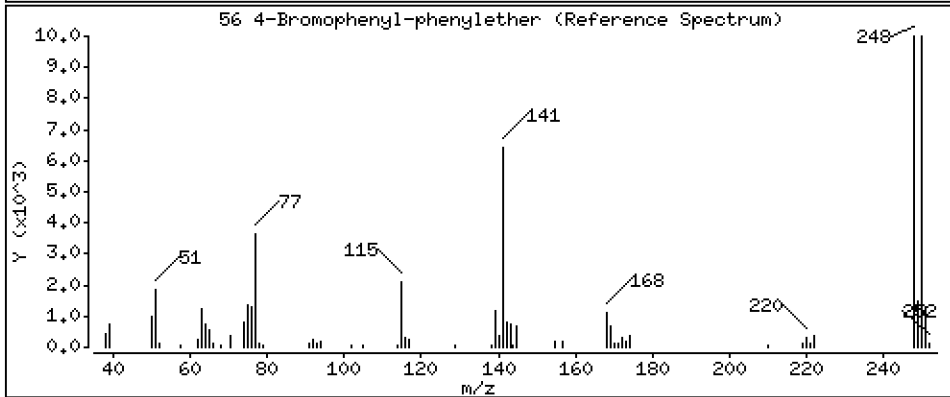
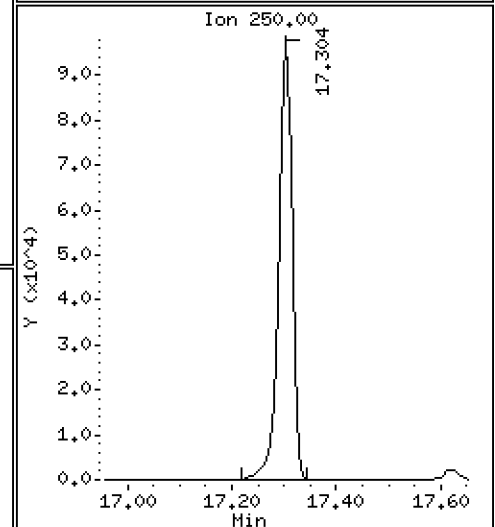
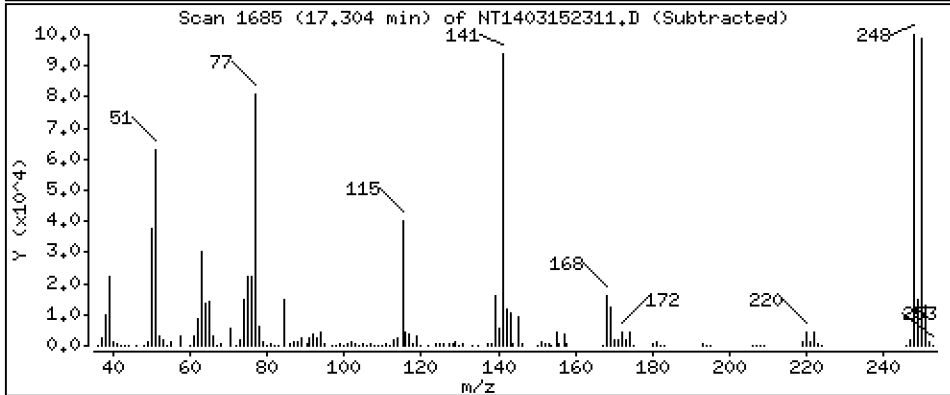
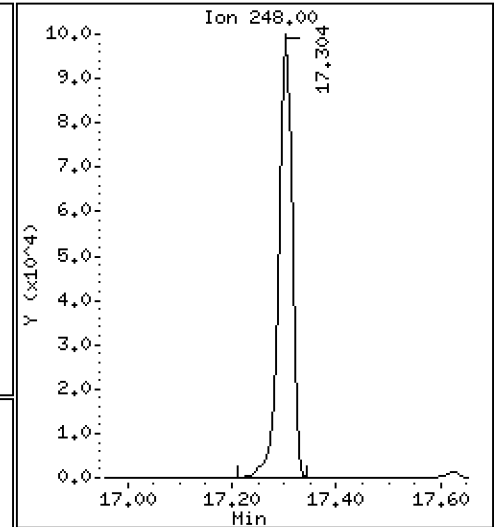
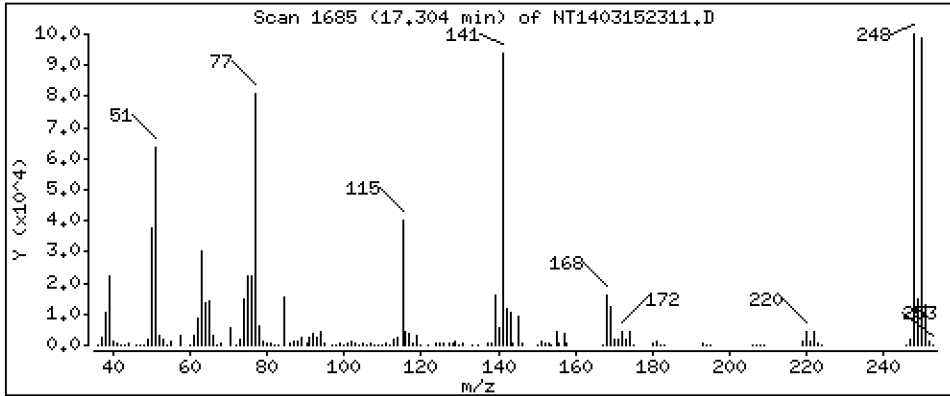
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,226 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

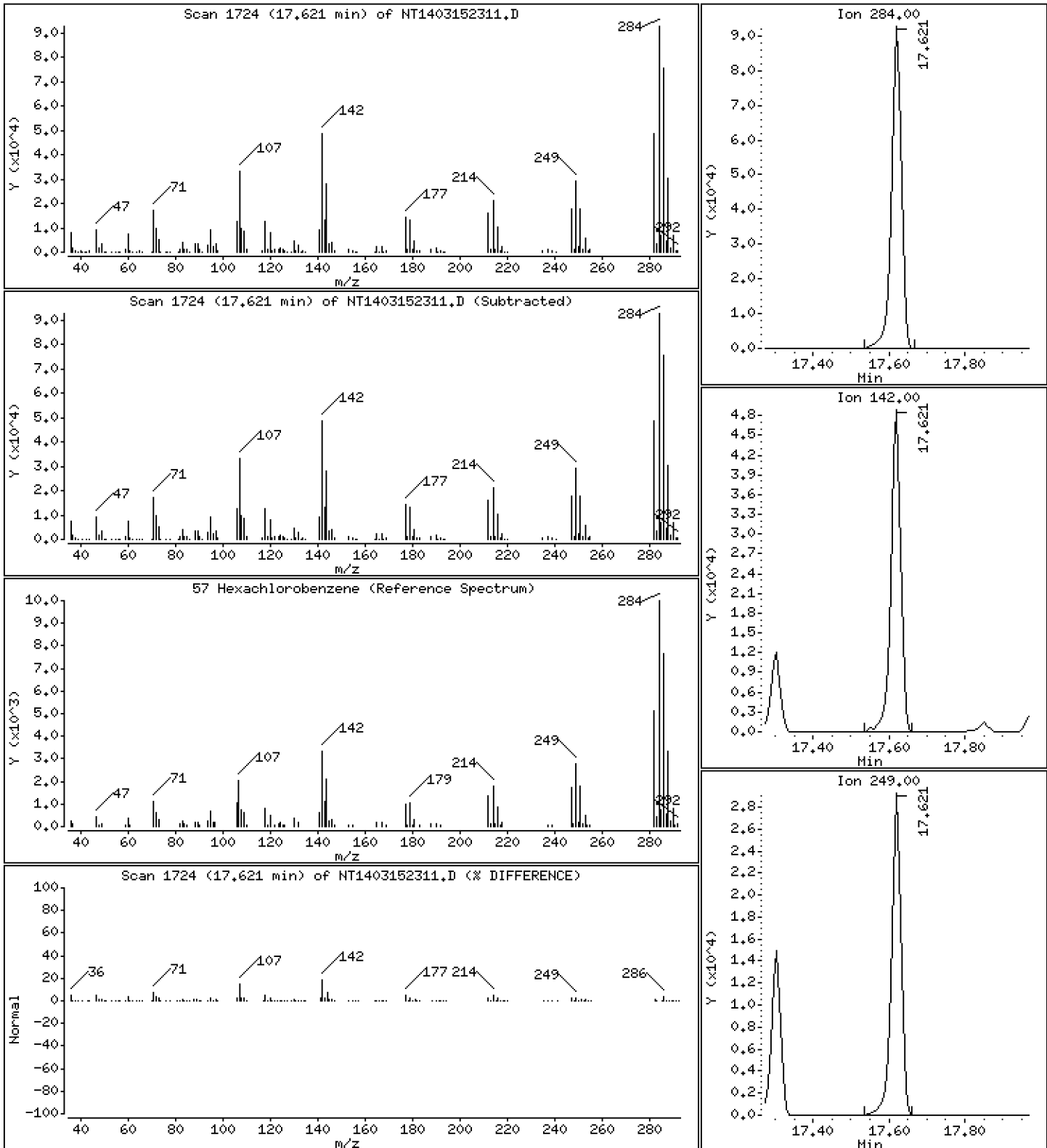
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,780 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

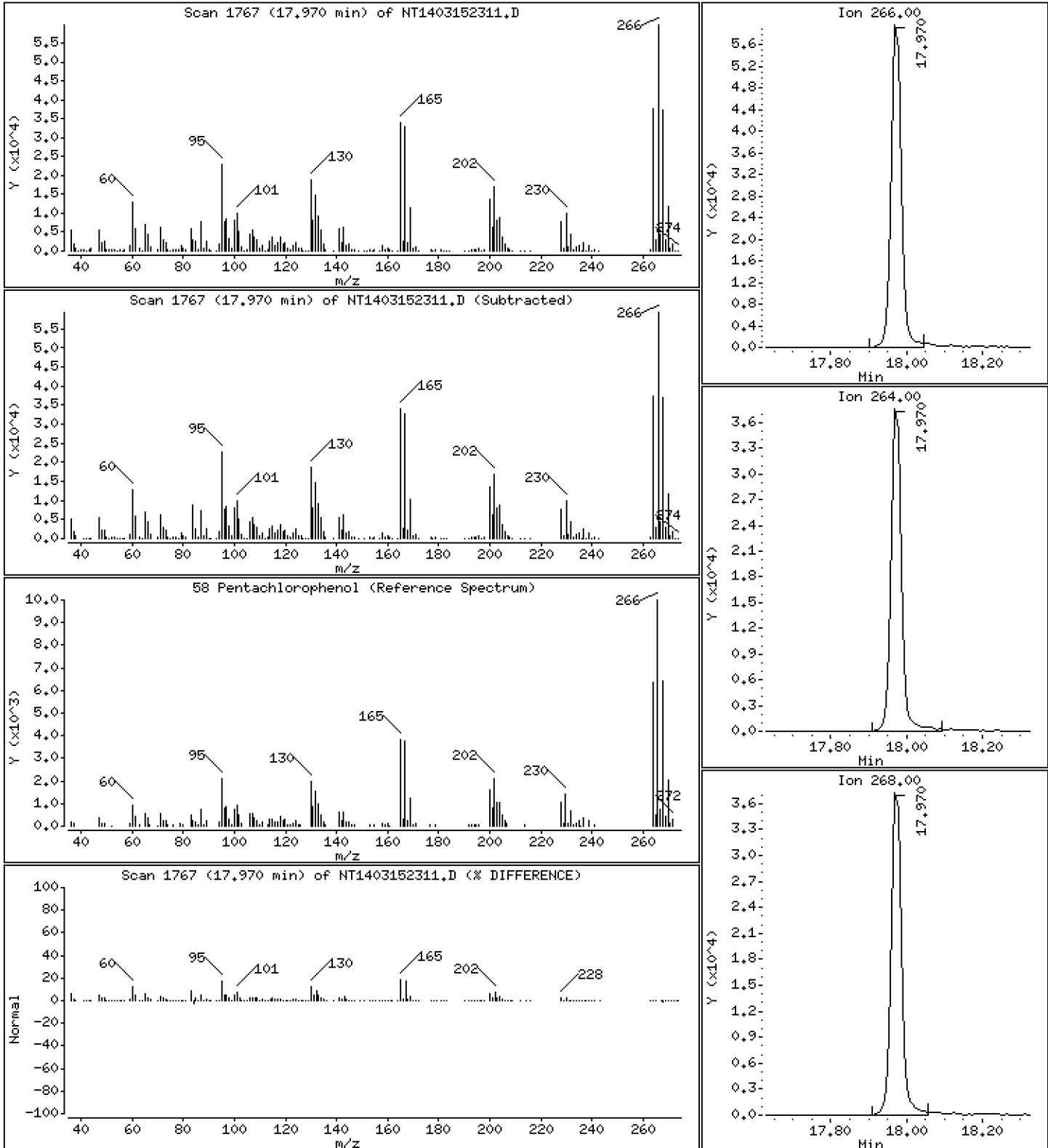
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,477 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

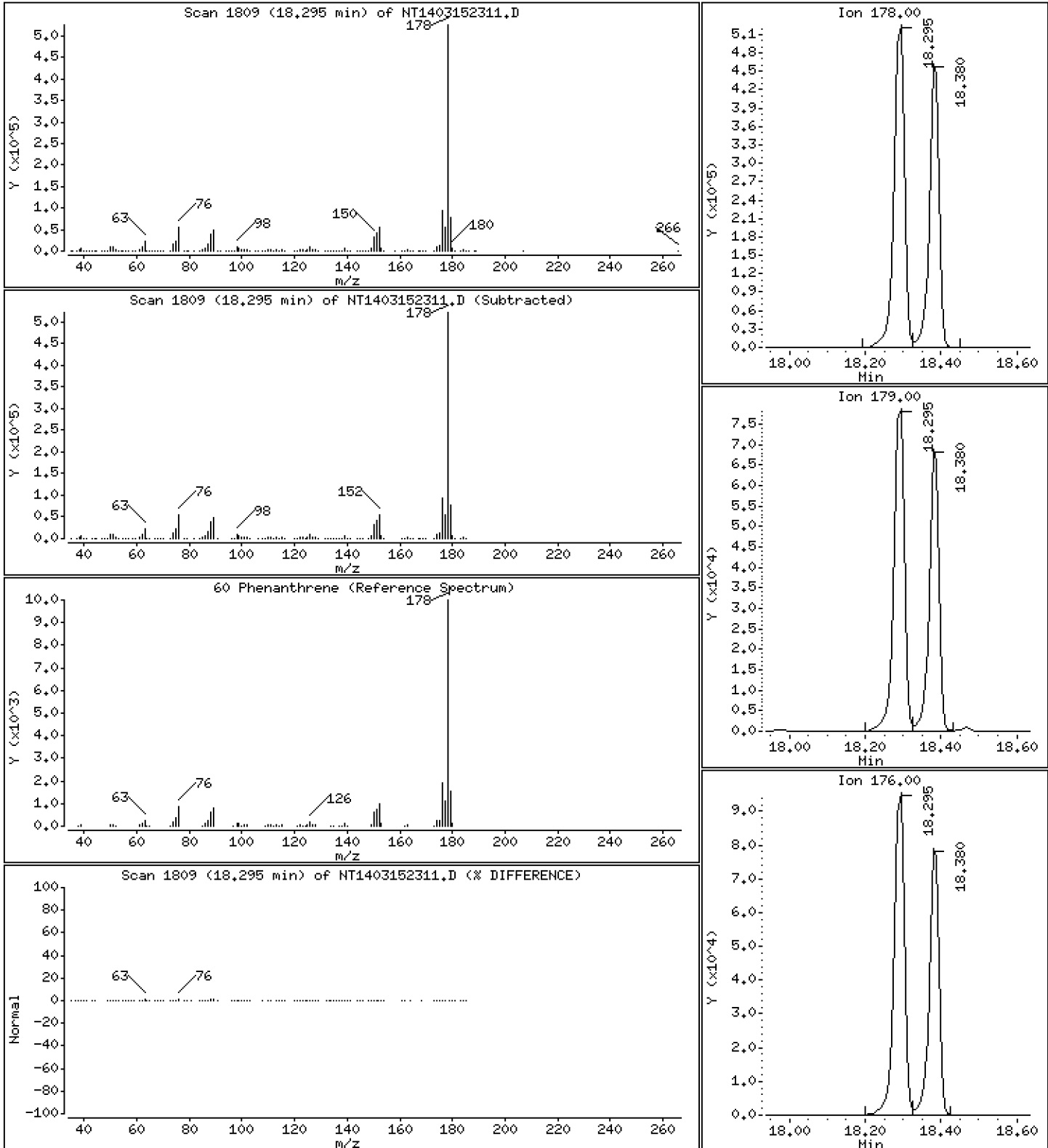
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,734 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

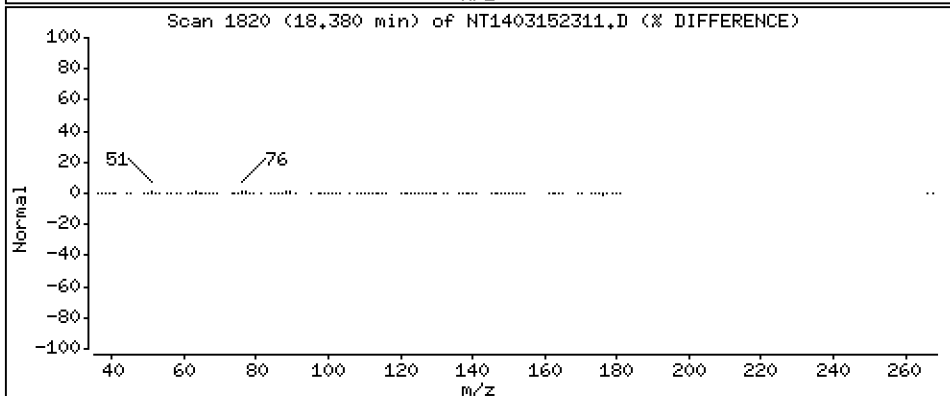
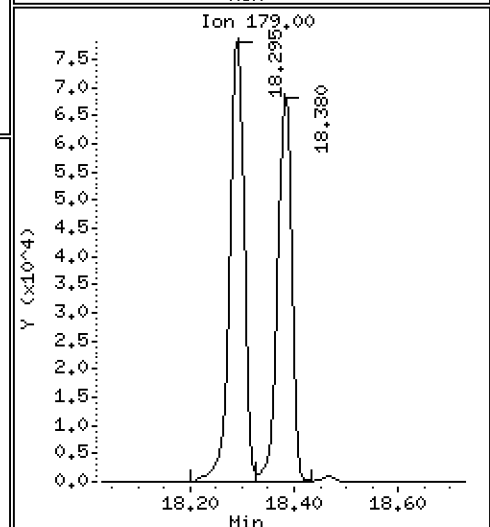
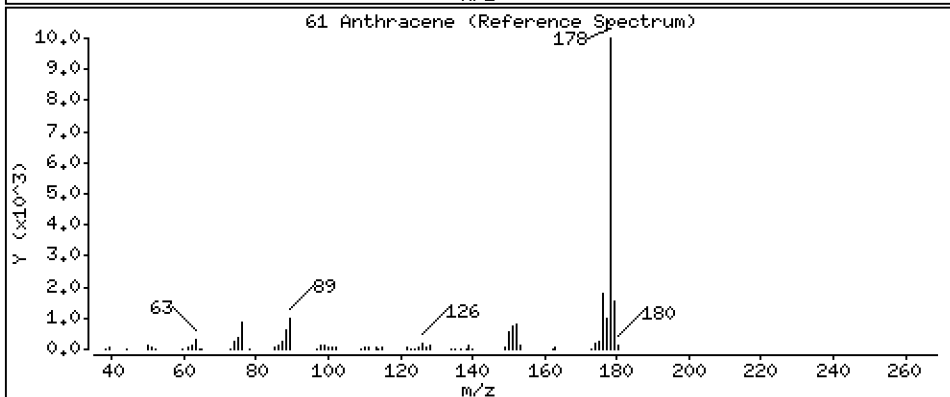
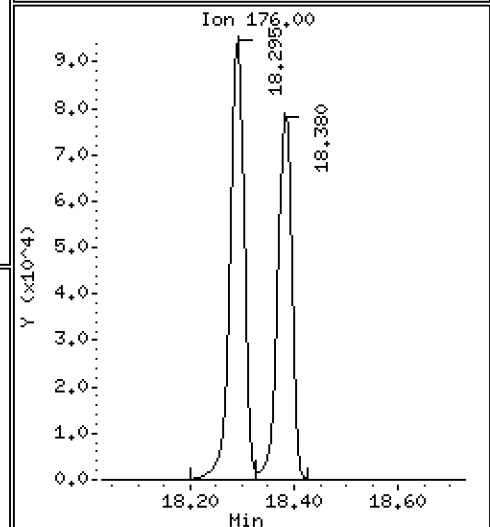
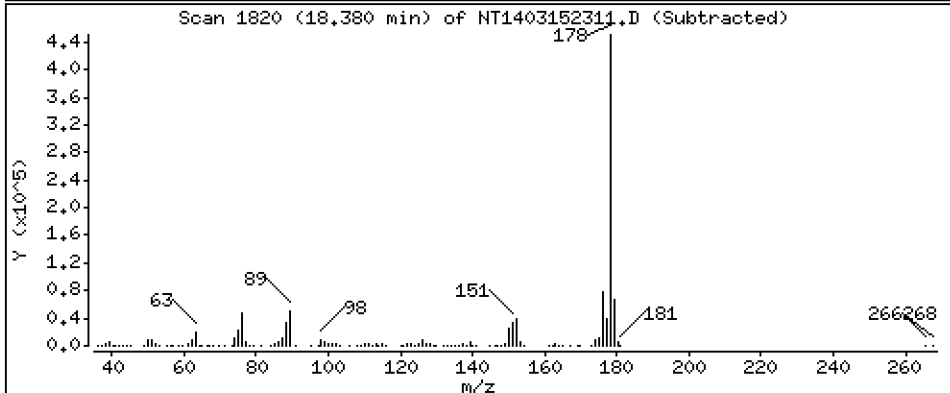
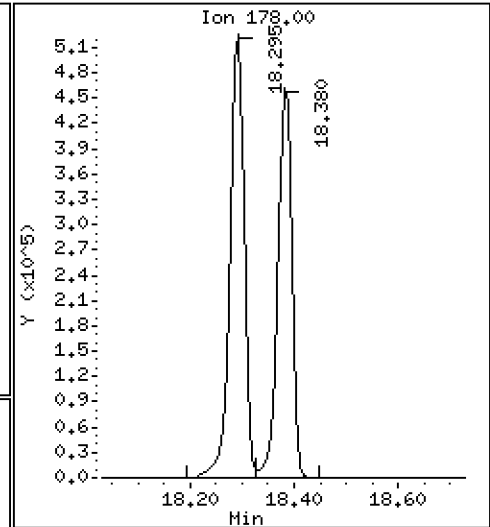
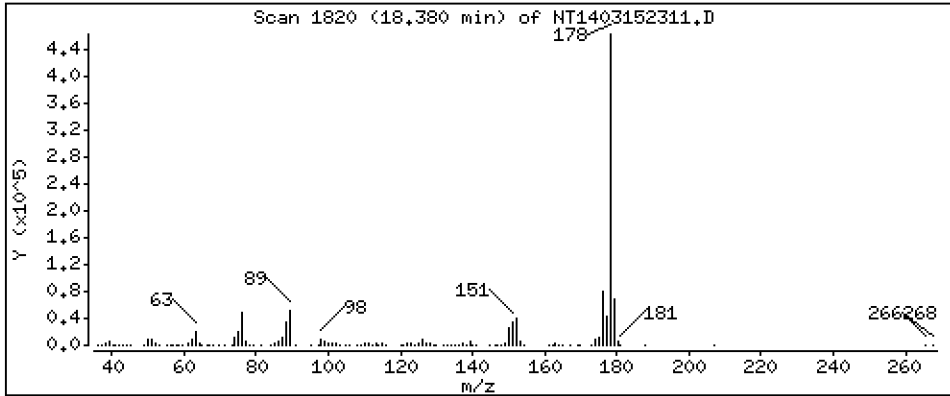
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,281 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

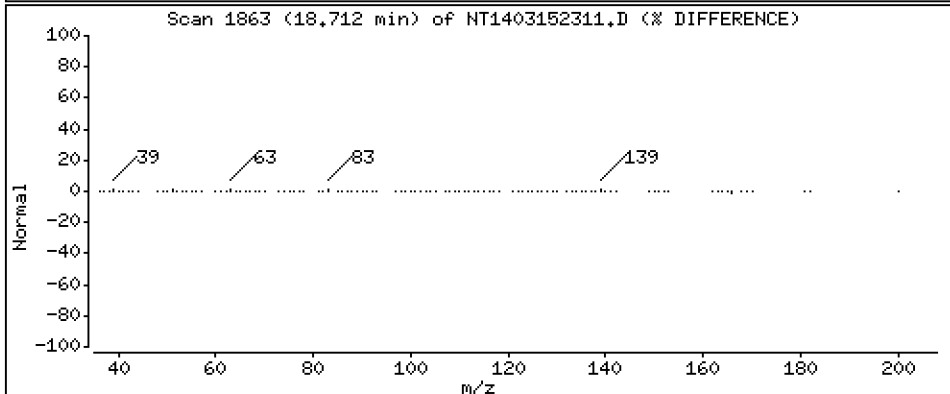
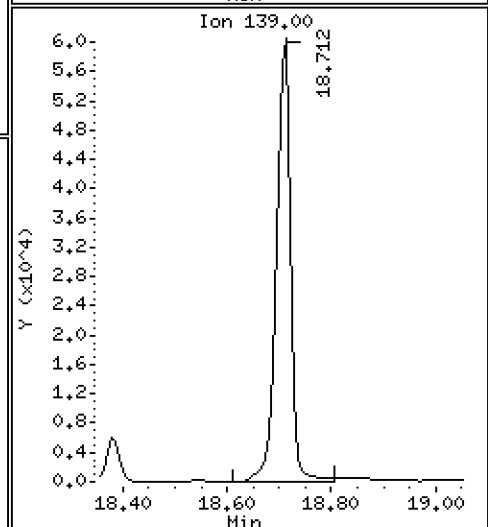
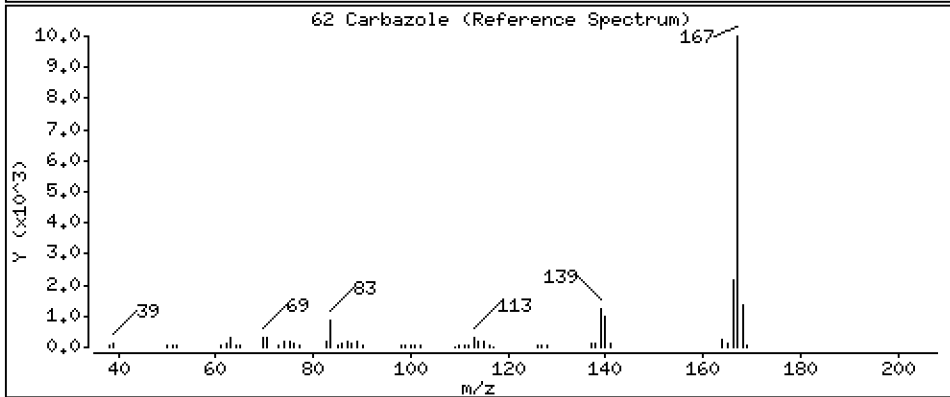
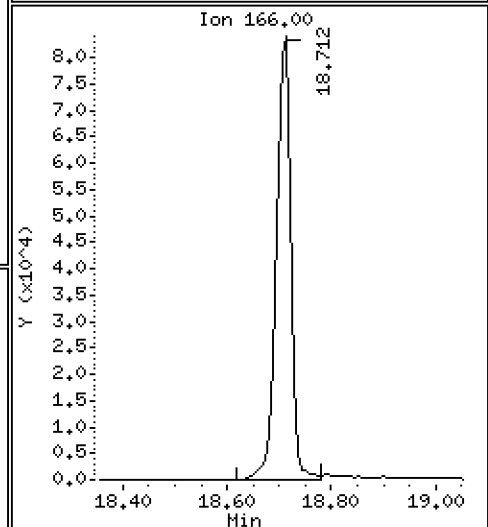
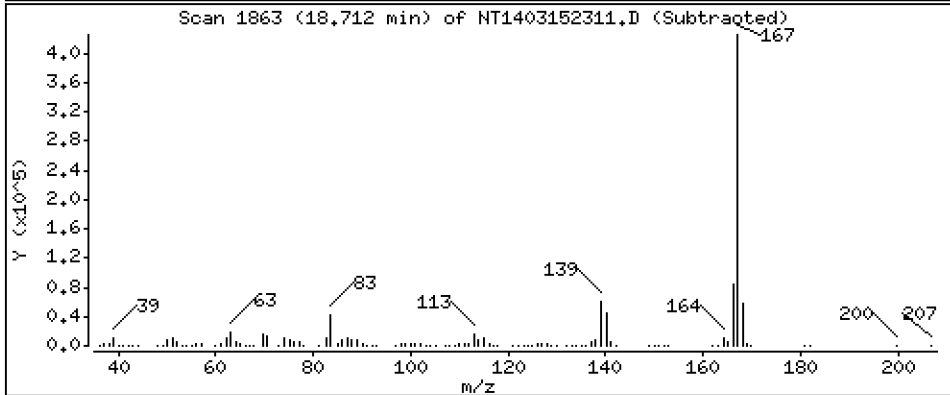
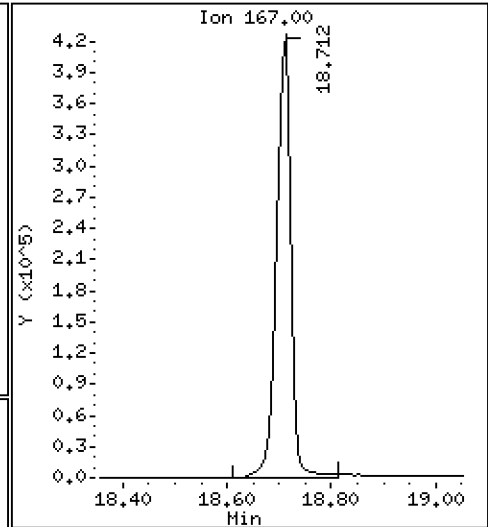
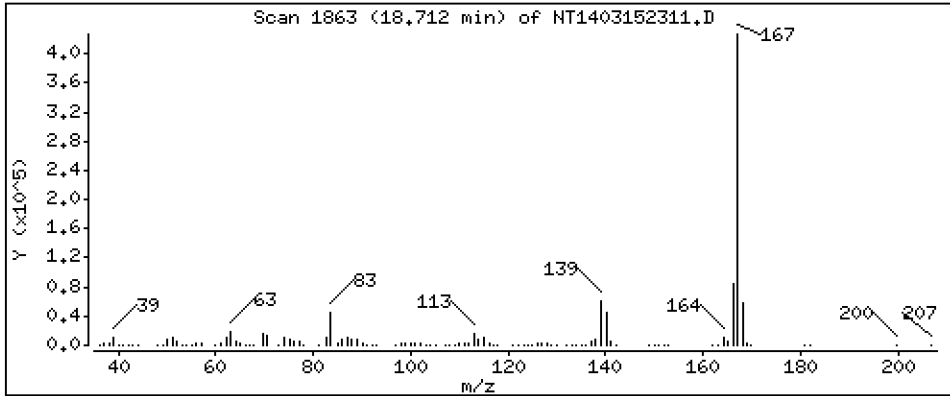
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,587 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

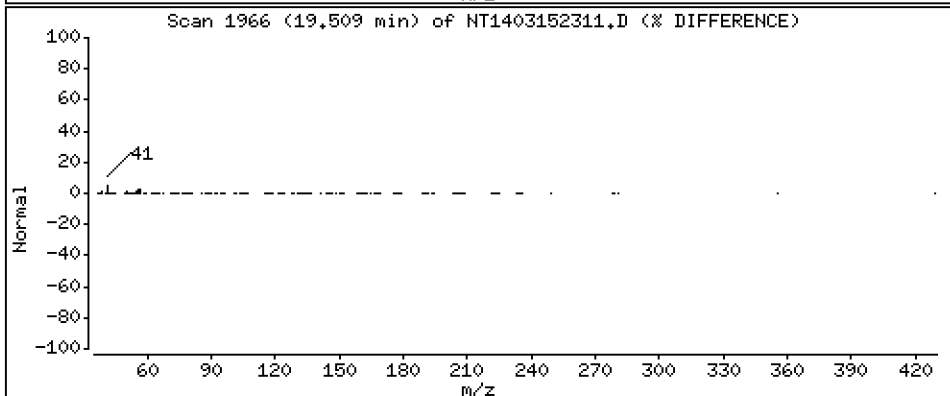
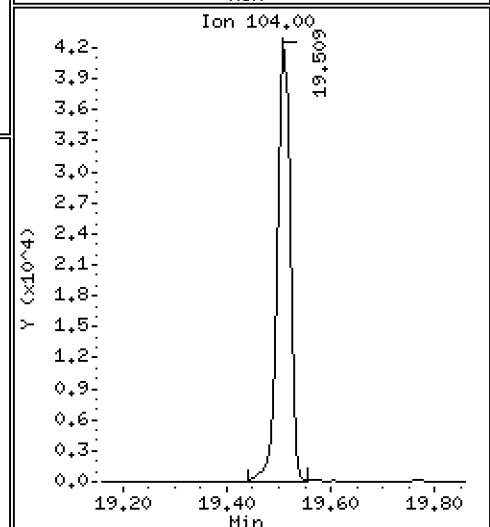
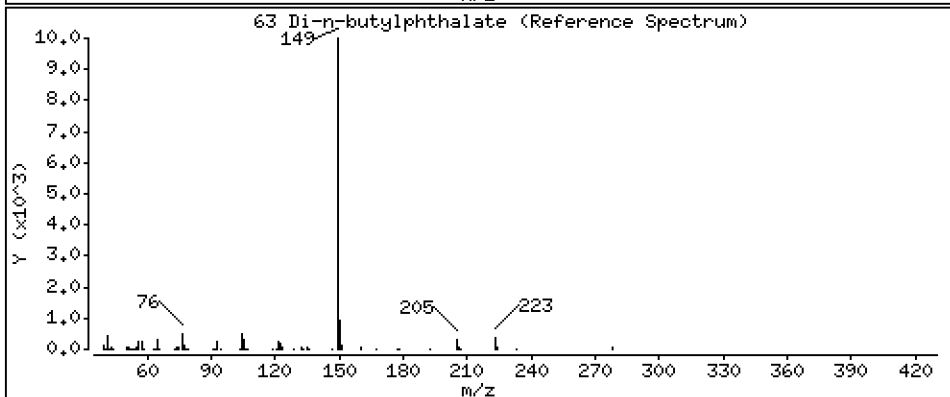
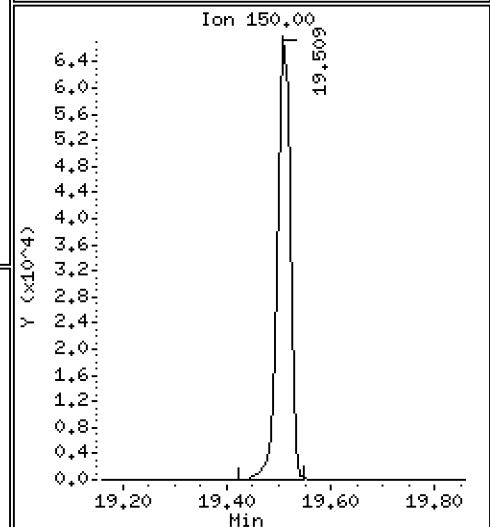
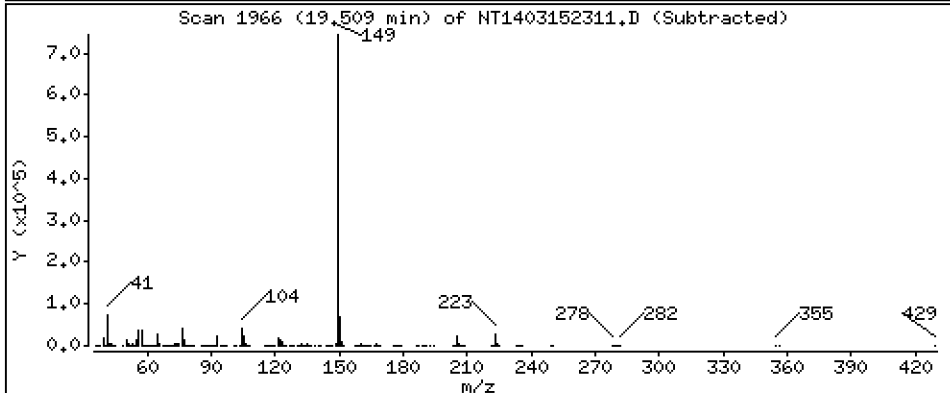
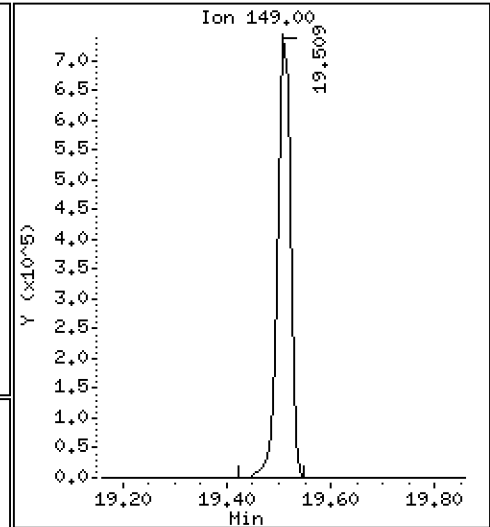
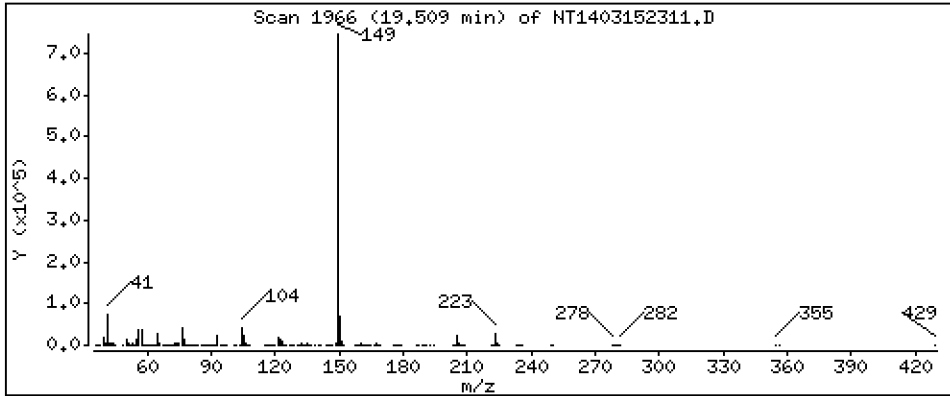
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,507 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

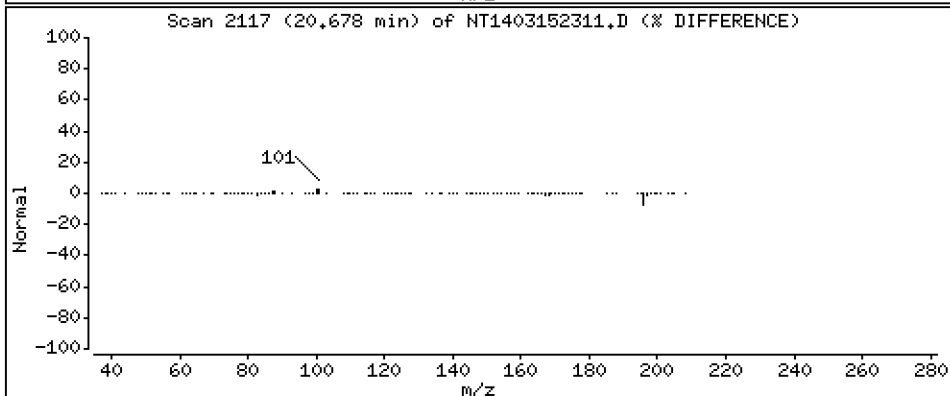
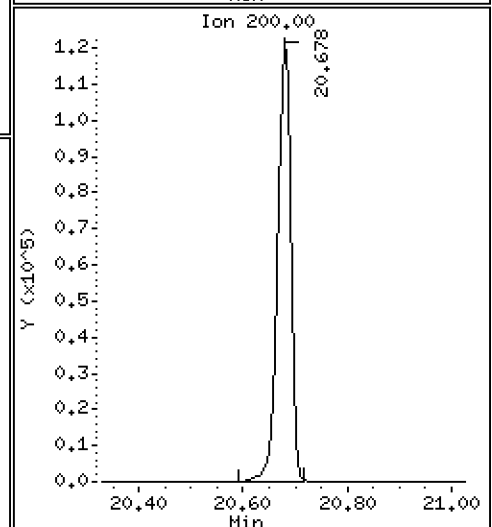
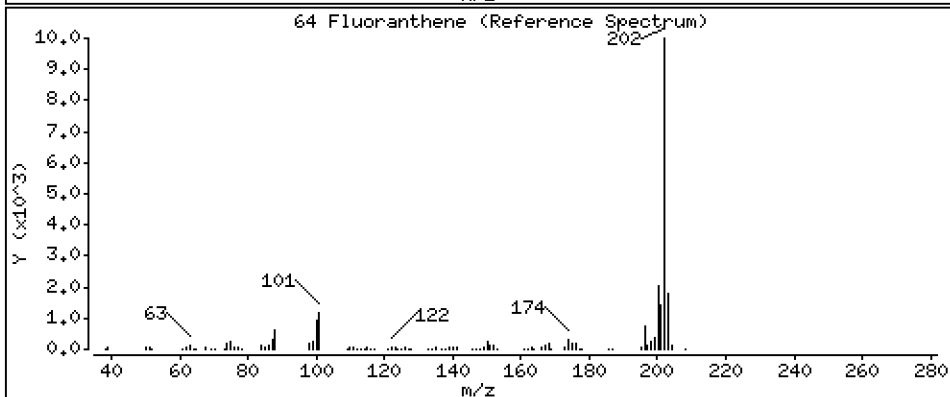
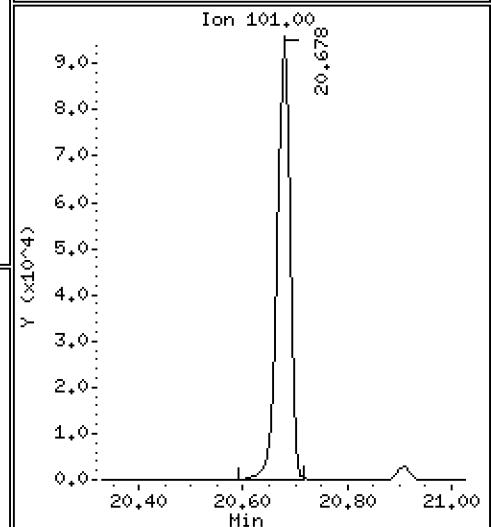
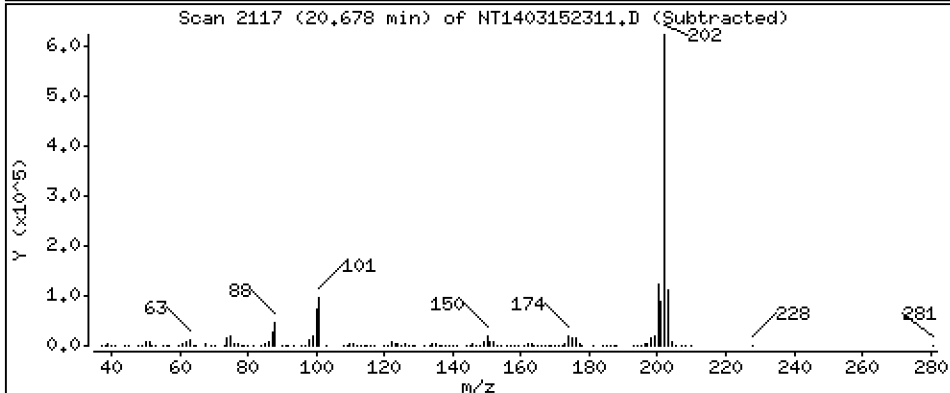
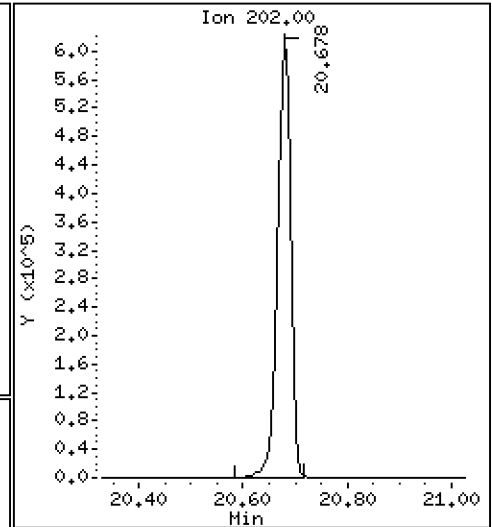
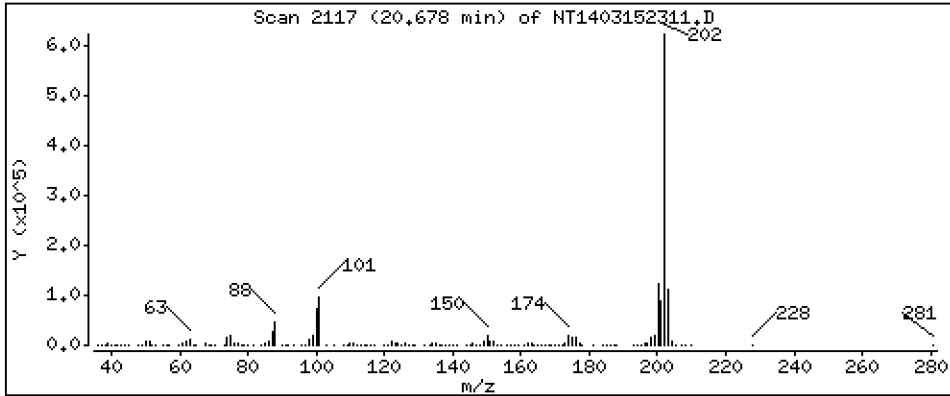
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 5,024 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

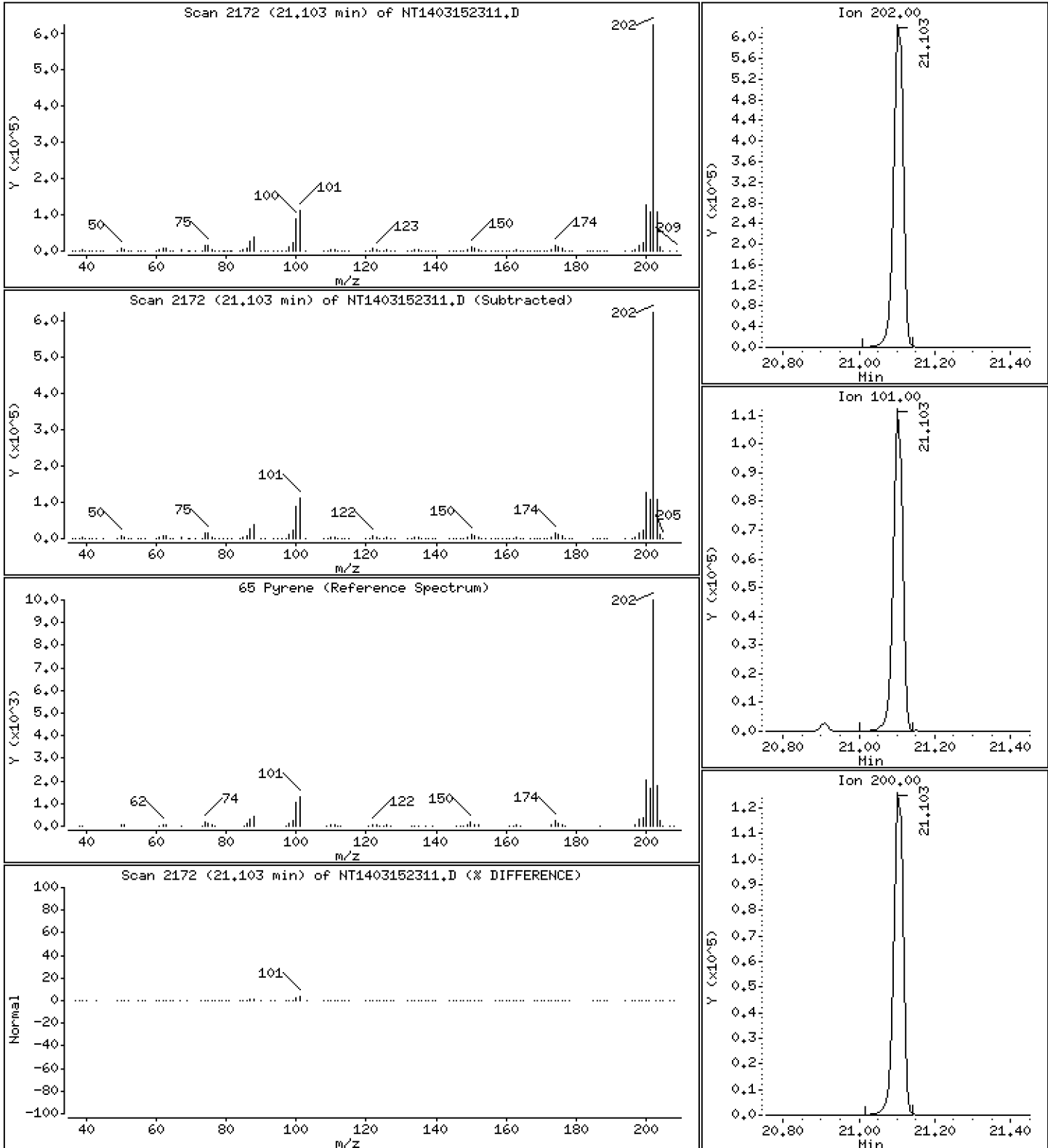
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,958 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

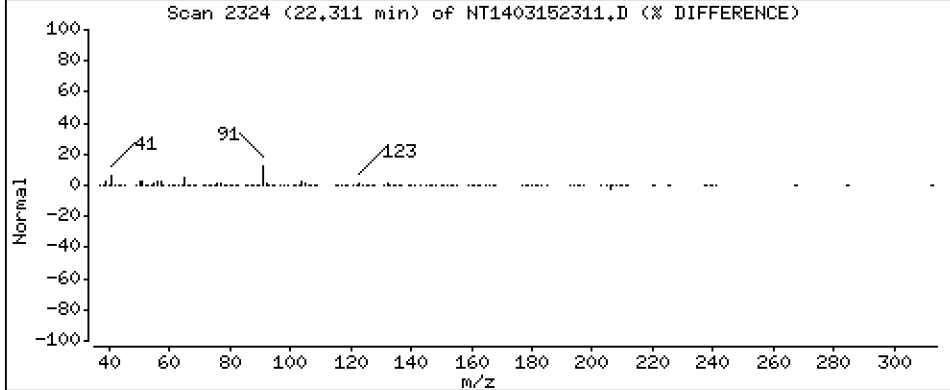
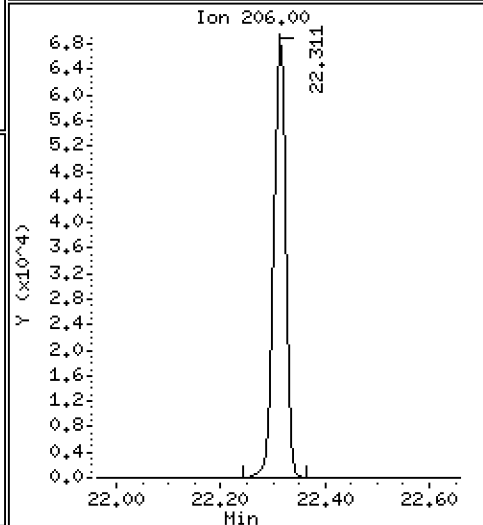
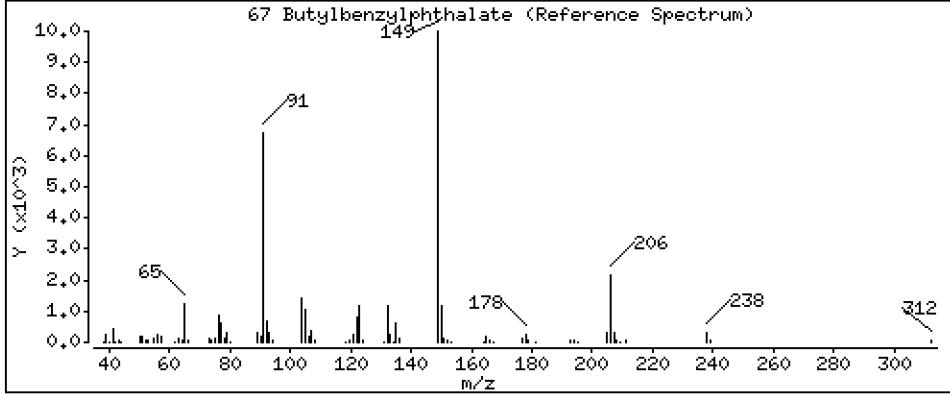
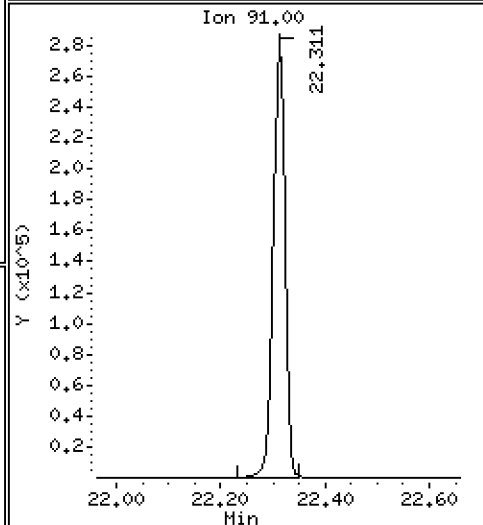
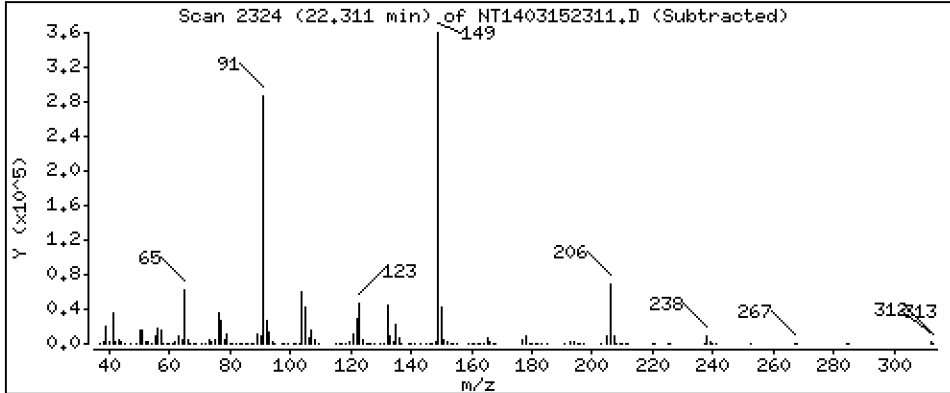
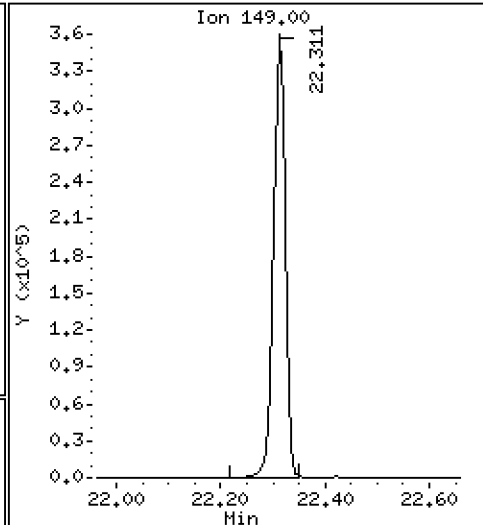
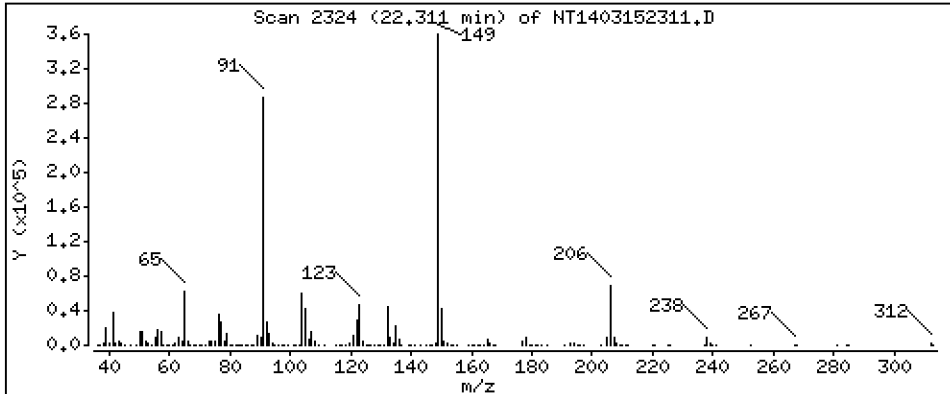
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,737 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

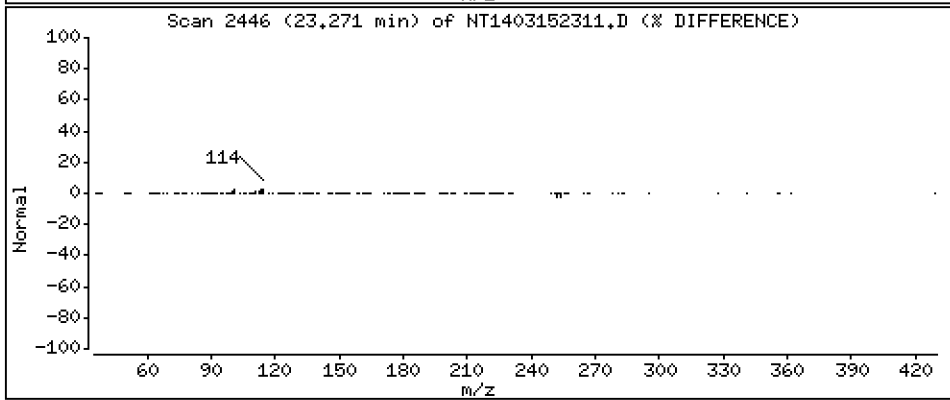
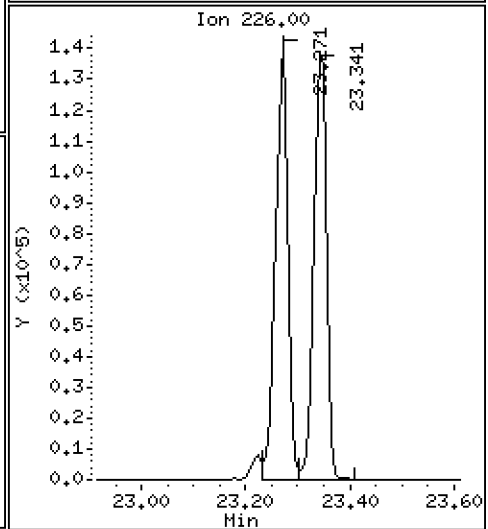
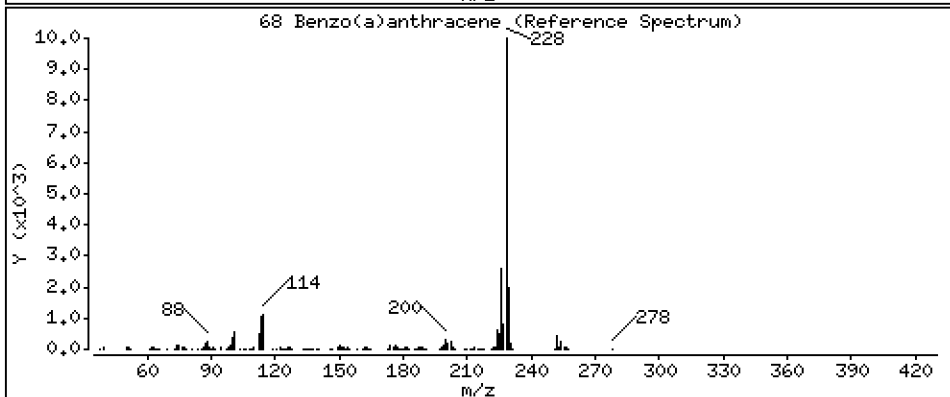
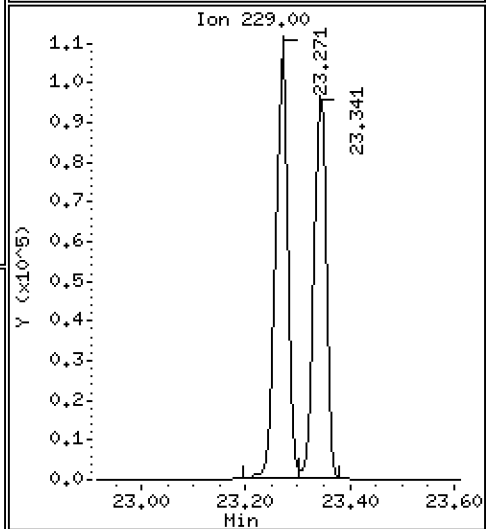
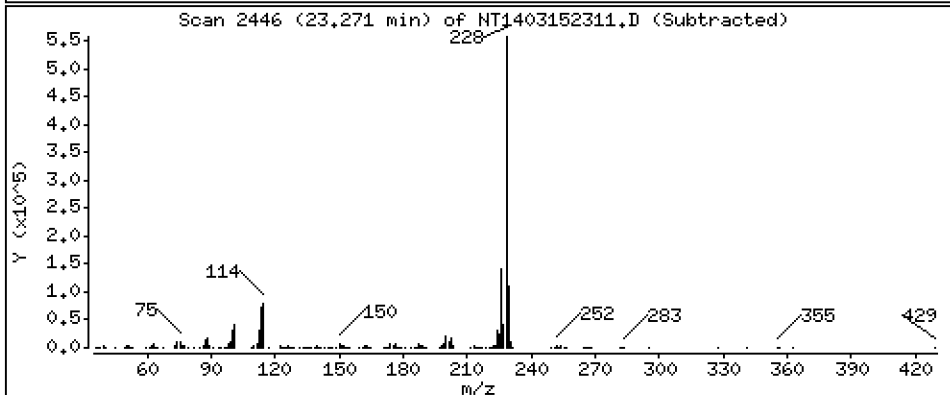
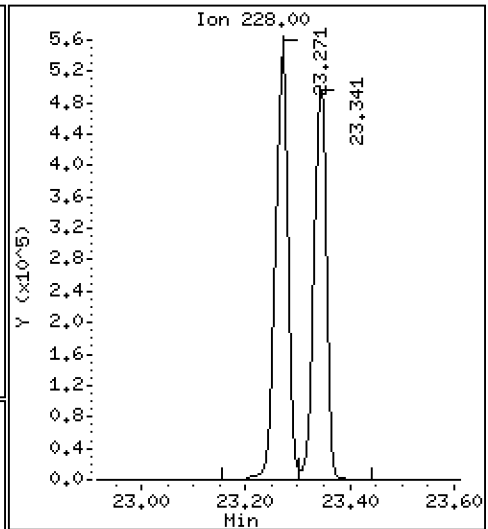
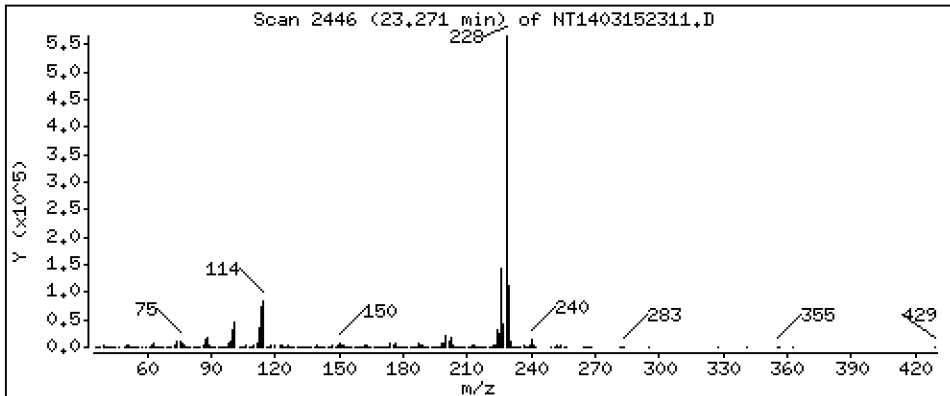
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,827 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

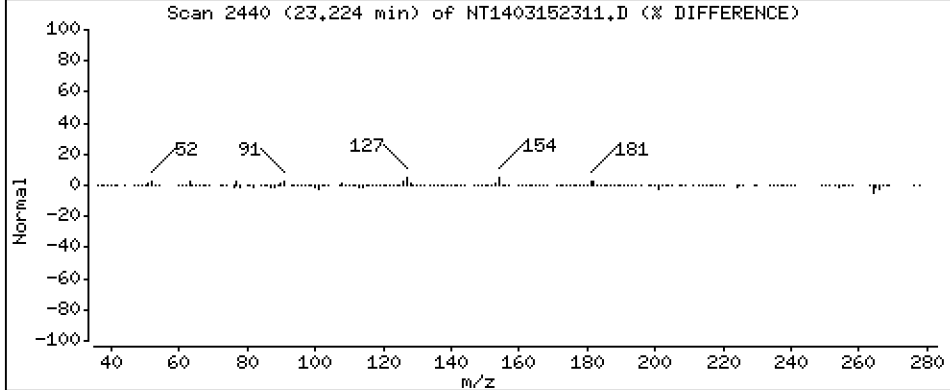
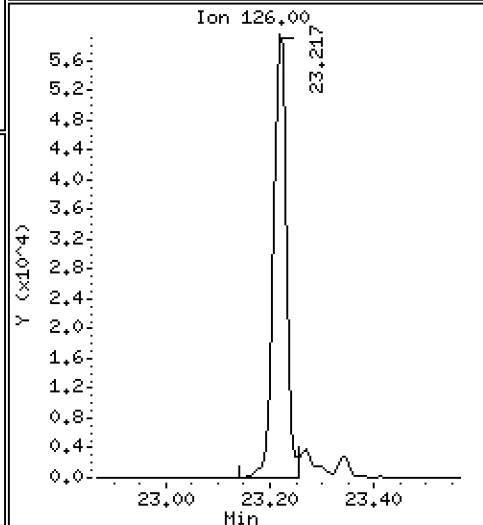
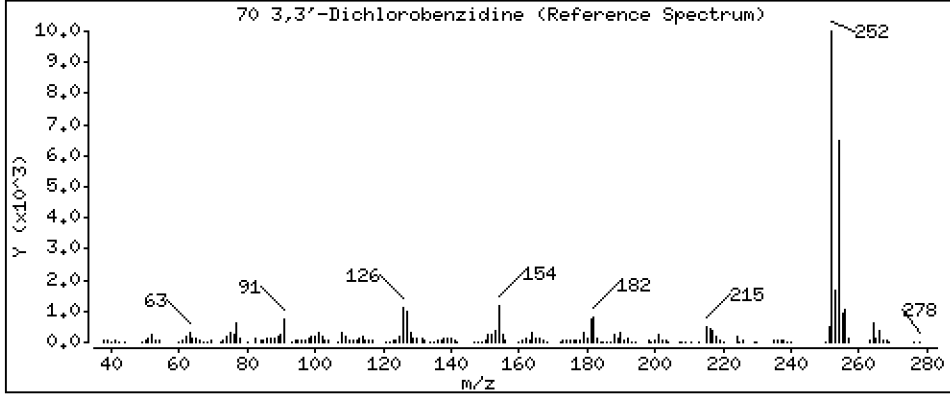
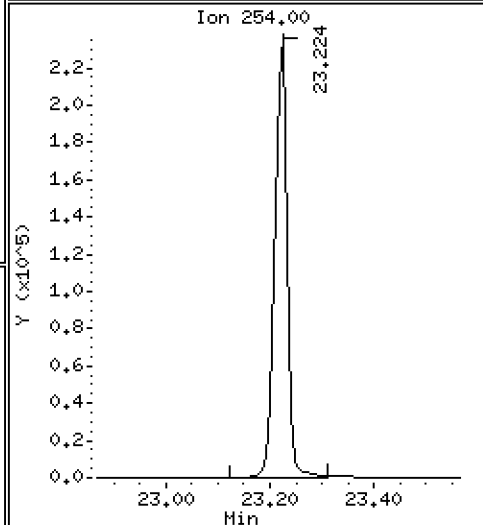
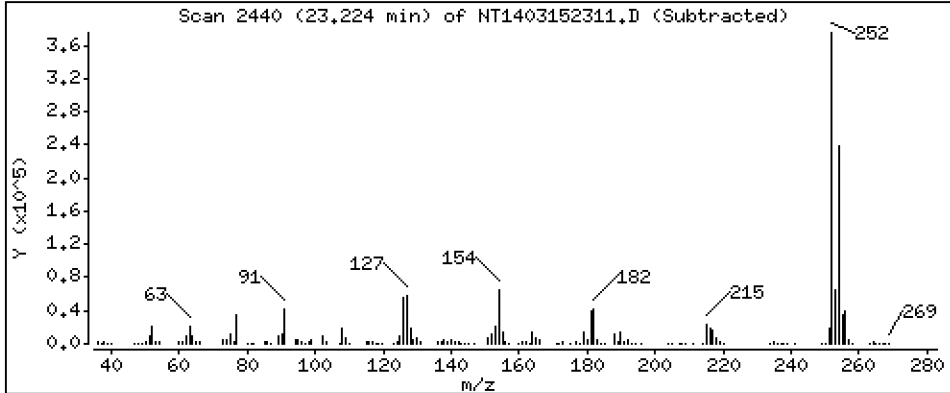
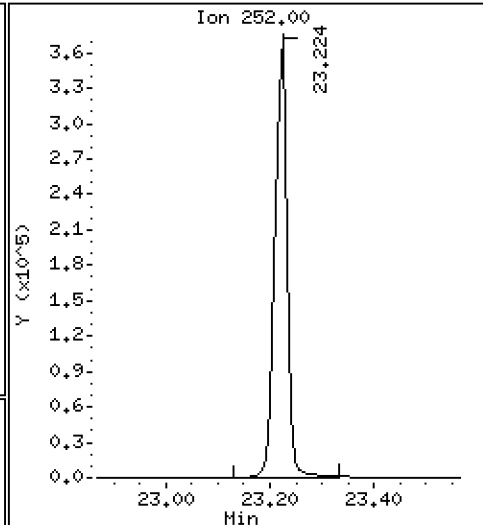
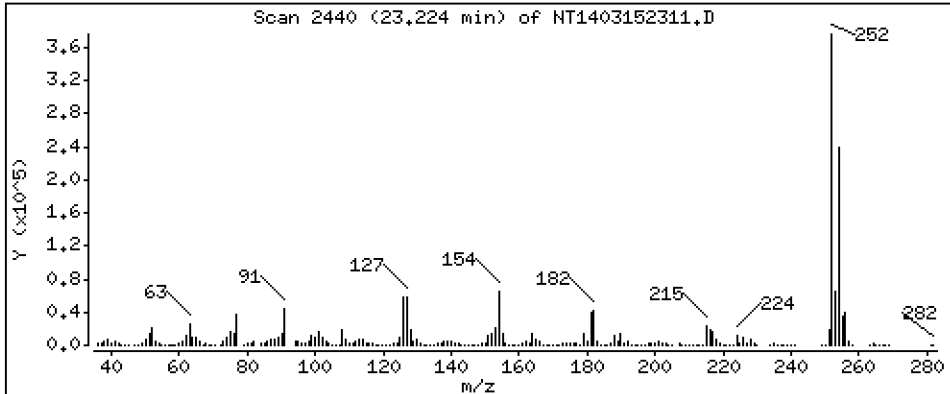
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 10,65 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

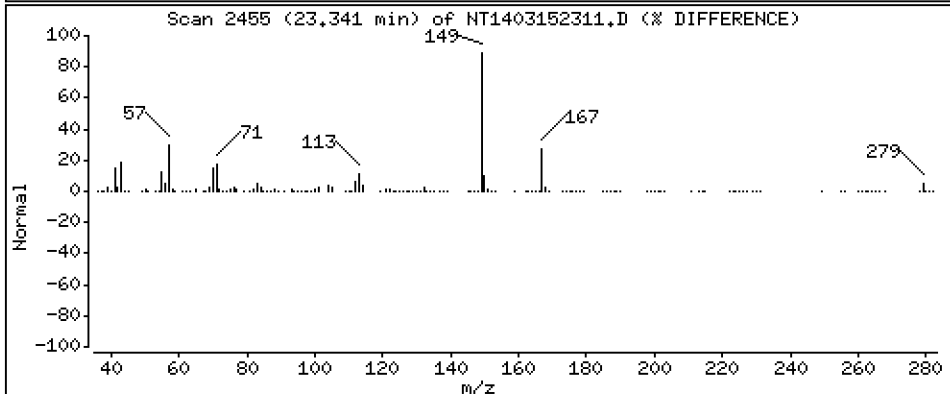
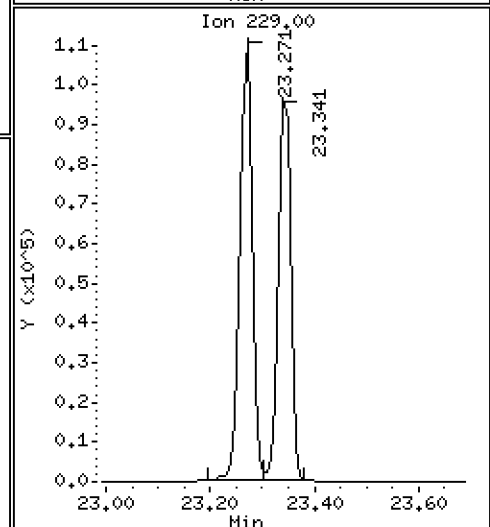
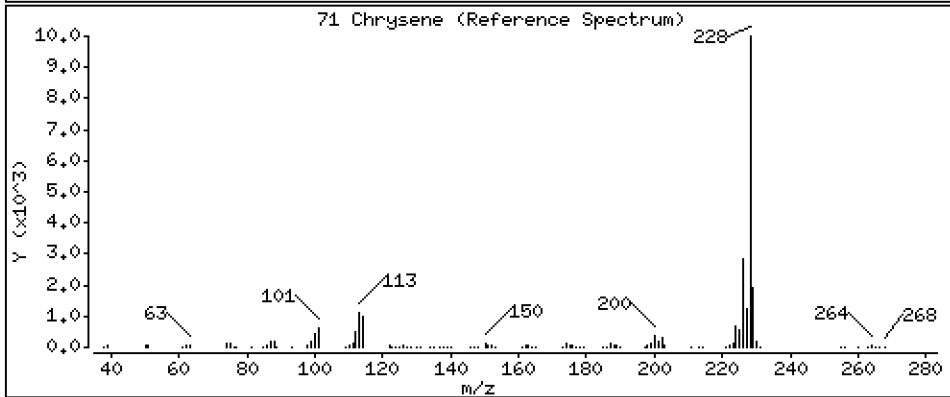
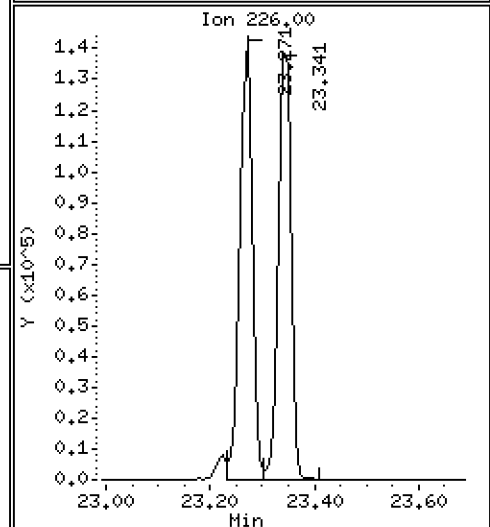
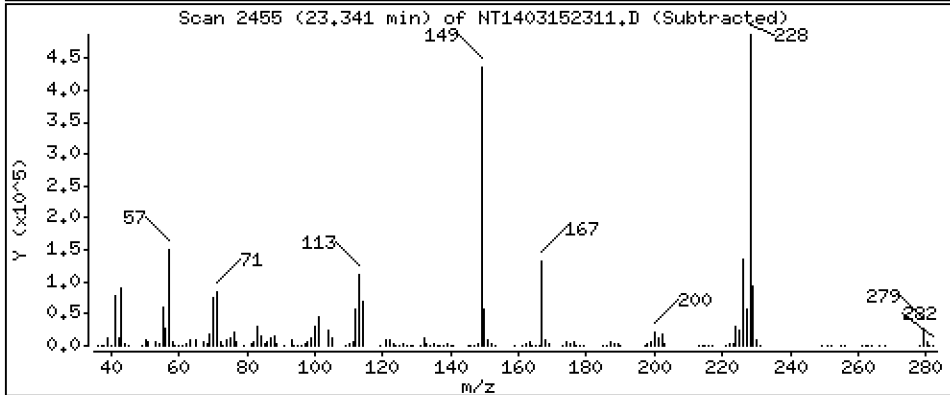
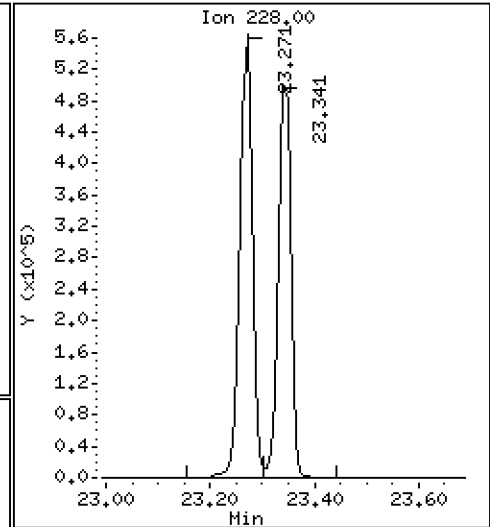
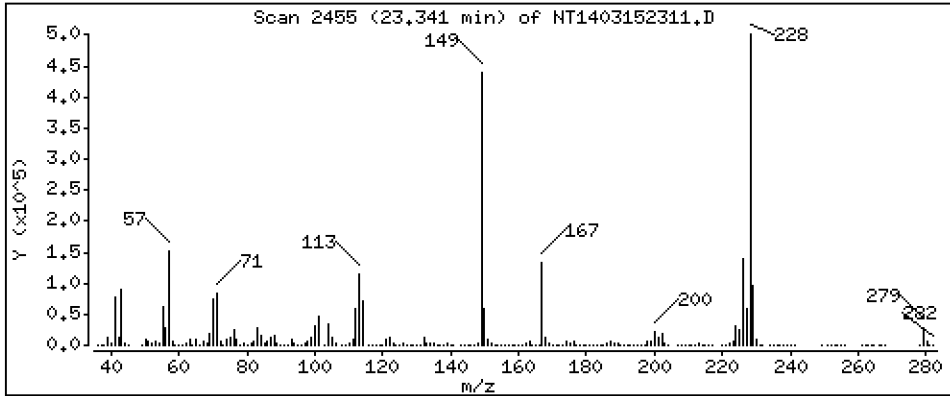
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,723 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

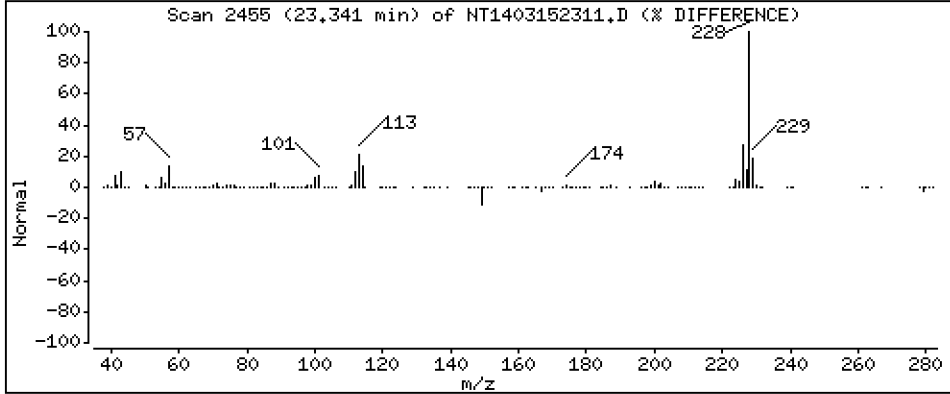
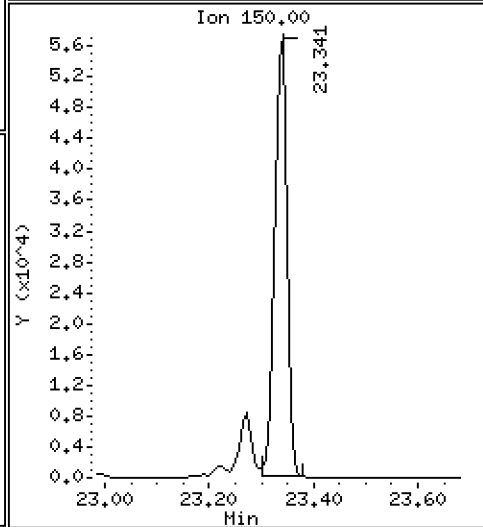
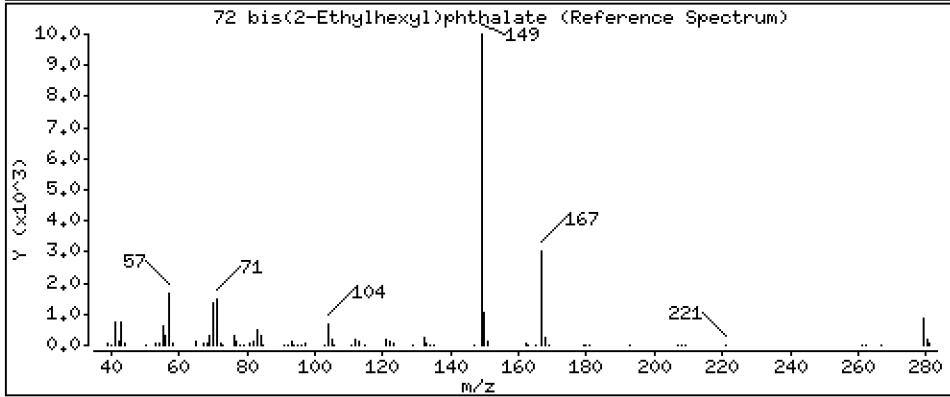
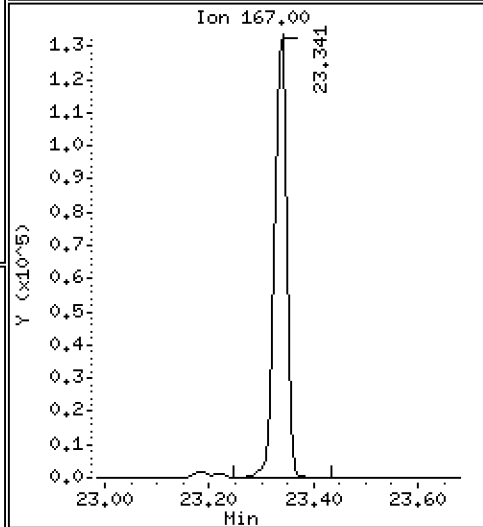
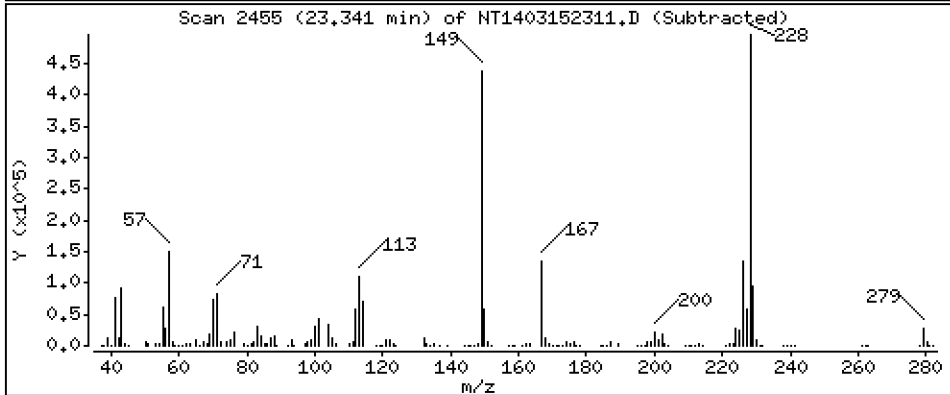
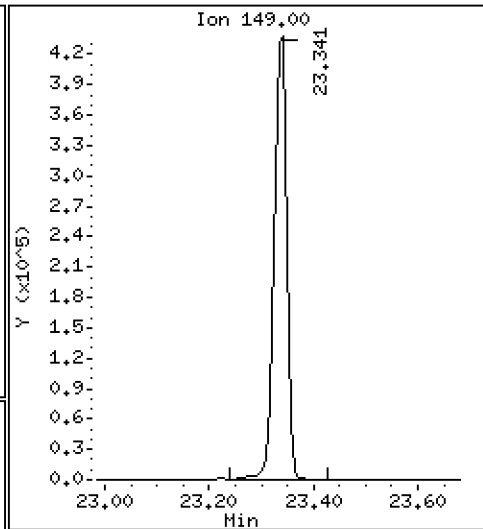
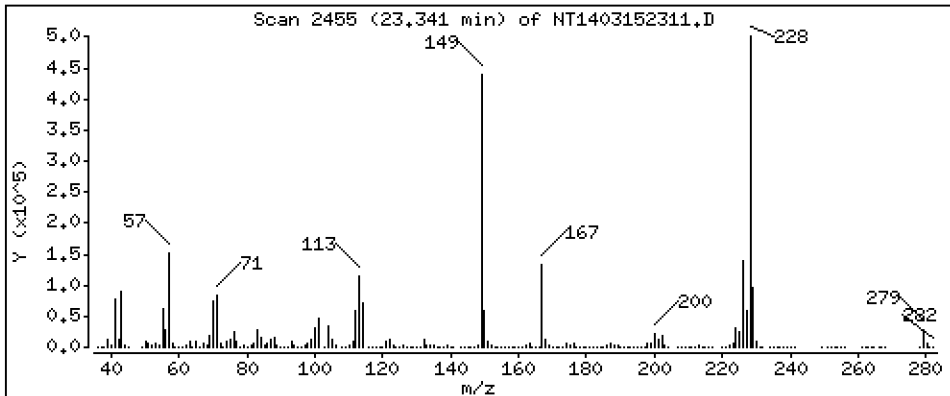
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 5,428 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

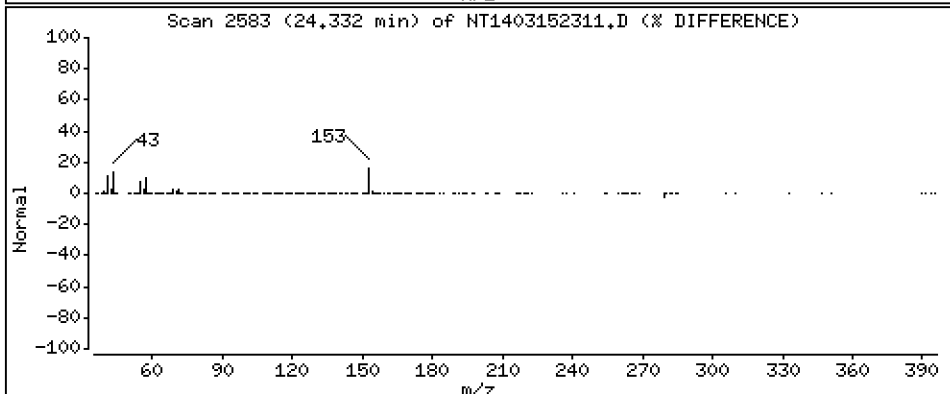
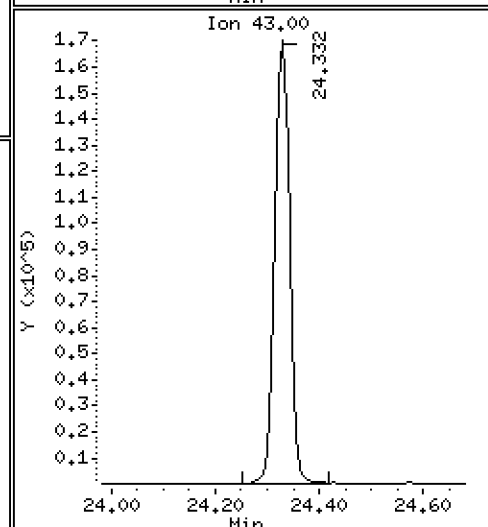
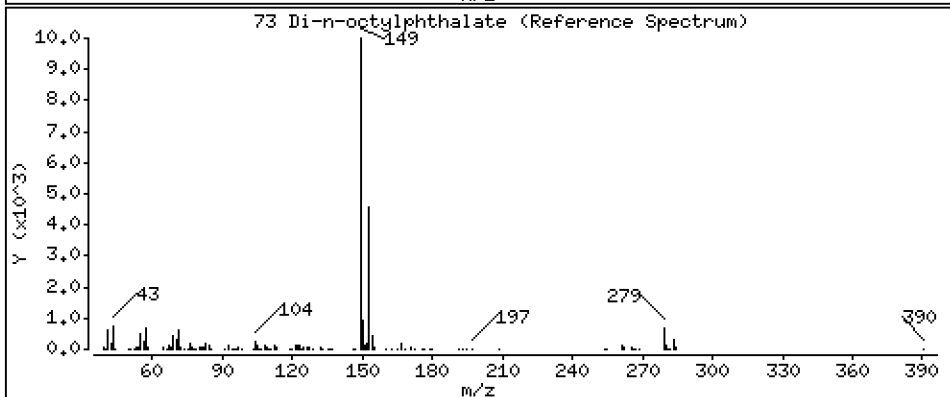
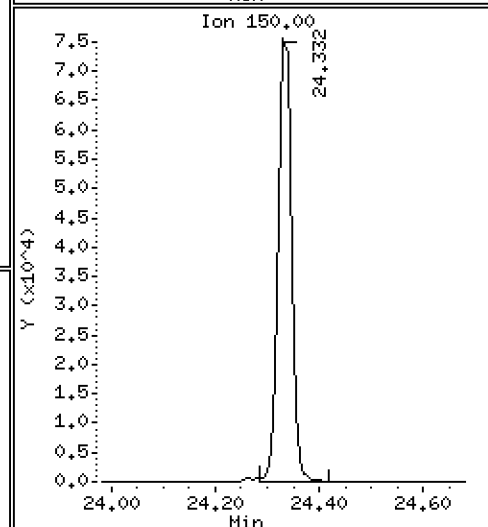
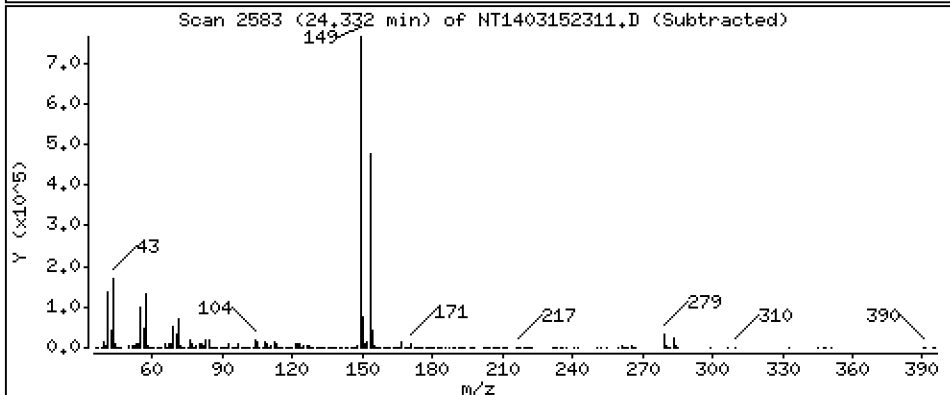
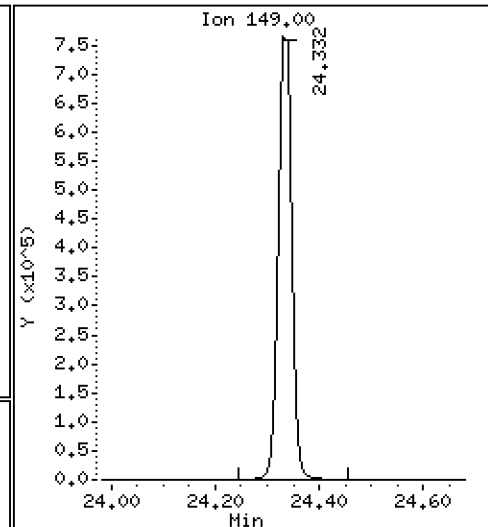
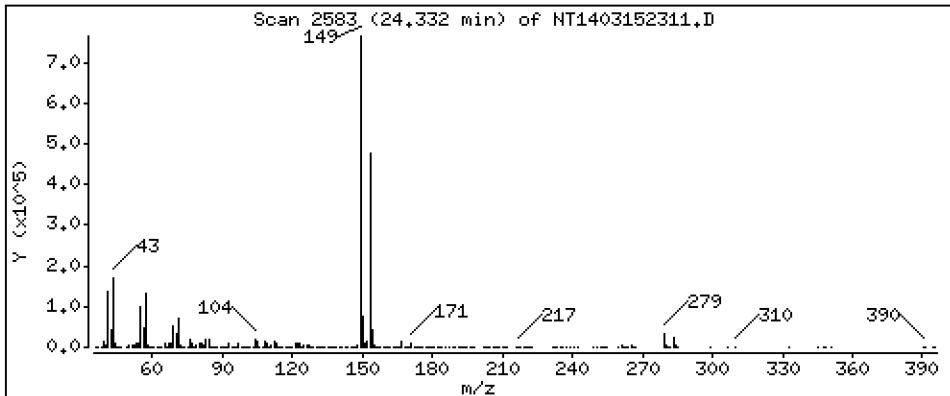
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,135 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

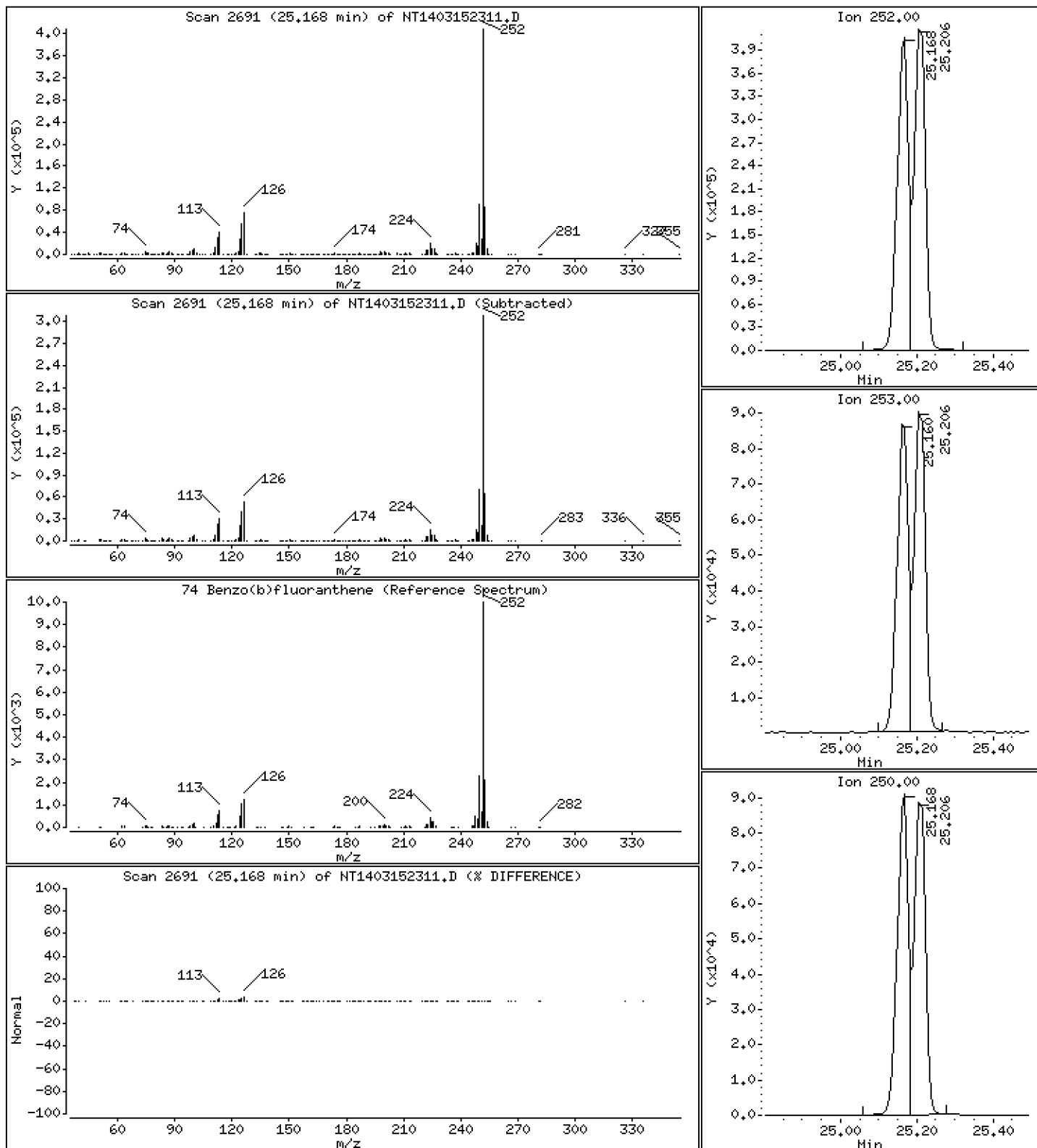
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,774 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

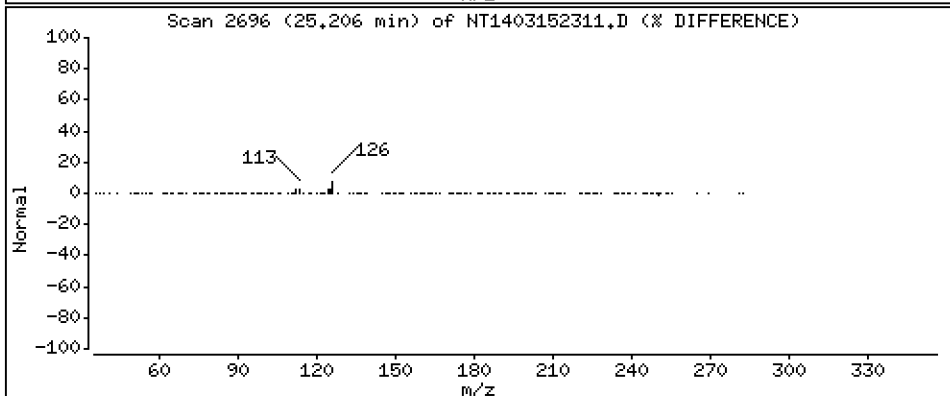
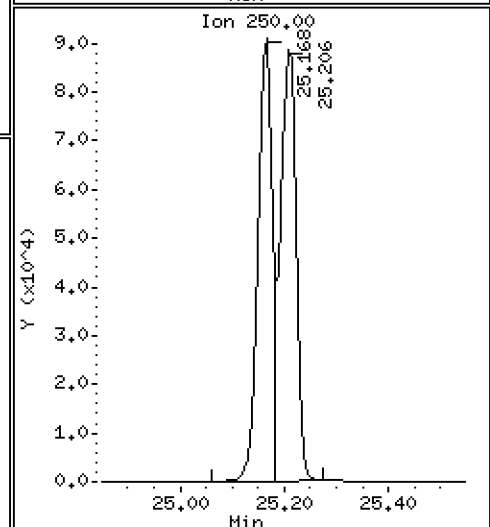
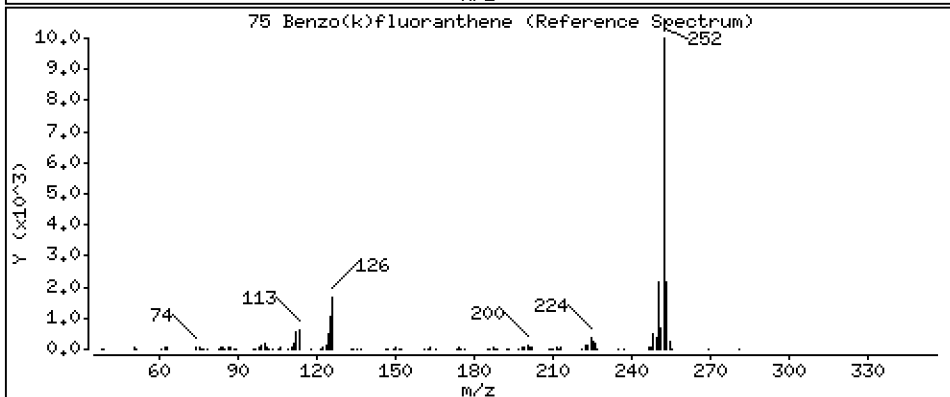
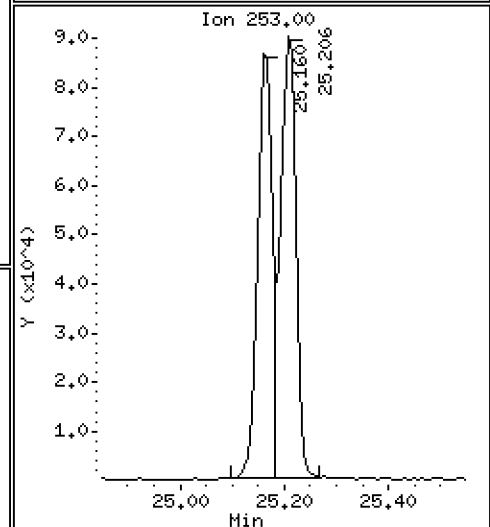
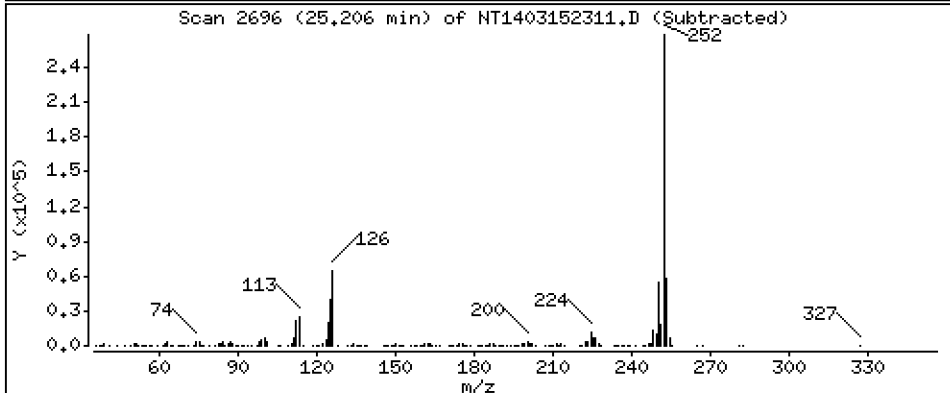
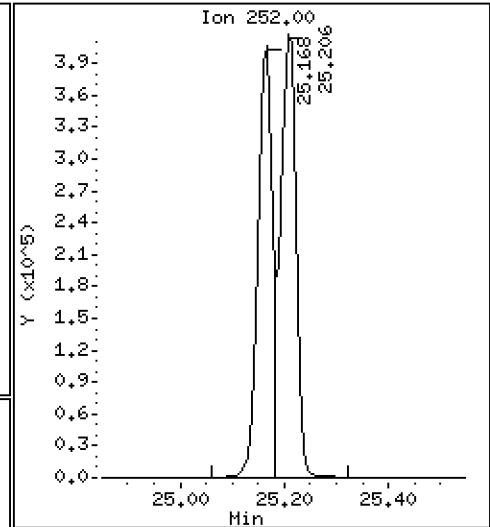
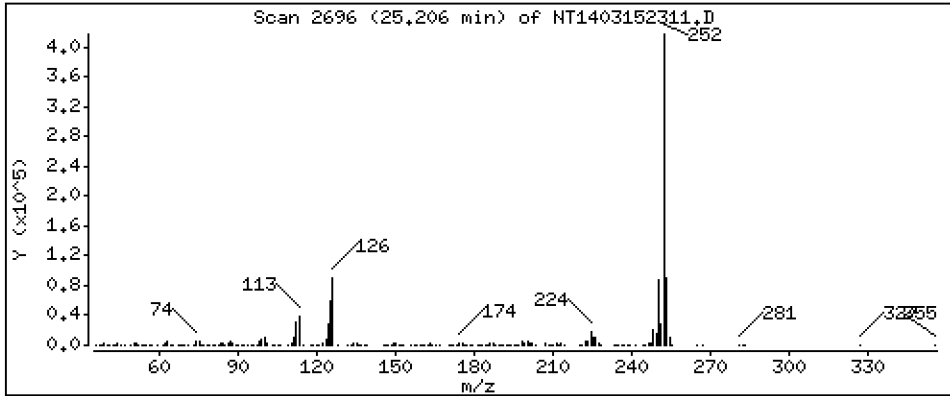
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

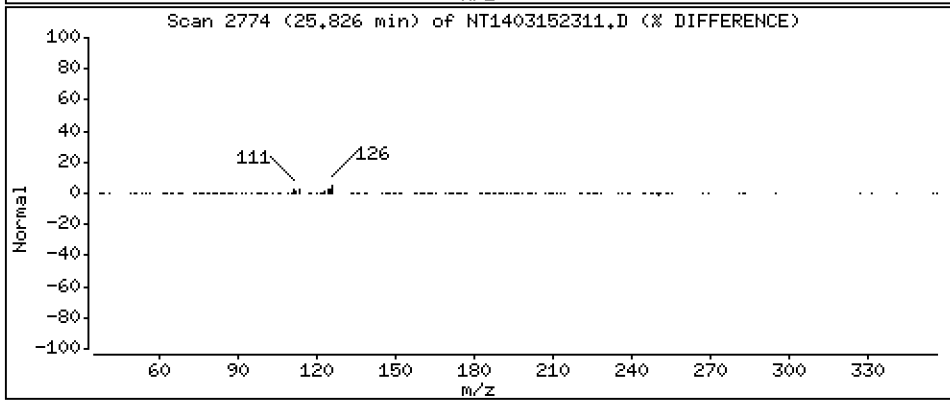
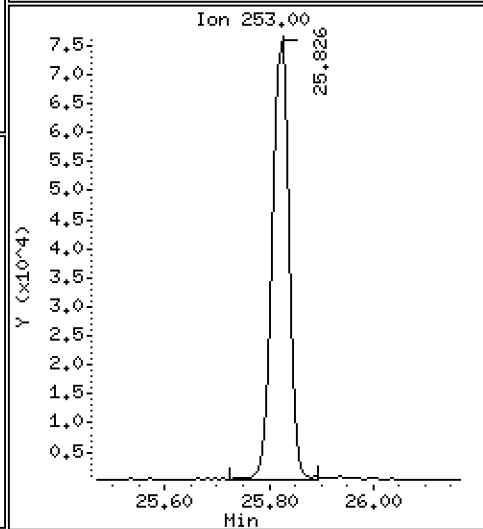
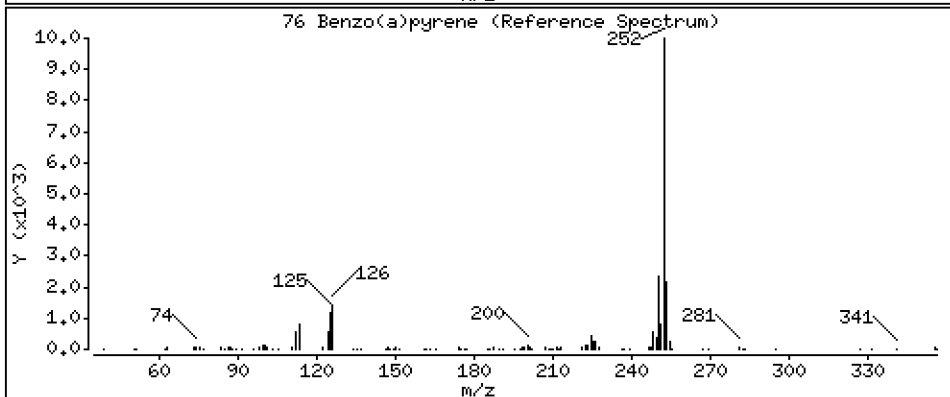
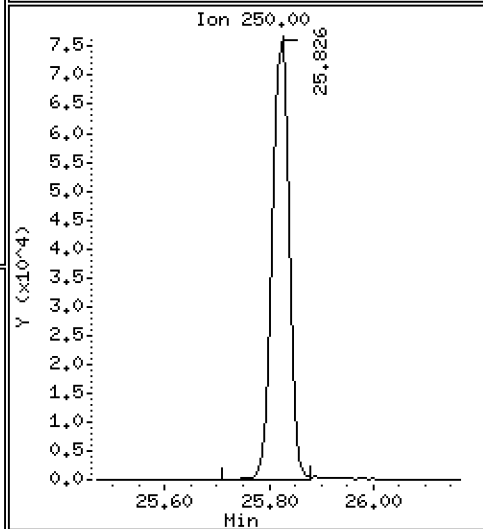
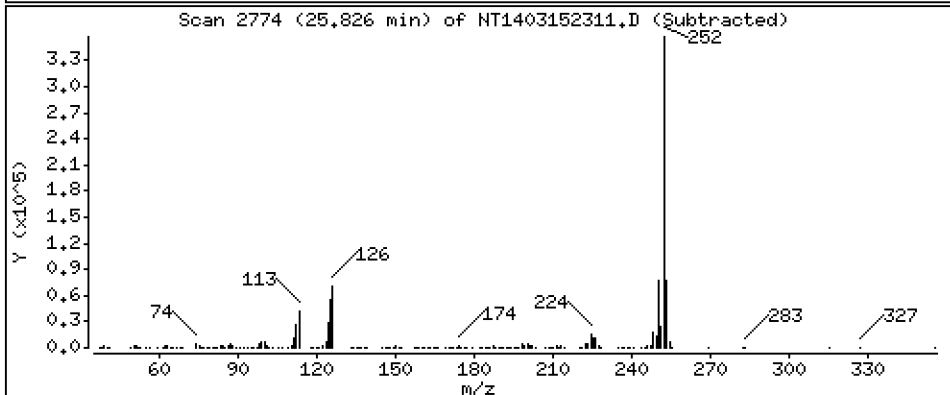
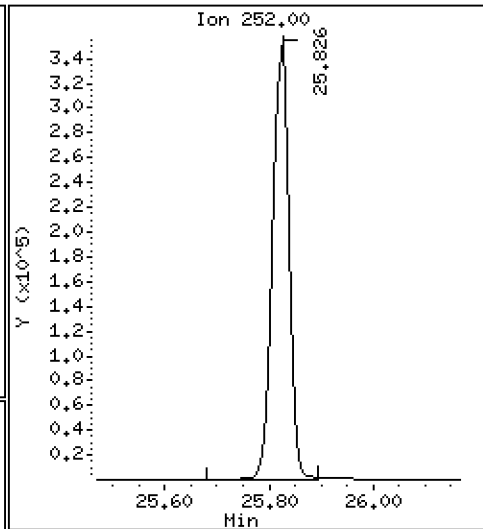
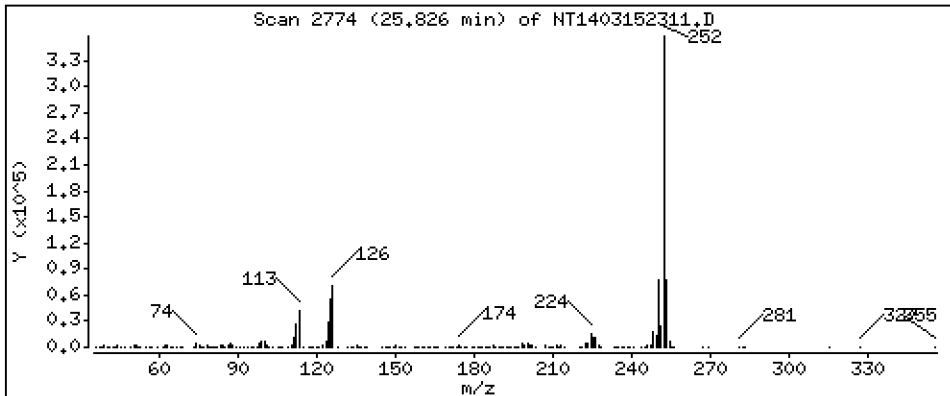
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,978 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

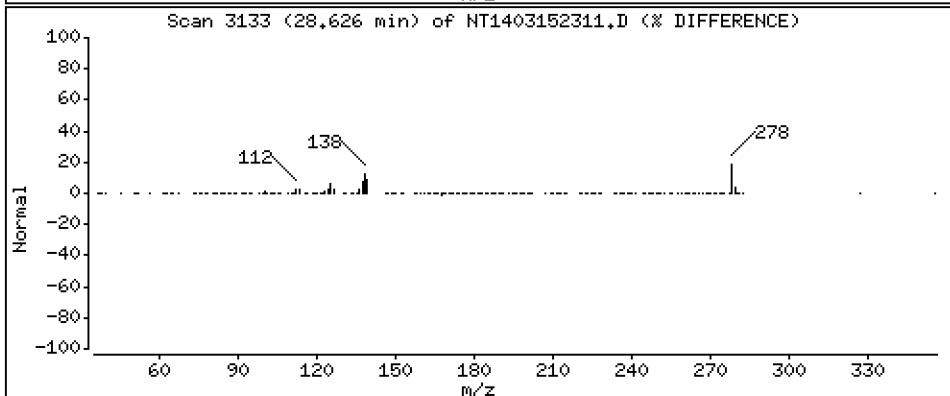
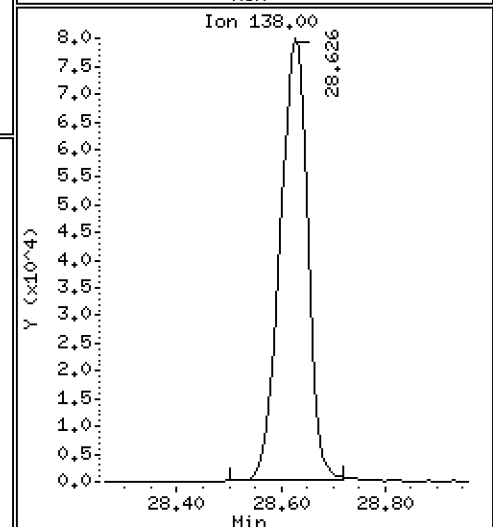
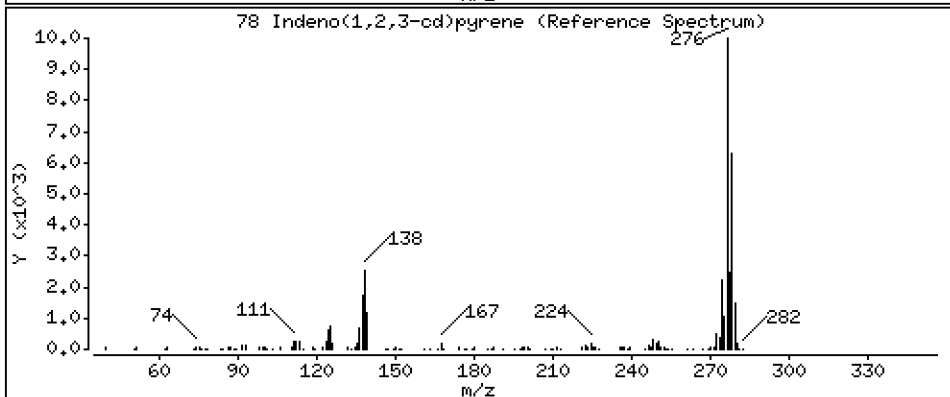
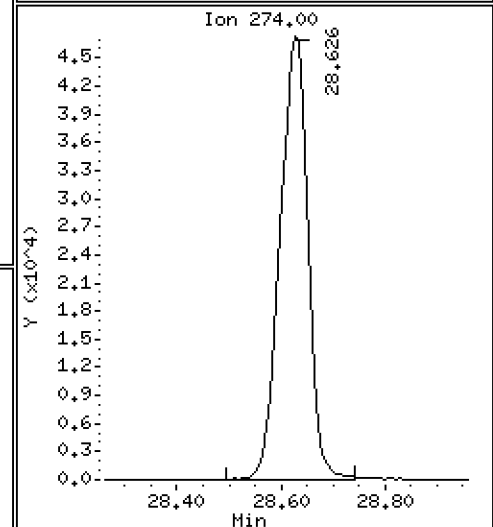
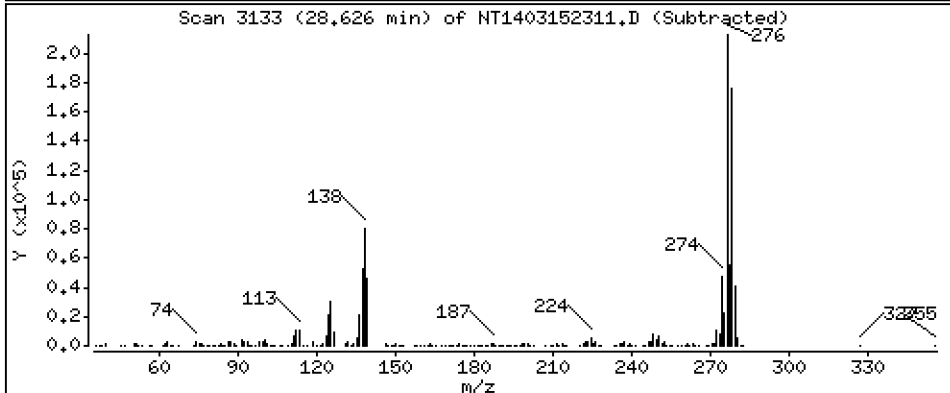
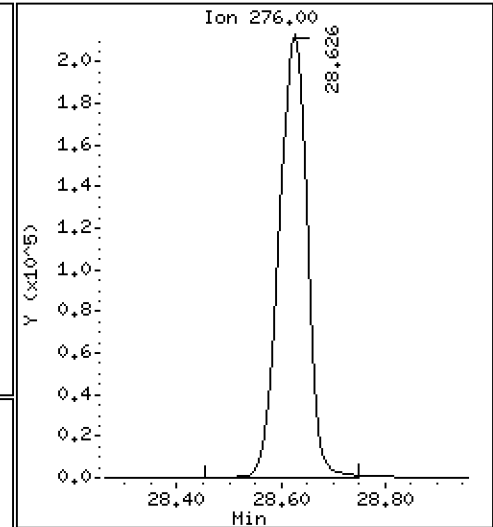
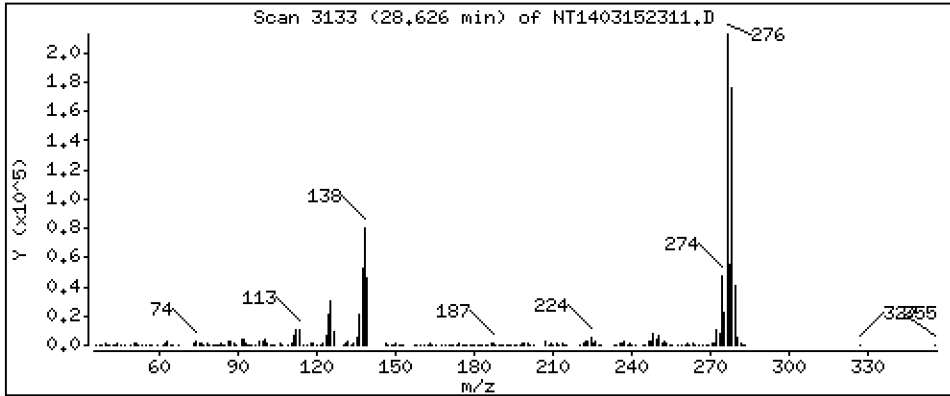
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,943 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

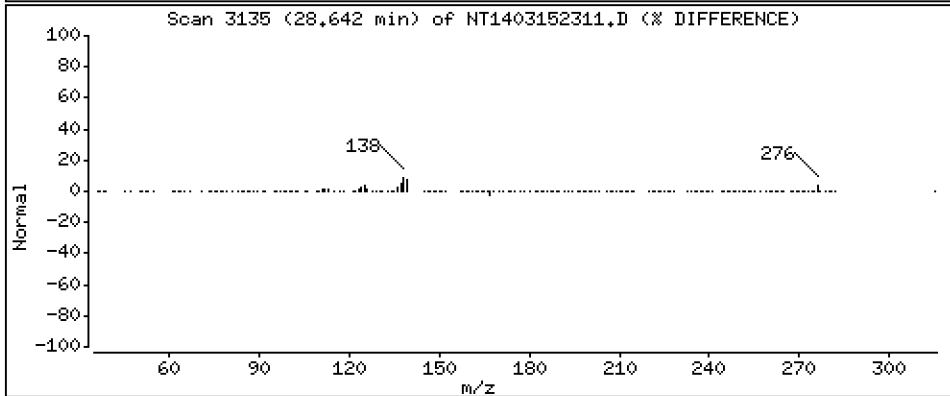
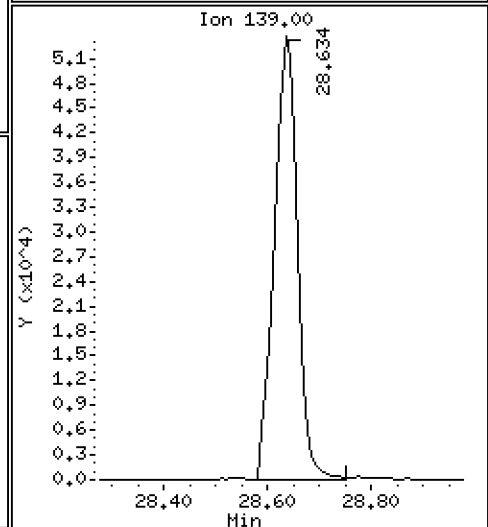
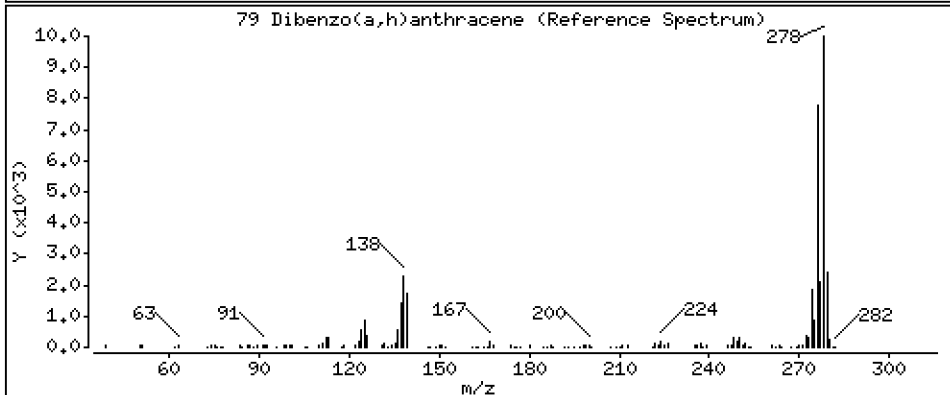
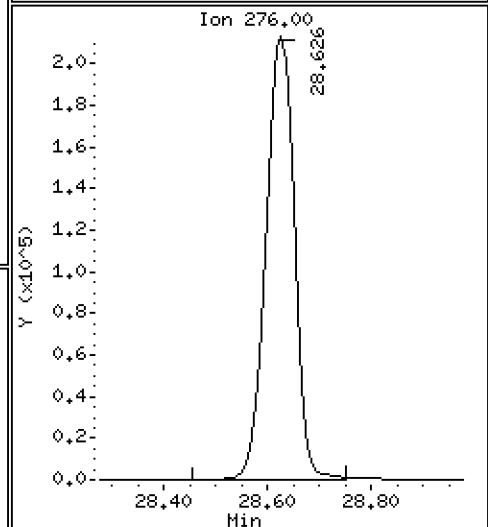
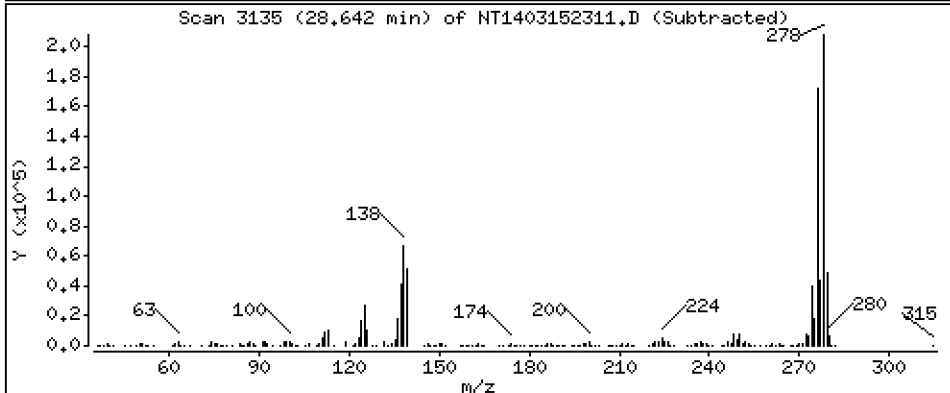
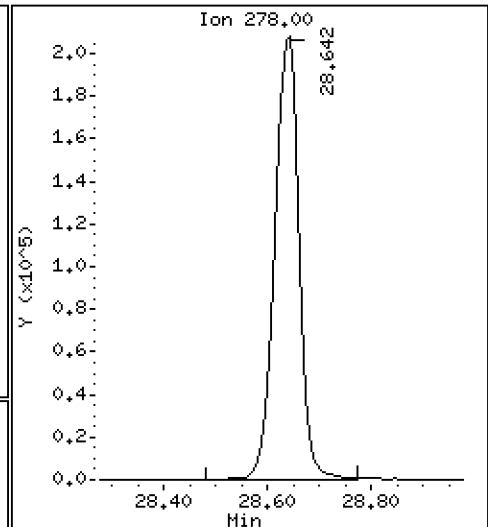
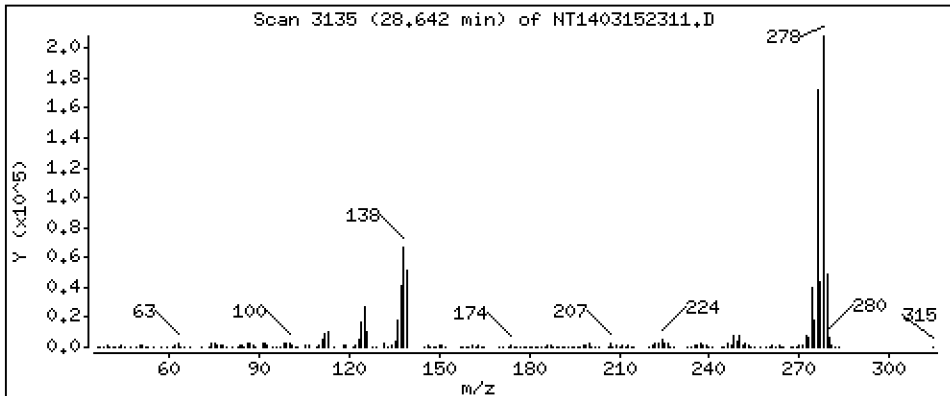
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,865 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

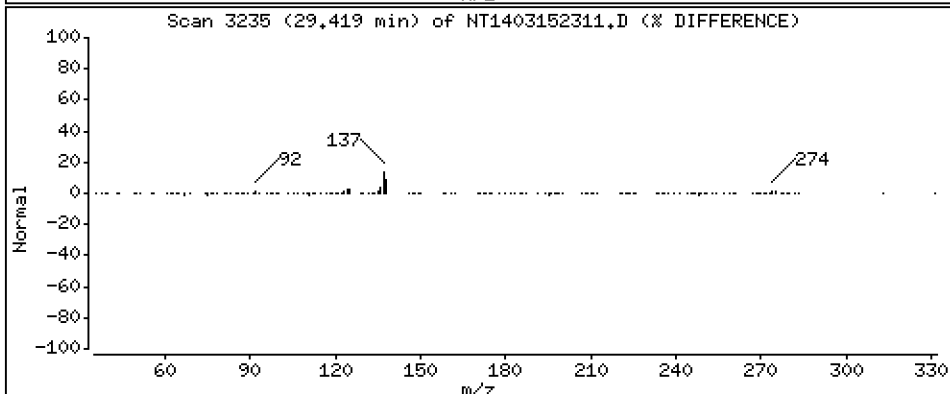
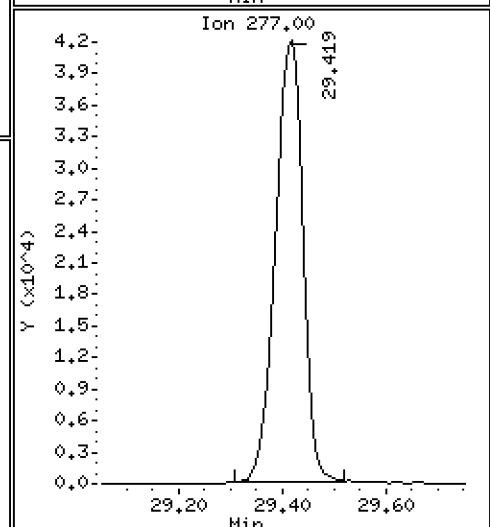
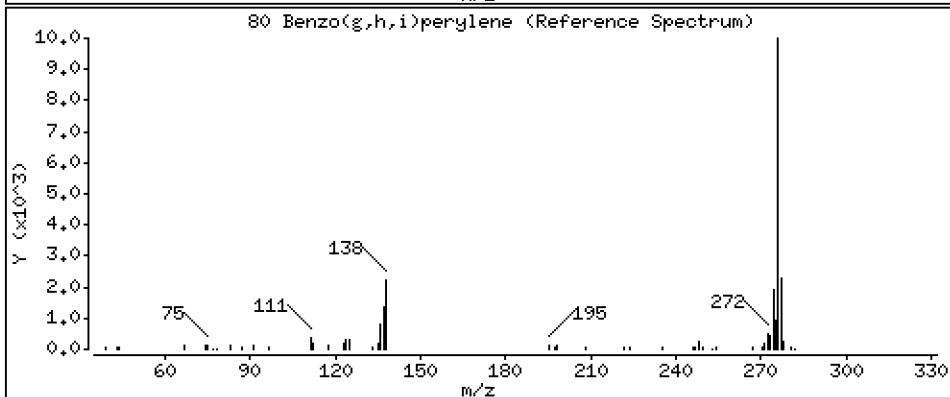
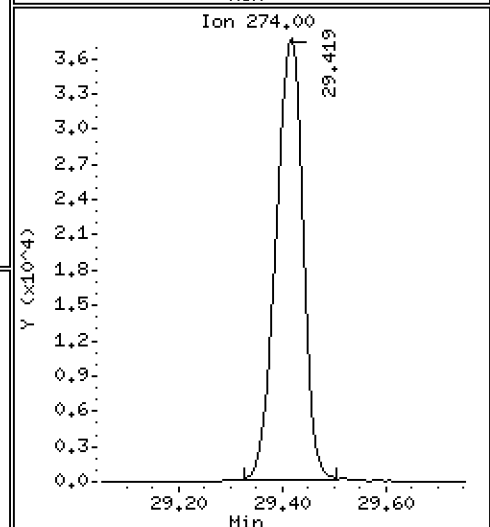
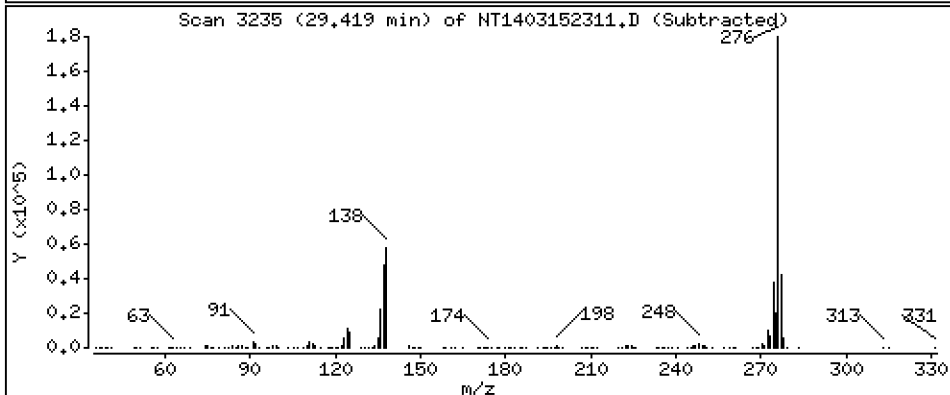
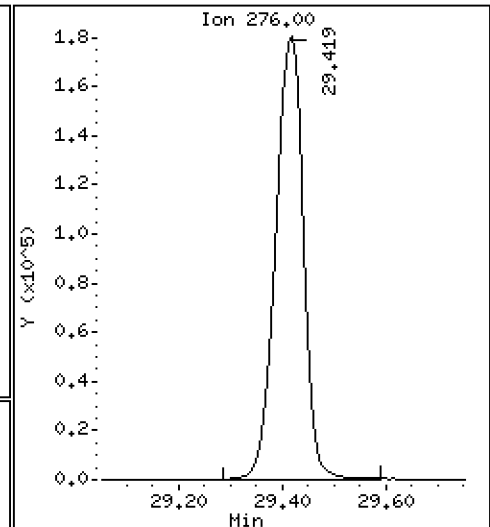
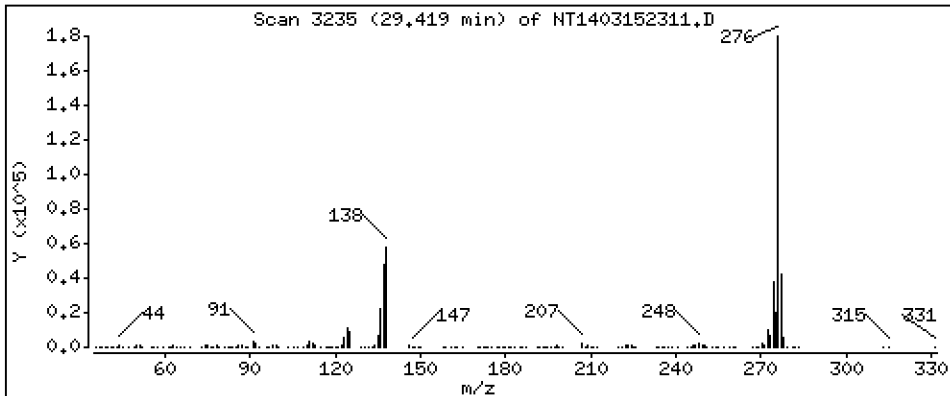
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,939 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

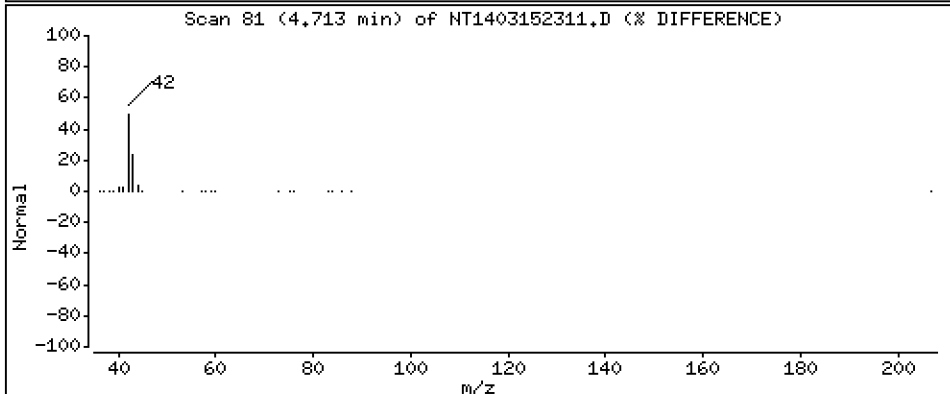
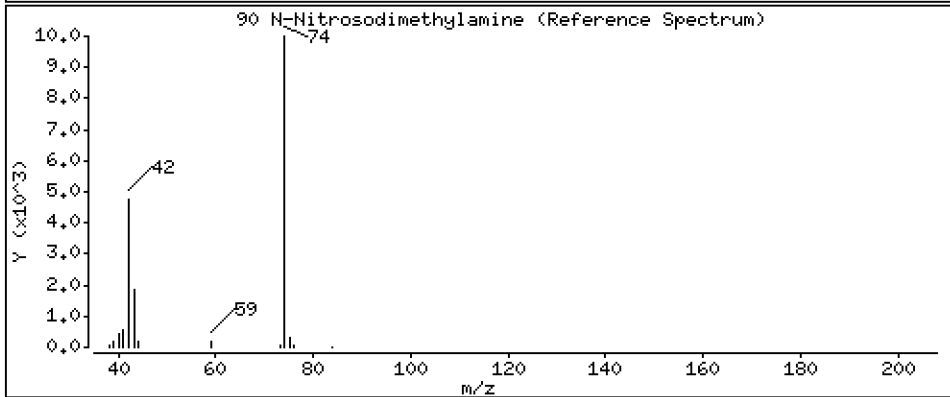
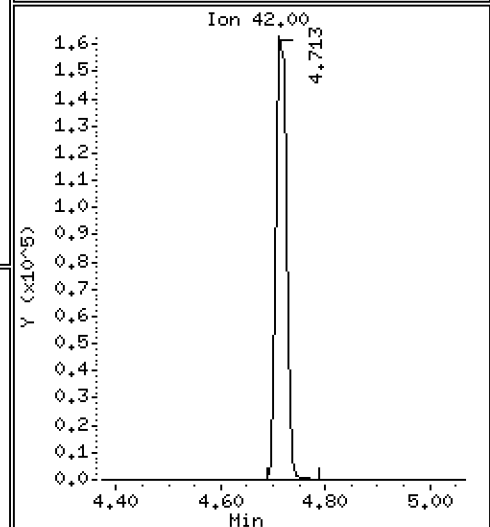
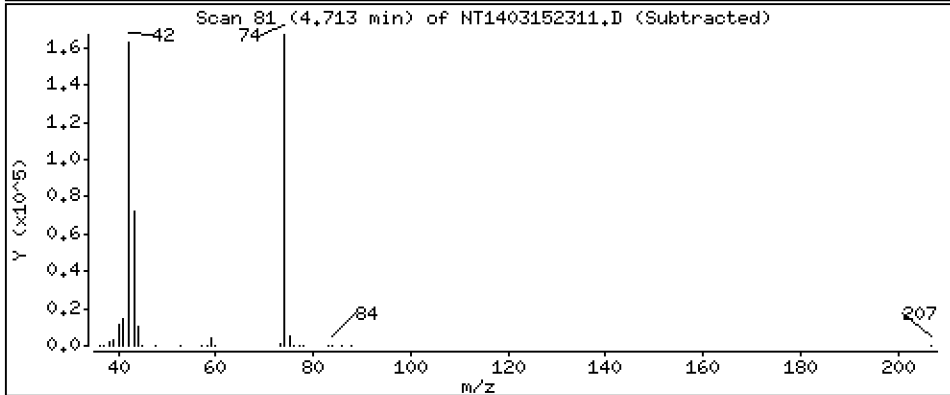
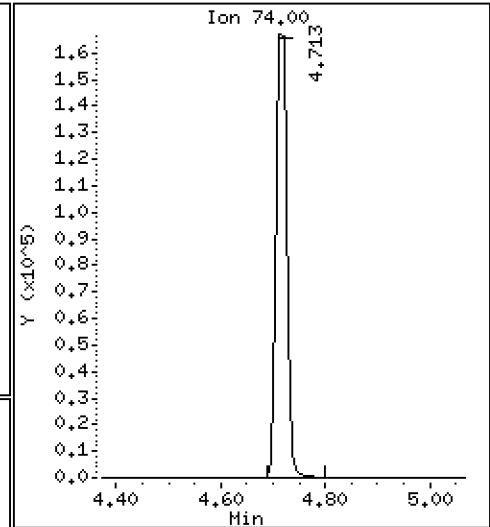
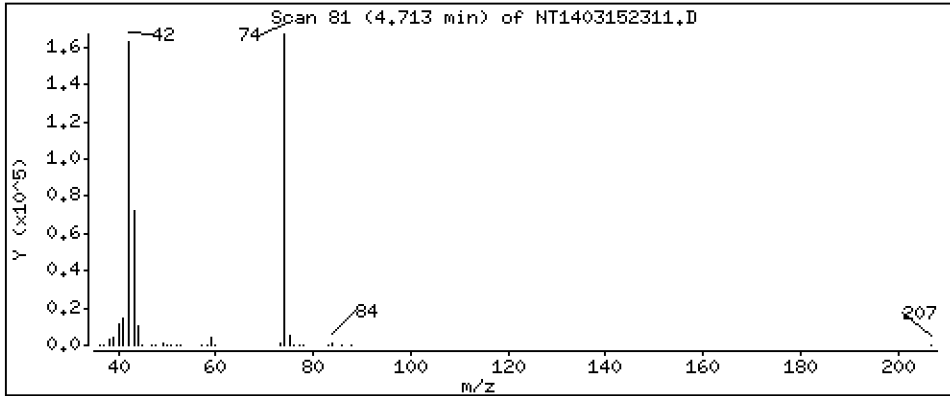
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5,200 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

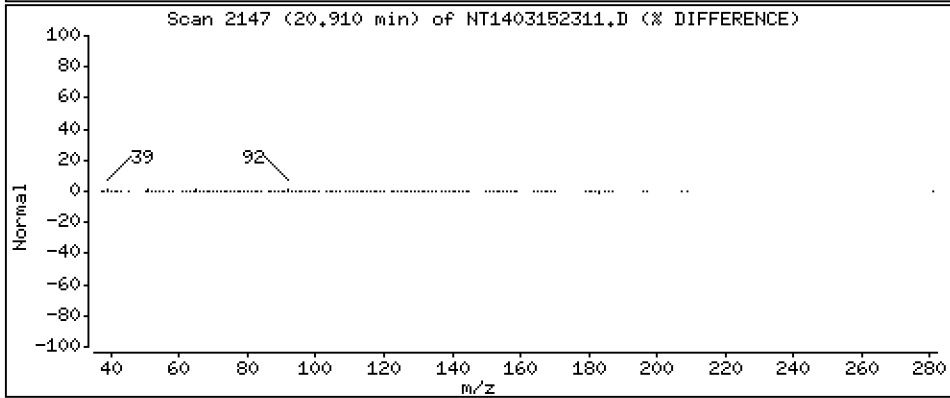
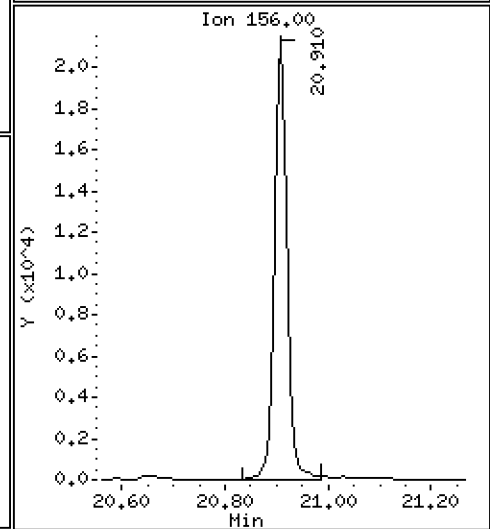
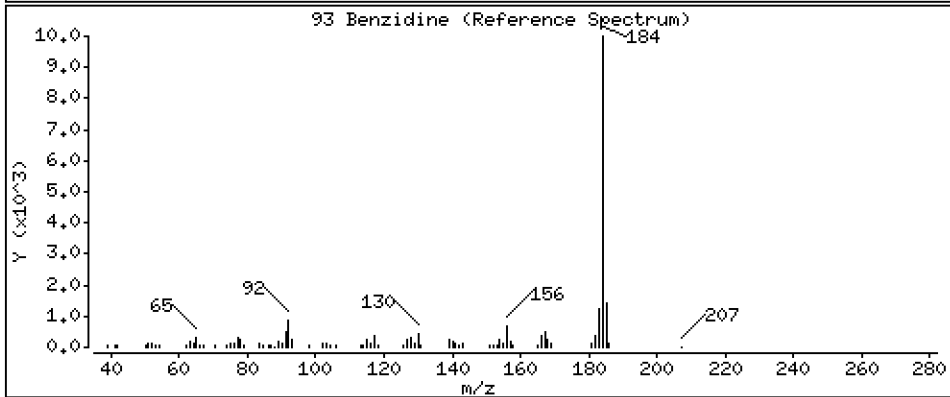
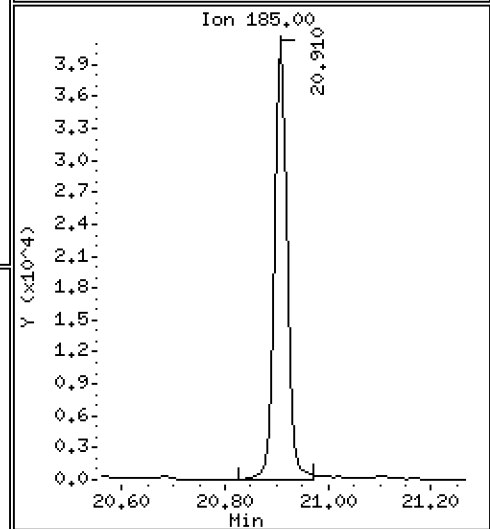
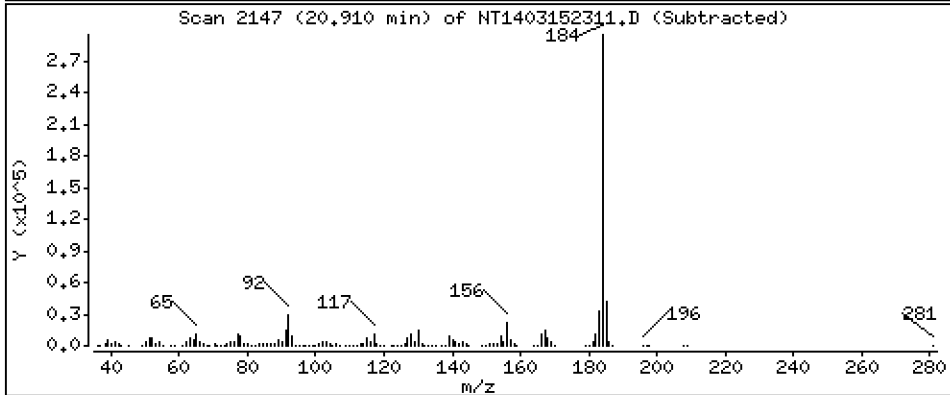
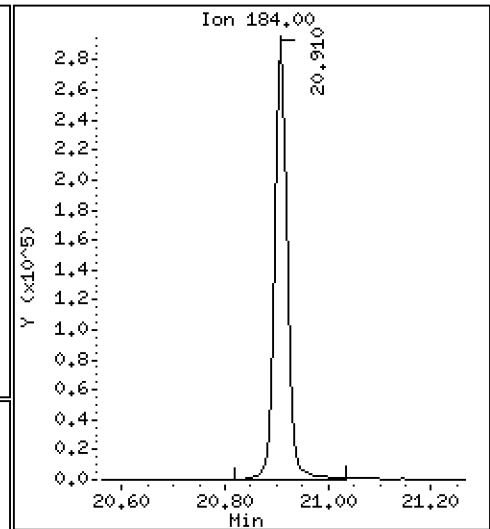
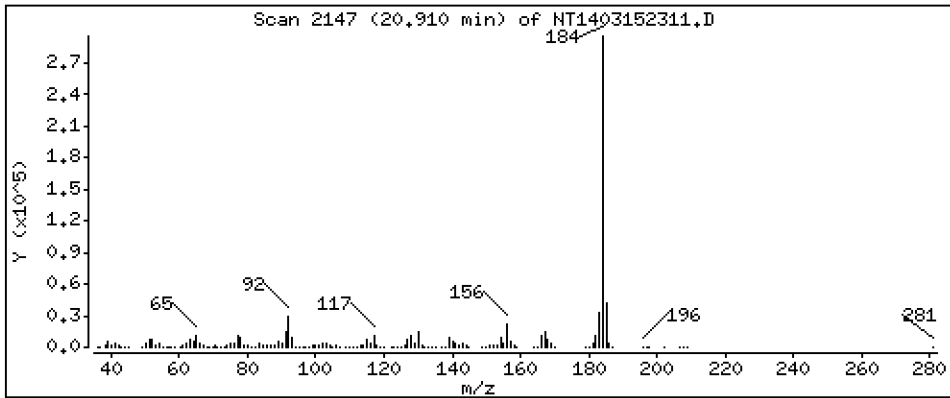
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,646 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

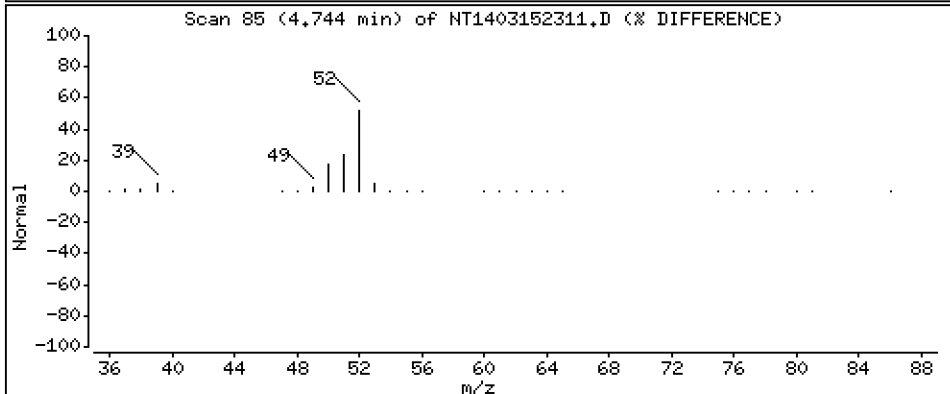
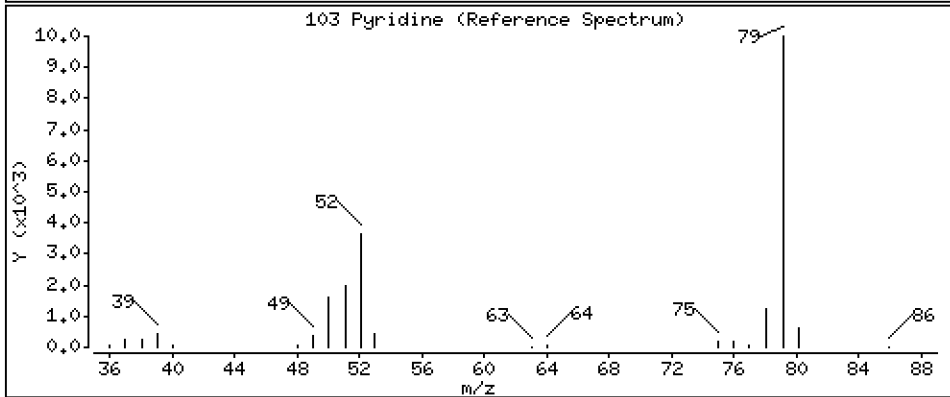
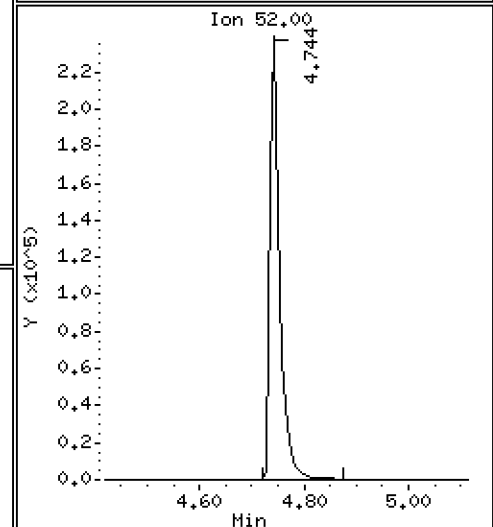
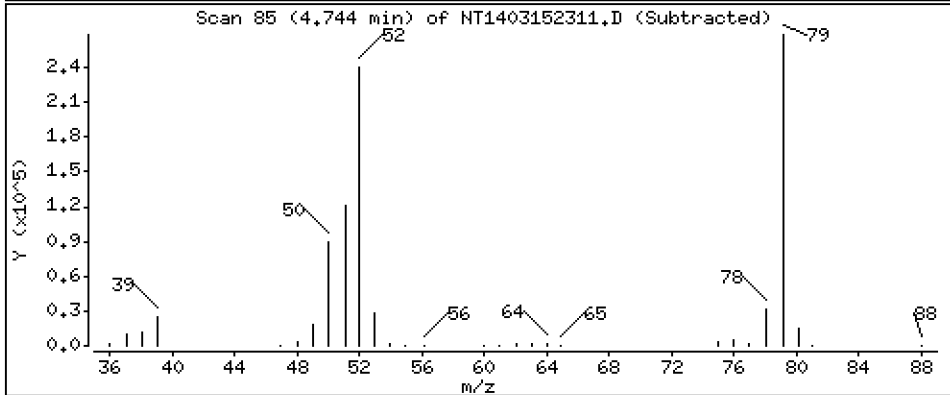
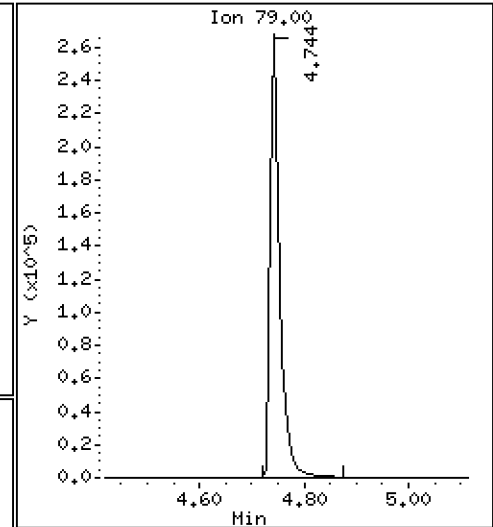
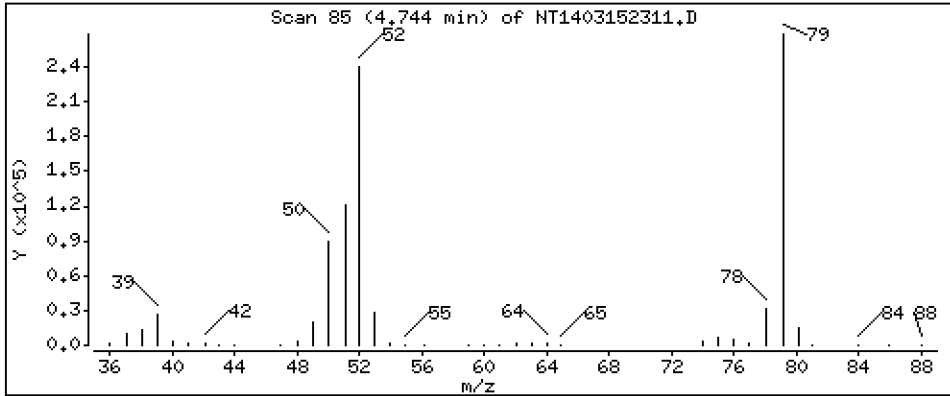
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

103 Pyridine

Concentration: 2,648 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

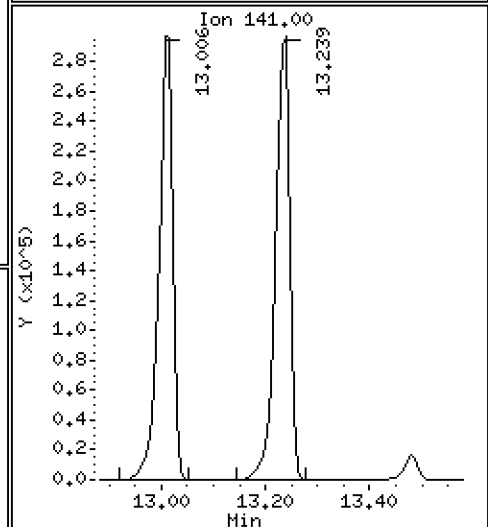
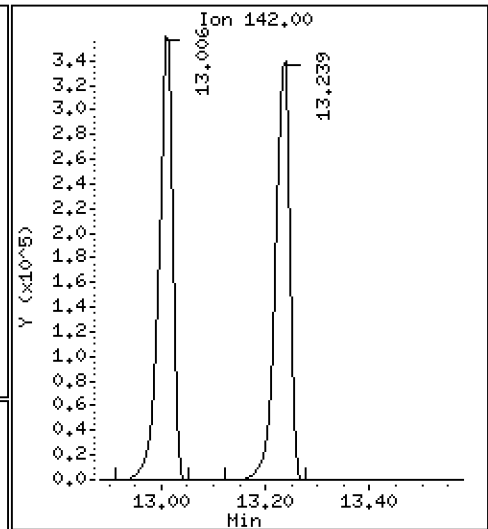
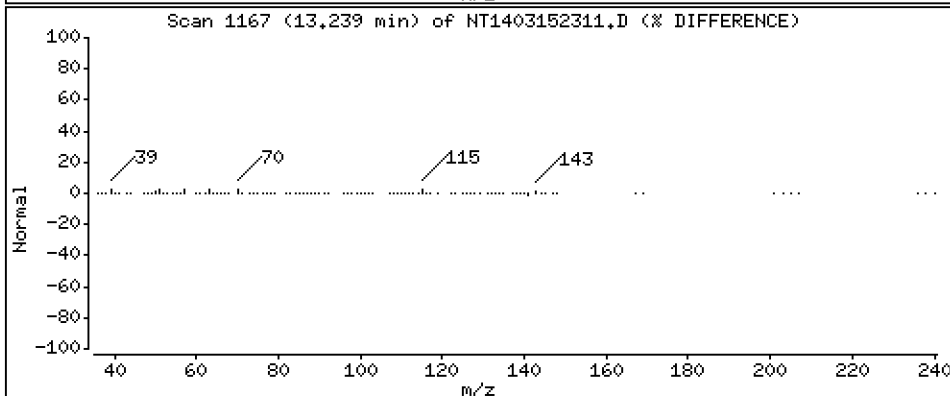
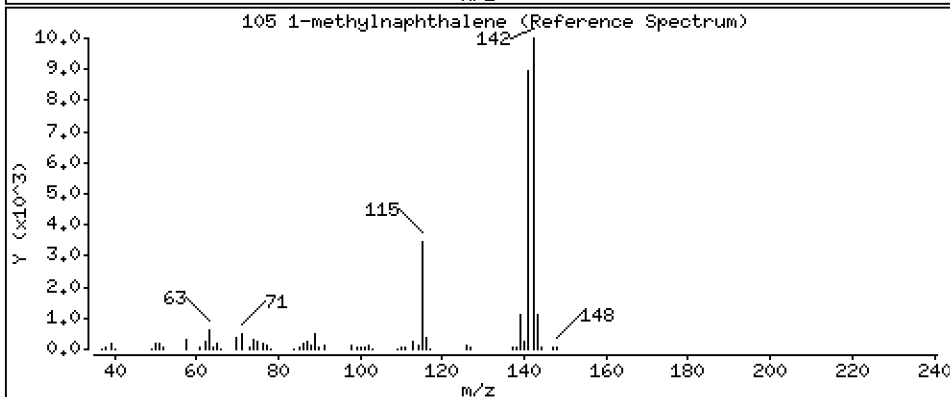
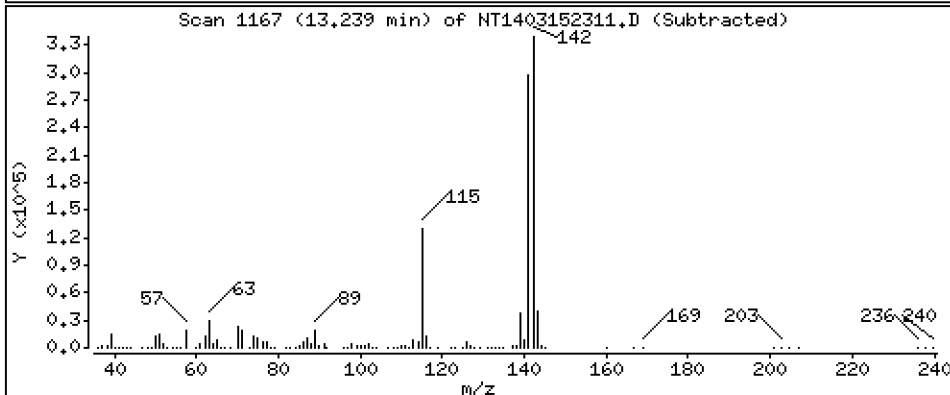
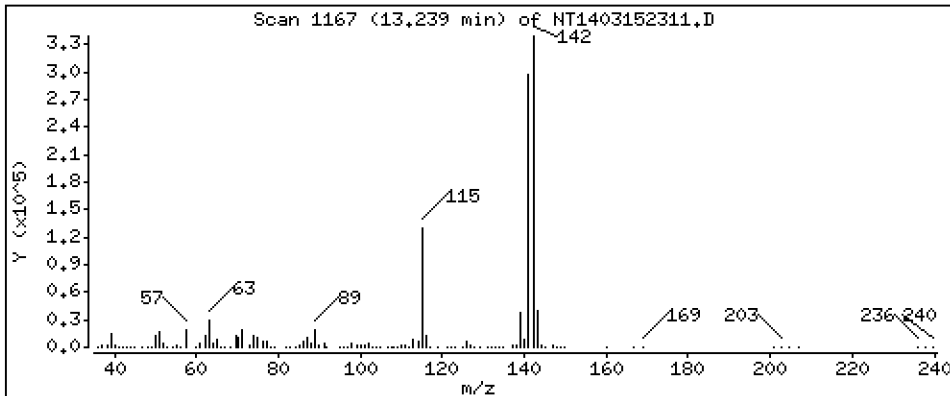
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,103 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

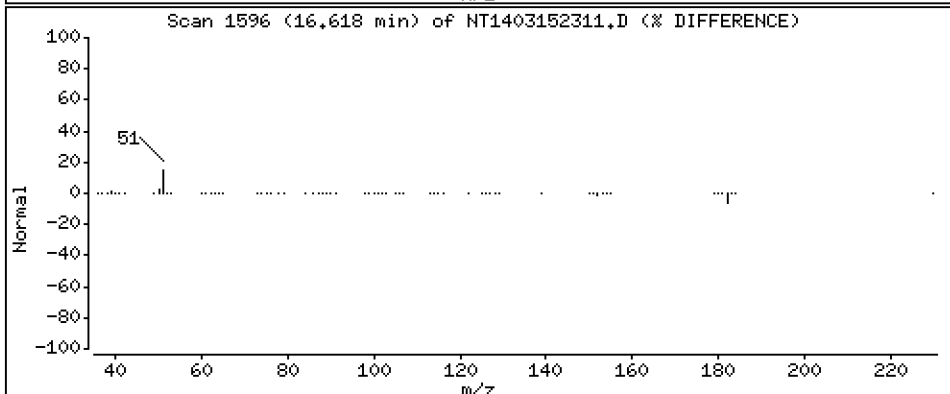
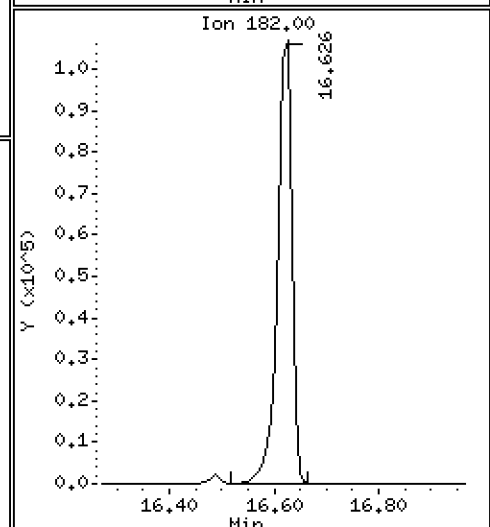
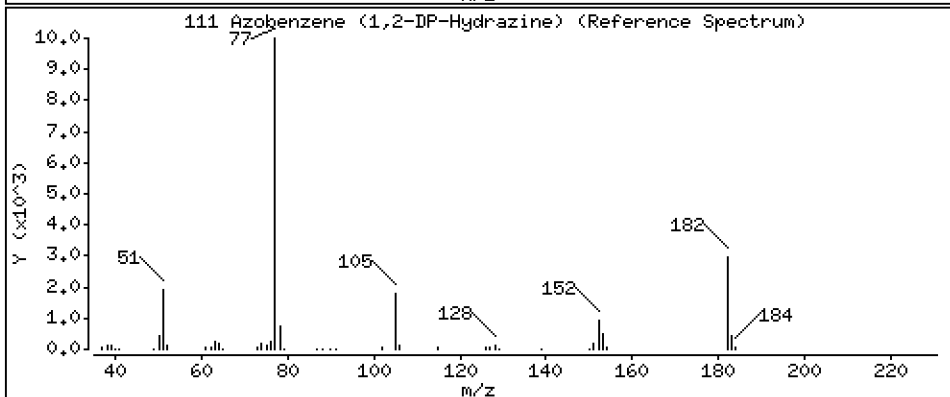
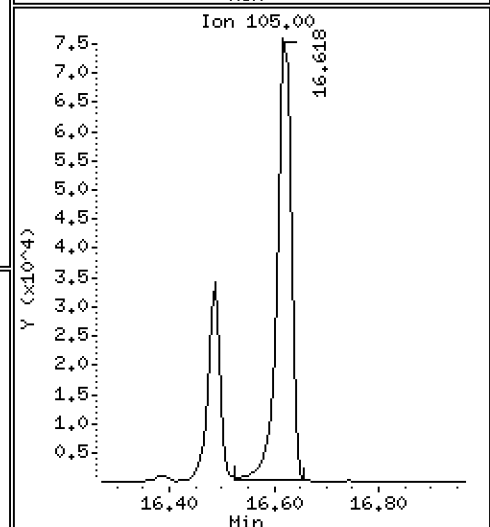
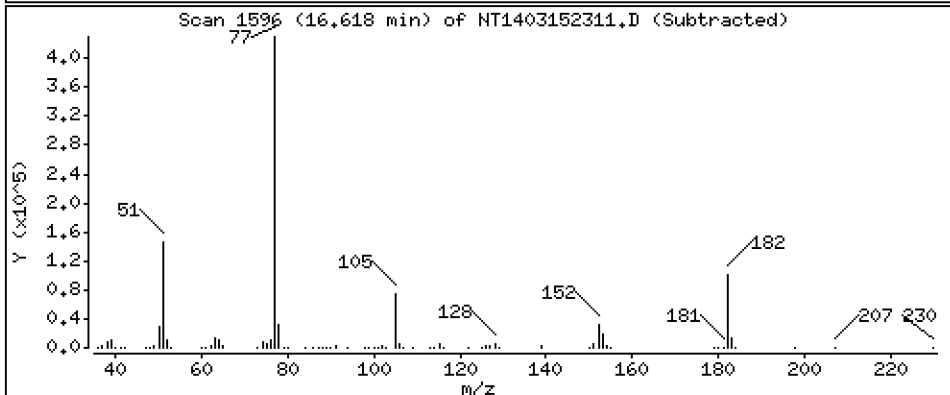
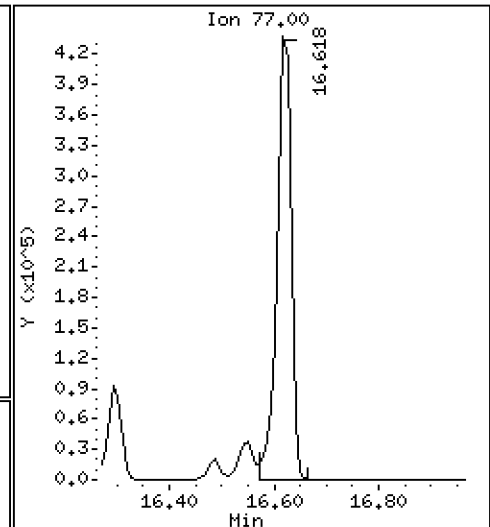
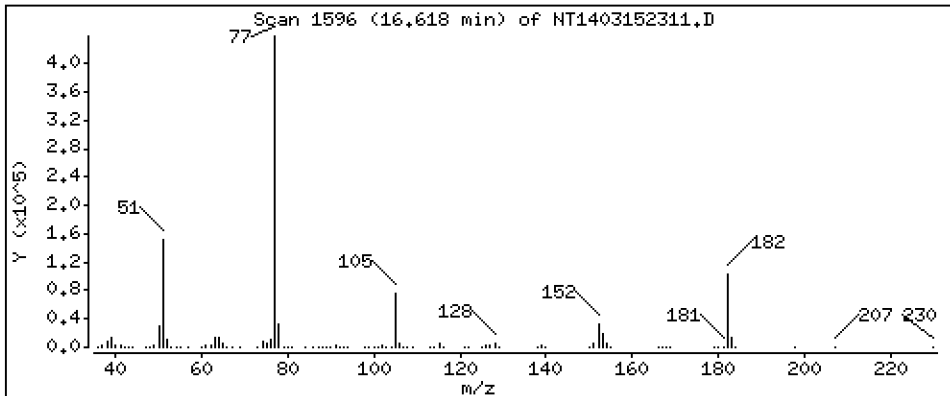
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,002 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

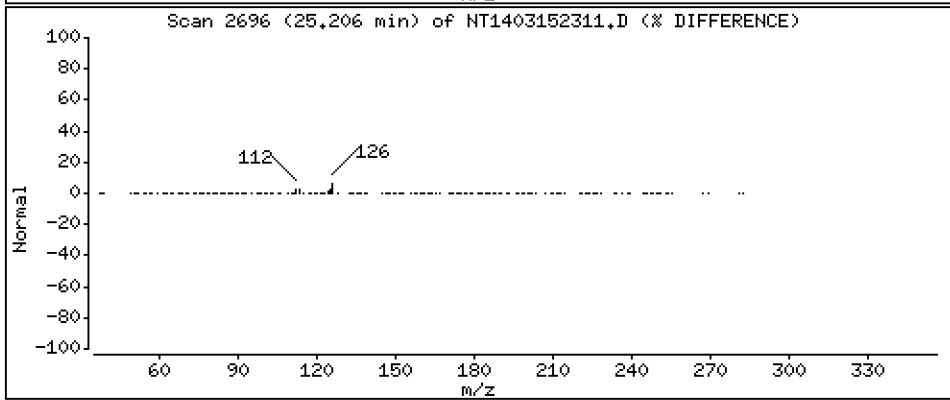
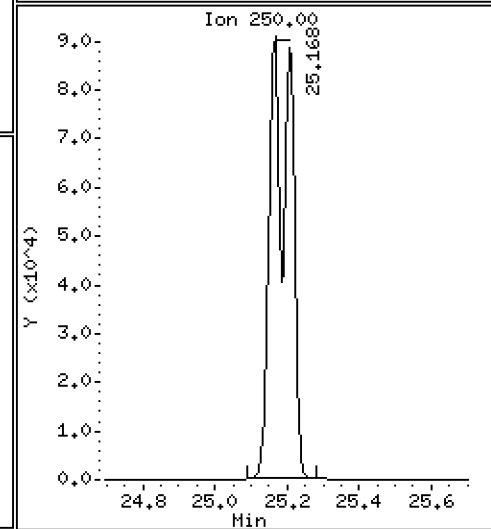
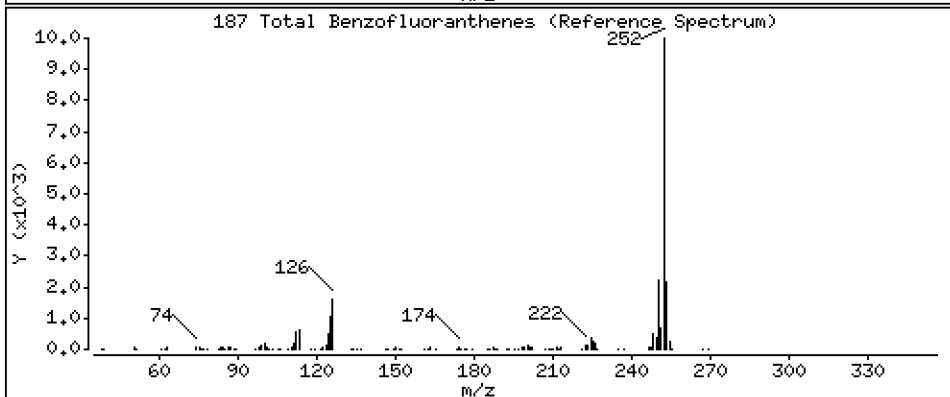
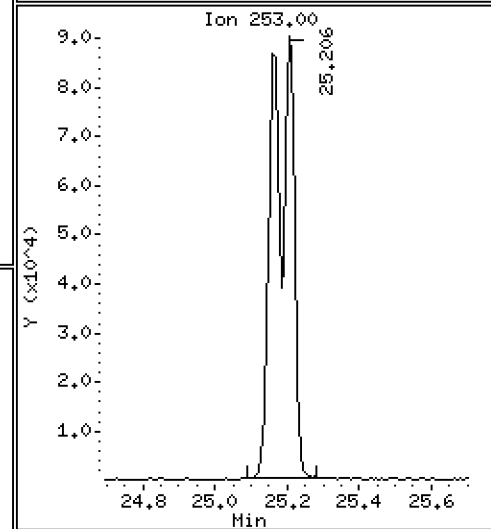
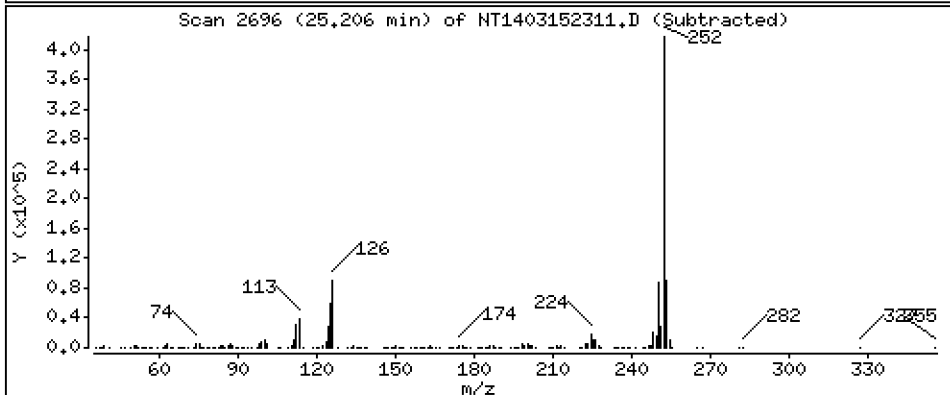
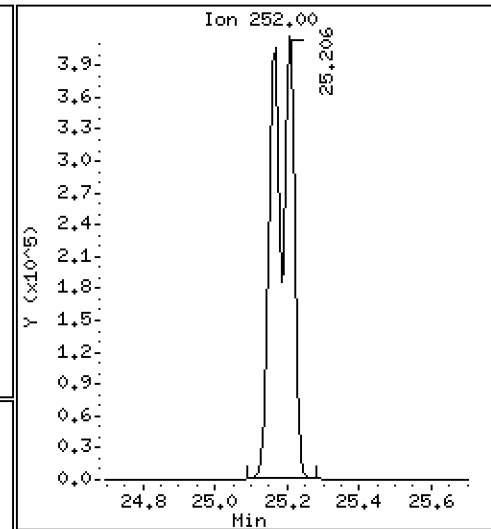
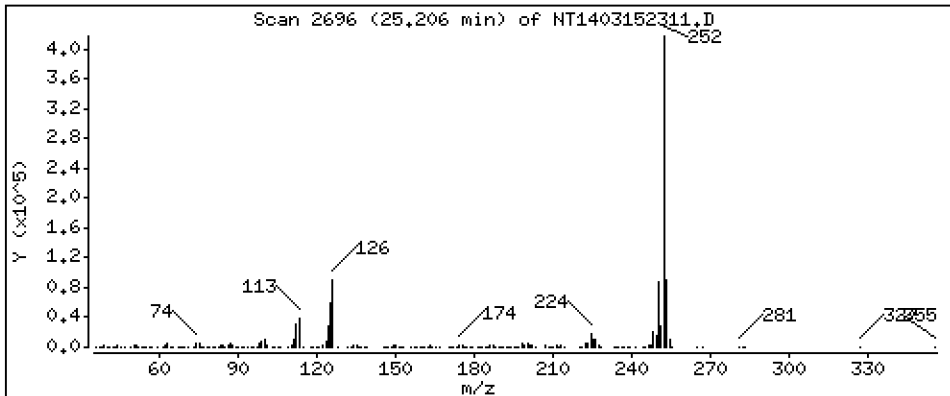
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 9,756 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

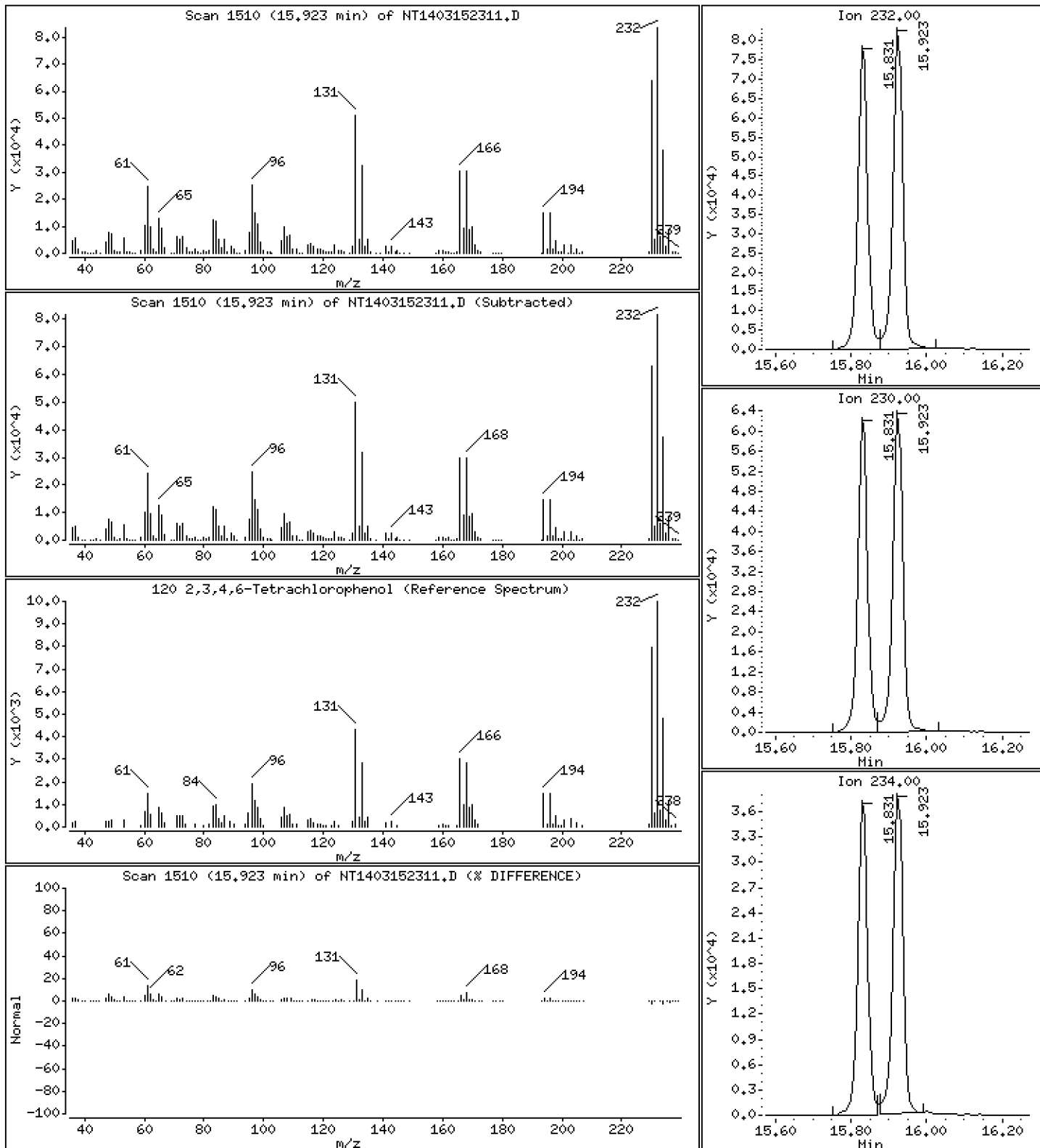
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,569 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152311.D
 Lab Smp Id: SLC0160-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112					Compound Not Detected.		
\$ 2 Phenol-d5	99					Compound Not Detected.		
3 Phenol	94		8.436	8.428	(1.000)	409924	4.36782	4.368
\$ 5 2-Chlorophenol-d4	132					Compound Not Detected.		
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	355357	5.25823	5.258
6 2-Chlorophenol	128		8.729	8.721	(1.000)	323438	4.37862	4.379
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	358409	4.79319	4.793
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	197462	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	352132	4.88937	4.889
\$ 10 1,2-Dichlorobenzene-d4	152					Compound Not Detected.		
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	340729	4.78641	4.786
11 Benzyl alcohol	108		9.334	9.334	(1.000)	220673	5.05069	5.051
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	114247	5.31866	5.319
13 2-Methylphenol	108		9.559	9.559	(1.000)	273187	4.11716	4.117
17 Hexachloroethane	117		10.056	10.056	(1.000)	152626	4.95501	4.955
16 N-Nitroso-di-n-propylamine	70		9.900	9.893	(1.000)	260326	4.98316	4.983
15 4-Methylphenol	108		9.830	9.823	(1.000)	337960	4.30182	4.302
\$ 18 Nitrobenzene-d5	82					Compound Not Detected.		
19 Nitrobenzene	77		10.203	10.195	(0.882)	375695	5.02268	5.023
20 Isophorone	82		10.653	10.645	(0.921)	691478	6.77053	6.771
21 2-Nitrophenol	139		10.831	10.831	(0.936)	194856	4.53030	4.530
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	250436	3.91450	3.915
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	402865	5.85923	5.859
24 Benzoic acid	105		11.064	10.963	(0.956)	444832	8.24795	8.248
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	243165	4.77930	4.779
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	315977	5.05188	5.052
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	726125	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	936737	4.82884	4.829
29 4-Chloroaniline	127		11.729	11.729	(1.014)	327500	4.03279	4.033
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	138599	4.90795	4.908
31 4-Chloro-3-methylphenol	107		12.696	12.689	(1.098)	298325	4.85224	4.852
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	656729	4.85435	4.854
33 Hexachlorocyclopentadiene	237		13.478	13.486	(0.887)	166439	5.22977	5.230

Compounds	QUANT SIG					CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.633	13.625	(0.897)	183263	4.71824	4.718	
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	188647	4.66090	4.661	
§ 36 2-Fluorobiphenyl	172	13.695	13.795	(0.901)	426	0.00307	0.003072	
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	591509	4.97719	4.977	
38 2-Nitroaniline	65	14.260	14.260	(0.938)	234033	5.09985	5.100	
39 Dimethylphthalate	163	14.701	14.693	(0.967)	642281	5.03056	5.031	
40 Acenaphthylene	152	14.887	14.879	(0.980)	974004	4.87938	4.879	
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.977)	153944	5.21947	5.219	
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	382881	4.00000		
43 3-Nitroaniline	138	15.119	15.111	(0.995)	211974	5.20957	5.210	
44 Acenaphthene	153	15.266	15.258	(1.005)	578656	4.96504	4.965	
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	70613	3.07711	3.077	
46 Dibenzofuran	168	15.590	15.590	(1.026)	824547	4.95562	4.956	
47 4-Nitrophenol	109	15.420	15.420	(1.015)	103988	4.82822	4.828	
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	214010	5.11873	5.119	
50 Diethylphthalate	149	16.163	16.155	(1.064)	686853	5.20331	5.203	
49 Fluorene	166	16.309	16.302	(1.073)	763926	4.84358	4.844	
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	337497	4.98506	4.985	
52 4-Nitroaniline	138	16.386	16.379	(1.078)	170484	4.81727	4.817	
53 4,6-Dinitro-2-methylphenol	198	16.487	16.479	(0.904)	109125	4.43923	4.439	
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	475466	4.95411	4.954	
§ 55 2,4,6-Tribromophenol	330	Compound Not Detected.						
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	169085	5.22559	5.226	
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	163199	4.78004	4.780	
58 Pentachlorophenol	266	17.969	17.977	(0.985)	106585	4.47687	4.477	
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	706616	4.00000		
60 Phenanthrene	178	18.294	18.286	(1.003)	955749	4.73403	4.734	
61 Anthracene	178	18.379	18.379	(1.008)	832701	4.28109	4.281	
62 Carbazole	167	18.712	18.704	(1.026)	793728	4.58650	4.587	
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	1207956	5.50673	5.507	
64 Fluoranthene	202	20.677	20.677	(0.887)	1031812	5.02399	5.024	
65 Pyrene	202	21.103	21.103	(0.906)	1044240	4.95802	4.958	
§ 66 Terphenyl-d14	244	21.381	21.389	(0.918)	662	0.00464	0.004643	
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	529418	5.73747	5.737	
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	898379	4.82654	4.827	
* 69 Chrysene-d12	240	23.301	23.294	(1.000)	504808	4.00000		
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	586696	10.6467	10.65	
71 Chrysene	228	23.340	23.340	(1.002)	795614	4.72292	4.723	
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.960)	706123	5.42778	5.428	
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	988248	4.00000		
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	1304643	5.13544	5.135	
74 Benzo(b)fluoranthene	252	25.167	25.152	(0.970)	838016	4.77369	4.774	
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	887530	5.10013	5.100	
76 Benzo(a)pyrene	252	25.825	25.818	(0.996)	747283	4.97798	4.978	
* 77 Perylene-d12	264	25.941	25.934	(1.000)	496785	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.103)	807644	4.94309	4.943	
79 Dibenzo(a,h)anthracene	278	28.641	28.626	(1.104)	669918	4.86500	4.865	
80 Benzo(g,h,i)perylene	276	29.418	29.403	(1.134)	665079	4.93915	4.939	
90 N-Nitrosodimethylamine	74	4.712	4.720	(1.000)	220898	5.19984	5.200	
91 Aniline	93	Compound Not Detected.						
93 Benzidine	184	20.909	20.909	(0.897)	466644	5.64609	5.646	
103 Pyridine	79	4.743	4.766	(1.000)	348414	2.64838	2.648	
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	625458	5.10291	5.103	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	788522	5.00236	5.002	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.206	25.199	(0.972)	1626530	9.75586	9.756
120 2,3,4,6-Tetrachlorophenol	232	15.923	15.923	(1.048)	141312	3.56895	3.569

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152311.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	197462	1.51
27 Naphthalene-d8	721321	360661	1442642	726125	0.67
42 Acenaphthene-d10	379602	189801	759204	382881	0.86
59 Phenanthrene-d10	703194	351597	1406388	706616	0.49
69 Chrysene-d12	504769	252385	1009538	504808	0.01
134 Di-n-octylphthala	978492	489246	1956984	988248	1.00
77 Perylene-d12	484073	242037	968146	496785	2.63

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.30	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311.D

Lab ID: SLC0160-SCV1
nt14.i, ABN.m, 15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)
0.956	0.948	0.0087	Benzoic acid
0.901	0.908	-0.0066	2-Fluorobiphenyl

RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

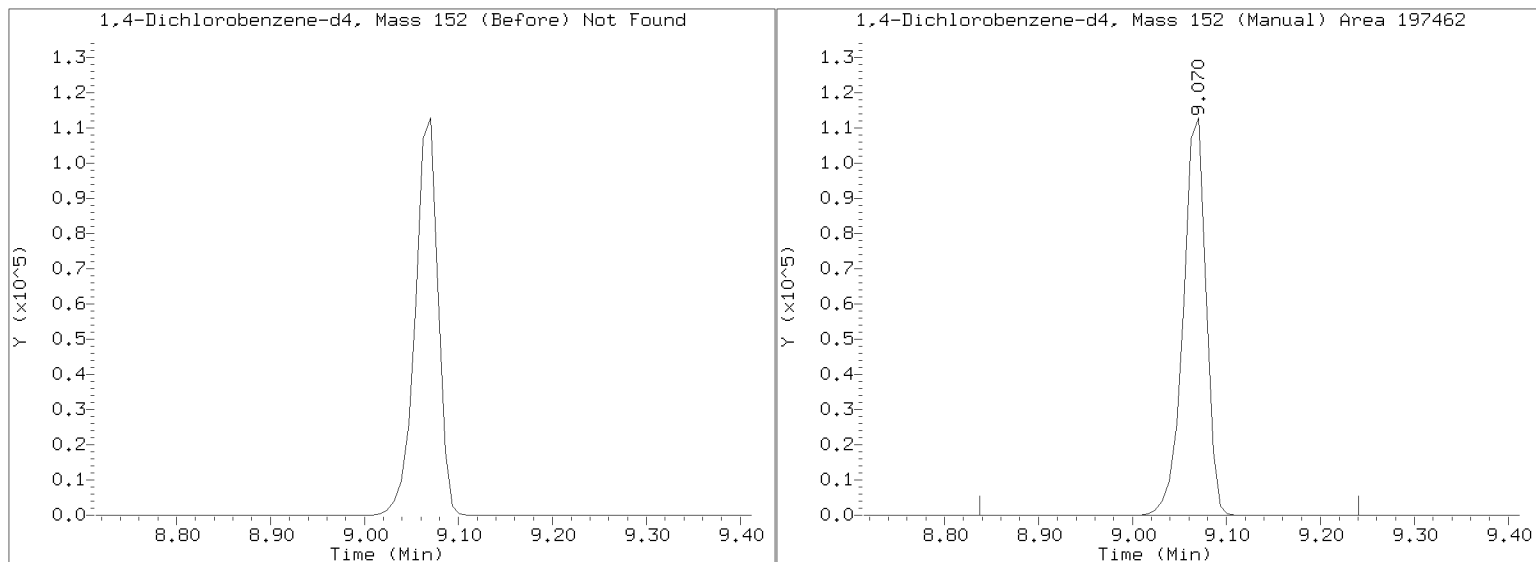
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152311.D

Injection Date: 15-MAR-2023 17:39

Lab ID: SLC0160-SCV1 Client ID:

Report Date: 03/21/2023 12:48





**SECOND-SOURCE
CALIBRATION VERIFICATION**

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0160-SCV1

Sequence: SLC0160

Standard ID: L002833

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.4	-12.6	20.00
bis(2-chloroethyl) ether	5.0000	5.3	5.2	20.00
2-Chlorophenol	5.0000	4.4	-12.4	20.00
1,3-Dichlorobenzene	5.0000	4.8	-4.1	20.00
1,4-Dichlorobenzene	5.0000	4.9	-2.2	20.00
1,2-Dichlorobenzene	5.0000	4.8	-4.3	20.00
Benzyl Alcohol	5.0000	5.1	1.0	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	5.3	6.4	20.00
2-Methylphenol	5.0000	4.1	-17.7	20.00
Hexachloroethane	5.0000	5.0	-0.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.0	-0.3	20.00
4-Methylphenol	5.0000	4.3	-14.0	20.00
Nitrobenzene	5.0000	5.0	0.5	20.00
Isophorone	5.0000	6.8	35.4 *	20.00
2-Nitrophenol	5.0000	4.5	-9.4	20.00
2,4-Dimethylphenol	5.0000	3.9	-21.7 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	5.9	17.2	20.00
2,4-Dichlorophenol	5.0000	4.8	-4.4	20.00
1,2,4-Trichlorobenzene	5.0000	5.1	1.0	20.00
Naphthalene	5.0000	4.8	-3.4	20.00
Benzoic acid	10.0000	8.2	-17.5	20.00
4-Chloroaniline	5.0000	4.0	-19.3	20.00
Hexachlorobutadiene	5.0000	4.9	-1.8	20.00
4-Chloro-3-Methylphenol	5.0000	4.9	-3.0	20.00
2-Methylnaphthalene	5.0000	4.9	-2.9	20.00
Hexachlorocyclopentadiene	5.0000	5.2	4.6	20.00
2,4,6-Trichlorophenol	5.0000	4.7	-5.6	20.00
2,4,5-Trichlorophenol	5.0000	4.7	-6.8	20.00
2-Chloronaphthalene	5.0000	5.0	-0.5	20.00
2-Nitroaniline	5.0000	5.1	2.0	20.00
Acenaphthylene	5.0000	4.9	-2.4	20.00
Dimethylphthalate	5.0000	5.0	0.6	20.00



**SECOND-SOURCE
CALIBRATION VERIFICATION**

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0160-SCV1

Sequence: SLC0160

Standard ID: L002833

2,6-Dinitrotoluene	5.0000	5.2	4.4	20.00
Acenaphthene	5.0000	5.0	-0.7	20.00
3-Nitroaniline	5.0000	5.2	4.2	20.00
2,4-Dinitrophenol	5.0000	3.1	-38.5 *	20.00
Dibenzofuran	5.0000	5.0	-0.9	20.00
4-Nitrophenol	5.0000	4.8	-3.4	20.00
2,4-Dinitrotoluene	5.0000	5.1	2.4	20.00
Fluorene	5.0000	4.8	-3.1	20.00
4-Chlorophenylphenyl ether	5.0000	5.0	-0.3	20.00
Diethyl phthalate	5.0000	5.2	4.1	20.00
4-Nitroaniline	5.0000	4.8	-3.7	20.00
4,6-Dinitro-2-methylphenol	5.0000	4.4	-11.2	20.00
N-Nitrosodiphenylamine	5.0000	5.0	-0.9	20.00
4-Bromophenyl phenyl ether	5.0000	5.2	4.5	20.00
Hexachlorobenzene	5.0000	4.8	-4.4	20.00
Pentachlorophenol	5.0000	4.5	-10.5	20.00
Phenanthrene	5.0000	4.7	-5.3	20.00
Anthracene	5.0000	4.3	-14.4	20.00
Carbazole	5.0000	4.6	-8.3	20.00
Di-n-Butylphthalate	5.0000	5.5	10.1	20.00
Fluoranthene	5.0000	5.0	0.5	20.00
Pyrene	5.0000	5.0	-0.8	20.00
Butylbenzylphthalate	5.0000	5.7	14.7	20.00
Benzo(a)anthracene	5.0000	4.8	-3.5	20.00
3,3'-Dichlorobenzidine	10.000	10.6	6.5	20.00
Chrysene	5.0000	4.7	-5.5	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.4	8.6	20.00
Di-n-Octylphthalate	5.0000	5.1	2.7	20.00
Benzo(a)fluoranthene, Total	10.000	9.8	-2.4	20.00
Benzo(a)pyrene	5.0000	5.0	-0.4	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.9	-1.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.9	-2.7	20.00
Benzo(g,h,i)perylene	5.0000	4.9	-1.2	20.00
1-Methylnaphthalene	5.0000	5.1	2.1	20.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152311.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0160-SCV1

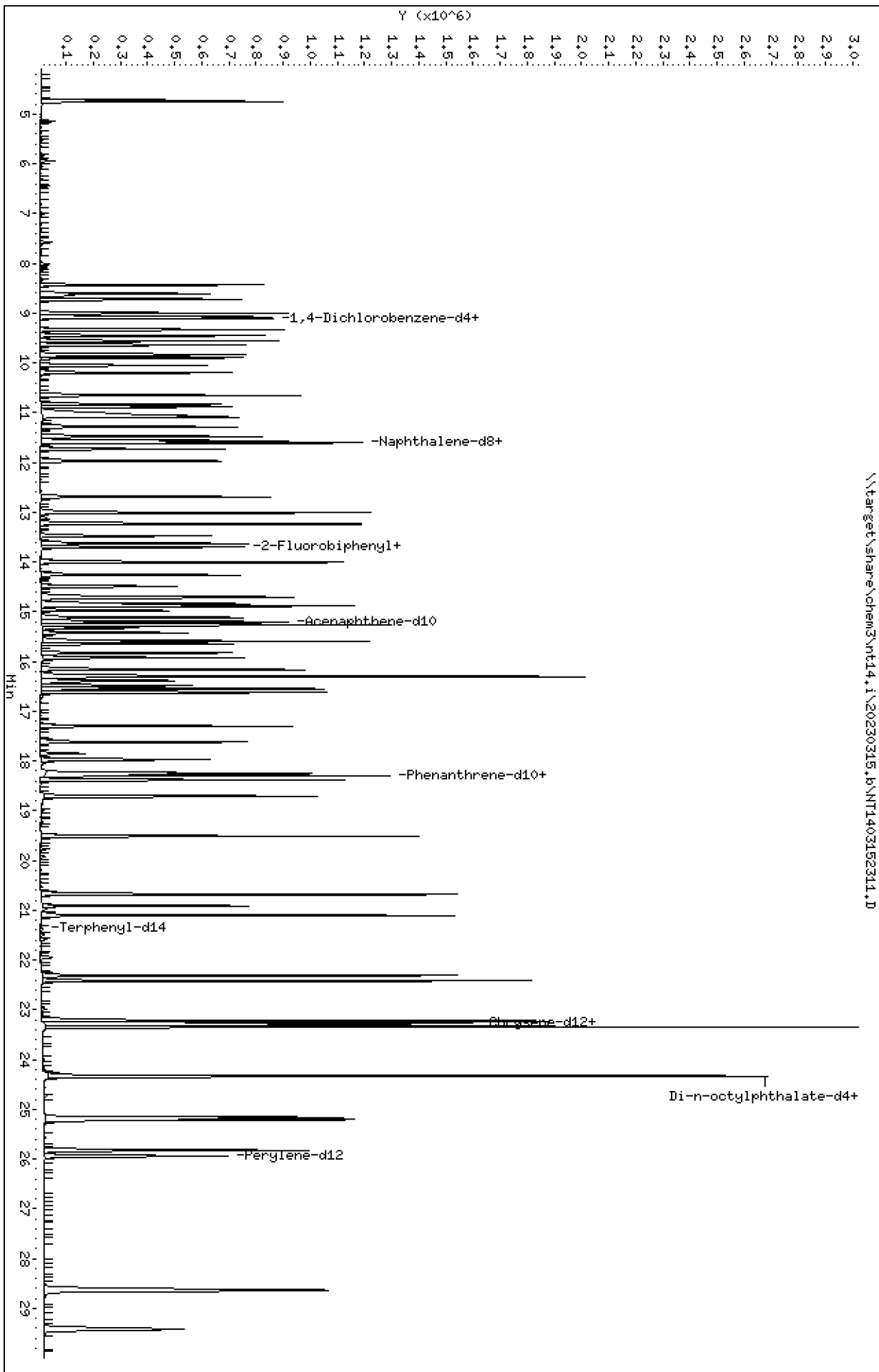
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152311.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

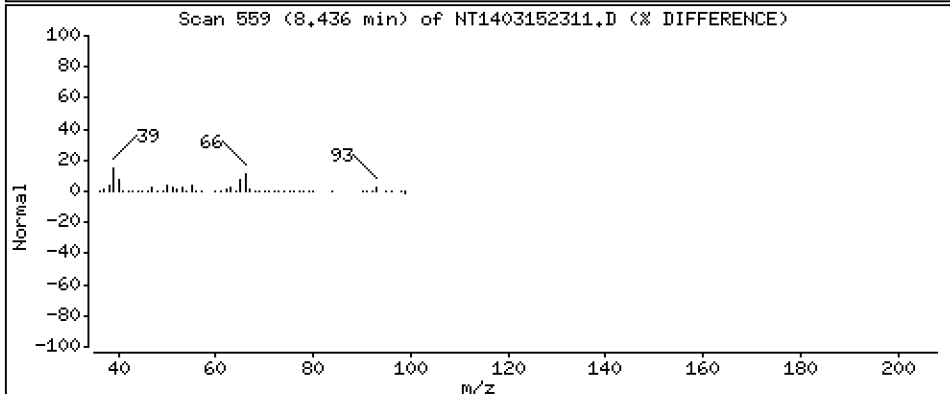
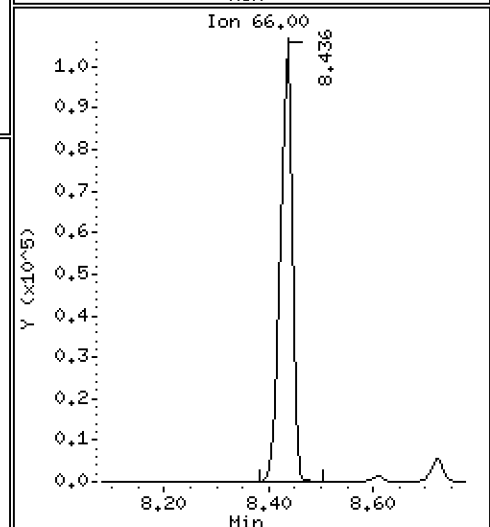
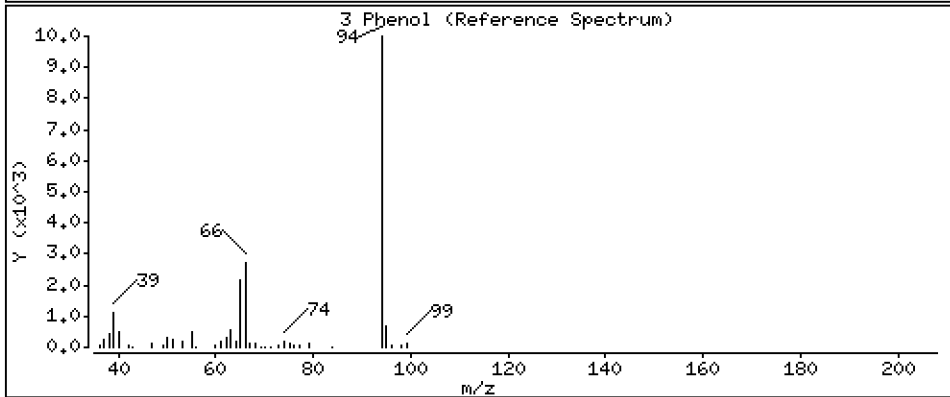
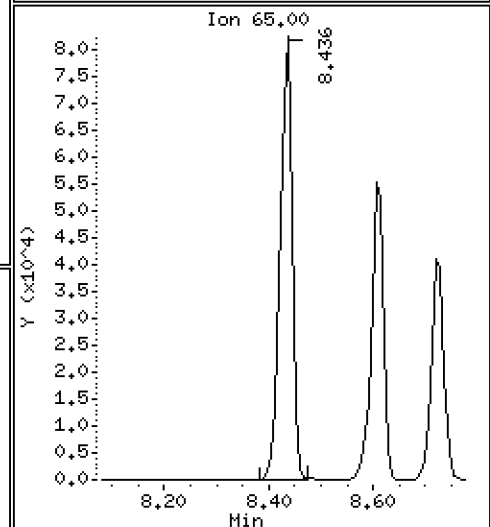
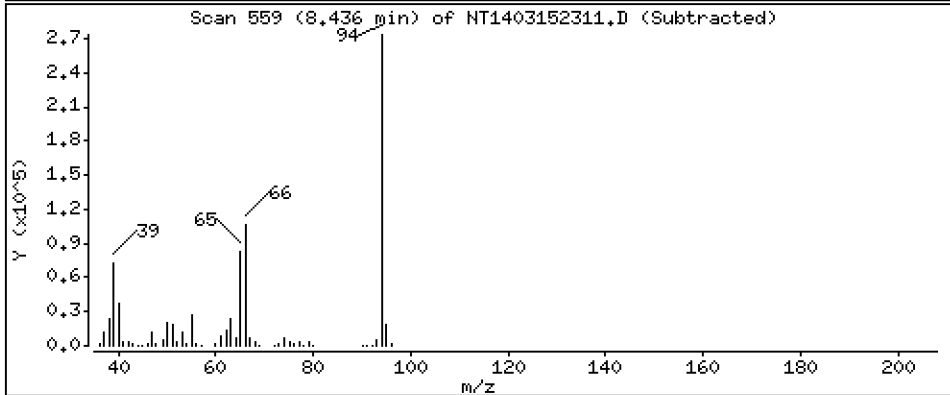
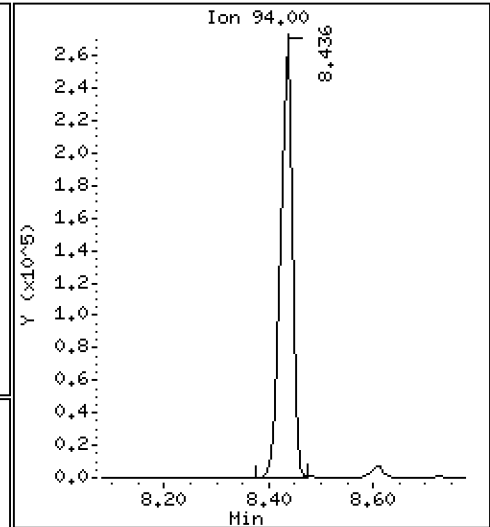
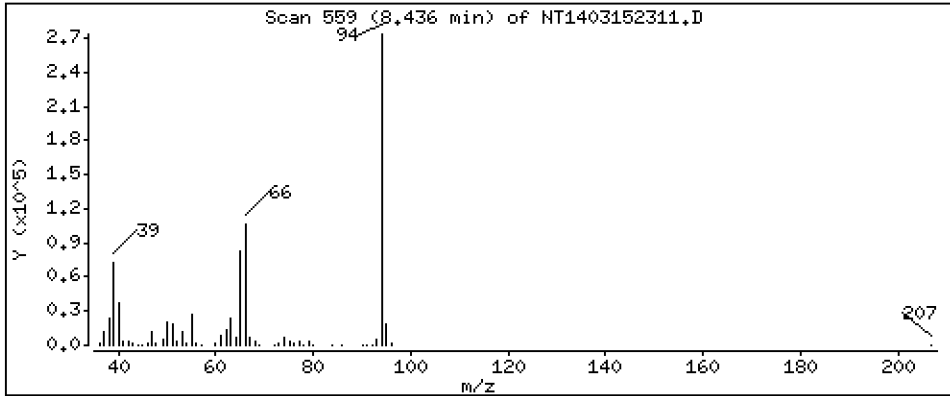
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.368 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

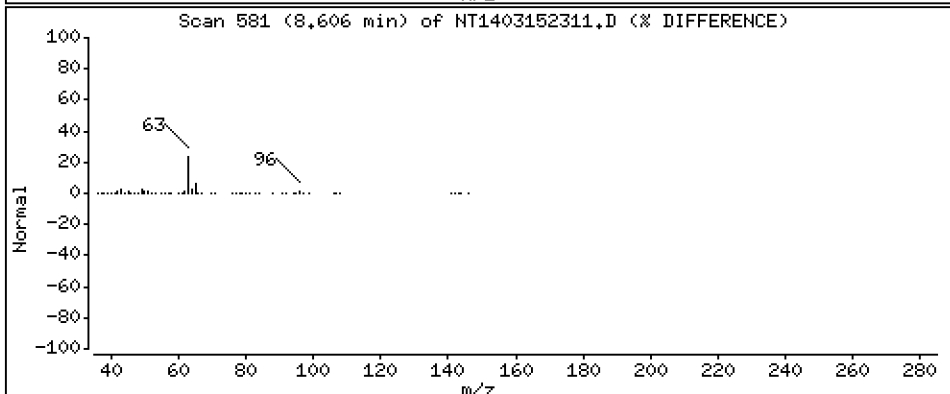
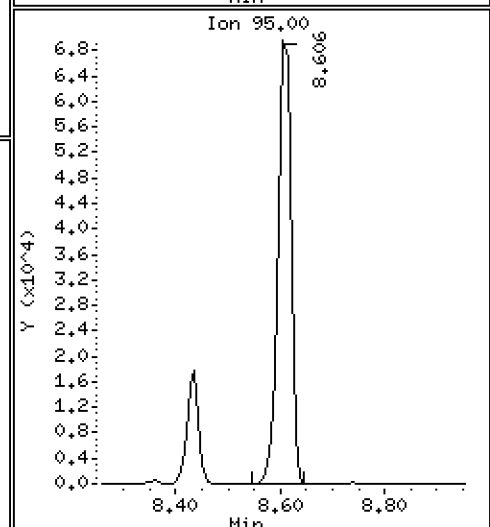
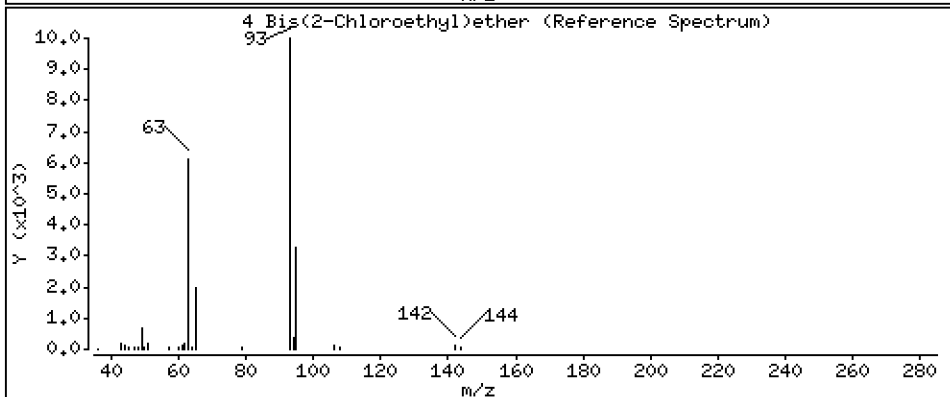
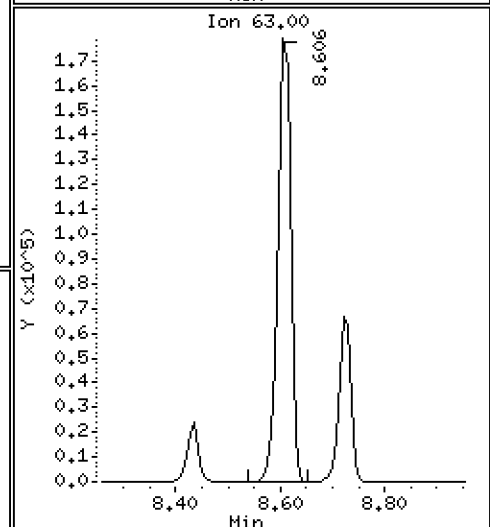
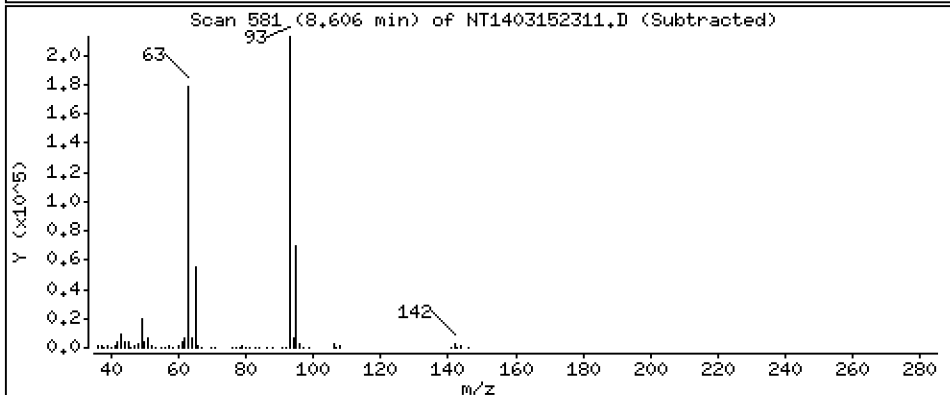
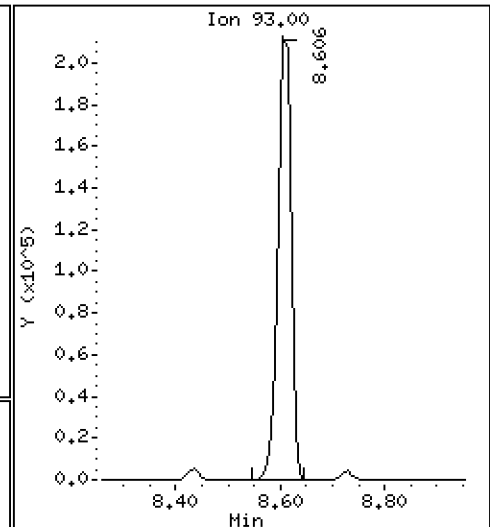
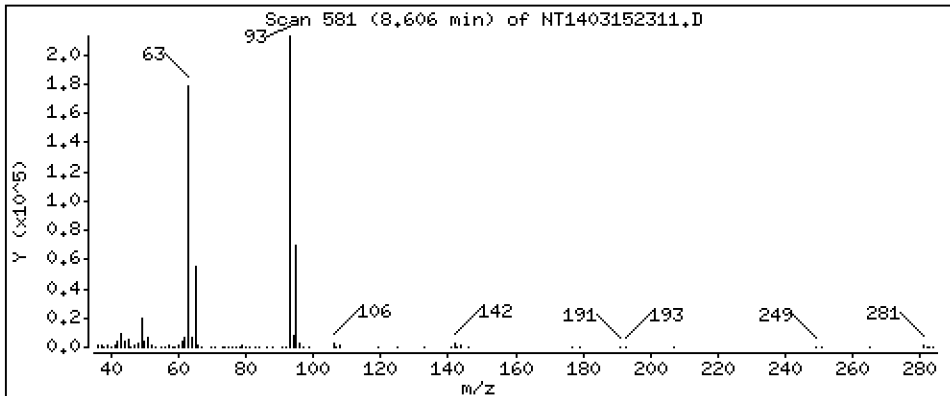
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,258 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

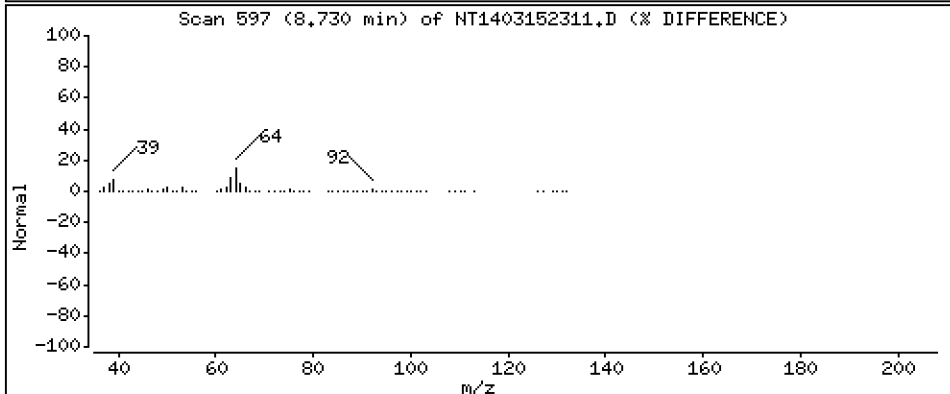
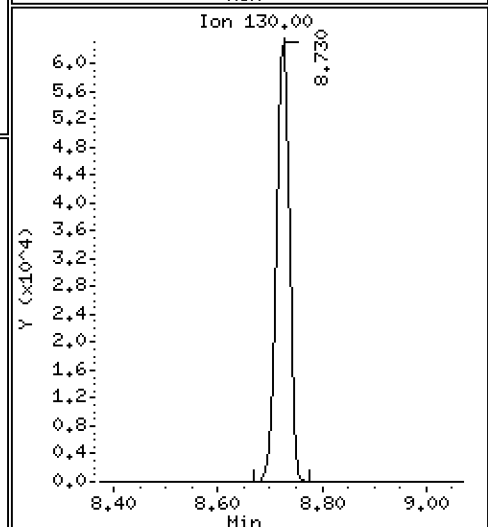
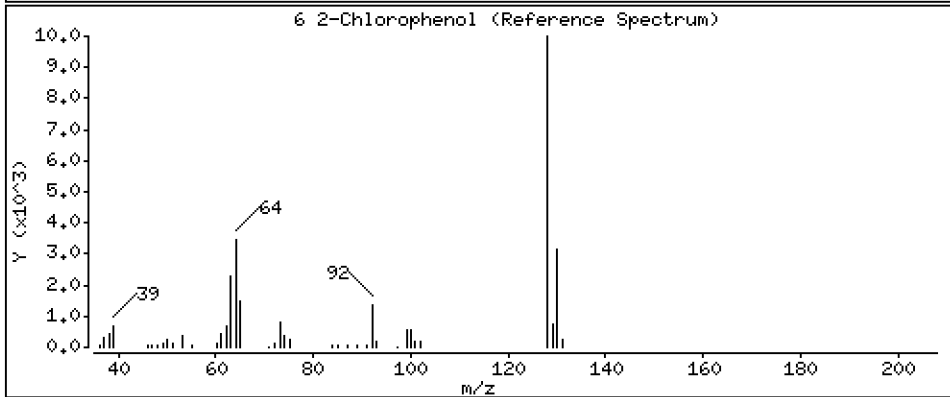
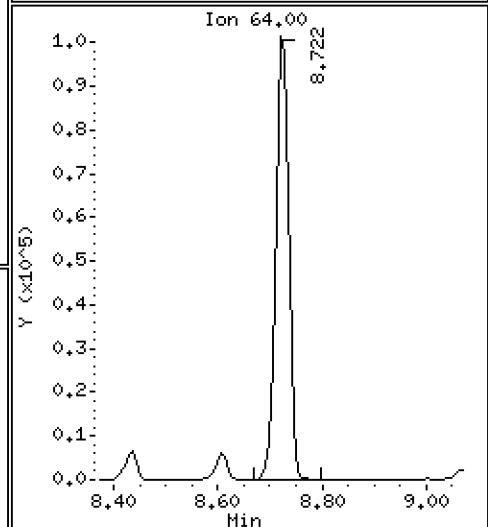
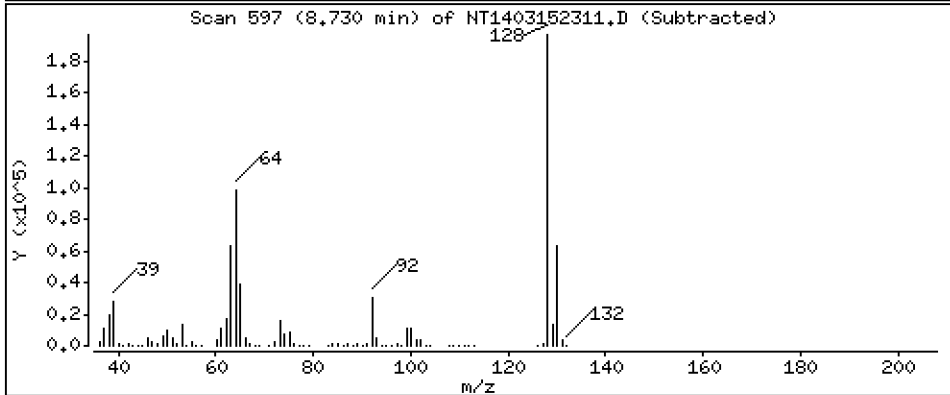
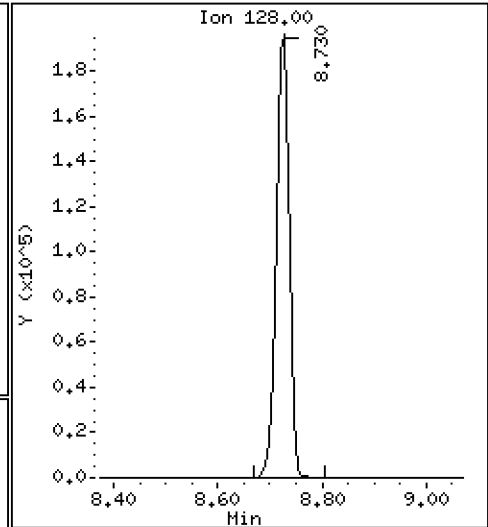
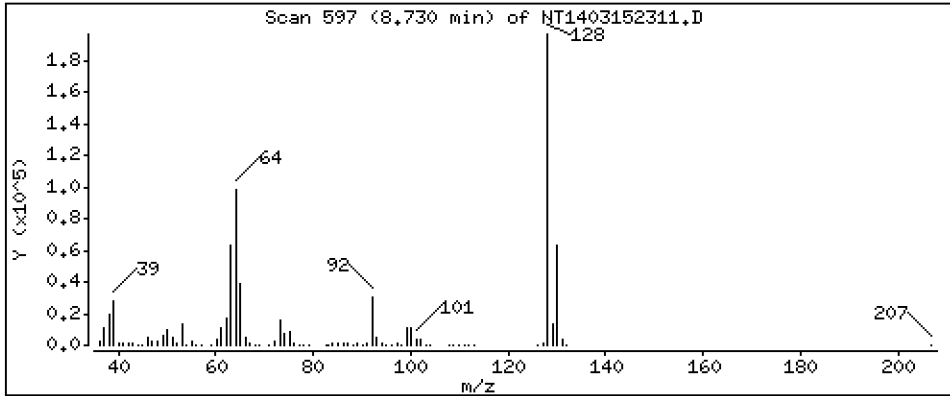
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,379 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

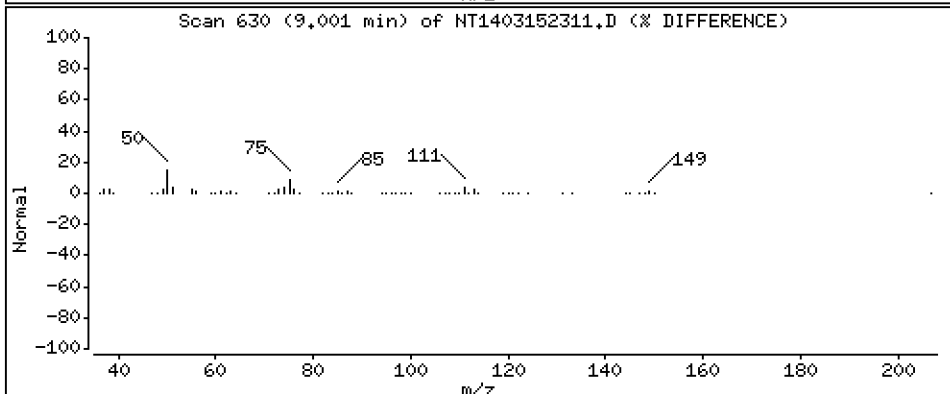
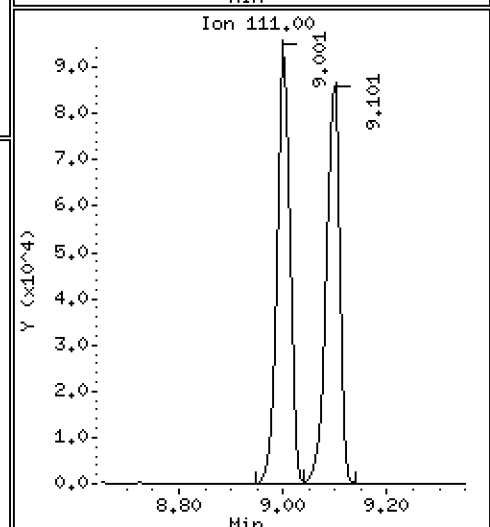
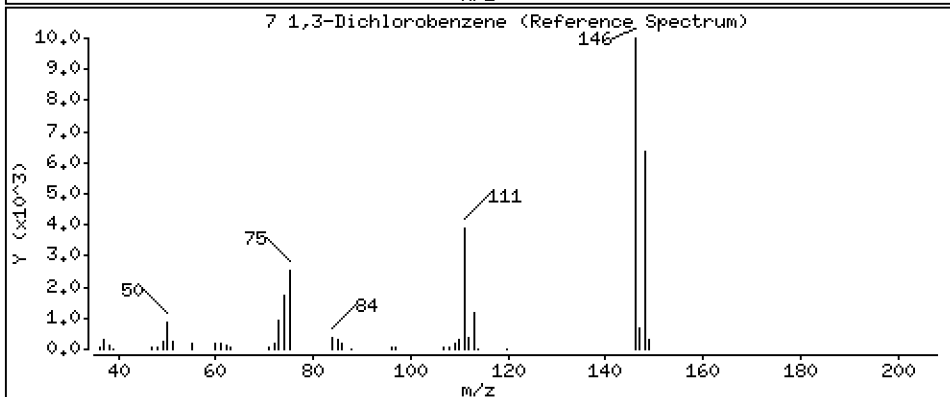
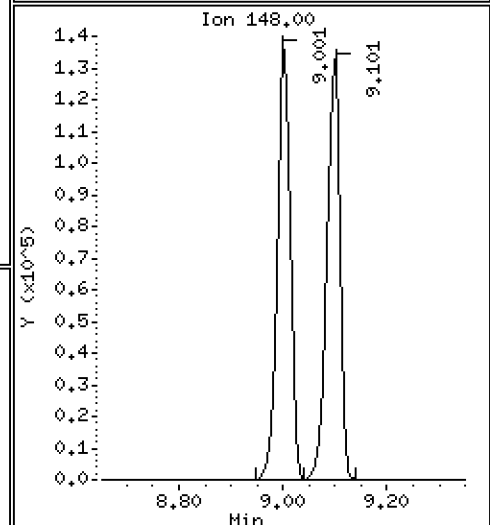
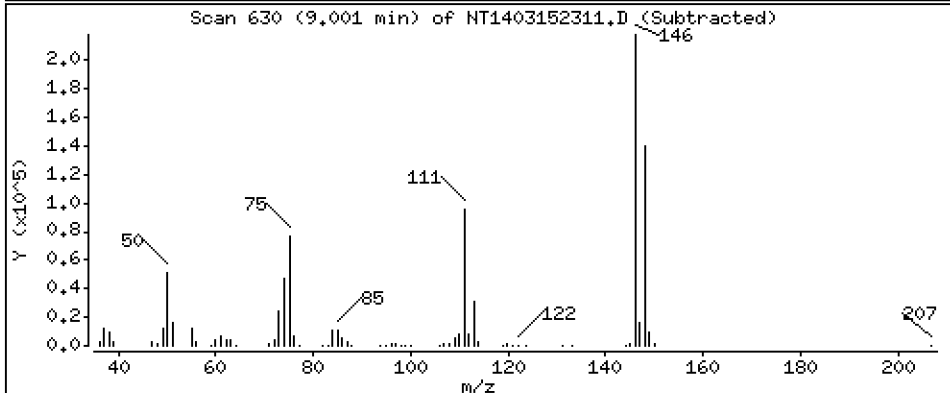
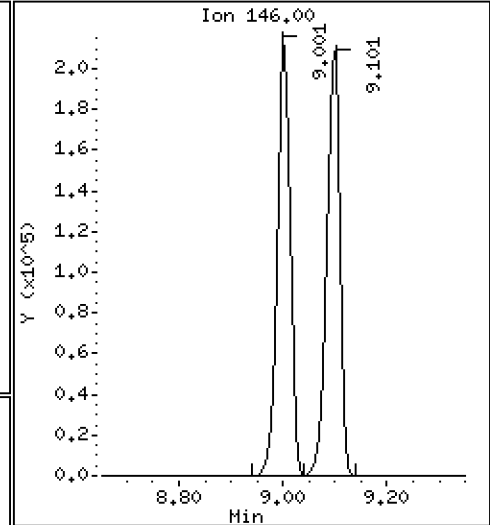
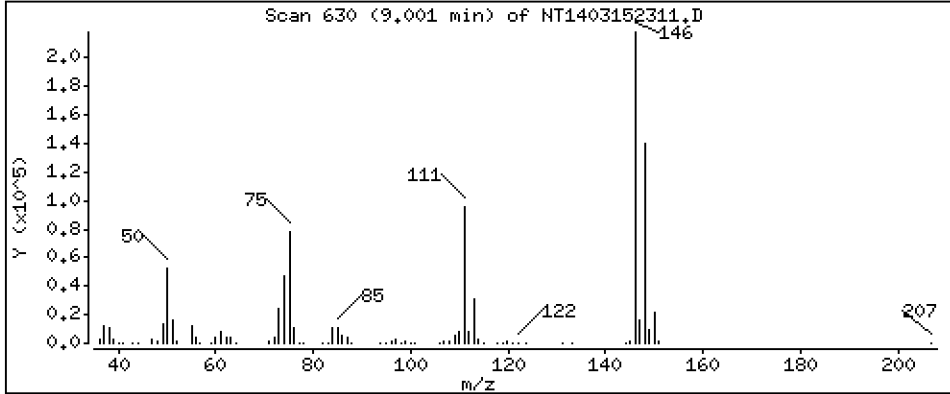
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.793 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

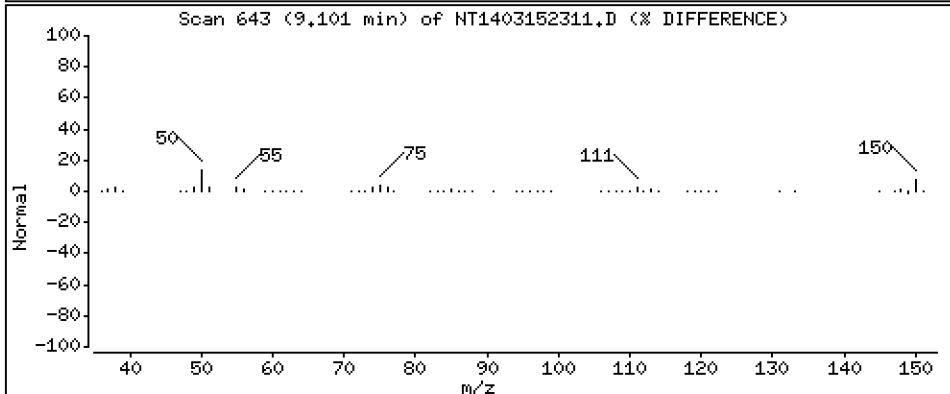
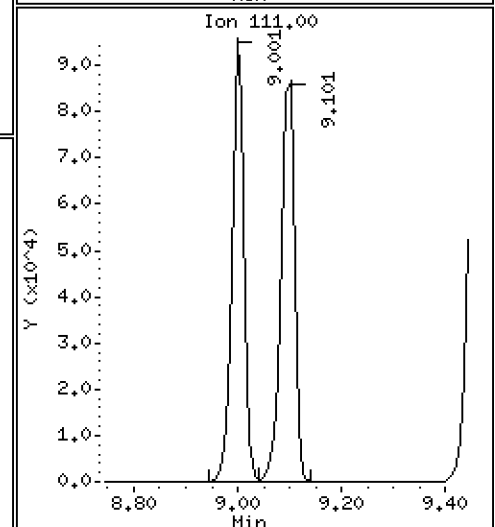
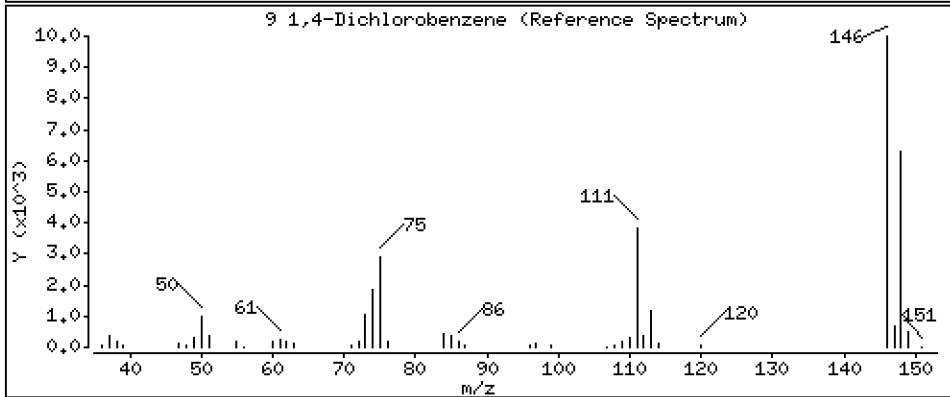
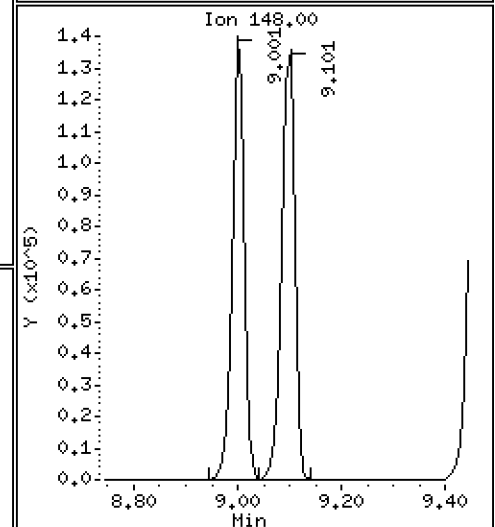
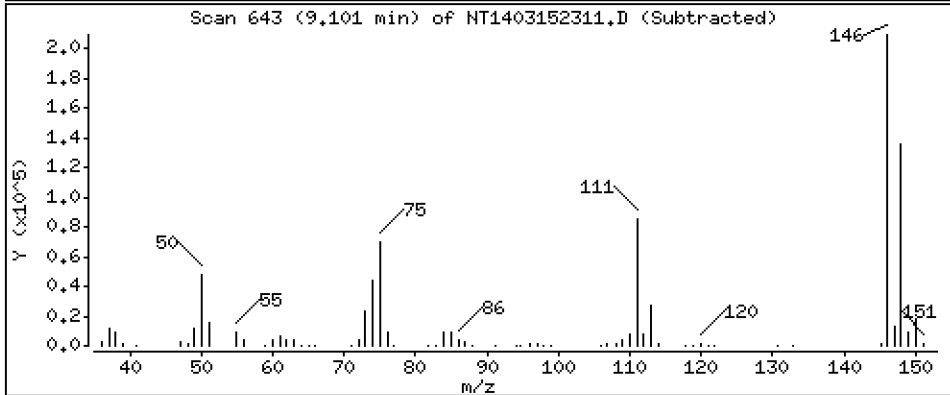
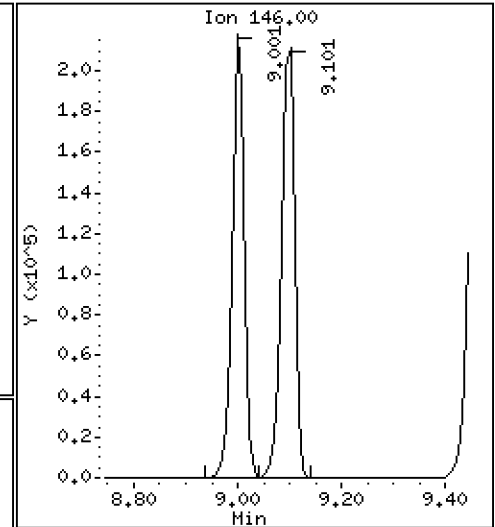
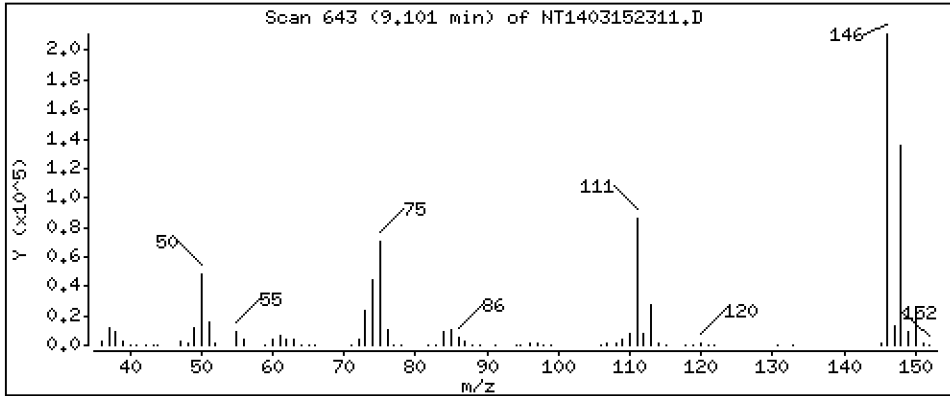
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,889 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

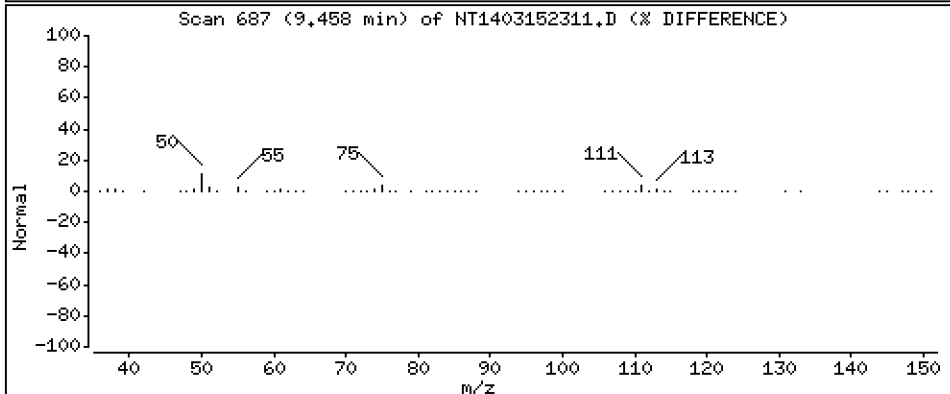
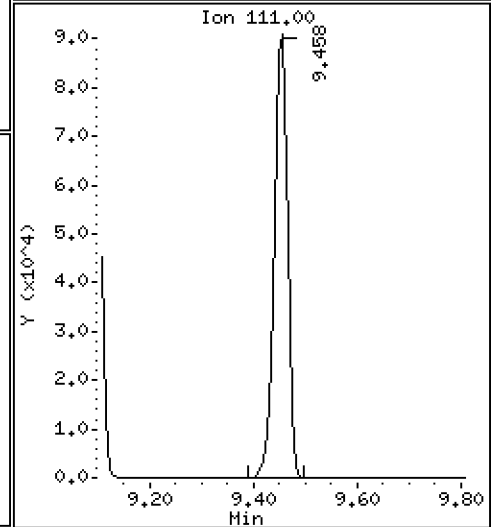
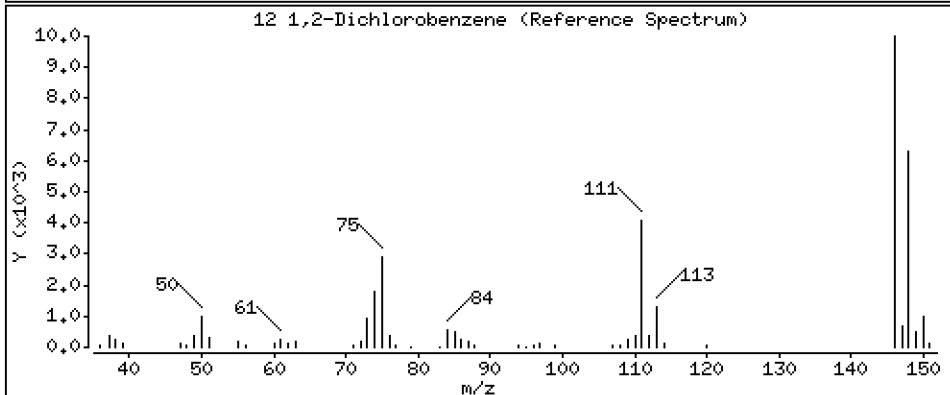
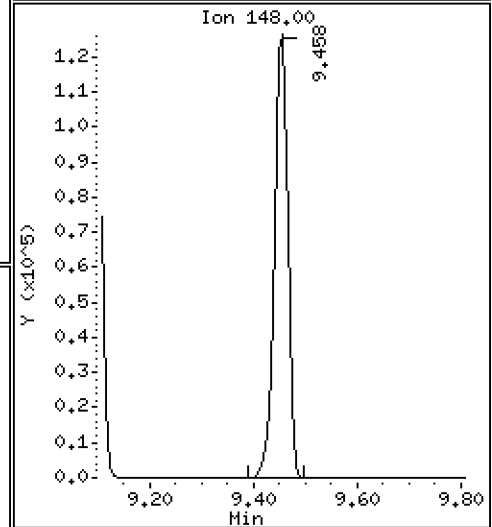
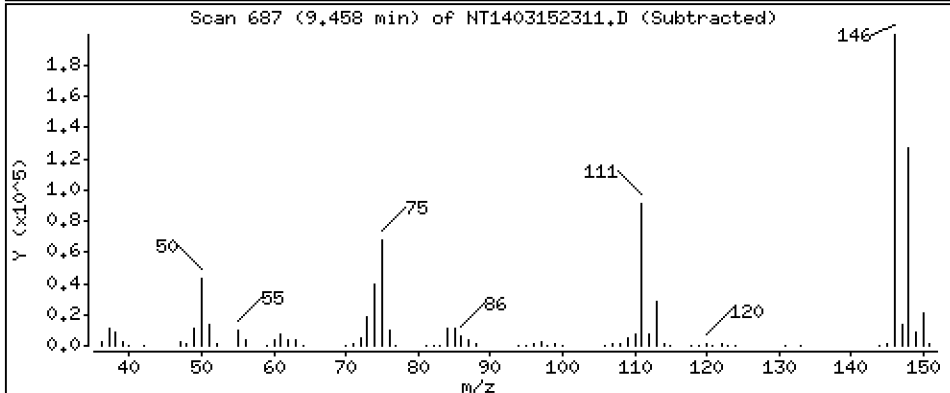
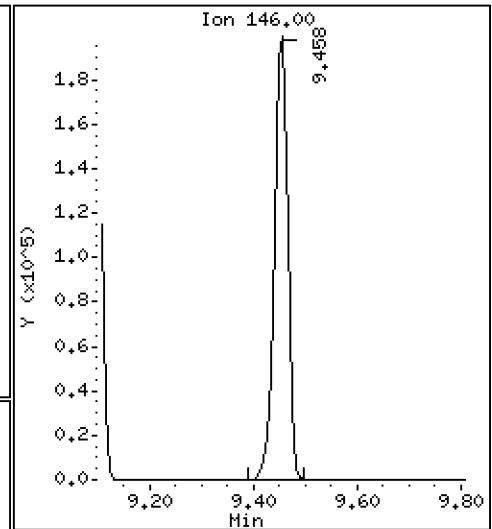
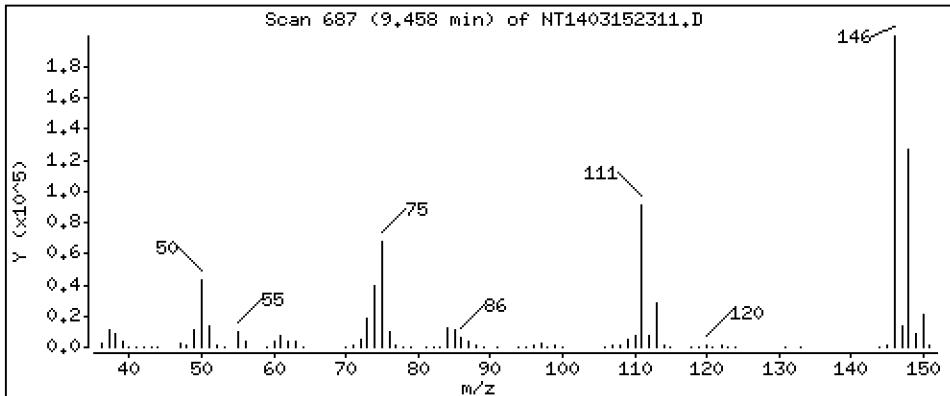
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,786 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

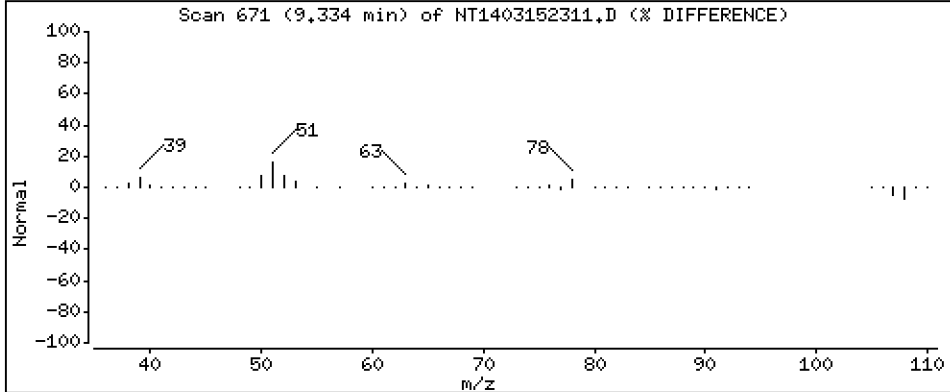
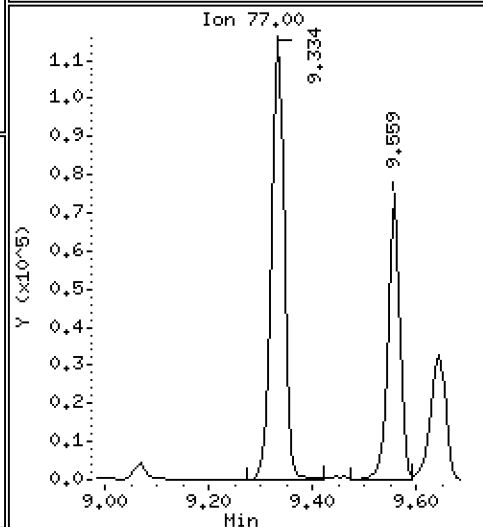
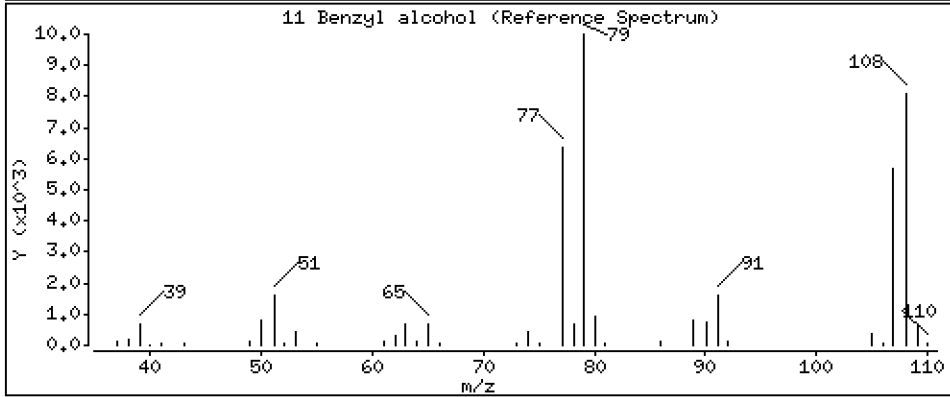
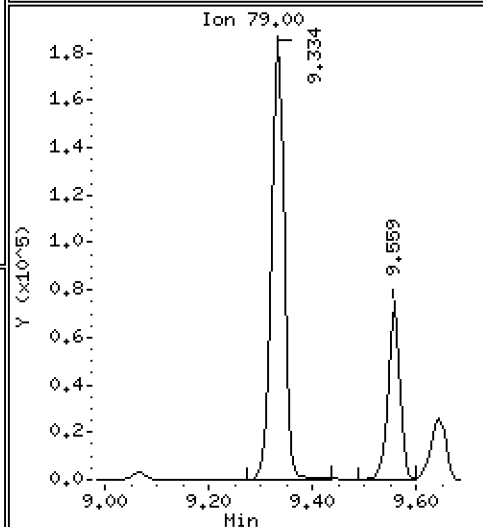
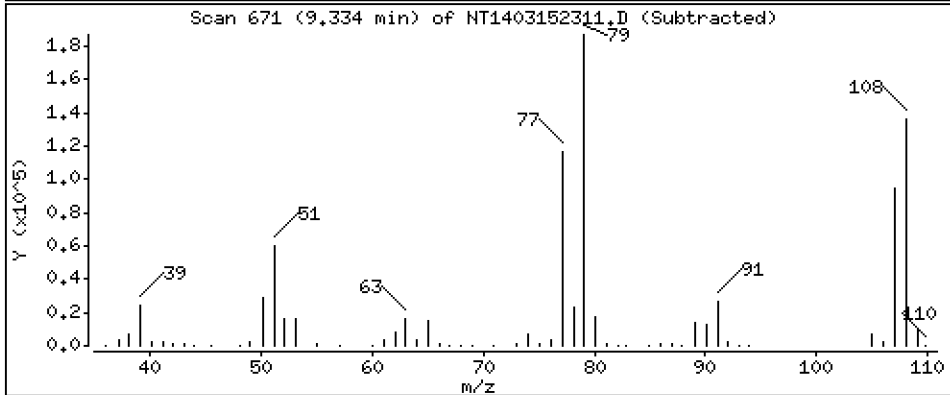
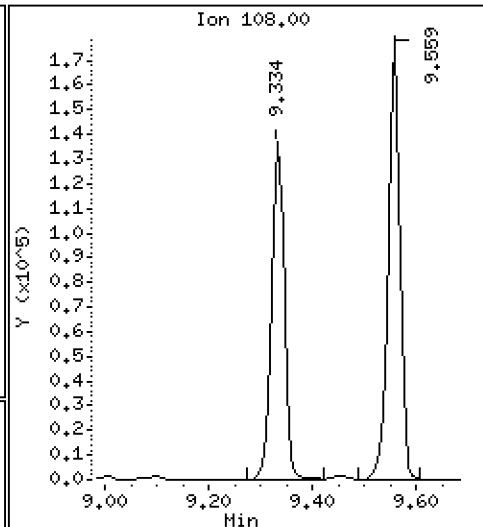
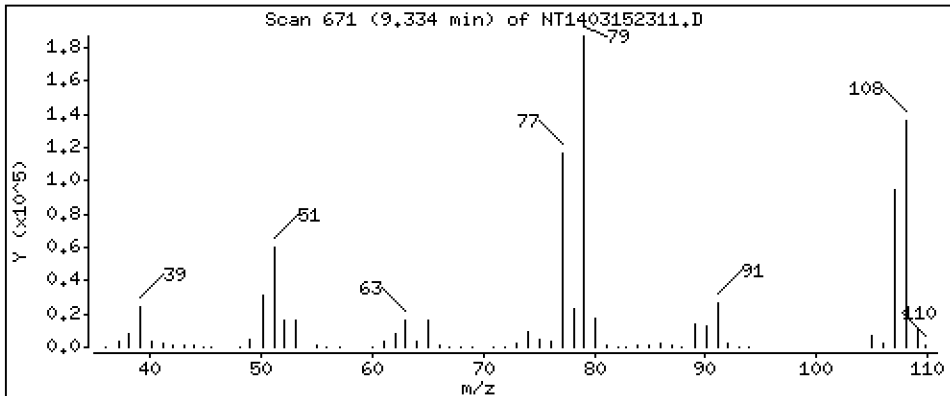
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5.051 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

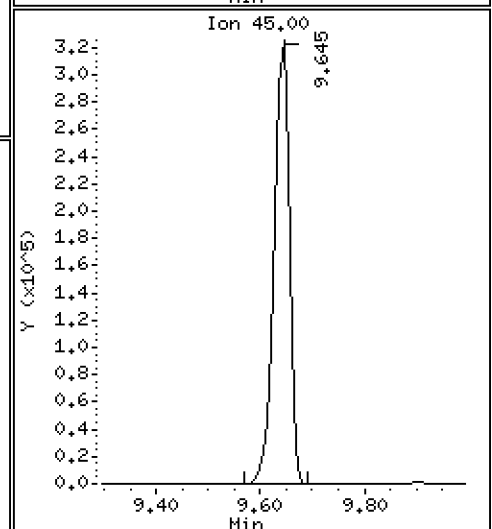
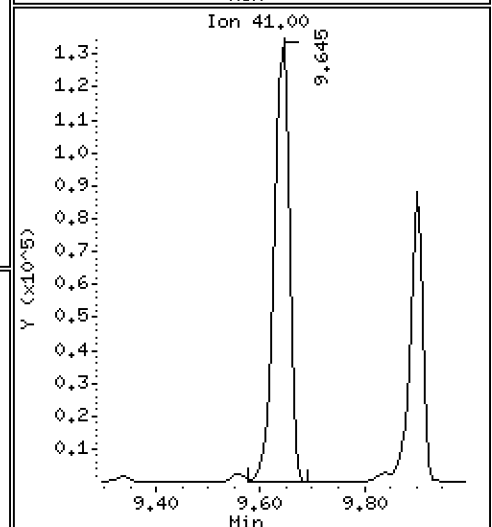
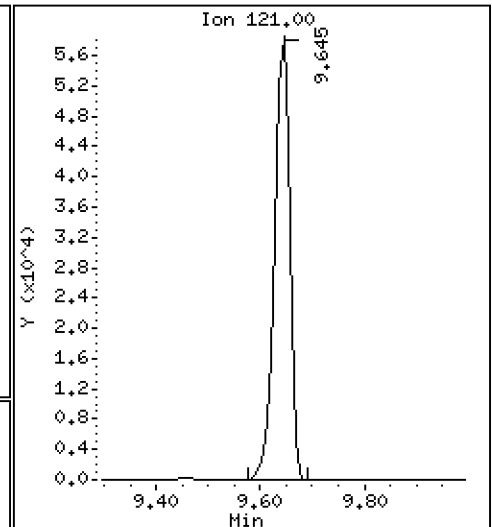
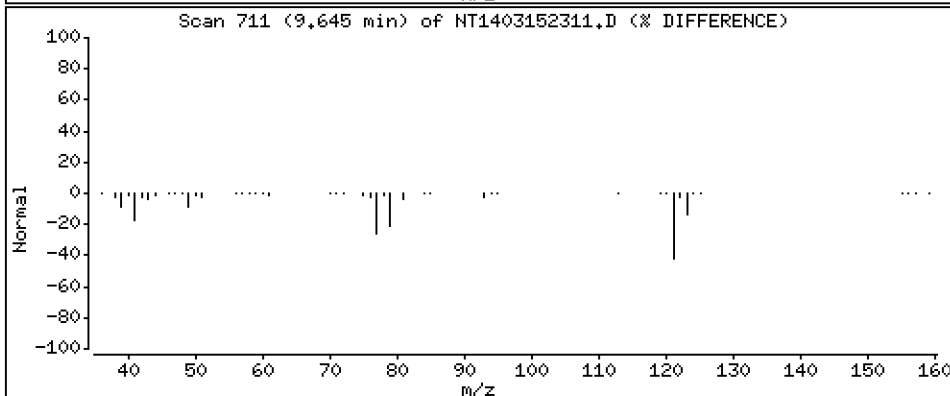
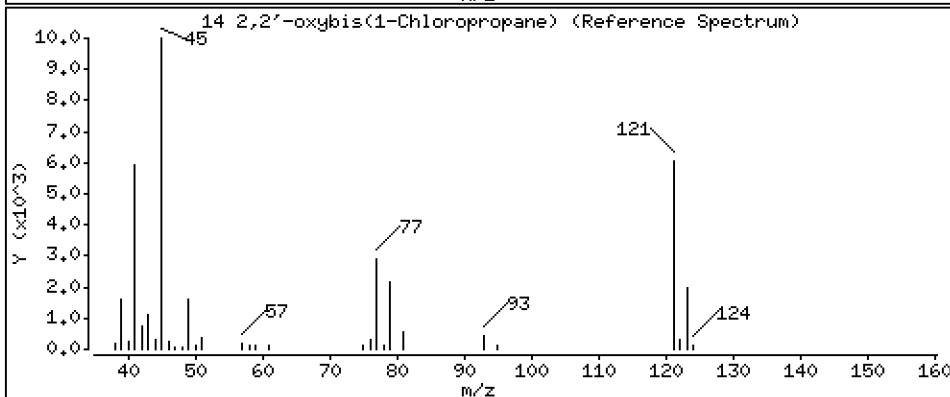
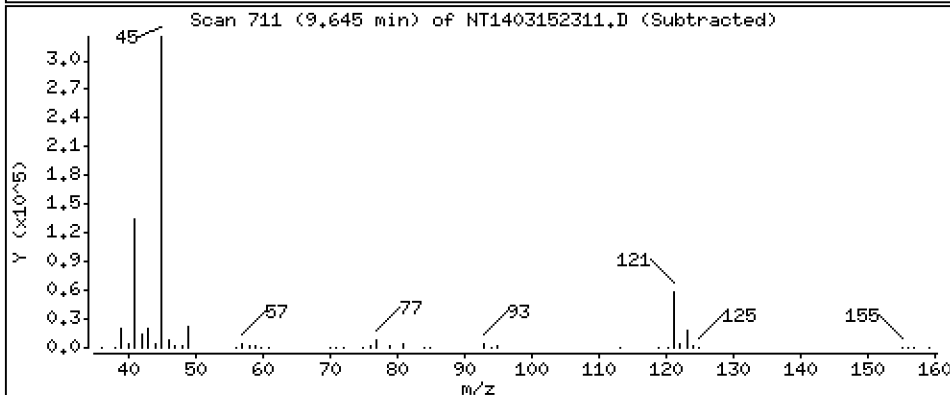
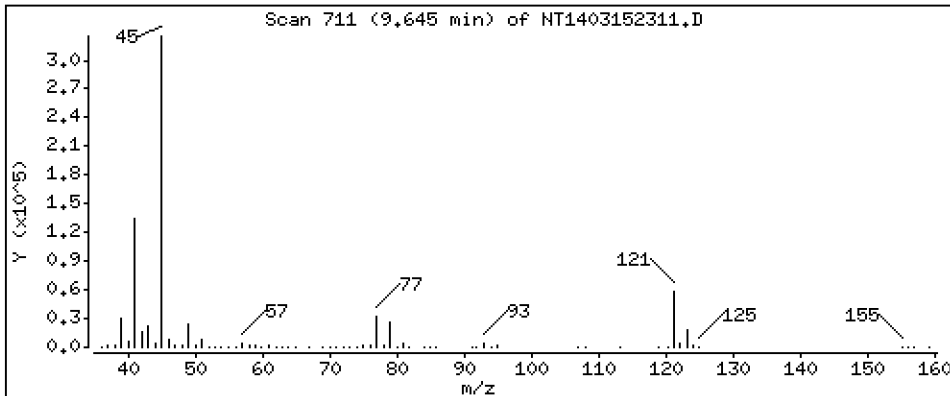
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 5,319 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

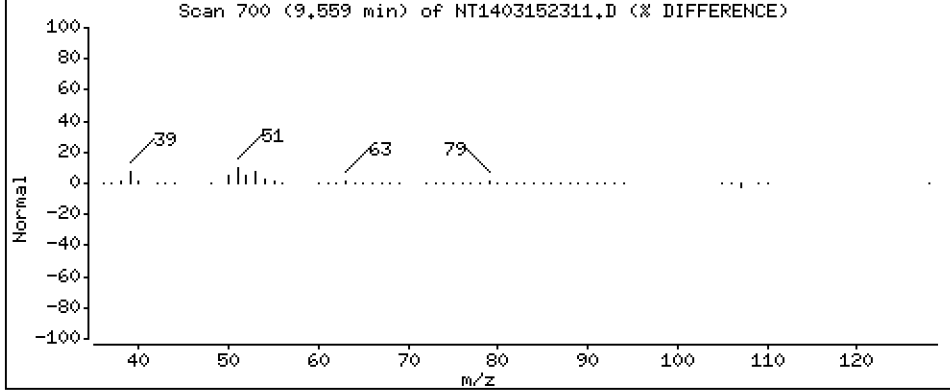
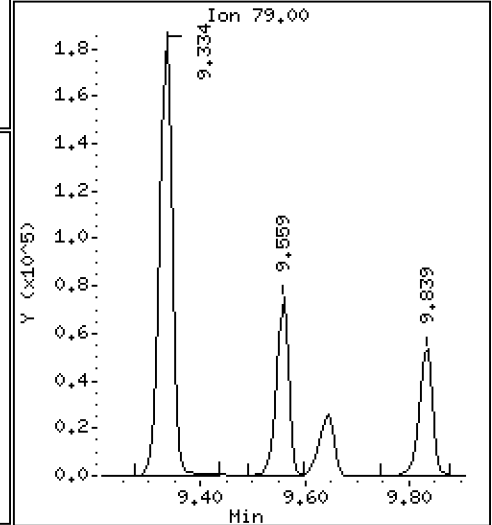
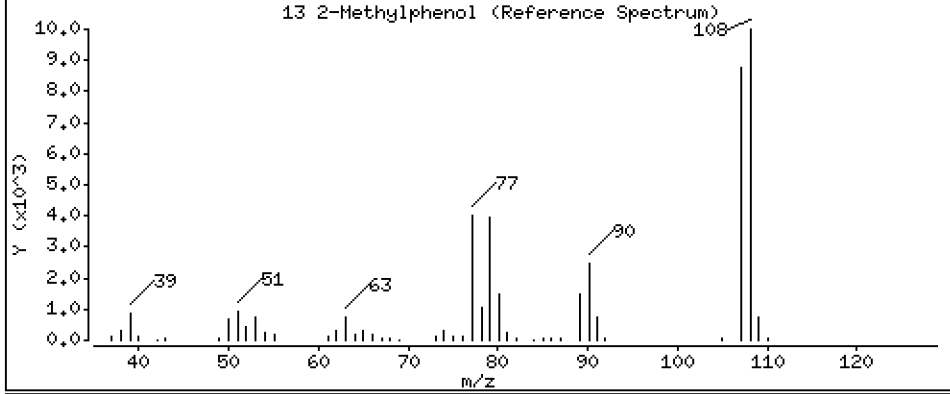
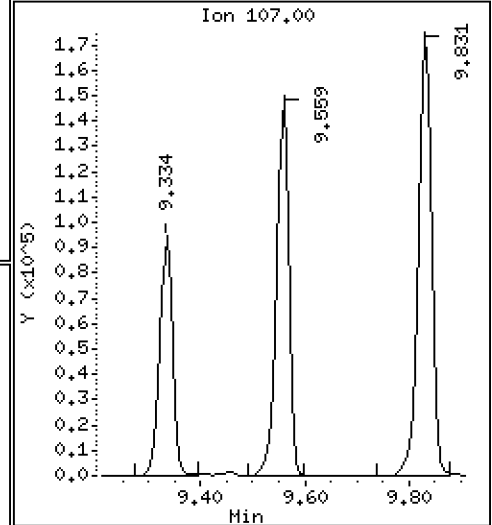
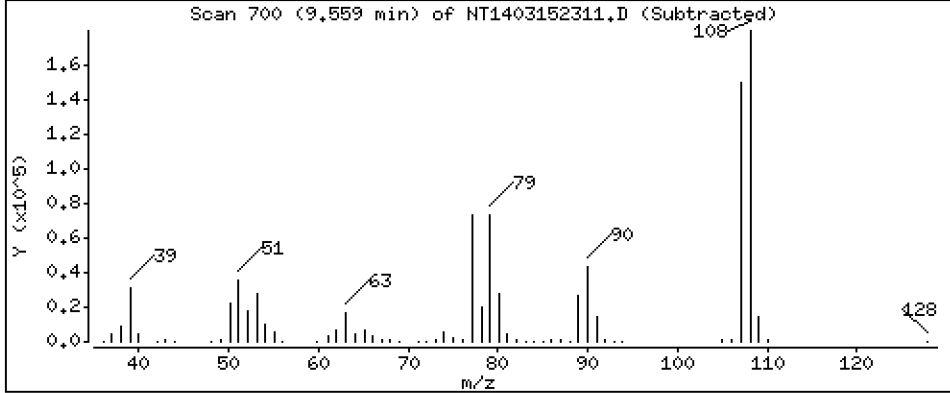
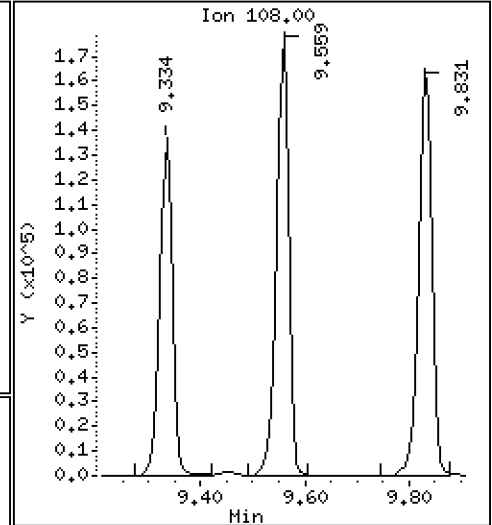
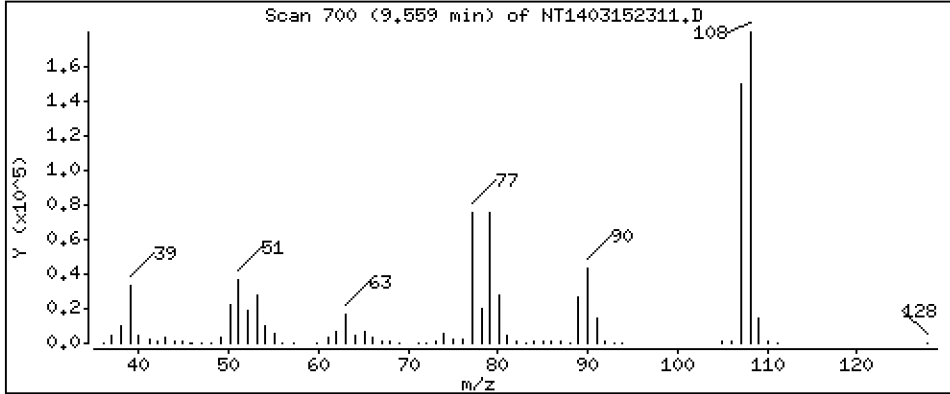
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.117 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

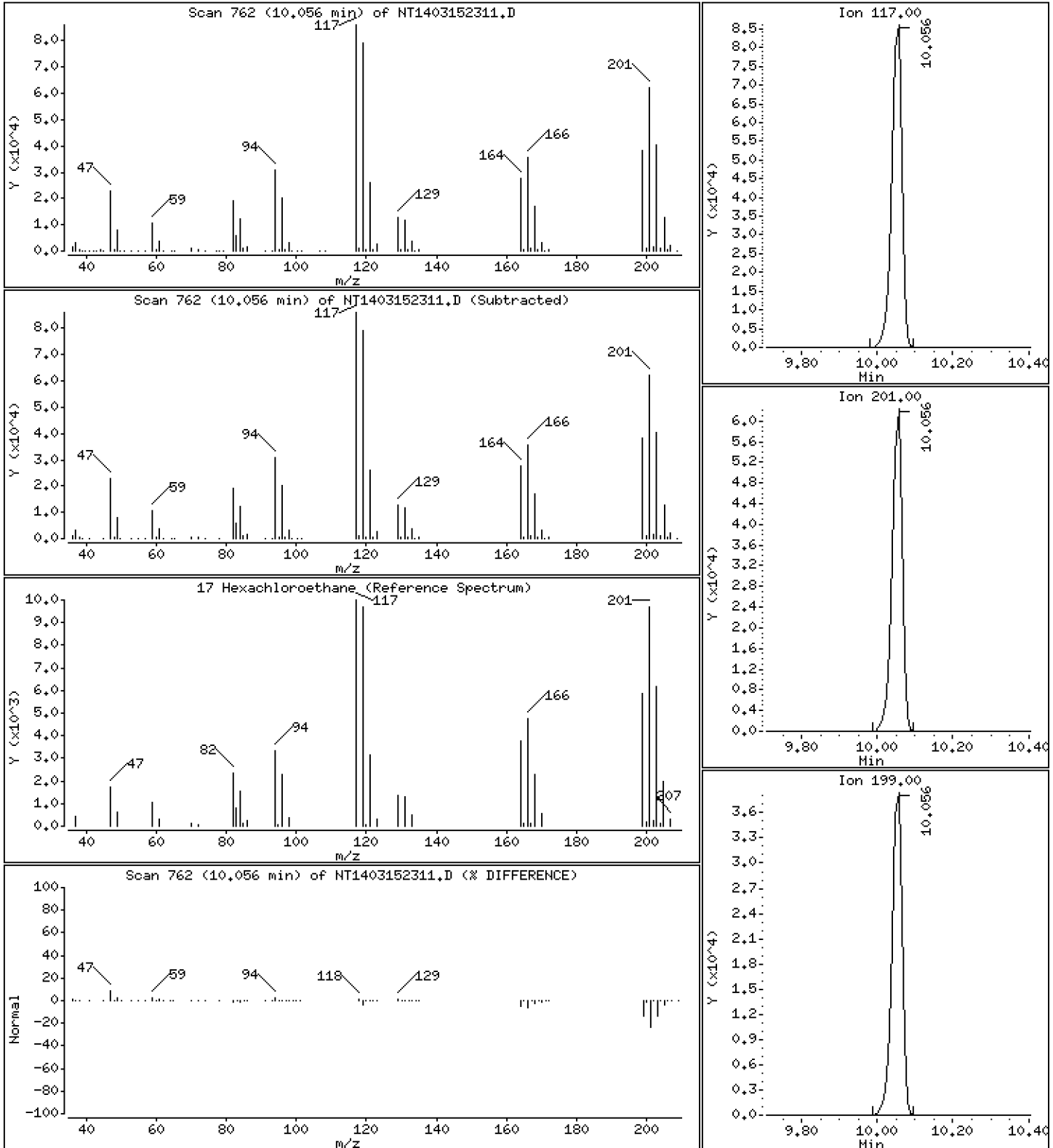
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 4.955 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

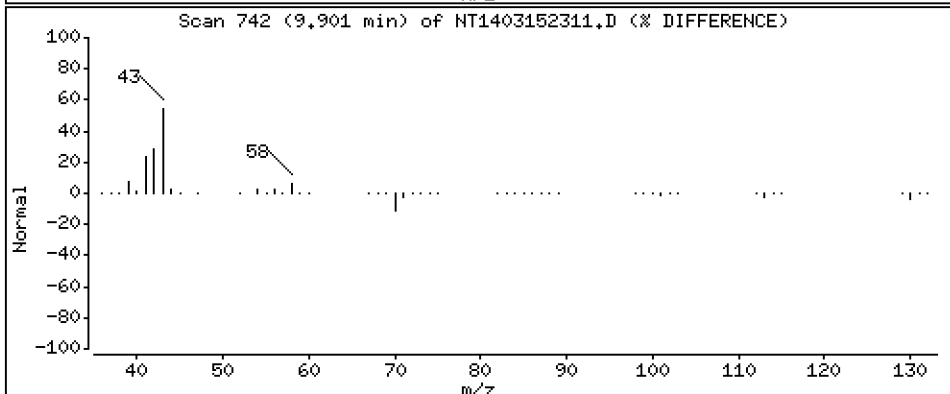
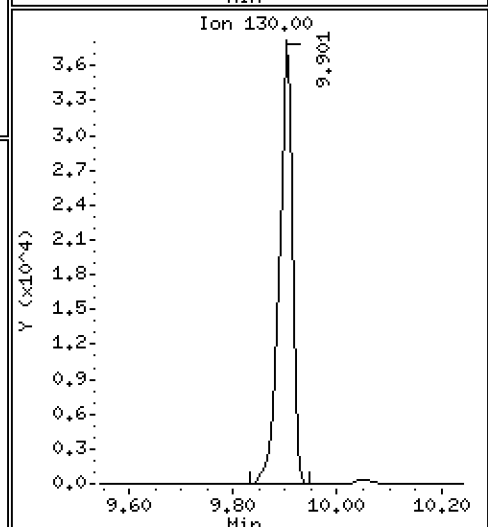
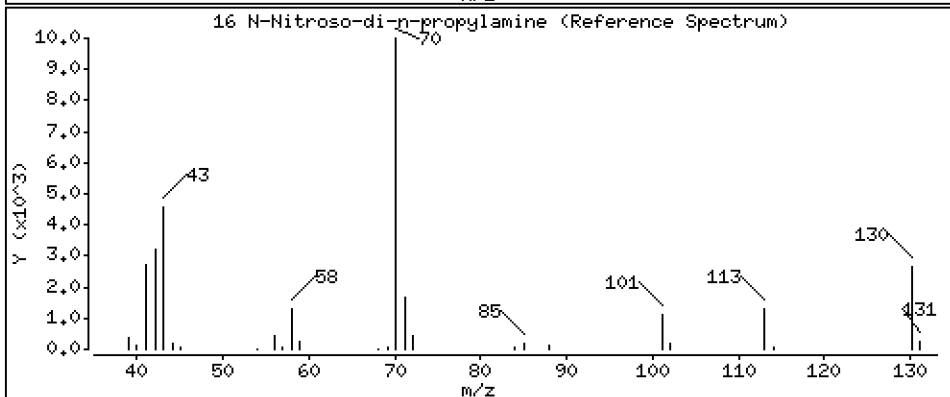
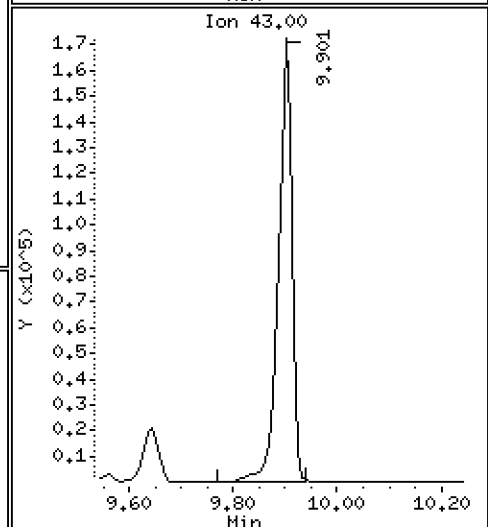
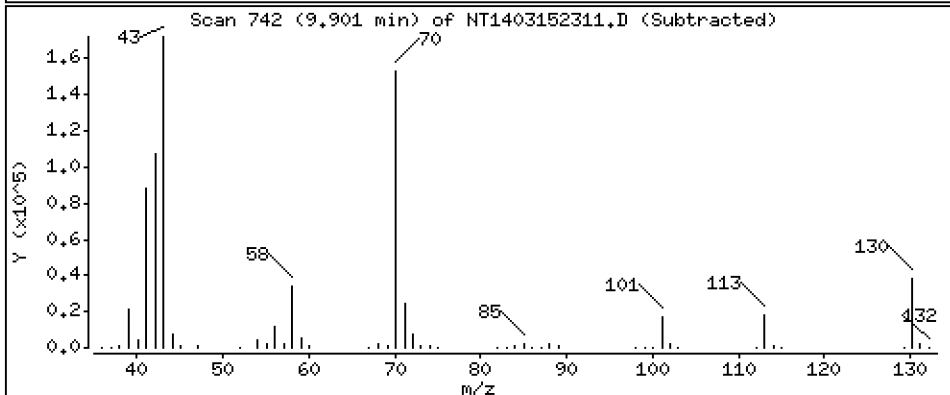
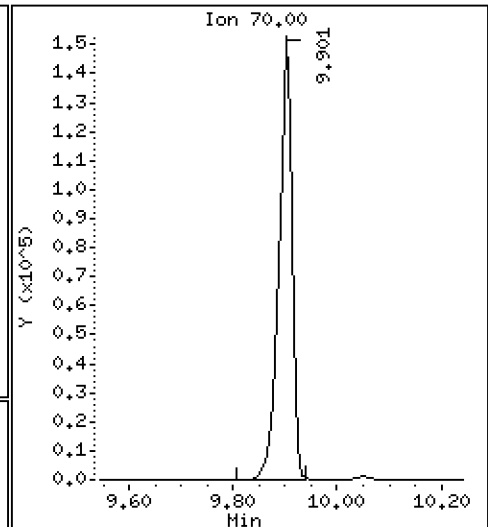
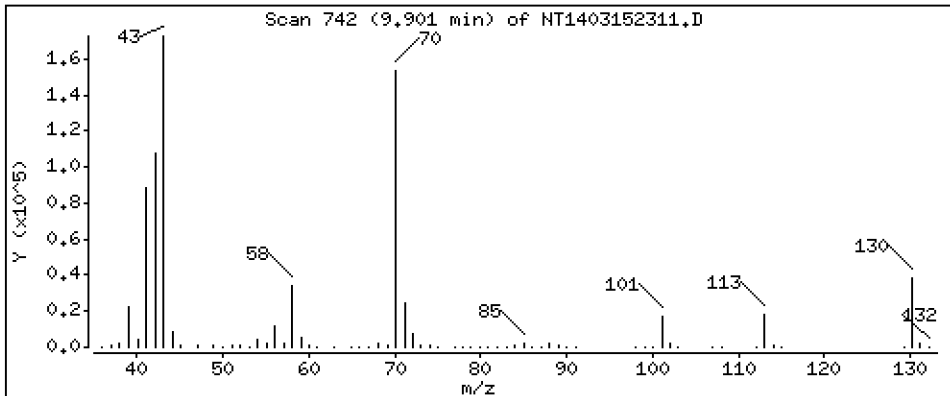
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,983 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

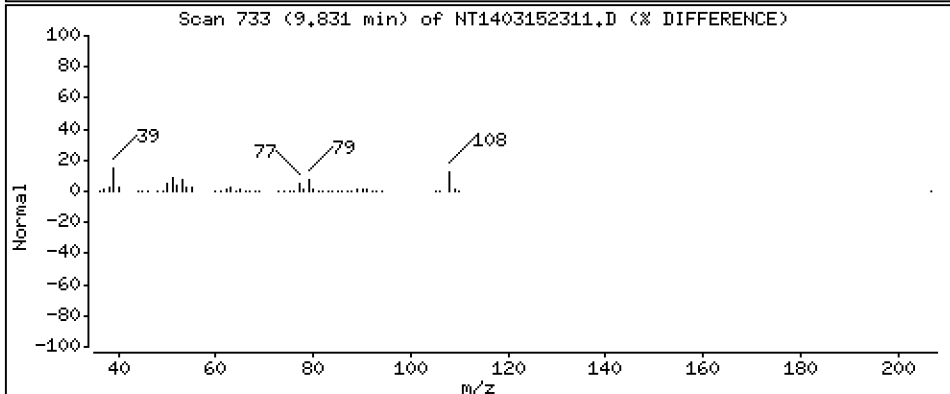
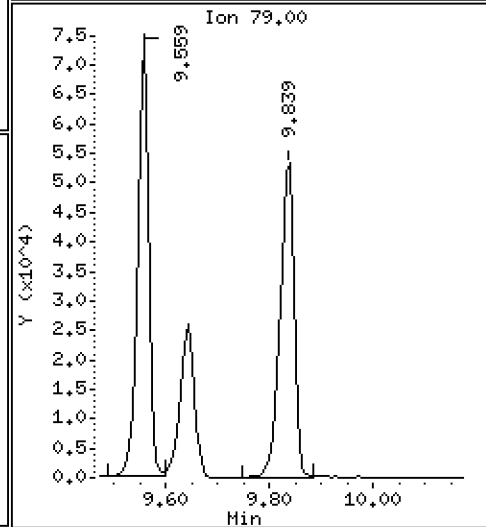
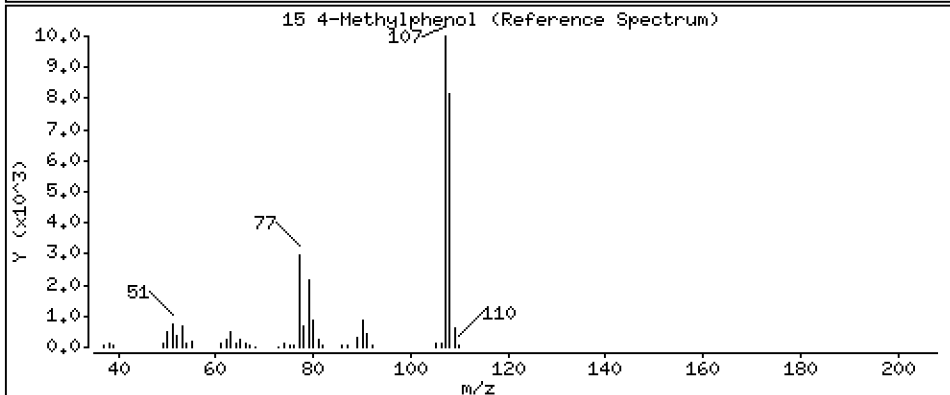
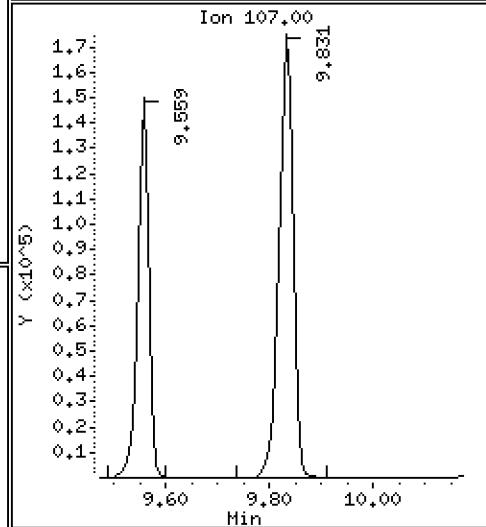
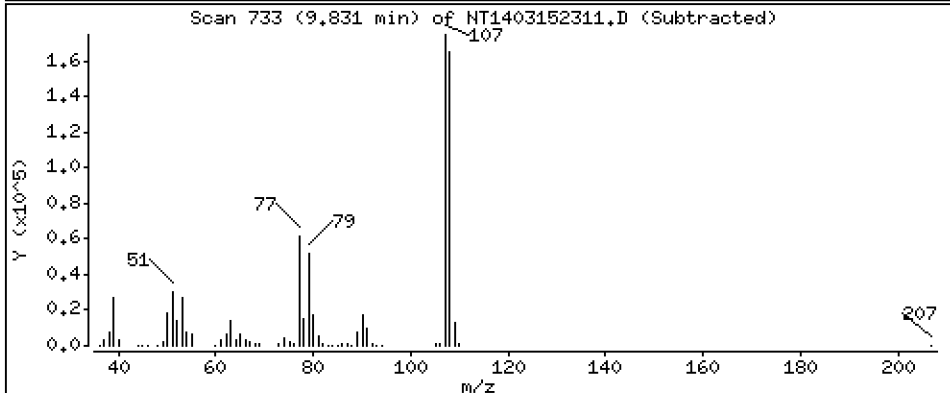
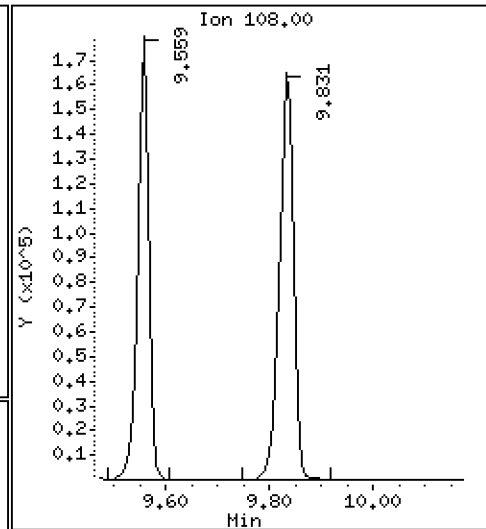
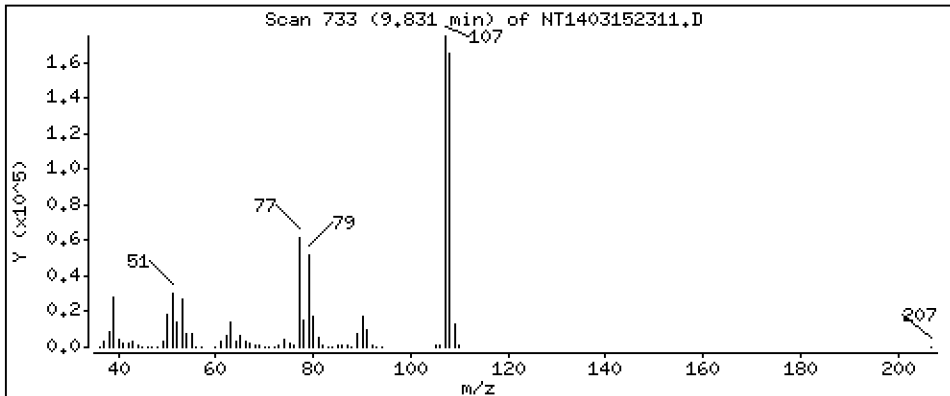
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,302 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

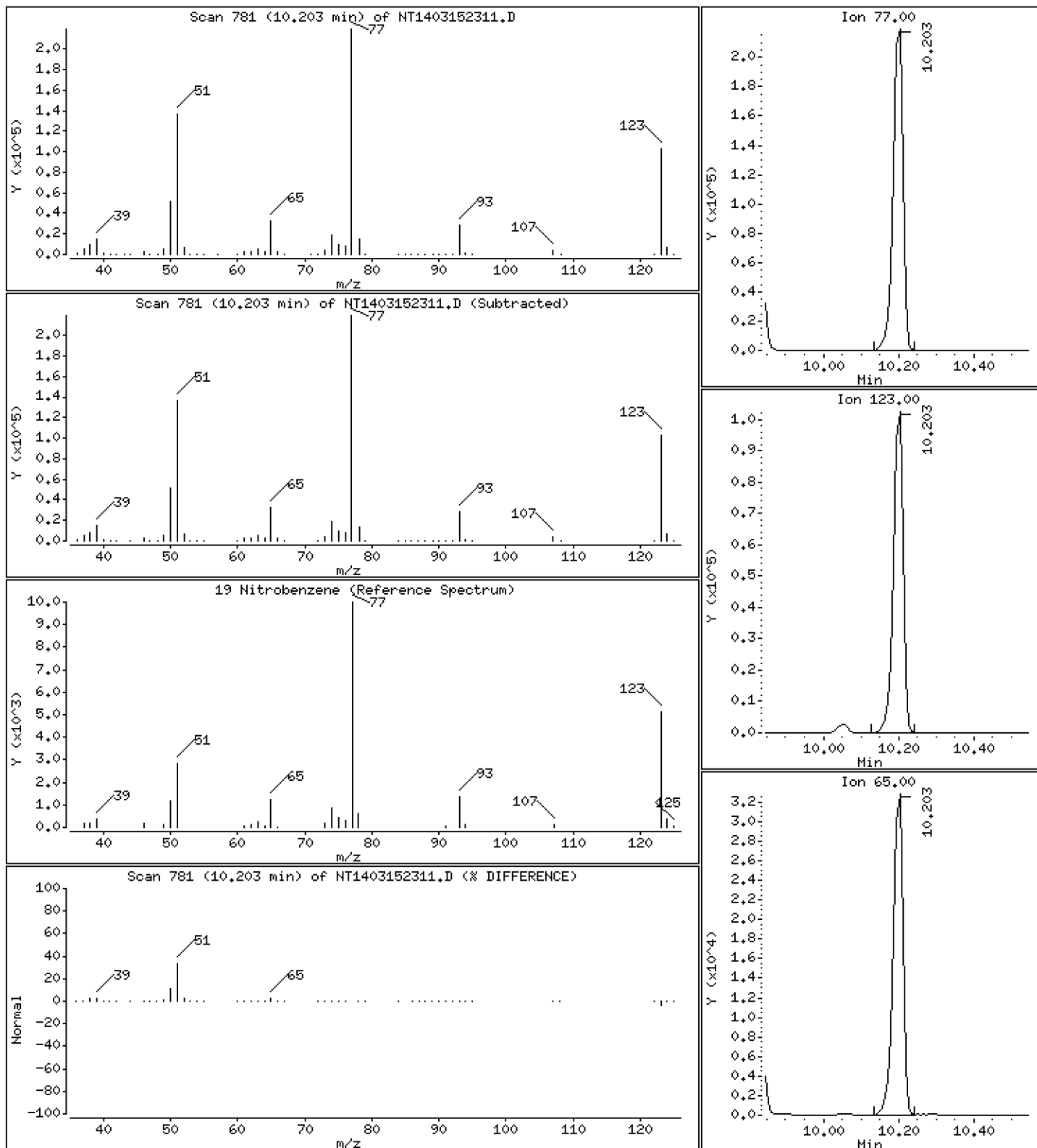
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,023 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

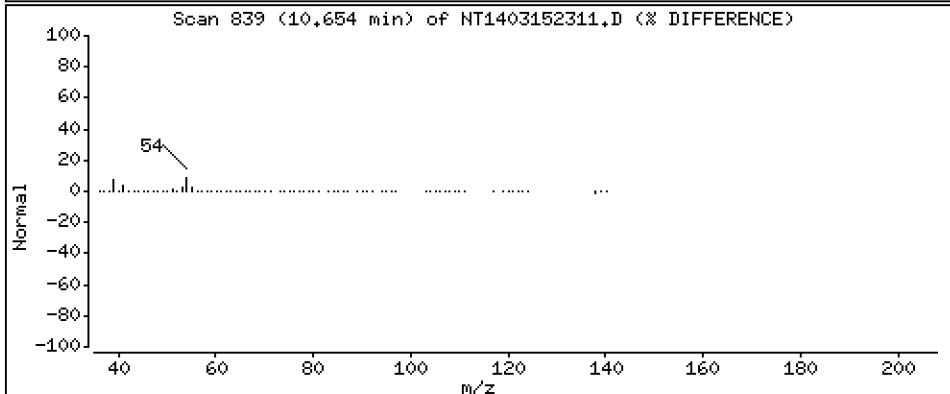
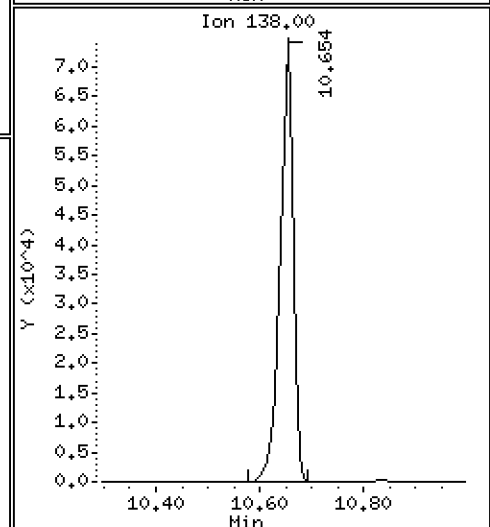
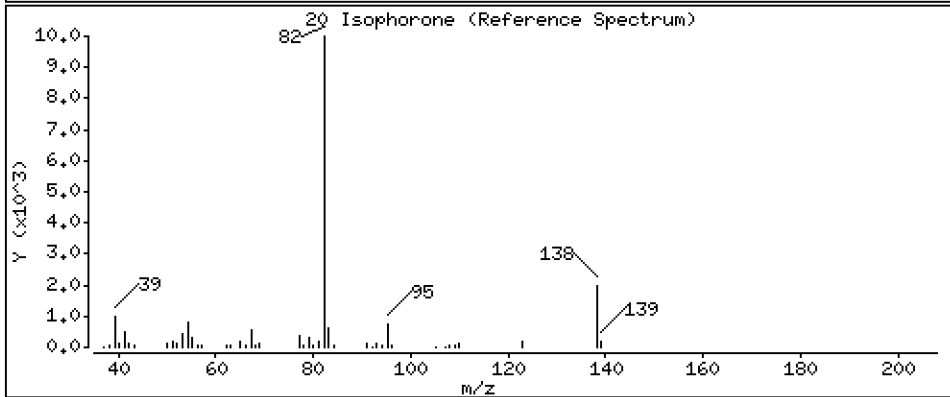
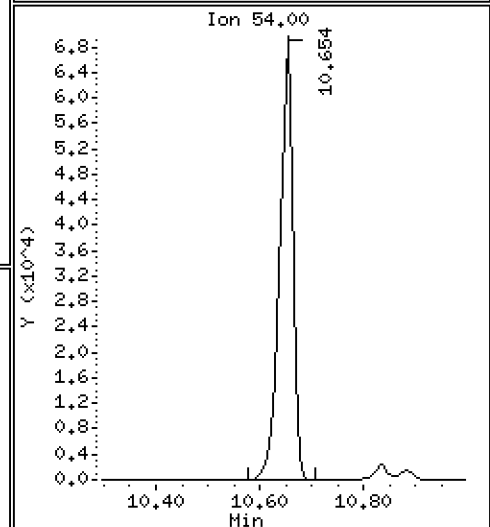
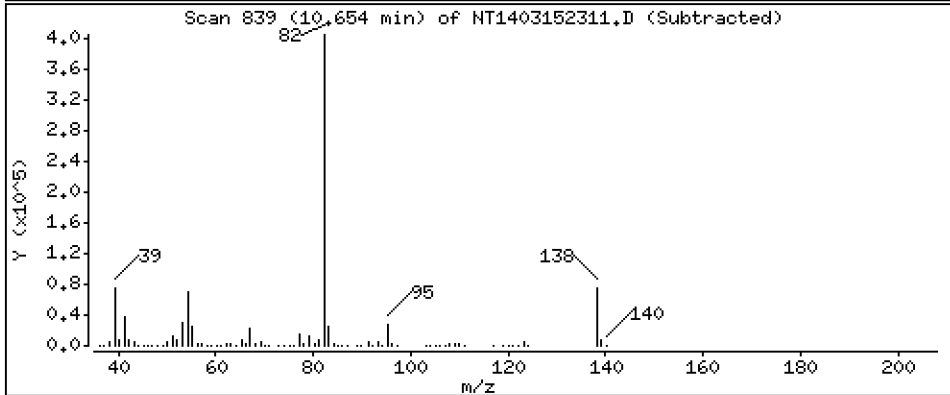
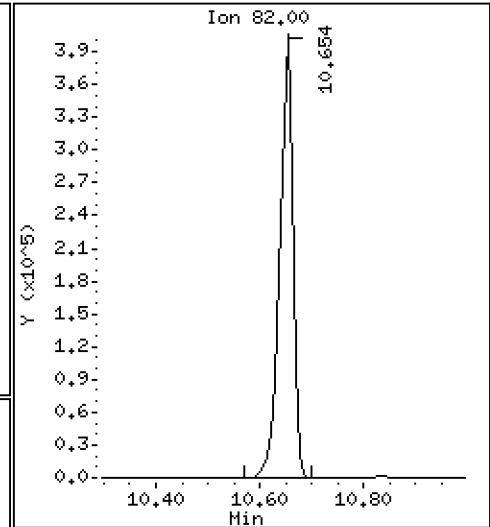
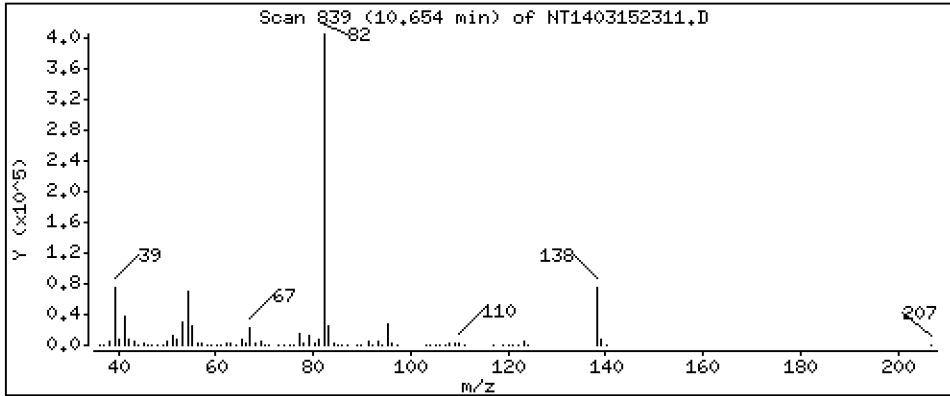
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 6,771 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

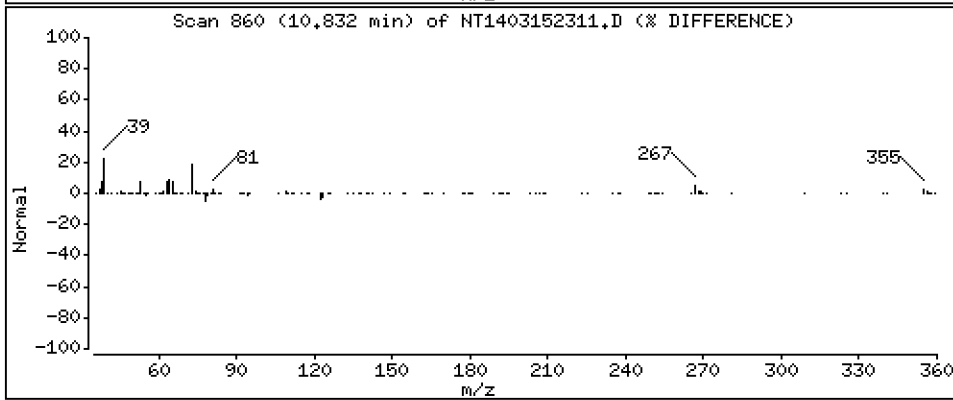
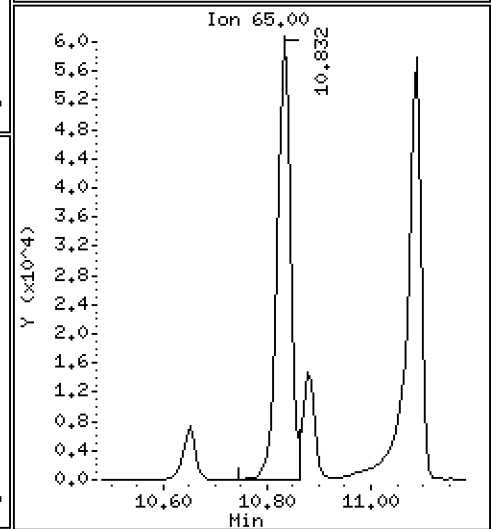
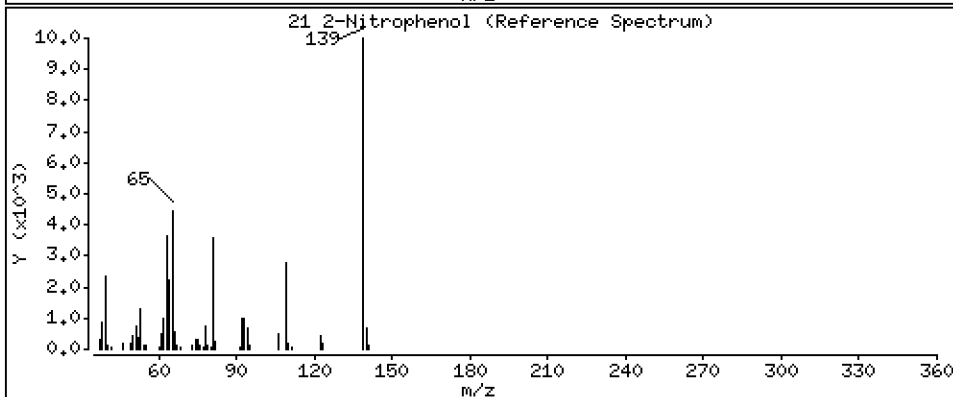
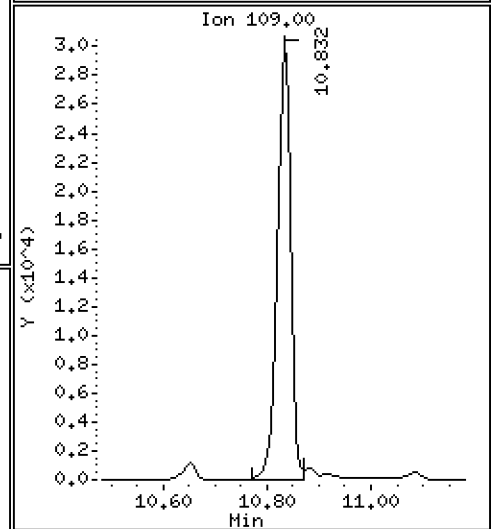
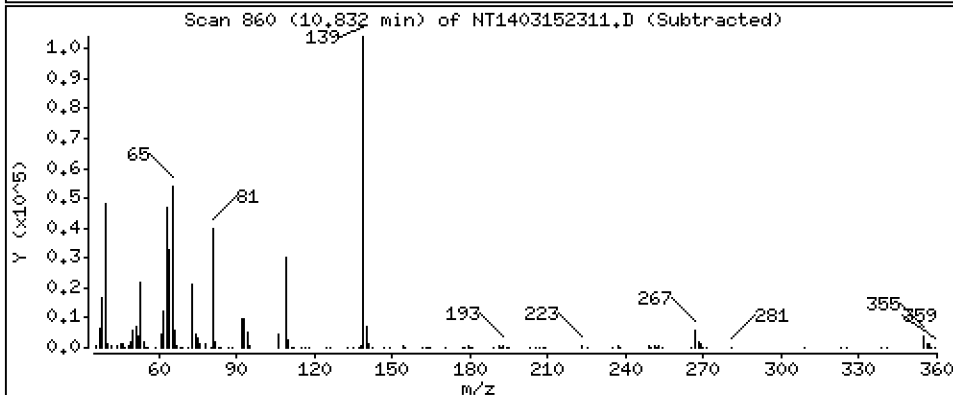
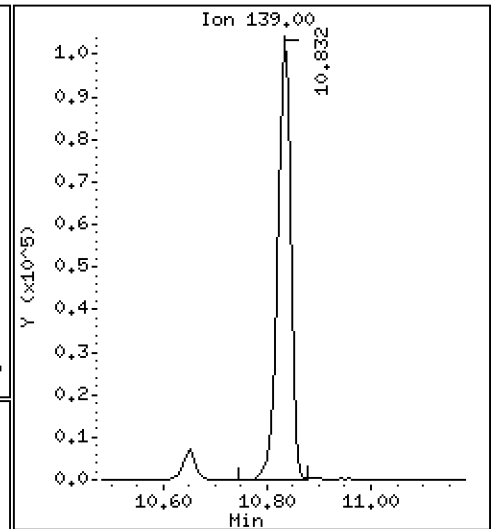
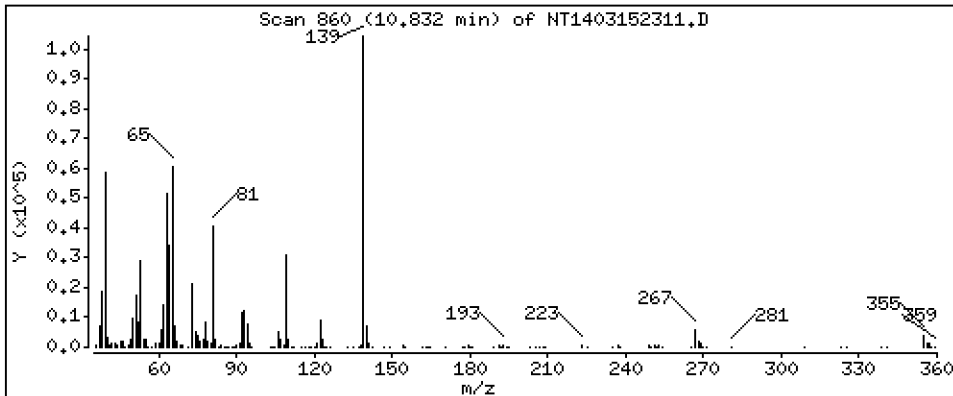
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,530 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

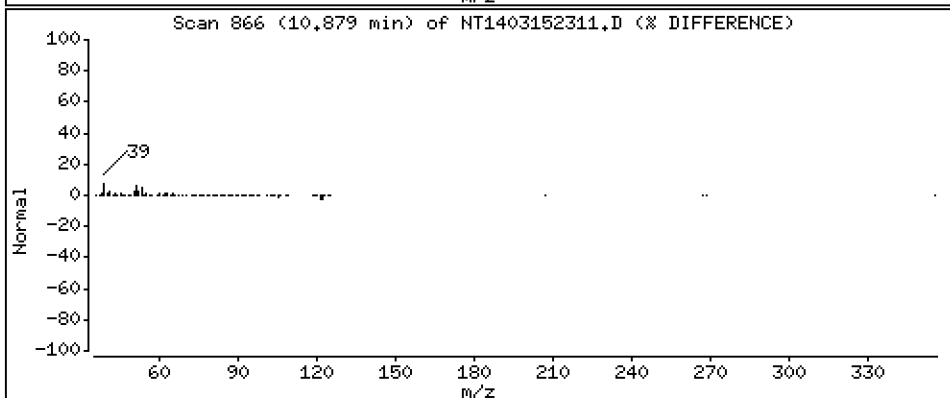
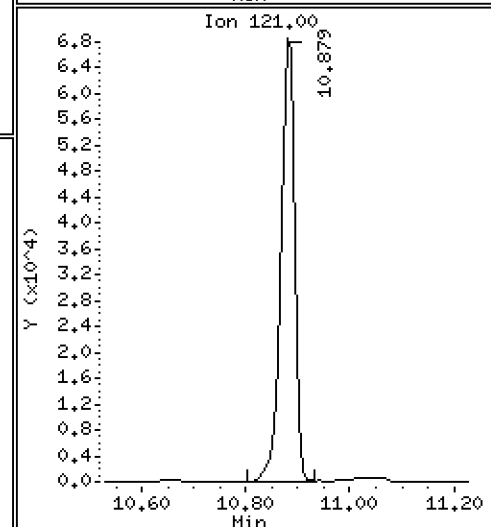
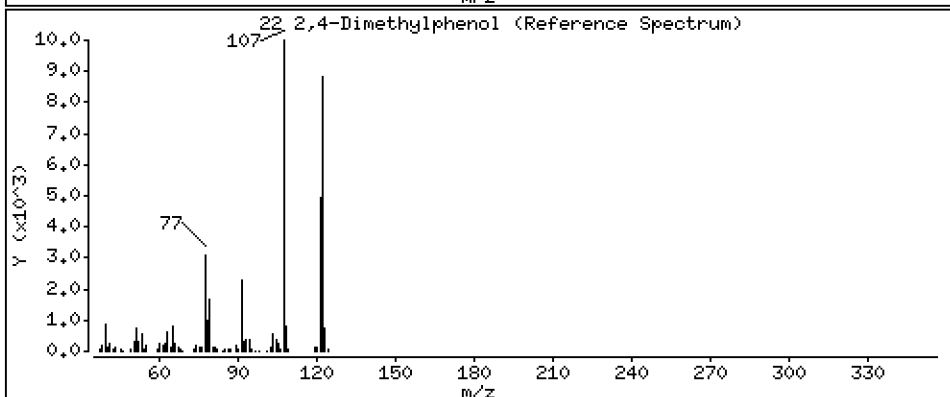
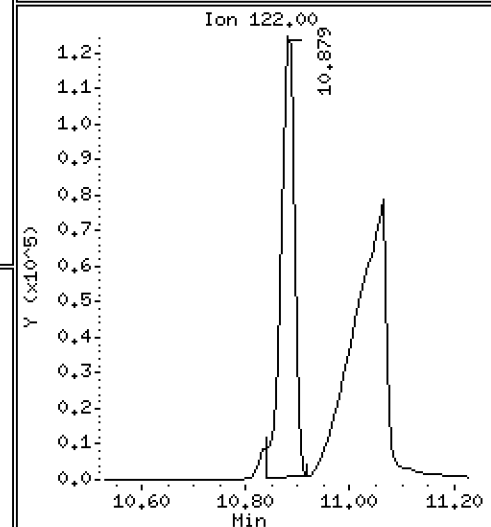
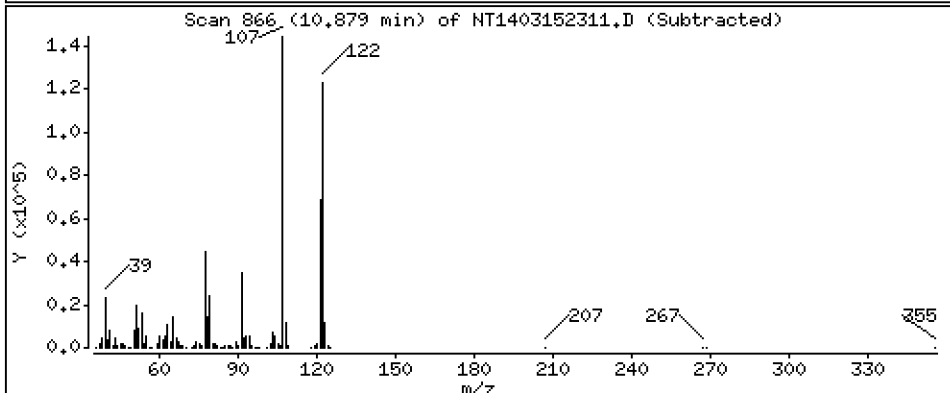
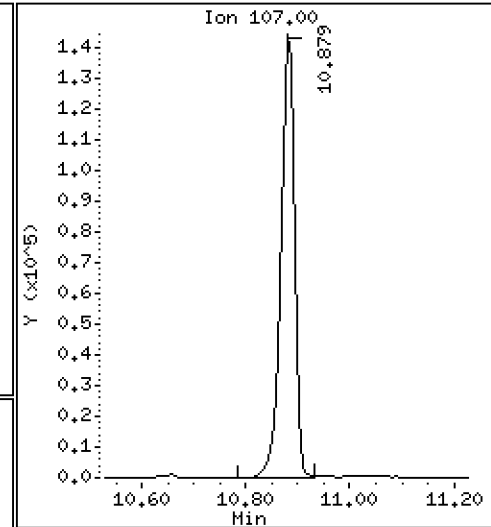
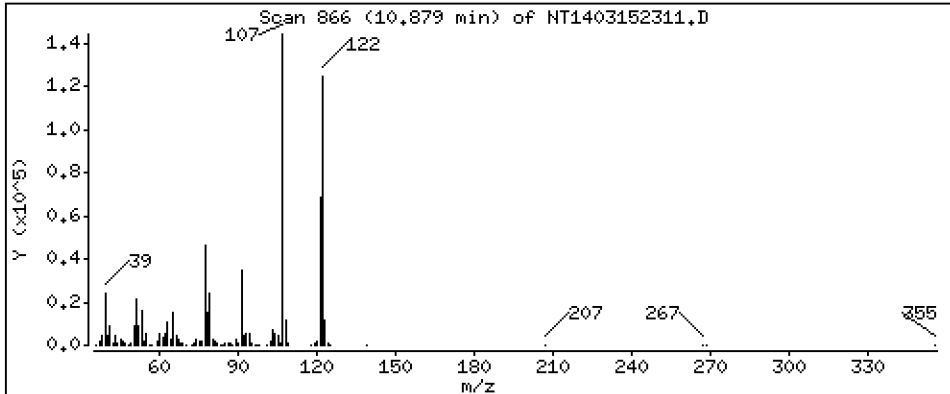
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,915 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

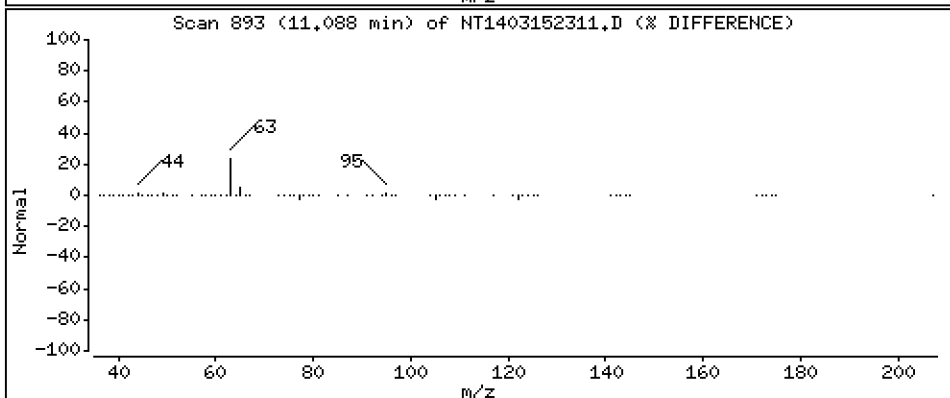
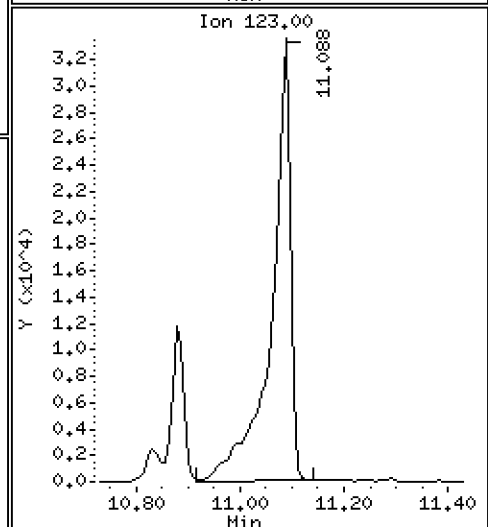
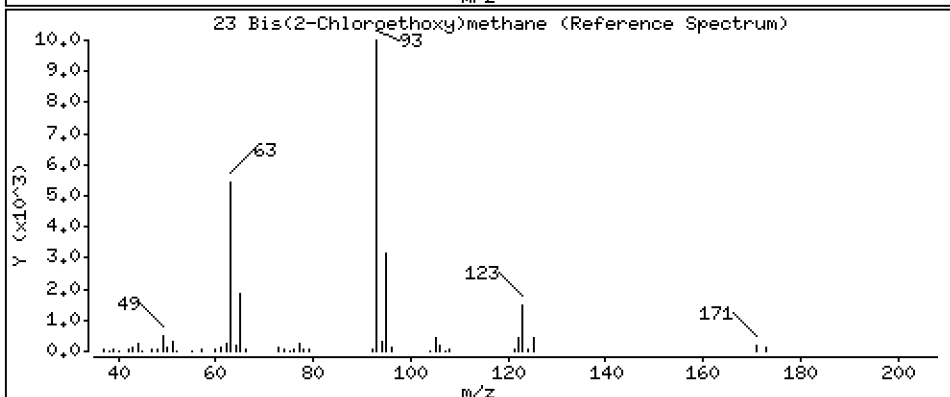
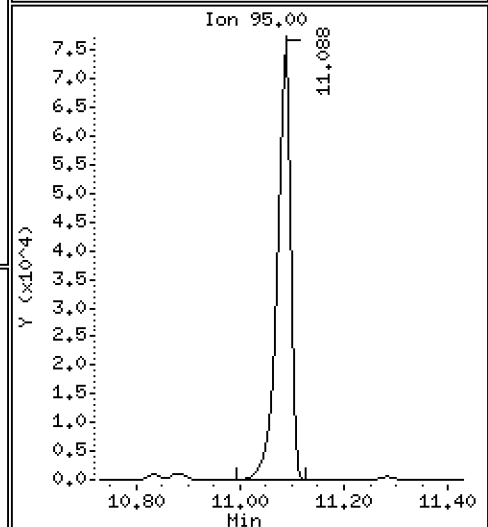
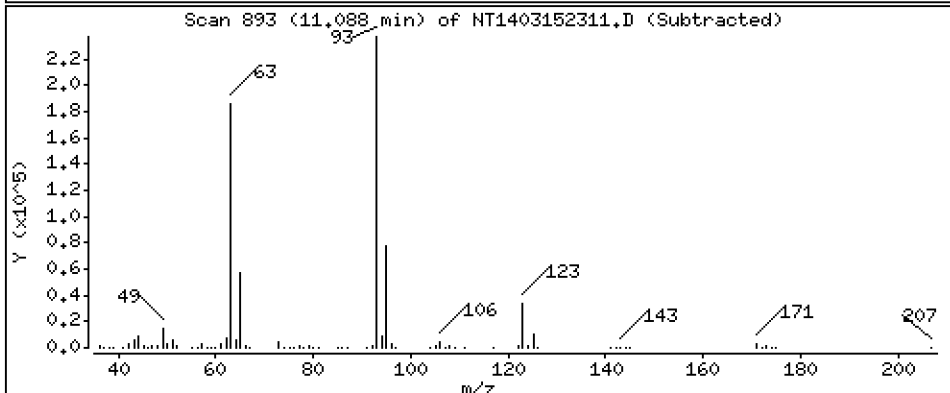
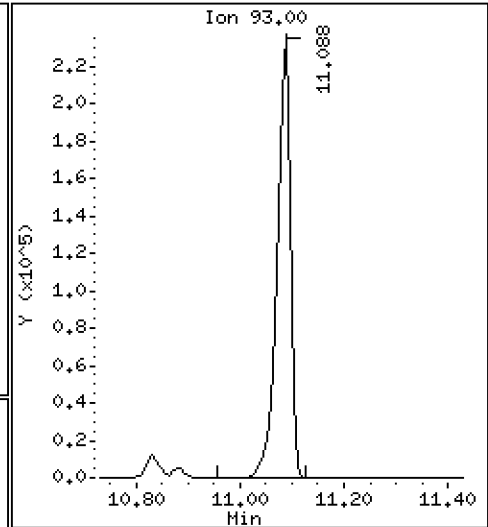
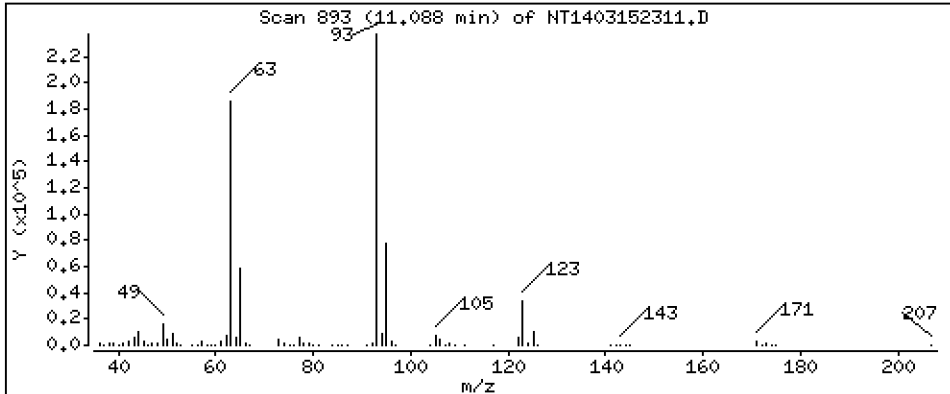
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,859 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

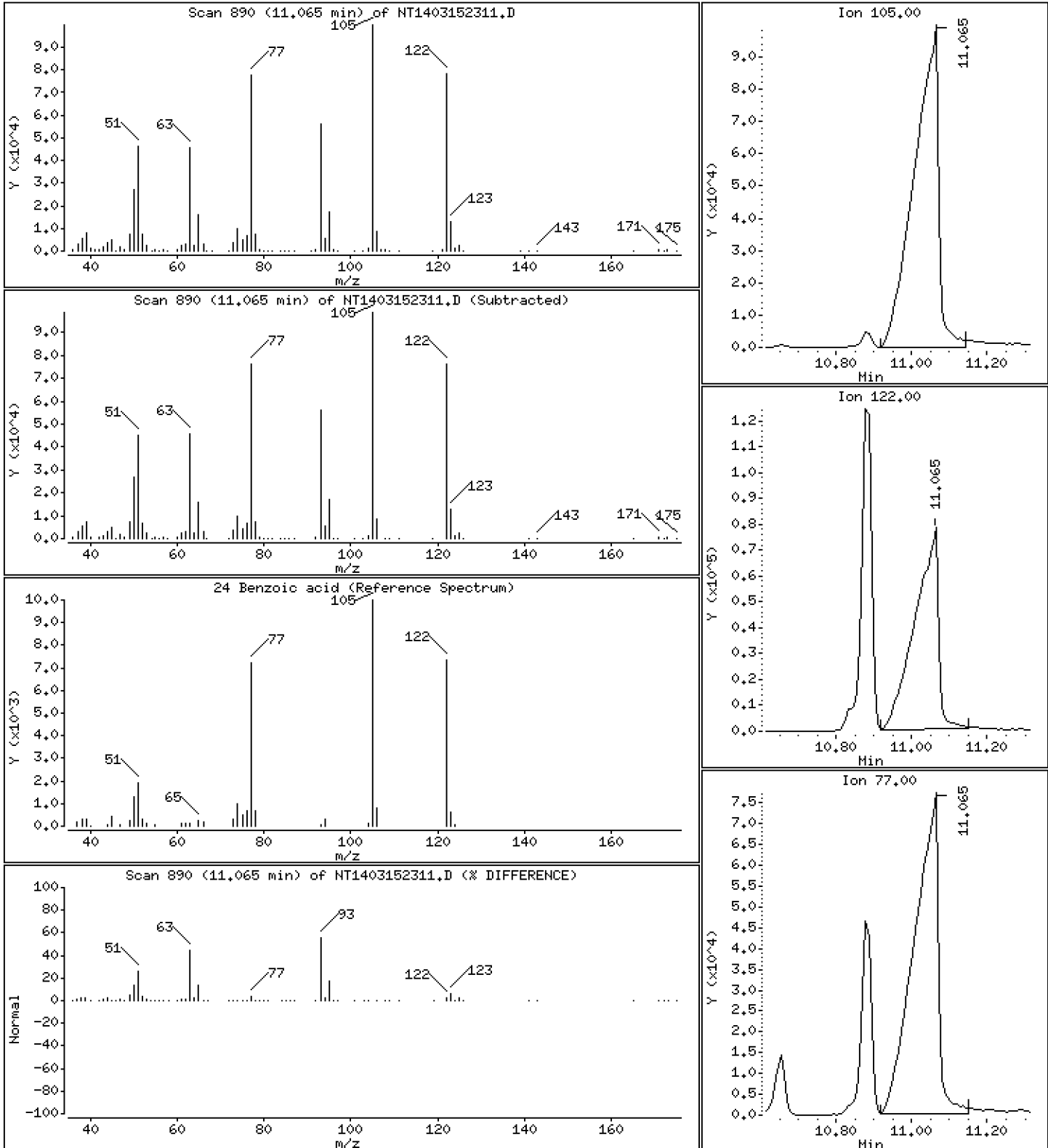
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 8,248 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

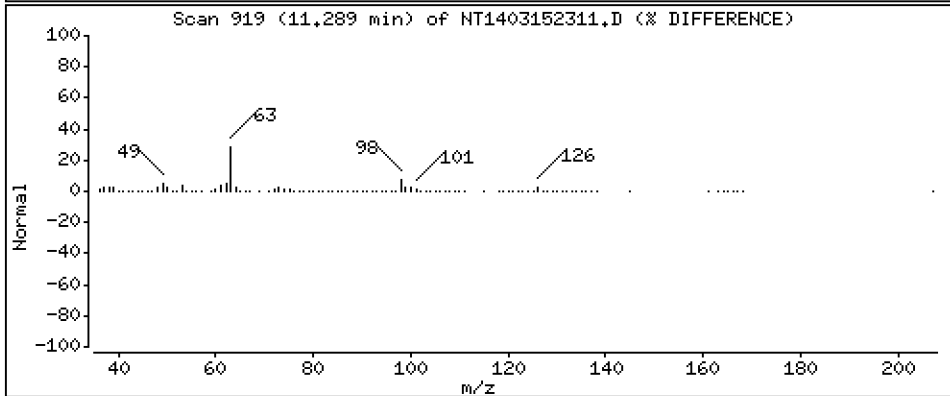
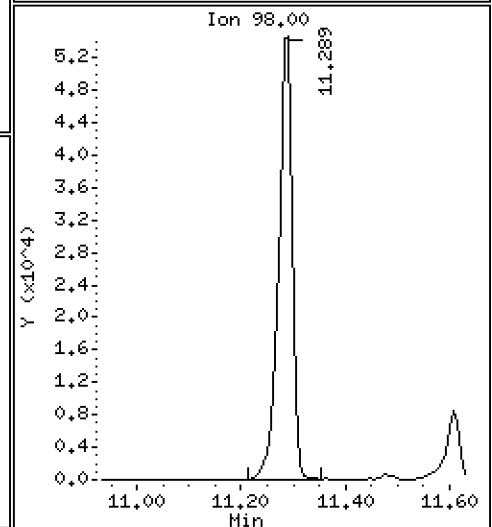
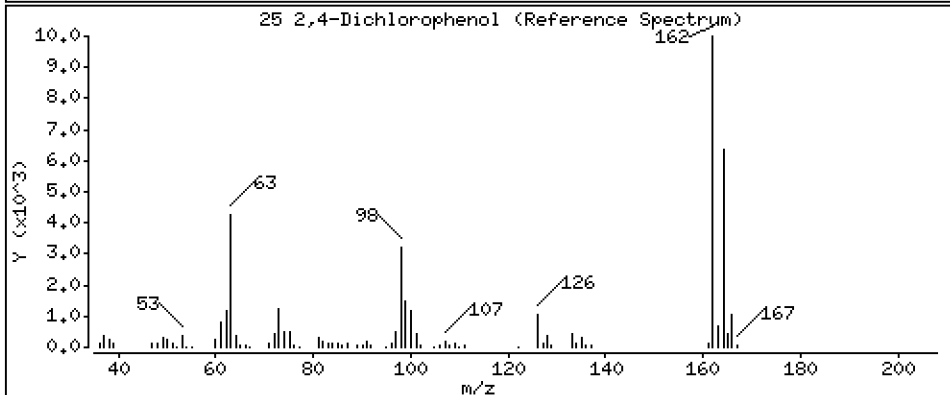
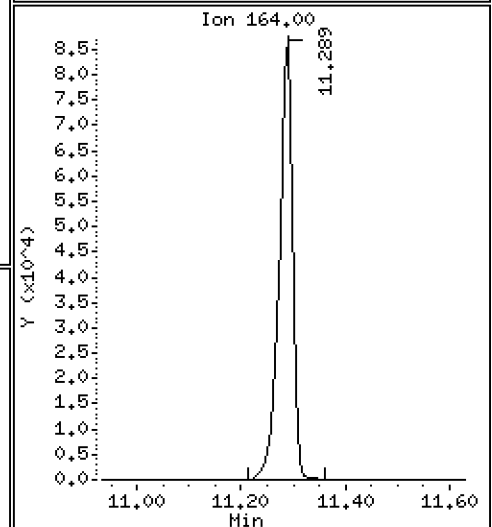
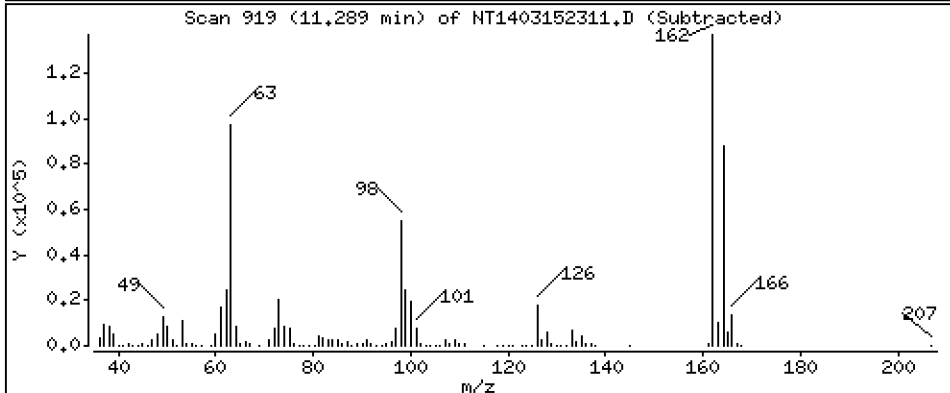
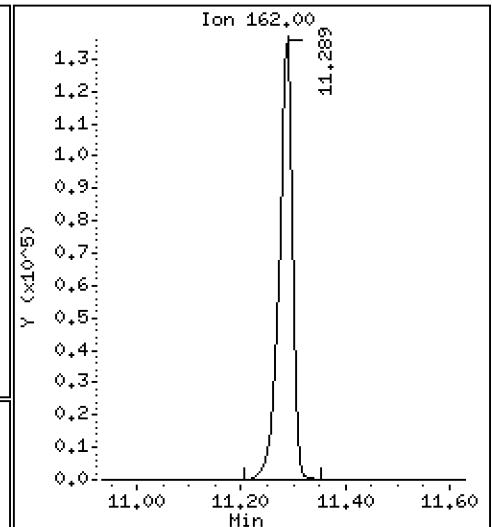
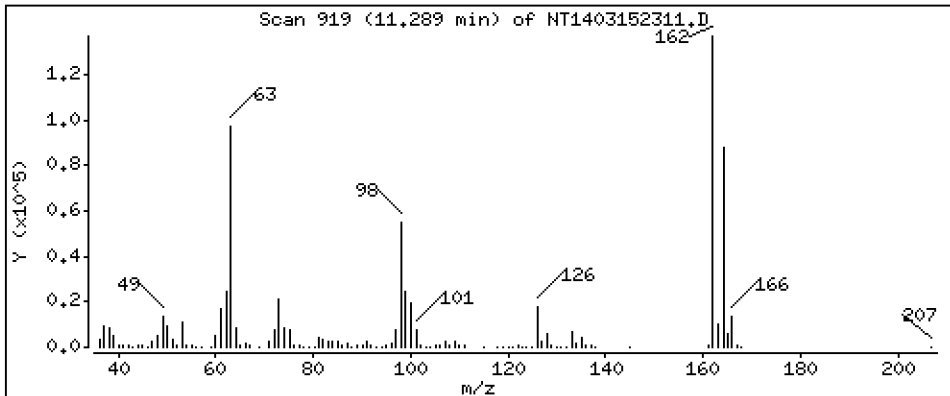
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,779 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

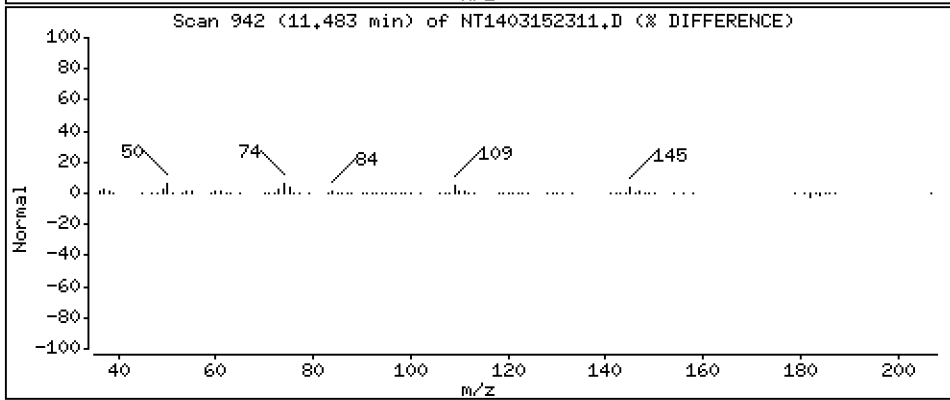
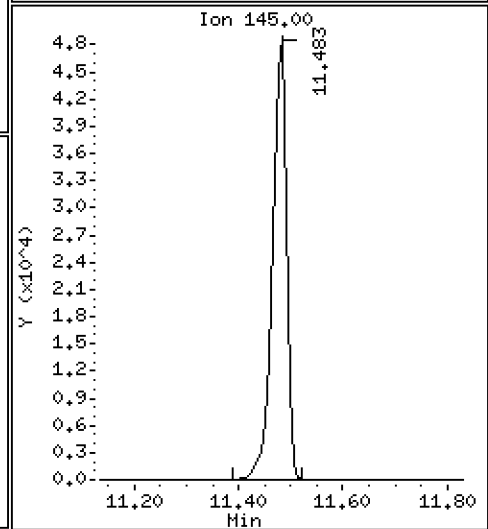
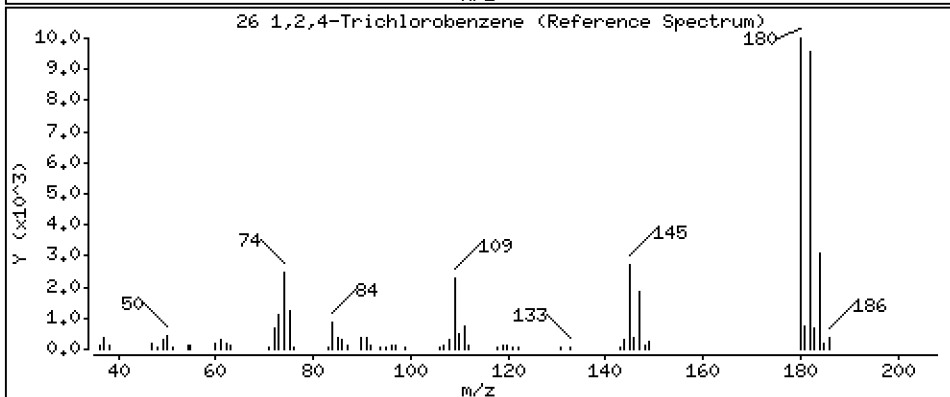
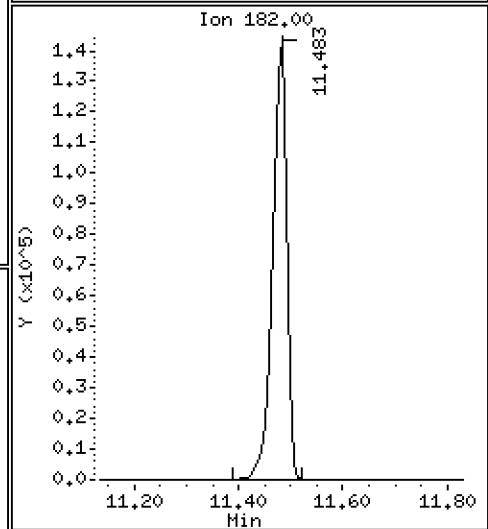
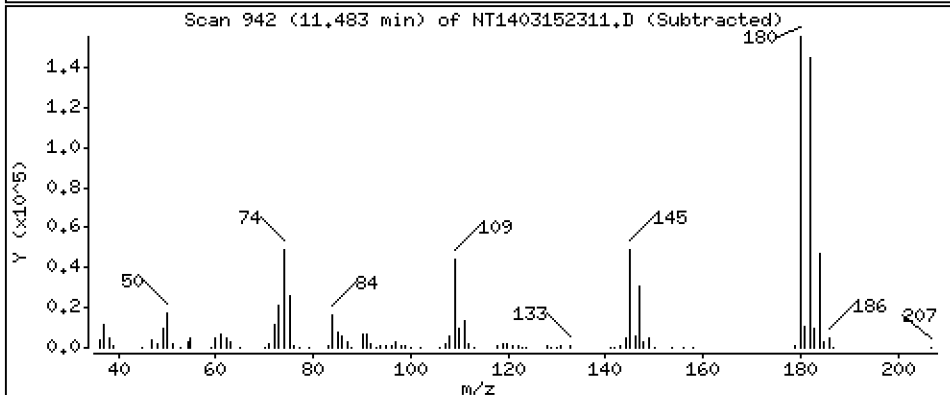
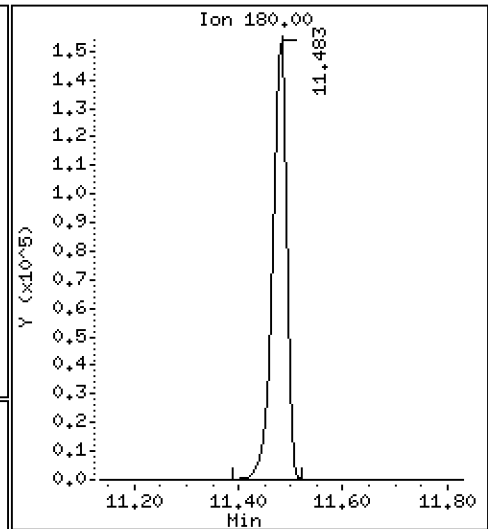
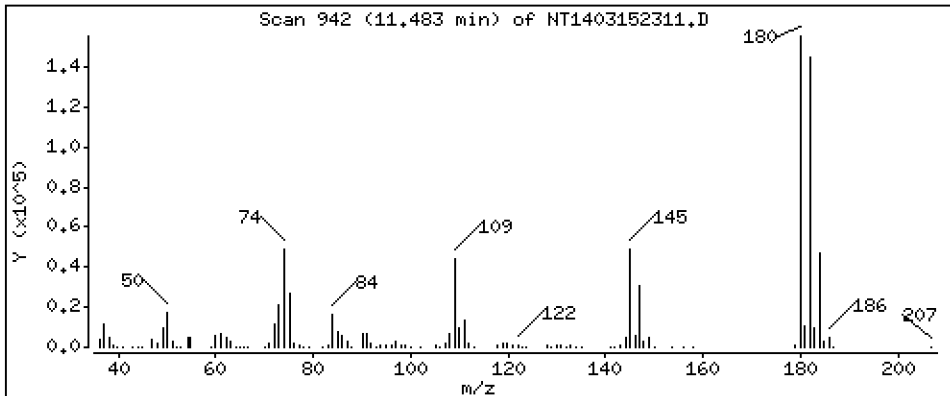
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,052 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

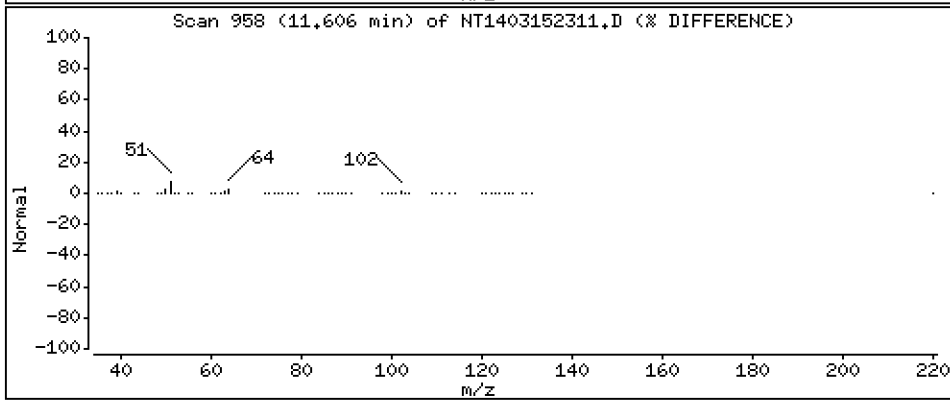
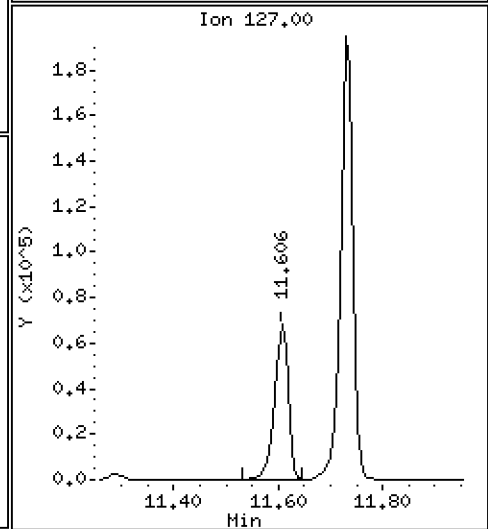
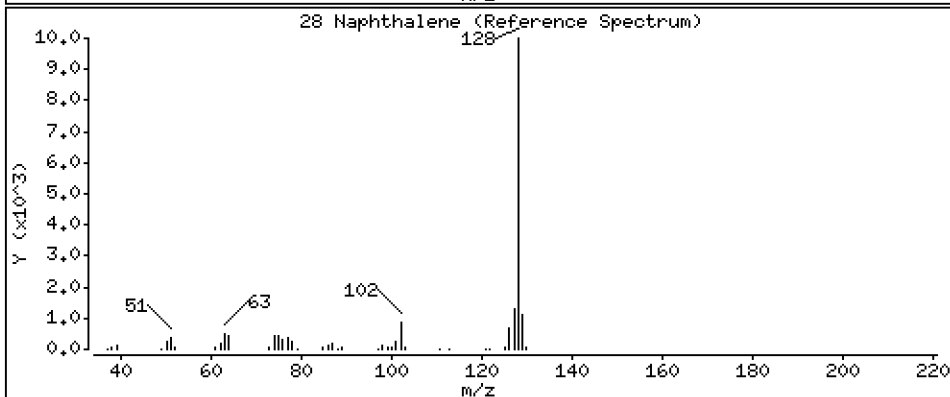
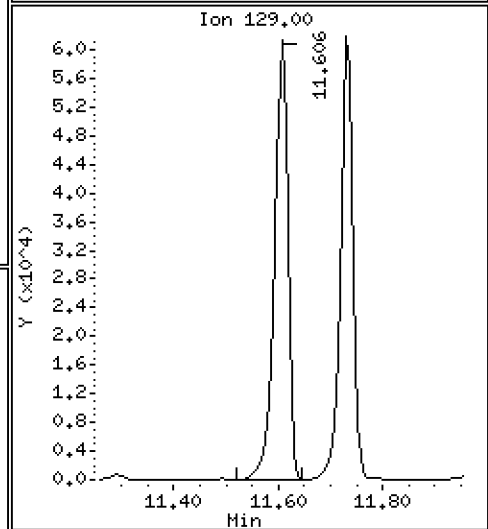
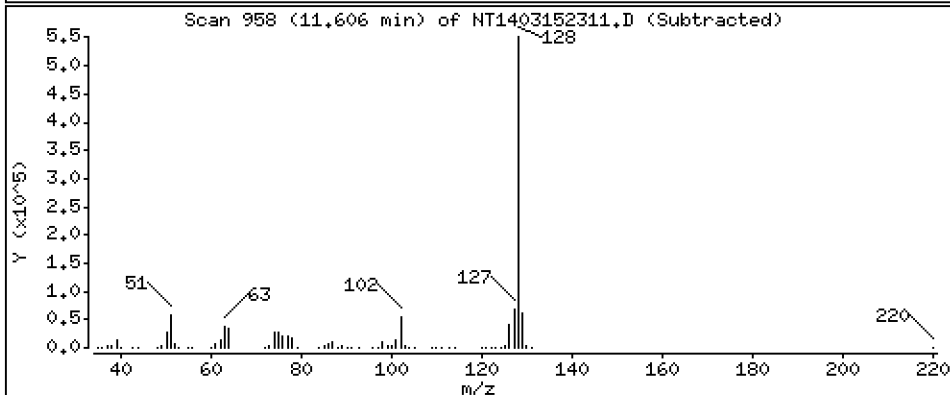
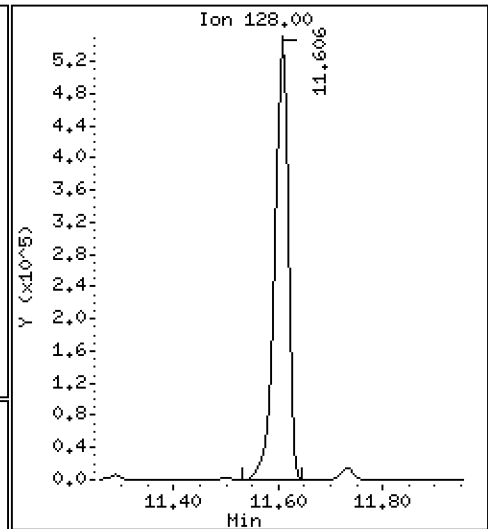
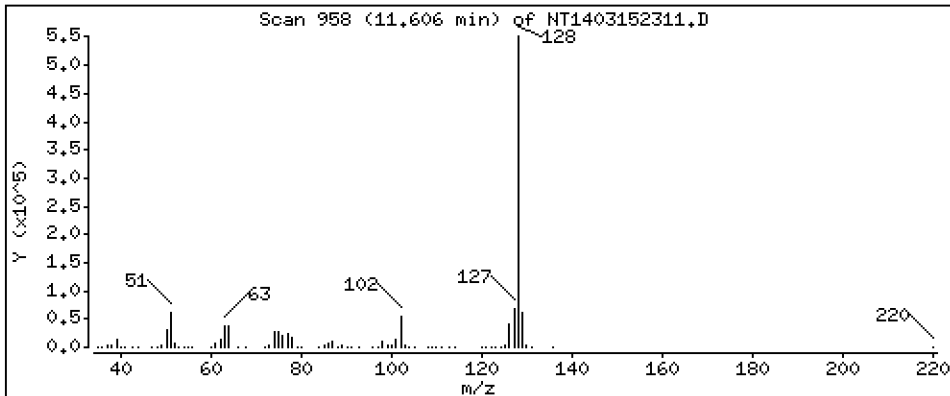
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,829 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

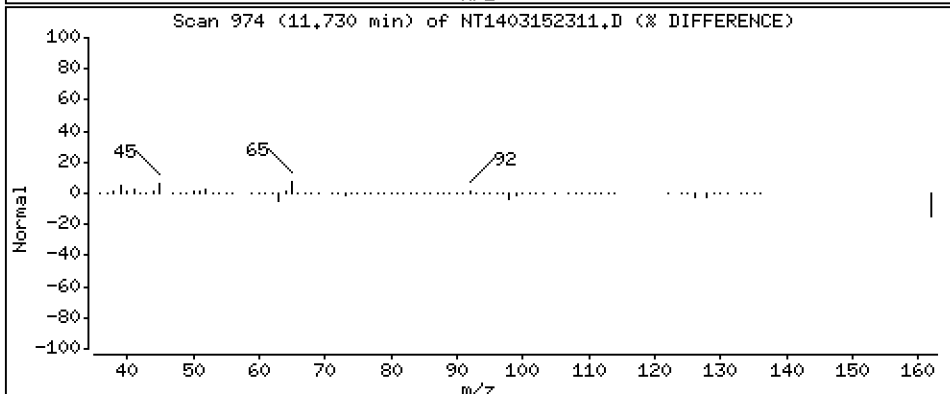
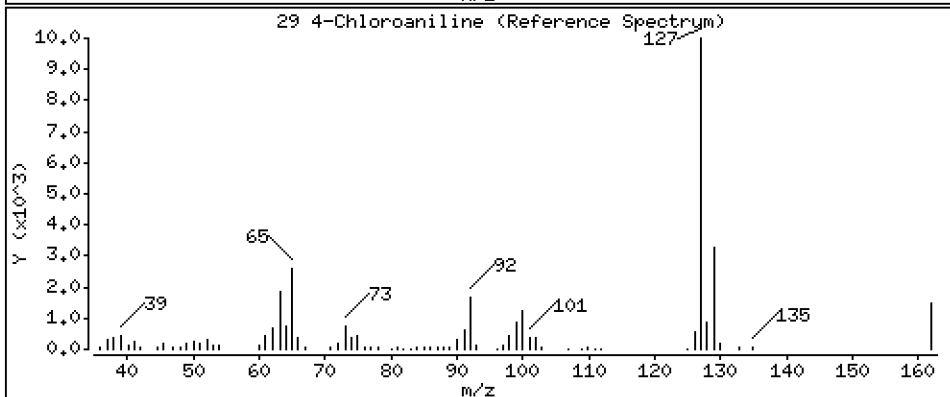
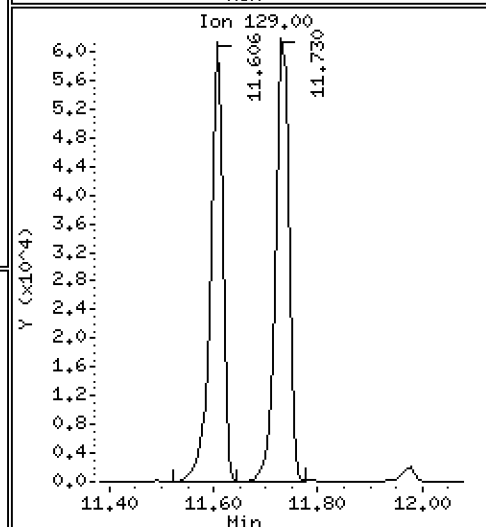
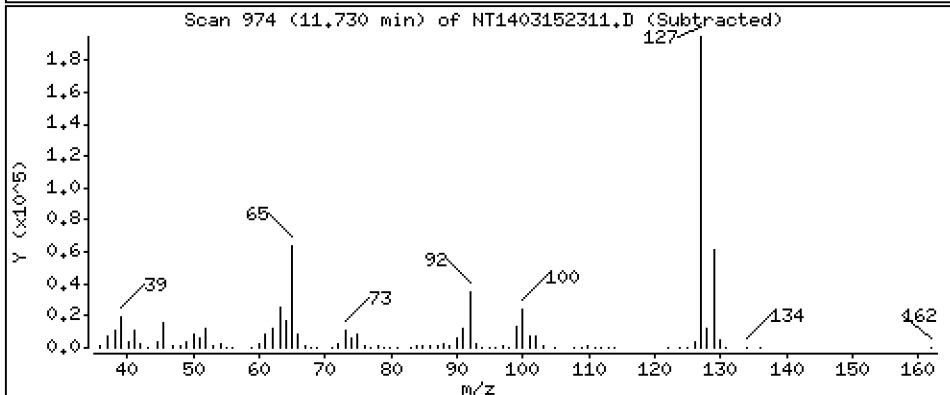
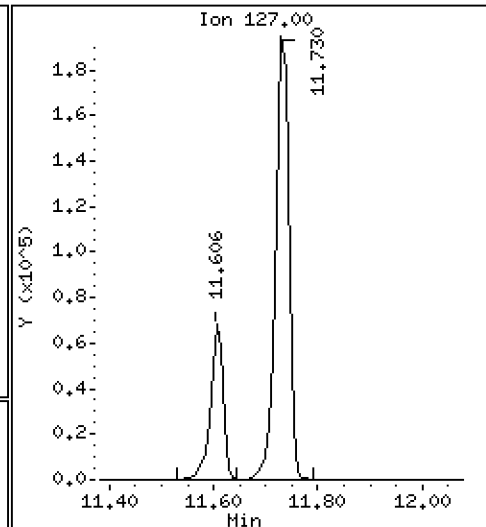
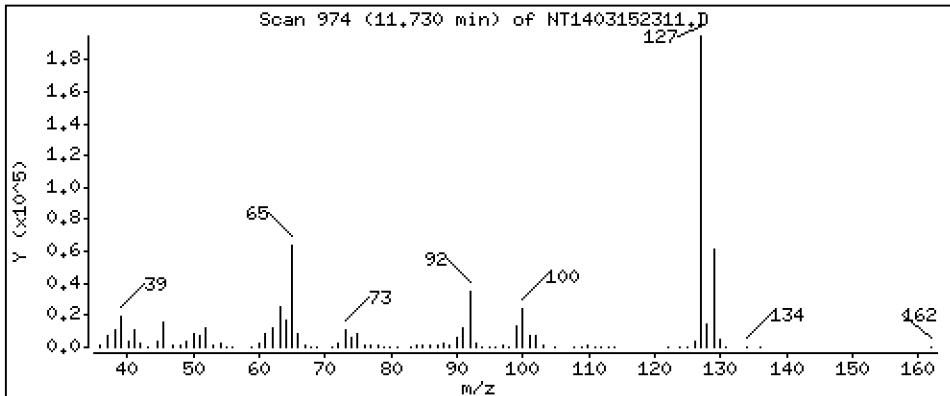
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 4,033 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

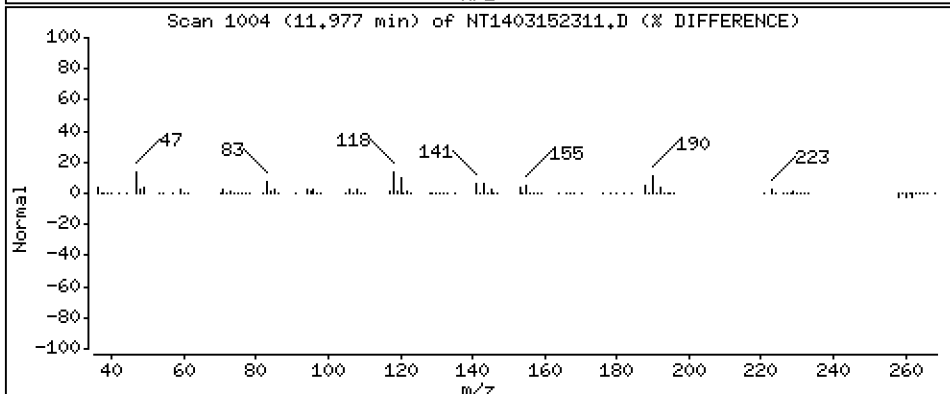
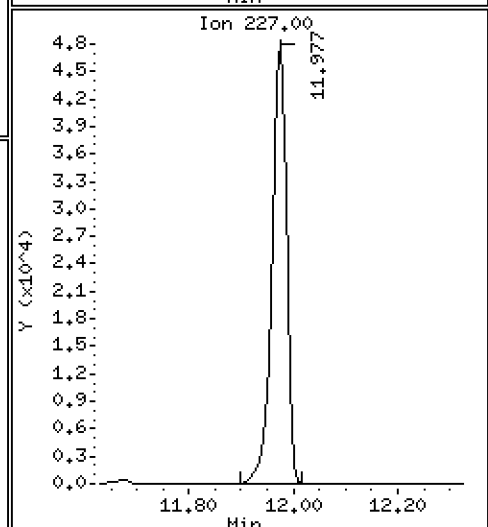
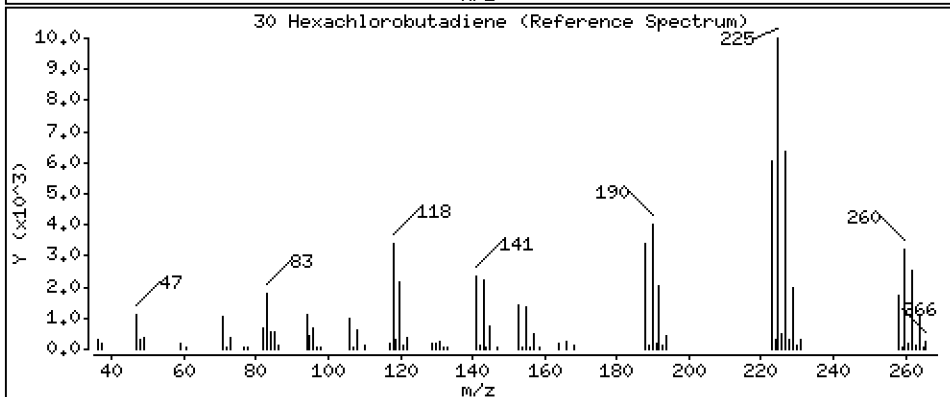
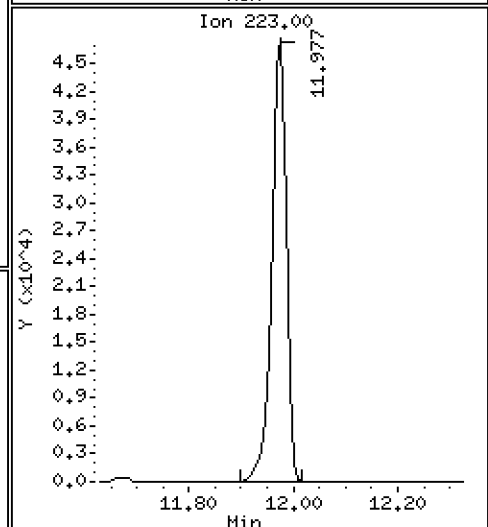
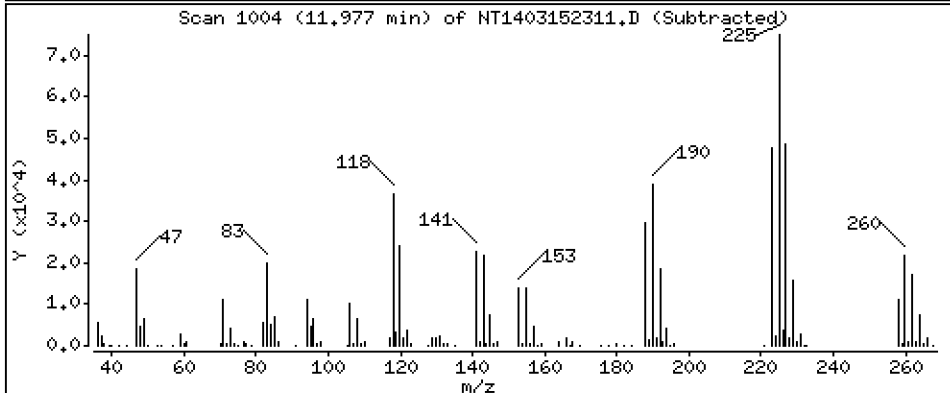
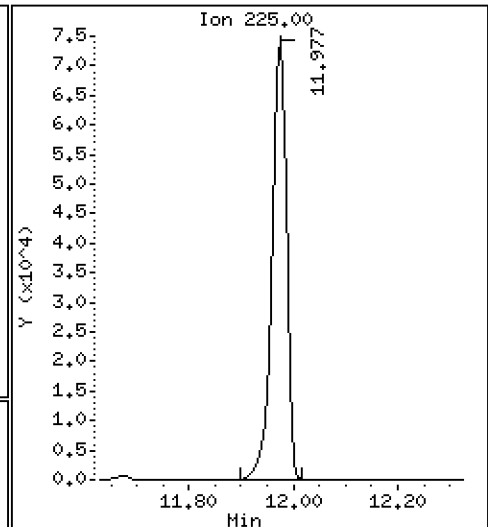
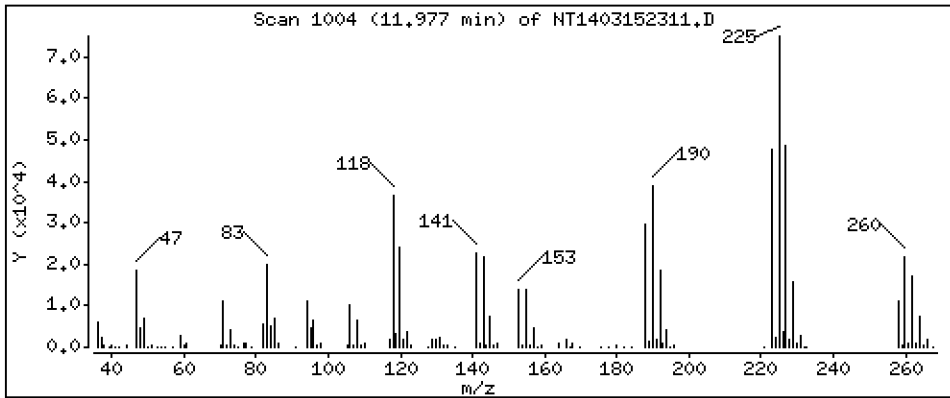
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,908 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

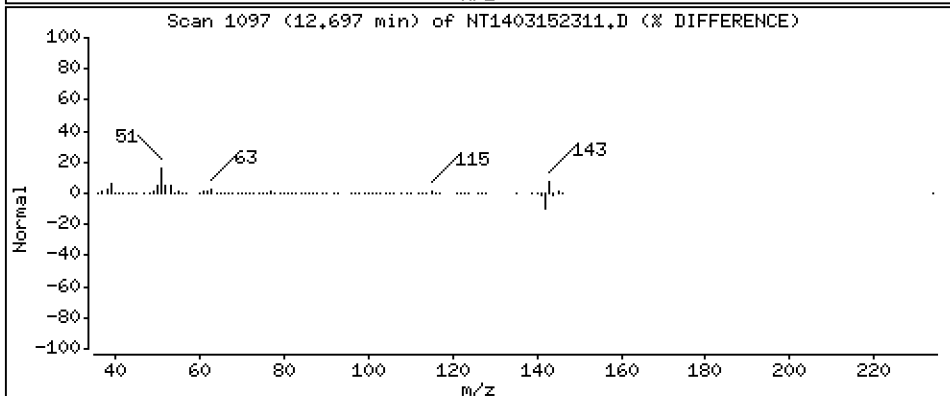
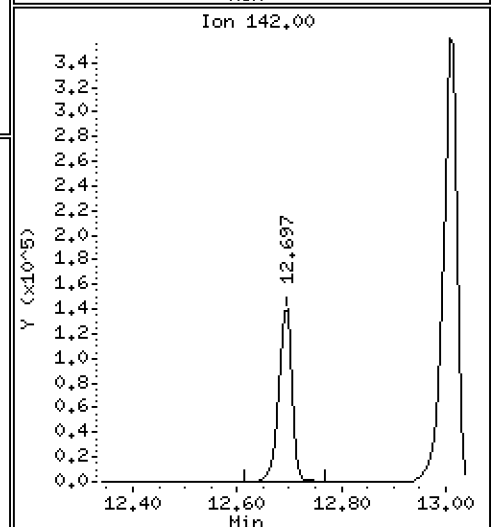
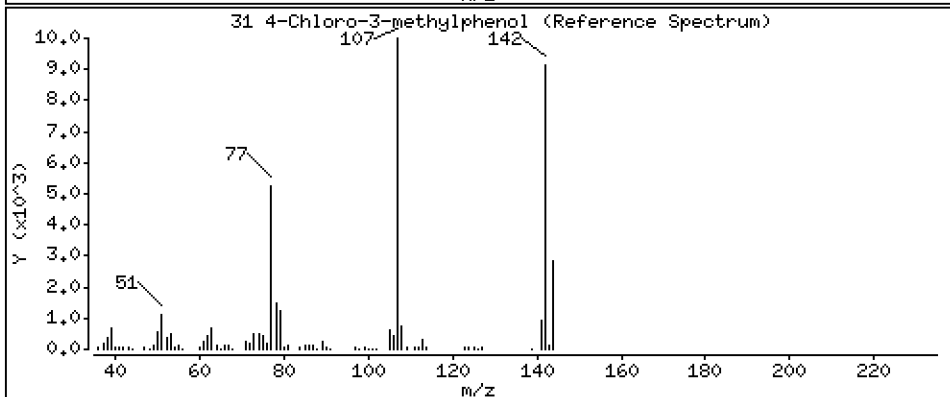
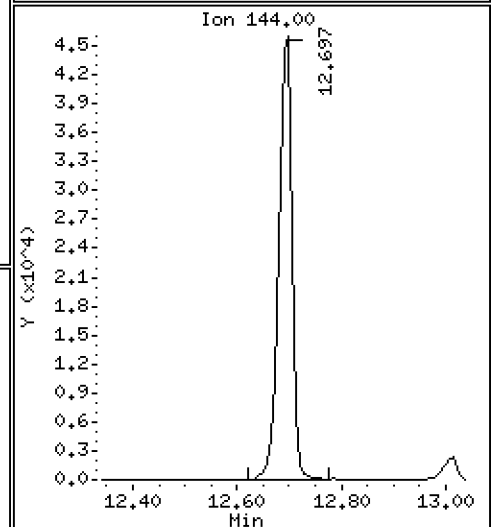
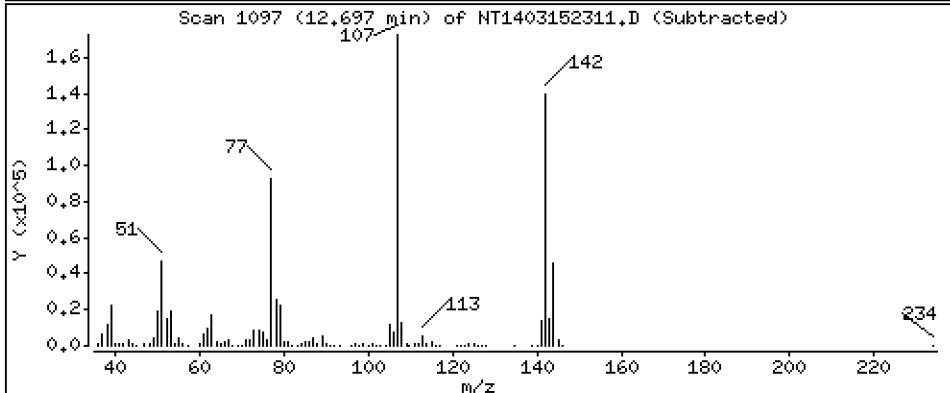
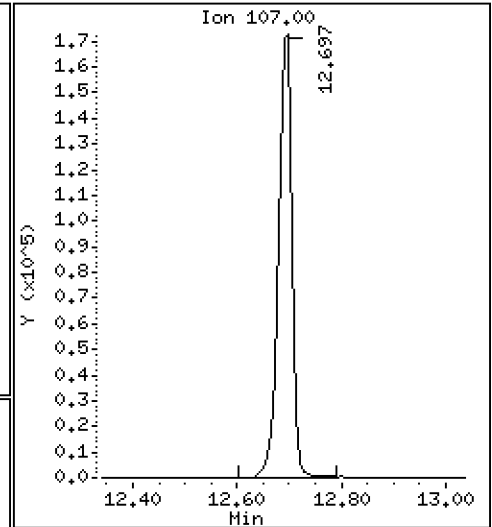
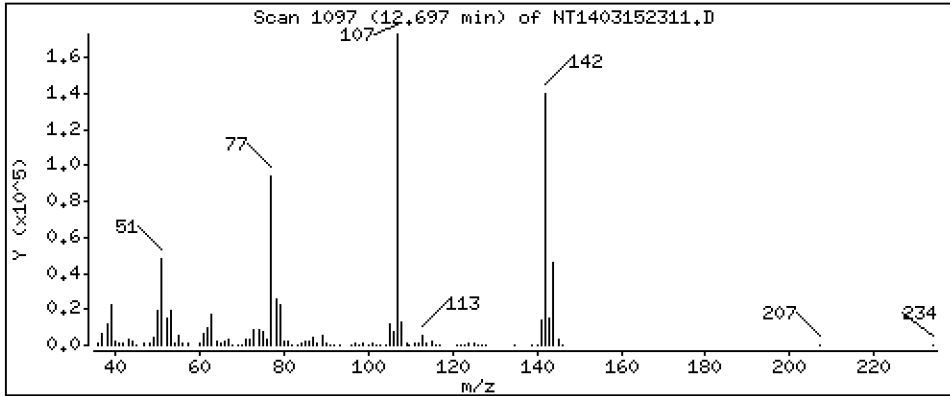
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,852 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

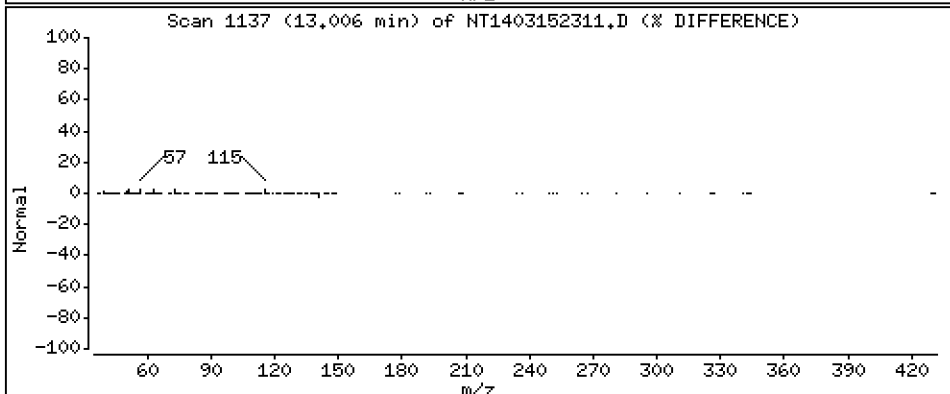
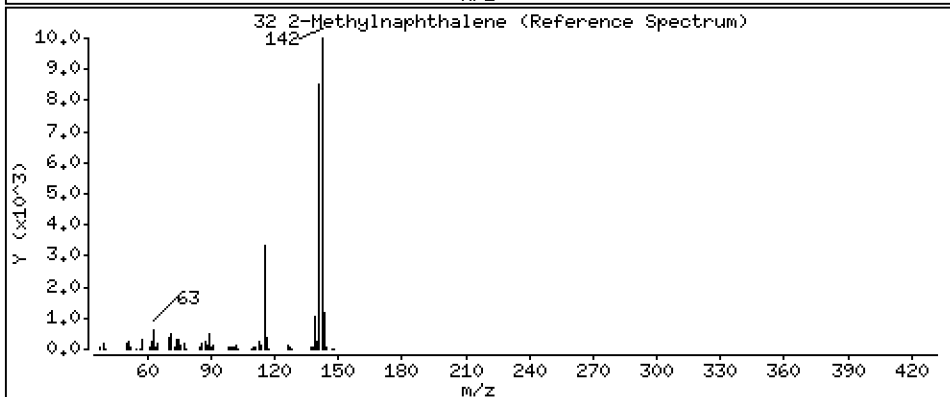
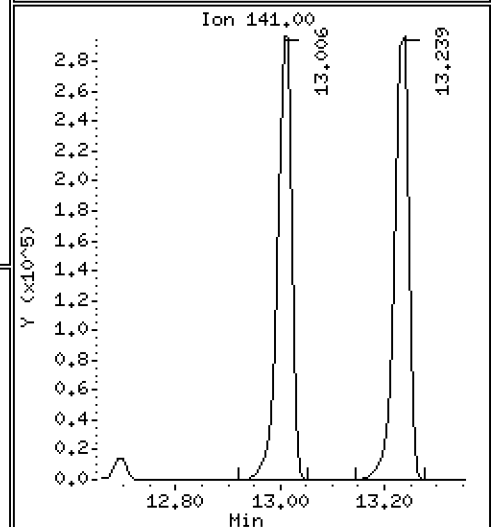
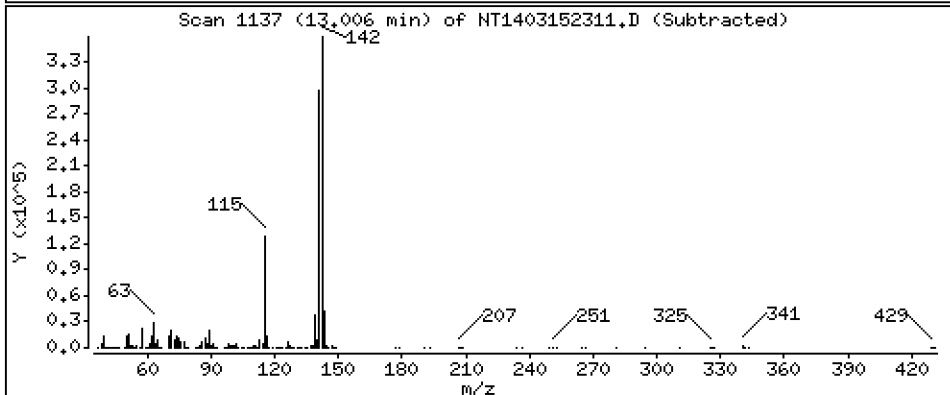
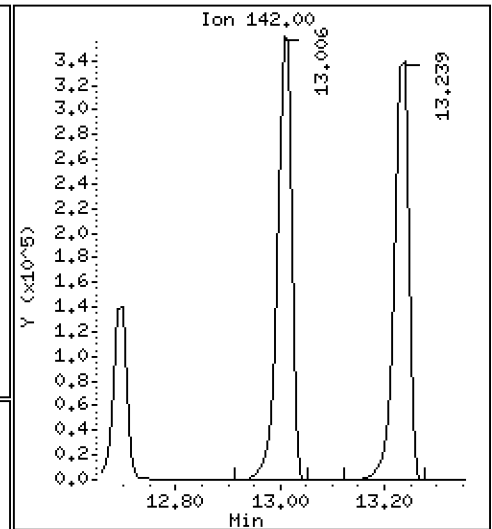
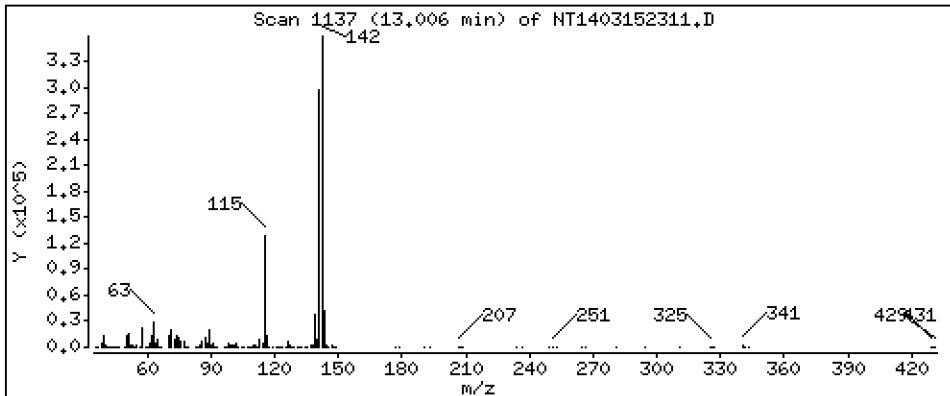
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 4.854 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

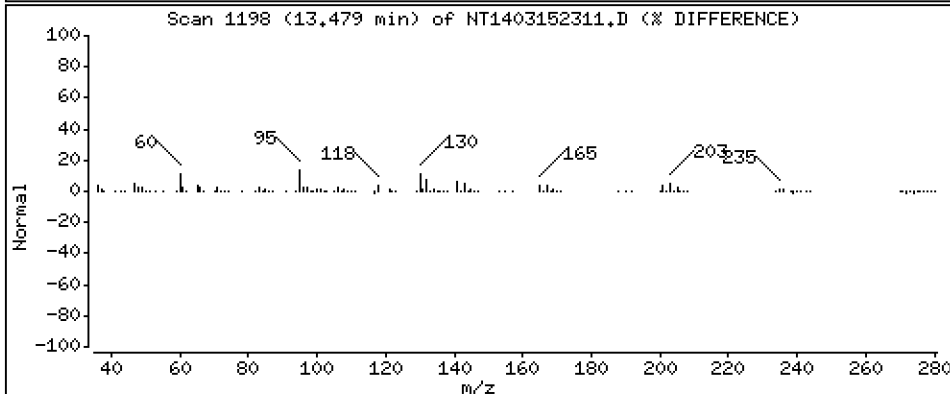
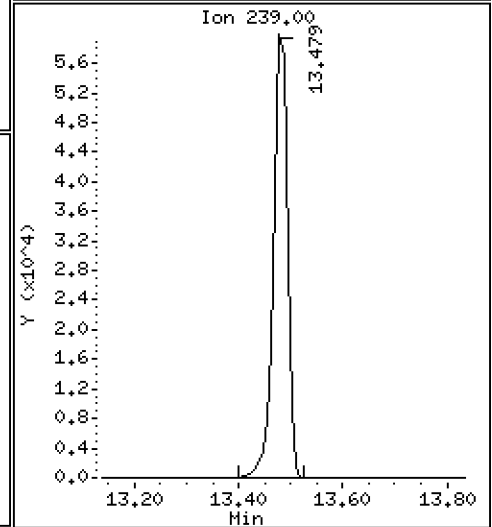
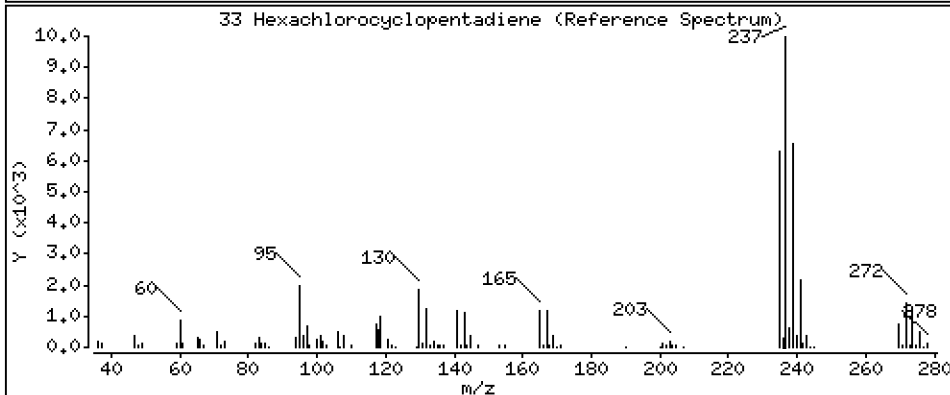
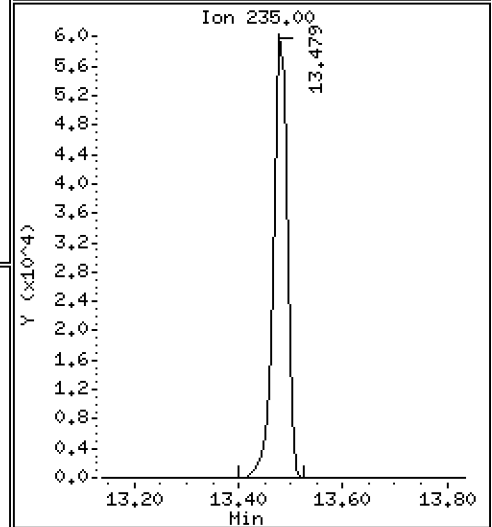
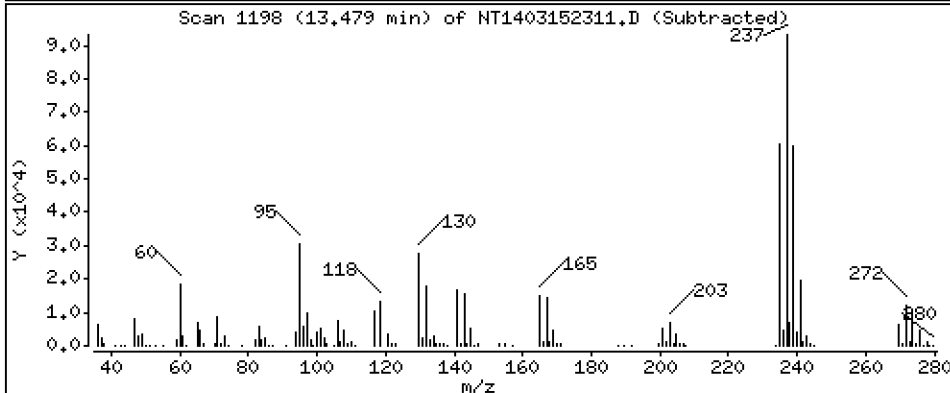
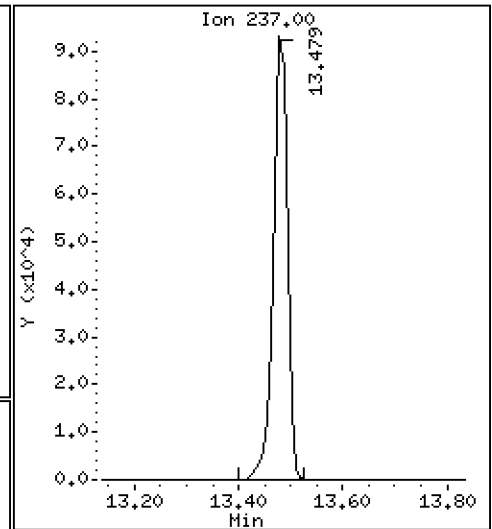
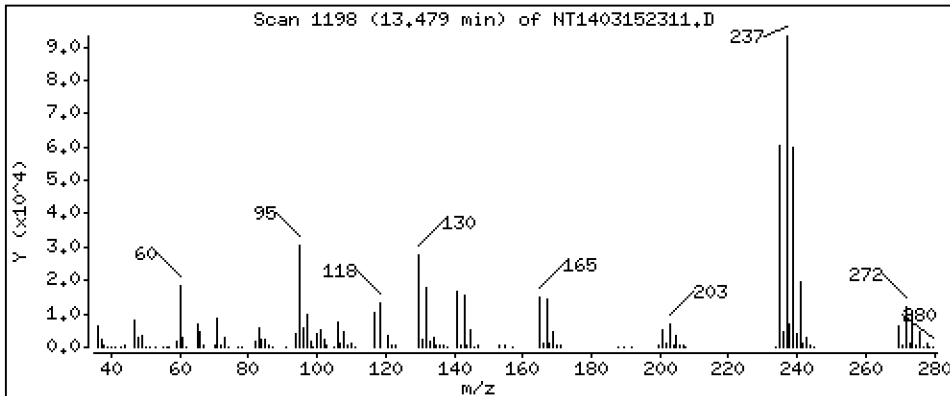
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 5,230 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

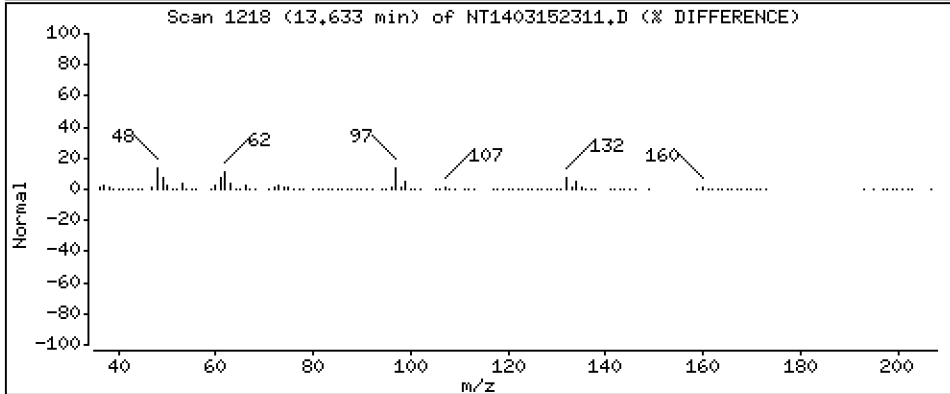
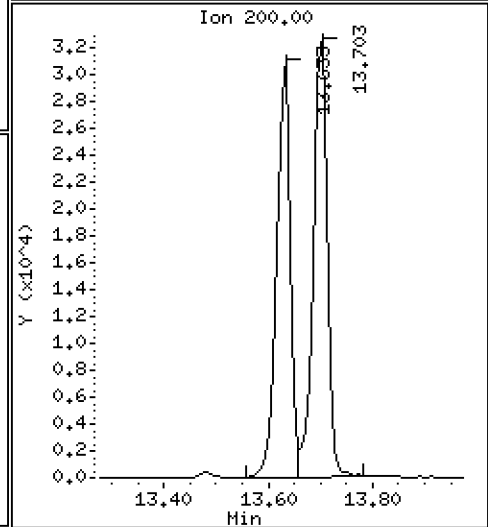
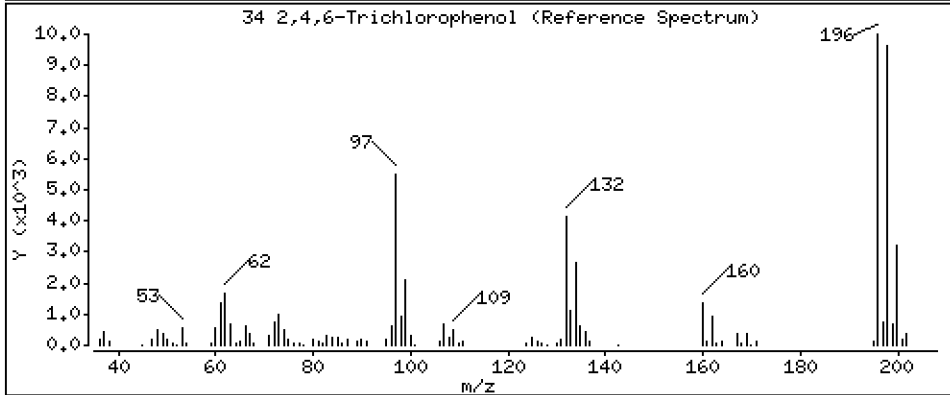
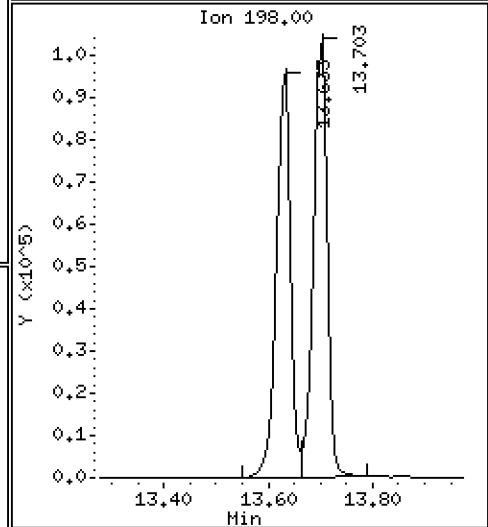
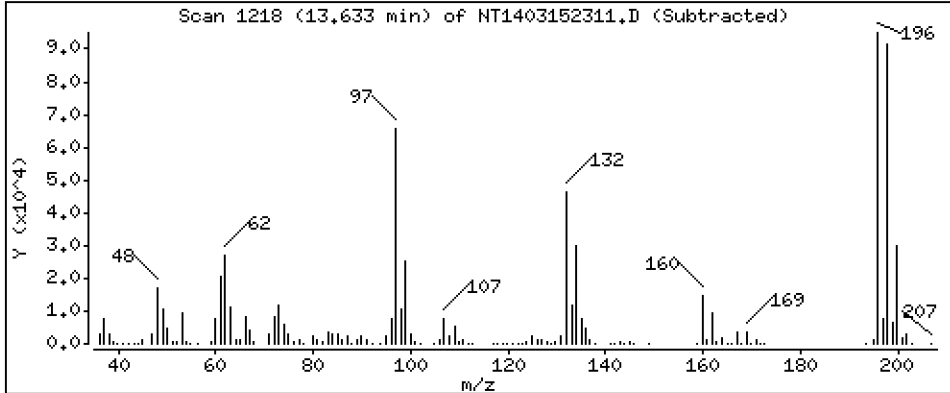
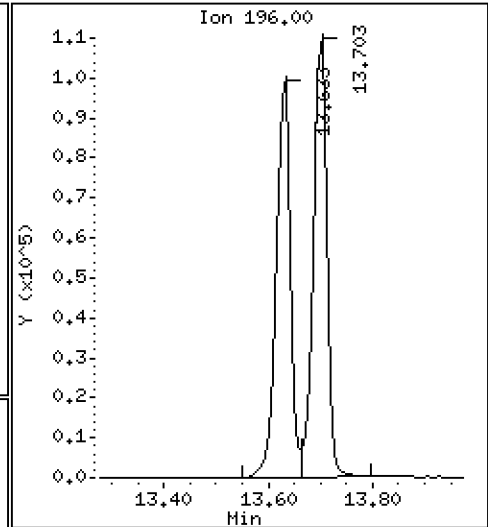
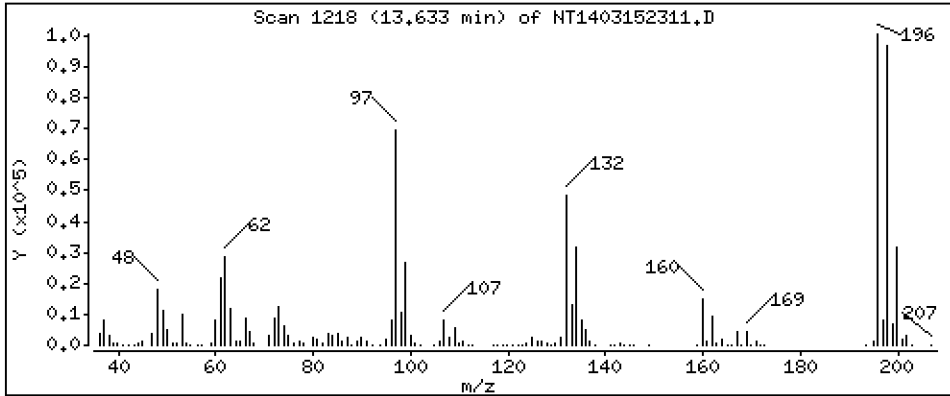
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,718 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

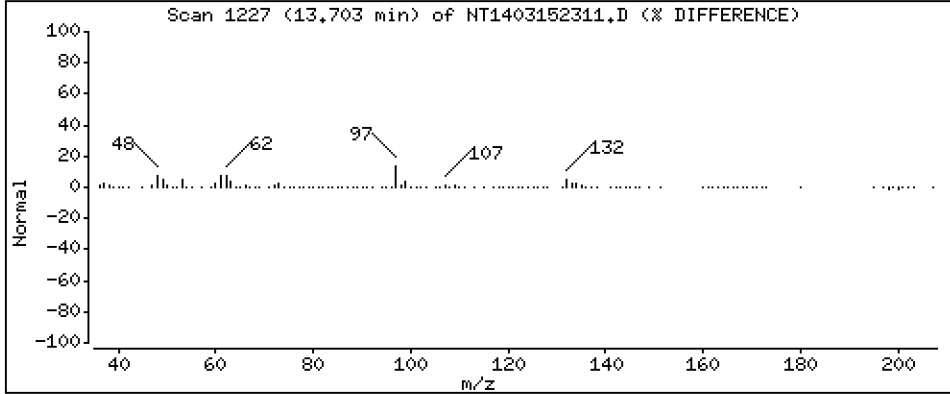
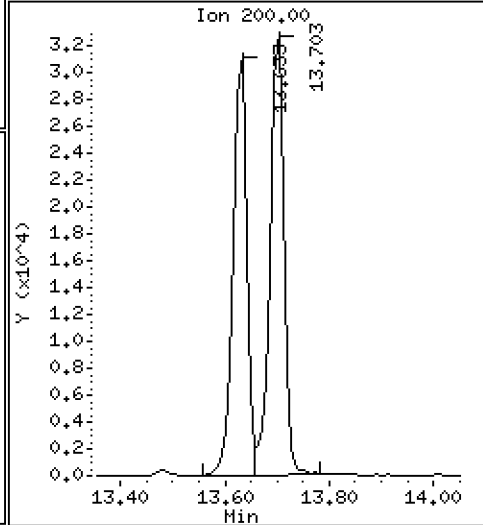
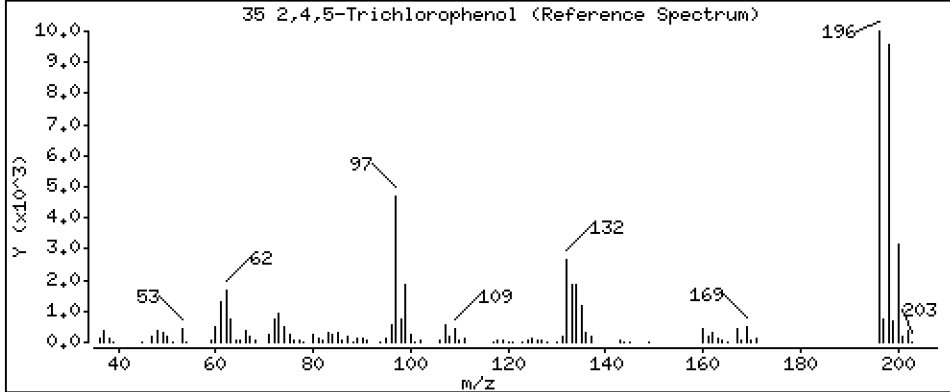
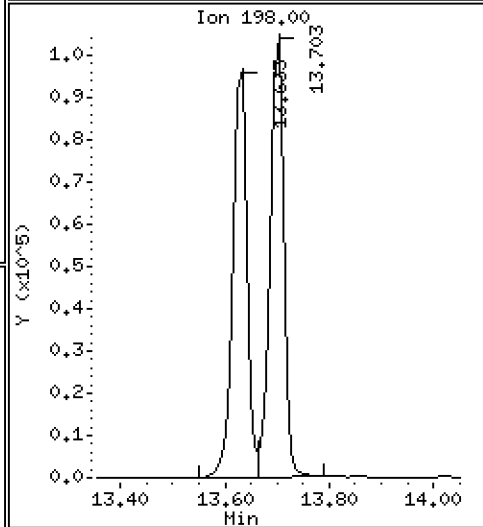
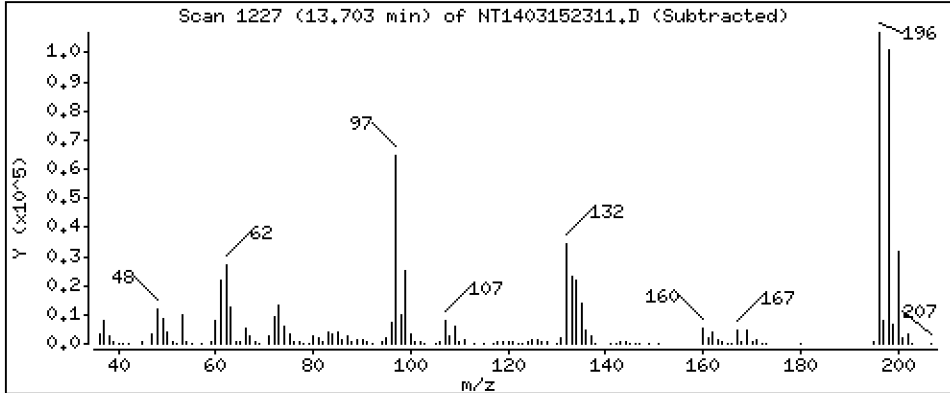
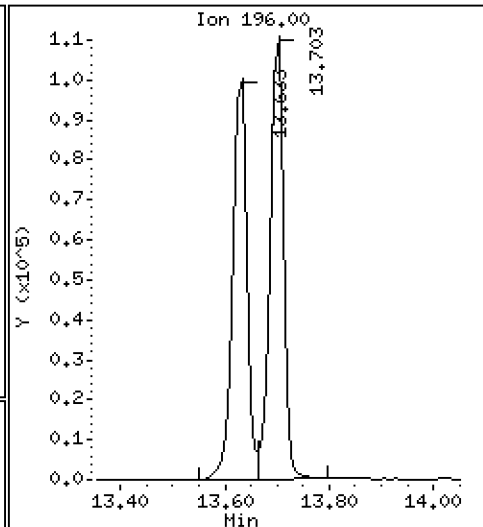
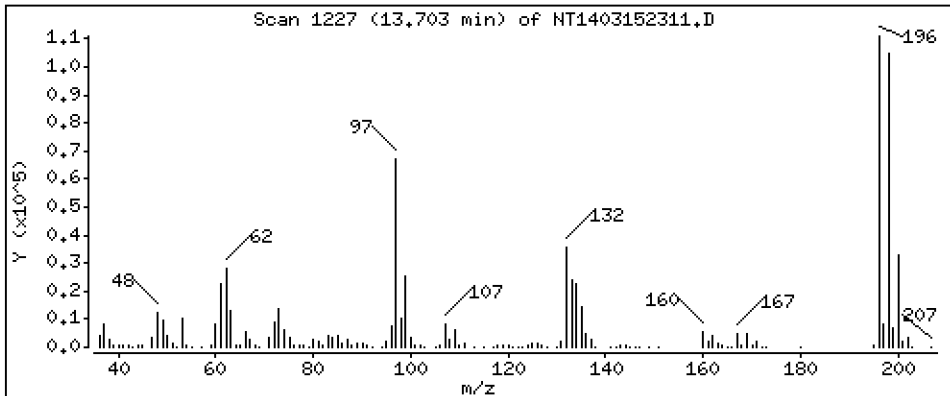
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,661 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

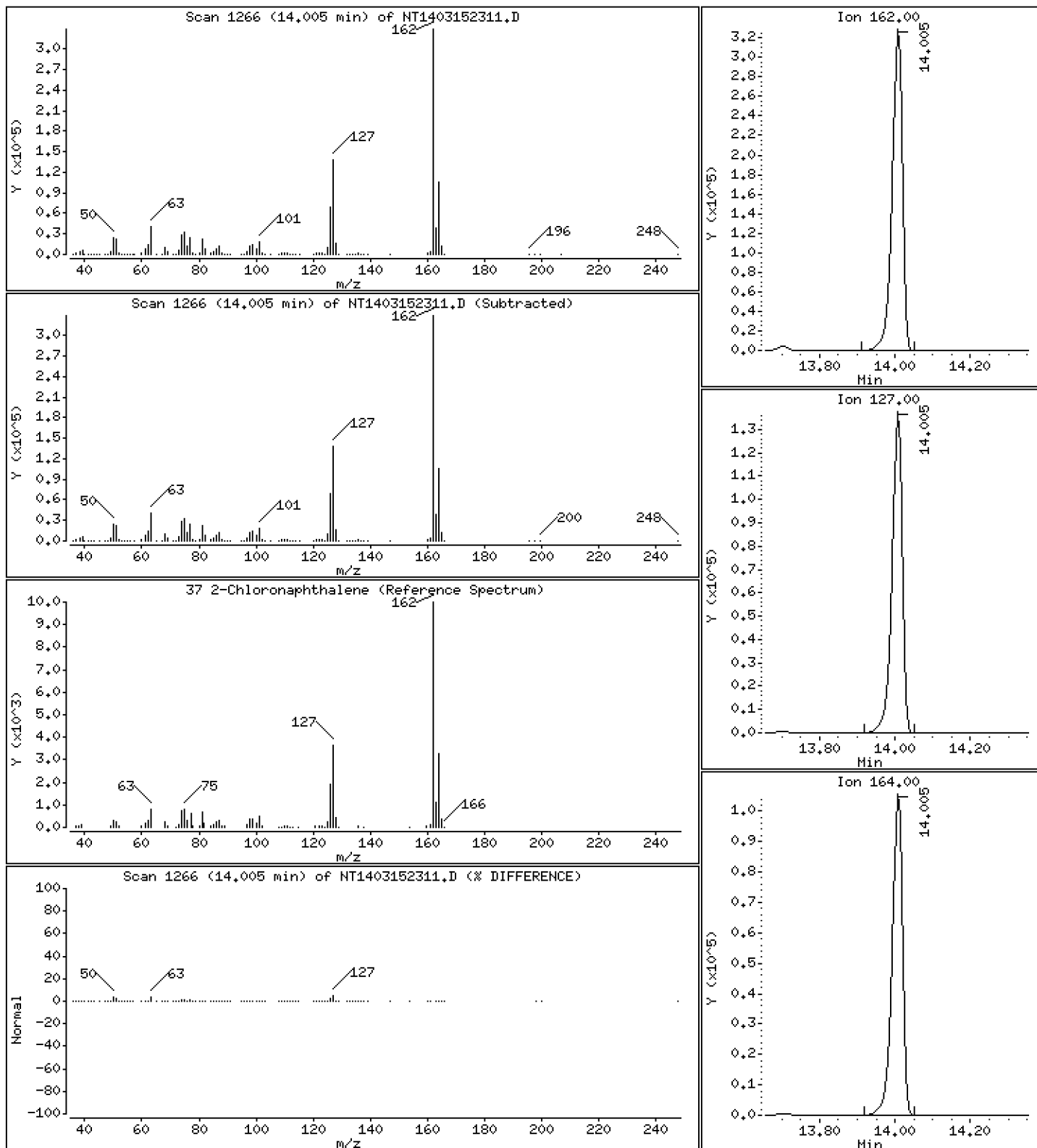
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

37 2-Chloronaphthalene

Concentration: 4.977 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

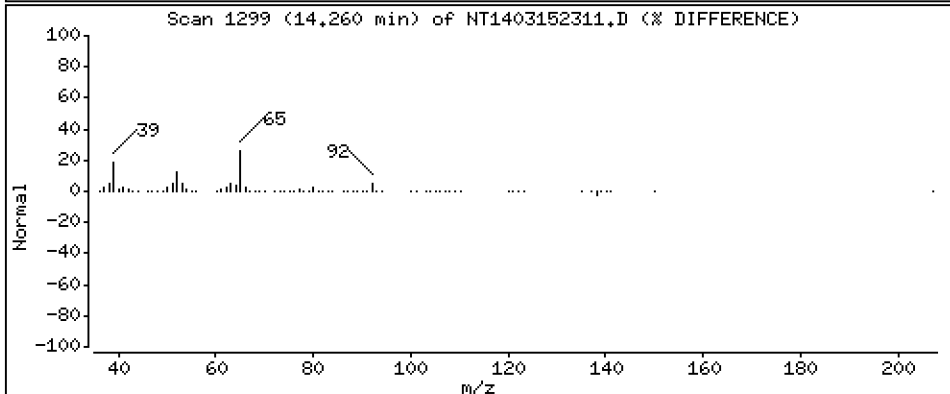
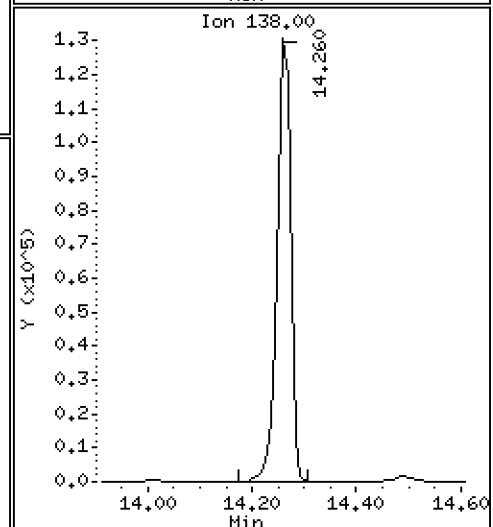
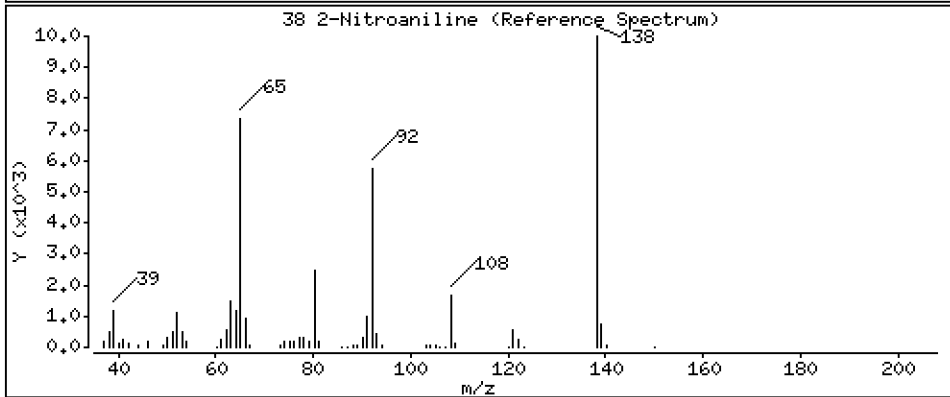
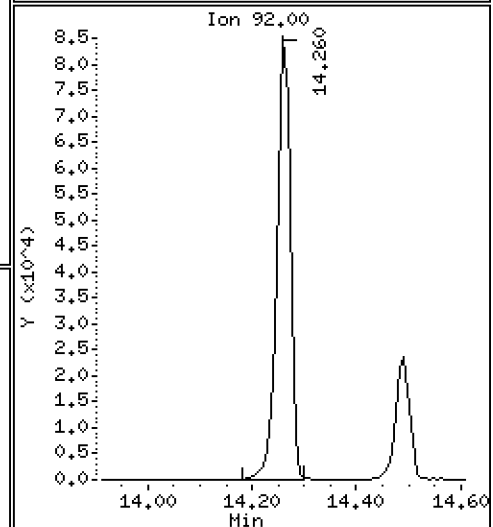
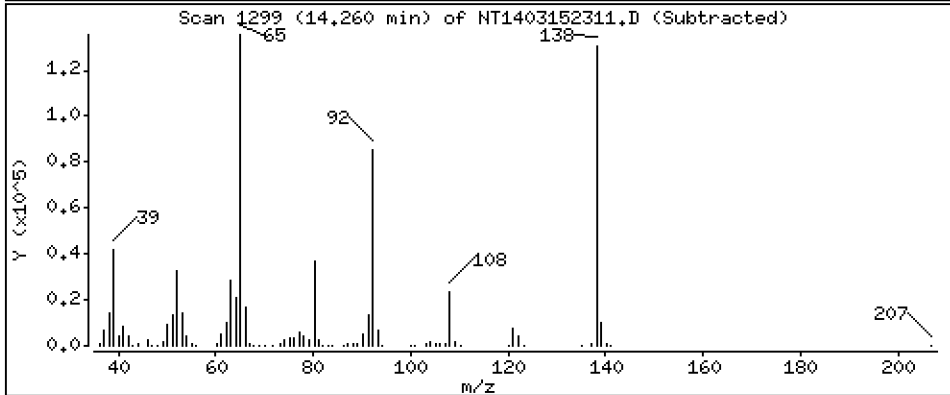
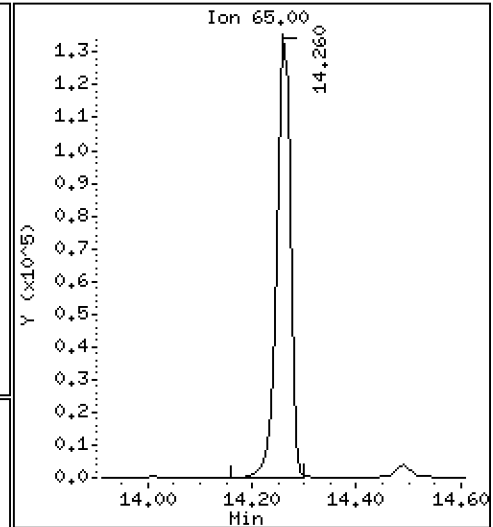
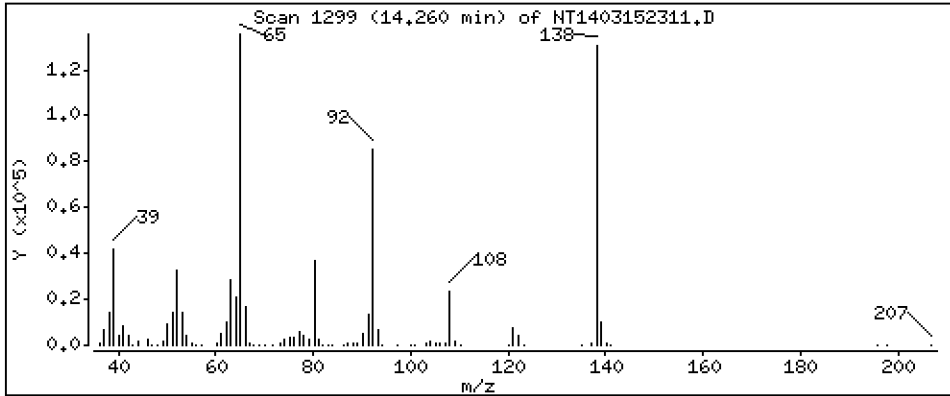
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

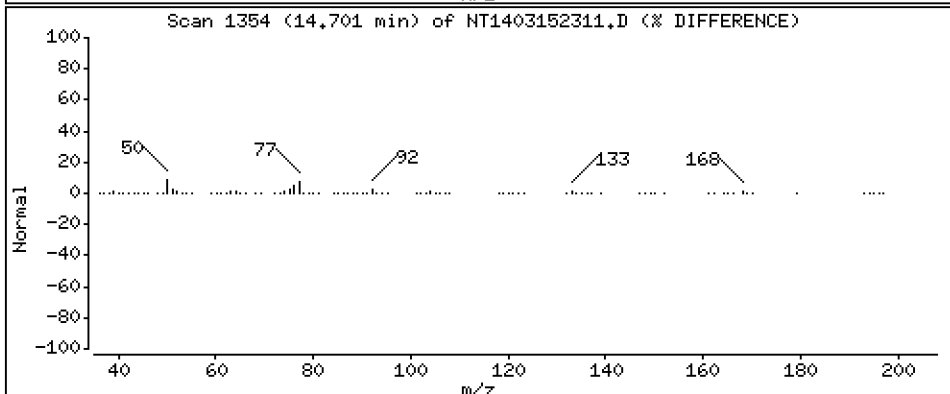
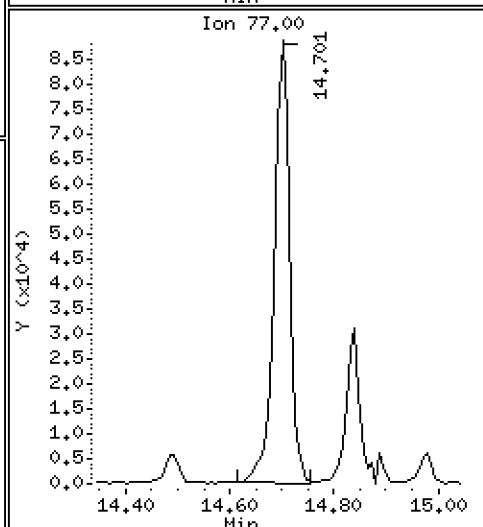
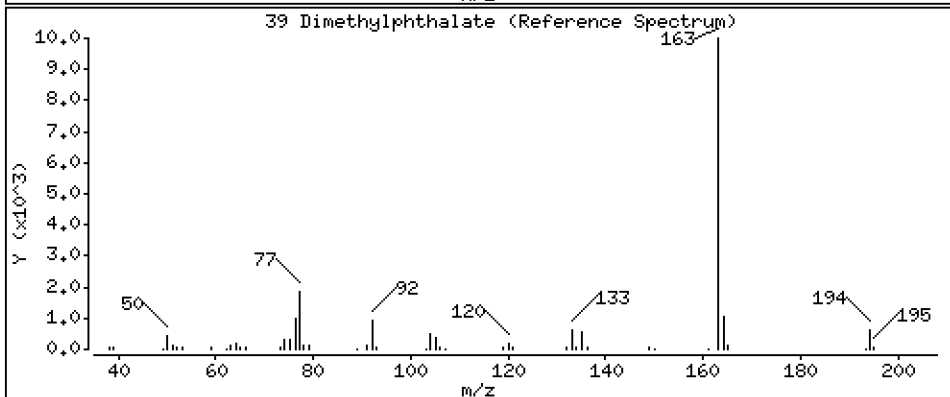
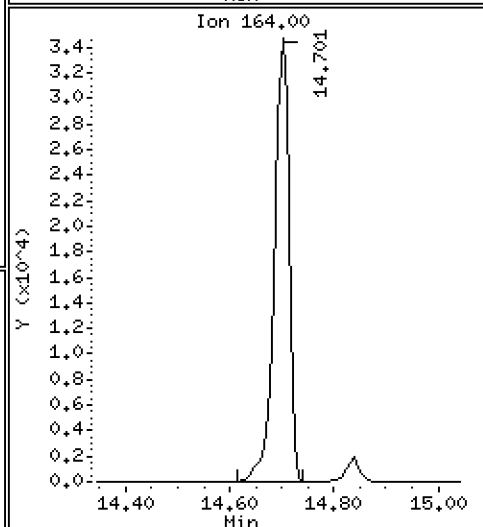
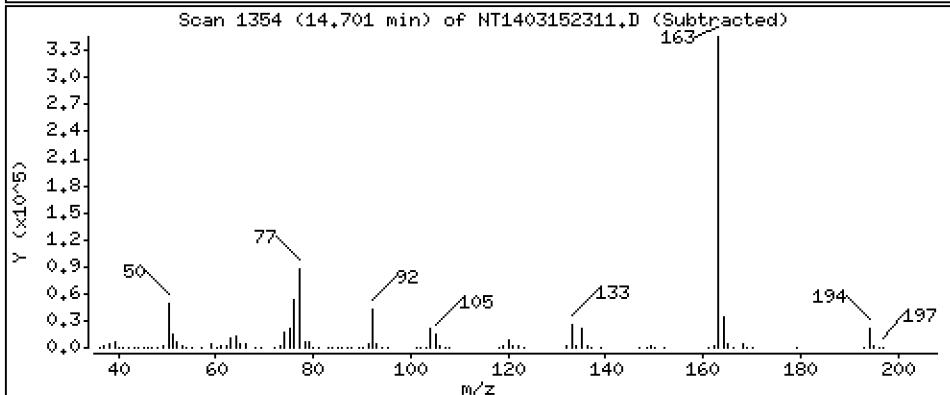
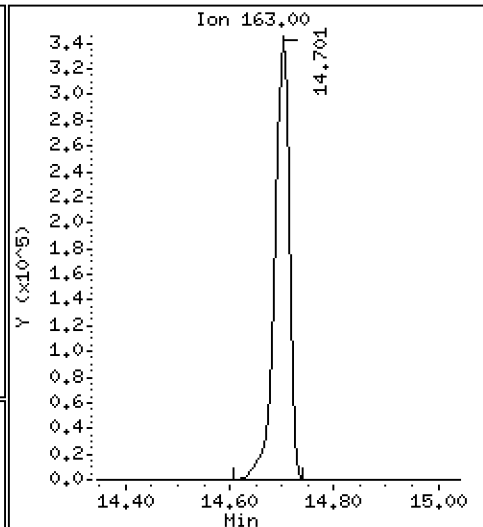
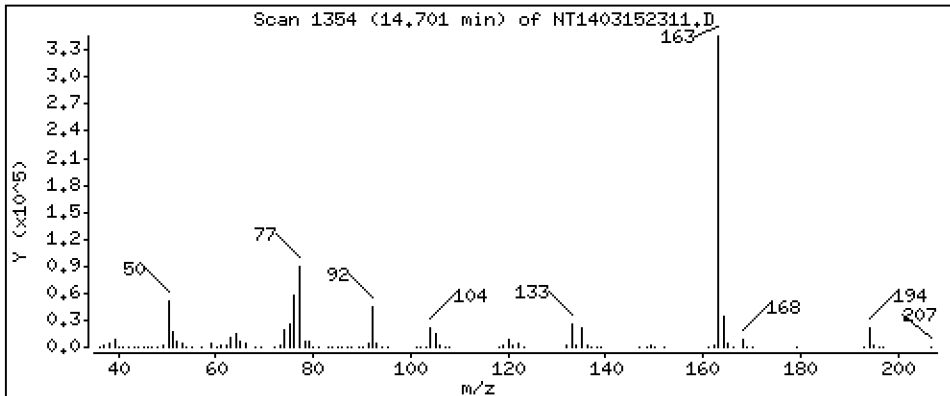
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 5.031 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

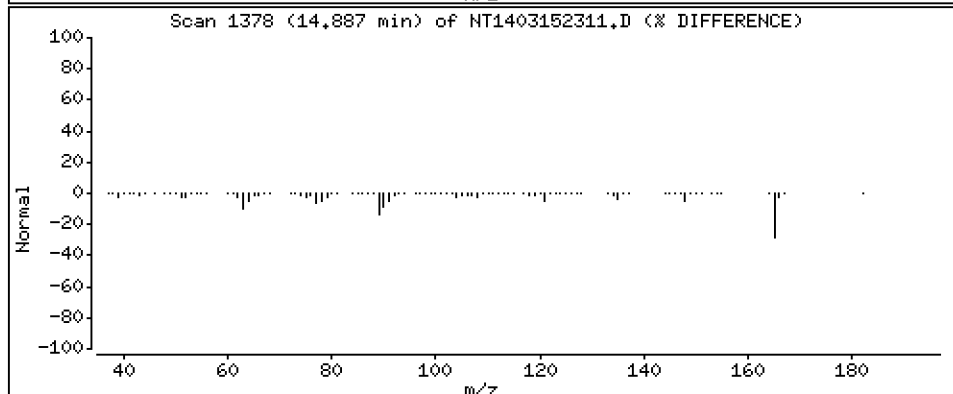
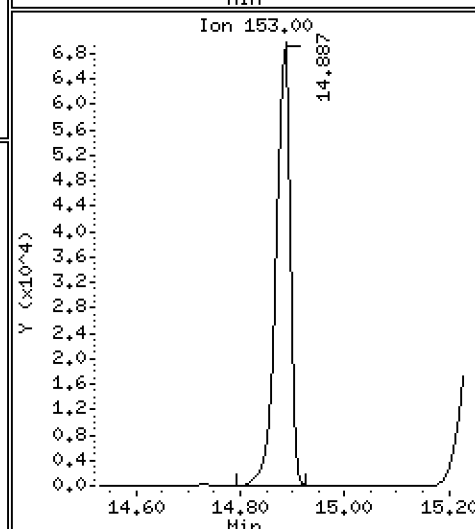
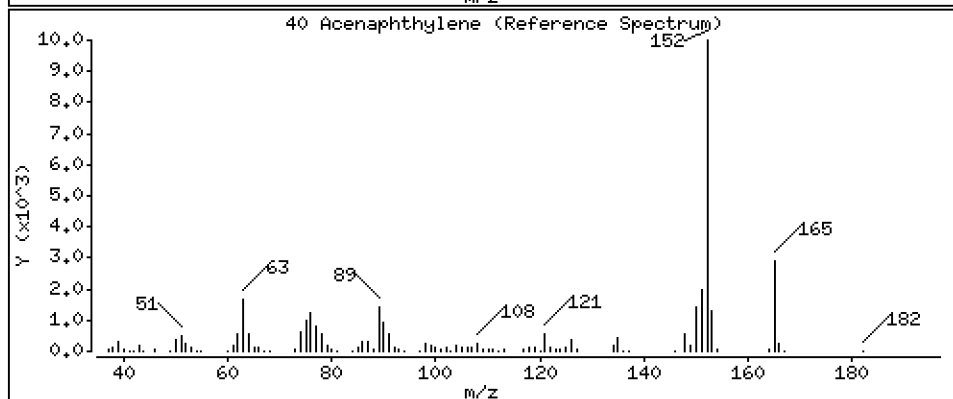
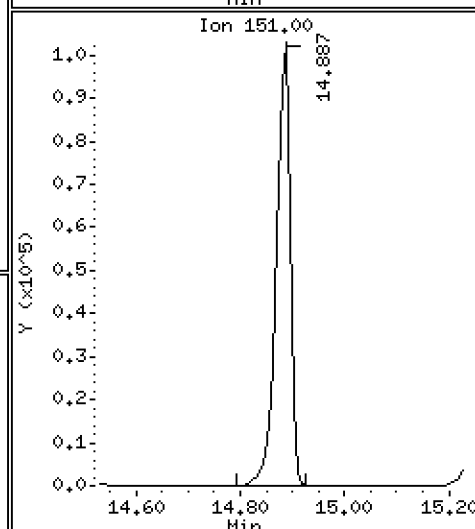
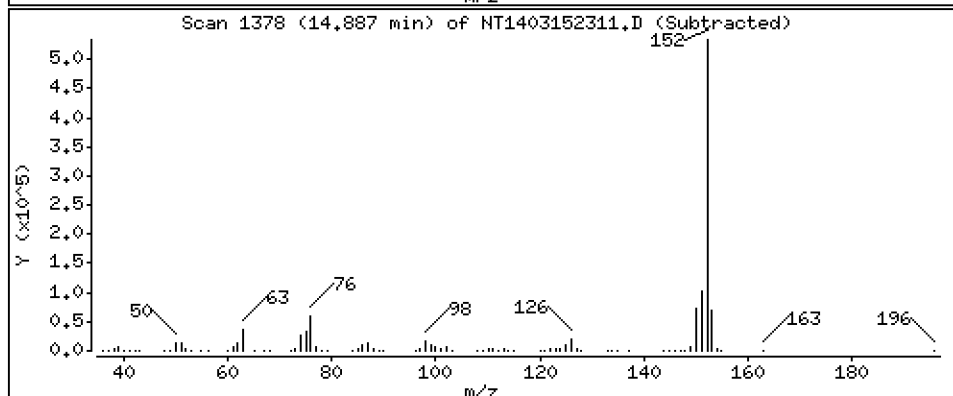
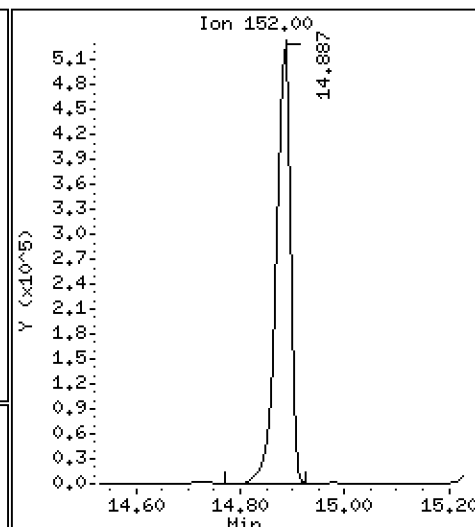
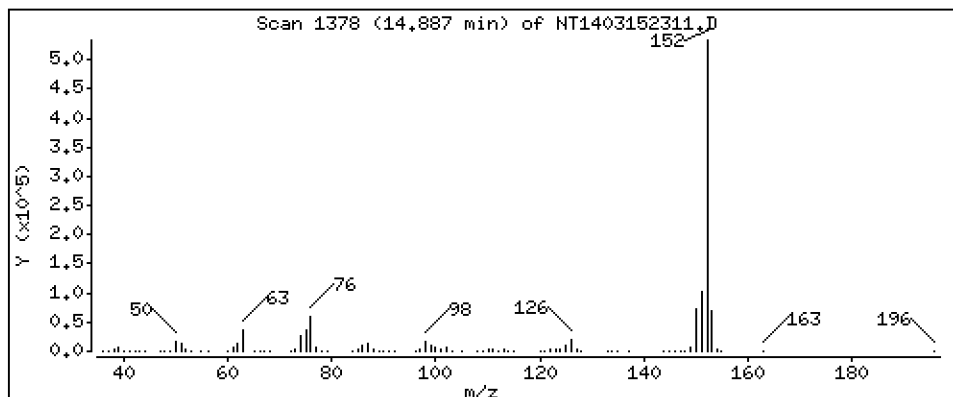
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,879 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

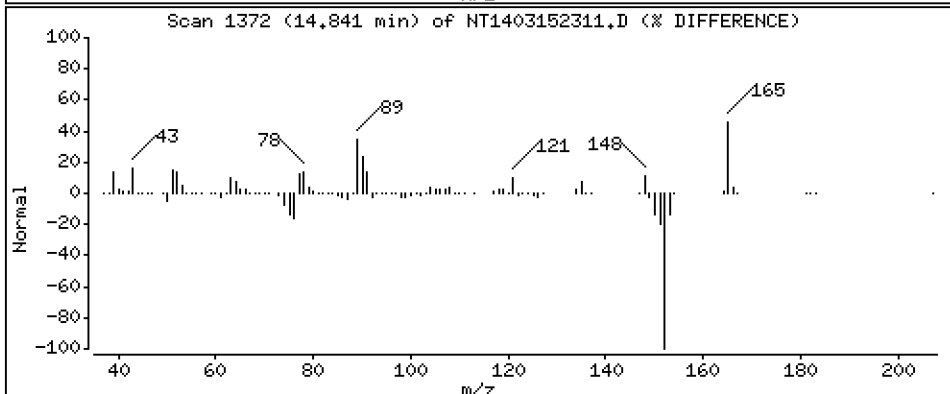
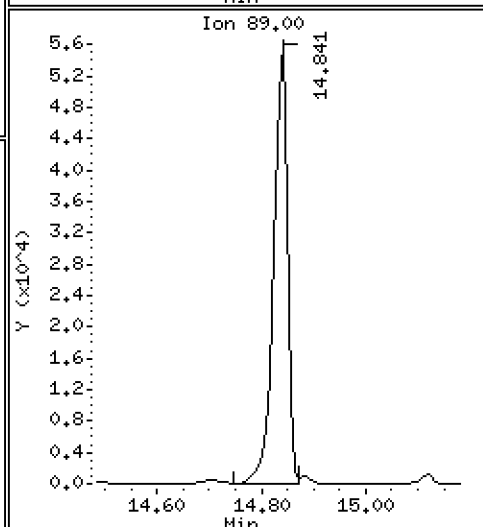
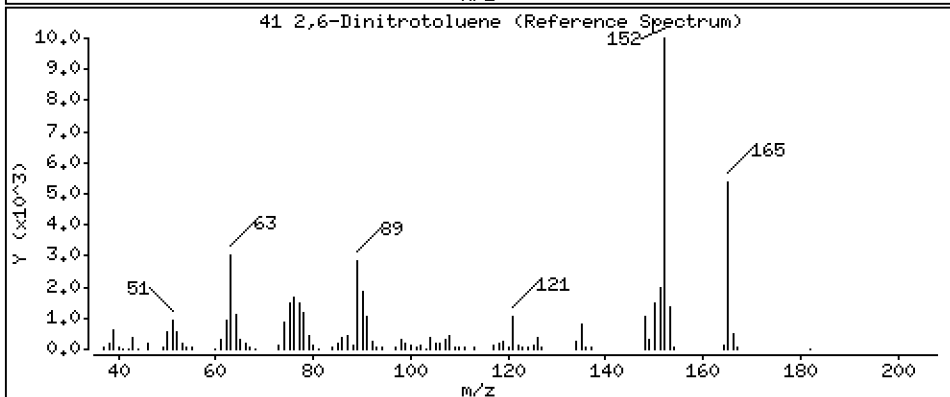
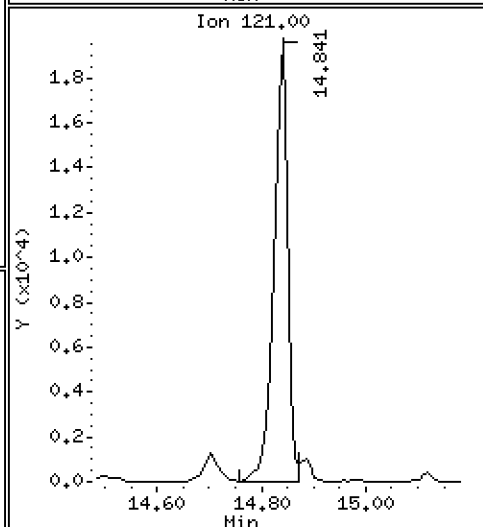
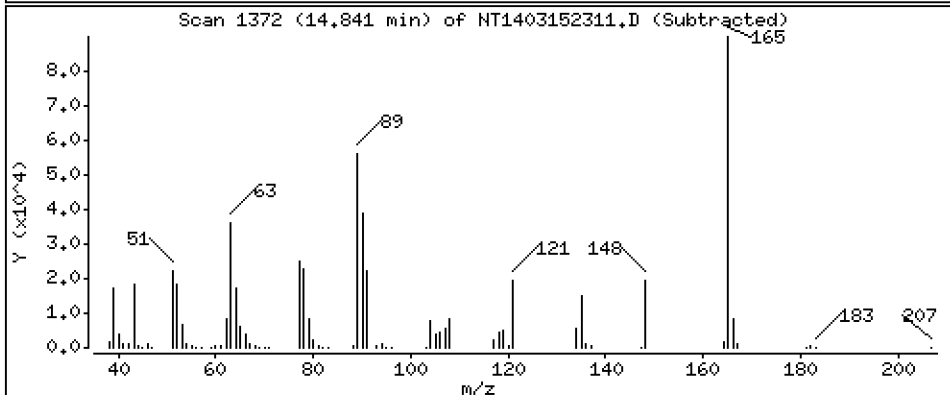
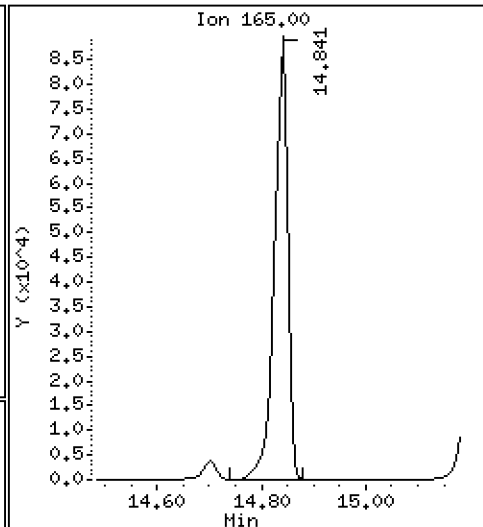
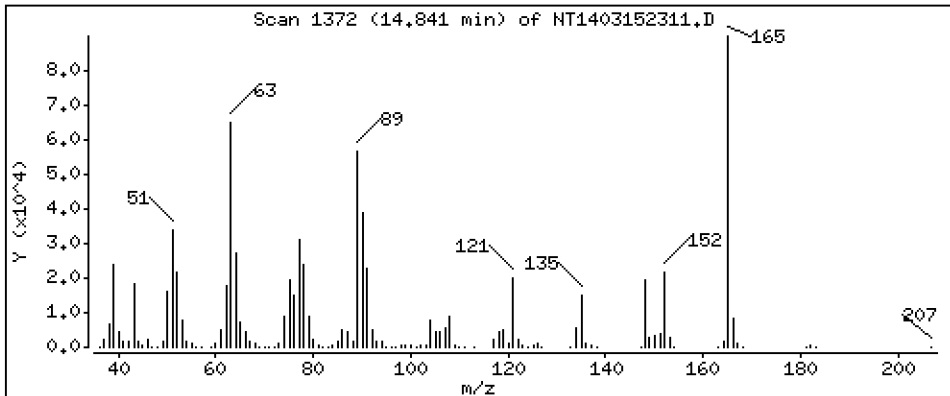
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 5,219 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

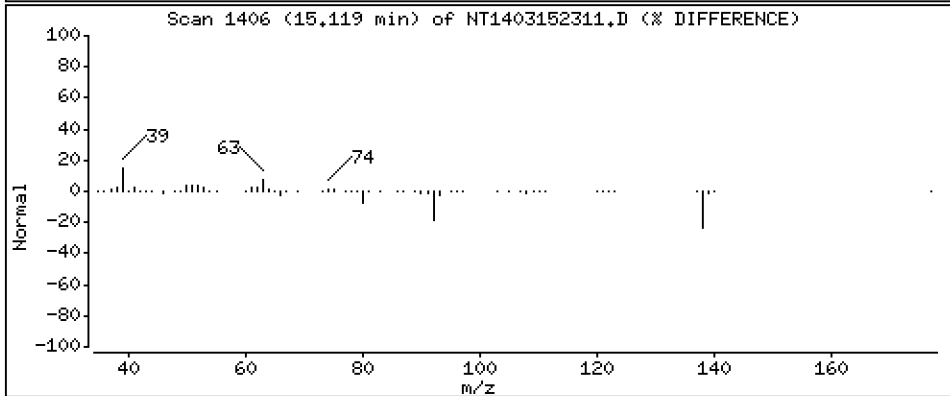
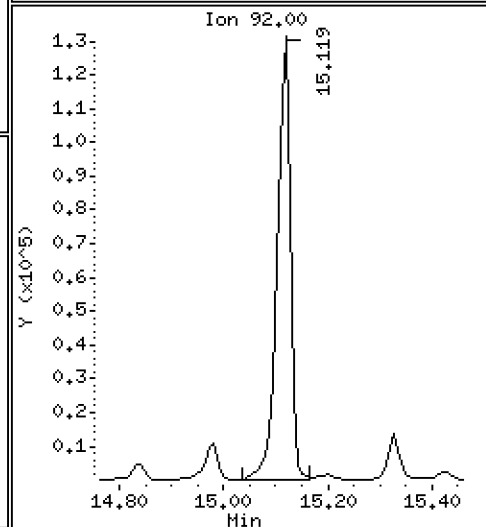
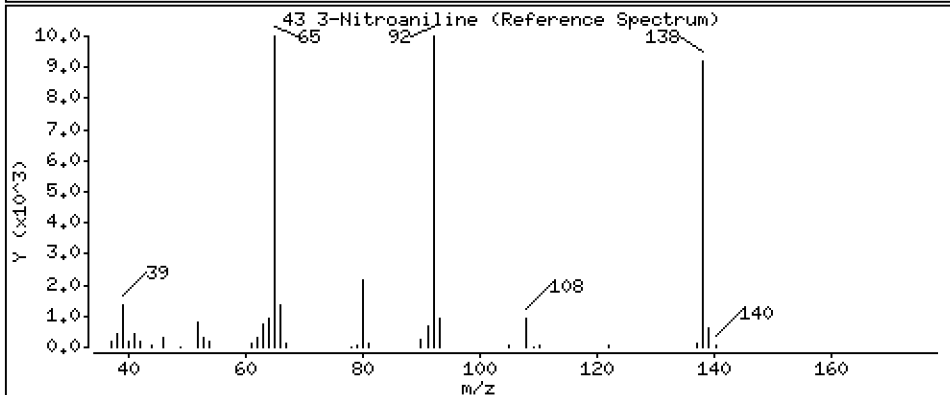
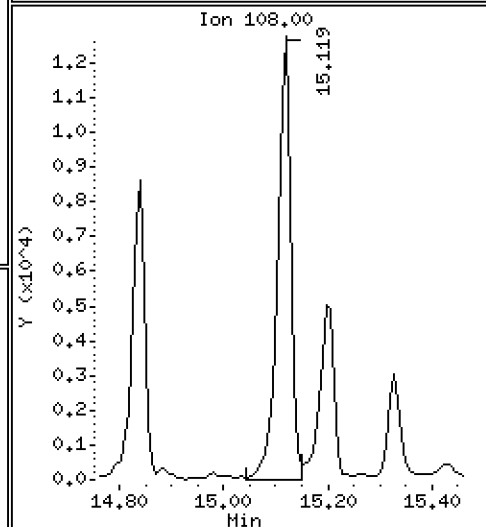
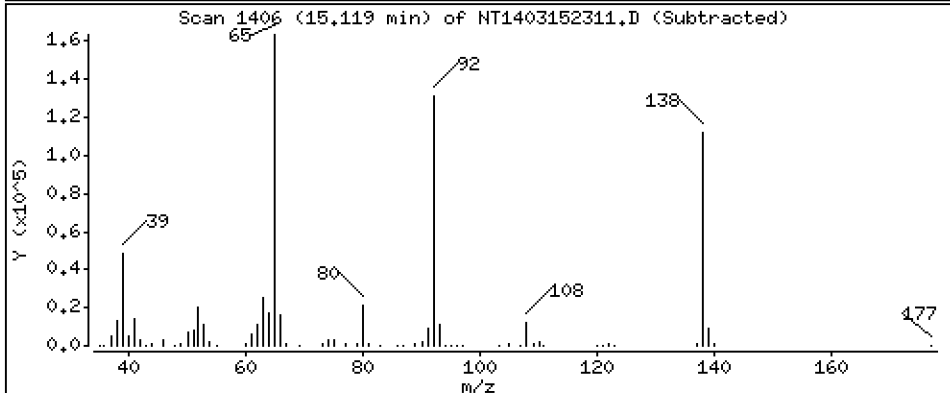
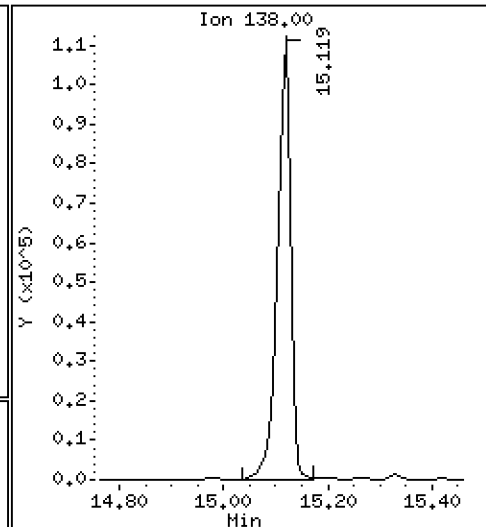
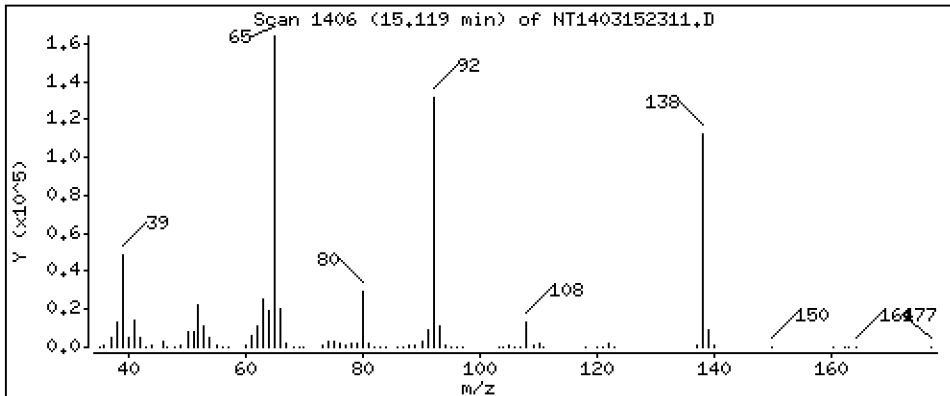
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,210 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

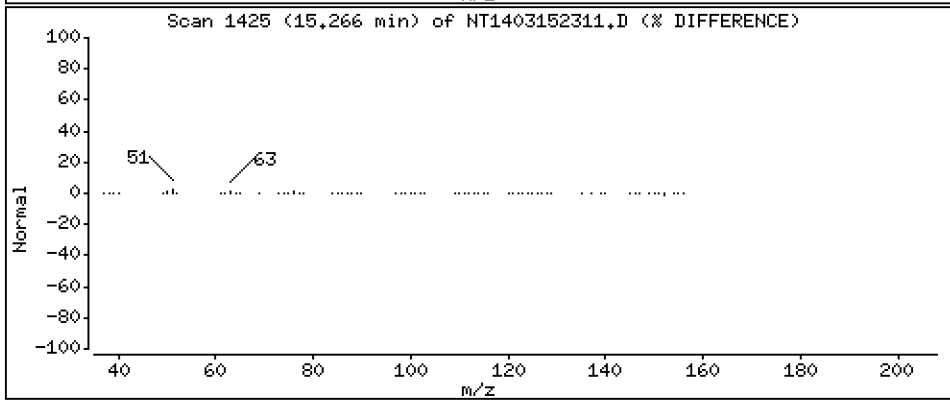
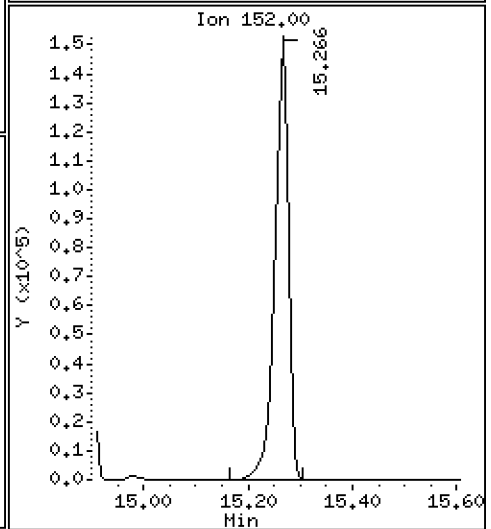
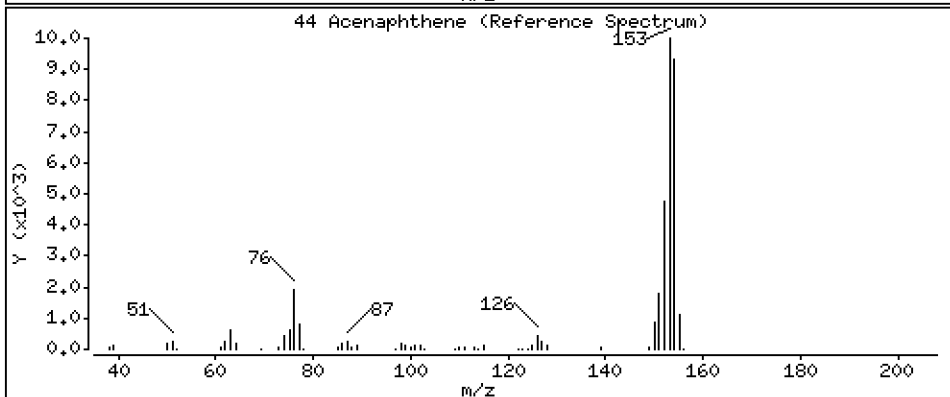
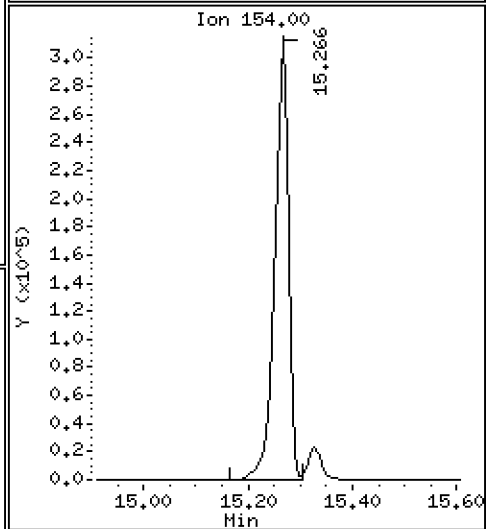
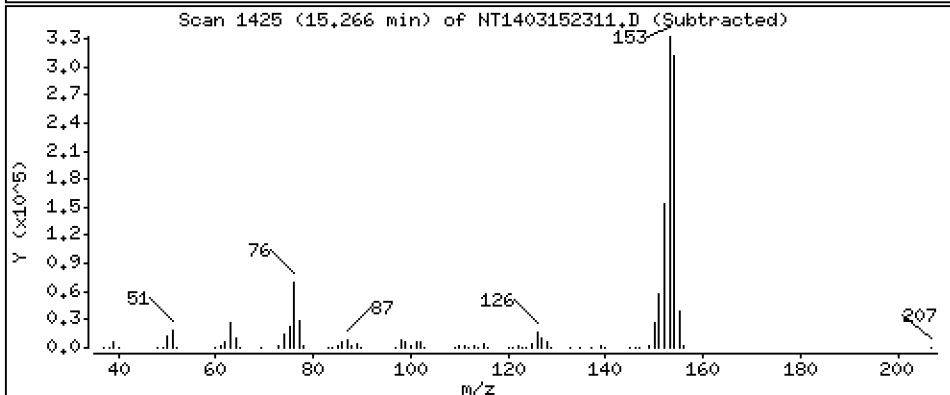
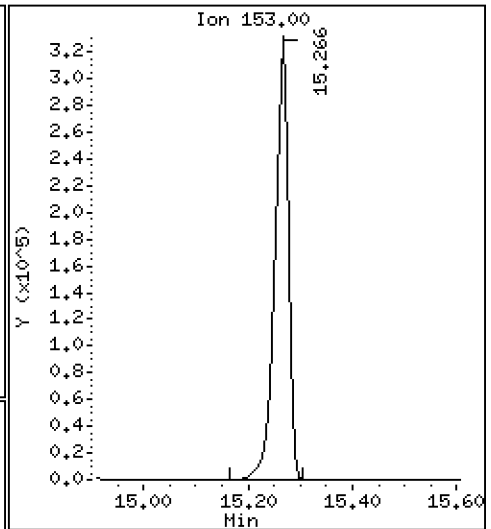
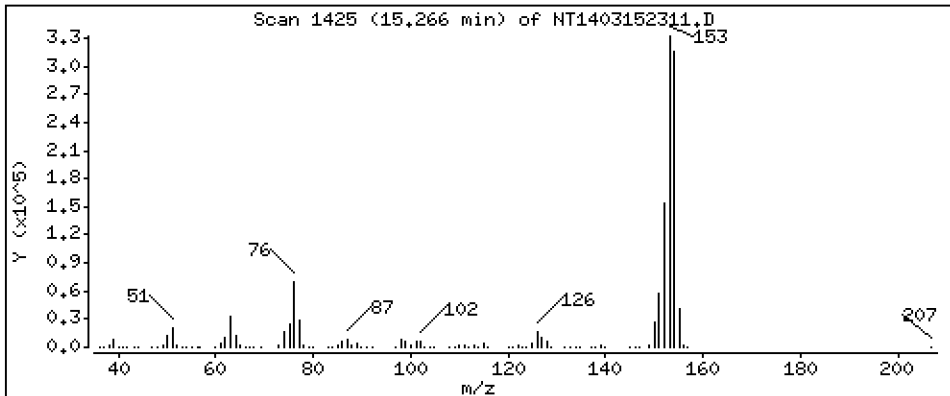
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,965 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

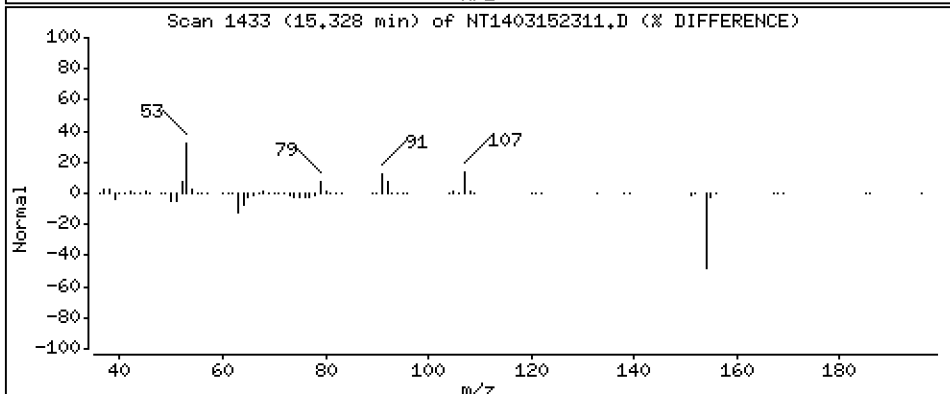
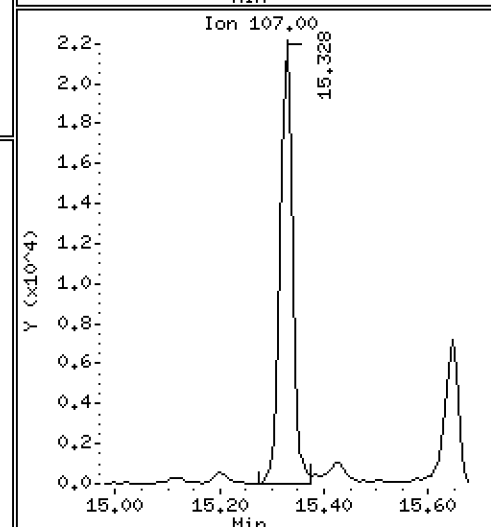
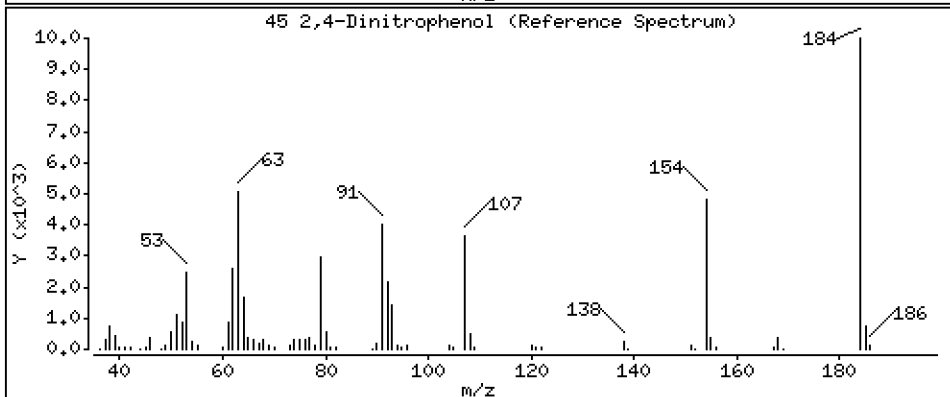
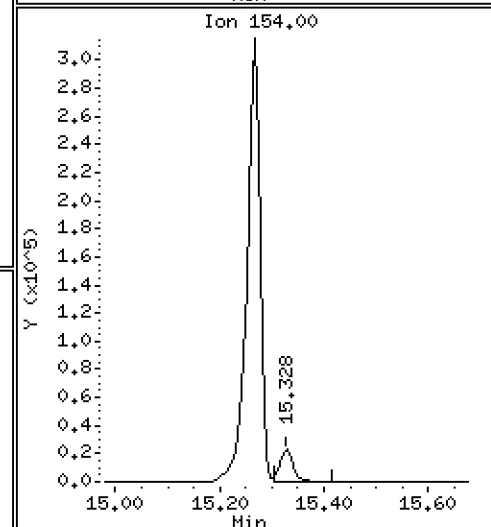
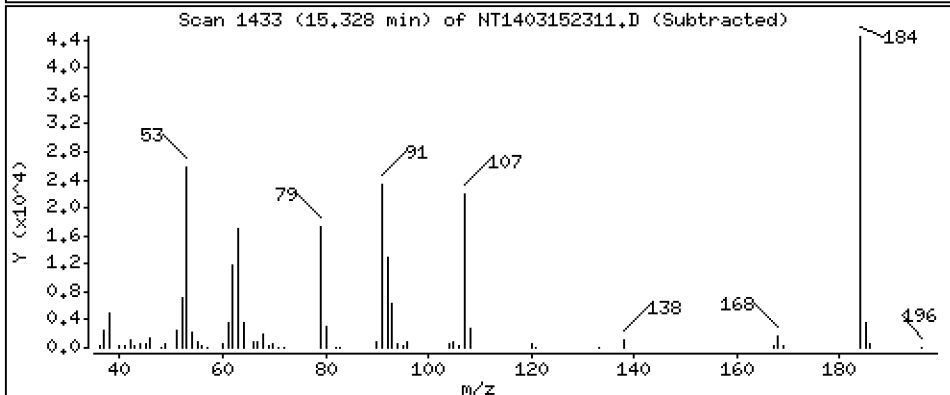
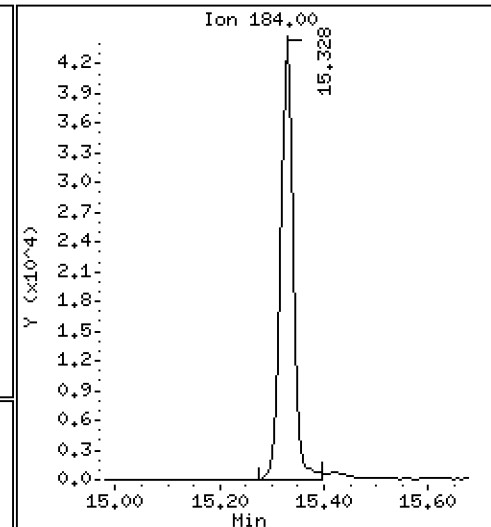
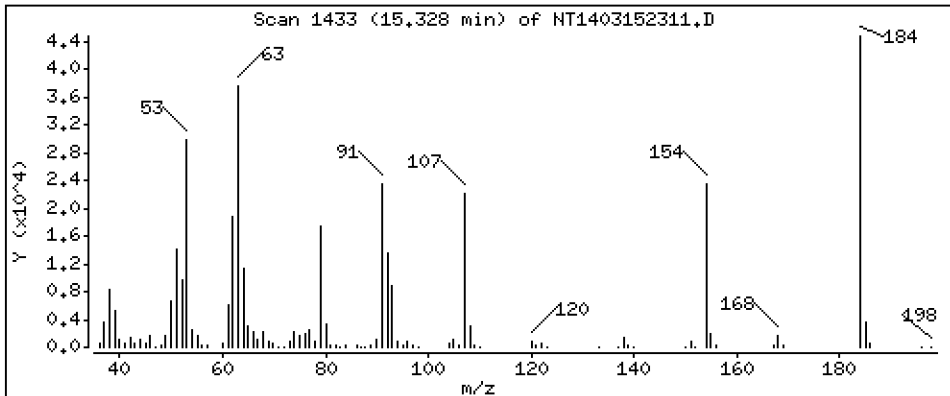
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 3,077 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

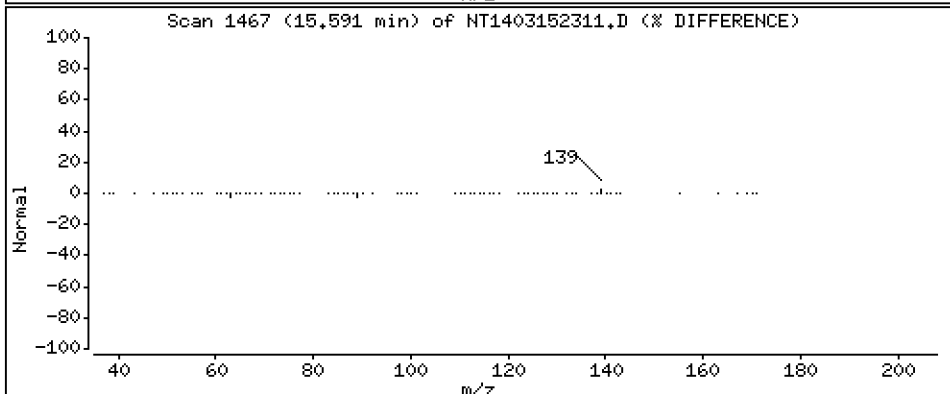
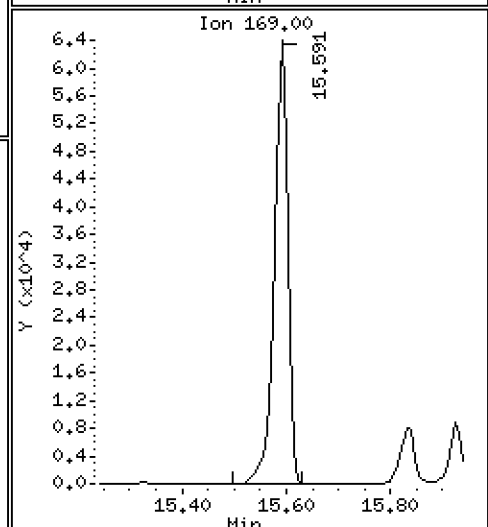
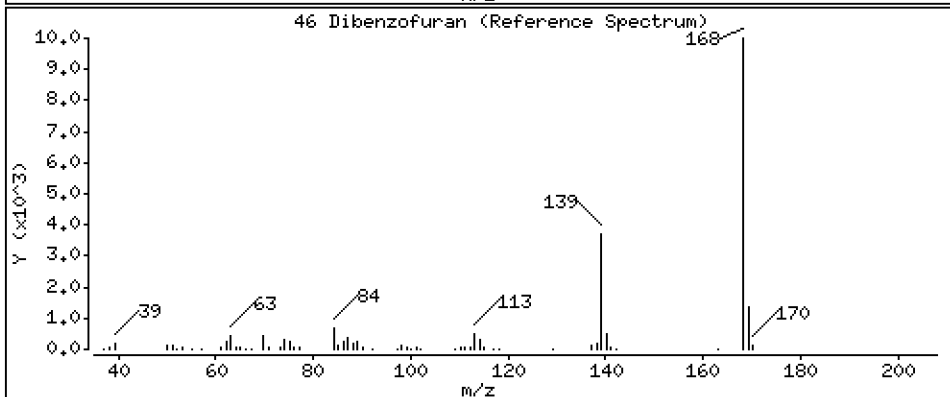
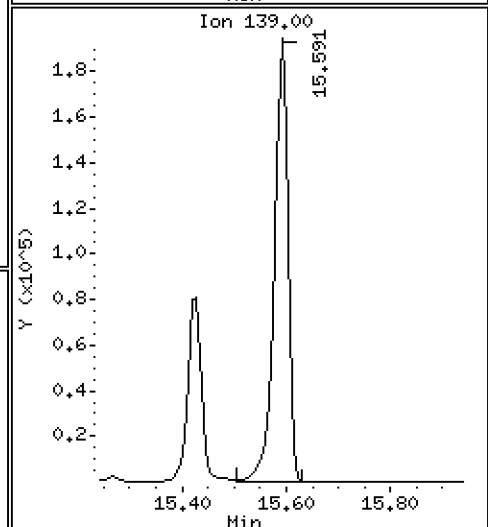
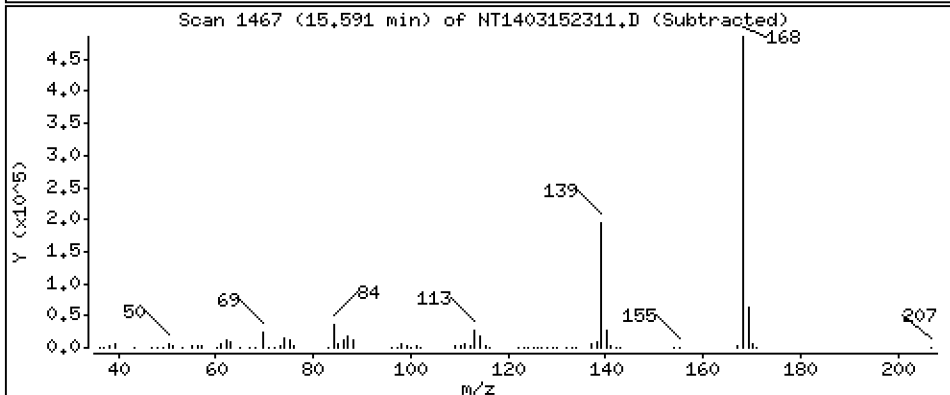
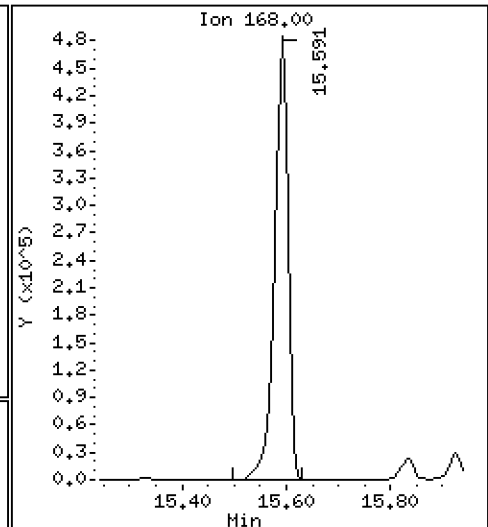
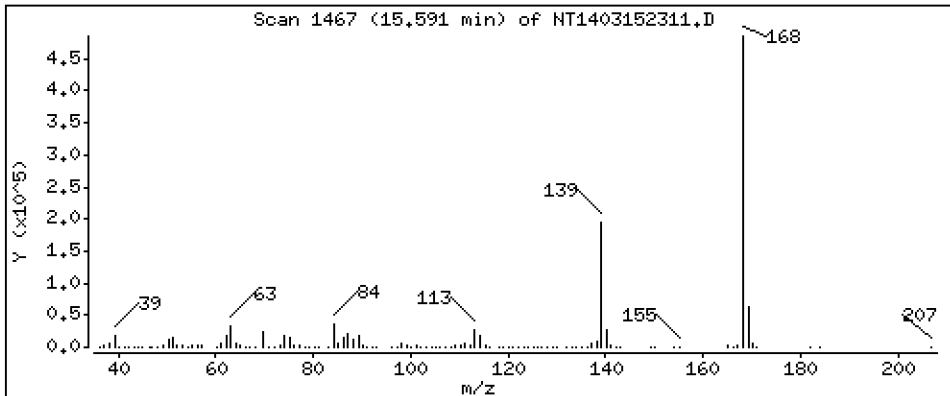
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,956 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

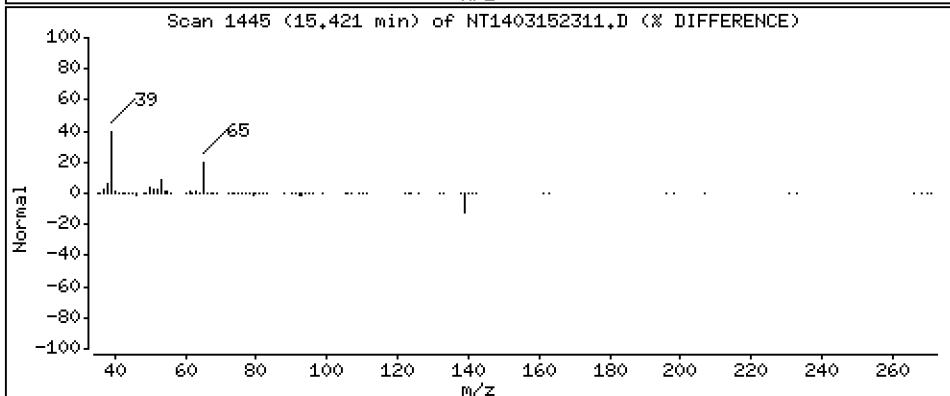
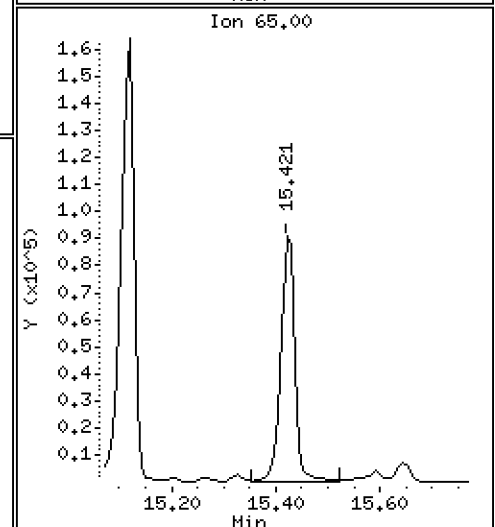
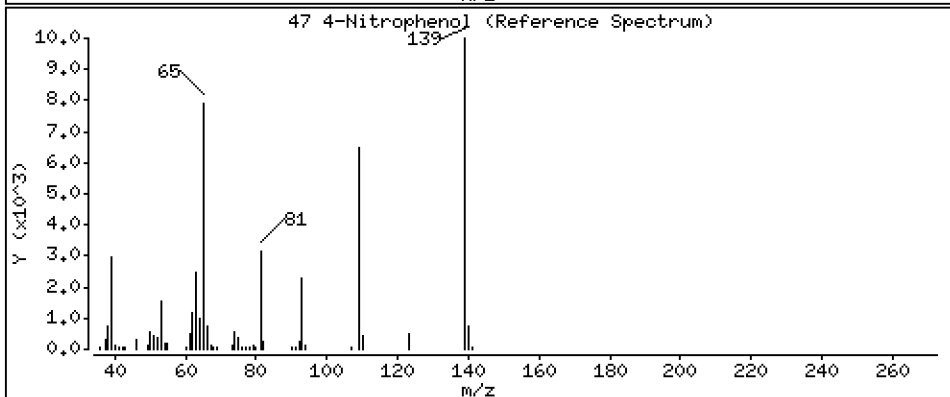
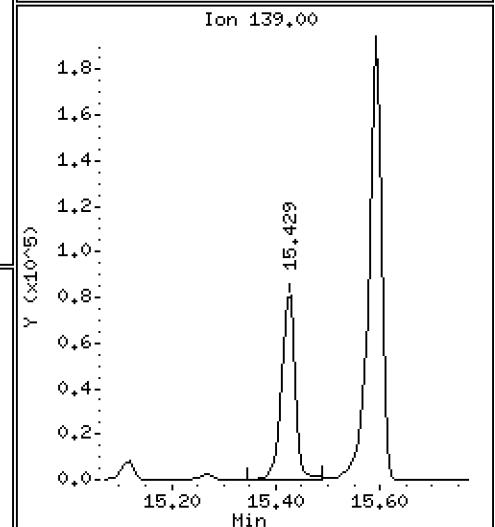
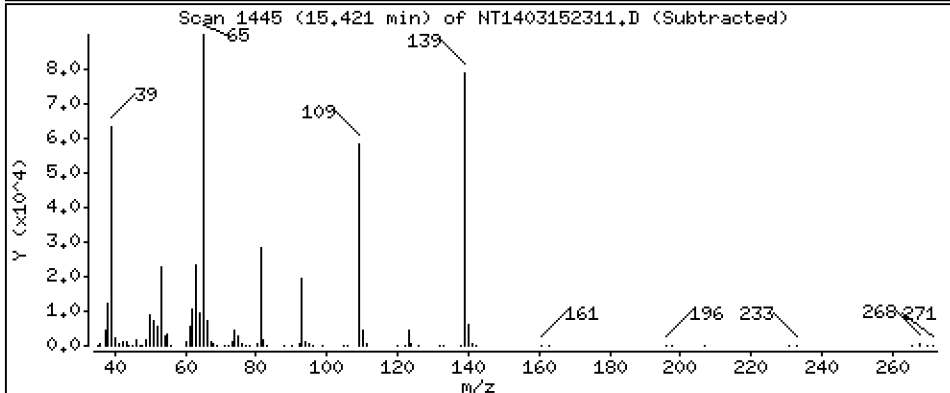
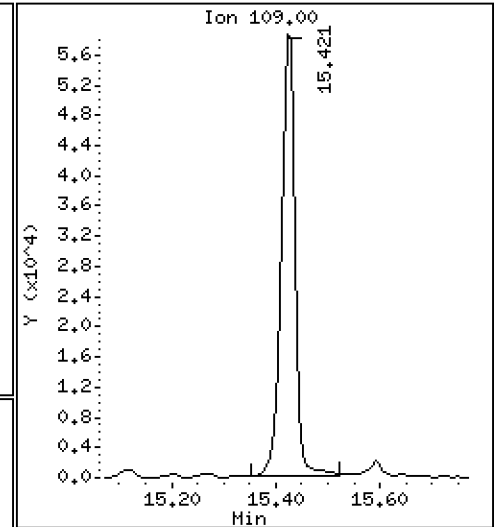
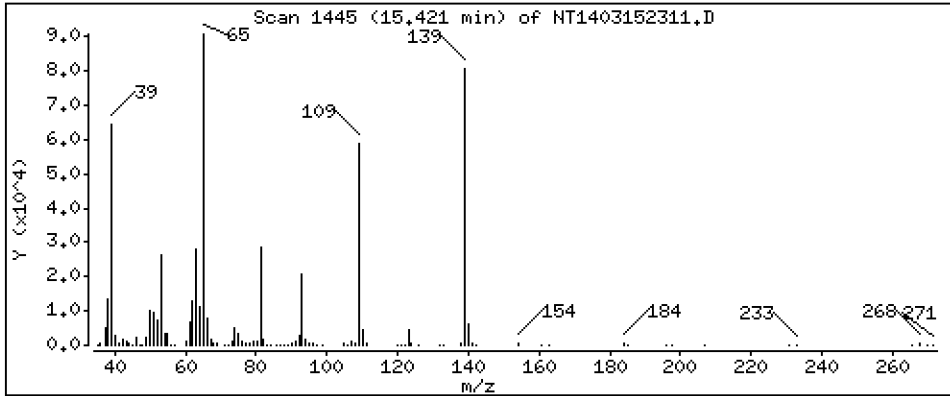
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 4,828 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

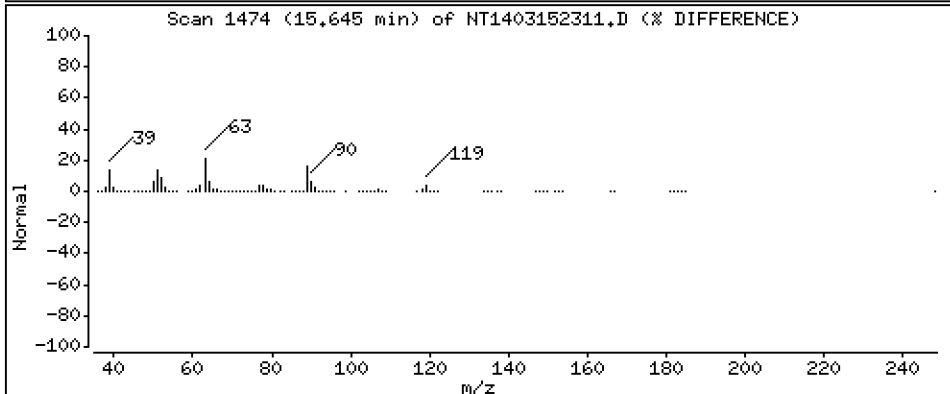
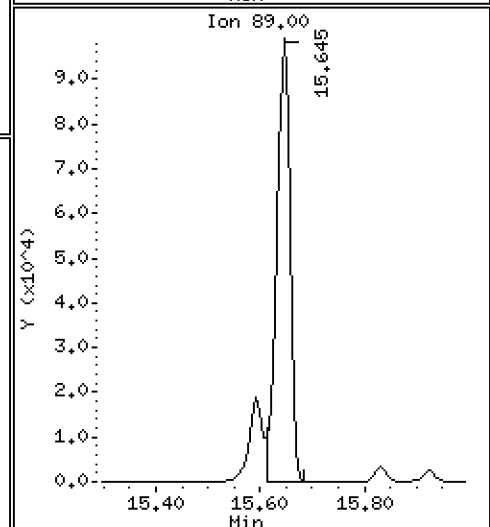
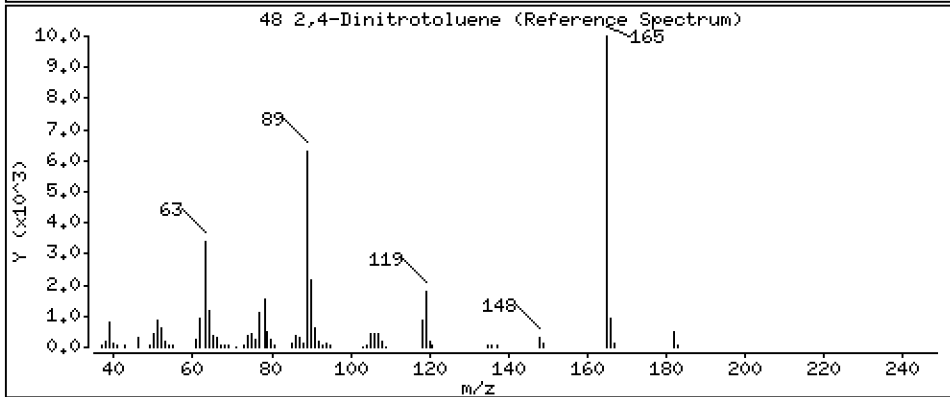
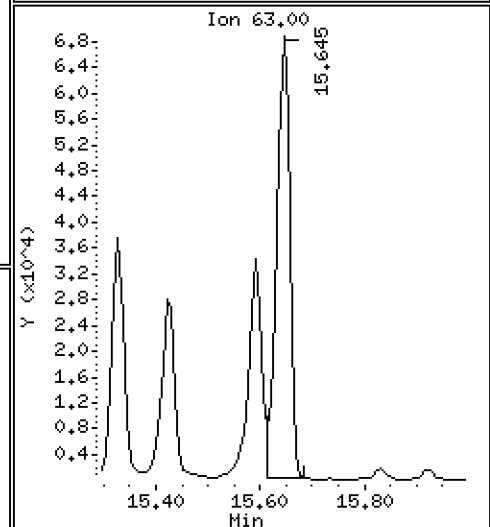
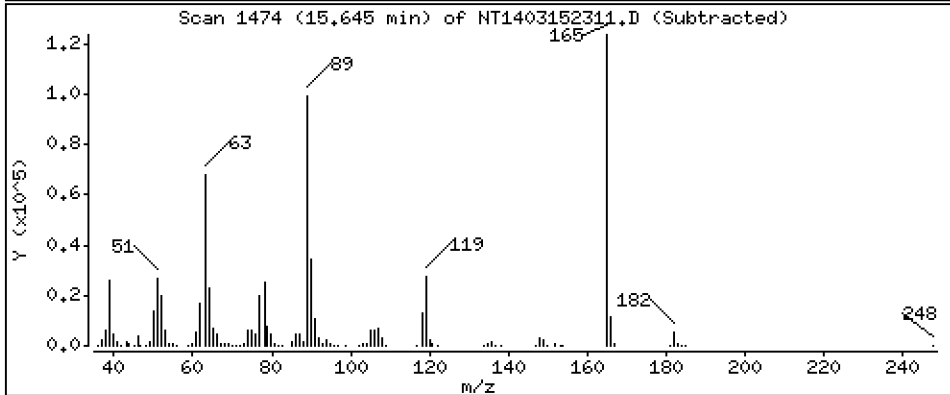
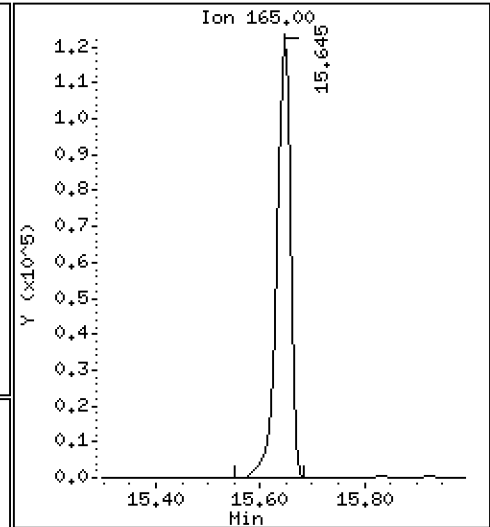
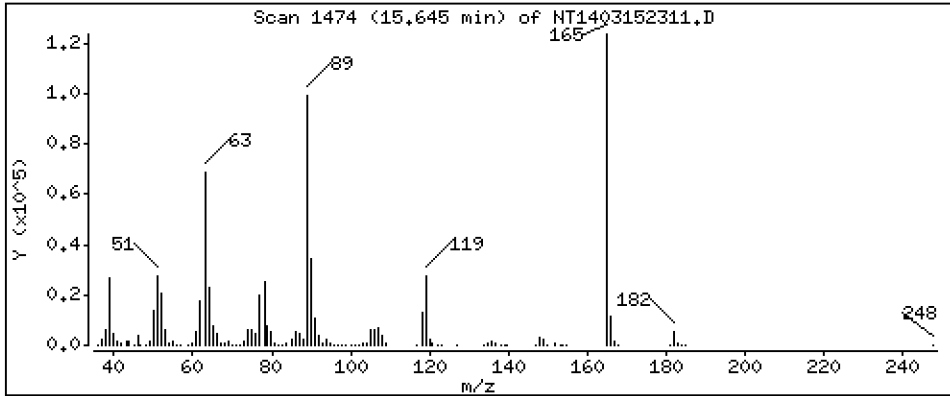
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 5,119 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

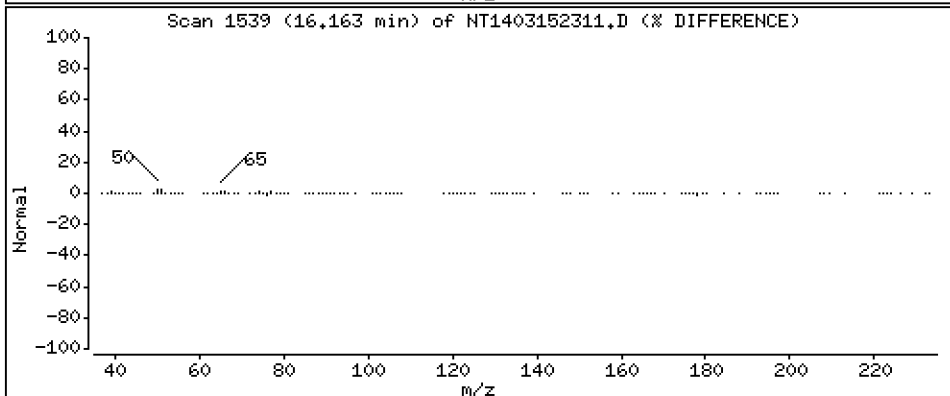
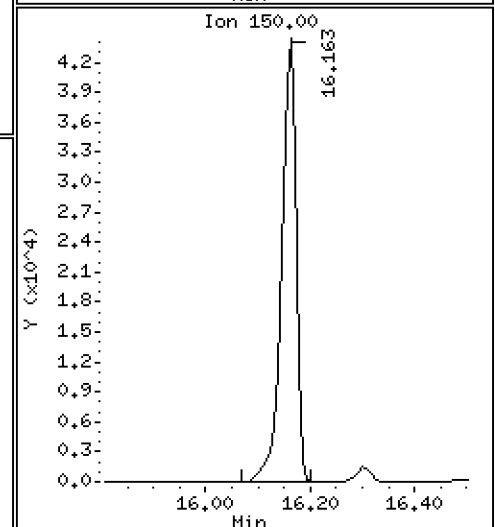
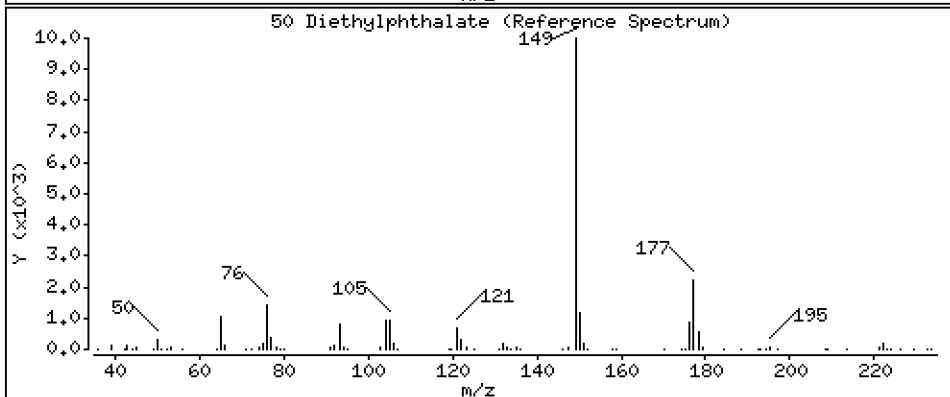
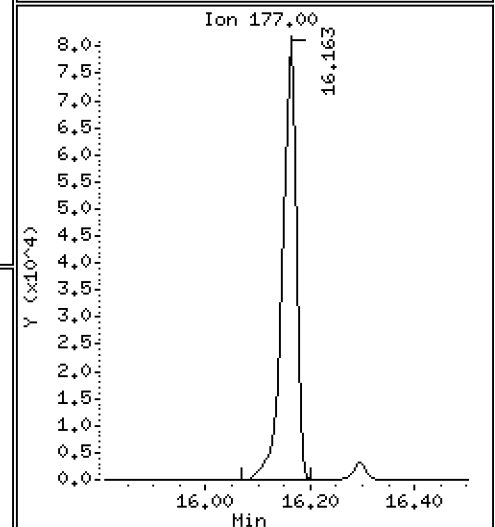
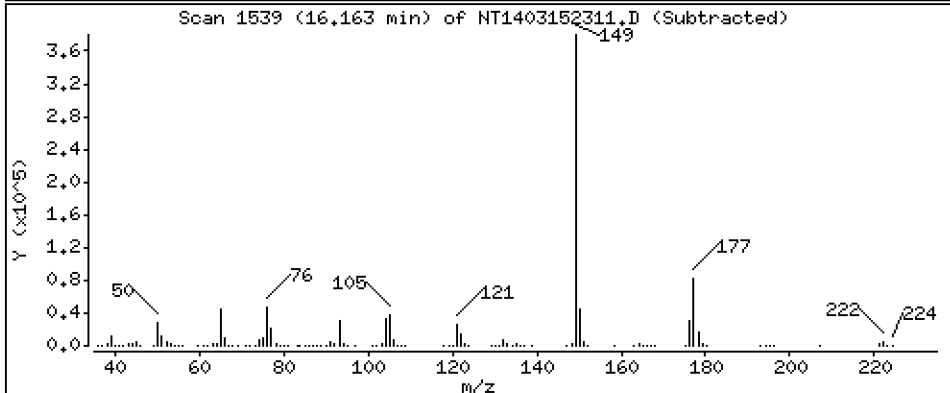
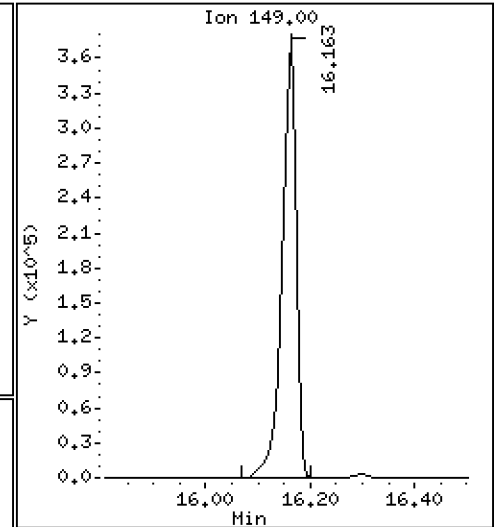
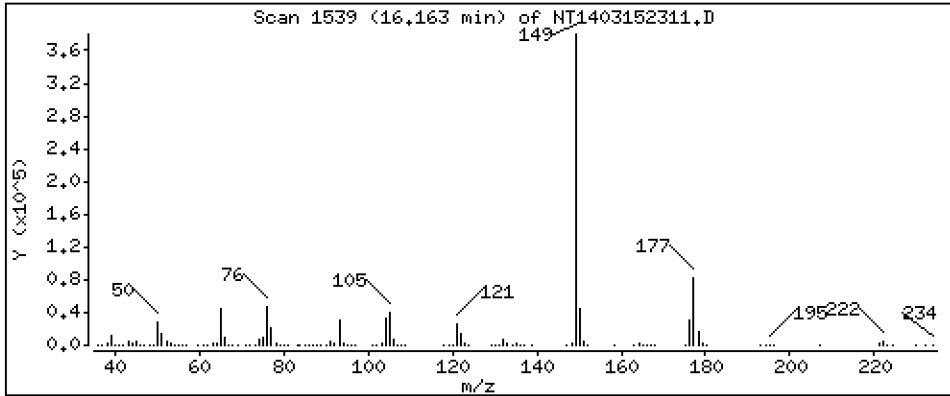
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,203 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

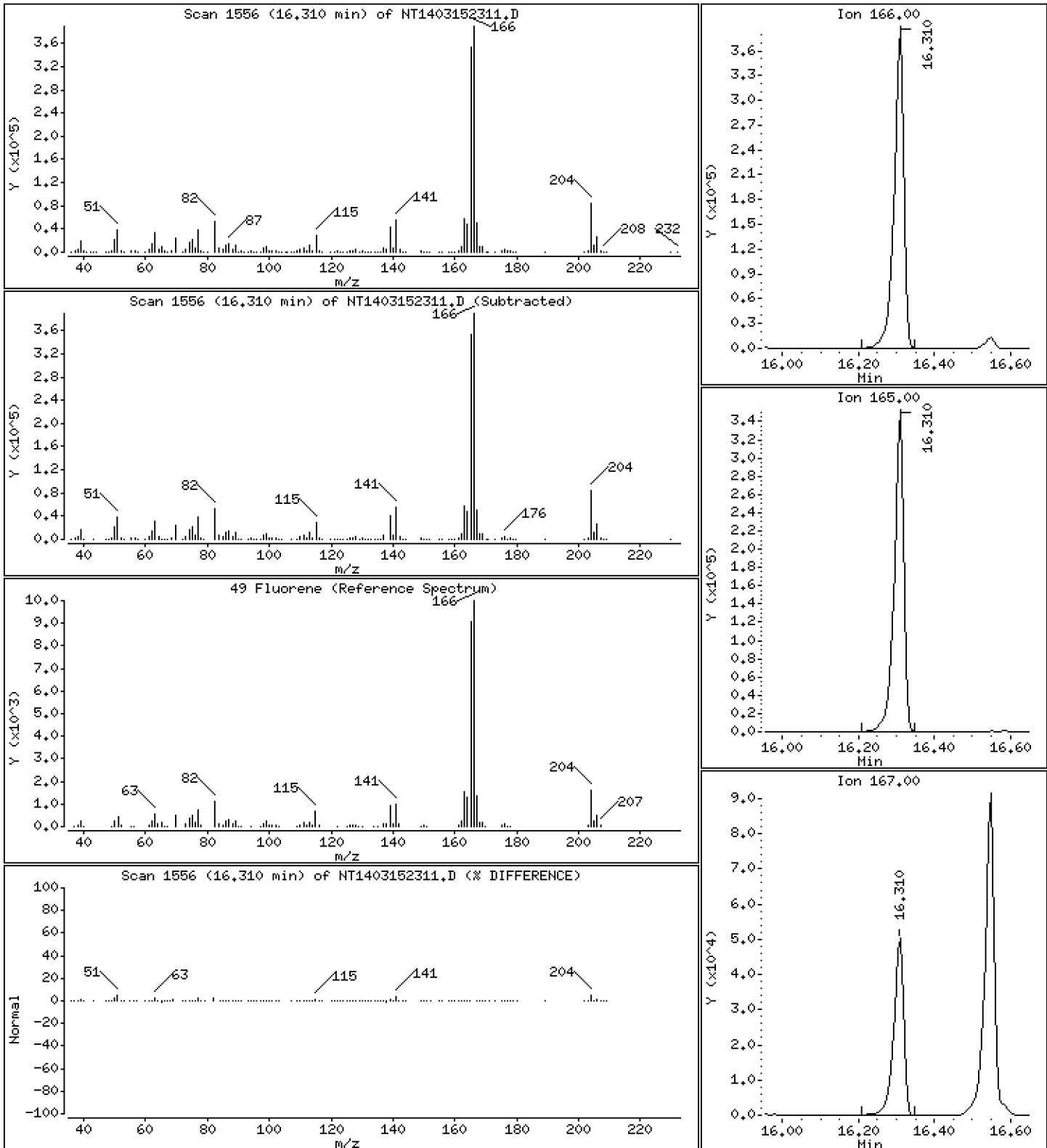
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,844 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

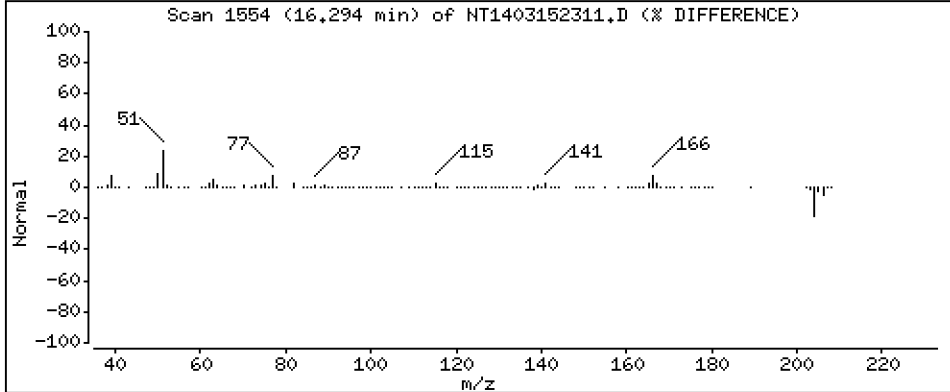
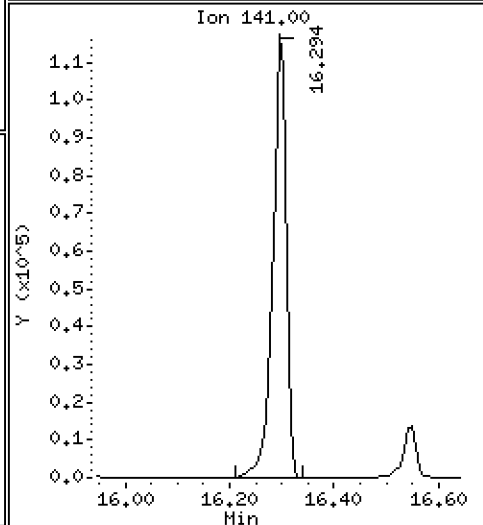
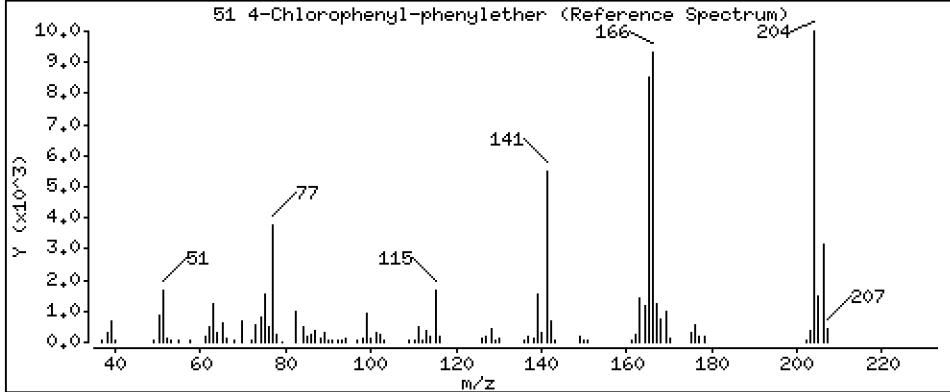
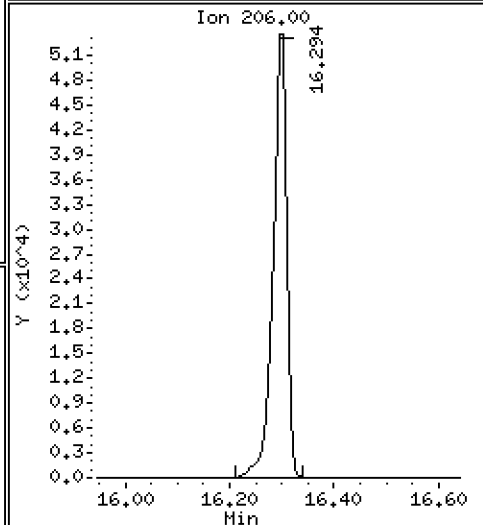
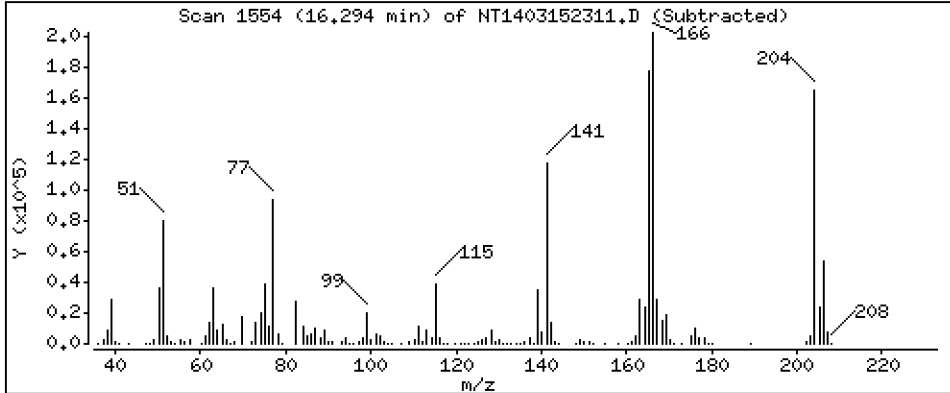
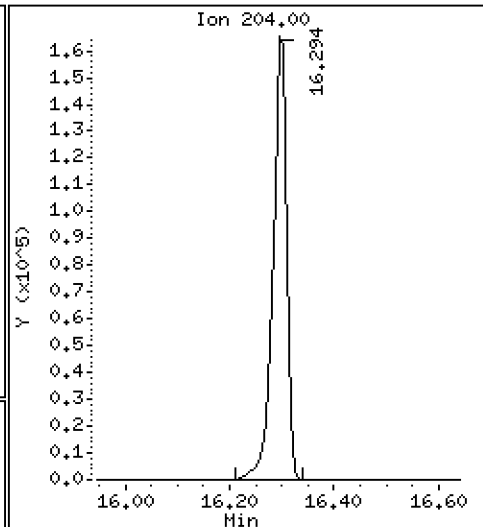
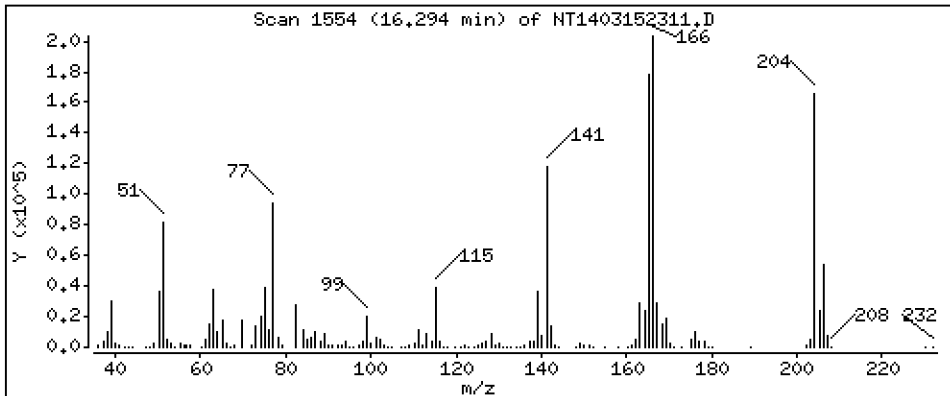
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,985 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

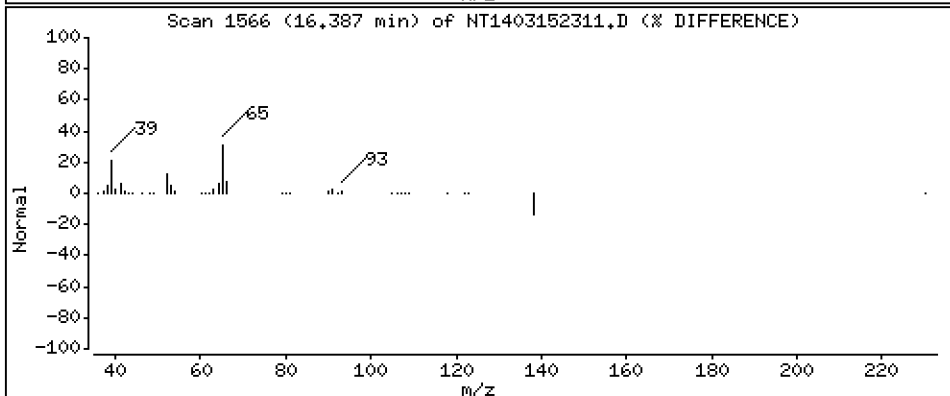
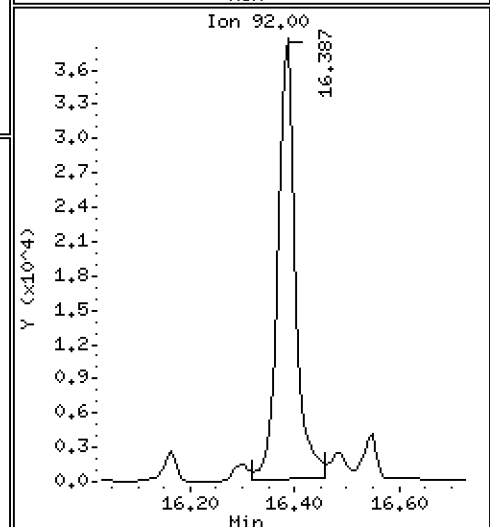
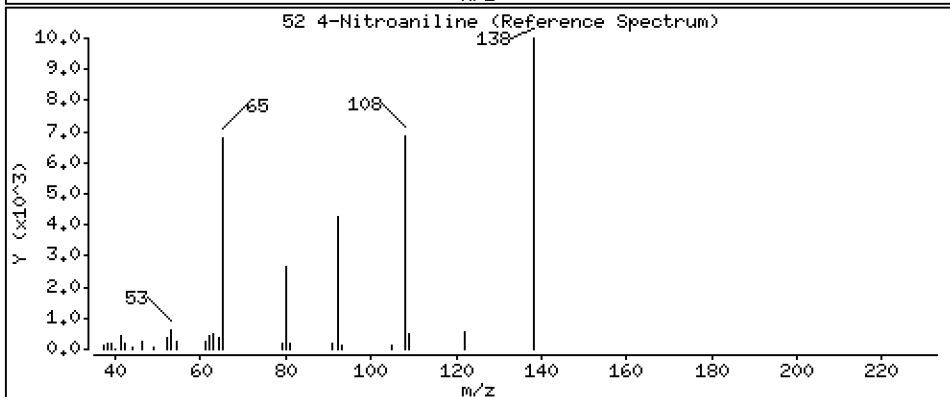
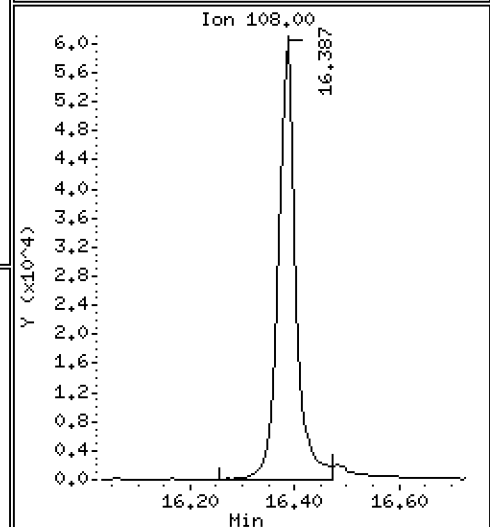
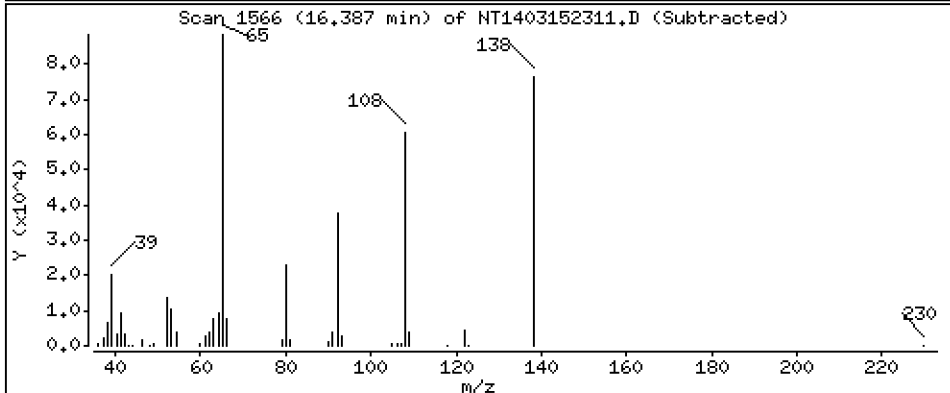
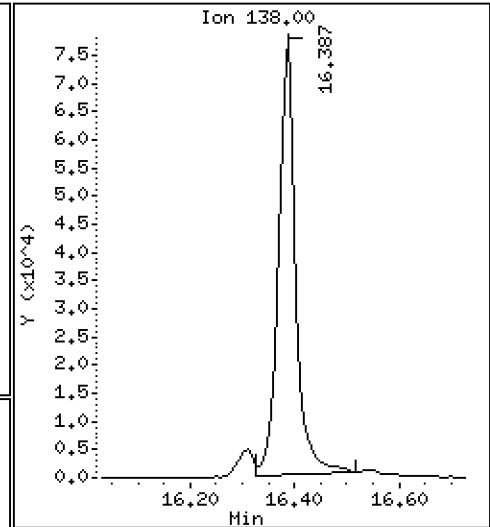
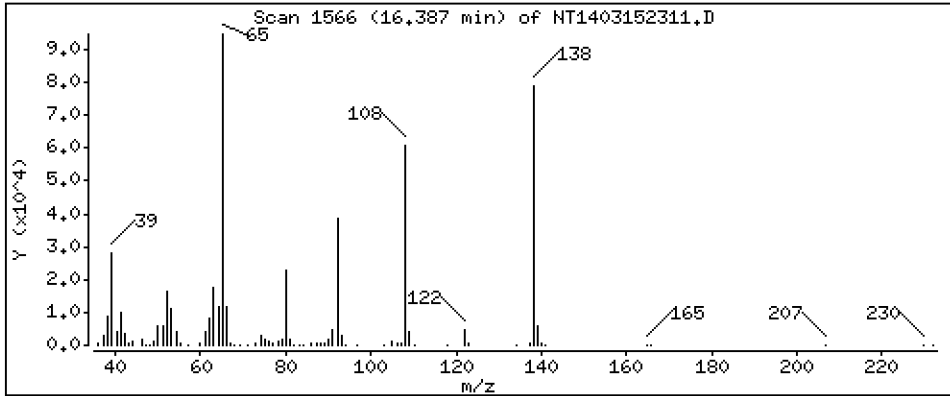
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 4,817 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

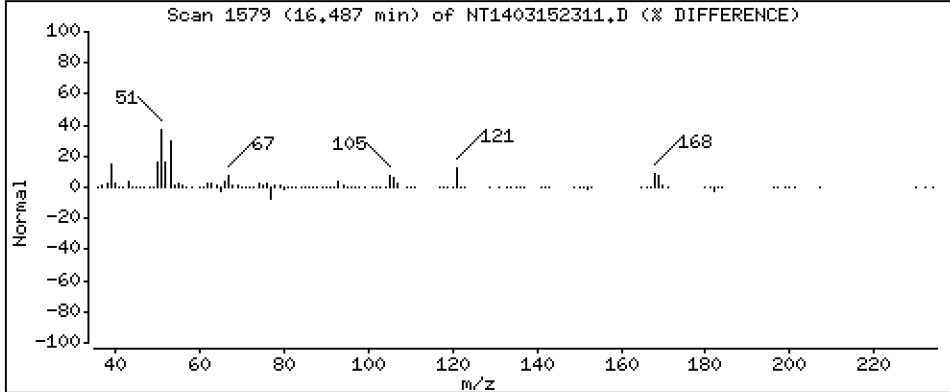
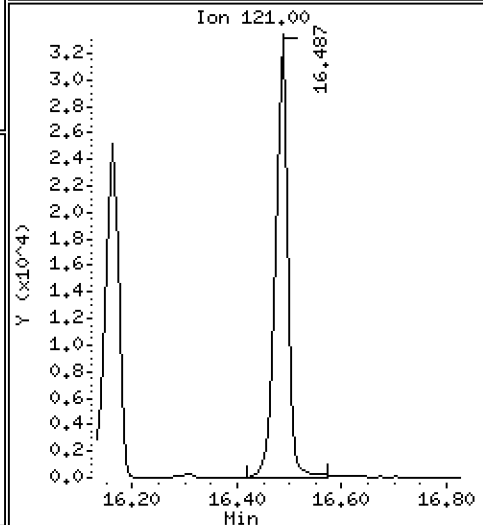
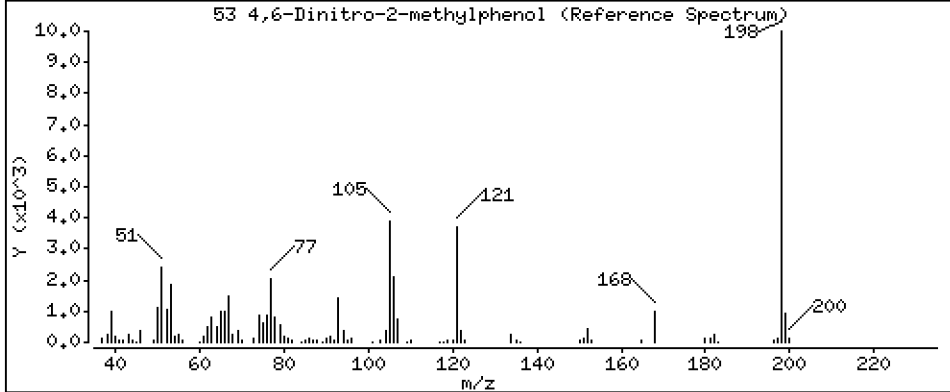
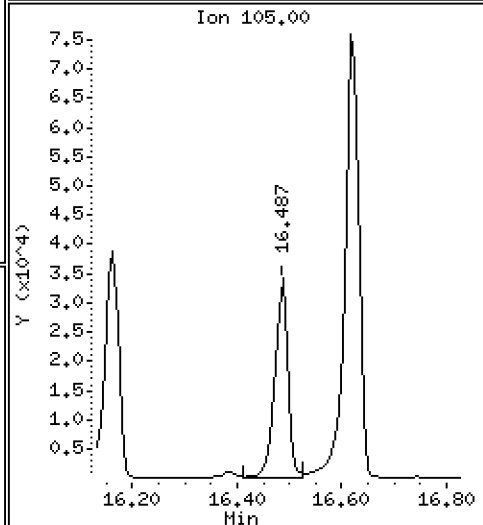
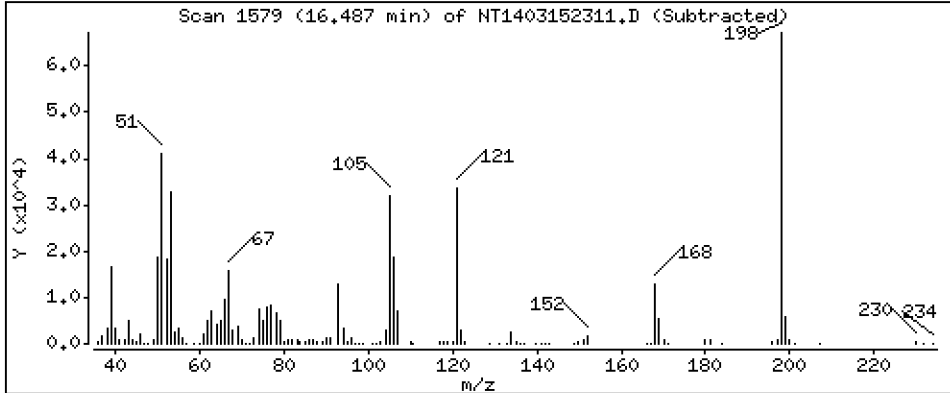
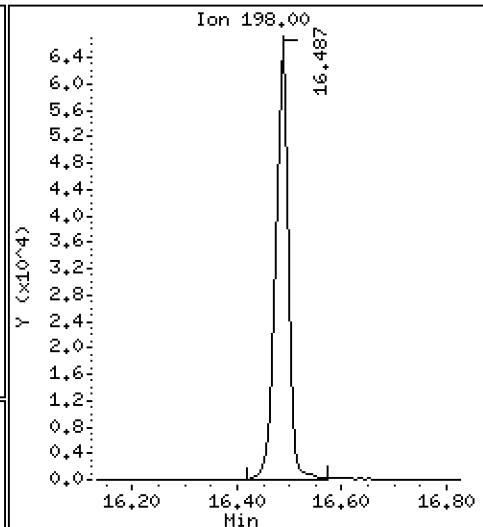
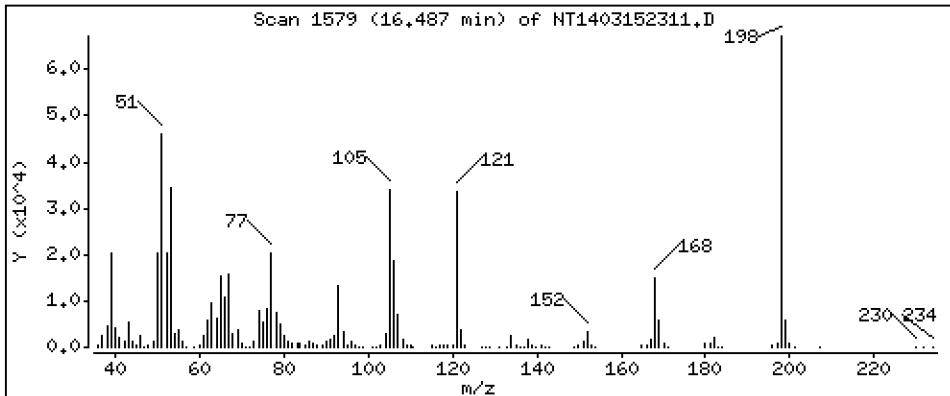
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 4,439 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

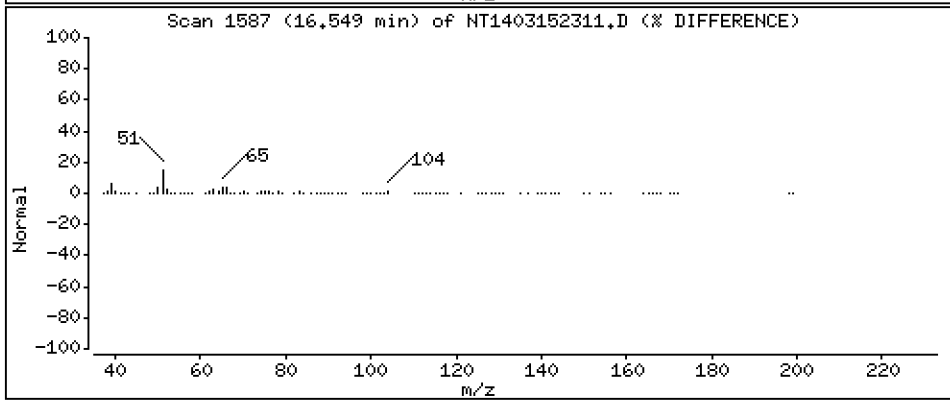
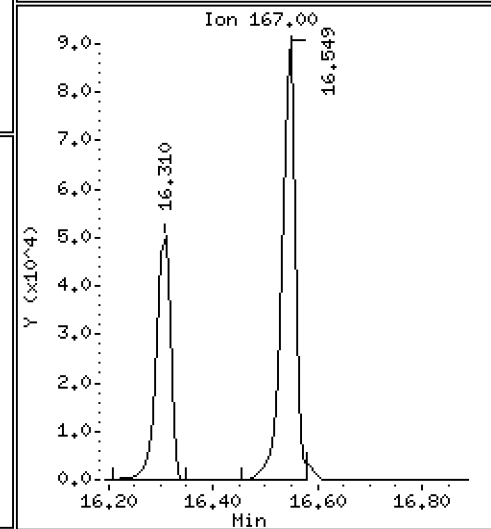
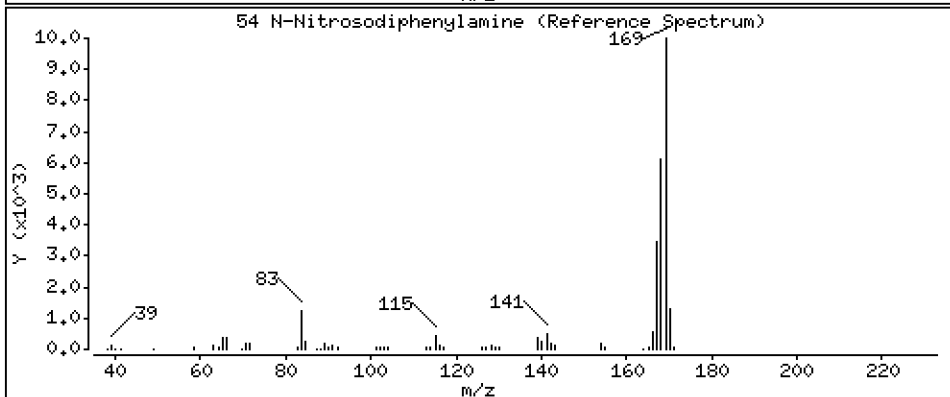
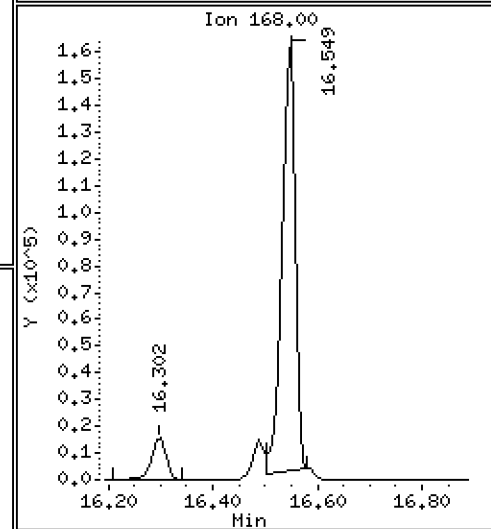
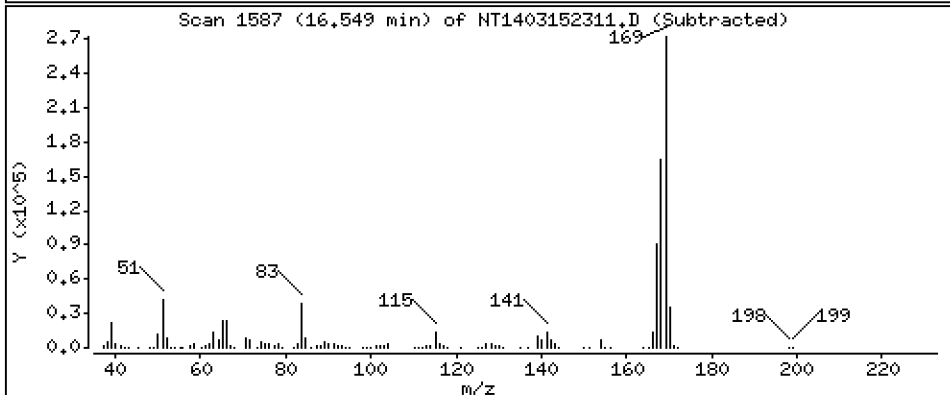
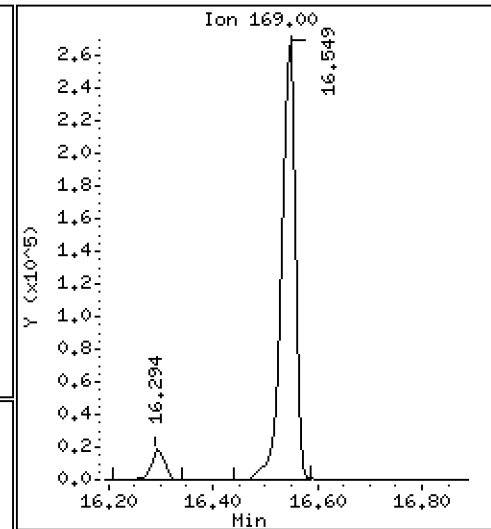
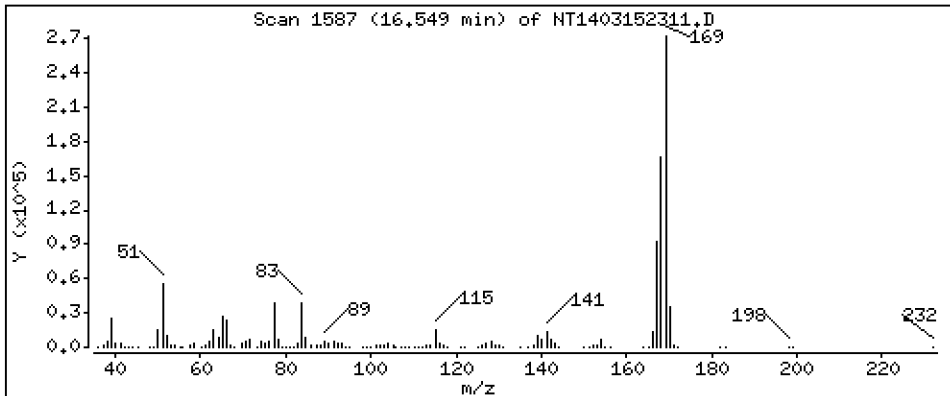
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.954 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

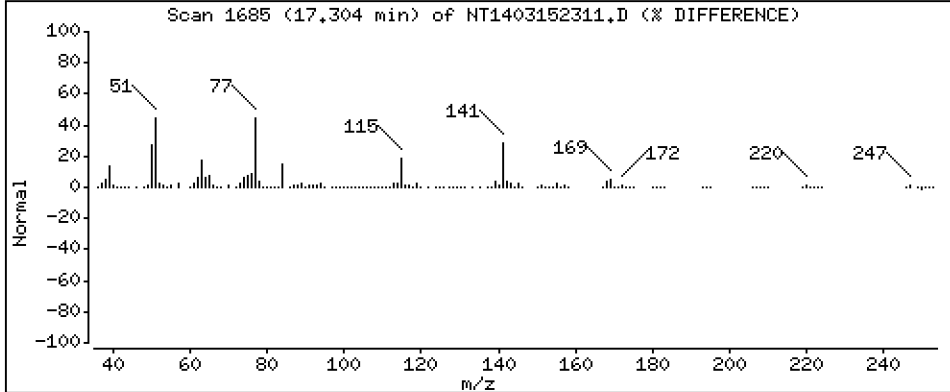
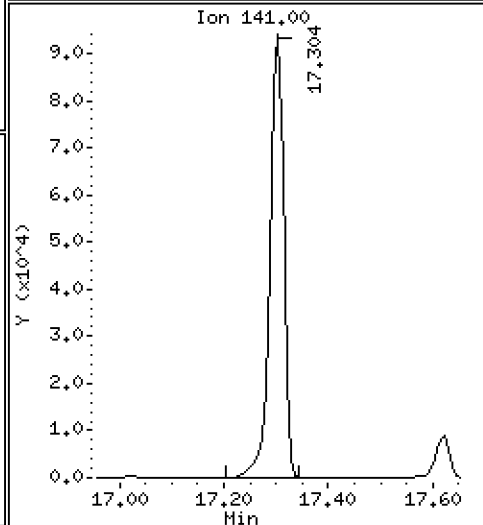
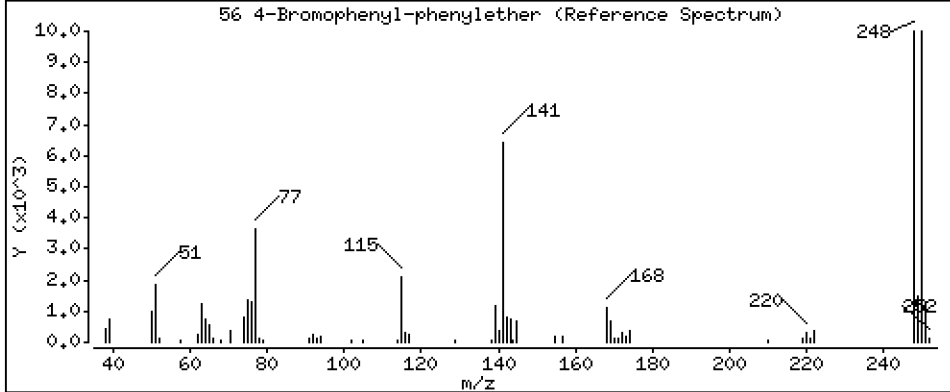
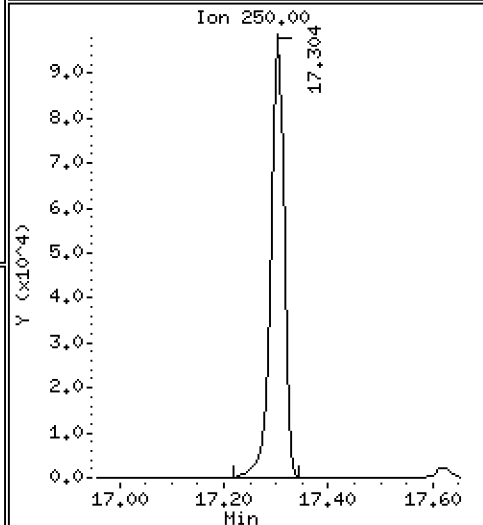
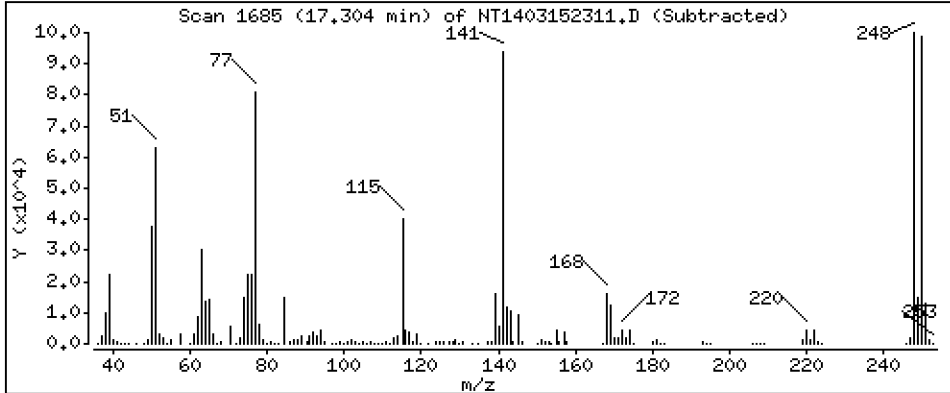
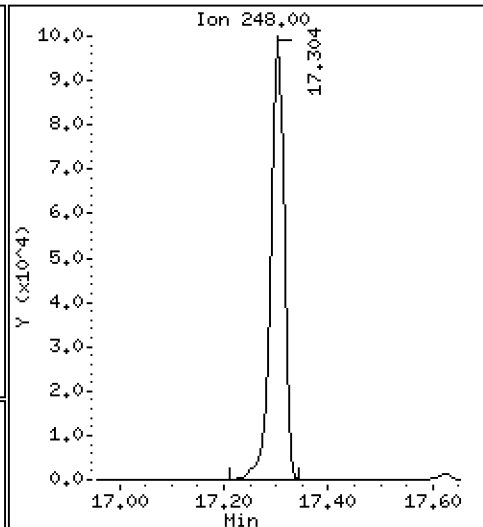
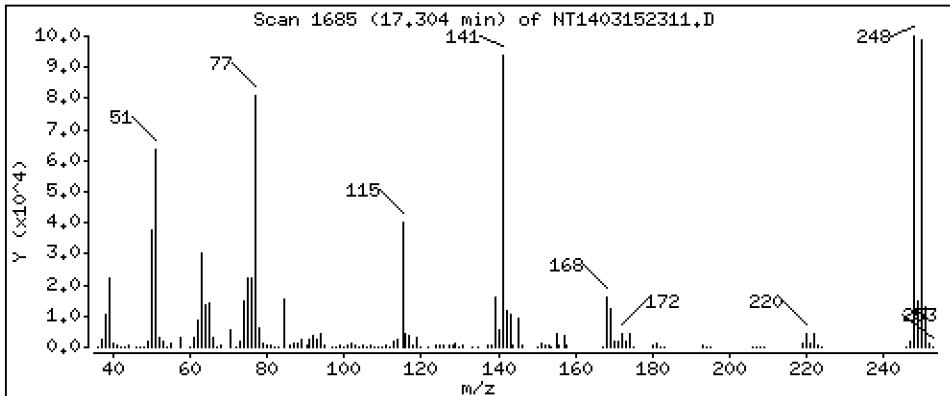
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,226 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

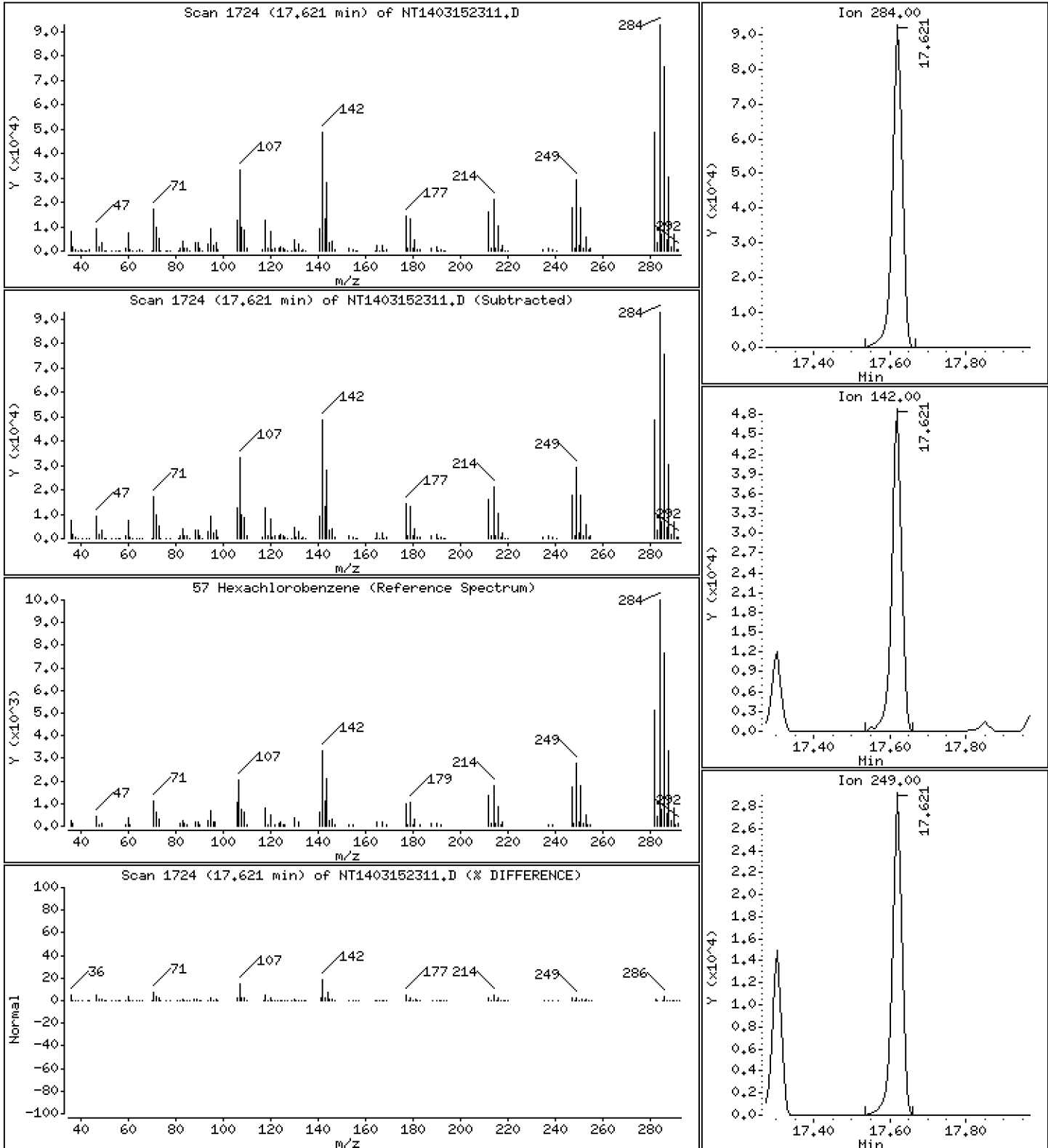
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,780 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

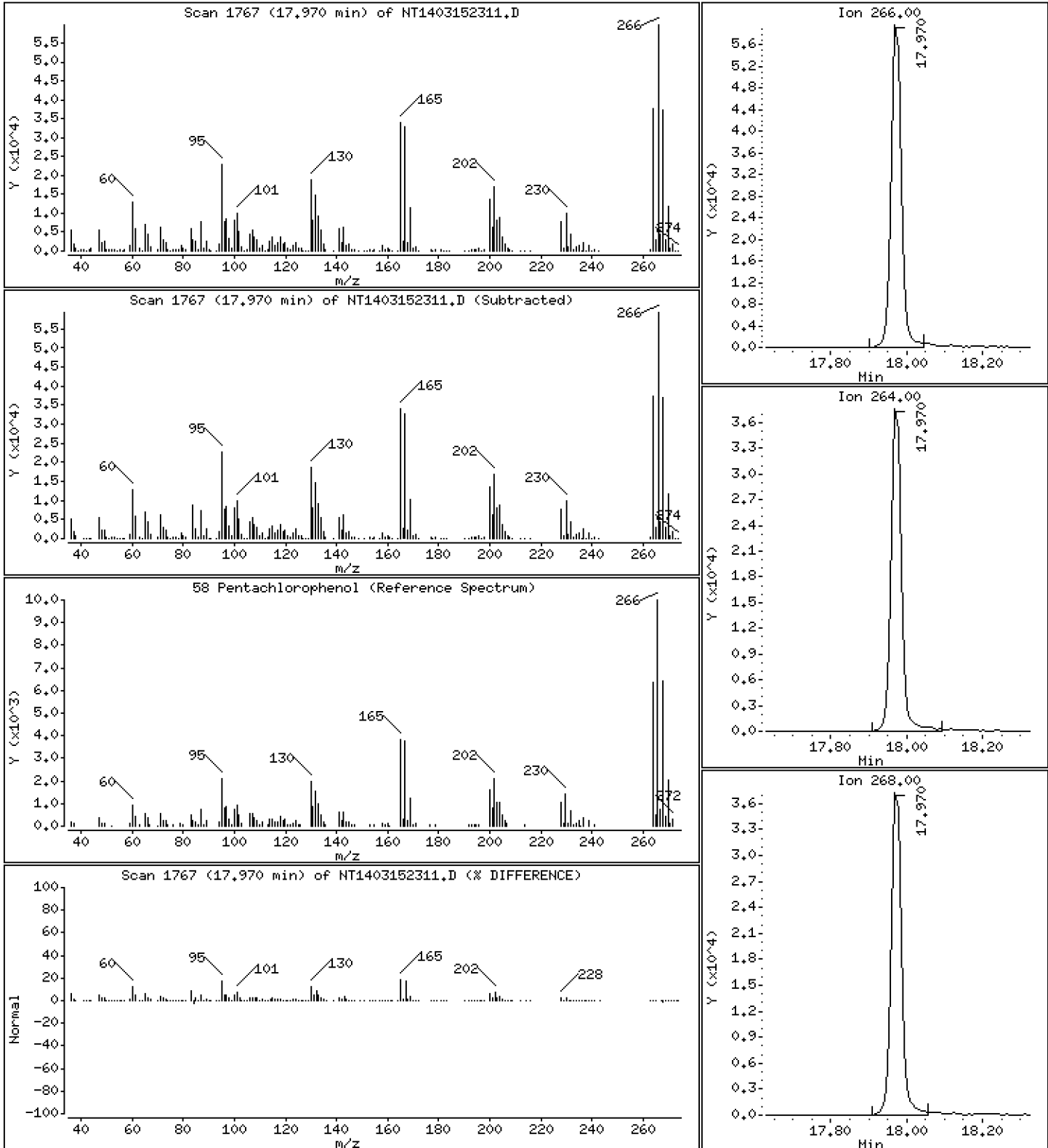
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,477 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

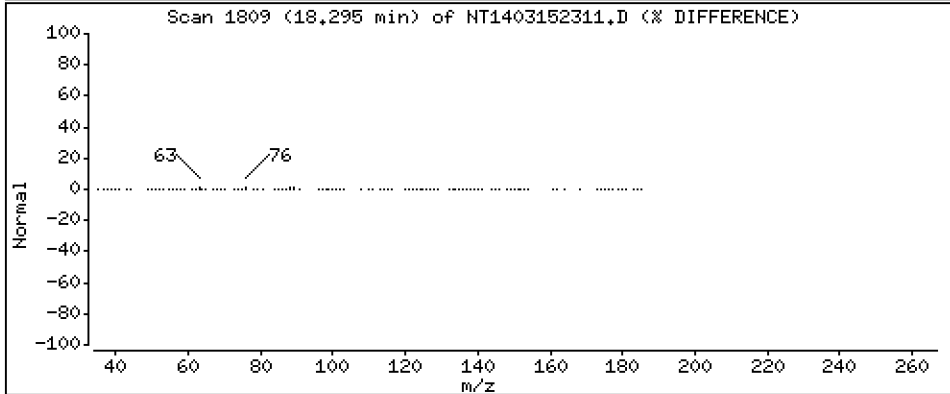
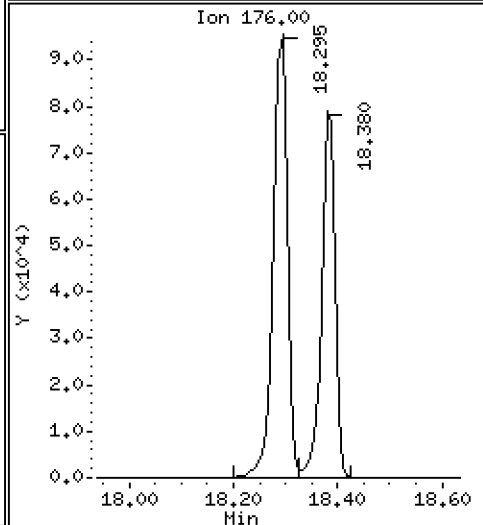
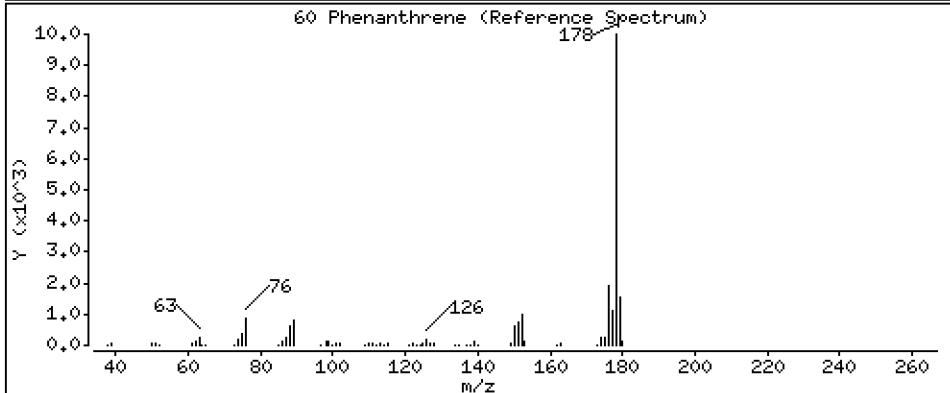
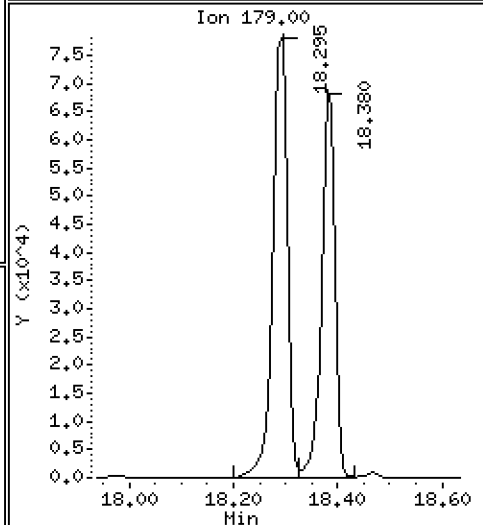
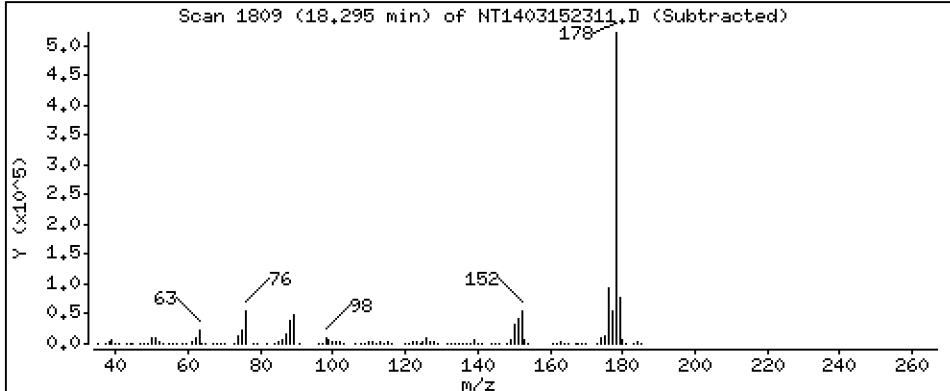
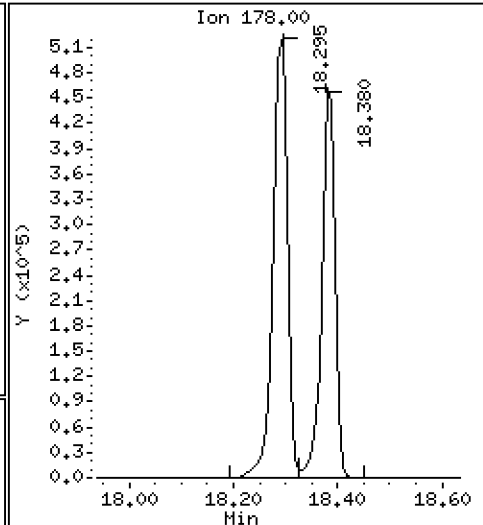
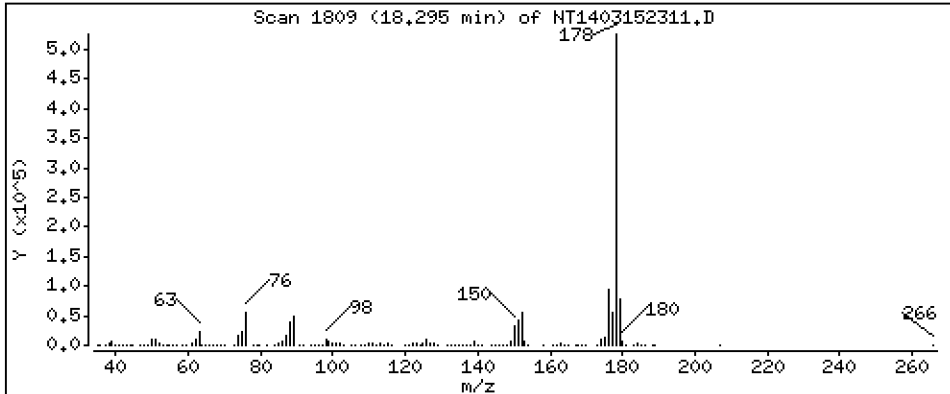
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,734 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

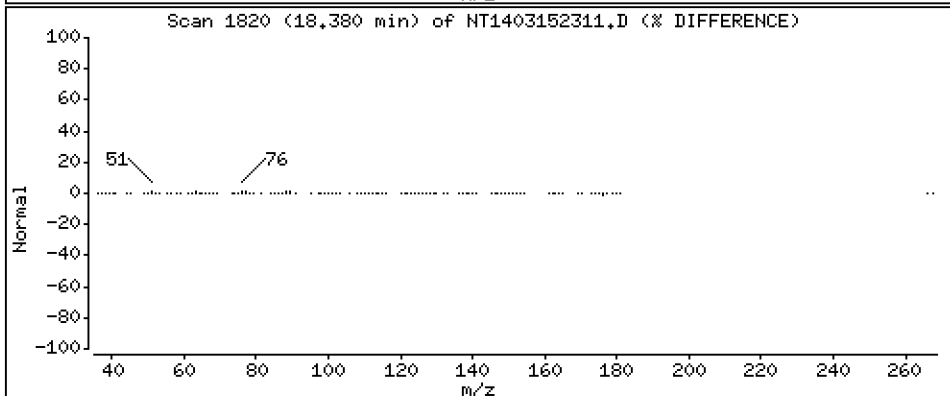
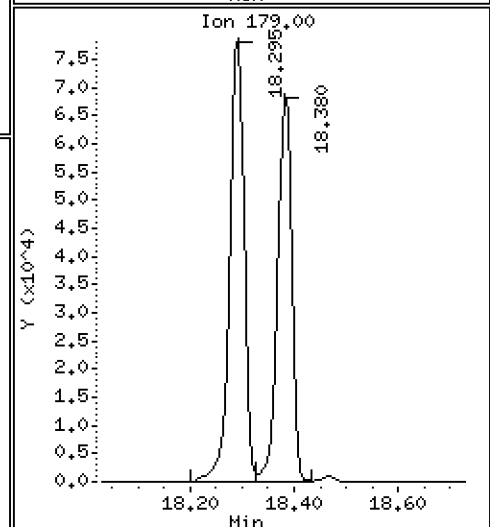
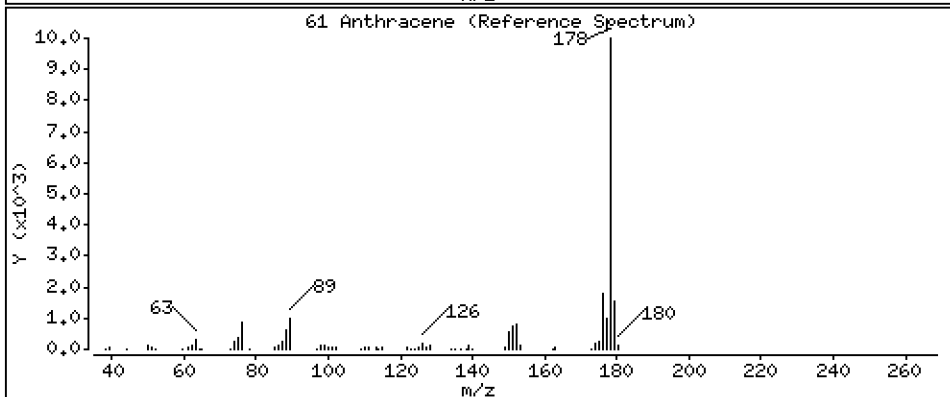
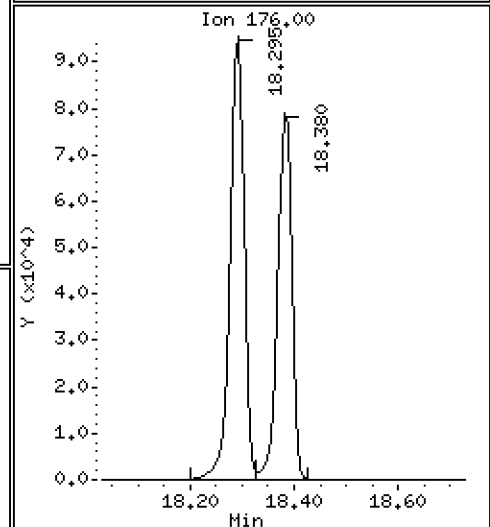
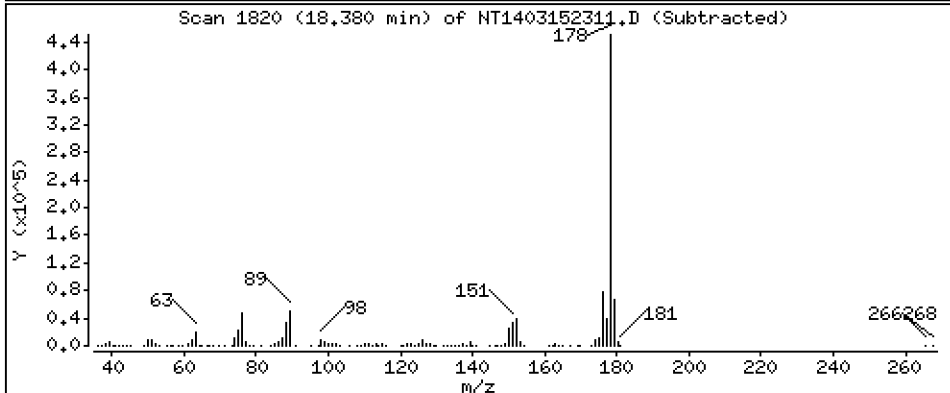
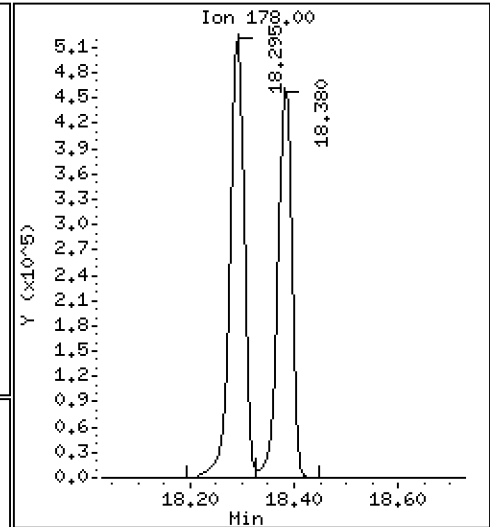
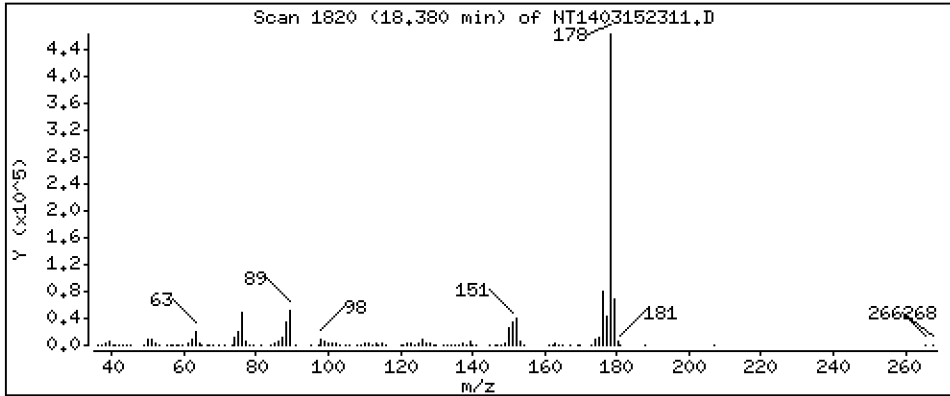
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,281 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

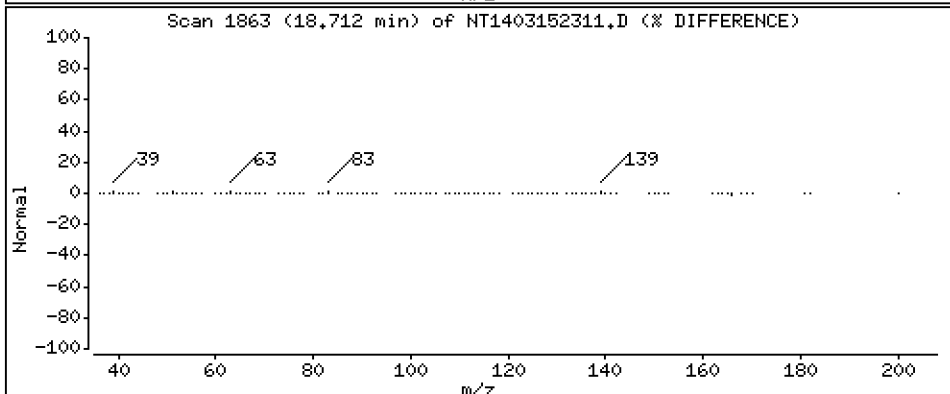
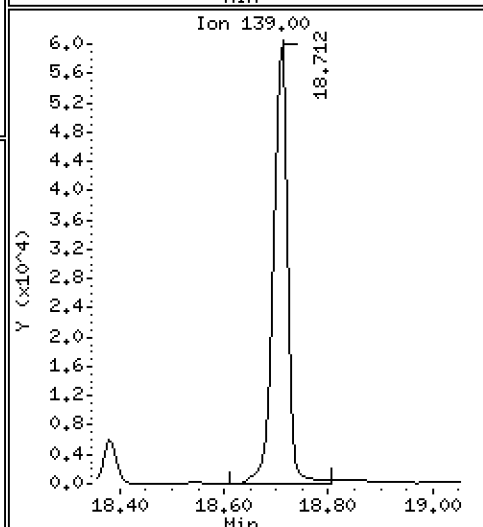
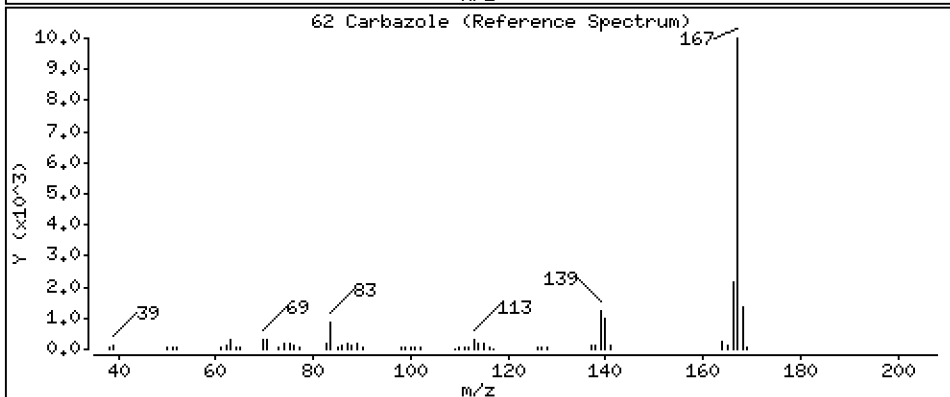
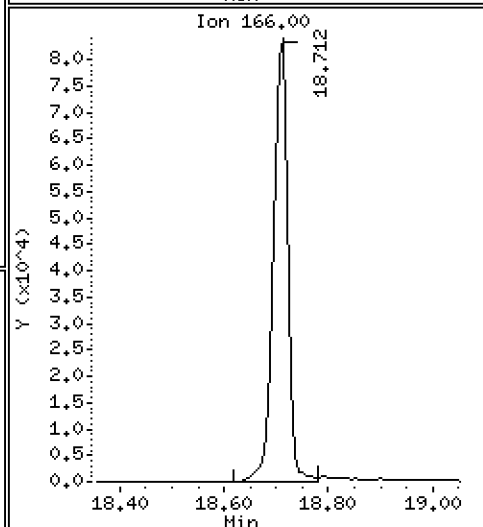
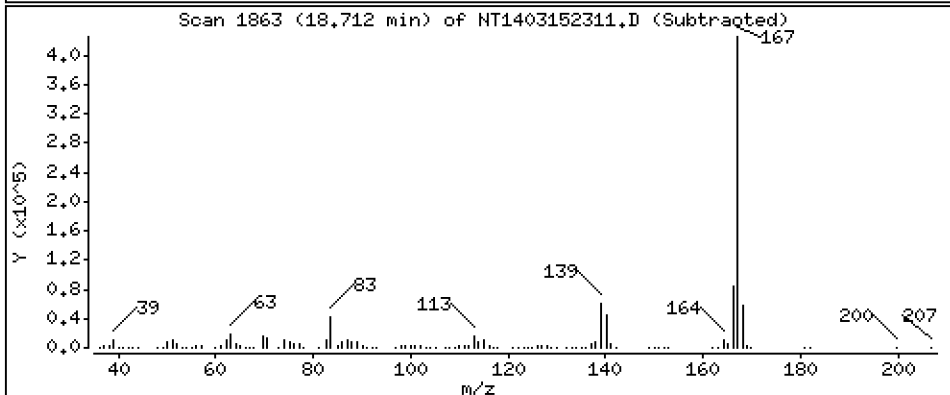
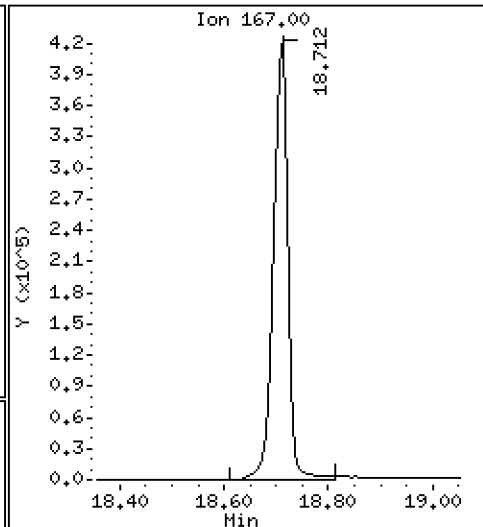
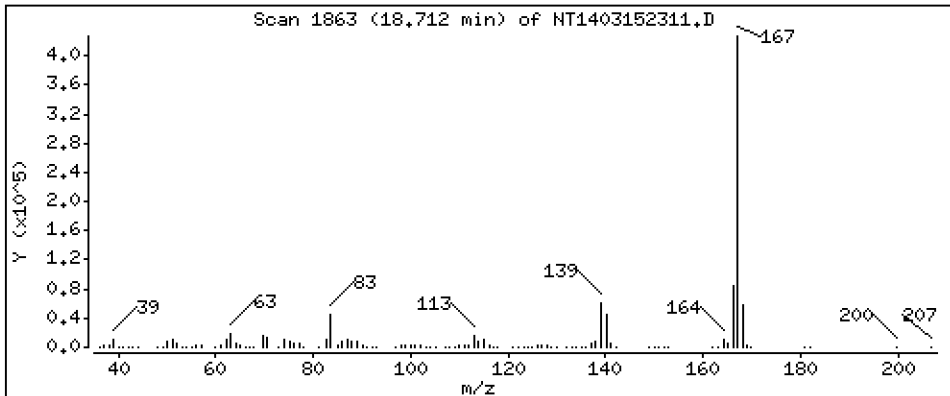
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,587 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

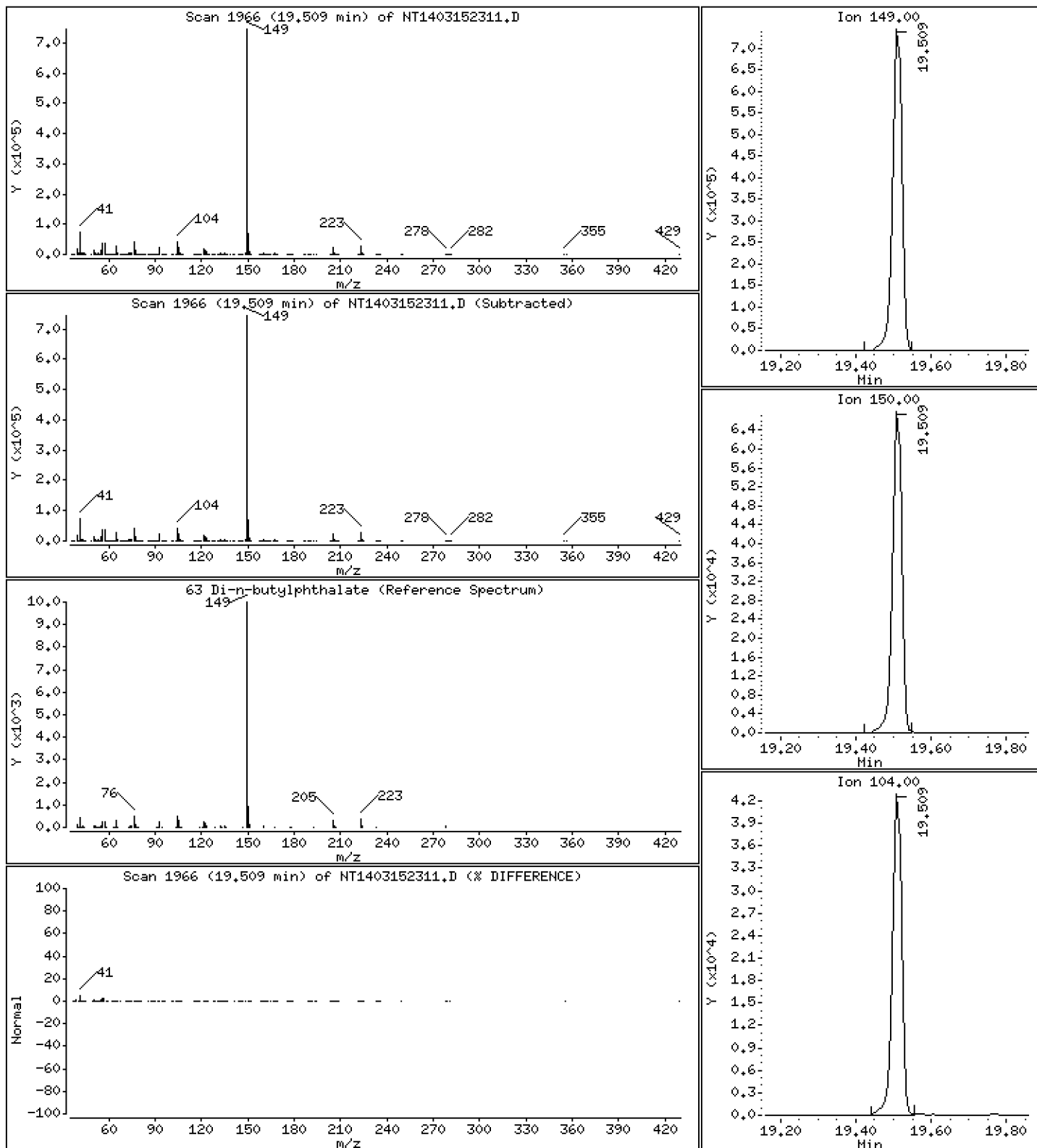
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,507 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

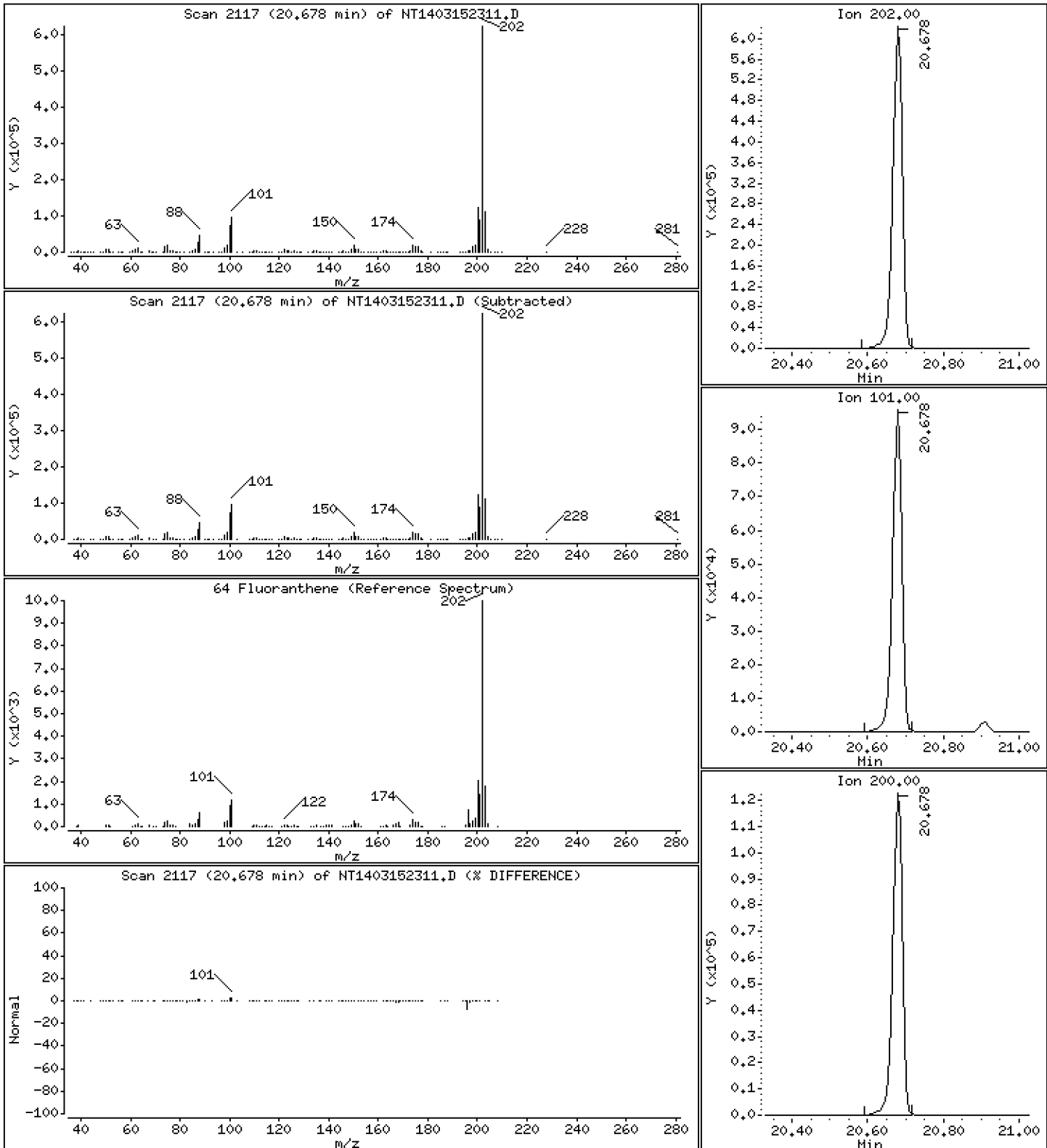
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 5,024 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

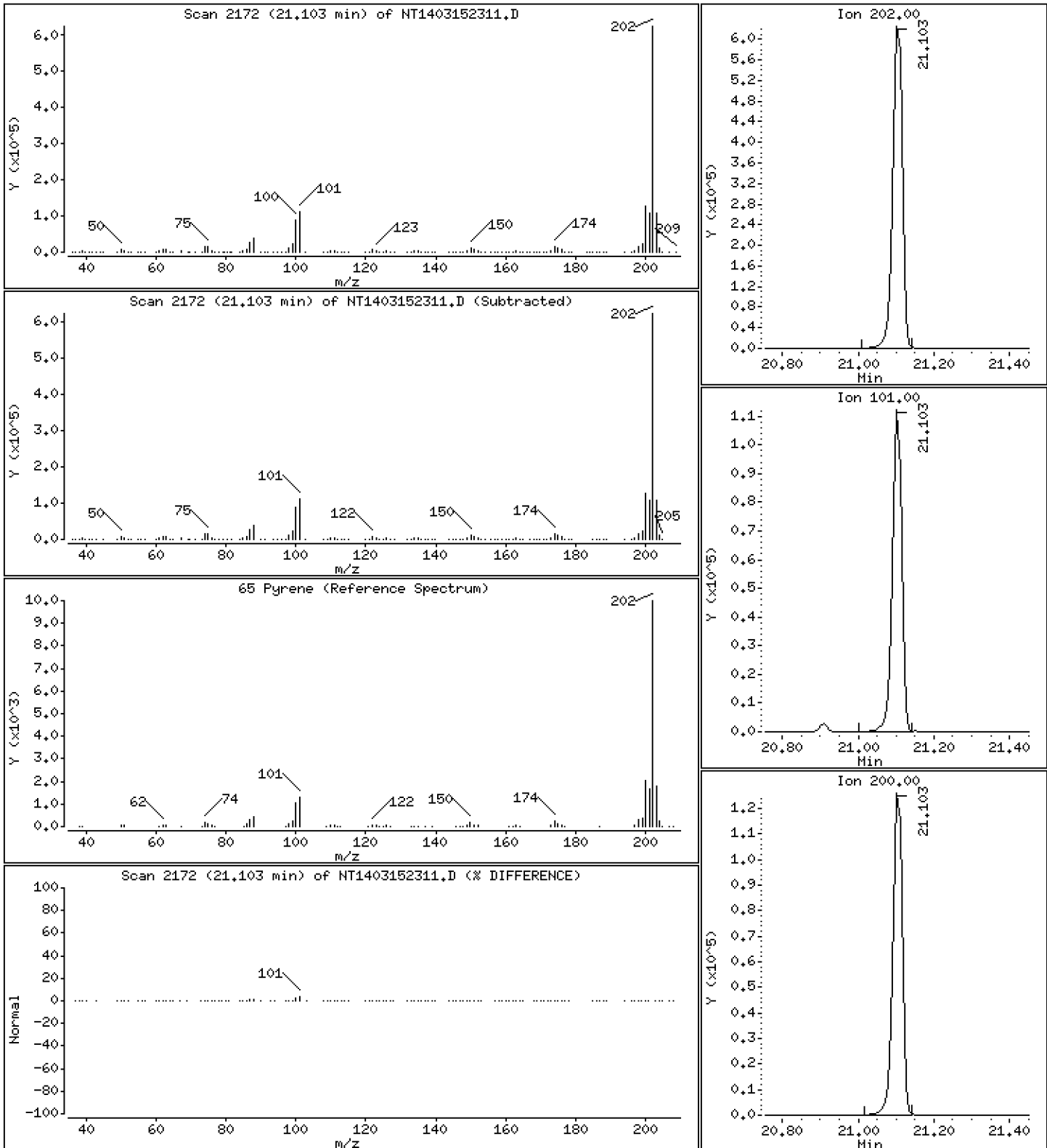
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,958 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

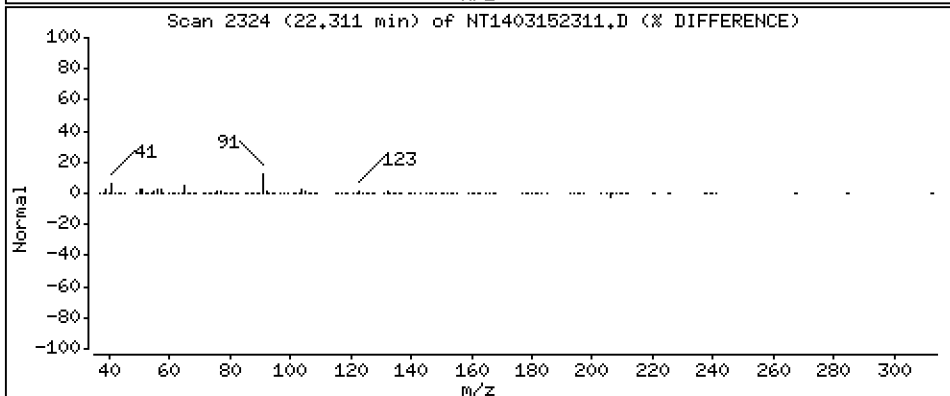
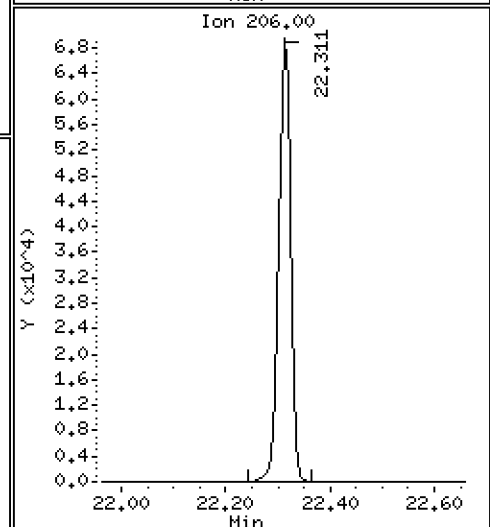
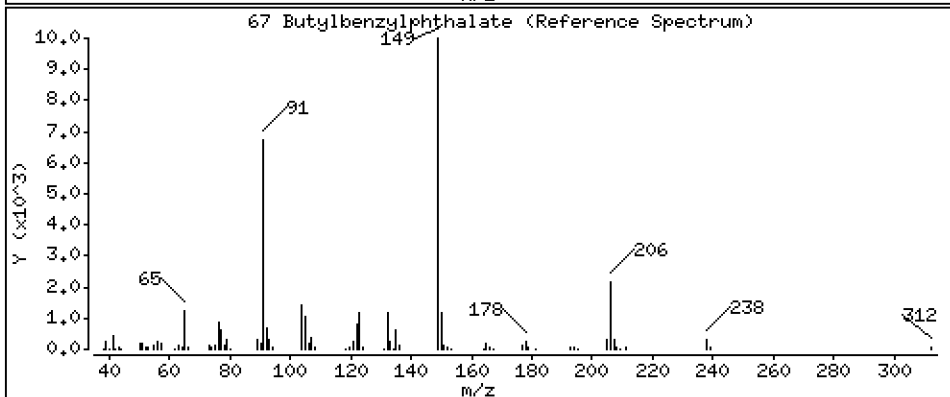
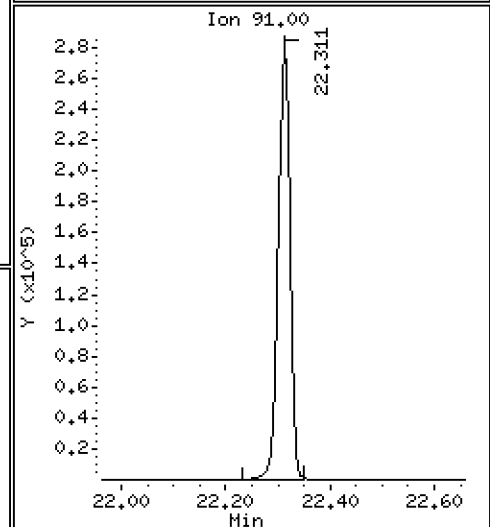
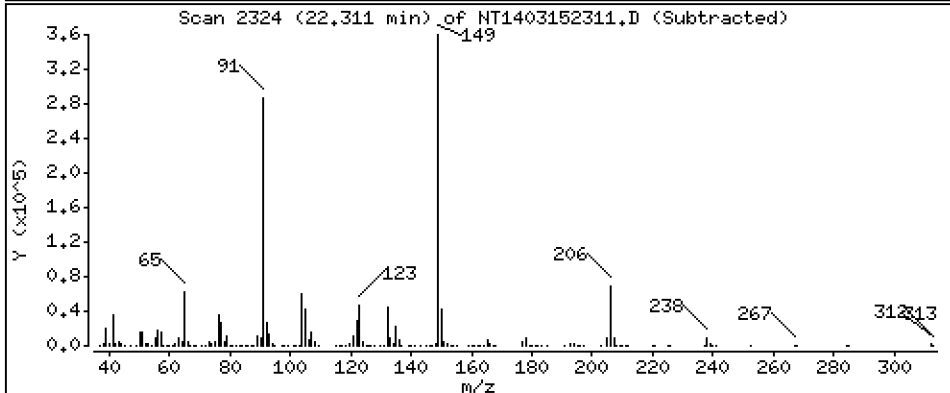
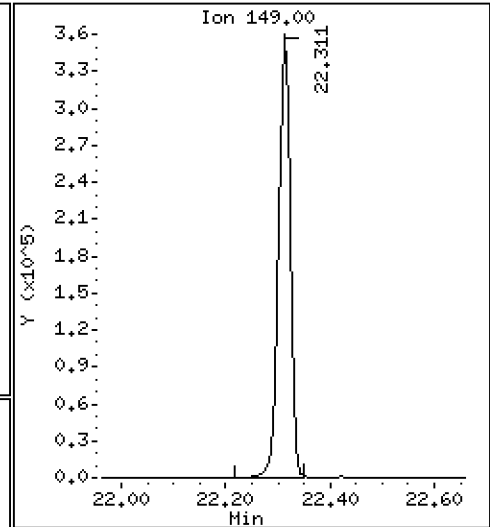
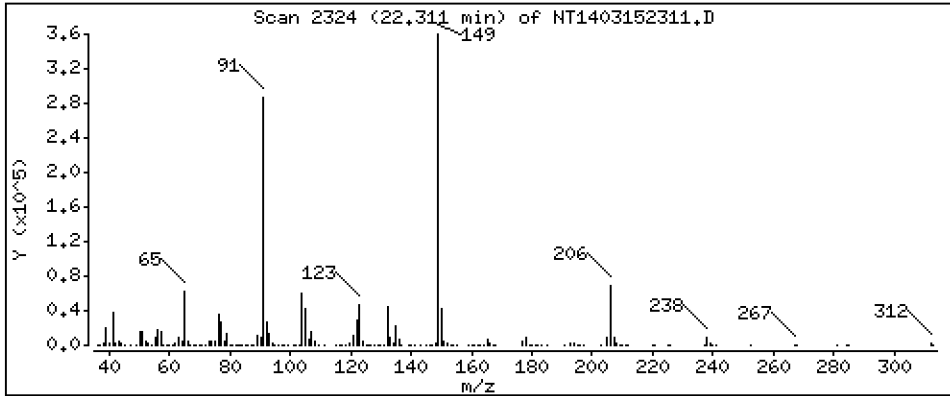
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,737 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

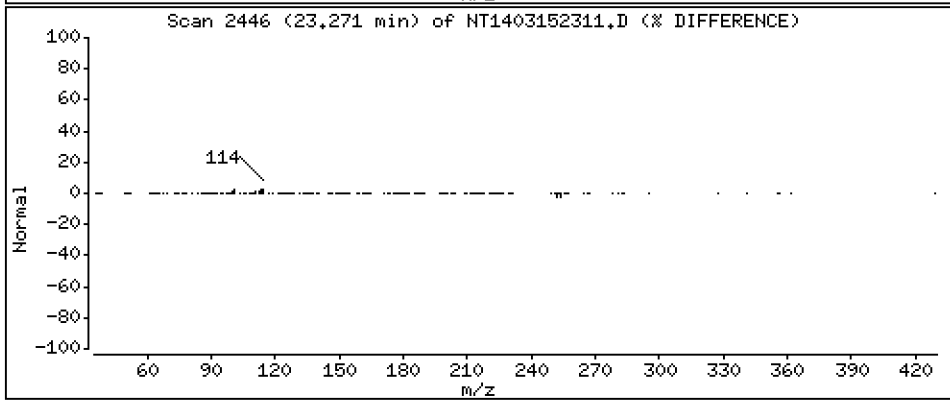
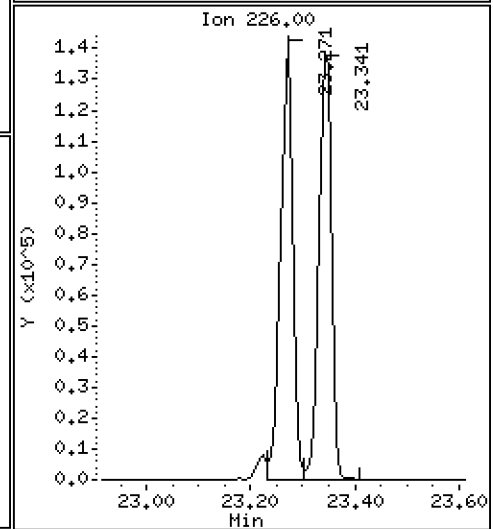
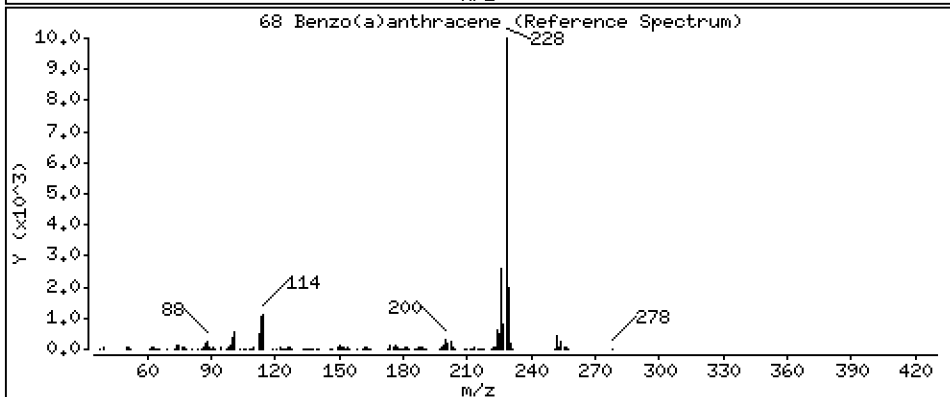
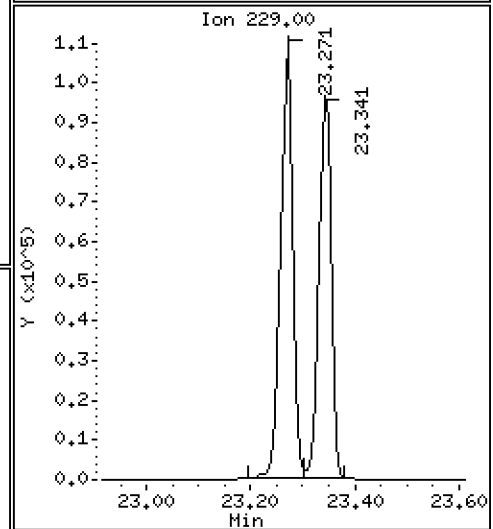
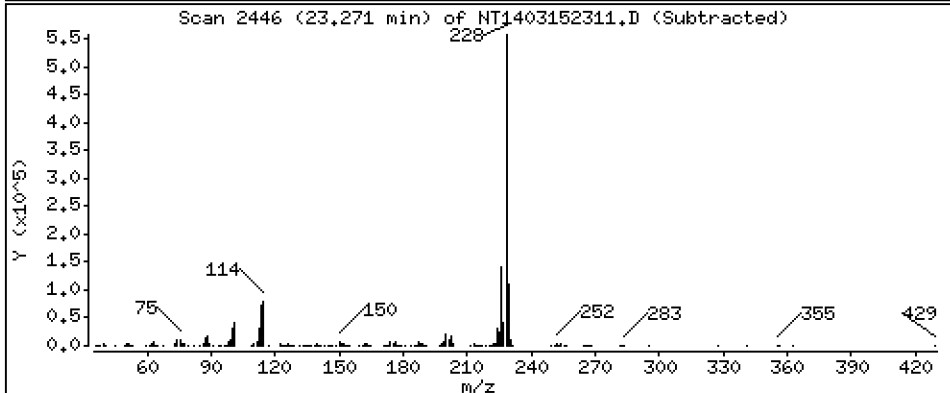
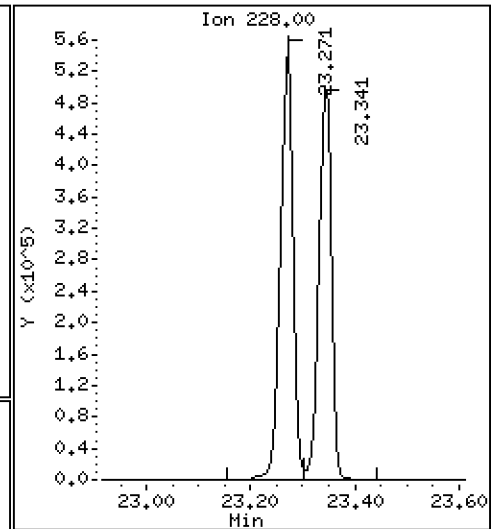
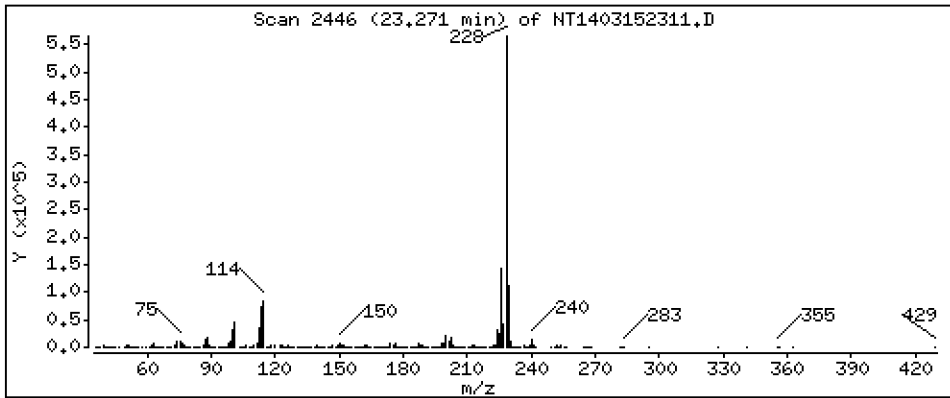
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,827 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

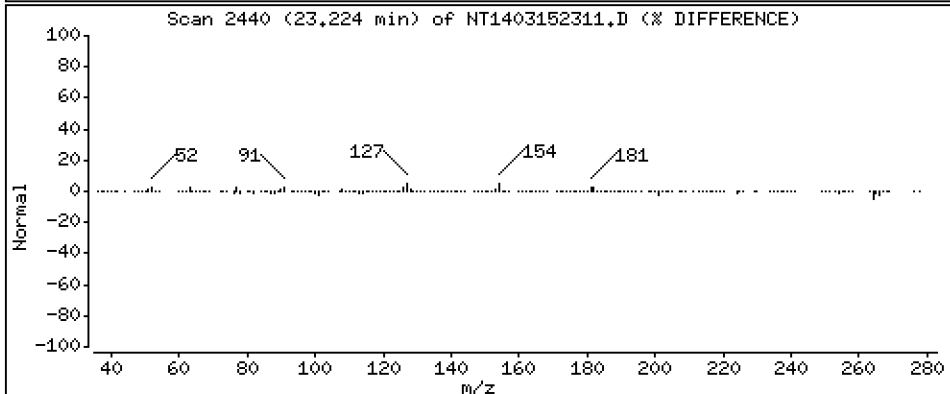
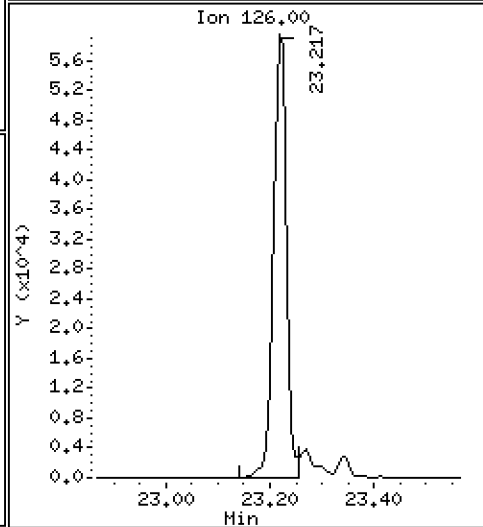
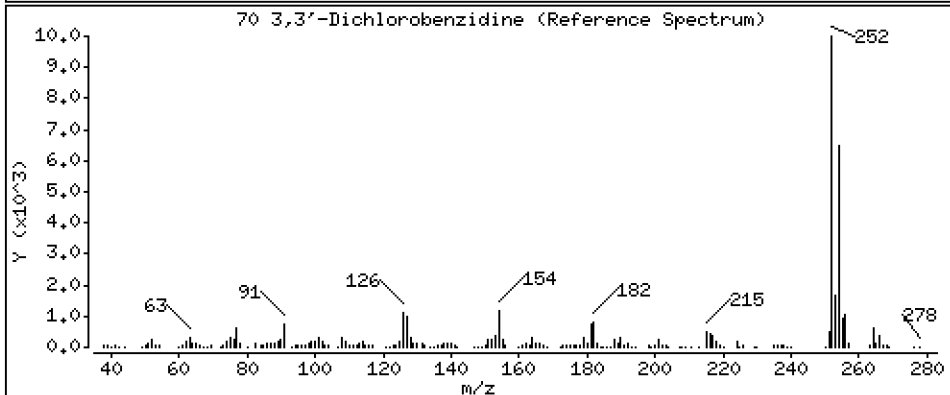
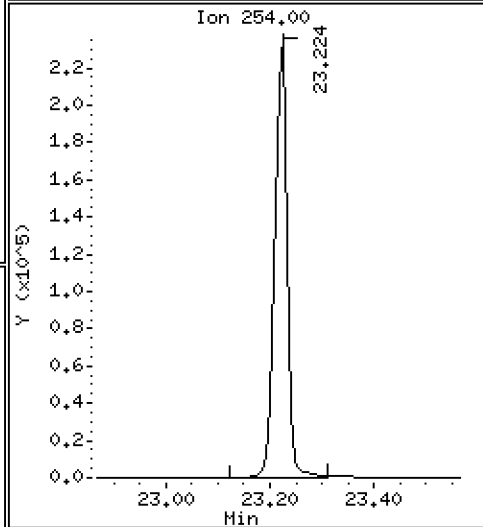
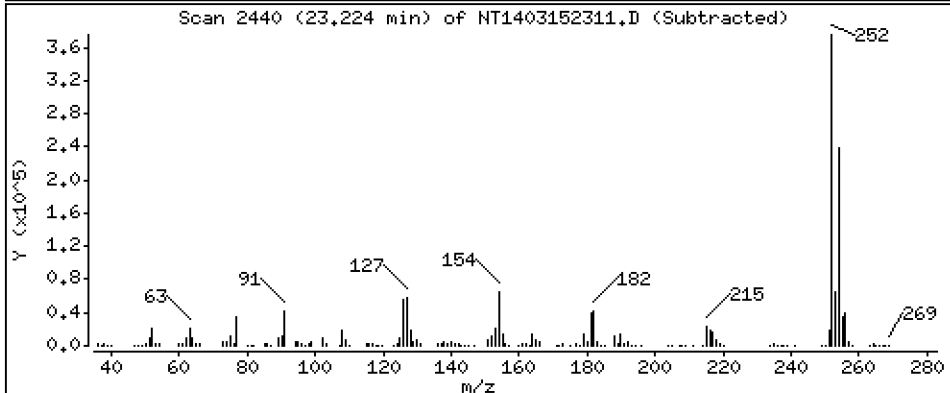
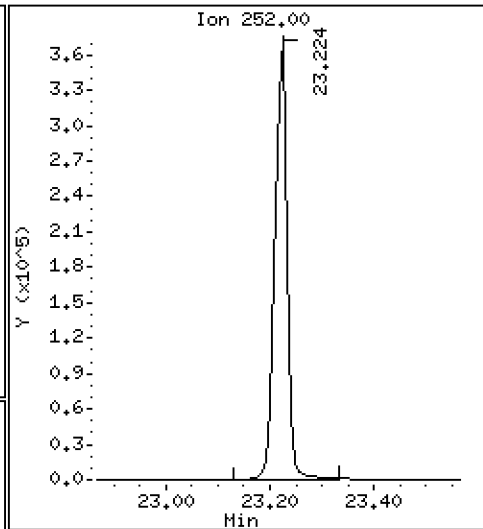
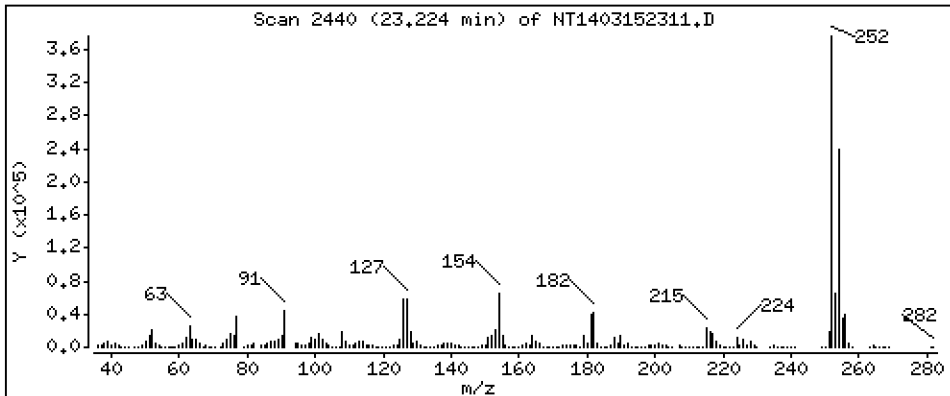
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 10,65 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

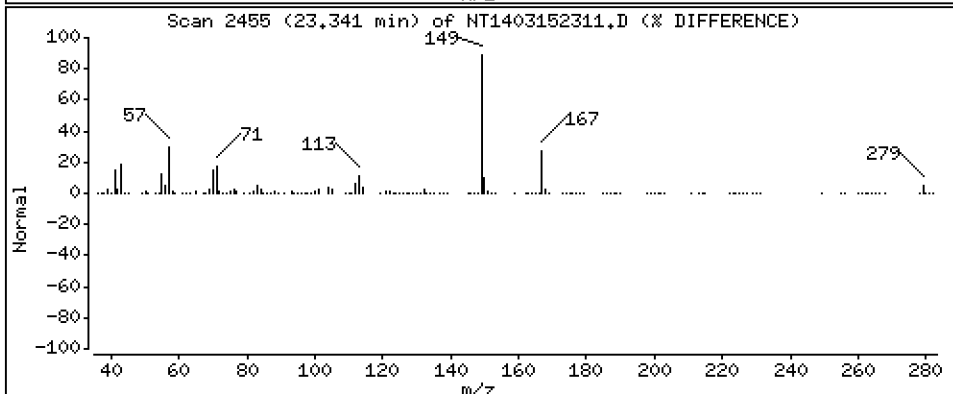
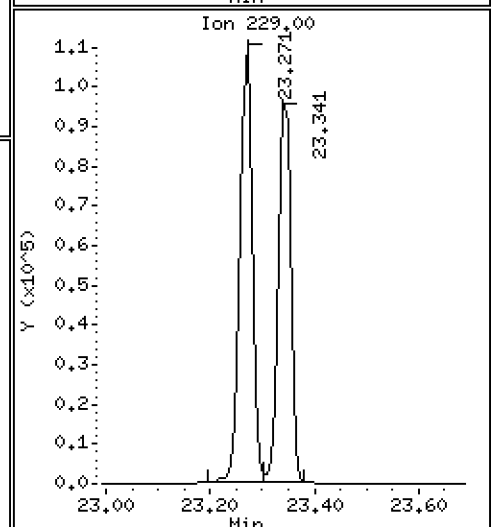
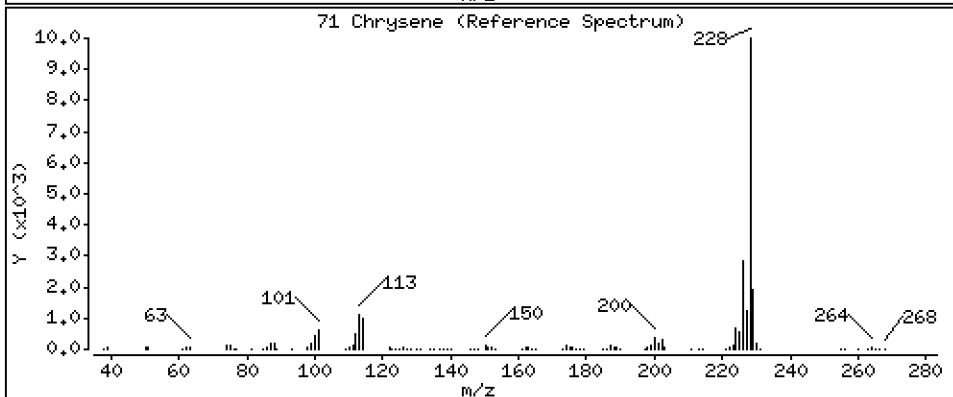
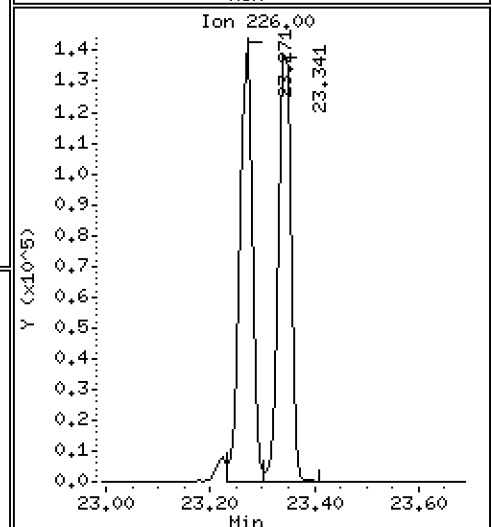
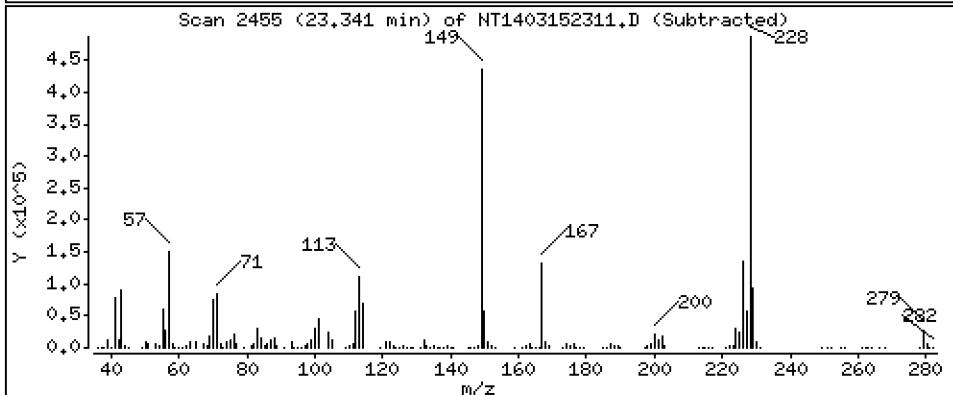
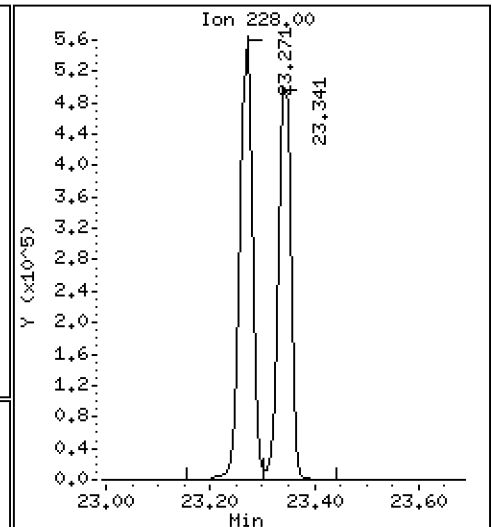
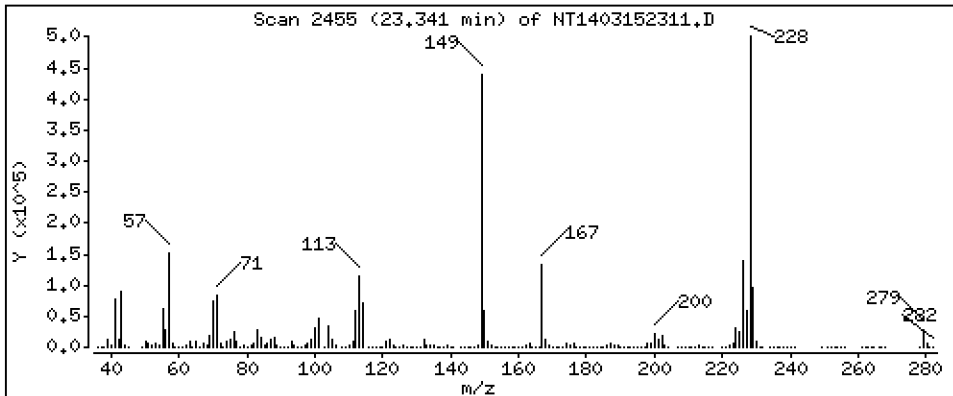
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 4,723 ug/mL

71 Chrysene



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

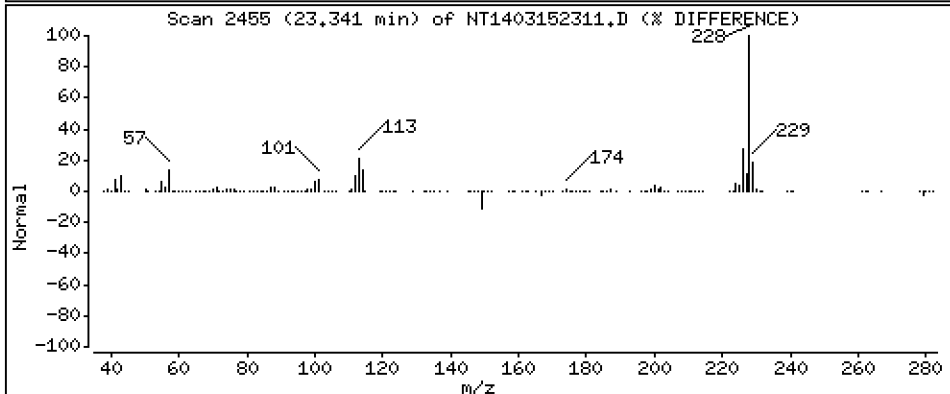
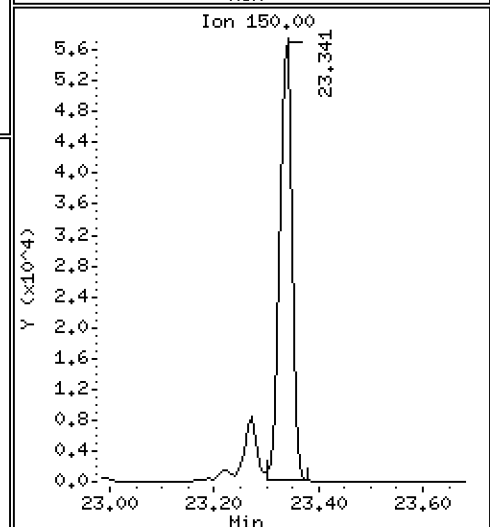
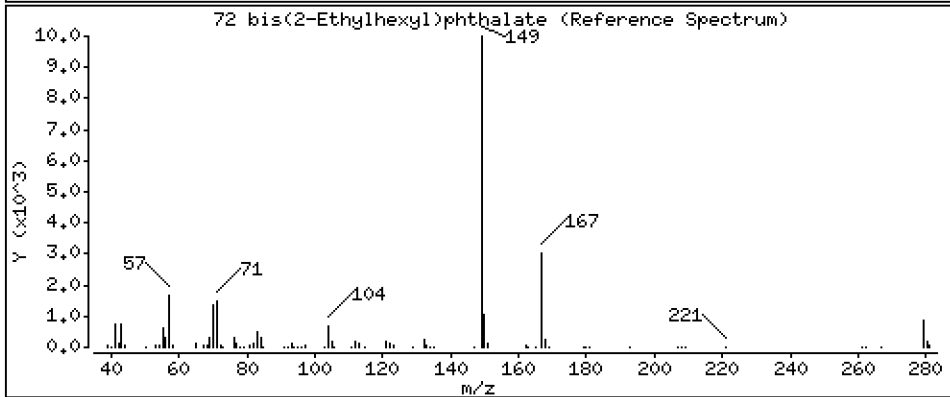
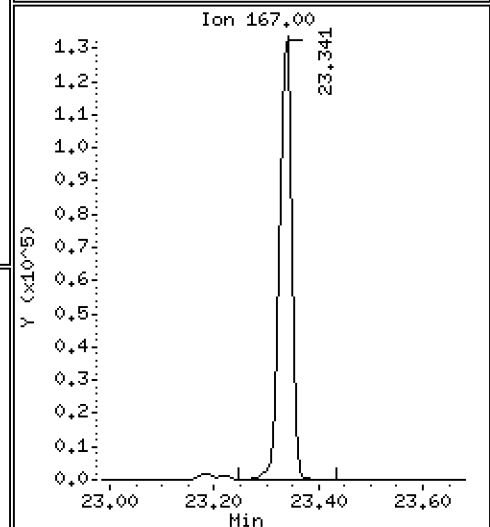
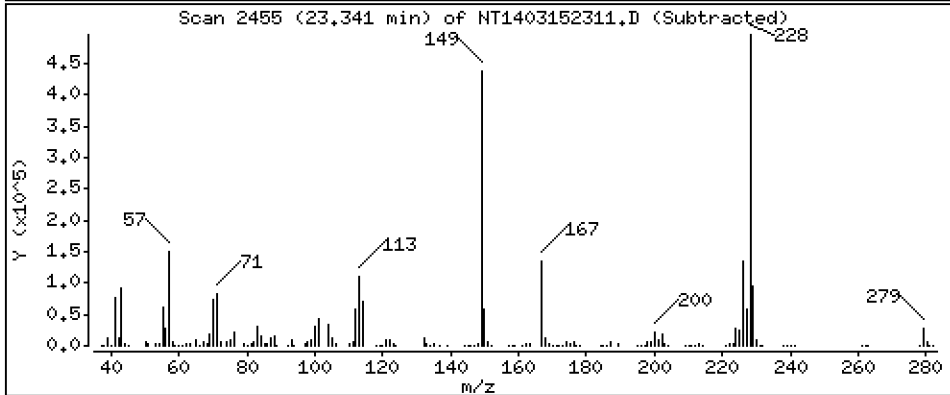
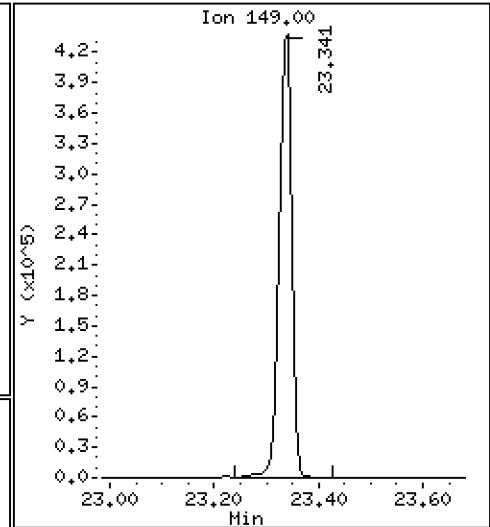
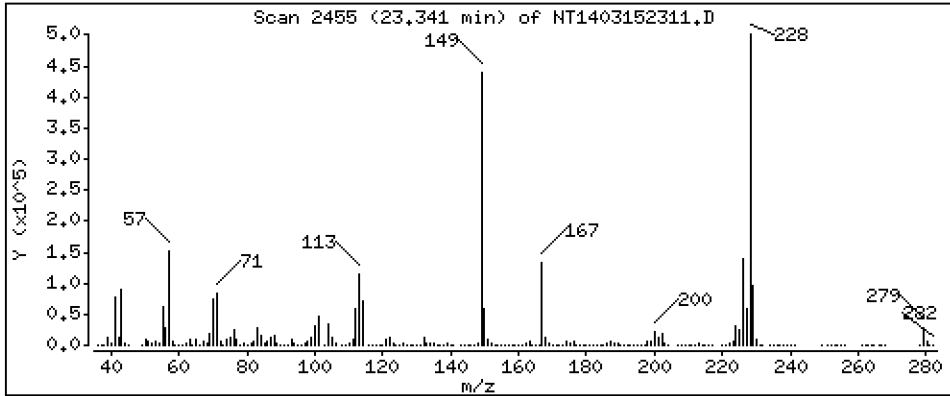
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 5,428 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

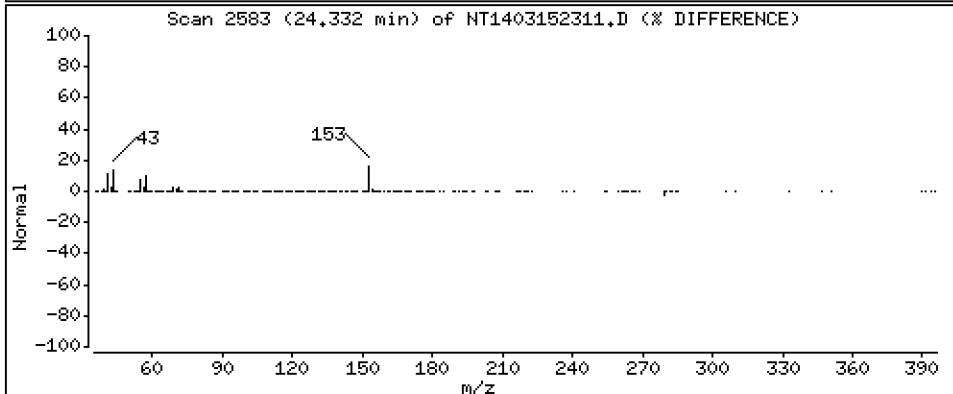
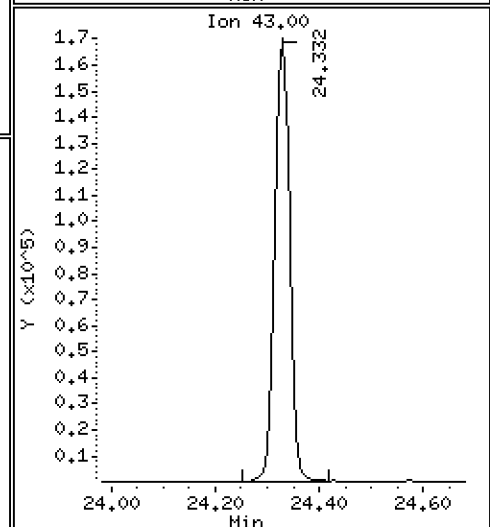
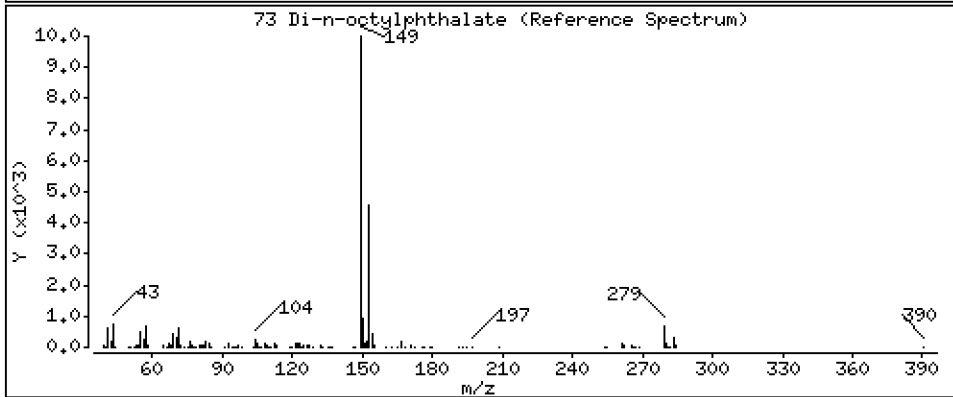
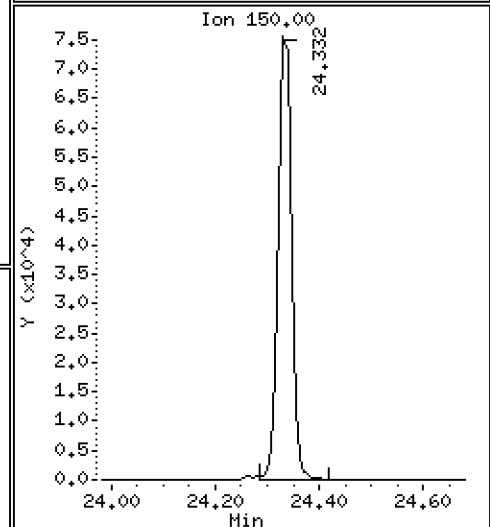
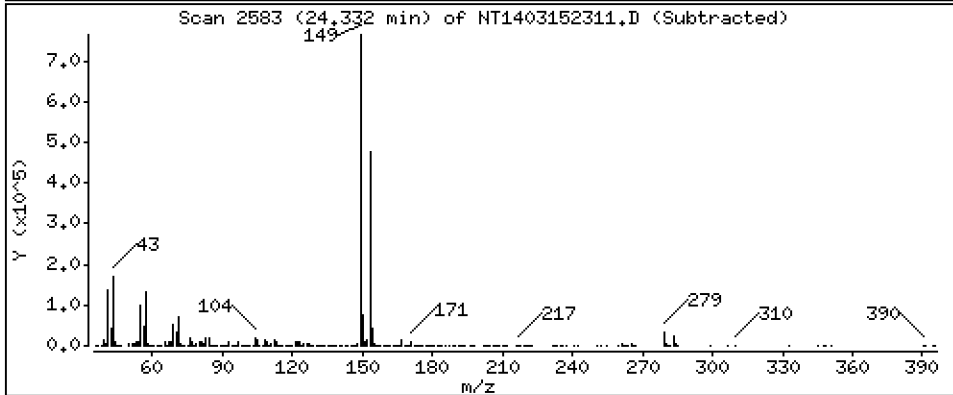
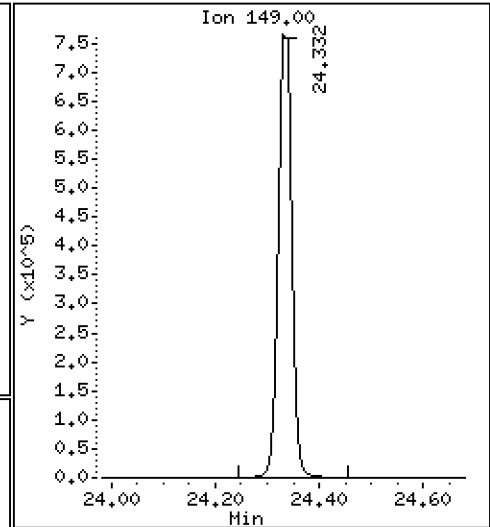
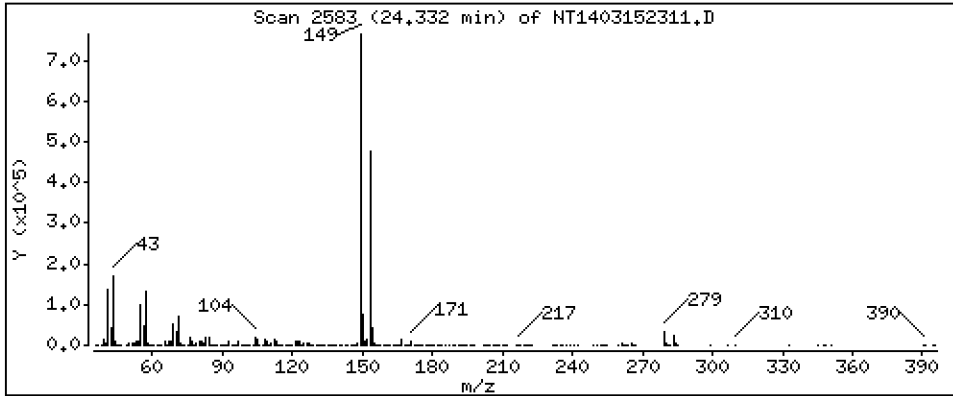
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,135 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

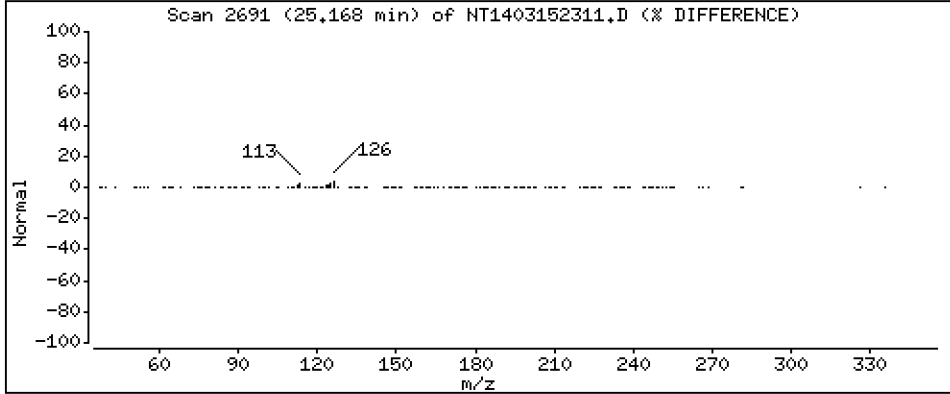
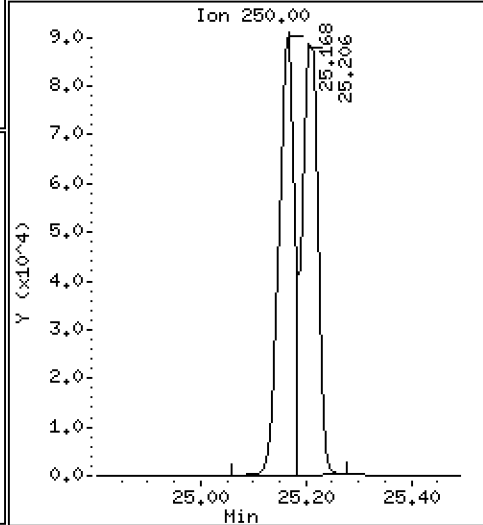
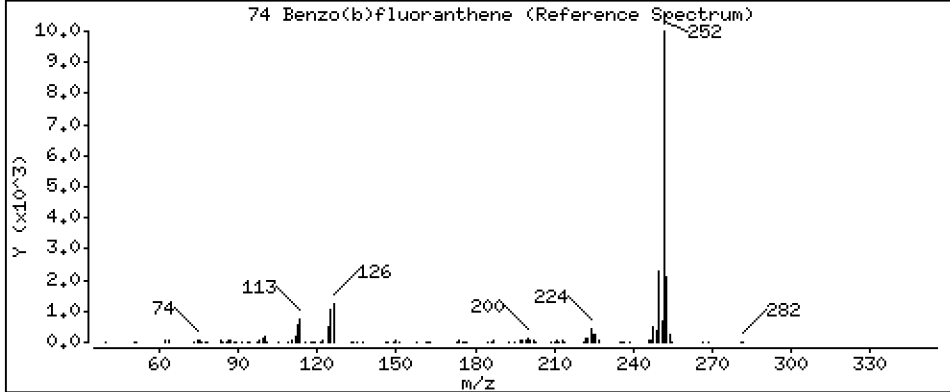
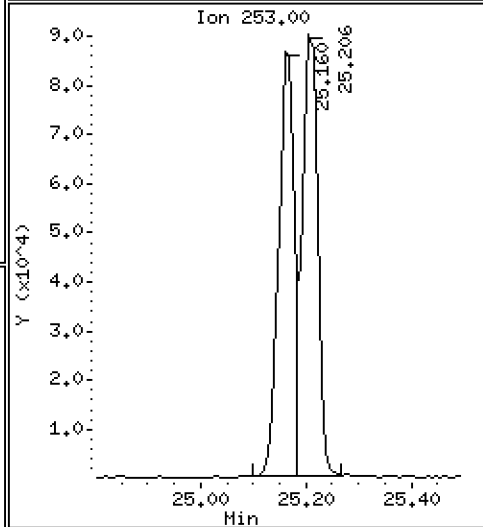
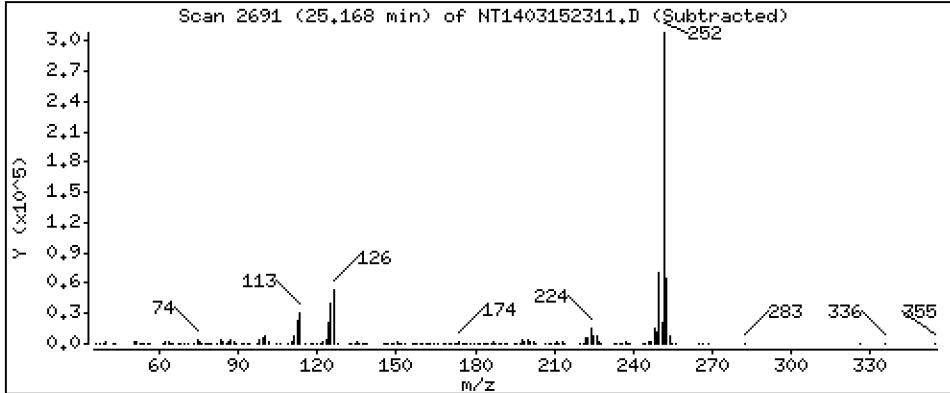
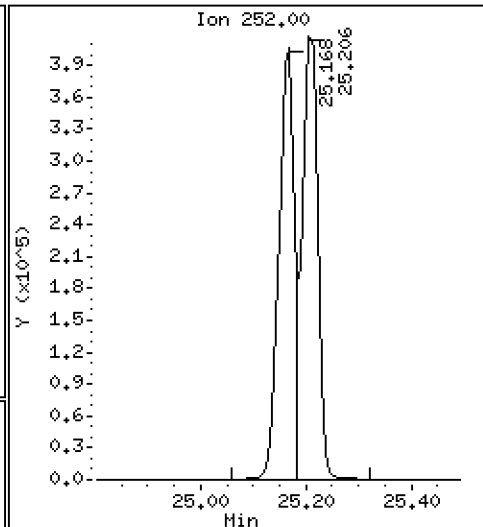
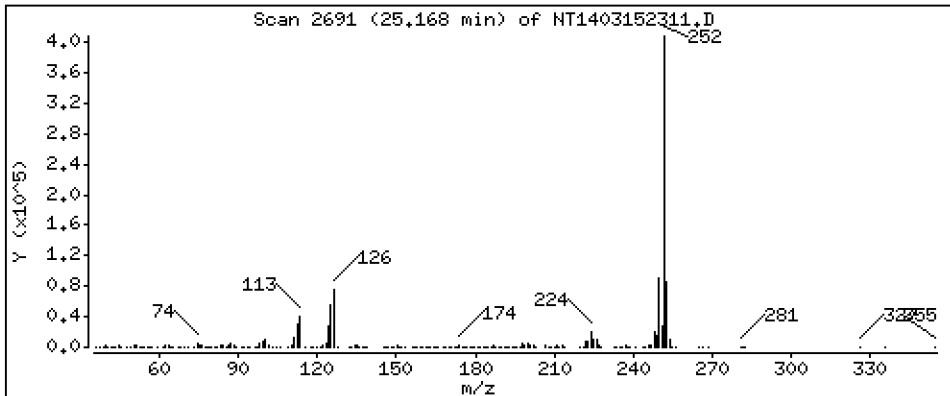
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,774 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

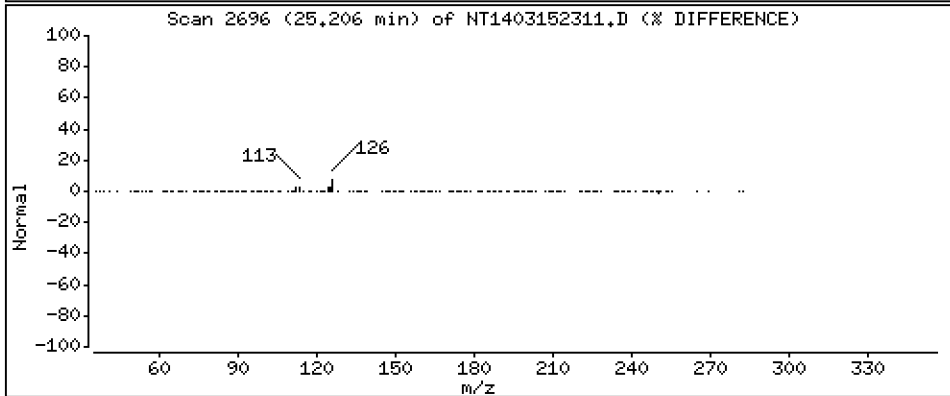
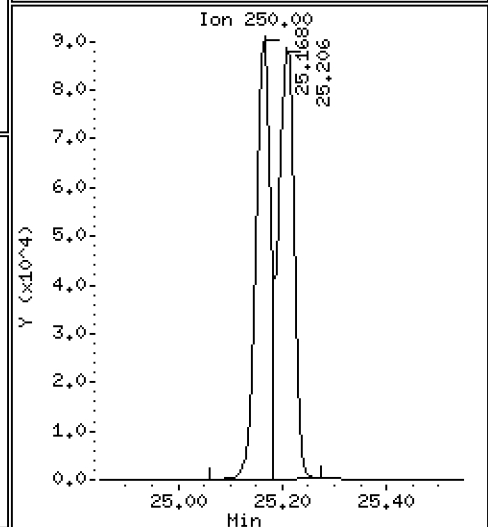
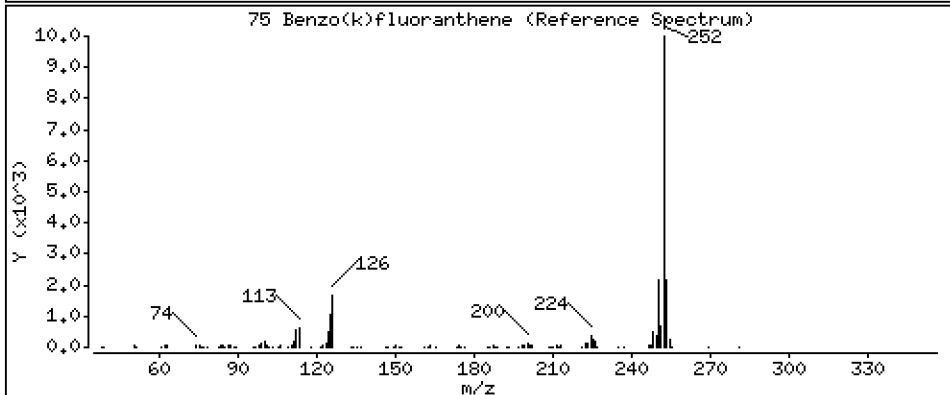
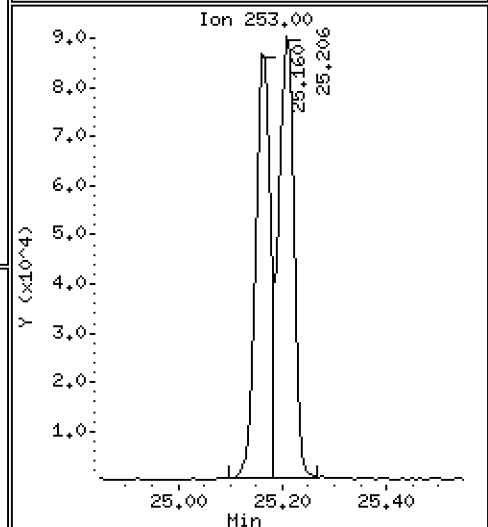
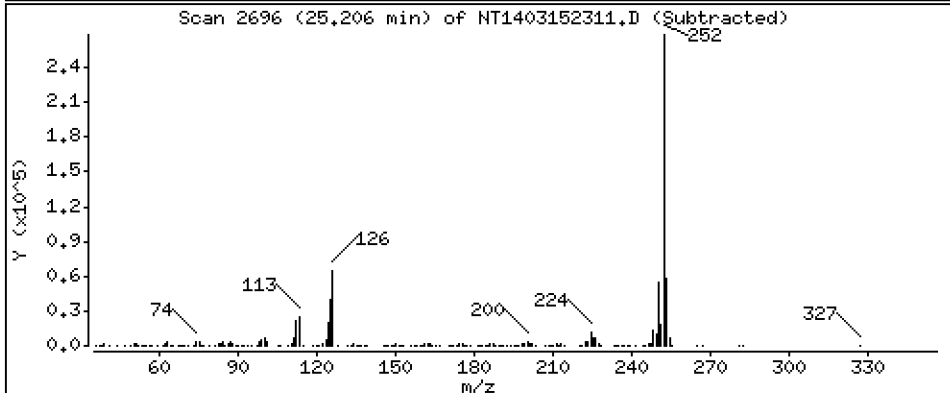
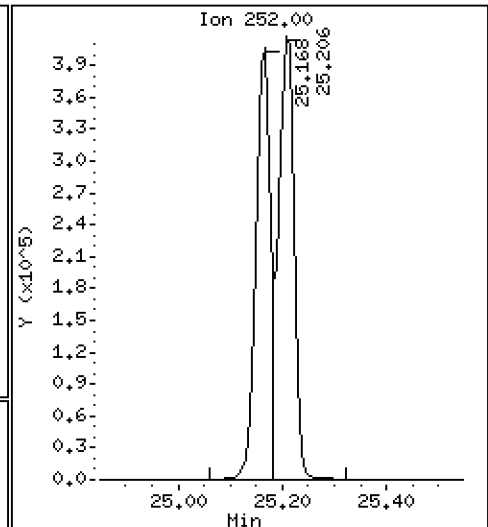
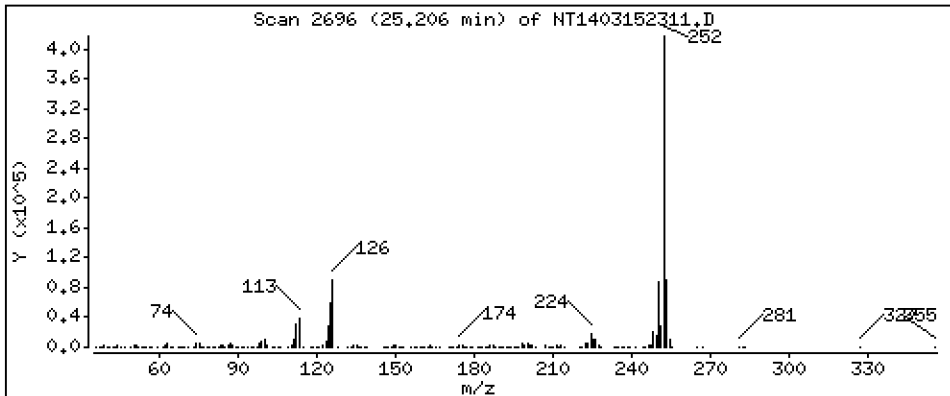
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

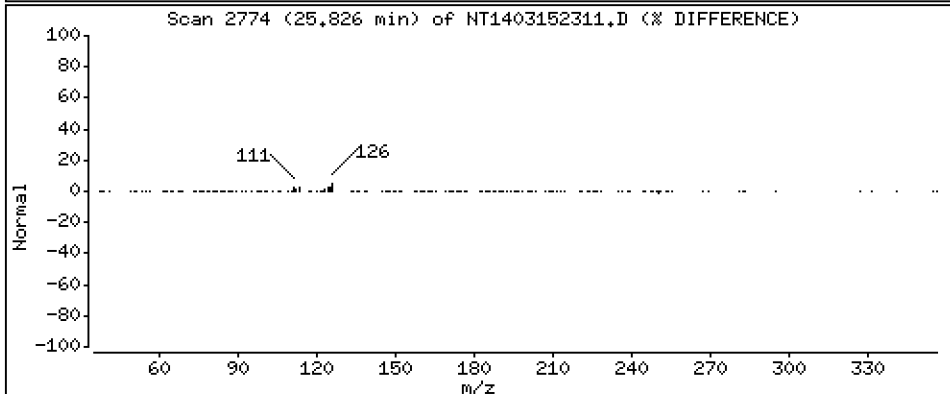
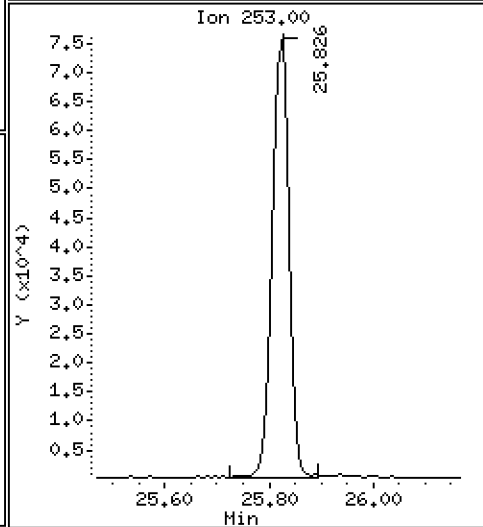
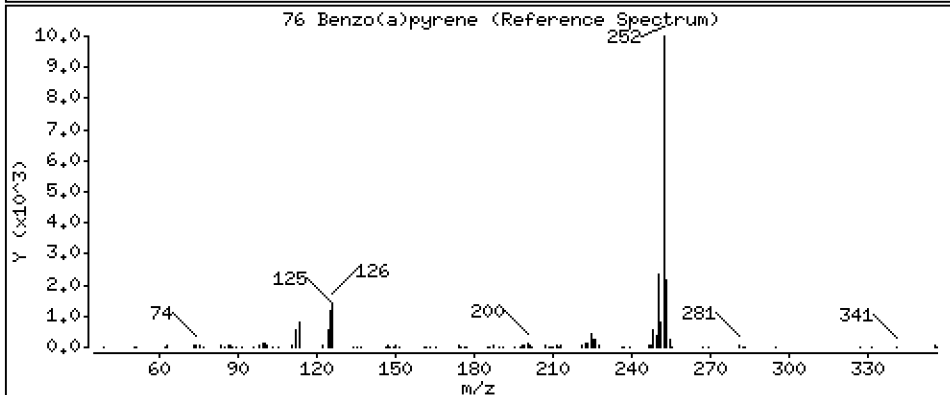
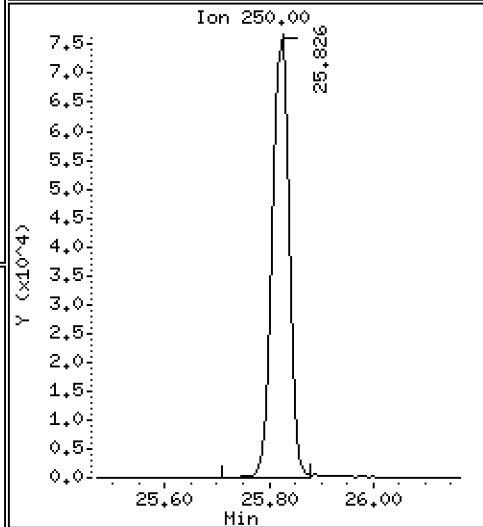
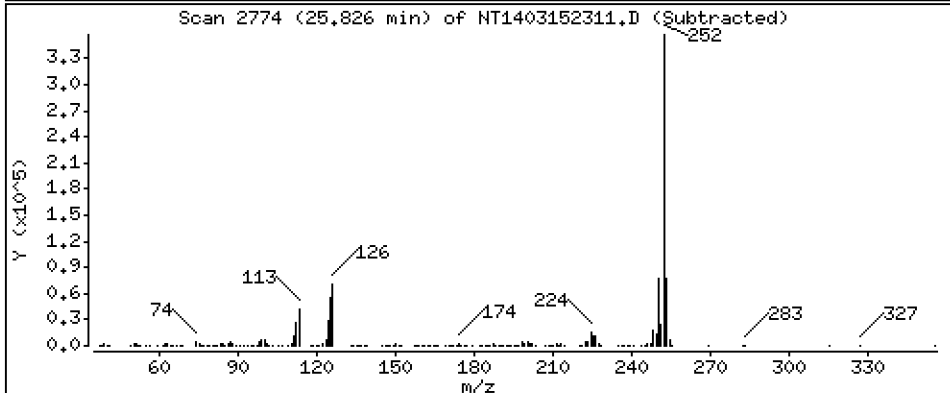
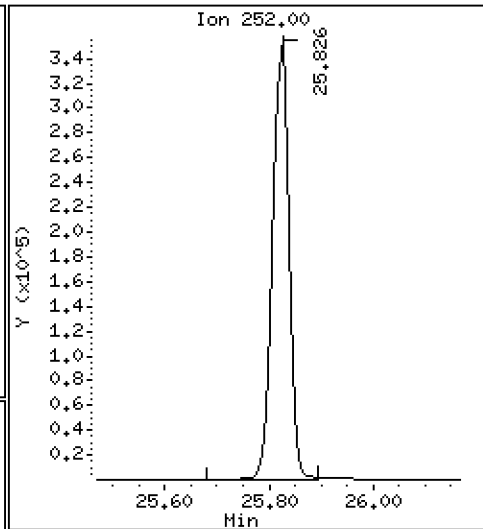
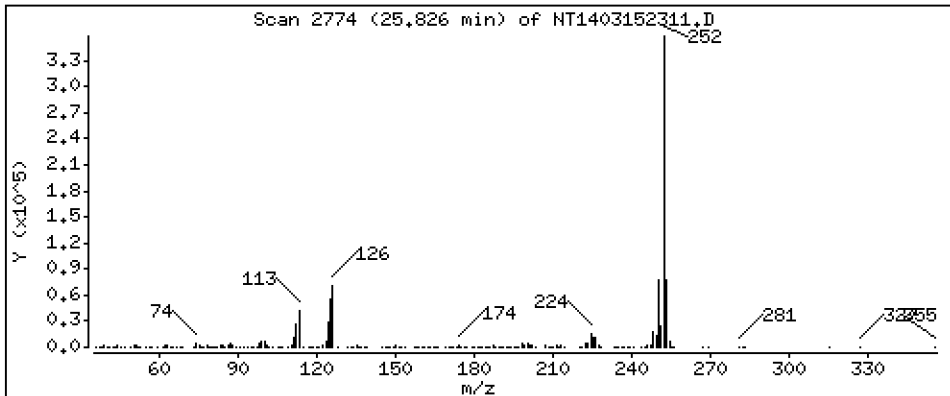
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,978 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

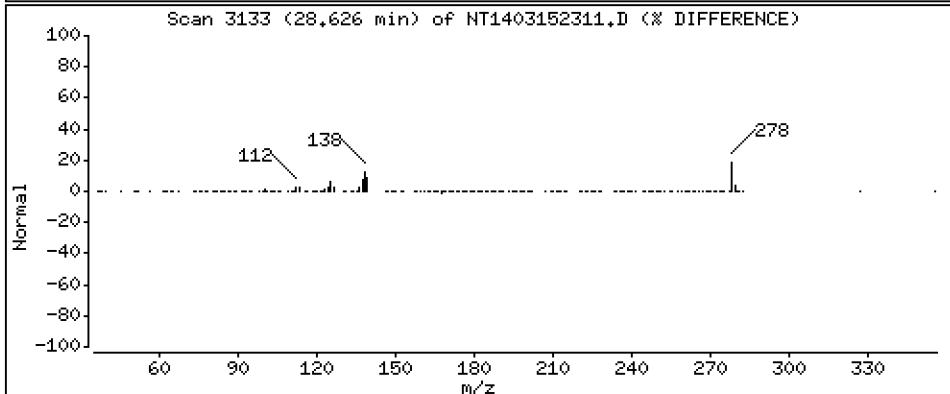
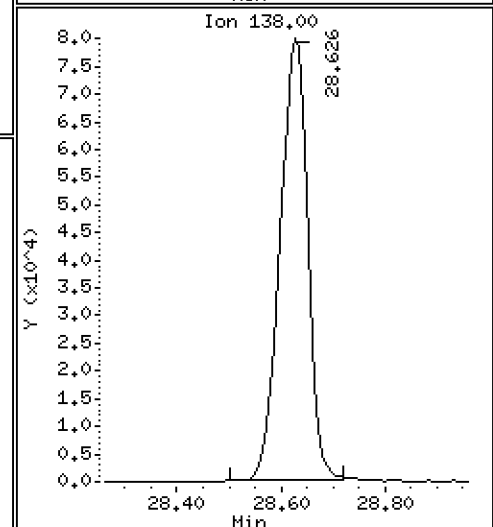
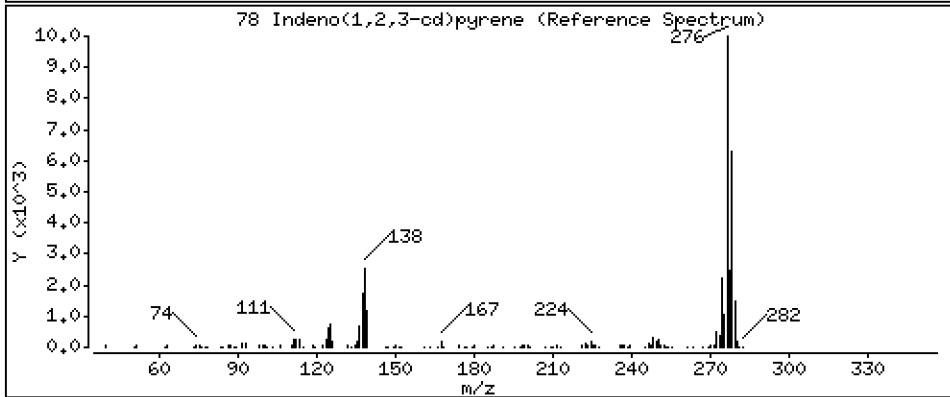
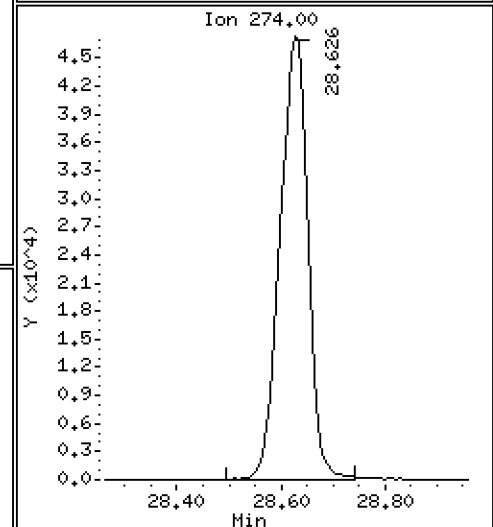
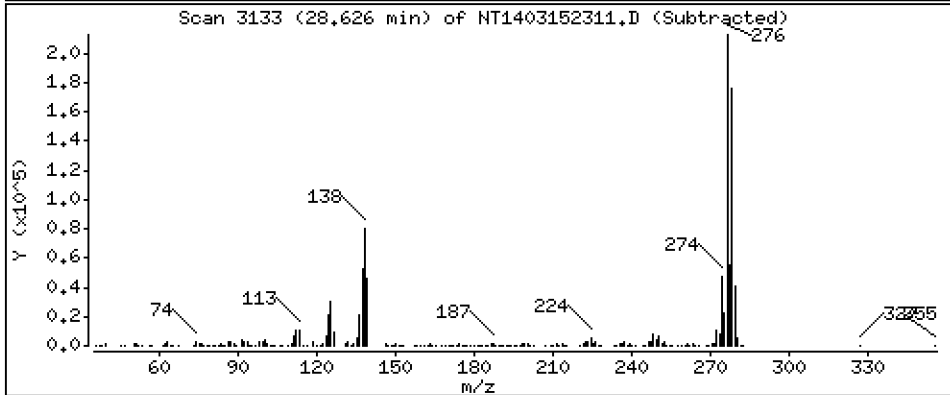
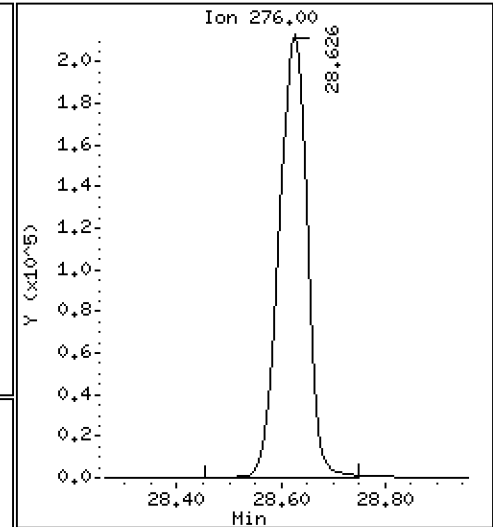
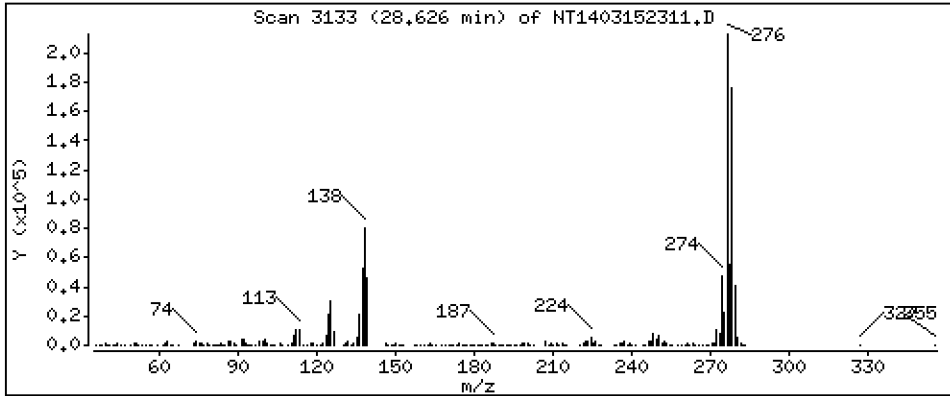
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,943 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

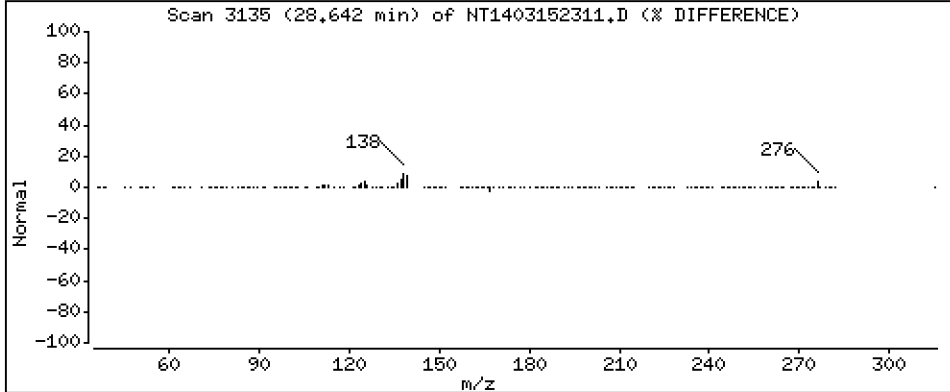
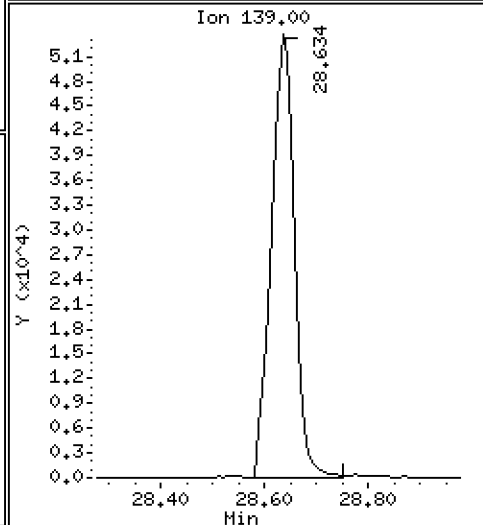
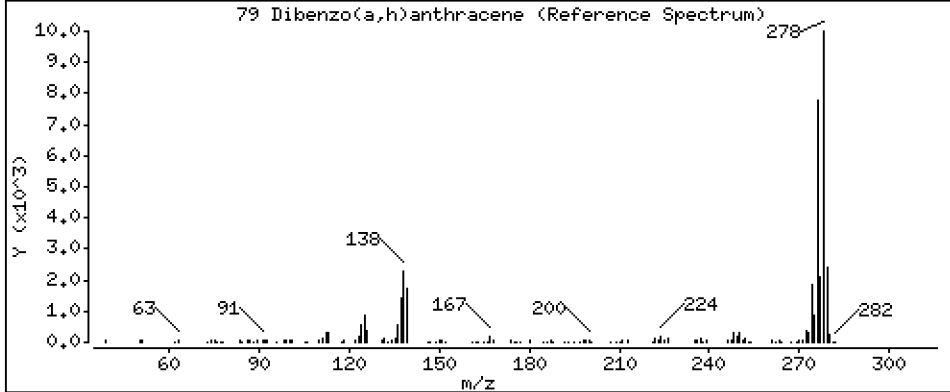
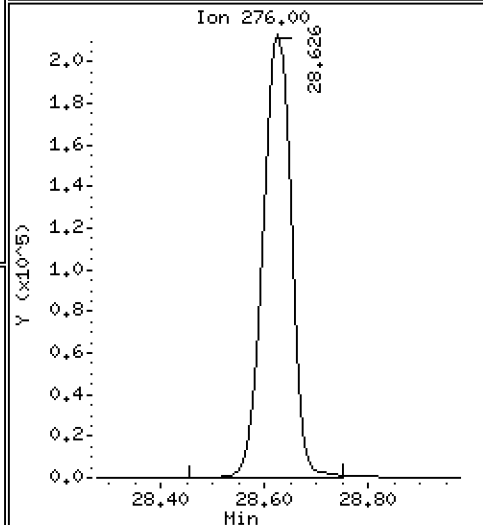
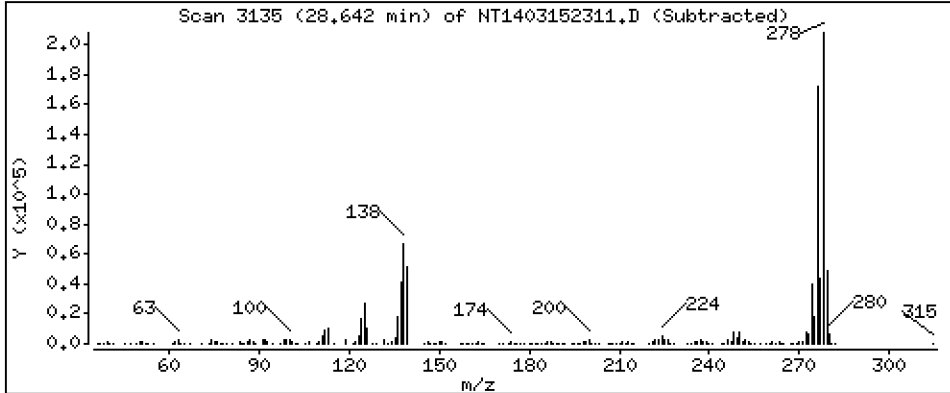
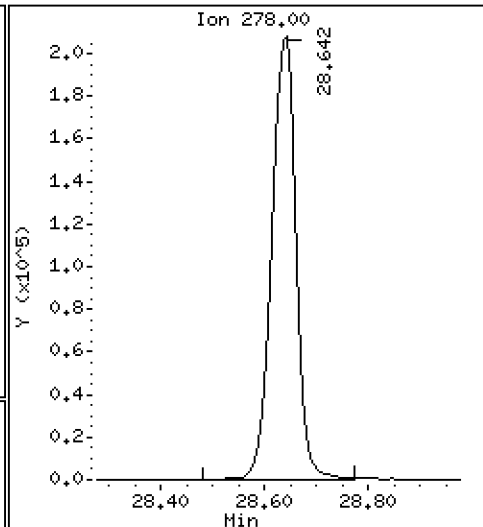
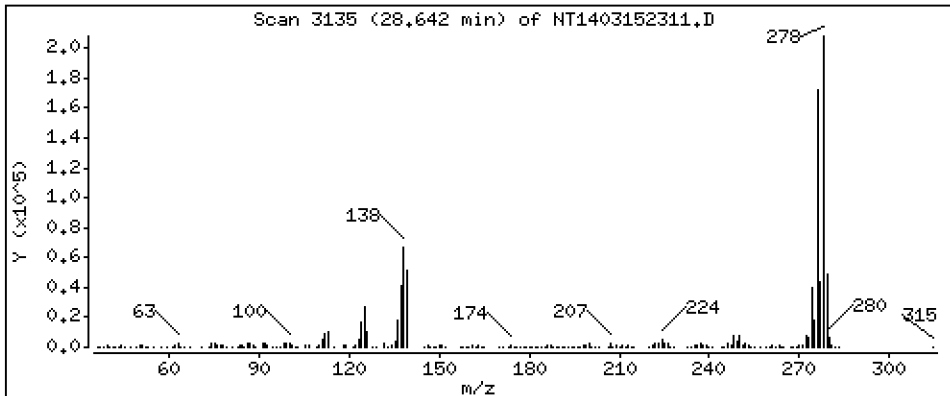
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,865 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

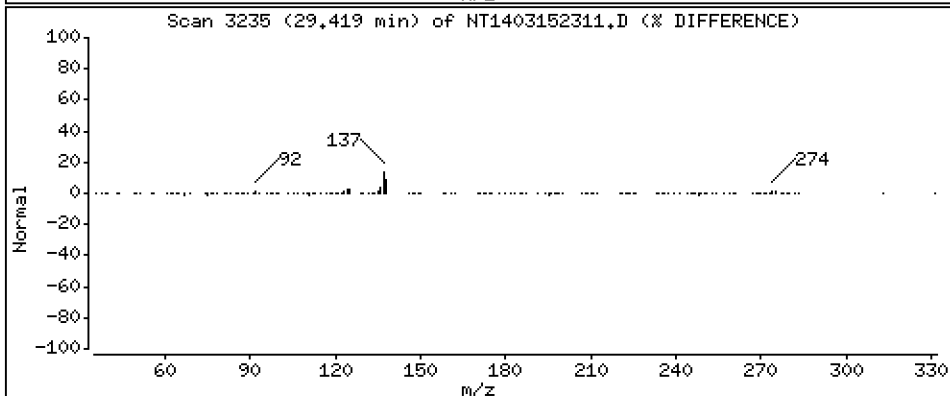
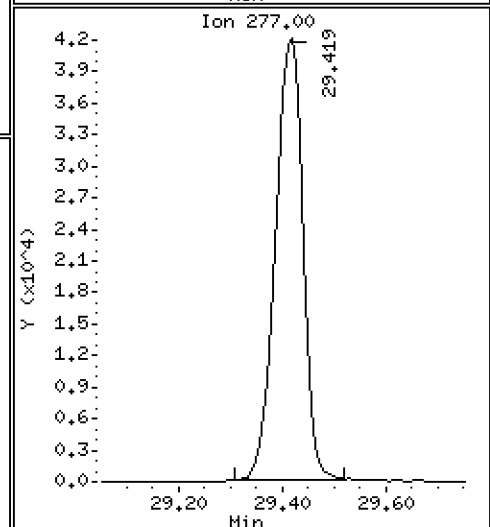
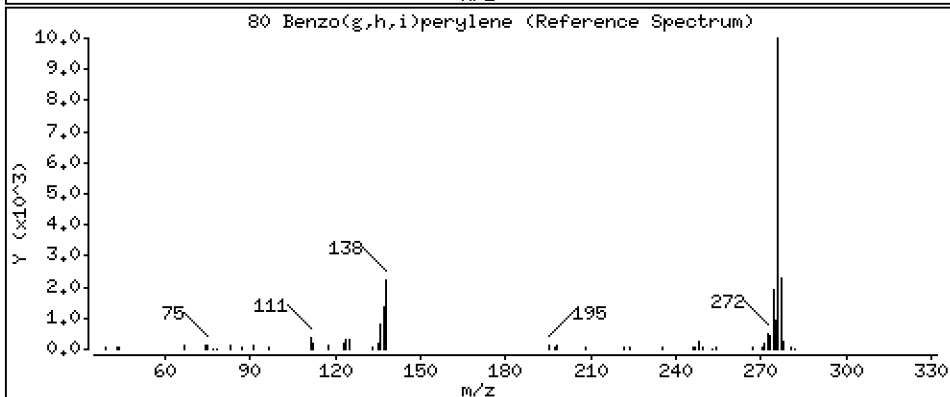
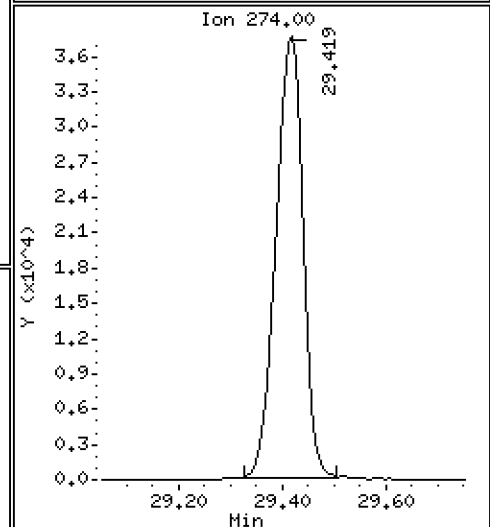
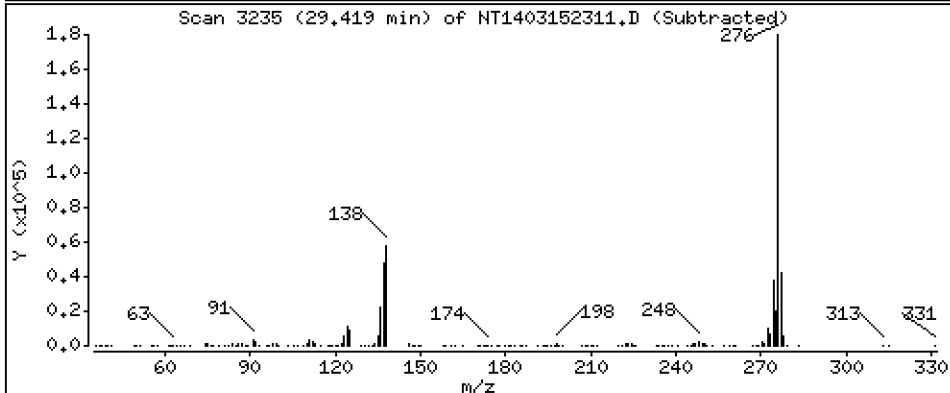
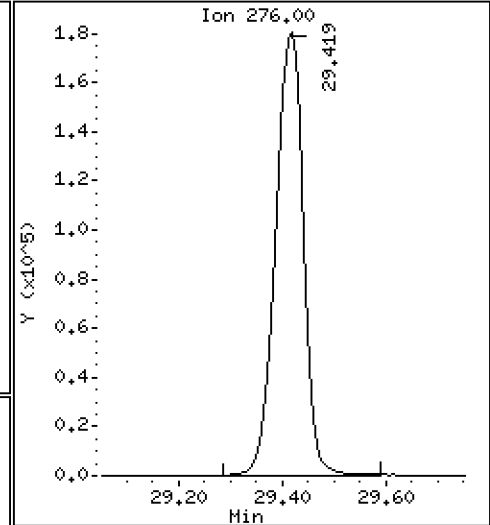
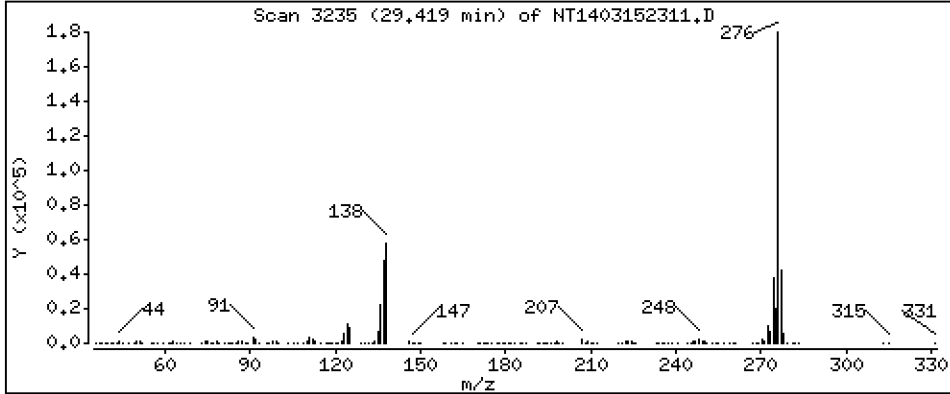
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,939 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

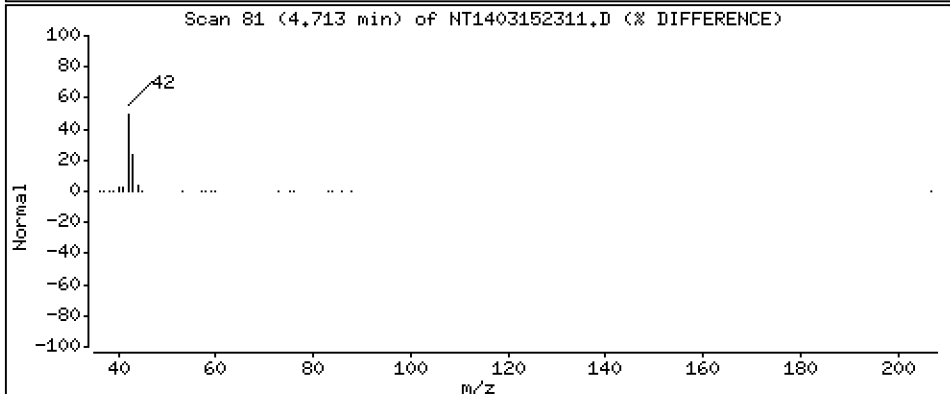
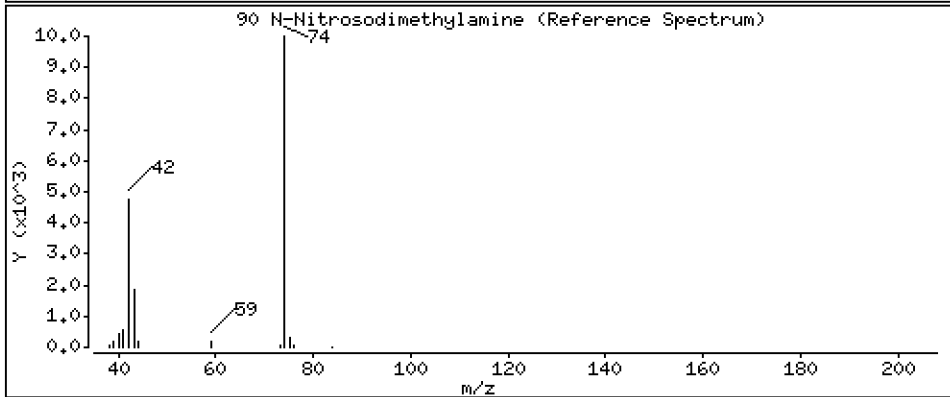
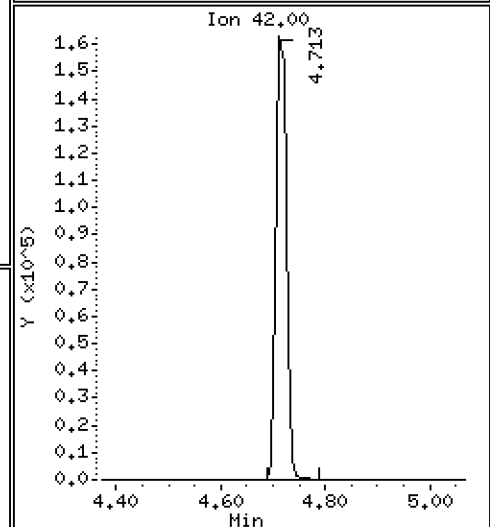
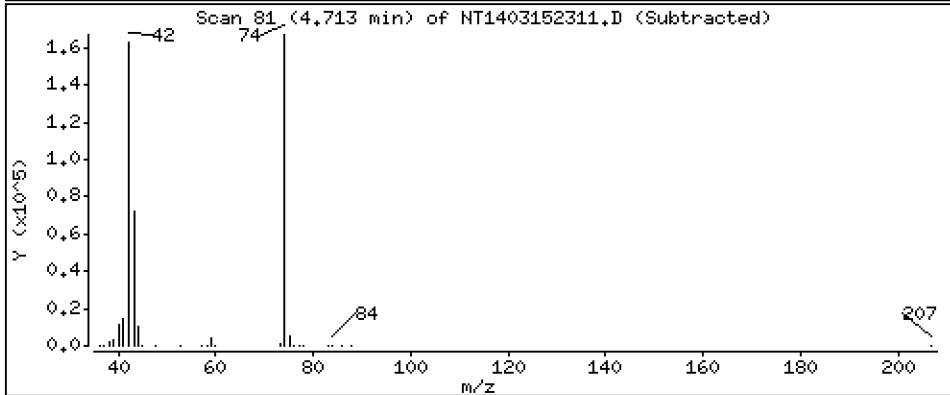
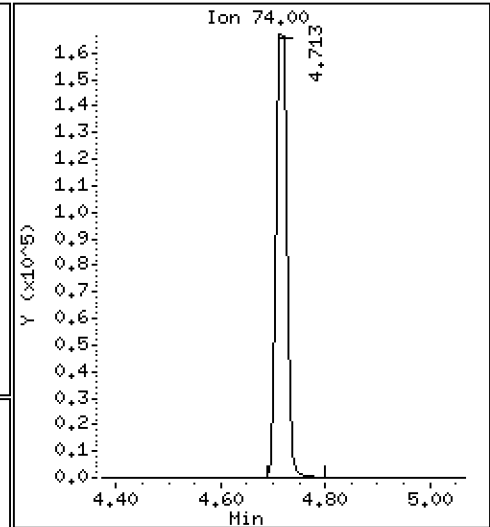
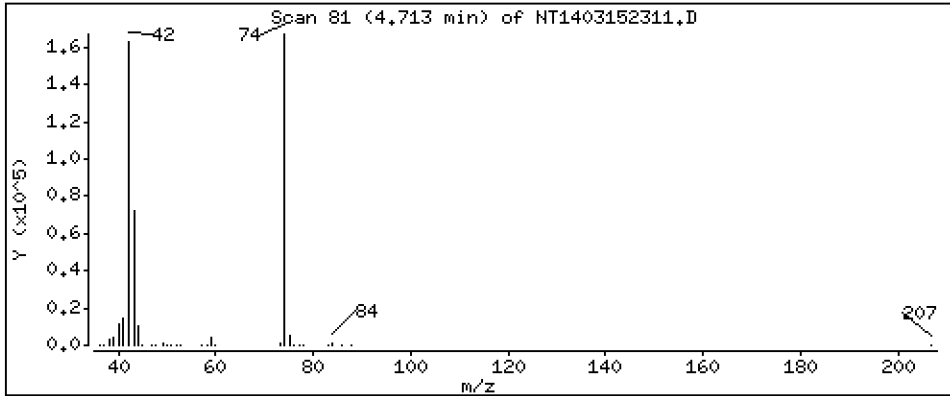
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5,200 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

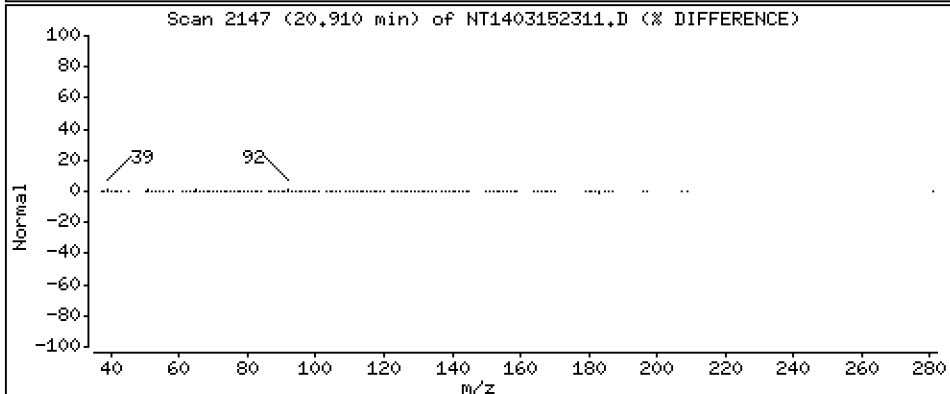
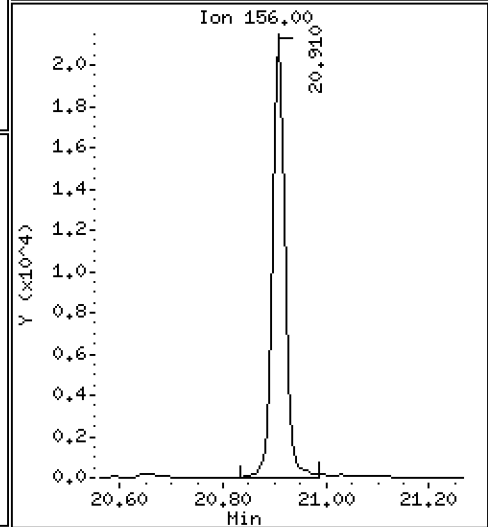
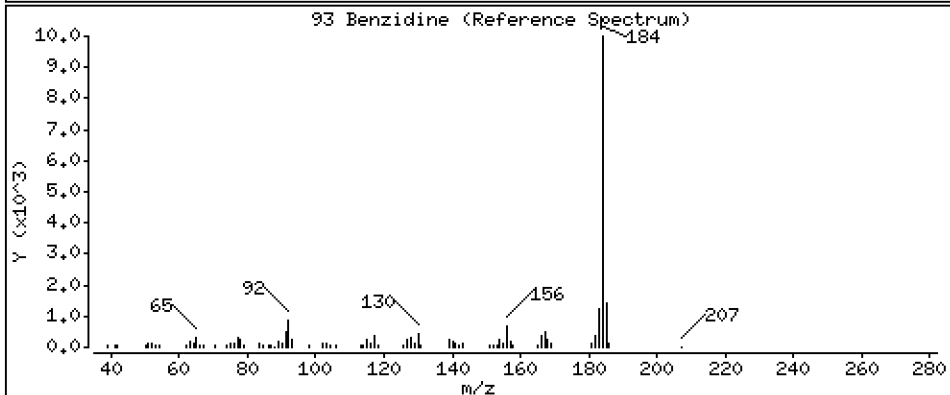
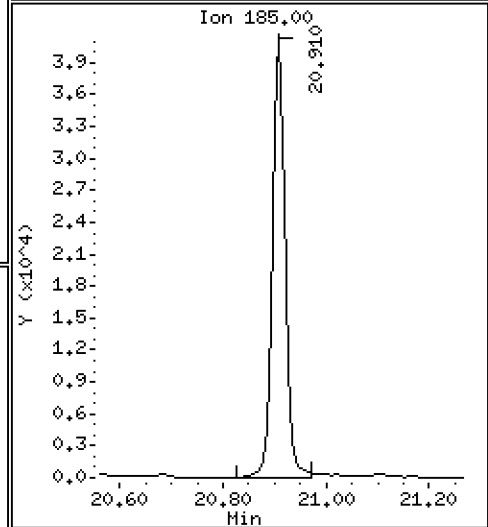
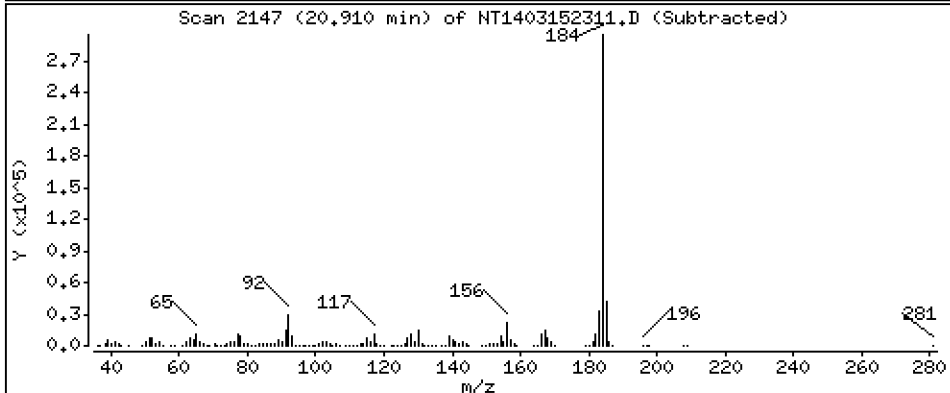
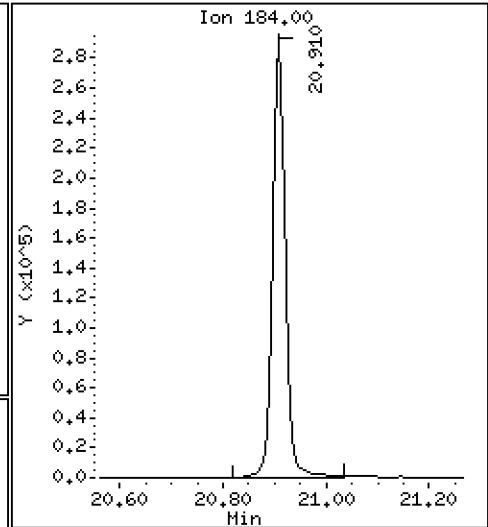
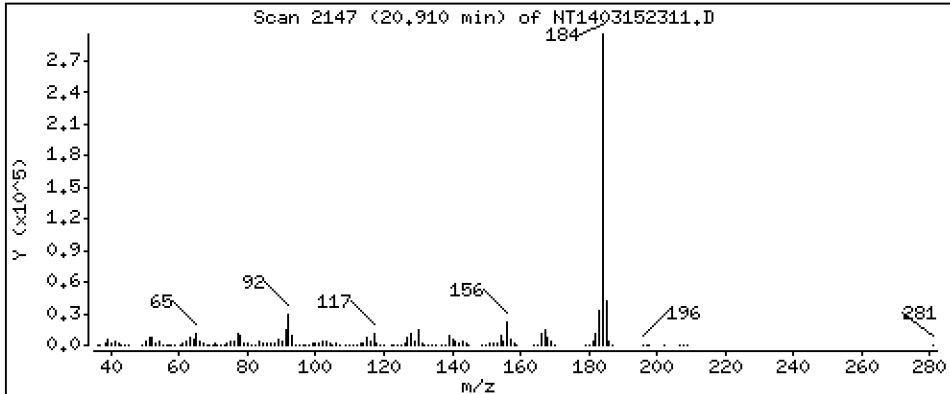
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,646 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

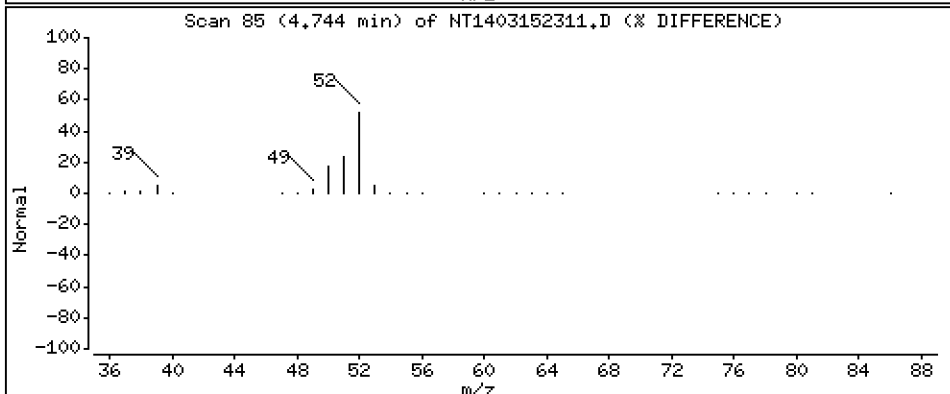
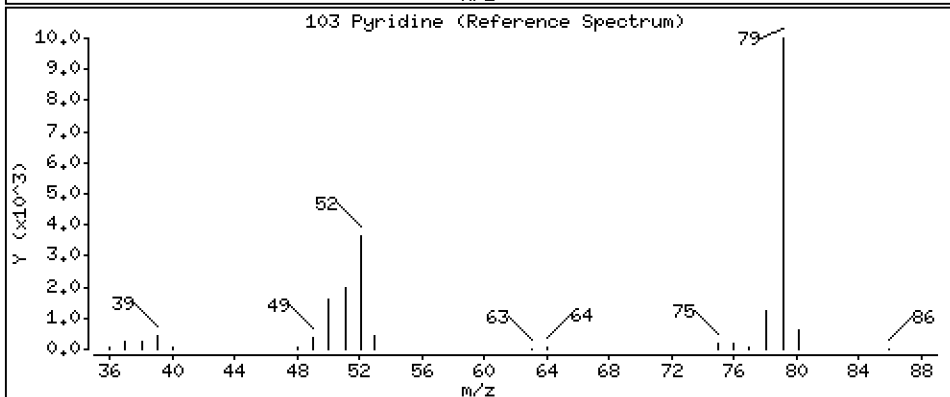
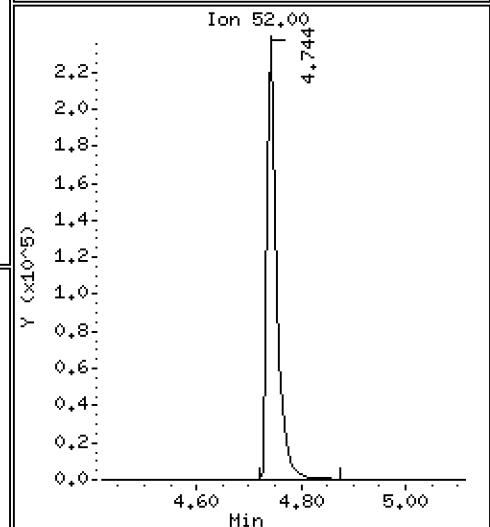
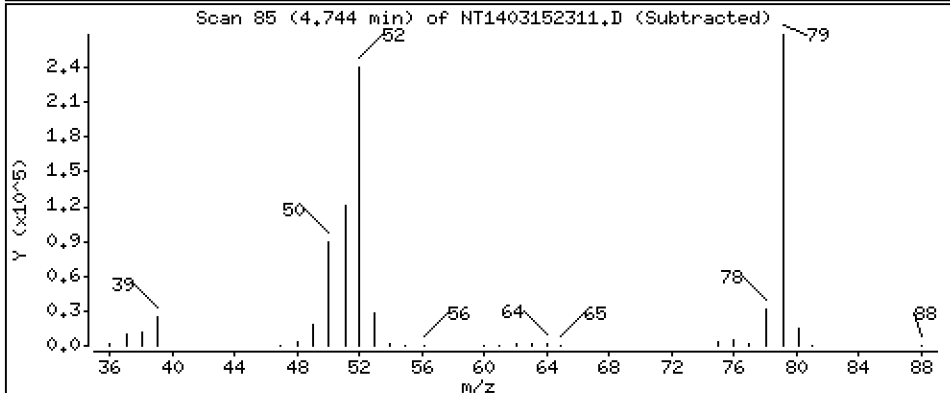
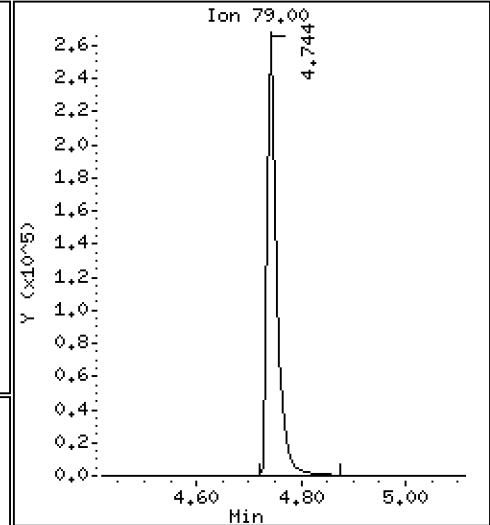
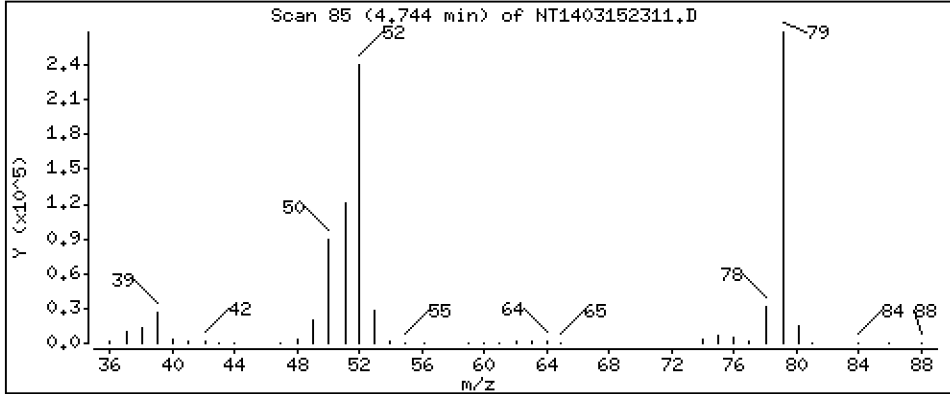
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 2,648 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

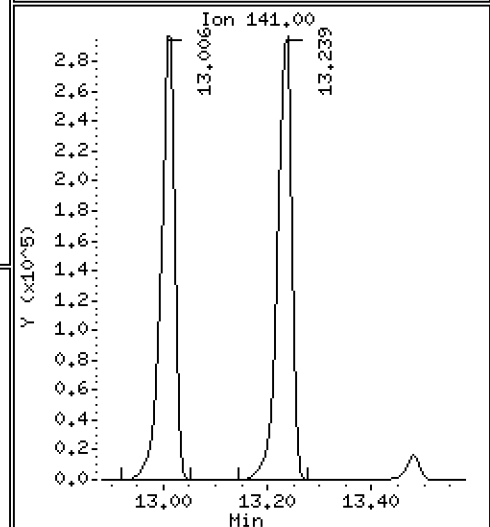
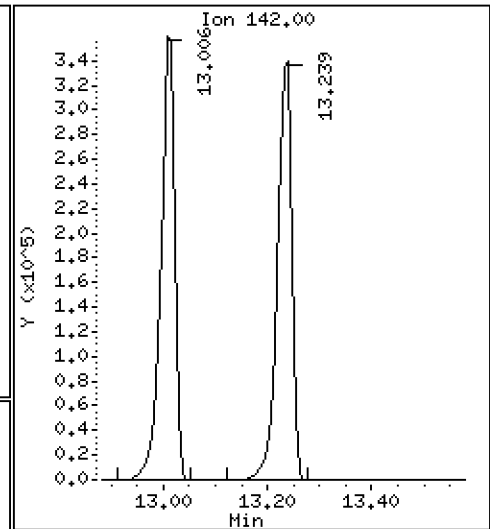
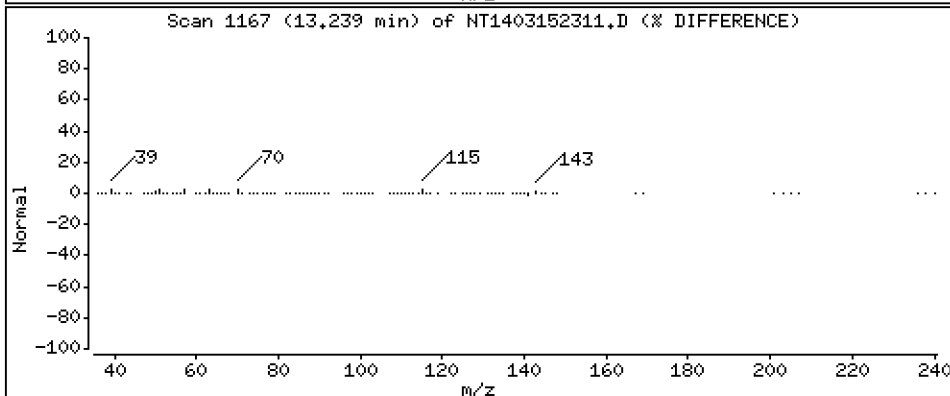
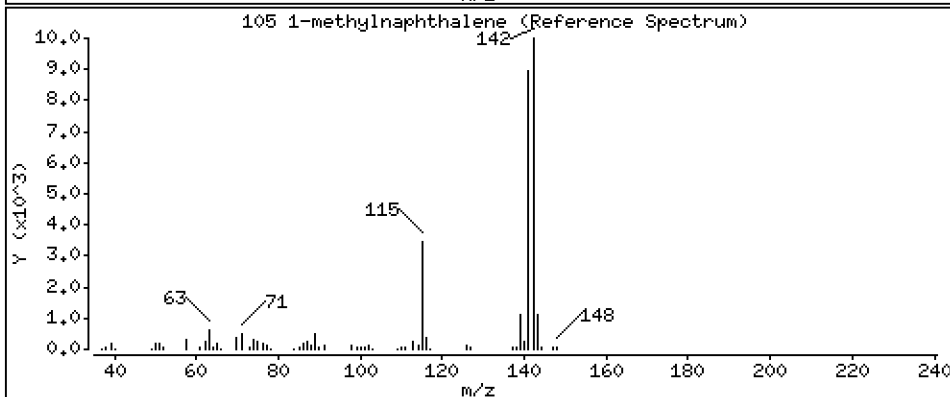
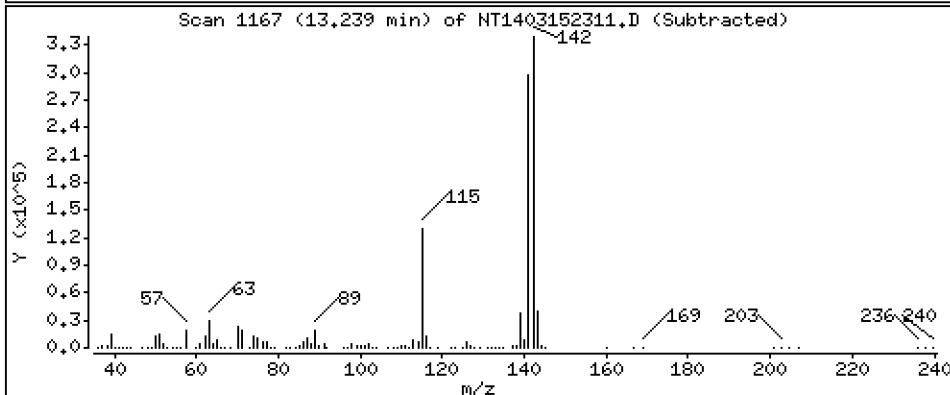
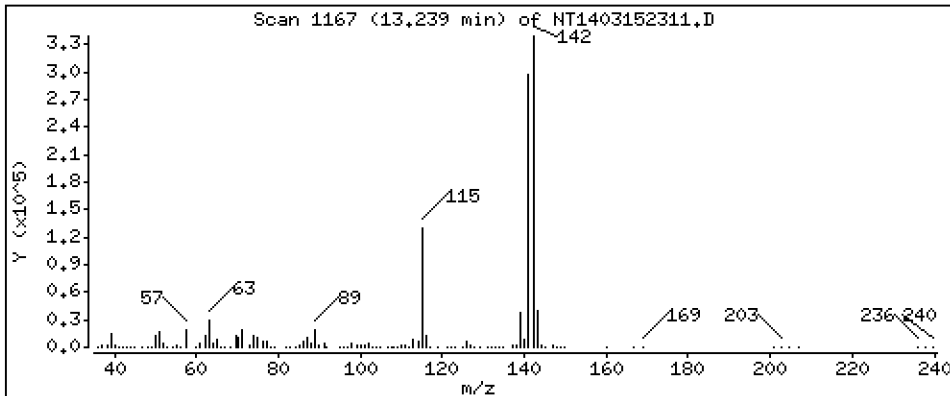
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,103 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

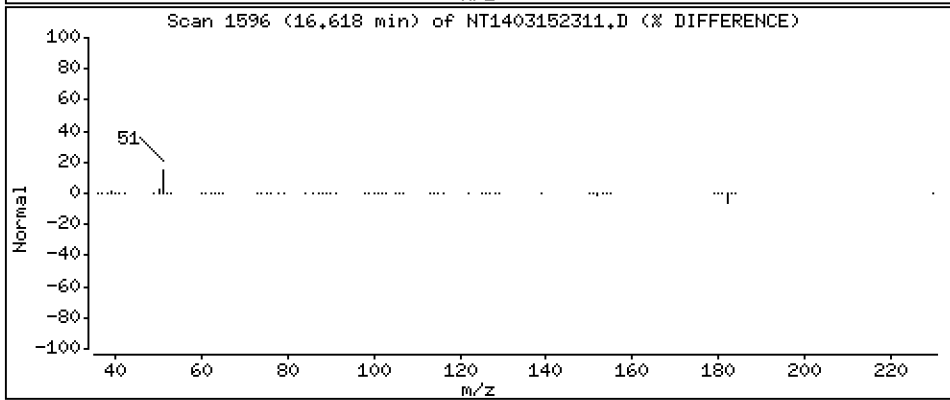
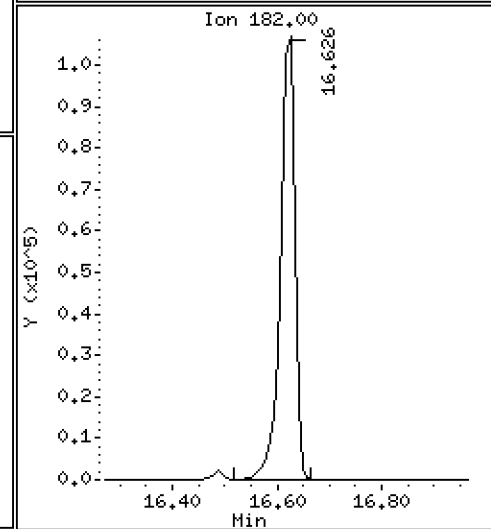
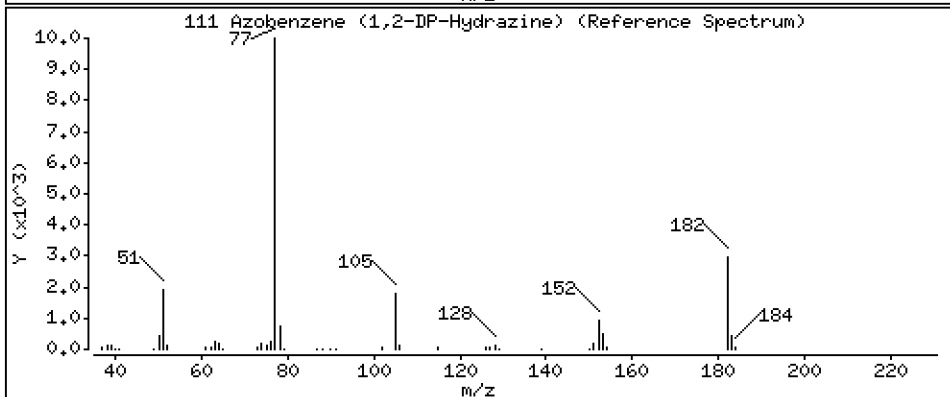
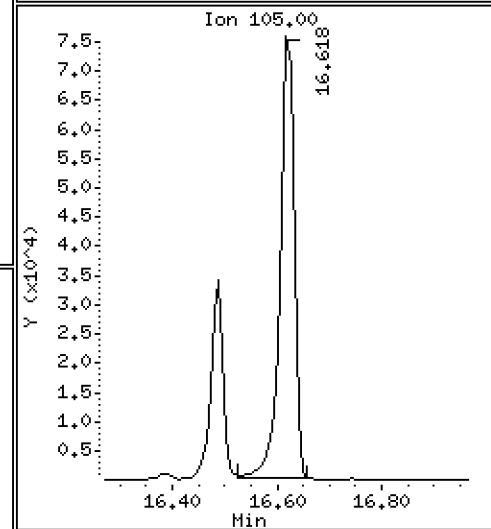
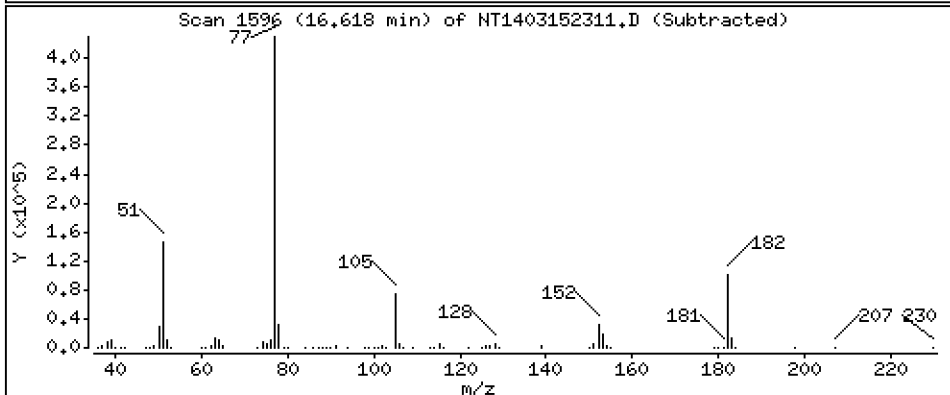
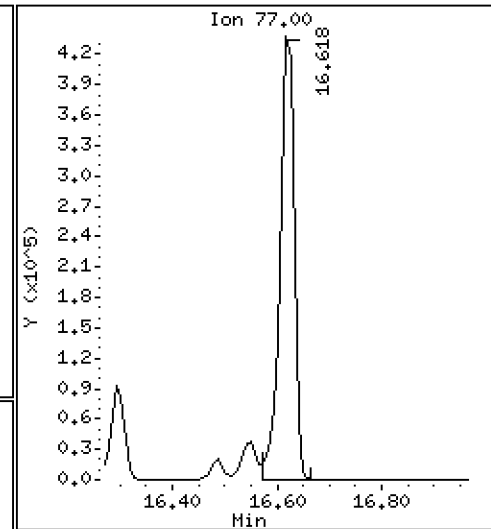
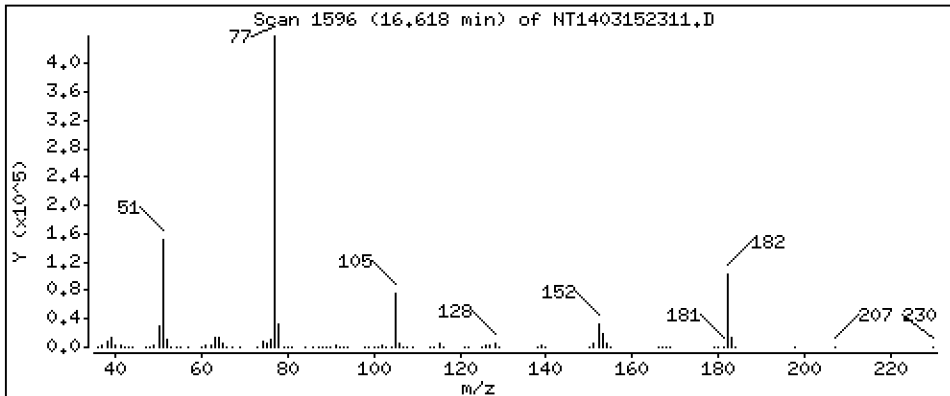
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,002 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

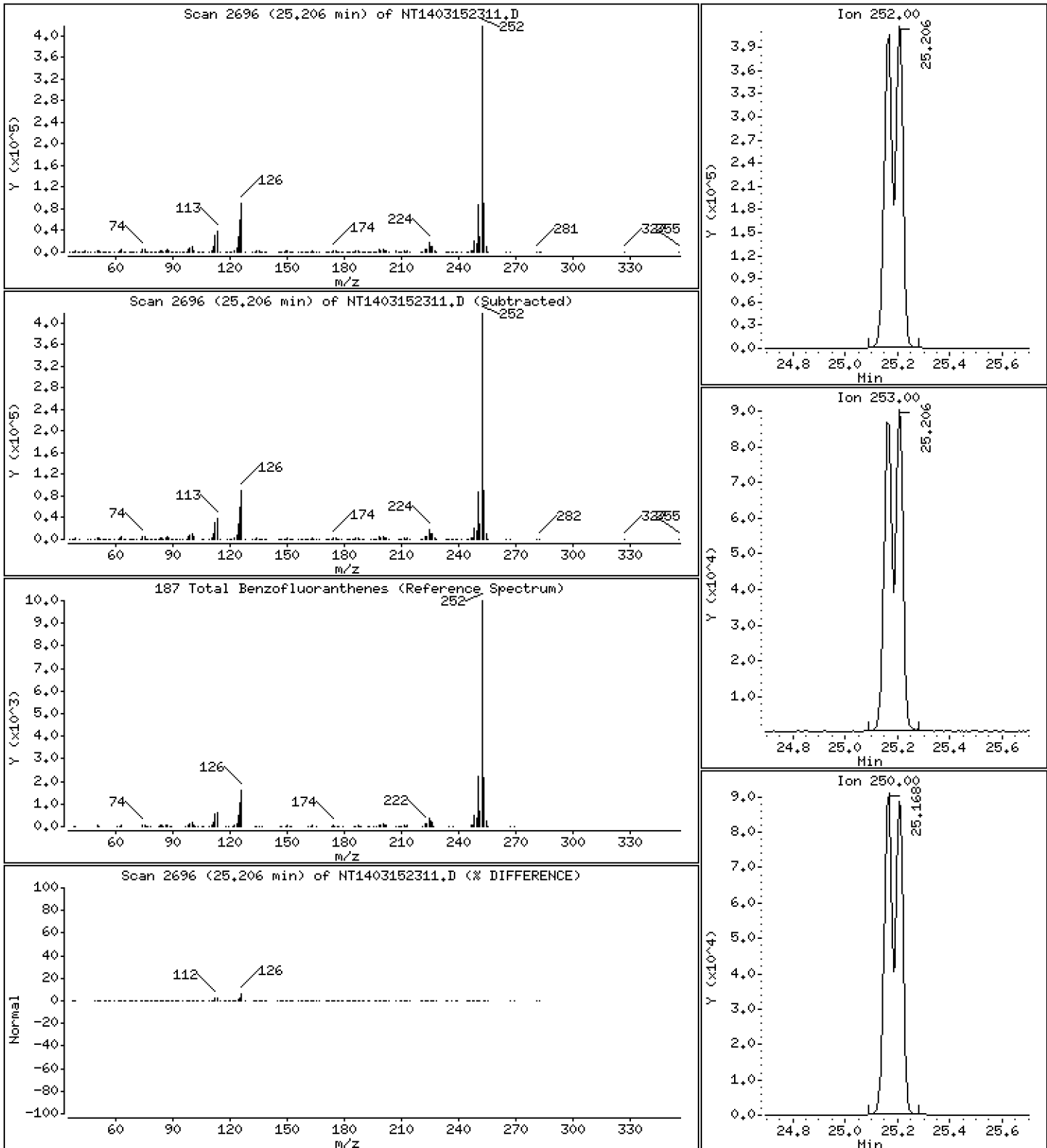
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 9,756 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

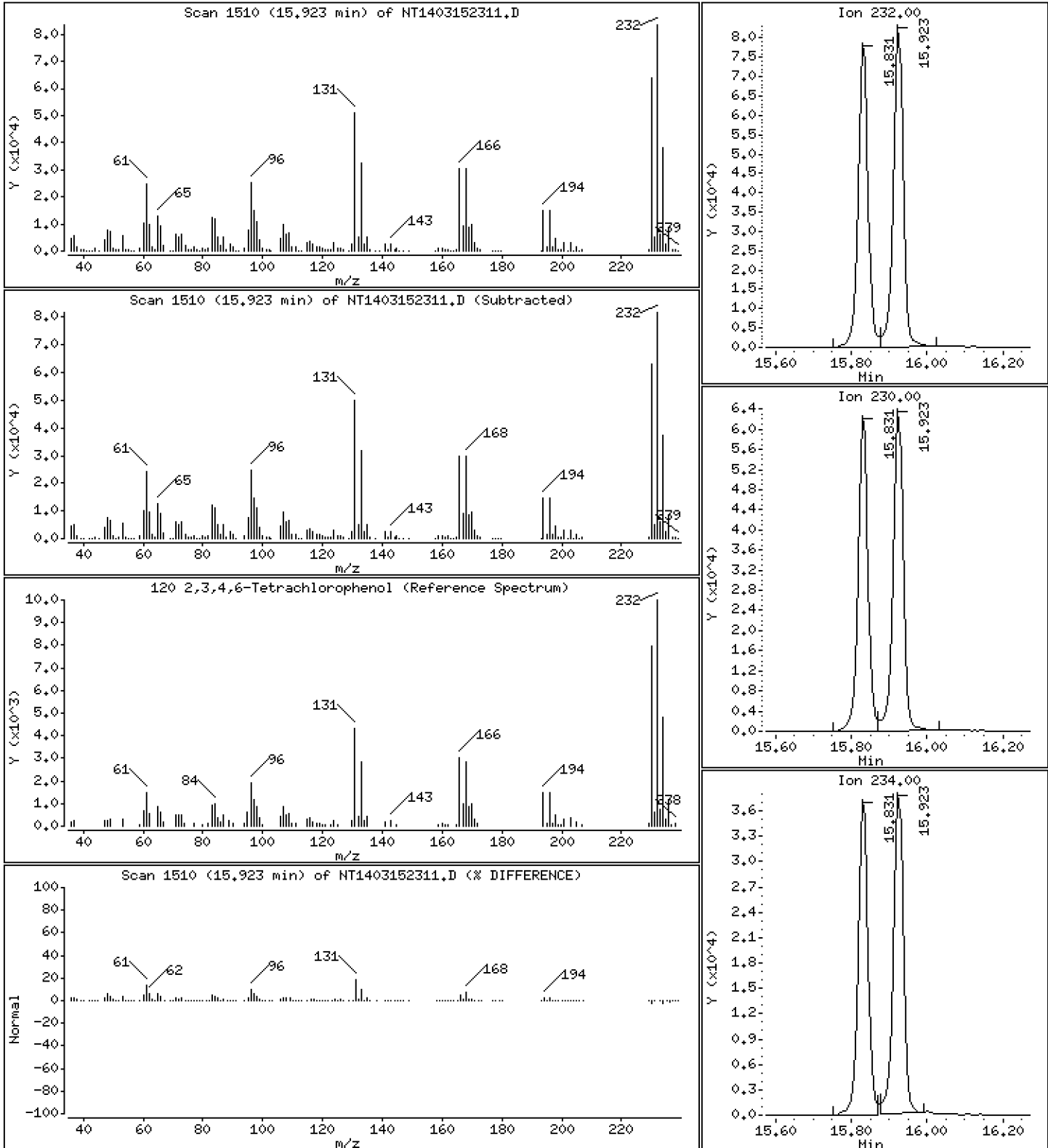
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,569 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152311.D
 Lab Smp Id: SLC0160-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112					Compound Not Detected.		
\$ 2 Phenol-d5	99					Compound Not Detected.		
3 Phenol	94		8.436	8.428	(1.000)	409924	4.36782	4.368
\$ 5 2-Chlorophenol-d4	132					Compound Not Detected.		
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	355357	5.25823	5.258
6 2-Chlorophenol	128		8.729	8.721	(1.000)	323438	4.37862	4.379
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	358409	4.79319	4.793
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	197462	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	352132	4.88937	4.889
\$ 10 1,2-Dichlorobenzene-d4	152					Compound Not Detected.		
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	340729	4.78641	4.786
11 Benzyl alcohol	108		9.334	9.334	(1.000)	220673	5.05069	5.051
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	114247	5.31866	5.319
13 2-Methylphenol	108		9.559	9.559	(1.000)	273187	4.11716	4.117
17 Hexachloroethane	117		10.056	10.056	(1.000)	152626	4.95501	4.955
16 N-Nitroso-di-n-propylamine	70		9.900	9.893	(1.000)	260326	4.98316	4.983
15 4-Methylphenol	108		9.830	9.823	(1.000)	337960	4.30182	4.302
\$ 18 Nitrobenzene-d5	82					Compound Not Detected.		
19 Nitrobenzene	77		10.203	10.195	(0.882)	375695	5.02268	5.023
20 Isophorone	82		10.653	10.645	(0.921)	691478	6.77053	6.771
21 2-Nitrophenol	139		10.831	10.831	(0.936)	194856	4.53030	4.530
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	250436	3.91450	3.915
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	402865	5.85923	5.859
24 Benzoic acid	105		11.064	10.963	(0.956)	444832	8.24795	8.248
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	243165	4.77930	4.779
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	315977	5.05188	5.052
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	726125	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	936737	4.82884	4.829
29 4-Chloroaniline	127		11.729	11.729	(1.014)	327500	4.03279	4.033
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	138599	4.90795	4.908
31 4-Chloro-3-methylphenol	107		12.696	12.689	(1.098)	298325	4.85224	4.852
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	656729	4.85435	4.854
33 Hexachlorocyclopentadiene	237		13.478	13.486	(0.887)	166439	5.22977	5.230

Compounds	QUANT SIG					CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.633	13.625	(0.897)	183263	4.71824	4.718	
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	188647	4.66090	4.661	
§ 36 2-Fluorobiphenyl	172	13.695	13.795	(0.901)	426	0.00307	0.003072	
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	591509	4.97719	4.977	
38 2-Nitroaniline	65	14.260	14.260	(0.938)	234033	5.09985	5.100	
39 Dimethylphthalate	163	14.701	14.693	(0.967)	642281	5.03056	5.031	
40 Acenaphthylene	152	14.887	14.879	(0.980)	974004	4.87938	4.879	
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.977)	153944	5.21947	5.219	
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	382881	4.00000		
43 3-Nitroaniline	138	15.119	15.111	(0.995)	211974	5.20957	5.210	
44 Acenaphthene	153	15.266	15.258	(1.005)	578656	4.96504	4.965	
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	70613	3.07711	3.077	
46 Dibenzofuran	168	15.590	15.590	(1.026)	824547	4.95562	4.956	
47 4-Nitrophenol	109	15.420	15.420	(1.015)	103988	4.82822	4.828	
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	214010	5.11873	5.119	
50 Diethylphthalate	149	16.163	16.155	(1.064)	686853	5.20331	5.203	
49 Fluorene	166	16.309	16.302	(1.073)	763926	4.84358	4.844	
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	337497	4.98506	4.985	
52 4-Nitroaniline	138	16.386	16.379	(1.078)	170484	4.81727	4.817	
53 4,6-Dinitro-2-methylphenol	198	16.487	16.479	(0.904)	109125	4.43923	4.439	
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	475466	4.95411	4.954	
§ 55 2,4,6-Tribromophenol	330	Compound Not Detected.						
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	169085	5.22559	5.226	
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	163199	4.78004	4.780	
58 Pentachlorophenol	266	17.969	17.977	(0.985)	106585	4.47687	4.477	
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	706616	4.00000		
60 Phenanthrene	178	18.294	18.286	(1.003)	955749	4.73403	4.734	
61 Anthracene	178	18.379	18.379	(1.008)	832701	4.28109	4.281	
62 Carbazole	167	18.712	18.704	(1.026)	793728	4.58650	4.587	
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	1207956	5.50673	5.507	
64 Fluoranthene	202	20.677	20.677	(0.887)	1031812	5.02399	5.024	
65 Pyrene	202	21.103	21.103	(0.906)	1044240	4.95802	4.958	
§ 66 Terphenyl-d14	244	21.381	21.389	(0.918)	662	0.00464	0.004643	
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	529418	5.73747	5.737	
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	898379	4.82654	4.827	
* 69 Chrysene-d12	240	23.301	23.294	(1.000)	504808	4.00000		
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	586696	10.6467	10.65	
71 Chrysene	228	23.340	23.340	(1.002)	795614	4.72292	4.723	
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.960)	706123	5.42778	5.428	
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	988248	4.00000		
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	1304643	5.13544	5.135	
74 Benzo(b)fluoranthene	252	25.167	25.152	(0.970)	838016	4.77369	4.774	
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	887530	5.10013	5.100	
76 Benzo(a)pyrene	252	25.825	25.818	(0.996)	747283	4.97798	4.978	
* 77 Perylene-d12	264	25.941	25.934	(1.000)	496785	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.103)	807644	4.94309	4.943	
79 Dibenzo(a,h)anthracene	278	28.641	28.626	(1.104)	669918	4.86500	4.865	
80 Benzo(g,h,i)perylene	276	29.418	29.403	(1.134)	665079	4.93915	4.939	
90 N-Nitrosodimethylamine	74	4.712	4.720	(1.000)	220898	5.19984	5.200	
91 Aniline	93	Compound Not Detected.						
93 Benzidine	184	20.909	20.909	(0.897)	466644	5.64609	5.646	
103 Pyridine	79	4.743	4.766	(1.000)	348414	2.64838	2.648	
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	625458	5.10291	5.103	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	788522	5.00236	5.002	

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.206	25.199	(0.972)	1626530	9.75586	9.756
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	141312	3.56895	3.569

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152311.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	197462	1.51
27 Naphthalene-d8	721321	360661	1442642	726125	0.67
42 Acenaphthene-d10	379602	189801	759204	382881	0.86
59 Phenanthrene-d10	703194	351597	1406388	706616	0.49
69 Chrysene-d12	504769	252385	1009538	504808	0.01
134 Di-n-octylphthala	978492	489246	1956984	988248	1.00
77 Perylene-d12	484073	242037	968146	496785	2.63

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.30	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311.D

Lab ID: SLC0160-SCV1
nt14.i, ABN.m, 15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)
0.956	0.948	0.0087	Benzoic acid
0.901	0.908	-0.0066	2-Fluorobiphenyl

RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

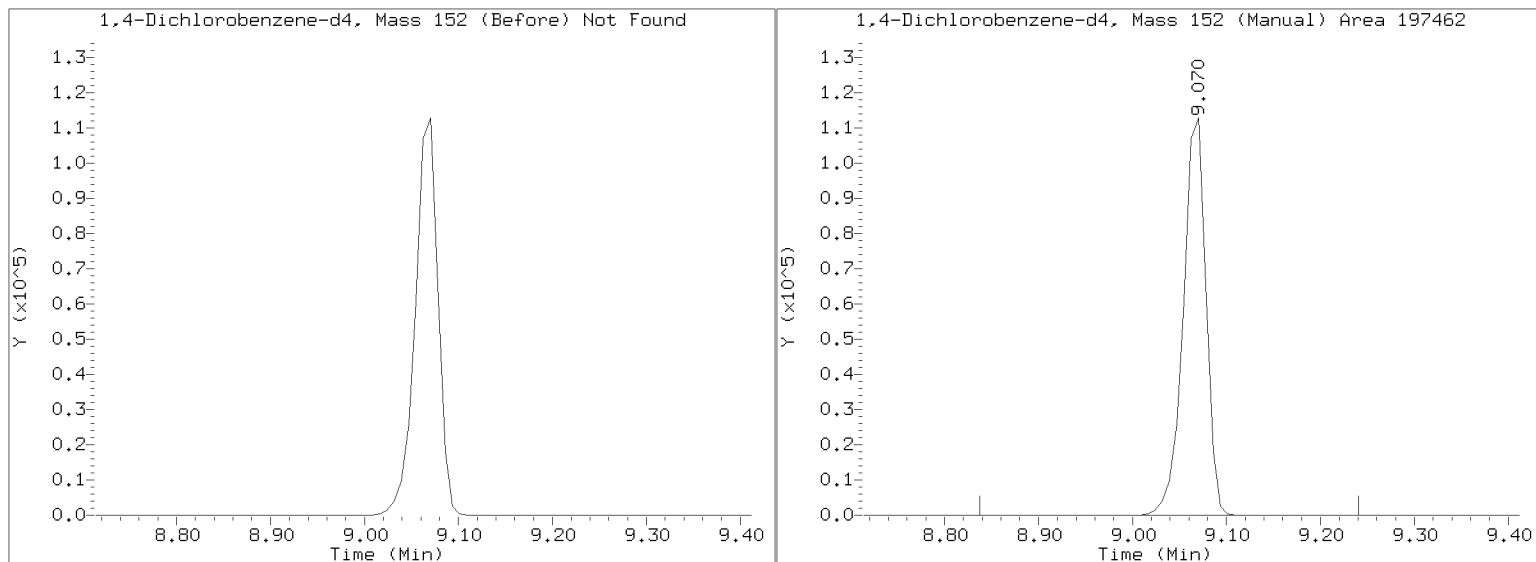
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152311.D

Injection Date: 15-MAR-2023 17:39

Lab ID: SLC0160-SCV1 Client ID:

Report Date: 03/21/2023 12:48





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

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0335-LCV1

Sequence: SLC0335

Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-19.9	50.00
4-Methylphenol	0.20000	0.2	-20.8	50.00
Naphthalene	0.20000	0.2	4.2	50.00
2-Methylnaphthalene	0.20000	0.2	-0.7	50.00
Acenaphthylene	0.20000	0.2	-3.1	50.00
Dimethylphthalate	0.20000	0.2	-2.2	50.00
Acenaphthene	0.20000	0.2	1.2	50.00
Dibenzofuran	0.20000	0.2	2.1	50.00
Fluorene	0.20000	0.2	-14.5	50.00
Phenanthrene	0.20000	0.2	-0.3	50.00
Anthracene	0.20000	0.2	-11.4	50.00
Fluoranthene	0.20000	0.2	4.6	50.00
Pyrene	0.20000	0.2	6.6	50.00
Butylbenzylphthalate	0.20000	0.2	-8.2	50.00
Benzo(a)anthracene	0.20000	0.2	4.1	50.00
Chrysene	0.20000	0.2	0.6	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	-2.1	50.00
Benzo(a)fluoranthene, Total	0.40000	0.4	-1.3	50.00
Benzo(a)pyrene	0.20000	0.2	-9.9	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.1	-31.7	50.00
Dibenzo(a,h)anthracene	0.20000	0.1	-29.7	50.00
Benzo(g,h,i)perylene	0.20000	0.1	-28.1	50.00
2-Fluorophenol	0.30000	0.252	-16.0	50.00
Phenol-d5	0.30000	0.253	-15.7	50.00
2-Chlorophenol-d4	0.30000	0.290	-3.5	50.00
1,2-Dichlorobenzene-d4	0.20000	0.217	8.5	50.00
Nitrobenzene-d5	0.20000	0.182	-9.1	50.00
2-Fluorobiphenyl	0.20000	0.206	3.0	50.00
2,4,6-Tribromophenol	0.30000	0.233	-22.5	50.00



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

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0335-LCV1

Sequence: SLC0335

Standard ID: K011105

p-Terphenyl-d14	0.20000	0.227	13.3	50.00
-----------------	---------	-------	------	-------

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172304.D

Date: 17-MAR-2023 16:16

Client ID:

Sample Info: SLC0335-LCW1

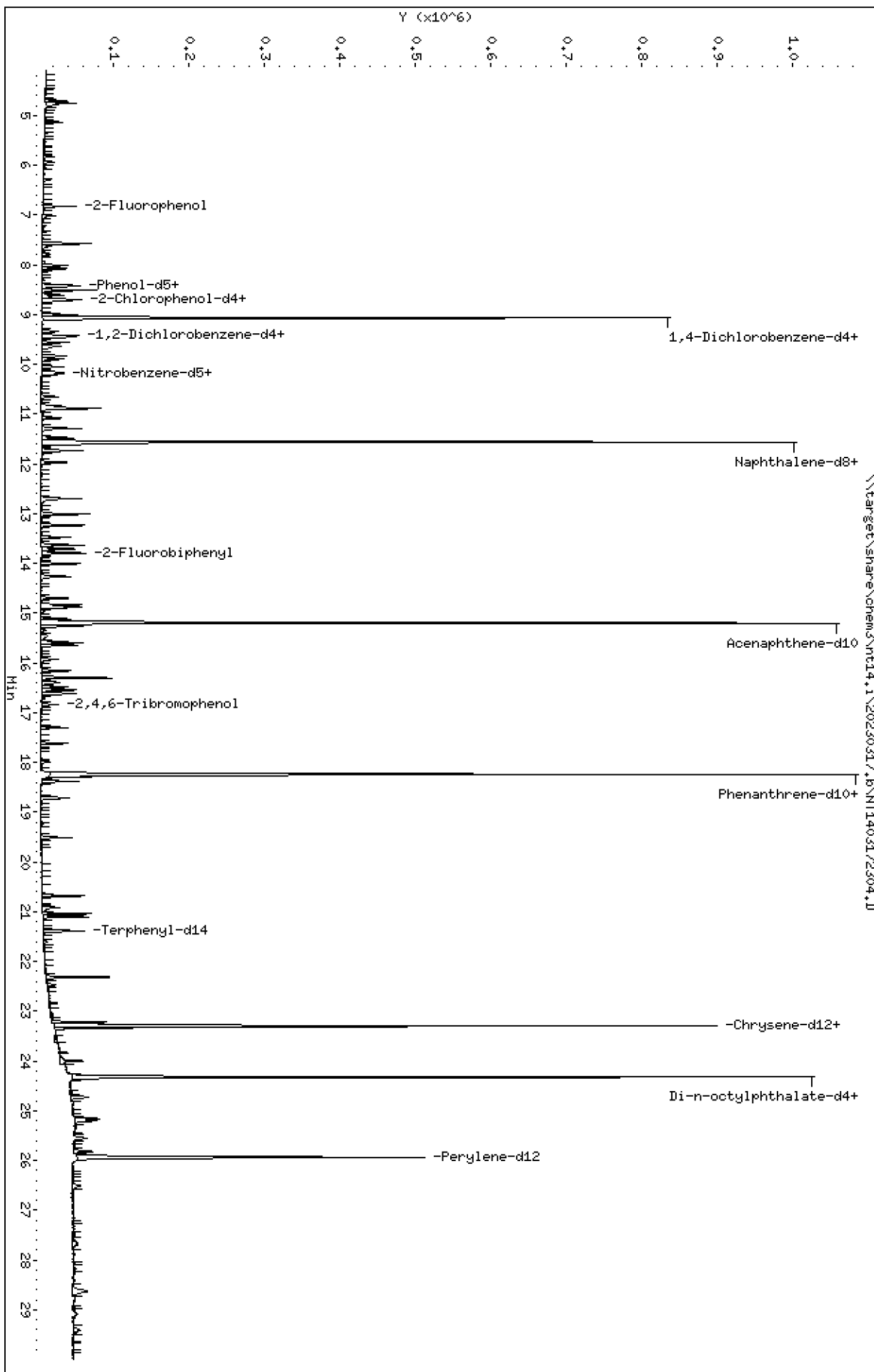
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

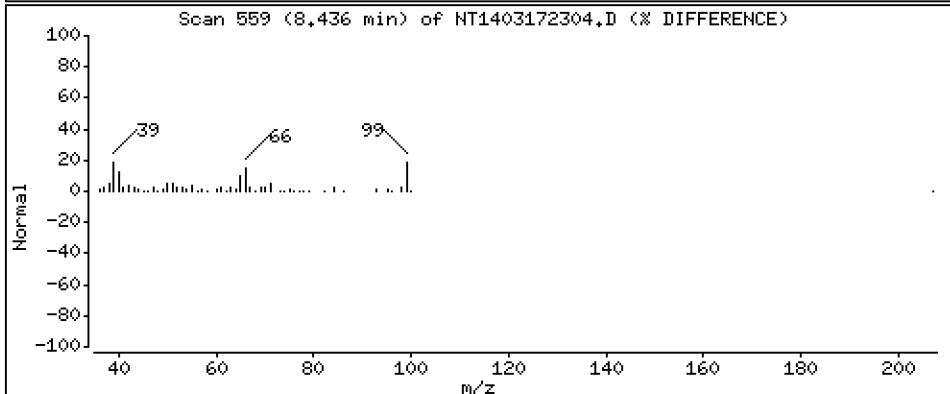
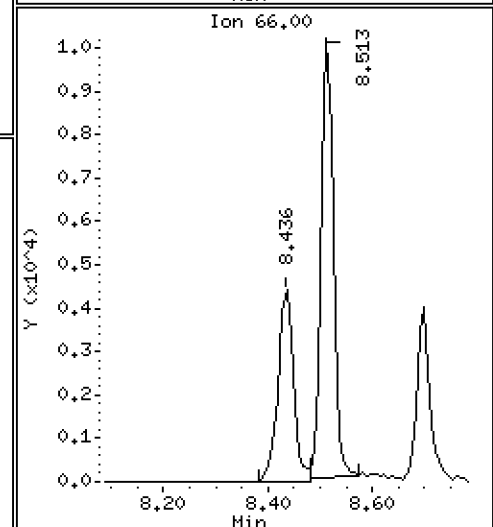
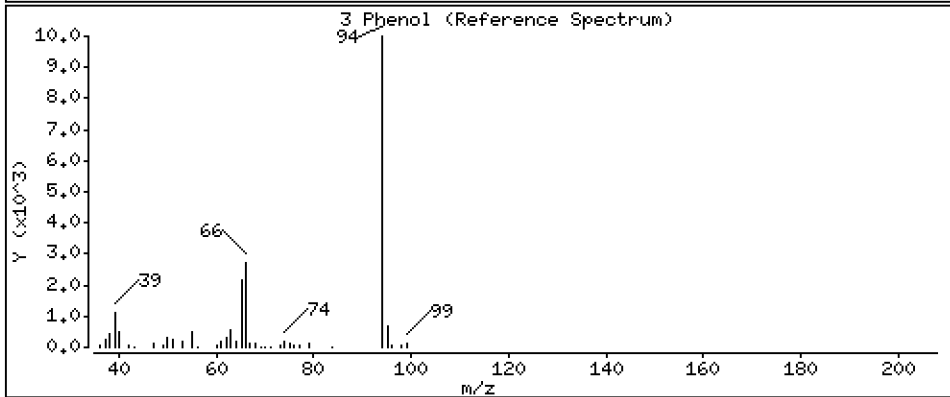
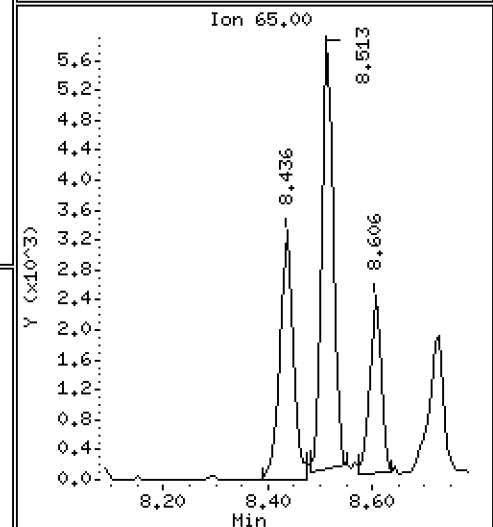
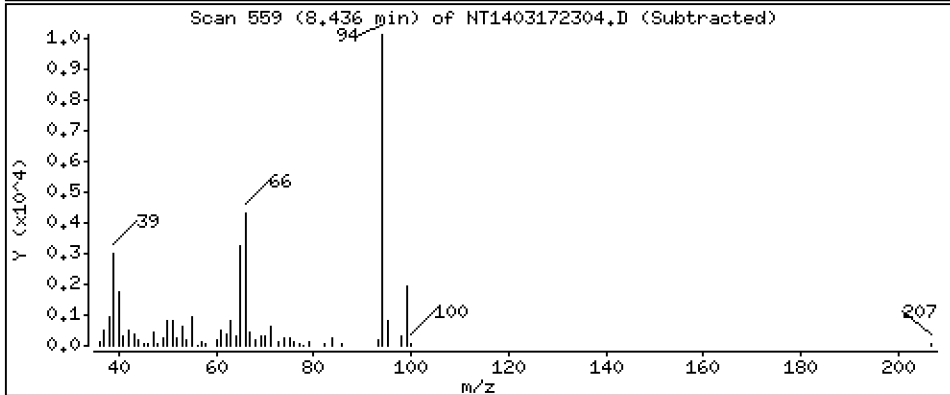
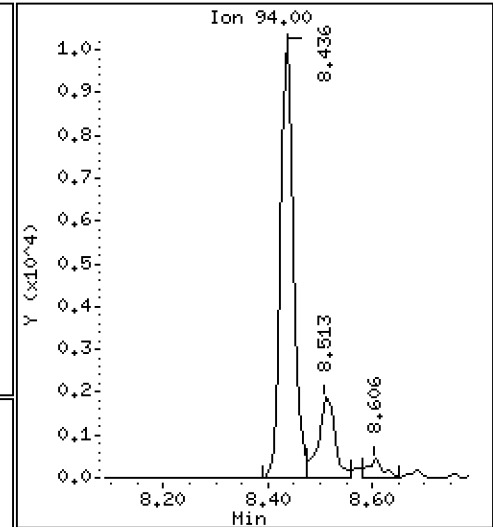
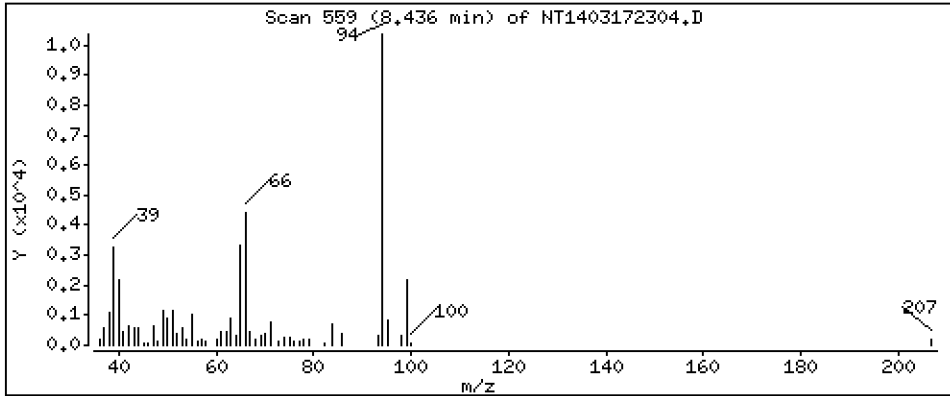
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1603 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

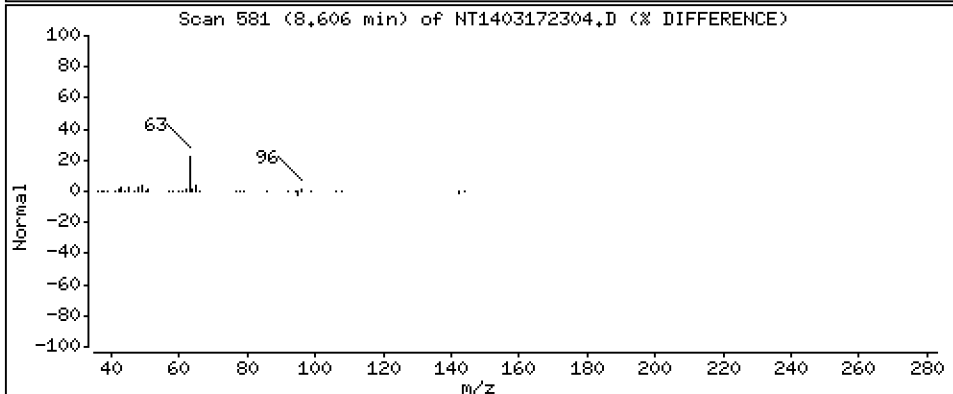
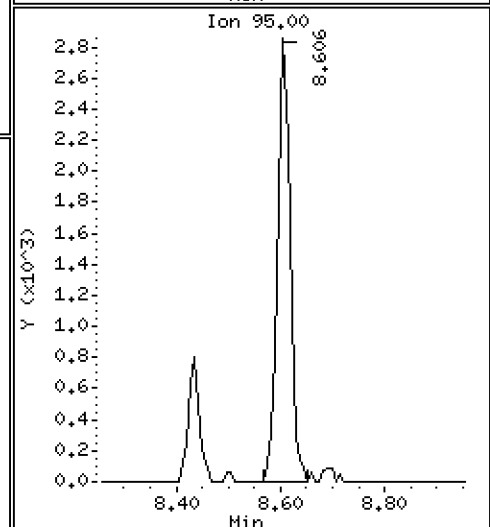
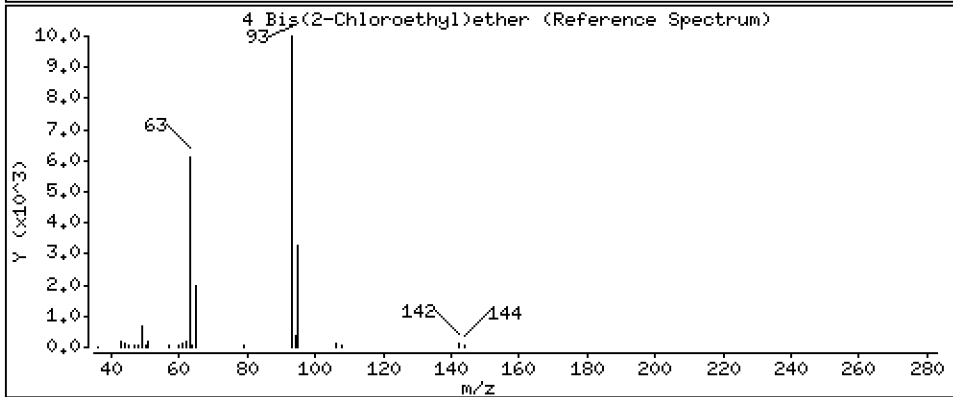
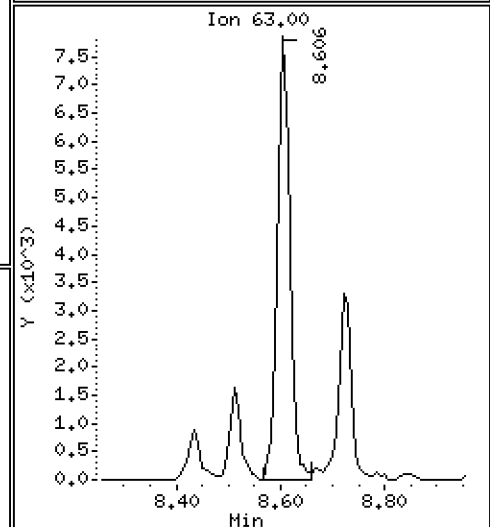
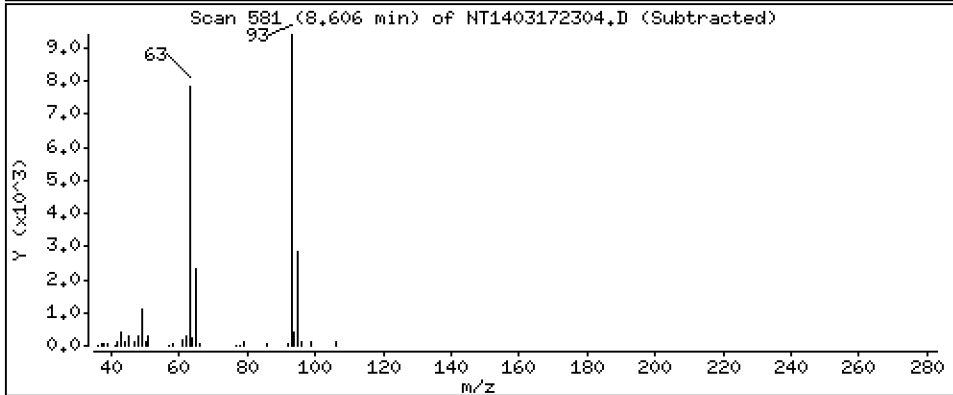
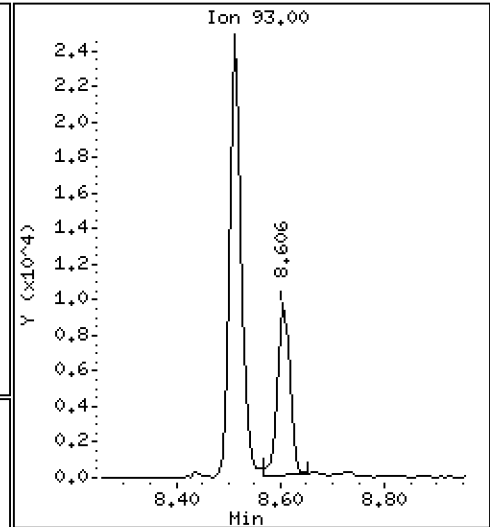
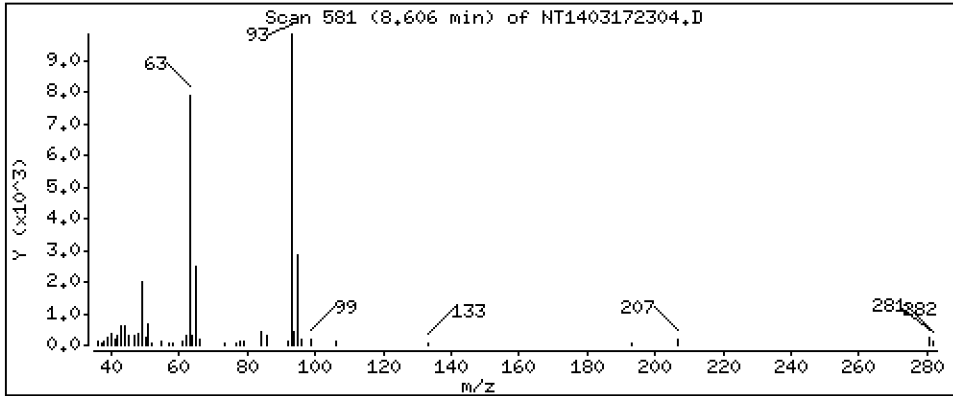
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,2004 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

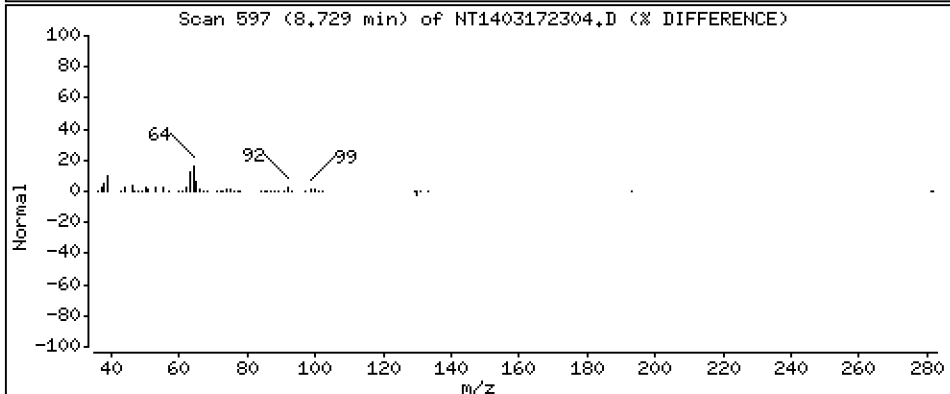
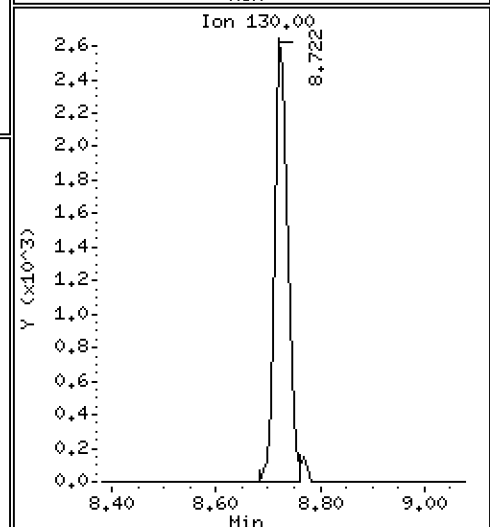
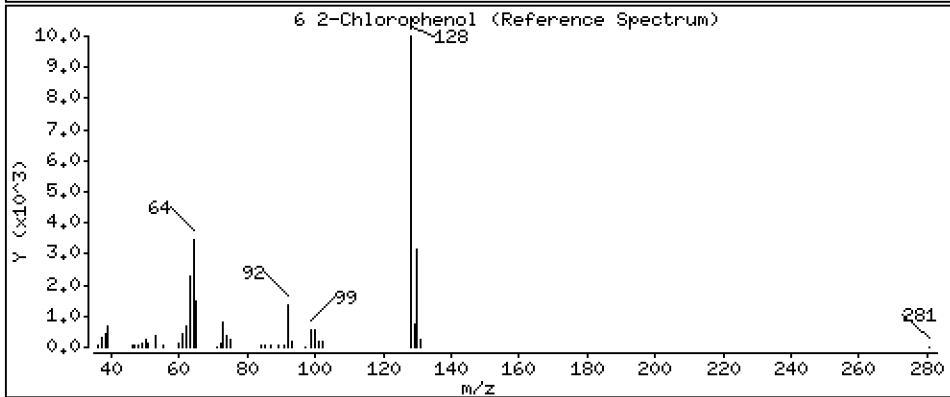
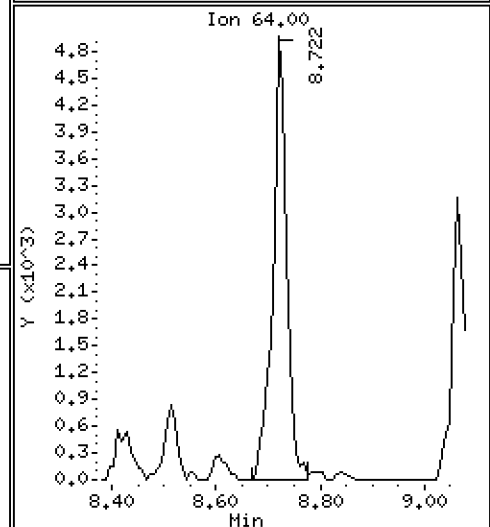
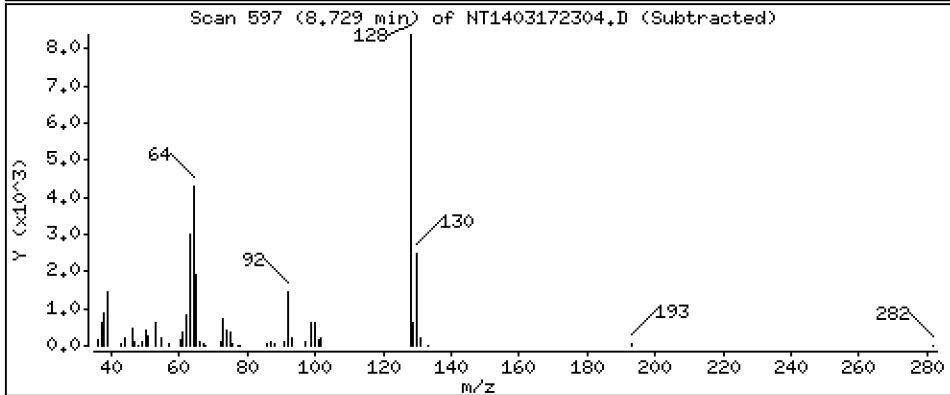
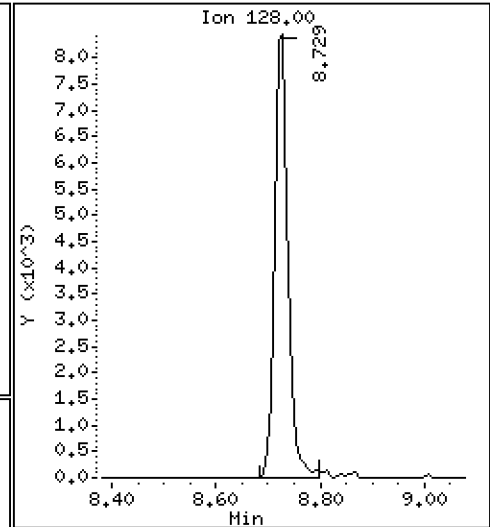
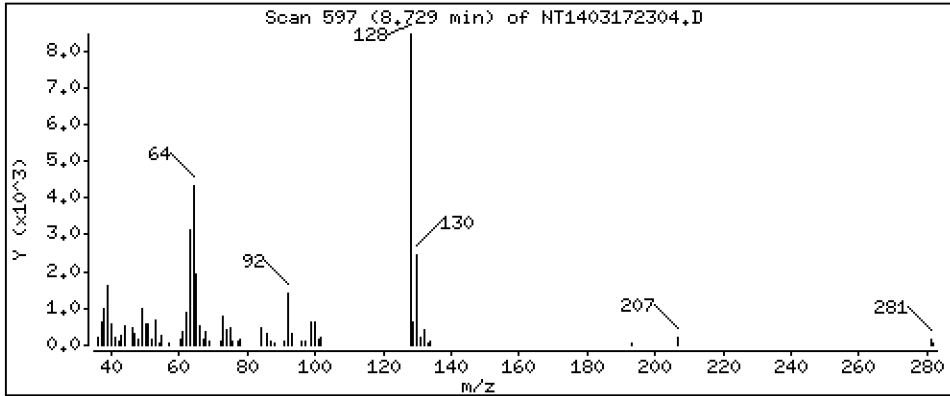
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 0.1847 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

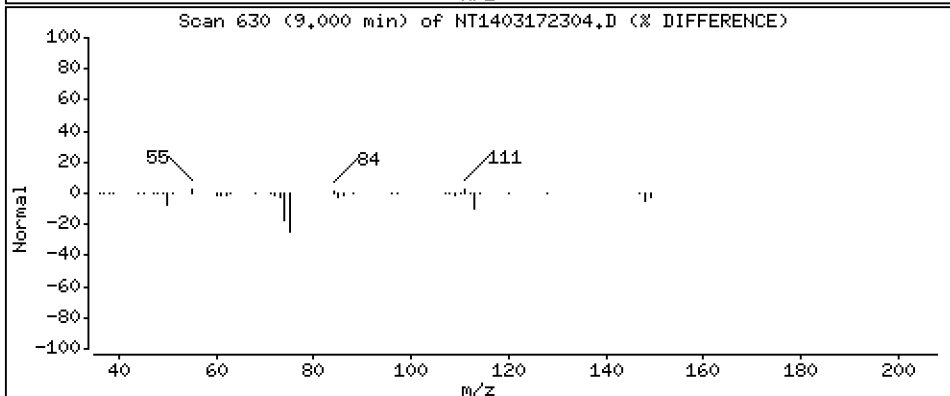
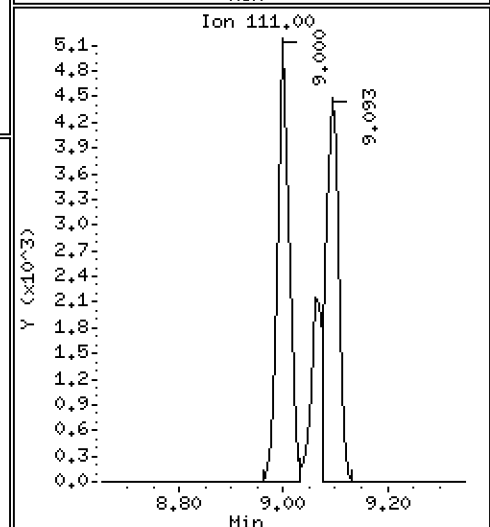
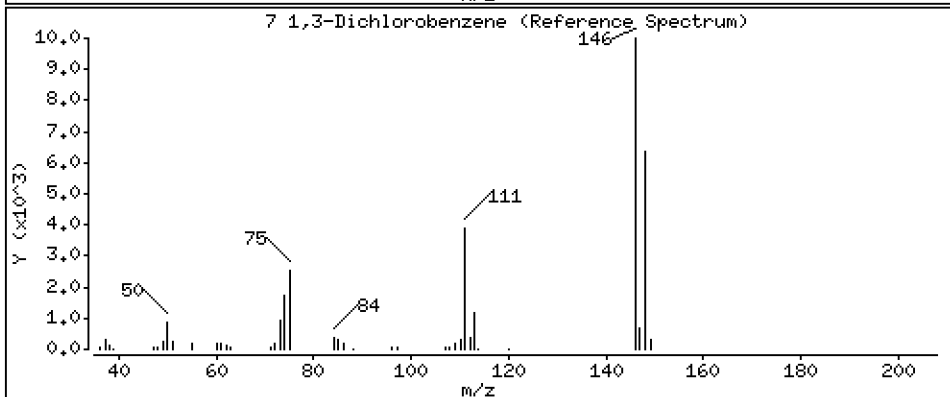
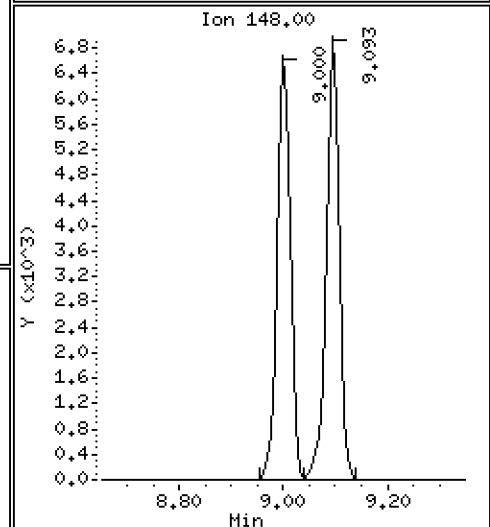
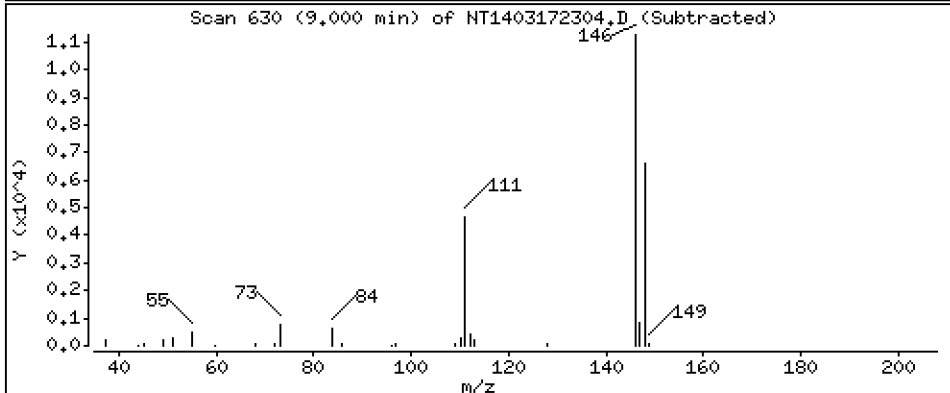
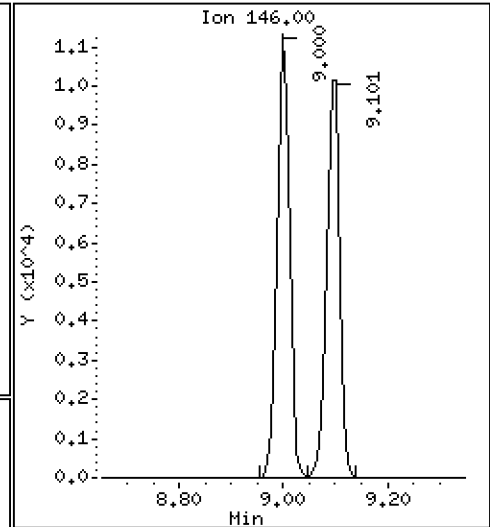
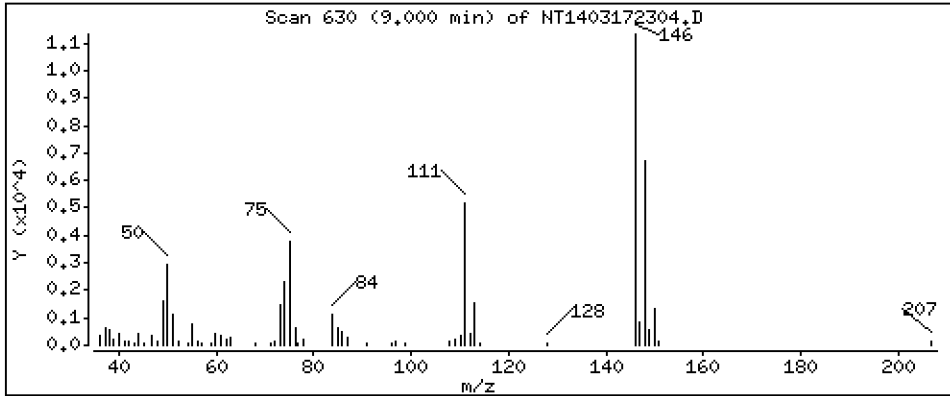
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2224 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

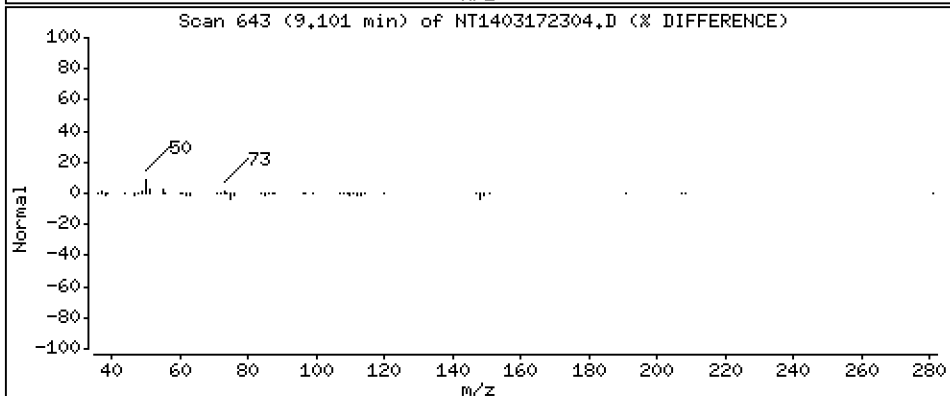
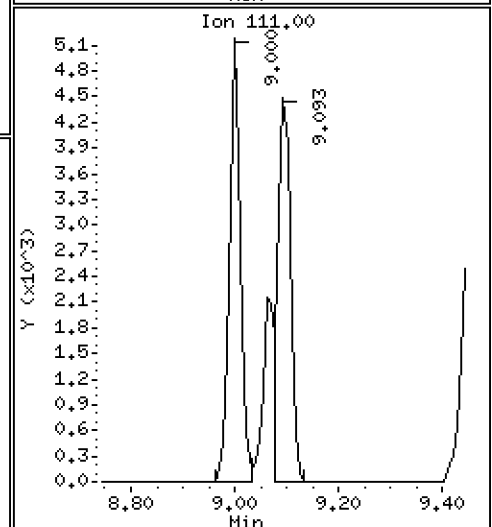
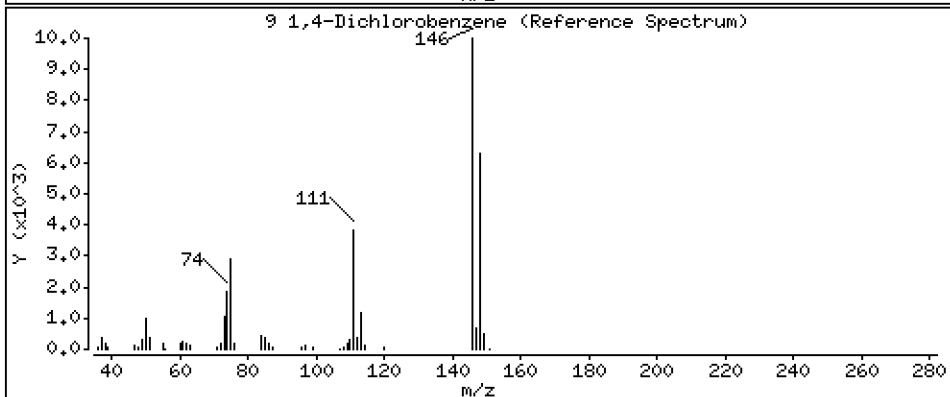
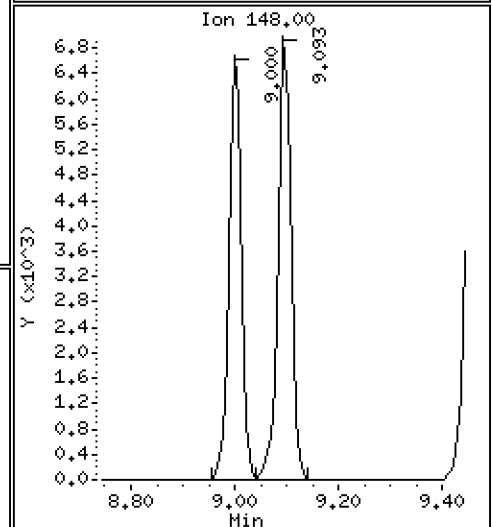
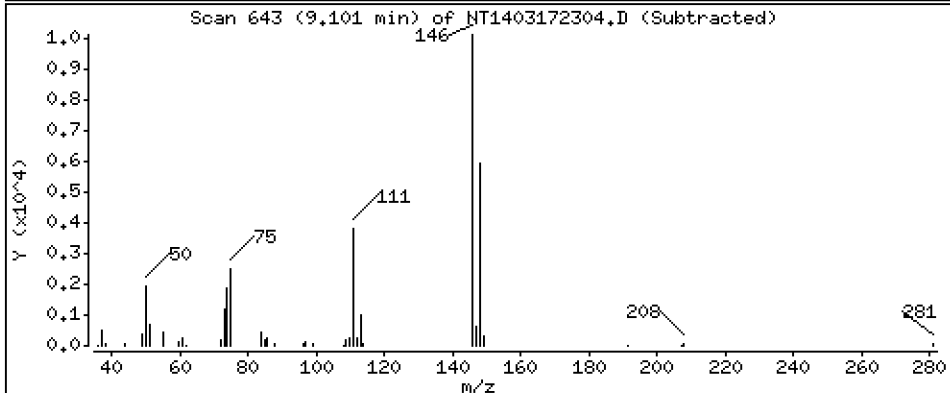
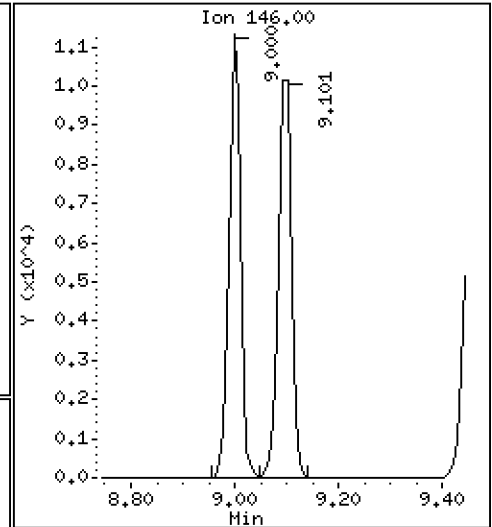
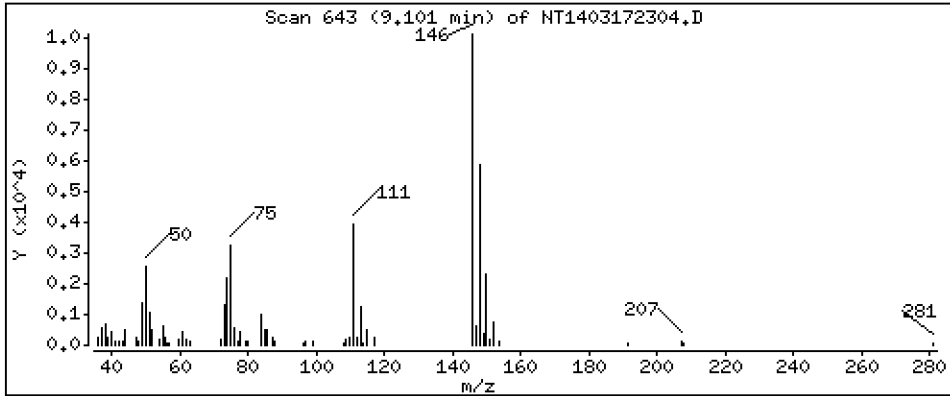
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2135 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

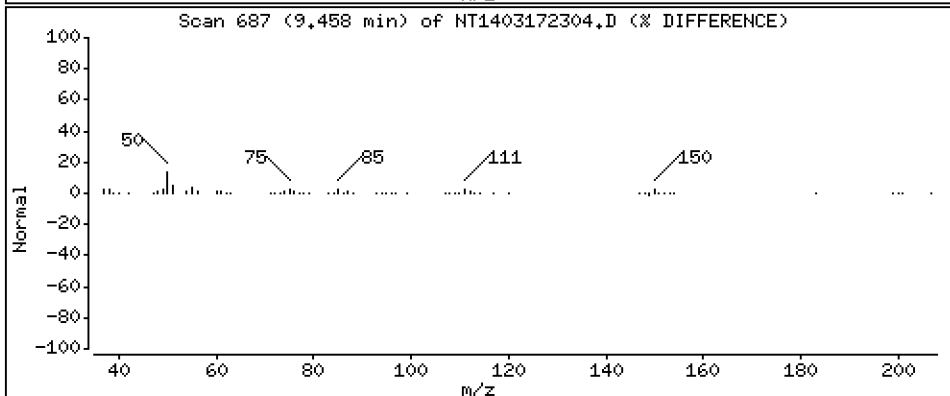
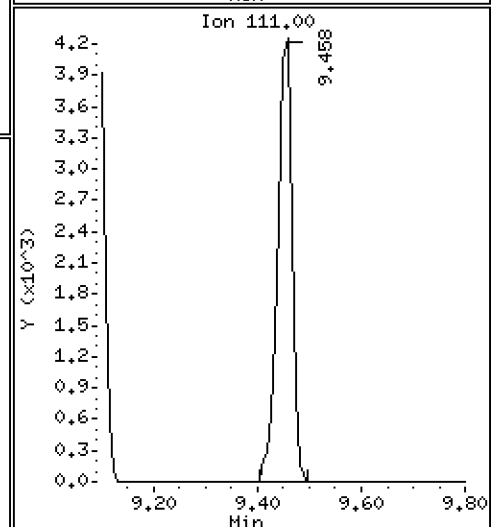
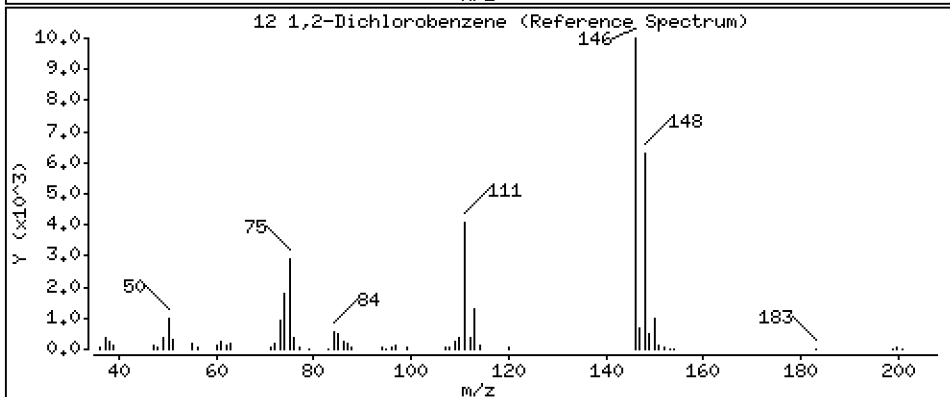
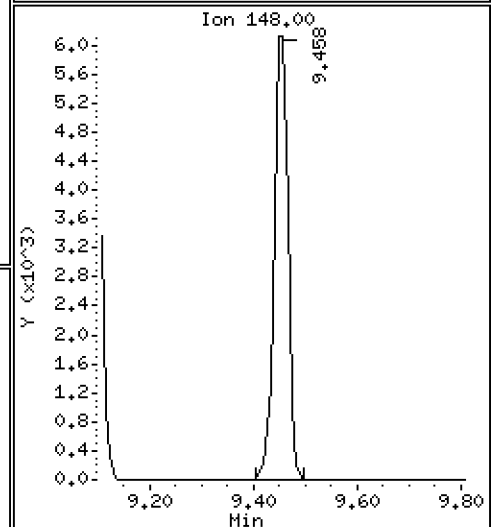
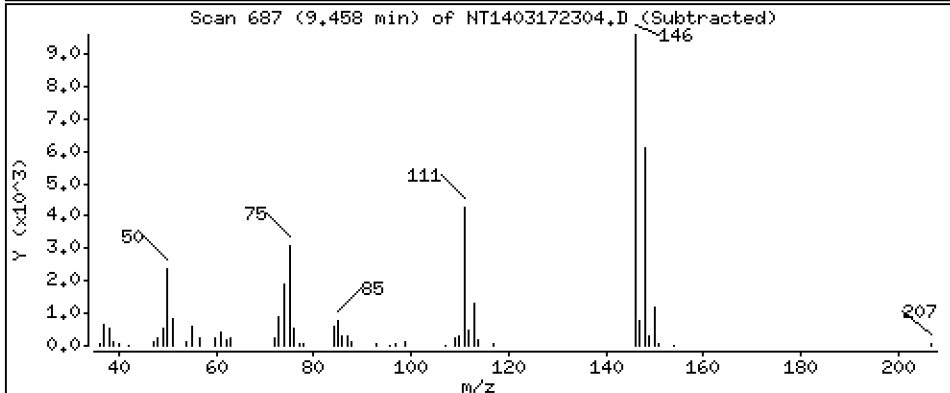
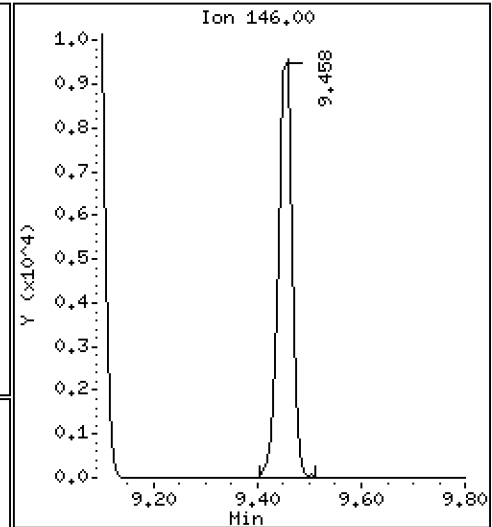
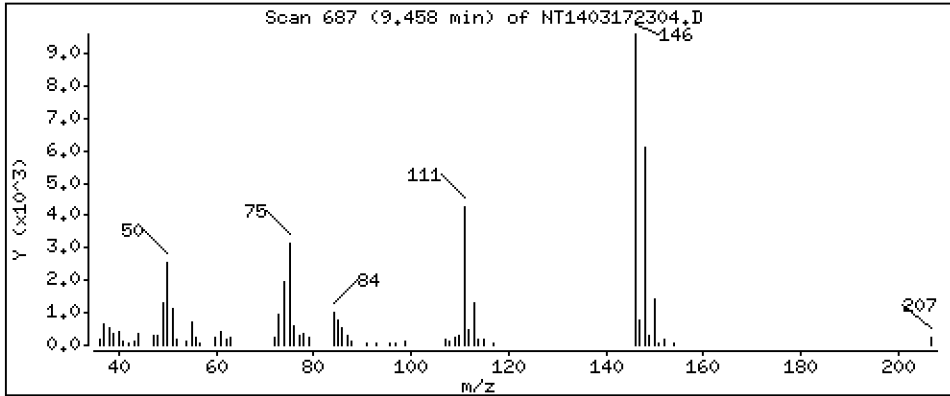
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2153 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

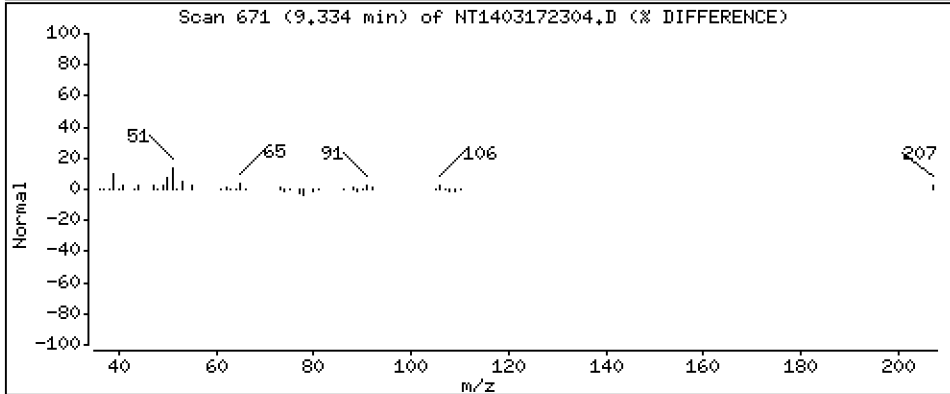
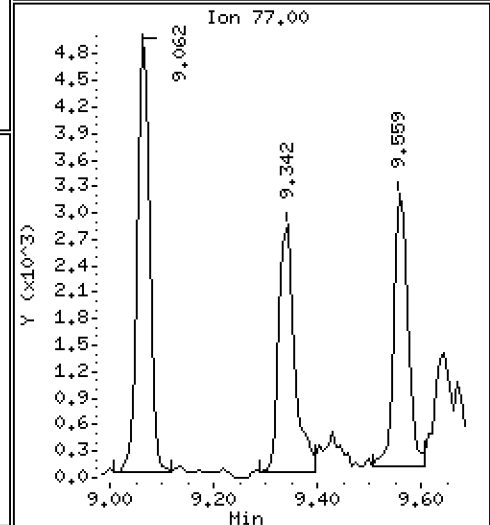
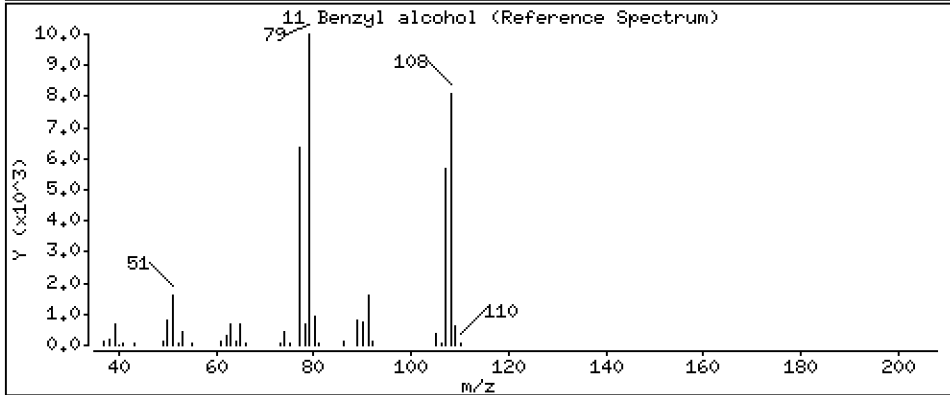
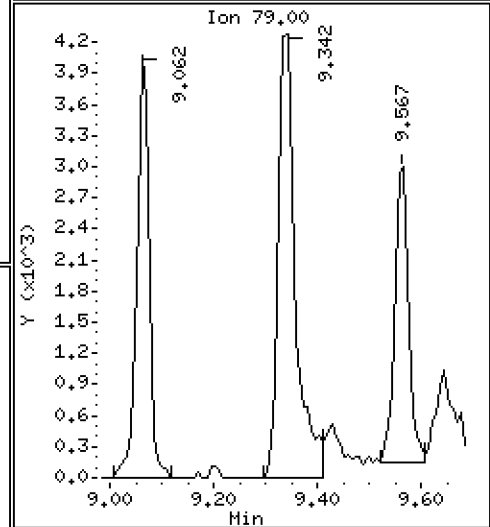
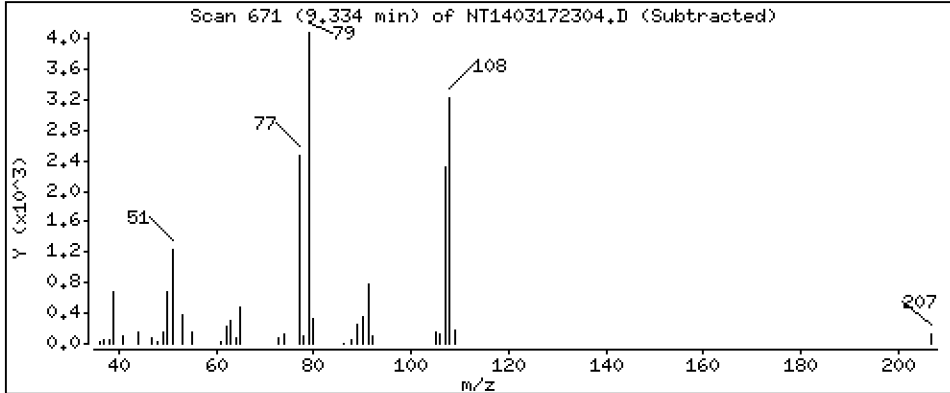
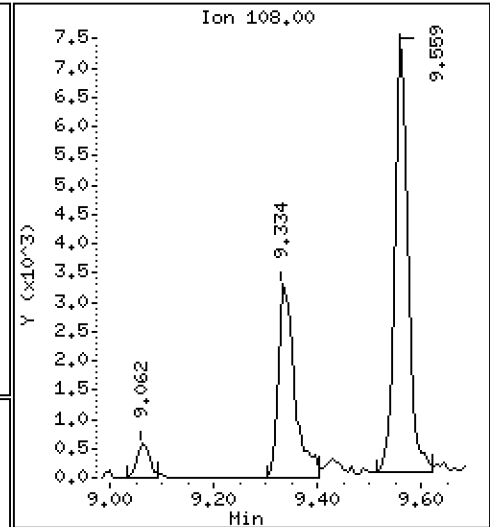
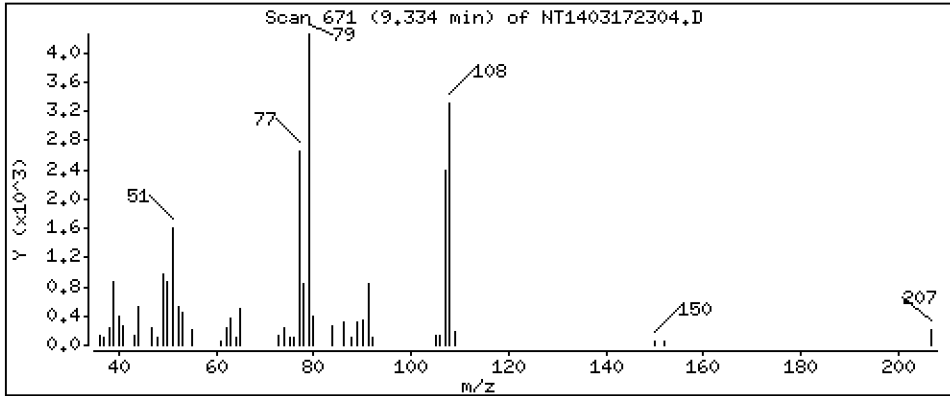
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1442 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

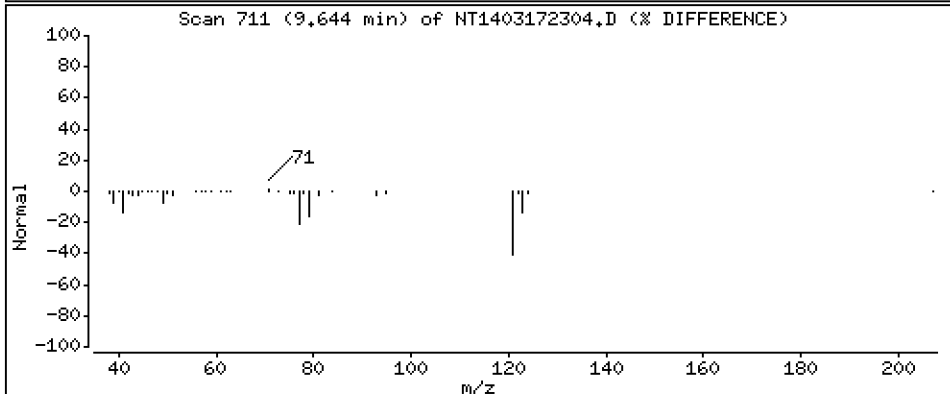
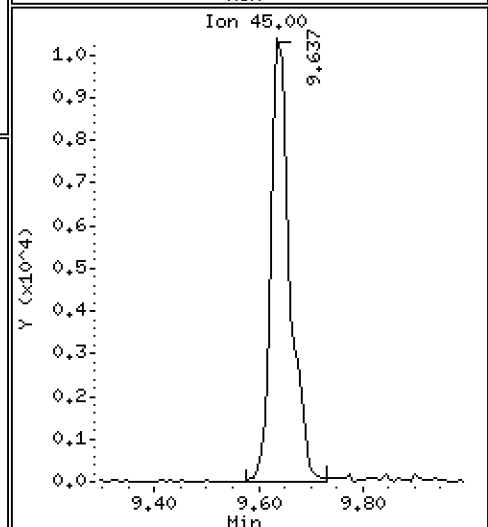
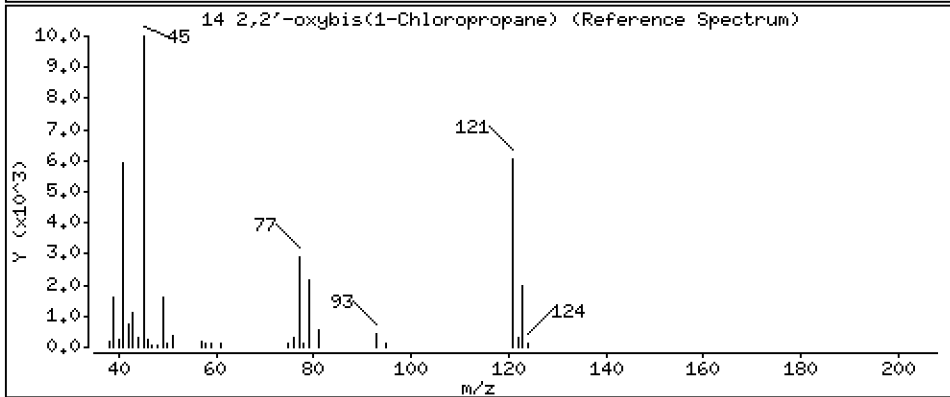
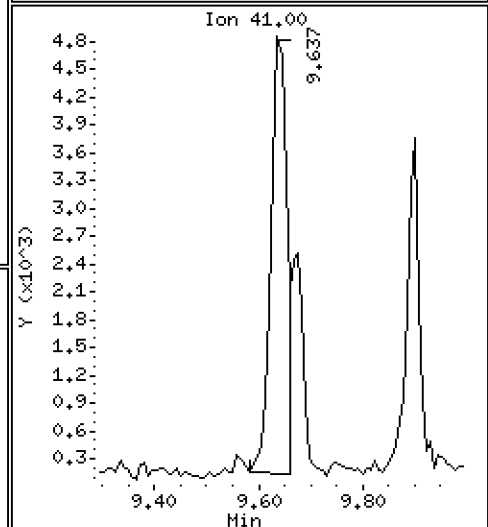
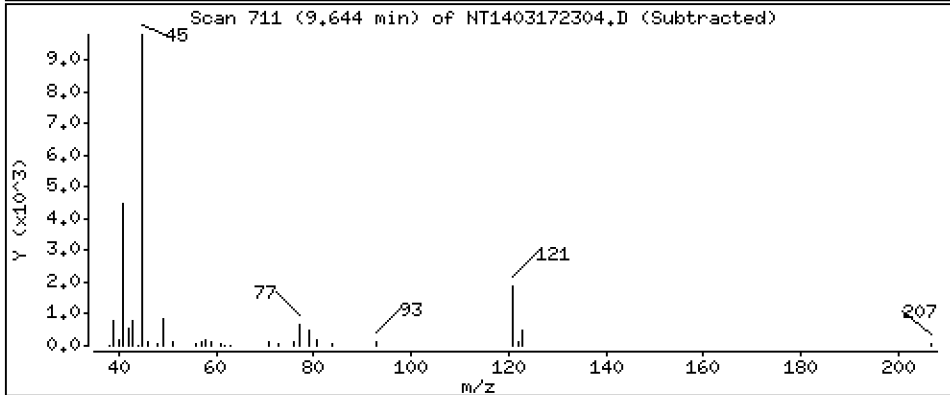
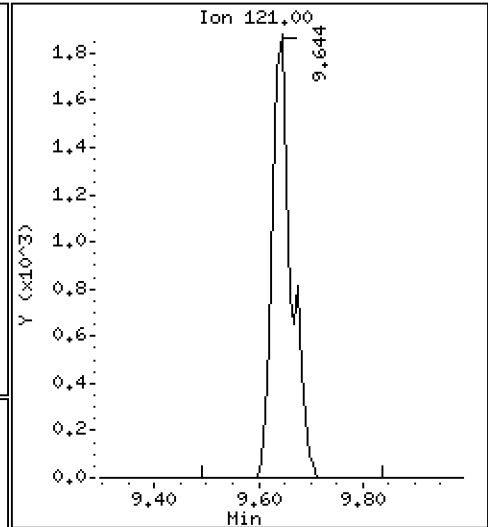
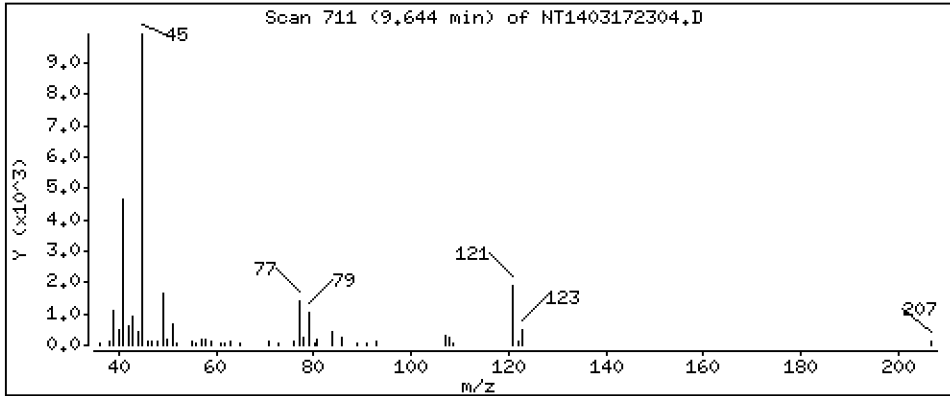
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2077 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

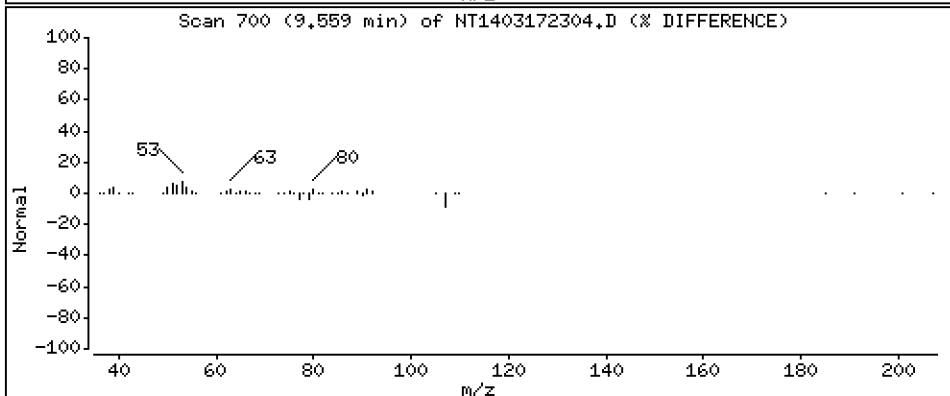
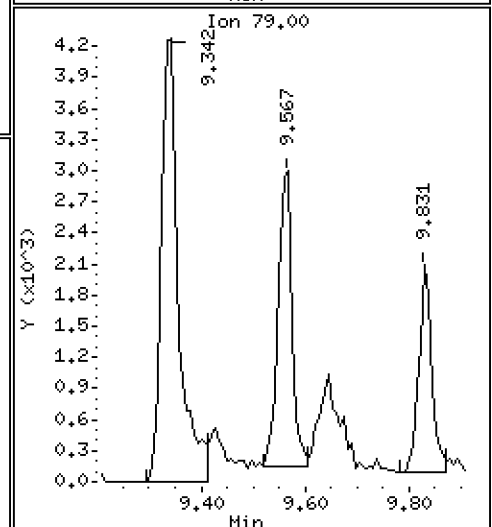
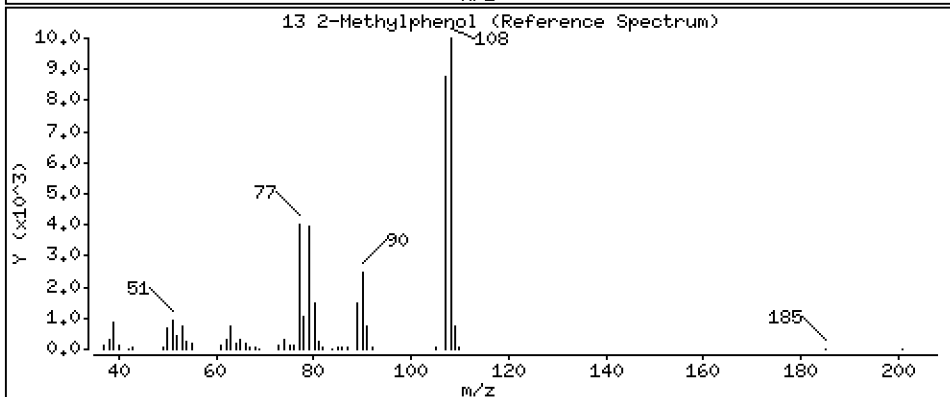
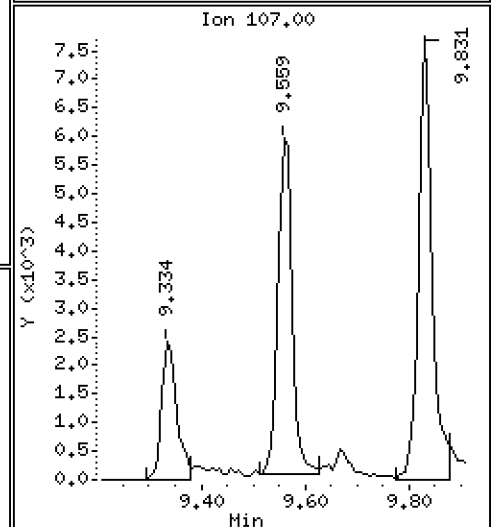
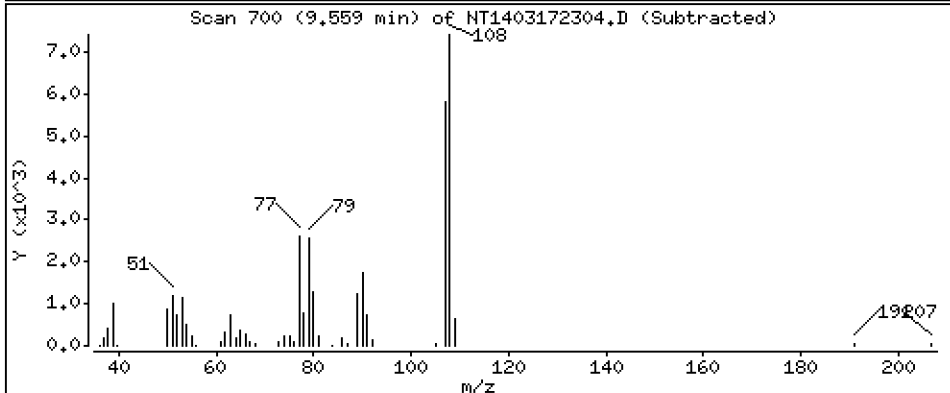
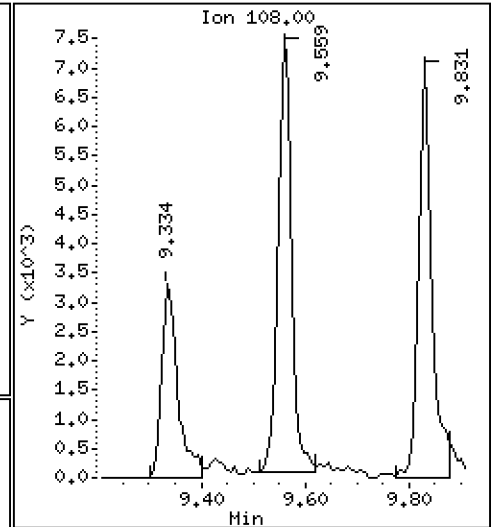
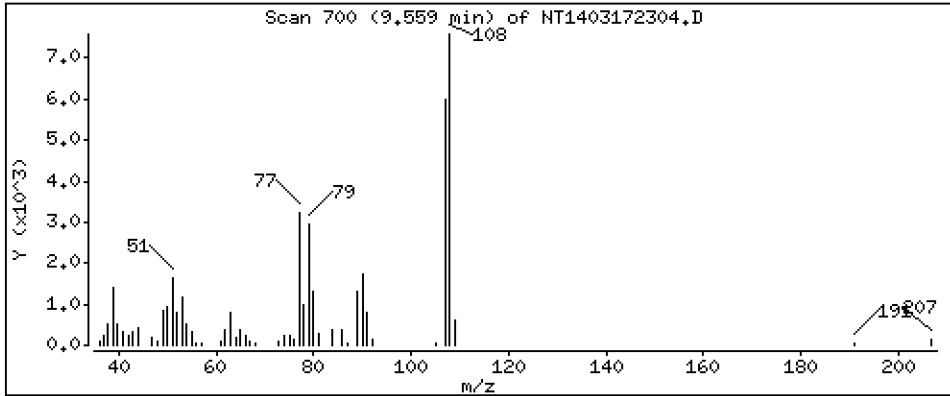
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1739 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

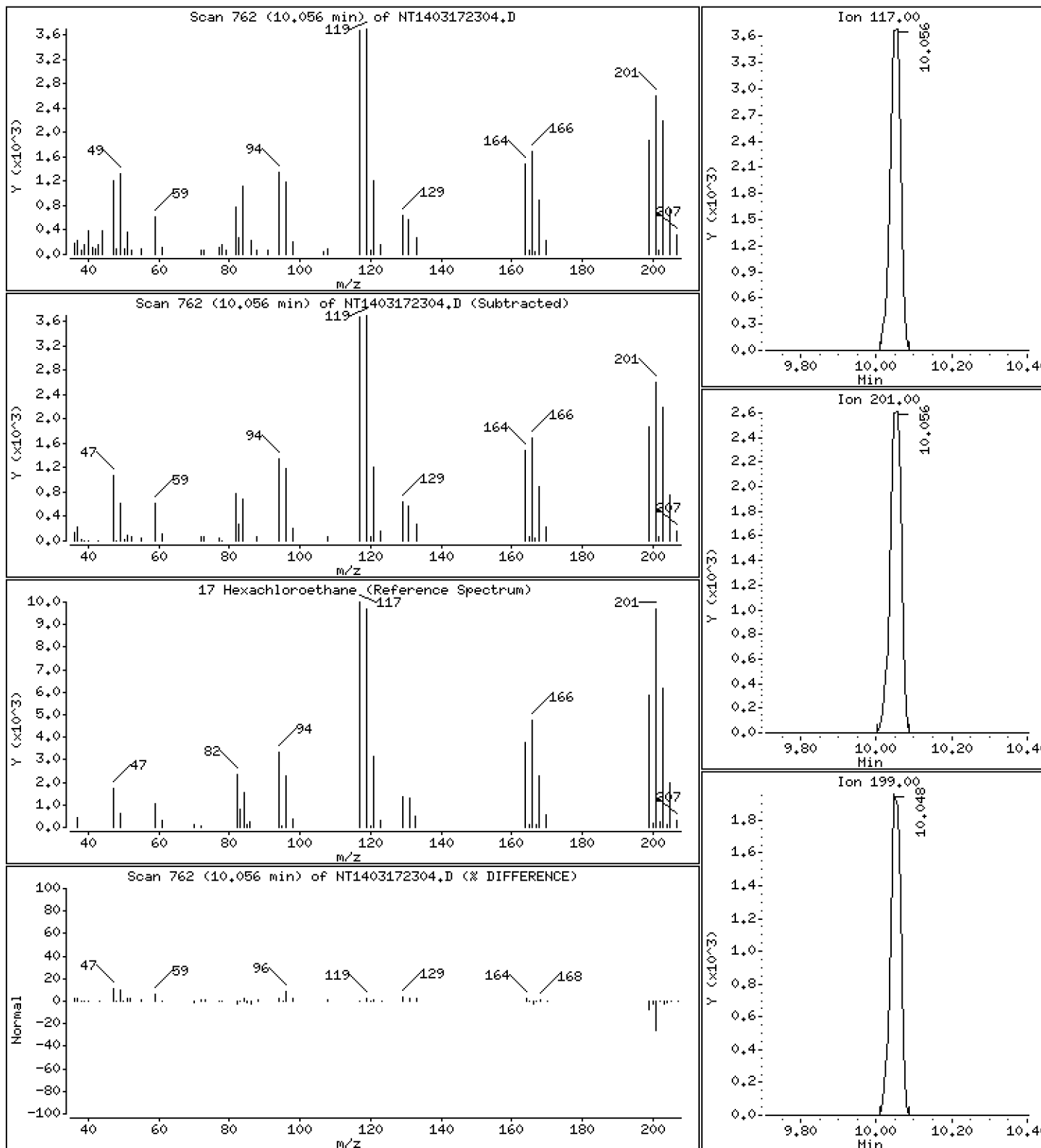
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 0.2033 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

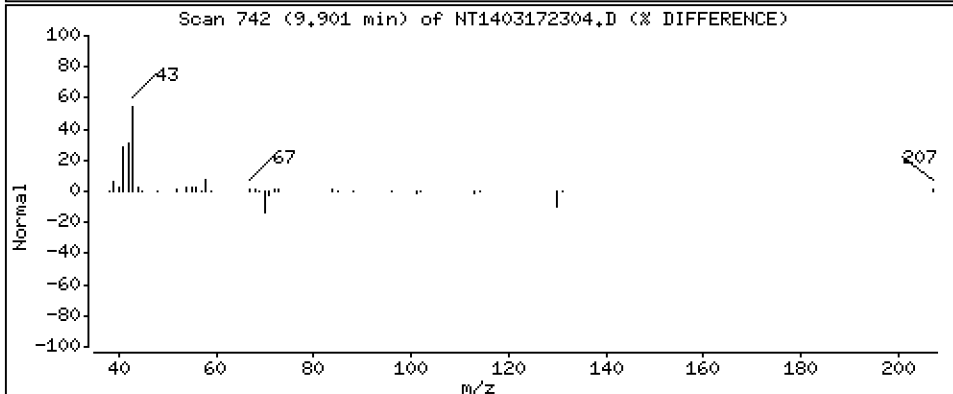
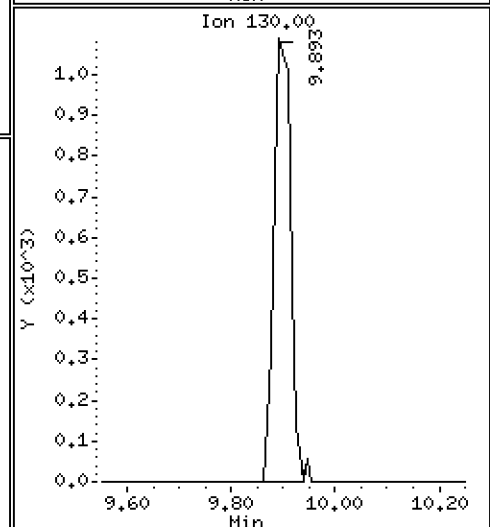
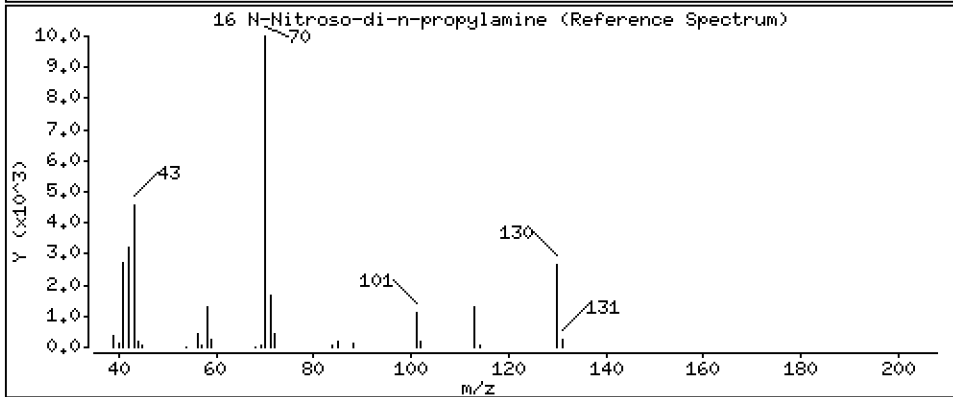
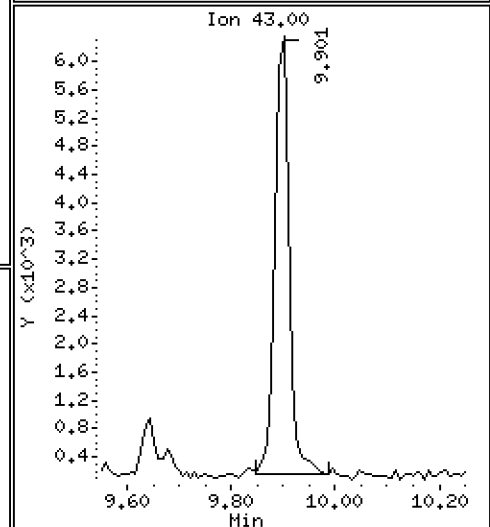
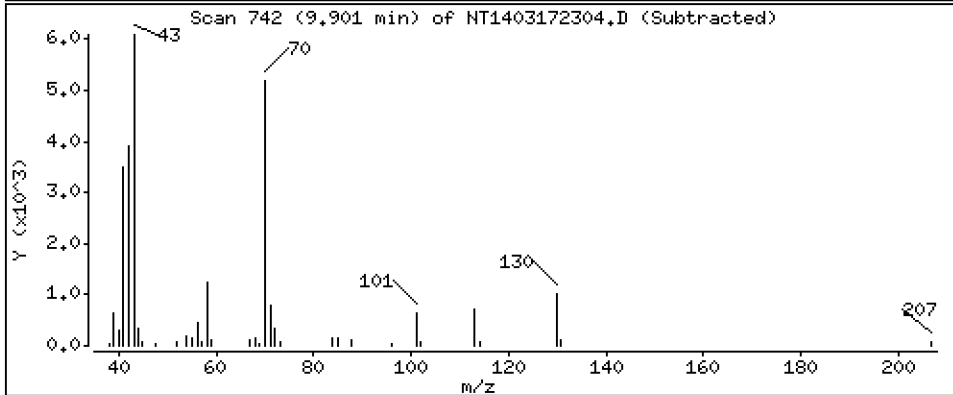
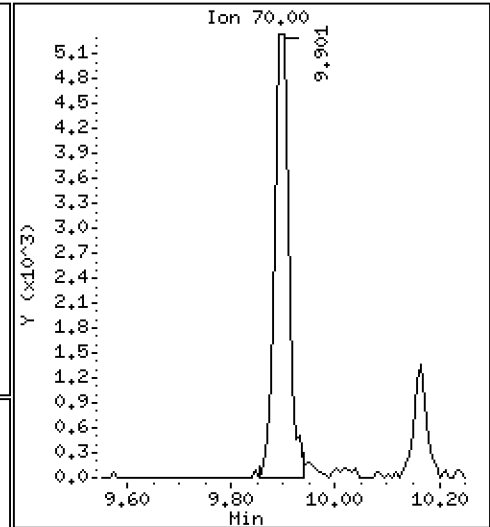
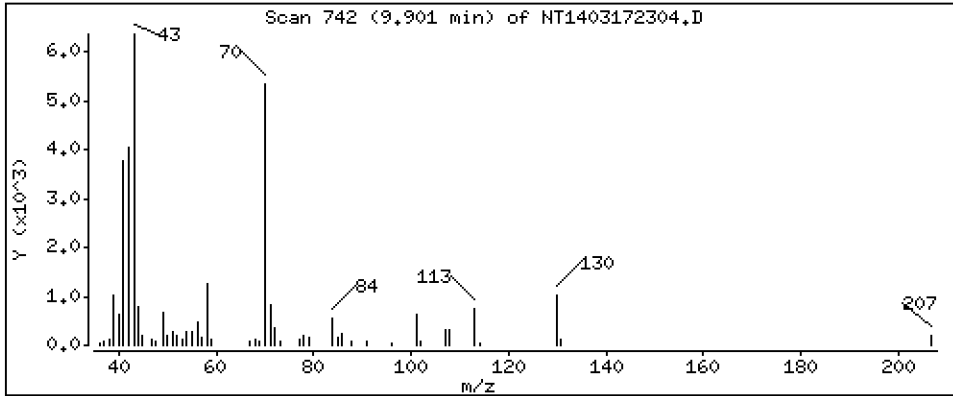
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.1688 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

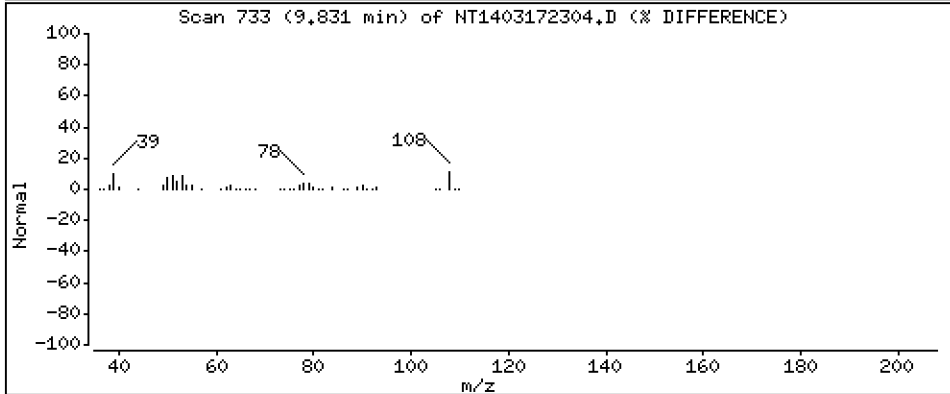
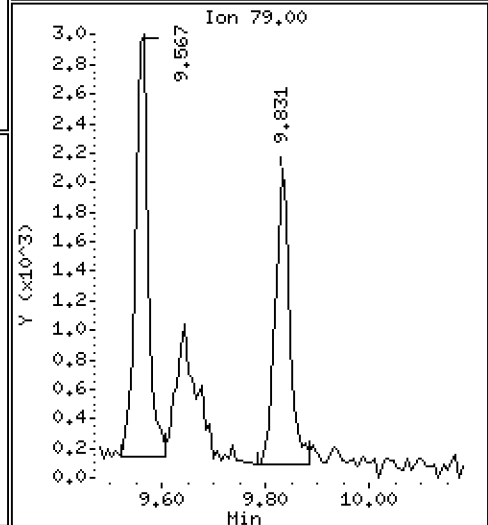
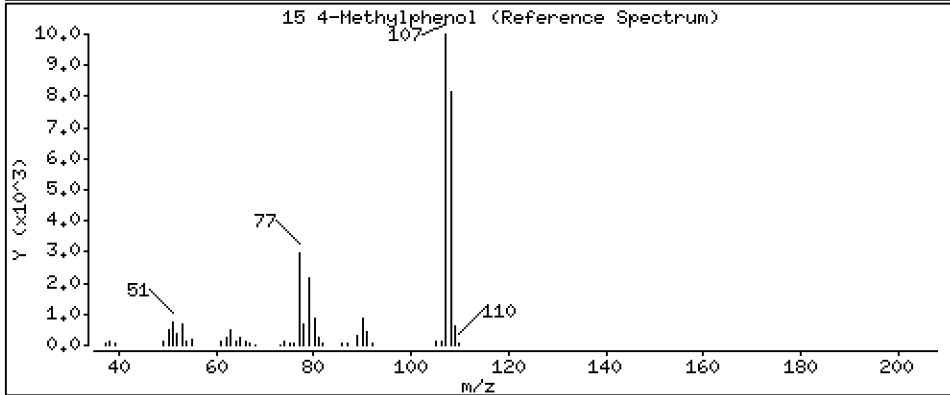
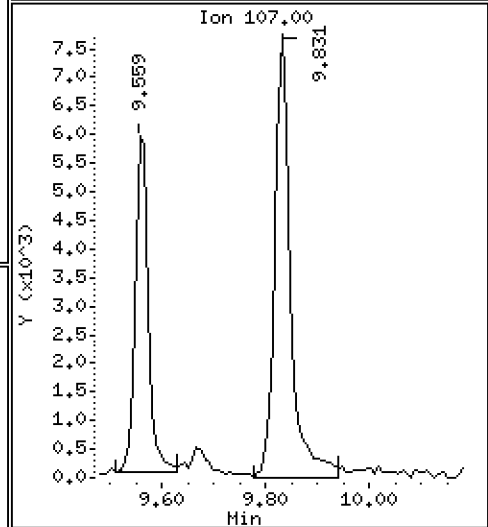
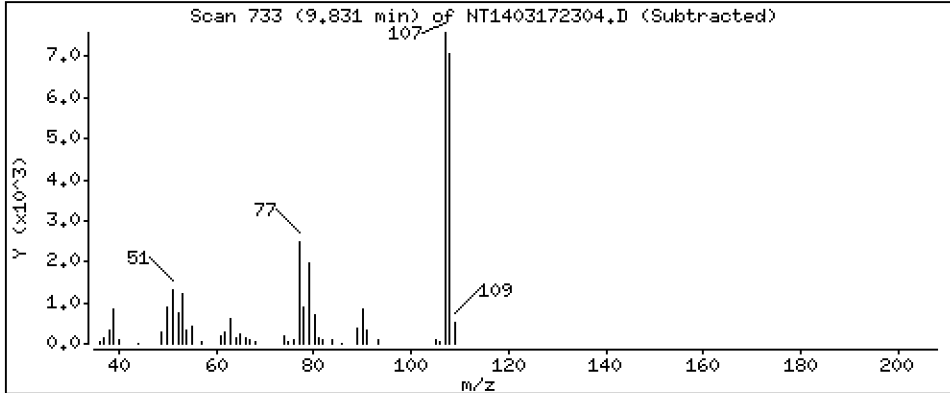
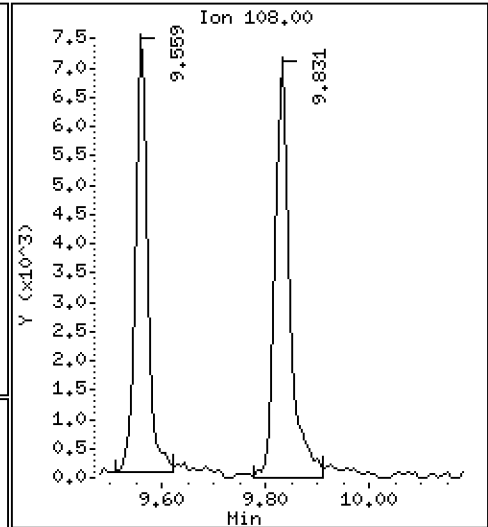
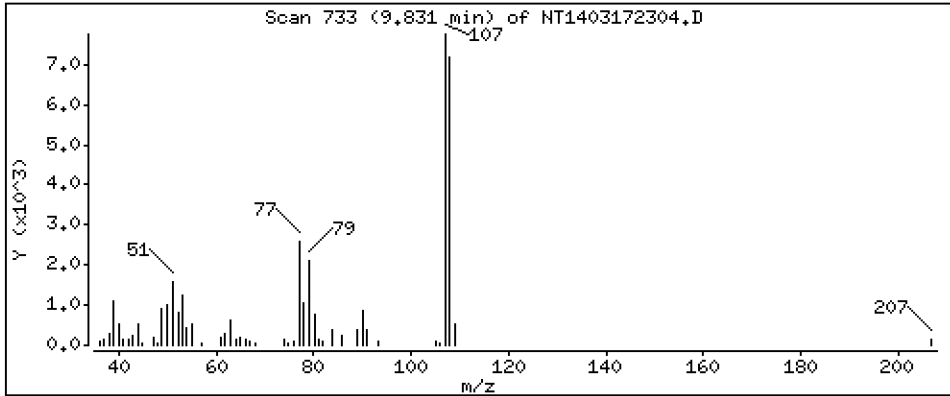
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1583 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

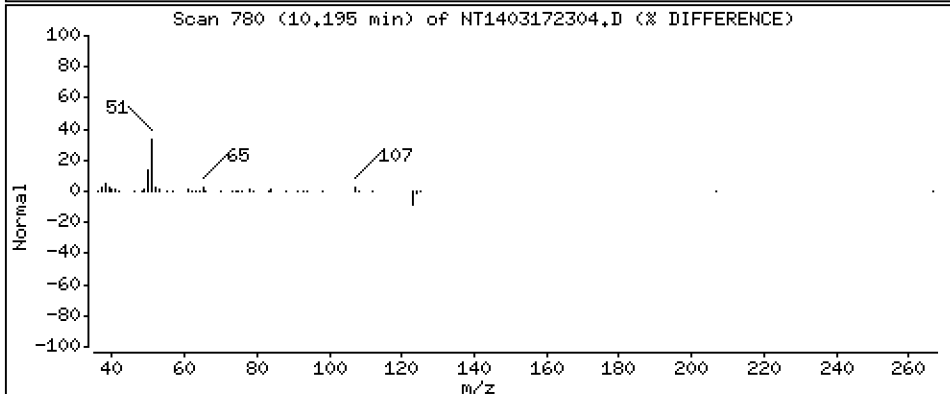
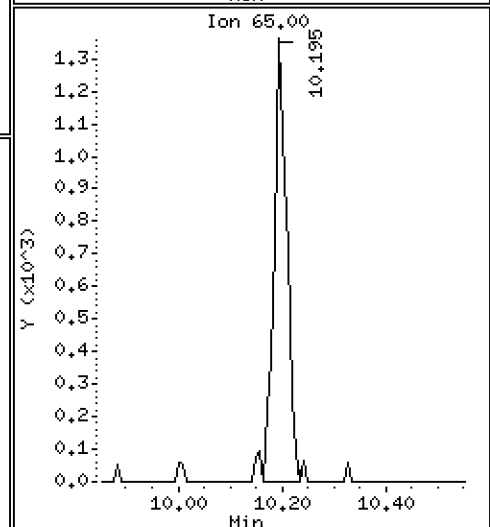
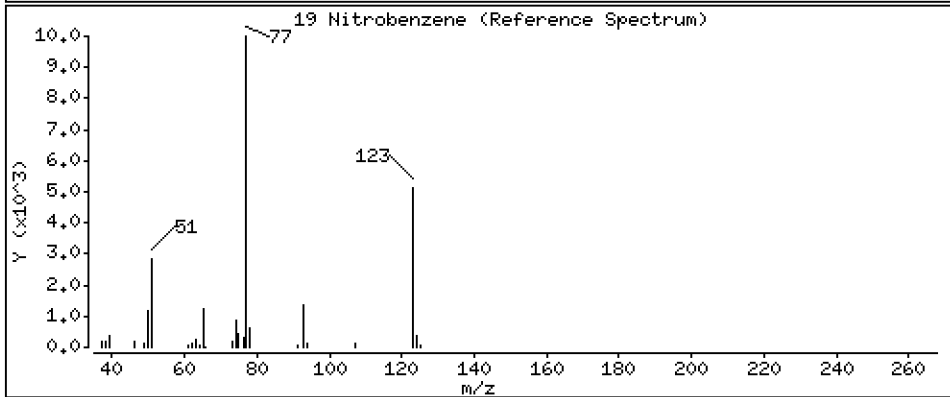
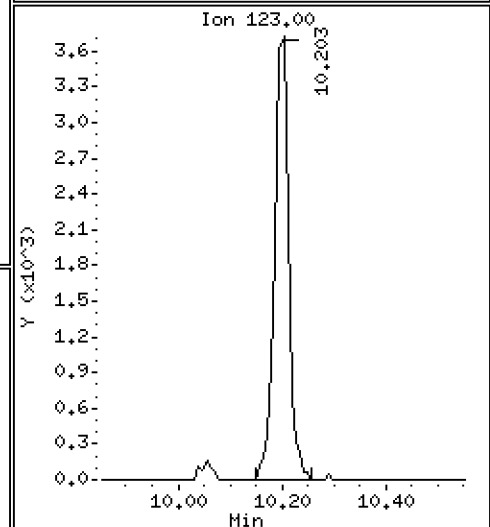
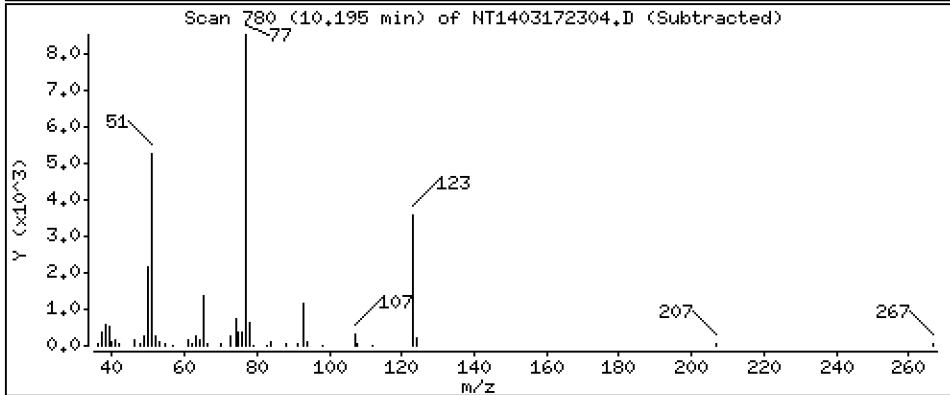
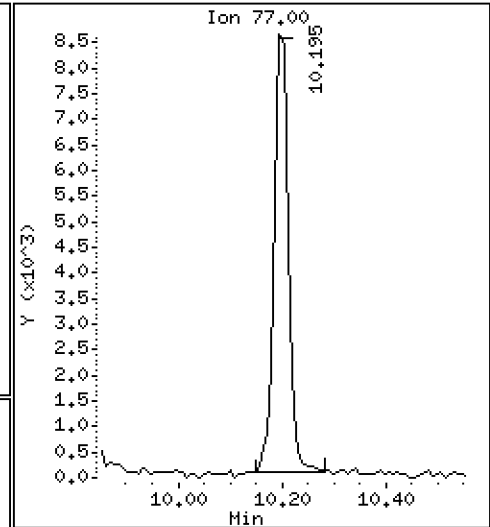
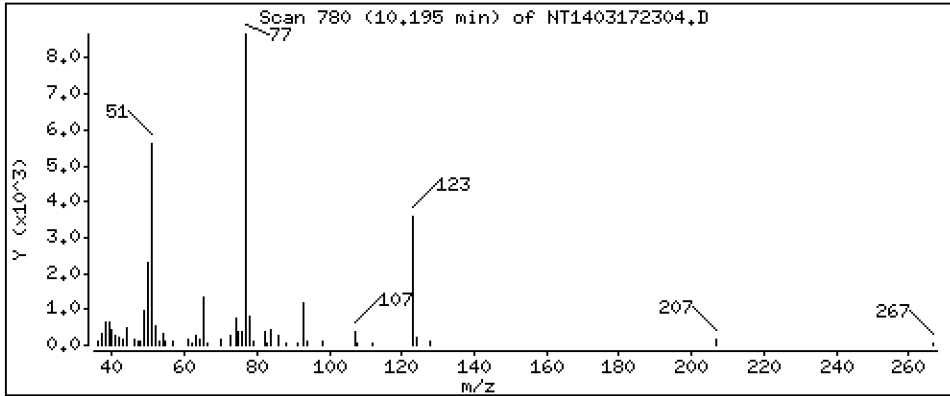
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,1840 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

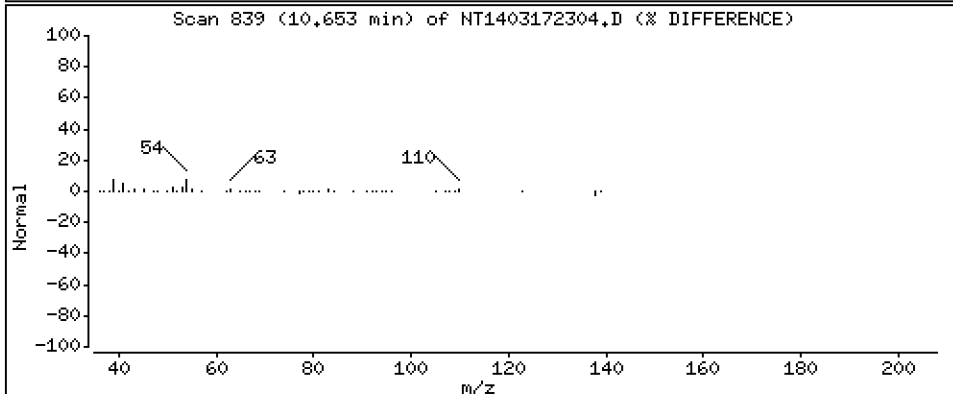
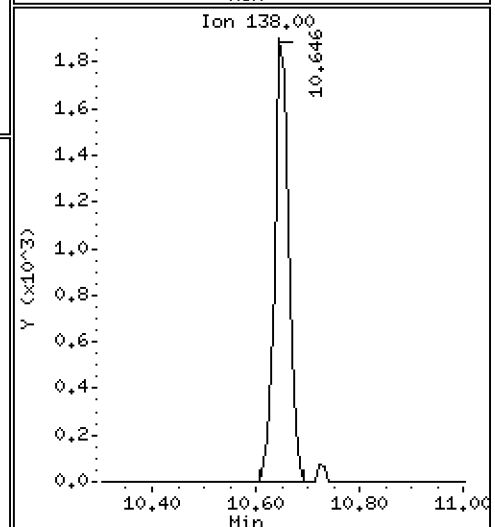
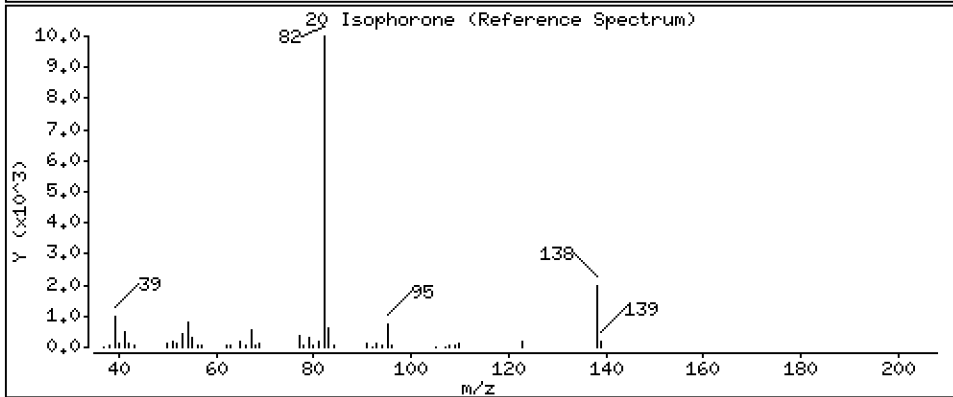
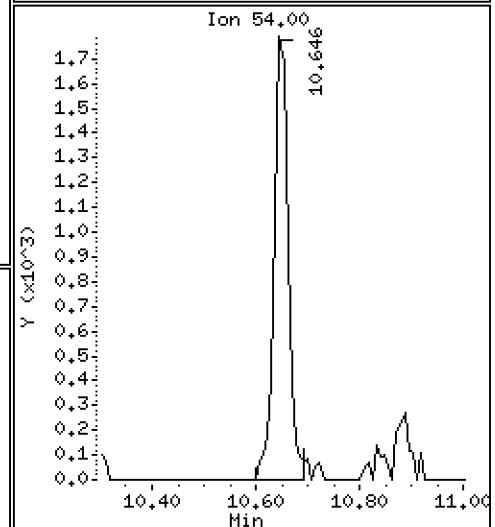
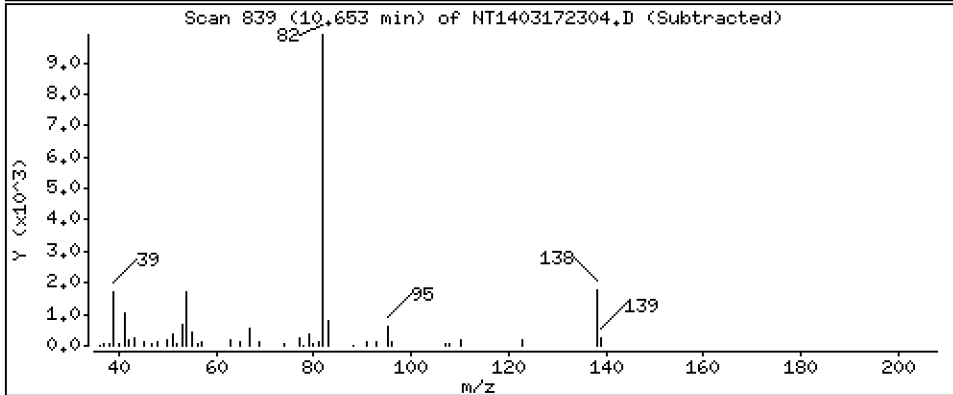
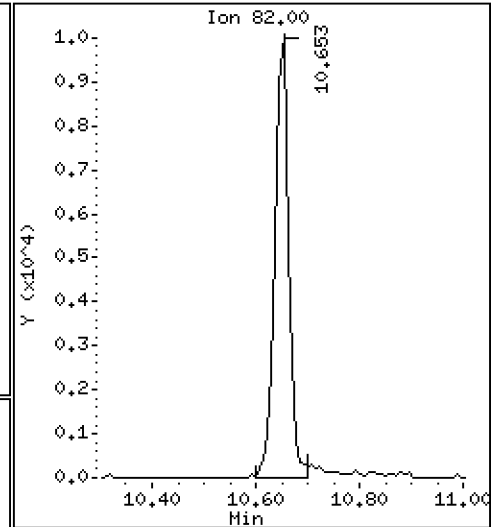
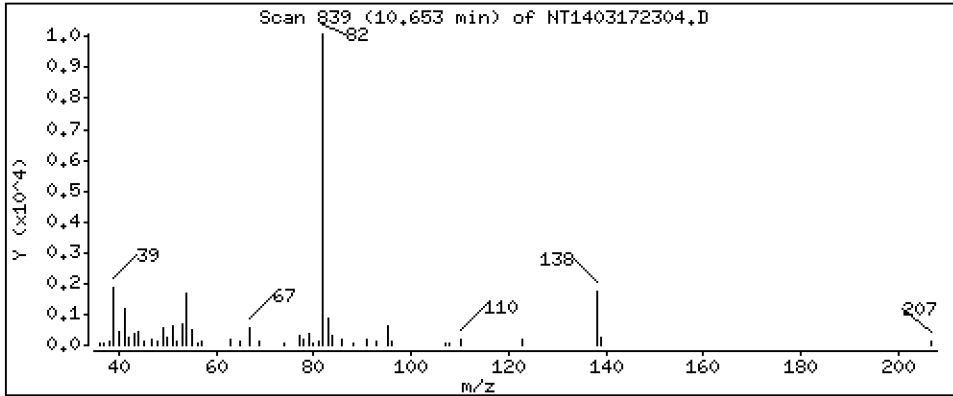
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1523 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

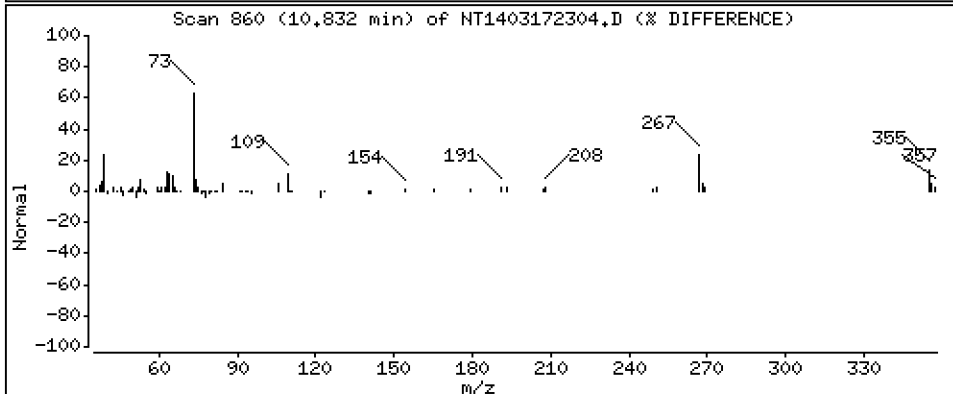
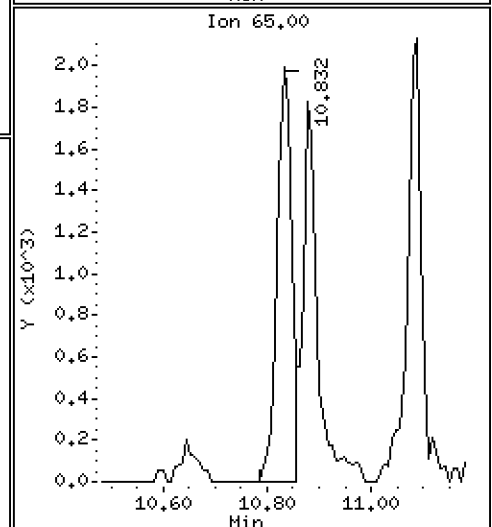
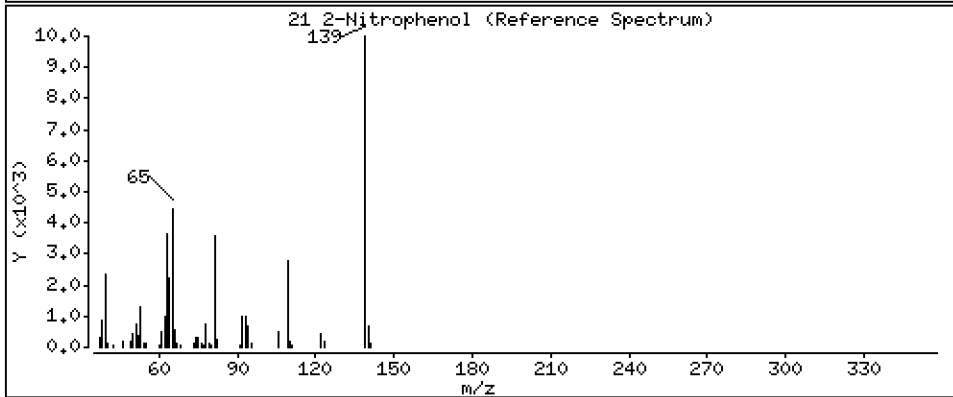
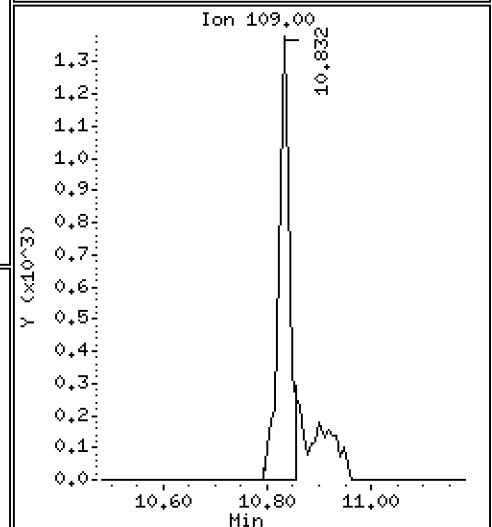
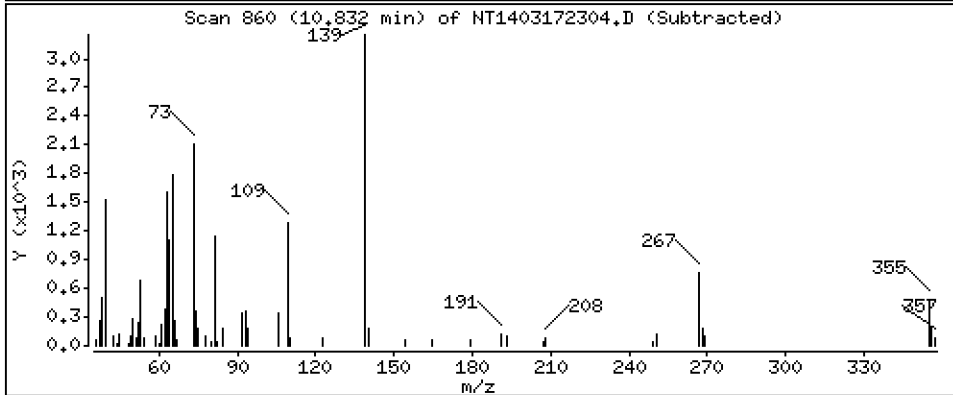
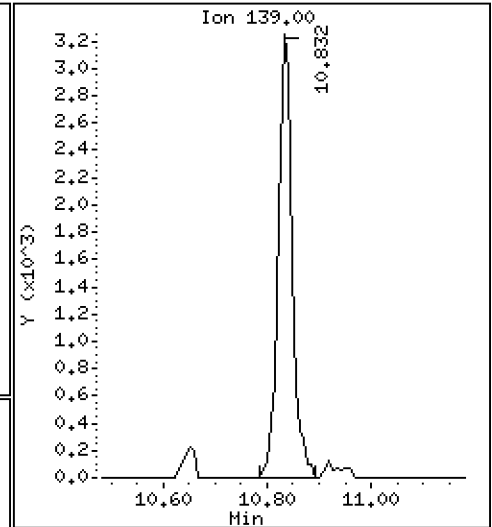
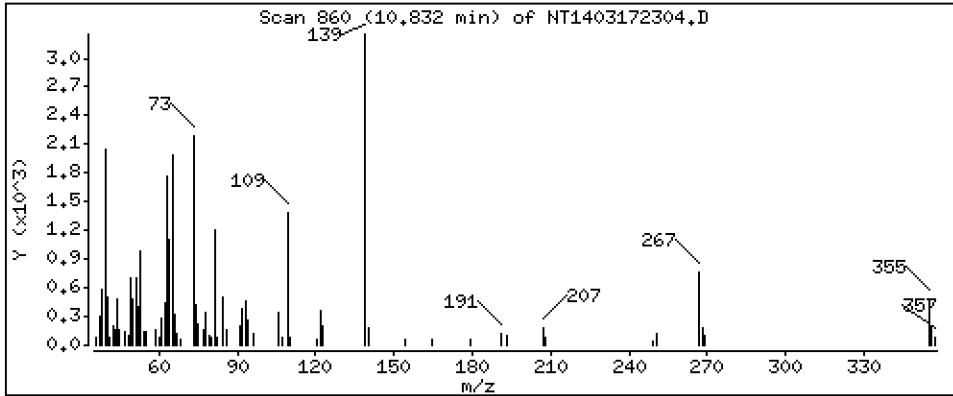
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1214 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

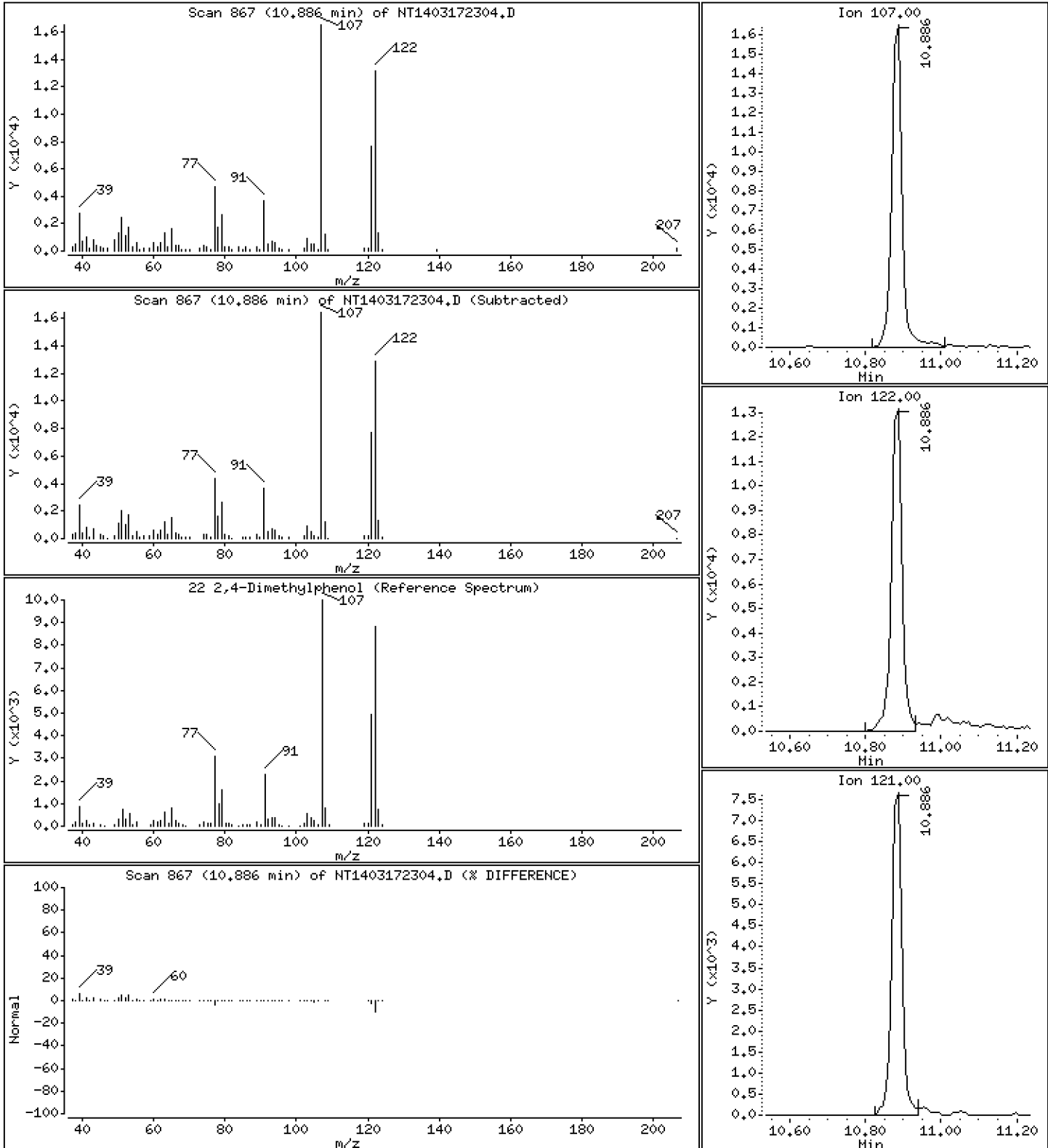
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,4112 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

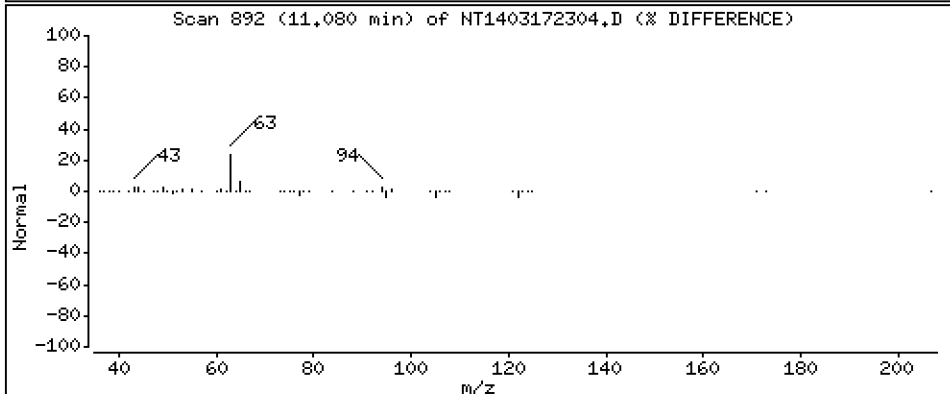
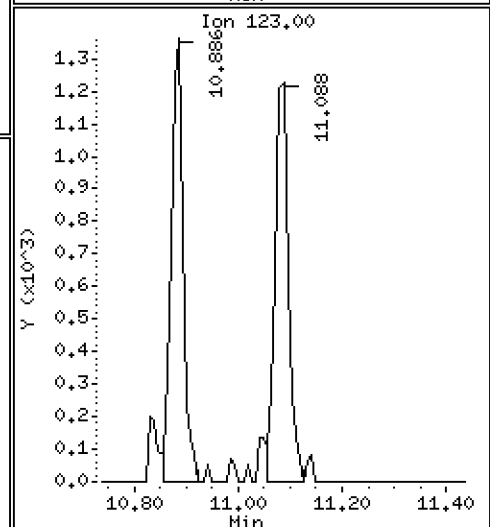
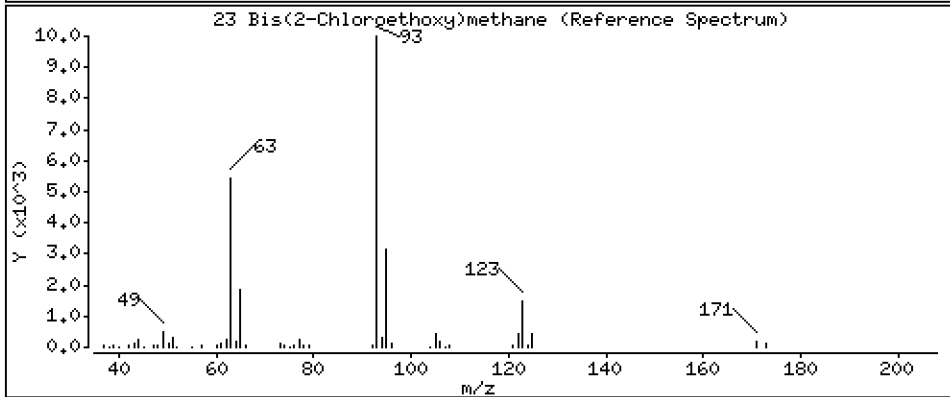
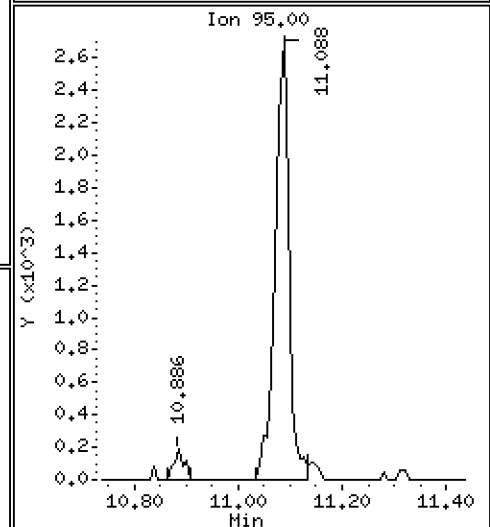
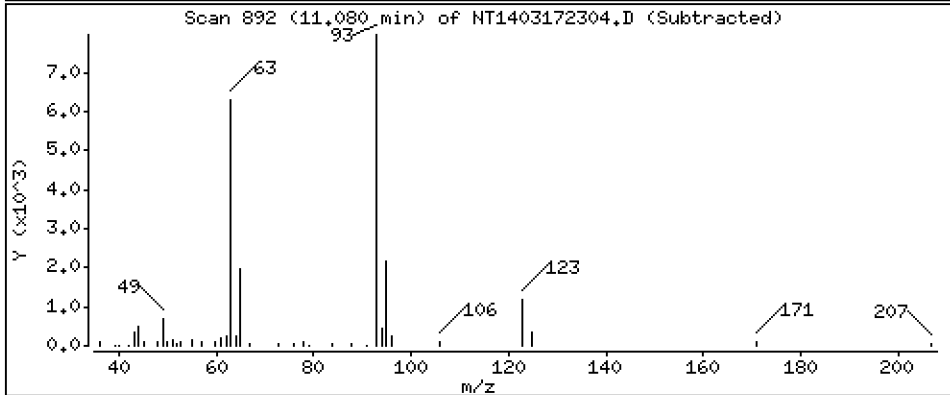
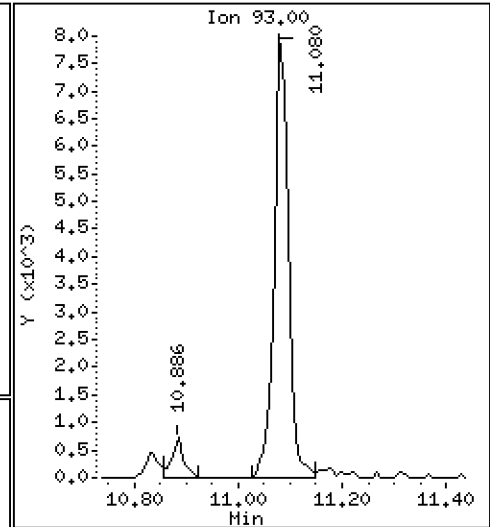
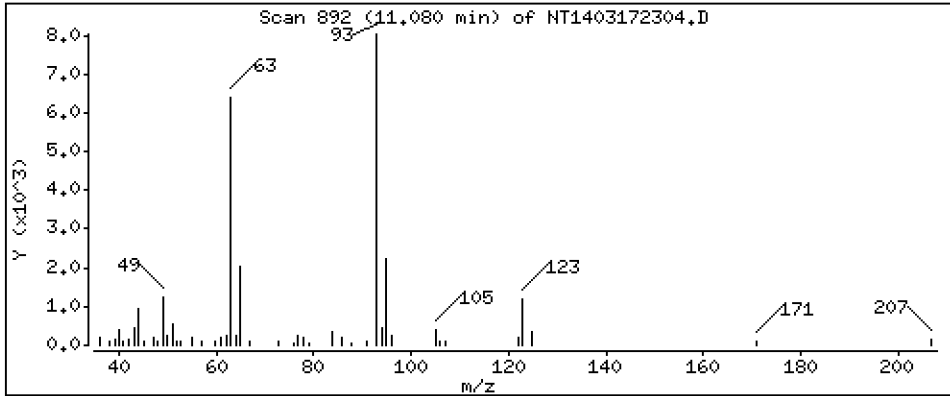
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

23 Bis(2-Chloroethoxy)methane

Concentration: 0.1847 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

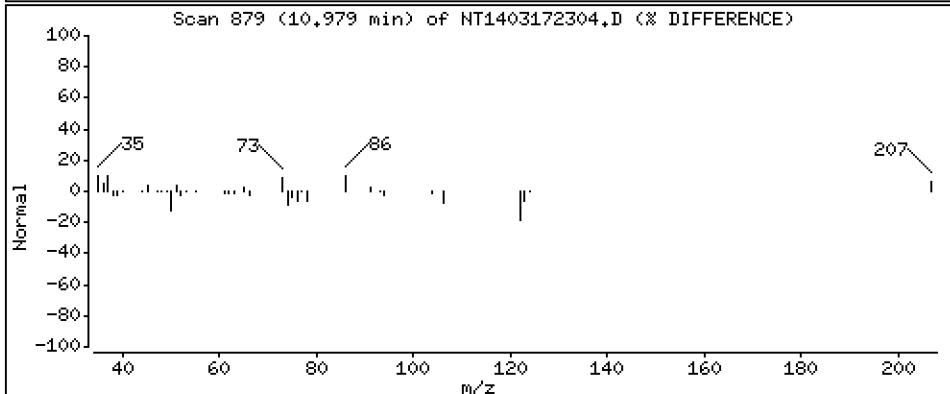
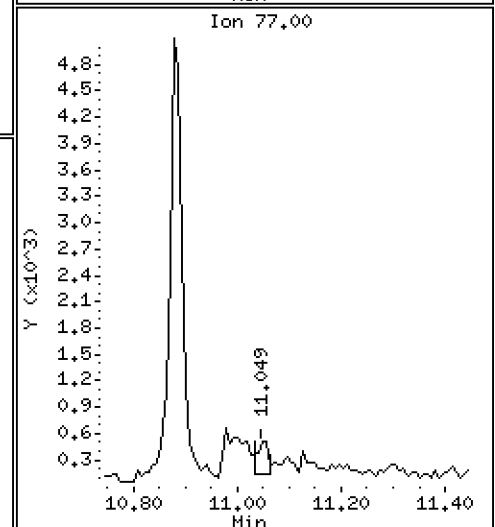
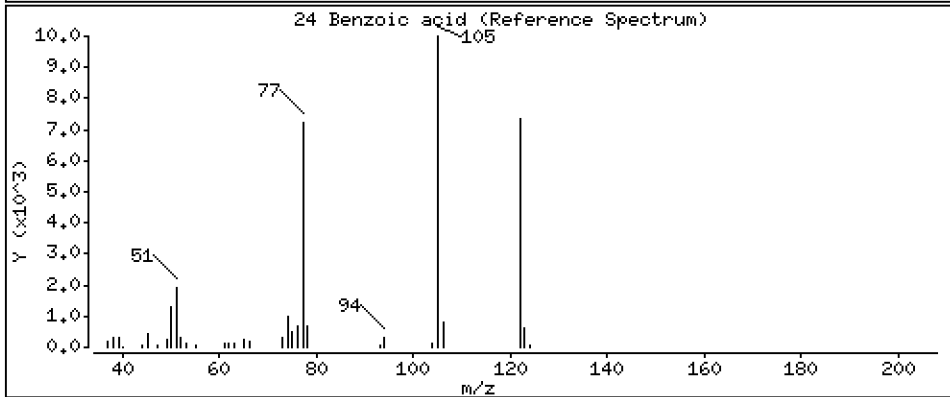
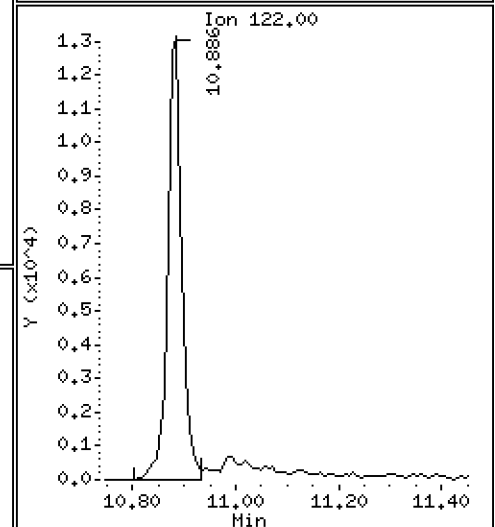
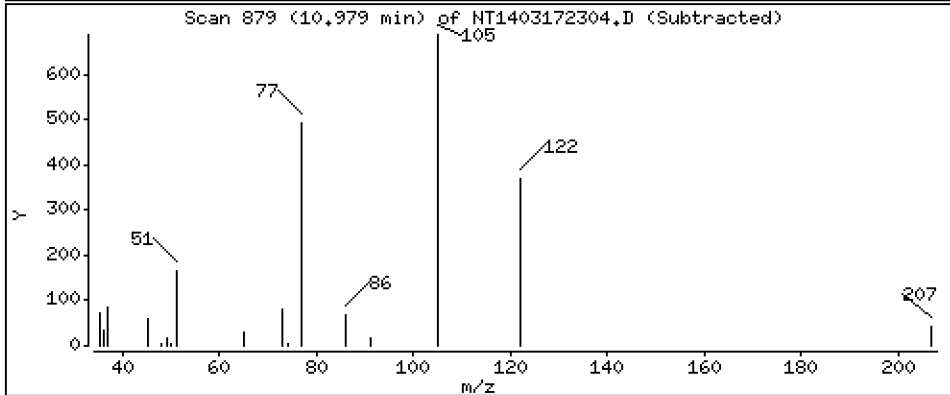
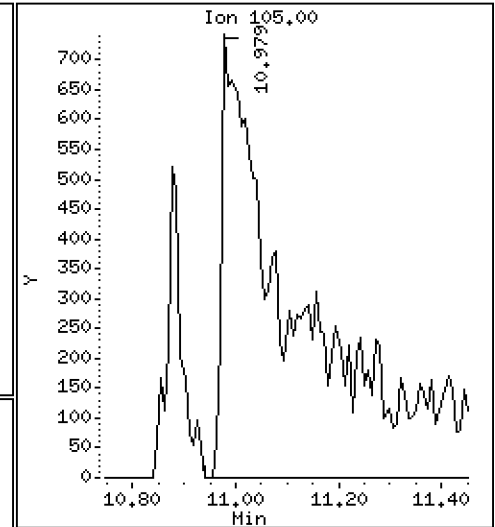
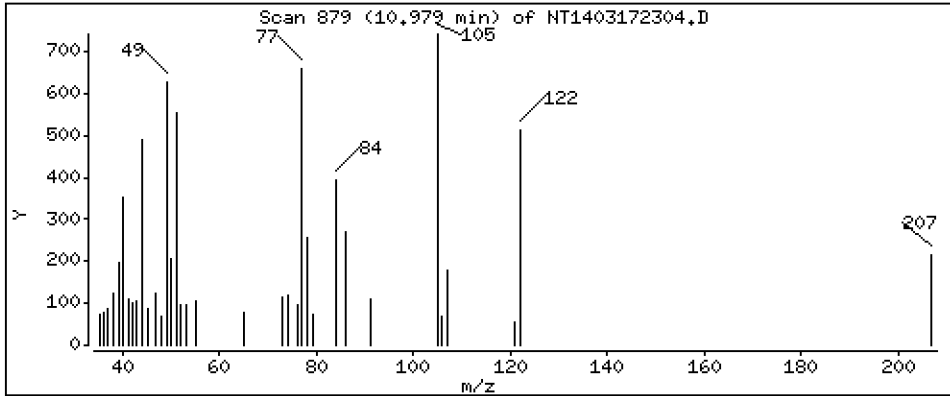
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1295 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

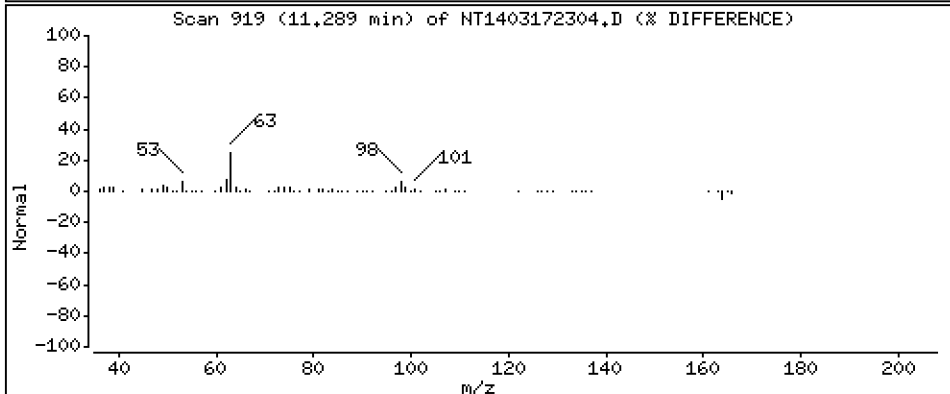
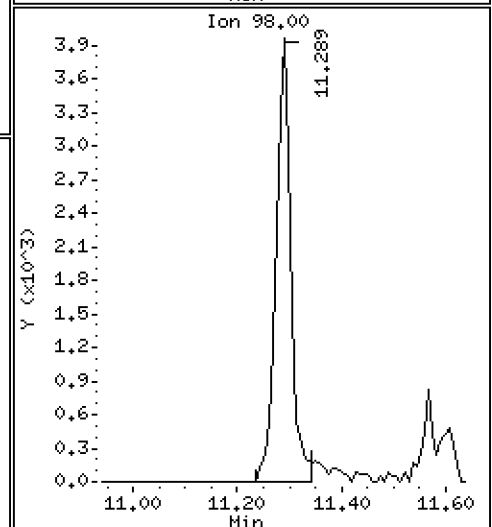
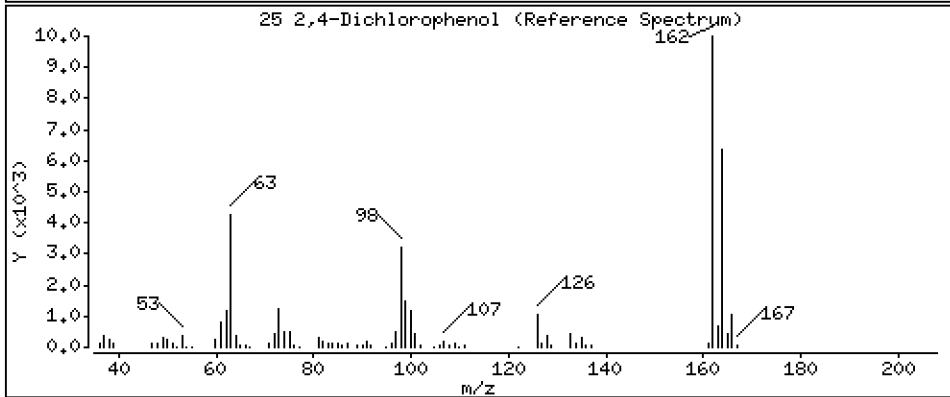
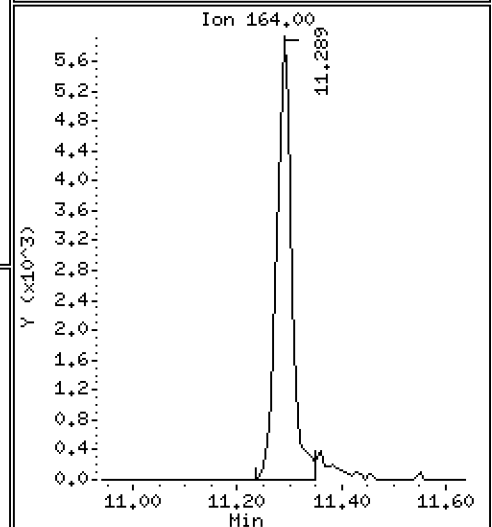
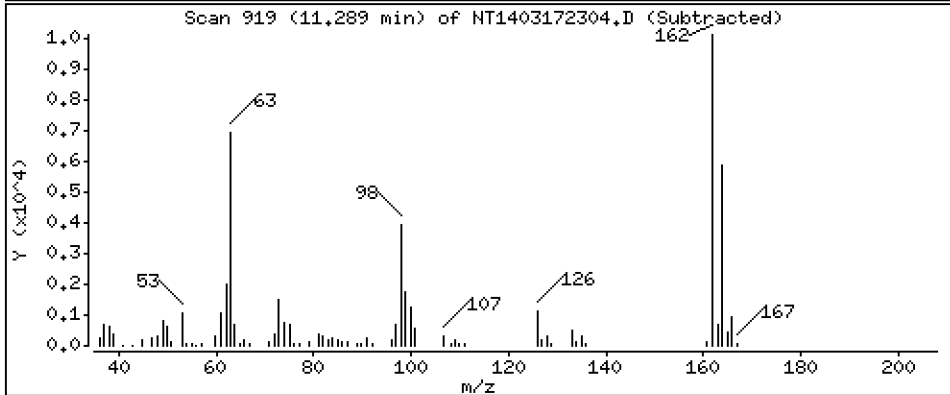
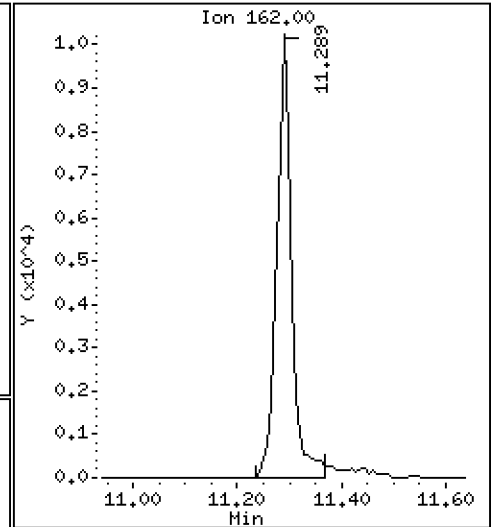
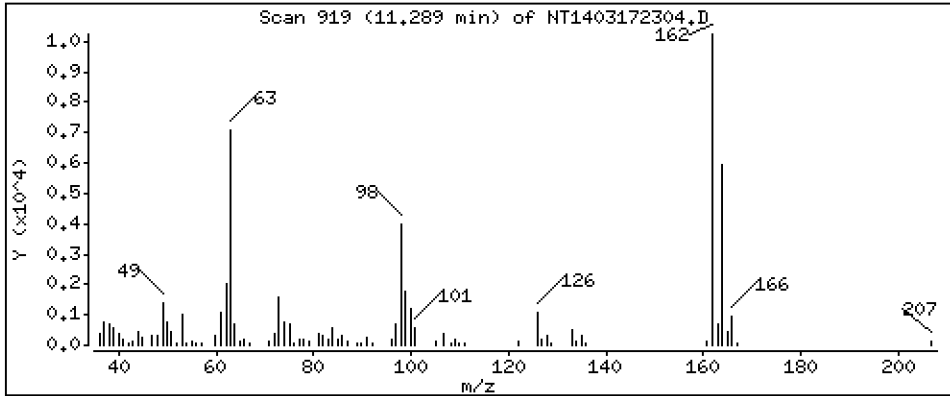
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3425 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

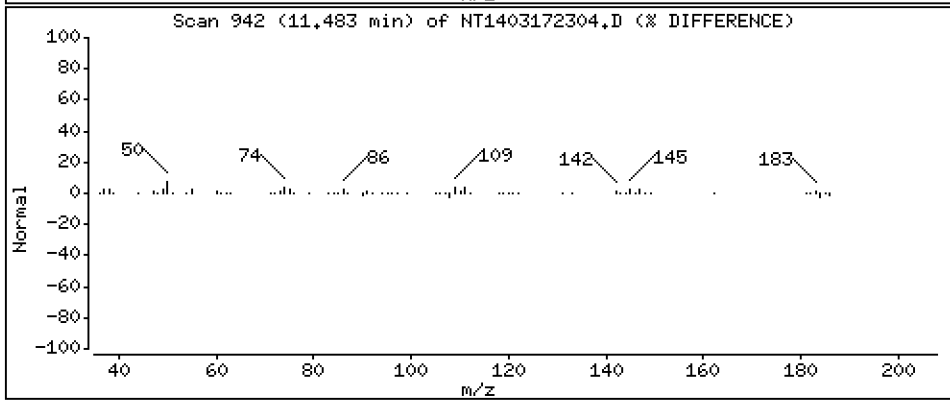
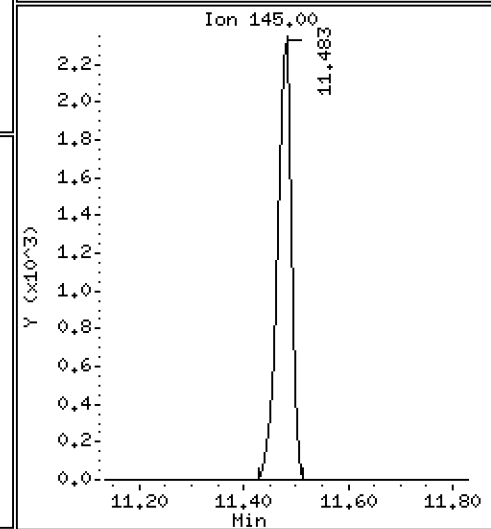
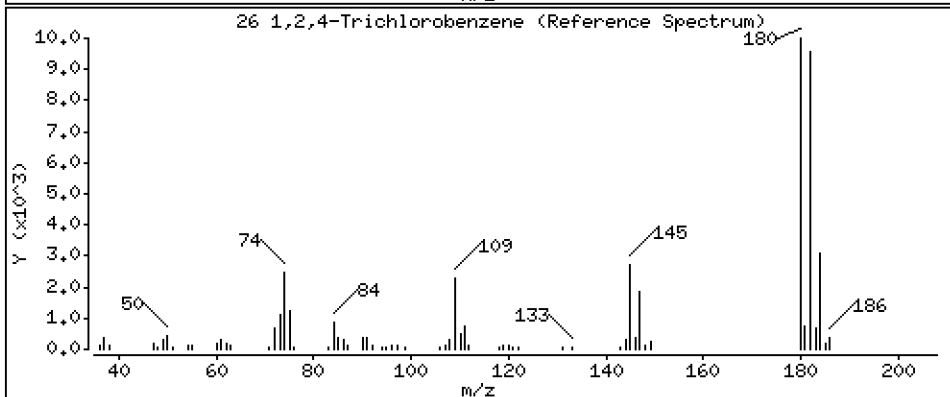
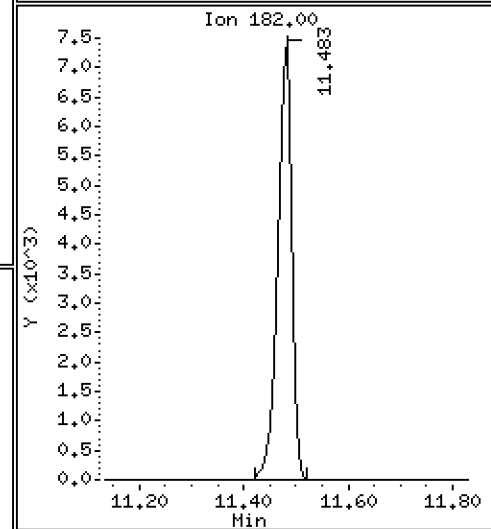
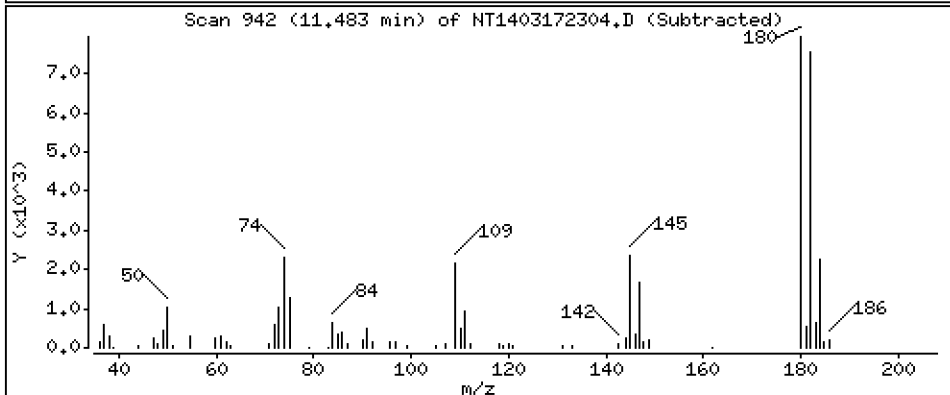
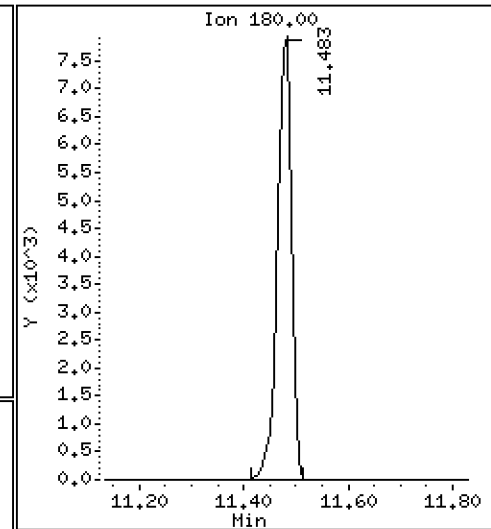
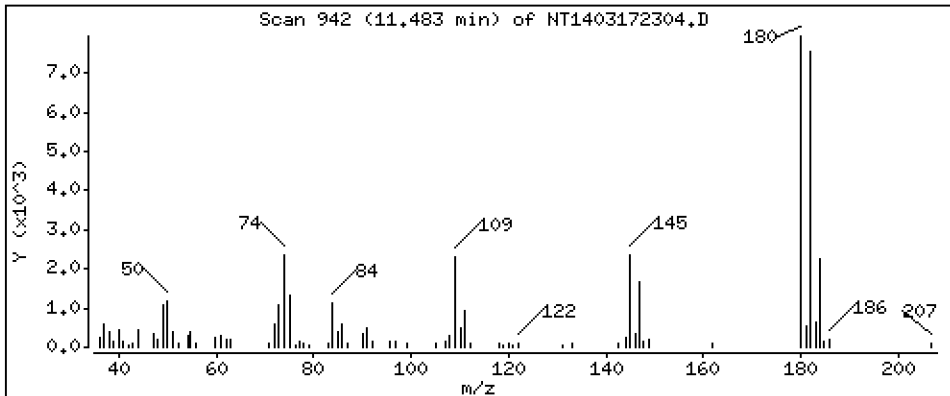
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2035 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

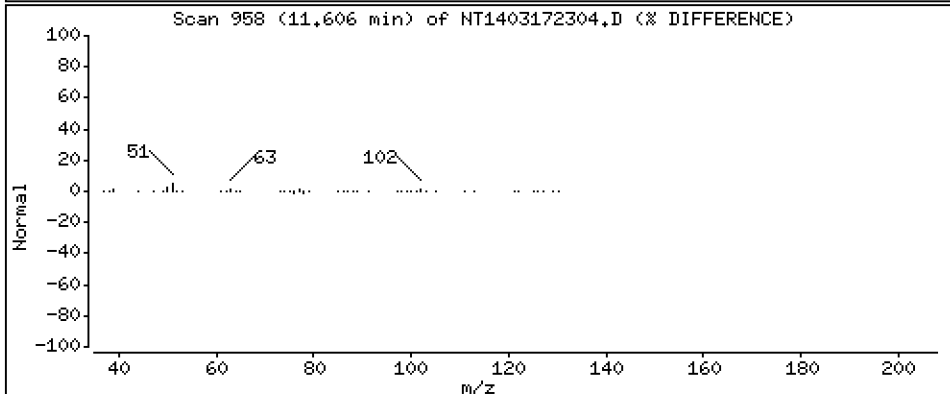
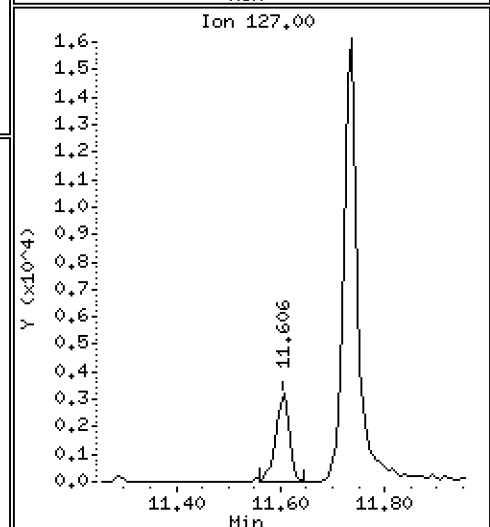
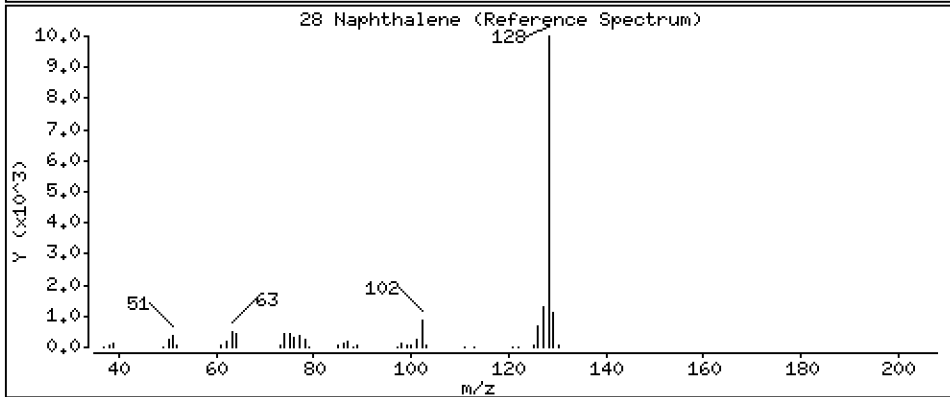
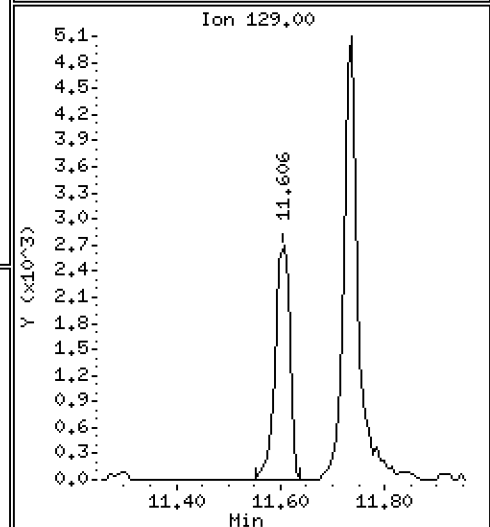
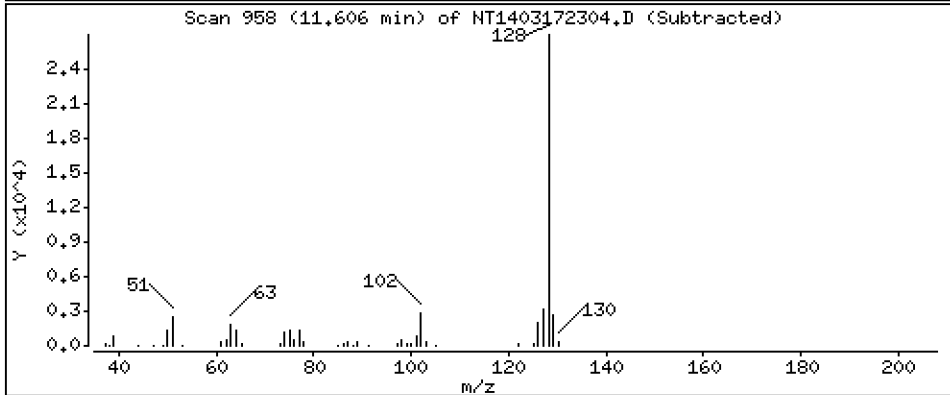
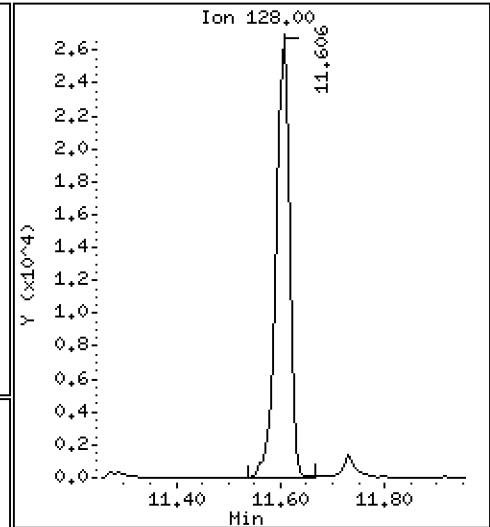
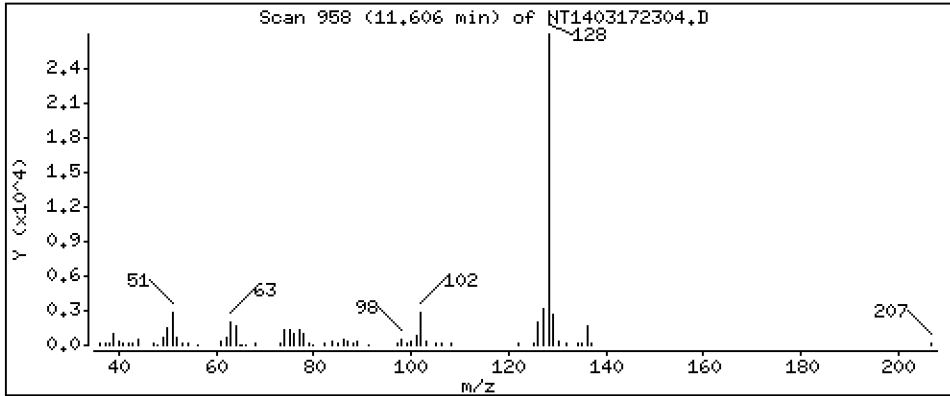
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2085 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

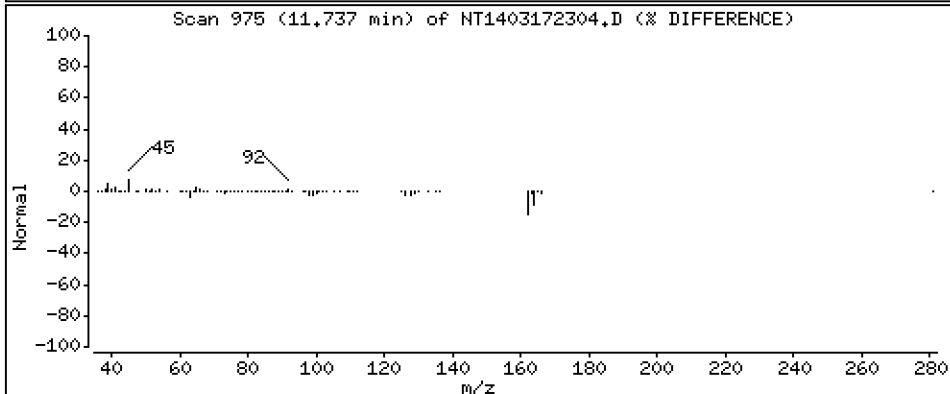
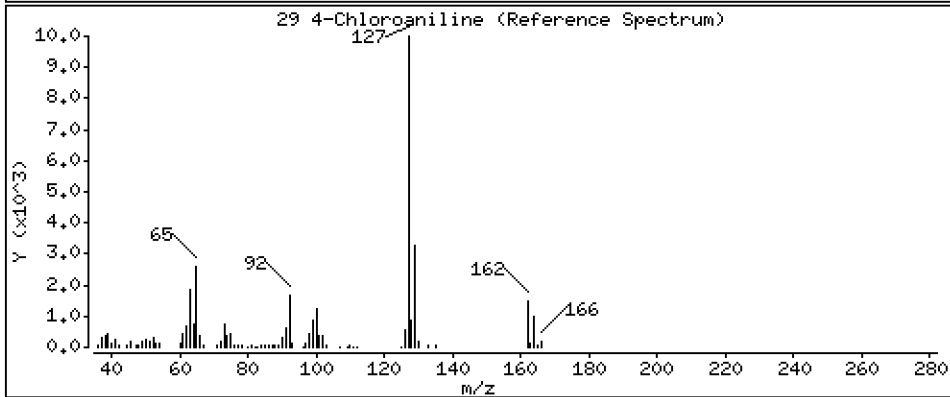
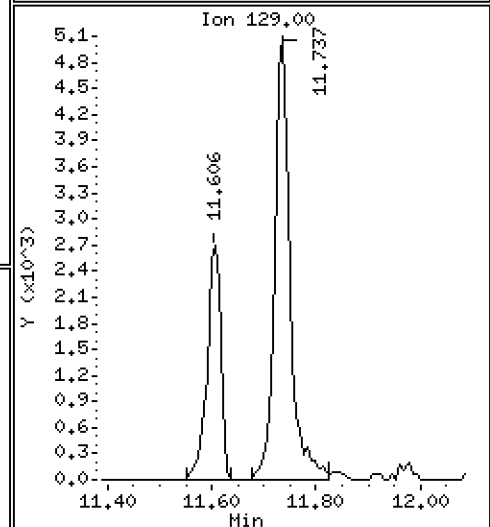
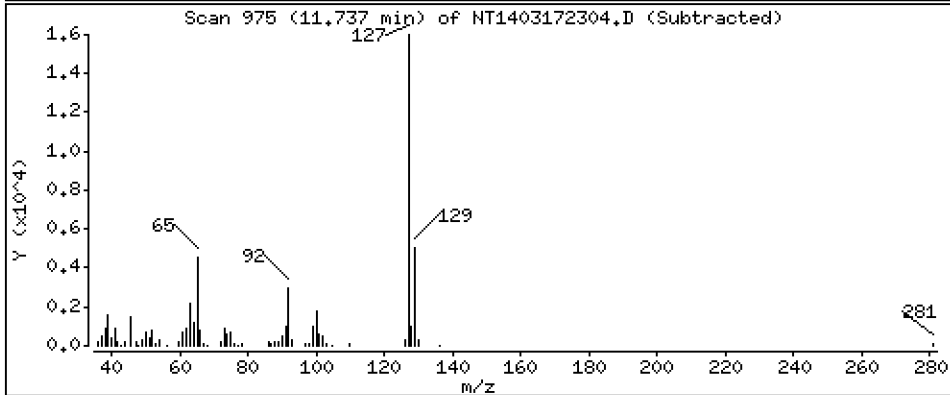
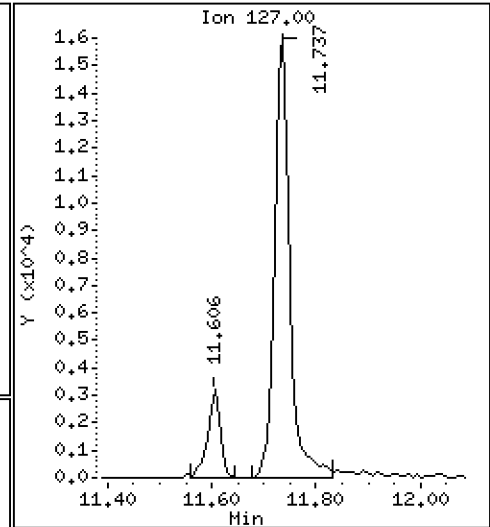
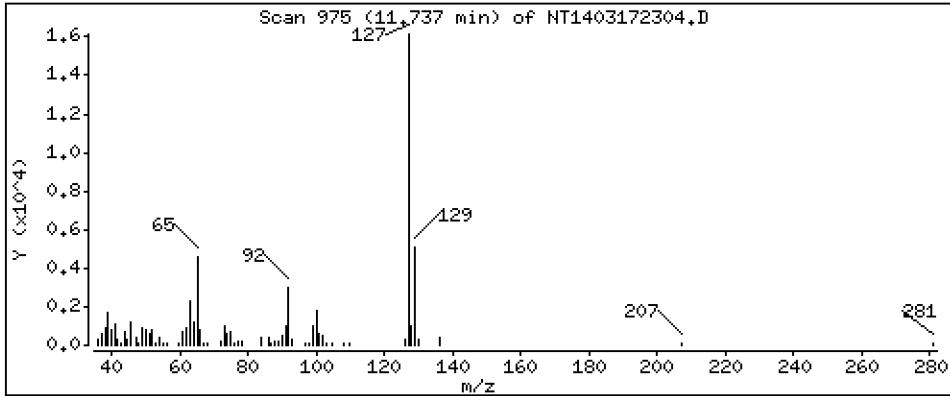
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,3382 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

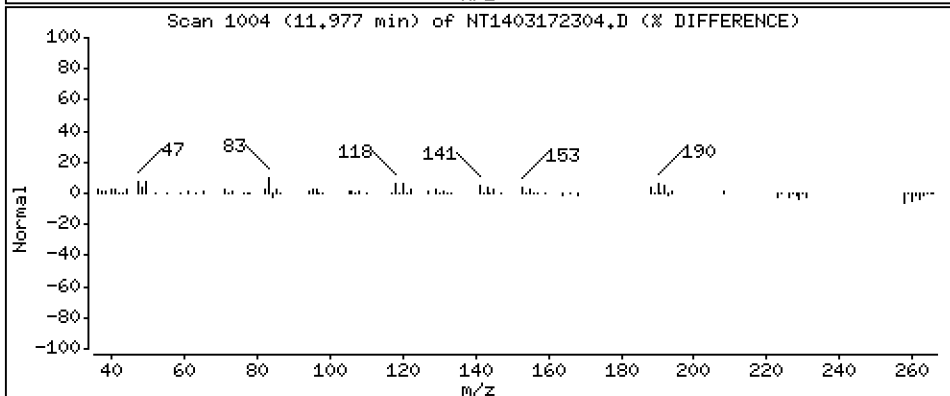
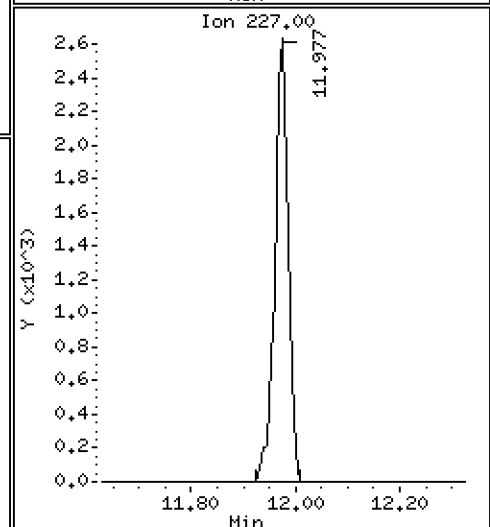
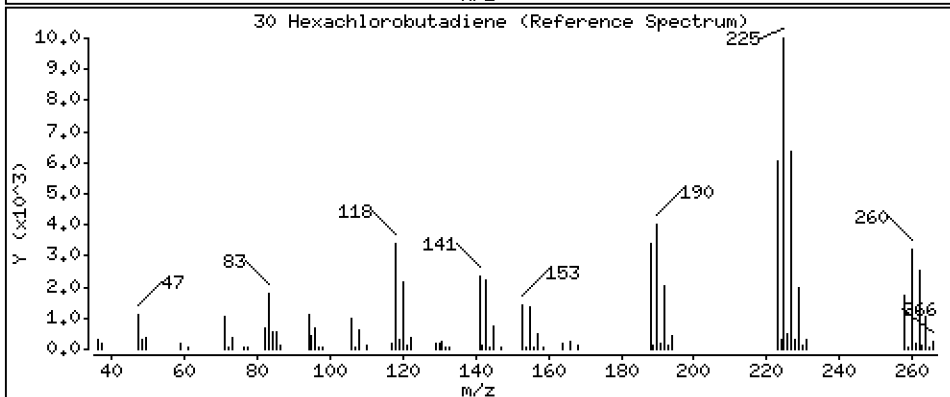
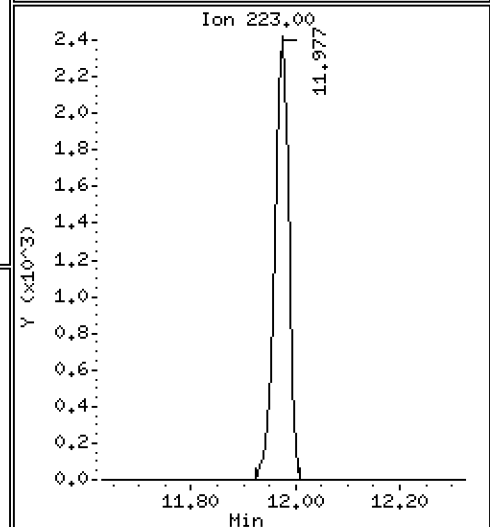
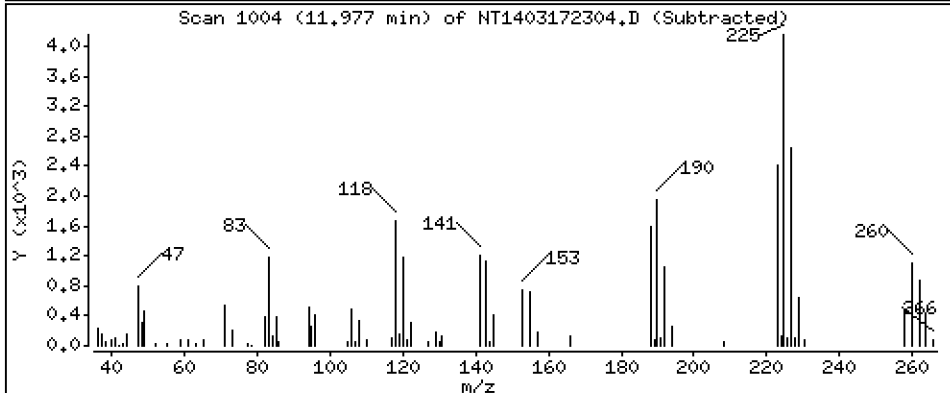
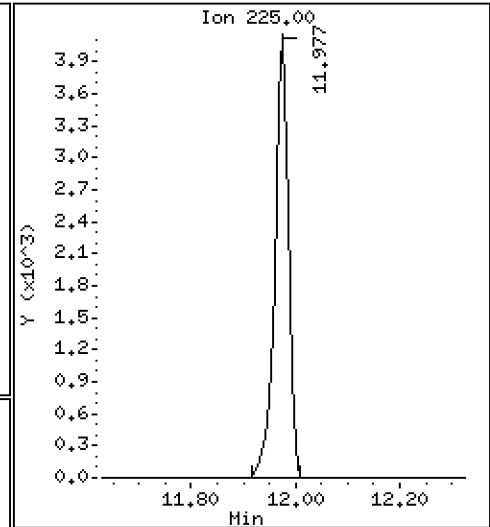
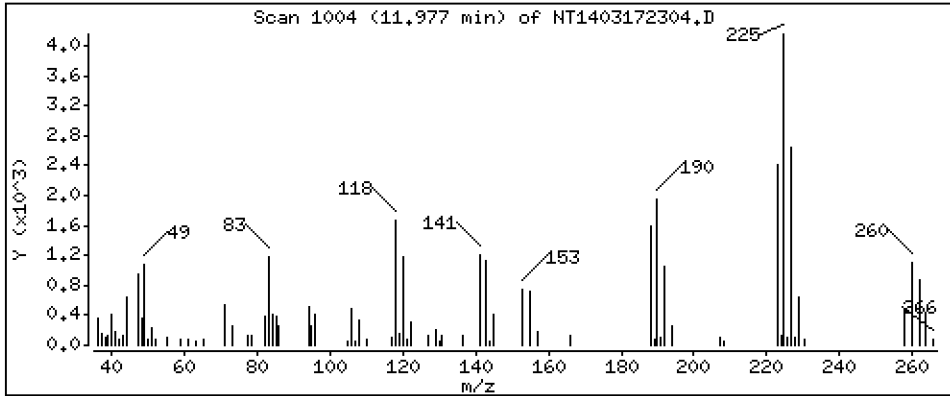
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2222 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

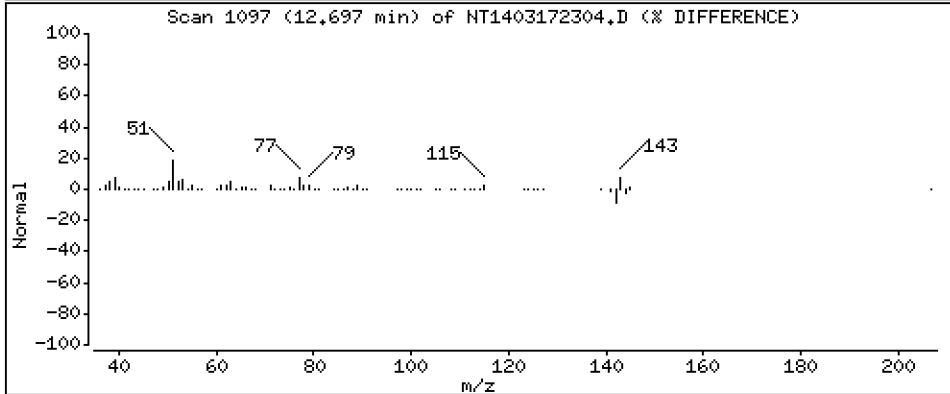
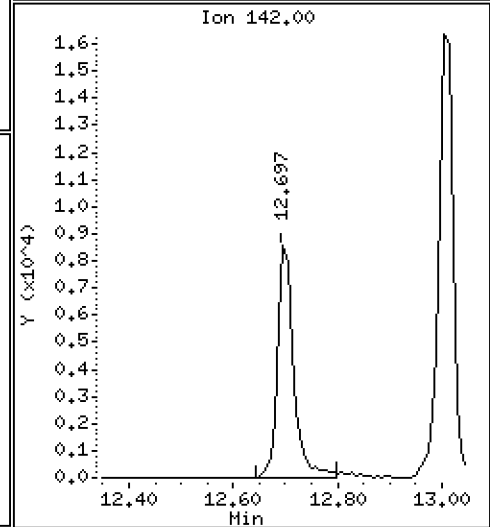
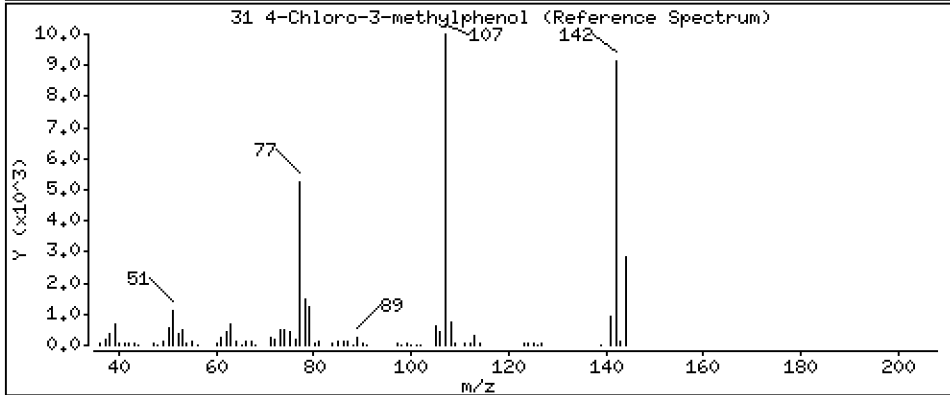
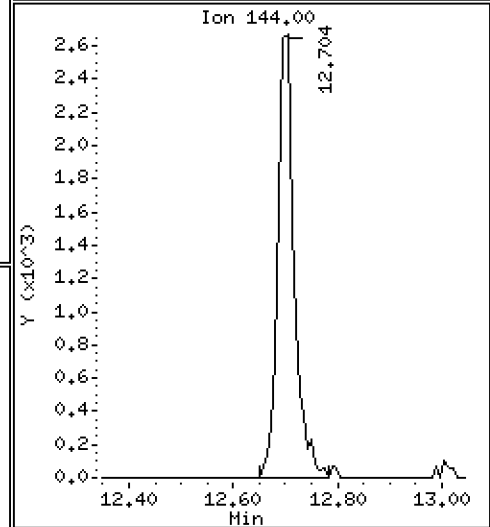
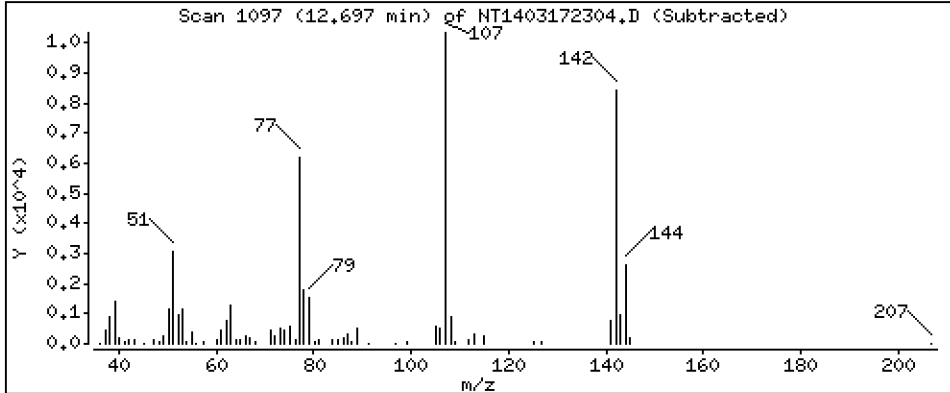
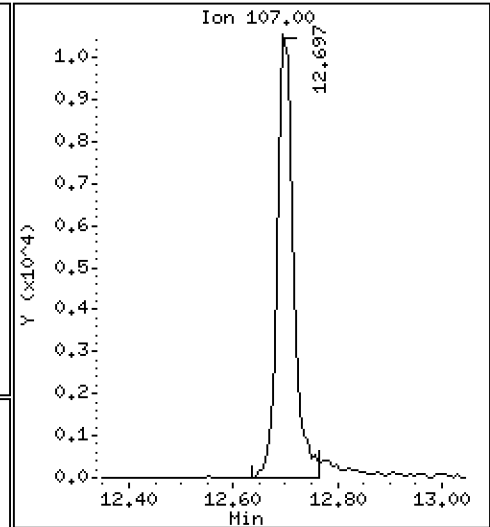
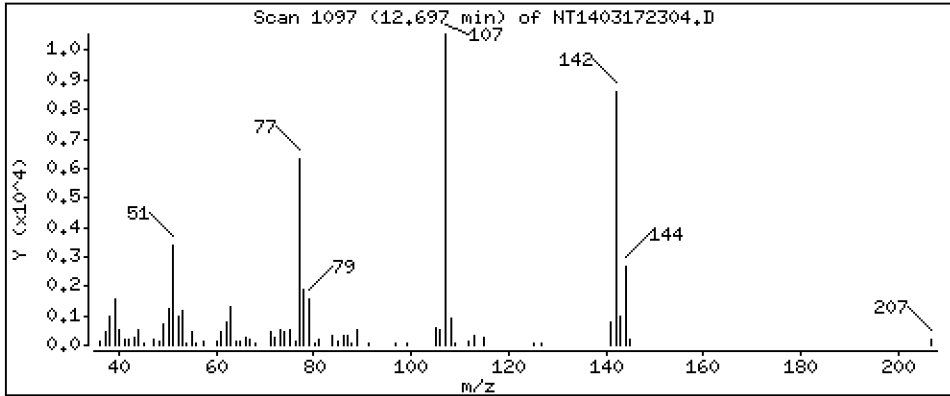
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.3158 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

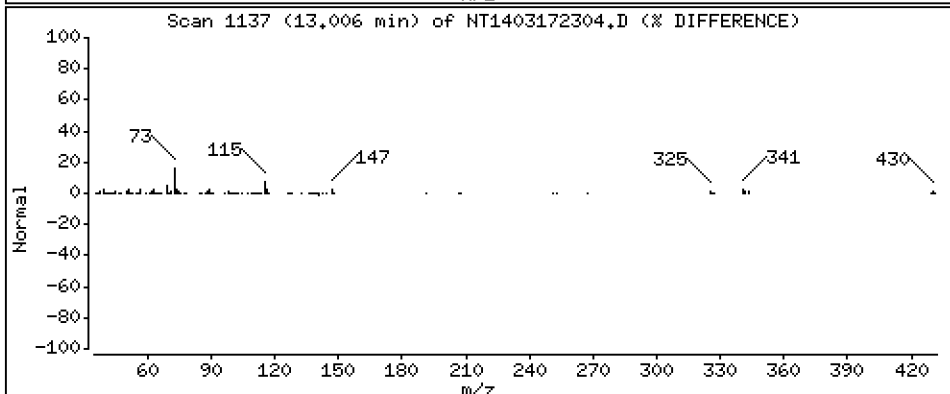
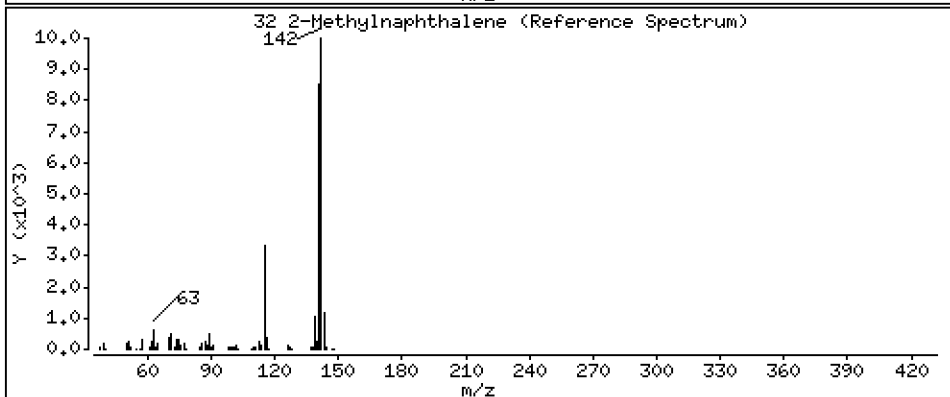
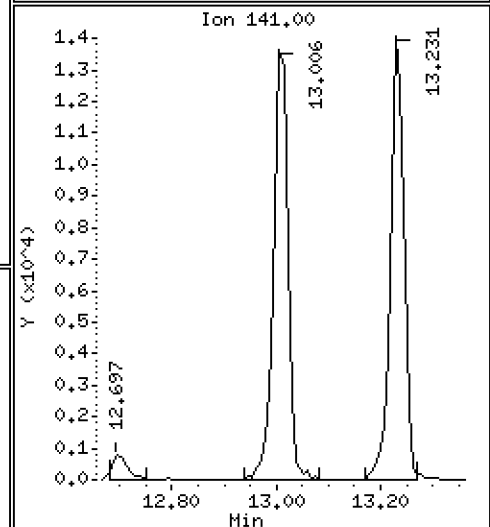
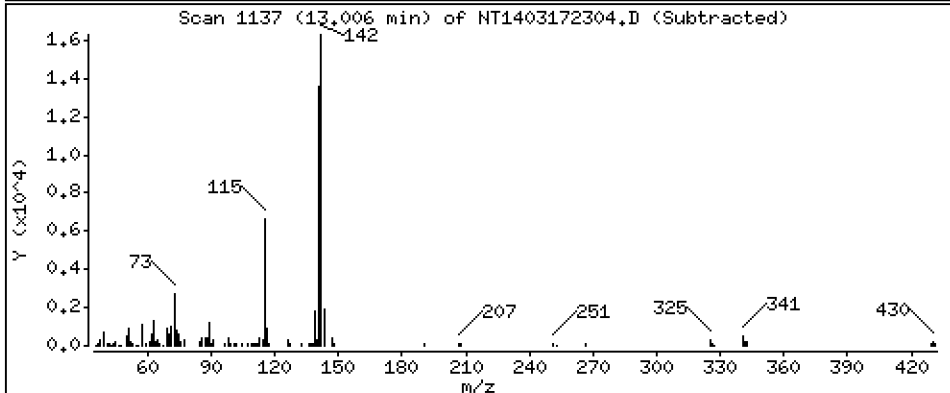
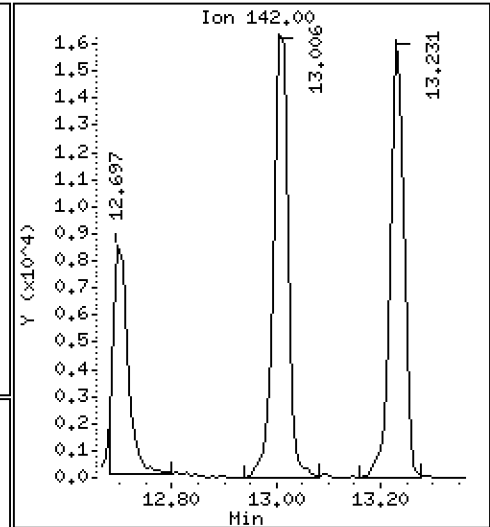
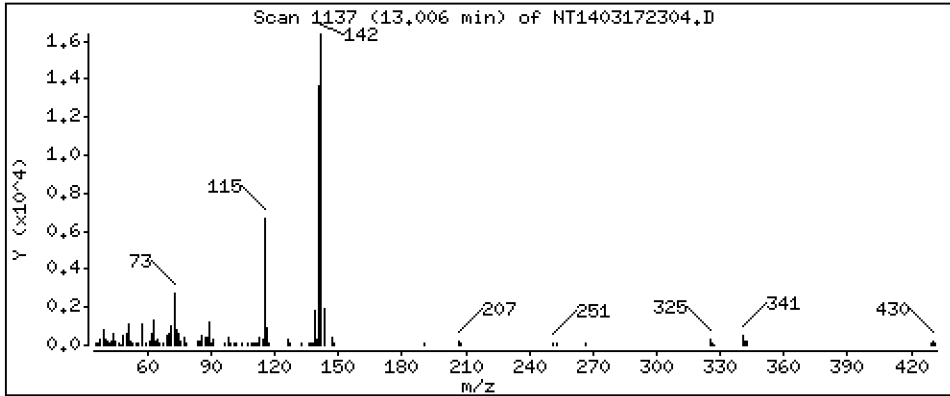
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1987 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

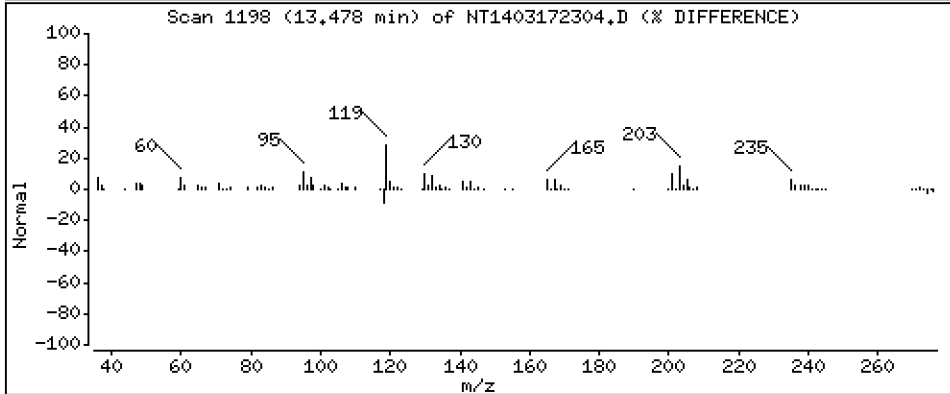
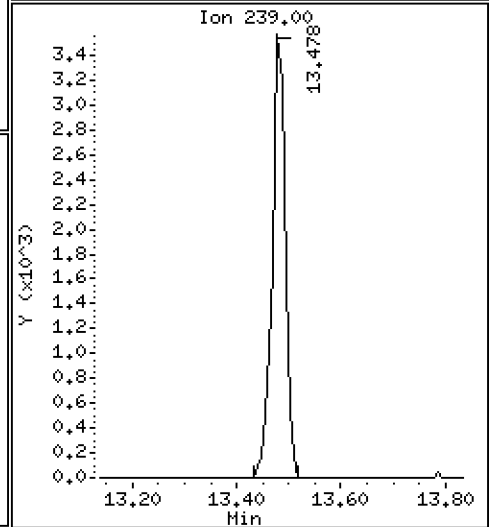
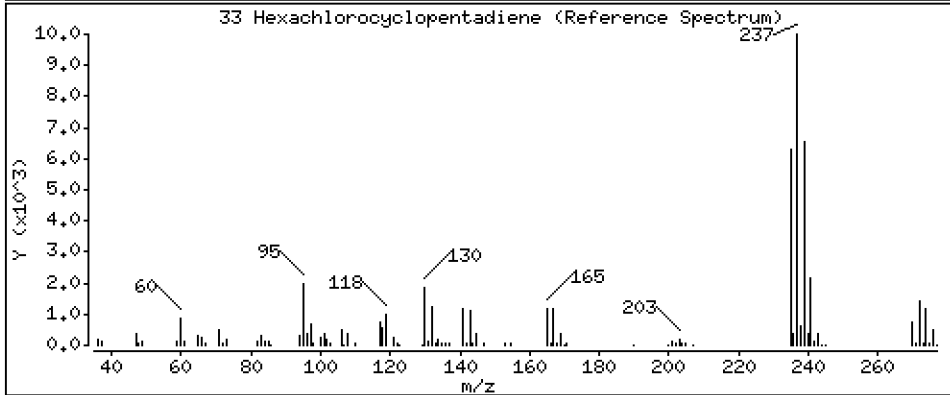
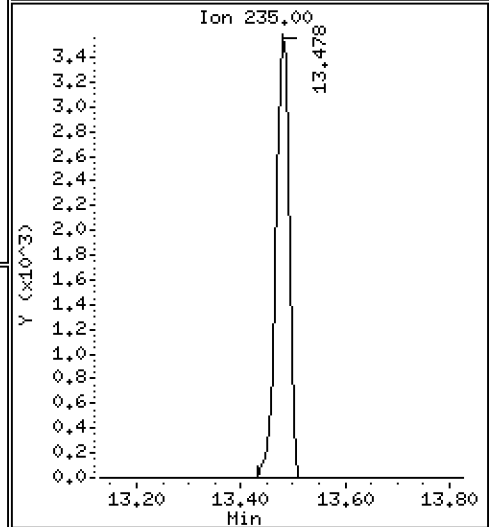
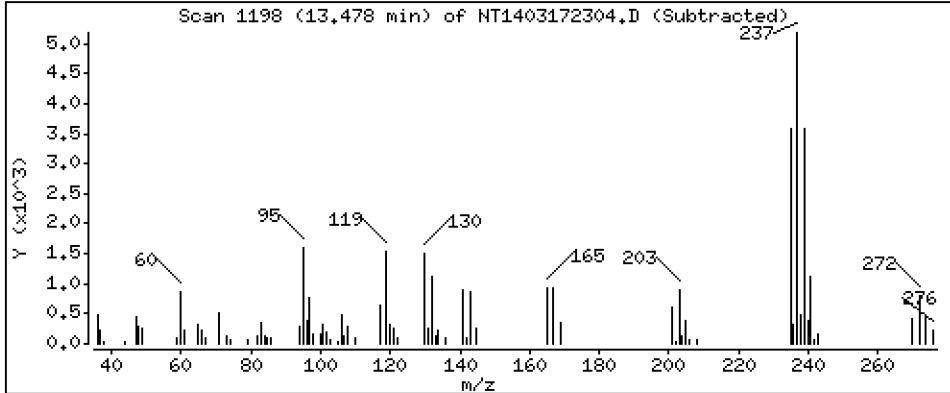
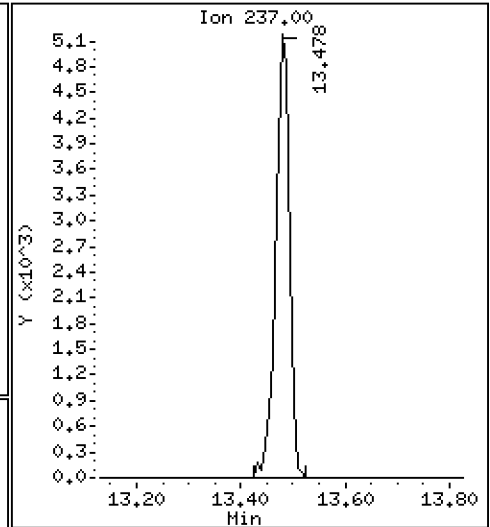
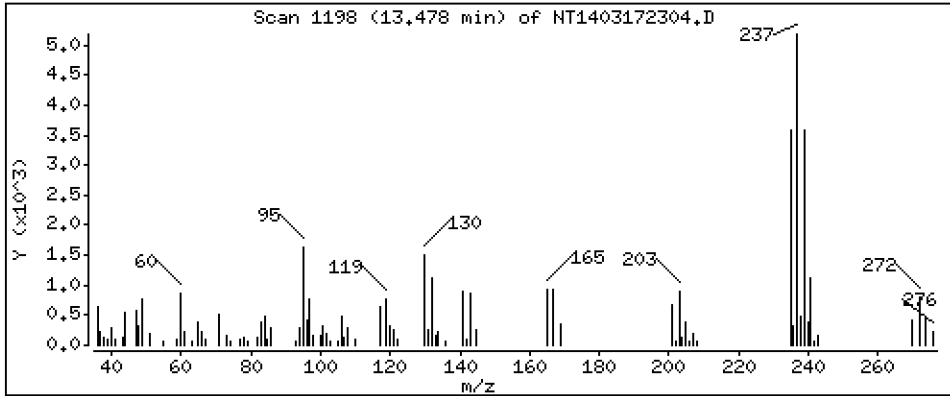
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

33 Hexachlorocyclopentadiene

Concentration: 0.2606 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

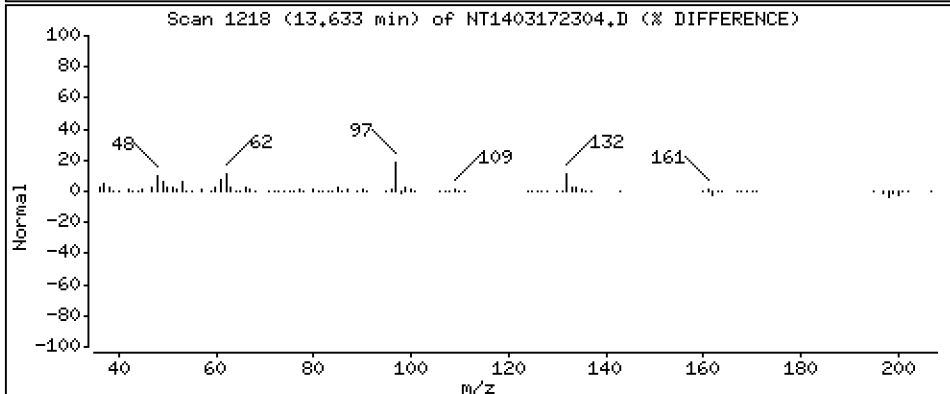
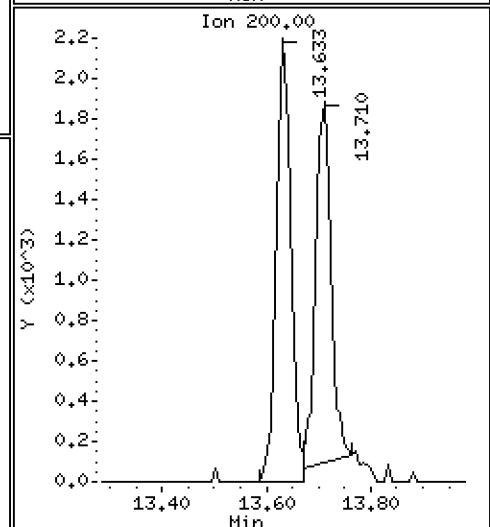
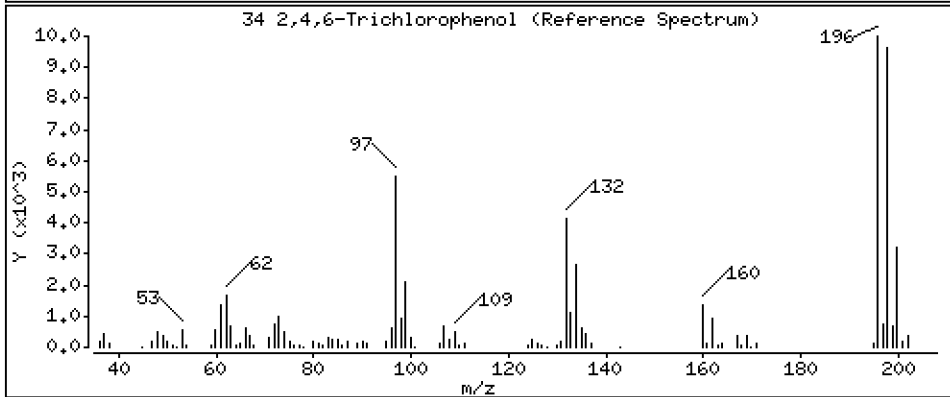
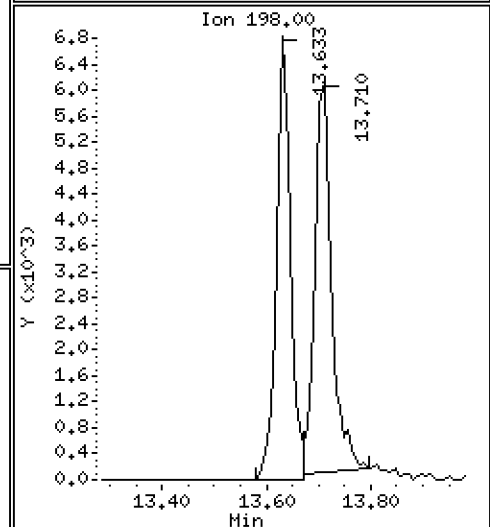
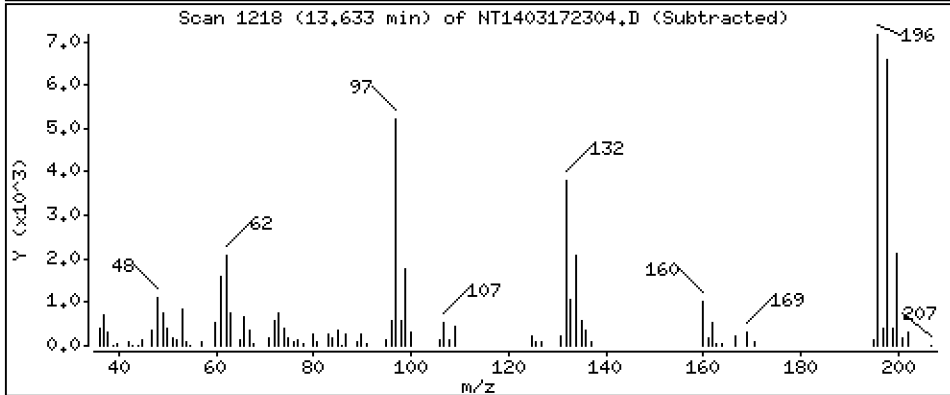
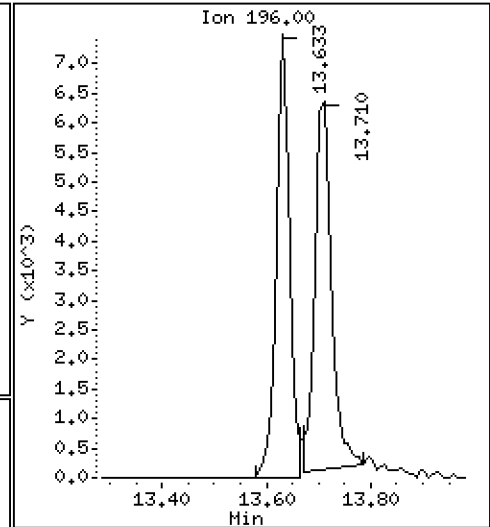
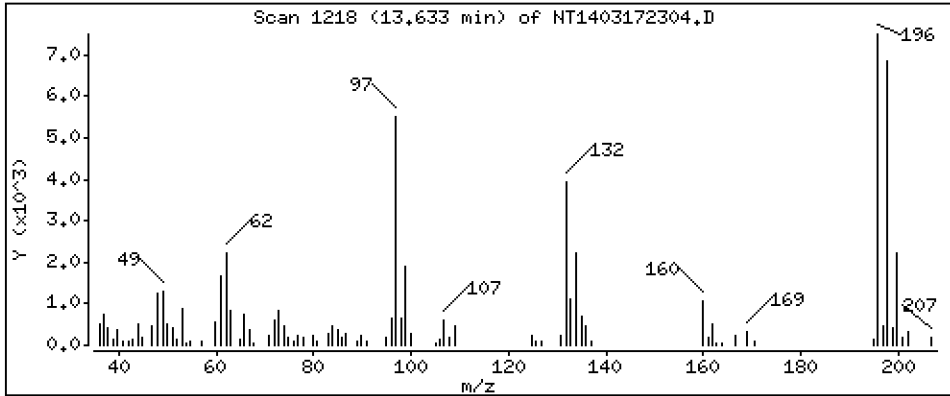
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

34 2,4,6-Trichlorophenol

Concentration: 0.2944 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

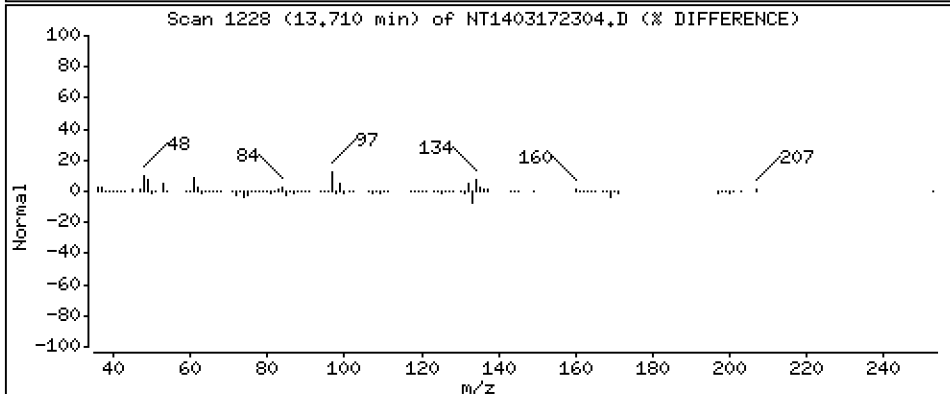
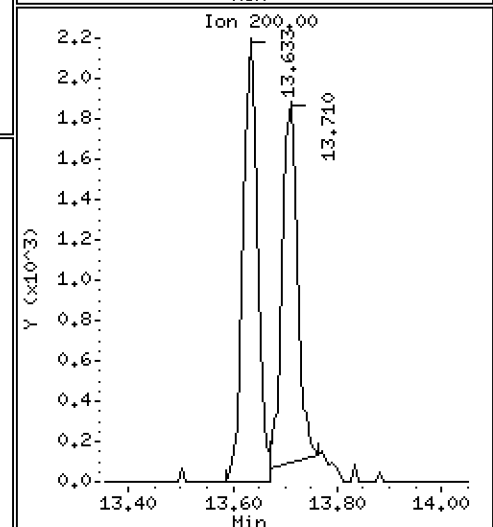
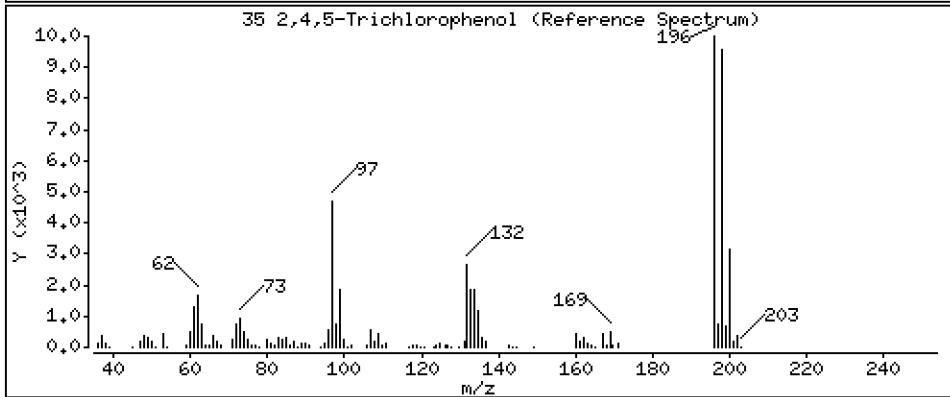
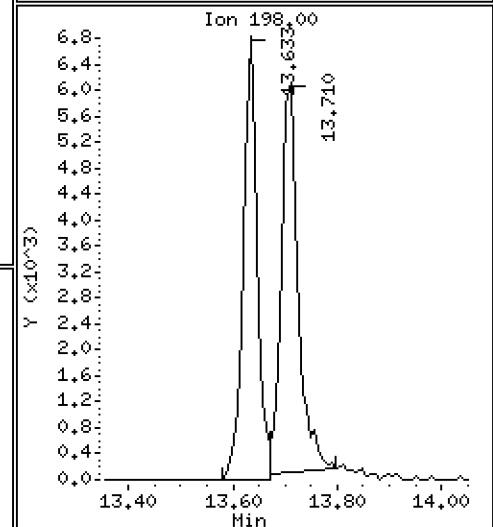
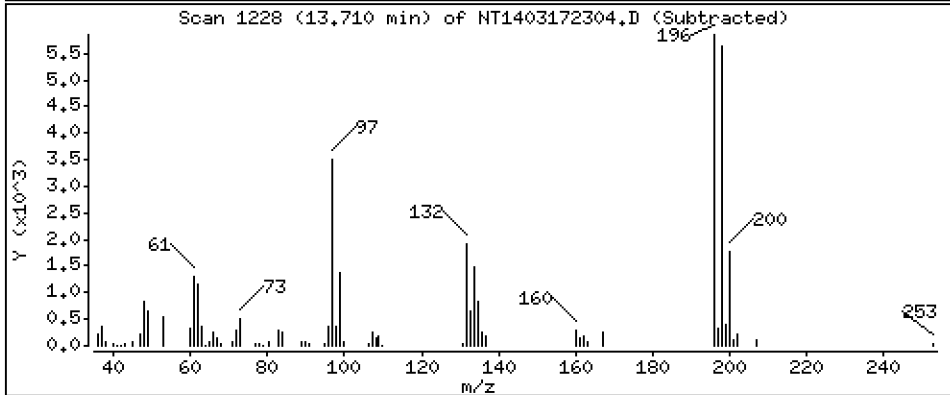
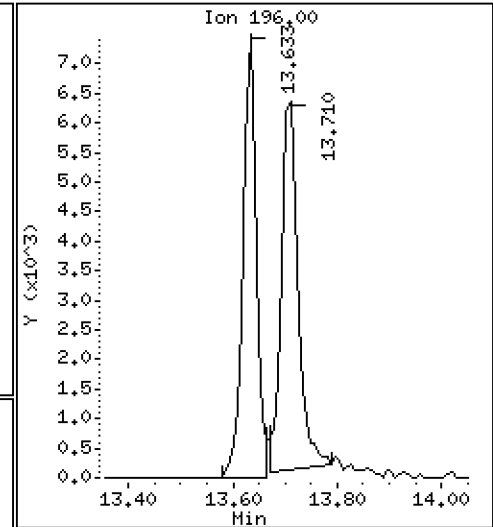
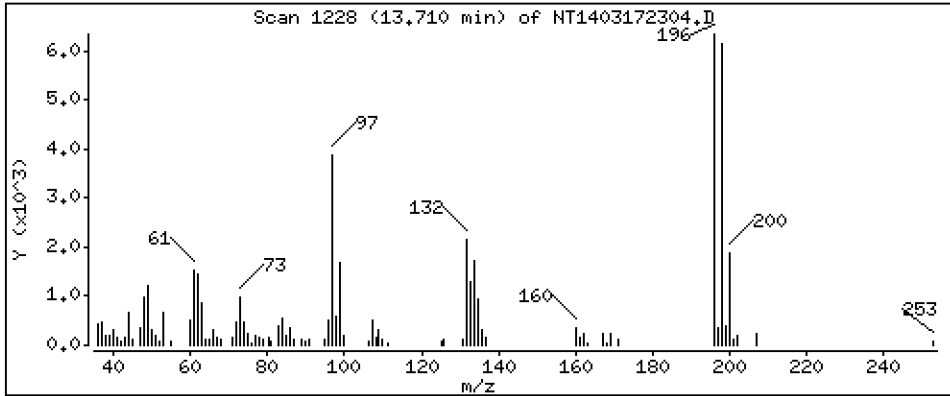
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2996 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

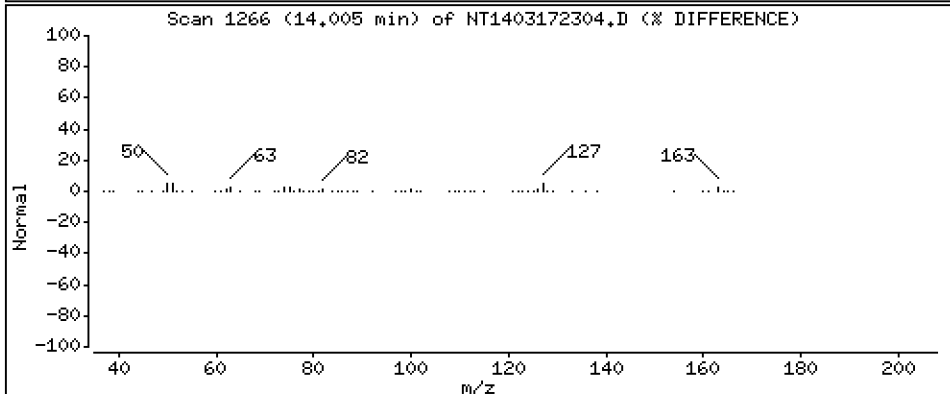
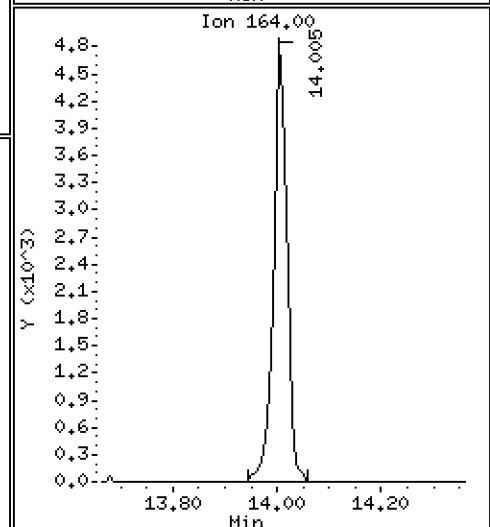
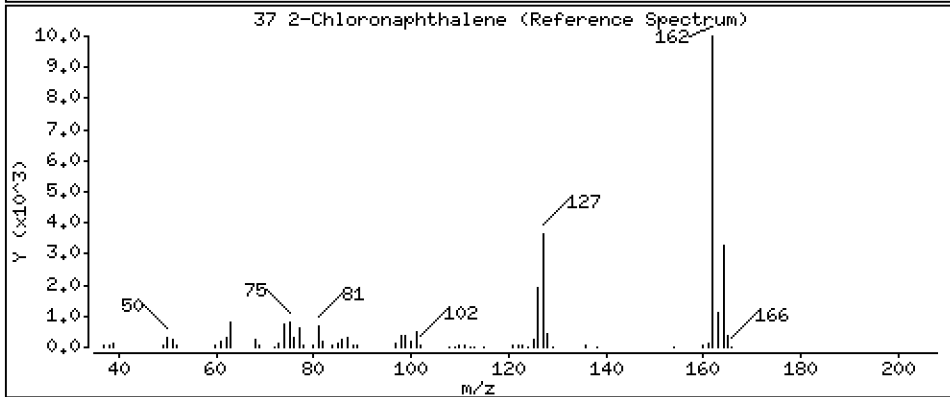
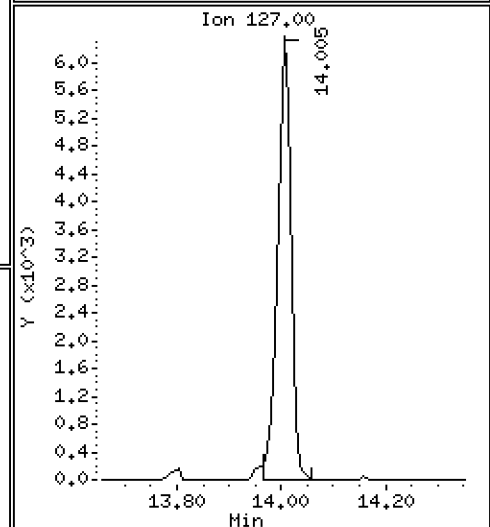
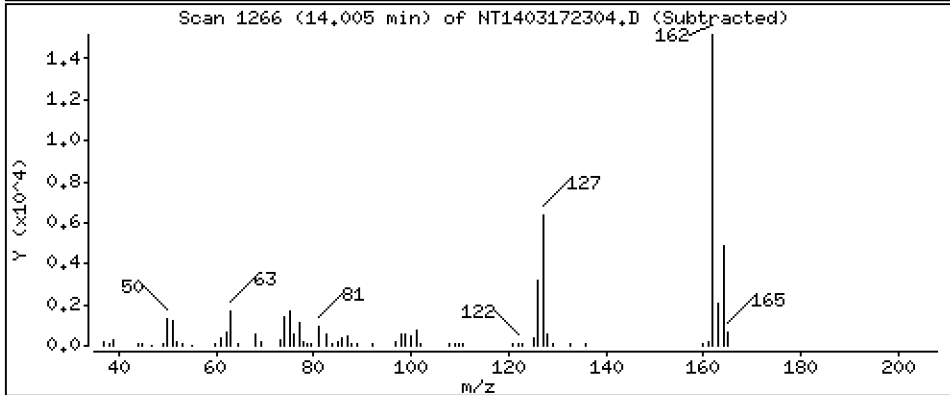
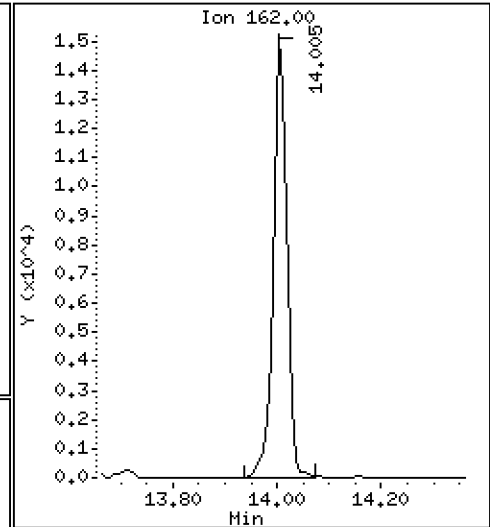
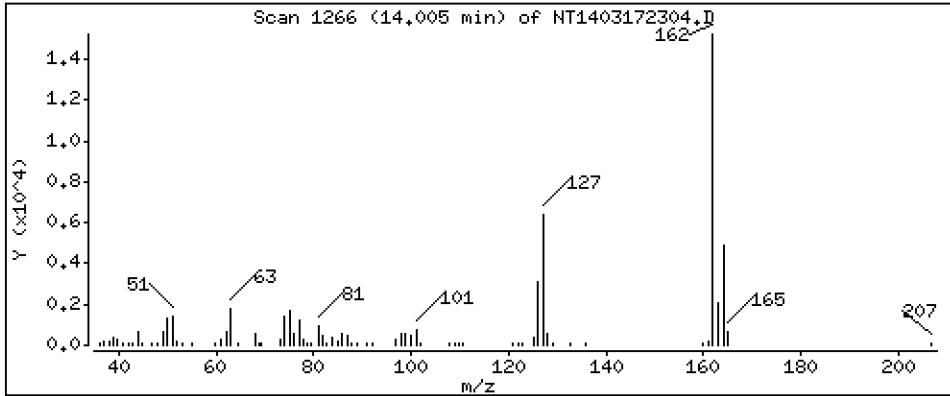
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2031 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

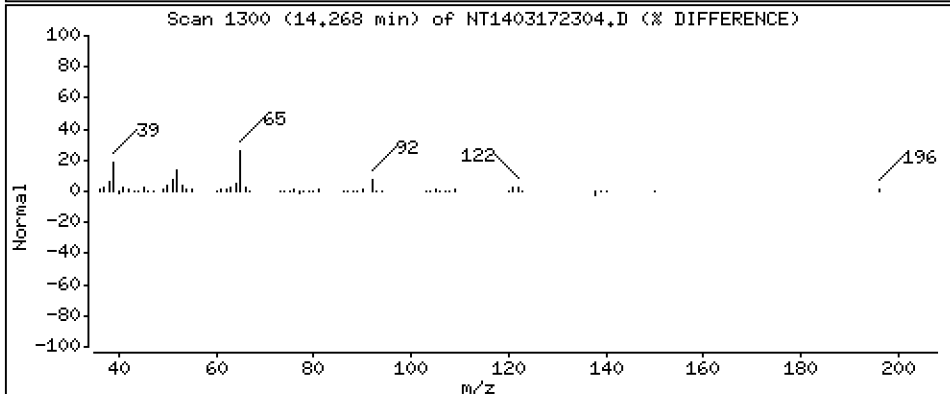
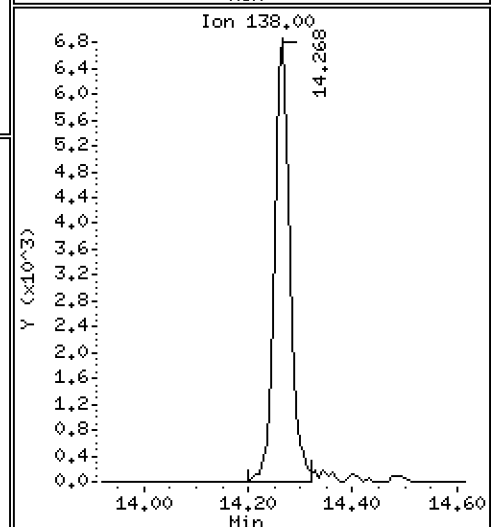
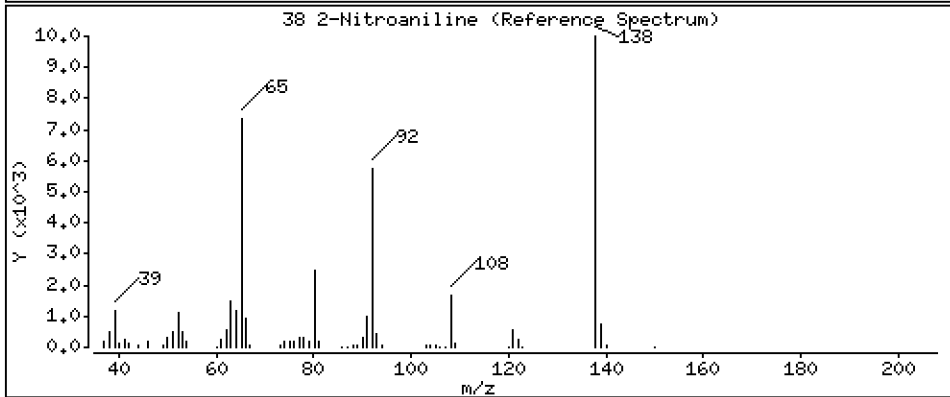
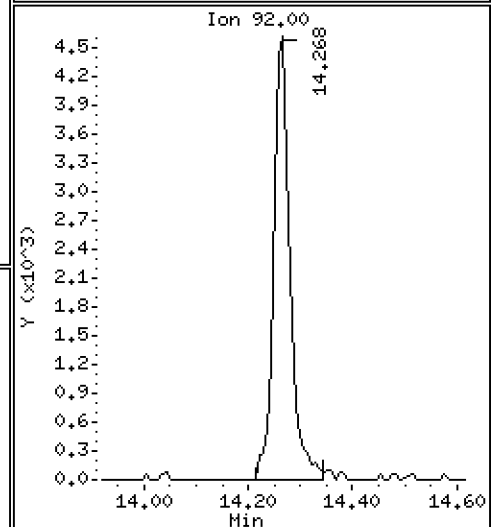
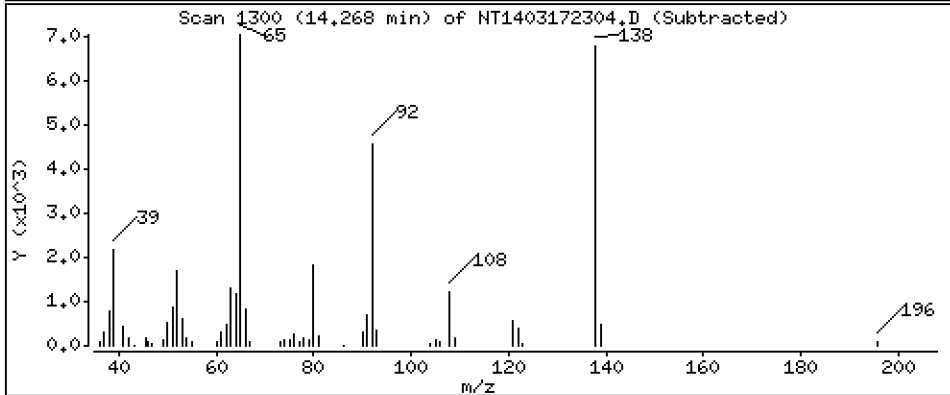
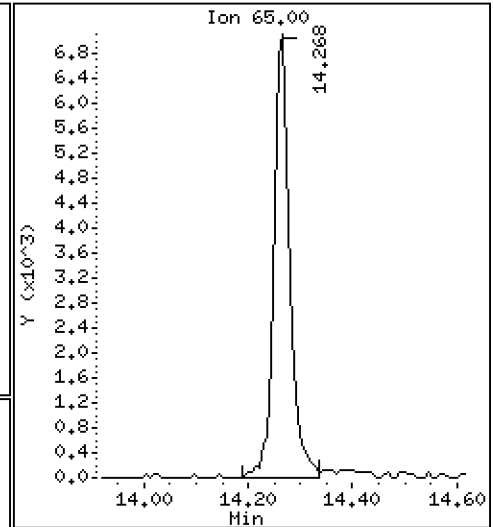
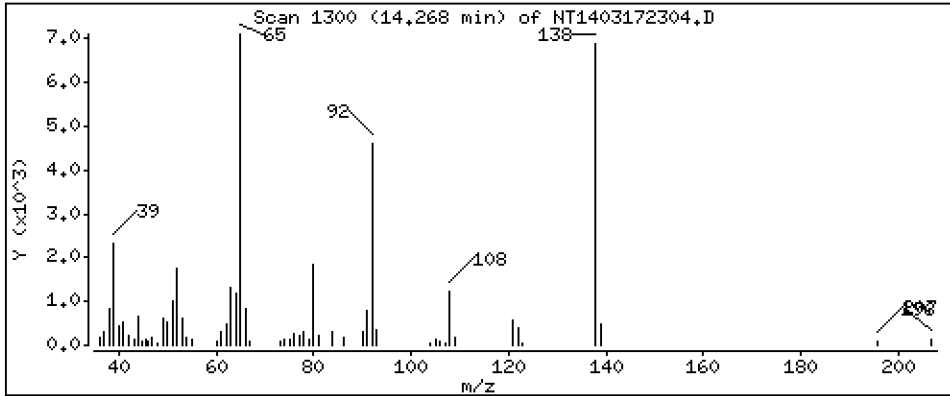
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2915 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

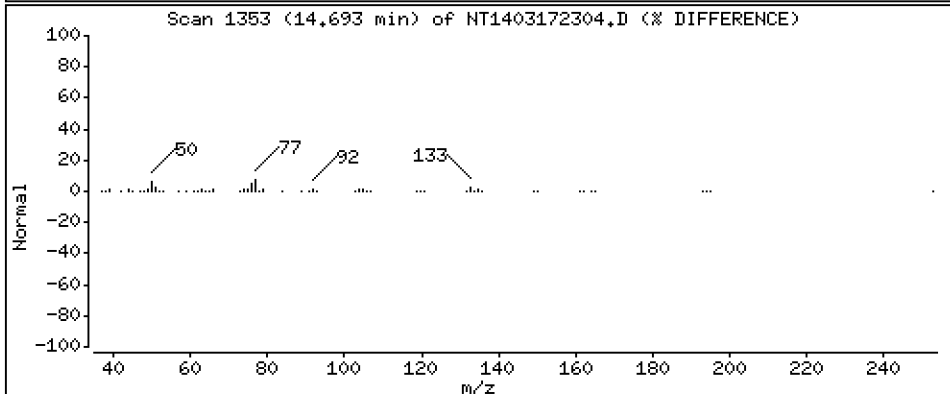
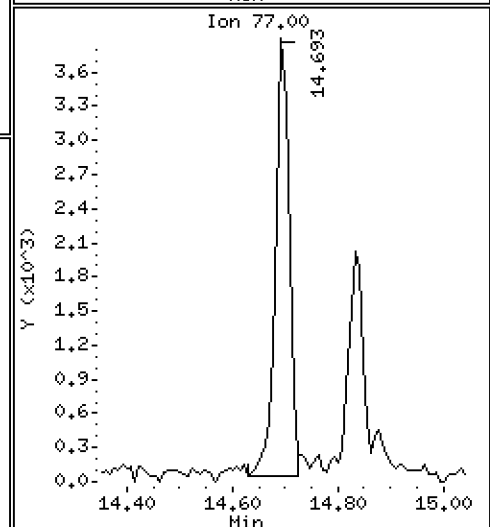
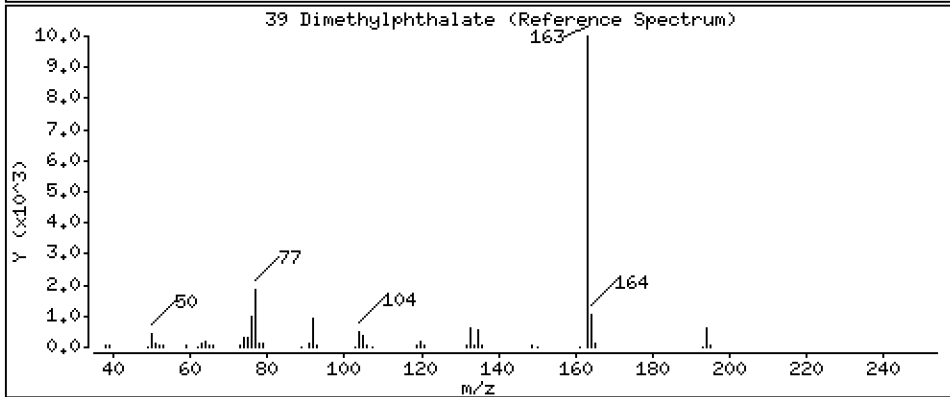
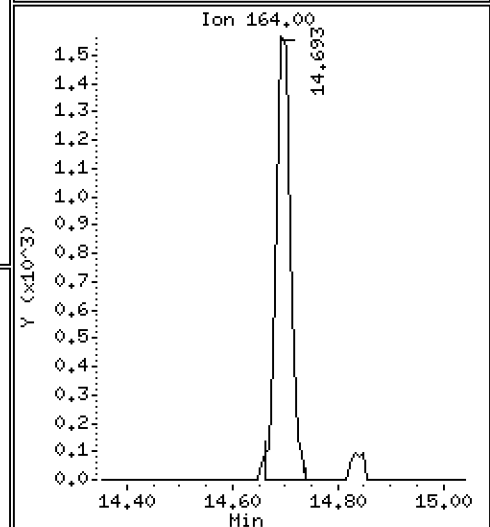
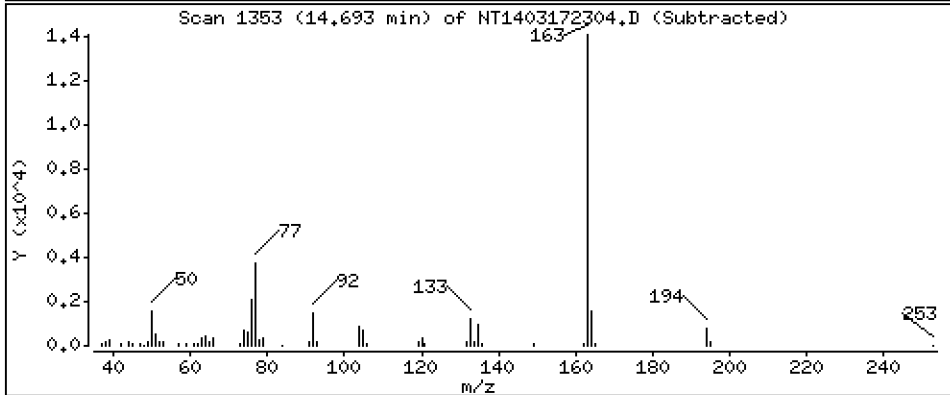
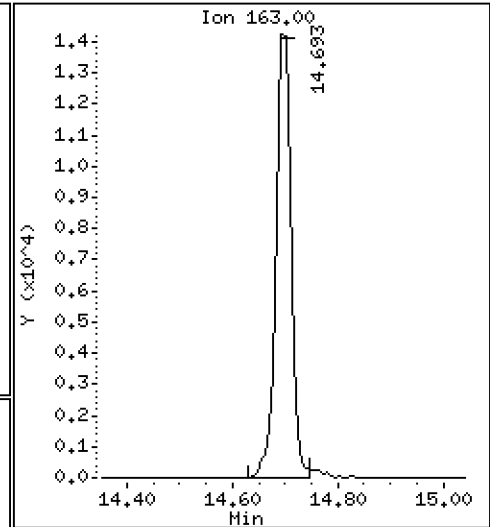
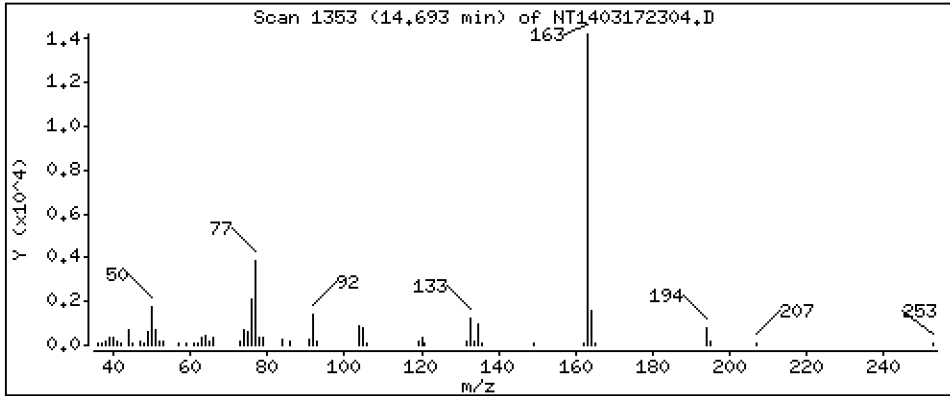
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1957 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

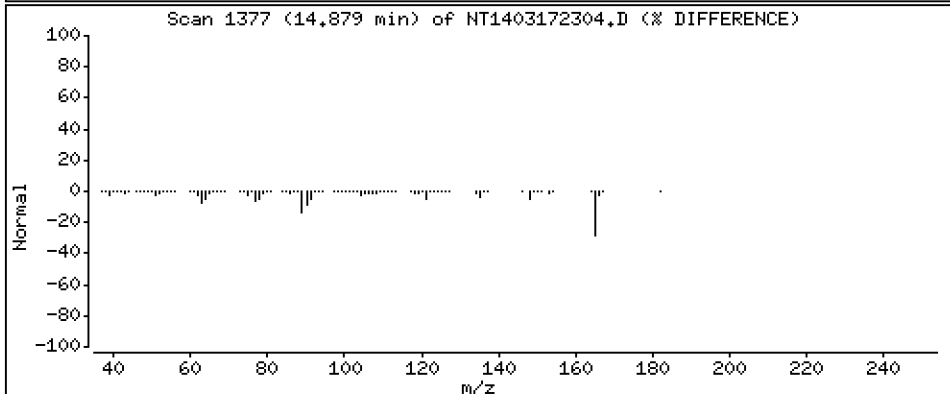
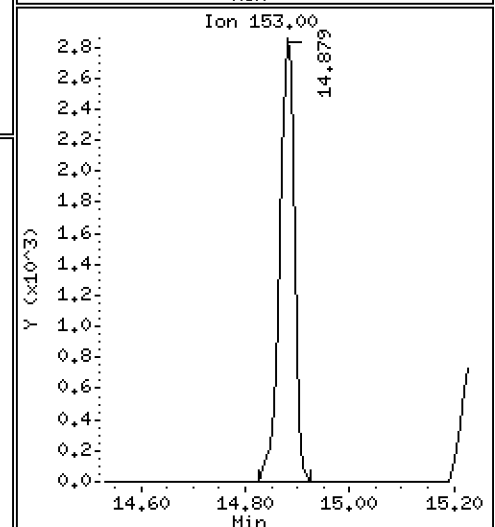
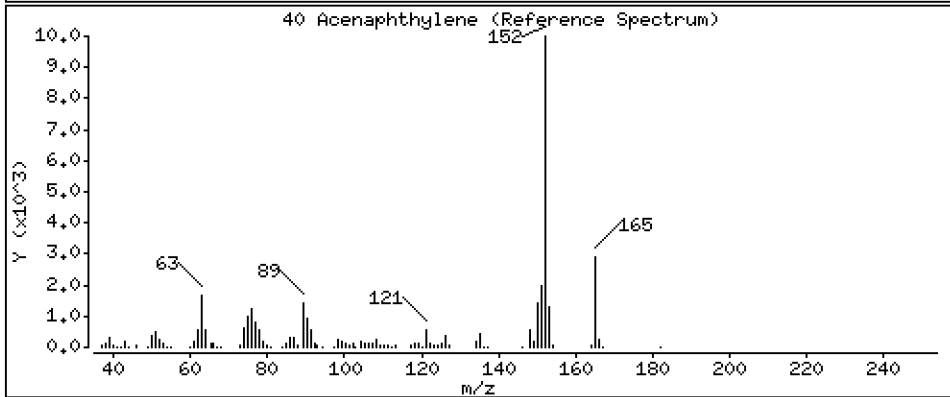
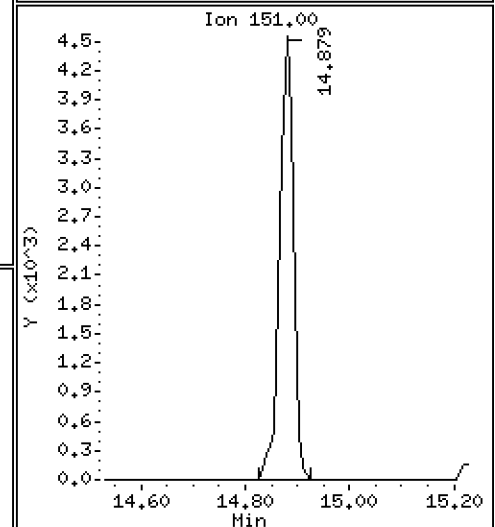
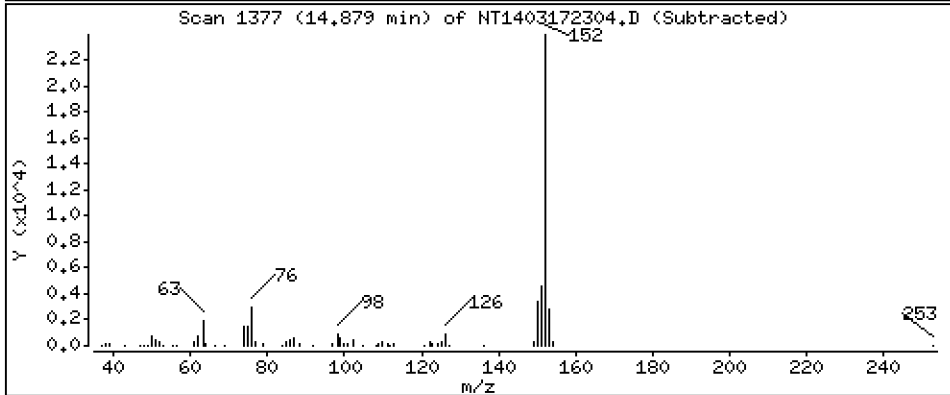
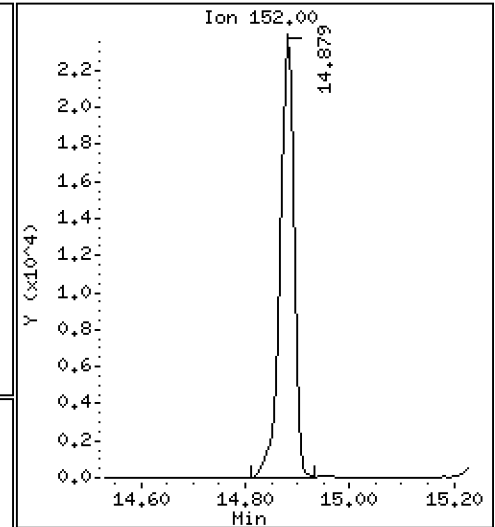
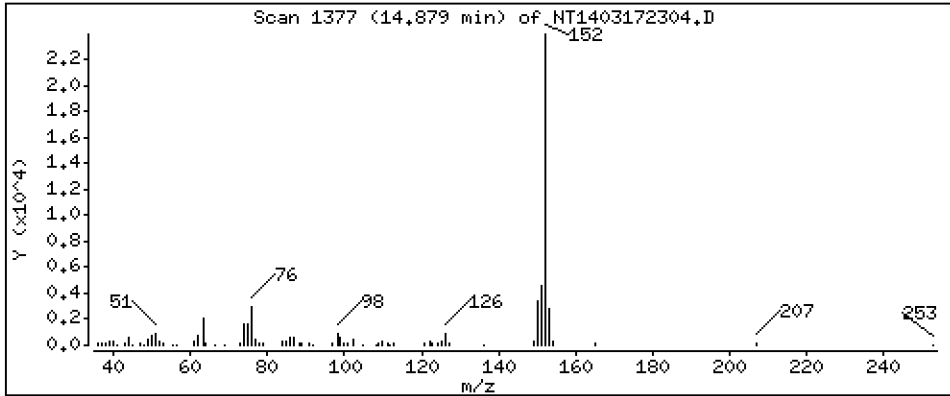
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1937 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

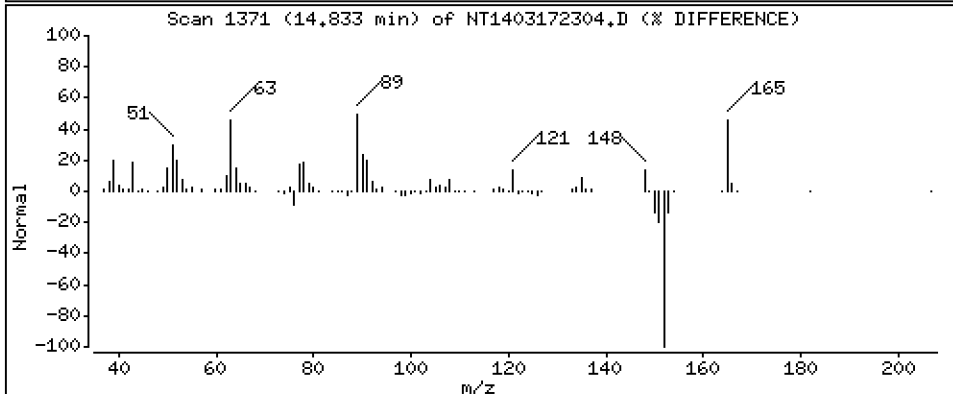
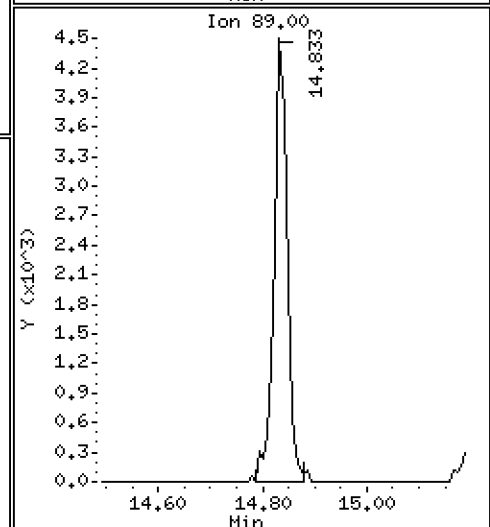
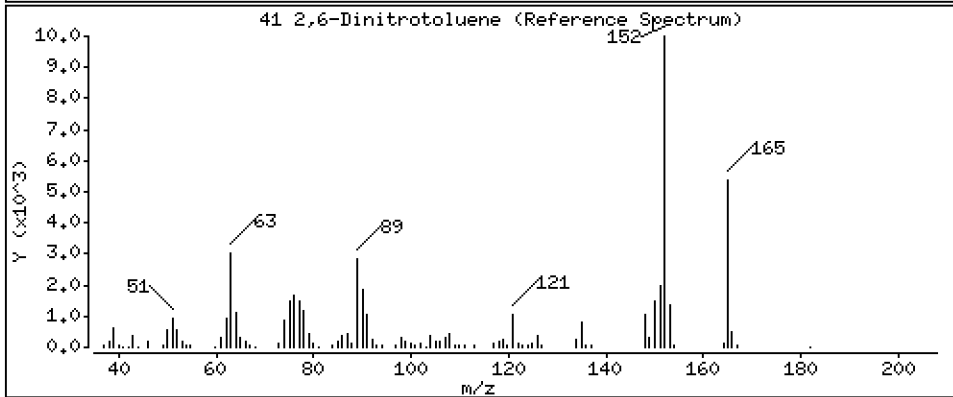
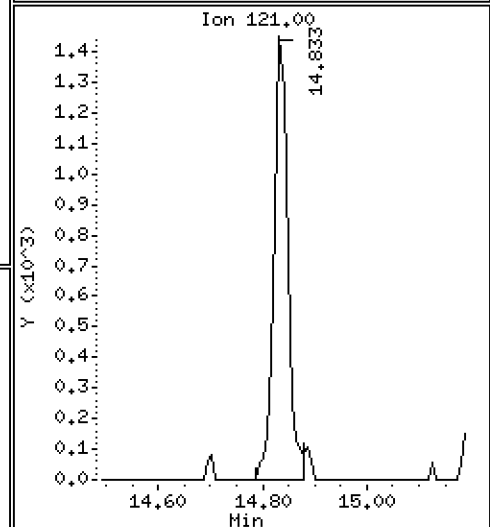
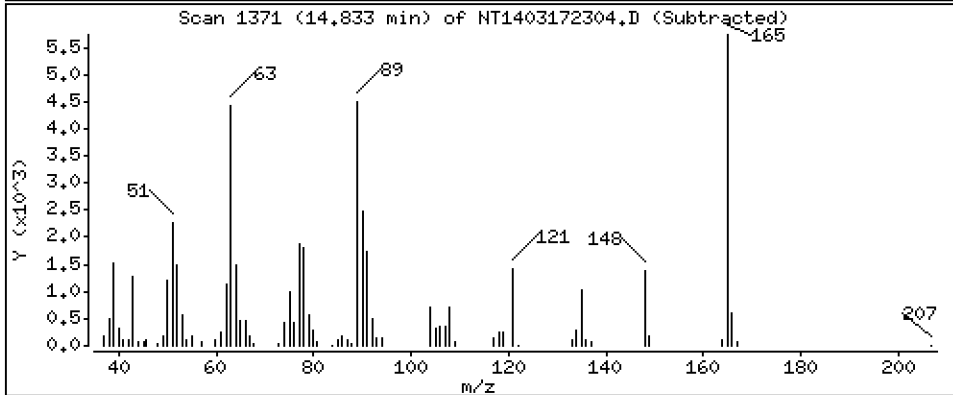
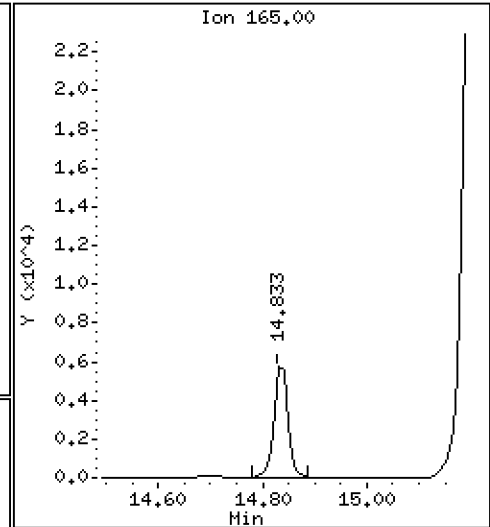
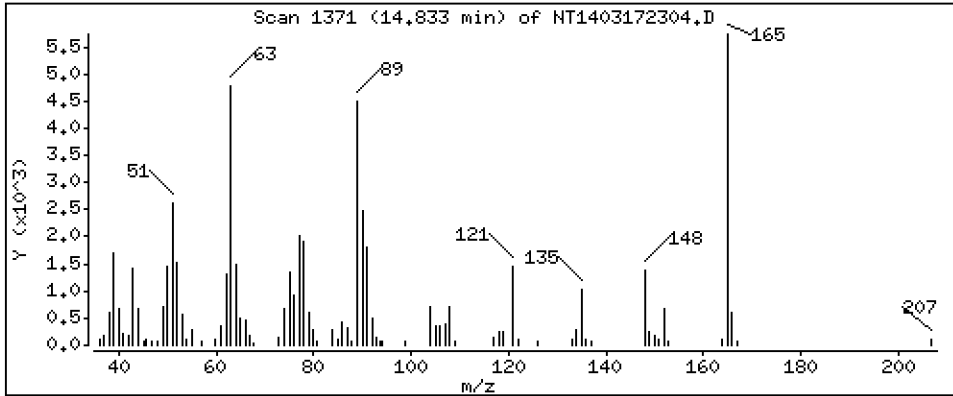
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,3165 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

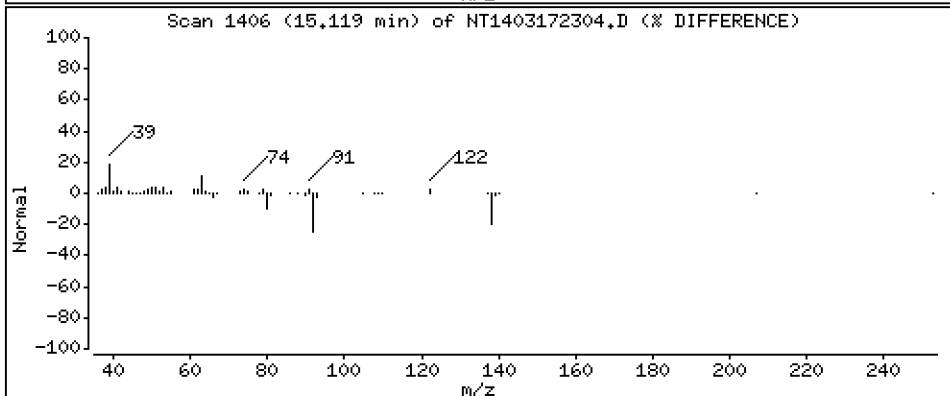
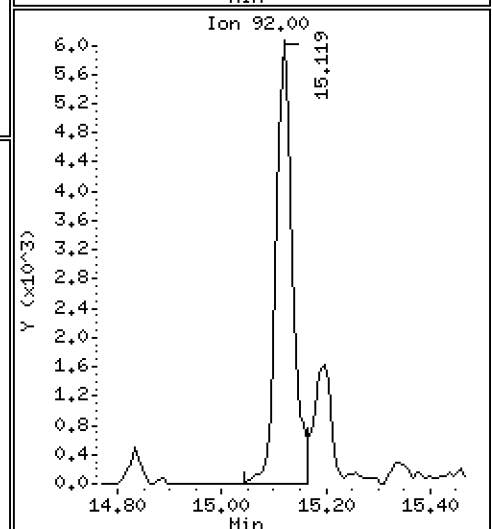
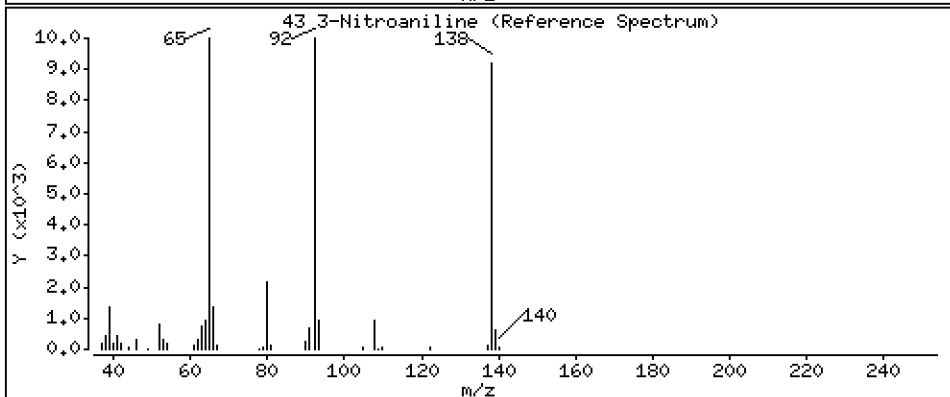
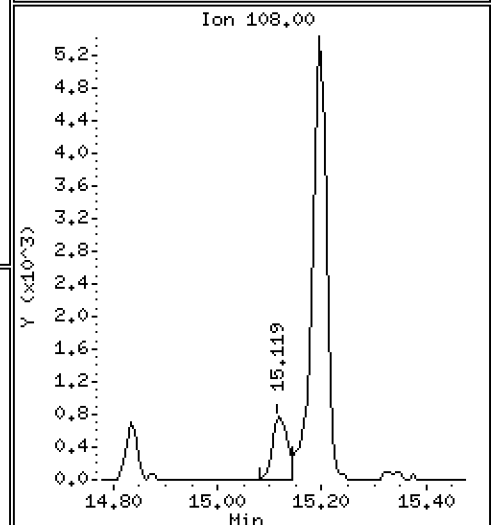
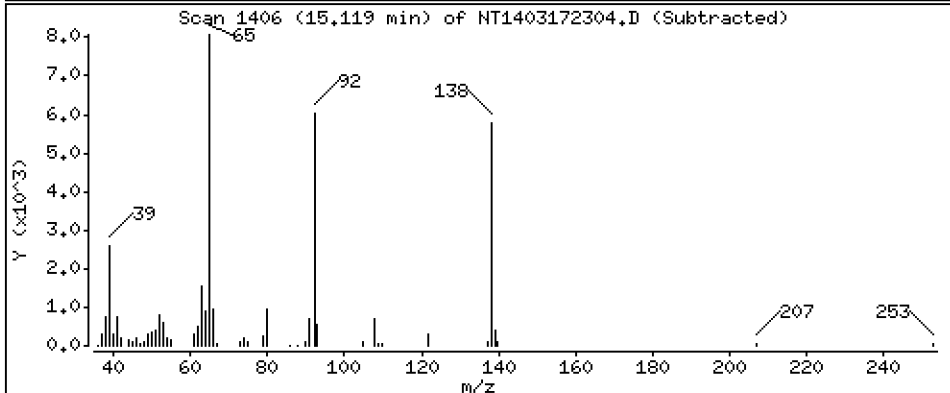
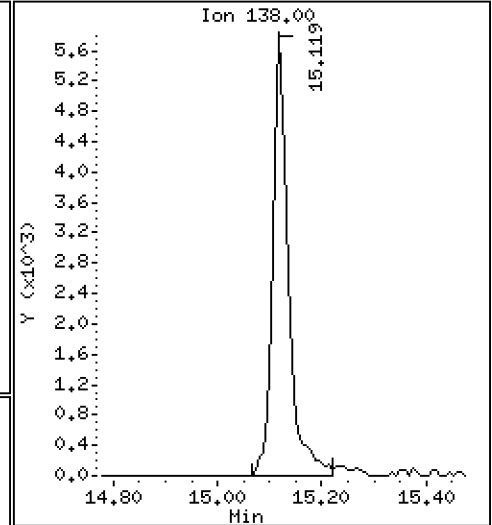
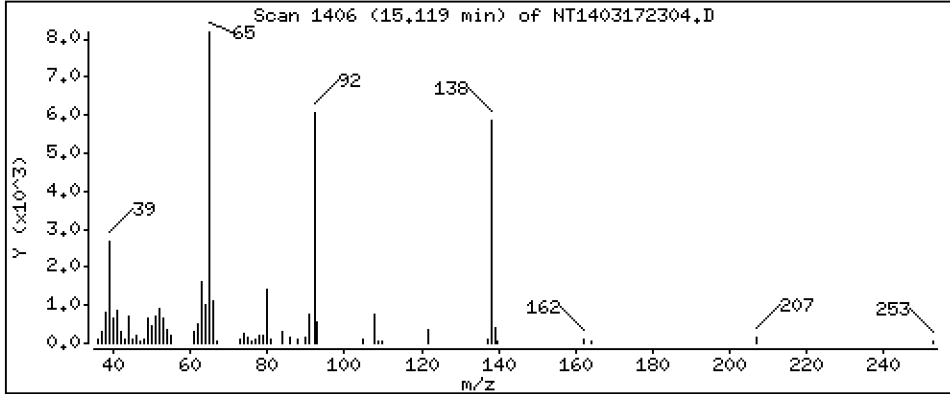
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,2595 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

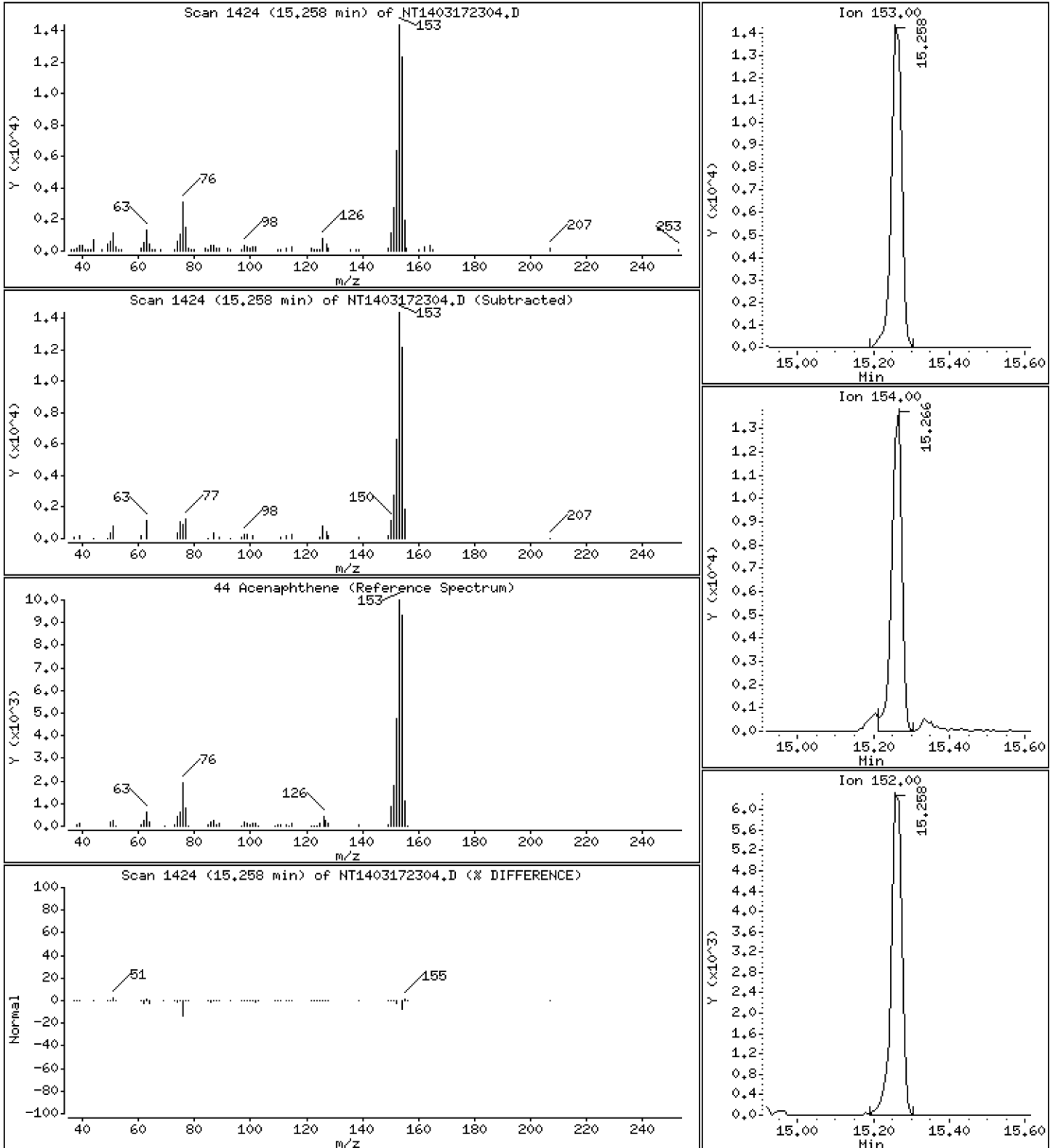
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,2025 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

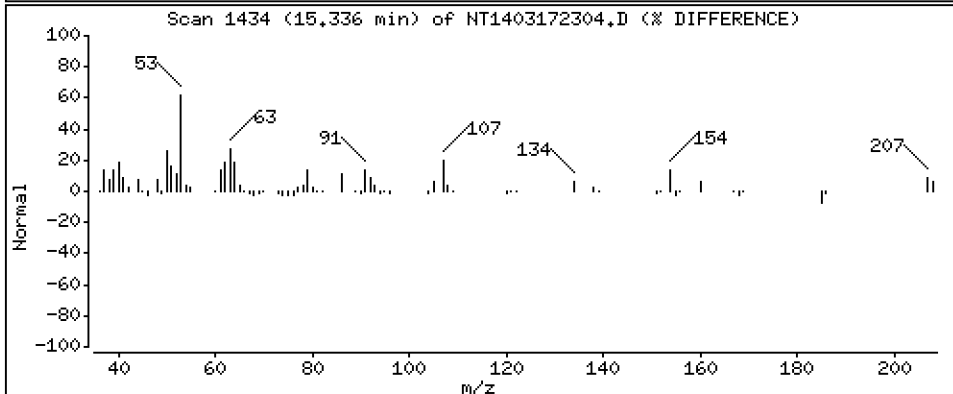
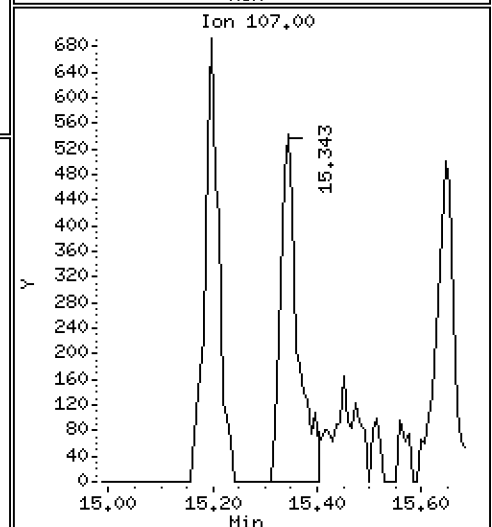
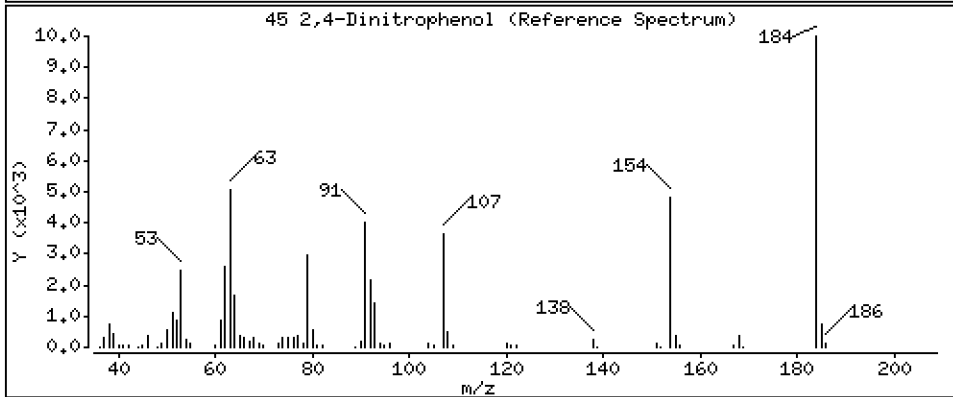
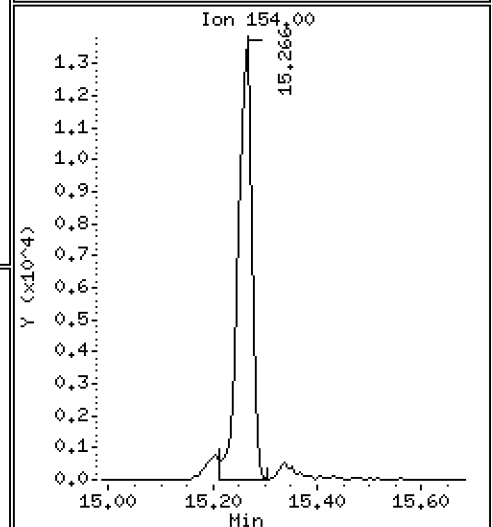
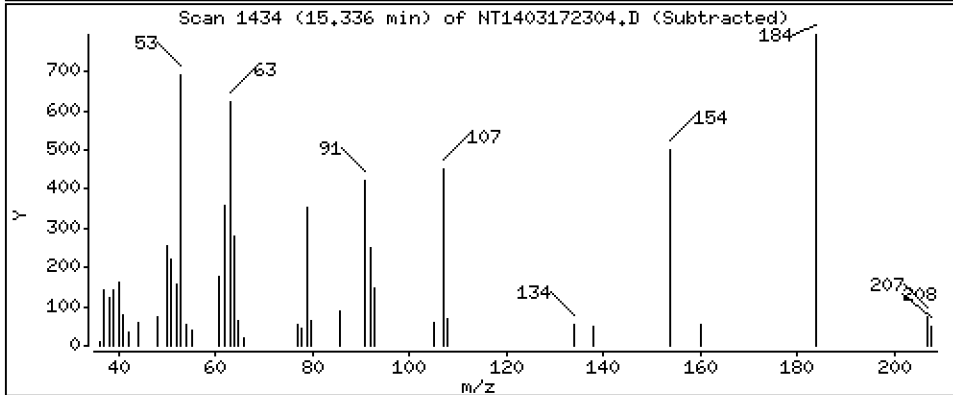
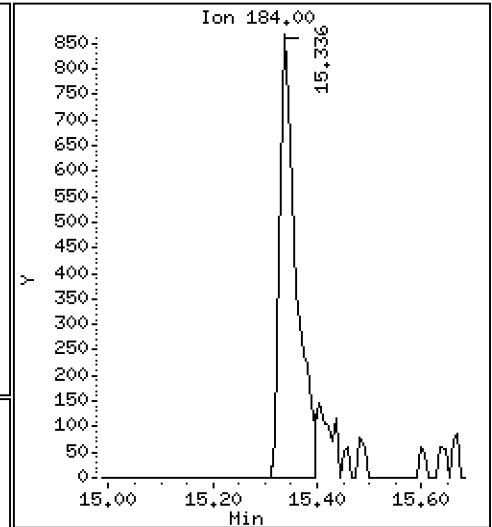
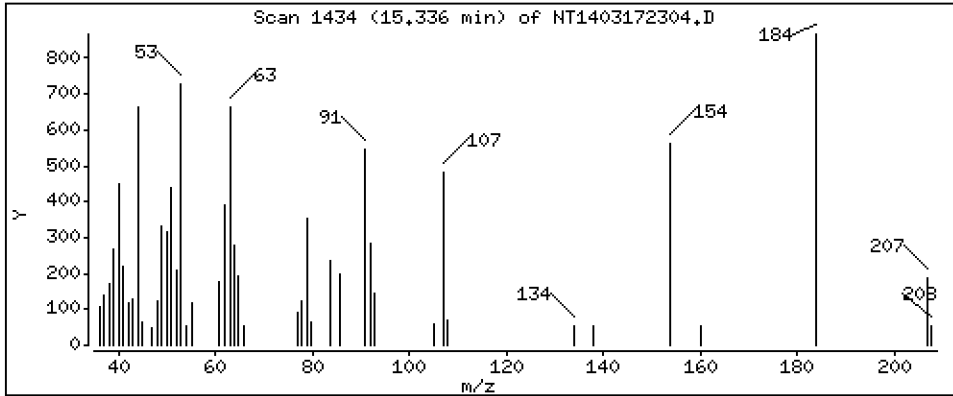
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,07503 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

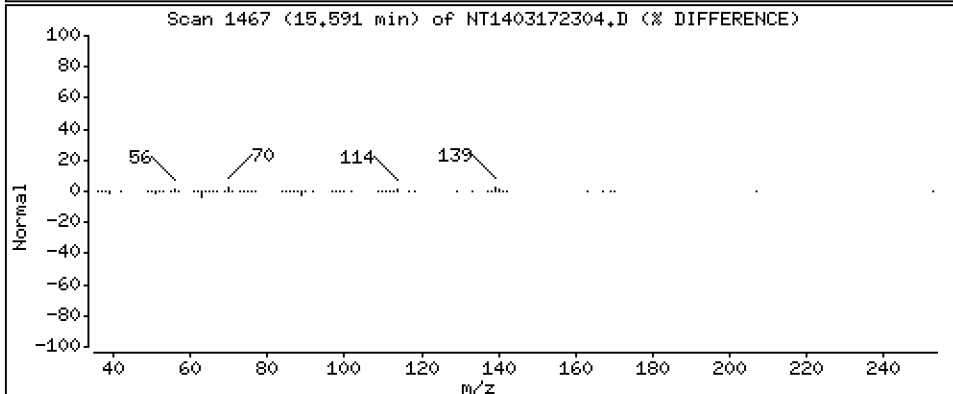
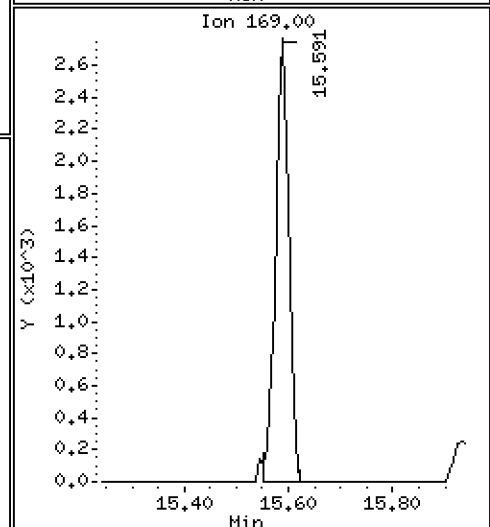
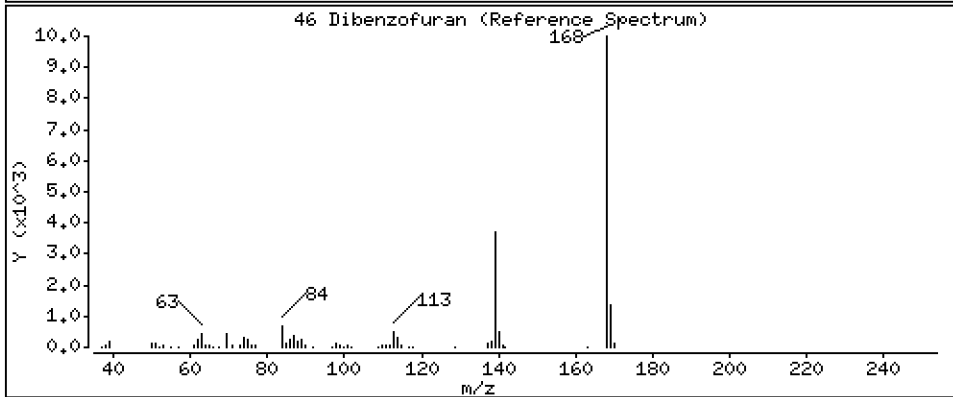
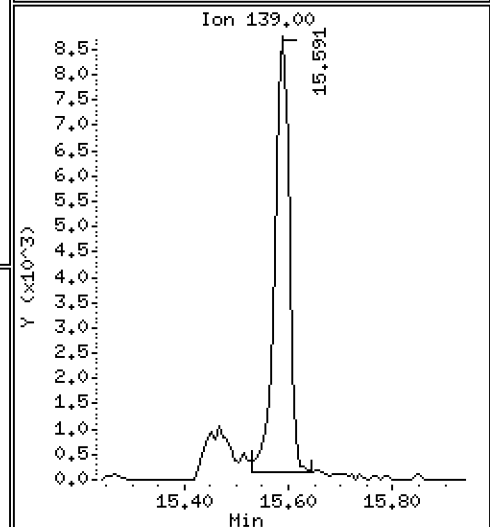
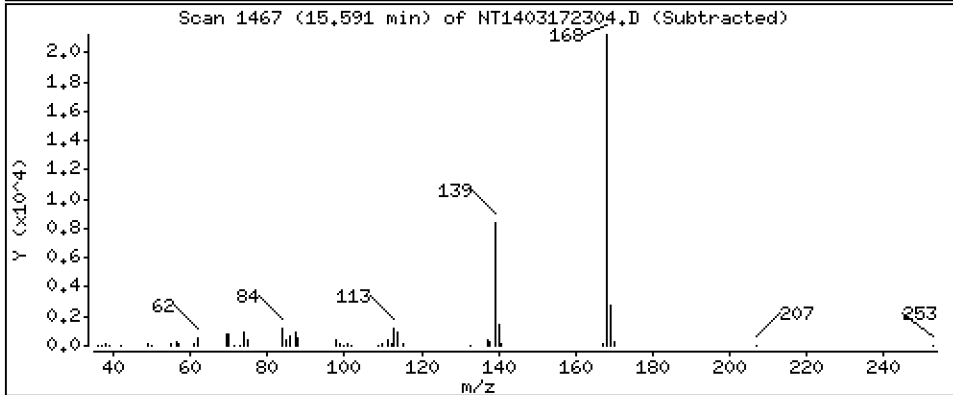
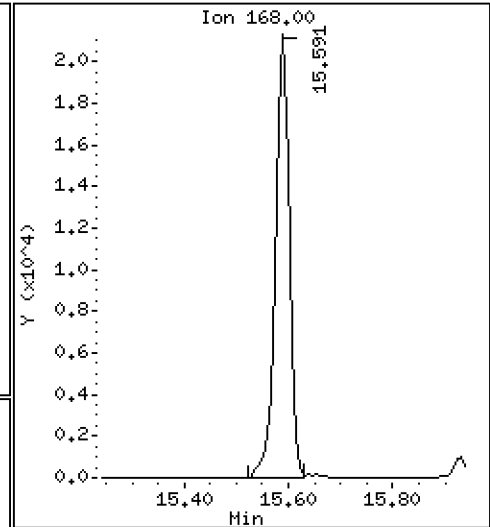
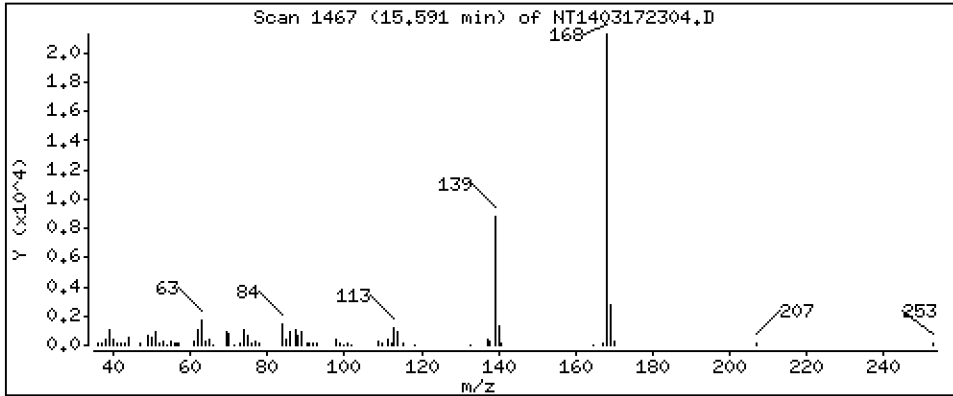
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2043 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

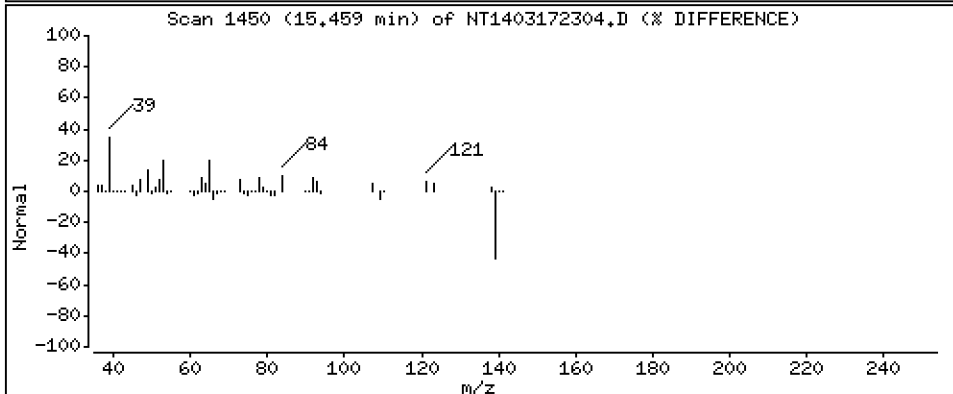
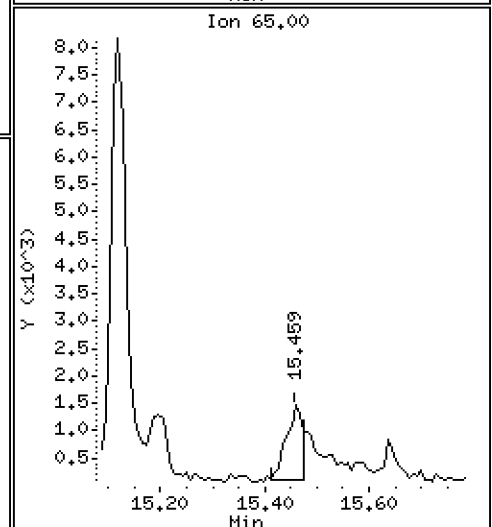
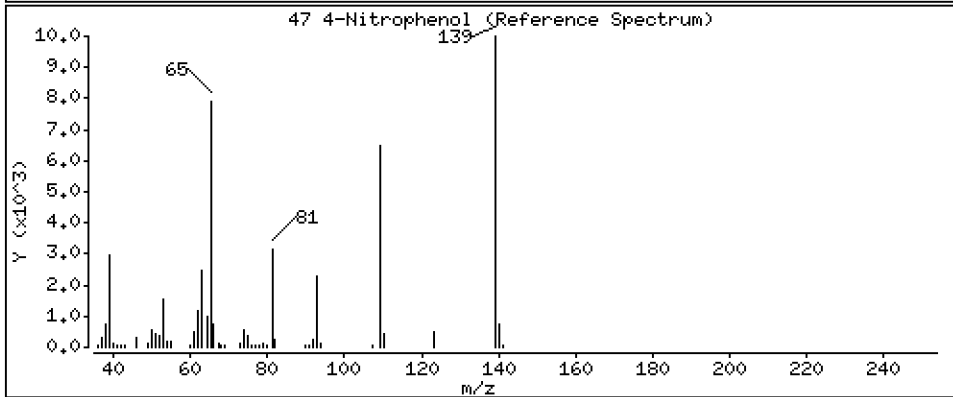
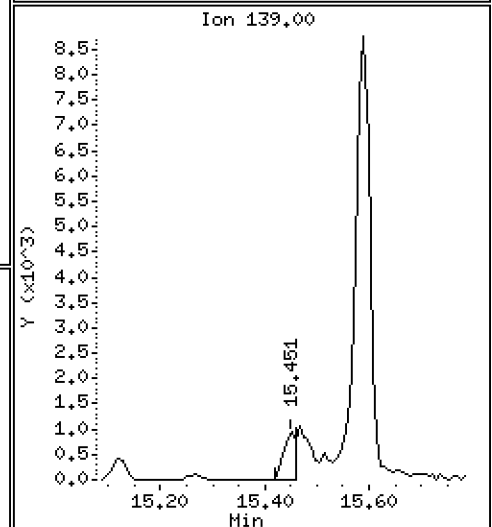
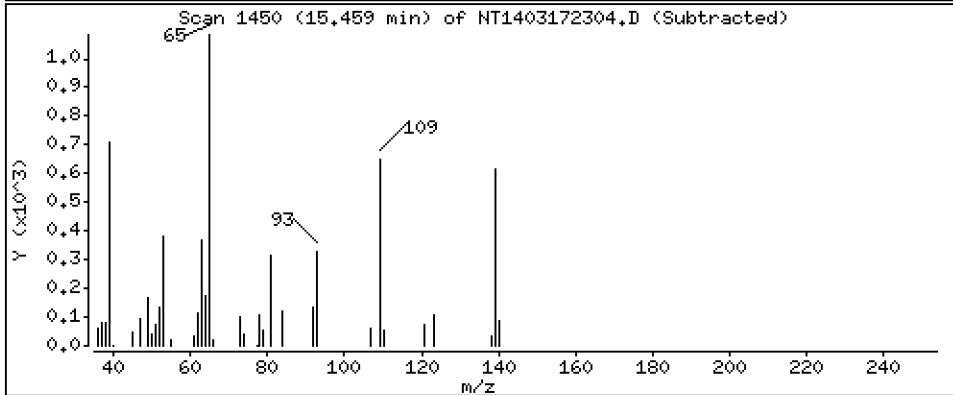
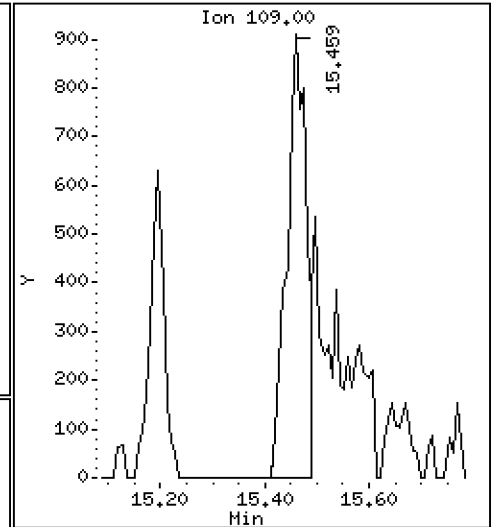
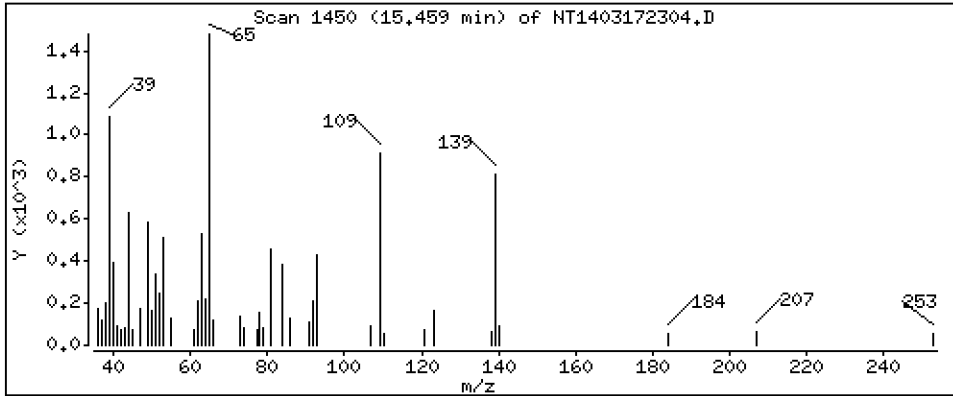
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 0,1020 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

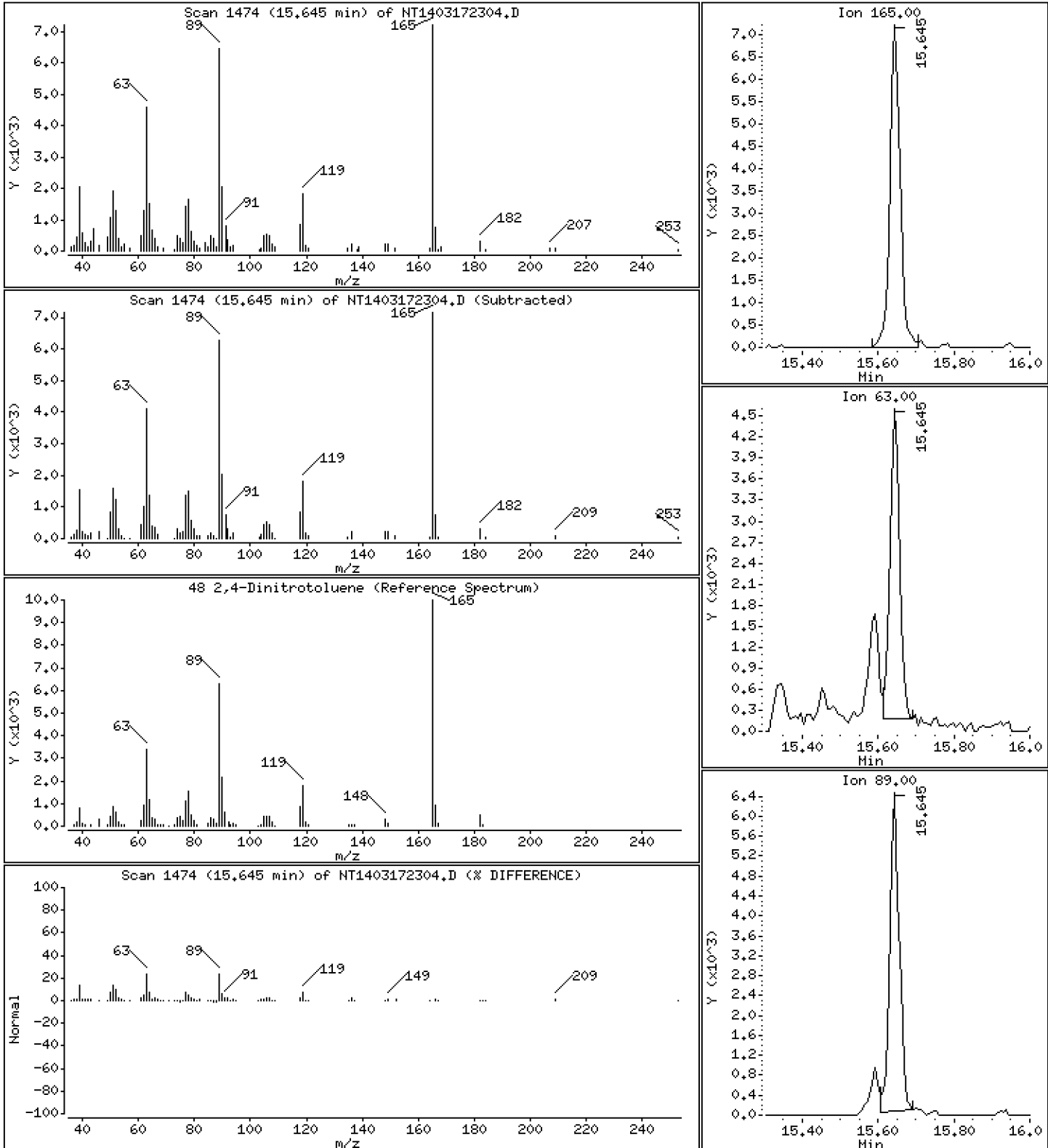
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2865 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

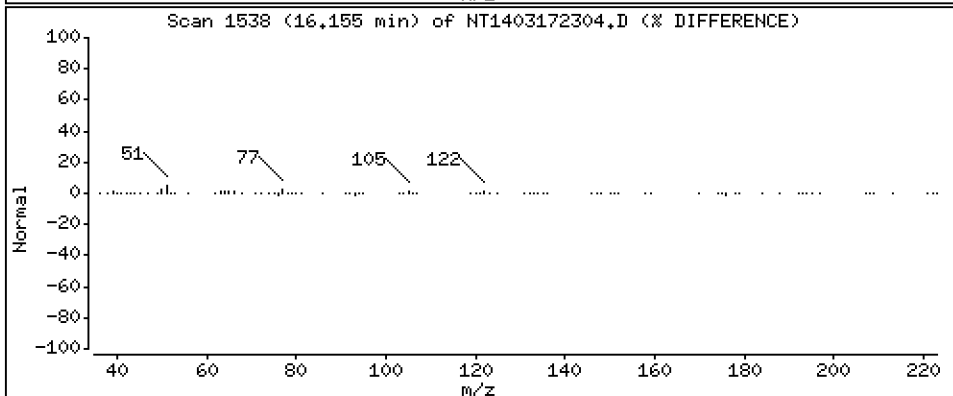
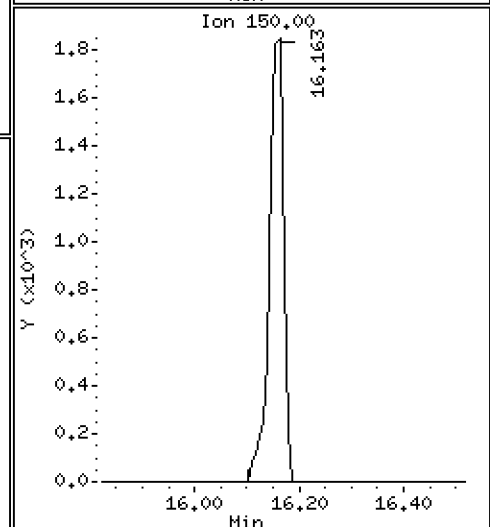
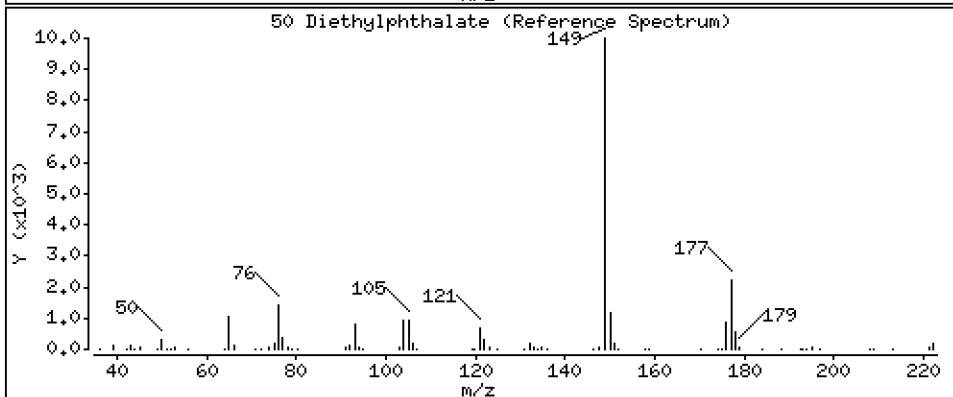
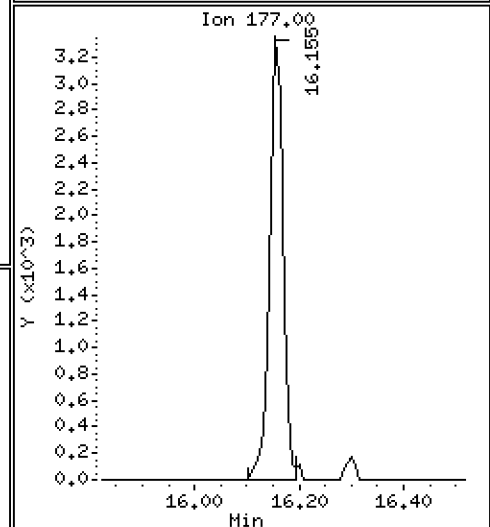
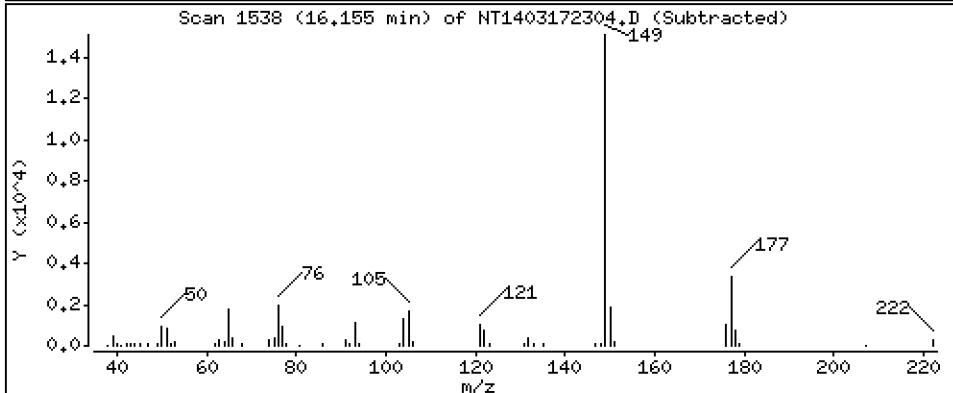
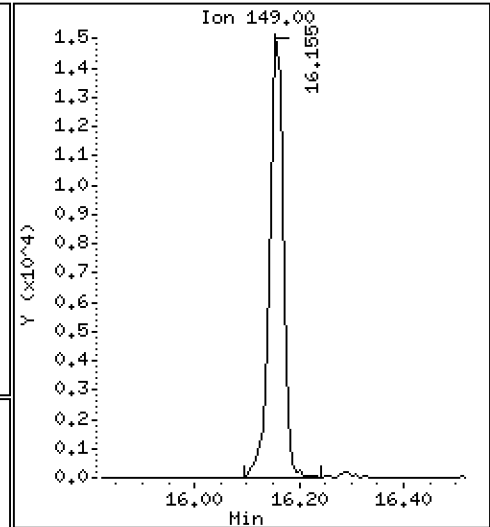
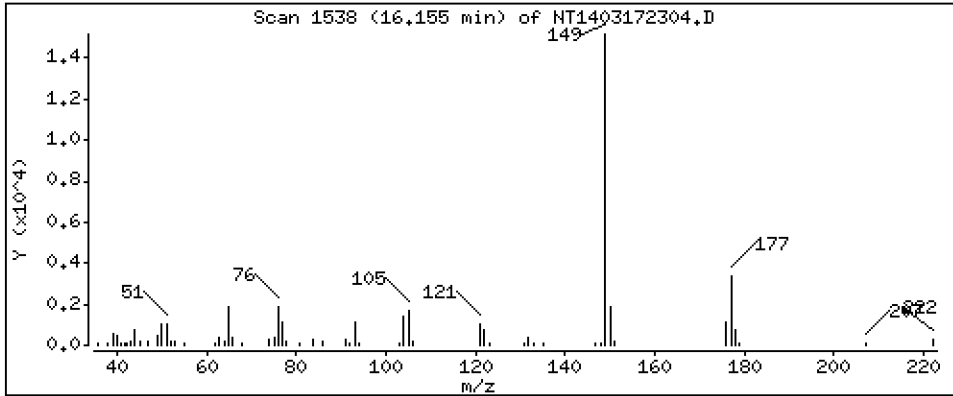
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2007 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

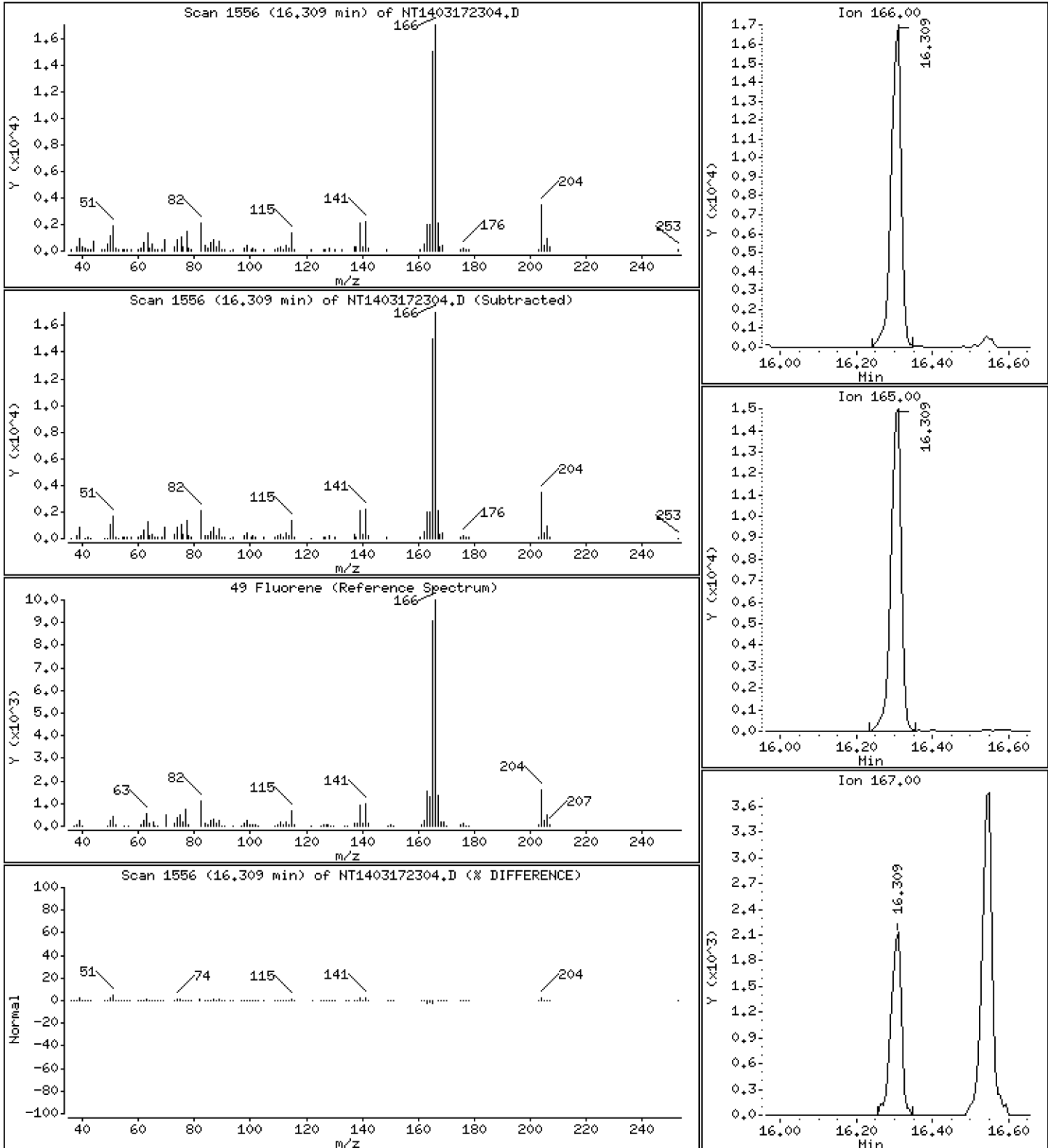
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1710 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

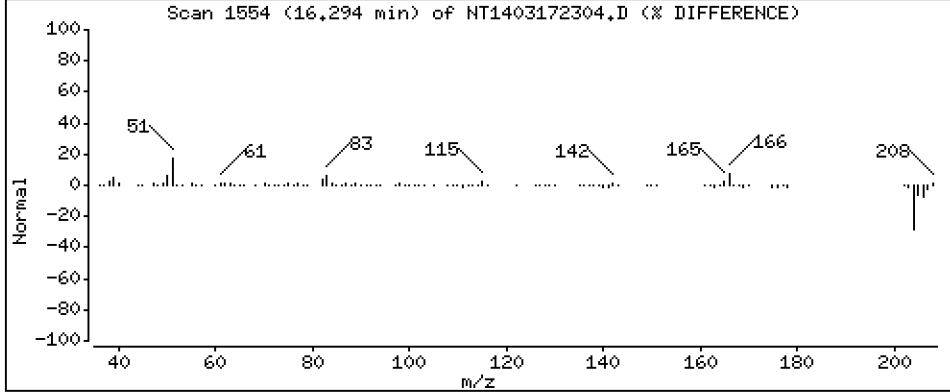
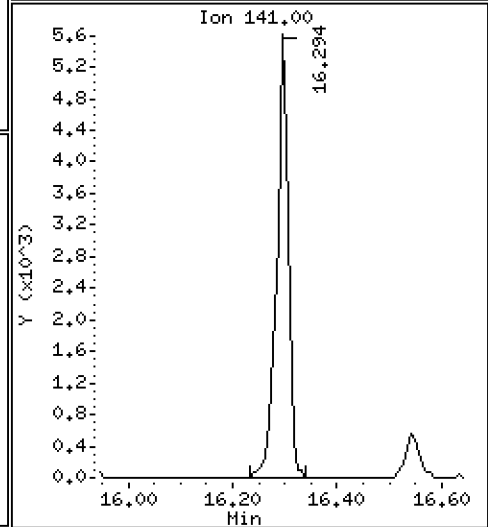
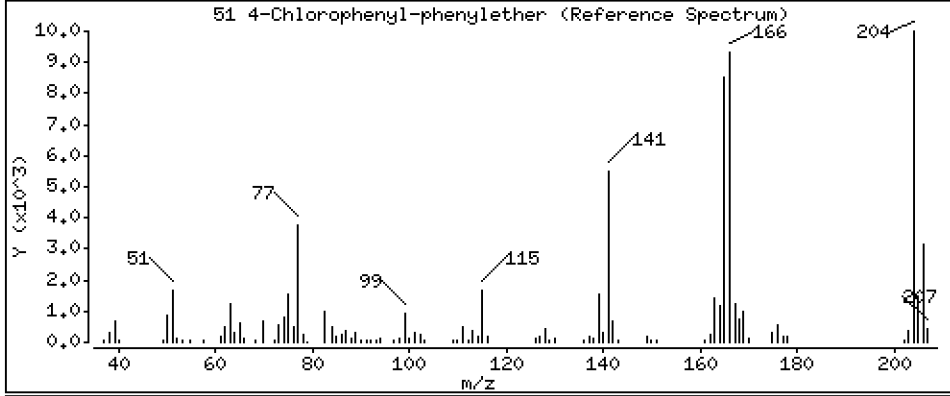
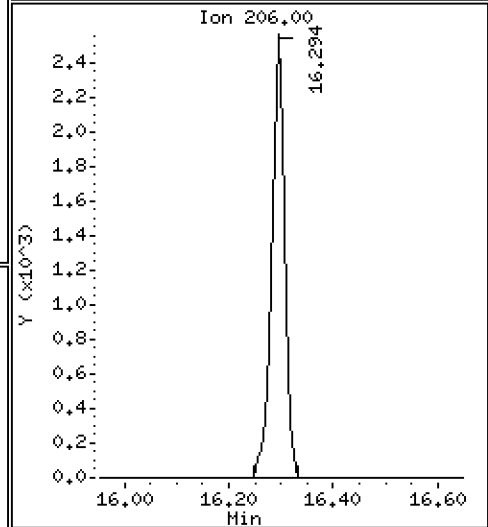
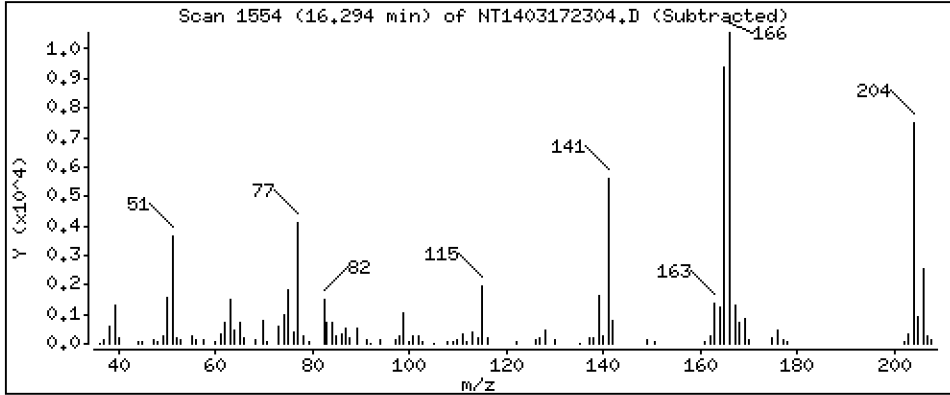
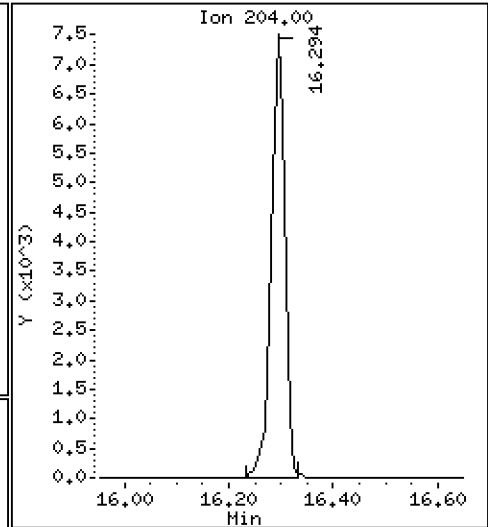
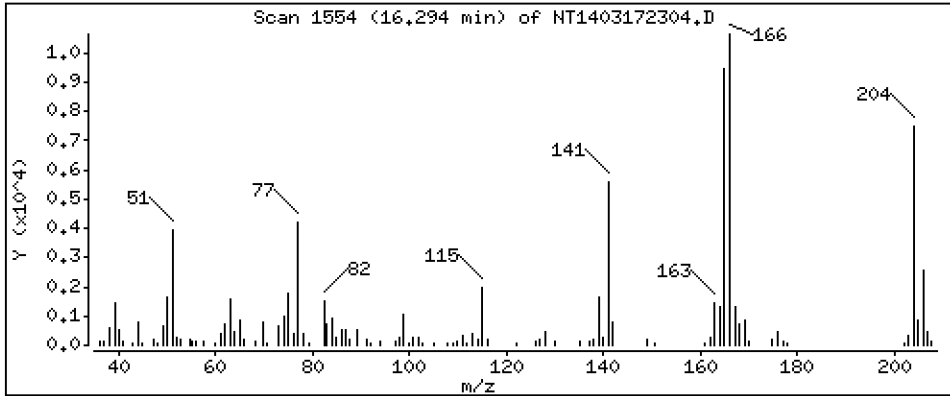
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,1743 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

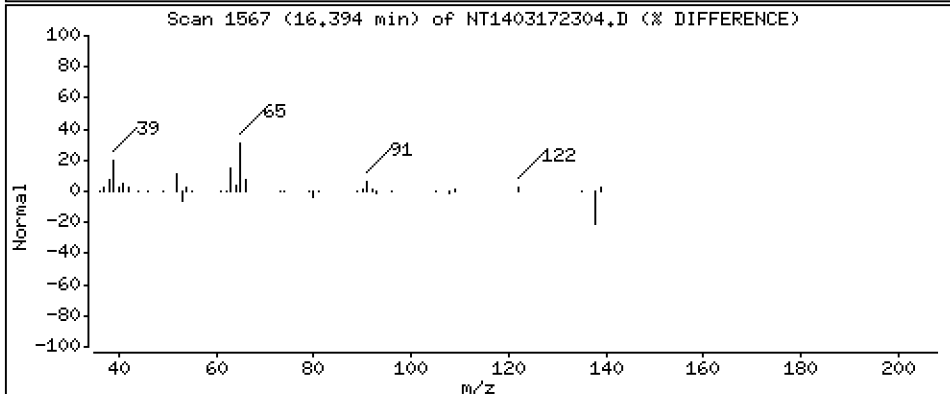
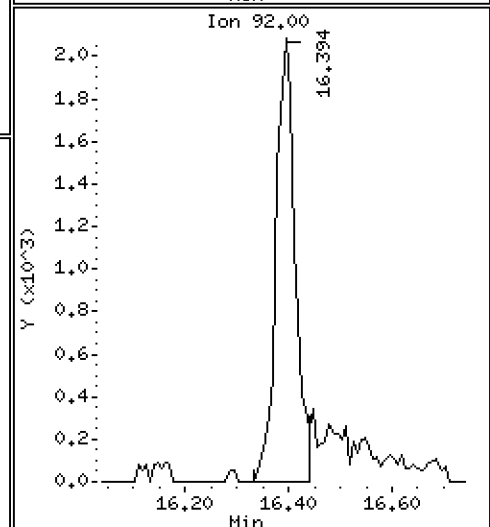
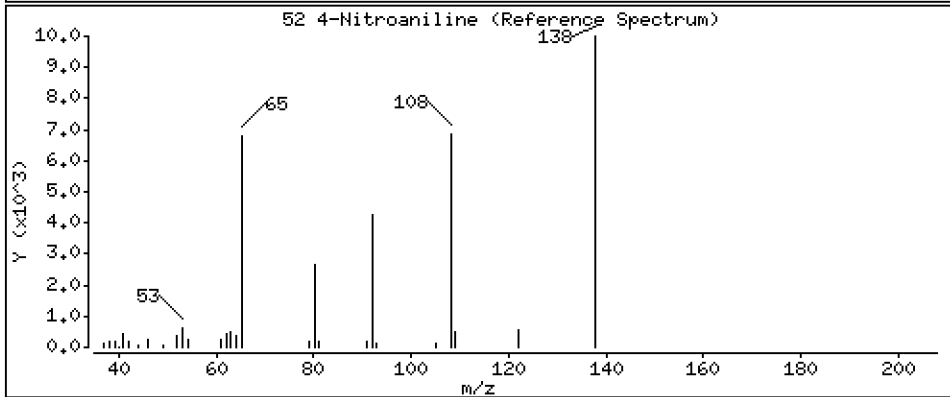
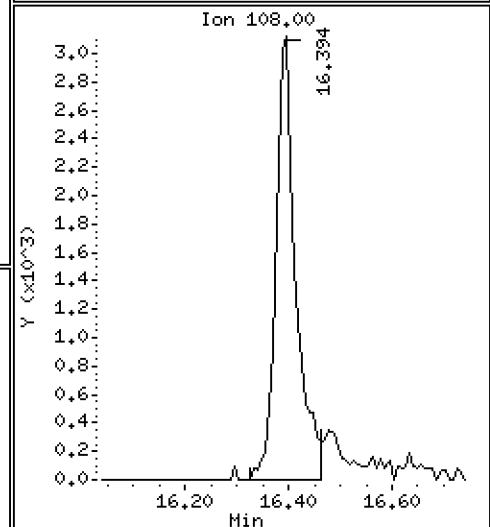
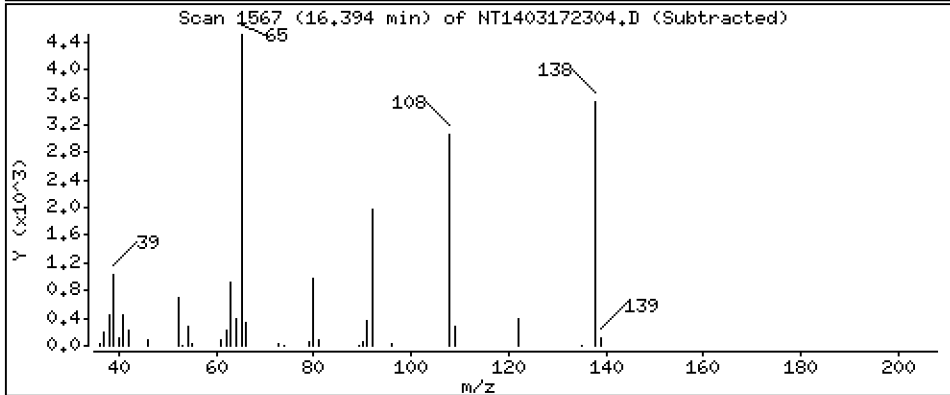
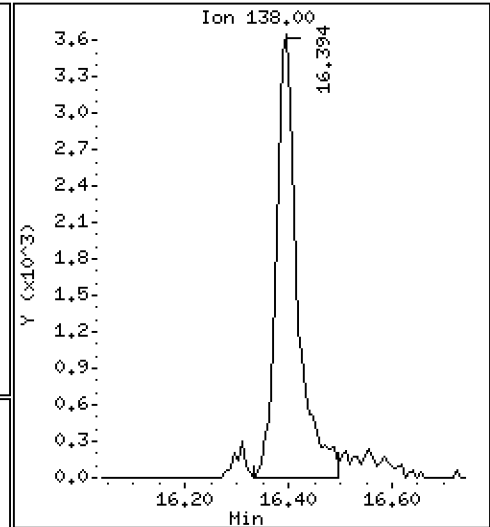
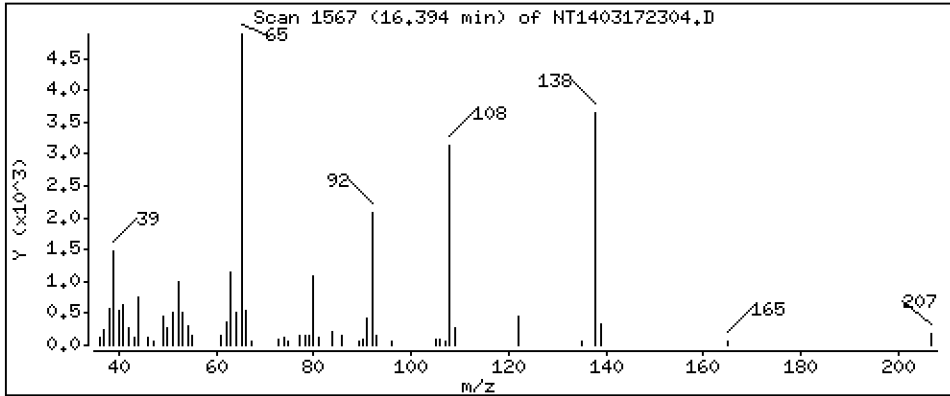
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 0,2615 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

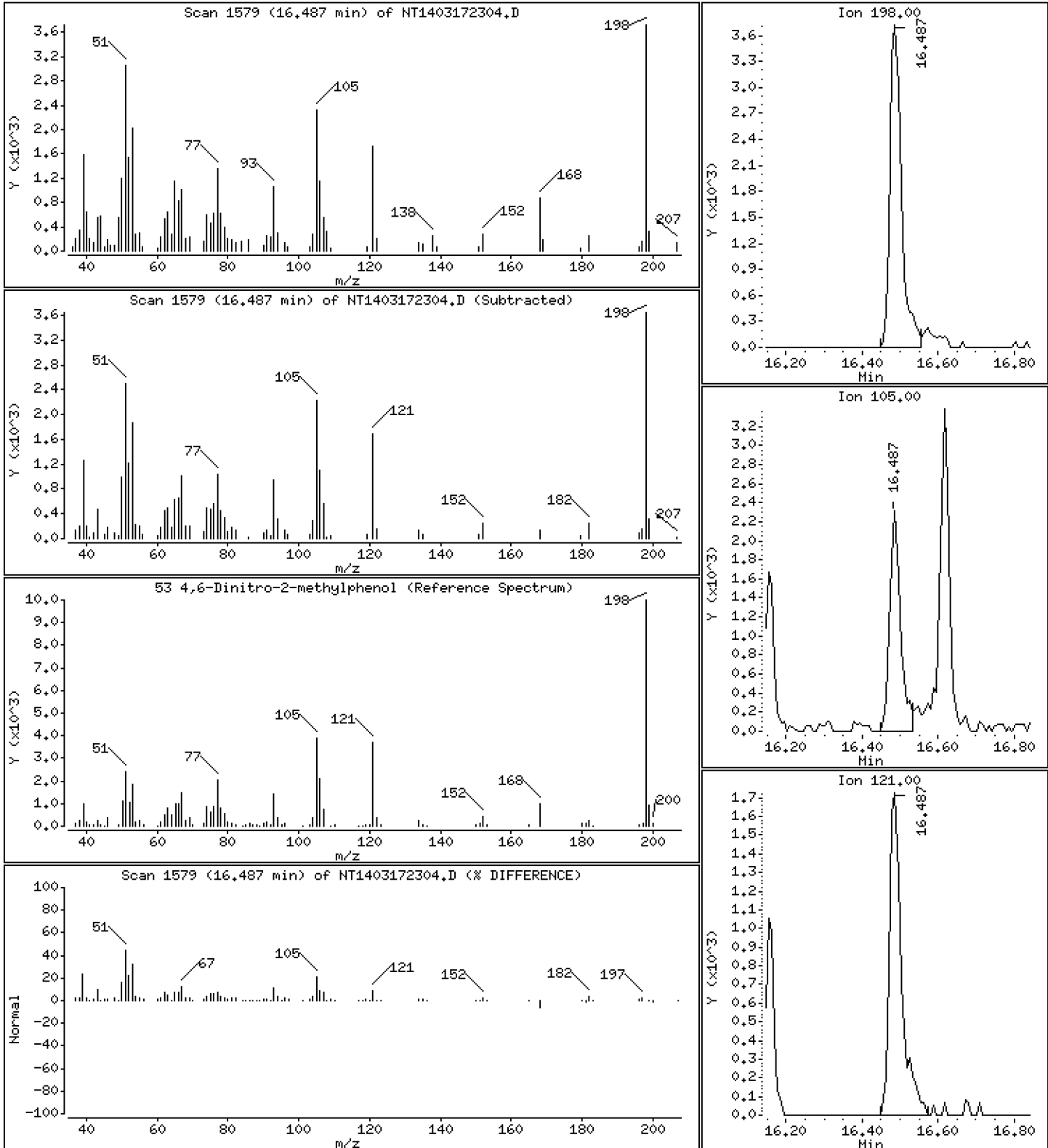
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2891 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

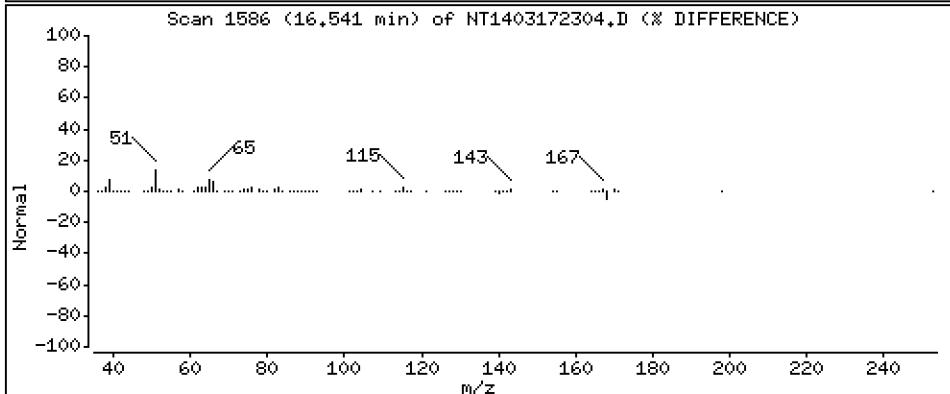
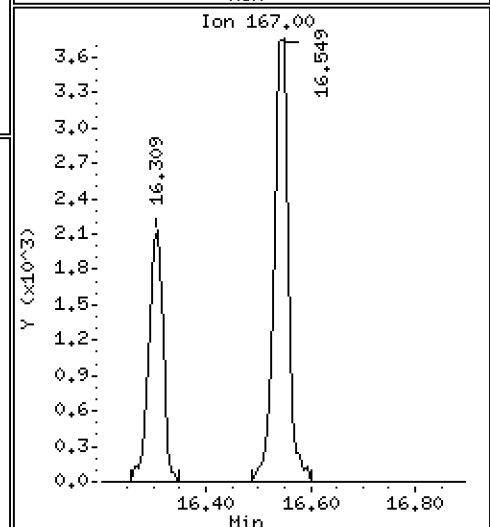
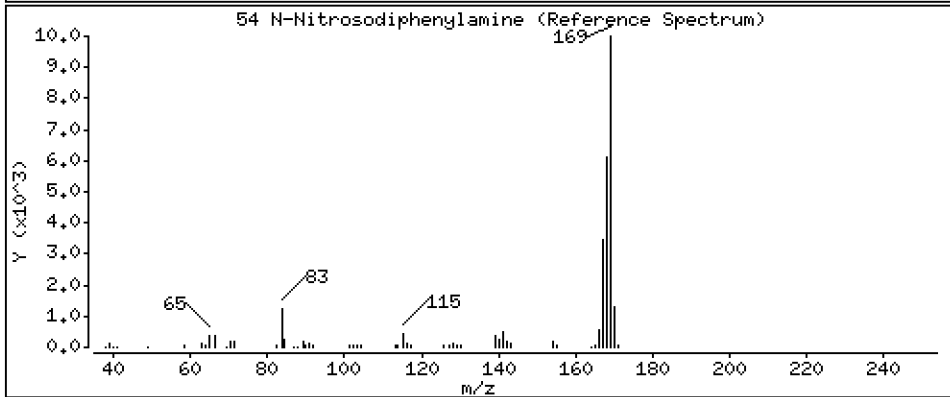
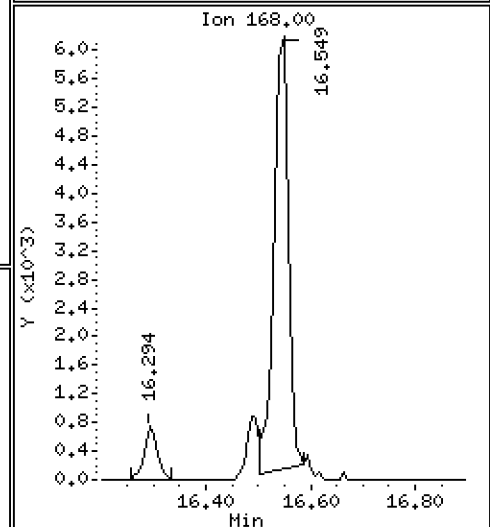
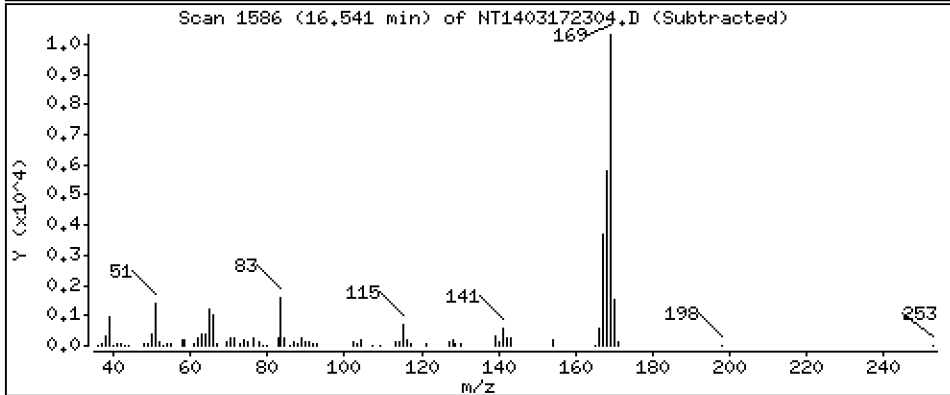
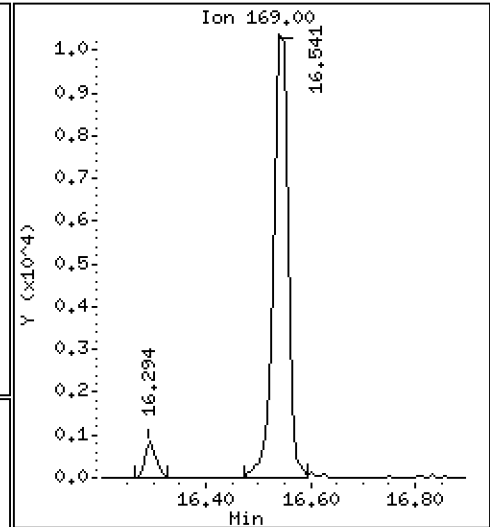
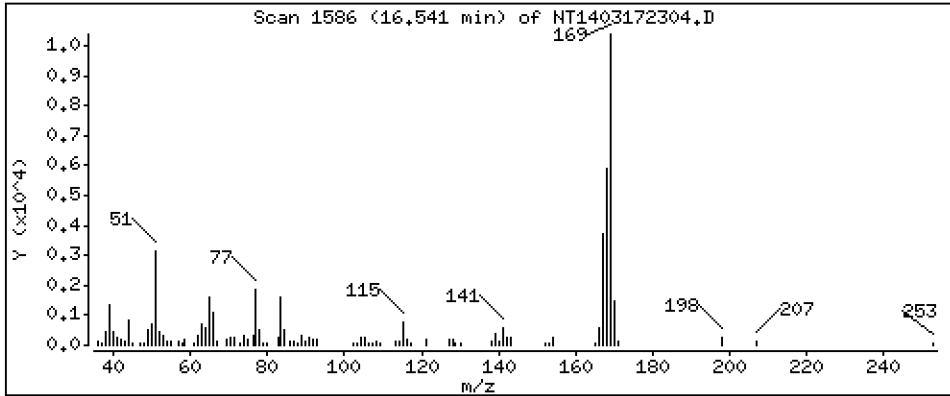
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,1883 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

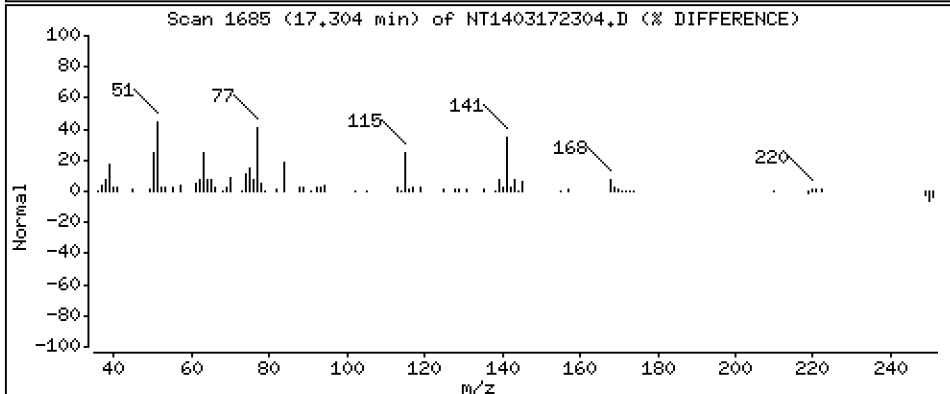
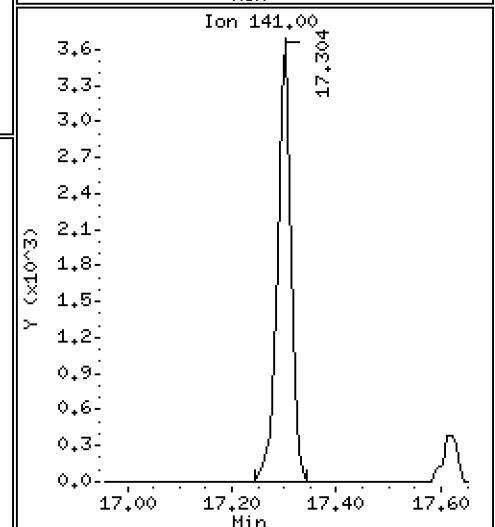
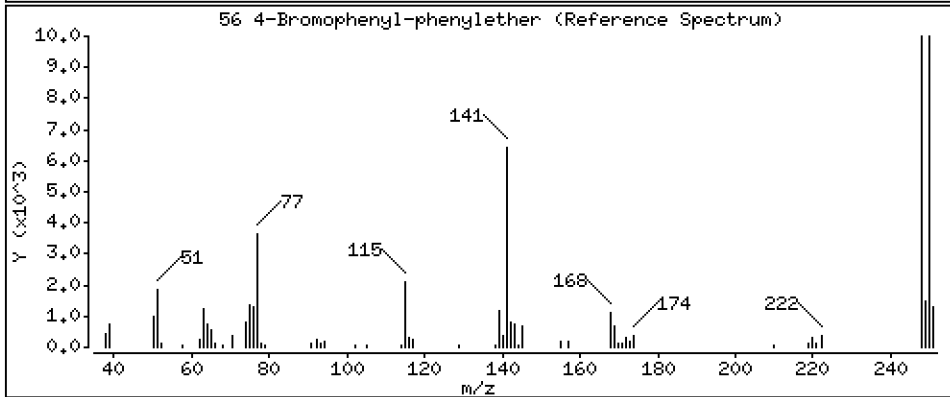
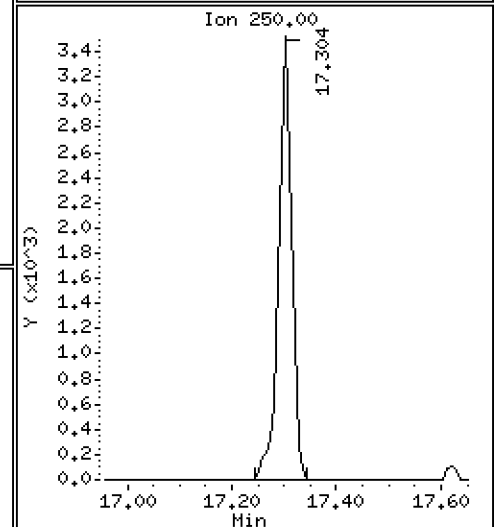
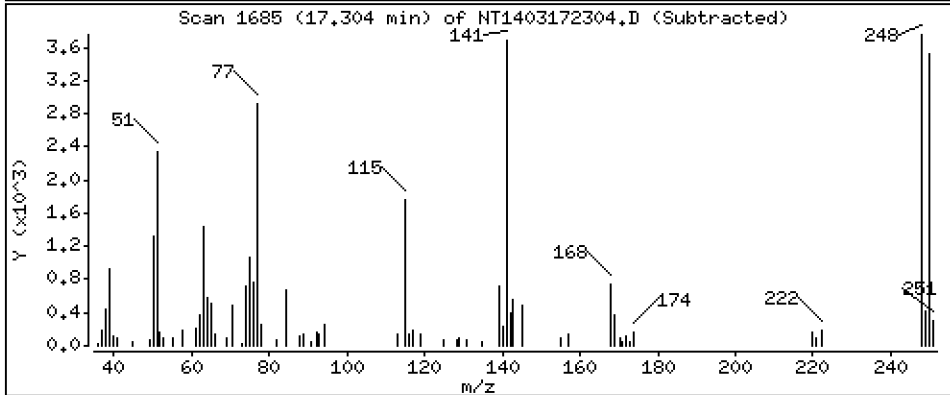
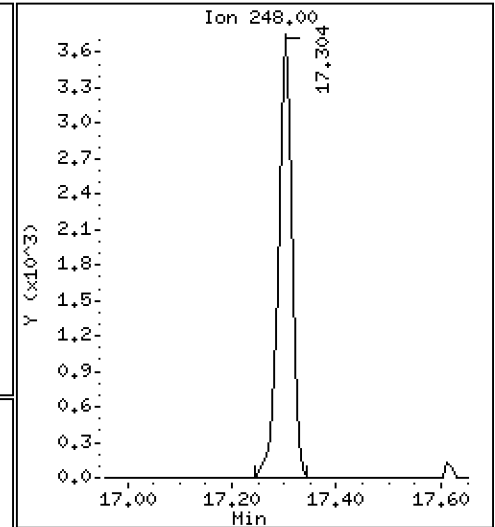
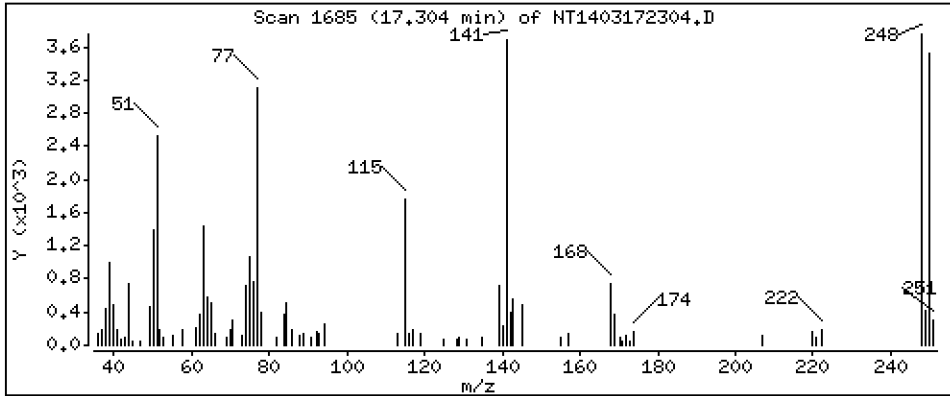
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1918 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

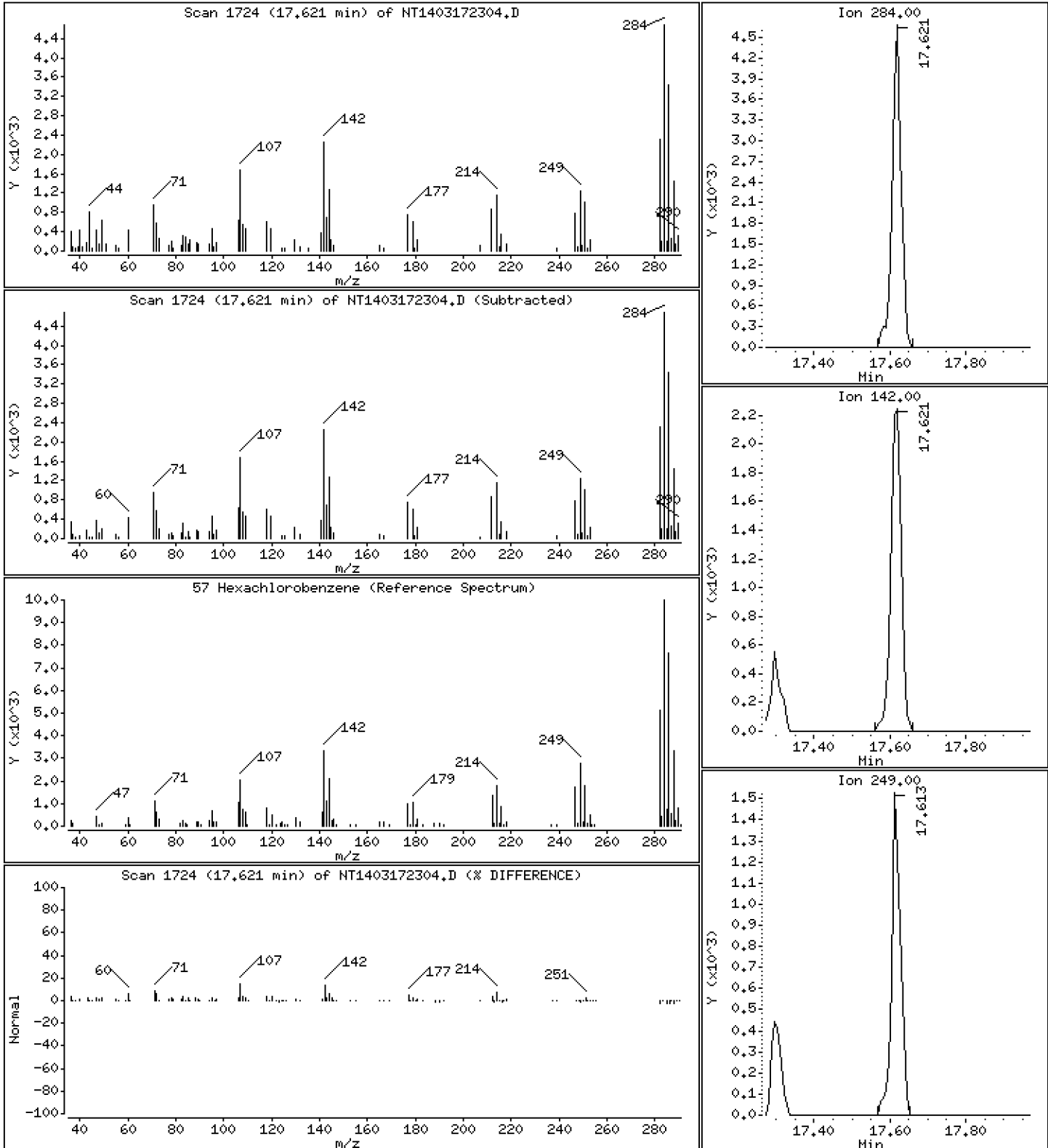
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2077 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

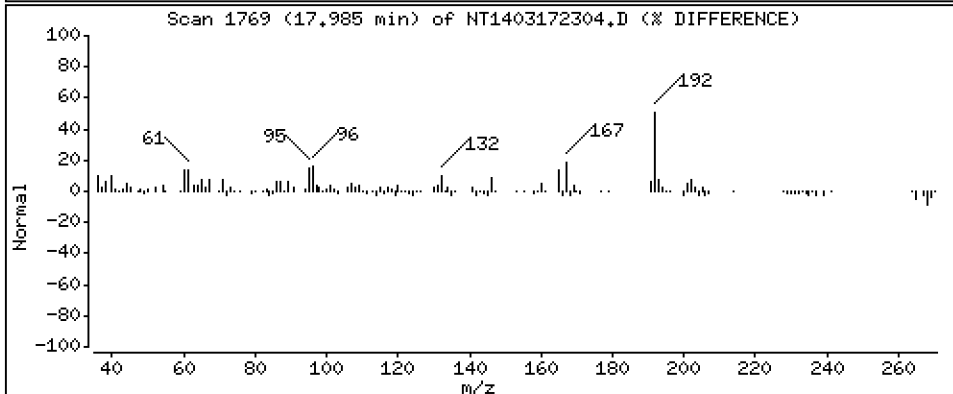
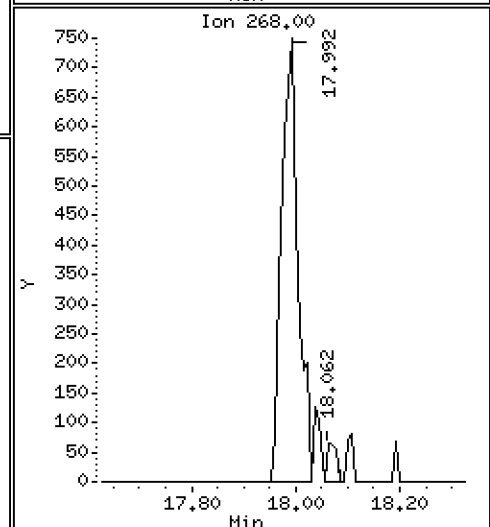
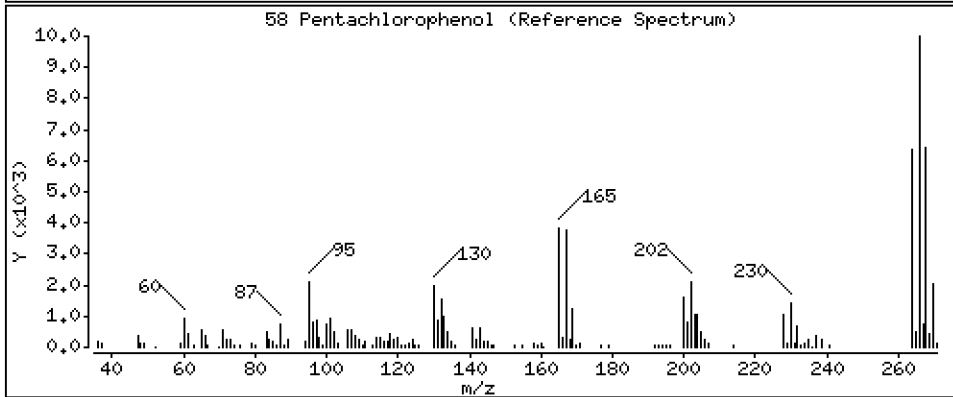
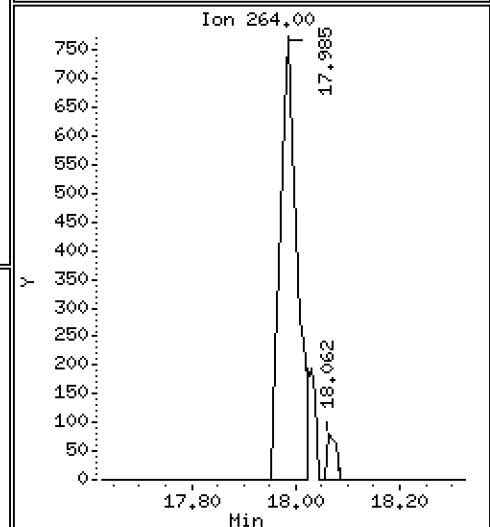
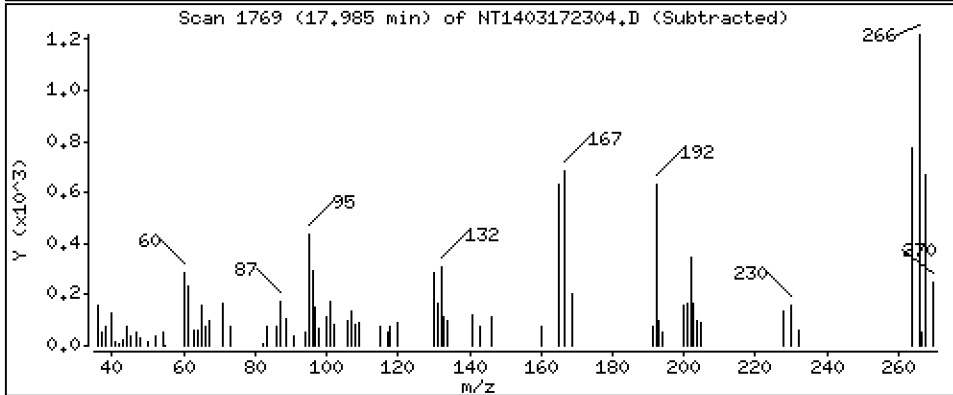
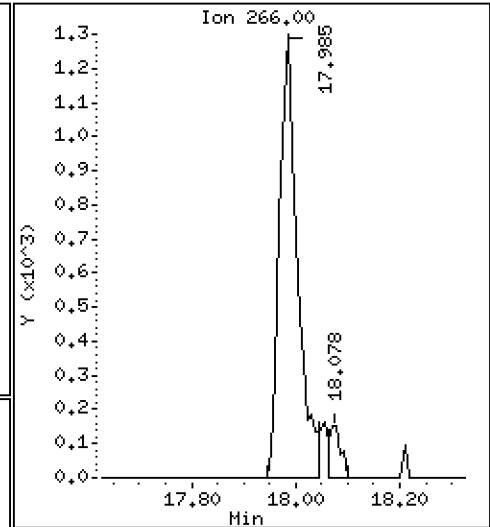
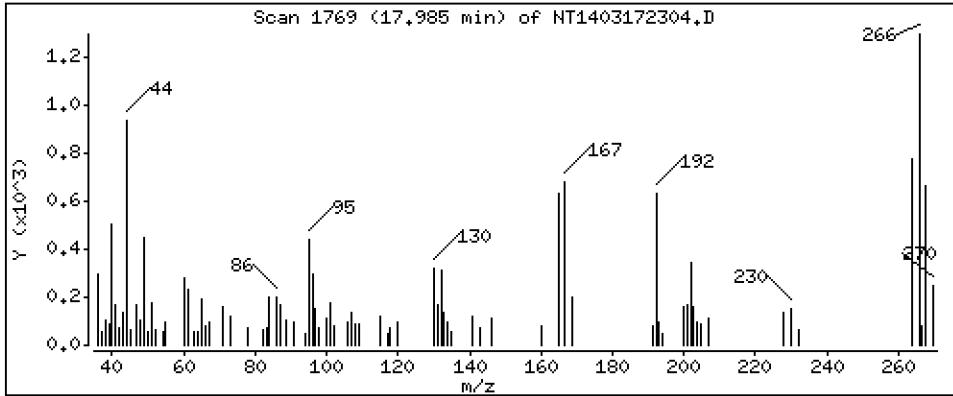
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1220 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

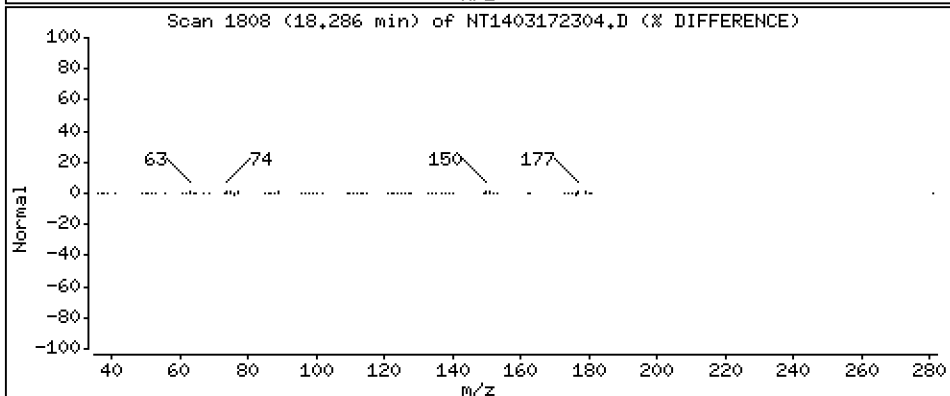
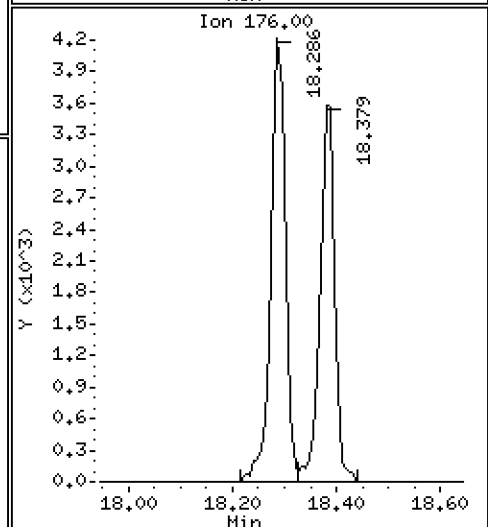
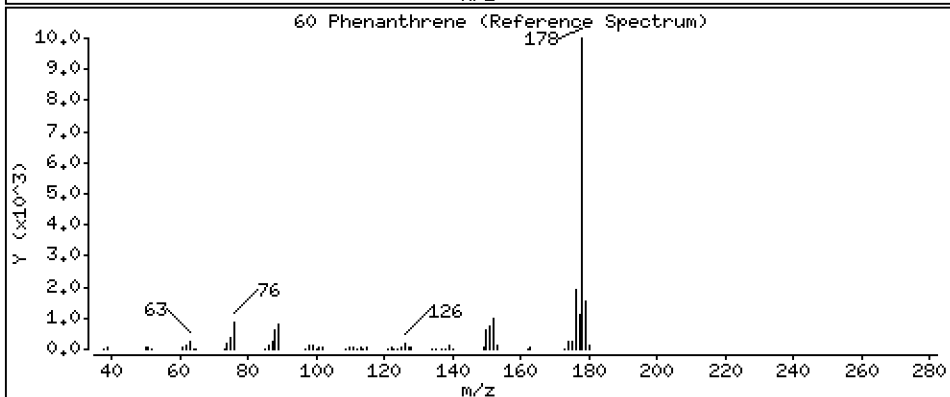
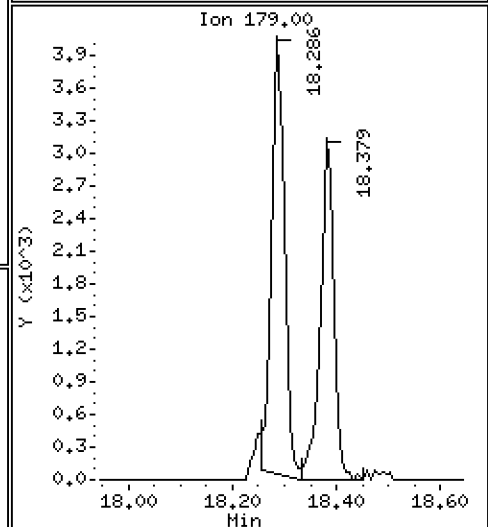
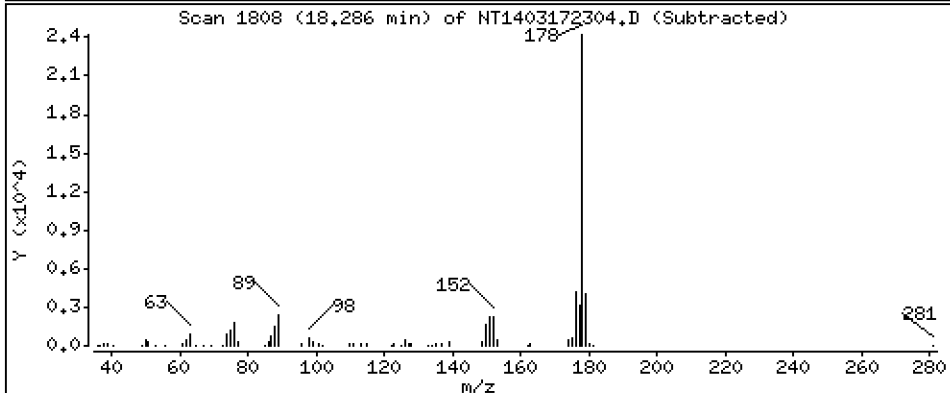
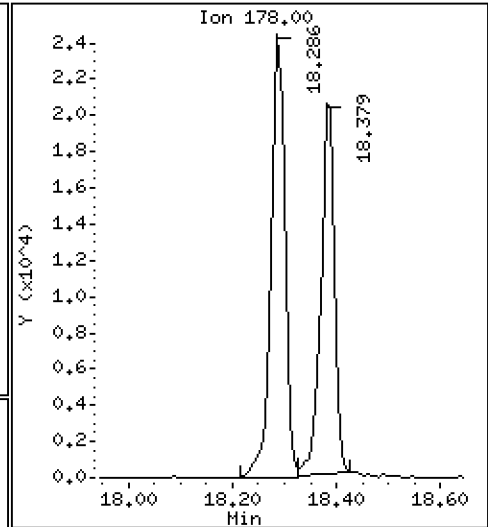
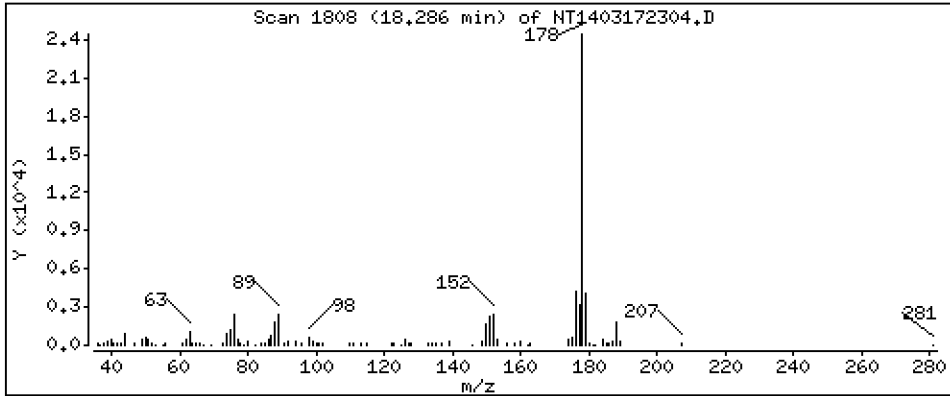
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,1994 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

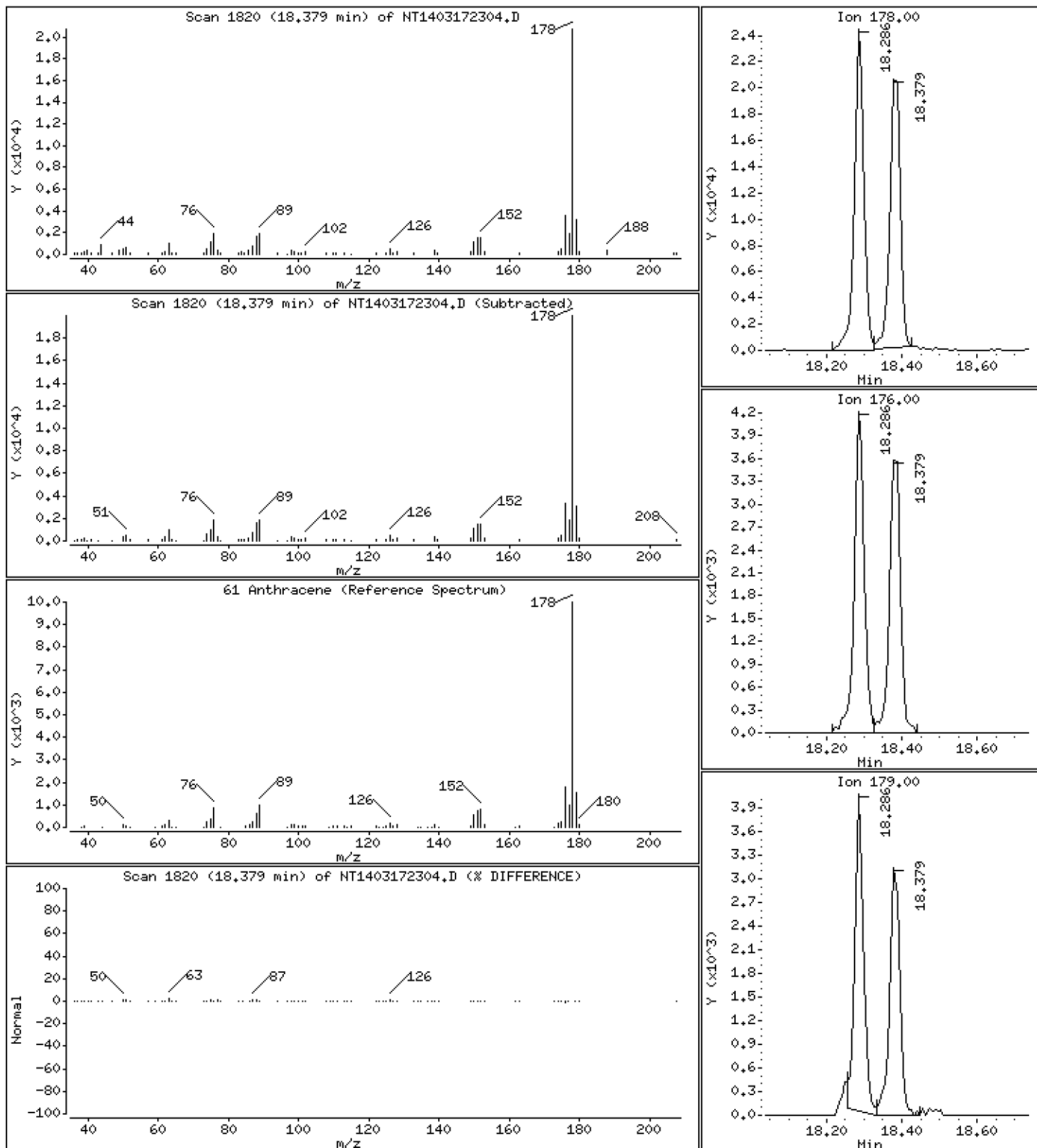
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1773 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

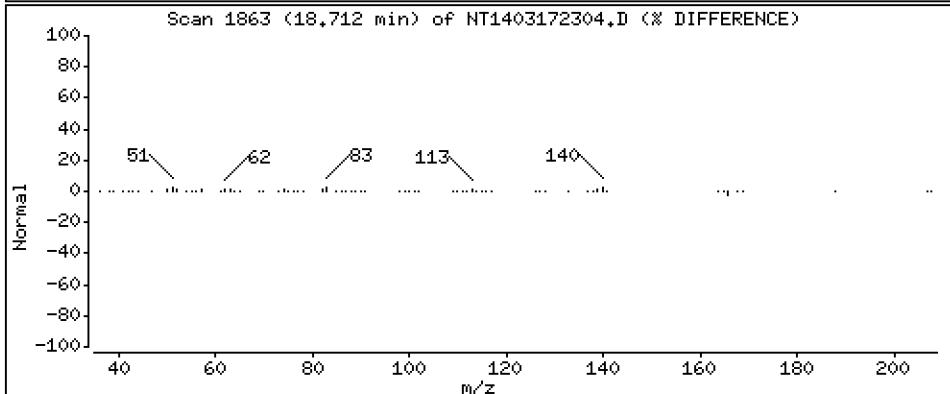
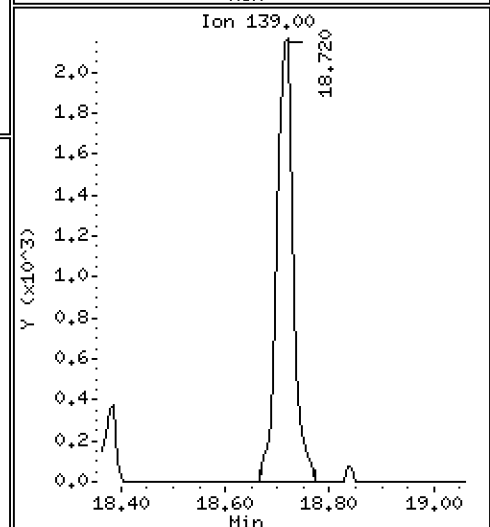
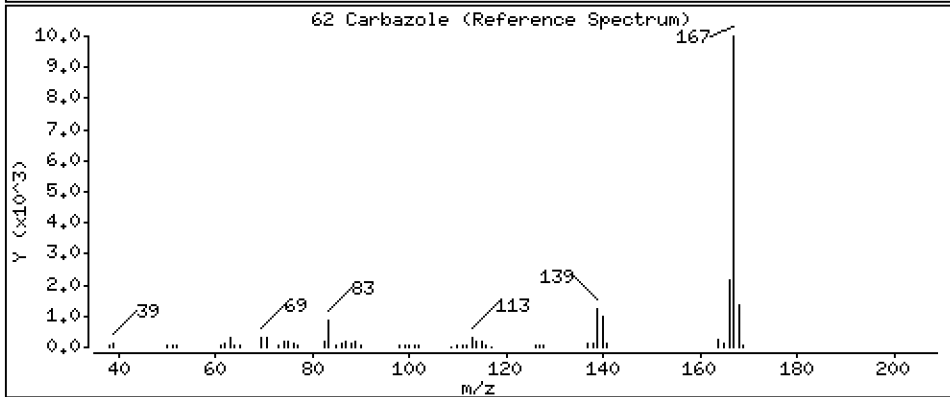
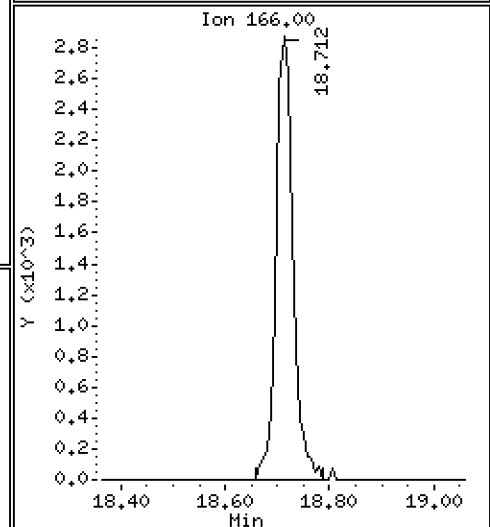
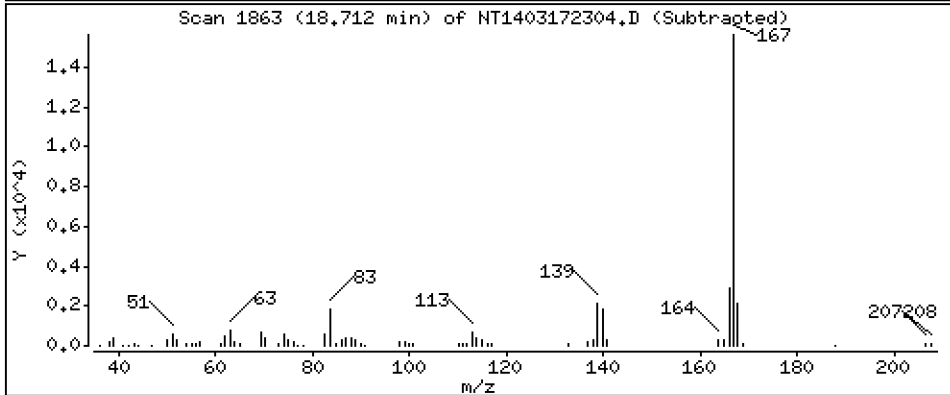
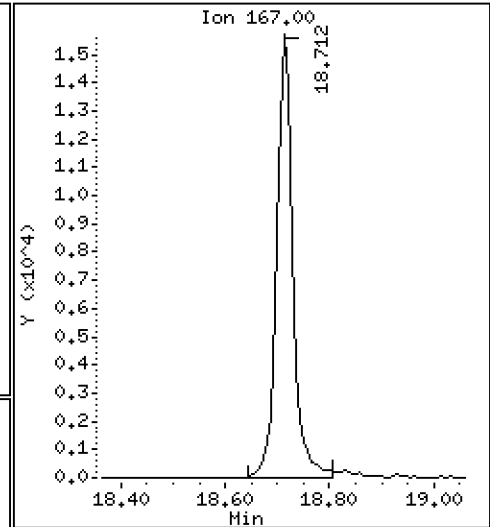
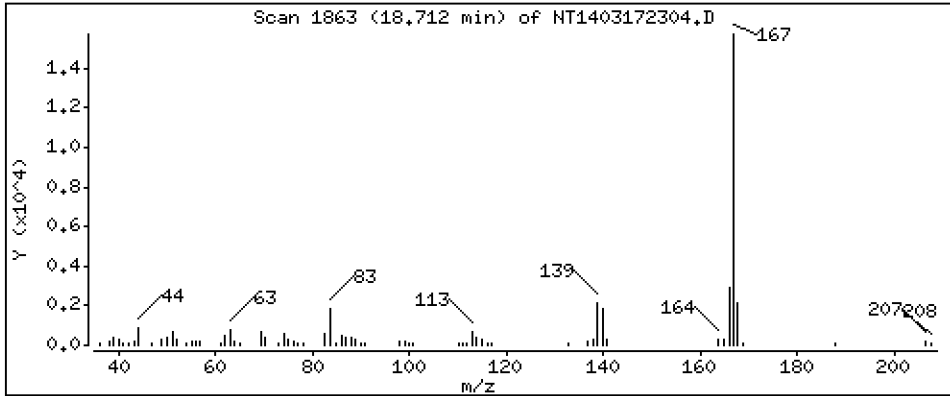
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1750 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

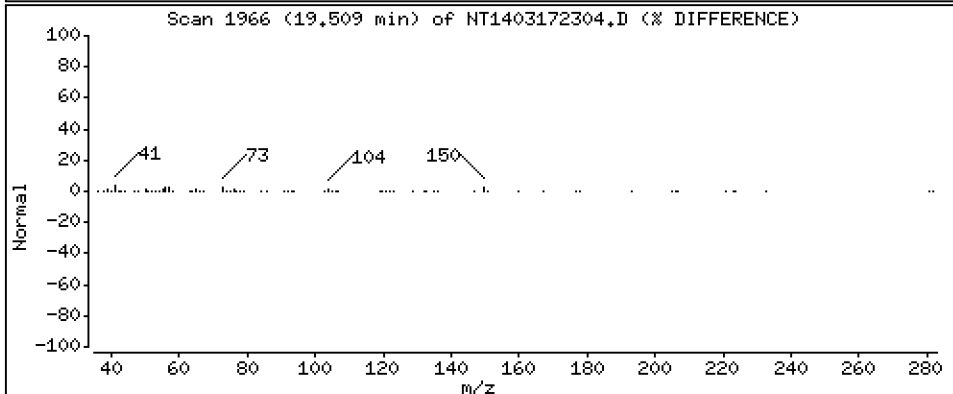
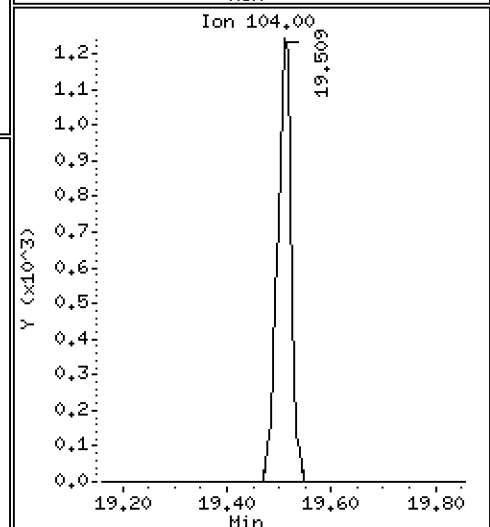
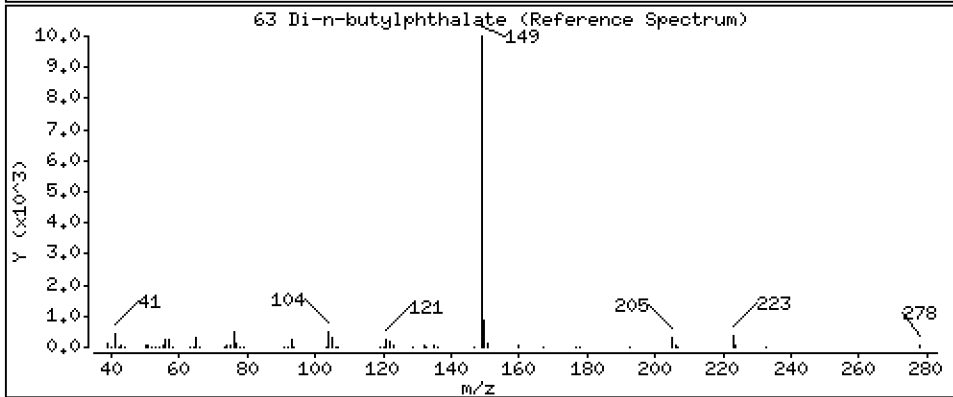
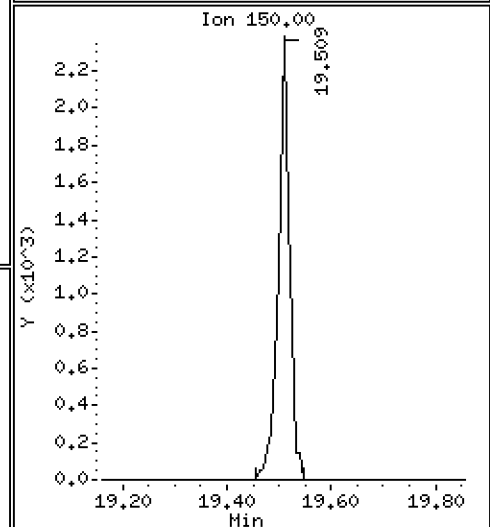
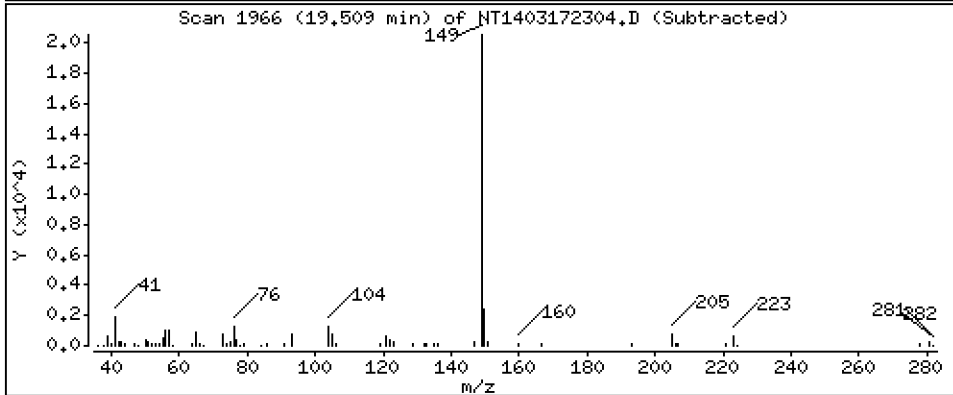
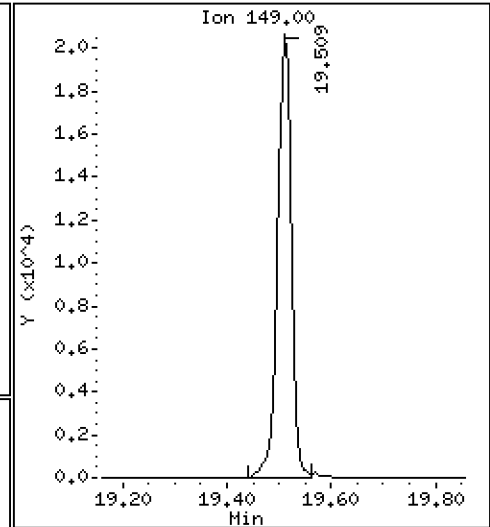
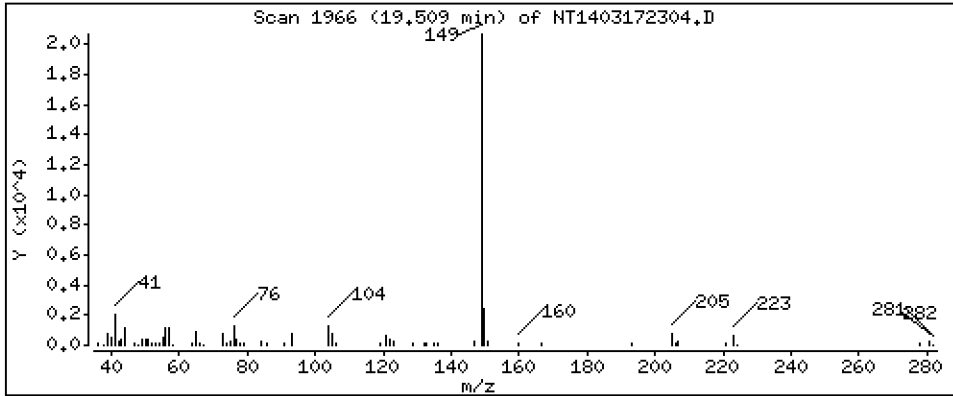
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1543 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

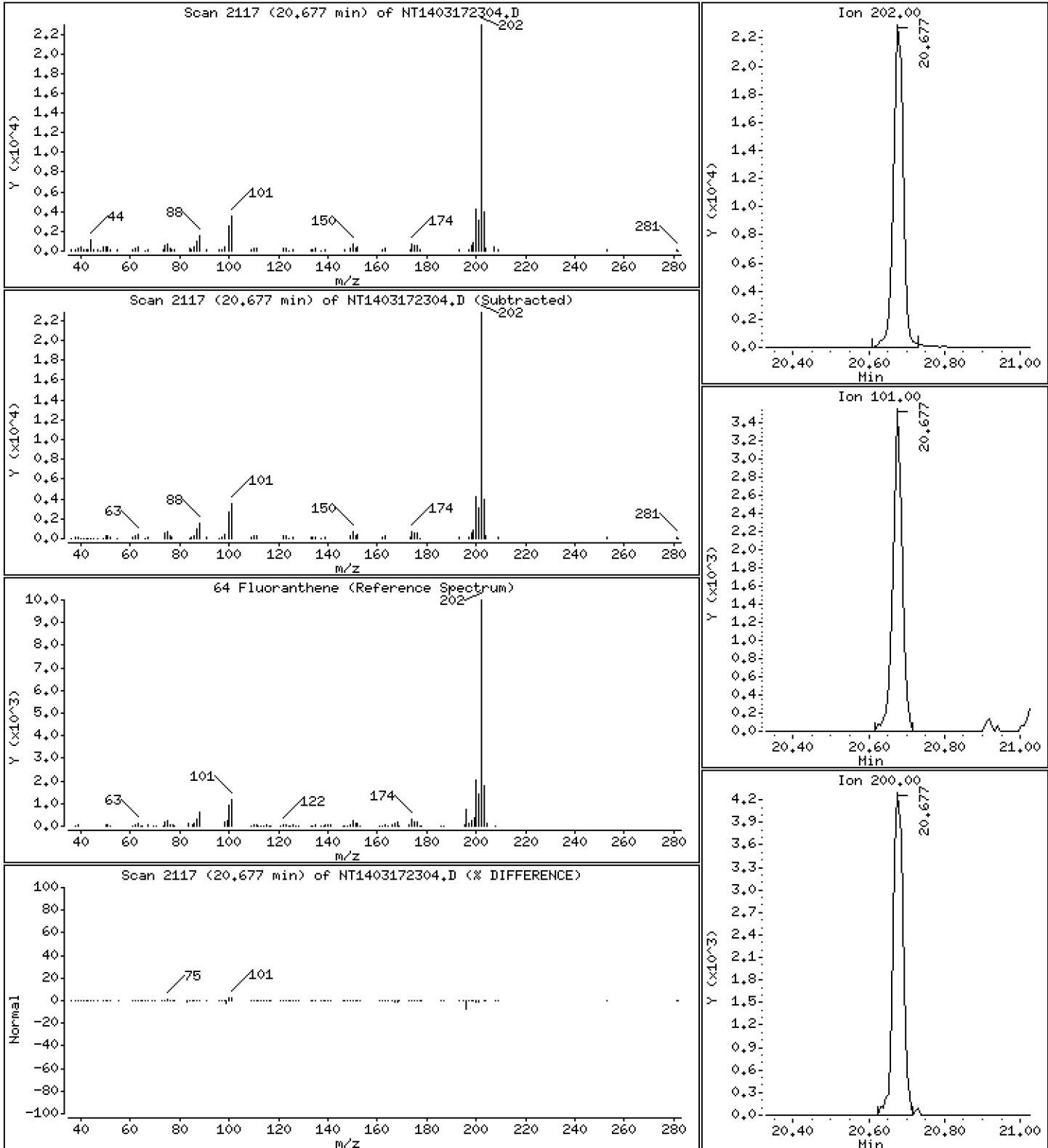
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,2091 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

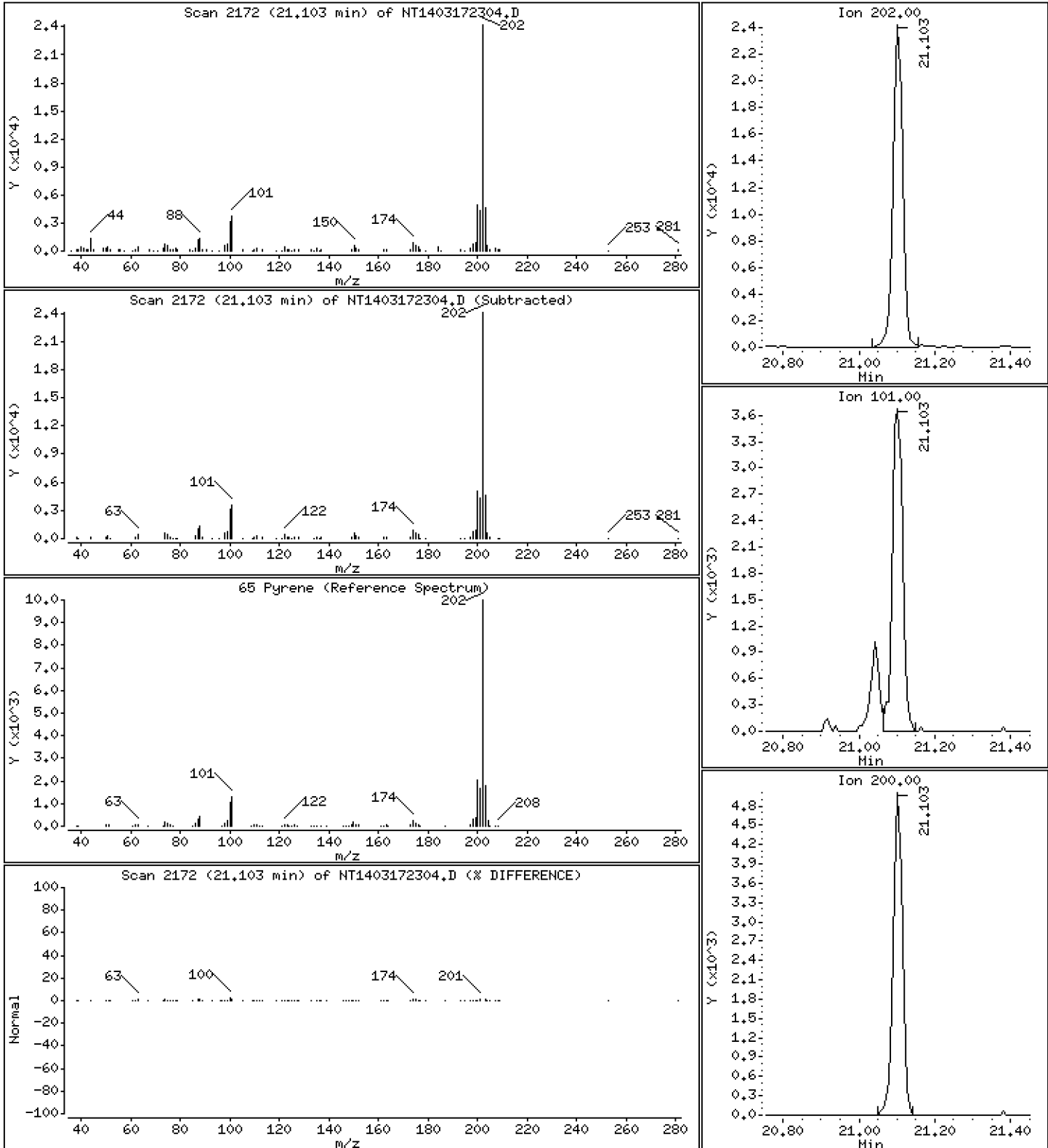
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,2132 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

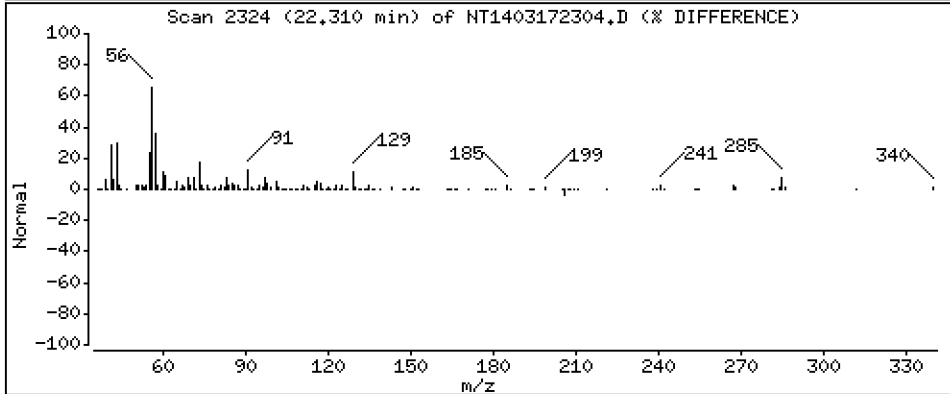
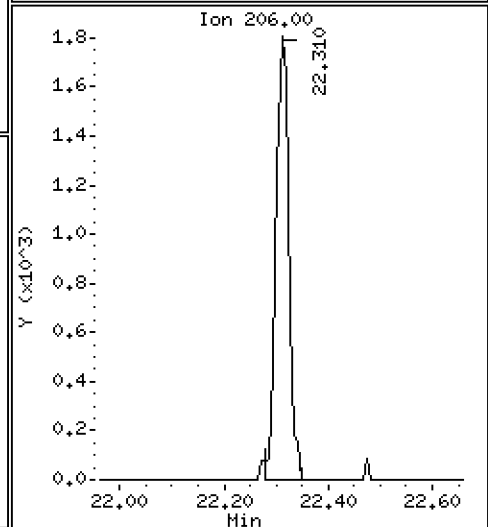
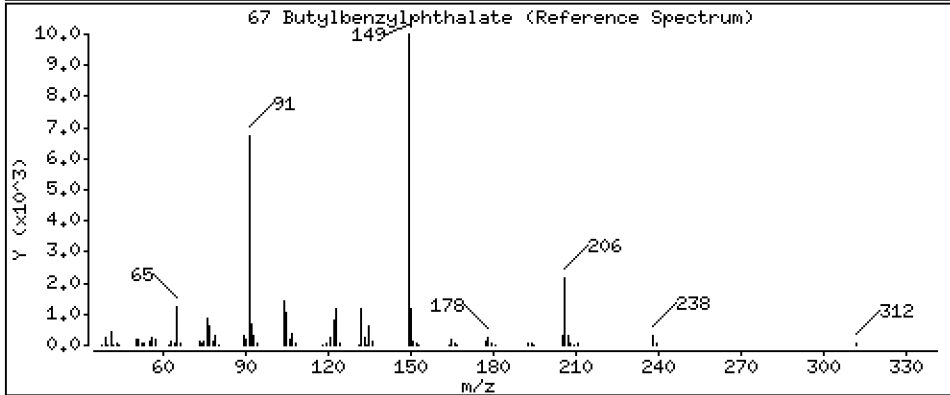
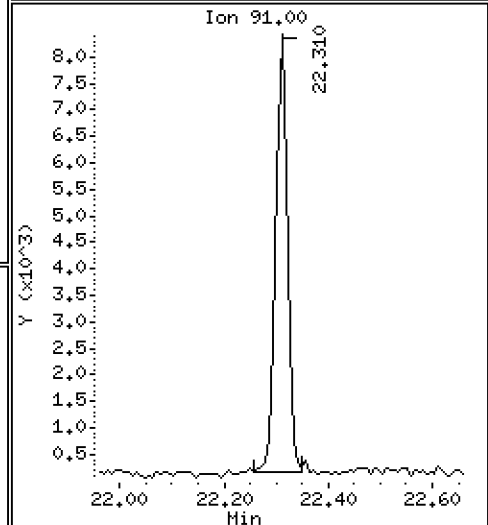
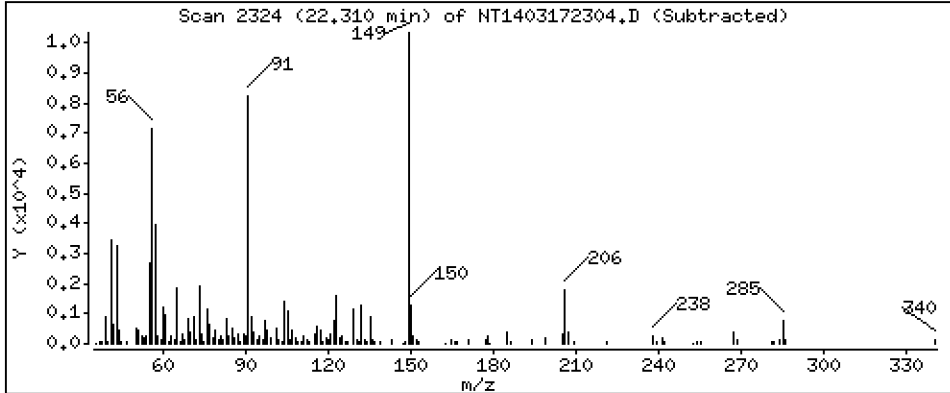
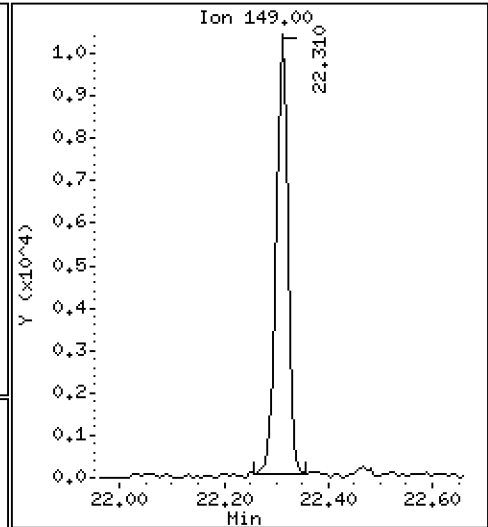
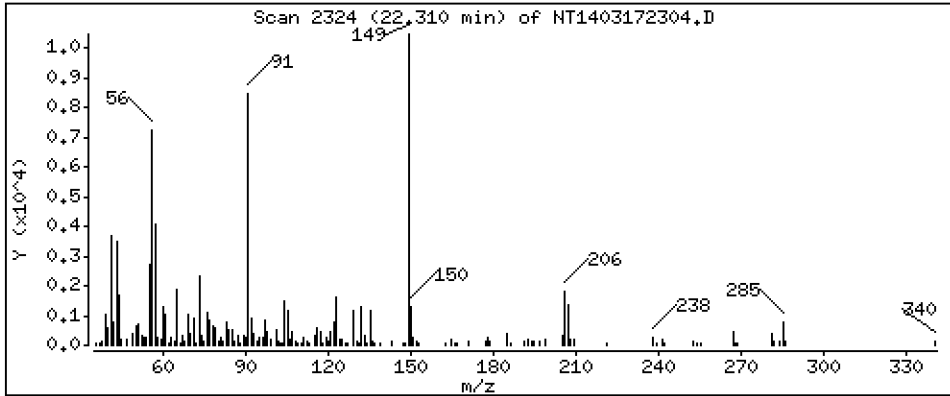
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1836 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

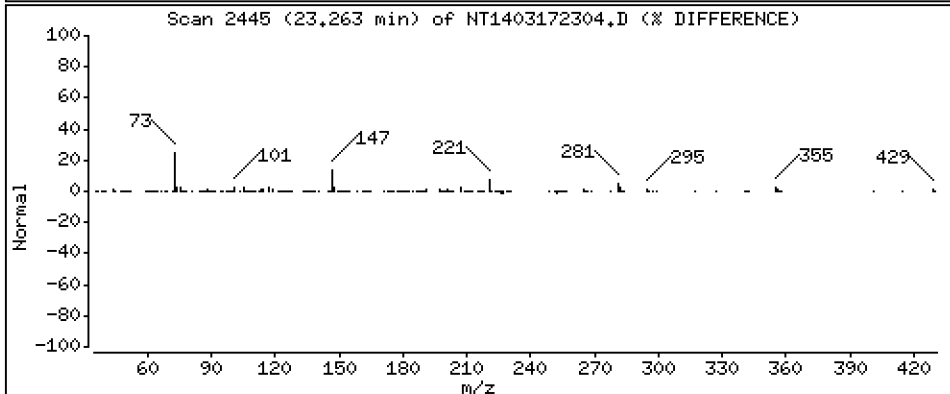
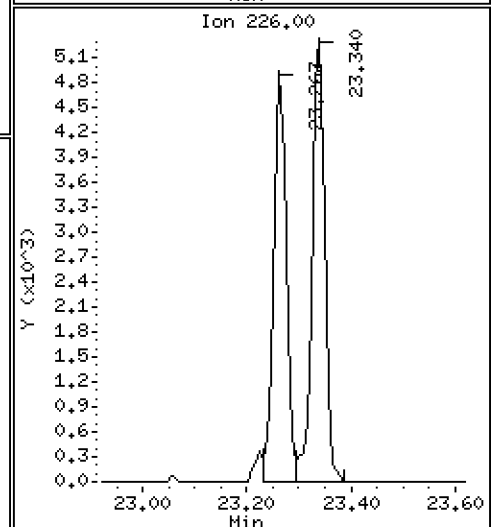
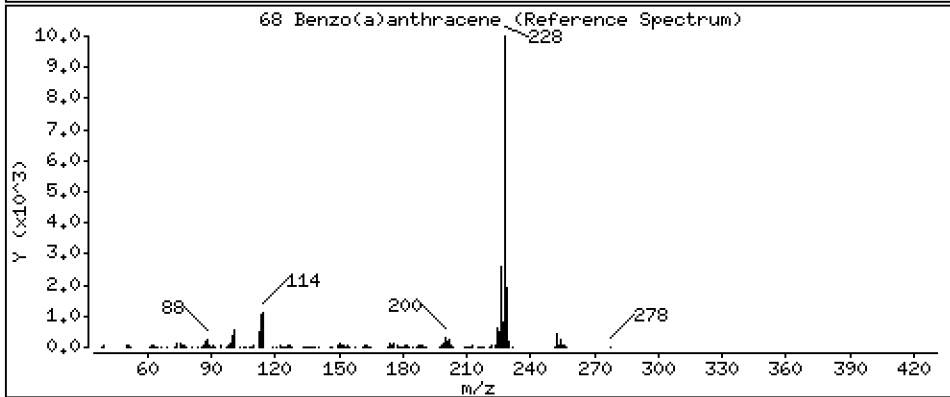
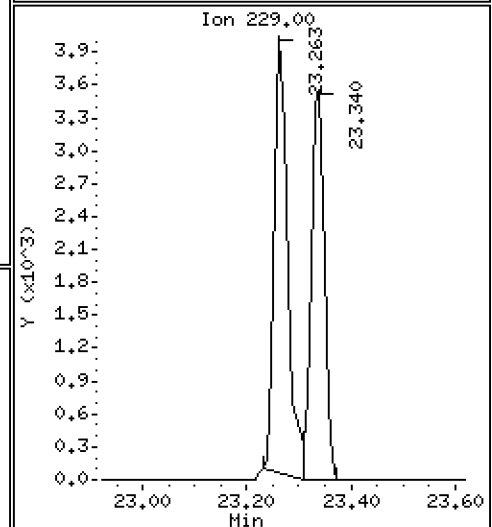
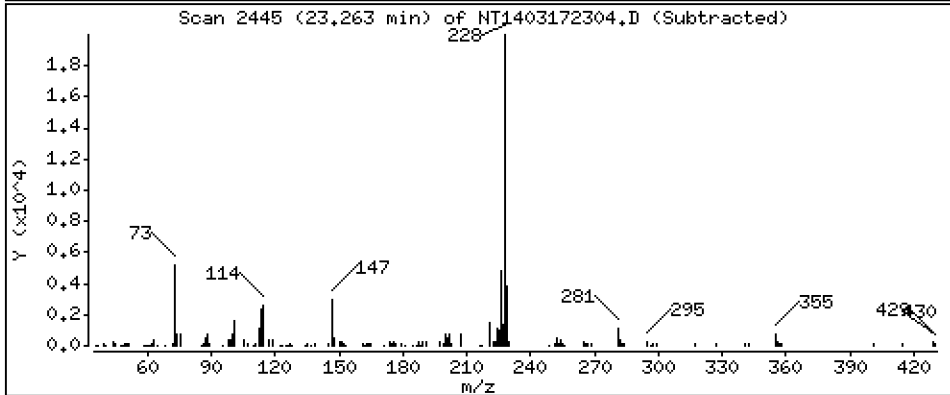
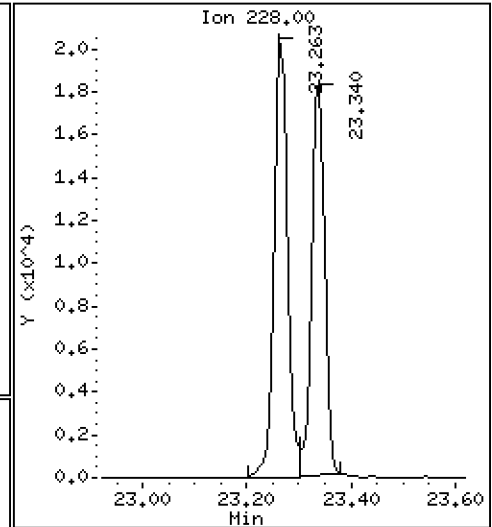
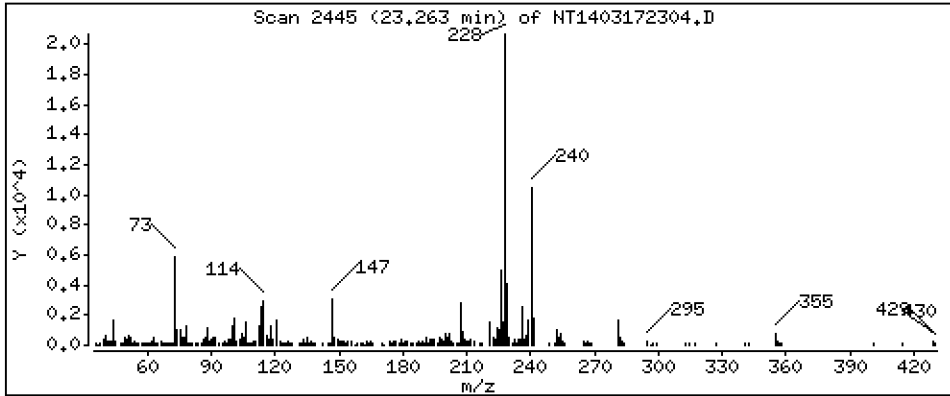
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,2082 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

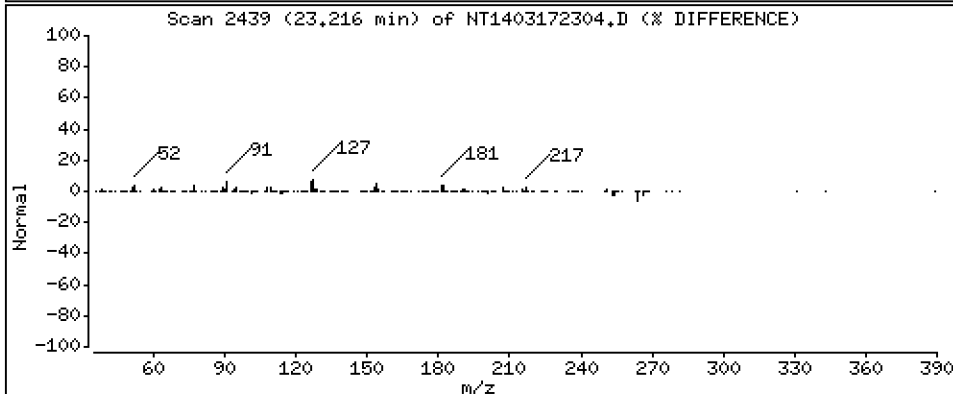
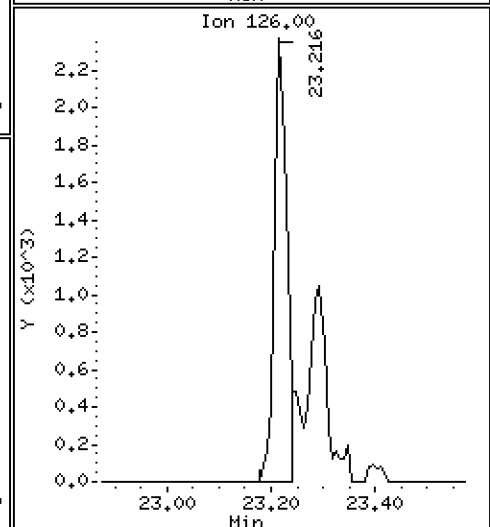
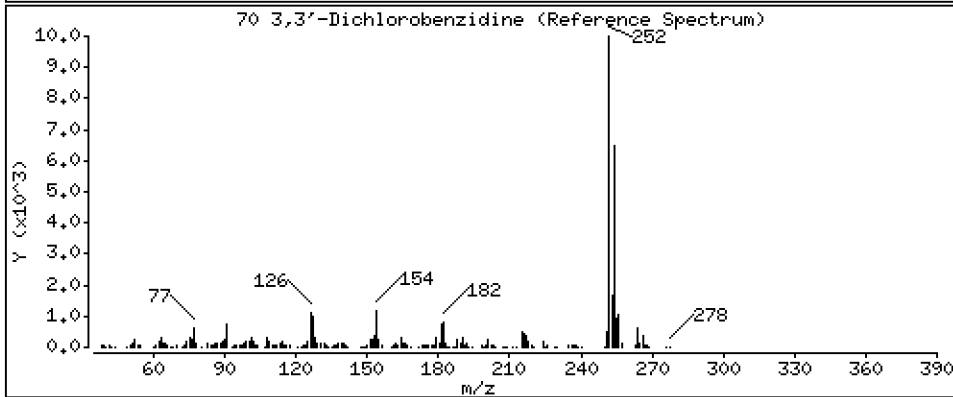
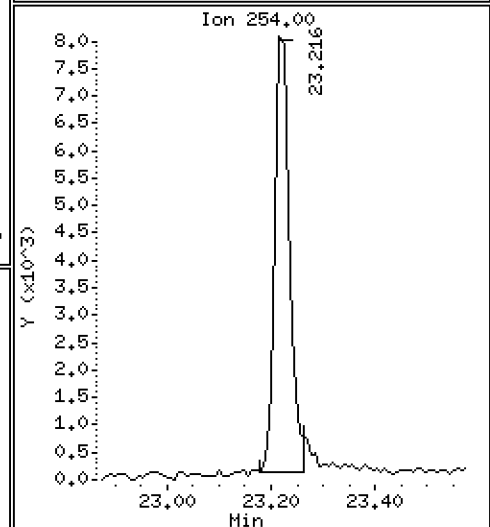
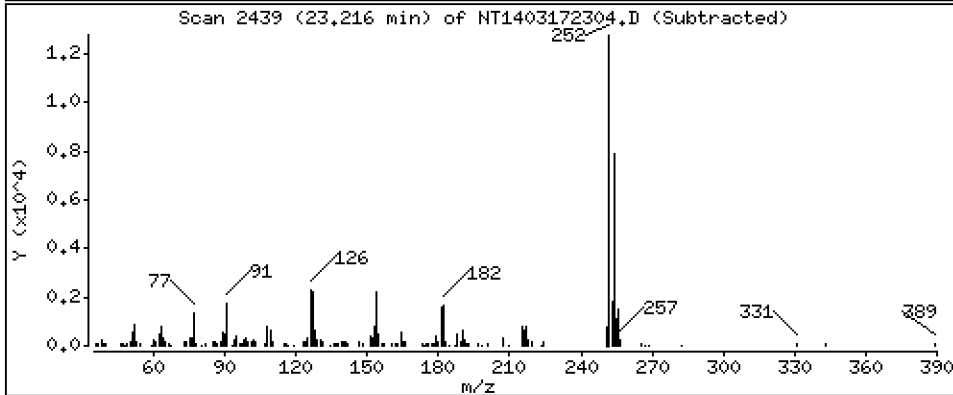
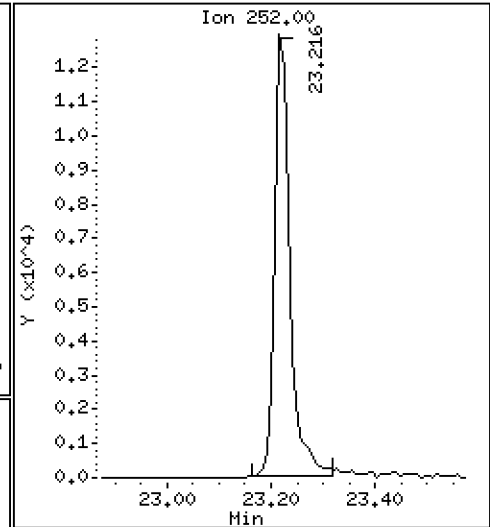
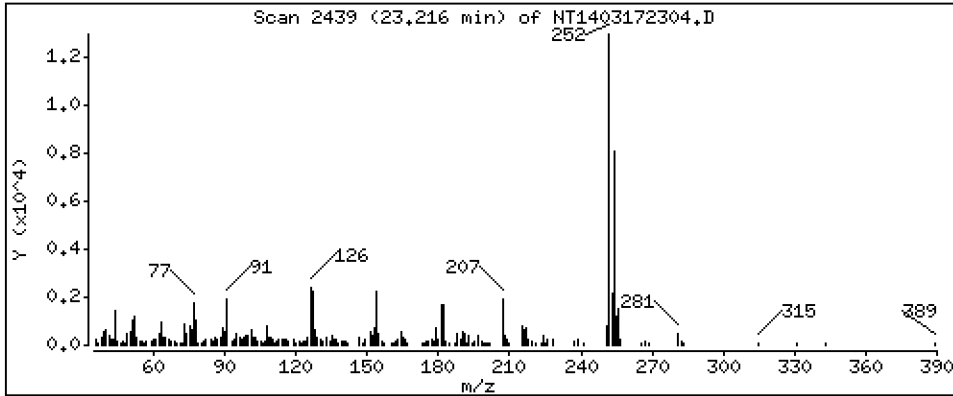
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,5150 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

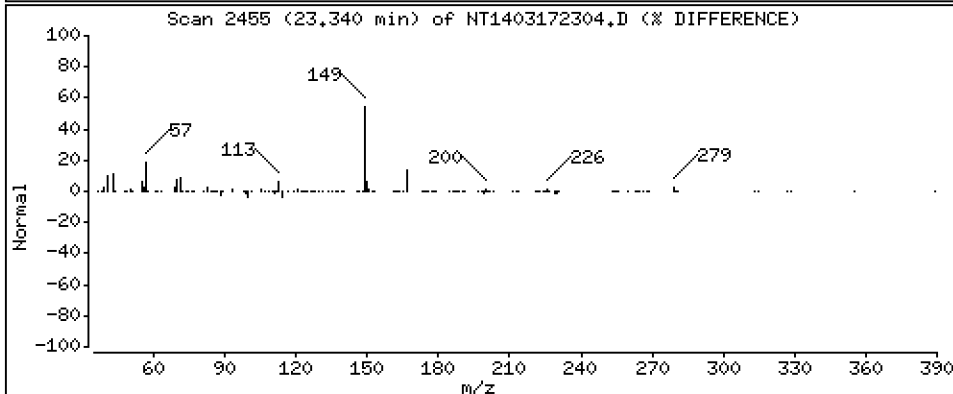
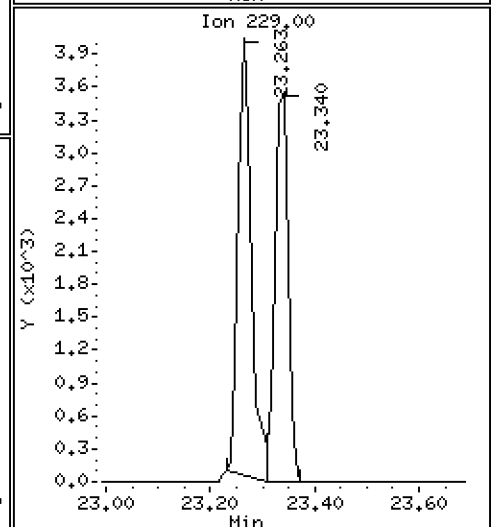
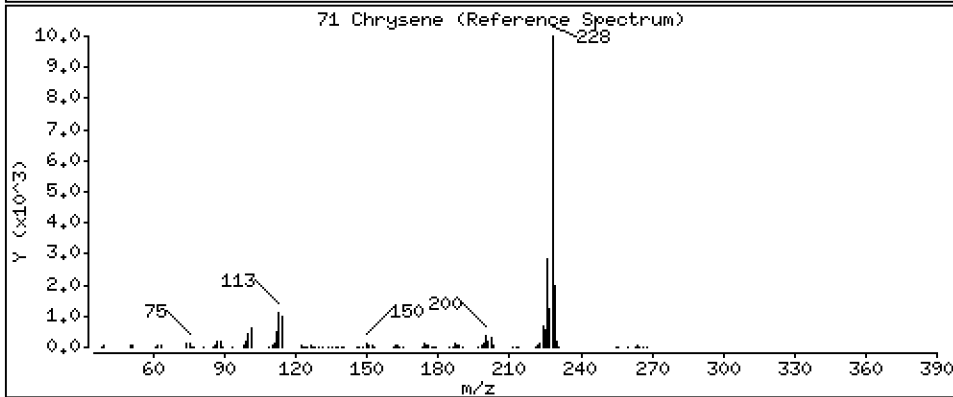
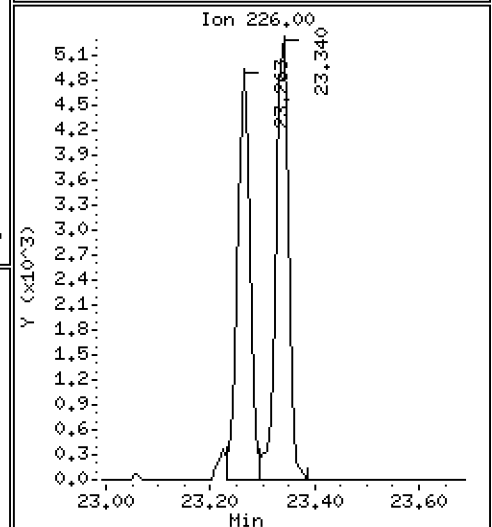
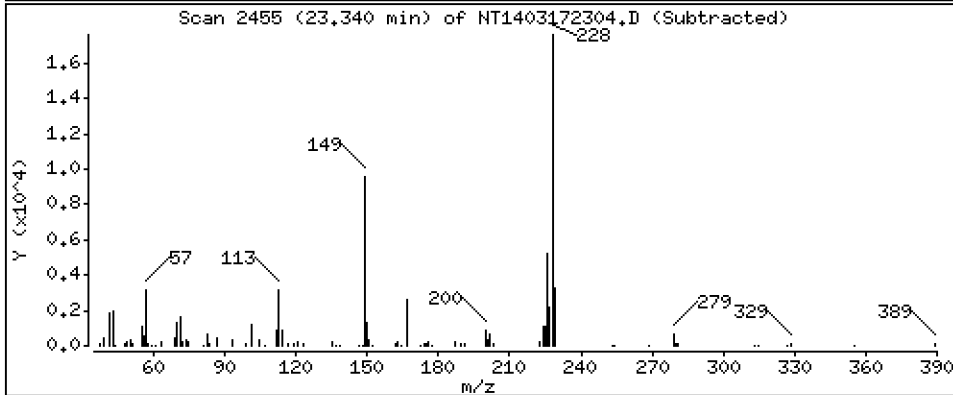
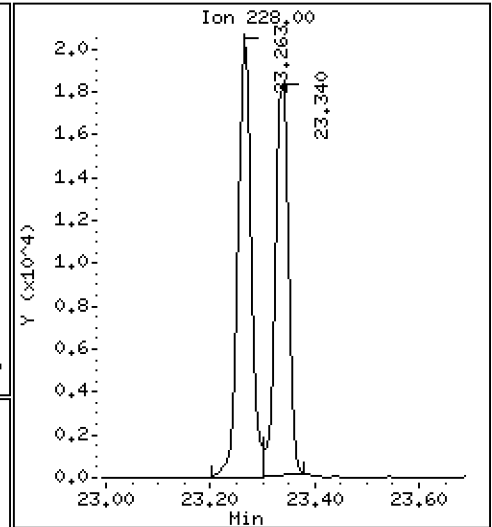
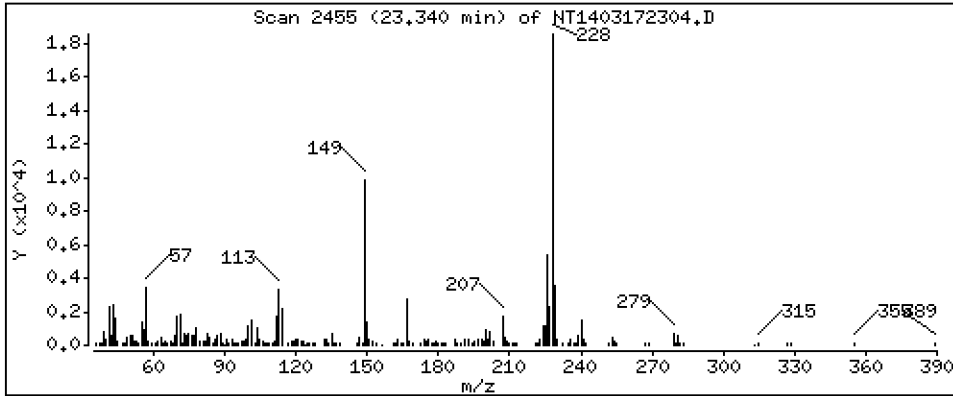
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2012 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

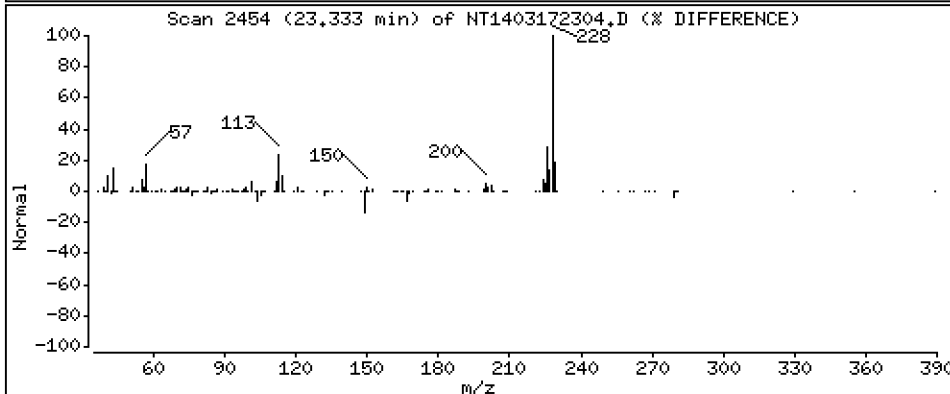
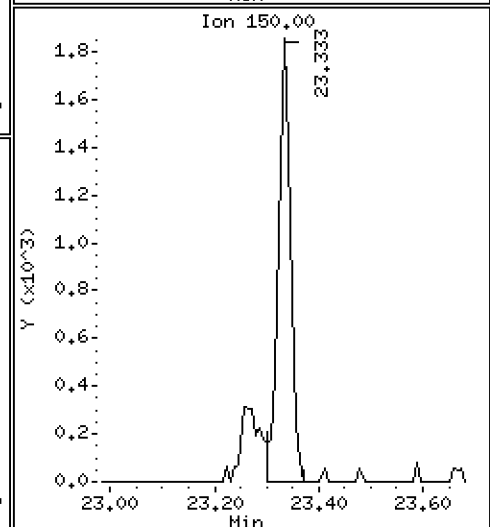
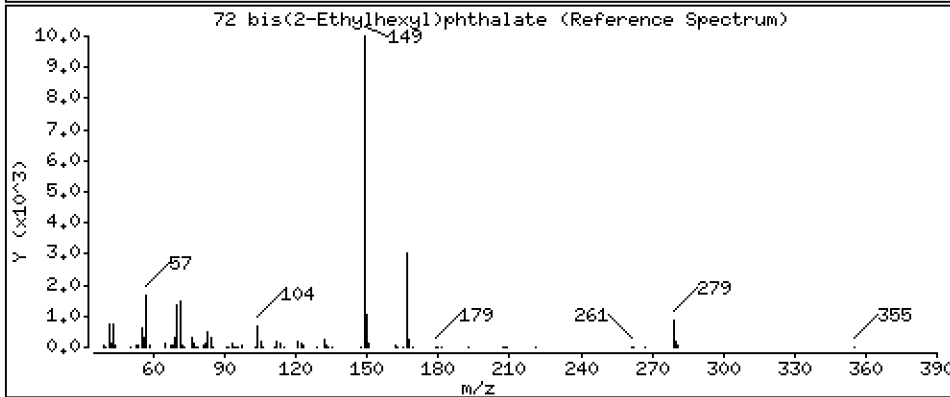
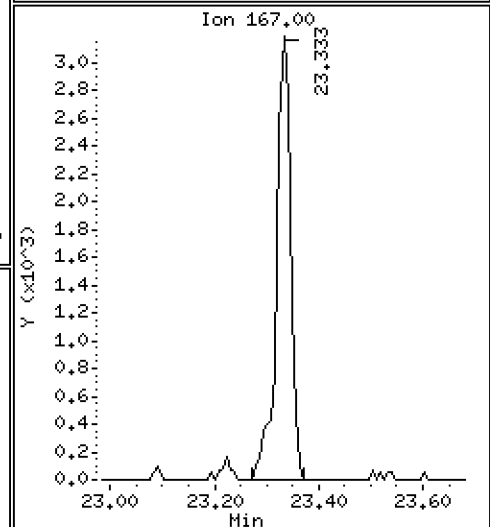
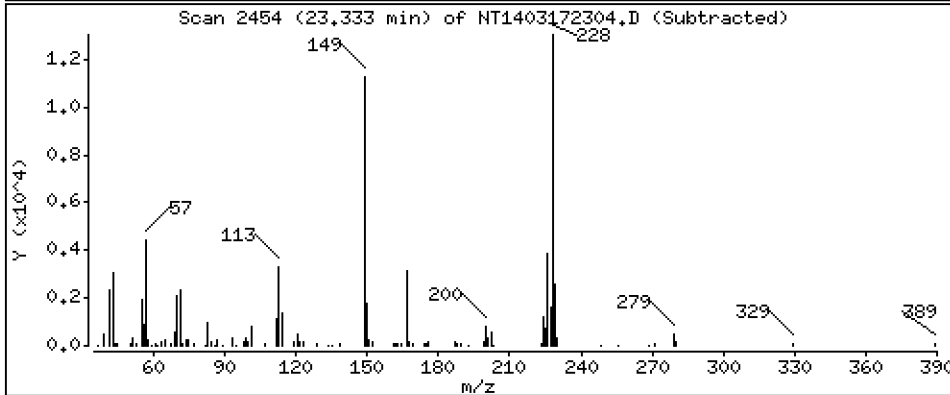
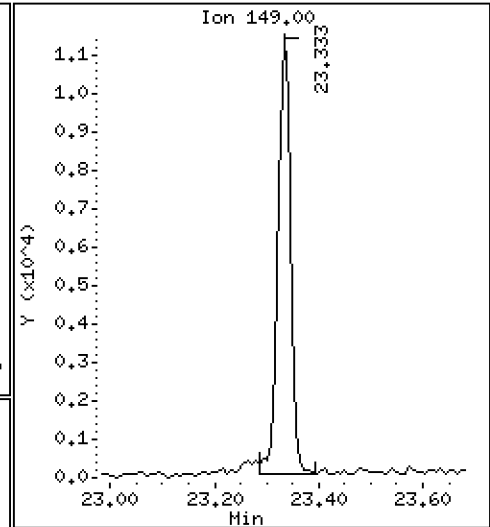
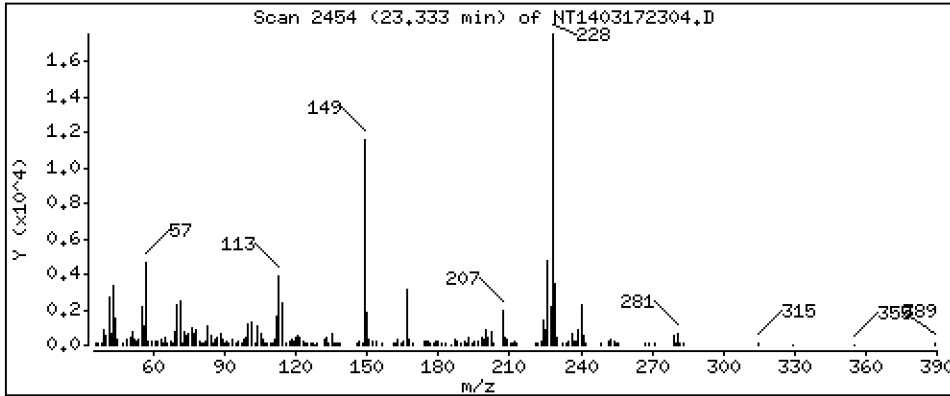
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,1958 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

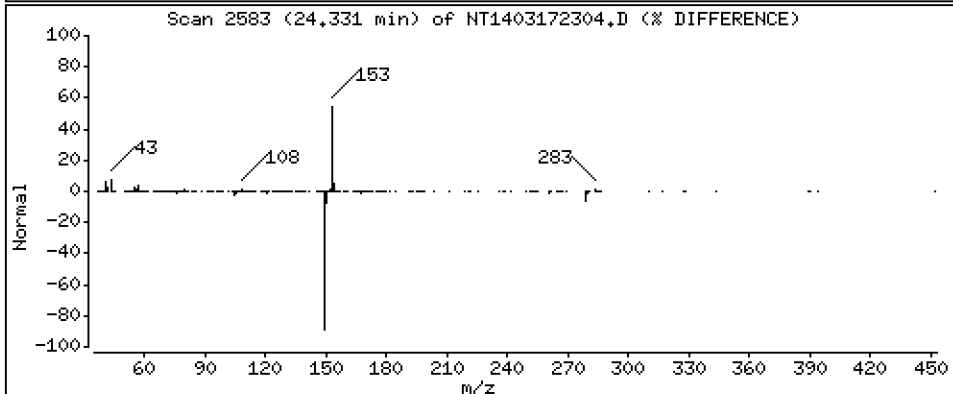
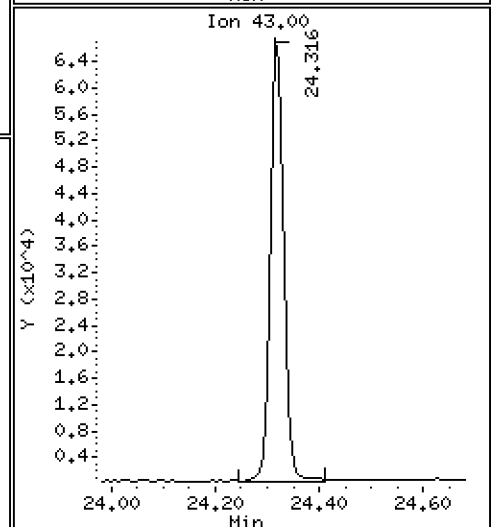
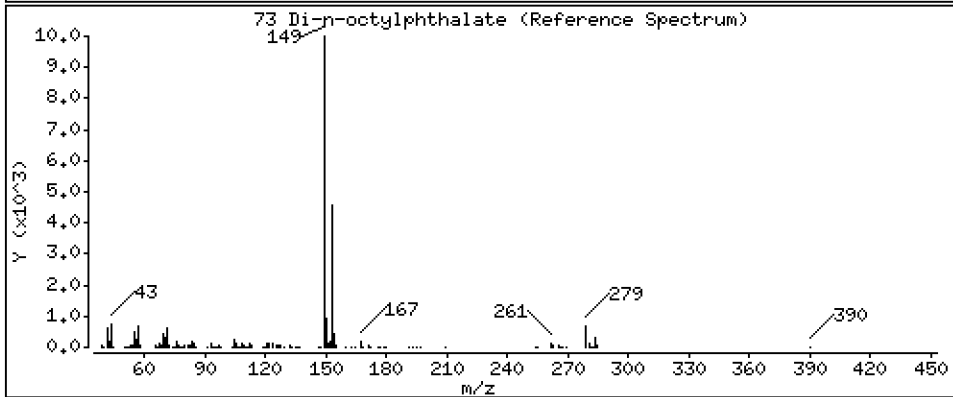
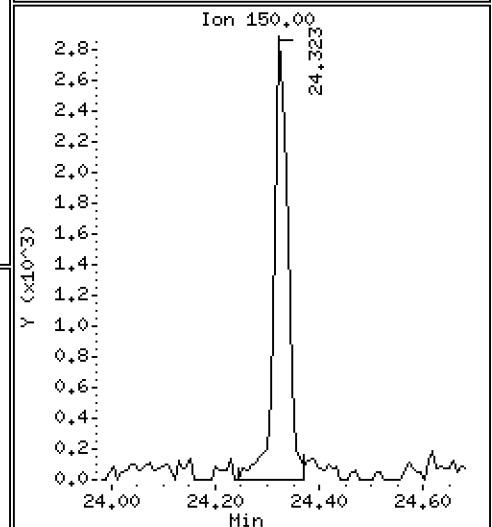
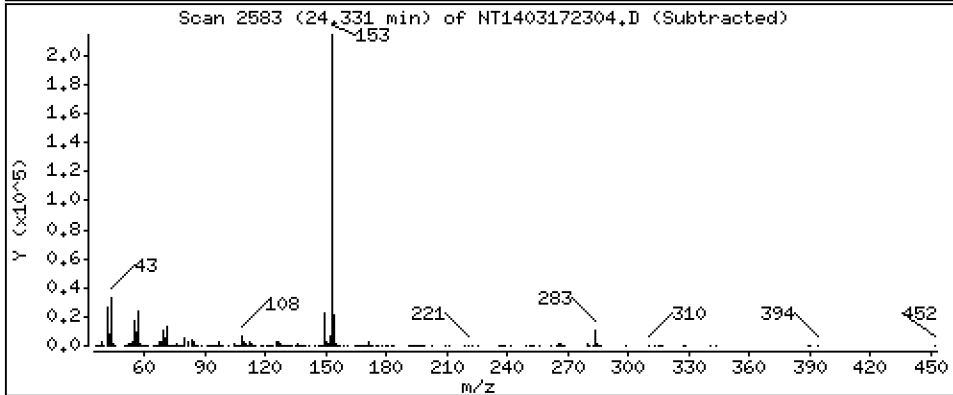
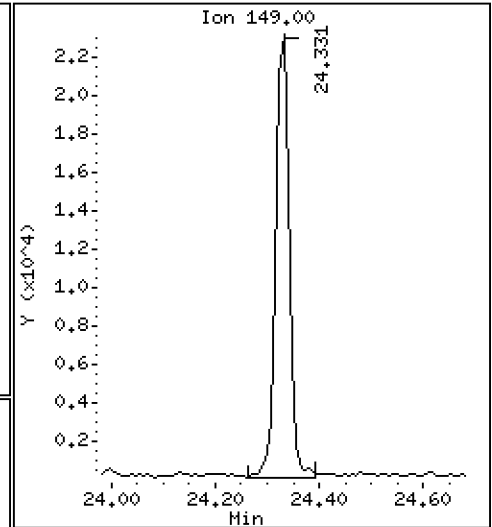
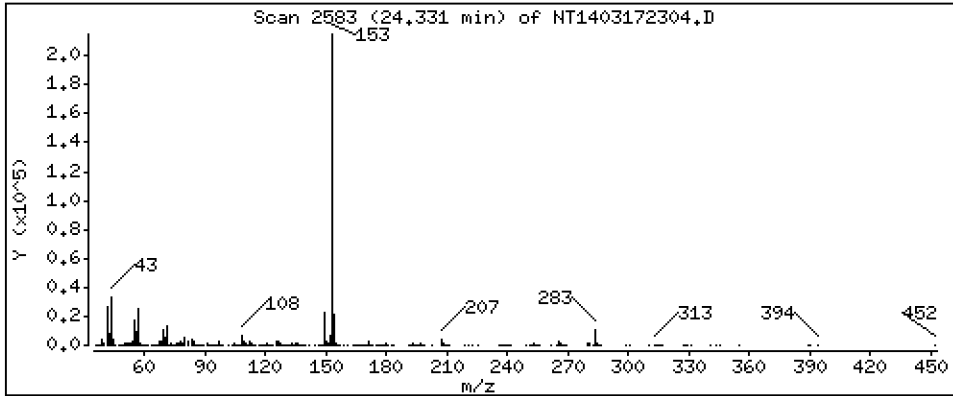
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2178 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

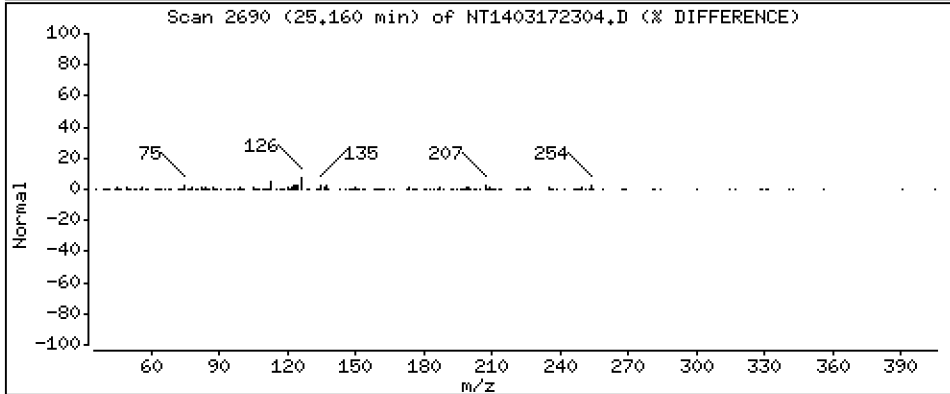
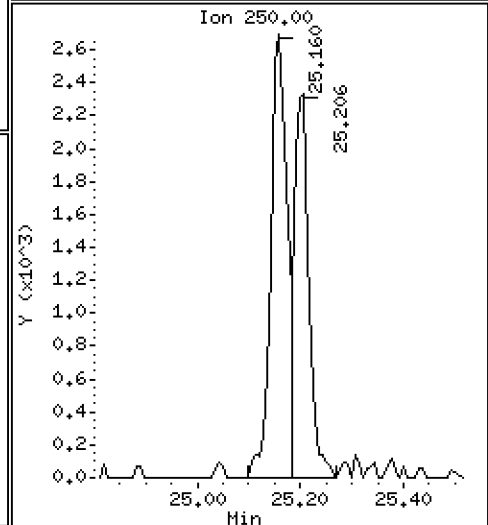
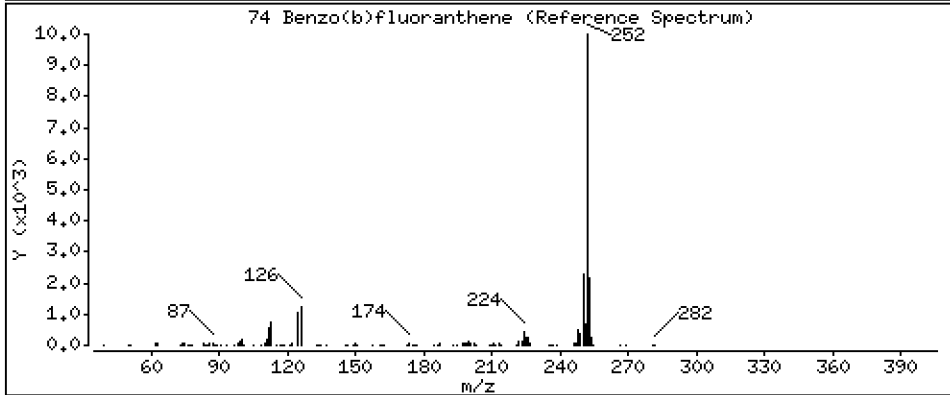
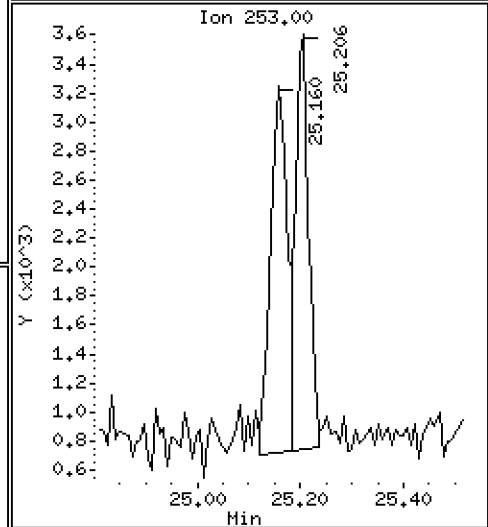
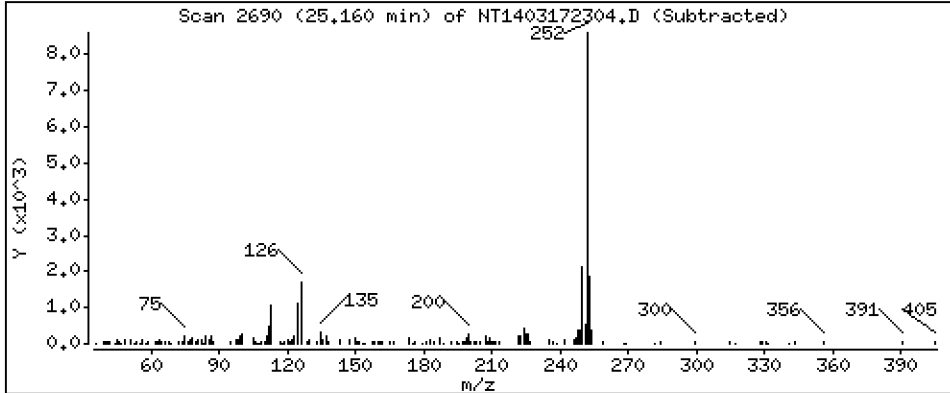
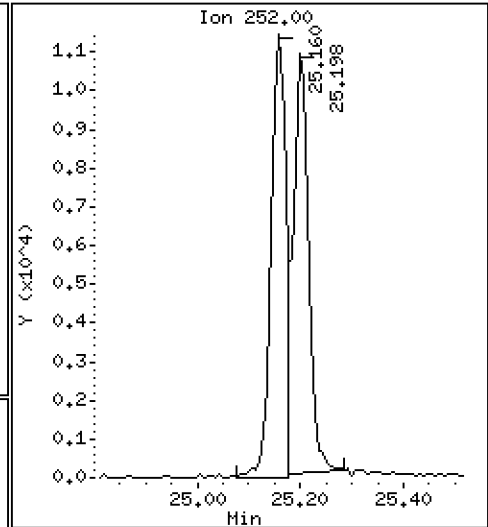
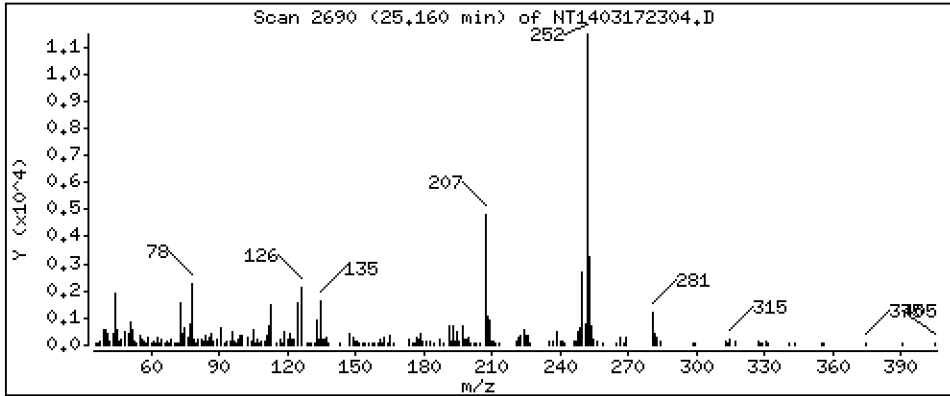
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1881 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

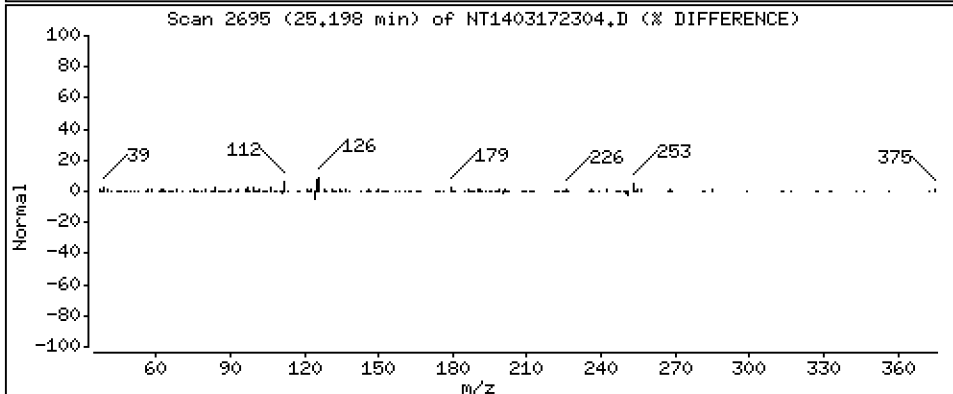
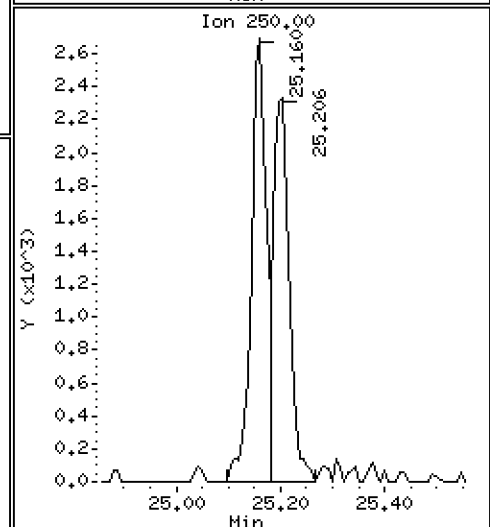
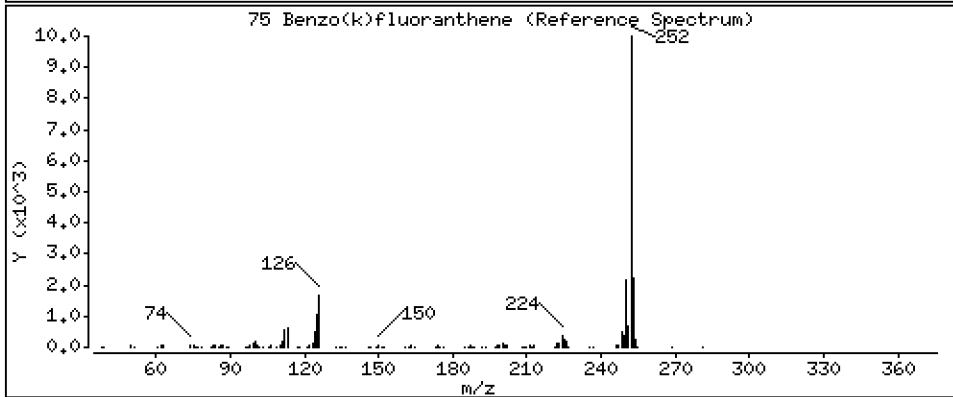
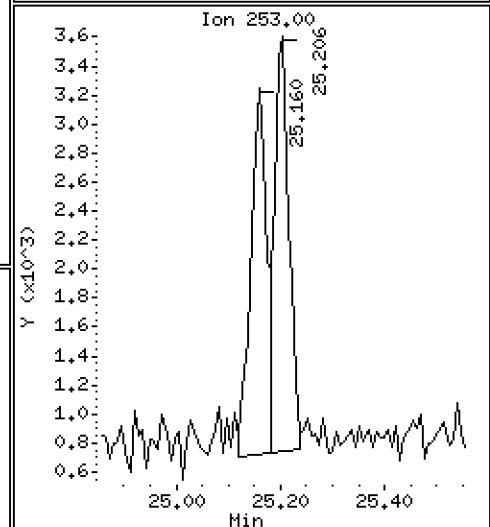
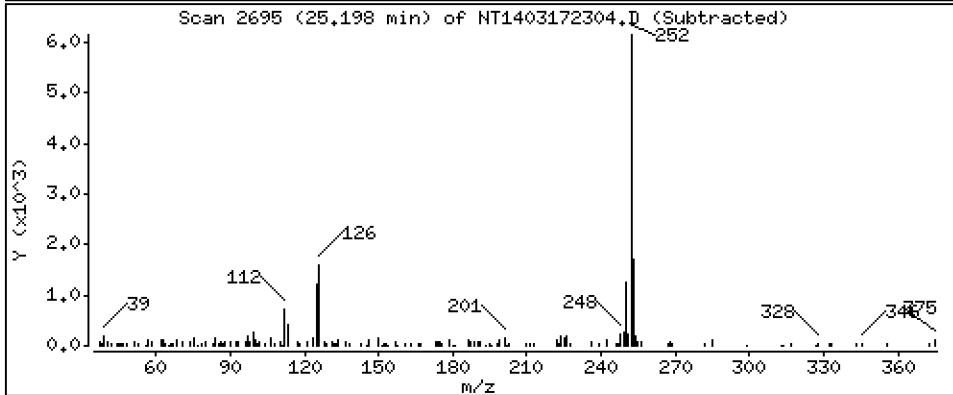
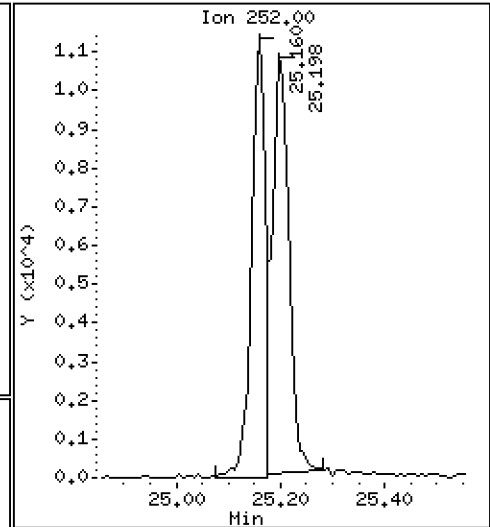
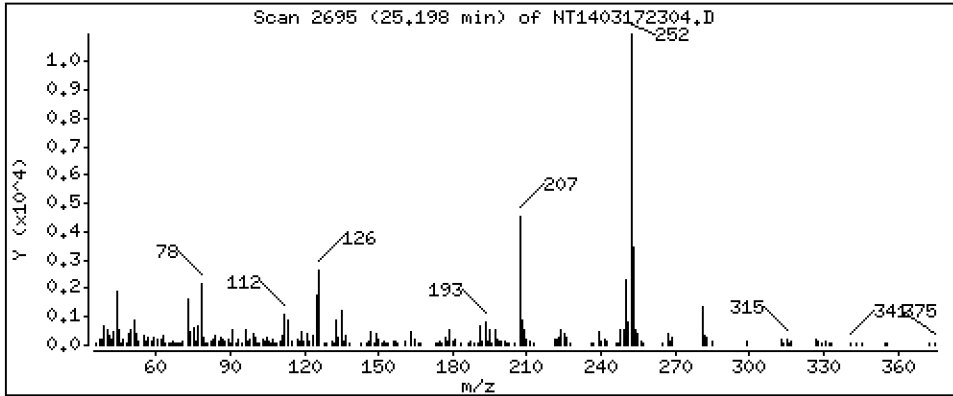
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,2144 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

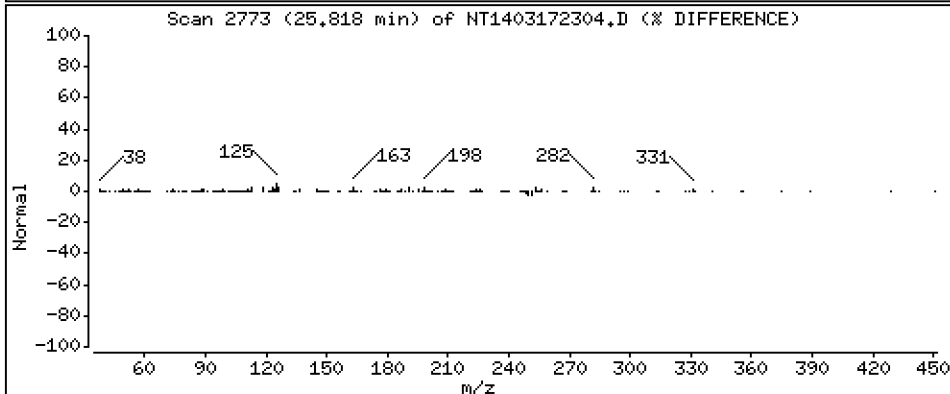
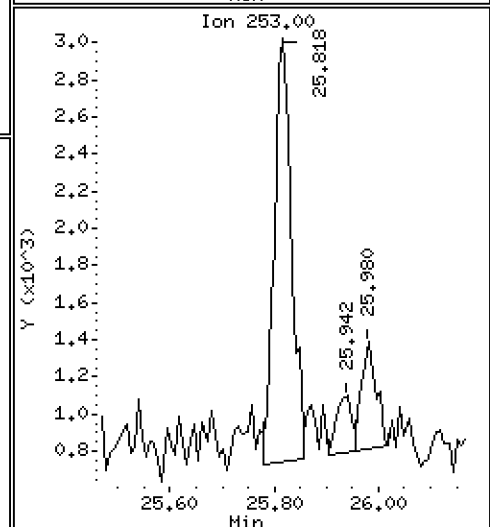
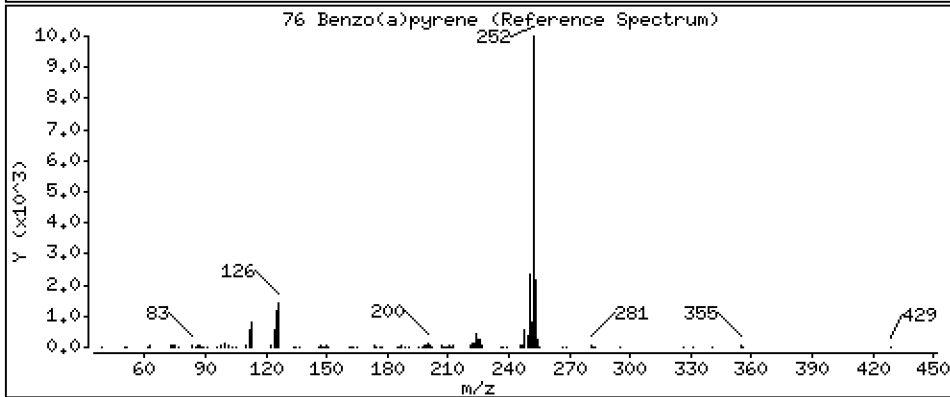
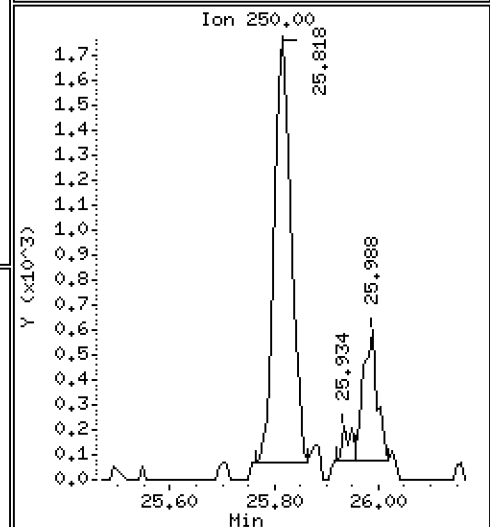
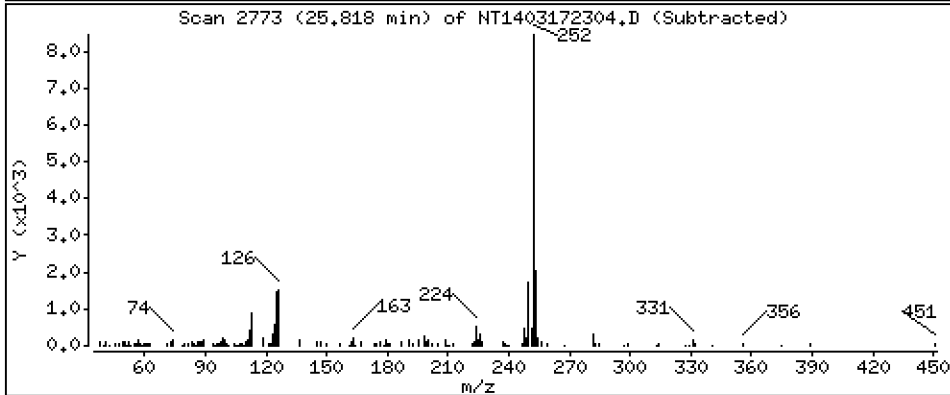
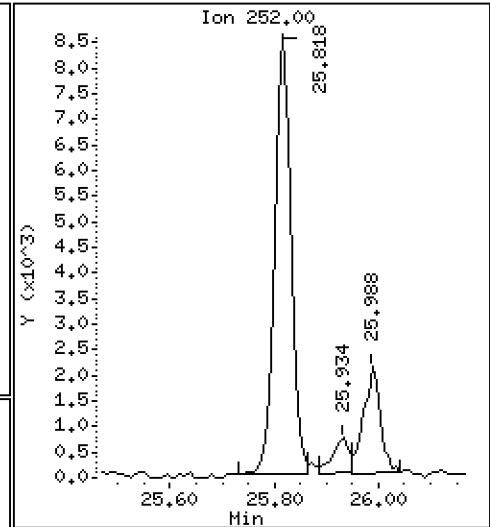
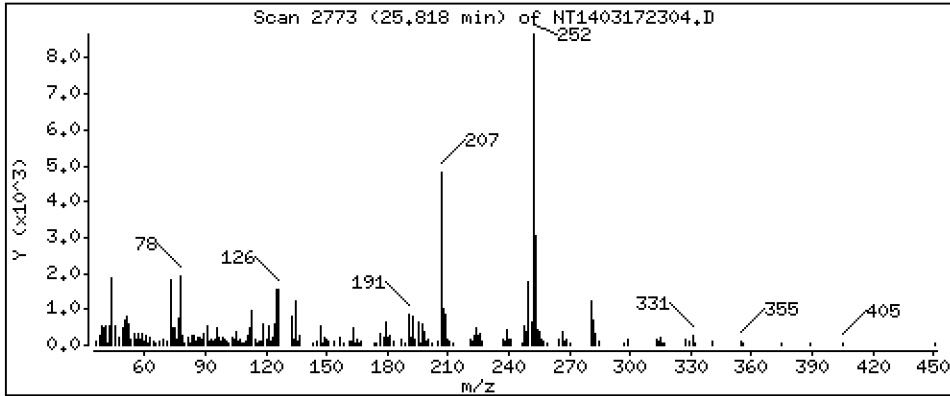
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1803 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

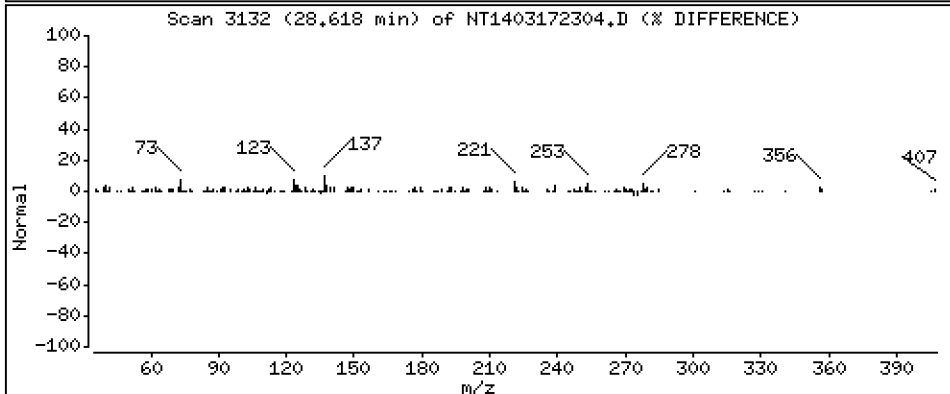
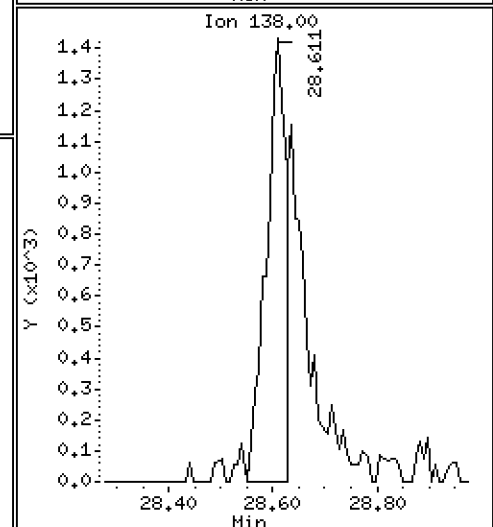
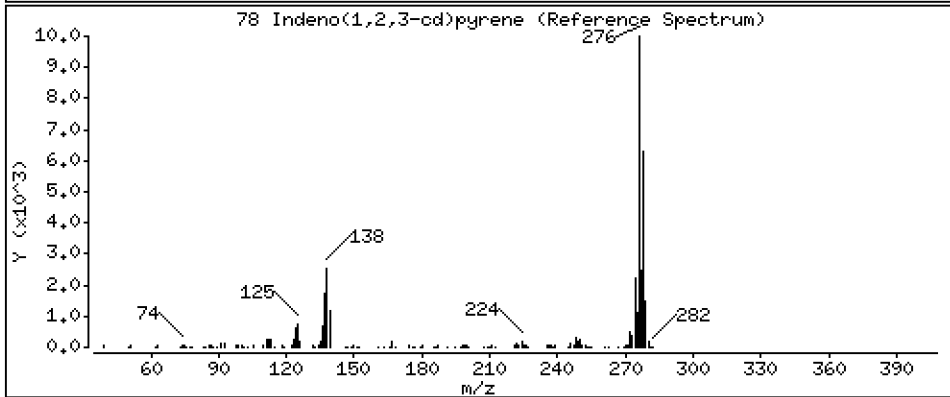
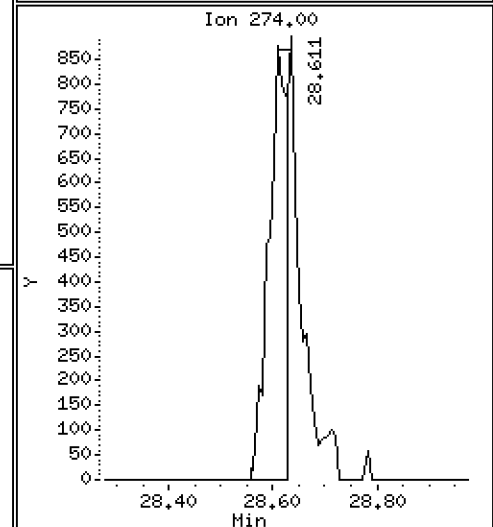
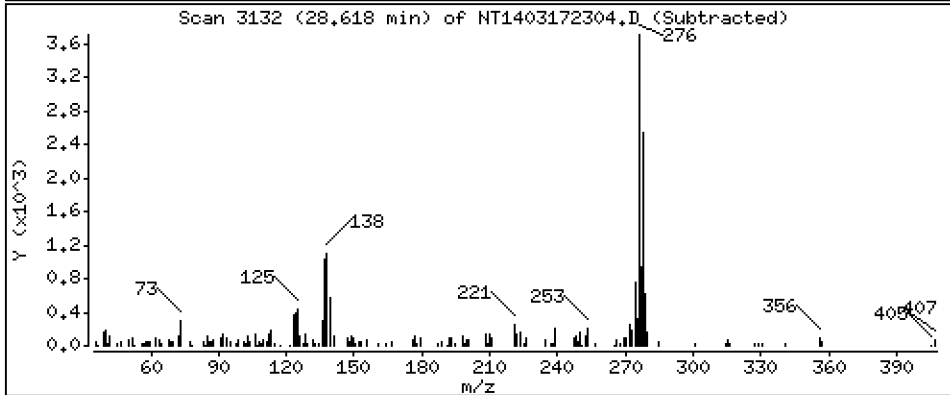
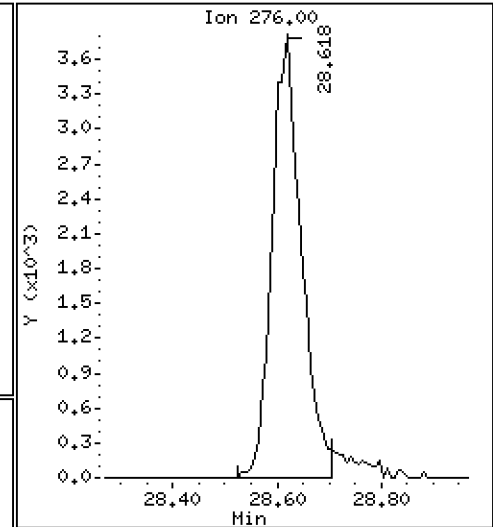
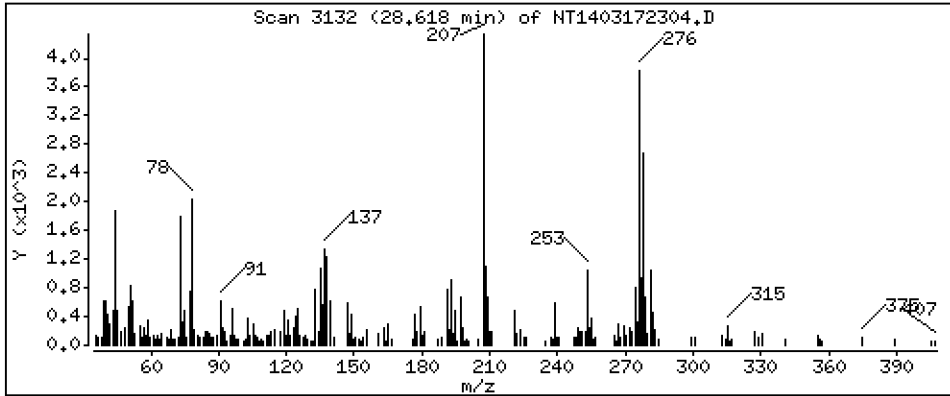
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1366 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

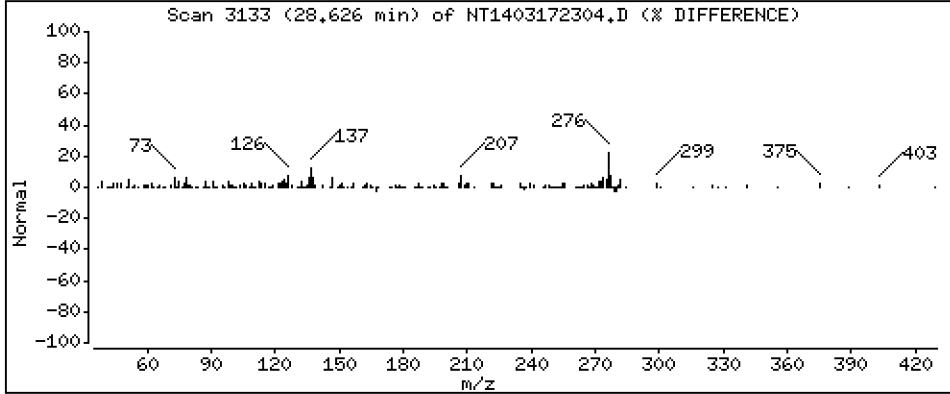
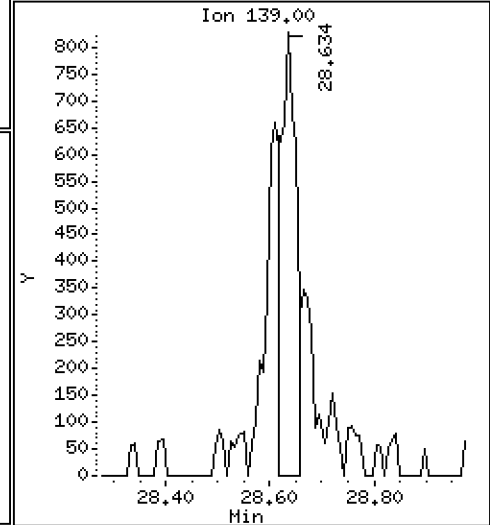
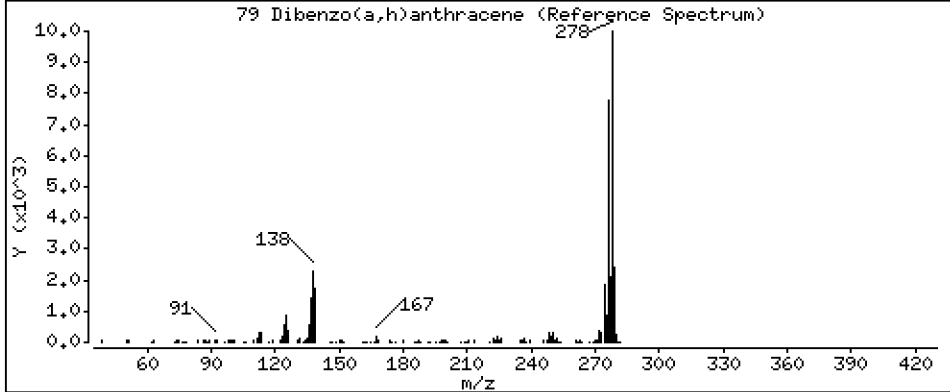
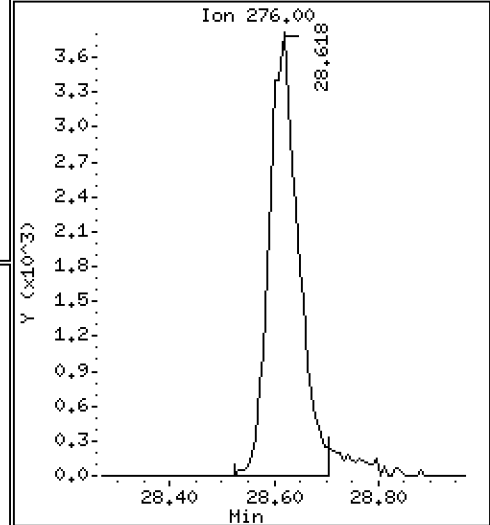
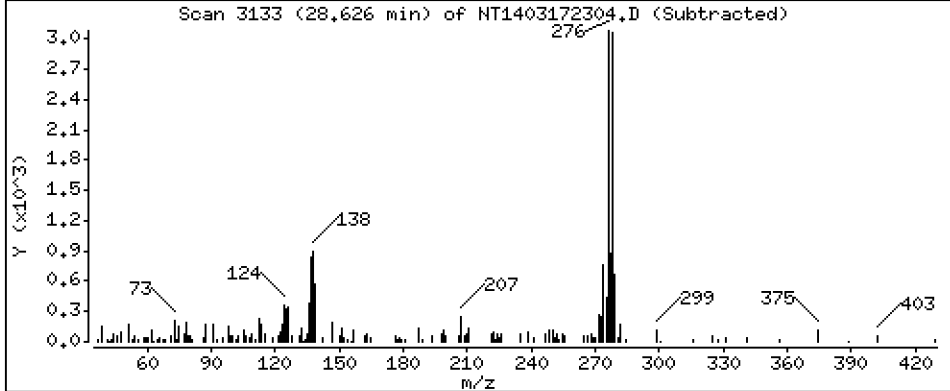
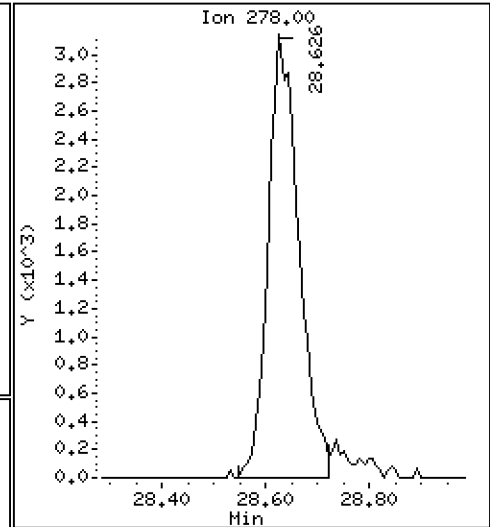
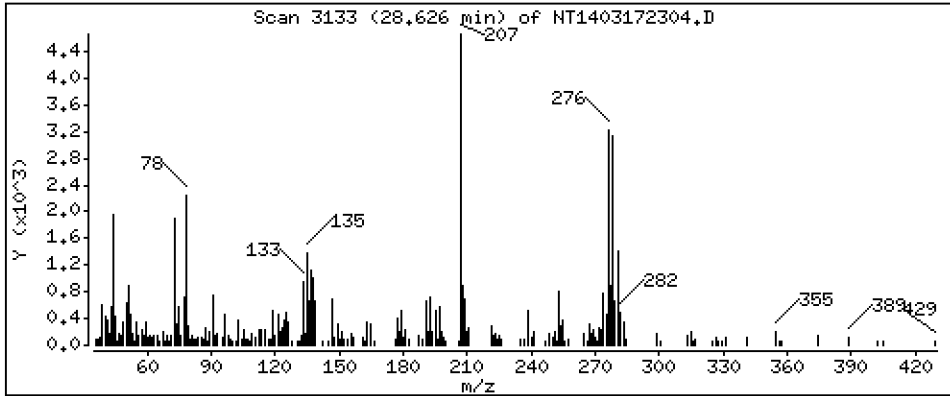
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1407 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

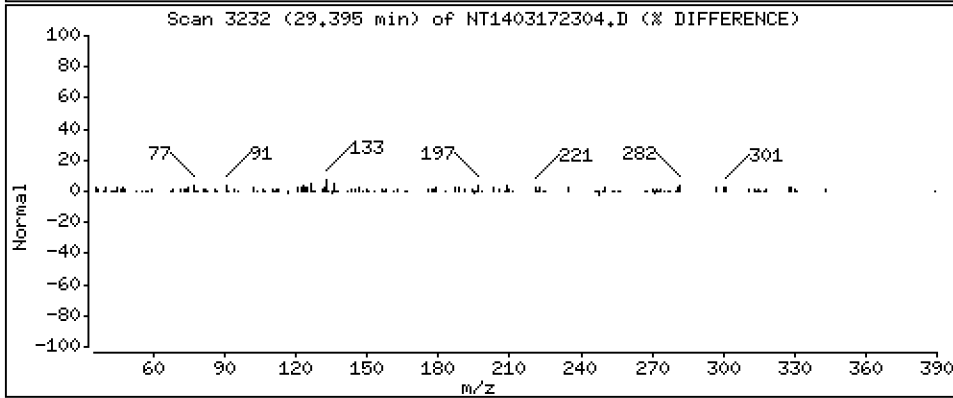
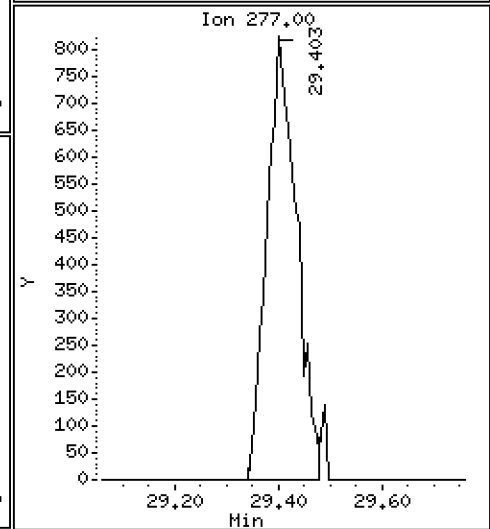
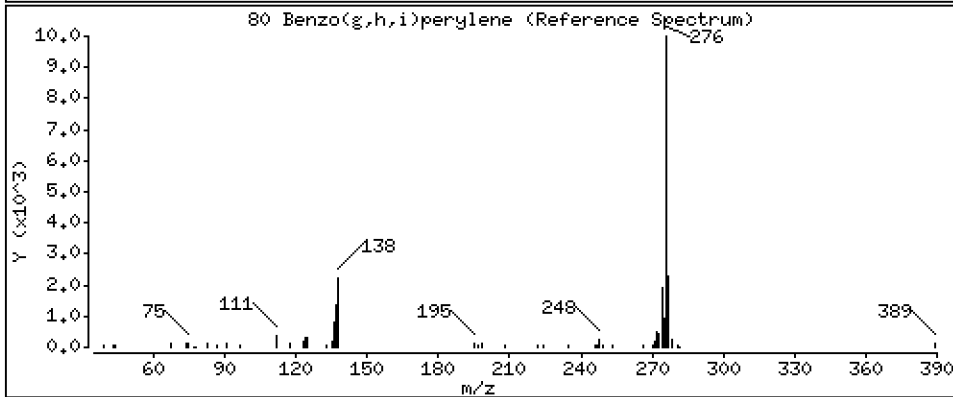
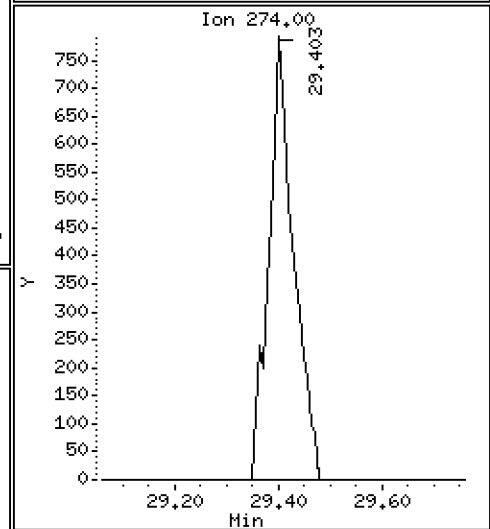
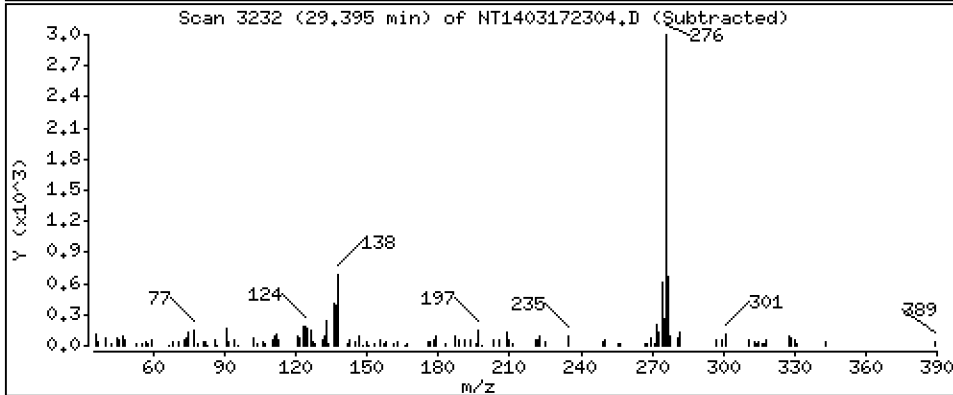
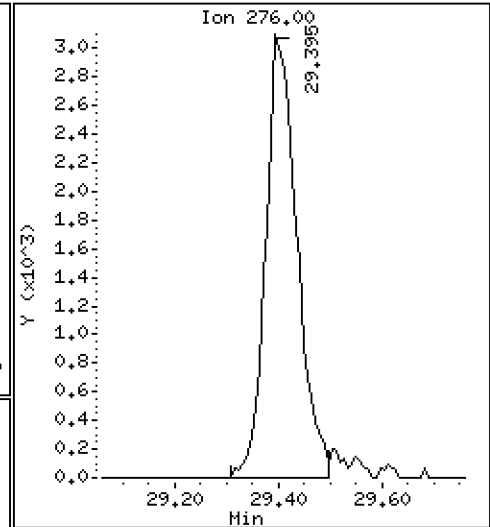
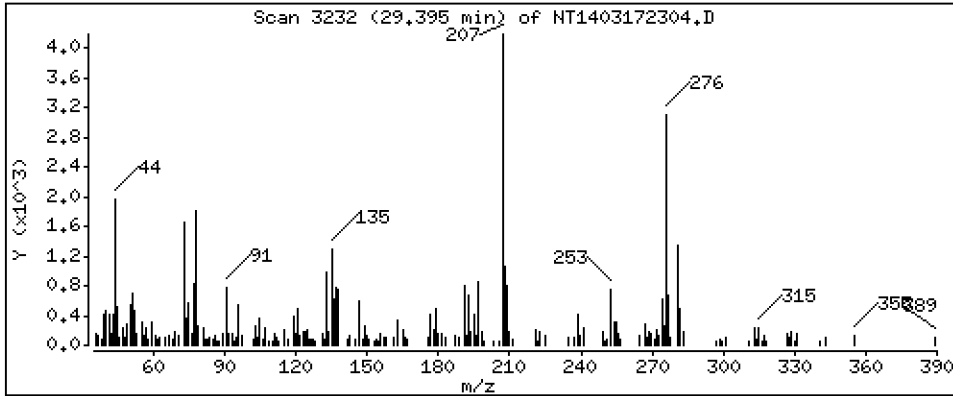
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1438 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

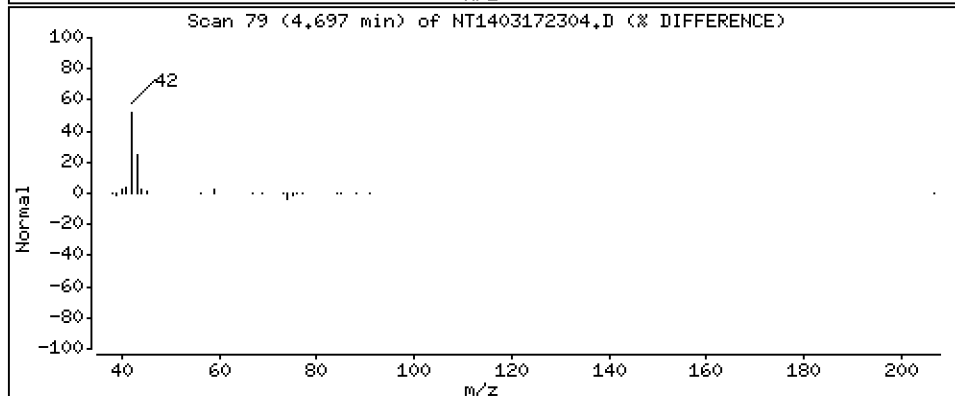
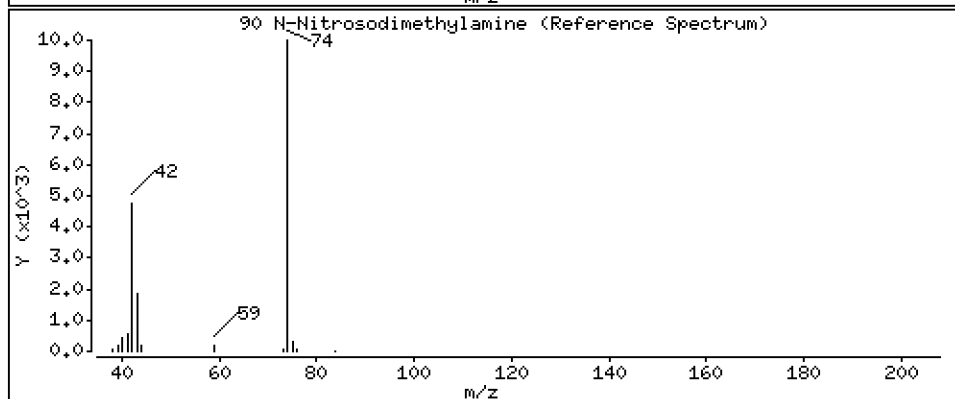
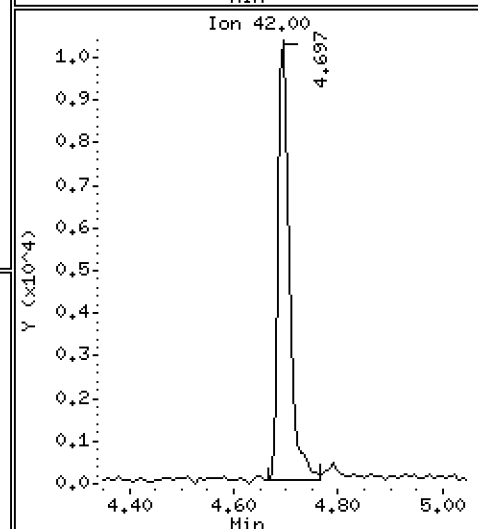
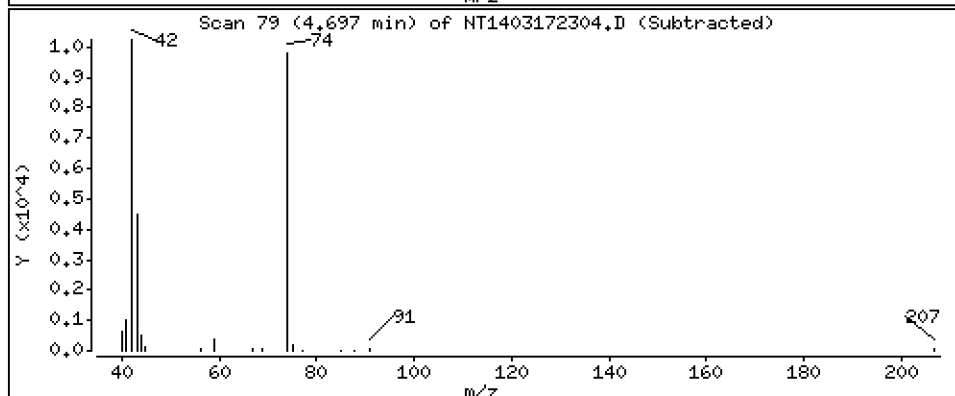
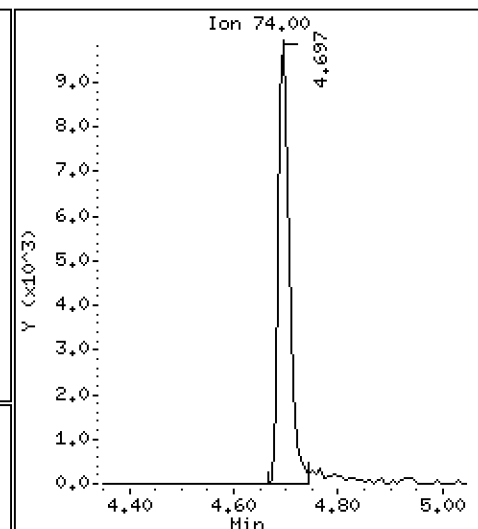
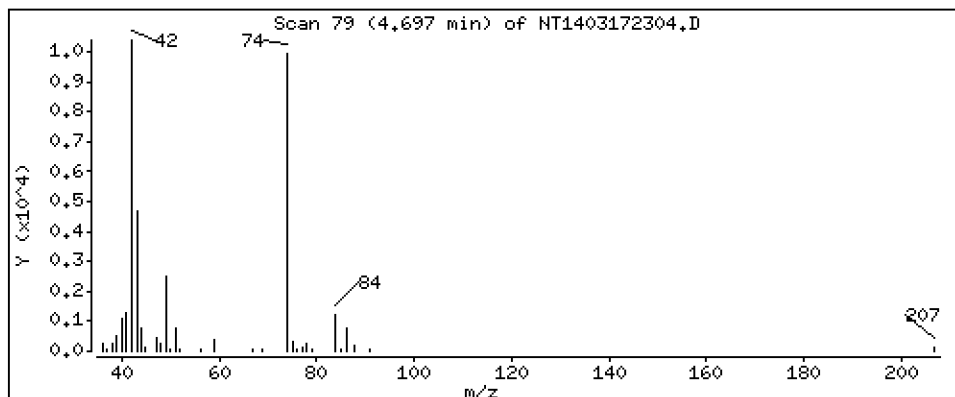
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2949 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

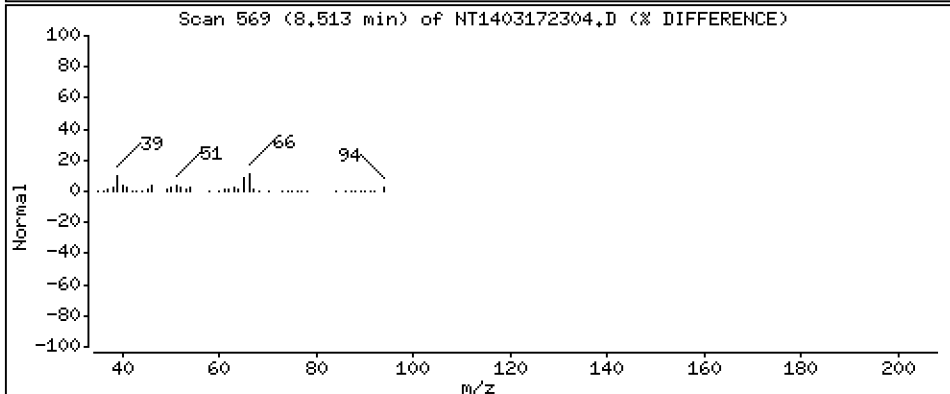
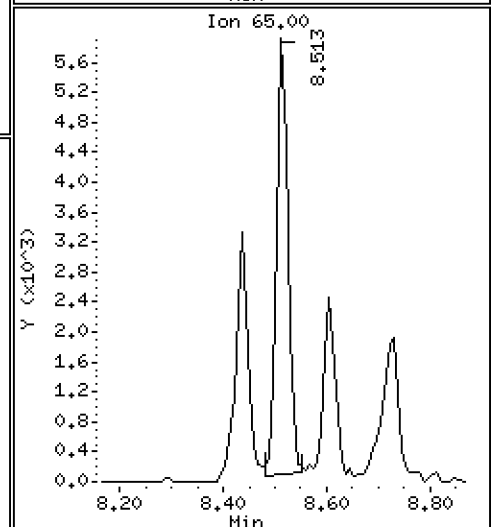
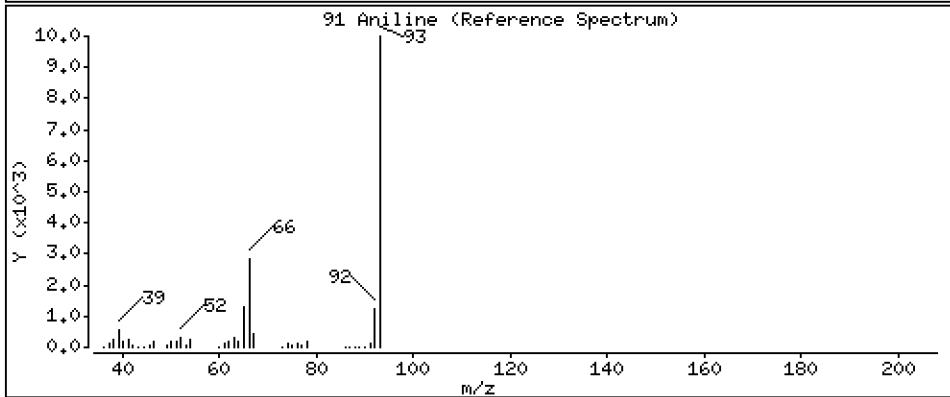
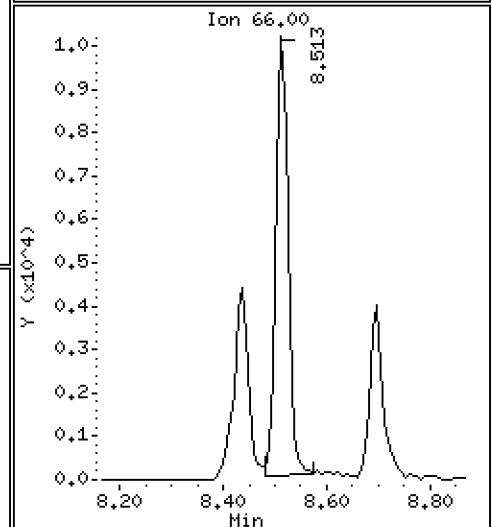
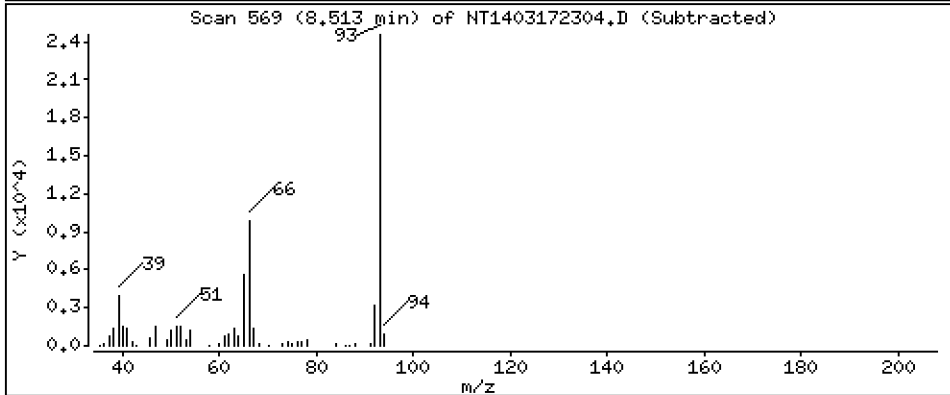
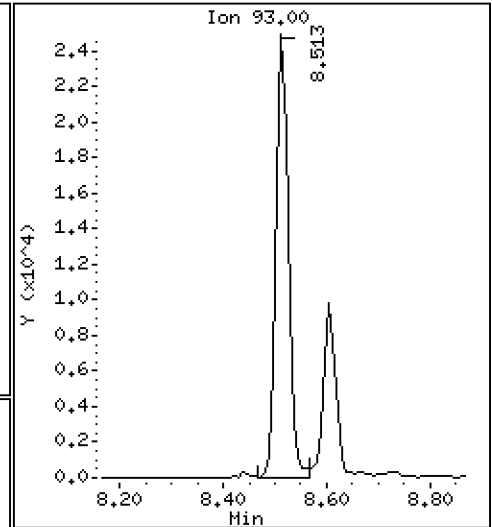
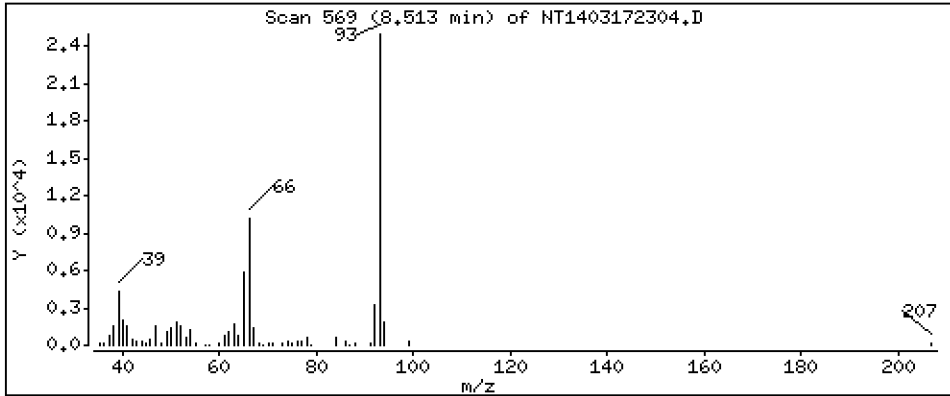
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 0.3769 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

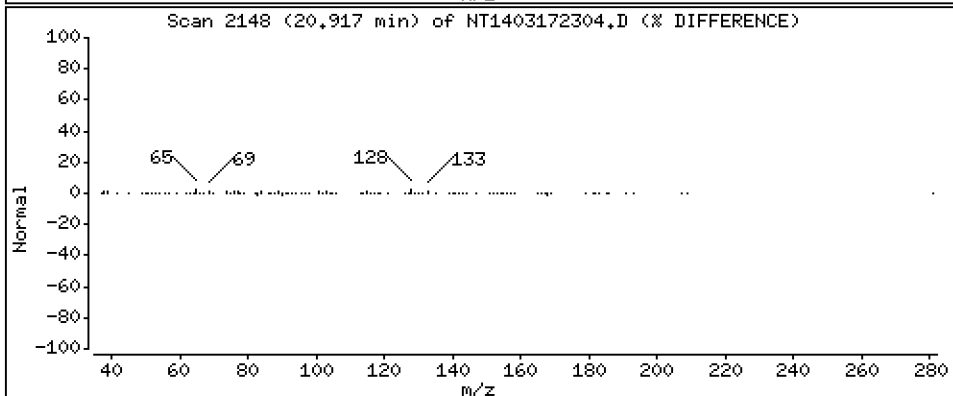
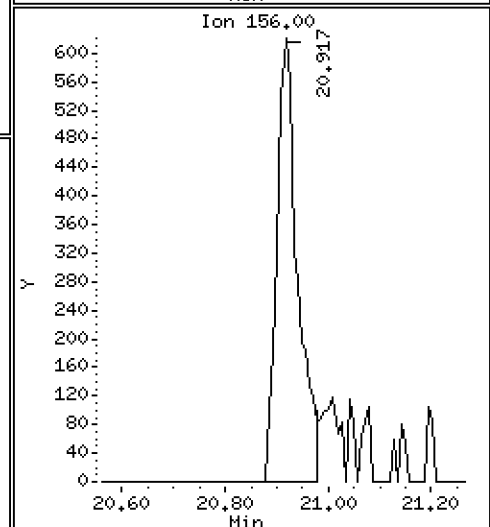
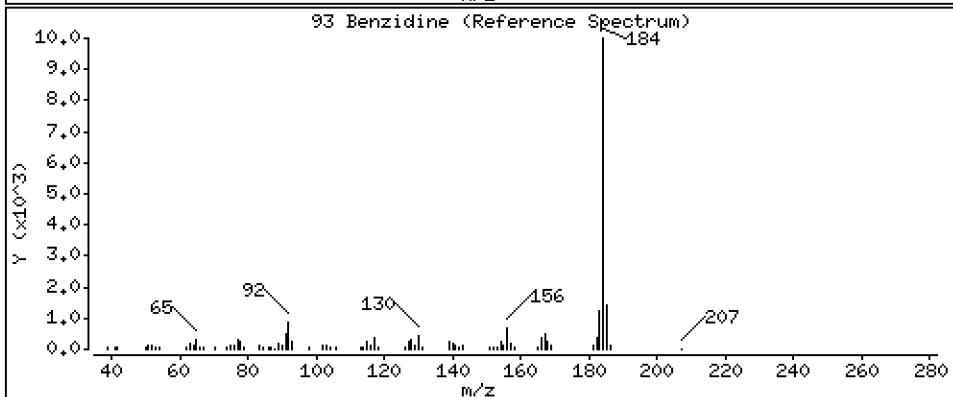
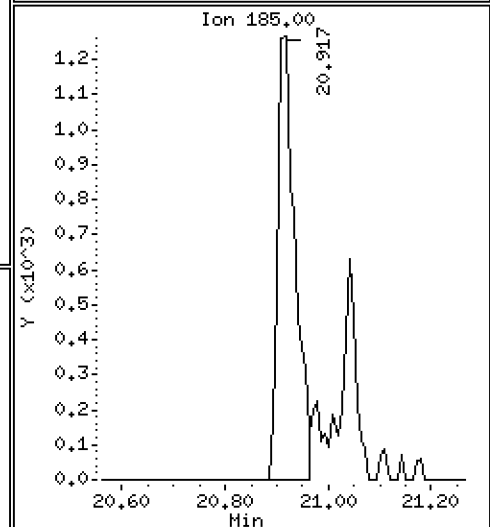
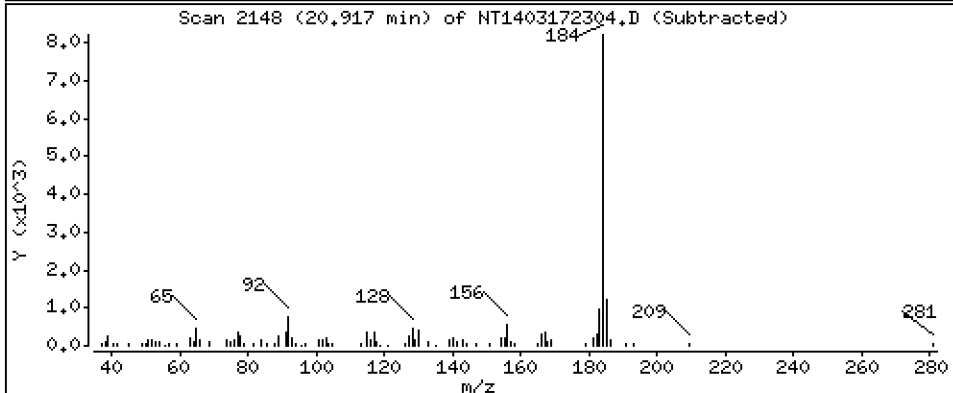
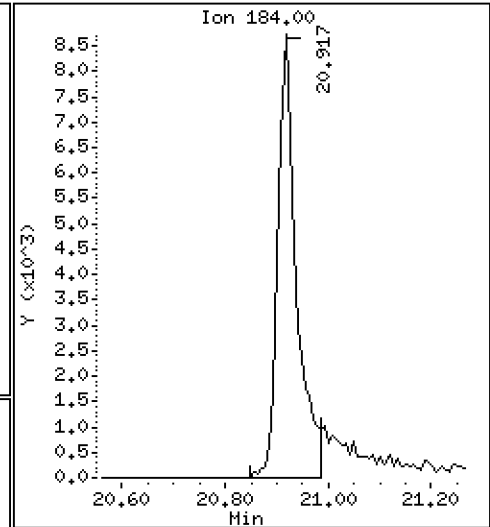
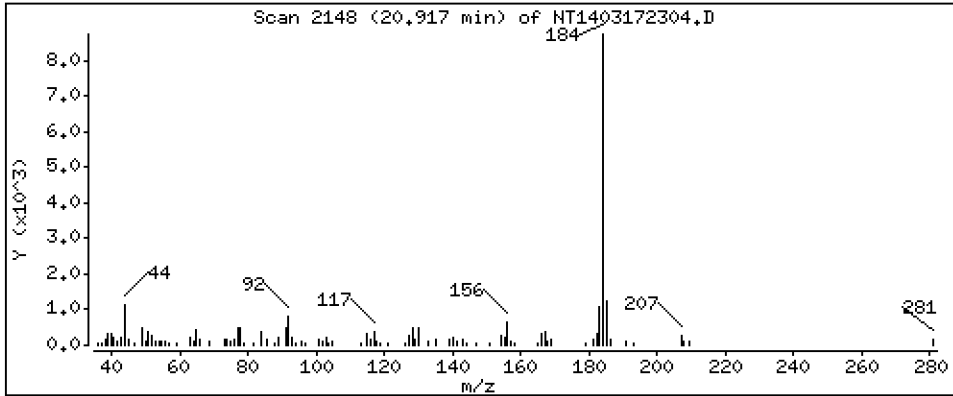
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,2853 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

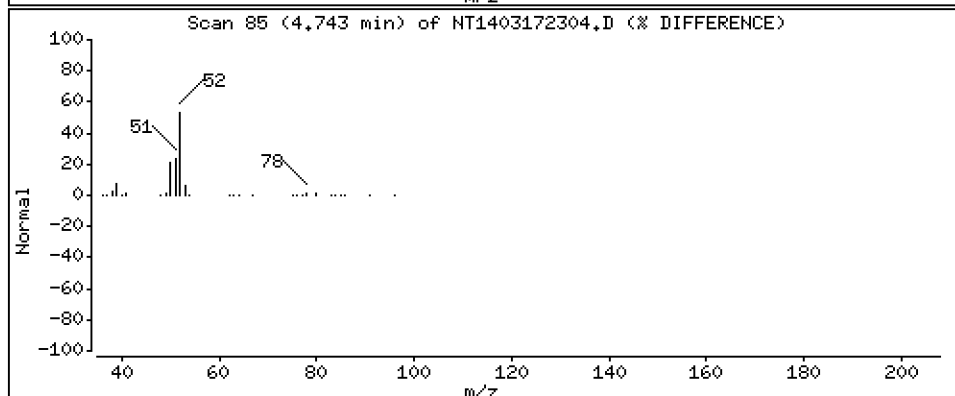
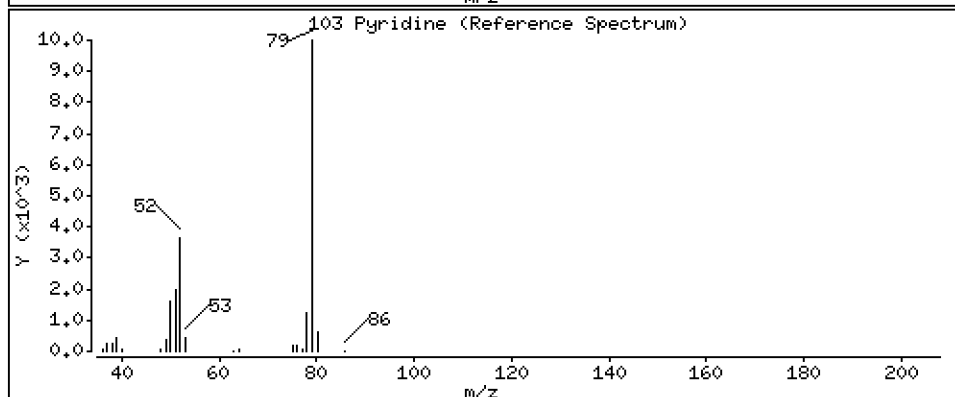
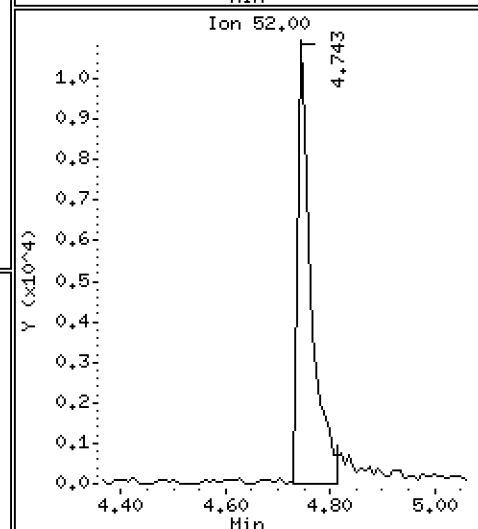
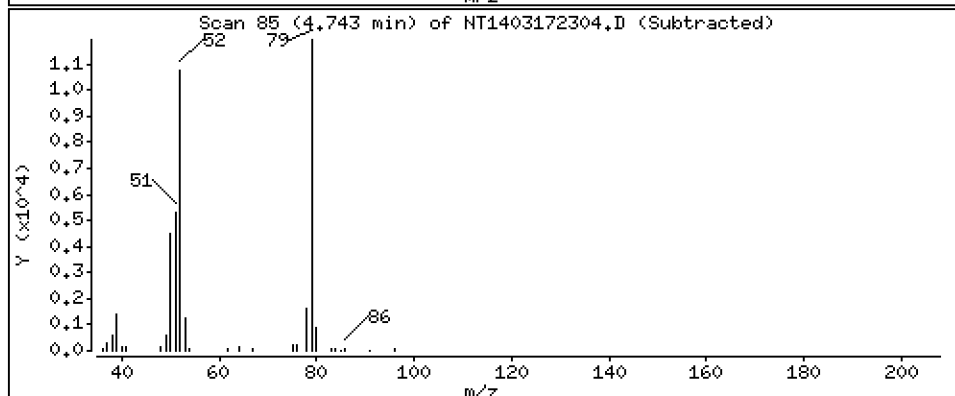
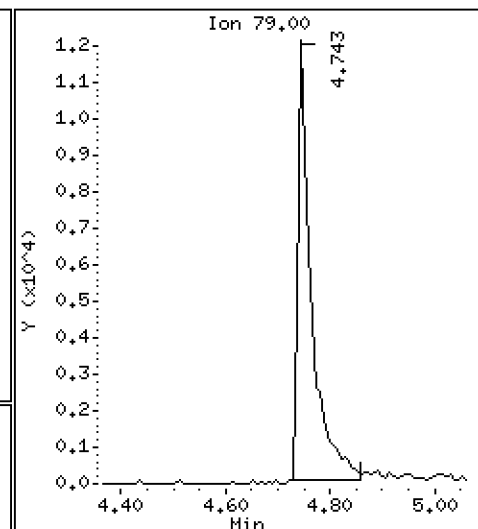
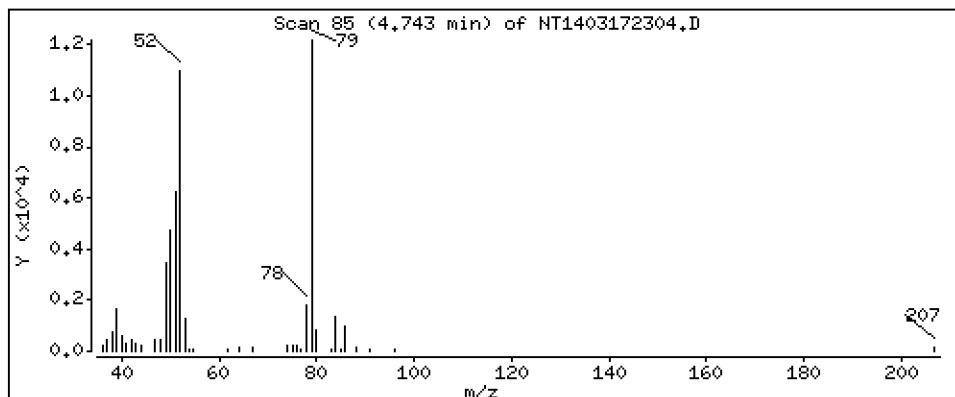
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,1554 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

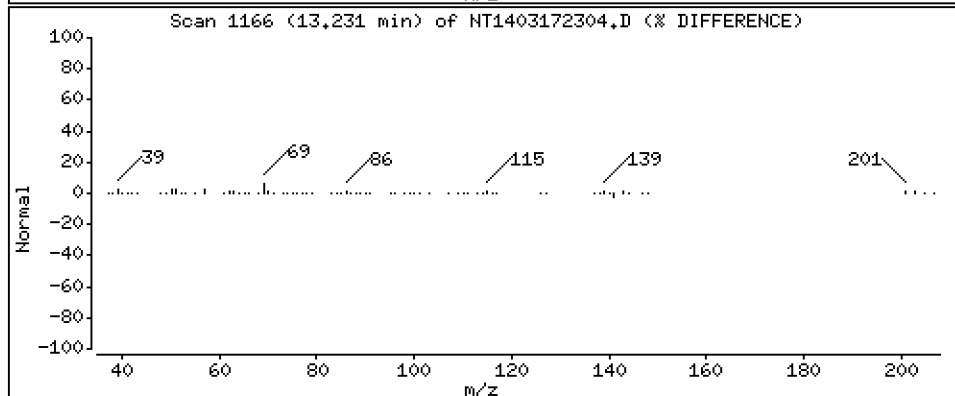
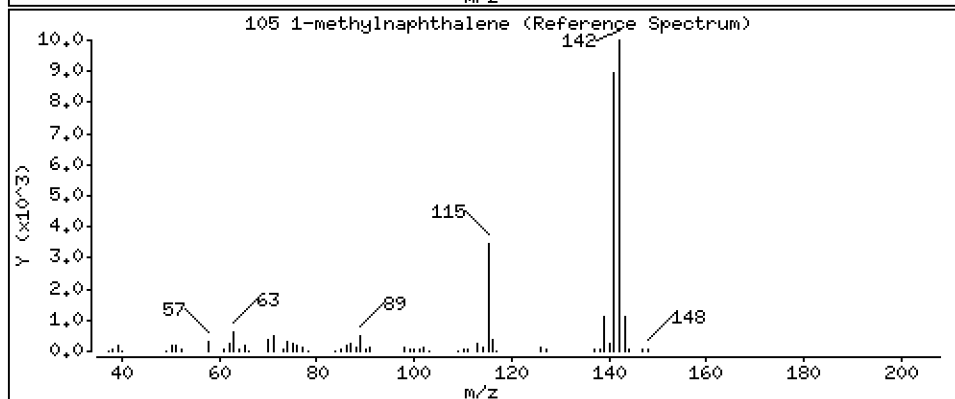
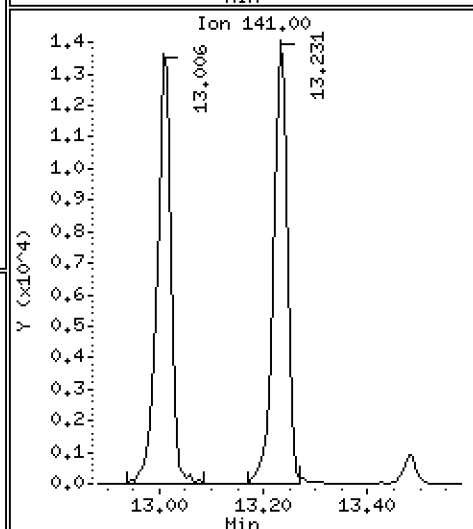
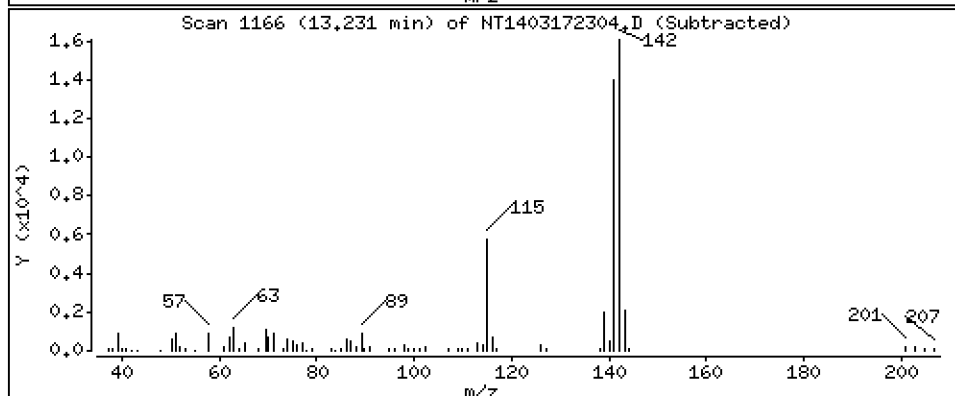
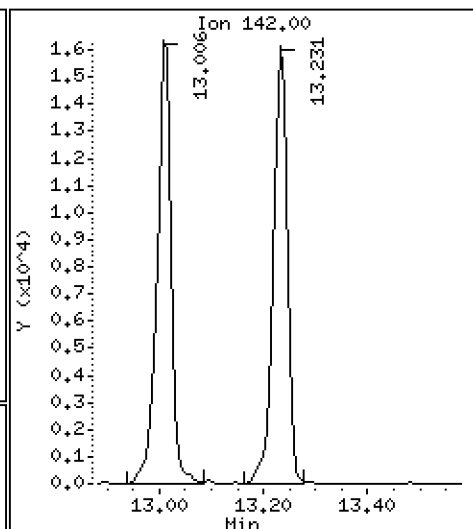
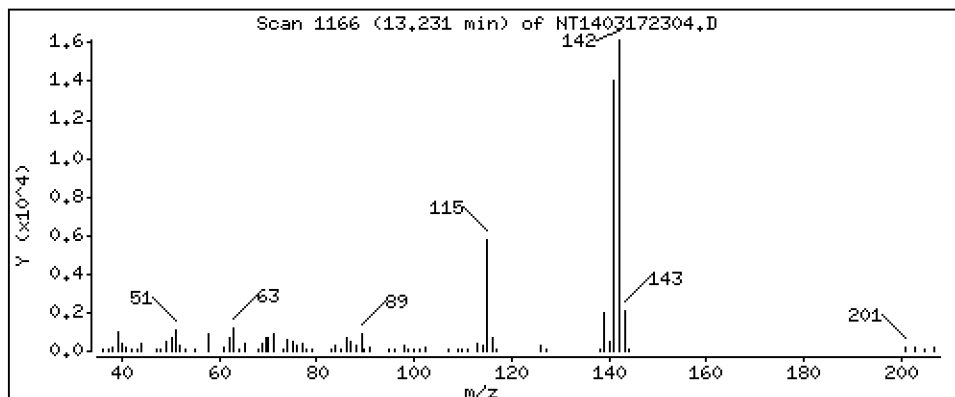
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2079 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

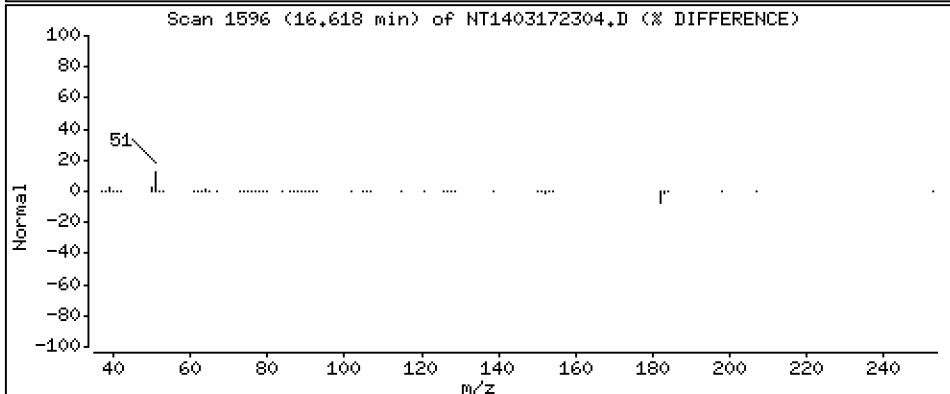
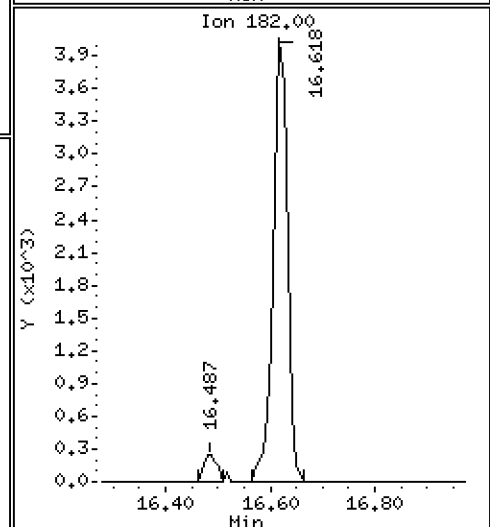
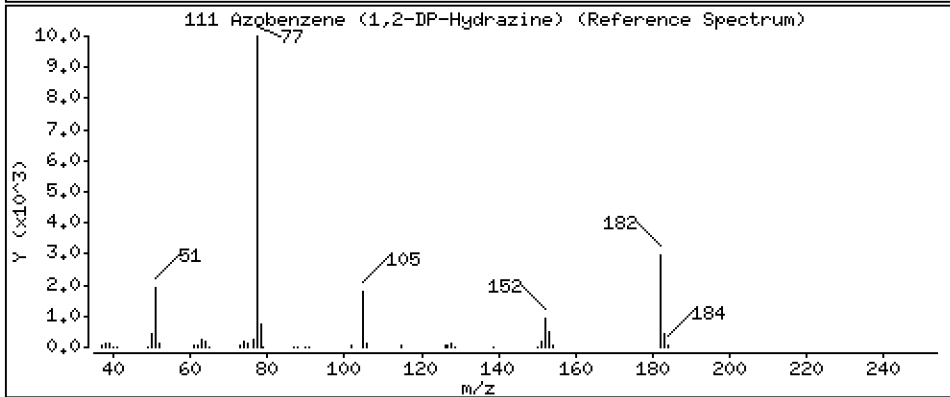
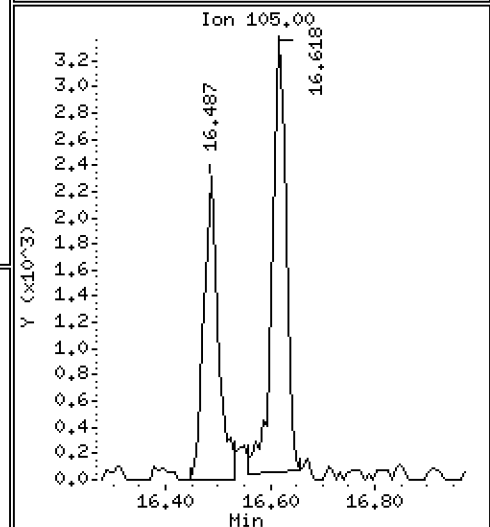
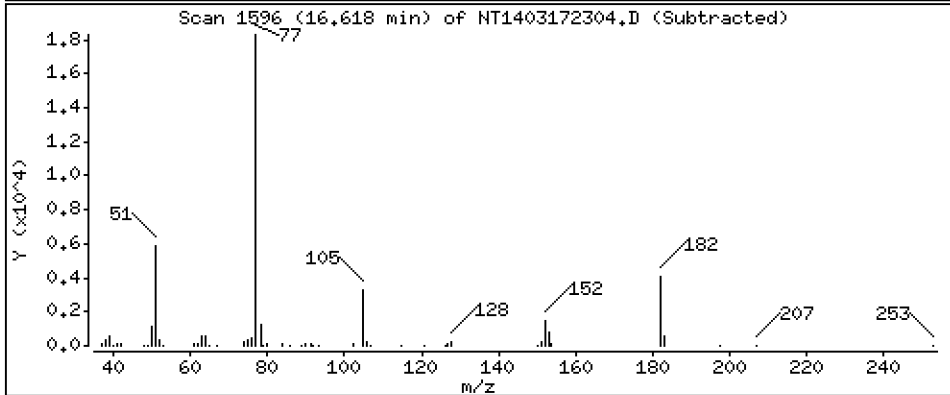
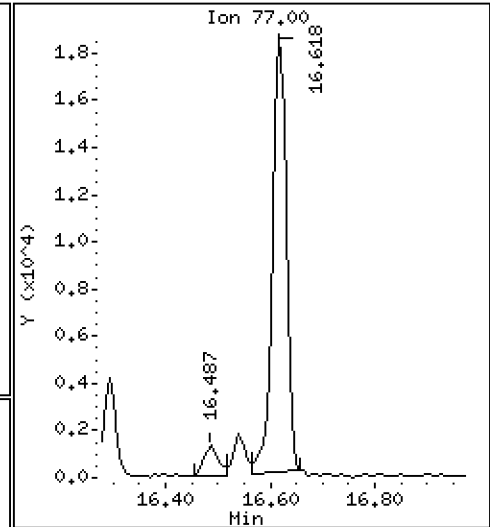
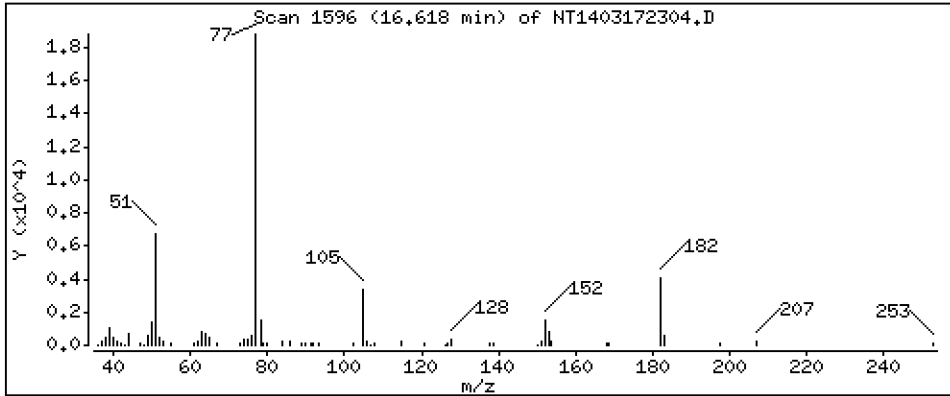
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1856 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

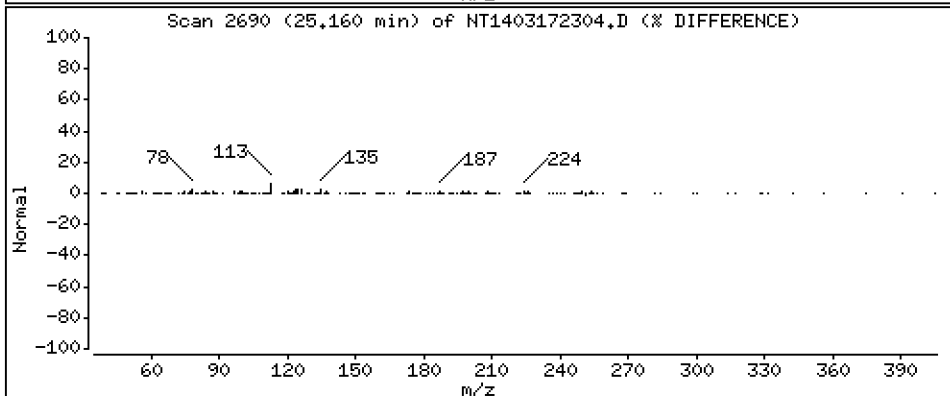
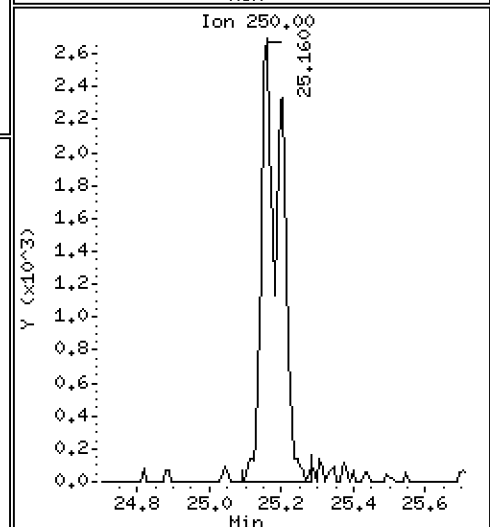
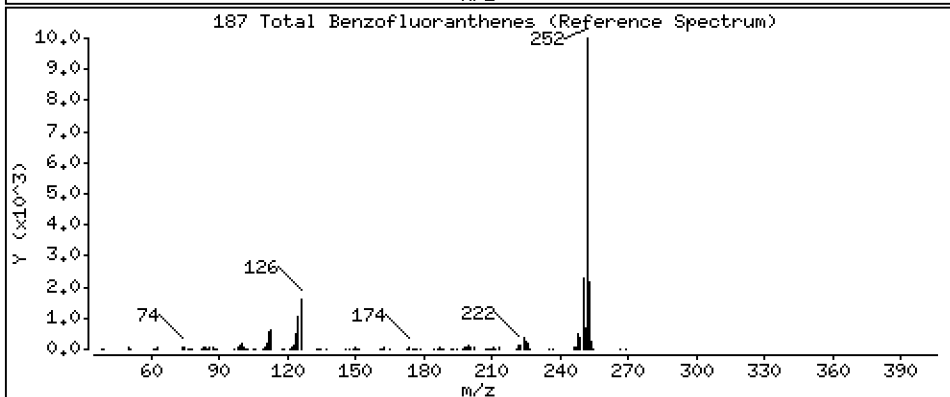
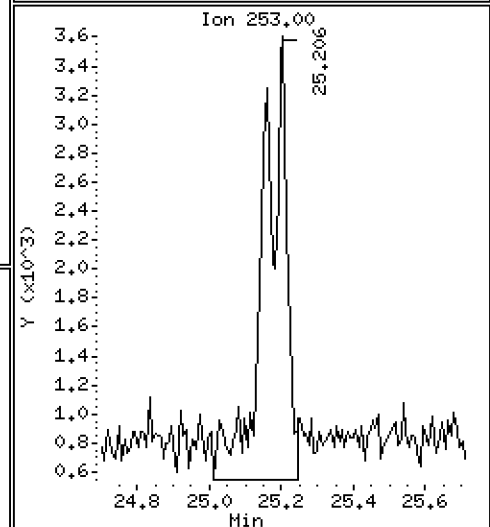
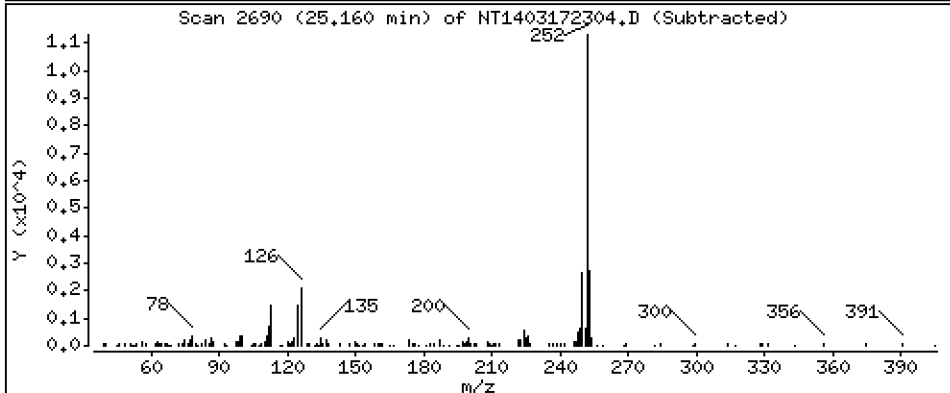
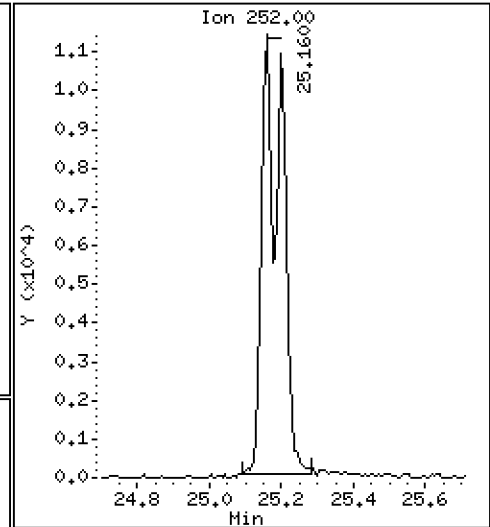
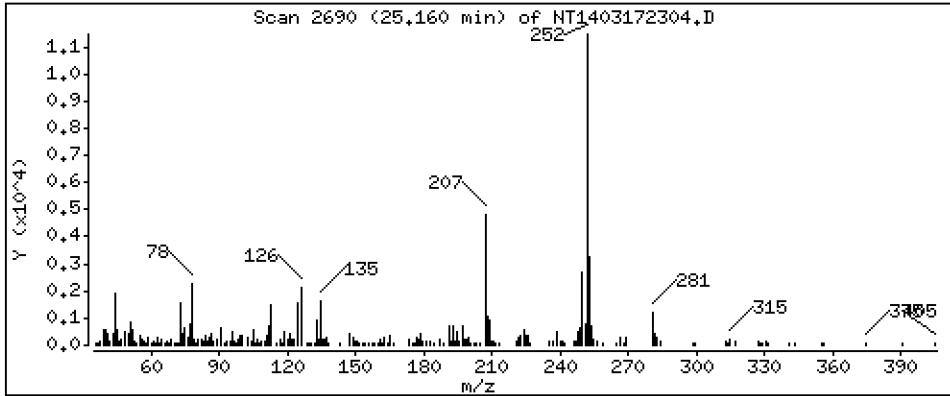
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3949 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

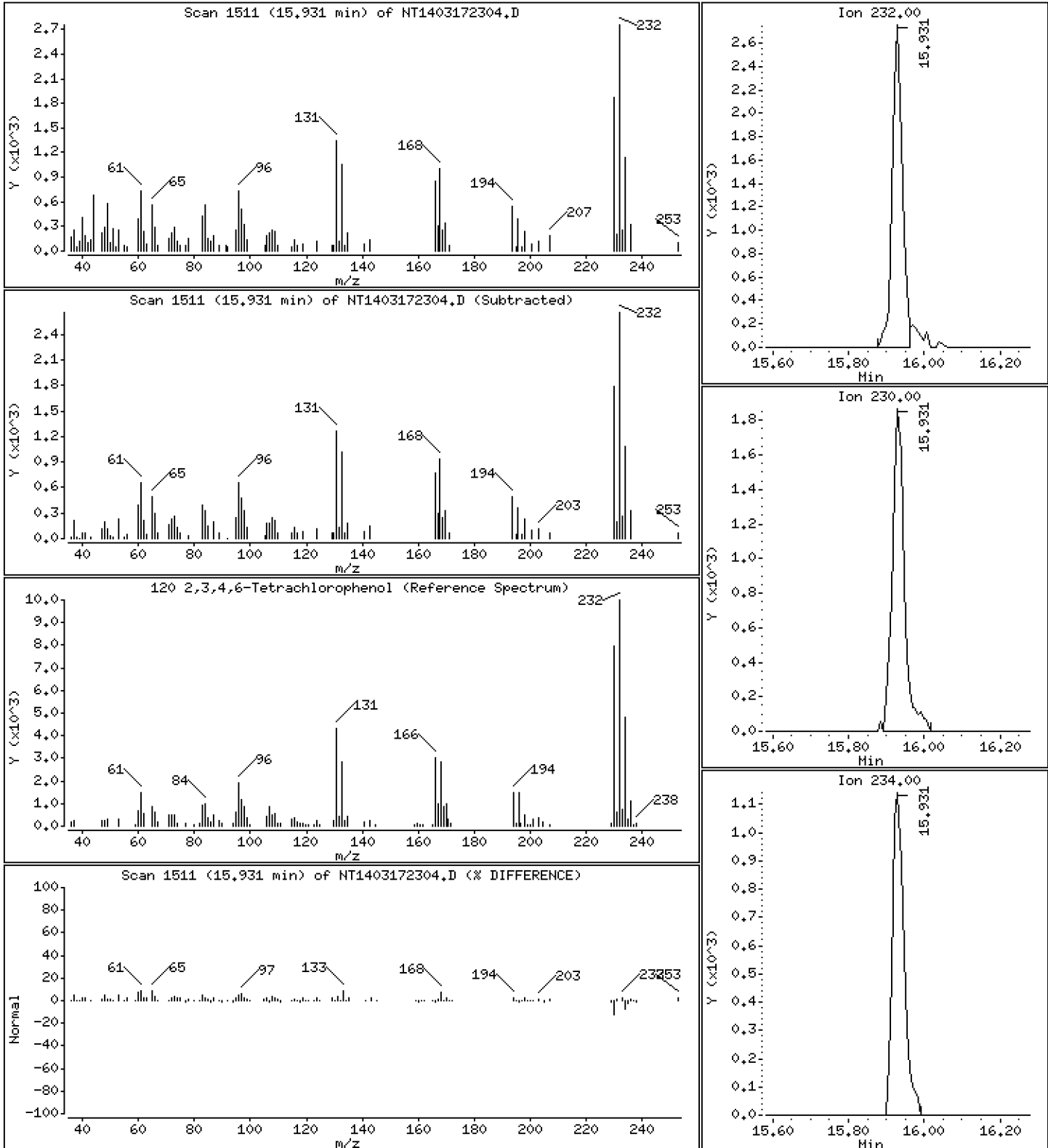
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0.1132 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172304.D
 Lab Smp Id: SLC0335-LCV1
 Inj Date : 17-MAR-2023 16:16 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.828	6.821	(1.000)	18594	0.25189	0.2519
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	24582	0.25293	0.2529
3 Phenol	94		8.435	8.435	(1.000)	16555	0.16028	0.1603
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	22189	0.28960	0.2896
4 Bis(2-Chloroethyl)ether	93		8.605	8.605	(1.000)	14905	0.20040	0.2004
6 2-Chlorophenol	128		8.729	8.729	(1.000)	15015	0.18470	0.1847
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	18302	0.22240	0.2224
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	217316	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	16921	0.21348	0.2135
\$ 10 1,2-Dichlorobenzene-d4	152		9.426	9.426	(1.000)	11108	0.21700	0.2170
12 1,2-Dichlorobenzene	146		9.458	9.450	(1.000)	16866	0.21528	0.2153
11 Benzyl alcohol	108		9.333	9.333	(1.000)	6933	0.14418	0.1442
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.064)	4910	0.20770	0.2077 (M)
13 2-Methylphenol	108		9.558	9.558	(1.000)	12696	0.17386	0.1739
17 Hexachloroethane	117		10.055	10.055	(1.000)	6893	0.20334	0.2033
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	9706	0.16882	0.1688
15 4-Methylphenol	108		9.830	9.830	(1.000)	13688	0.15831	0.1583
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	15853	0.18189	0.1819
19 Nitrobenzene	77		10.195	10.203	(0.881)	15610	0.18399	0.1840
20 Isophorone	82		10.653	10.653	(0.921)	17641	0.15229	0.1523
21 2-Nitrophenol	139		10.831	10.831	(0.936)	5816	0.12142	0.1214
22 2,4-Dimethylphenol	107		10.885	10.885	(0.941)	29837	0.41118	0.4112
23 Bis(2-Chloroethoxy)methane	93		11.079	11.087	(0.958)	14401	0.18466	0.1847
24 Benzoic acid	105		10.978	11.103	(0.949)	7828	0.12953	0.1295 (M)
25 2,4-Dichlorophenol	162		11.289	11.289	(0.976)	19763	0.34246	0.3425
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	14434	0.20346	0.2035
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	823606	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	45873	0.20848	0.2085
29 4-Chloroaniline	127		11.737	11.737	(1.015)	31151	0.33819	0.3382
30 Hexachlorobutadiene	225		11.976	11.976	(1.035)	7118	0.22222	0.2222
31 4-Chloro-3-methylphenol	107		12.696	12.696	(1.098)	22025	0.31584	0.3158
32 2-Methylnaphthalene	142		13.006	13.013	(1.124)	30490	0.19870	0.1987
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	9116	0.26060	0.2606

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	12570	0.29444	0.2944
35 2,4,5-Trichlorophenol	196	13.710	13.702	(0.902)	13329	0.29962	0.2996
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	31403	0.20605	0.2060
37 2-Chloronaphthalene	162	14.004	14.012	(0.922)	26527	0.20308	0.2031
38 2-Nitroaniline	65	14.267	14.267	(0.939)	14704	0.29152	0.2915
39 Dimethylphthalate	163	14.693	14.701	(0.967)	27457	0.19566	0.1957
40 Acenaphthylene	152	14.879	14.879	(0.979)	42509	0.19375	0.1937
41 2,6-Dinitrotoluene	165	14.832	14.840	(0.976)	10259	0.31646	0.3165
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	420838	4.00000	
43 3-Nitroaniline	138	15.119	15.126	(0.995)	11607	0.25953	0.2595
44 Acenaphthene	153	15.258	15.265	(1.004)	25936	0.20247	0.2025
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	1883	0.07503	0.07503
46 Dibenzofuran	168	15.590	15.590	(1.026)	37357	0.20427	0.2043
47 4-Nitrophenol	109	15.459	15.435	(1.017)	2414	0.10197	0.1020
48 2,4-Dinitrotoluene	165	15.644	15.652	(1.030)	13166	0.28650	0.2865
50 Diethylphthalate	149	16.155	16.170	(1.063)	29117	0.20068	0.2007
49 Fluorene	166	16.309	16.309	(1.073)	29637	0.17096	0.1710
51 4-Chlorophenyl-phenylether	204	16.294	16.301	(1.072)	12967	0.17426	0.1743
52 4-Nitroaniline	138	16.394	16.394	(1.079)	10172	0.26150	0.2615
53 4,6-Dinitro-2-methylphenol	198	16.486	16.494	(0.904)	7582	0.28913	0.2891
54 N-Nitrosodiphenylamine	169	16.540	16.548	(0.907)	19386	0.18831	0.1883
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	3716	0.23258	0.2326
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	6658	0.19183	0.1918
57 Hexachlorobenzene	284	17.620	17.620	(0.966)	7606	0.20769	0.2077
58 Pentachlorophenol	266	17.984	17.976	(0.986)	3079	0.12204	0.1220
* 59 Phenanthrene-d10	188	18.240	18.247	(1.000)	757941	4.00000	
60 Phenanthrene	178	18.286	18.294	(1.003)	43188	0.19943	0.1994
61 Anthracene	178	18.379	18.387	(1.008)	36981	0.17725	0.1773
62 Carbazole	167	18.712	18.711	(1.026)	32491	0.17503	0.1750
63 Di-n-butylphthalate	149	19.508	19.508	(1.070)	36311	0.15432	0.1543
64 Fluoranthene	202	20.677	20.677	(0.888)	38705	0.20915	0.2091
65 Pyrene	202	21.102	21.102	(0.906)	40464	0.21322	0.2132
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	29120	0.22666	0.2267
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	15269	0.18364	0.1836
68 Benzo(a)anthracene	228	23.262	23.270	(0.999)	34915	0.20818	0.2082
* 69 Chrysene-d12	240	23.293	23.293	(1.000)	454867	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.224	(0.997)	24773	0.51505	0.5150
71 Chrysene	228	23.340	23.340	(1.002)	30534	0.20116	0.2012
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.960)	18300	0.19578	0.1958
* 134 Di-n-octylphthalate-d4	153	24.315	24.323	(1.000)	710040	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.001)	39746	0.21775	0.2178
74 Benzo(b)fluoranthene	252	25.159	25.159	(0.970)	21964	0.18808	0.1881
75 Benzo(k)fluoranthene	252	25.198	25.205	(0.972)	24822	0.21442	0.2144
76 Benzo(a)pyrene	252	25.817	25.817	(0.996)	18002	0.18027	0.1803
* 77 Perylene-d12	264	25.933	25.933	(1.000)	330470	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.618	28.618	(1.104)	14842	0.13656	0.1366
79 Dibenzo(a,h)anthracene	278	28.626	28.633	(1.104)	12885	0.14066	0.1407
80 Benzo(g,h,i)perylene	276	29.395	29.410	(1.133)	12878	0.14377	0.1438
90 N-Nitrosodimethylamine	74	4.697	4.697	(1.000)	13786	0.29487	0.2949
91 Aniline	93	8.513	8.513	(1.000)	39158	0.37694	0.3769
93 Benzidine	184	20.917	20.909	(0.898)	21244	0.28526	0.2853
103 Pyridine	79	4.743	4.712	(1.000)	22503	0.15542	0.1554
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	28901	0.20789	0.2079
111 Azobenzene (1,2-DP-Hydrazine)	77	16.617	16.625	(1.094)	32160	0.18562	0.1856

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.159	25.205	(0.970)	43799	0.39492	0.3949
120 2,3,4,6-Tetrachlorophenol	232	15.930	15.930	(1.048)	4827	0.11321	0.1132

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172304.D Calibration Time: 15:03
 Lab Smp Id: SLC0335-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	217316	-1.76
27 Naphthalene-d8	809500	404750	1619000	823606	1.74
42 Acenaphthene-d10	420689	210345	841378	420838	0.04
59 Phenanthrene-d10	757520	378760	1515040	757941	0.06
69 Chrysene-d12	450500	225250	901000	454867	0.97
134 Di-n-octylphthala	828388	414194	1656776	710040	-14.29
77 Perylene-d12	339914	169957	679828	330470	-2.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172304.D

Lab ID: SLC0335-LCV1
nt14.i, ABN.m, 17-MAR-2023 16:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.064	1.000	0.0642	2,2'-oxybis(1-Chloropropane)
0.949	0.960	-0.0107	Benzoic acid

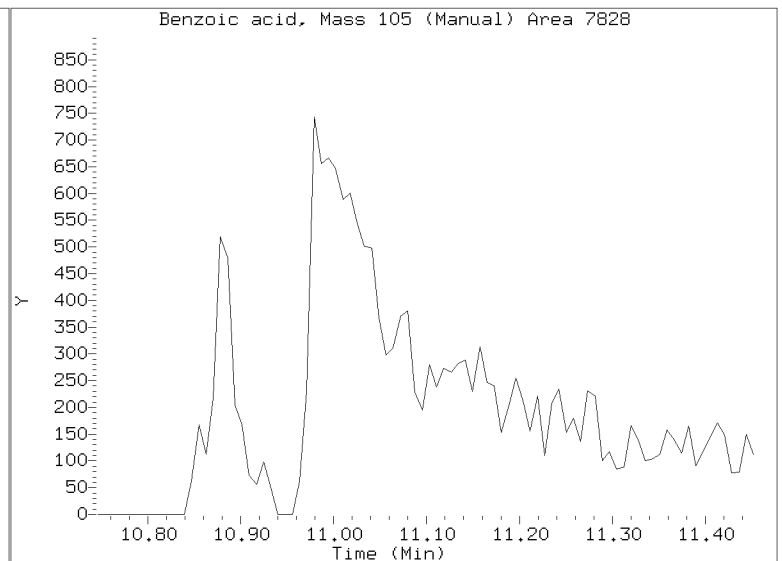
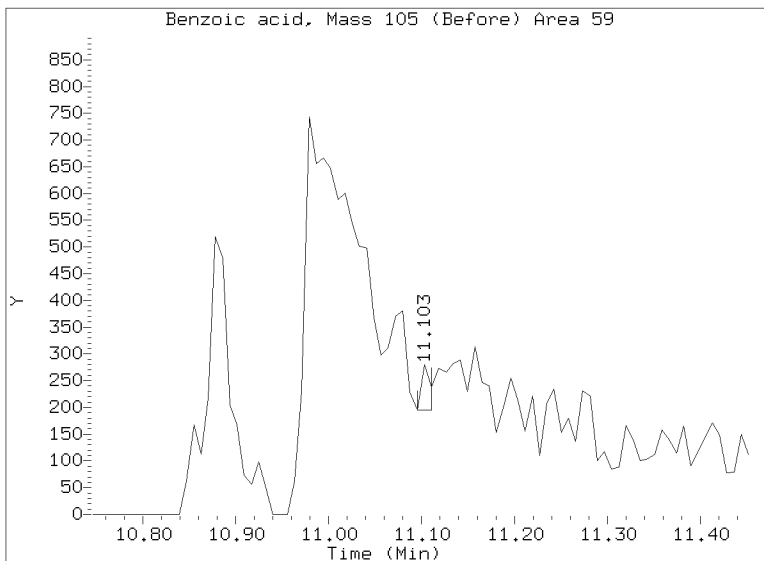
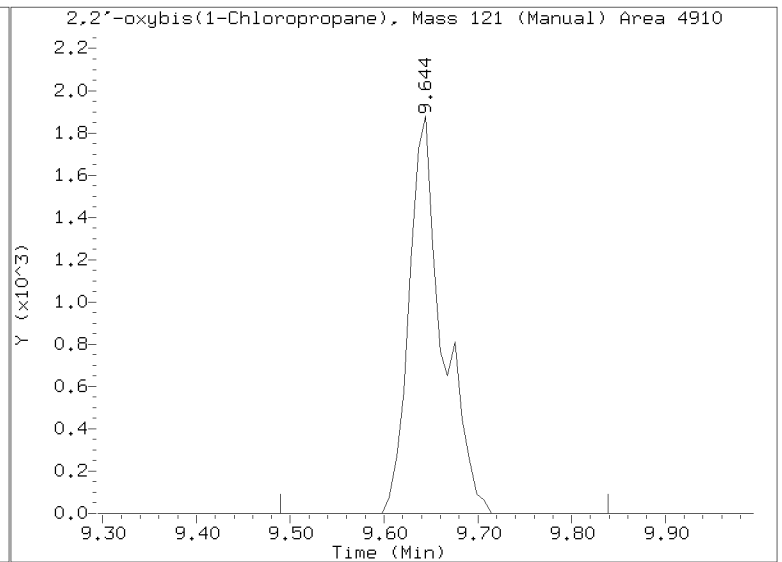
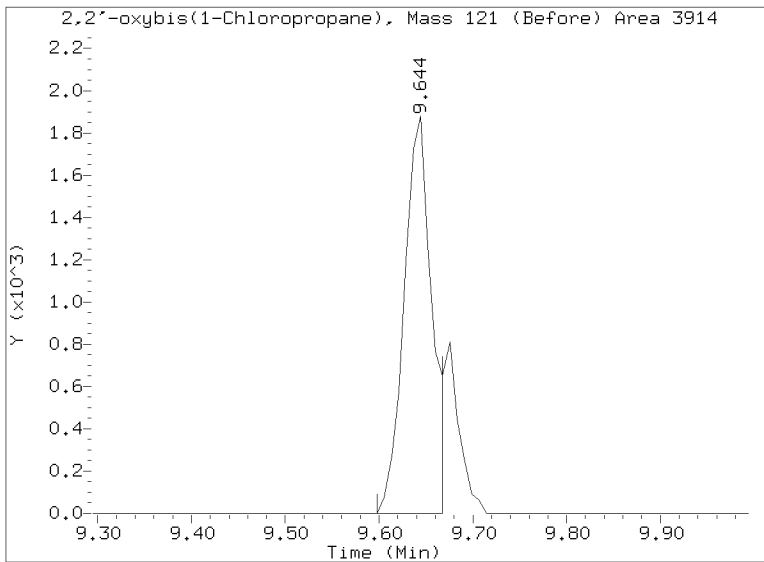
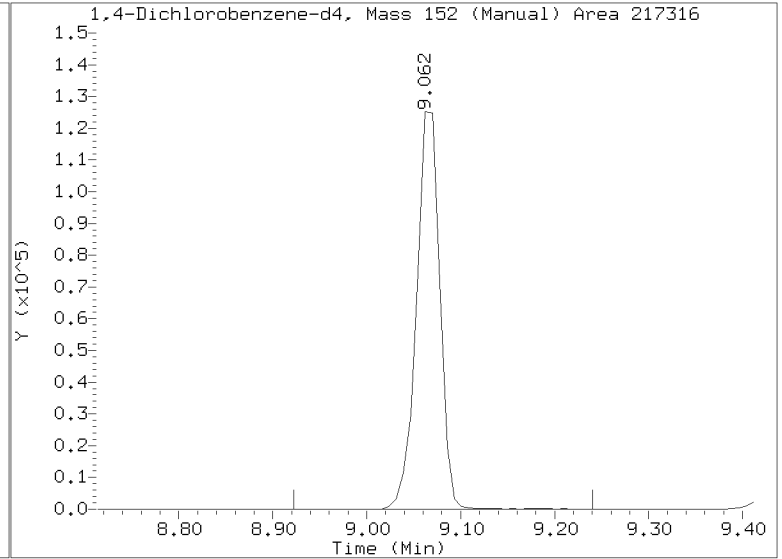
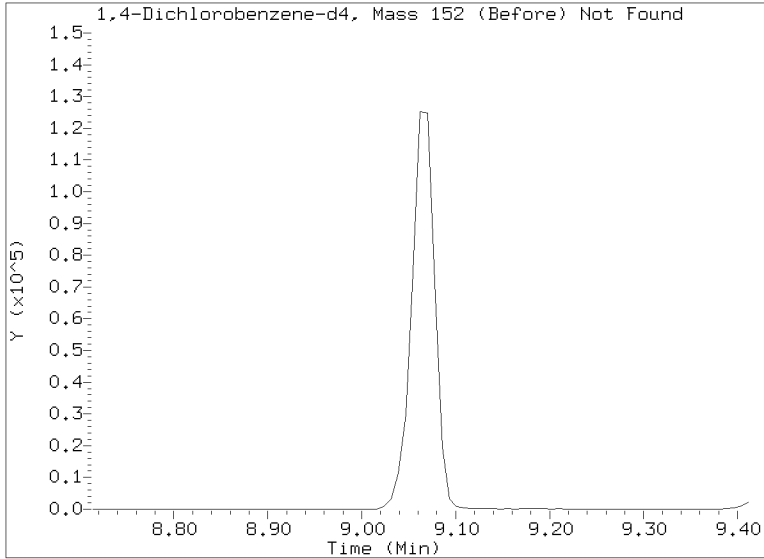
RRT check based on Ccal File: NT1403172302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172304.D
Injection Date: 17-MAR-2023 16:16
Lab ID: SLC0335-LCV1 Client ID:
Report Date: 03/22/2023 08:11





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

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0335-LCV2

Sequence: SLC0335

Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-19.1	50.00
4-Methylphenol	0.20000	0.2	-21.1	50.00
Naphthalene	0.20000	0.2	1.0	50.00
2-Methylnaphthalene	0.20000	0.2	-1.2	50.00
Acenaphthylene	0.20000	0.2	-3.9	50.00
Dimethylphthalate	0.20000	0.2	-4.9	50.00
Acenaphthene	0.20000	0.2	-3.0	50.00
Dibenzofuran	0.20000	0.2	-0.1	50.00
Fluorene	0.20000	0.2	-15.2	50.00
Phenanthrene	0.20000	0.2	-0.3	50.00
Anthracene	0.20000	0.2	-8.4	50.00
Fluoranthene	0.20000	0.2	12.1	50.00
Pyrene	0.20000	0.2	15.3	50.00
Butylbenzylphthalate	0.20000	0.2	0.9	50.00
Benzo(a)anthracene	0.20000	0.2	-0.7	50.00
Chrysene	0.20000	0.2	-4.9	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	2.5	50.00
Benzo(a)pyrene	0.20000	0.2	-10.3	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.1	-27.5	50.00
Dibenzo(a,h)anthracene	0.20000	0.1	-29.6	50.00
Benzo(g,h,i)perylene	0.20000	0.2	-24.0	50.00
2-Fluorophenol	0.30000	0.231	-22.8	50.00
Phenol-d5	0.30000	0.246	-18.0	50.00
2-Chlorophenol-d4	0.30000	0.275	-8.4	50.00
1,2-Dichlorobenzene-d4	0.20000	0.224	12.0	50.00
Nitrobenzene-d5	0.20000	0.183	-8.3	50.00
2-Fluorobiphenyl	0.20000	0.209	4.4	50.00
2,4,6-Tribromophenol	0.30000	0.191	-36.3	50.00



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

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0335-LCV2

Sequence: SLC0335

Standard ID: K011105

p-Terphenyl-d14	0.20000	0.243	21.7	50.00
-----------------	---------	-------	------	-------

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172318.D

Date : 18-MAR-2023 00:43

Client ID:

Sample Info: SLC0335-LCW2

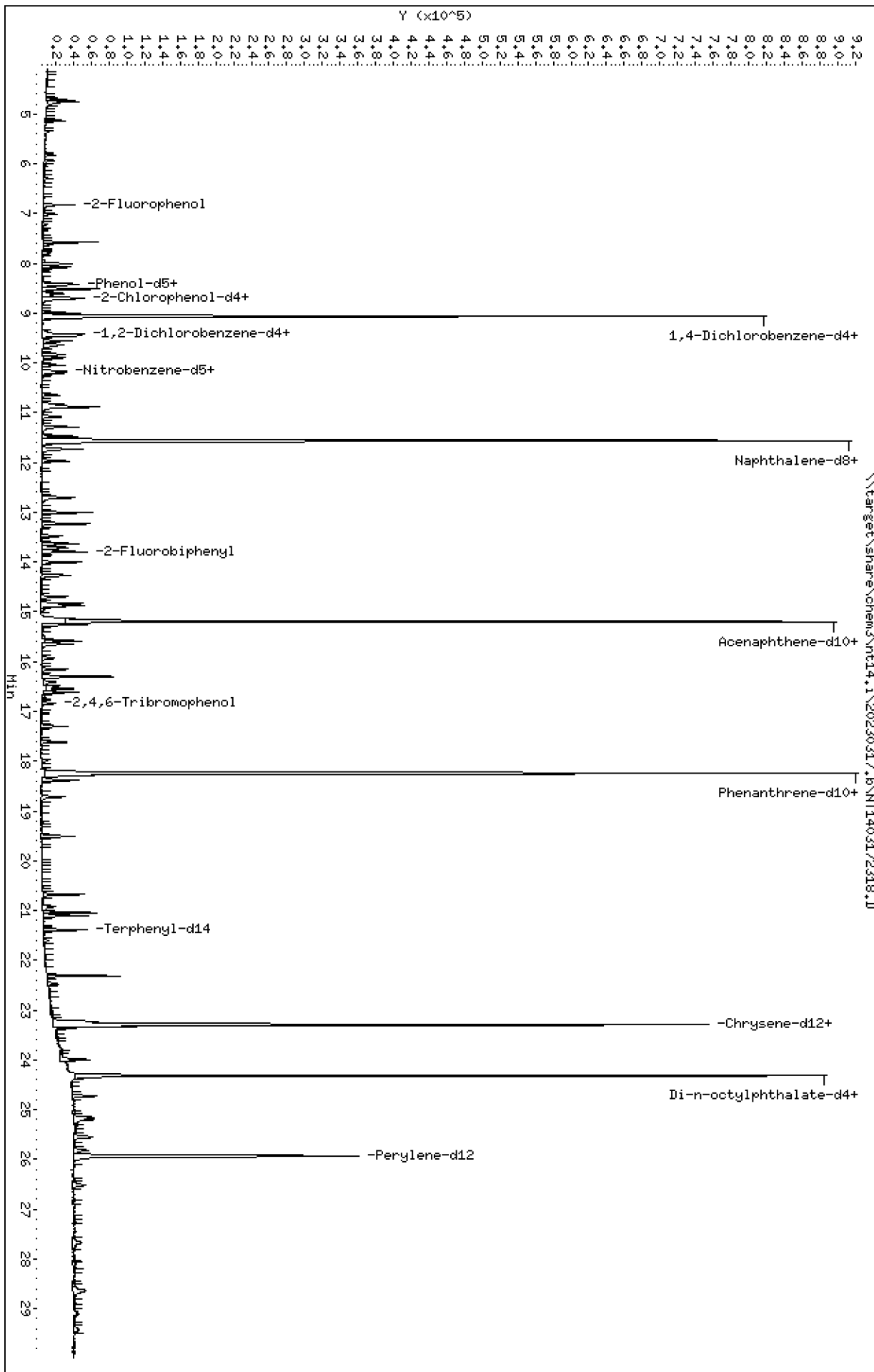
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

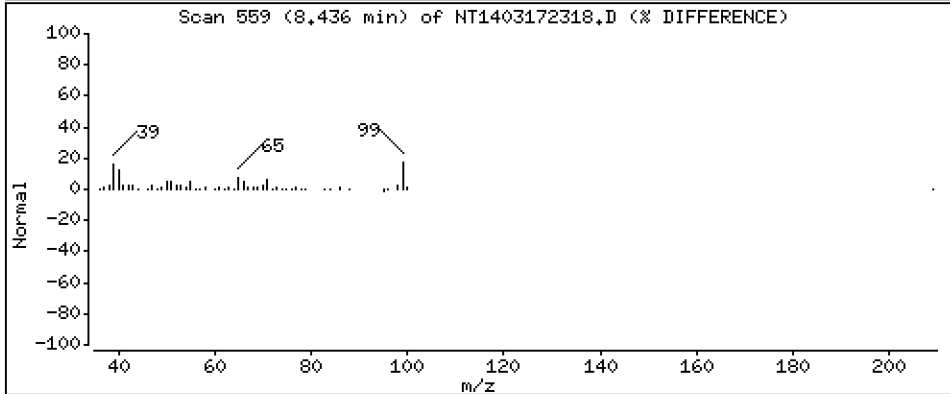
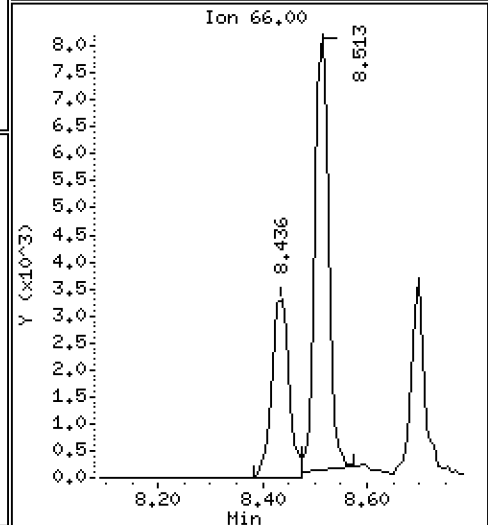
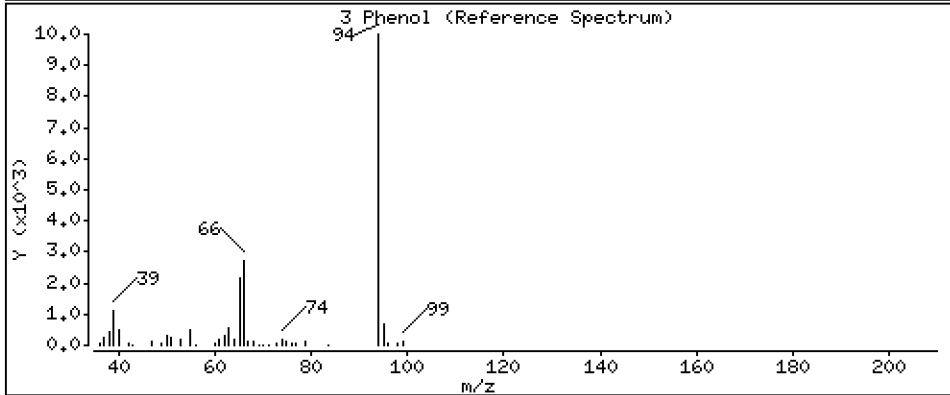
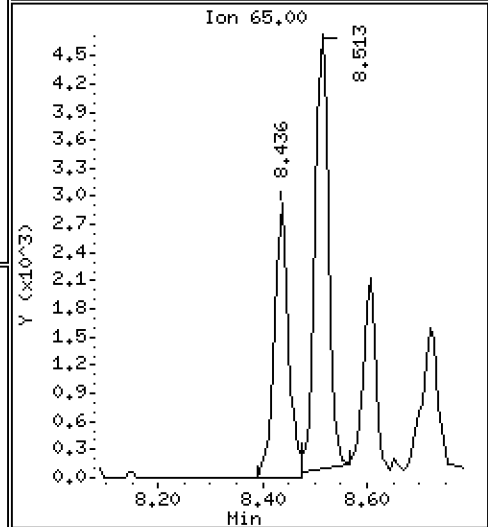
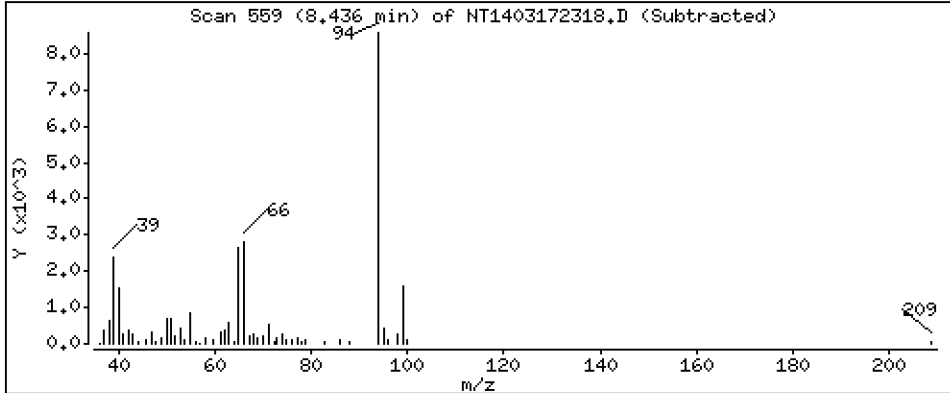
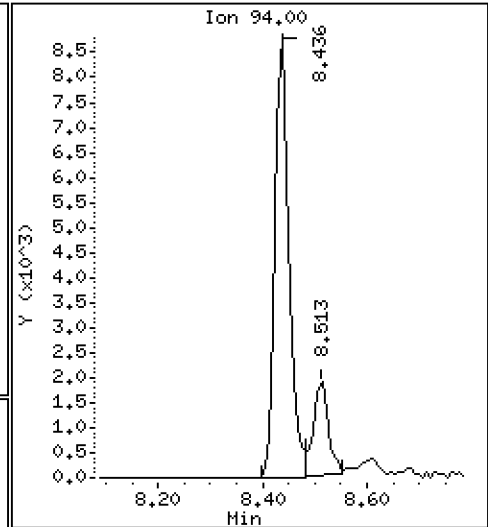
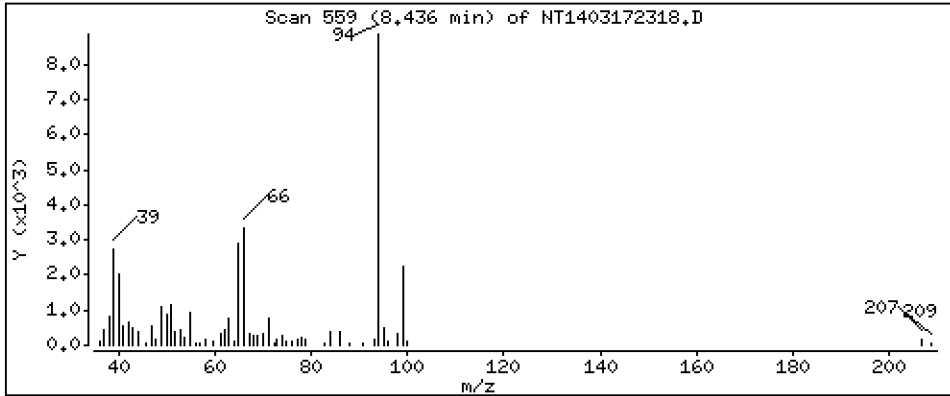
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1618 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

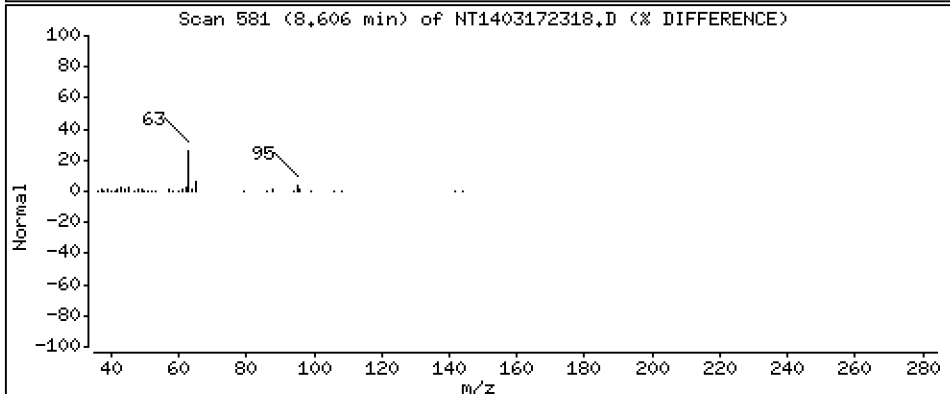
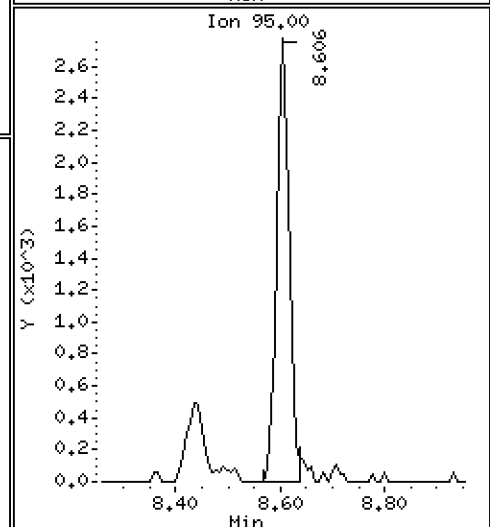
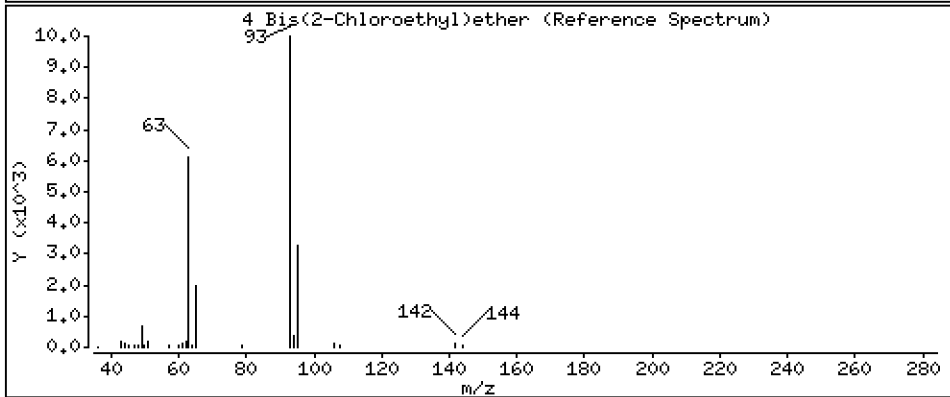
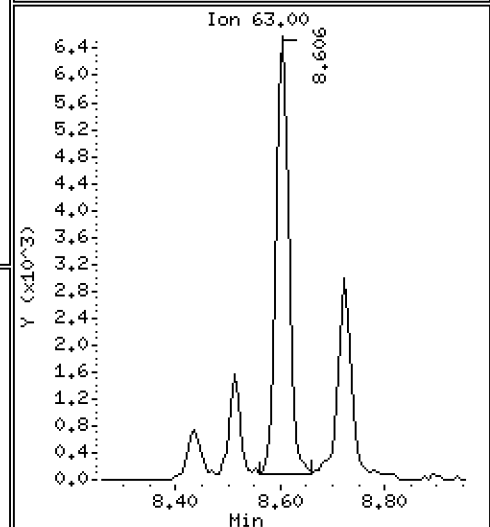
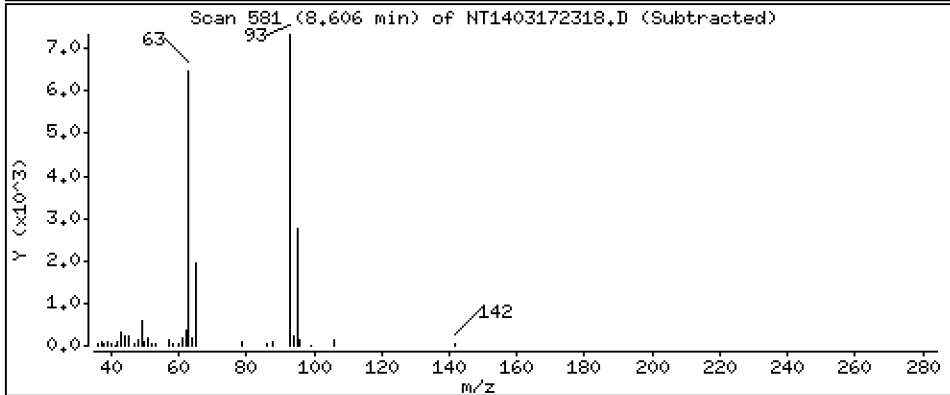
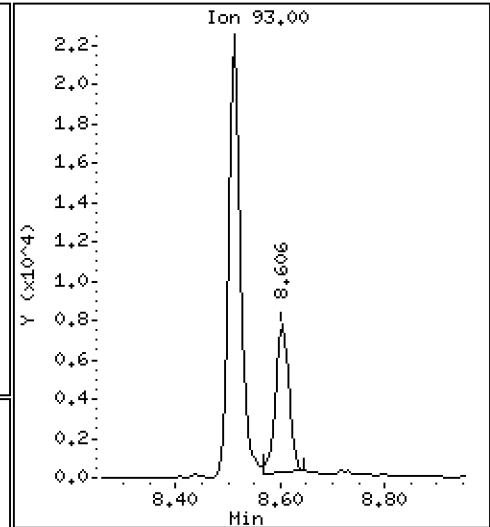
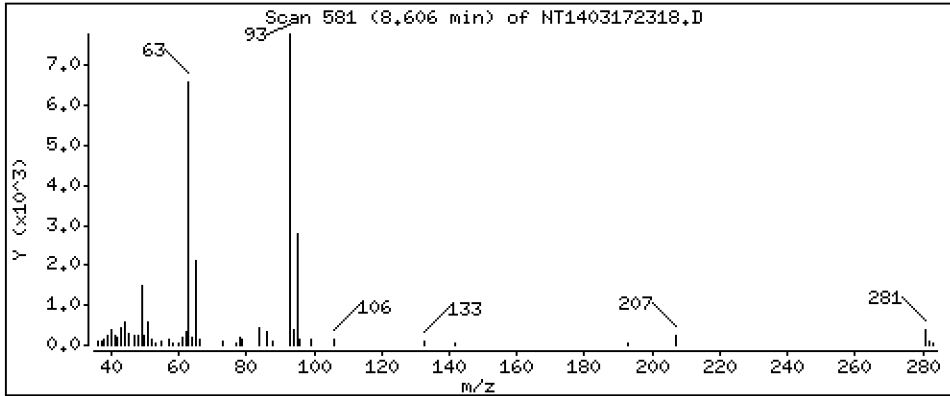
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,1837 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

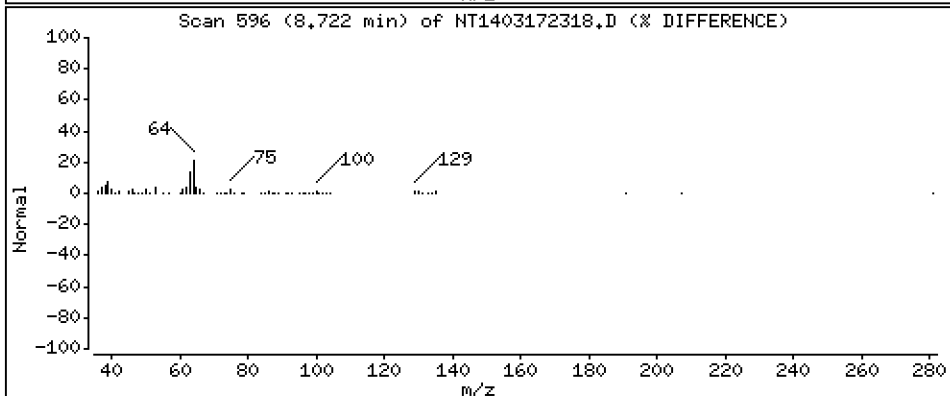
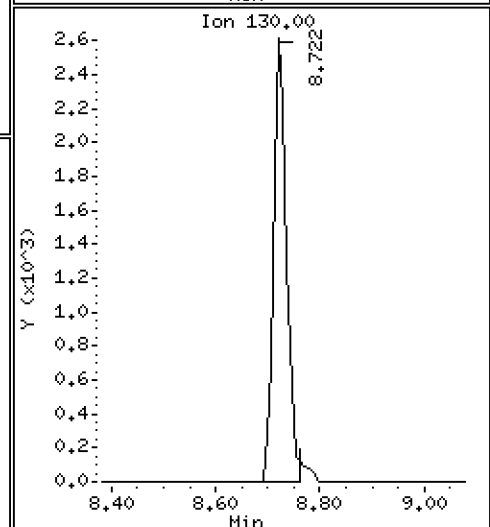
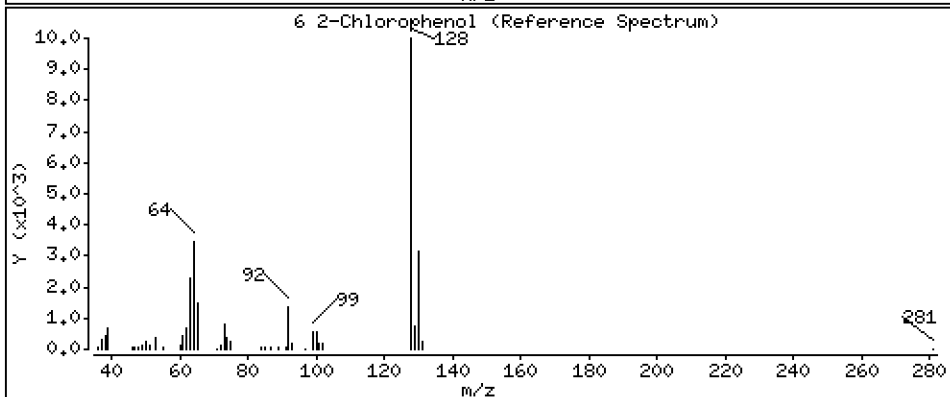
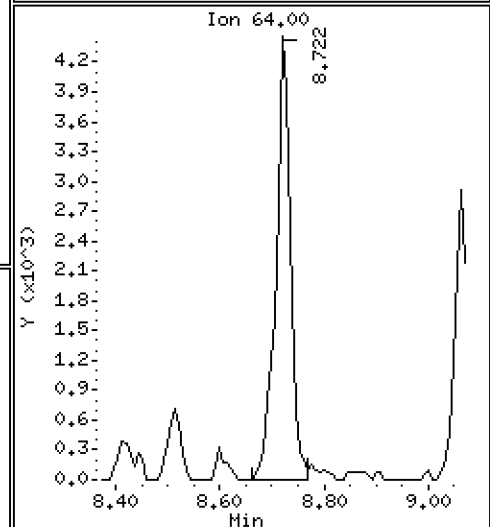
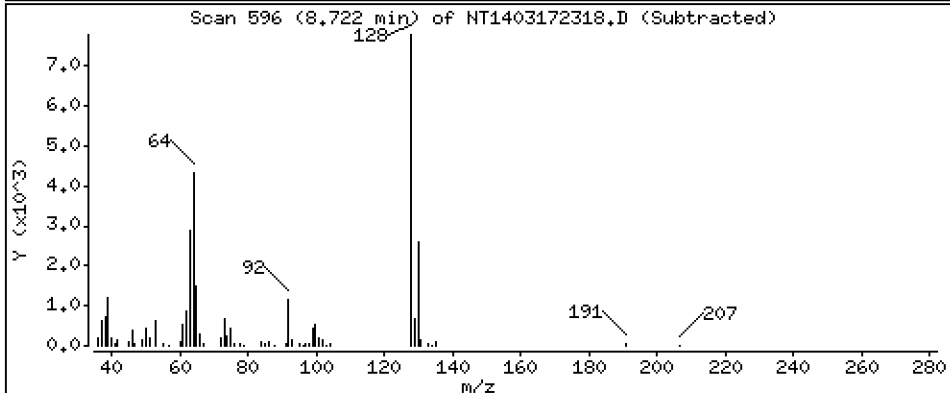
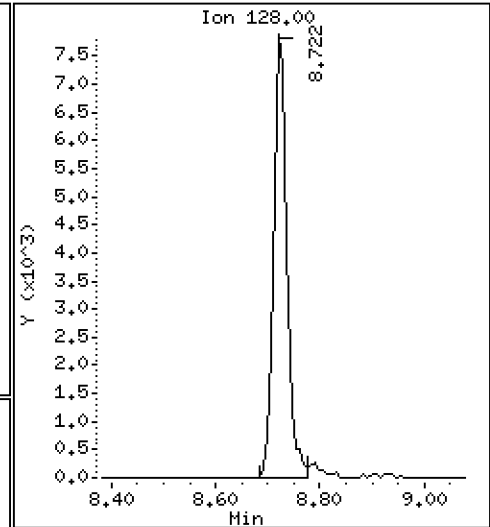
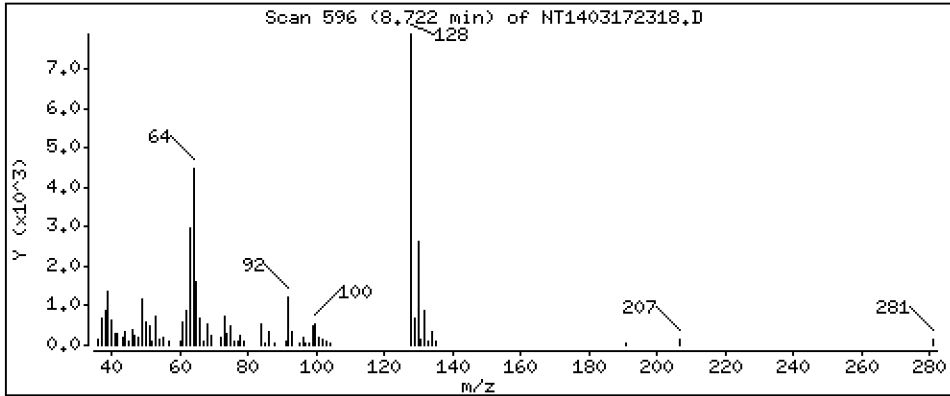
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1831 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

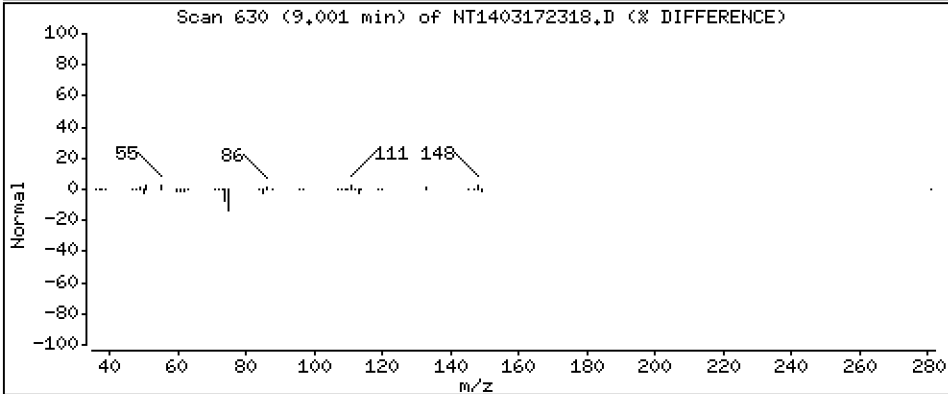
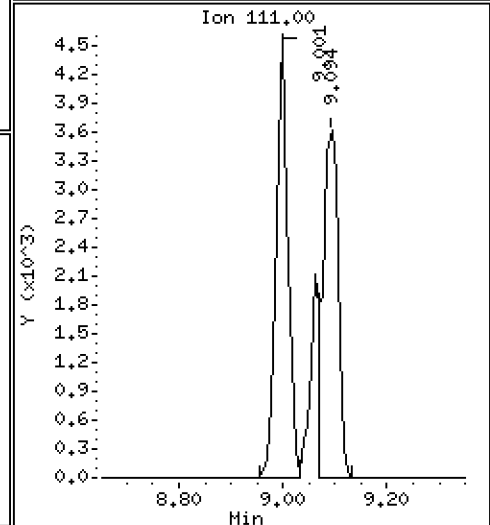
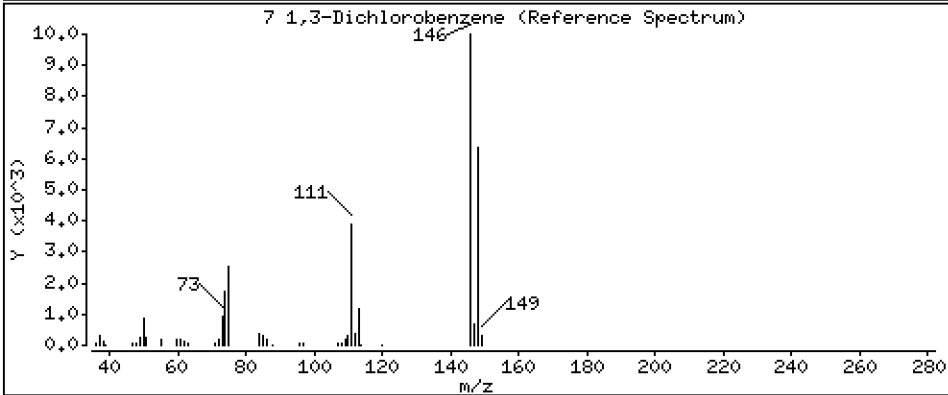
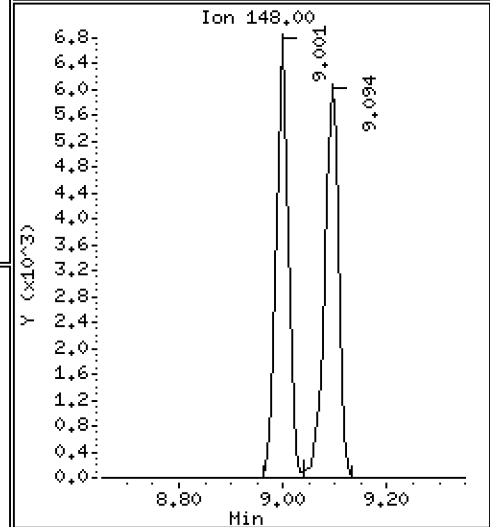
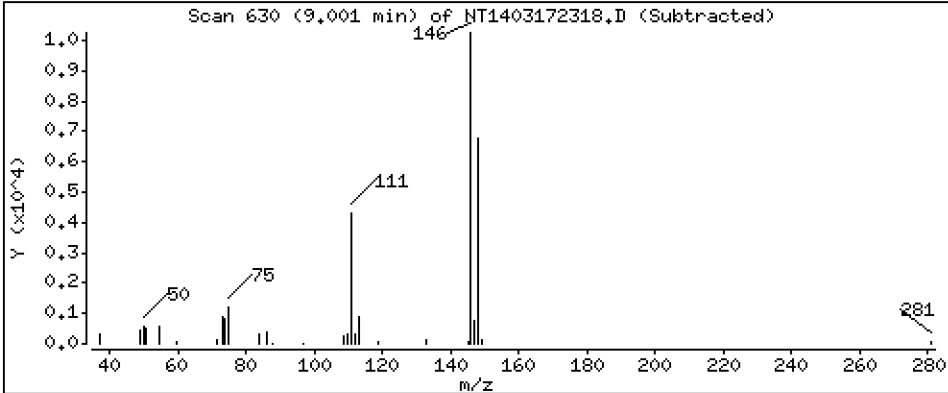
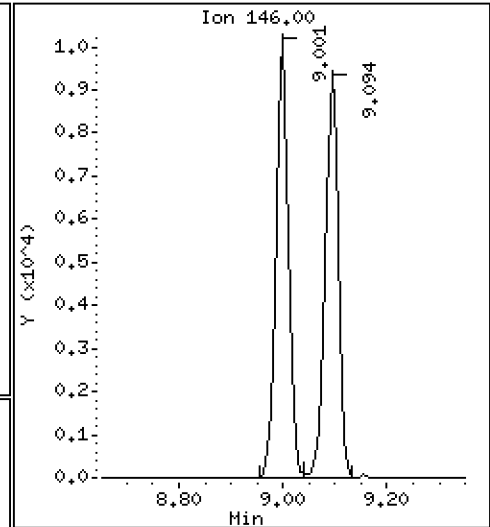
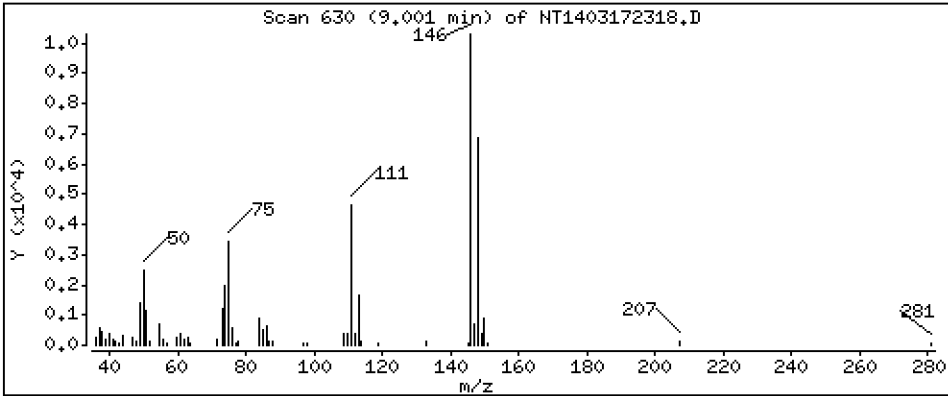
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2146 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

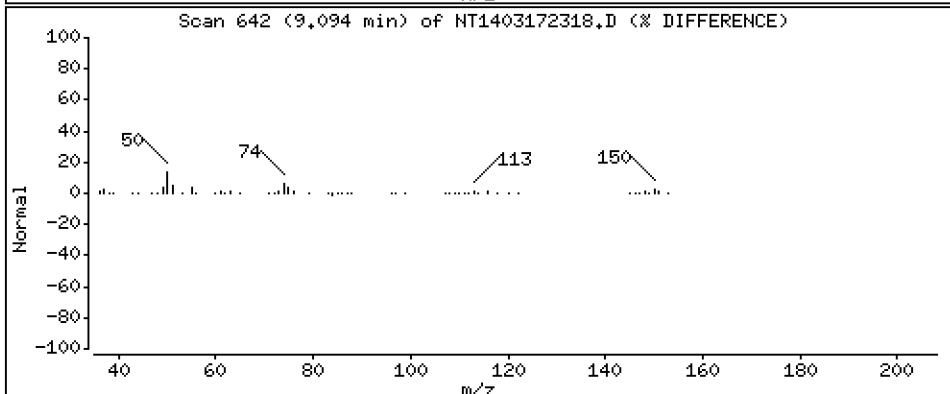
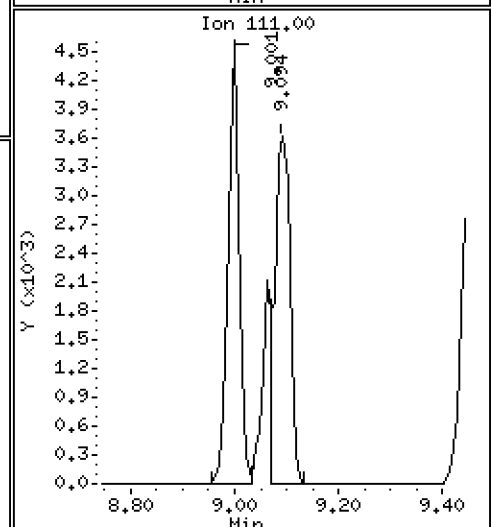
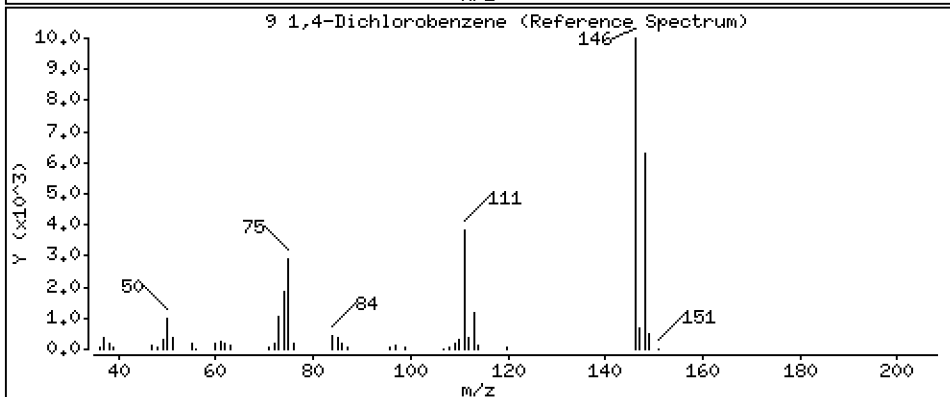
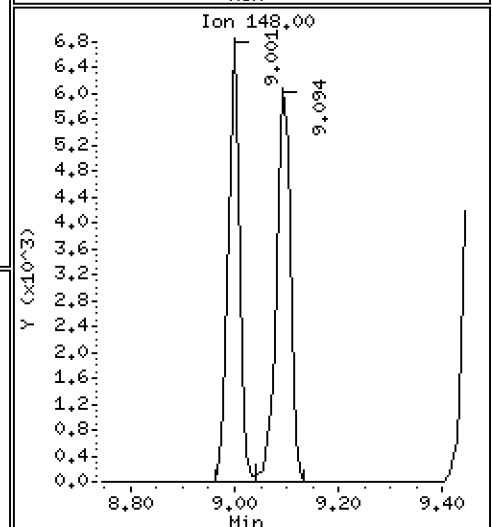
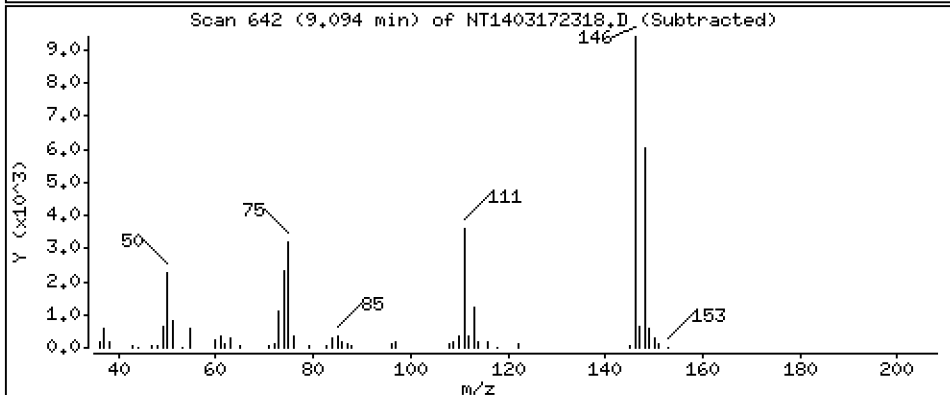
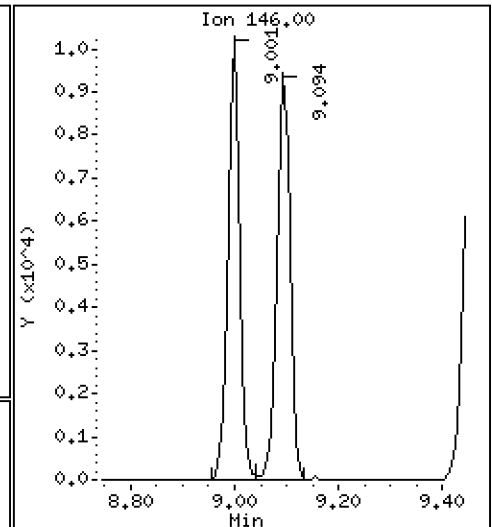
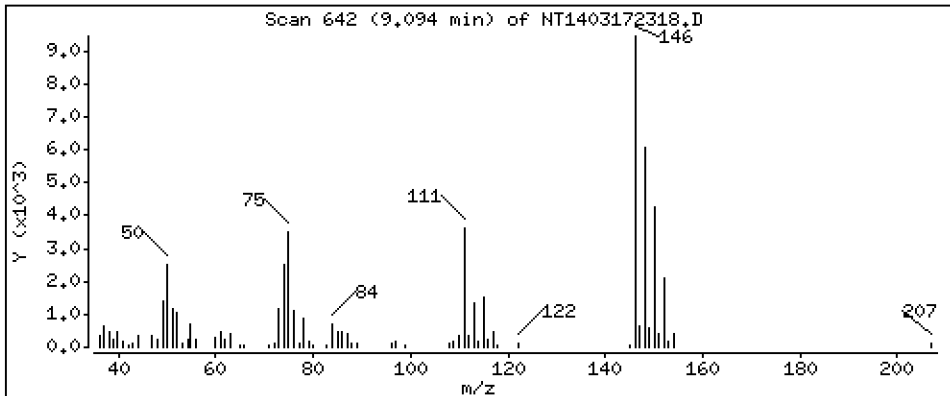
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2091 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

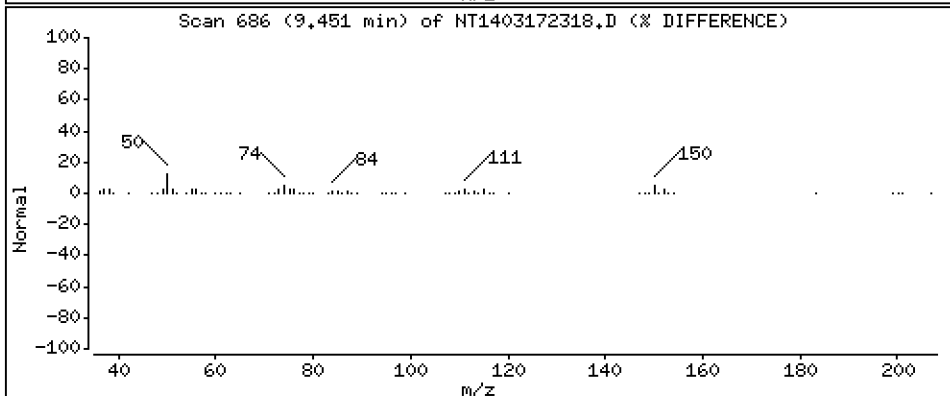
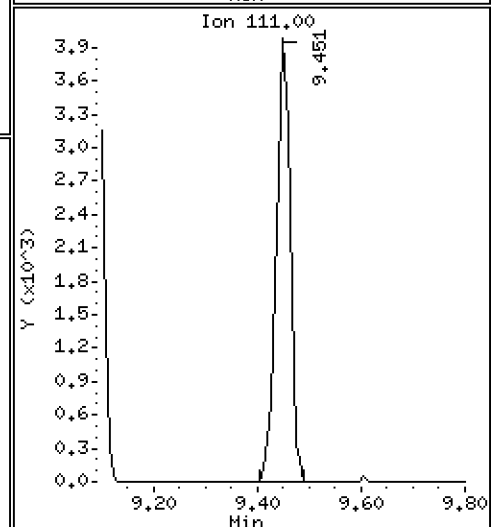
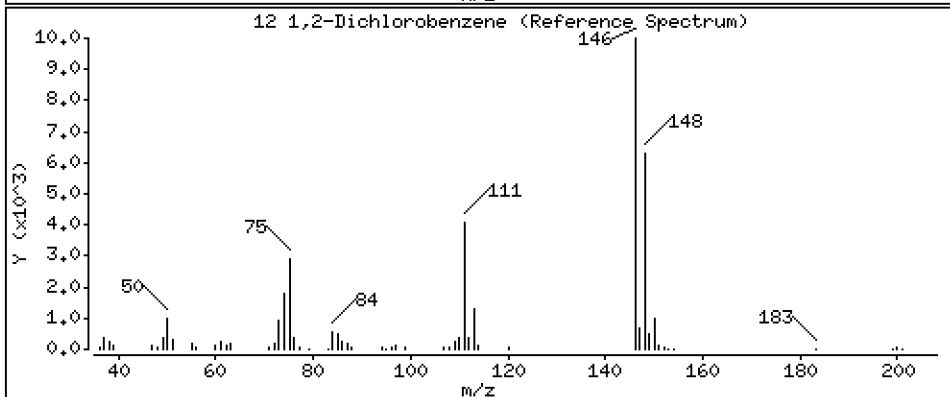
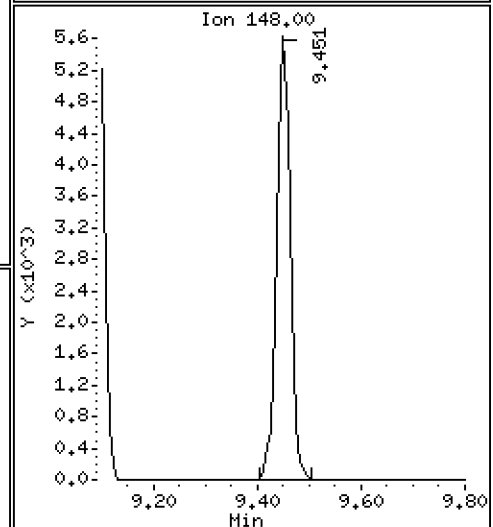
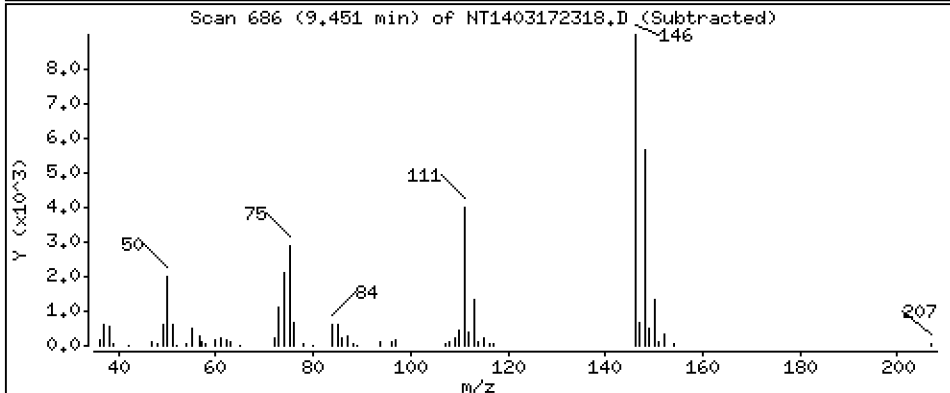
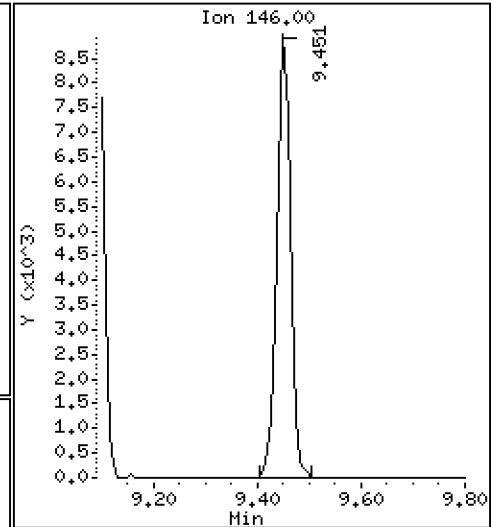
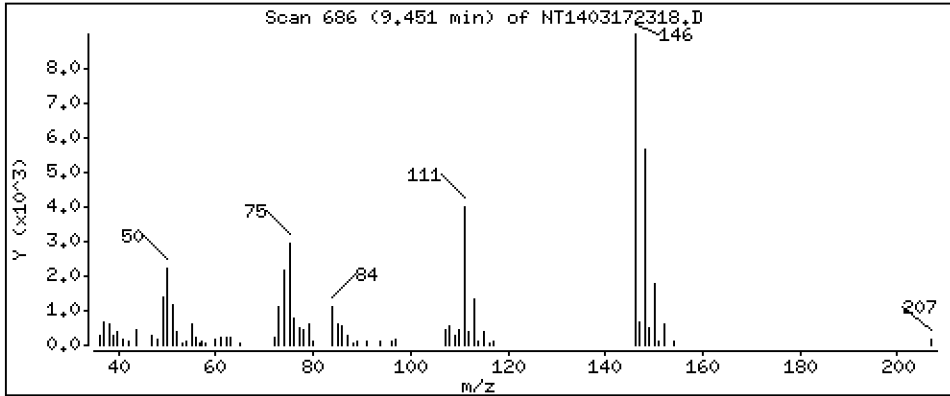
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2094 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

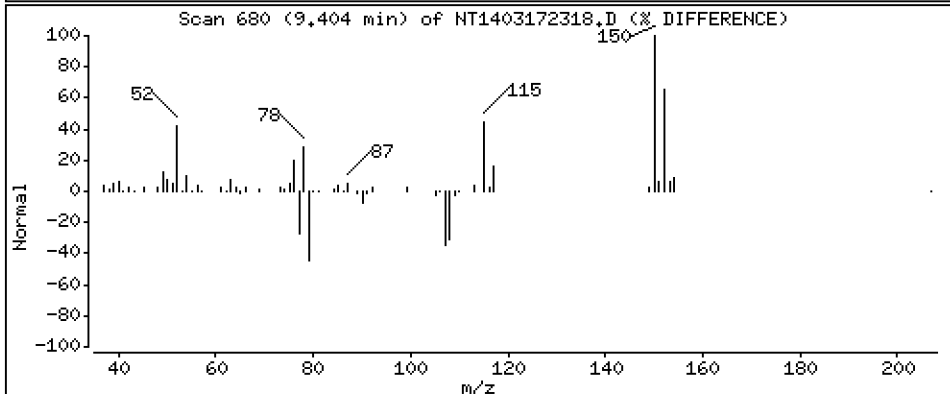
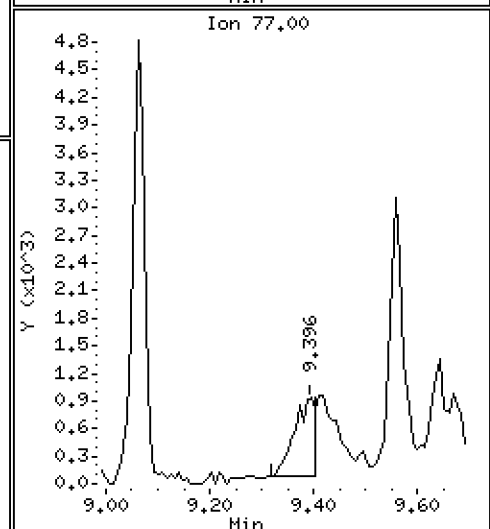
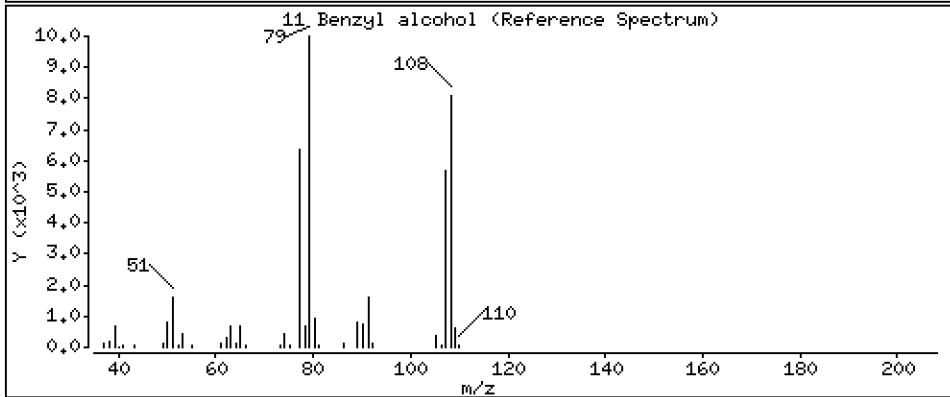
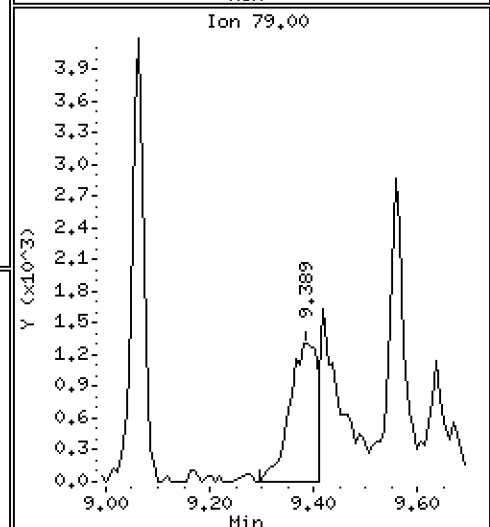
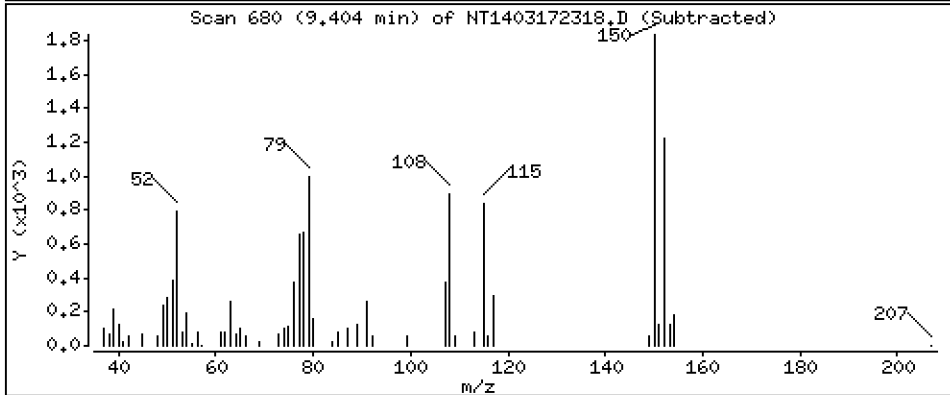
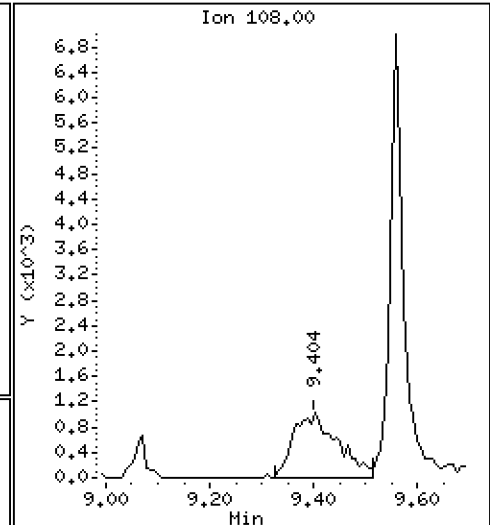
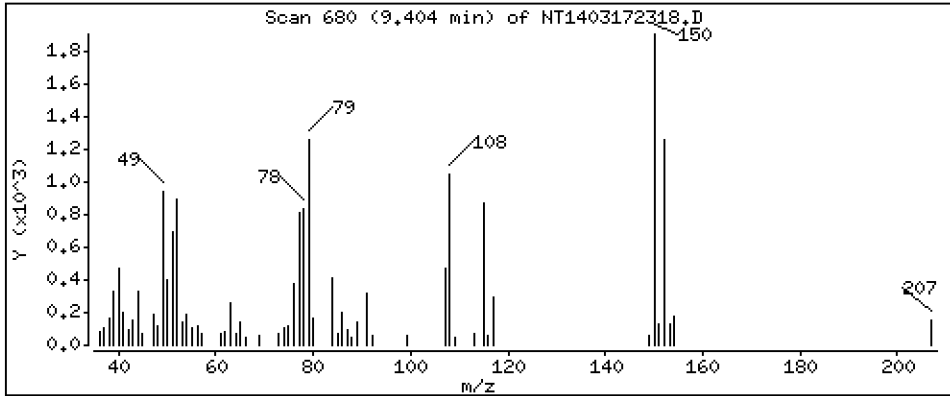
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1341 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

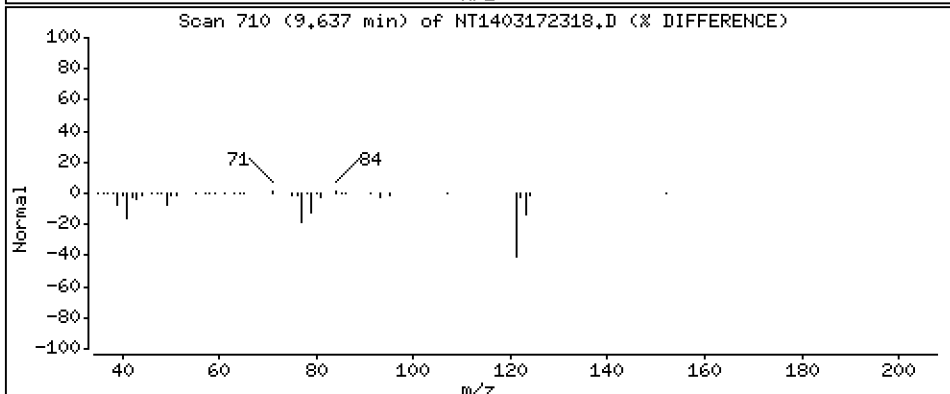
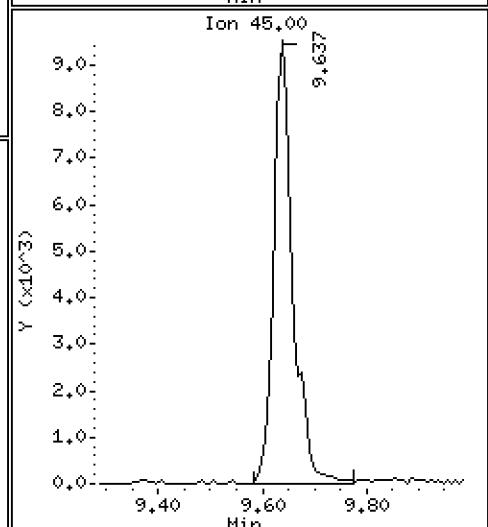
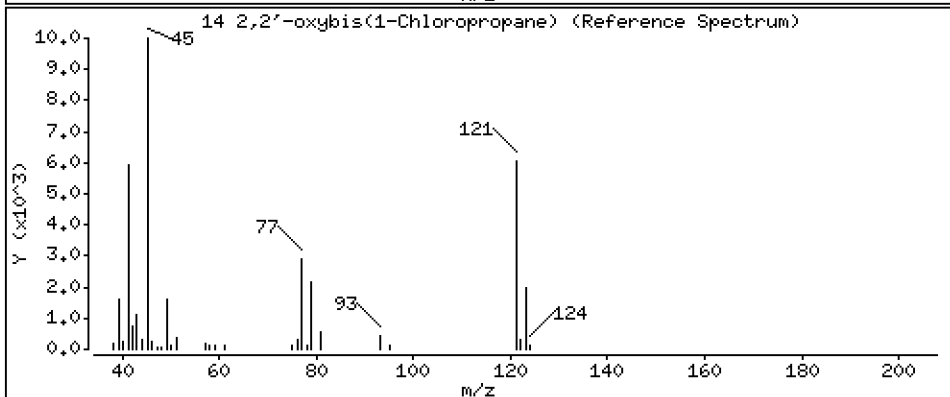
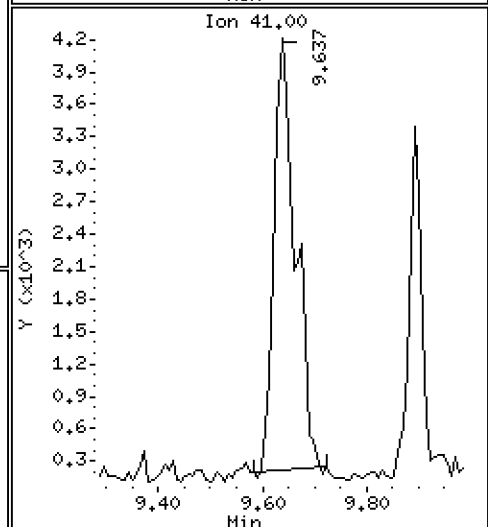
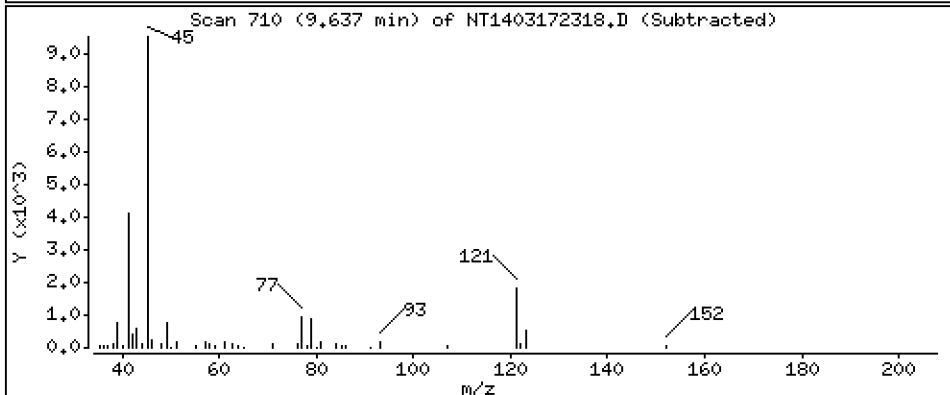
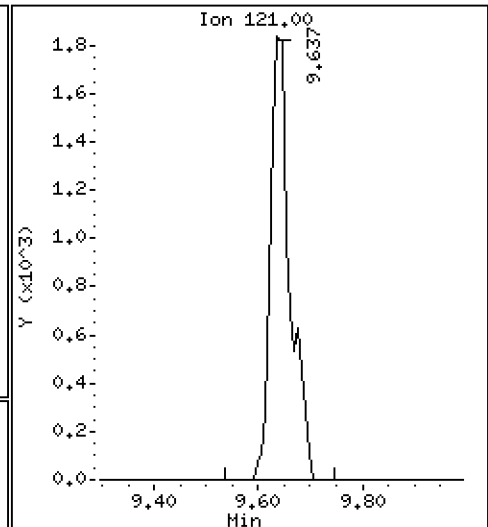
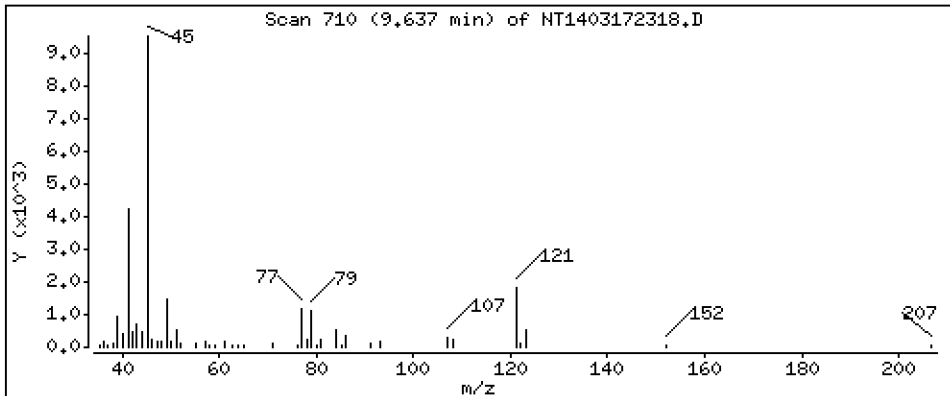
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2112 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

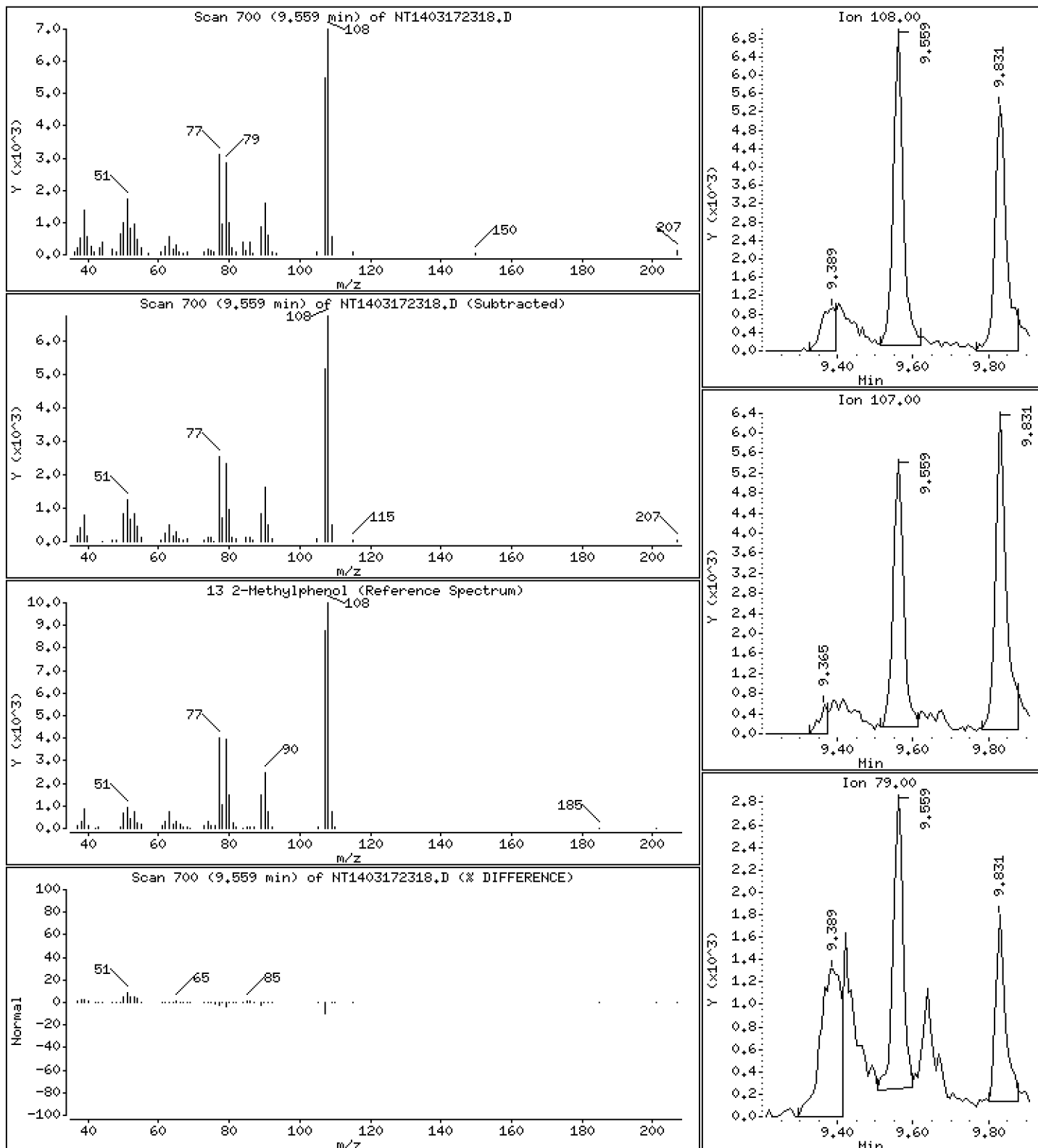
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1749 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

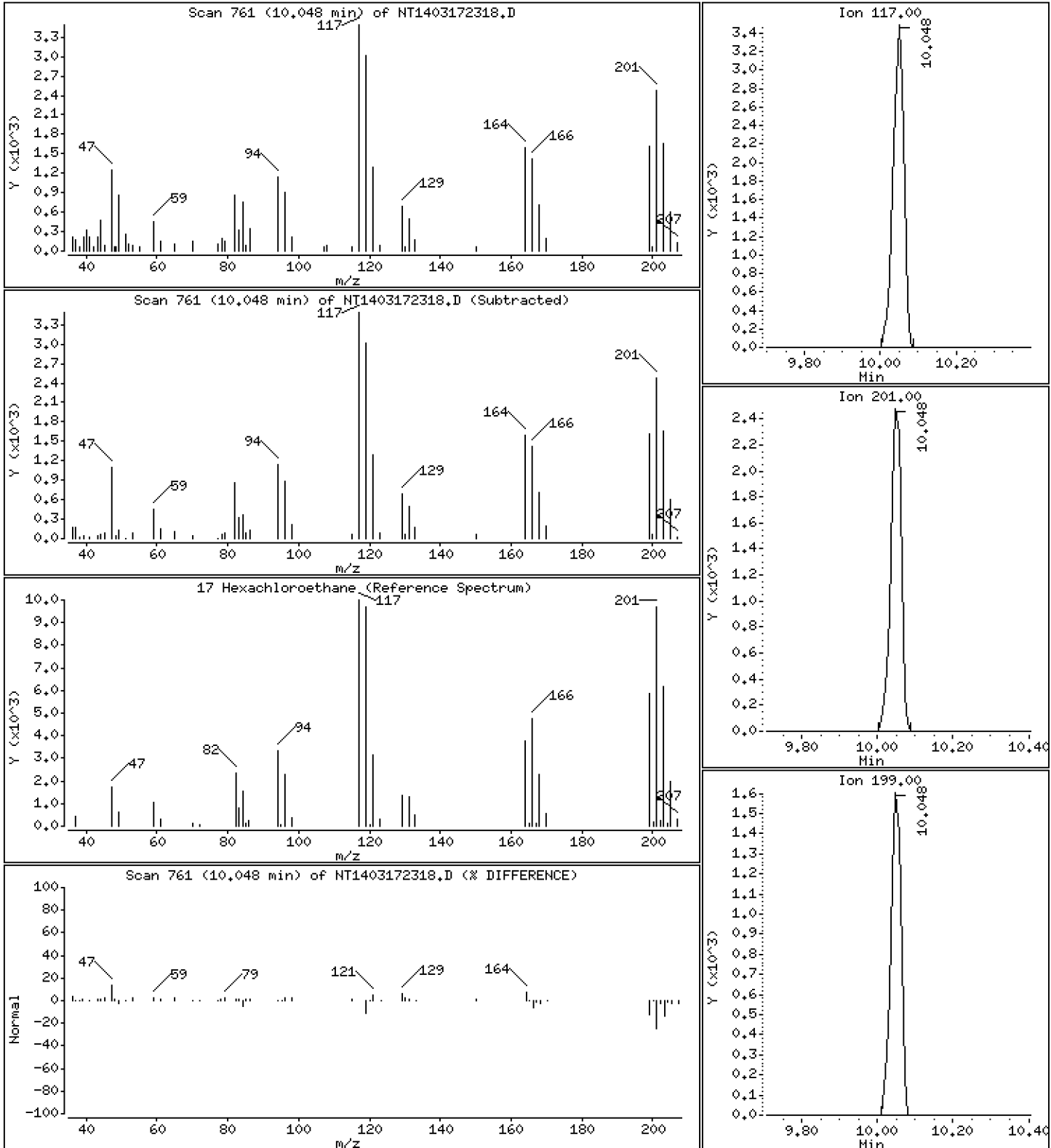
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,2068 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

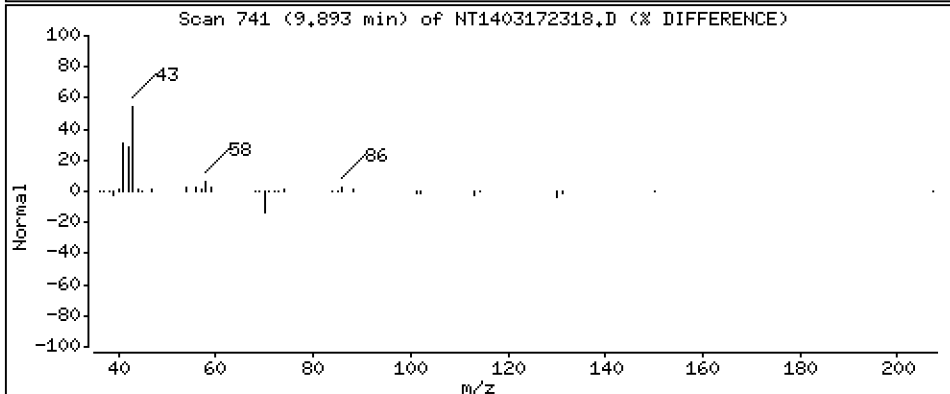
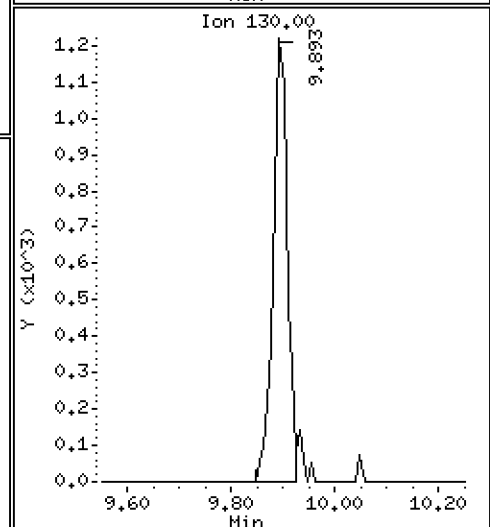
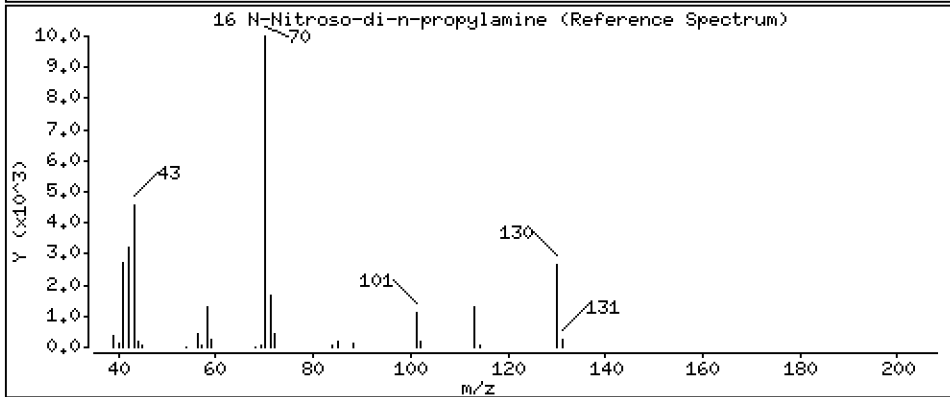
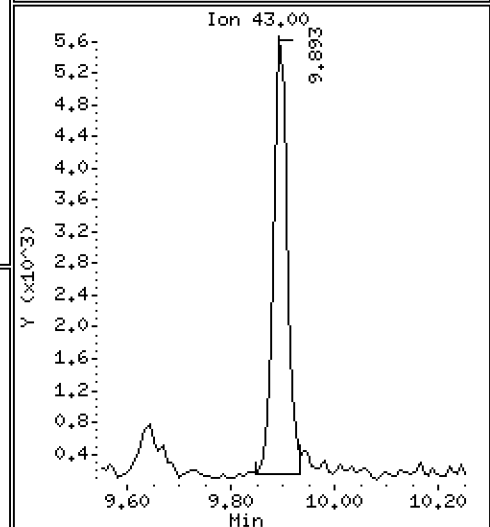
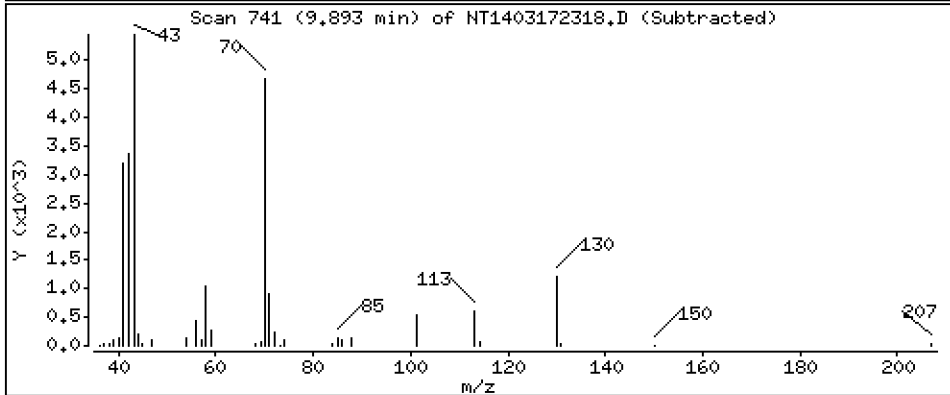
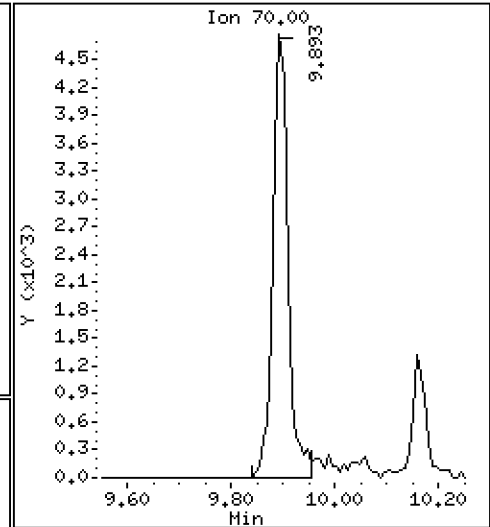
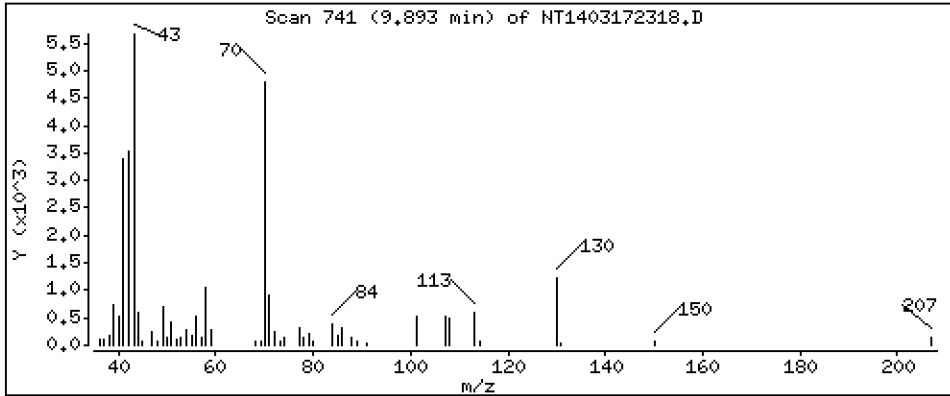
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.1717 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

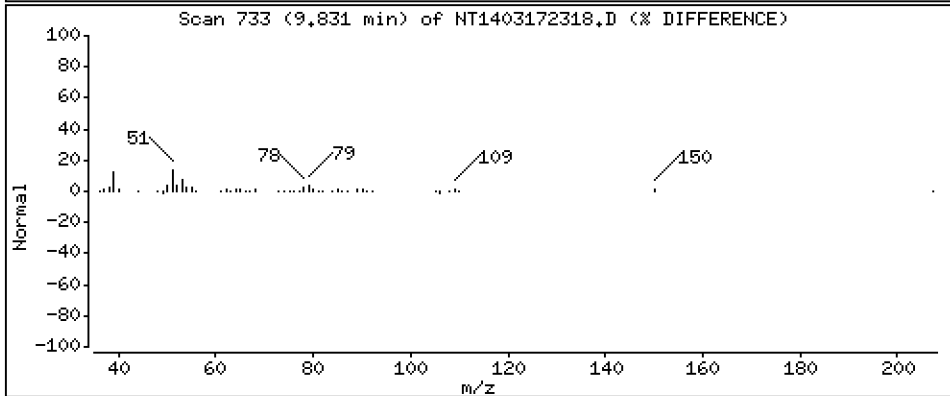
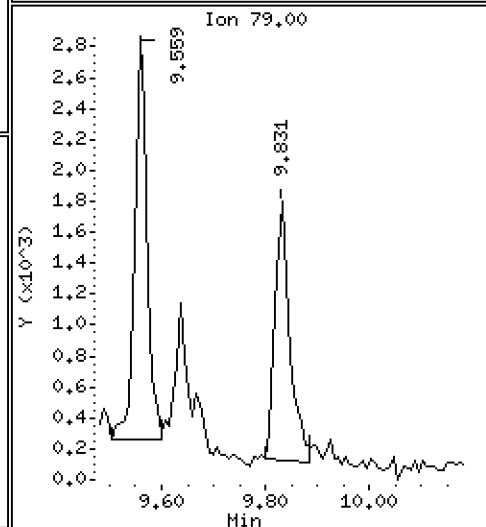
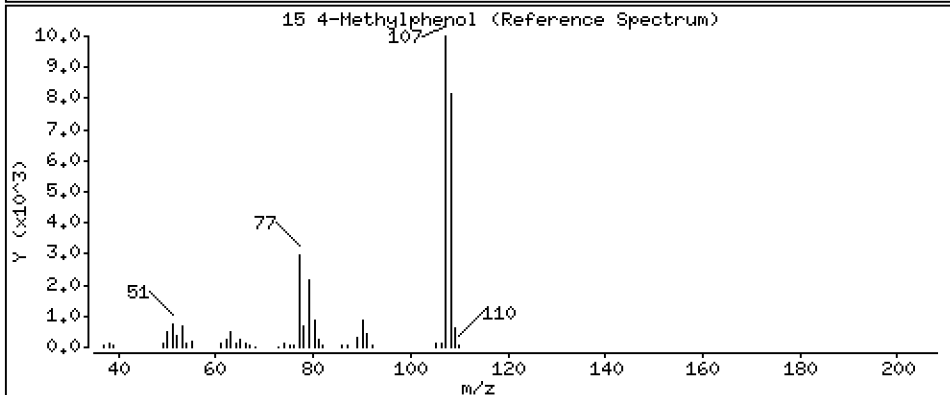
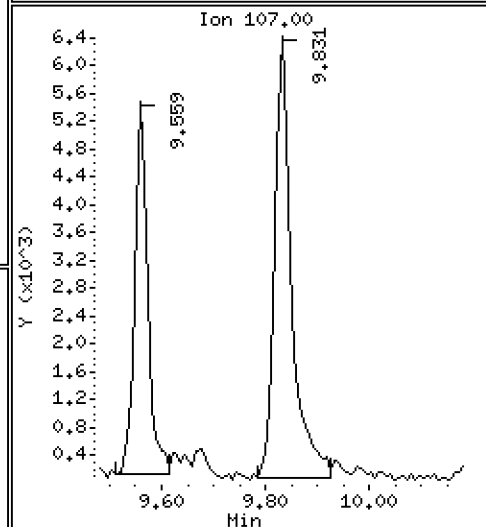
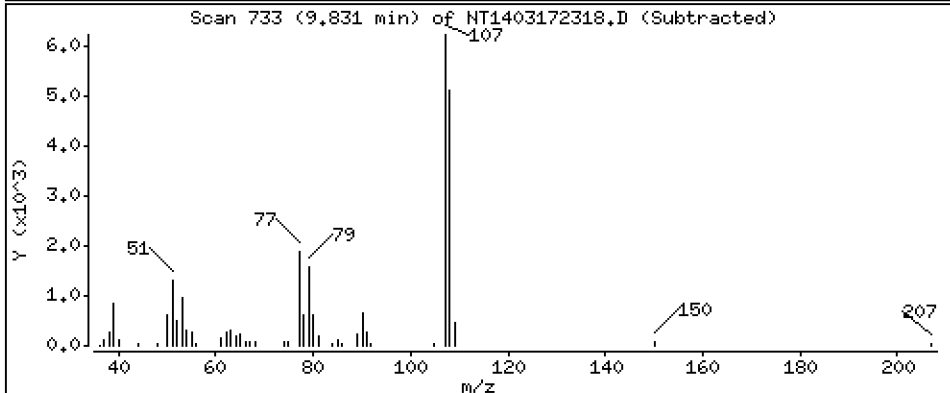
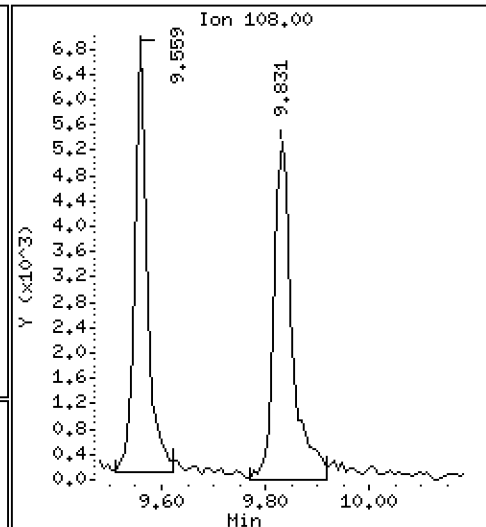
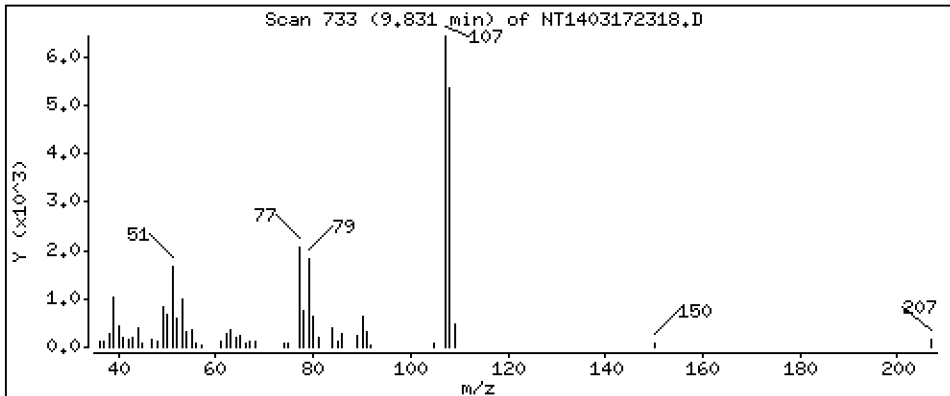
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1578 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

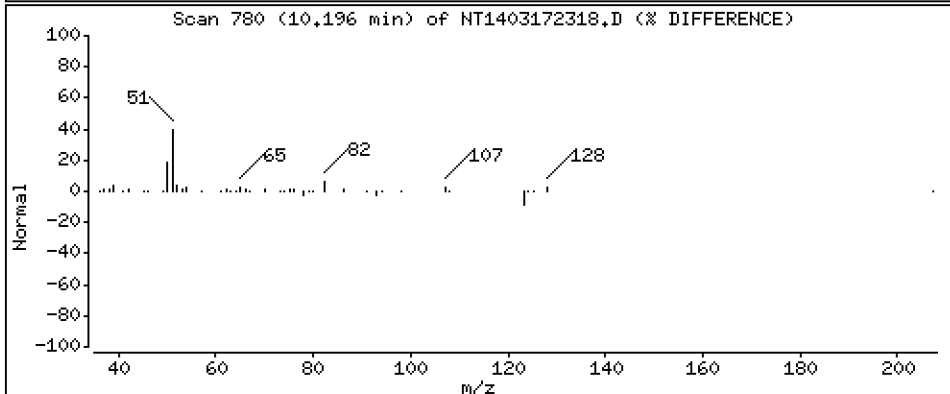
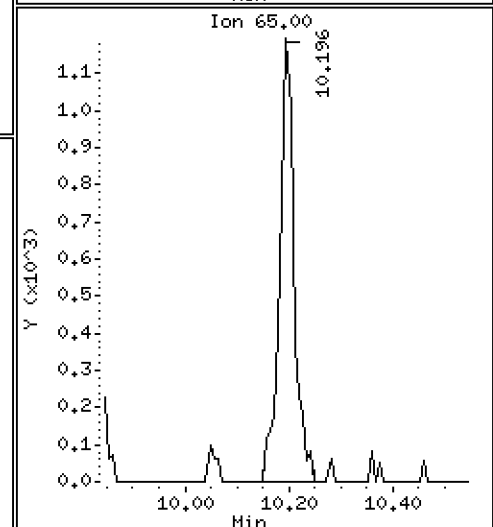
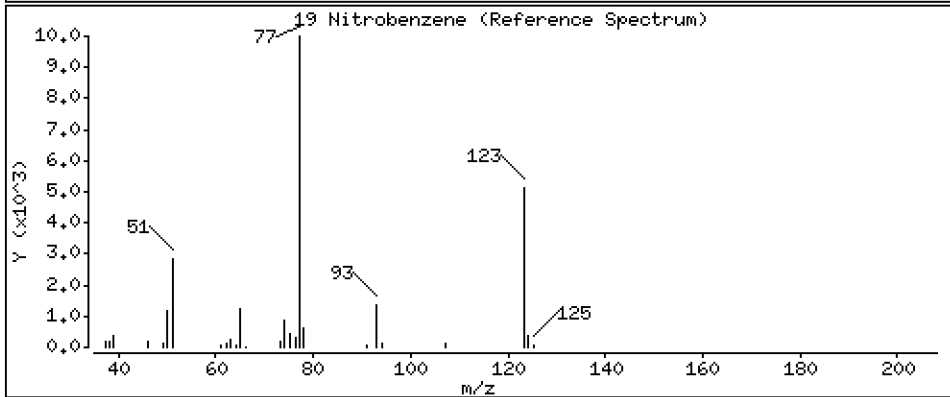
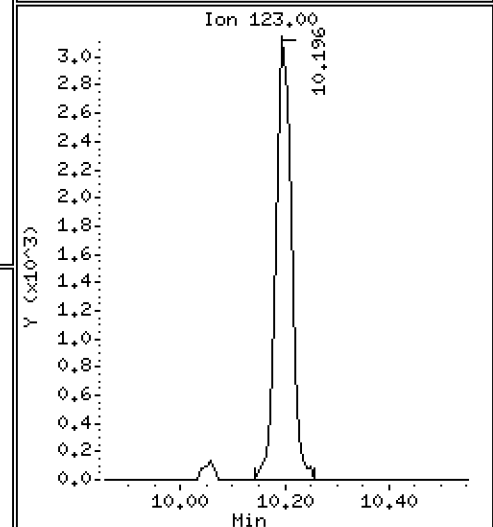
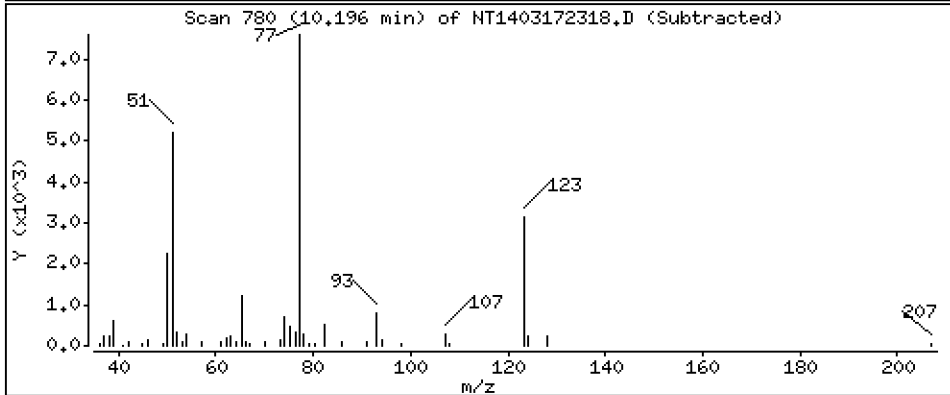
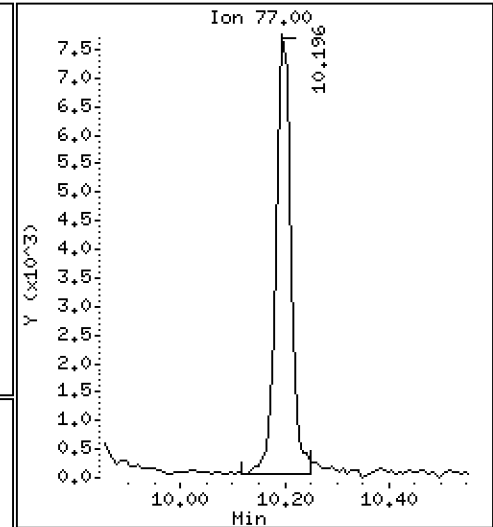
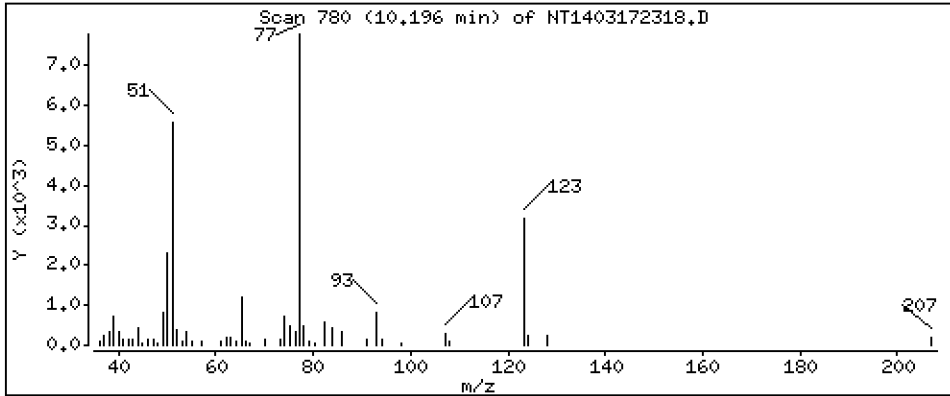
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,1856 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

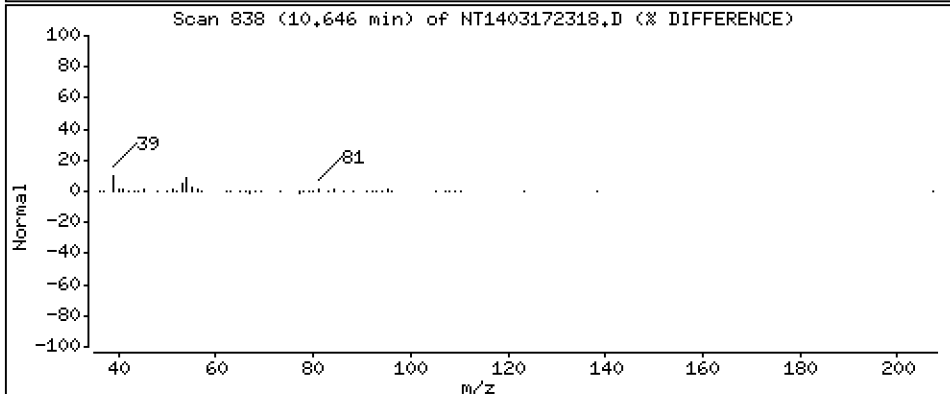
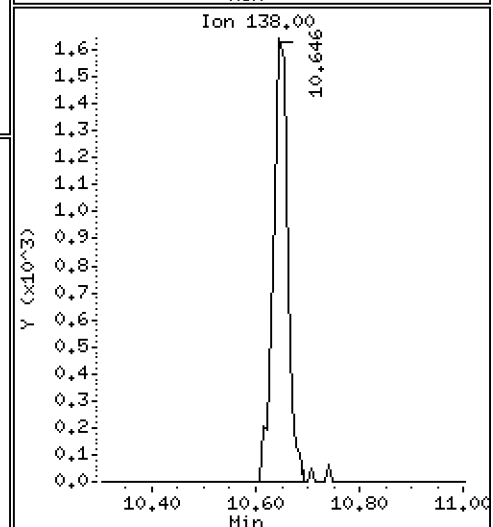
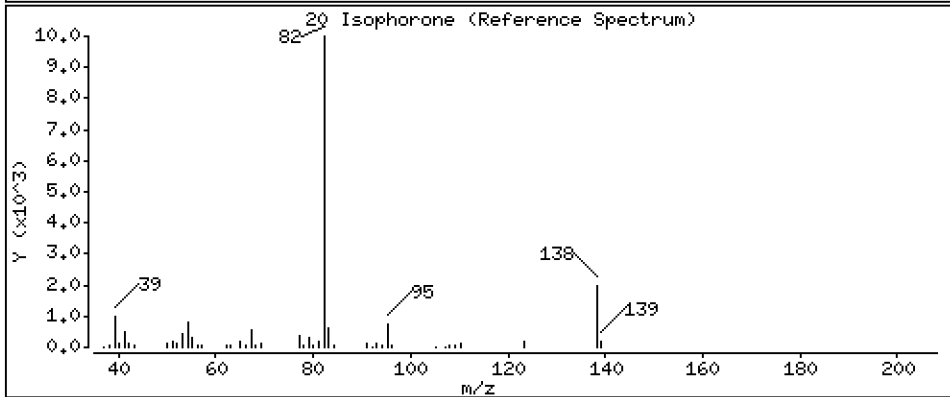
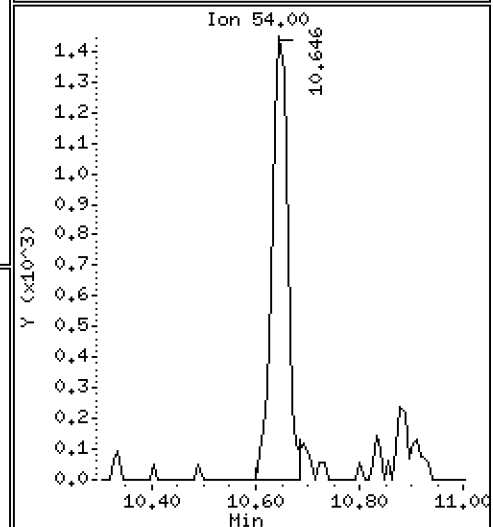
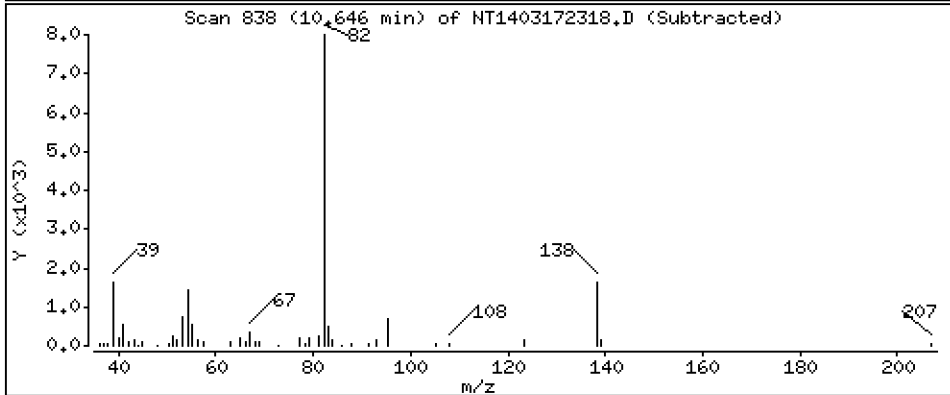
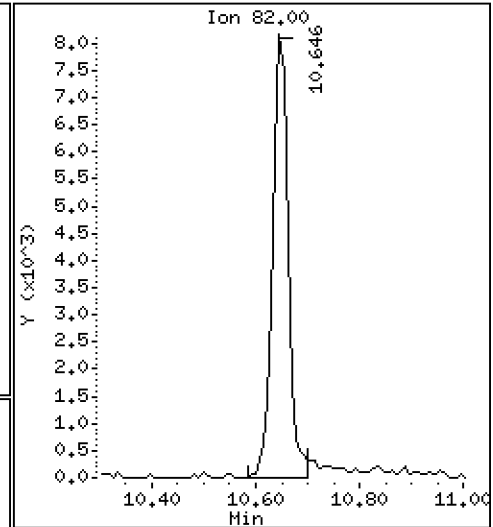
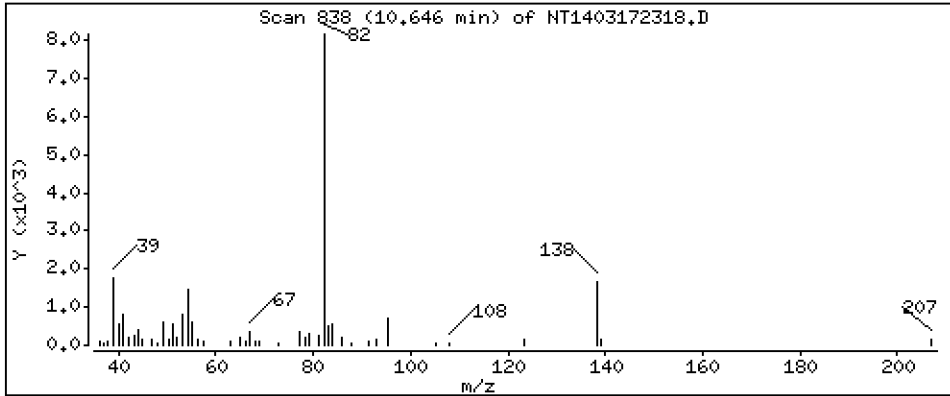
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1499 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

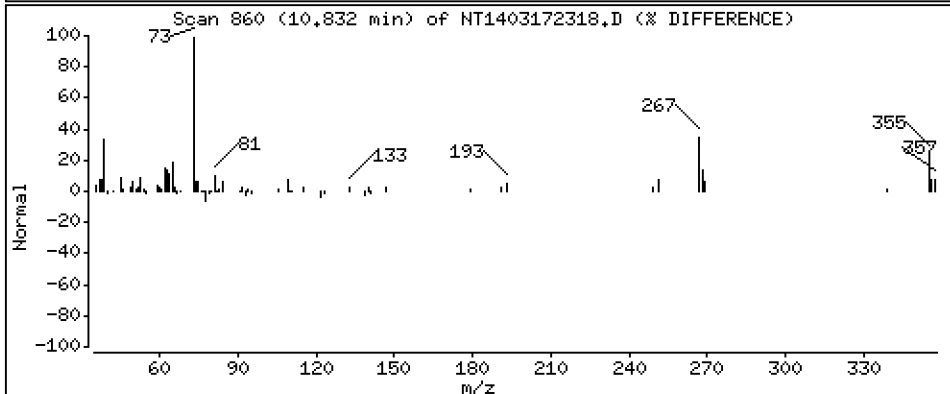
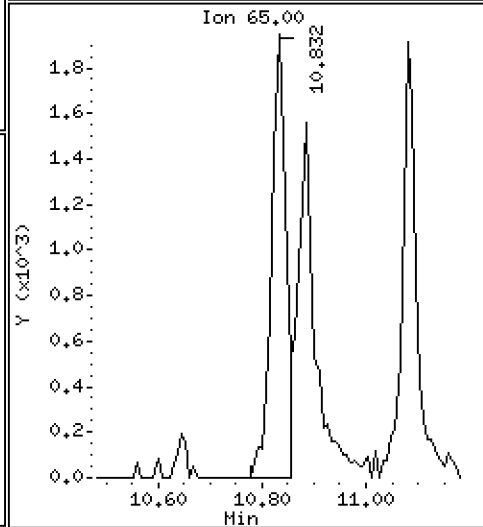
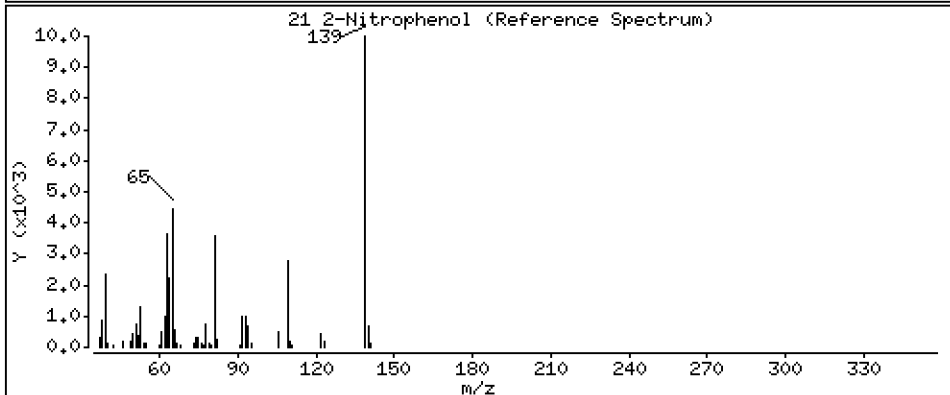
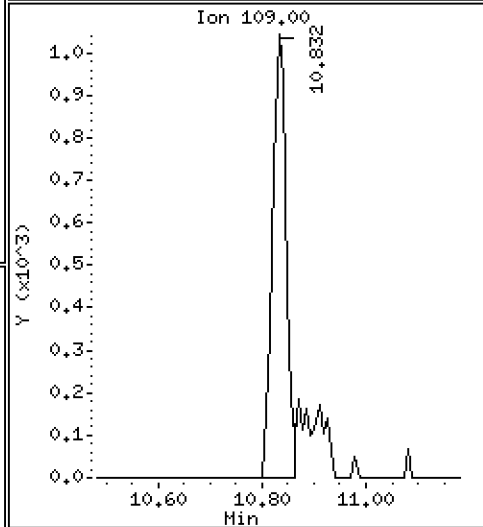
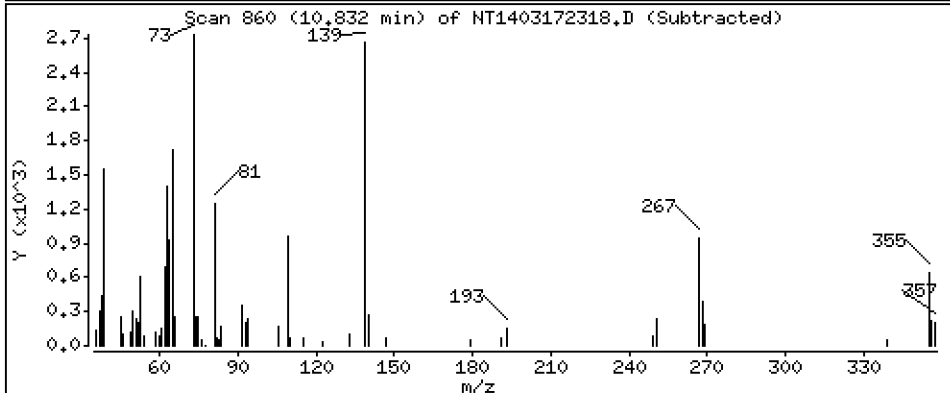
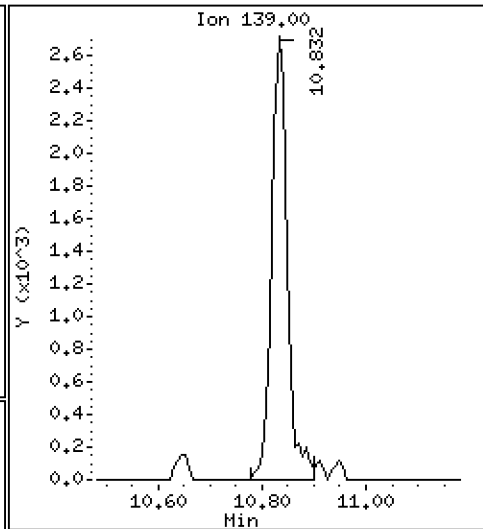
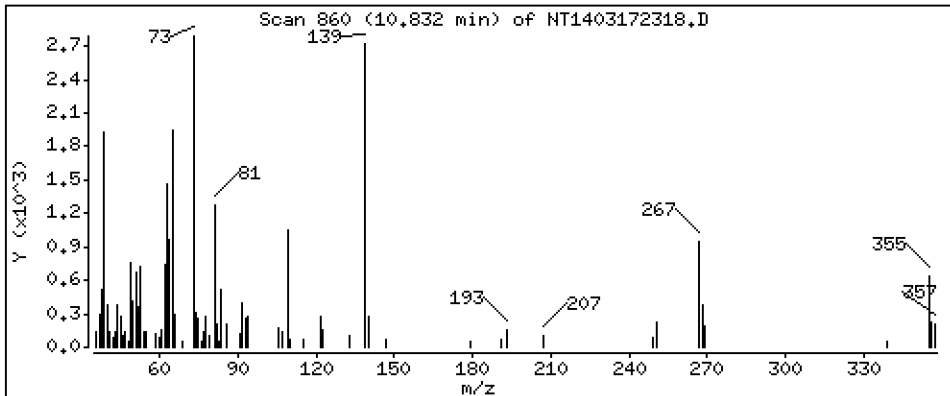
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1226 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

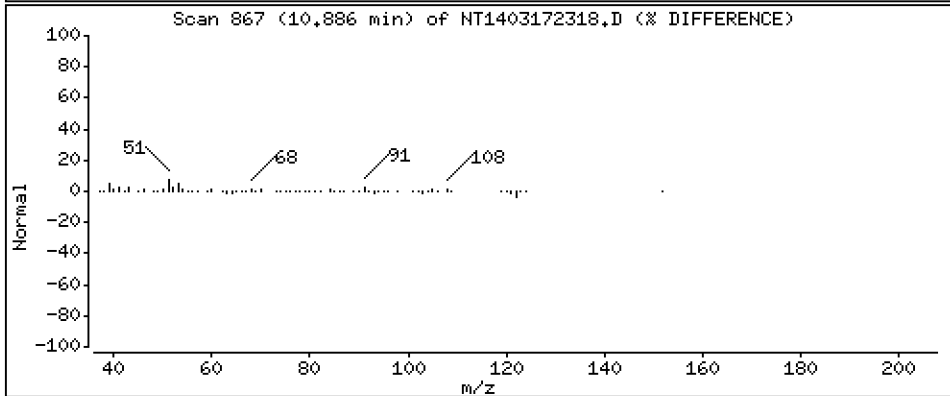
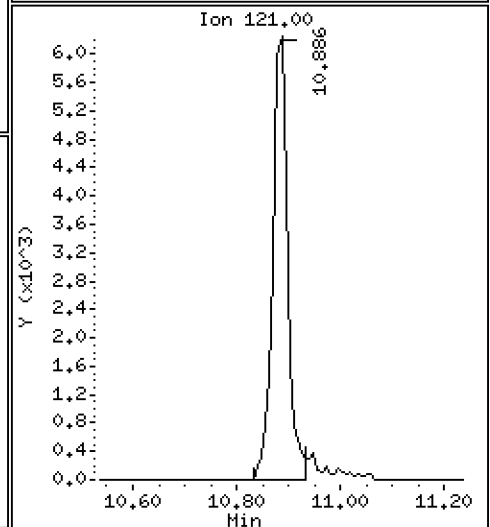
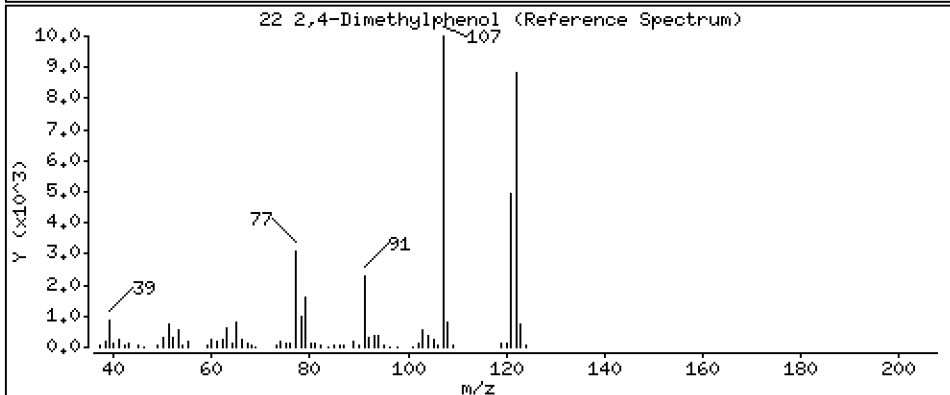
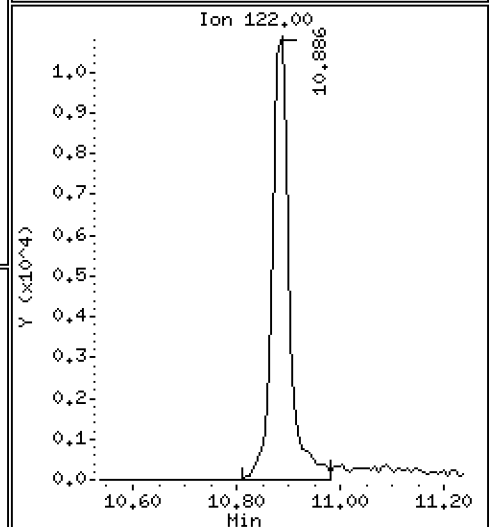
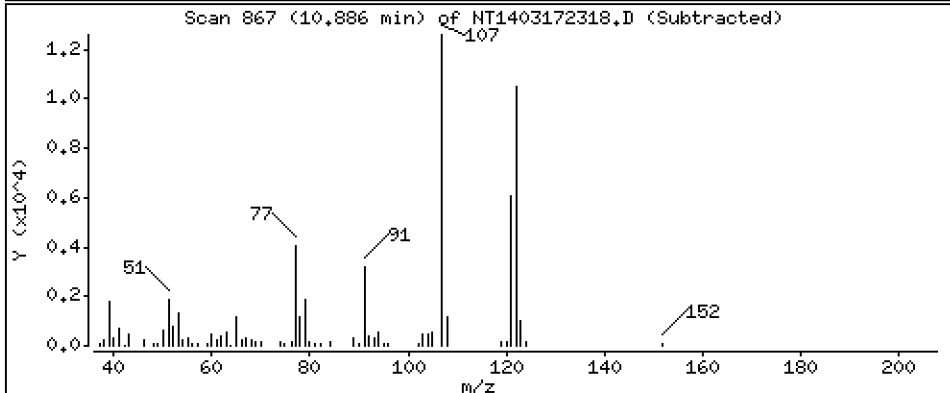
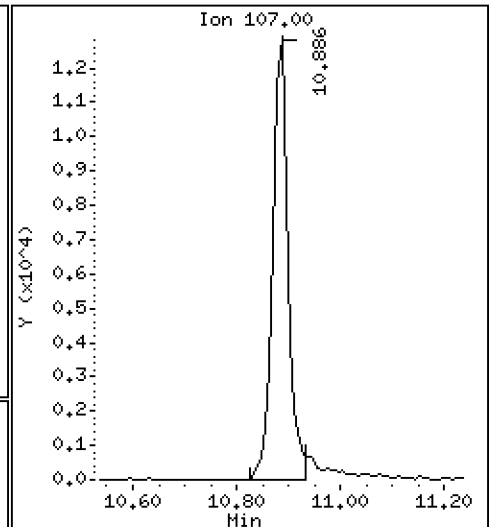
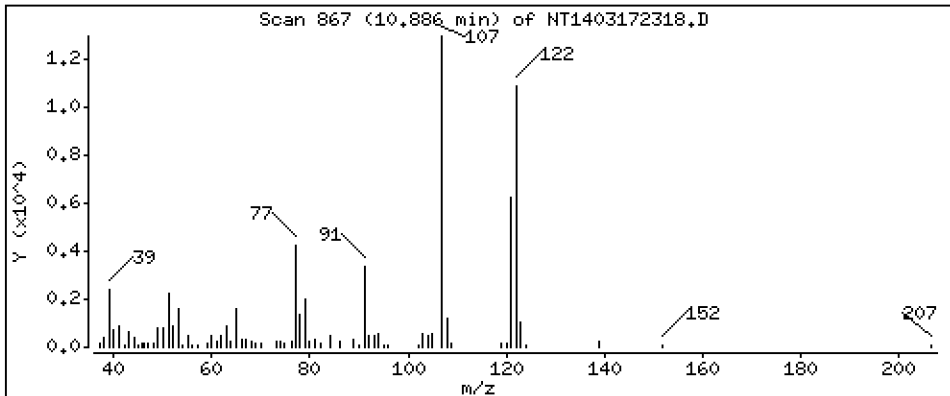
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3712 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

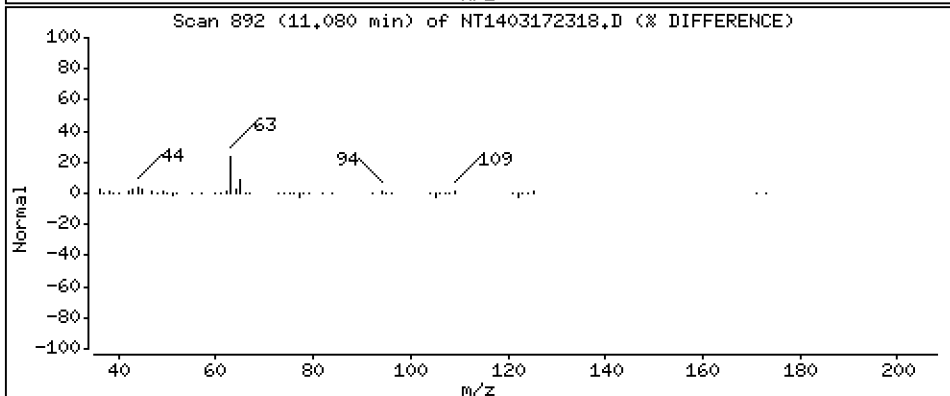
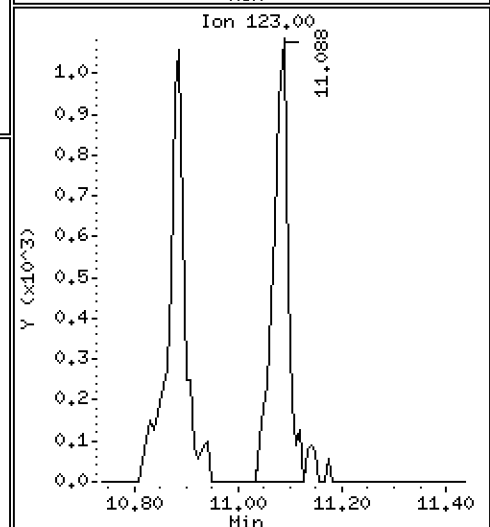
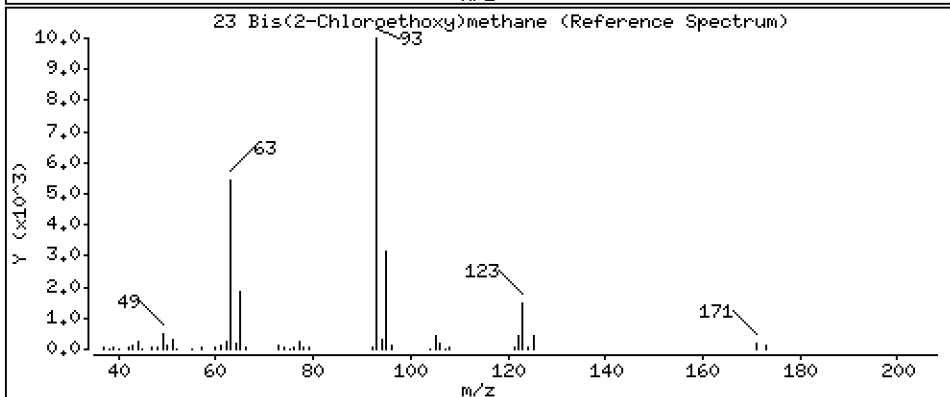
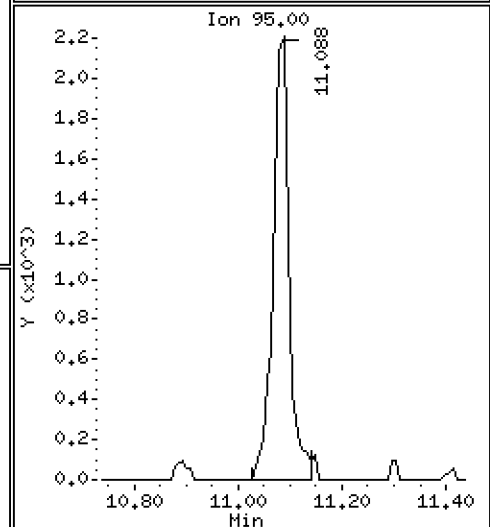
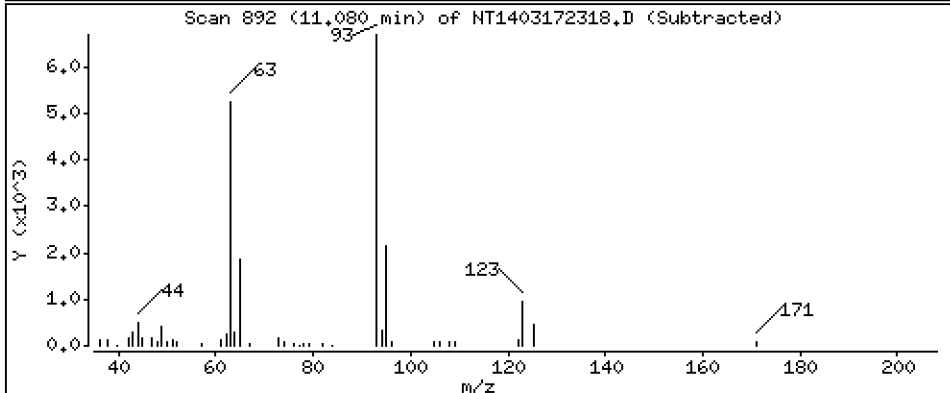
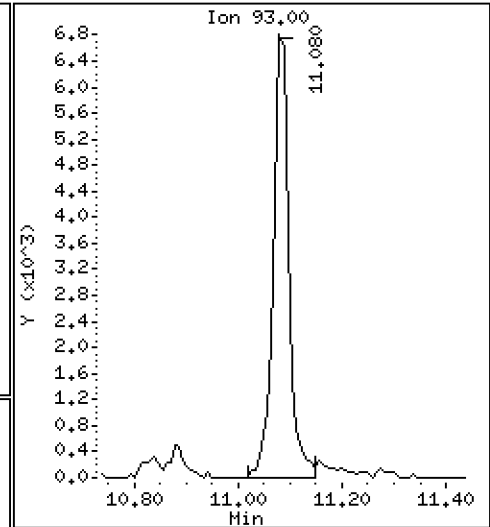
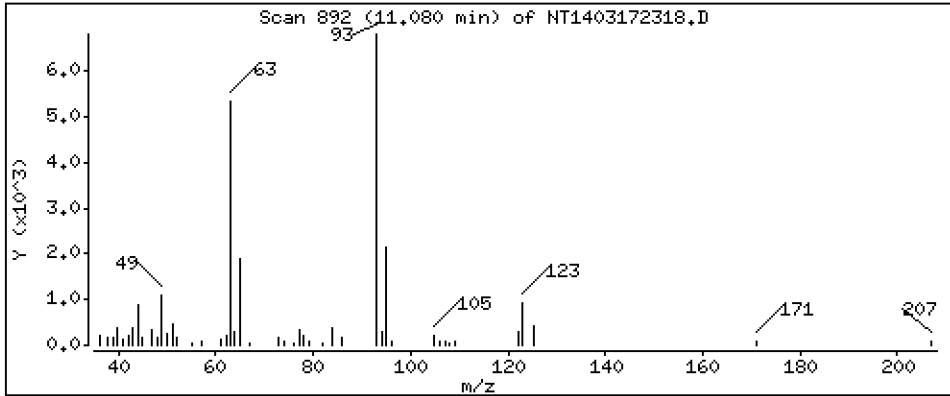
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

23 Bis(2-Chloroethoxy)methane

Concentration: 0.1857 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

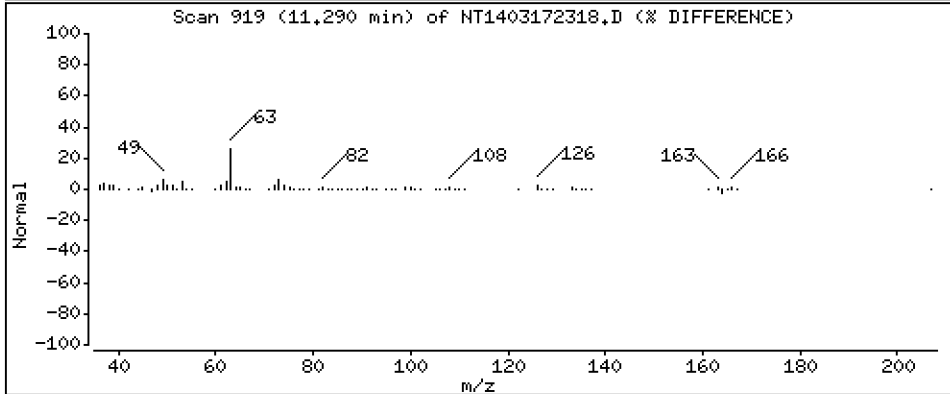
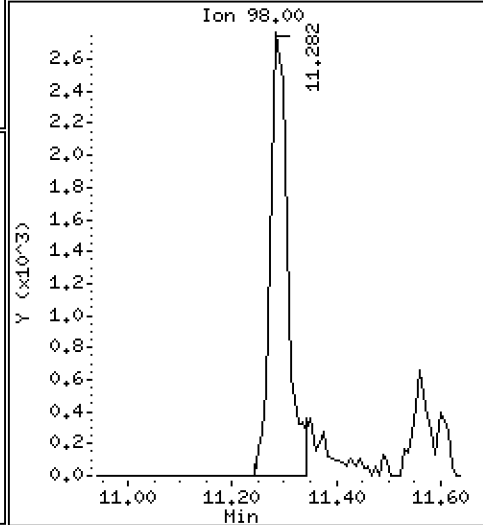
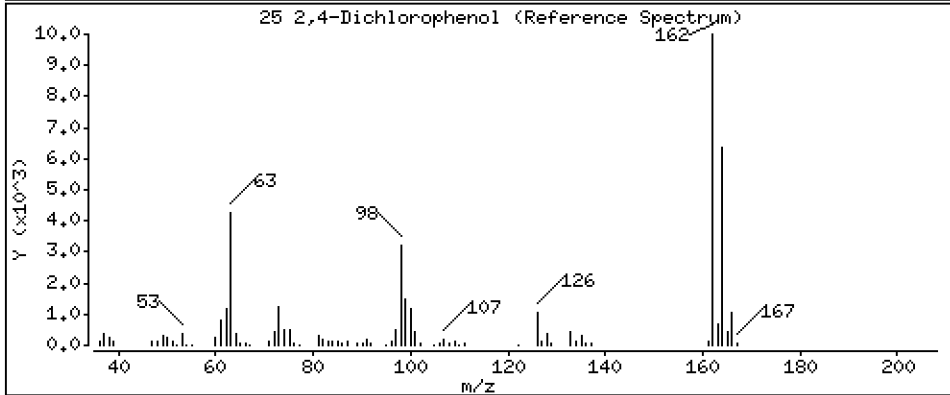
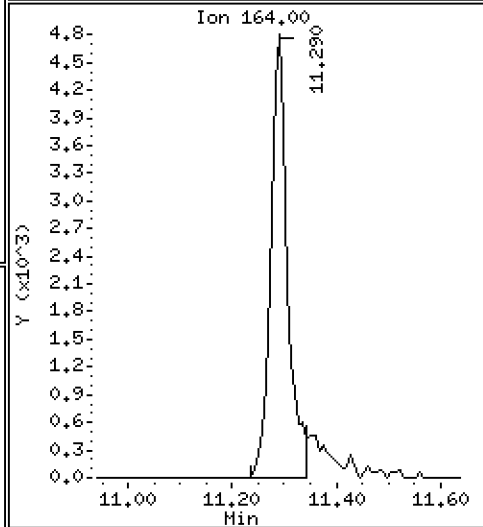
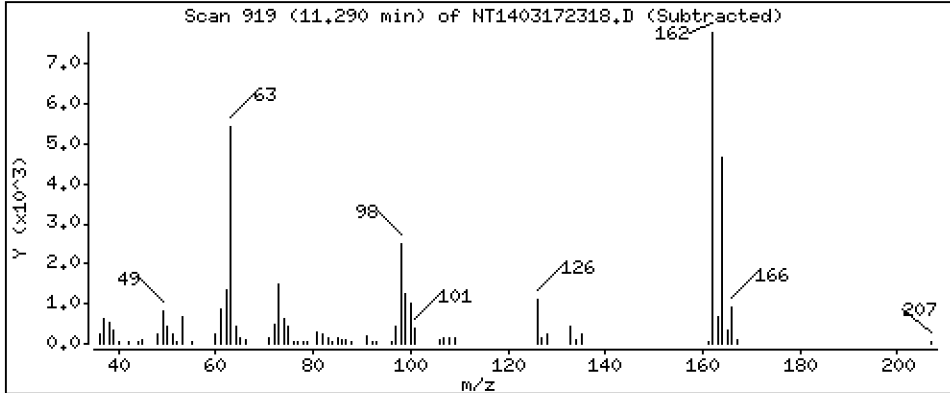
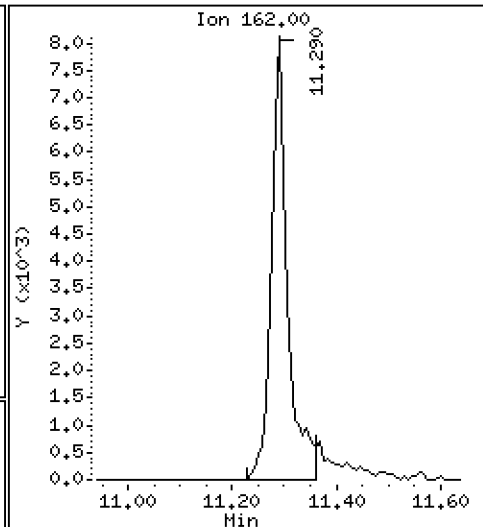
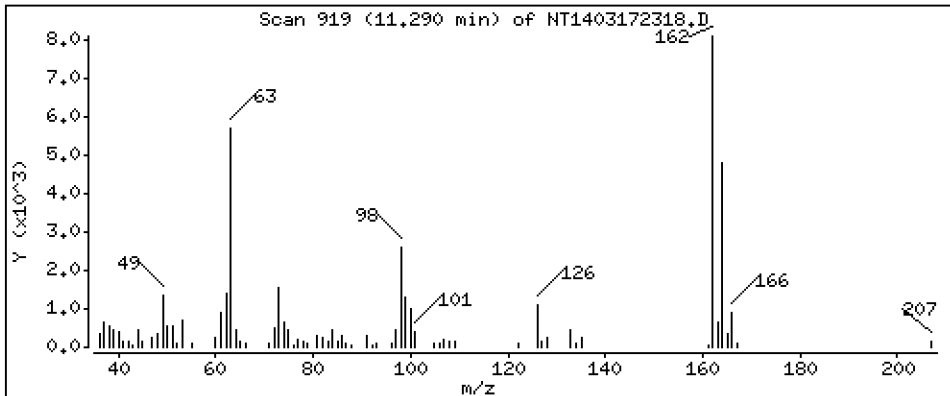
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3147 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

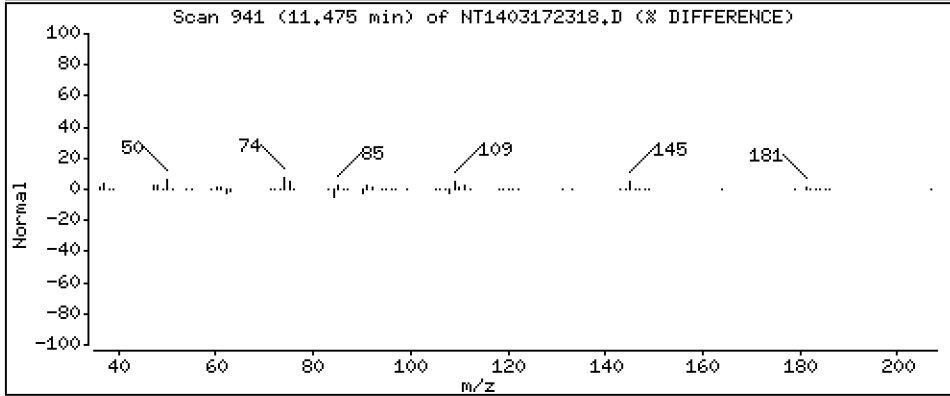
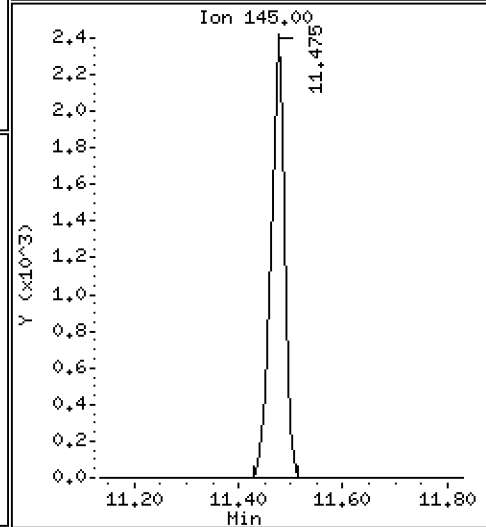
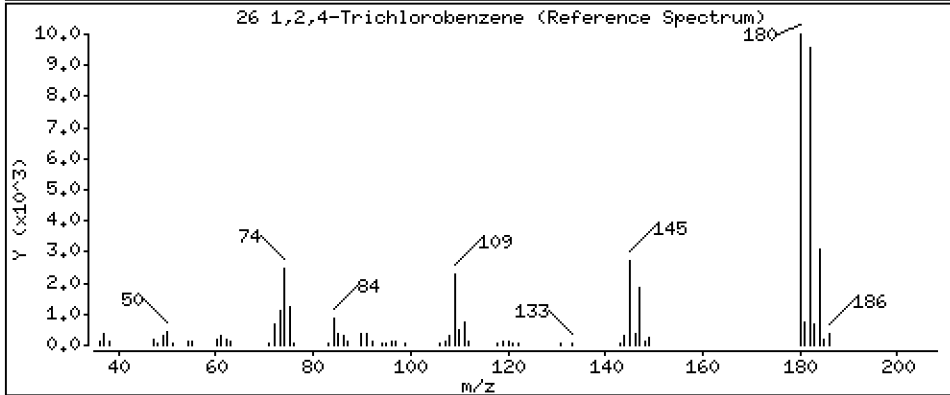
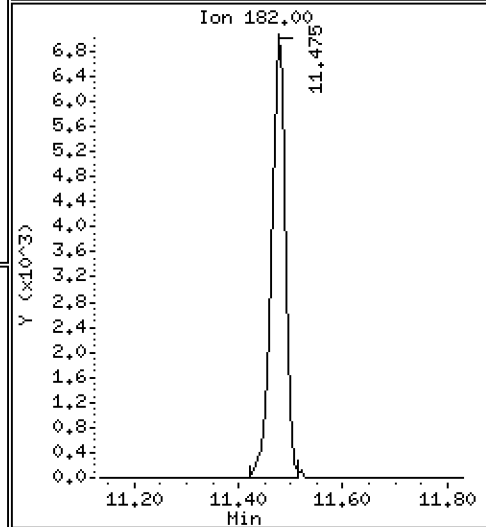
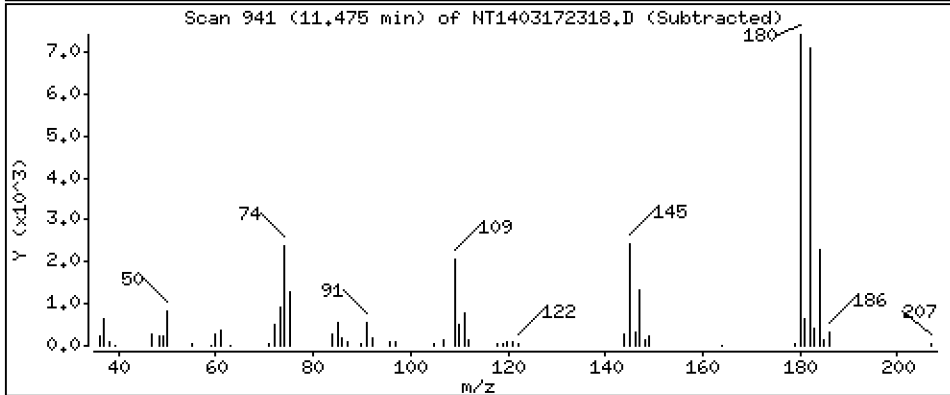
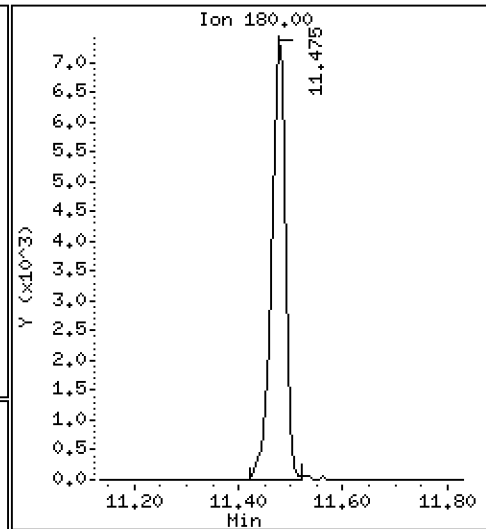
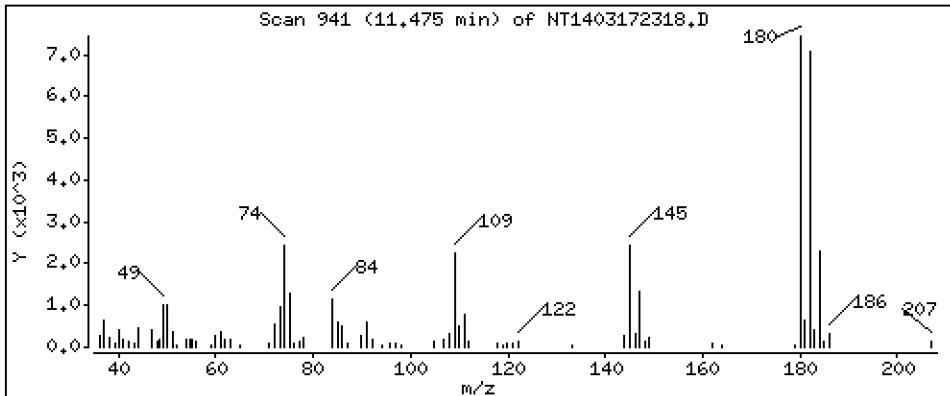
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,1956 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

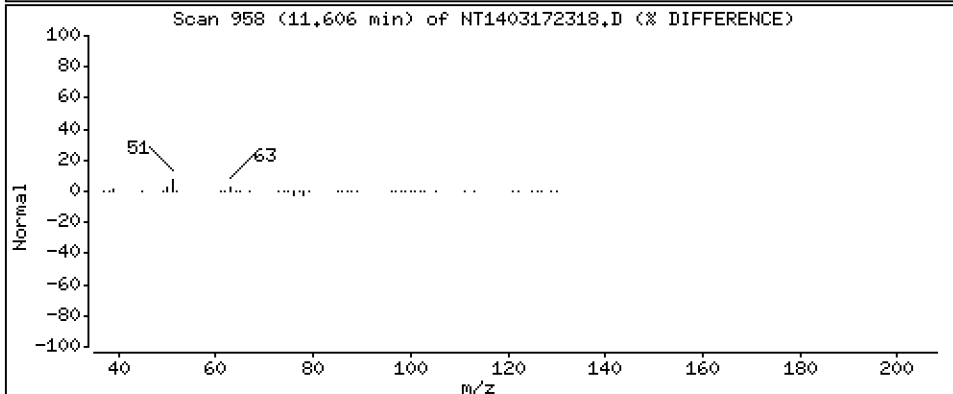
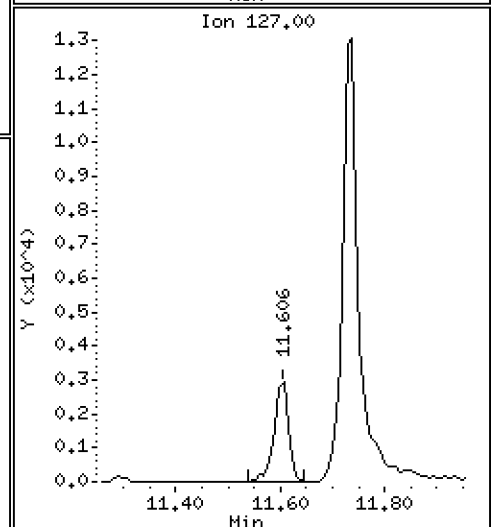
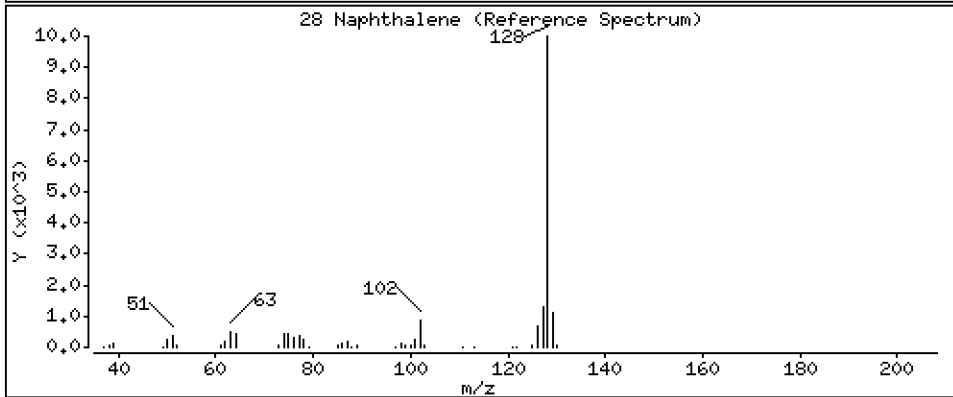
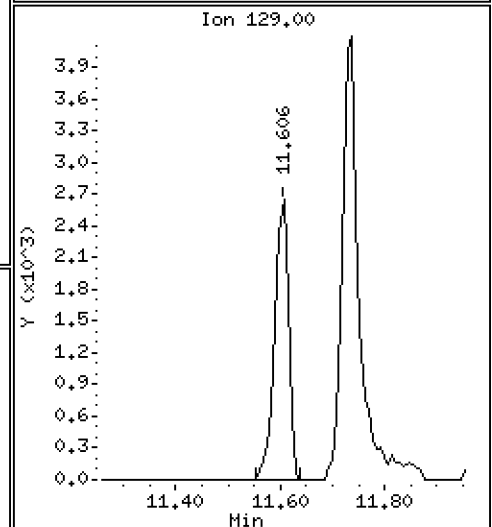
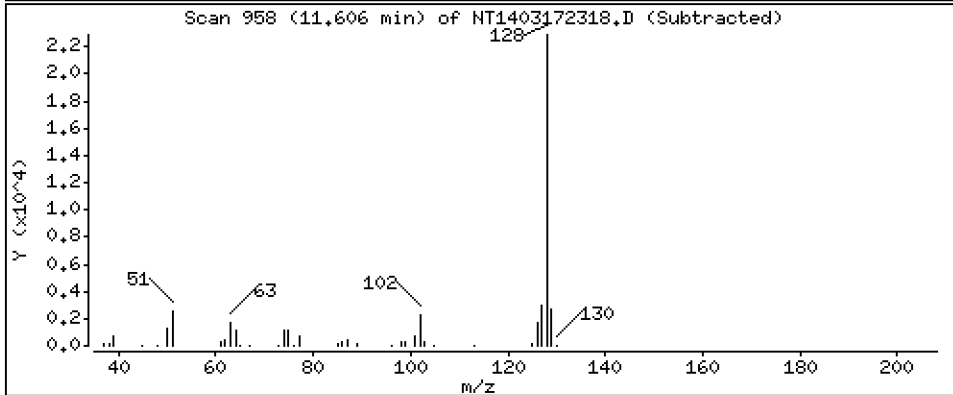
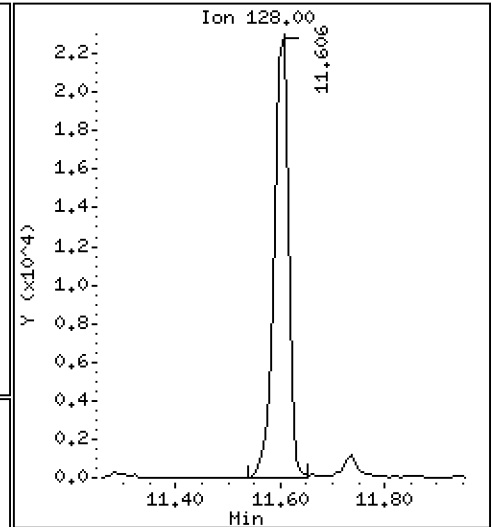
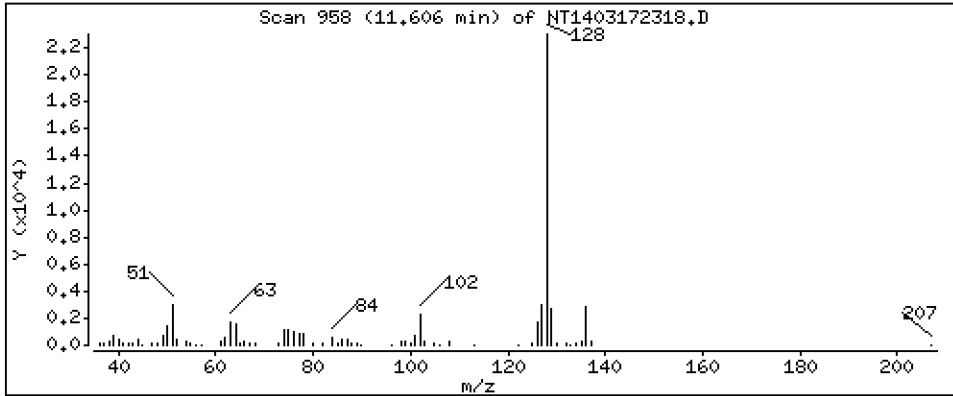
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2019 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

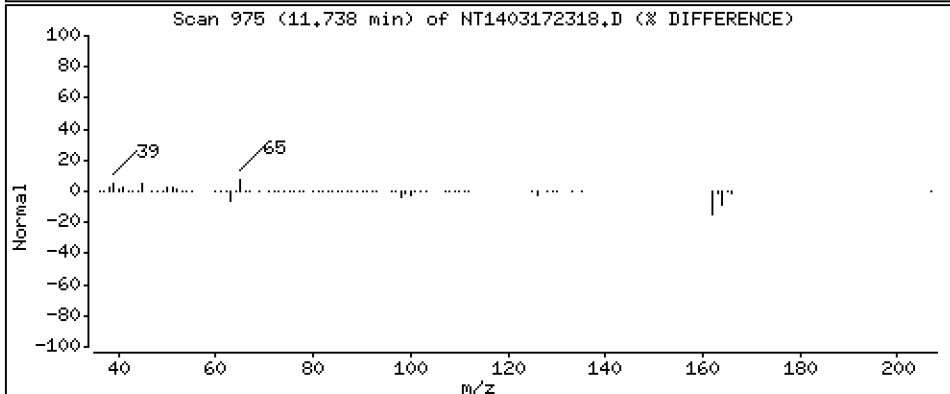
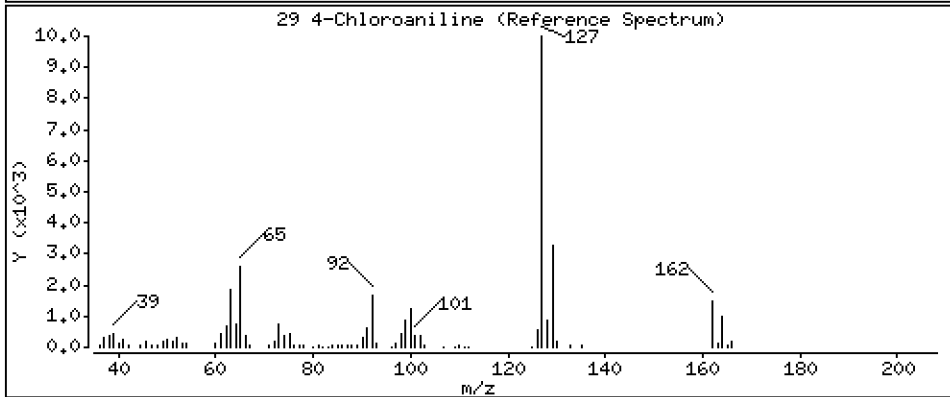
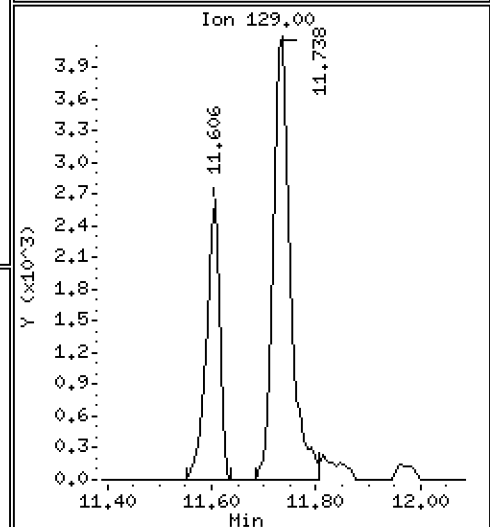
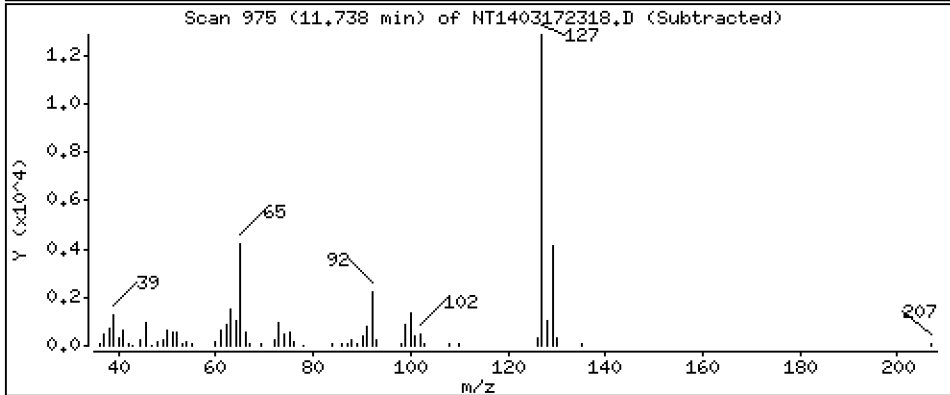
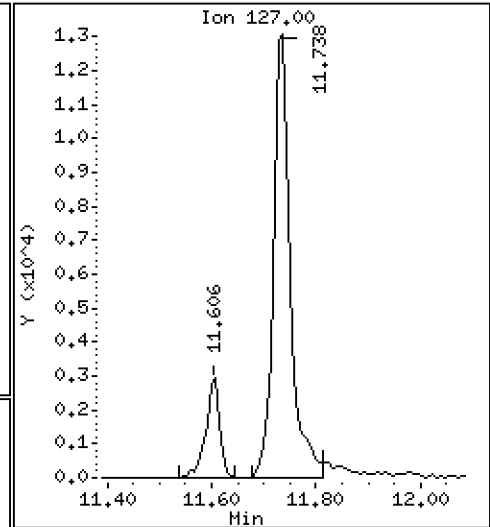
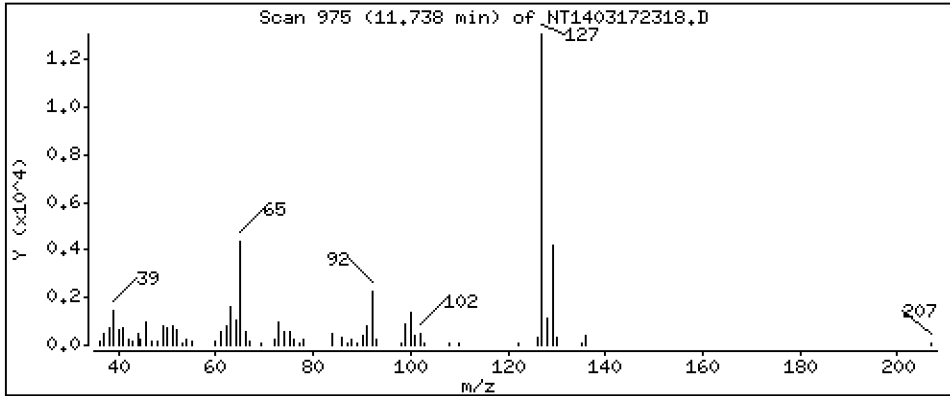
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,3283 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

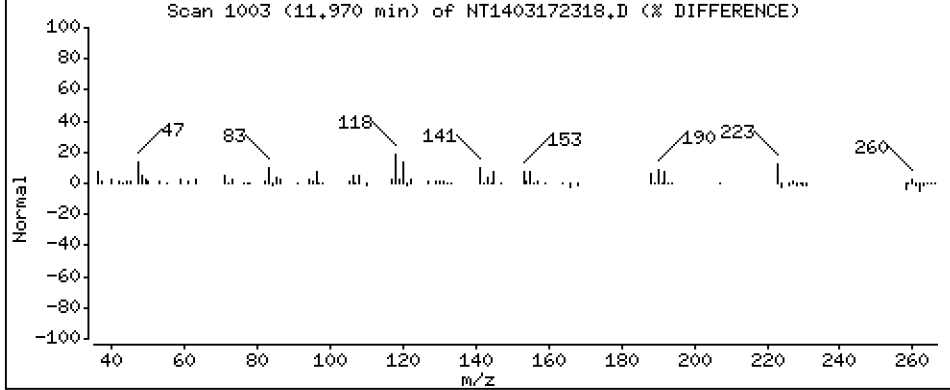
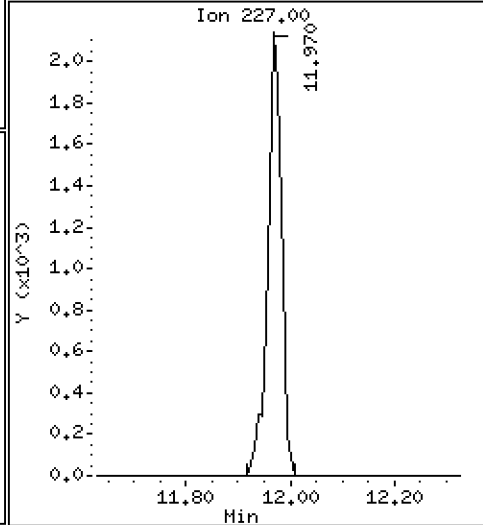
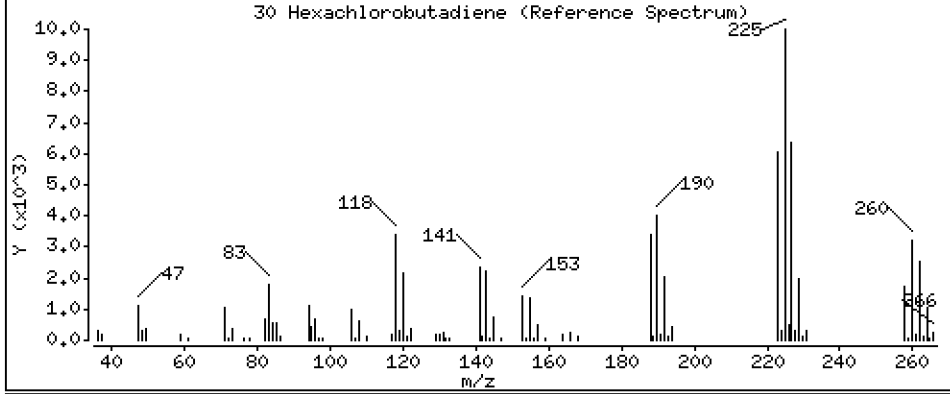
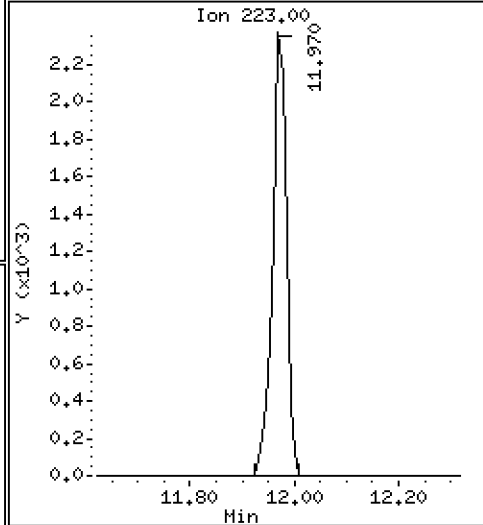
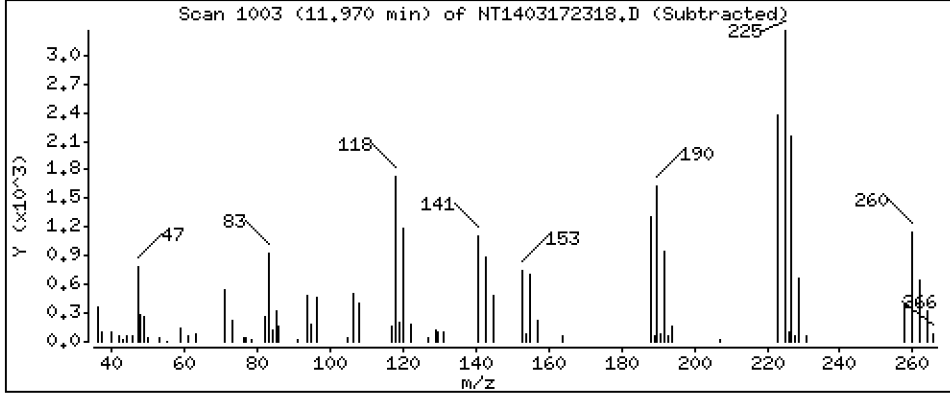
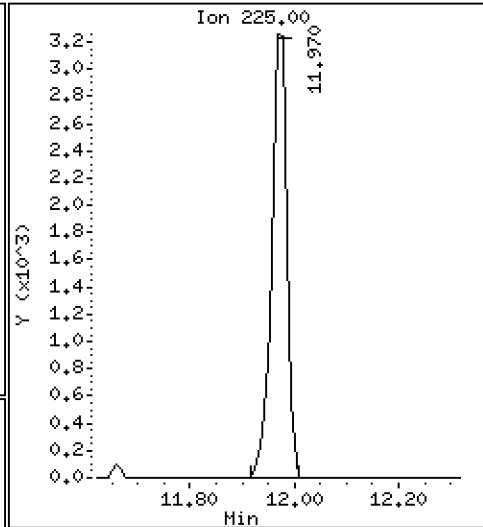
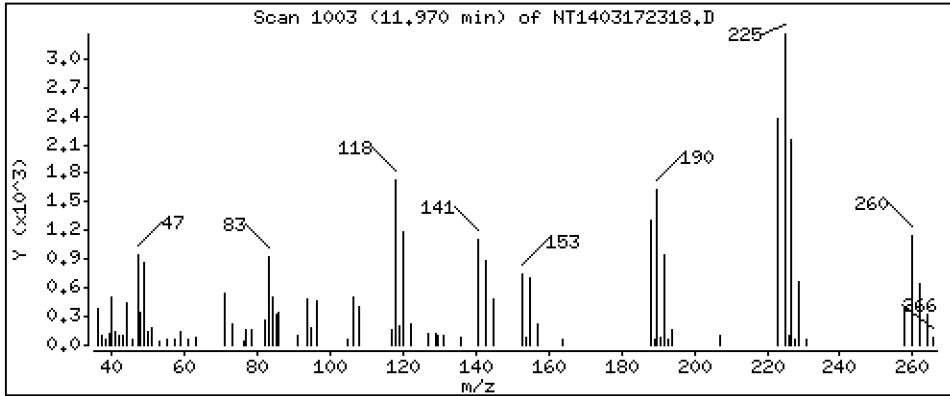
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2090 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

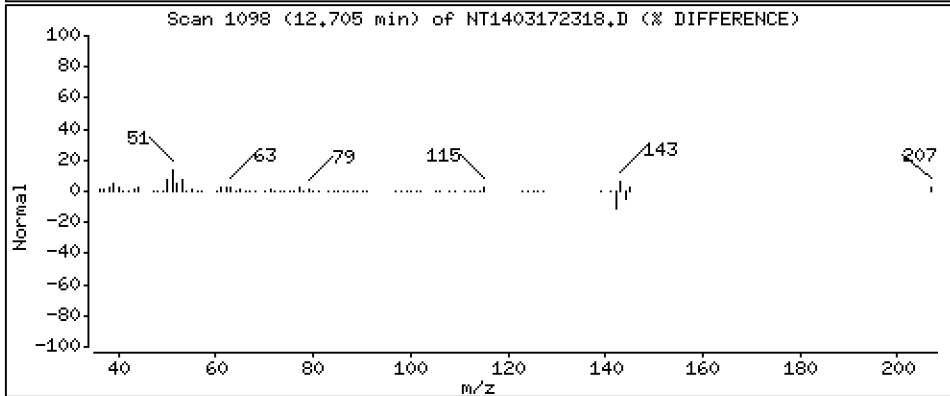
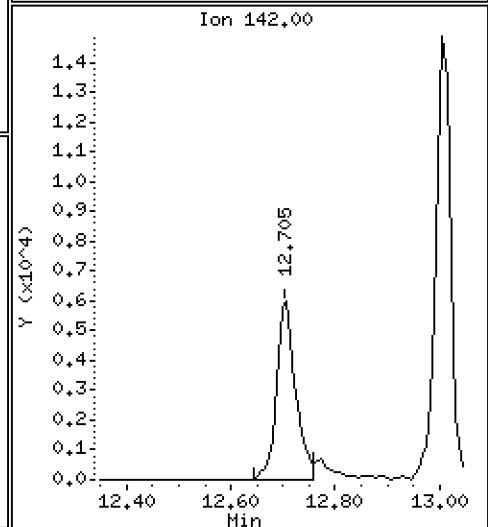
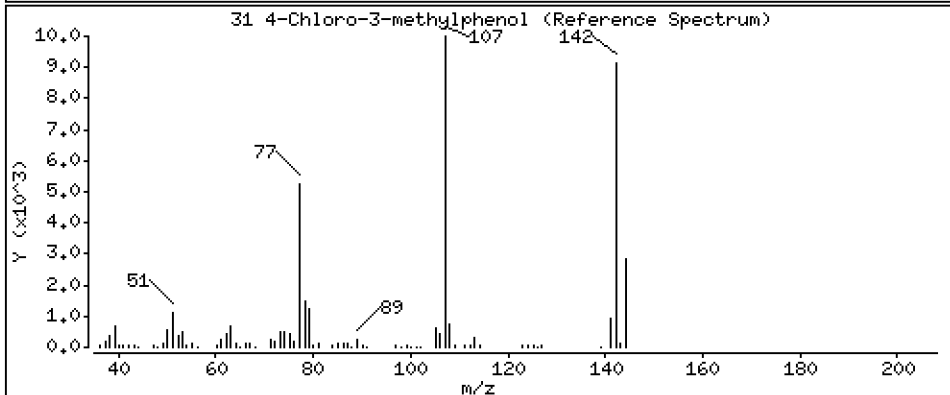
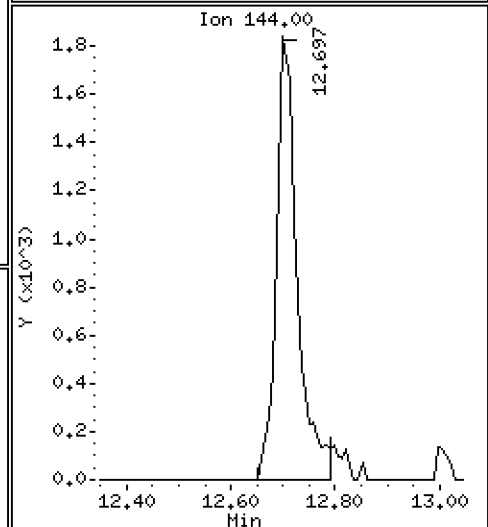
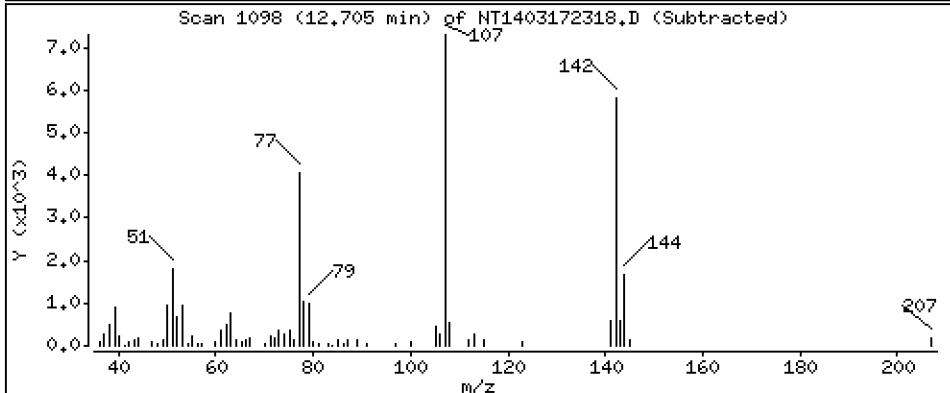
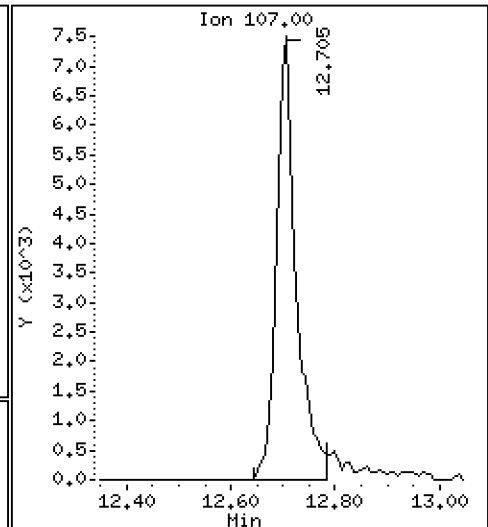
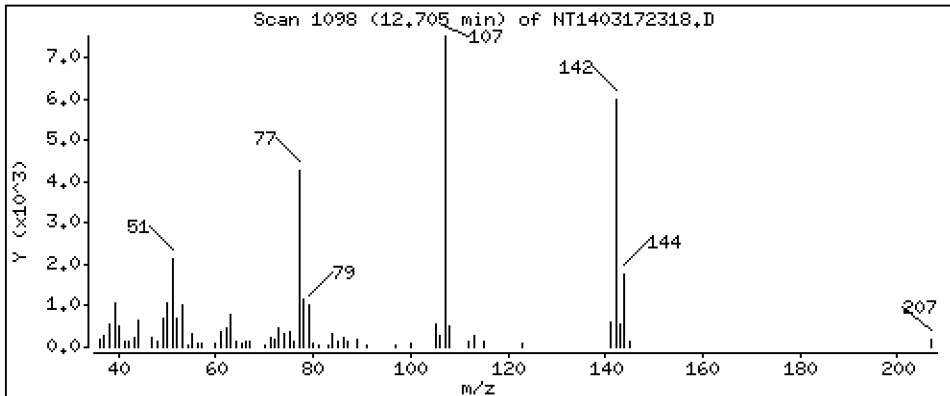
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.2961 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

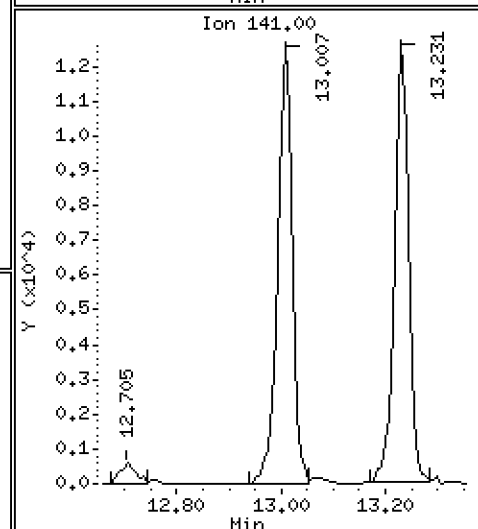
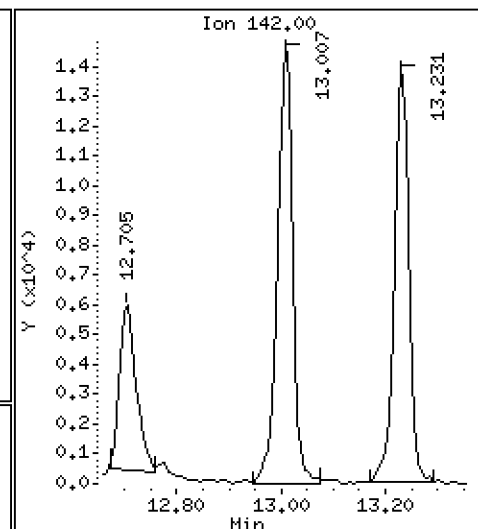
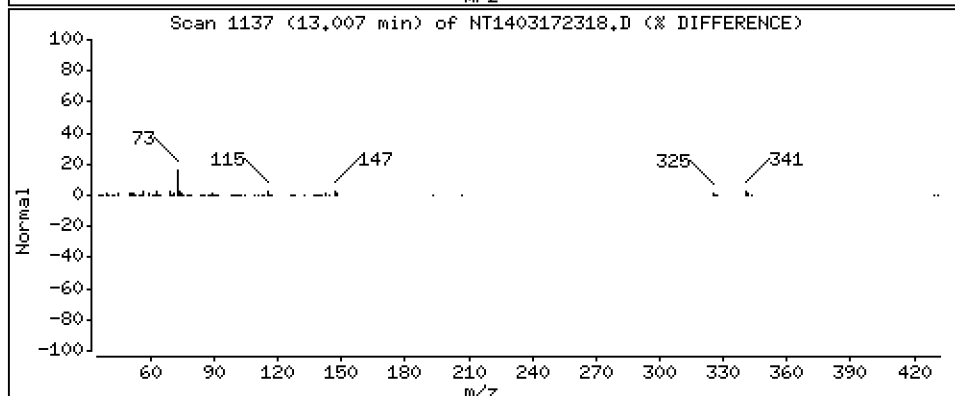
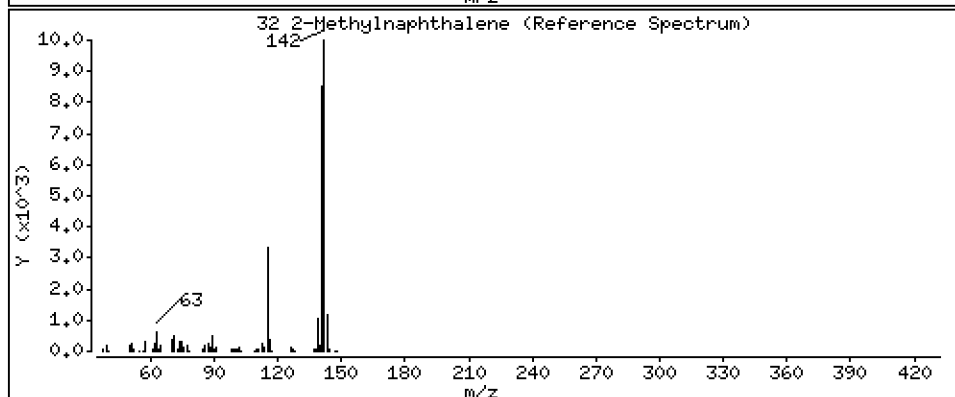
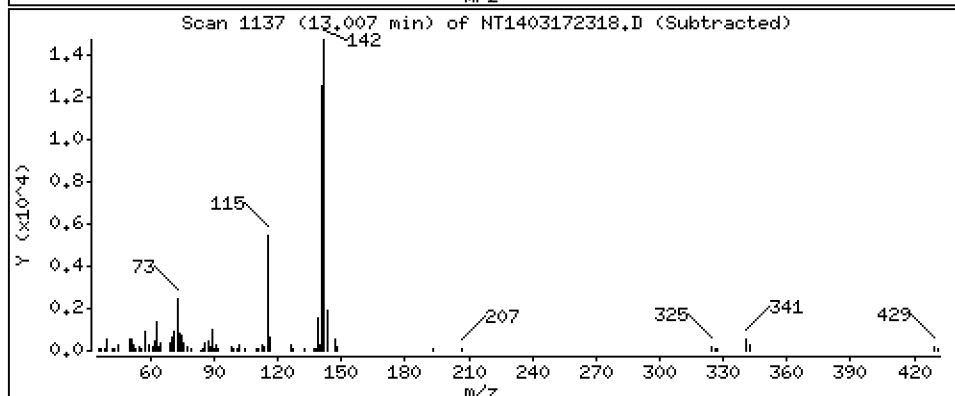
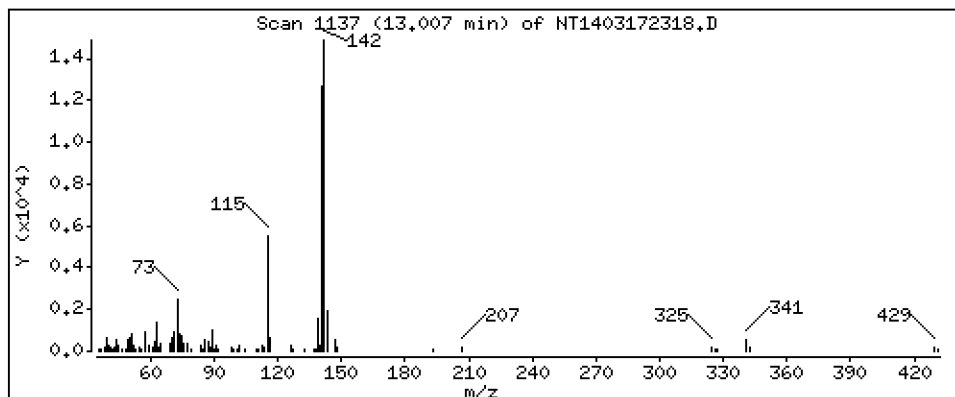
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1975 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

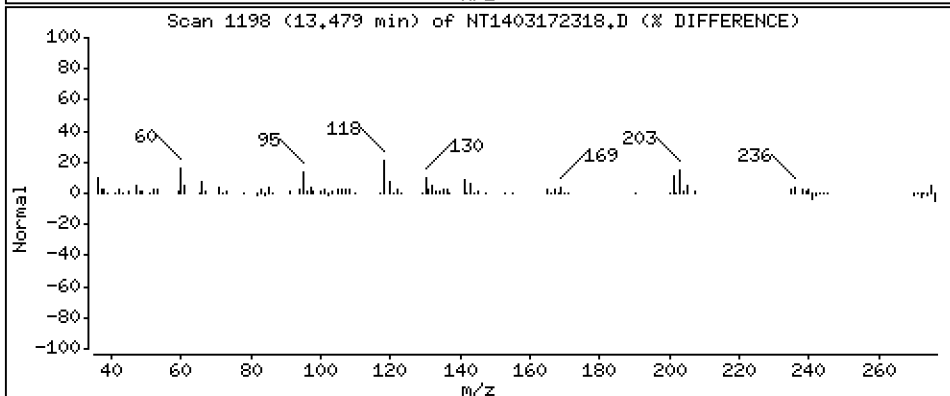
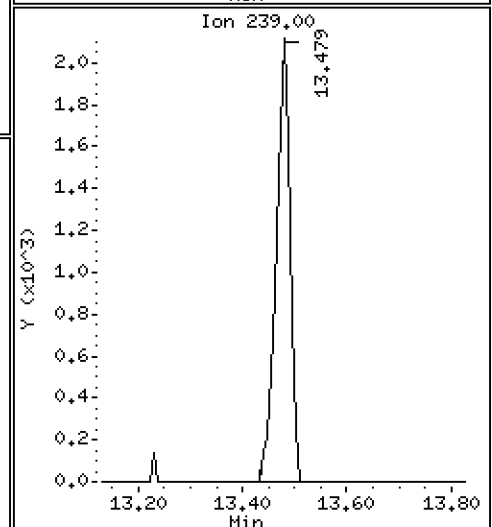
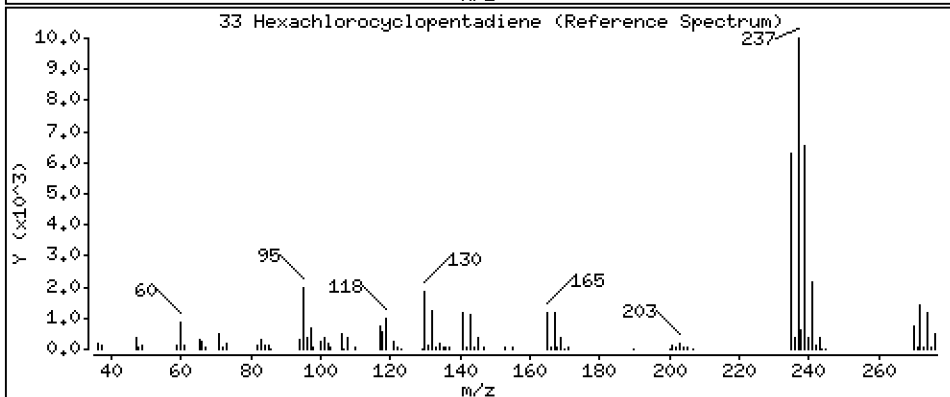
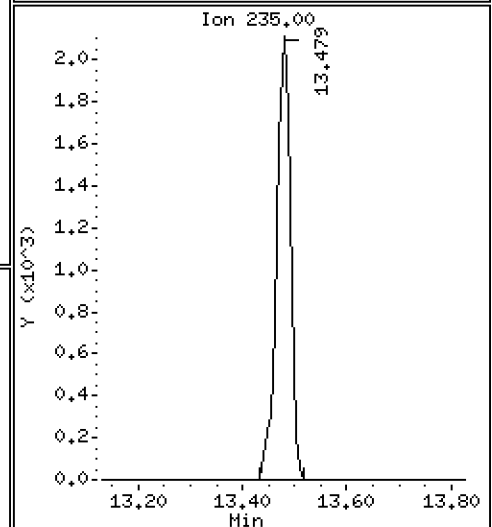
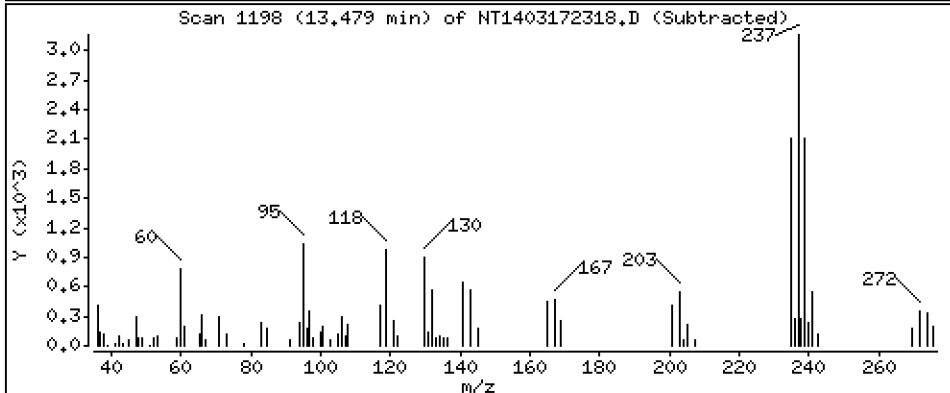
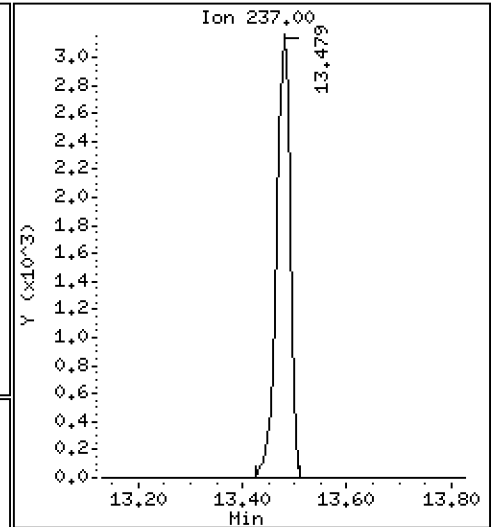
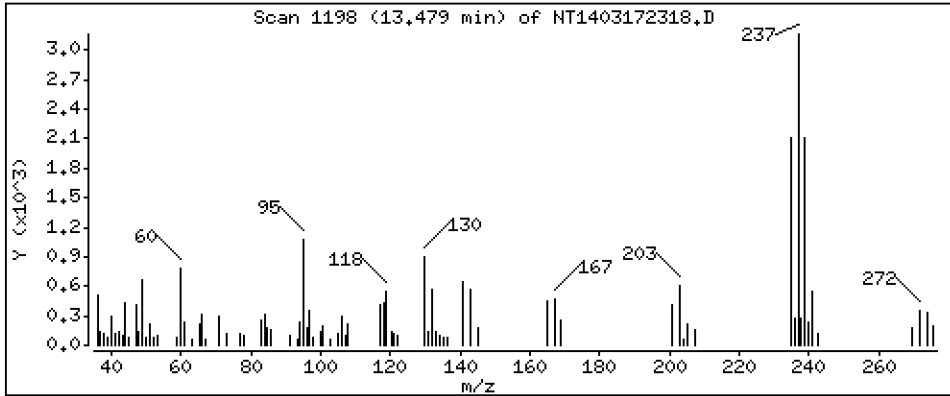
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

33 Hexachlorocyclopentadiene

Concentration: 0.1718 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

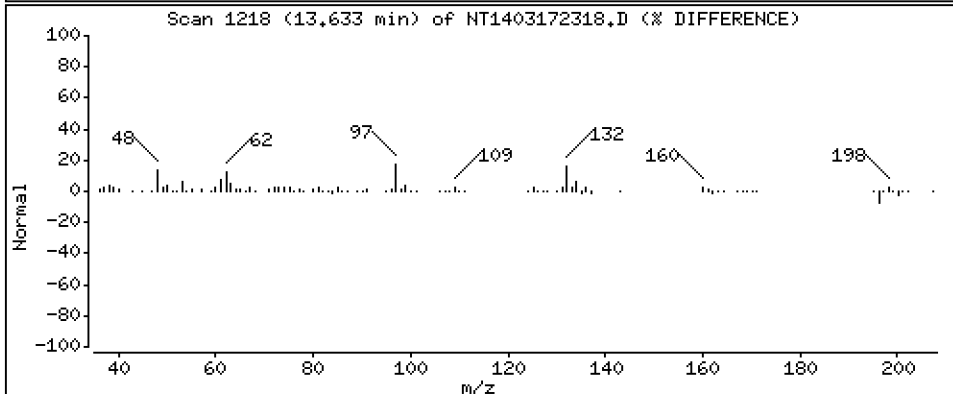
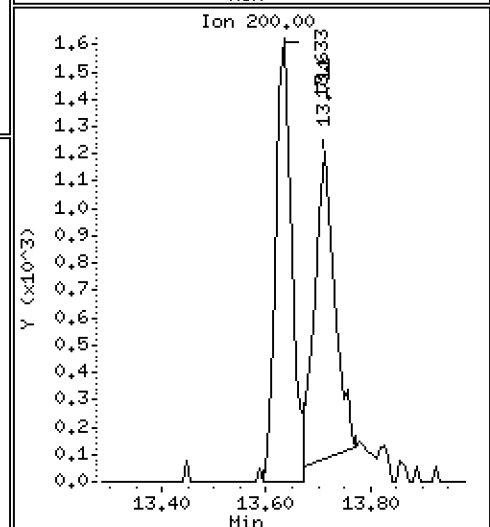
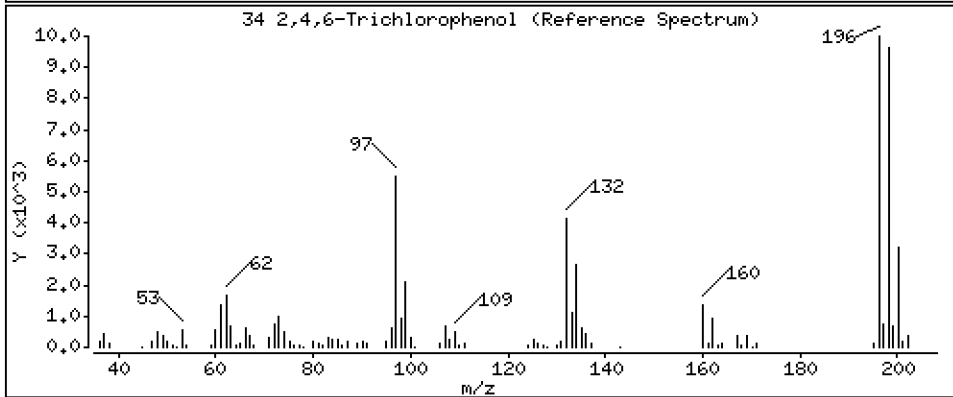
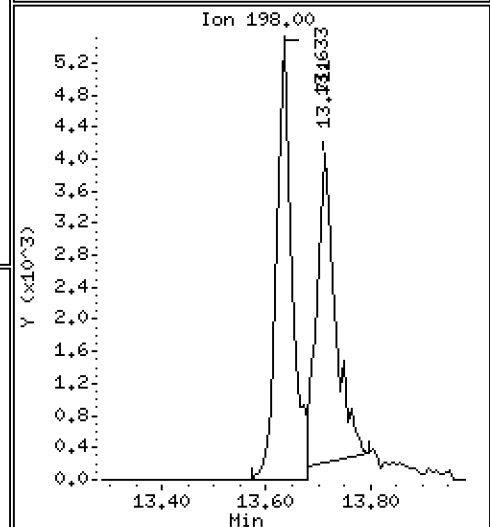
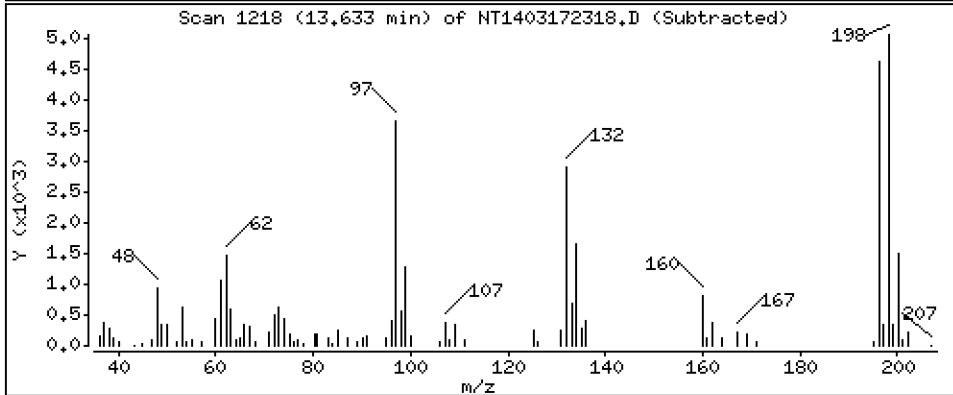
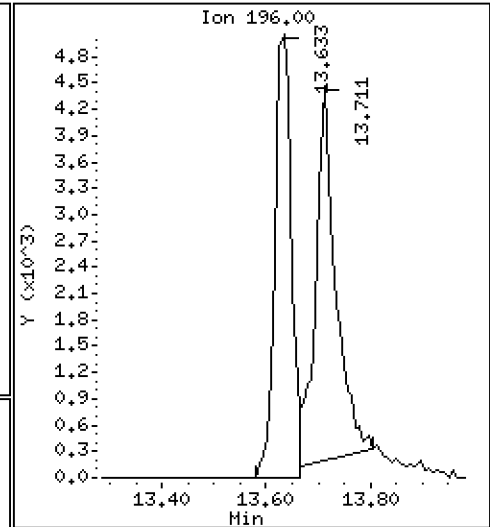
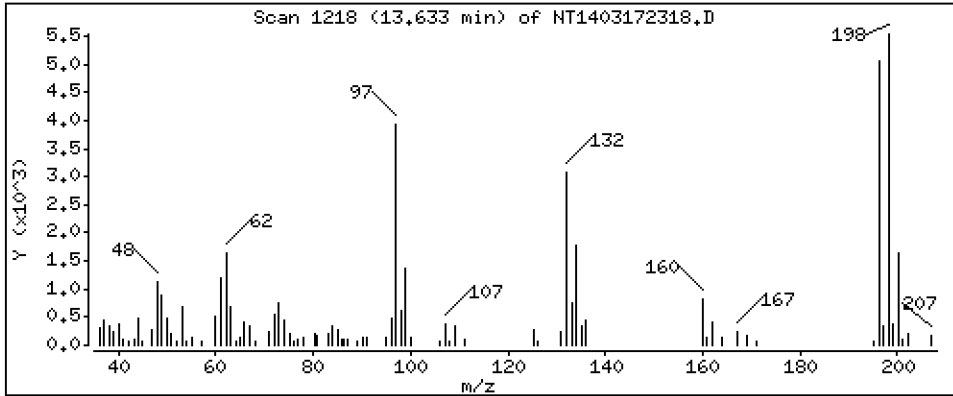
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,2769 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

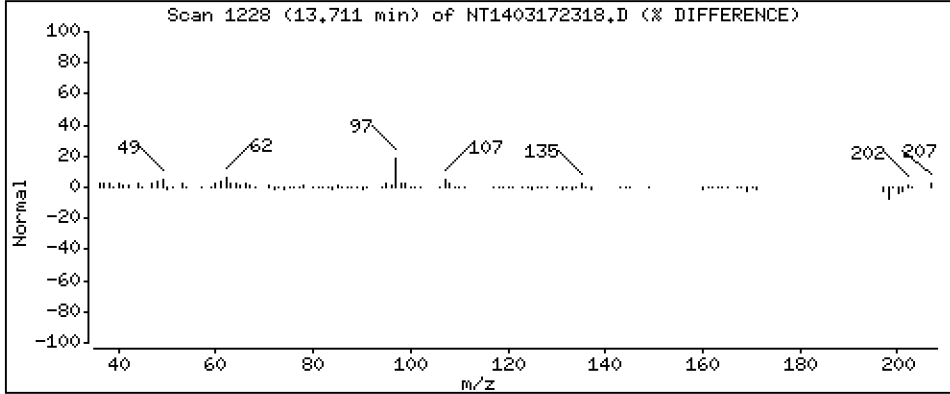
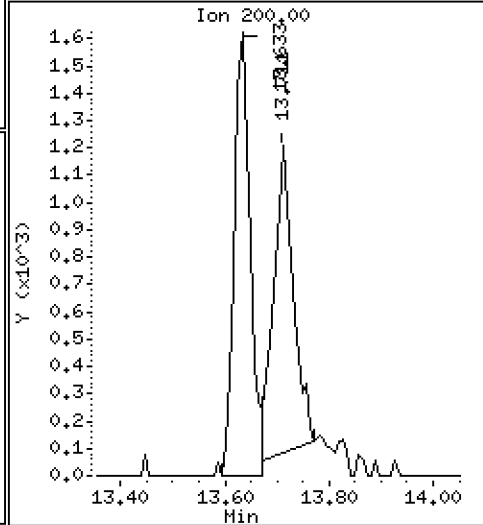
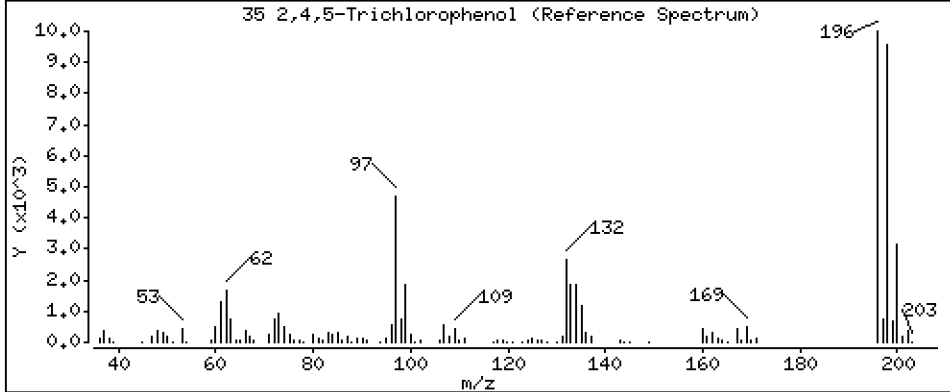
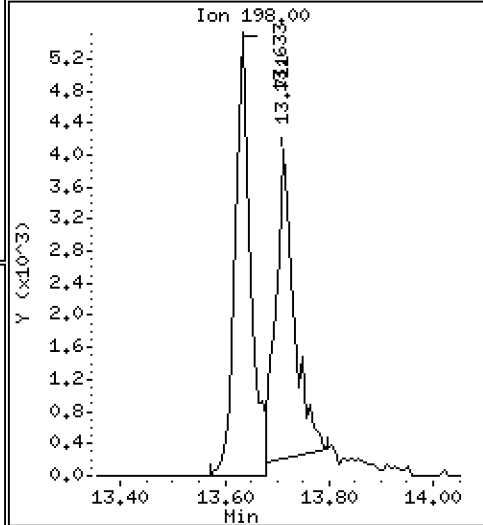
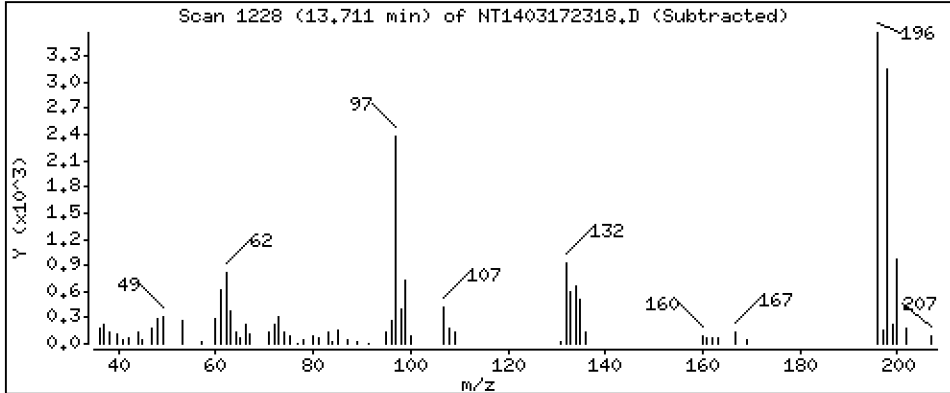
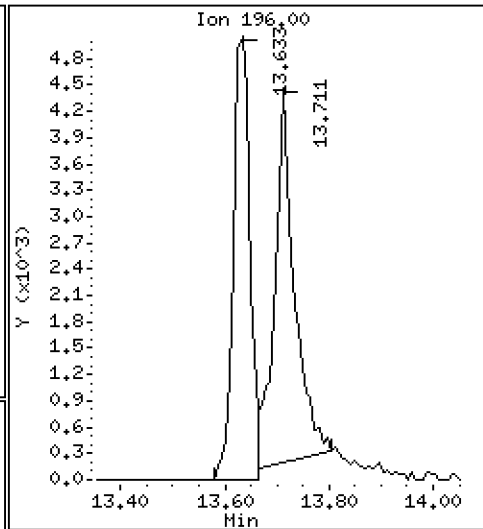
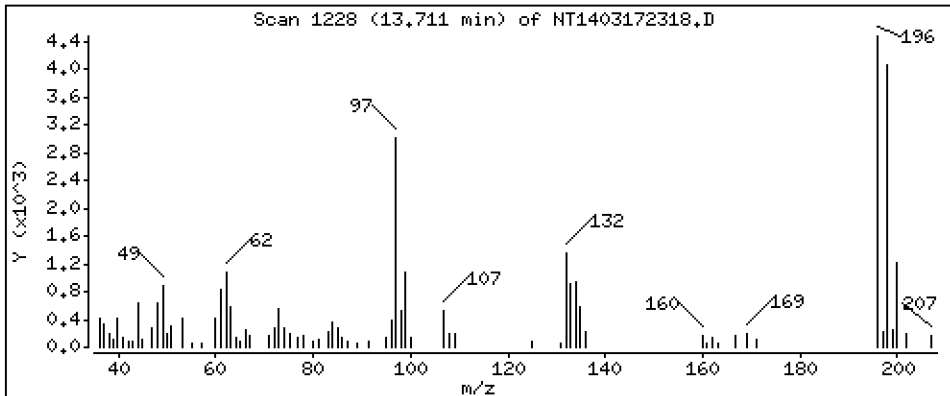
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2803 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

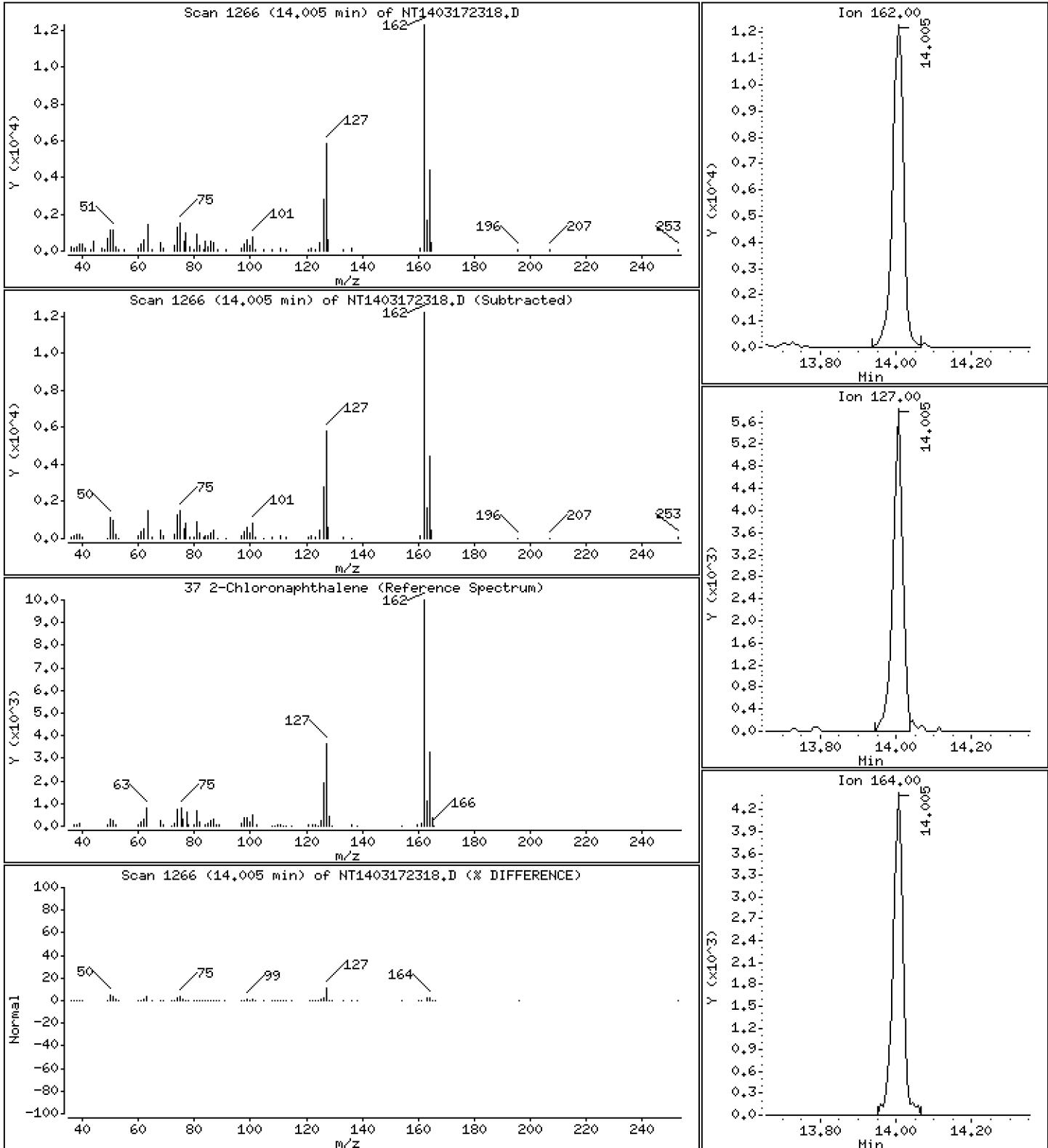
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2000 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

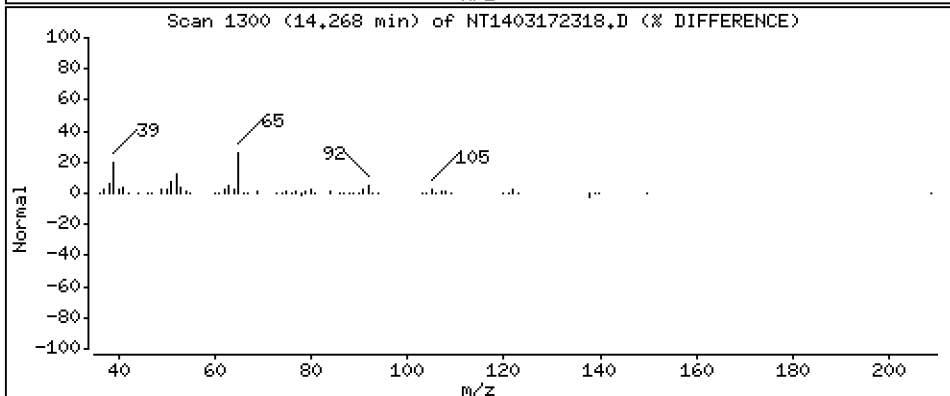
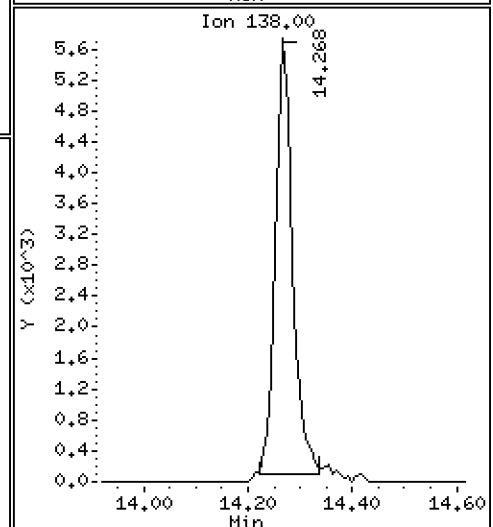
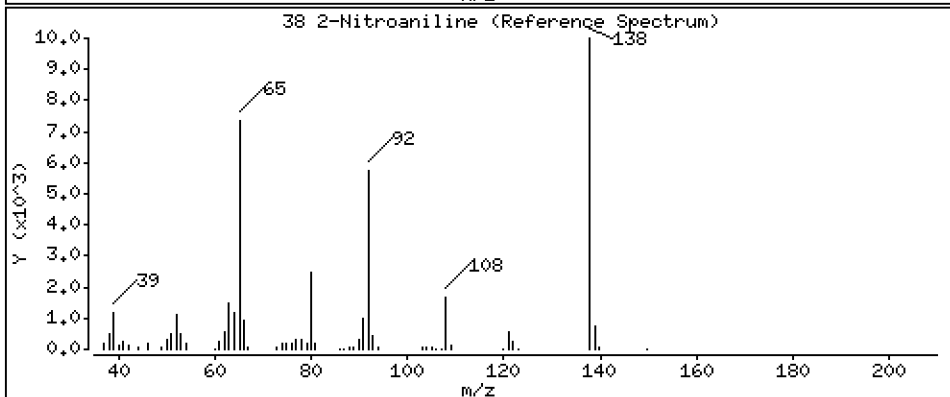
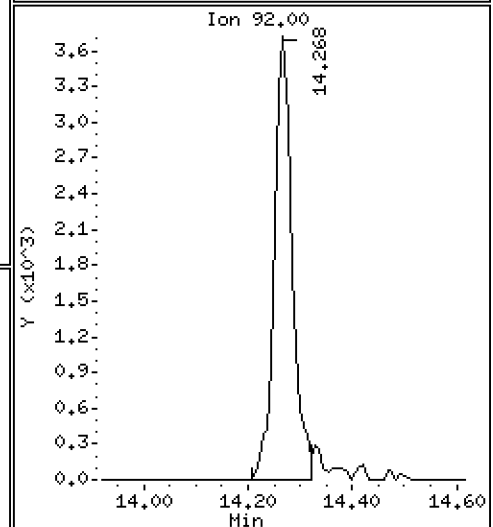
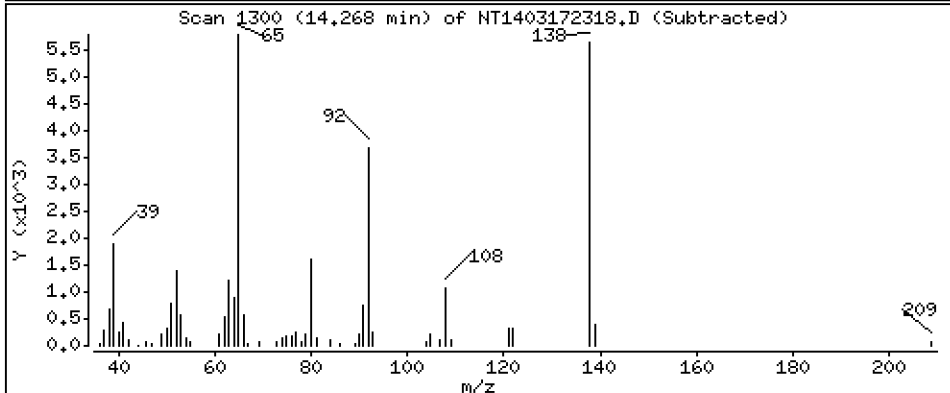
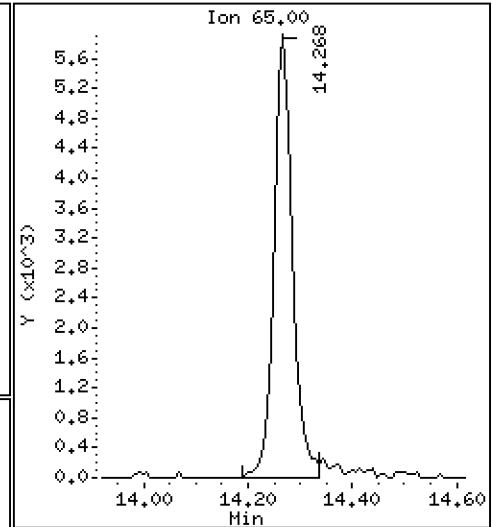
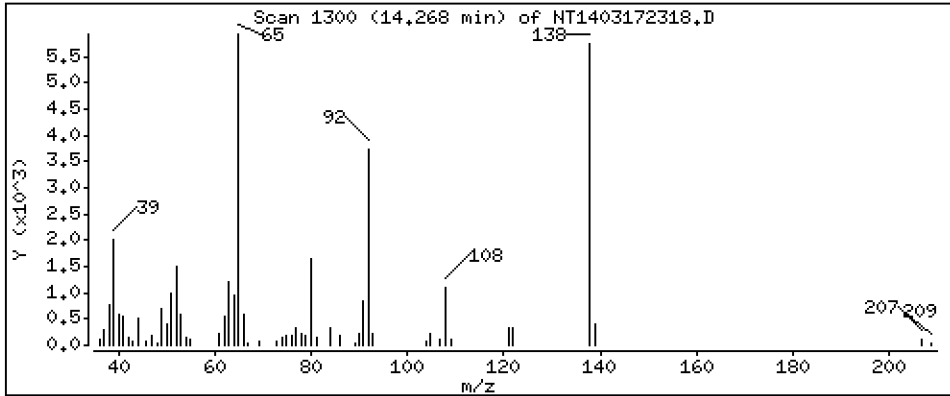
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,3073 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

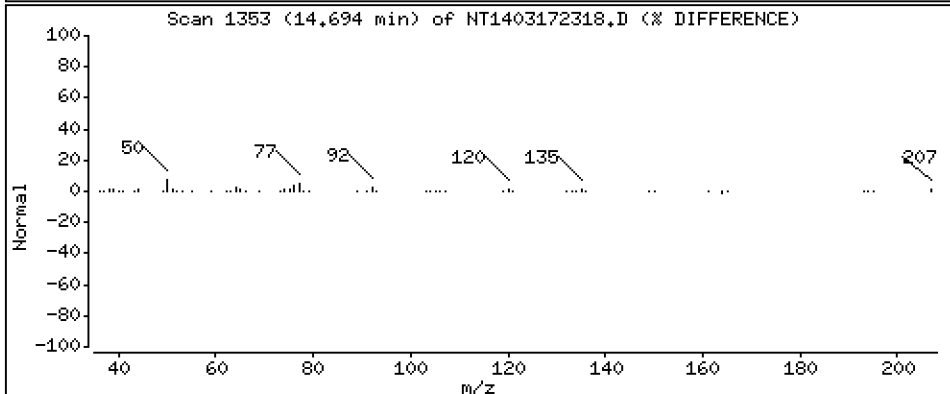
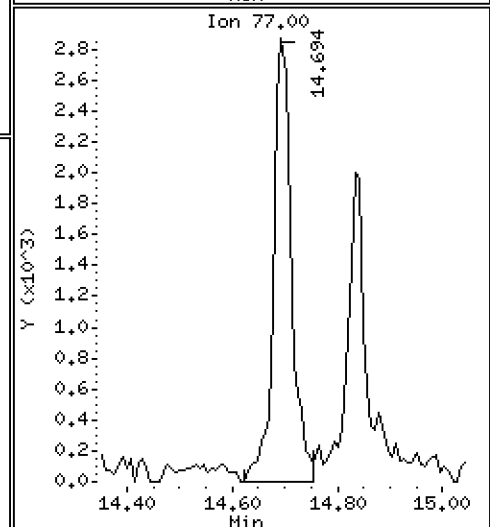
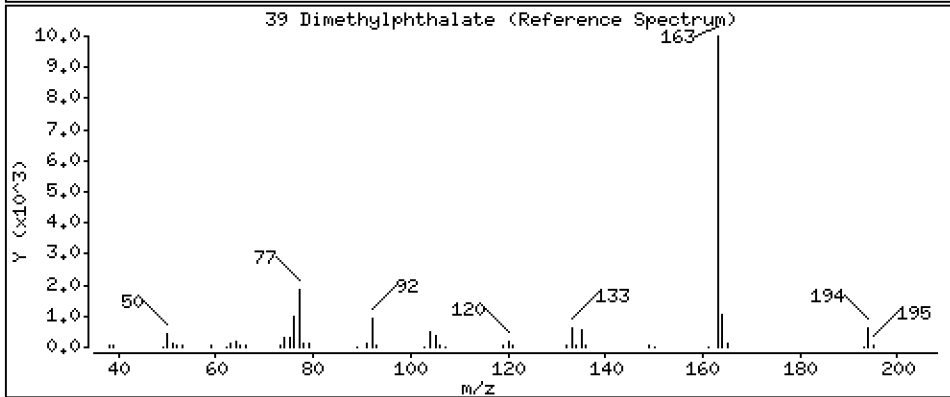
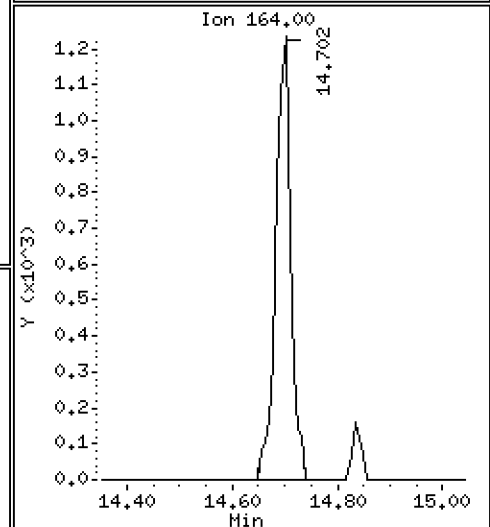
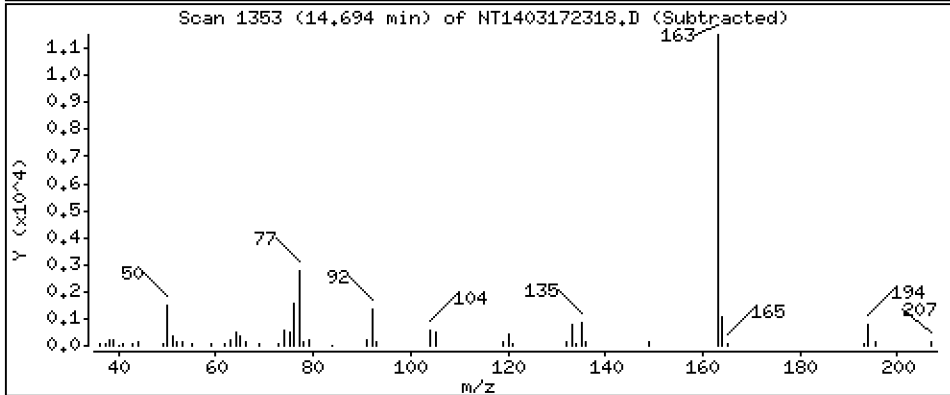
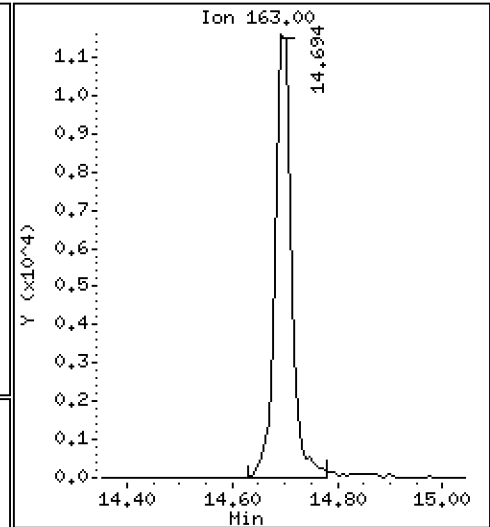
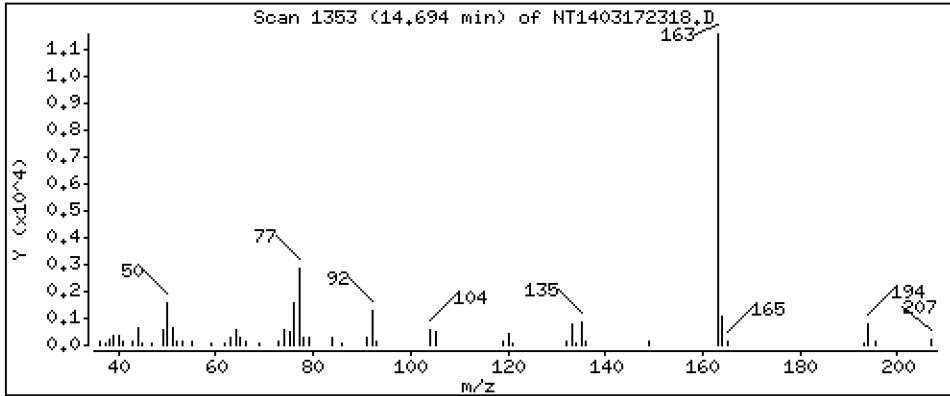
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1902 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

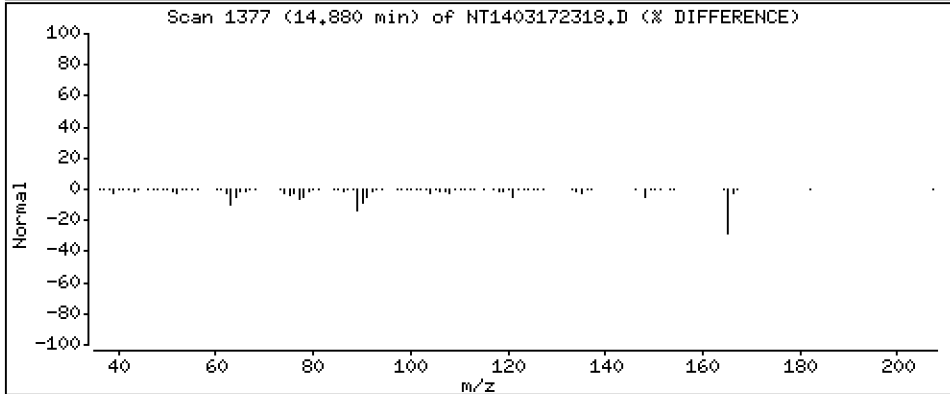
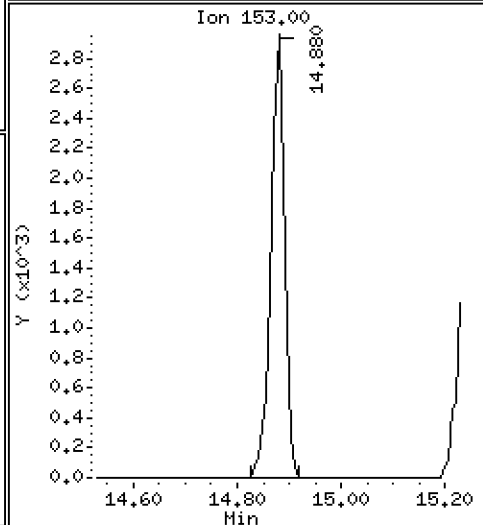
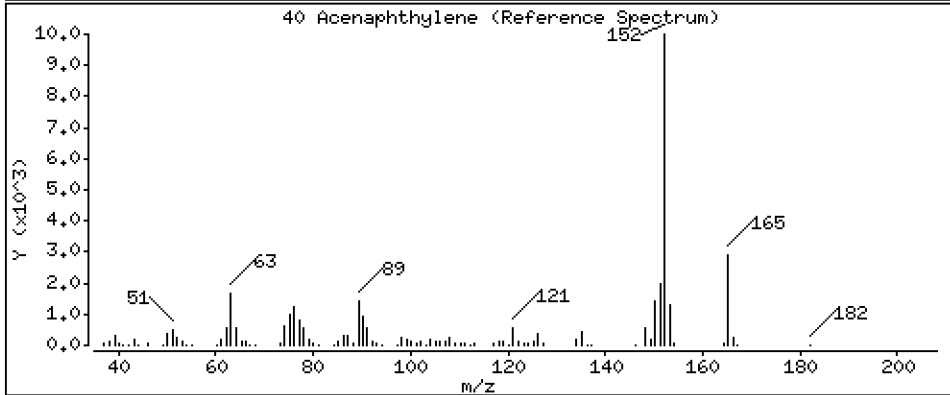
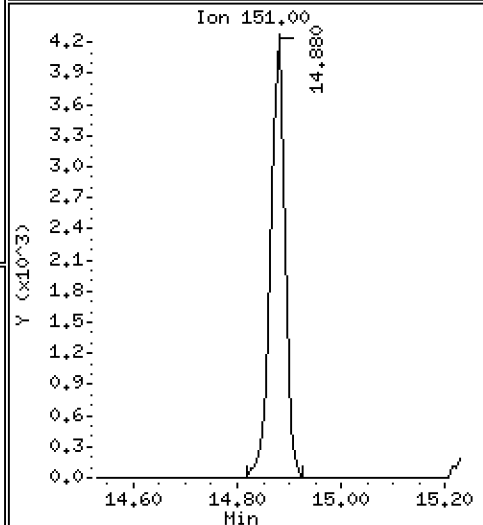
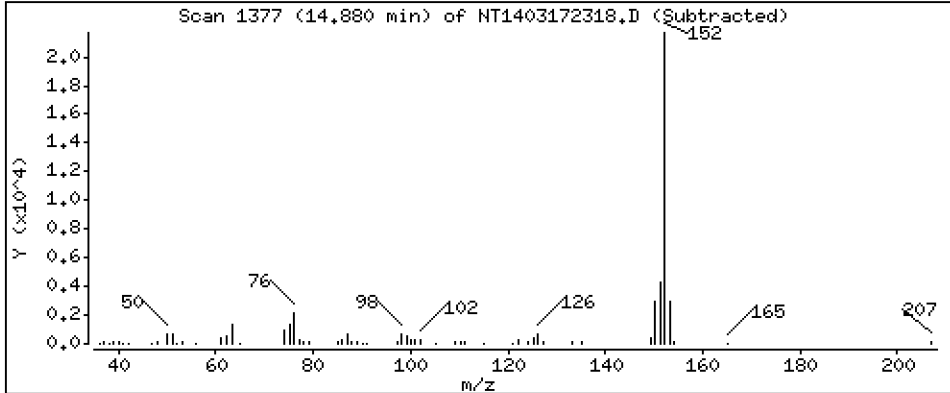
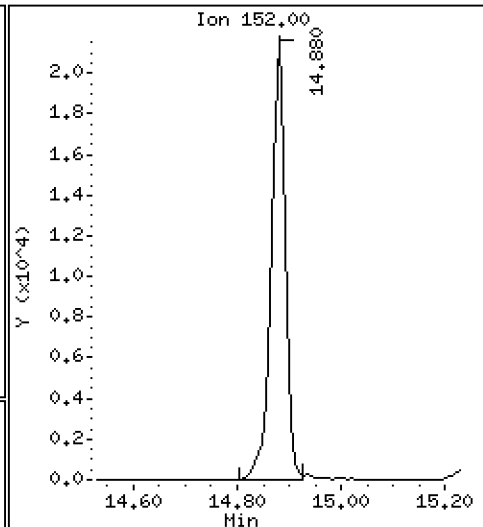
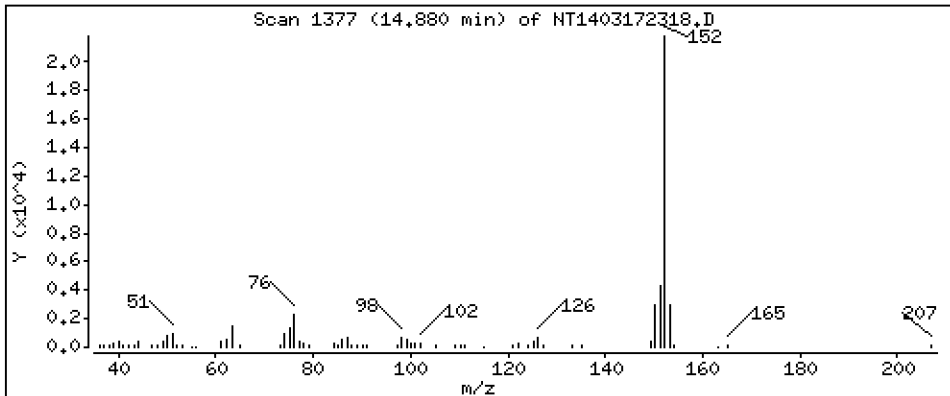
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1922 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

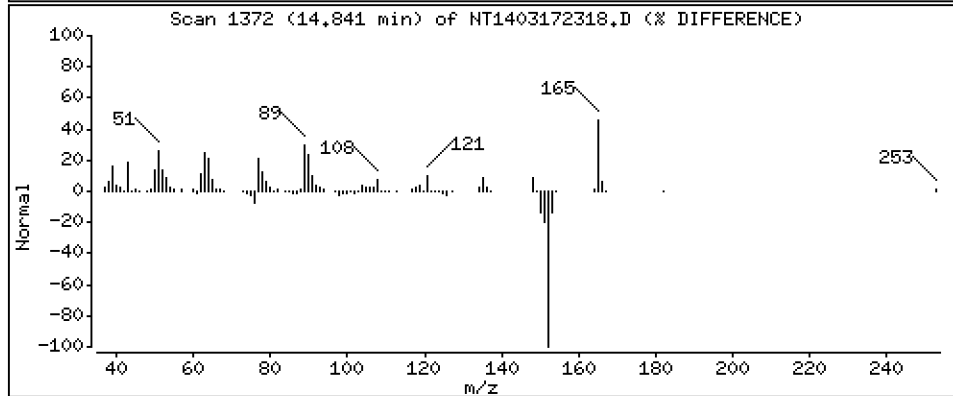
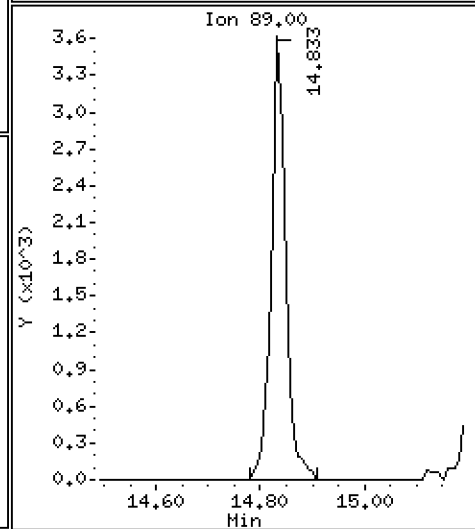
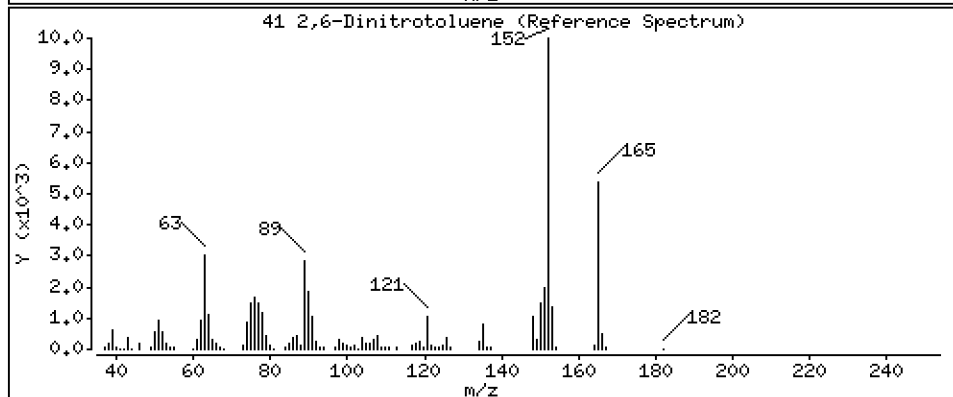
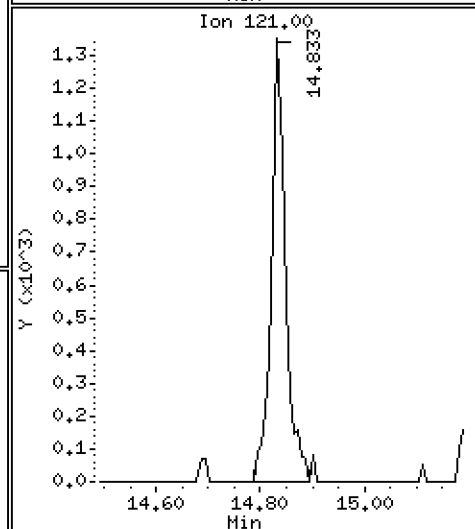
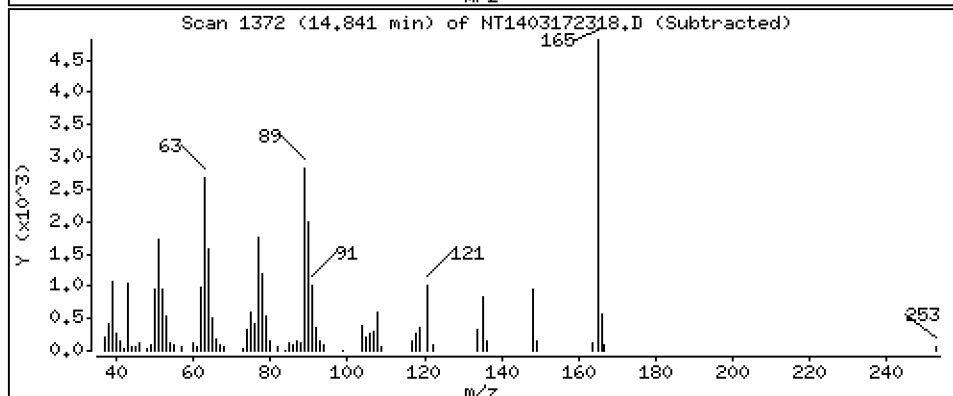
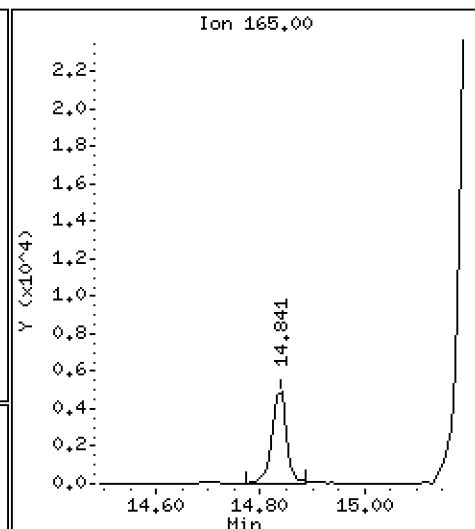
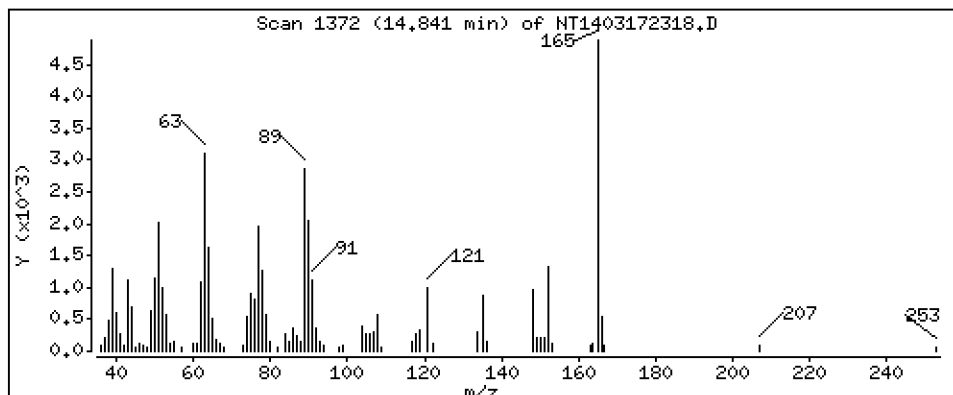
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,3118 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

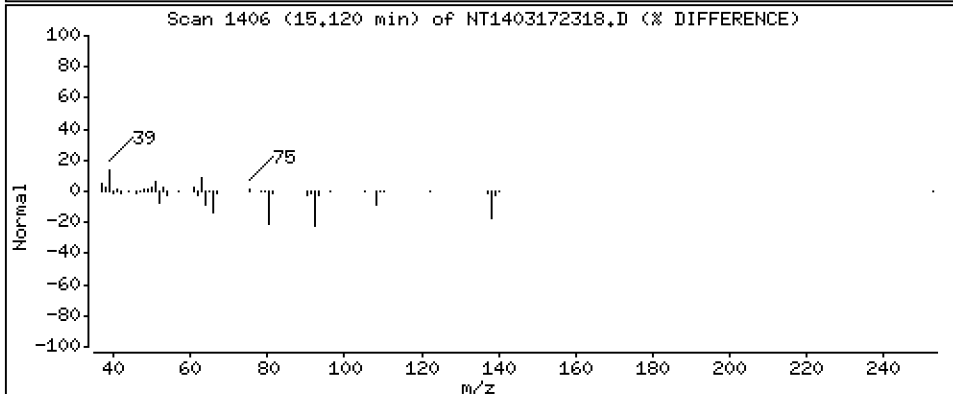
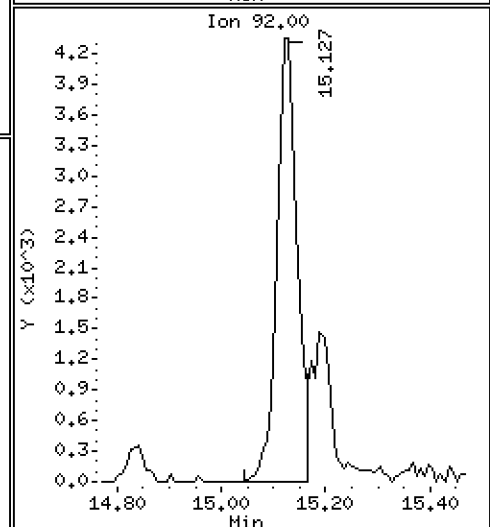
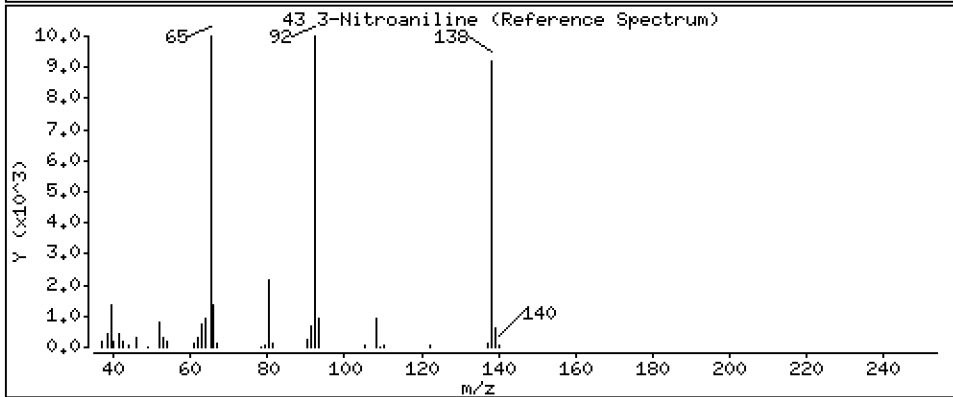
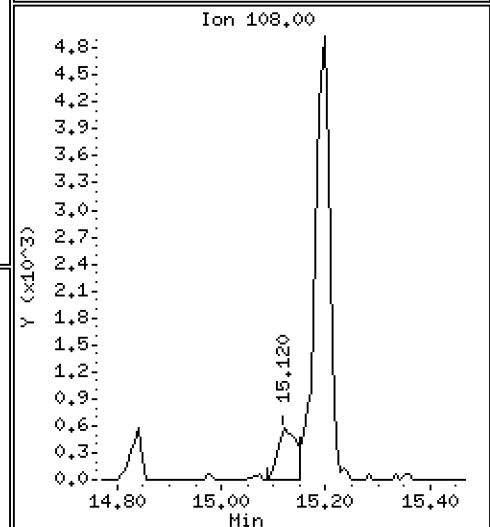
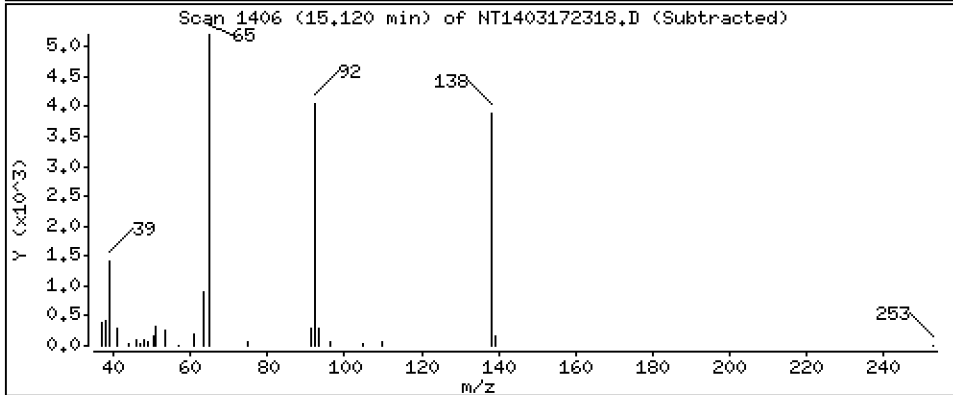
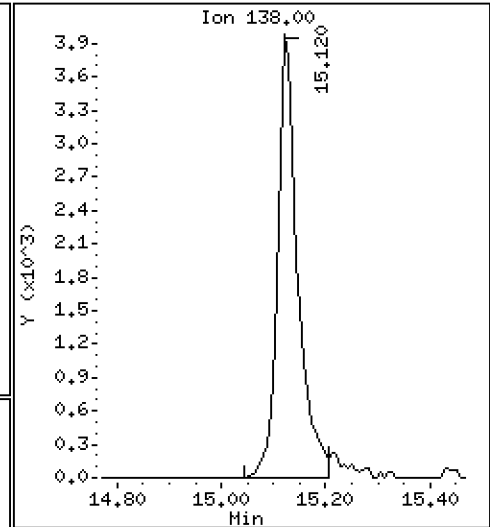
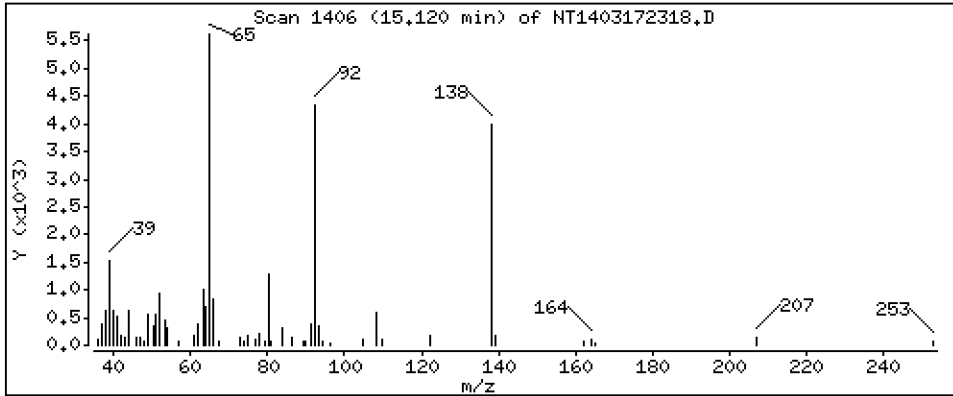
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,2816 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

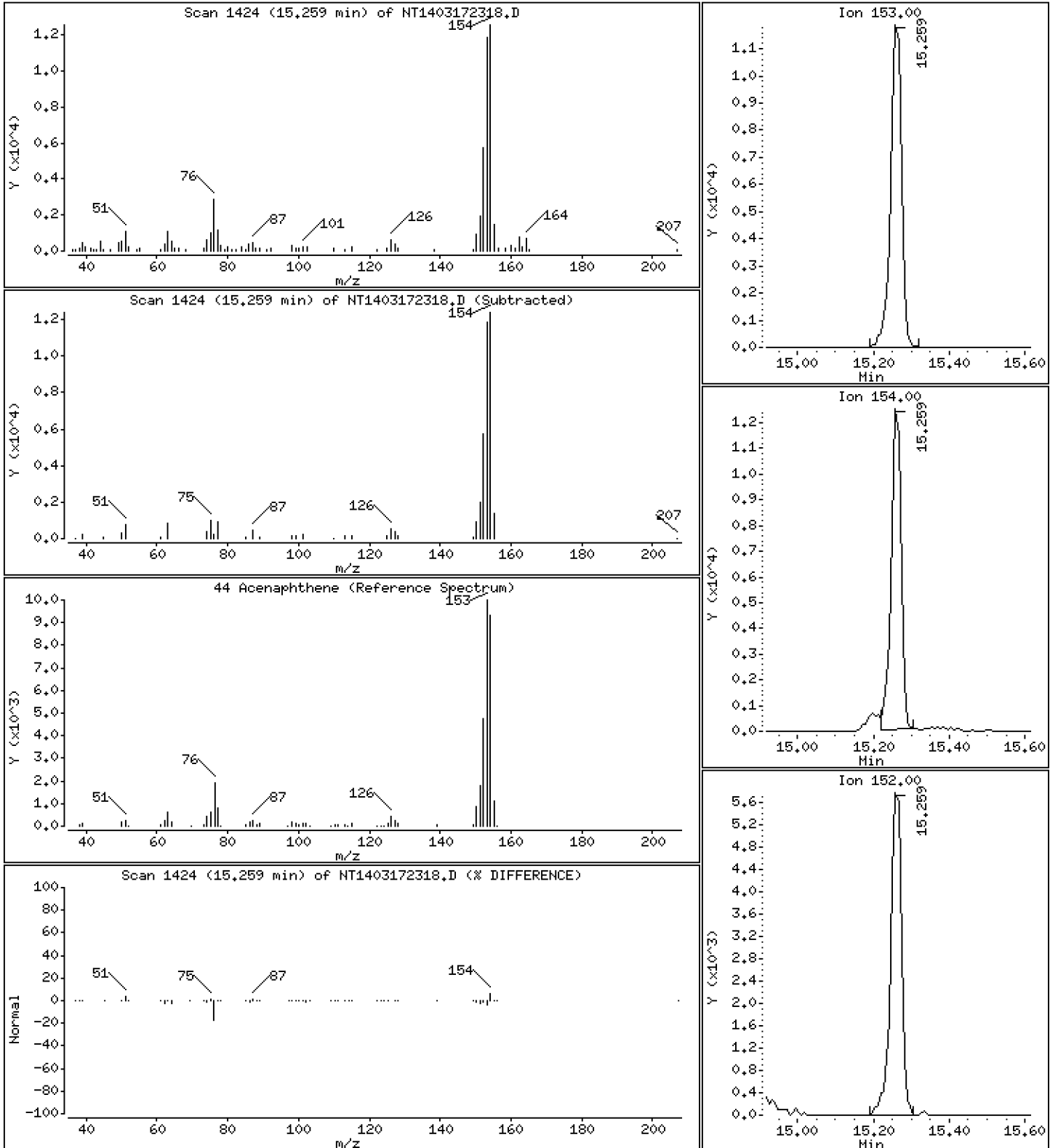
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1939 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

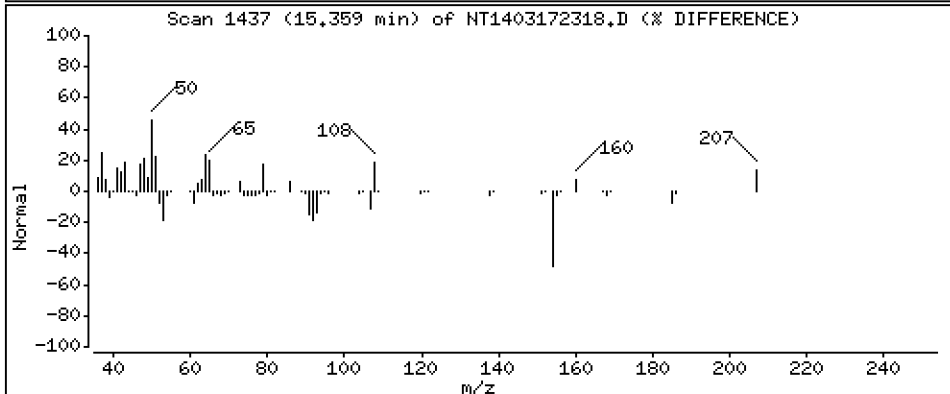
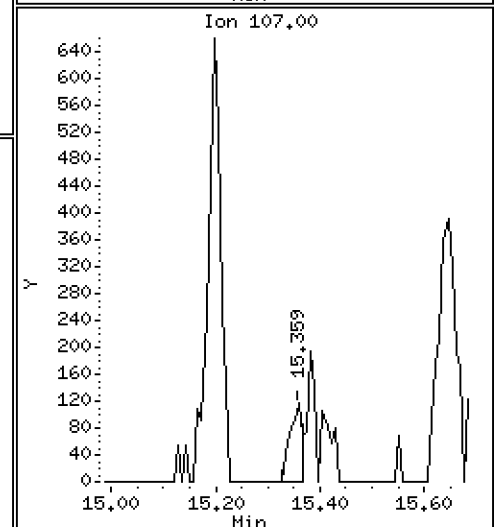
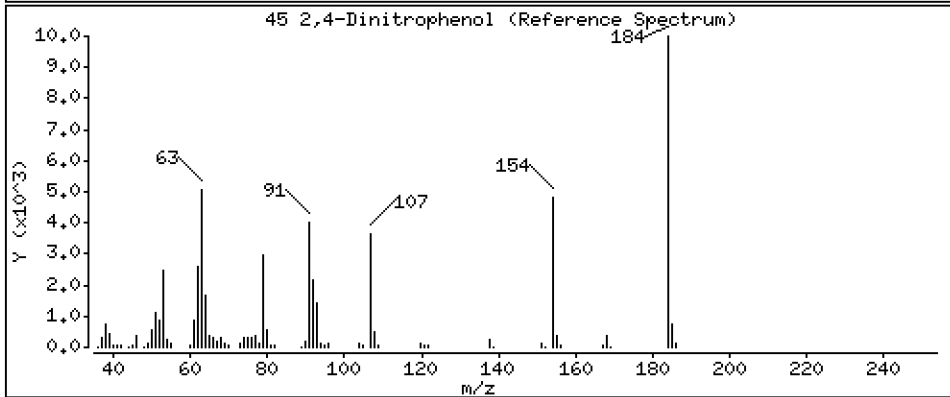
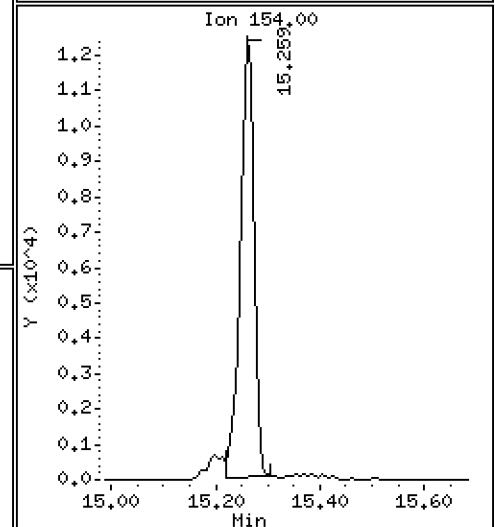
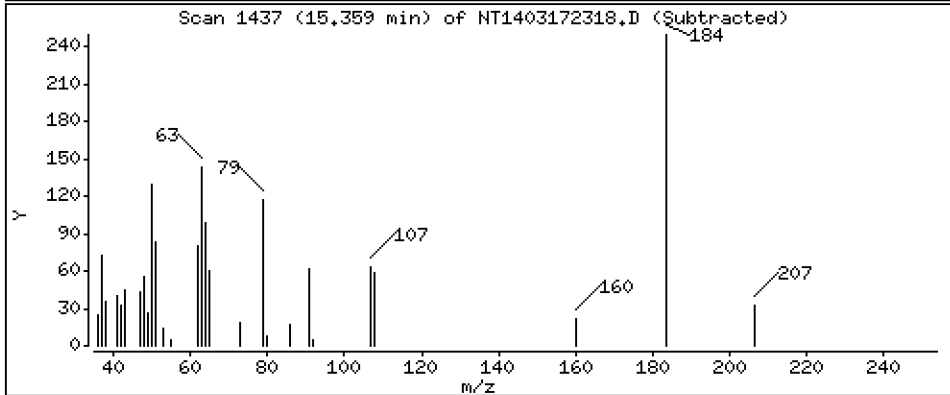
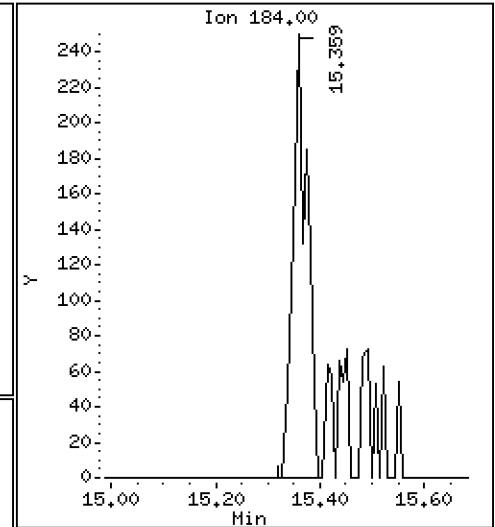
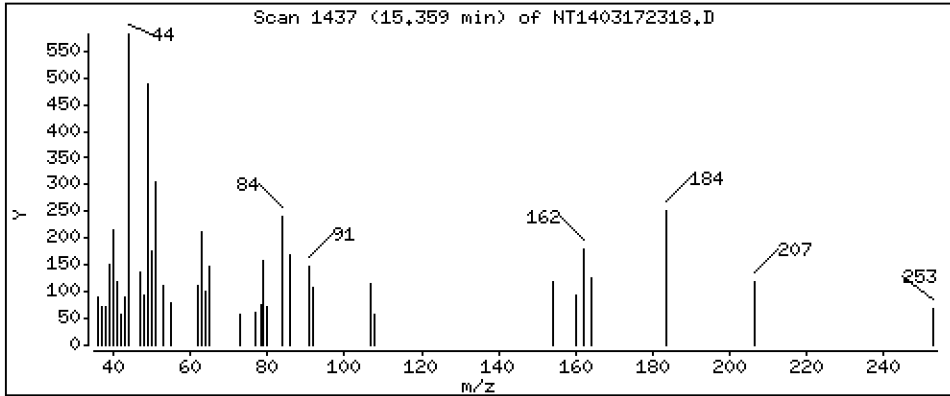
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,02168 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

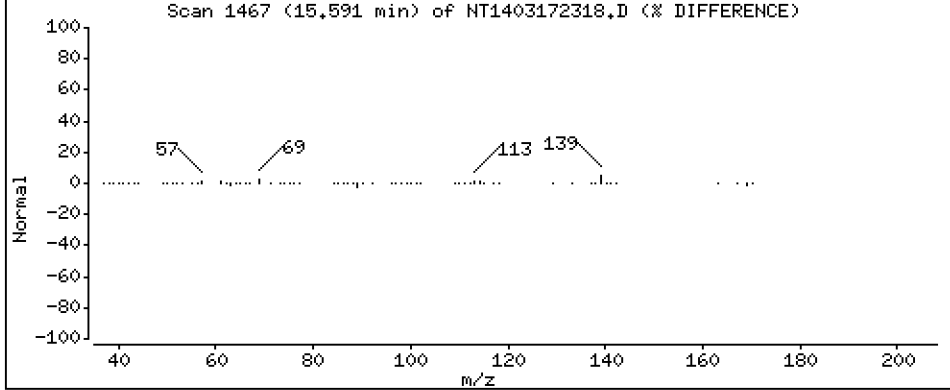
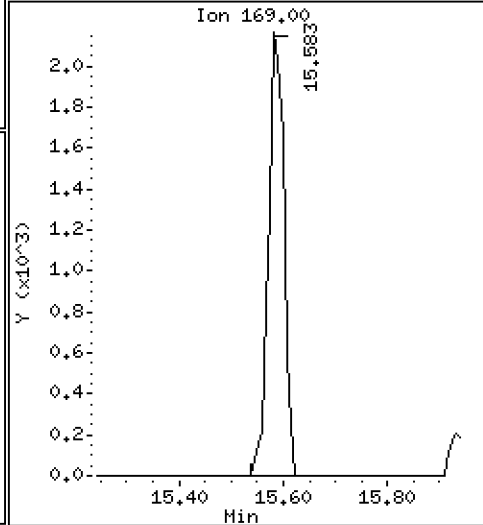
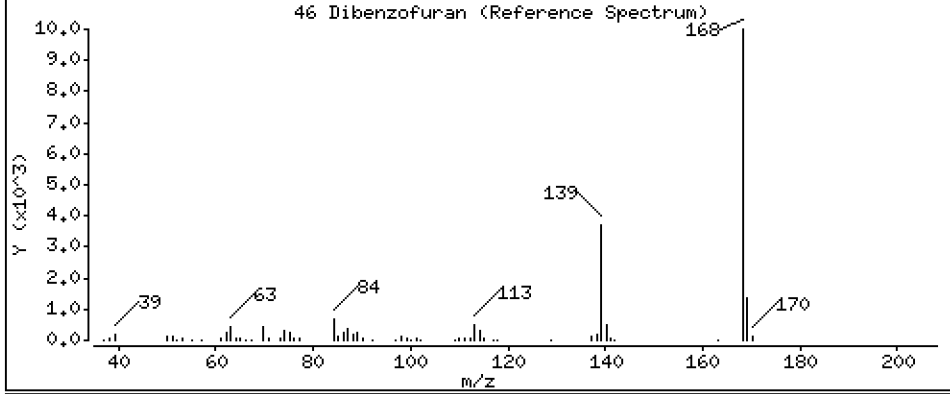
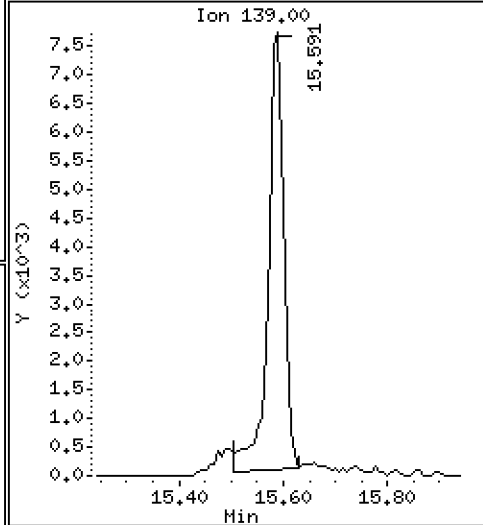
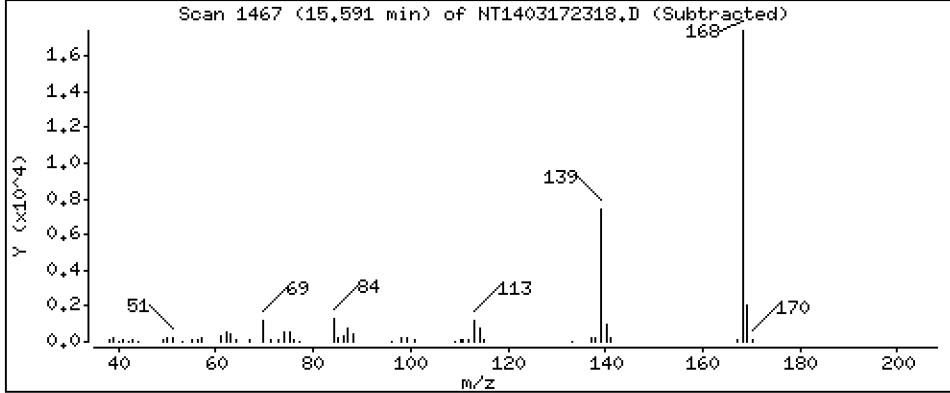
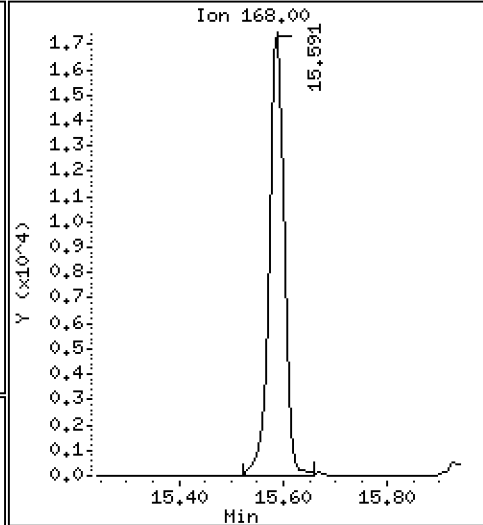
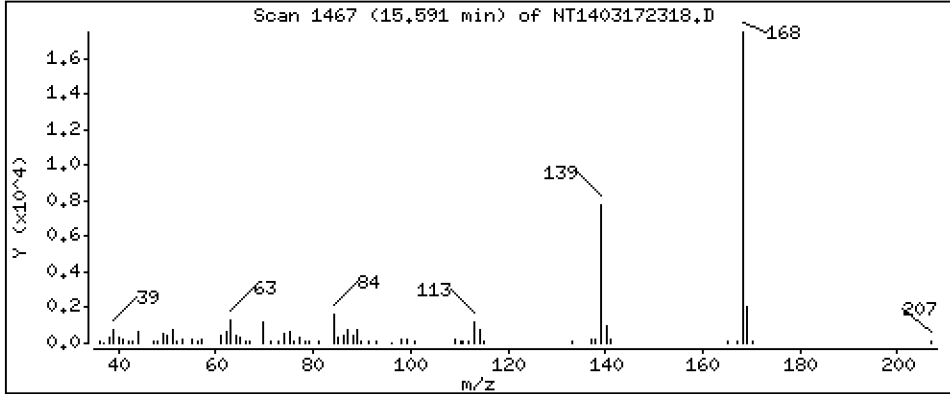
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1998 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

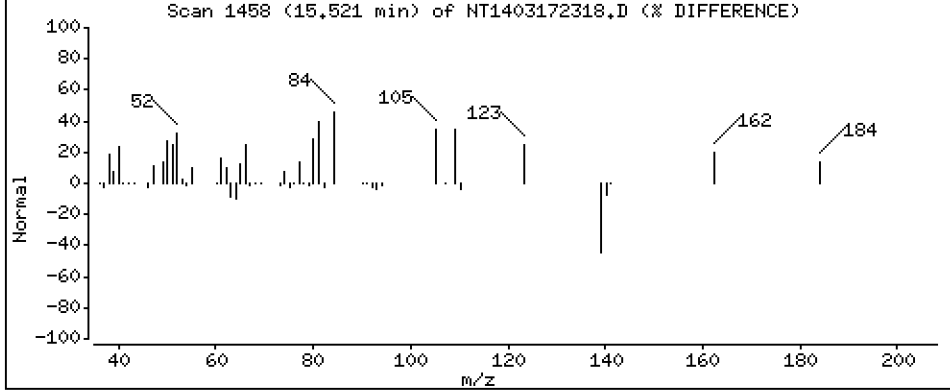
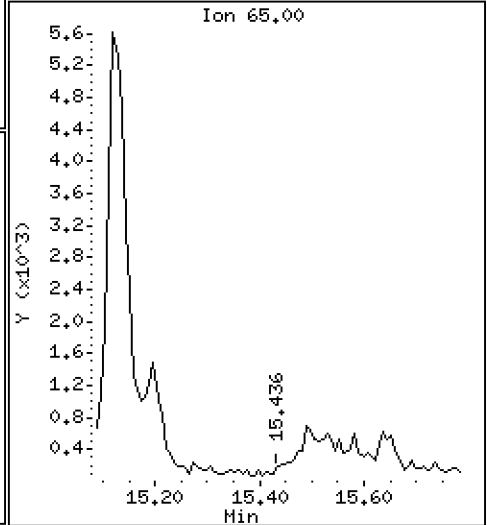
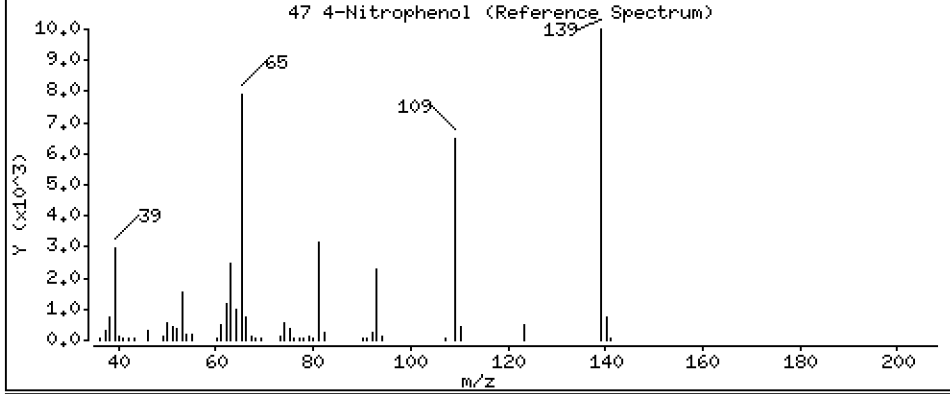
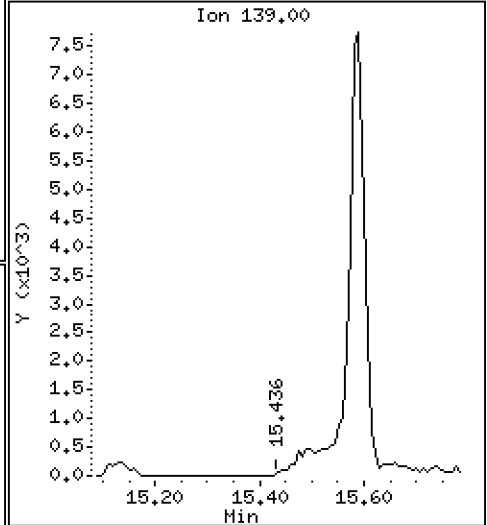
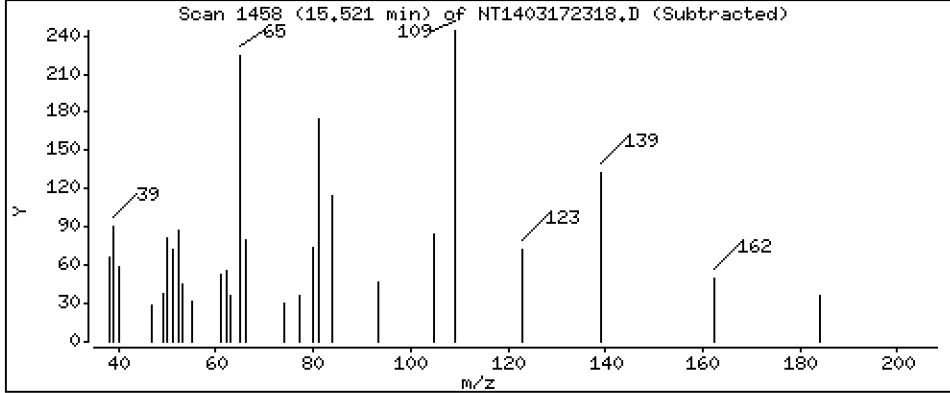
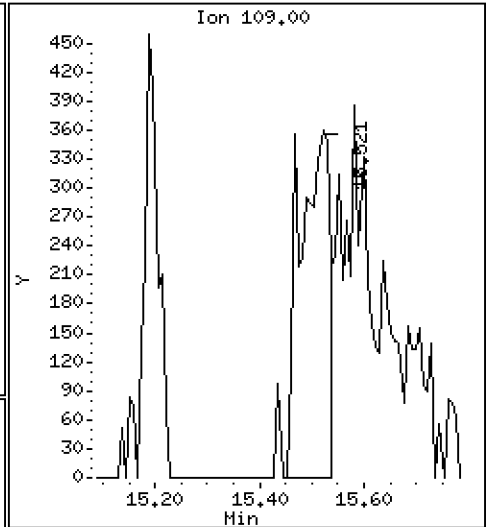
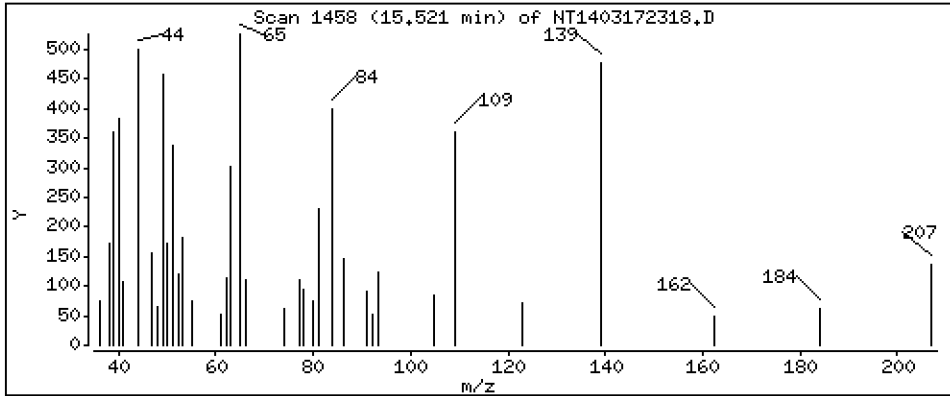
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 0,06483 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

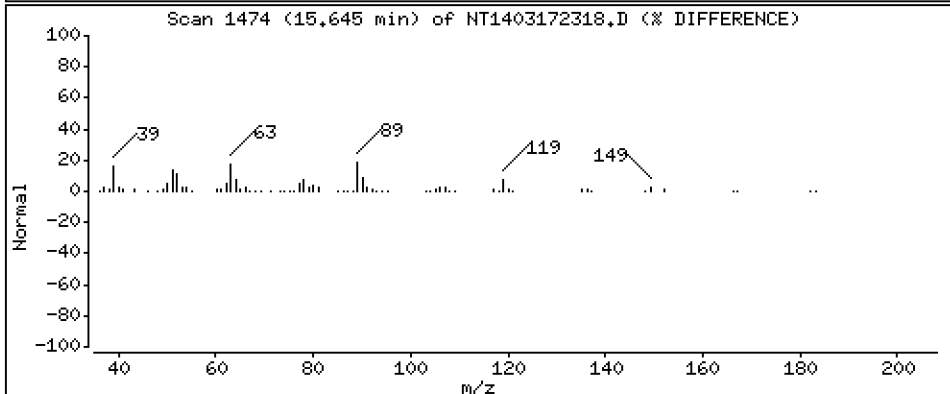
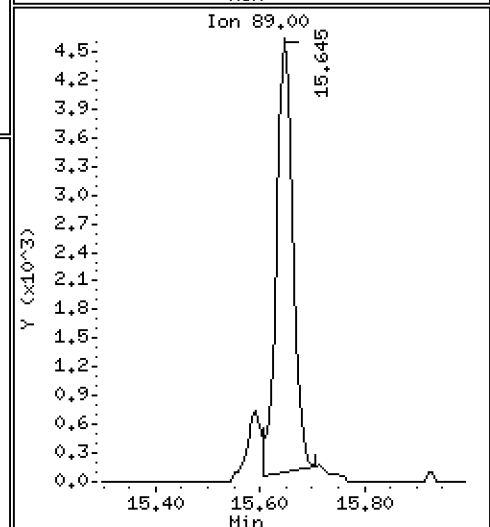
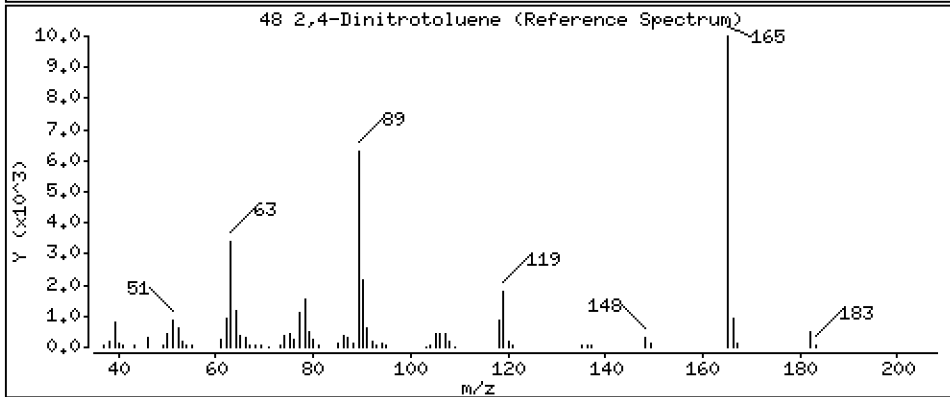
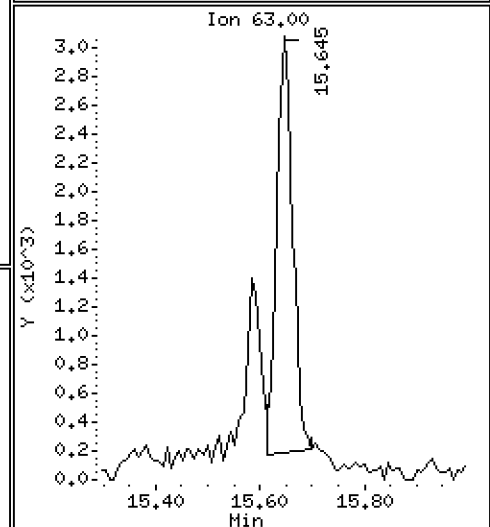
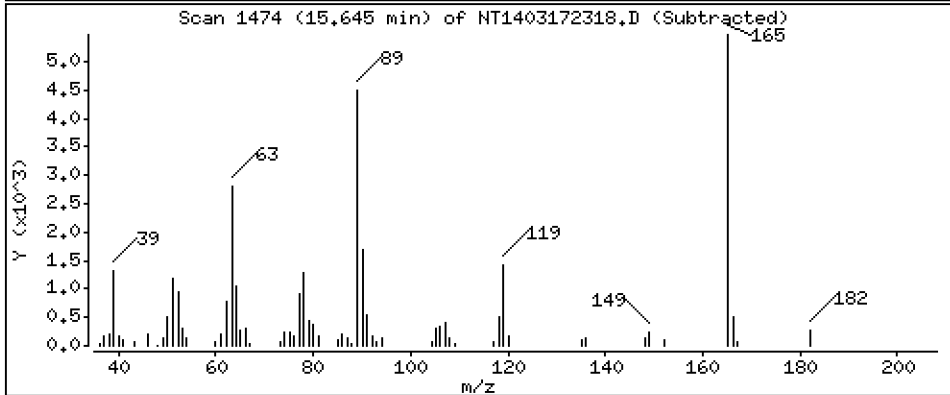
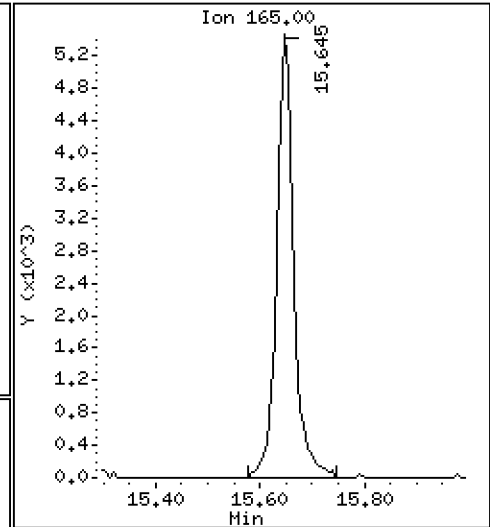
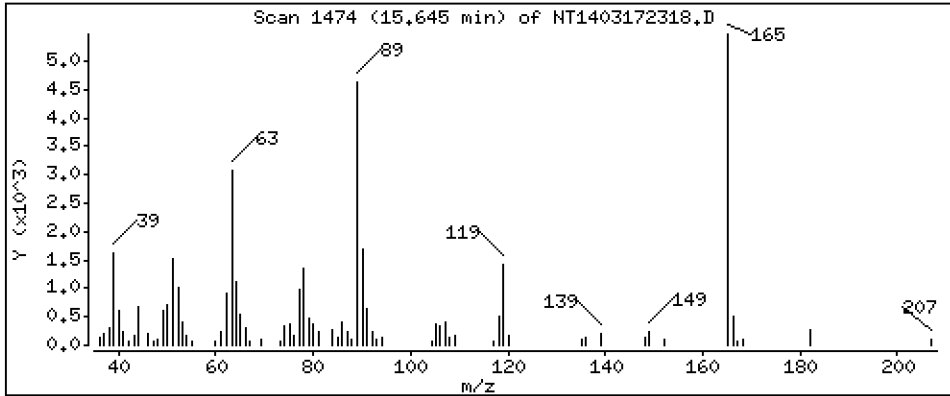
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2845 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

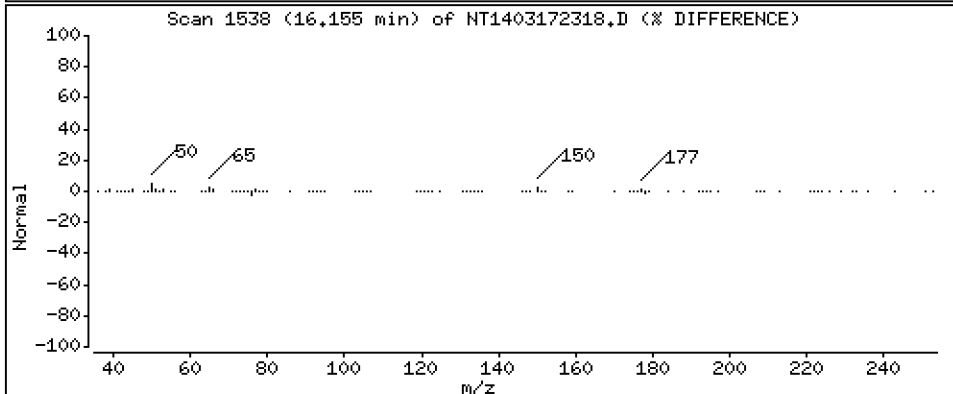
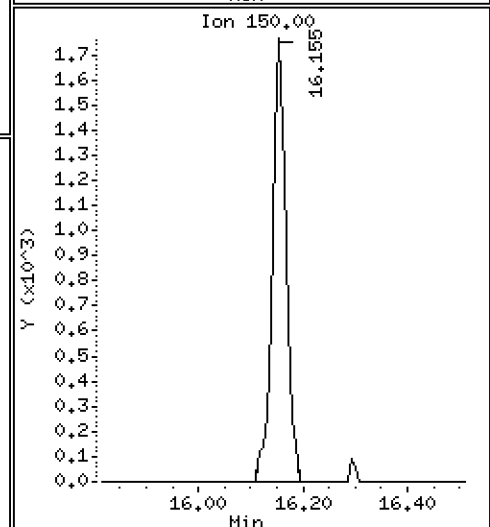
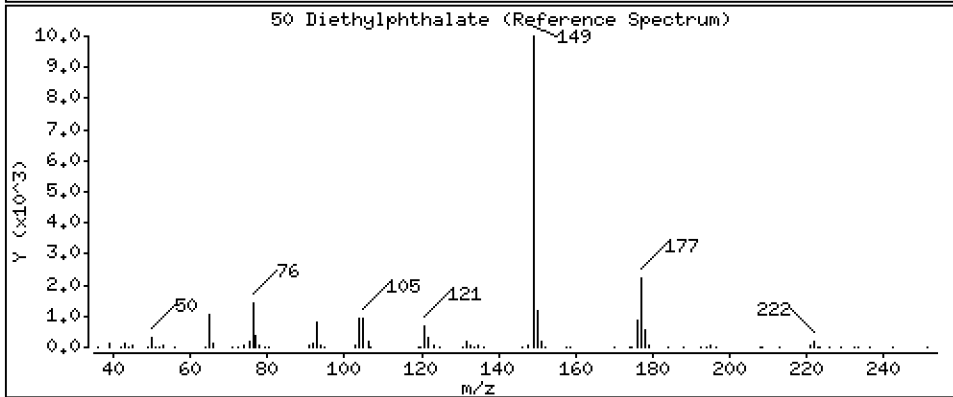
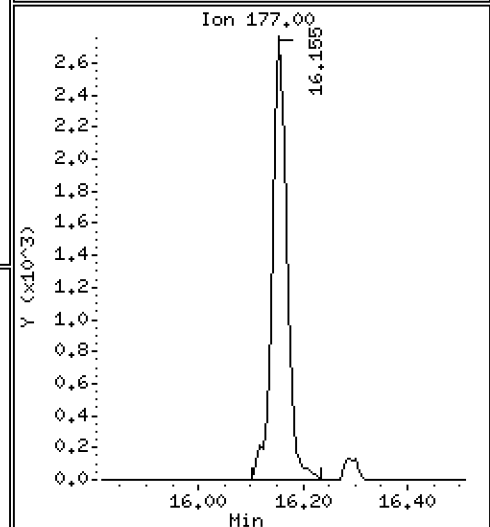
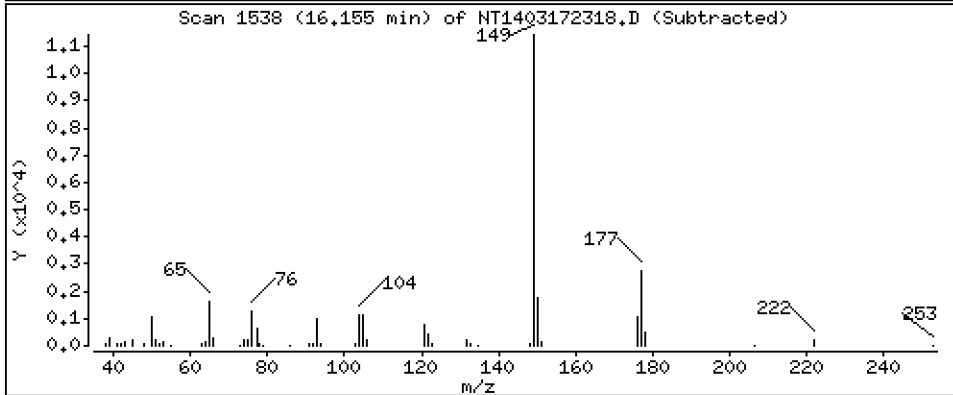
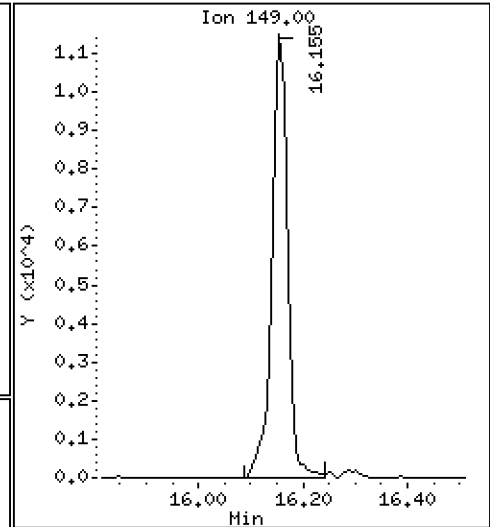
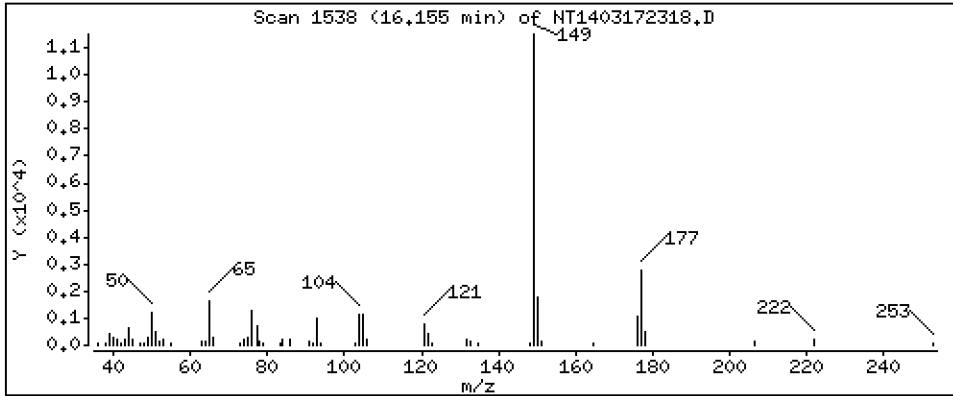
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1917 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

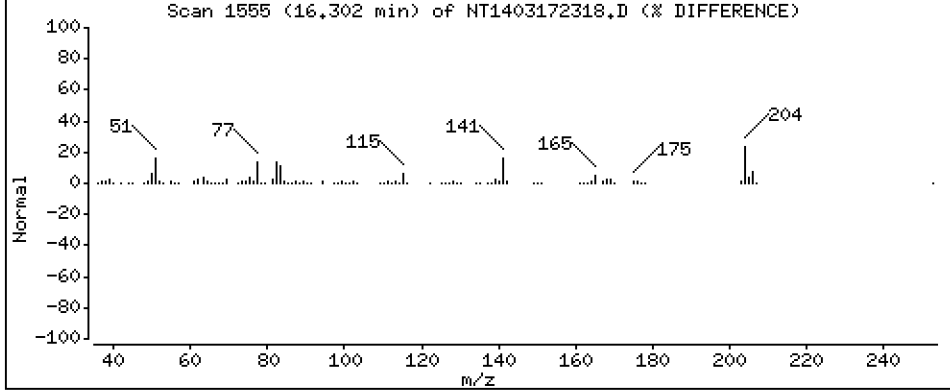
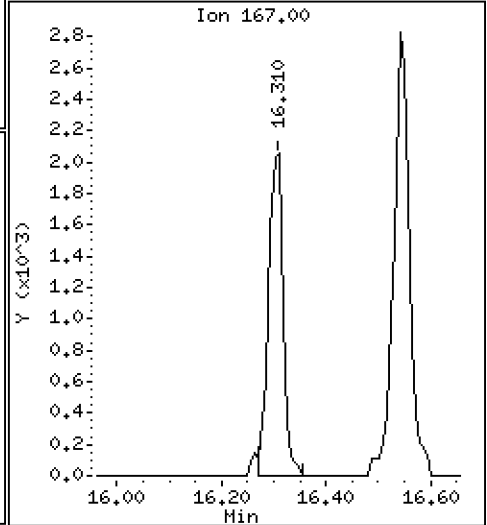
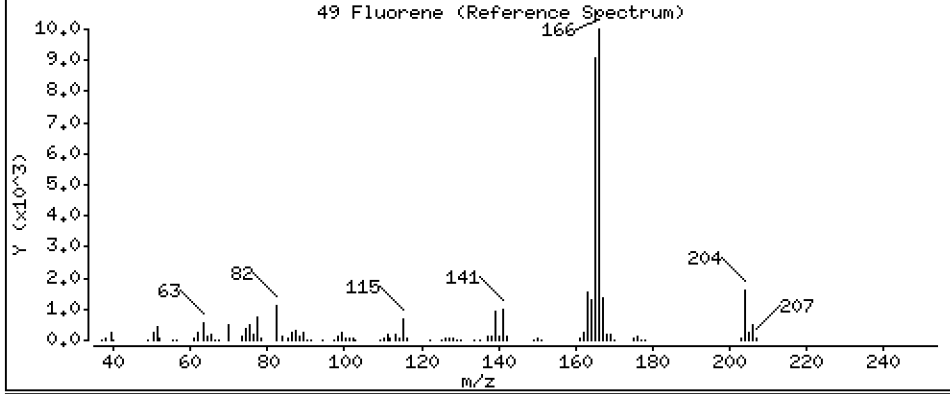
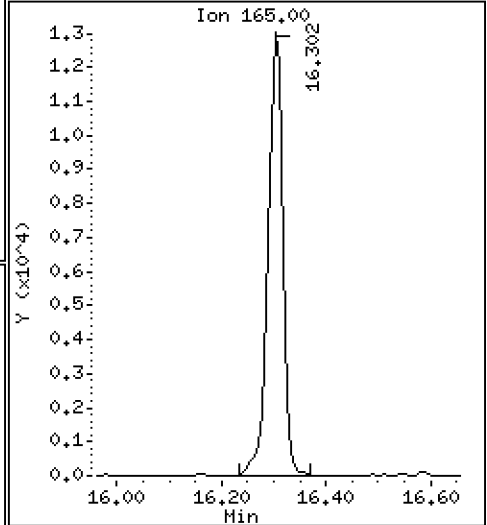
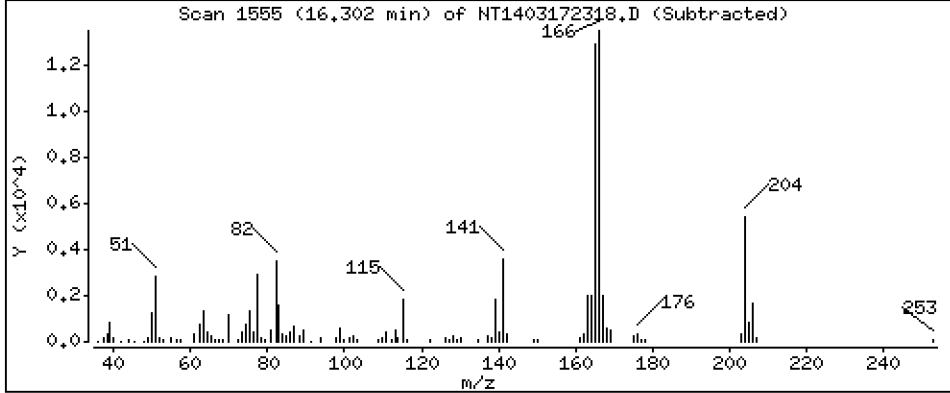
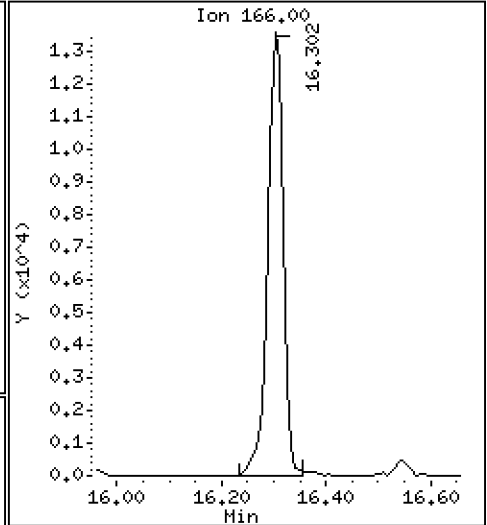
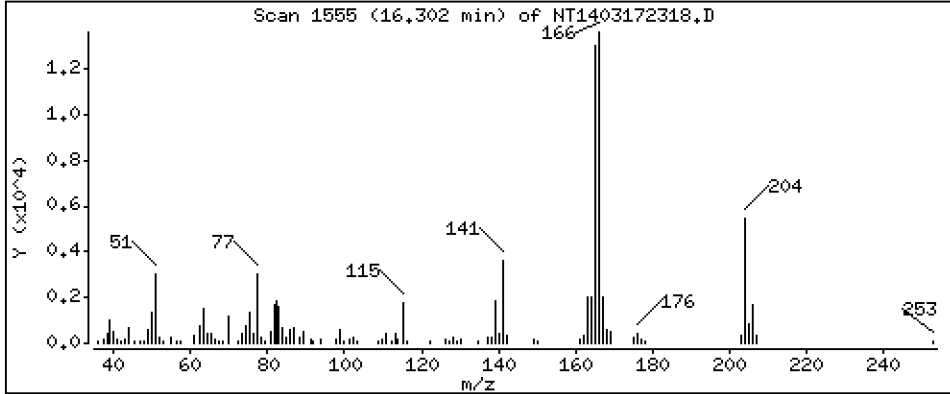
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1696 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

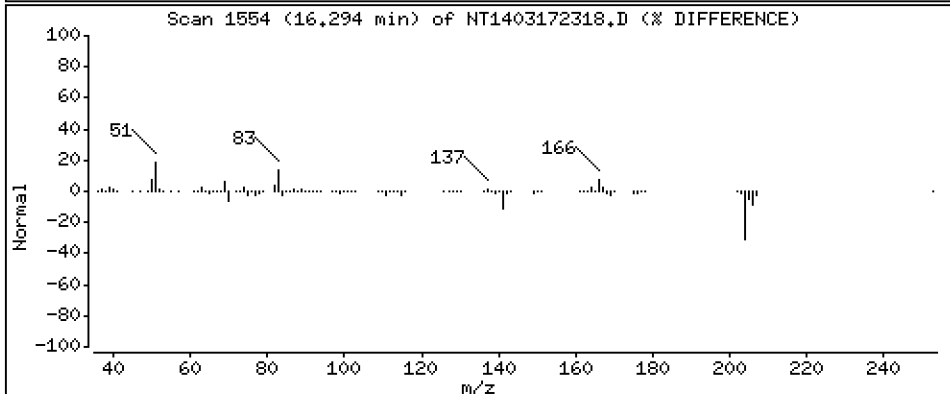
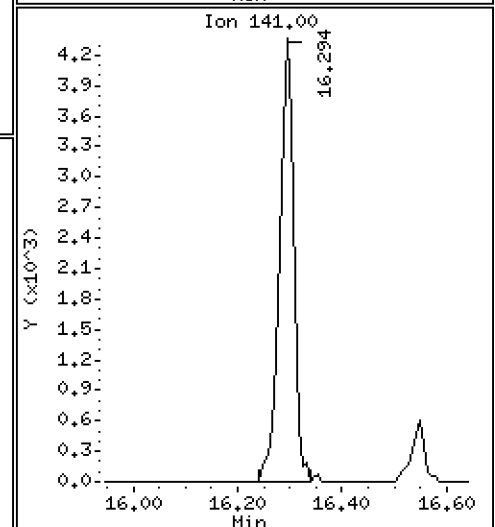
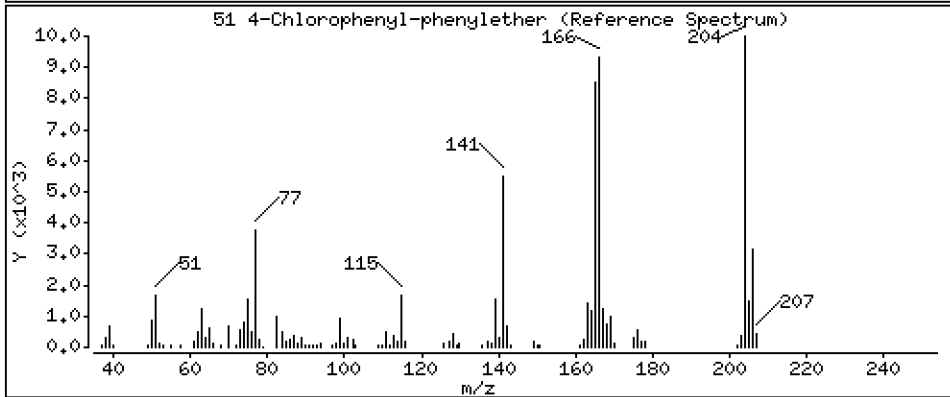
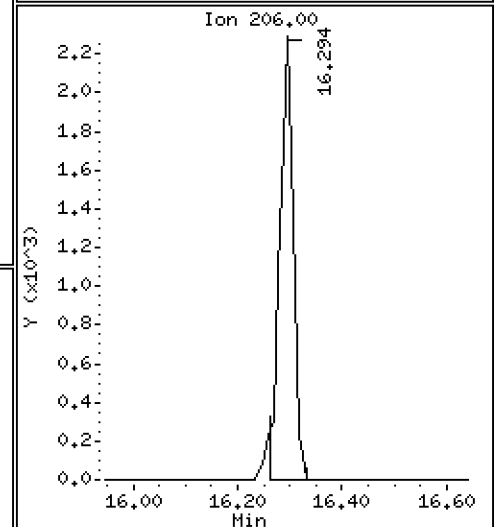
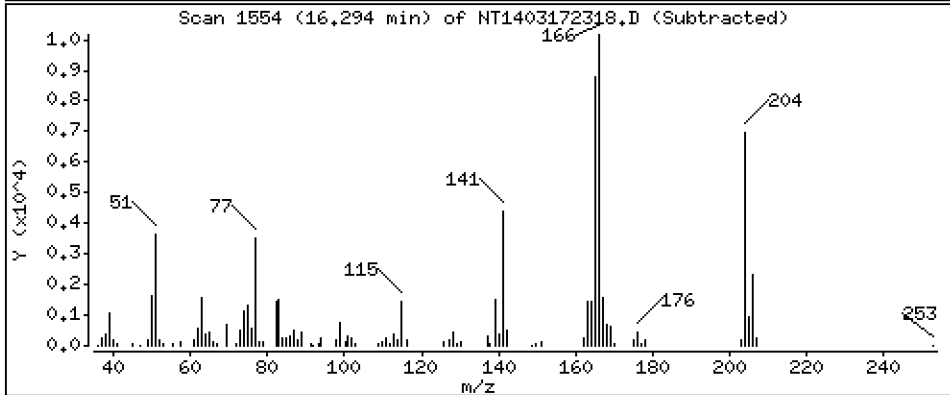
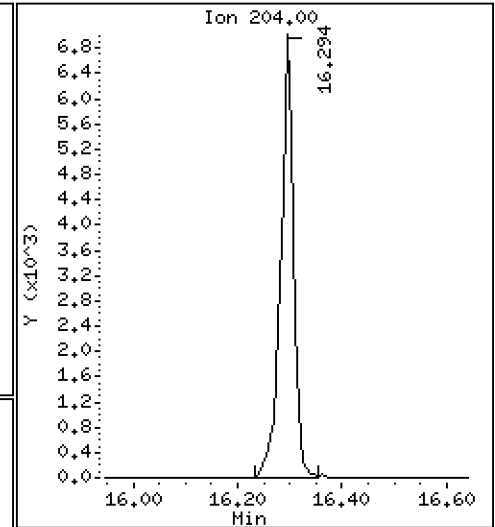
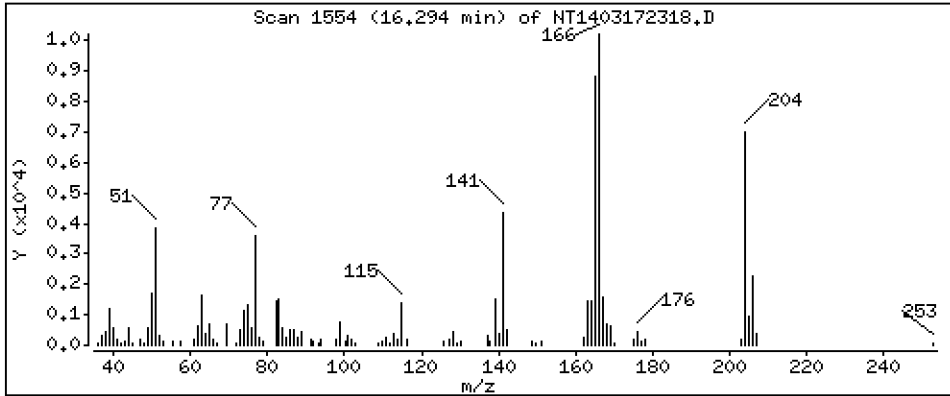
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,1733 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

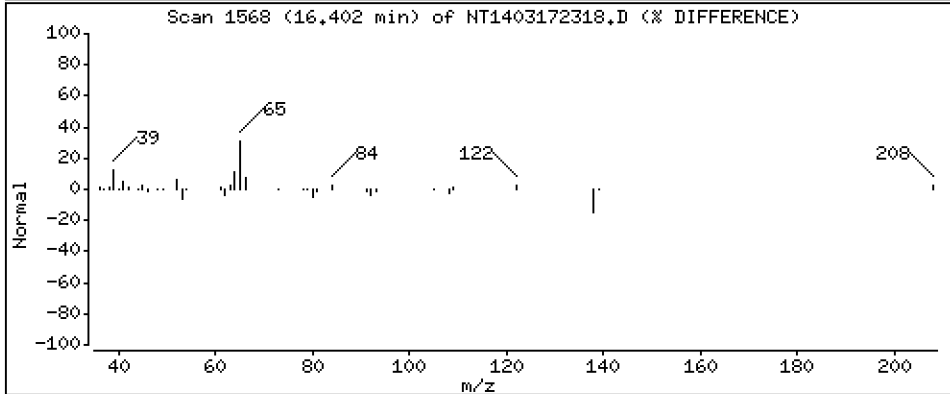
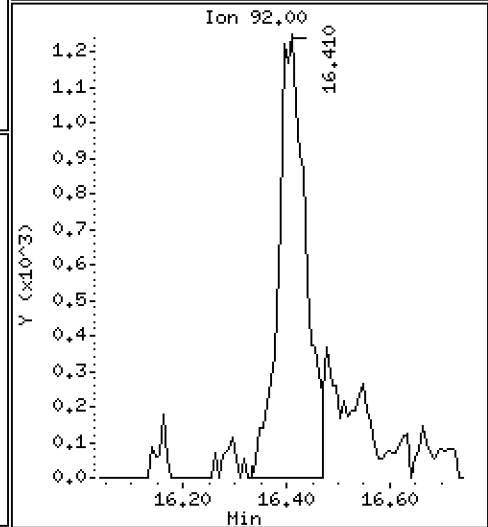
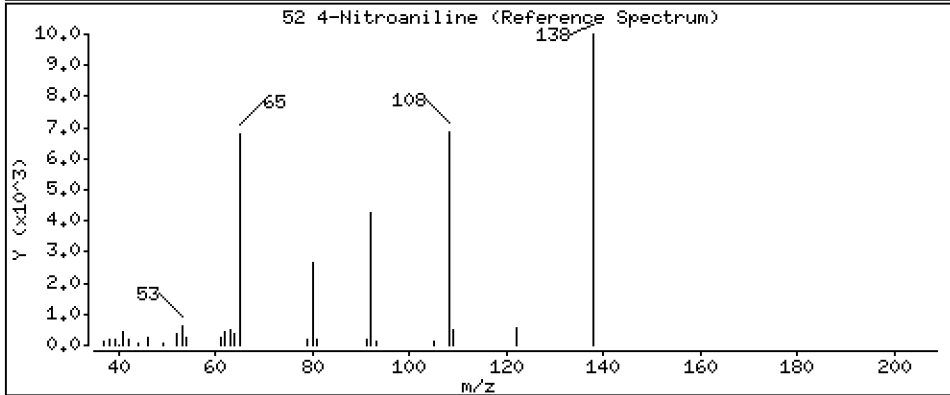
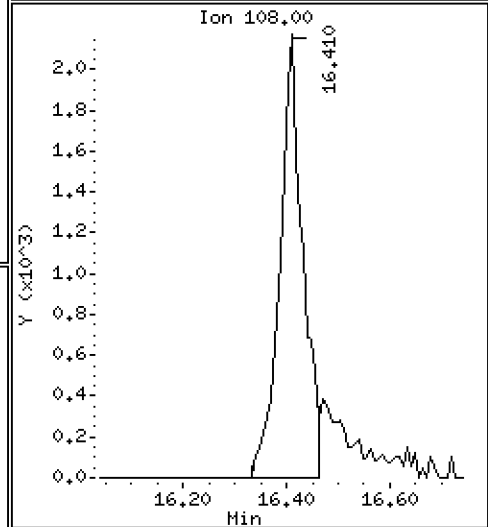
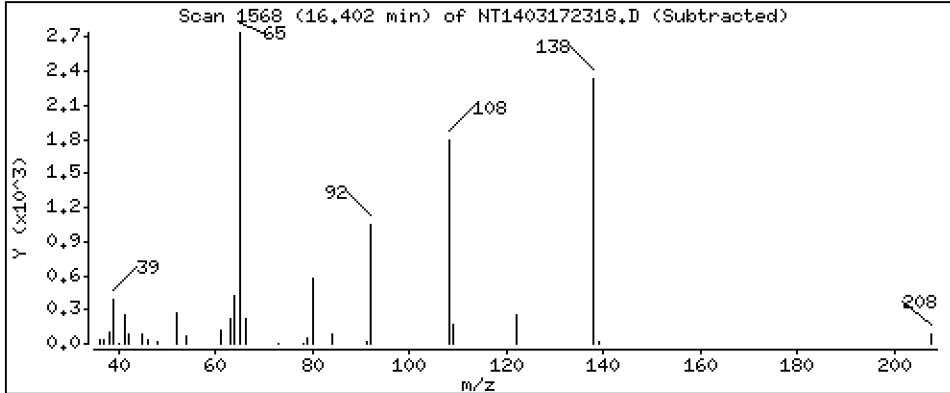
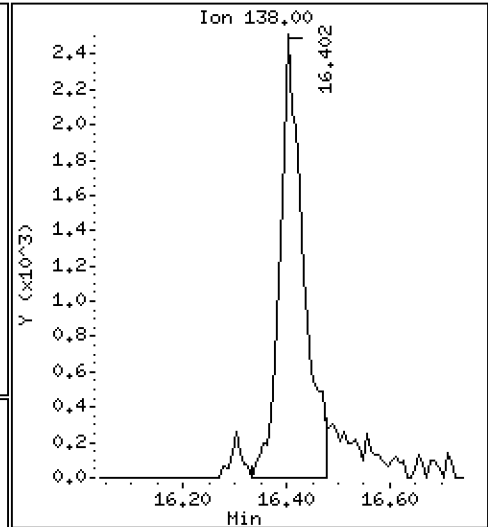
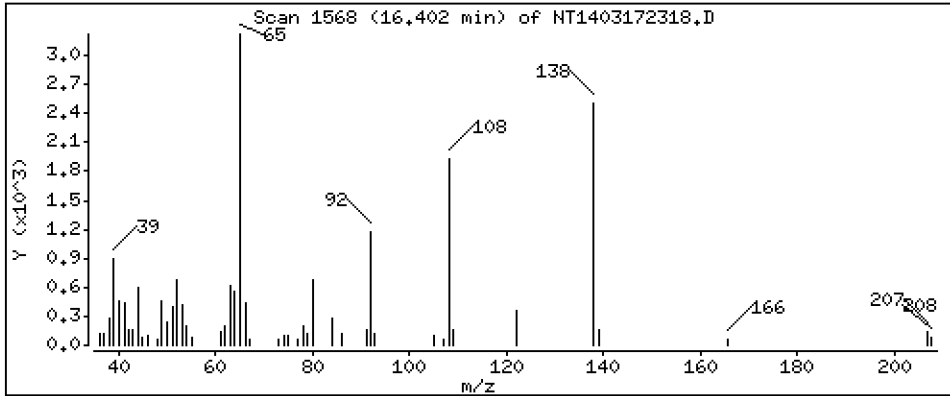
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.2262 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

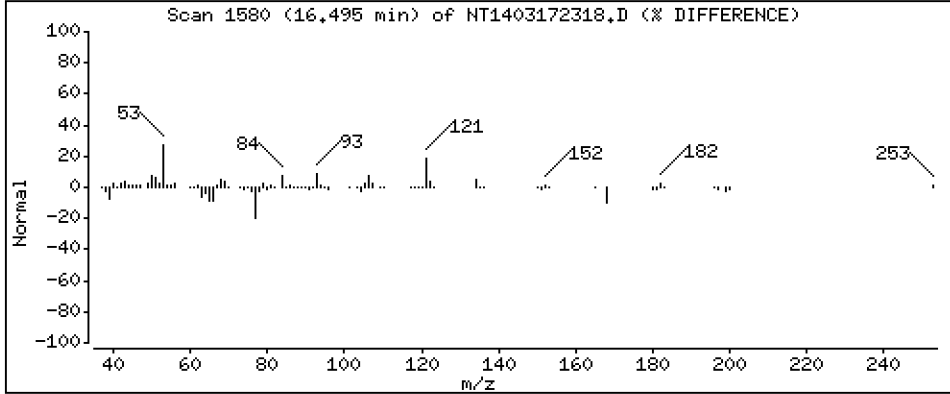
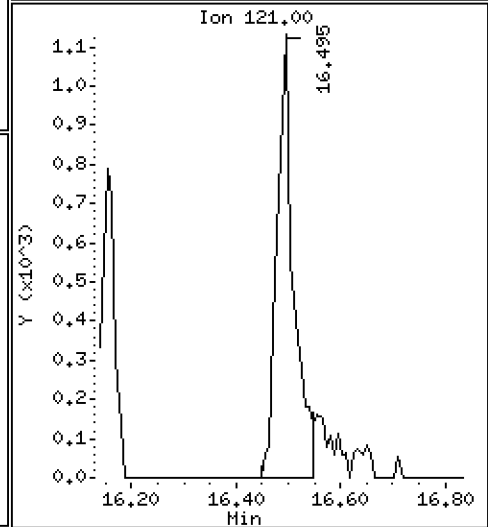
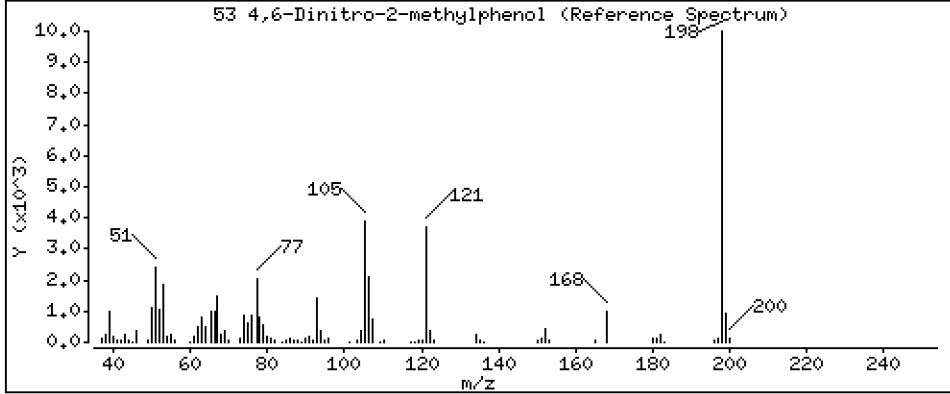
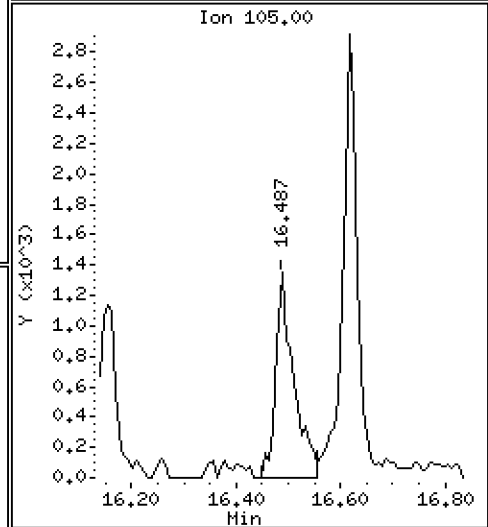
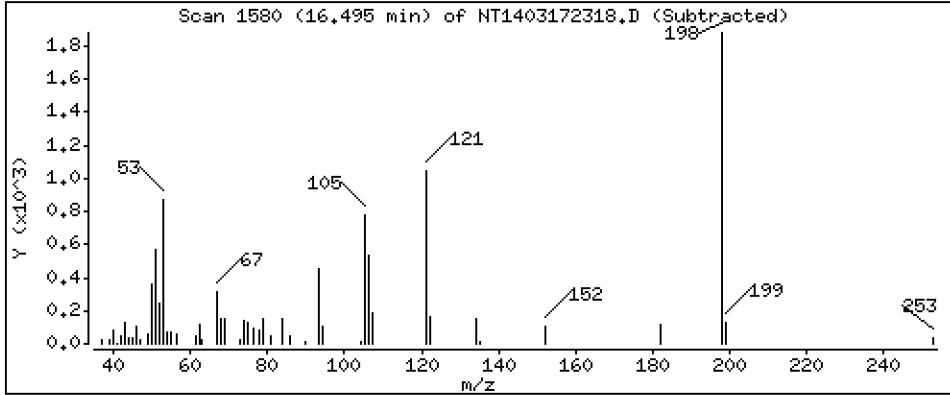
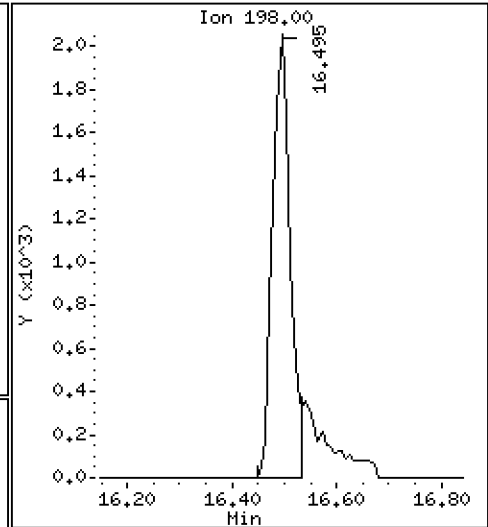
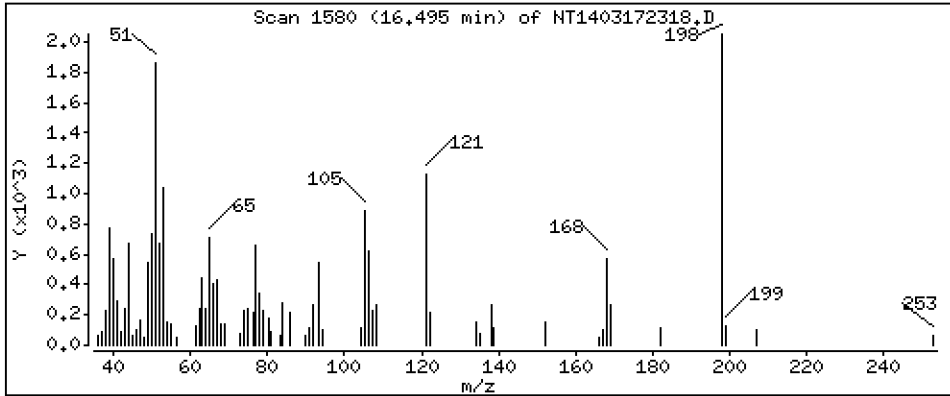
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2002 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

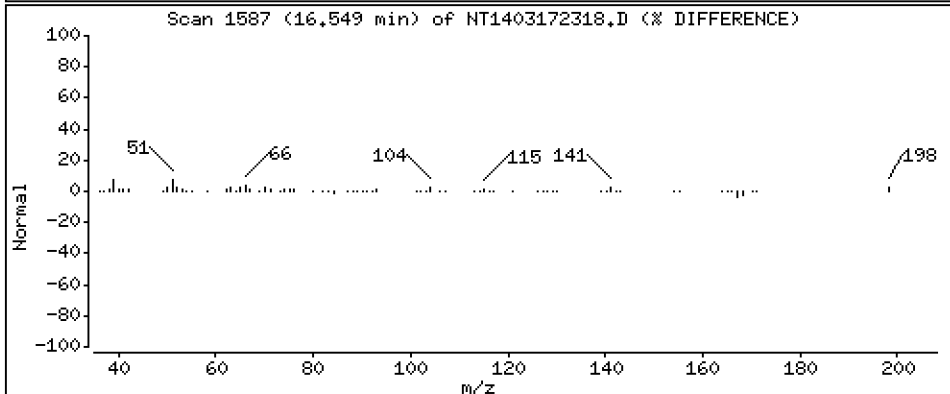
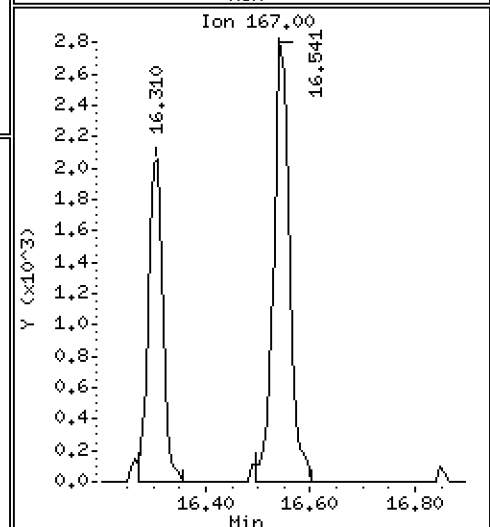
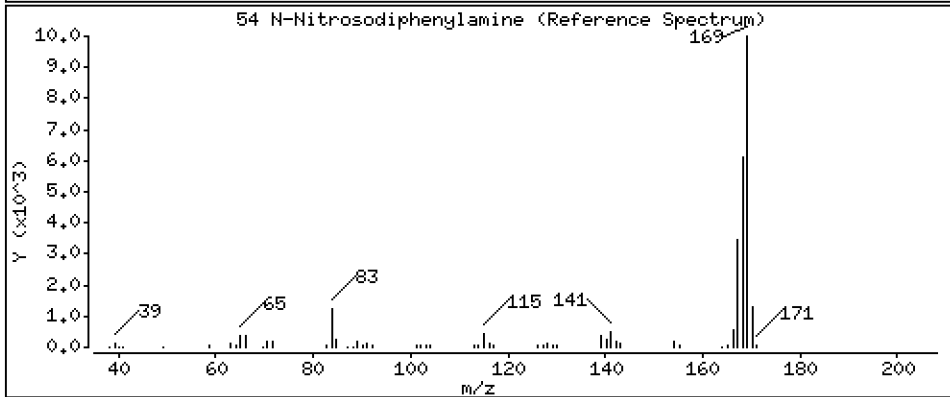
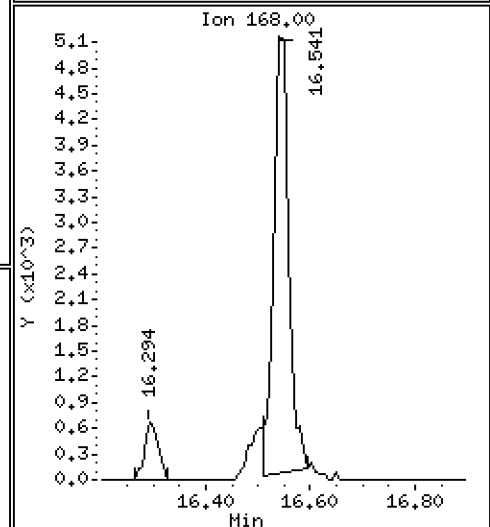
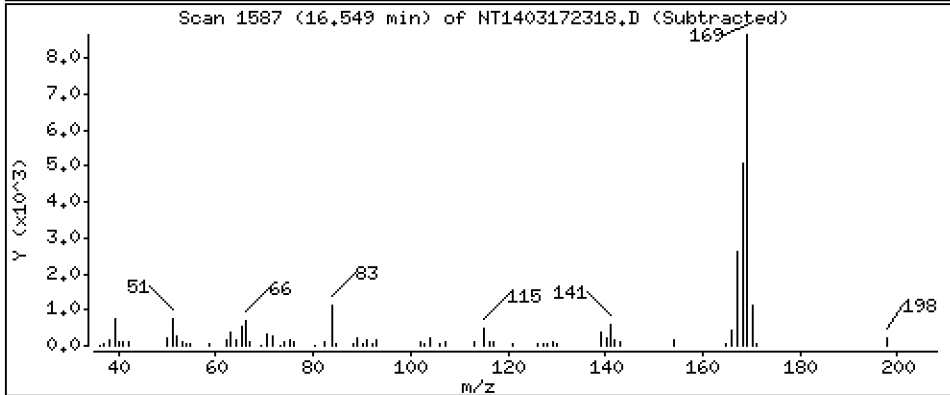
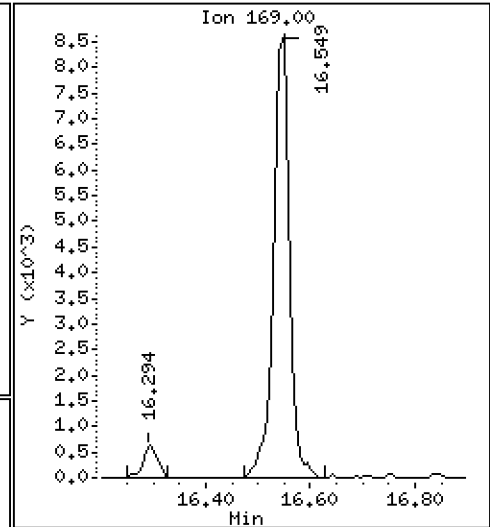
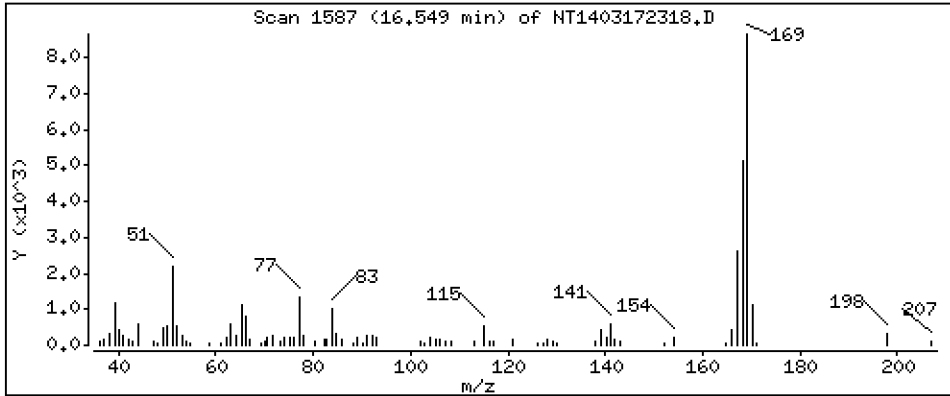
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.1901 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

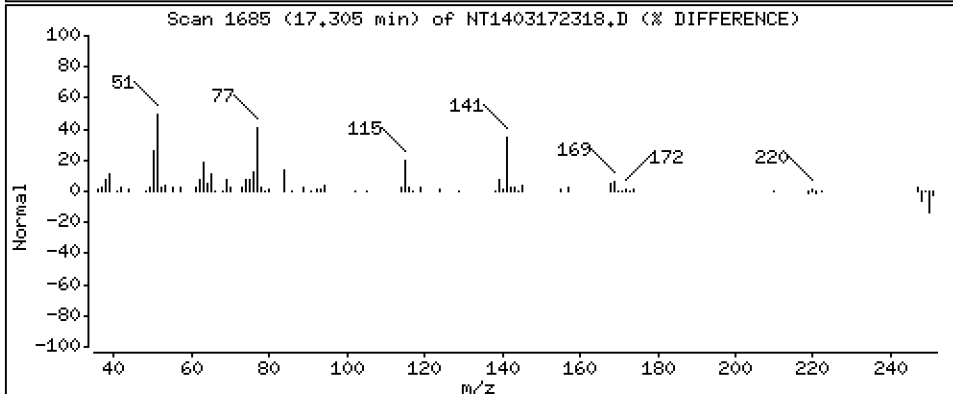
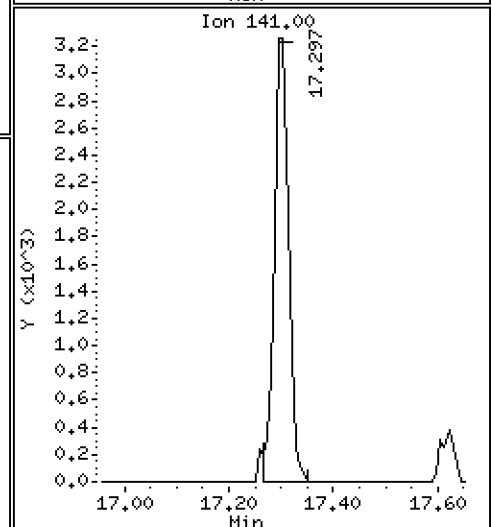
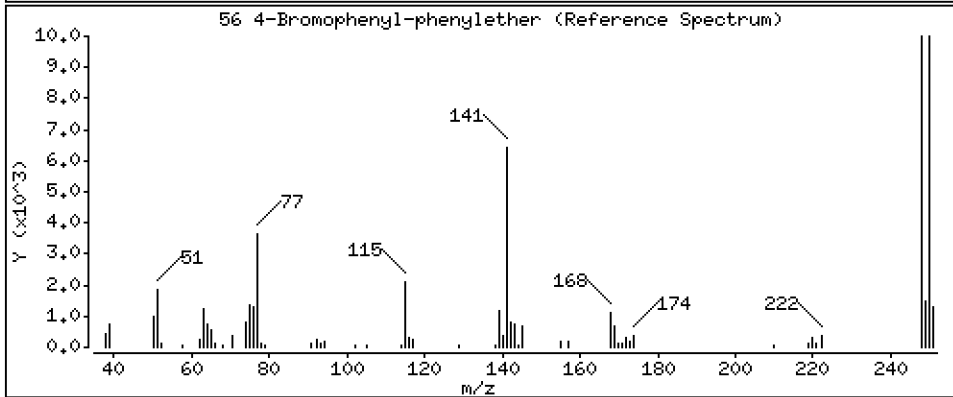
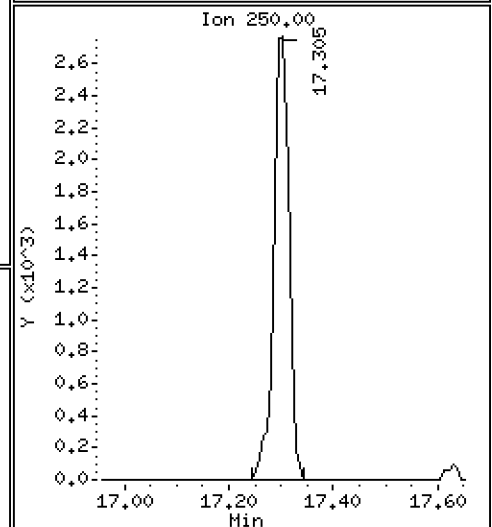
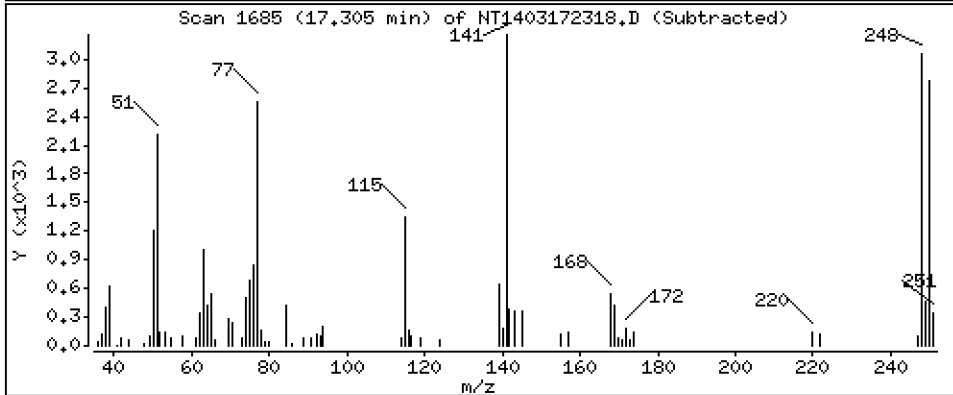
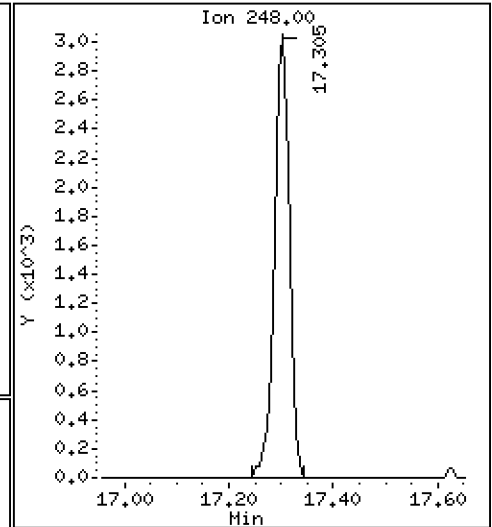
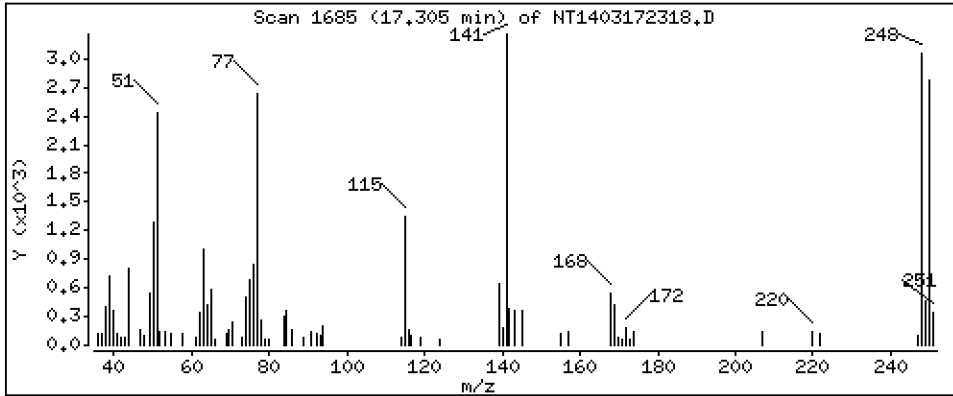
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

56 4-Bromophenyl-phenylether

Concentration: 0.1868 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

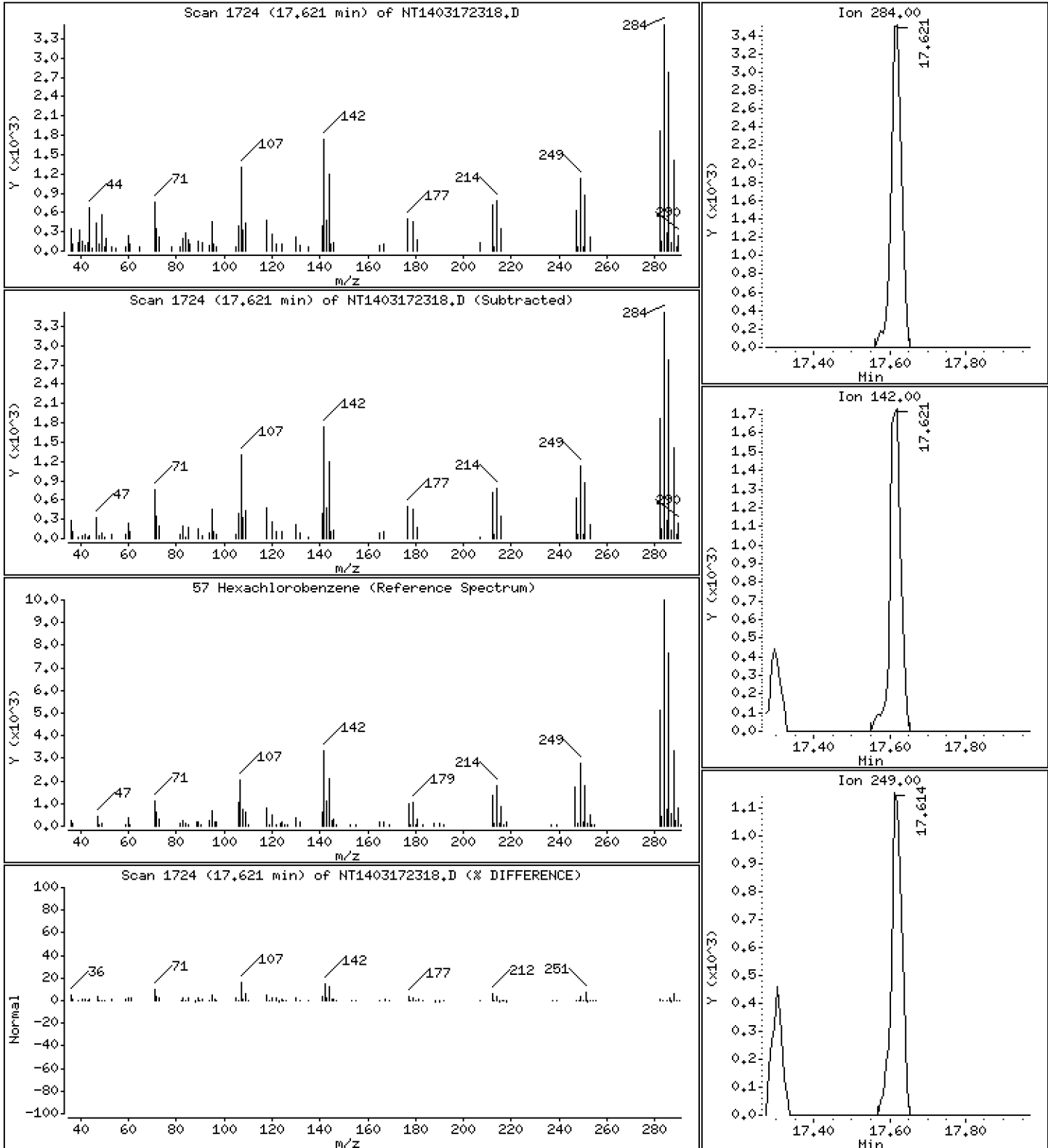
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2040 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

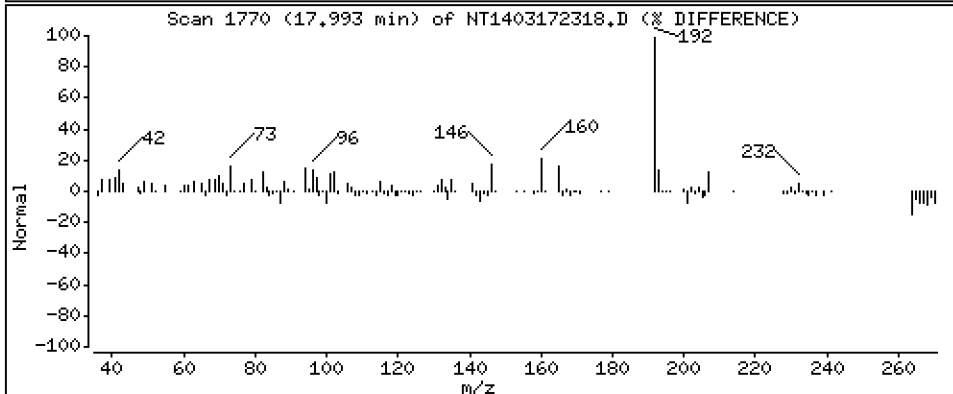
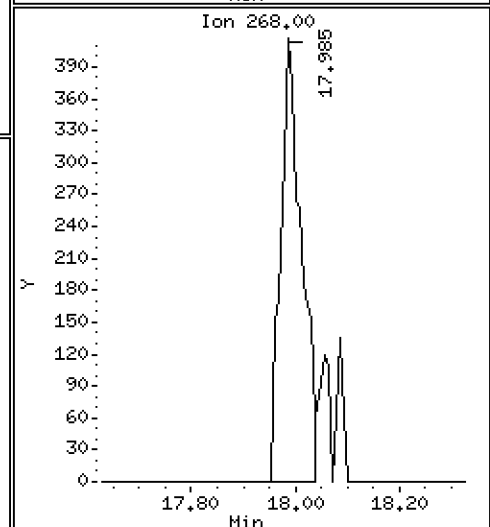
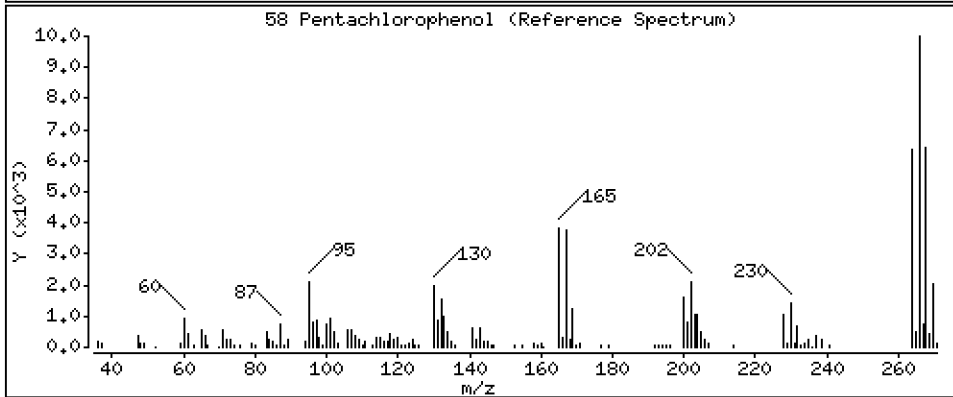
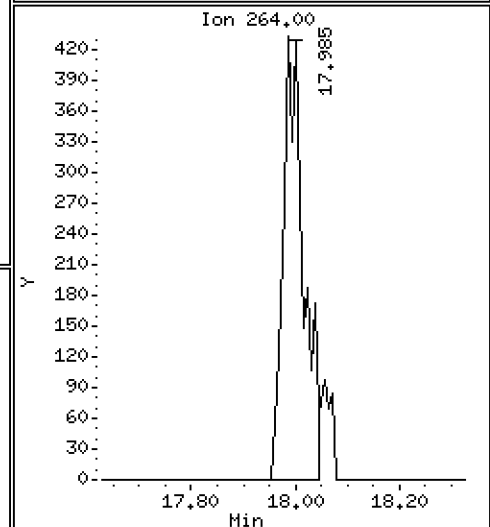
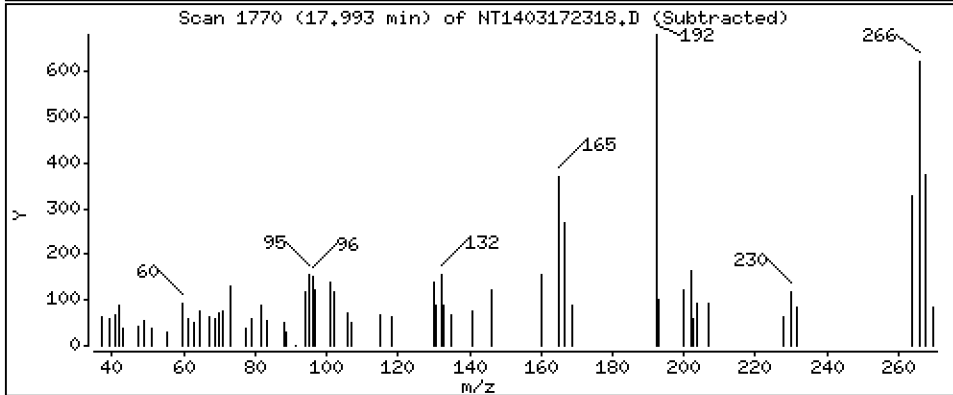
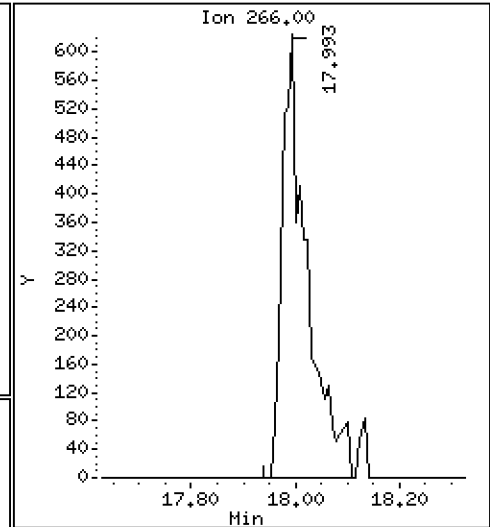
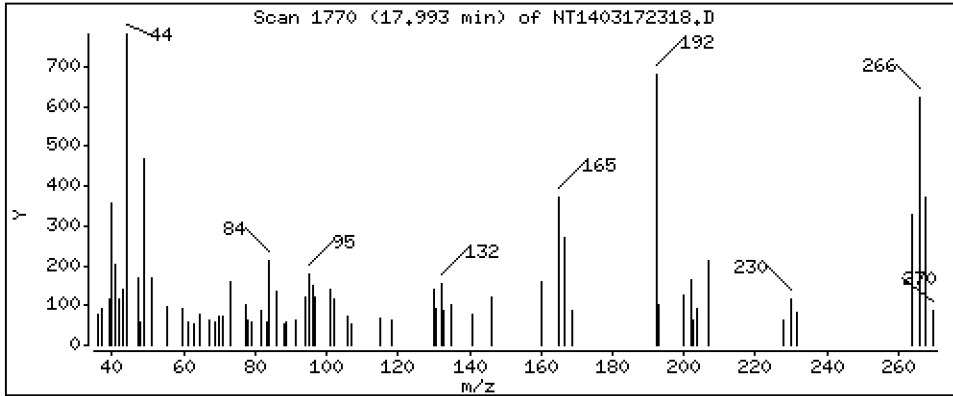
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,09107 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

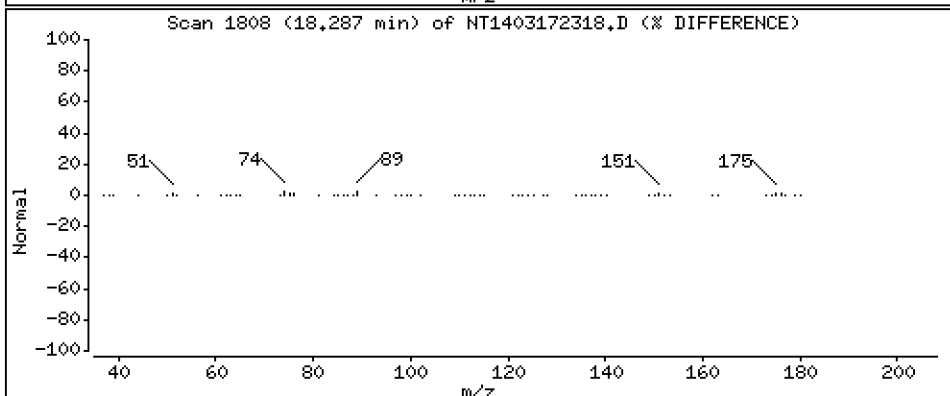
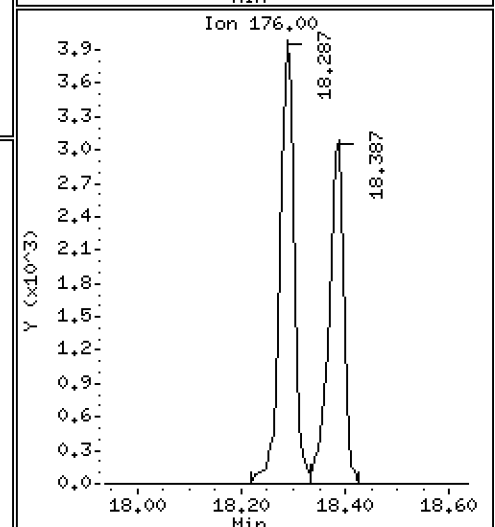
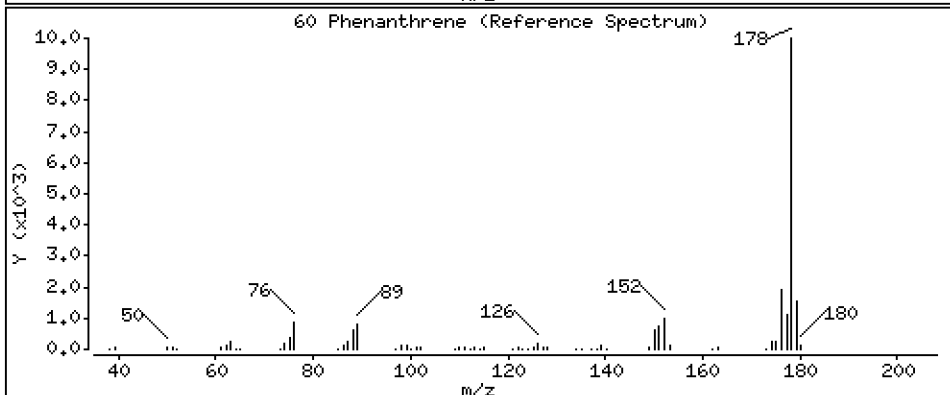
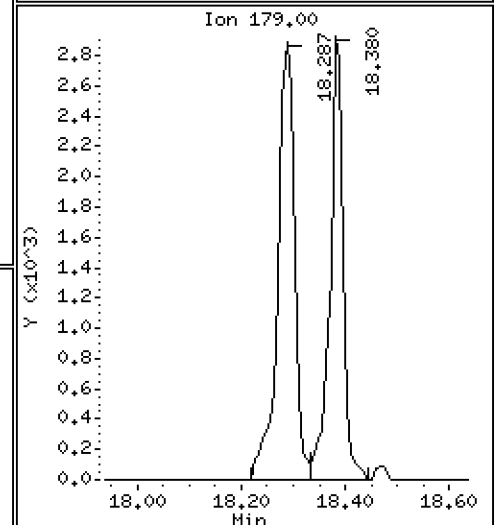
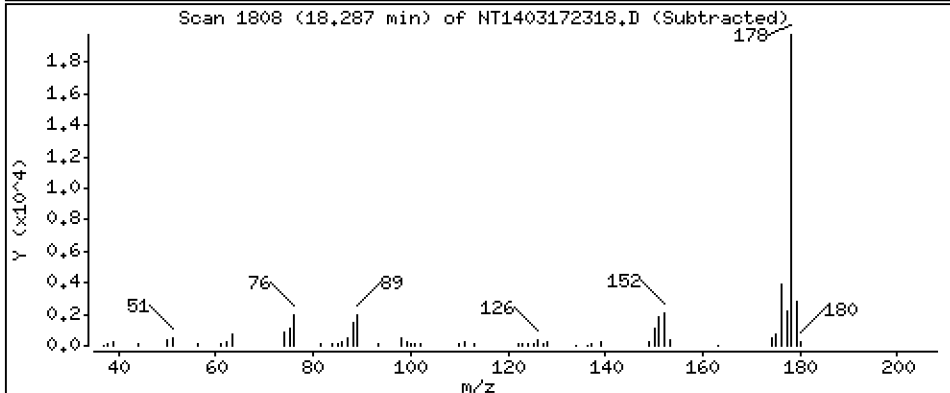
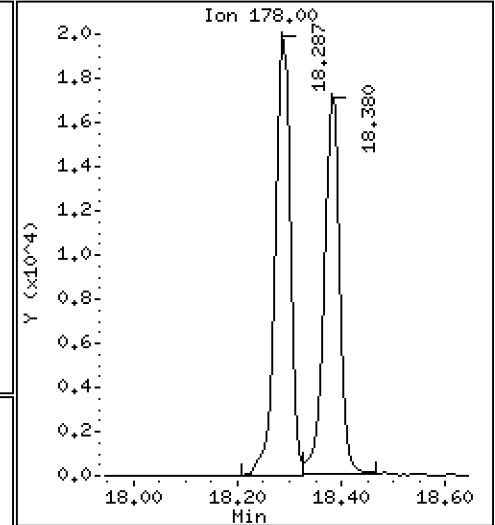
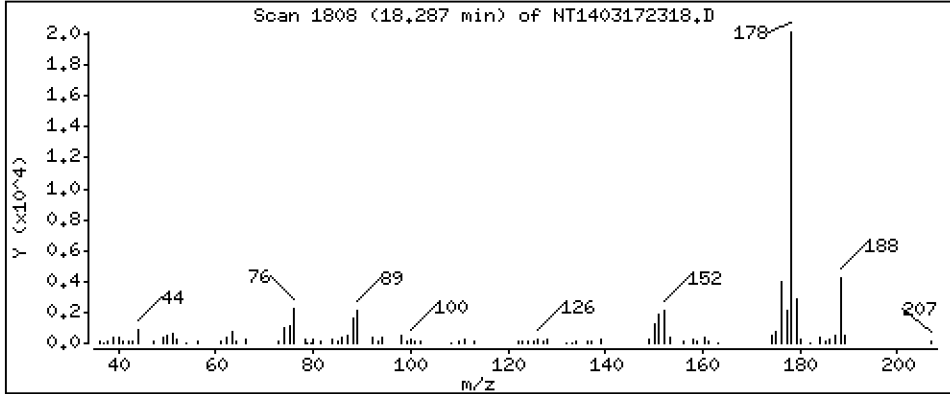
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1994 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

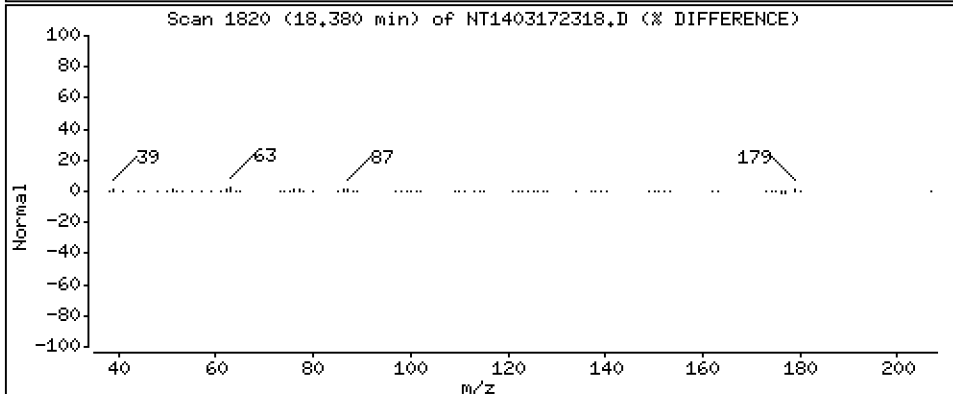
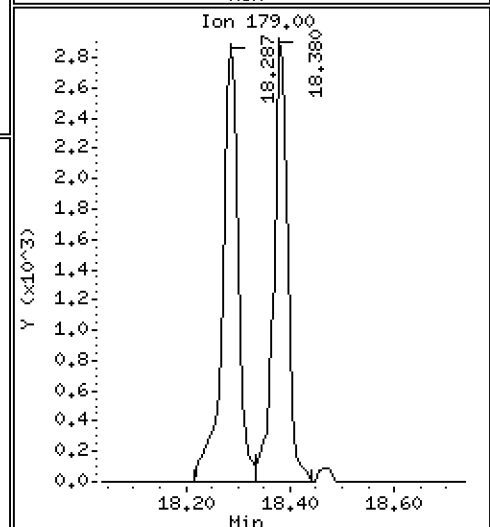
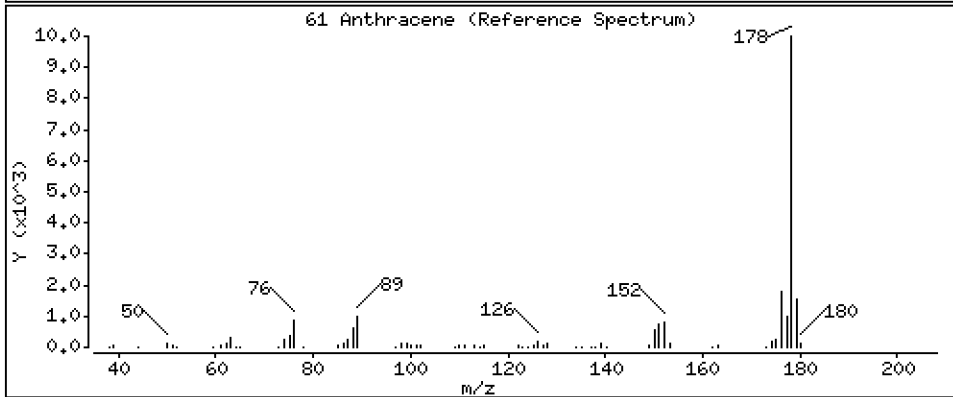
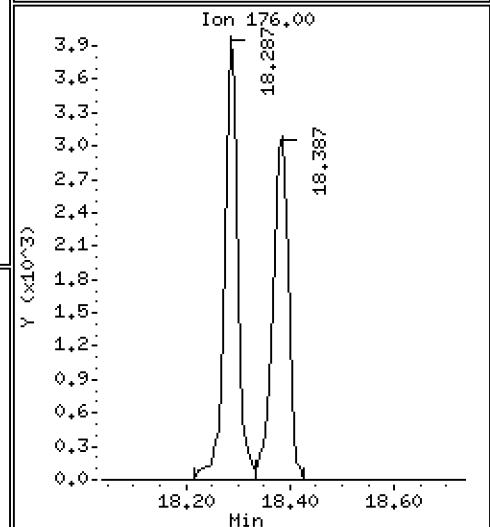
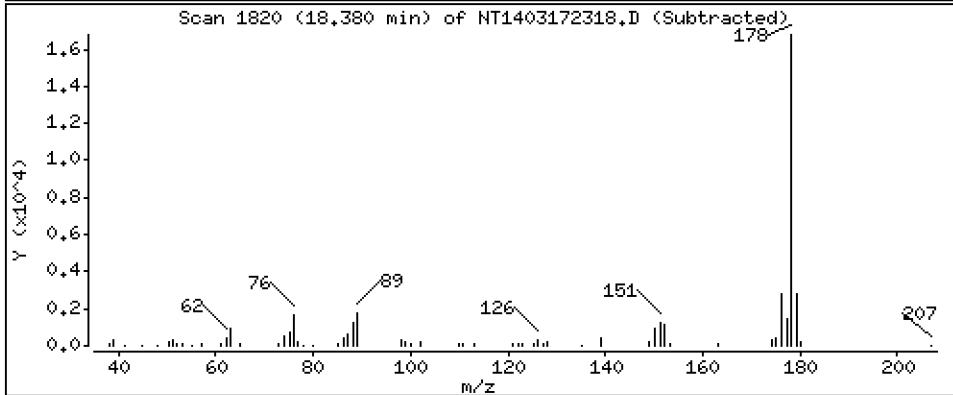
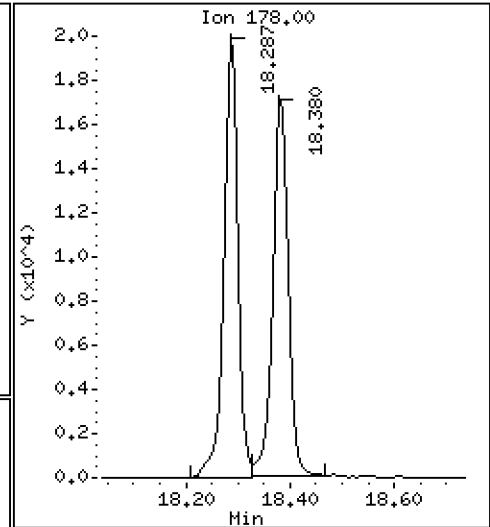
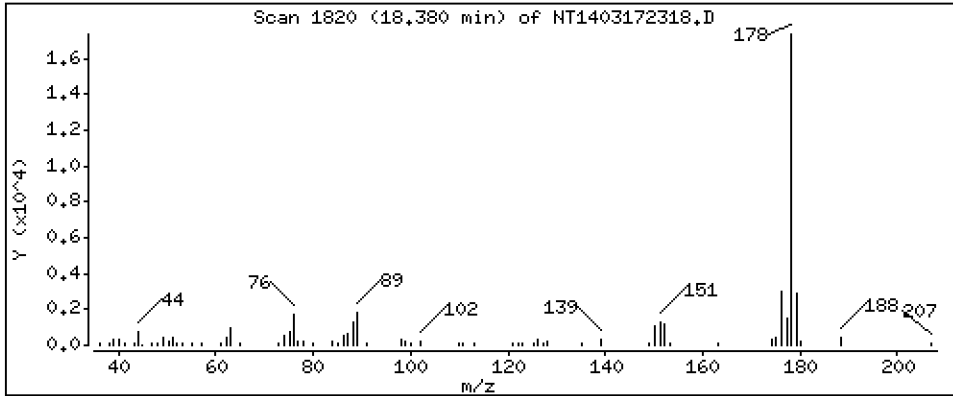
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1833 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

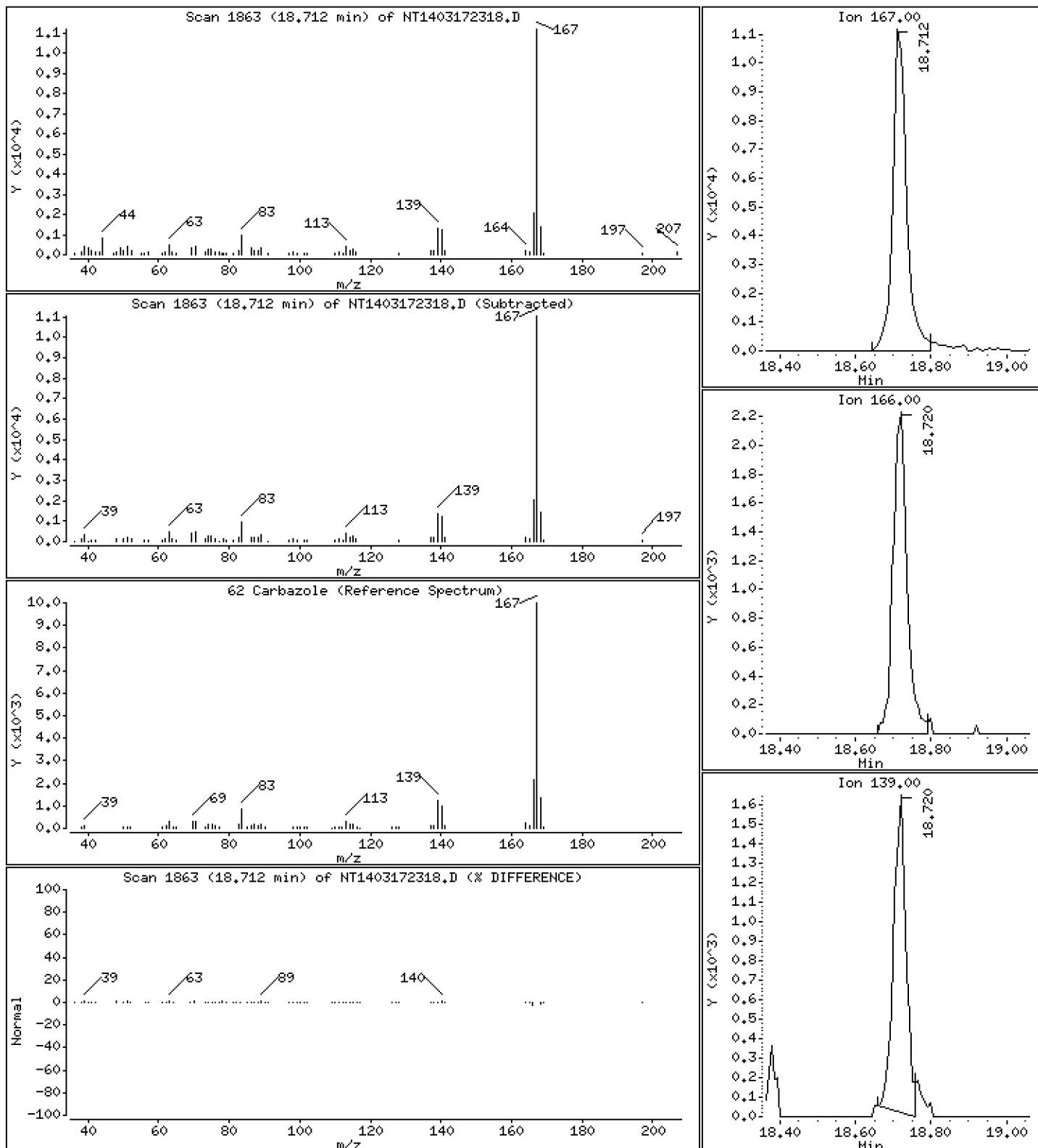
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1654 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

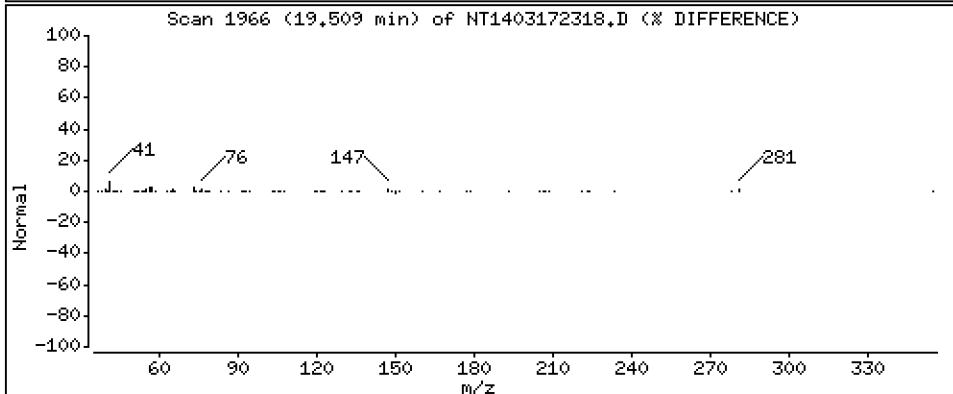
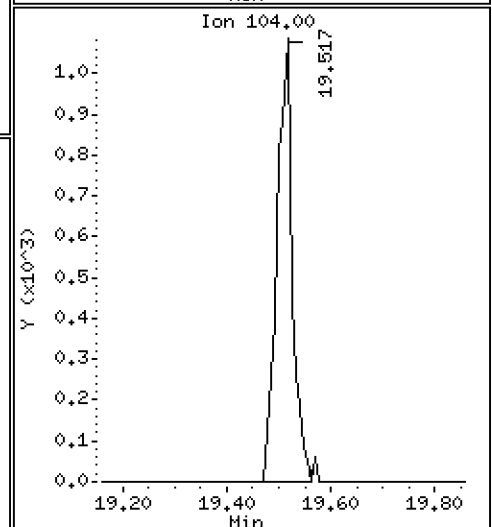
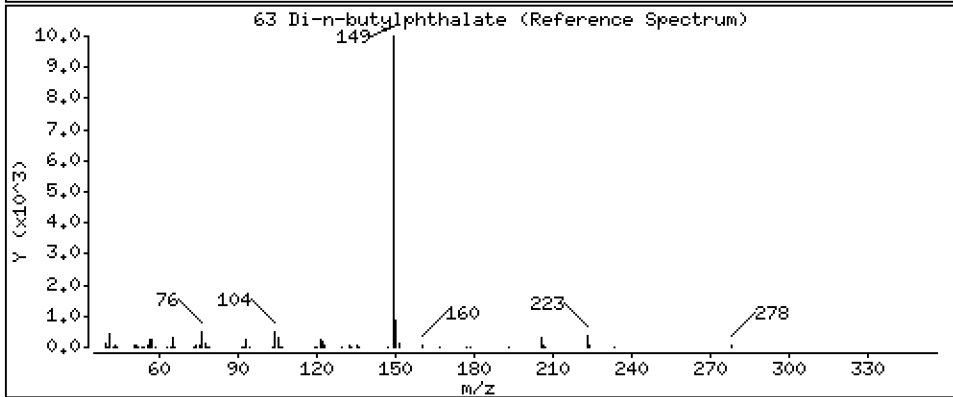
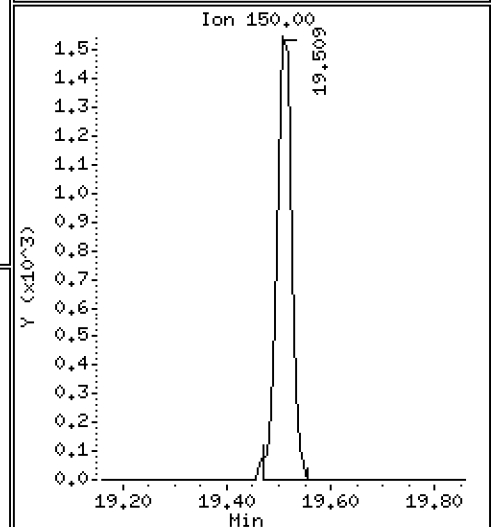
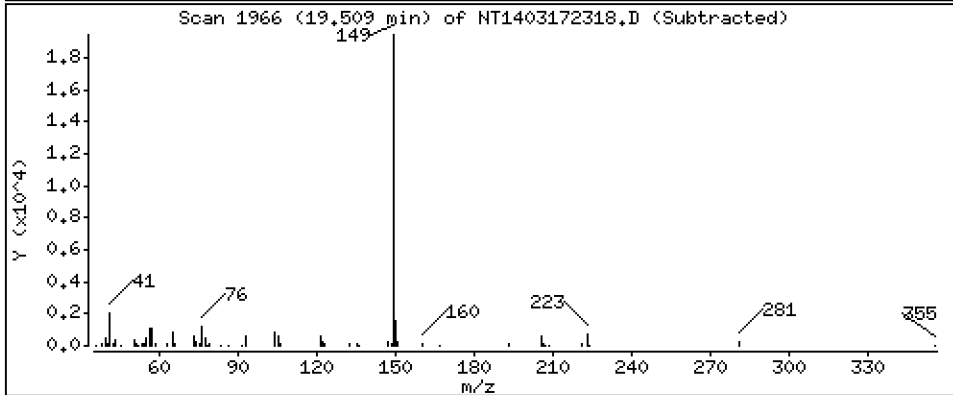
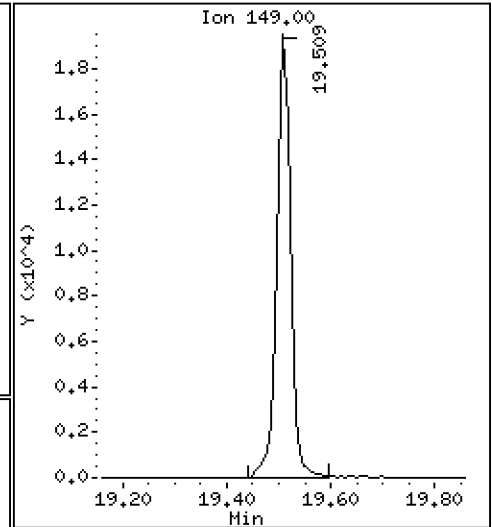
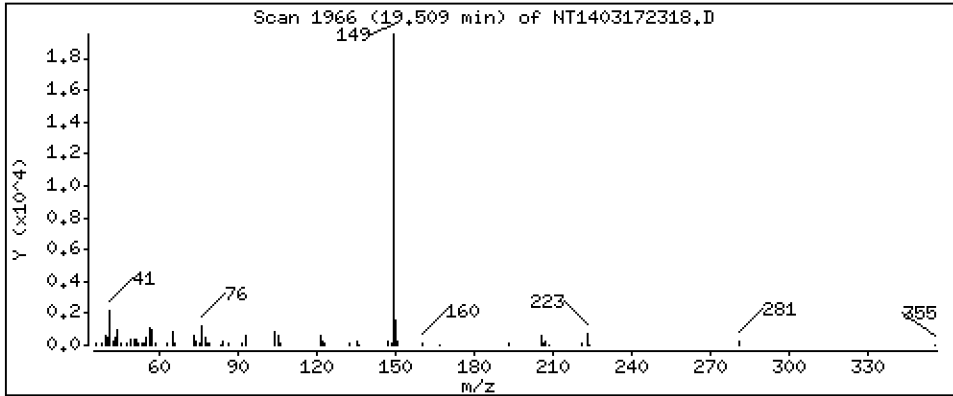
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1620 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

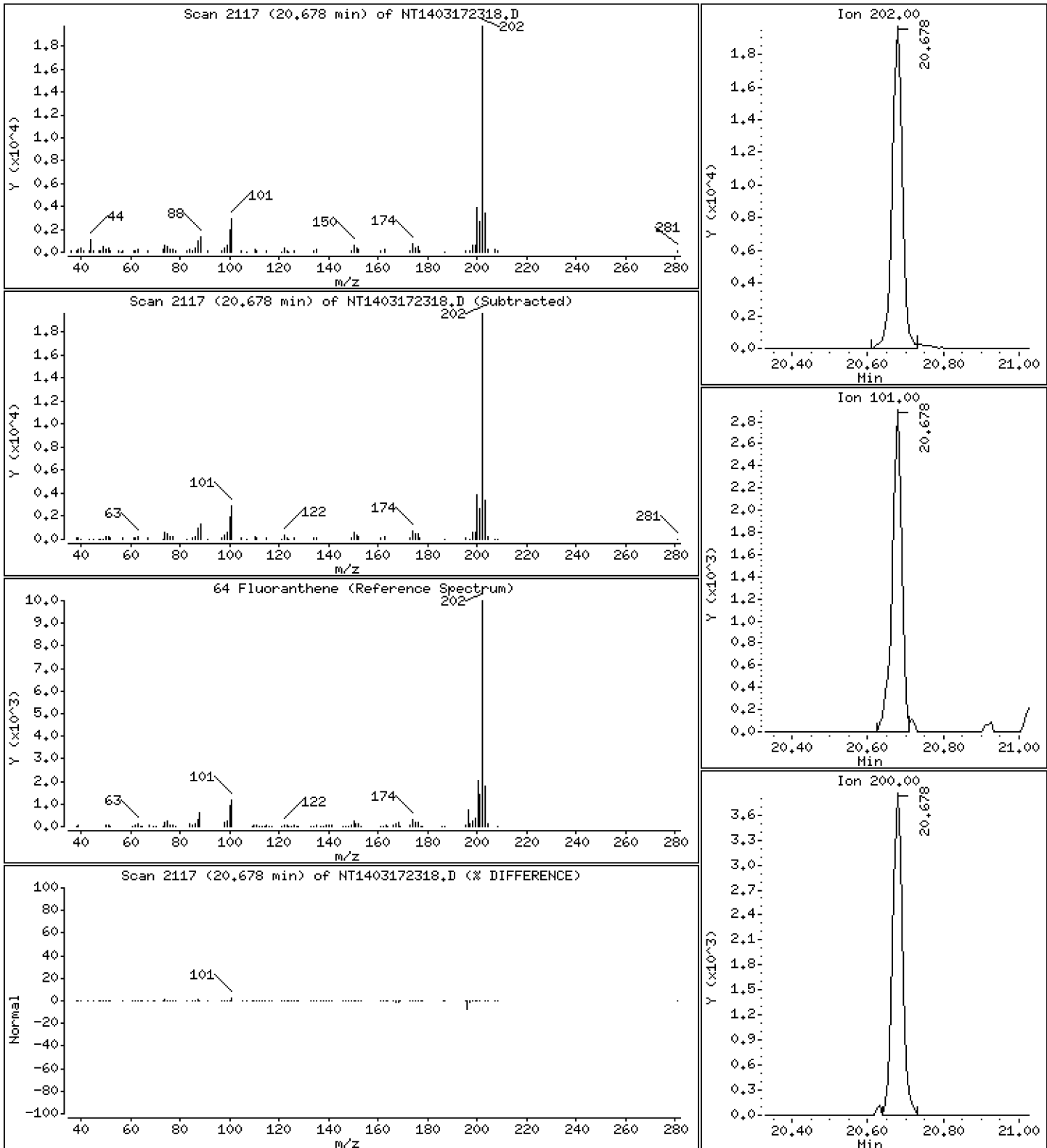
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,2242 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

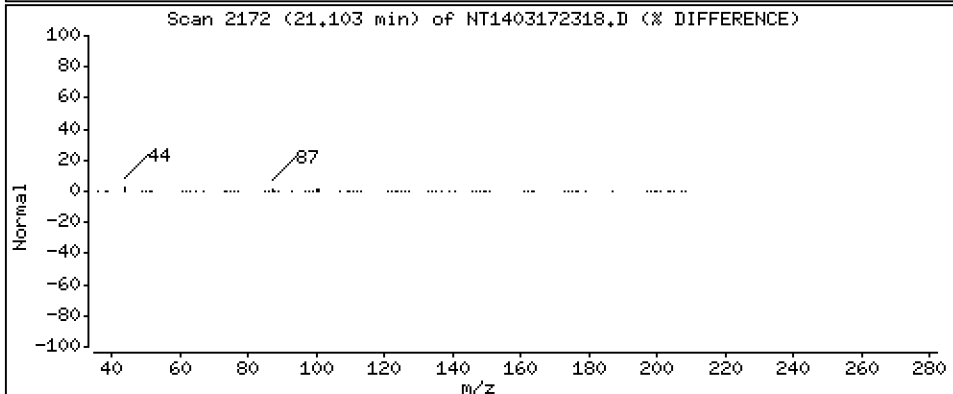
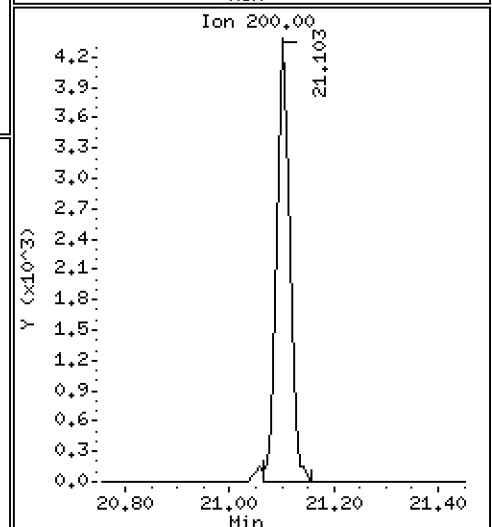
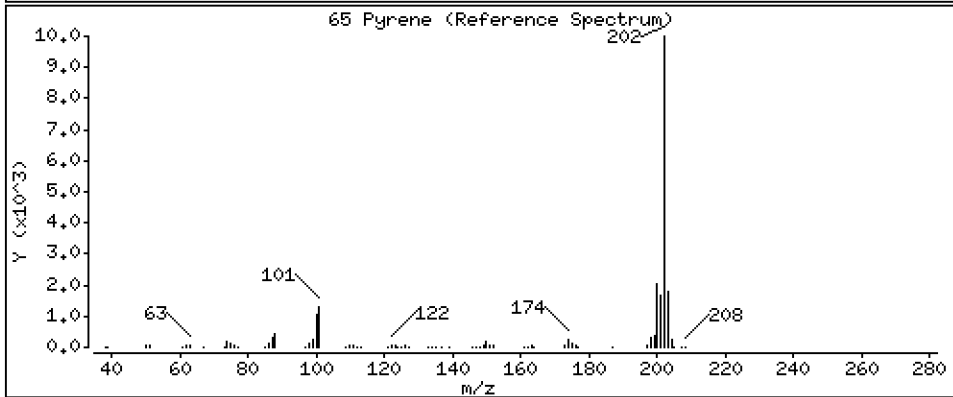
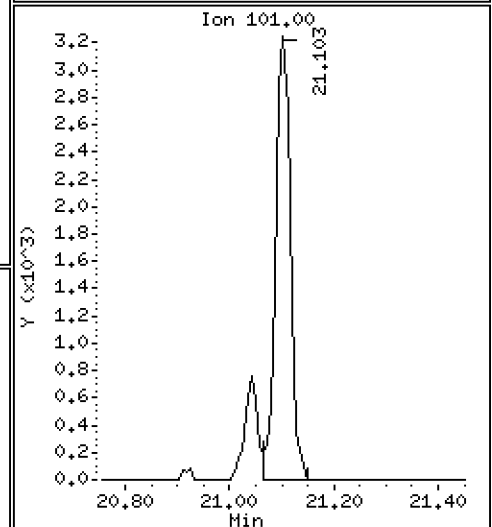
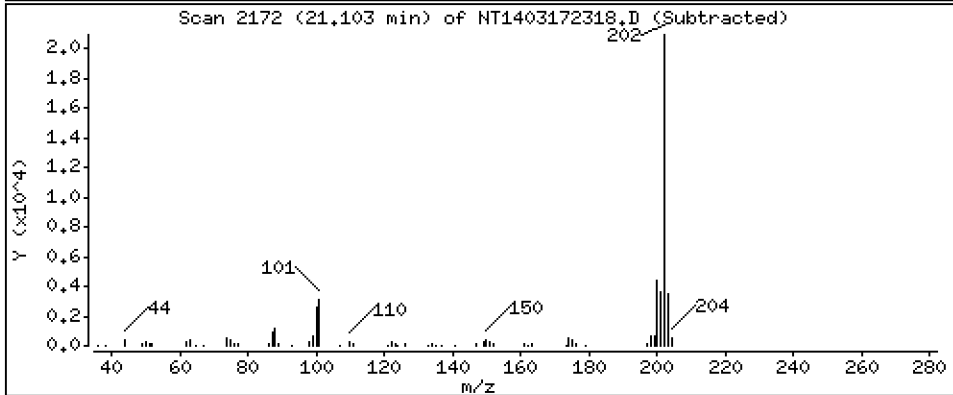
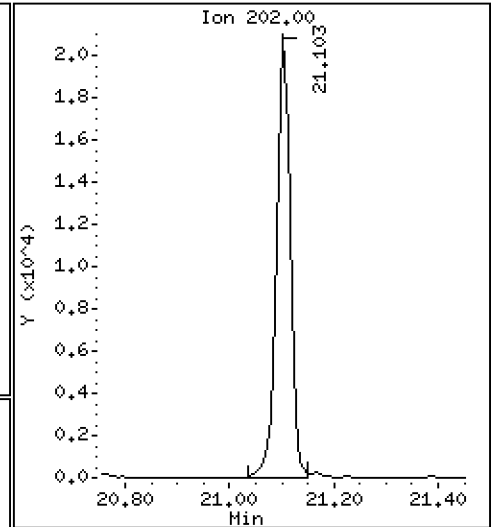
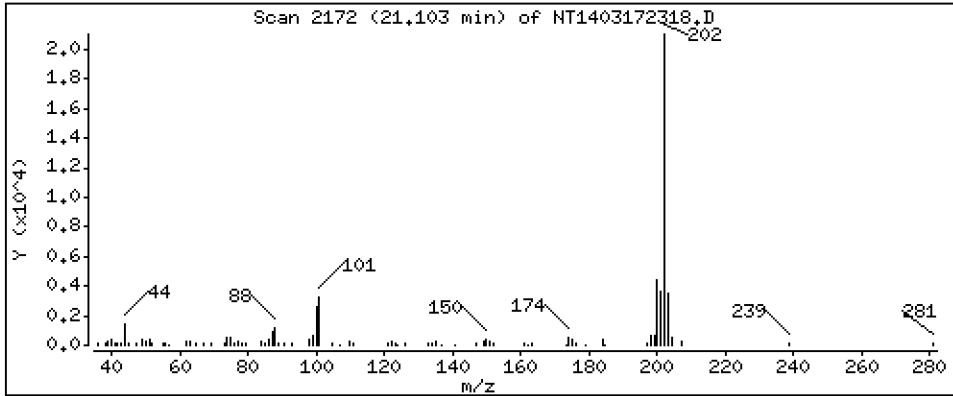
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,2306 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

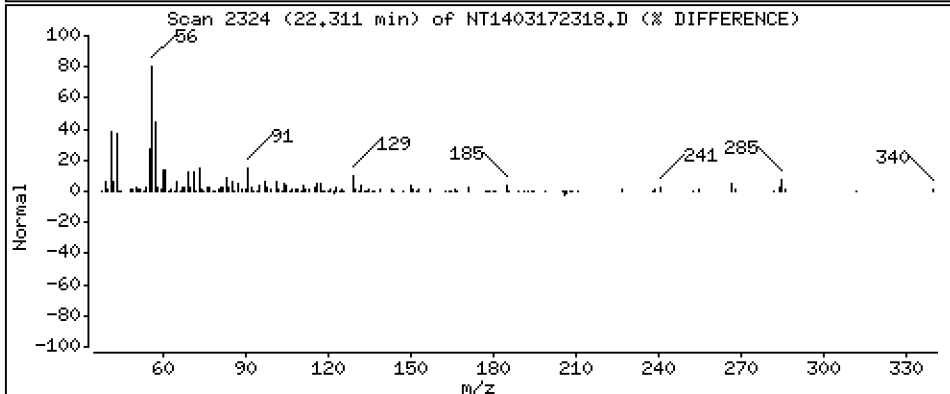
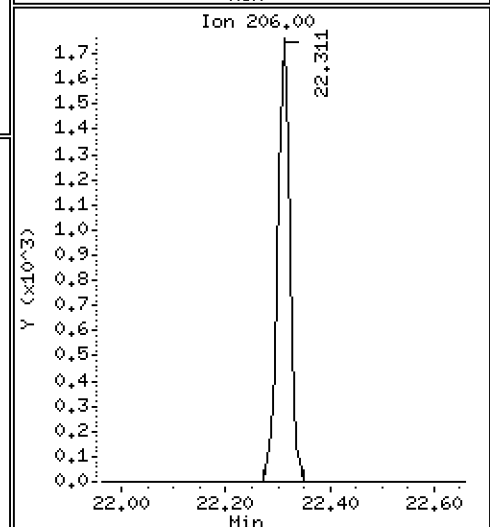
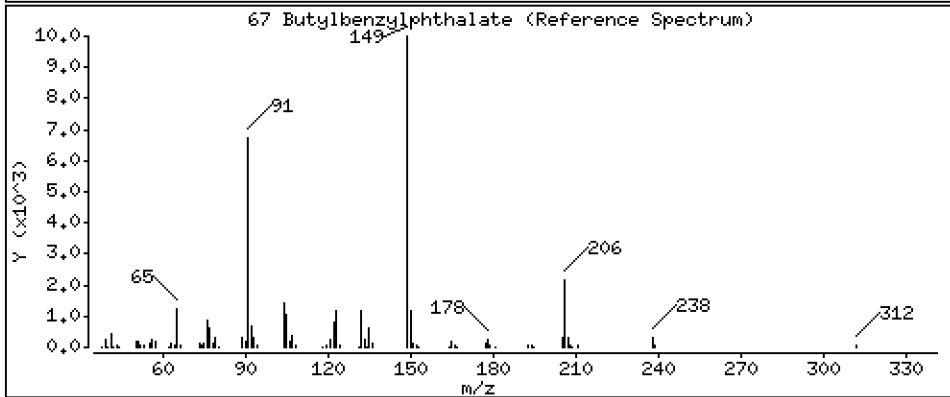
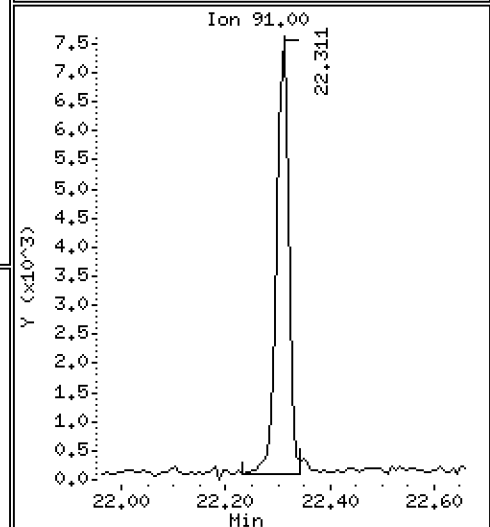
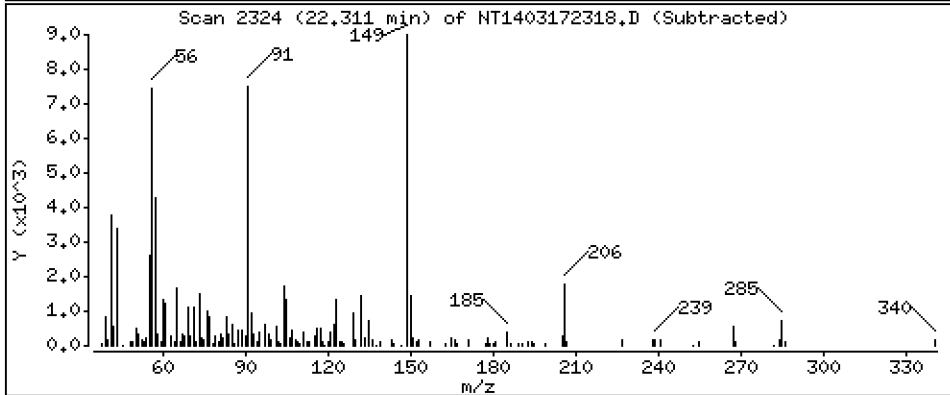
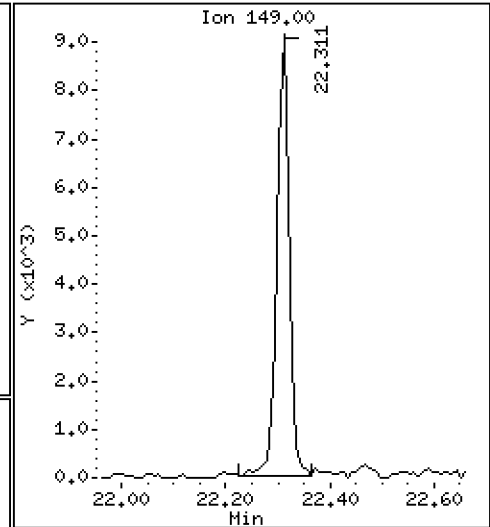
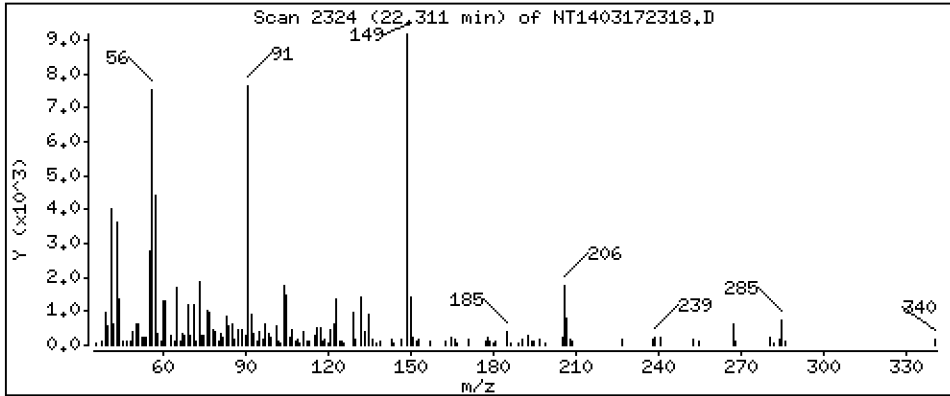
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2018 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

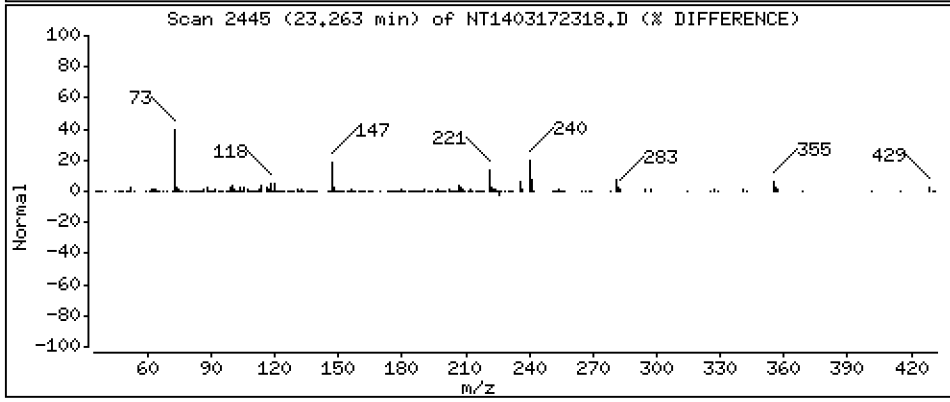
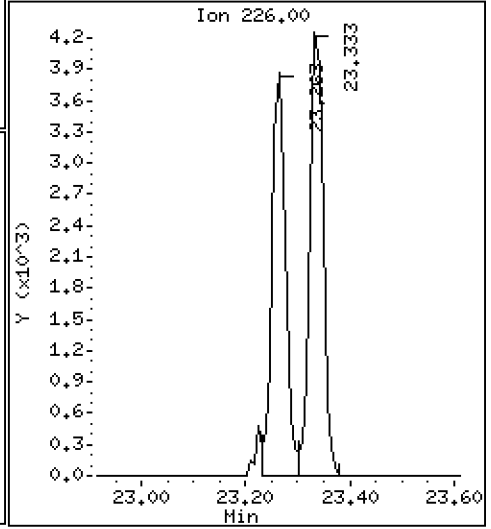
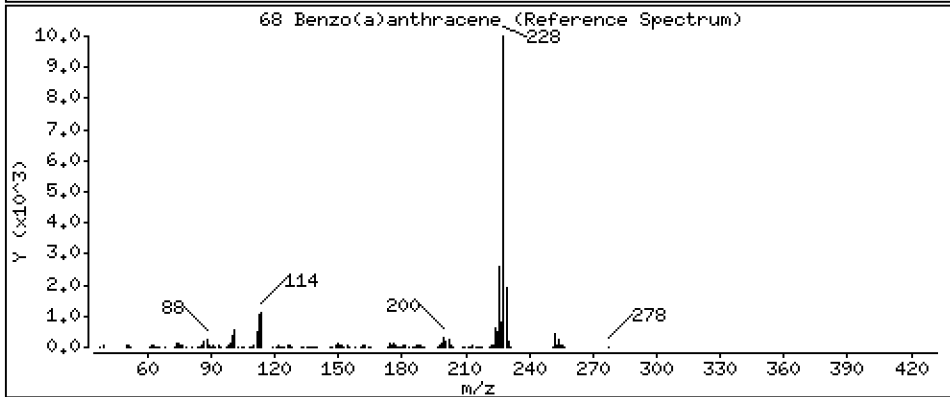
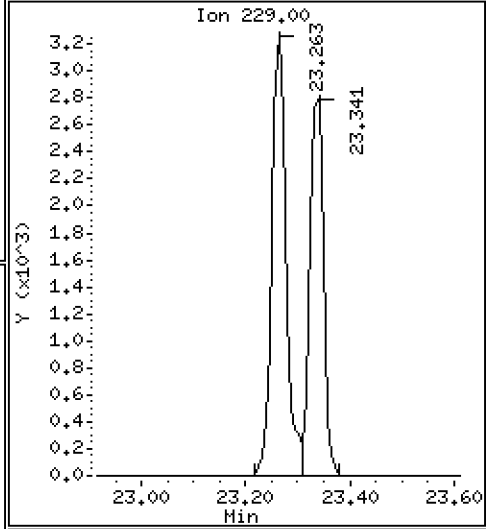
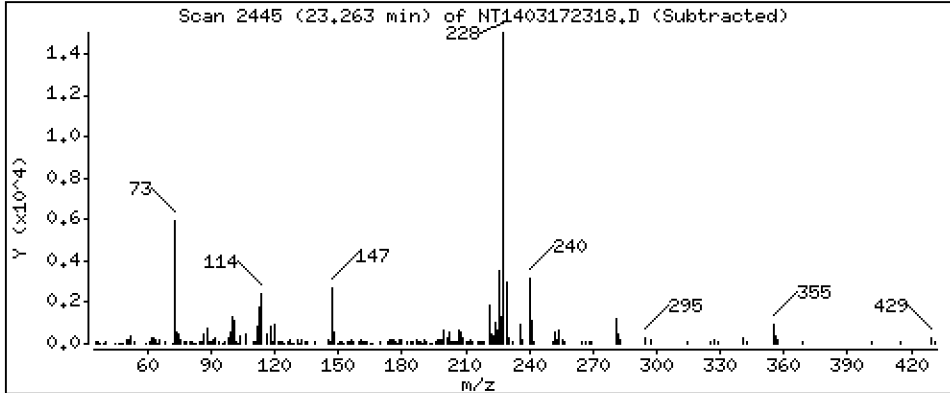
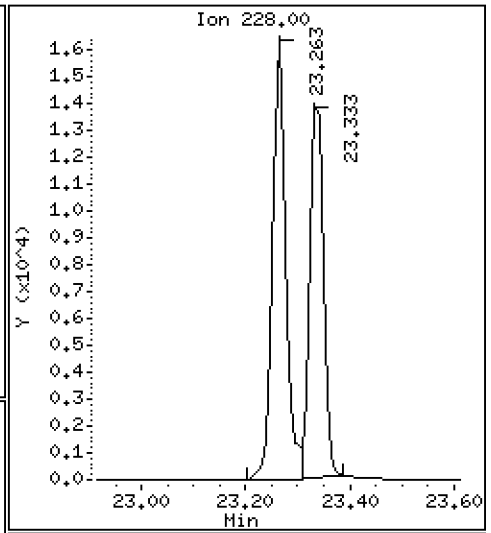
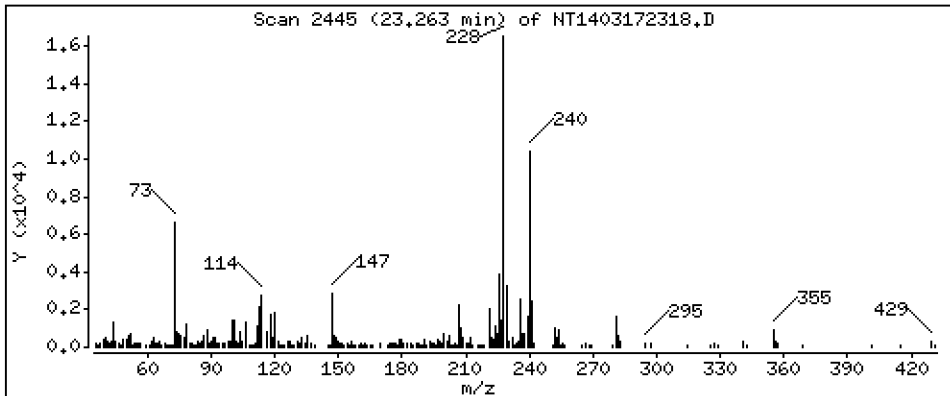
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 0.1986 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

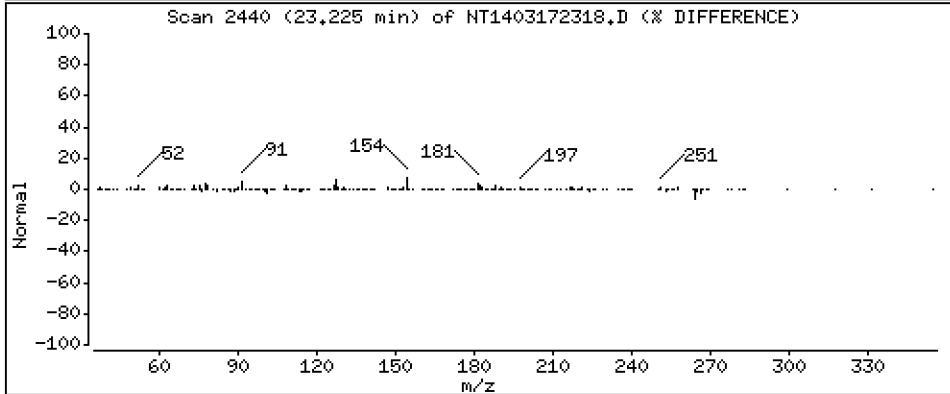
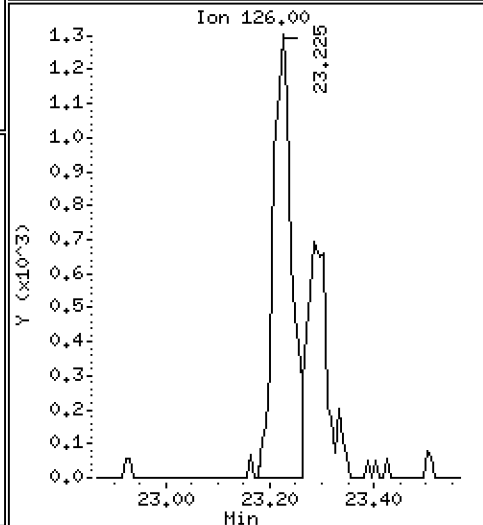
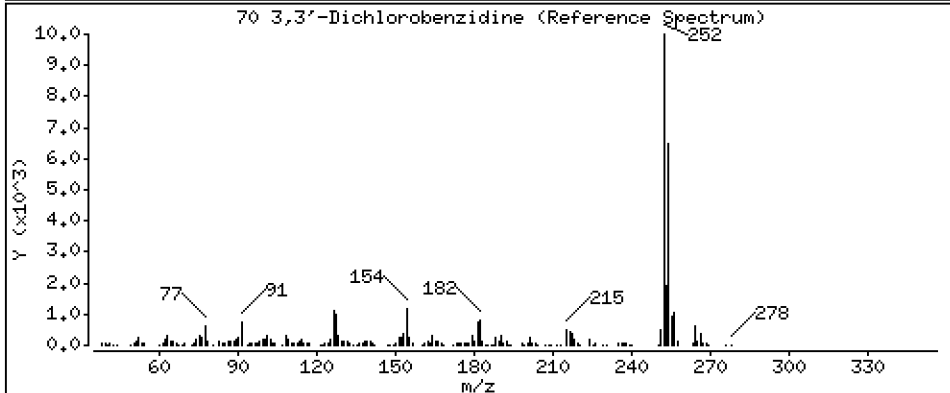
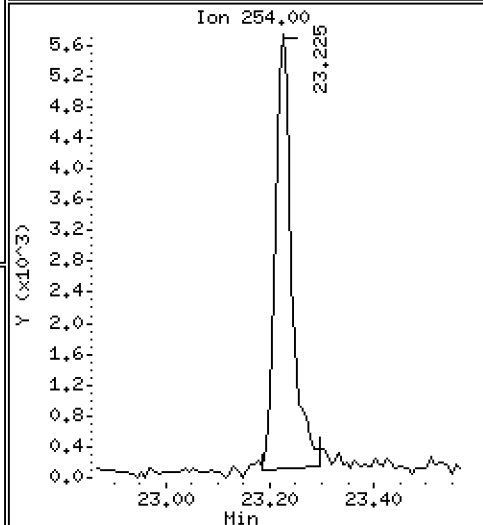
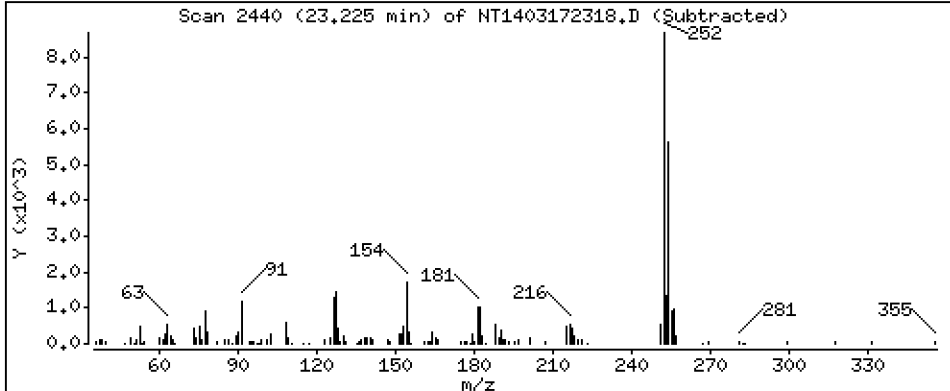
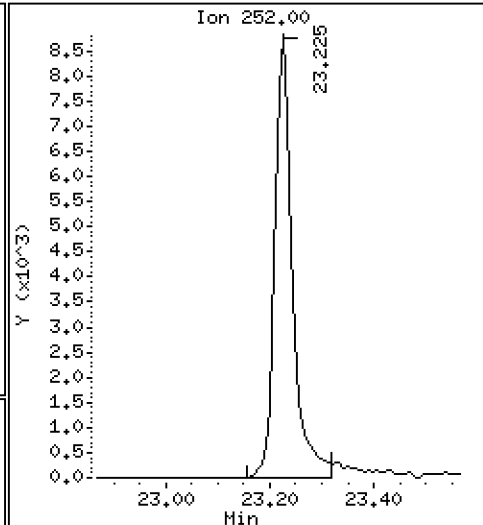
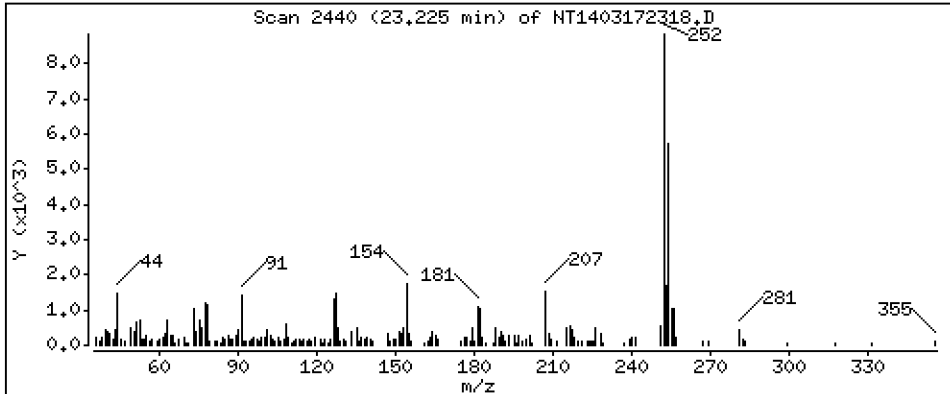
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,5100 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

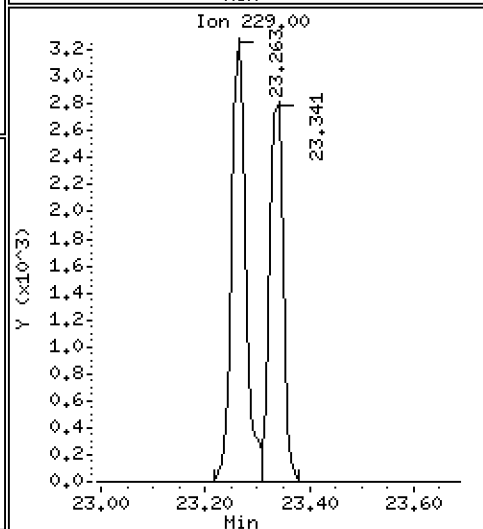
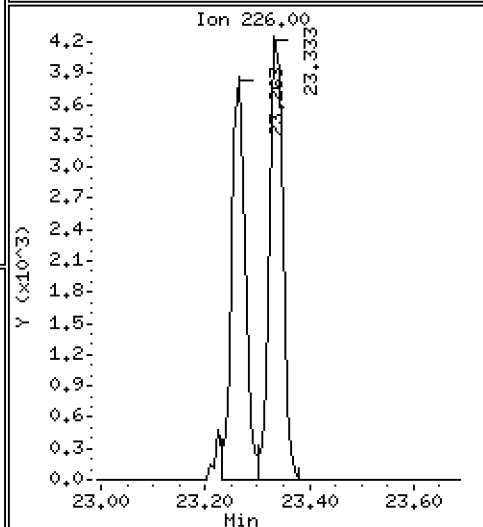
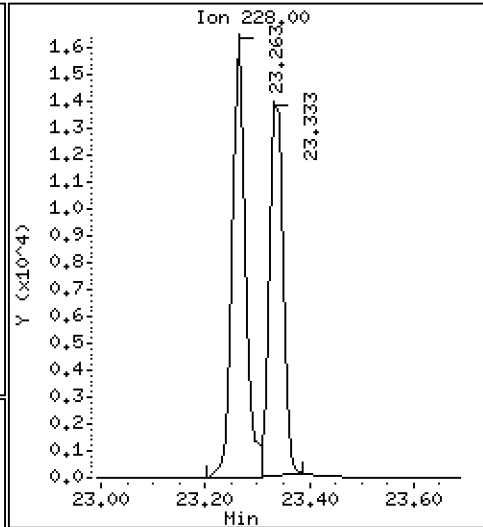
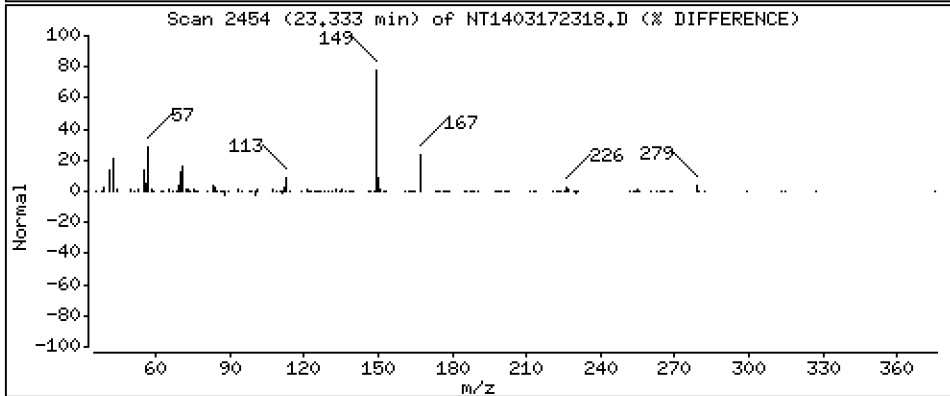
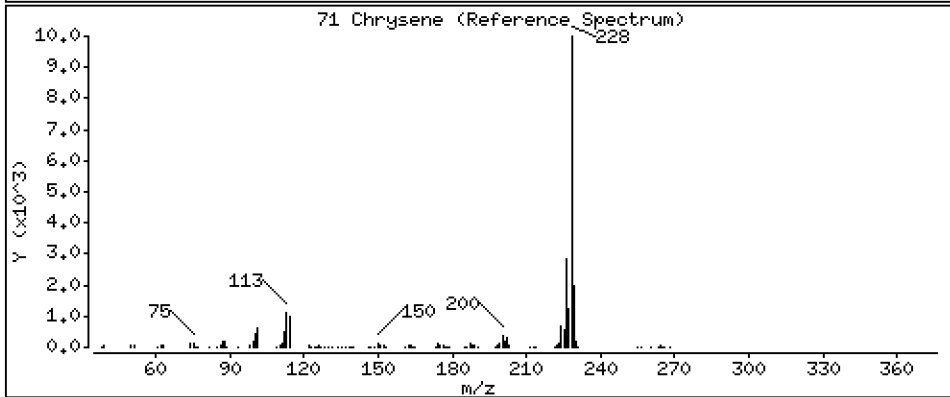
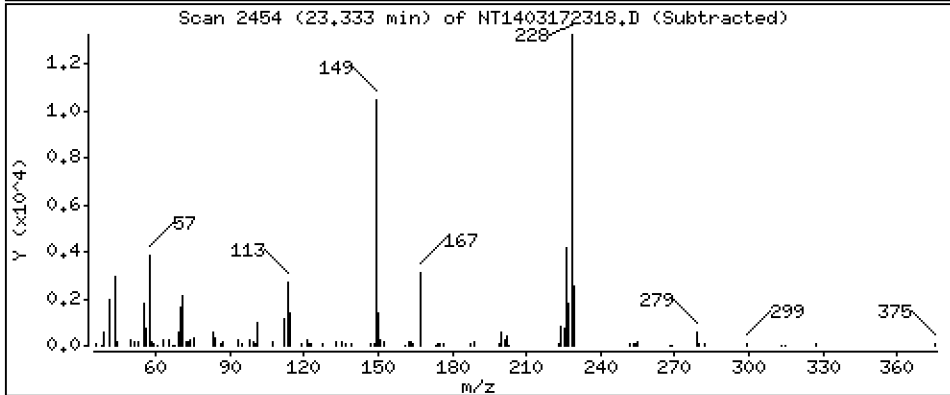
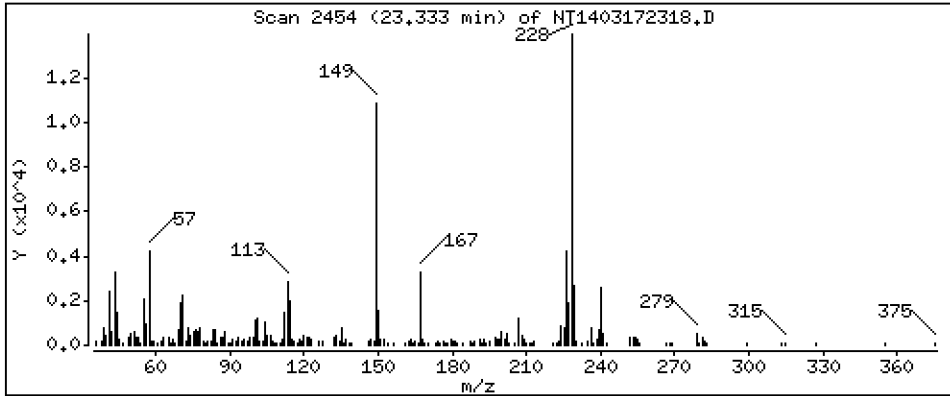
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,1902 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

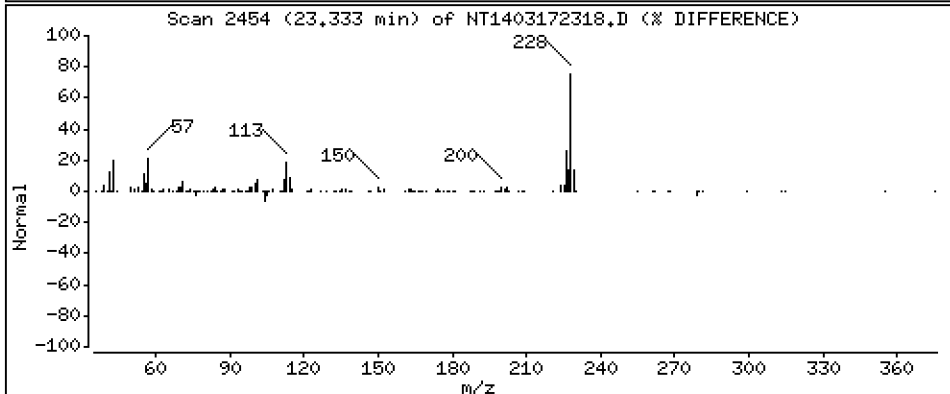
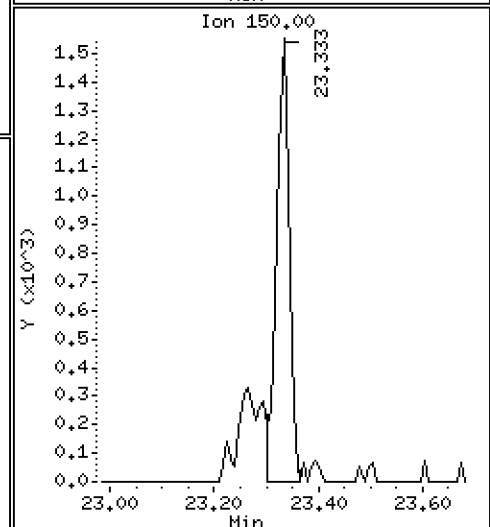
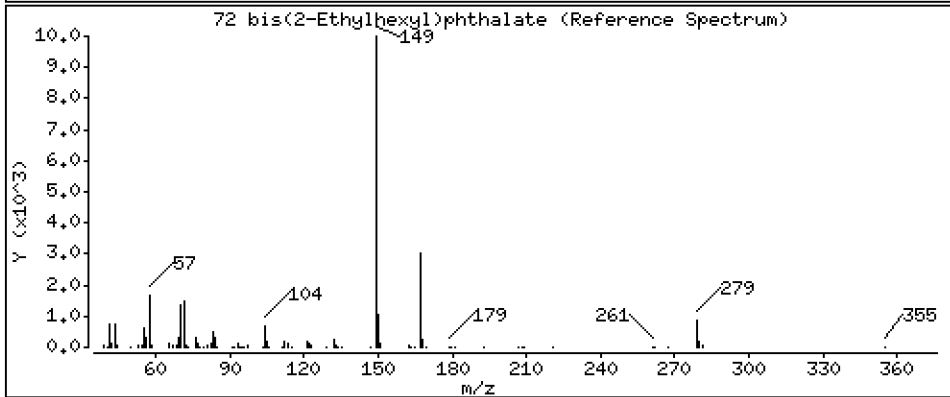
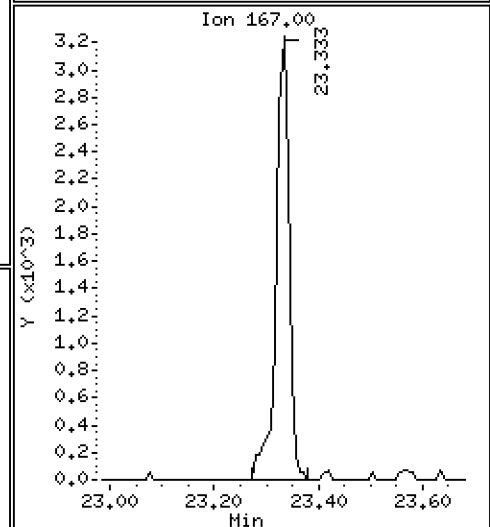
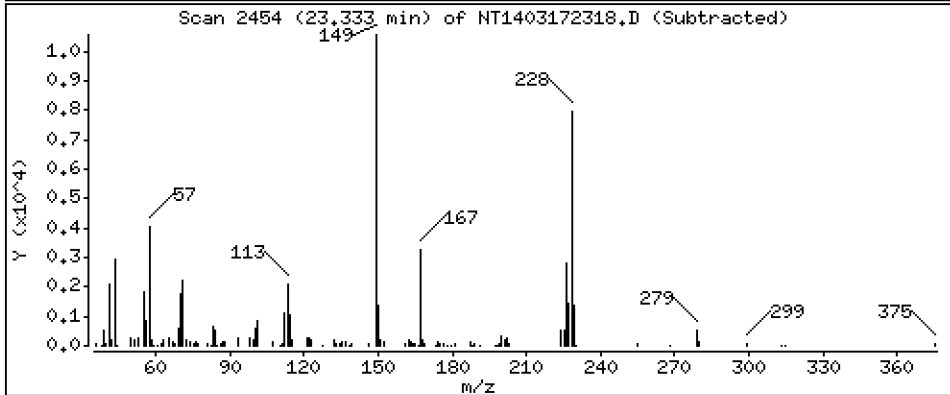
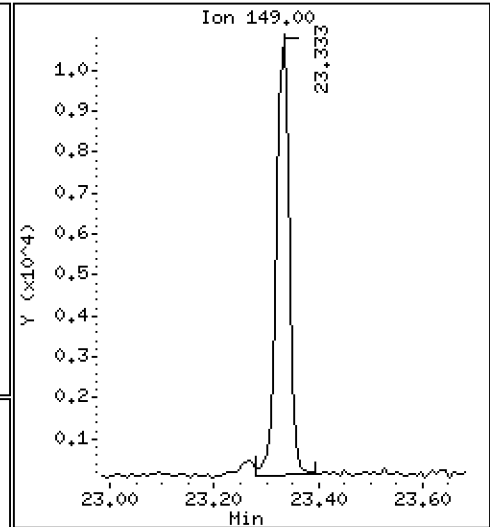
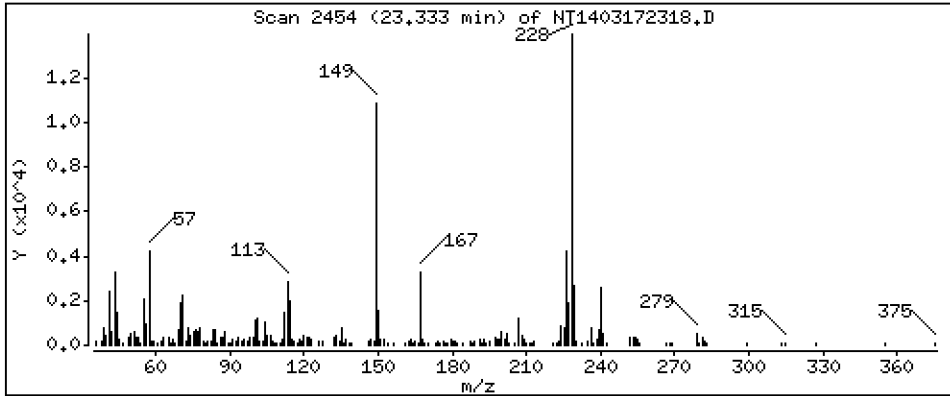
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,2051 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

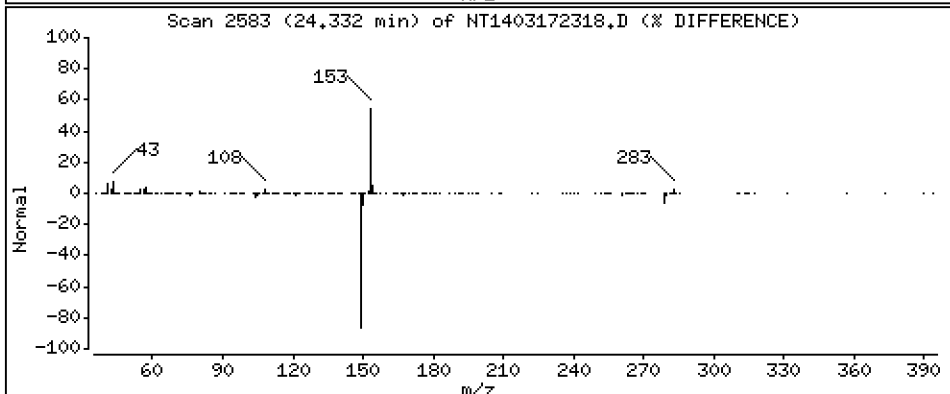
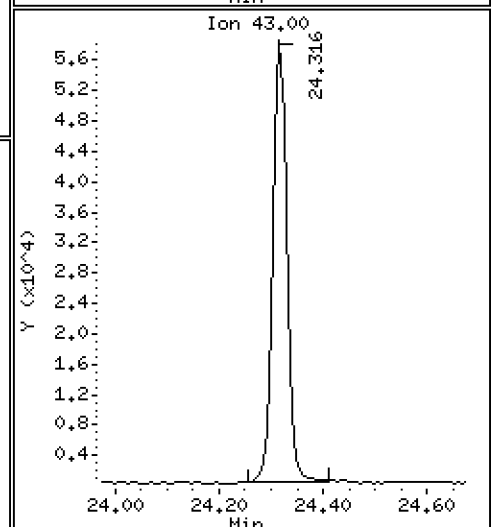
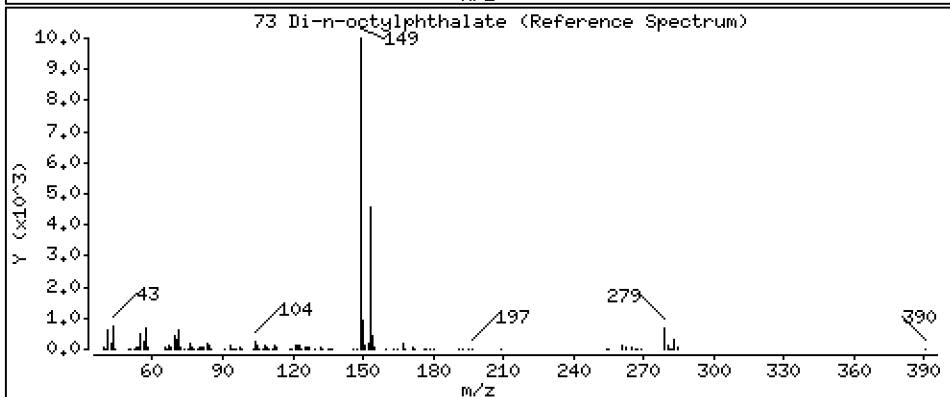
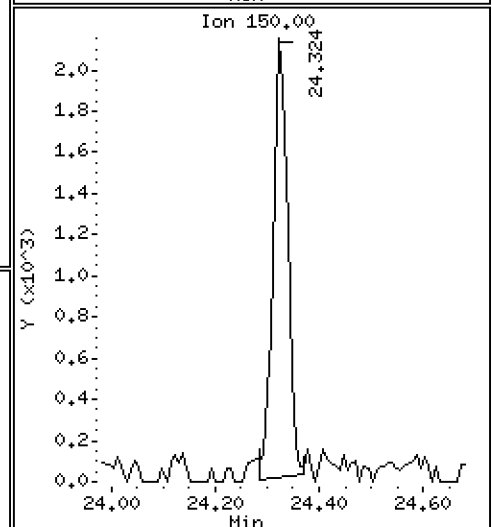
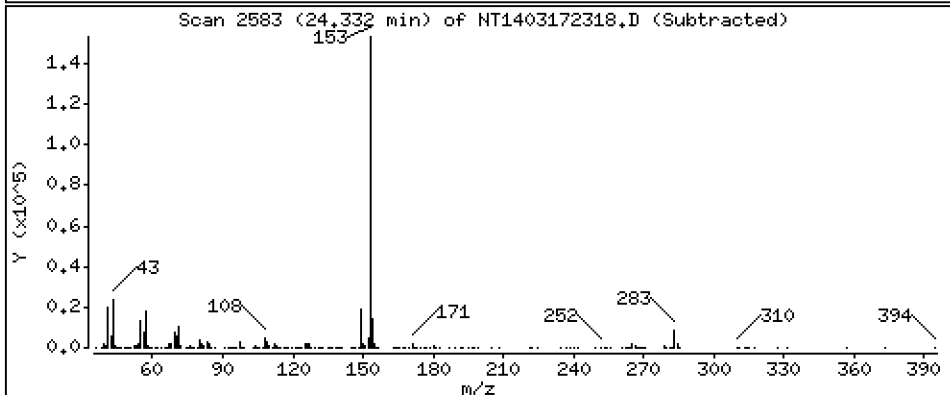
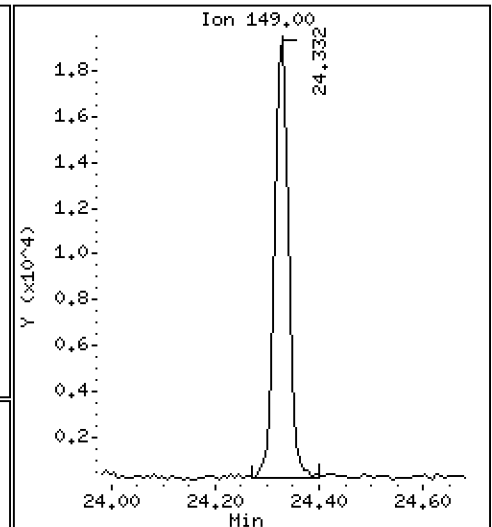
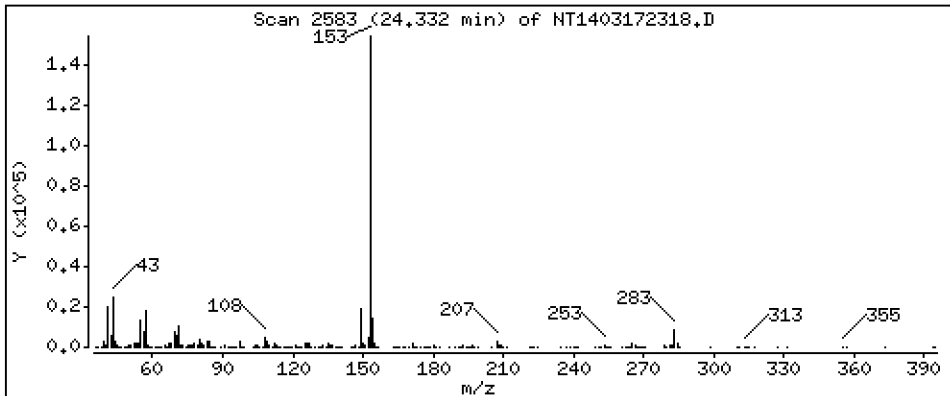
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2086 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

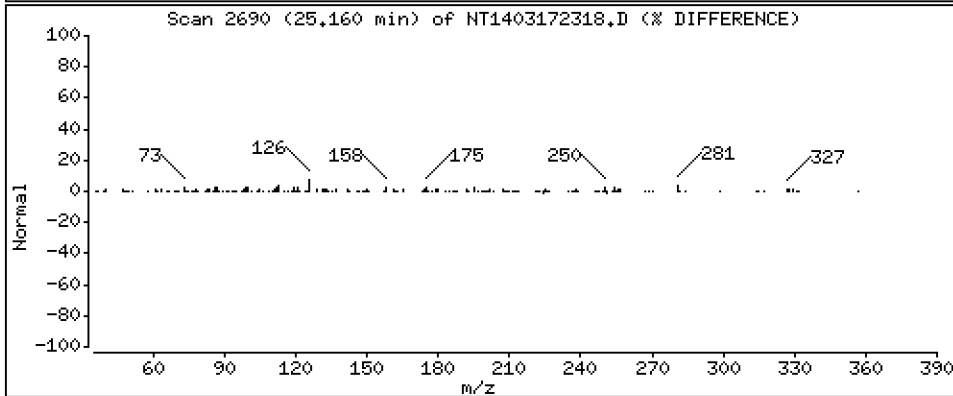
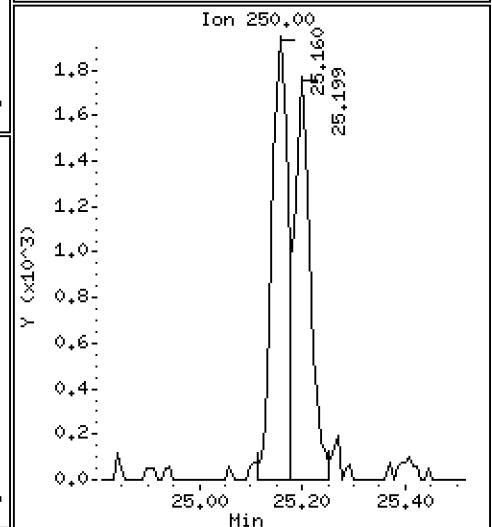
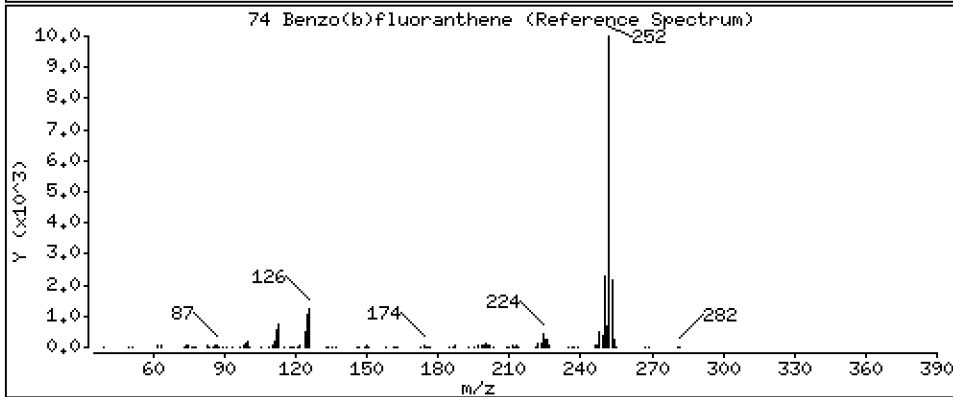
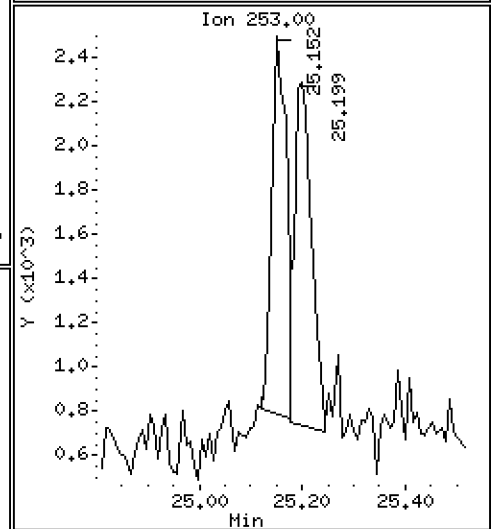
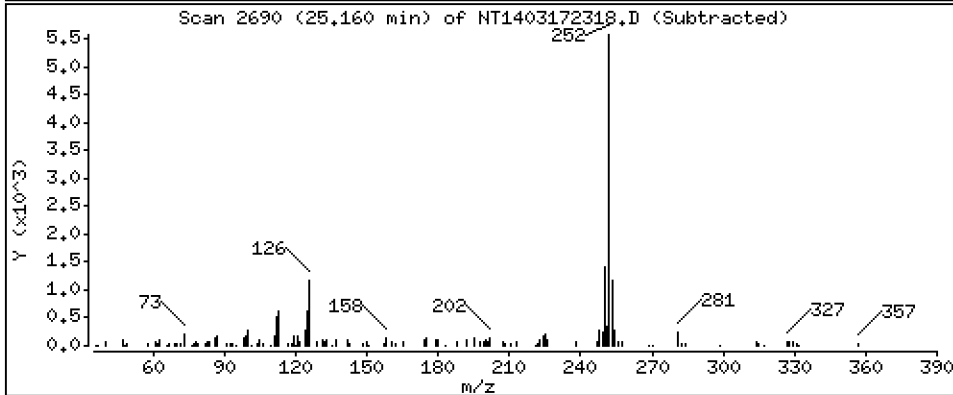
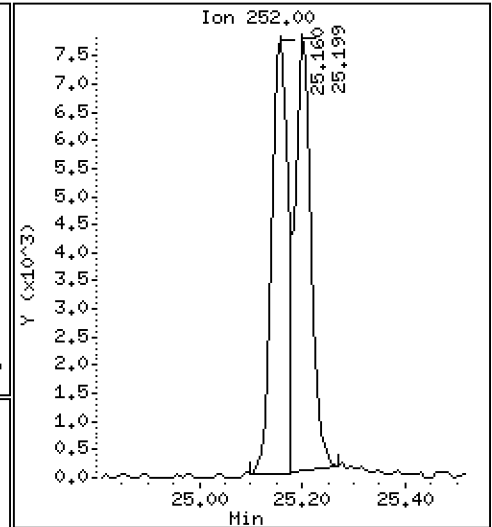
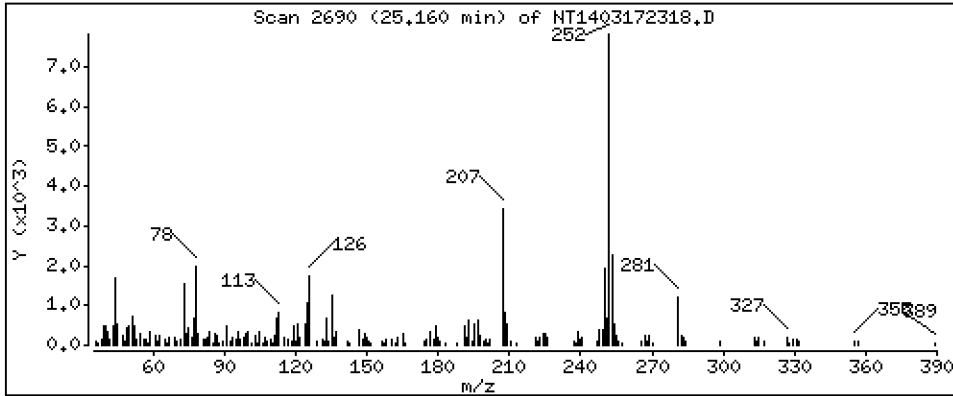
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1871 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

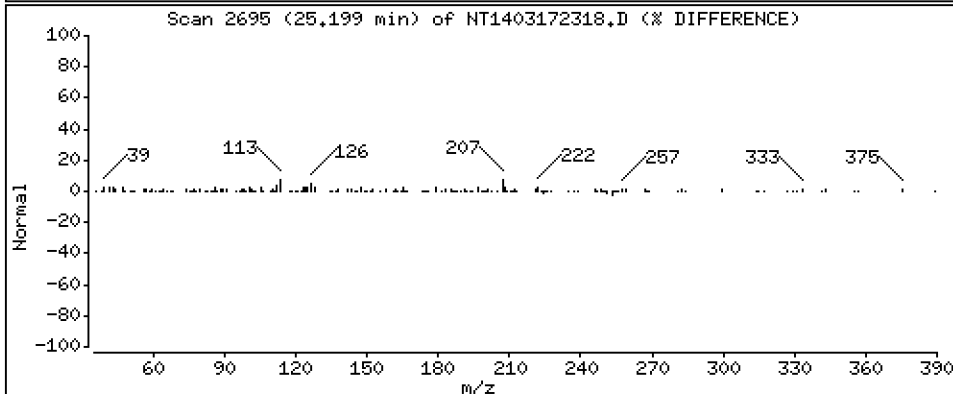
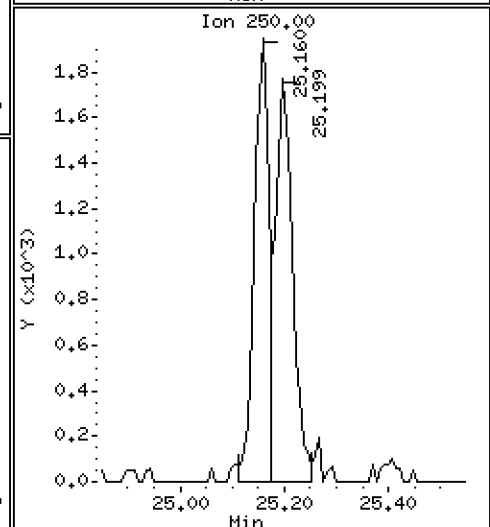
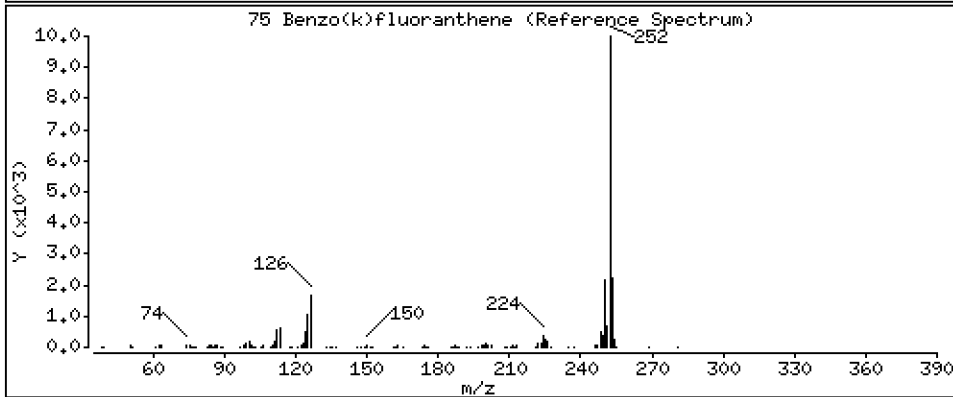
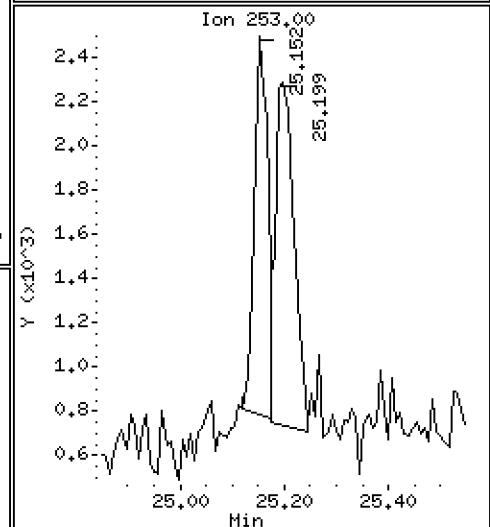
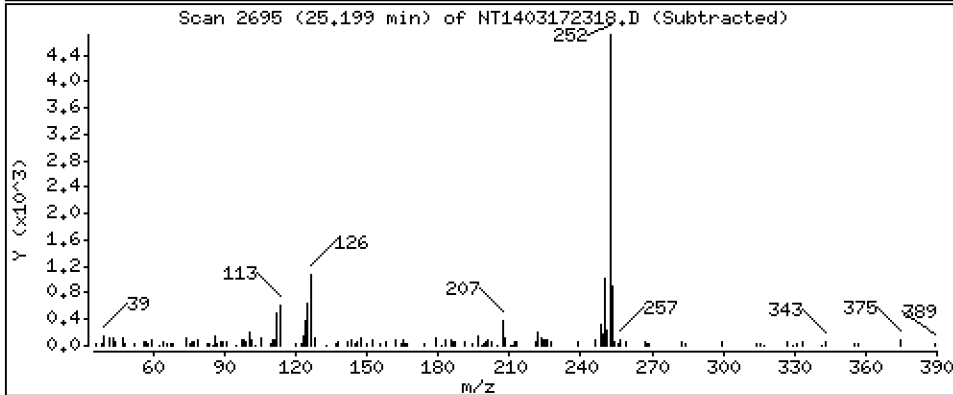
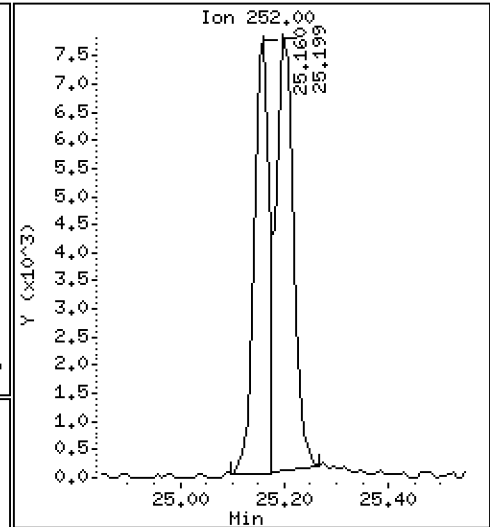
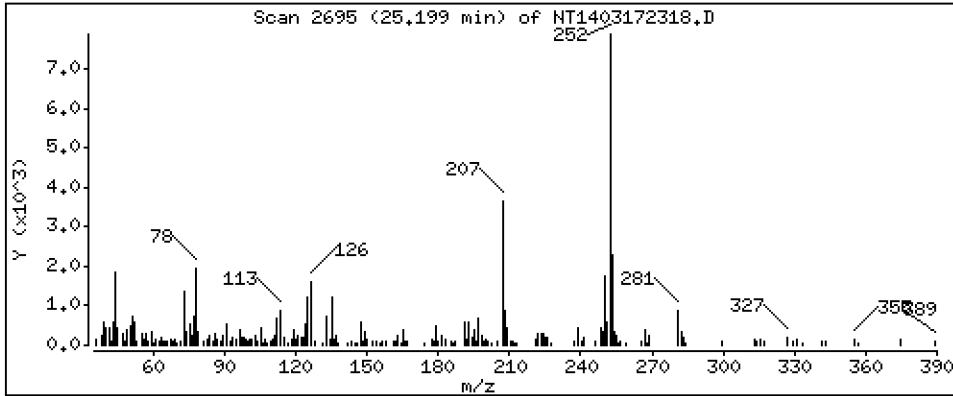
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,2162 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

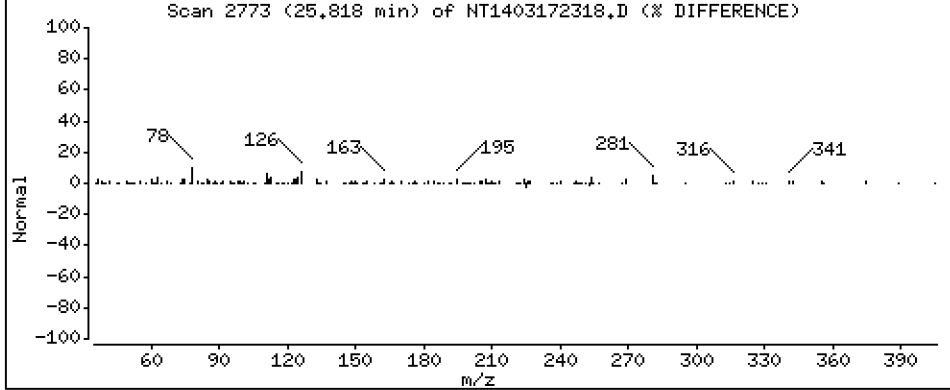
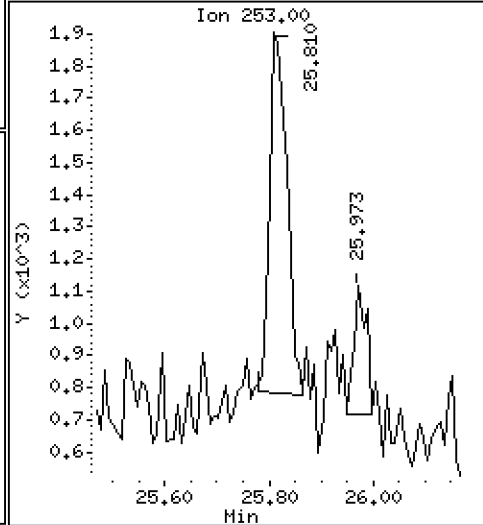
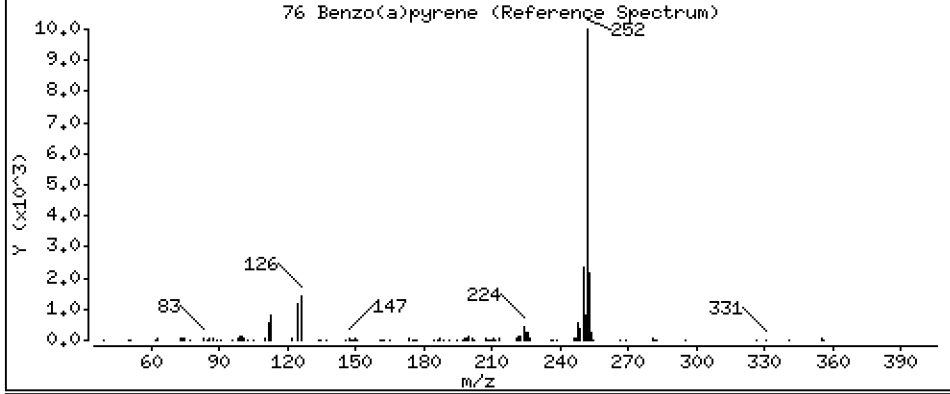
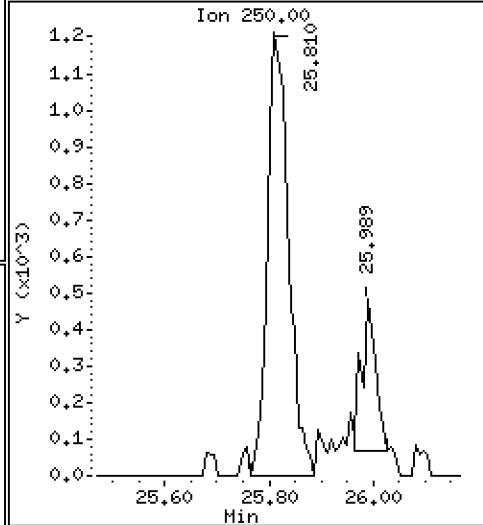
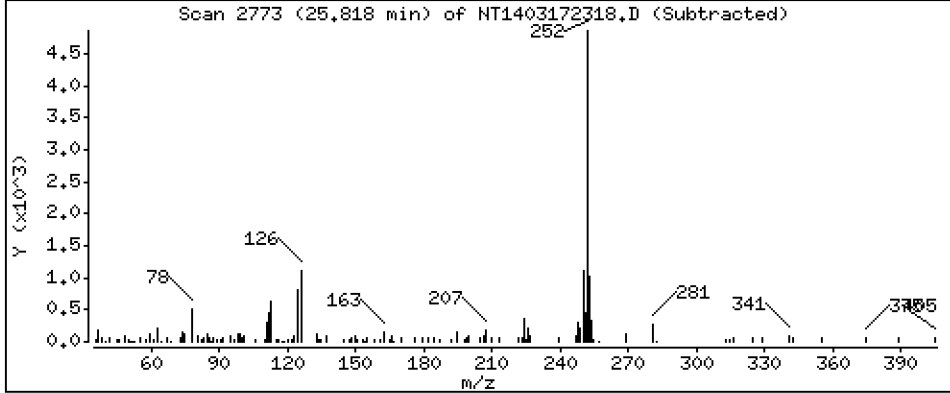
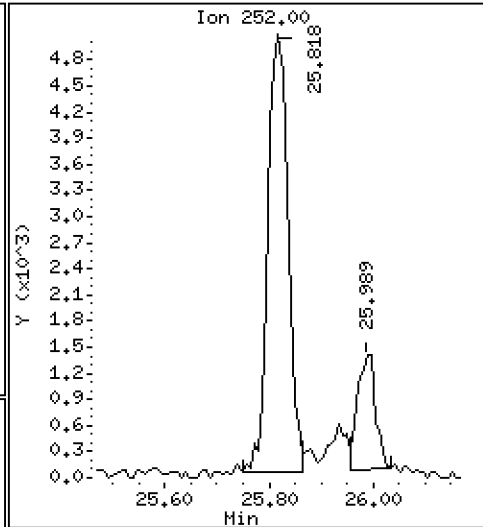
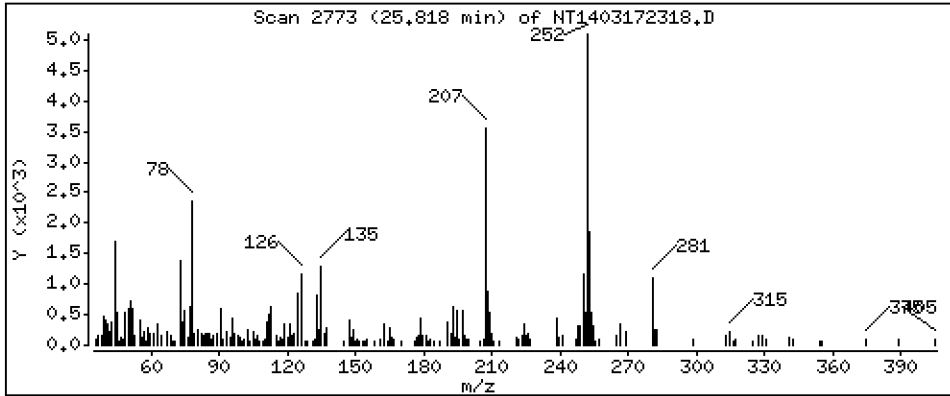
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1794 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

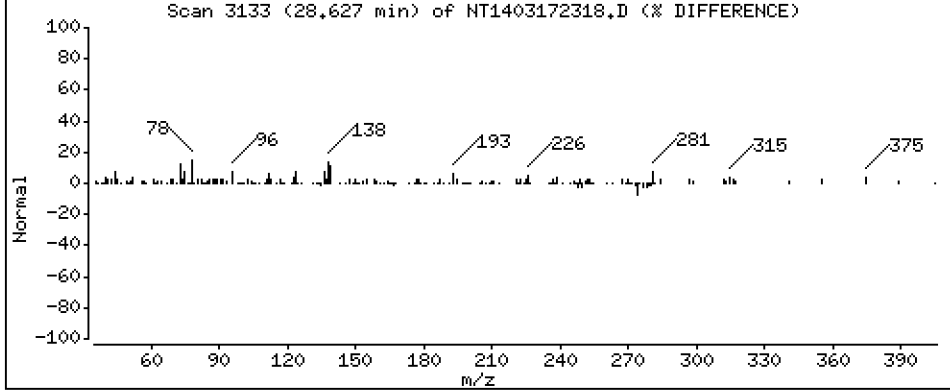
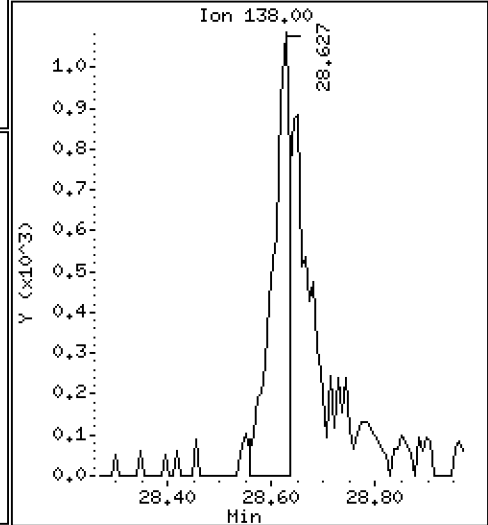
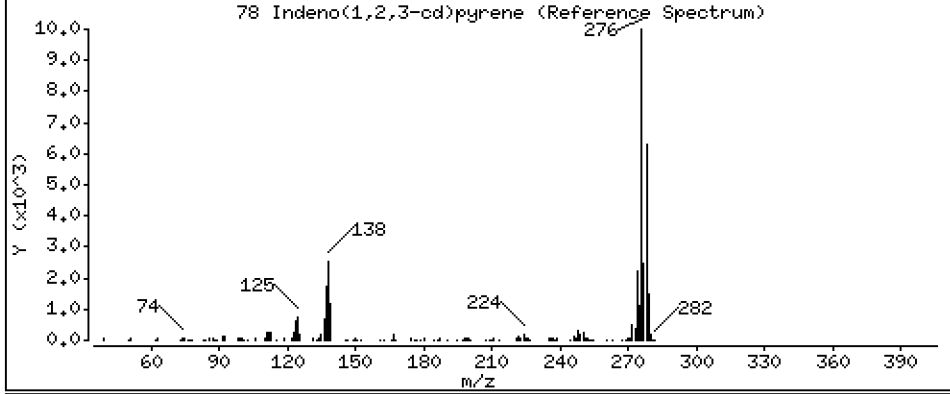
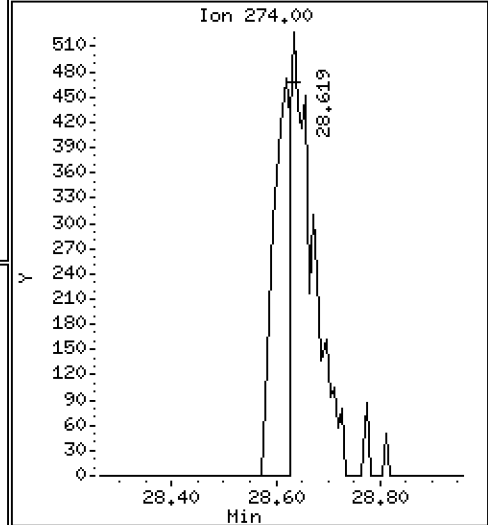
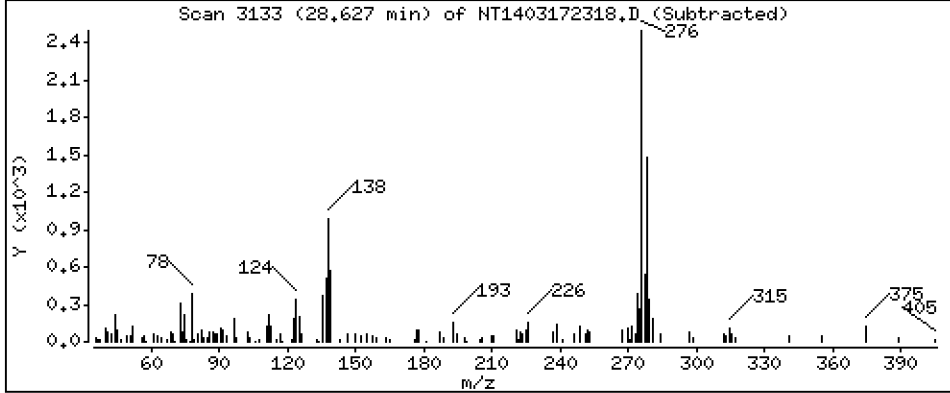
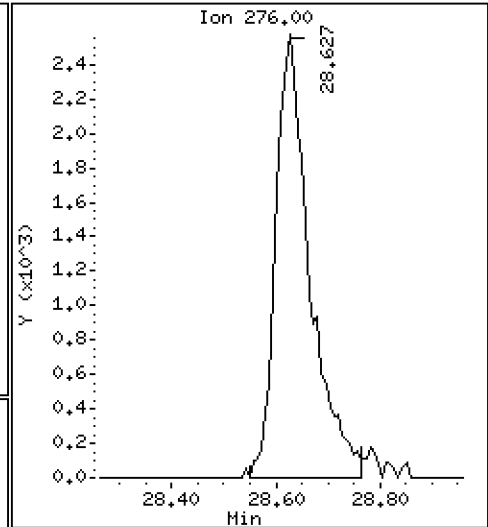
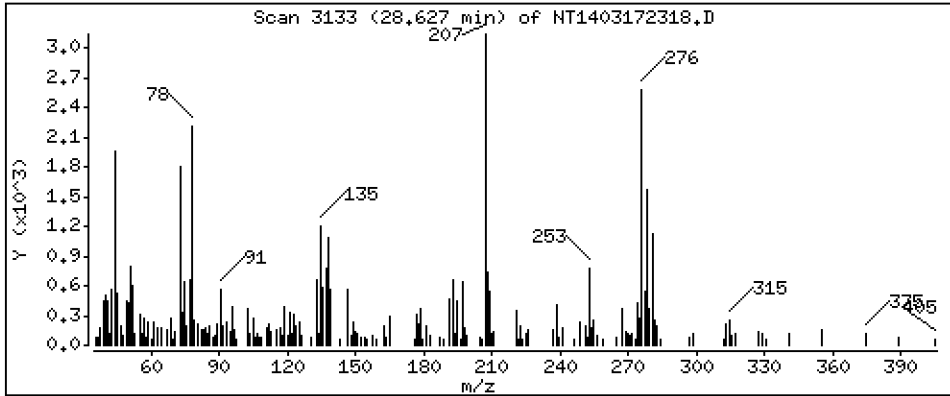
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1449 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

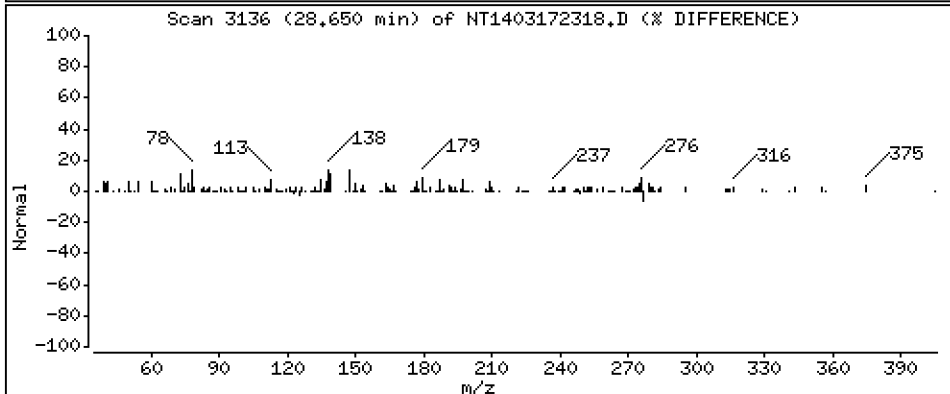
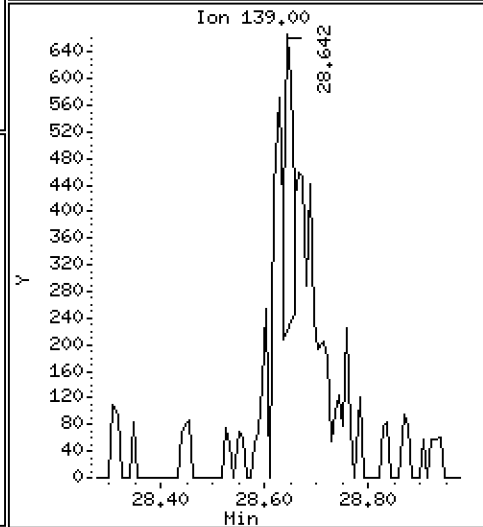
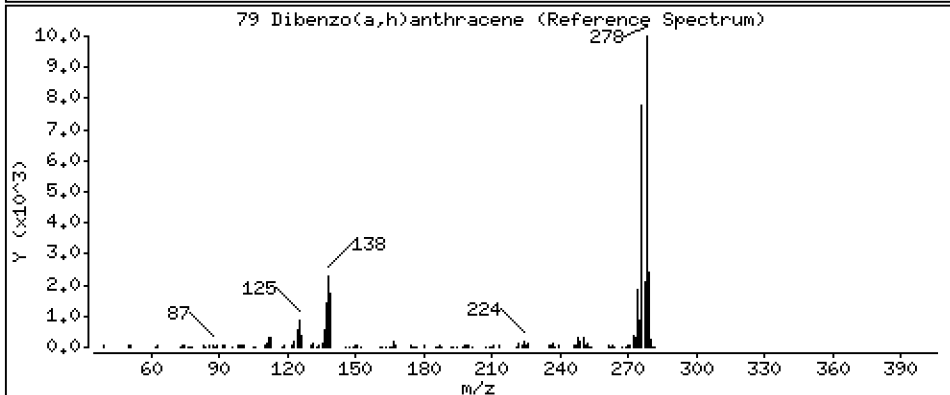
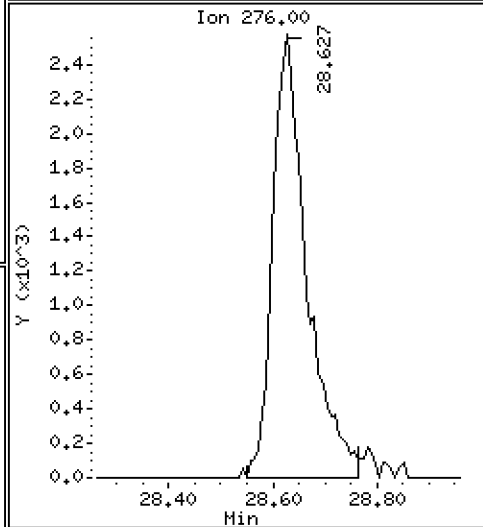
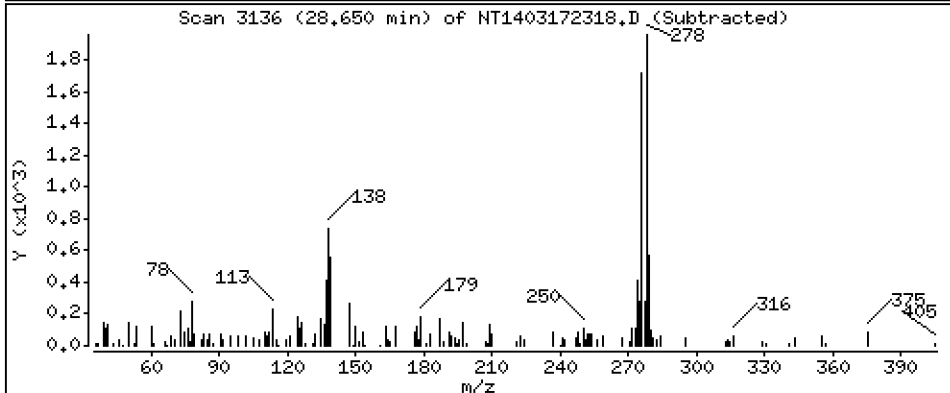
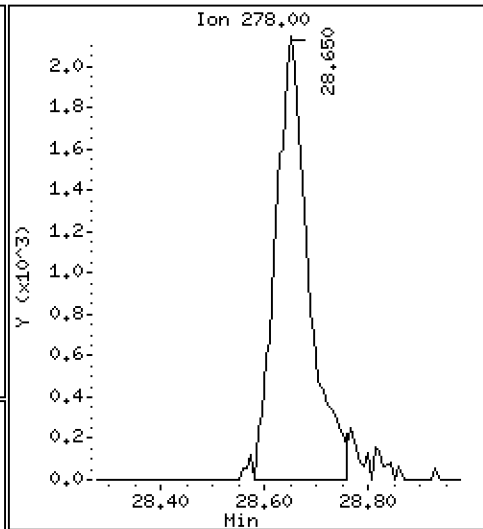
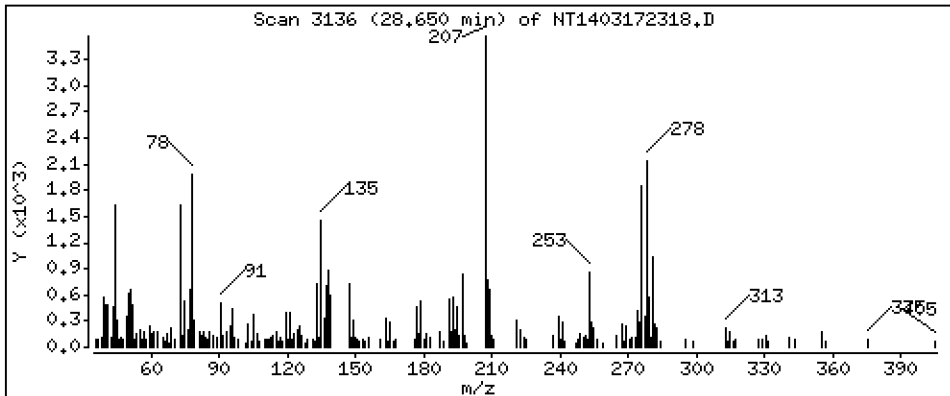
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1409 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

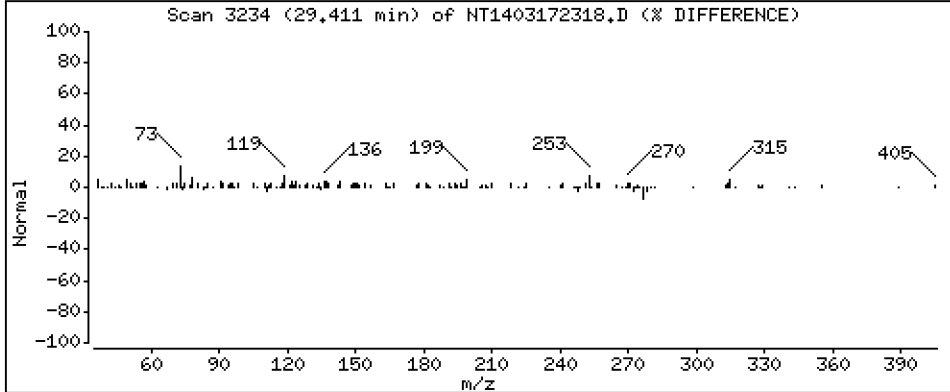
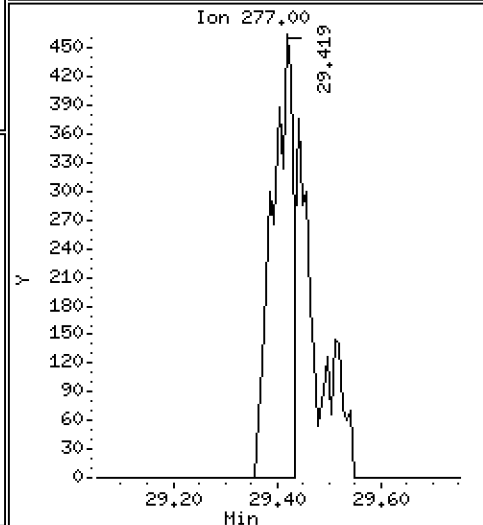
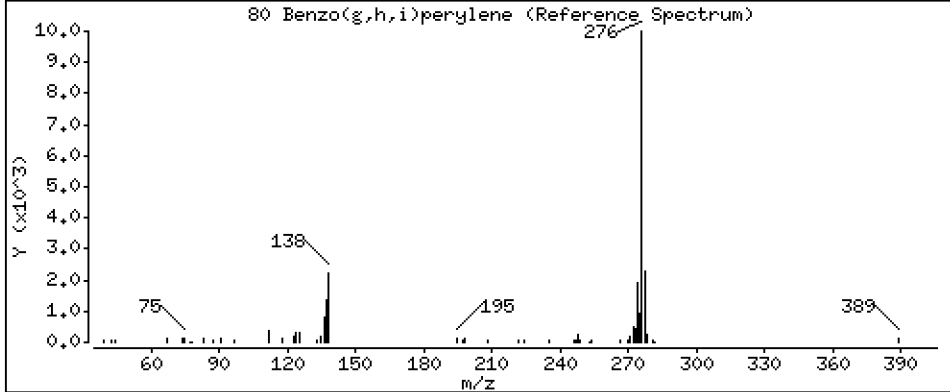
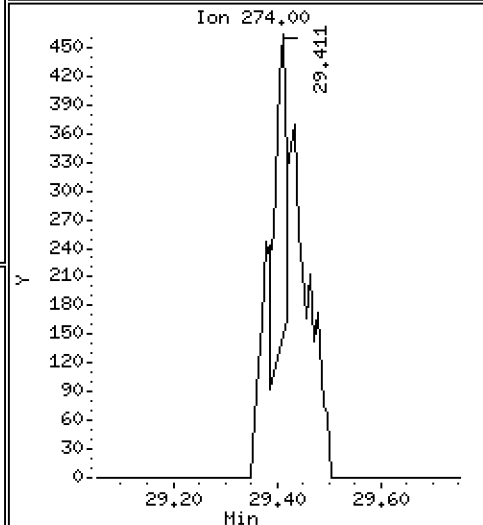
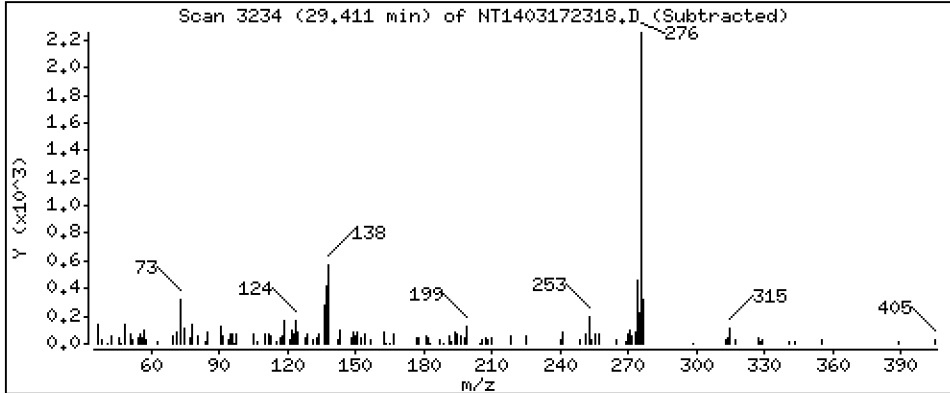
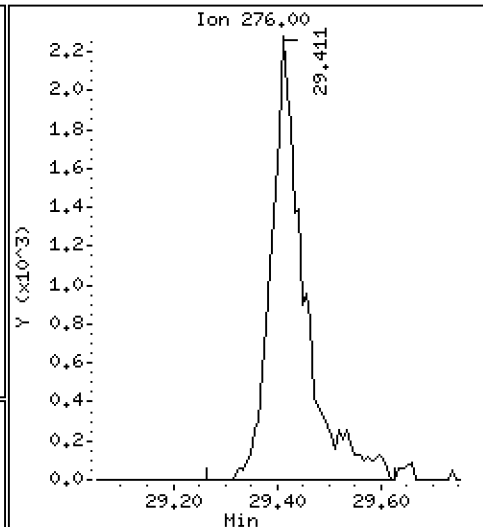
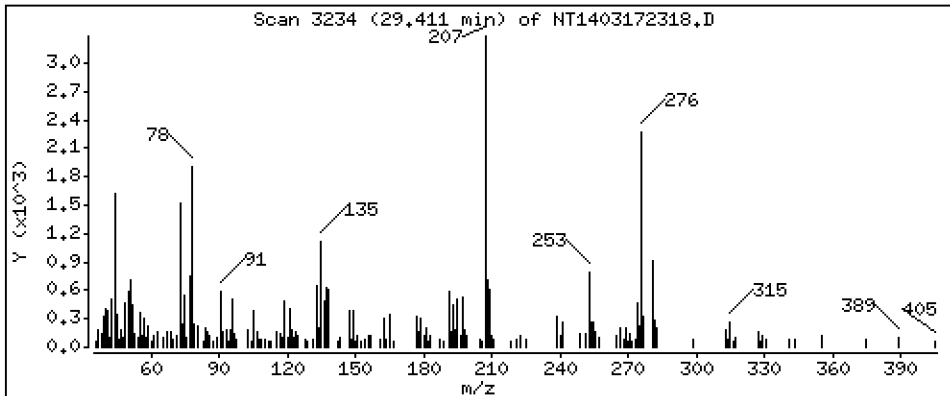
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1521 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

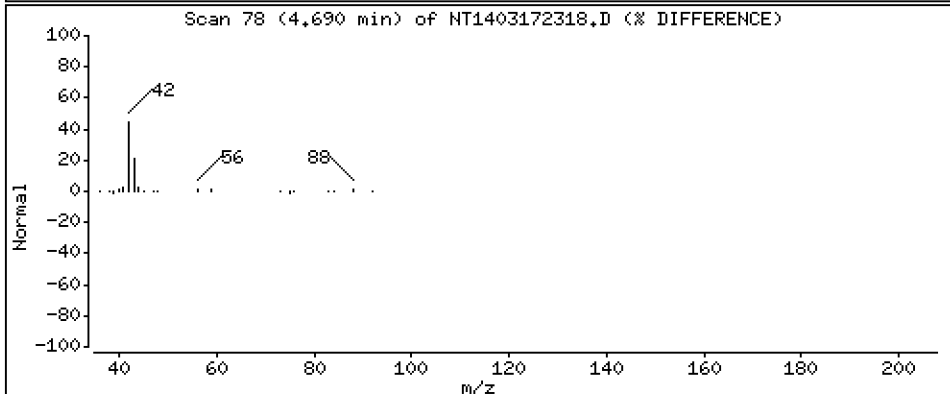
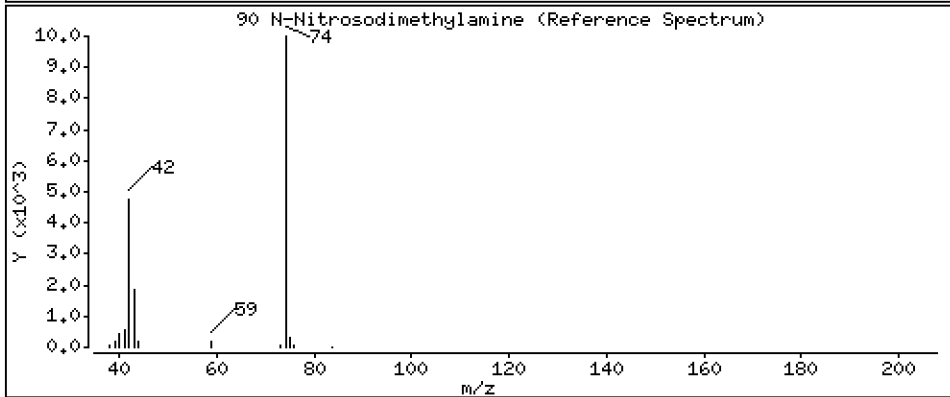
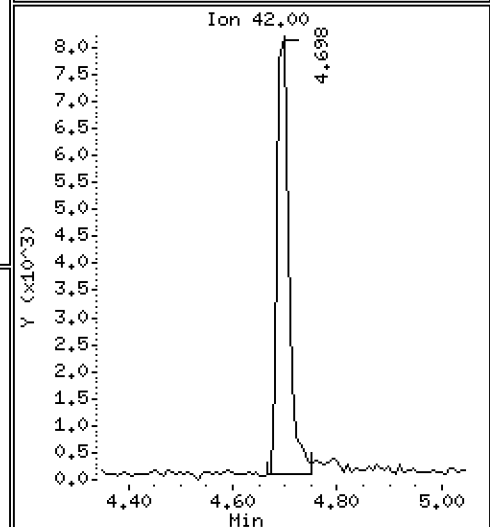
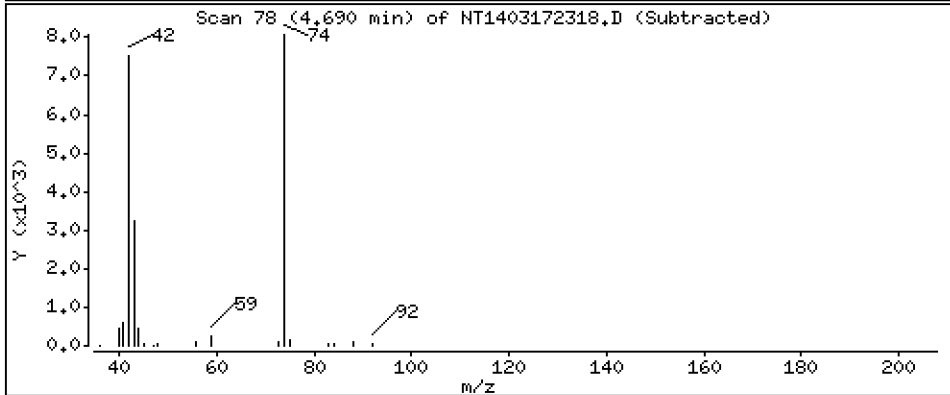
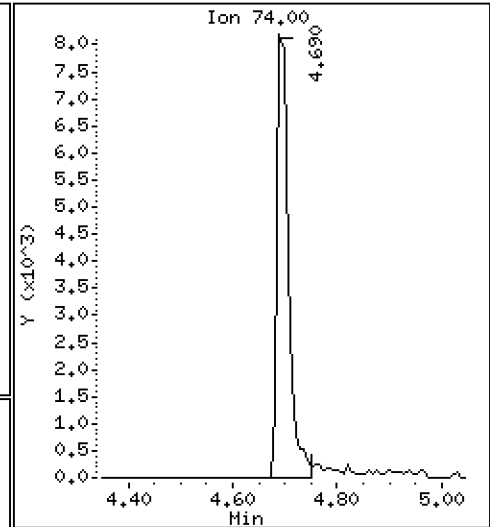
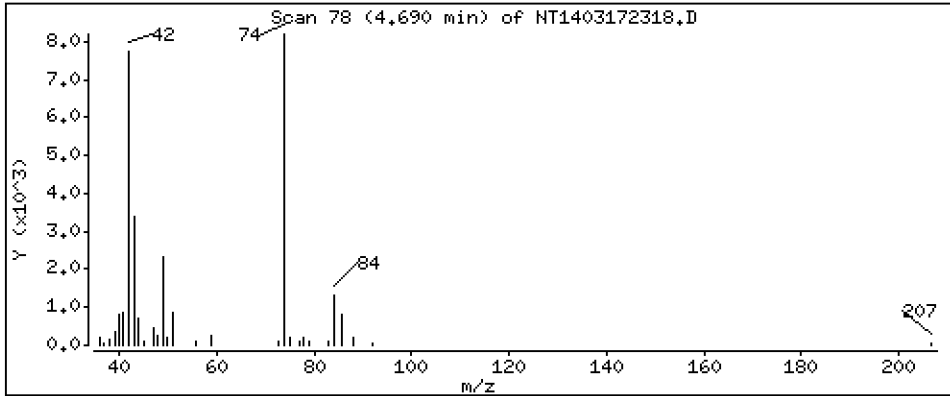
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2681 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

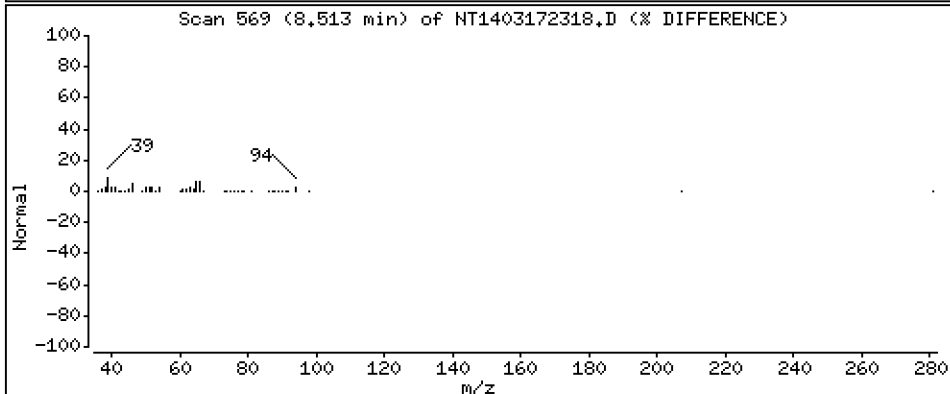
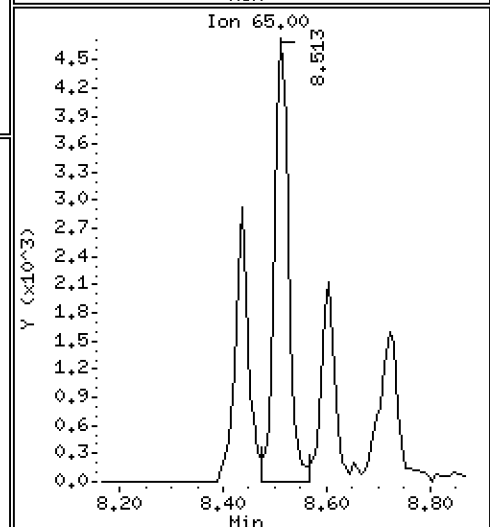
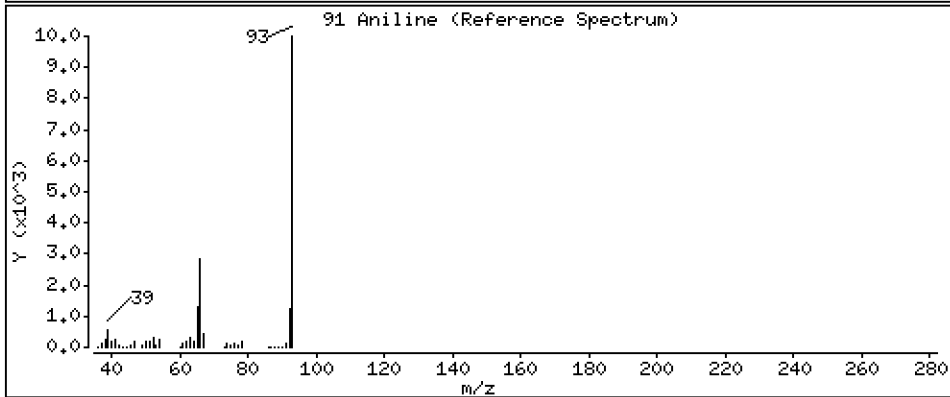
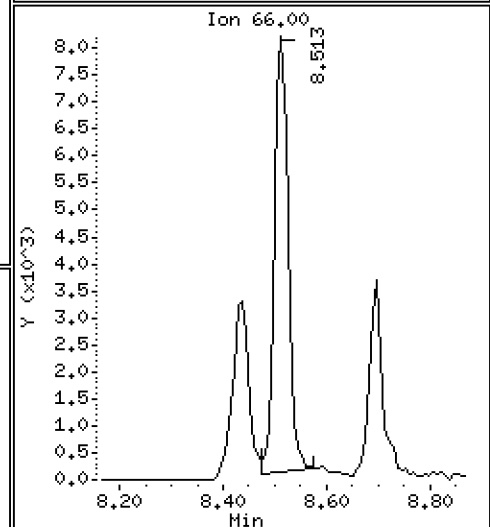
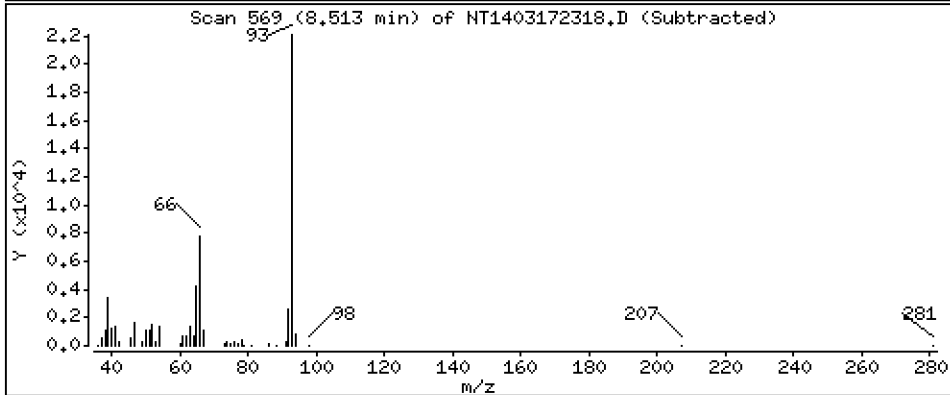
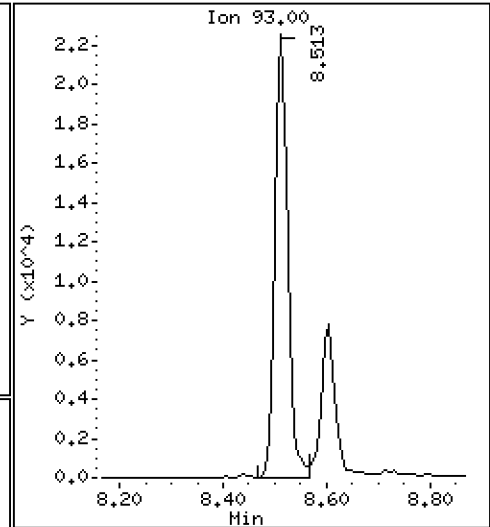
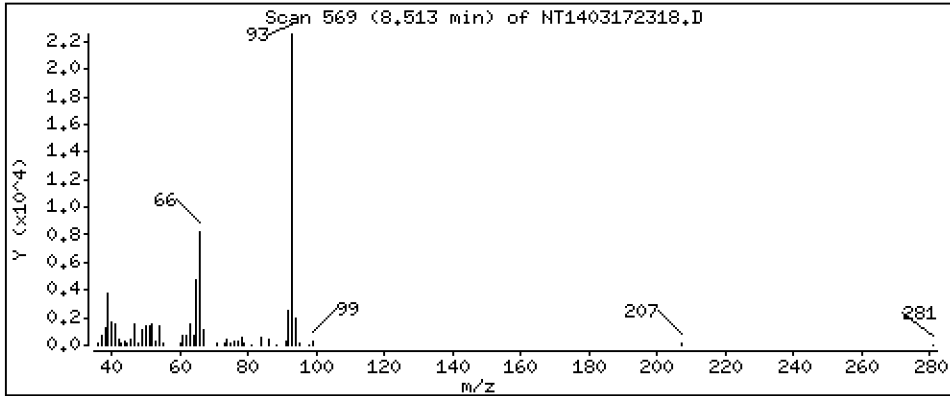
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 0.3747 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

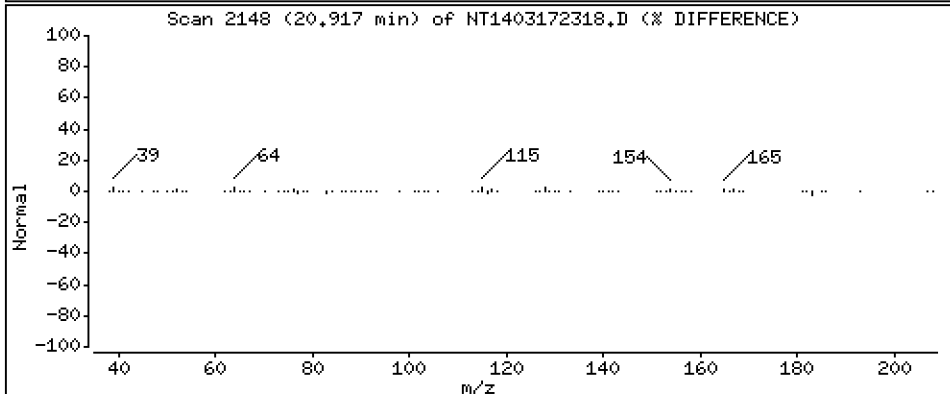
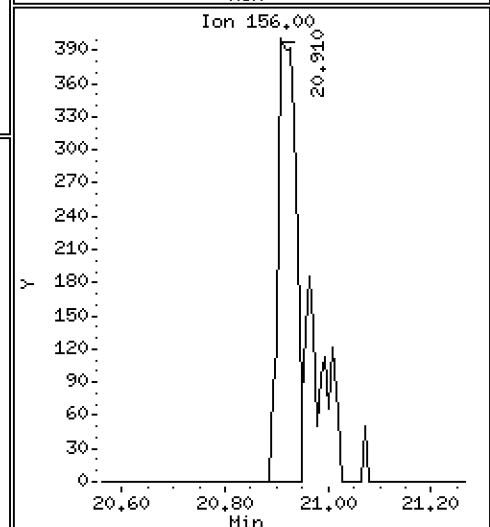
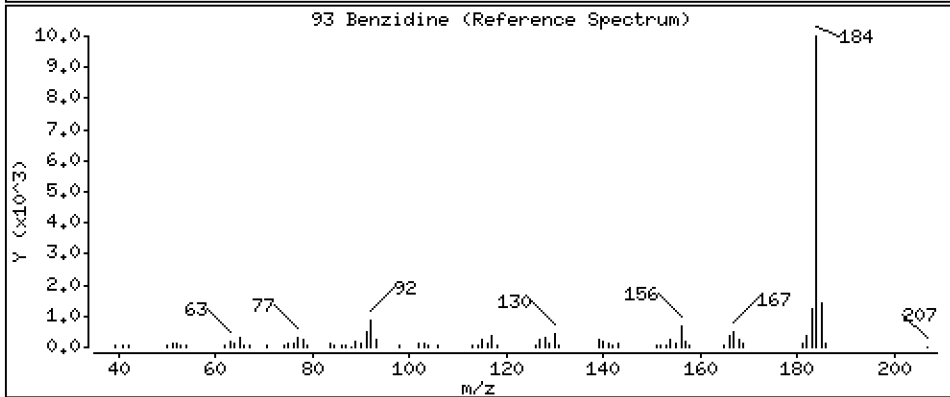
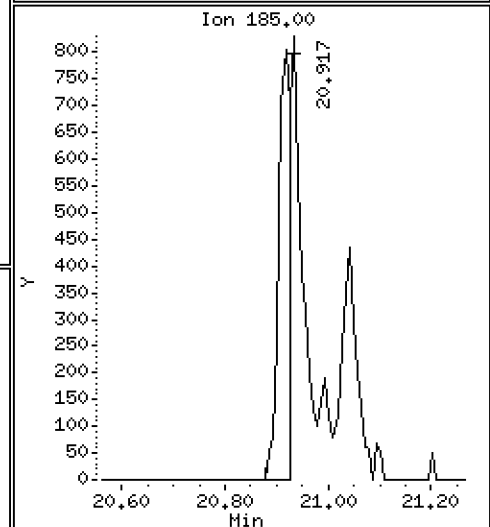
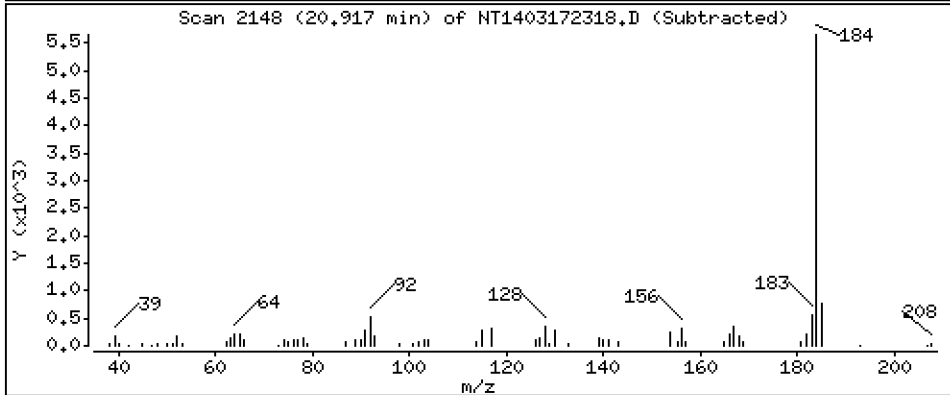
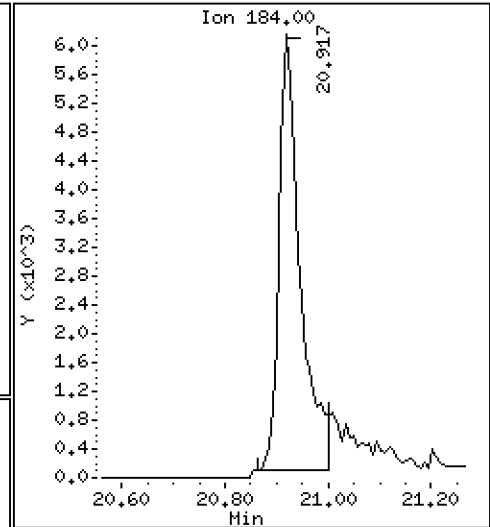
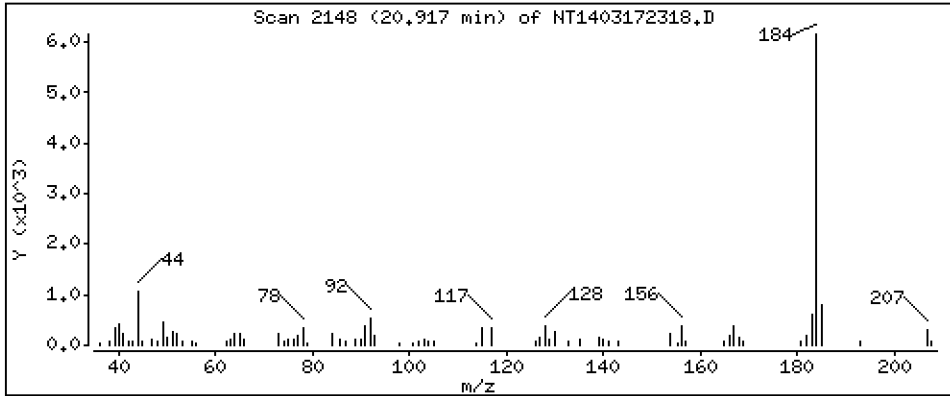
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,2724 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

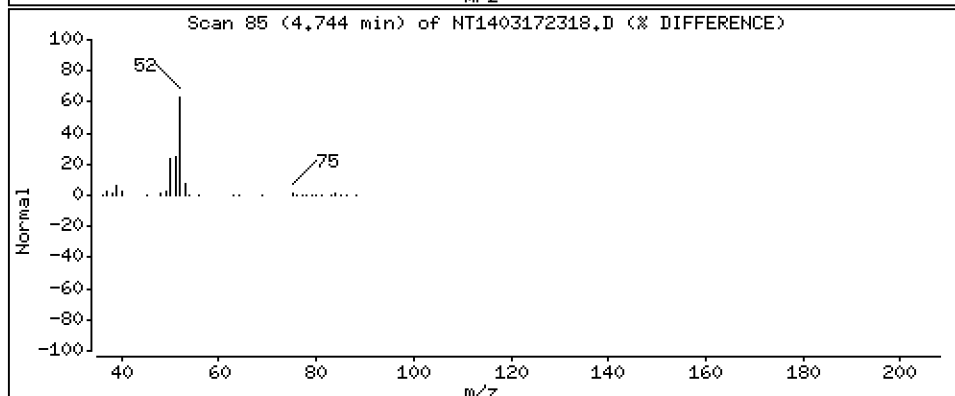
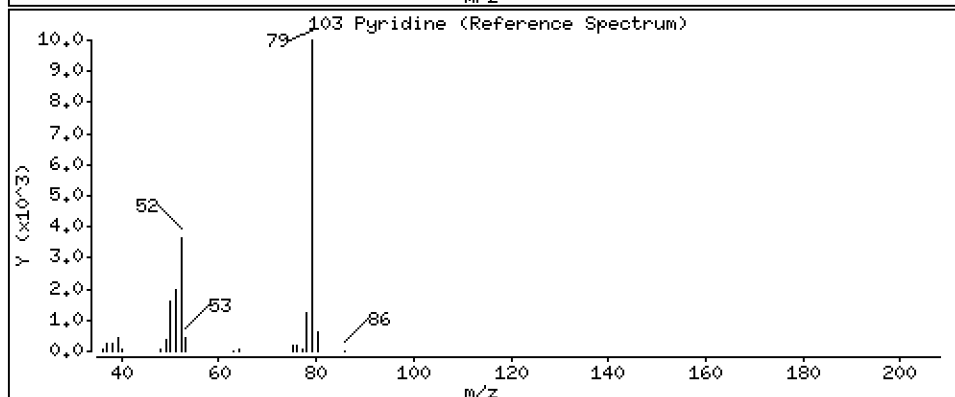
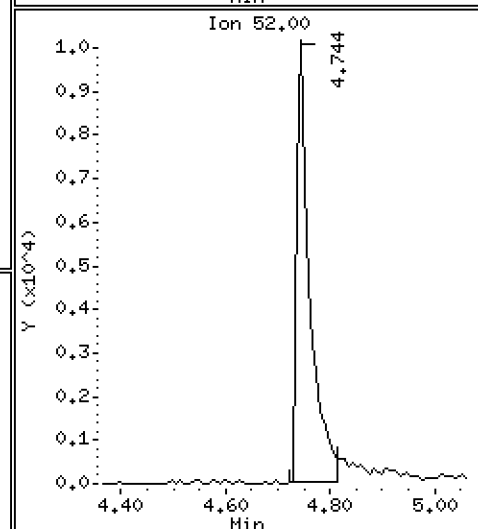
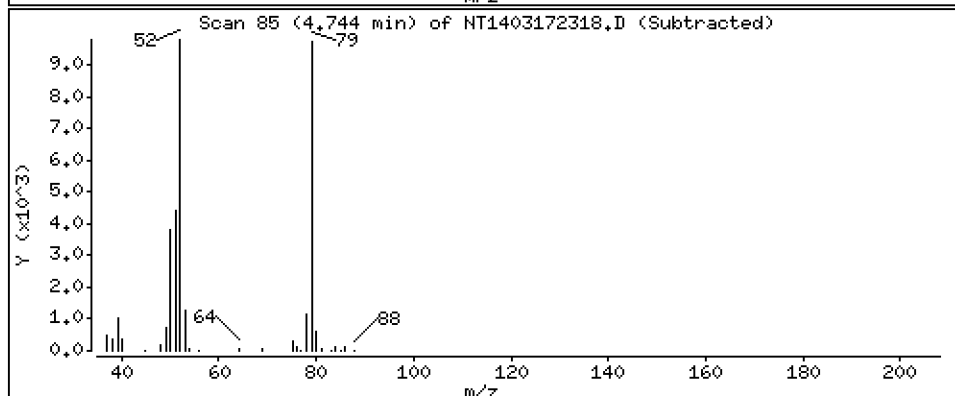
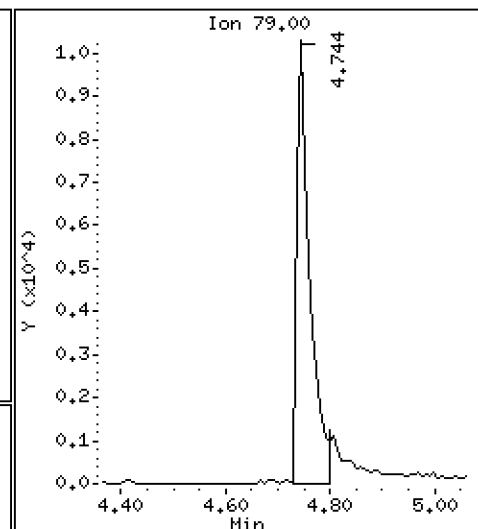
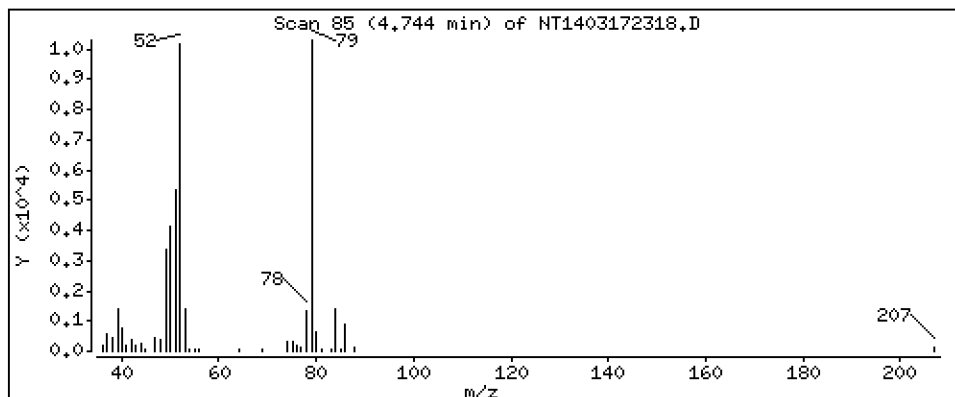
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,1356 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

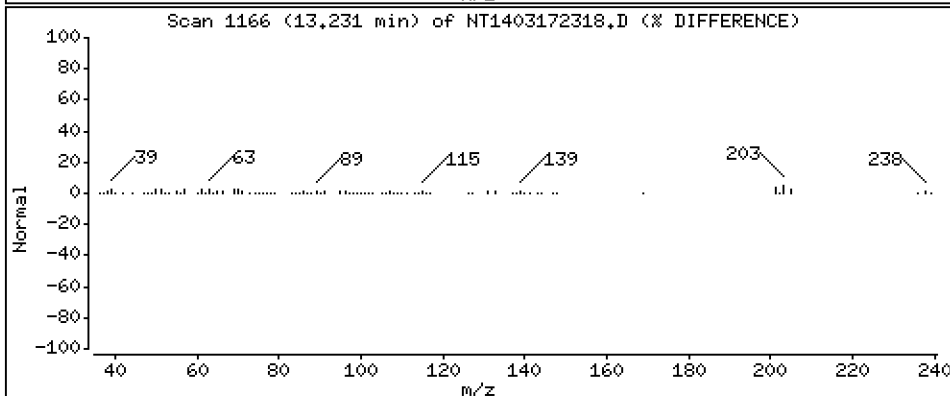
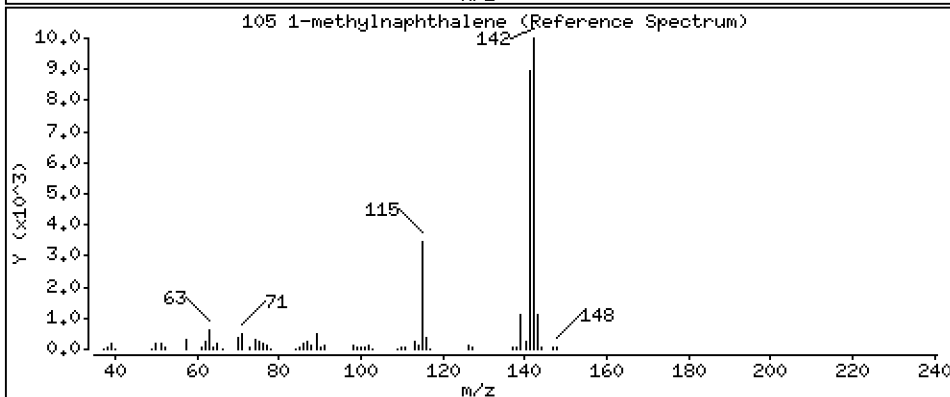
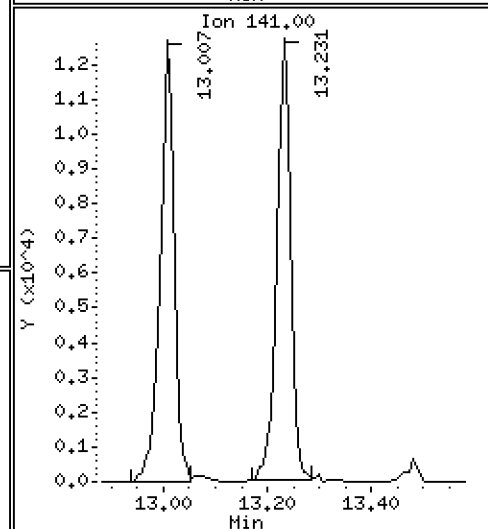
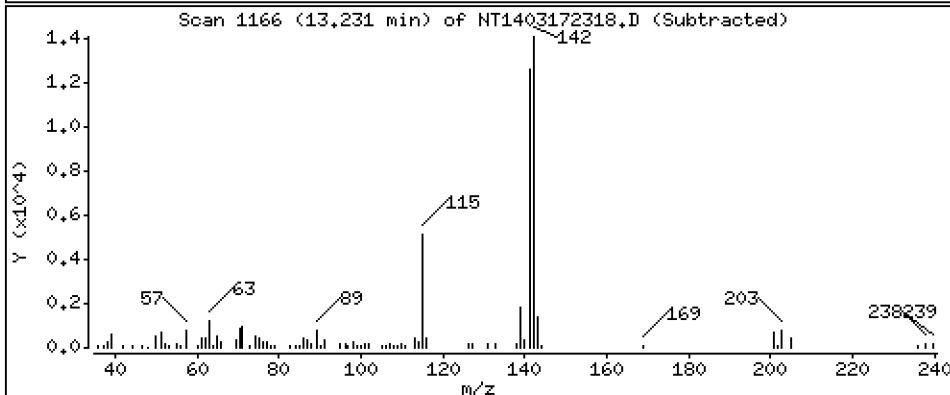
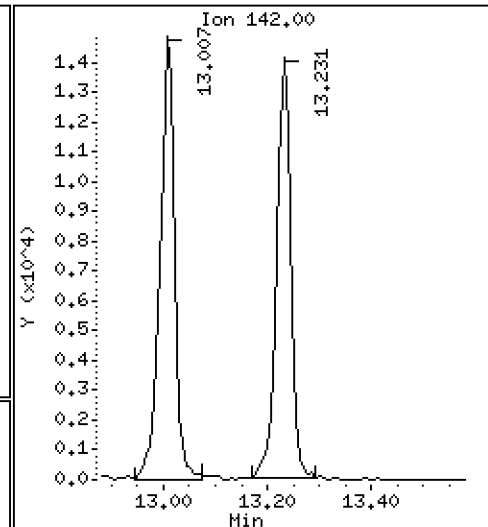
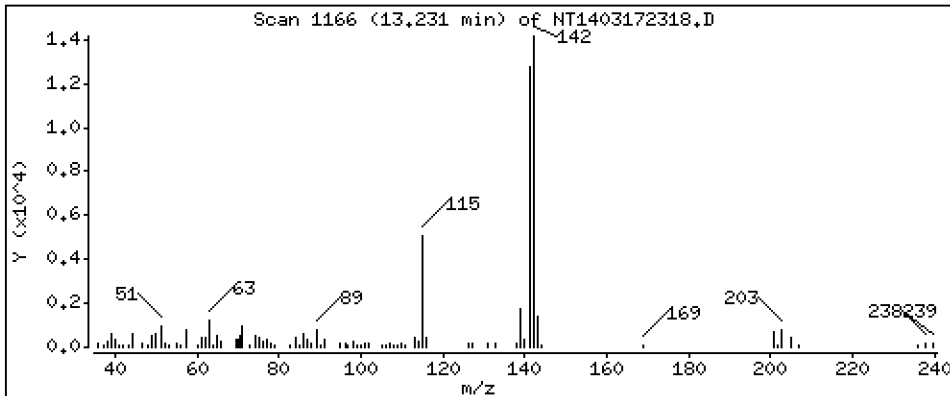
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1940 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

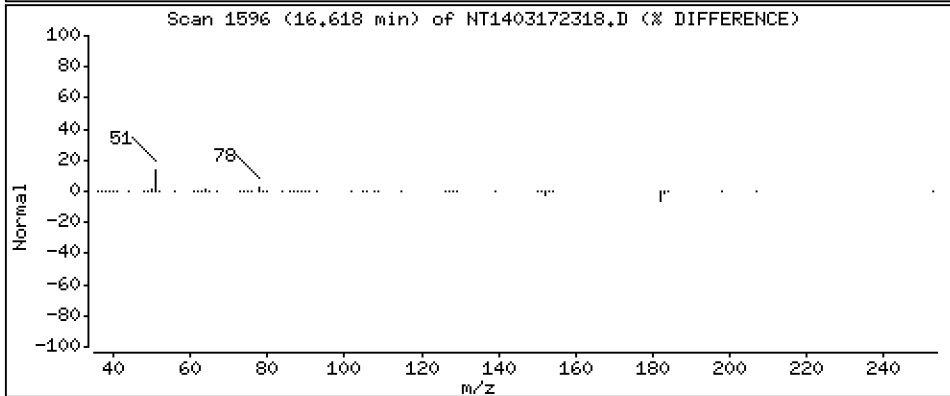
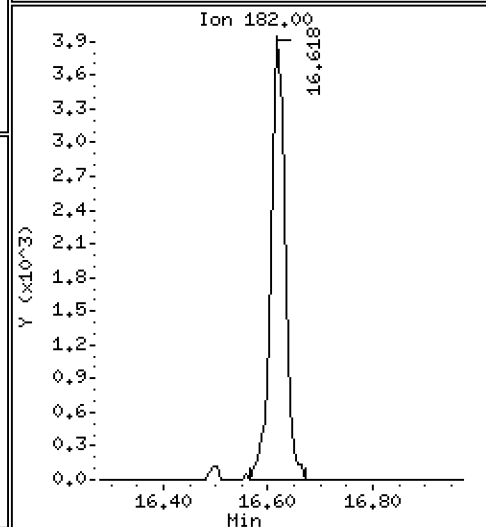
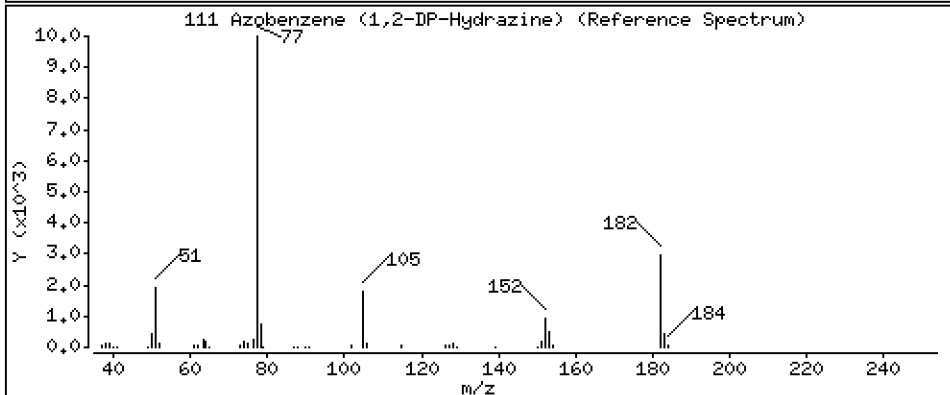
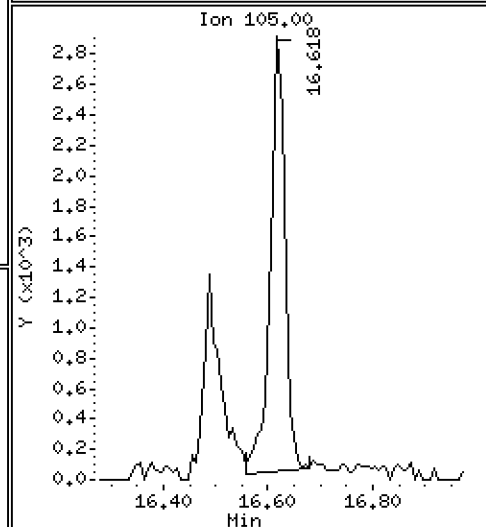
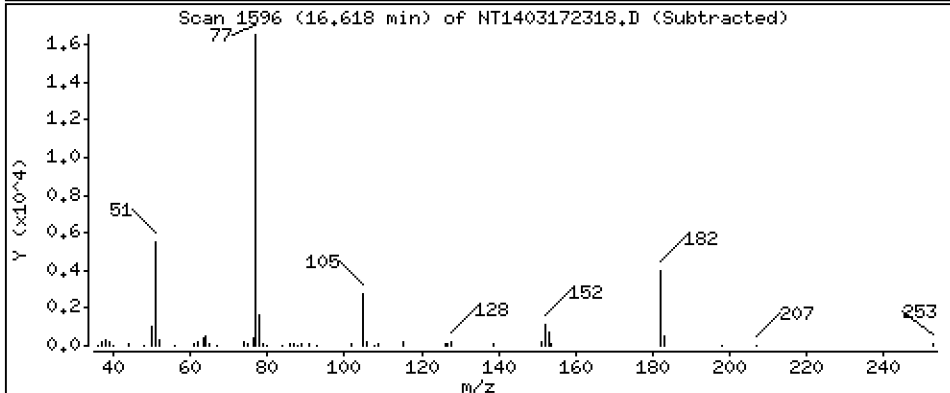
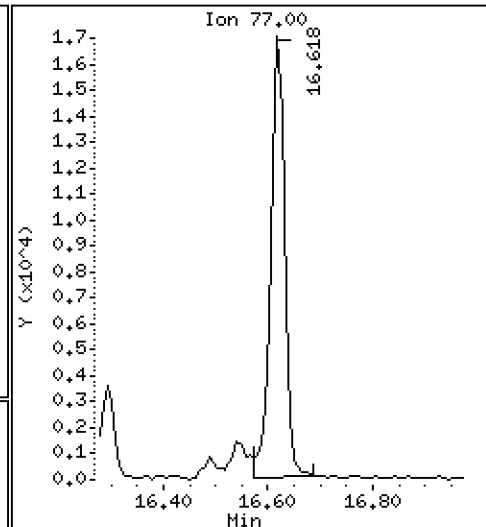
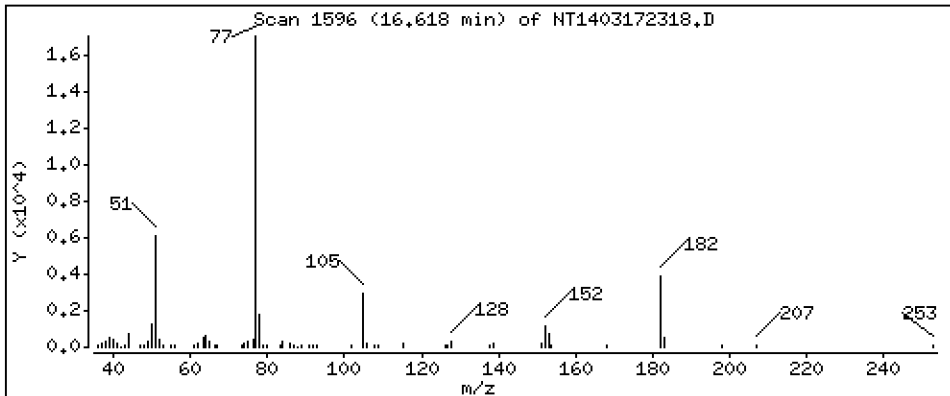
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1900 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

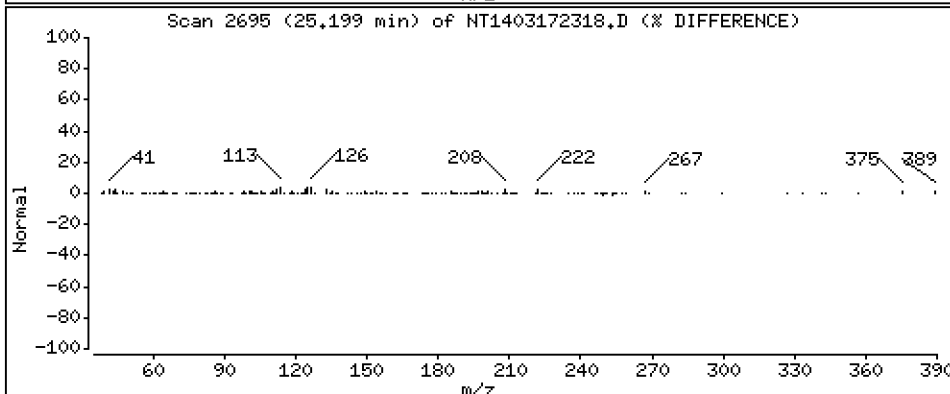
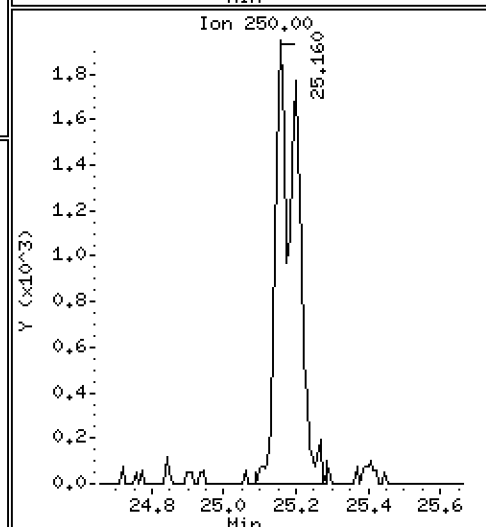
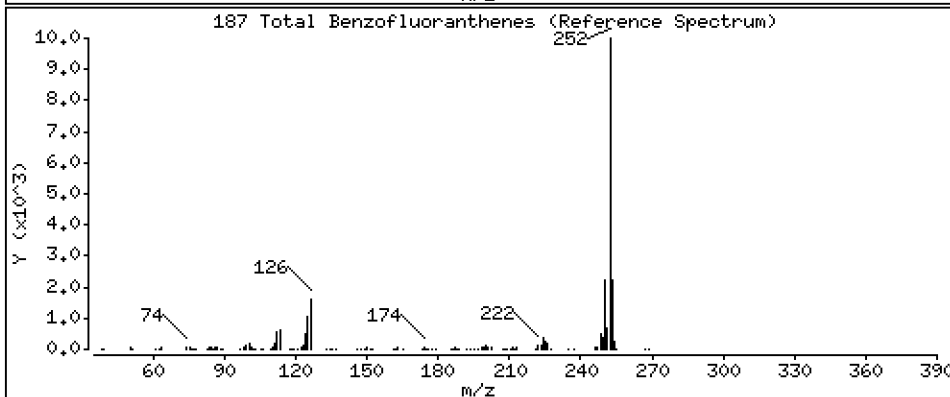
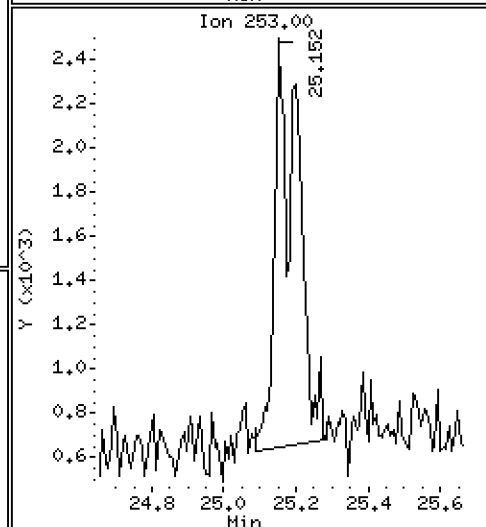
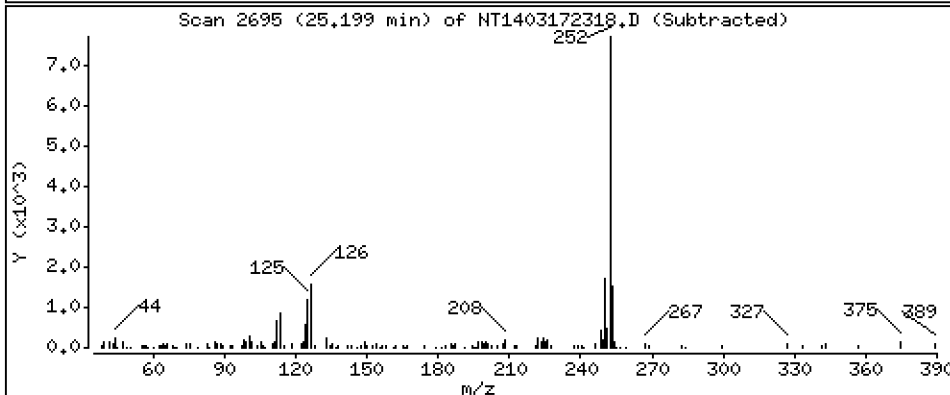
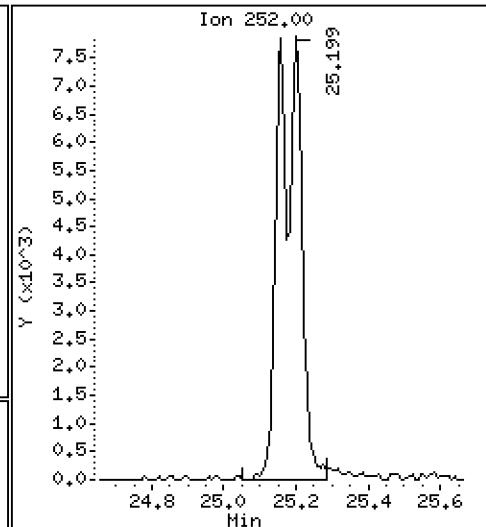
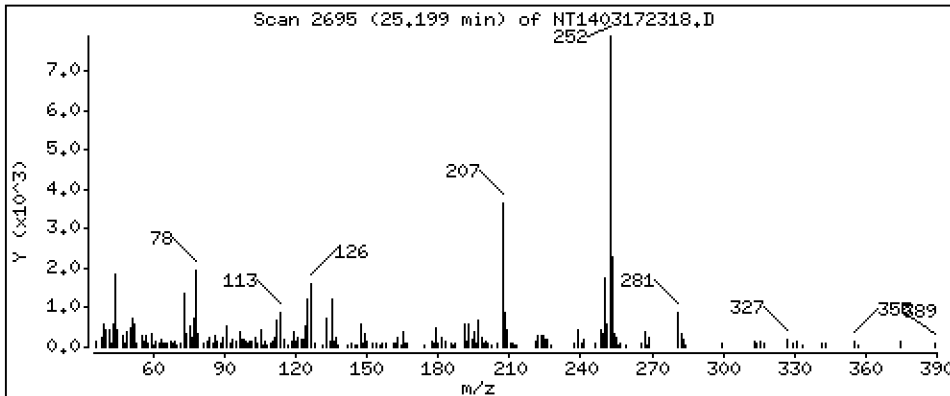
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,4172 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

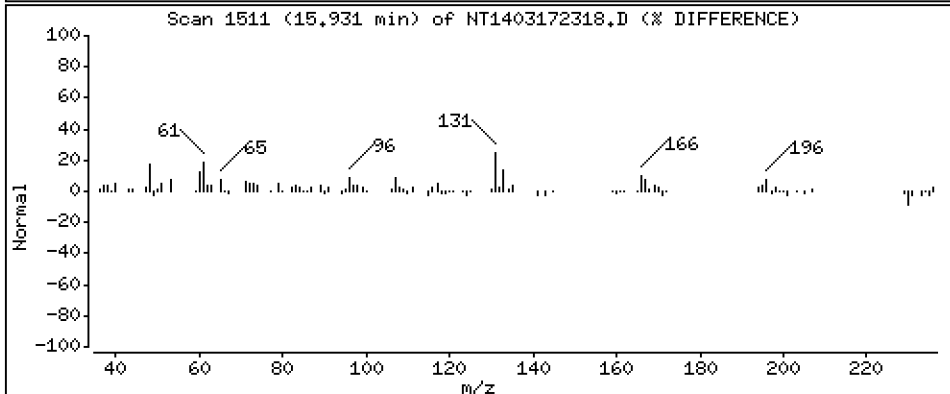
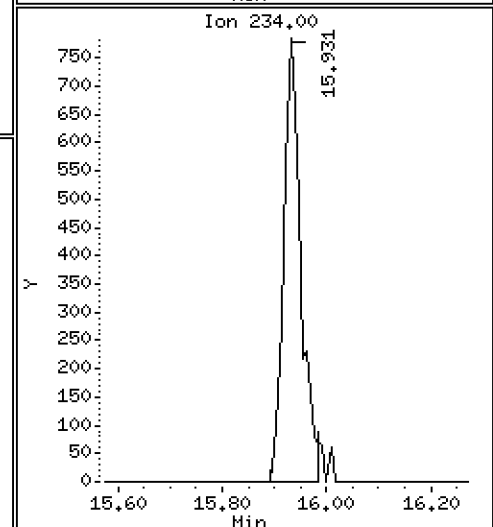
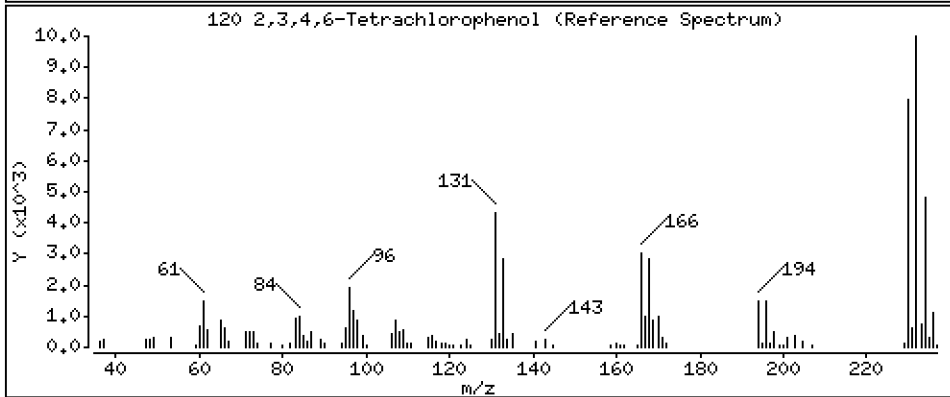
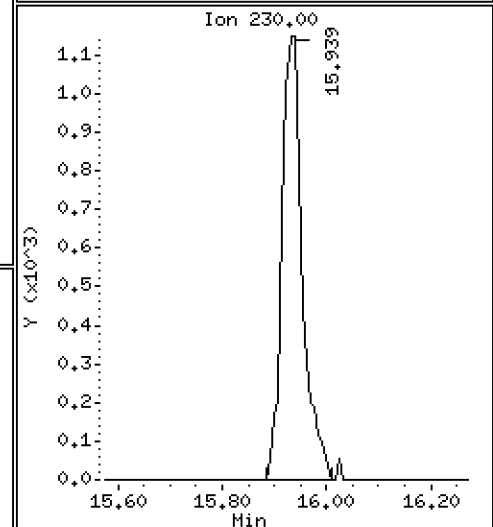
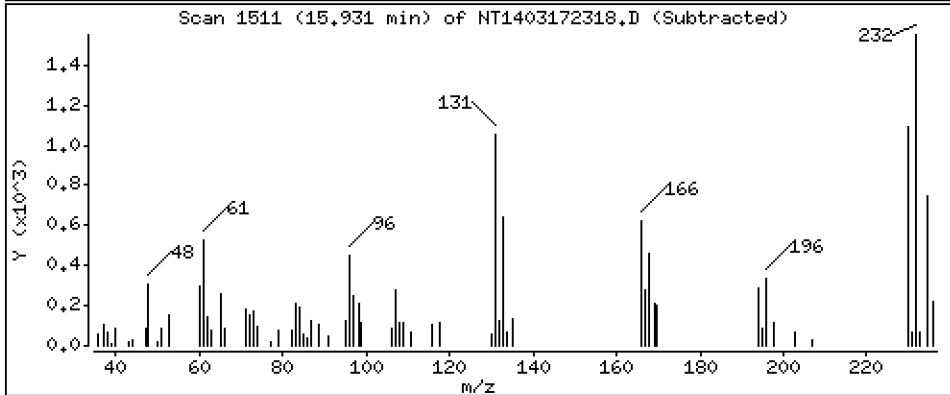
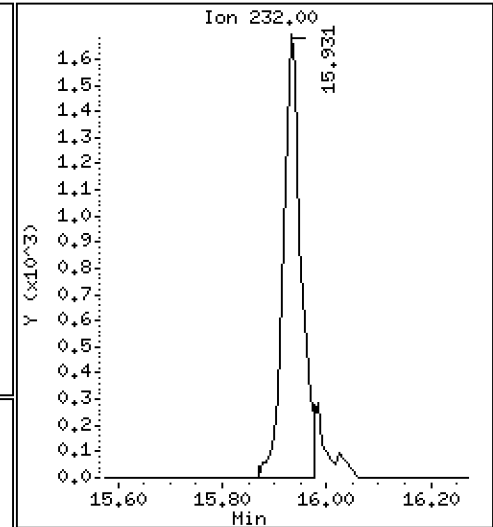
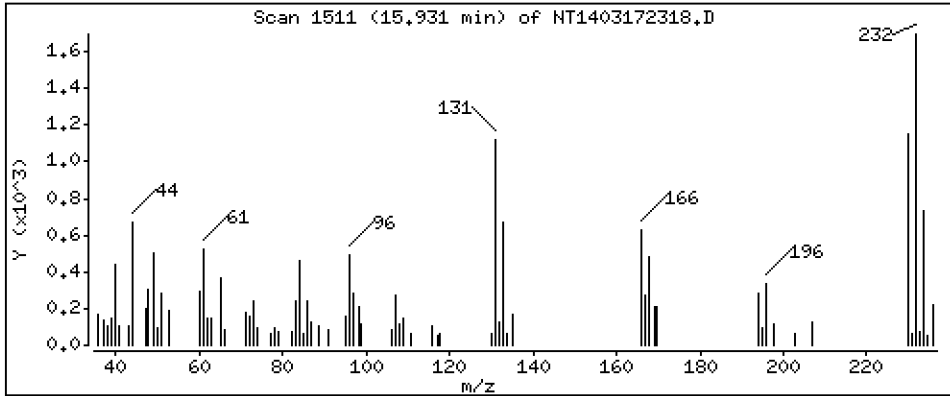
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,1003 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172318.D
 Lab Smp Id: SLC0335-LCV2
 Inj Date : 18-MAR-2023 00:43 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-LCV2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.821	6.821	(1.000)	16043	0.23147	0.2315
\$ 2 Phenol-d5	99		8.413	8.412	(1.000)	22436	0.24588	0.2459
3 Phenol	94		8.436	8.436	(1.000)	15686	0.16175	0.1618
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	19774	0.27487	0.2749
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	12828	0.18370	0.1837
6 2-Chlorophenol	128		8.722	8.729	(1.000)	13975	0.18309	0.1831
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	16579	0.21457	0.2146
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	204038	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	15564	0.20914	0.2091
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	10767	0.22403	0.2240
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	15401	0.20937	0.2094
11 Benzyl alcohol	108		9.404	9.341	(1.038)	6056	0.13414	0.1341 (M)
14 2,2'-oxybis(1-Chloropropane)	121		9.637	9.644	(1.063)	4687	0.21117	0.2112 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	11991	0.17489	0.1749
17 Hexachloroethane	117		10.048	10.048	(1.000)	6581	0.20677	0.2068
16 N-Nitroso-di-n-propylamine	70		9.893	9.900	(1.000)	9269	0.17171	0.1717
15 4-Methylphenol	108		9.831	9.830	(1.000)	12807	0.15776	0.1578
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	15064	0.18345	0.1835
19 Nitrobenzene	77		10.195	10.203	(0.882)	14833	0.18557	0.1856
20 Isophorone	82		10.645	10.653	(0.921)	16359	0.14989	0.1499
21 2-Nitrophenol	139		10.832	10.831	(0.937)	5533	0.12260	0.1226
22 2,4-Dimethylphenol	107		10.886	10.886	(0.942)	25374	0.37115	0.3712
23 Bis(2-Chloroethoxy)methane	93		11.080	11.087	(0.958)	13647	0.18574	0.1857
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.289	11.289	(0.977)	17112	0.31474	0.3147
26 1,2,4-Trichlorobenzene	180		11.475	11.482	(0.993)	13070	0.19555	0.1956
* 27 Naphthalene-d8	136		11.560	11.567	(1.000)	775937	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	41862	0.20194	0.2019
29 4-Chloroaniline	127		11.737	11.737	(1.015)	28494	0.32835	0.3283
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	6307	0.20900	0.2090
31 4-Chloro-3-methylphenol	107		12.704	12.696	(1.099)	19456	0.29614	0.2961
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	28554	0.19751	0.1975
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	5490	0.17179	0.1718

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	10802	0.27695	0.2769
35 2,4,5-Trichlorophenol	196	13.710	13.702	(0.902)	11391	0.28027	0.2803
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	29072	0.20879	0.2088
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	23866	0.19998	0.2000
38 2-Nitroaniline	65	14.268	14.267	(0.939)	14161	0.30730	0.3073
39 Dimethylphthalate	163	14.693	14.701	(0.967)	24385	0.19020	0.1902
40 Acenaphthylene	152	14.879	14.879	(0.979)	38524	0.19219	0.1922
41 2,6-Dinitrotoluene	165	14.840	14.840	(0.977)	9236	0.31184	0.3118
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	384479	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	11505	0.28158	0.2816
44 Acenaphthene	153	15.258	15.266	(1.004)	22698	0.19395	0.1939
45 2,4-Dinitrophenol	184	15.359	15.335	(1.011)	497	0.02168	0.02168 (M)
46 Dibenzofuran	168	15.591	15.590	(1.026)	33382	0.19980	0.1998
47 4-Nitrophenol	109	15.521	15.436	(1.021)	1402	0.06483	0.06483 (M)
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	11945	0.28452	0.2845
50 Diethylphthalate	149	16.155	16.163	(1.063)	25406	0.19167	0.1917
49 Fluorene	166	16.302	16.309	(1.073)	26861	0.16960	0.1696
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	11780	0.17328	0.1733
52 4-Nitroaniline	138	16.402	16.394	(1.079)	8037	0.22615	0.2262
53 4,6-Dinitro-2-methylphenol	198	16.494	16.494	(0.904)	4699	0.20016	0.2002
54 N-Nitrosodiphenylamine	169	16.548	16.548	(0.907)	17523	0.19011	0.1901
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	2788	0.19100	0.1910
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	5805	0.18680	0.1868
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	6690	0.20403	0.2040
58 Pentachlorophenol	266	17.992	17.977	(0.986)	2057	0.09107	0.09107 (M)
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	678623	4.00000	
60 Phenanthrene	178	18.286	18.294	(1.003)	38655	0.19936	0.1994
61 Anthracene	178	18.379	18.387	(1.008)	34239	0.18329	0.1833
62 Carbazole	167	18.712	18.712	(1.026)	27483	0.16536	0.1654
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	34134	0.16203	0.1620
64 Fluoranthene	202	20.677	20.677	(0.888)	34573	0.22419	0.2242
65 Pyrene	202	21.103	21.103	(0.906)	36468	0.23059	0.2306
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	26055	0.24336	0.2434
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	13984	0.20183	0.2018
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	27759	0.19861	0.1986
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	379052	4.00000	
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	20441	0.50999	0.5100
71 Chrysene	228	23.332	23.340	(1.002)	24062	0.19022	0.1902
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.960)	17448	0.20508	0.2051
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	646291	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.001)	34651	0.20856	0.2086
74 Benzo(b)fluoranthene	252	25.160	25.159	(0.970)	16214	0.18713	0.1871
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	18568	0.21618	0.2162
76 Benzo(a)pyrene	252	25.818	25.818	(0.996)	13291	0.17938	0.1794
* 77 Perylene-d12	264	25.934	25.934	(1.000)	245193	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.104)	11686	0.14491	0.1449
79 Dibenzo(a,h)anthracene	278	28.649	28.626	(1.105)	9576	0.14090	0.1409
80 Benzo(g,h,i)perylene	276	29.411	29.403	(1.134)	10108	0.15209	0.1521 (M)
90 N-Nitrosodimethylamine	74	4.689	4.697	(1.000)	11768	0.26809	0.2681
91 Aniline	93	8.513	8.513	(1.000)	36551	0.37474	0.3747
93 Benzidine	184	20.917	20.909	(0.898)	16903	0.27237	0.2724
103 Pyridine	79	4.743	4.712	(1.000)	18433	0.13560	0.1356
105 1-methylnaphthalene	142	13.231	13.230	(1.145)	25403	0.19395	0.1940
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.625	(1.094)	30076	0.19001	0.1900

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
=====	=====		=====	=====	=====	=====	=====	=====	
187 Total Benzofluoranthenes	252		25.198	25.159	(0.972)	34327	0.41716	0.4172	
120 2,3,4,6-Tetrachlorophenol	232		15.931	15.923	(1.048)	3906	0.10028	0.1003	

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172318.D Calibration Time: 23:31
 Lab Smp Id: SLC0335-LCV2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	204038	-11.68
27 Naphthalene-d8	843789	421895	1687578	775937	-8.04
42 Acenaphthene-d10	432455	216228	864910	384479	-11.09
59 Phenanthrene-d10	793780	396890	1587560	678623	-14.51
69 Chrysene-d12	411057	205529	822114	379052	-7.79
134 Di-n-octylphthala	799010	399505	1598020	646291	-19.11
77 Perylene-d12	254782	127391	509564	245193	-3.76

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.24	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172318.D

Lab ID: SLC0335-LCV2
nt14.i, ABN.m, 18-MAR-2023 00:43

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.038	1.000	0.0377	Benzyl alcohol
1.063	1.000	0.0634	2,2'-oxybis(1-Chloropropane)
1.021	1.016	0.0056	4-Nitrophenol

RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

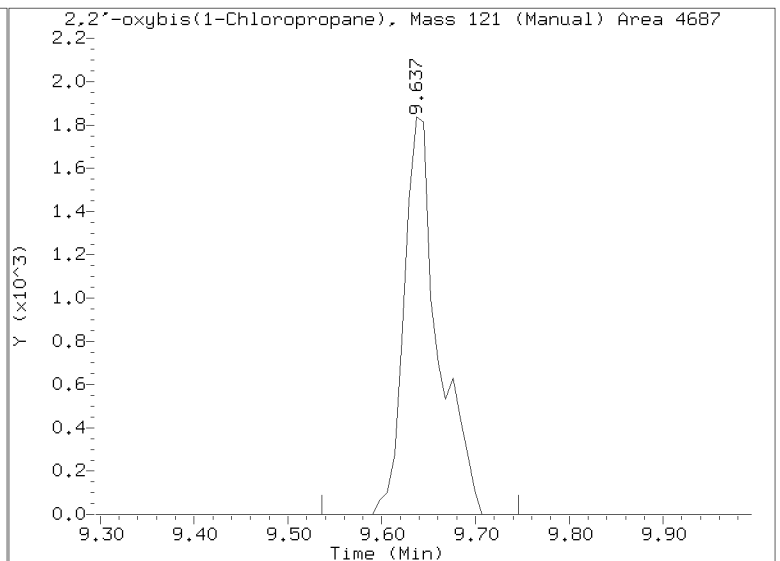
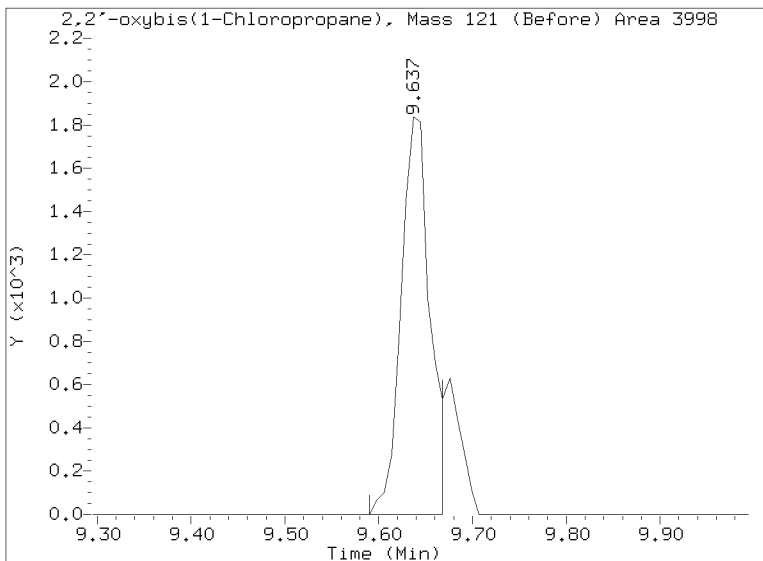
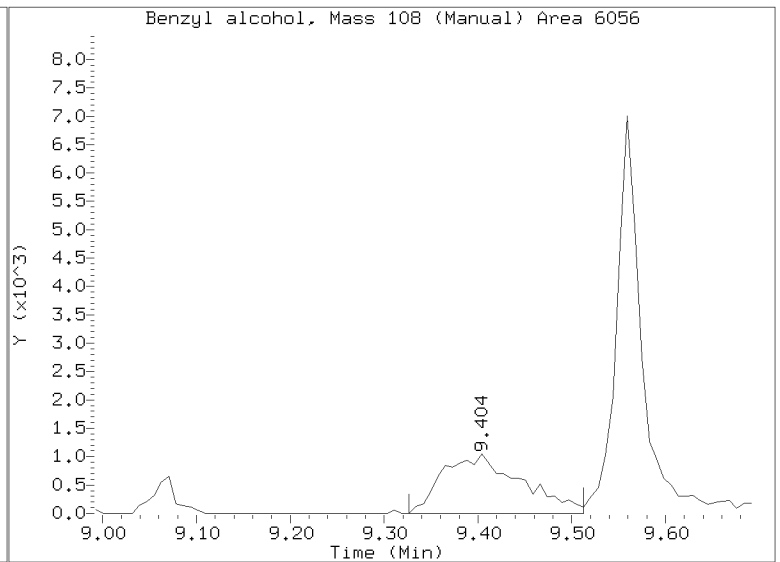
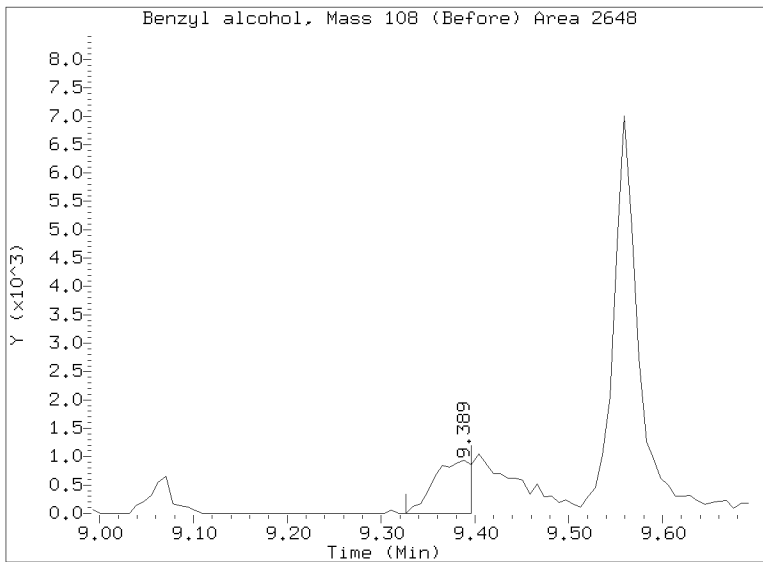
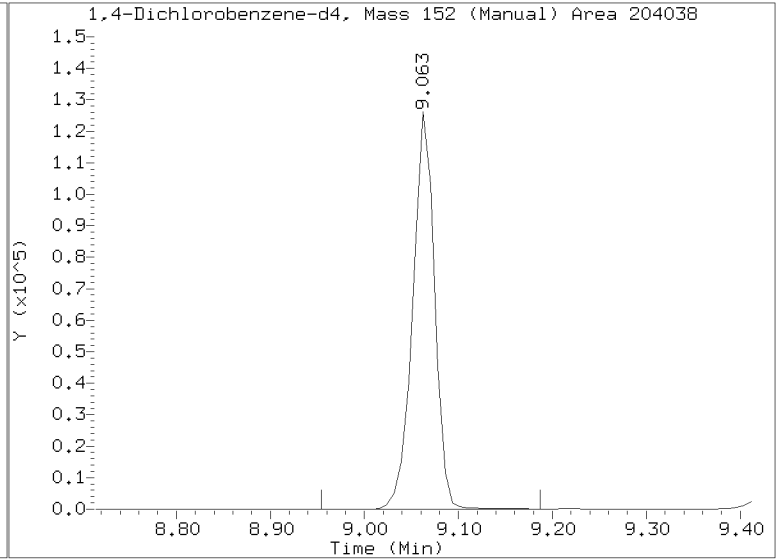
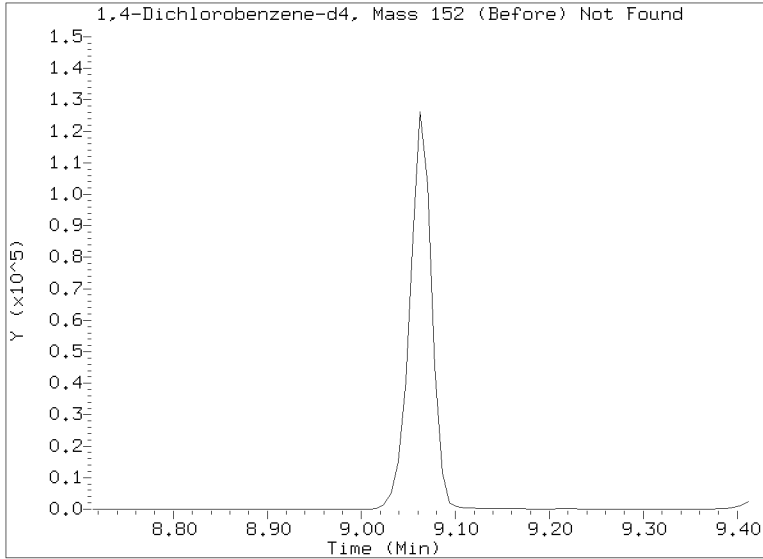
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172318.D

Injection Date: 18-MAR-2023 00:43

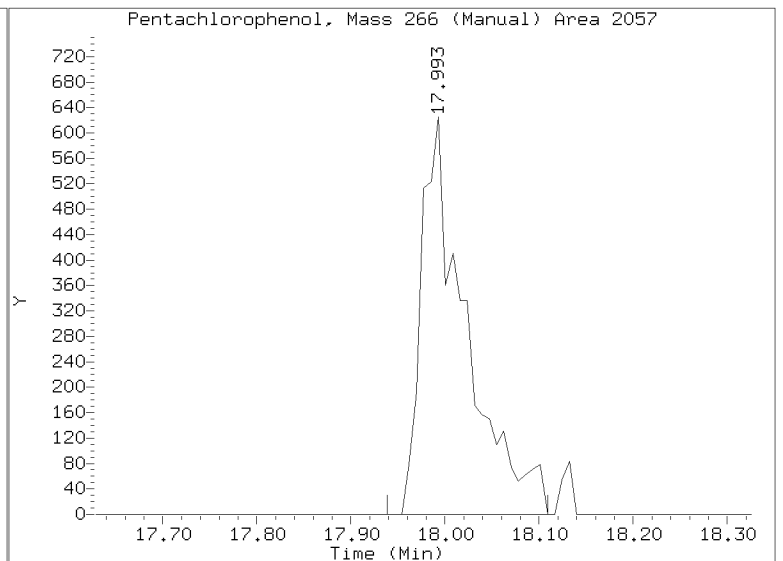
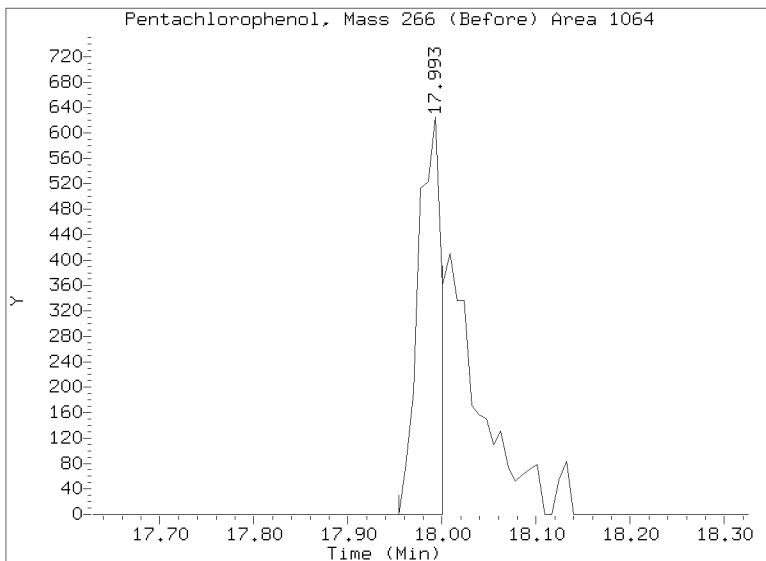
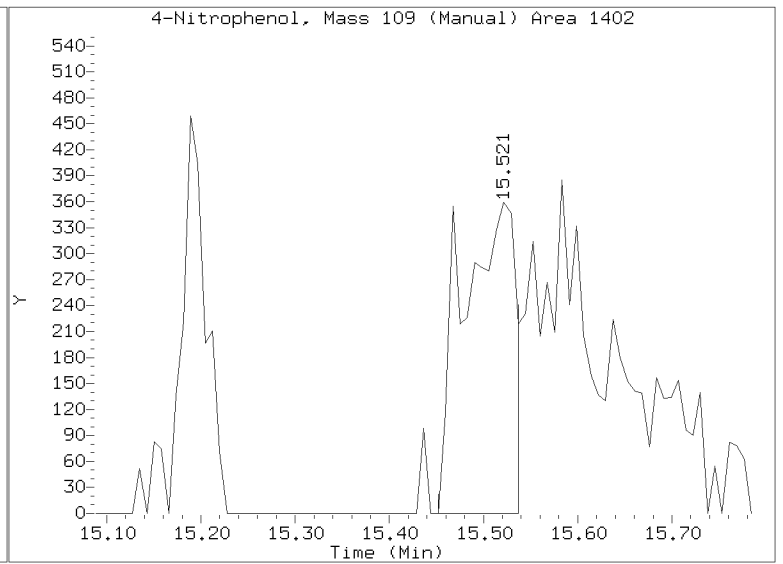
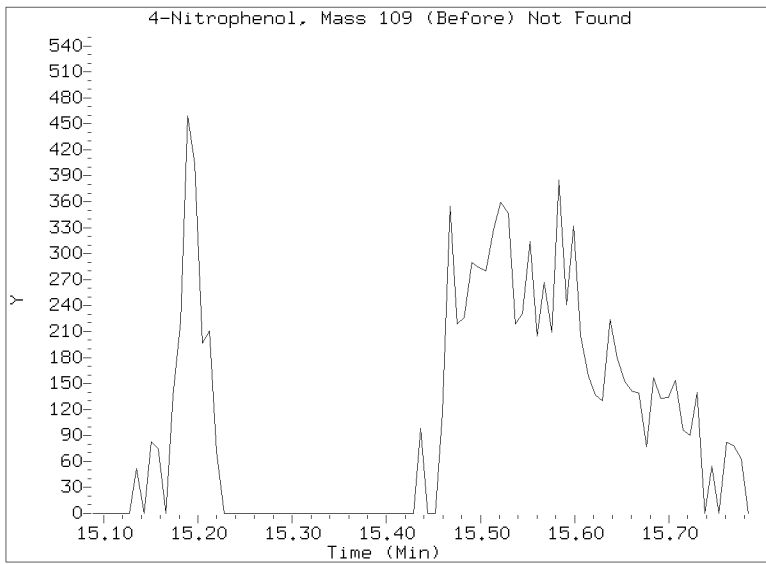
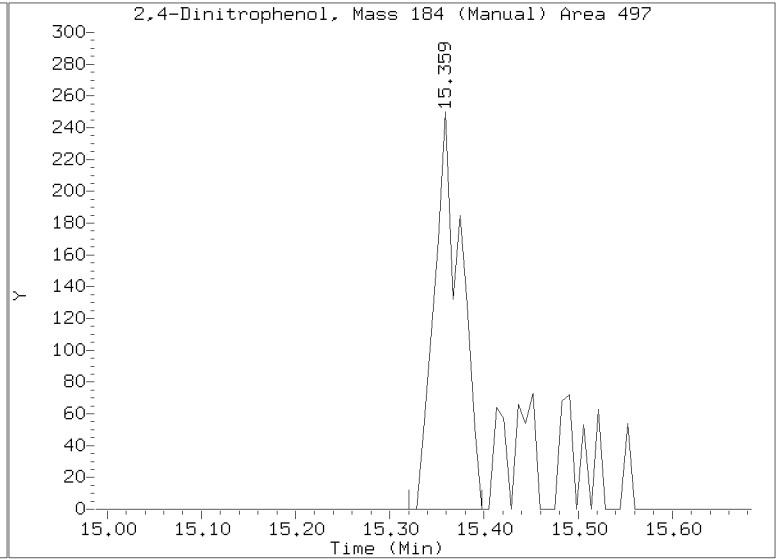
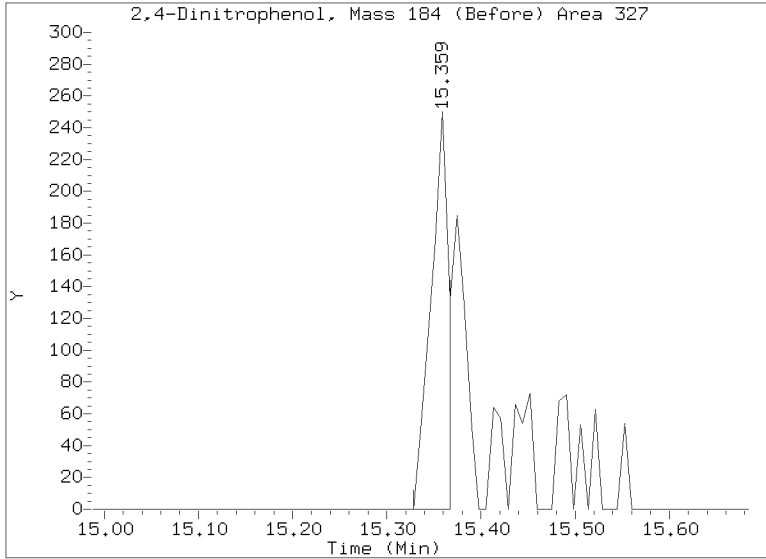
Lab ID: SLC0335-LCV2 Client ID:

Report Date: 03/22/2023 09:49



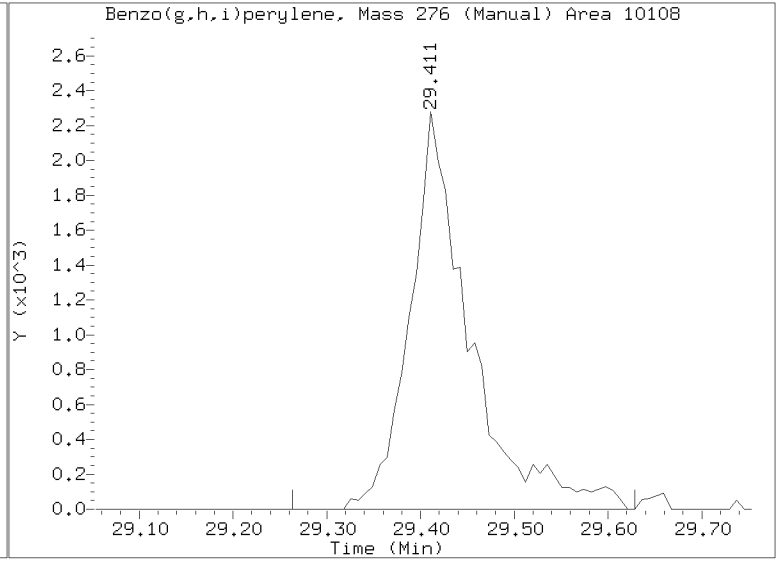
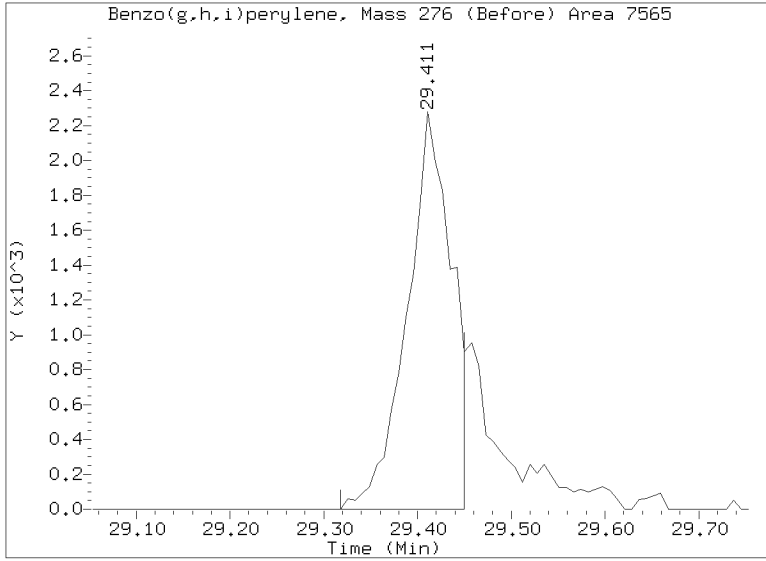
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172318.D
Injection Date: 18-MAR-2023 00:43
Lab ID:SLC0335-LCV2 Client ID:
Report Date: 03/22/2023 09:49



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172318.D
Injection Date: 18-MAR-2023 00:43
Lab ID:SLC0335-LCV2 Client ID:
Report Date: 03/22/2023 09:49





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

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0355-LCV2

Sequence: SLC0355

Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-14.0	50.00
4-Methylphenol	0.20000	0.1	-25.2	50.00
Naphthalene	0.20000	0.2	6.8	50.00
2-Methylnaphthalene	0.20000	0.2	0.4	50.00
Acenaphthylene	0.20000	0.2	3.2	50.00
Dimethylphthalate	0.20000	0.2	4.0	50.00
Acenaphthene	0.20000	0.2	1.5	50.00
Dibenzofuran	0.20000	0.2	2.0	50.00
Fluorene	0.20000	0.2	1.5	50.00
Phenanthrene	0.20000	0.2	-0.5	50.00
Anthracene	0.20000	0.2	-6.4	50.00
Fluoranthene	0.20000	0.2	23.0	50.00
Pyrene	0.20000	0.2	20.5	50.00
Butylbenzylphthalate	0.20000	0.3	31.3	50.00
Benzo(a)anthracene	0.20000	0.2	7.6	50.00
Chrysene	0.20000	0.2	3.5	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	14.2	50.00
Benzo(a)fluoranthene, Total	0.40000	0.4	-3.8	50.00
Benzo(a)pyrene	0.20000	0.2	-0.7	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-11.3	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	-3.8	50.00
Benzo(g,h,i)perylene	0.20000	0.2	-21.8	50.00
2-Fluorophenol	0.30000	0.276	-8.0	50.00
Phenol-d5	0.30000	0.264	-12.2	50.00
2-Chlorophenol-d4	0.30000	0.279	-6.9	50.00
1,2-Dichlorobenzene-d4	0.20000	0.210	5.0	50.00
Nitrobenzene-d5	0.20000	0.200	-0.2	50.00
2-Fluorobiphenyl	0.20000	0.212	6.1	50.00
2,4,6-Tribromophenol	0.30000	0.238	-20.6	50.00



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

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00048

Laboratory ID: SLC0355-LCV2

Sequence: SLC0355

Standard ID: K011105

p-Terphenyl-d14	0.20000	0.247	23.7	50.00
-----------------	---------	-------	------	-------

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230318,16\NT1403182320.D

Date: 18-MAR-2023 04:28

Client ID:

Sample Info: SLC0355-LCW2

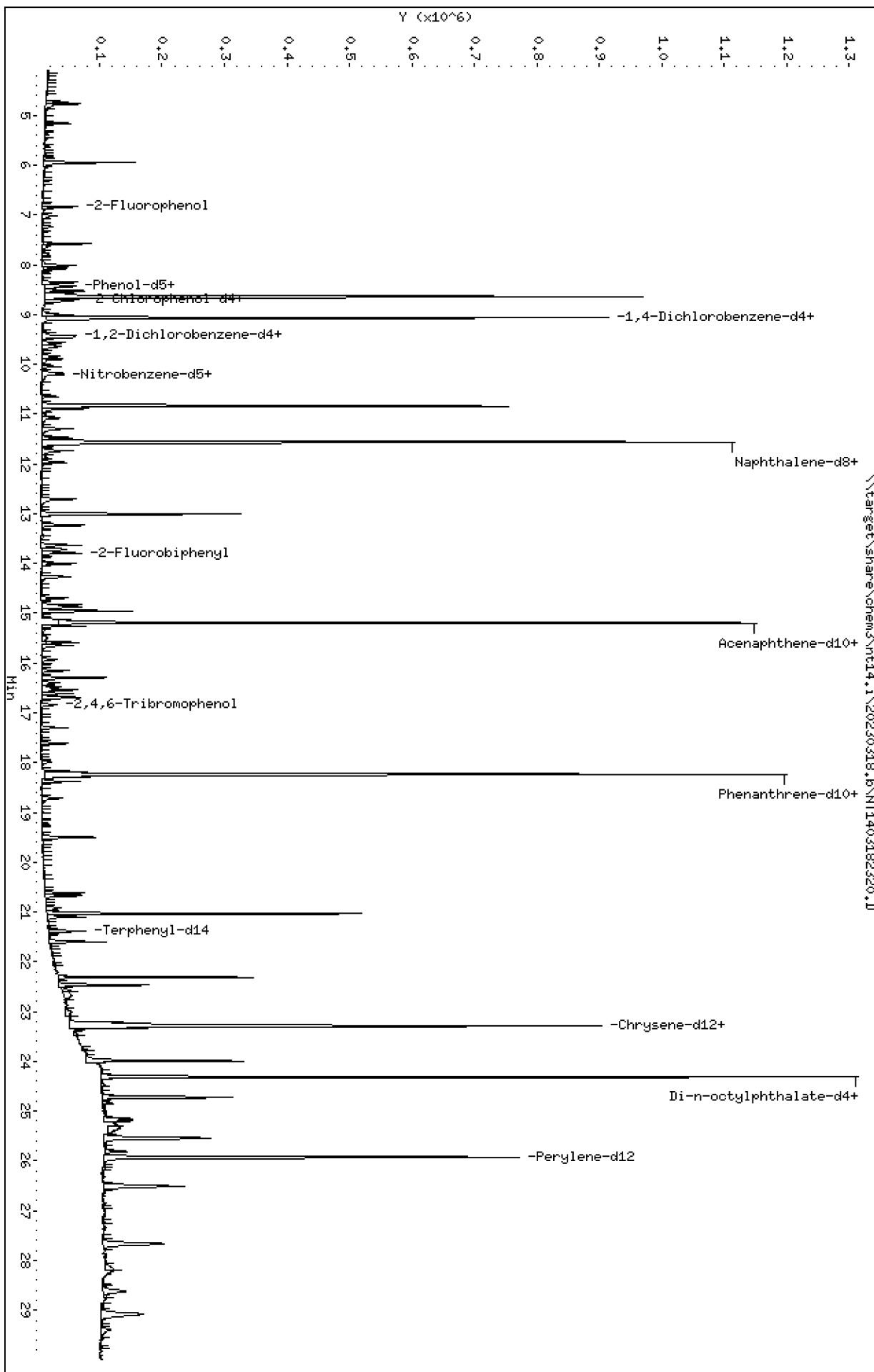
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

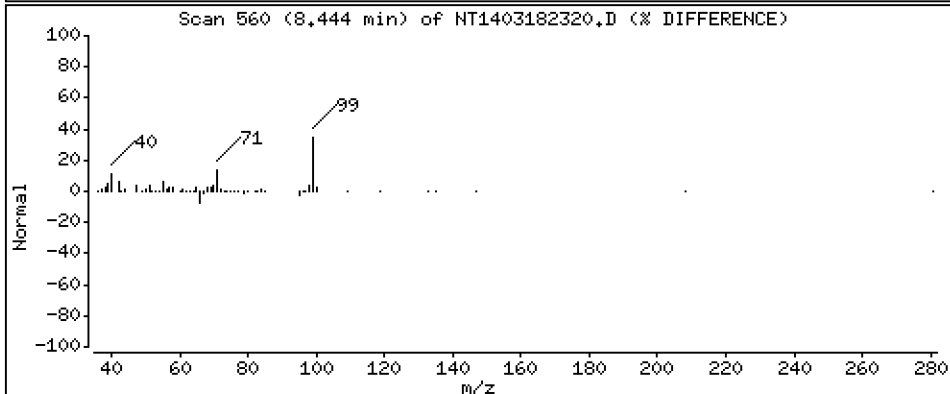
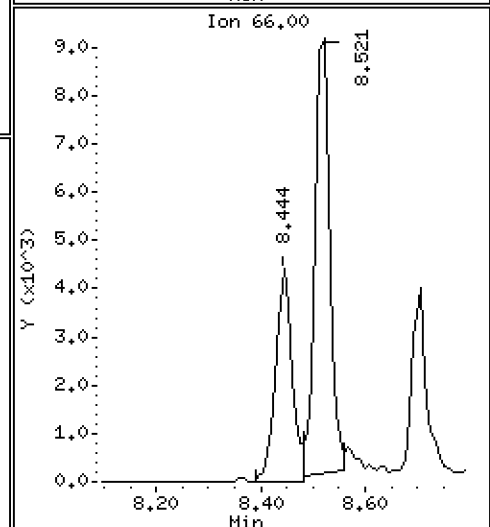
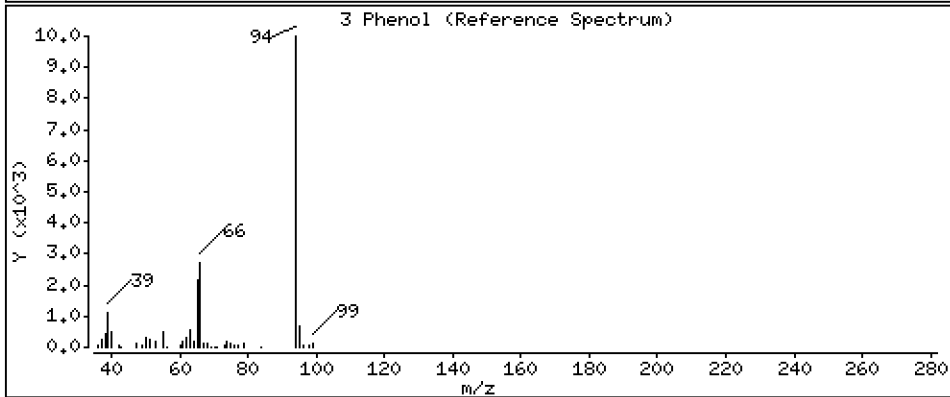
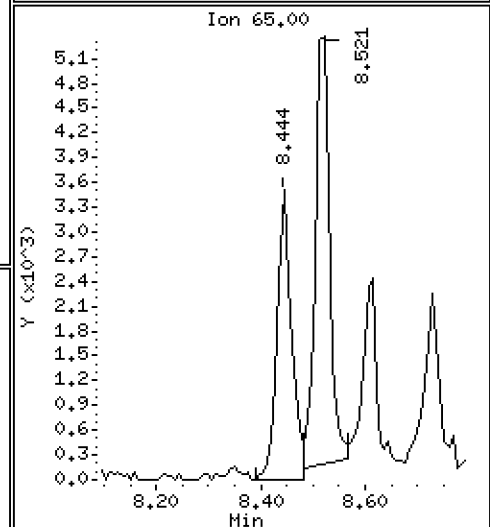
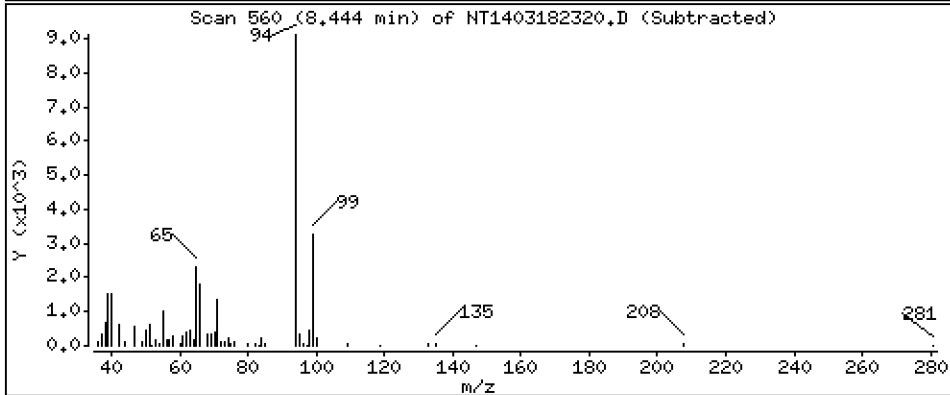
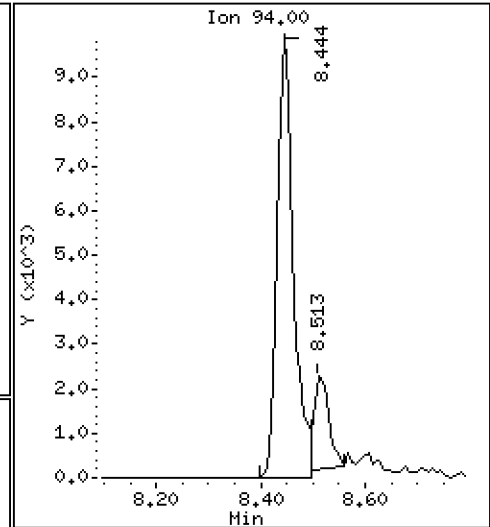
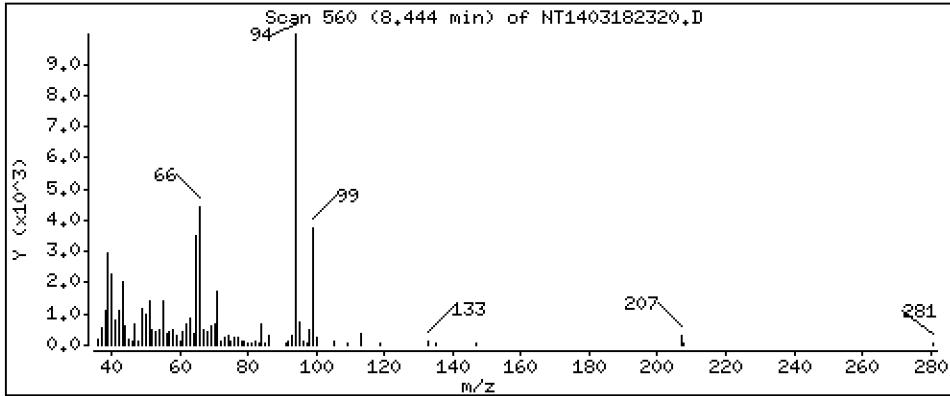
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1720 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

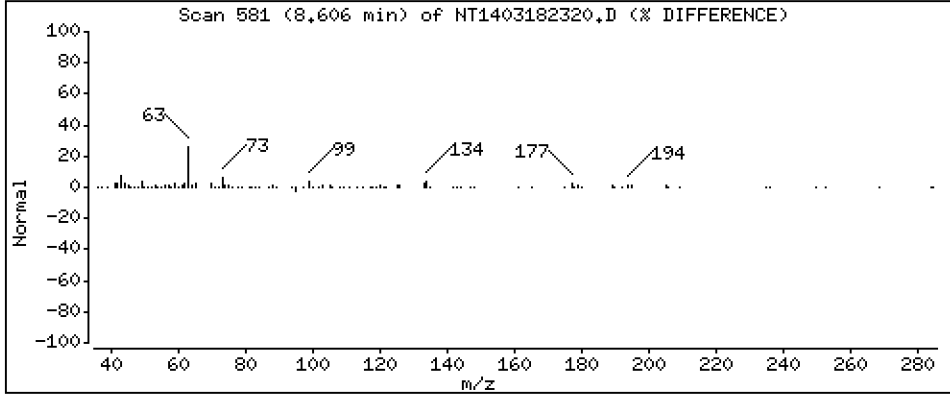
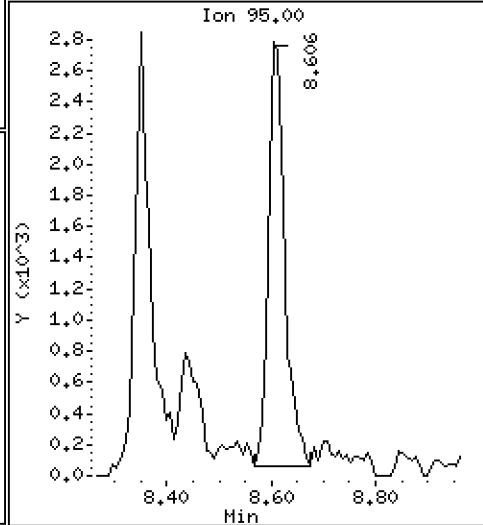
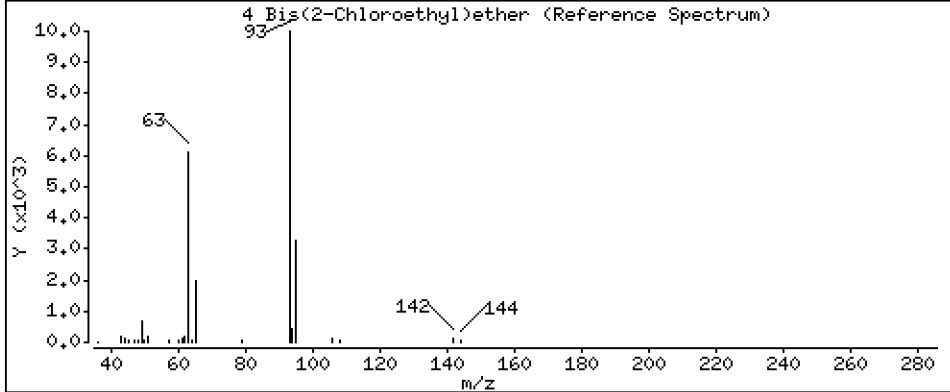
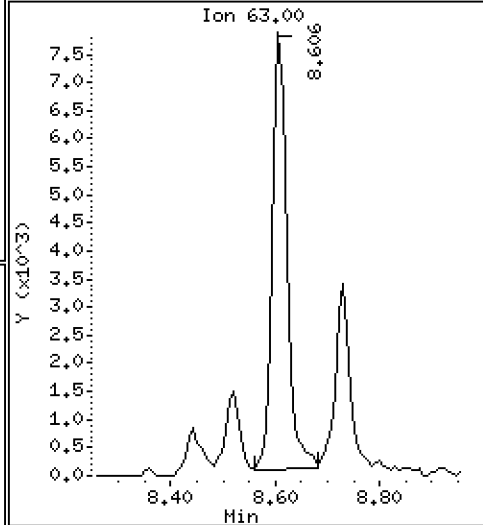
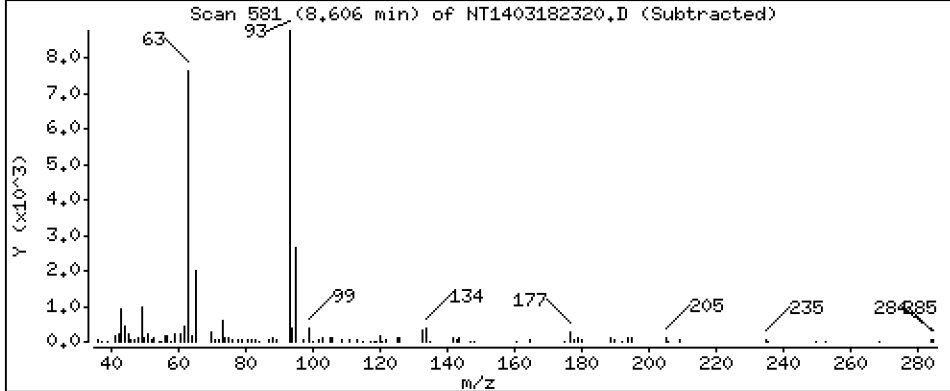
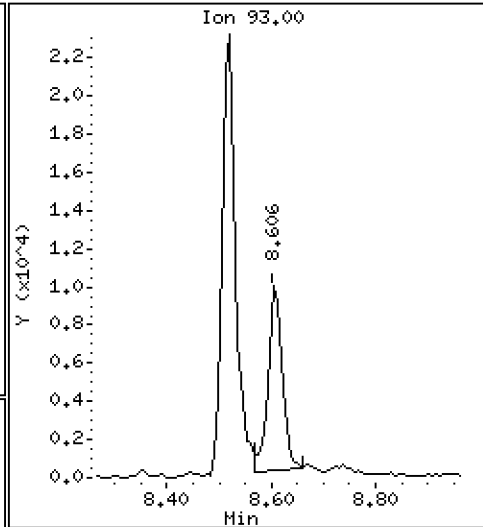
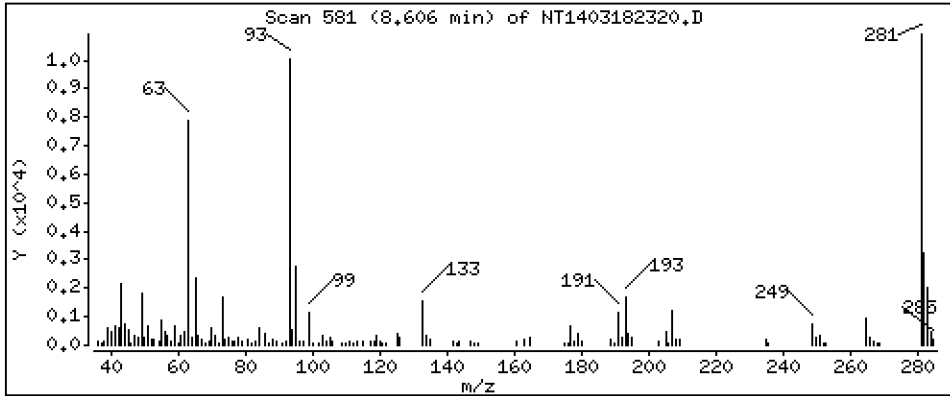
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,2035 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

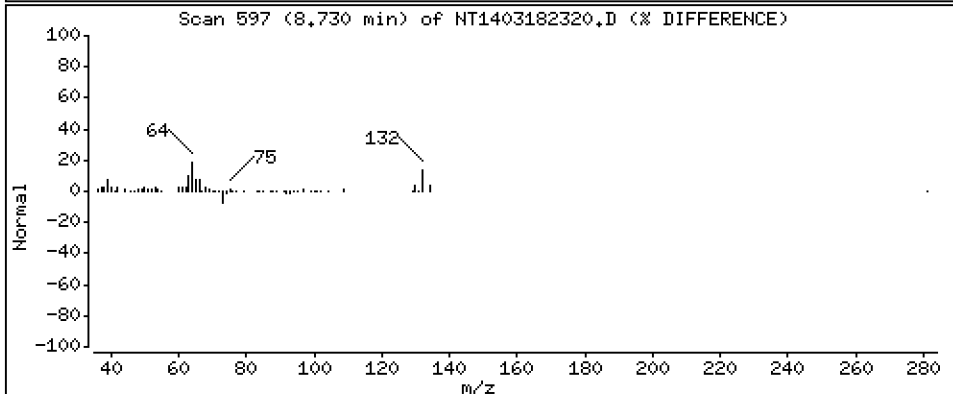
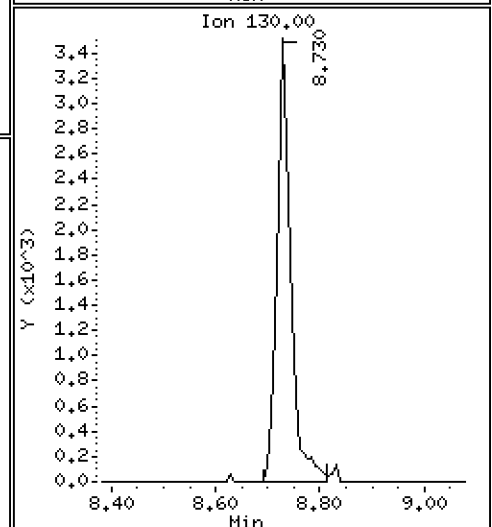
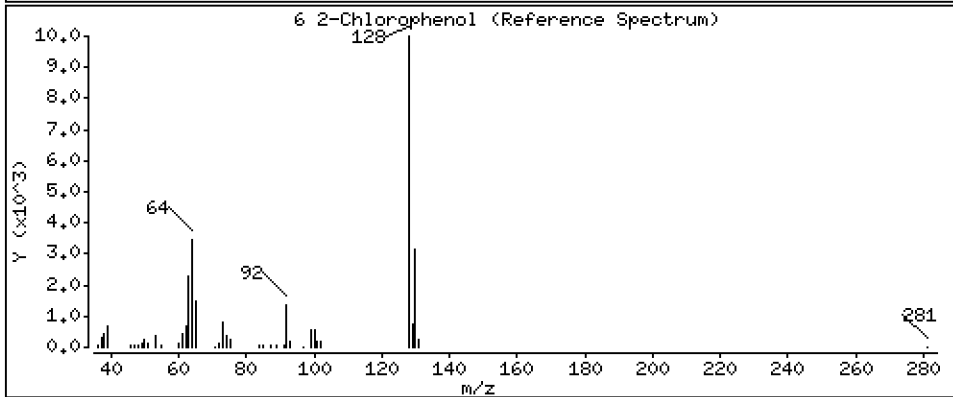
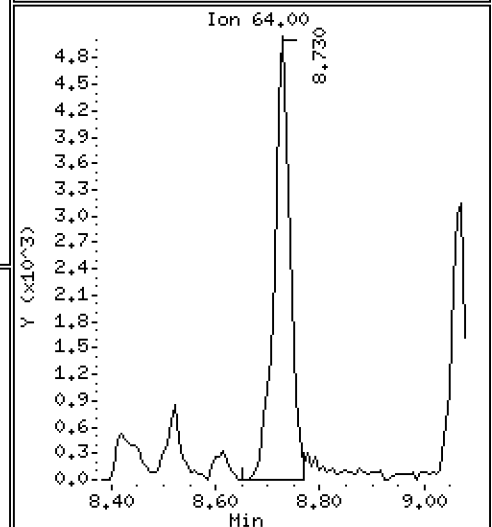
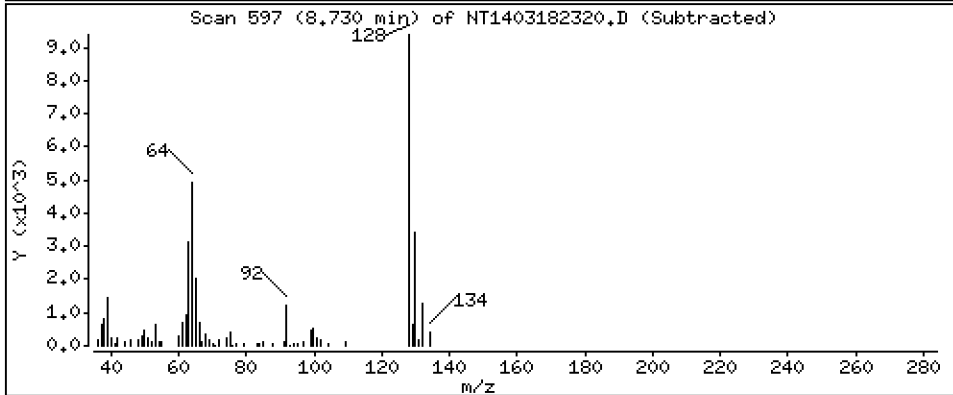
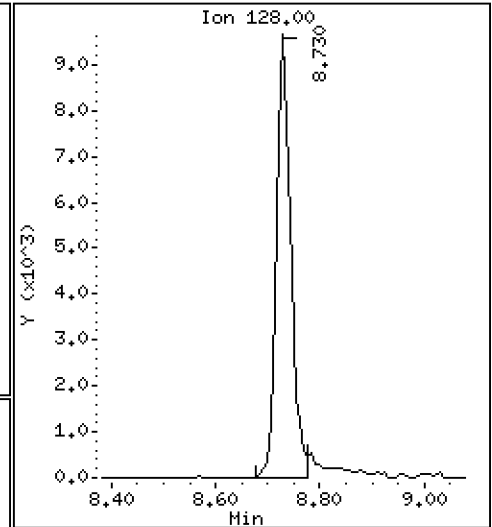
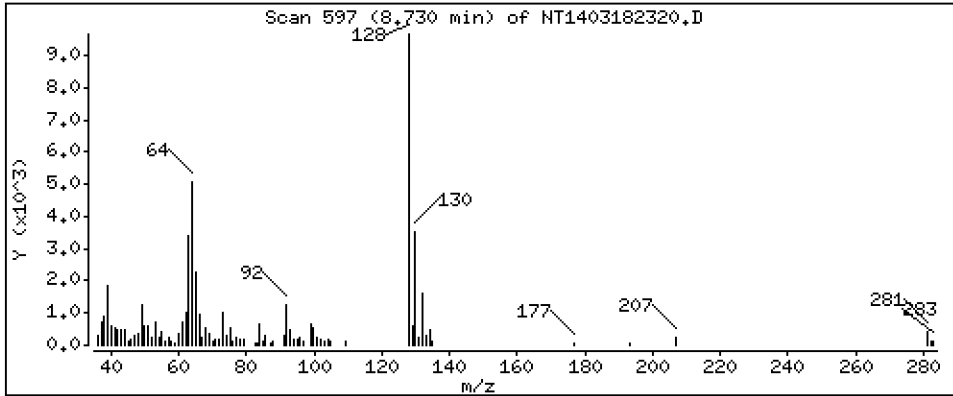
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1894 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

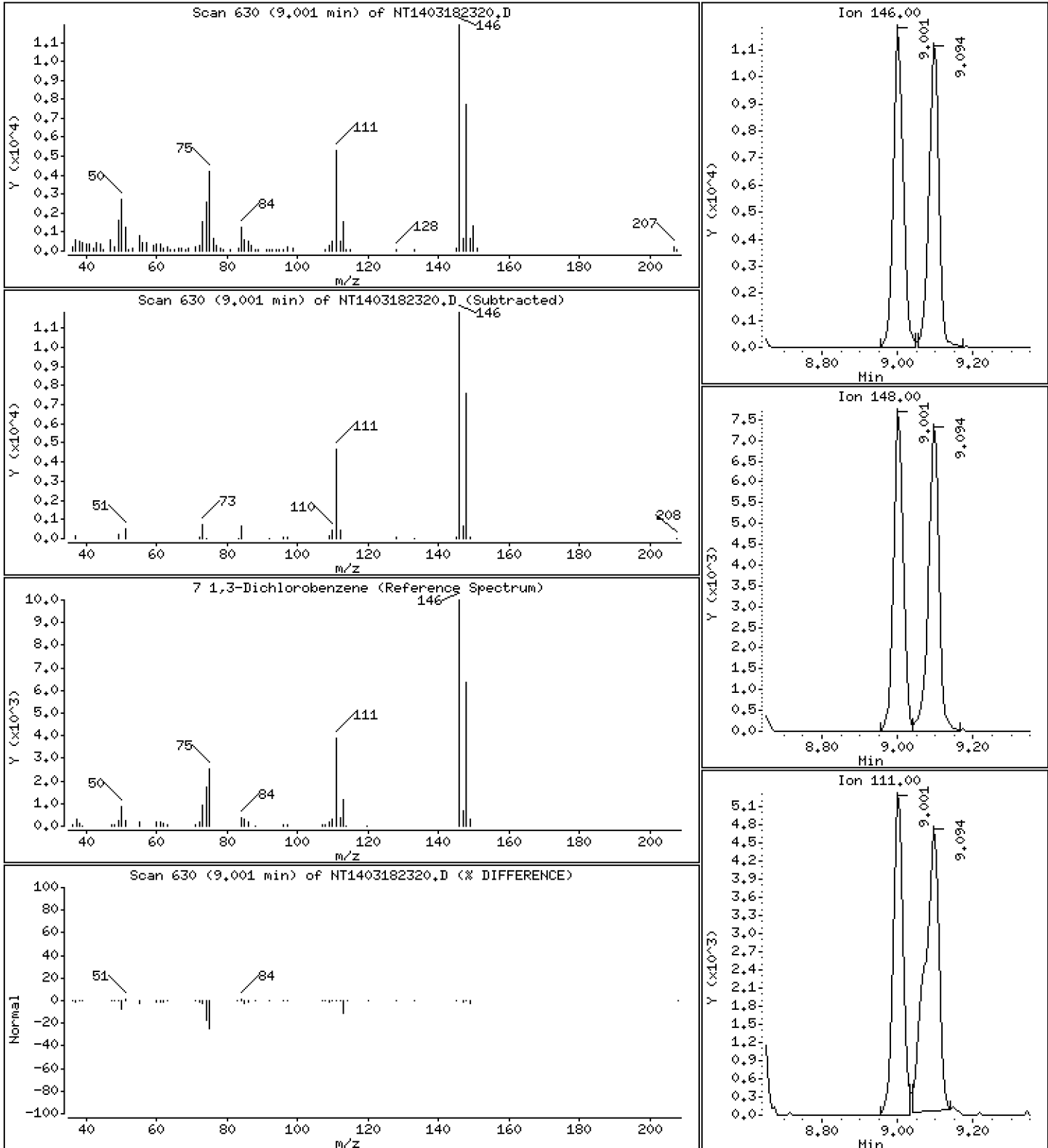
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2138 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

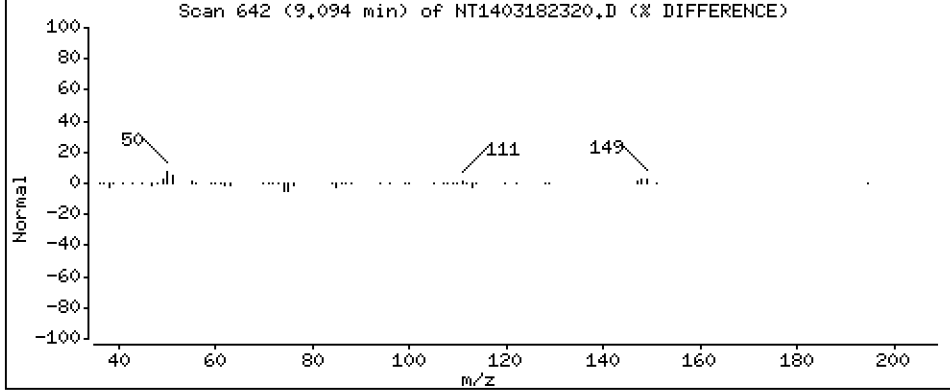
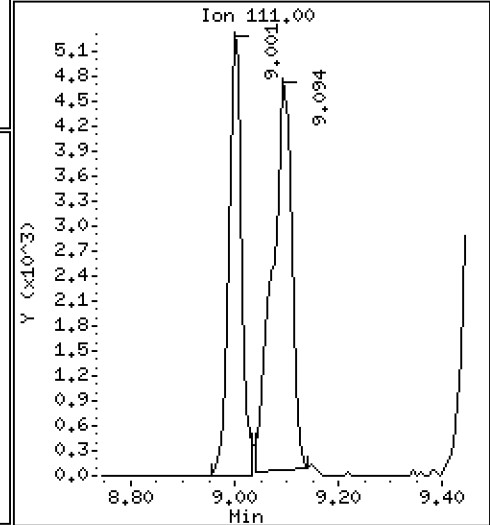
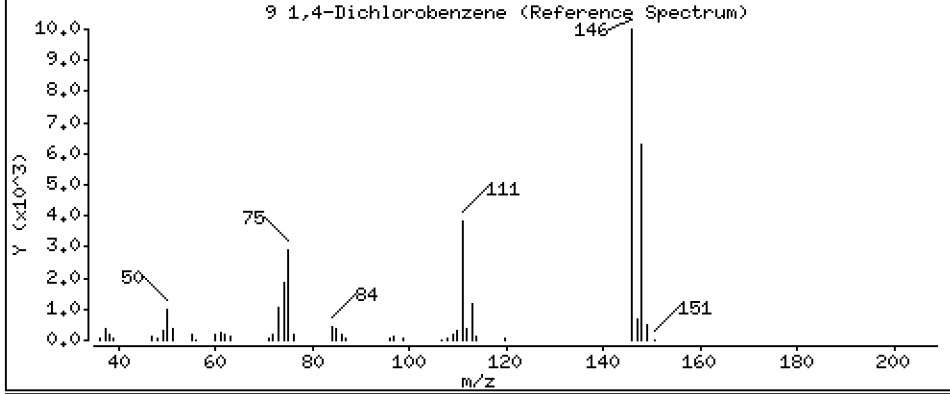
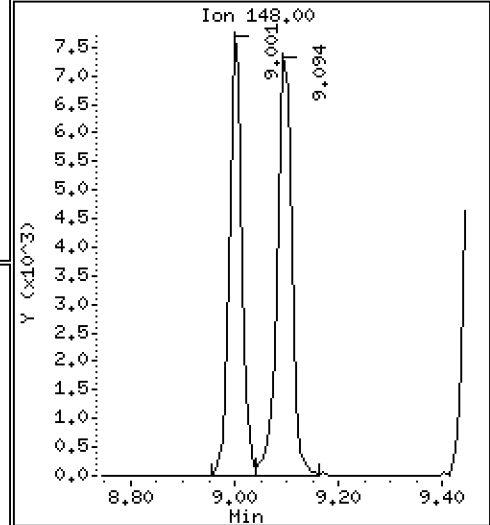
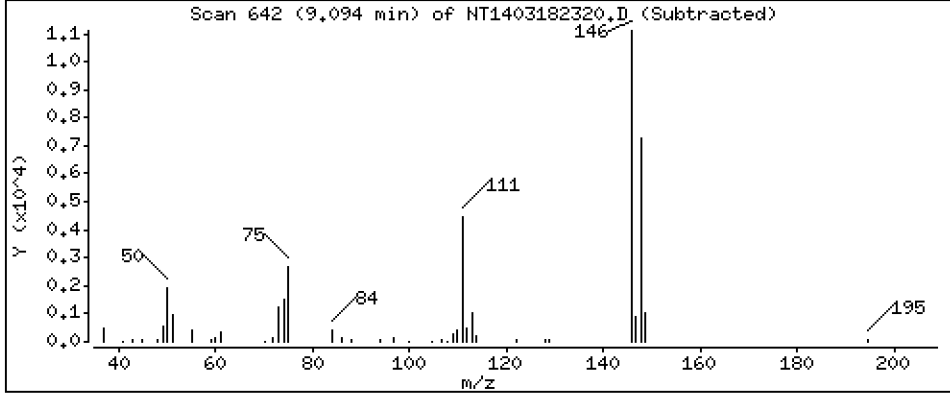
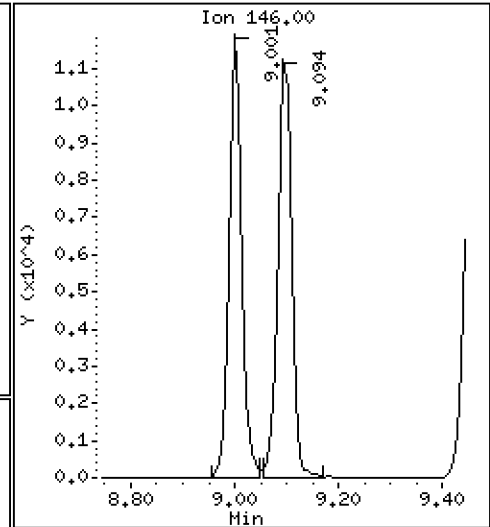
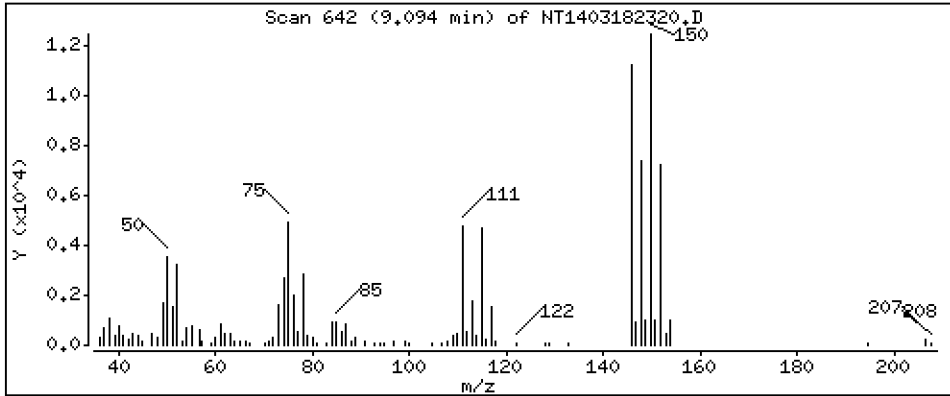
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2120 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

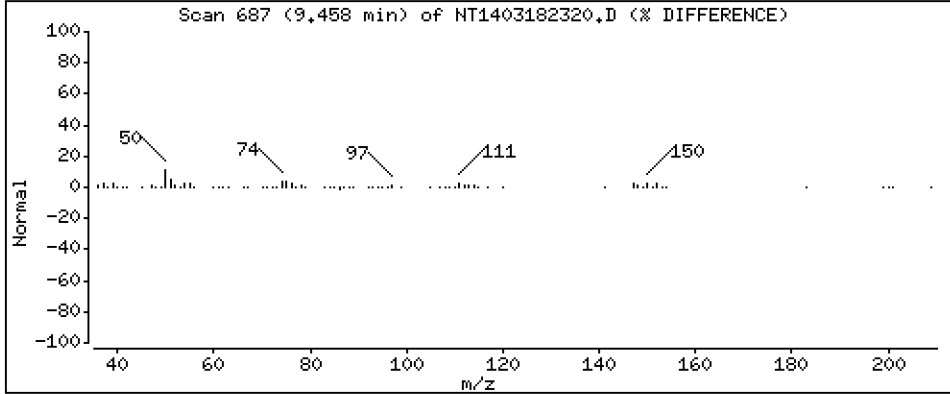
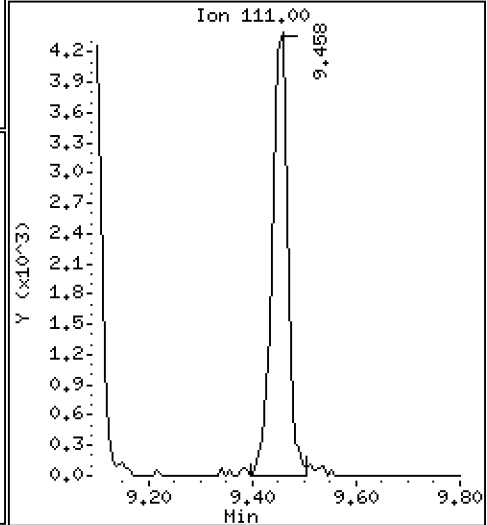
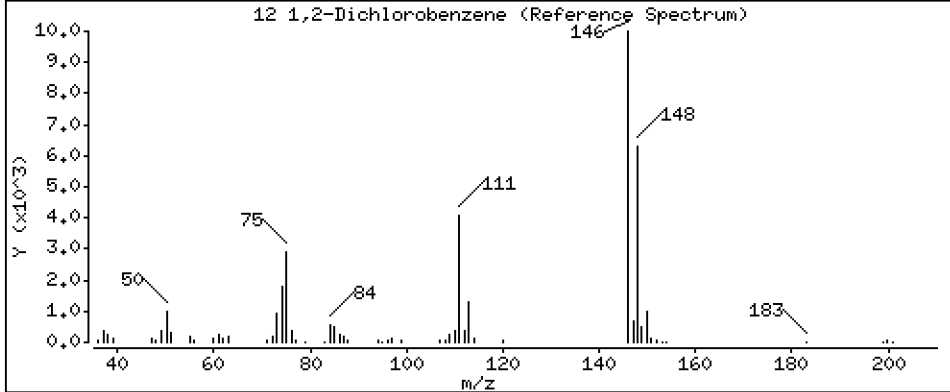
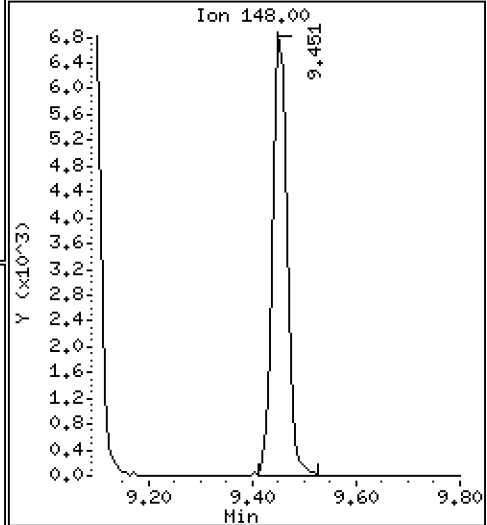
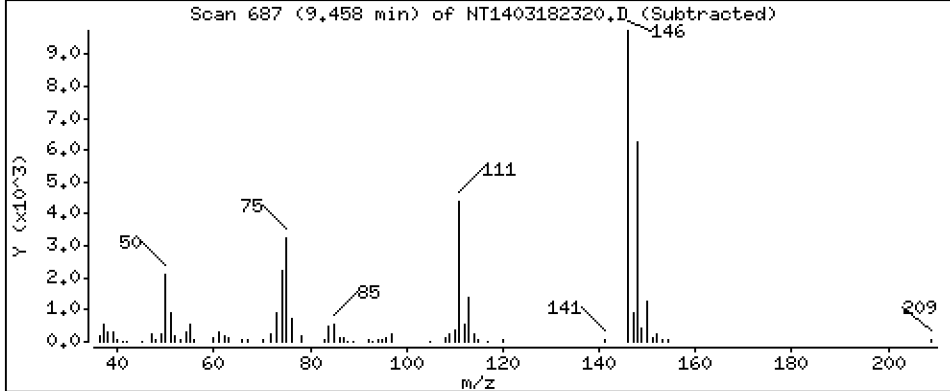
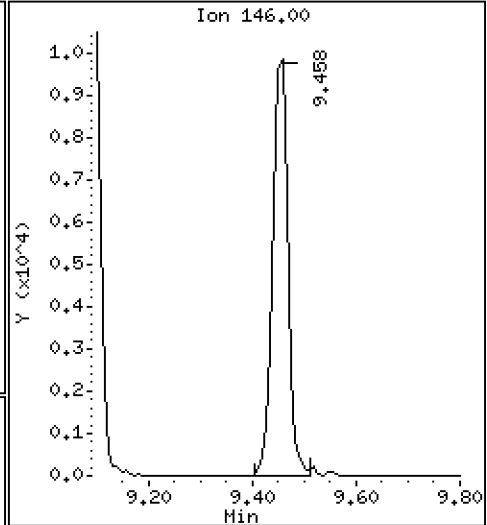
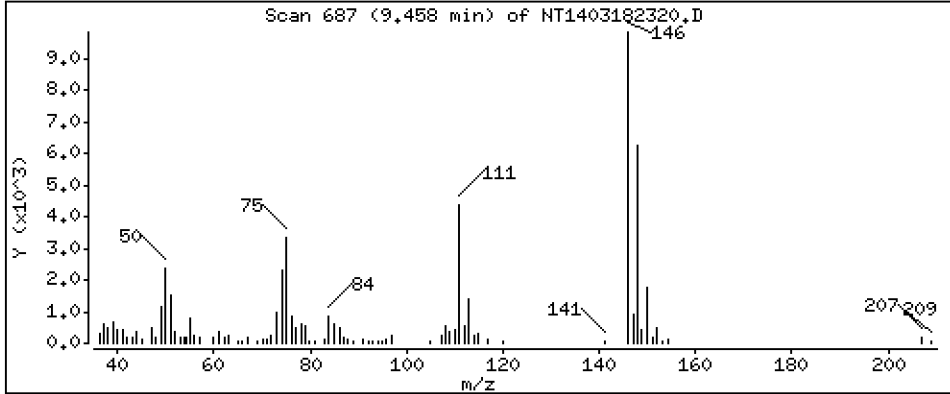
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.2105 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

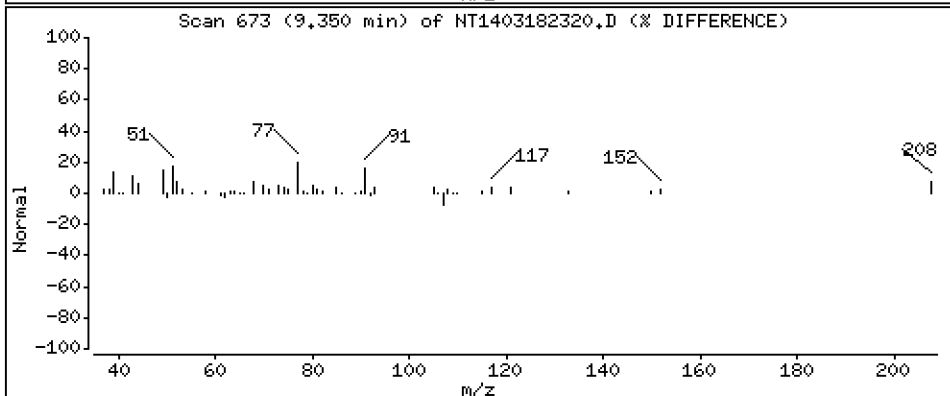
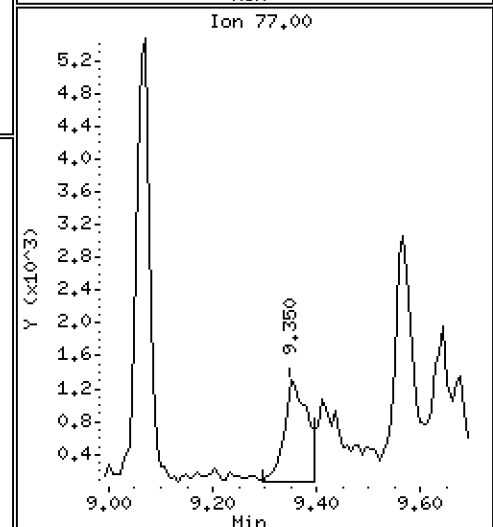
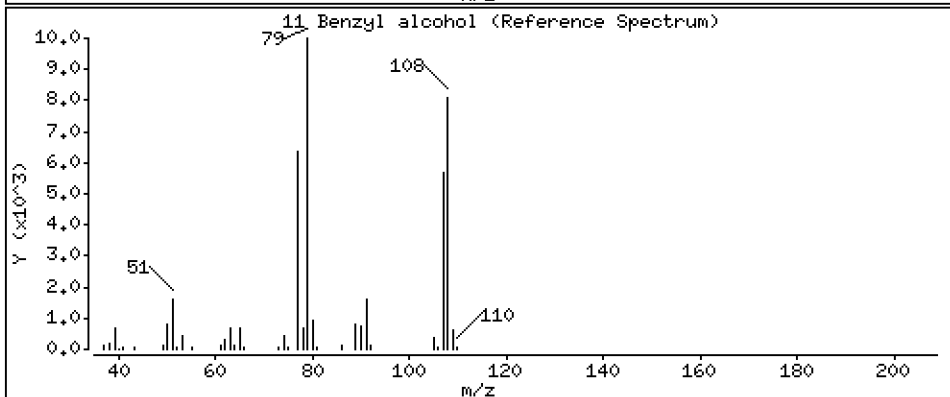
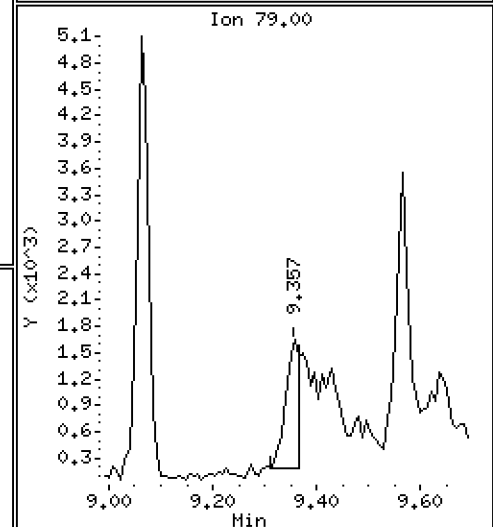
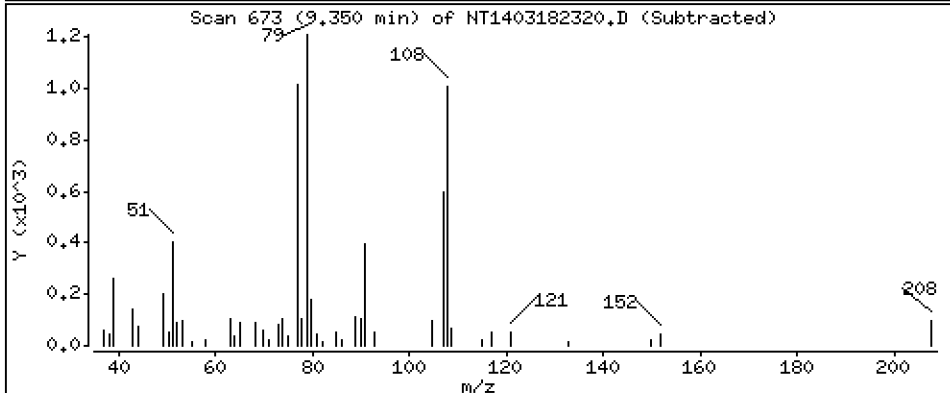
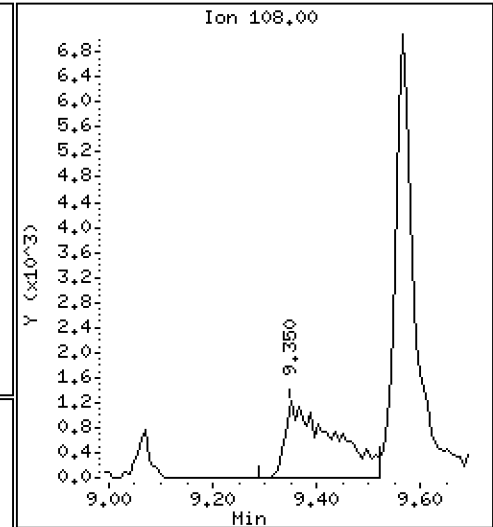
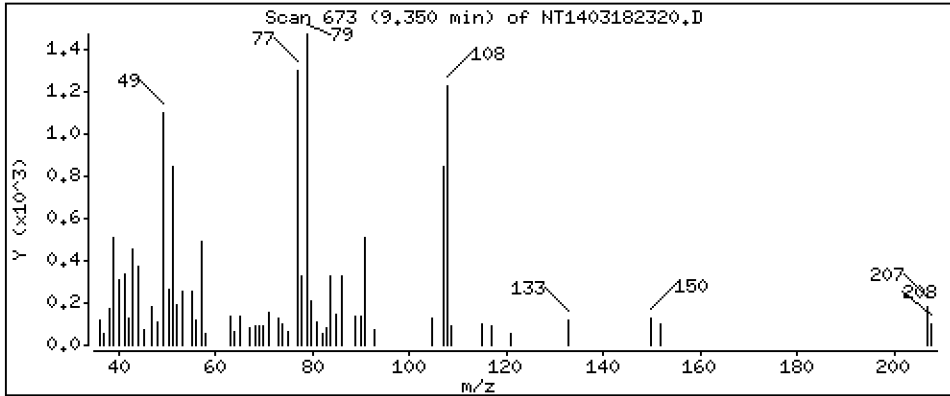
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1385 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

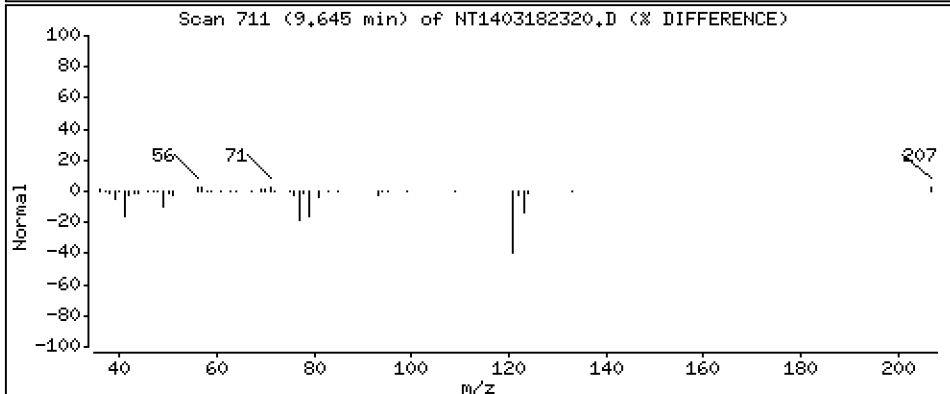
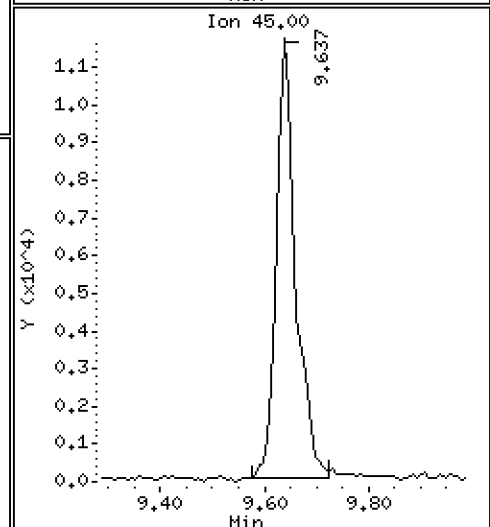
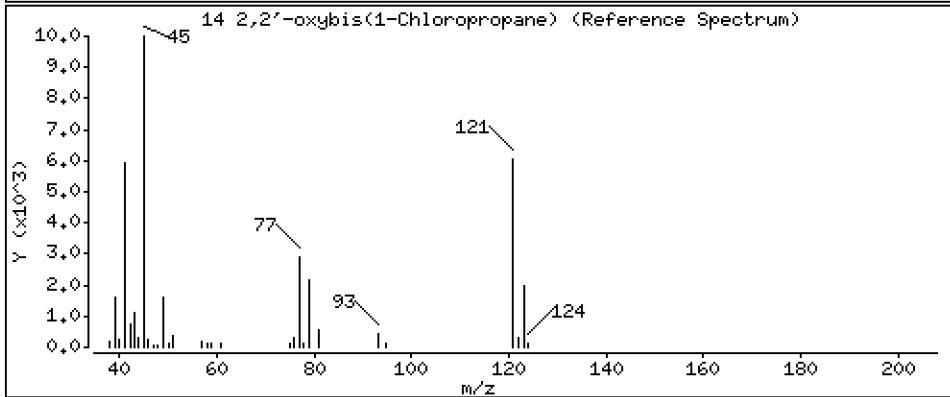
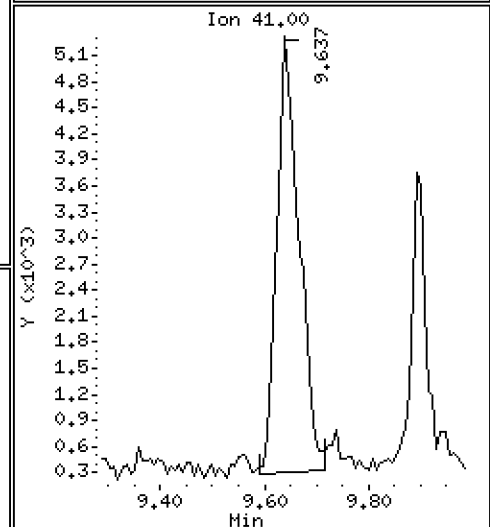
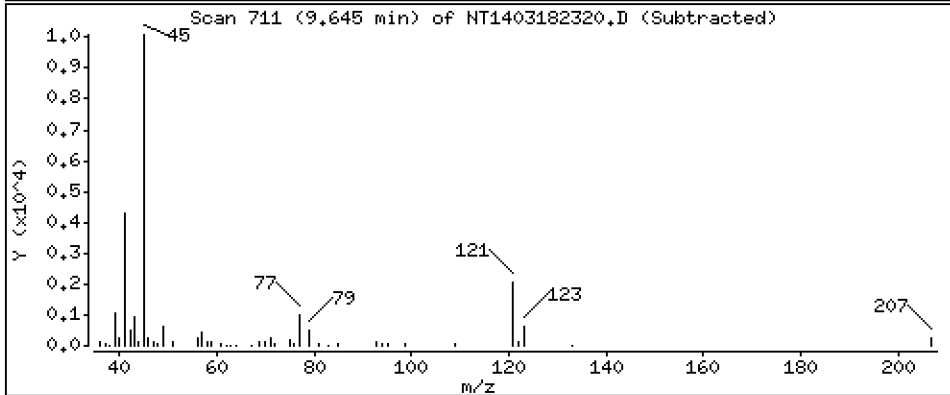
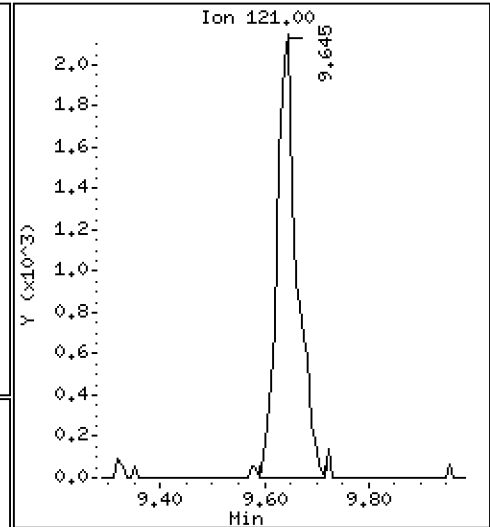
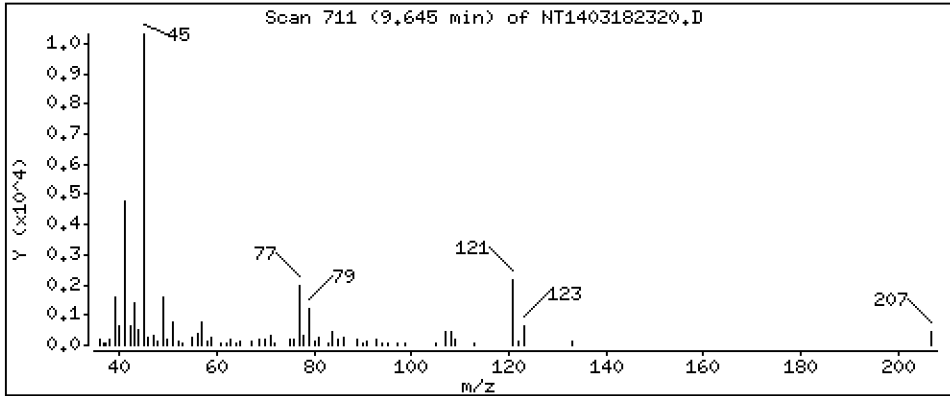
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 0.2283 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

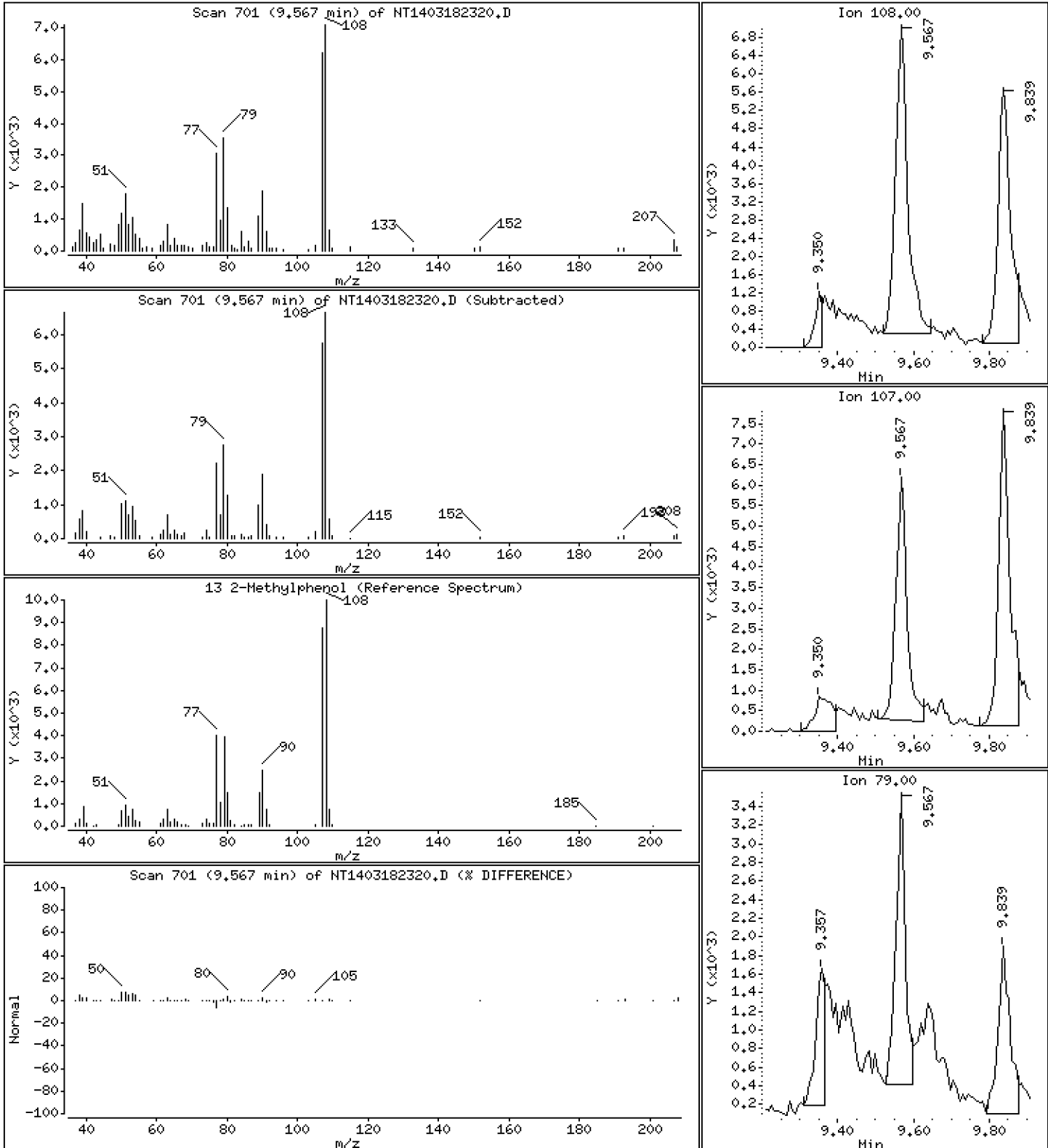
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.1763 ug/mL

13 2-Methylphenol



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

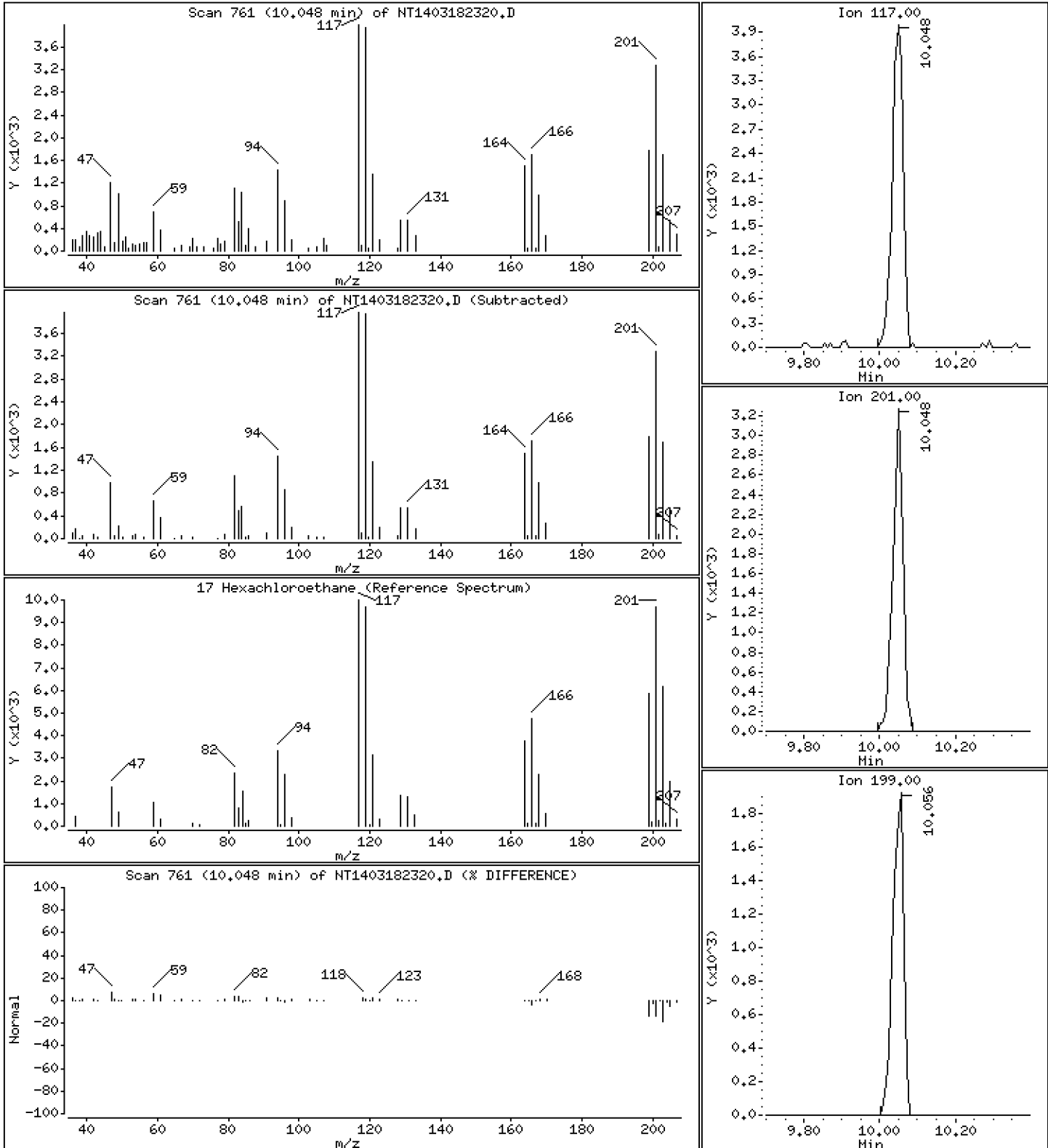
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,1935 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

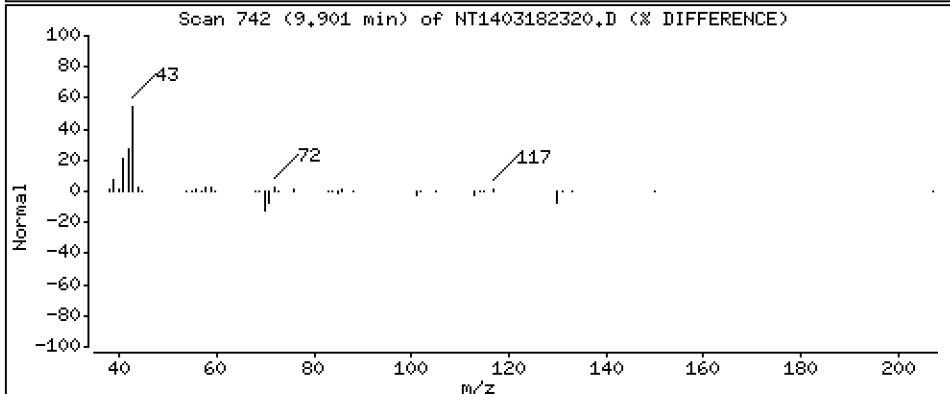
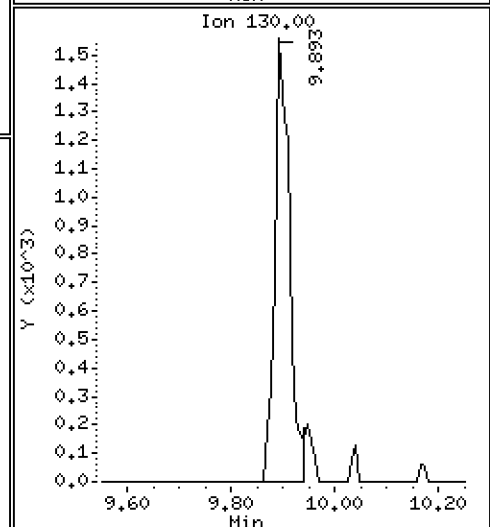
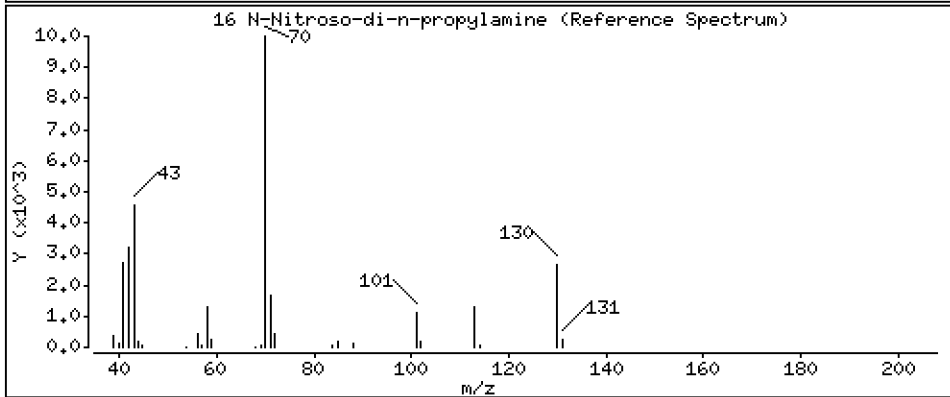
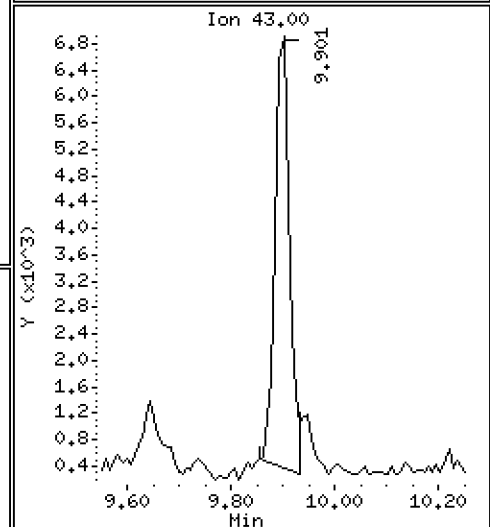
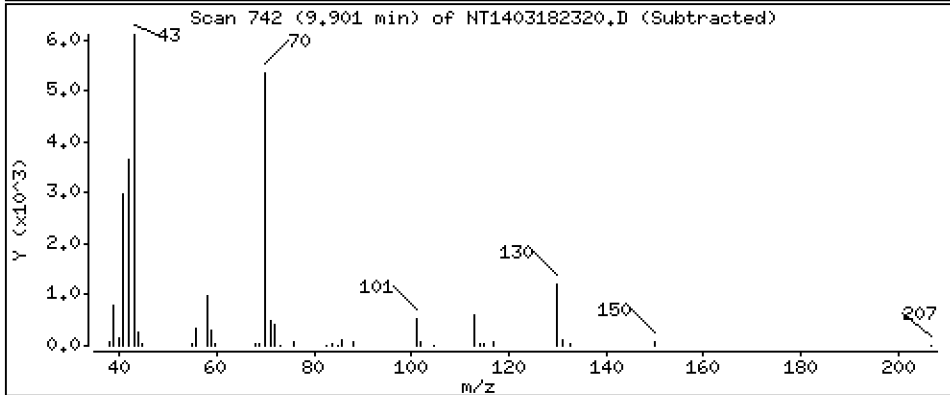
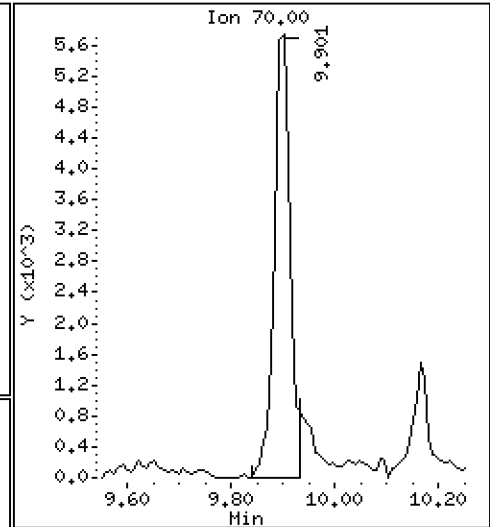
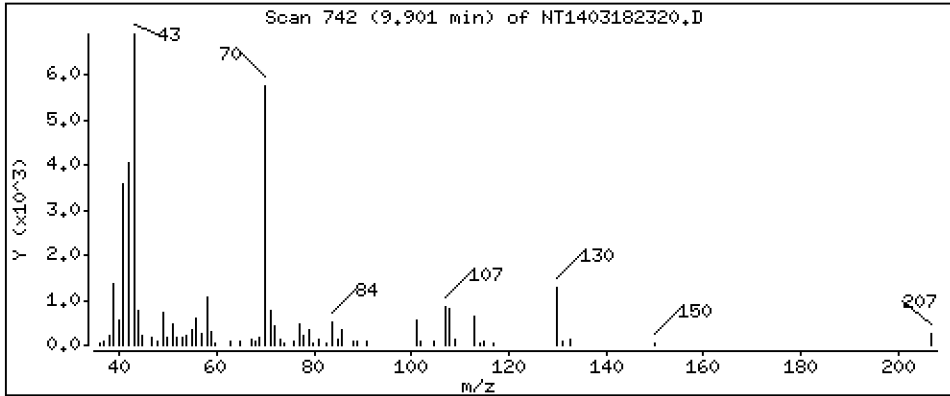
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,1756 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

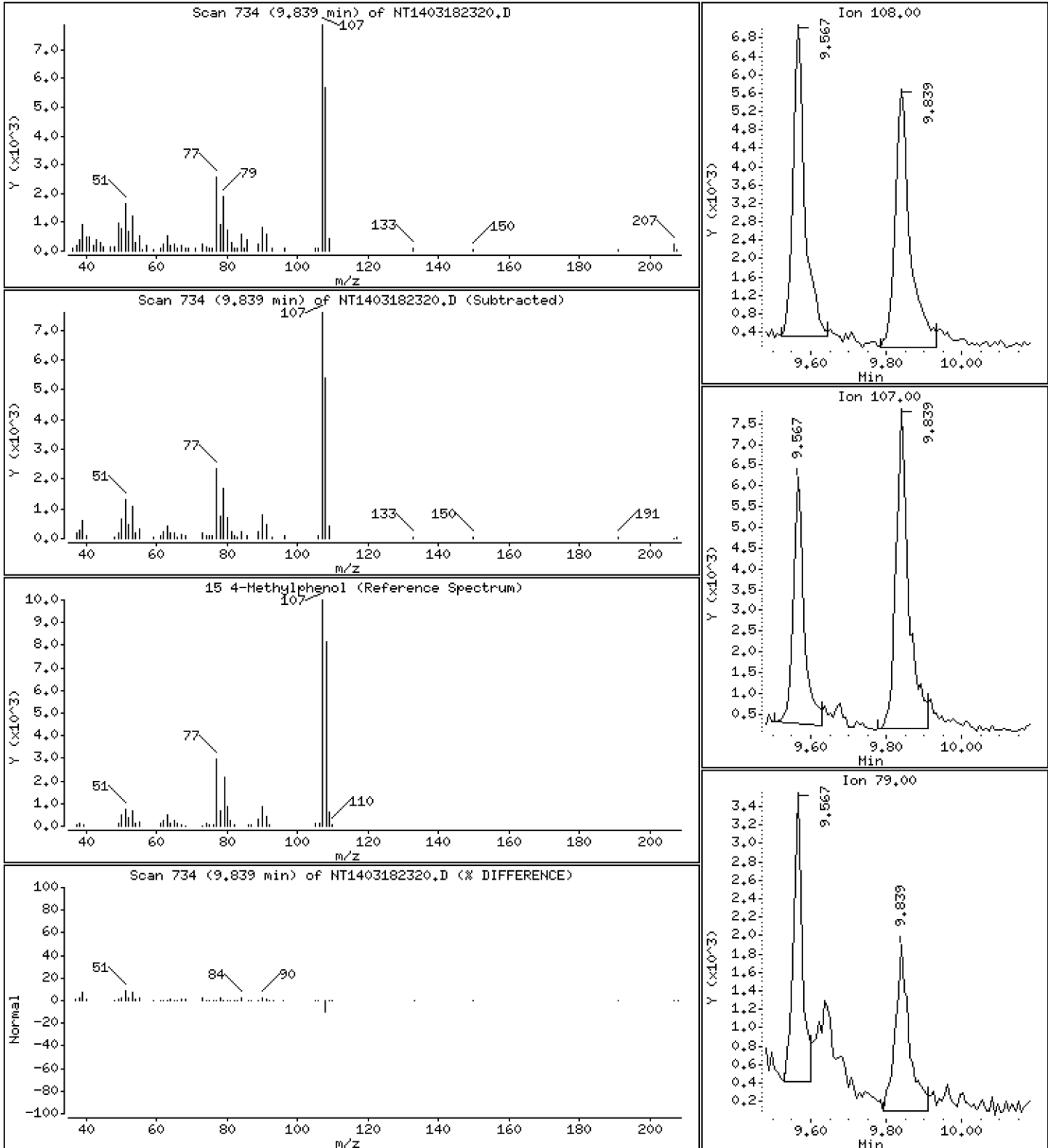
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1496 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

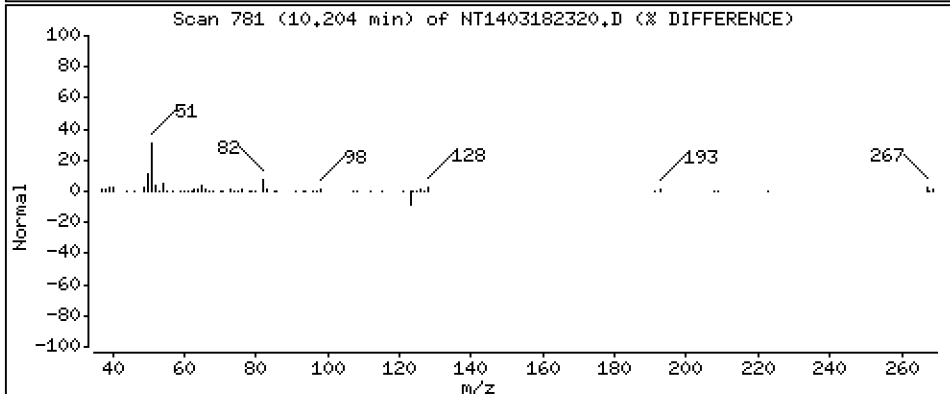
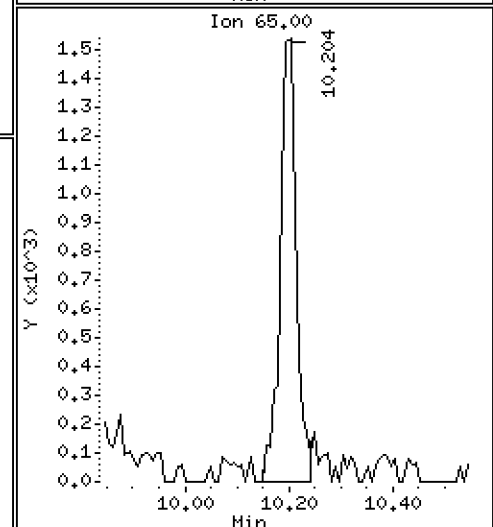
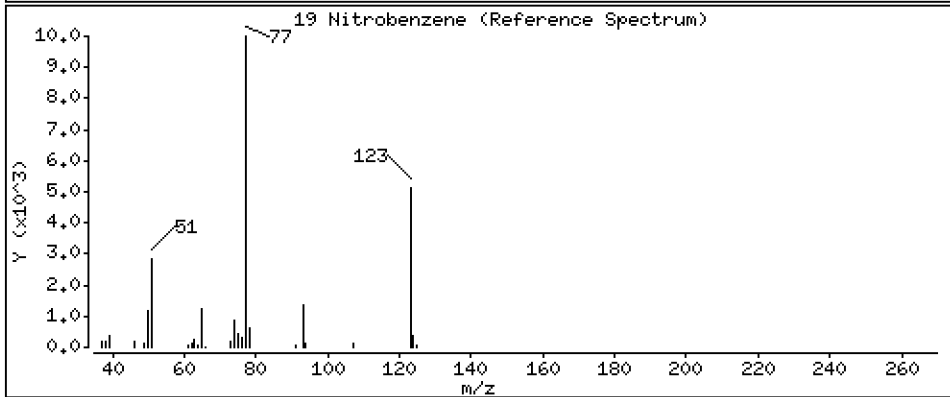
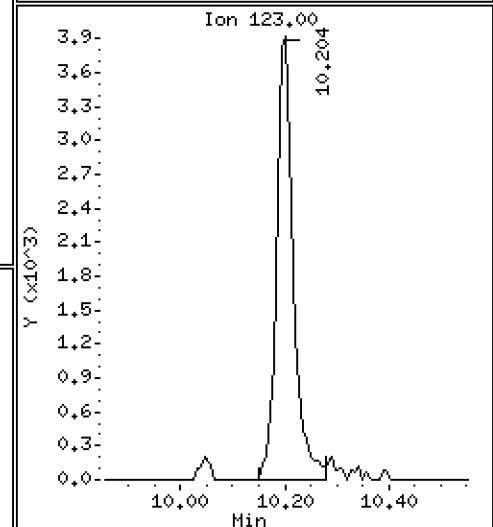
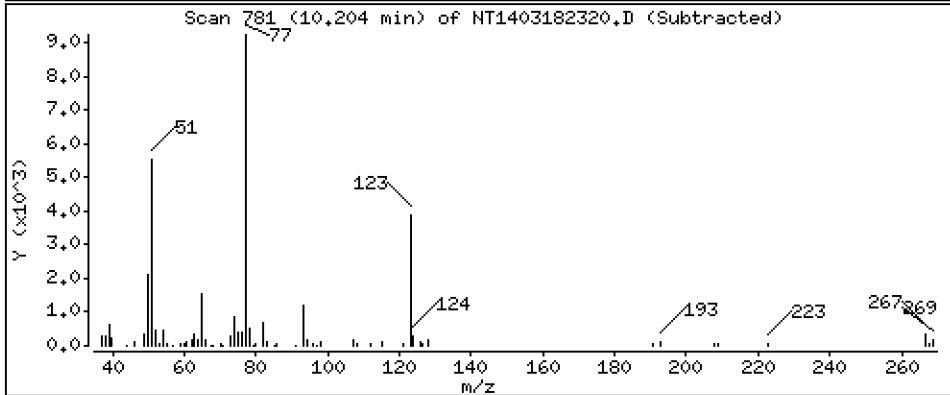
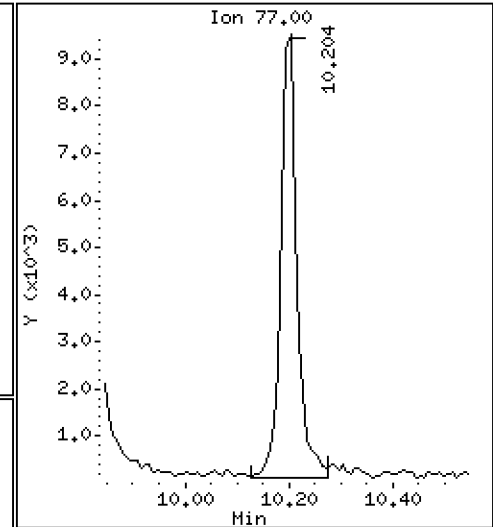
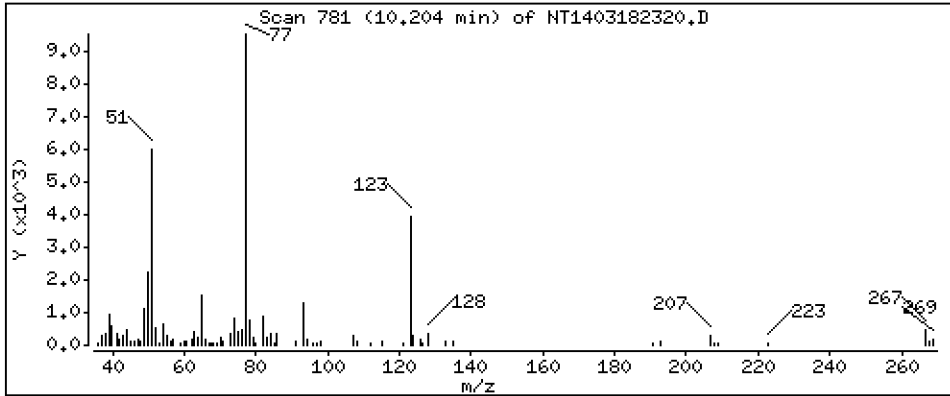
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,1949 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

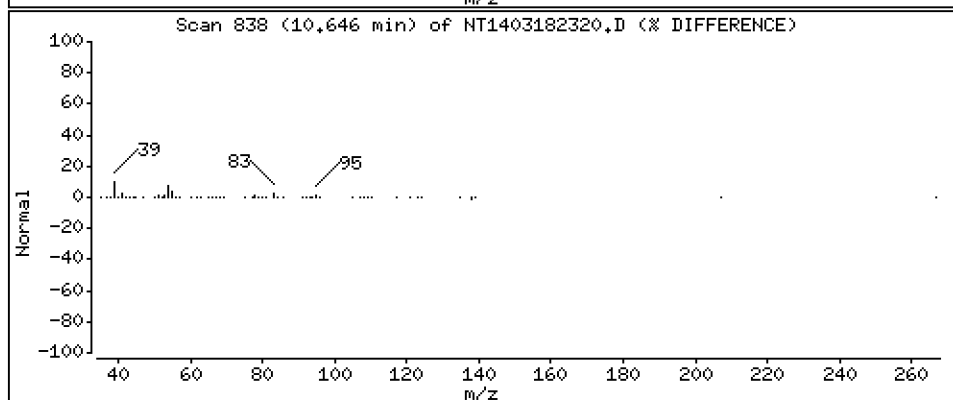
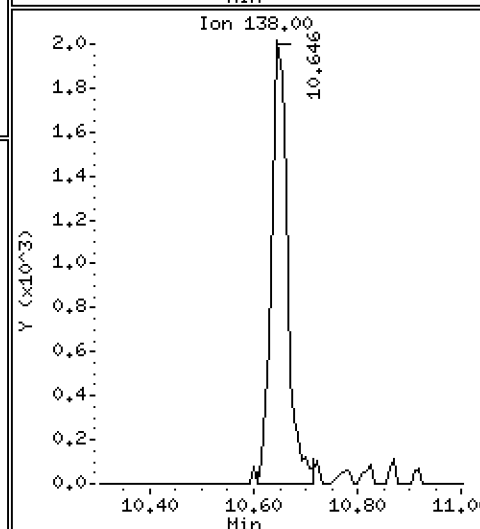
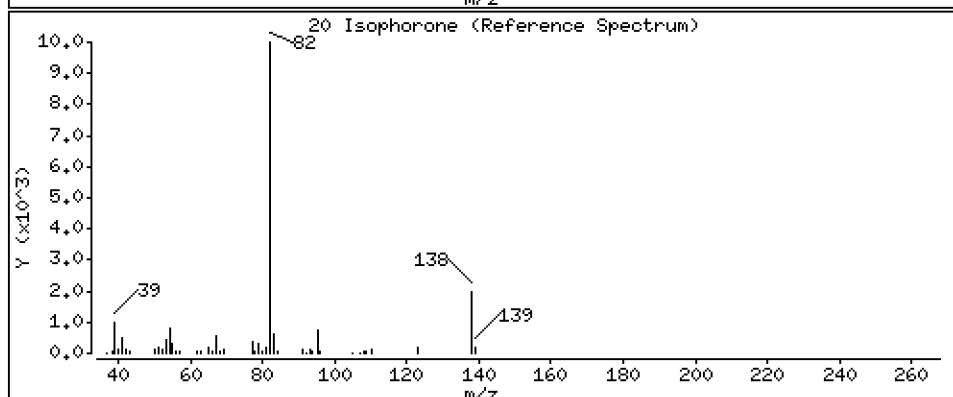
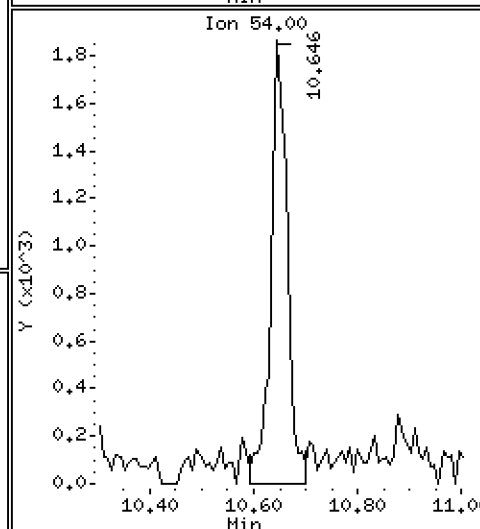
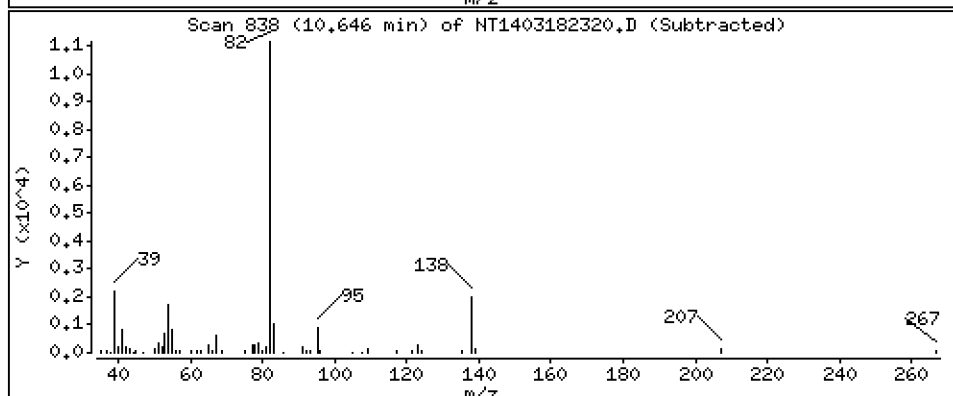
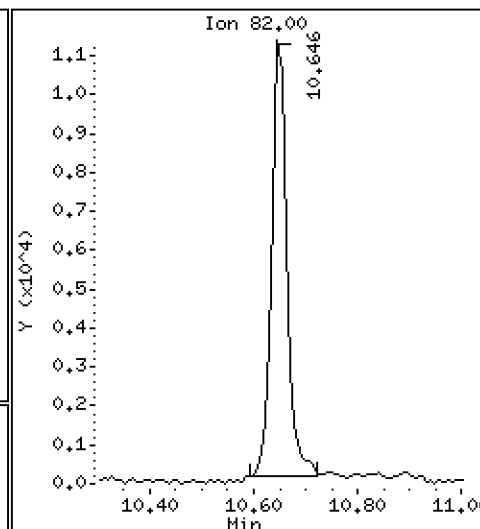
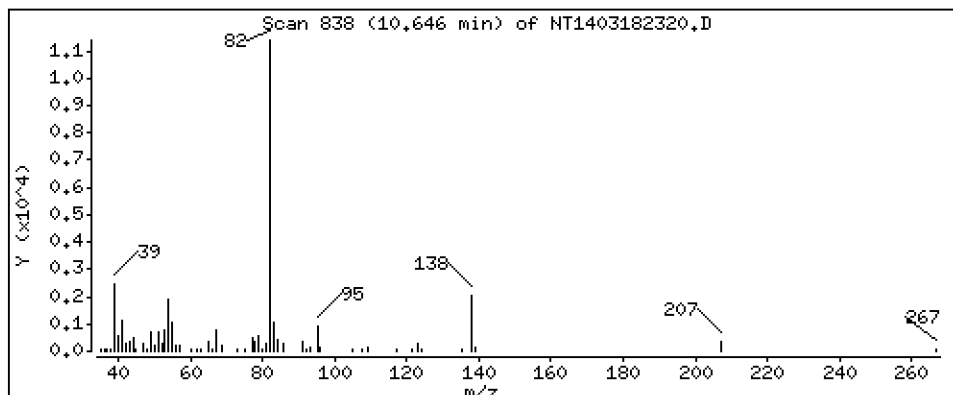
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1613 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

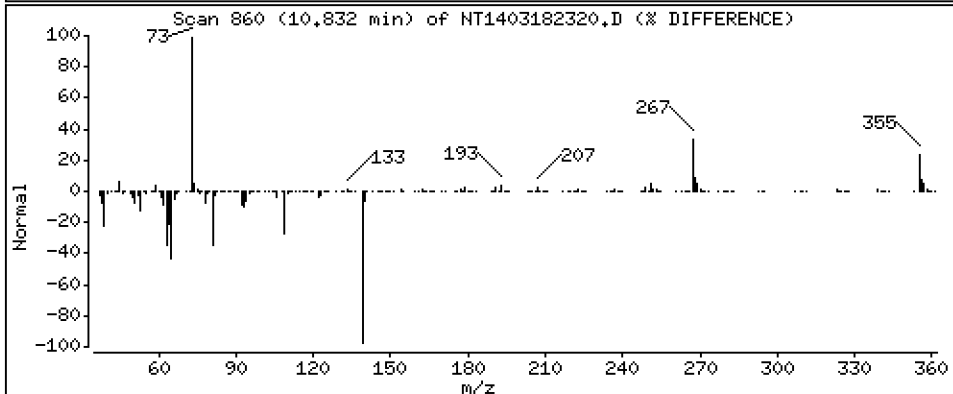
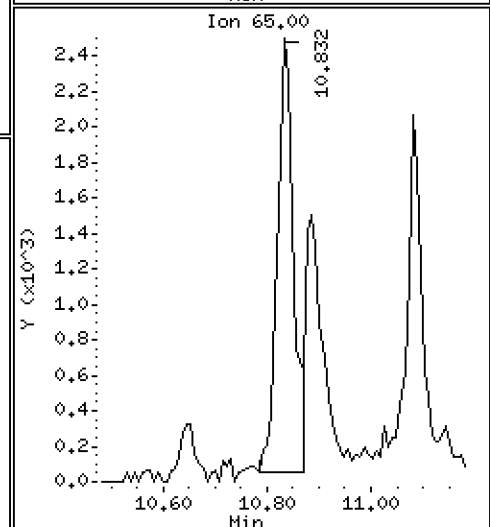
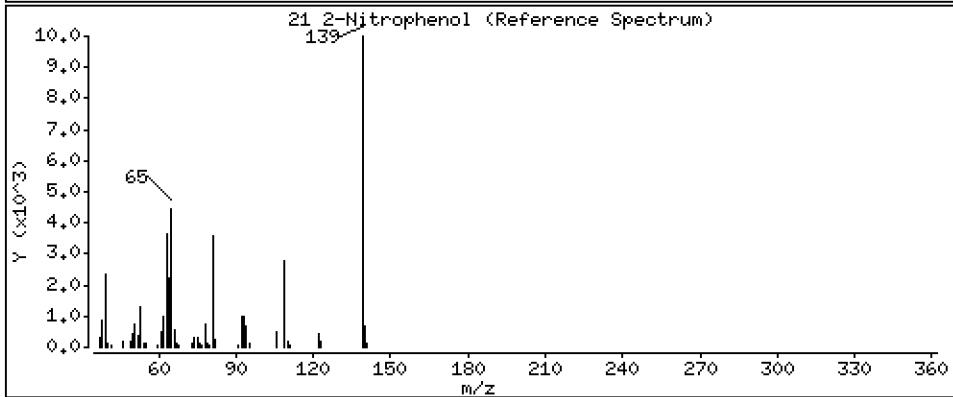
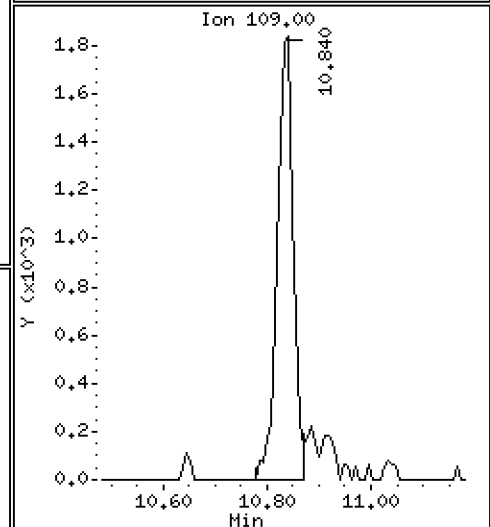
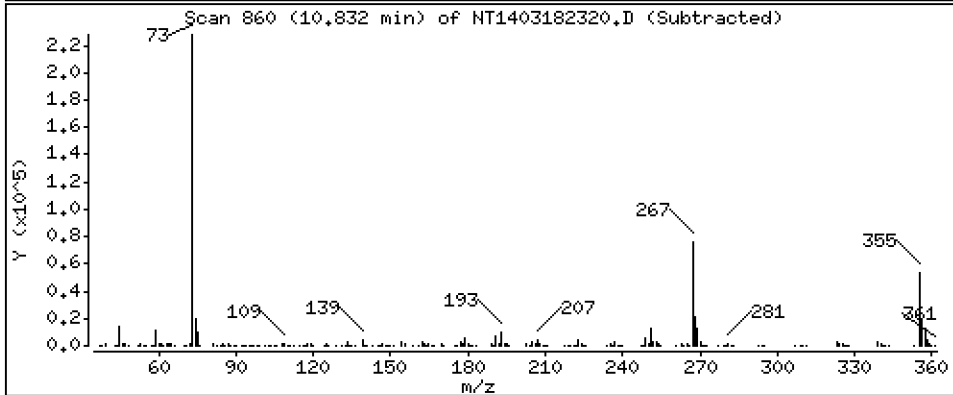
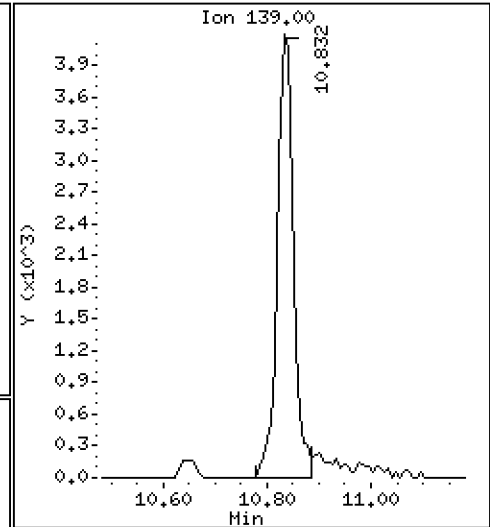
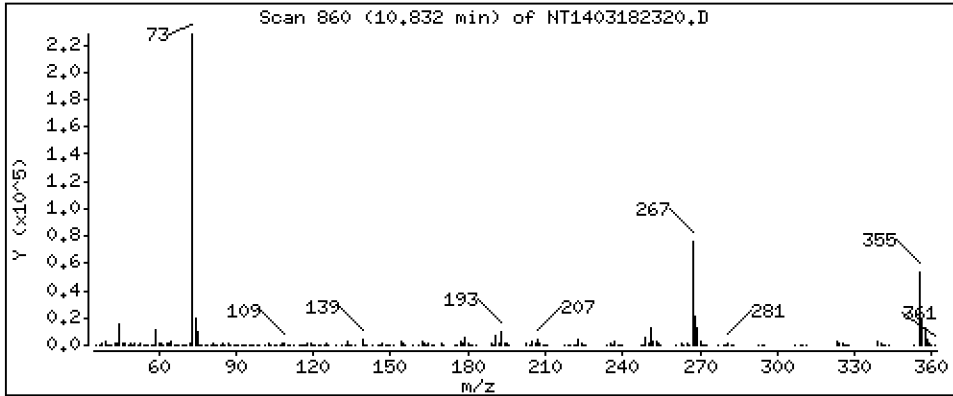
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1562 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

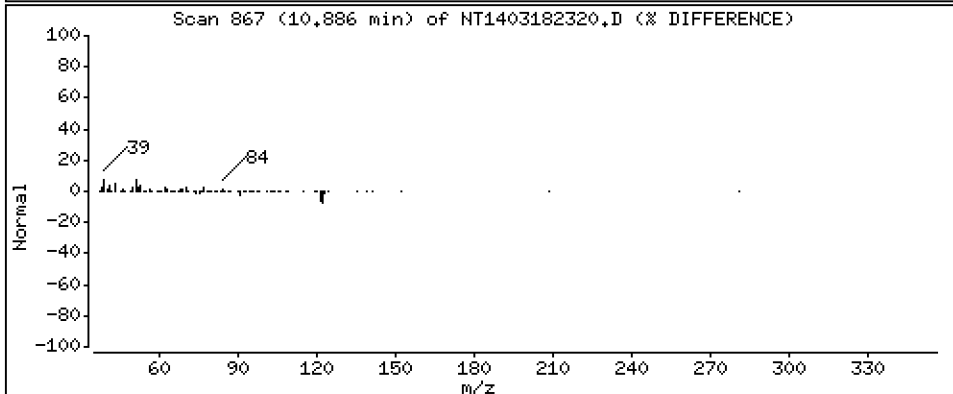
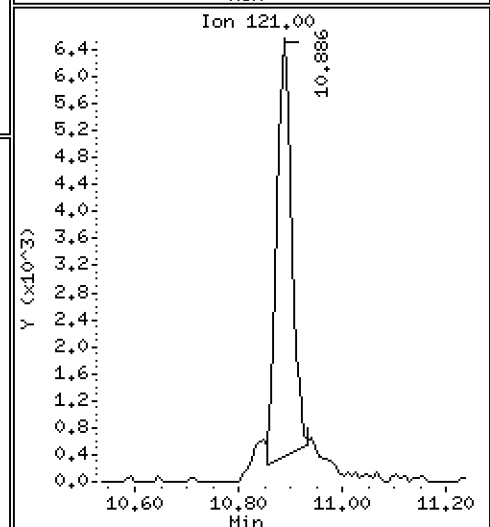
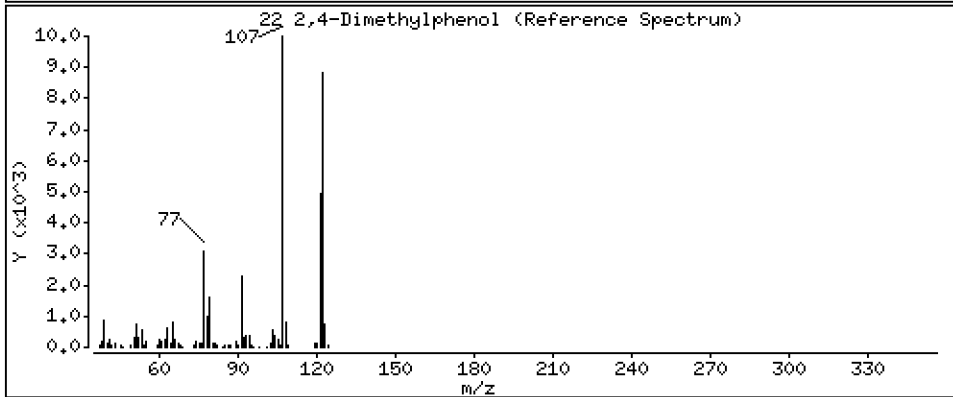
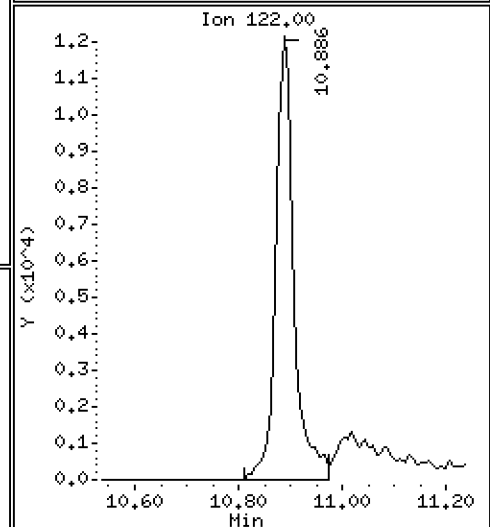
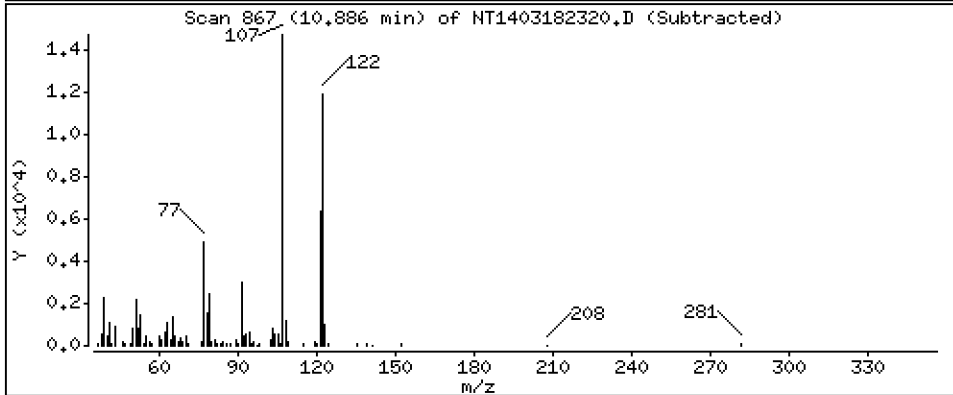
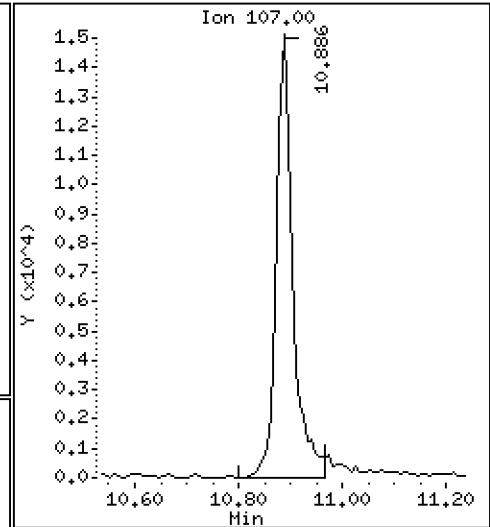
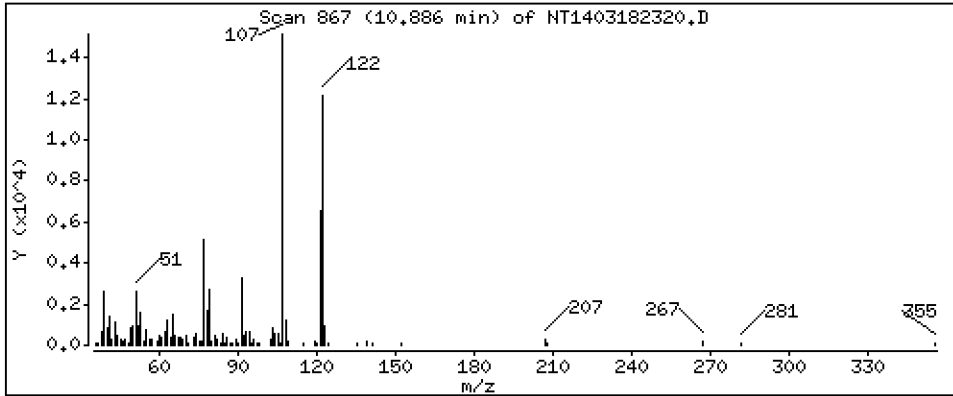
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.3789 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

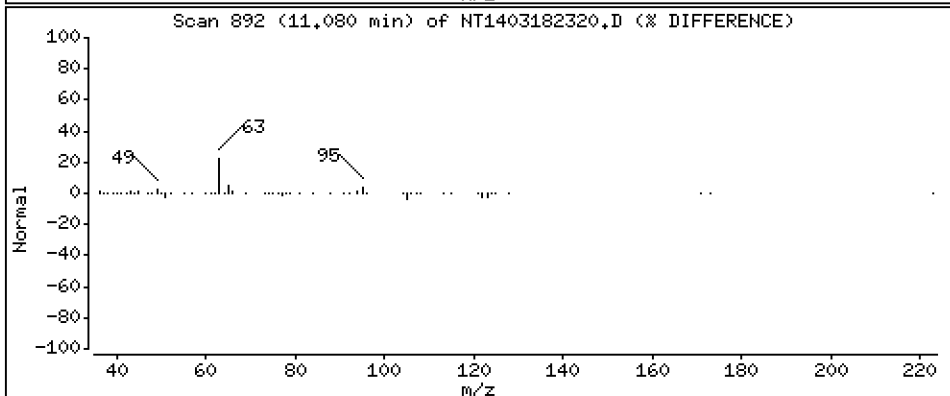
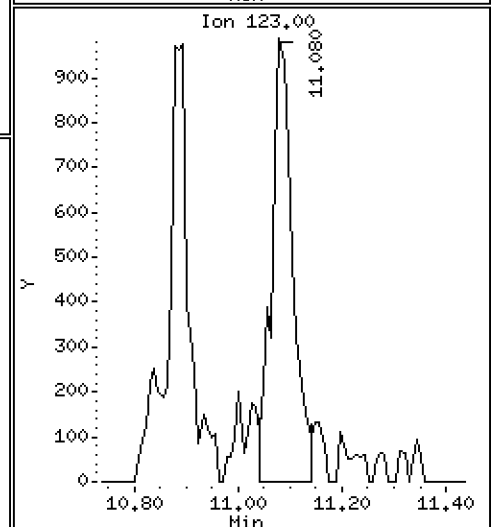
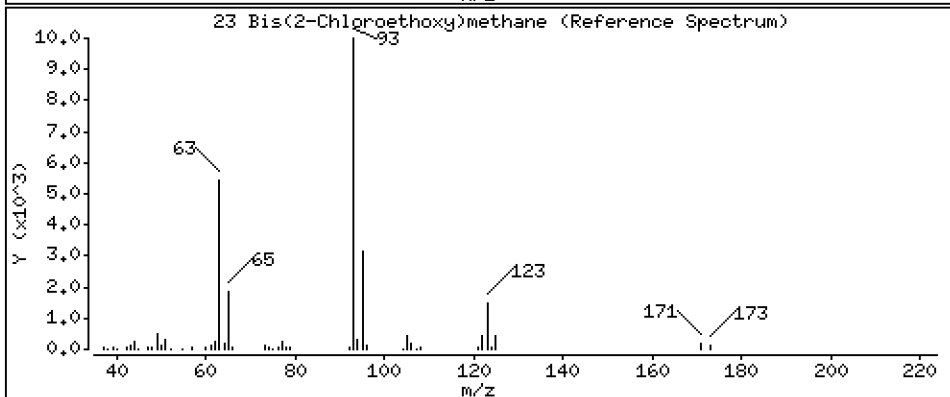
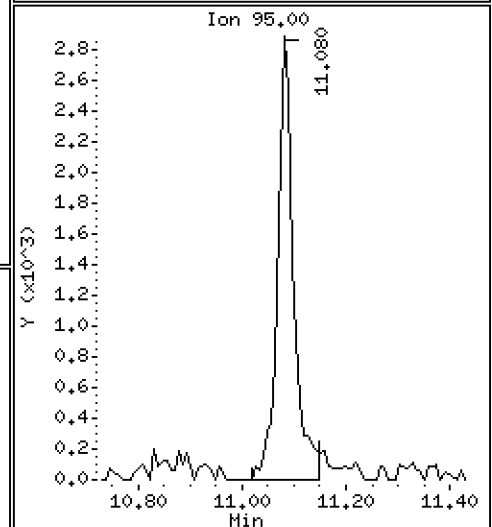
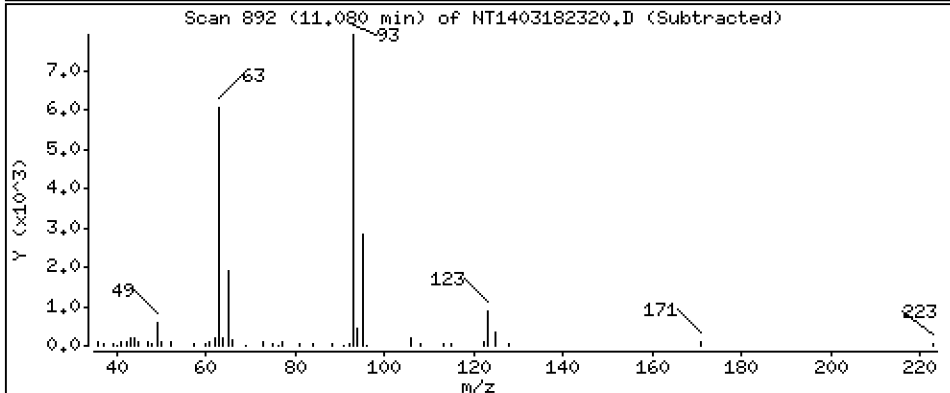
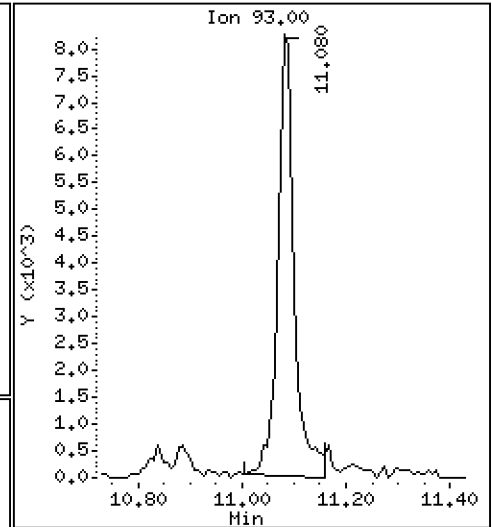
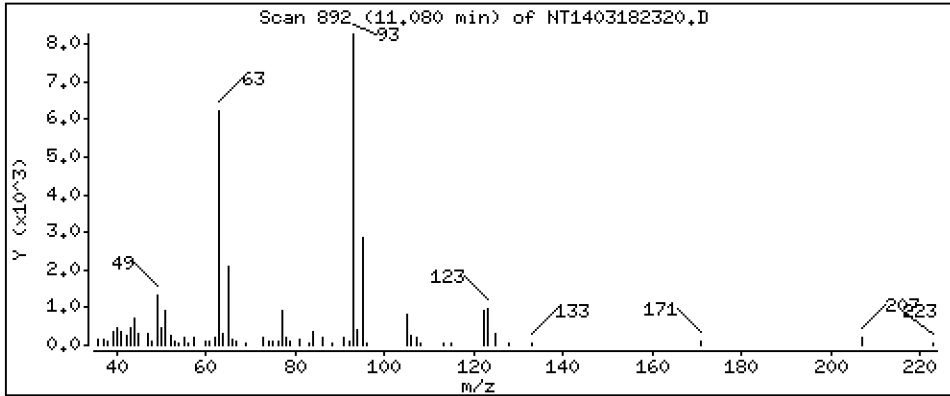
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

23 Bis(2-Chloroethoxy)methane

Concentration: 0.1909 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

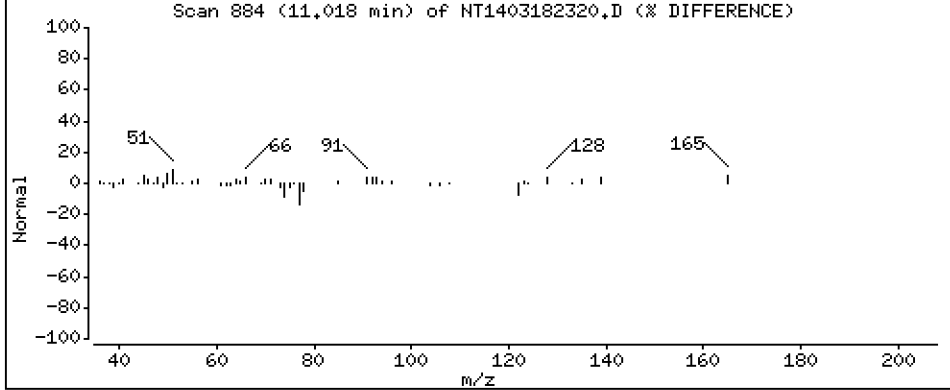
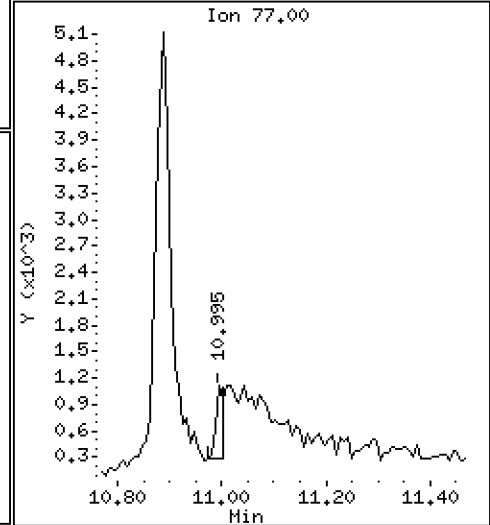
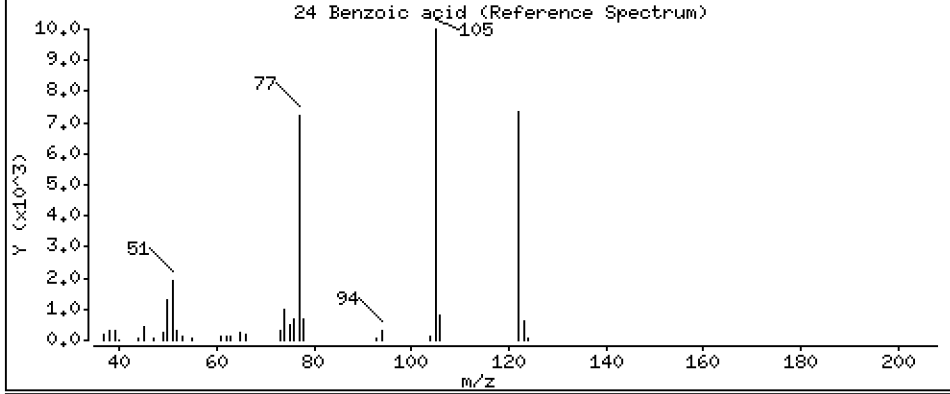
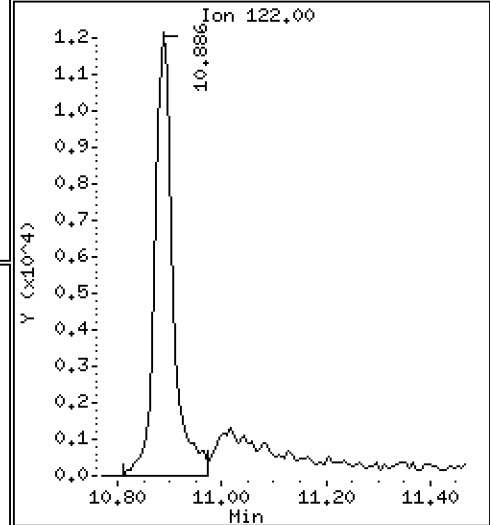
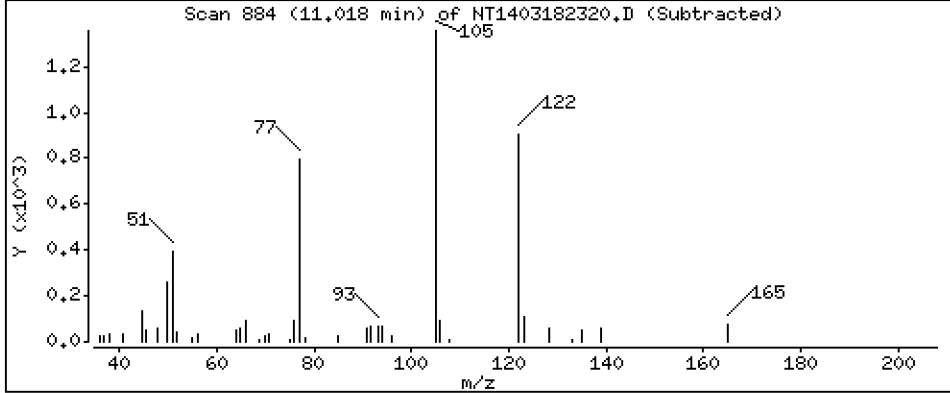
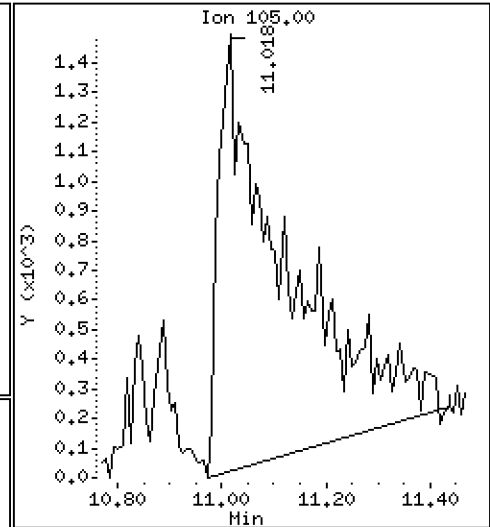
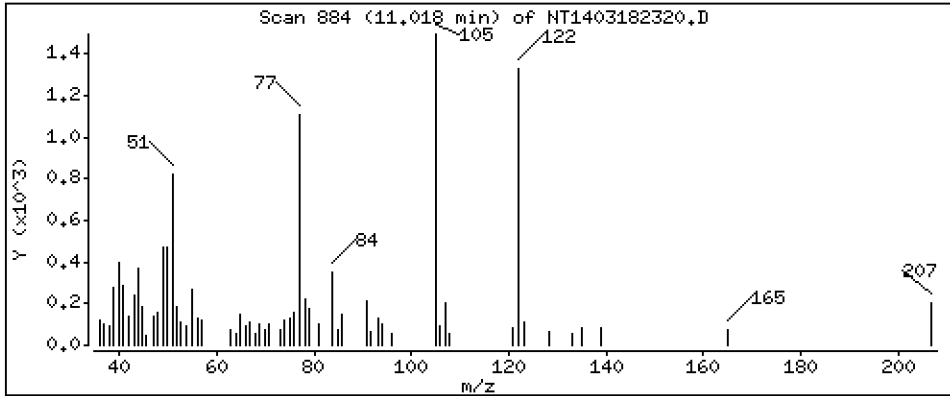
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1958 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

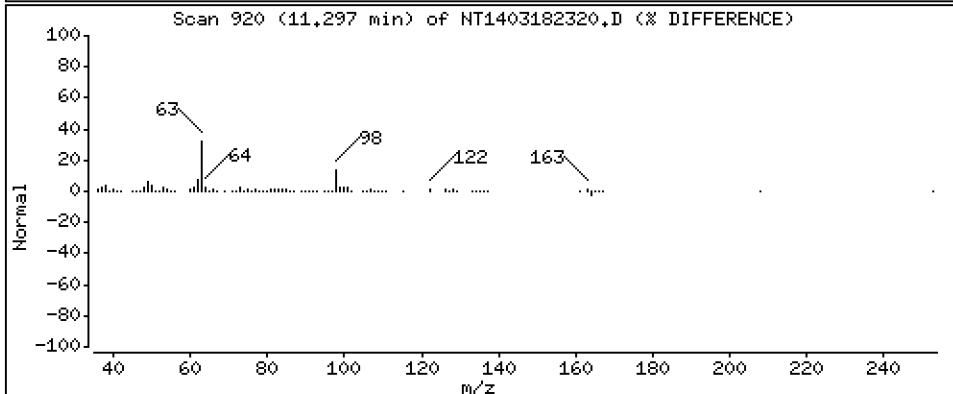
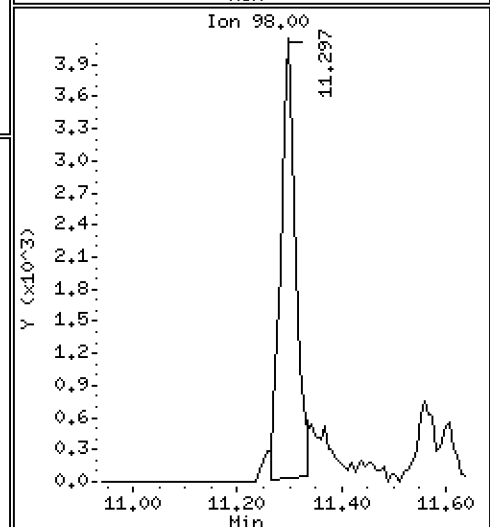
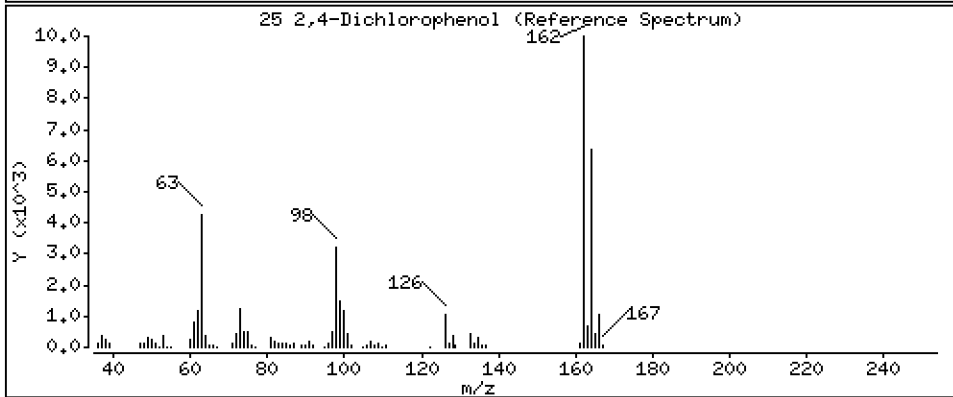
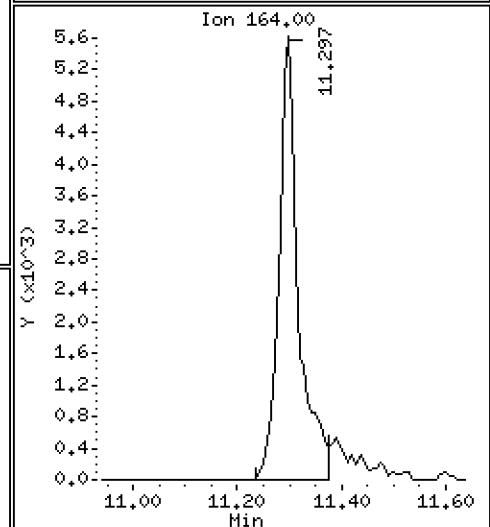
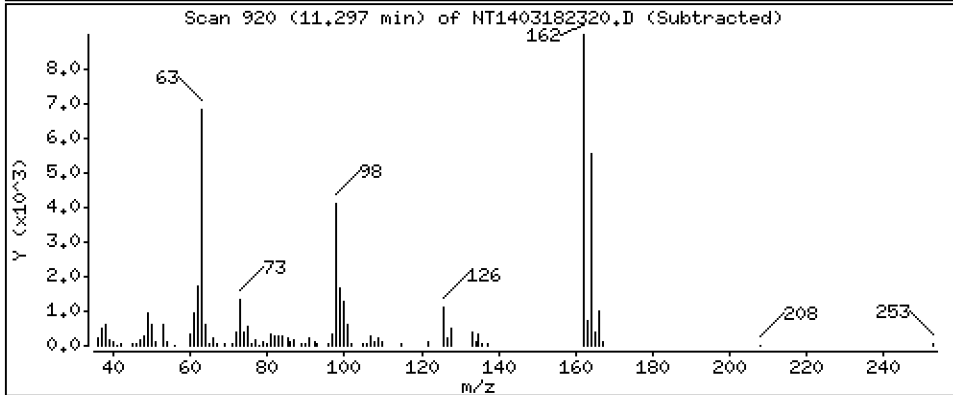
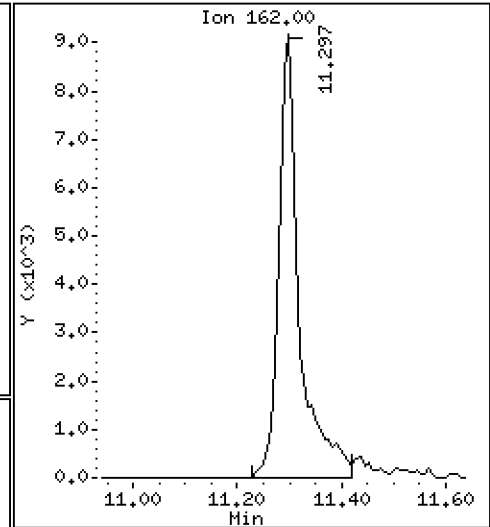
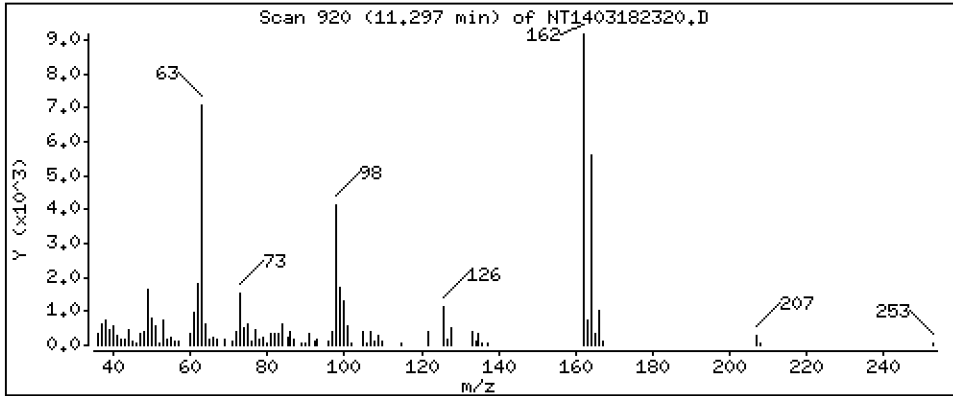
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3983 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

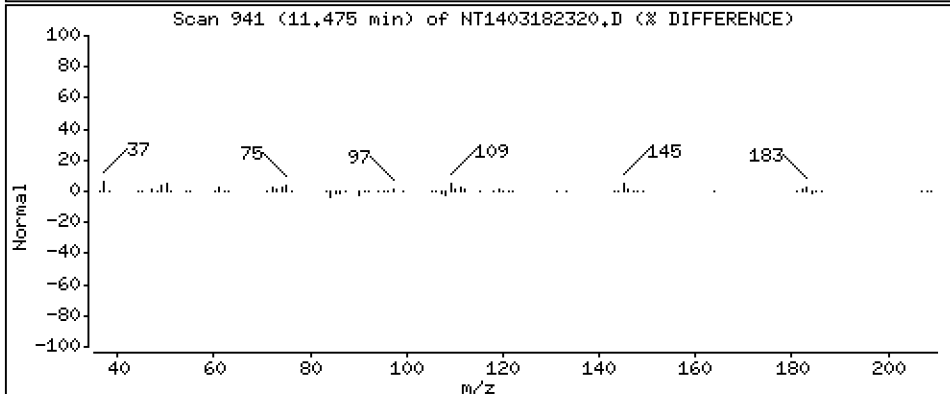
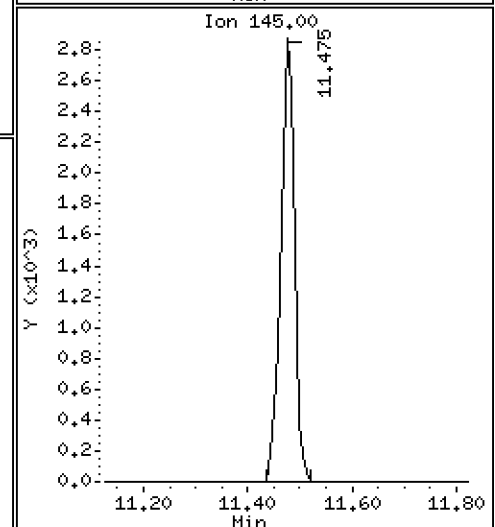
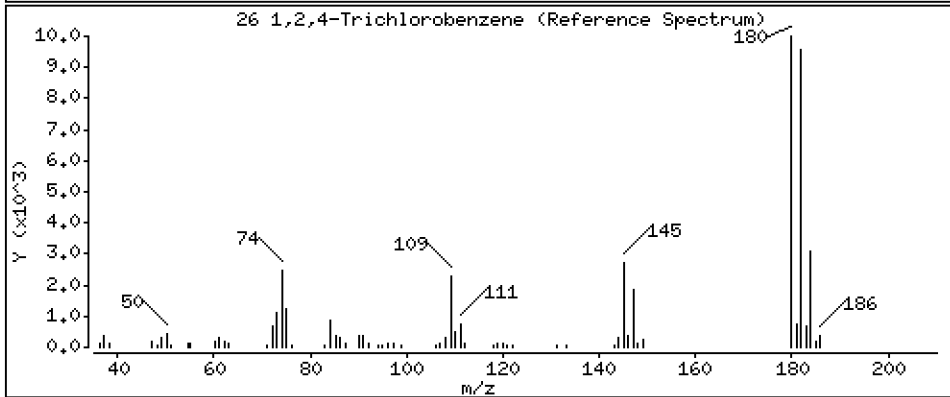
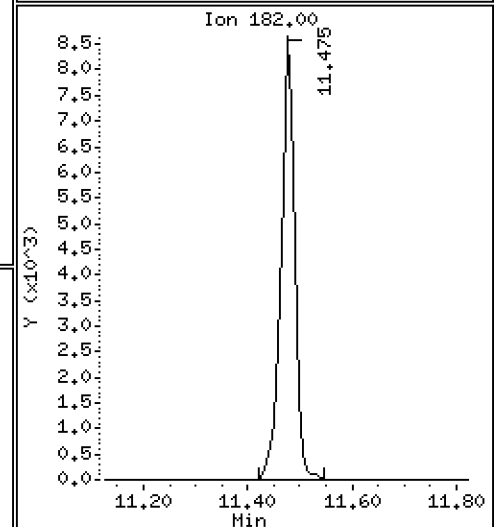
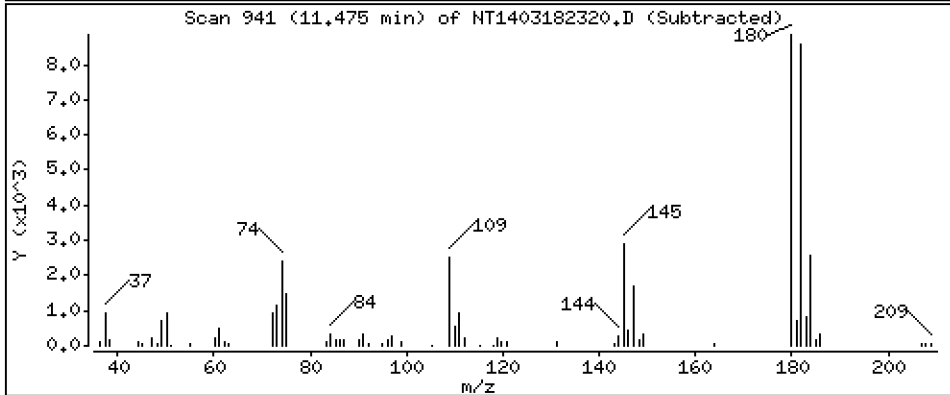
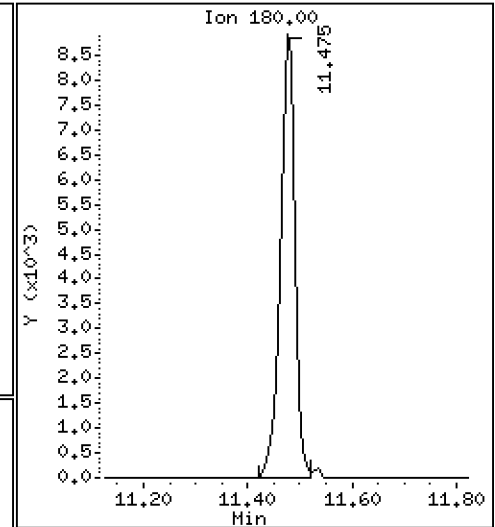
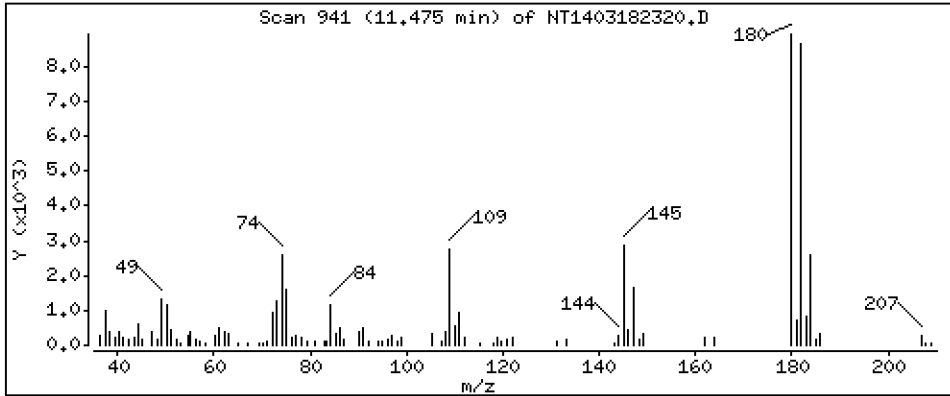
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2039 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

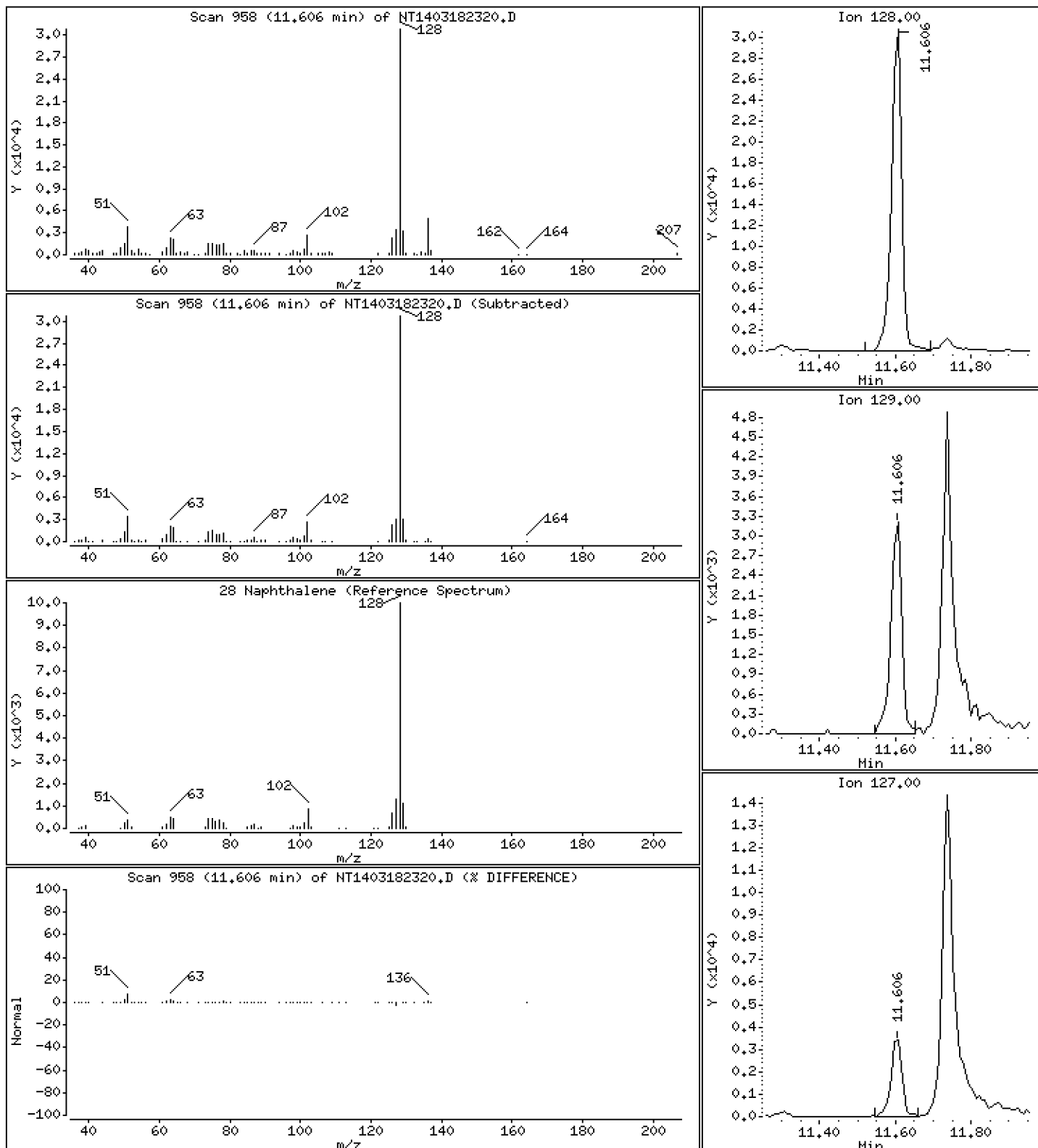
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2136 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

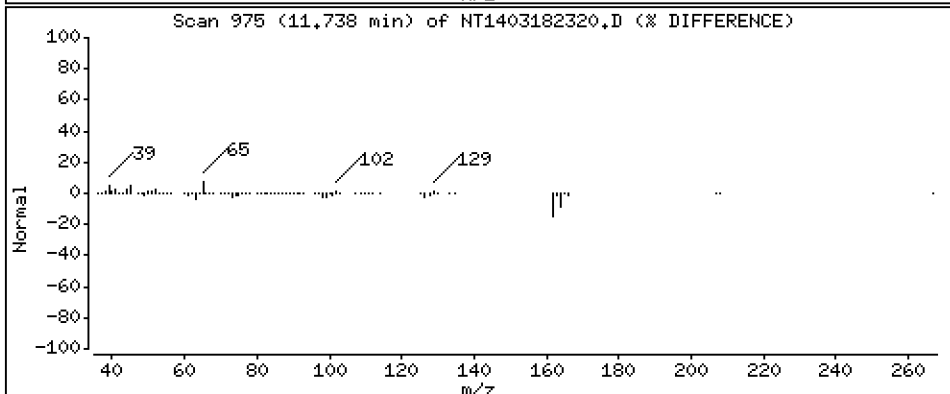
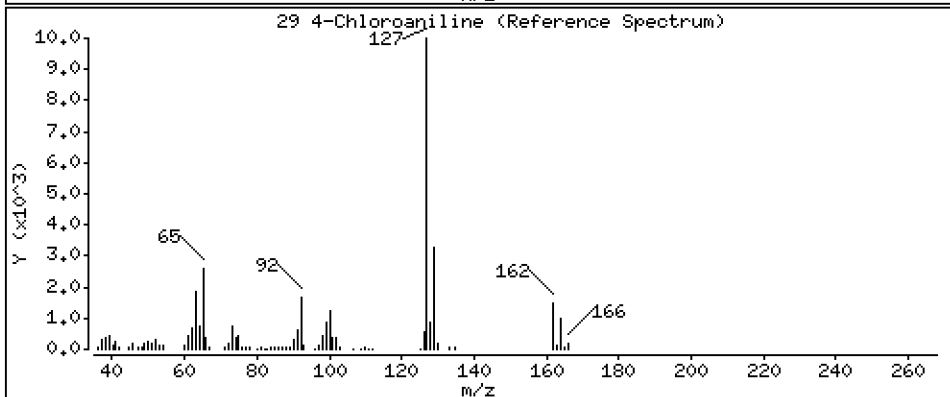
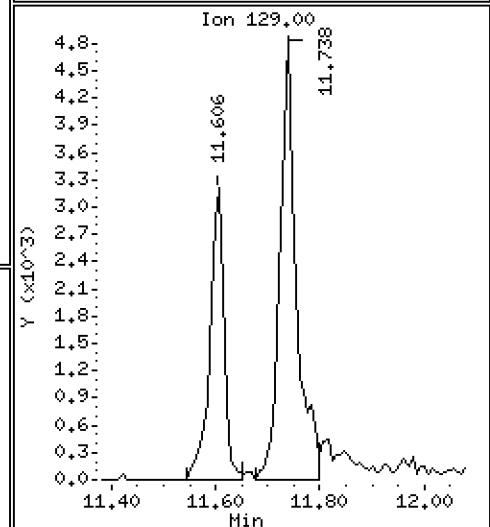
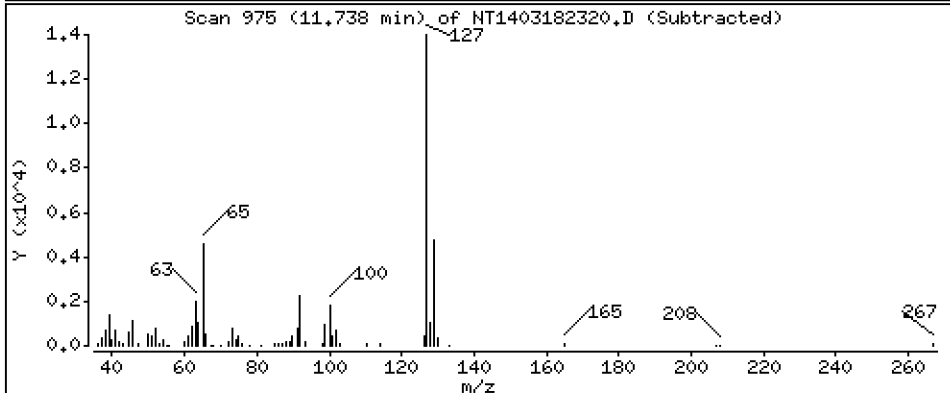
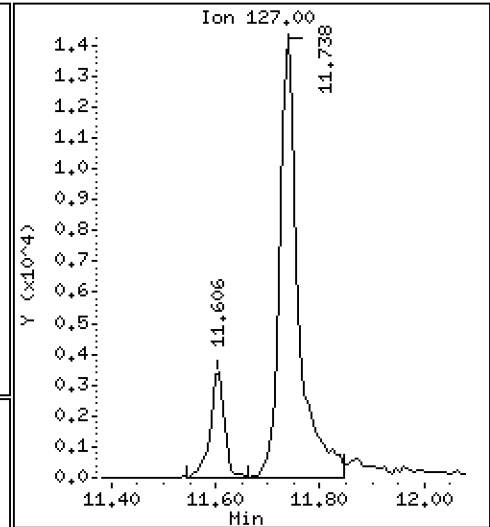
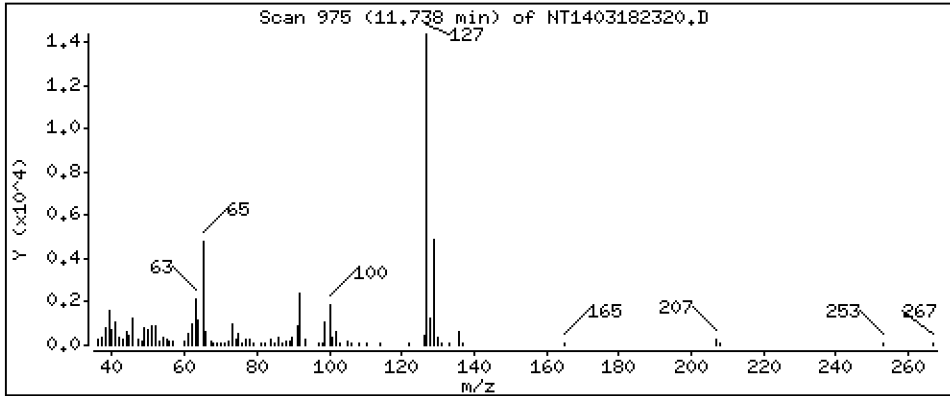
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,3212 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

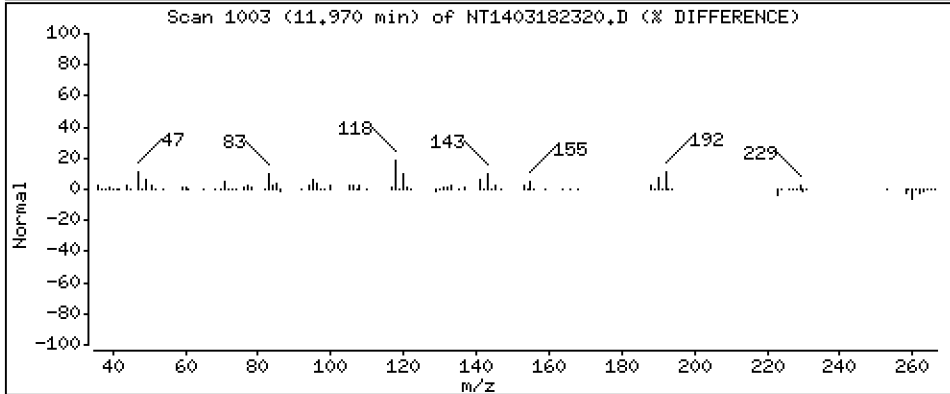
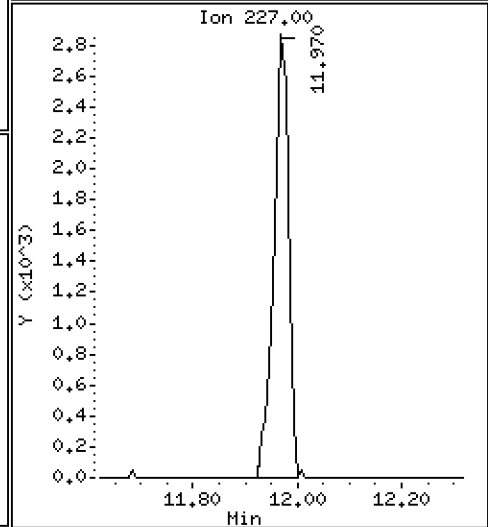
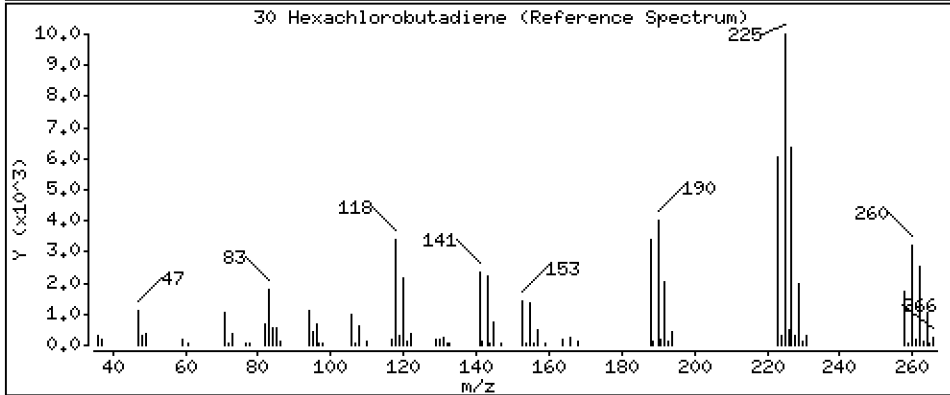
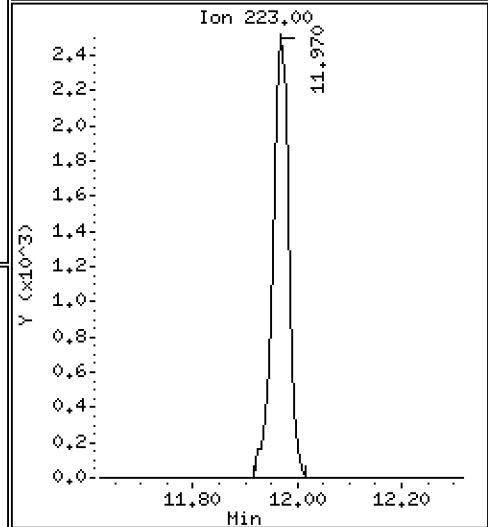
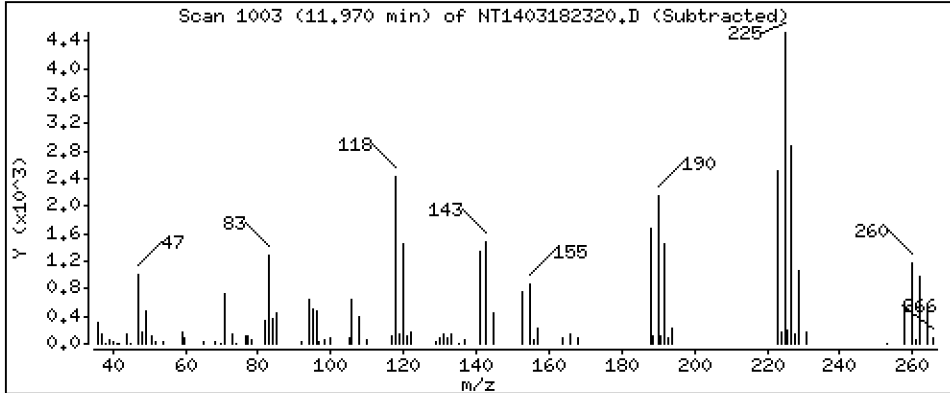
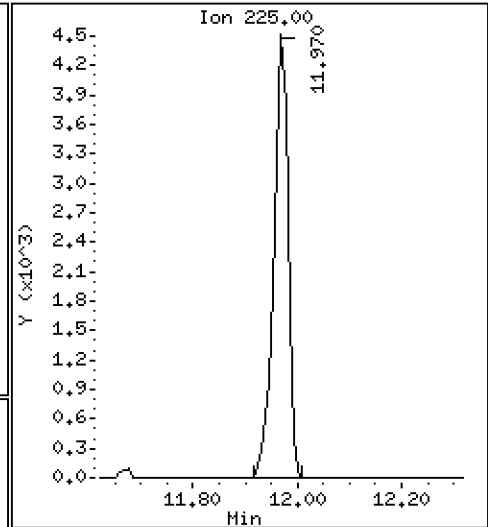
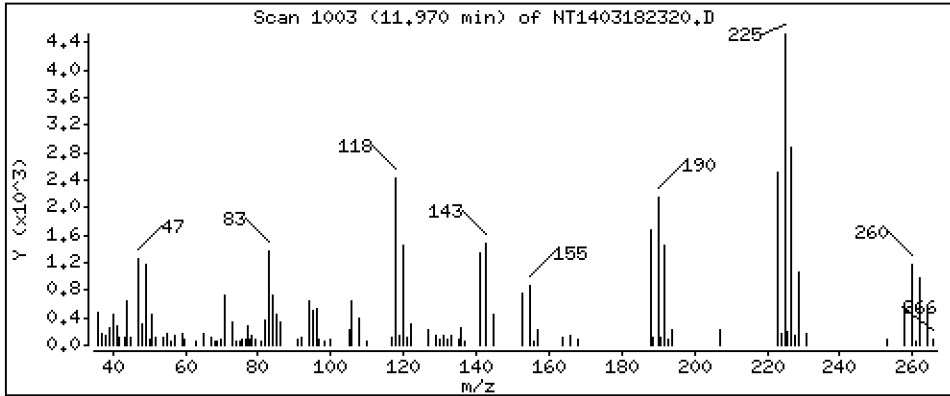
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2176 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

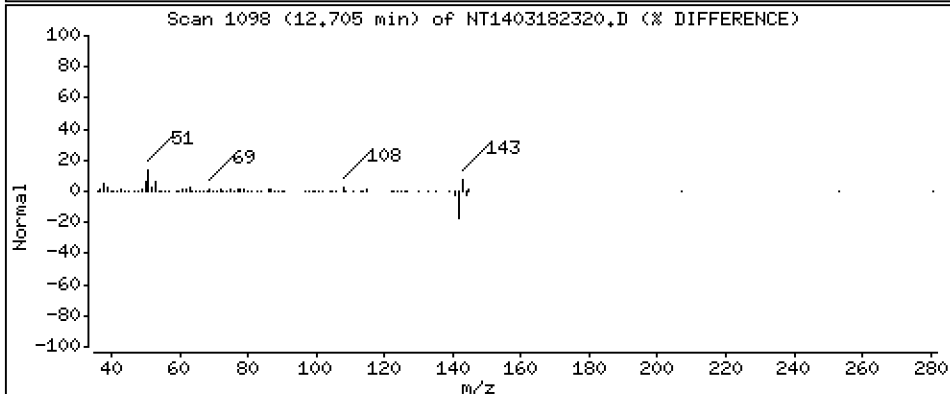
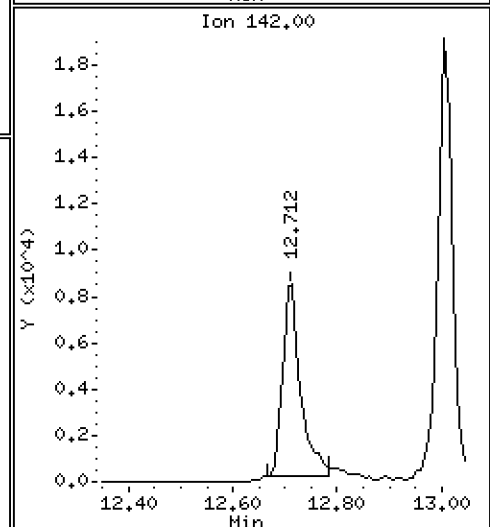
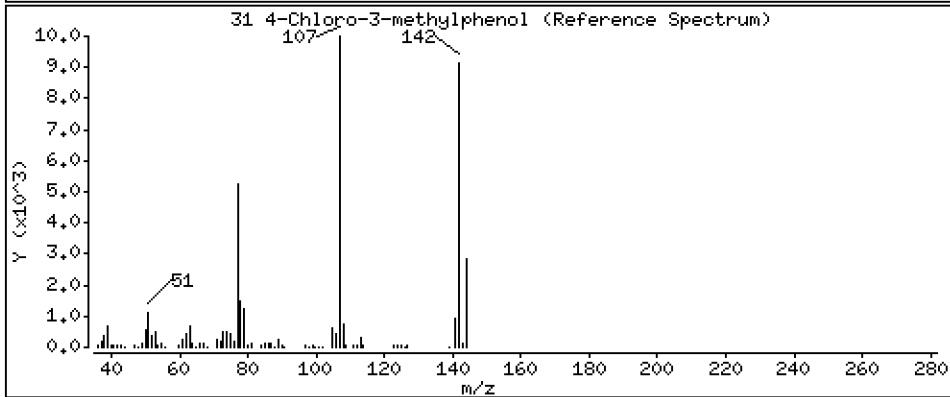
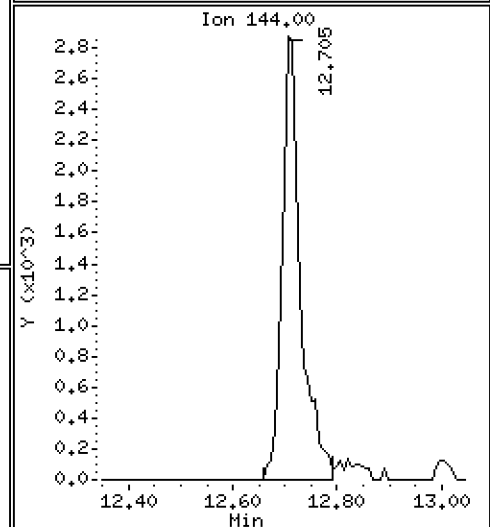
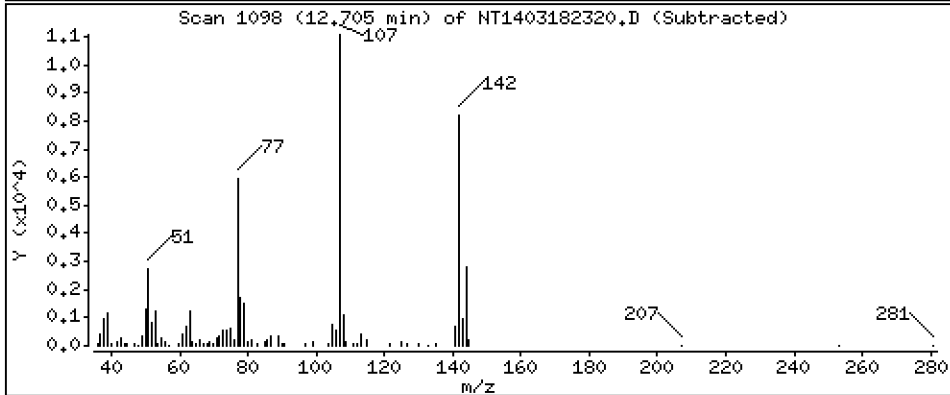
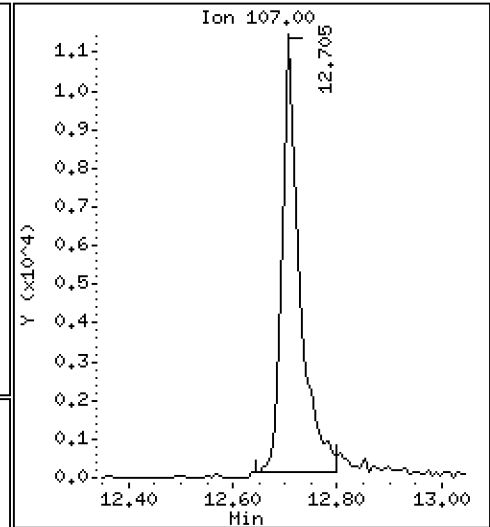
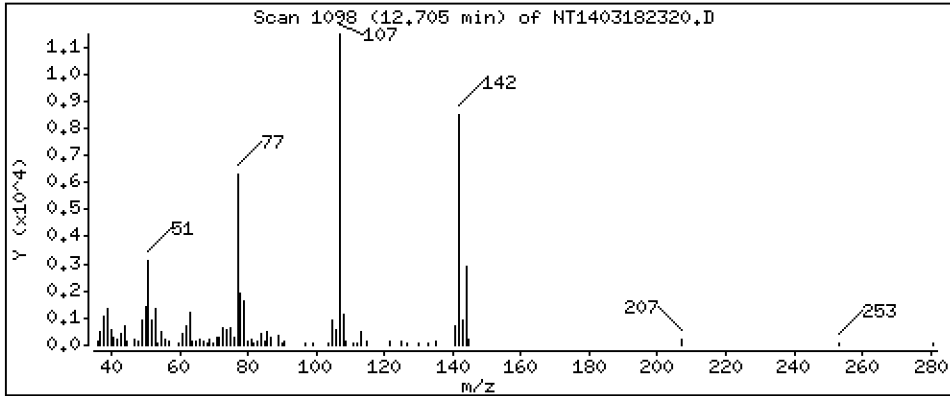
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.3256 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

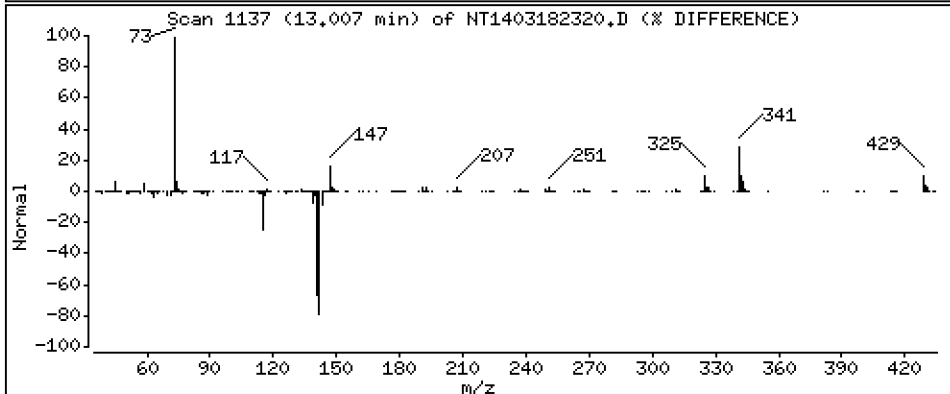
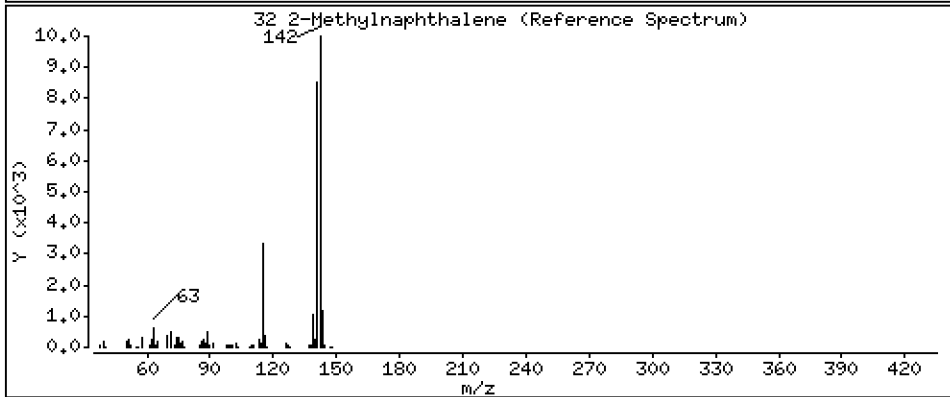
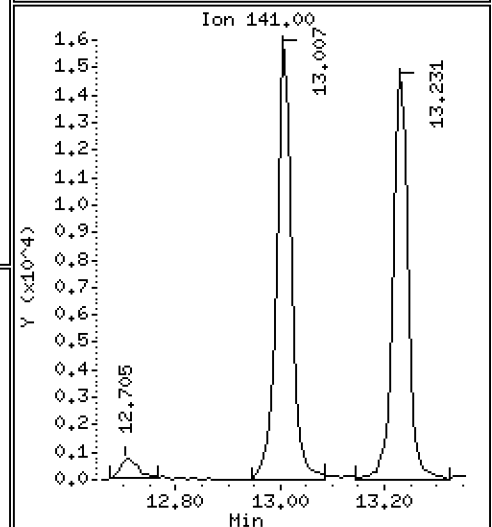
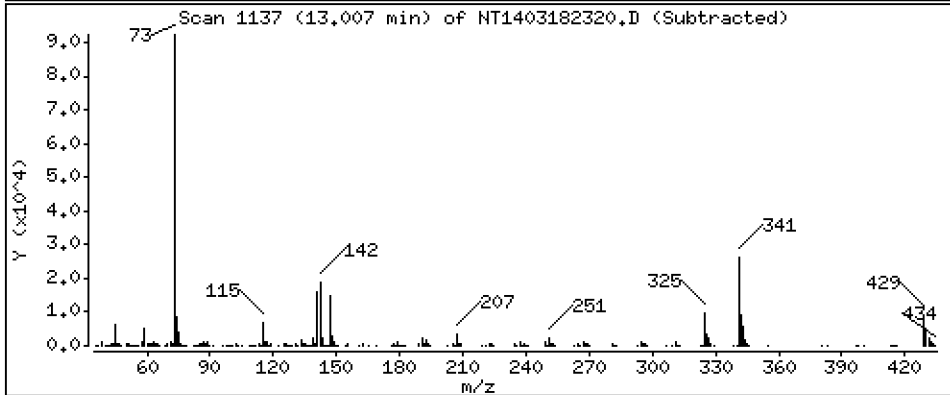
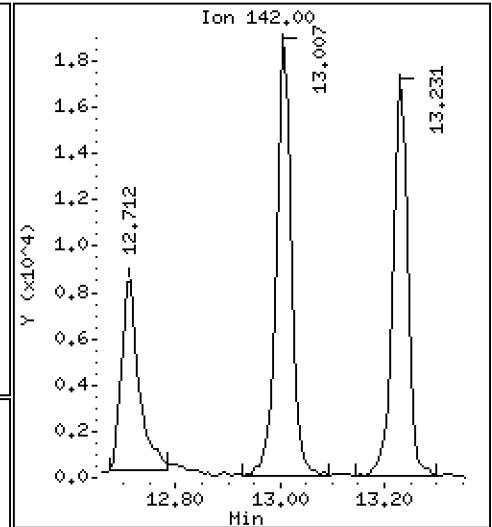
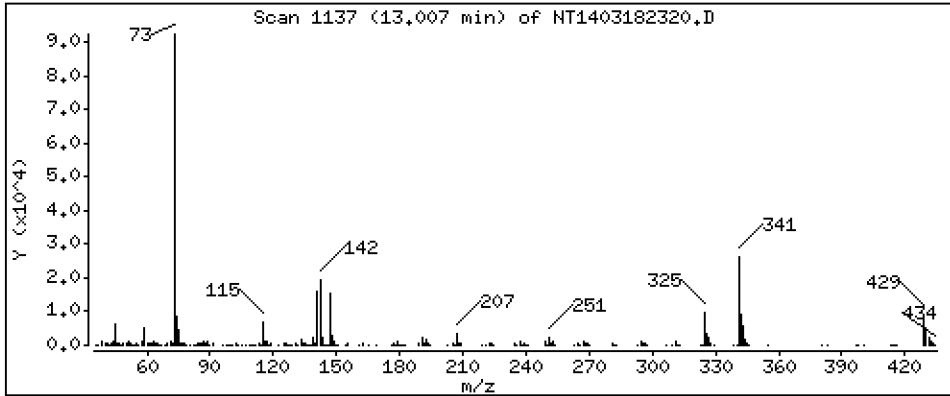
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,2009 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

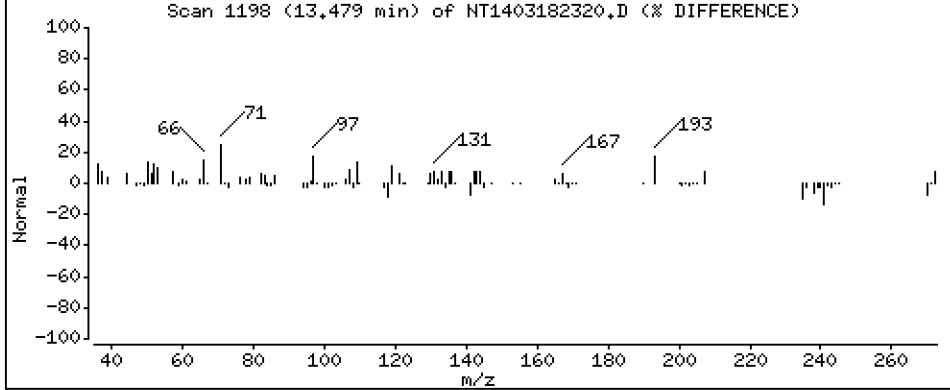
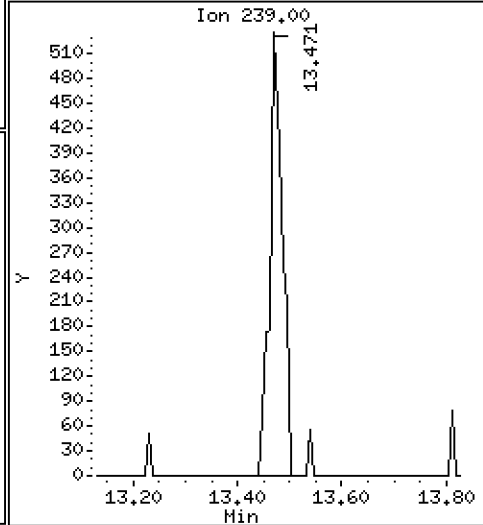
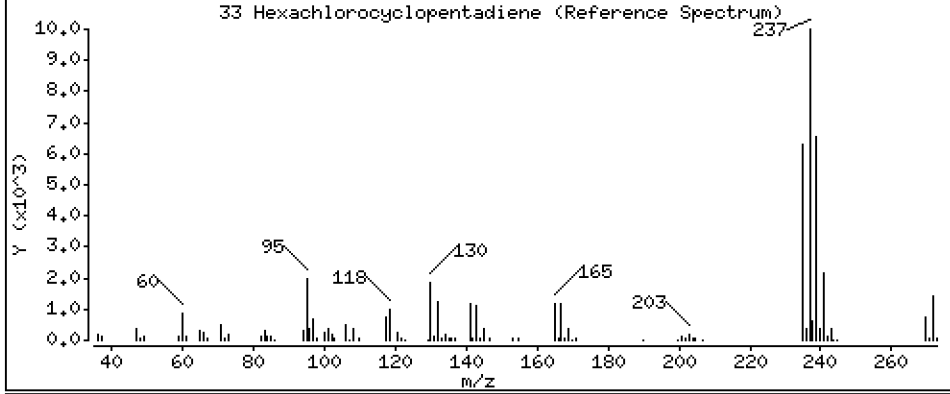
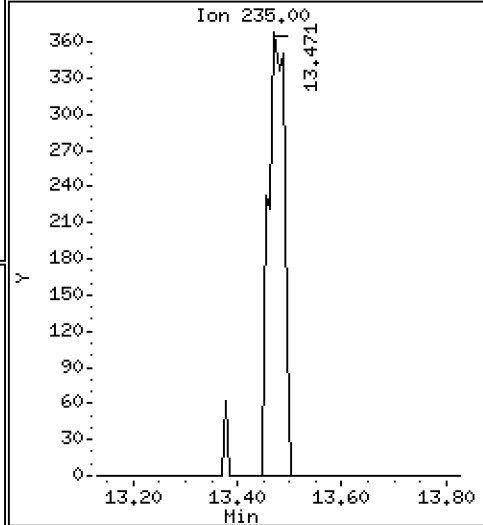
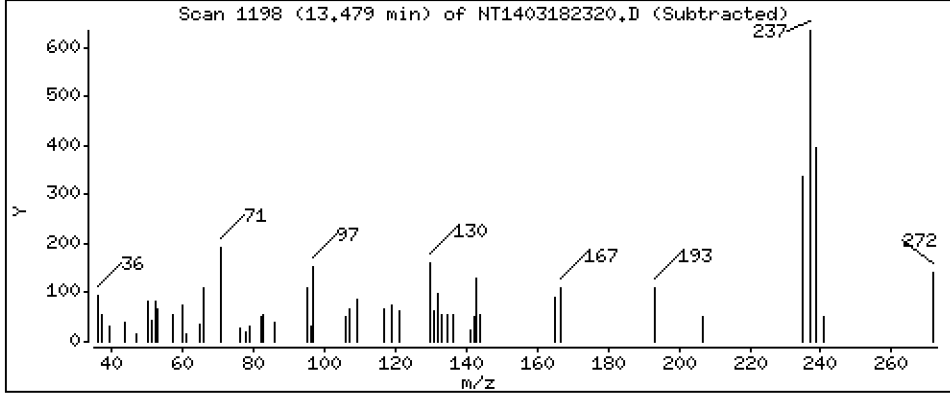
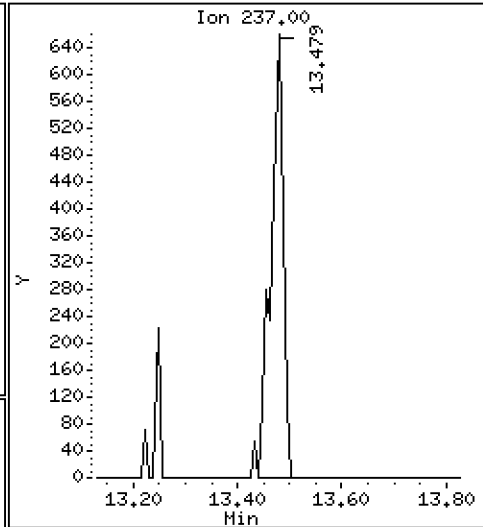
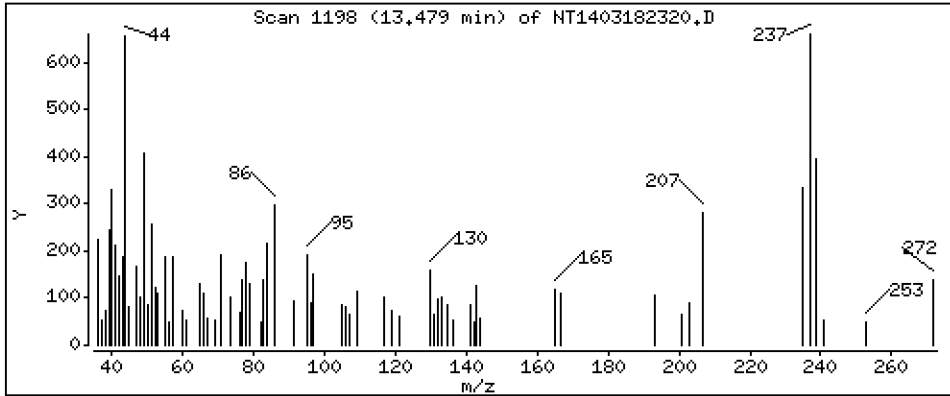
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 0,02526 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

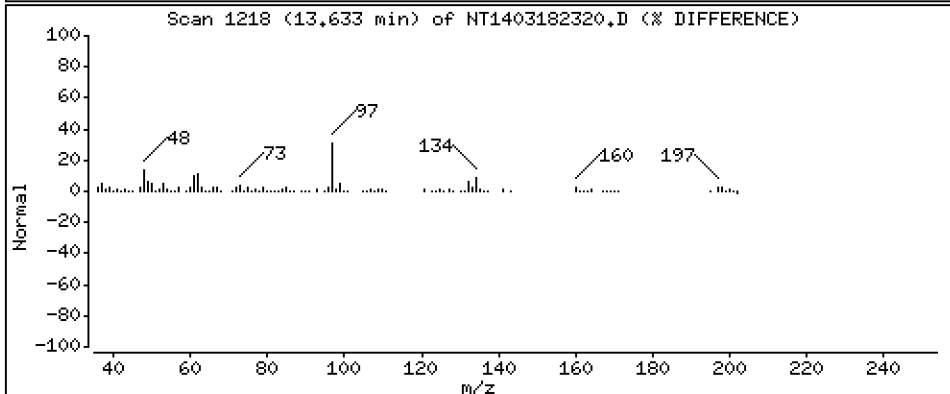
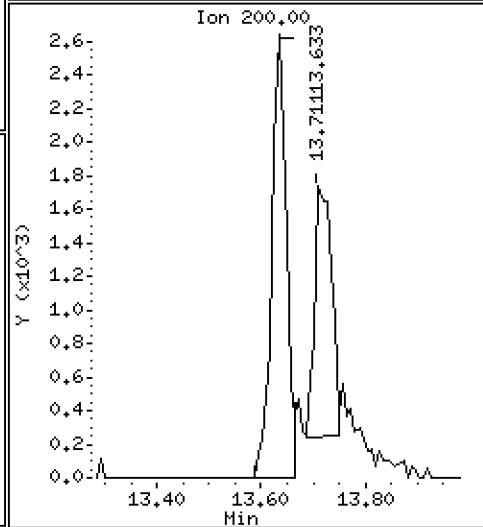
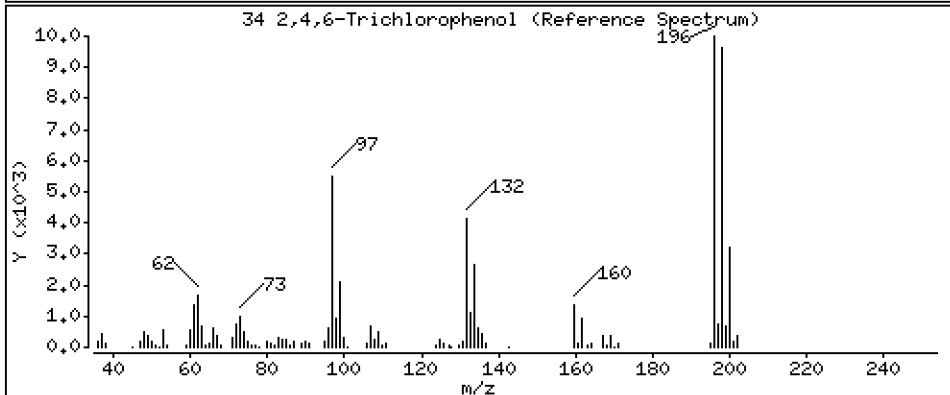
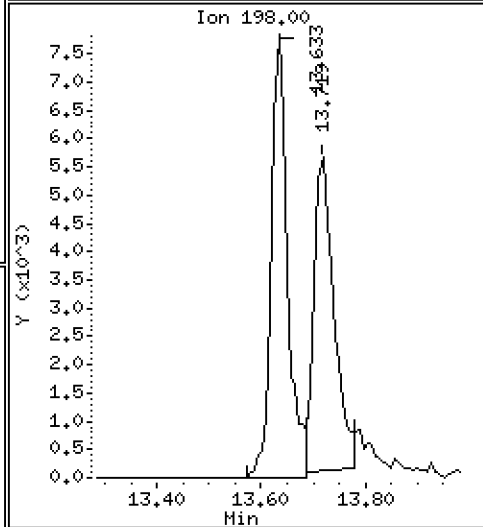
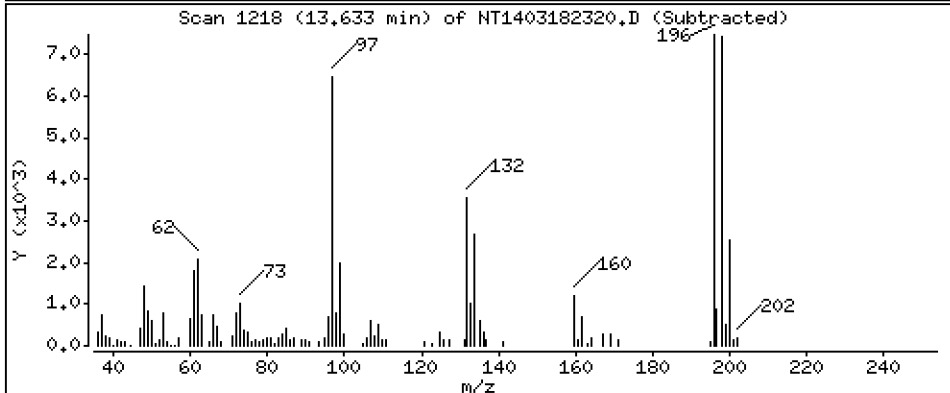
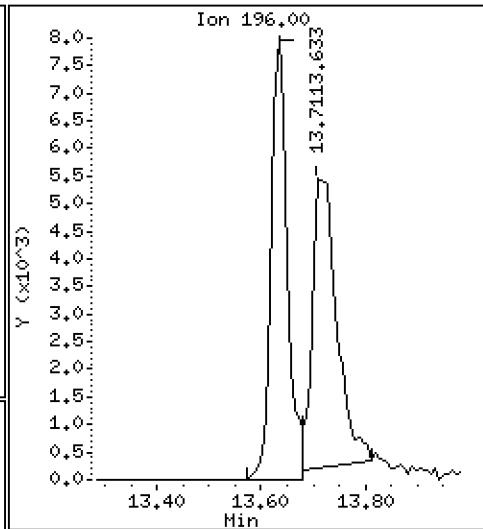
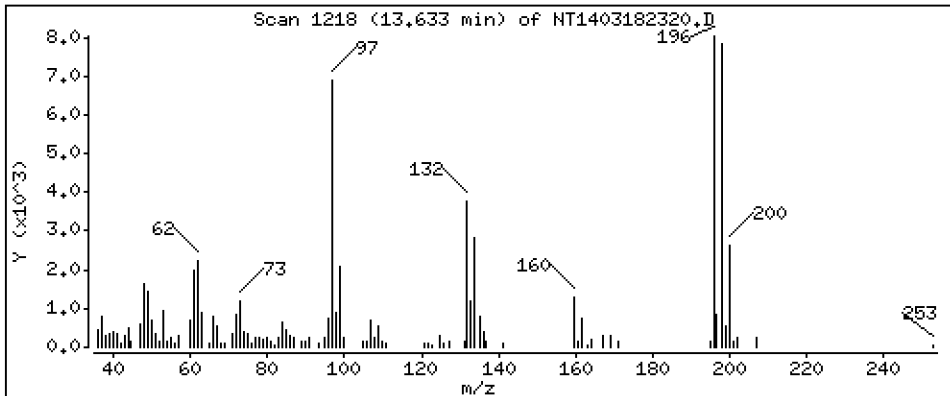
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,3390 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

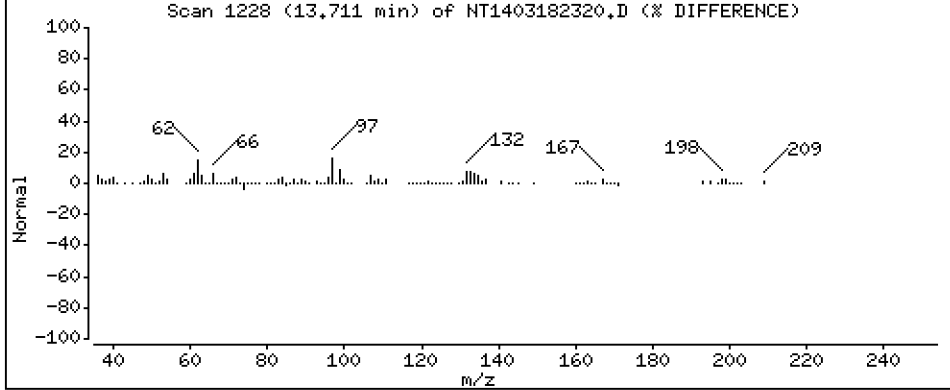
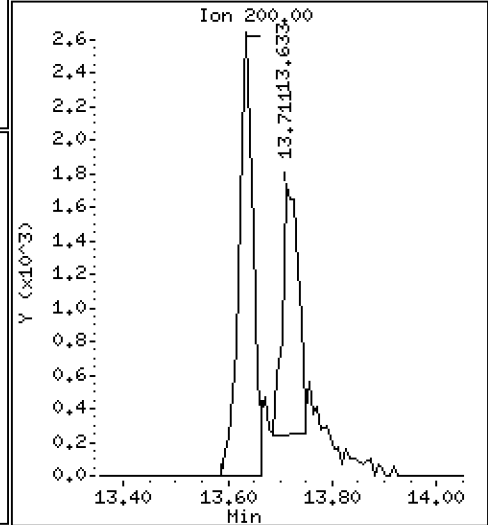
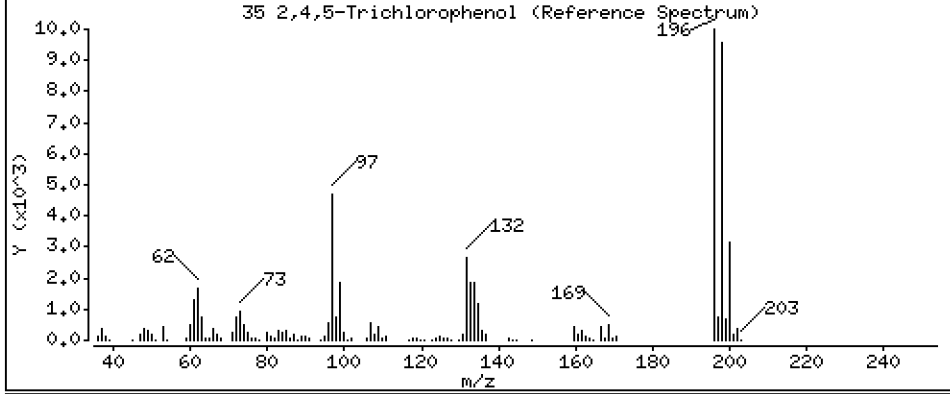
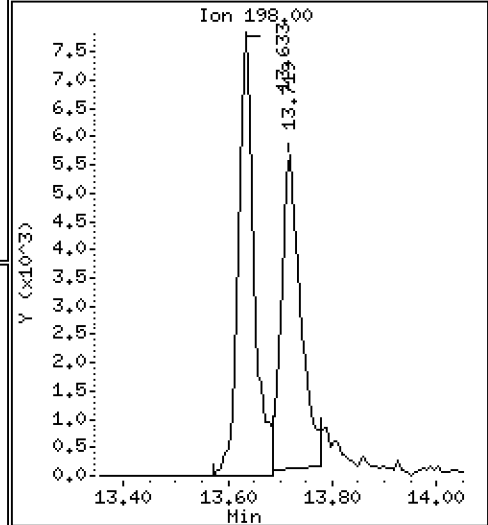
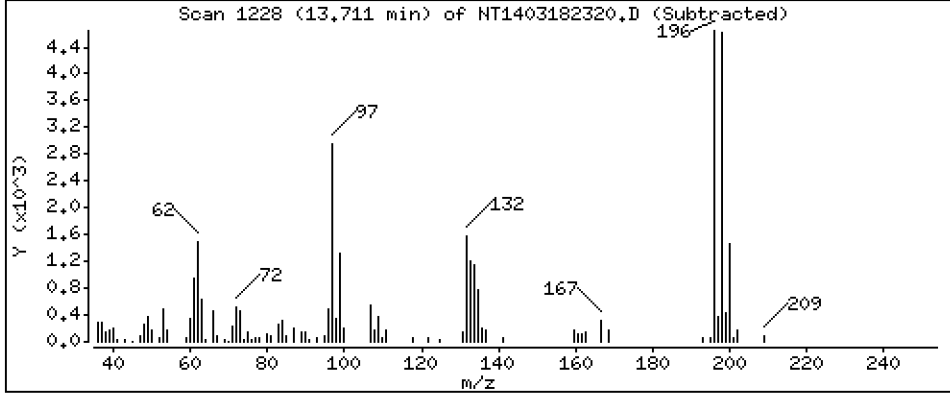
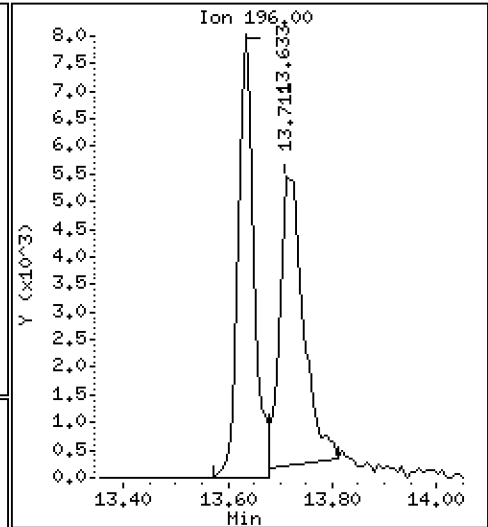
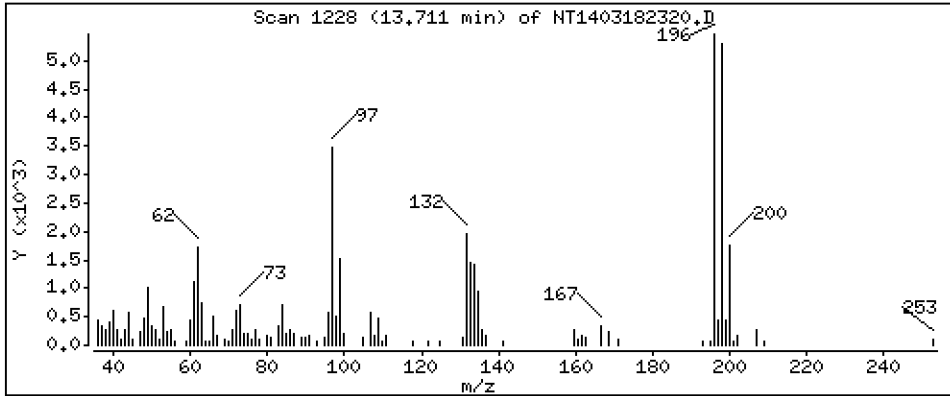
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,3283 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

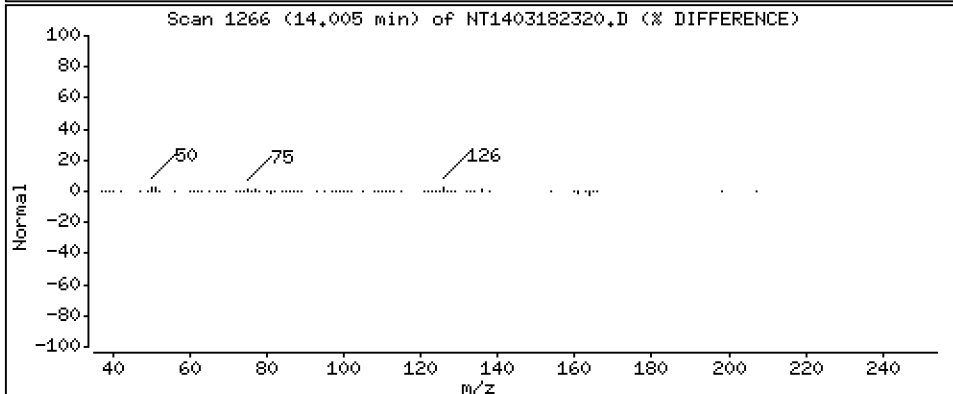
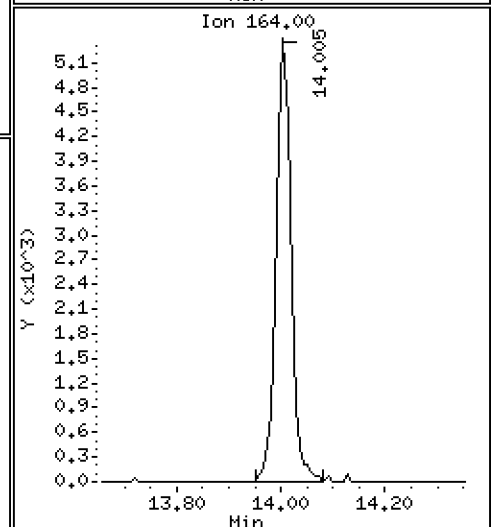
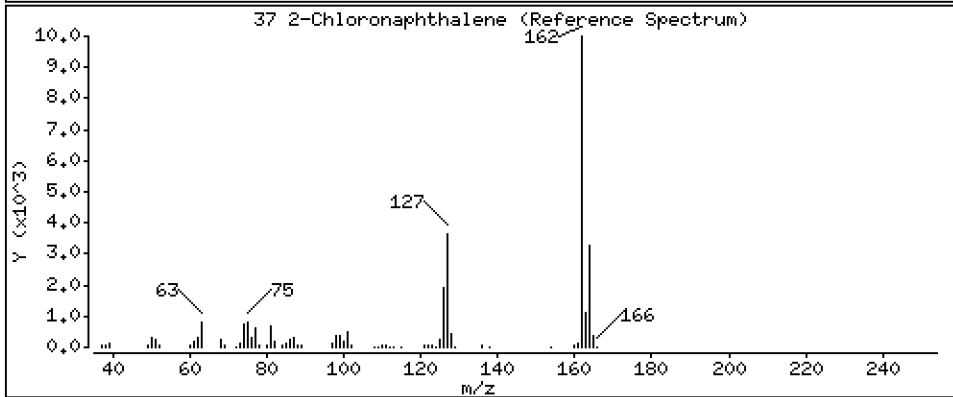
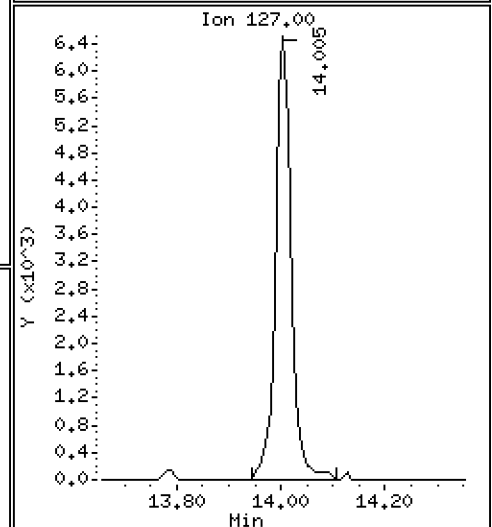
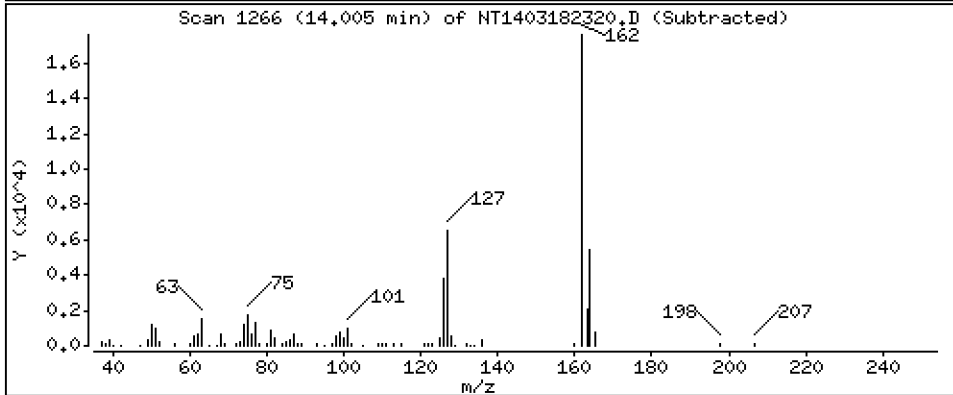
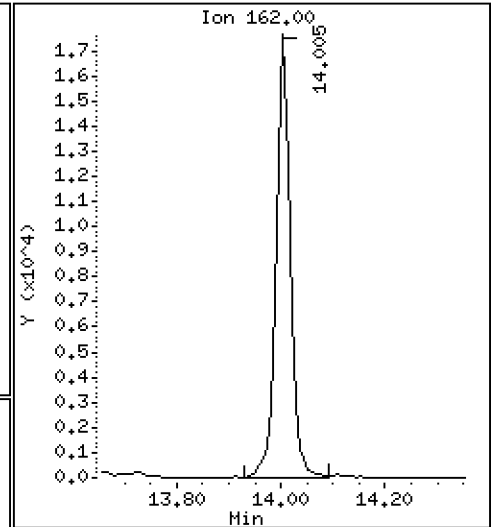
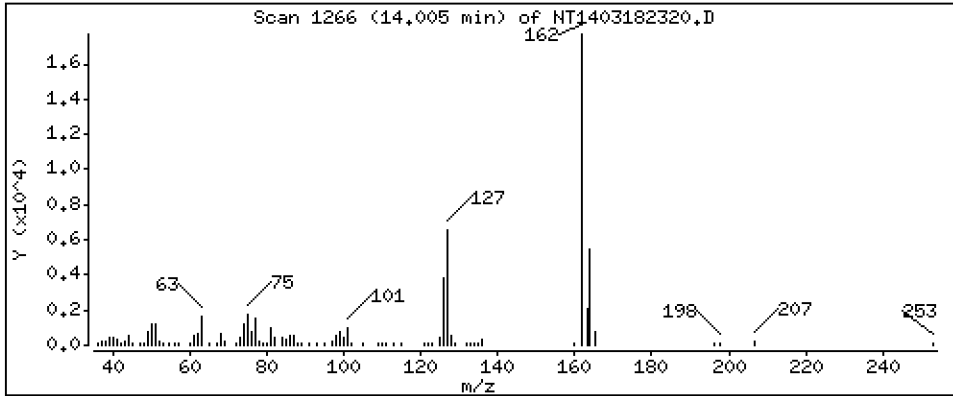
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2094 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

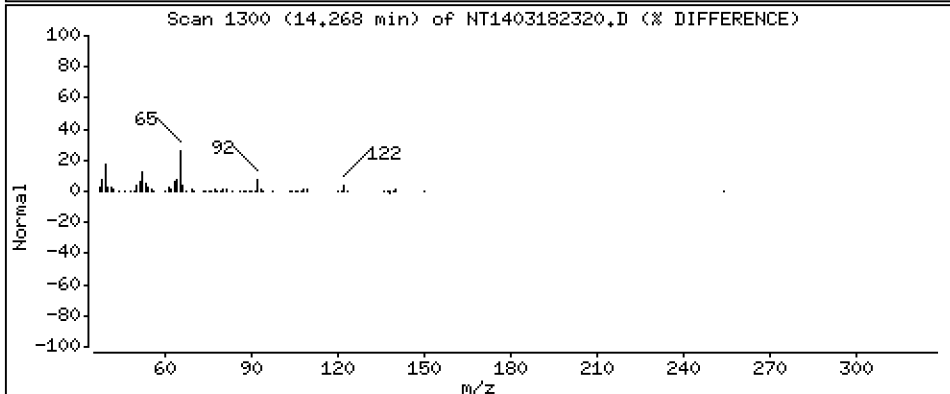
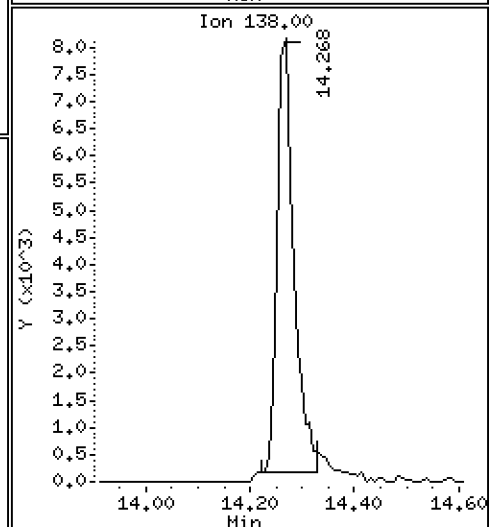
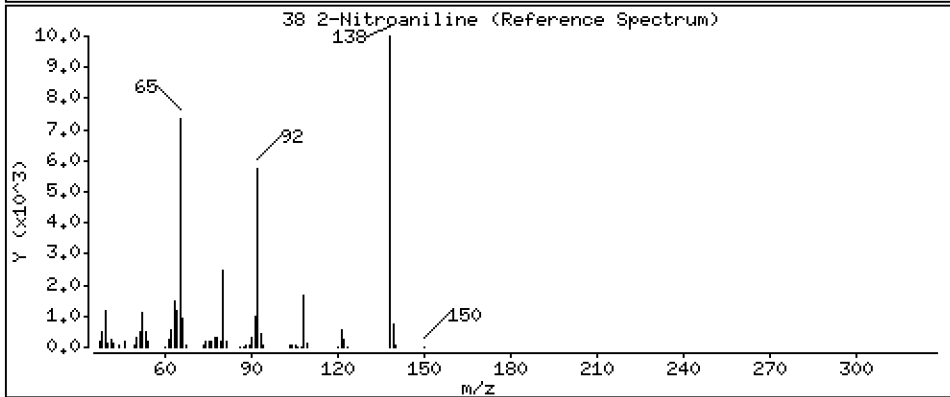
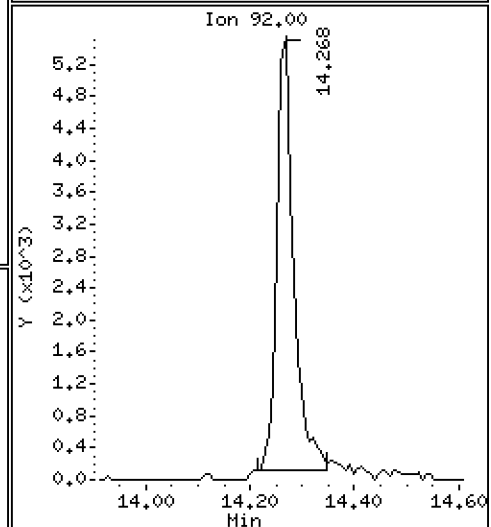
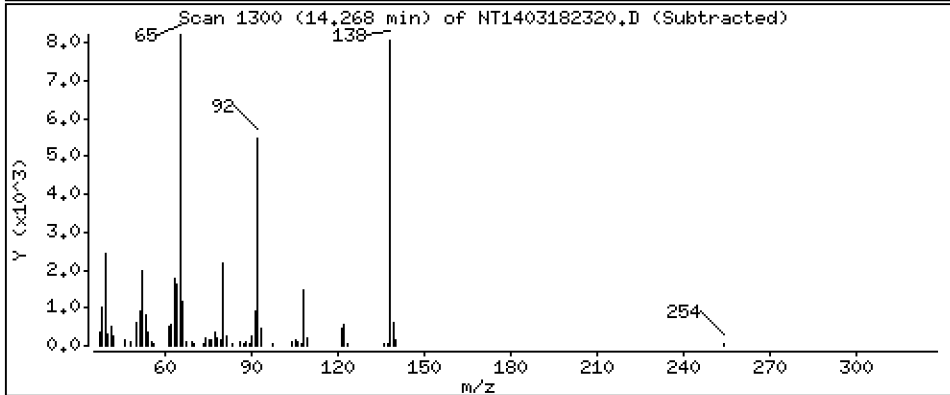
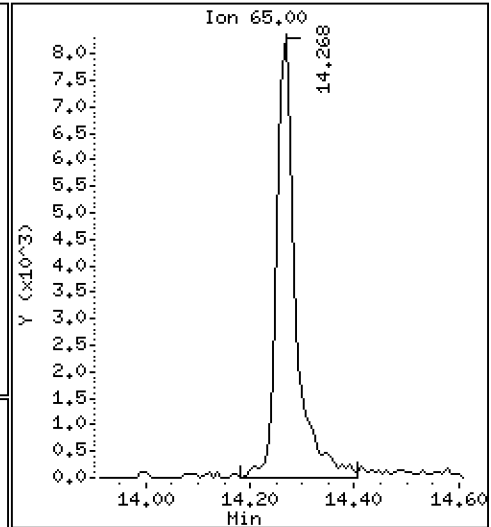
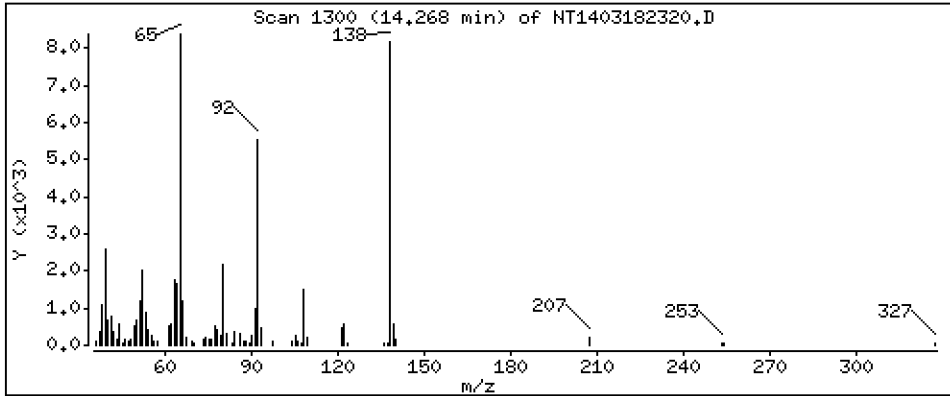
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,3533 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

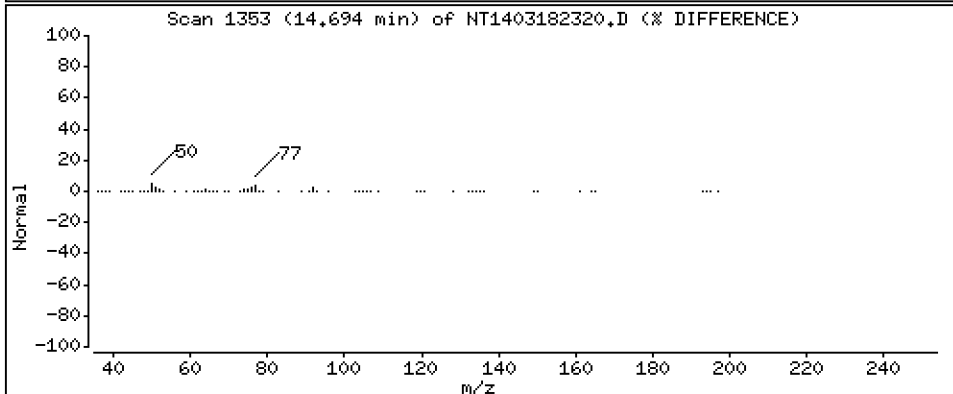
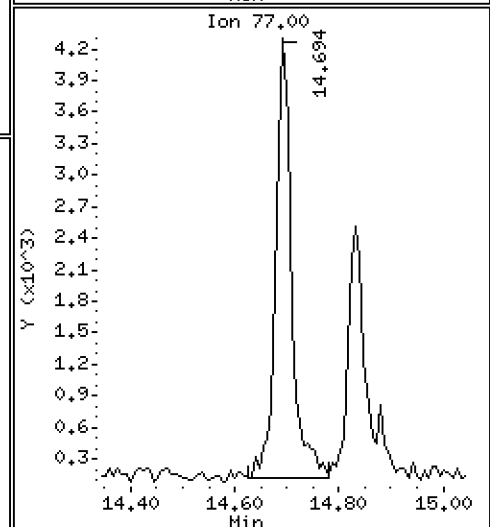
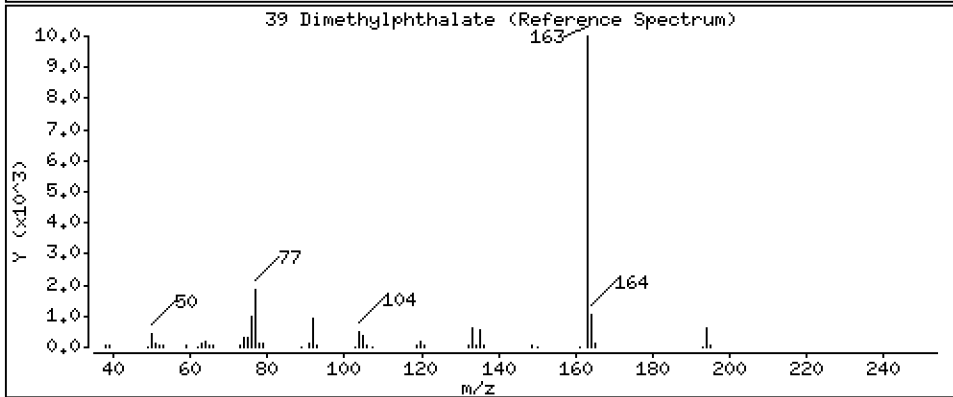
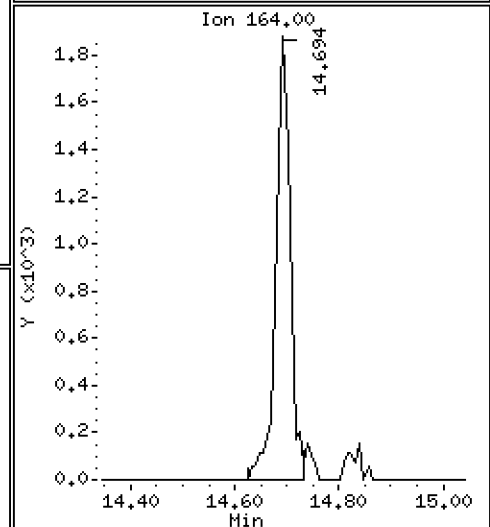
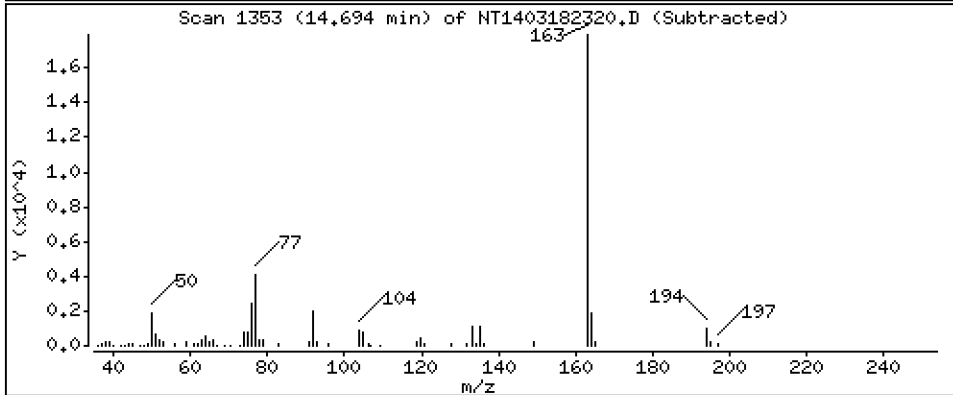
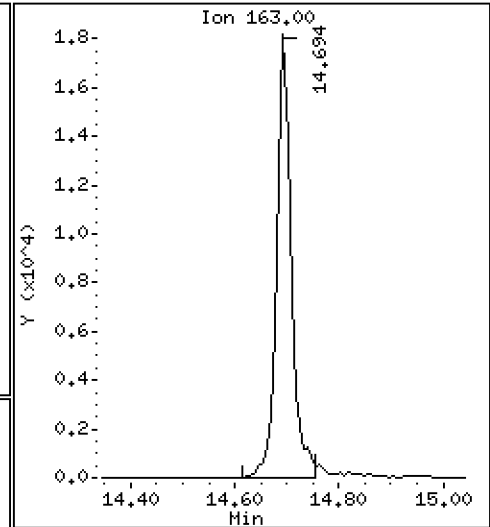
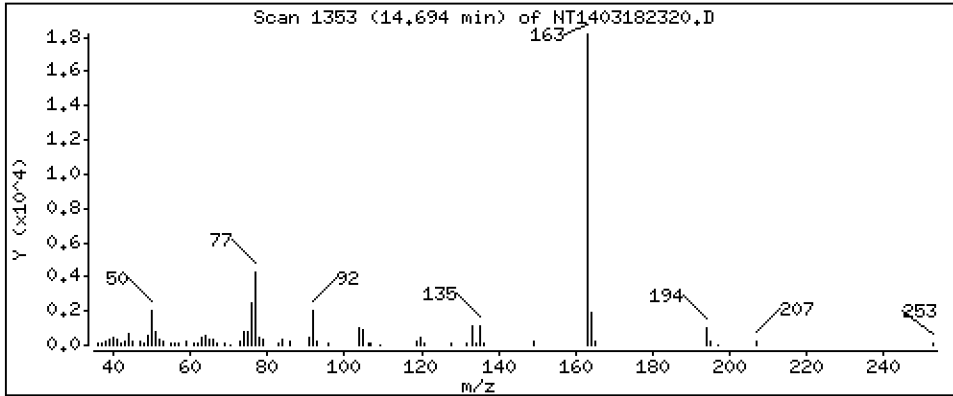
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.2079 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

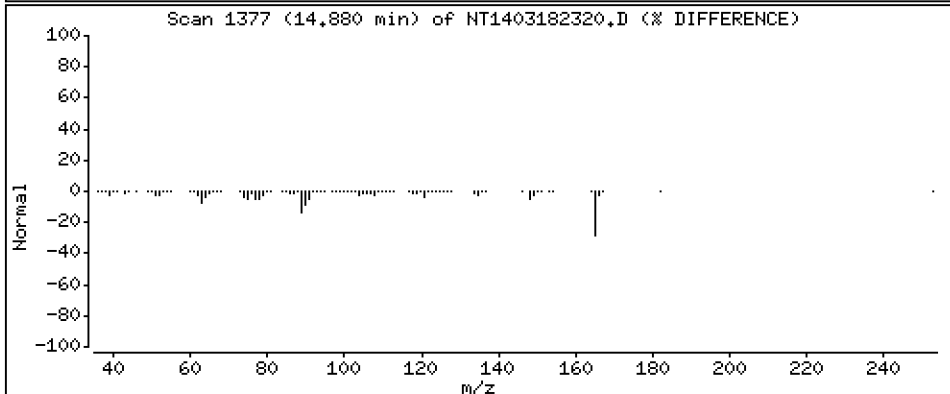
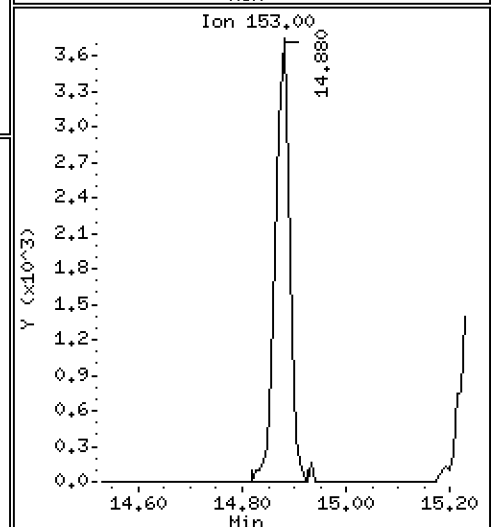
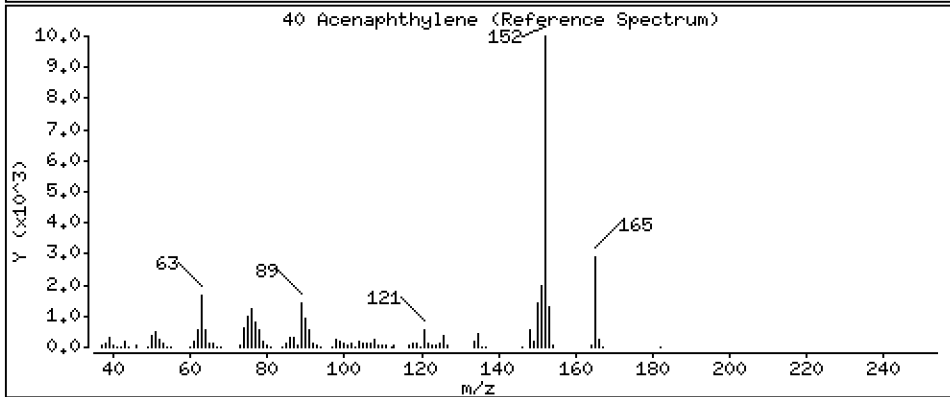
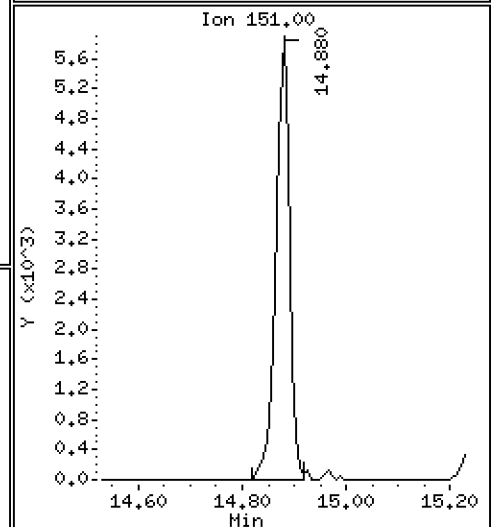
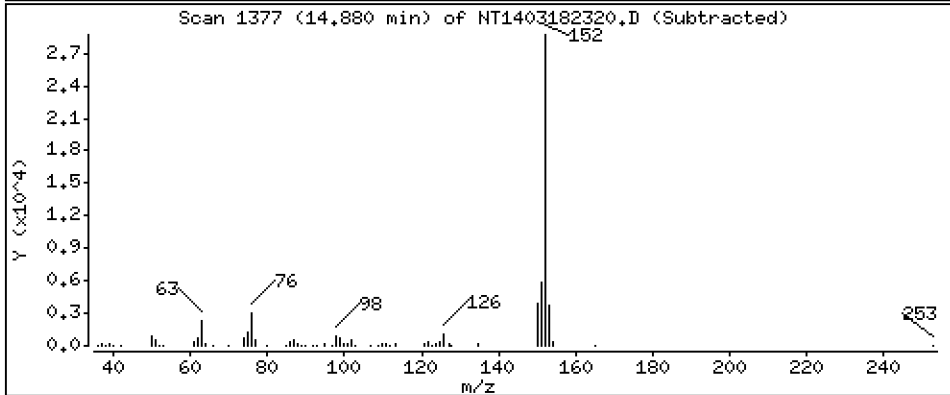
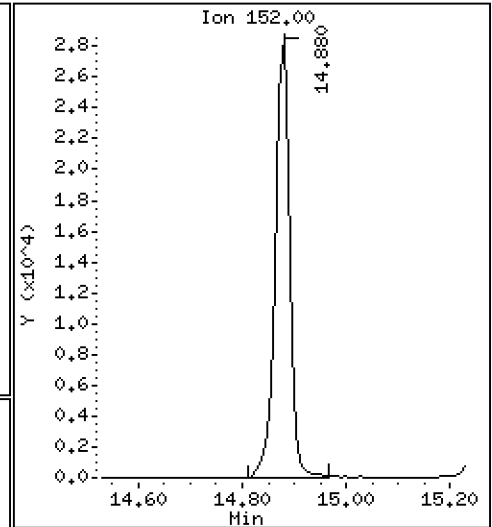
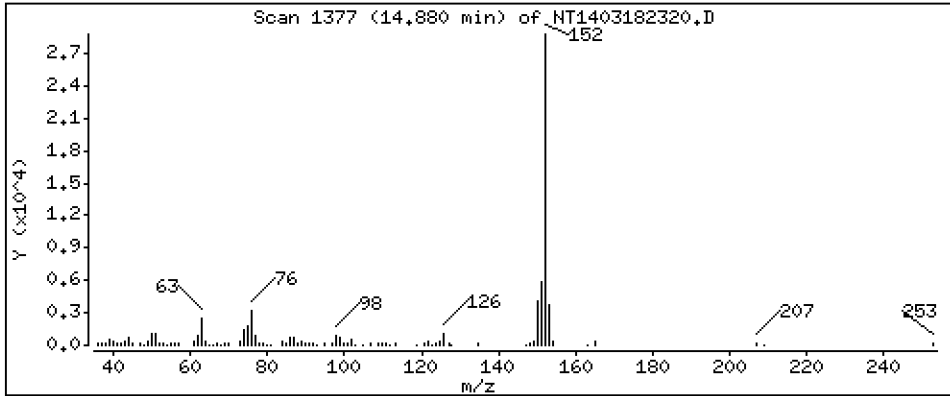
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,2063 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

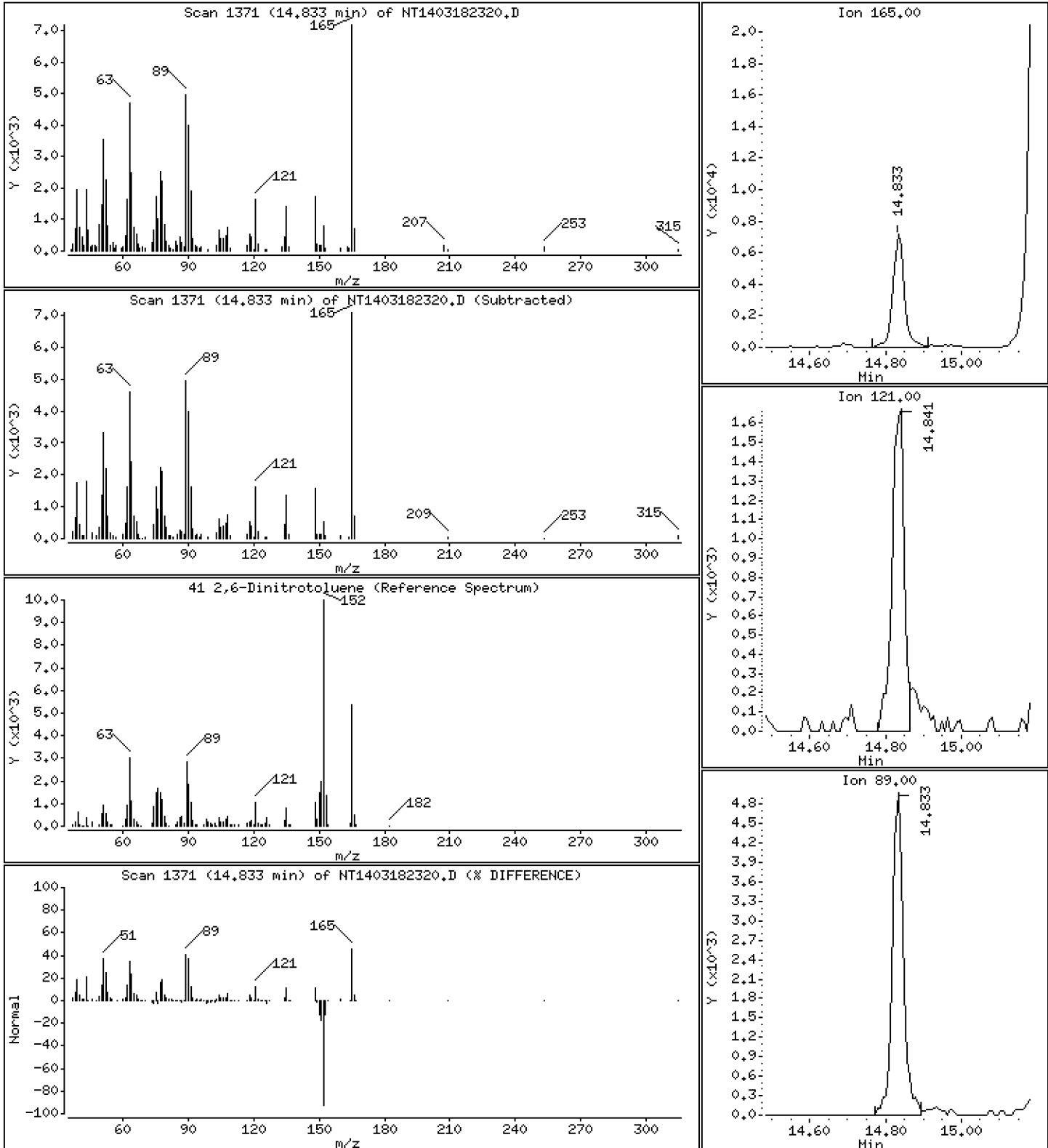
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 0.3859 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

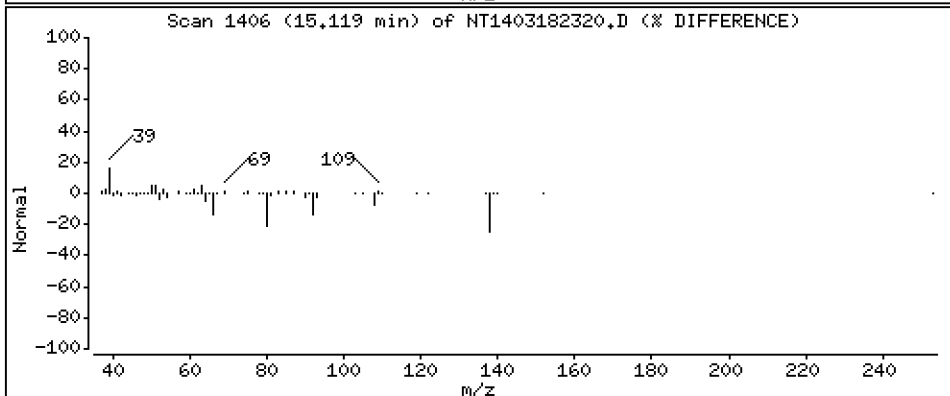
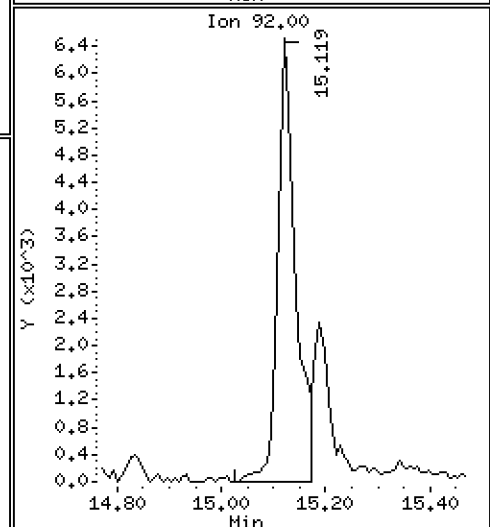
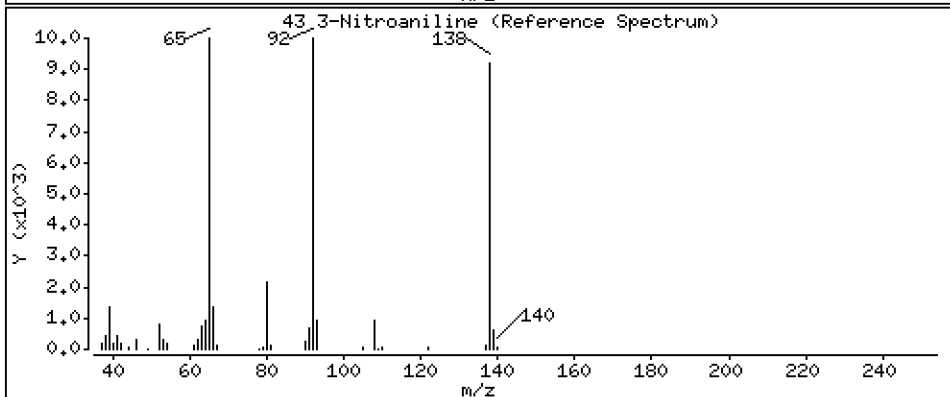
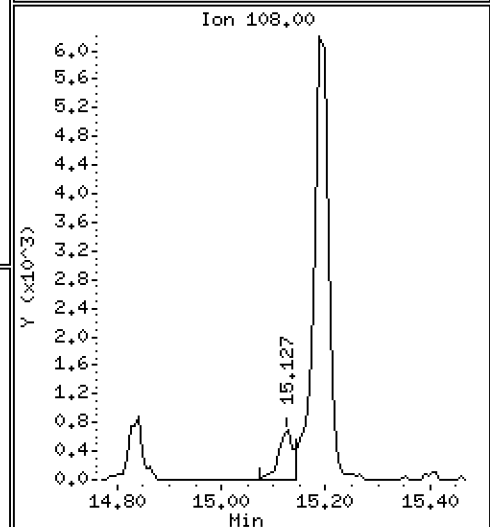
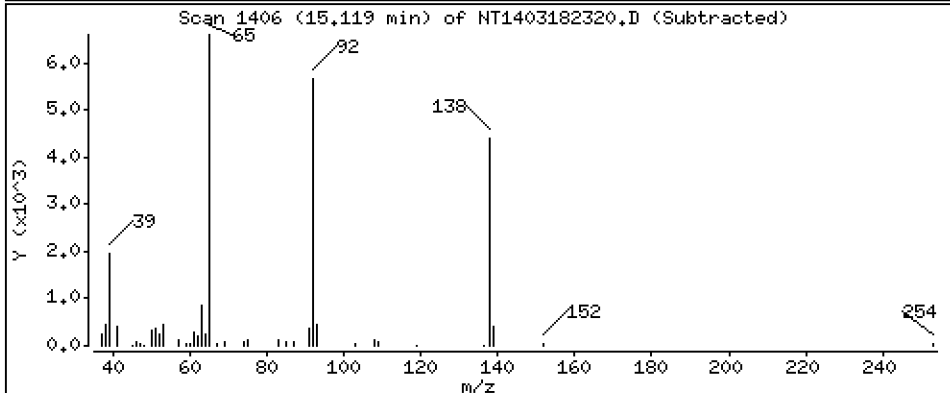
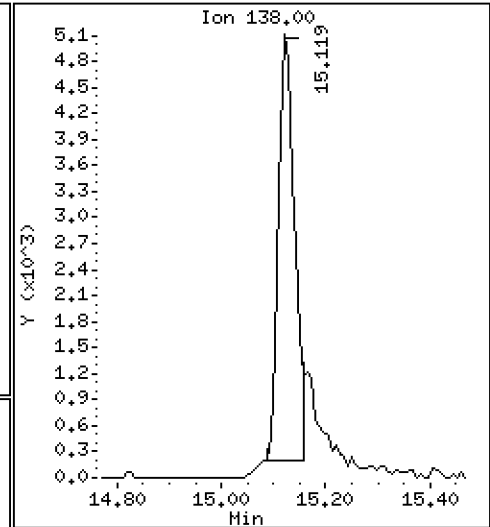
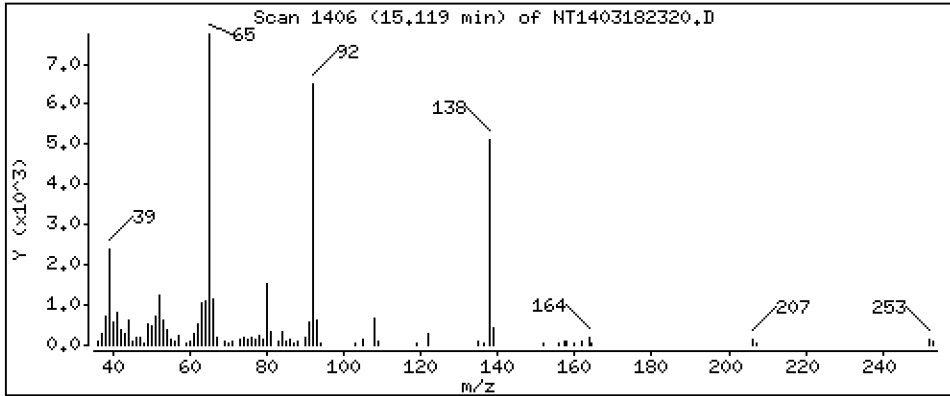
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,2002 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

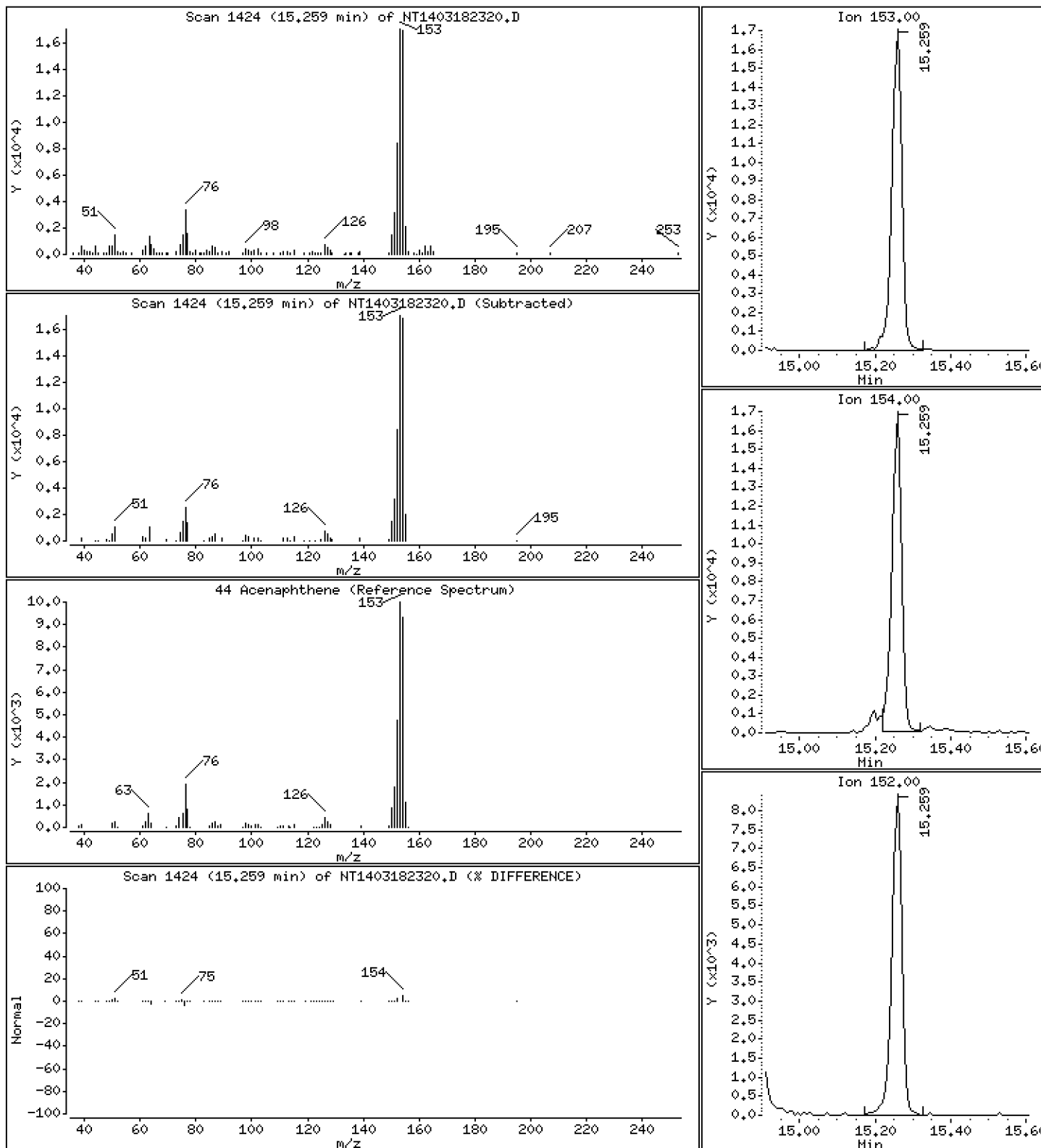
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,2030 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

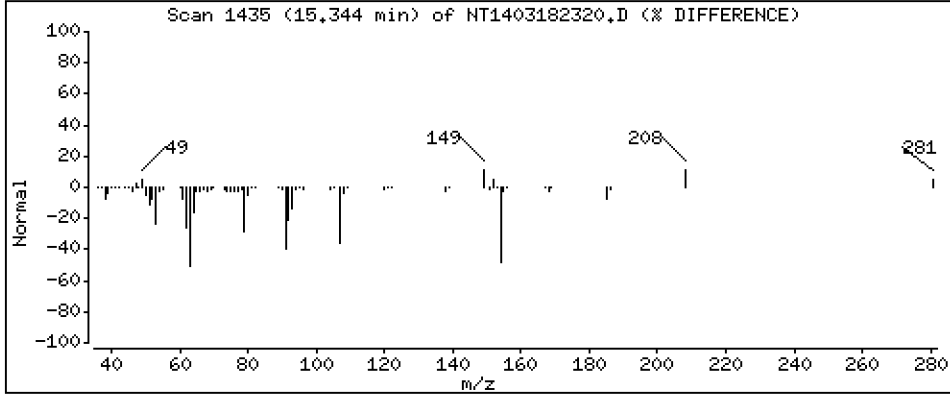
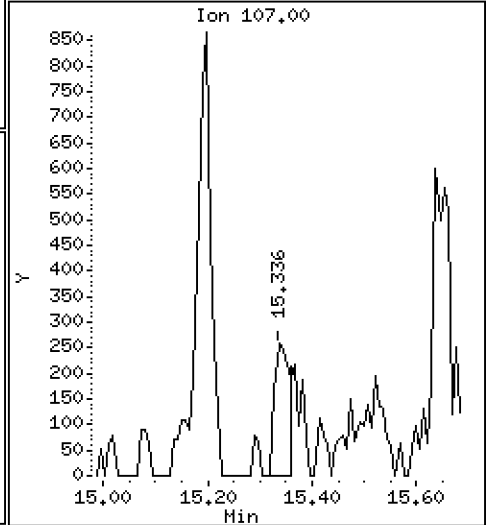
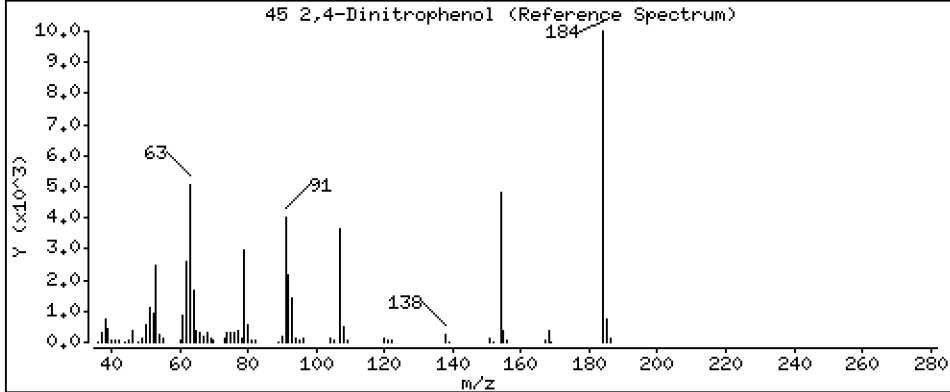
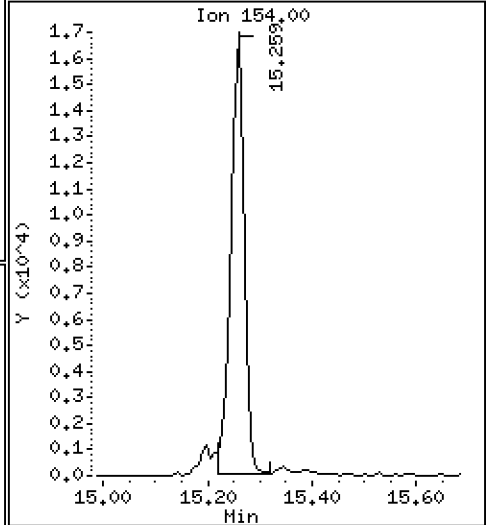
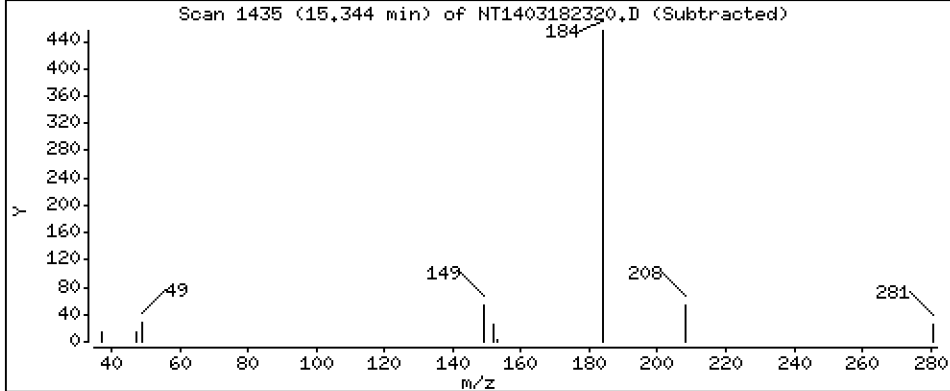
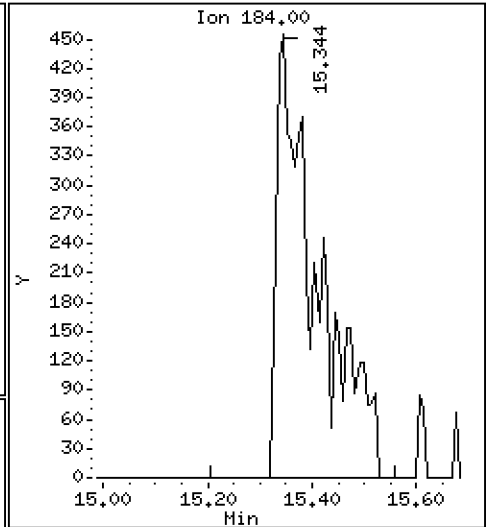
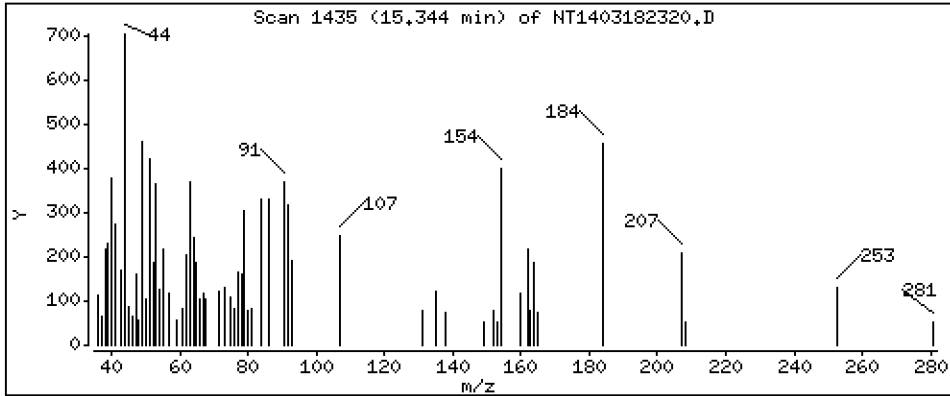
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

45 2,4-Dinitrophenol

Concentration: 0.08347 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

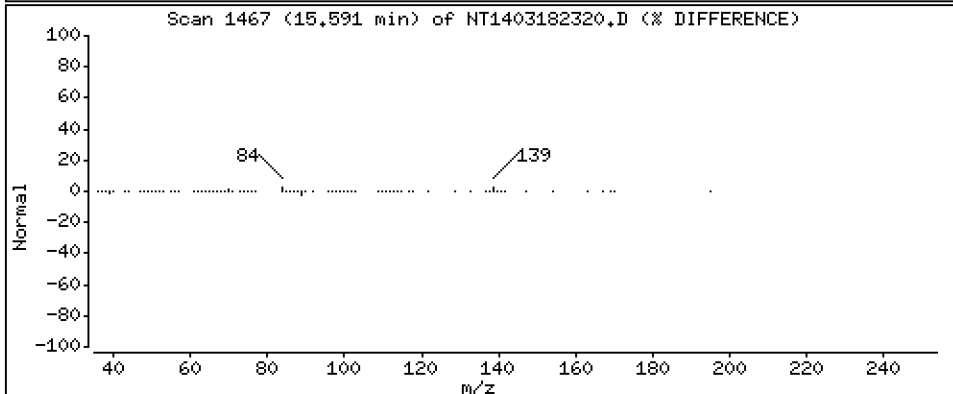
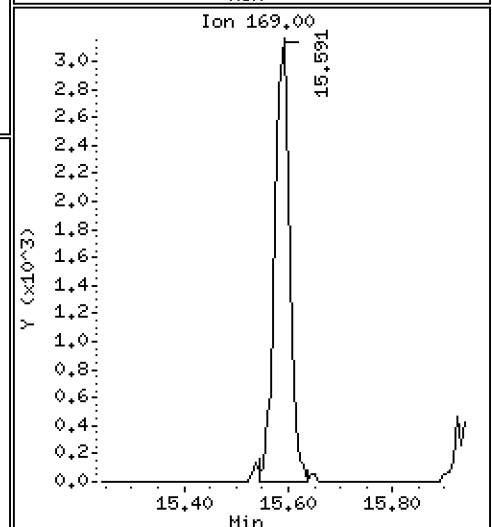
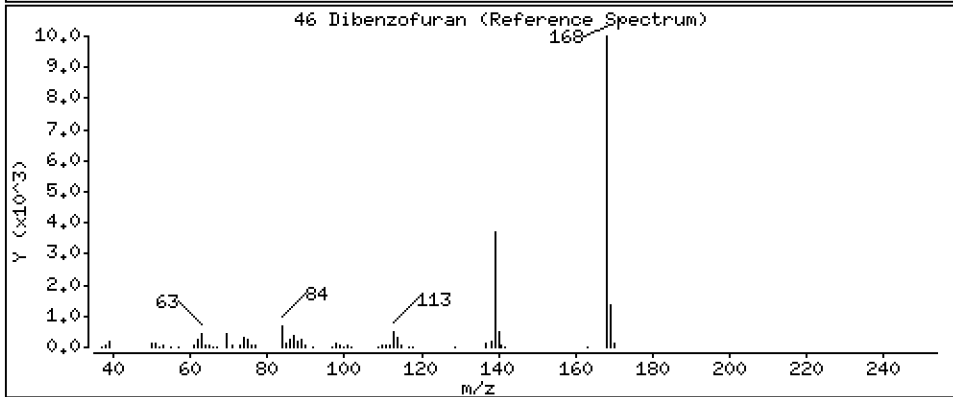
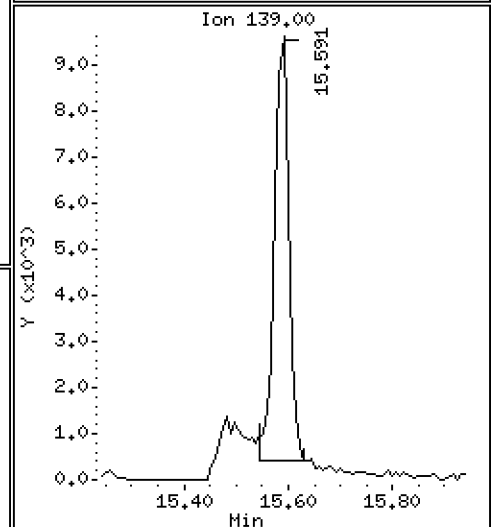
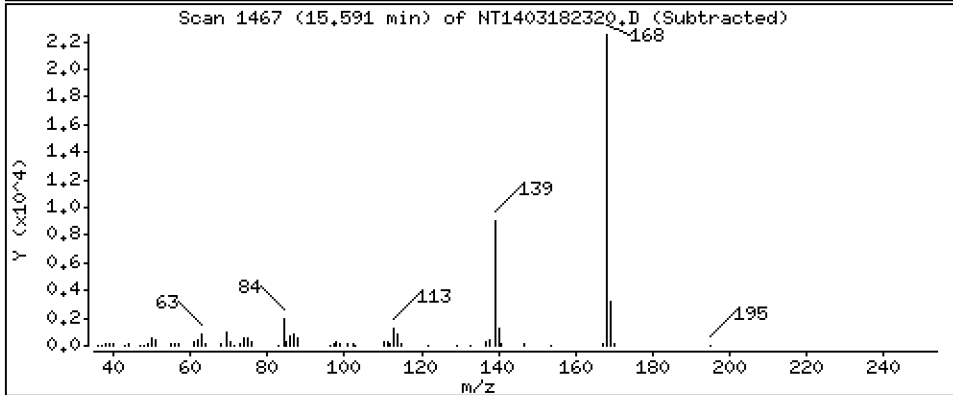
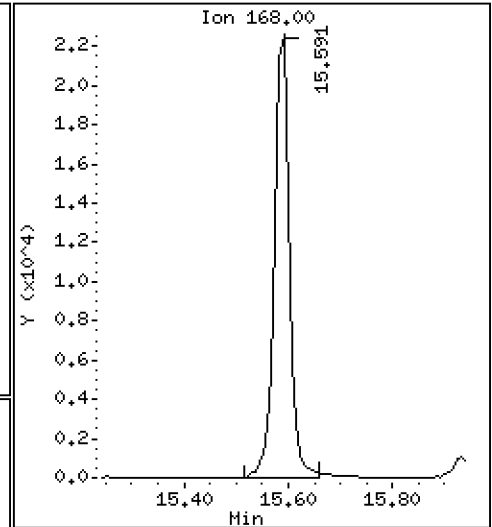
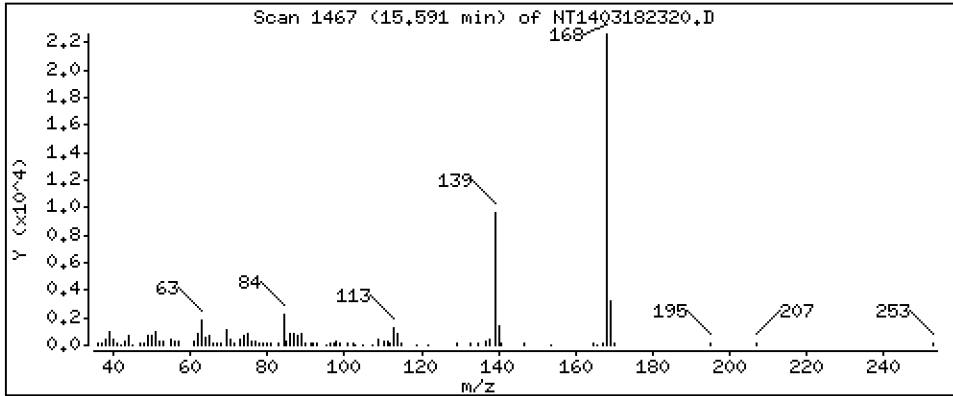
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2040 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

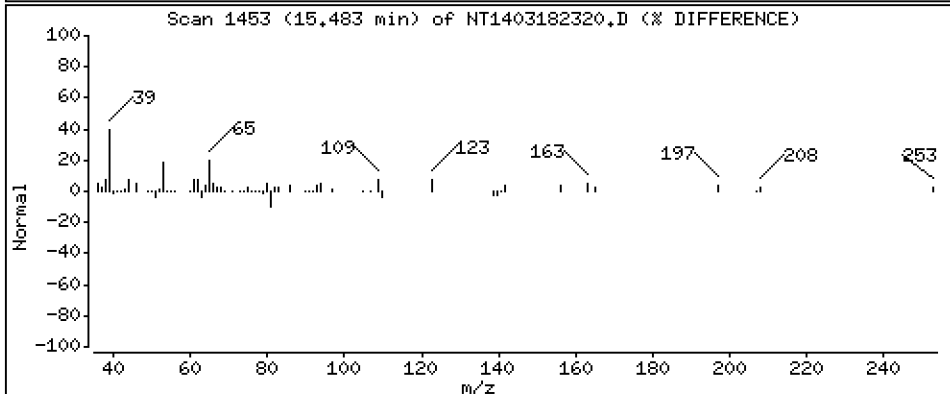
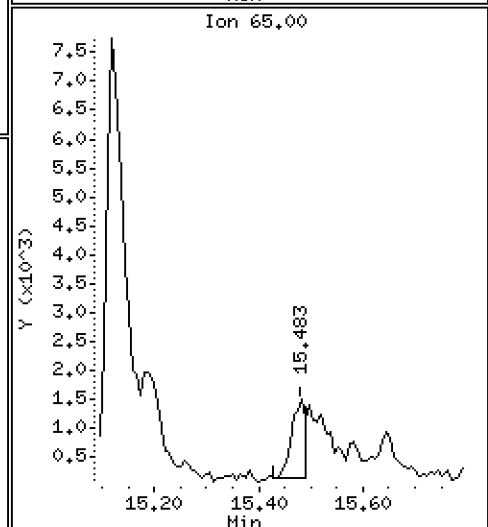
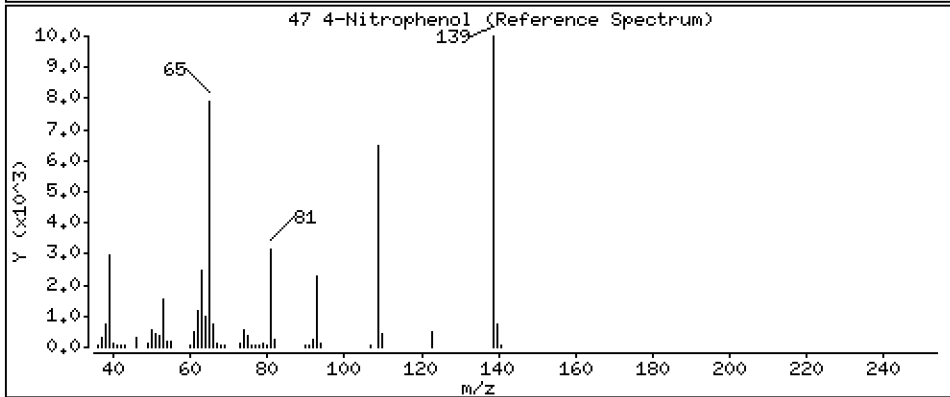
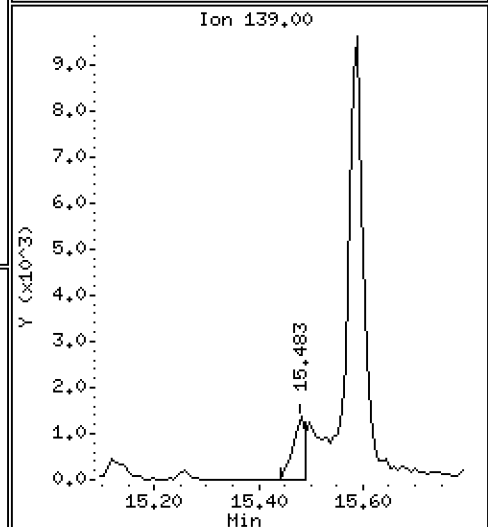
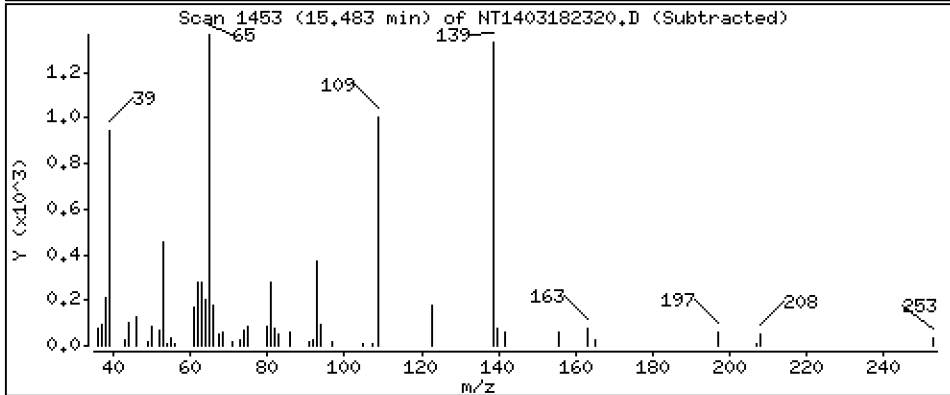
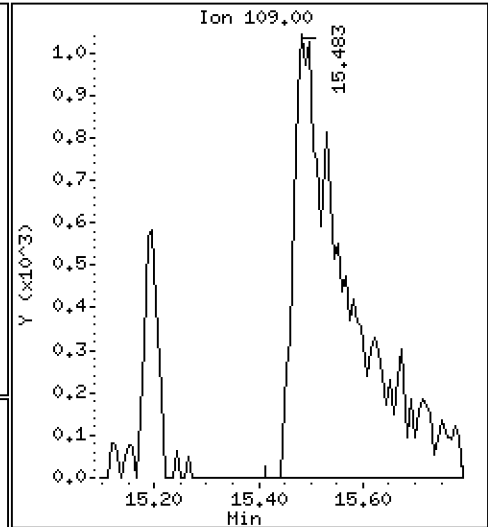
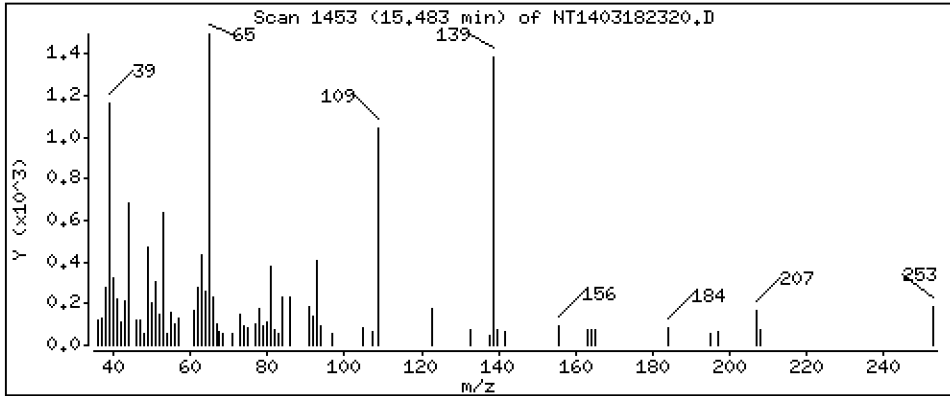
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 0,2784 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

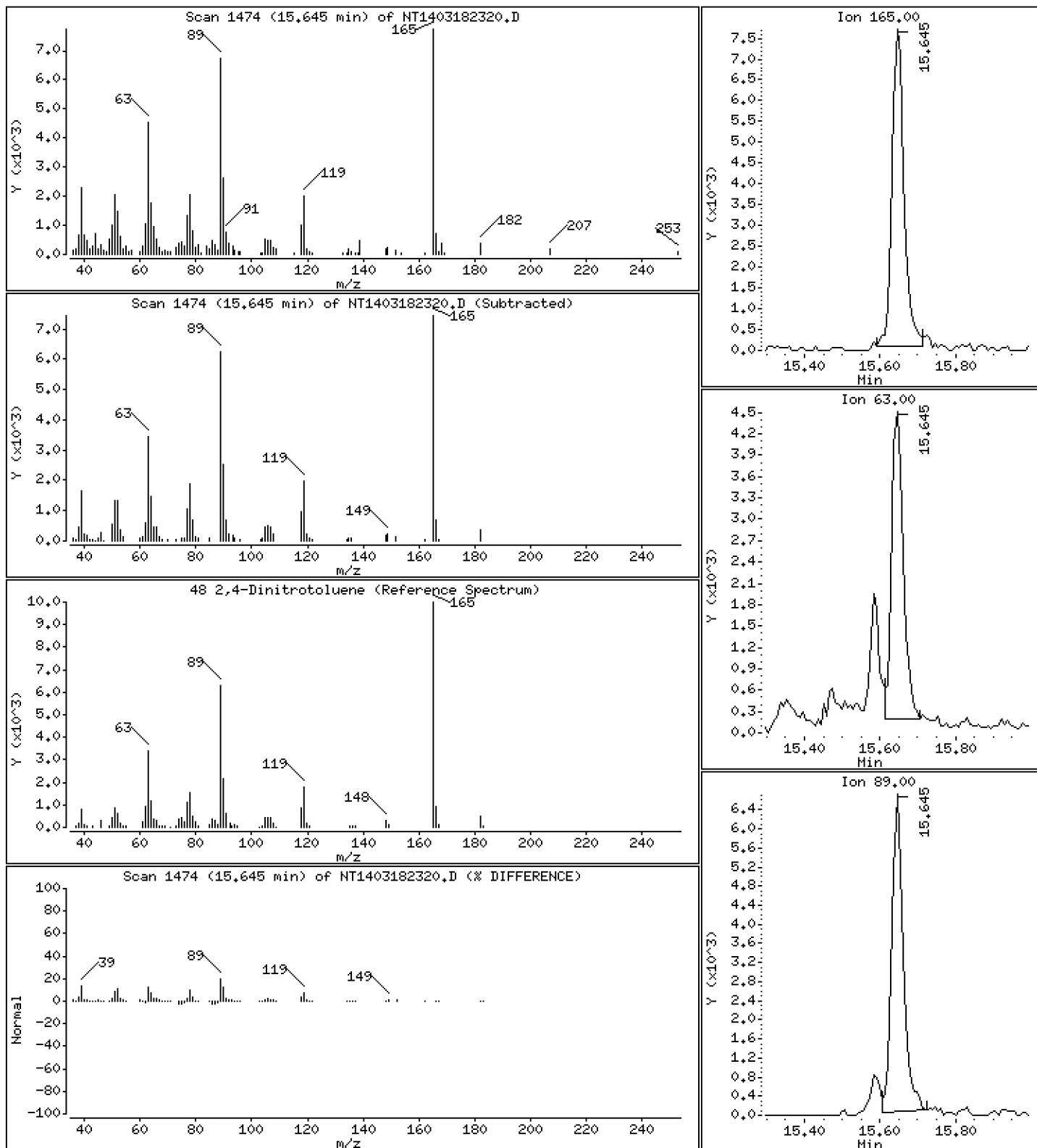
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,3045 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

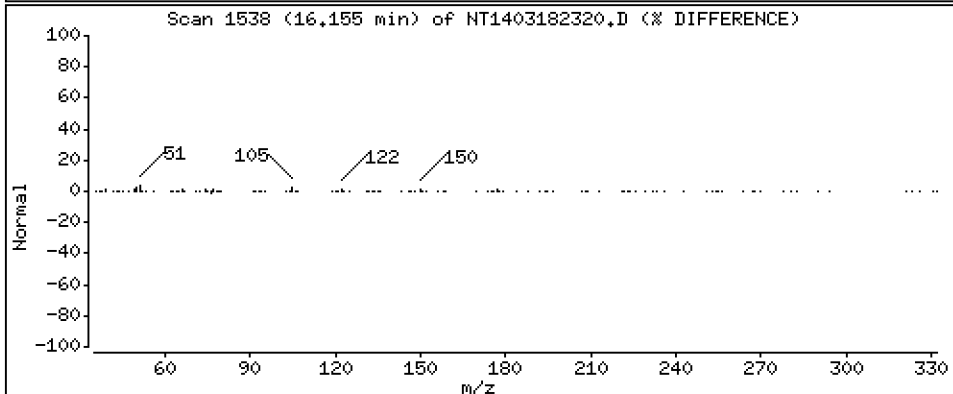
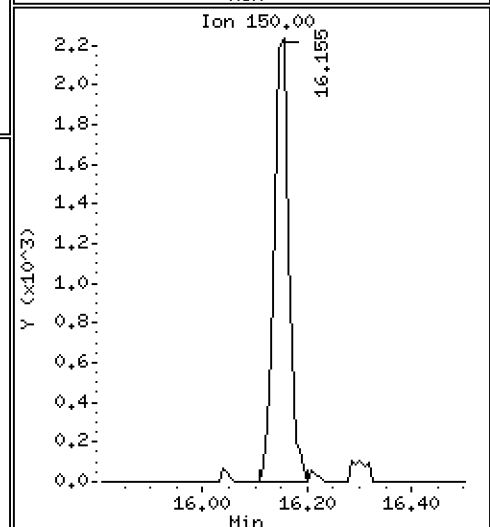
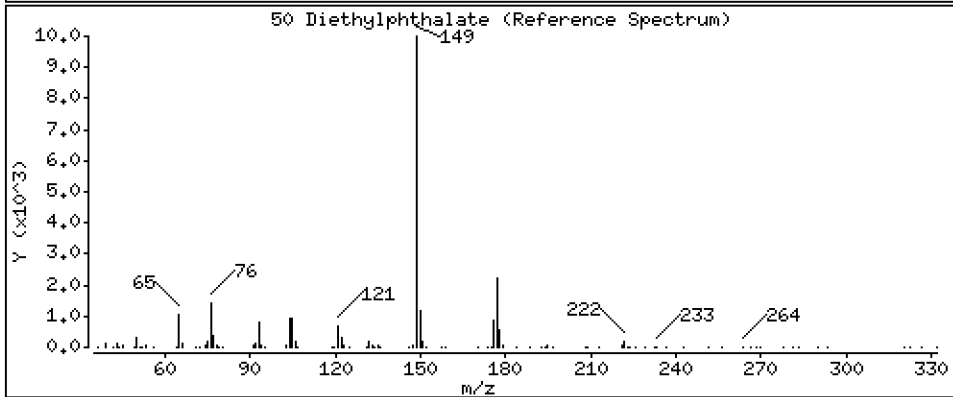
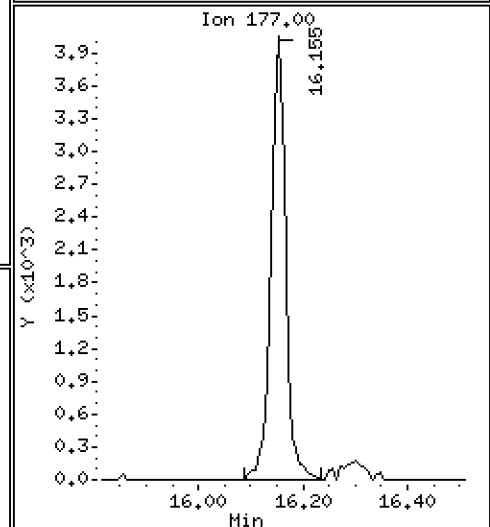
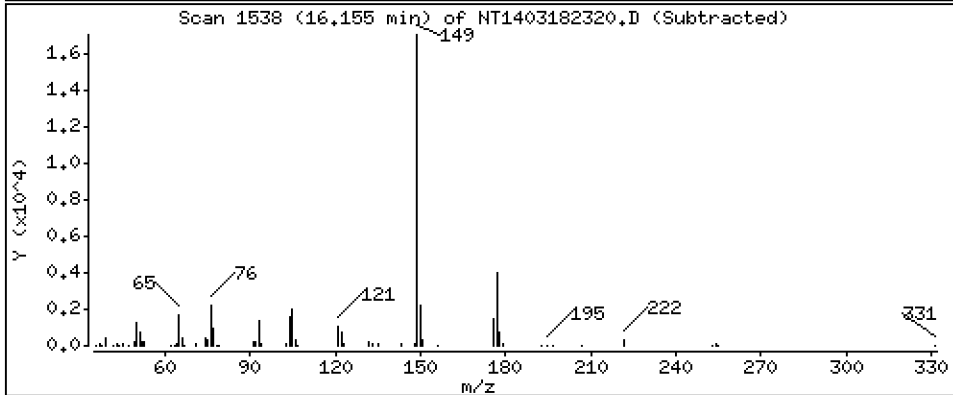
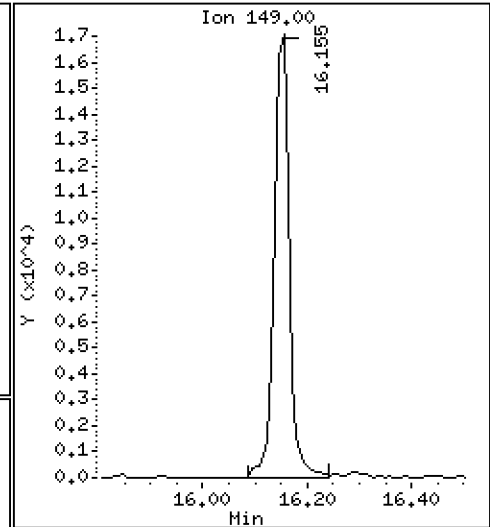
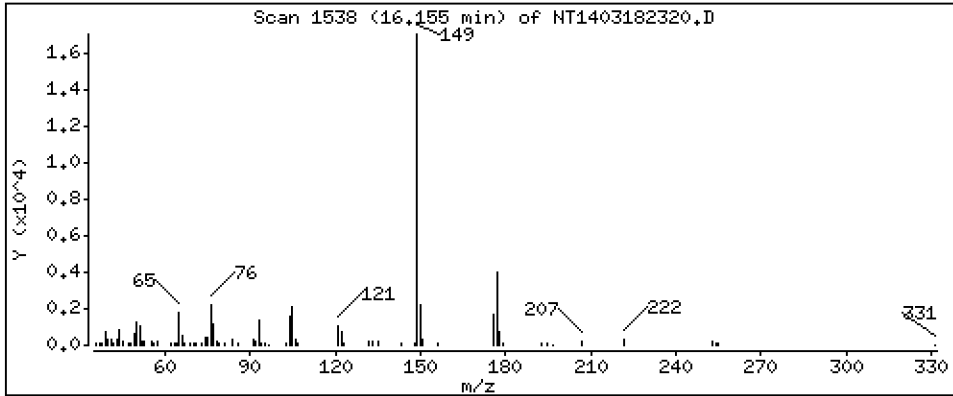
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.2157 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

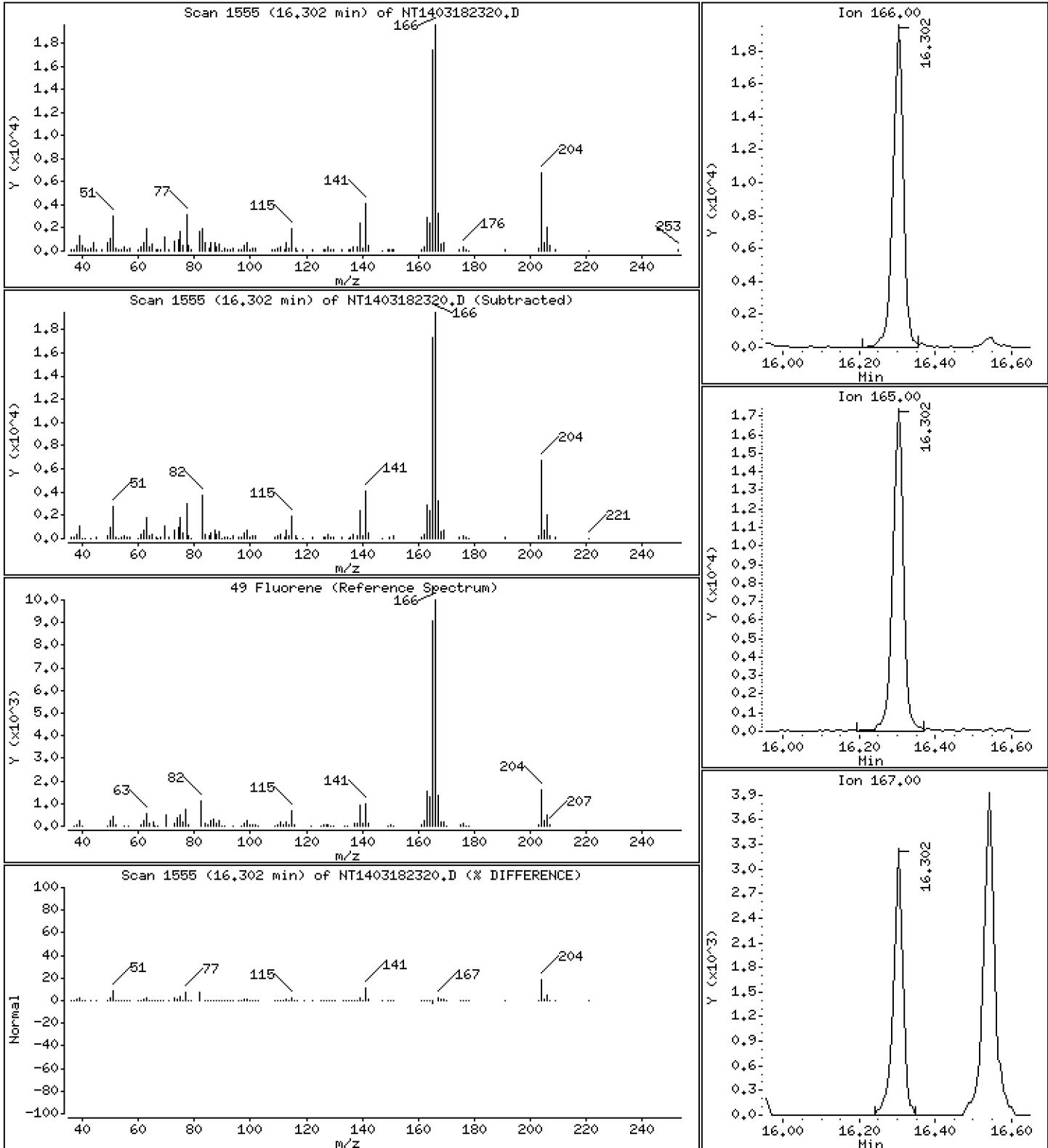
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.2030 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

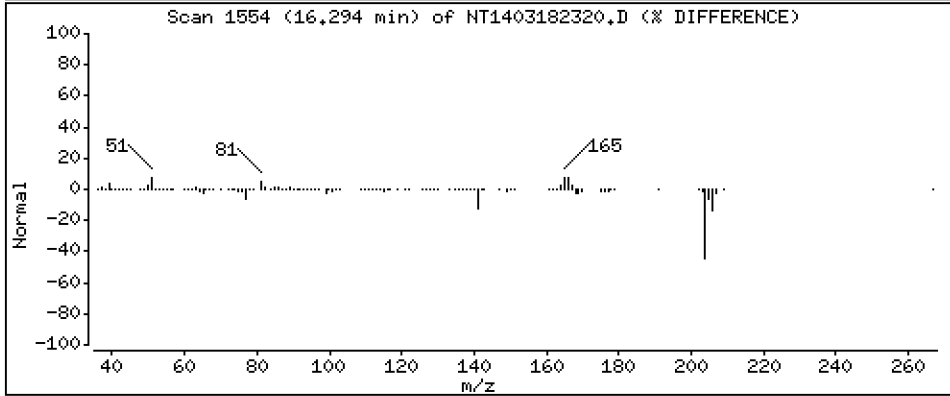
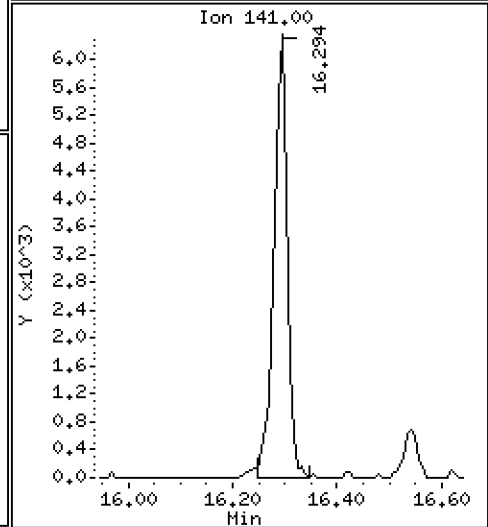
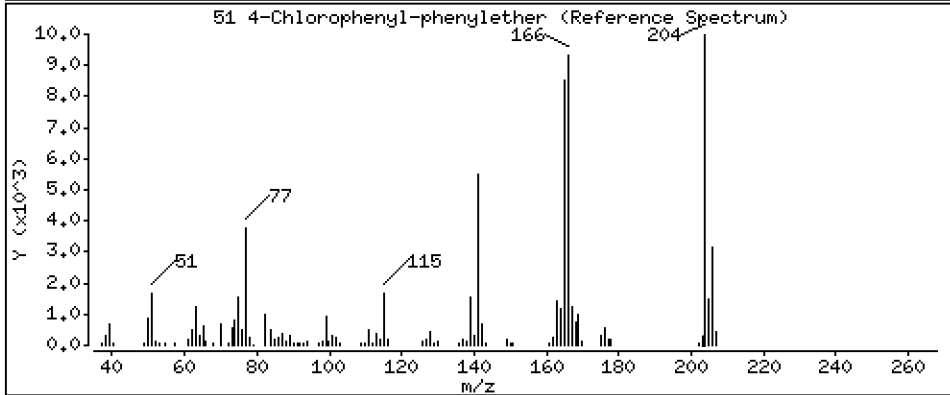
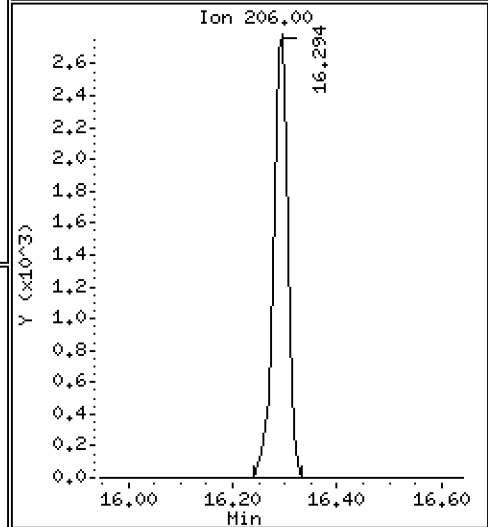
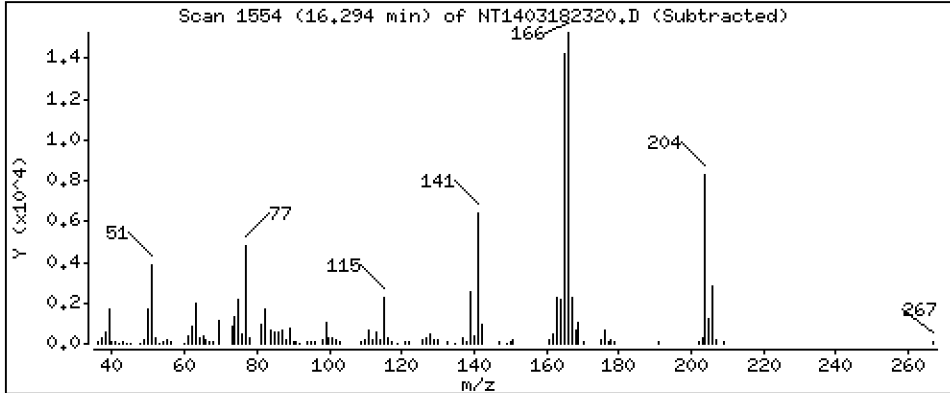
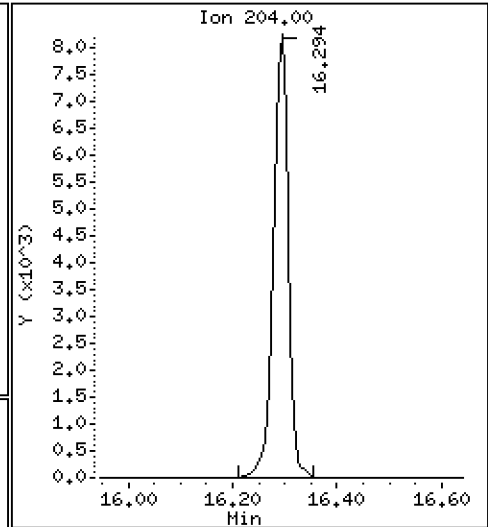
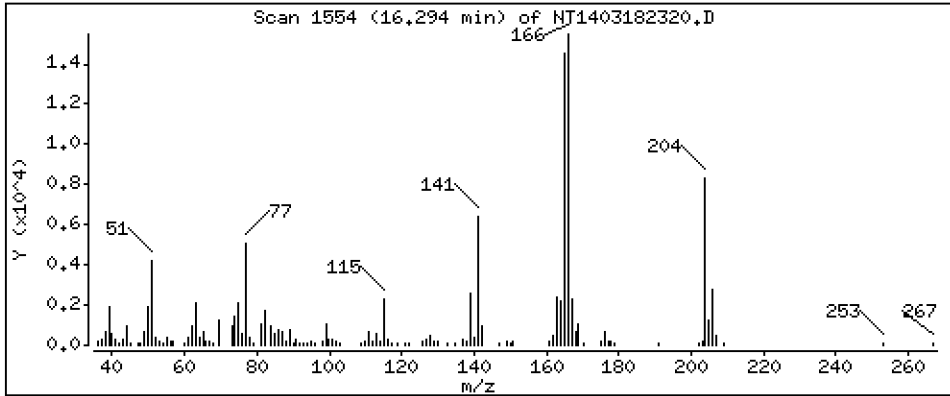
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2061 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

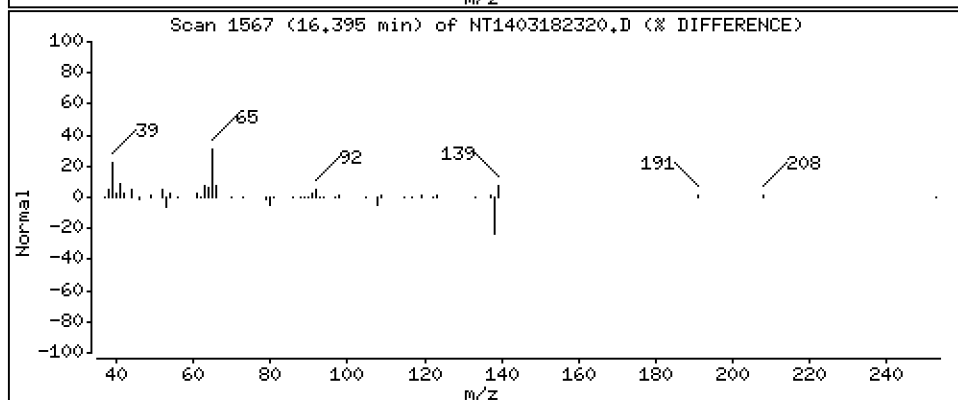
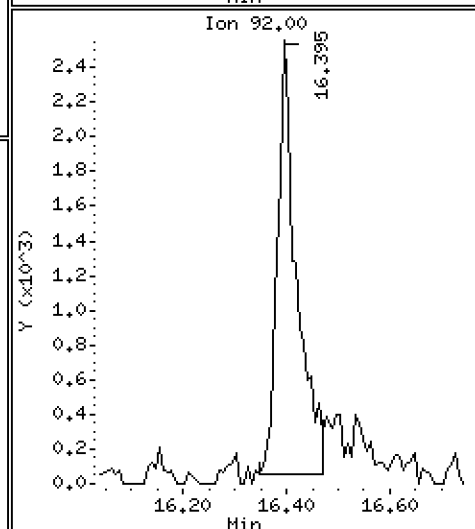
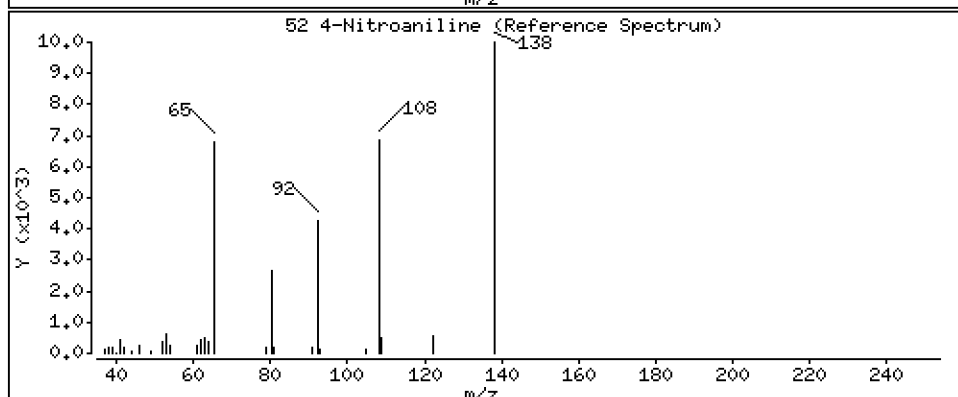
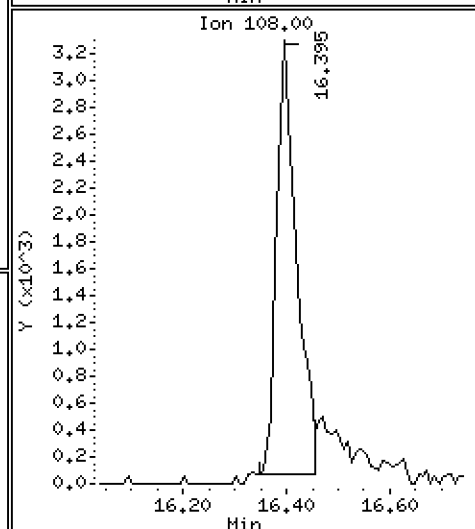
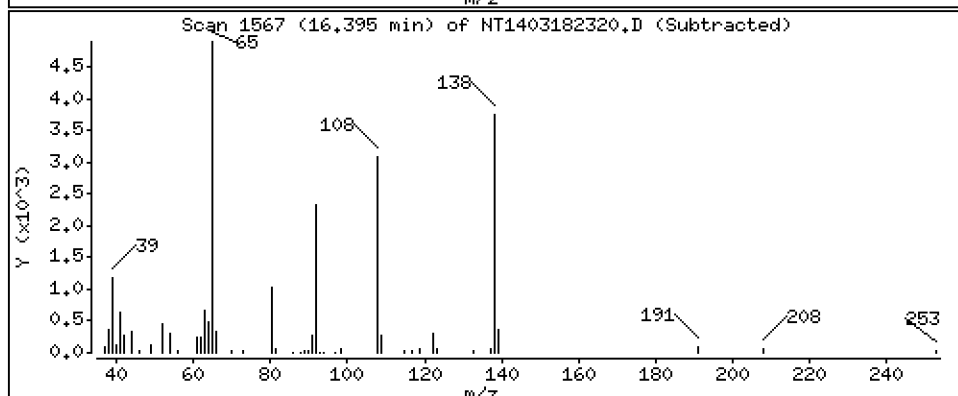
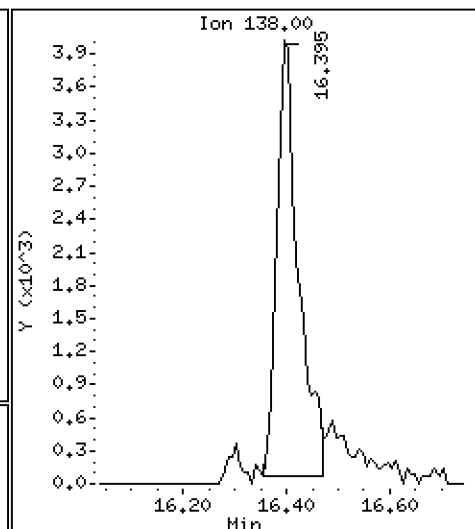
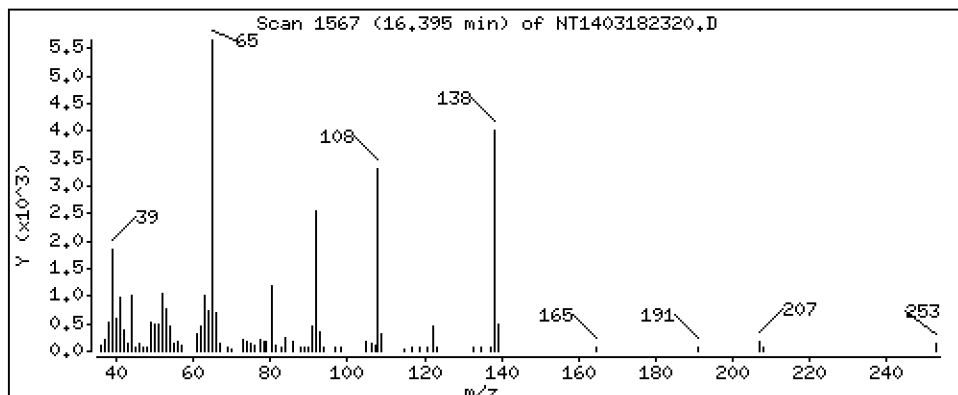
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 0,2532 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

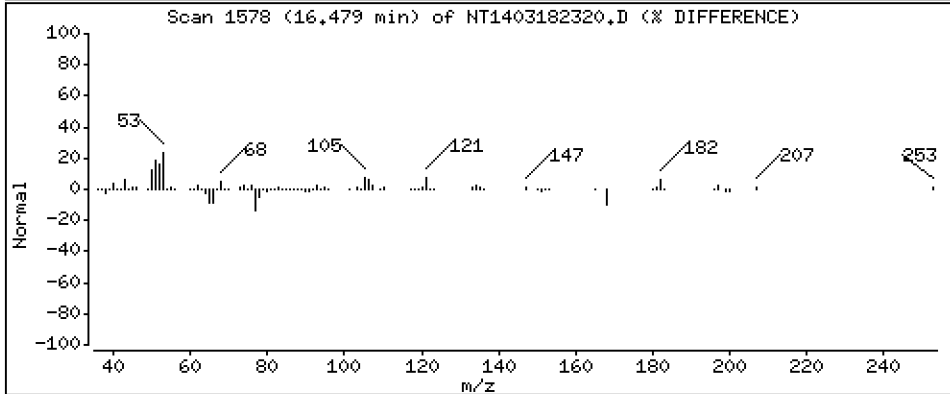
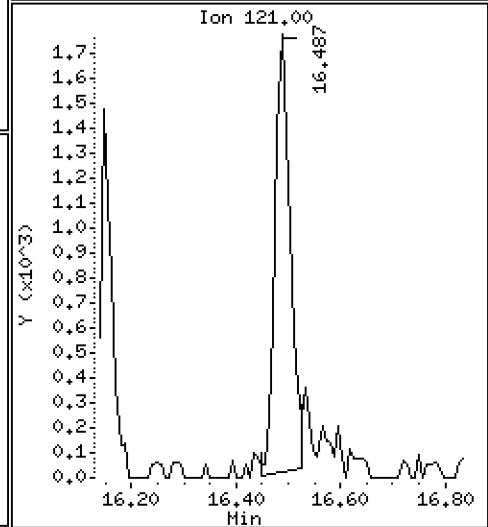
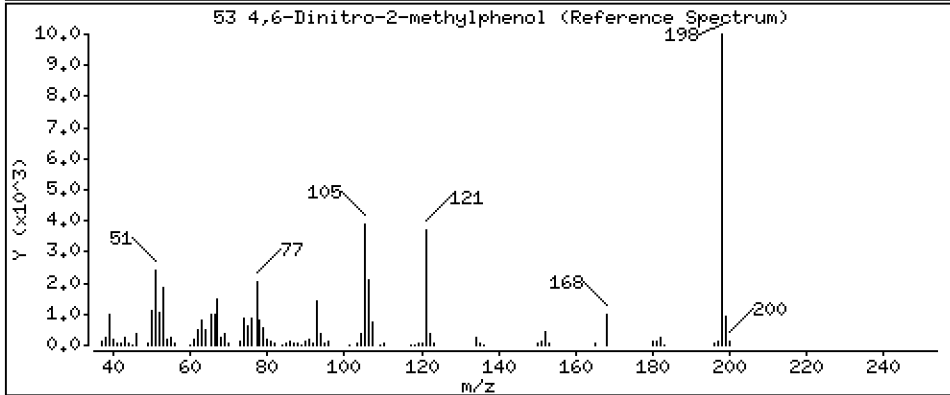
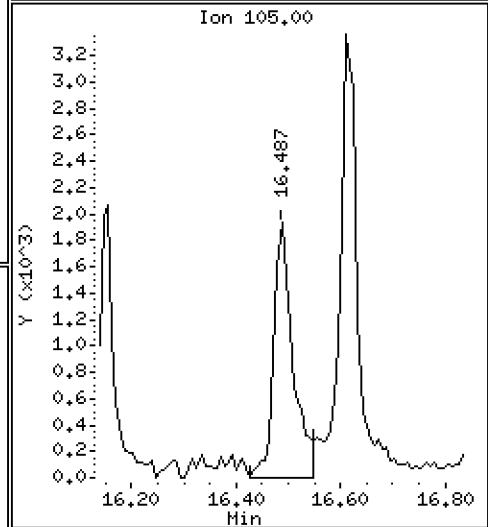
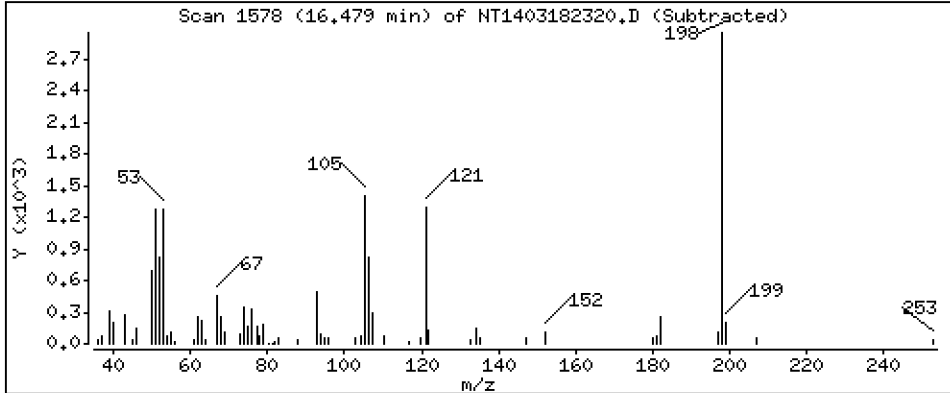
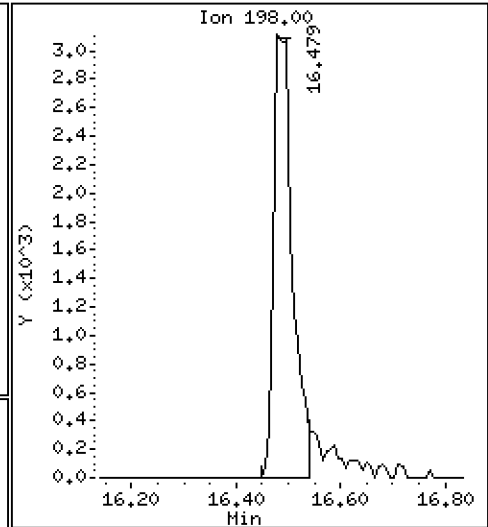
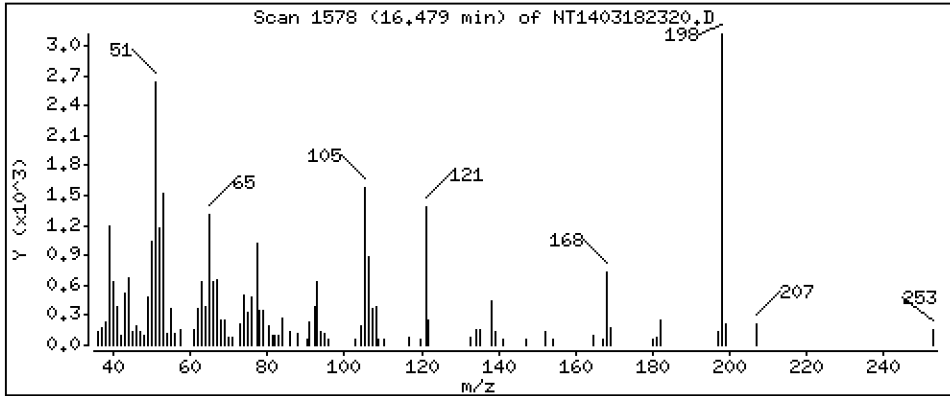
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2578 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

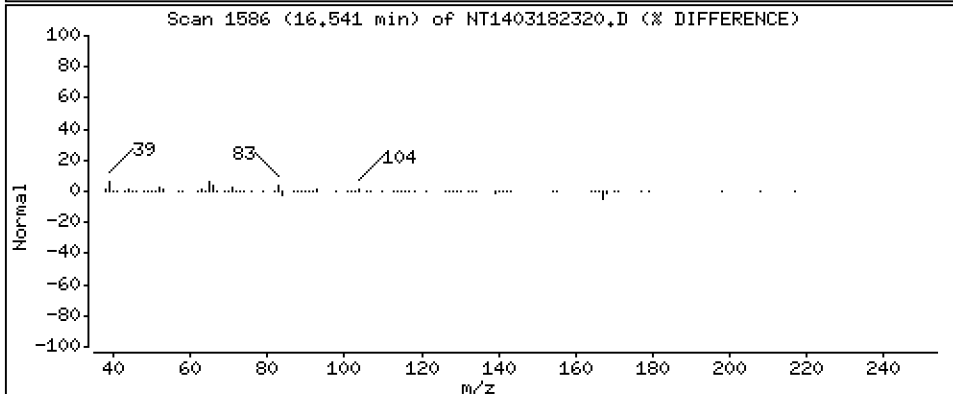
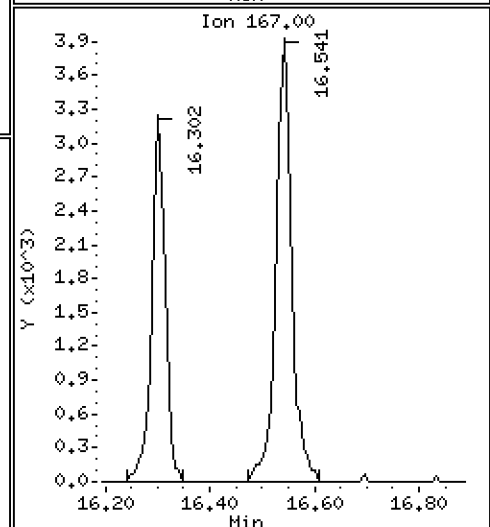
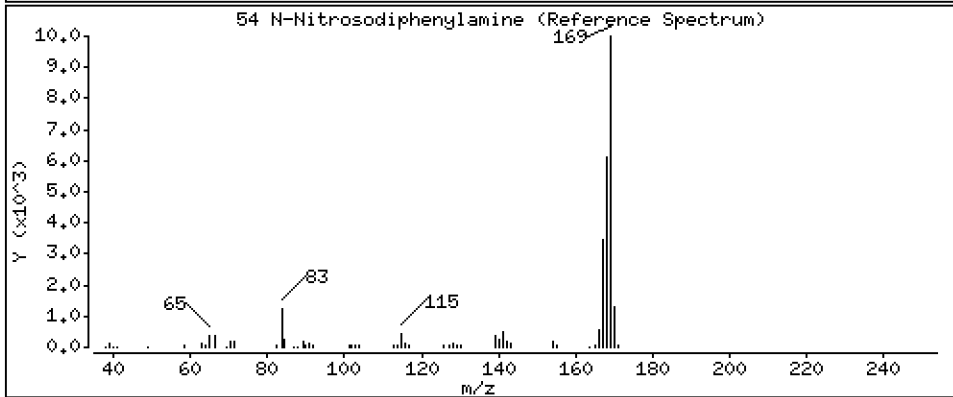
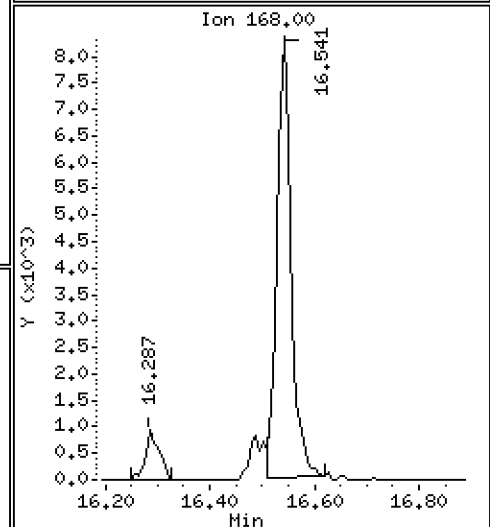
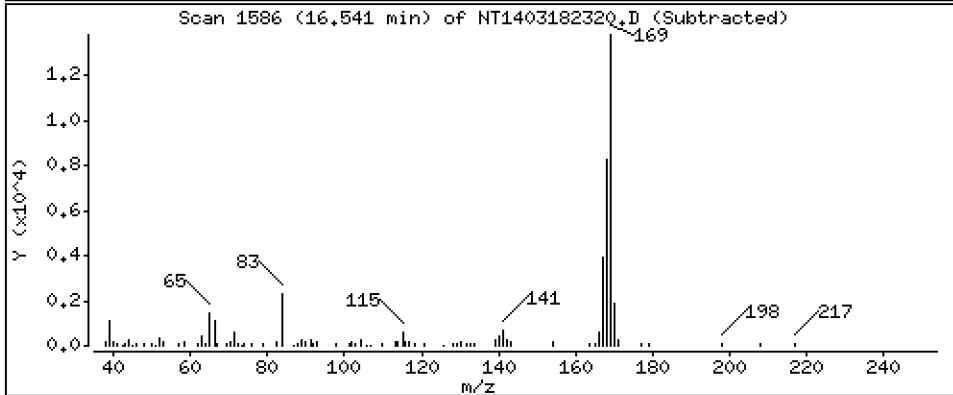
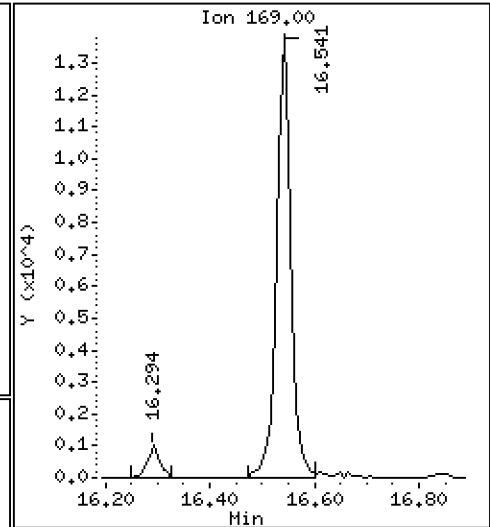
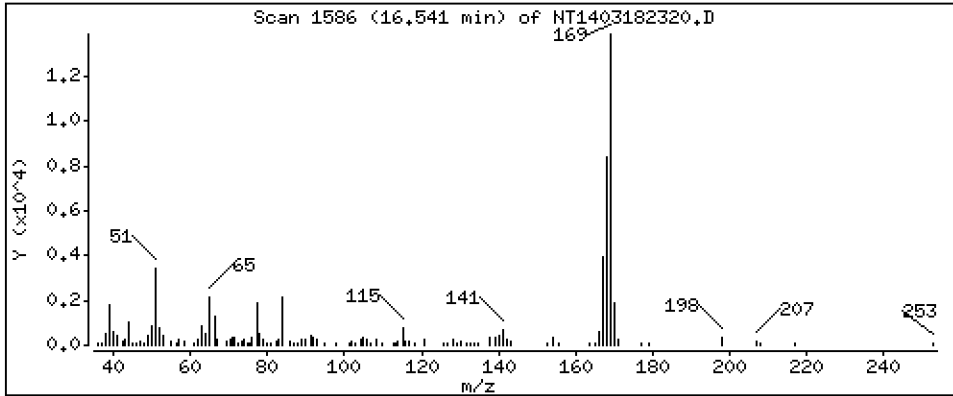
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,2130 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

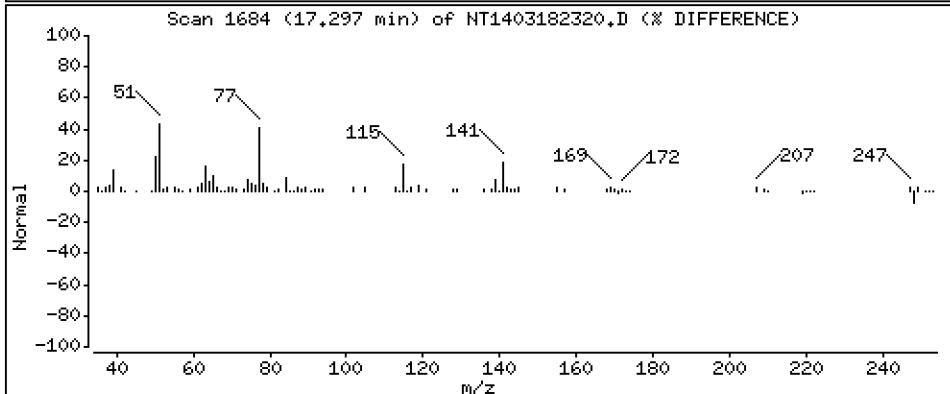
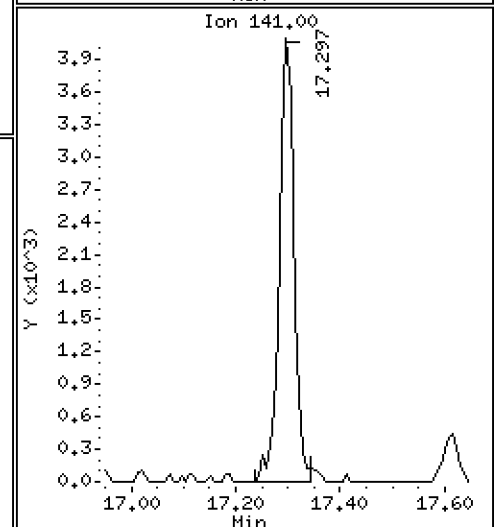
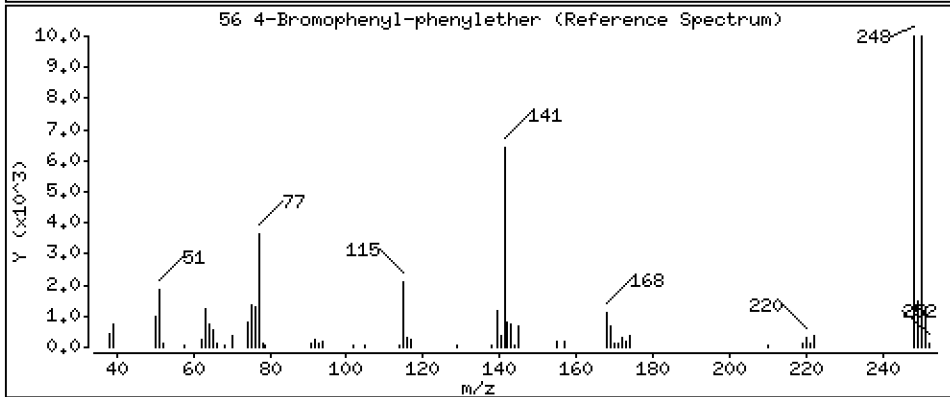
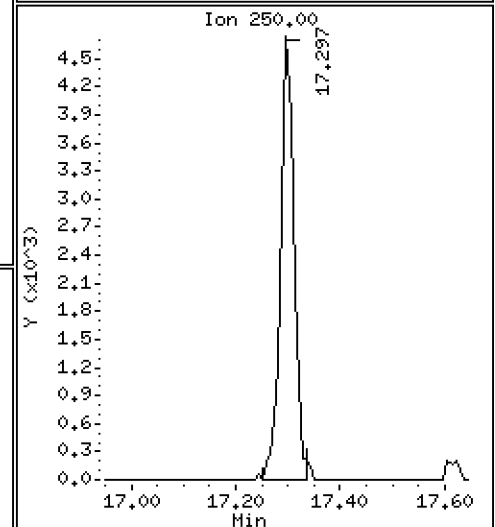
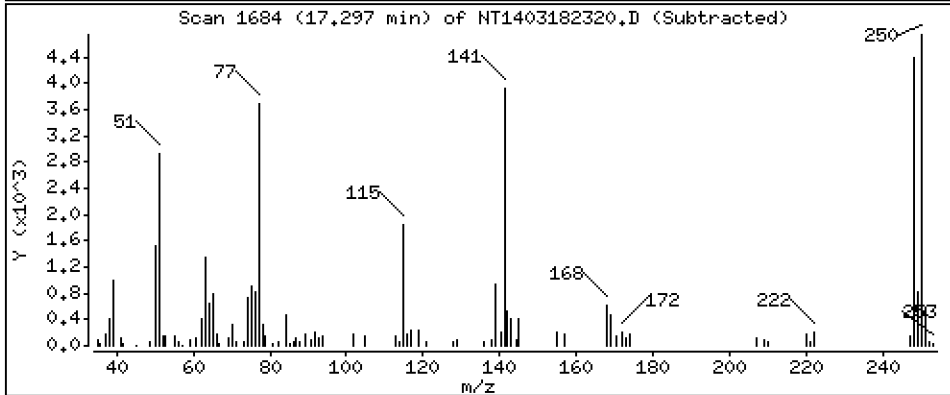
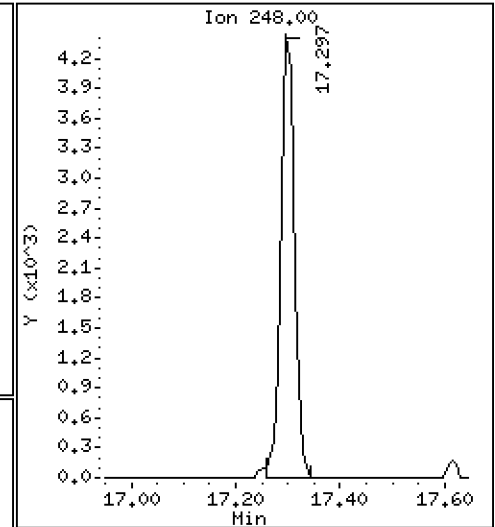
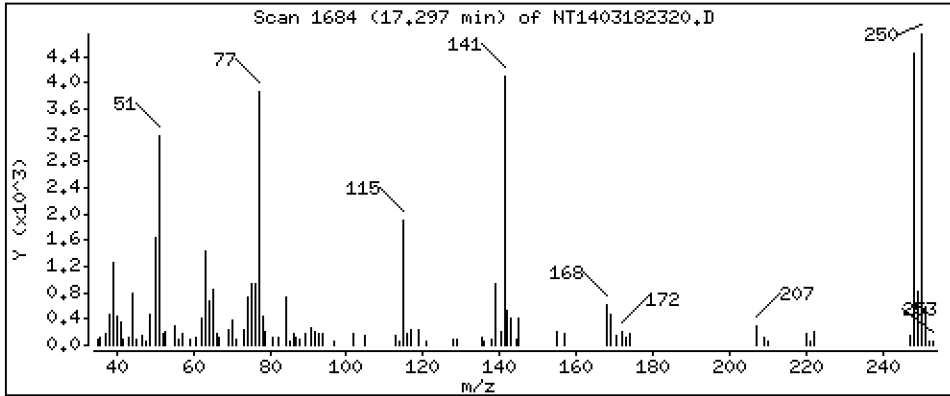
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1930 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

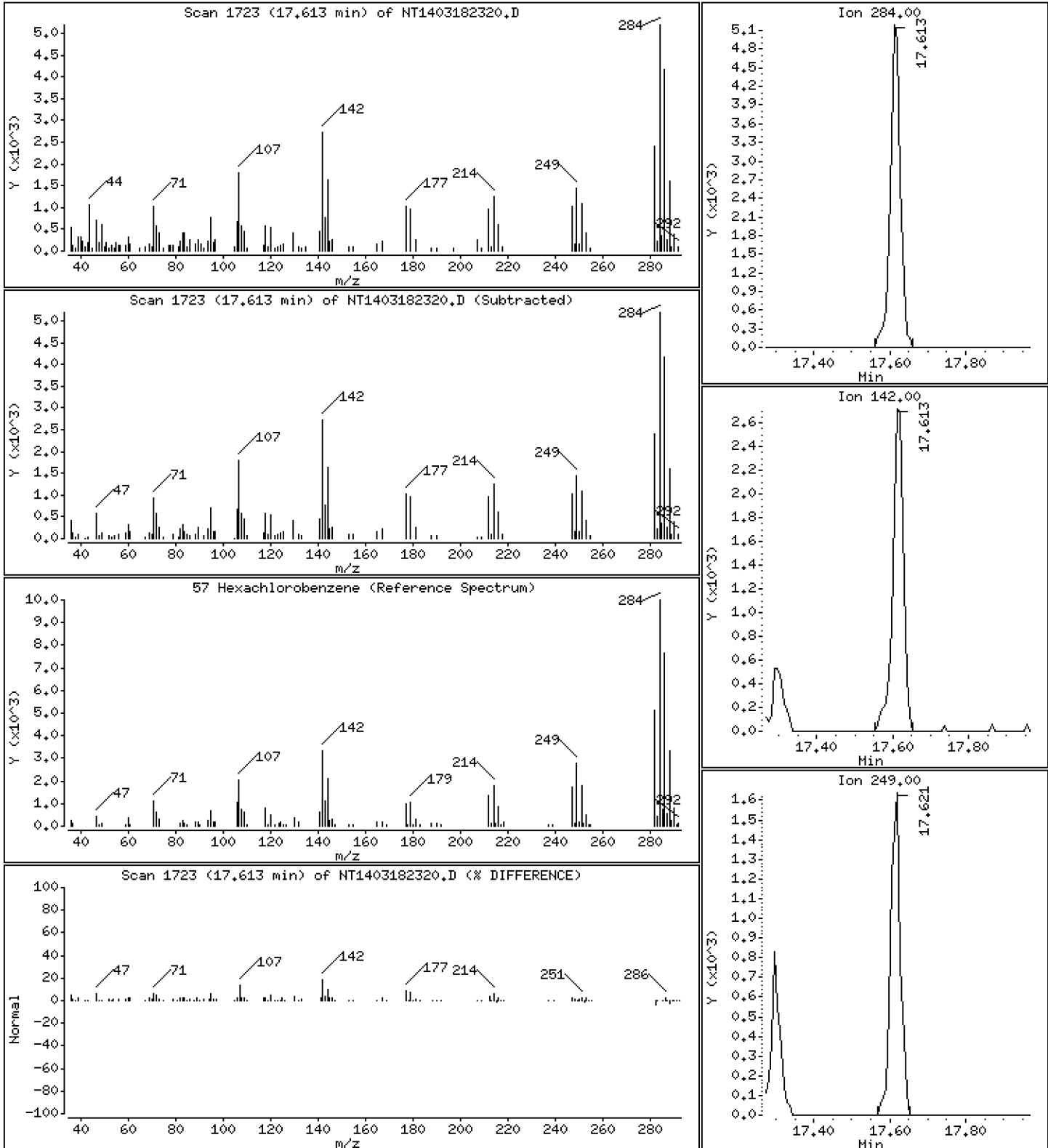
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2326 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

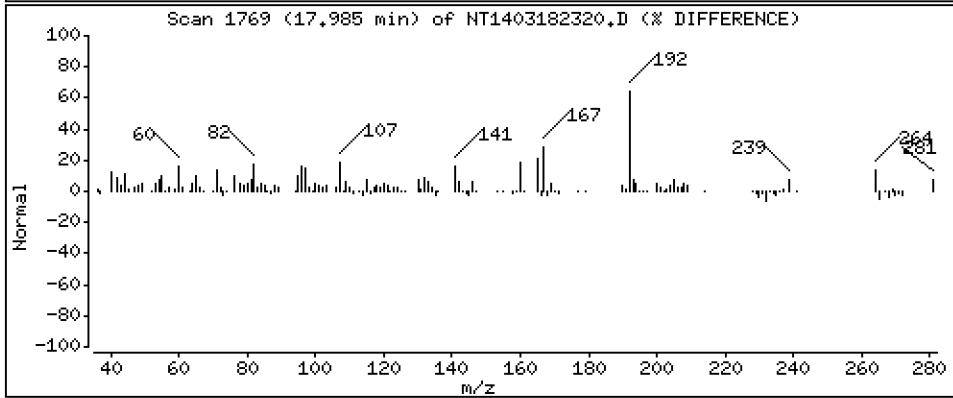
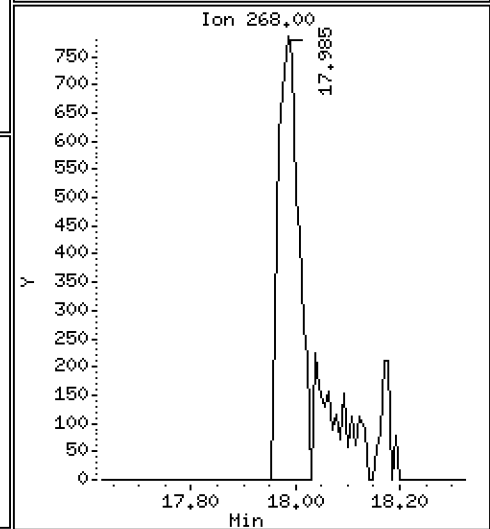
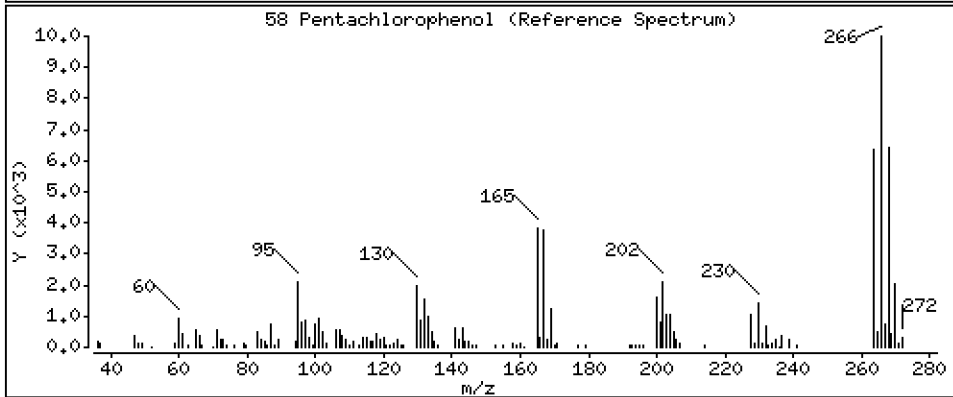
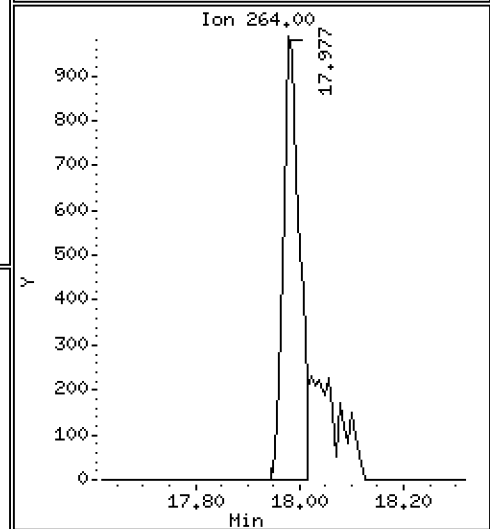
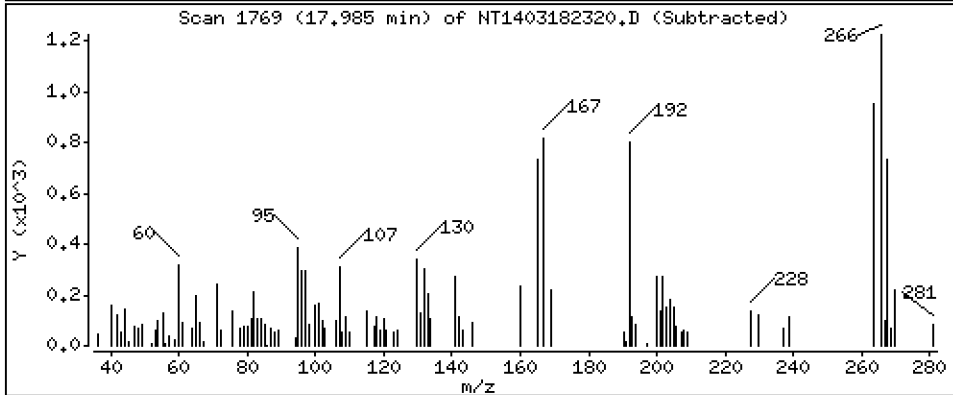
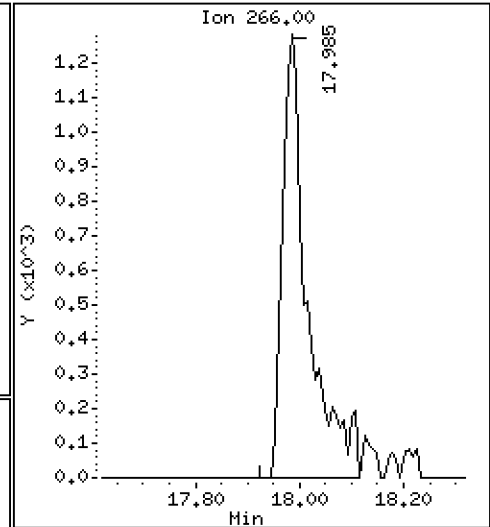
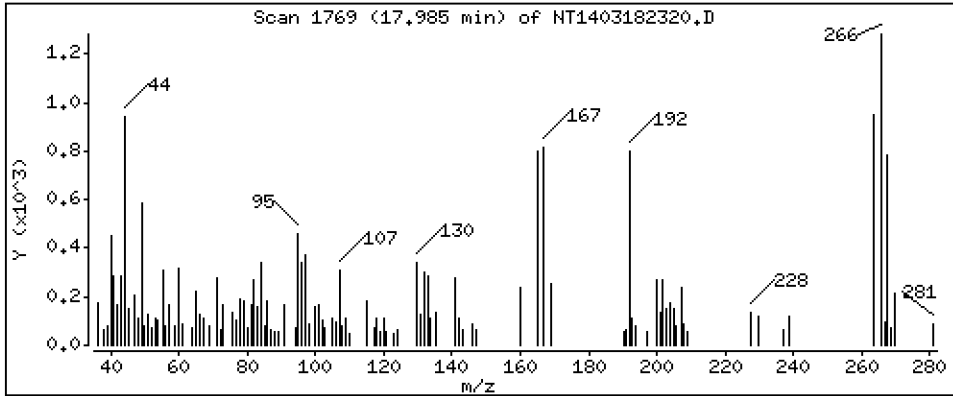
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

58 Pentachlorophenol

Concentration: 0.1516 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

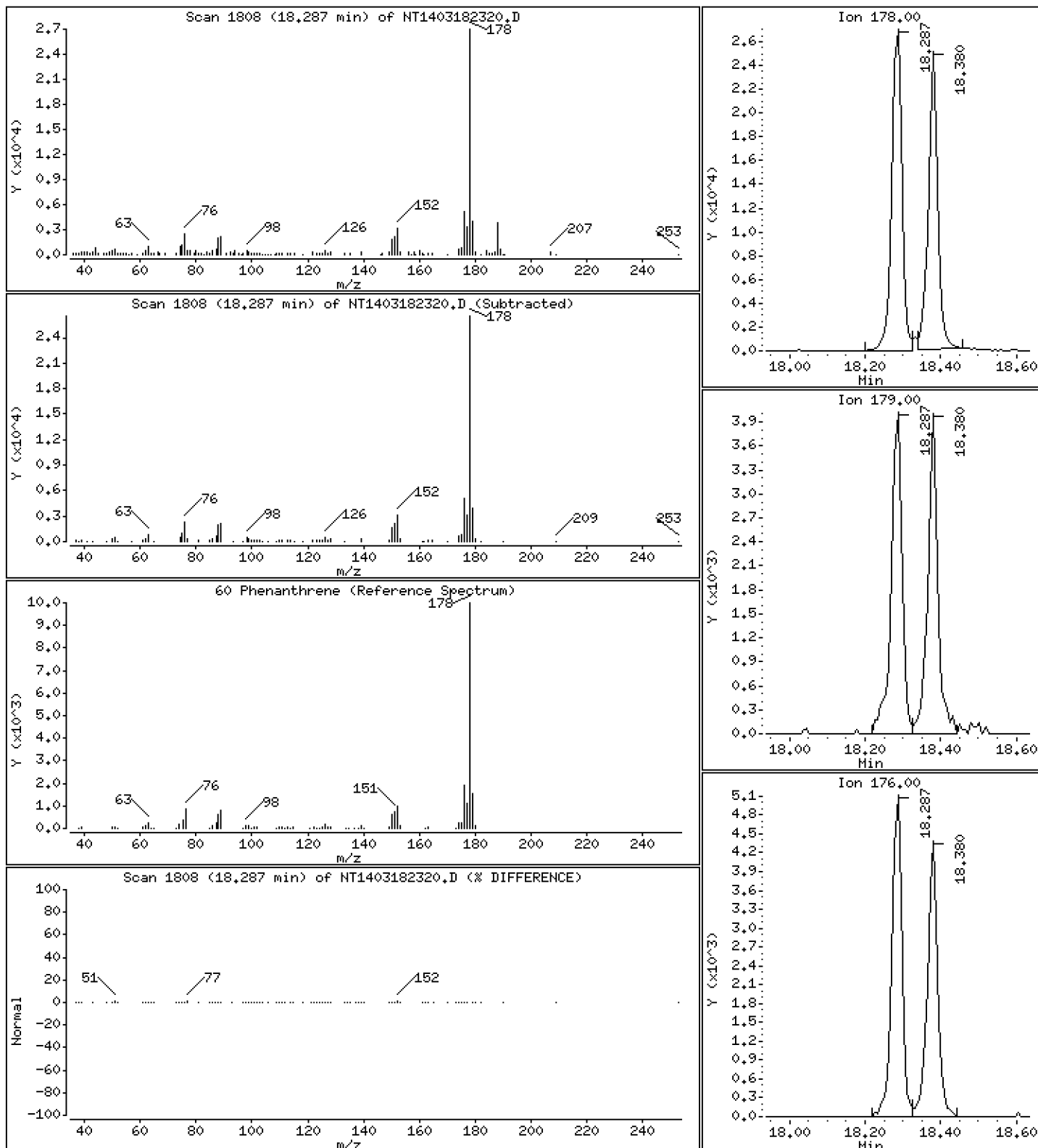
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1990 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

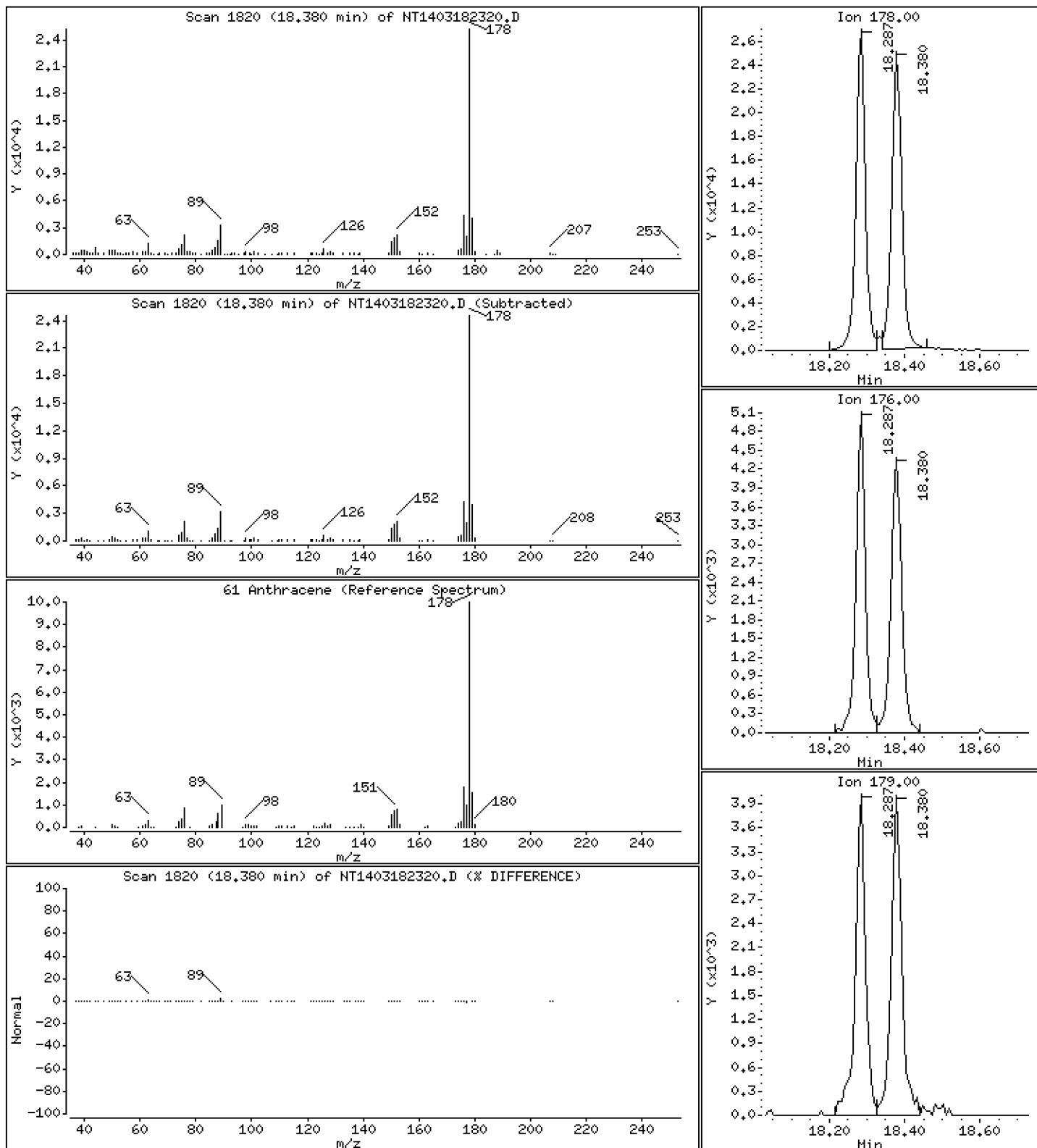
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1873 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

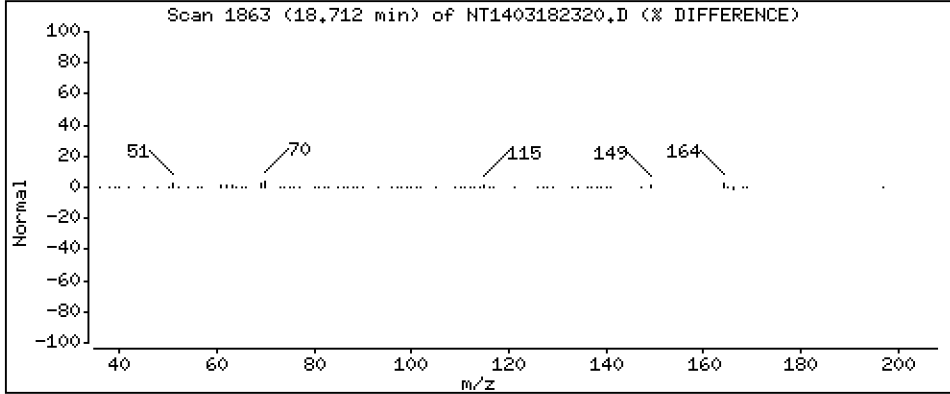
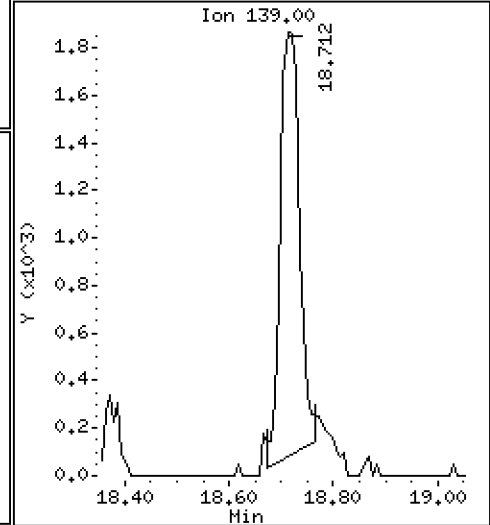
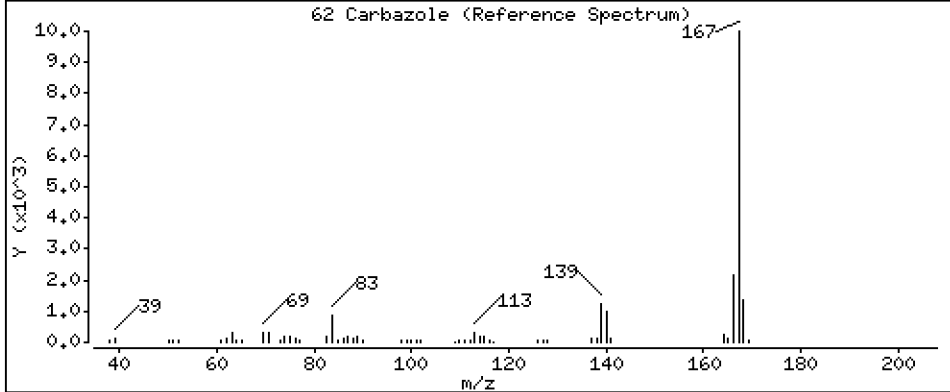
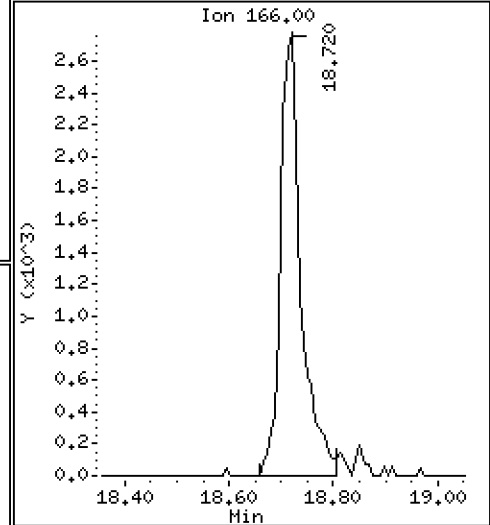
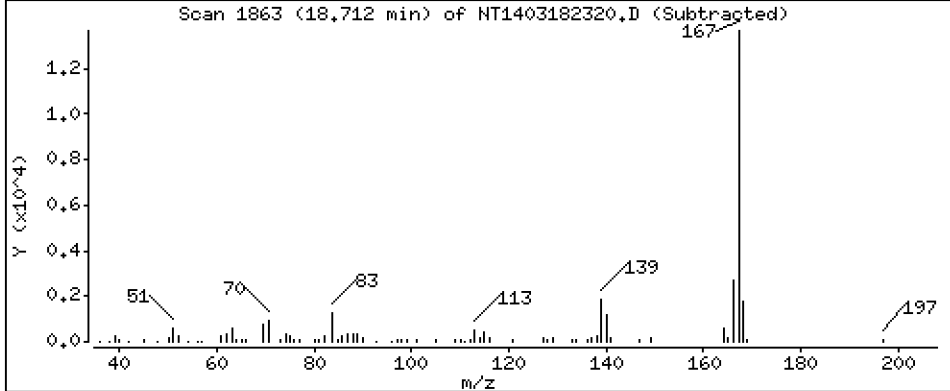
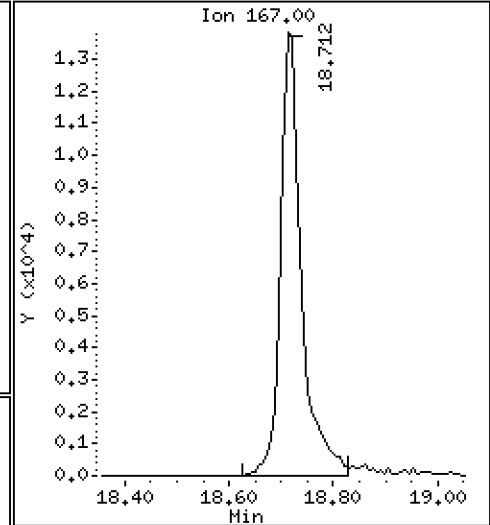
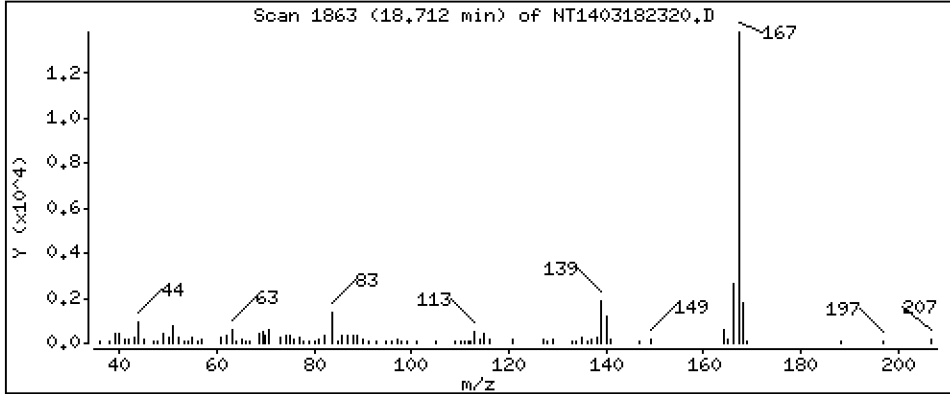
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1801 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

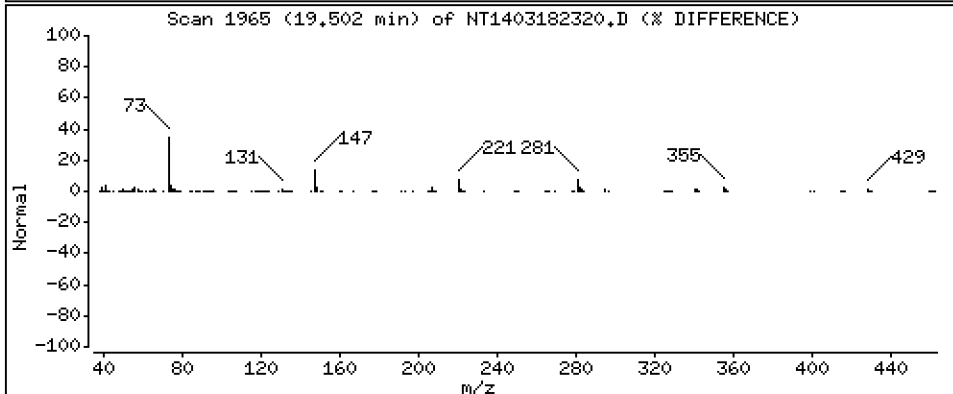
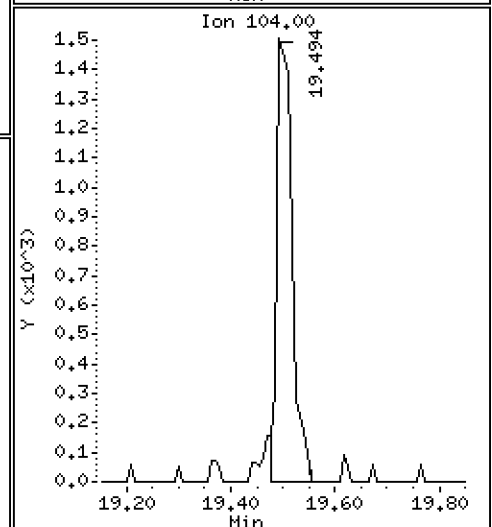
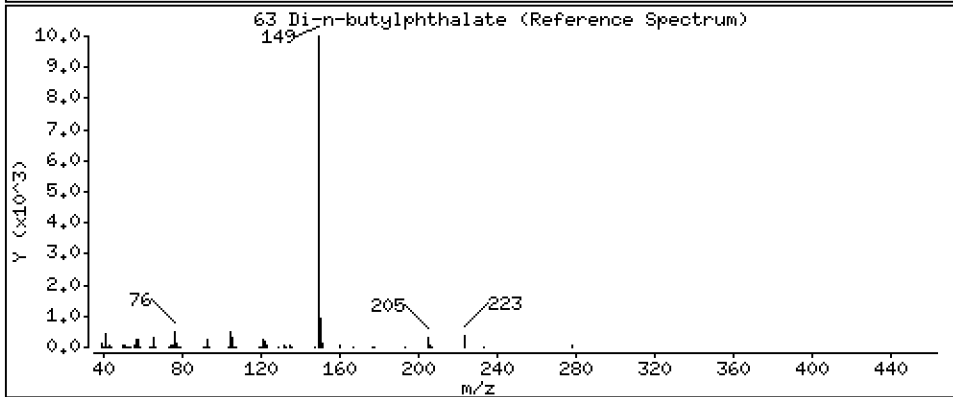
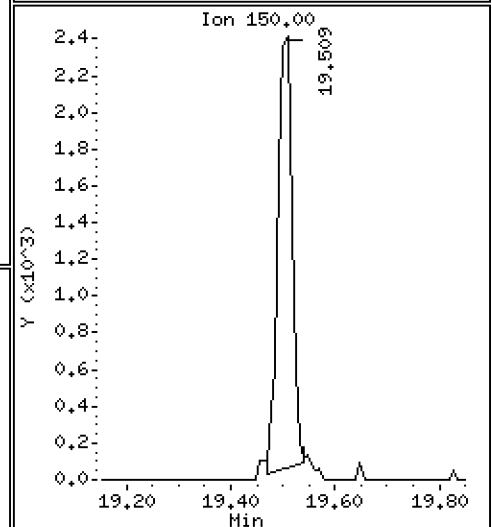
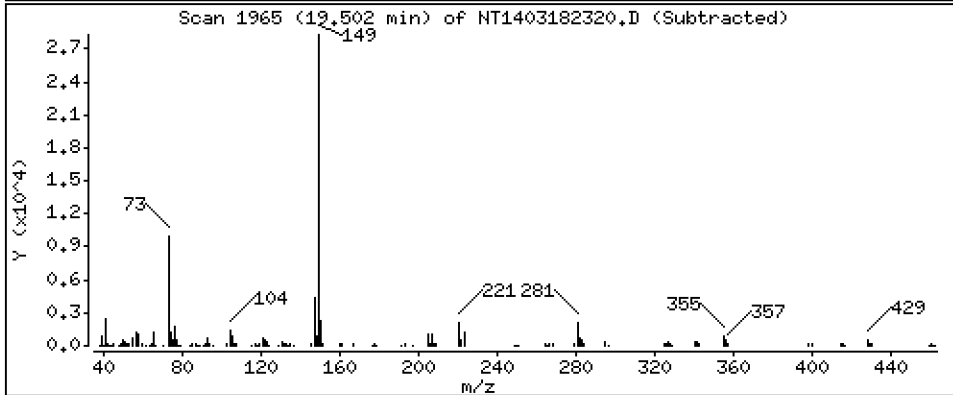
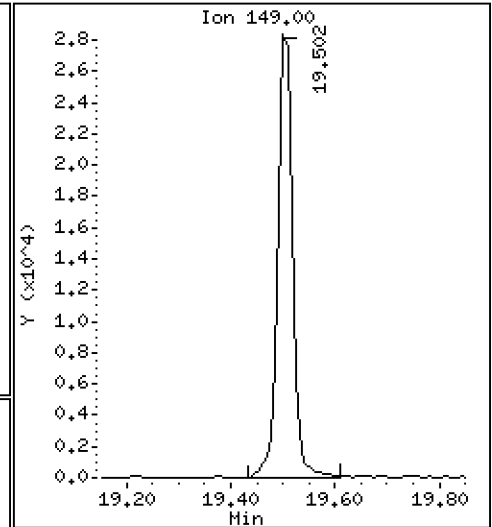
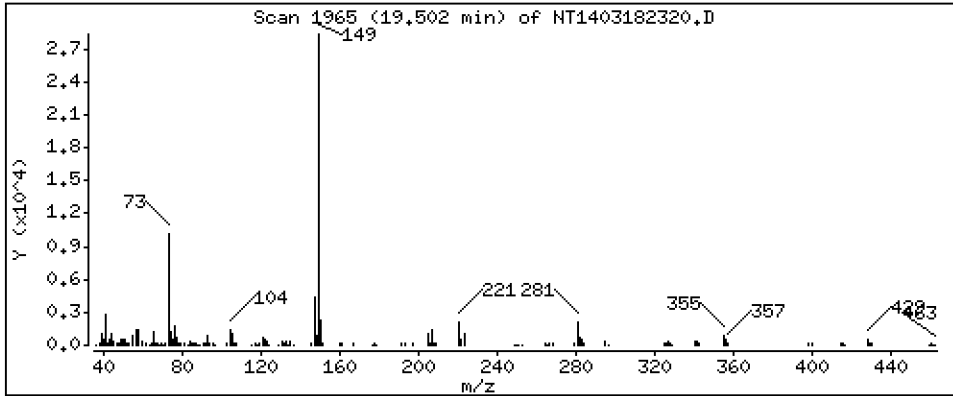
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,2032 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

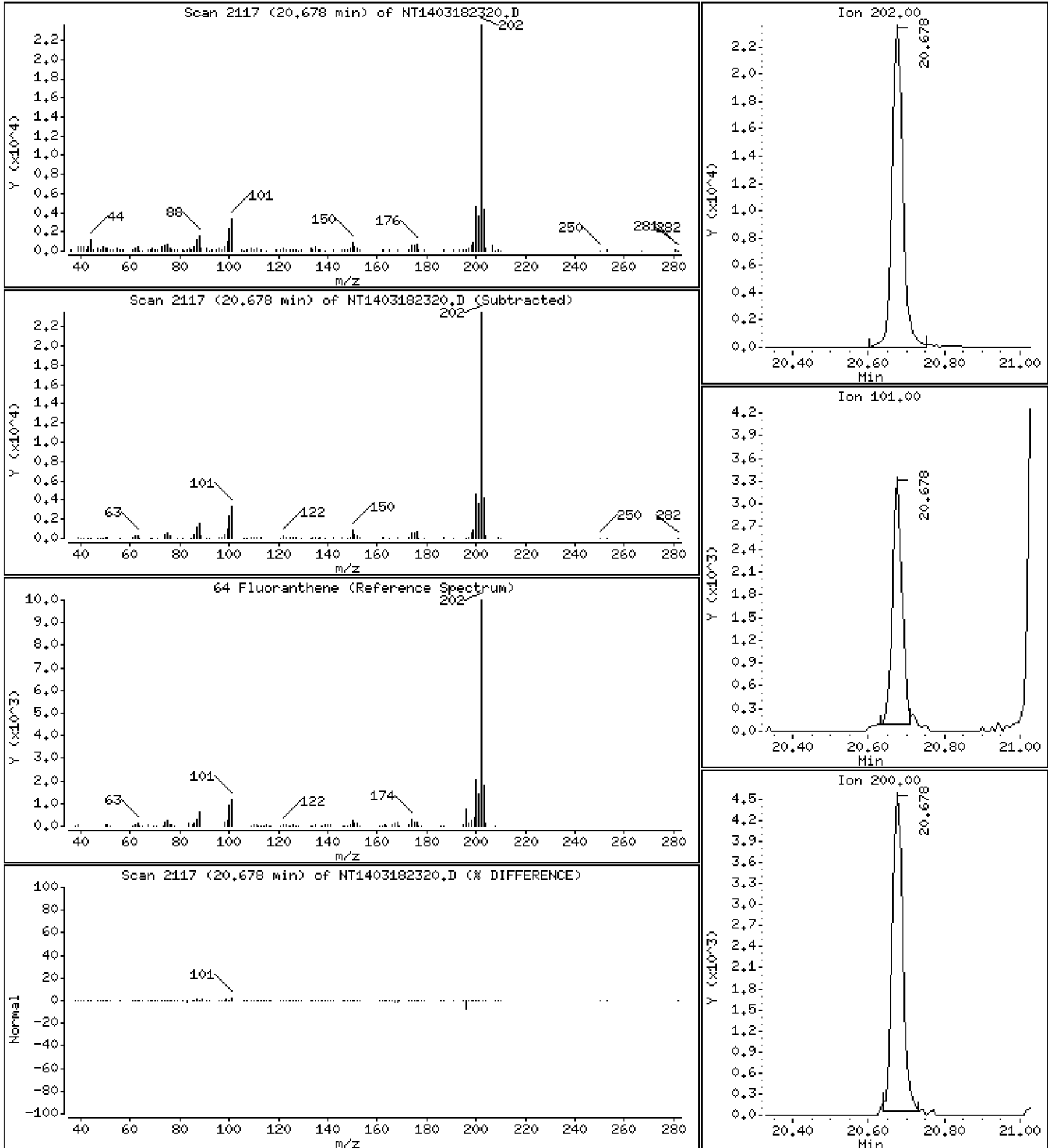
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,2459 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

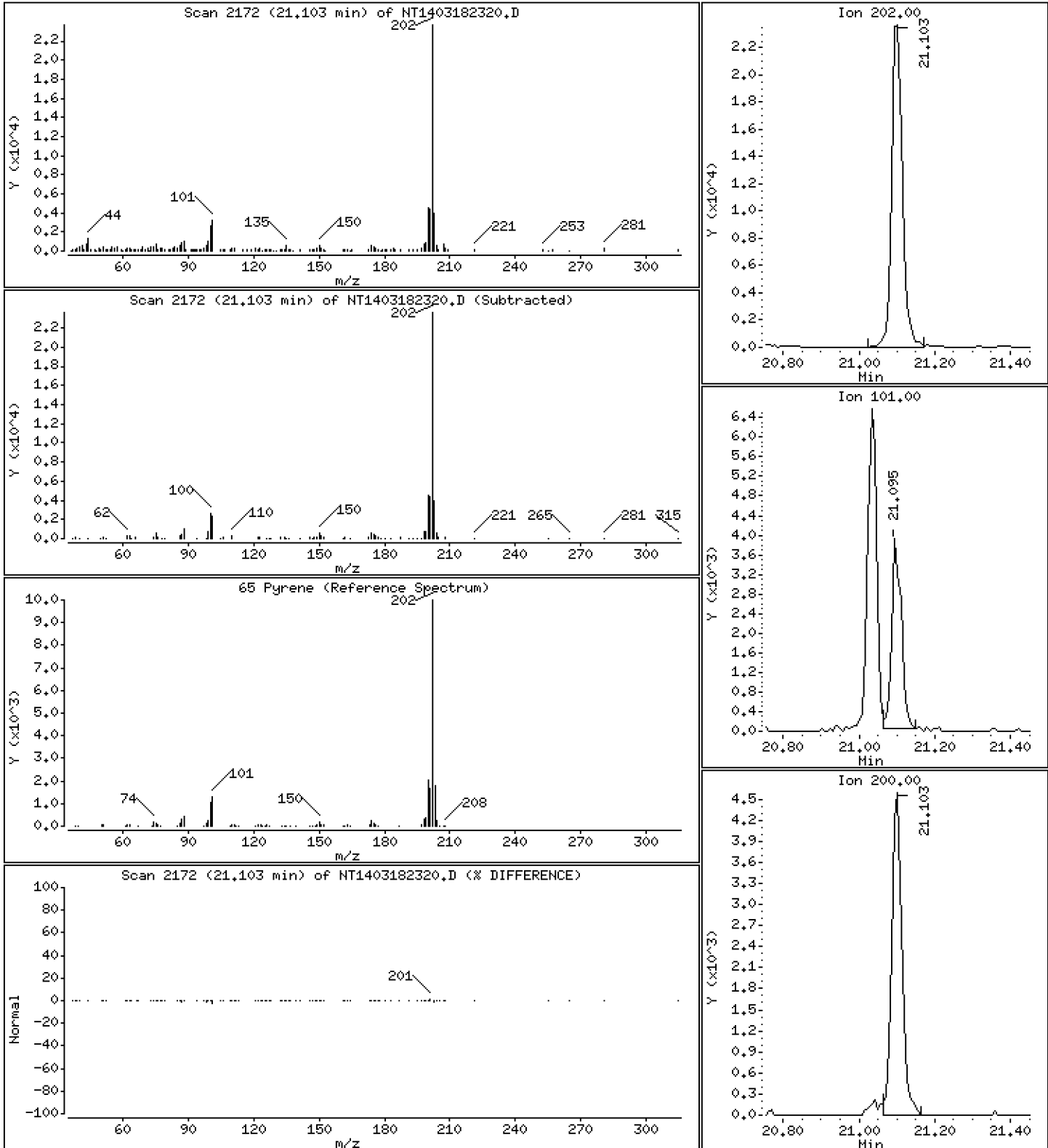
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,2411 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

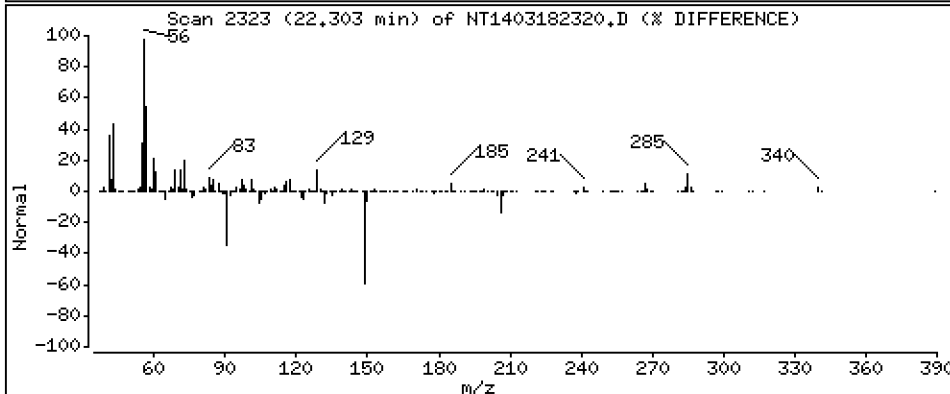
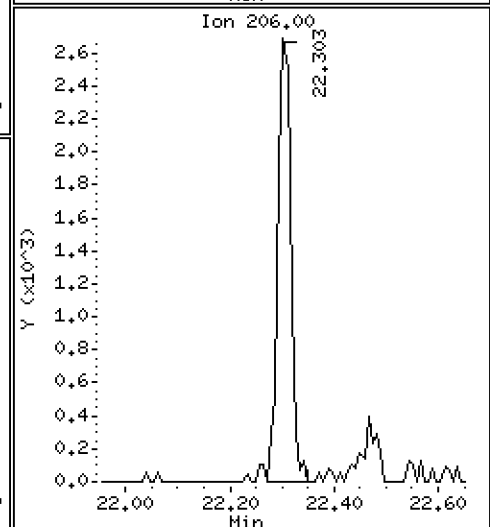
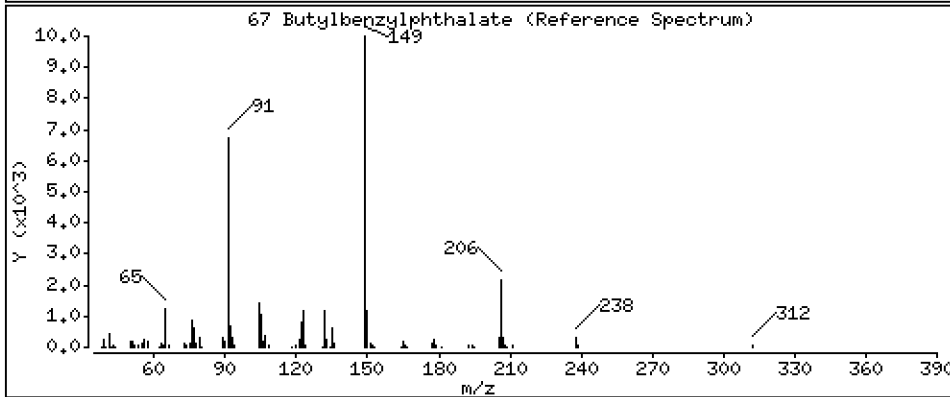
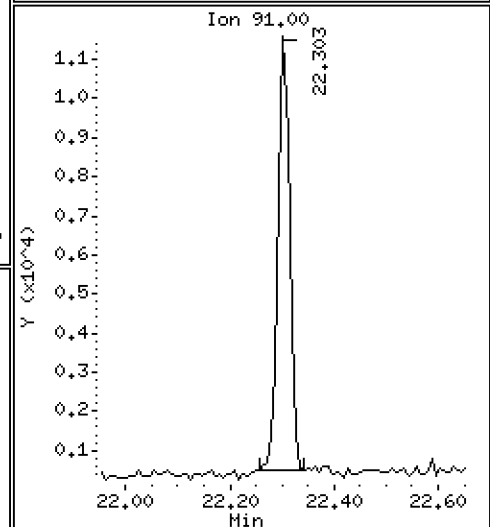
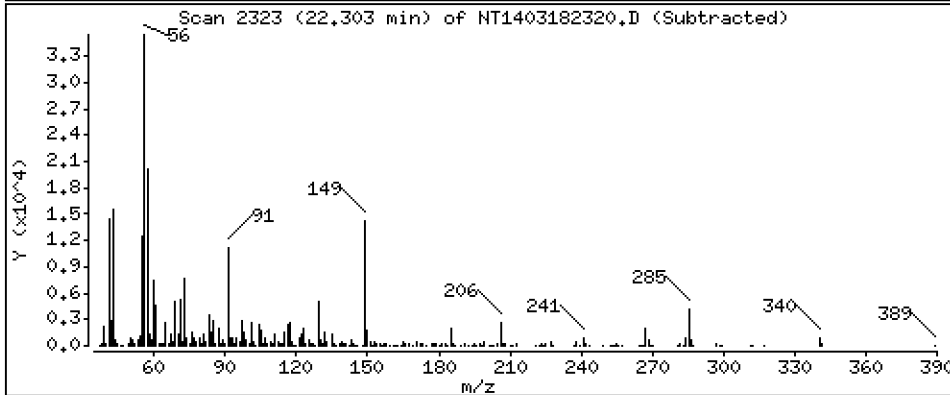
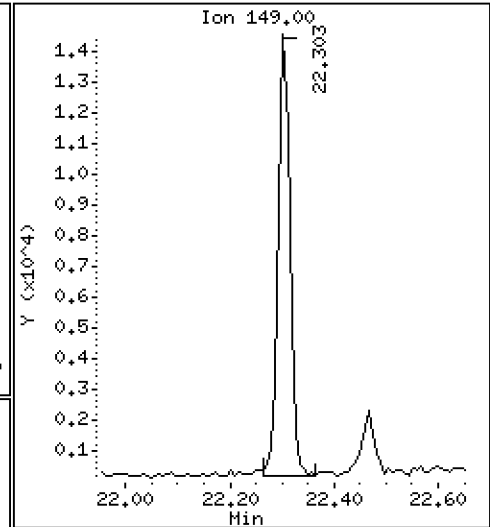
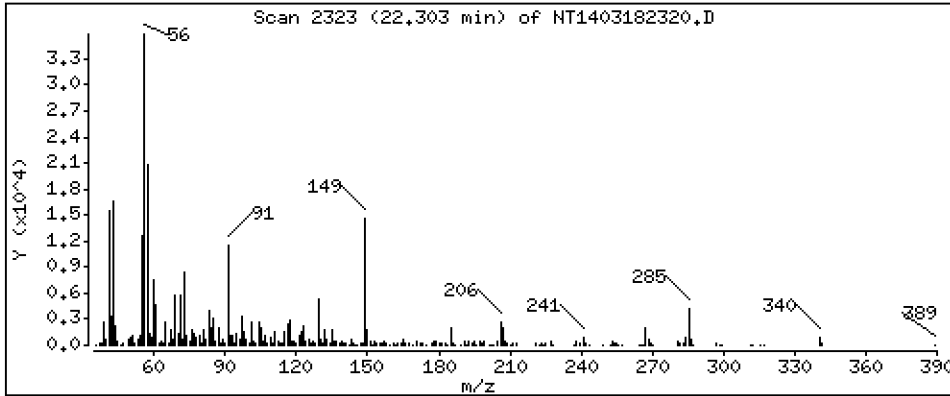
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.2626 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

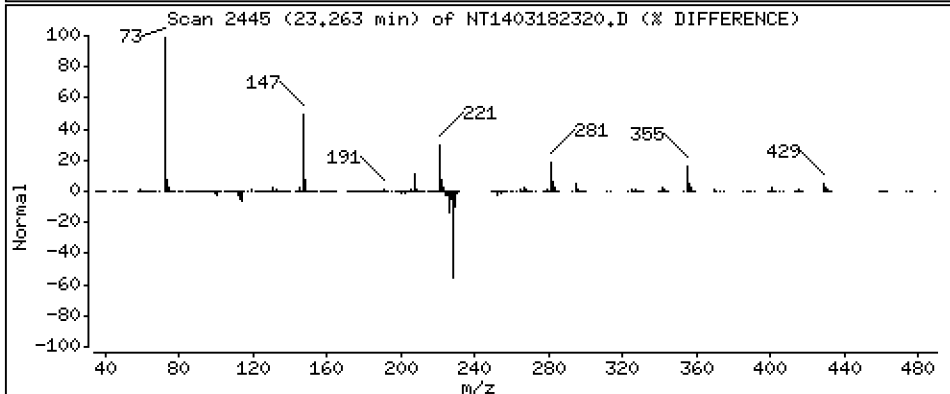
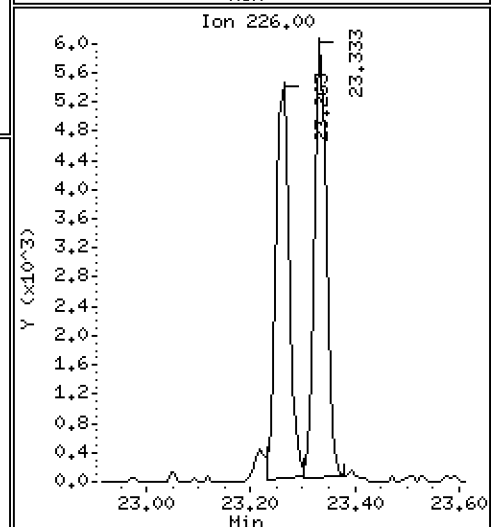
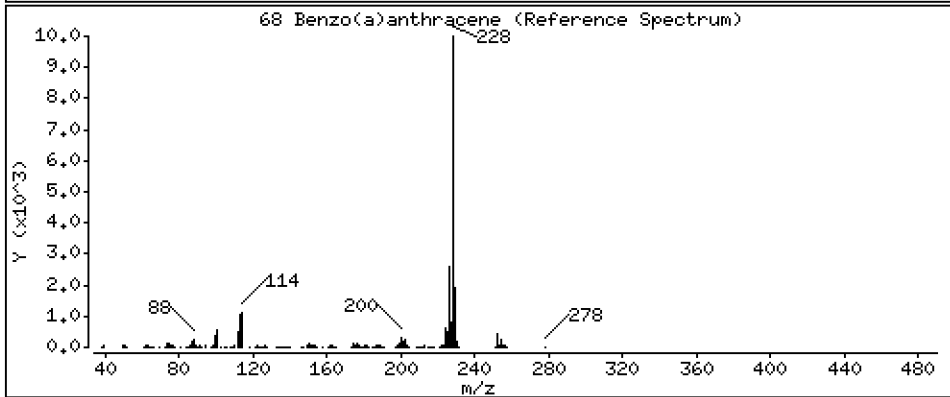
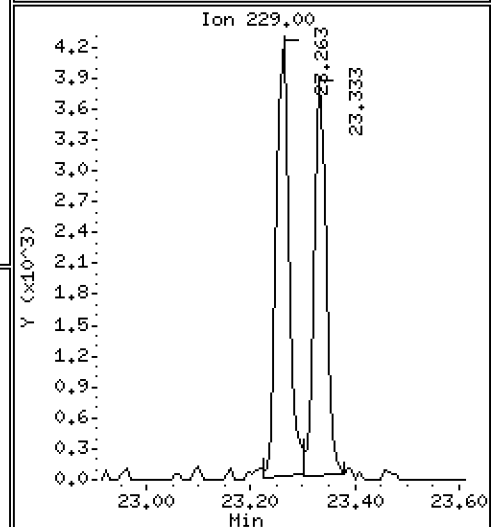
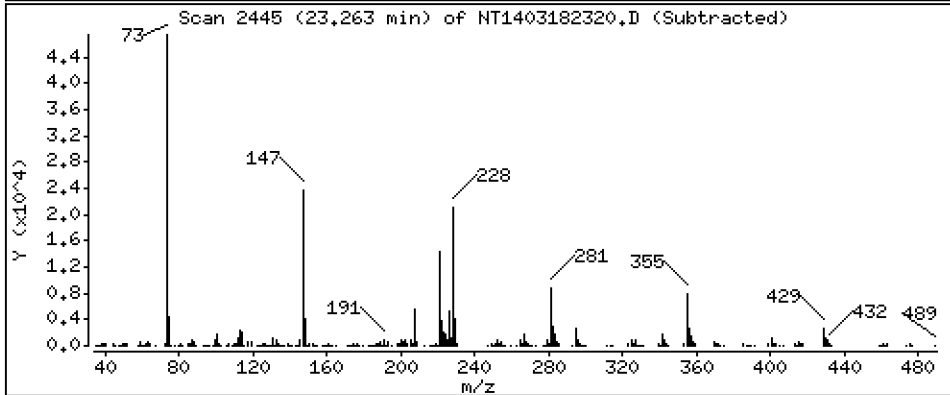
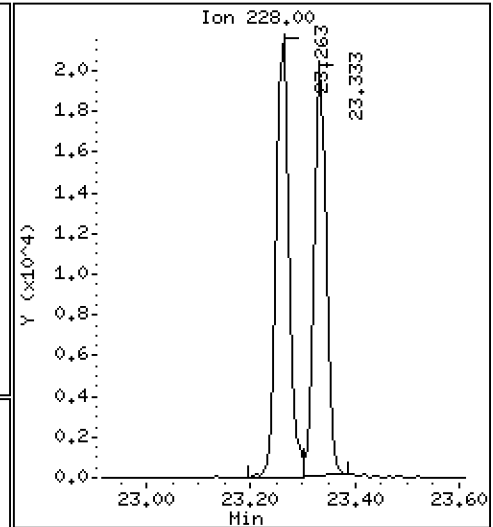
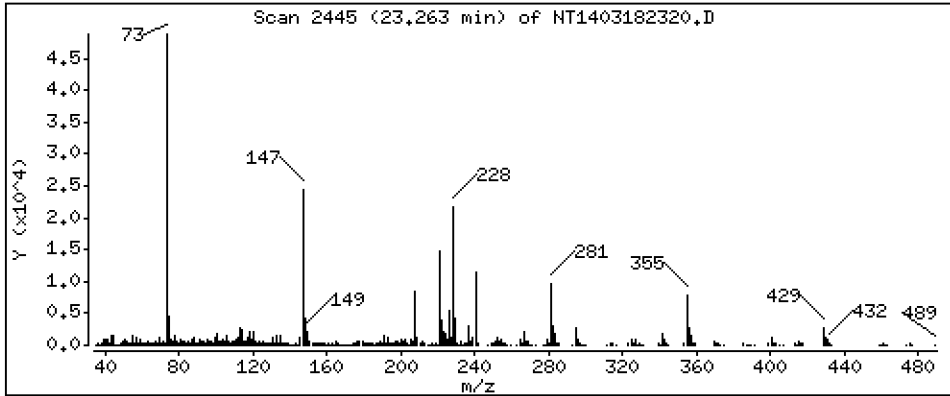
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,2153 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

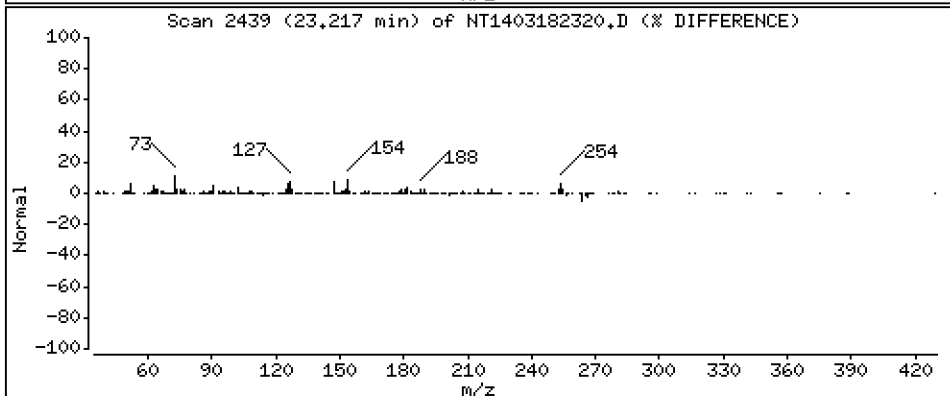
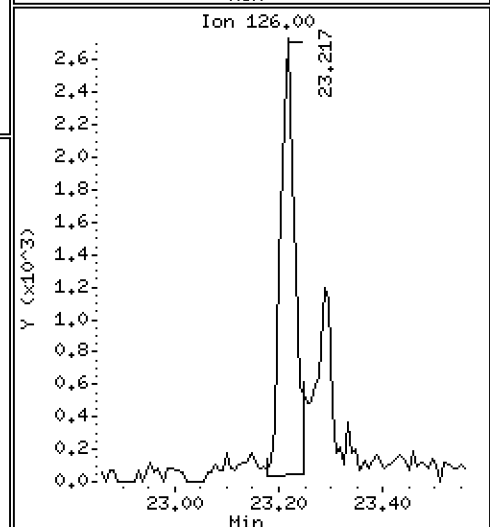
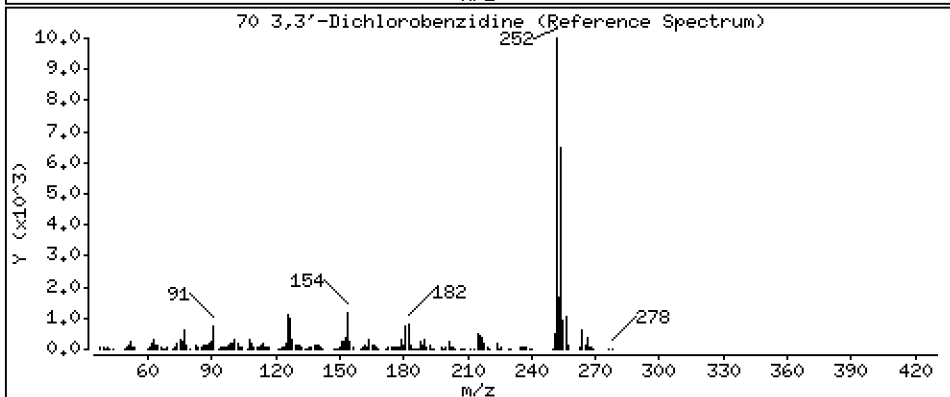
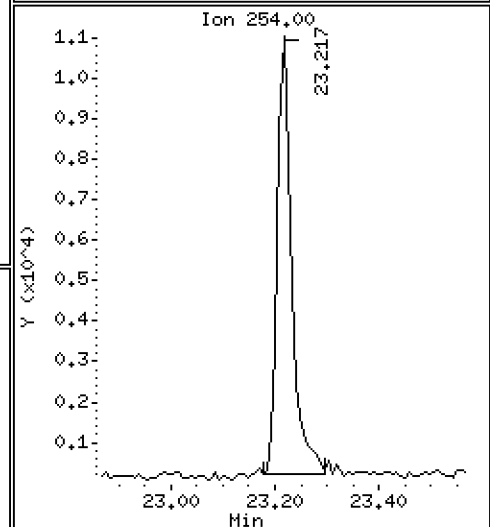
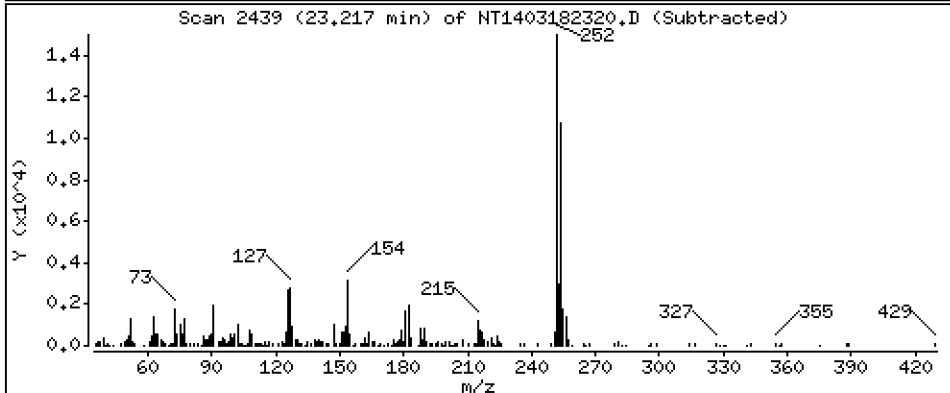
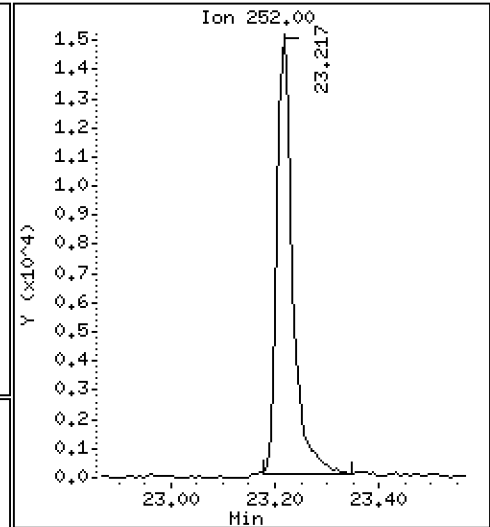
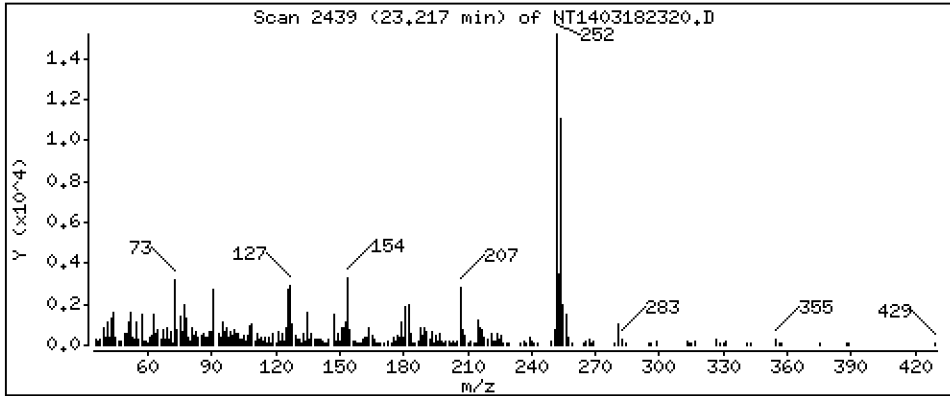
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,6487 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

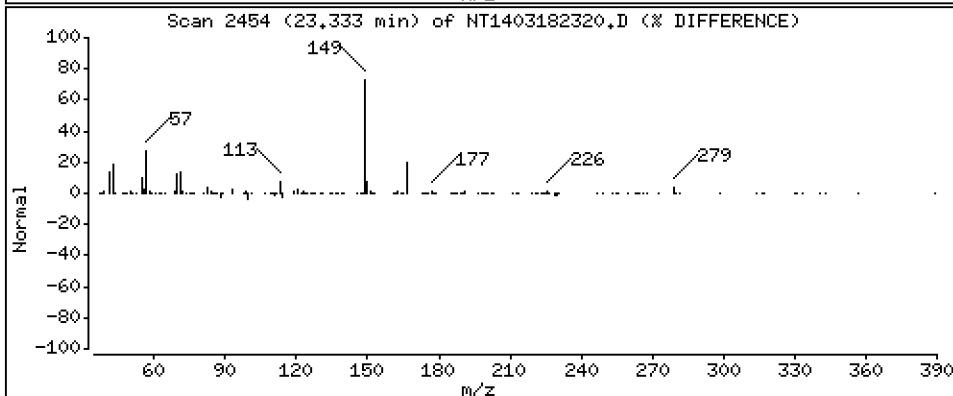
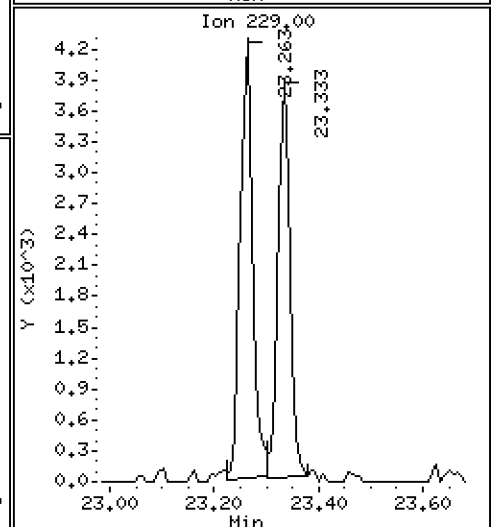
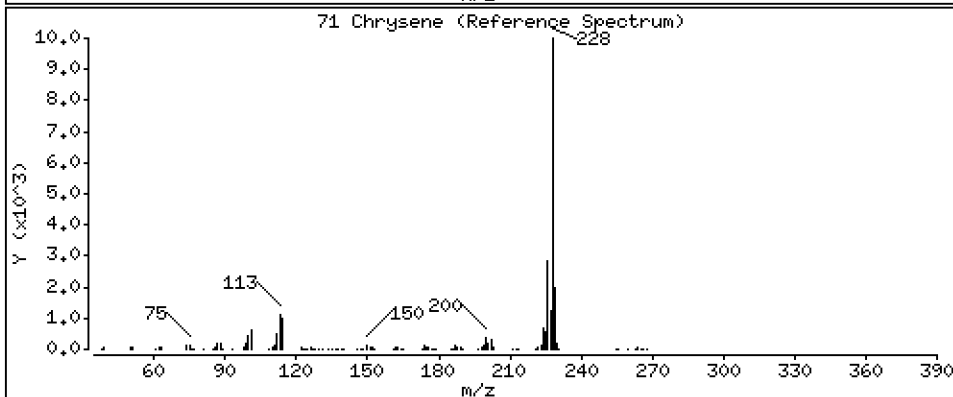
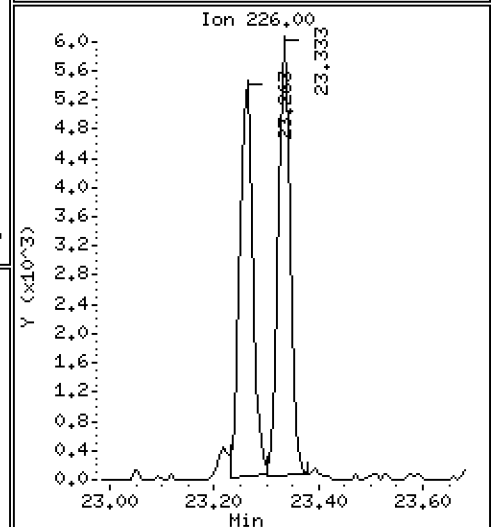
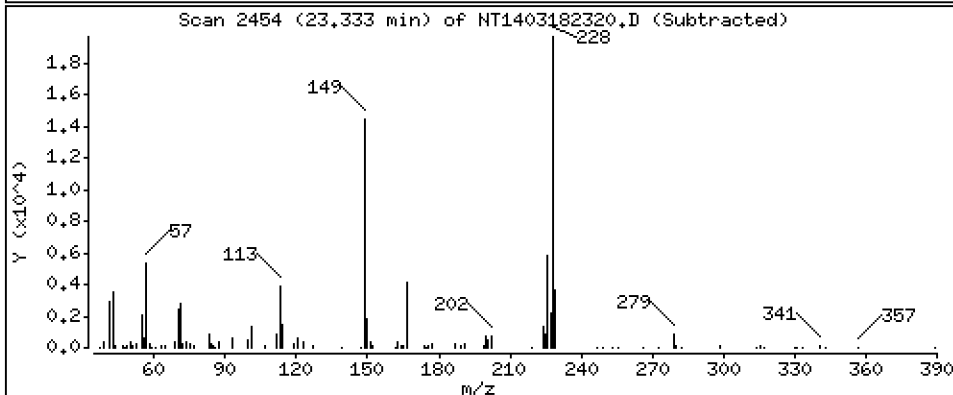
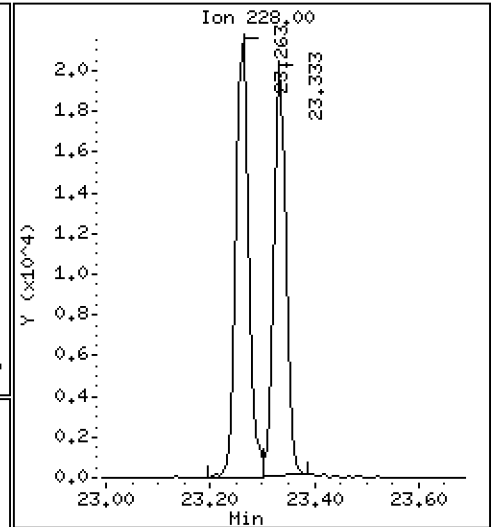
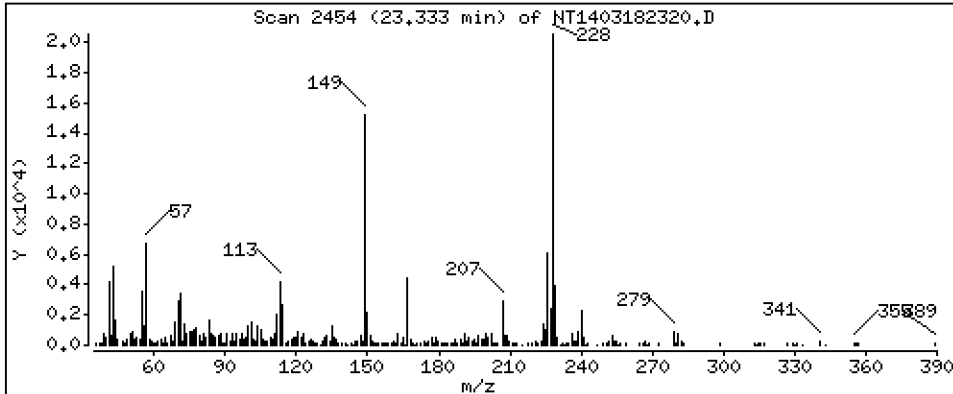
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2071 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

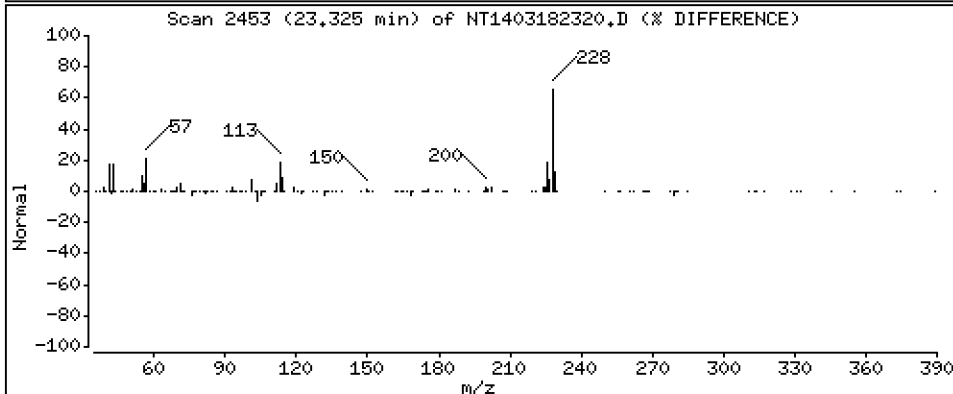
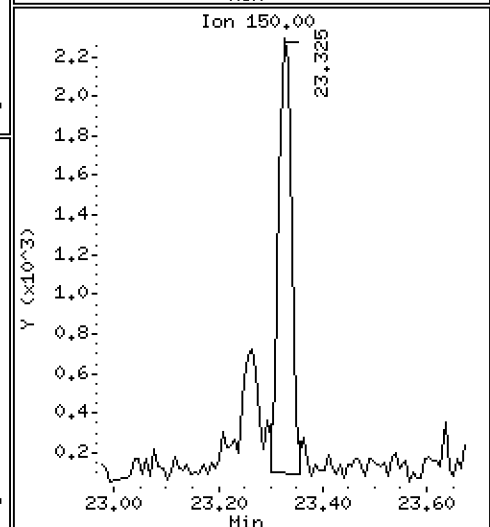
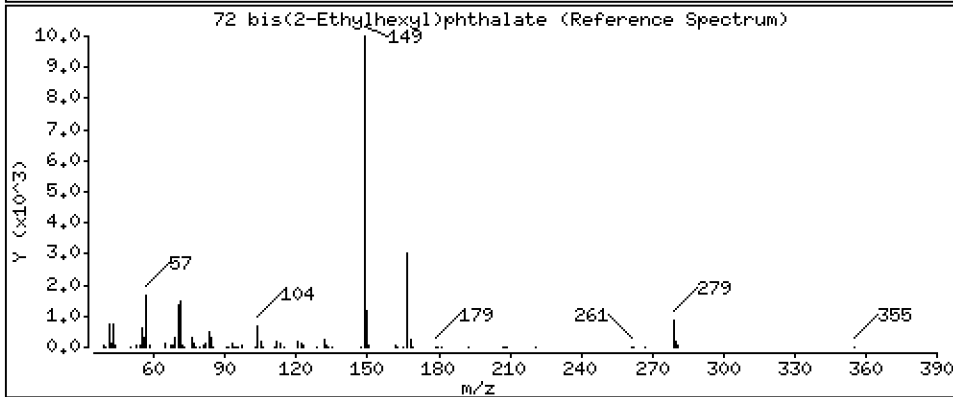
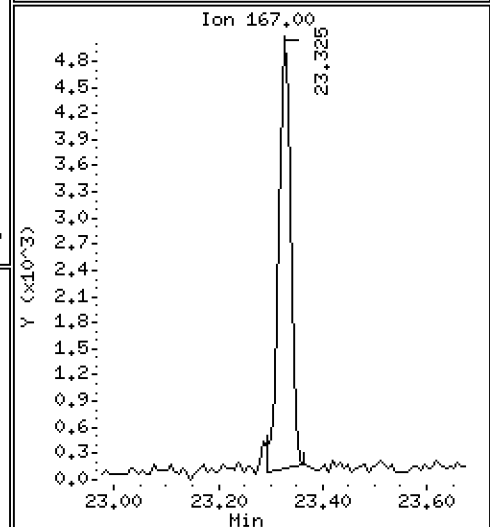
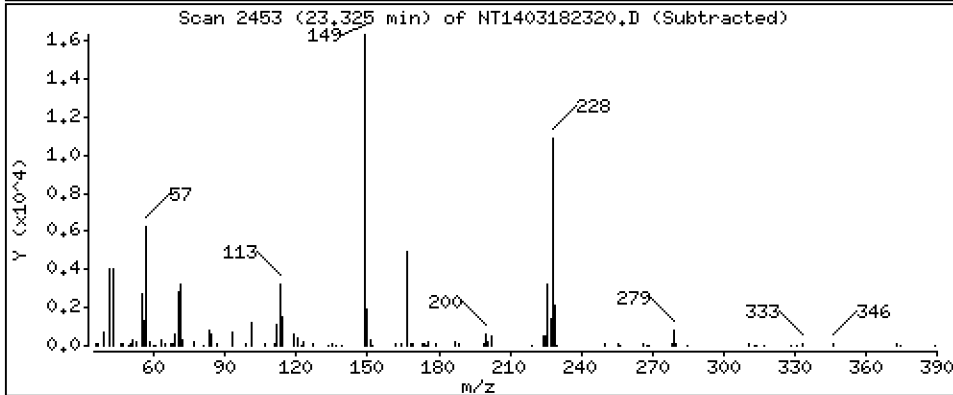
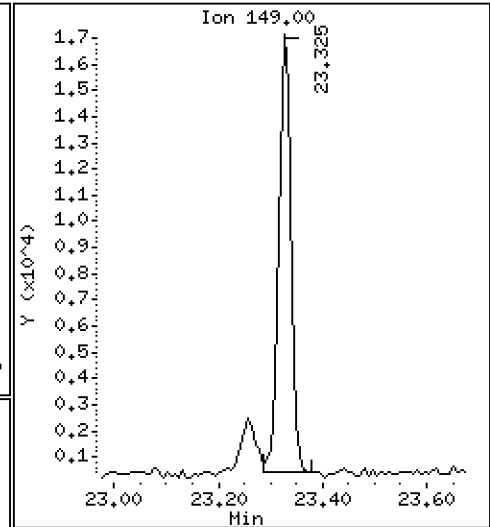
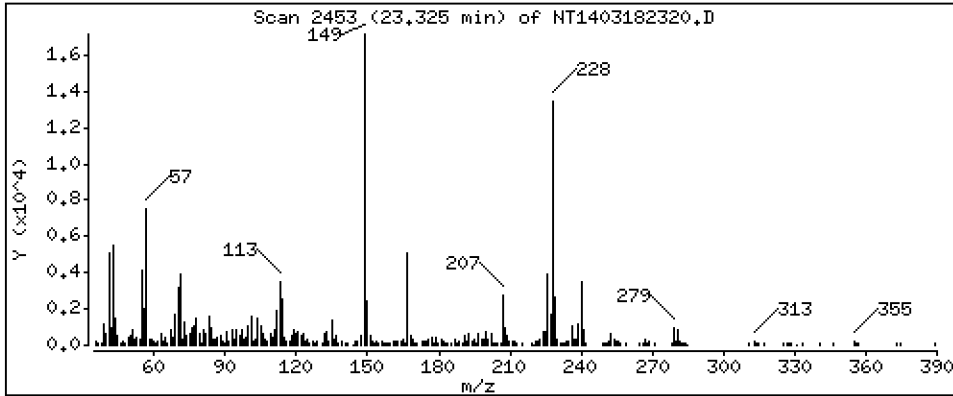
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,2285 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

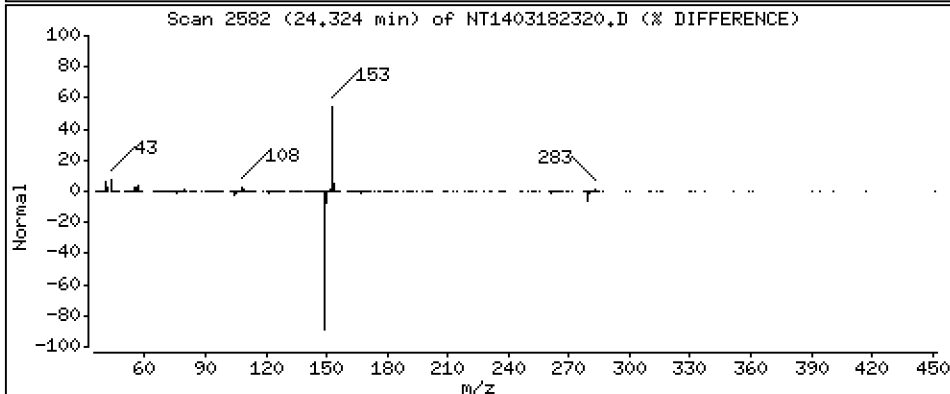
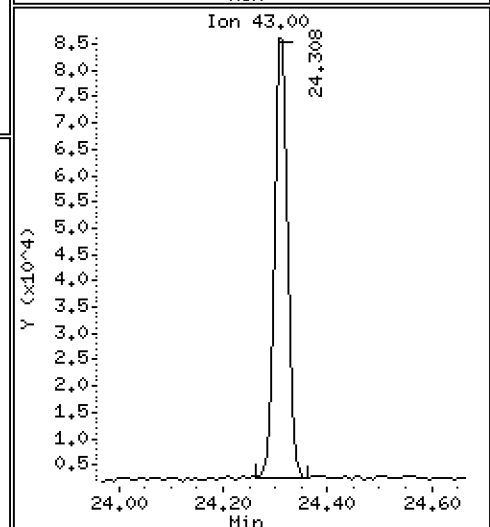
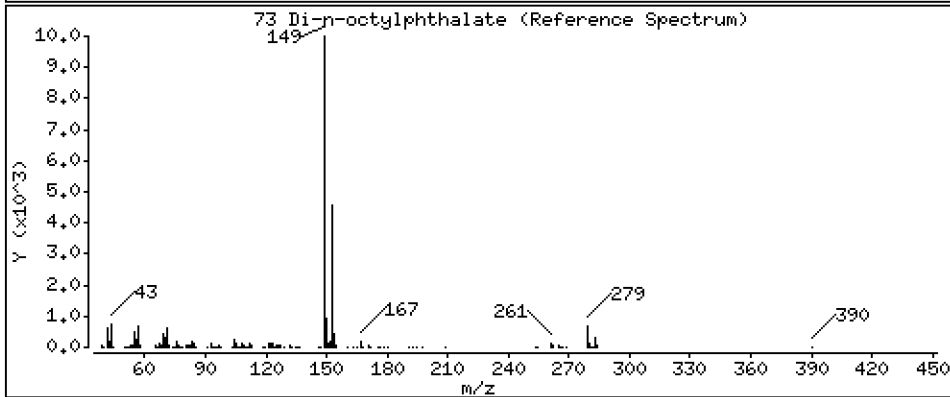
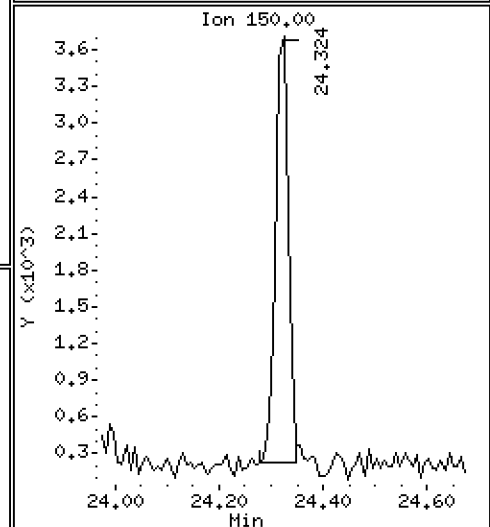
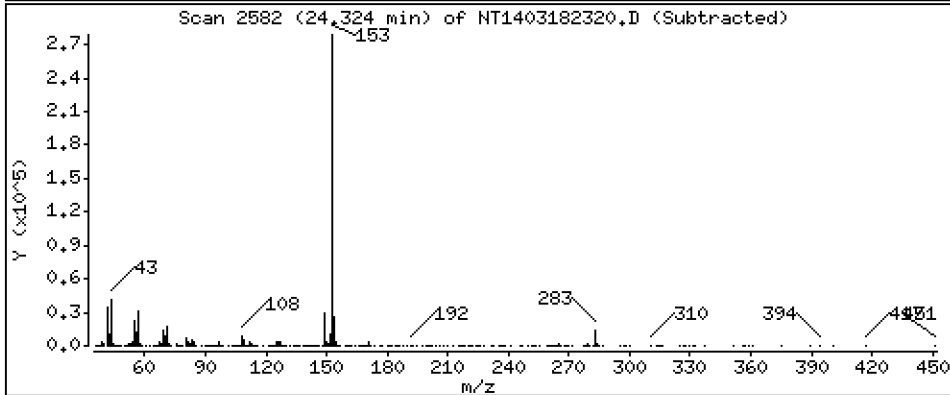
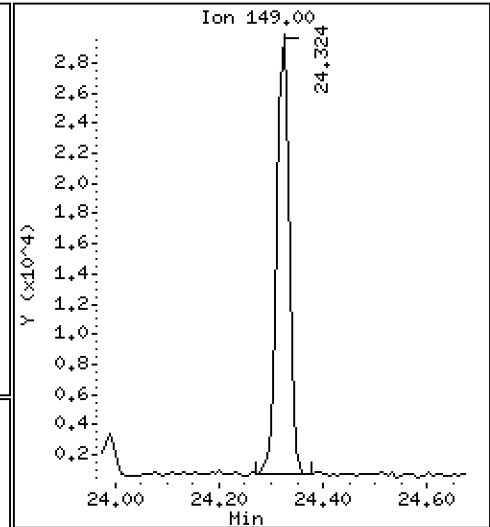
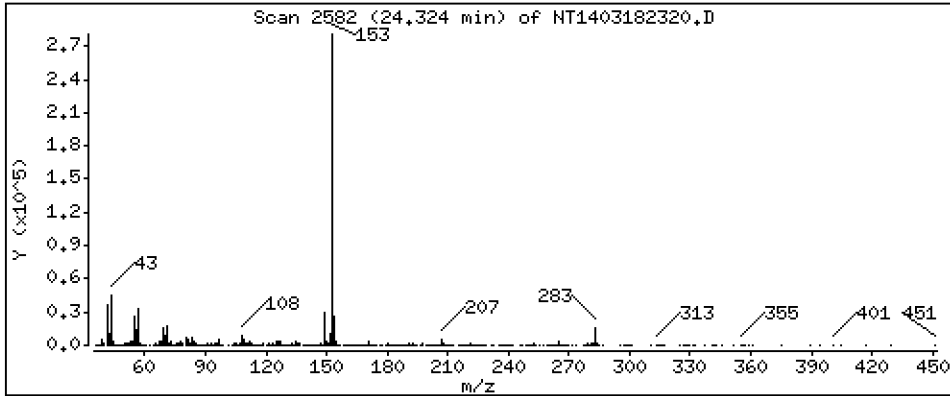
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2058 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

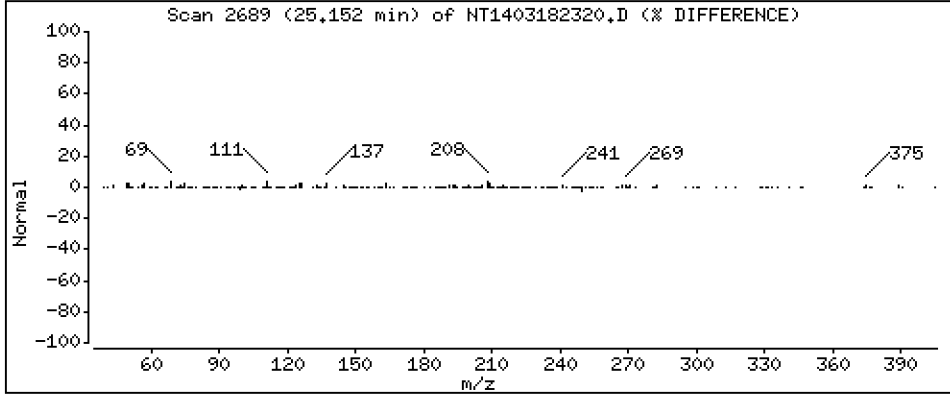
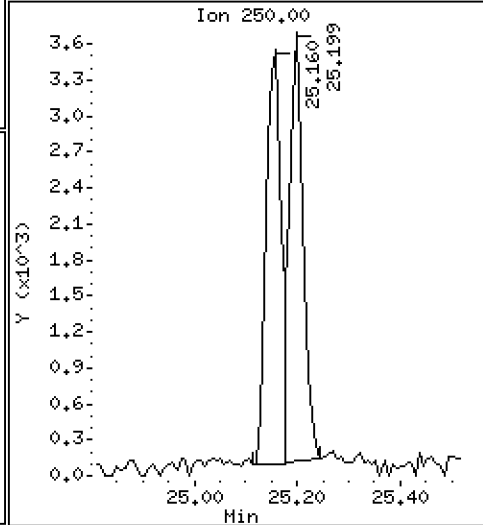
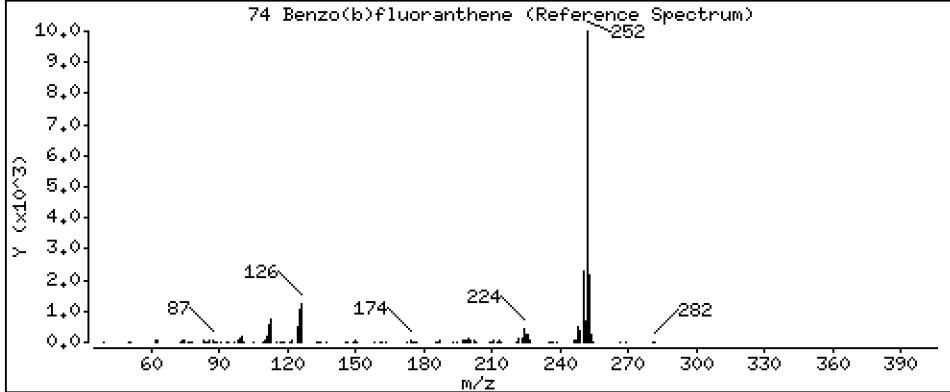
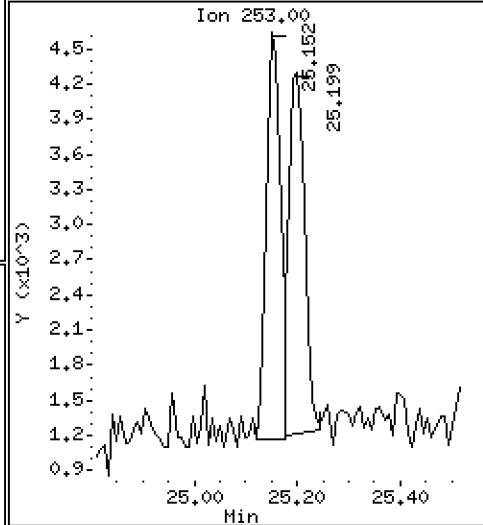
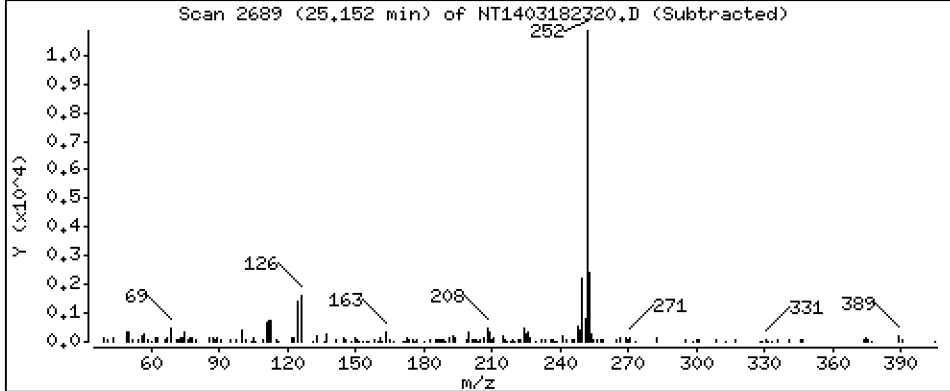
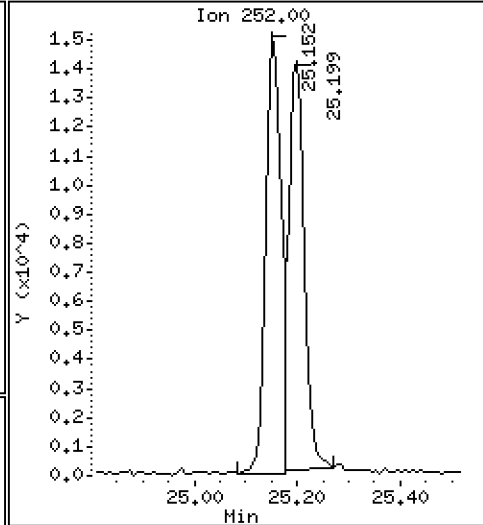
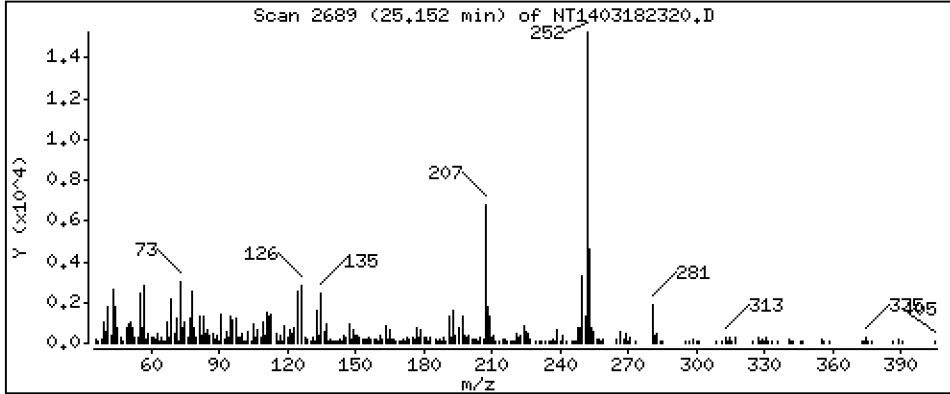
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1855 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

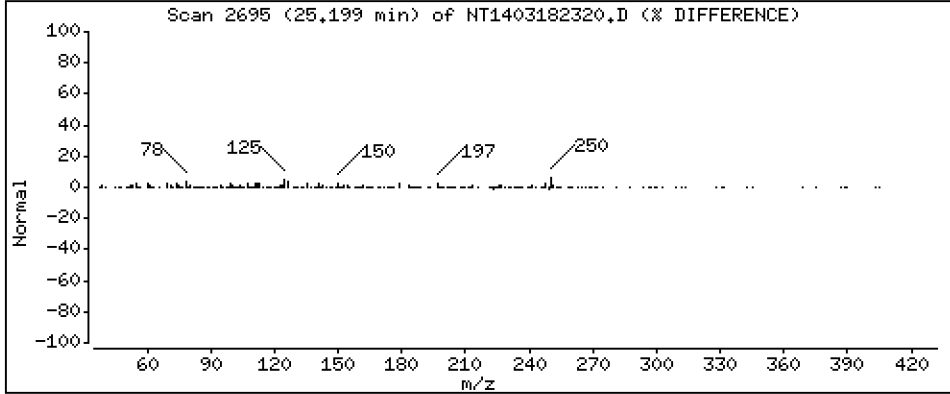
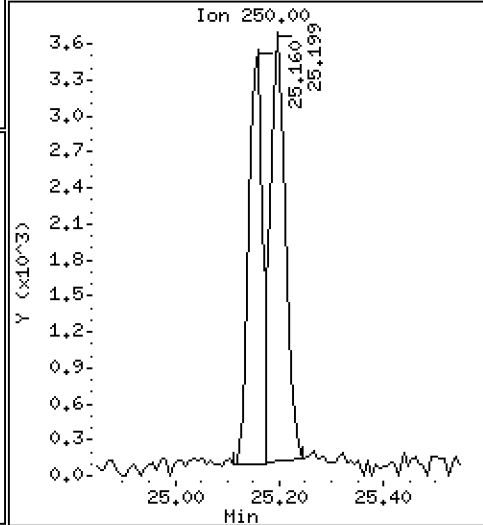
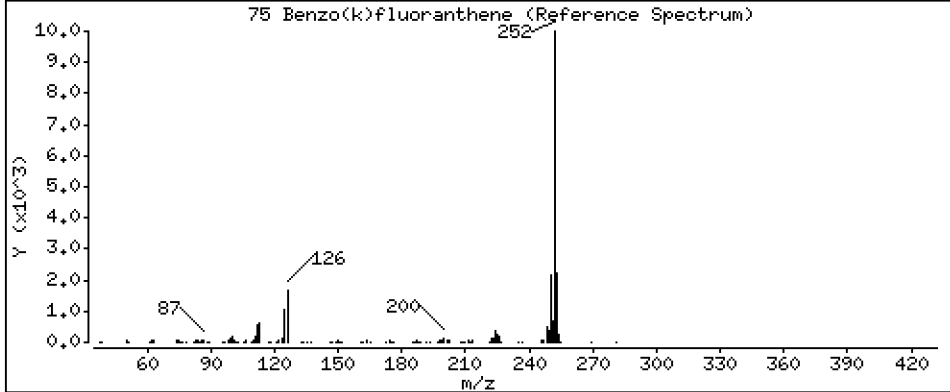
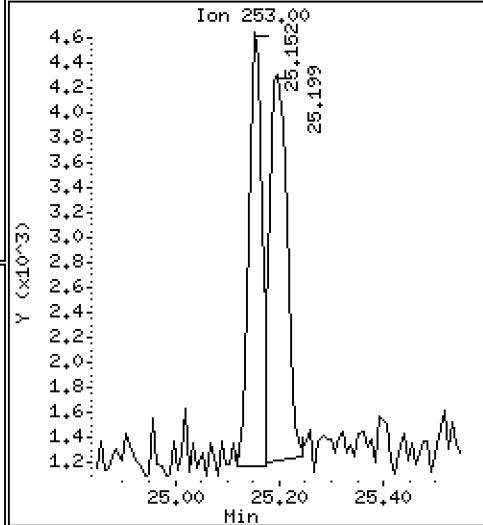
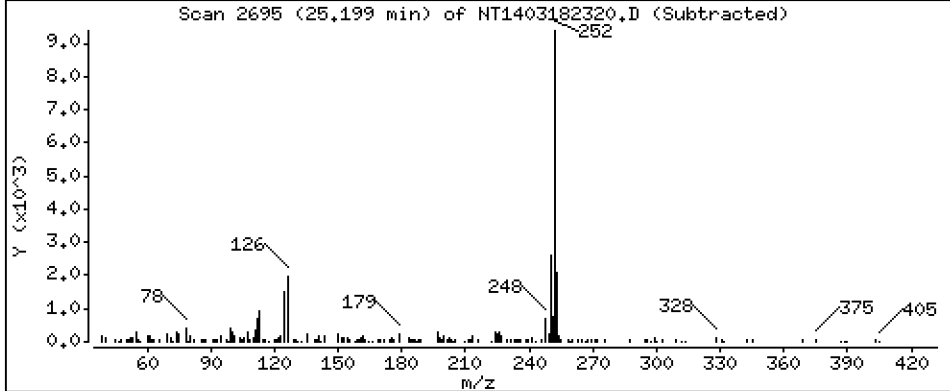
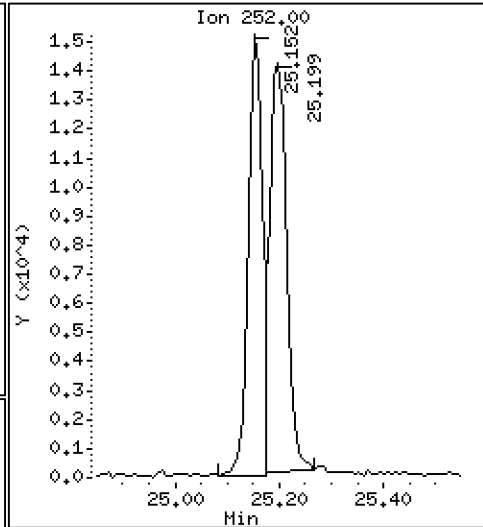
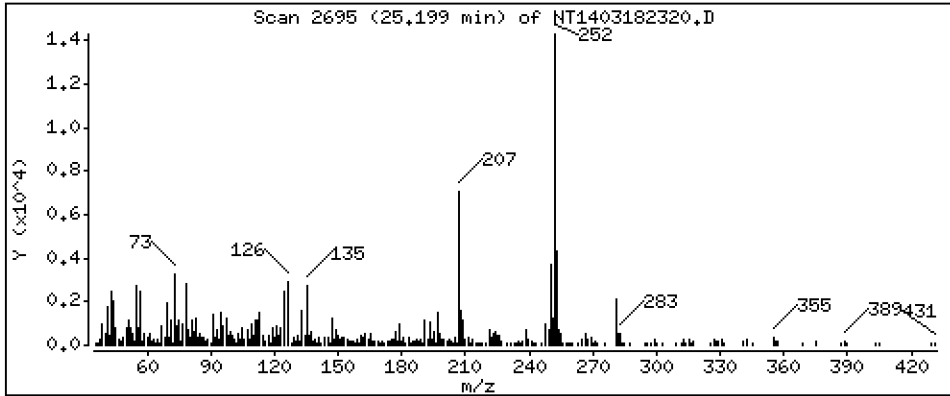
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,1949 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

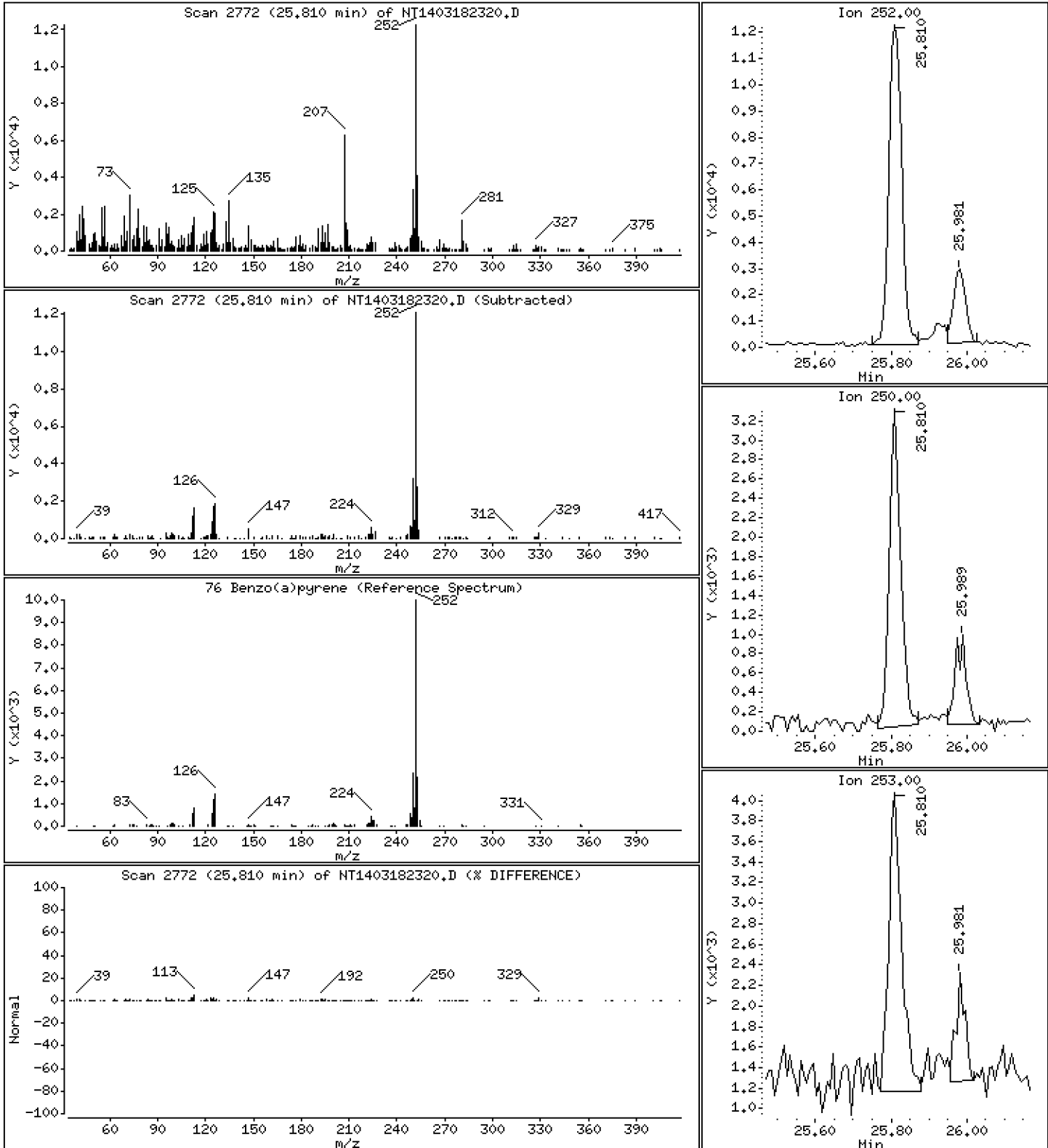
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1986 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

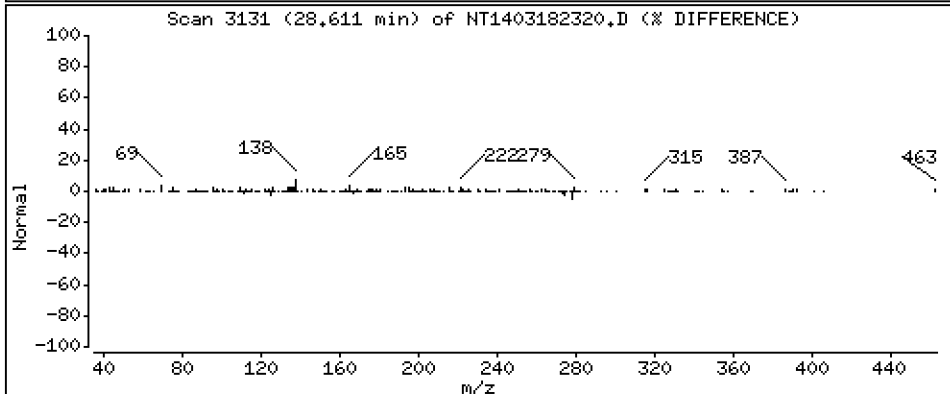
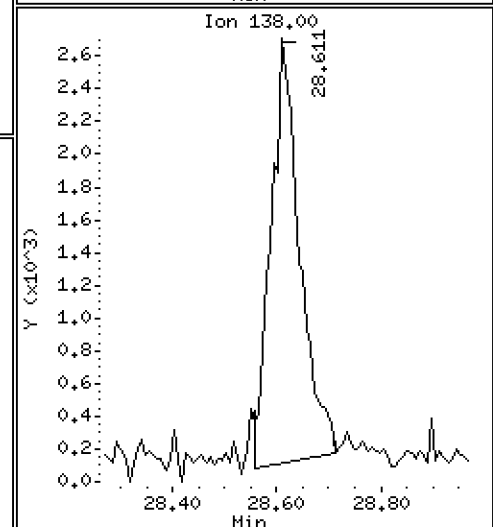
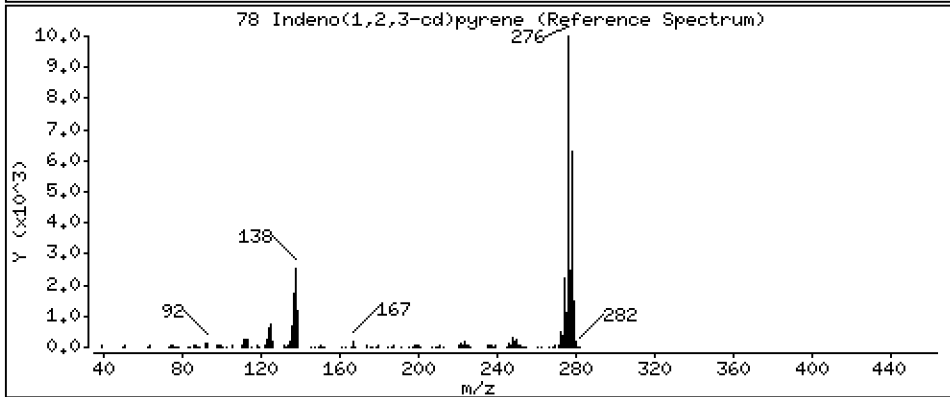
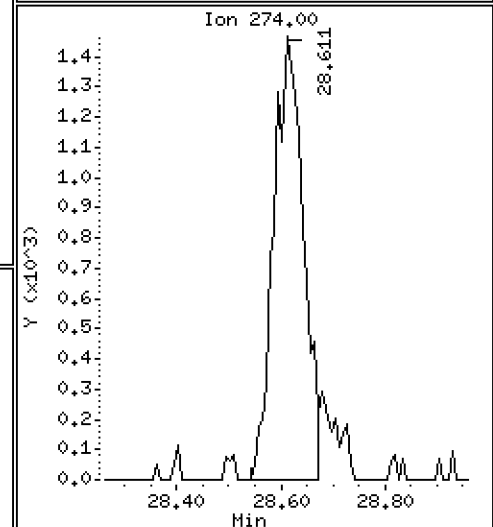
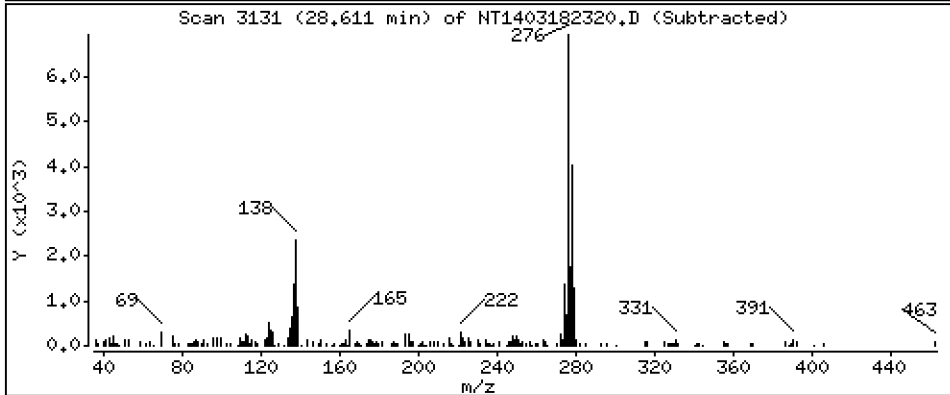
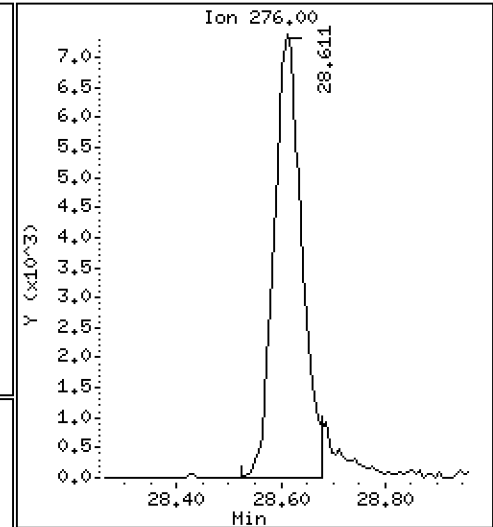
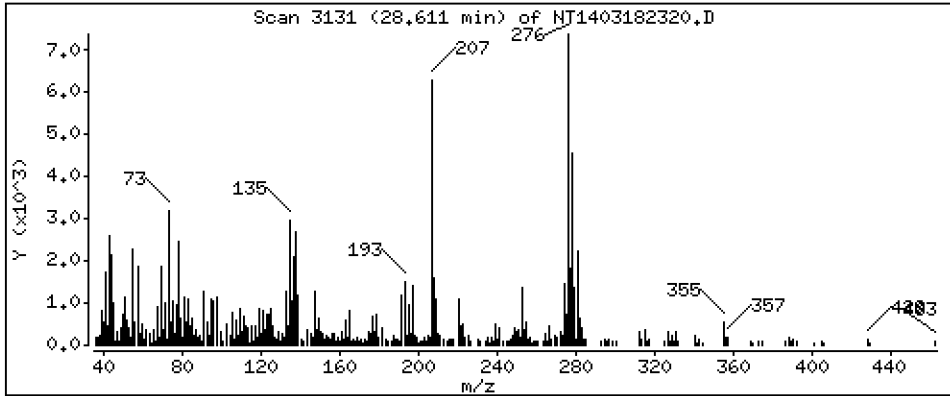
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1774 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

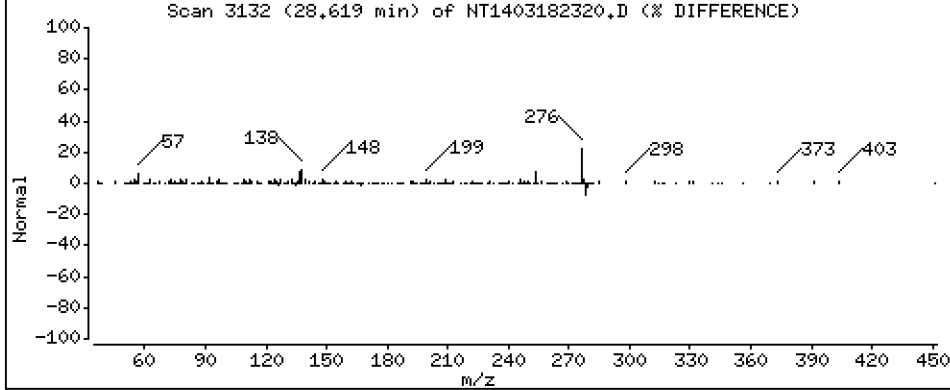
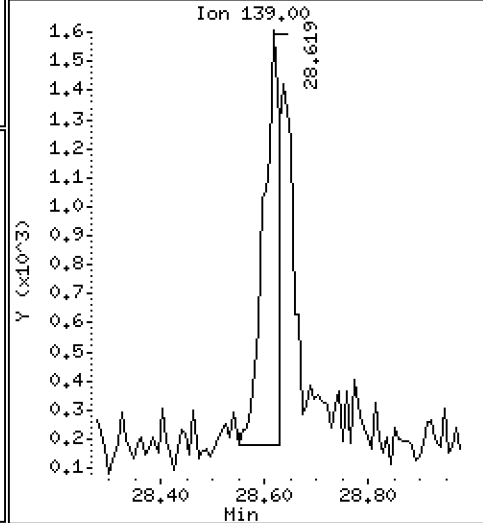
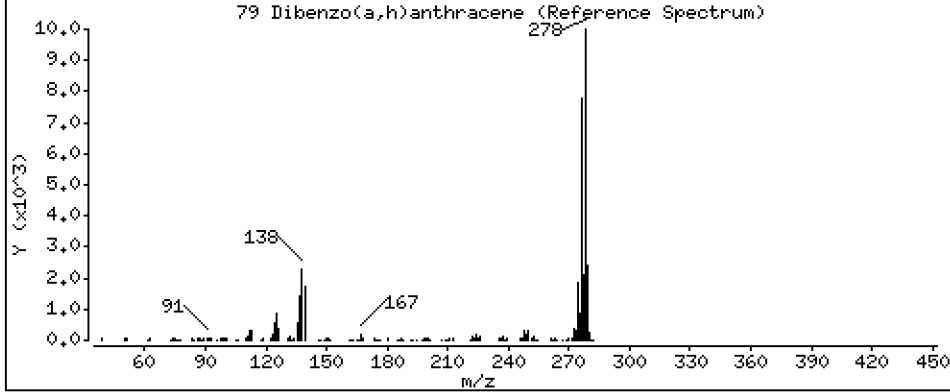
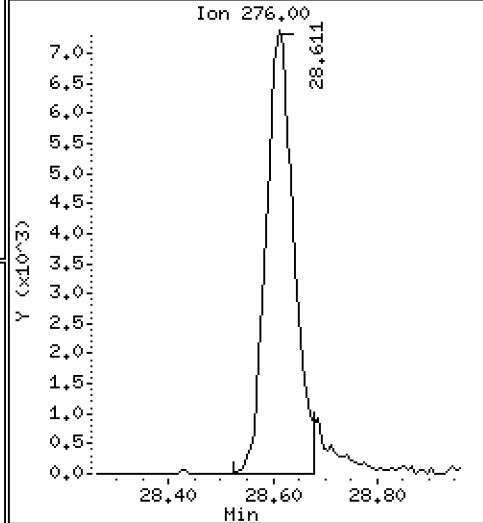
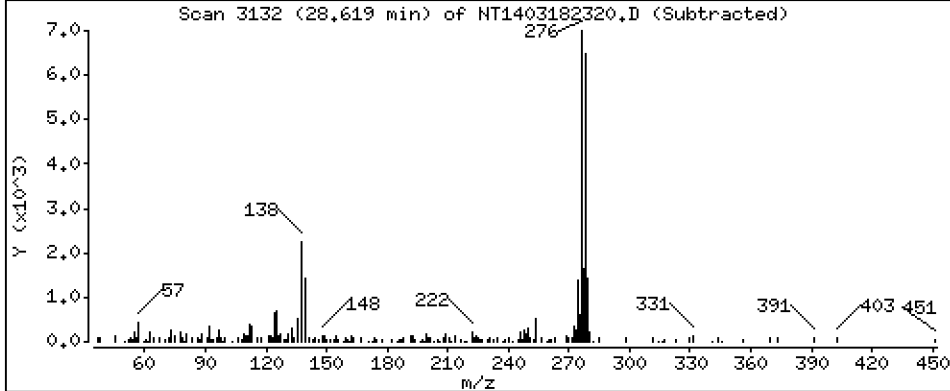
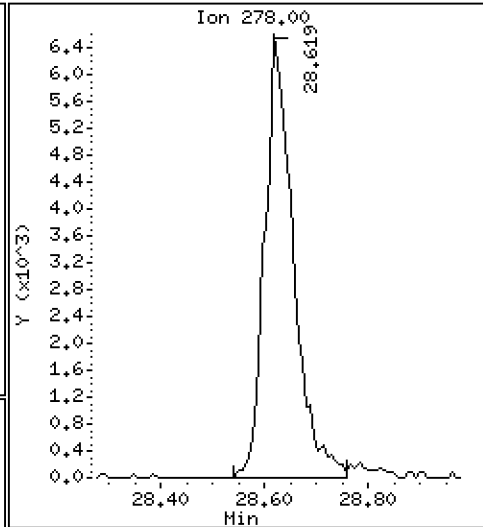
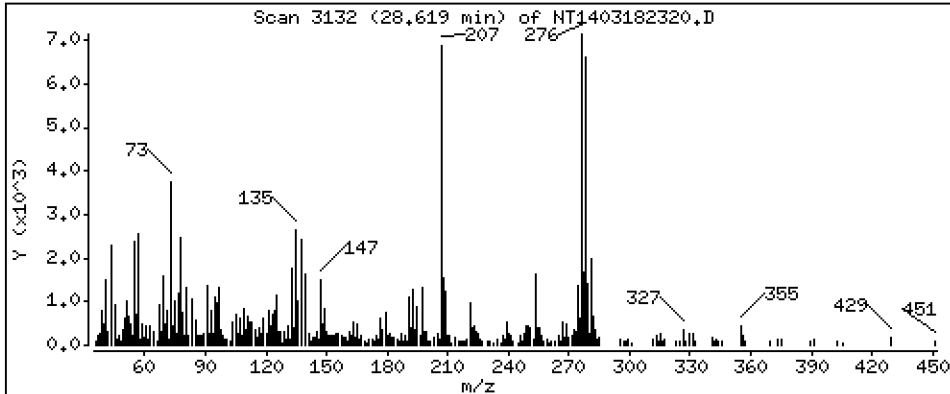
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1924 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

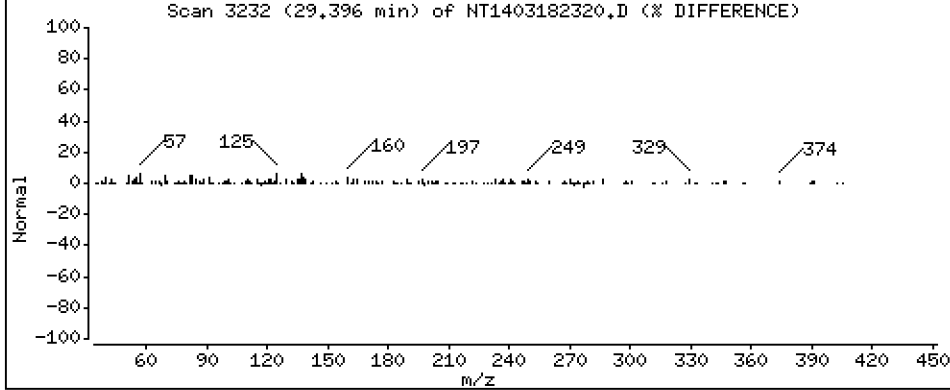
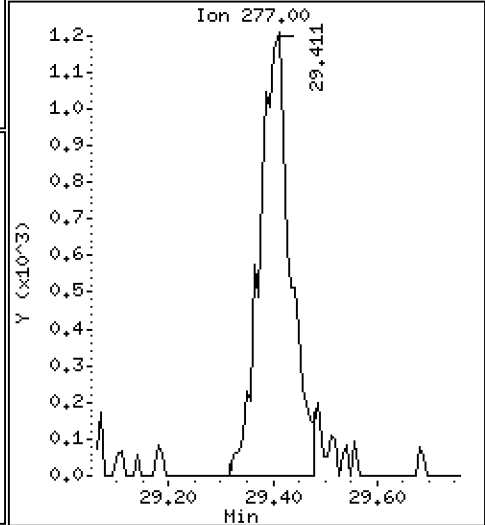
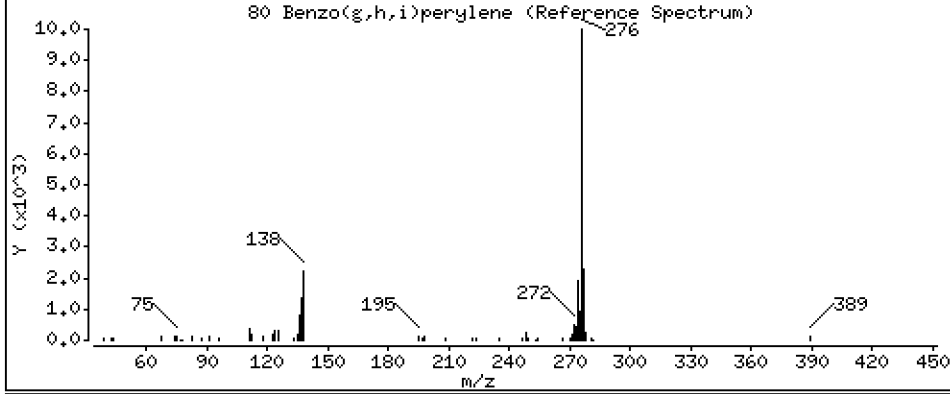
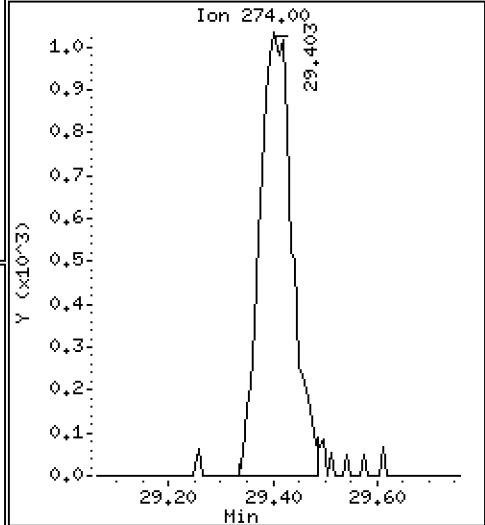
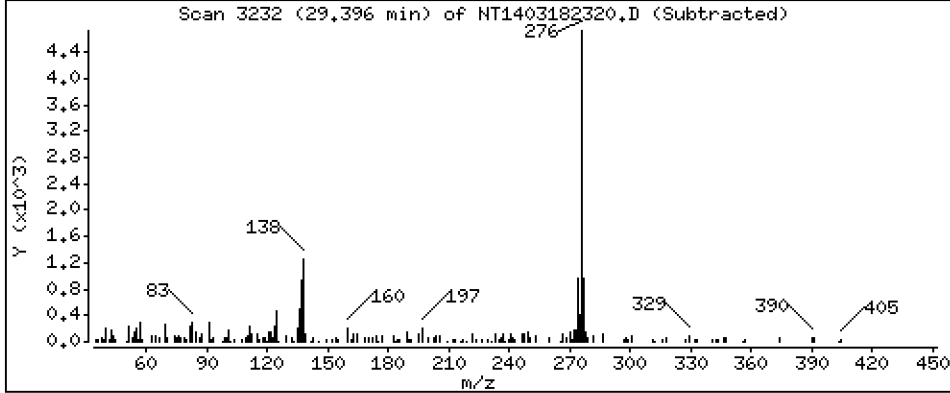
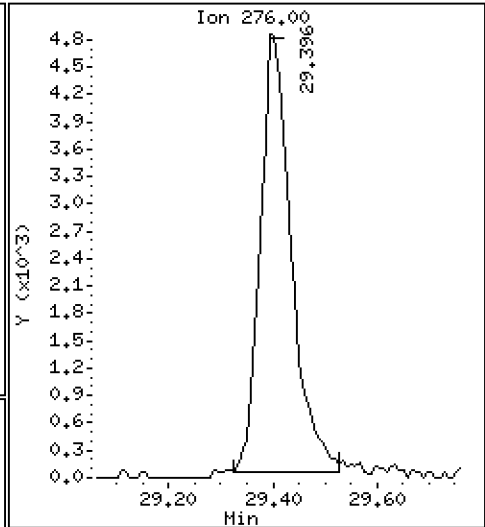
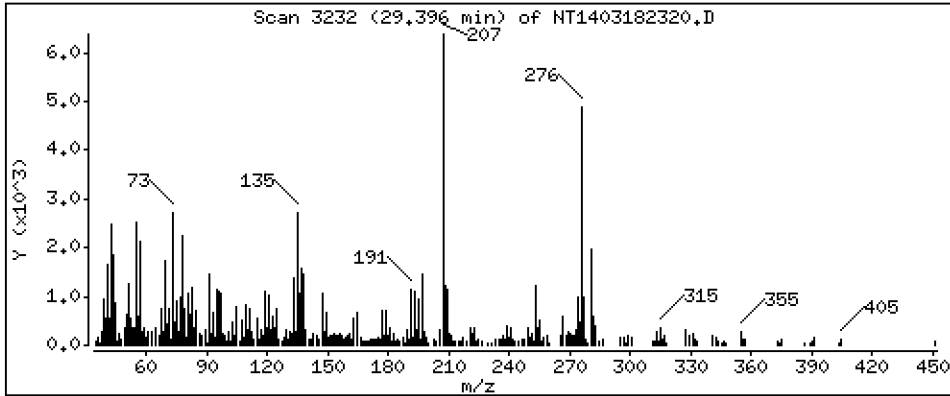
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1564 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

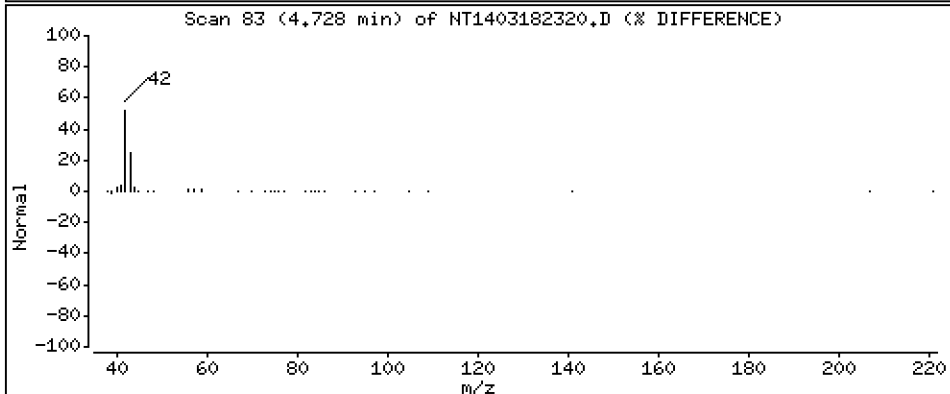
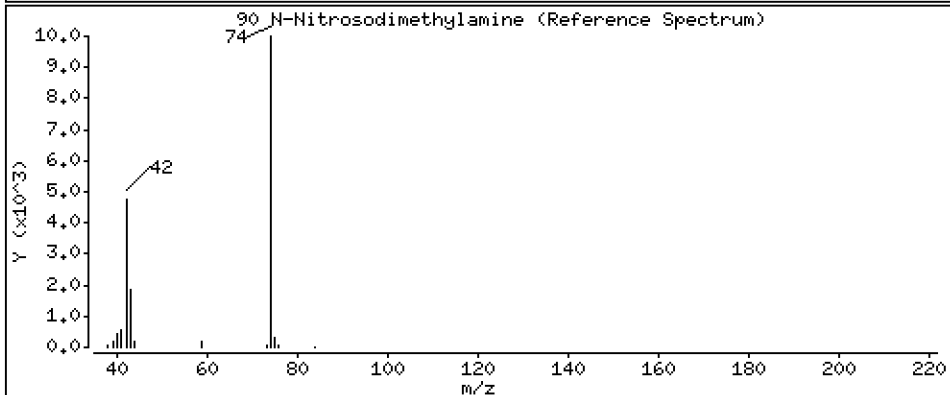
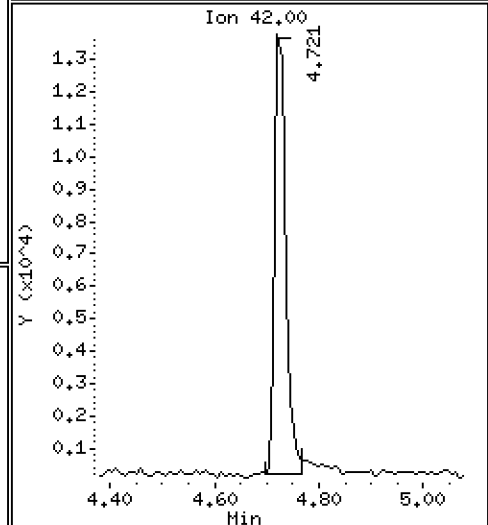
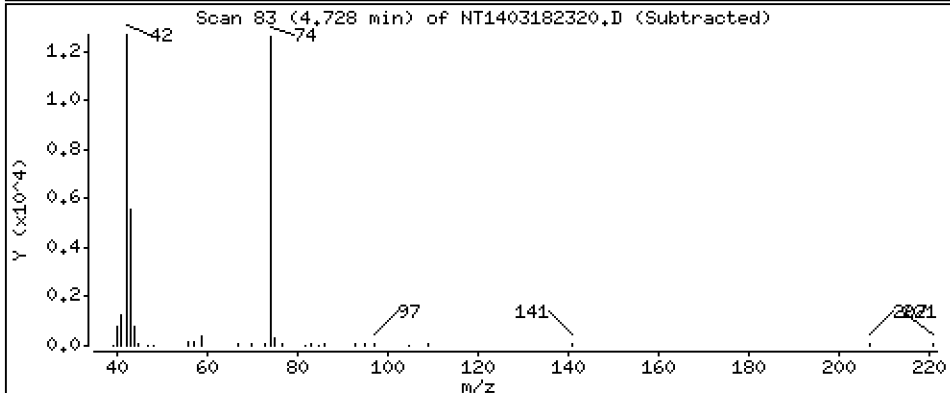
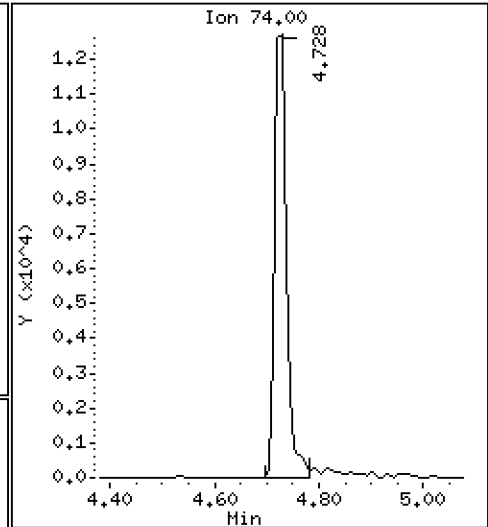
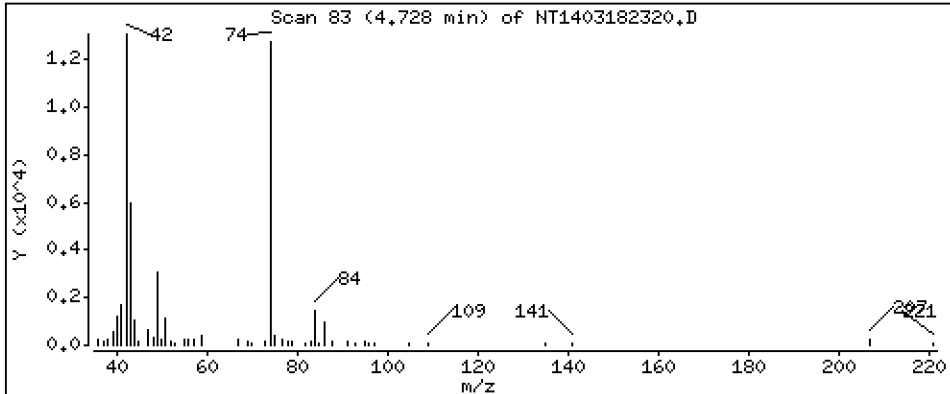
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,3433 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

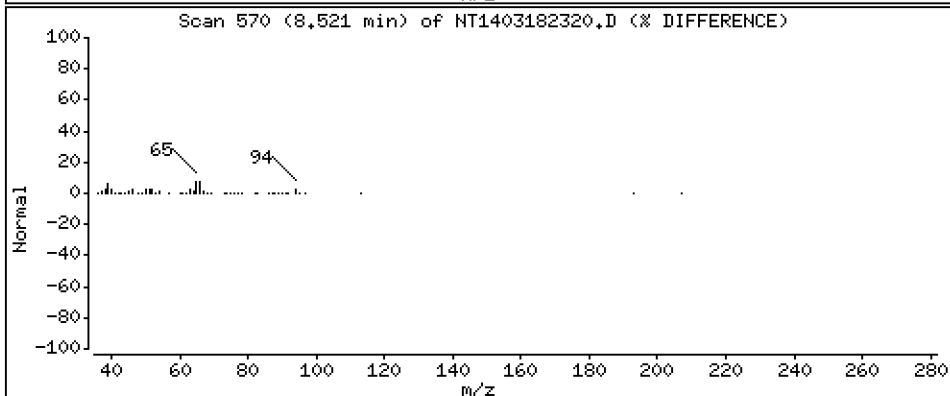
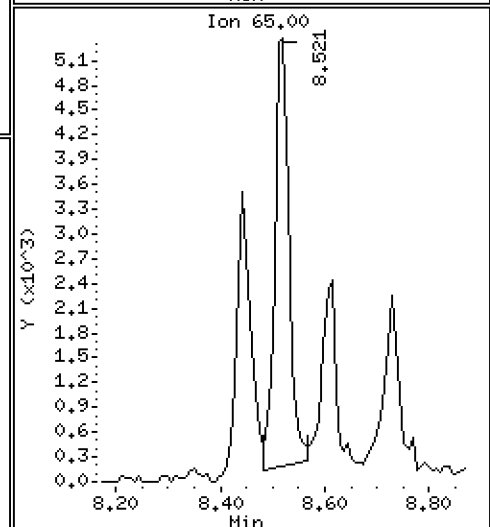
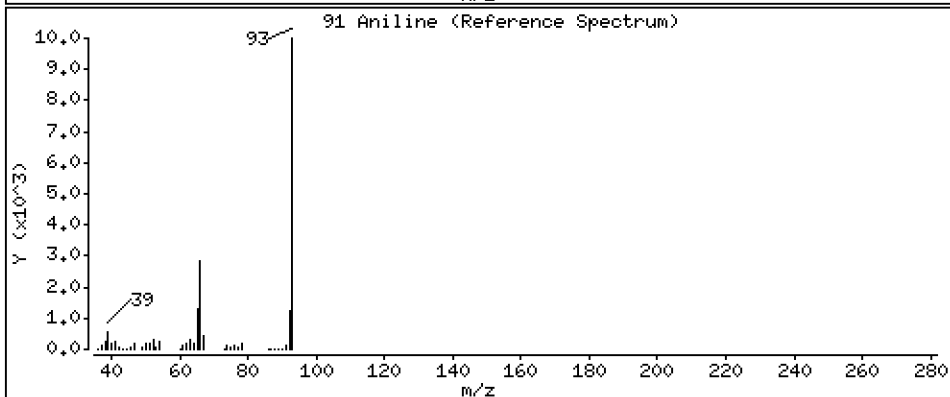
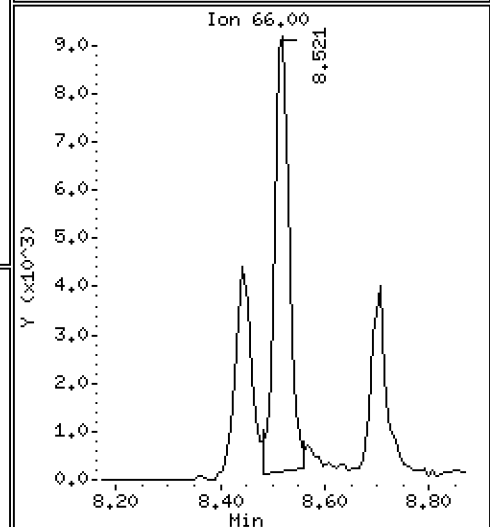
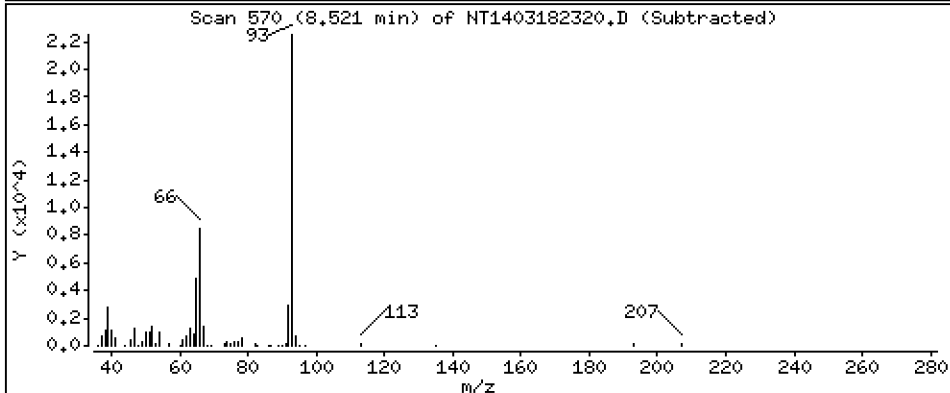
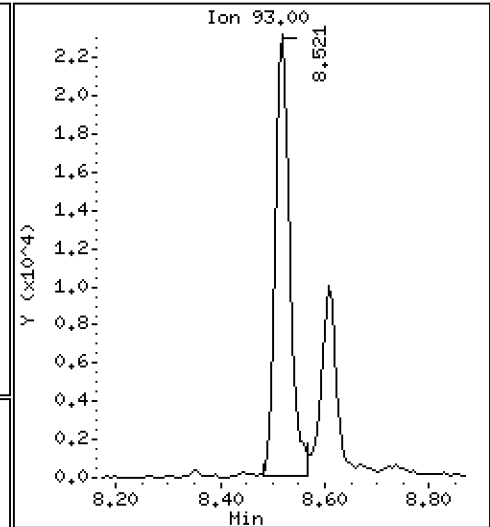
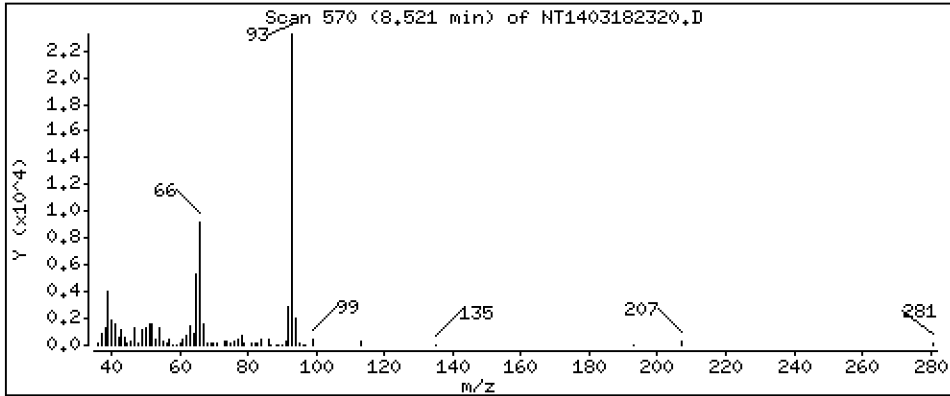
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3486 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

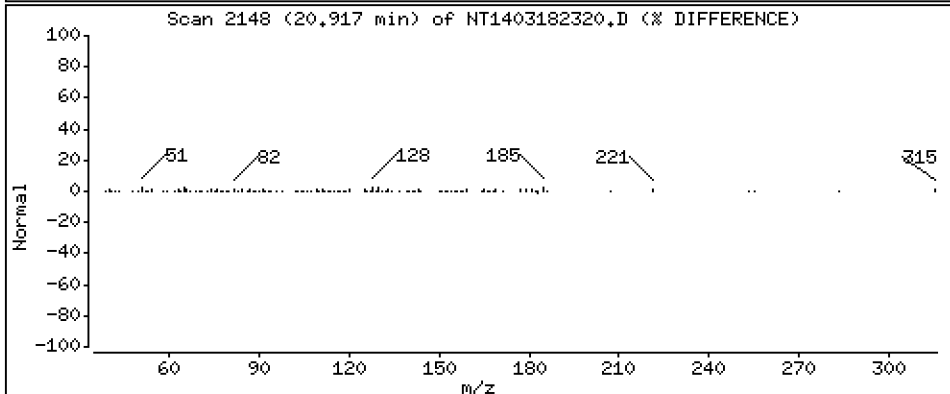
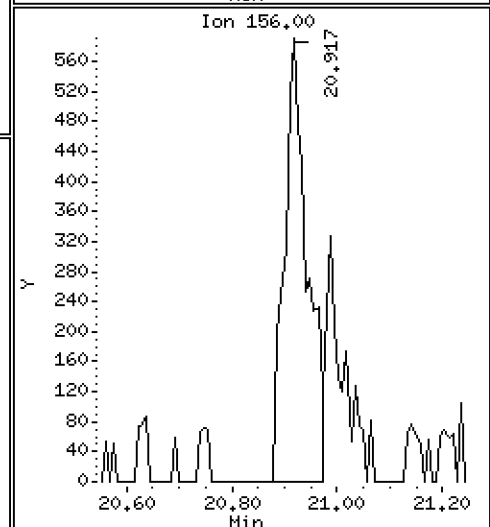
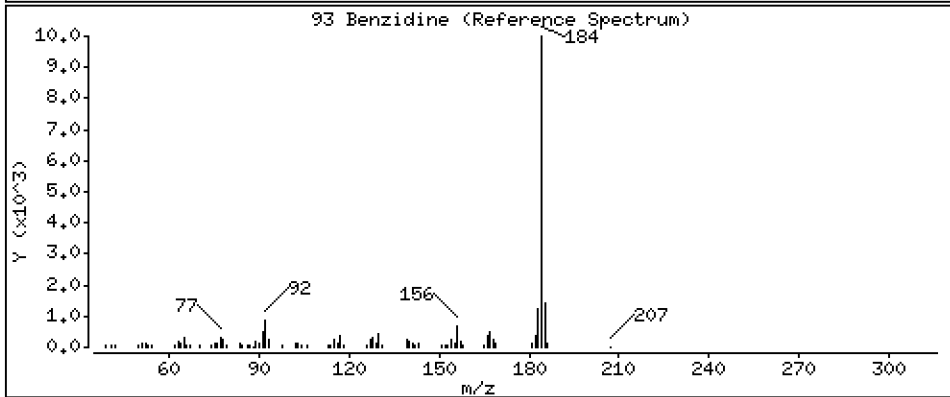
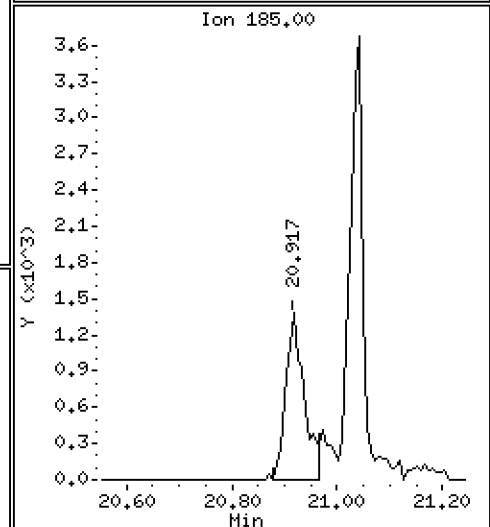
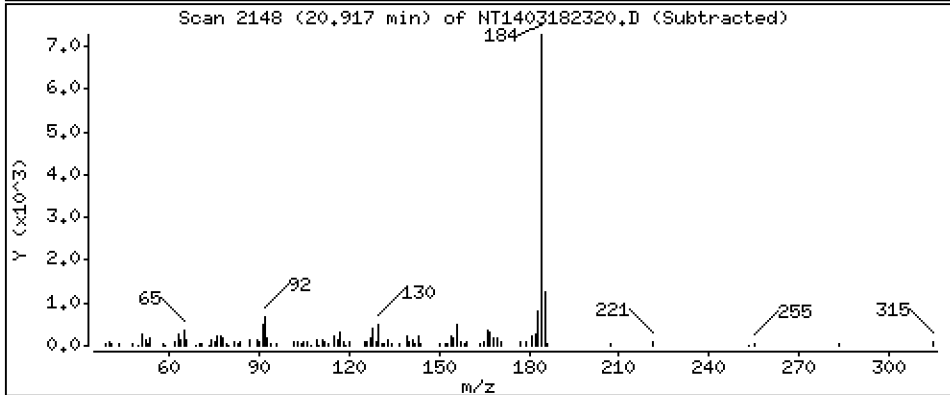
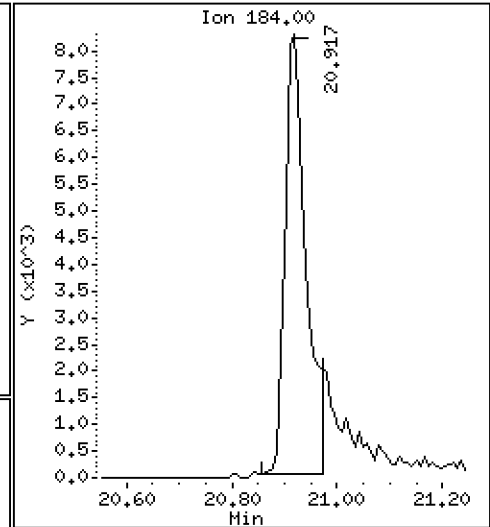
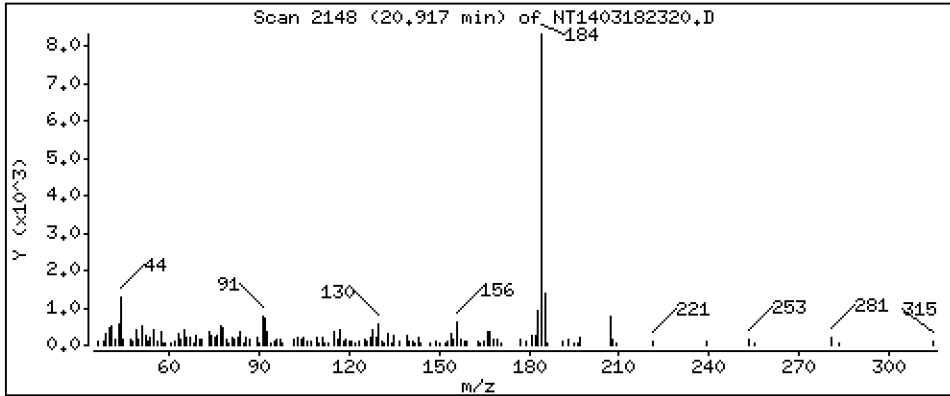
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,3153 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

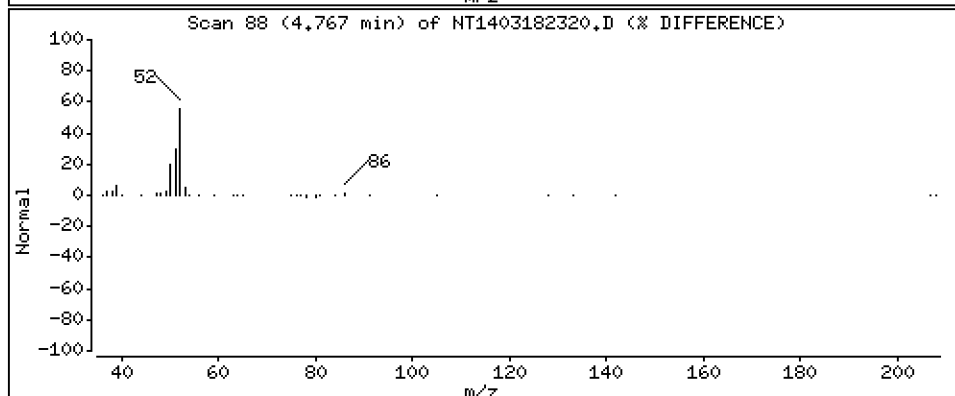
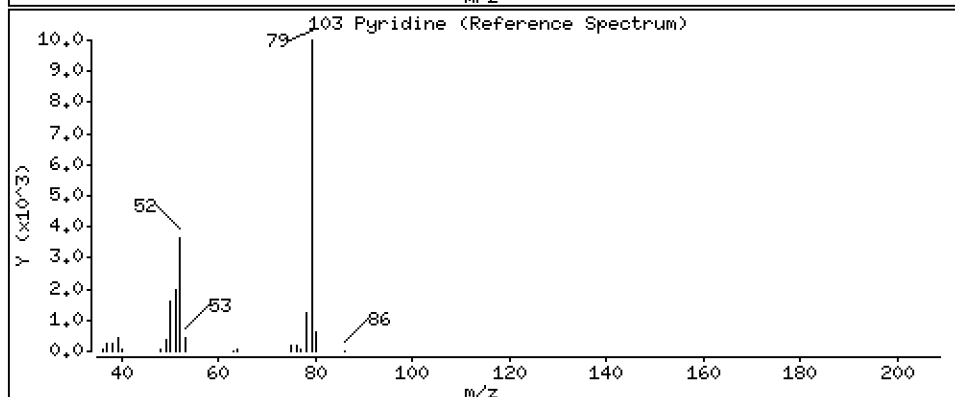
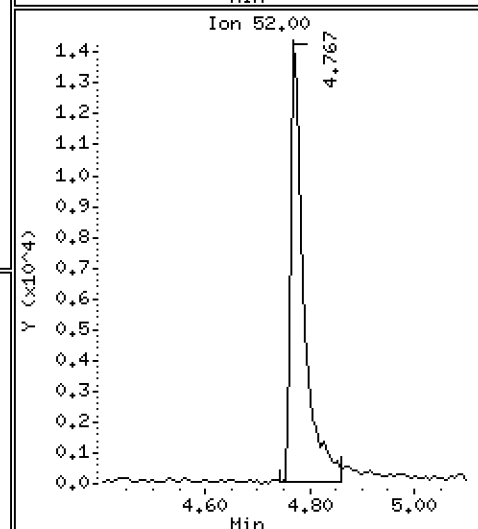
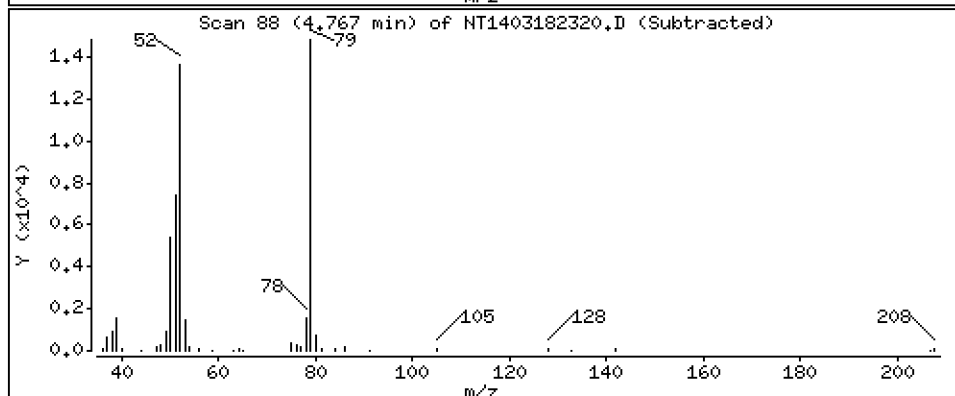
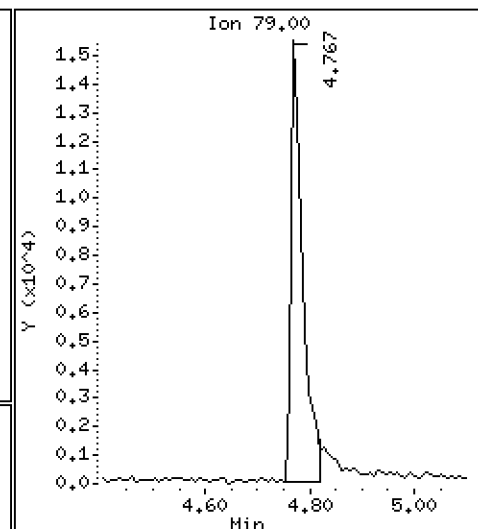
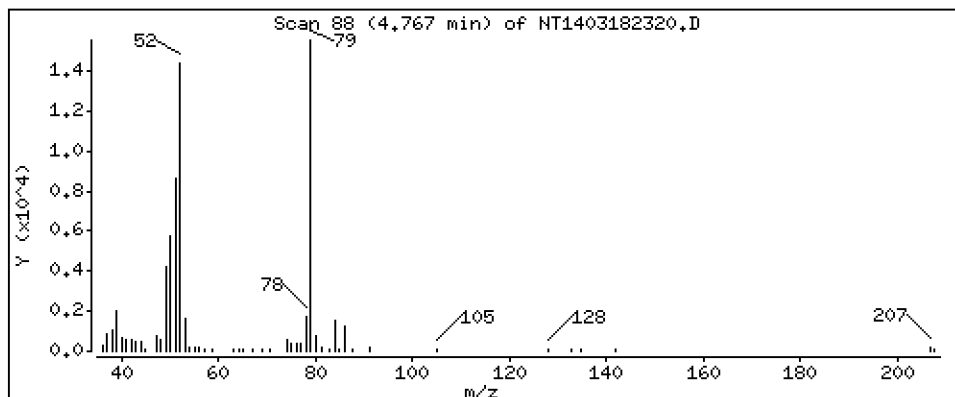
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,1486 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

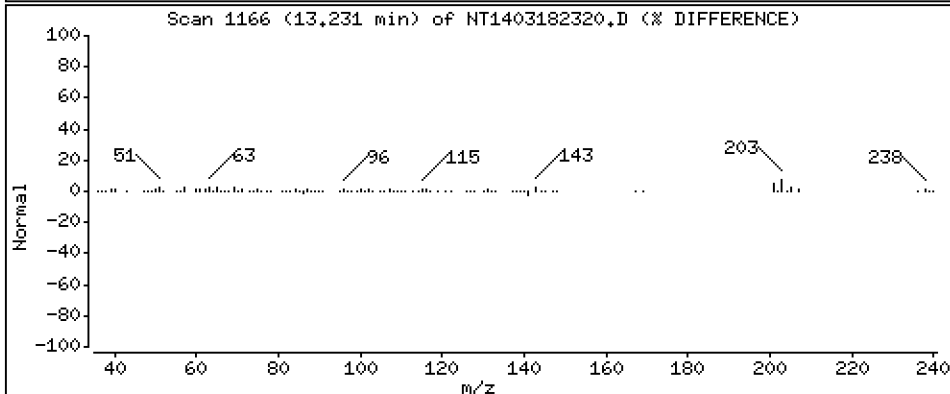
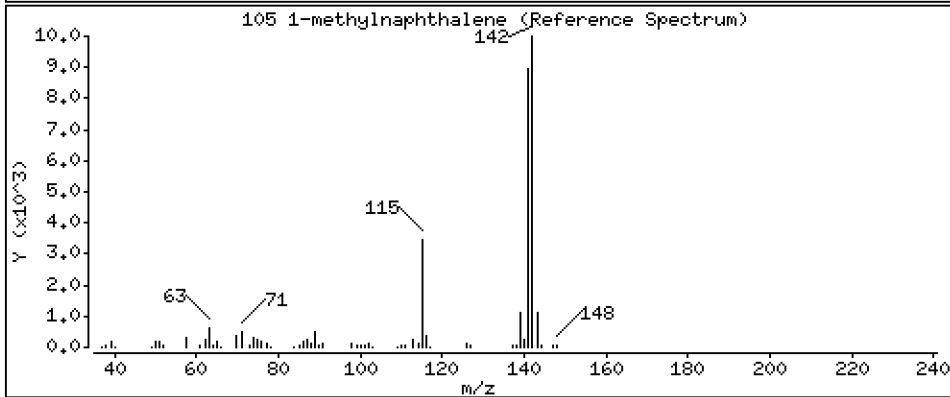
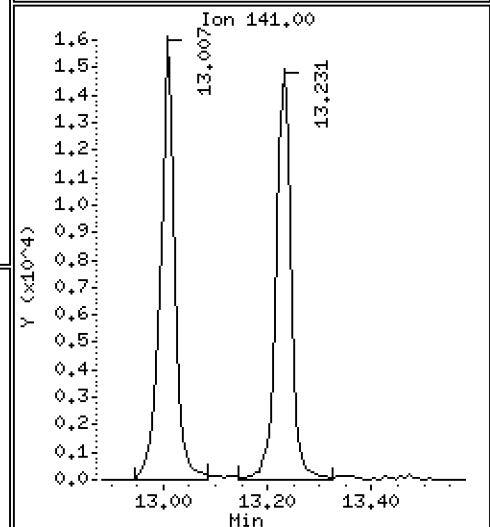
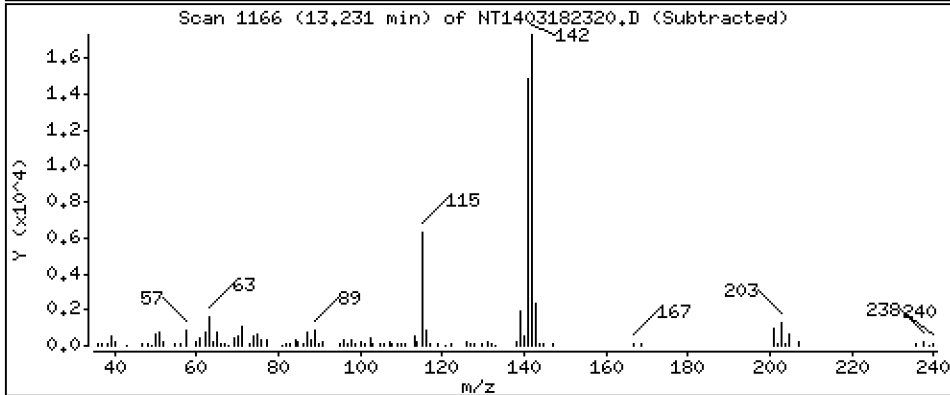
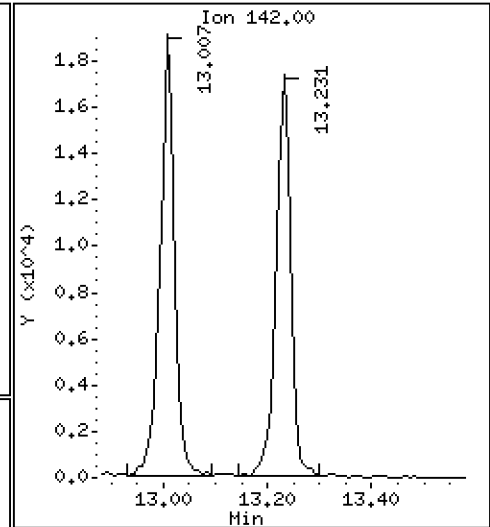
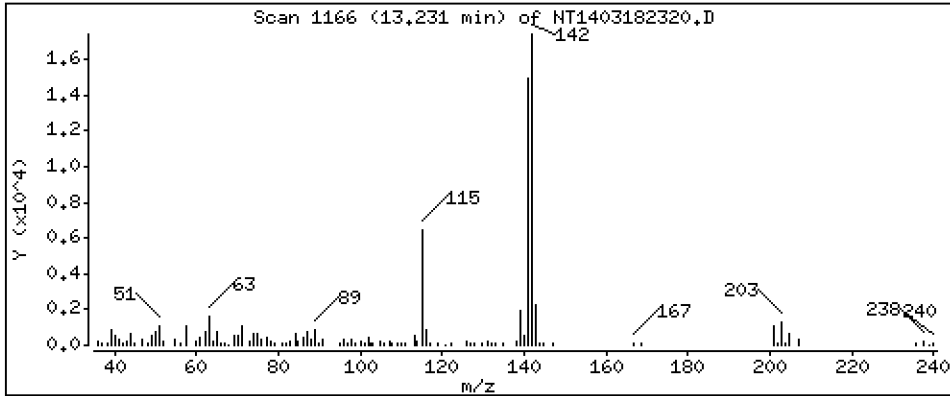
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1988 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

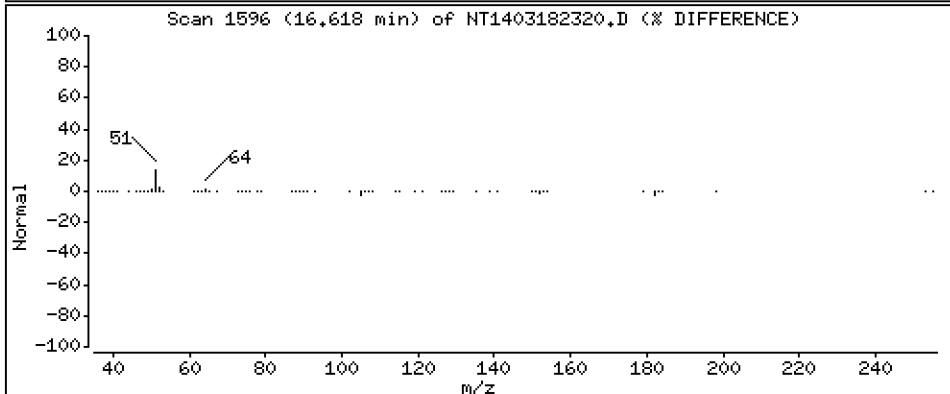
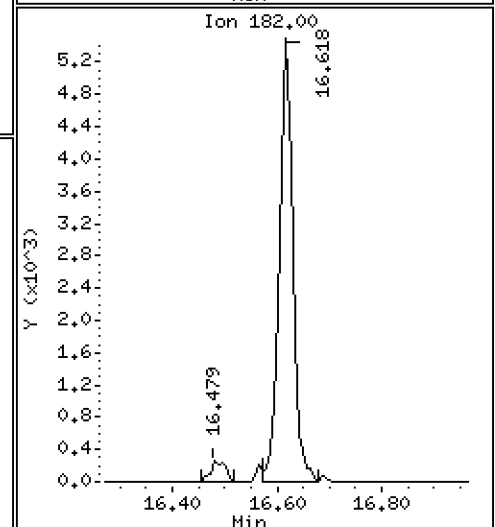
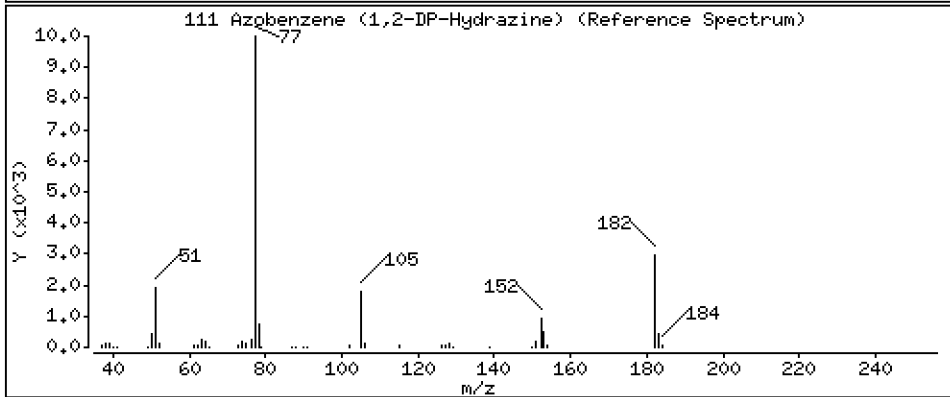
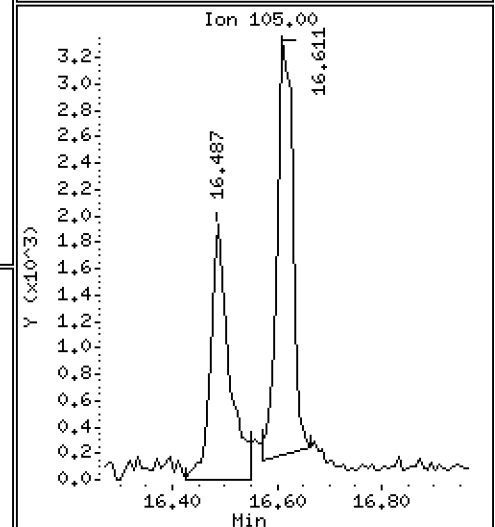
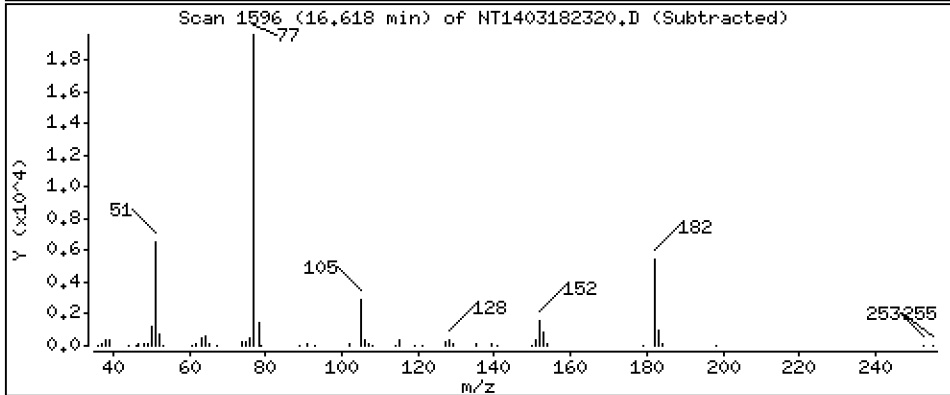
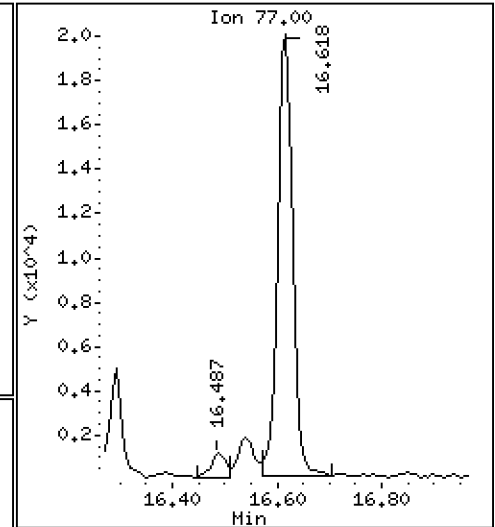
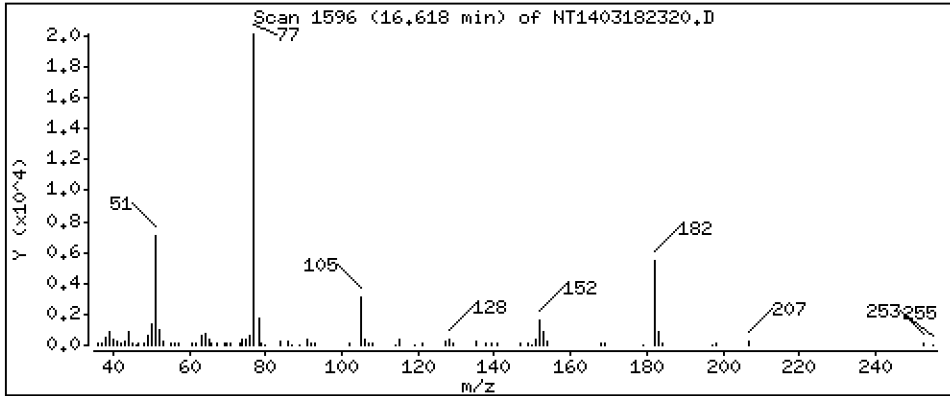
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1904 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

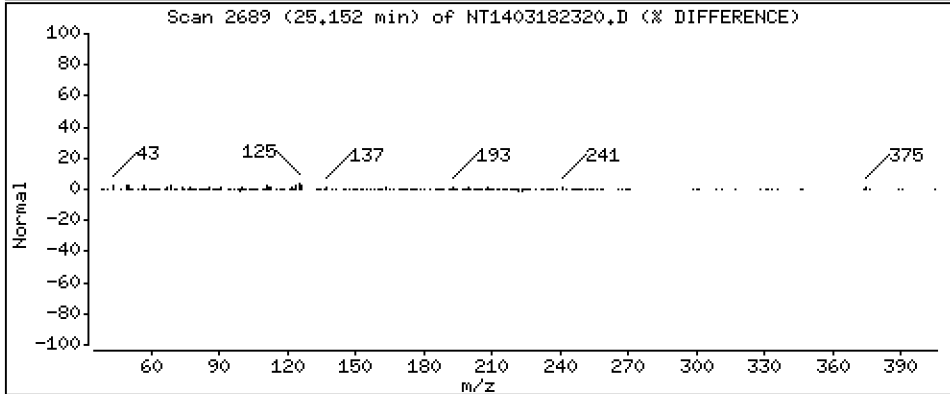
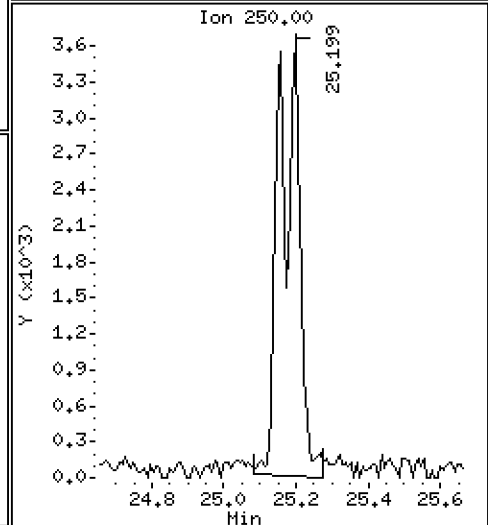
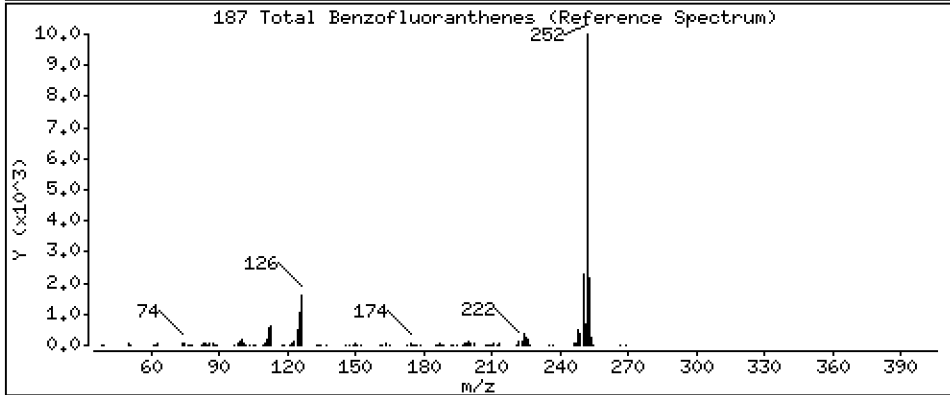
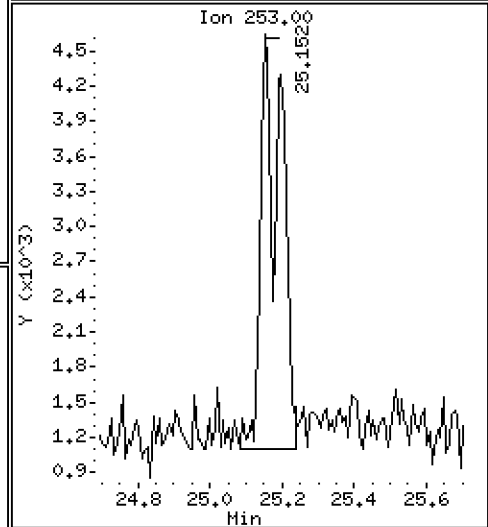
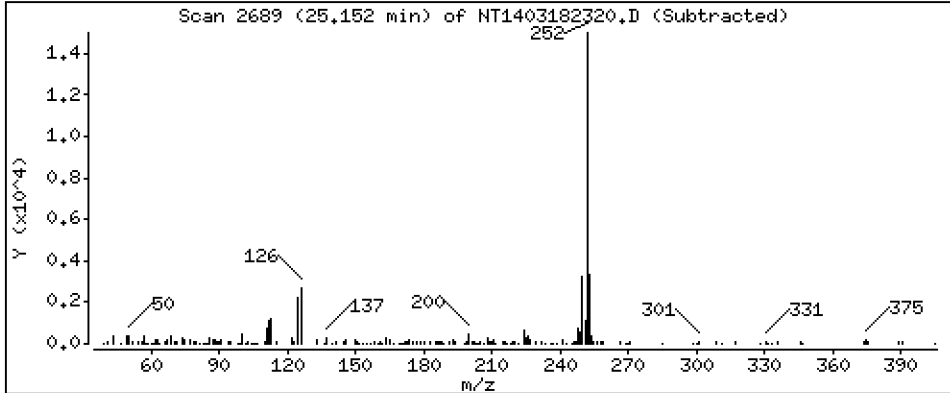
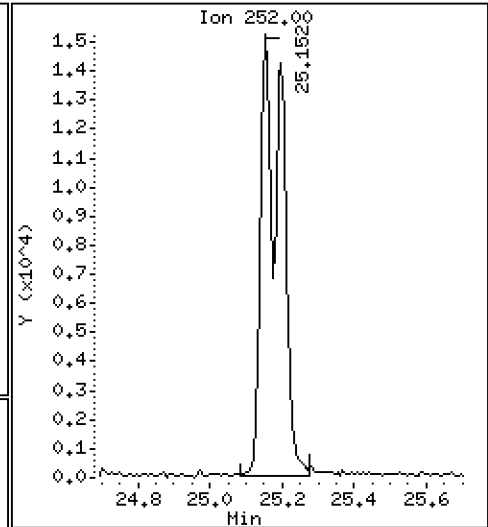
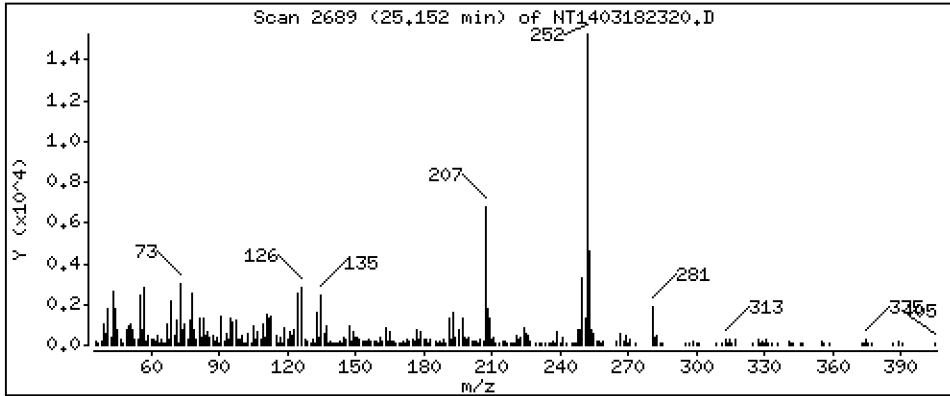
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3850 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

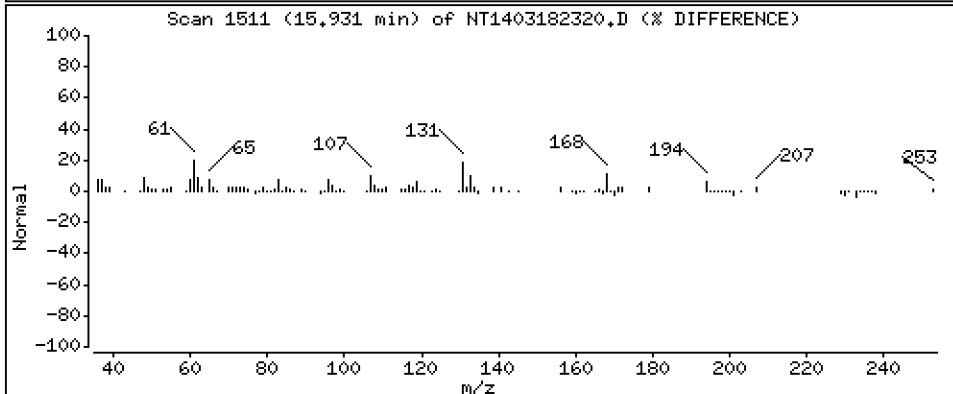
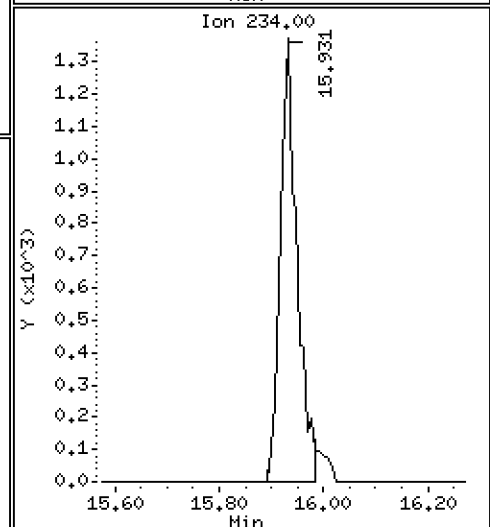
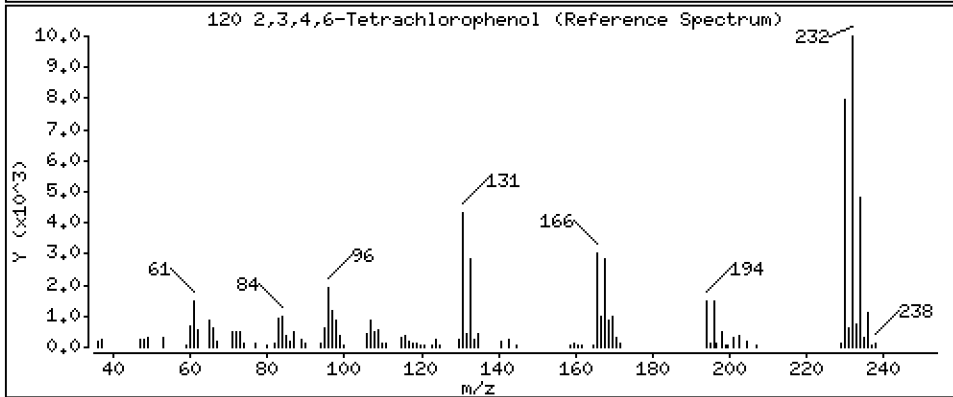
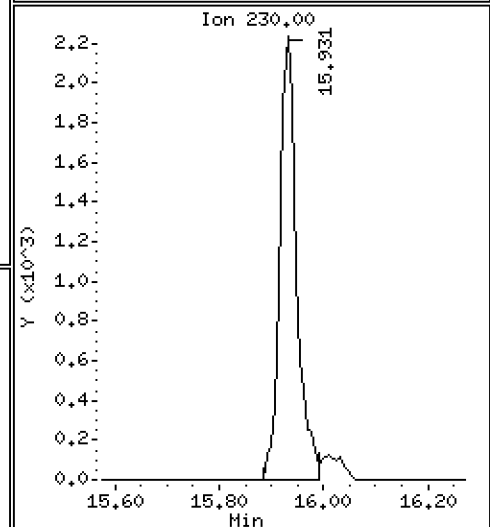
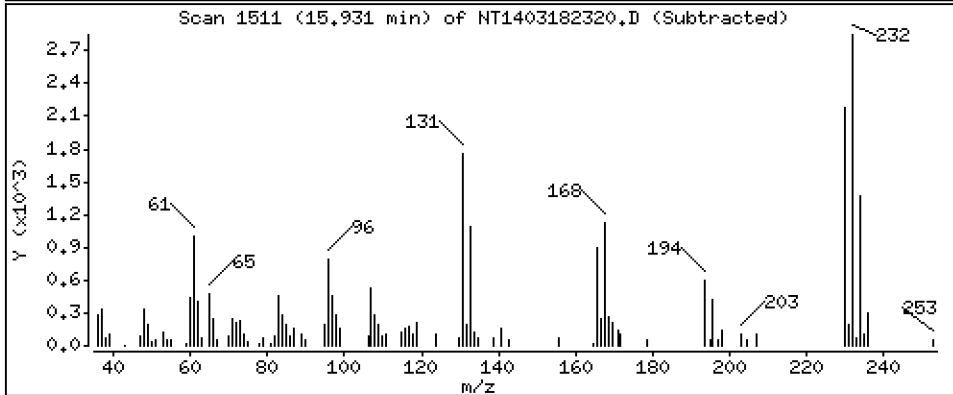
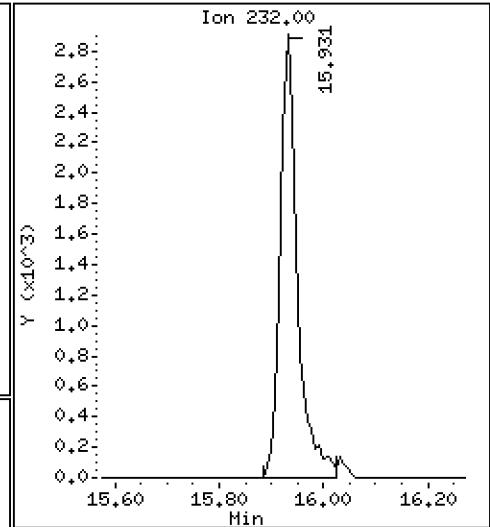
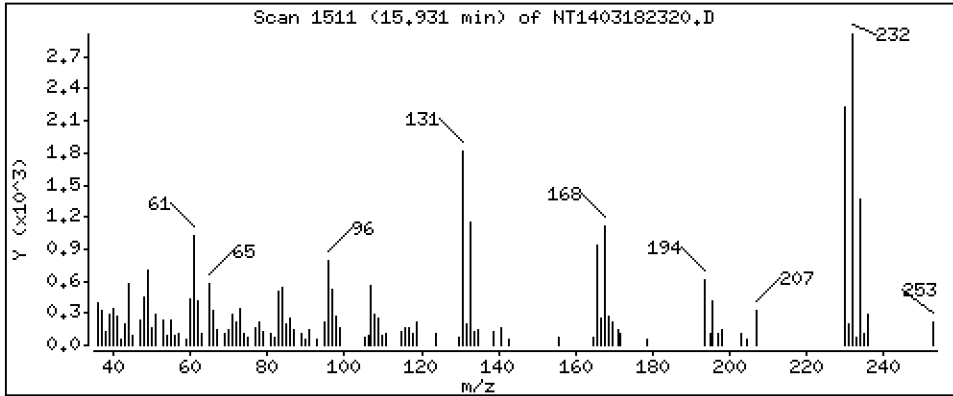
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,1312 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182320.D
 Lab Smp Id: SLC0355-LCV2
 Inj Date : 19-MAR-2023 04:28 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0355-LCV2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 08:01 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.836	6.837	(1.000)	23878	0.27614	0.2761
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	30003	0.26355	0.2635
3 Phenol	94		8.443	8.444	(1.000)	20806	0.17197	0.1720
\$ 5 2-Chlorophenol-d4	132		8.706	8.698	(1.000)	25062	0.27924	0.2792
4 Bis(2-Chloroethyl)ether	93		8.606	8.613	(1.000)	17729	0.20349	0.2035
6 2-Chlorophenol	128		8.729	8.729	(1.000)	18038	0.18942	0.1894
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	20607	0.21377	0.2138
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	254560	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	19687	0.21204	0.2120
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	12596	0.21007	0.2101
12 1,2-Dichlorobenzene	146		9.458	9.450	(1.000)	19314	0.21046	0.2105
11 Benzyl alcohol	108		9.349	9.342	(1.031)	7800	0.13848	0.1385 (M)
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.637	(1.000)	5687	0.22835	0.2283
13 2-Methylphenol	108		9.567	9.559	(1.000)	15079	0.17628	0.1763
17 Hexachloroethane	117		10.048	10.048	(1.000)	7682	0.19346	0.1935
16 N-Nitroso-di-n-propylamine	70		9.900	9.901	(1.000)	11827	0.17561	0.1756
15 4-Methylphenol	108		9.838	9.831	(1.000)	15155	0.14964	0.1496
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	20426	0.19962	0.1996
19 Nitrobenzene	77		10.203	10.195	(0.883)	19415	0.19492	0.1949
20 Isophorone	82		10.645	10.653	(0.921)	21931	0.16126	0.1613
21 2-Nitrophenol	139		10.832	10.832	(0.937)	8788	0.15625	0.1562
22 2,4-Dimethylphenol	107		10.886	10.886	(0.942)	32276	0.37887	0.3789
23 Bis(2-Chloroethoxy)methane	93		11.080	11.080	(0.958)	17477	0.19089	0.1909
24 Benzoic acid	105		11.018	11.118	(0.953)	13412	0.19576	0.1958 (M)
25 2,4-Dichlorophenol	162		11.297	11.289	(0.977)	26984	0.39829	0.3983
26 1,2,4-Trichlorobenzene	180		11.475	11.475	(0.993)	16986	0.20395	0.2039
* 27 Naphthalene-d8	136		11.560	11.560	(1.000)	966904	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	55165	0.21356	0.2136
29 4-Chloroaniline	127		11.737	11.730	(1.015)	34733	0.32119	0.3212
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	8181	0.21756	0.2176
31 4-Chloro-3-methylphenol	107		12.704	12.697	(1.099)	26660	0.32564	0.3256
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	36188	0.20088	0.2009
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	1023	0.02526	0.02526

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	16753	0.33900	0.3390
35 2,4,5-Trichlorophenol	196	13.710	13.703	(0.902)	16908	0.32834	0.3283
§ 36 2-Fluorobiphenyl	172	13.795	13.796	(0.908)	37440	0.21222	0.2122
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	31661	0.20939	0.2094
38 2-Nitroaniline	65	14.268	14.260	(0.939)	20628	0.35330	0.3533
39 Dimethylphthalate	163	14.693	14.693	(0.967)	33772	0.20790	0.2079
40 Acenaphthylene	152	14.879	14.879	(0.979)	52401	0.20632	0.2063
41 2,6-Dinitrotoluene	165	14.833	14.833	(0.976)	14481	0.38589	0.3859
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	487144	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	10366	0.20023	0.2002
44 Acenaphthene	153	15.258	15.258	(1.004)	30100	0.20299	0.2030
45 2,4-Dinitrophenol	184	15.343	15.335	(1.010)	2425	0.08347	0.08347 (M)
46 Dibenzofuran	168	15.590	15.591	(1.026)	43188	0.20401	0.2040
47 4-Nitrophenol	109	15.482	15.444	(1.019)	7628	0.27837	0.2784 (M)
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	16198	0.30451	0.3045
50 Diethylphthalate	149	16.155	16.155	(1.063)	36219	0.21565	0.2157
49 Fluorene	166	16.302	16.302	(1.073)	40744	0.20304	0.2030
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	17751	0.20608	0.2061
52 4-Nitroaniline	138	16.394	16.394	(1.079)	11402	0.25322	0.2532
53 4,6-Dinitro-2-methylphenol	198	16.479	16.487	(0.903)	7625	0.25778	0.2578
54 N-Nitrosodiphenylamine	169	16.541	16.541	(0.907)	24729	0.21296	0.2130
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	4562	0.23819	0.2382
56 4-Bromophenyl-phenylether	248	17.296	17.296	(0.948)	7556	0.19300	0.1930
57 Hexachlorobenzene	284	17.613	17.621	(0.966)	9608	0.23259	0.2326
58 Pentachlorophenol	266	17.985	17.969	(0.986)	4315	0.15161	0.1516 (M)
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	854961	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	48620	0.19904	0.1990
61 Anthracene	178	18.379	18.379	(1.008)	44080	0.18730	0.1873
62 Carbazole	167	18.712	18.704	(1.026)	37716	0.18012	0.1801
63 Di-n-butylphthalate	149	19.501	19.501	(1.069)	53926	0.20318	0.2032
64 Fluoranthene	202	20.677	20.677	(0.888)	44498	0.24594	0.2459
65 Pyrene	202	21.103	21.103	(0.906)	44730	0.24107	0.2411
§ 66 Terphenyl-d14	244	21.381	21.381	(0.918)	31064	0.24730	0.2473
67 Butylbenzylphthalate	149	22.303	22.303	(0.957)	21350	0.26264	0.2626
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	35300	0.21527	0.2153
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	444724	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	30519	0.64872	0.6487
71 Chrysene	228	23.332	23.340	(1.002)	30728	0.20705	0.2071
72 bis(2-Ethylhexyl)phthalate	149	23.325	23.325	(0.959)	25814	0.22845	0.2285
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	858353	4.00000	
73 Di-n-octylphthalate	149	24.323	24.323	(1.000)	45409	0.20579	0.2058
74 Benzo(b)fluoranthene	252	25.152	25.160	(0.970)	30713	0.18547	0.1855
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	31989	0.19487	0.1949
76 Benzo(a)pyrene	252	25.810	25.818	(0.996)	28121	0.19859	0.1986
* 77 Perylene-d12	264	25.926	25.934	(1.000)	468611	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.610	28.611	(1.104)	27343	0.17741	0.1774
79 Dibenzo(a,h)anthracene	278	28.618	28.626	(1.104)	24993	0.19241	0.1924
80 Benzo(g,h,i)perylene	276	29.395	29.411	(1.134)	19870	0.15643	0.1564
90 N-Nitrosodimethylamine	74	4.728	4.728	(1.000)	18801	0.34330	0.3433
91 Aniline	93	8.521	8.521	(1.000)	42418	0.34858	0.3486
93 Benzidine	184	20.917	20.902	(0.898)	22954	0.31525	0.3153
103 Pyridine	79	4.766	4.751	(1.000)	25203	0.14860	0.1486
105 1-methylnaphthalene	142	13.230	13.231	(1.145)	32446	0.19880	0.1988
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	38191	0.19043	0.1904

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.152	25.198	(0.970)	60449	0.38498	0.3850
120 2,3,4,6-Tetrachlorophenol	232	15.931	15.923	(1.048)	6474	0.13116	0.1312

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 19-MAR-2023
 Lab File ID: NT1403182320.D Calibration Time: 03:16
 Lab Smp Id: SLC0355-LCV2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	237594	118797	475188	254560	7.14
27 Naphthalene-d8	944151	472076	1888302	966904	2.41
42 Acenaphthene-d10	498100	249050	996200	487144	-2.20
59 Phenanthrene-d10	845417	422709	1690834	854961	1.13
69 Chrysene-d12	410836	205418	821672	444724	8.25
134 Di-n-octylphthala	914780	457390	1829560	858353	-6.17
77 Perylene-d12	441517	220759	883034	468611	6.14

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.07	0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.56	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.24	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403182320.D

Lab ID: SLC0355-LCV2
nt14.i, ABN.m, 19-MAR-2023 04:28

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.031	1.000	0.0308	Benzyl alcohol
1.000	1.063	-0.0634	2,2'-oxybis(1-Chloropropane)
0.953	0.962	-0.0087	Benzoic acid

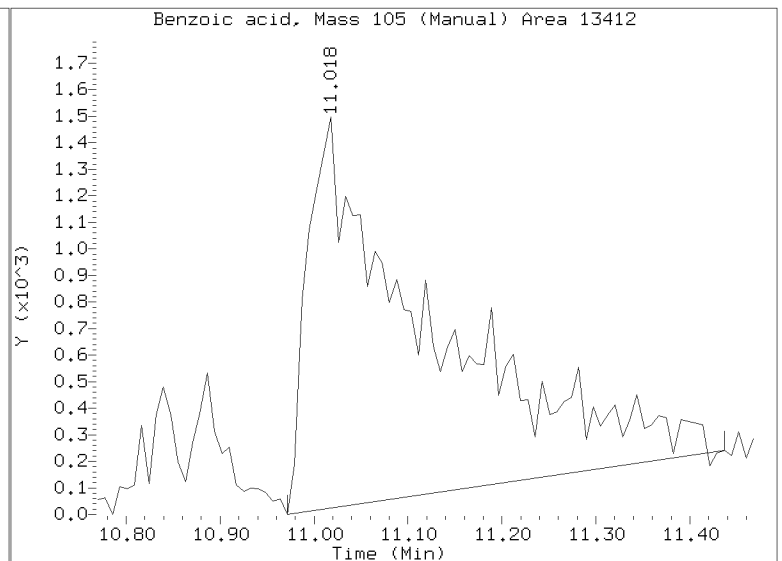
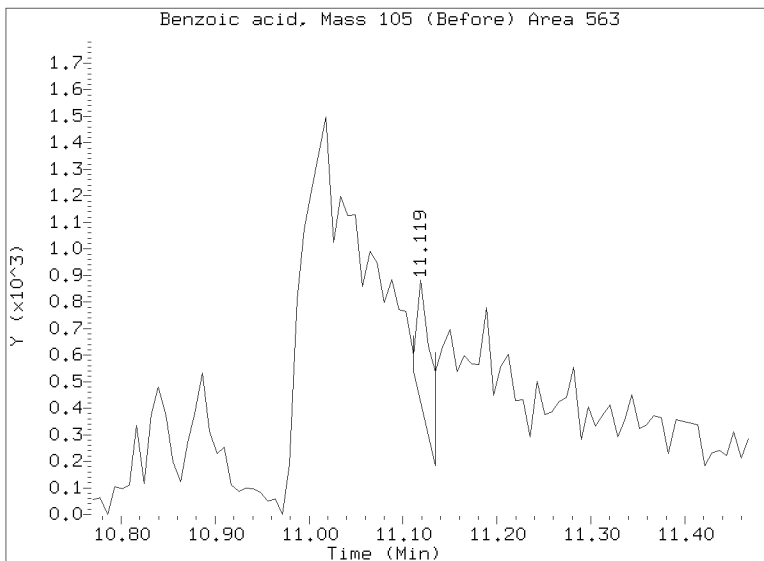
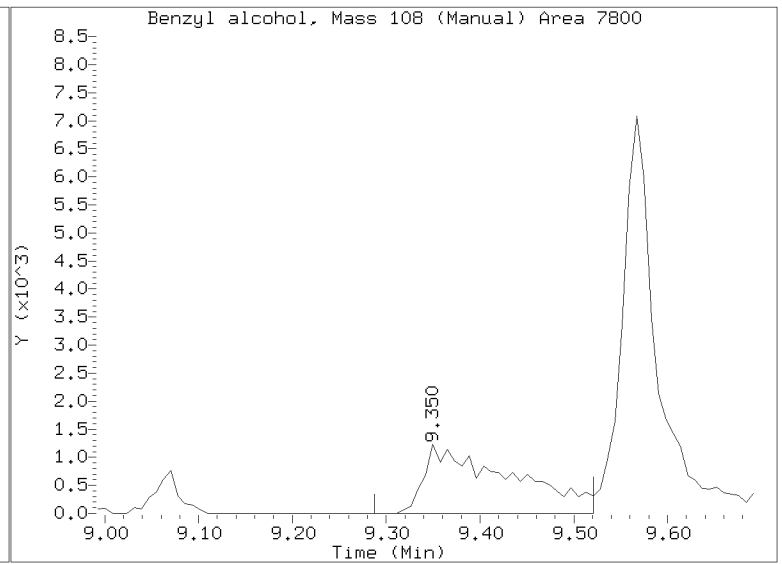
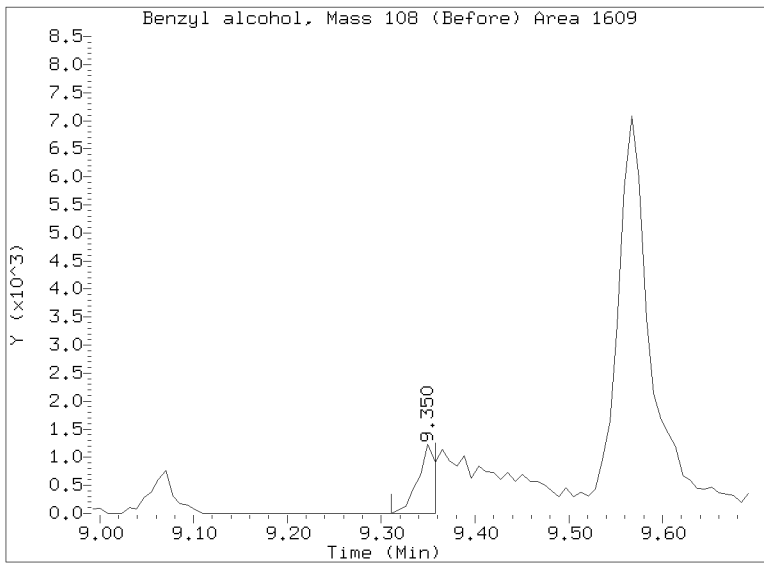
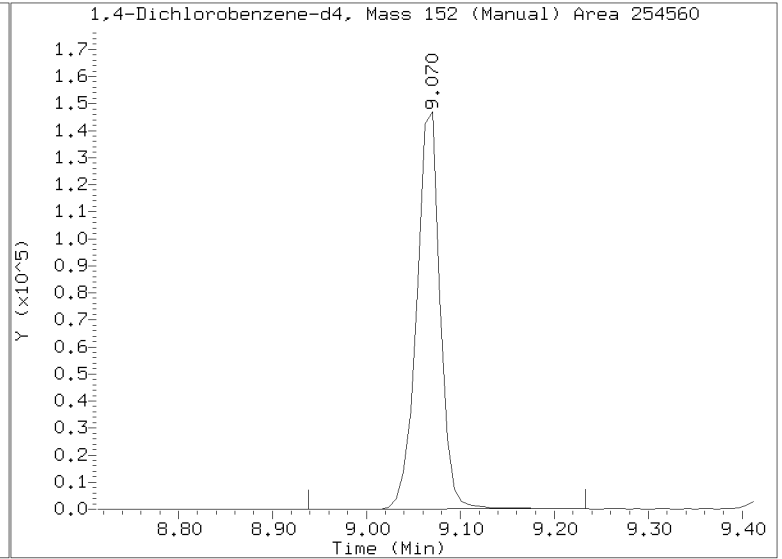
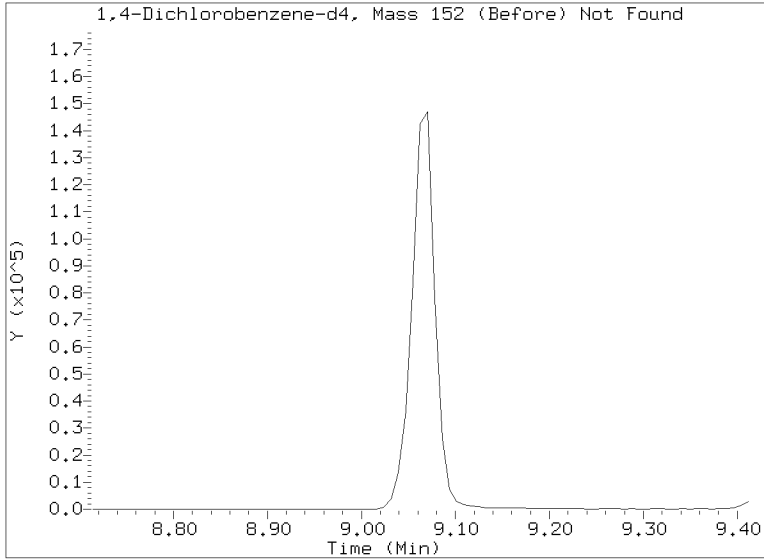
RRT check based on Ccal File: NT1403182318.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

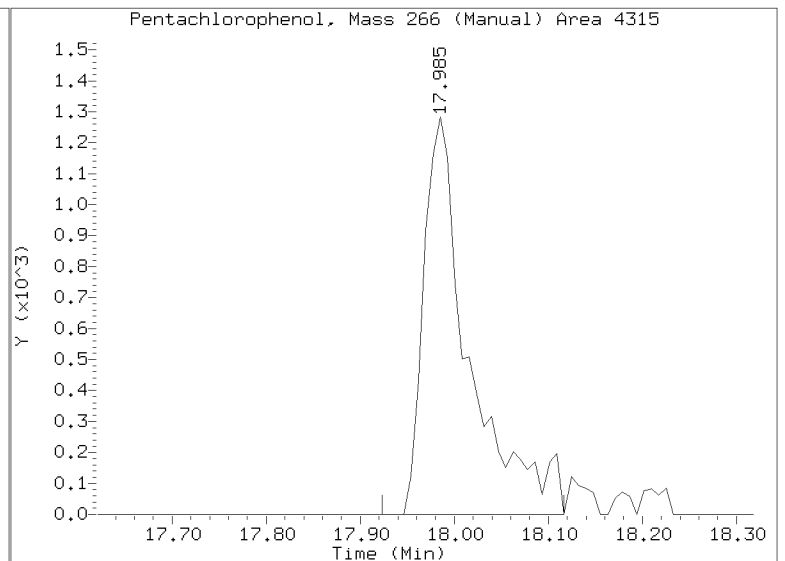
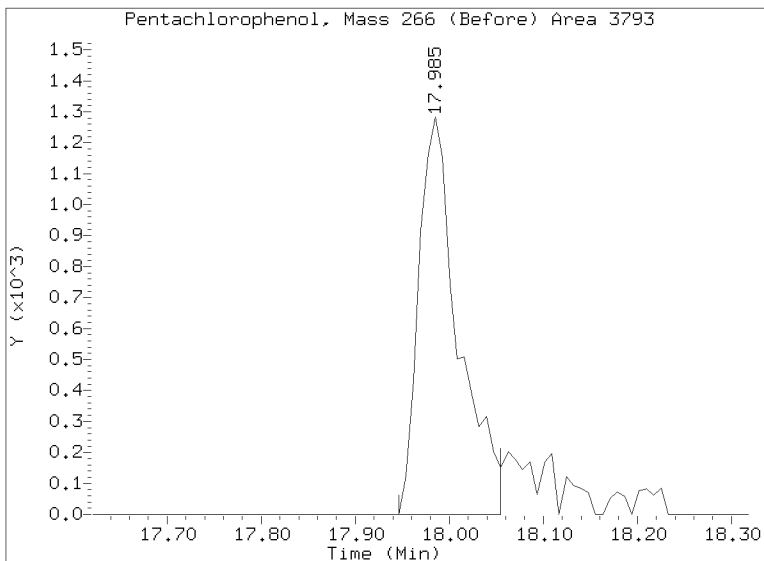
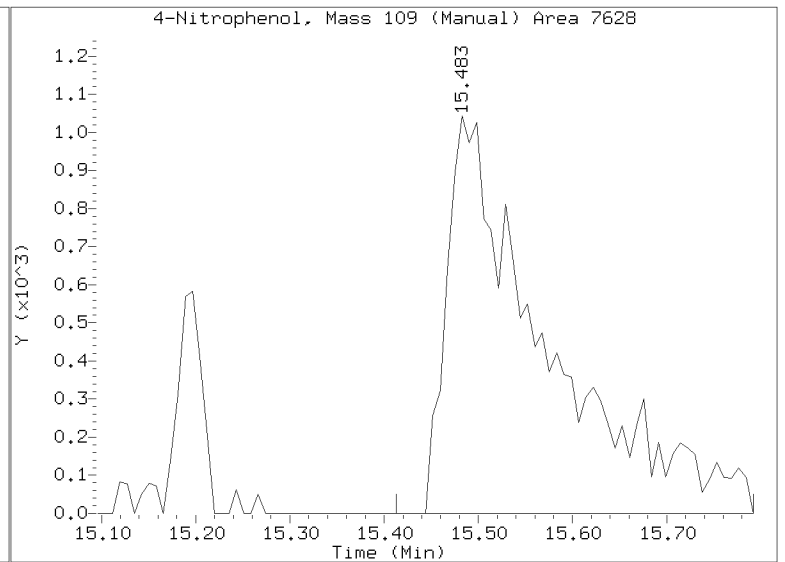
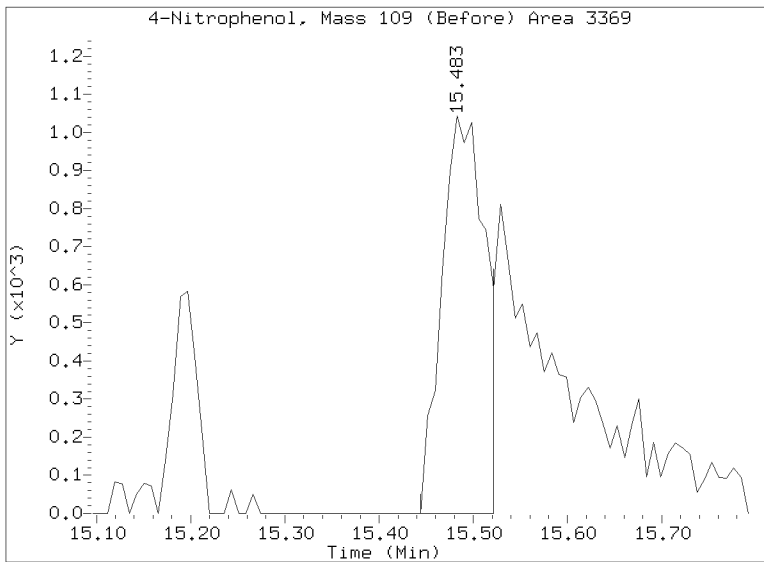
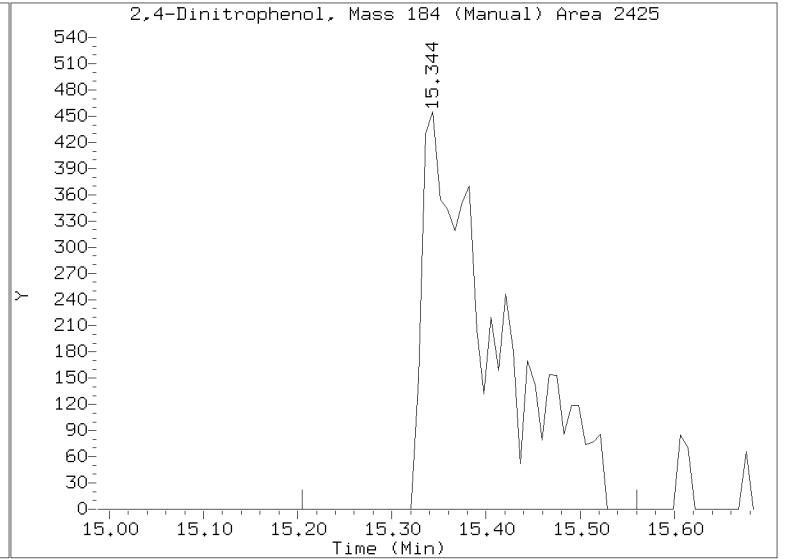
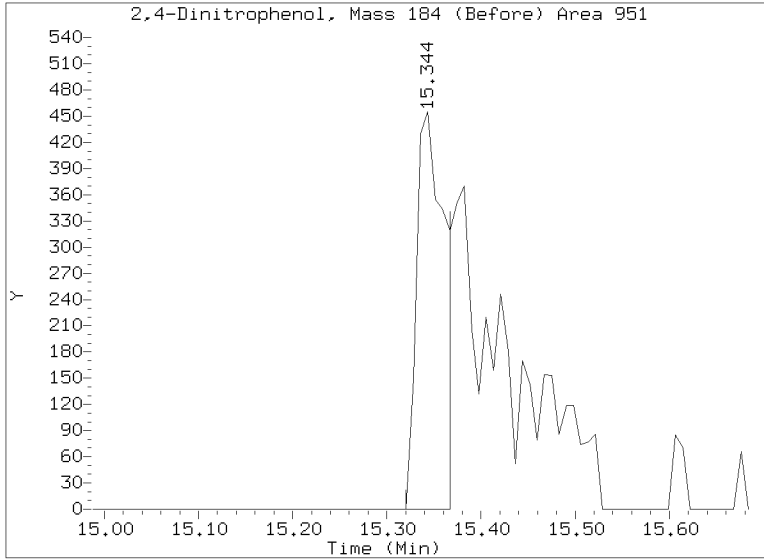
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182320.D
Injection Date: 19-MAR-2023 04:28
Lab ID:SLC0355-LCV2 Client ID:
Report Date: 03/23/2023 08:01



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182320.D
Injection Date: 19-MAR-2023 04:28
Lab ID: SLC0355-LCV2 Client ID:
Report Date: 03/23/2023 08:01





INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403172302.D

Calibration Date: 03/15/2023

Sequence: SLC0335

Injection Date: 03/17/23

Lab Sample ID: SLC0335-ICV1

Injection Time: 15:03

Sequence Name: SICV1

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	4.6	1.9011440	1.7478170		-8.1	+/-20
4-Methylphenol	A	5.0000	4.3	1.5914380	1.3551960		-14.8	+/-20
Naphthalene	A	5.0000	4.8	1.0686200	1.0351970		-3.1	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7452524	0.7483049		0.4	+/-20
Acenaphthylene	A	5.0000	4.8	2.0854140	1.9937370		-4.4	+/-20
Dimethylphthalate	A	5.0000	4.8	1.3338450	1.2861530		-3.6	+/-20
Acenaphthene	A	5.0000	4.8	1.2175690	1.1700200		-3.9	+/-20
Dibenzofuran	A	5.0000	4.9	1.7382550	1.7157240		-1.3	+/-20
Fluorene	A	5.0000	4.8	1.6477120	1.5943600		-3.2	+/-20
Phenanthrene	A	5.0000	4.7	1.1428510	1.0756920		-5.9	+/-20
Anthracene	A	5.0000	4.9	1.1010610	1.0890030		-1.1	+/-20
Fluoranthene	A	5.0000	5.8	1.6273660	1.8950480		16.4	+/-20
Pyrene	A	5.0000	5.5	1.6688810	1.8268750		9.5	+/-20
Butylbenzylphthalate	A	5.0000	5.8	0.7311588	0.8433794		15.3	+/-20
Benzo(a)anthracene	A	5.0000	5.0	1.4748830	1.4732660		-0.1	+/-20
Chrysene	A	5.0000	4.9	1.3348290	1.3099030		-1.9	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.6	0.5265649	0.5917227		12.4	+/-20
Benzofluoranthenes, Total	A	10.0000	10.8	1.3424190	1.4461980		7.7	+/-20
Benzo(a)pyrene	A	5.0000	5.2	1.2087150	1.2538280		3.7	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.2	1.3155660	1.1062120		-15.9	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.2	1.1087420	0.9294304		-16.2	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.0	1.0842080	0.8648282		-20.2	+/-20 *
2-Fluorophenol	A	7.5000	7.33	1.3587350	1.3274760		-2.3	+/-20
Phenol-d5	A	7.5000	7.23	1.7888720	1.7234040		-3.7	+/-20
2-Chlorophenol-d4	A	7.5000	7.29	1.4103050	1.3702670		-2.8	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.85	0.9421955	0.9138383		-3.0	+/-20
Nitrobenzene-d5	A	5.0000	5.08	0.4233007	0.4302636		1.6	+/-20
2-Fluorobiphenyl	A	5.0000	5.00	1.4485960	1.4473230		-0.08	+/-20
2,4,6-Tribromophenol	A	7.5000	7.42	0.1518639	0.1502399		-1.1	+/-20
p-Terphenyl-d14	A	5.0000	5.70	1.1297810	1.2888190		14.1	+/-20

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00048</u>
Lab File ID:	<u>NT1403172302.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0335</u>	Injection Date:	<u>03/17/23</u>
Lab Sample ID:	<u>SLC0335-ICV1</u>	Injection Time:	<u>15:03</u>
Sequence Name:	<u>SICV1</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene-d4	A	4.0000	4.0	48445.4300	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	183571.5000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	95634.1400	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	176078.0000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	127293.4000	1.0000		0.0	
Di-n-Octylphthalate-d4	A	4.0000	4.0	236003.4000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	121097.1000	1.0000		0.0	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172302.D

Date : 17-MAR-2023 15:03

Client ID:

Sample Info: SLC0335-ICW1

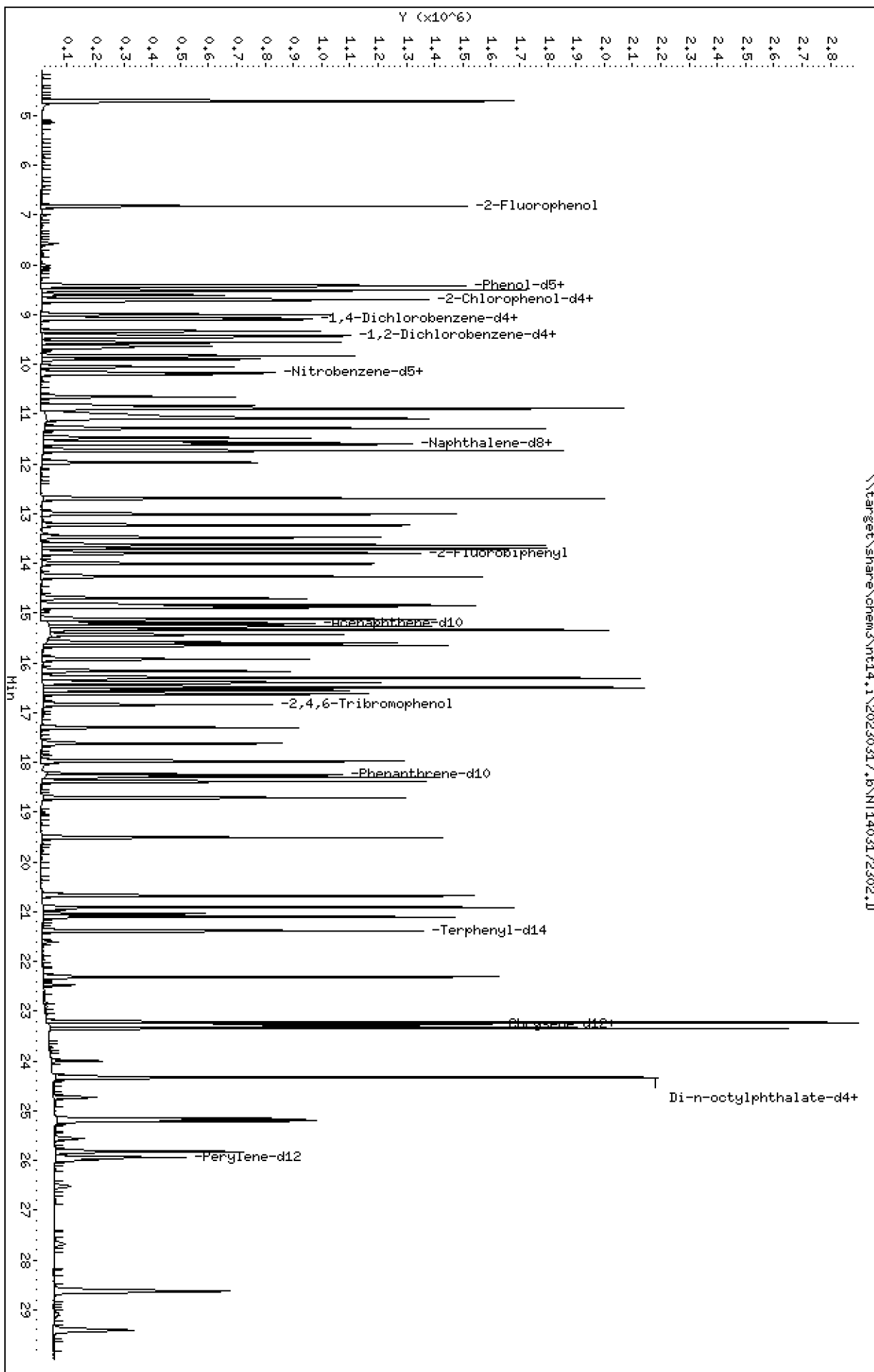
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230317,6\NT1403172302.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172302.D
 Lab Smp Id: SLC0335-ICV1
 Inj Date : 17-MAR-2023 15:03 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-ICV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.821	6.821	(1.000)	550618	7.50000	7.327
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	714843	7.50000	7.226
3 Phenol	94		8.435	8.435	(1.000)	483313	5.00000	4.597
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	568367	7.50000	7.287
4 Bis(2-Chloroethyl)ether	93		8.605	8.605	(1.000)	346607	5.00000	4.578
6 2-Chlorophenol	128		8.729	8.729	(1.000)	386577	5.00000	4.671
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	395007	5.00000	4.715
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	221219	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	382660	5.00000	4.743
\$ 10 1,2-Dichlorobenzene-d4	152		9.426	9.426	(1.000)	252698	5.00000	4.850
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	374974	5.00000	4.702
11 Benzyl alcohol	108		9.333	9.333	(1.000)	243337	5.00000	4.971
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	111978	5.00000	4.653
13 2-Methylphenol	108		9.558	9.558	(1.000)	348982	5.00000	4.695
17 Hexachloroethane	117		10.055	10.055	(1.000)	169906	5.00000	4.924
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	268975	5.00000	4.596
15 4-Methylphenol	108		9.830	9.830	(1.000)	374744	5.00000	4.258
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	435373	5.00000	5.082
19 Nitrobenzene	77		10.203	10.203	(0.882)	411915	5.00000	4.940
20 Isophorone	82		10.653	10.653	(0.921)	527720	5.00000	4.635
21 2-Nitrophenol	139		10.831	10.831	(0.936)	209678	5.00000	4.376
22 2,4-Dimethylphenol	107		10.885	10.885	(0.941)	722162	10.0000	10.13
23 Bis(2-Chloroethoxy)methane	93		11.087	11.087	(0.959)	361497	5.00000	4.716
24 Benzoic acid	105		11.103	11.103	(0.960)	1003884	20.0000	16.48
25 2,4-Dichlorophenol	162		11.289	11.289	(0.976)	564058	10.0000	9.944
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	353725	5.00000	5.073
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	809500	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	1047490	5.00000	4.844
29 4-Chloroaniline	127		11.737	11.737	(1.015)	960993	10.0000	10.61
30 Hexachlorobutadiene	225		11.976	11.976	(1.035)	159746	5.00000	5.074
31 4-Chloro-3-methylphenol	107		12.696	12.696	(1.098)	664962	10.0000	9.702
32 2-Methylnaphthalene	142		13.013	13.013	(1.125)	757191	5.00000	5.020
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	348302	10.0000	9.961

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	416763	10.0000	9.766
35 2,4,5-Trichlorophenol	196	13.702	13.702	(0.902)	441138	10.0000	9.920
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	761091	5.00000	4.996
37 2-Chloronaphthalene	162	14.012	14.012	(0.922)	639201	5.00000	4.895
38 2-Nitroaniline	65	14.267	14.267	(0.939)	496351	10.0000	9.844
39 Dimethylphthalate	163	14.701	14.701	(0.967)	676338	5.00000	4.821
40 Acenaphthylene	152	14.879	14.879	(0.979)	1048429	5.00000	4.780
41 2,6-Dinitrotoluene	165	14.840	14.840	(0.977)	318619	10.0000	9.832
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	420689	4.00000	
43 3-Nitroaniline	138	15.126	15.126	(0.995)	435753	10.0000	9.747
44 Acenaphthene	153	15.265	15.265	(1.005)	615268	5.00000	4.805
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	436308	20.0000	16.89
46 Dibenzofuran	168	15.590	15.590	(1.026)	902233	5.00000	4.935
47 4-Nitrophenol	109	15.435	15.435	(1.016)	218372	10.0000	9.228
48 2,4-Dinitrotoluene	165	15.652	15.652	(1.030)	443446	10.0000	9.653
50 Diethylphthalate	149	16.170	16.170	(1.064)	691600	5.00000	4.768
49 Fluorene	166	16.309	16.309	(1.073)	838412	5.00000	4.838
51 4-Chlorophenyl-phenylether	204	16.301	16.301	(1.073)	361344	5.00000	4.858
52 4-Nitroaniline	138	16.394	16.394	(1.079)	381409	10.0000	9.809
53 4,6-Dinitro-2-methylphenol	198	16.494	16.494	(0.904)	505514	20.0000	18.81
54 N-Nitrosodiphenylamine	169	16.548	16.548	(0.907)	501160	5.00000	4.871
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	118508	7.50000	7.420
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.948)	174537	5.00000	5.032
57 Hexachlorobenzene	284	17.620	17.620	(0.966)	177179	5.00000	4.841
58 Pentachlorophenol	266	17.976	17.976	(0.985)	231845	10.0000	8.966
* 59 Phenanthrene-d10	188	18.247	18.247	(1.000)	757520	4.00000	
60 Phenanthrene	178	18.294	18.294	(1.003)	1018573	5.00000	4.706
61 Anthracene	178	18.387	18.387	(1.008)	1031177	5.00000	4.945
62 Carbazole	167	18.711	18.711	(1.025)	928059	5.00000	5.002
63 Di-n-butylphthalate	149	19.508	19.508	(1.069)	1219887	5.00000	5.187
64 Fluoranthene	202	20.677	20.677	(0.888)	1067149	5.00000	5.822
65 Pyrene	202	21.102	21.102	(0.906)	1028759	5.00000	5.473
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	725766	5.00000	5.704
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	474928	5.00000	5.767
68 Benzo(a)anthracene	228	23.270	23.270	(0.999)	829633	5.00000	4.995
* 69 Chrysene-d12	240	23.293	23.293	(1.000)	450500	4.00000	
70 3,3'-Dichlorobenzidine	252	23.224	23.224	(0.997)	883473	15.0000	17.55
71 Chrysene	228	23.340	23.340	(1.002)	737639	5.00000	4.907
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.959)	612720	5.00000	5.619
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	828388	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	1018494	5.00000	4.783
74 Benzo(b)fluoranthene	252	25.159	25.159	(0.970)	643020	5.00000	5.353
75 Benzo(k)fluoranthene	252	25.205	25.205	(0.972)	648399	5.00000	5.446
76 Benzo(a)pyrene	252	25.817	25.817	(0.996)	532742	5.00000	5.187
* 77 Perylene-d12	264	25.933	25.933	(1.000)	339914	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.618	28.618	(1.104)	470021	5.00000	4.204
79 Dibenzo(a,h)anthracene	278	28.633	28.633	(1.104)	394908	5.00000	4.191
80 Benzo(g,h,i)perylene	276	29.410	29.410	(1.134)	367459	5.00000	3.988
90 N-Nitrosodimethylamine	74	4.697	4.697	(1.000)	421348	10.0000	8.853
91 Aniline	93	8.513	8.513	(1.000)	988884	10.0000	9.351
93 Benzidine	184	20.909	20.909	(0.898)	1107296	10.0000	15.01
103 Pyridine	79	4.712	4.712	(1.000)	666229	5.00000	4.520
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	681137	5.00000	4.985
111 Azobenzene (1,2-DP-Hydrazine)	77	16.625	16.625	(1.094)	830671	5.00000	4.796

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.205	25.205	(0.972)	1228957	10.0000	10.77
120 2,3,4,6-Tetrachlorophenol	232		15.930	15.930	(1.048)	193840	5.00000	4.432

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403172302.D Calibration Time: 13:26
 Lab Smp Id: SLC0335-ICV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	221219	0.00
27 Naphthalene-d8	809500	404750	1619000	809500	0.00
42 Acenaphthene-d10	420689	210345	841378	420689	0.00
59 Phenanthrene-d10	757520	378760	1515040	757520	0.00
69 Chrysene-d12	450500	225250	901000	450500	0.00
134 Di-n-octylphthala	828388	414194	1656776	828388	0.00
77 Perylene-d12	339914	169957	679828	339914	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172302.D

Lab ID: SLC0335-ICV1
nt14.i, ABN.m, 17-MAR-2023 15:03

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

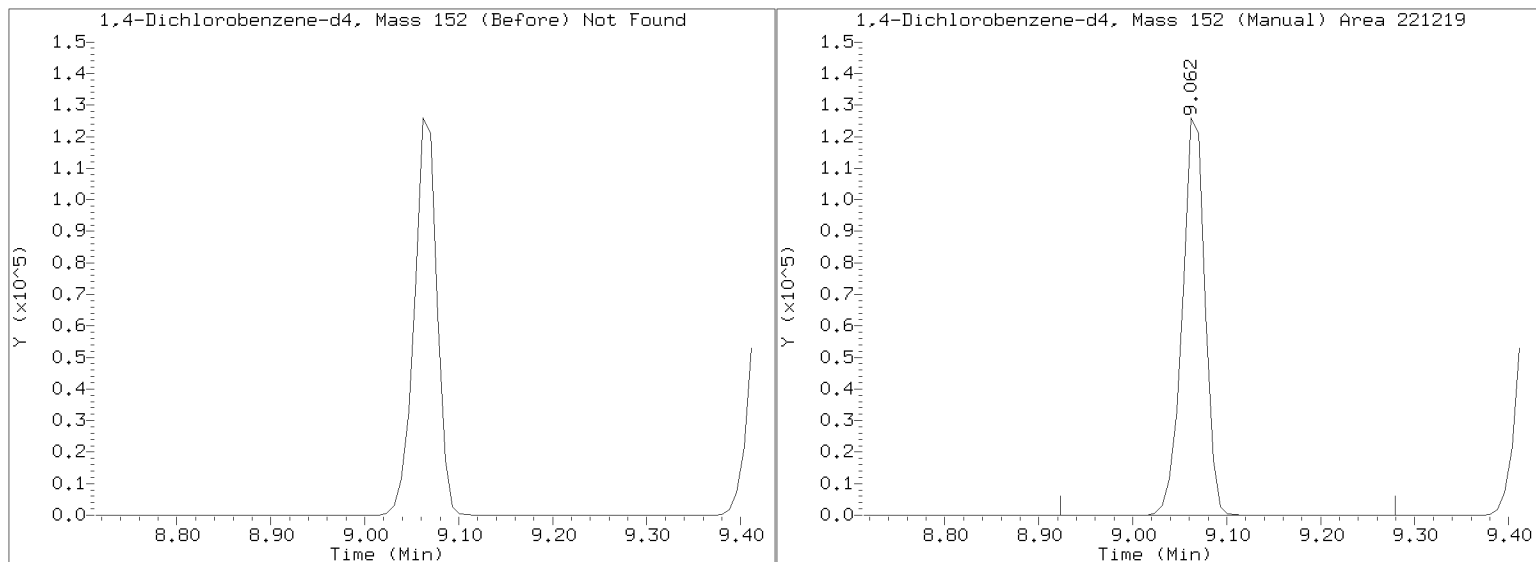
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172302.D

Injection Date: 17-MAR-2023 15:03

Lab ID: SLC0335-ICV1 Client ID:

Report Date: 03/22/2023 08:11



Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b

Instrument: nt14.i Date: 17-MAR-2023 Method: ABN.m

INITIAL CAL: 15-MAR-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1403172302.D 17-MAR-2023 15:03

Compound	%D

Benzo(g,h,i)perylene	-20.23
Benzidine	50.13



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403172316.D

Calibration Date: 03/15/2023

Sequence: SLC0335

Injection Date: 03/17/23

Lab Sample ID: SLC0335-ICV2

Injection Time: 23:31

Sequence Name: SSTD005

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	4.5	1.9011440	1.7067590		-10.2	+/-20
4-Methylphenol	A	5.0000	4.2	1.5914380	1.3426200		-15.6	+/-20
Naphthalene	A	5.0000	4.8	1.0686200	1.0278110		-3.8	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7452524	0.7456717		0.06	+/-20
Acenaphthylene	A	5.0000	4.8	2.0854140	2.0224720		-3.0	+/-20
Dimethylphthalate	A	5.0000	4.8	1.3338450	1.2891790		-3.3	+/-20
Acenaphthene	A	5.0000	4.9	1.2175690	1.1831670		-2.8	+/-20
Dibenzofuran	A	5.0000	5.0	1.7382550	1.7338680		-0.3	+/-20
Fluorene	A	5.0000	4.9	1.6477120	1.6101450		-2.3	+/-20
Phenanthrene	A	5.0000	4.7	1.1428510	1.0752890		-5.9	+/-20
Anthracene	A	5.0000	4.9	1.1010610	1.0807260		-1.8	+/-20
Fluoranthene	A	5.0000	6.4	1.6273660	2.0876370		28.3	+/-20 *
Pyrene	A	5.0000	5.9	1.6688810	1.9781880		18.5	+/-20
Butylbenzylphthalate	A	5.0000	6.4	0.7311588	0.9354284		27.9	+/-20 *
Benzo(a)anthracene	A	5.0000	4.9	1.4748830	1.4523400		-1.5	+/-20
Chrysene	A	5.0000	4.7	1.3348290	1.2567480		-5.8	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.8	0.5265649	0.6089646		15.6	+/-20
Benzo(a)pyrene	A	5.0000	5.1	1.2087150	1.2310410		1.8	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.0	1.3155660	1.0580940		-19.6	+/-20
Dibenzo(a,h)anthracene	A	5.0000	3.9	1.1087420	0.8644033		-22.0	+/-20 *
Benzo(g,h,i)perylene	A	5.0000	3.7	1.0842080	0.7952116		-26.7	+/-20 *
2-Fluorophenol	A	7.5000	7.04	1.3587350	1.2758130		-6.1	+/-20
Phenol-d5	A	7.5000	7.09	1.7888720	1.6899510		-5.5	+/-20
2-Chlorophenol-d4	A	7.5000	7.23	1.4103050	1.3603450		-3.5	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.77	0.9421955	0.8996948		-4.5	+/-20
Nitrobenzene-d5	A	5.0000	5.12	0.4233007	0.4335160		2.4	+/-20
2-Fluorobiphenyl	A	5.0000	5.02	1.4485960	1.4552470		0.5	+/-20
2,4,6-Tribromophenol	A	7.5000	7.71	0.1518639	0.1562046		2.9	+/-20
p-Terphenyl-d14	A	5.0000	6.23	1.1297810	1.4086360		24.7	+/-20 *

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00048</u>
Lab File ID:	<u>NT1403172316.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0335</u>	Injection Date:	<u>03/17/23</u>
Lab Sample ID:	<u>SLC0335-ICV2</u>	Injection Time:	<u>23:31</u>
Sequence Name:	<u>SSTD005</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene-d4	A	4.0000	4.0	48445.4300	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	183571.5000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	95634.1400	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	176078.0000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	127293.4000	1.0000		0.0	
Di-n-Octylphthalate-d4	A	4.0000	4.0	236003.4000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	121097.1000	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172316.D

Date: 17-MAR-2023 23:31

Client ID:

Sample Info: SLC0335-ICW2

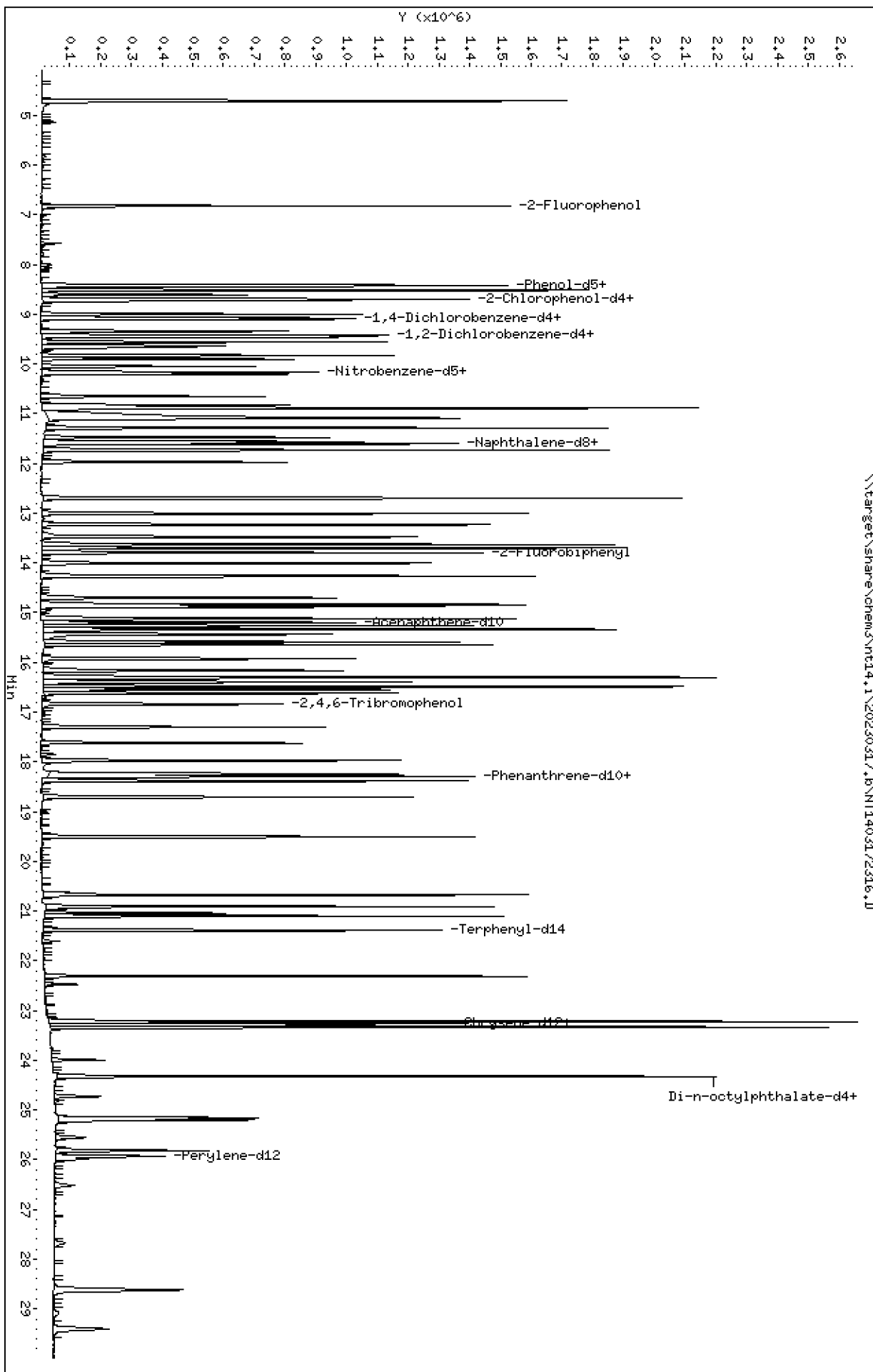
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172316.D
 Lab Smp Id: SLC0335-ICV2
 Inj Date : 17-MAR-2023 23:31 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-ICV2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.821	6.821	(1.000)	552627	7.50000	7.042
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	732014	7.50000	7.085
3 Phenol	94		8.436	8.436	(1.000)	492863	5.00000	4.489
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	589243	7.50000	7.234
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	350404	5.00000	4.432
6 2-Chlorophenol	128		8.729	8.729	(1.000)	402991	5.00000	4.663
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	404070	5.00000	4.619
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	231017	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	391934	5.00000	4.652
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	259806	5.00000	4.774
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	384703	5.00000	4.619
11 Benzyl alcohol	108		9.341	9.341	(1.000)	245616	5.00000	4.805
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	113824	5.00000	4.529
13 2-Methylphenol	108		9.559	9.559	(1.000)	357977	5.00000	4.611
17 Hexachloroethane	117		10.048	10.048	(1.000)	175252	5.00000	4.863
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	278682	5.00000	4.560
15 4-Methylphenol	108		9.830	9.830	(1.000)	387710	5.00000	4.218
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	457245	5.00000	5.121
19 Nitrobenzene	77		10.203	10.203	(0.882)	429696	5.00000	4.944
20 Isophorone	82		10.653	10.653	(0.921)	553125	5.00000	4.661
21 2-Nitrophenol	139		10.831	10.831	(0.936)	248655	5.00000	4.966
22 2,4-Dimethylphenol	107		10.886	10.886	(0.941)	745186	10.0000	10.02
23 Bis(2-Chloroethoxy)methane	93		11.087	11.087	(0.959)	376050	5.00000	4.707
24 Benzoic acid	105		11.103	11.103	(0.960)	1010902	20.0000	15.94
25 2,4-Dichlorophenol	162		11.289	11.289	(0.976)	586144	10.0000	9.914
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	368156	5.00000	5.065
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	843789	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	1084070	5.00000	4.809
29 4-Chloroaniline	127		11.737	11.737	(1.015)	999352	10.0000	10.59
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	164075	5.00000	5.000
31 4-Chloro-3-methylphenol	107		12.696	12.696	(1.098)	693102	10.0000	9.701
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	786487	5.00000	5.003
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	337054	10.0000	9.377

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	434640	10.0000	9.907
35 2,4,5-Trichlorophenol	196	13.702	13.702	(0.902)	467141	10.0000	10.22
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	786661	5.00000	5.023
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	666898	5.00000	4.968
38 2-Nitroaniline	65	14.267	14.267	(0.939)	519689	10.0000	10.03
39 Dimethylphthalate	163	14.701	14.701	(0.967)	696890	5.00000	4.833
40 Acenaphthylene	152	14.879	14.879	(0.979)	1093285	5.00000	4.849
41 2,6-Dinitrotoluene	165	14.840	14.840	(0.977)	334830	10.0000	10.05
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	432455	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	449932	10.0000	9.790
44 Acenaphthene	153	15.266	15.266	(1.005)	639583	5.00000	4.859
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	426420	20.0000	16.08
46 Dibenzofuran	168	15.590	15.590	(1.026)	937275	5.00000	4.987
47 4-Nitrophenol	109	15.436	15.436	(1.016)	210345	10.0000	8.647
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	465718	10.0000	9.862
50 Diethylphthalate	149	16.163	16.163	(1.064)	797912	5.00000	5.352
49 Fluorene	166	16.309	16.309	(1.073)	870394	5.00000	4.886
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	371769	5.00000	4.862
52 4-Nitroaniline	138	16.394	16.394	(1.079)	390281	10.0000	9.764
53 4,6-Dinitro-2-methylphenol	198	16.494	16.494	(0.904)	508856	20.0000	18.09
54 N-Nitrosodiphenylamine	169	16.548	16.548	(0.907)	526989	5.00000	4.888
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	126659	7.50000	7.714
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	181194	5.00000	4.985
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	187265	5.00000	4.883
58 Pentachlorophenol	266	17.977	17.977	(0.986)	226626	10.0000	8.379
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	793780	4.00000	
60 Phenanthrene	178	18.294	18.294	(1.003)	1066929	5.00000	4.704
61 Anthracene	178	18.387	18.387	(1.008)	1072323	5.00000	4.908
62 Carbazole	167	18.712	18.712	(1.026)	958958	5.00000	4.933
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	1263889	5.00000	5.129
64 Fluoranthene	202	20.677	20.677	(0.888)	1072672	5.00000	6.414
65 Pyrene	202	21.103	21.103	(0.906)	1016435	5.00000	5.927
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	723787	5.00000	6.234
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	480643	5.00000	6.397
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	746243	5.00000	4.924
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	411057	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	750640	15.0000	16.40
71 Chrysene	228	23.340	23.340	(1.002)	645744	5.00000	4.708
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.960)	608211	5.00000	5.782
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	799010	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.001)	977528	5.00000	4.759
74 Benzo(b)fluoranthene	252	25.159	25.159	(0.970)	527337	5.00000	5.857
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	473131	5.00000	5.301
76 Benzo(a)pyrene	252	25.818	25.818	(0.996)	392059	5.00000	5.092
* 77 Perylene-d12	264	25.934	25.934	(1.000)	254782	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.610	28.610	(1.103)	336979	5.00000	4.021
79 Dibenzo(a,h)anthracene	278	28.626	28.626	(1.104)	275293	5.00000	3.898
80 Benzo(g,h,i)perylene	276	29.403	29.403	(1.134)	253257	5.00000	3.667
90 N-Nitrosodimethylamine	74	4.697	4.697	(1.000)	410993	10.0000	8.269
91 Aniline	93	8.513	8.513	(1.000)	1009932	10.0000	9.145
93 Benzidine	184	20.909	20.909	(0.898)	972542	10.0000	14.45
103 Pyridine	79	4.712	4.712	(1.000)	641216	5.00000	4.166
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	712804	5.00000	5.005
111 Azobenzene (1,2-DP-Hydrazine)	77	16.625	16.625	(1.094)	866273	5.00000	4.866

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.159	25.159	(0.970)	948944	10.0000	11.10
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	205137	5.00000	4.559

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172316.D Calibration Time: 15:03
 Lab Smp Id: SLC0335-ICV2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	231017	4.43
27 Naphthalene-d8	809500	404750	1619000	843789	4.24
42 Acenaphthene-d10	420689	210345	841378	432455	2.80
59 Phenanthrene-d10	757520	378760	1515040	793780	4.79
69 Chrysene-d12	450500	225250	901000	411057	-8.76
134 Di-n-octylphthala	828388	414194	1656776	799010	-3.55
77 Perylene-d12	339914	169957	679828	254782	-25.05

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172316.D

Lab ID: SLC0335-ICV2
nt14.i, ABN.m, 17-MAR-2023 23:31

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

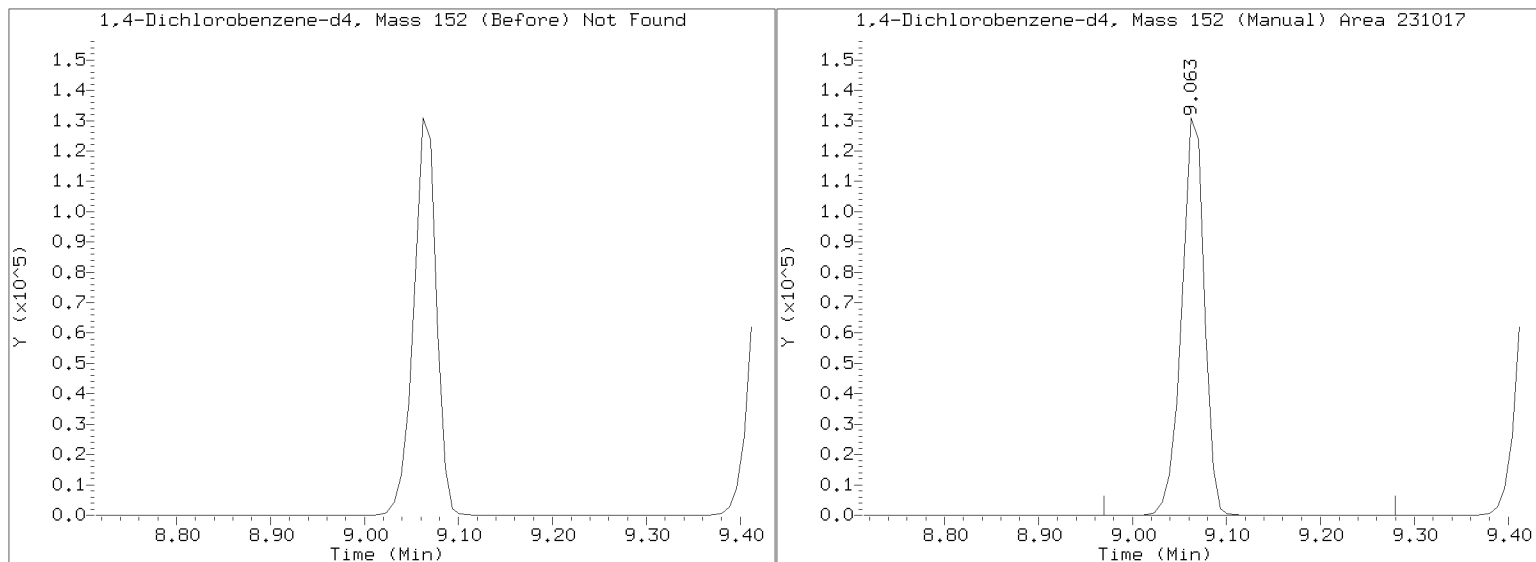
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172316.D

Injection Date: 17-MAR-2023 23:31

Lab ID: SLC0335-ICV2 Client ID:

Report Date: 03/22/2023 09:49



Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b

Instrument: nt14.i Date: 17-MAR-2023 Method: ABN.m

INITIAL CAL: 15-MAR-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1403172316.D 17-MAR-2023 23:31

Compound	%D

Benzoic acid	-20.3
Fluoranthene	28.28
Butylbenzylphthalate	27.94
Dibenzo(a,h)anthracene	-22.04
Benzo(g,h,i)perylene	-26.66
Benzidine	44.51
Terphenyl-d14	24.68



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403182302.D

Calibration Date: 03/15/2023

Sequence: SLC0355

Injection Date: 03/18/23

Lab Sample ID: SLC0355-ICV1

Injection Time: 17:38

Sequence Name: SICV1

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	4.9	1.9011440	1.8500600		-2.7	+/-20
4-Methylphenol	A	5.0000	4.5	1.5914380	1.4188590		-10.8	+/-20
Naphthalene	A	5.0000	5.0	1.0686200	1.0631850		-0.5	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7452524	0.7525314		1.0	+/-20
Acenaphthylene	A	5.0000	4.9	2.0854140	2.0257590		-2.9	+/-20
Dimethylphthalate	A	5.0000	5.0	1.3338450	1.3253870		-0.6	+/-20
Acenaphthene	A	5.0000	4.8	1.2175690	1.1777280		-3.3	+/-20
Dibenzofuran	A	5.0000	5.0	1.7382550	1.7272240		-0.6	+/-20
Fluorene	A	5.0000	4.9	1.6477120	1.6036040		-2.7	+/-20
Phenanthrene	A	5.0000	4.8	1.1428510	1.1022910		-3.5	+/-20
Anthracene	A	5.0000	5.0	1.1010610	1.0933180		-0.7	+/-20
Fluoranthene	A	5.0000	5.9	1.6273660	1.9240420		18.2	+/-20
Pyrene	A	5.0000	5.6	1.6688810	1.8741450		12.3	+/-20
Butylbenzylphthalate	A	5.0000	6.0	0.7311588	0.8806851		20.5	+/-20
Benzo(a)anthracene	A	5.0000	5.0	1.4748830	1.4750700		0.02	+/-20
Chrysene	A	5.0000	5.0	1.3348290	1.3278740		-0.5	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.5	0.5265649	0.5739771		9.0	+/-20
Benzofluoranthenes, Total	A	10.0000	10.5	1.3424190	1.4085150		5.1	+/-20
Benzo(a)pyrene	A	5.0000	5.1	1.2087150	1.2396010		2.6	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.9	1.3155660	1.2990110		-1.3	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.1087420	1.0860060		-2.1	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.8	1.0842080	1.0449220		-3.6	+/-20
2-Fluorophenol	A	7.5000	7.20	1.3587350	1.3049490		-4.0	+/-20
Phenol-d5	A	7.5000	7.32	1.7888720	1.7463830		-2.4	+/-20
2-Chlorophenol-d4	A	7.5000	7.58	1.4103050	1.4244690		1.0	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.98	0.9421955	0.9387508		-0.4	+/-20
Nitrobenzene-d5	A	5.0000	5.06	0.4233007	0.4284437		1.2	+/-20
2-Fluorobiphenyl	A	5.0000	4.94	1.4485960	1.4308460		-1.2	+/-20
2,4,6-Tribromophenol	A	7.5000	7.54	0.1518639	0.1581807		0.6	+/-20
p-Terphenyl-d14	A	5.0000	5.62	1.1297810	1.2689780		12.3	+/-20

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00048</u>
Lab File ID:	<u>NT1403182302.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0355</u>	Injection Date:	<u>03/18/23</u>
Lab Sample ID:	<u>SLC0355-ICV1</u>	Injection Time:	<u>17:38</u>
Sequence Name:	<u>SICV1</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene-d4	A	4.0000	4.0	48445.4300	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	183571.5000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	95634.1400	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	176078.0000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	127293.4000	1.0000		0.0	
Di-n-Octylphthalate-d4	A	4.0000	4.0	236003.4000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	121097.1000	1.0000		0.0	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230318,6\NT1403182302.D

Date: 18-MAR-2023 17:38

Client ID:

Sample Info: SLC0385-ICV1

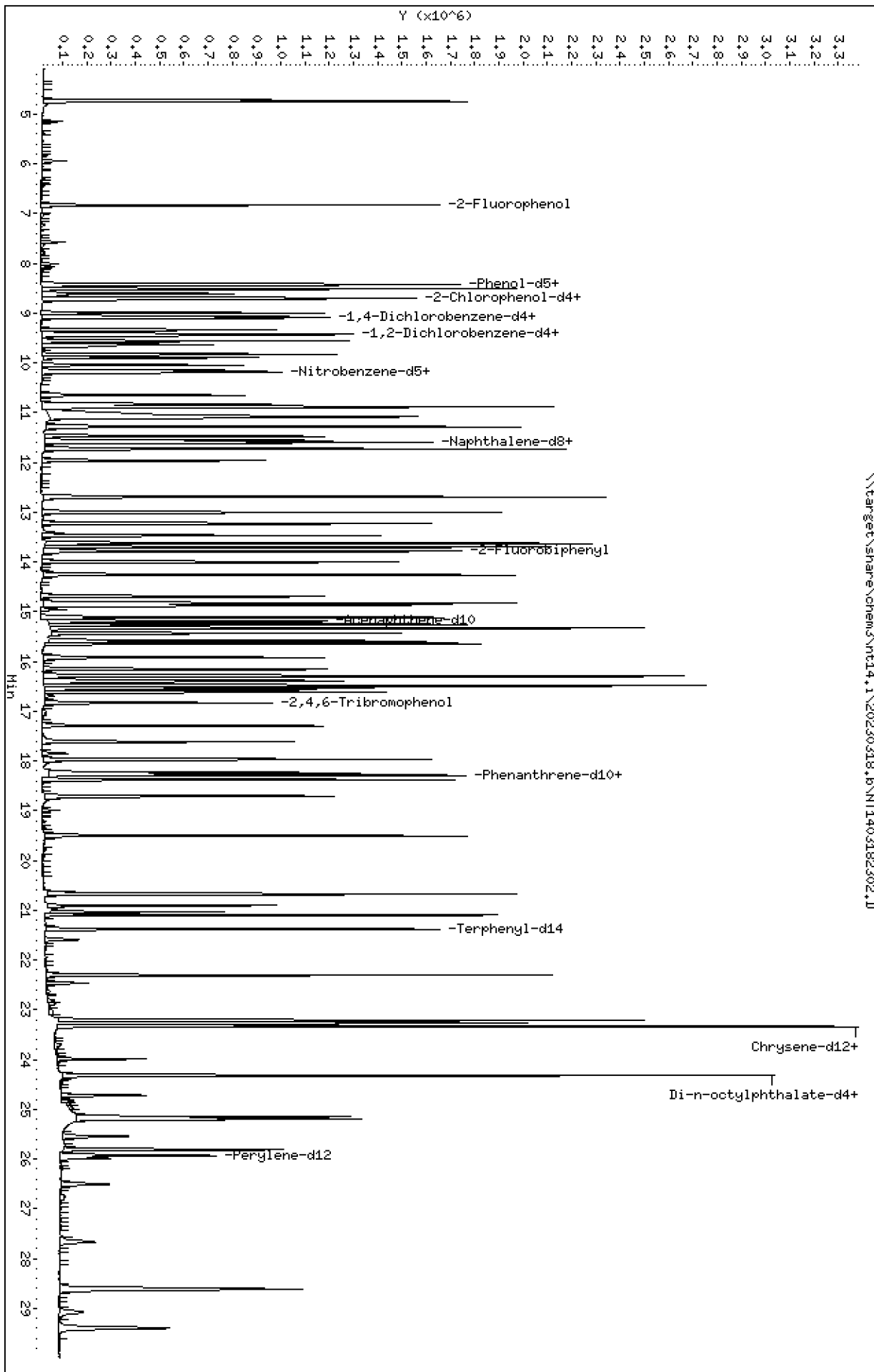
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230318,6\NT1403182302.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182302.D
 Lab Smp Id: SLC0355-ICV1
 Inj Date : 18-MAR-2023 17:38 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0355-ICV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 10:18 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.829	(1.000)	605874	7.50000	7.203
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	810827	7.50000	7.322
3 Phenol	94		8.435	8.435	(1.000)	572642	5.00000	4.866
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	661366	7.50000	7.575
4 Bis(2-Chloroethyl)ether	93		8.605	8.605	(1.000)	404611	5.00000	4.774
6 2-Chlorophenol	128		8.721	8.721	(1.000)	459680	5.00000	4.962
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	460017	5.00000	4.906
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	247621	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	437816	5.00000	4.848
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	290568	5.00000	4.982
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	441709	5.00000	4.948
11 Benzyl alcohol	108		9.333	9.333	(1.000)	264802	5.00000	4.833
14 2,2'-oxybis(1-Chloropropane)	121		9.636	9.636	(1.063)	128696	5.00000	5.312 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	410543	5.00000	4.934
17 Hexachloroethane	117		10.048	10.048	(1.000)	196239	5.00000	5.080
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	321142	5.00000	4.902
15 4-Methylphenol	108		9.830	9.830	(1.000)	439174	5.00000	4.458
\$ 18 Nitrobenzene-d5	82		10.156	10.156	(0.879)	511602	5.00000	5.061
19 Nitrobenzene	77		10.195	10.195	(0.882)	494052	5.00000	5.021
20 Isophorone	82		10.645	10.645	(0.921)	694478	5.00000	5.169
21 2-Nitrophenol	139		10.831	10.831	(0.937)	282146	5.00000	4.977
22 2,4-Dimethylphenol	107		10.878	10.878	(0.941)	782447	10.0000	9.296
23 Bis(2-Chloroethoxy)methane	93		11.079	11.079	(0.958)	422176	5.00000	4.667
24 Benzoic acid	105		11.110	11.110	(0.961)	1221554	20.0000	17.90
25 2,4-Dichlorophenol	162		11.289	11.289	(0.977)	738913	10.0000	11.04
26 1,2,4-Trichlorobenzene	180		11.475	11.475	(0.993)	434887	5.00000	5.285
* 27 Naphthalene-d8	136		11.559	11.559	(1.000)	955275	4.00000	
28 Naphthalene	128		11.598	11.598	(1.003)	1269542	5.00000	4.975
29 4-Chloroaniline	127		11.729	11.729	(1.015)	1145838	10.0000	10.73
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	191773	5.00000	5.162
31 4-Chloro-3-methylphenol	107		12.696	12.696	(1.098)	831506	10.0000	10.28
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	898593	5.00000	5.049
33 Hexachlorocyclopentadiene	237		13.470	13.470	(0.887)	378458	10.0000	8.917

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.625	13.625	(0.897)	521880	10.0000	10.08
35 2,4,5-Trichlorophenol	196	13.702	13.702	(0.902)	562529	10.0000	10.42
§ 36 2-Fluorobiphenyl	172	13.787	13.787	(0.908)	913218	5.00000	4.939
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	789027	5.00000	4.979
38 2-Nitroaniline	65	14.260	14.260	(0.939)	604784	10.0000	9.883
39 Dimethylphthalate	163	14.693	14.693	(0.967)	845910	5.00000	4.968
40 Acenaphthylene	152	14.879	14.879	(0.980)	1292913	5.00000	4.857
41 2,6-Dinitrotoluene	165	14.832	14.832	(0.977)	402243	10.0000	10.23
* 42 Acenaphthene-d10	164	15.188	15.188	(1.000)	510589	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	510950	10.0000	9.417
44 Acenaphthene	153	15.258	15.258	(1.005)	751669	5.00000	4.836
45 2,4-Dinitrophenol	184	15.327	15.327	(1.009)	547123	20.0000	17.44
46 Dibenzofuran	168	15.583	15.583	(1.026)	1102377	5.00000	4.968
47 4-Nitrophenol	109	15.436	15.436	(1.016)	292213	10.0000	10.17
48 2,4-Dinitrotoluene	165	15.644	15.644	(1.030)	565695	10.0000	10.15
50 Diethylphthalate	149	16.155	16.155	(1.064)	1034367	5.00000	5.876
49 Fluorene	166	16.301	16.301	(1.073)	1023478	5.00000	4.866
51 4-Chlorophenyl-phenylether	204	16.286	16.286	(1.072)	460518	5.00000	5.101
52 4-Nitroaniline	138	16.386	16.386	(1.079)	459998	10.0000	9.747
53 4,6-Dinitro-2-methylphenol	198	16.486	16.486	(0.904)	642904	20.0000	19.66
54 N-Nitrosodiphenylamine	169	16.540	16.540	(0.907)	608344	5.00000	4.864
§ 55 2,4,6-Tribromophenol	330	16.833	16.833	(1.108)	151435	7.50000	7.543
56 4-Bromophenyl-phenylether	248	17.296	17.296	(0.949)	224076	5.00000	5.314
57 Hexachlorobenzene	284	17.613	17.613	(0.966)	226055	5.00000	5.081
58 Pentachlorophenol	266	17.969	17.969	(0.986)	280522	10.0000	8.926
* 59 Phenanthrene-d10	188	18.232	18.232	(1.000)	920812	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	1268753	5.00000	4.823
61 Anthracene	178	18.379	18.379	(1.008)	1258425	5.00000	4.965
62 Carbazole	167	18.704	18.704	(1.026)	1091185	5.00000	4.839
63 Di-n-butylphthalate	149	19.501	19.501	(1.070)	1503182	5.00000	5.259
64 Fluoranthene	202	20.669	20.669	(0.887)	1314813	5.00000	5.912
65 Pyrene	202	21.095	21.095	(0.906)	1280716	5.00000	5.615
§ 66 Terphenyl-d14	244	21.381	21.381	(0.918)	867169	5.00000	5.616
67 Butylbenzylphthalate	149	22.302	22.302	(0.957)	601825	5.00000	6.023
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	1008004	5.00000	5.001
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	546688	4.00000	
70 3,3'-Dichlorobenzidine	252	23.208	23.208	(0.996)	792264	15.0000	13.16
71 Chrysene	228	23.332	23.332	(1.002)	907416	5.00000	4.974
72 bis(2-Ethylhexyl)phthalate	149	23.324	23.324	(0.959)	766108	5.00000	5.450
* 134 Di-n-octylphthalate-d4	153	24.315	24.315	(1.000)	1067789	4.00000	
73 Di-n-octylphthalate	149	24.323	24.323	(1.000)	1330617	5.00000	4.848
74 Benzo(b)fluoranthene	252	25.152	25.152	(0.970)	834688	5.00000	5.302
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	813128	5.00000	5.210
76 Benzo(a)pyrene	252	25.810	25.810	(0.996)	690334	5.00000	5.128
* 77 Perylene-d12	264	25.926	25.926	(1.000)	445520	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.610	28.610	(1.104)	723419	5.00000	4.937
79 Dibenzo(a,h)anthracene	278	28.618	28.618	(1.104)	604797	5.00000	4.897
80 Benzo(g,h,i)perylene	276	29.395	29.395	(1.134)	581917	5.00000	4.819
90 N-Nitrosodimethylamine	74	4.720	4.720	(1.000)	479089	10.0000	8.993
91 Aniline	93	8.513	8.513	(1.000)	1119032	10.0000	9.454
93 Benzidine	184	20.901	20.901	(0.897)	643222	10.0000	7.186
103 Pyridine	79	4.743	4.743	(1.000)	705669	5.00000	4.277
105 1-methylnaphthalene	142	13.223	13.223	(1.144)	811768	5.00000	5.034
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	1012296	5.00000	4.816

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.198	25.198	(0.972)	1568804	10.0000	10.51
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	248136	5.00000	4.668

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 19-MAR-2023
 Lab File ID: NT1403182302.D Calibration Time: 03:16
 Lab Smp Id: SLC0355-ICV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	247621	123811	495242	247621	0.00
27 Naphthalene-d8	955275	477638	1910550	955275	0.00
42 Acenaphthene-d10	510589	255295	1021178	510589	0.00
59 Phenanthrene-d10	920812	460406	1841624	920812	0.00
69 Chrysene-d12	546688	273344	1093376	546688	0.00
134 Di-n-octylphthala	1067789	533895	2135578	1067789	0.00
77 Perylene-d12	445520	222760	891040	445520	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.23	17.73	18.73	18.23	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403182302.D

Lab ID: SLC0355-ICV1
nt14.i, ABN.m, 18-MAR-2023 17:38

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

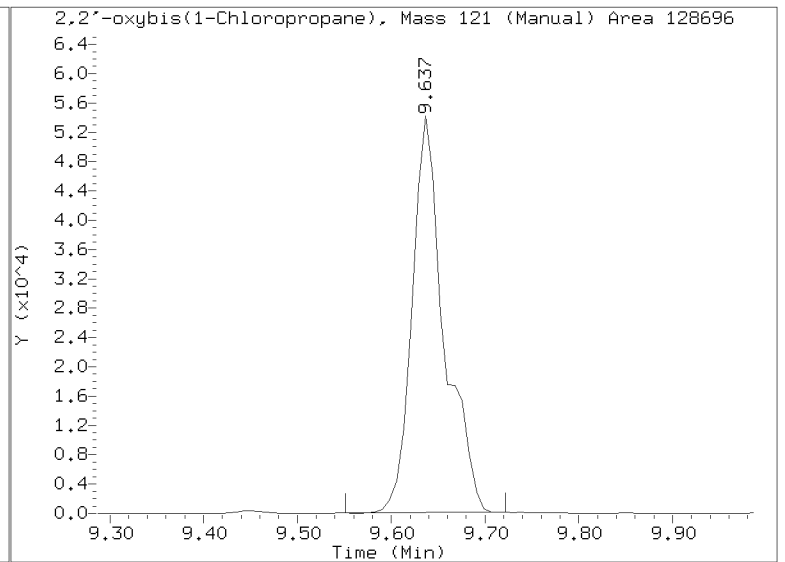
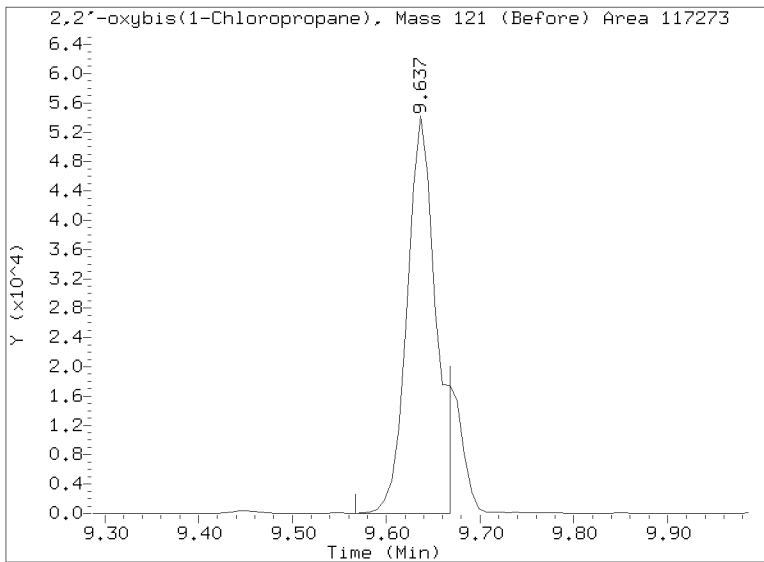
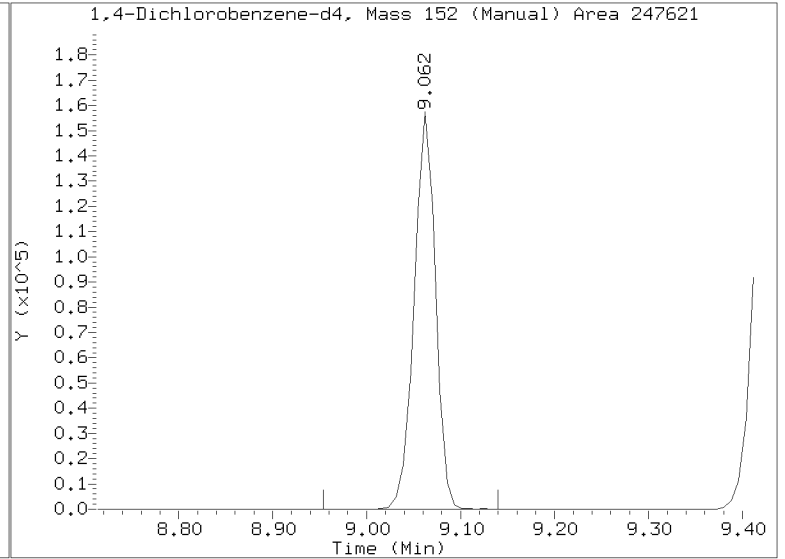
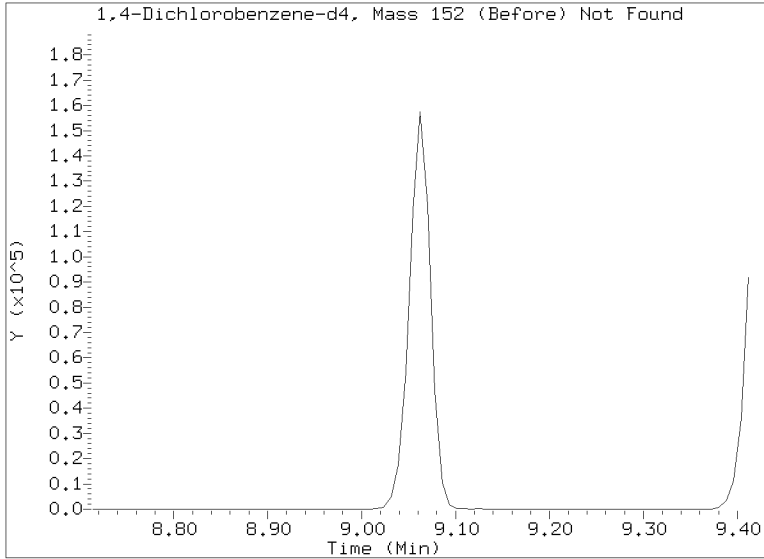
No RRT check. Ccal file.

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182302.D
Injection Date: 18-MAR-2023 17:38
Lab ID:SLC0355-ICV1 Client ID:
Report Date: 03/23/2023 11:34



Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230318.b

Instrument: nt14.i Date: 18-MAR-2023 Method: ABN.m

INITIAL CAL: 28-FEB-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1403182302.D 18-MAR-2023 17:38

Compound	%D

Butylbenzylphthalate	20.45
Benzidine	-28.14



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403182318.D

Calibration Date: 03/15/2023

Sequence: SLC0355

Injection Date: 03/19/23

Lab Sample ID: SLC0355-ICV2

Injection Time: 03:16

Sequence Name: SSTD005

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	4.8	1.9011440	1.8433260		-3.0	+/-20
4-Methylphenol	A	5.0000	4.5	1.5914380	1.4480130		-9.0	+/-20
Naphthalene	A	5.0000	4.9	1.0686200	1.0417970		-2.5	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7452524	0.7448588		-0.06	+/-20
Acenaphthylene	A	5.0000	4.9	2.0854140	2.0410210		-2.1	+/-20
Dimethylphthalate	A	5.0000	5.0	1.3338450	1.3233410		-0.8	+/-20
Acenaphthene	A	5.0000	4.8	1.2175690	1.1795530		-3.1	+/-20
Dibenzofuran	A	5.0000	4.9	1.7382550	1.7031280		-2.0	+/-20
Fluorene	A	5.0000	4.8	1.6477120	1.5820450		-4.0	+/-20
Phenanthrene	A	5.0000	4.7	1.1428510	1.0832560		-5.2	+/-20
Anthracene	A	5.0000	5.0	1.1010610	1.1073420		0.6	+/-20
Fluoranthene	A	5.0000	6.4	1.6273660	2.0832350		28.0	+/-20 *
Pyrene	A	5.0000	6.0	1.6688810	2.0191160		21.0	+/-20 *
Butylbenzylphthalate	A	5.0000	6.7	0.7311588	0.9724640		33.0	+/-20 *
Benzo(a)anthracene	A	5.0000	5.0	1.4748830	1.4651390		-0.7	+/-20
Chrysene	A	5.0000	5.1	1.3348290	1.3527440		1.3	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.5	0.5265649	0.5812090		10.4	+/-20
Benzo(a)pyrene	A	5.0000	5.0	1.2087150	1.2180480		0.8	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.9	1.3155660	1.2889470		-2.0	+/-20
Dibenzo(a,h)anthracene	A	5.0000	5.1	1.1087420	1.1316290		2.1	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.4	1.0842080	0.9549132		-11.9	+/-20
2-Fluorophenol	A	7.5000	7.13	1.3587350	1.2915190		-4.9	+/-20
Phenol-d5	A	7.5000	7.41	1.7888720	1.7674120		-1.2	+/-20
2-Chlorophenol-d4	A	7.5000	7.56	1.4103050	1.4213130		0.8	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	5.06	0.9421955	0.9530914		1.2	+/-20
Nitrobenzene-d5	A	5.0000	4.99	0.4233007	0.4227197		-0.1	+/-20
2-Fluorobiphenyl	A	5.0000	4.96	1.4485960	1.4364260		-0.8	+/-20
2,4,6-Tribromophenol	A	7.5000	7.55	0.1518639	0.1583318		0.7	+/-20
p-Terphenyl-d14	A	5.0000	6.05	1.1297810	1.3670700		21.0	+/-20 *

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00048</u>
Lab File ID:	<u>NT1403182318.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0355</u>	Injection Date:	<u>03/19/23</u>
Lab Sample ID:	<u>SLC0355-ICV2</u>	Injection Time:	<u>03:16</u>
Sequence Name:	<u>SSTD005</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene-d4	A	4.0000	4.0	48445.4300	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	183571.5000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	95634.1400	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	176078.0000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	127293.4000	1.0000		0.0	
Di-n-Octylphthalate-d4	A	4.0000	4.0	236003.4000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	121097.1000	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230318,6\NT1403182318.D

Date: 18-MAR-2023 03:16

Client ID:

Sample Info: SLC0355-ICW2

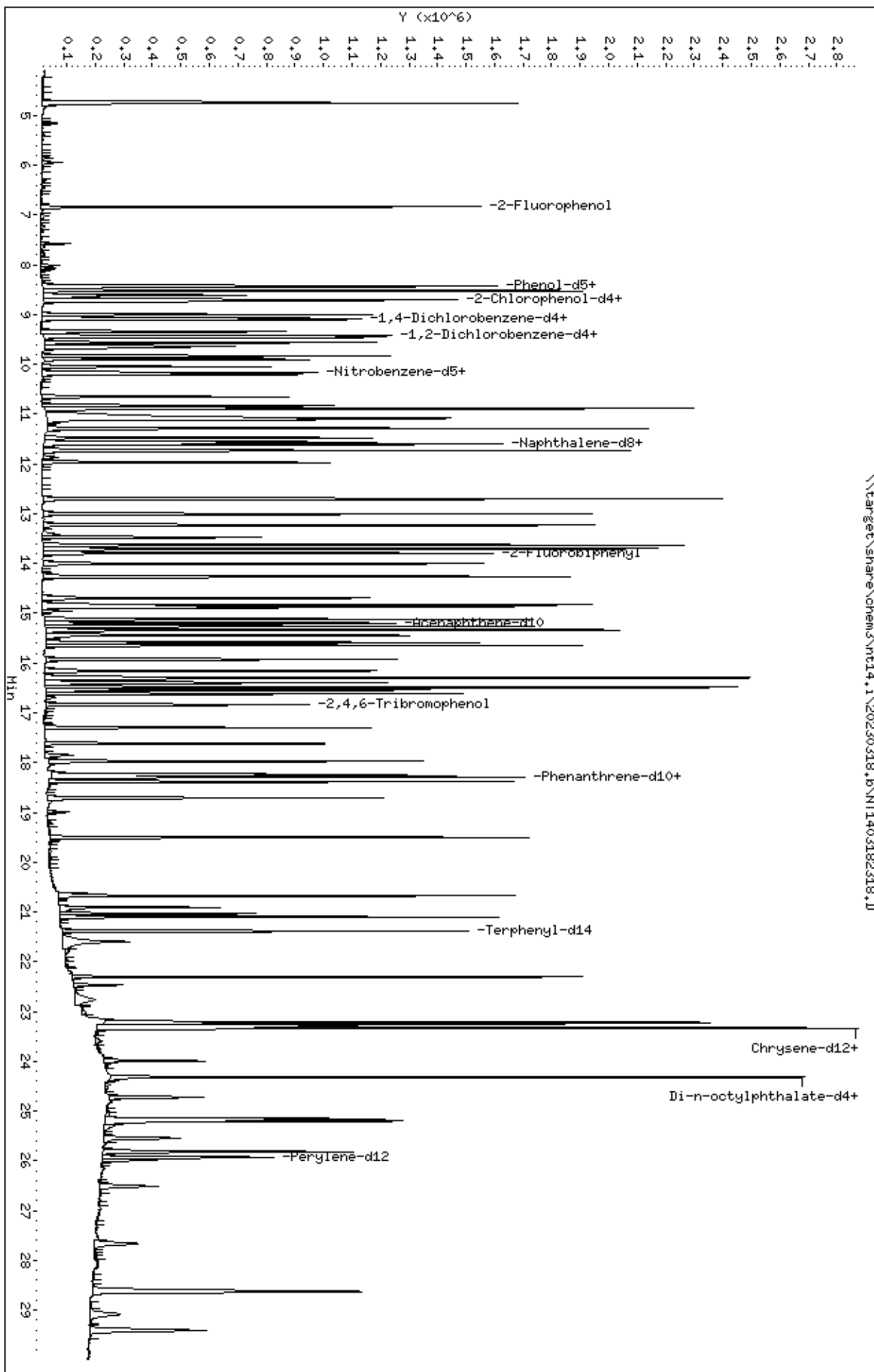
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230318,6\NT1403182318.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182318.D
 Lab Smp Id: SLC0355-ICV2
 Inj Date : 19-MAR-2023 03:16 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0355-ICV2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 08:01 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.837	6.837	(1.000)	575357	7.50000	7.129
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	787362	7.50000	7.410
3 Phenol	94		8.444	8.444	(1.000)	547454	5.00000	4.848
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	633179	7.50000	7.559
4 Bis(2-Chloroethyl)ether	93		8.613	8.613	(1.000)	392444	5.00000	4.826
6 2-Chlorophenol	128		8.729	8.729	(1.000)	445529	5.00000	5.013
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	444445	5.00000	4.940
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	237594	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	427289	5.00000	4.931
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	283061	5.00000	5.058
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	427235	5.00000	4.988
11 Benzyl alcohol	108		9.342	9.342	(1.000)	254192	5.00000	4.835
14 2,2'-oxybis(1-Chloropropane)	121		9.637	9.637	(1.063)	125597	5.00000	5.403 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	400784	5.00000	5.020
17 Hexachloroethane	117		10.048	10.048	(1.000)	186247	5.00000	5.025
16 N-Nitroso-di-n-propylamine	70		9.901	9.901	(1.000)	313745	5.00000	4.991
15 4-Methylphenol	108		9.831	9.831	(1.000)	430049	5.00000	4.549
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	498889	5.00000	4.993
19 Nitrobenzene	77		10.195	10.195	(0.882)	472416	5.00000	4.857
20 Isophorone	82		10.653	10.653	(0.922)	691527	5.00000	5.207
21 2-Nitrophenol	139		10.832	10.832	(0.937)	282859	5.00000	5.047
22 2,4-Dimethylphenol	107		10.886	10.886	(0.942)	756918	10.0000	9.099
23 Bis(2-Chloroethoxy)methane	93		11.080	11.080	(0.958)	422030	5.00000	4.721
24 Benzoic acid	105		11.118	11.118	(0.962)	1196243	20.0000	17.74
25 2,4-Dichlorophenol	162		11.289	11.289	(0.977)	729232	10.0000	11.02
26 1,2,4-Trichlorobenzene	180		11.475	11.475	(0.993)	416995	5.00000	5.127
* 27 Naphthalene-d8	136		11.560	11.560	(1.000)	944151	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	1229517	5.00000	4.874
29 4-Chloroaniline	127		11.730	11.730	(1.015)	1101750	10.0000	10.43
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	188370	5.00000	5.130
31 4-Chloro-3-methylphenol	107		12.697	12.697	(1.098)	798938	10.0000	9.994
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	879074	5.00000	4.997
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	209978	10.0000	5.072

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	511091	10.0000	10.11
35 2,4,5-Trichlorophenol	196	13.703	13.703	(0.902)	550549	10.0000	10.46
§ 36 2-Fluorobiphenyl	172	13.796	13.796	(0.908)	894355	5.00000	4.958
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	774464	5.00000	5.009
38 2-Nitroaniline	65	14.260	14.260	(0.938)	585882	10.0000	9.814
39 Dimethylphthalate	163	14.693	14.693	(0.967)	823945	5.00000	4.961
40 Acenaphthylene	152	14.879	14.879	(0.979)	1270791	5.00000	4.894
41 2,6-Dinitrotoluene	165	14.833	14.833	(0.976)	396658	10.0000	10.34
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	498100	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	495660	10.0000	9.364
44 Acenaphthene	153	15.258	15.258	(1.004)	734419	5.00000	4.844
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	451412	20.0000	14.82
46 Dibenzofuran	168	15.591	15.591	(1.026)	1060410	5.00000	4.899
47 4-Nitrophenol	109	15.444	15.444	(1.016)	255472	10.0000	9.118
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	547629	10.0000	10.07
50 Diethylphthalate	149	16.155	16.155	(1.063)	928742	5.00000	5.408
49 Fluorene	166	16.302	16.302	(1.073)	985021	5.00000	4.801
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	439607	5.00000	4.991
52 4-Nitroaniline	138	16.394	16.394	(1.079)	417705	10.0000	9.073
53 4,6-Dinitro-2-methylphenol	198	16.487	16.487	(0.904)	578866	20.0000	19.29
54 N-Nitrosodiphenylamine	169	16.541	16.541	(0.907)	593305	5.00000	5.167
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	147872	7.50000	7.551
56 4-Bromophenyl-phenylether	248	17.296	17.296	(0.948)	210314	5.00000	5.433
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	216889	5.00000	5.310
58 Pentachlorophenol	266	17.969	17.969	(0.985)	244469	10.0000	8.484
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	845417	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	1144754	5.00000	4.739
61 Anthracene	178	18.379	18.379	(1.008)	1170207	5.00000	5.029
62 Carbazole	167	18.704	18.704	(1.025)	943269	5.00000	4.556
63 Di-n-butylphthalate	149	19.501	19.501	(1.069)	1372012	5.00000	5.228
64 Fluoranthene	202	20.677	20.677	(0.888)	1069835	5.00000	6.401
65 Pyrene	202	21.103	21.103	(0.906)	1036907	5.00000	6.049
§ 66 Terphenyl-d14	244	21.381	21.381	(0.918)	702052	5.00000	6.050
67 Butylbenzylphthalate	149	22.303	22.303	(0.957)	499404	5.00000	6.650
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	752415	5.00000	4.967
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	410836	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	695144	15.0000	15.26
71 Chrysene	228	23.340	23.340	(1.002)	694695	5.00000	5.067
72 bis(2-Ethylhexyl)phthalate	149	23.325	23.325	(0.959)	664598	5.00000	5.519
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	914780	4.00000	
73 Di-n-octylphthalate	149	24.323	24.323	(1.000)	1127893	5.00000	4.796
74 Benzo(b)fluoranthene	252	25.160	25.160	(0.970)	693312	5.00000	4.444
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	764778	5.00000	4.945
76 Benzo(a)pyrene	252	25.818	25.818	(0.996)	672236	5.00000	5.039
* 77 Perylene-d12	264	25.934	25.934	(1.000)	441517	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.611	28.611	(1.103)	711365	5.00000	4.899
79 Dibenzo(a,h)anthracene	278	28.626	28.626	(1.104)	624542	5.00000	5.103
80 Benzo(g,h,i)perylene	276	29.411	29.411	(1.134)	527013	5.00000	4.404
90 N-Nitrosodimethylamine	74	4.728	4.728	(1.000)	434711	10.0000	8.504
91 Aniline	93	8.521	8.521	(1.000)	1093738	10.0000	9.630
93 Benzidine	184	20.902	20.902	(0.897)	388520	10.0000	5.776
103 Pyridine	79	4.751	4.751	(1.000)	626881	5.00000	3.960
105 1-methylnaphthalene	142	13.231	13.231	(1.145)	798402	5.00000	5.010
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	975920	5.00000	4.759

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.198	25.198	(0.972)	1385086	10.0000	9.362
120 2,3,4,6-Tetrachlorophenol	232		15.923	15.923	(1.048)	259766	5.00000	4.998

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 18-MAR-2023
 Lab File ID: NT1403182318.D Calibration Time: 17:38
 Lab Smp Id: SLC0355-ICV2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	237594	118797	475188	237594	0.00
27 Naphthalene-d8	944151	472076	1888302	944151	0.00
42 Acenaphthene-d10	498100	249050	996200	498100	0.00
59 Phenanthrene-d10	845417	422709	1690834	845417	0.00
69 Chrysene-d12	410836	205418	821672	410836	0.00
134 Di-n-octylphthala	914780	457390	1829560	914780	0.00
77 Perylene-d12	441517	220759	883034	441517	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.24	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403182318.D

Lab ID: SLC0355-ICV2
nt14.i, ABN.m, 19-MAR-2023 03:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

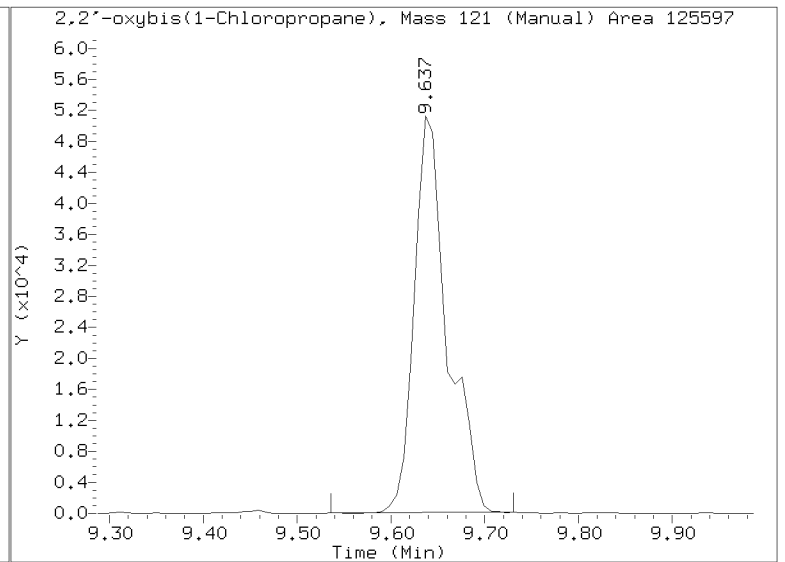
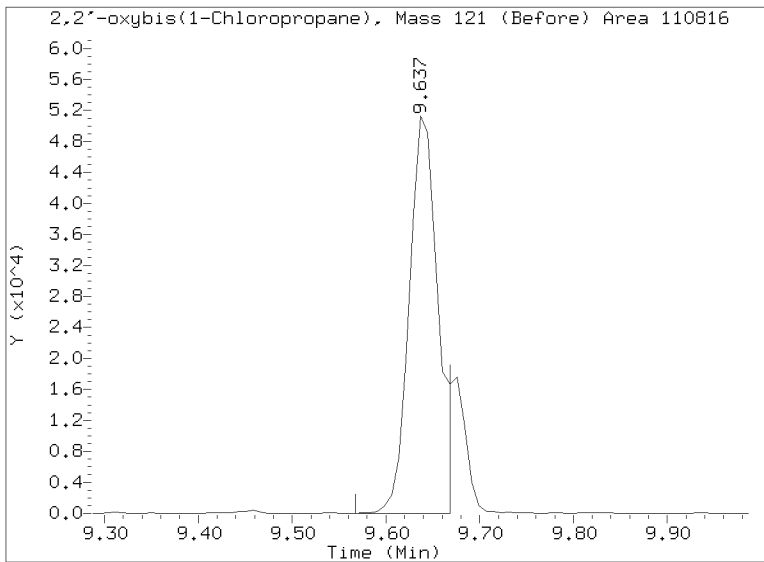
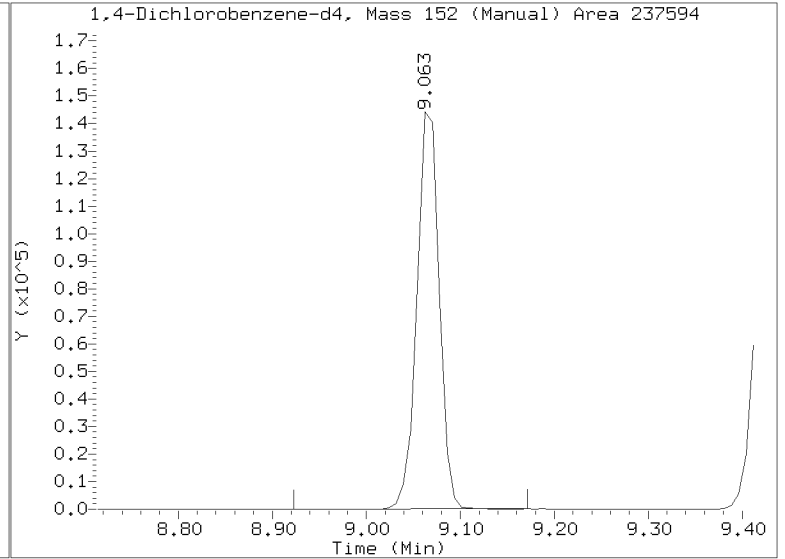
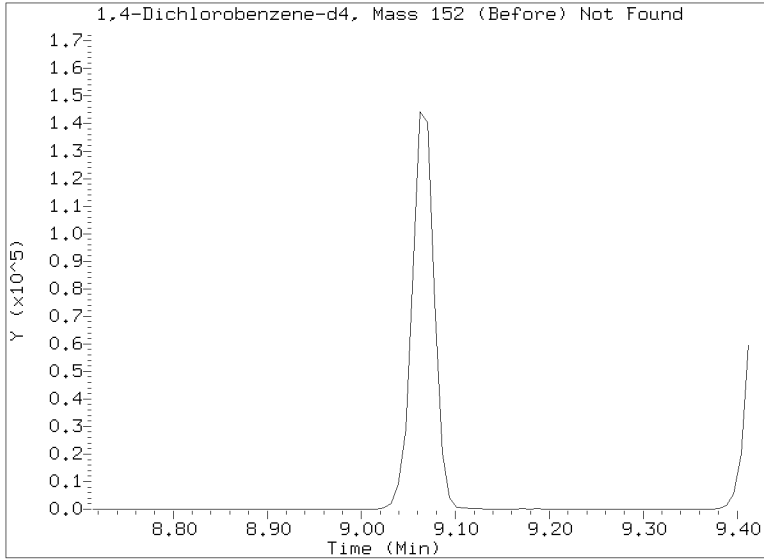
No RRT check. Ccal file.

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182318.D
Injection Date: 19-MAR-2023 03:16
Lab ID:SLC0355-ICV2 Client ID:
Report Date: 03/23/2023 08:01



Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230318.b

Instrument: nt14.i Date: 19-MAR-2023 Method: ABN.m

INITIAL CAL: 28-FEB-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1403182318.D 19-MAR-2023 03:16

Compound	%D

Hexachlorocyclopentadiene	-49.28
2,4-Dinitrophenol	-25.9
Fluoranthene	28.01
Pyrene	20.99
Butylbenzylphthalate	33.00
Benzidine	-42.24
Pyridine	-20.80
Terphenyl-d14	21.00



SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403152311.D

Calibration Date: 03/15/2023

Sequence: SLC0160

Injection Date: 03/15/23

Lab Sample ID: SLC0160-SCV1

Injection Time: 17:39

Sequence Name: SCV 5.0

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.4	1.9011440	1.6607710		-12.6	+/-20
bis(2-chloroethyl) ether	A	5.0000	5.3	1.3689940	1.4396980		5.2	+/-20
2-Chlorophenol	A	5.0000	4.4	1.4963410	1.3103810		-12.4	+/-20
1,3-Dichlorobenzene	A	5.0000	4.8	1.5147140	1.4520630		-4.1	+/-20
1,4-Dichlorobenzene	A	5.0000	4.9	1.4589130	1.4266320		-2.2	+/-20
1,2-Dichlorobenzene	A	5.0000	4.8	1.4420330	1.3804340		-4.3	+/-20
Benzyl Alcohol	A	5.0000	5.1	0.8850644	0.8940373		1.0	+/-20
2,2'-Oxybis(1-chloropropane)	A	5.0000	5.3	0.4351304	0.4628617		6.4	+/-20
2-Methylphenol	A	5.0000	4.1	1.3441210	1.1067930		-17.7	+/-20
Hexachloroethane	A	5.0000	5.0	0.6239658	0.6183509		-0.9	+/-20
N-Nitroso-di-n-Propylamine	A	5.0000	5.0	1.0582520	1.0546880		-0.3	+/-20
4-Methylphenol	A	5.0000	4.3	1.5914380	1.3692150		-14.0	+/-20
Nitrobenzene	A	5.0000	5.0	0.4120485	0.4139177		0.5	+/-20
Isophorone	A	5.0000	6.8	0.5626055	0.7618281		35.4	+/-20 *
2-Nitrophenol	A	5.0000	4.5	0.2157234	0.2146804		-9.4	+/-20
2,4-Dimethylphenol	A	5.0000	3.9	0.3524265	0.2759150		-21.7	+/-20 *
Bis(2-Chloroethoxy)methane	A	5.0000	5.9	0.3787631	0.4438520		17.2	+/-20
2,4-Dichlorophenol	A	5.0000	4.8	0.2802759	0.2679043		-4.4	+/-20
1,2,4-Trichlorobenzene	A	5.0000	5.1	0.3445492	0.3481241		1.0	+/-20
Naphthalene	A	5.0000	4.8	1.0686200	1.0320390		-3.4	+/-20
Benzoic acid	A	10.000	8.2	0.2689191	0.2450443		-17.5	+/-20
4-Chloroaniline	A	5.0000	4.0	0.4473571	0.3608194		-19.3	+/-20
Hexachlorobutadiene	A	5.0000	4.9	0.1555637	0.1526999		-1.8	+/-20
4-Chloro-3-Methylphenol	A	5.0000	4.9	0.3386850	0.3286762		-3.0	+/-20
2-Methylnaphthalene	A	5.0000	4.9	0.7452524	0.7235437		-2.9	+/-20
Hexachlorocyclopentadiene	A	5.0000	5.2	0.3324825	0.3477613		4.6	+/-20
2,4,6-Trichlorophenol	A	5.0000	4.7	0.4057798	0.3829138		-5.6	+/-20
2,4,5-Trichlorophenol	A	5.0000	4.7	0.4228403	0.3941632		-6.8	+/-20
2-Chloronaphthalene	A	5.0000	5.0	1.2415760	1.2359120		-0.5	+/-20
2-Nitroaniline	A	5.0000	5.1	0.4794195	0.4889937		2.0	+/-20
Acenaphthylene	A	5.0000	4.9	2.0854140	2.0351050		-2.4	+/-20
Dimethylphthalate	A	5.0000	5.0	1.3338450	1.3419960		0.6	+/-20
2,6-Dinitrotoluene	A	5.0000	5.2	0.3081292	0.3216540		4.4	+/-20

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403152311.D

Calibration Date: 03/15/2023

Sequence: SLC0160

Injection Date: 03/15/23

Lab Sample ID: SLC0160-SCV1

Injection Time: 17:39

Sequence Name: SCV 5.0

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Acenaphthene	A	5.0000	5.0	1.2175690	1.2090570		-0.7	+/-20
3-Nitroaniline	A	5.0000	5.2	0.4250863	0.4429031		4.2	+/-20
2,4-Dinitrophenol	A	5.0000	3.1	0.2096741	0.1475404		-38.5	+/-20 *
Dibenzofuran	A	5.0000	5.0	1.7382550	1.7228270		-0.9	+/-20
4-Nitrophenol	A	5.0000	4.8	0.2250052	0.2172748		-3.4	+/-20
2,4-Dinitrotoluene	A	5.0000	5.1	0.4367856	0.4471572		2.4	+/-20
Fluorene	A	5.0000	4.8	1.6477120	1.5961640		-3.1	+/-20
4-Chlorophenylphenyl ether	A	5.0000	5.0	0.7072865	0.7051737		-0.3	+/-20
Diethyl phthalate	A	5.0000	5.2	1.3790520	1.4351260		4.1	+/-20
4-Nitroaniline	A	5.0000	4.8	0.3697249	0.3562130		-3.7	+/-20
4,6-Dinitro-2-methylphenol	A	5.0000	4.4	0.1216791	0.1235466		-11.2	+/-20
N-Nitrosodiphenylamine	A	5.0000	5.0	0.5432885	0.5383020		-0.9	+/-20
4-Bromophenyl phenyl ether	A	5.0000	5.2	0.1831666	0.1914307		4.5	+/-20
Hexachlorobenzene	A	5.0000	4.8	0.1932690	0.1847668		-4.4	+/-20
Pentachlorophenol	A	5.0000	4.5	0.1275457	0.1206709		-10.5	+/-20
Phenanthrene	A	5.0000	4.7	1.1428510	1.0820580		-5.3	+/-20
Anthracene	A	5.0000	4.3	1.1010610	0.9427480		-14.4	+/-20
Carbazole	A	5.0000	4.6	0.9796404	0.8986244		-8.3	+/-20
Di-n-Butylphthalate	A	5.0000	5.5	1.2417490	1.3675950		10.1	+/-20
Fluoranthene	A	5.0000	5.0	1.6273660	1.6351750		0.5	+/-20
Pyrene	A	5.0000	5.0	1.6688810	1.6548710		-0.8	+/-20
Butylbenzylphthalate	A	5.0000	5.7	0.7311588	0.8390010		14.7	+/-20
Benzo(a)anthracene	A	5.0000	4.8	1.4748830	1.4237160		-3.5	+/-20
3,3'-Dichlorobenzidine	A	10.000	10.6	0.4321372	0.4648865		6.5	+/-20
Chrysene	A	5.0000	4.7	1.3348290	1.2608580		-5.5	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.4	0.5265649	0.5716160		8.6	+/-20
Di-n-Octylphthalate	A	5.0000	5.1	1.0282720	1.0561260		2.7	+/-20
Benzo(a)fluoranthene, Total	A	10.000	9.8	1.3424190	1.3096450		-2.4	+/-20
Benzo(a)pyrene	A	5.0000	5.0	1.2087150	1.2033910		-0.4	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.9	1.3155660	1.3005930		-1.1	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.1087420	1.0788060		-2.7	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.9	1.0842080	1.0710130		-1.2	+/-20
1-Methylnaphthalene	A	5.0000	5.1	0.6751941	0.6890913		2.1	+/-20

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230315,6\NT1403152311.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0160-SCV1

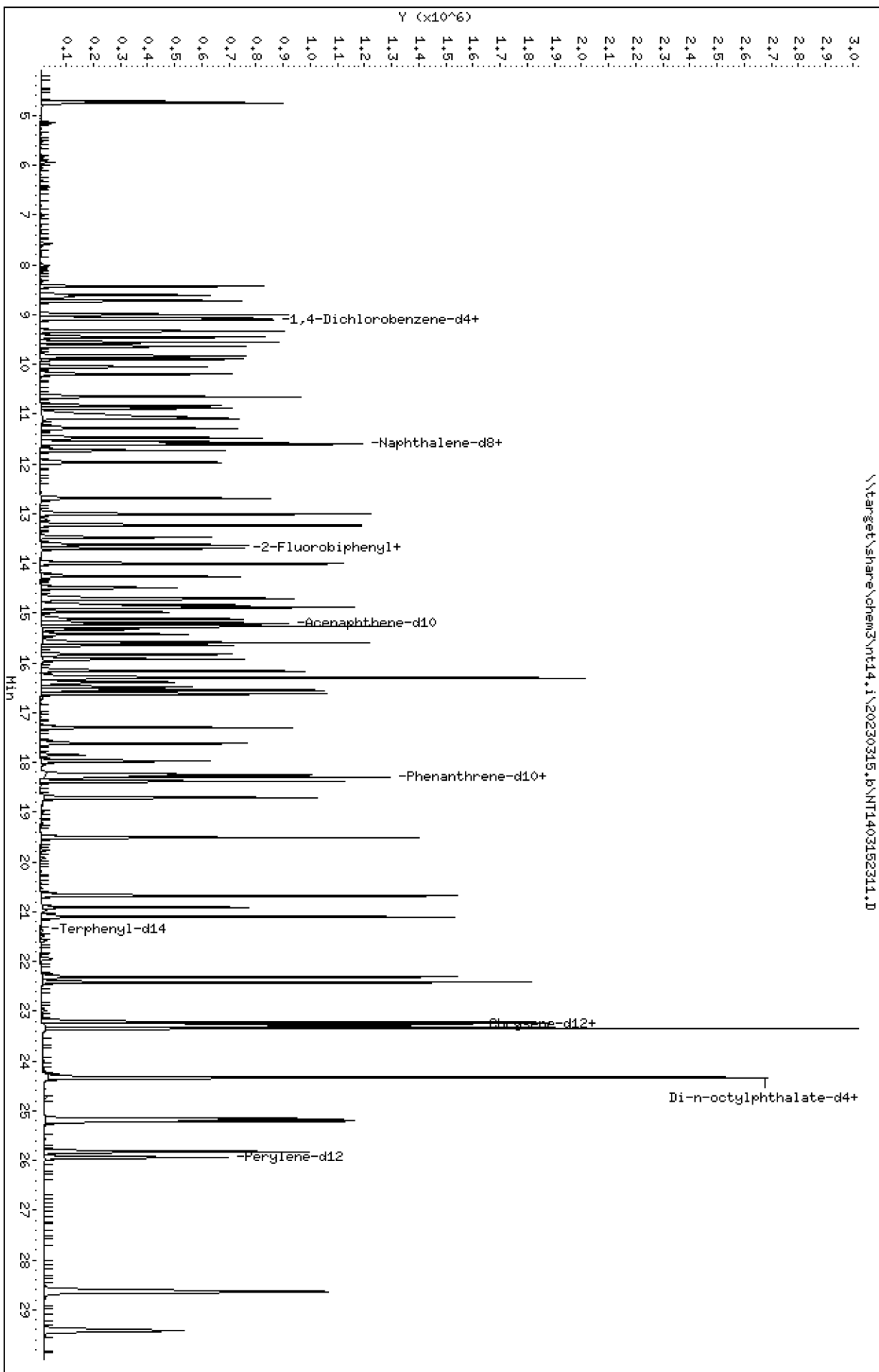
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14,1\20230315,6\NT1403152311.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

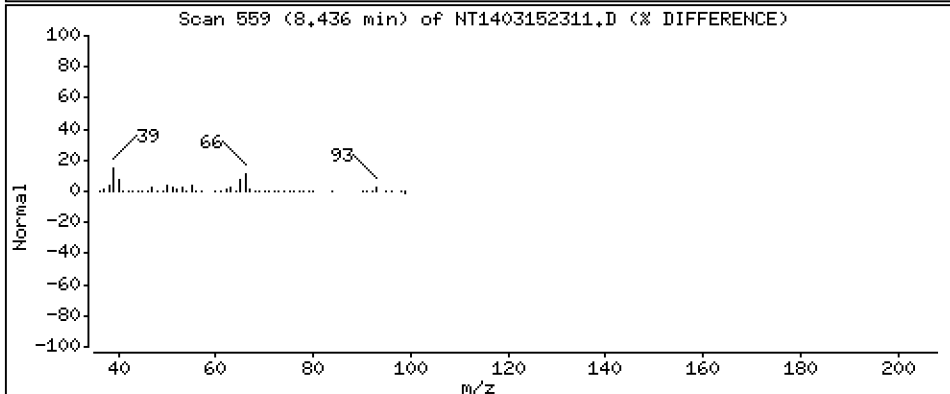
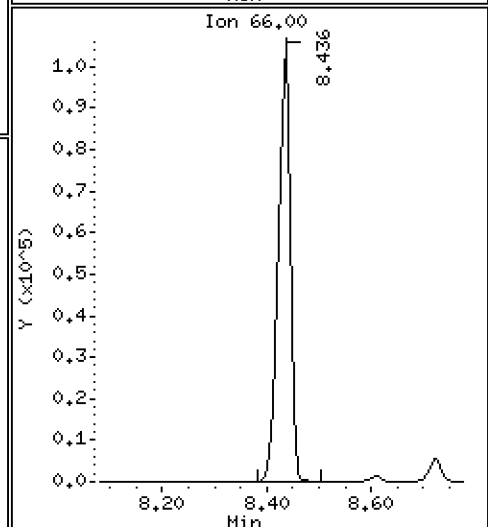
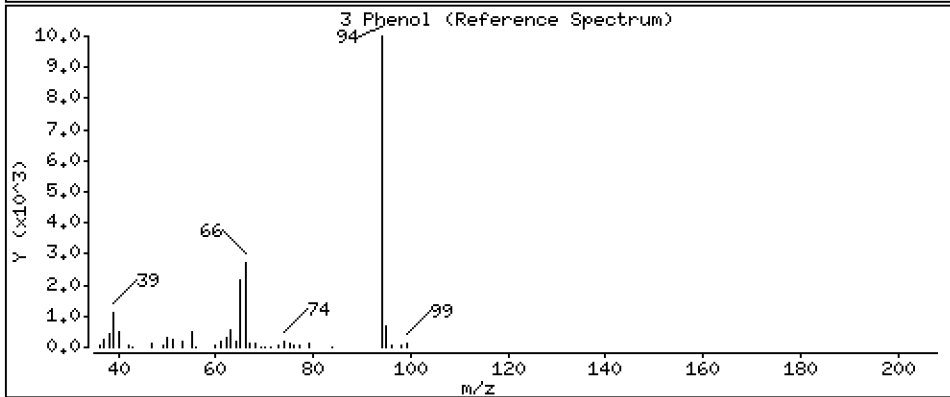
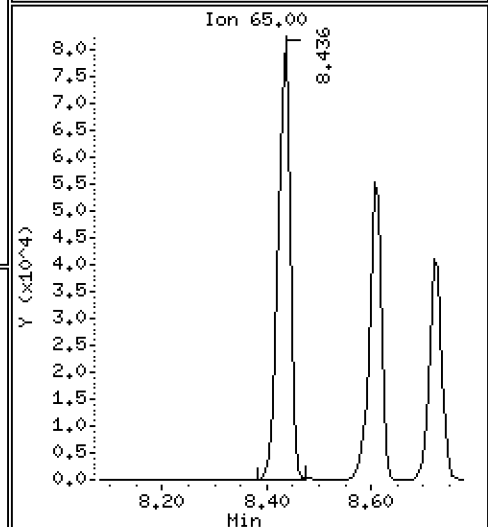
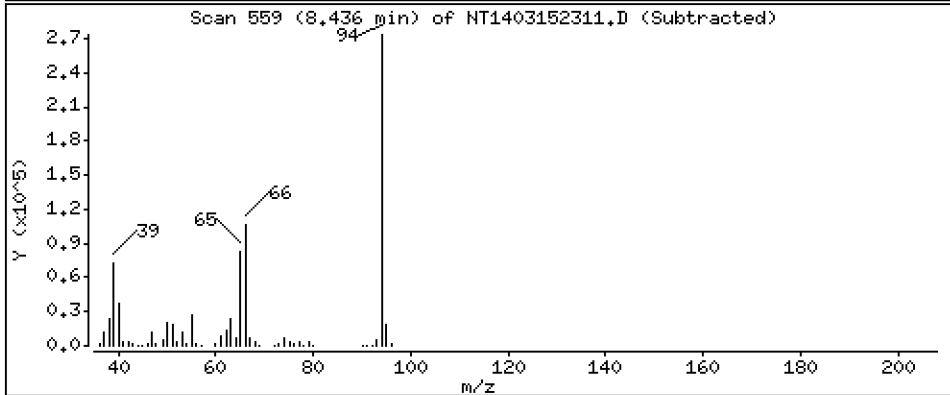
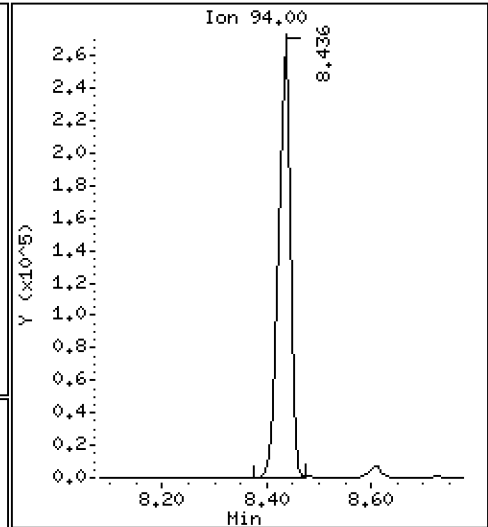
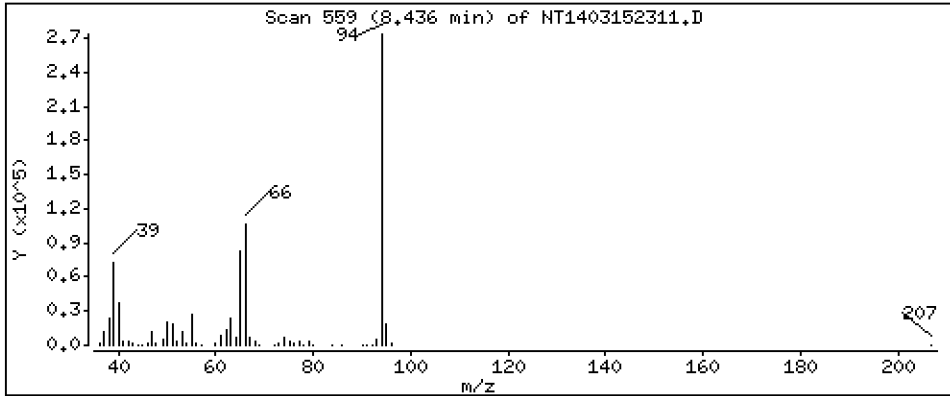
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,368 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

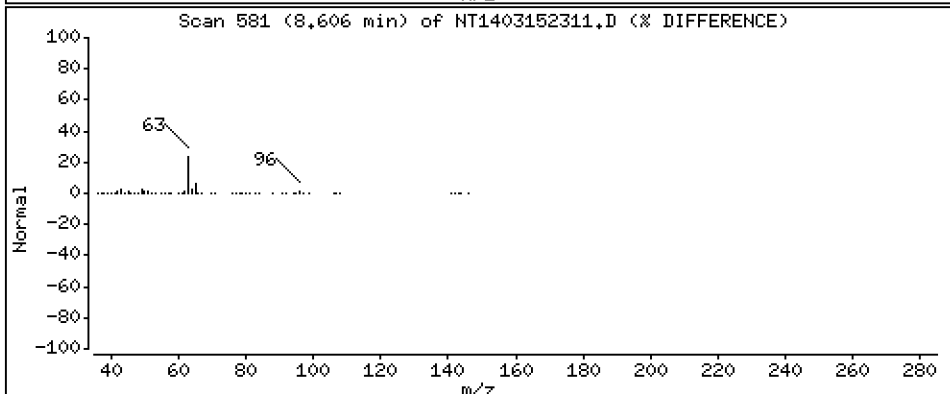
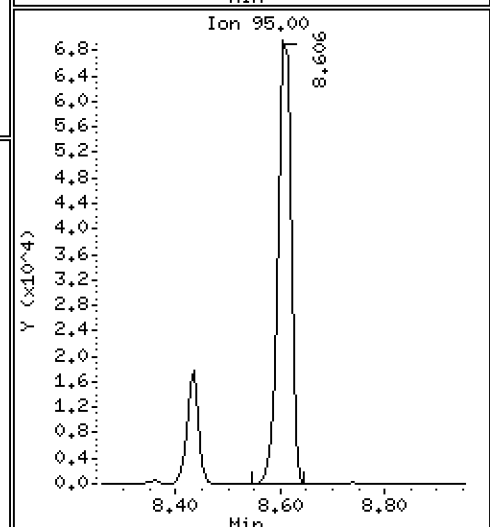
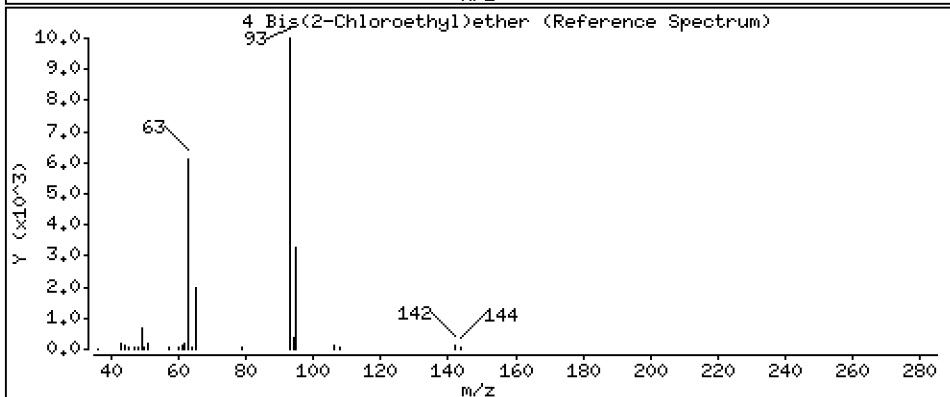
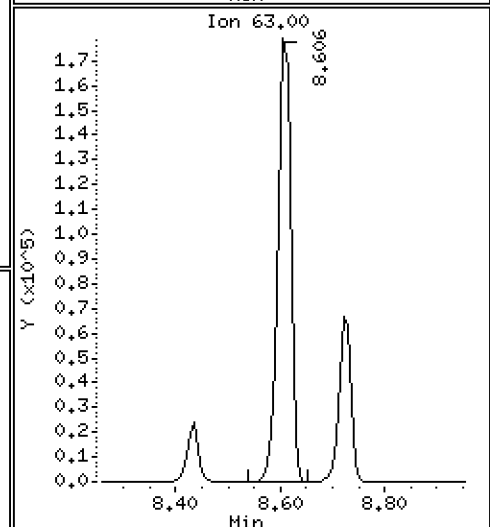
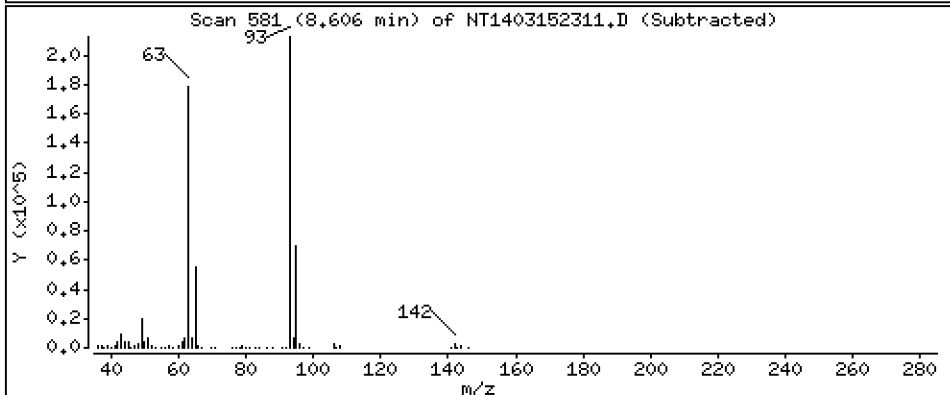
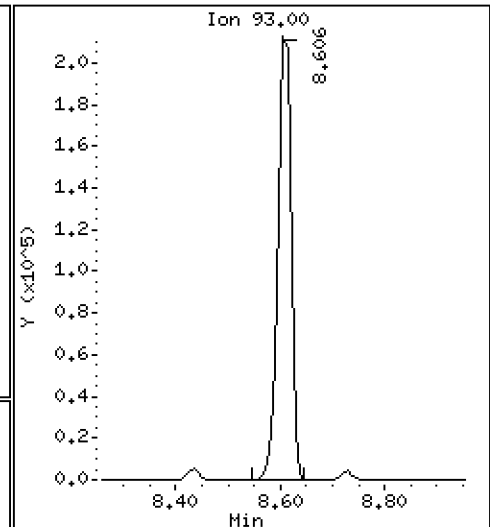
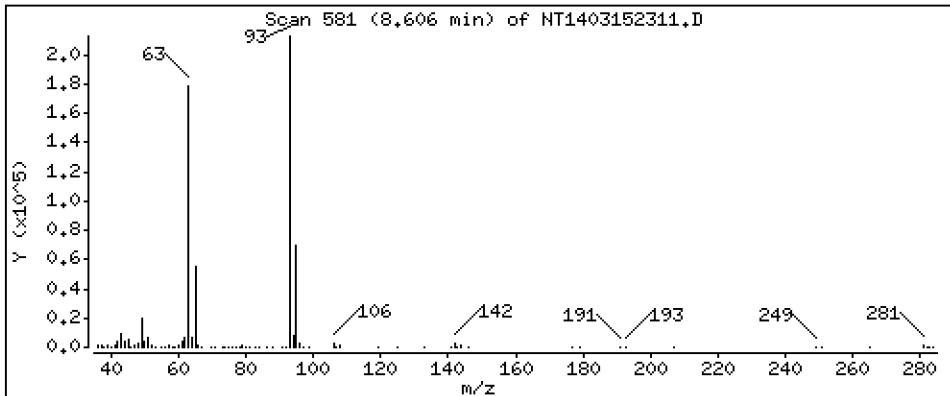
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,258 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

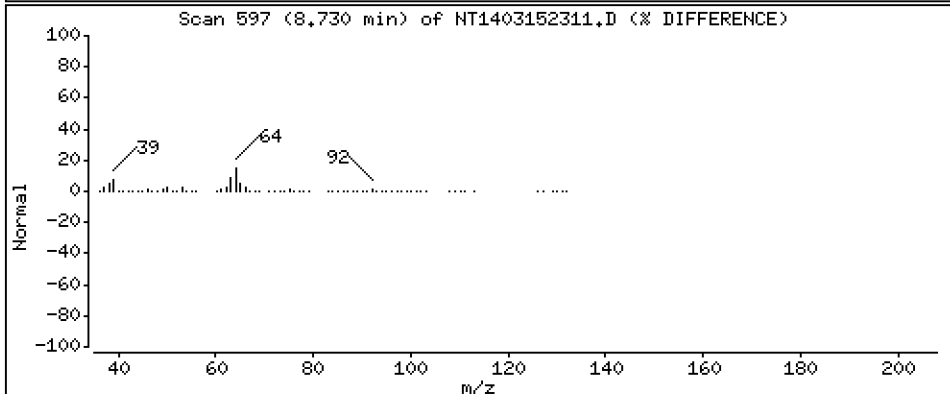
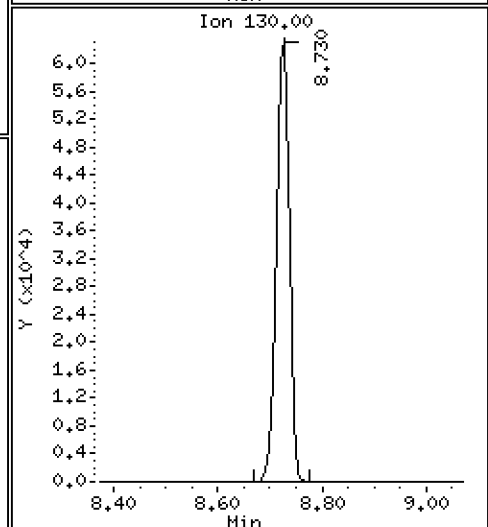
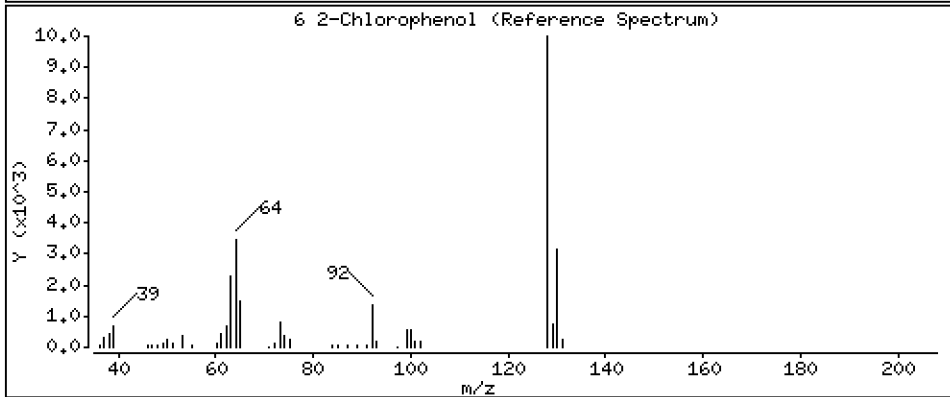
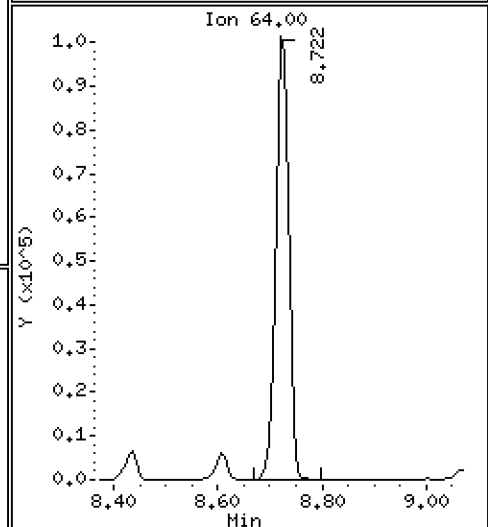
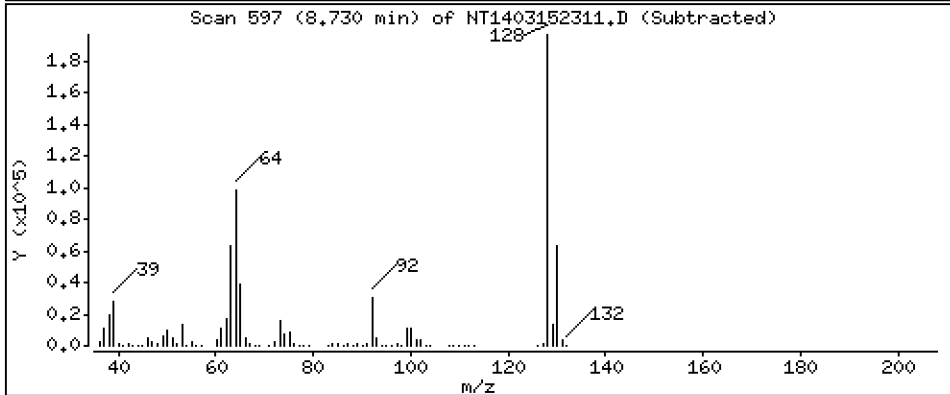
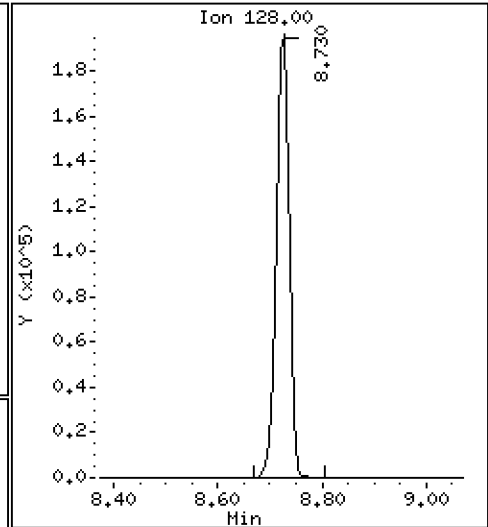
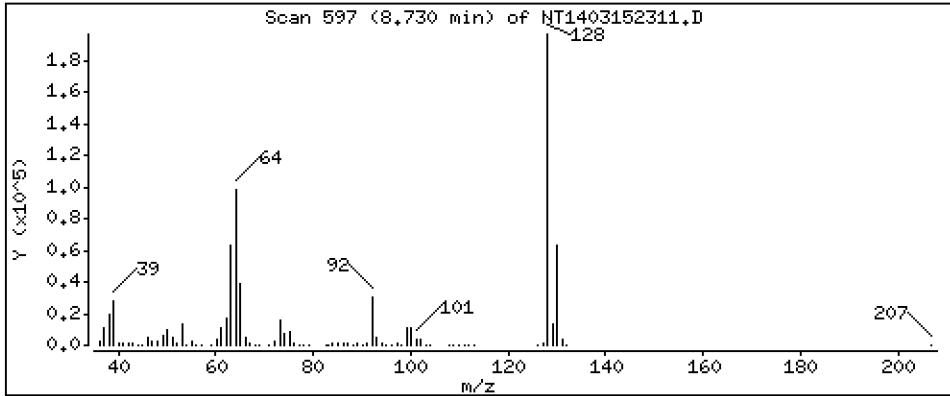
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,379 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

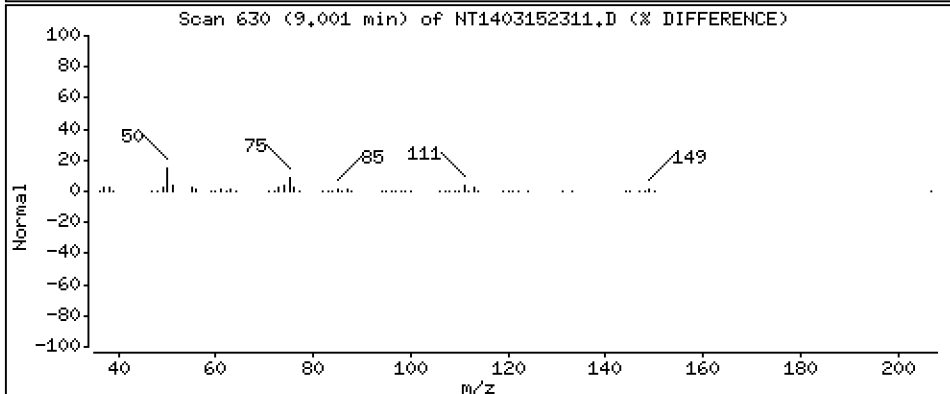
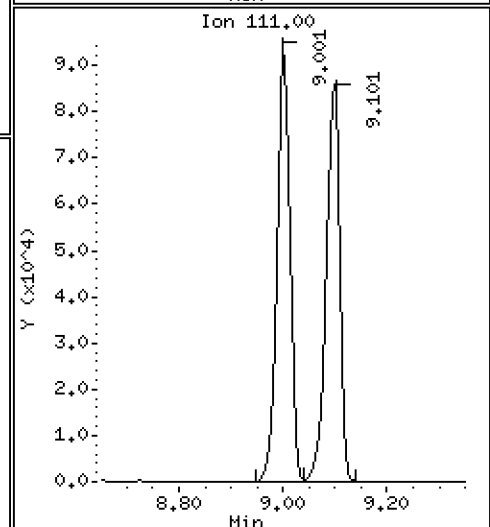
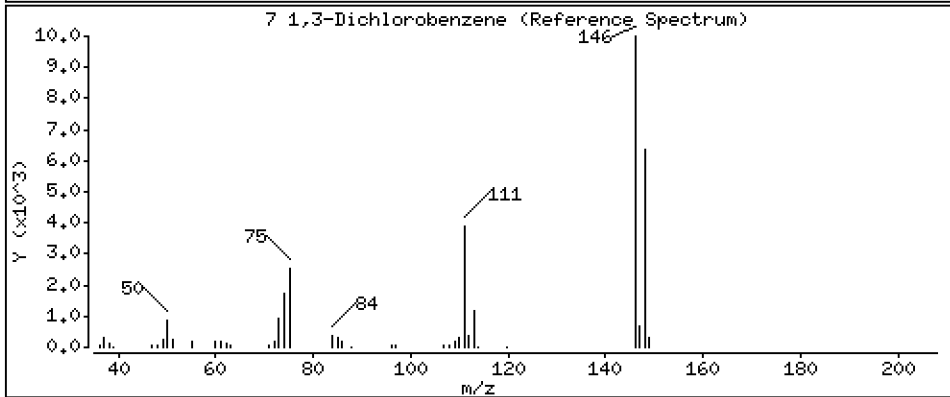
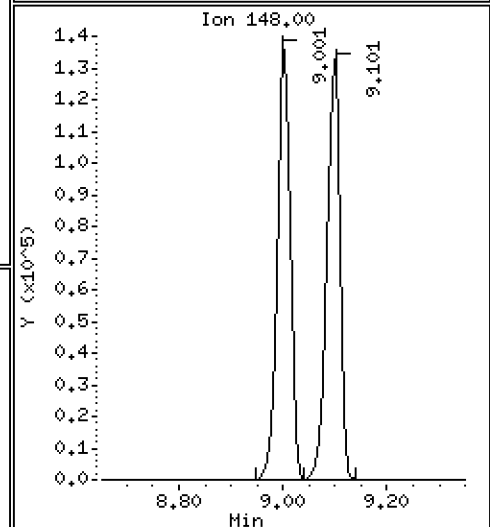
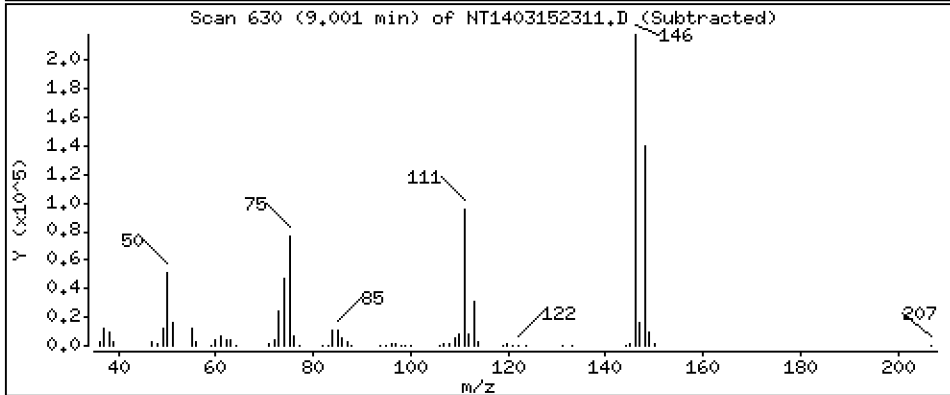
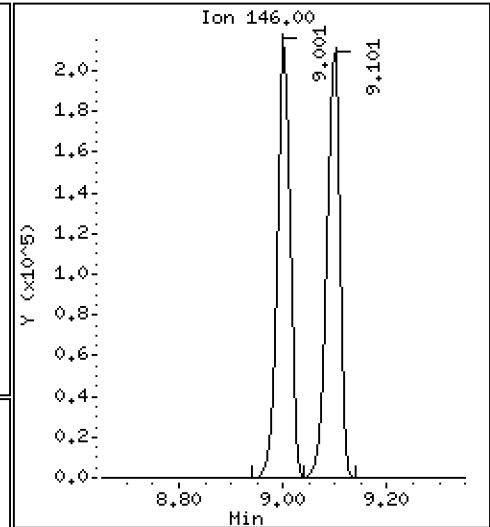
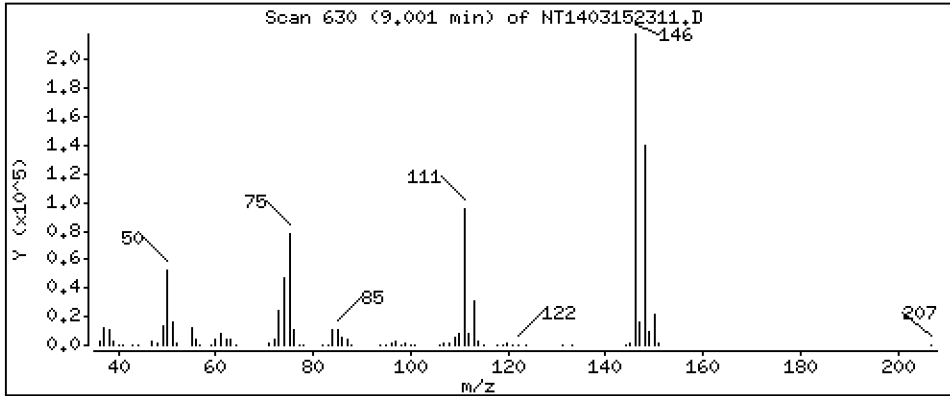
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.793 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

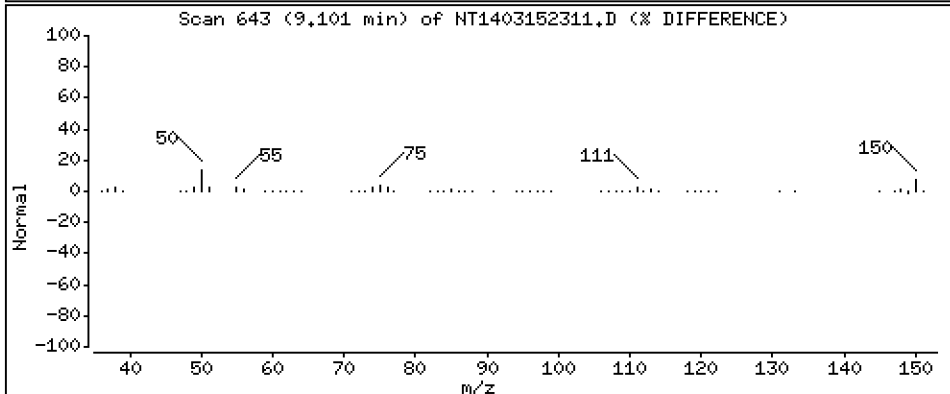
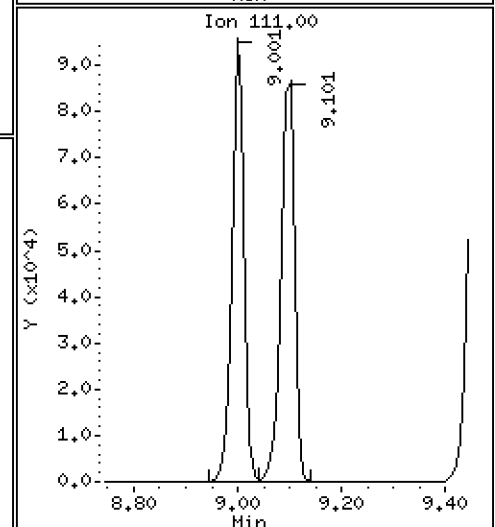
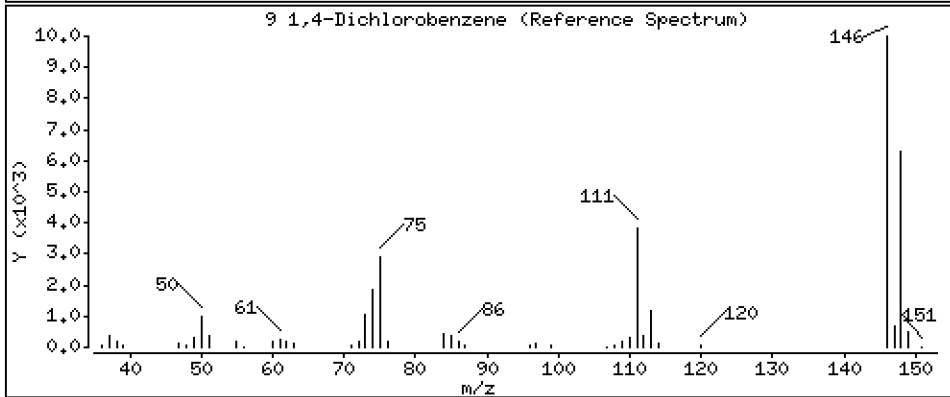
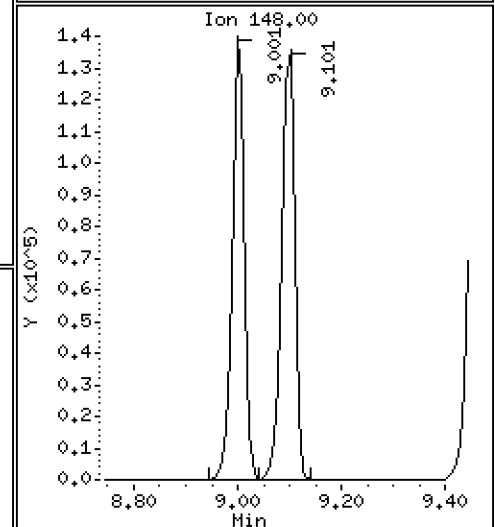
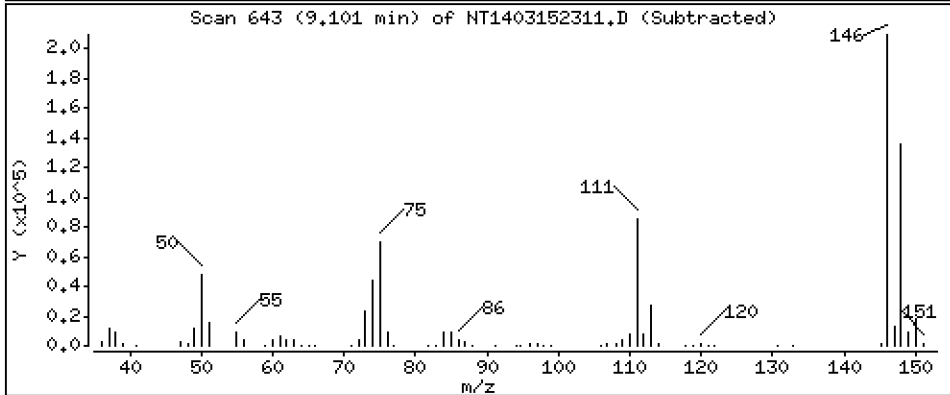
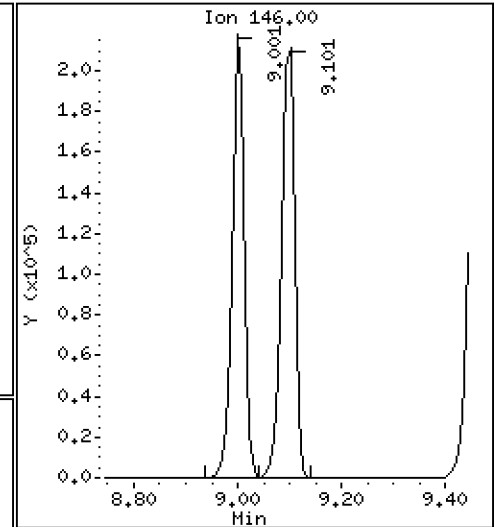
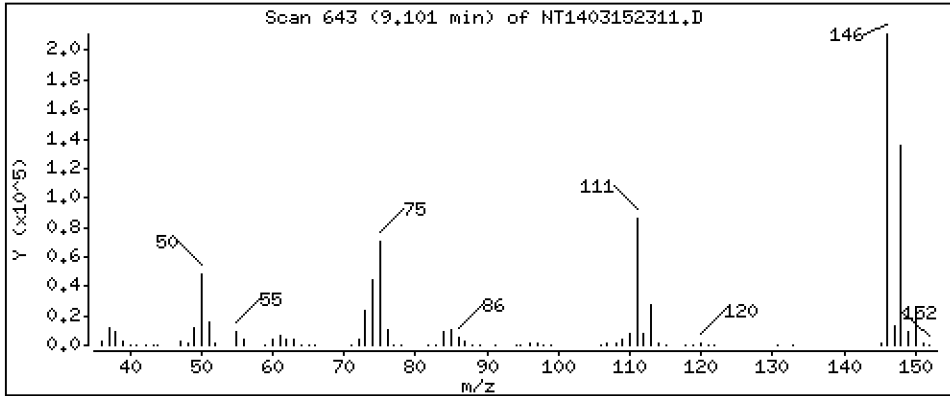
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,889 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

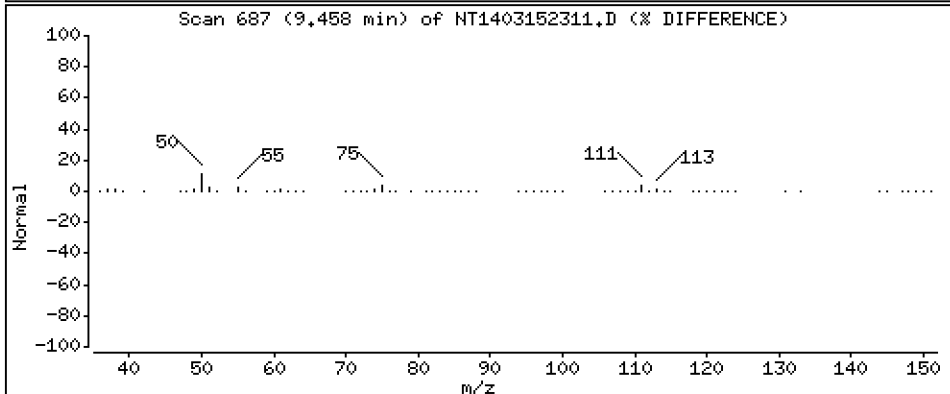
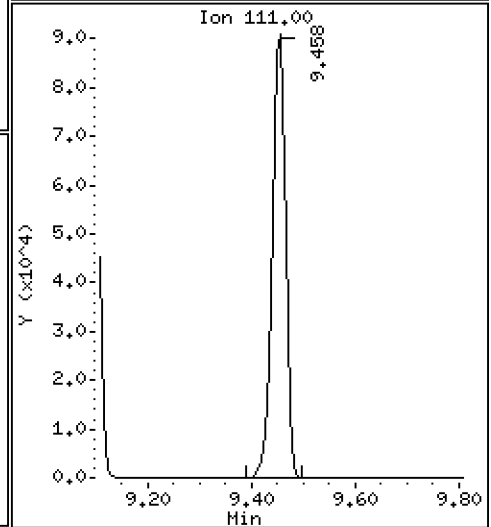
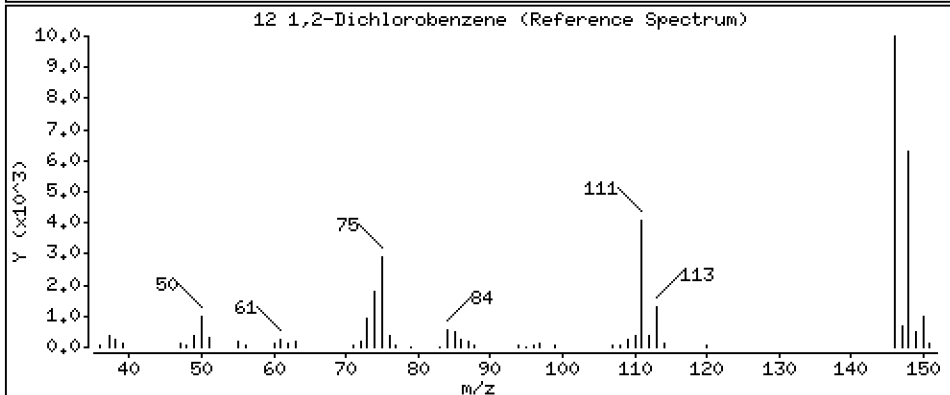
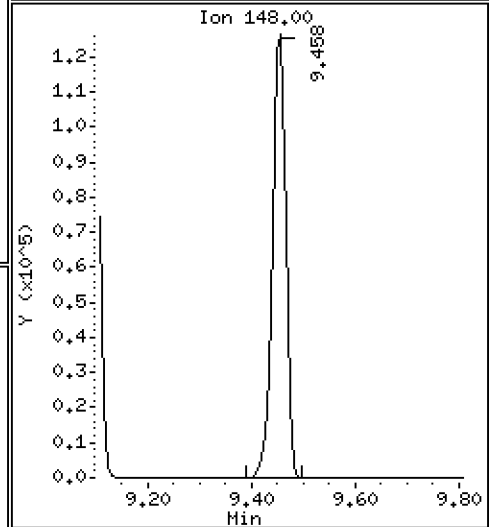
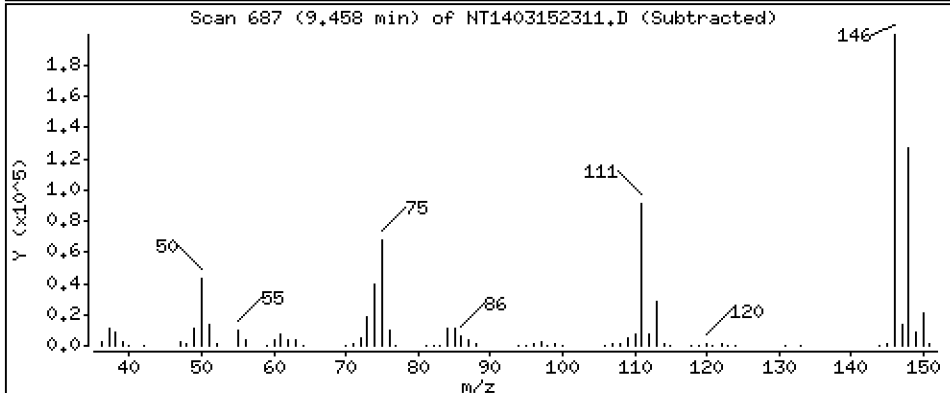
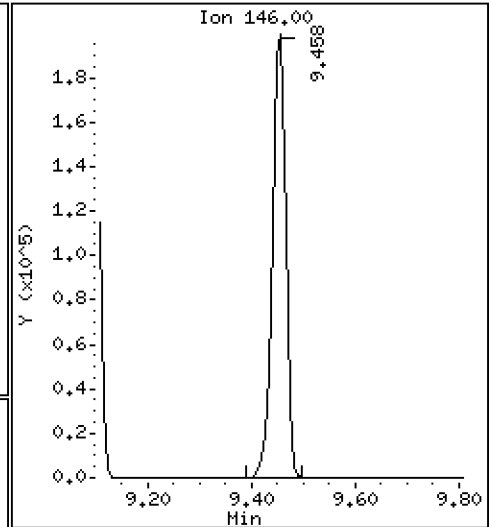
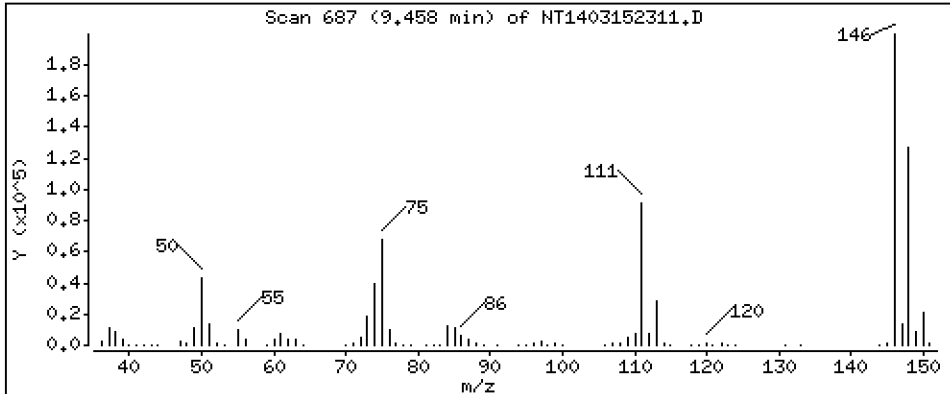
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,786 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

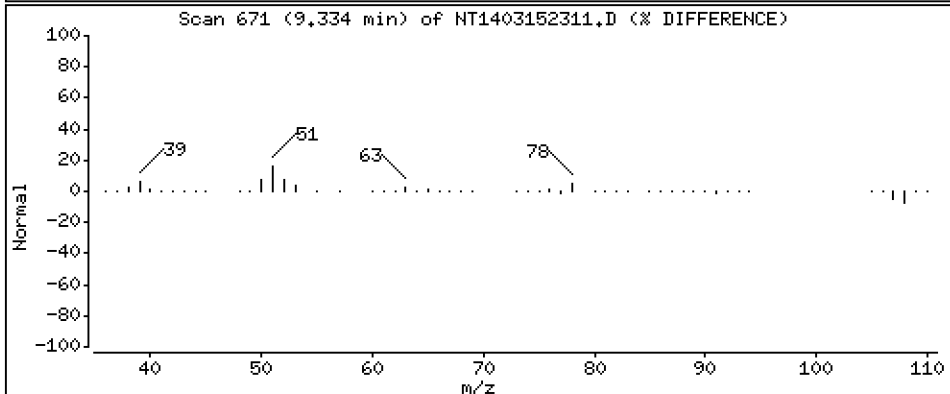
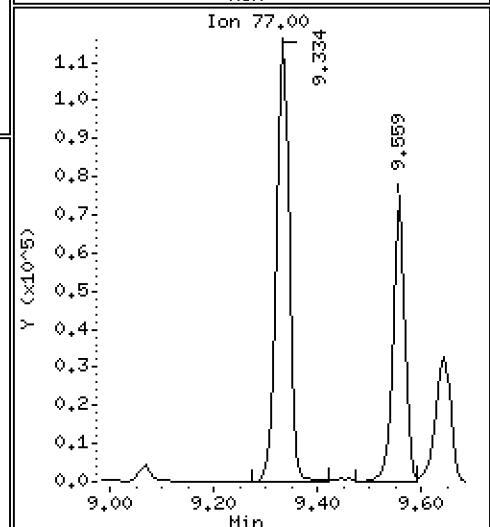
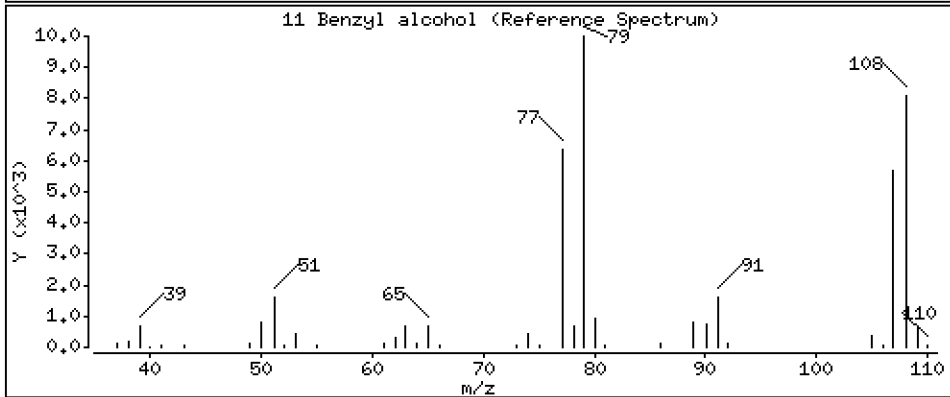
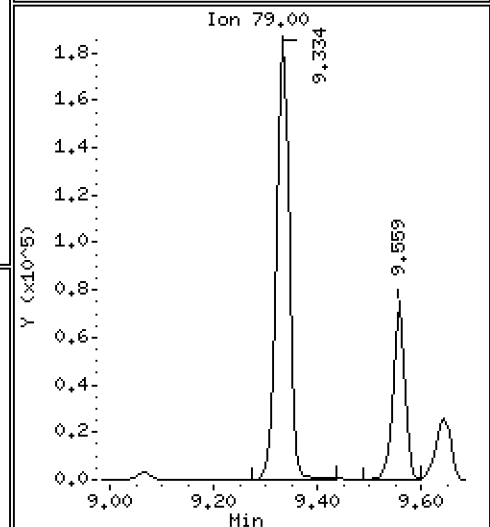
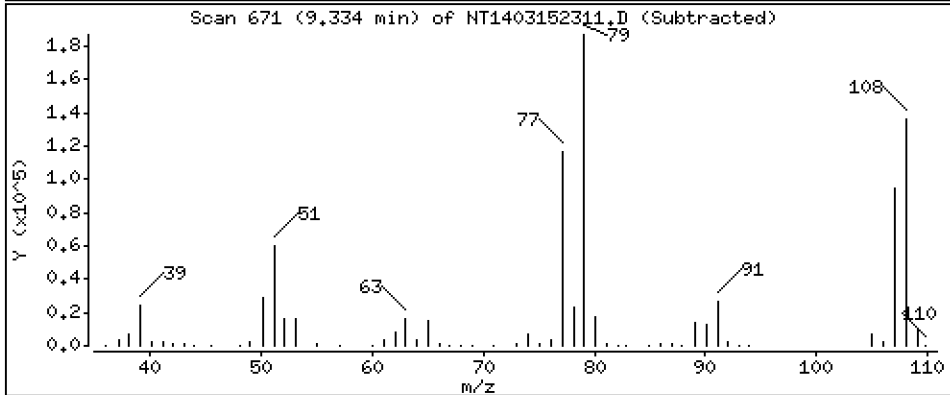
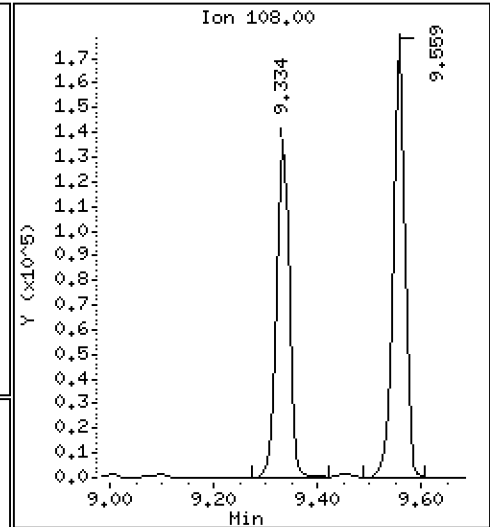
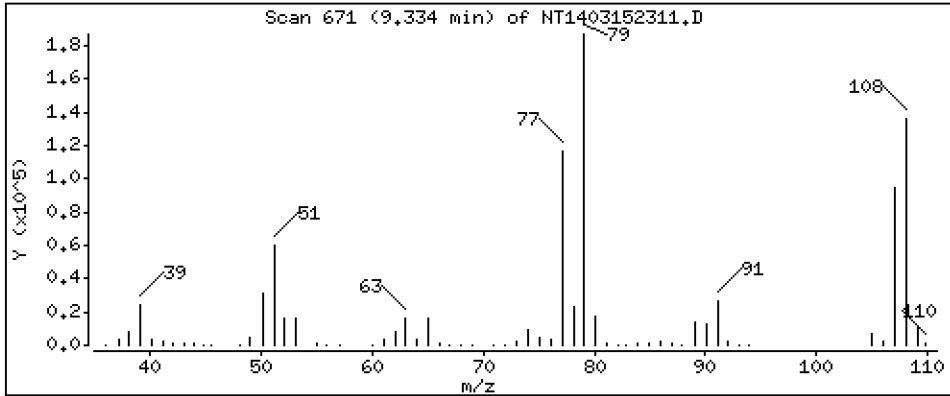
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5.051 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

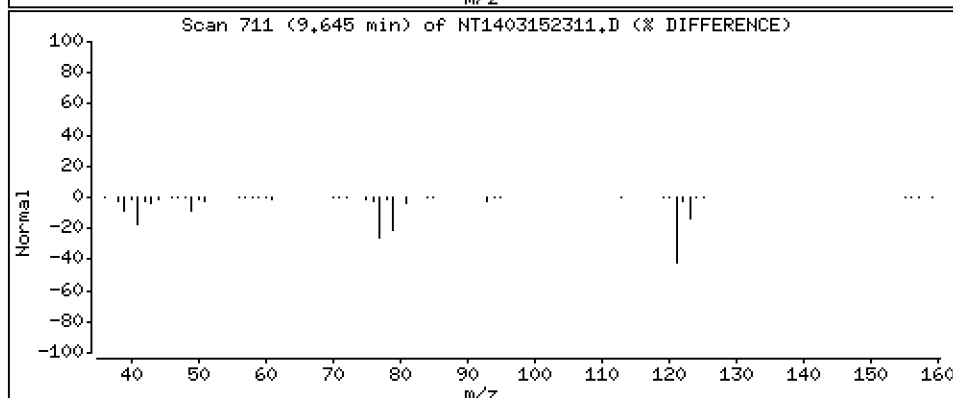
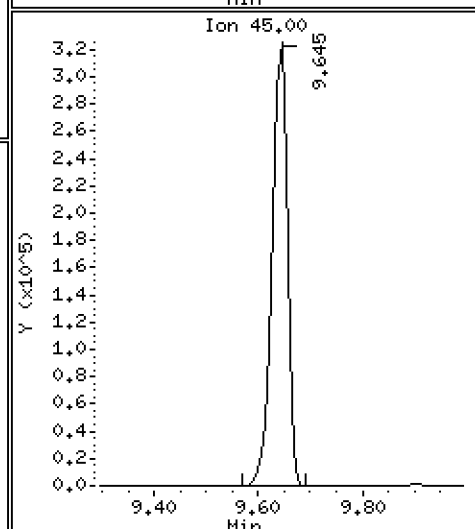
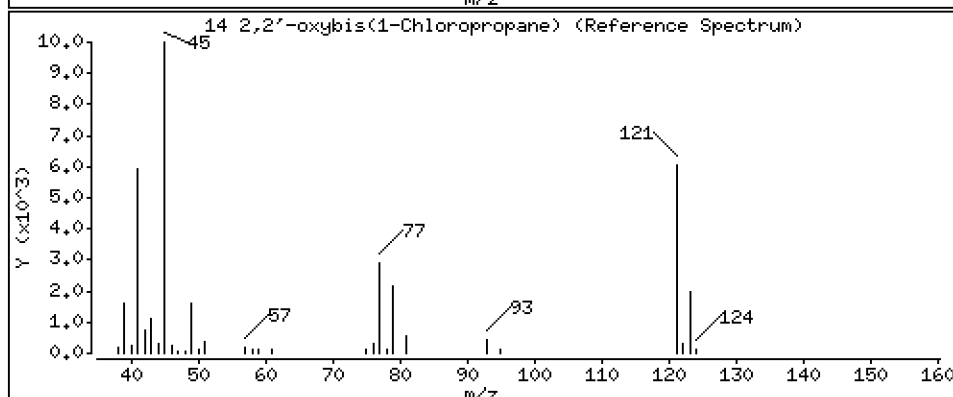
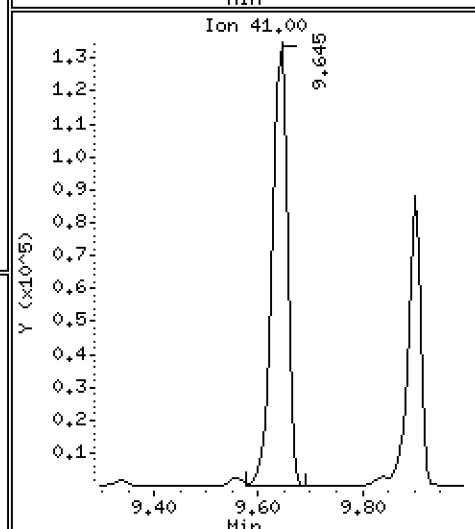
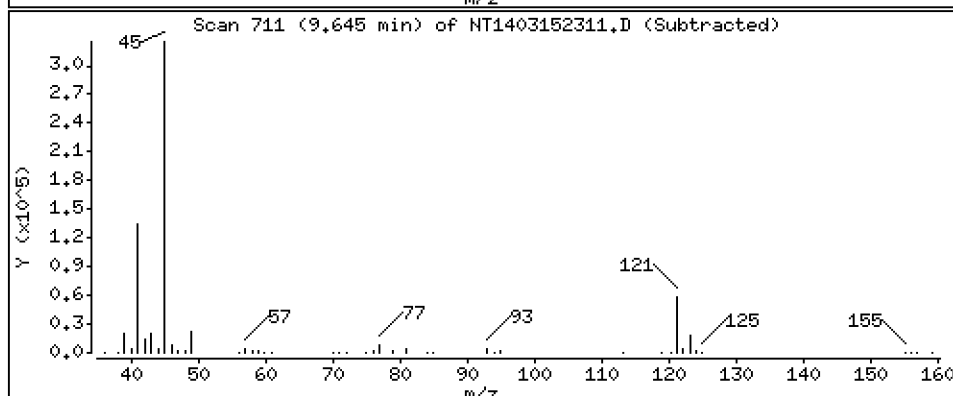
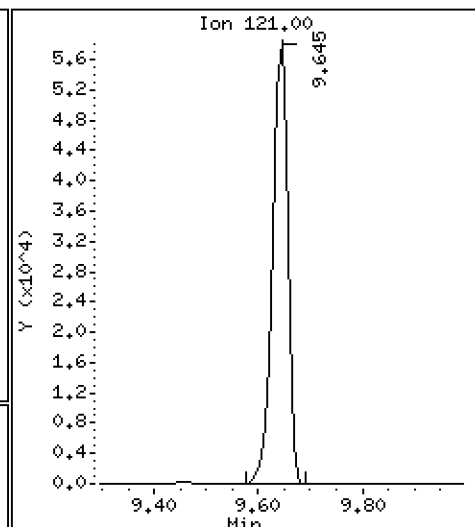
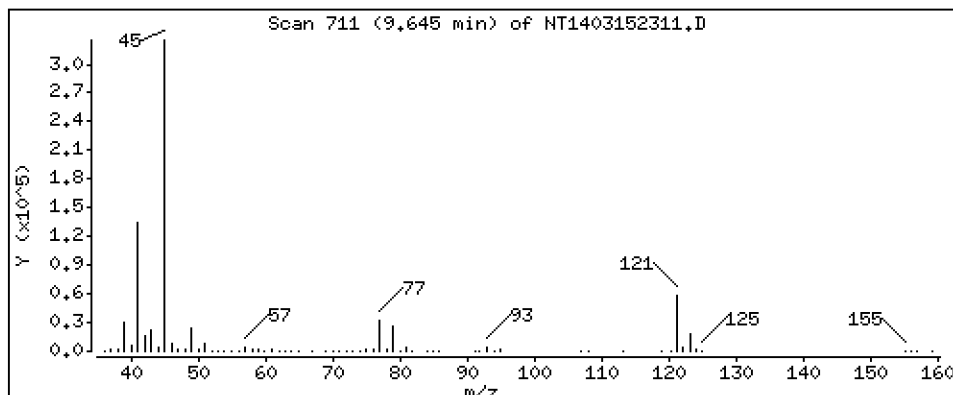
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 5,319 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

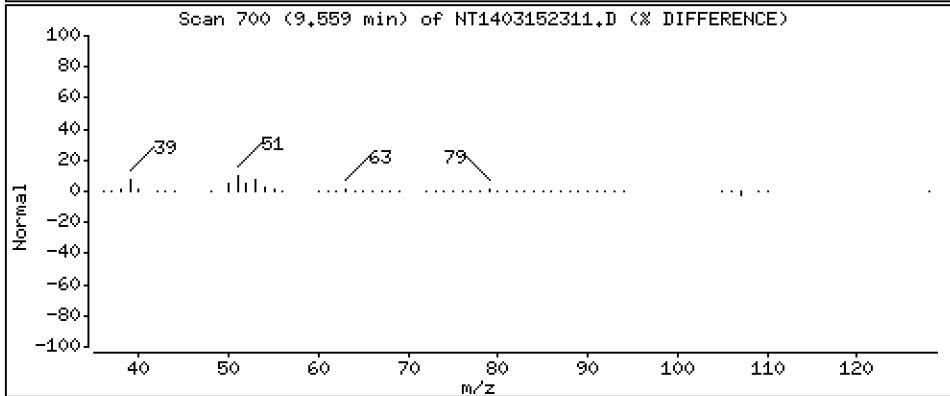
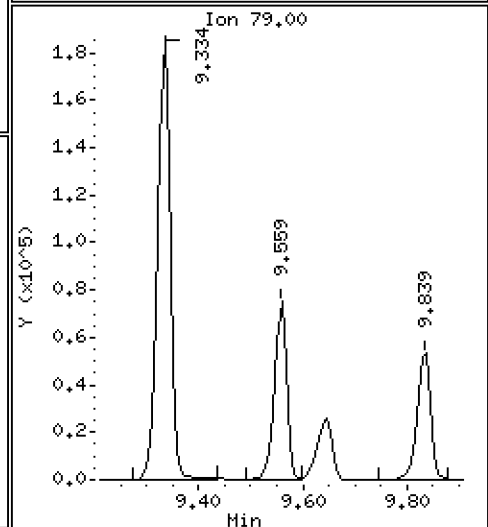
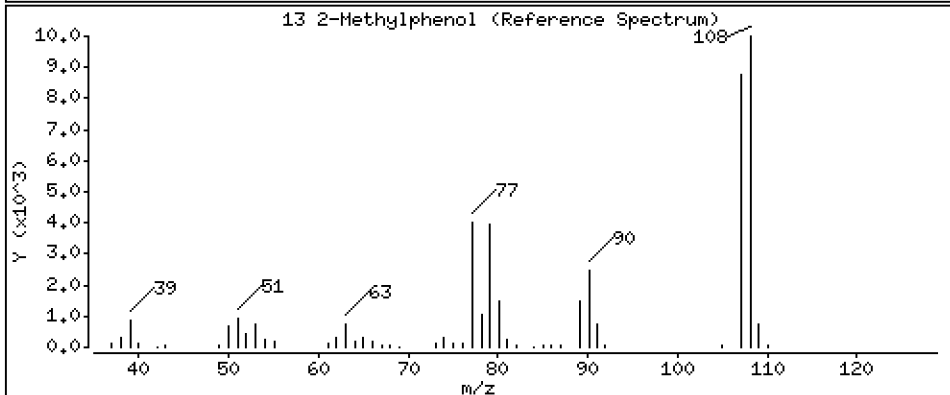
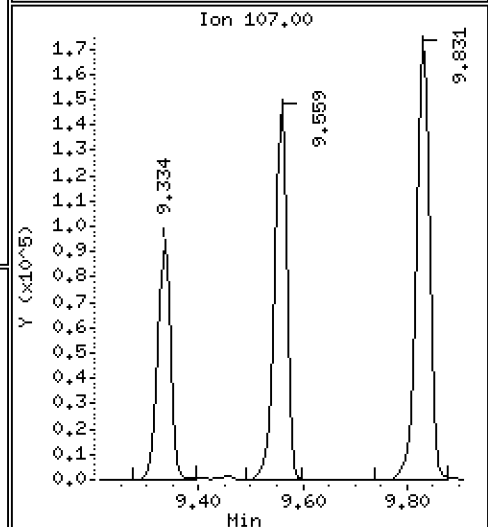
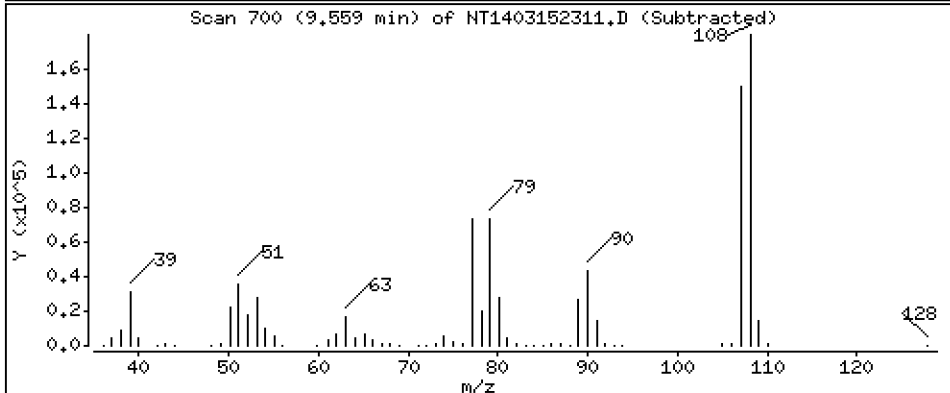
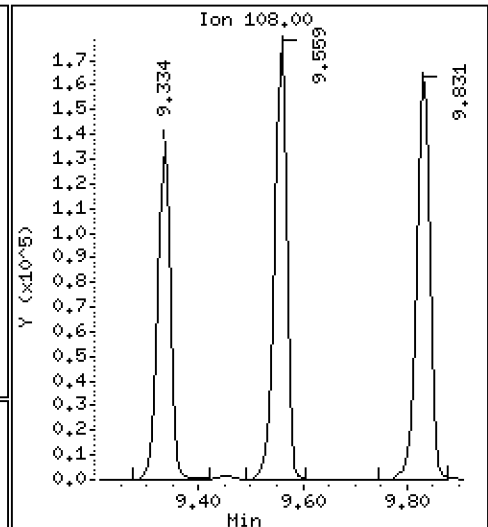
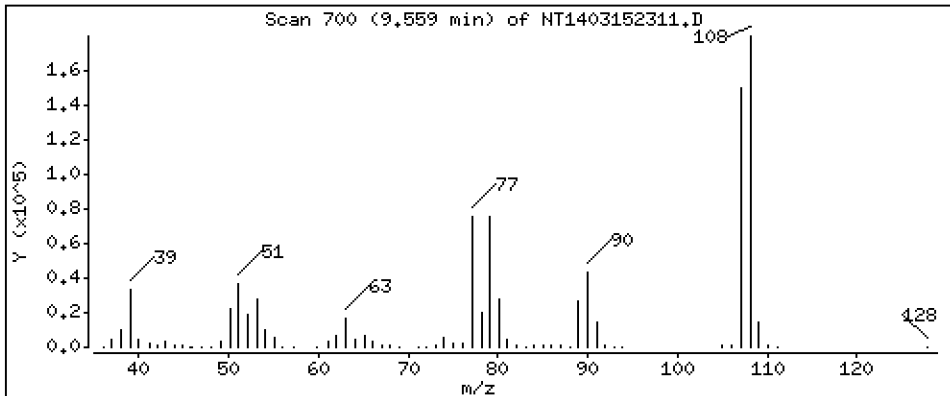
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.117 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

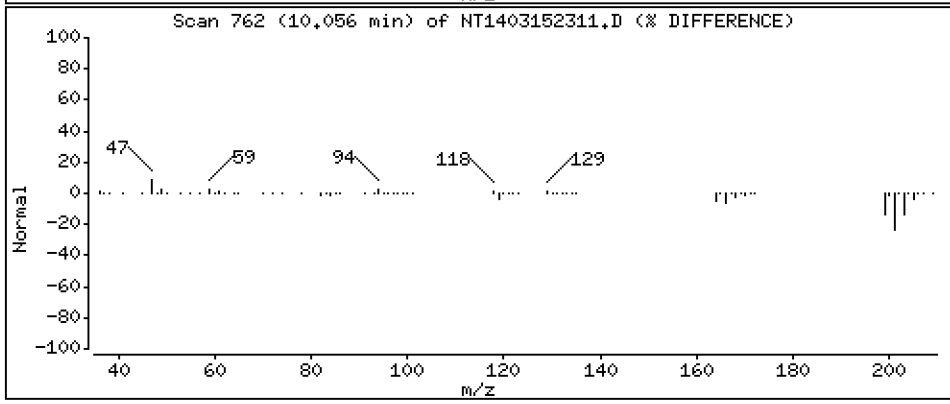
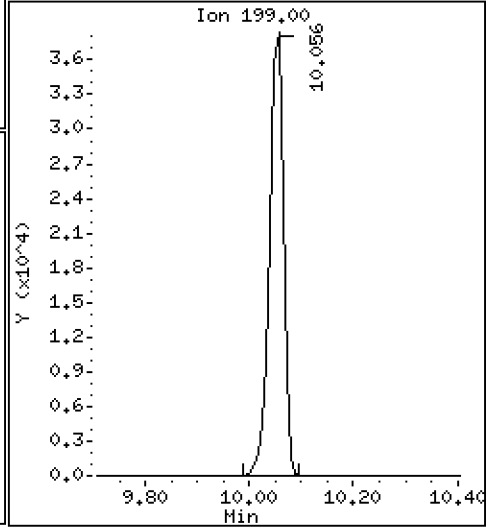
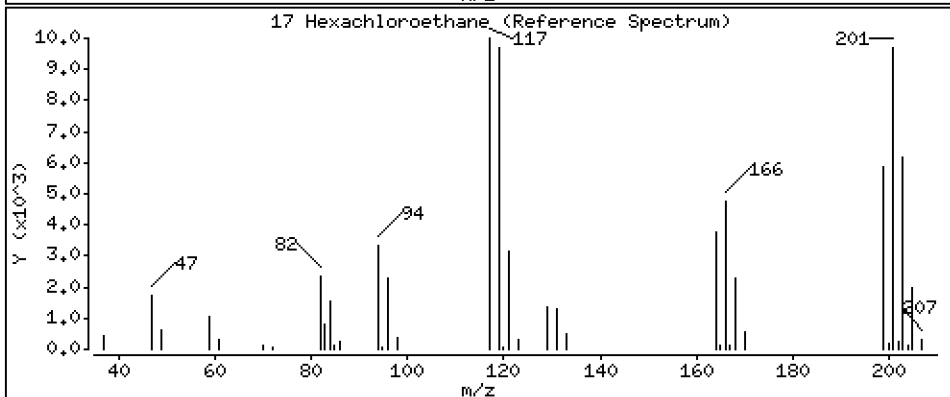
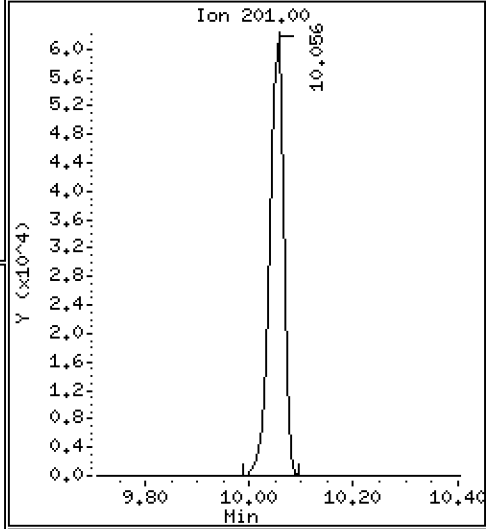
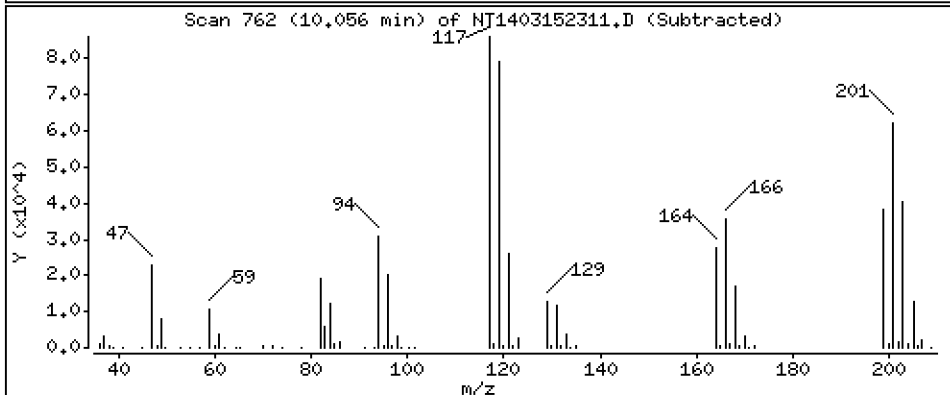
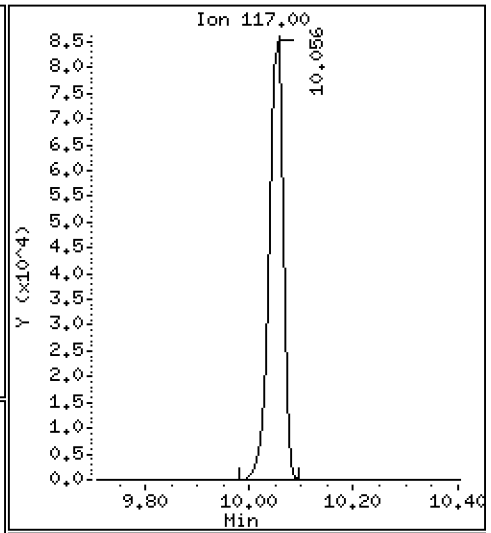
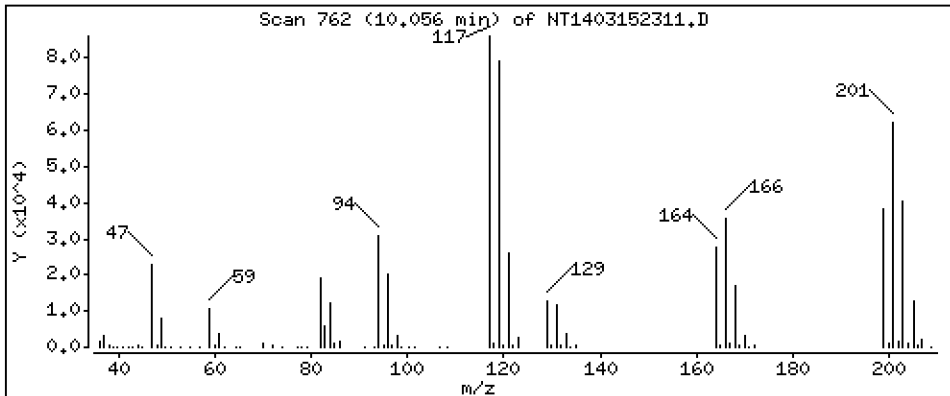
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 4.955 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

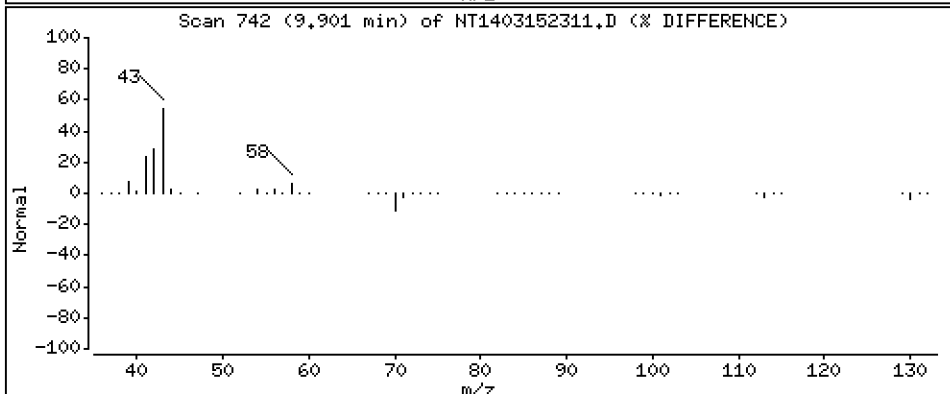
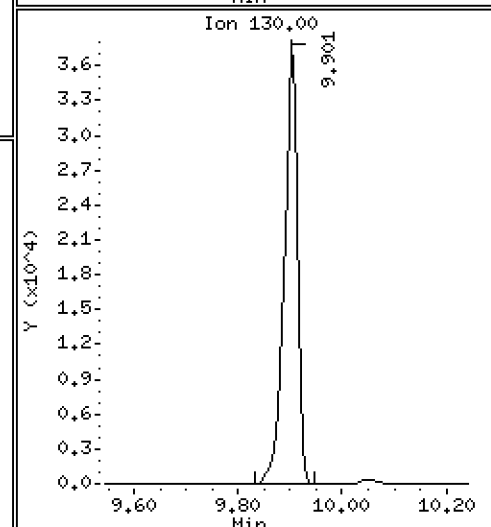
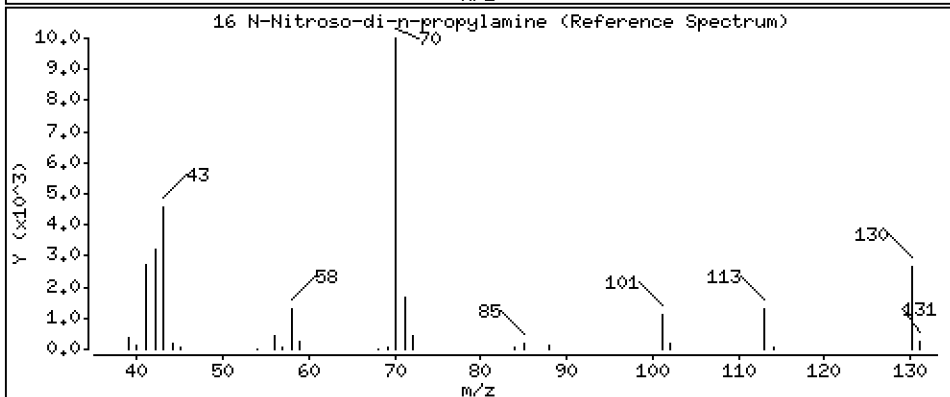
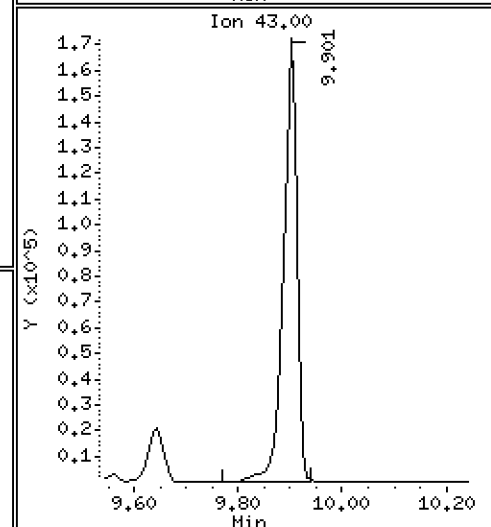
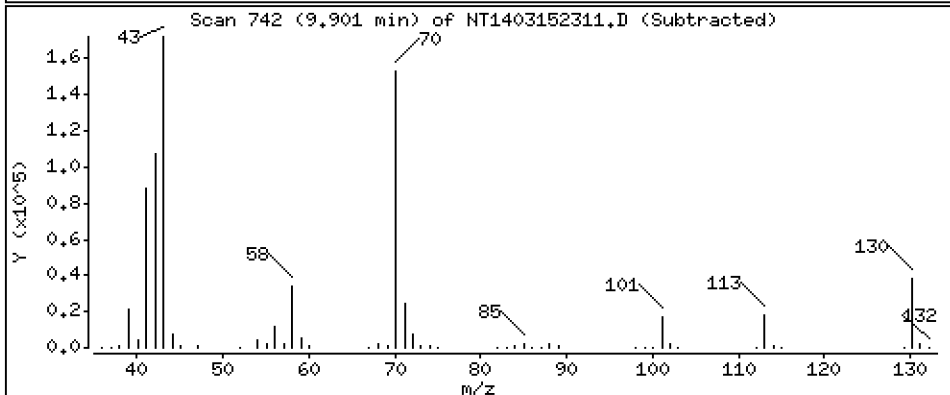
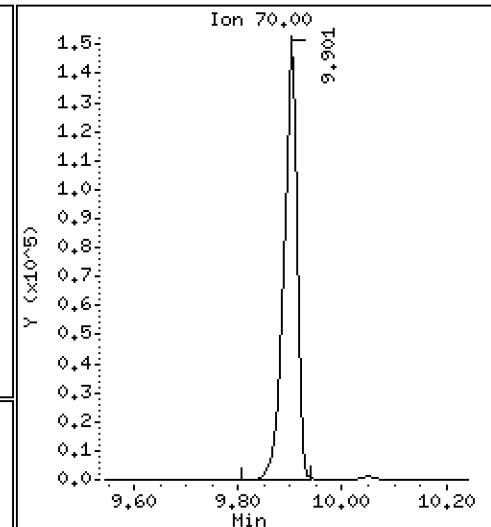
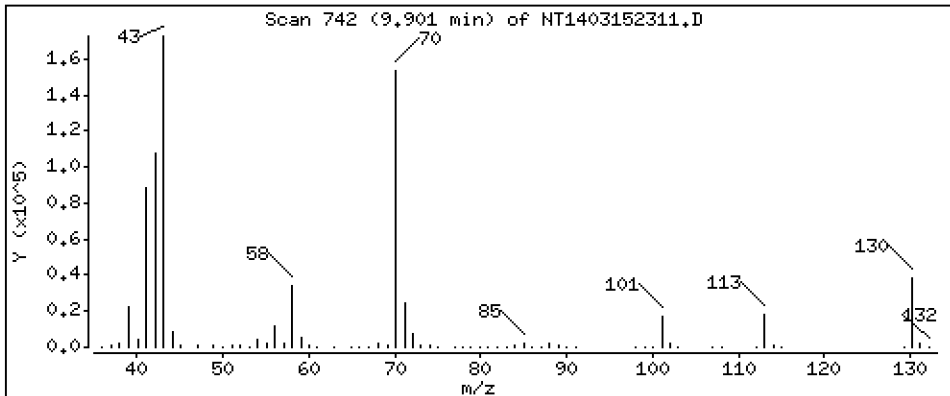
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,983 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

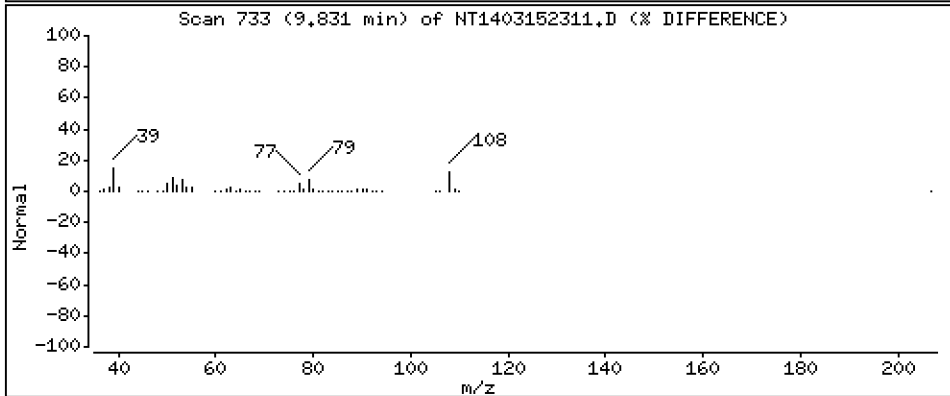
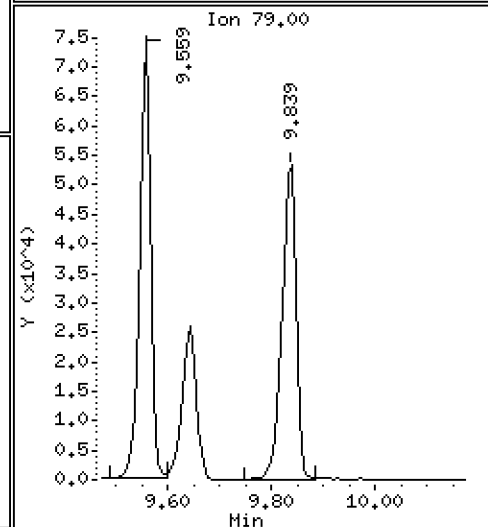
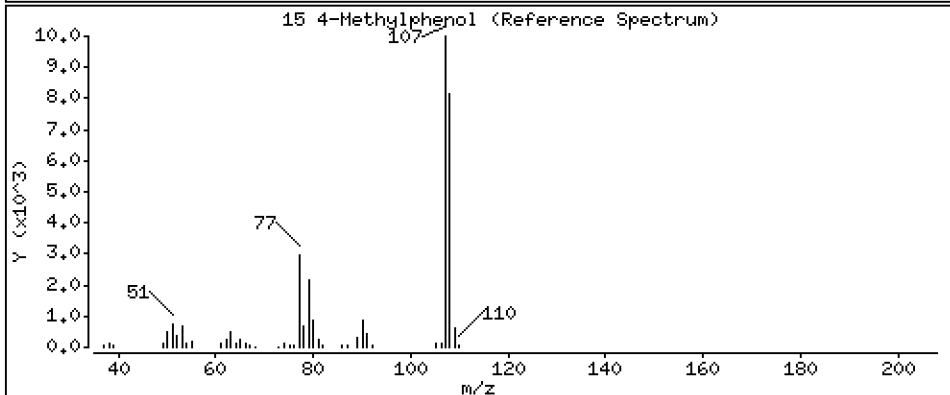
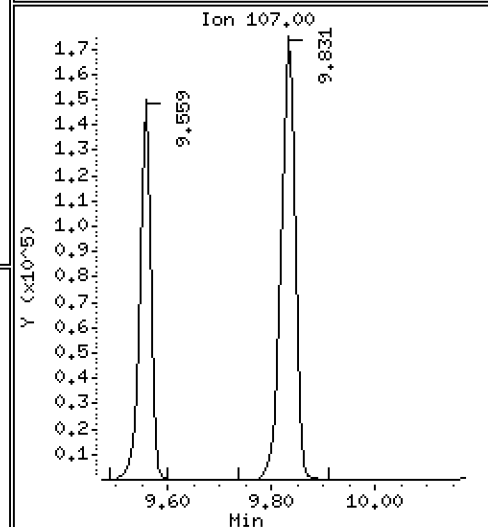
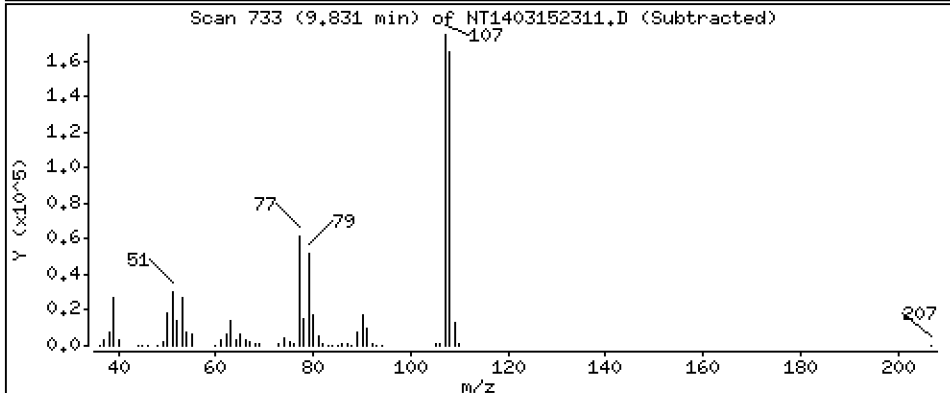
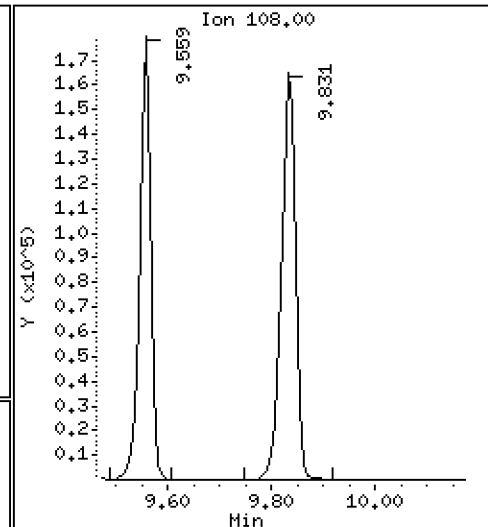
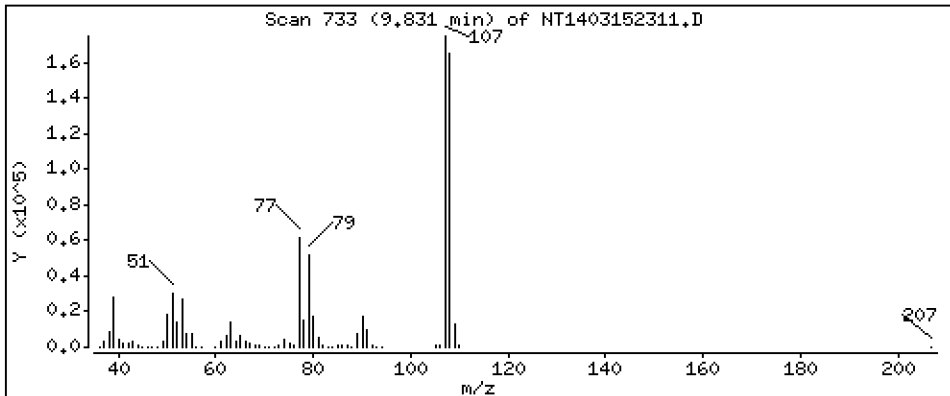
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,302 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

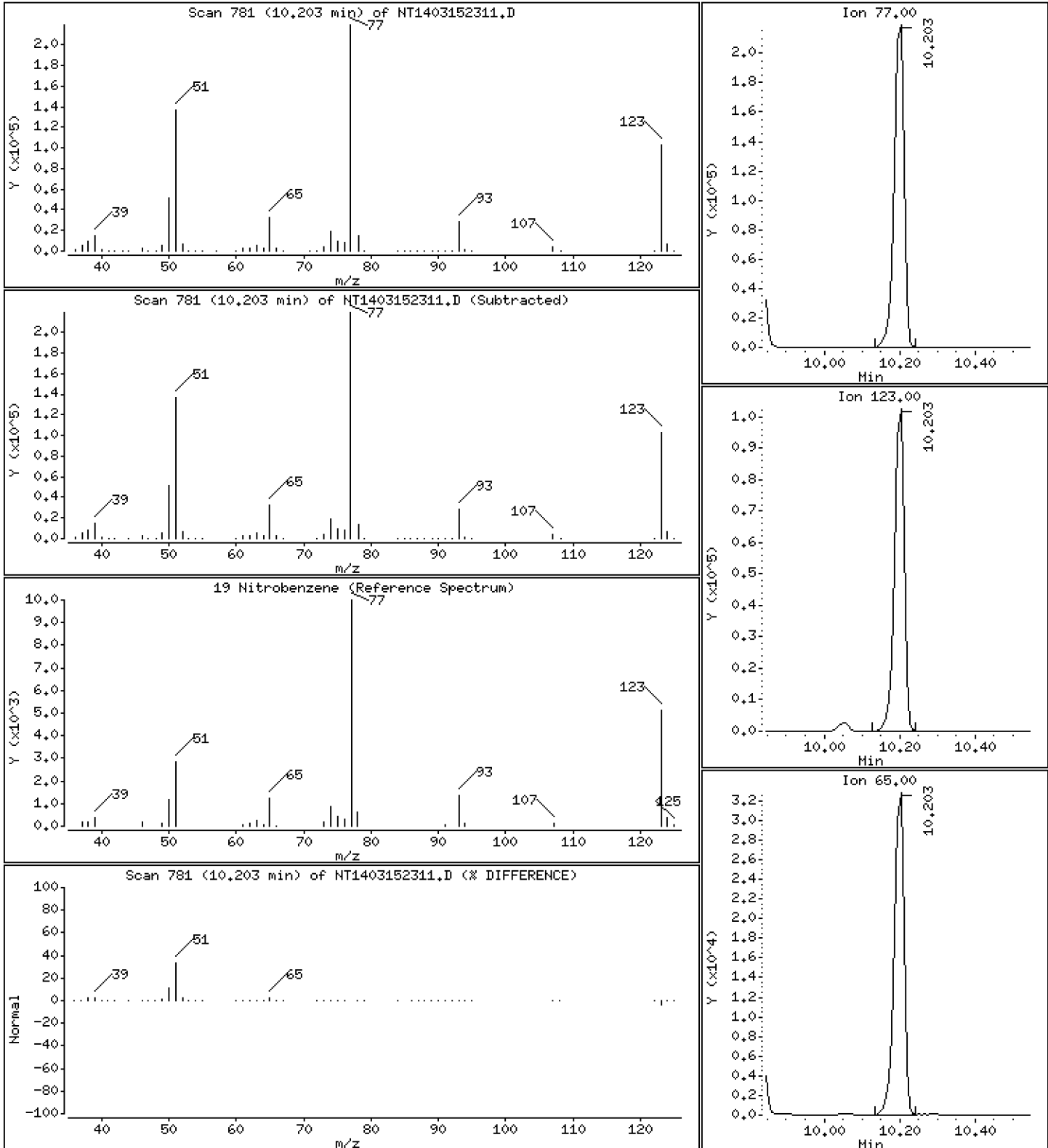
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,023 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

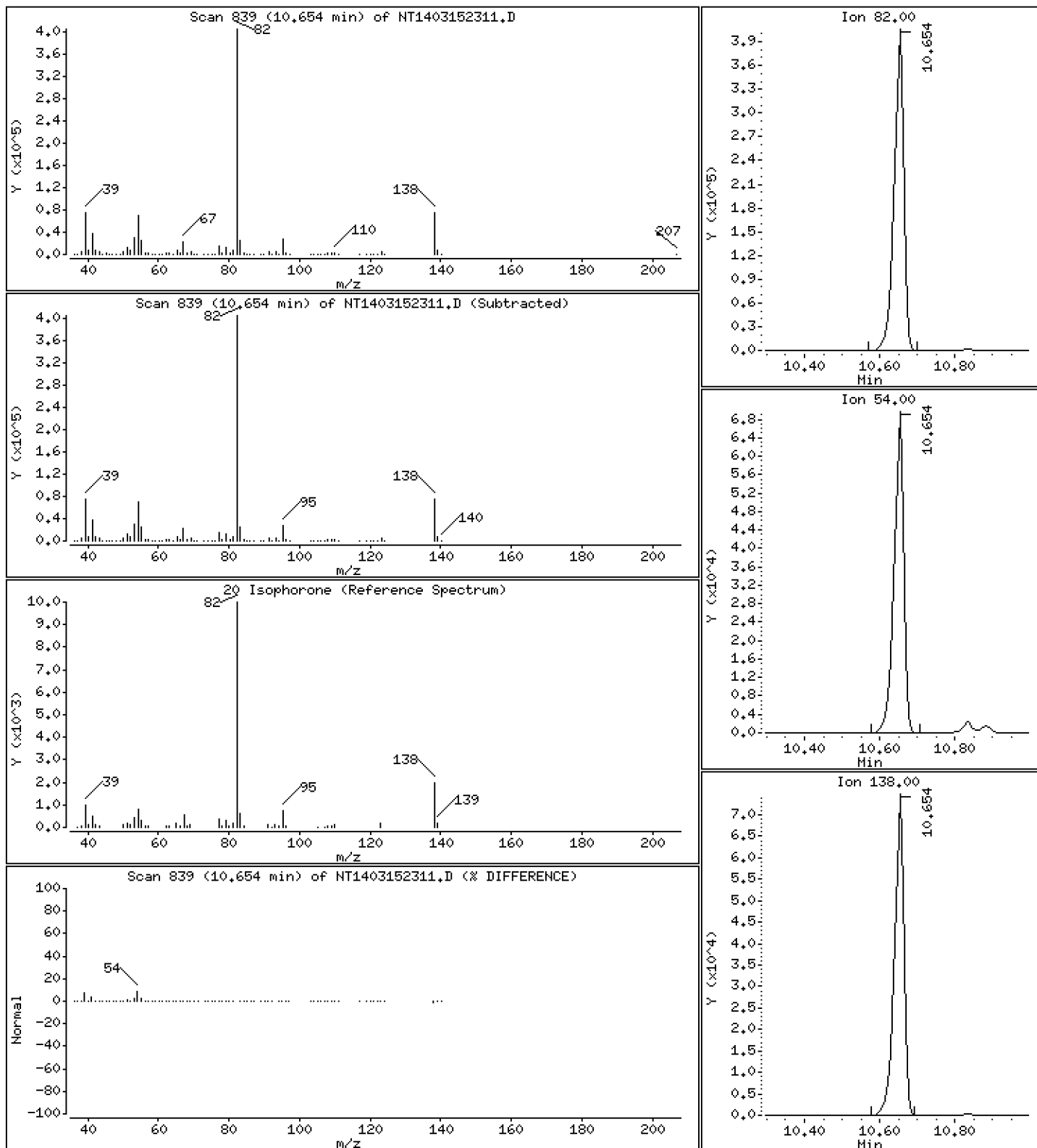
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 6,771 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

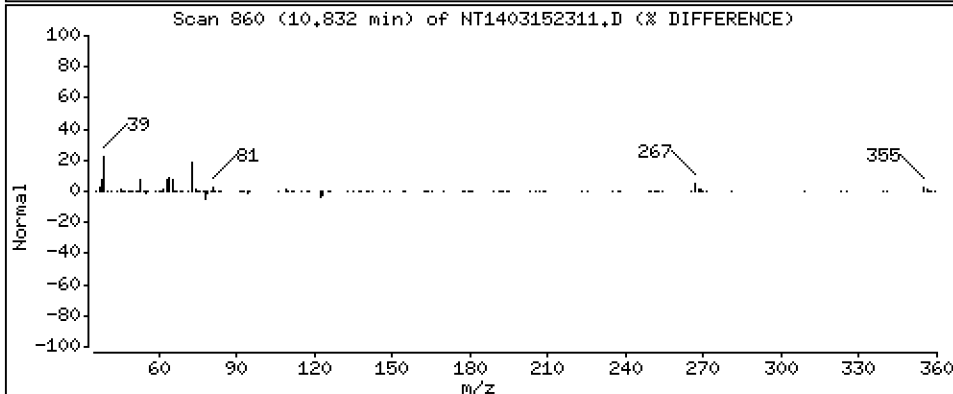
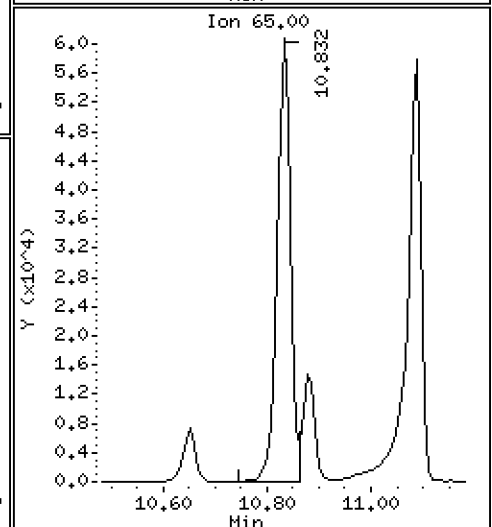
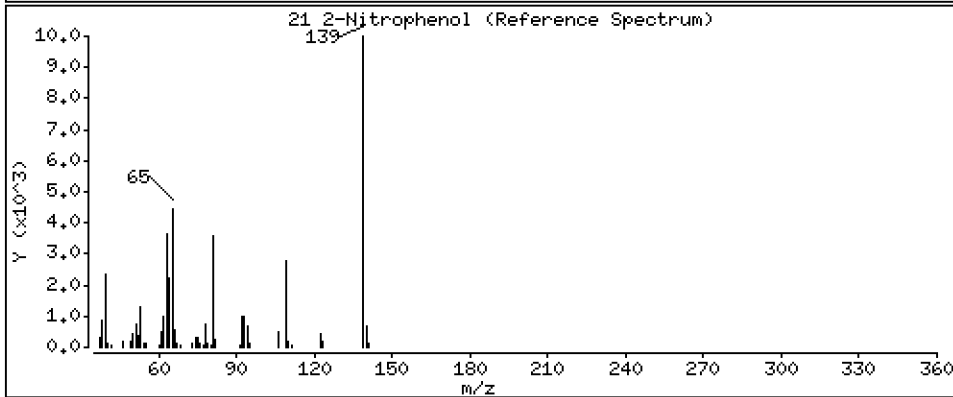
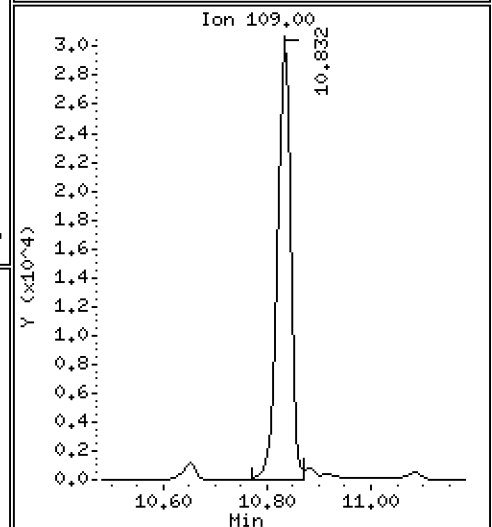
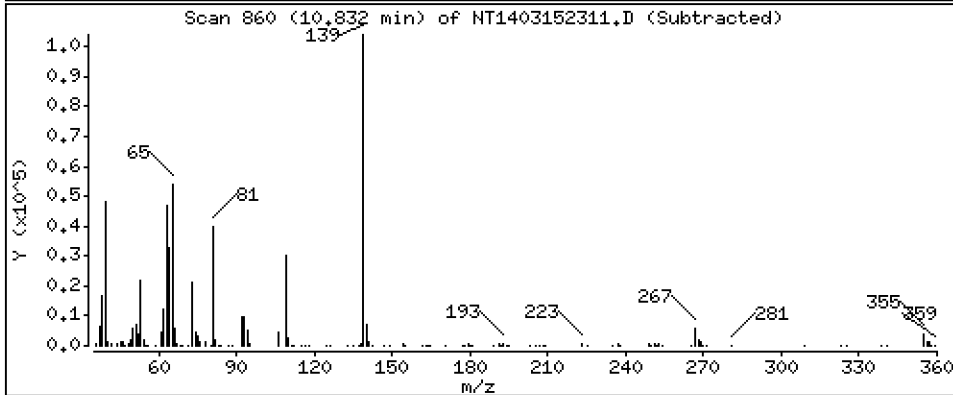
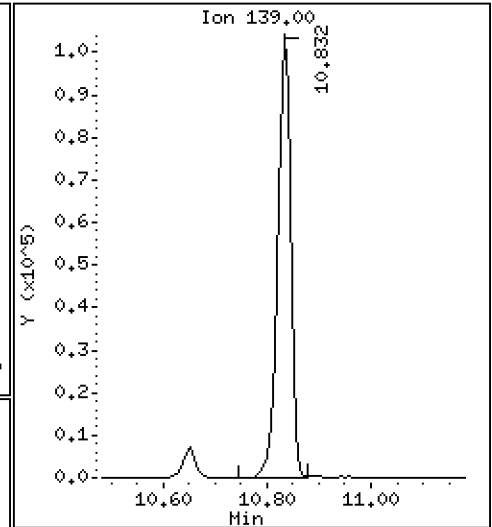
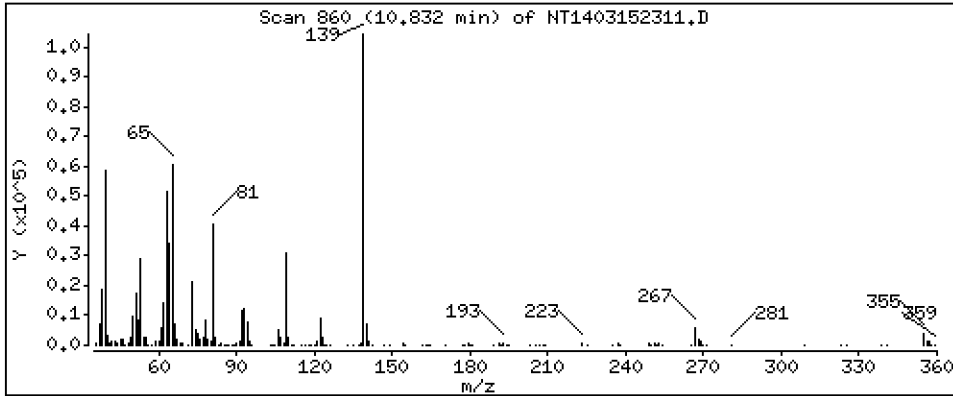
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,530 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

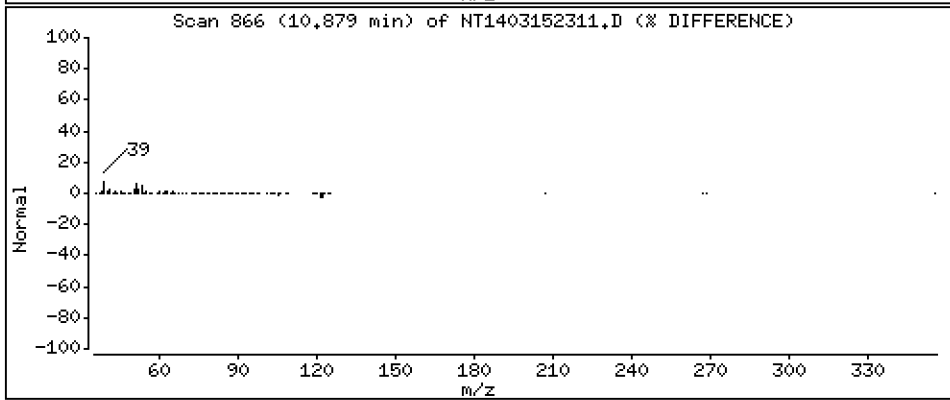
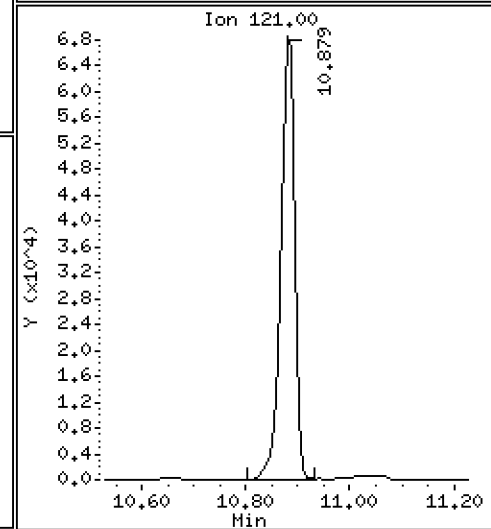
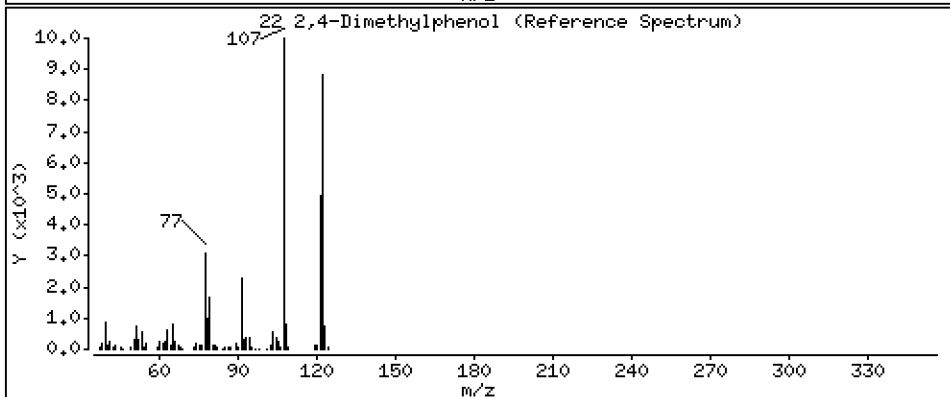
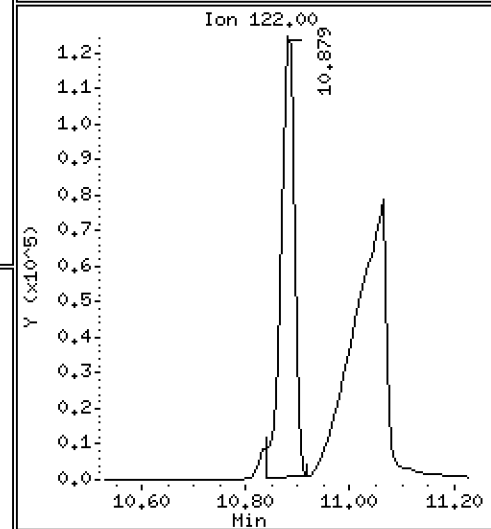
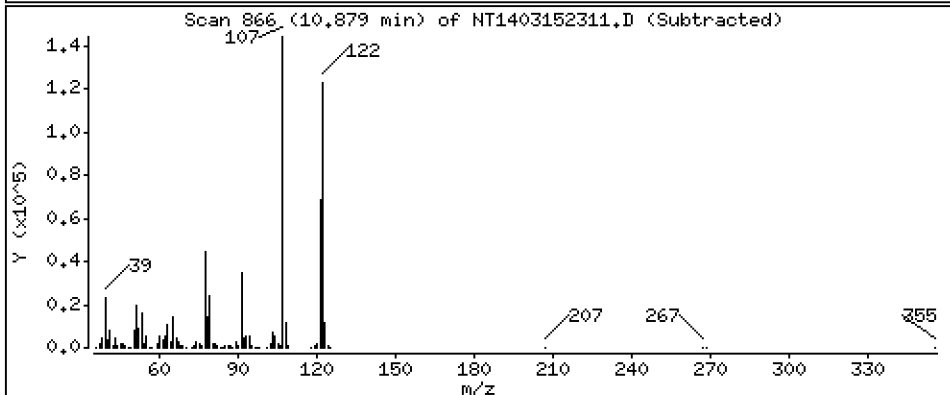
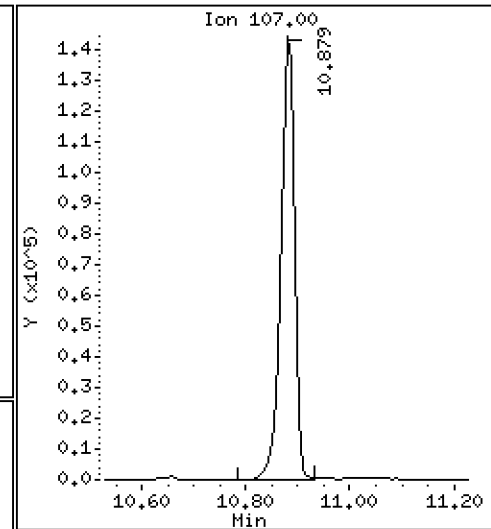
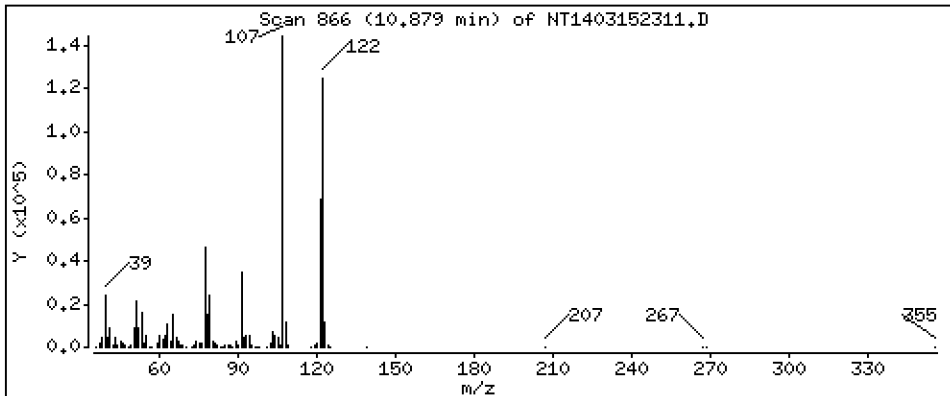
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,915 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

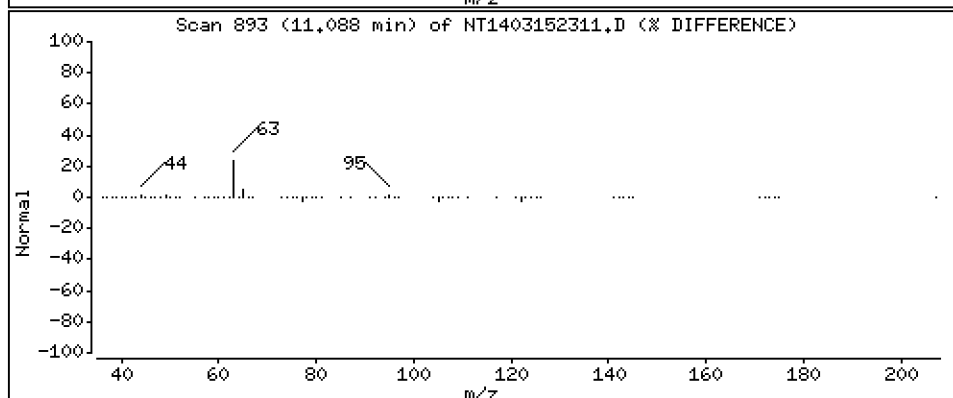
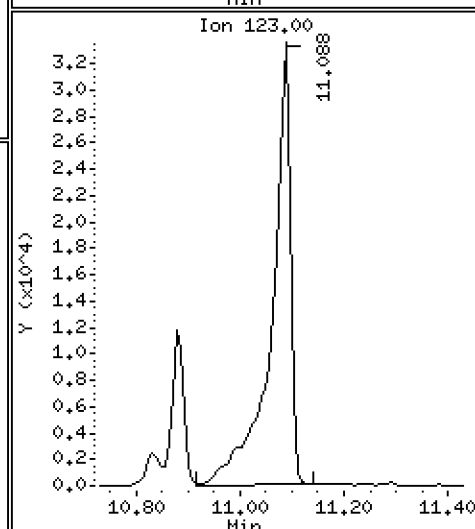
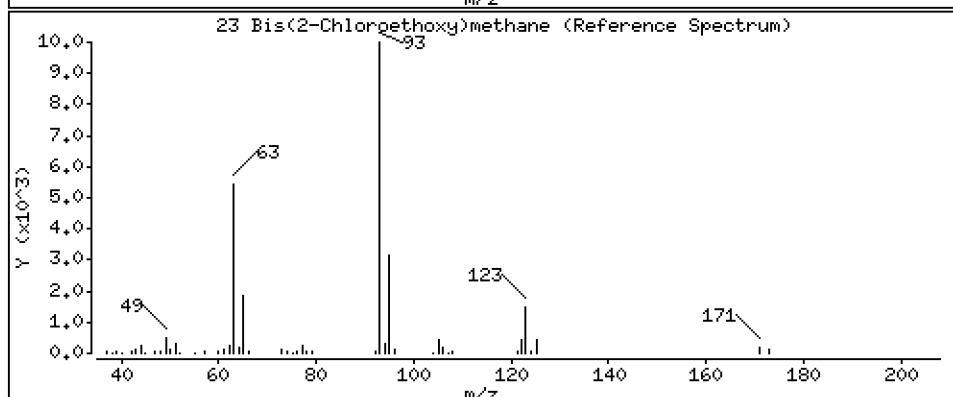
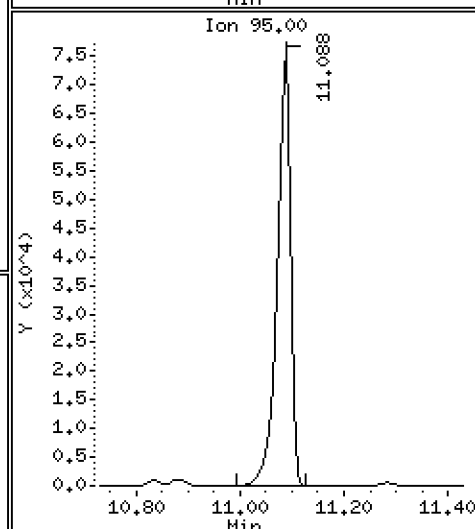
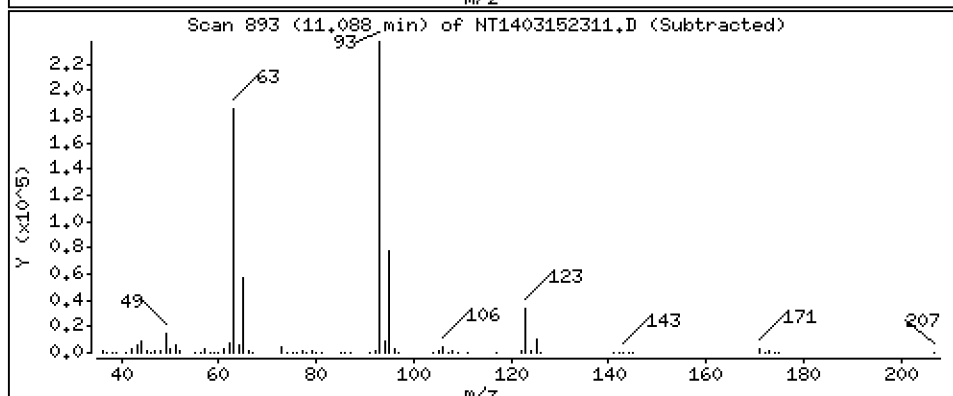
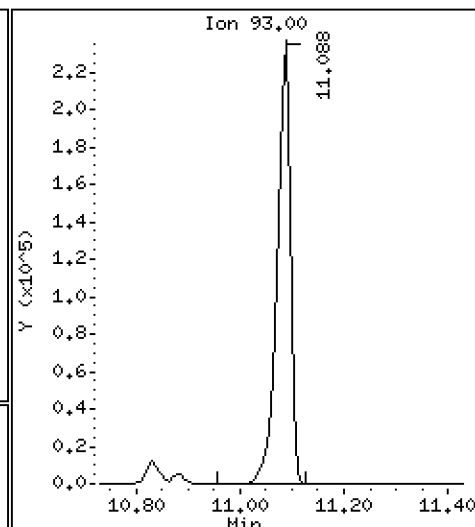
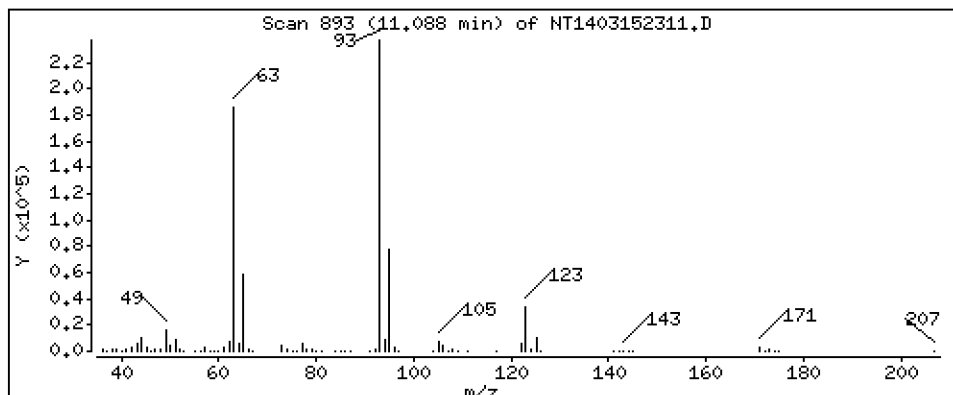
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,859 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

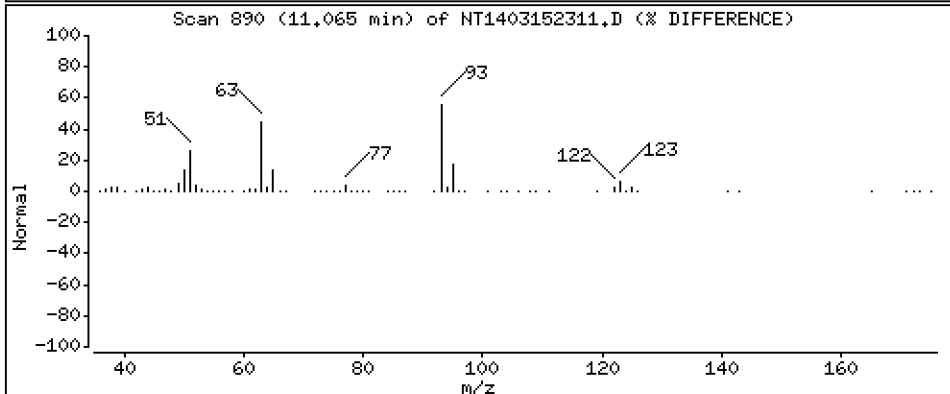
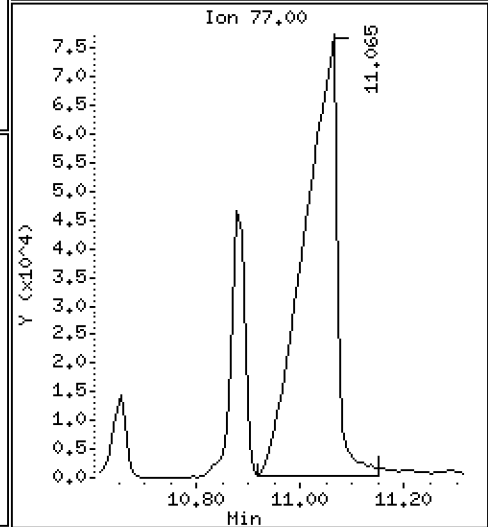
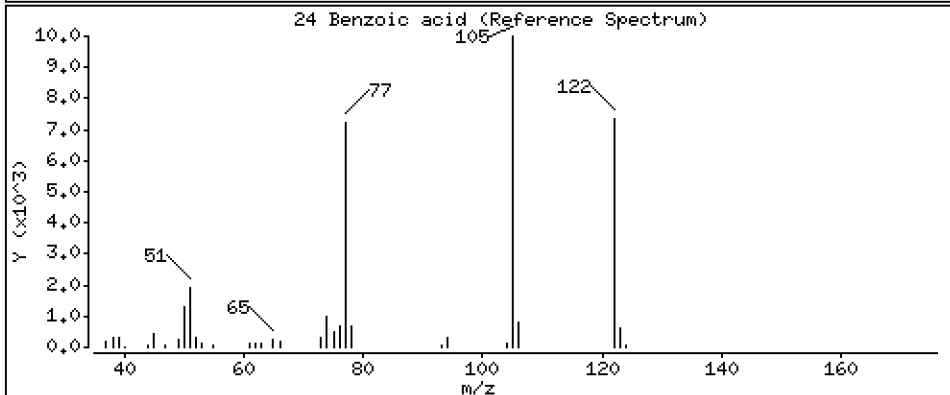
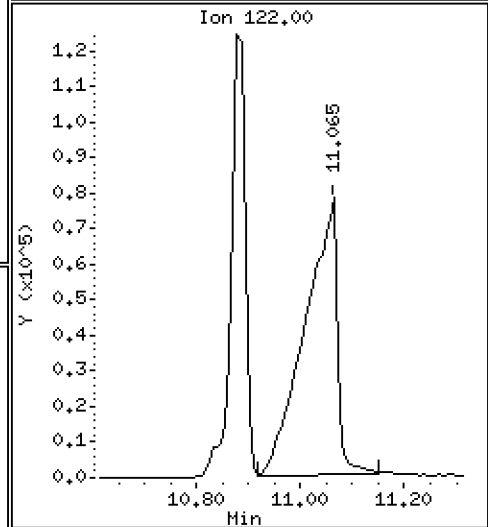
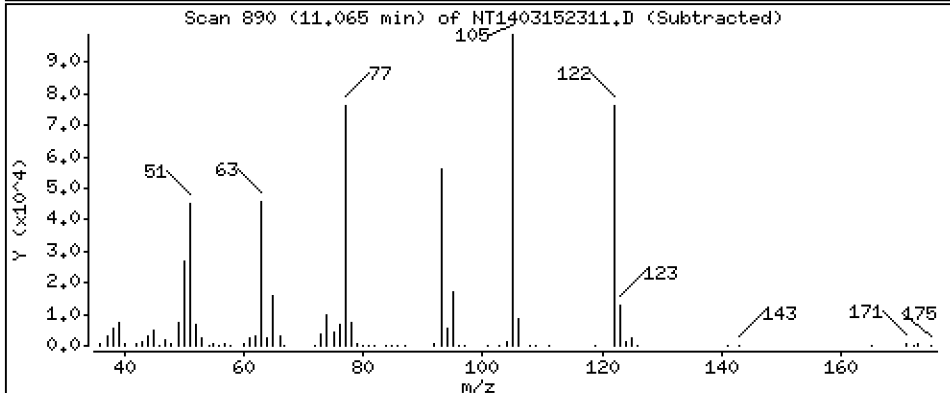
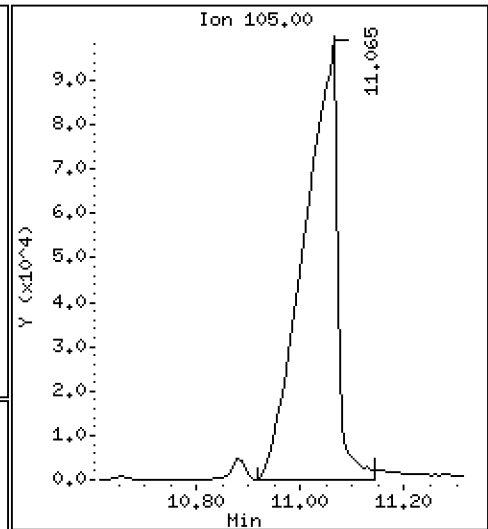
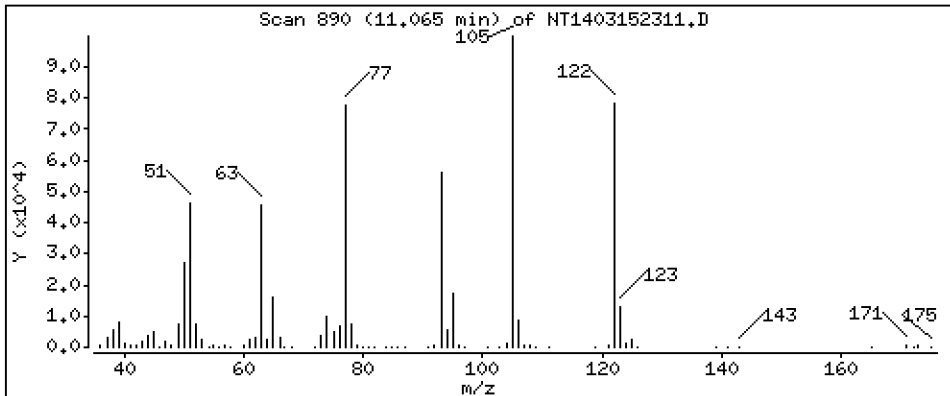
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 8,248 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

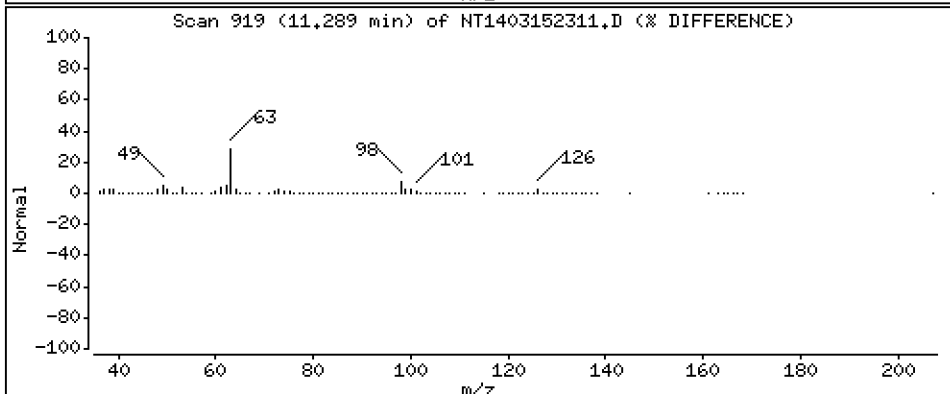
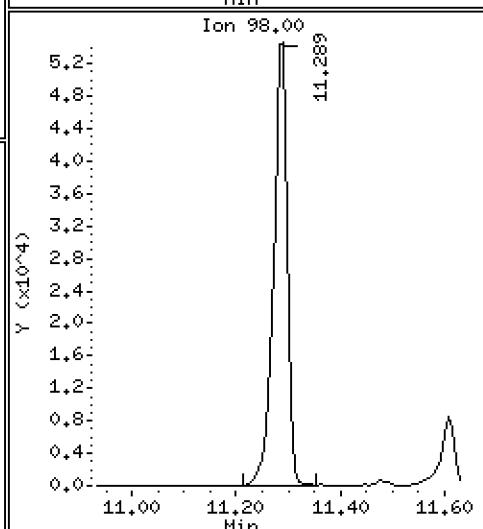
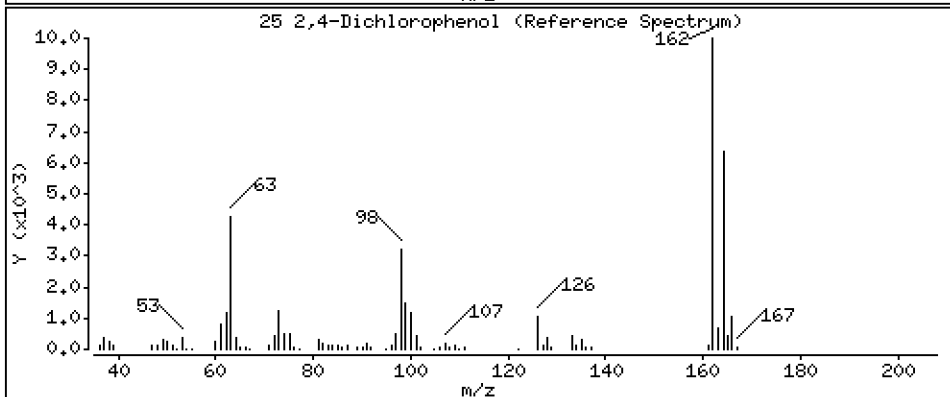
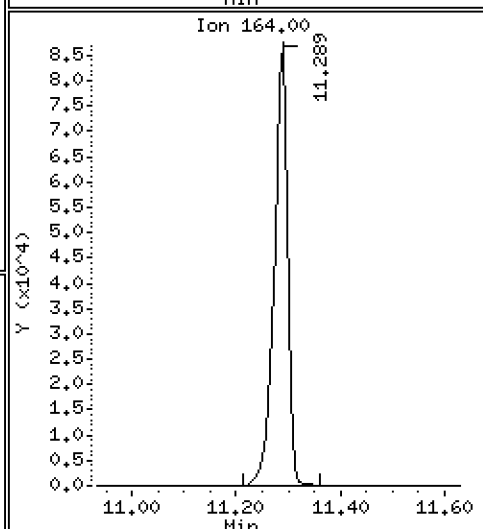
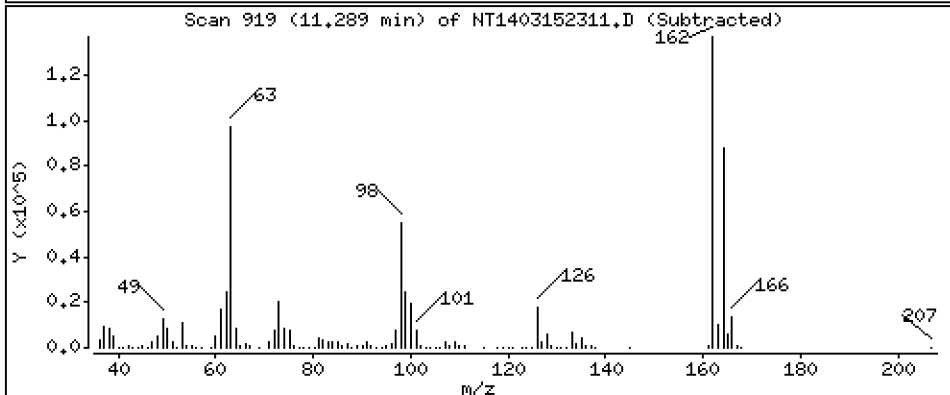
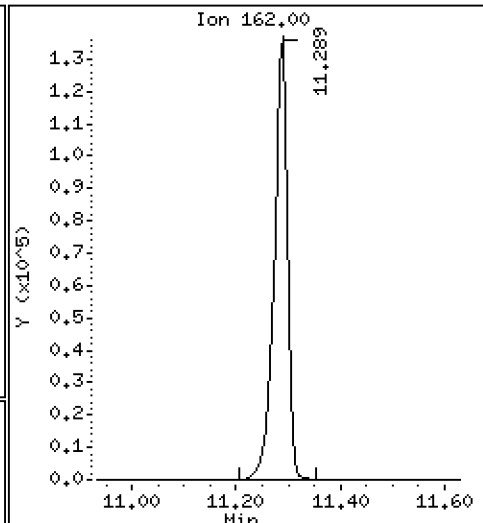
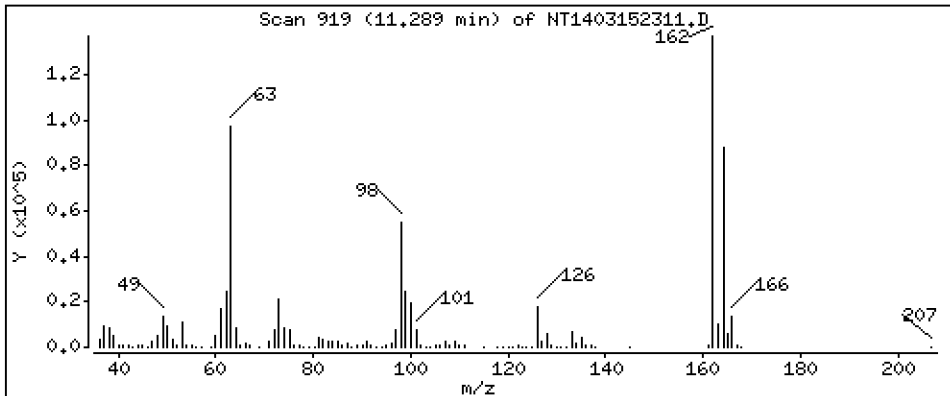
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,779 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

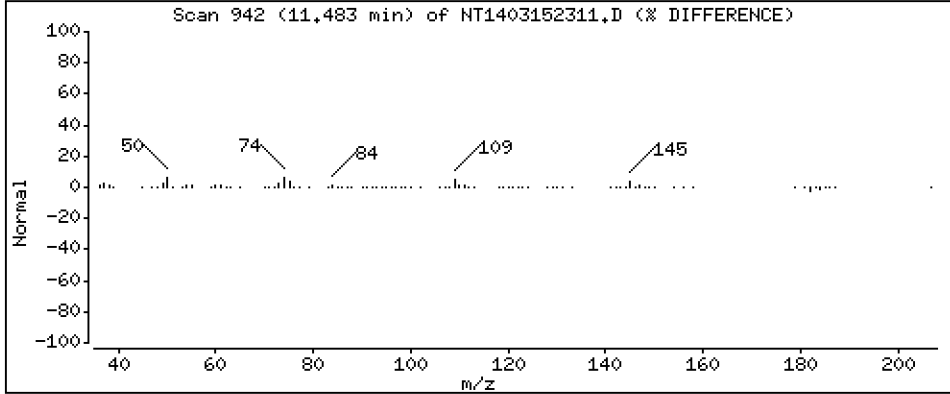
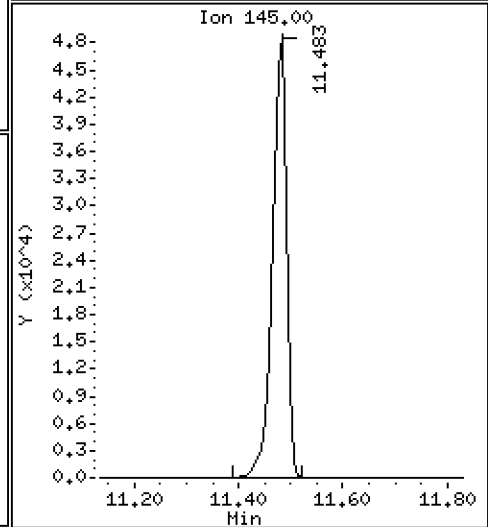
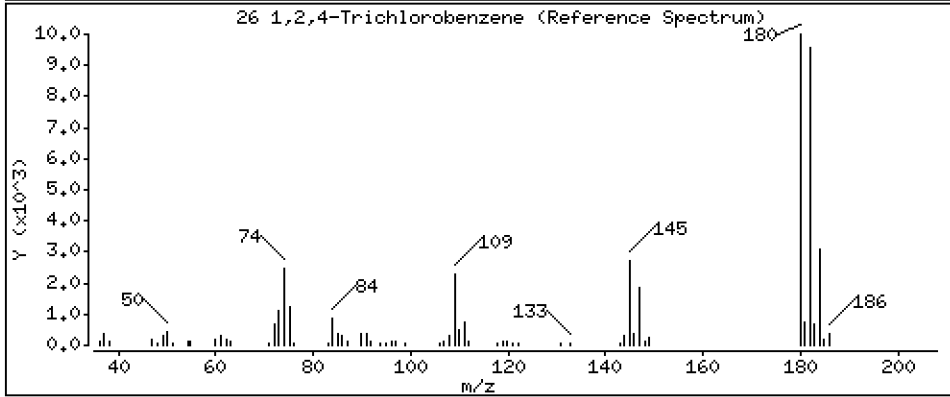
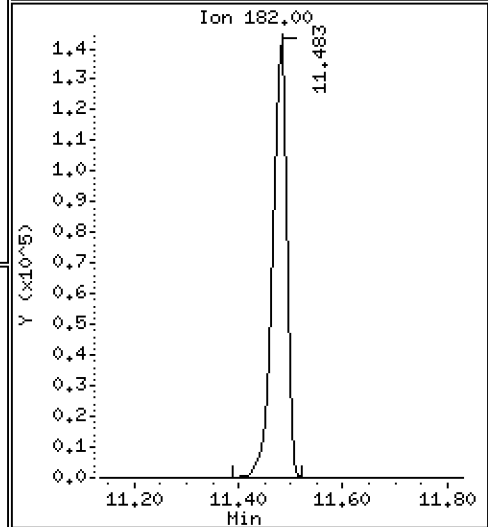
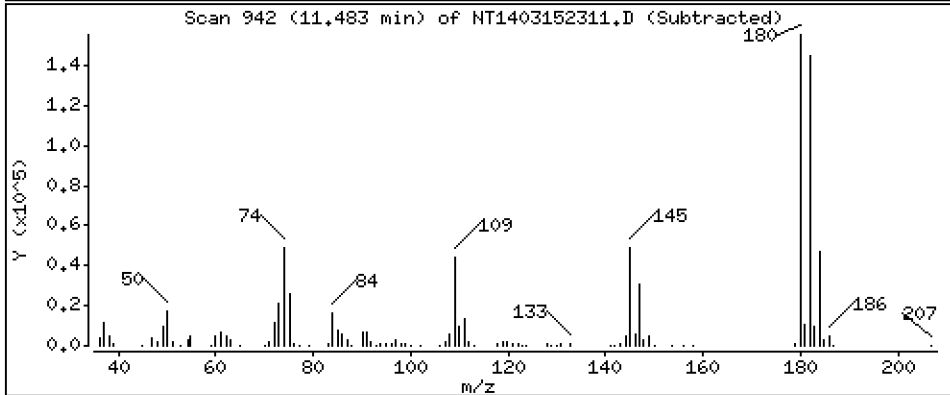
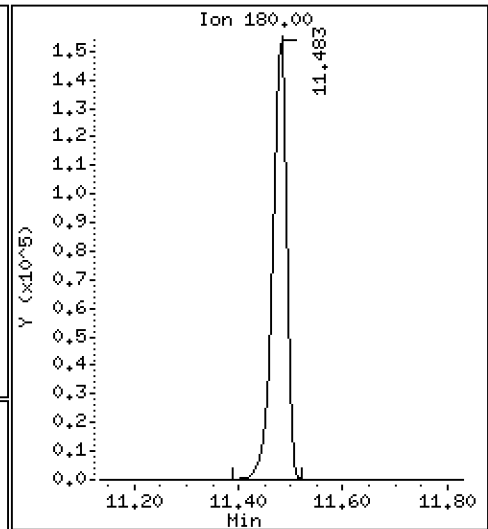
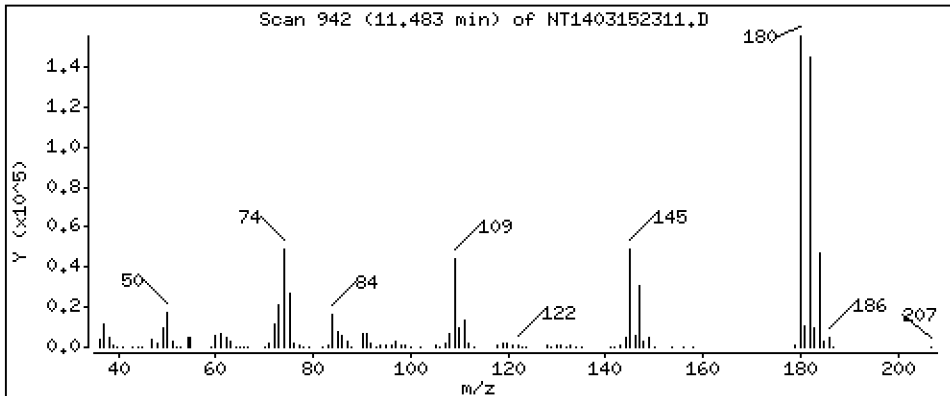
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,052 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

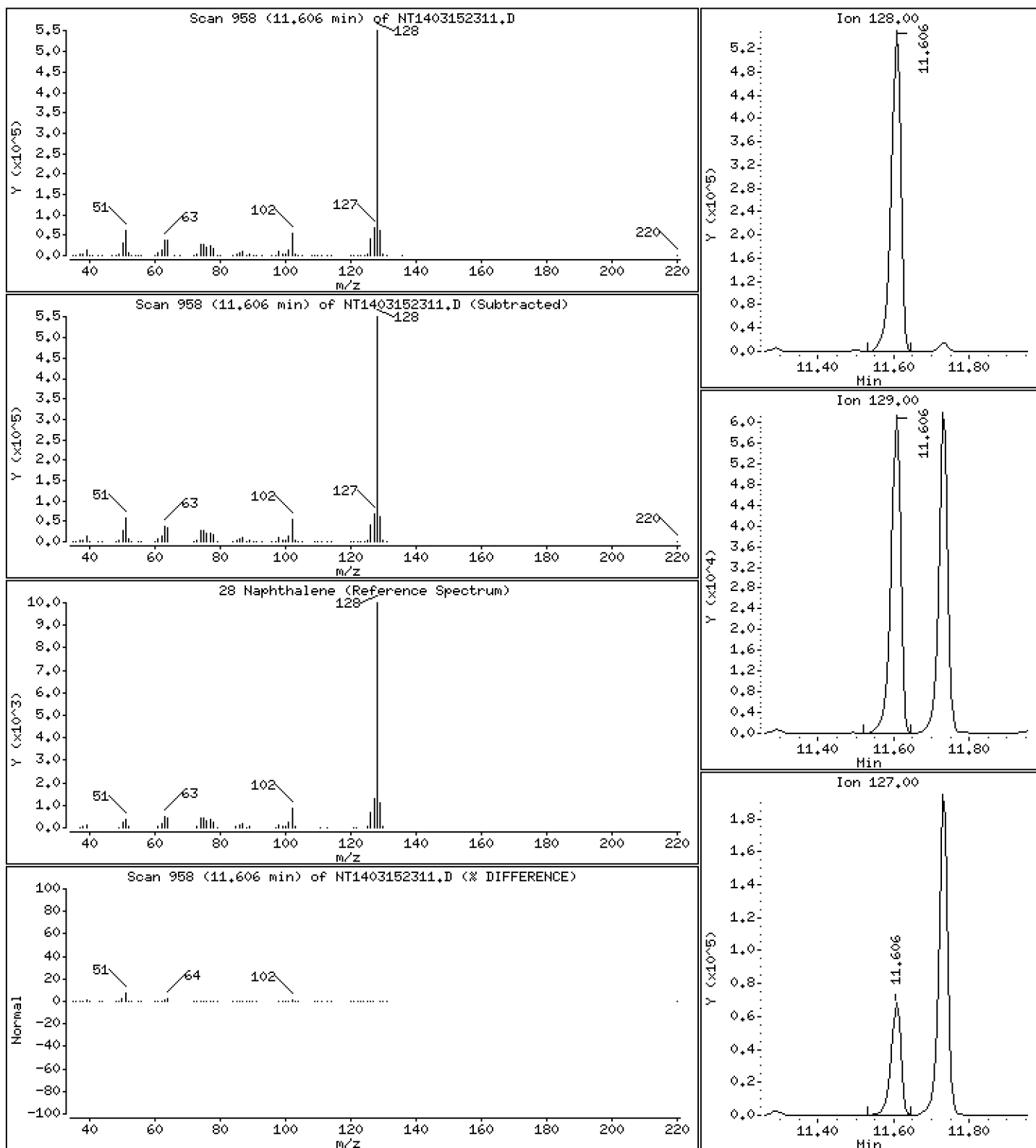
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,829 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

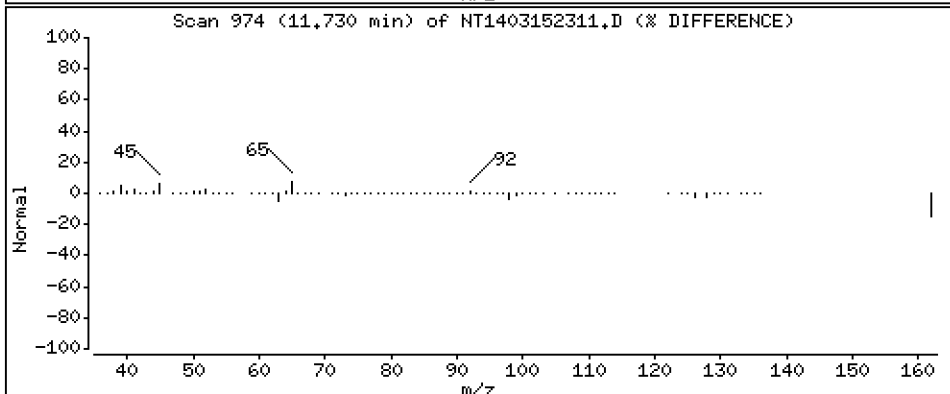
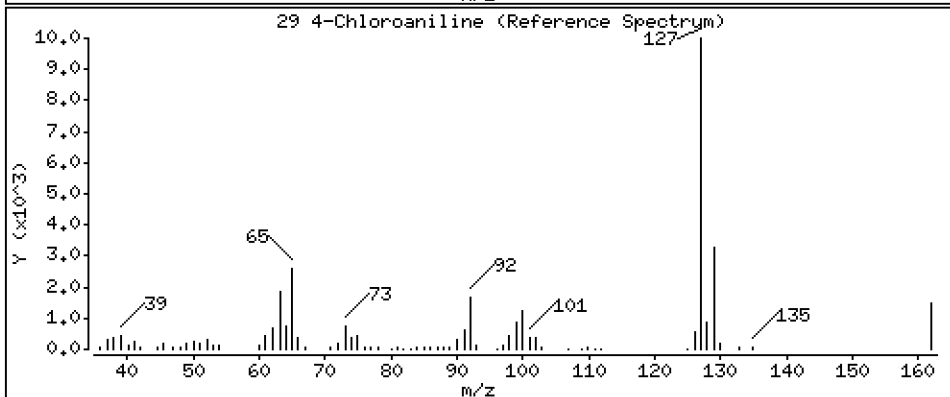
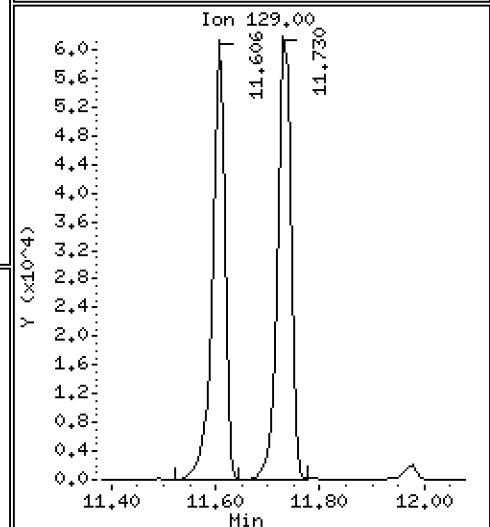
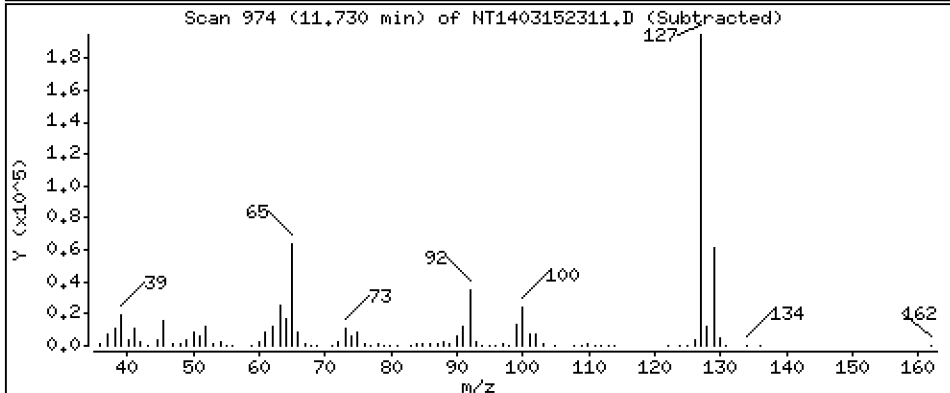
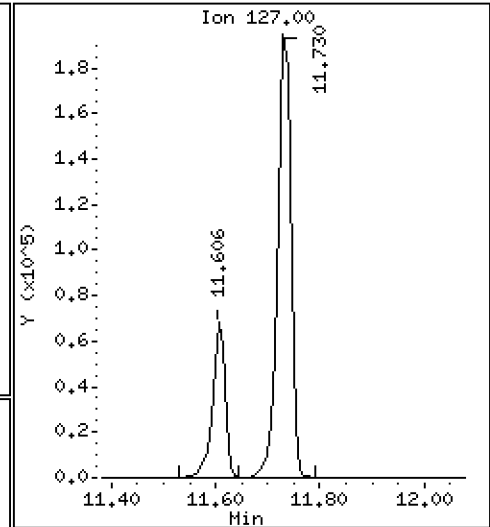
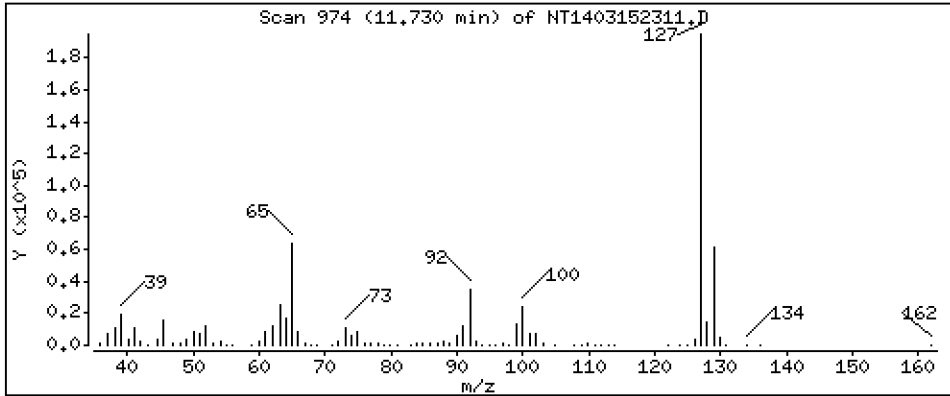
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 4,033 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

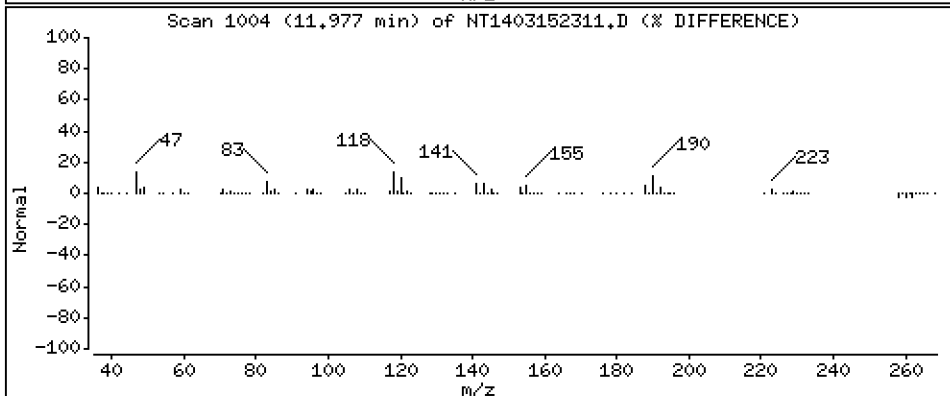
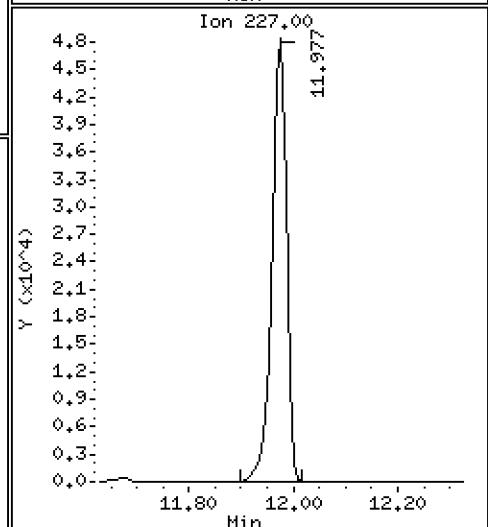
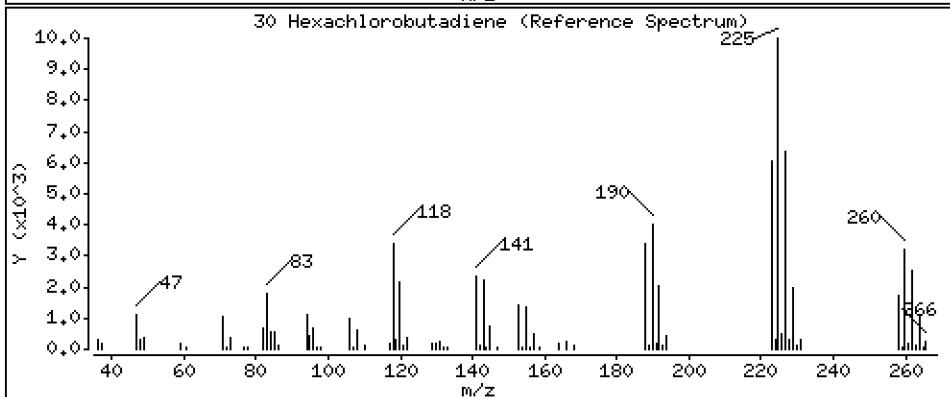
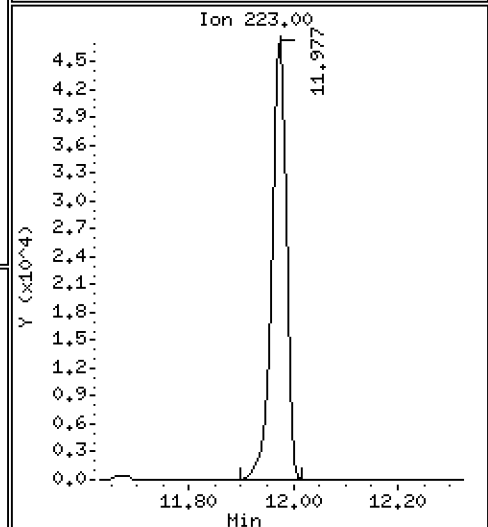
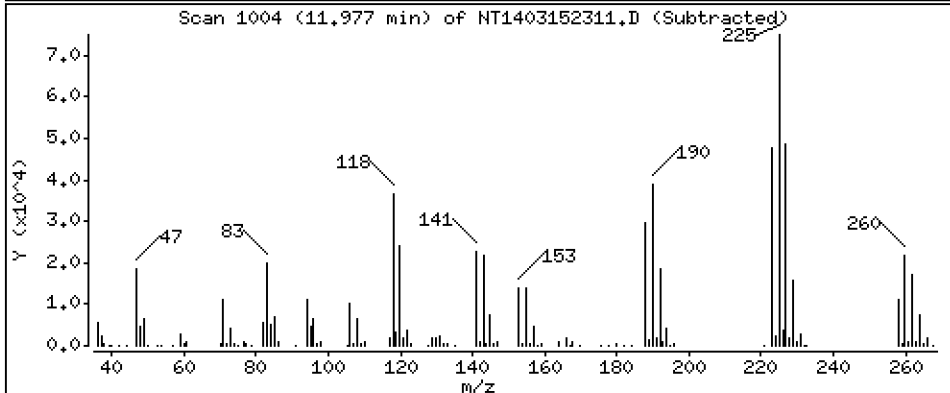
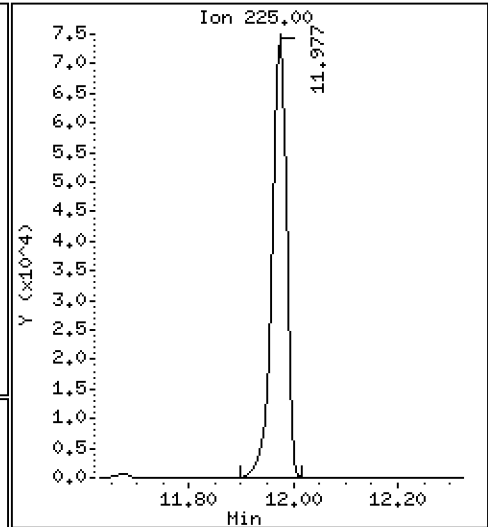
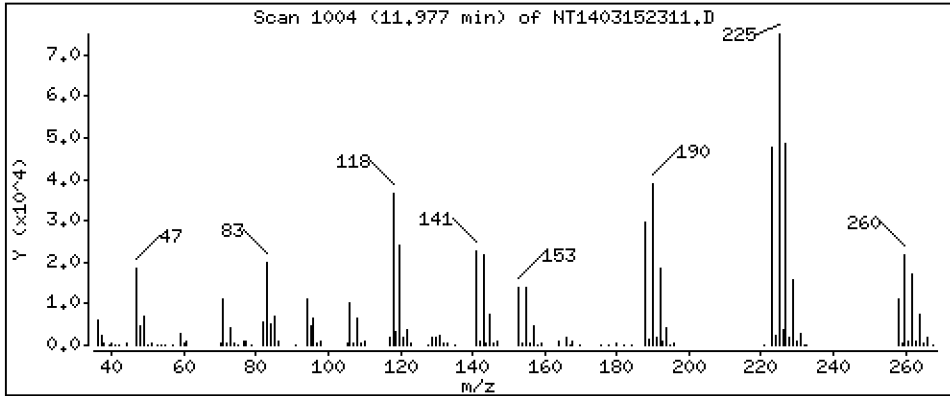
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,908 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

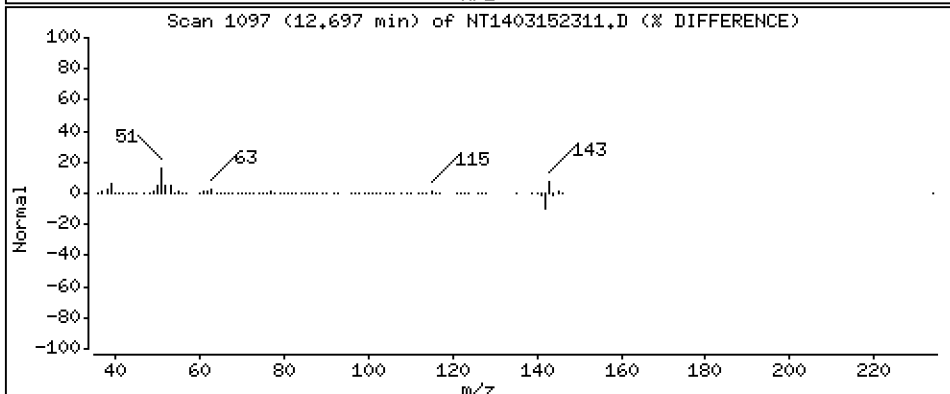
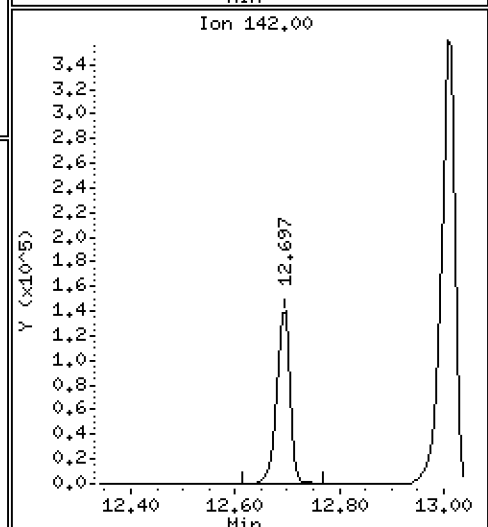
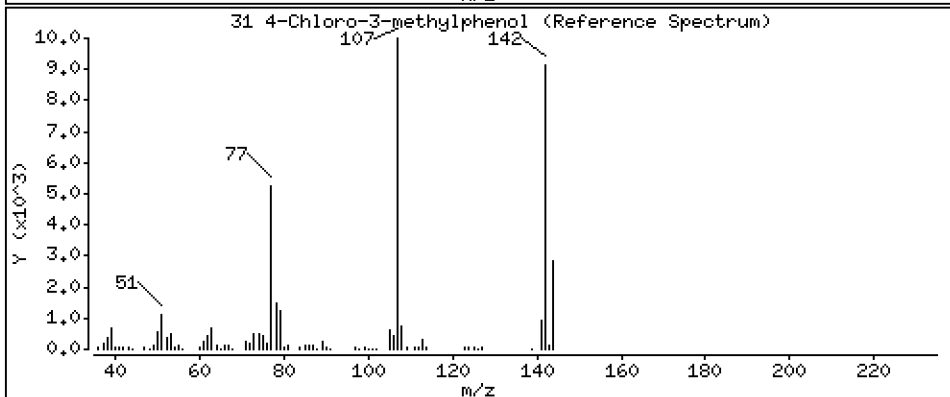
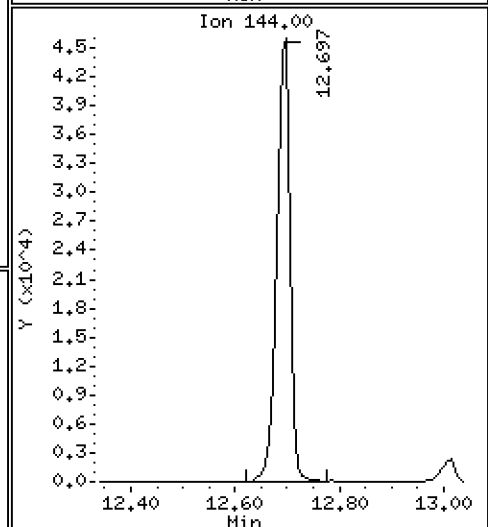
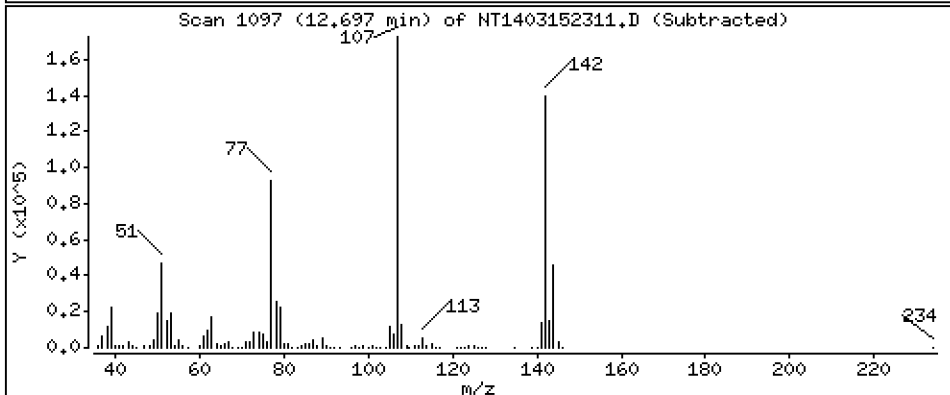
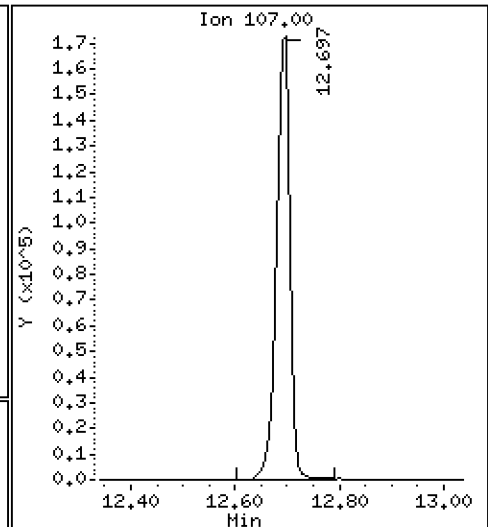
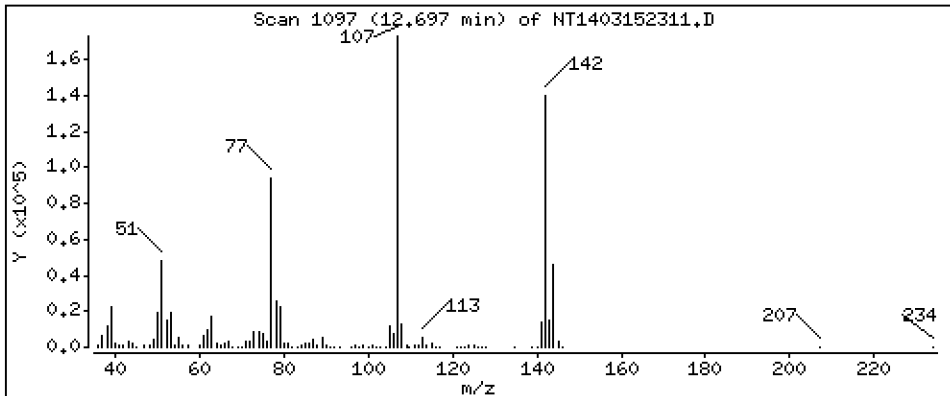
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,852 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

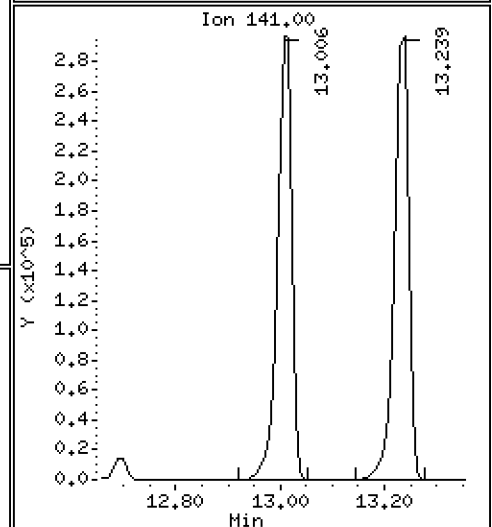
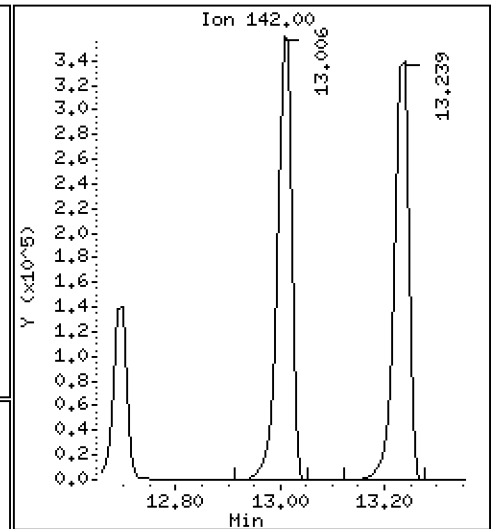
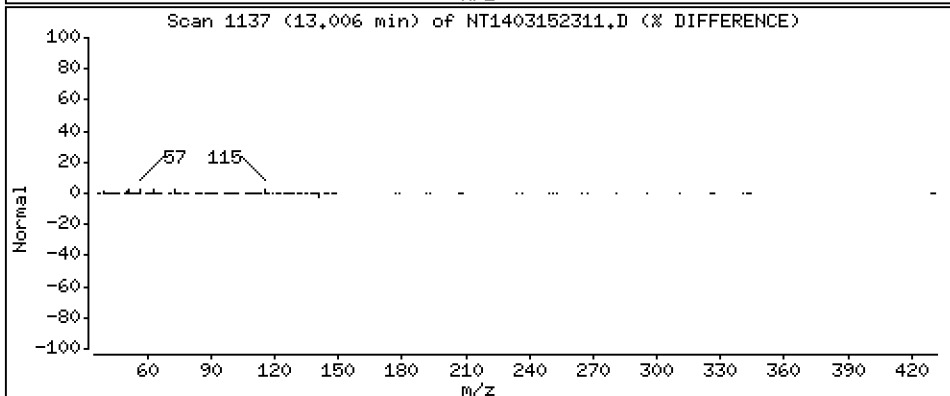
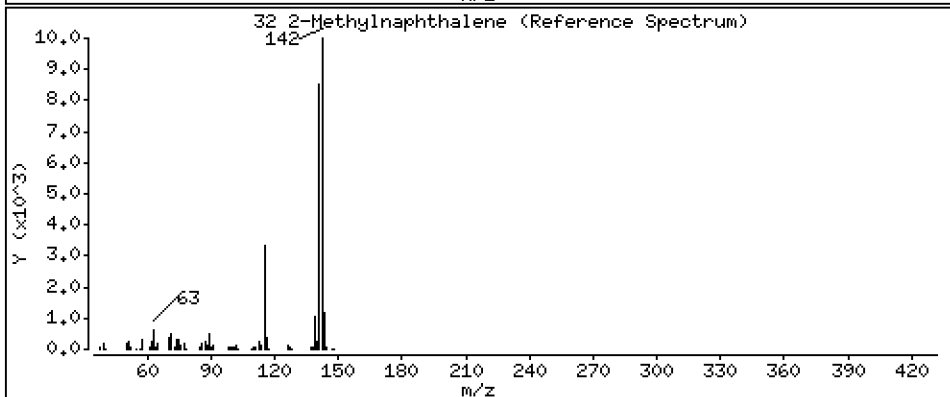
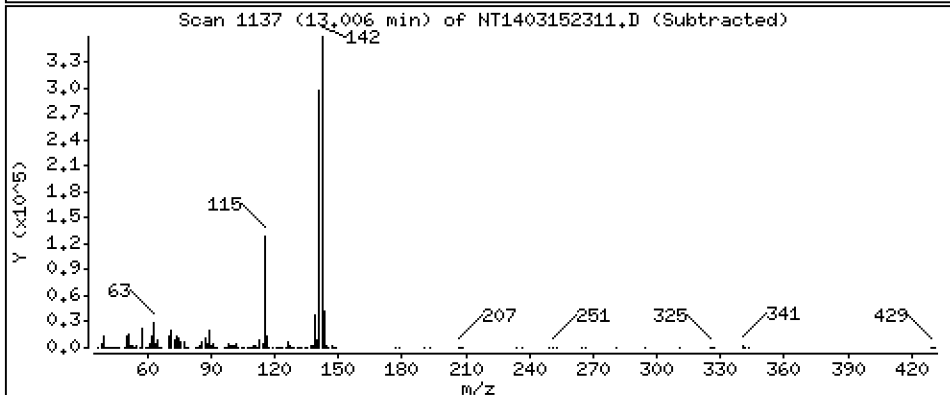
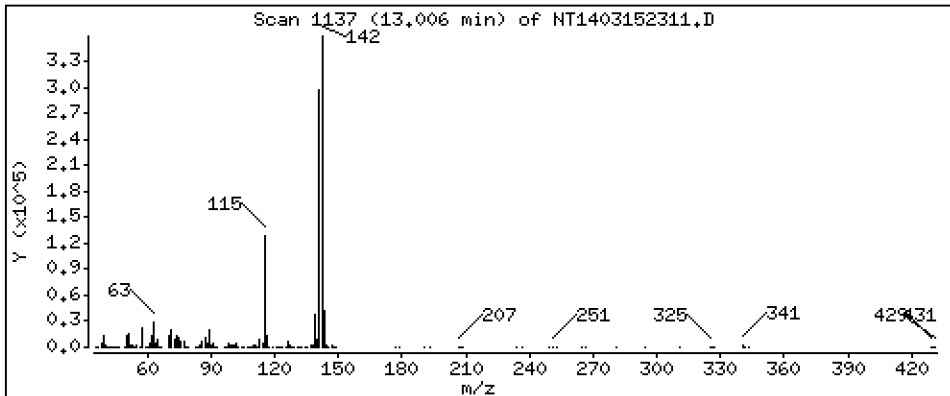
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 4.854 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

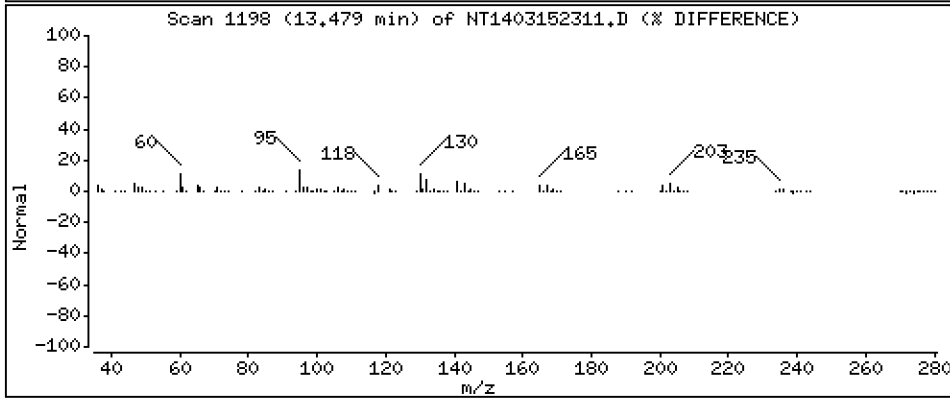
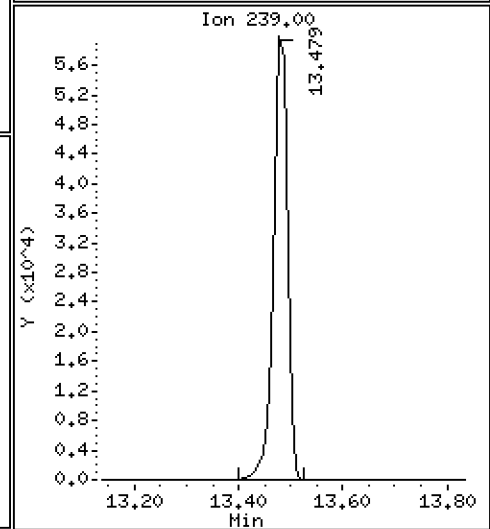
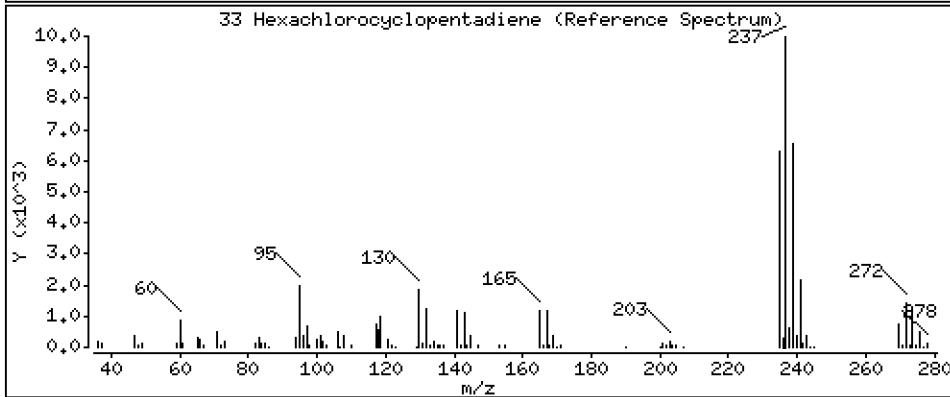
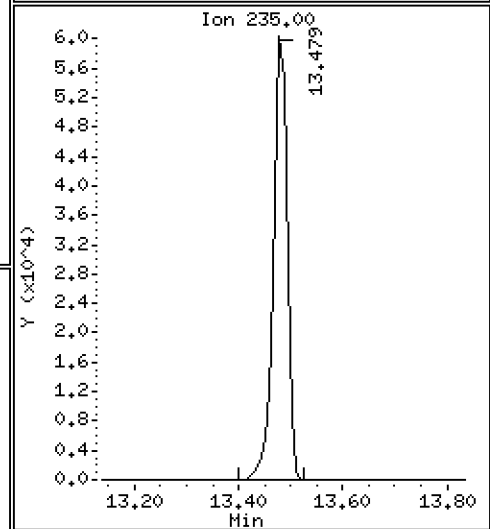
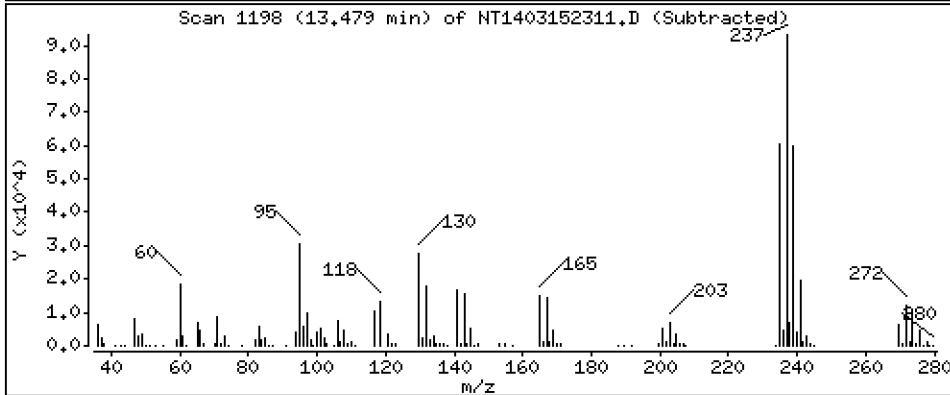
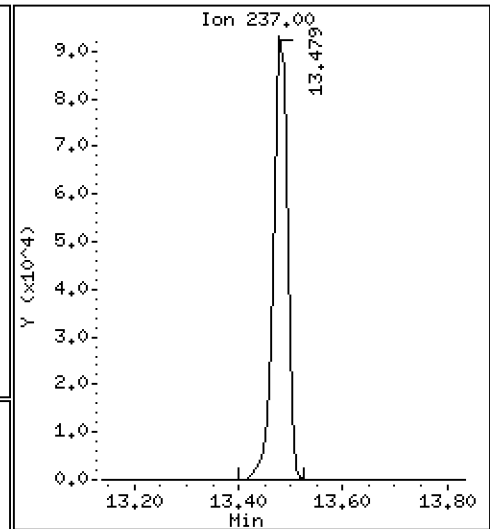
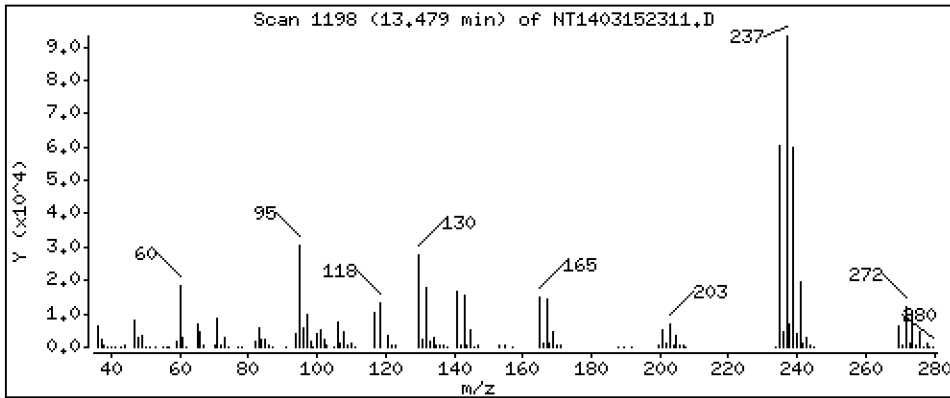
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 5,230 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

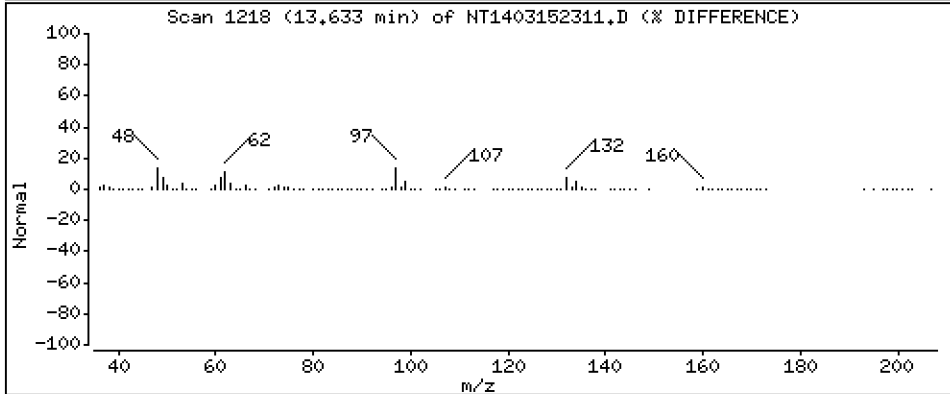
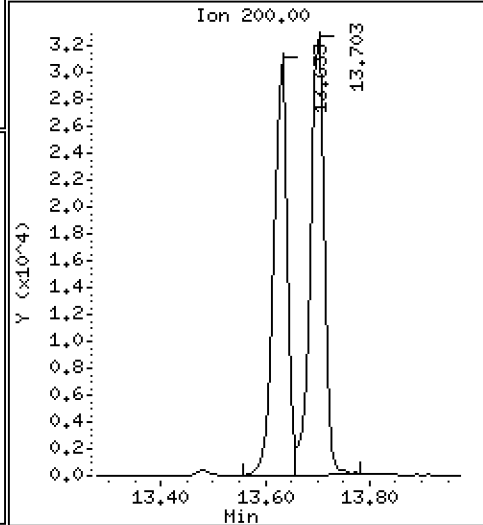
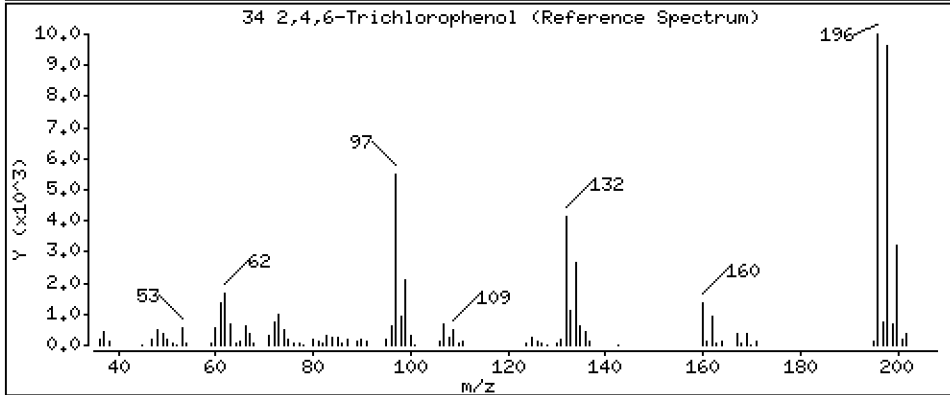
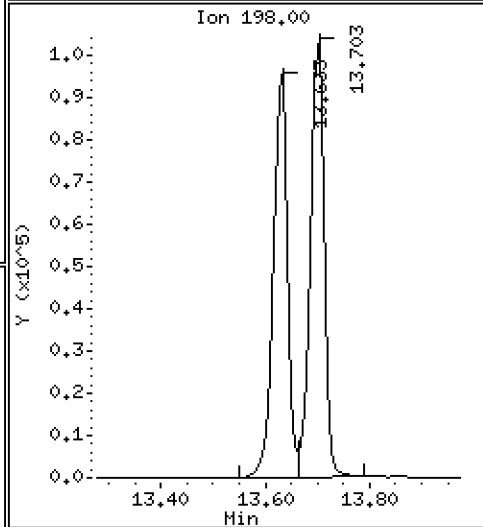
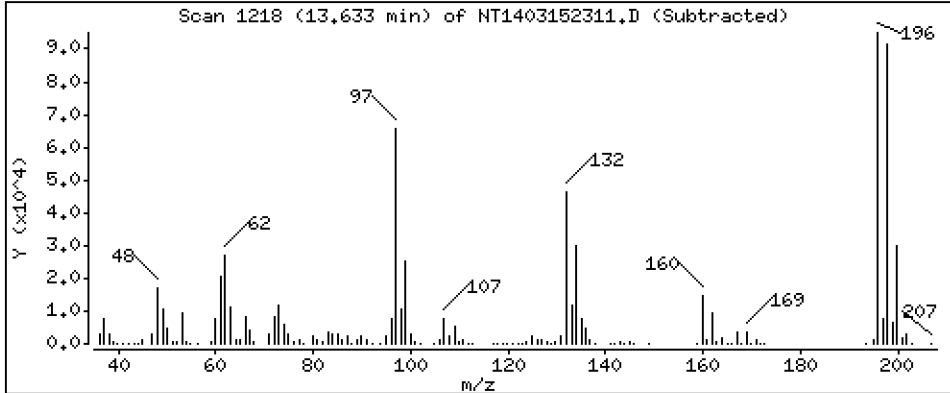
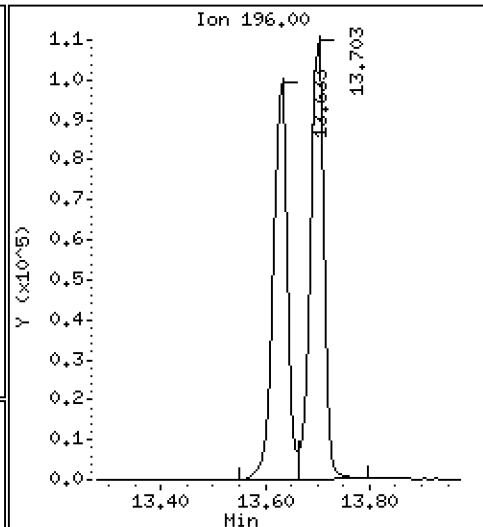
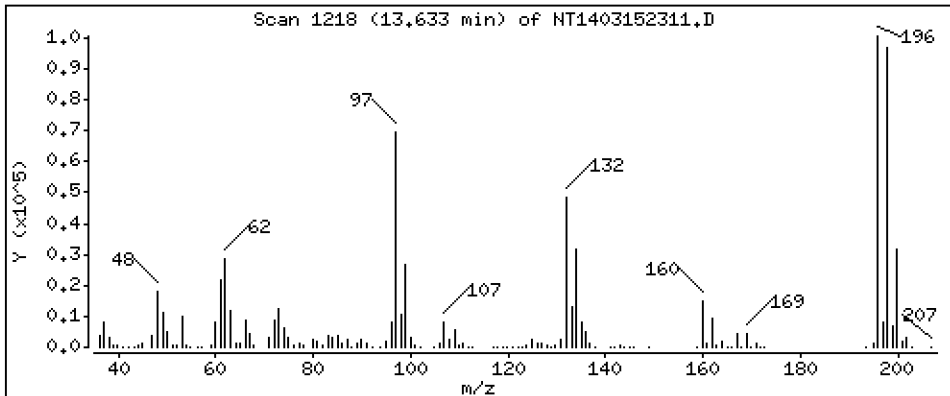
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,718 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

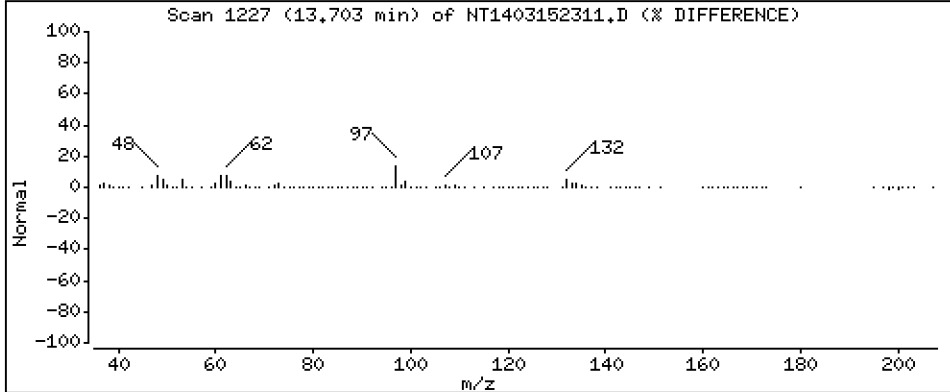
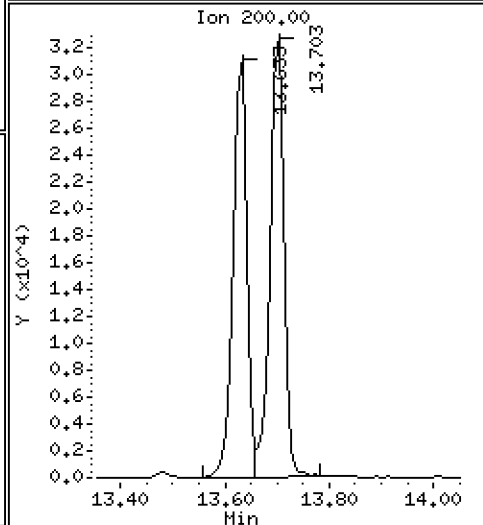
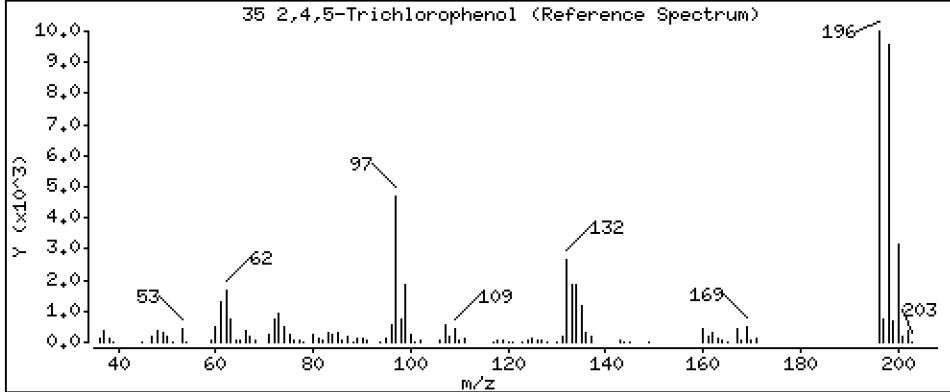
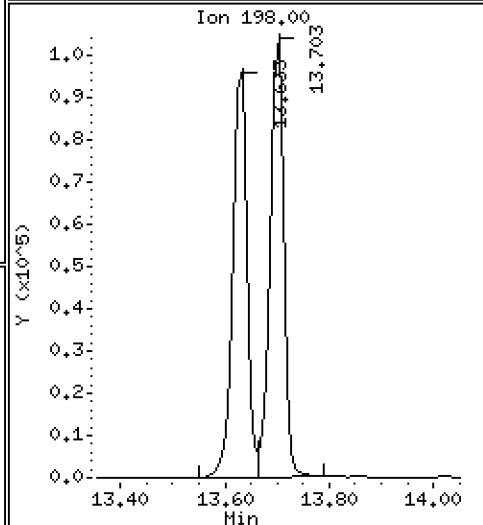
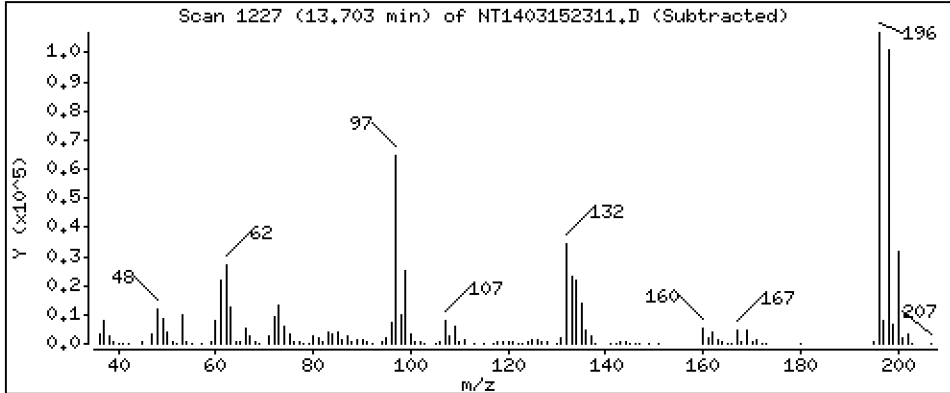
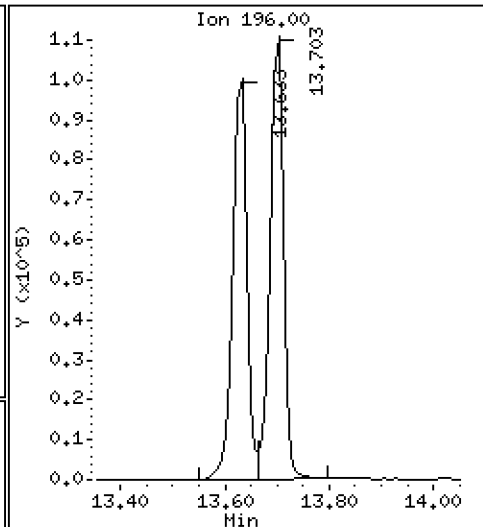
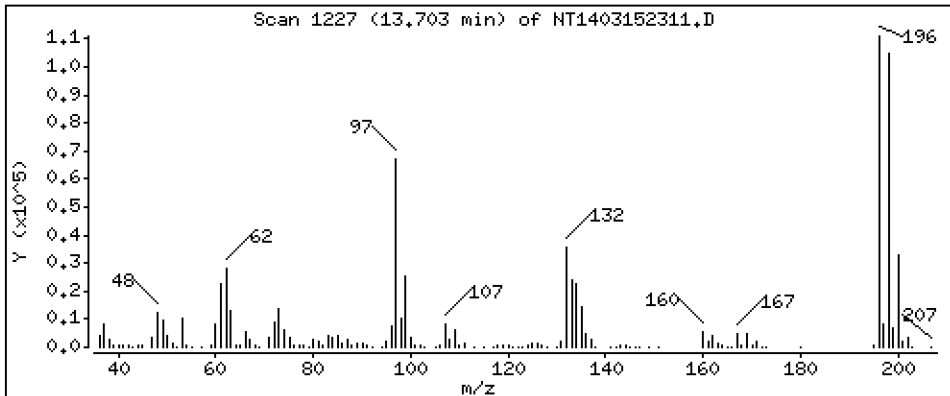
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,661 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

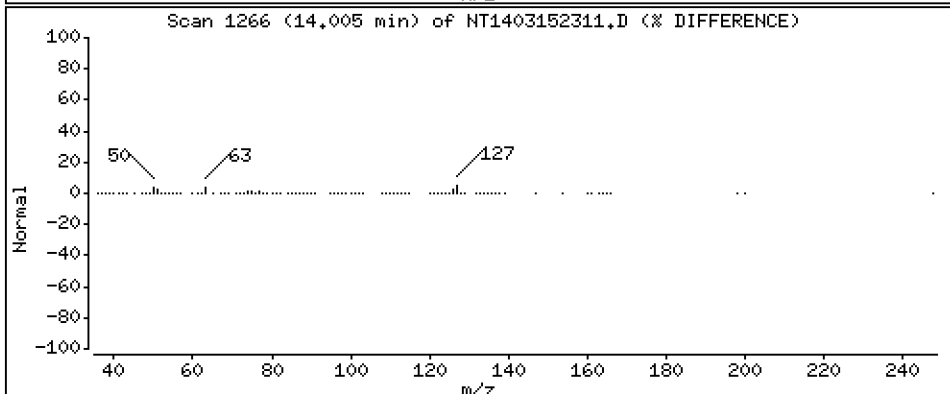
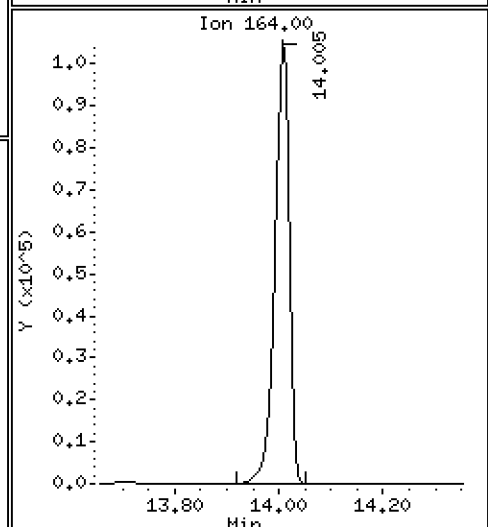
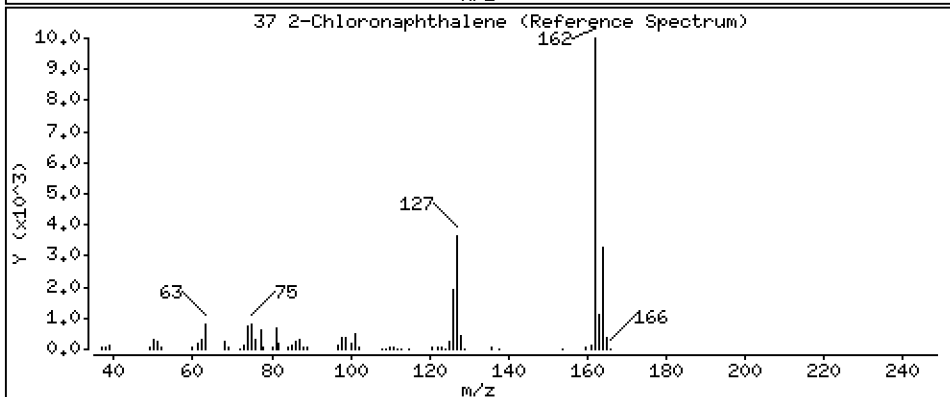
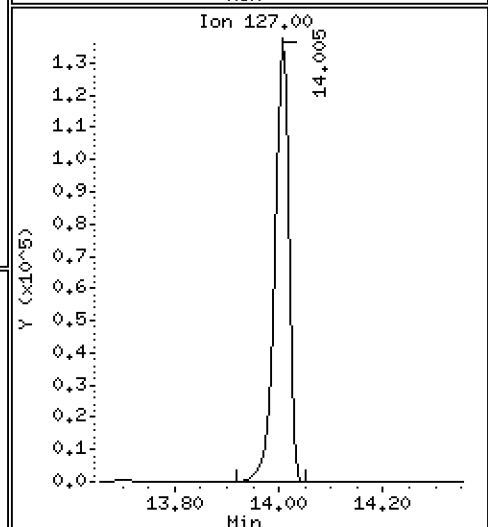
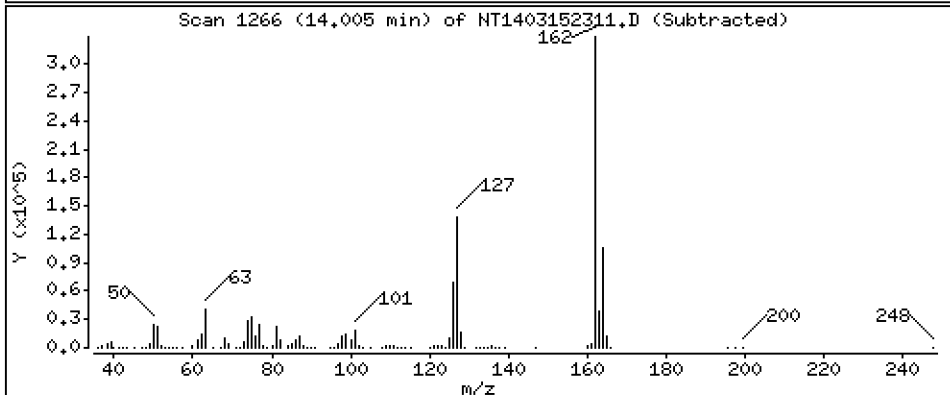
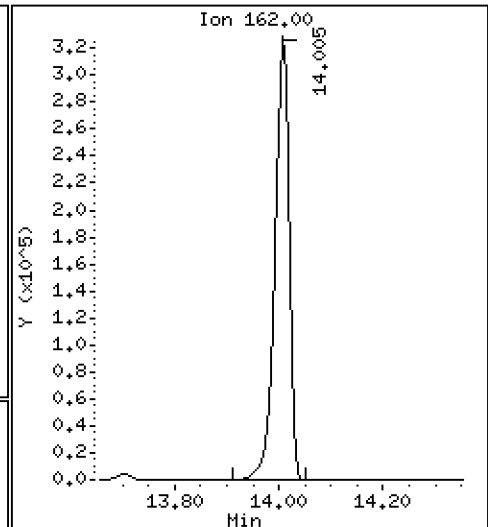
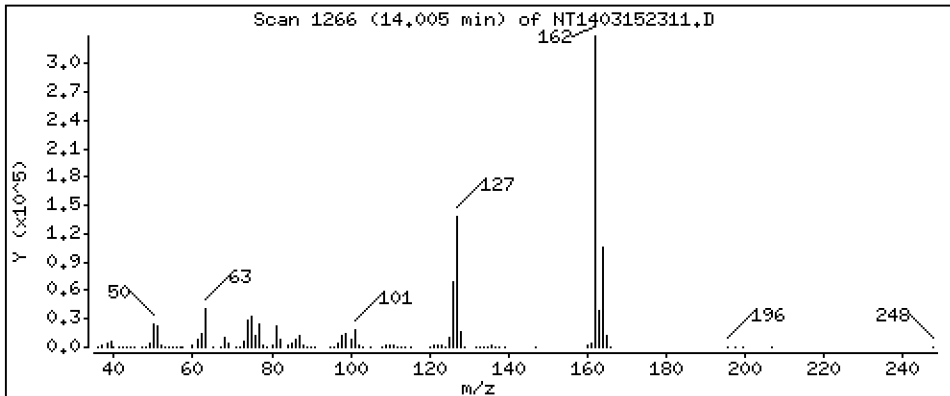
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 4,977 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

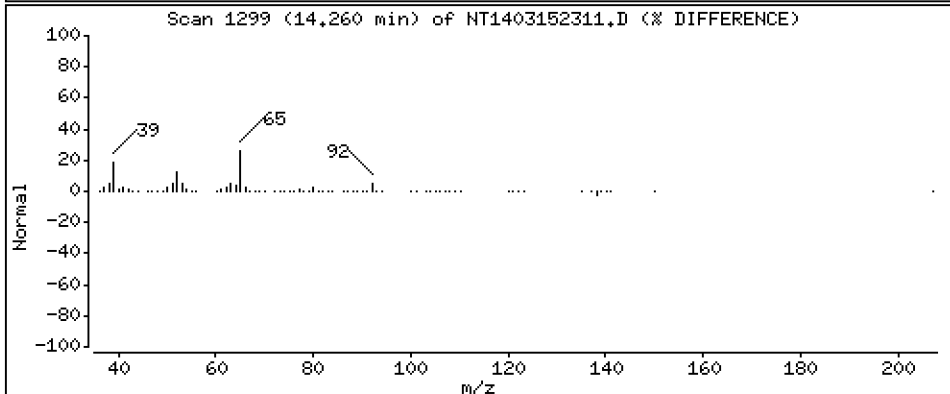
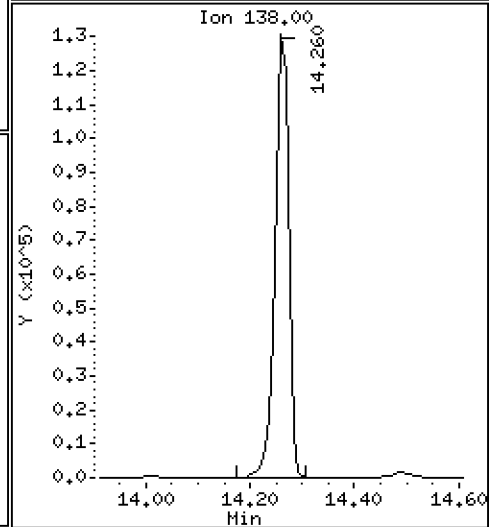
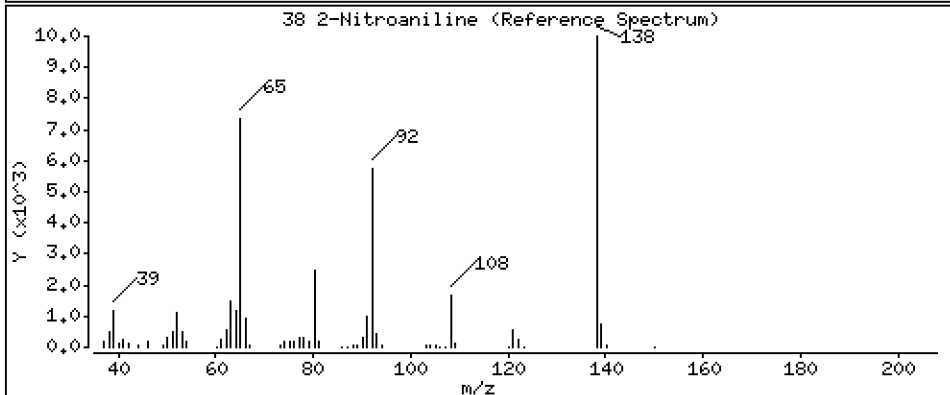
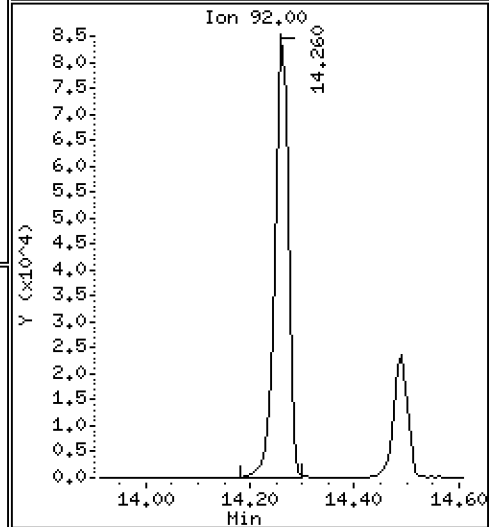
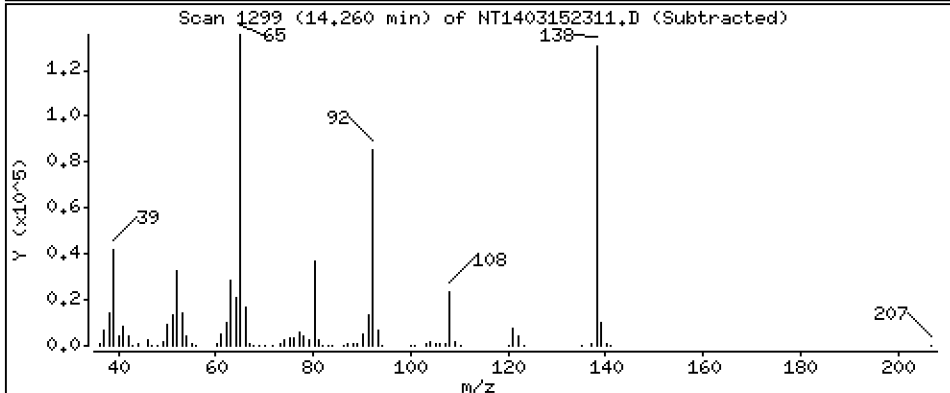
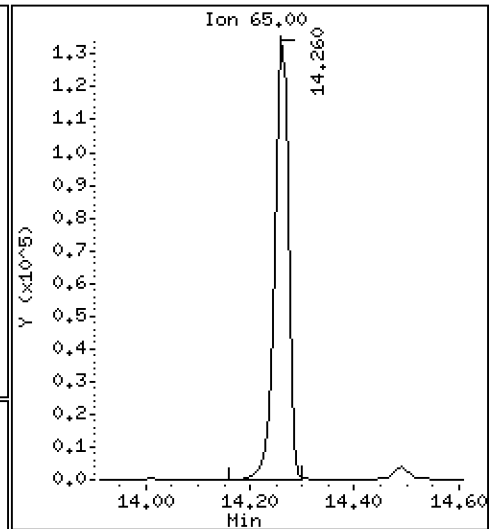
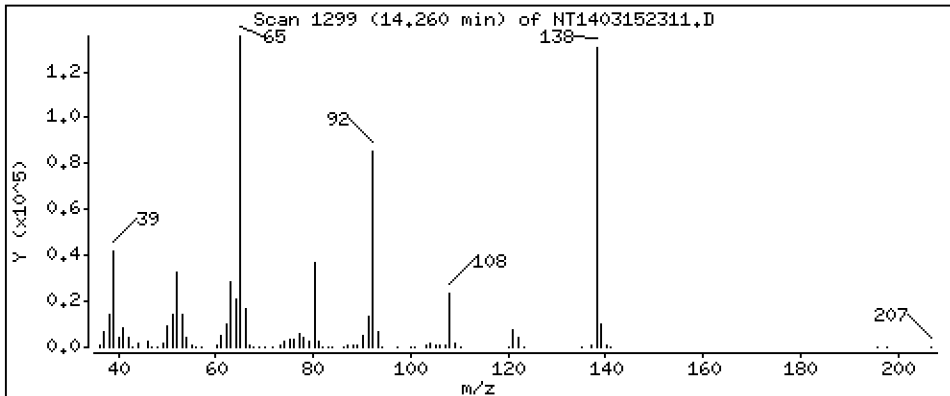
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

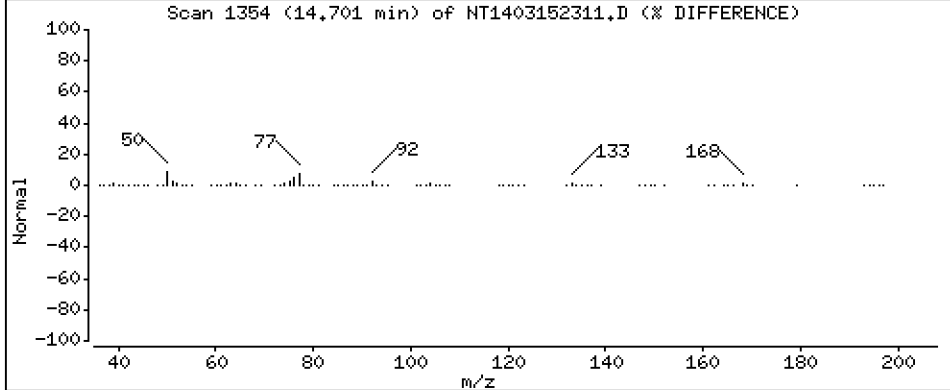
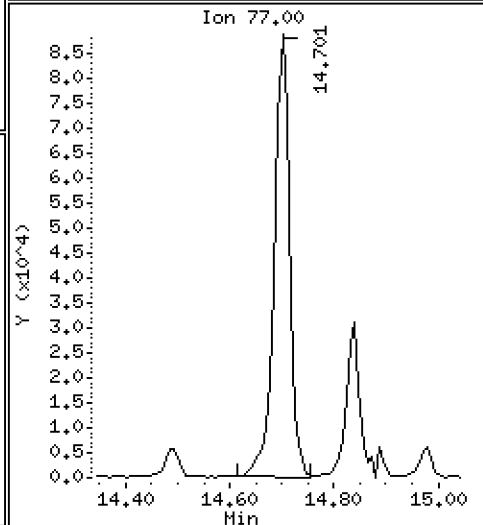
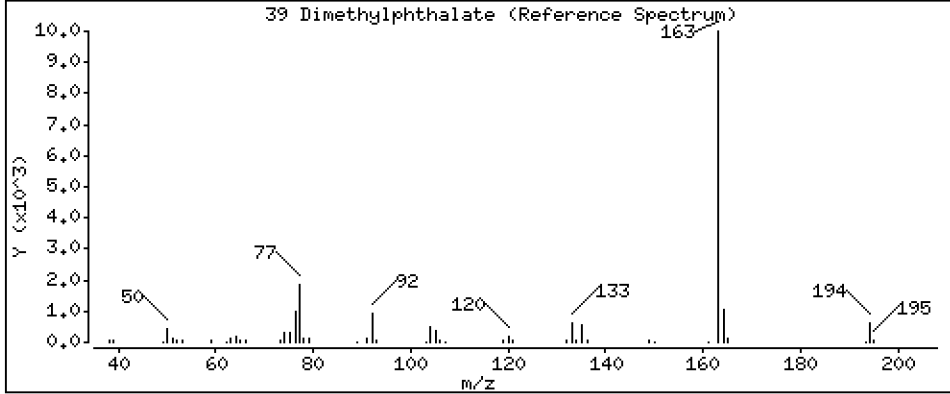
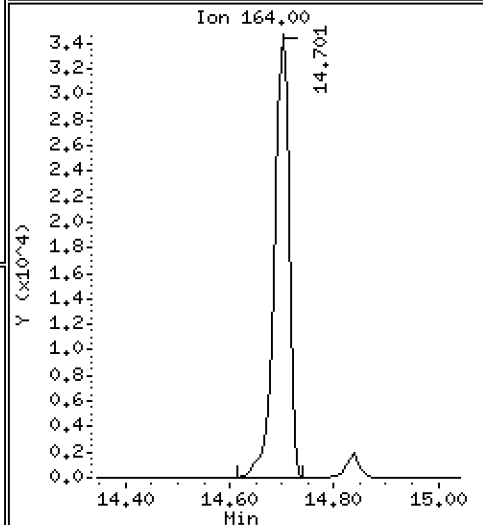
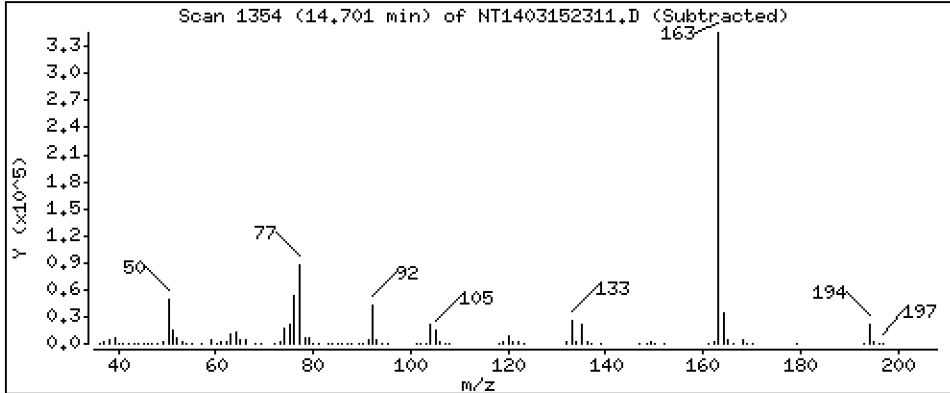
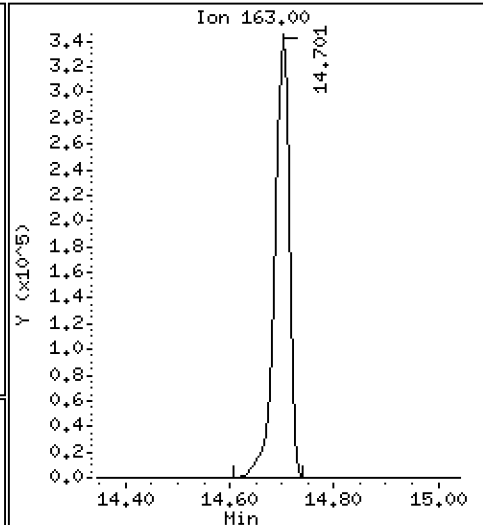
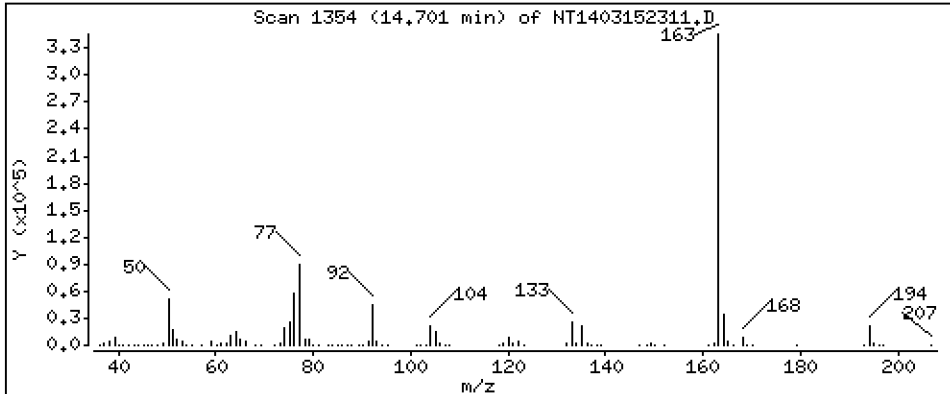
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 5.031 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

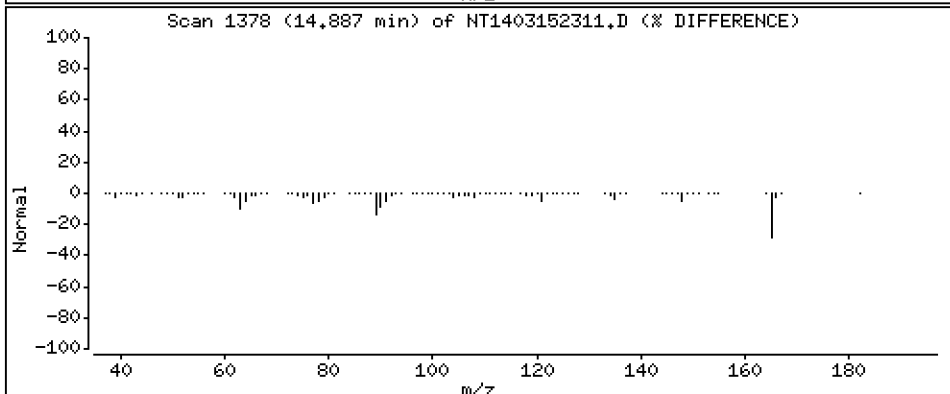
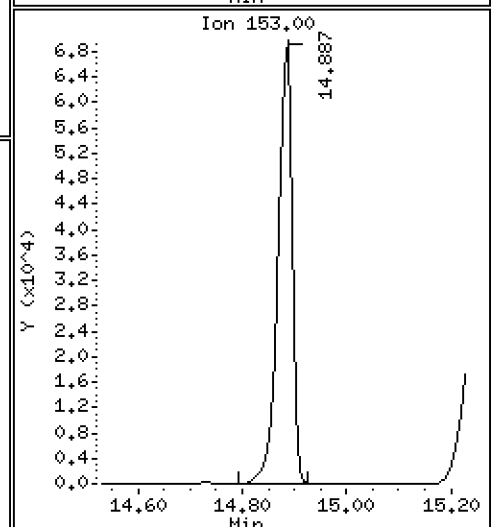
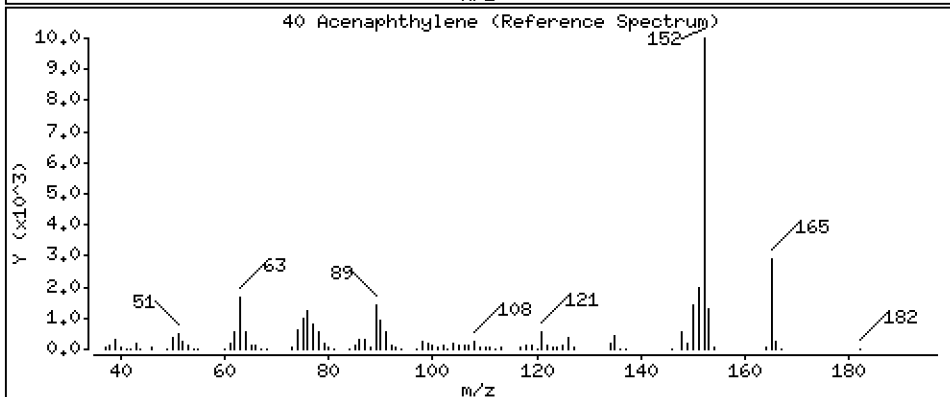
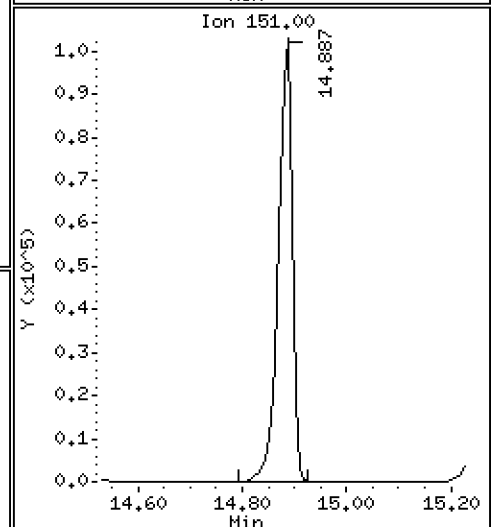
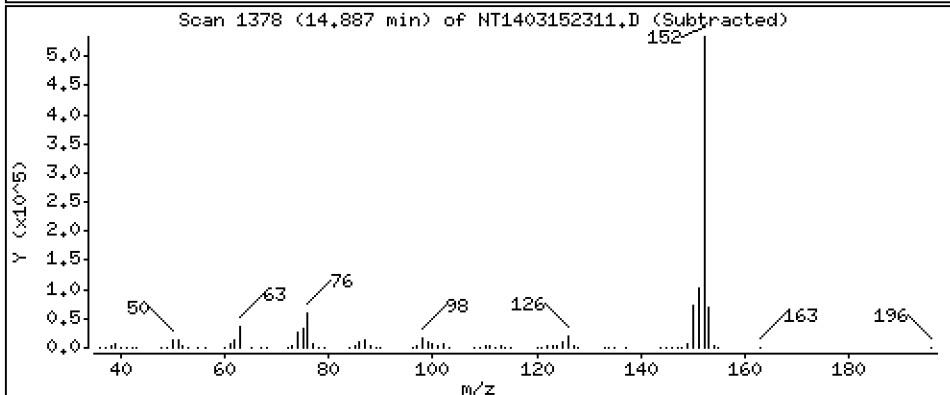
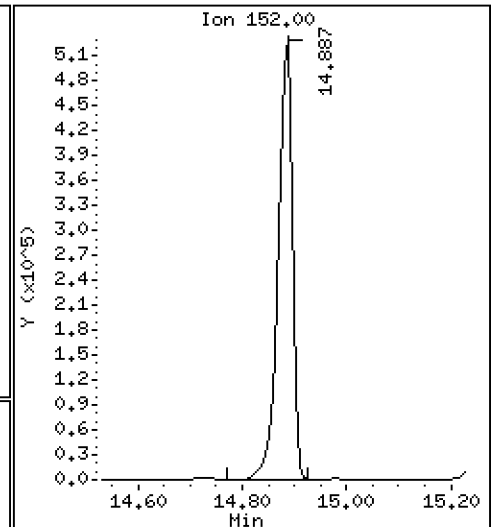
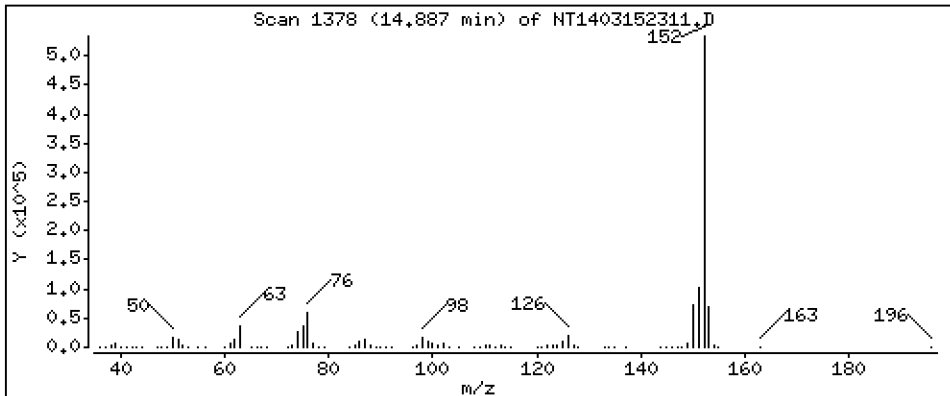
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,879 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

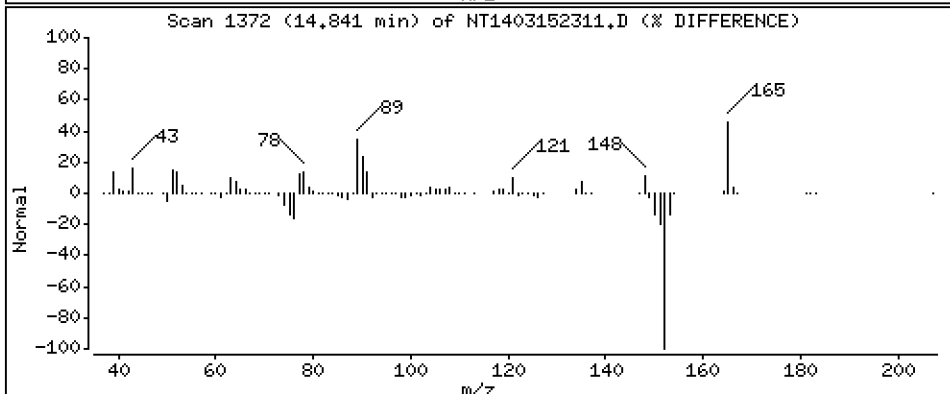
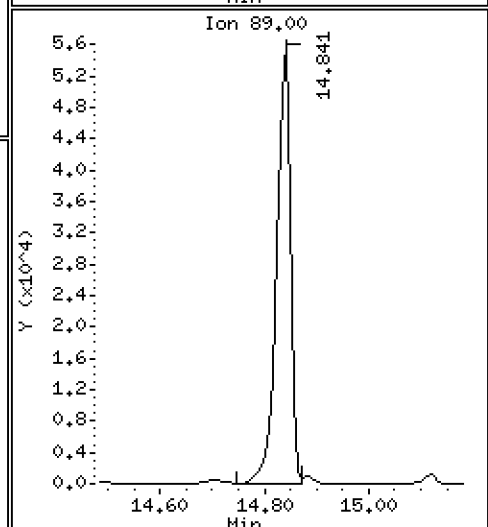
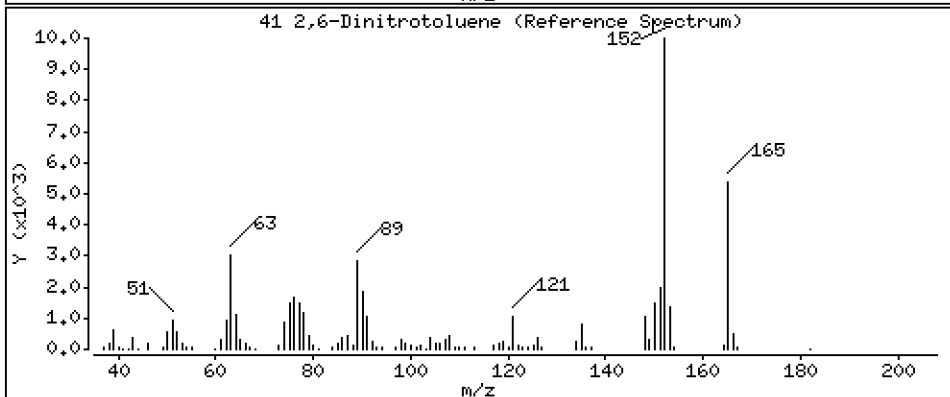
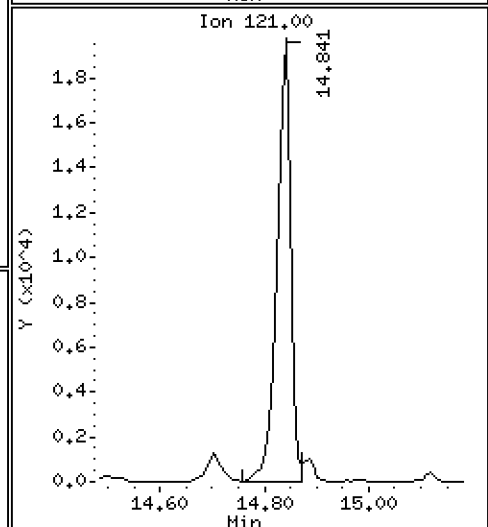
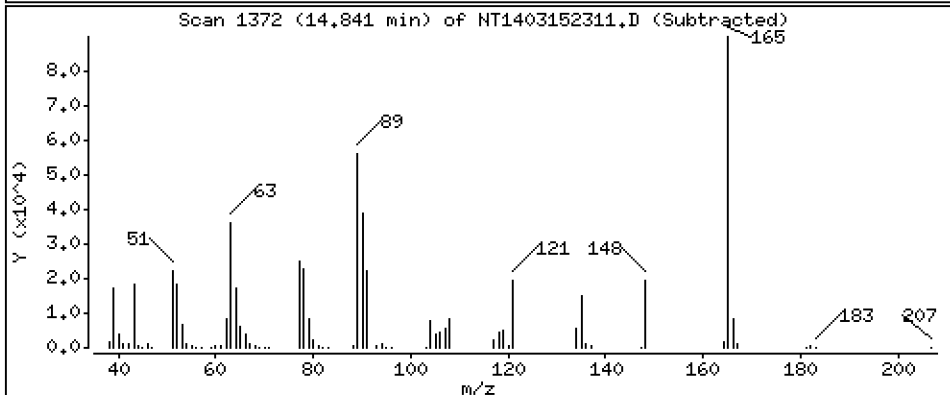
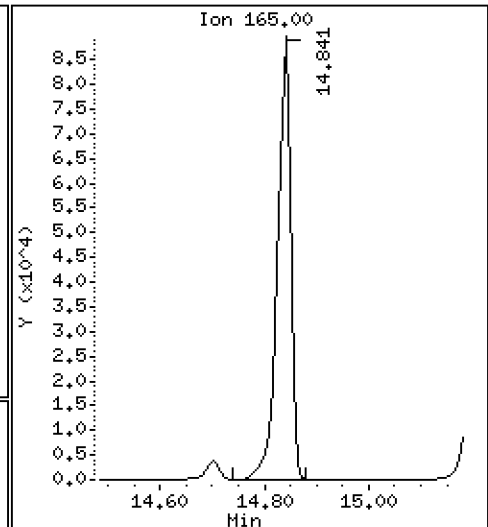
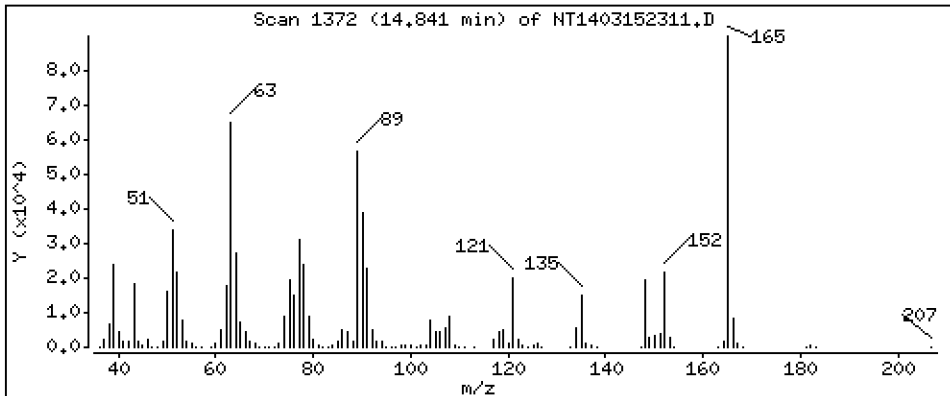
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 5,219 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

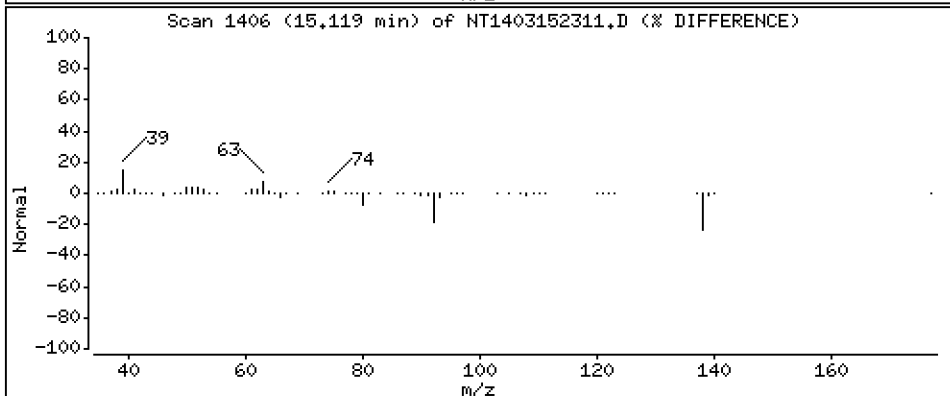
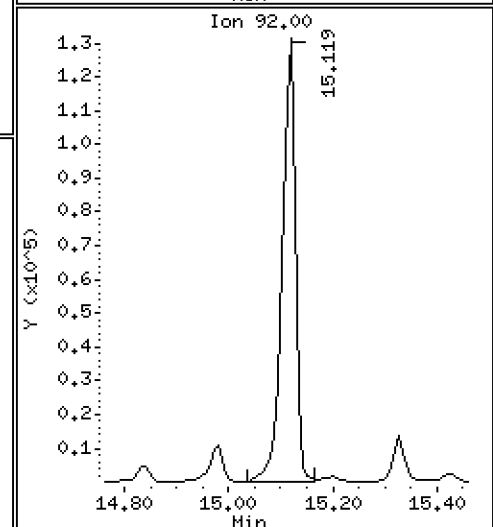
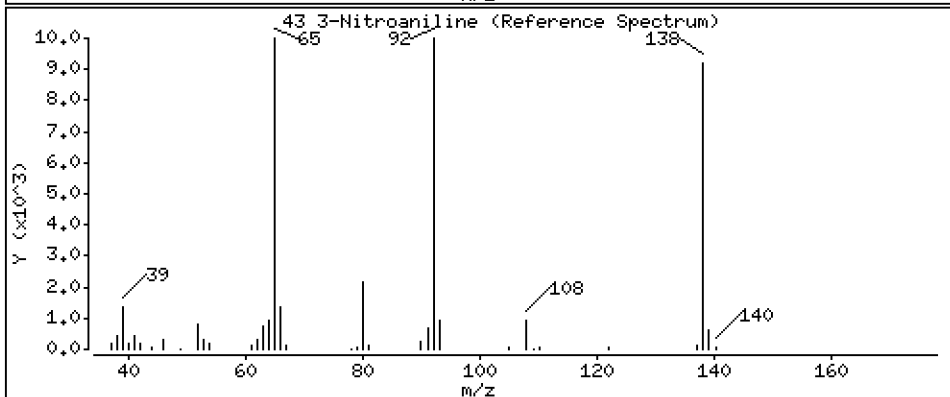
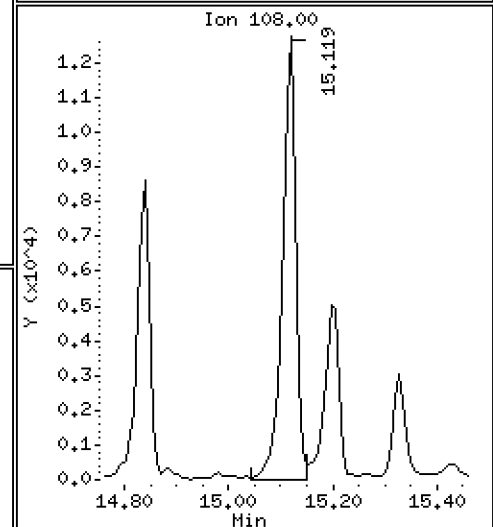
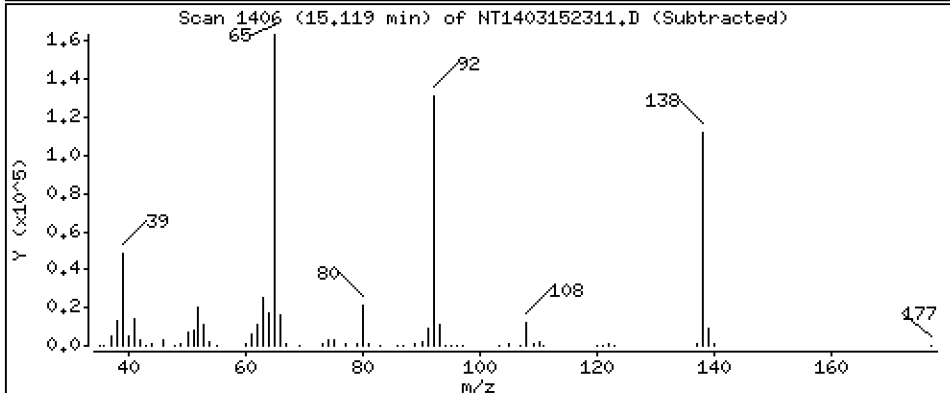
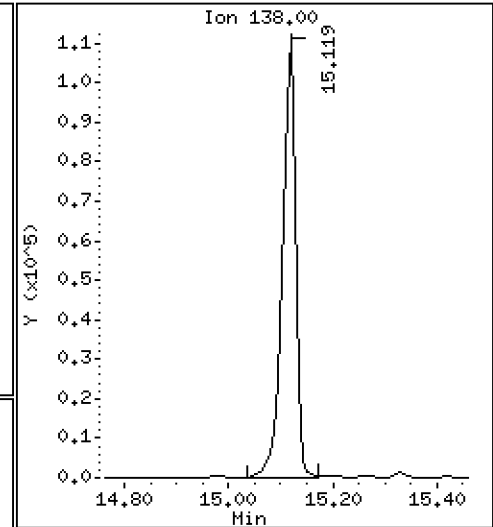
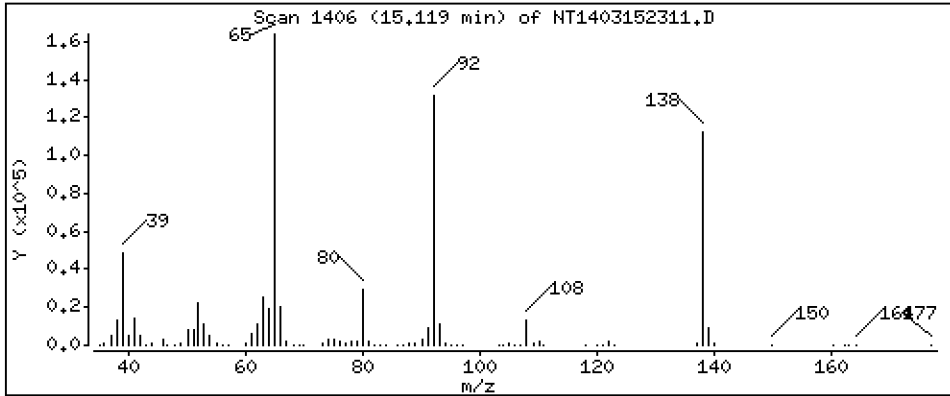
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,210 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

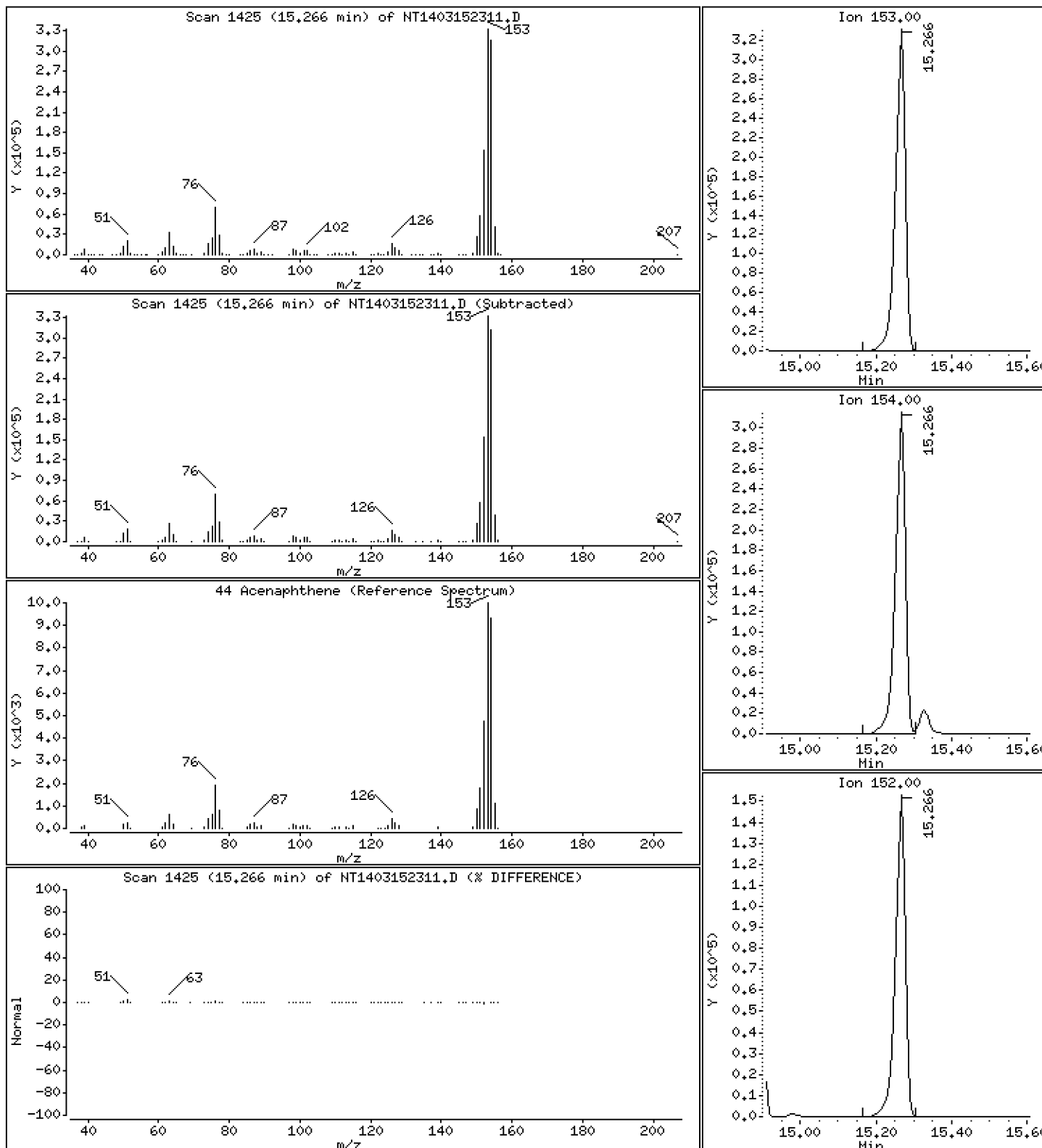
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,965 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

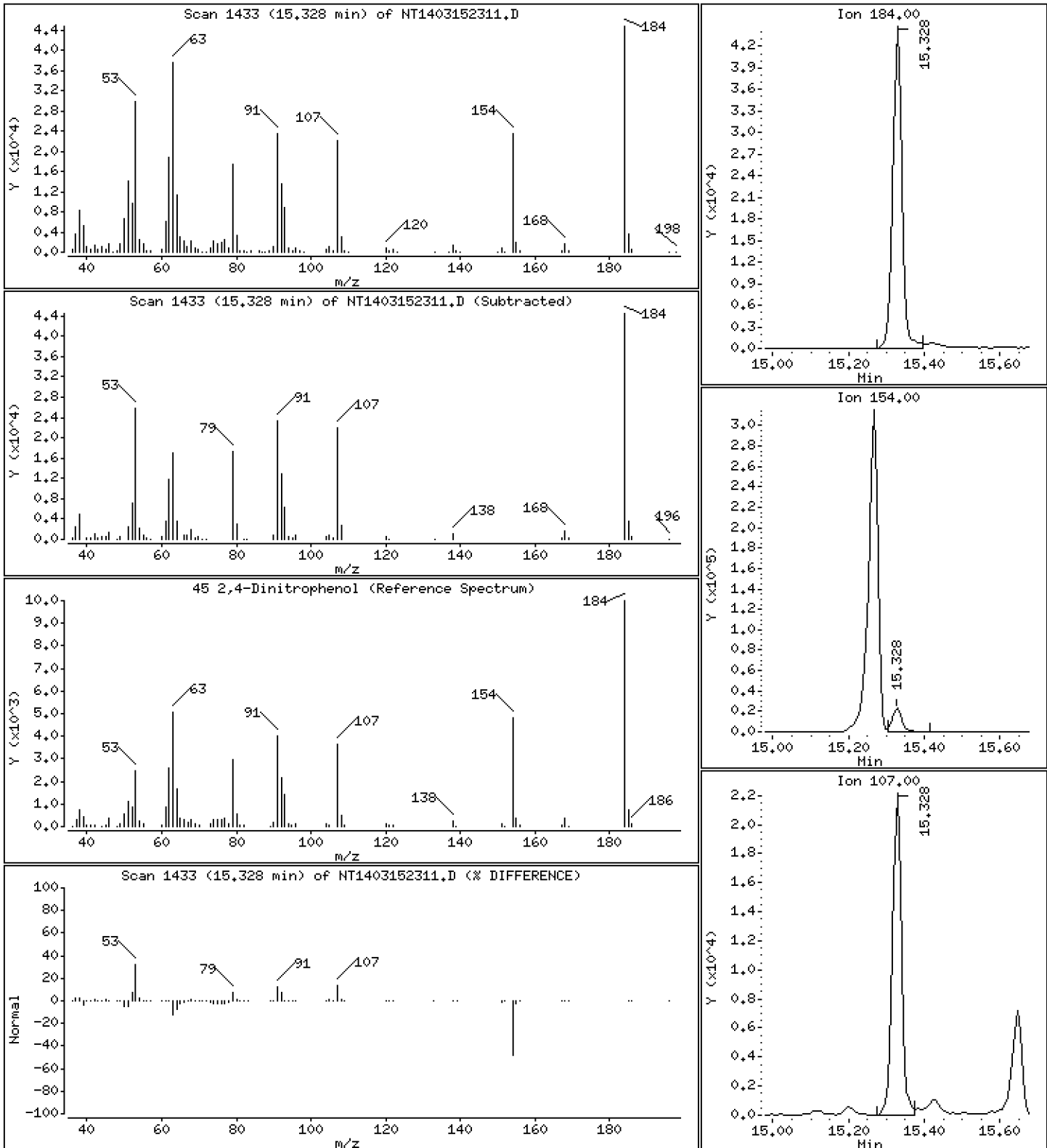
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 3,077 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

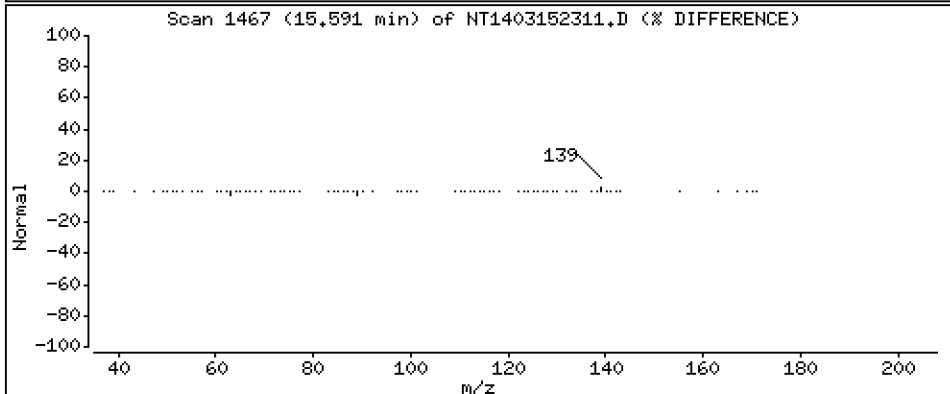
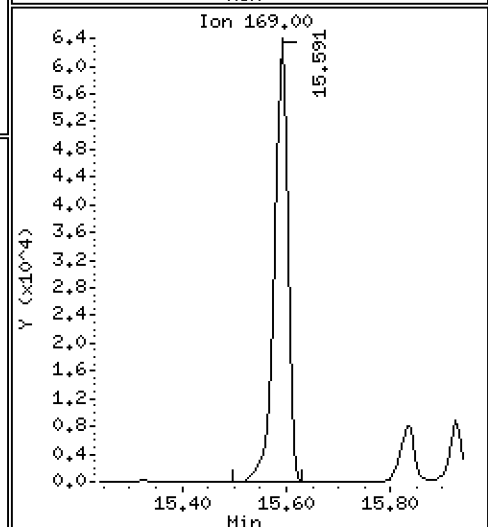
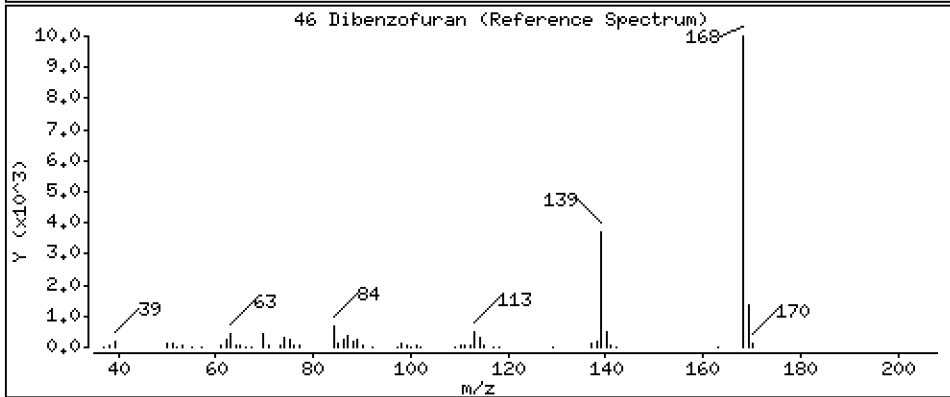
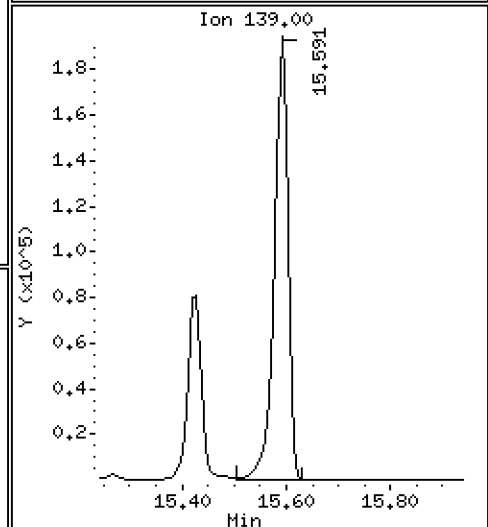
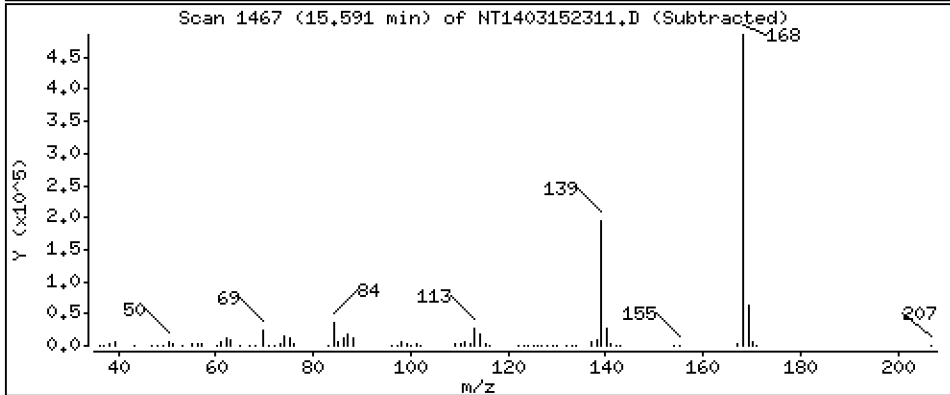
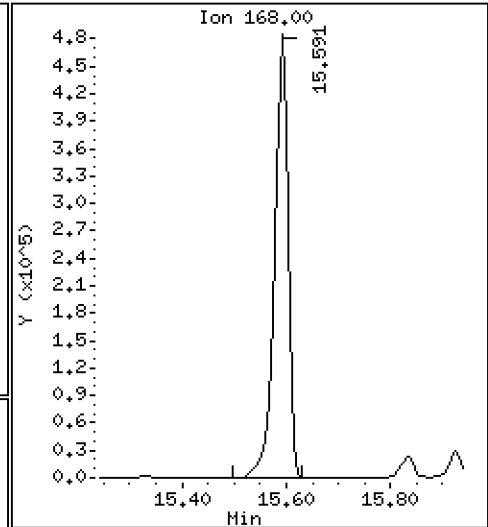
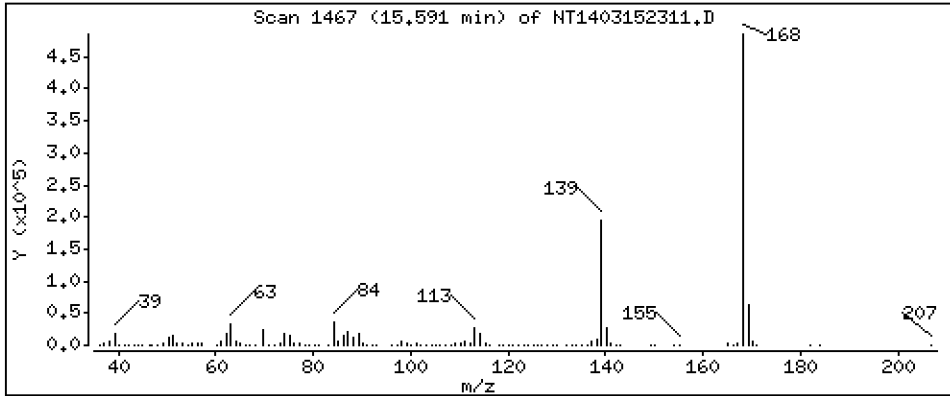
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,956 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

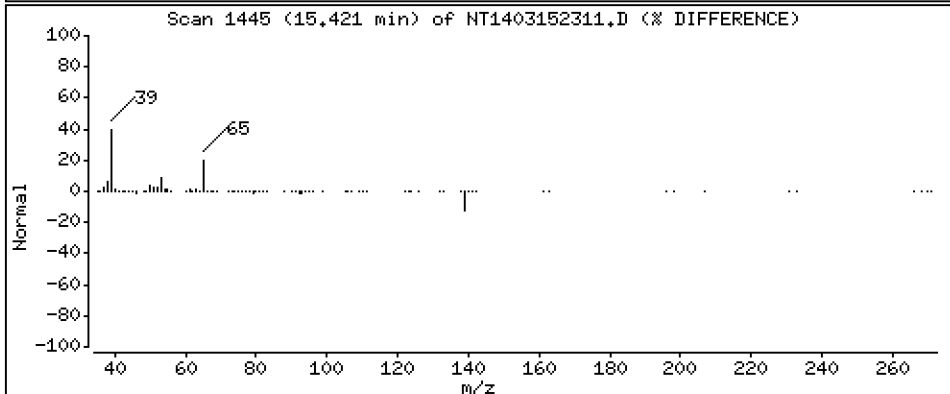
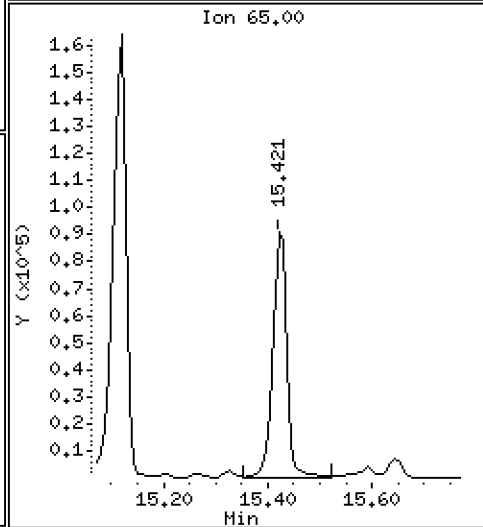
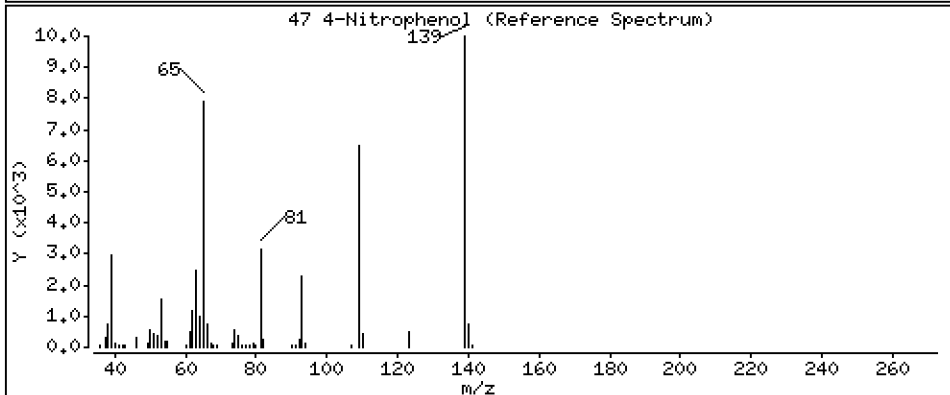
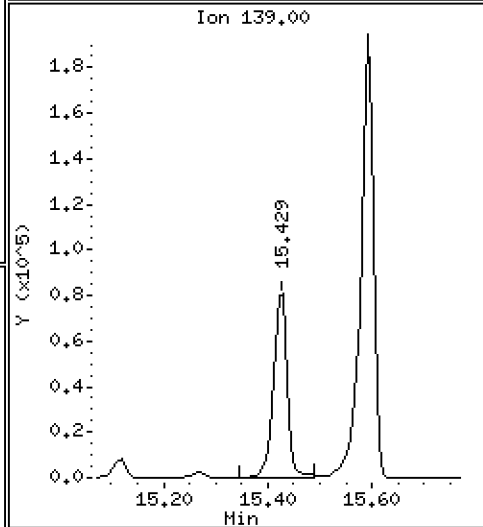
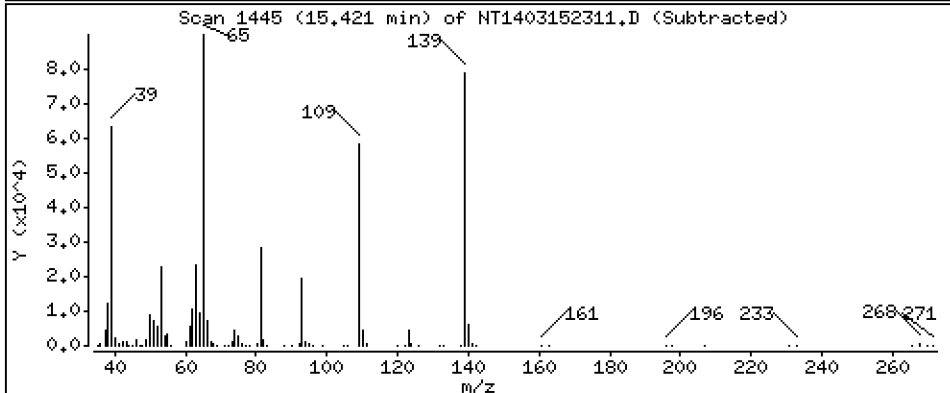
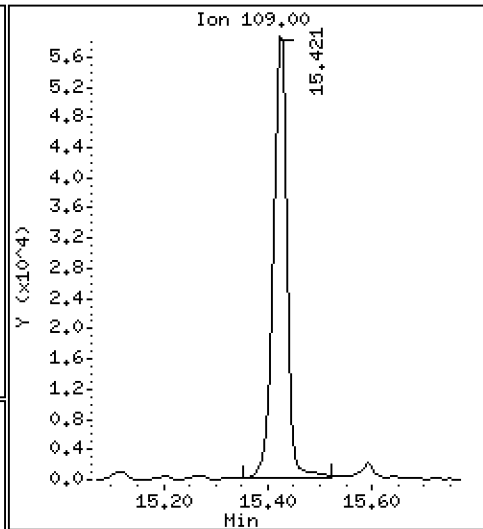
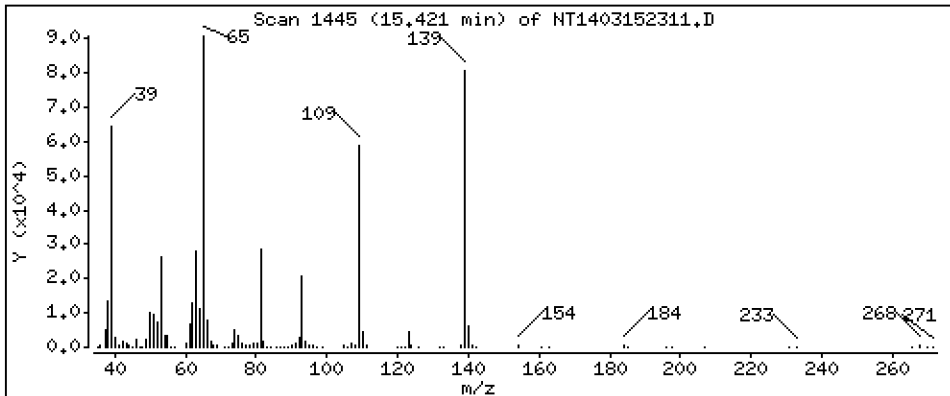
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 4,828 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

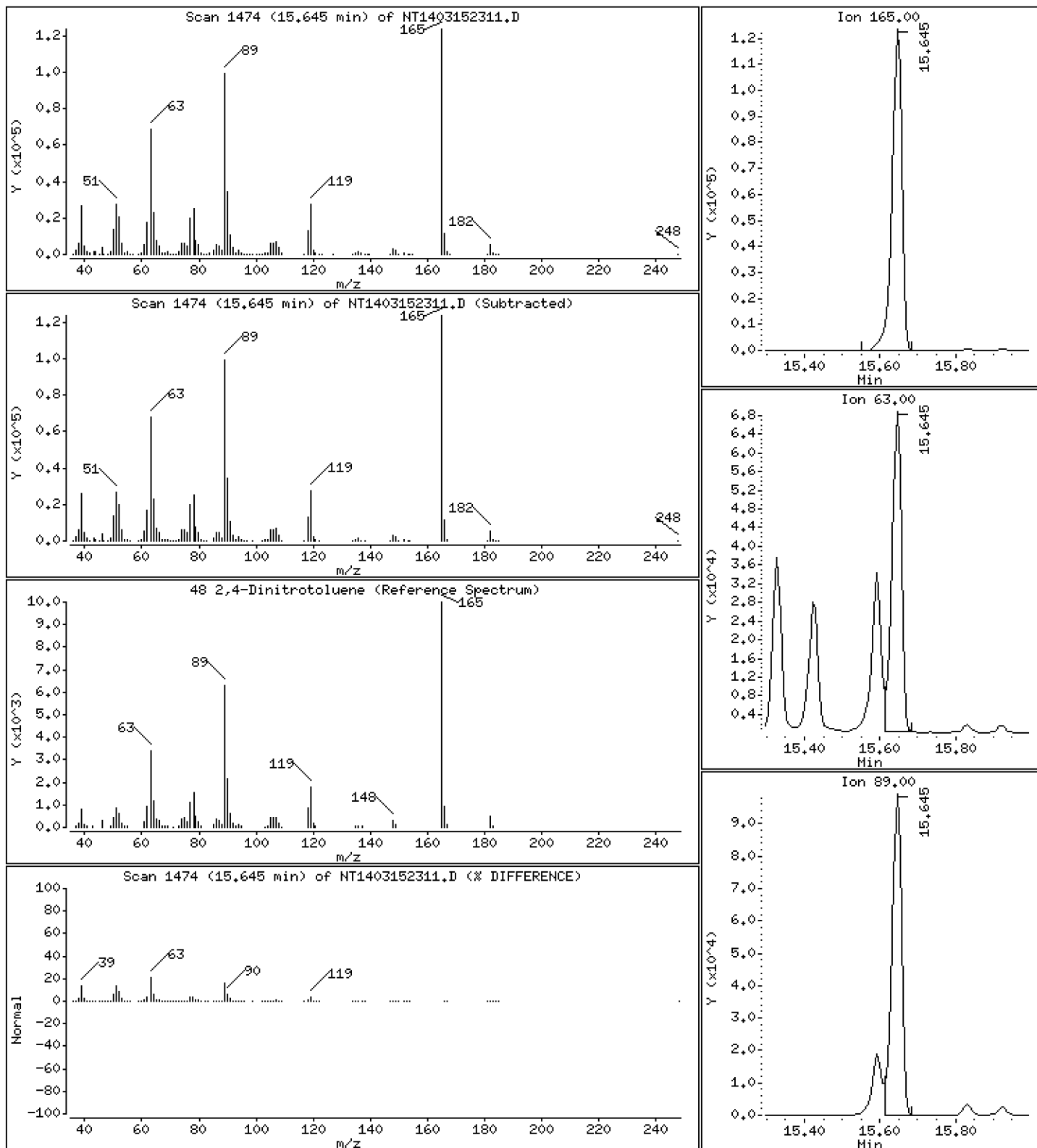
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 5,119 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

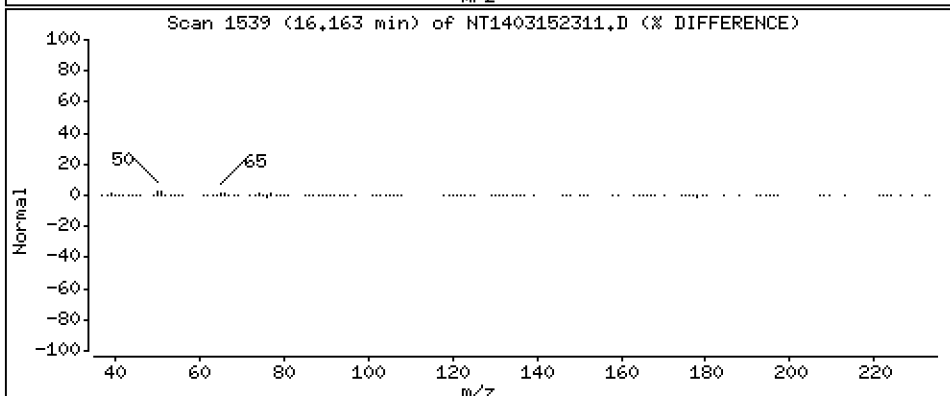
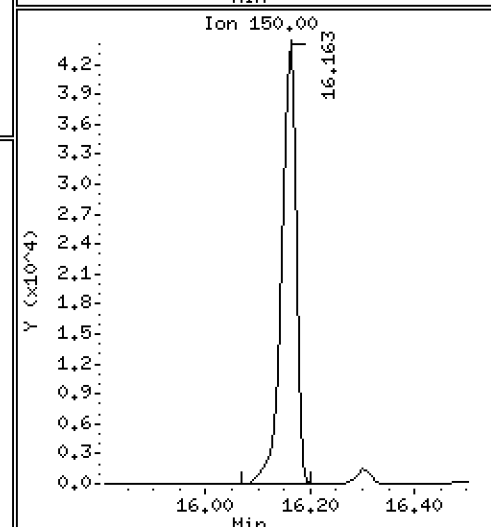
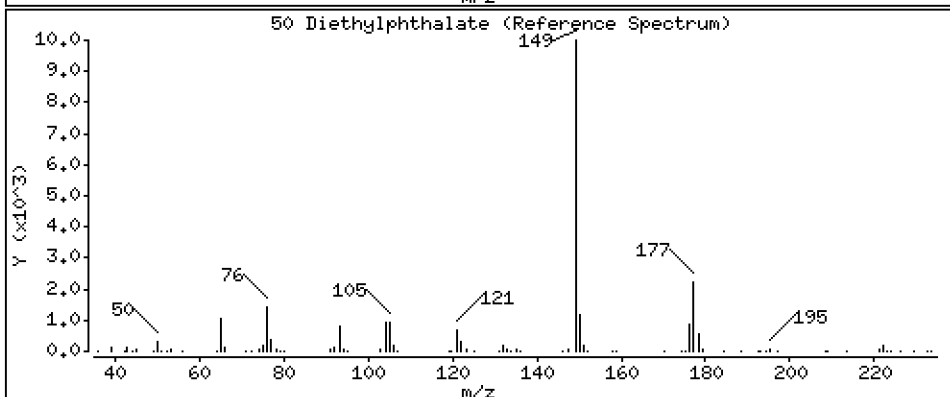
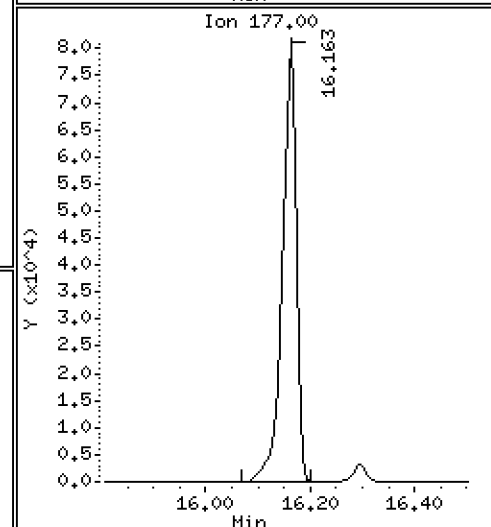
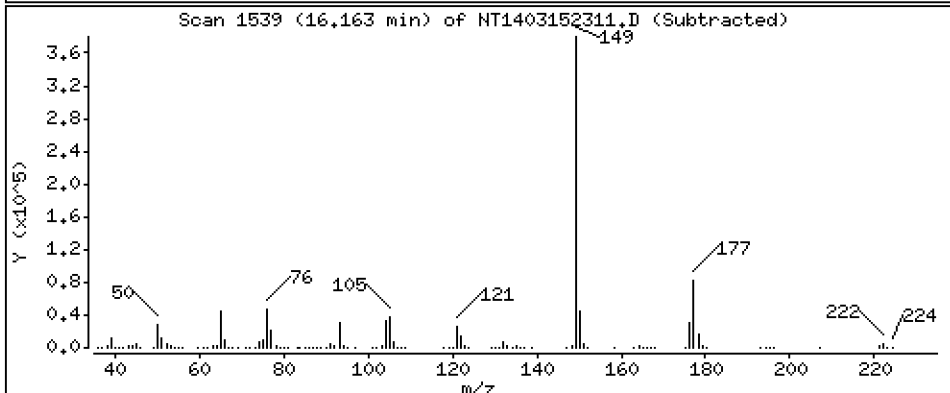
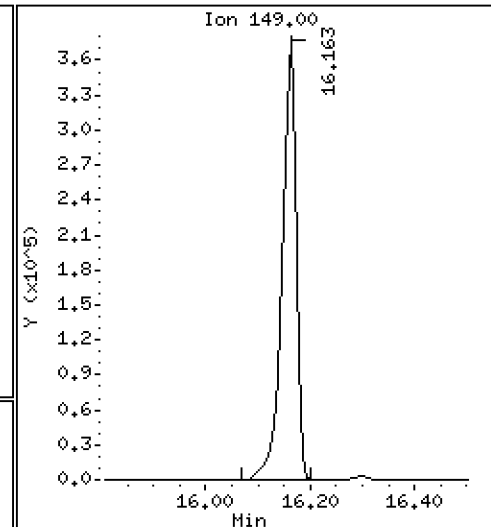
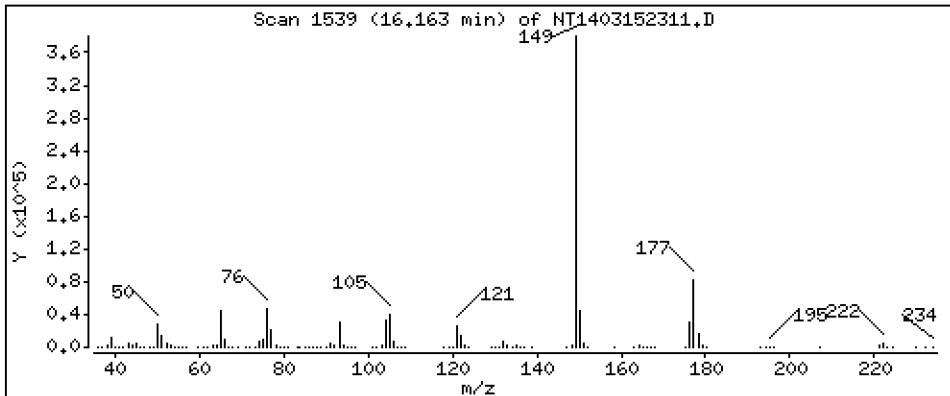
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,203 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

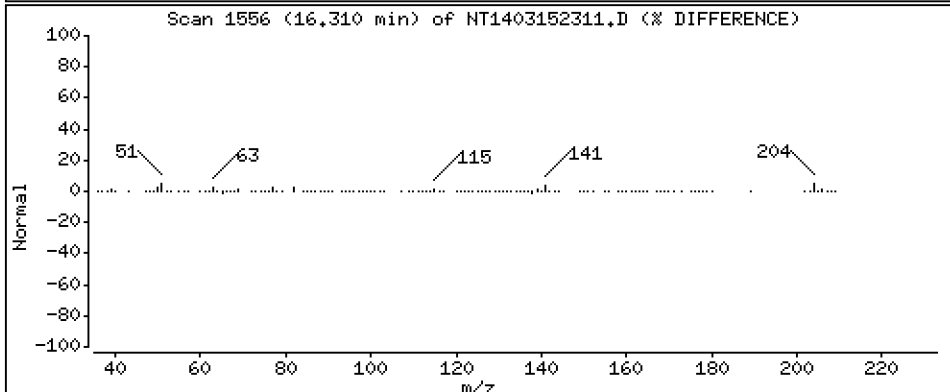
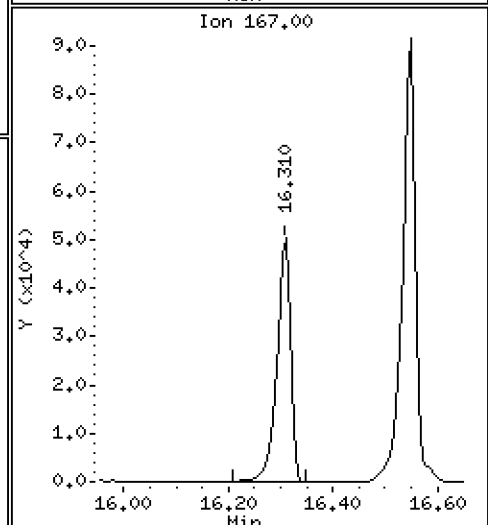
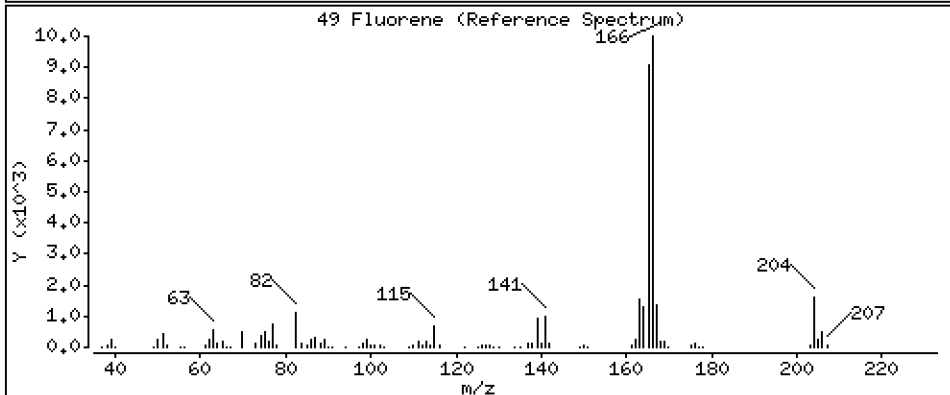
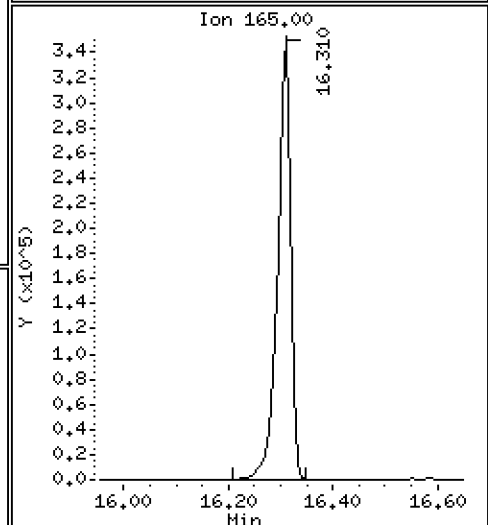
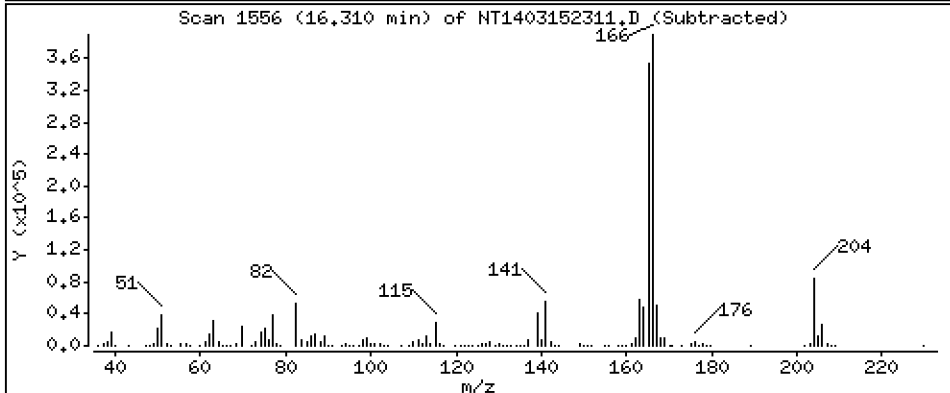
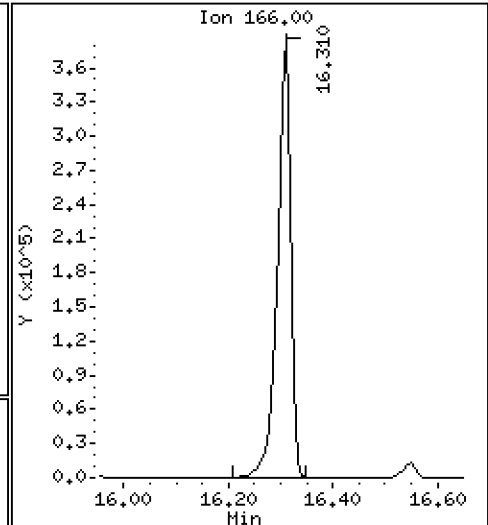
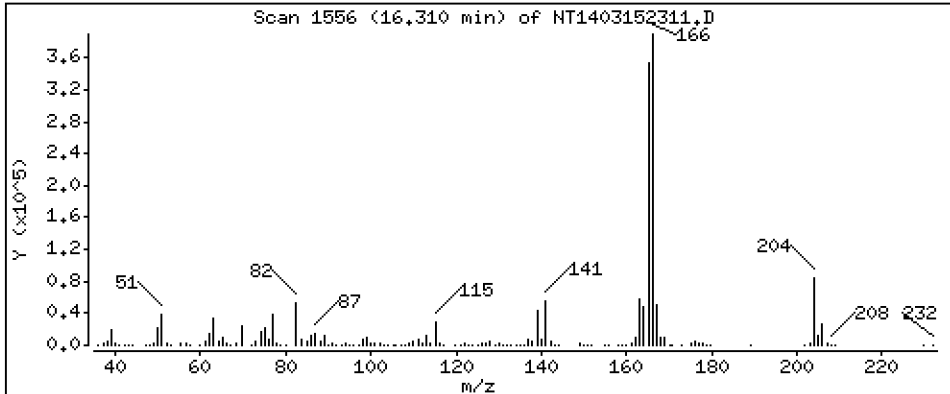
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,844 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

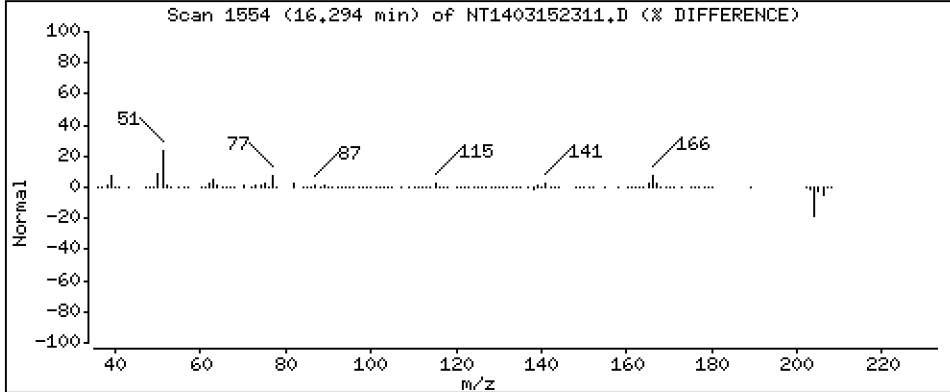
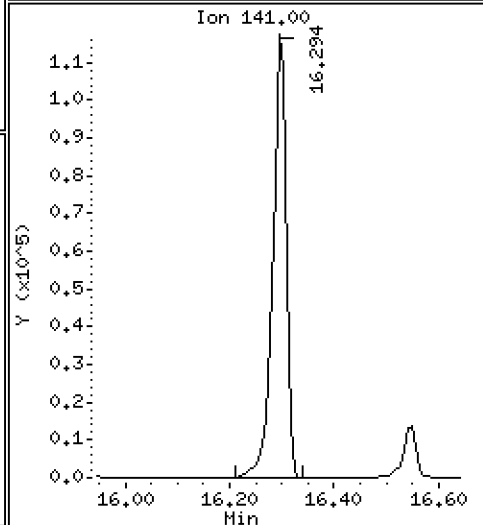
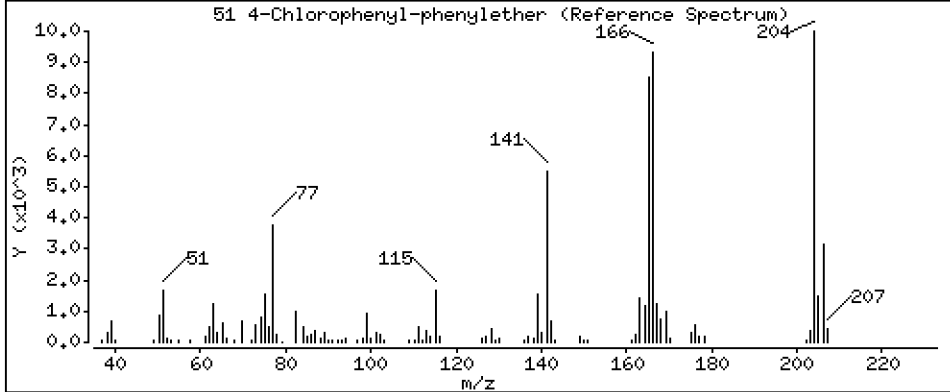
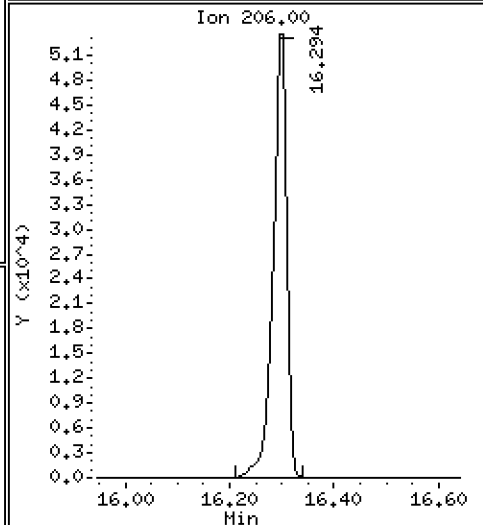
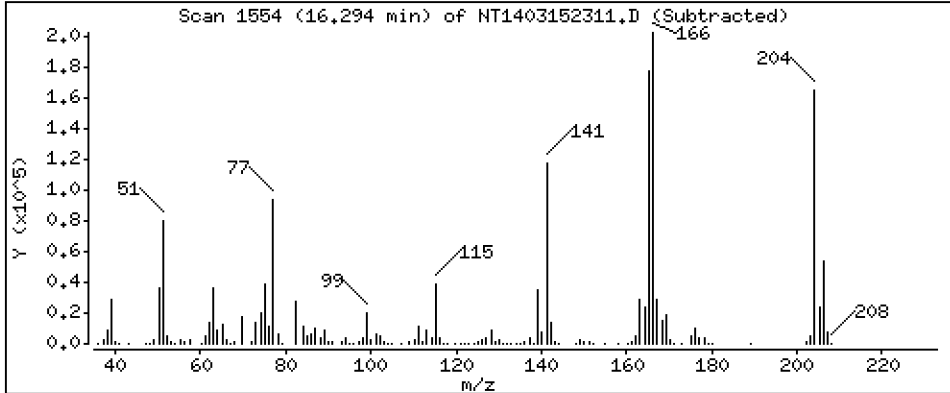
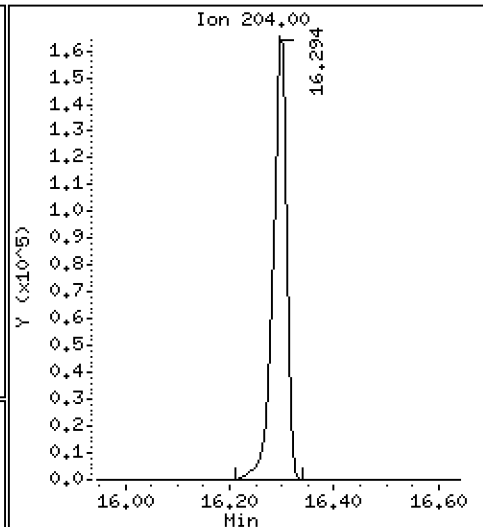
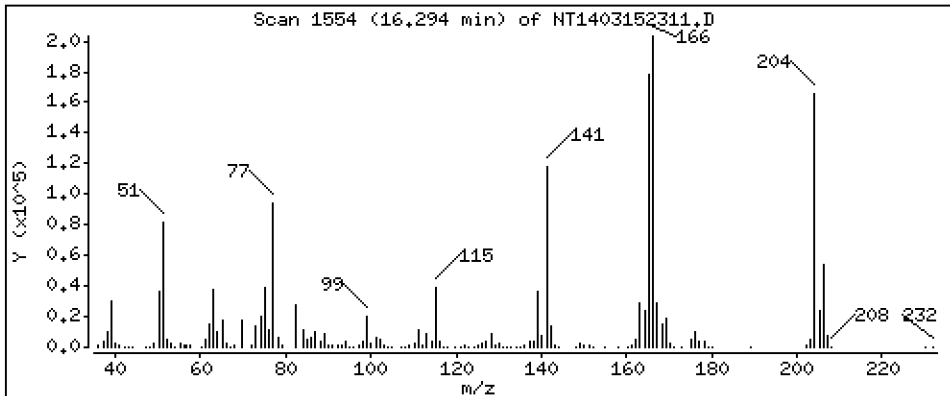
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,985 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

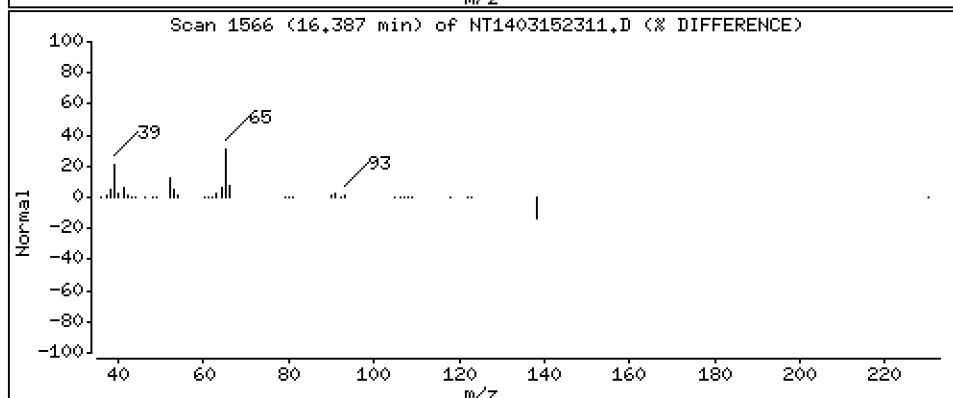
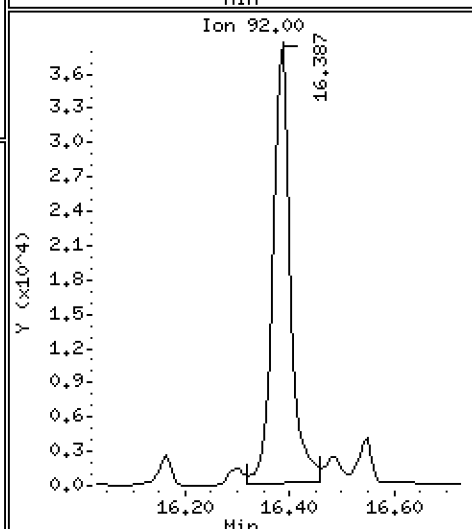
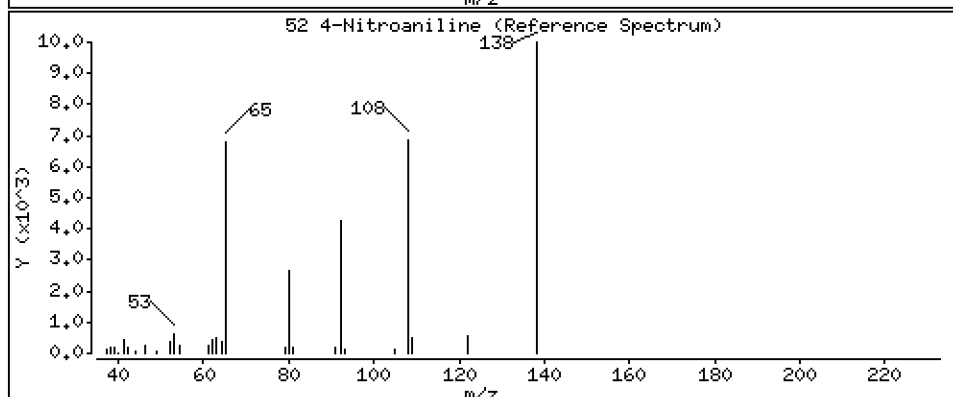
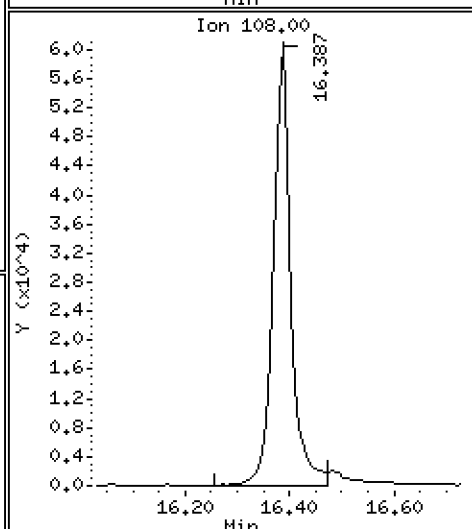
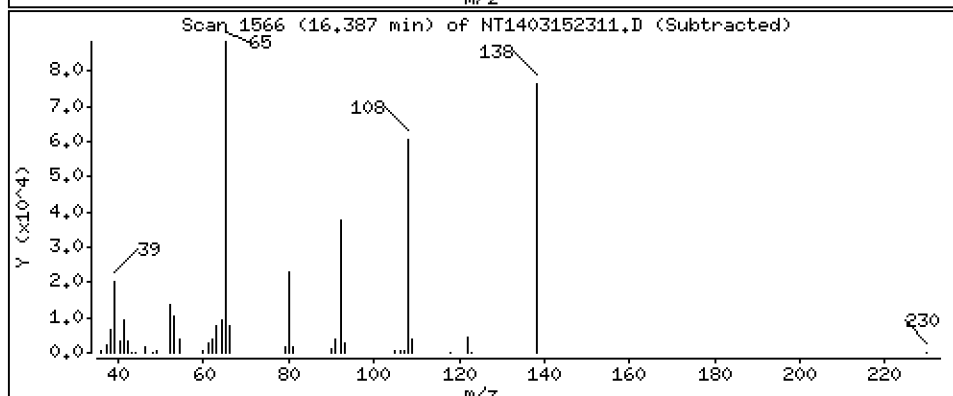
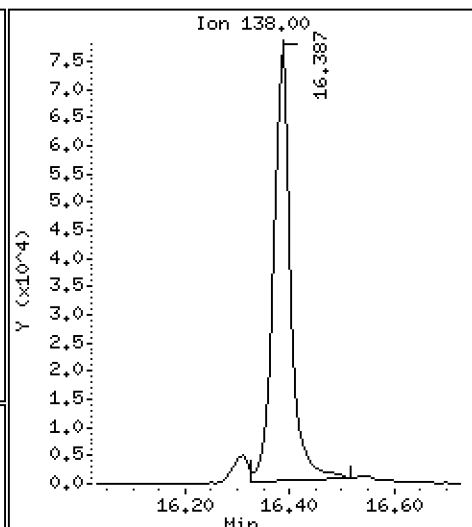
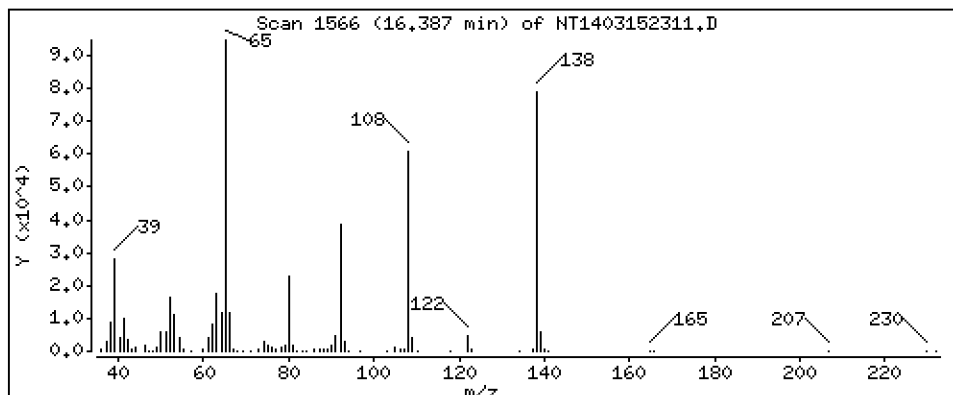
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 4,817 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

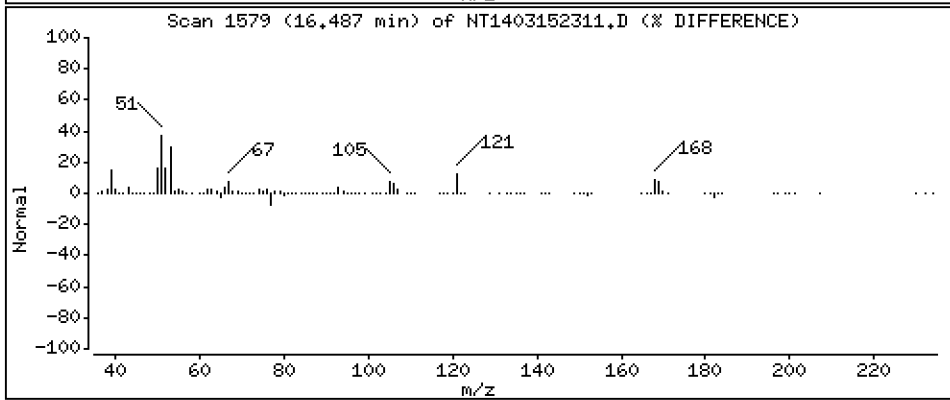
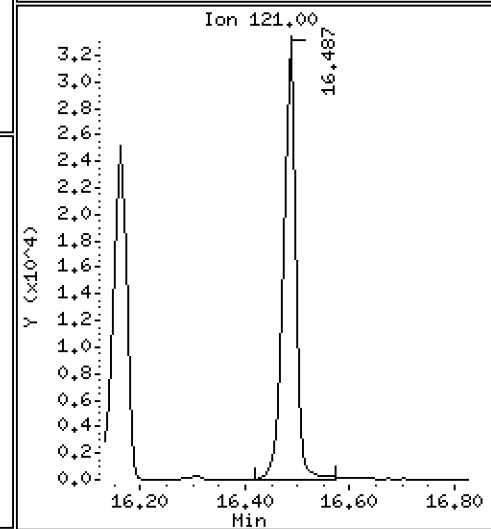
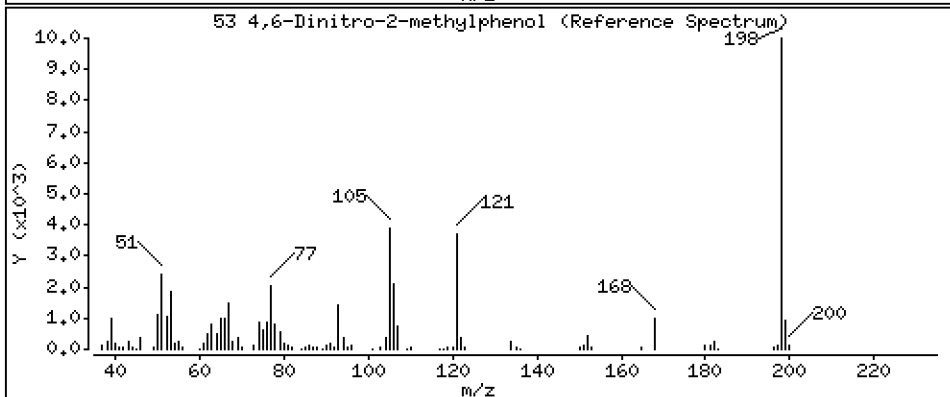
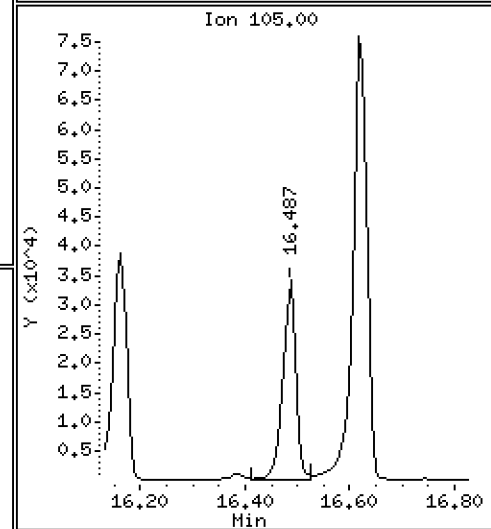
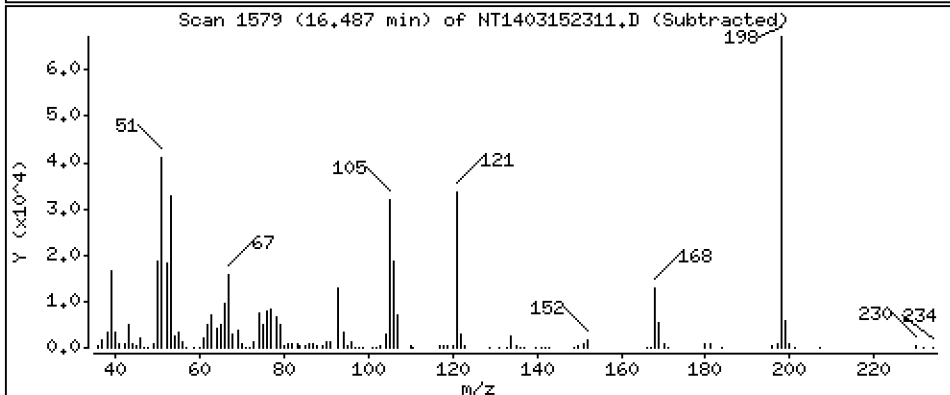
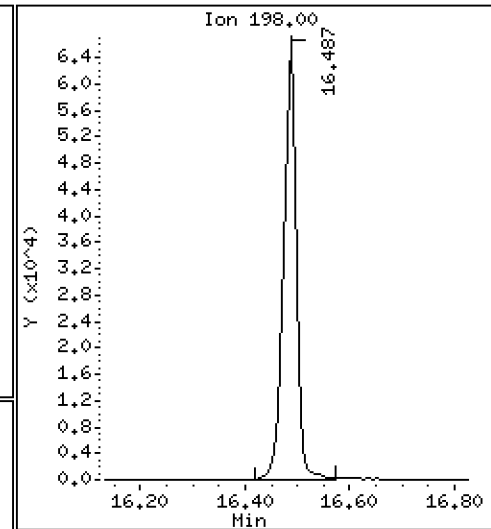
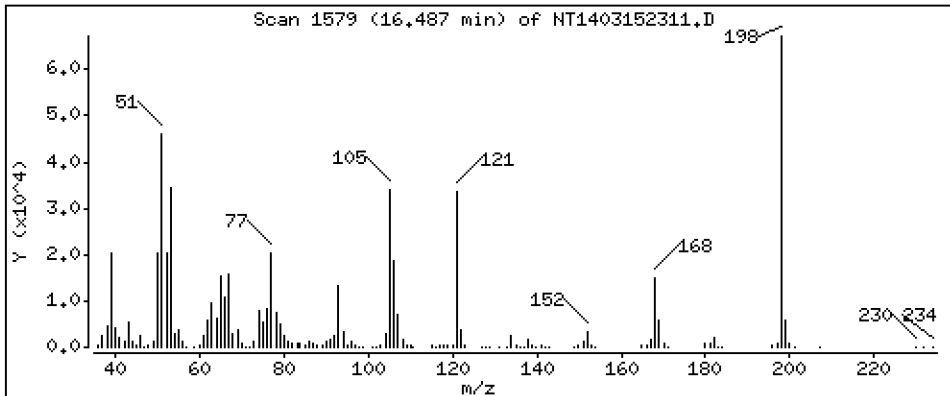
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 4,439 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

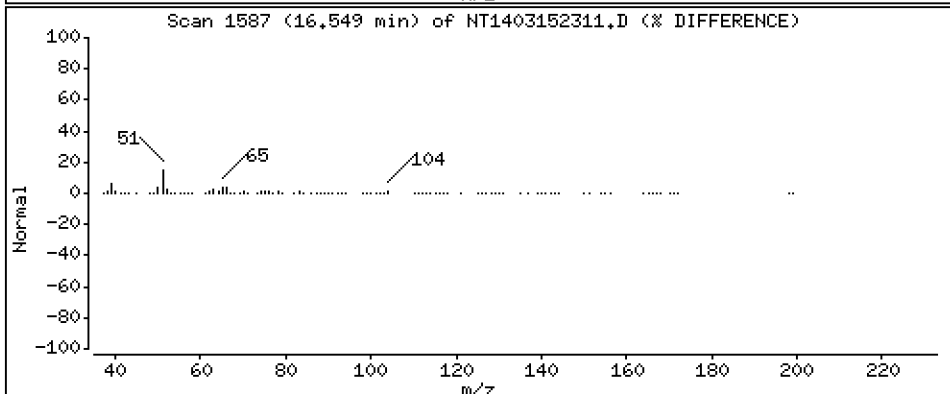
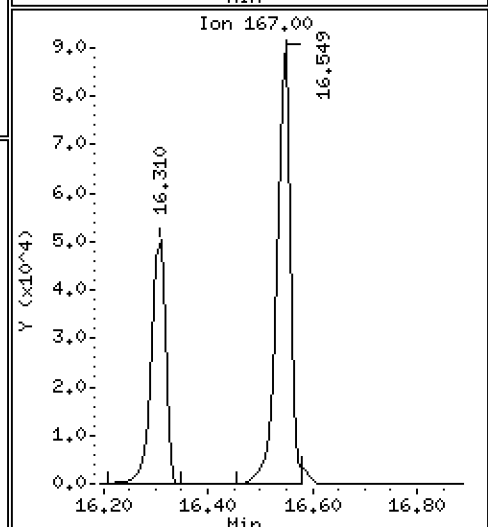
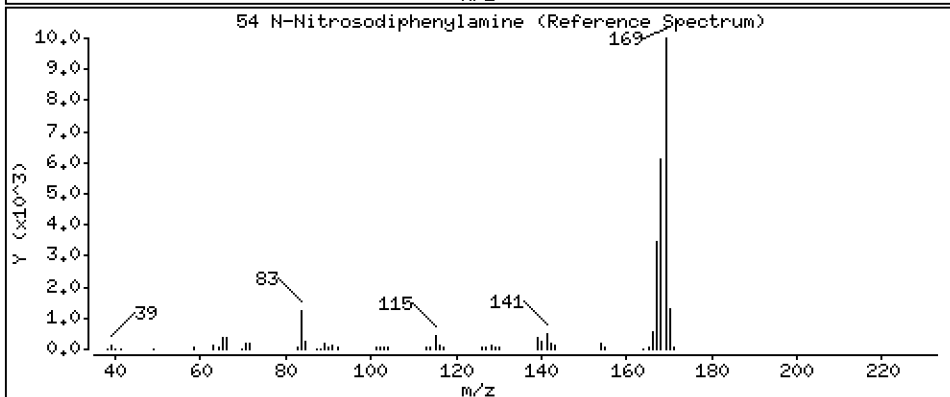
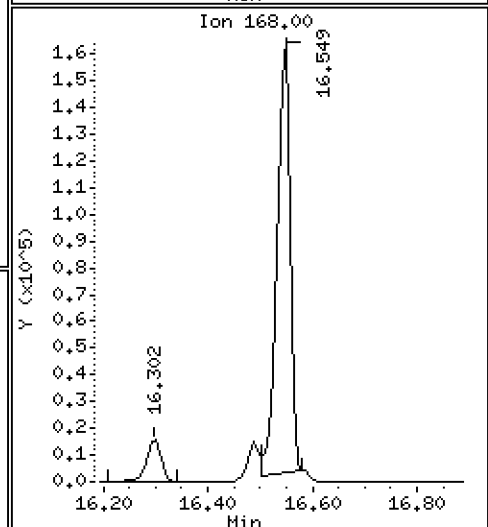
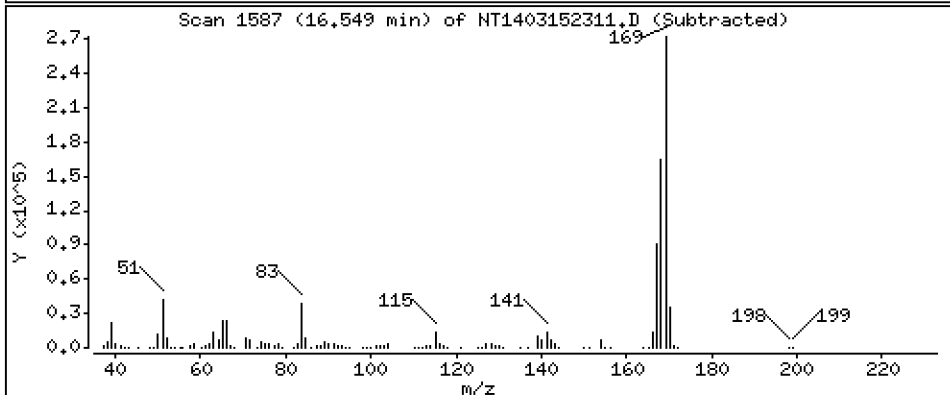
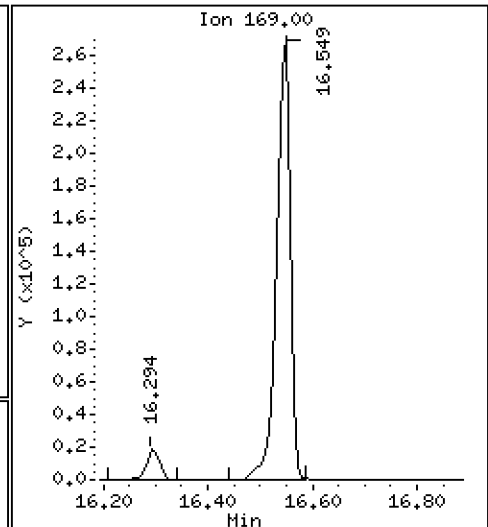
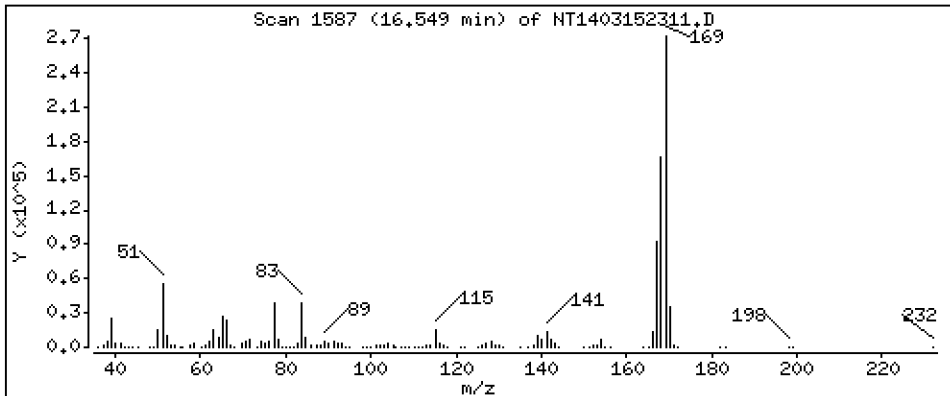
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.954 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

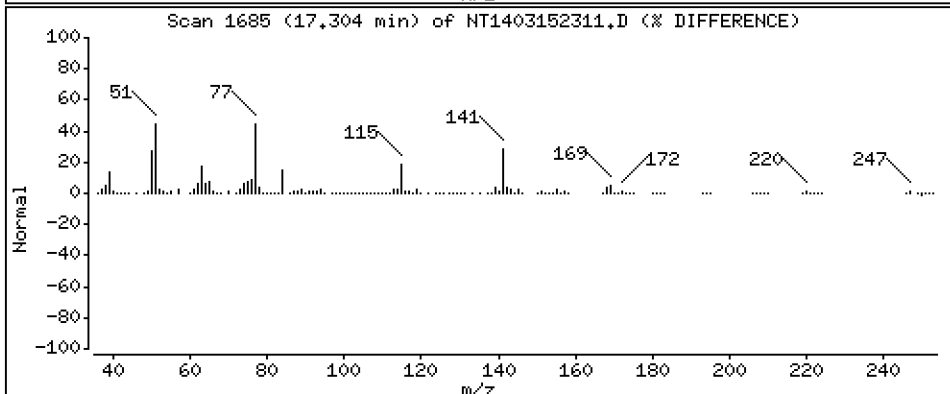
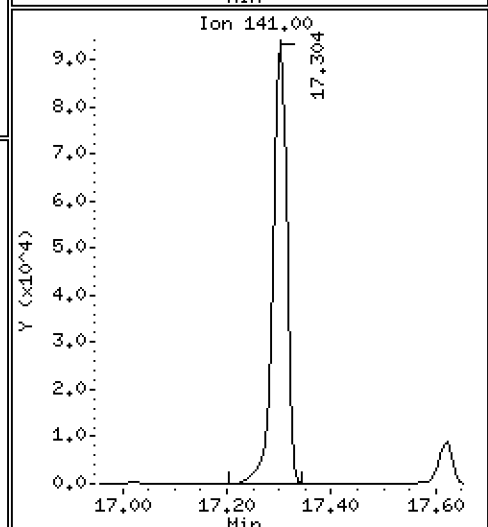
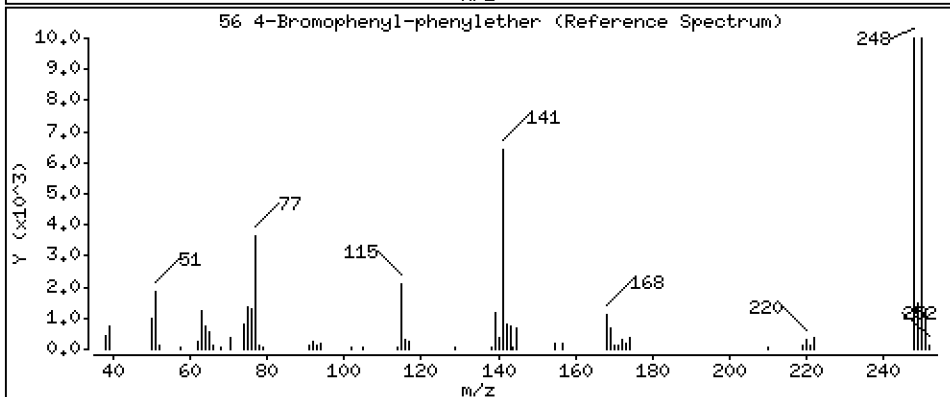
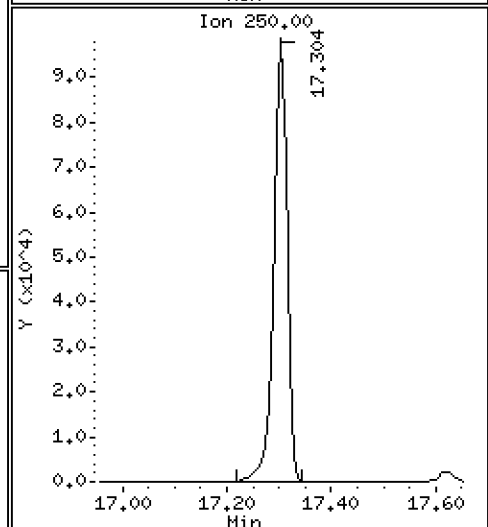
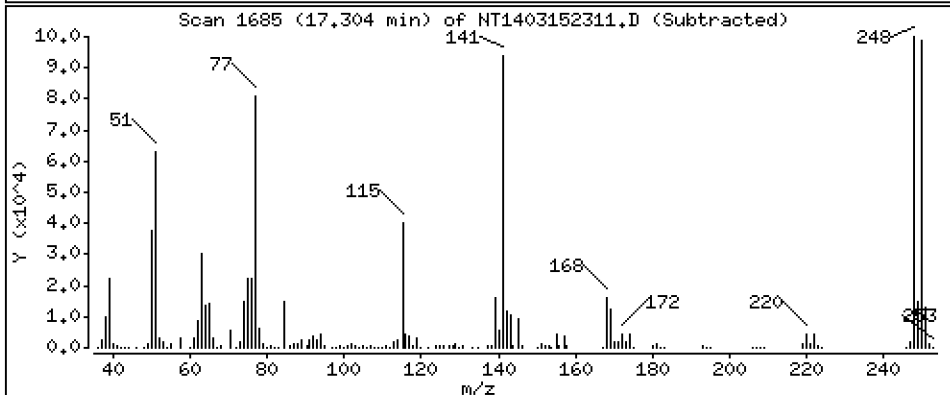
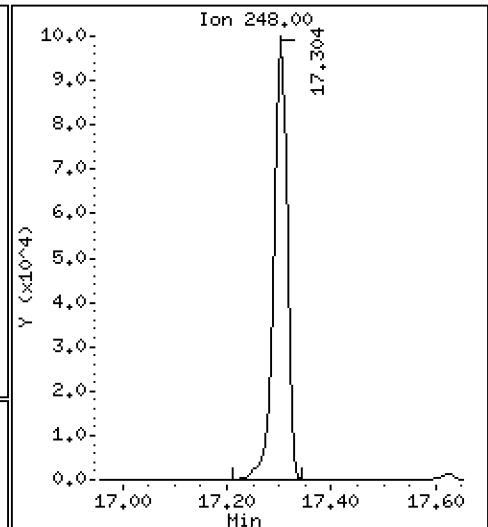
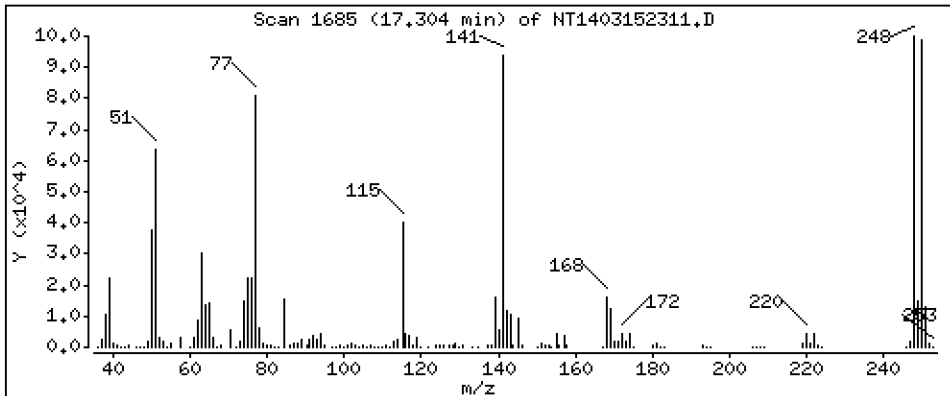
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,226 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

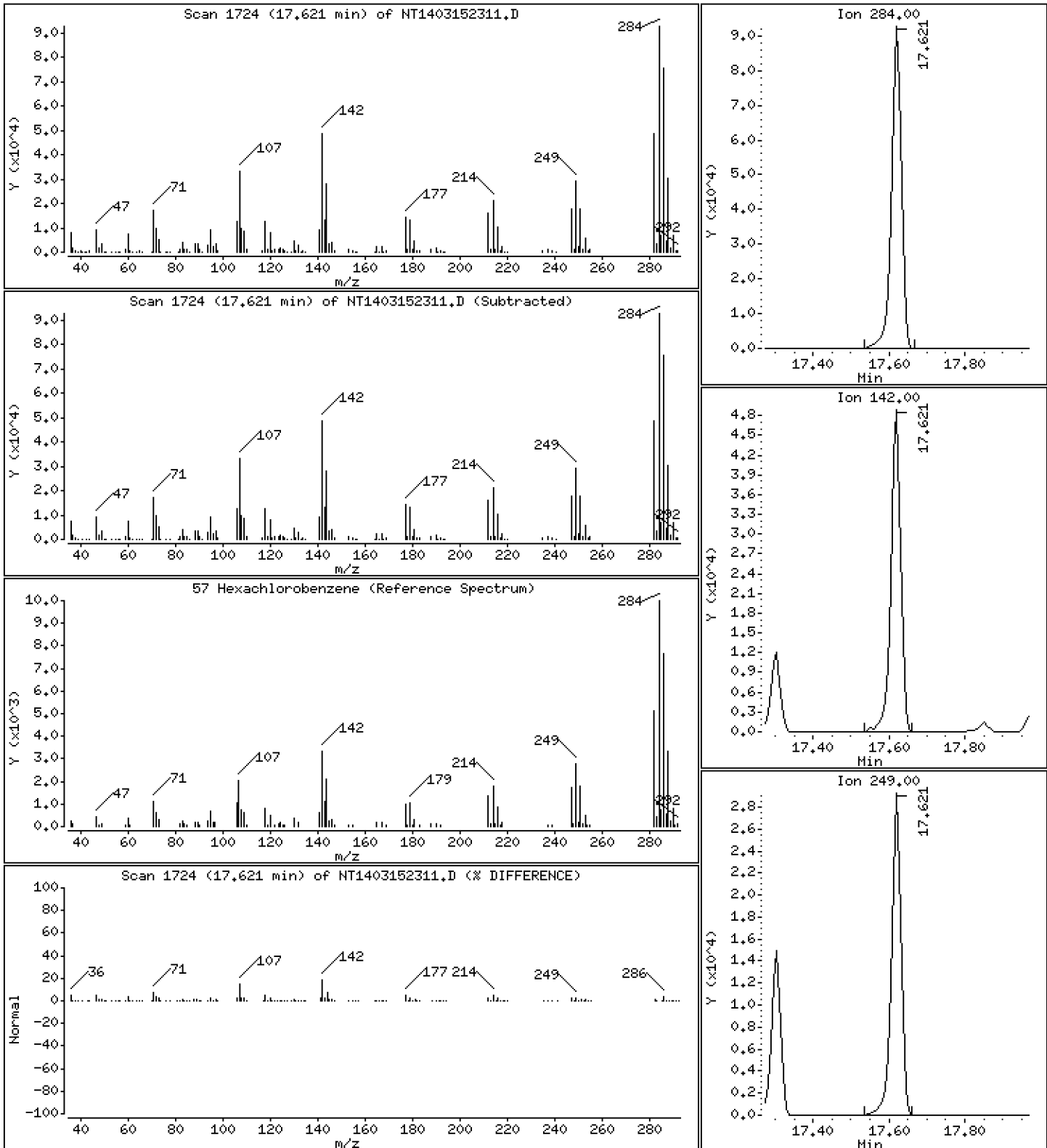
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,780 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

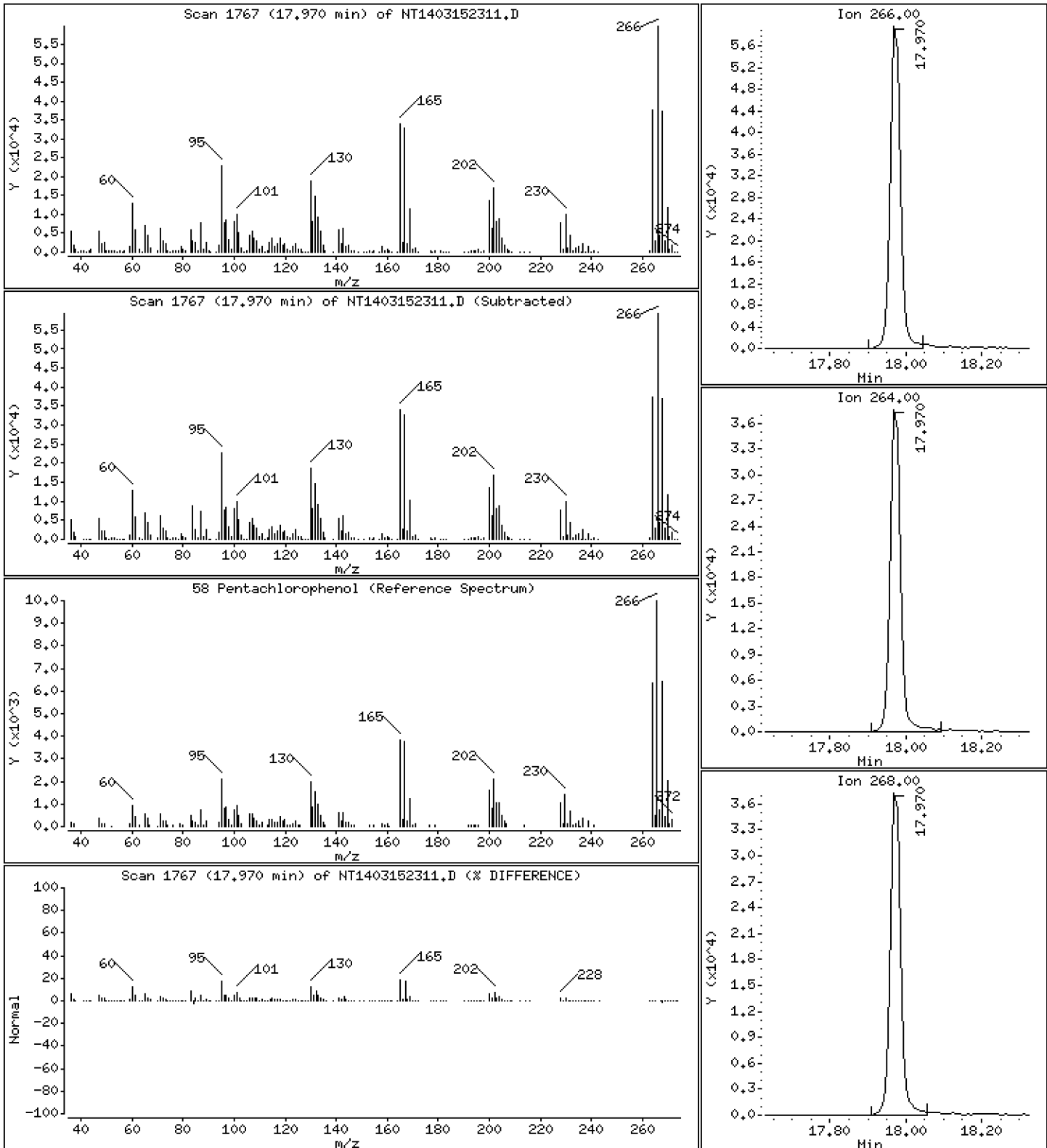
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,477 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

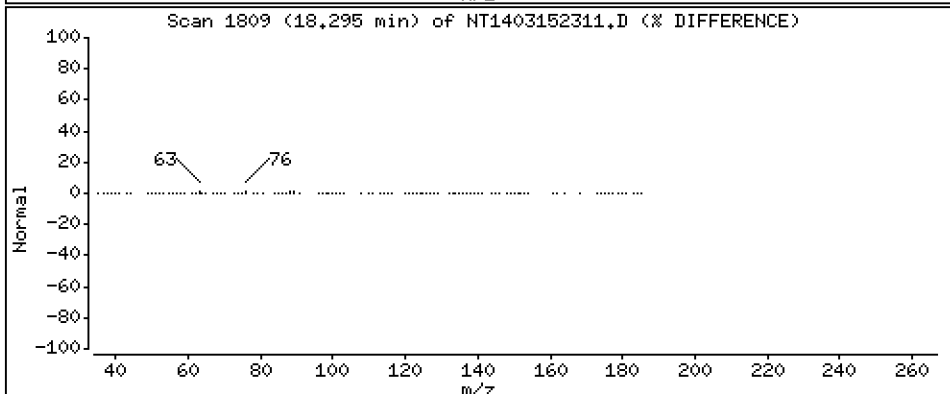
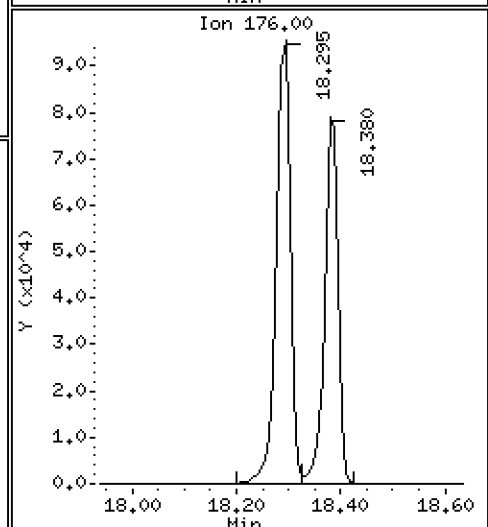
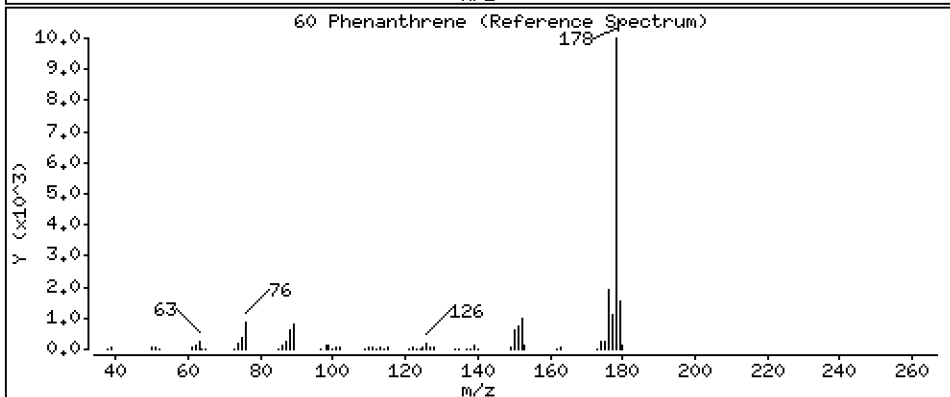
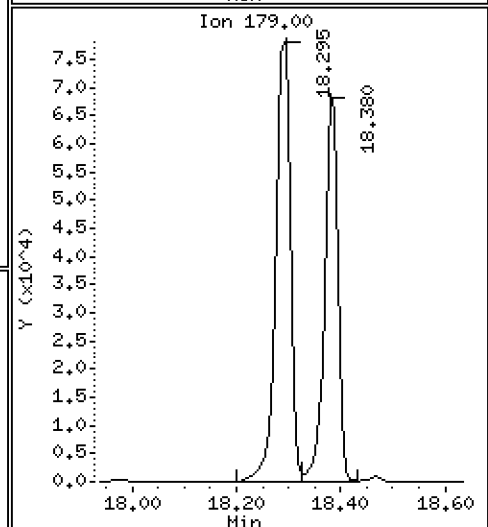
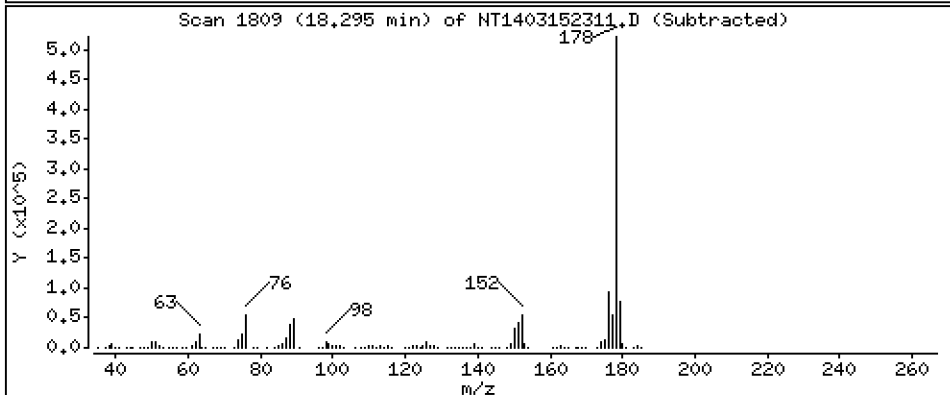
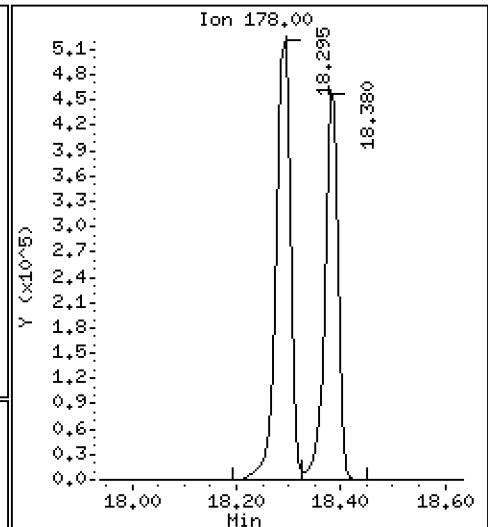
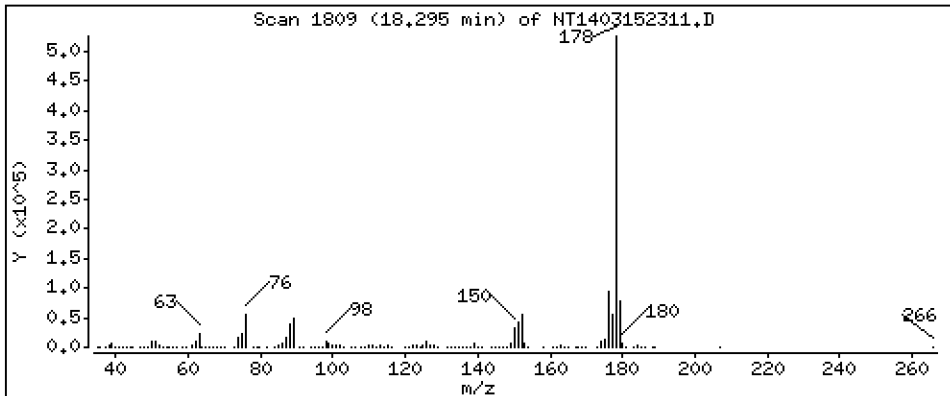
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,734 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

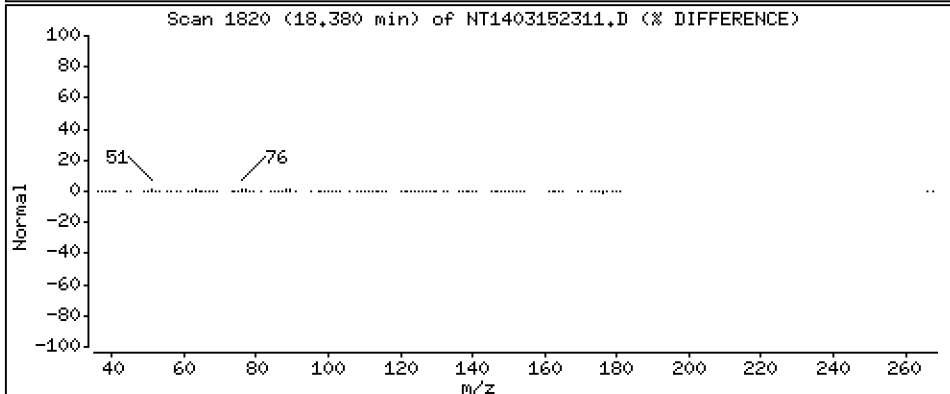
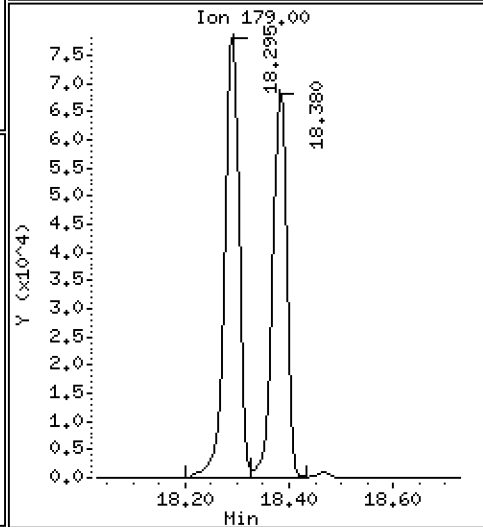
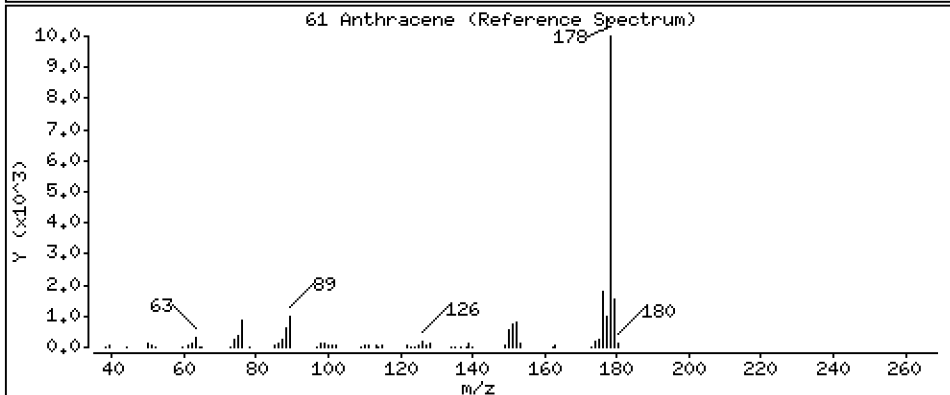
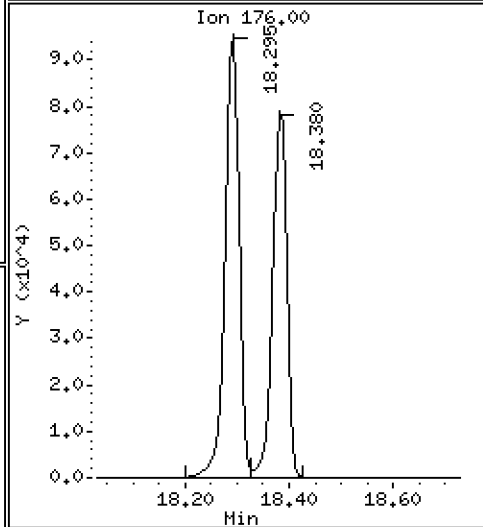
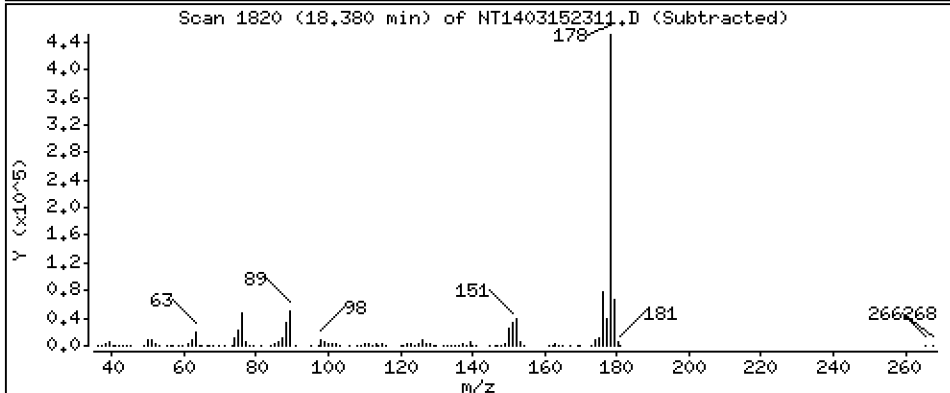
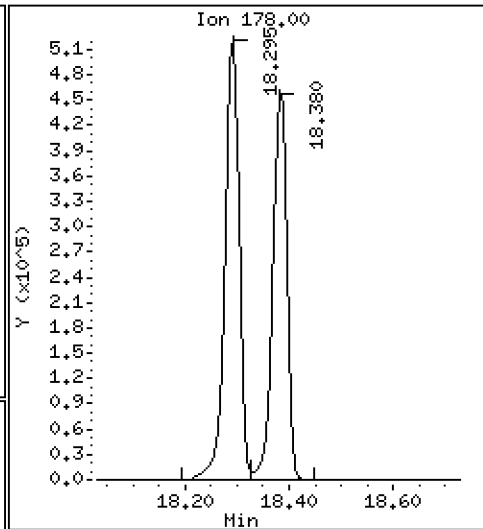
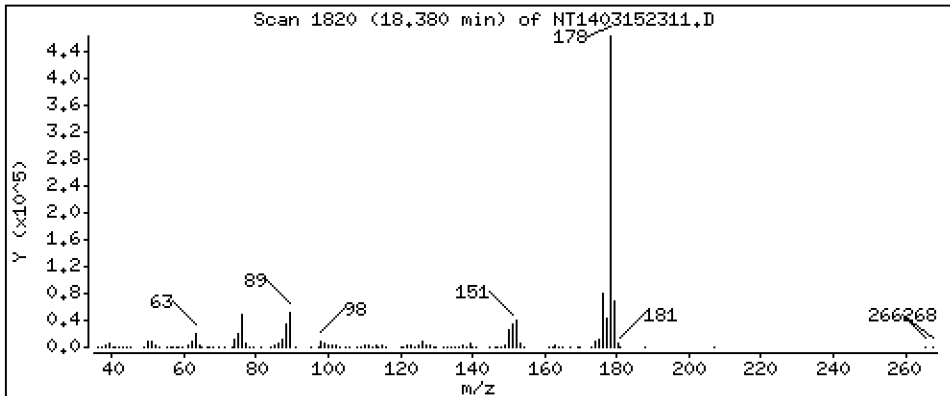
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,281 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

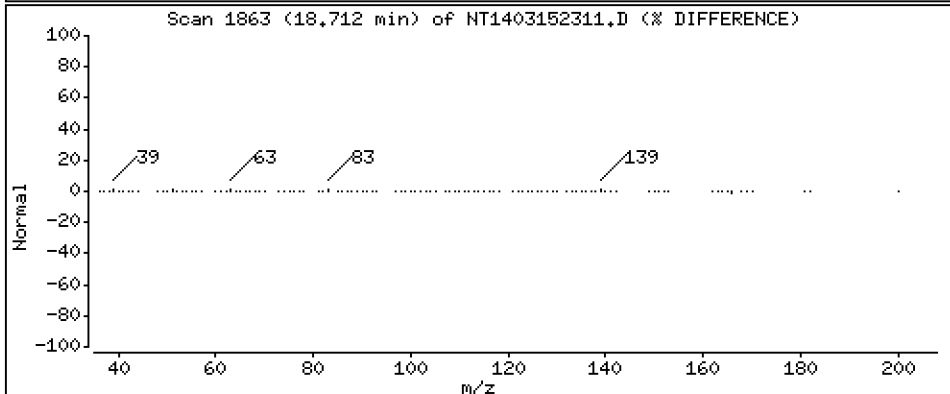
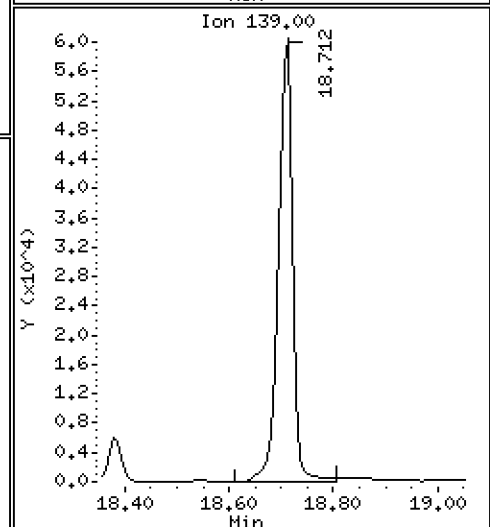
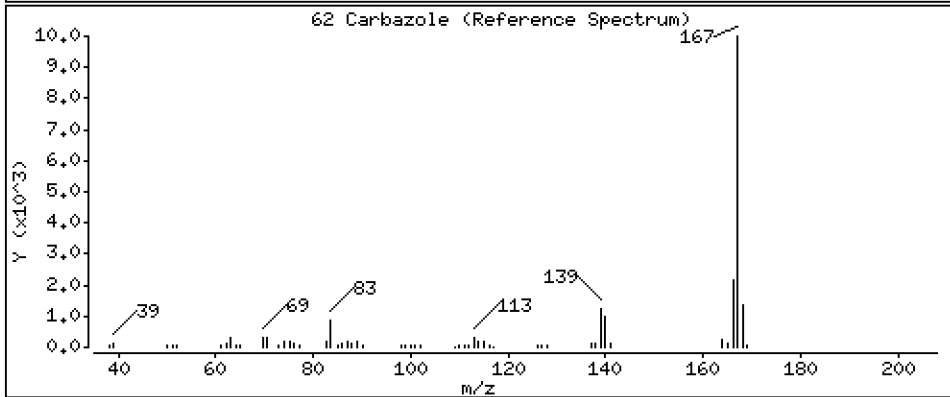
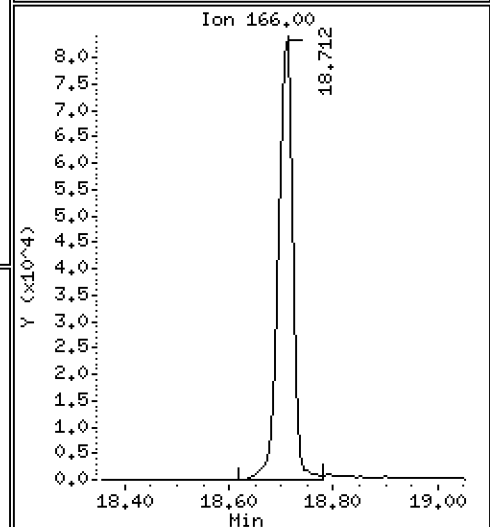
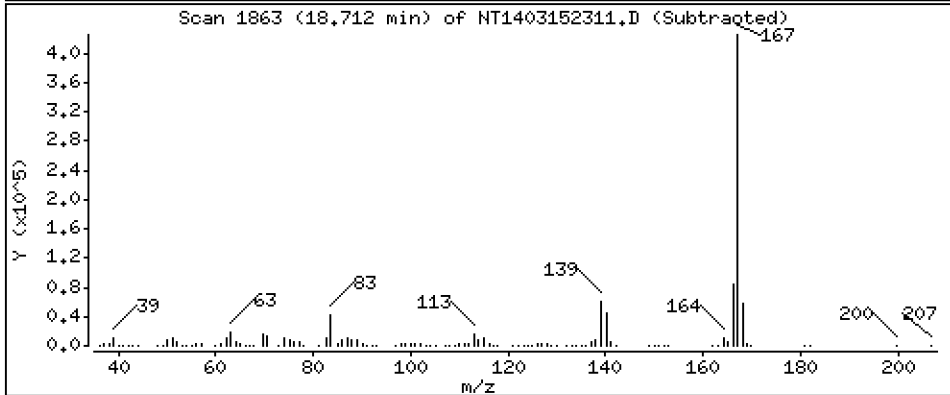
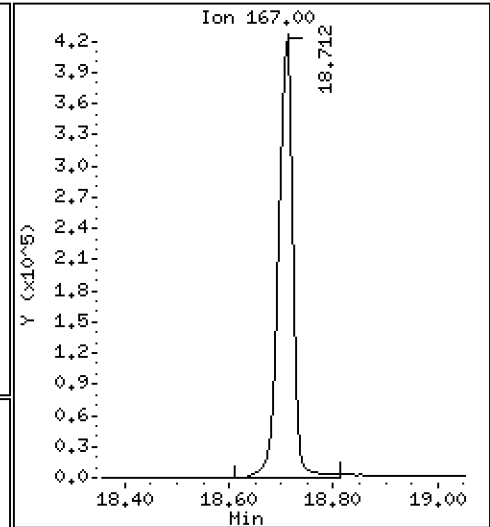
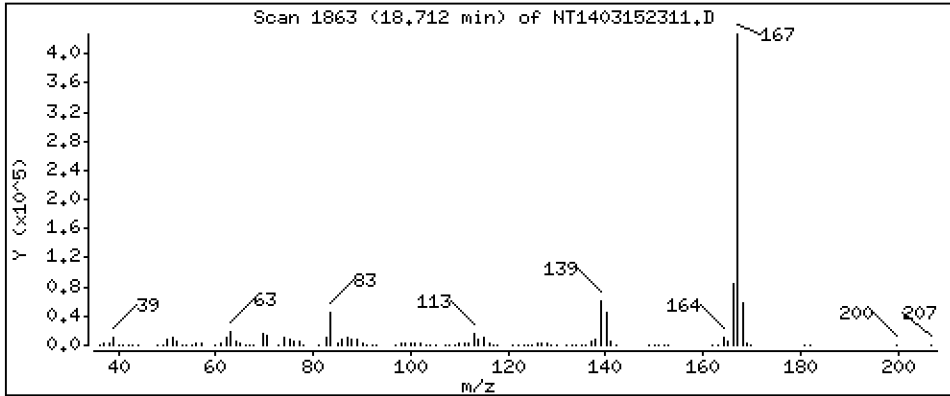
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,587 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

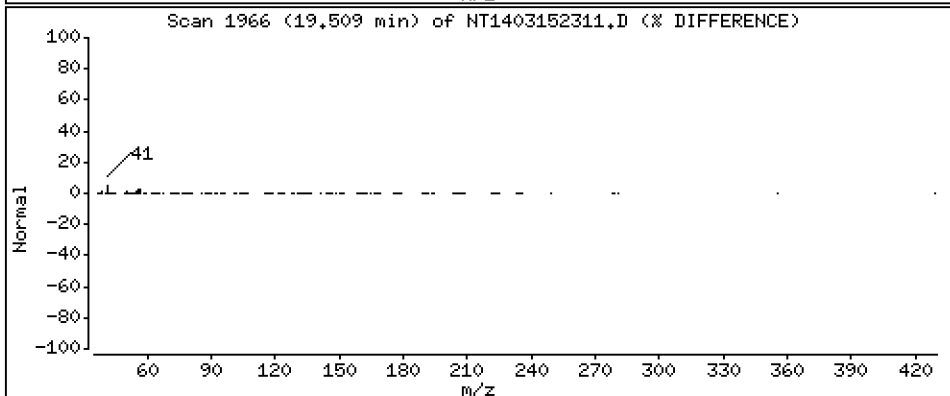
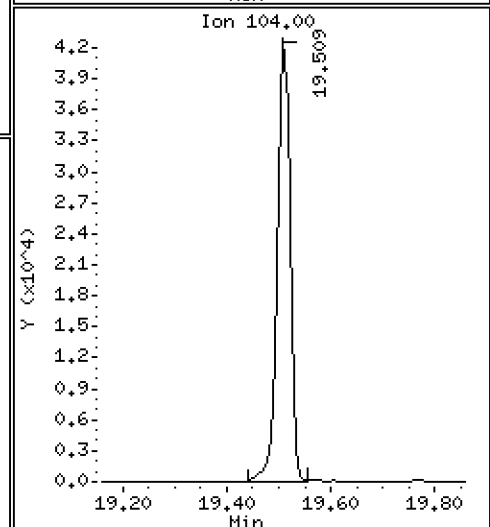
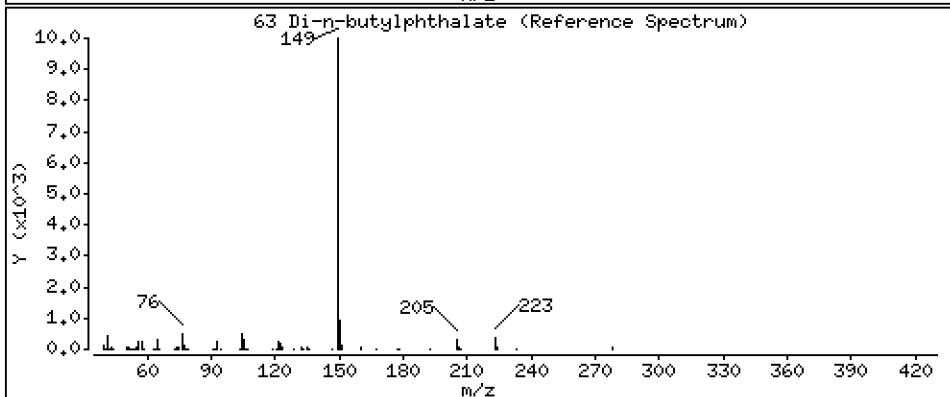
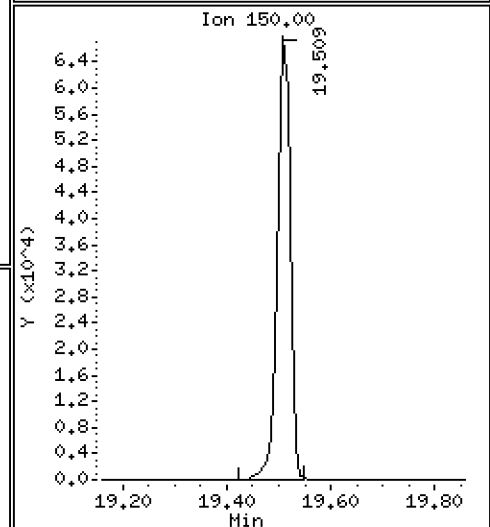
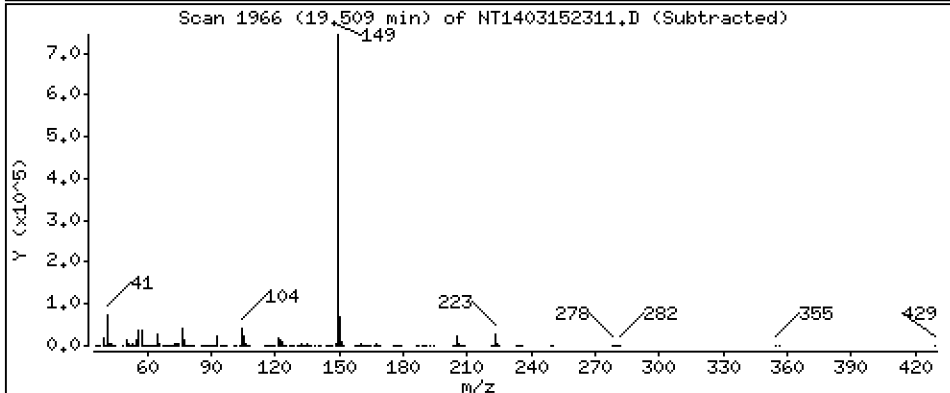
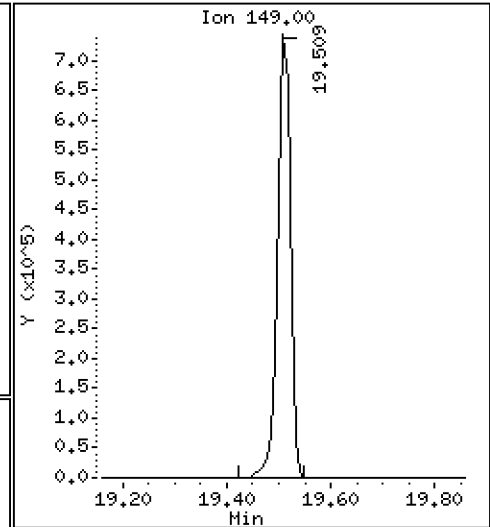
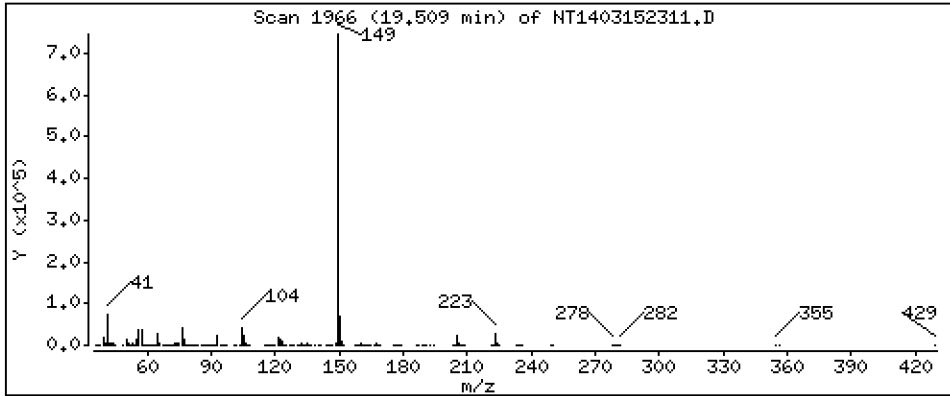
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,507 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

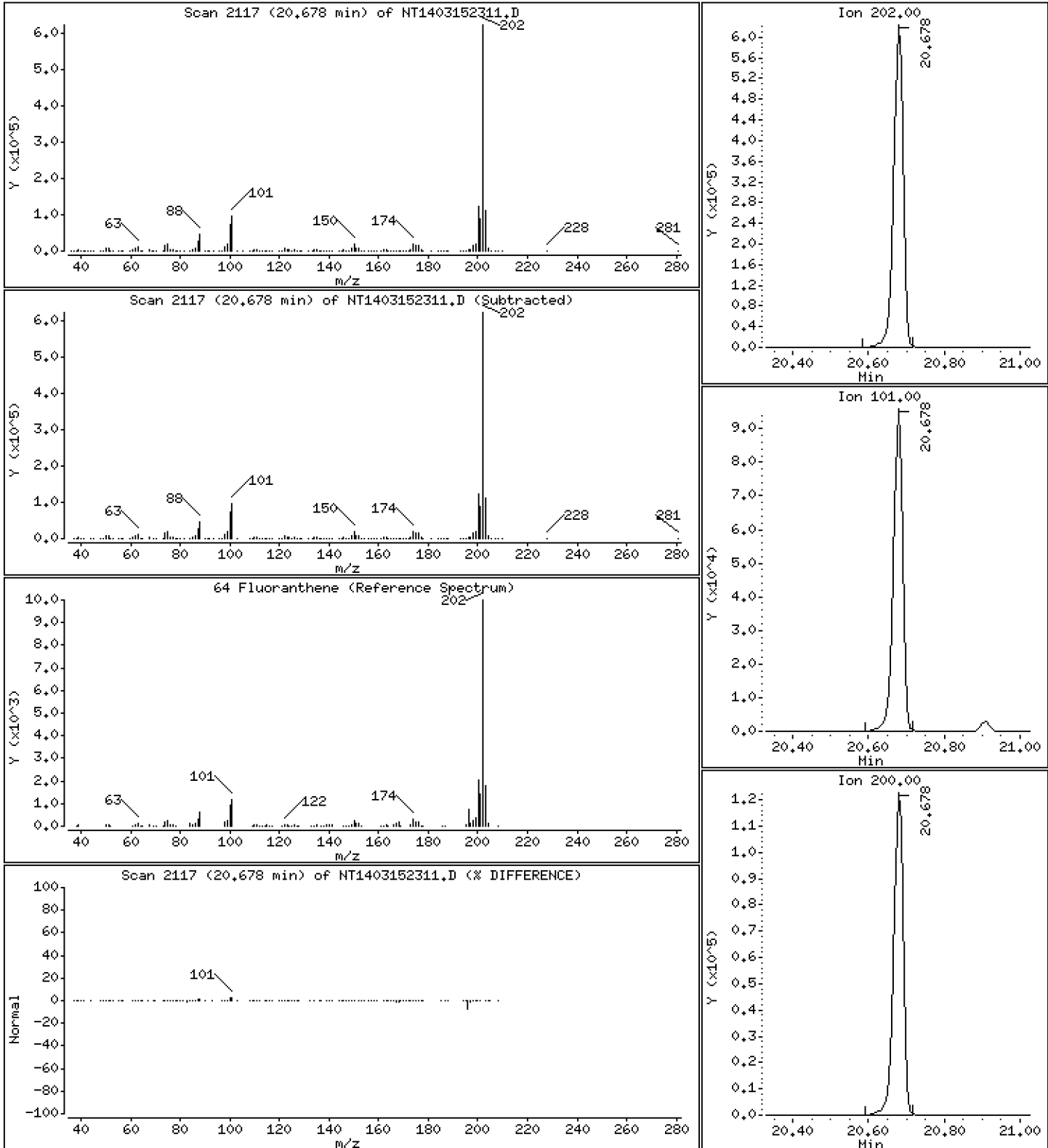
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 5,024 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

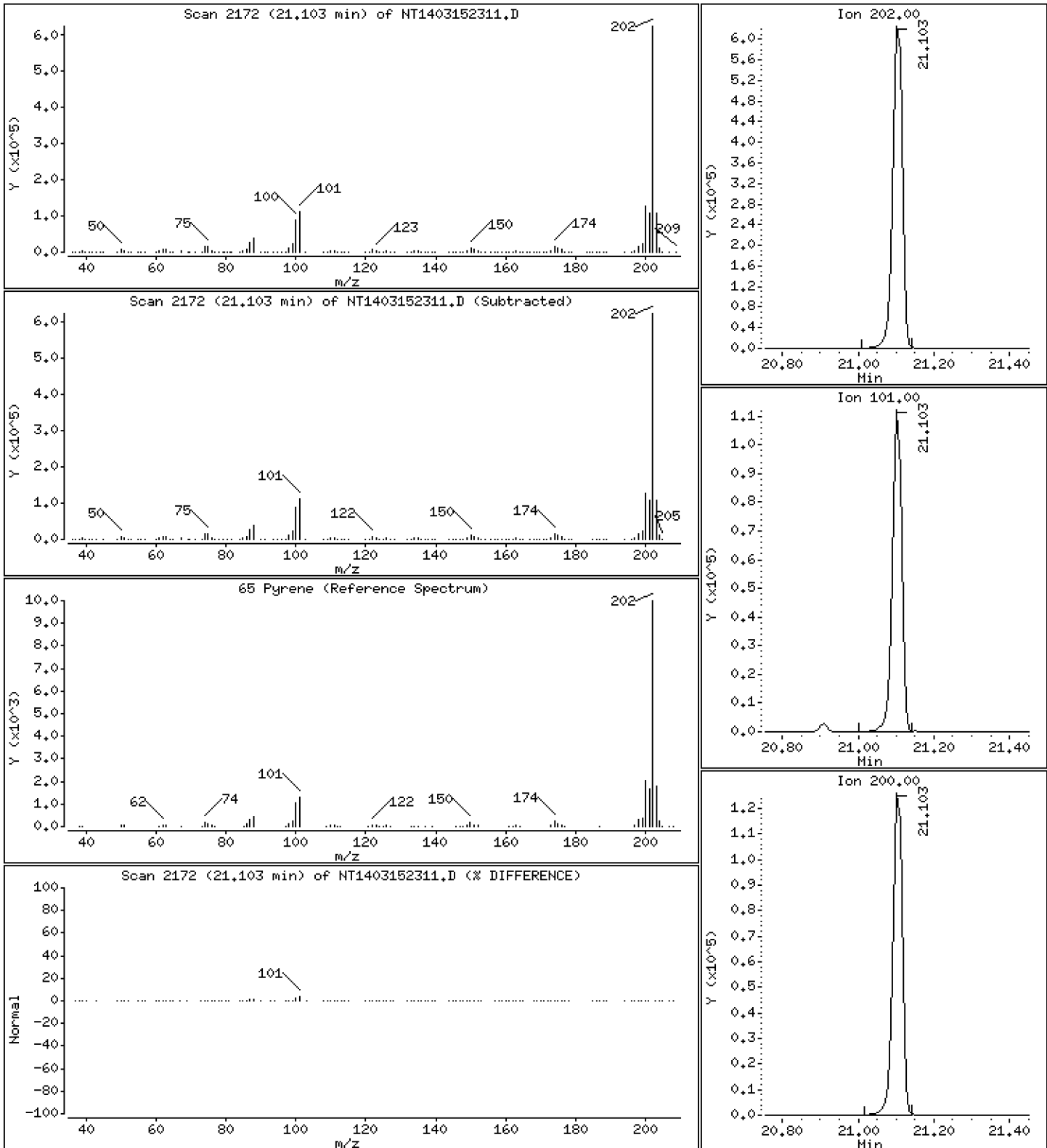
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,958 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

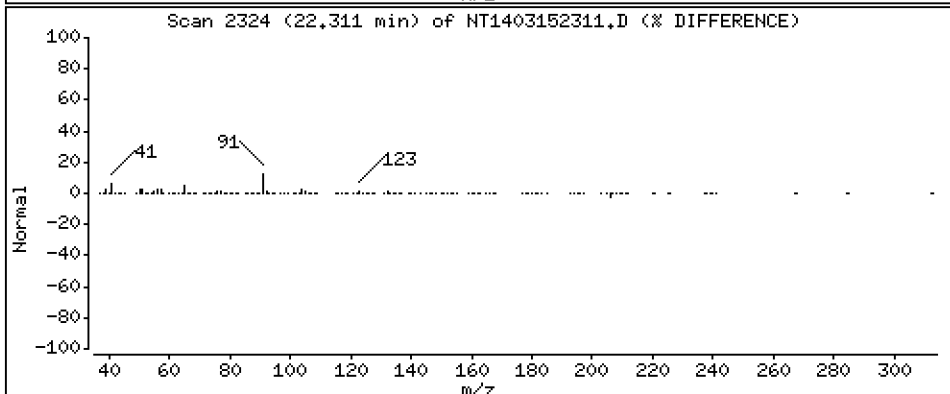
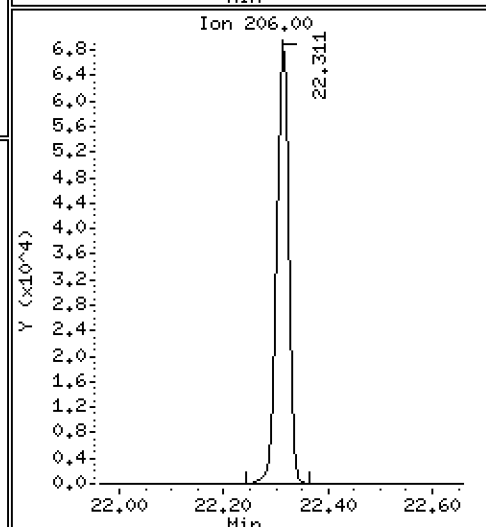
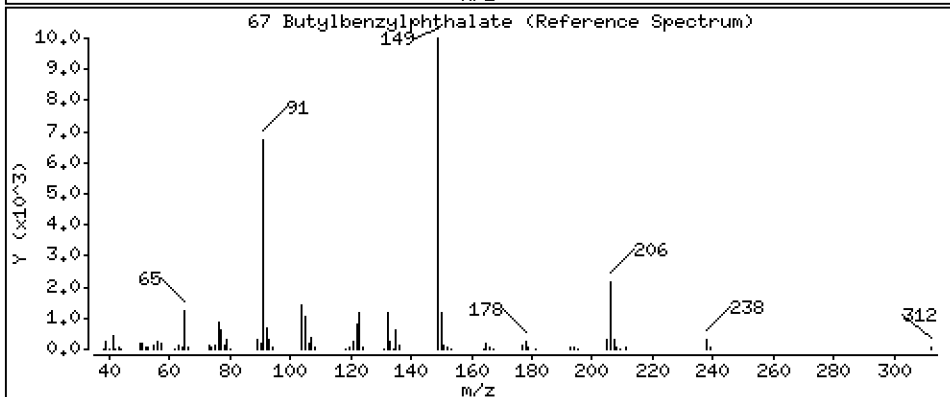
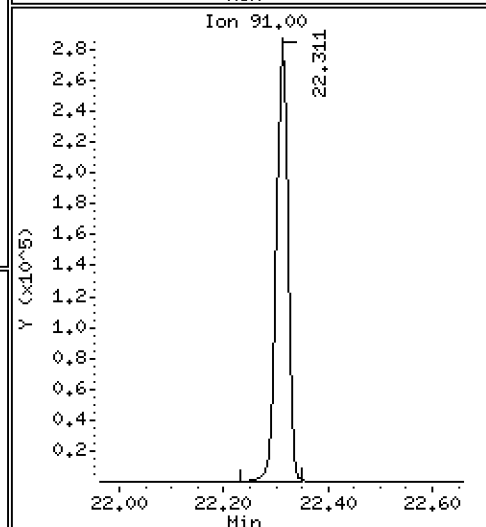
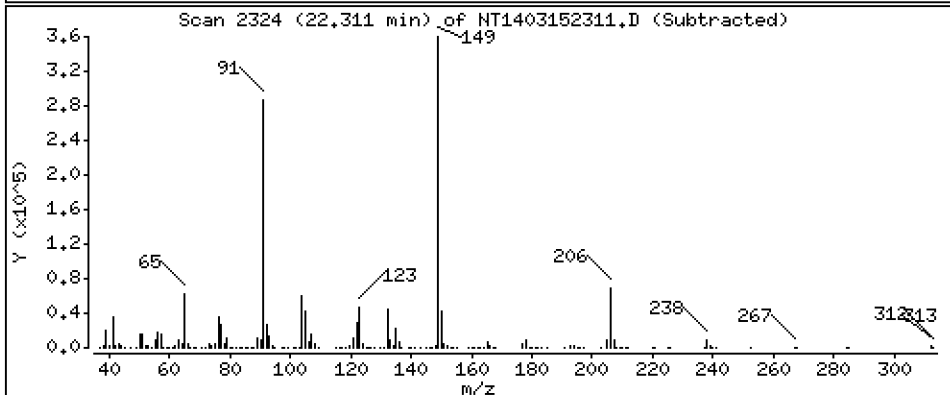
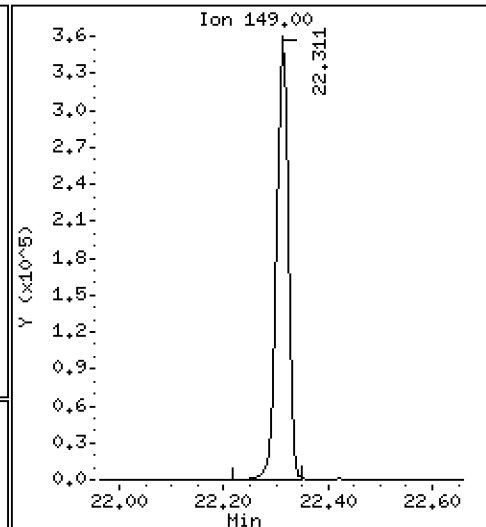
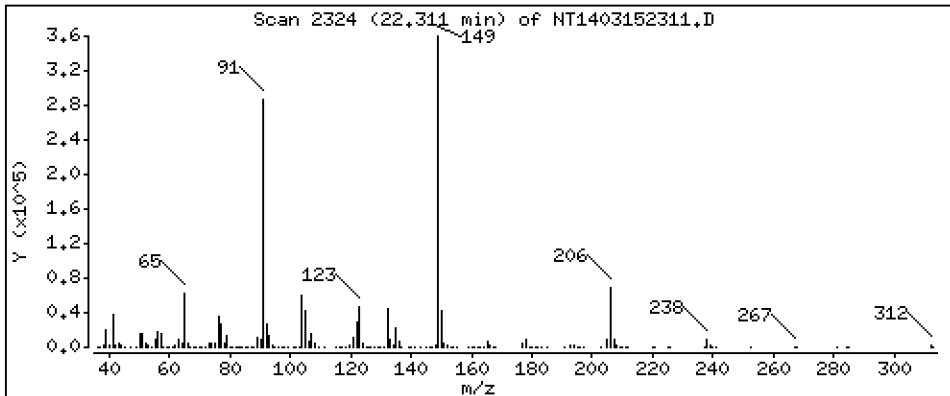
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,737 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

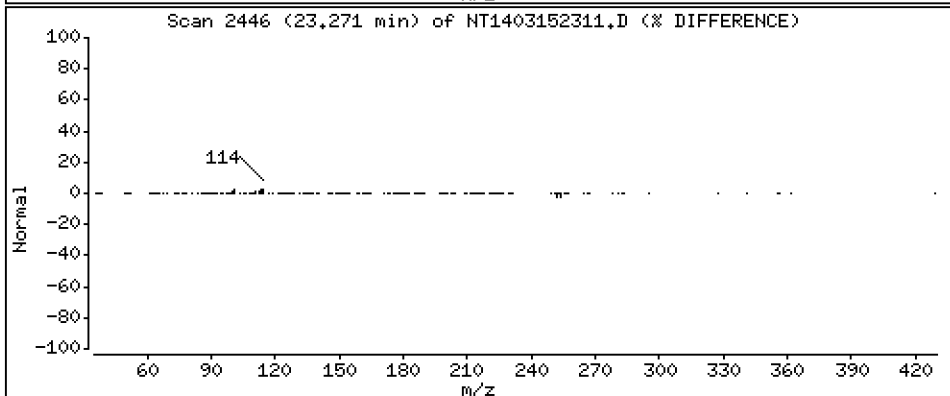
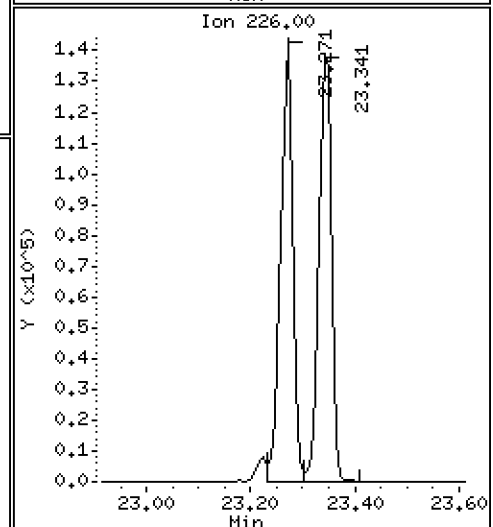
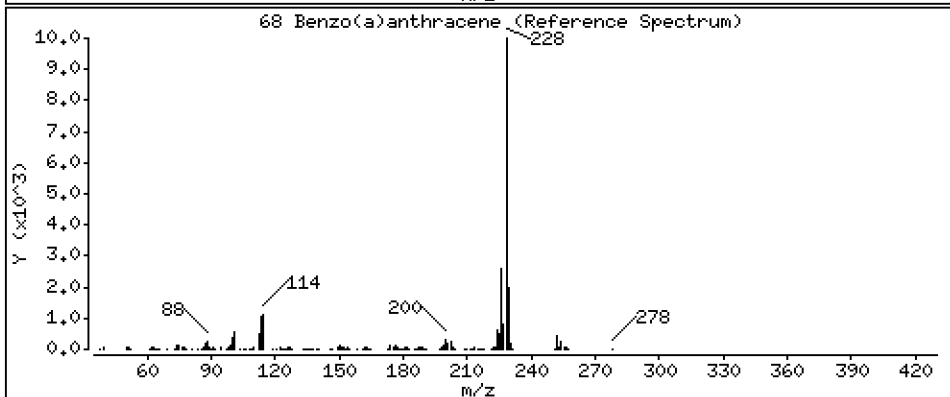
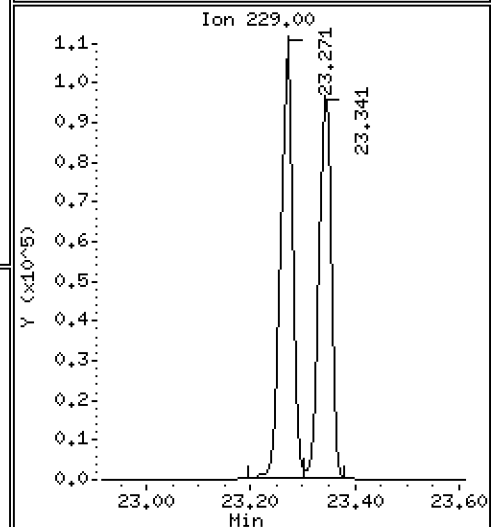
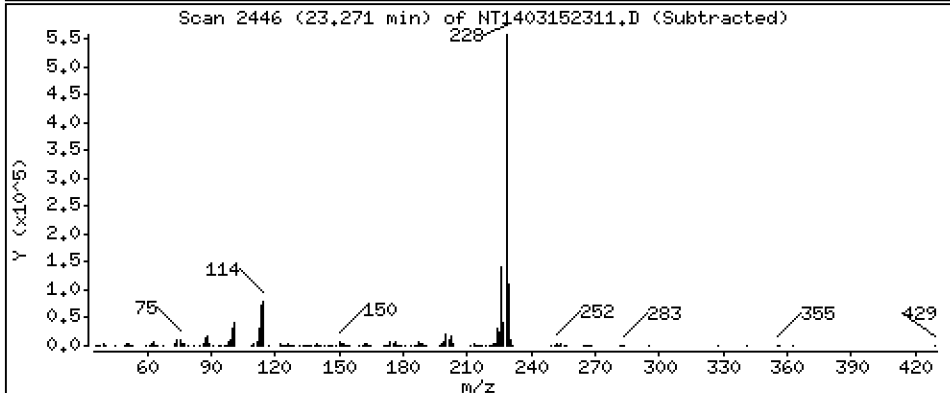
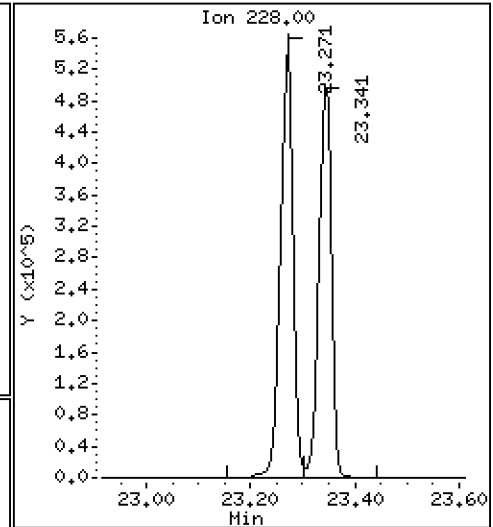
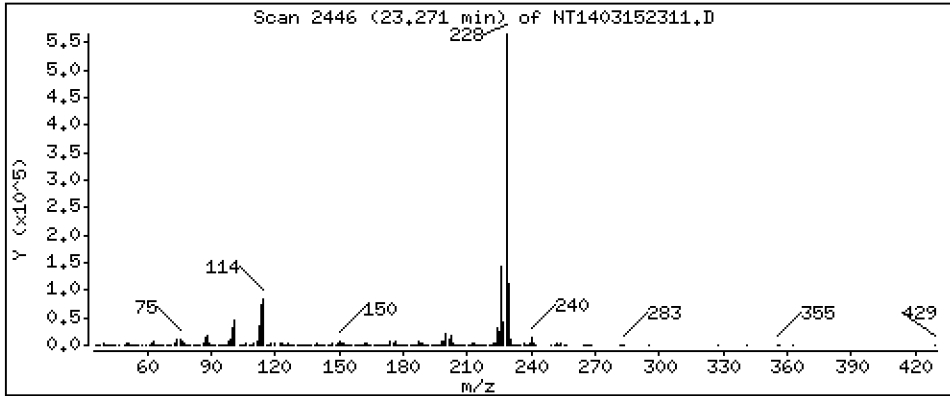
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,827 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

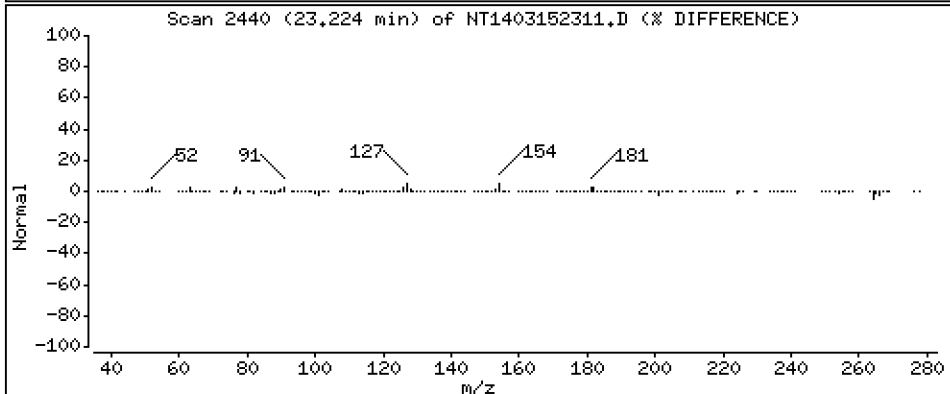
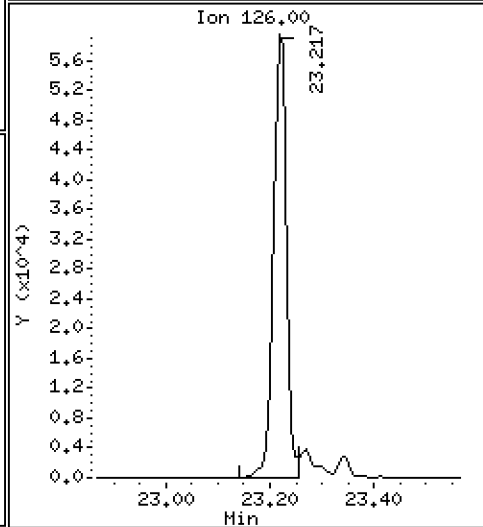
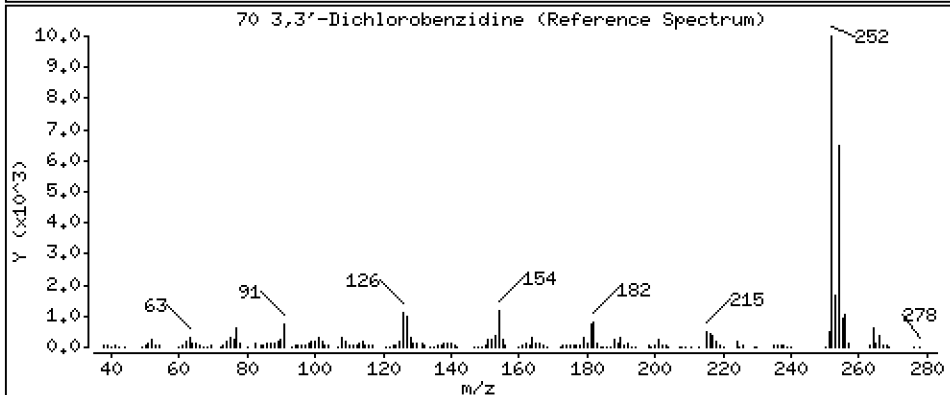
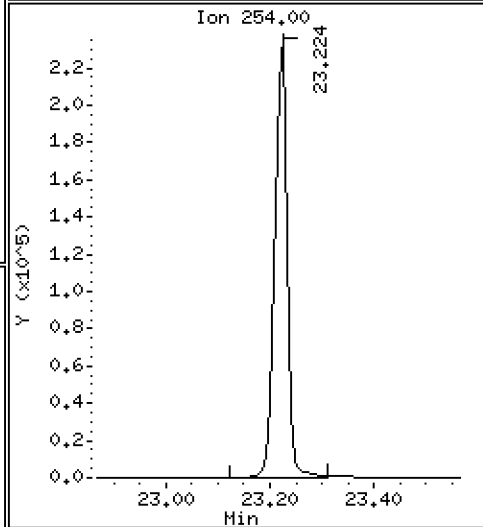
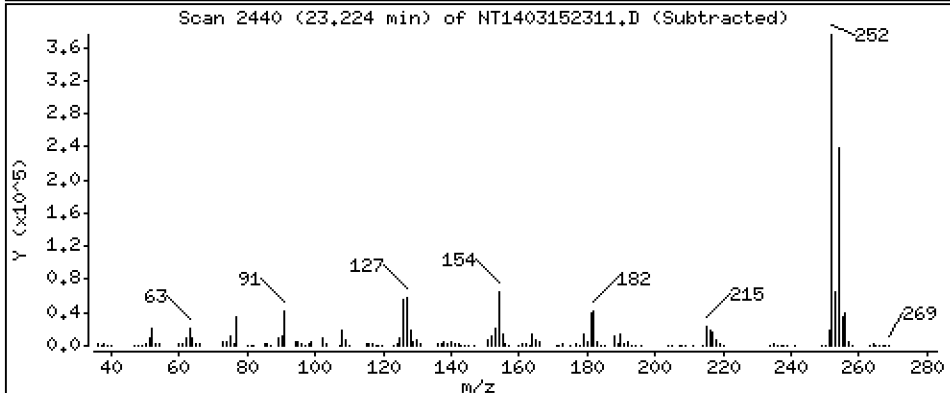
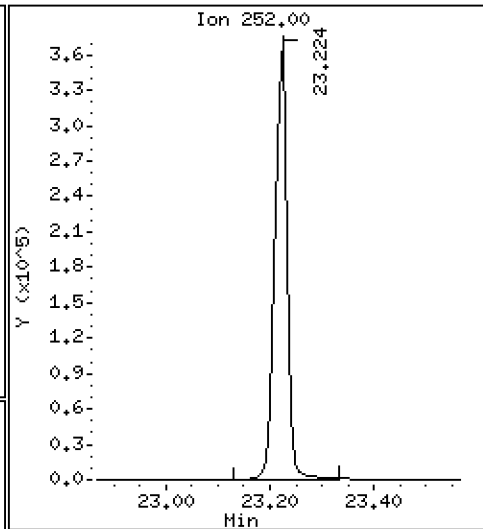
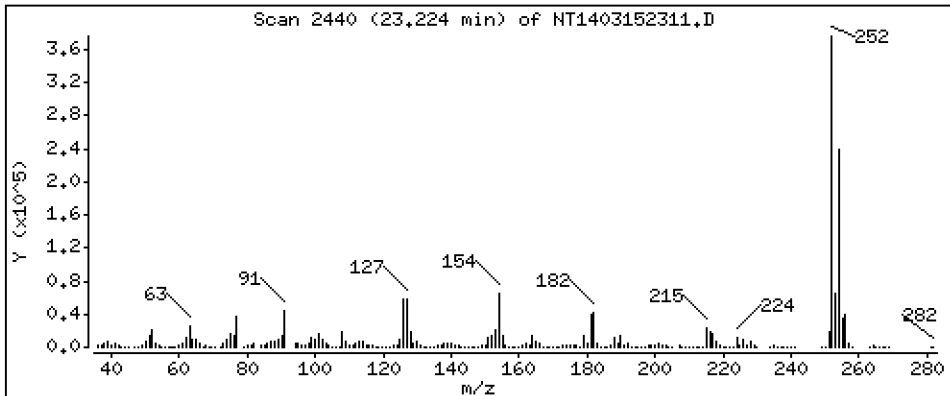
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 10,65 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

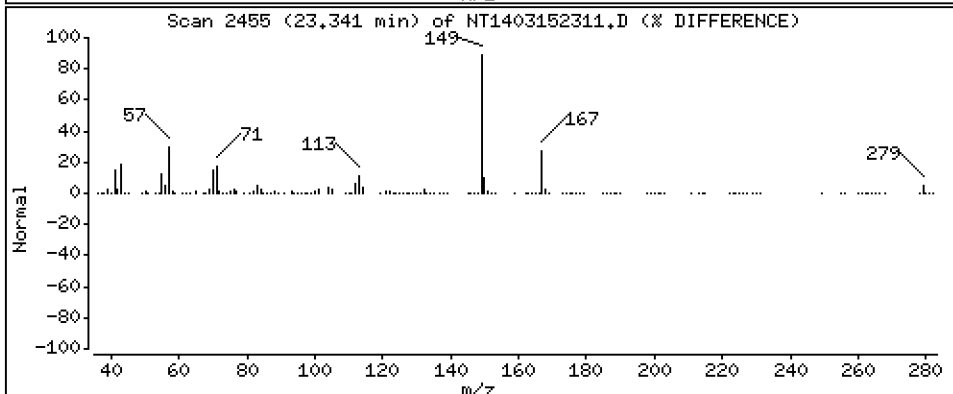
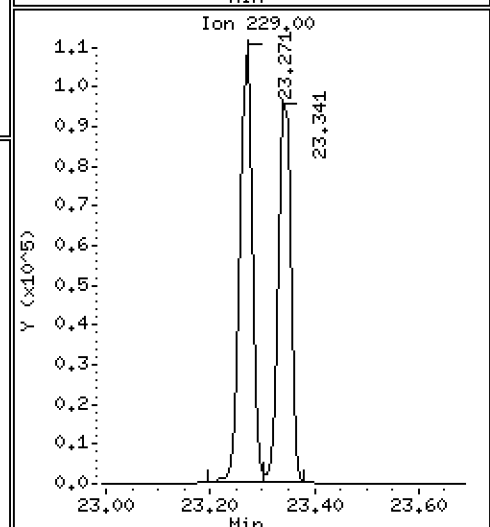
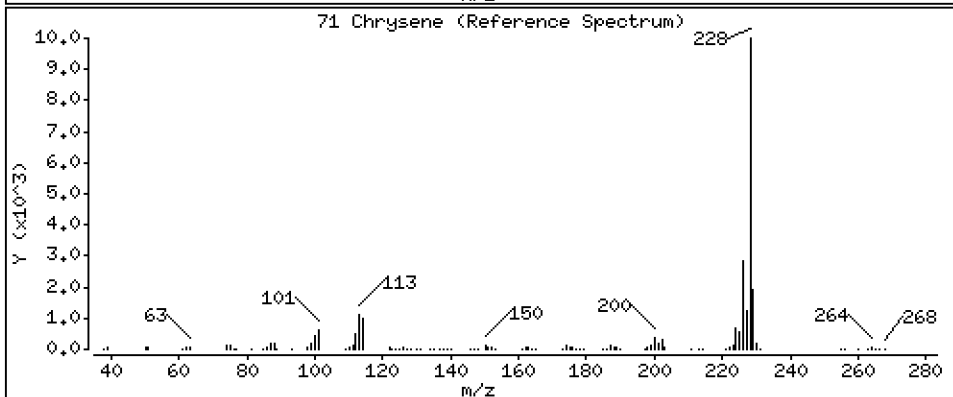
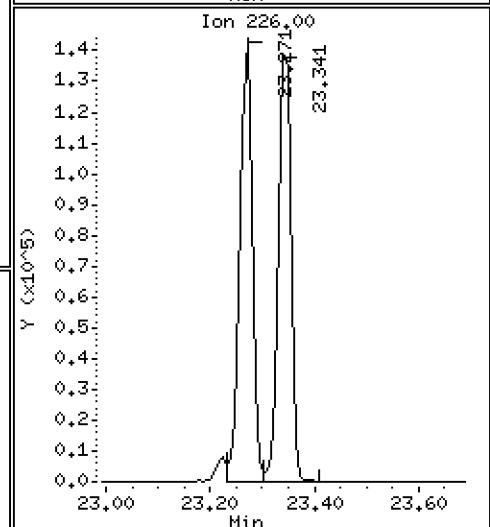
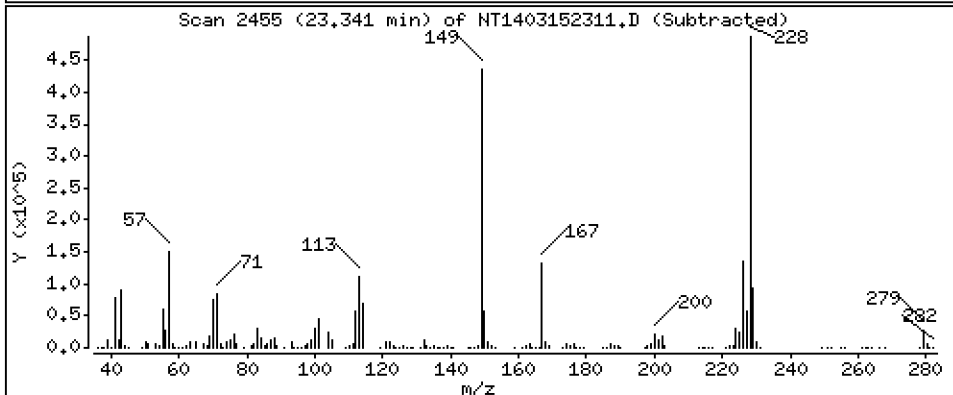
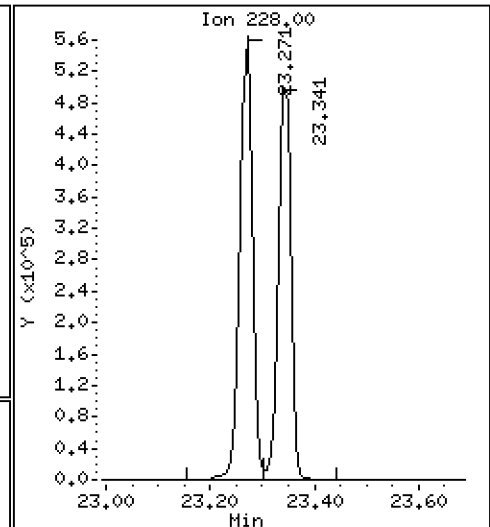
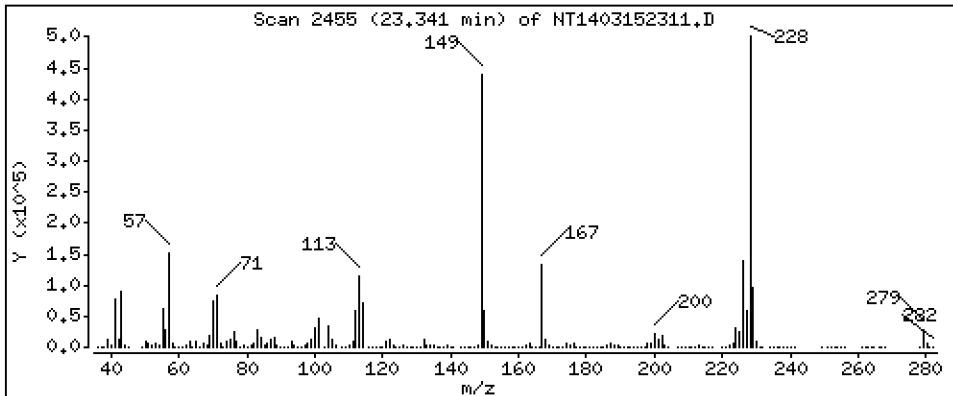
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 4,723 ug/mL

71 Chrysene



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

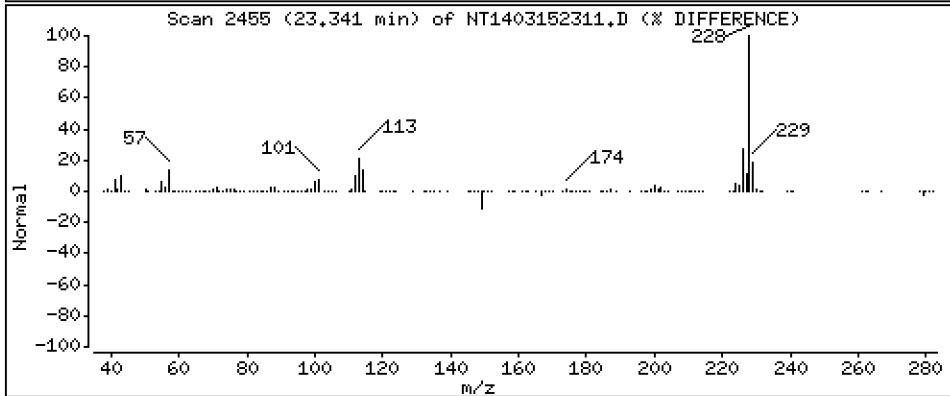
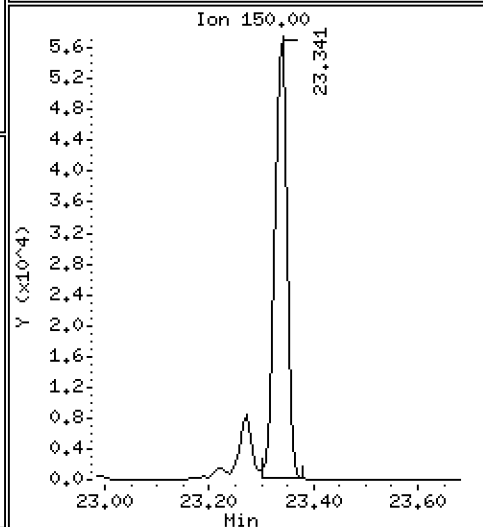
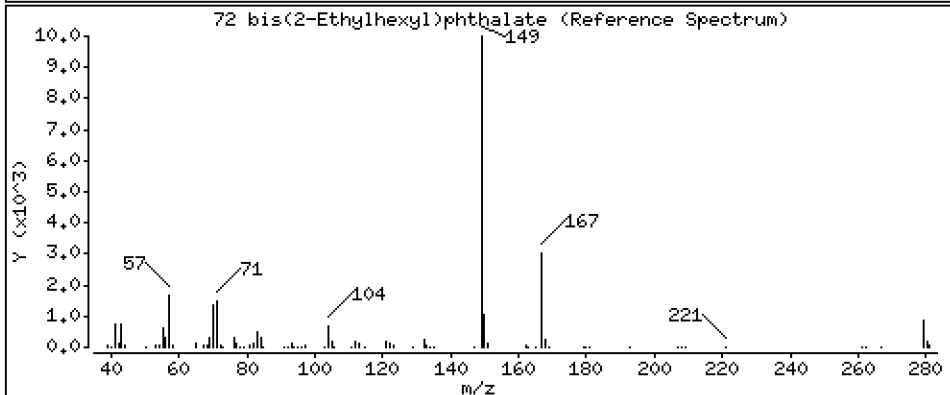
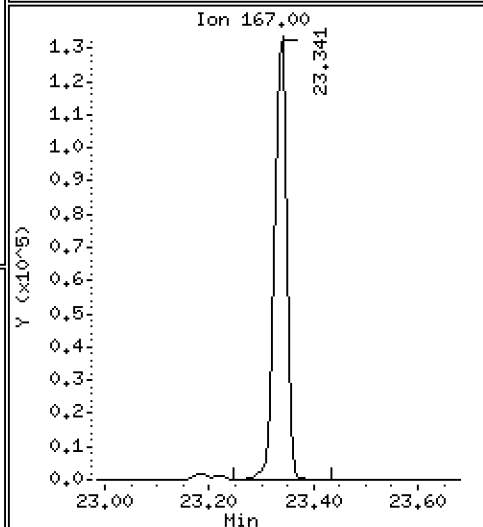
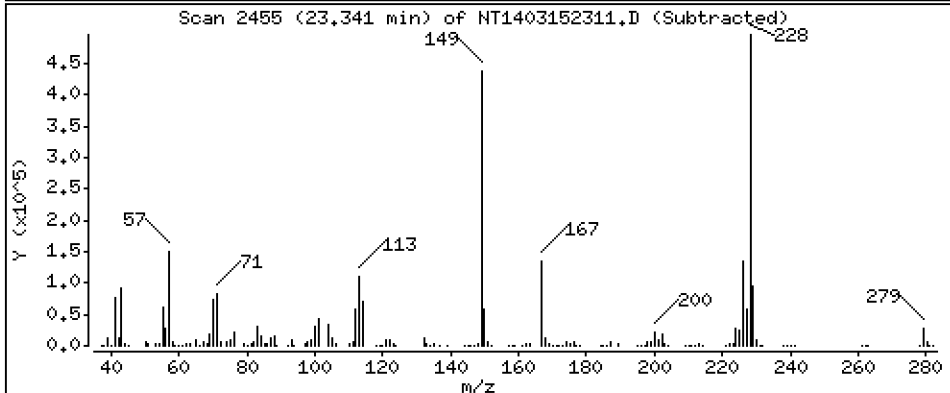
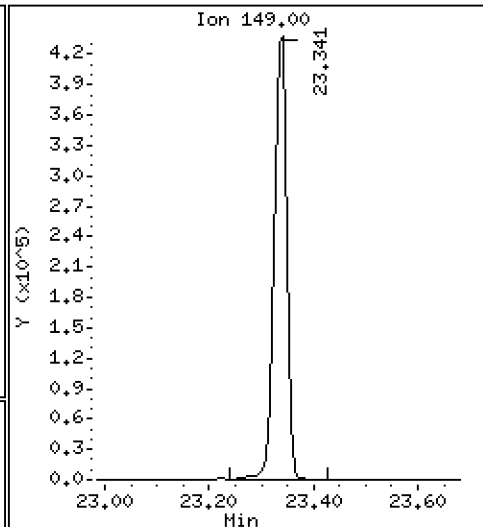
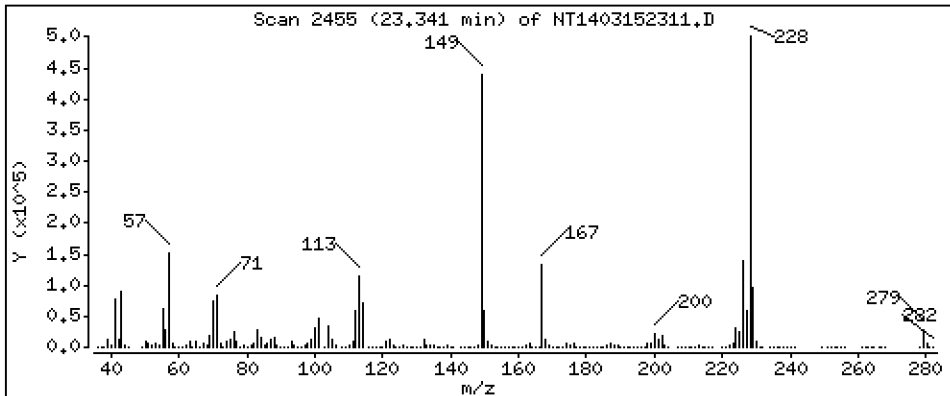
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 5,428 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

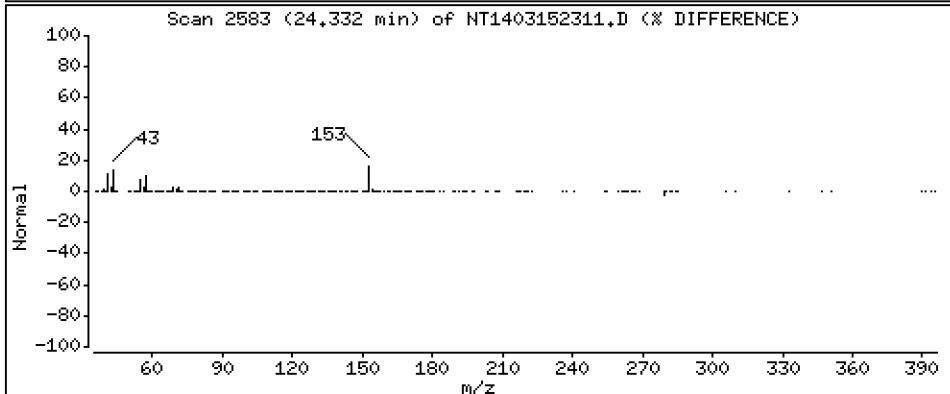
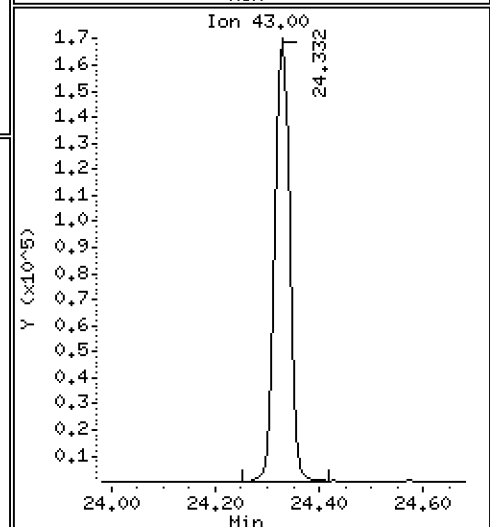
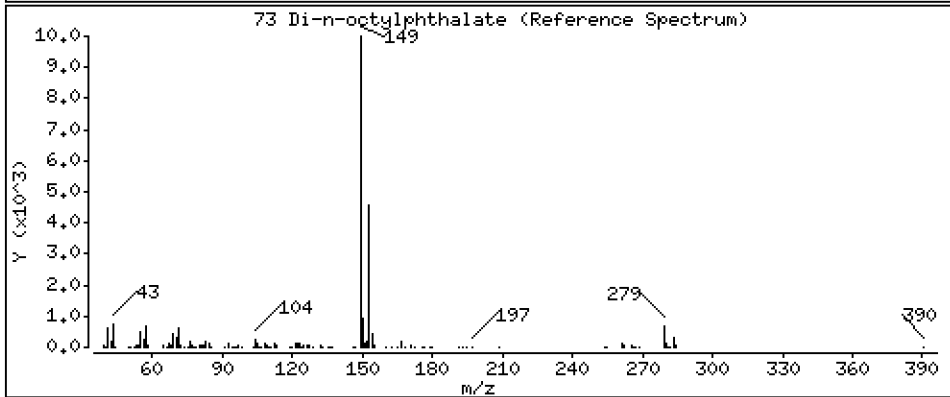
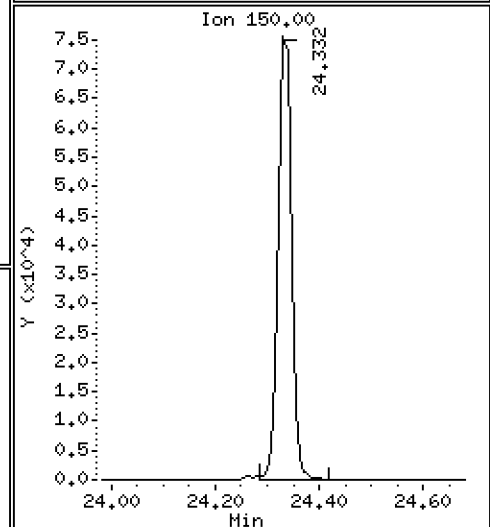
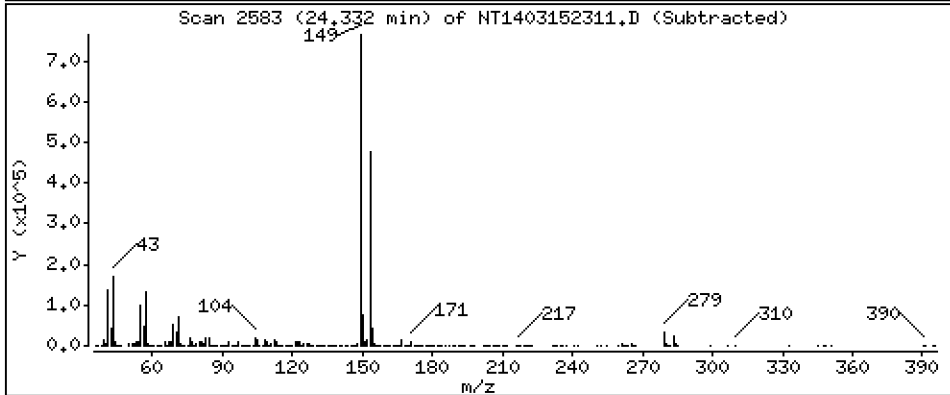
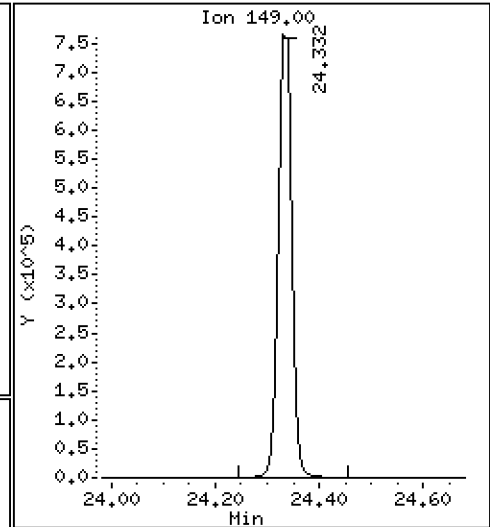
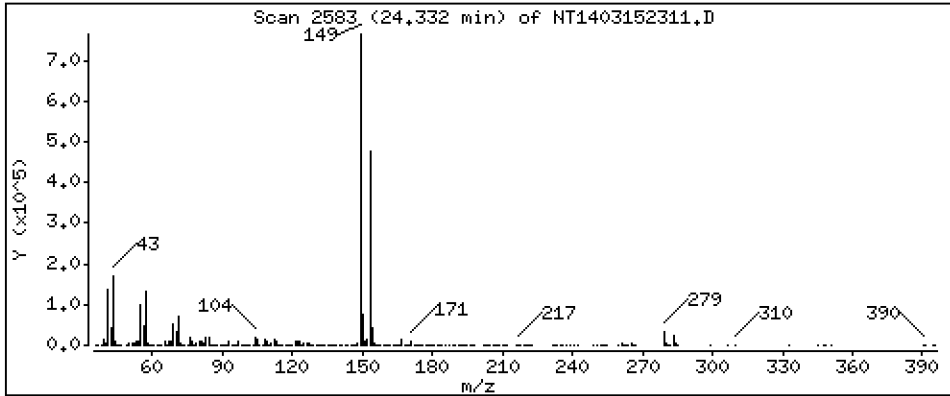
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,135 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

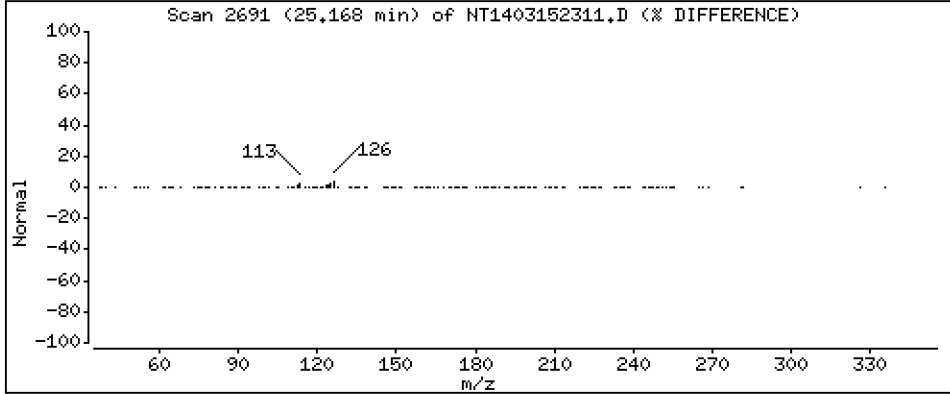
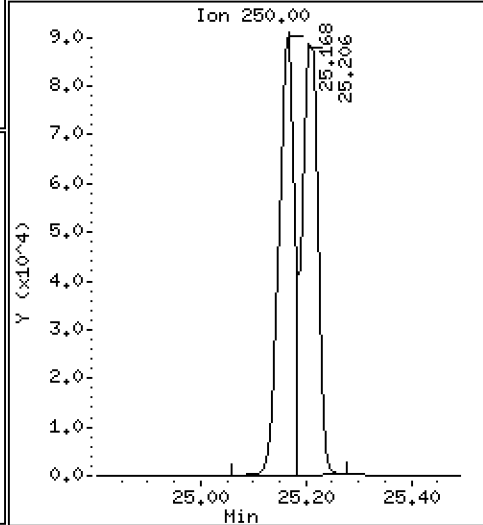
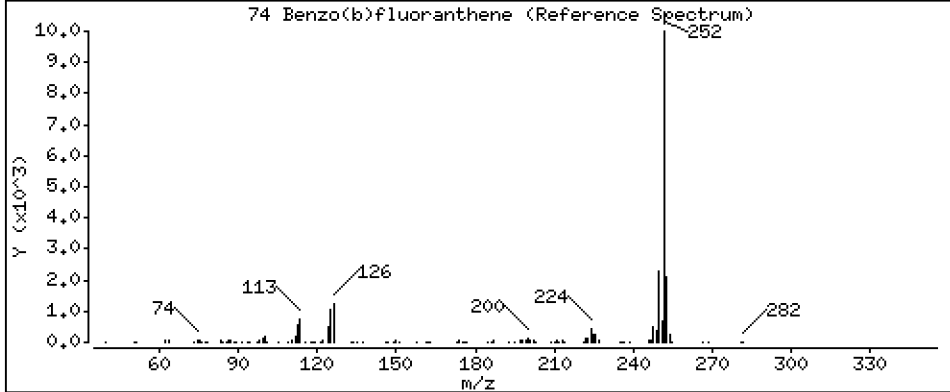
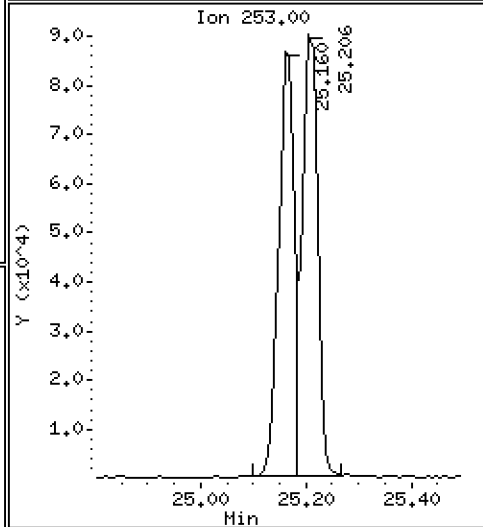
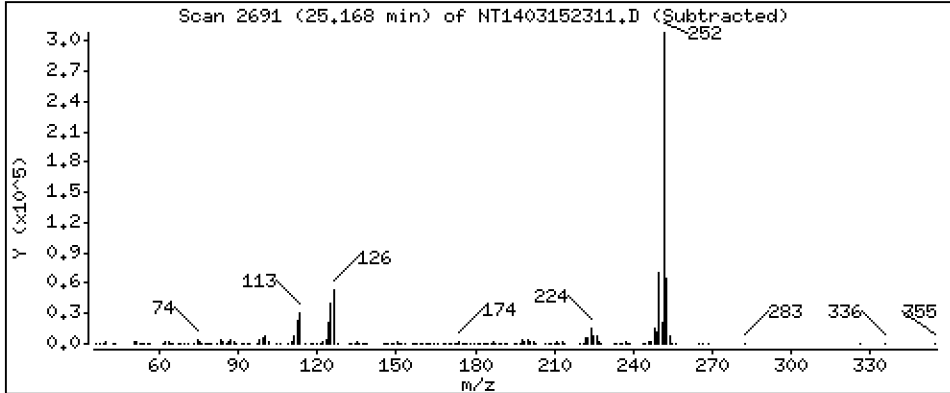
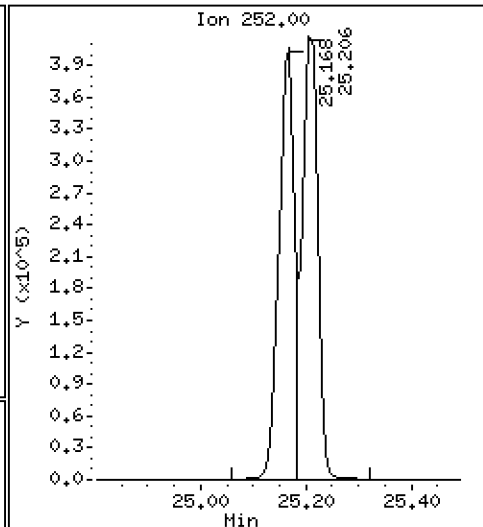
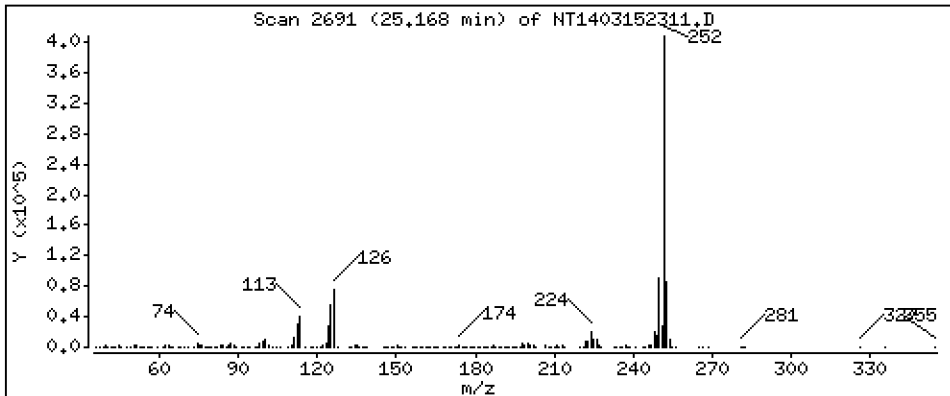
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,774 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

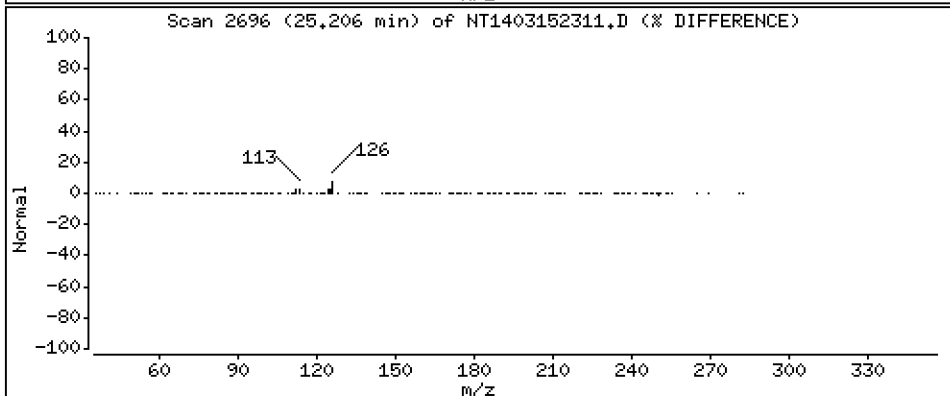
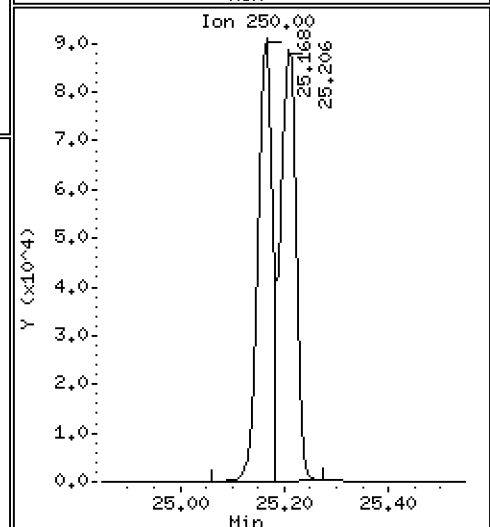
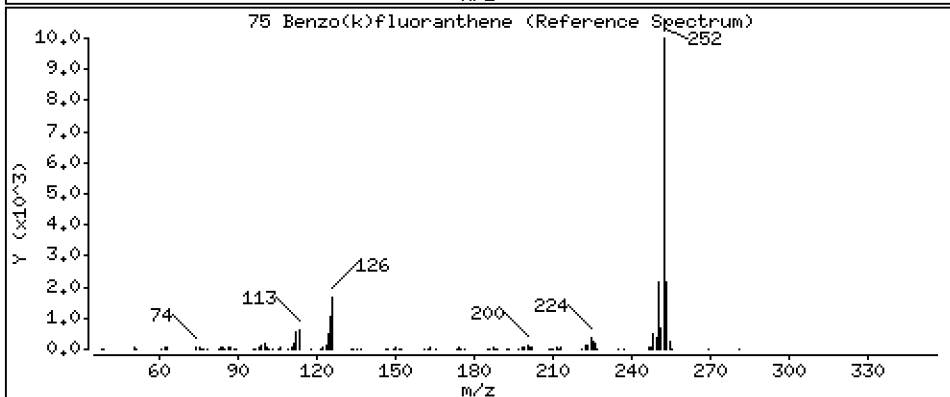
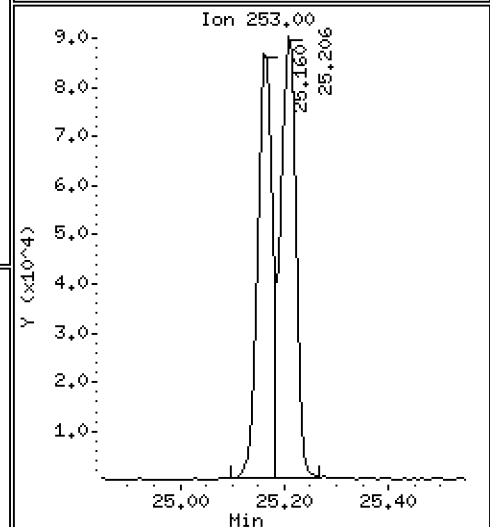
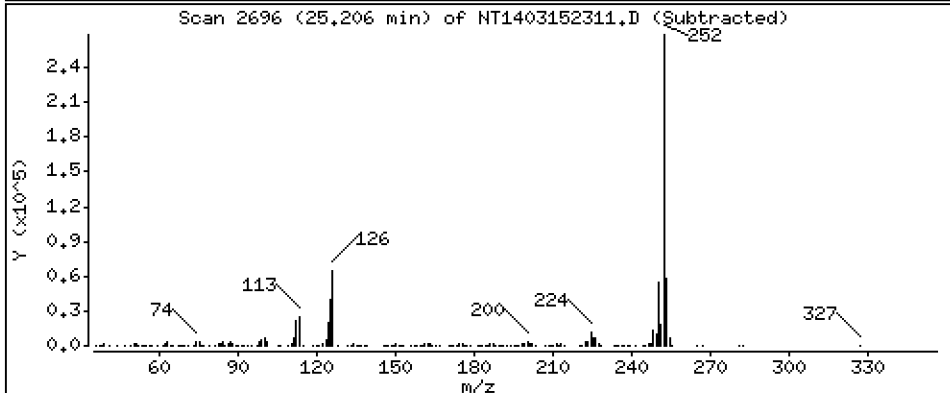
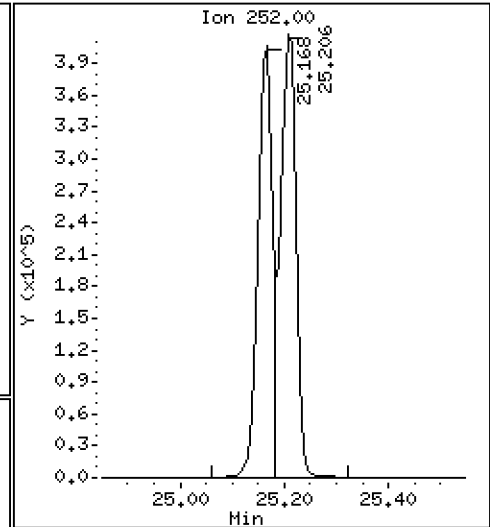
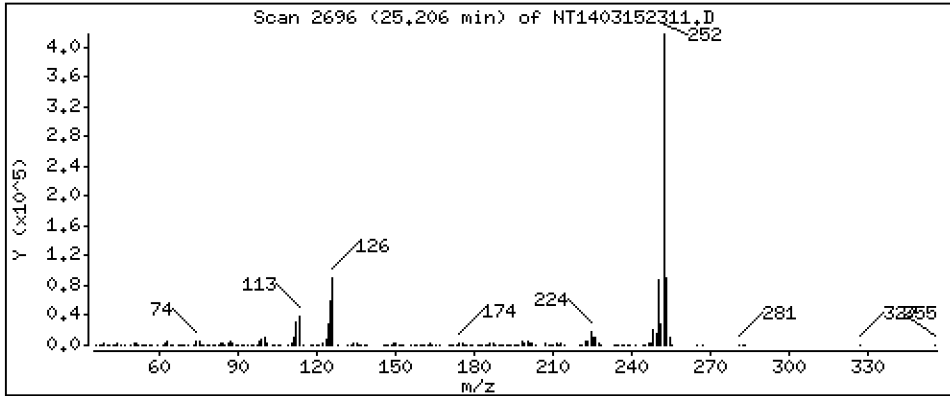
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,100 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

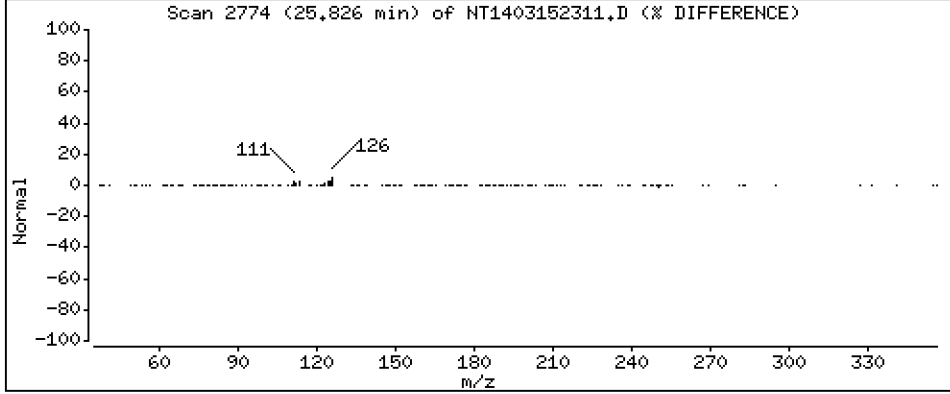
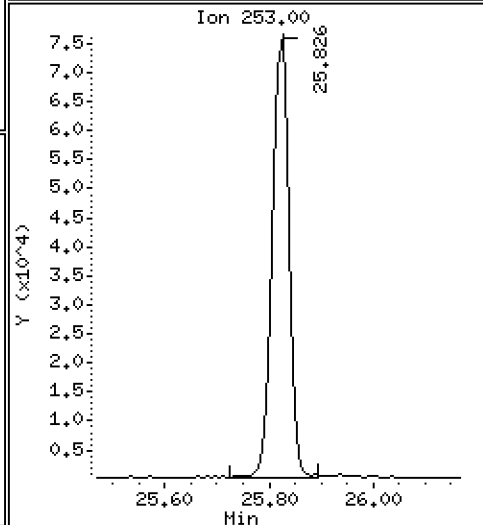
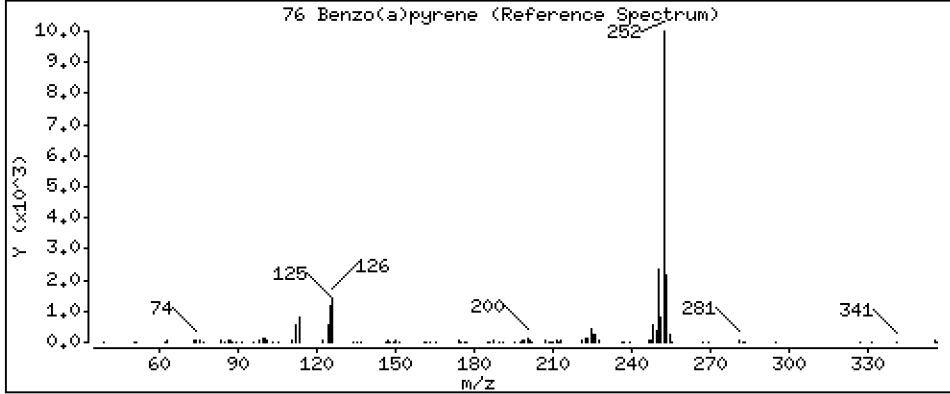
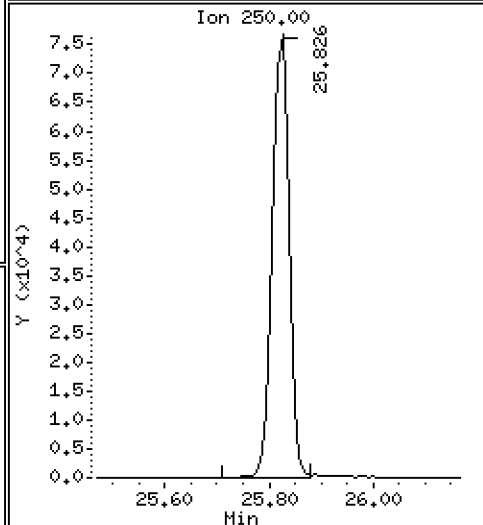
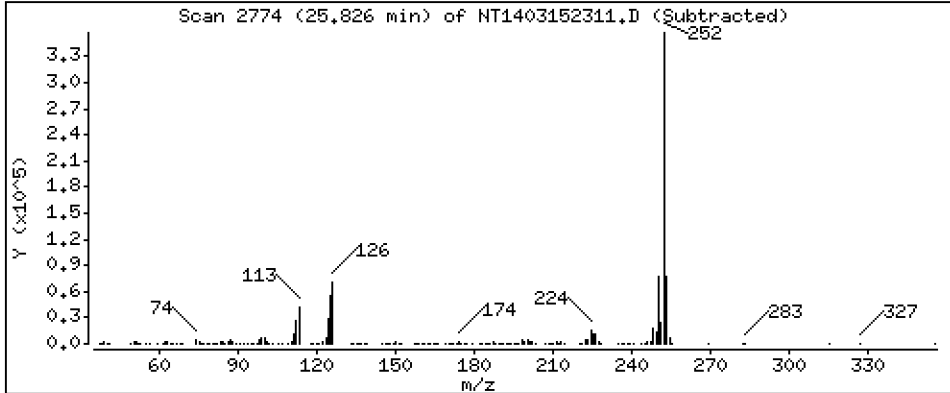
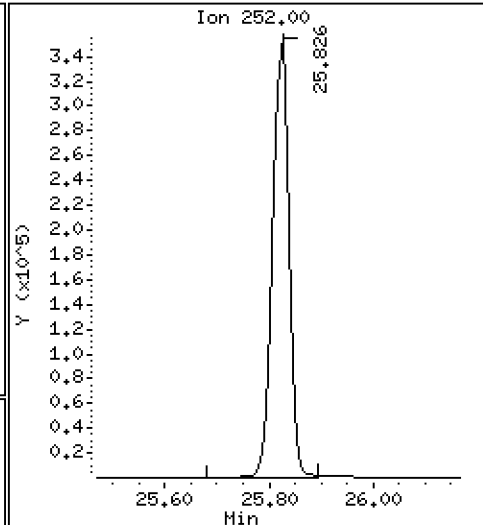
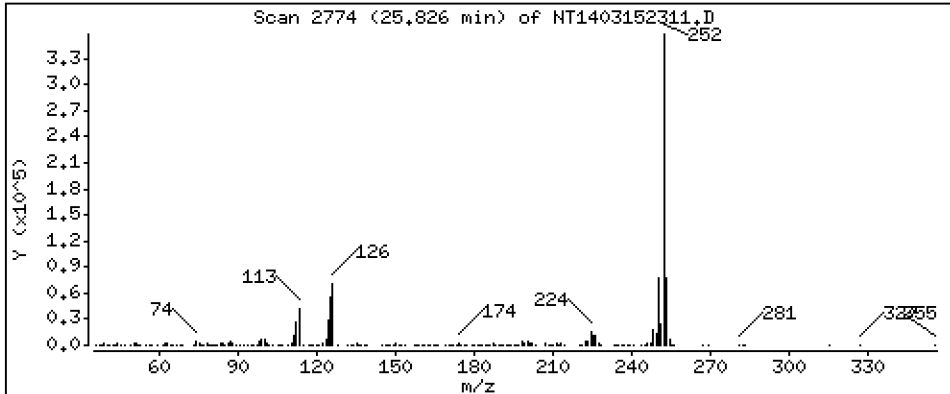
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,978 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

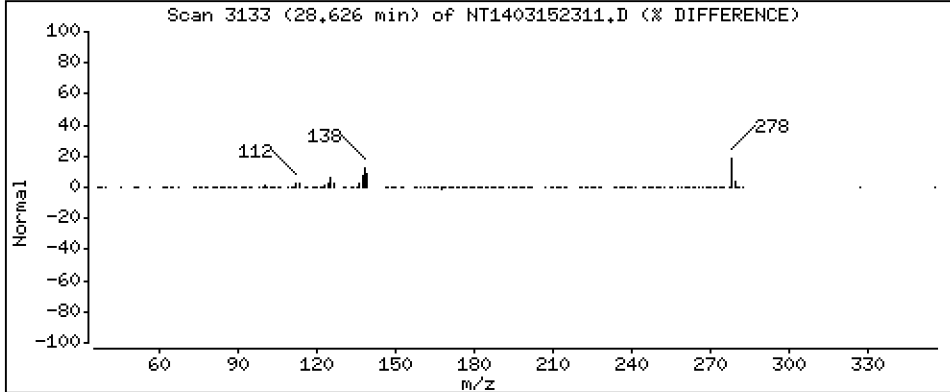
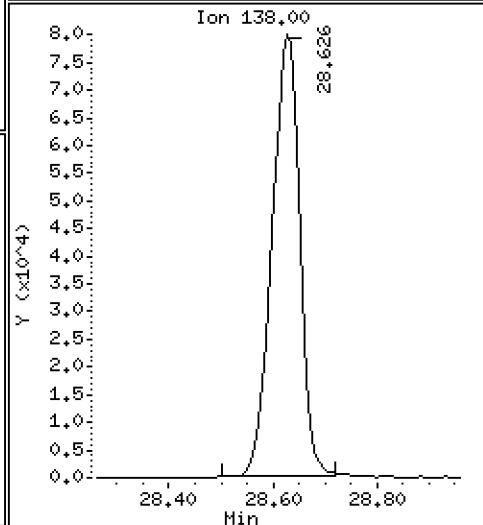
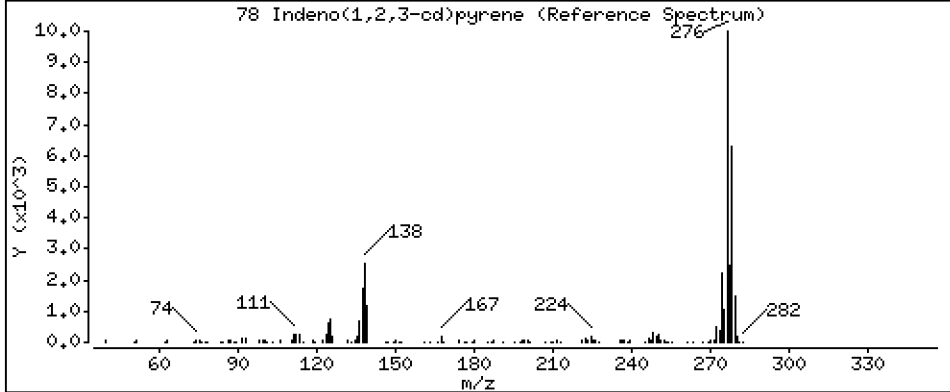
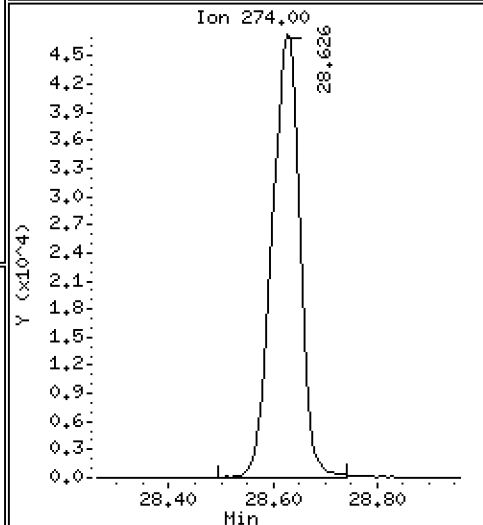
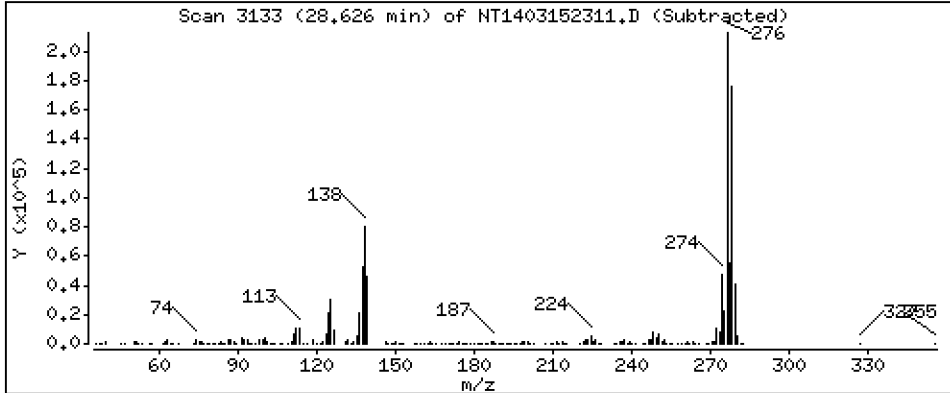
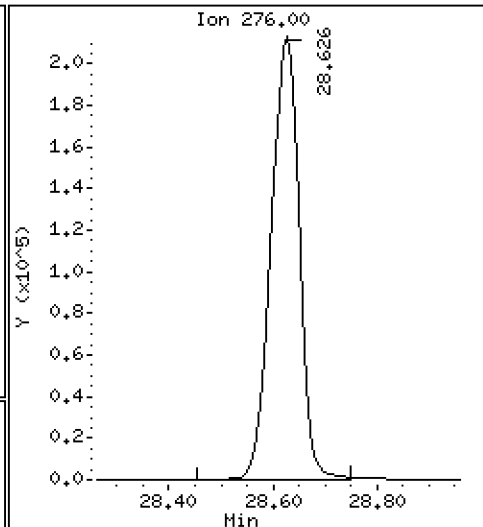
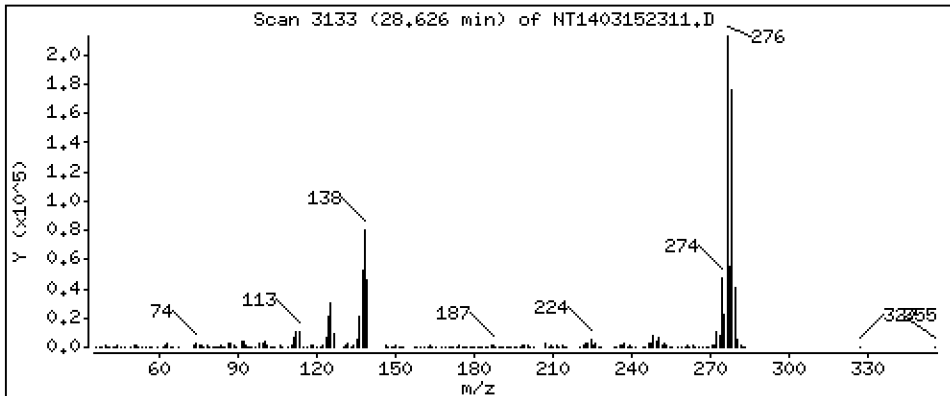
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,943 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

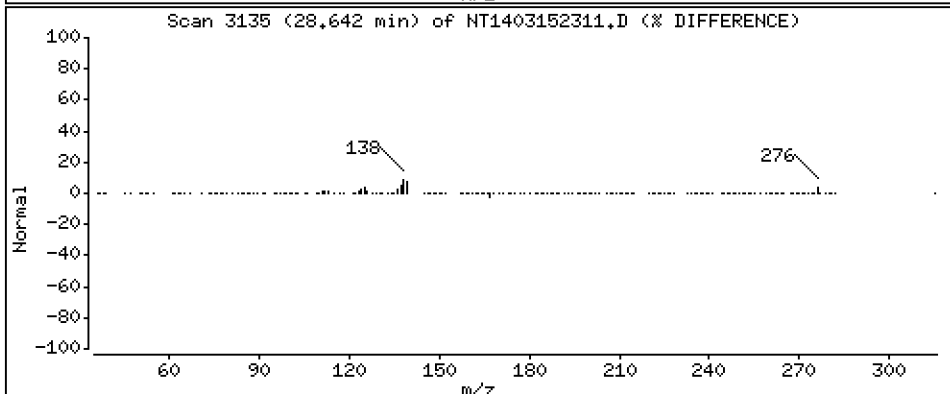
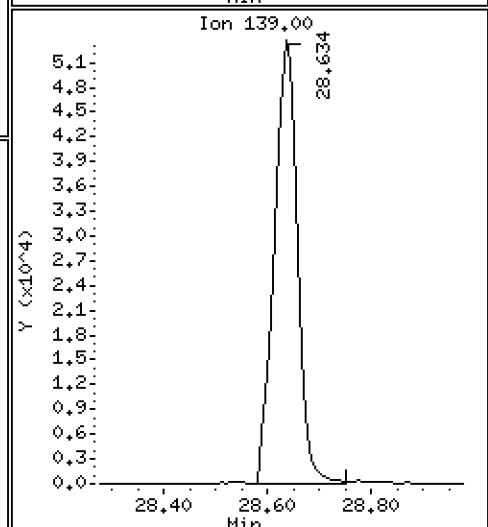
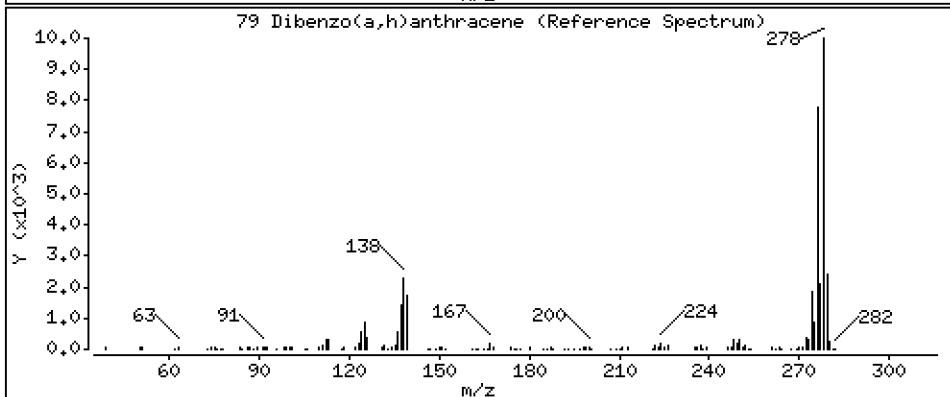
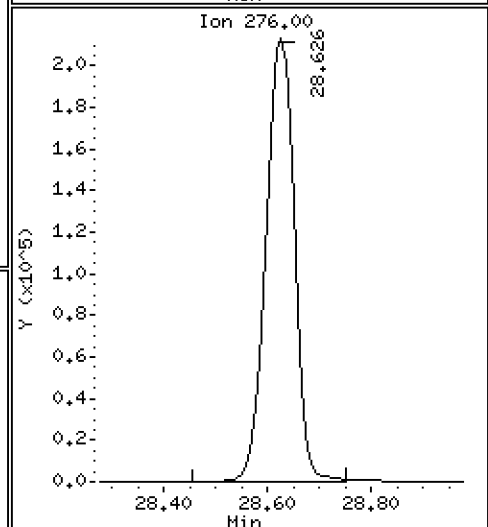
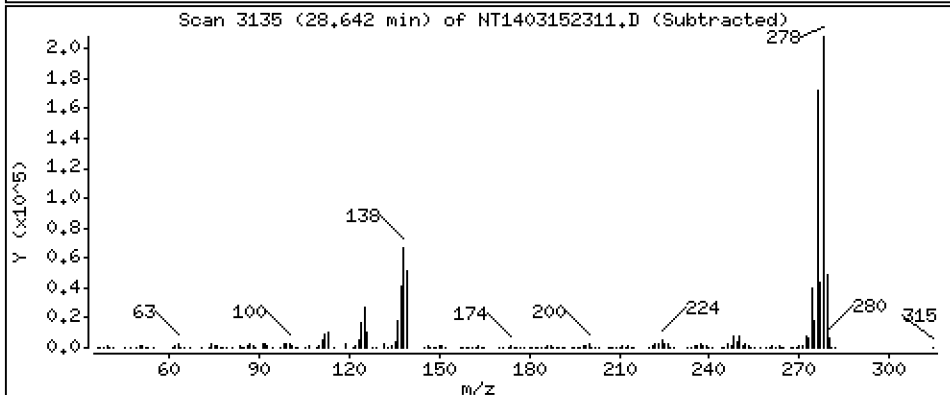
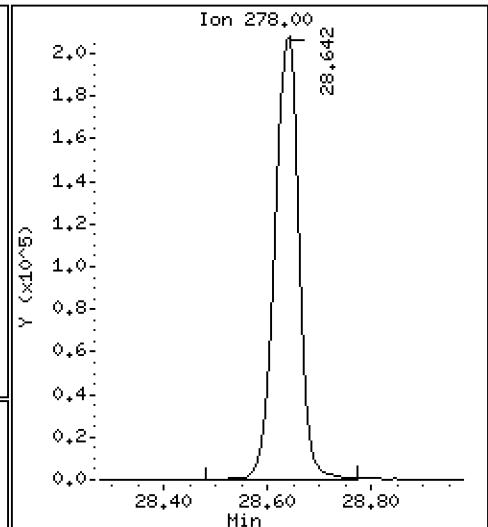
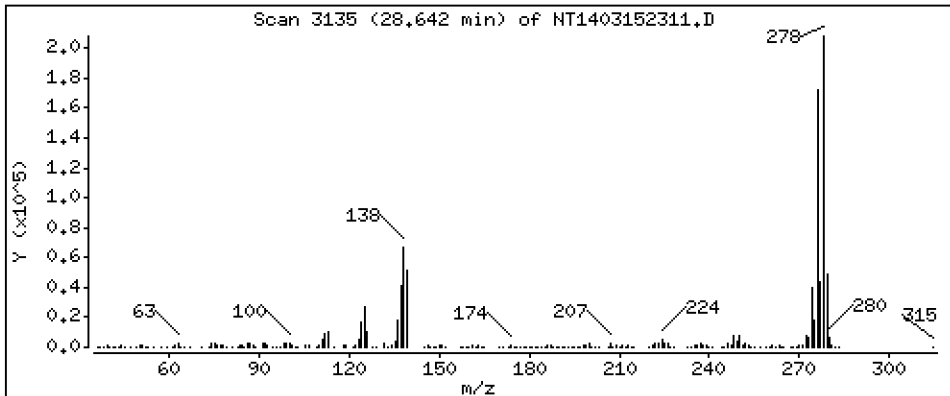
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,865 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

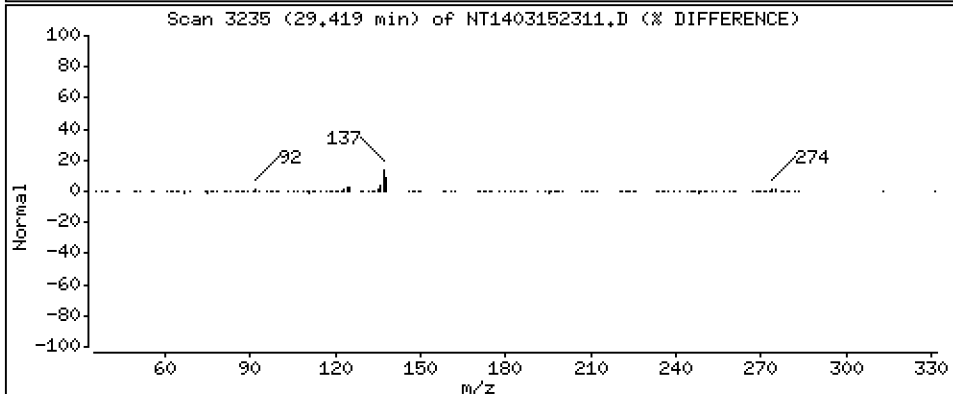
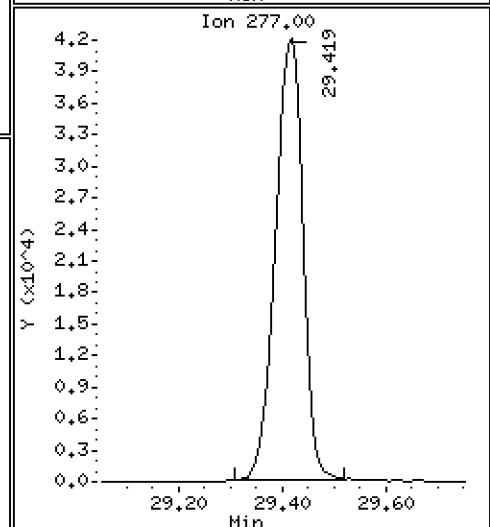
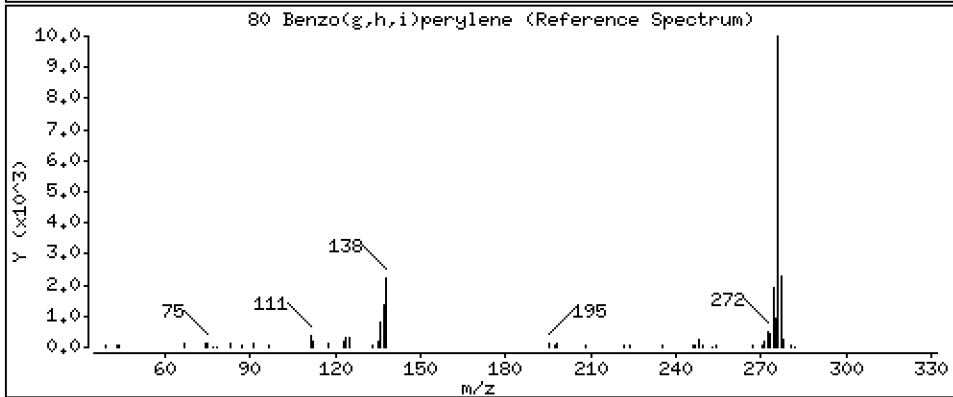
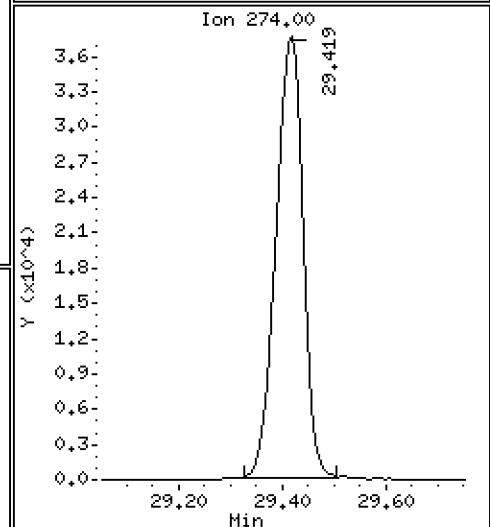
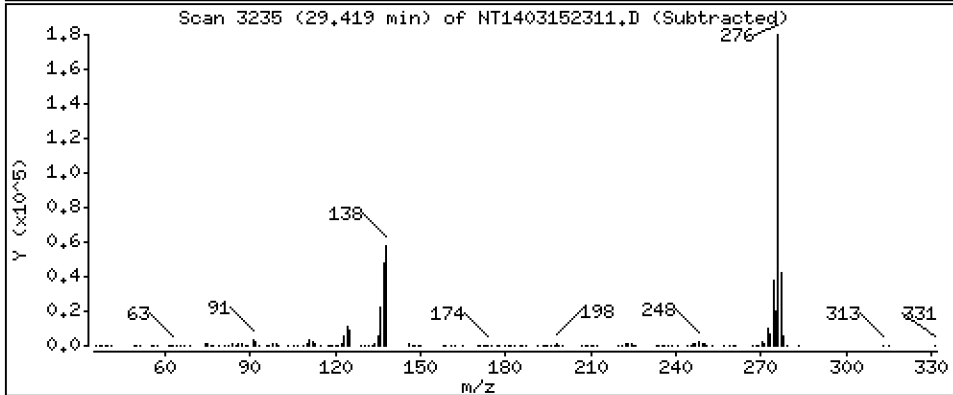
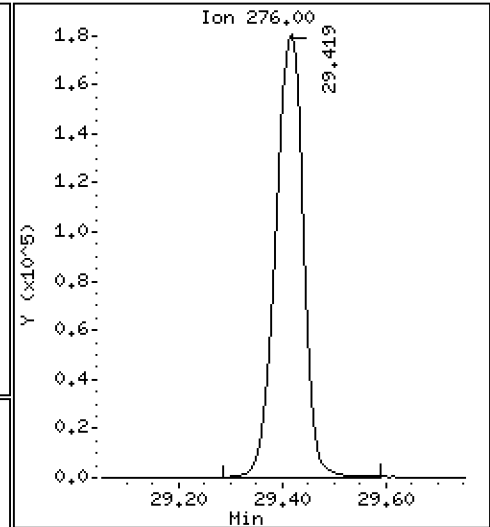
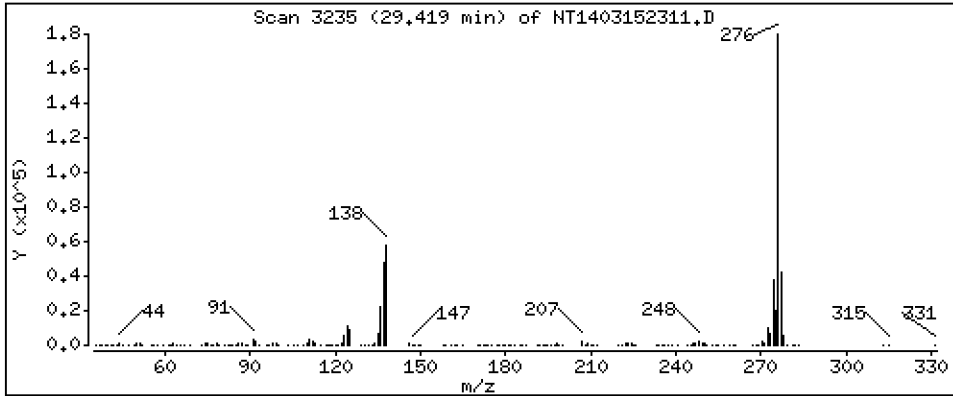
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,939 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

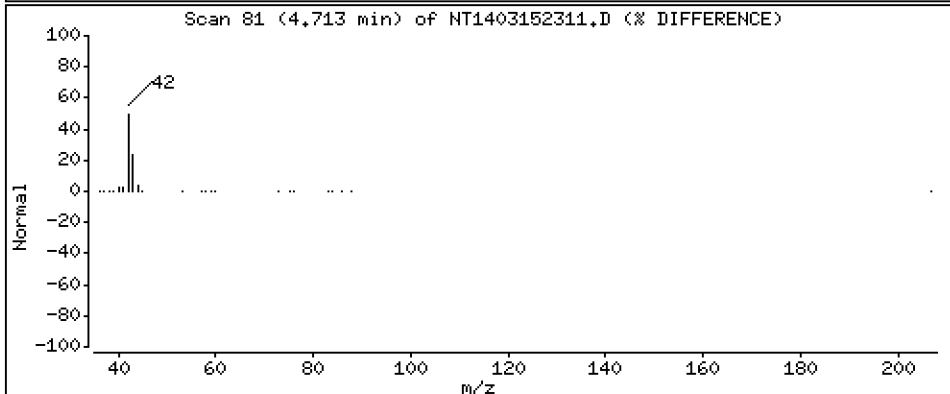
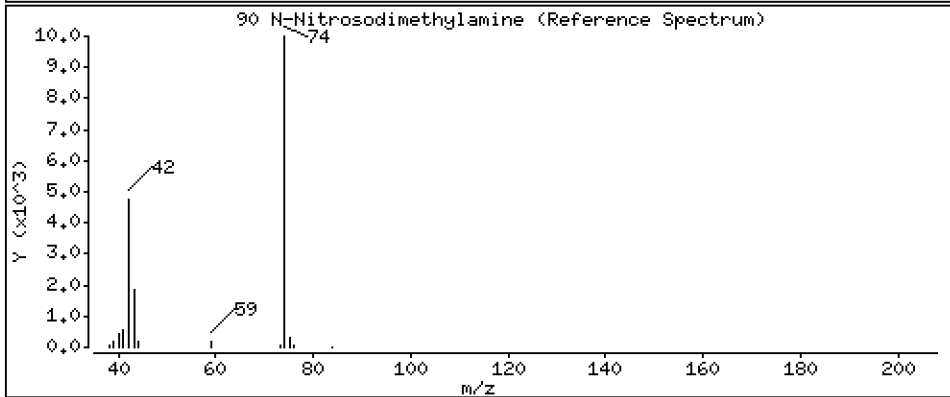
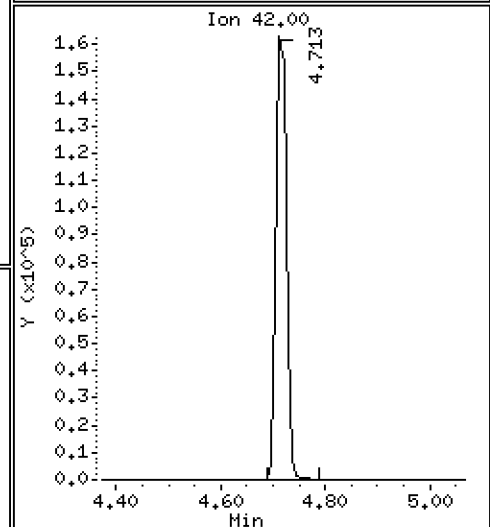
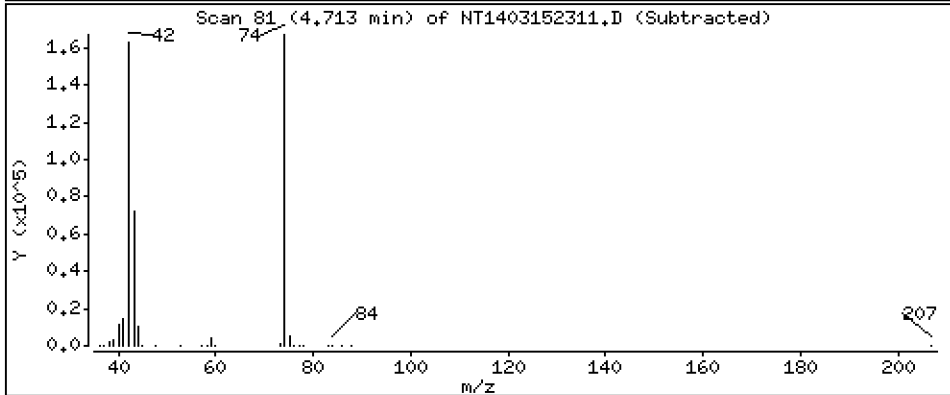
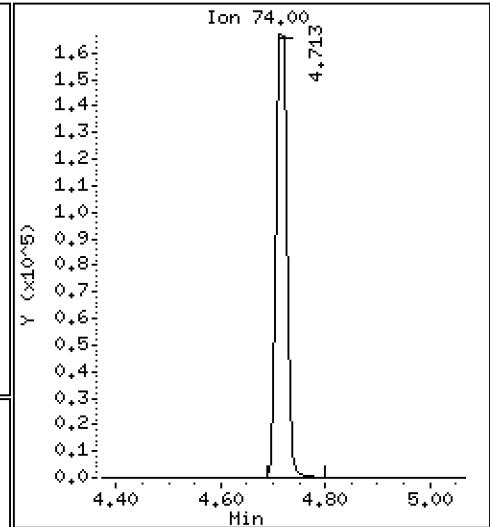
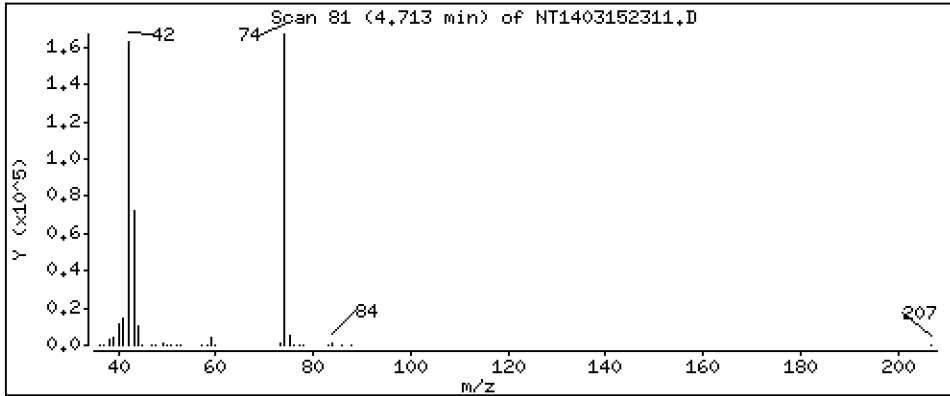
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5,200 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

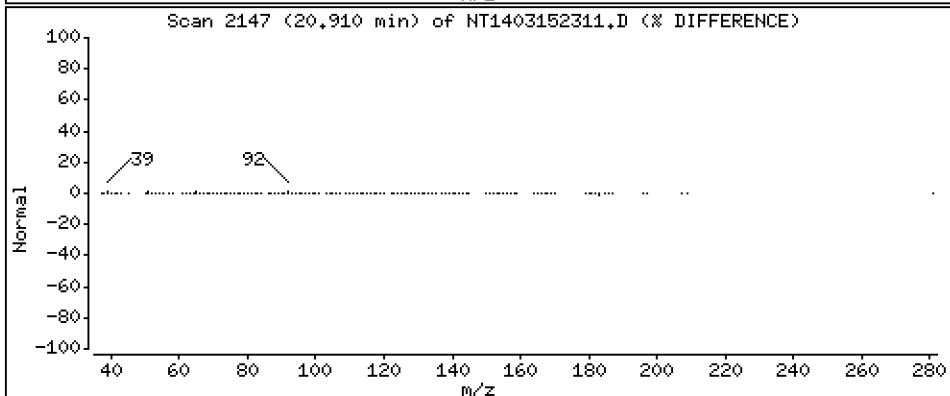
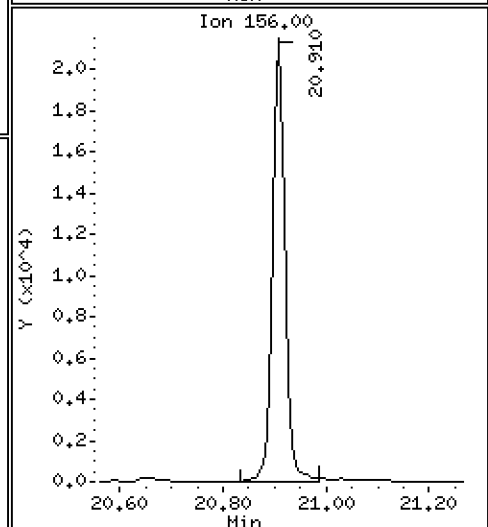
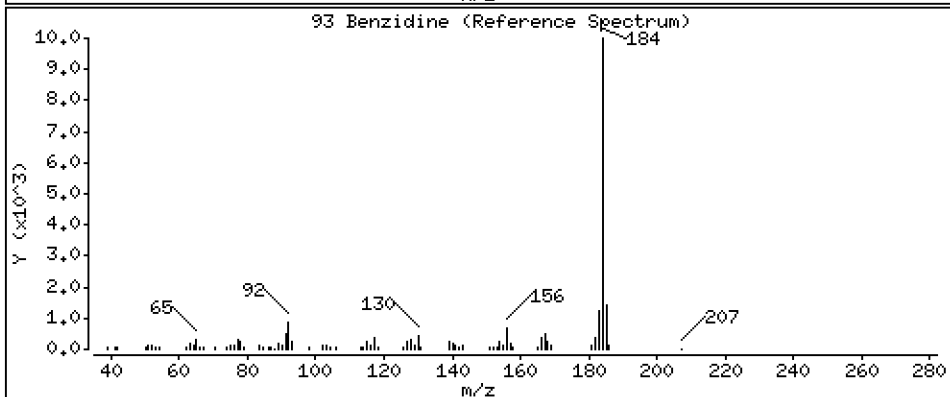
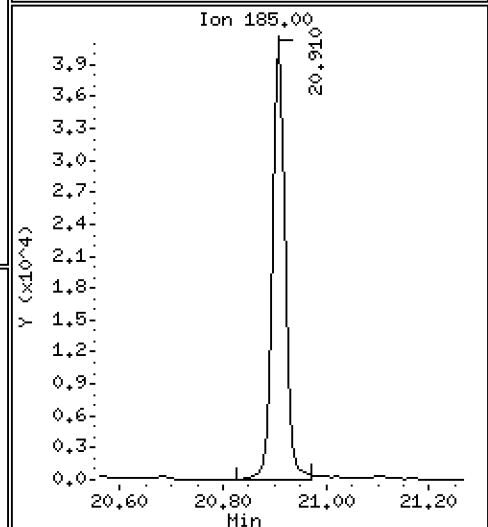
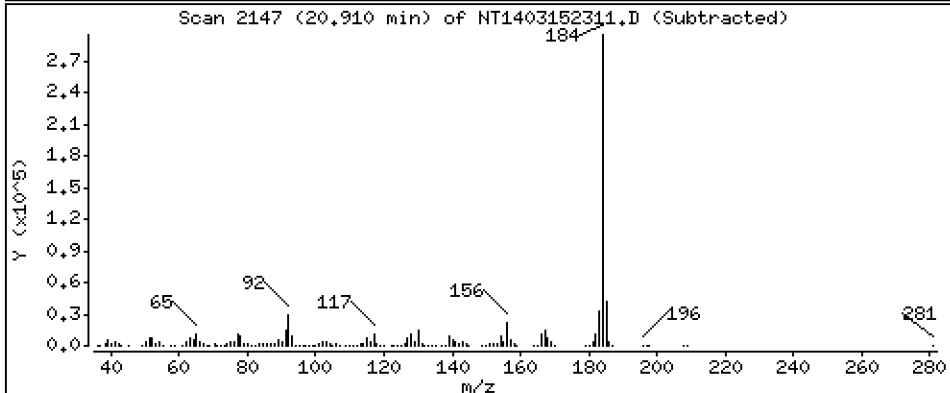
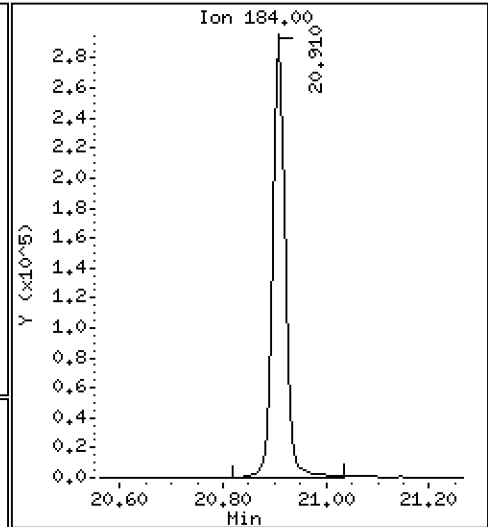
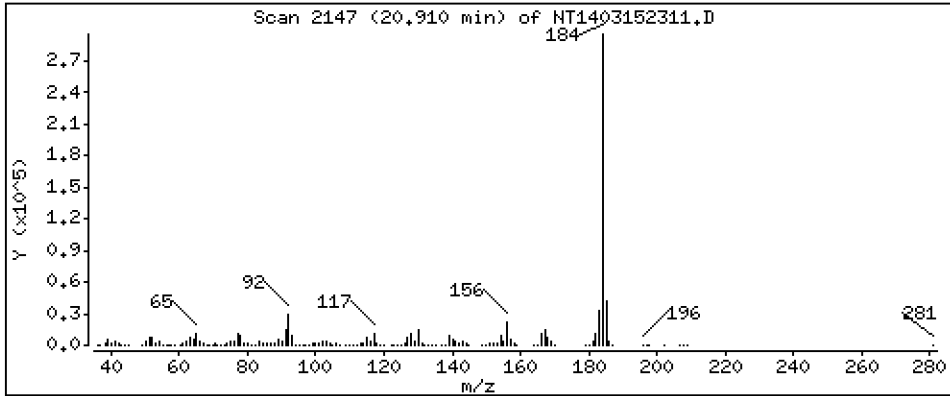
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,646 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

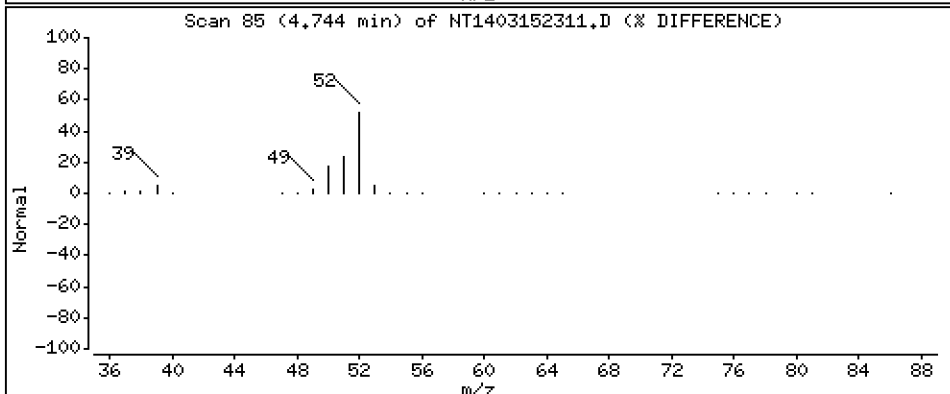
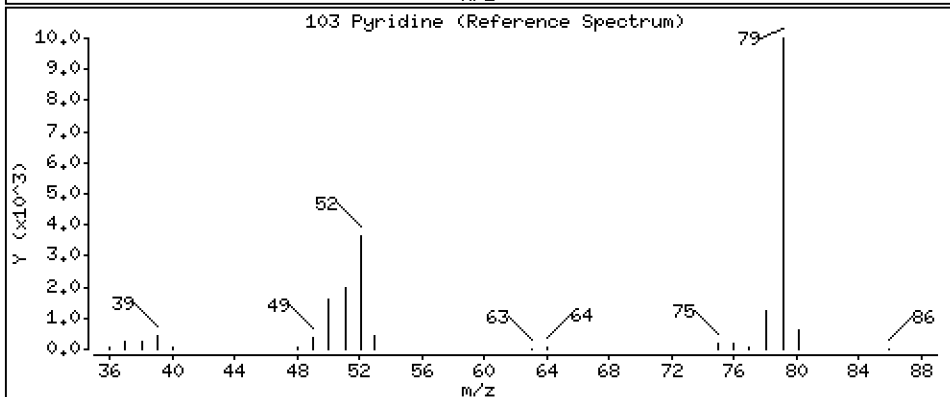
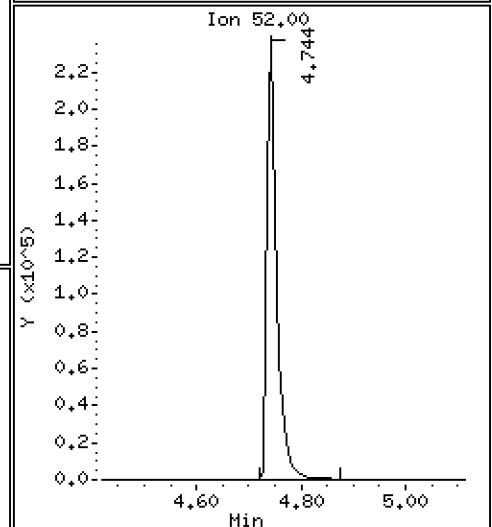
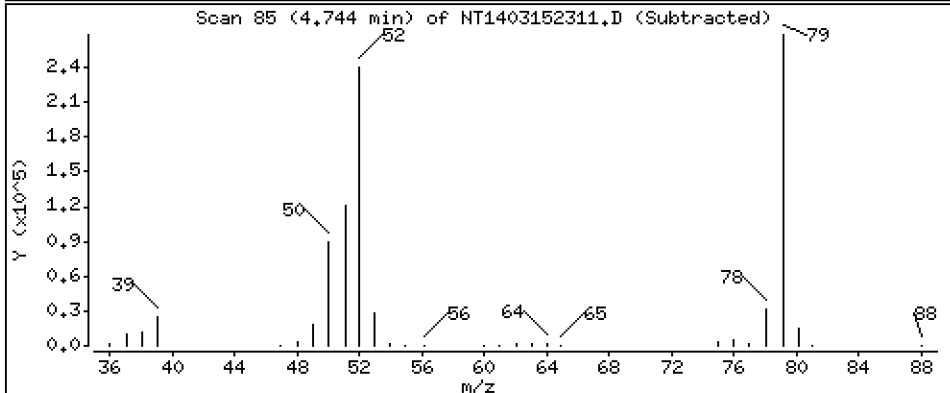
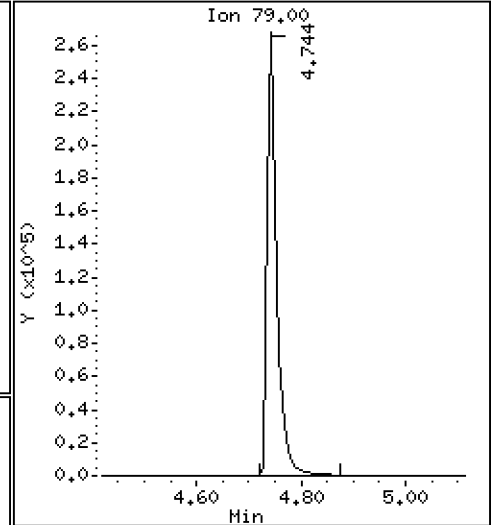
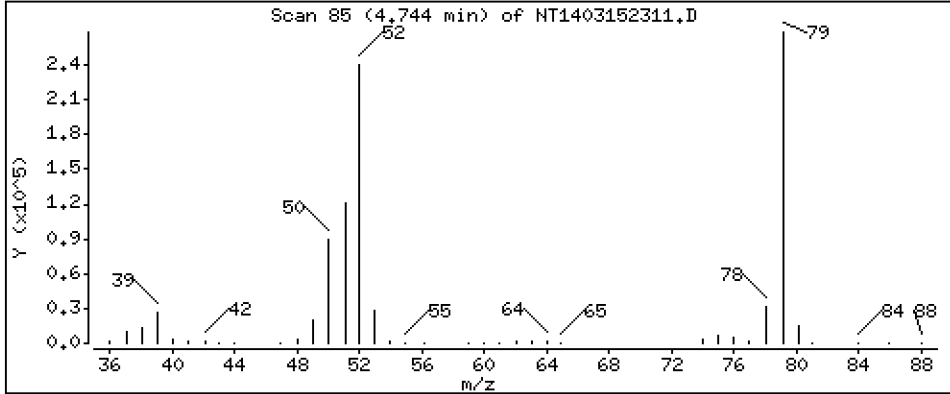
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

103 Pyridine

Concentration: 2,648 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

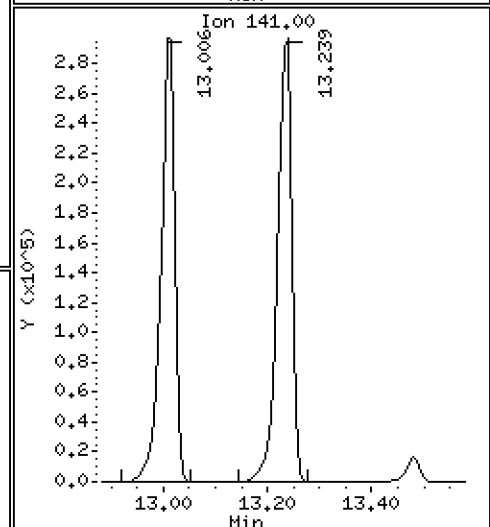
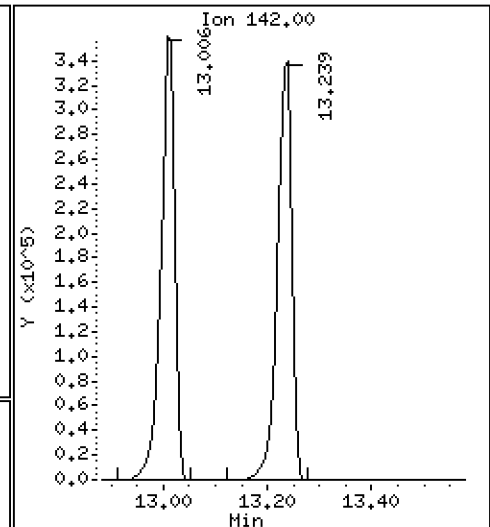
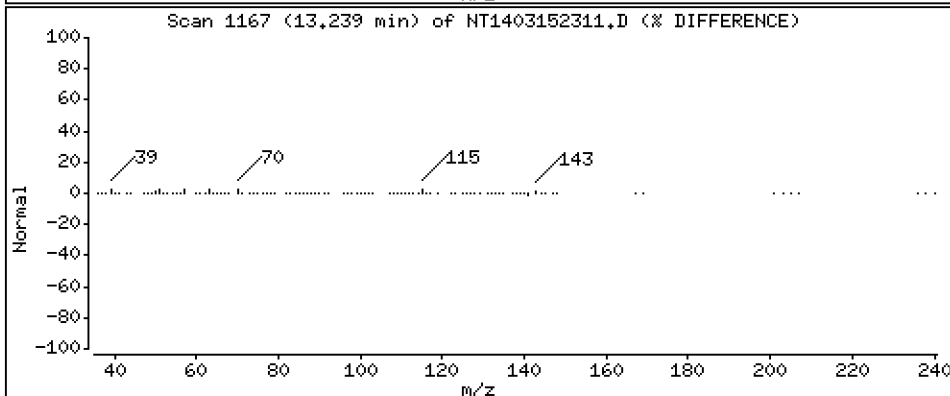
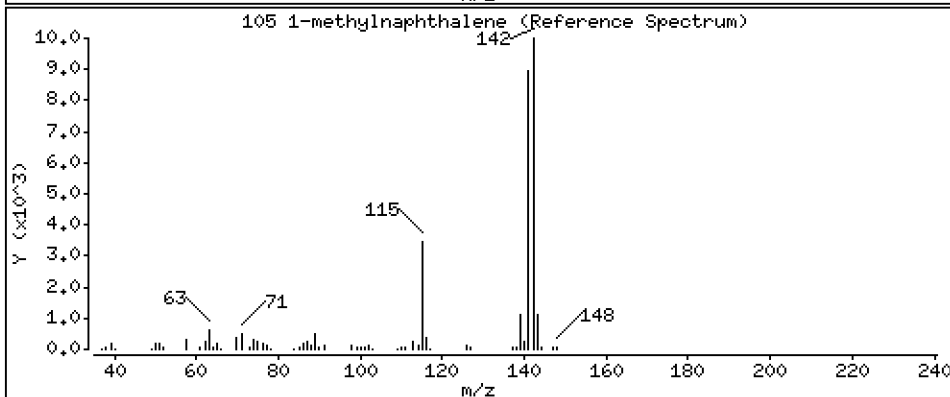
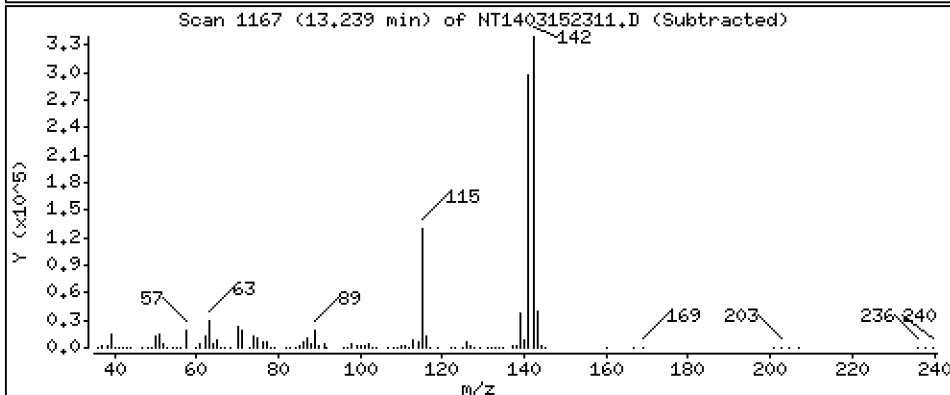
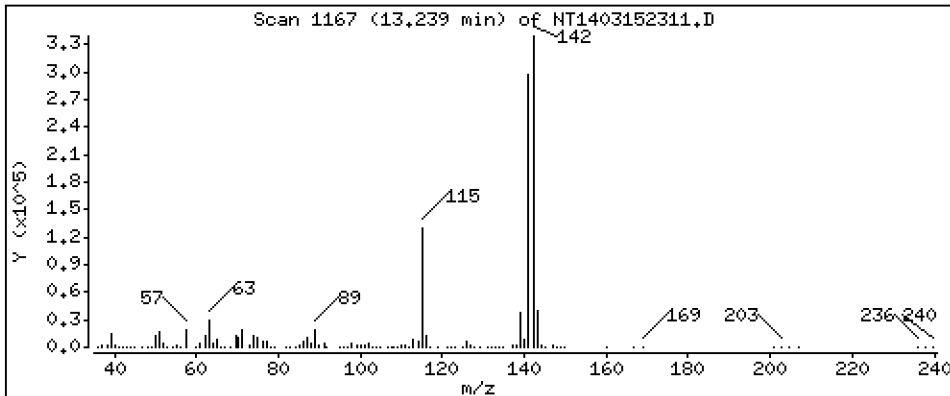
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,103 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

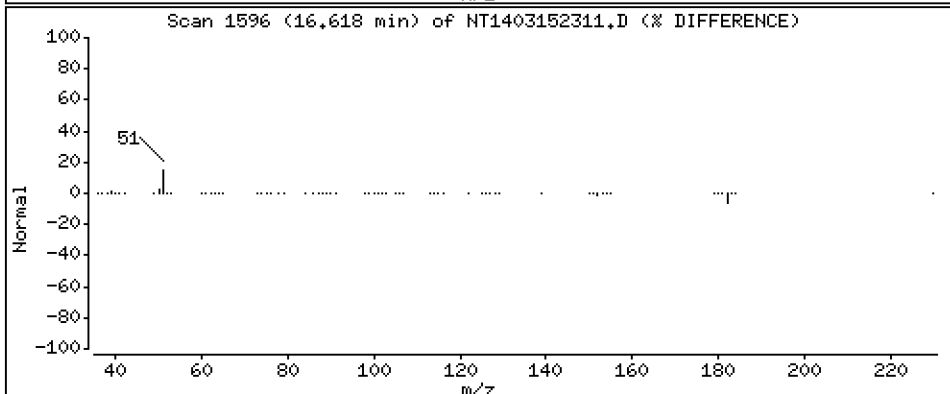
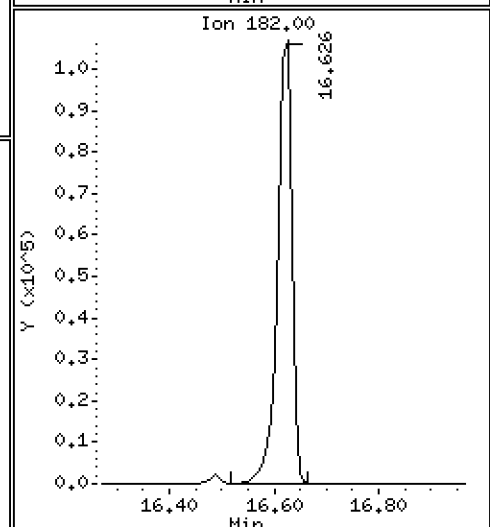
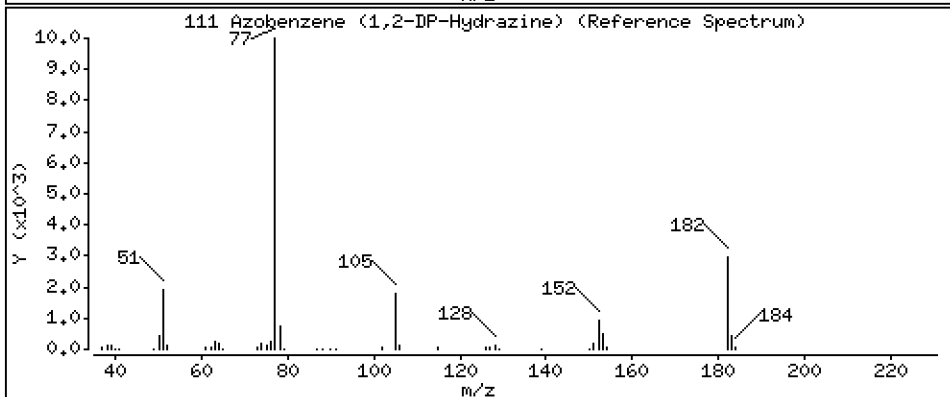
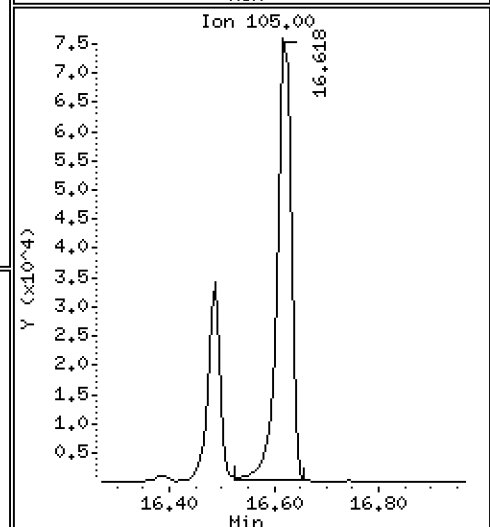
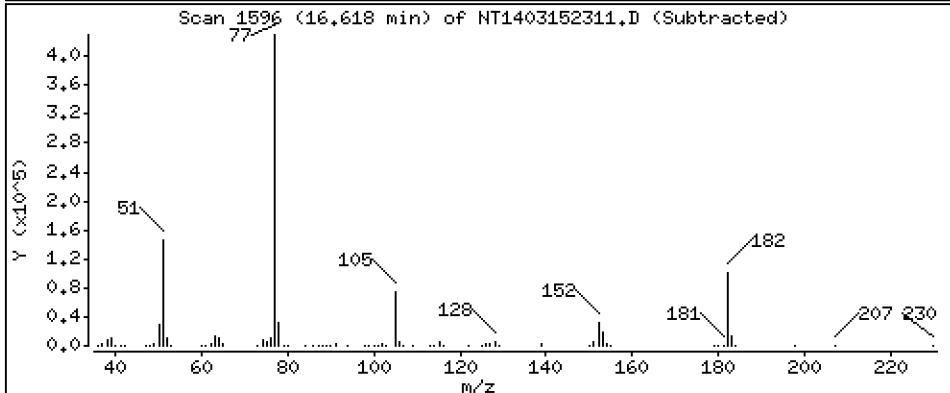
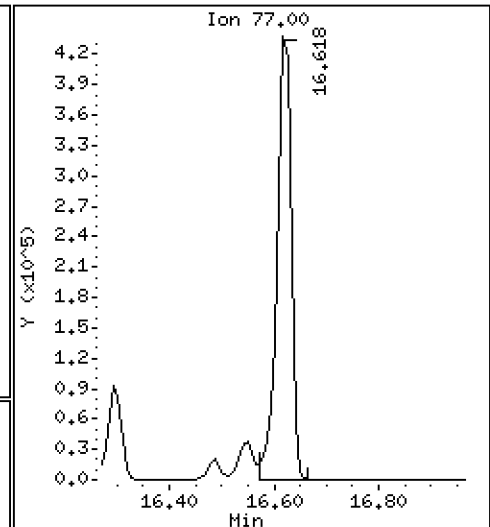
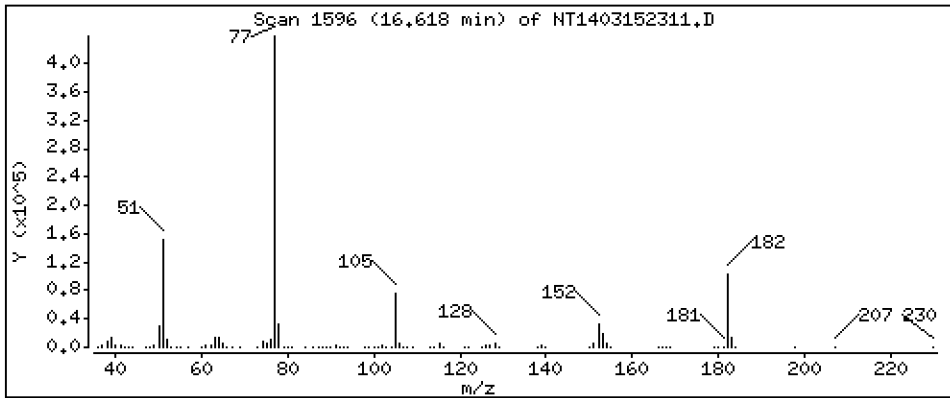
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,002 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

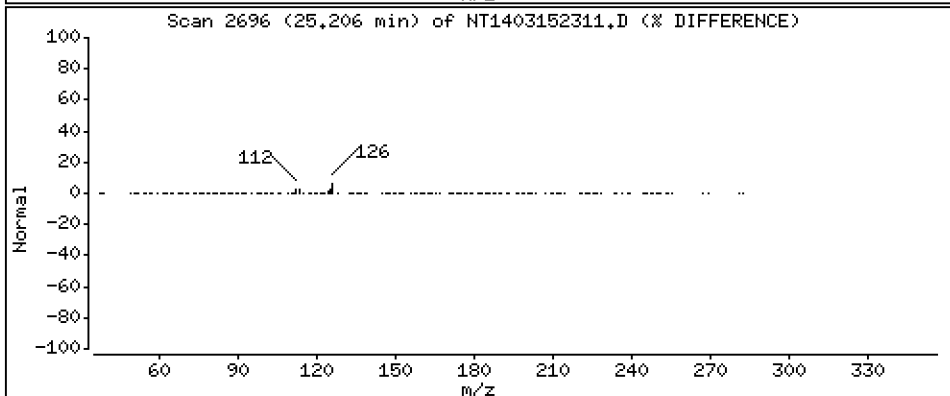
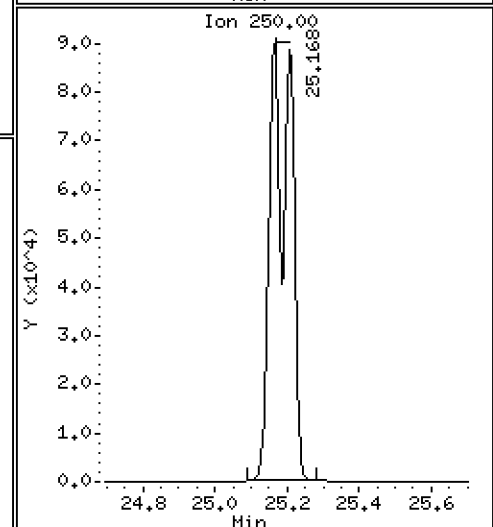
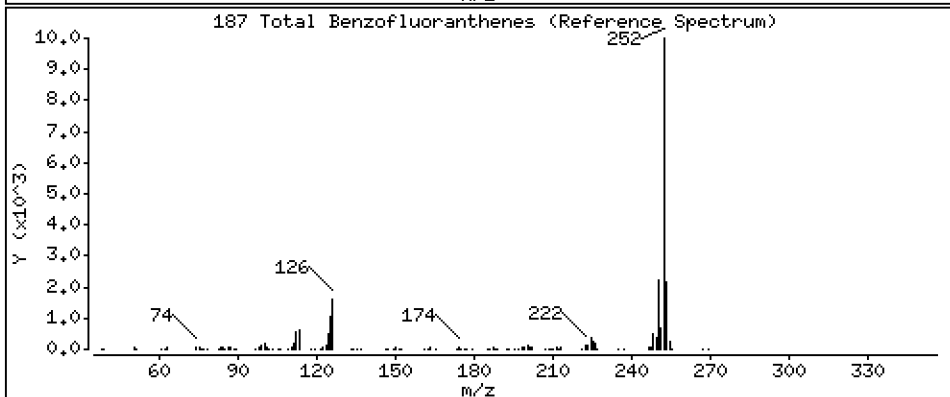
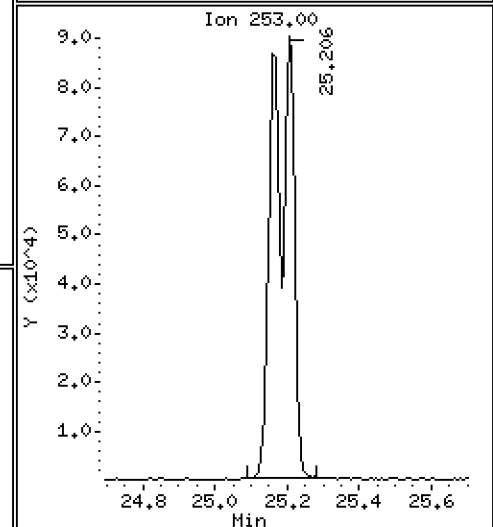
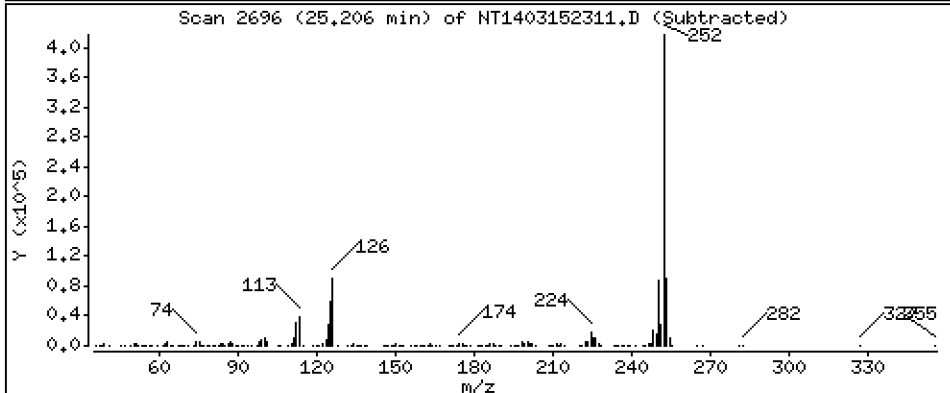
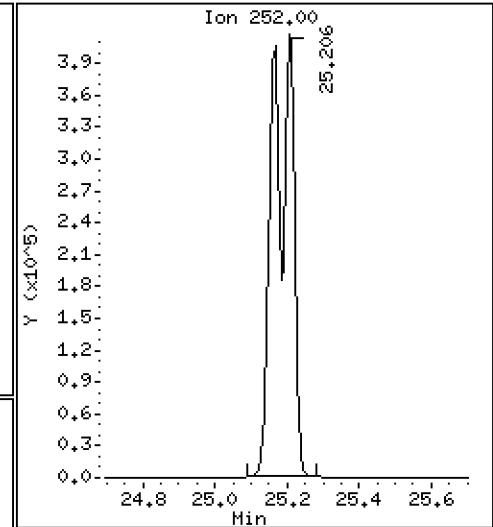
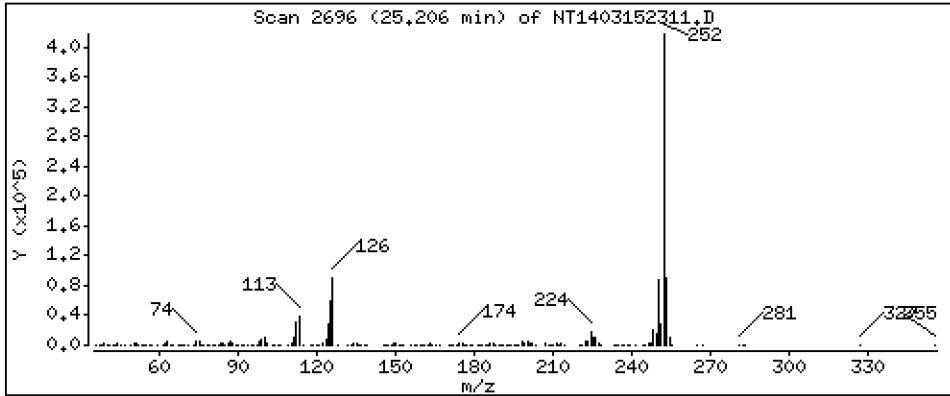
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 9,756 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0160-SCV1

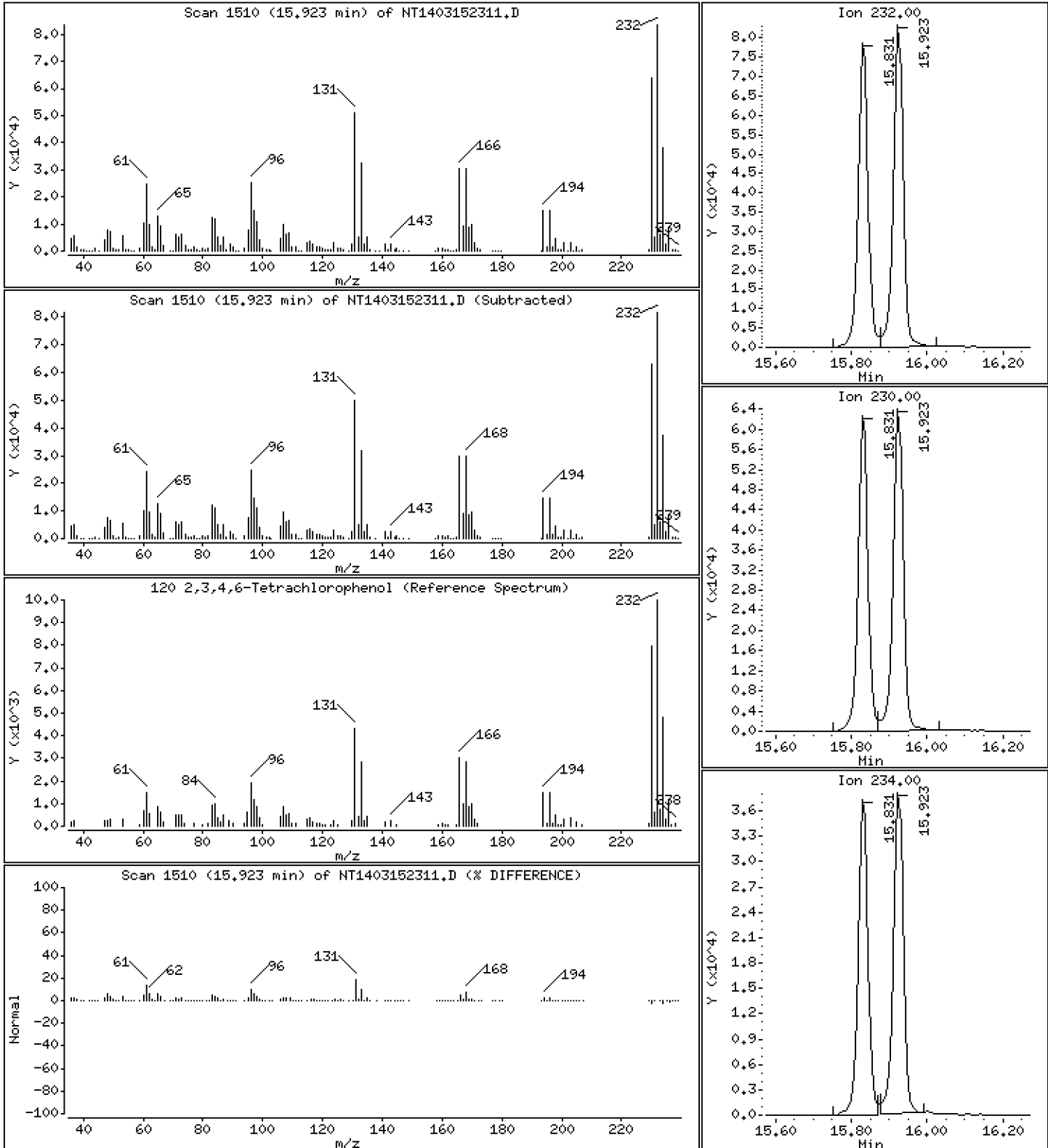
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,569 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230315.b\NT1403152311.D
 Lab Smp Id: SLC0160-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0160-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Meth Date : 21-Mar-2023 12:29 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112					Compound Not Detected.		
\$ 2 Phenol-d5	99					Compound Not Detected.		
3 Phenol	94		8.436	8.428	(1.000)	409924	4.36782	4.368
\$ 5 2-Chlorophenol-d4	132					Compound Not Detected.		
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	355357	5.25823	5.258
6 2-Chlorophenol	128		8.729	8.721	(1.000)	323438	4.37862	4.379
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	358409	4.79319	4.793
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	197462	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	352132	4.88937	4.889
\$ 10 1,2-Dichlorobenzene-d4	152					Compound Not Detected.		
12 1,2-Dichlorobenzene	146		9.458	9.458	(1.000)	340729	4.78641	4.786
11 Benzyl alcohol	108		9.334	9.334	(1.000)	220673	5.05069	5.051
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.000)	114247	5.31866	5.319
13 2-Methylphenol	108		9.559	9.559	(1.000)	273187	4.11716	4.117
17 Hexachloroethane	117		10.056	10.056	(1.000)	152626	4.95501	4.955
16 N-Nitroso-di-n-propylamine	70		9.900	9.893	(1.000)	260326	4.98316	4.983
15 4-Methylphenol	108		9.830	9.823	(1.000)	337960	4.30182	4.302
\$ 18 Nitrobenzene-d5	82					Compound Not Detected.		
19 Nitrobenzene	77		10.203	10.195	(0.882)	375695	5.02268	5.023
20 Isophorone	82		10.653	10.645	(0.921)	691478	6.77053	6.771
21 2-Nitrophenol	139		10.831	10.831	(0.936)	194856	4.53030	4.530
22 2,4-Dimethylphenol	107		10.878	10.878	(0.940)	250436	3.91450	3.915
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	402865	5.85923	5.859
24 Benzoic acid	105		11.064	10.963	(0.956)	444832	8.24795	8.248
25 2,4-Dichlorophenol	162		11.289	11.281	(0.976)	243165	4.77930	4.779
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	315977	5.05188	5.052
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	726125	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	936737	4.82884	4.829
29 4-Chloroaniline	127		11.729	11.729	(1.014)	327500	4.03279	4.033
30 Hexachlorobutadiene	225		11.977	11.977	(1.035)	138599	4.90795	4.908
31 4-Chloro-3-methylphenol	107		12.696	12.689	(1.098)	298325	4.85224	4.852
32 2-Methylnaphthalene	142		13.006	13.006	(1.124)	656729	4.85435	4.854
33 Hexachlorocyclopentadiene	237		13.478	13.486	(0.887)	166439	5.22977	5.230

Compounds	QUANT SIG					CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.633	13.625	(0.897)	183263	4.71824	4.718	
35 2,4,5-Trichlorophenol	196	13.703	13.702	(0.902)	188647	4.66090	4.661	
\$ 36 2-Fluorobiphenyl	172	13.695	13.795	(0.901)	426	0.00307	0.003072	
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	591509	4.97719	4.977	
38 2-Nitroaniline	65	14.260	14.260	(0.938)	234033	5.09985	5.100	
39 Dimethylphthalate	163	14.701	14.693	(0.967)	642281	5.03056	5.031	
40 Acenaphthylene	152	14.887	14.879	(0.980)	974004	4.87938	4.879	
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.977)	153944	5.21947	5.219	
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	382881	4.00000		
43 3-Nitroaniline	138	15.119	15.111	(0.995)	211974	5.20957	5.210	
44 Acenaphthene	153	15.266	15.258	(1.005)	578656	4.96504	4.965	
45 2,4-Dinitrophenol	184	15.328	15.328	(1.009)	70613	3.07711	3.077	
46 Dibenzofuran	168	15.590	15.590	(1.026)	824547	4.95562	4.956	
47 4-Nitrophenol	109	15.420	15.420	(1.015)	103988	4.82822	4.828	
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	214010	5.11873	5.119	
50 Diethylphthalate	149	16.163	16.155	(1.064)	686853	5.20331	5.203	
49 Fluorene	166	16.309	16.302	(1.073)	763926	4.84358	4.844	
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	337497	4.98506	4.985	
52 4-Nitroaniline	138	16.386	16.379	(1.078)	170484	4.81727	4.817	
53 4,6-Dinitro-2-methylphenol	198	16.487	16.479	(0.904)	109125	4.43923	4.439	
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	475466	4.95411	4.954	
\$ 55 2,4,6-Tribromophenol	330	Compound Not Detected.						
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	169085	5.22559	5.226	
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	163199	4.78004	4.780	
58 Pentachlorophenol	266	17.969	17.977	(0.985)	106585	4.47687	4.477	
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	706616	4.00000		
60 Phenanthrene	178	18.294	18.286	(1.003)	955749	4.73403	4.734	
61 Anthracene	178	18.379	18.379	(1.008)	832701	4.28109	4.281	
62 Carbazole	167	18.712	18.704	(1.026)	793728	4.58650	4.587	
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	1207956	5.50673	5.507	
64 Fluoranthene	202	20.677	20.677	(0.887)	1031812	5.02399	5.024	
65 Pyrene	202	21.103	21.103	(0.906)	1044240	4.95802	4.958	
\$ 66 Terphenyl-d14	244	21.381	21.389	(0.918)	662	0.00464	0.004643	
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	529418	5.73747	5.737	
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	898379	4.82654	4.827	
* 69 Chrysene-d12	240	23.301	23.294	(1.000)	504808	4.00000		
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	586696	10.6467	10.65	
71 Chrysene	228	23.340	23.340	(1.002)	795614	4.72292	4.723	
72 bis(2-Ethylhexyl)phthalate	149	23.340	23.332	(0.960)	706123	5.42778	5.428	
* 134 Di-n-octylphthalate-d4	153	24.323	24.323	(1.000)	988248	4.00000		
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	1304643	5.13544	5.135	
74 Benzo(b)fluoranthene	252	25.167	25.152	(0.970)	838016	4.77369	4.774	
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	887530	5.10013	5.100	
76 Benzo(a)pyrene	252	25.825	25.818	(0.996)	747283	4.97798	4.978	
* 77 Perylene-d12	264	25.941	25.934	(1.000)	496785	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.103)	807644	4.94309	4.943	
79 Dibenzo(a,h)anthracene	278	28.641	28.626	(1.104)	669918	4.86500	4.865	
80 Benzo(g,h,i)perylene	276	29.418	29.403	(1.134)	665079	4.93915	4.939	
90 N-Nitrosodimethylamine	74	4.712	4.720	(1.000)	220898	5.19984	5.200	
91 Aniline	93	Compound Not Detected.						
93 Benzidine	184	20.909	20.909	(0.897)	466644	5.64609	5.646	
103 Pyridine	79	4.743	4.766	(1.000)	348414	2.64838	2.648	
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	625458	5.10291	5.103	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	788522	5.00236	5.002	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.206	25.199	(0.972)	1626530	9.75586	9.756
120 2,3,4,6-Tetrachlorophenol	232	15.923	15.923	(1.048)	141312	3.56895	3.569

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 15-MAR-2023
 Lab File ID: NT1403152311.D Calibration Time: 13:26
 Lab Smp Id: SLC0160-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	194517	97259	389034	197462	1.51
27 Naphthalene-d8	721321	360661	1442642	726125	0.67
42 Acenaphthene-d10	379602	189801	759204	382881	0.86
59 Phenanthrene-d10	703194	351597	1406388	706616	0.49
69 Chrysene-d12	504769	252385	1009538	504808	0.01
134 Di-n-octylphthala	978492	489246	1956984	988248	1.00
77 Perylene-d12	484073	242037	968146	496785	2.63

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.30	22.80	23.80	23.30	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311.D

Lab ID: SLC0160-SCV1
nt14.i, ABN.m, 15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.064	-0.0642	2,2'-oxybis(1-Chloropropane)
0.956	0.948	0.0087	Benzoic acid
0.901	0.908	-0.0066	2-Fluorobiphenyl

RRT check based on Ccal File: NT1403152308.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

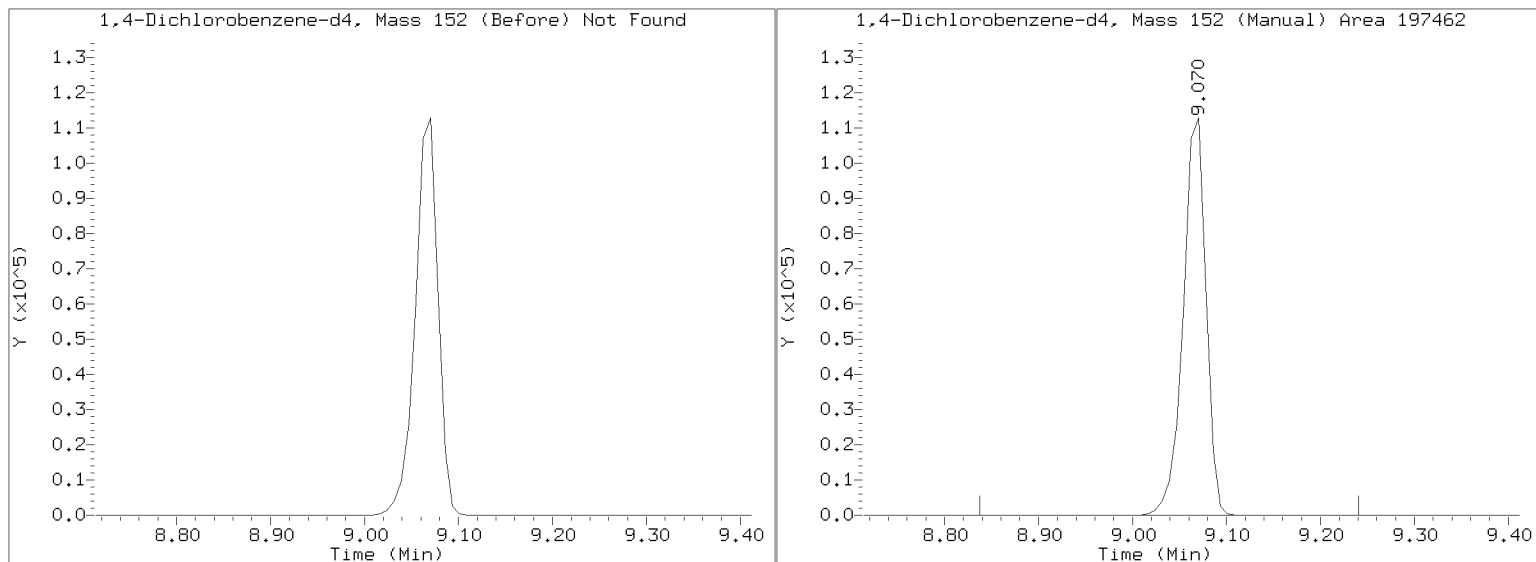
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230315.b/NT1403152311.D

Injection Date: 15-MAR-2023 17:39

Lab ID: SLC0160-SCV1 Client ID:

Report Date: 03/21/2023 12:48





CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403172330.D

Calibration Date: 03/15/2023

Sequence: SLC0335

Injection Date: 03/18/23

Lab Sample ID: SLC0335-CCV1

Injection Time: 07:54

Sequence Name: Calibration Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.7	1.9011440	1.7826460		-6.2	+/-50
4-Methylphenol	A	5.0000	4.4	1.5914380	1.3931290		-12.5	+/-50
Naphthalene	A	5.0000	4.8	1.0686200	1.0322160		-3.4	+/-50
2-Methylnaphthalene	A	5.0000	4.9	0.7452524	0.7377859		-1.0	+/-50
Acenaphthylene	A	5.0000	4.9	2.0854140	2.0286110		-2.7	+/-50
Dimethylphthalate	A	5.0000	5.0	1.3338450	1.3269510		-0.5	+/-50
Acenaphthene	A	5.0000	4.8	1.2175690	1.1803840		-3.1	+/-50
Dibenzofuran	A	5.0000	5.0	1.7382550	1.7400100		0.1	+/-50
Fluorene	A	5.0000	4.7	1.6477120	1.5511220		-5.9	+/-50
Phenanthrene	A	5.0000	4.7	1.1428510	1.0653690		-6.8	+/-50
Anthracene	A	5.0000	4.8	1.1010610	1.0662860		-3.2	+/-50
Fluoranthene	A	5.0000	8.2	1.6273660	2.6680680		64.0	+/-50 *
Pyrene	A	5.0000	7.5	1.6688810	2.4907480		49.2	+/-50
Butylbenzylphthalate	A	5.0000	8.8	0.7311588	1.2858080		75.9	+/-50 *
Benzo(a)anthracene	A	5.0000	4.9	1.4748830	1.4395480		-2.4	+/-50
Chrysene	A	5.0000	4.9	1.3348290	1.3127330		-1.7	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	6.5	0.5265649	0.6884214		30.7	+/-50
Benzo(a)fluoranthene, Total	A	10.0000	10.0	1.3424190	1.3467800		0.3	+/-50
Benzo(a)pyrene	A	5.0000	4.8	1.2087150	1.1672140		-3.4	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.3	1.3155660	1.1279620		-14.3	+/-50
Dibenzo(a,h)anthracene	A	5.0000	4.4	1.1087420	0.9691667		-12.6	+/-50
Benzo(g,h,i)perylene	A	5.0000	3.9	1.0842080	0.8405490		-22.5	+/-50
2-Fluorophenol	A	7.5000	7.20	1.3587350	1.3045660		-4.0	+/-50
Phenol-d5	A	7.5000	7.28	1.7888720	1.7367810		-2.9	+/-50
2-Chlorophenol-d4	A	7.5000	7.59	1.4103050	1.4276540		1.2	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	5.13	0.9421955	0.9671395		2.6	+/-50
Nitrobenzene-d5	A	5.0000	5.09	0.4233007	0.4310995		1.8	+/-50
2-Fluorobiphenyl	A	5.0000	5.21	1.4485960	1.5102360		4.3	+/-50
2,4,6-Tribromophenol	A	7.5000	7.12	0.1518639	0.1441679		-5.1	+/-50
p-Terphenyl-d14	A	5.0000	8.26	1.1297810	1.8660960		65.2	+/-50 *

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172330.D

Date: 18-MAR-2023 07:54

Client ID:

Sample Info: SLC0335-CCW1

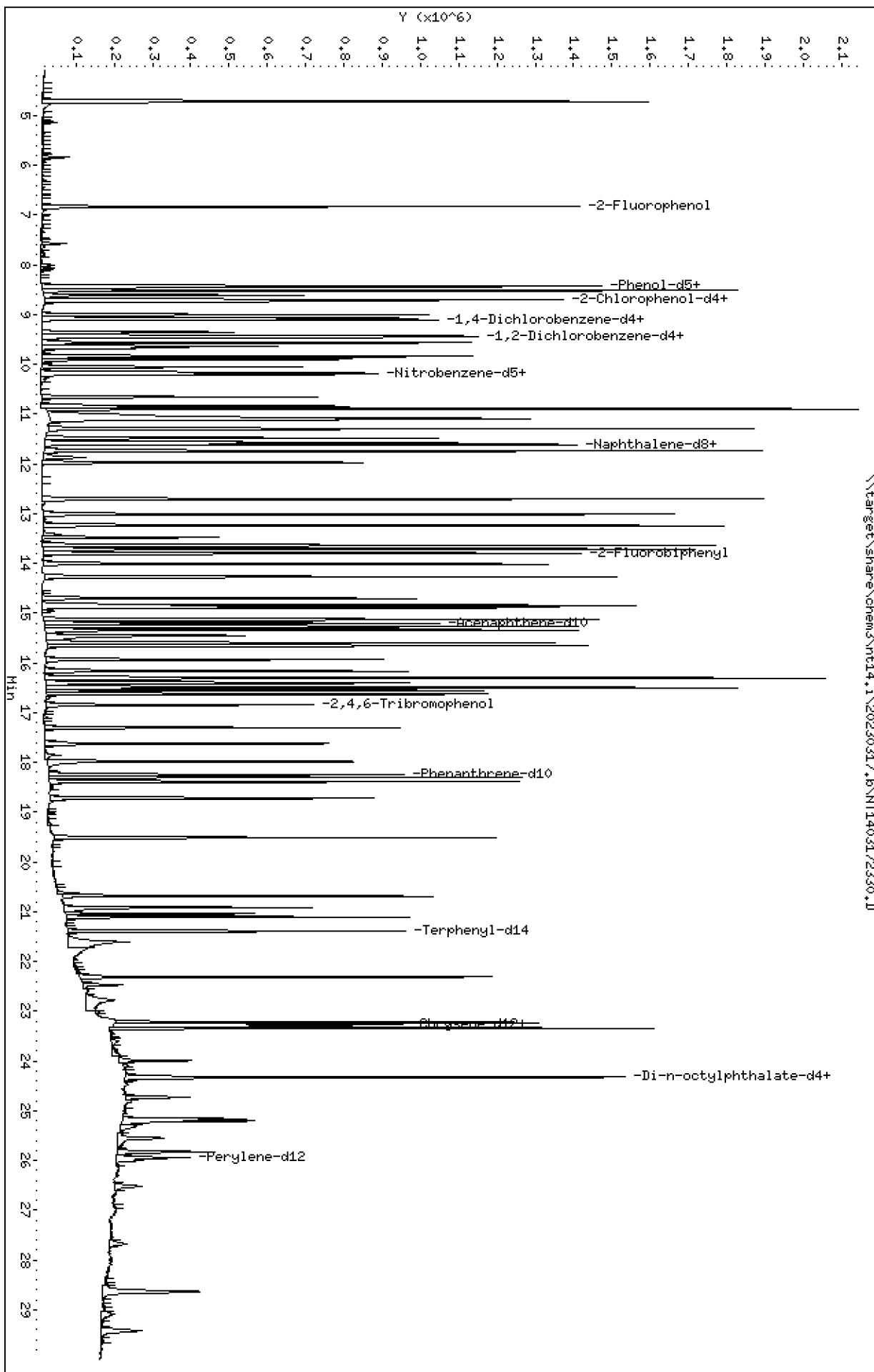
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

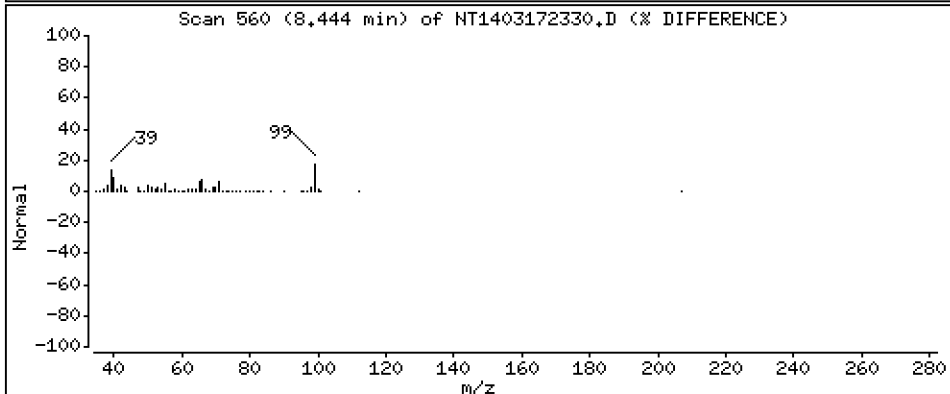
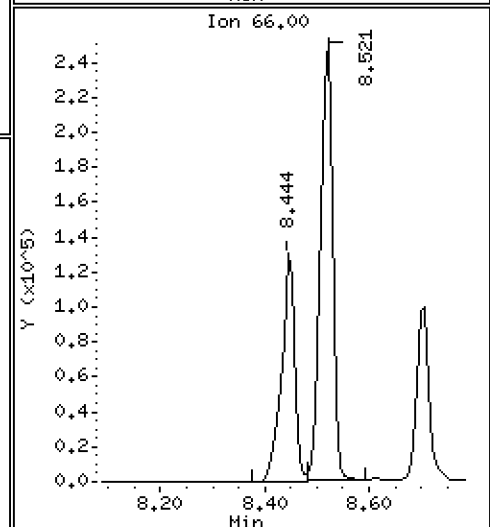
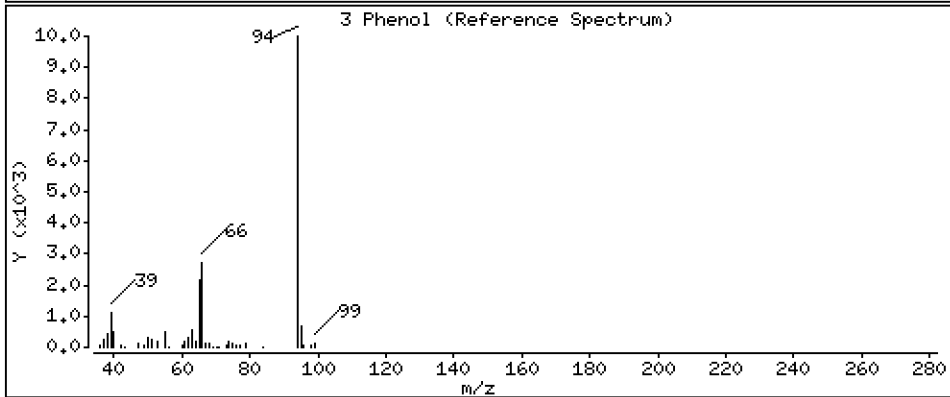
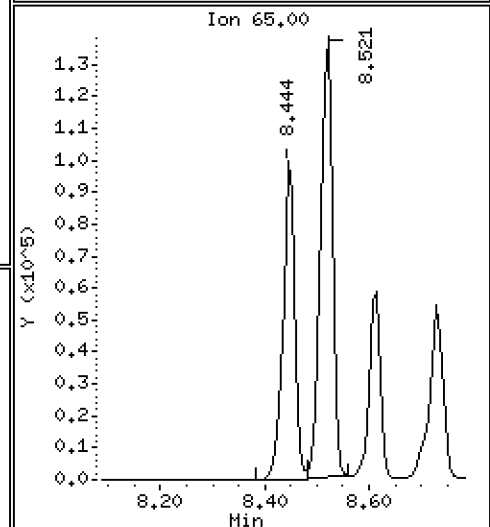
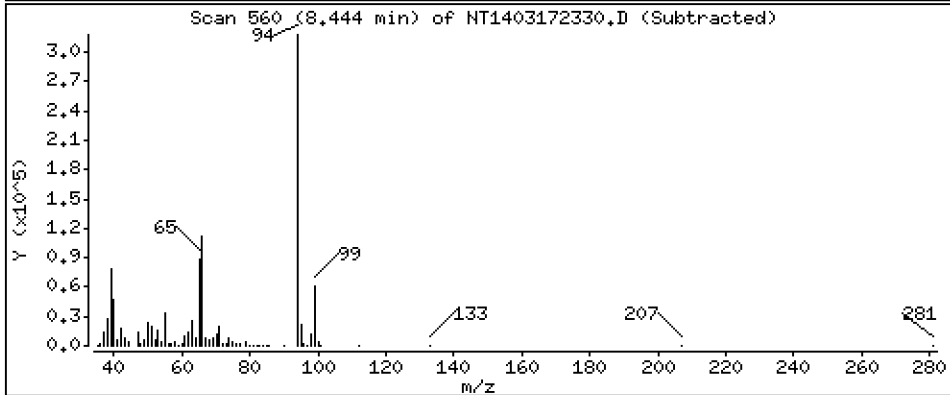
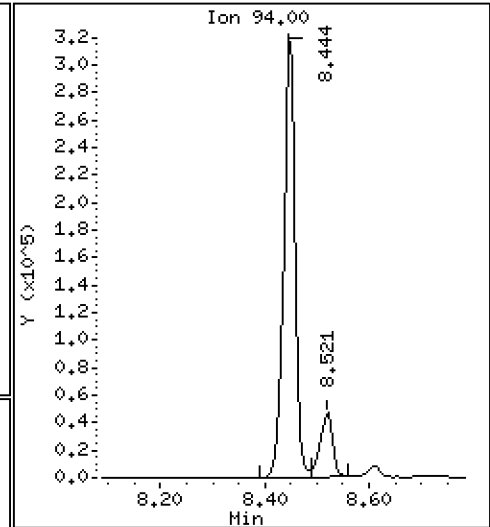
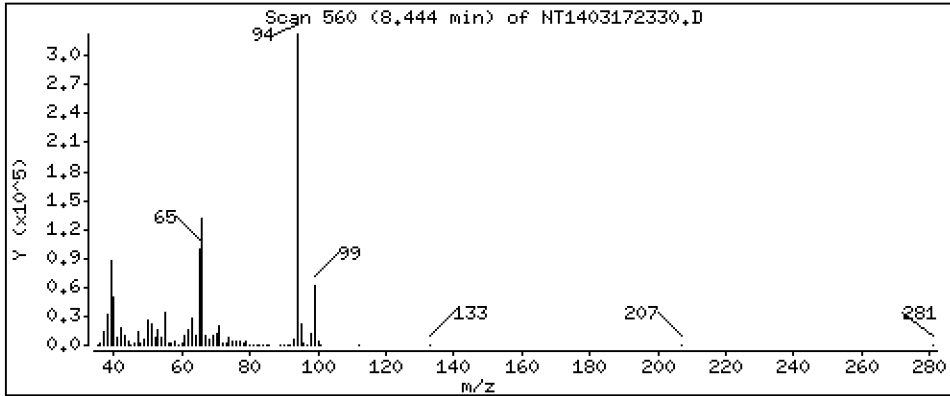
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,688 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

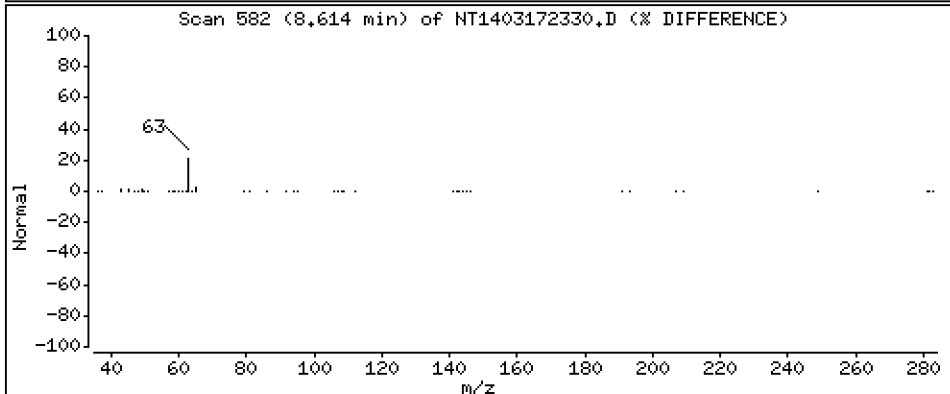
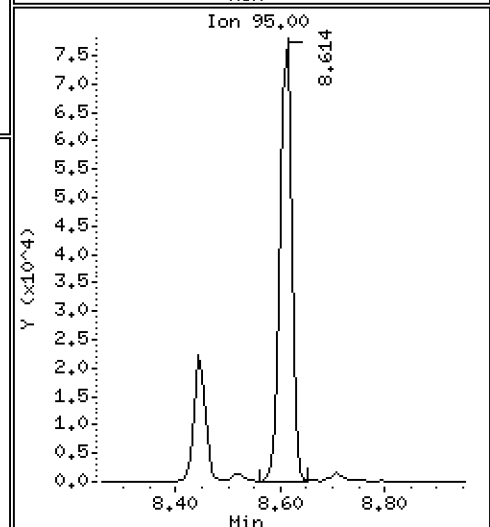
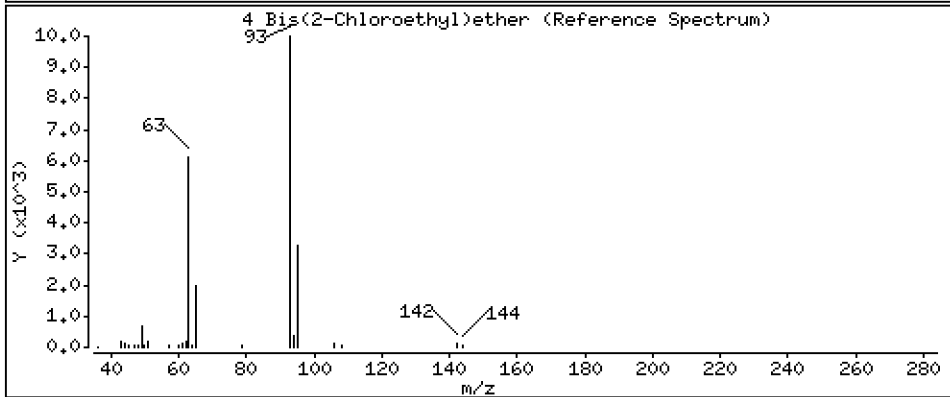
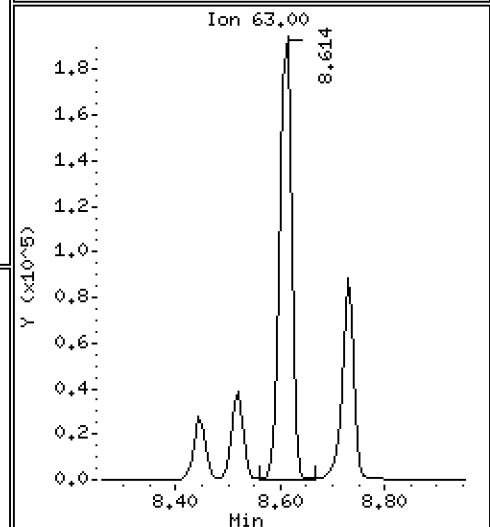
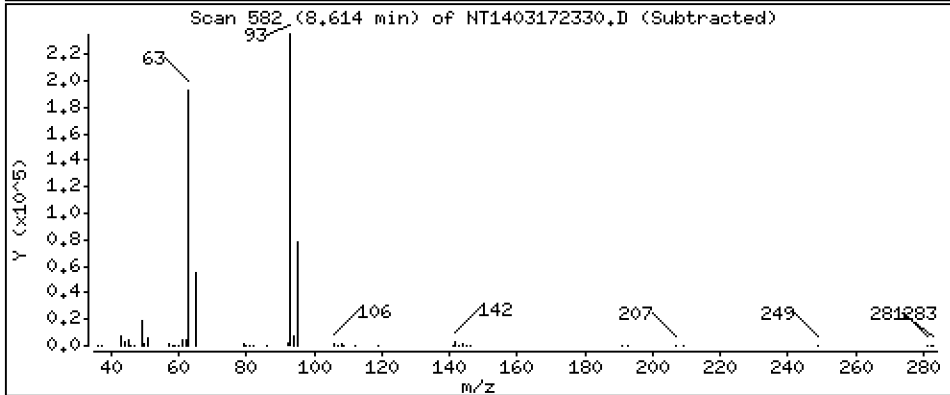
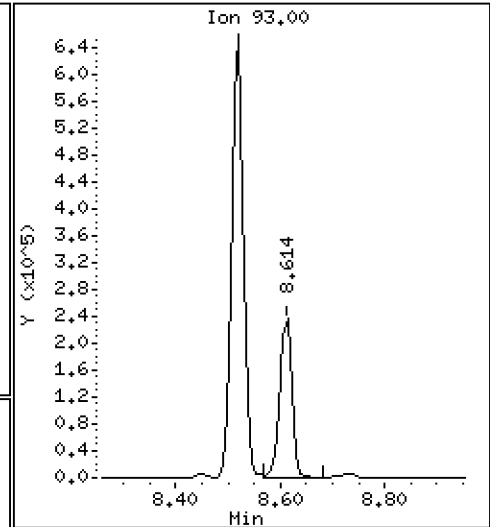
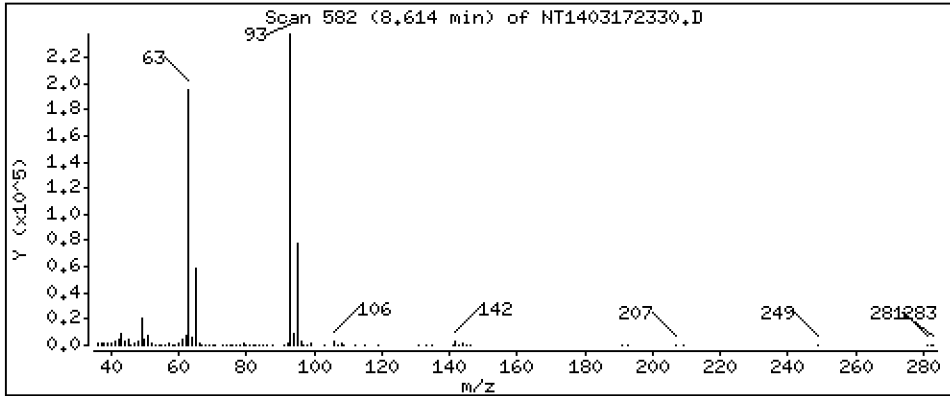
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 4,763 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

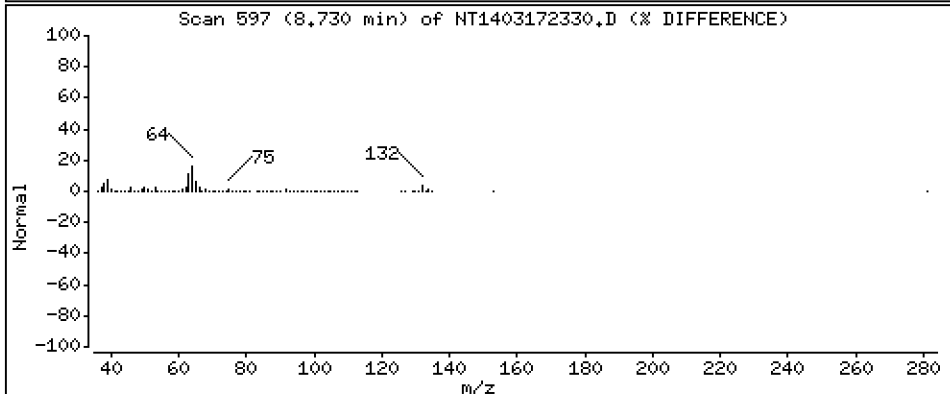
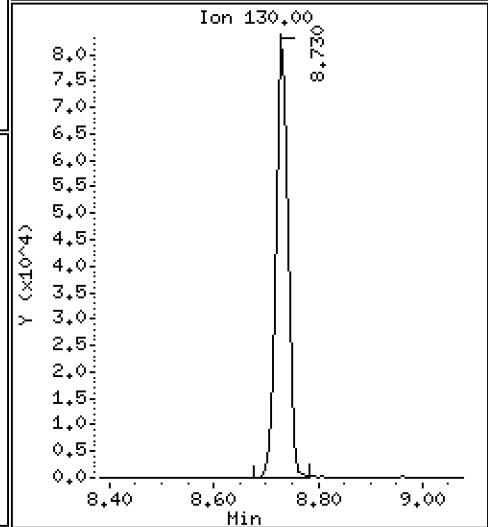
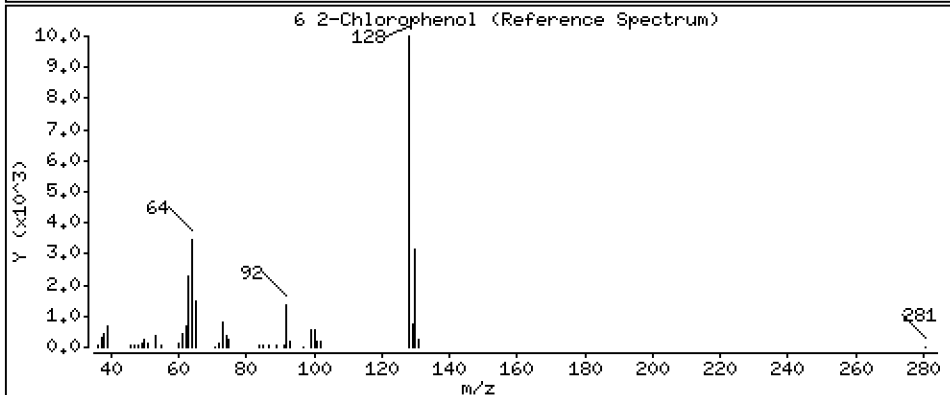
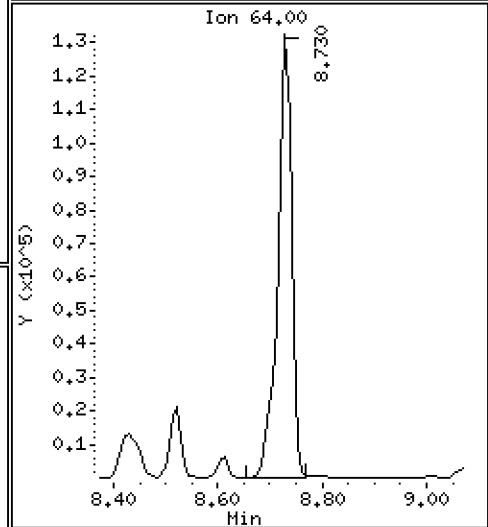
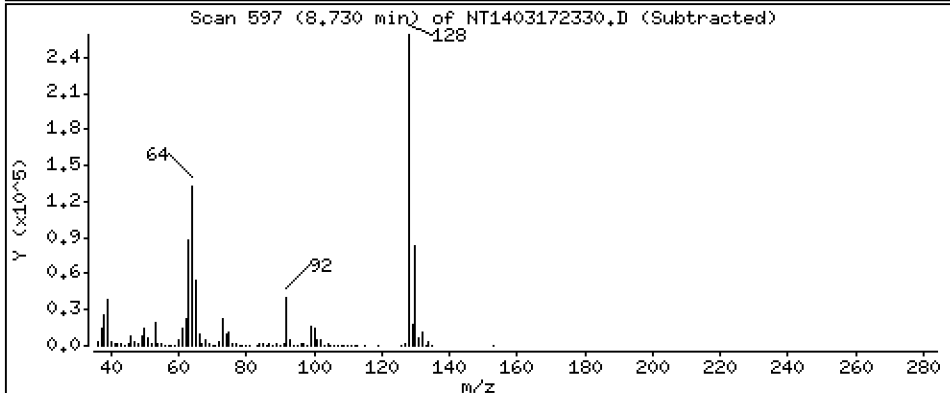
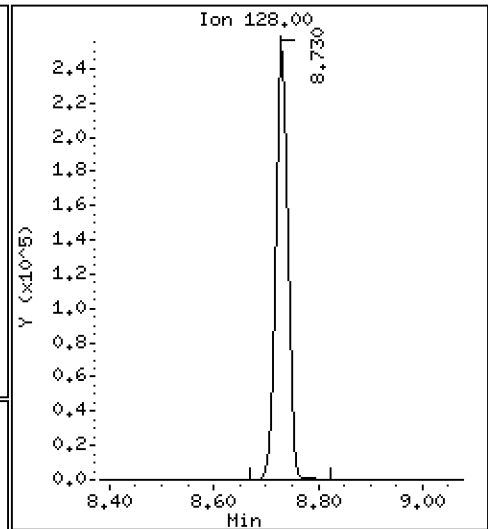
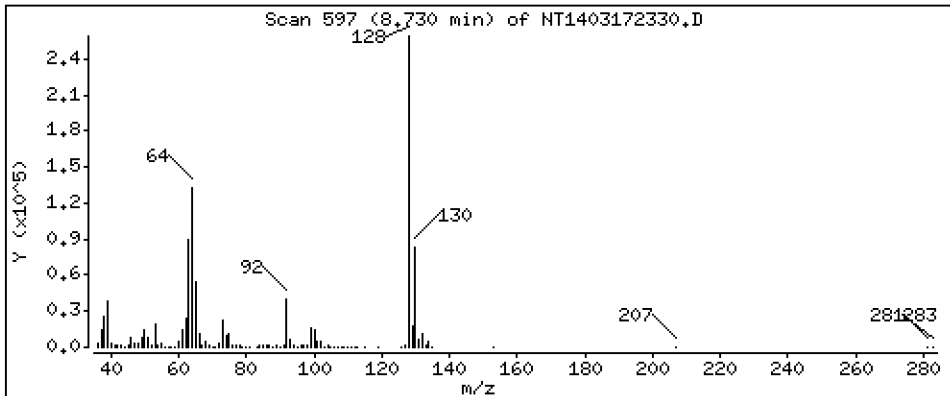
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,863 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

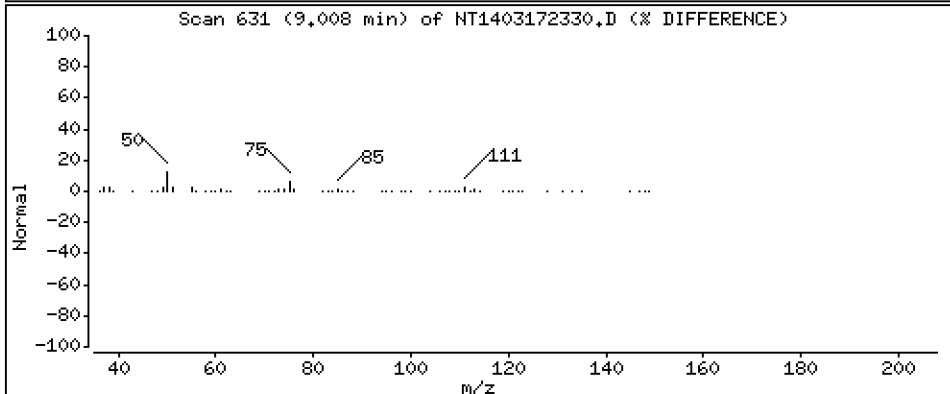
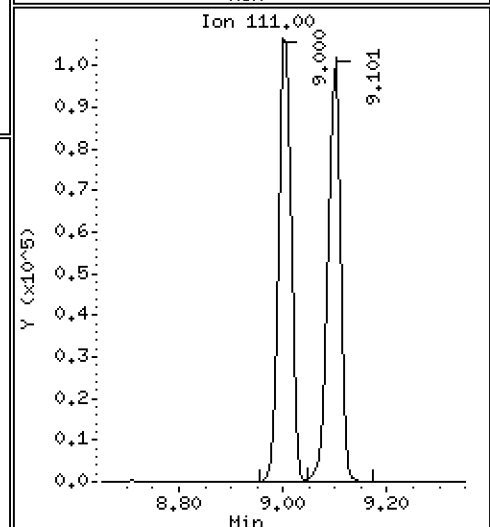
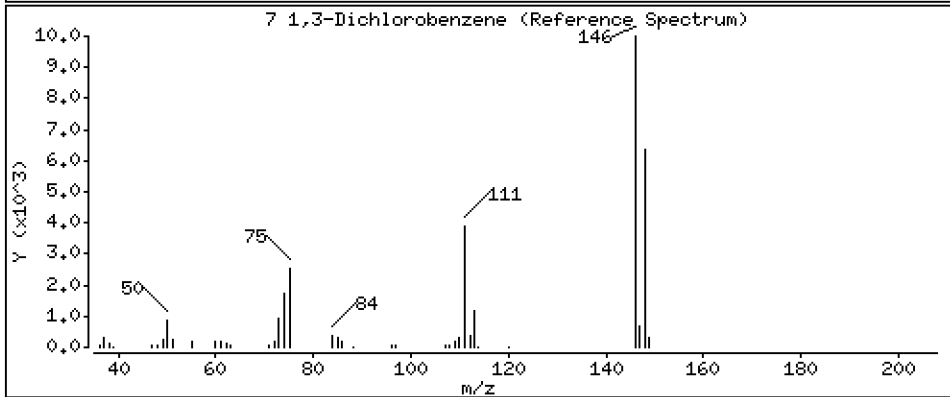
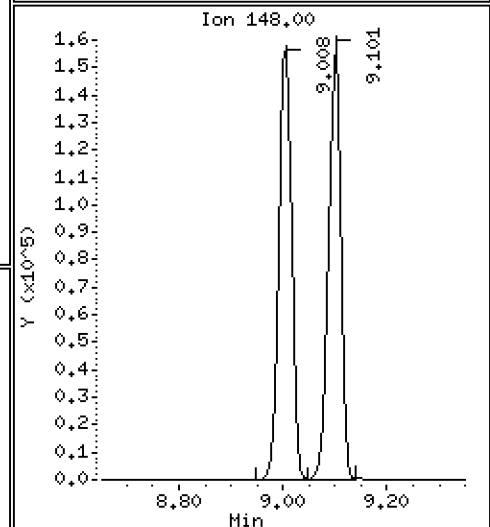
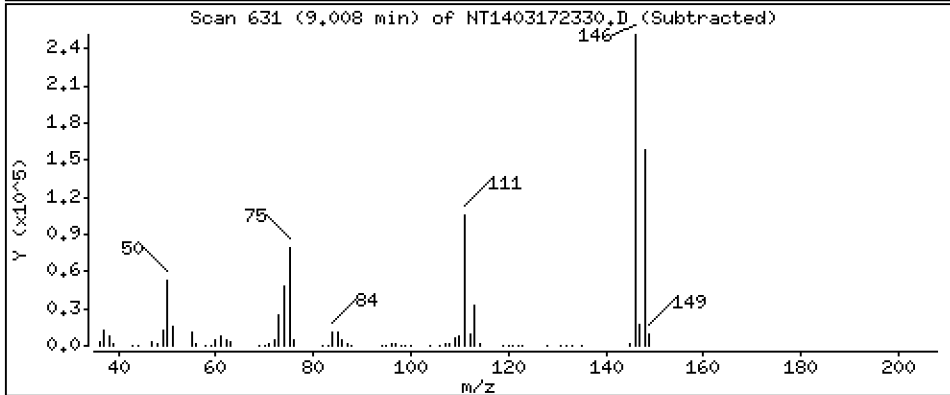
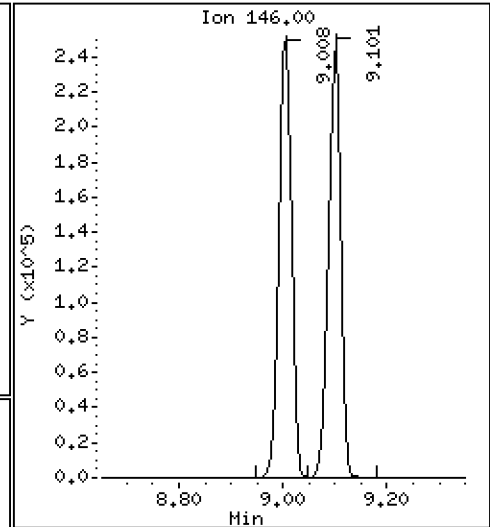
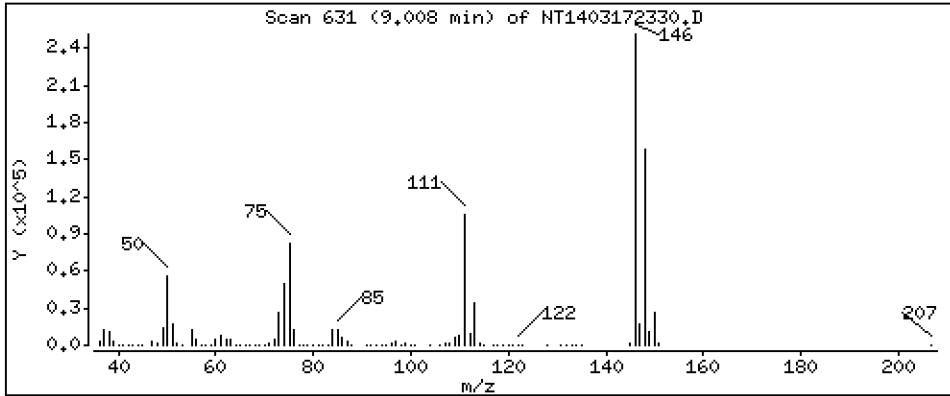
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,922 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

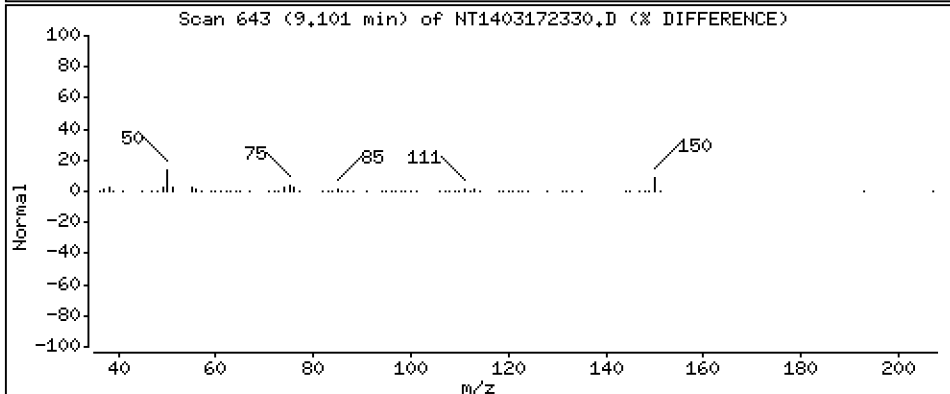
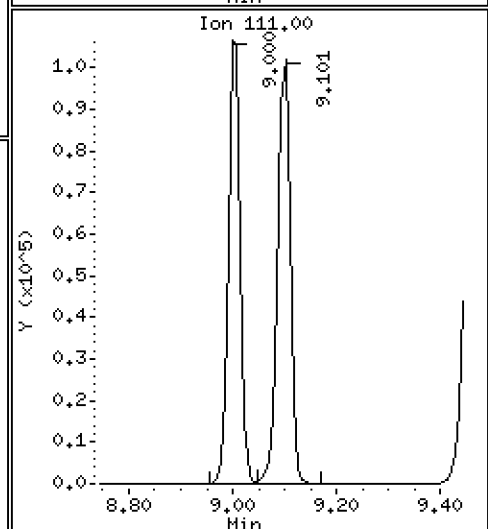
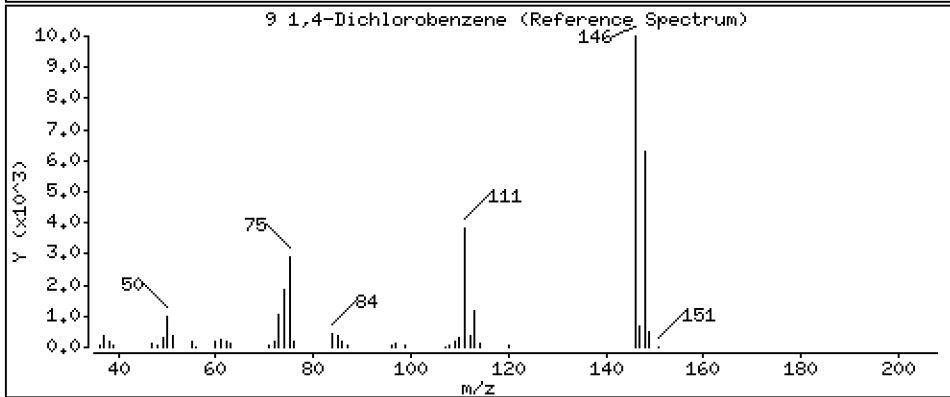
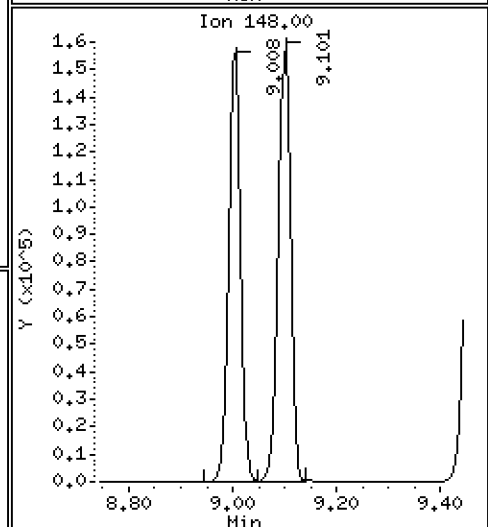
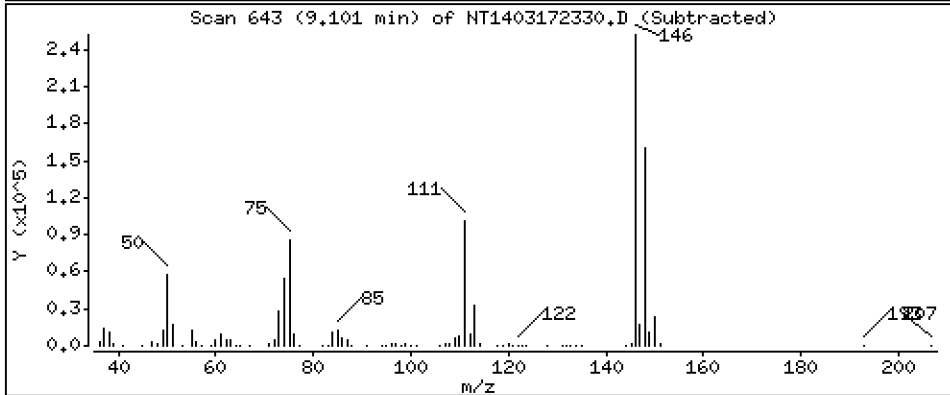
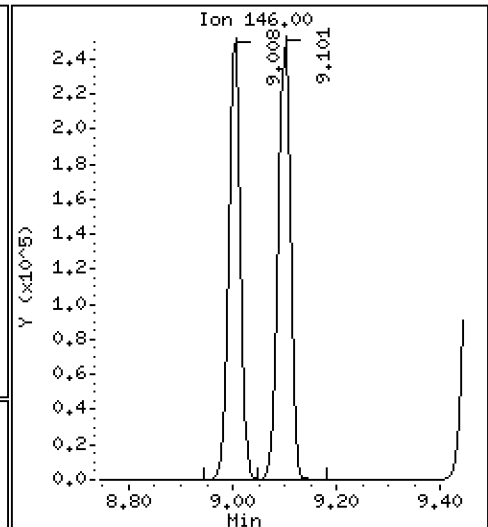
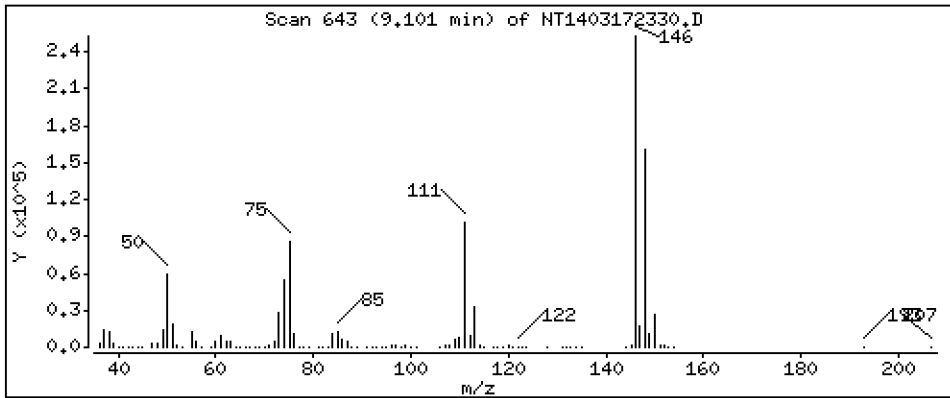
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.941 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

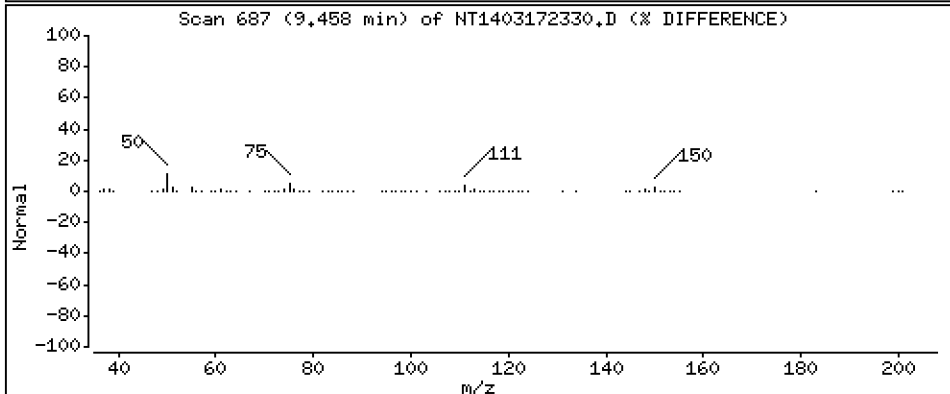
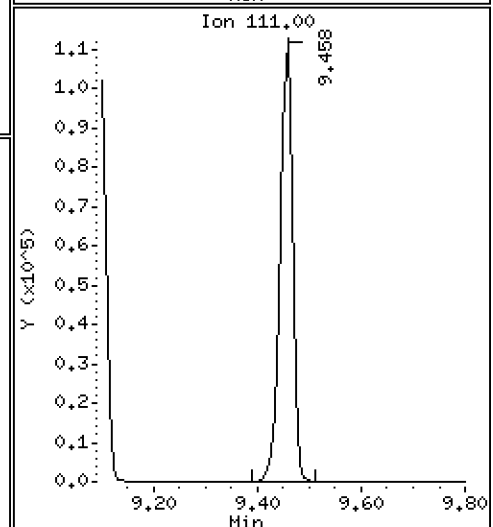
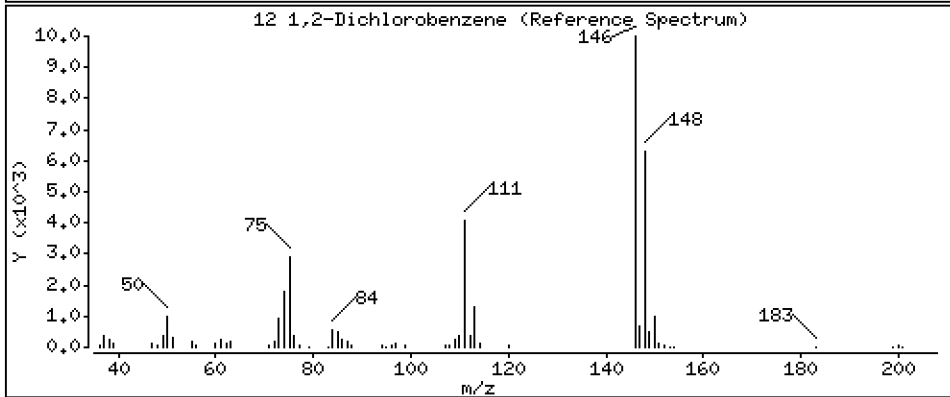
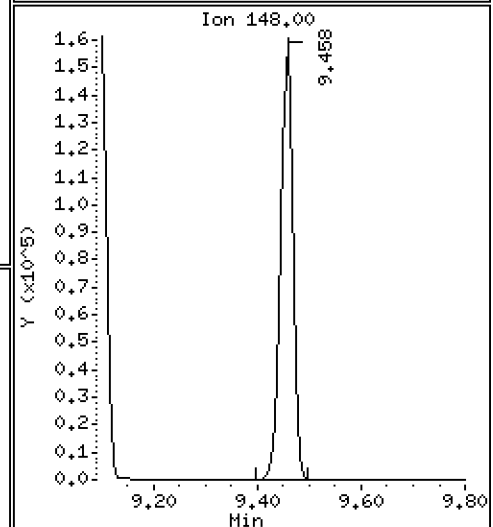
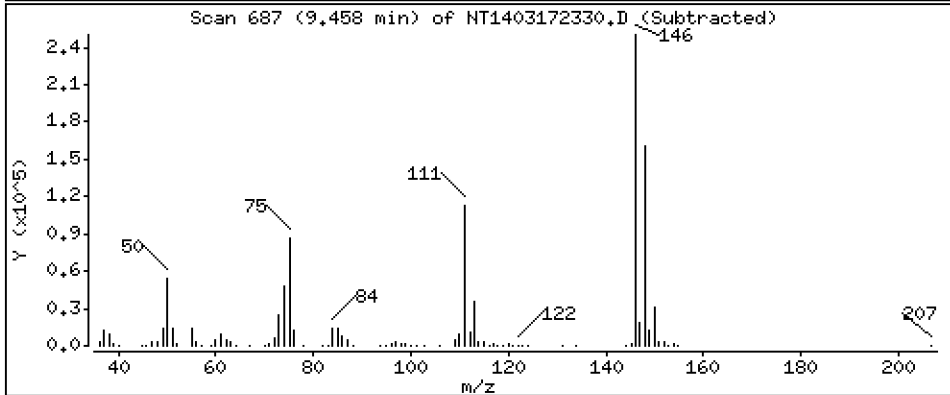
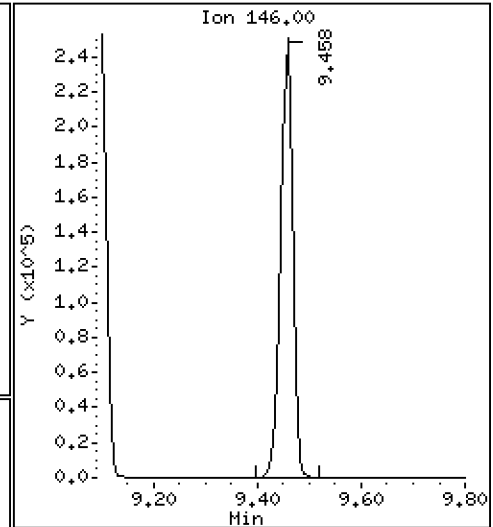
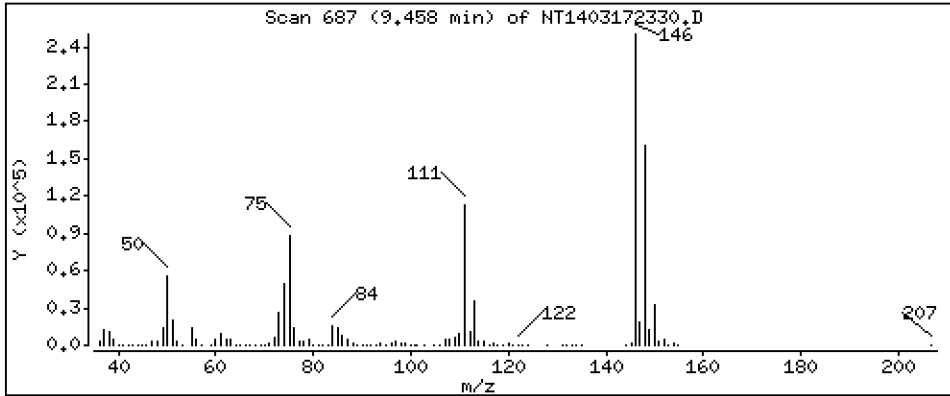
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,878 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

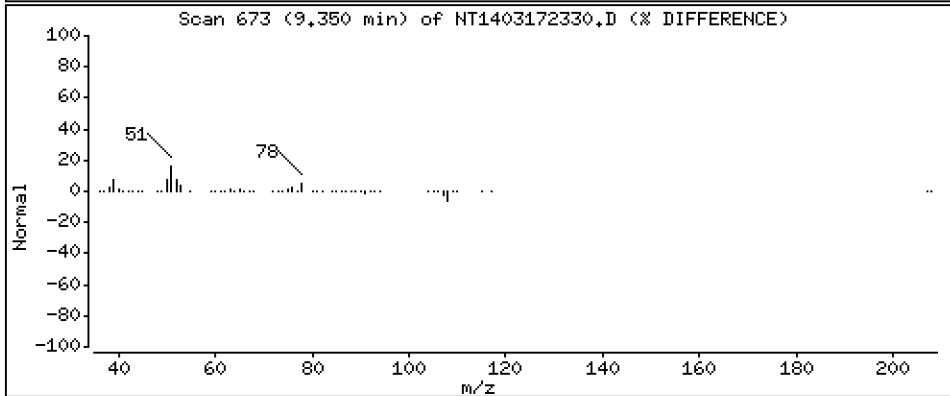
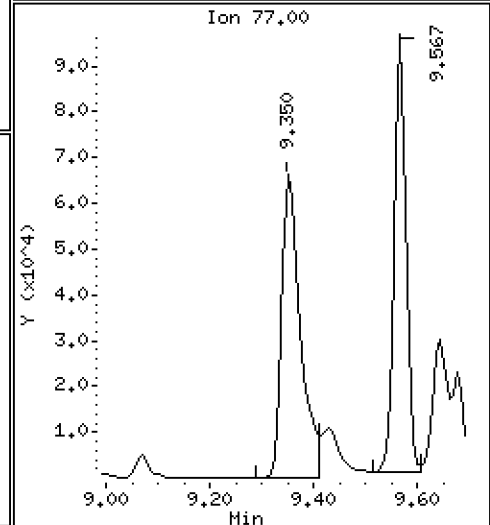
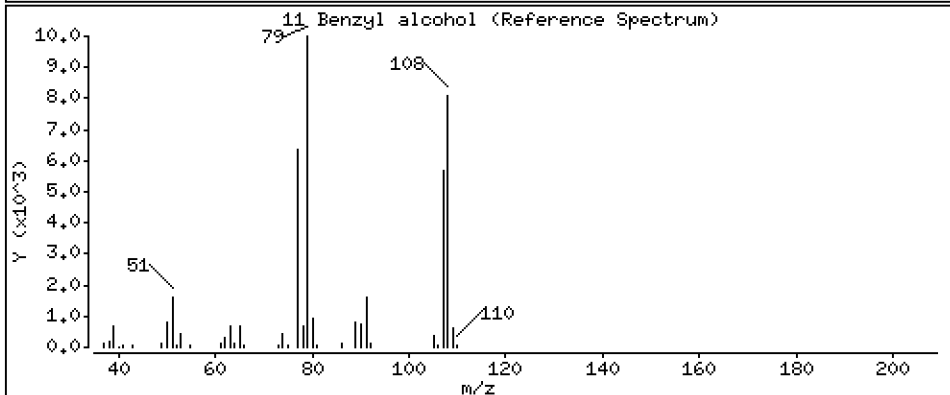
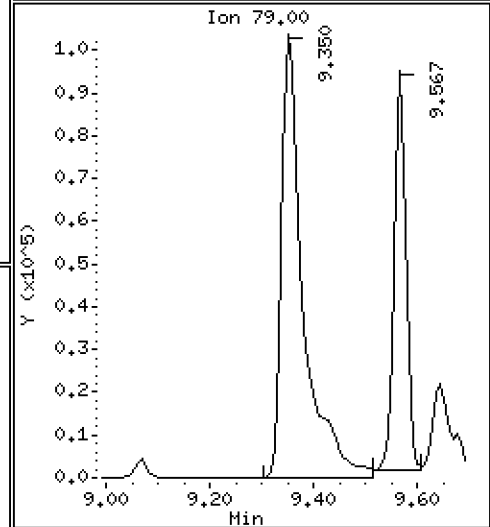
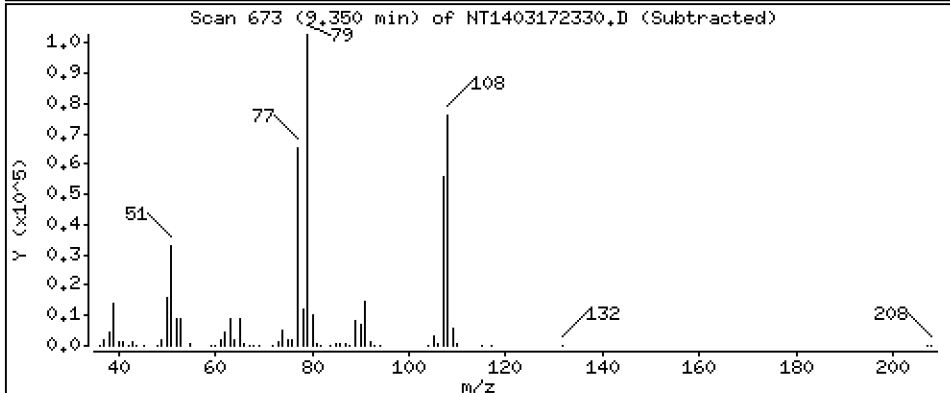
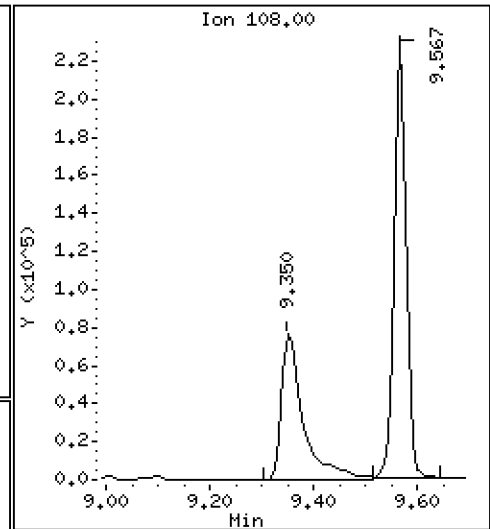
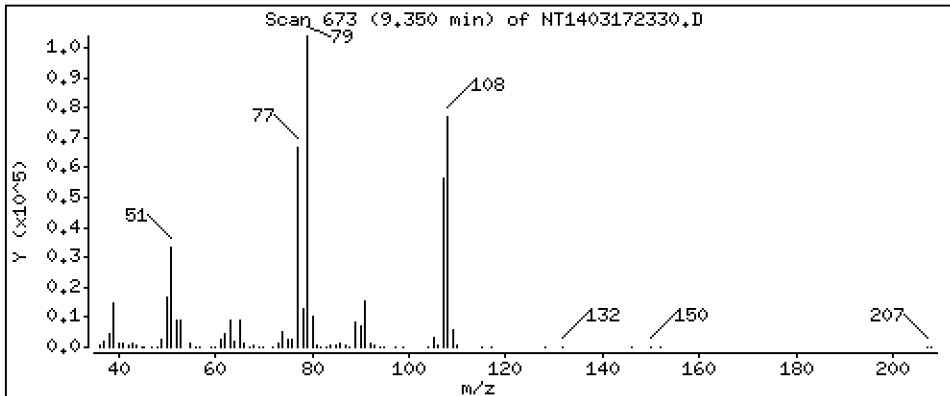
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.543 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

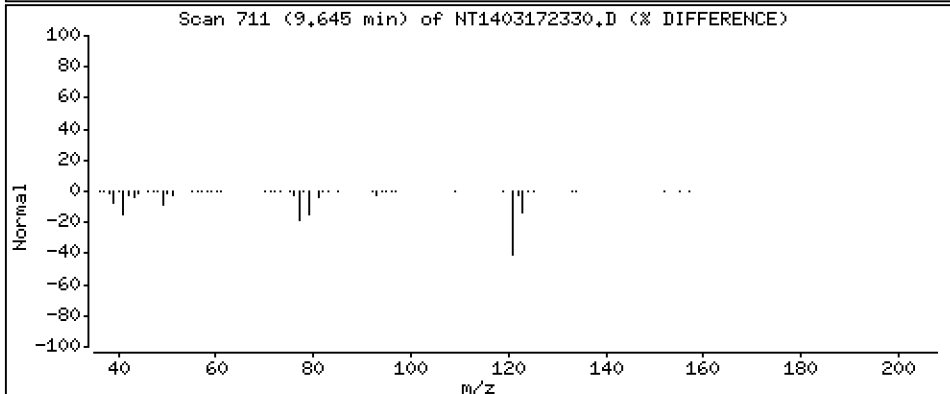
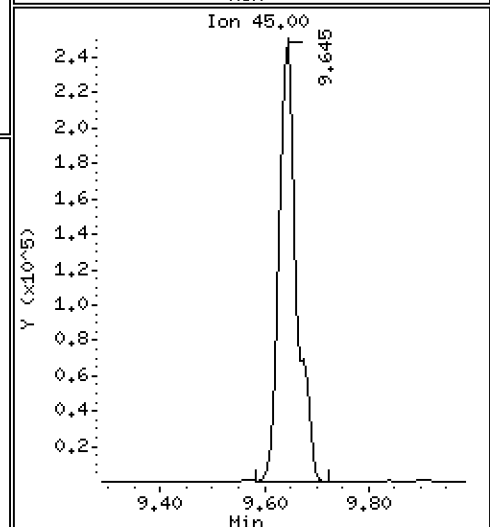
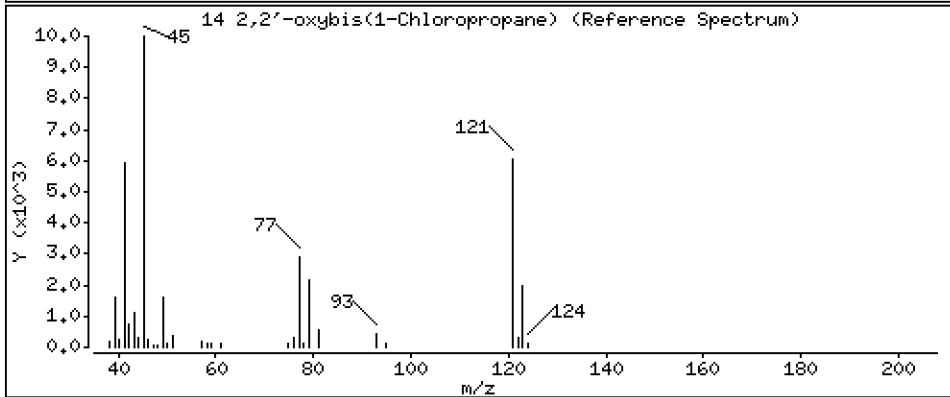
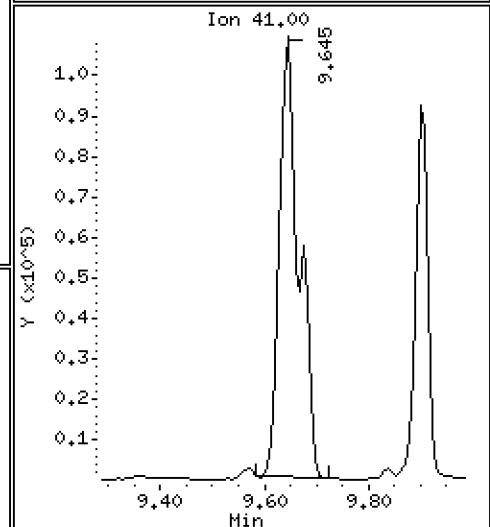
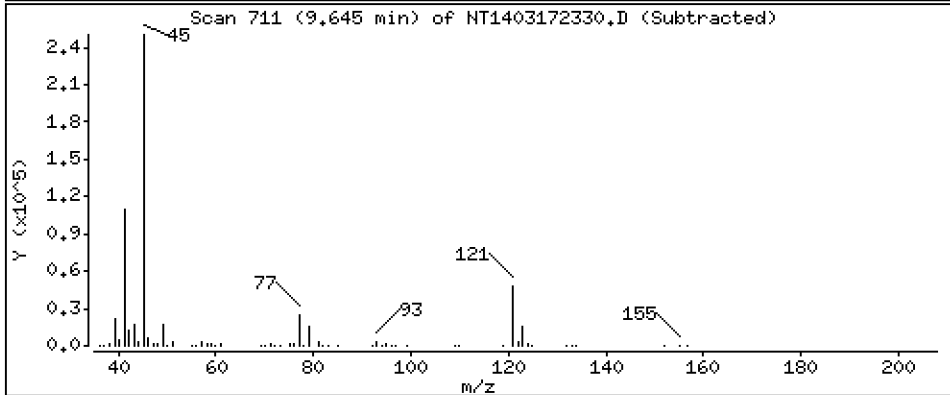
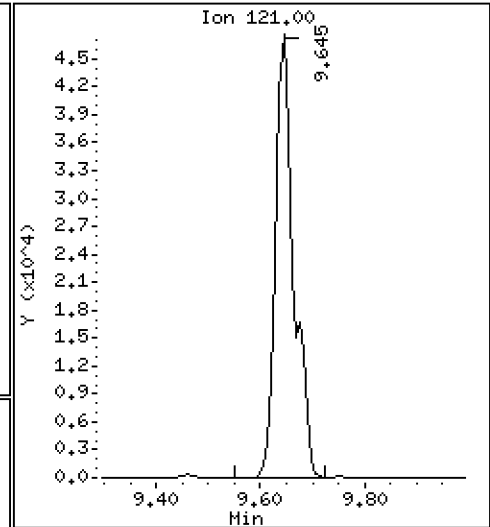
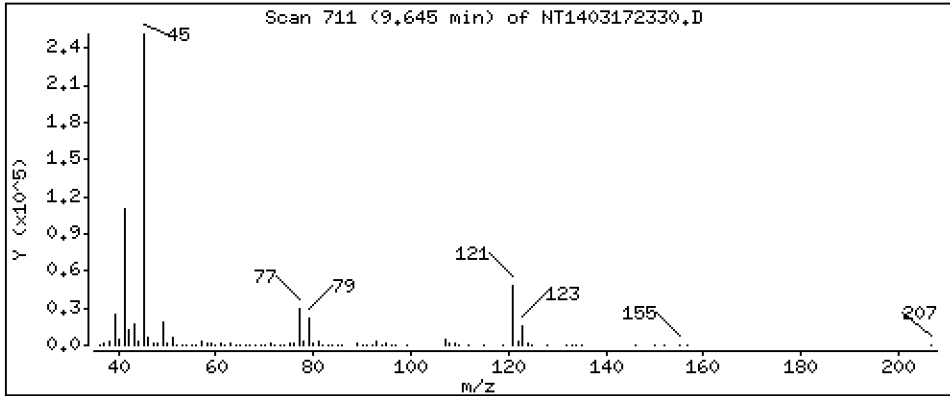
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,763 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

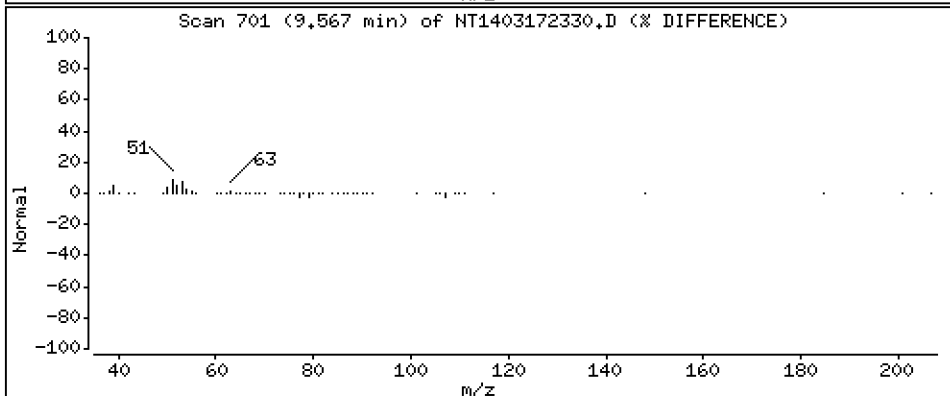
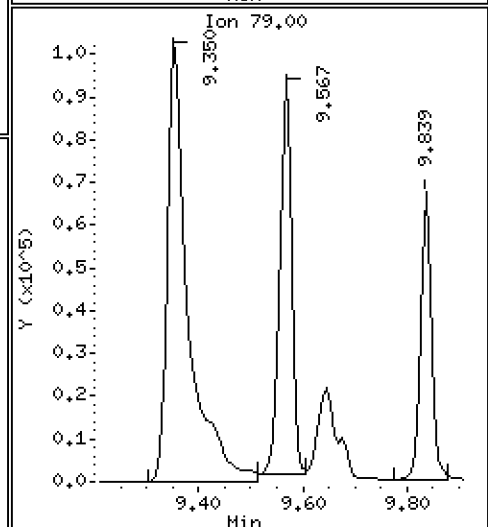
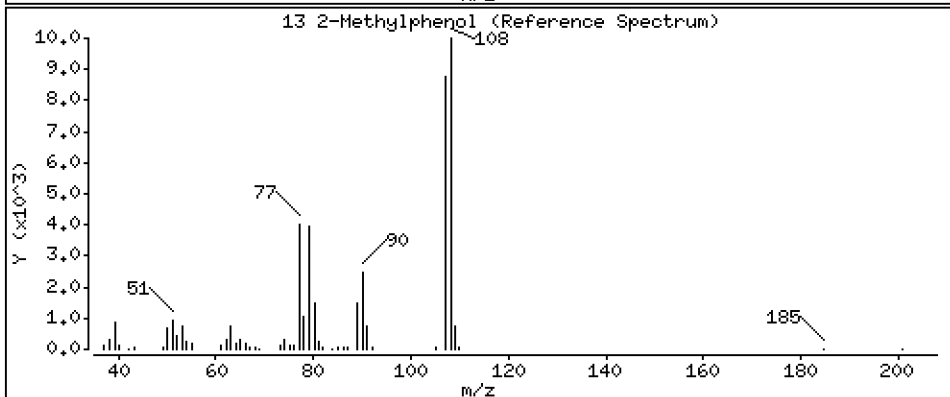
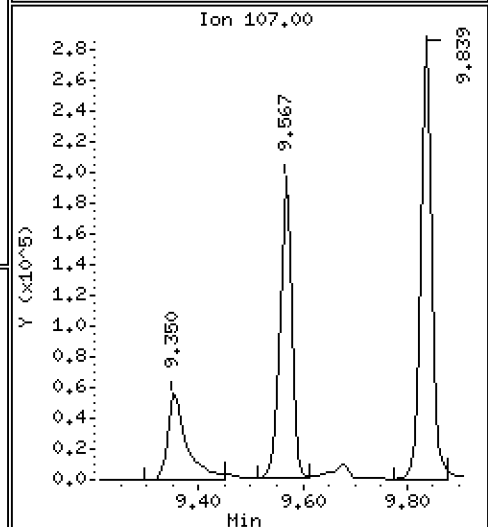
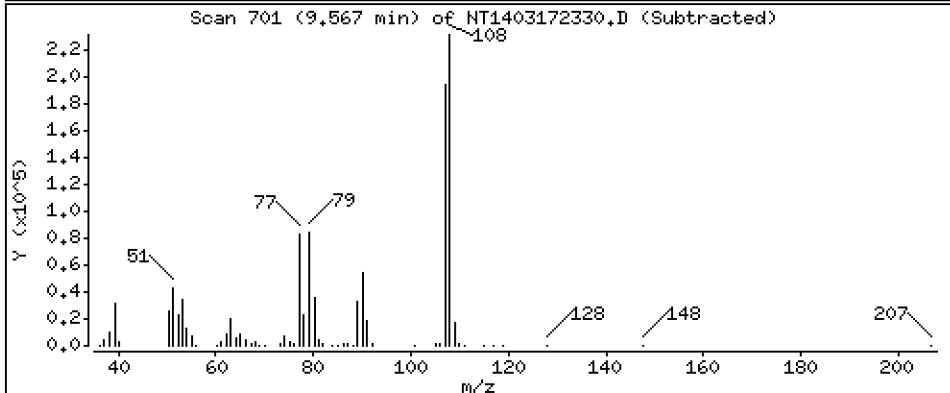
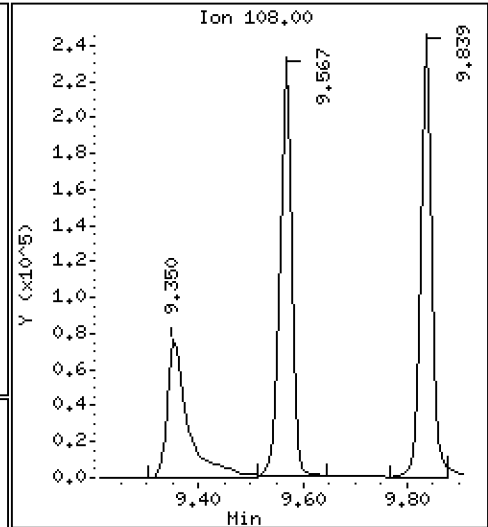
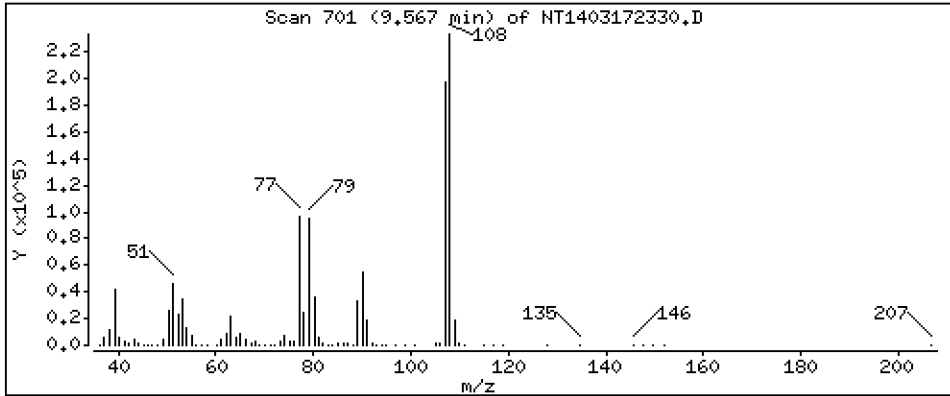
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.840 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

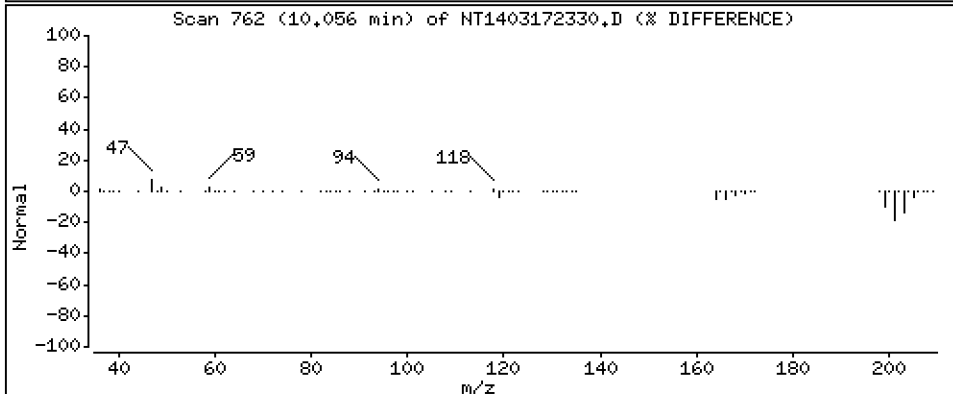
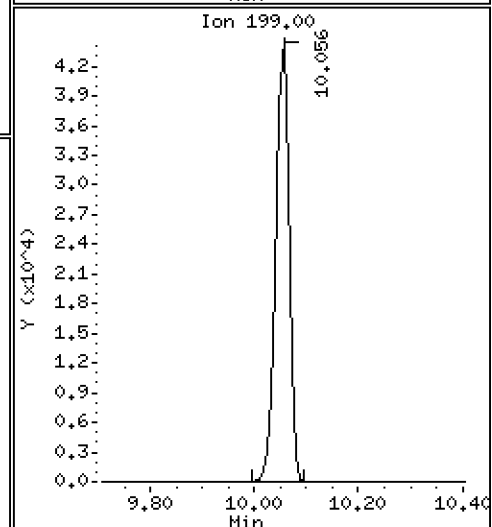
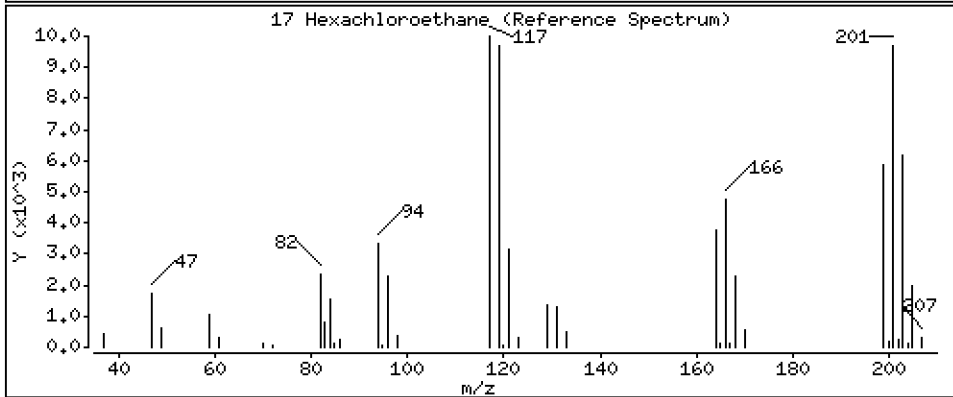
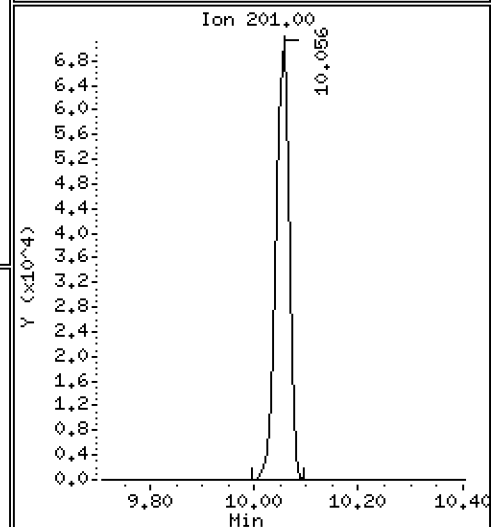
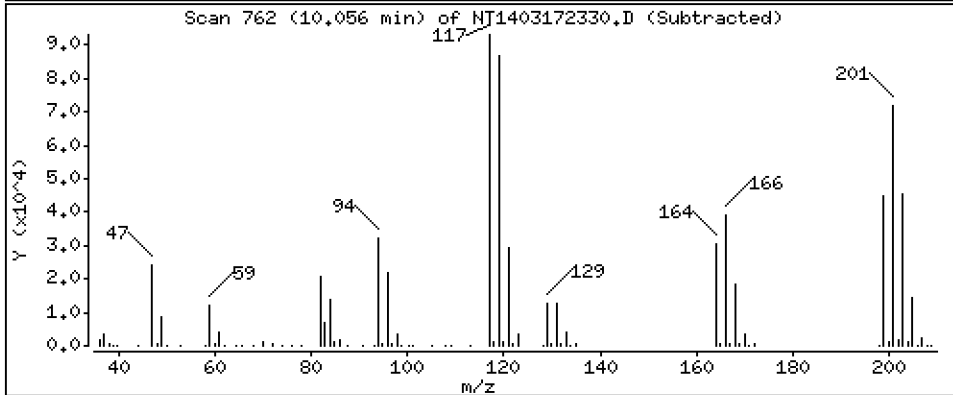
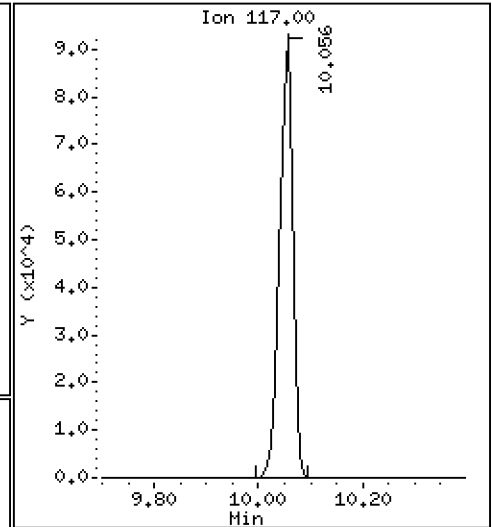
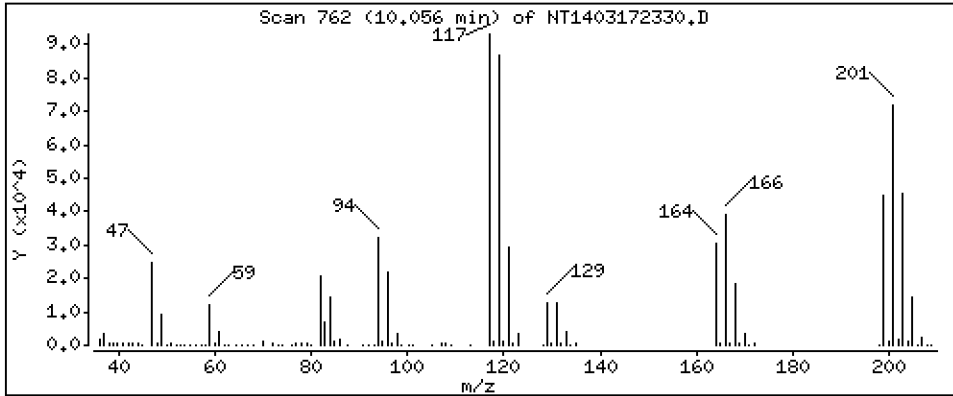
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,667 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

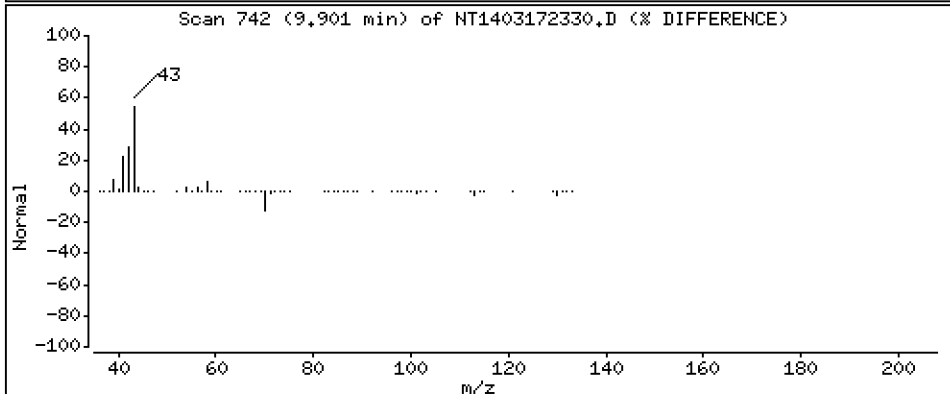
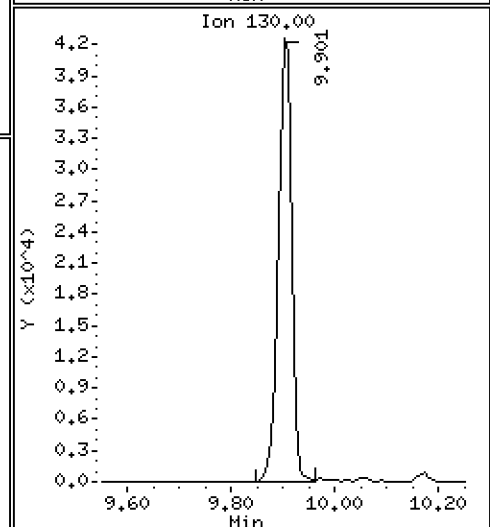
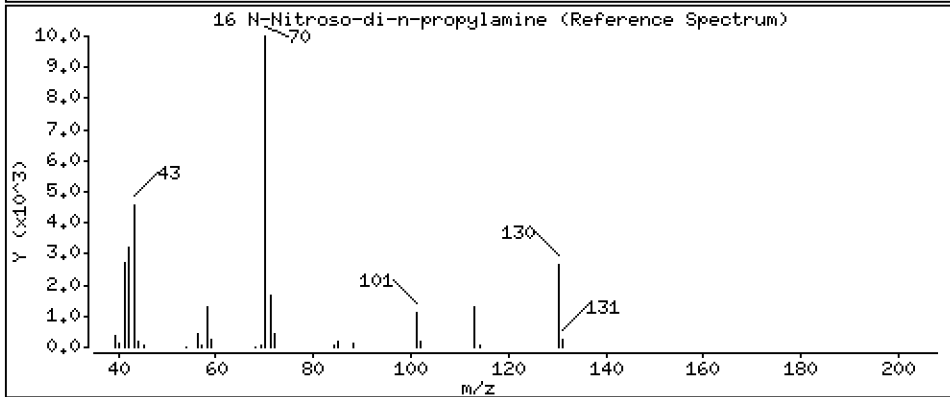
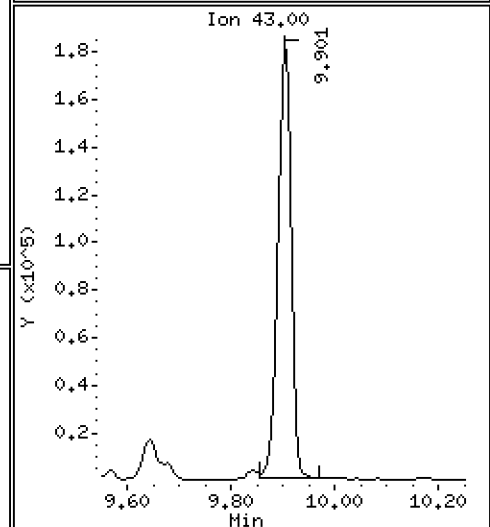
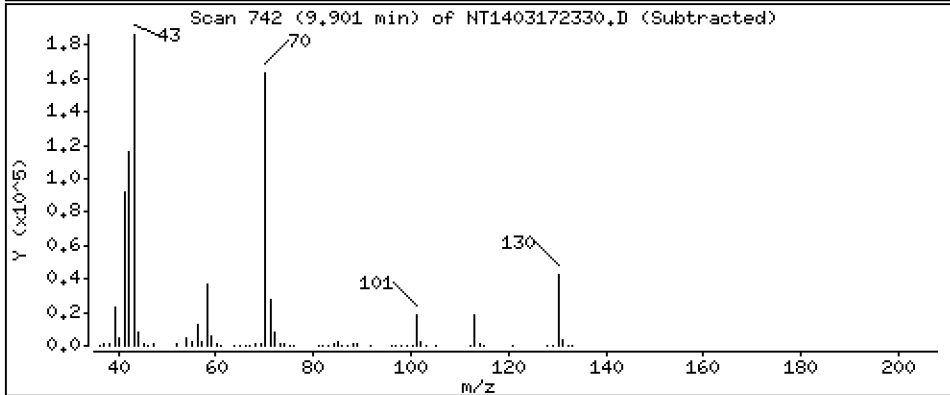
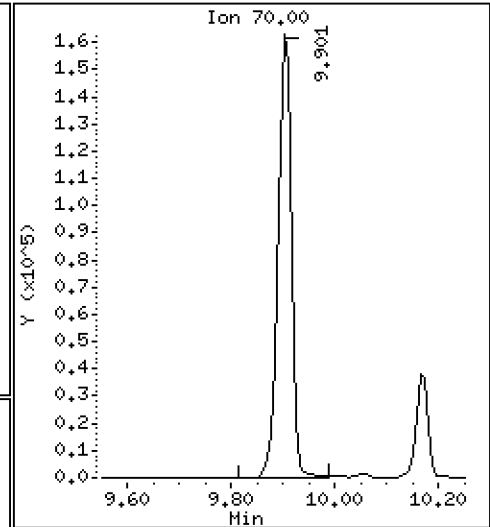
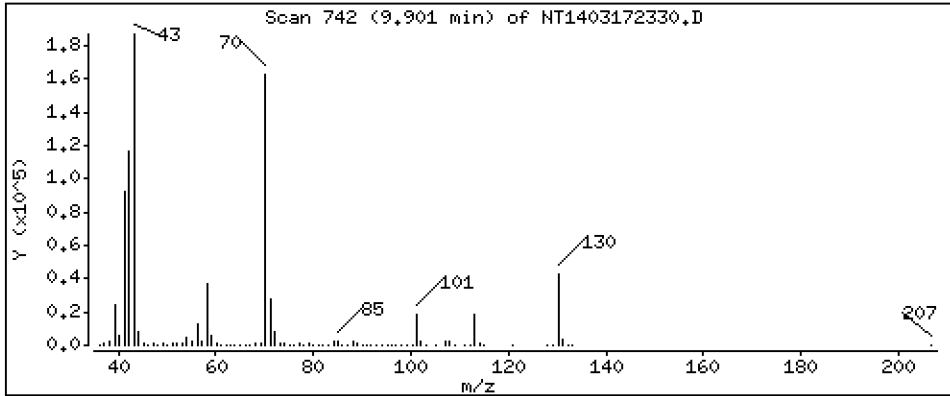
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,823 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

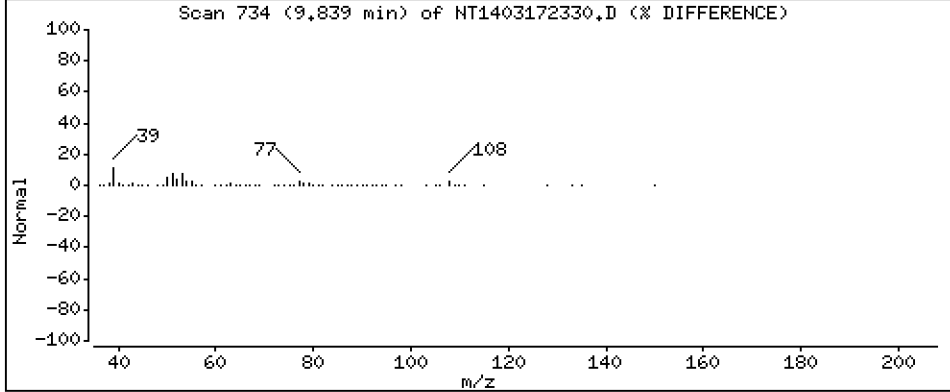
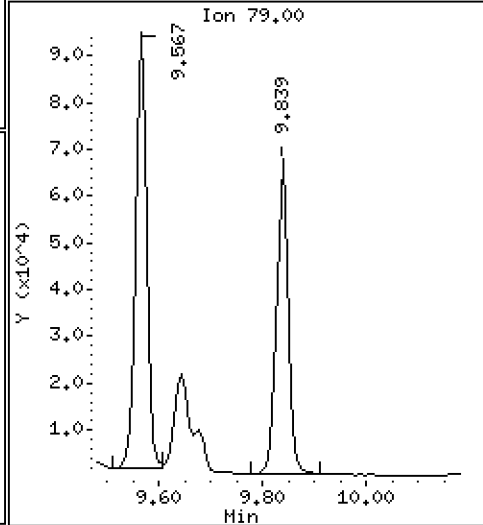
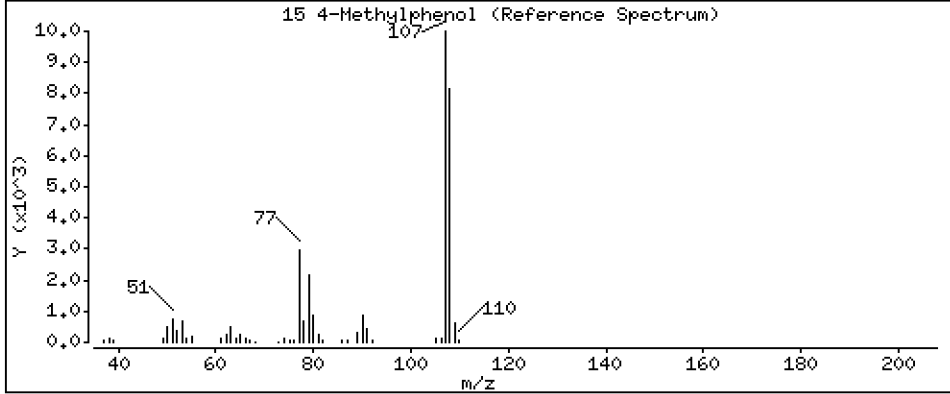
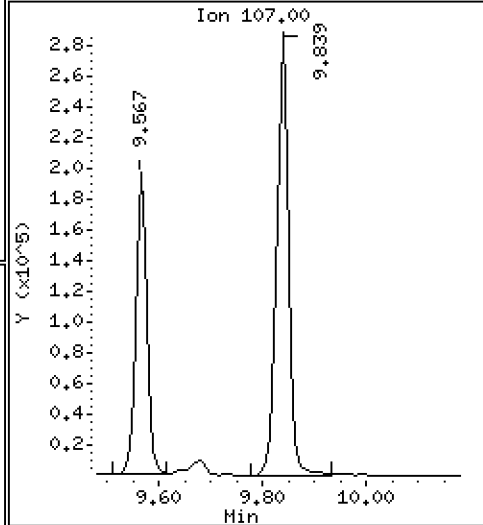
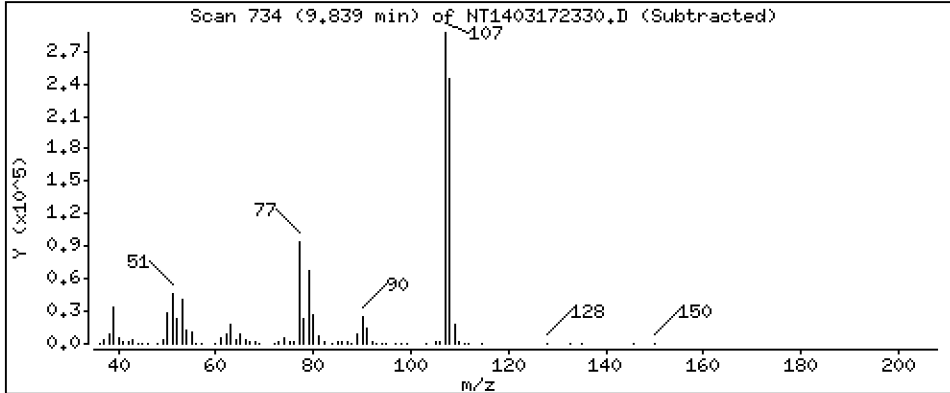
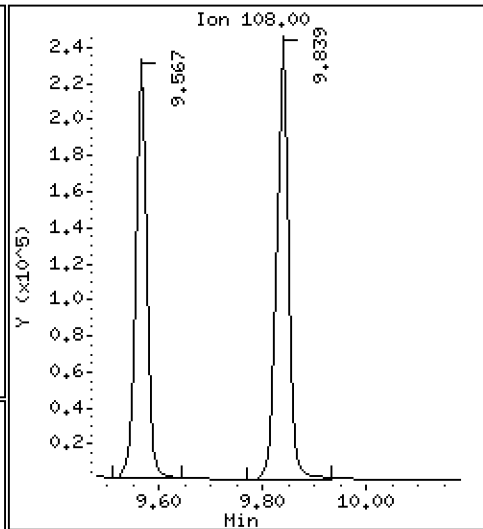
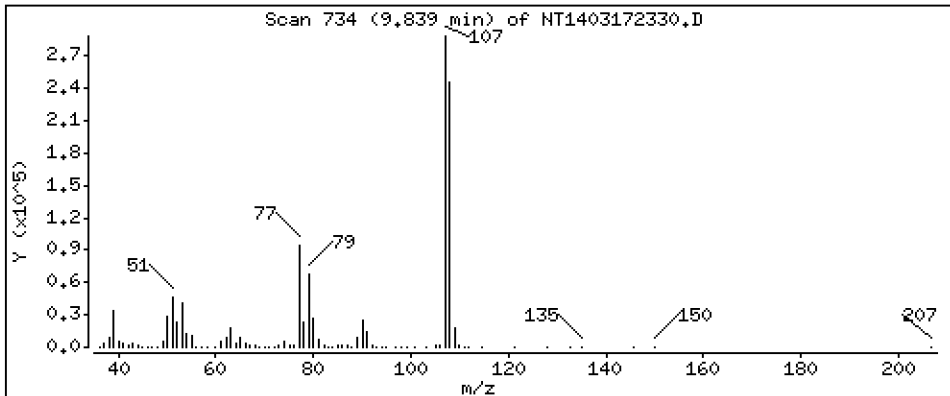
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,377 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

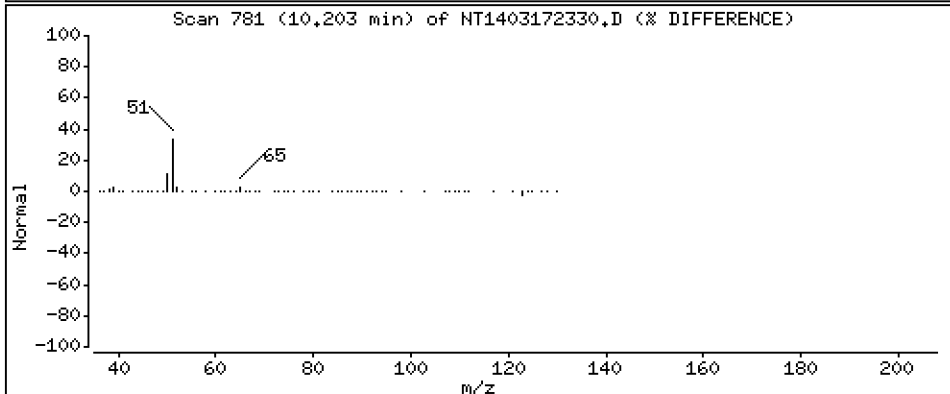
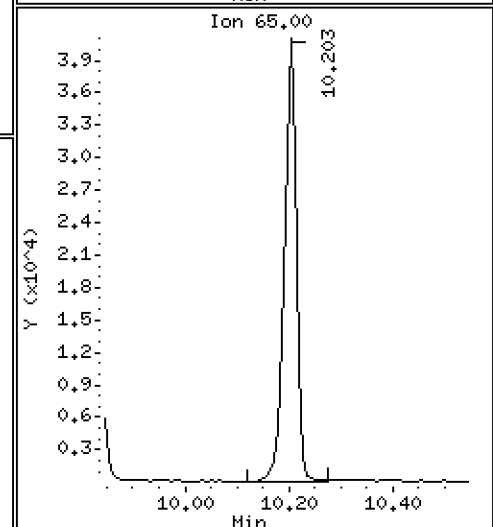
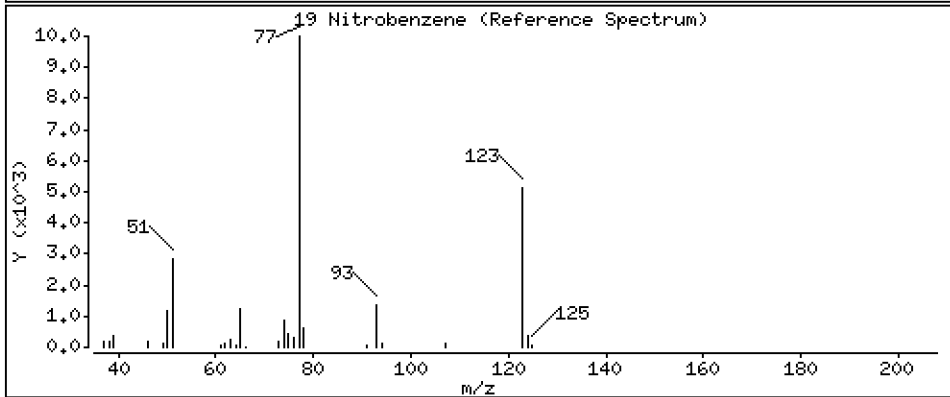
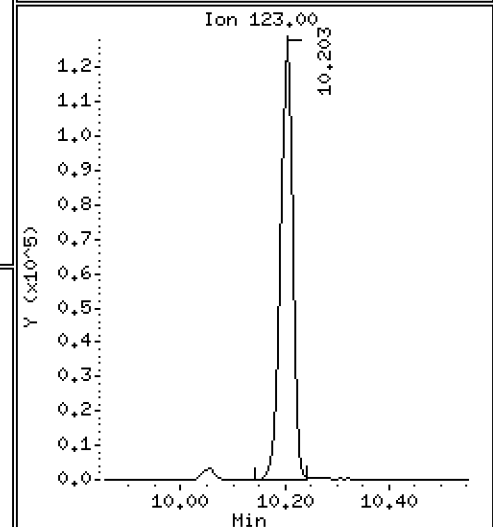
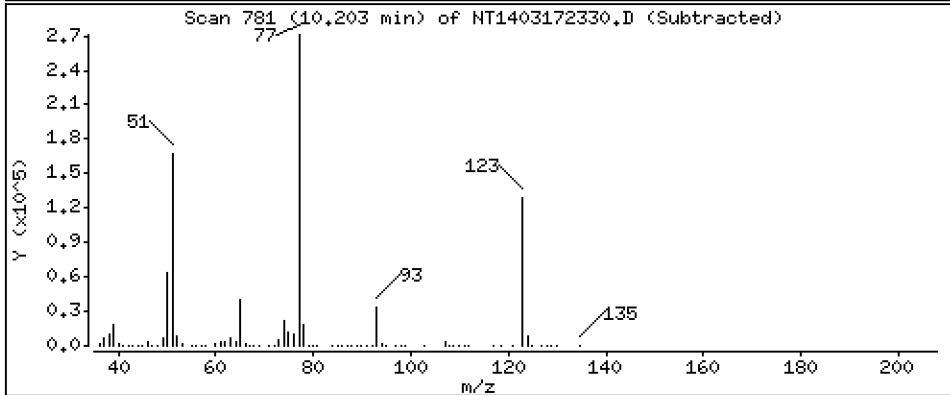
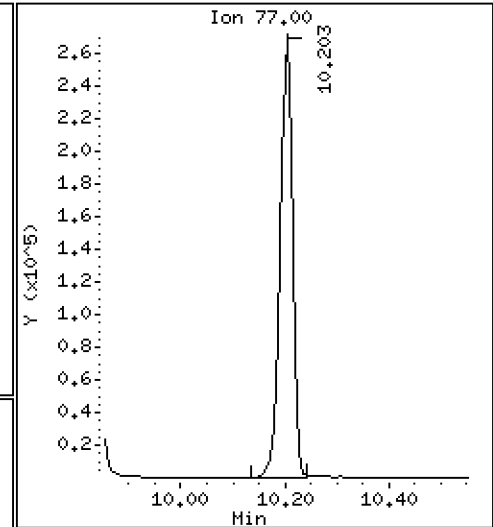
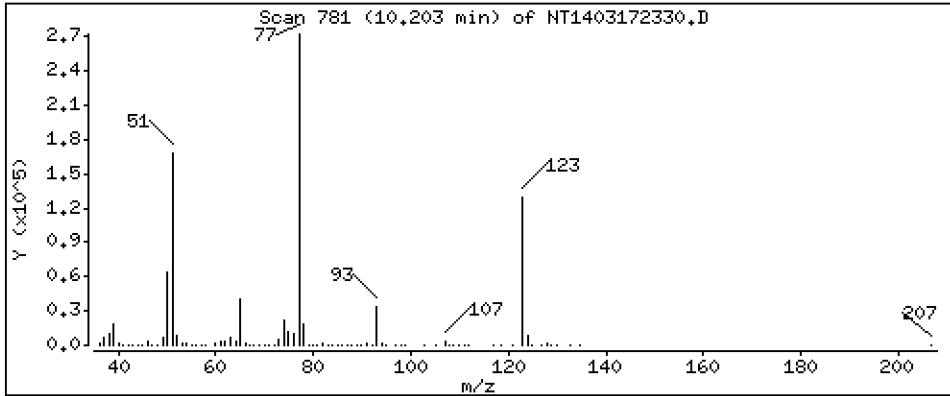
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 4,830 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

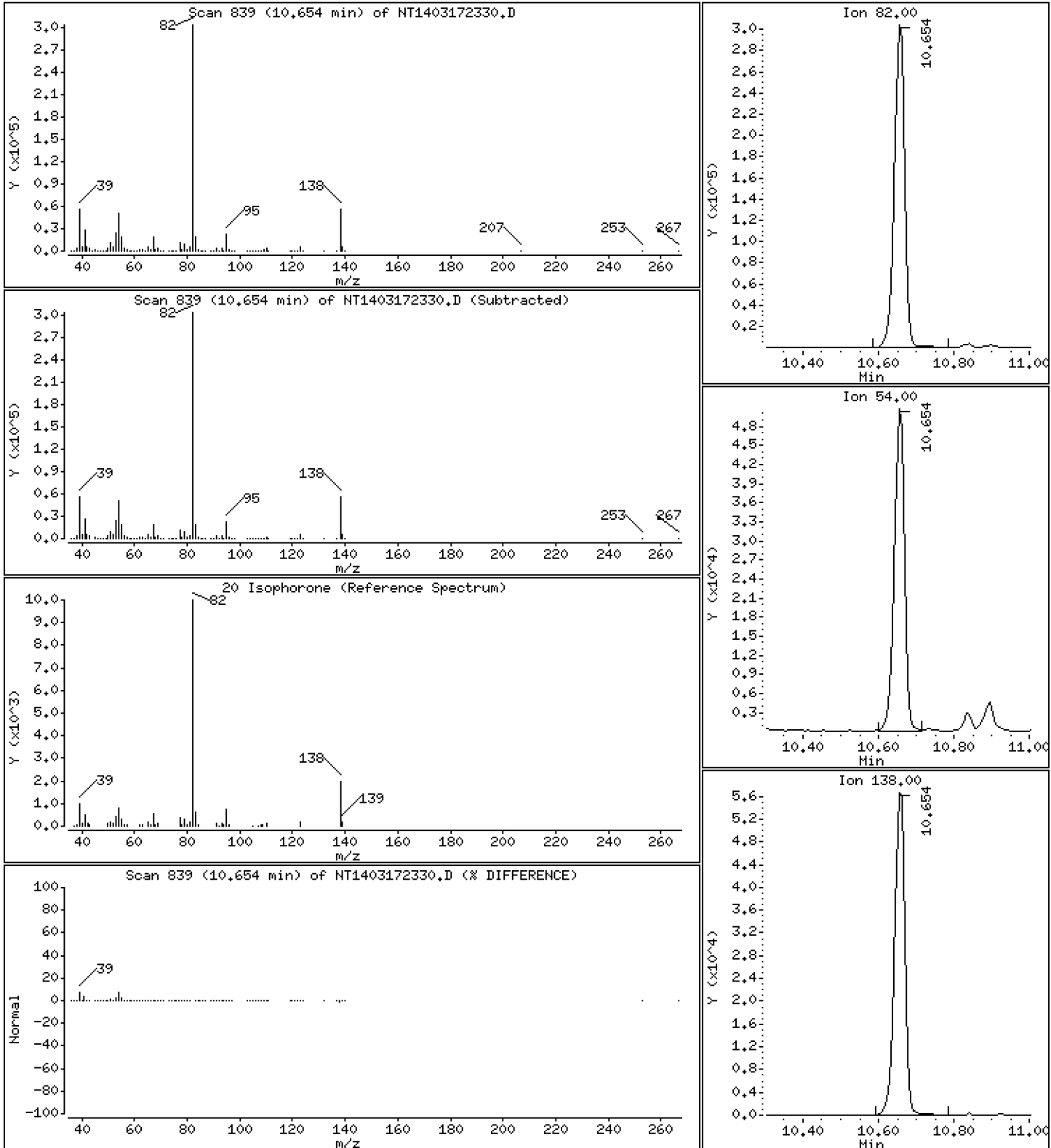
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 5,002 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

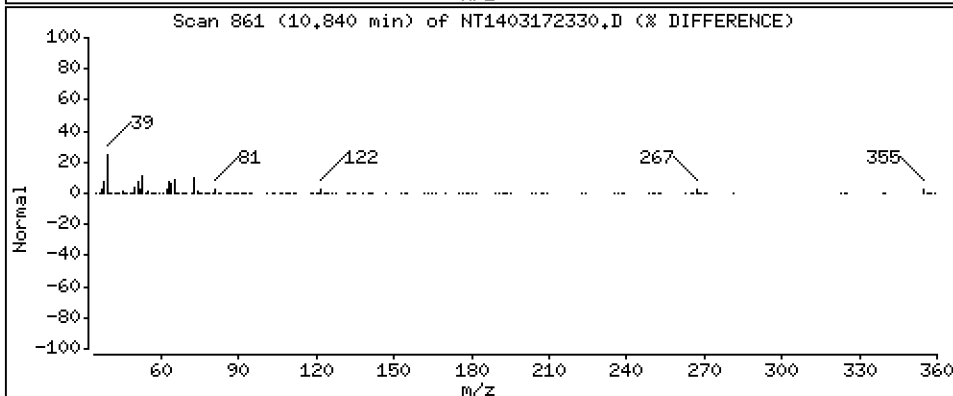
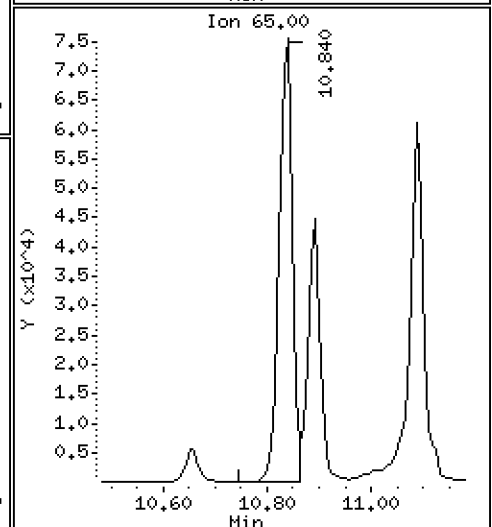
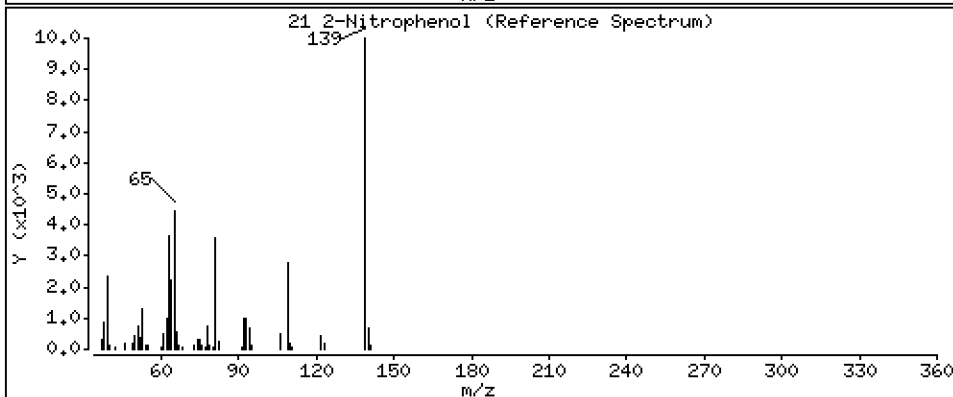
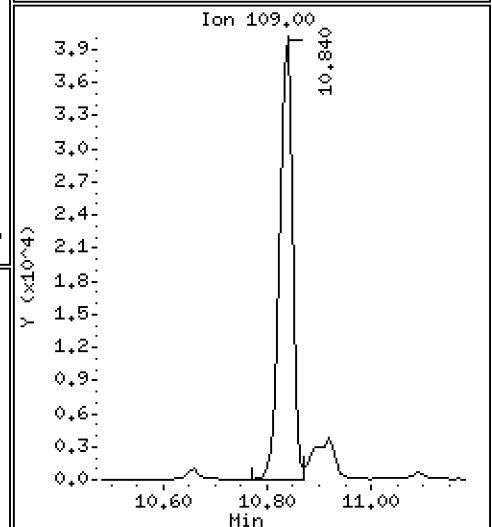
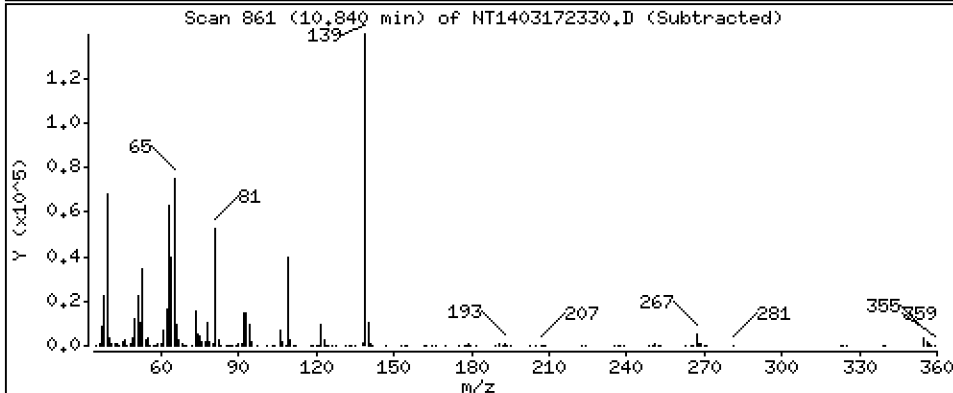
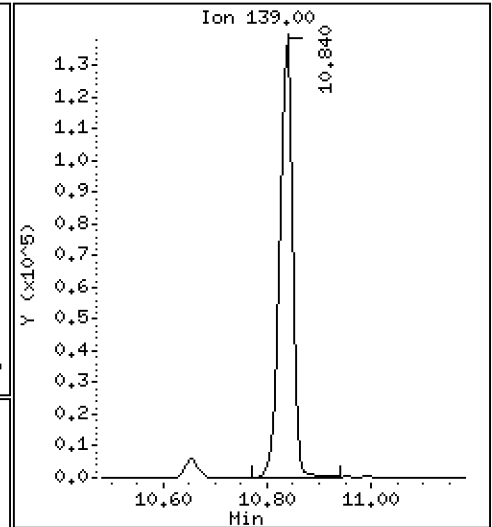
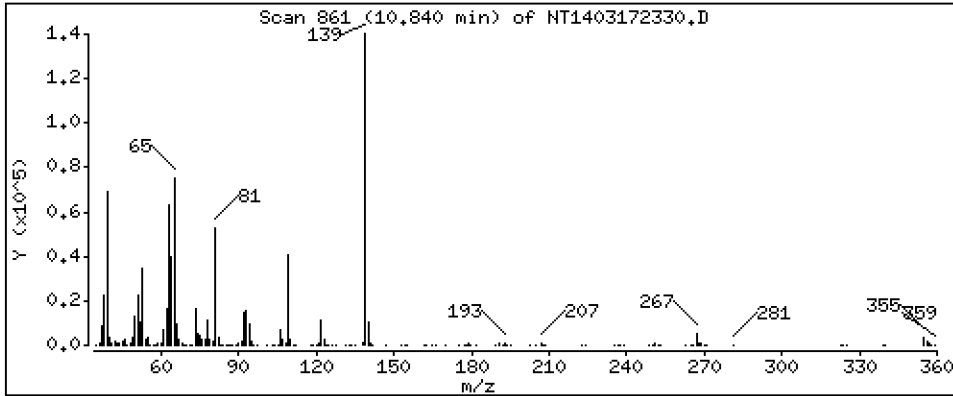
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,623 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

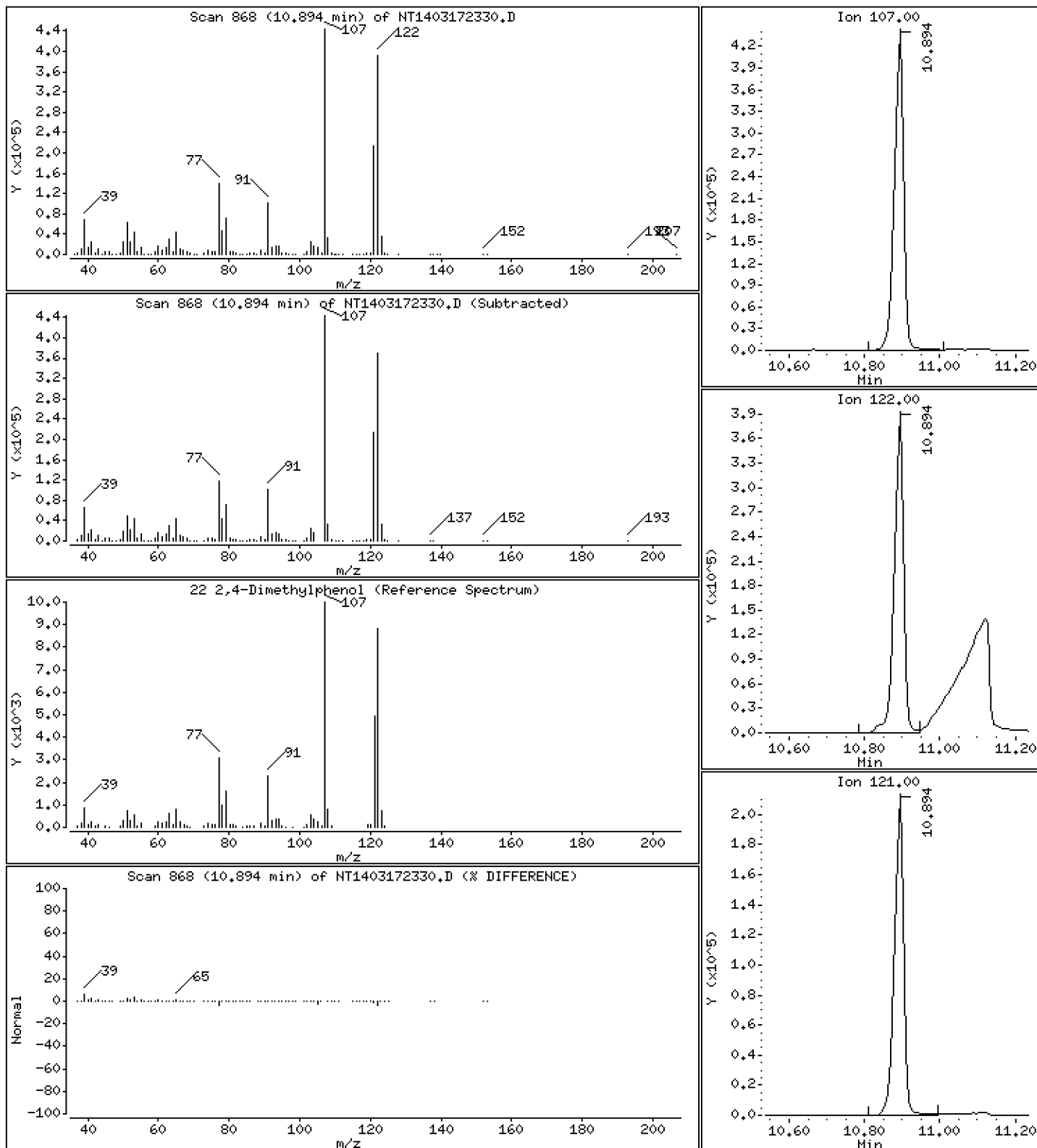
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 9,712 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

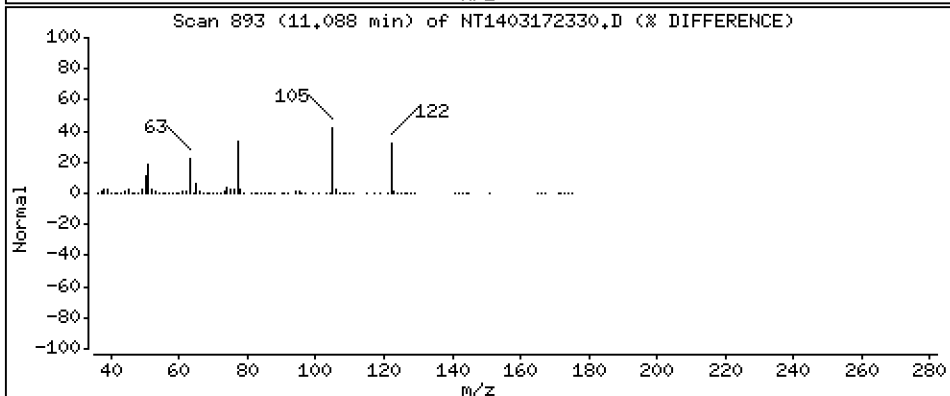
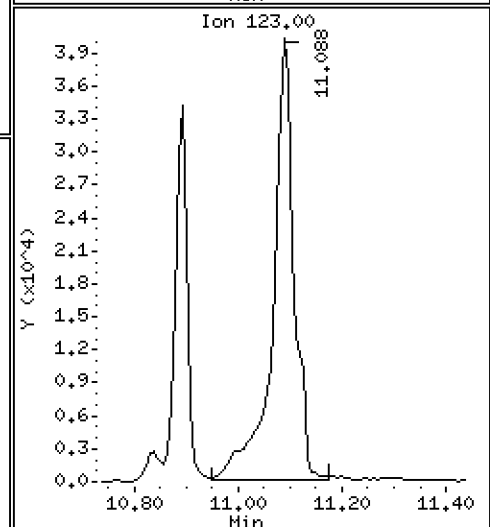
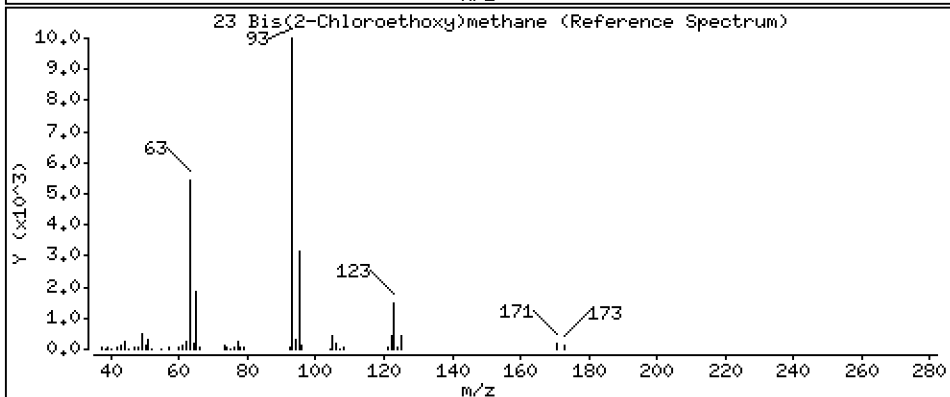
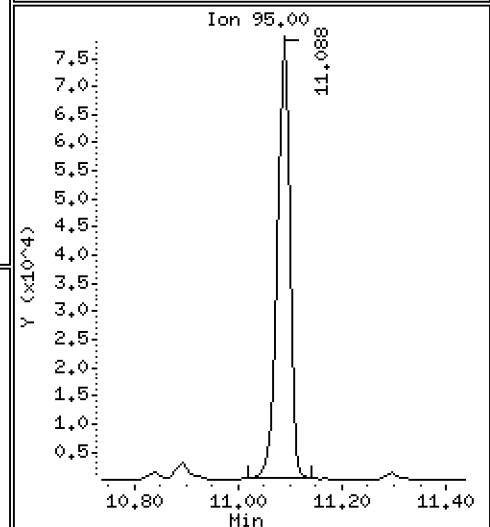
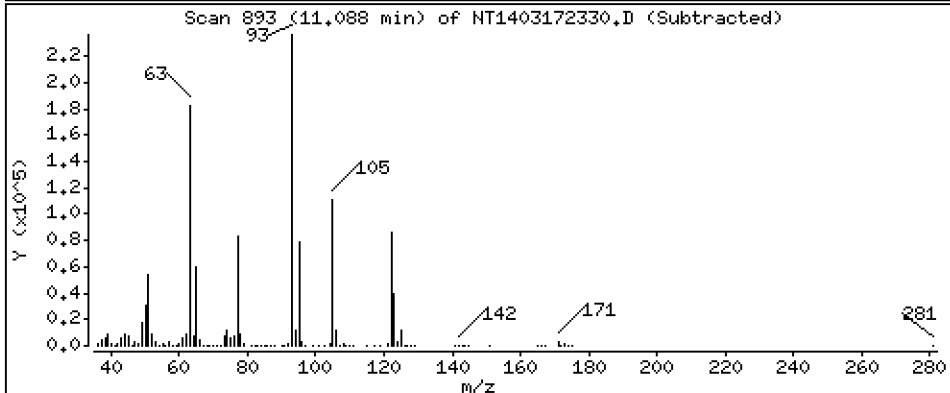
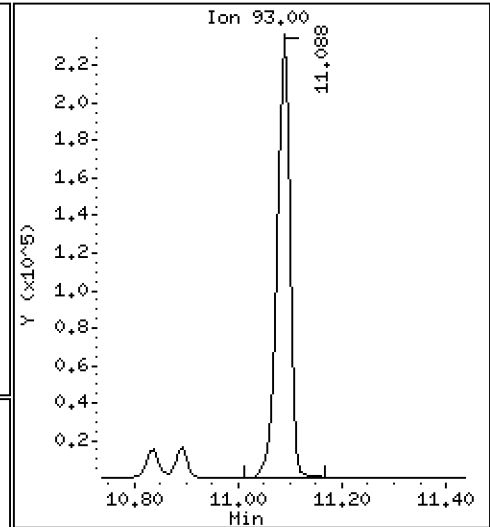
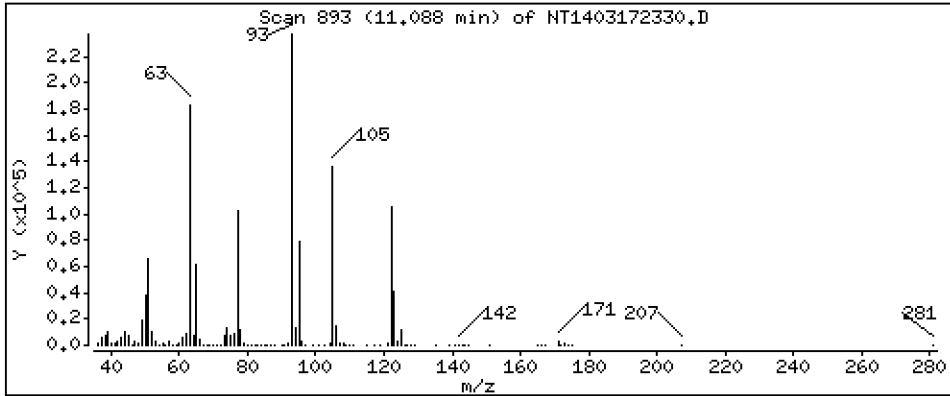
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 4,769 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

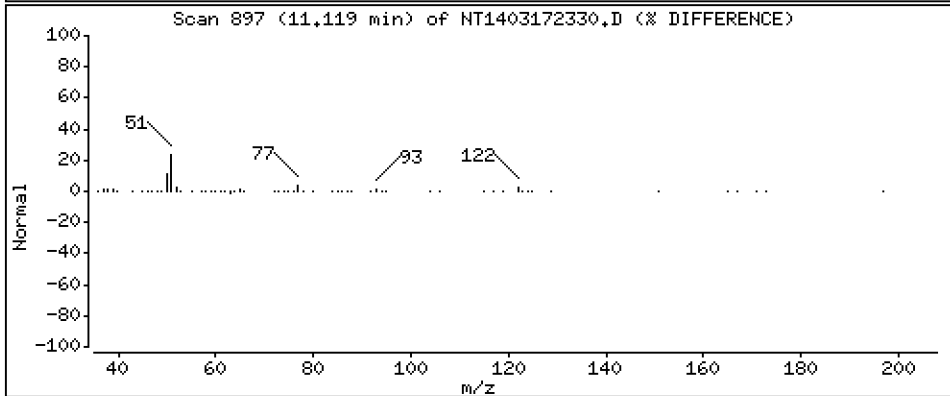
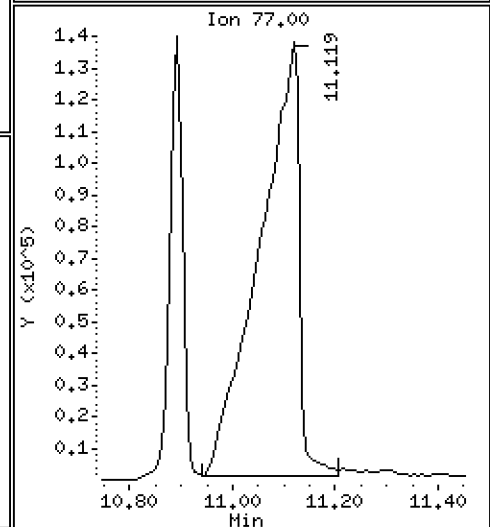
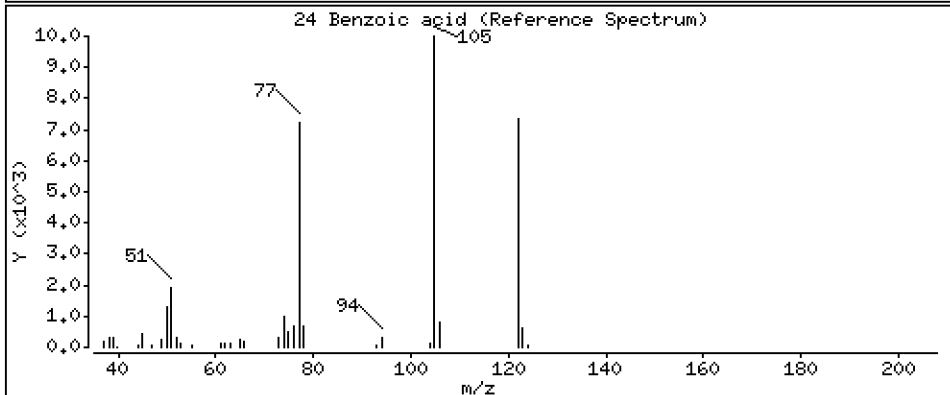
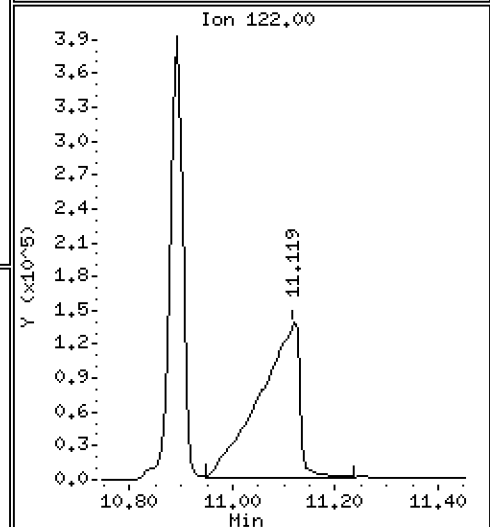
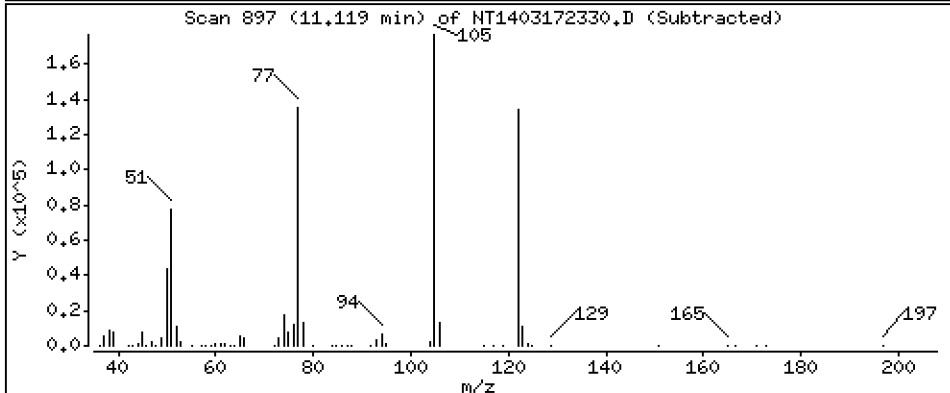
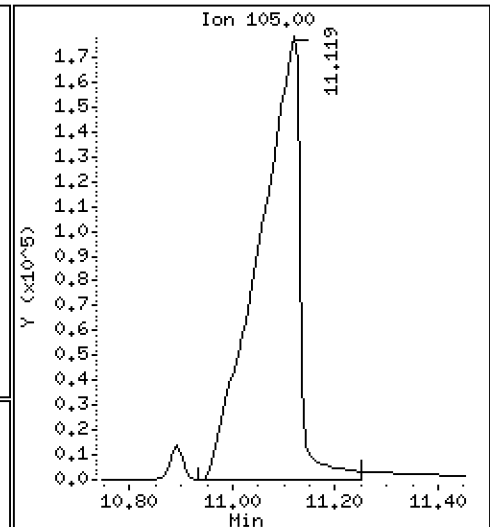
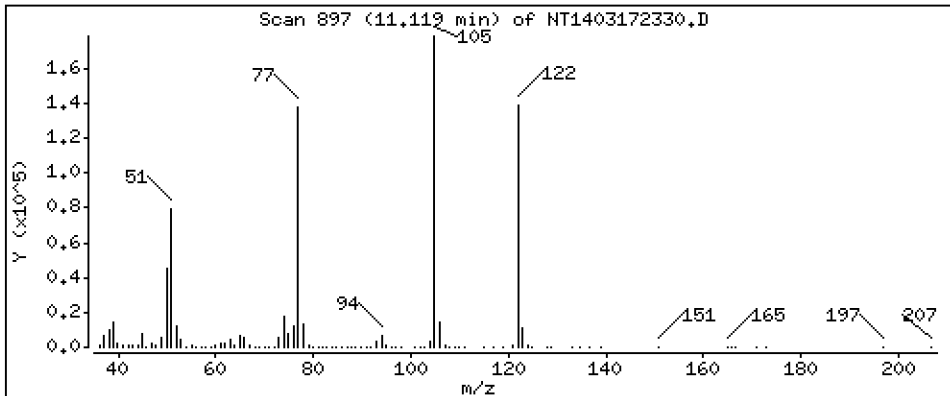
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 15.59 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

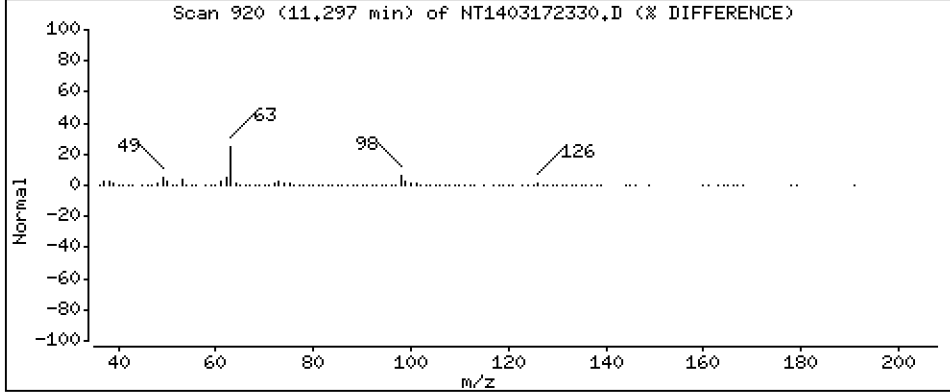
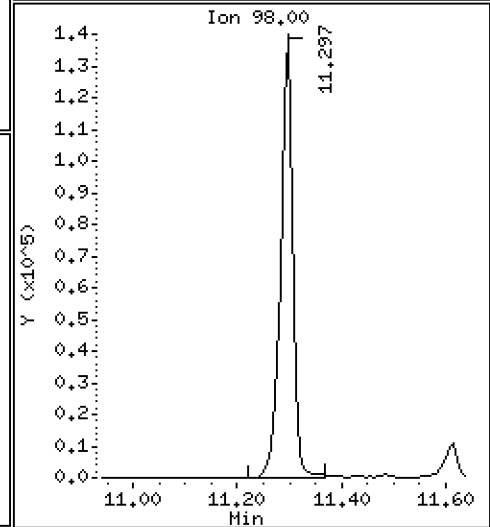
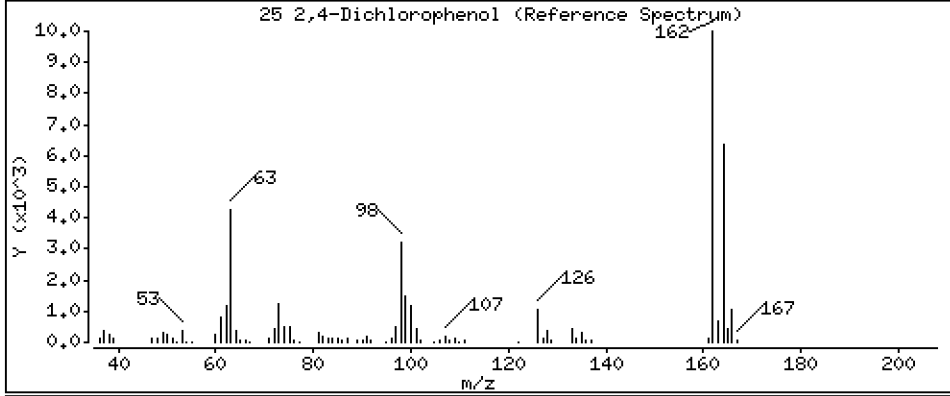
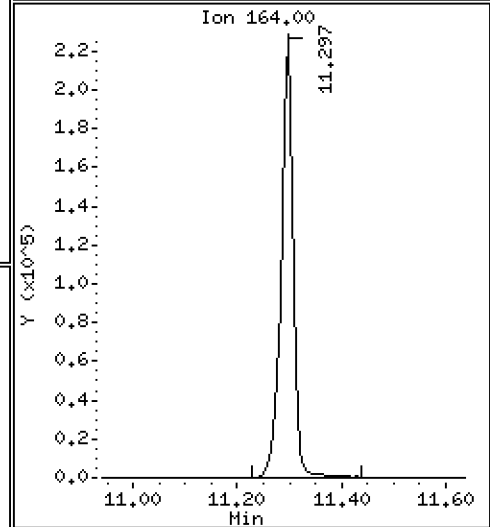
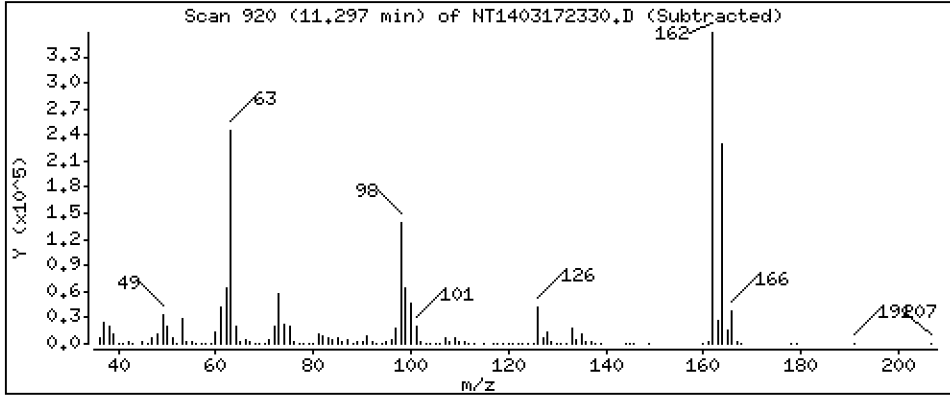
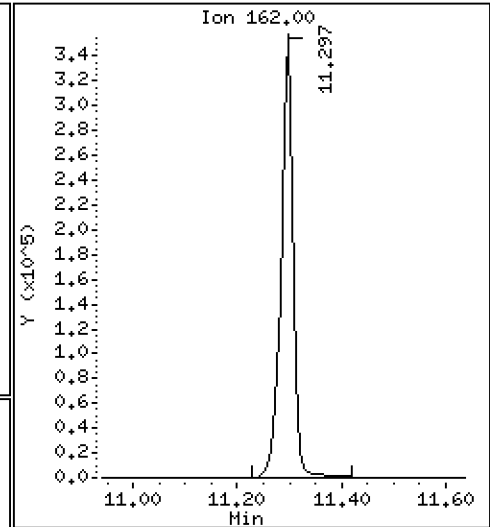
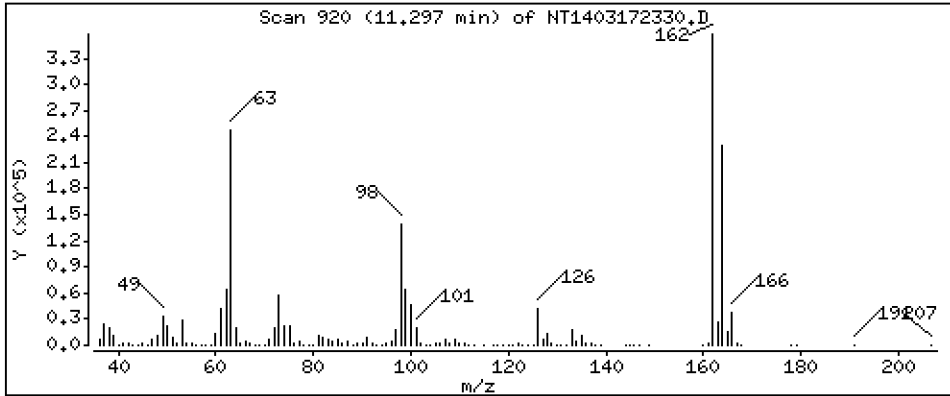
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 10,58 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

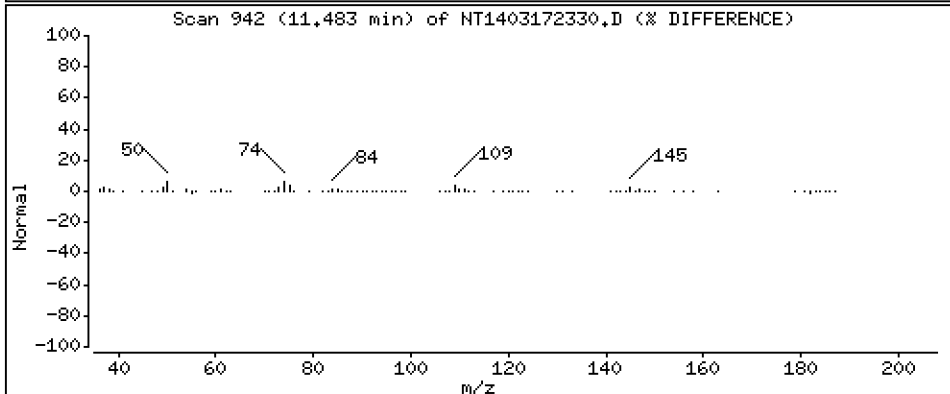
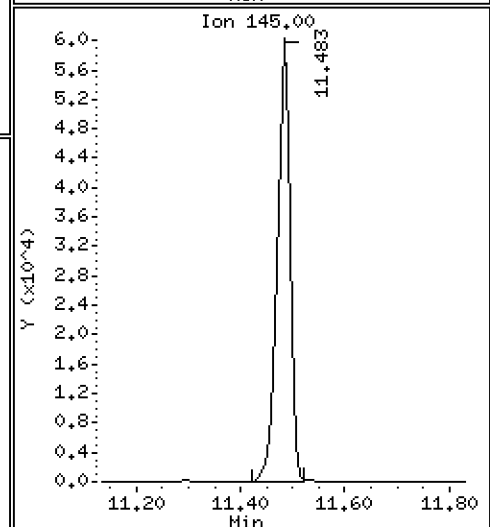
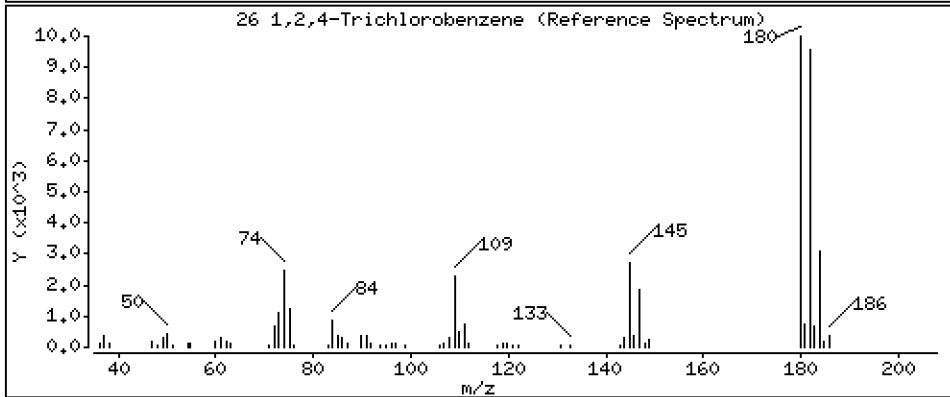
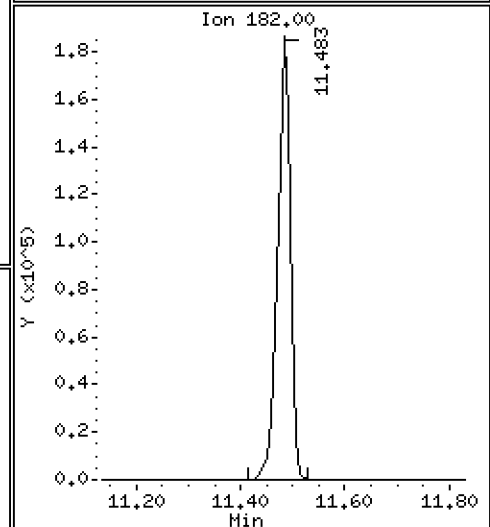
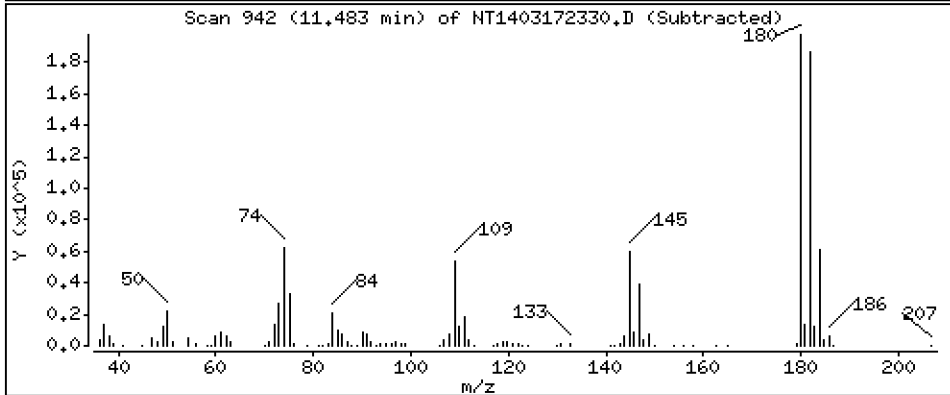
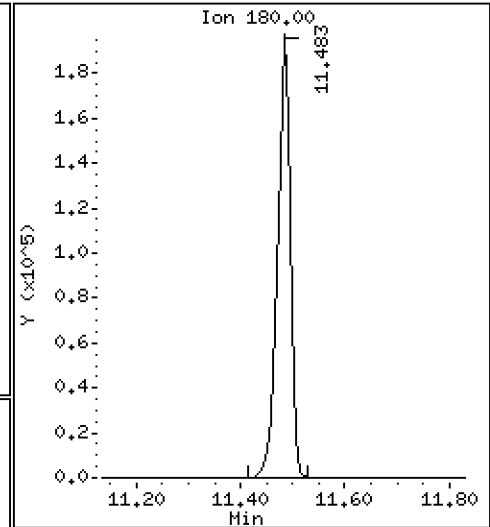
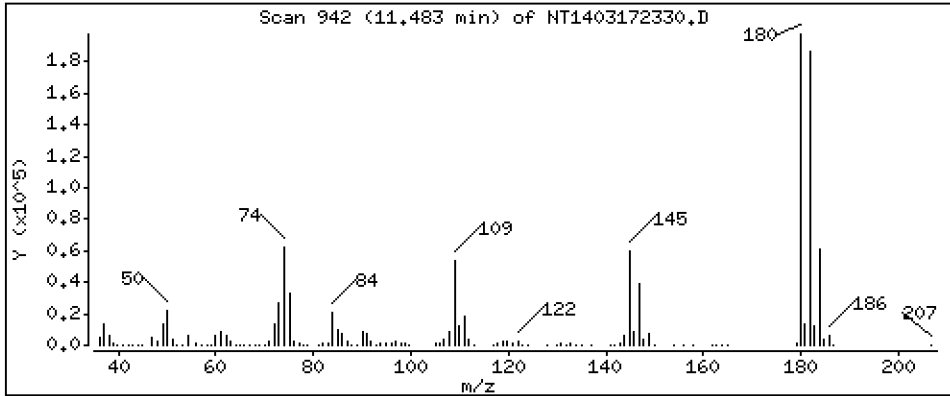
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,488 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

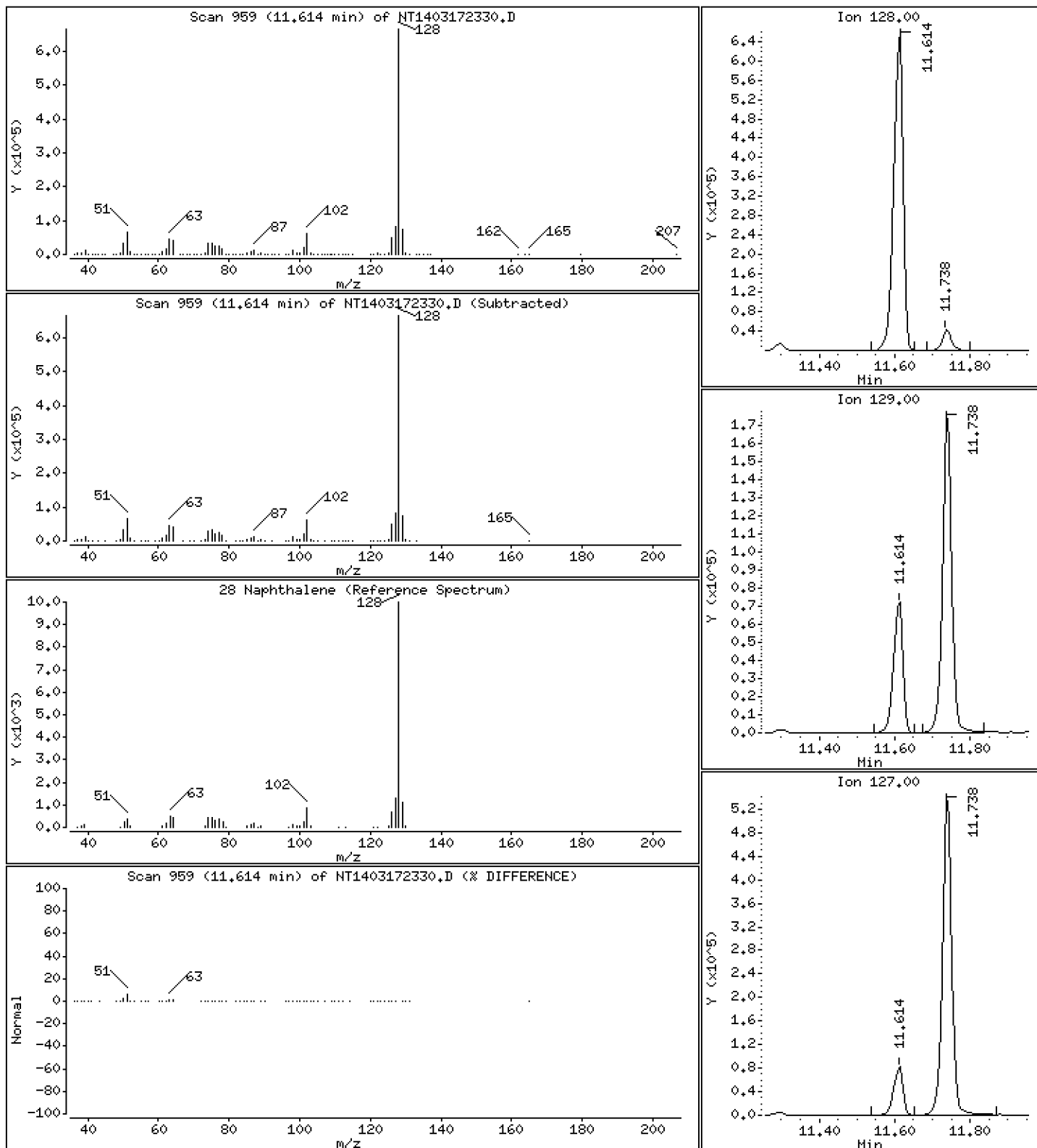
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 4.830 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

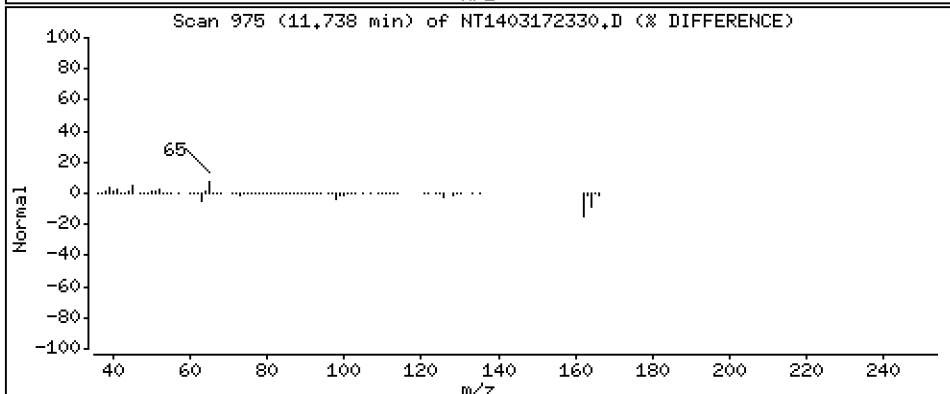
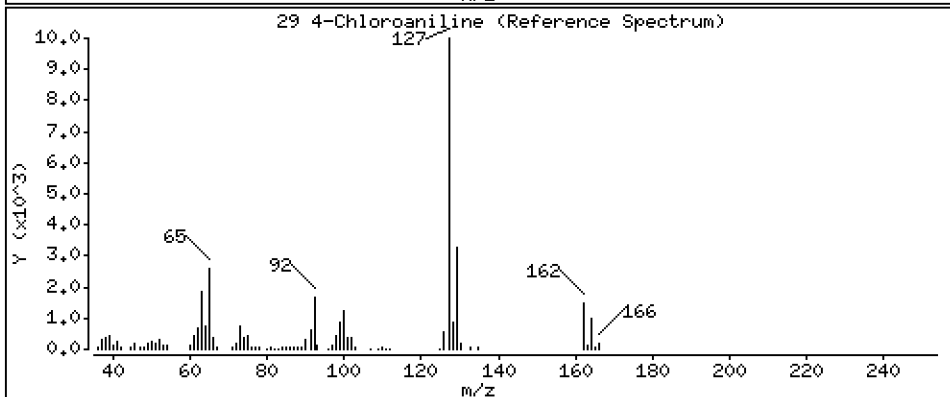
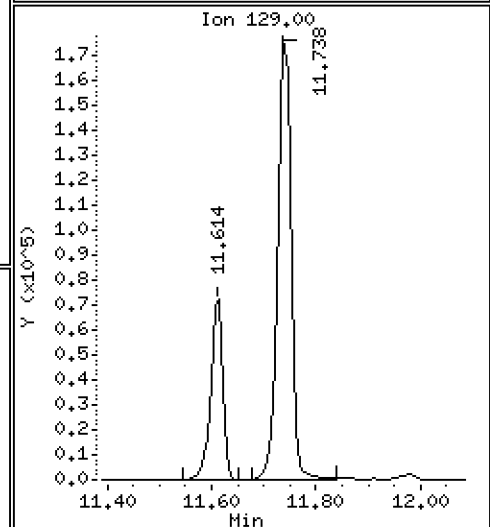
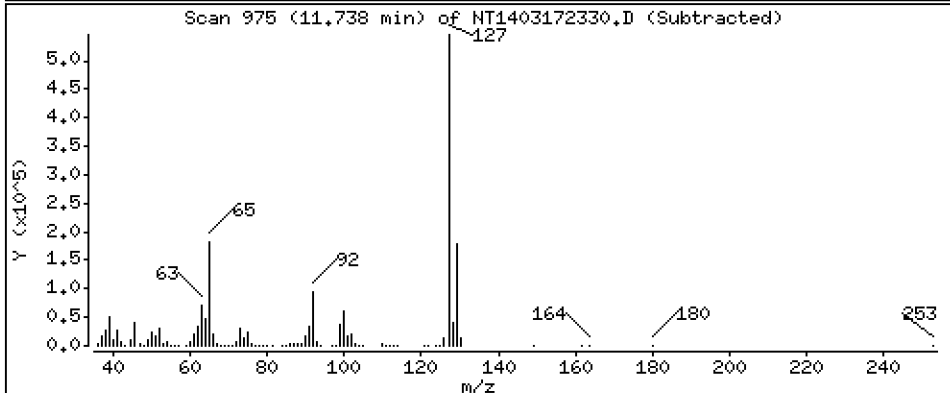
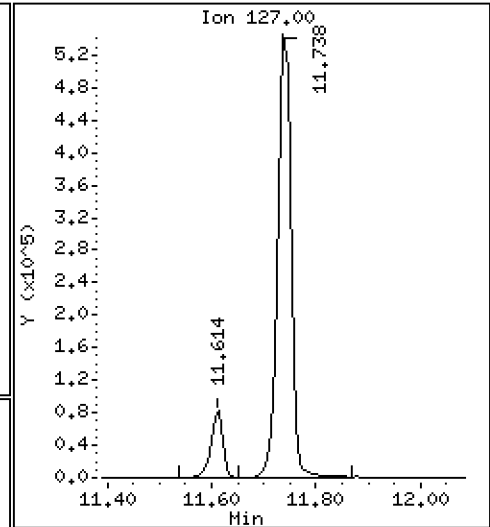
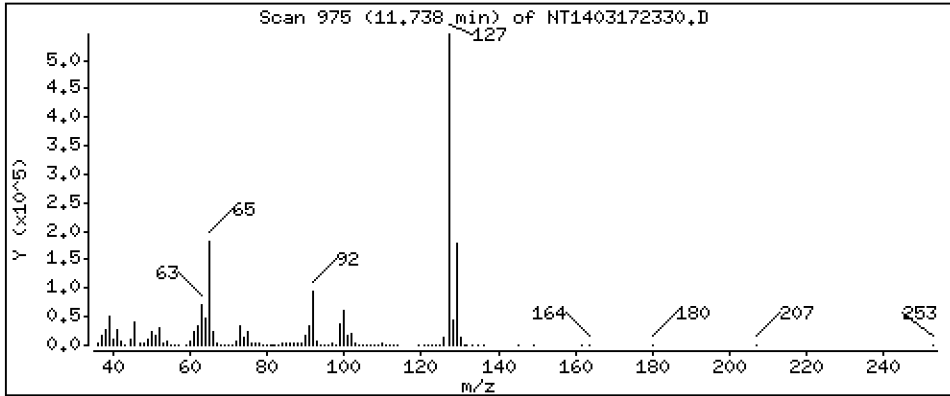
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 10,55 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

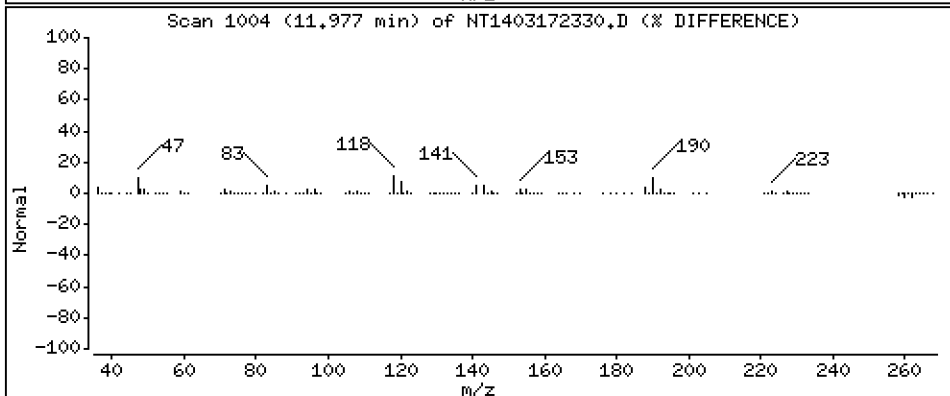
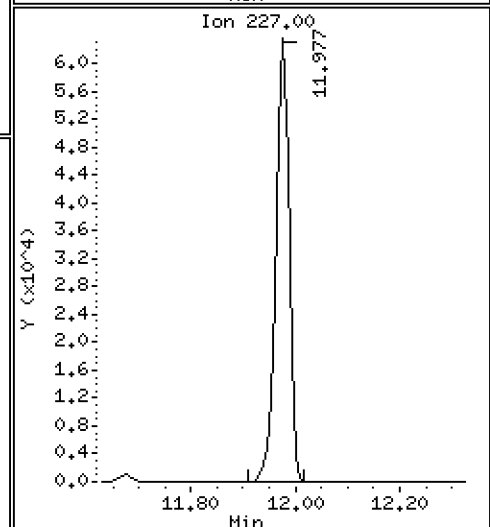
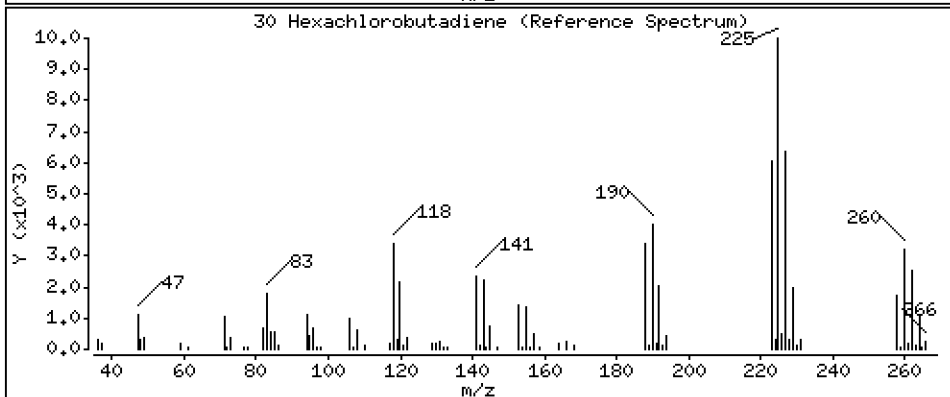
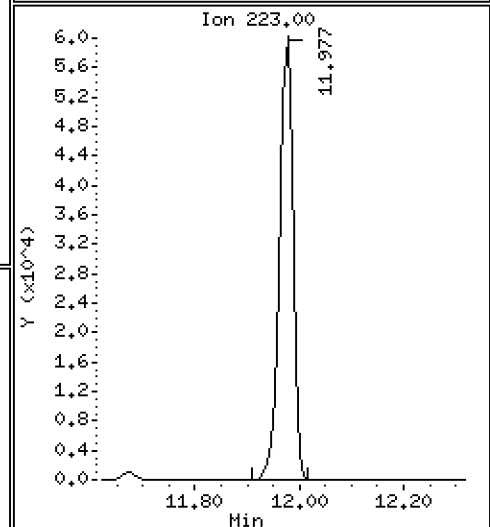
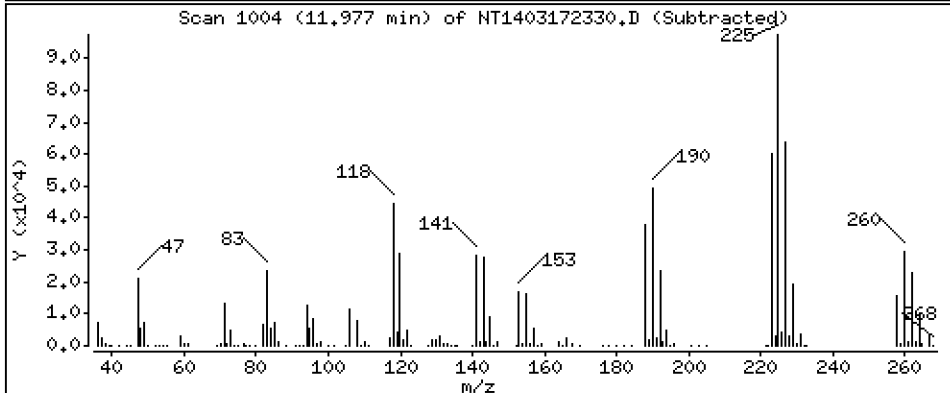
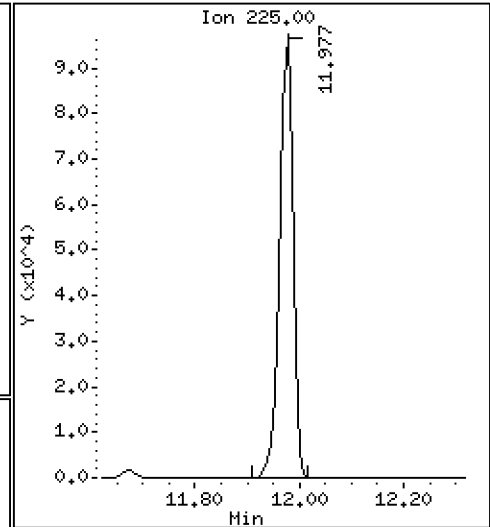
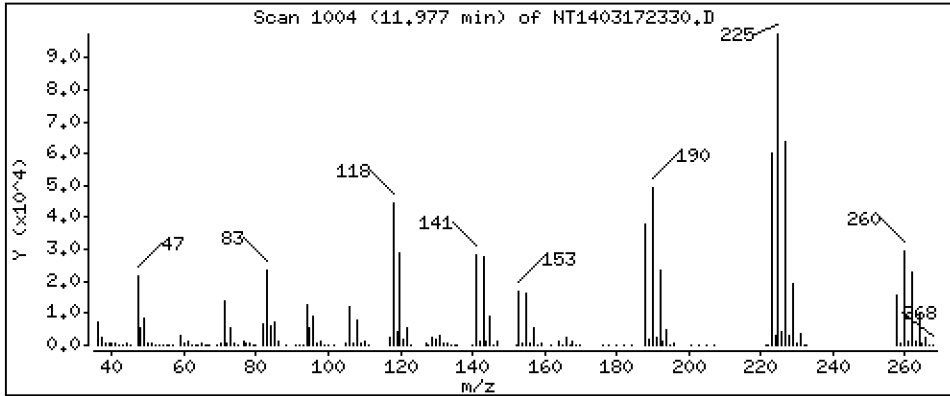
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,042 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

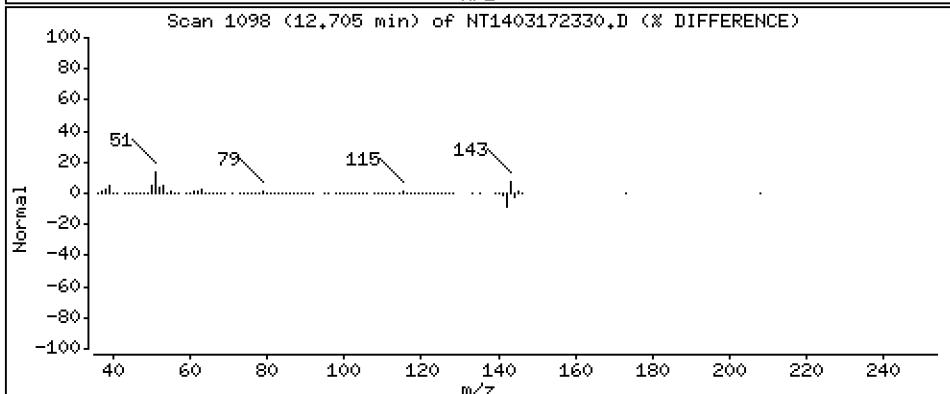
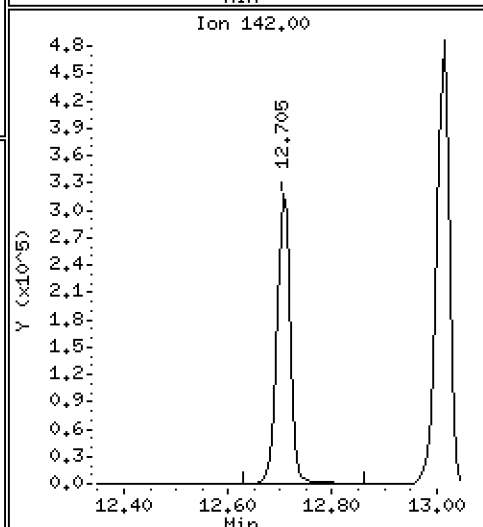
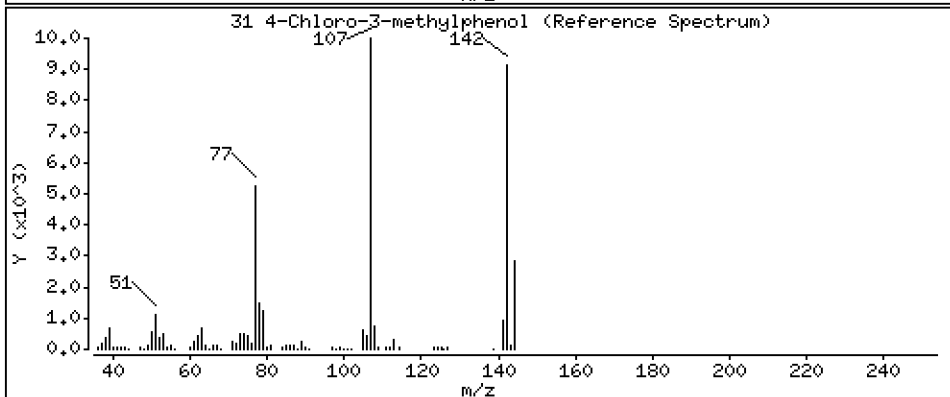
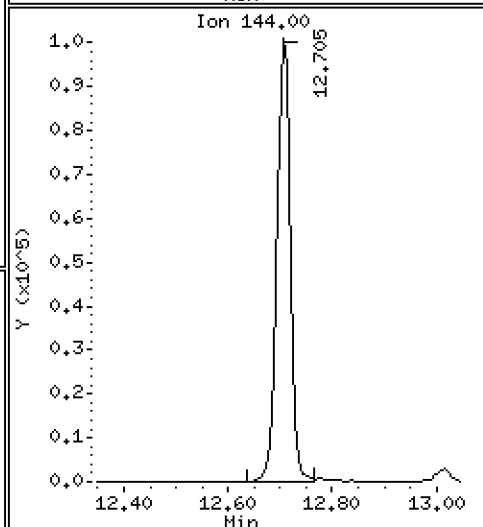
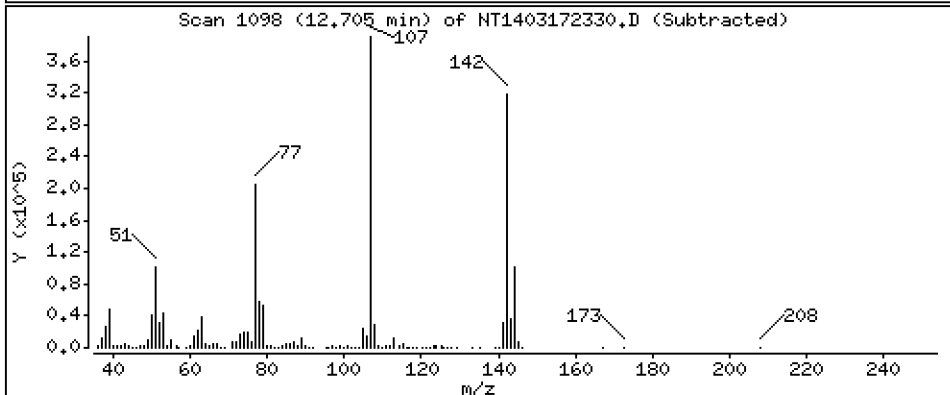
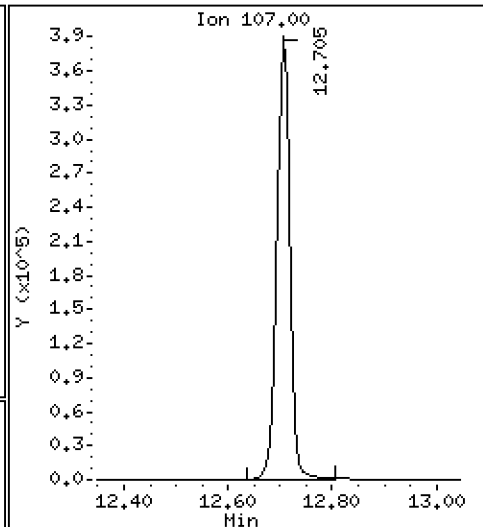
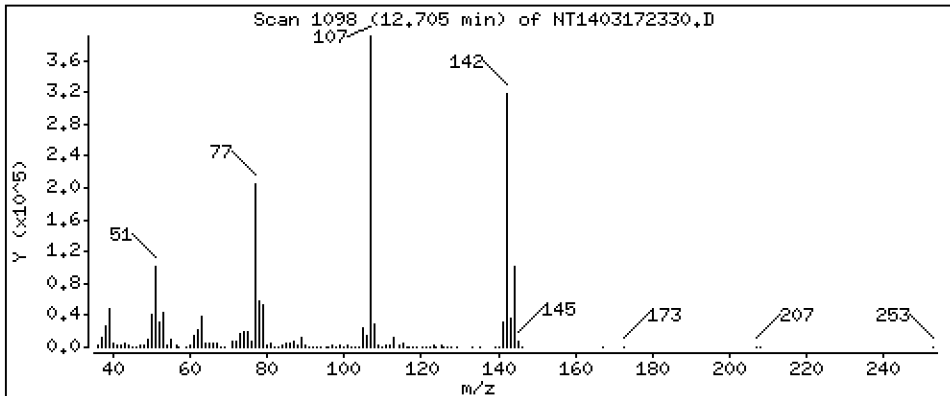
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 9,026 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

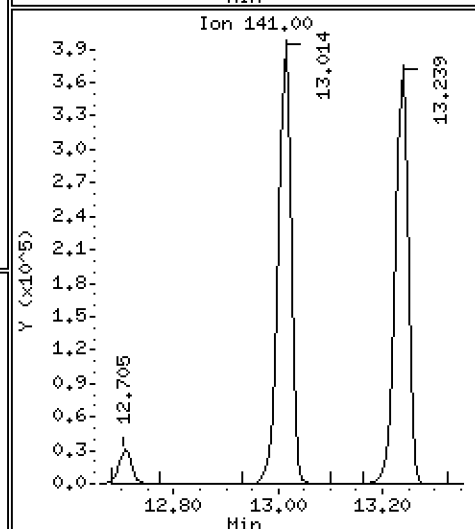
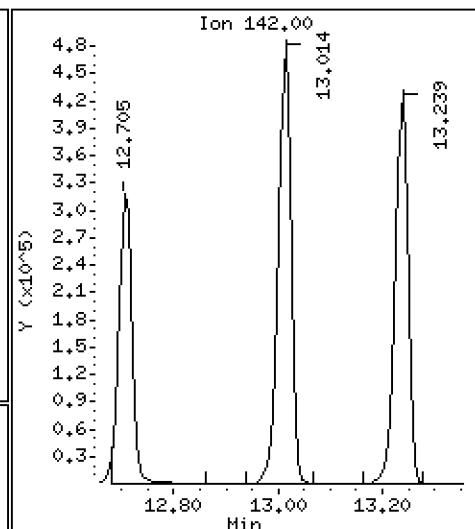
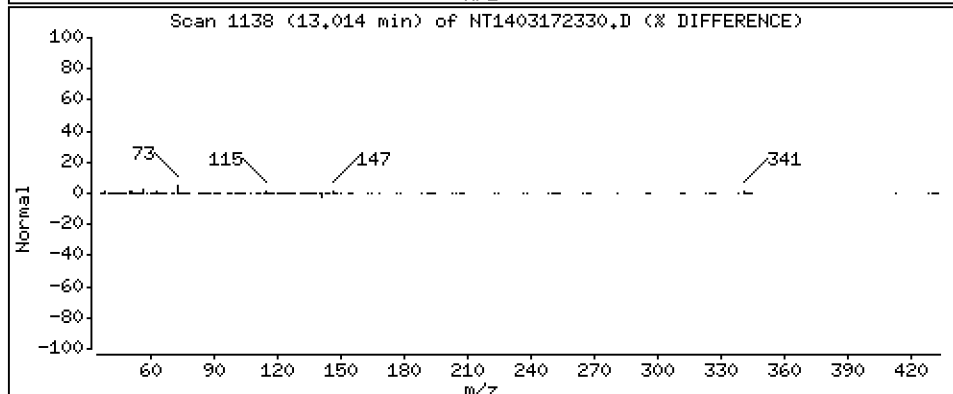
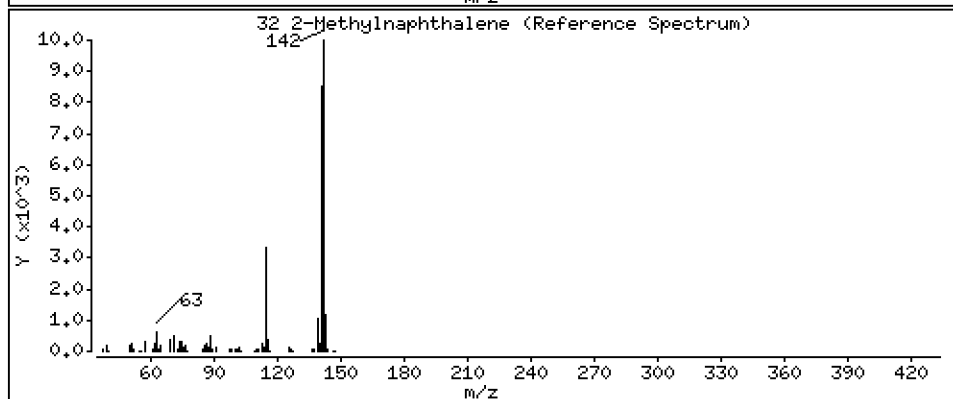
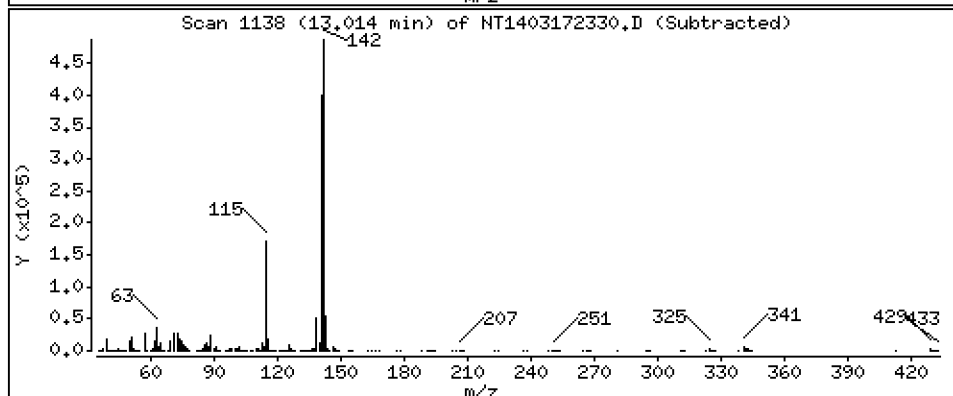
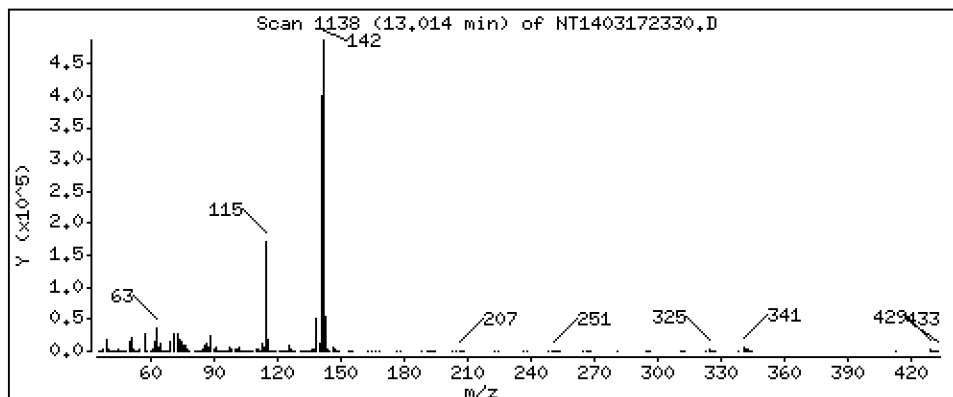
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,950 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

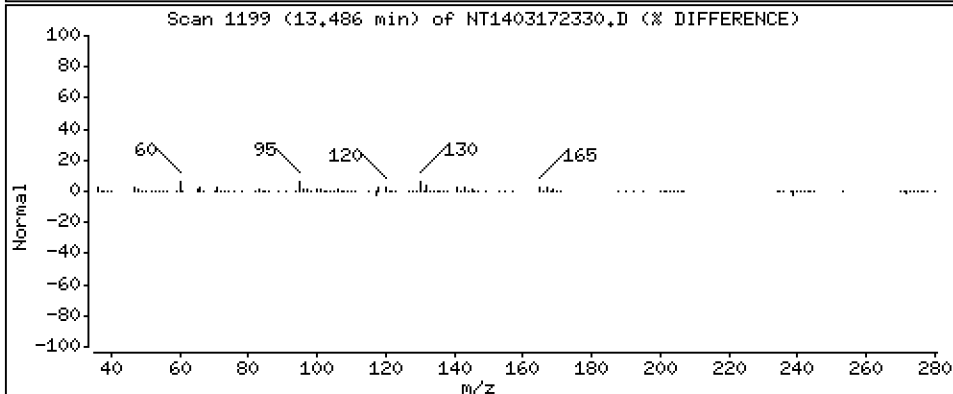
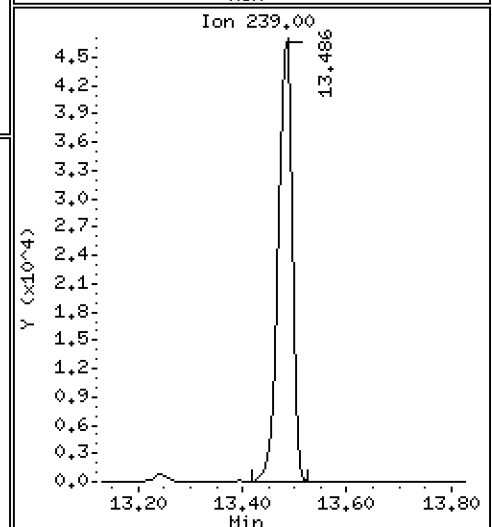
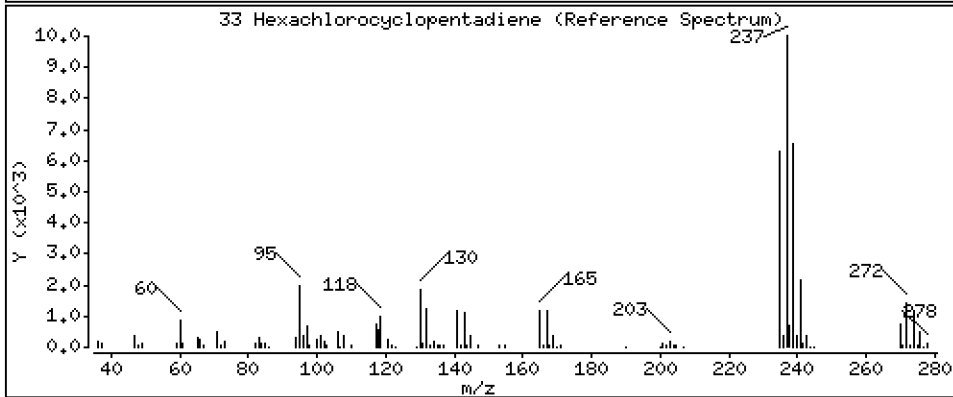
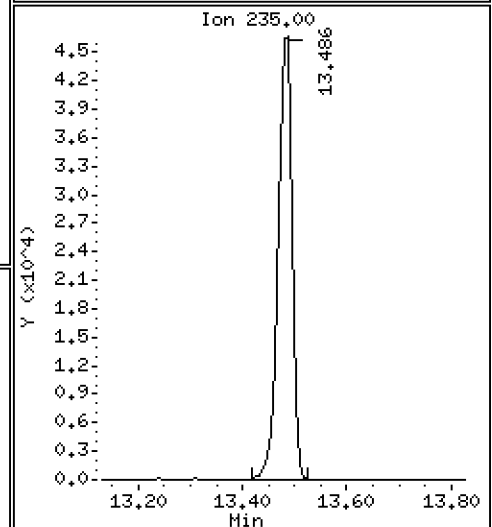
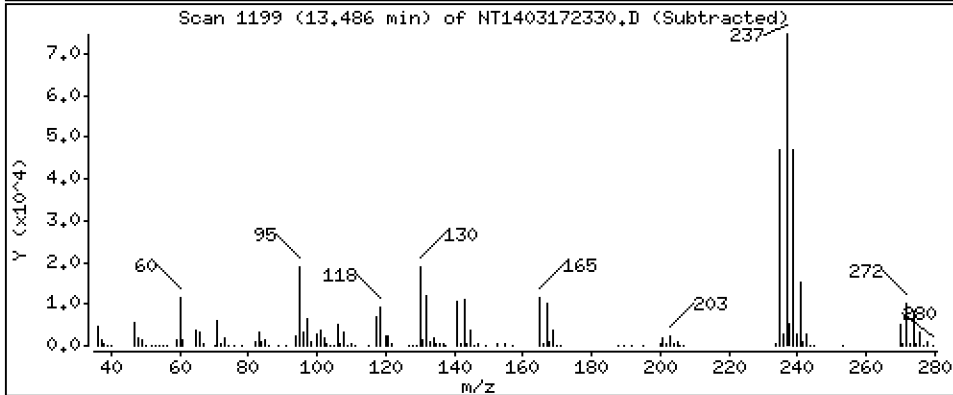
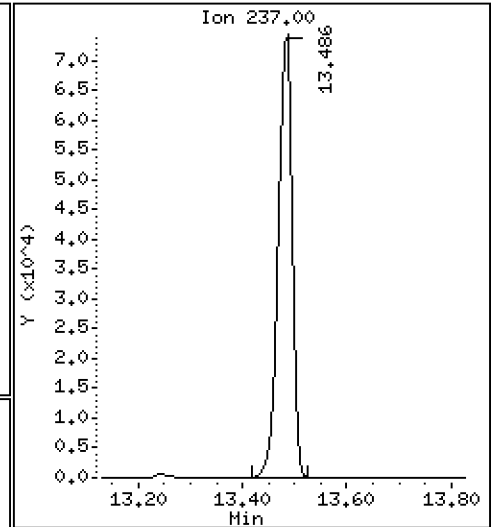
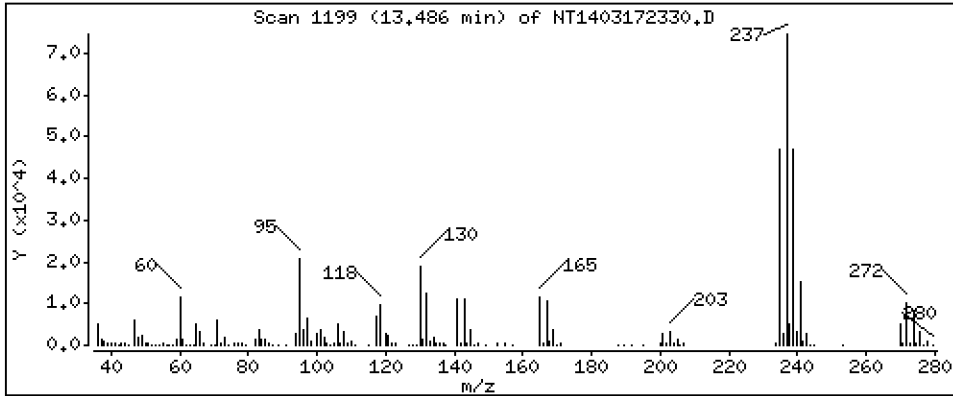
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 3,869 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

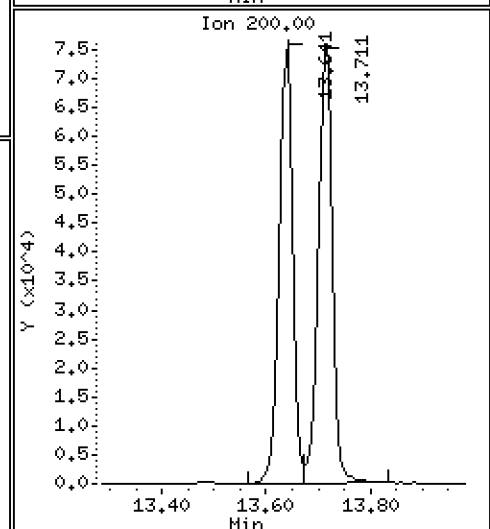
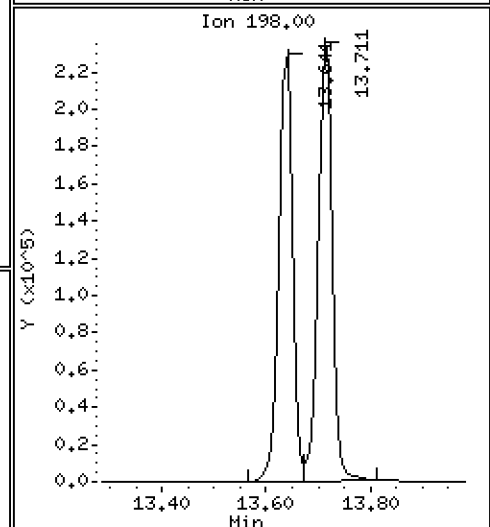
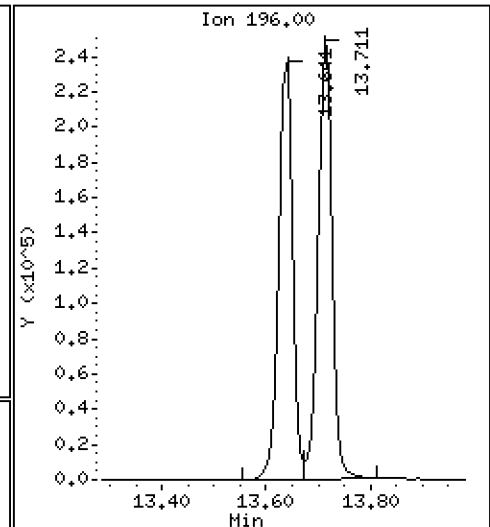
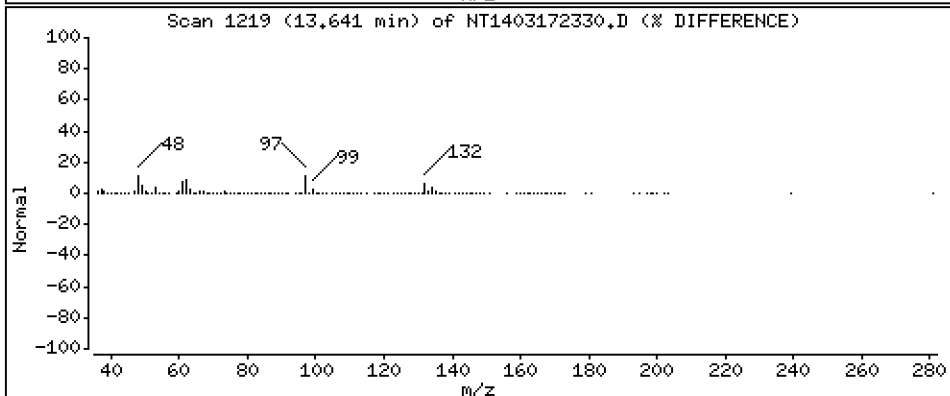
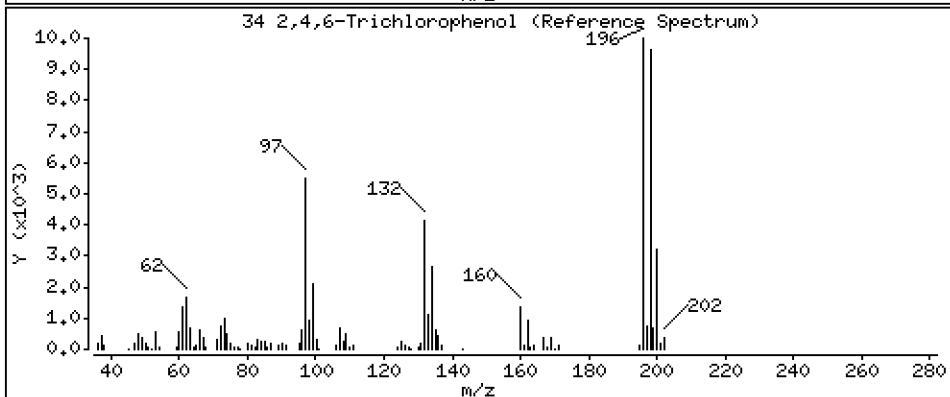
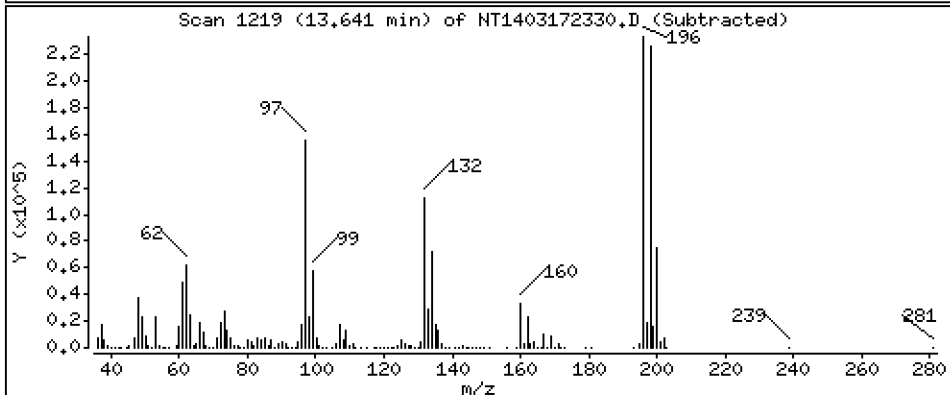
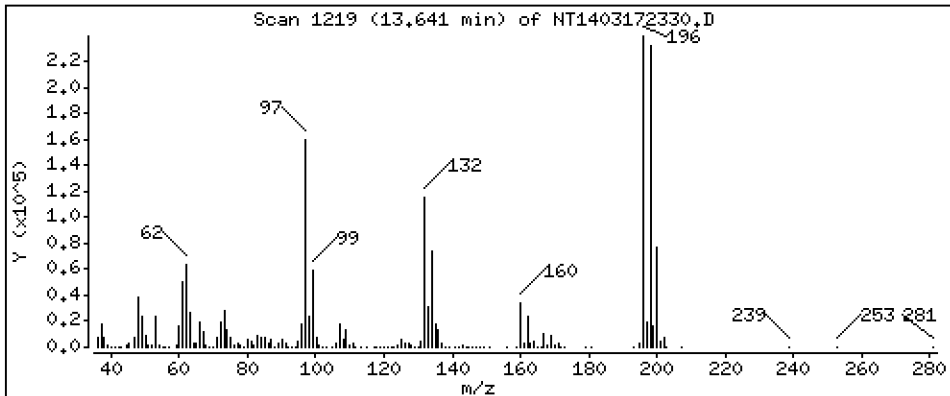
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 10,02 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

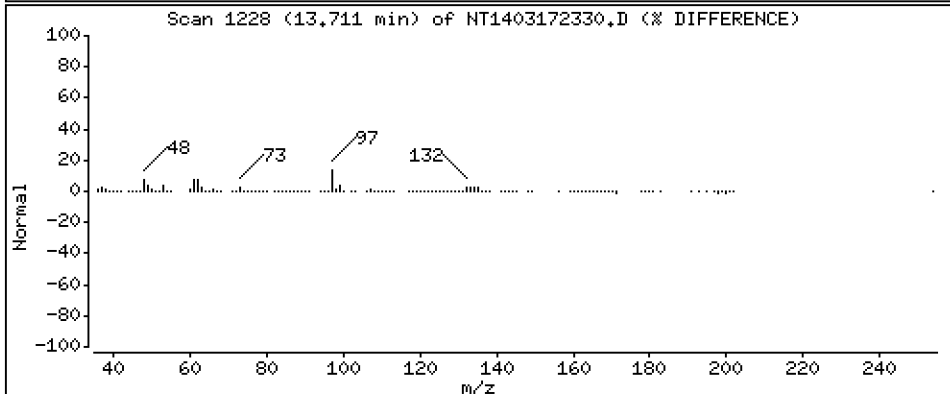
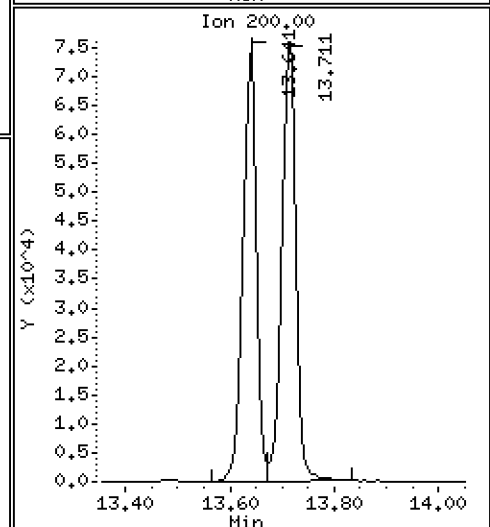
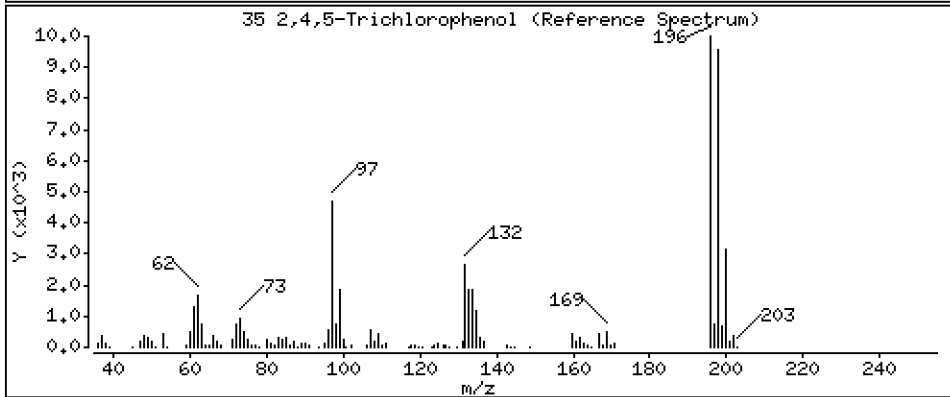
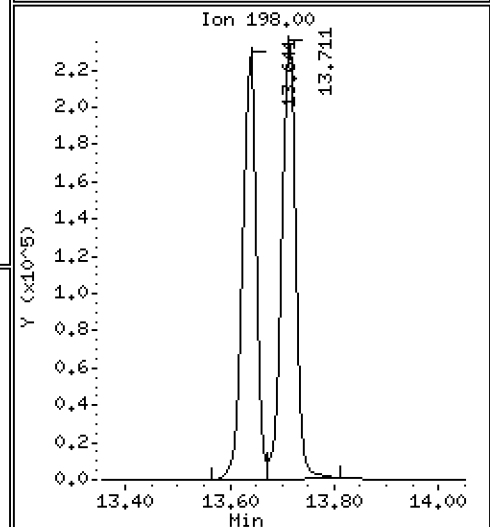
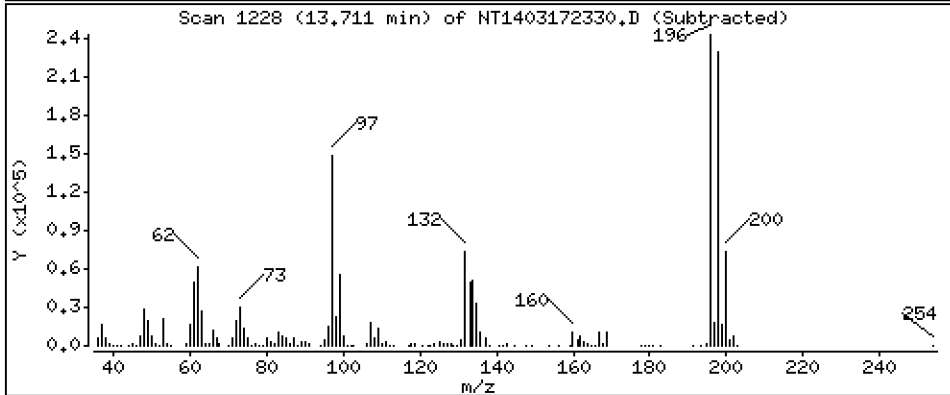
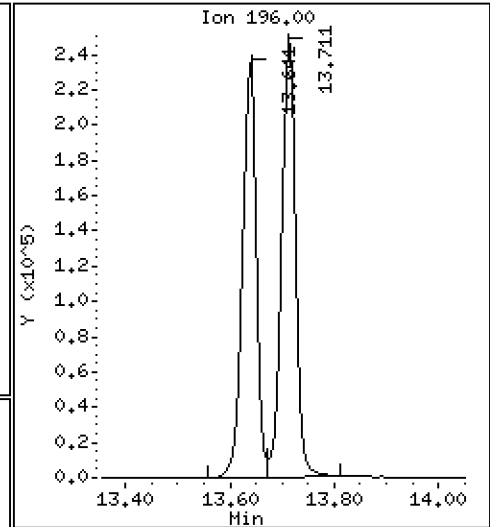
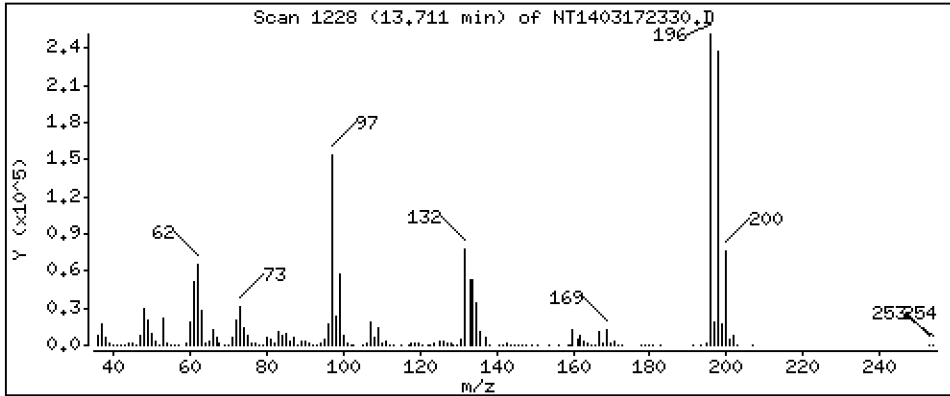
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 10,18 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

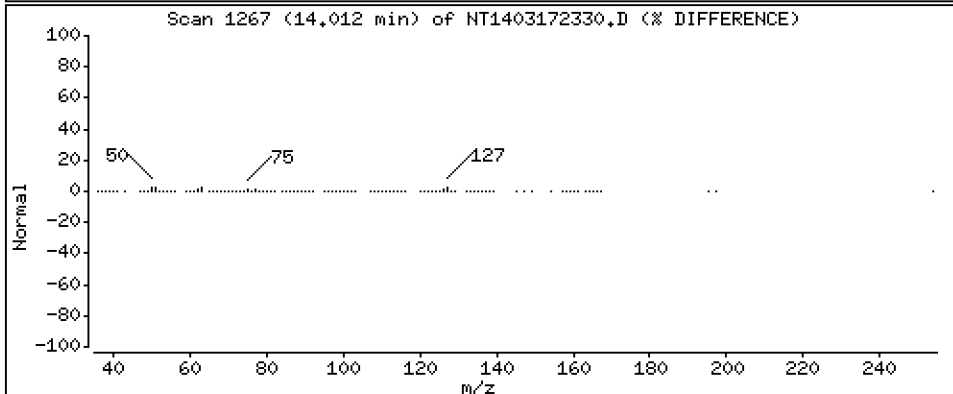
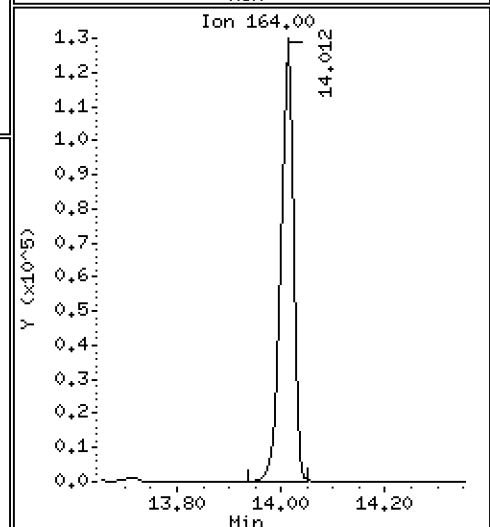
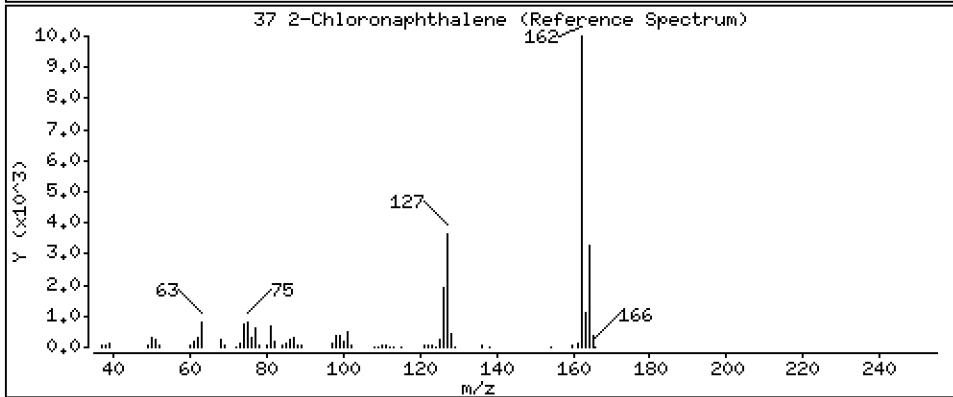
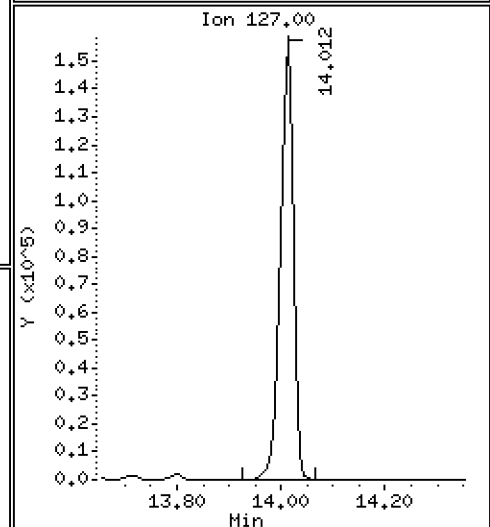
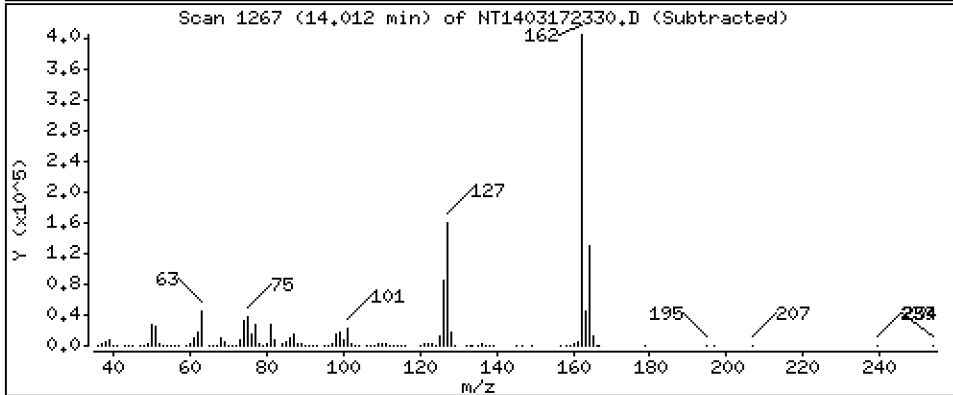
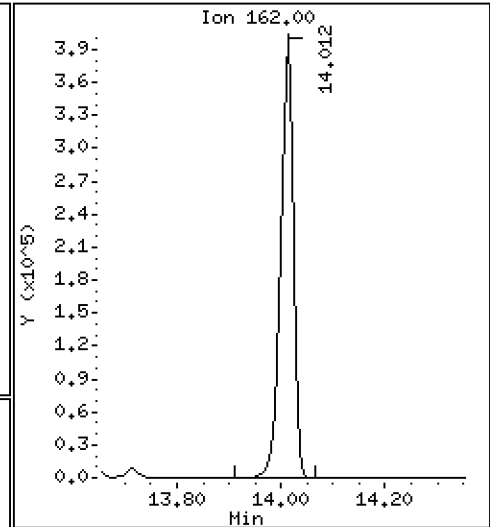
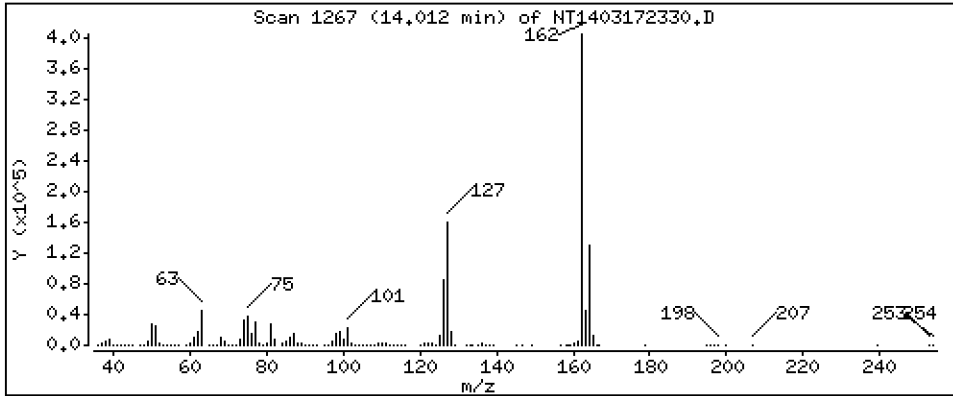
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

37 2-Chloronaphthalene

Concentration: 5.153 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

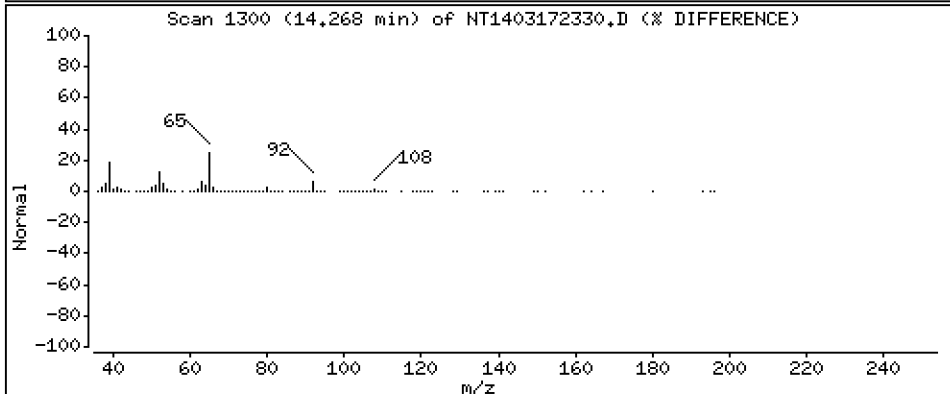
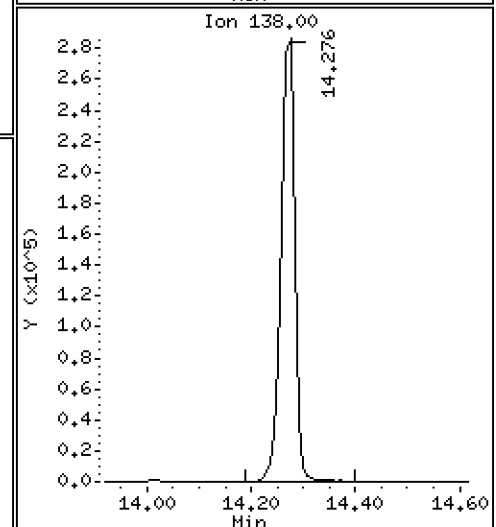
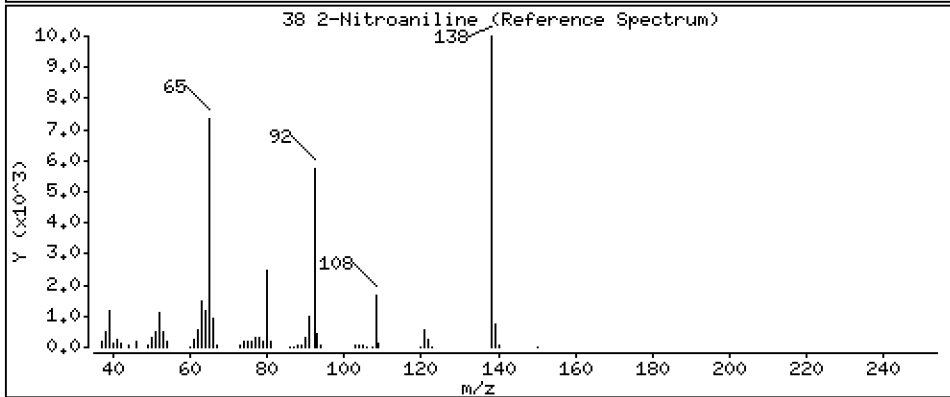
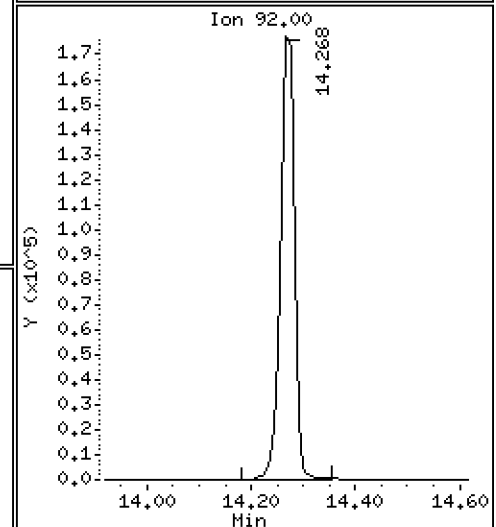
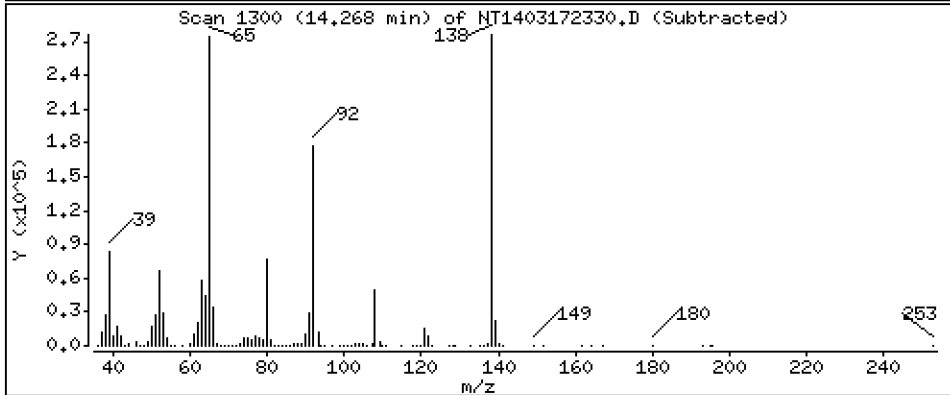
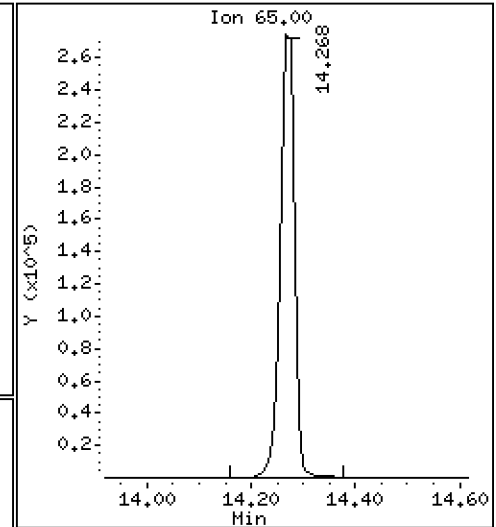
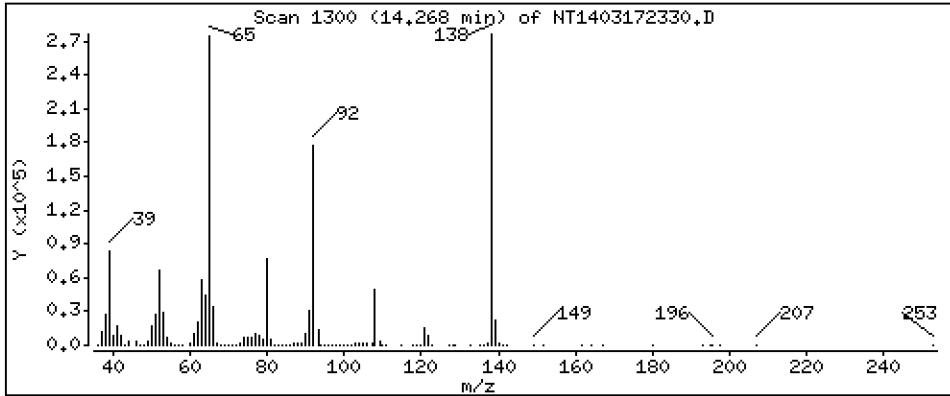
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 10,01 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

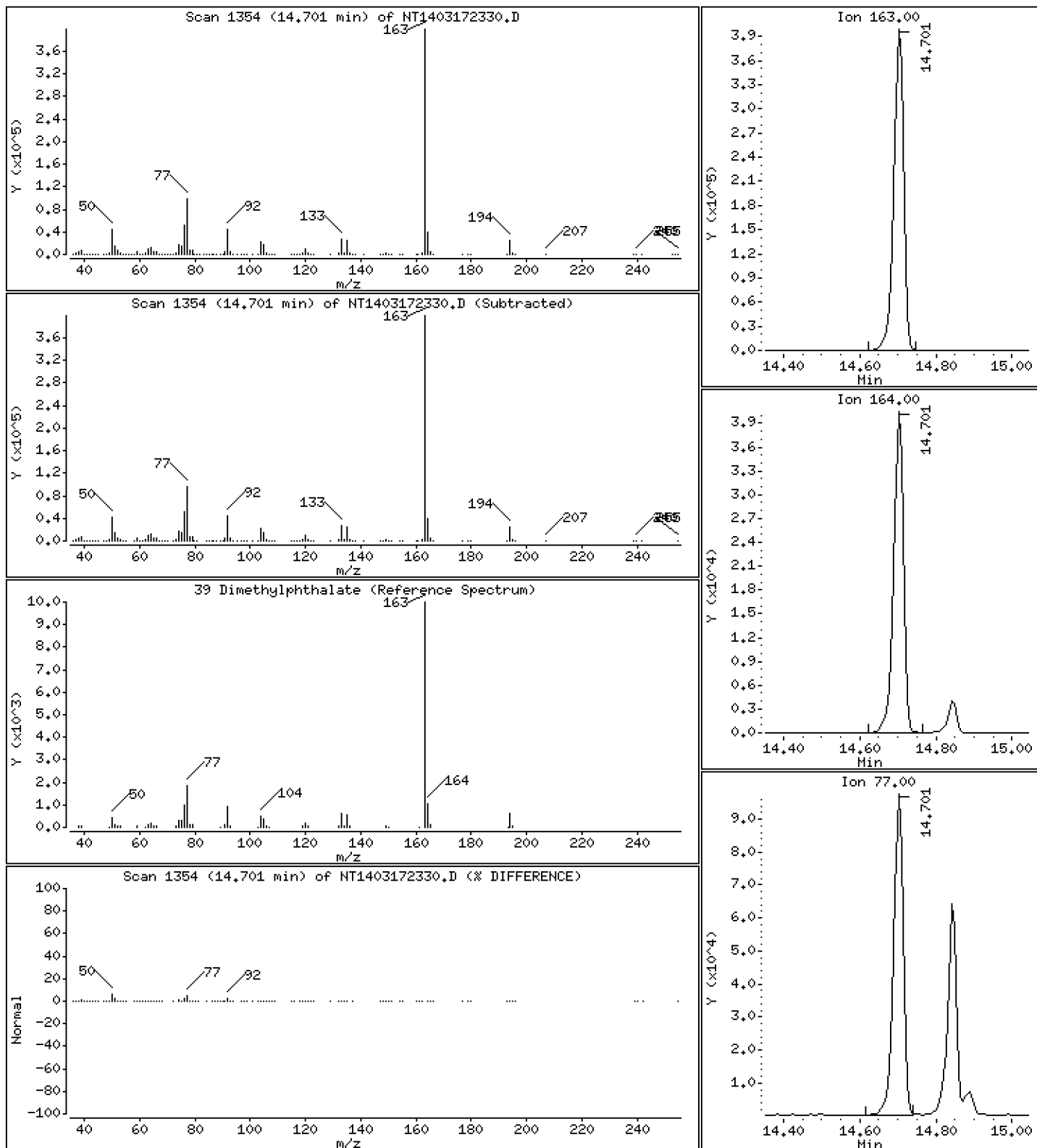
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,974 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

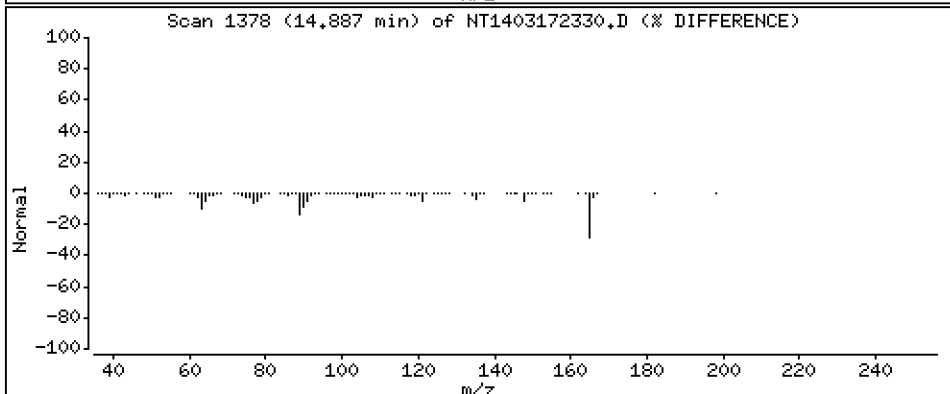
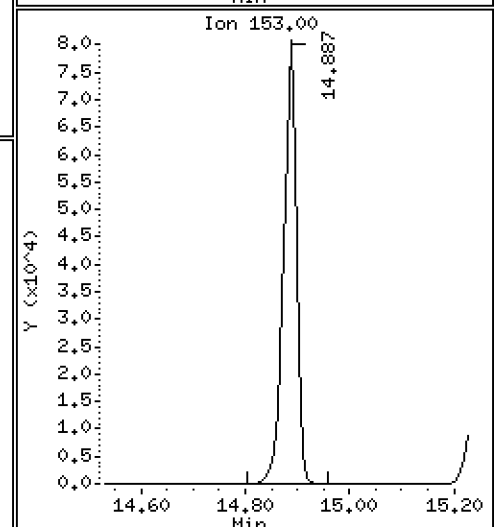
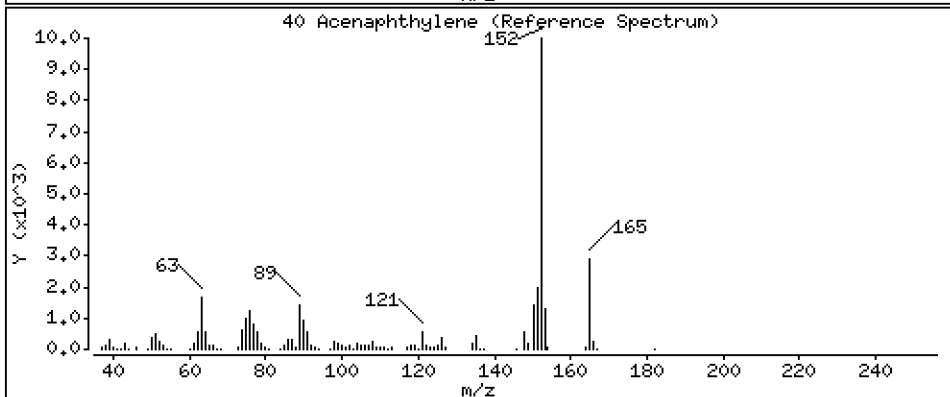
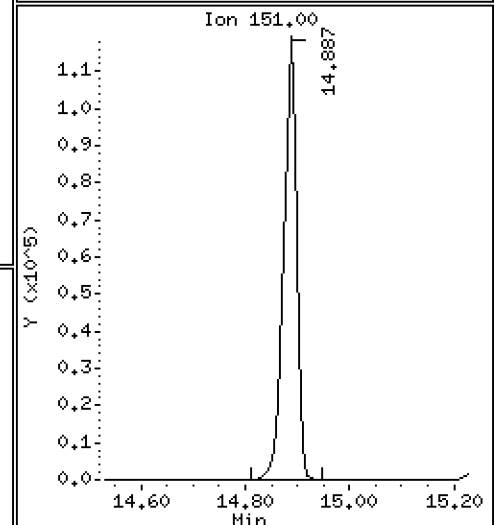
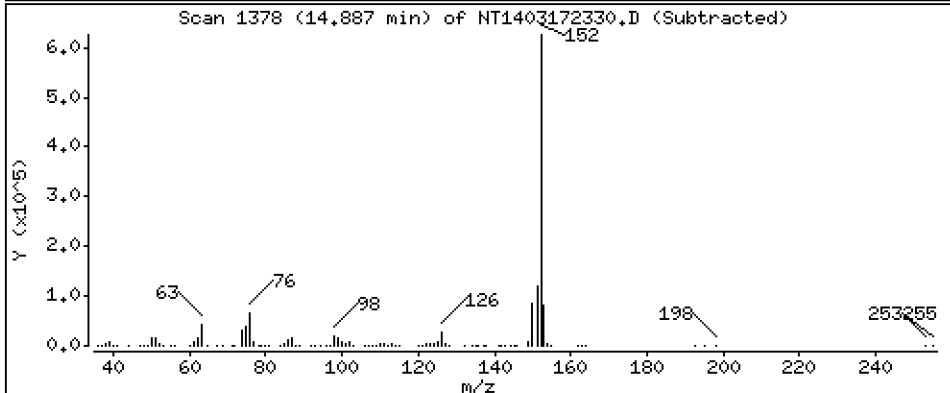
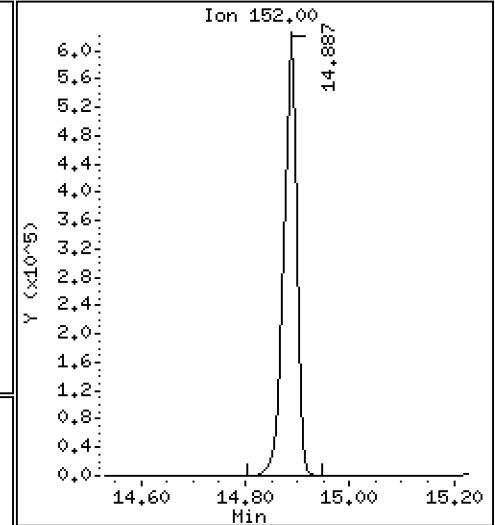
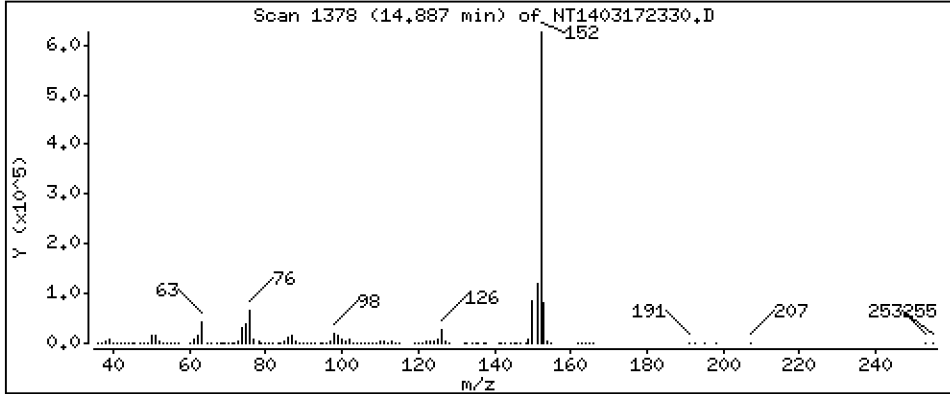
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,864 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

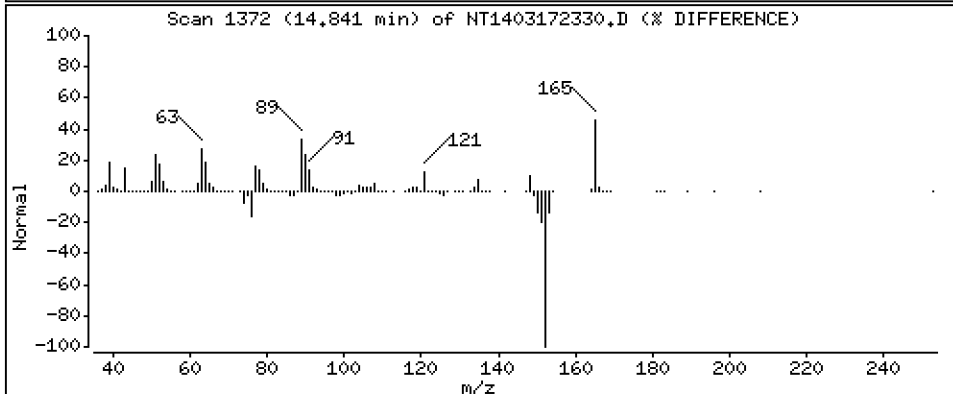
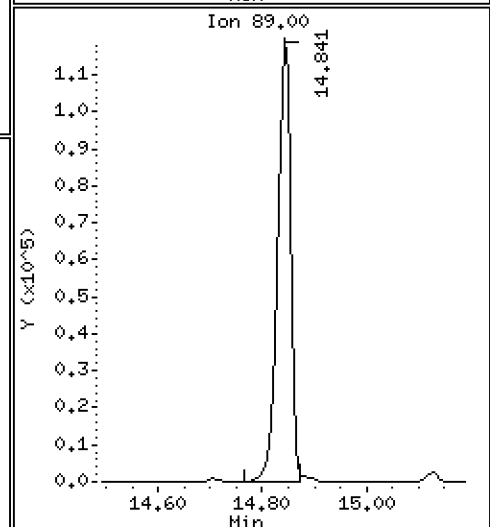
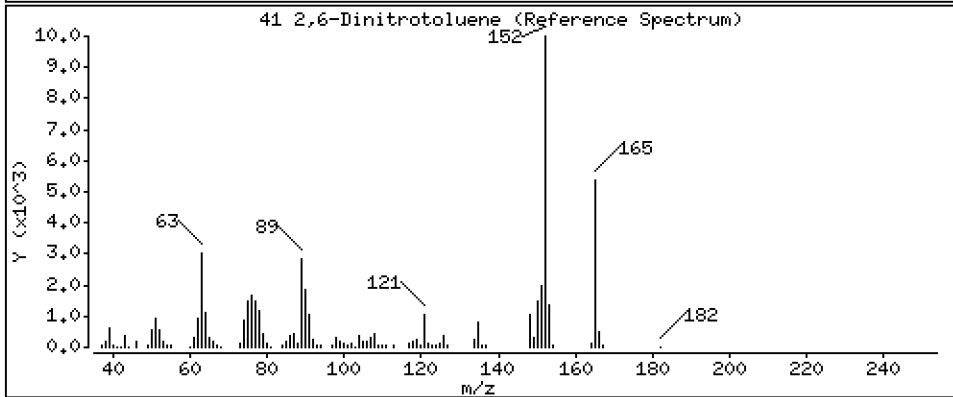
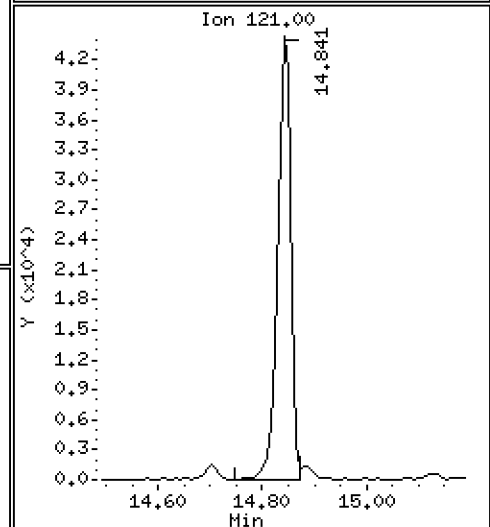
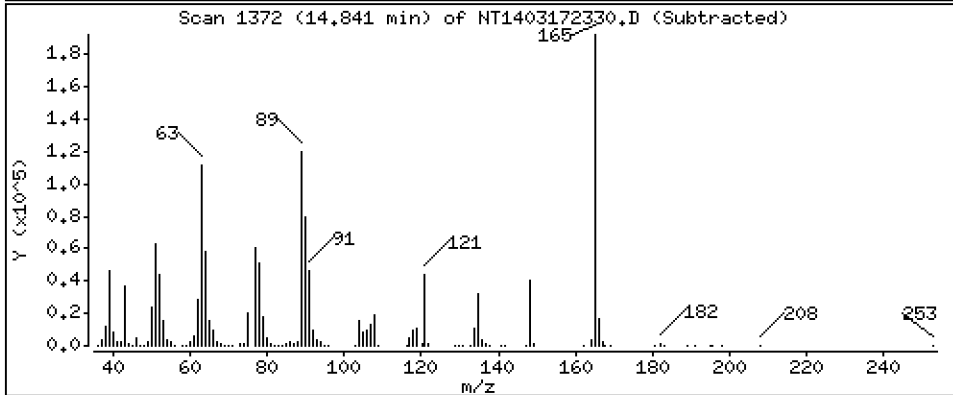
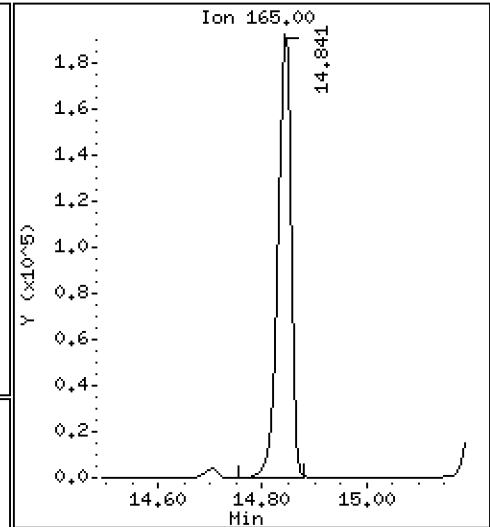
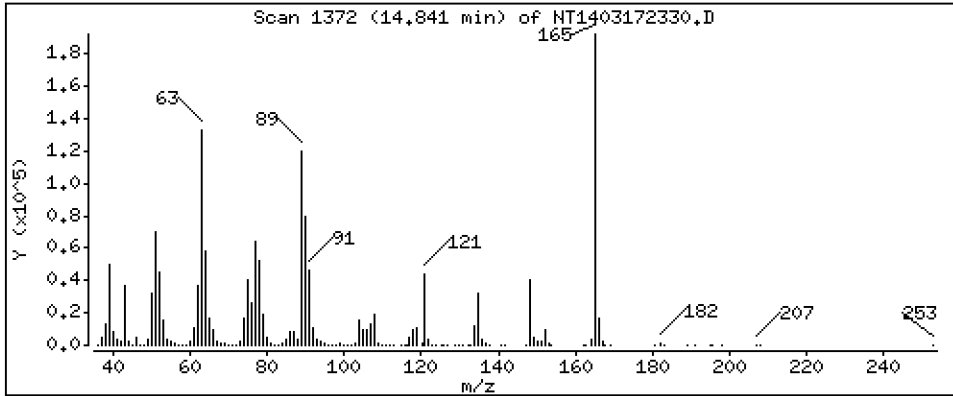
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 10,11 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

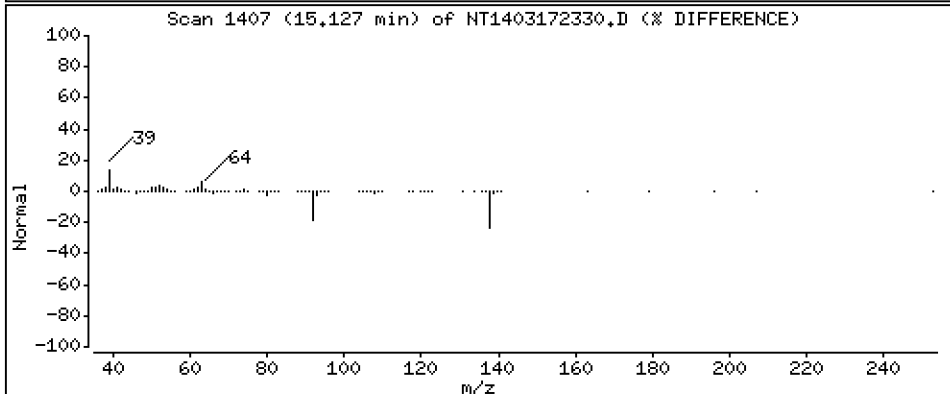
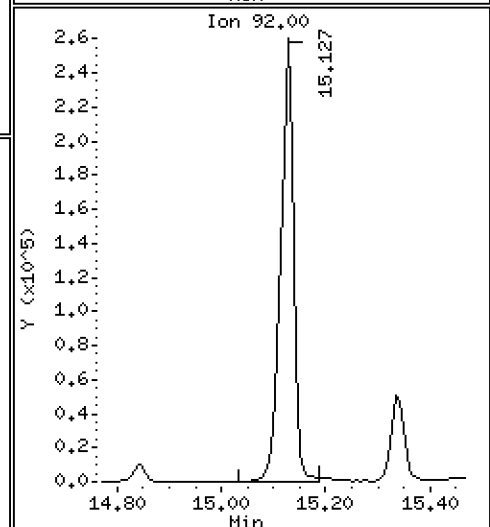
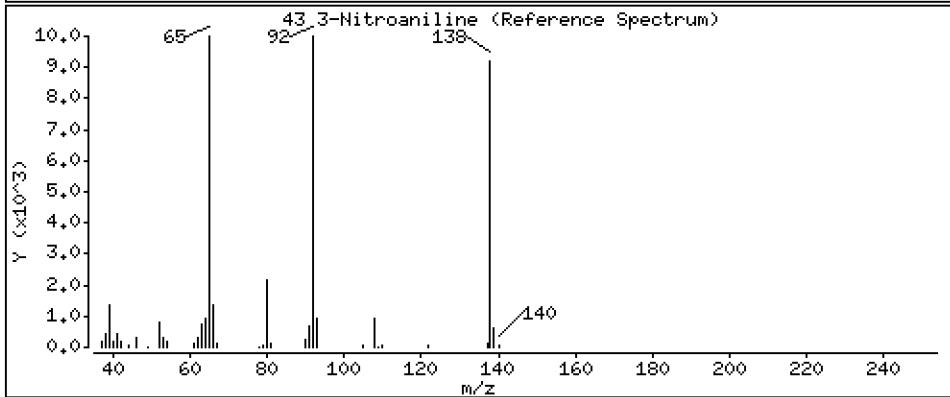
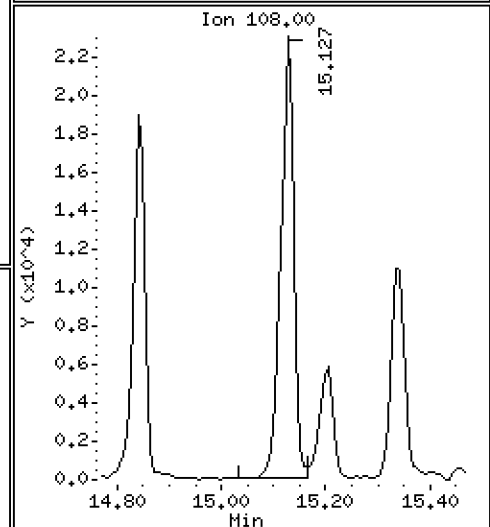
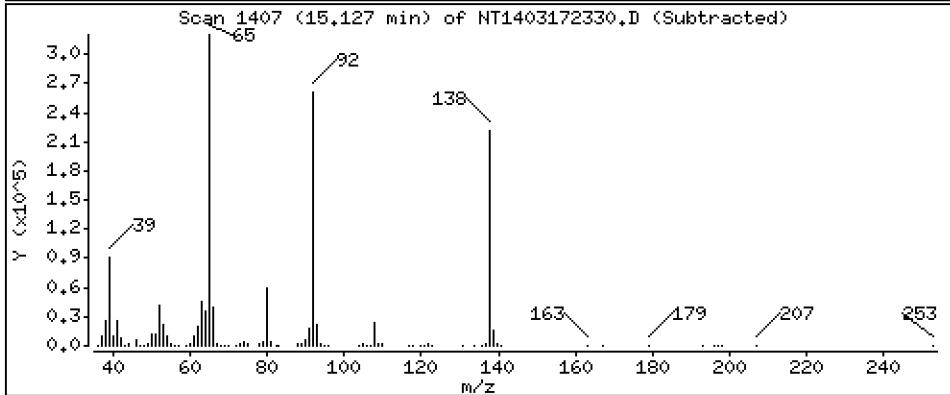
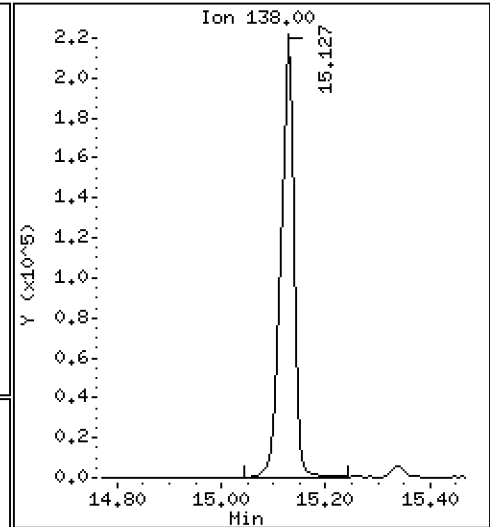
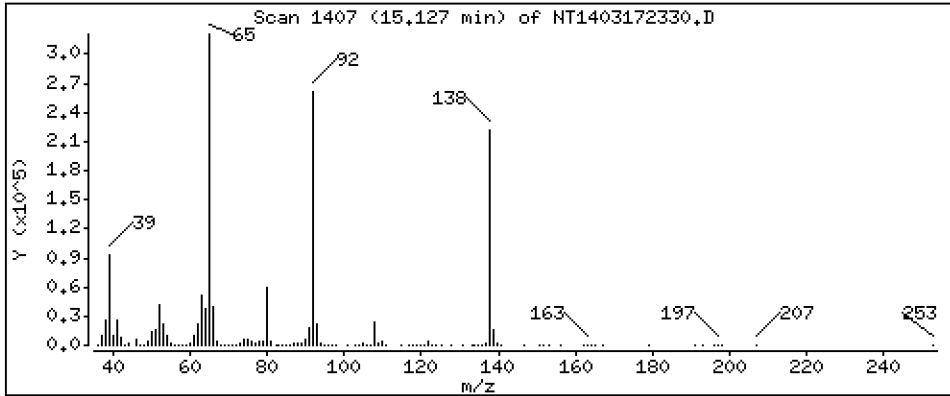
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 9,354 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

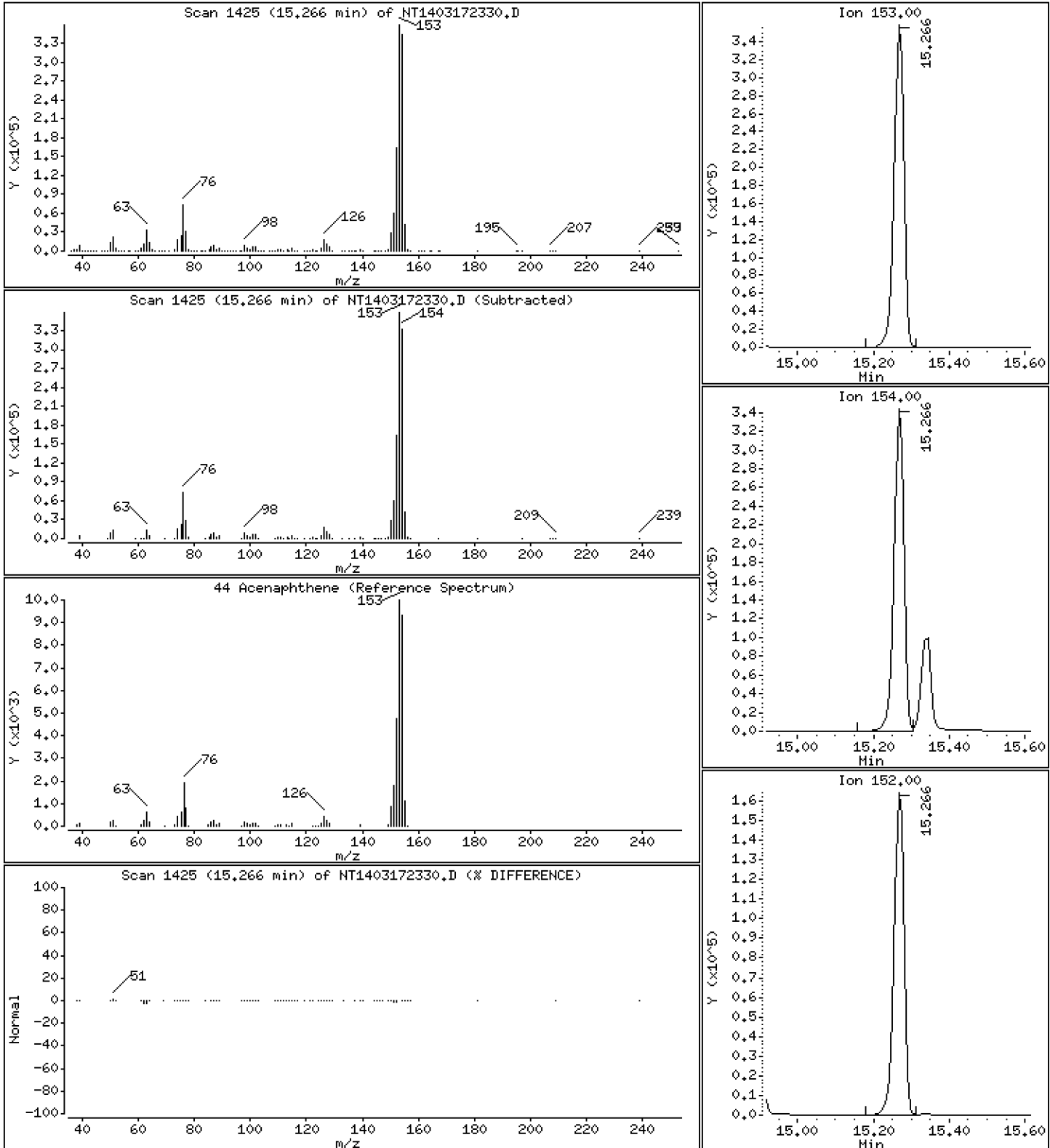
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,847 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

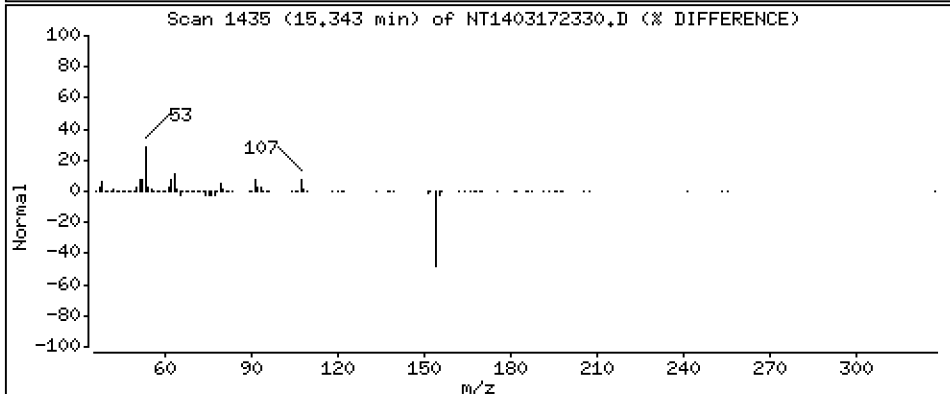
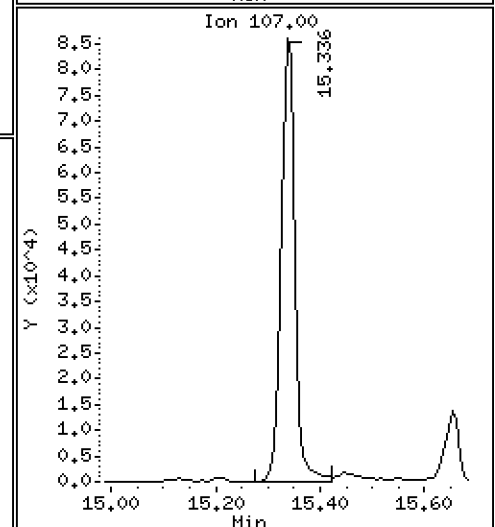
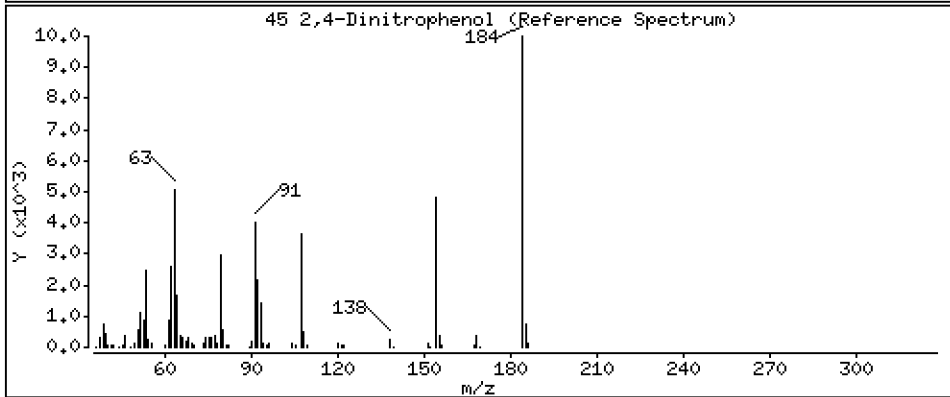
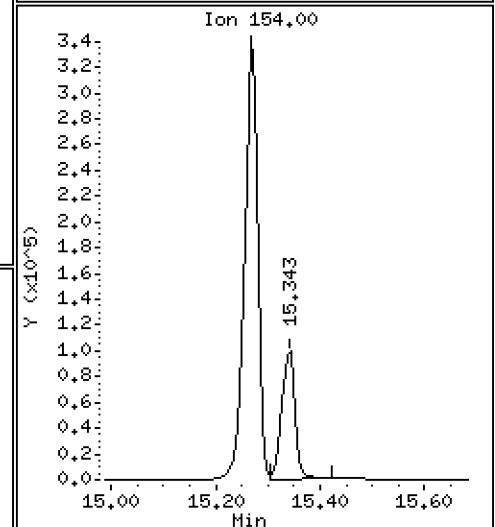
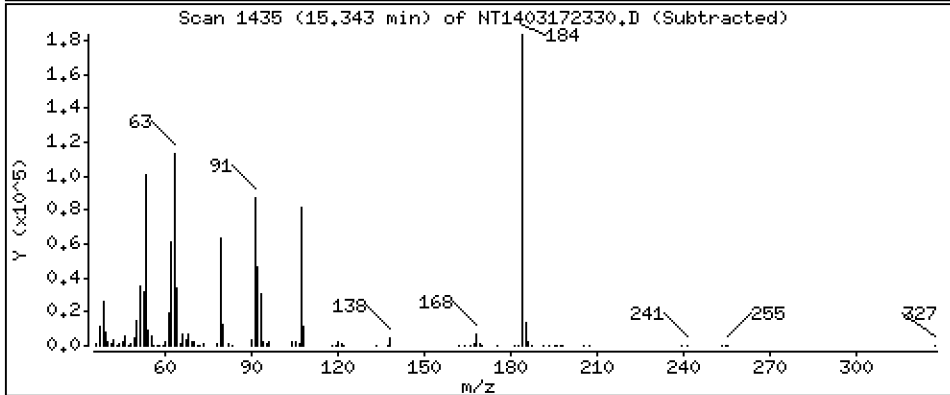
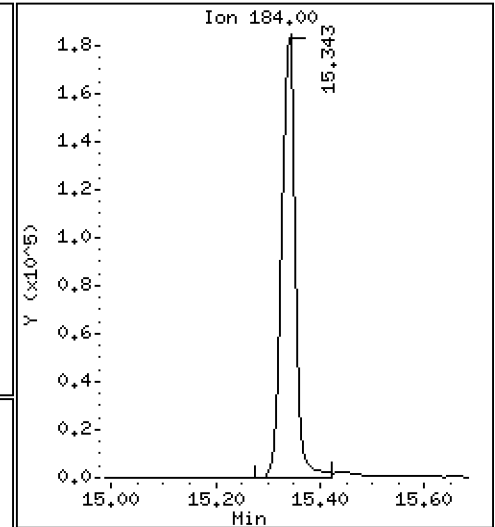
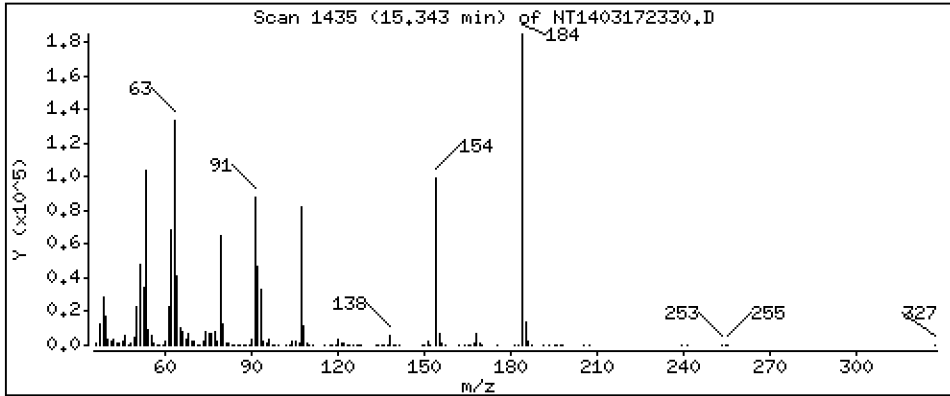
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 12,71 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

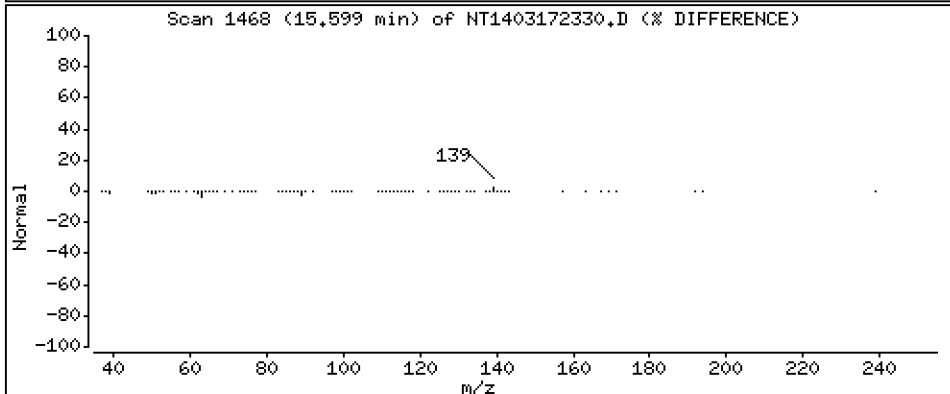
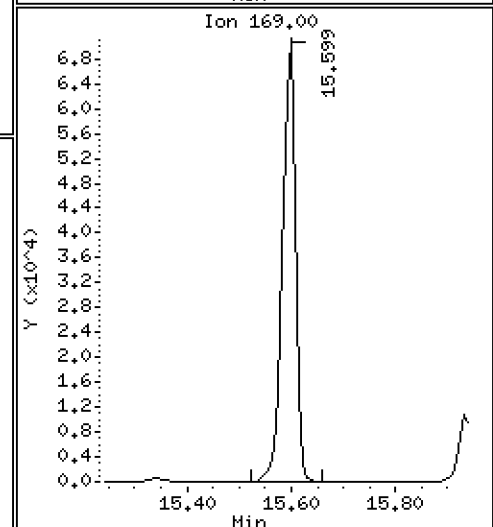
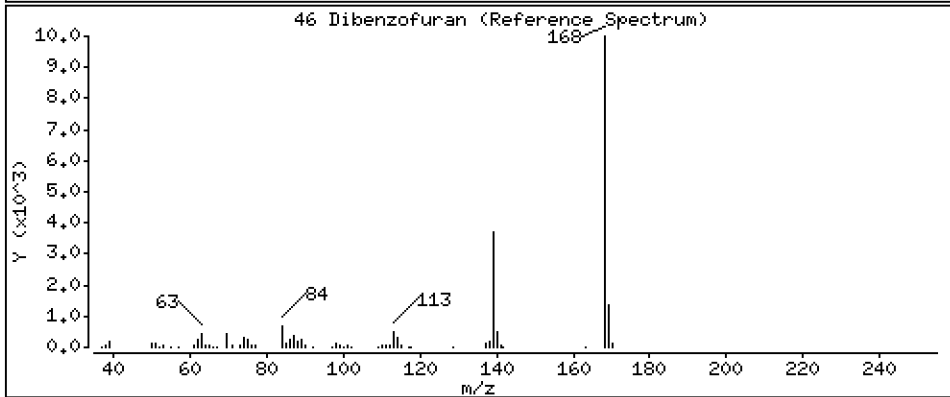
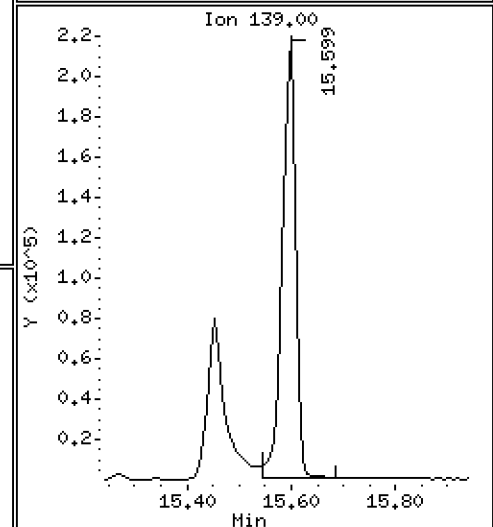
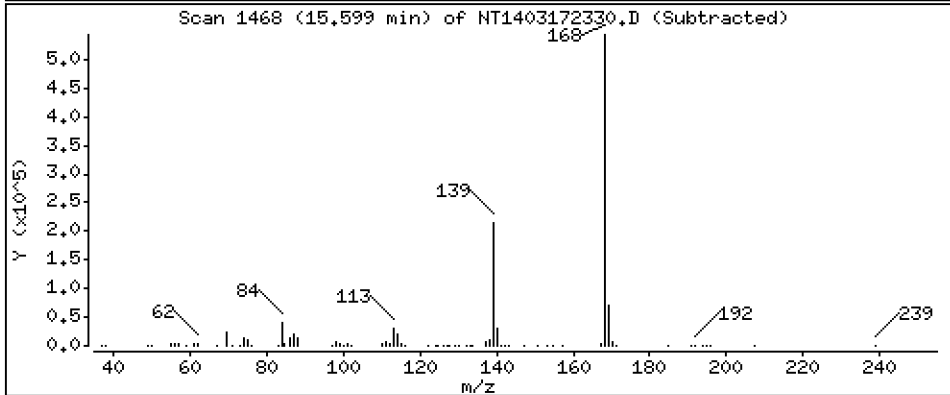
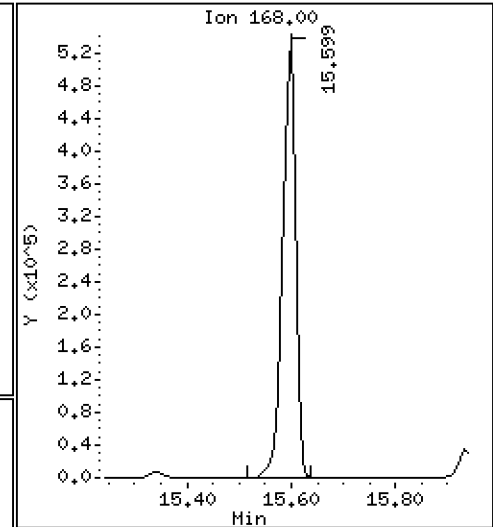
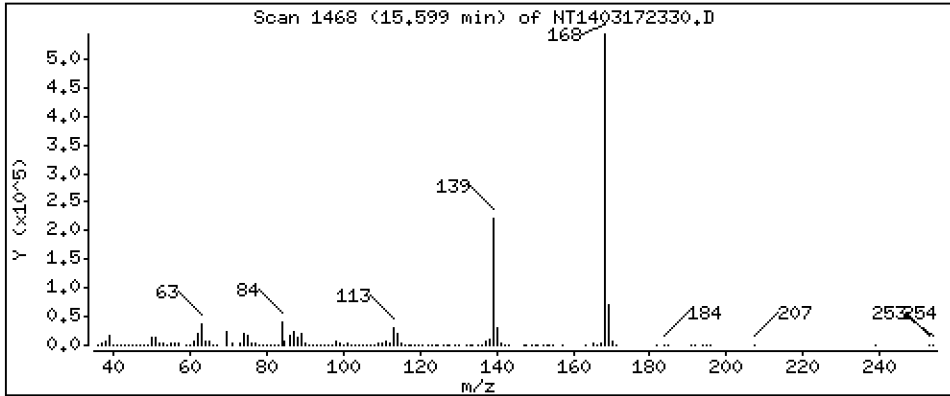
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 5,005 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

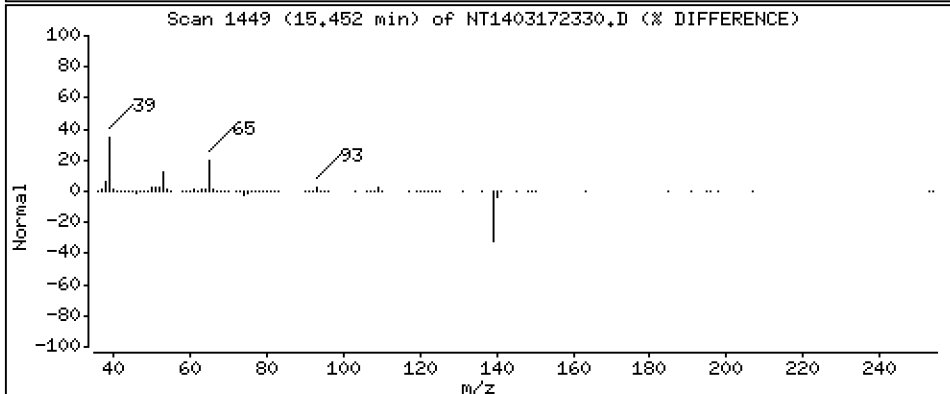
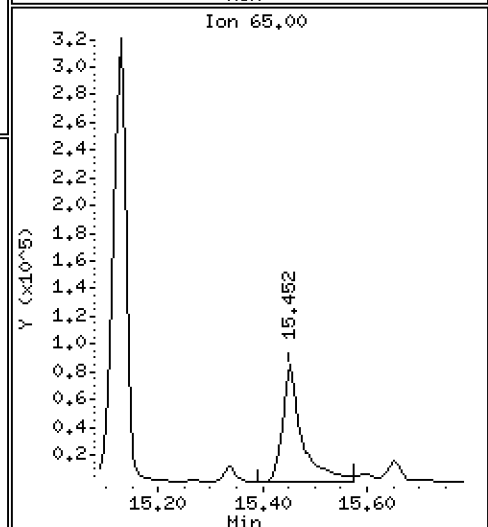
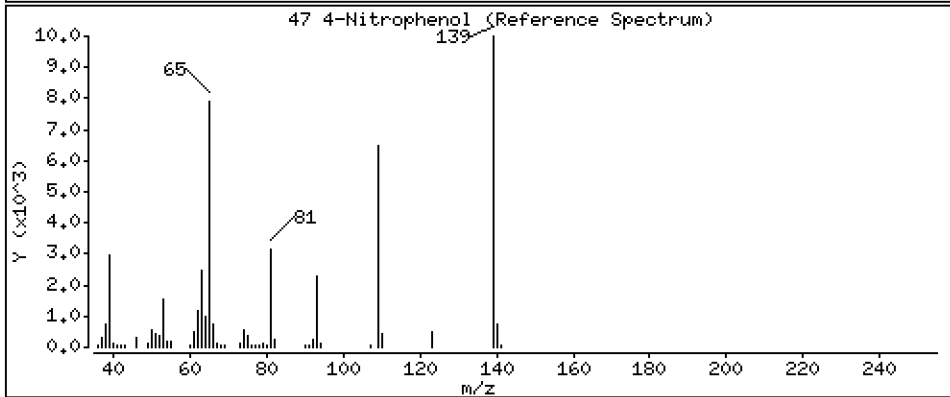
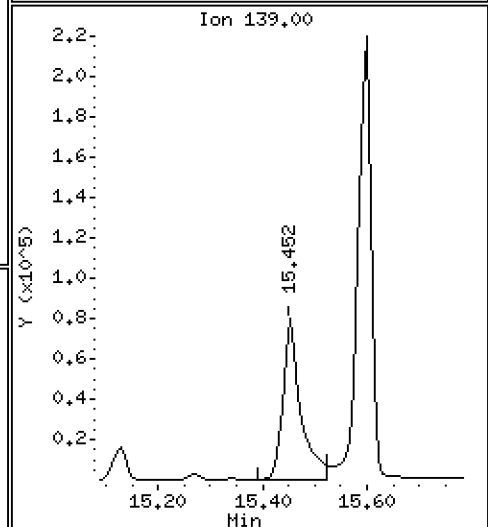
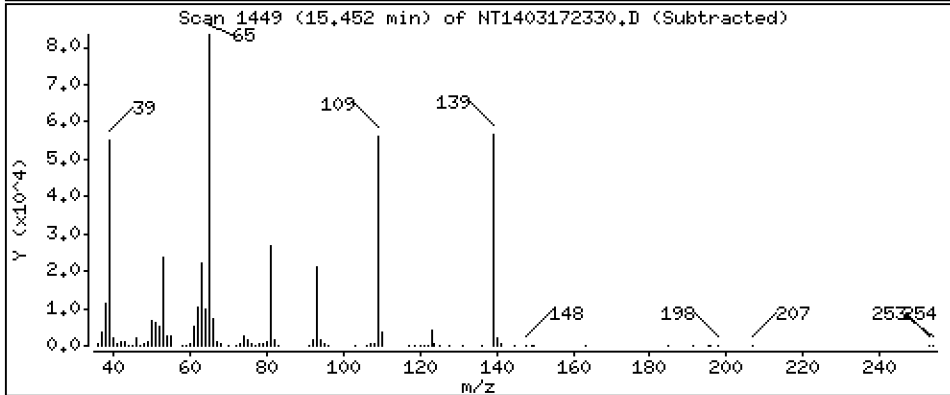
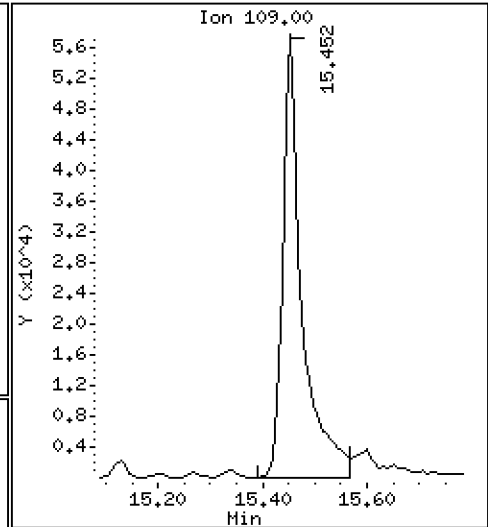
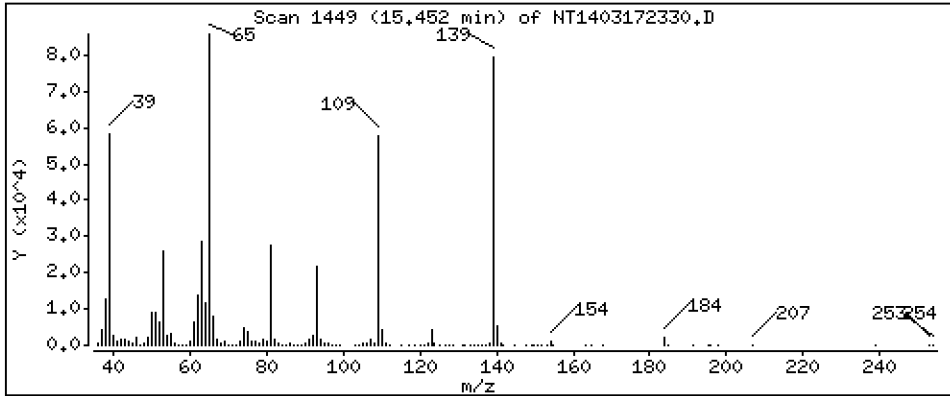
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 6,349 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

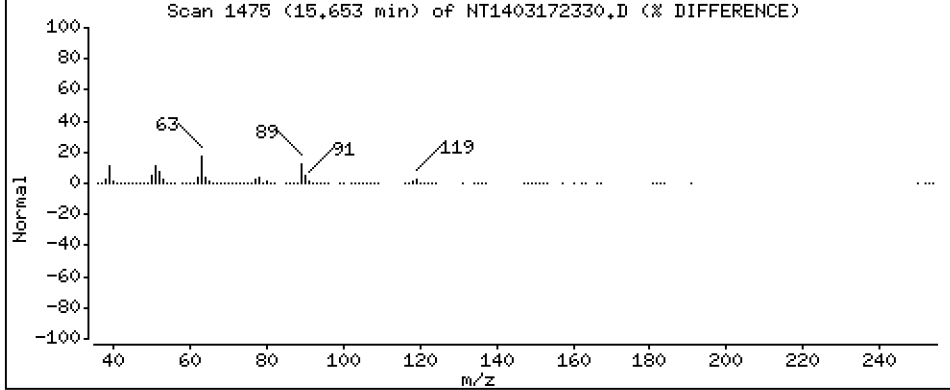
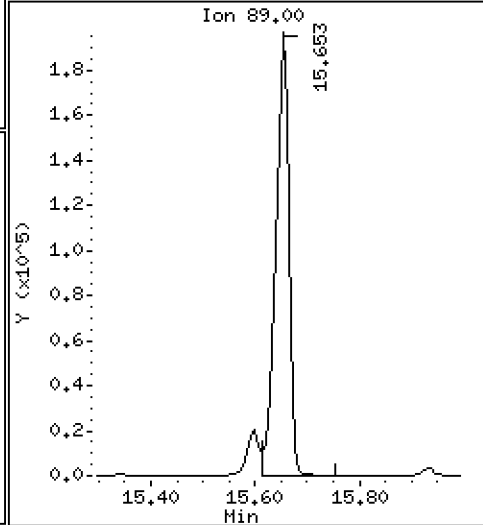
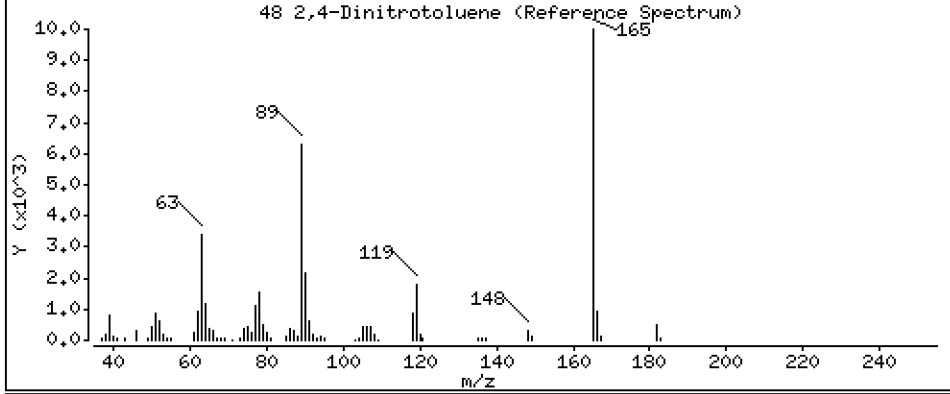
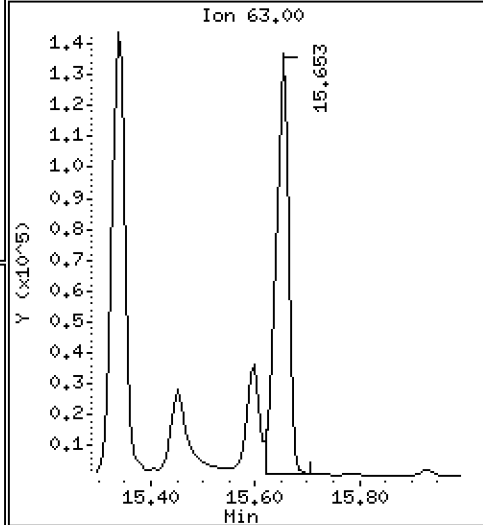
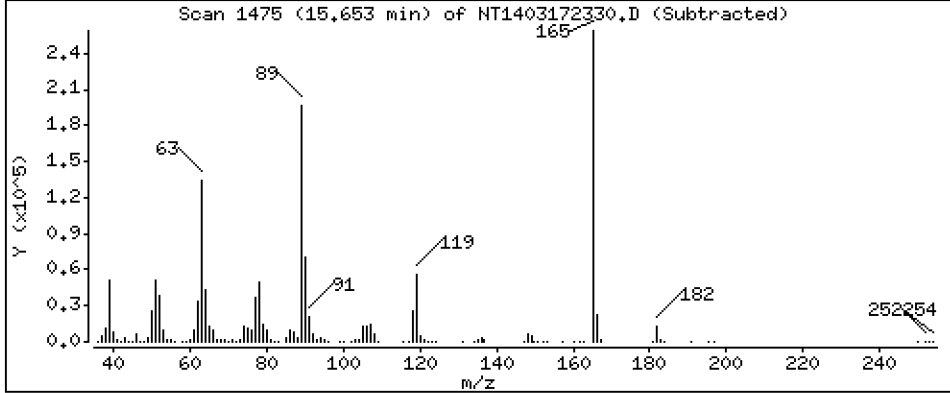
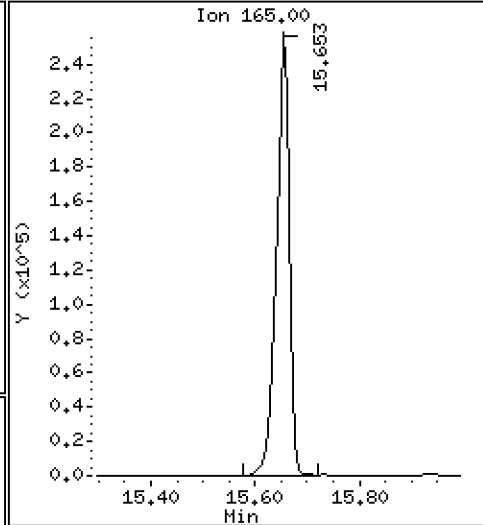
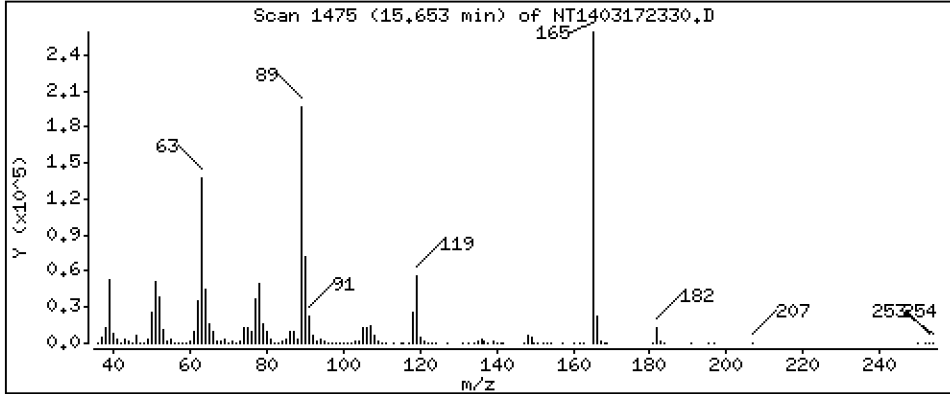
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 9,611 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

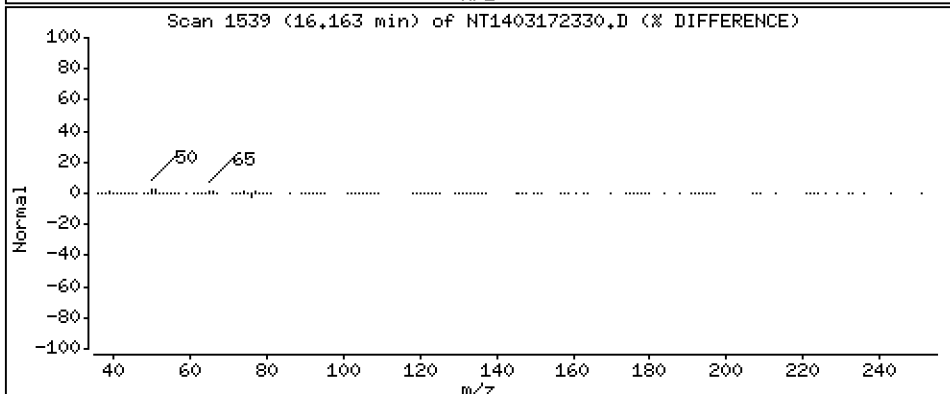
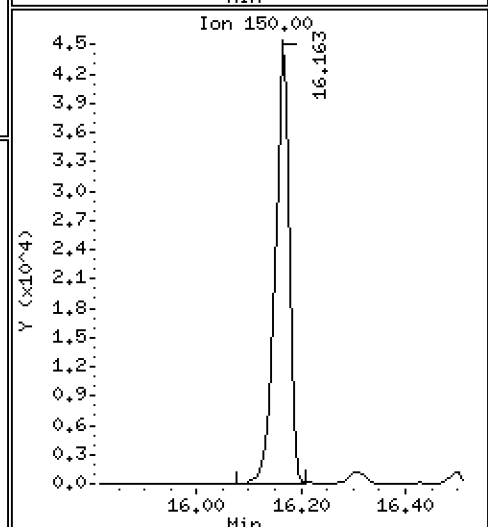
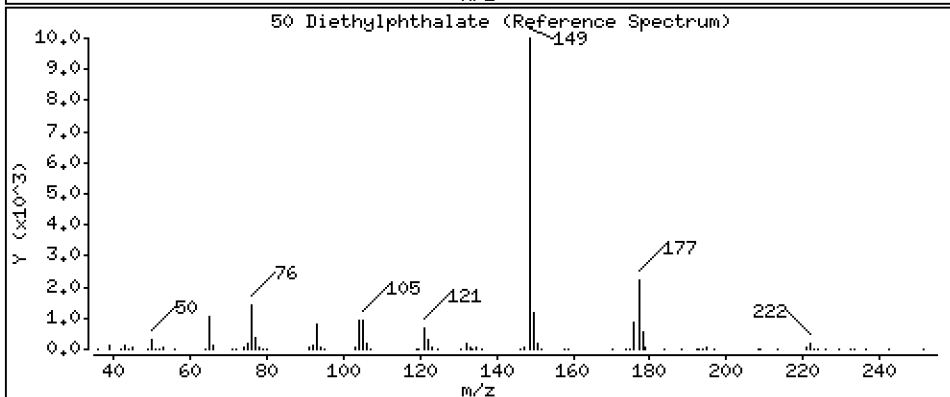
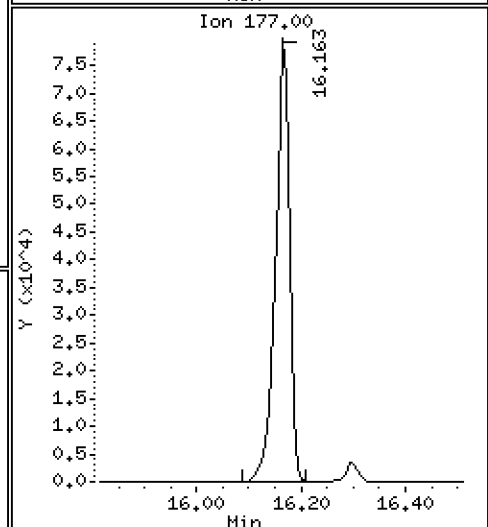
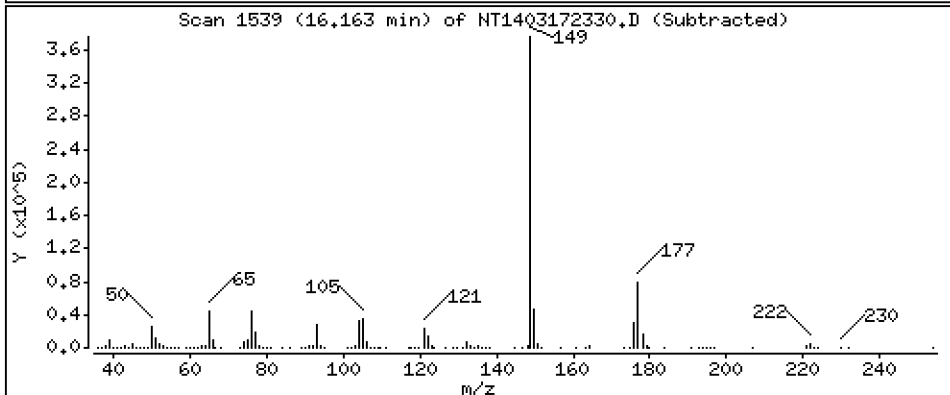
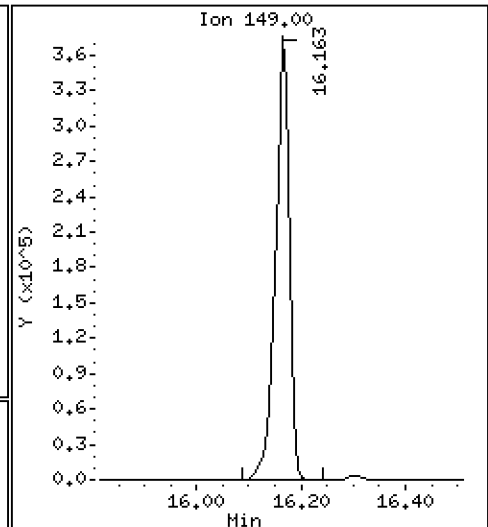
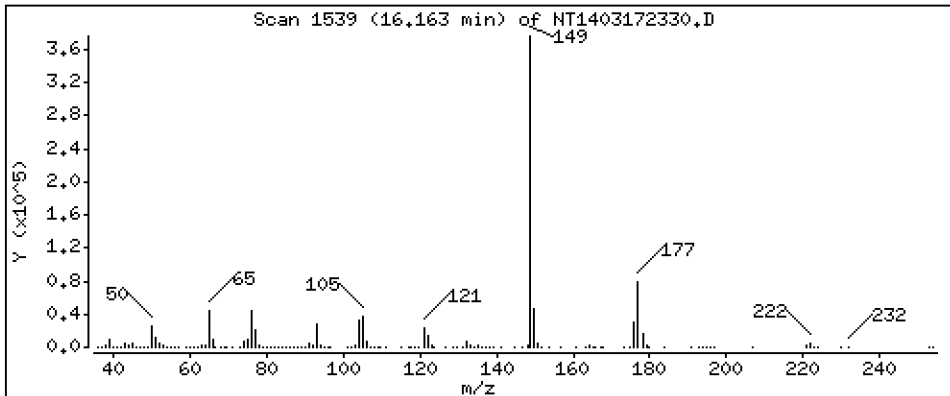
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,328 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

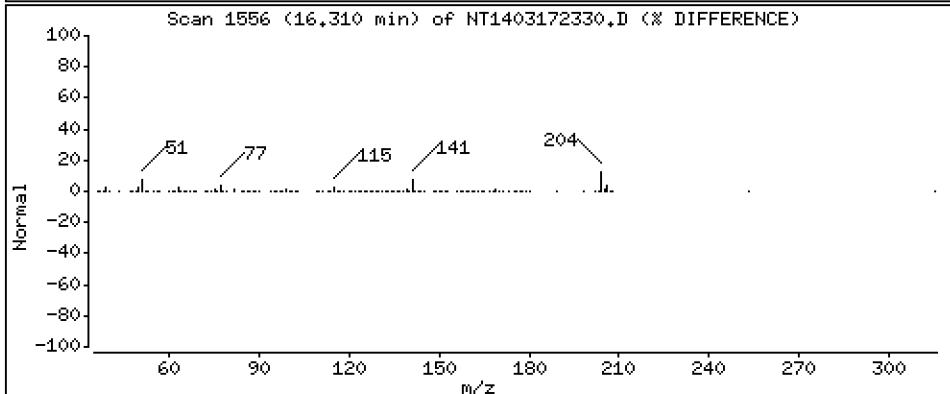
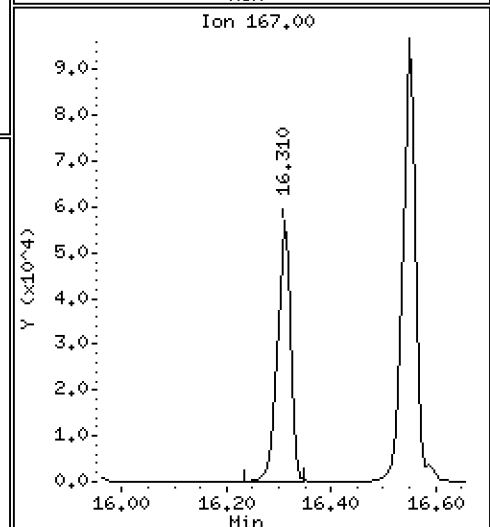
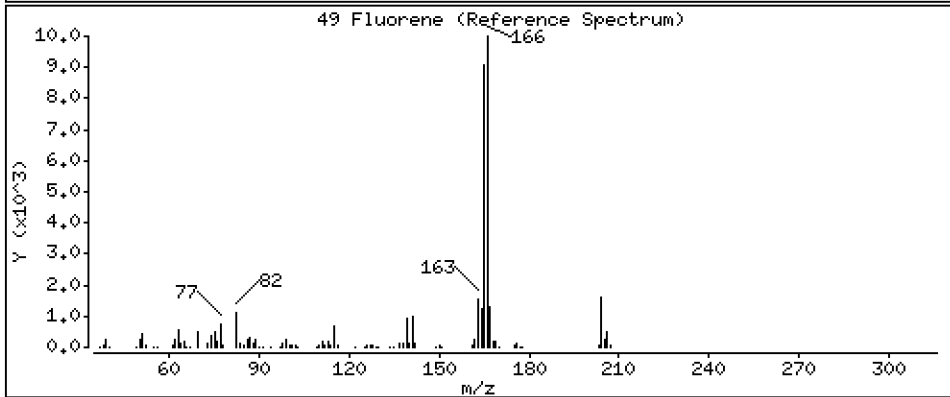
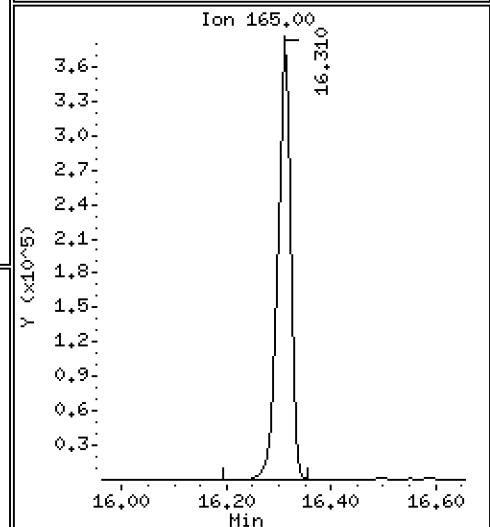
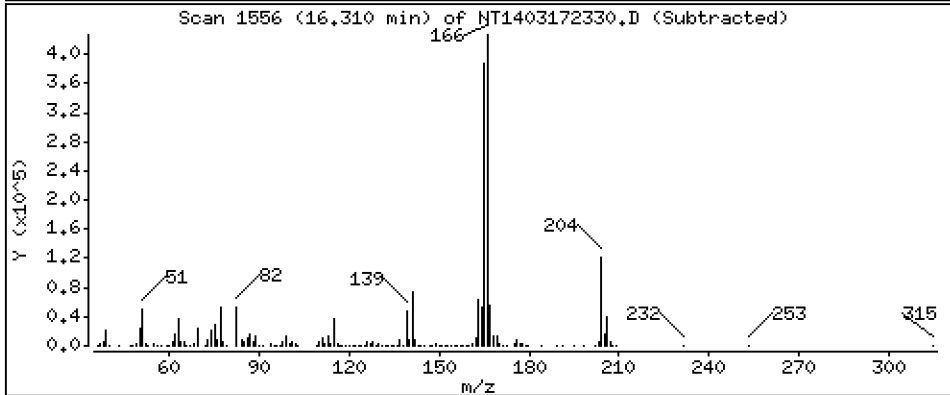
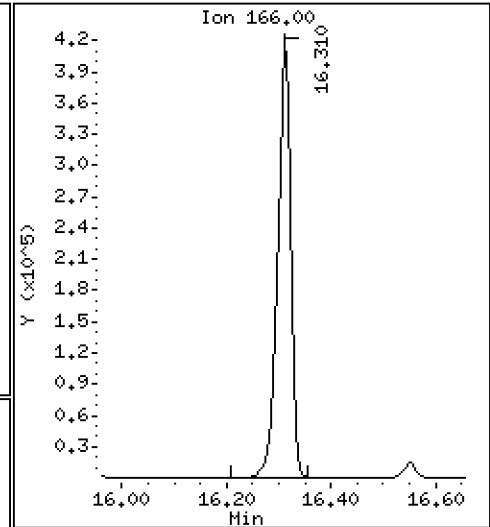
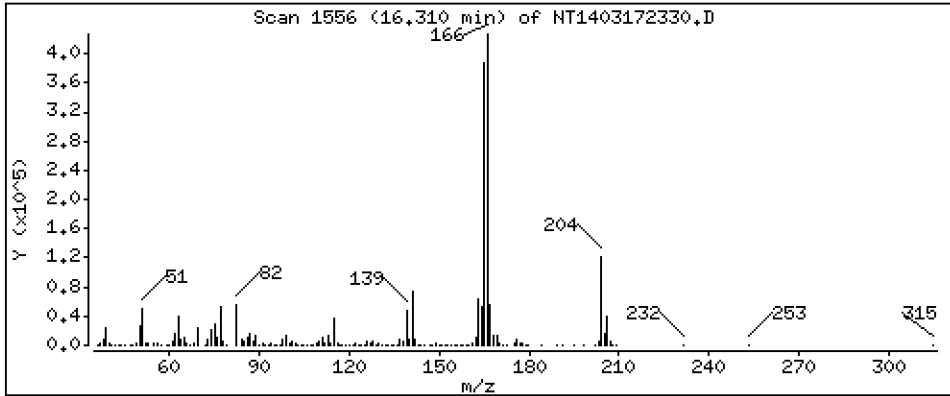
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,707 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

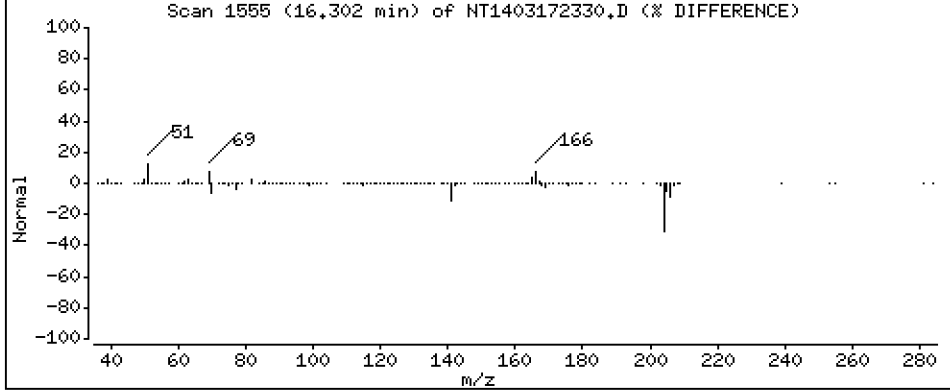
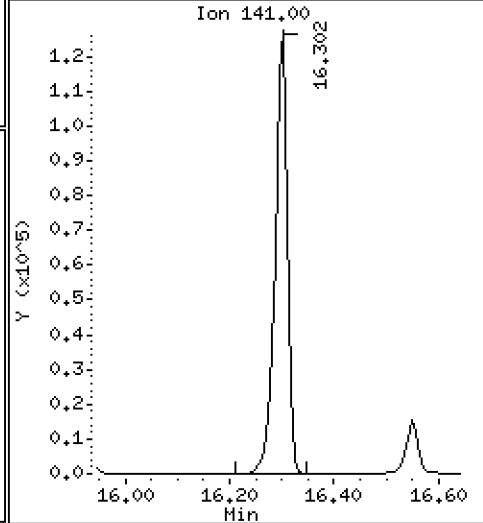
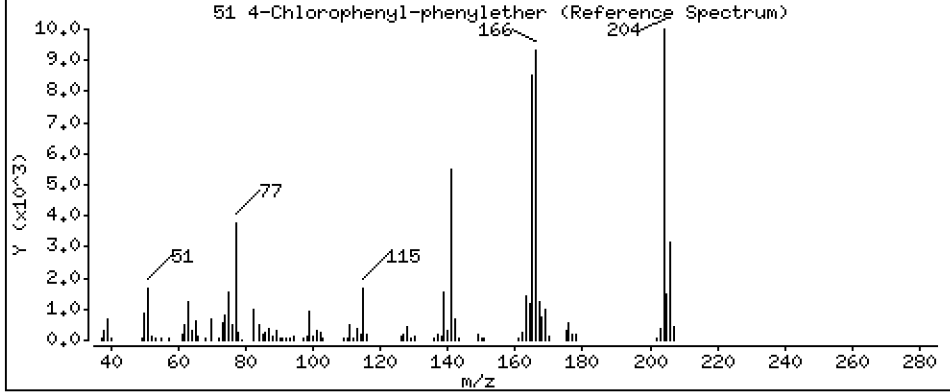
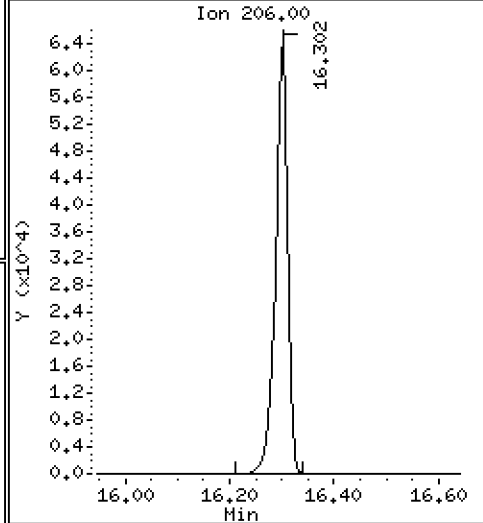
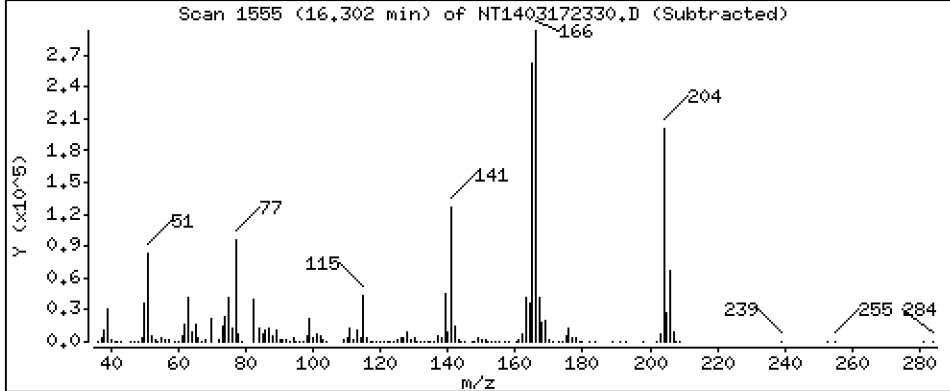
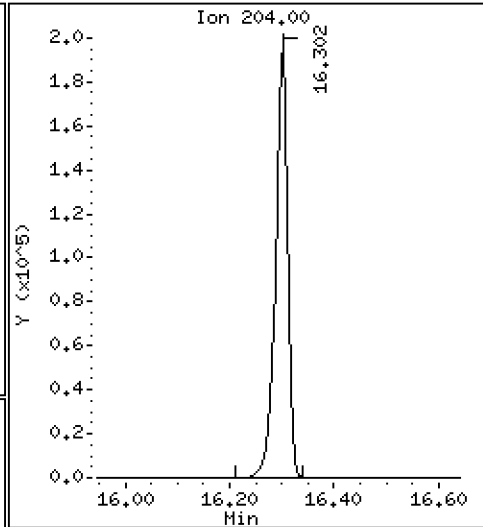
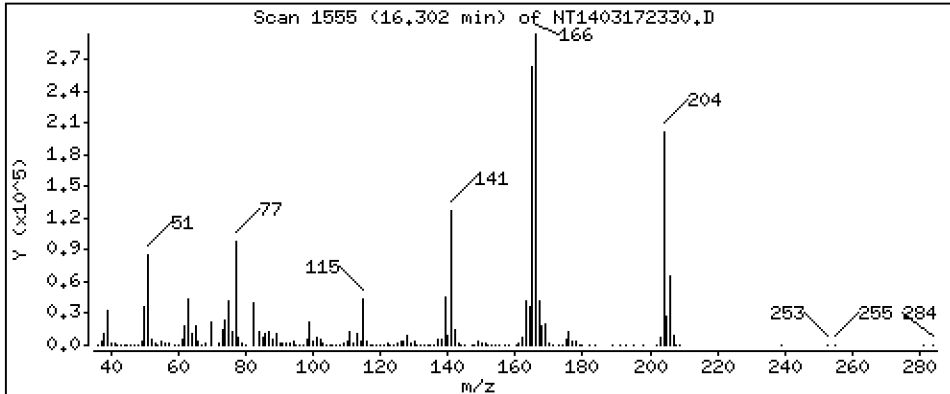
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,943 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

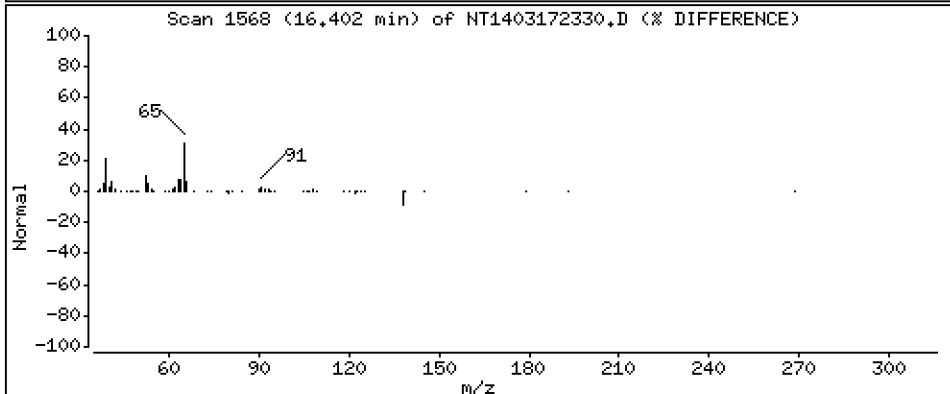
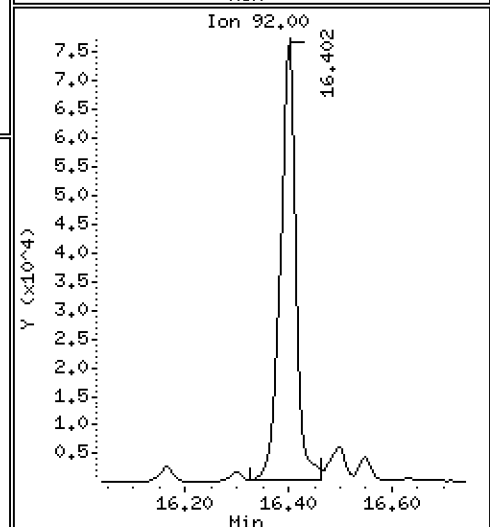
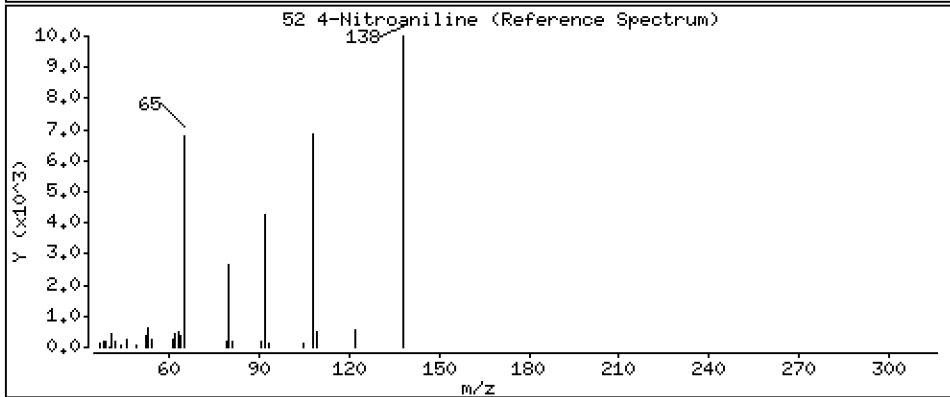
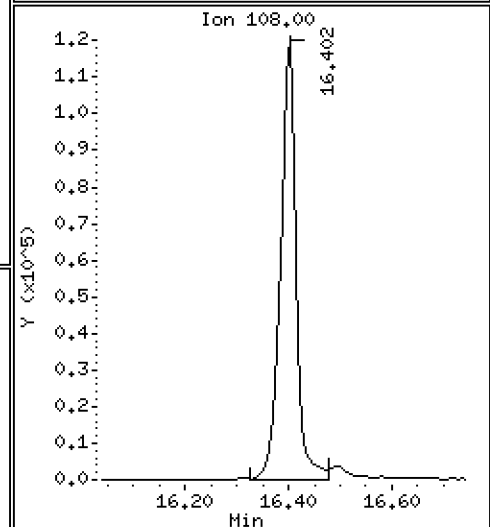
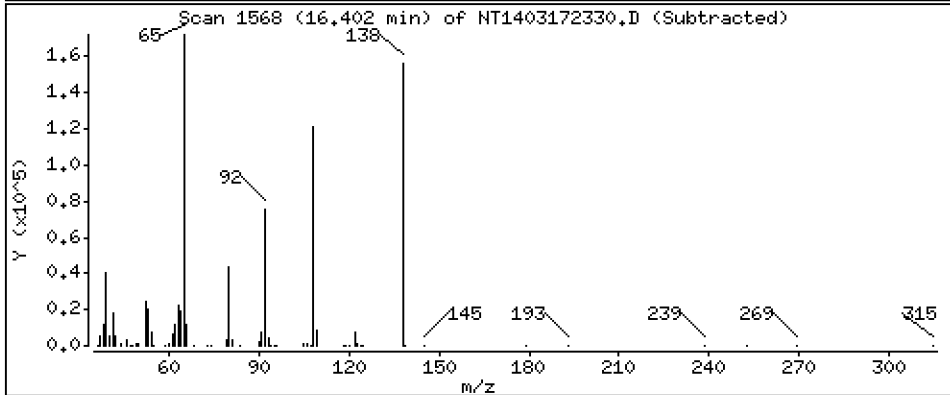
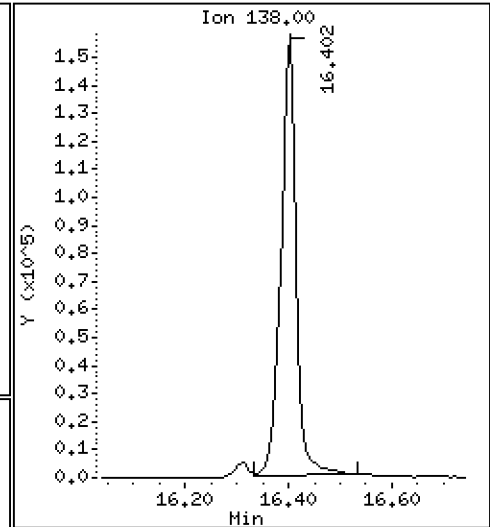
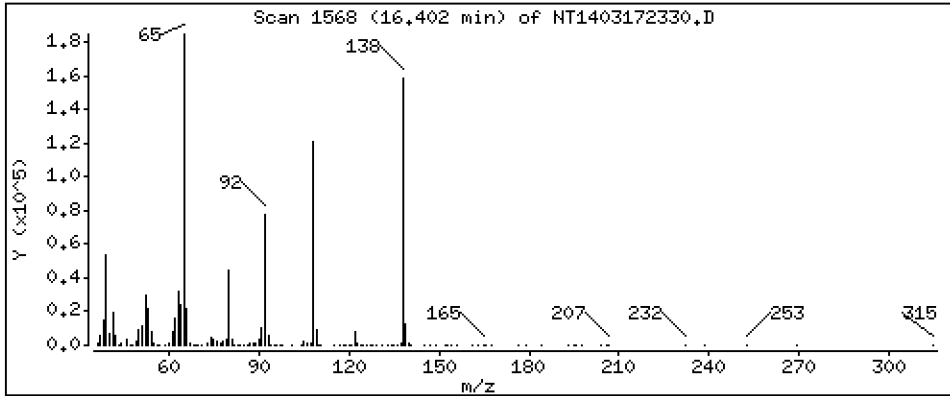
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 8,288 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

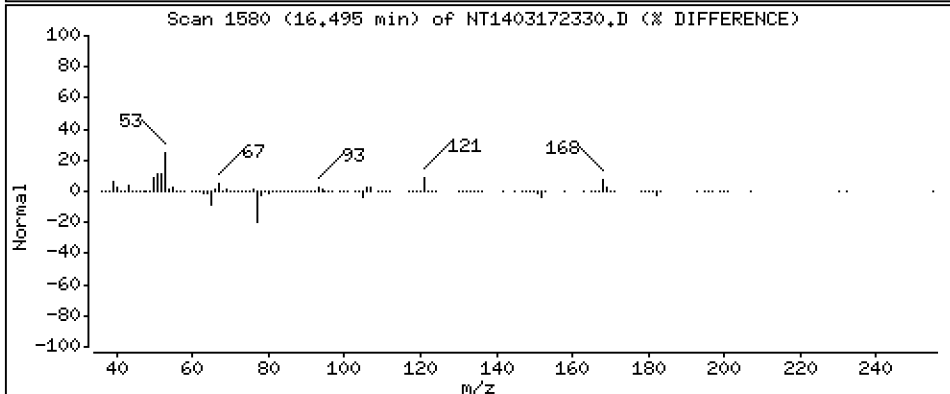
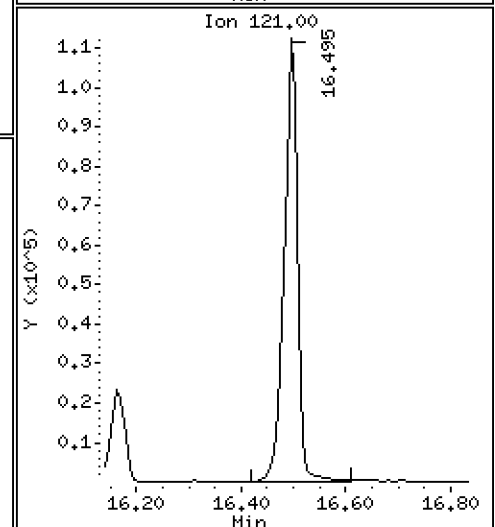
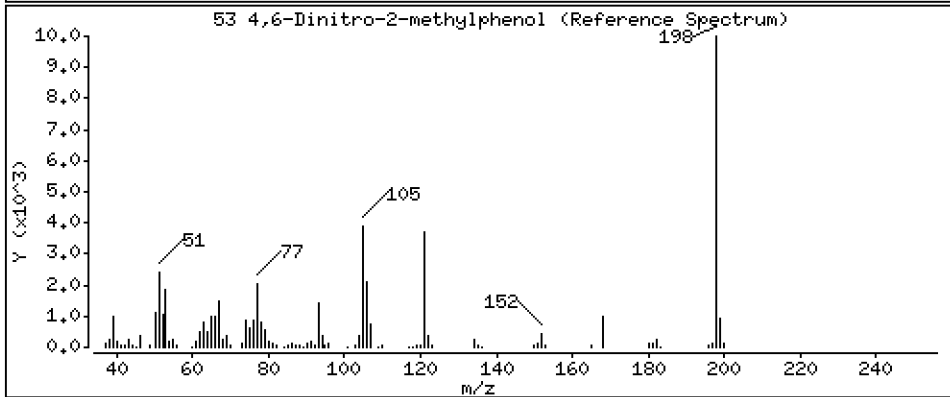
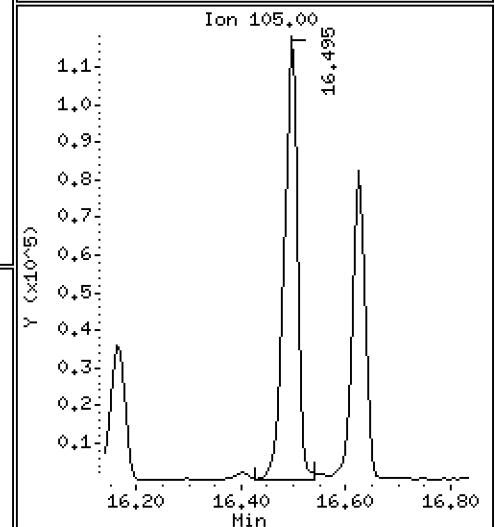
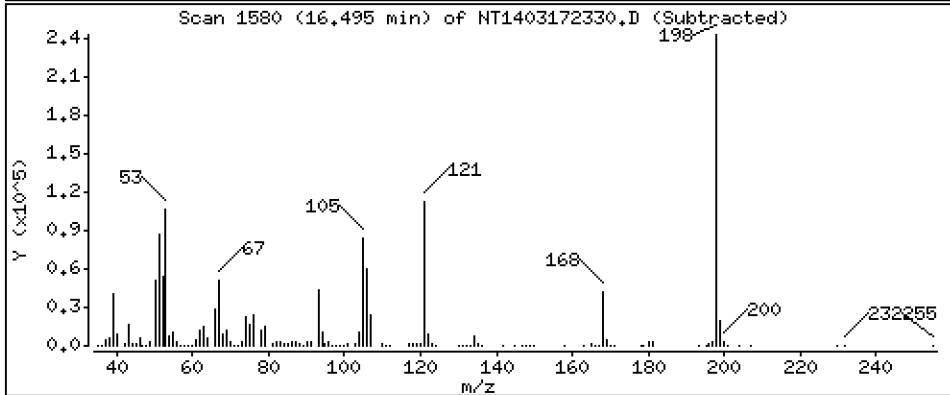
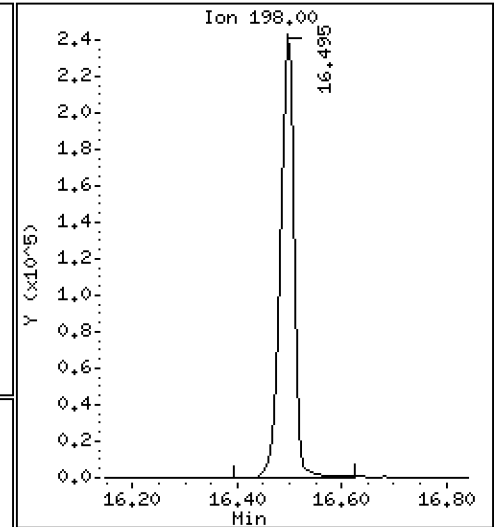
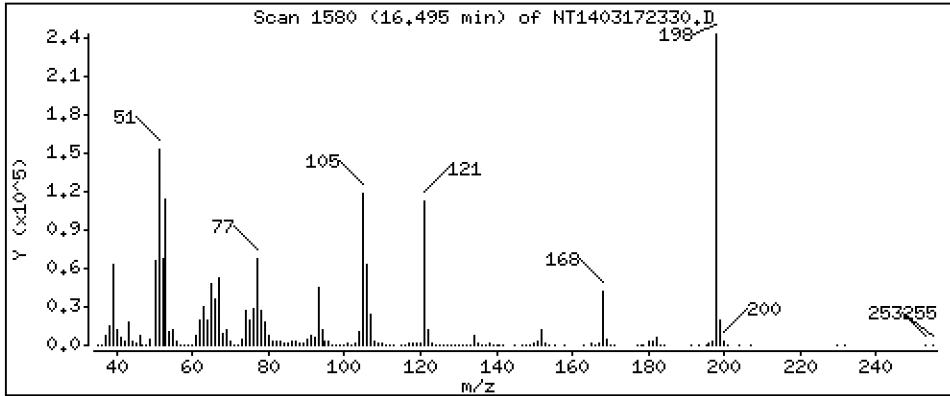
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 18,58 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

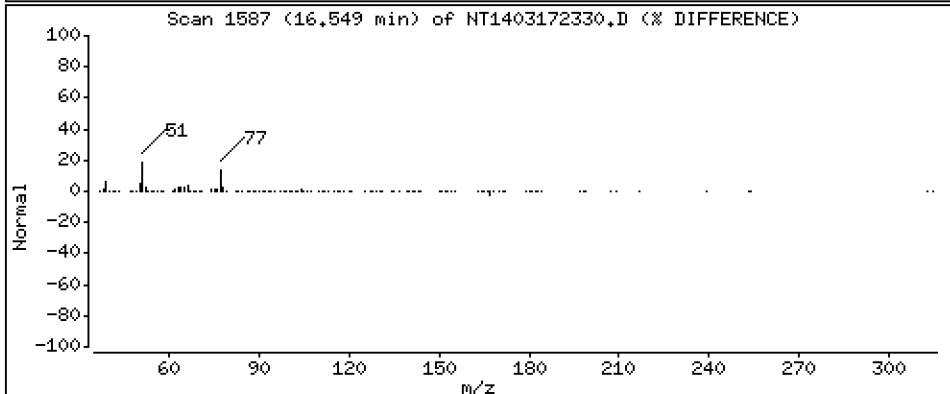
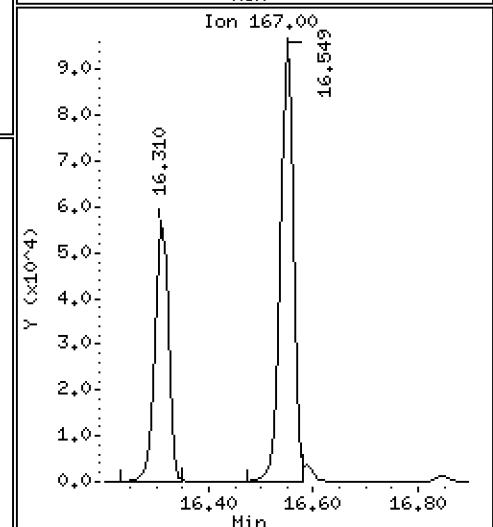
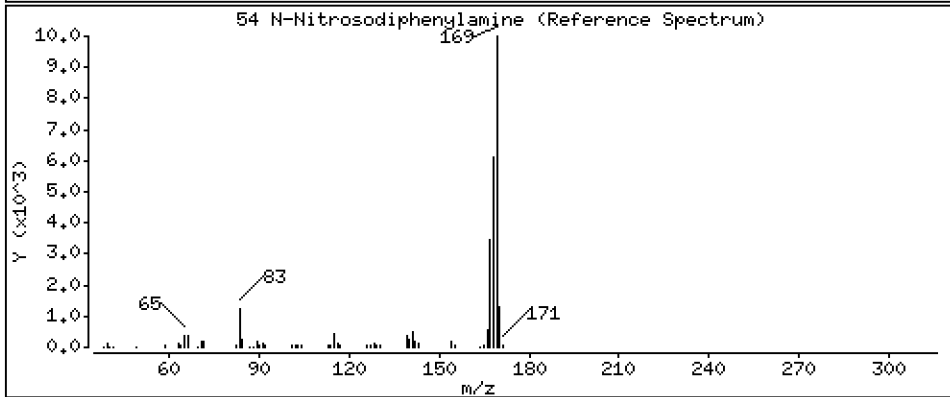
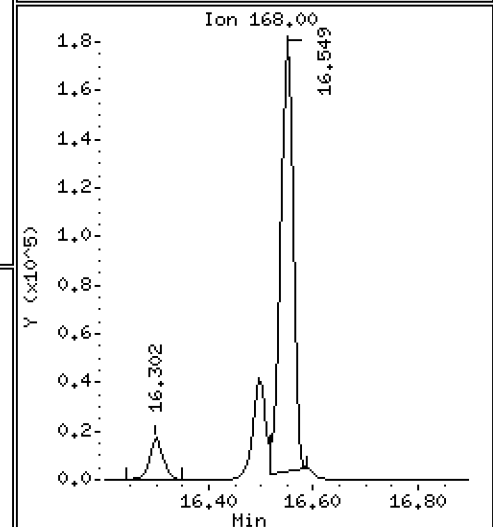
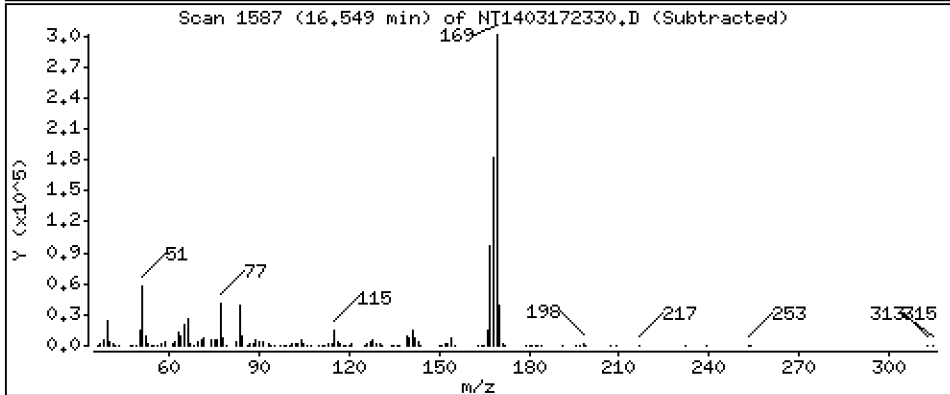
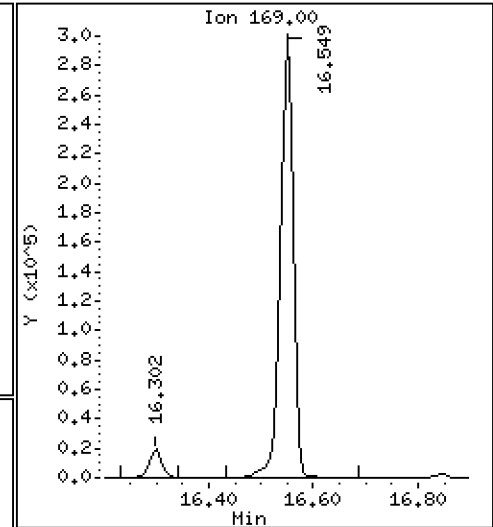
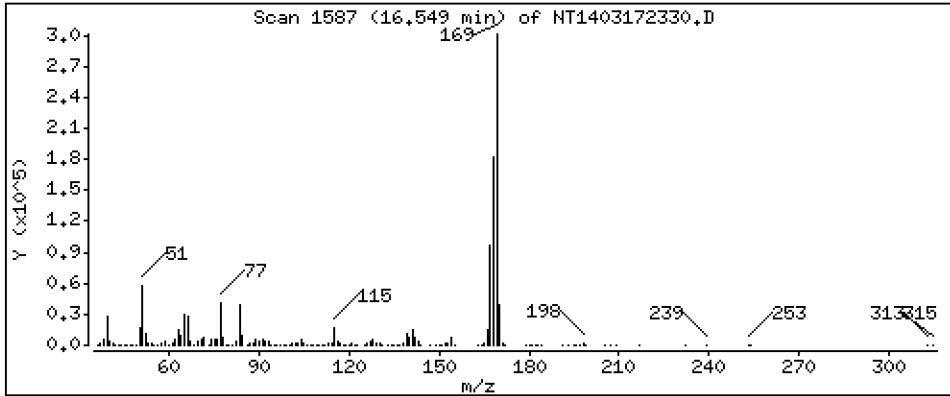
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,619 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

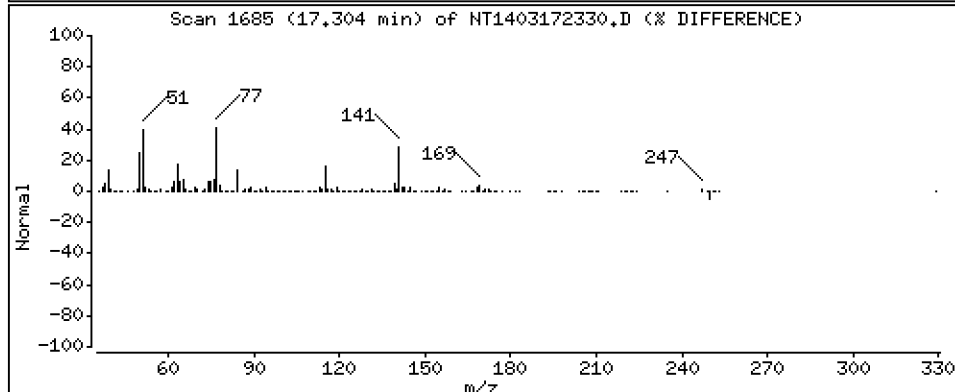
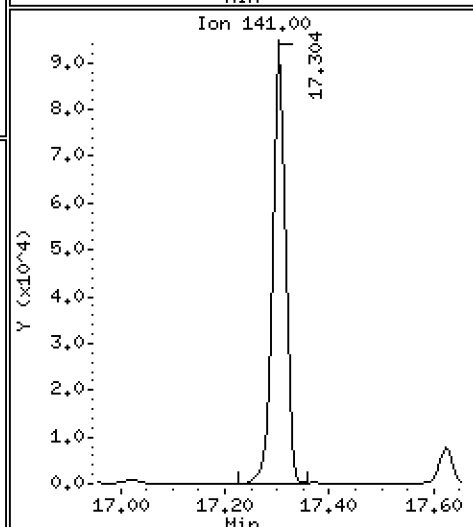
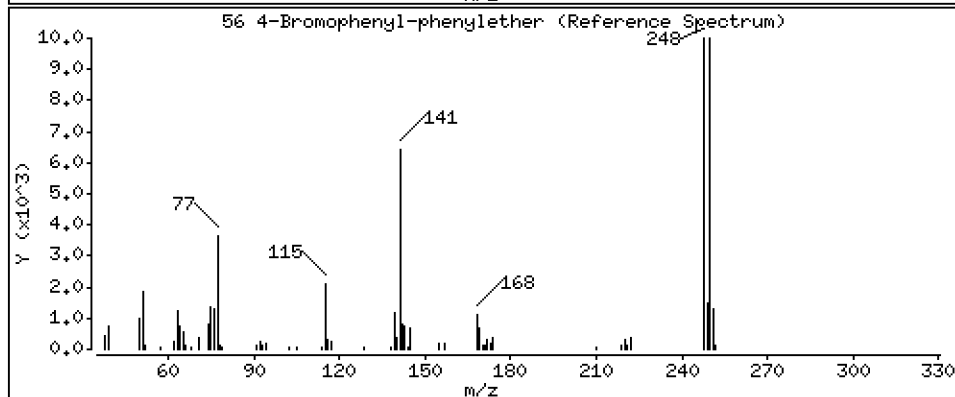
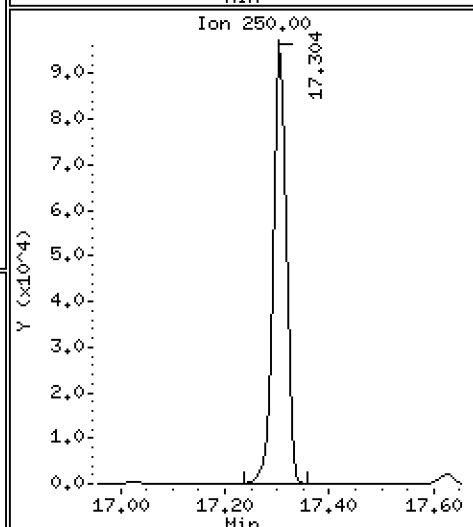
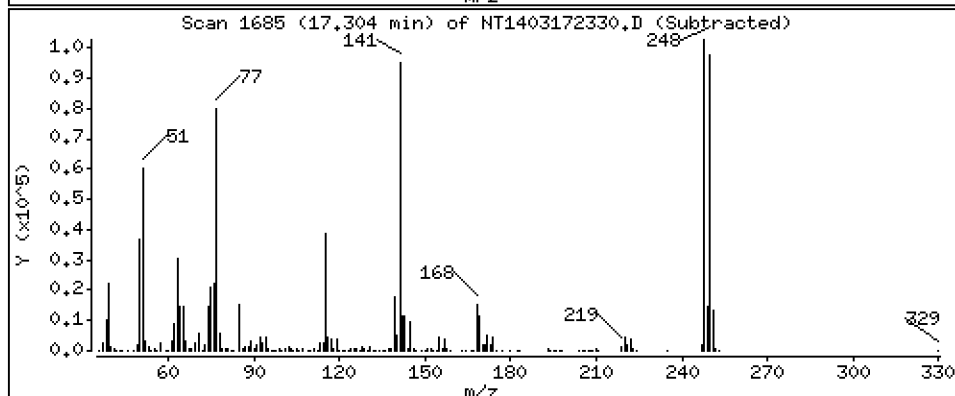
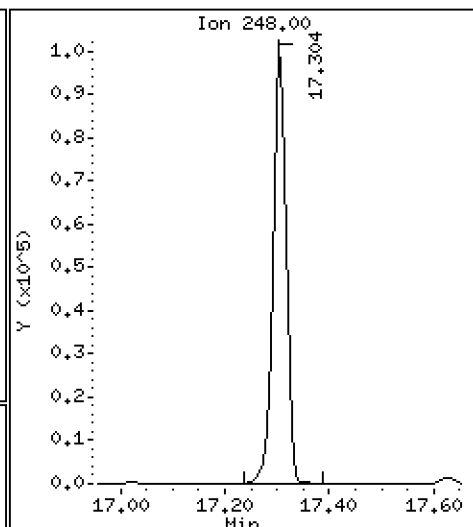
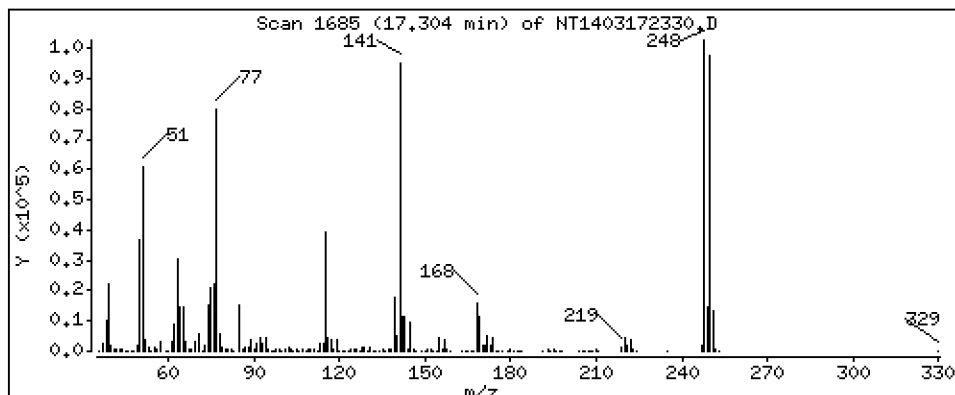
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,789 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

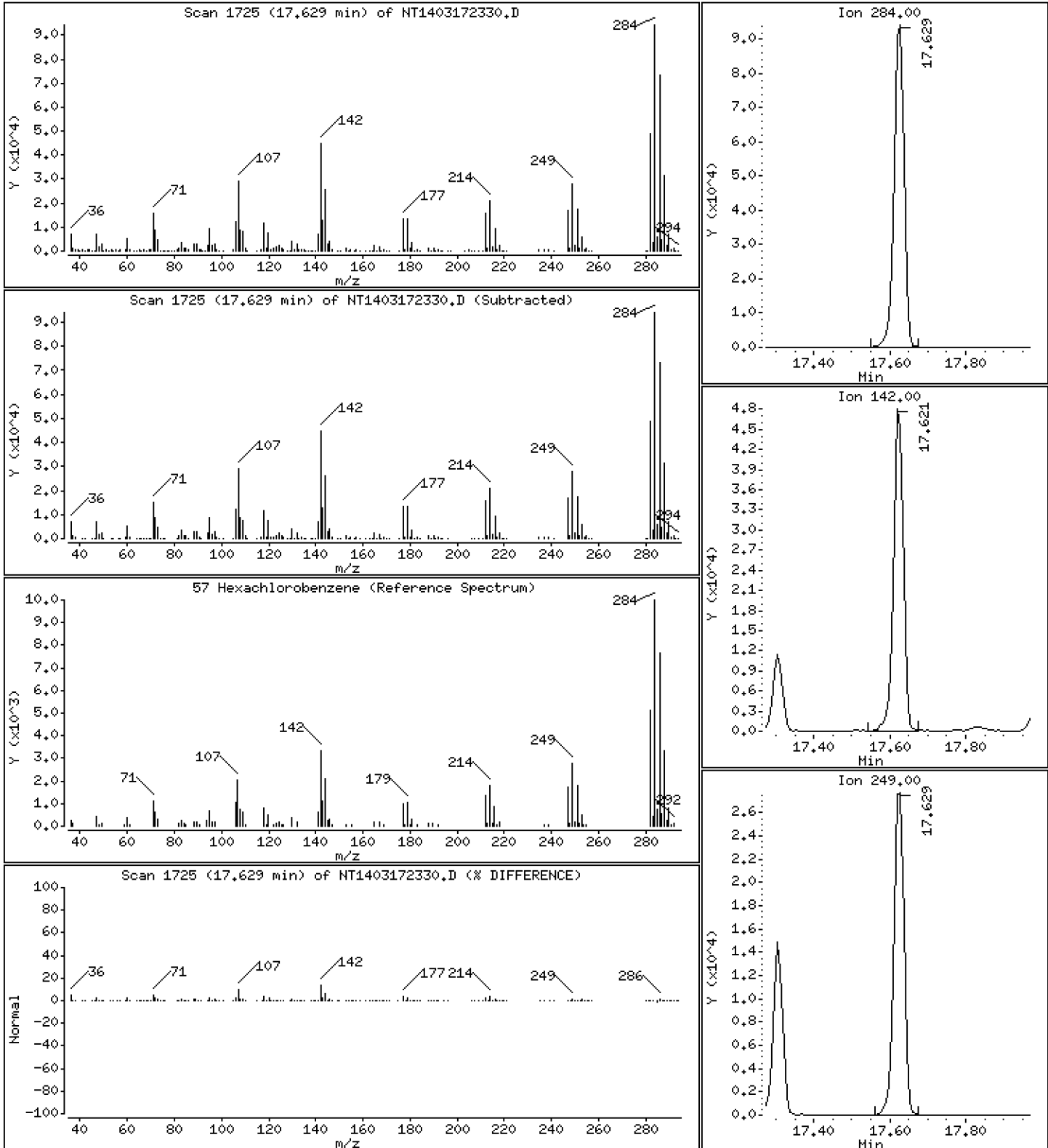
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,341 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

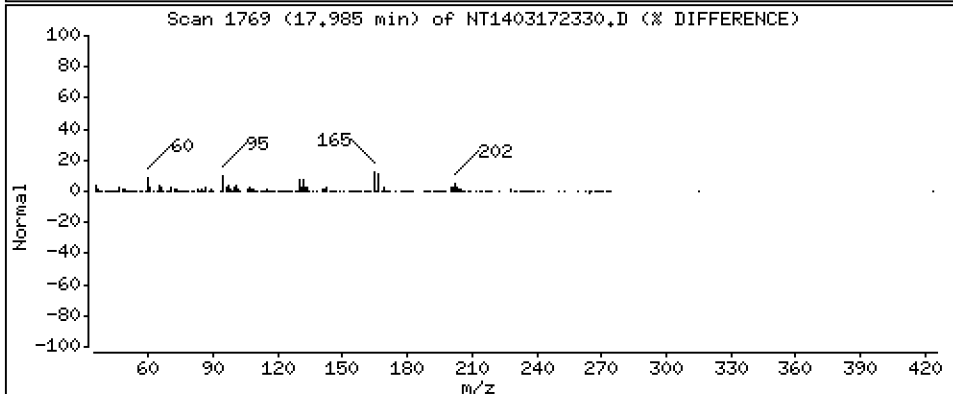
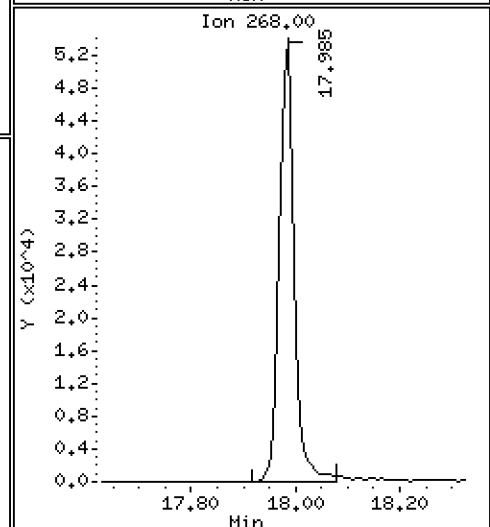
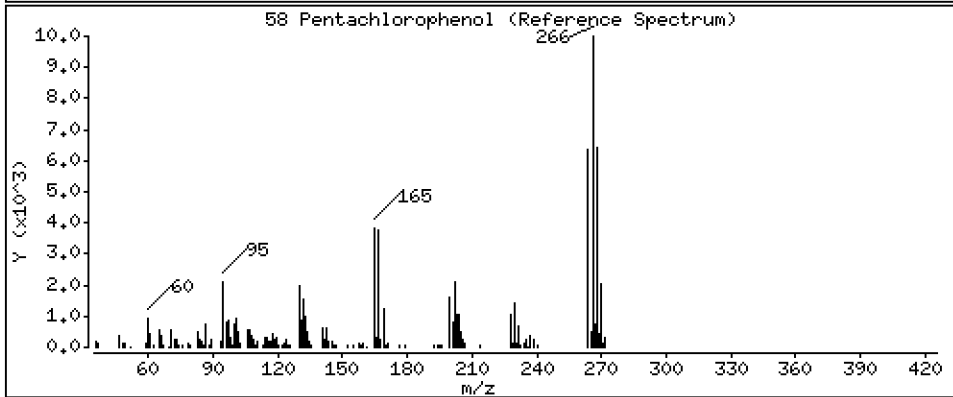
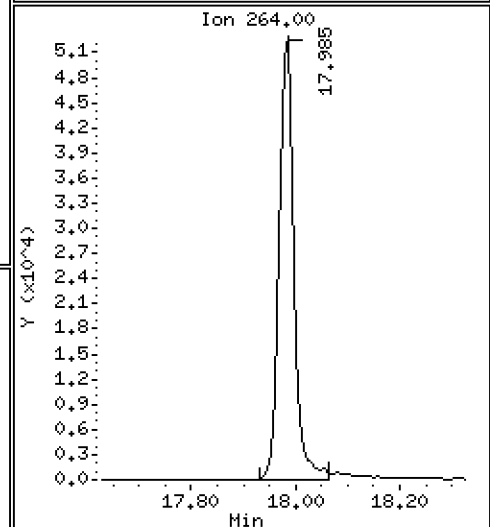
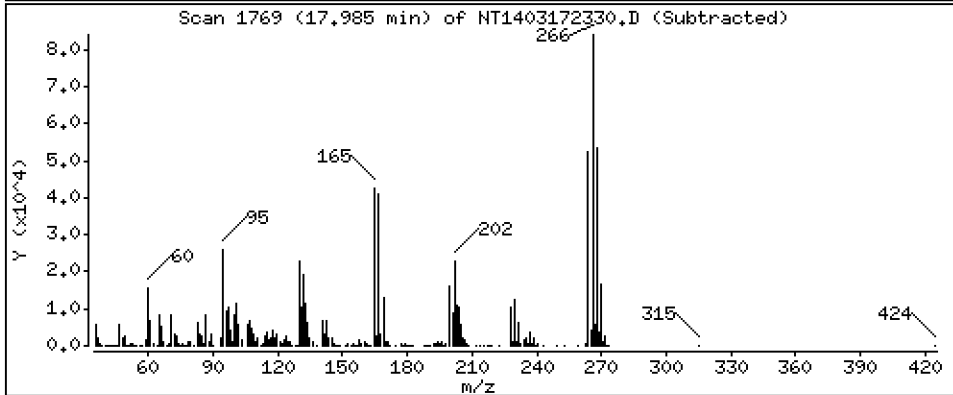
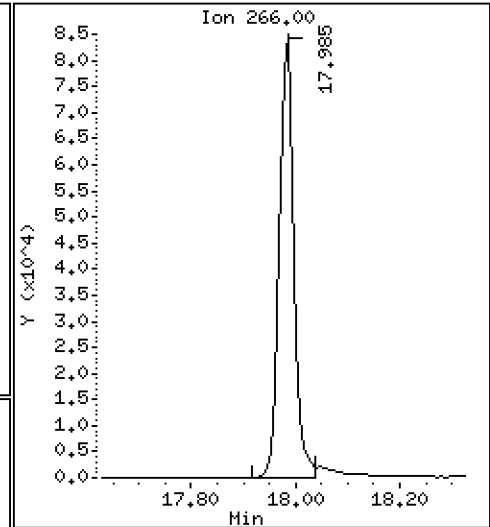
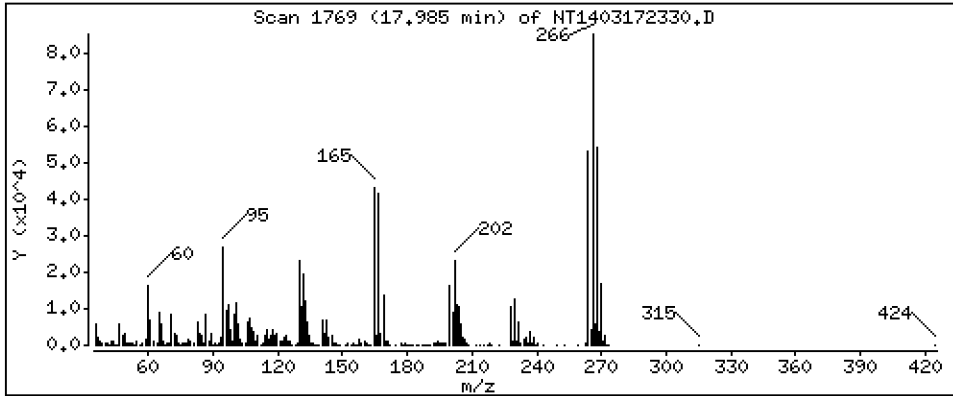
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 7,284 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

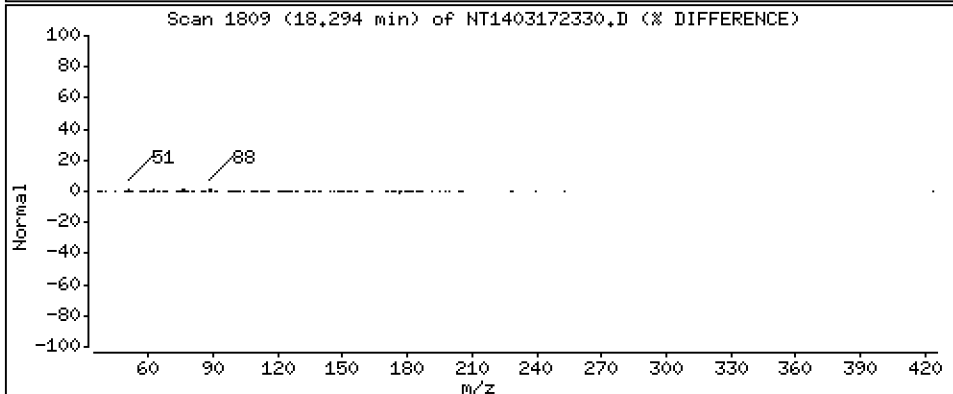
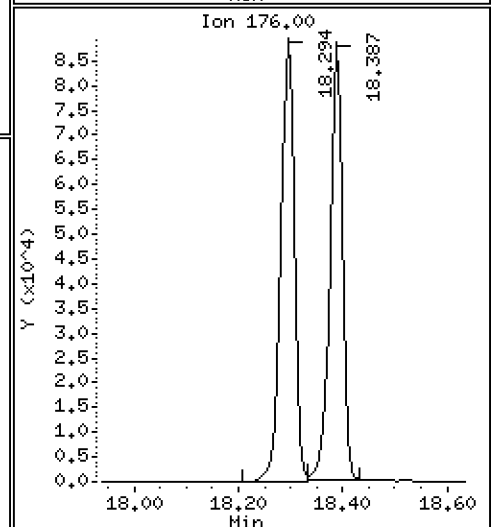
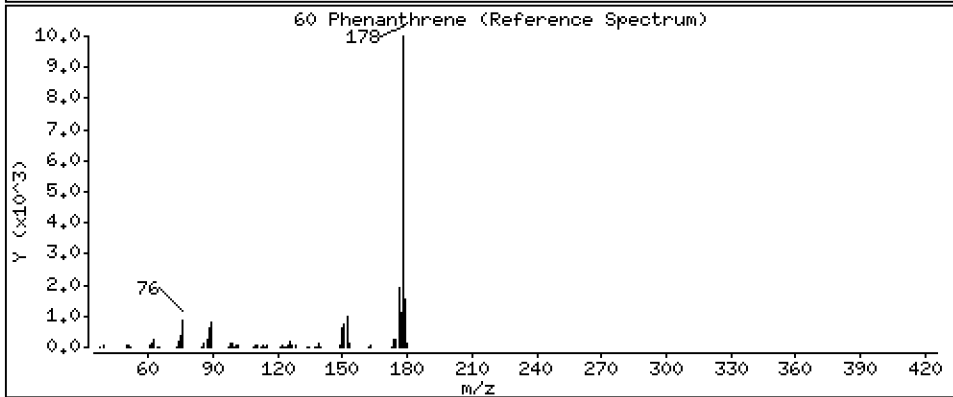
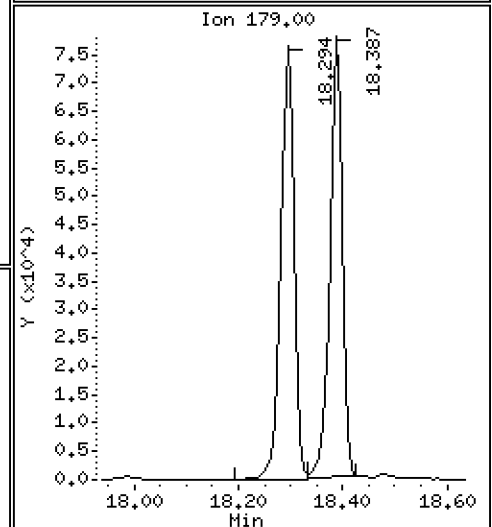
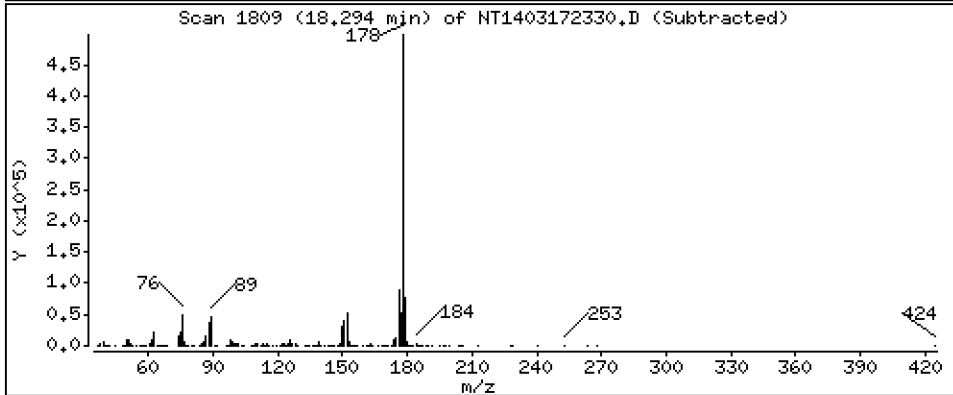
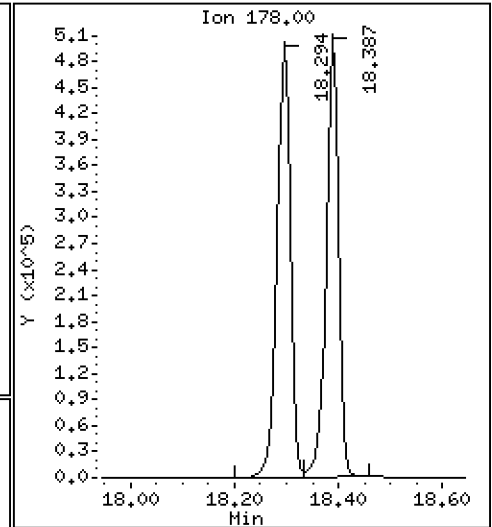
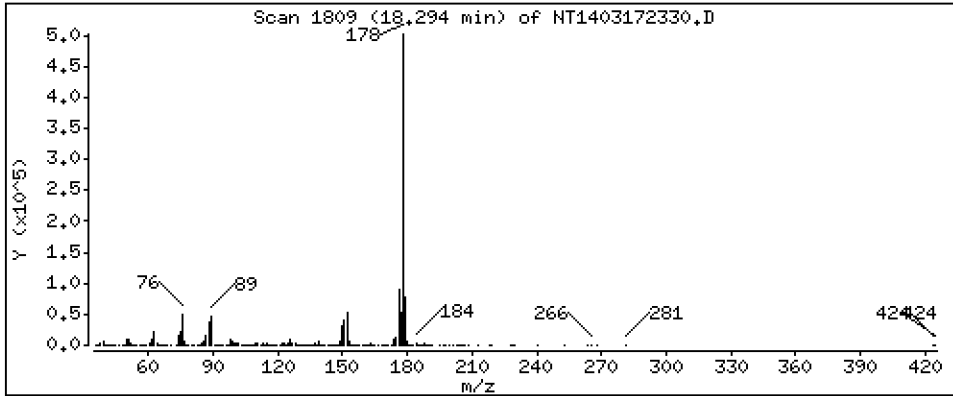
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,661 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

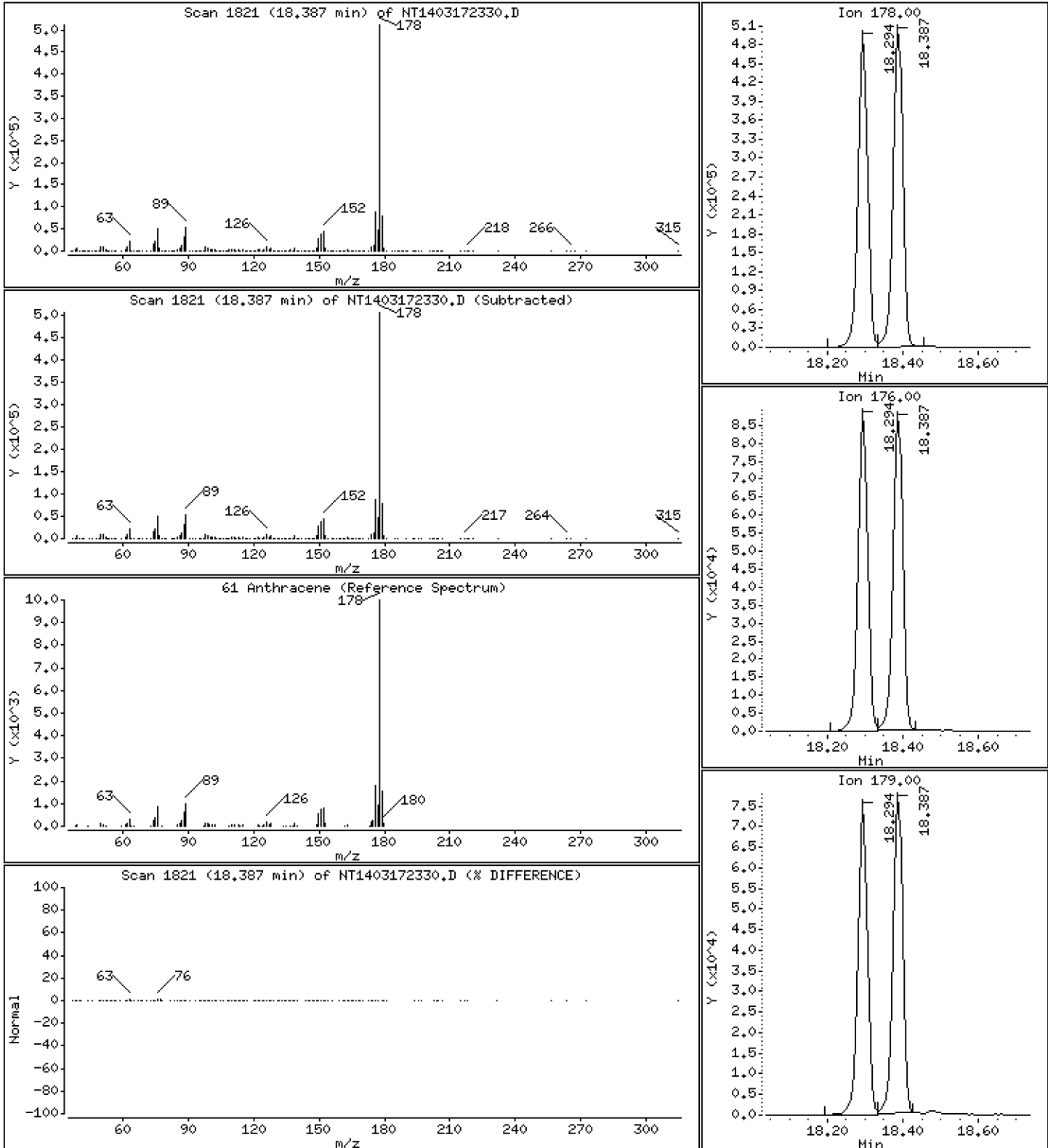
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,842 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

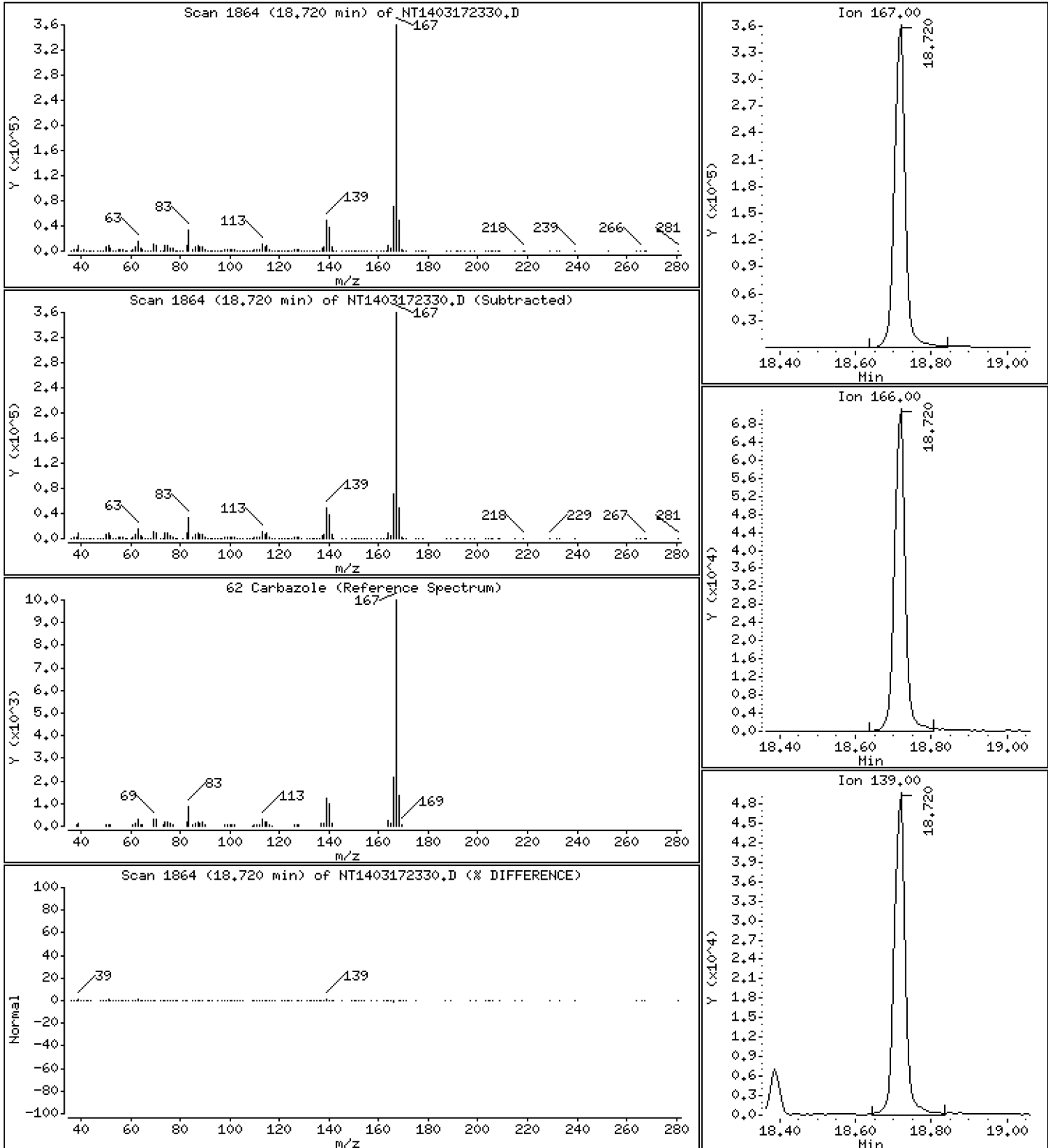
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,371 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

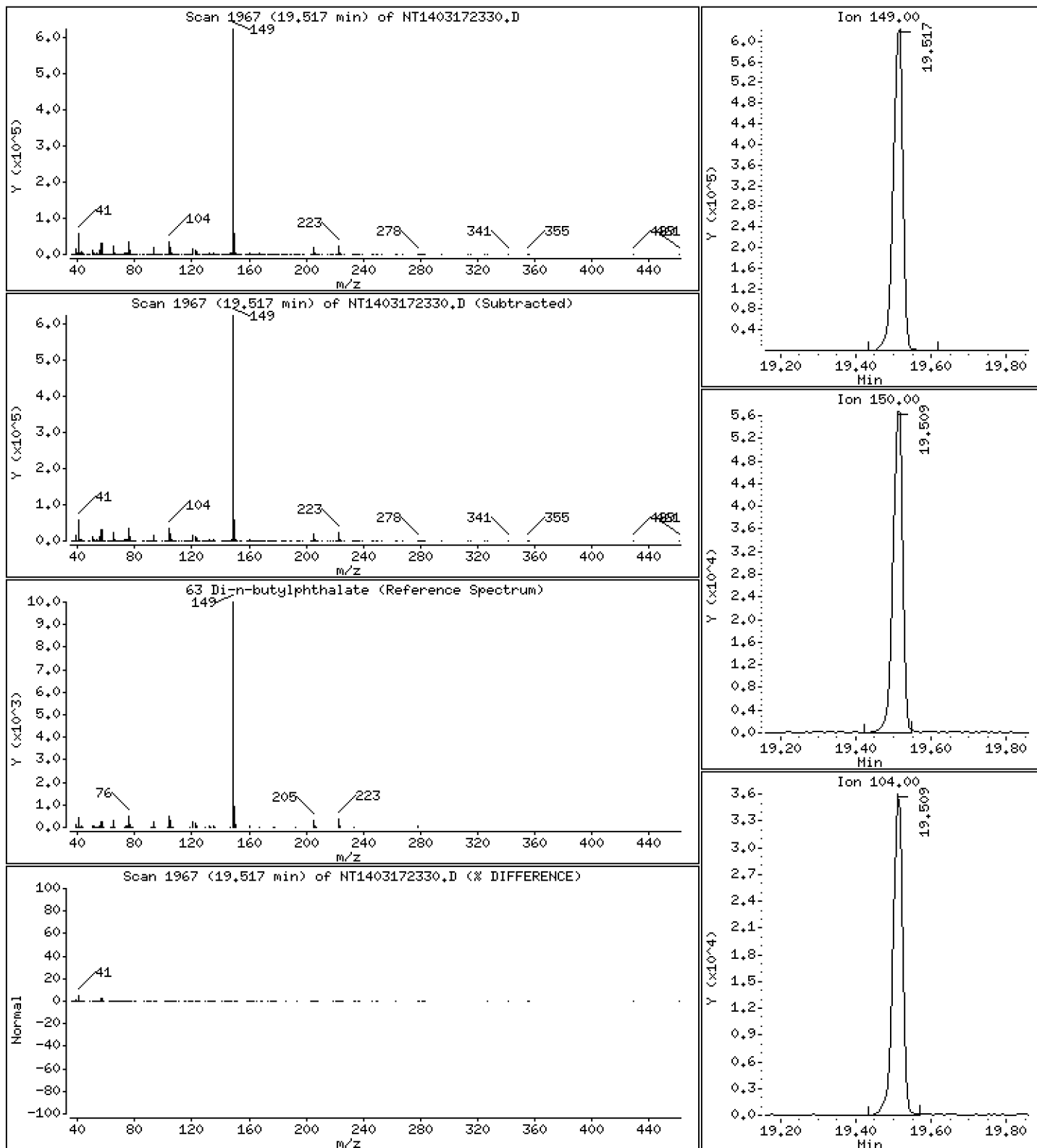
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,310 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

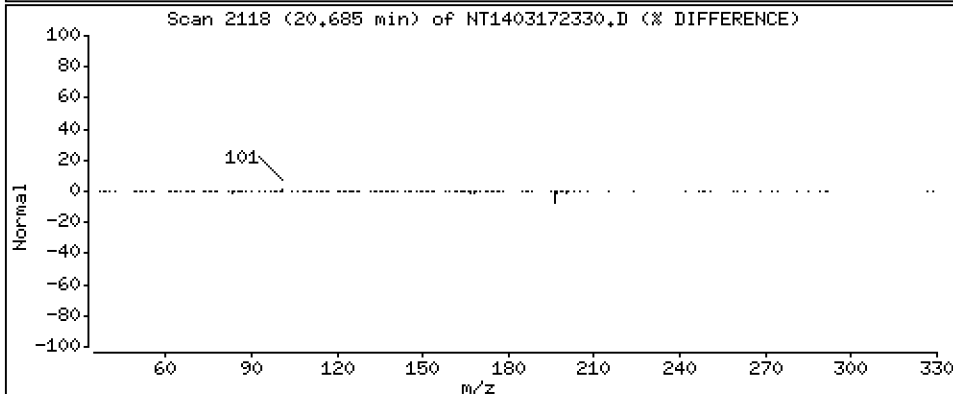
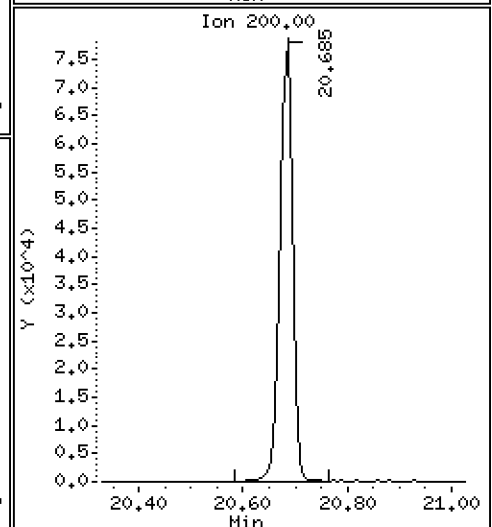
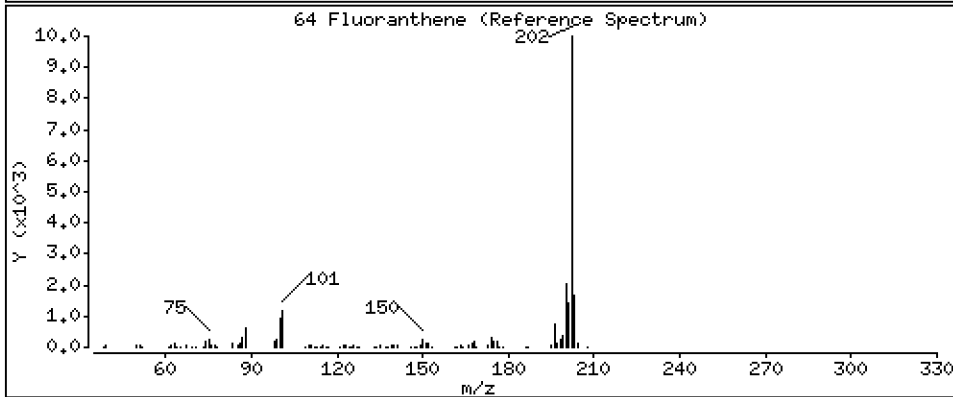
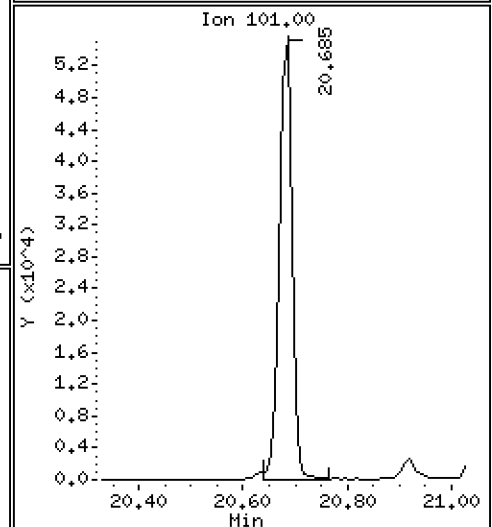
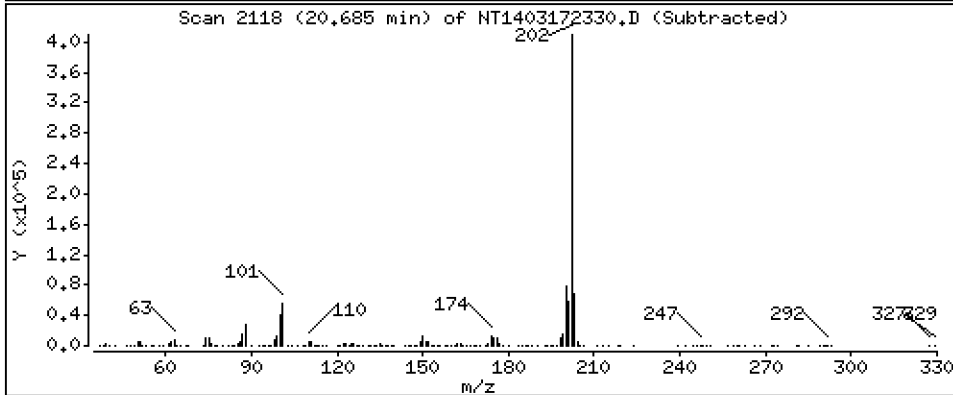
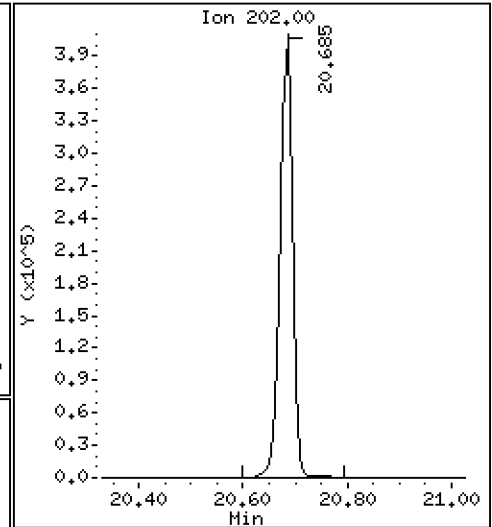
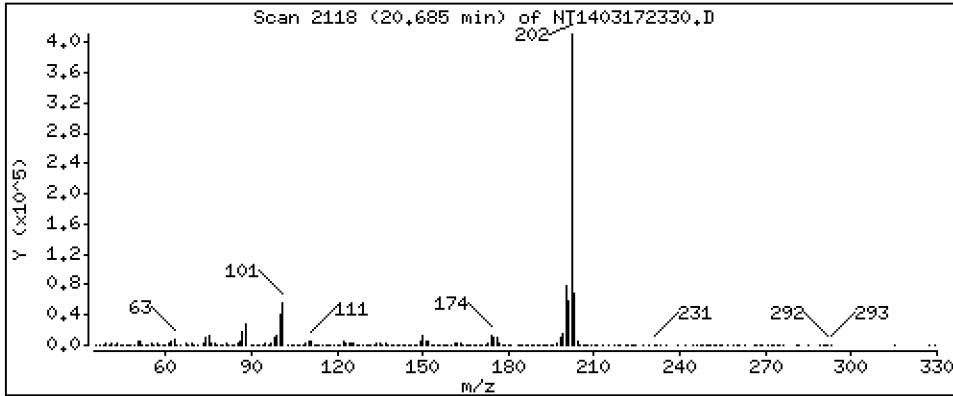
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 8,198 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

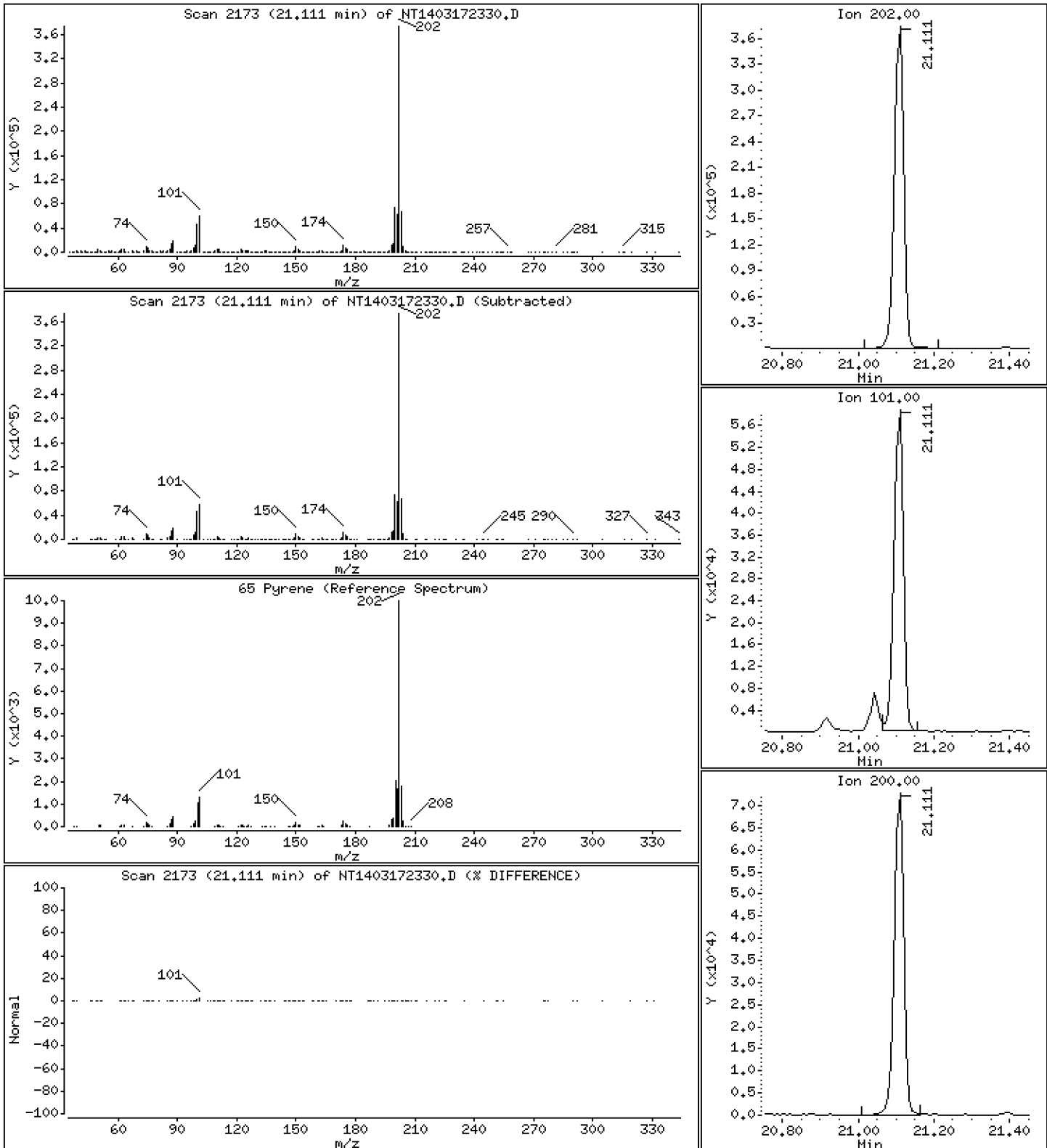
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 7,462 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

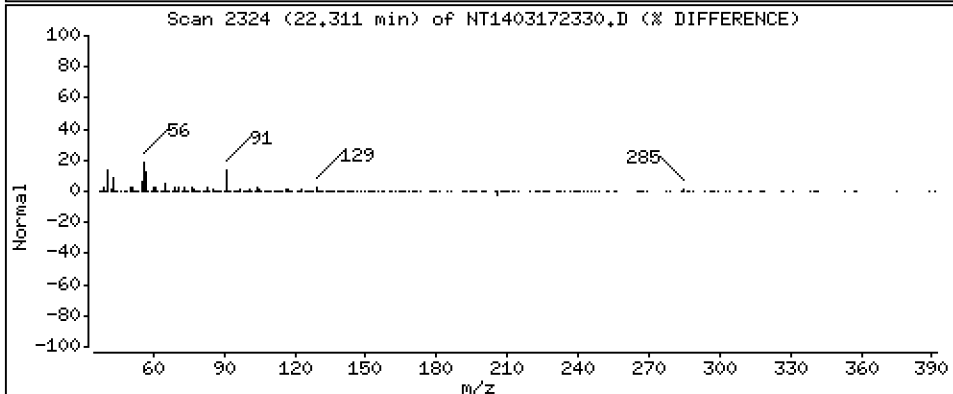
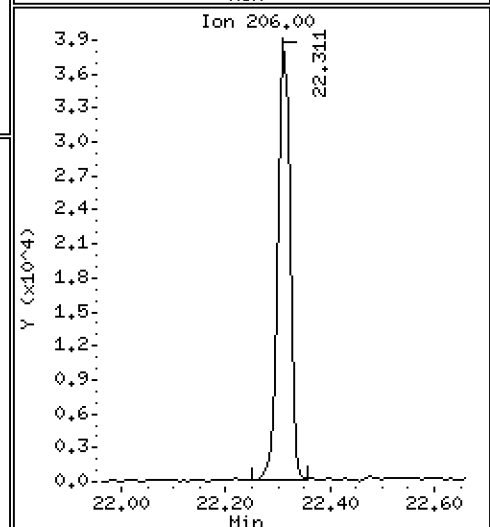
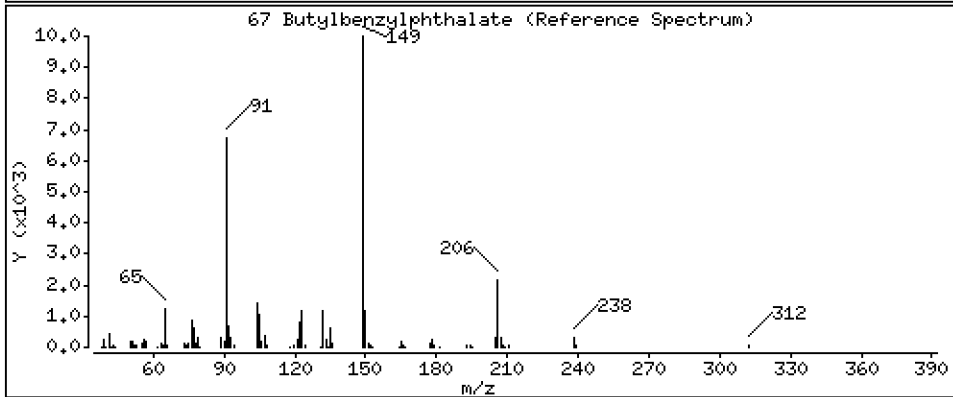
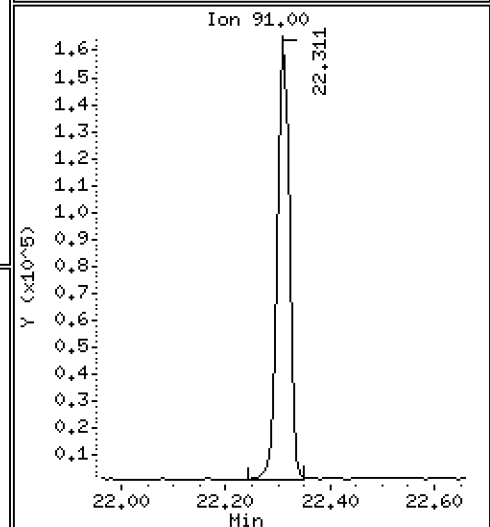
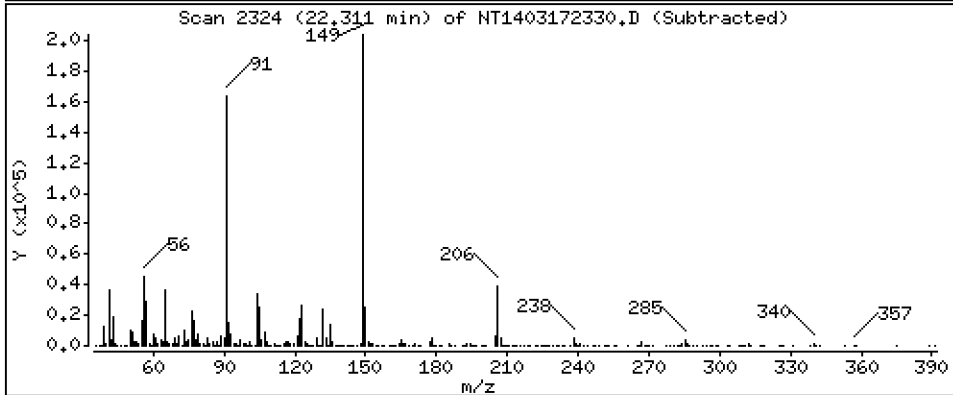
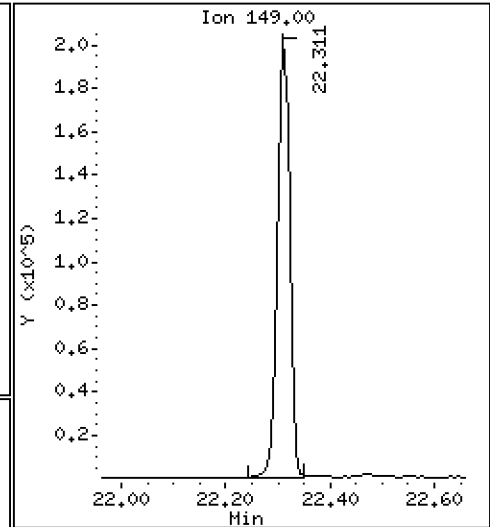
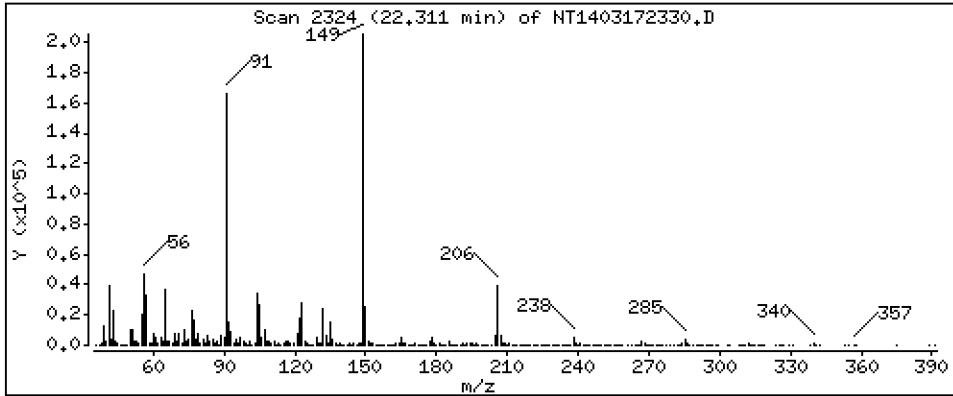
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 8,793 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

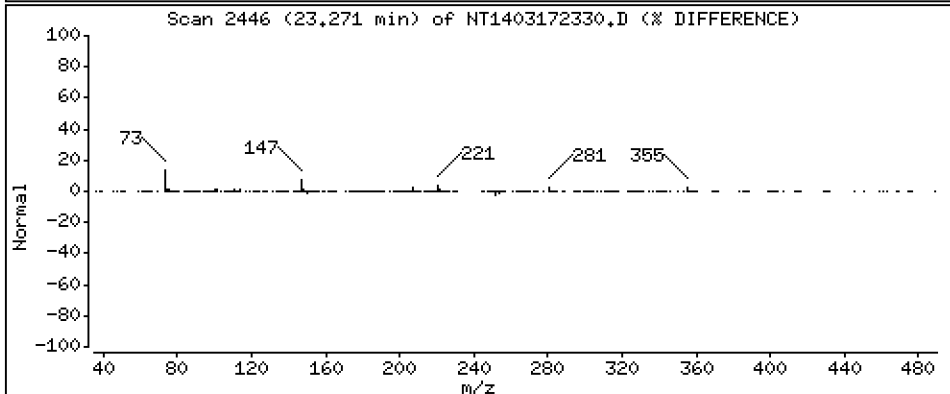
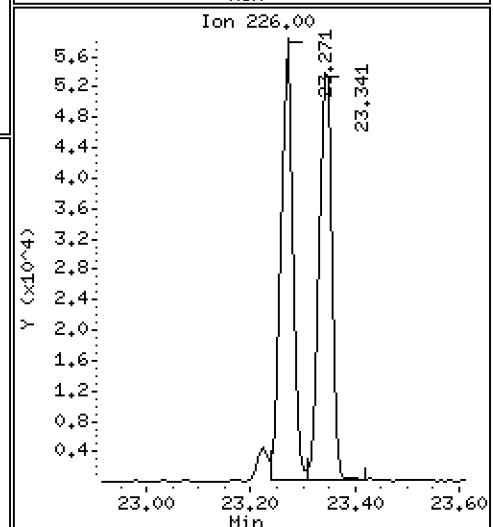
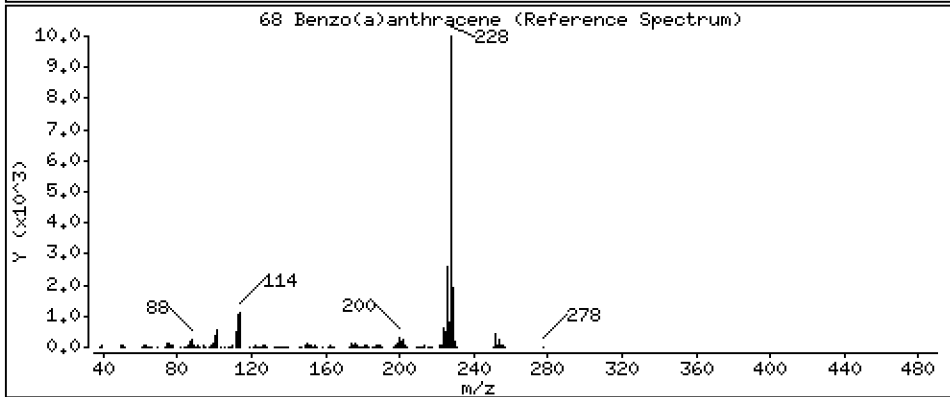
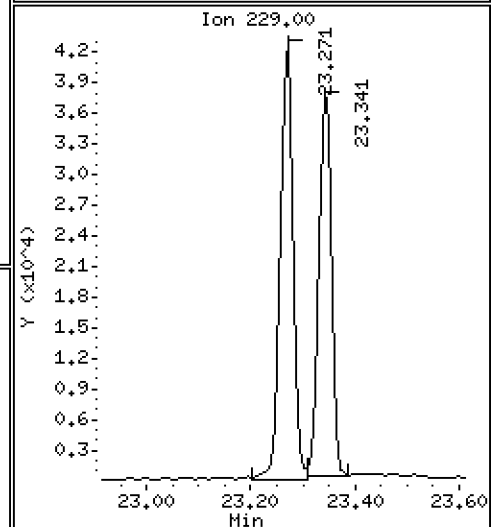
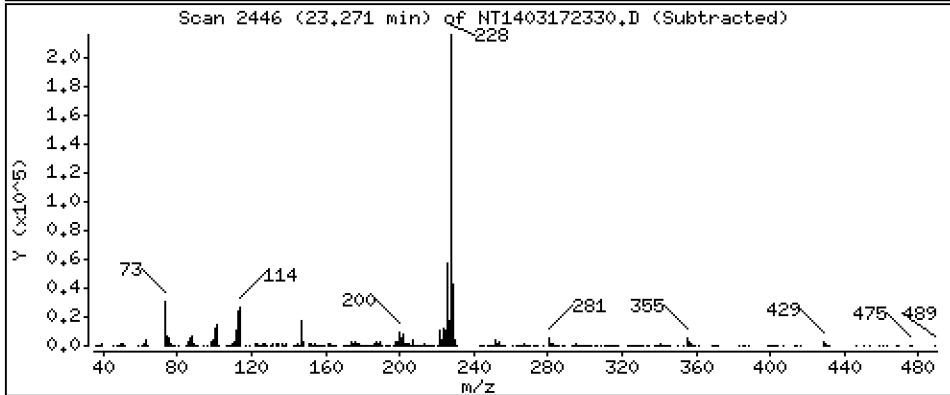
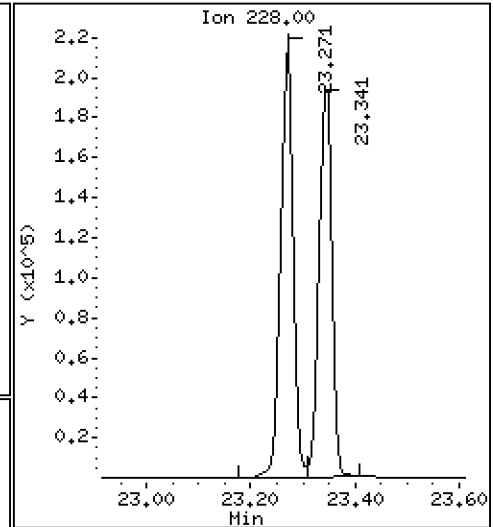
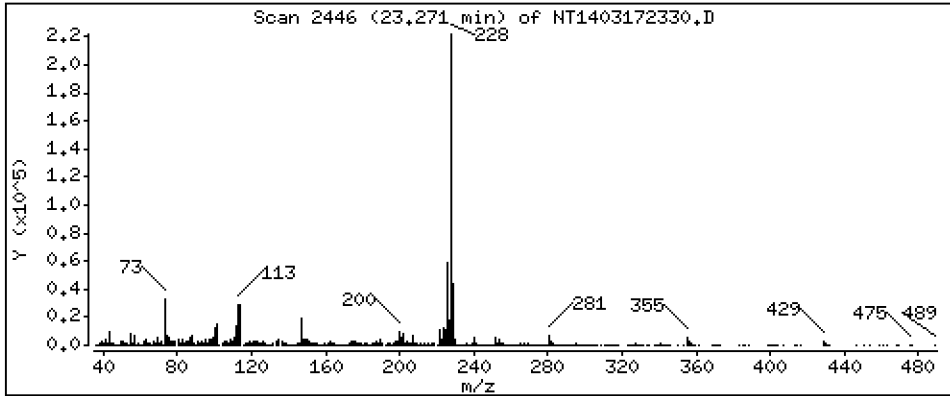
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,880 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

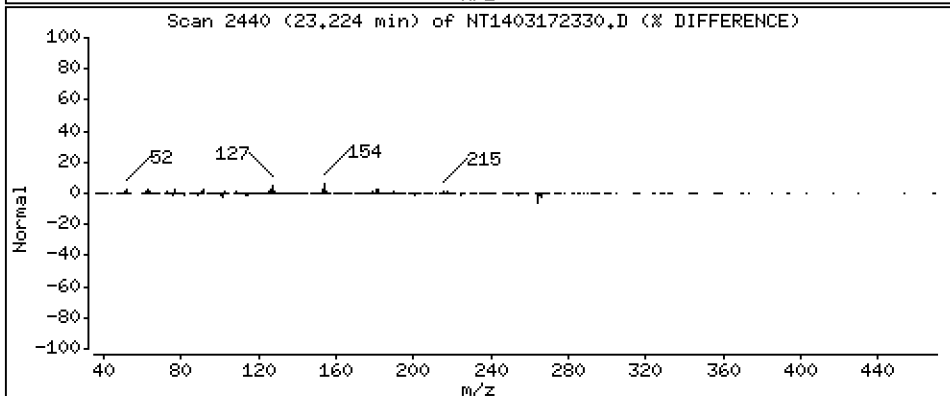
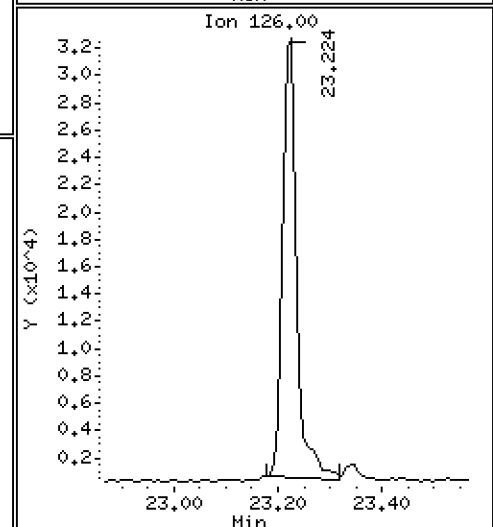
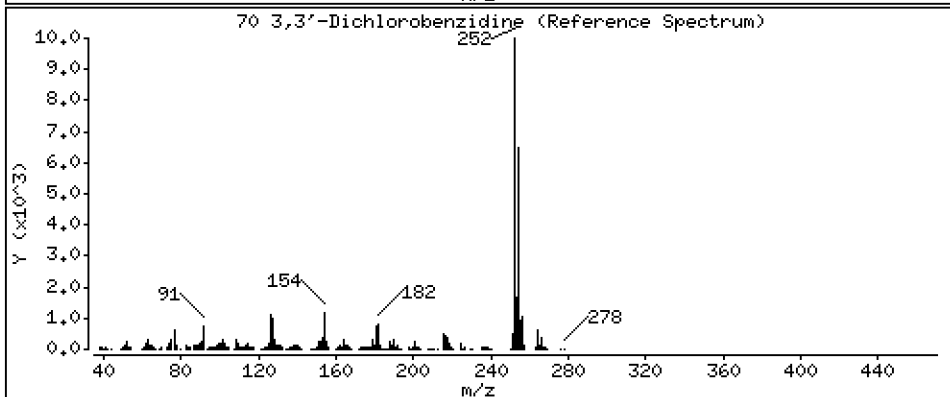
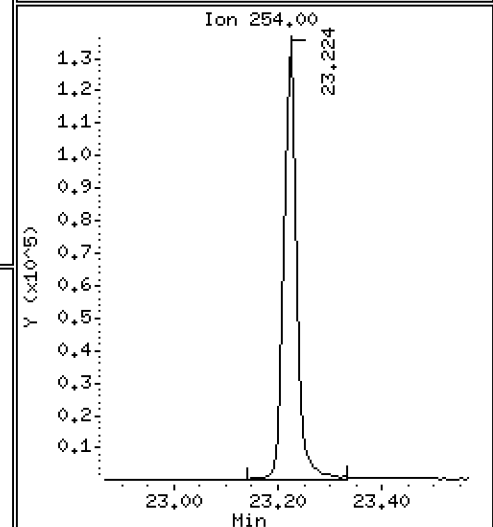
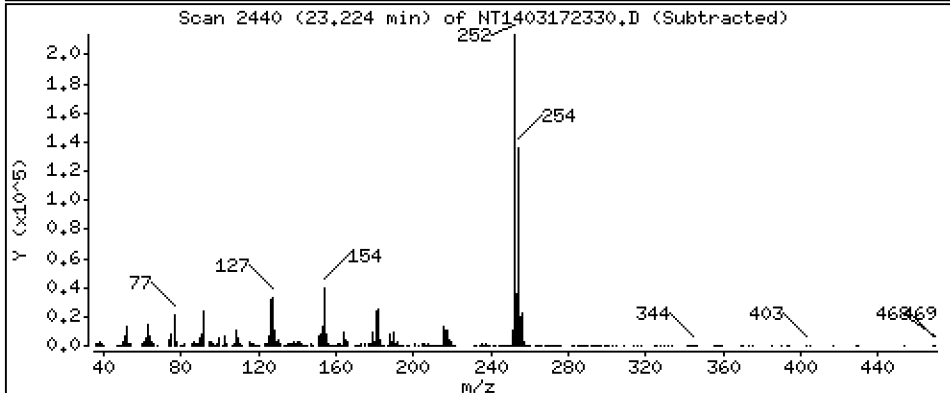
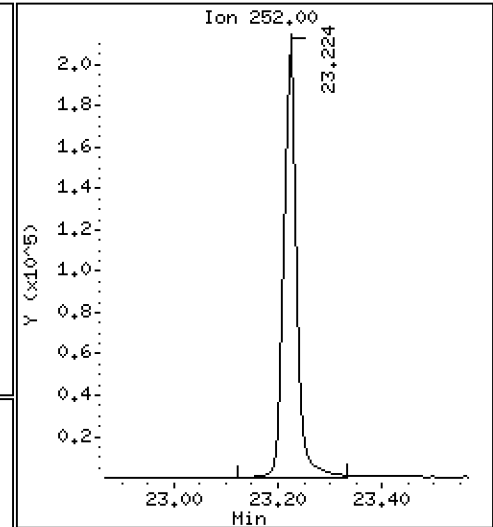
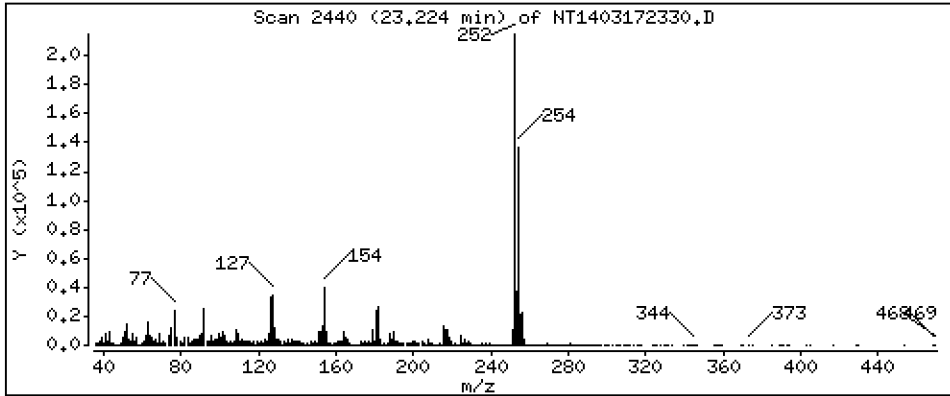
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 16,19 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

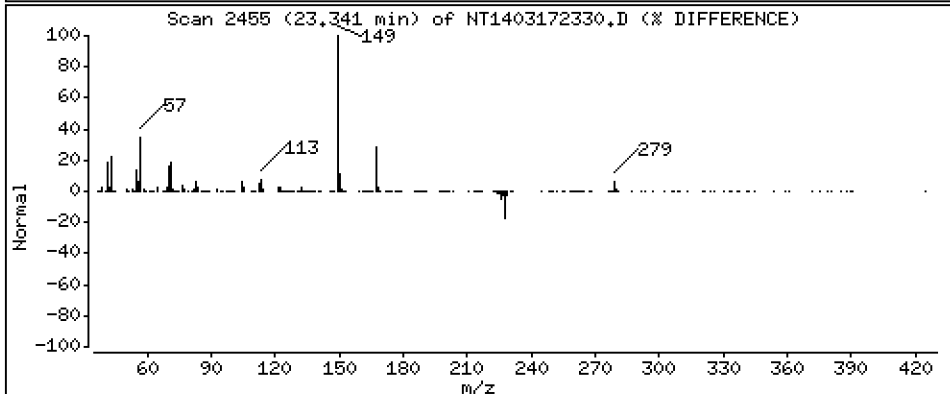
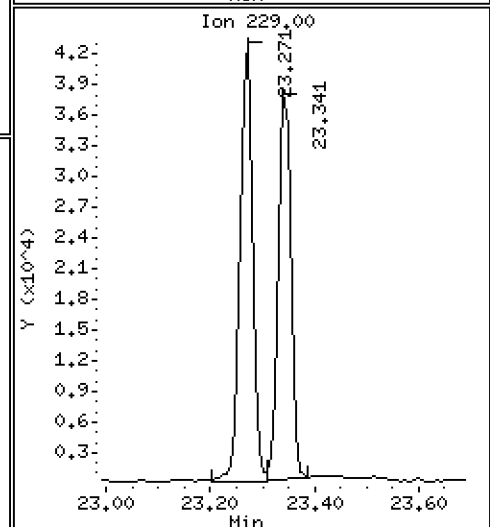
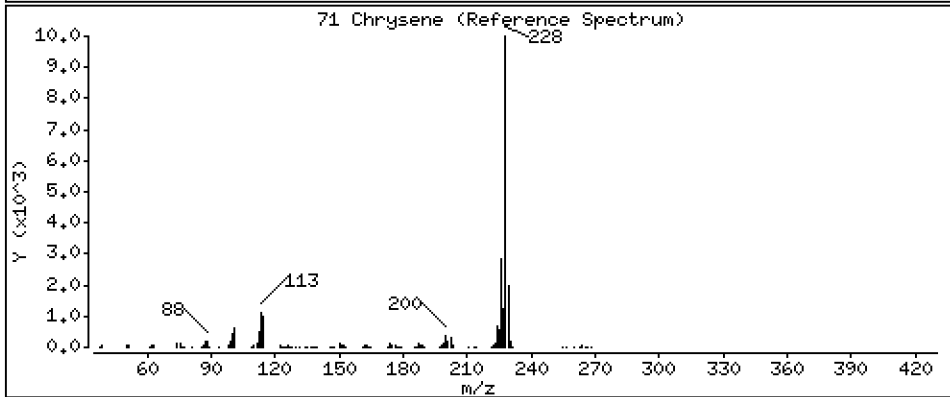
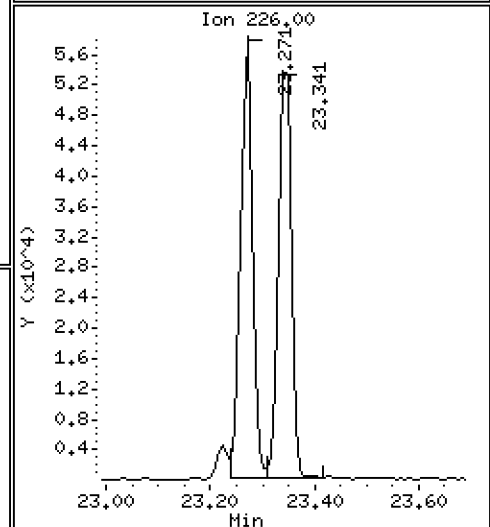
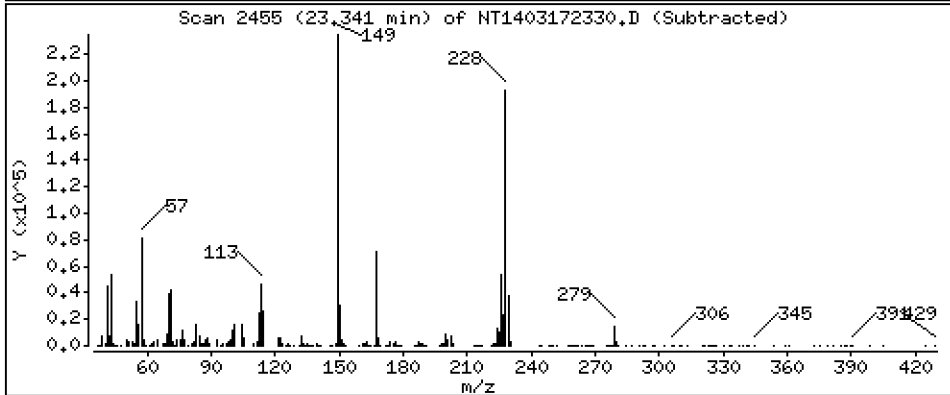
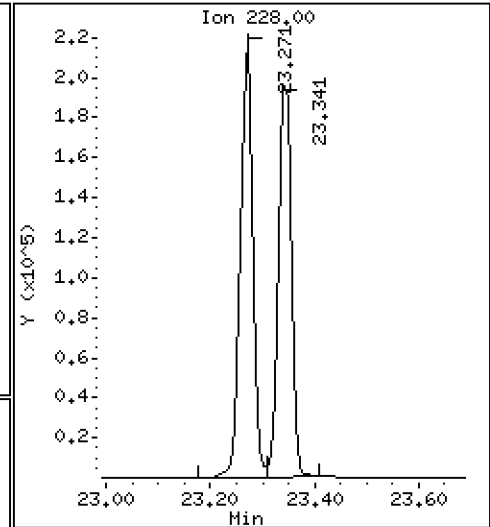
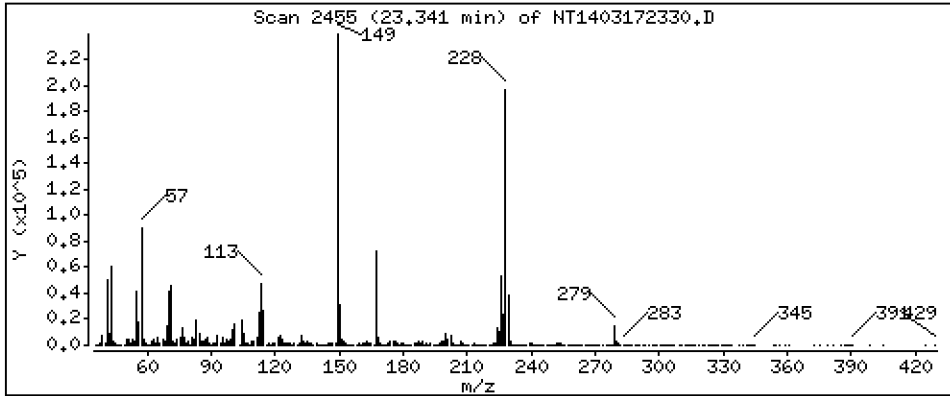
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,917 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

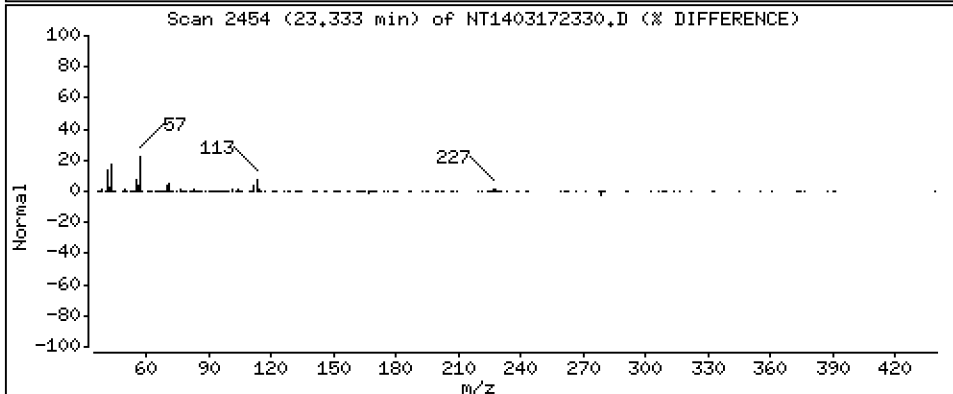
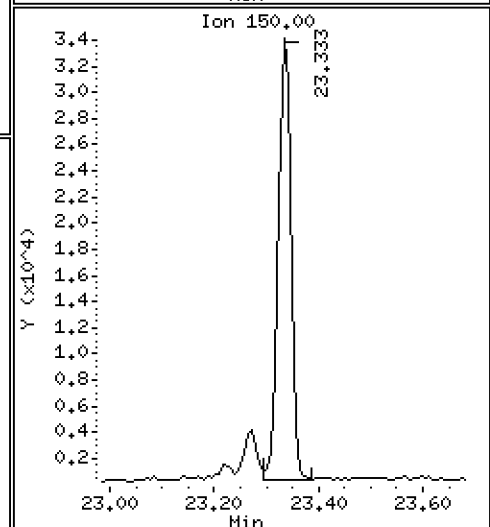
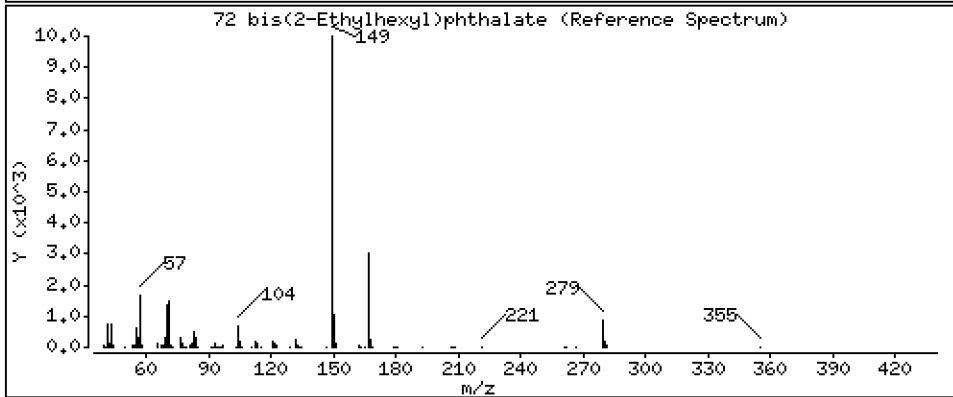
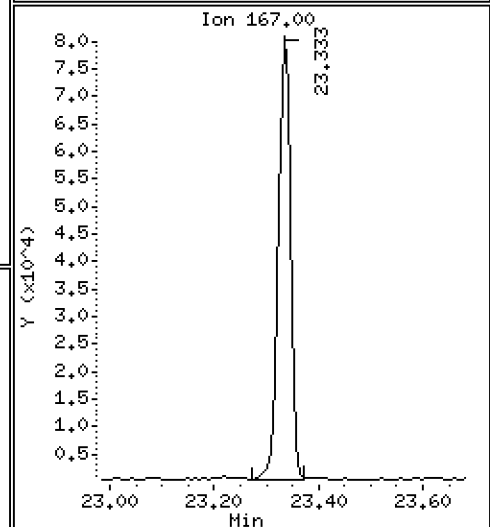
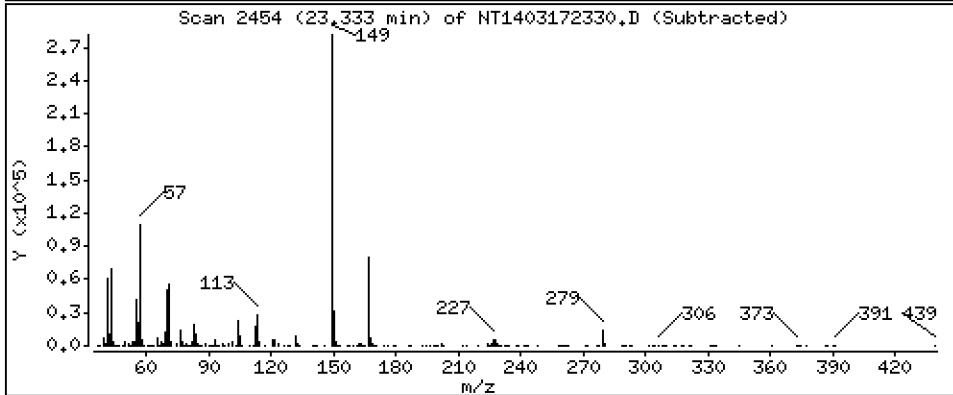
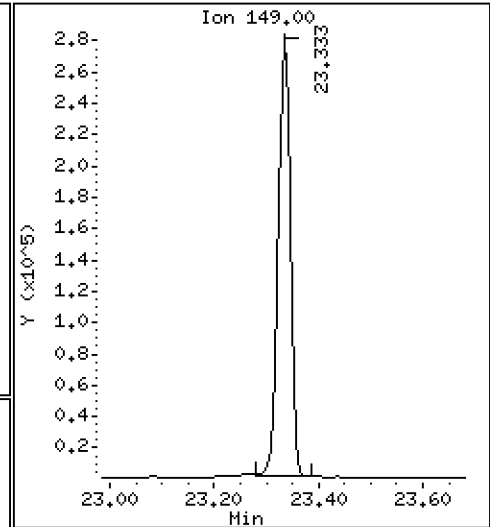
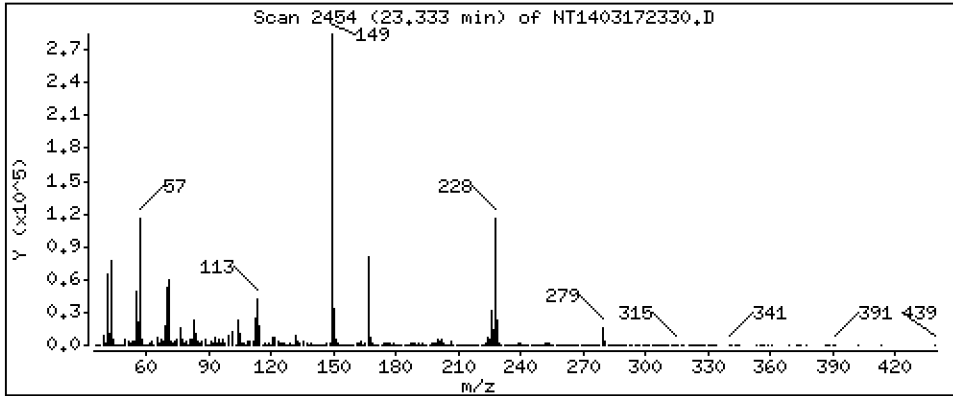
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 6,537 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

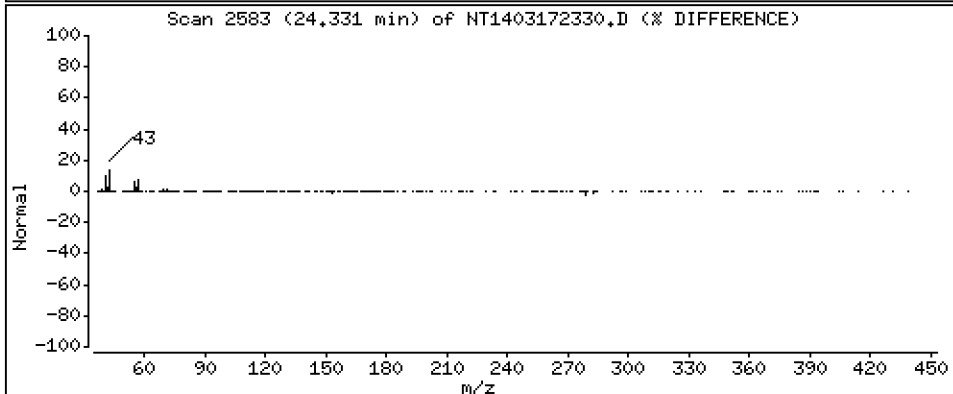
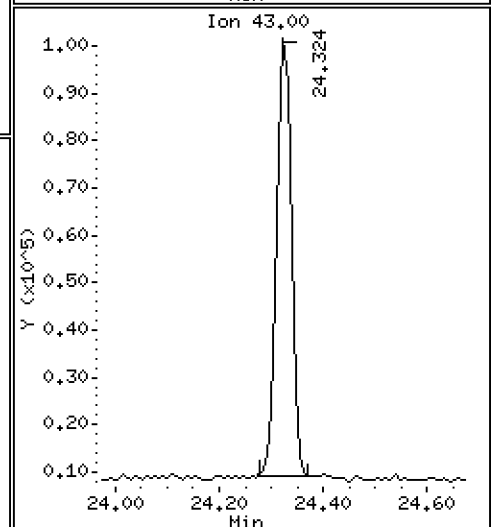
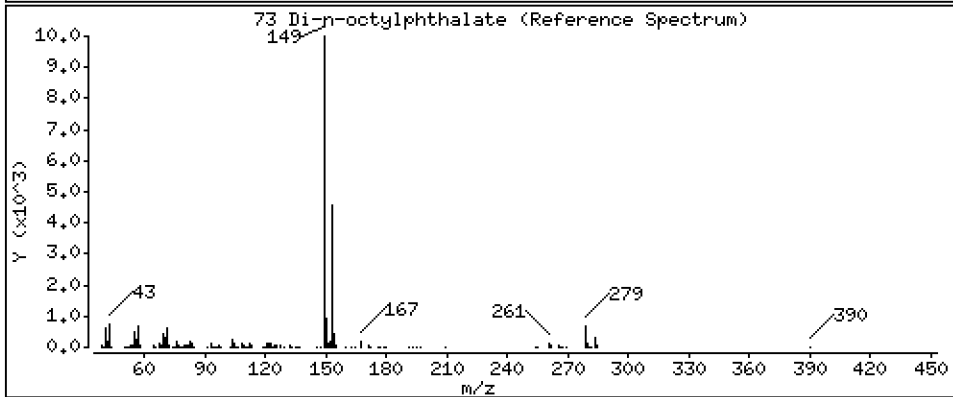
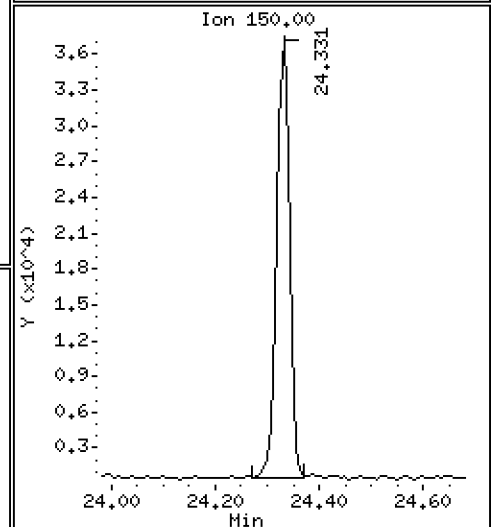
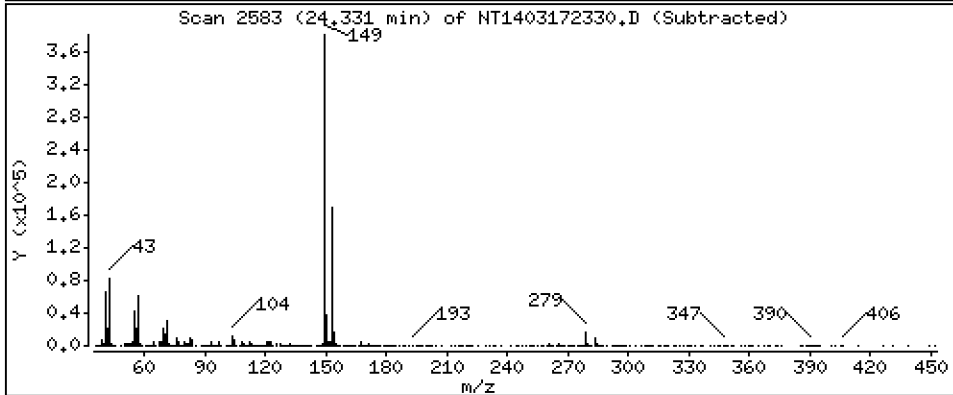
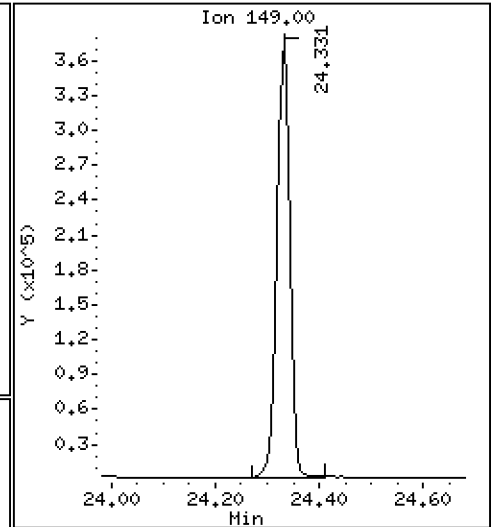
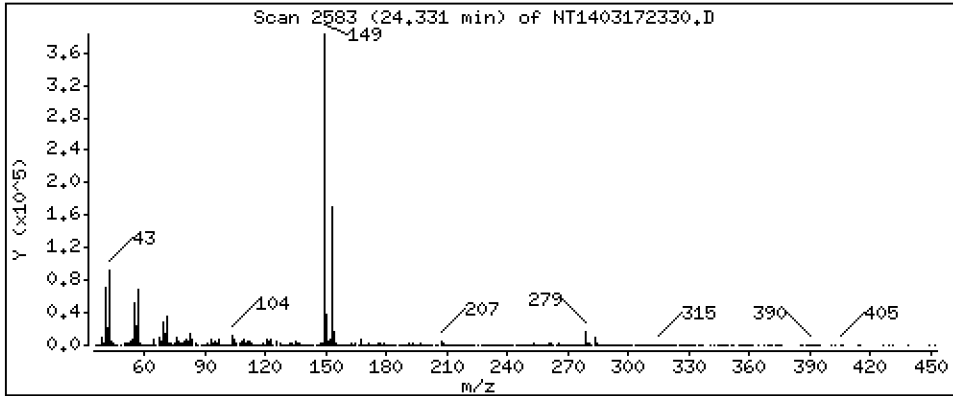
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 4,742 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

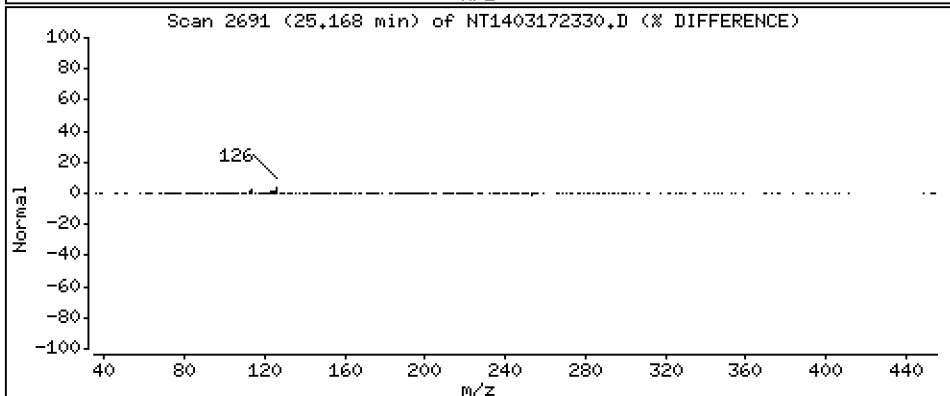
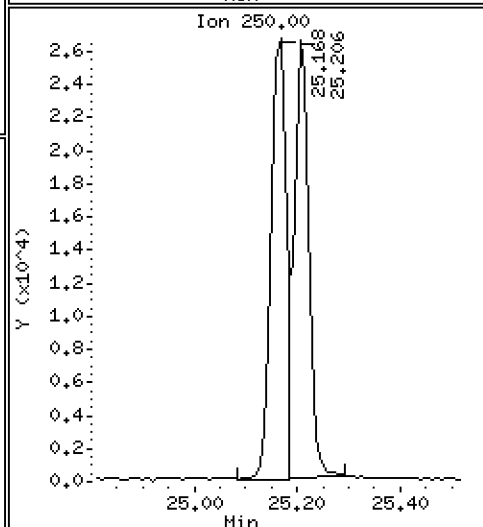
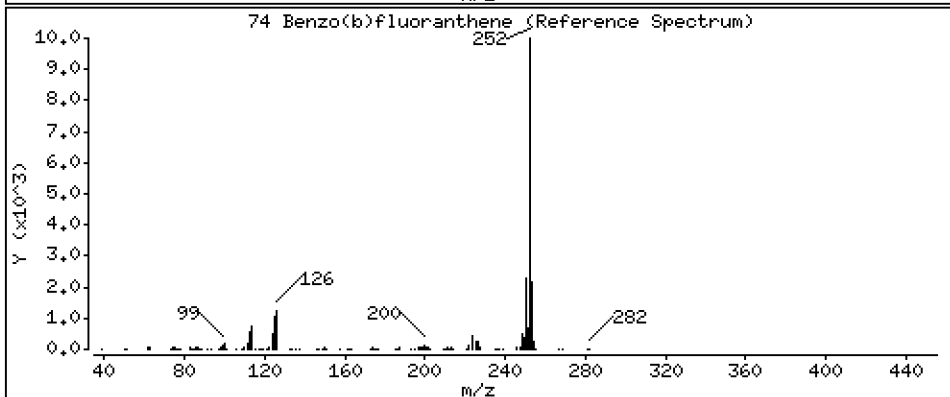
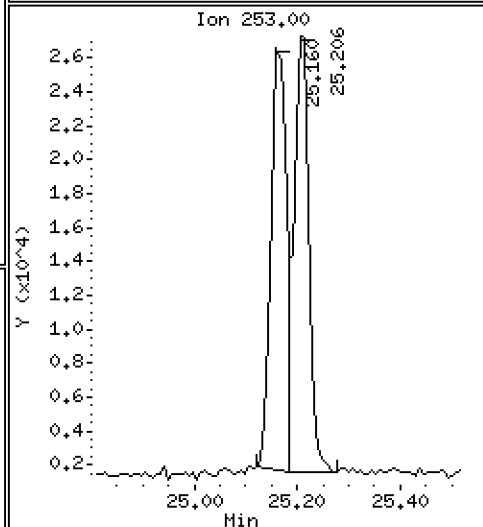
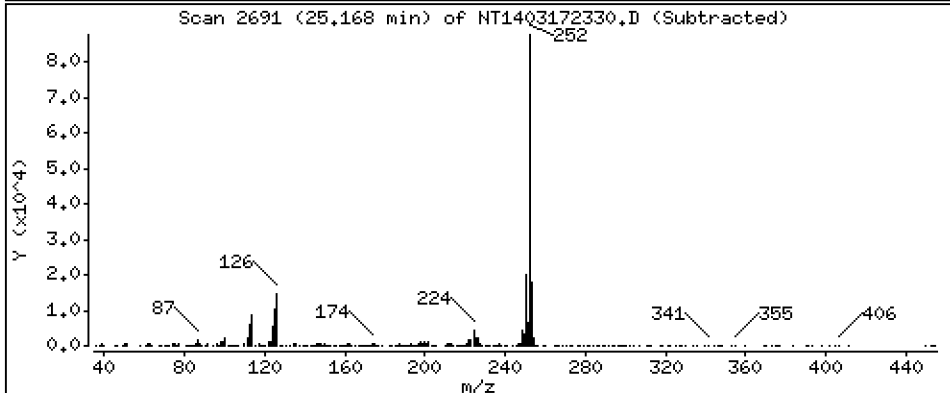
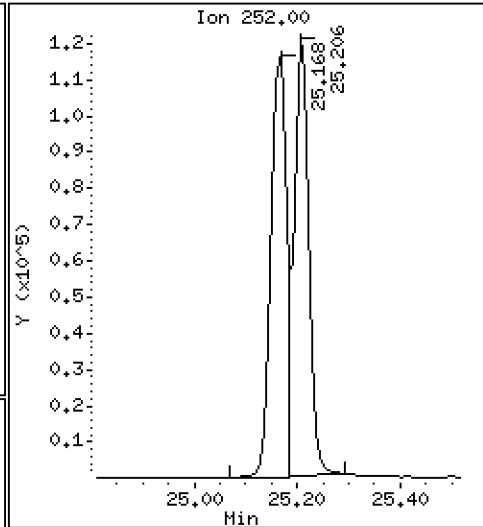
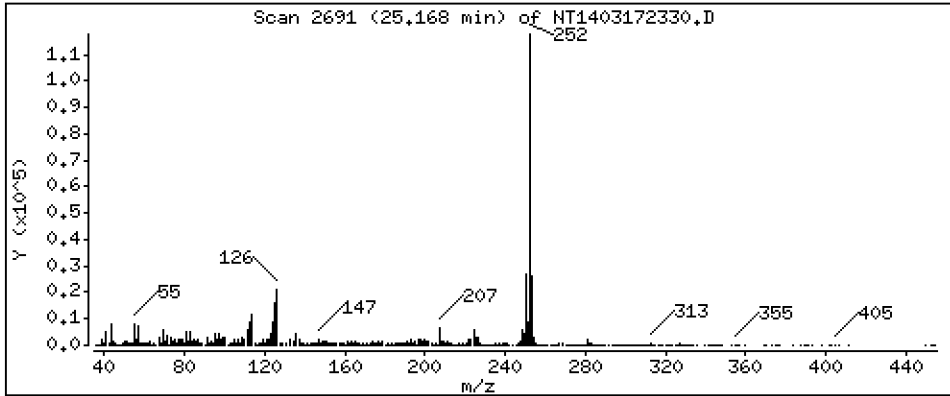
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,704 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

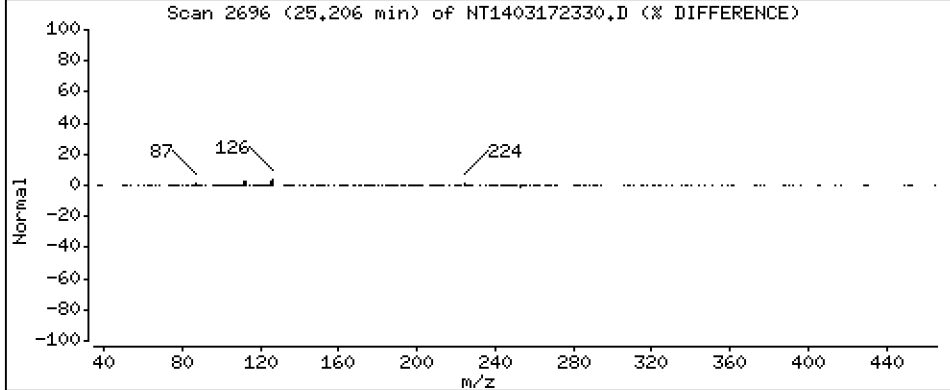
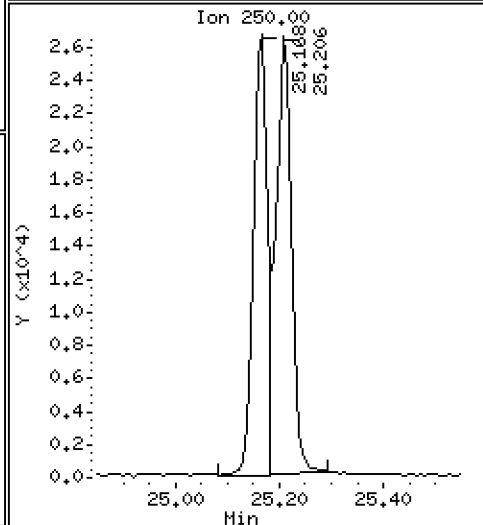
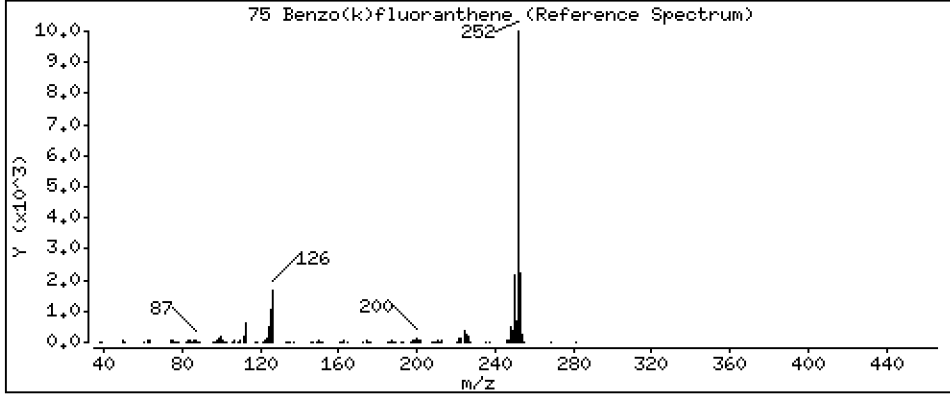
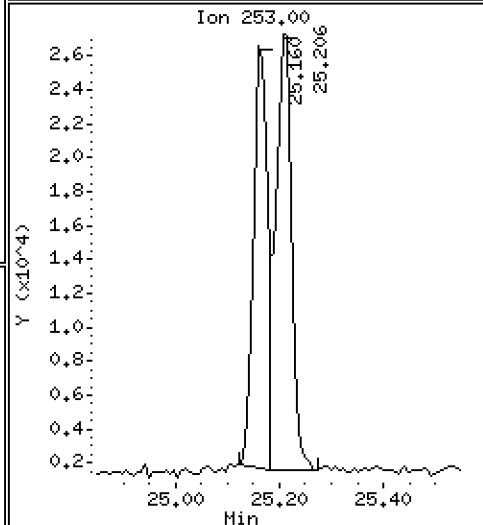
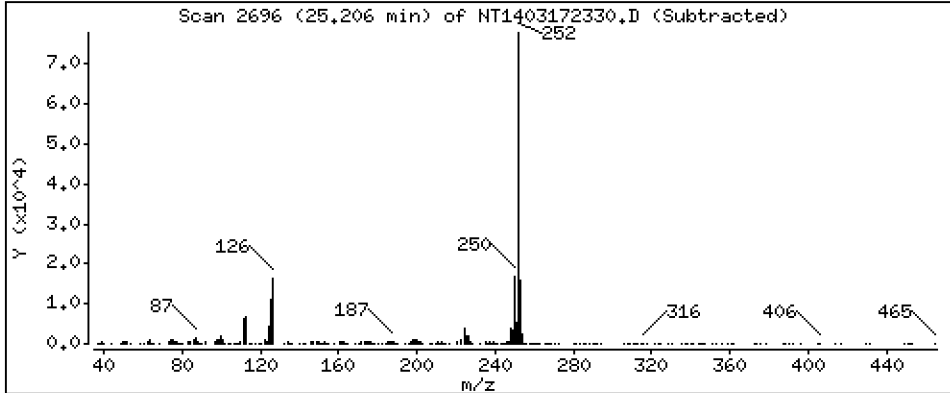
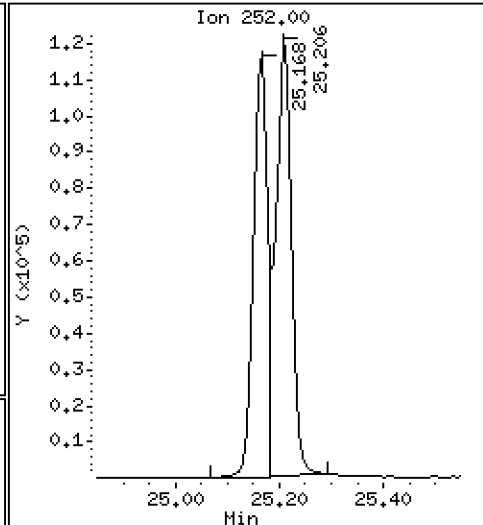
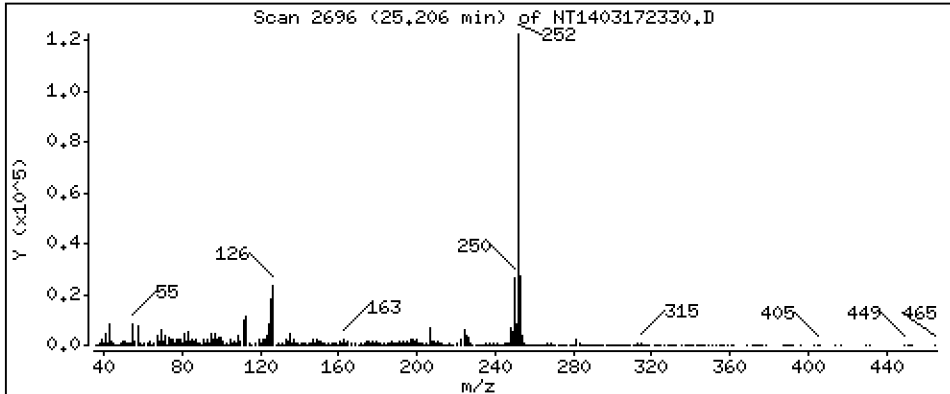
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,306 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

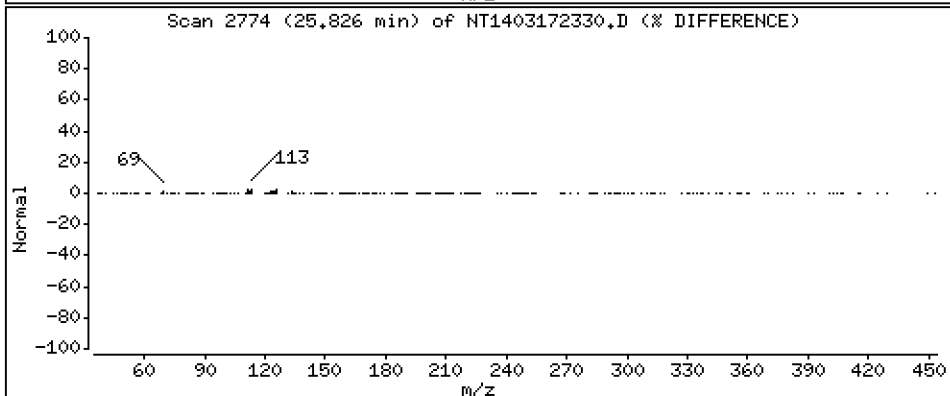
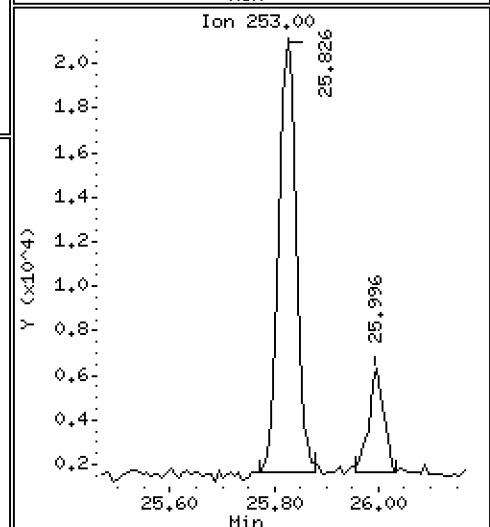
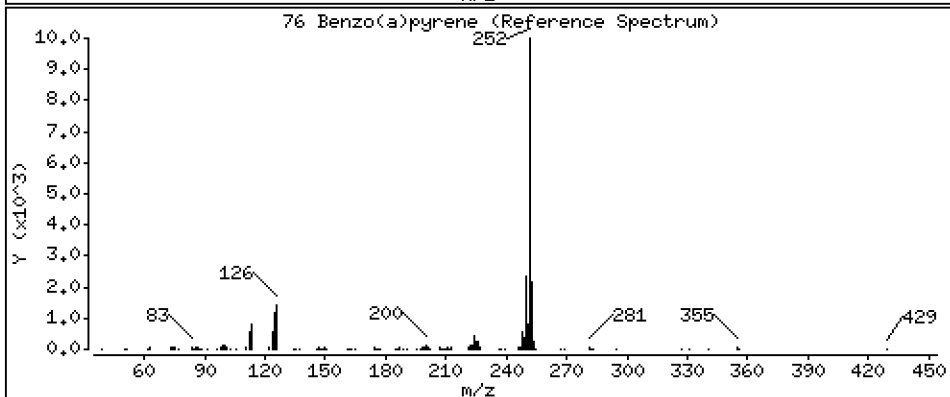
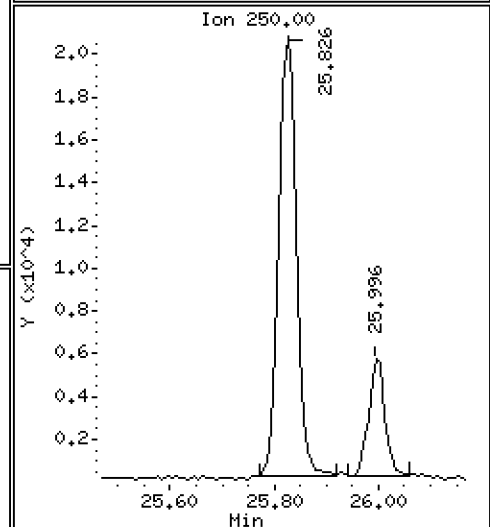
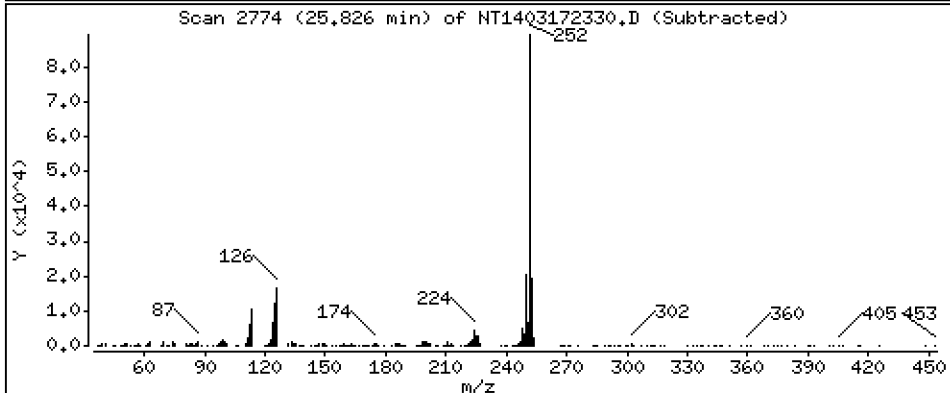
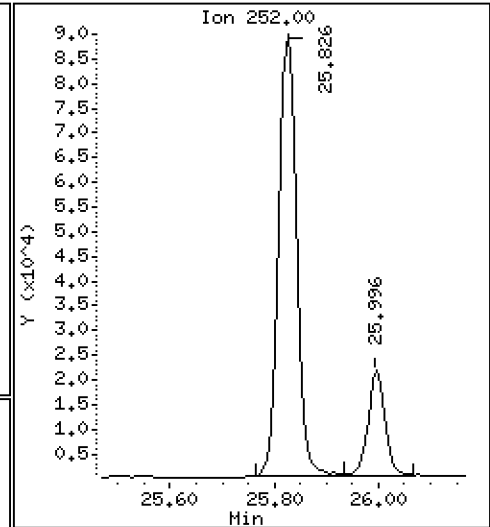
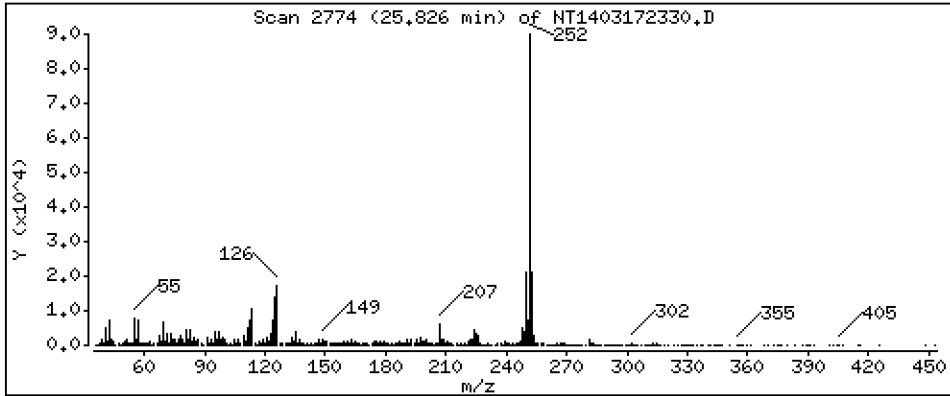
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,828 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

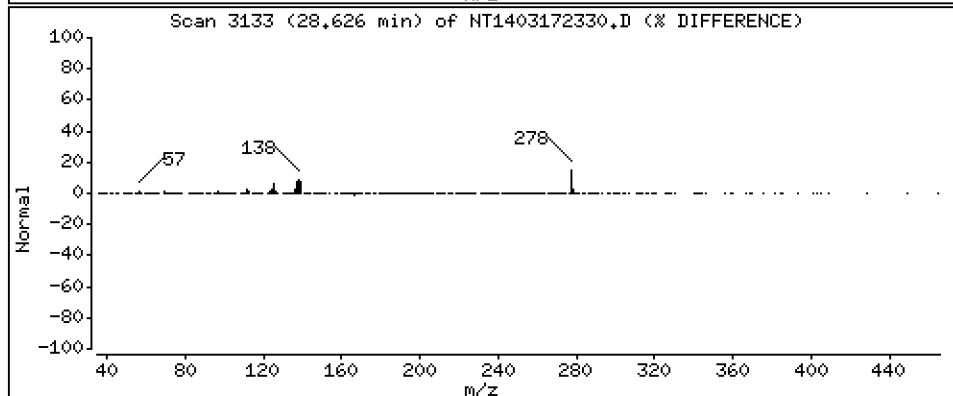
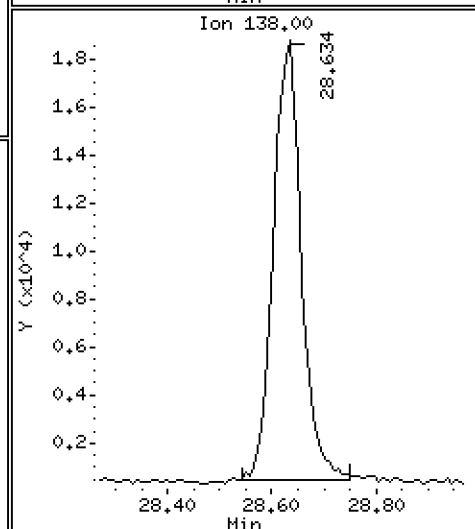
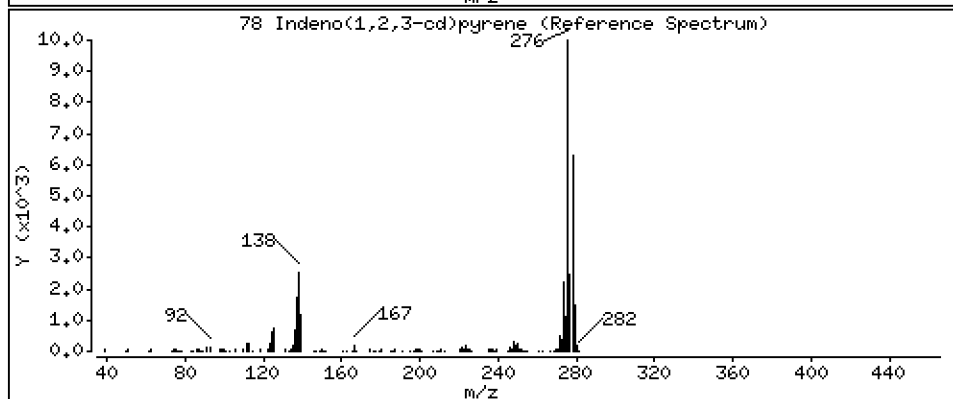
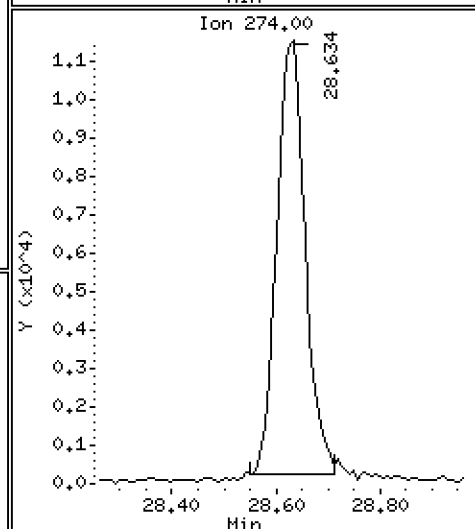
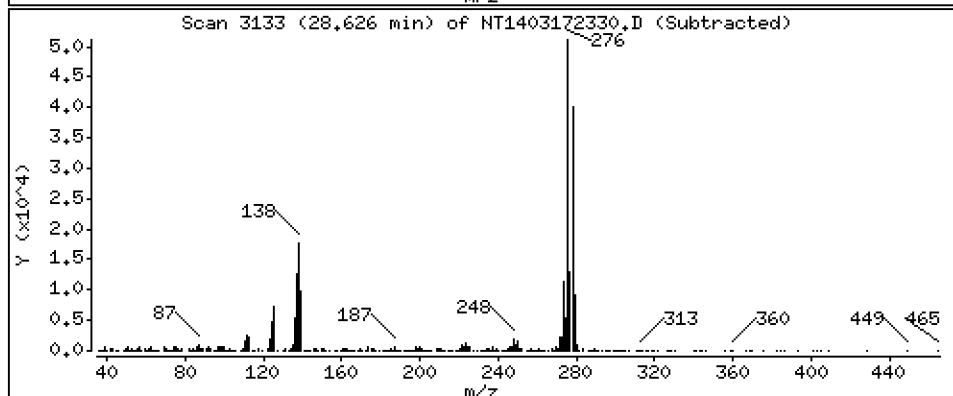
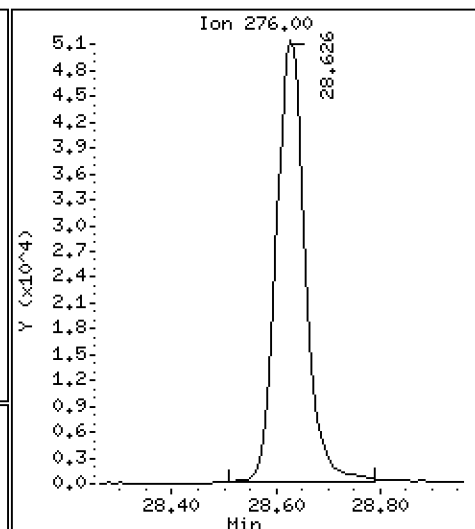
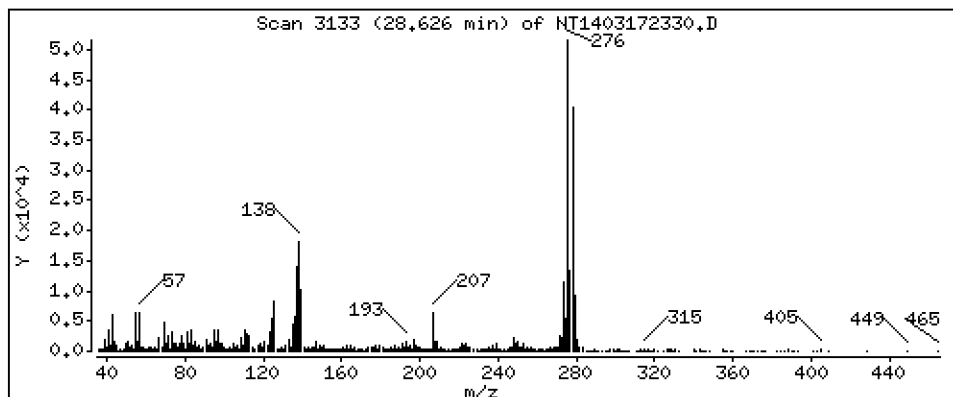
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,287 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

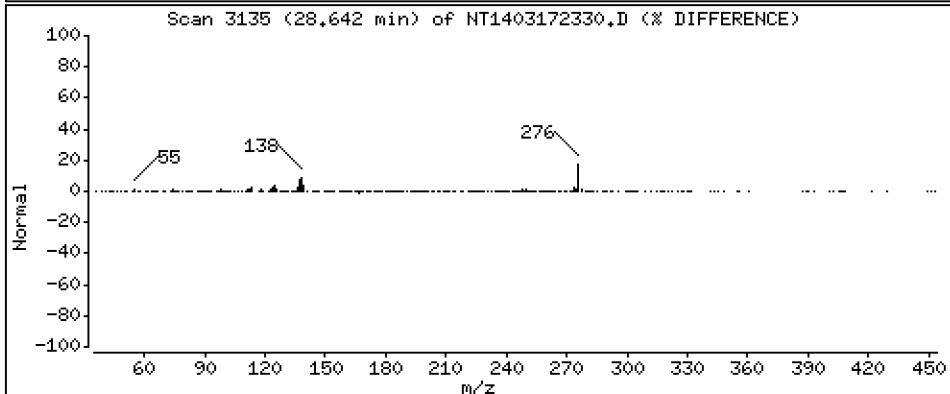
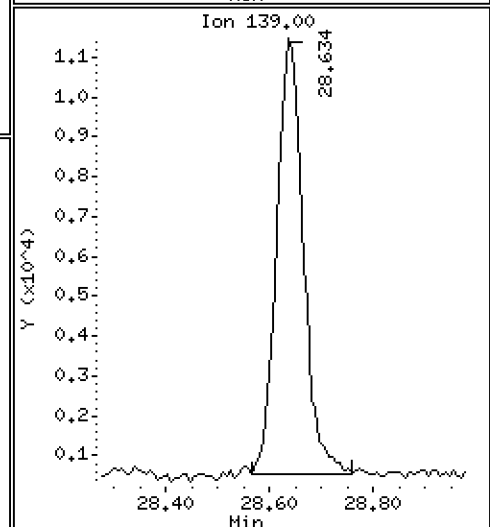
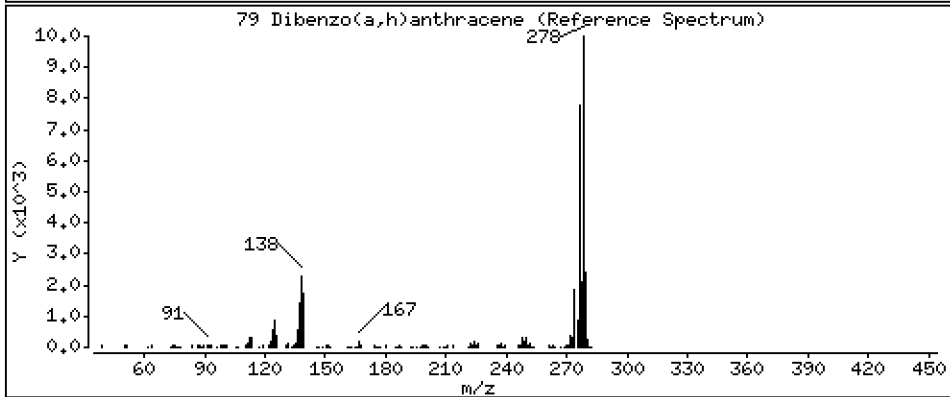
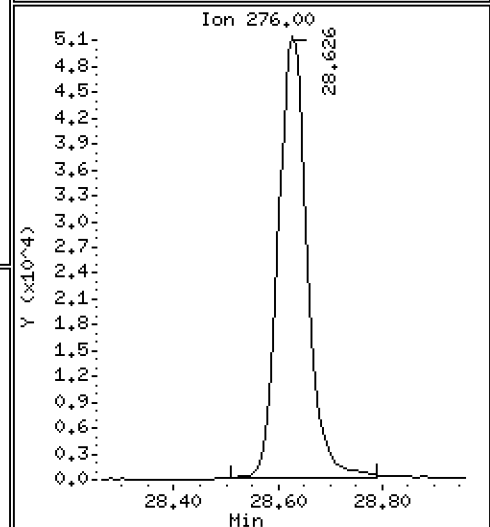
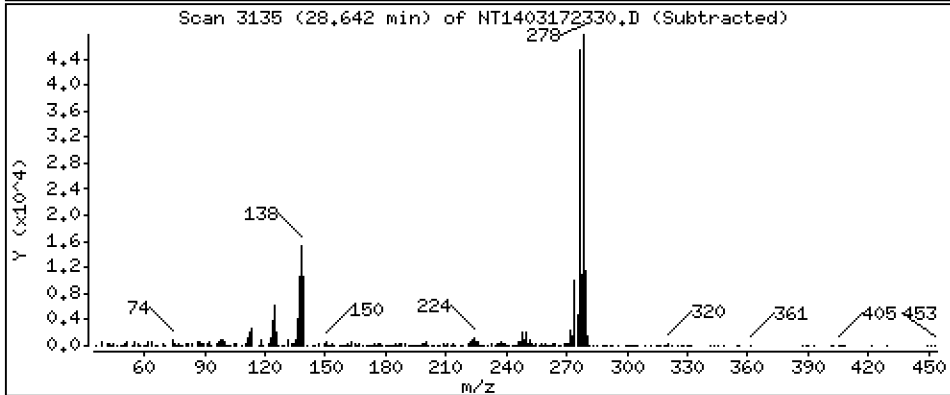
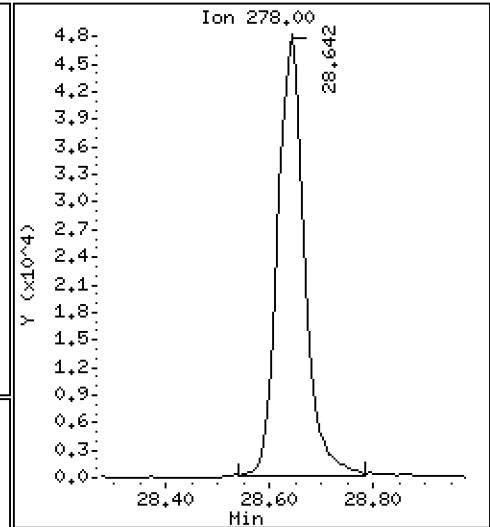
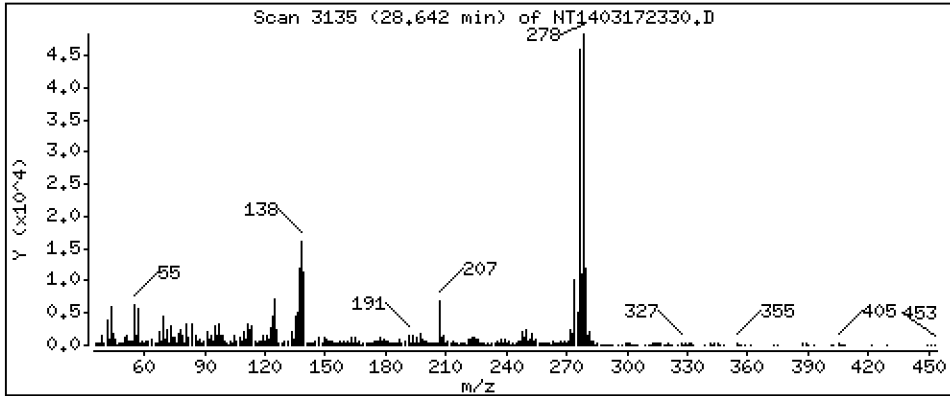
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,371 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

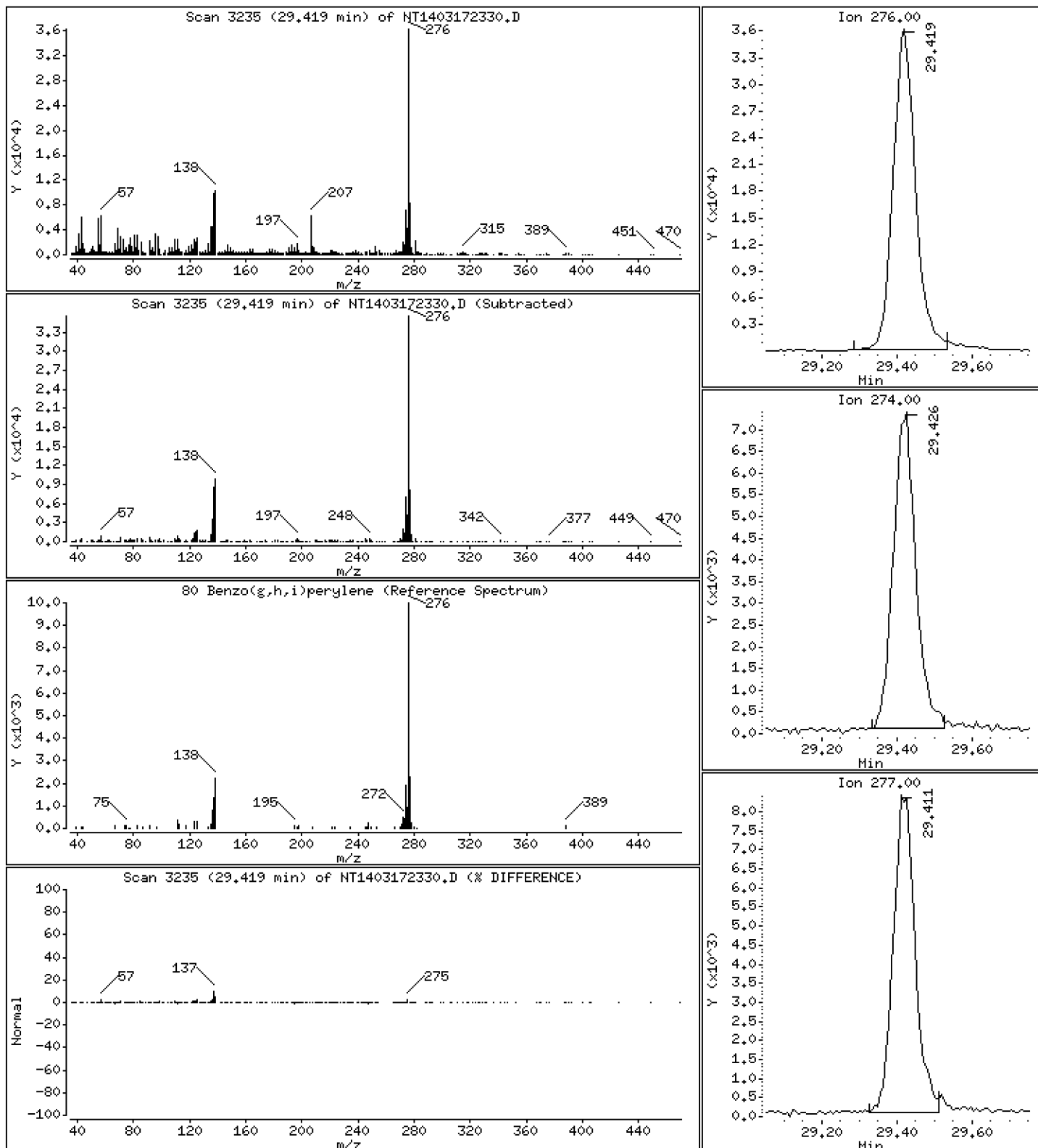
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 3,876 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

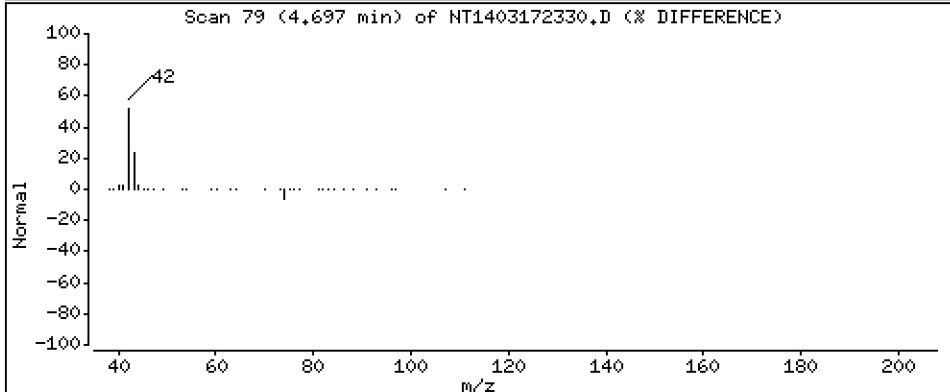
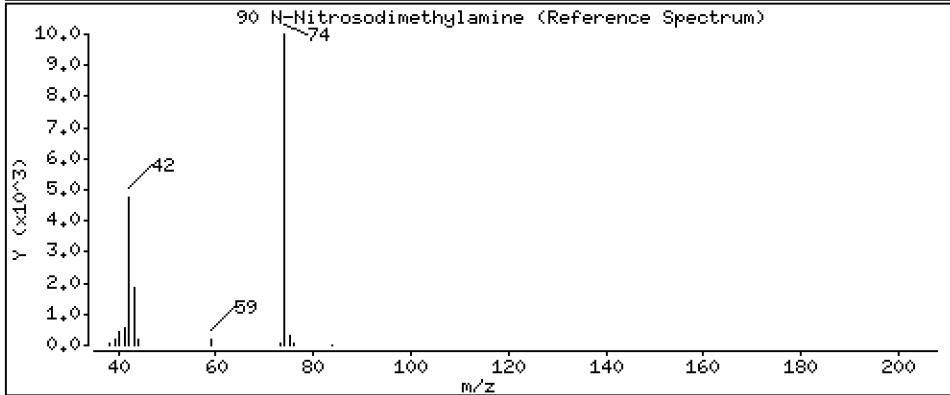
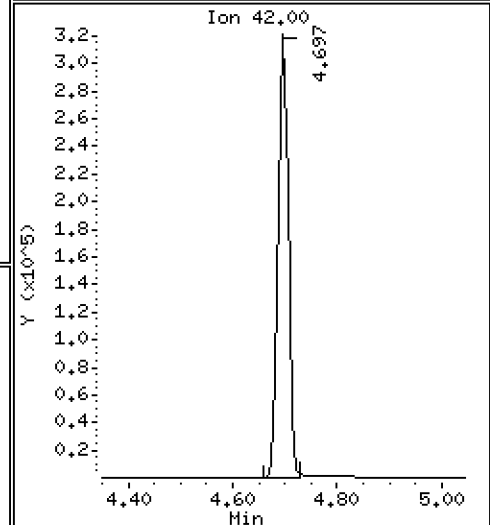
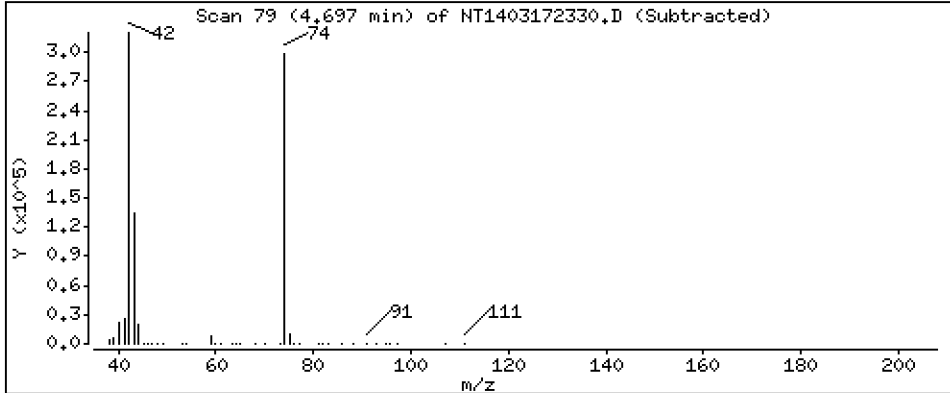
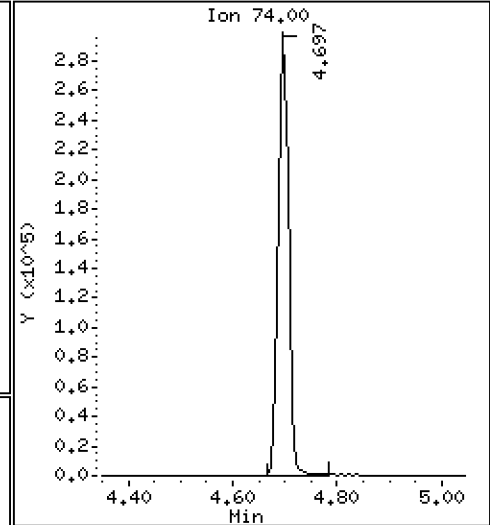
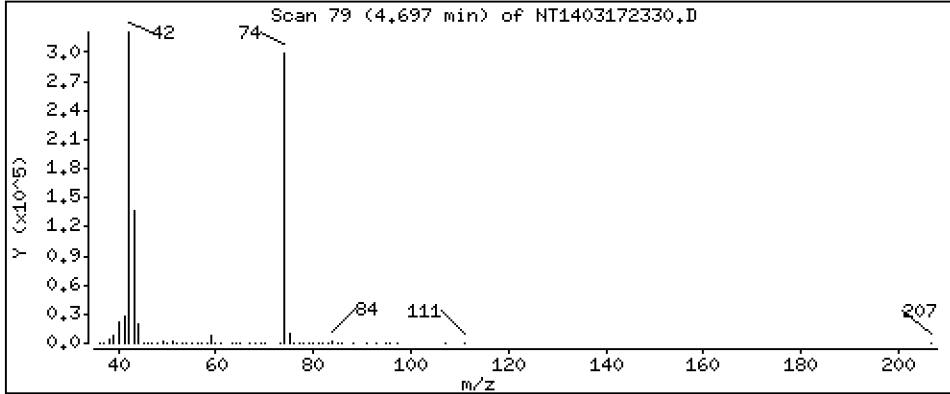
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 8,152 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

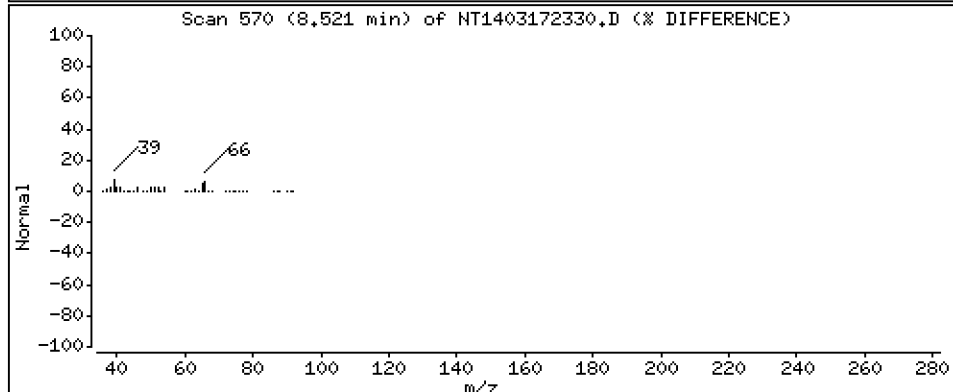
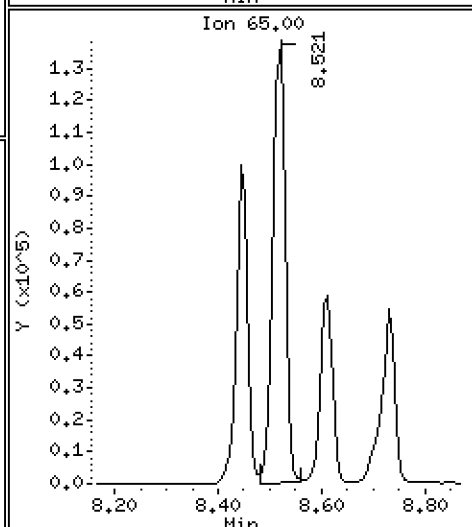
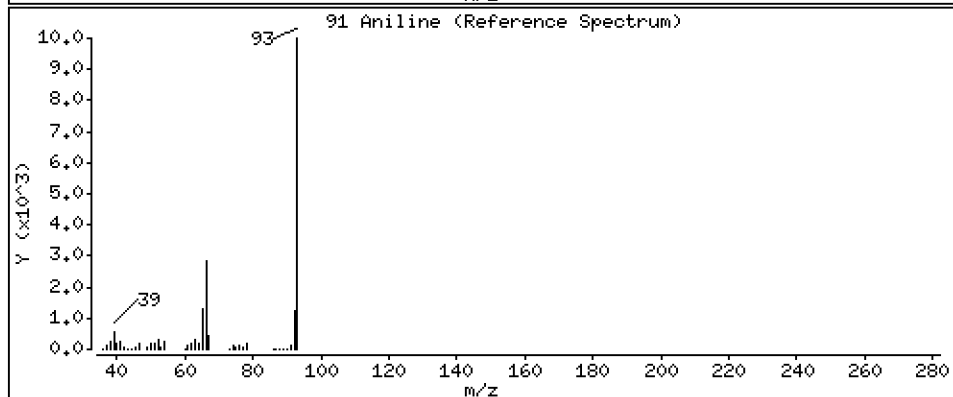
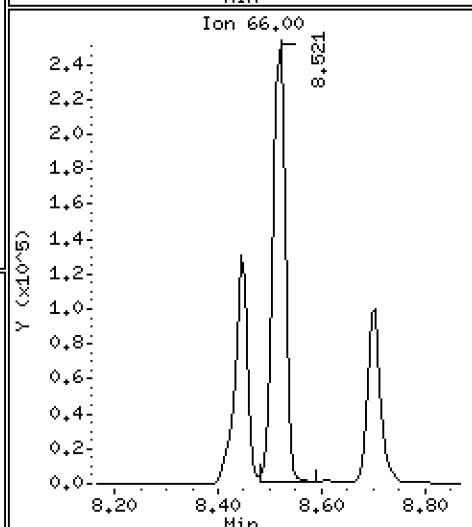
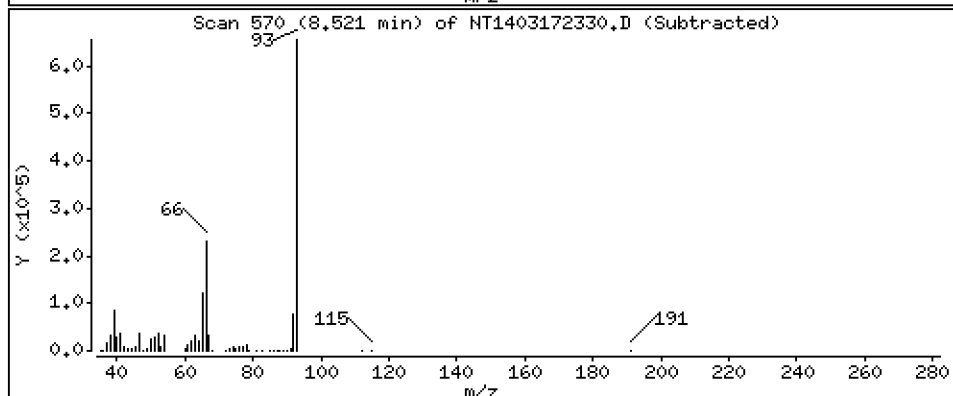
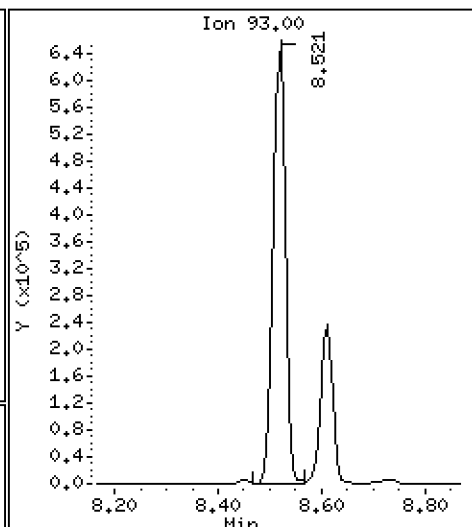
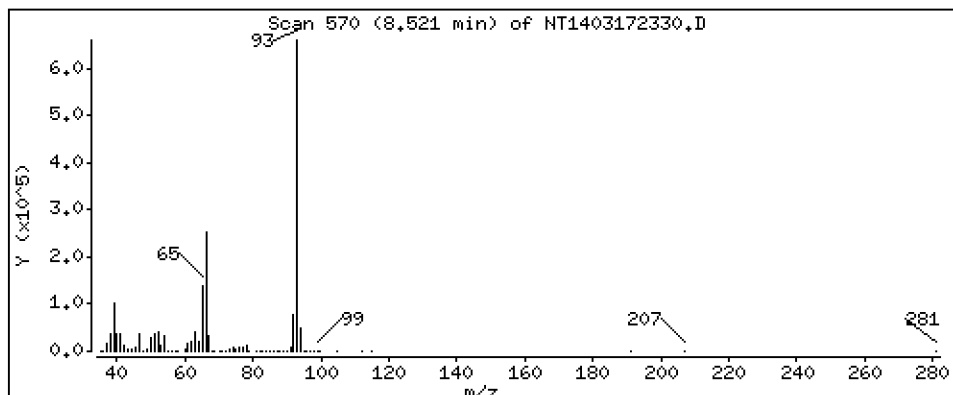
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 9,693 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

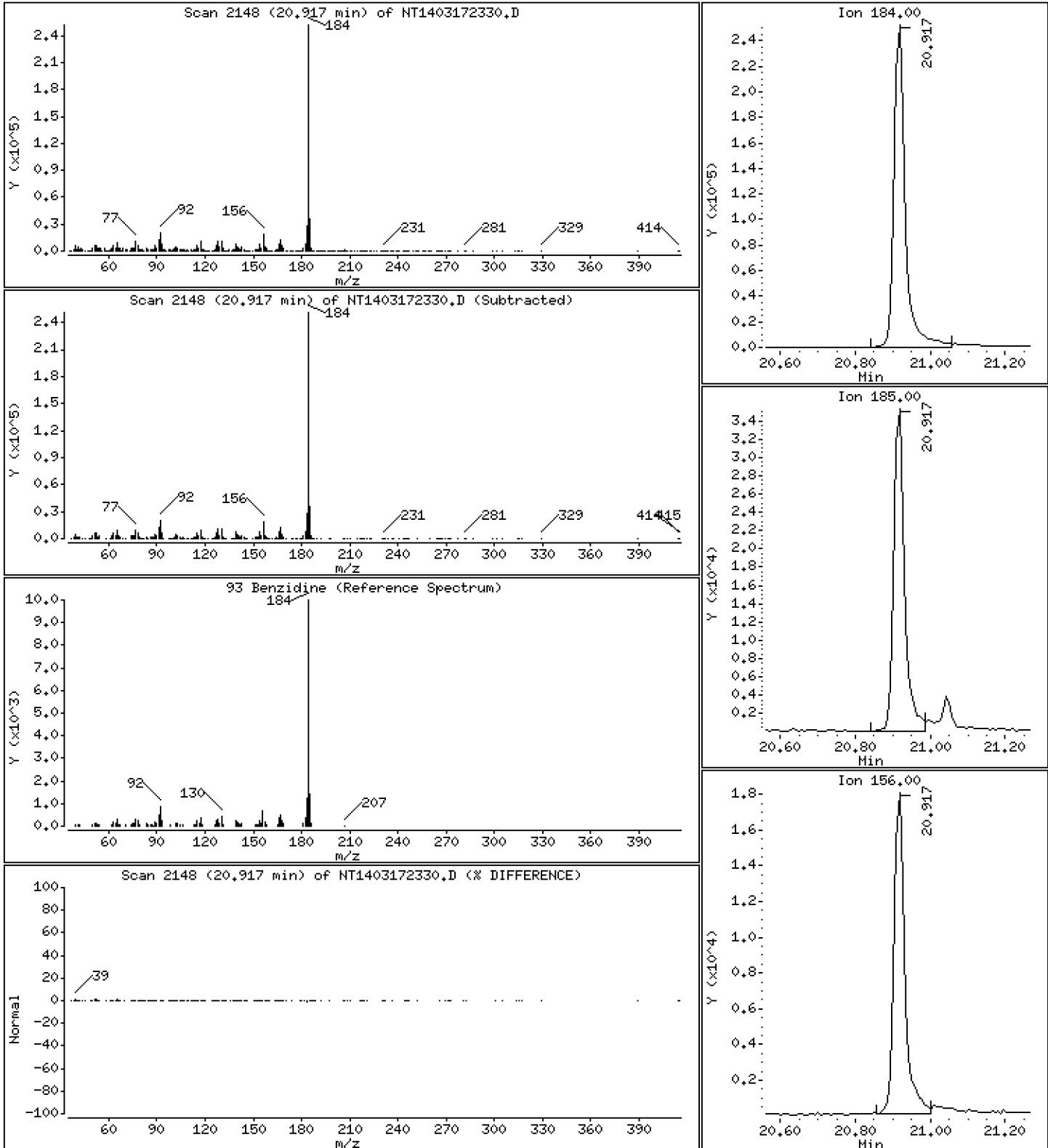
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 15,68 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

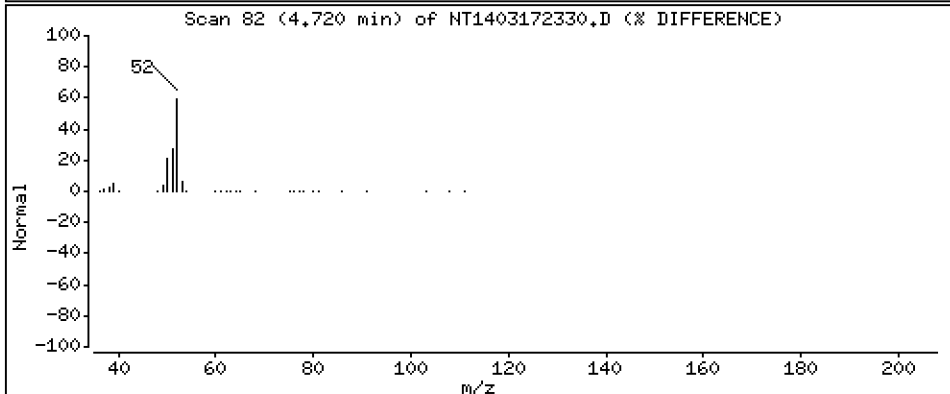
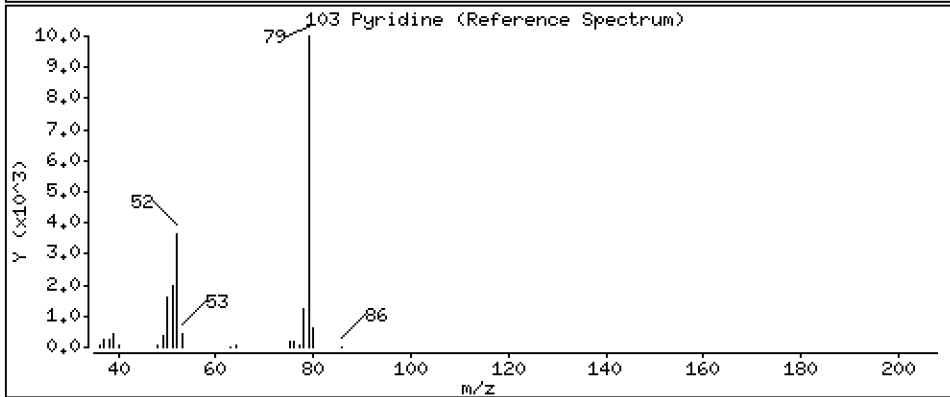
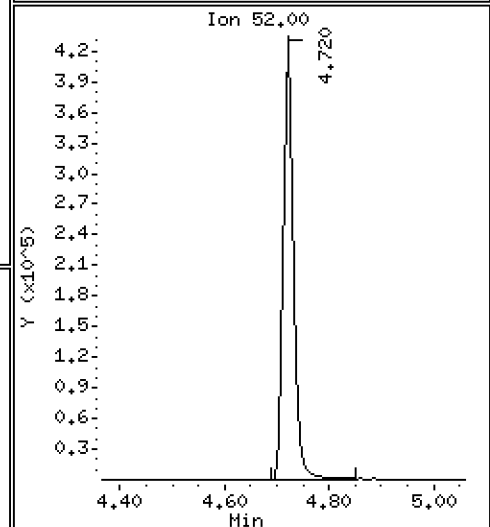
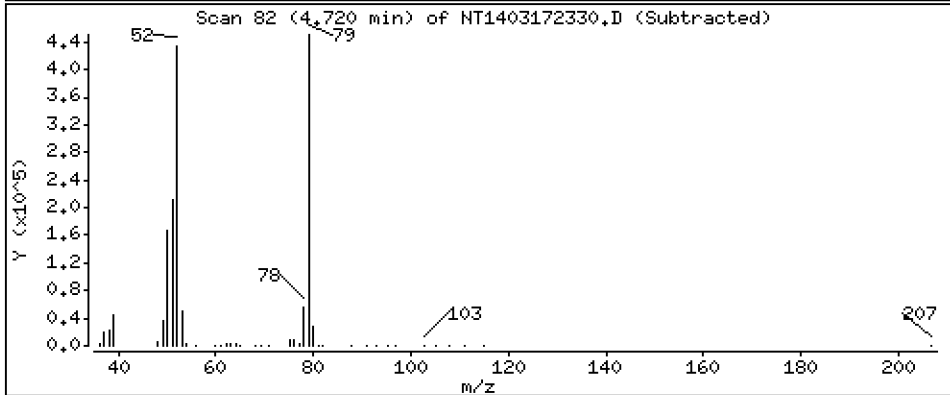
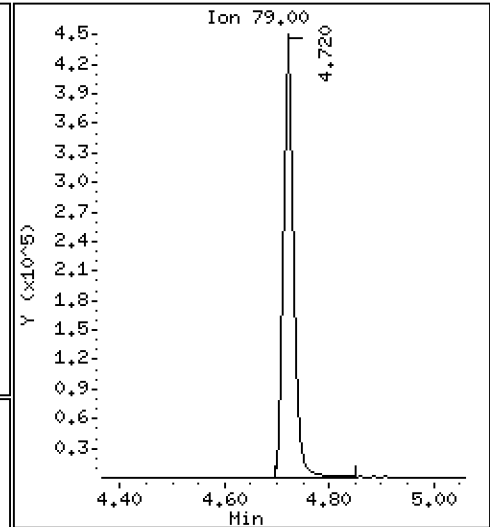
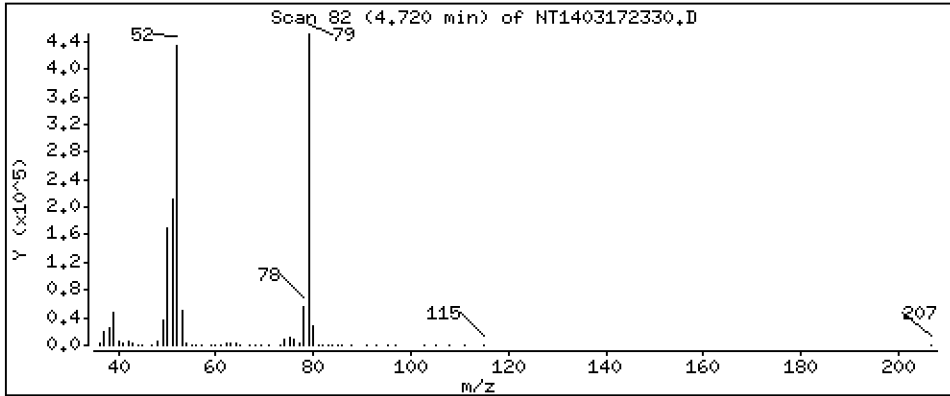
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 4,100 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

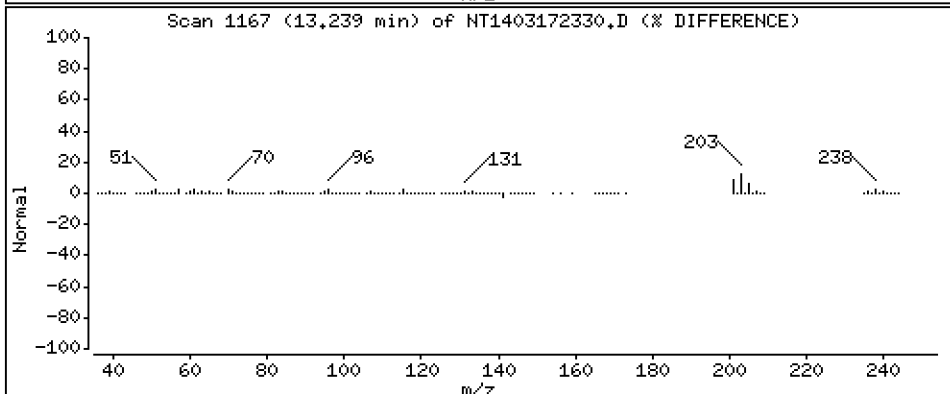
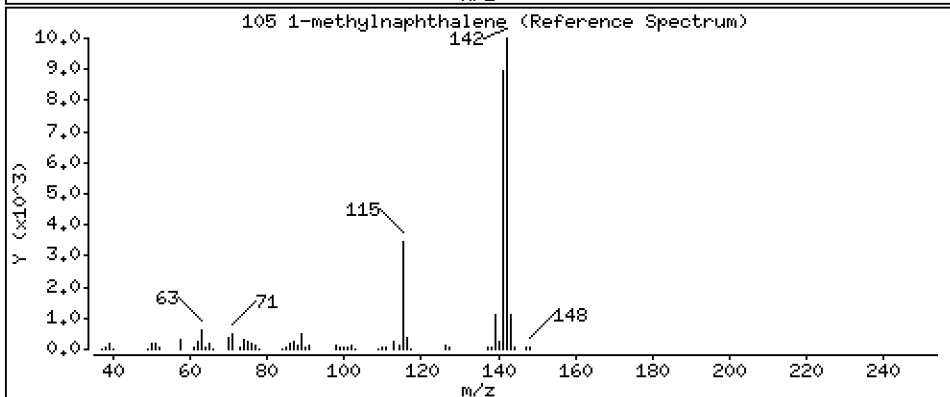
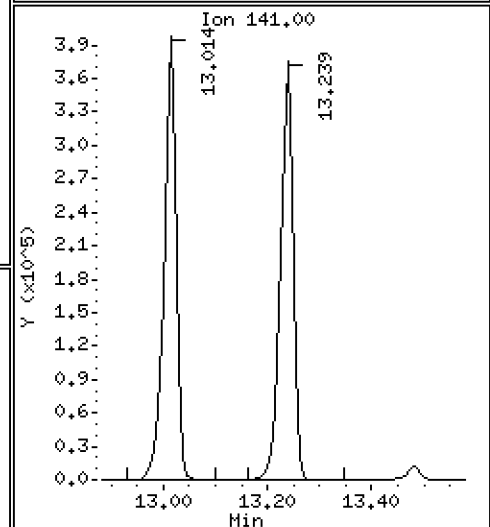
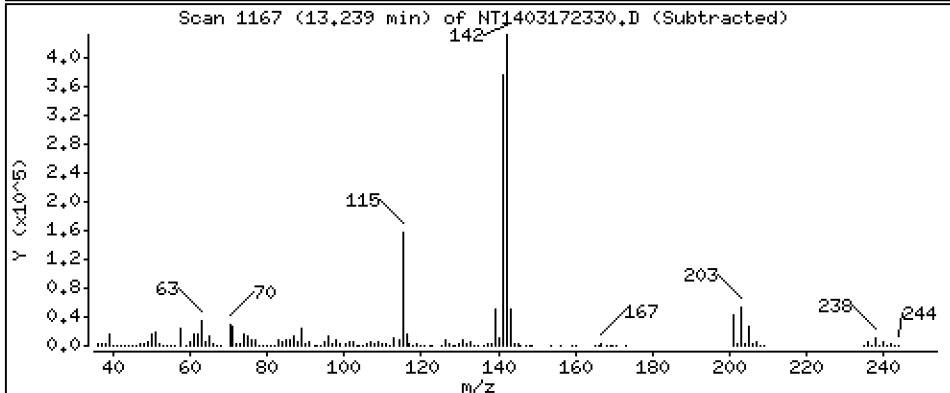
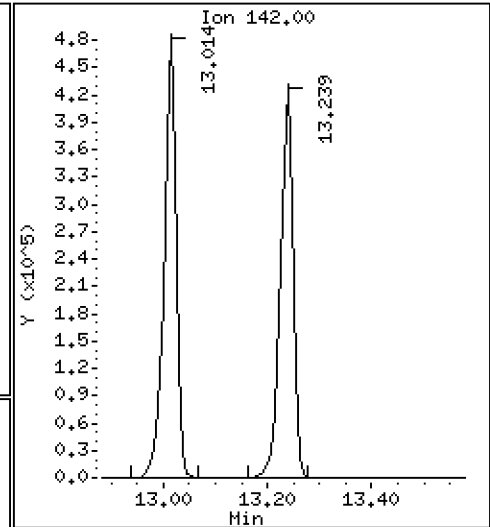
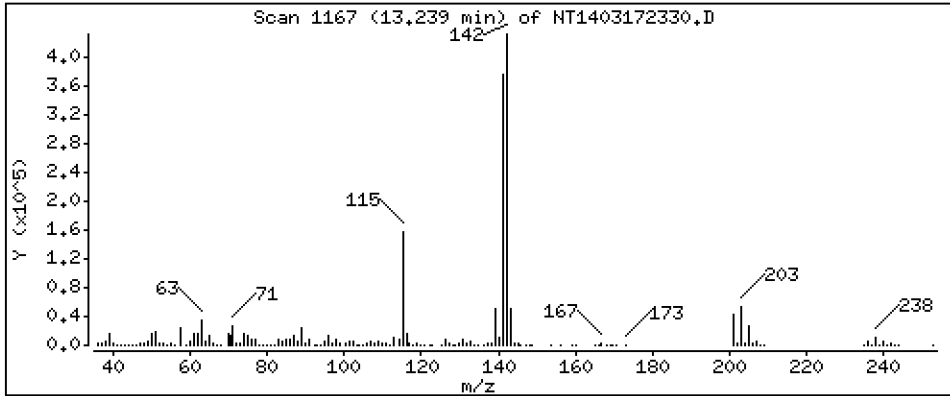
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,925 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

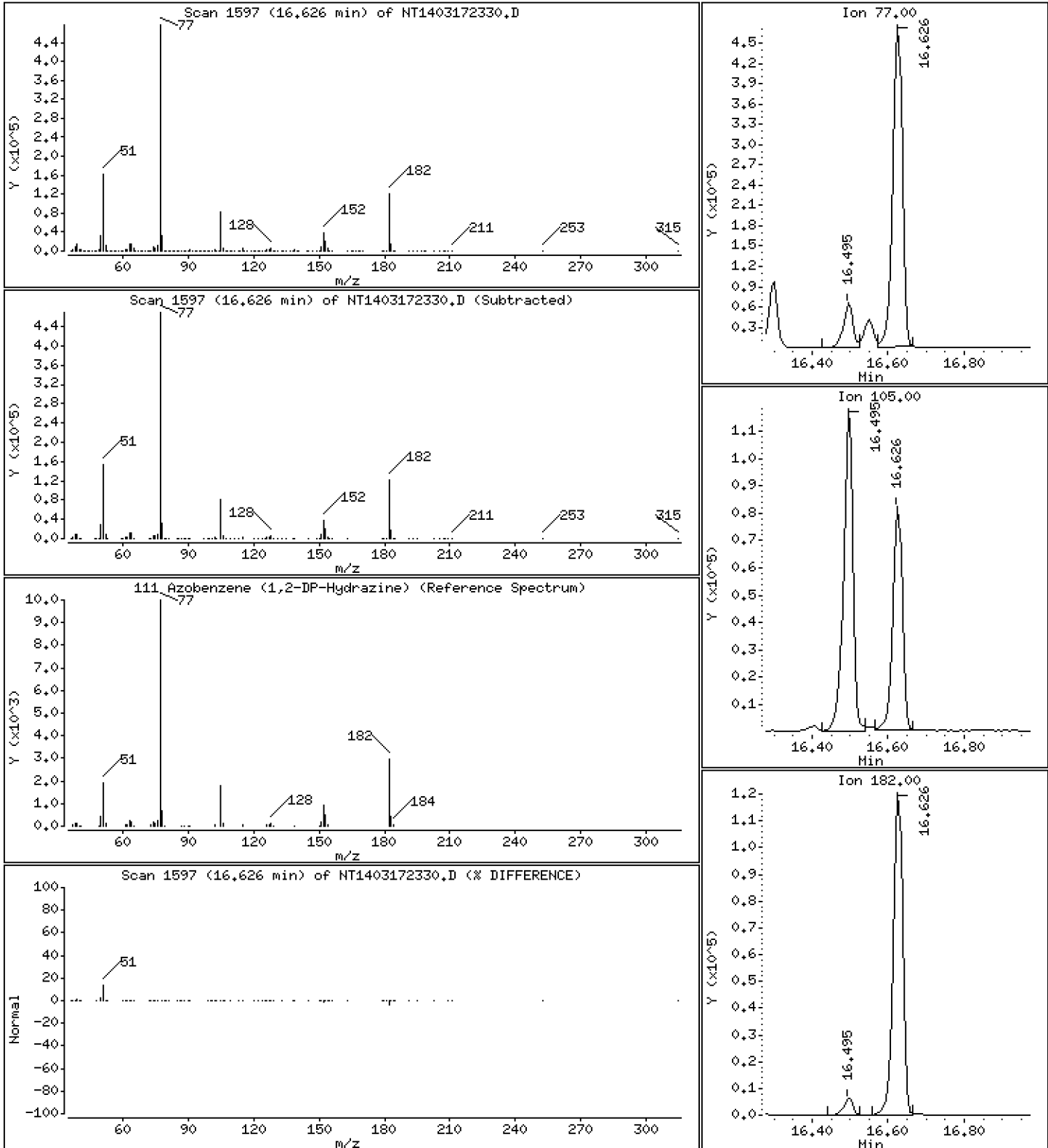
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,659 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

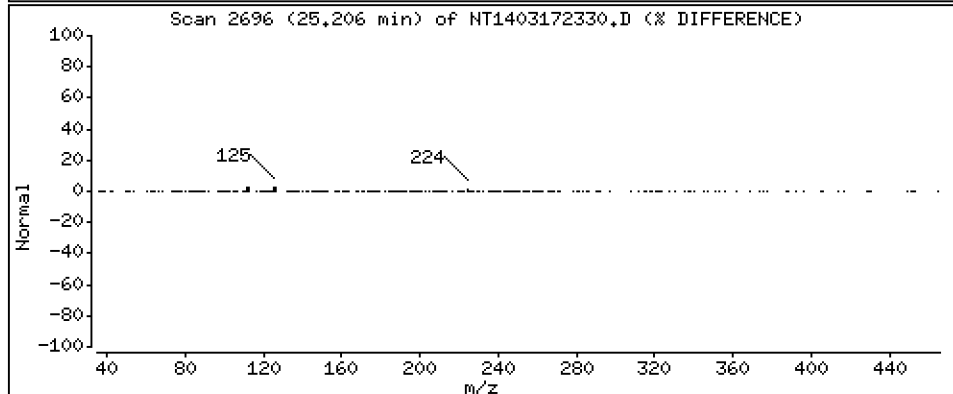
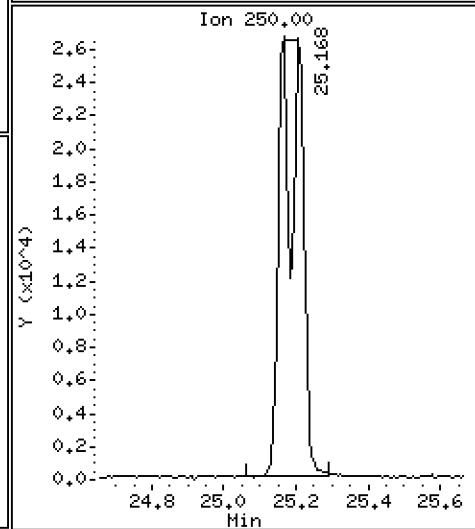
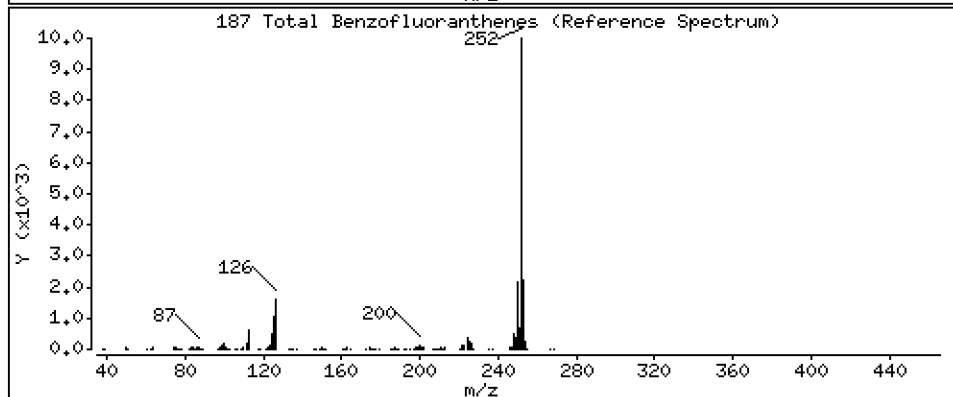
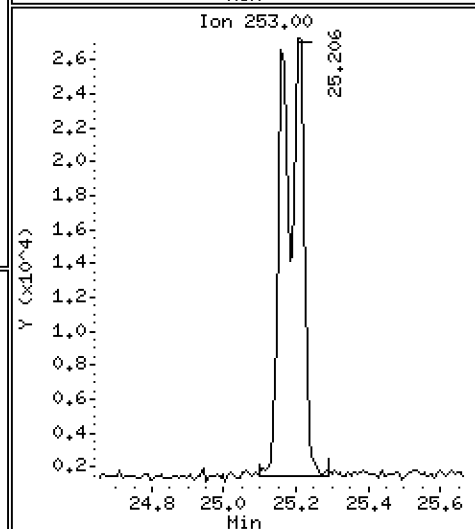
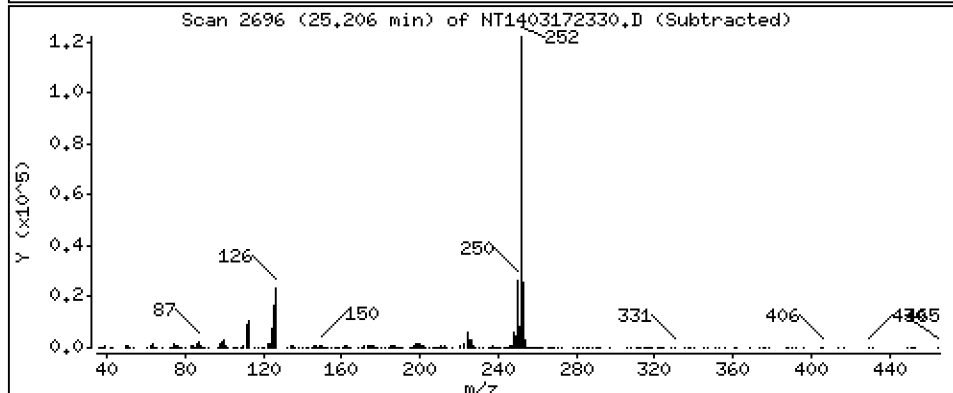
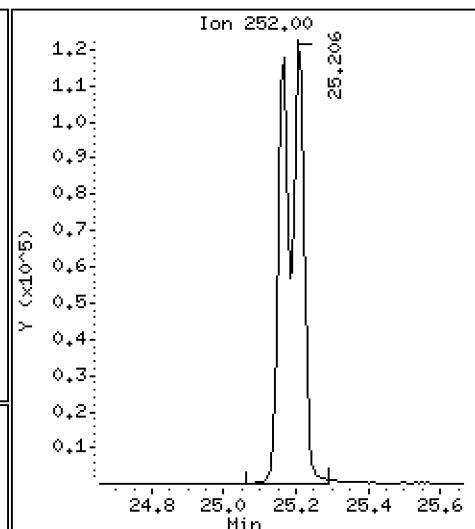
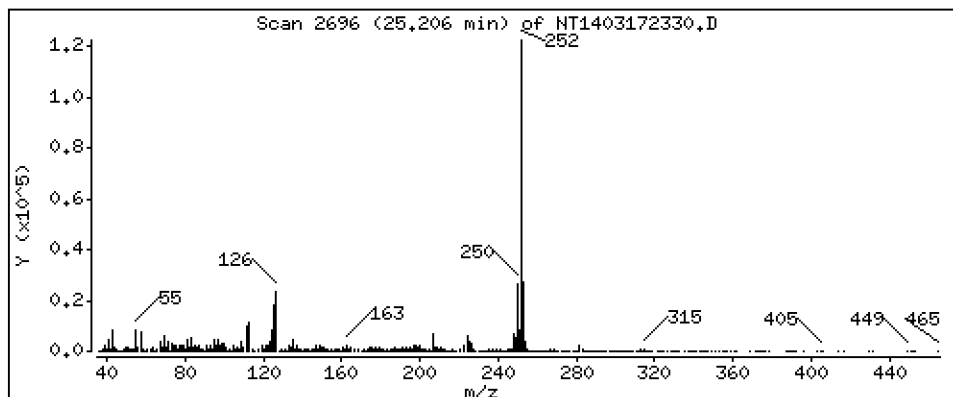
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 10,03 ug/mL



Date : 18-MAR-2023 07:54

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-CCV1

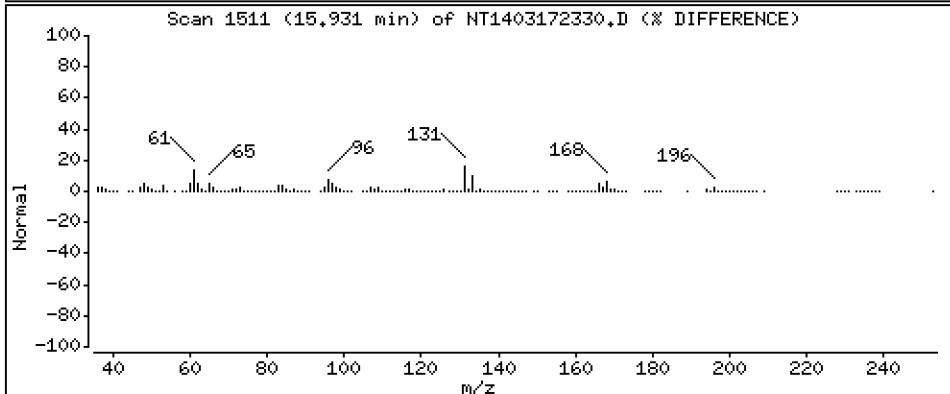
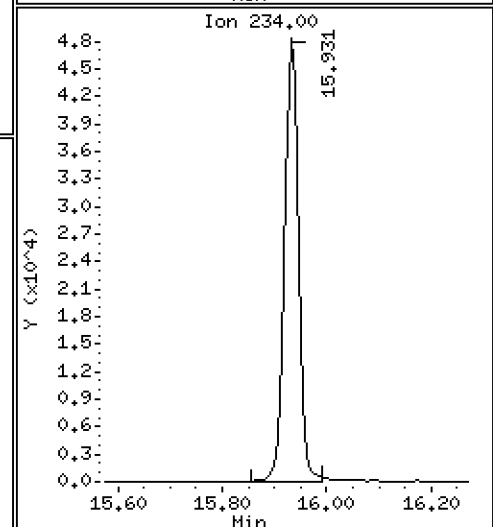
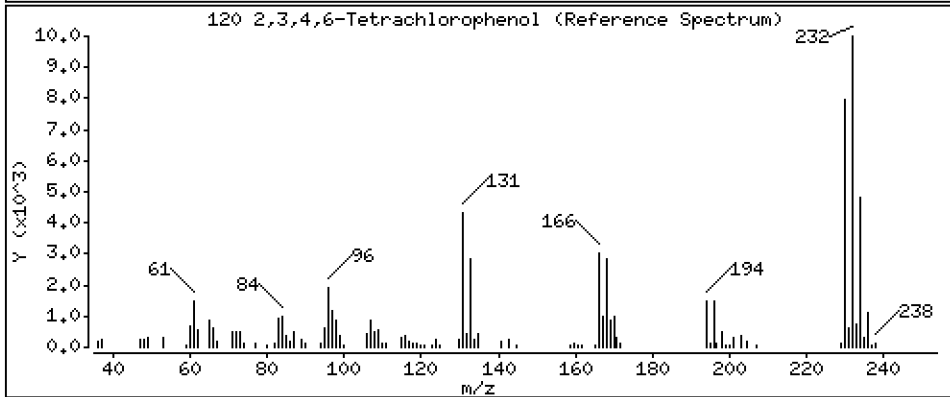
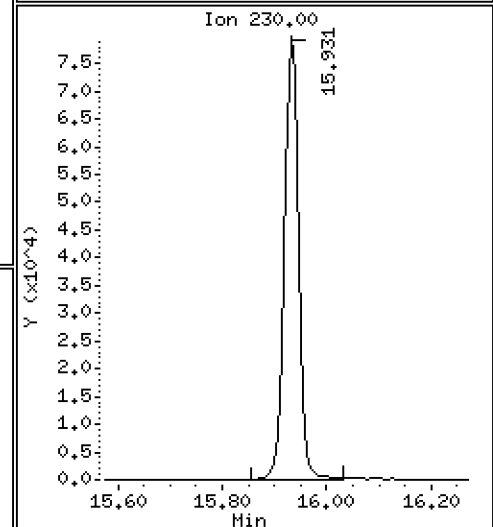
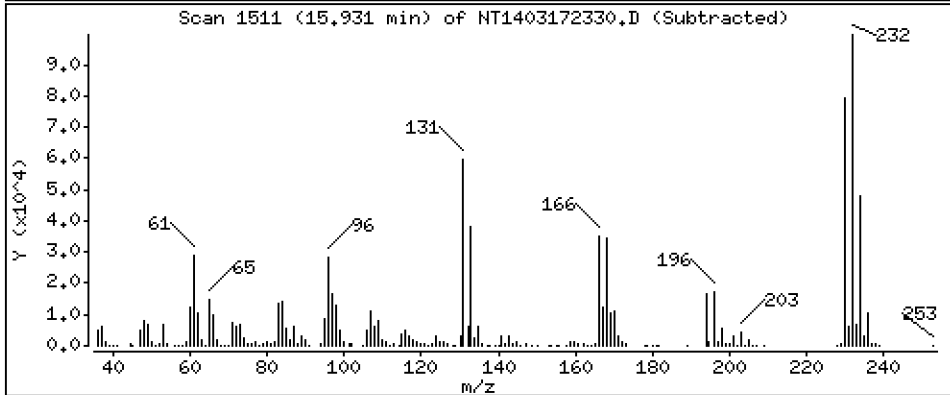
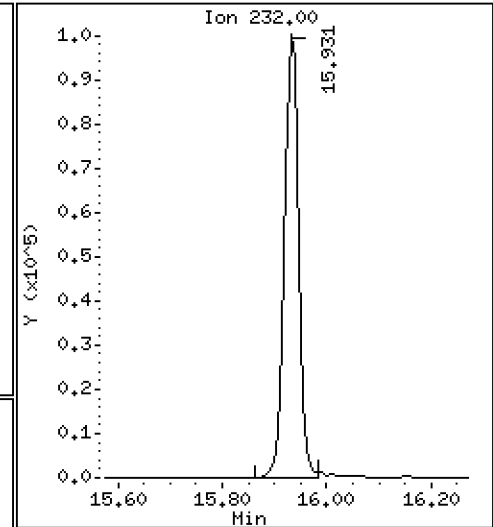
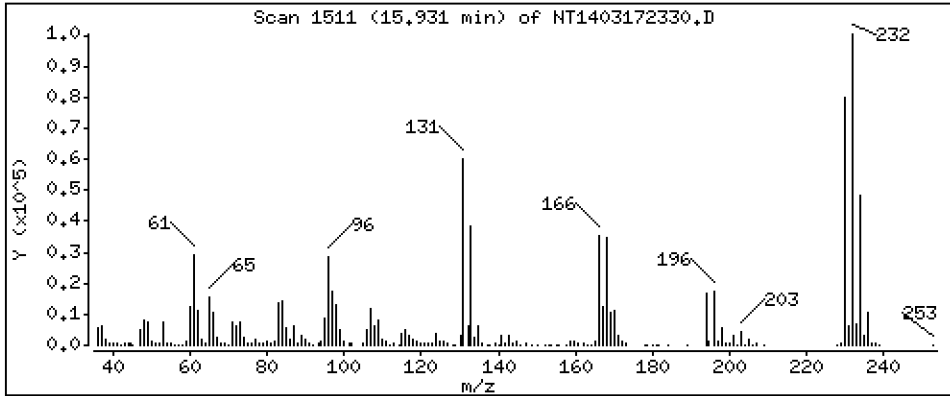
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 4,200 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172330.D
 Lab Smp Id: SLC0335-CCV1
 Inj Date : 18-MAR-2023 07:54 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-CCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.829	6.821	(1.000)	532170	7.20100	7.201
\$ 2 Phenol-d5	99		8.428	8.412	(1.000)	708483	7.28161	7.282
3 Phenol	94		8.443	8.436	(1.000)	484795	4.68835	4.688
\$ 5 2-Chlorophenol-d4	132		8.706	8.698	(1.000)	582381	7.59226	7.592
4 Bis(2-Chloroethyl)ether	93		8.613	8.606	(1.000)	354659	4.76306	4.763
6 2-Chlorophenol	128		8.729	8.729	(1.000)	395796	4.86315	4.863
7 1,3-Dichlorobenzene	146		9.008	9.000	(1.000)	405501	4.92196	4.922
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	217562	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	392059	4.94082	4.941
\$ 10 1,2-Dichlorobenzene-d4	152		9.434	9.427	(1.000)	263016	5.13237	5.132
12 1,2-Dichlorobenzene	146		9.458	9.450	(1.000)	382584	4.87785	4.878
11 Benzyl alcohol	108		9.349	9.341	(1.000)	218677	4.54261	4.543
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.063)	112728	4.76310	4.763 (M)
13 2-Methylphenol	108		9.566	9.559	(1.000)	353861	4.84029	4.840
17 Hexachloroethane	117		10.055	10.048	(1.000)	158383	4.66686	4.667
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	277631	4.82343	4.823
15 4-Methylphenol	108		9.838	9.830	(1.000)	378865	4.37695	4.377
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	454991	5.09212	5.092
19 Nitrobenzene	77		10.203	10.203	(0.882)	420090	4.82991	4.830
20 Isophorone	82		10.653	10.653	(0.921)	594080	5.00248	5.002
21 2-Nitrophenol	139		10.839	10.831	(0.937)	231289	4.62267	4.623
22 2,4-Dimethylphenol	107		10.893	10.886	(0.942)	722498	9.71209	9.712
23 Bis(2-Chloroethoxy)methane	93		11.087	11.087	(0.959)	381301	4.76919	4.769
24 Benzoic acid	105		11.118	11.103	(0.961)	989162	15.5943	15.59
25 2,4-Dichlorophenol	162		11.297	11.289	(0.977)	625800	10.5778	10.58
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	326403	4.48795	4.488
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	844336	4.00000	
28 Naphthalene	128		11.614	11.606	(1.004)	1089421	4.82966	4.830
29 4-Chloroaniline	127		11.737	11.737	(1.015)	996588	10.5537	10.55
30 Hexachlorobutadiene	225		11.977	11.969	(1.035)	165556	5.04175	5.042
31 4-Chloro-3-methylphenol	107		12.704	12.696	(1.098)	645260	9.02575	9.026
32 2-Methylnaphthalene	142		13.014	13.006	(1.125)	778674	4.94991	4.950
33 Hexachlorocyclopentadiene	237		13.486	13.478	(0.887)	133065	3.86929	3.869

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.641	13.633	(0.897)	420537	10.0196	10.02
35 2,4,5-Trichlorophenol	196	13.710	13.702	(0.902)	445266	10.1808	10.18
§ 36 2-Fluorobiphenyl	172	13.803	13.795	(0.908)	781049	5.21276	5.213
37 2-Chloronaphthalene	162	14.012	14.004	(0.922)	661786	5.15325	5.153
38 2-Nitroaniline	65	14.267	14.267	(0.938)	496402	10.0105	10.01
39 Dimethylphthalate	163	14.701	14.701	(0.967)	686259	4.97416	4.974
40 Acenaphthylene	152	14.887	14.879	(0.979)	1049137	4.86381	4.864
41 2,6-Dinitrotoluene	165	14.840	14.840	(0.976)	322373	10.1149	10.11
* 42 Acenaphthene-d10	164	15.204	15.196	(1.000)	413736	4.00000	
43 3-Nitroaniline	138	15.127	15.119	(0.995)	411285	9.35411	9.354
44 Acenaphthene	153	15.266	15.266	(1.004)	610459	4.84730	4.847
45 2,4-Dinitrophenol	184	15.343	15.335	(1.009)	320320	12.7055	12.71
46 Dibenzofuran	168	15.598	15.590	(1.026)	899881	5.00505	5.005
47 4-Nitrophenol	109	15.451	15.436	(1.016)	147768	6.34928	6.349
48 2,4-Dinitrotoluene	165	15.652	15.645	(1.029)	434200	9.61077	9.611
50 Diethylphthalate	149	16.162	16.163	(1.063)	760048	5.32840	5.328
49 Fluorene	166	16.309	16.309	(1.073)	802194	4.70690	4.707
51 4-Chlorophenyl-phenylether	204	16.301	16.294	(1.072)	361584	4.94254	4.943
52 4-Nitroaniline	138	16.402	16.394	(1.079)	316946	8.28788	8.288
53 4,6-Dinitro-2-methylphenol	198	16.494	16.494	(0.904)	422354	18.5809	18.58
54 N-Nitrosodiphenylamine	169	16.548	16.548	(0.907)	489138	5.61930	5.619
§ 55 2,4,6-Tribromophenol	330	16.849	16.841	(1.108)	111839	7.11993	7.120
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.948)	169892	5.78906	5.789
57 Hexachlorobenzene	284	17.628	17.621	(0.966)	165387	5.34097	5.341
58 Pentachlorophenol	266	17.984	17.977	(0.986)	158567	7.28436	7.284
* 59 Phenanthrene-d10	188	18.248	18.240	(1.000)	640883	4.00000	
60 Phenanthrene	178	18.294	18.294	(1.003)	853471	4.66101	4.661
61 Anthracene	178	18.387	18.387	(1.008)	854206	4.84209	4.842
62 Carbazole	167	18.719	18.712	(1.026)	686053	4.37091	4.371
63 Di-n-butylphthalate	149	19.516	19.509	(1.070)	1056462	5.31008	5.310
64 Fluoranthene	202	20.685	20.677	(0.888)	646763	8.19750	8.198
65 Pyrene	202	21.110	21.103	(0.906)	603779	7.46233	7.462
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	452358	8.25866	8.259
67 Butylbenzylphthalate	149	22.310	22.310	(0.957)	311691	8.79294	8.793
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	348959	4.88021	4.880
* 69 Chrysene-d12	240	23.301	23.294	(1.000)	193927	4.00000	
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	349219	16.1888	16.19
71 Chrysene	228	23.340	23.340	(1.002)	318218	4.91723	4.917
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.959)	430309	6.53691	6.537
* 134 Di-n-octylphthalate-d4	153	24.323	24.316	(1.000)	500053	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.000)	609513	4.74153	4.742
74 Benzo(b)fluoranthene	252	25.167	25.159	(0.970)	235798	4.70405	4.704
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	263659	5.30604	5.306
76 Benzo(a)pyrene	252	25.825	25.818	(0.996)	206966	4.82833	4.828
* 77 Perylene-d12	264	25.941	25.934	(1.000)	141853	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.103)	200006	4.28698	4.287
79 Dibenzo(a,h)anthracene	278	28.641	28.626	(1.104)	171849	4.37057	4.371
80 Benzo(g,h,i)perylene	276	29.418	29.403	(1.134)	149043	3.87633	3.876
90 N-Nitrosodimethylamine	74	4.697	4.697	(1.000)	381560	8.15196	8.152
91 Aniline	93	8.521	8.513	(1.000)	1008064	9.69268	9.693
93 Benzidine	184	20.917	20.909	(0.898)	497938	15.6829	15.68
103 Pyridine	79	4.720	4.712	(1.000)	594327	4.10025	4.100
105 1-methylnaphthalene	142	13.238	13.230	(1.144)	701965	4.92529	4.925
111 Azobenzene (1,2-DP-Hydrazine)	77	16.625	16.625	(1.093)	793513	4.65861	4.659

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.206	25.159	(0.972)	477612	10.0325	10.03
120 2,3,4,6-Tetrachlorophenol	232	15.930	15.923	(1.048)	180397	4.19994	4.200

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172330.D Calibration Time: 23:31
 Lab Smp Id: SLC0335-CCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	217562	-5.82
27 Naphthalene-d8	843789	421895	1687578	844336	0.06
42 Acenaphthene-d10	432455	216228	864910	413736	-4.33
59 Phenanthrene-d10	793780	396890	1587560	640883	-19.26
69 Chrysene-d12	411057	205529	822114	193927	-52.82
134 Di-n-octylphthala	799010	399505	1598020	500053	-37.42
77 Perylene-d12	254782	127391	509564	141853	-44.32

<-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.07	0.08
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.05
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172330.D

Lab ID: SLC0335-CCV1
nt14.i, ABN.m, 18-MAR-2023 07:54

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
1.063	1.000	0.0633		2,2'-oxybis(1-Chloropropane)

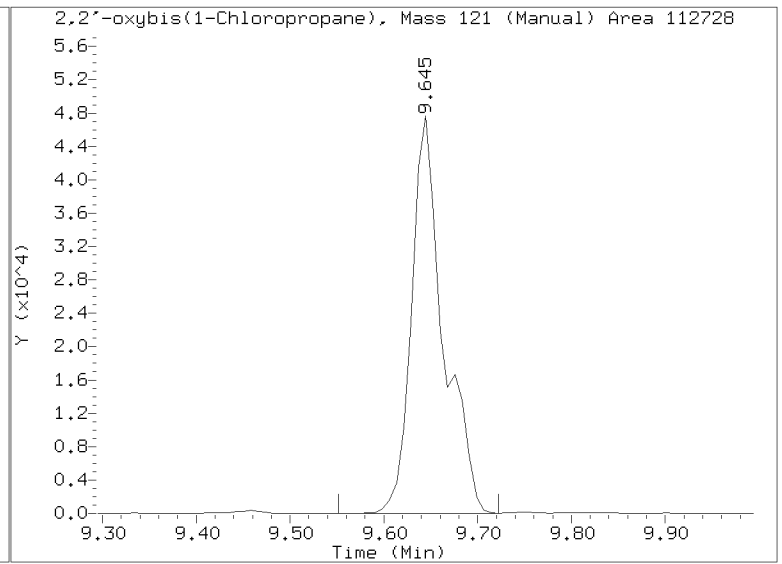
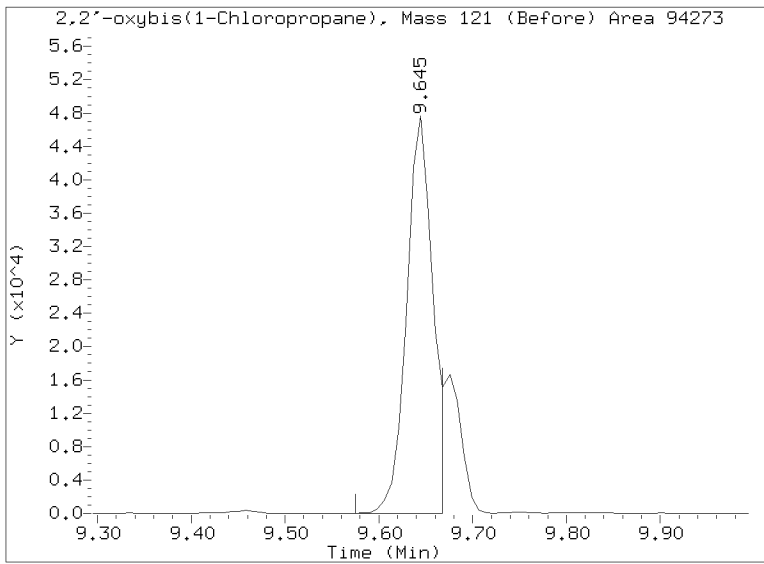
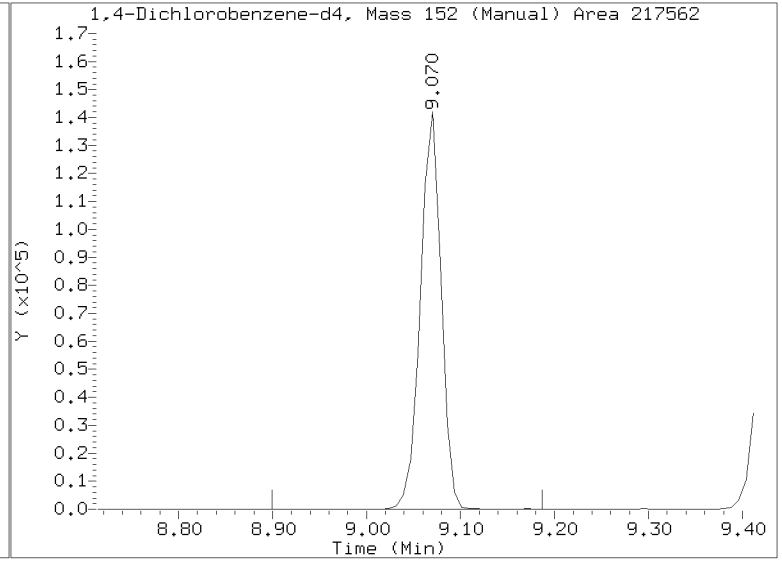
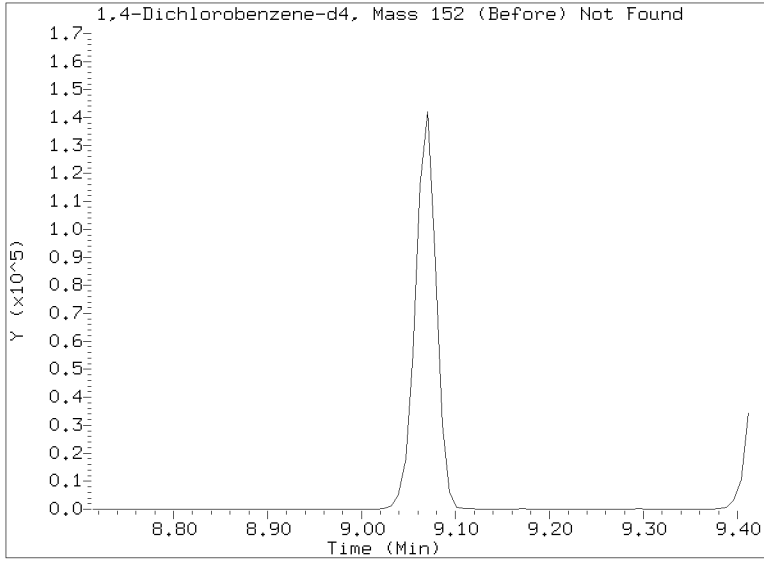
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172330.D
Injection Date: 18-MAR-2023 07:54
Lab ID:SLC0335-CCV1 Client ID:
Report Date: 03/22/2023 09:51





**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403172304.D

Calibration Date: 03/15/2023

Sequence: SLC0335

Injection Date: 03/17/23

Lab Sample ID: SLC0335-LCV1

Injection Time: 16:16

Sequence Name: ABN 0.2

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.9011440	1.5235880		-19.9	+/-50
4-Methylphenol	A	0.20000	0.2	1.5914380	1.2597320		-20.8	+/-50
Naphthalene	A	0.20000	0.2	1.0686200	1.1139550		4.2	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7452524	0.7404026		-0.7	+/-50
Acenaphthylene	A	0.20000	0.2	2.0854140	2.0202070		-3.1	+/-50
Dimethylphthalate	A	0.20000	0.2	1.3338450	1.3048730		-2.2	+/-50
Acenaphthene	A	0.20000	0.2	1.2175690	1.2325880		1.2	+/-50
Dibenzofuran	A	0.20000	0.2	1.7382550	1.7753620		2.1	+/-50
Fluorene	A	0.20000	0.2	1.6477120	1.4084750		-14.5	+/-50
Phenanthrene	A	0.20000	0.2	1.1428510	1.1396140		-0.3	+/-50
Anthracene	A	0.20000	0.2	1.1010610	0.9758279		-11.4	+/-50
Fluoranthene	A	0.20000	0.2	1.6273660	1.7018160		4.6	+/-50
Pyrene	A	0.20000	0.2	1.6688810	1.7791570		6.6	+/-50
Butylbenzylphthalate	A	0.20000	0.2	0.7311588	0.6713611		-8.2	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4748830	1.5351740		4.1	+/-50
Chrysene	A	0.20000	0.2	1.3348290	1.3425460		0.6	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5265649	0.5154639		-2.1	+/-50
Benzo(a)fluoranthene, Total	A	0.40000	0.4	1.3424190	1.3253550		-1.3	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2087150	1.0894790		-9.9	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.1	1.3155660	0.8982358		-31.7	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.1	1.1087420	0.7797985		-29.7	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.1	1.0842080	0.7793748		-28.1	+/-50
2-Fluorophenol	A	0.30000	0.252	1.3587350	1.1408270		-16.0	+/-50
Phenol-d5	A	0.30000	0.253	1.7888720	1.5082180		-15.7	+/-50
2-Chlorophenol-d4	A	0.30000	0.290	1.4103050	1.3613970		-3.5	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.217	0.9421955	1.0222900		8.5	+/-50
Nitrobenzene-d5	A	0.20000	0.182	0.4233007	0.3849656		-9.1	+/-50
2-Fluorobiphenyl	A	0.20000	0.206	1.4485960	1.4924030		3.0	+/-50
2,4,6-Tribromophenol	A	0.30000	0.233	0.1518639	0.1177333		-22.5	+/-50
p-Terphenyl-d14	A	0.20000	0.227	1.1297810	1.2803740		13.3	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230317,6\NT1403172304.D

Date: 17-MAR-2023 16:16

Client ID:

Sample Info: SLC0335-LCW1

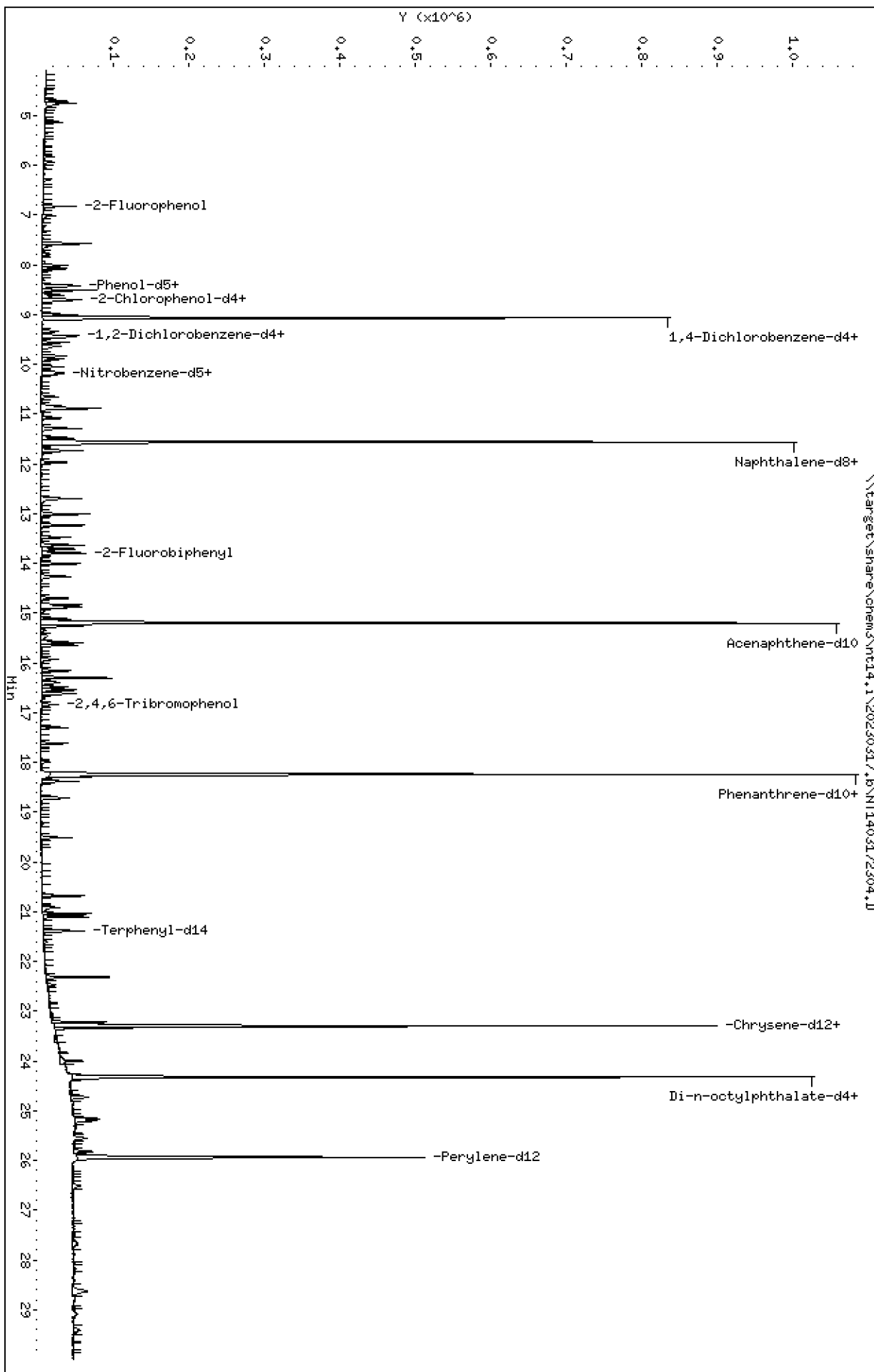
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

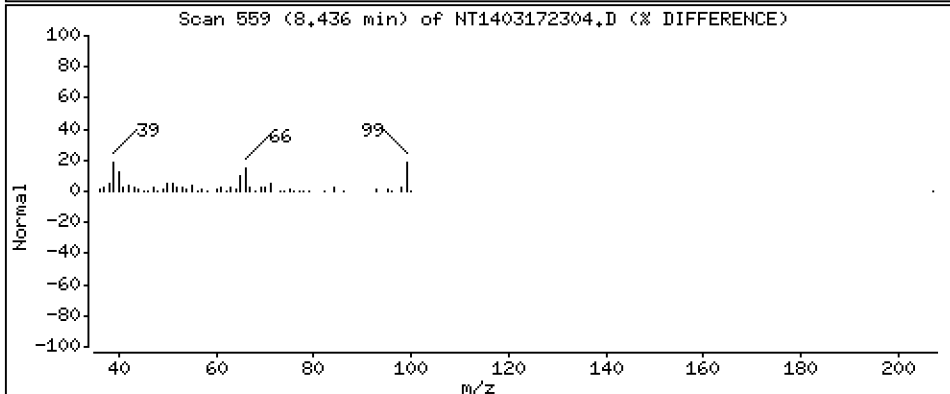
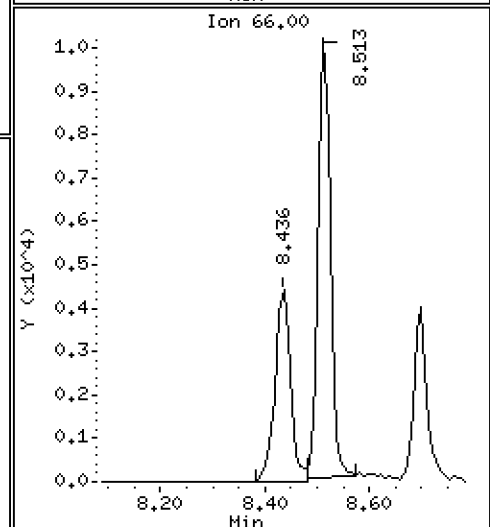
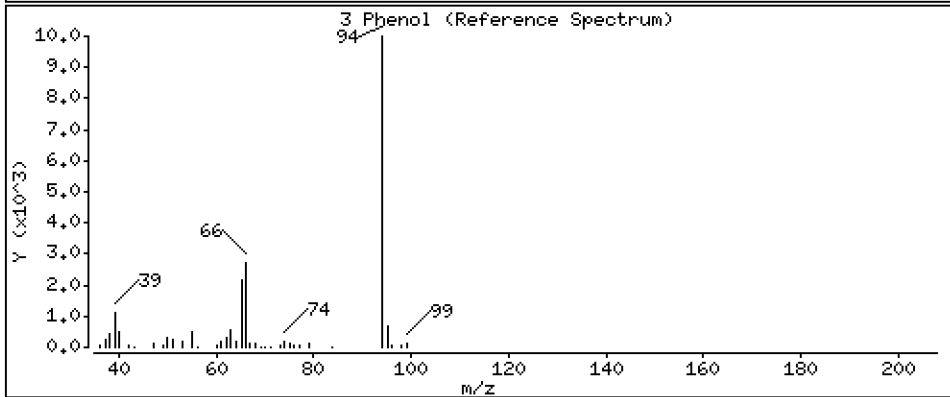
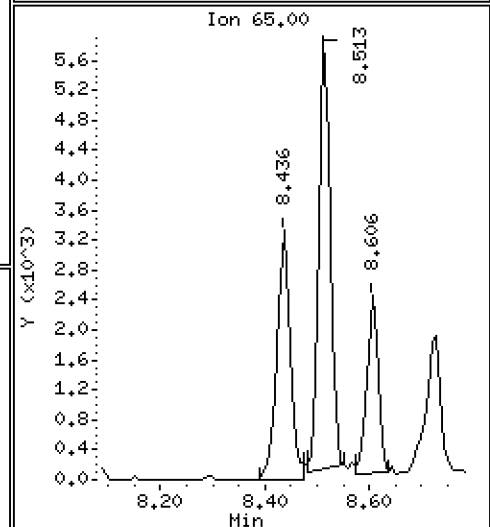
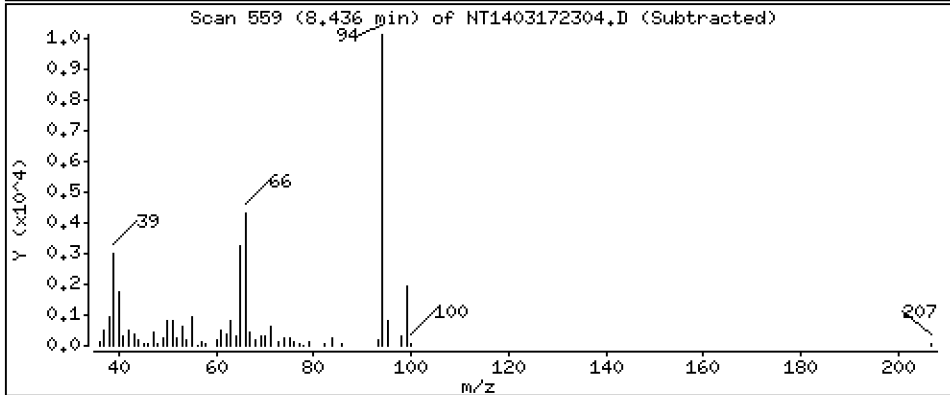
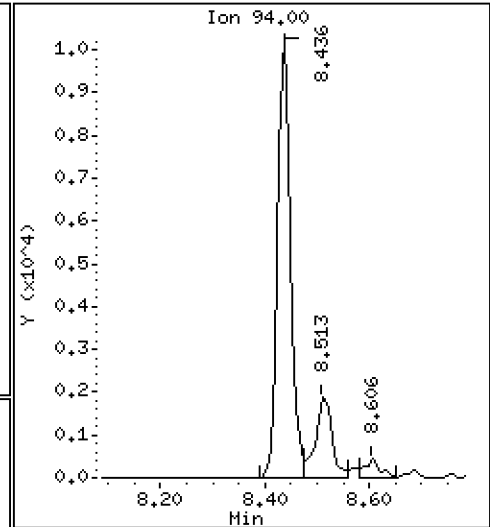
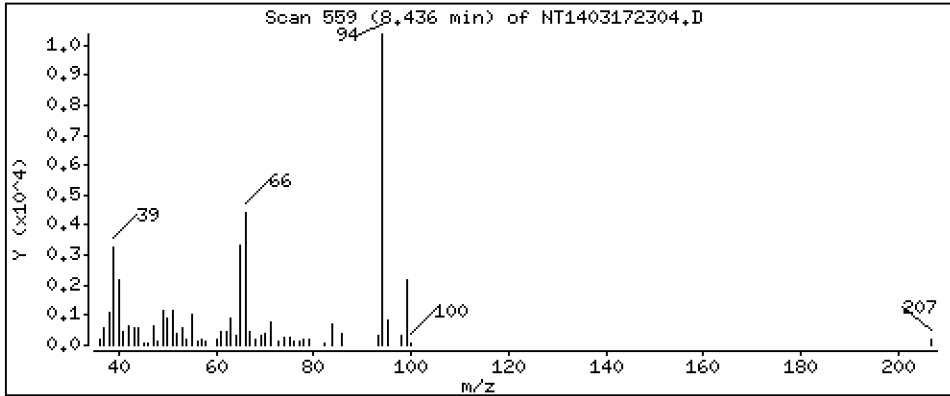
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1603 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

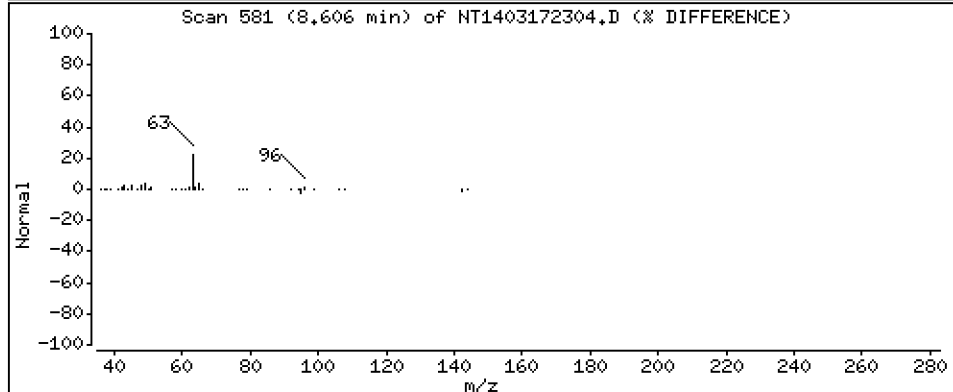
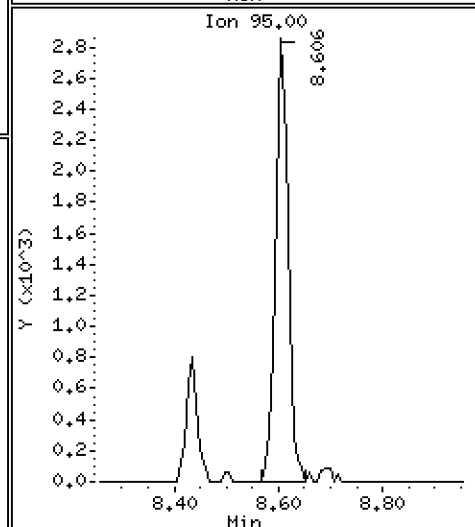
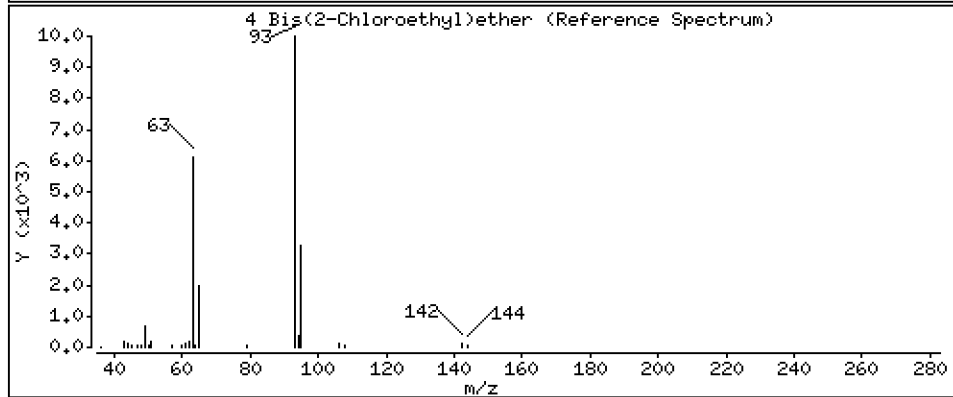
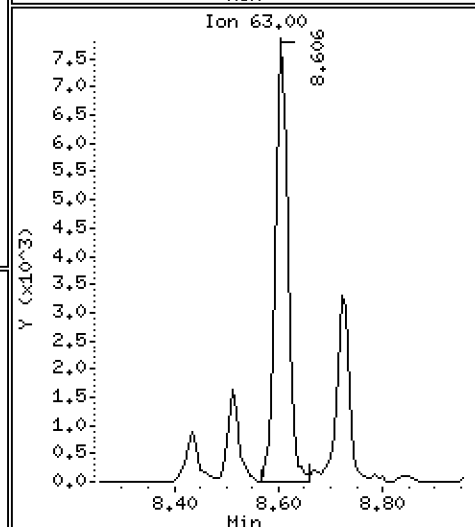
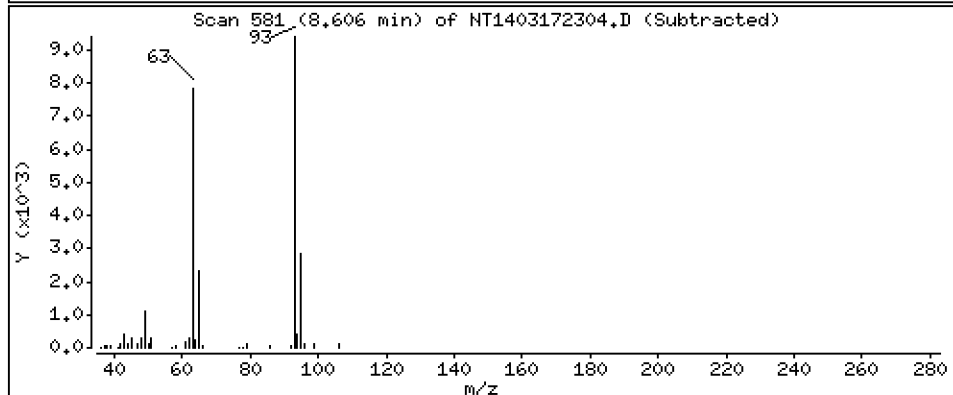
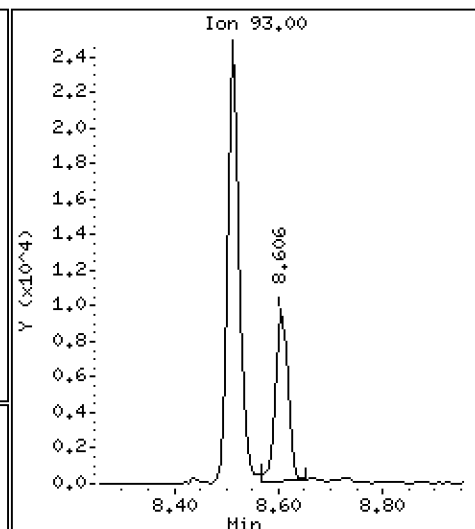
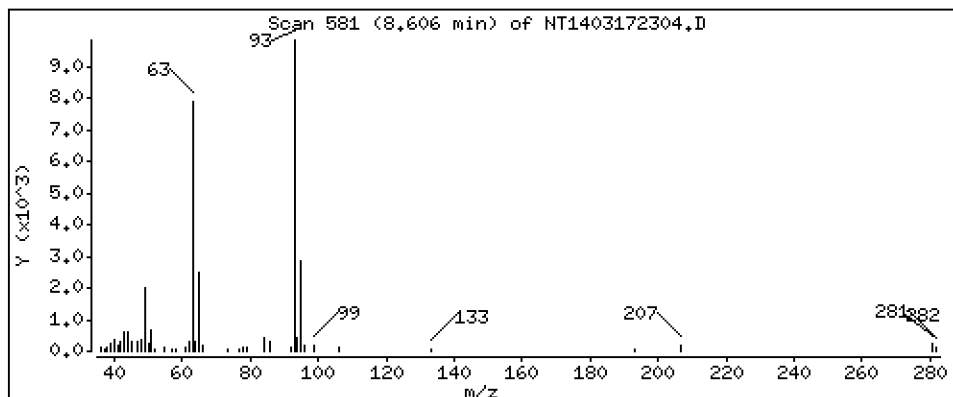
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,2004 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

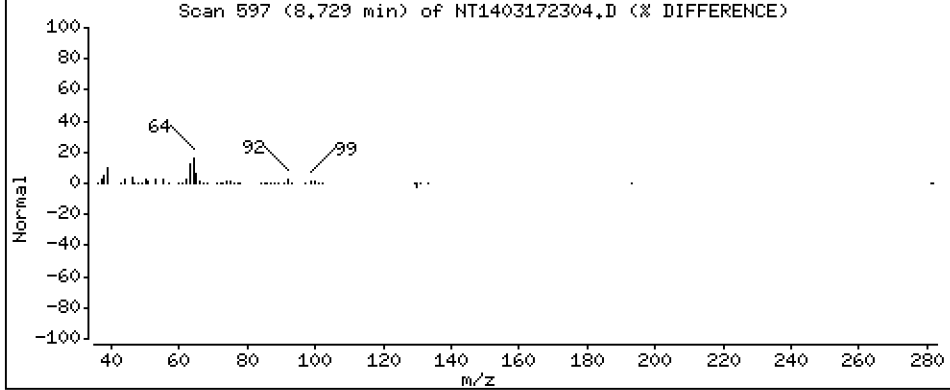
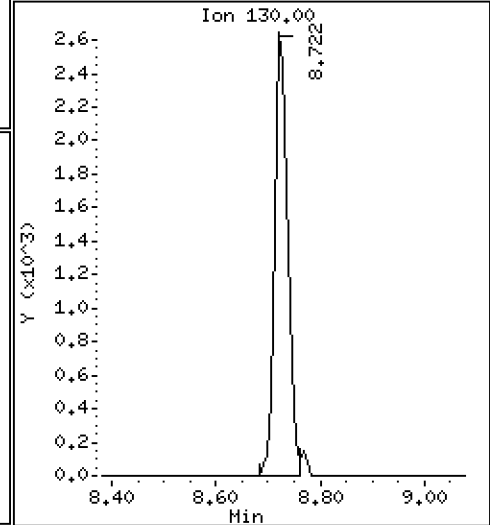
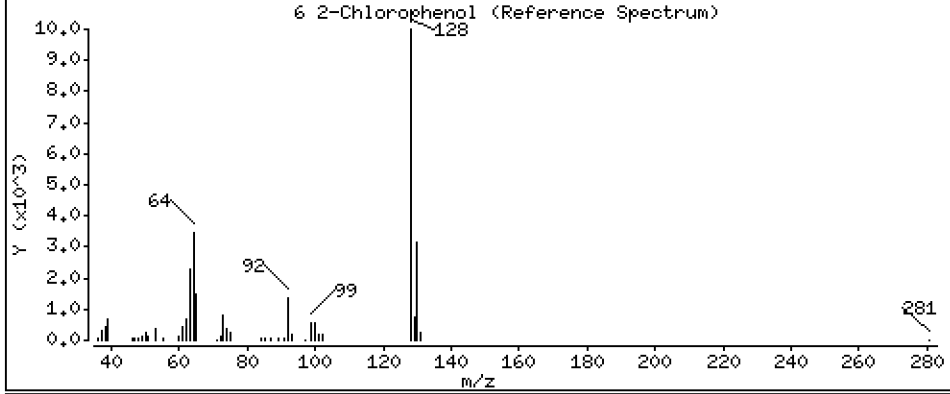
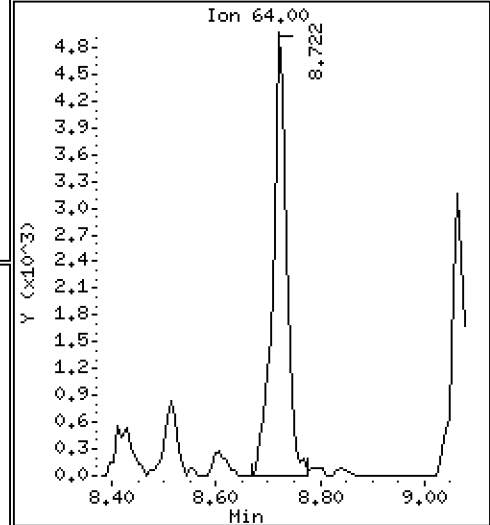
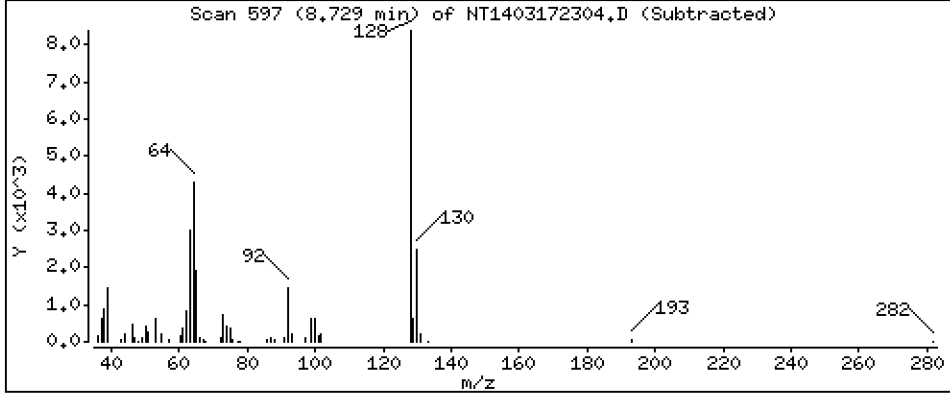
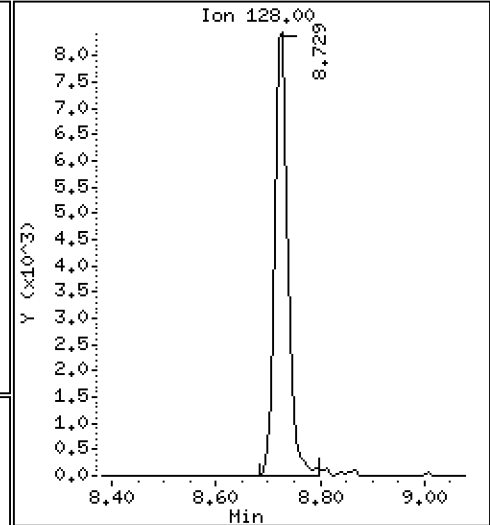
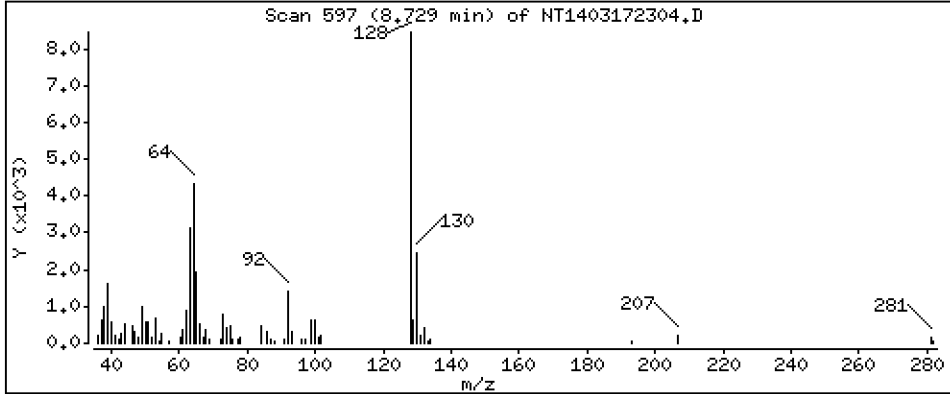
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1847 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

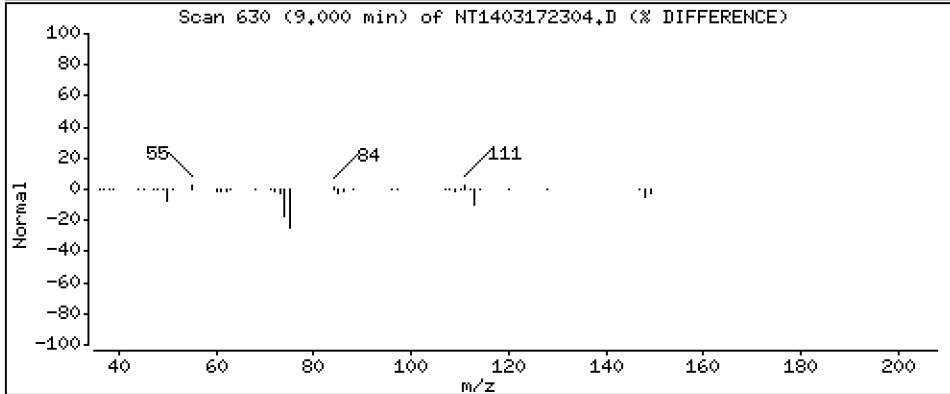
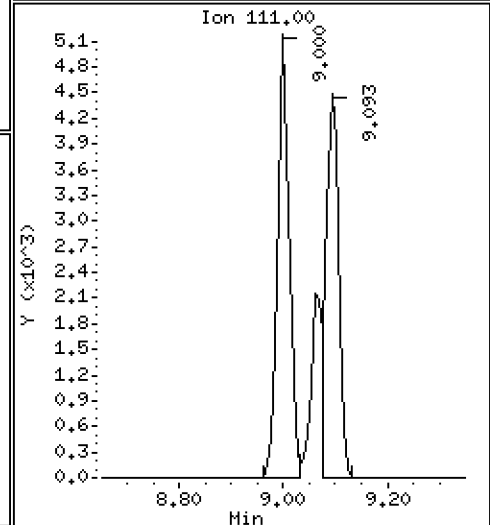
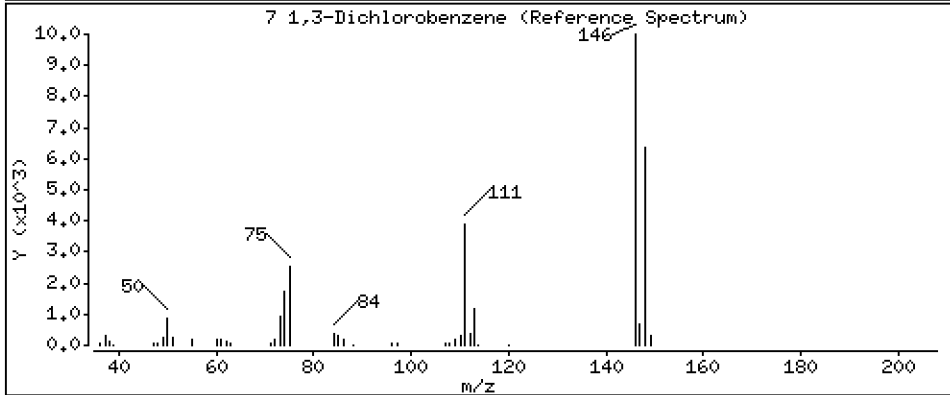
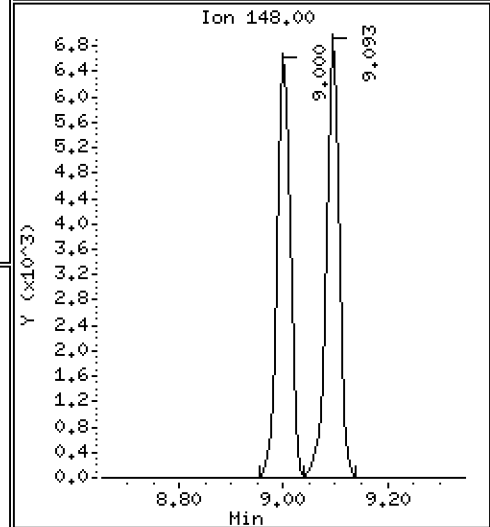
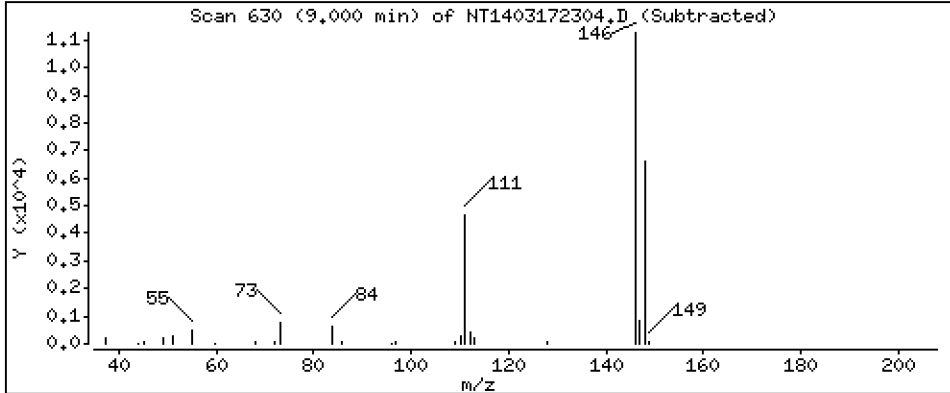
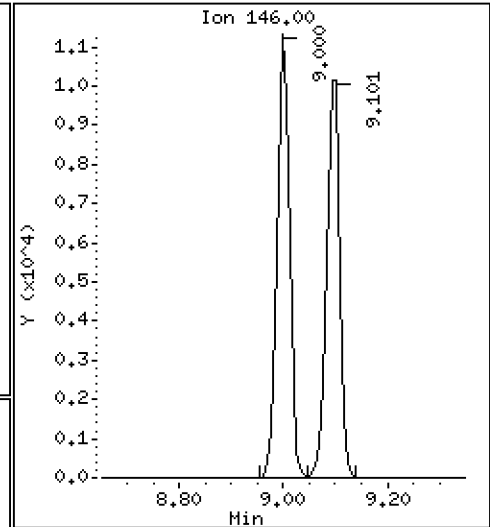
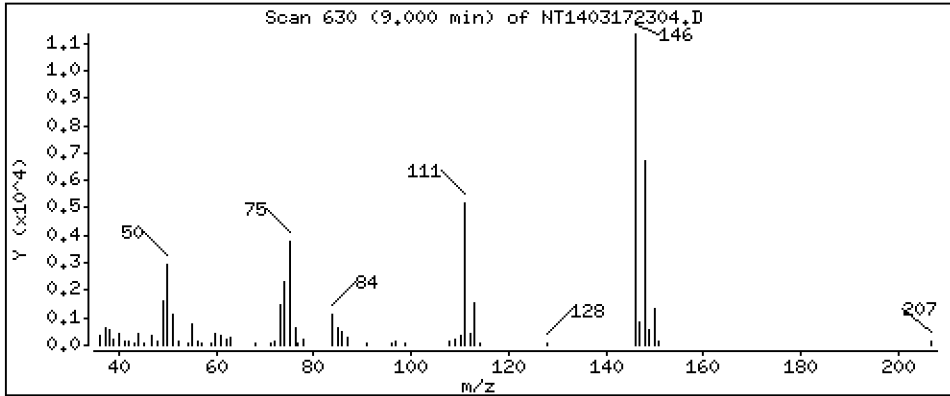
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2224 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

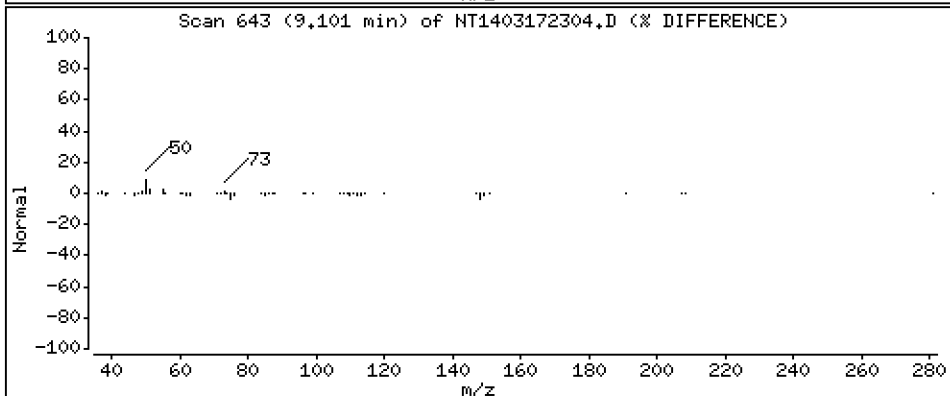
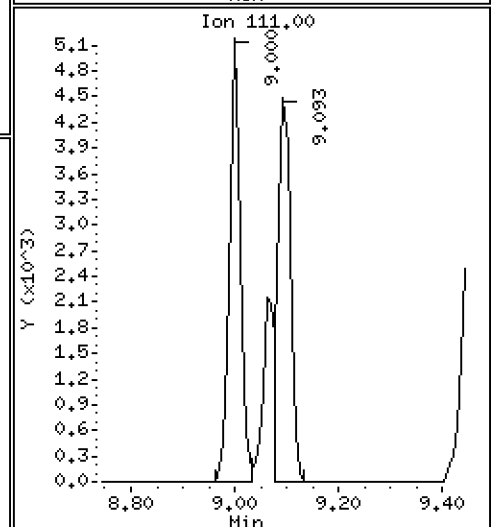
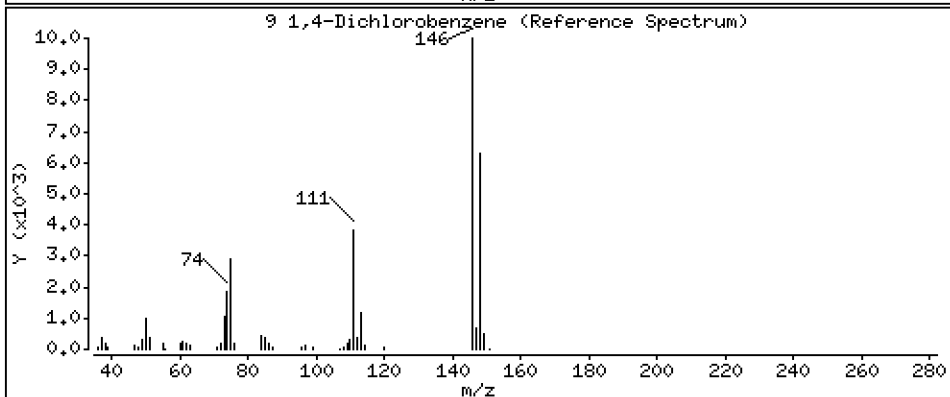
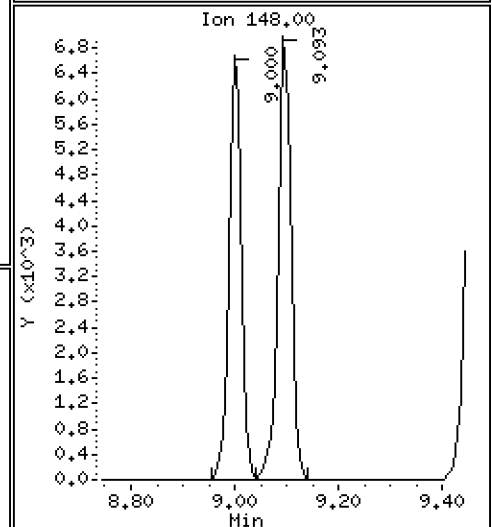
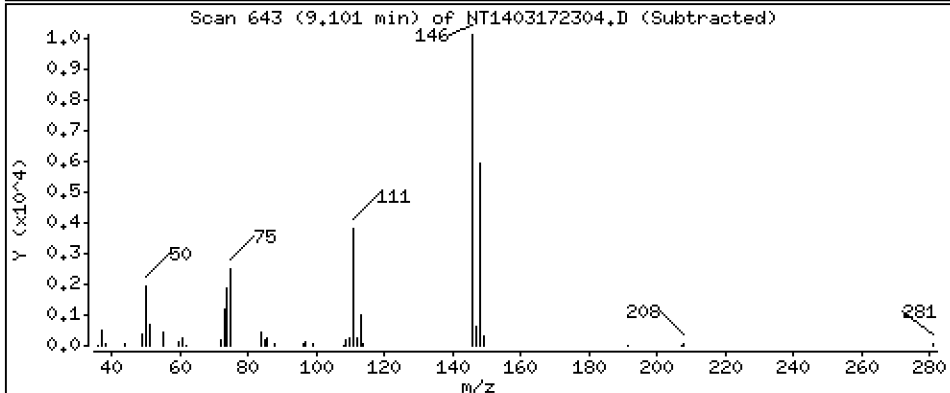
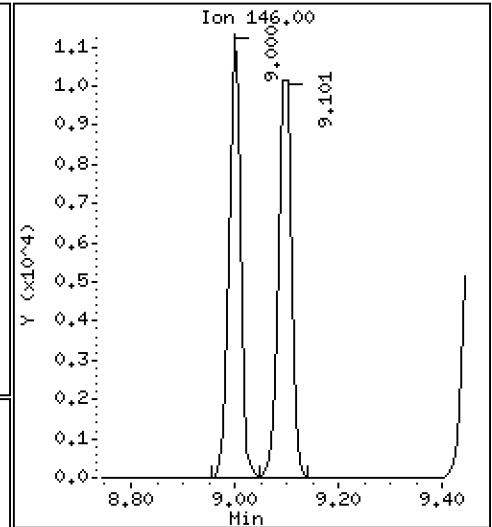
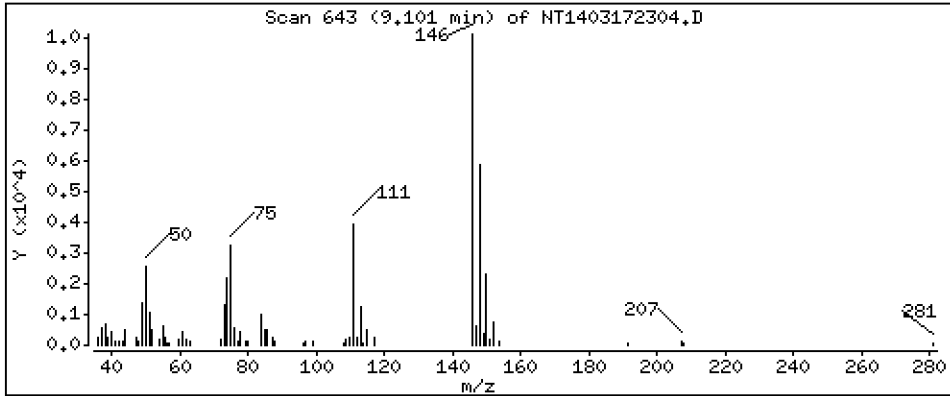
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2135 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

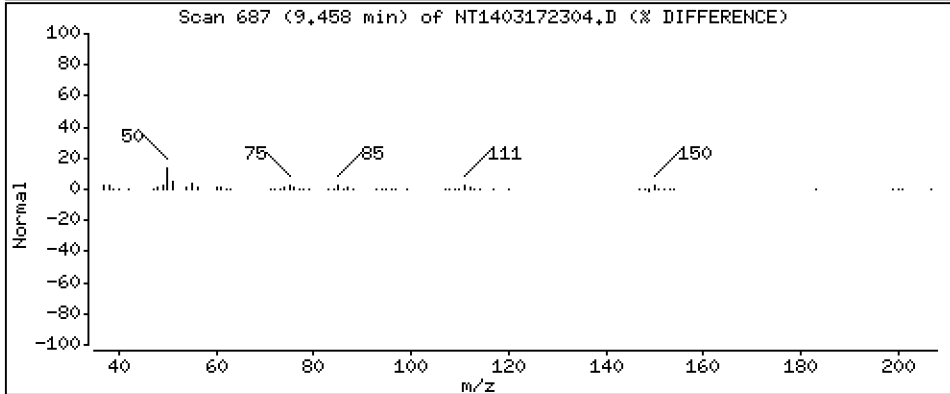
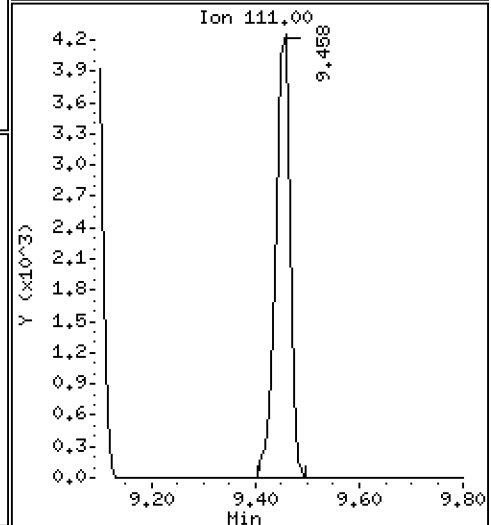
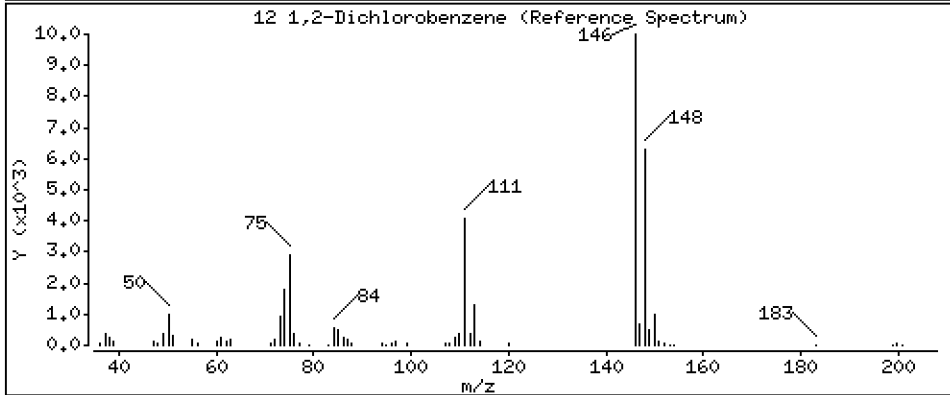
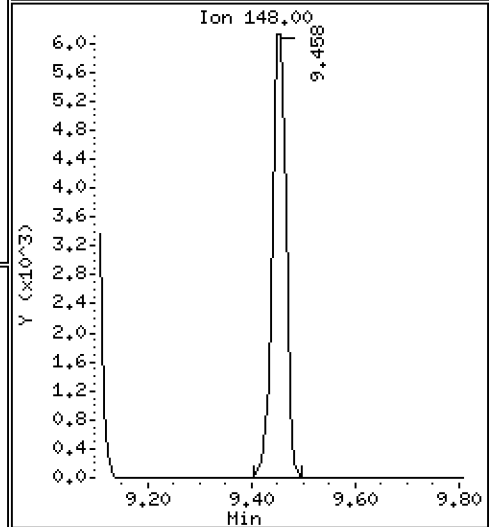
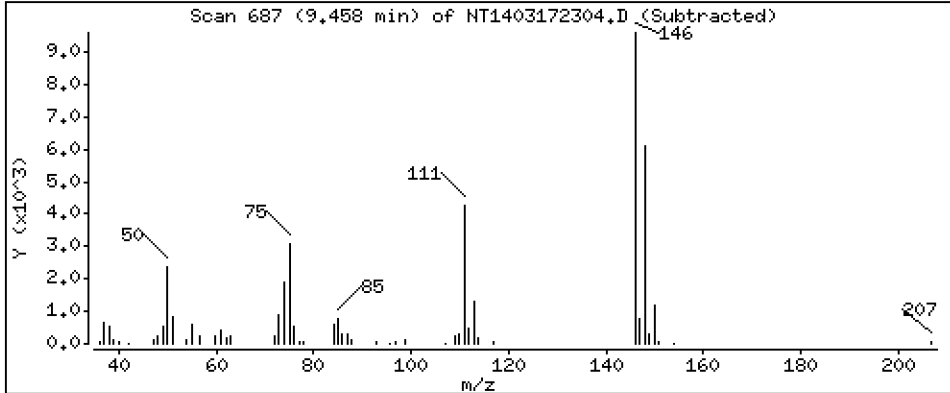
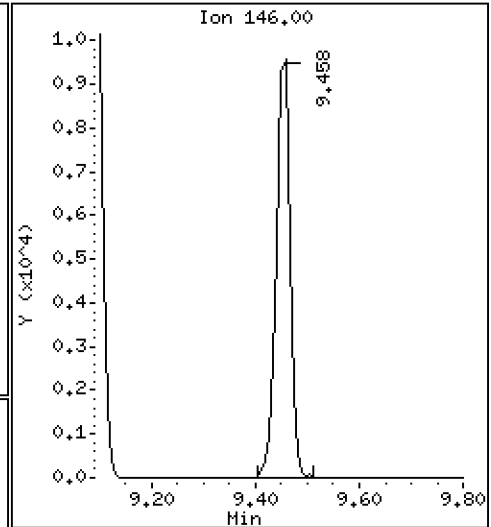
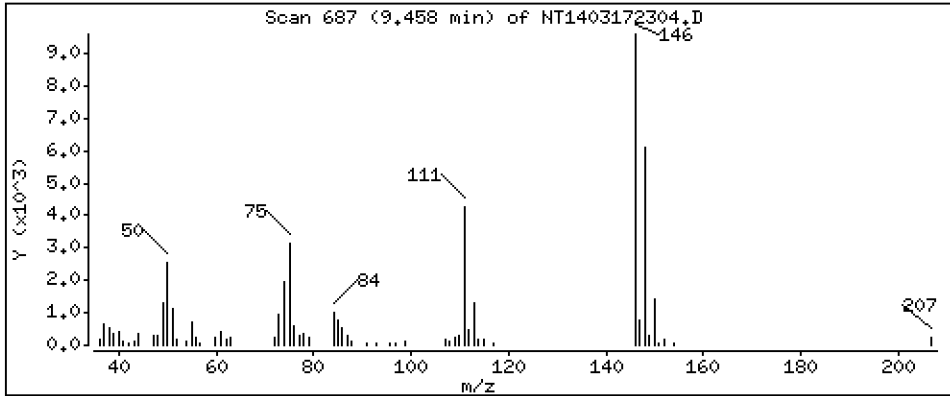
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2153 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

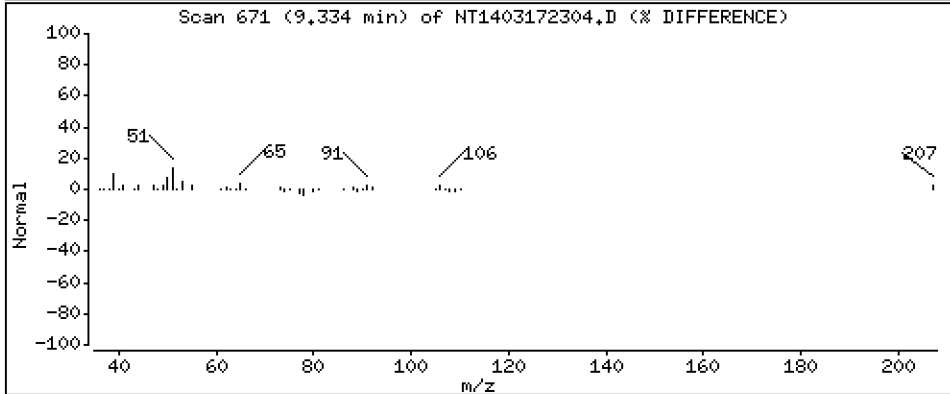
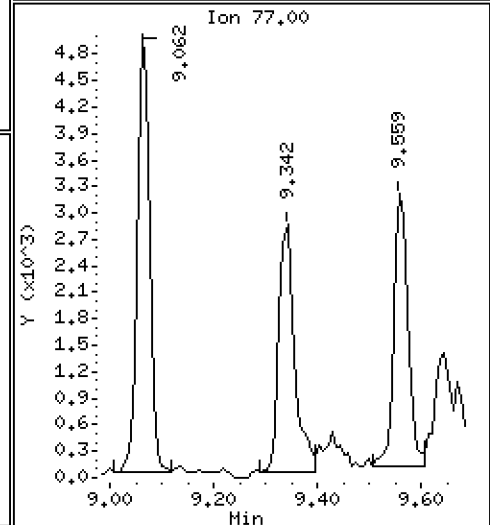
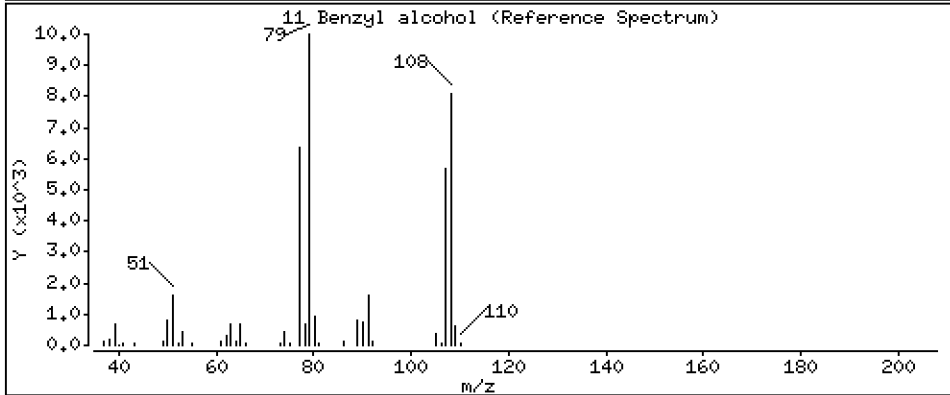
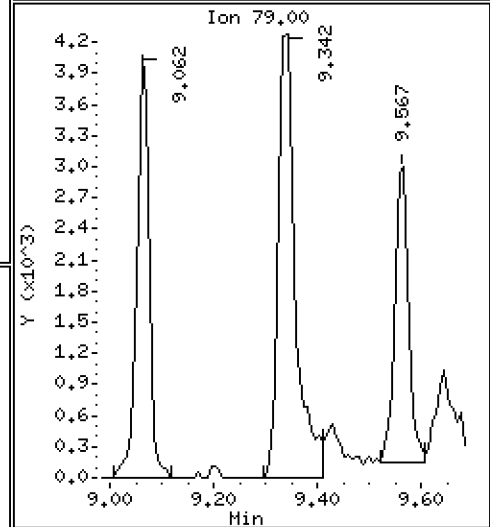
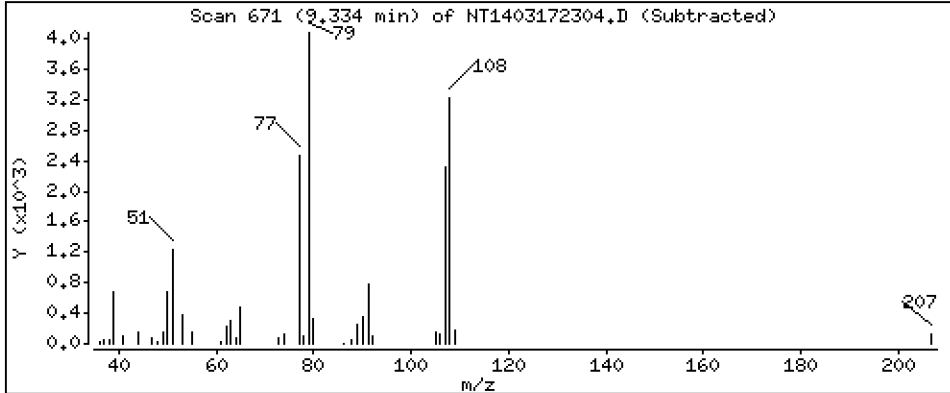
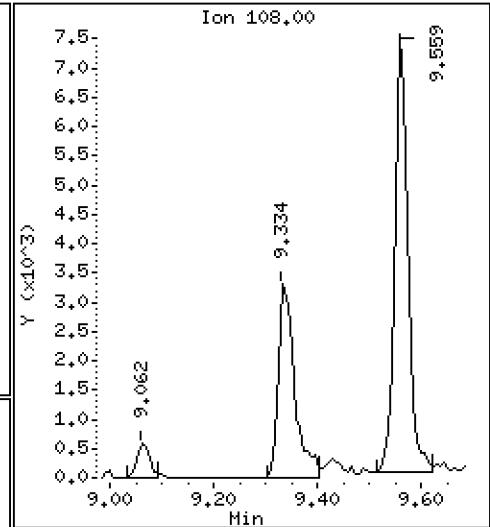
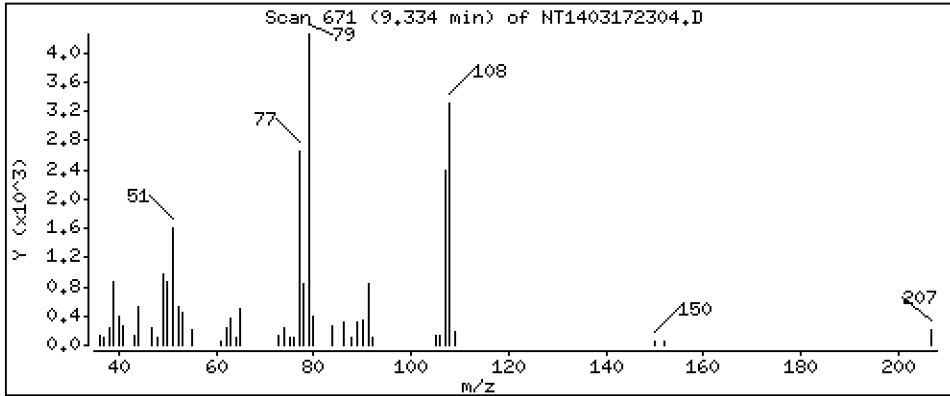
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1442 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

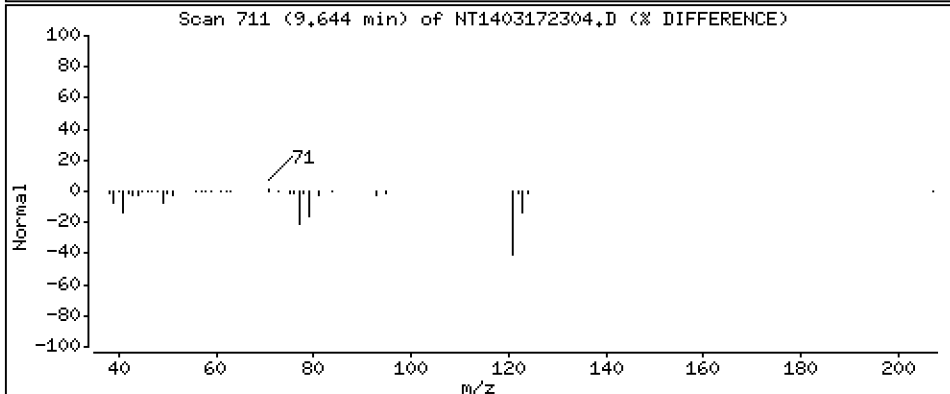
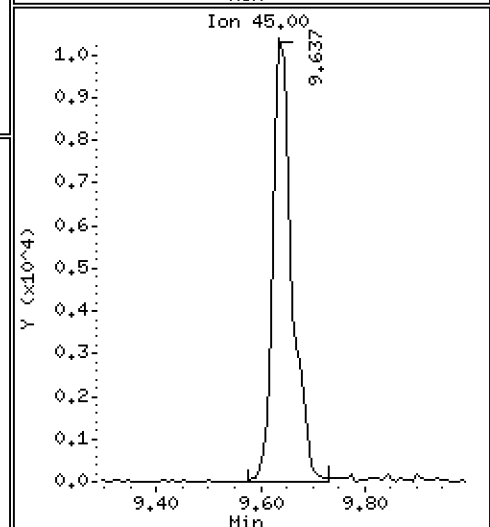
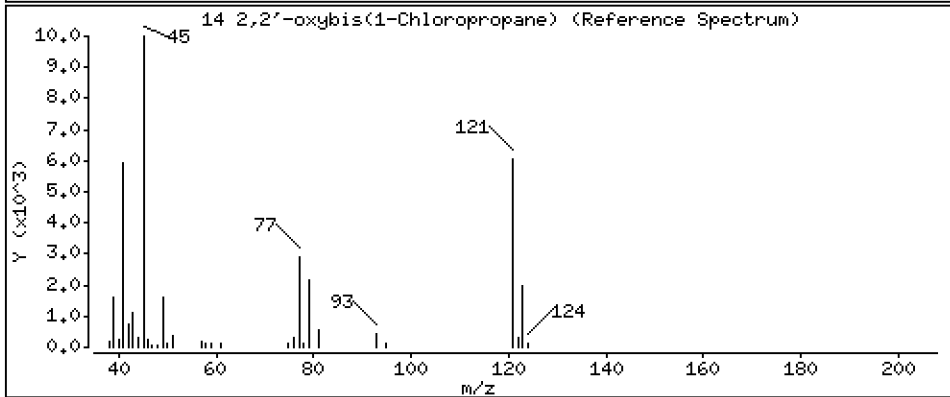
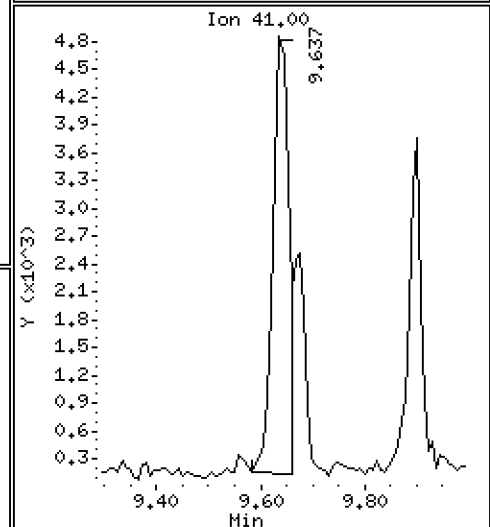
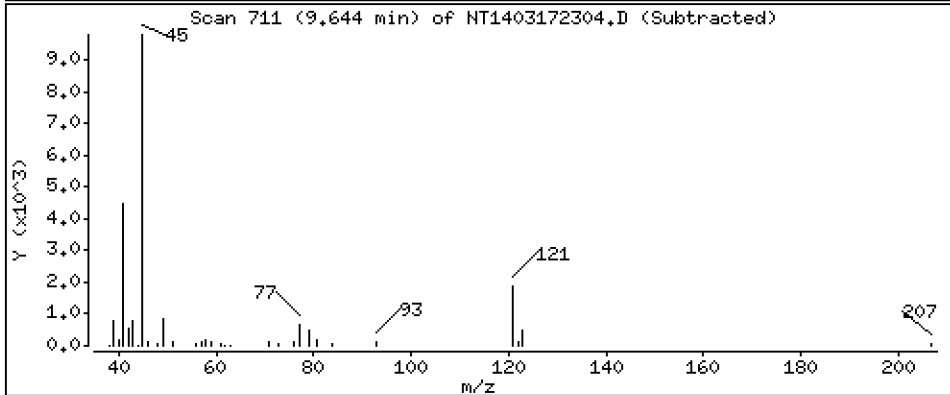
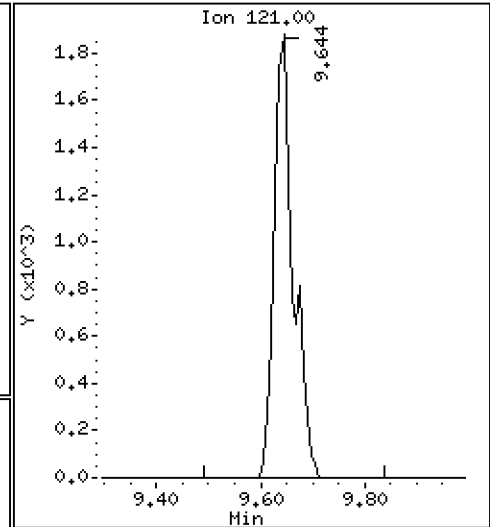
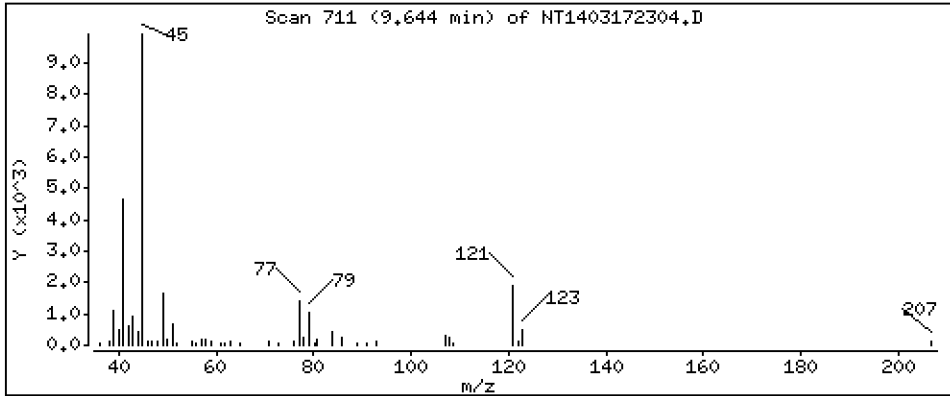
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2077 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

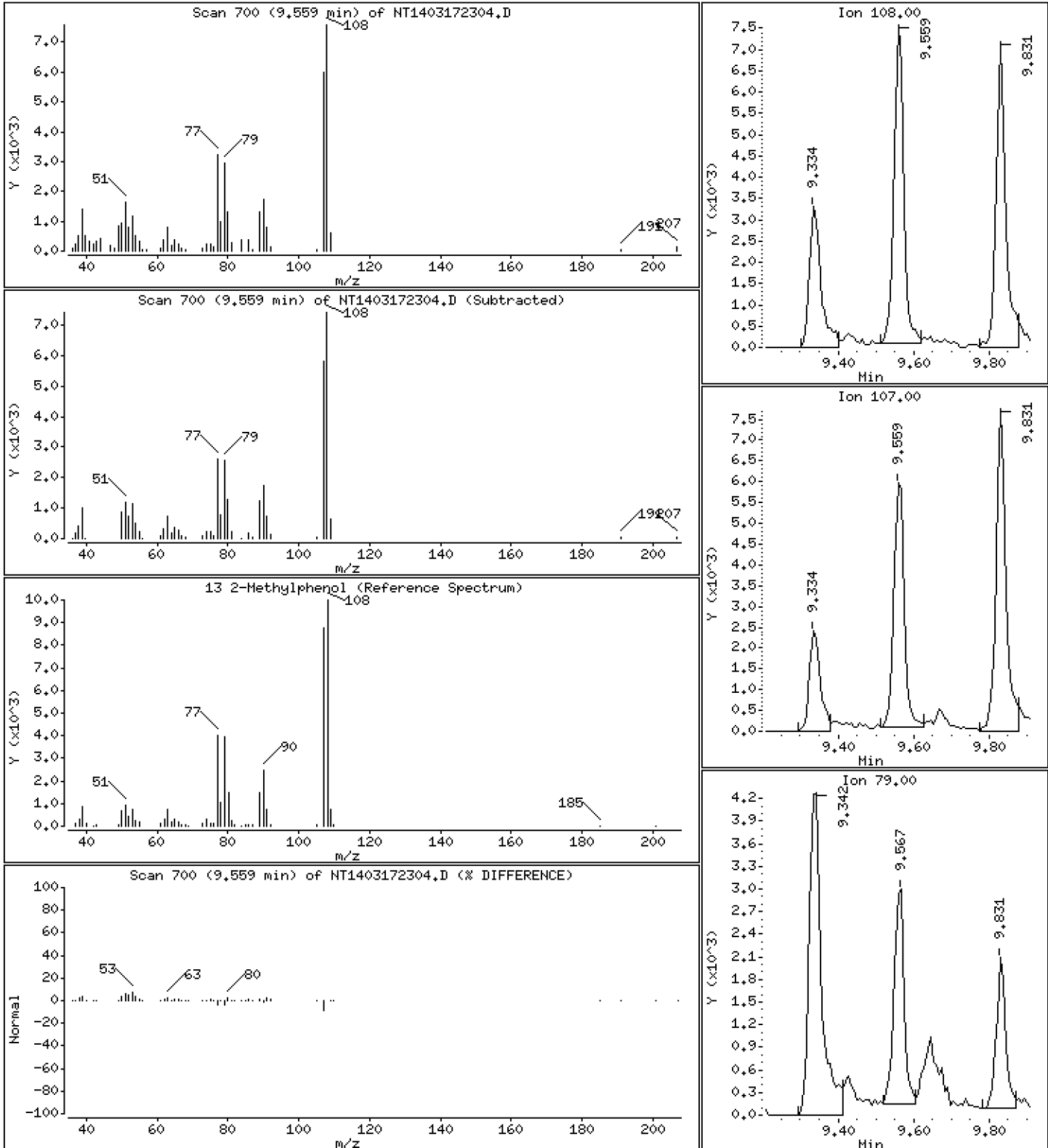
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1739 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

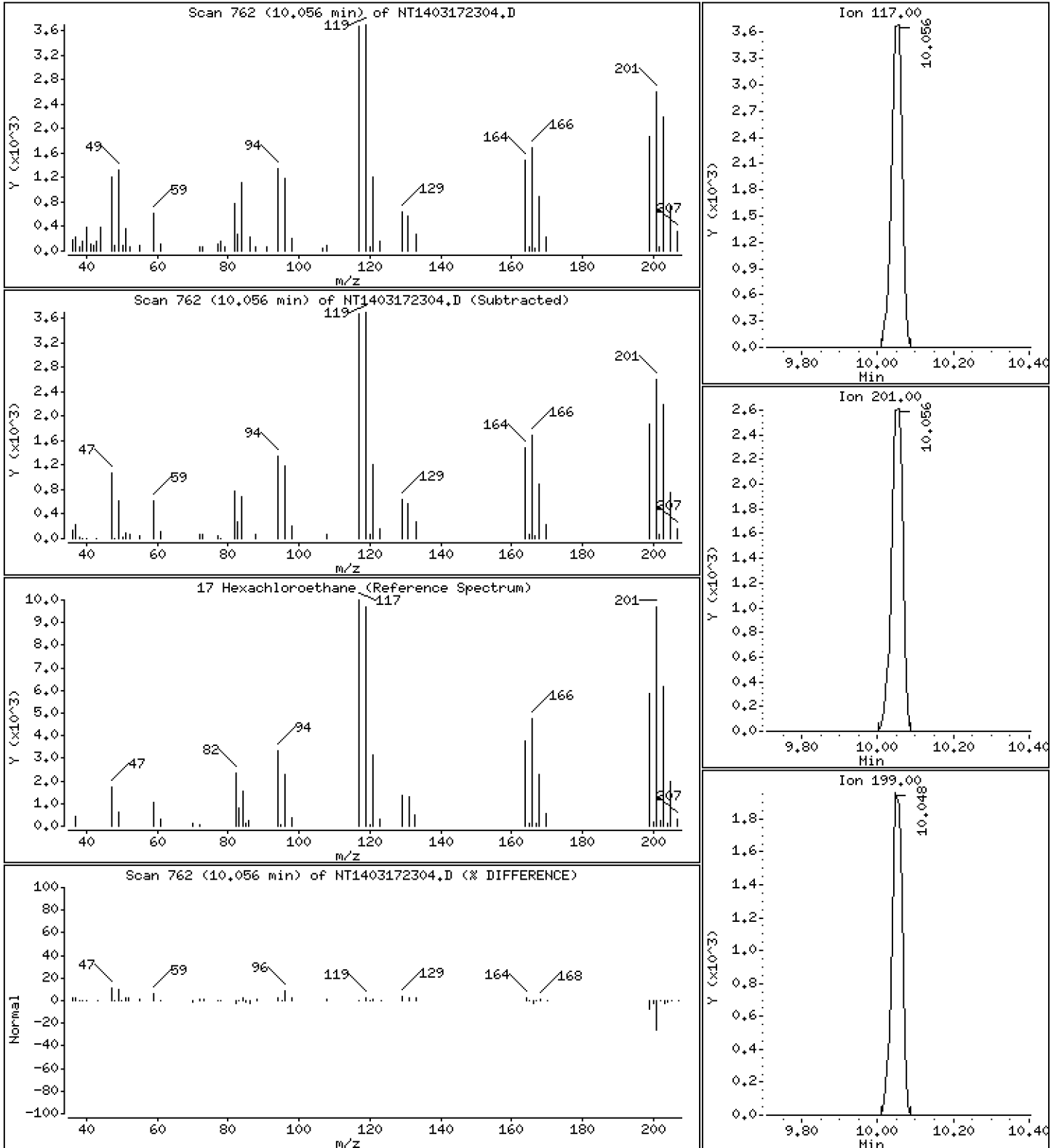
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 0.2033 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

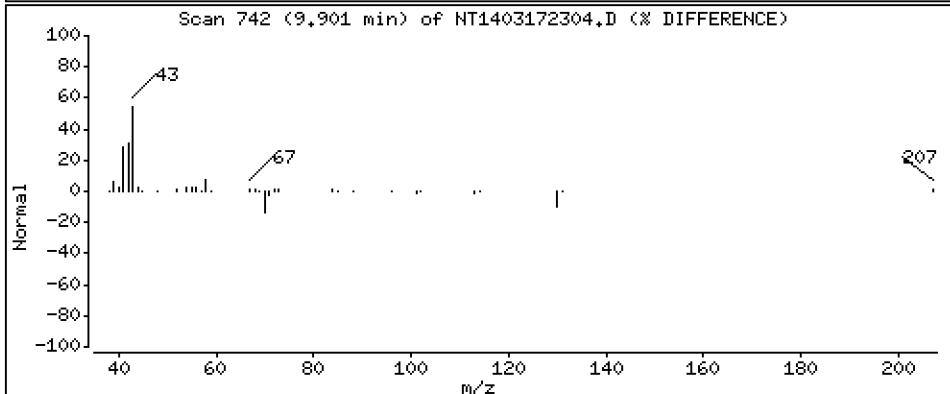
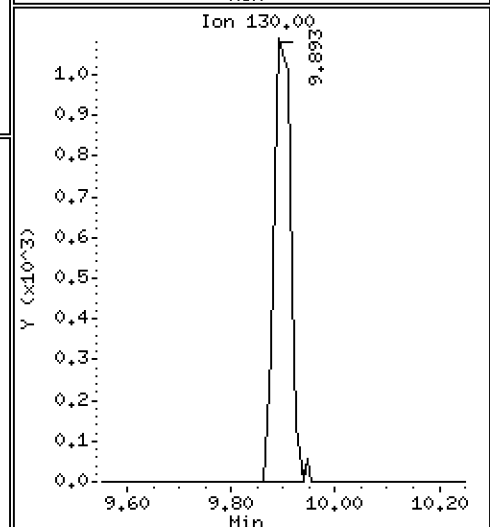
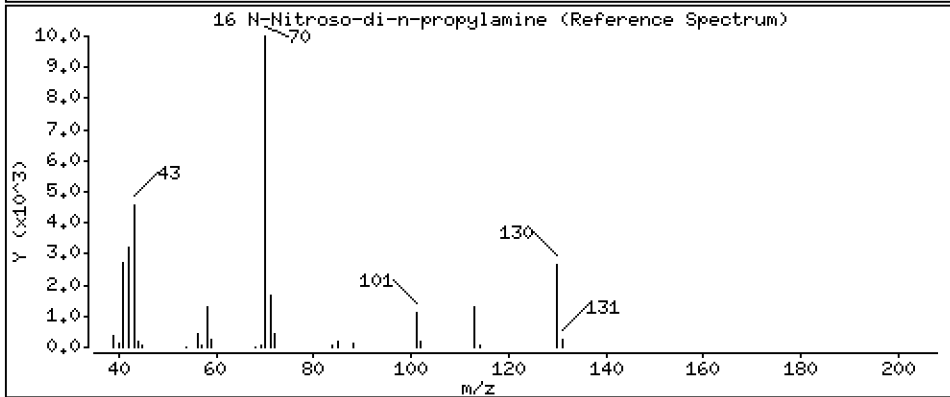
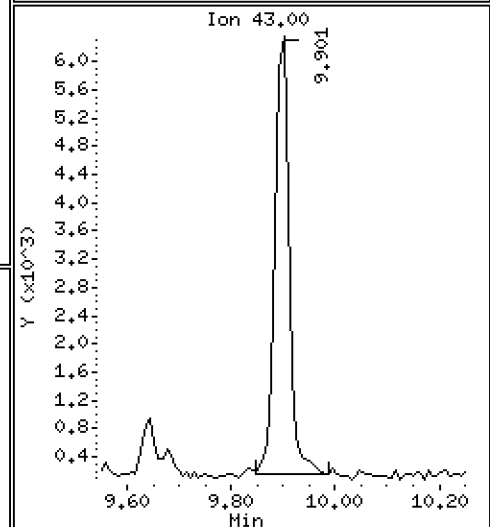
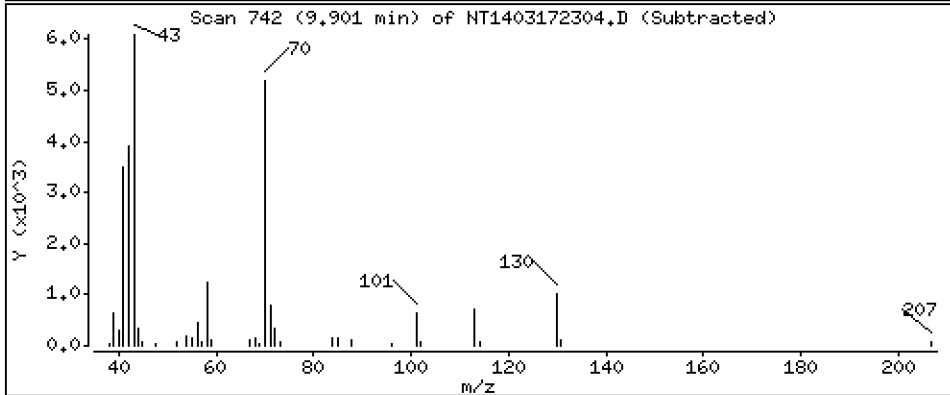
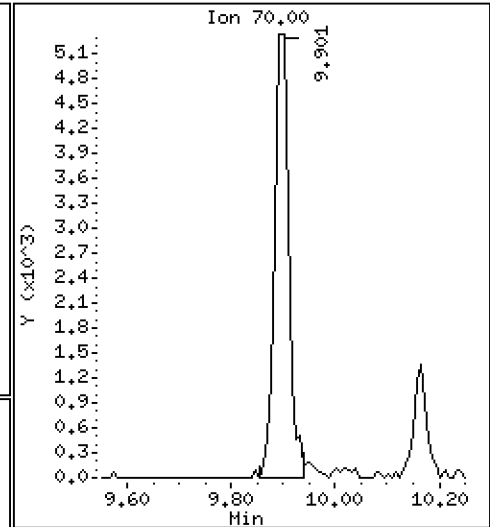
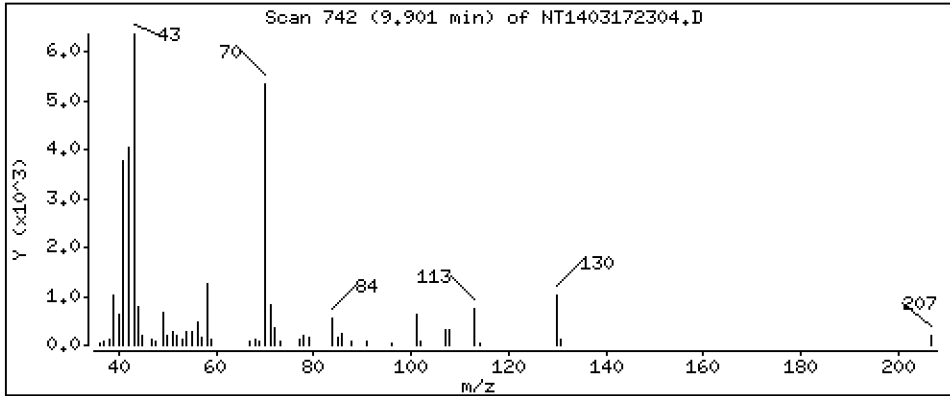
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.1688 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

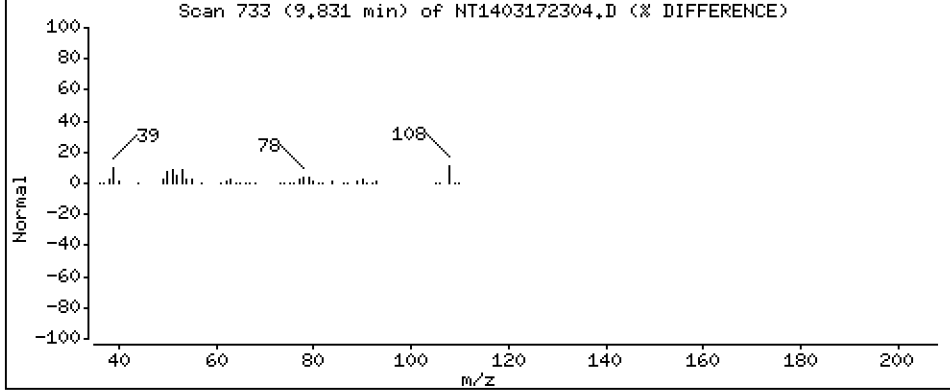
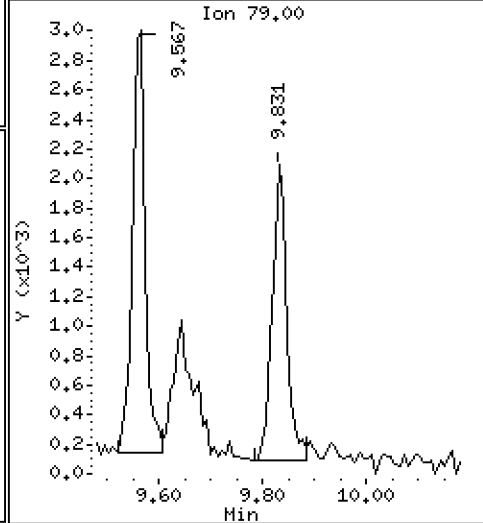
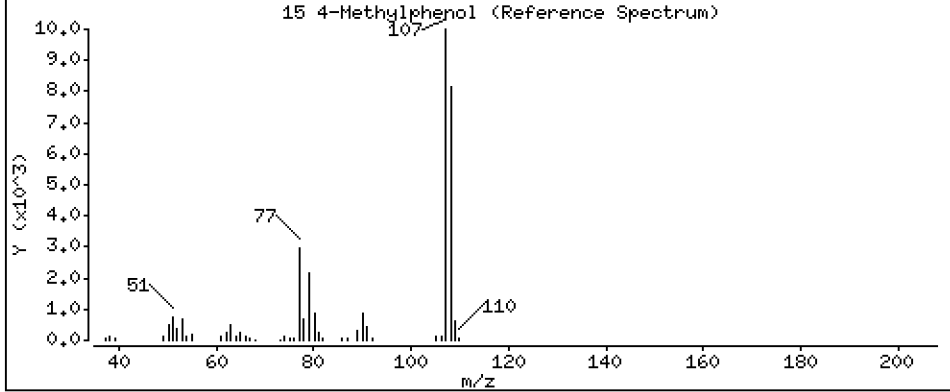
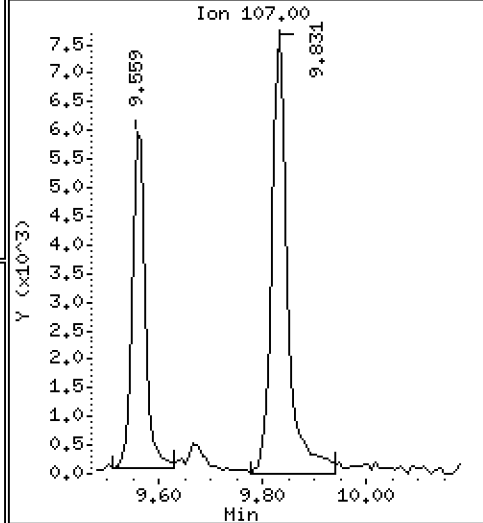
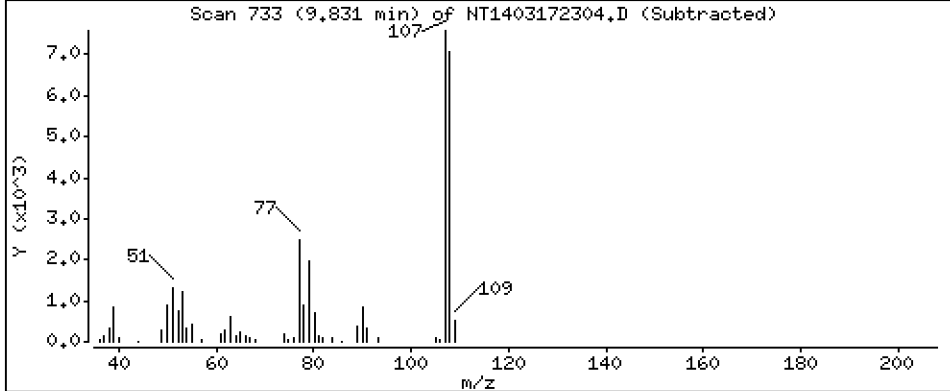
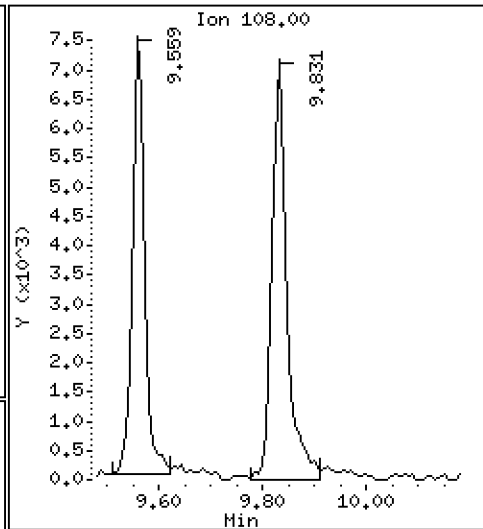
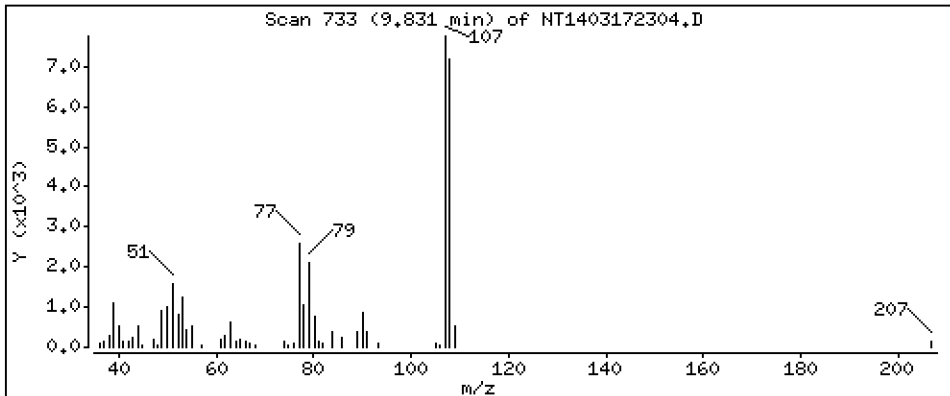
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1583 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

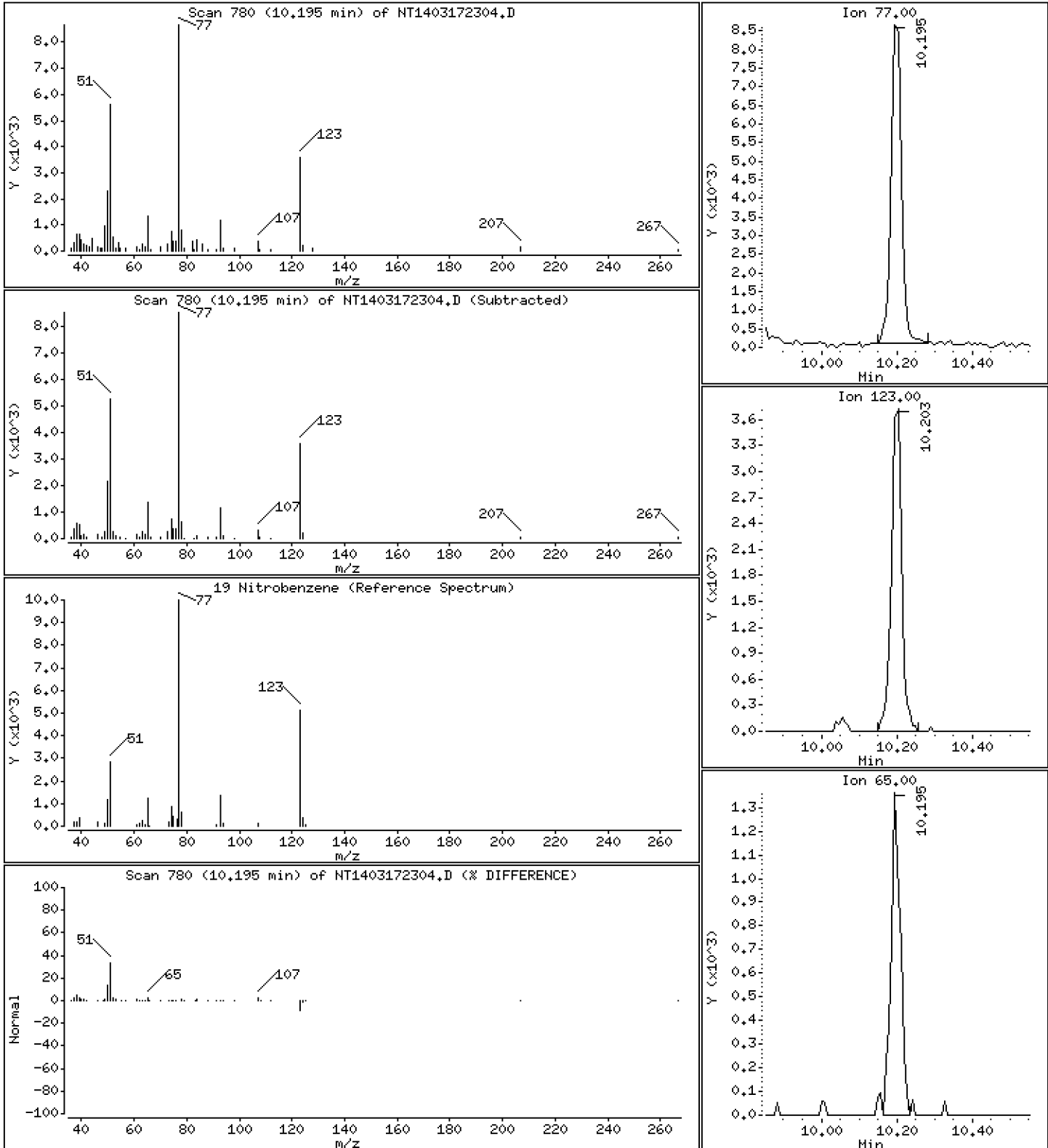
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,1840 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

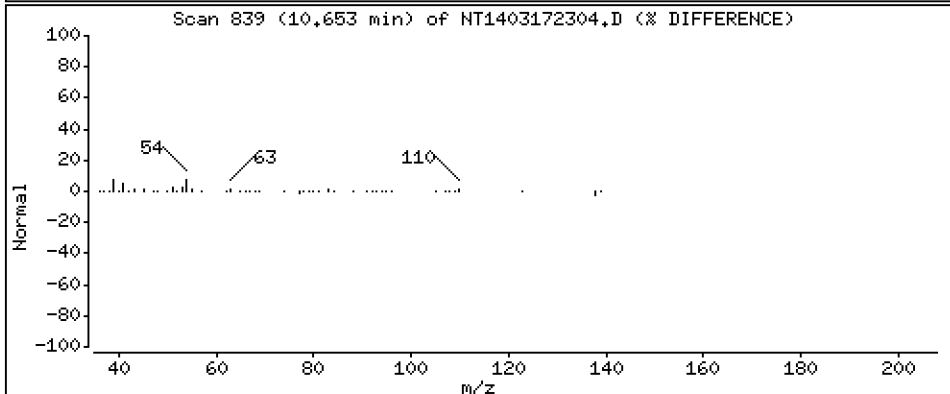
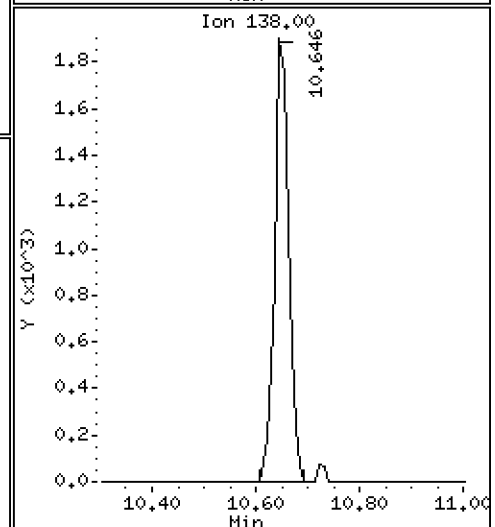
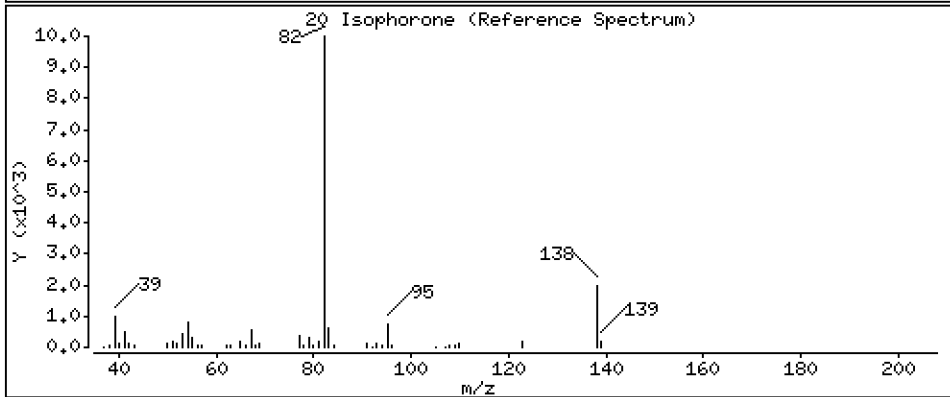
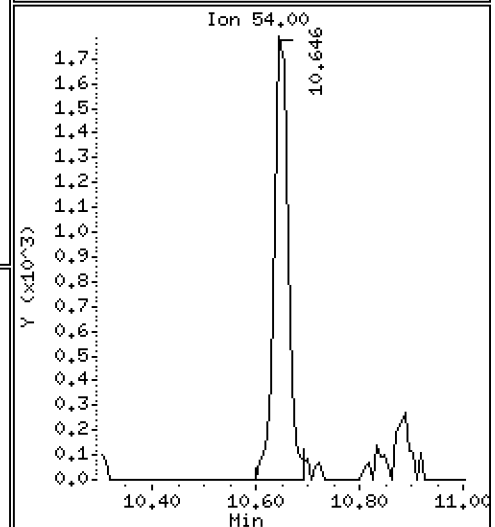
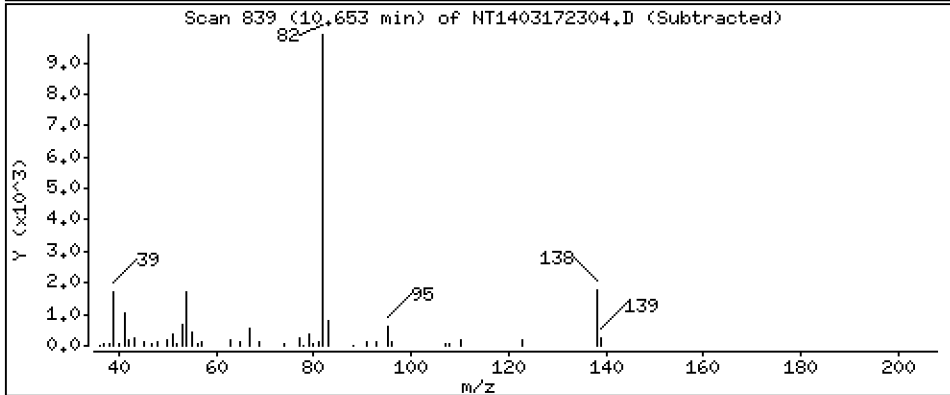
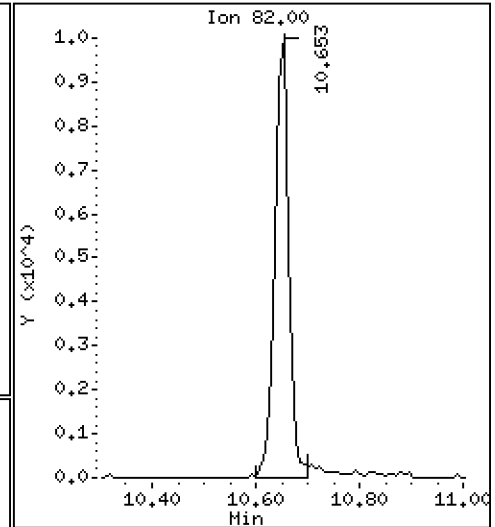
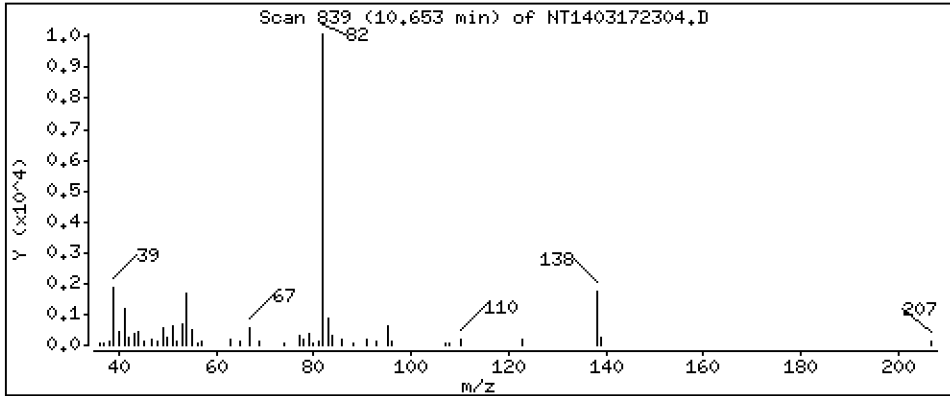
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1523 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

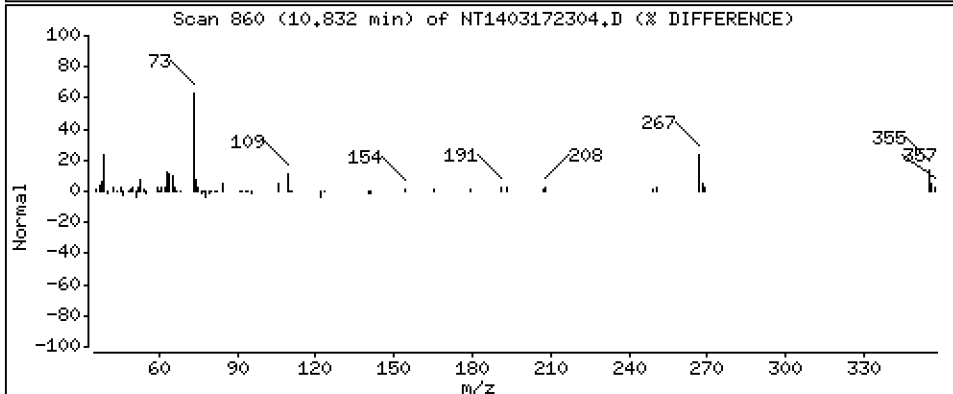
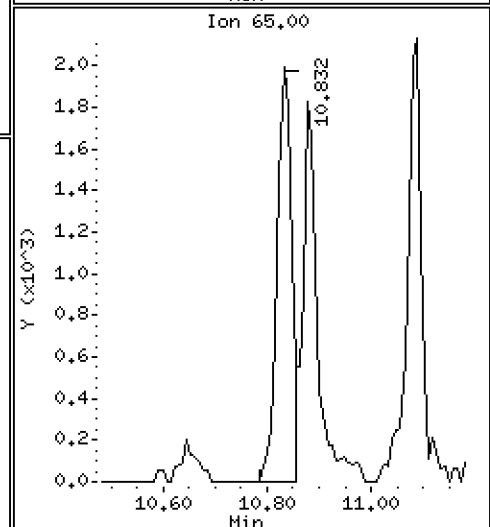
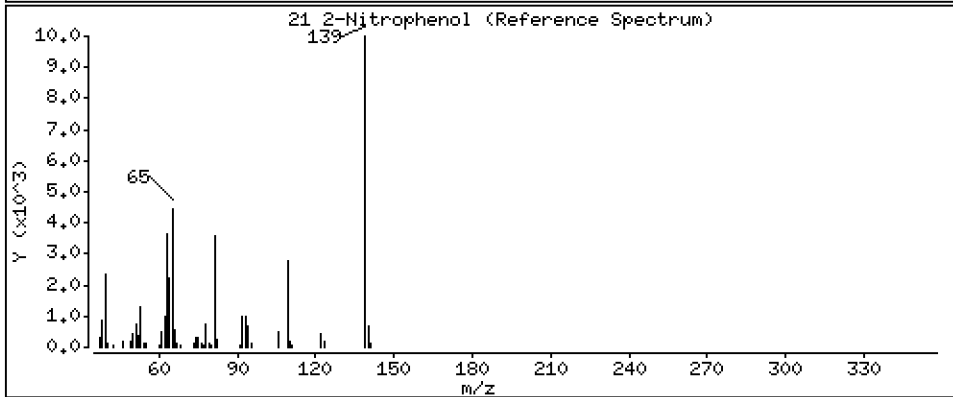
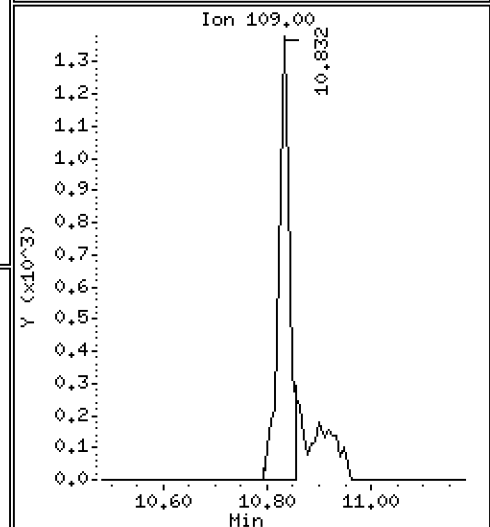
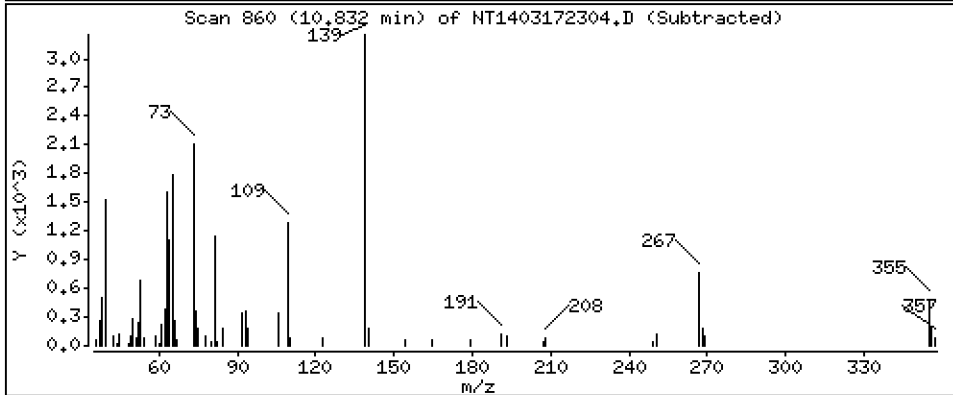
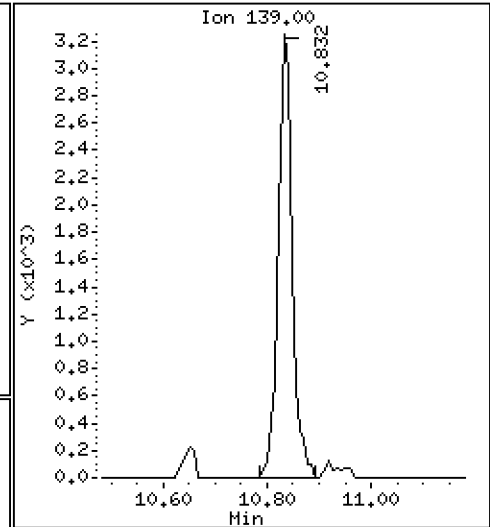
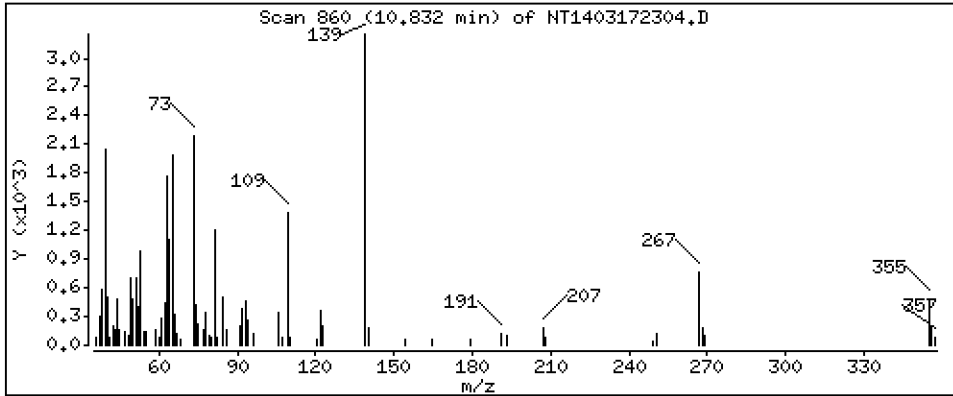
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1214 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

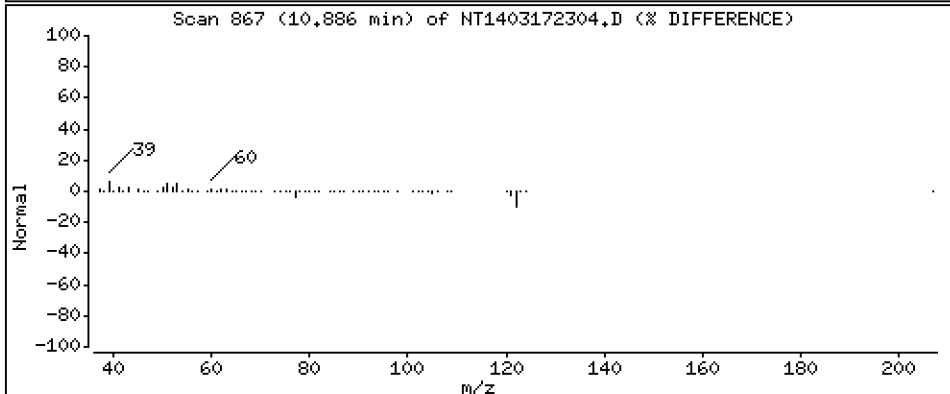
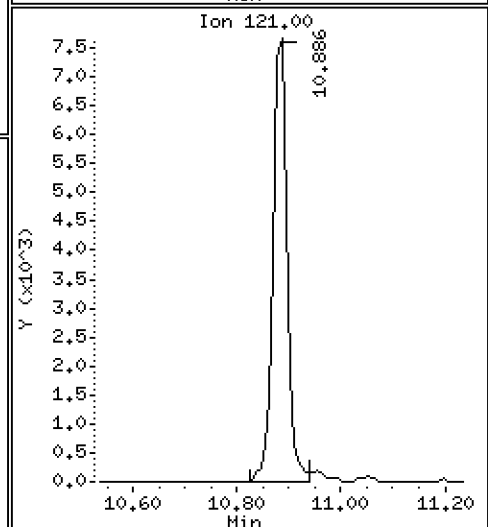
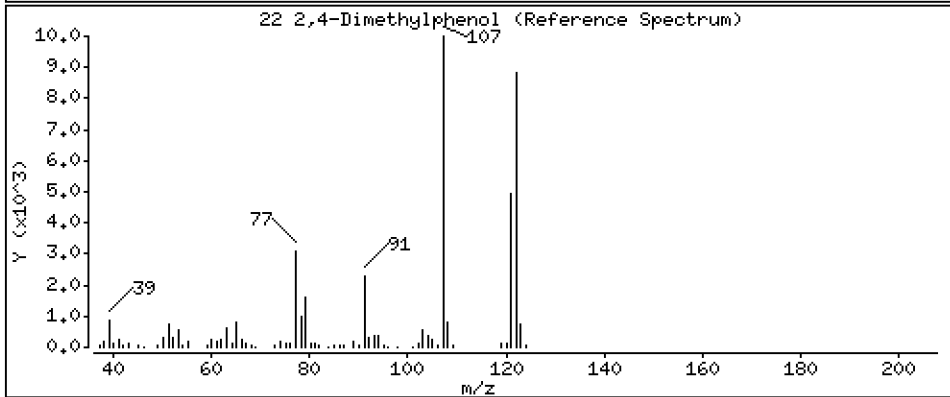
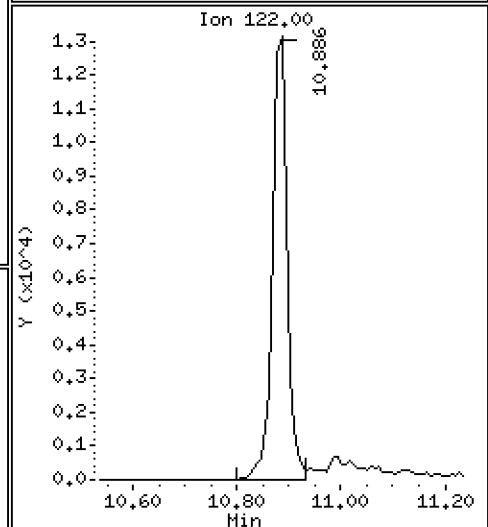
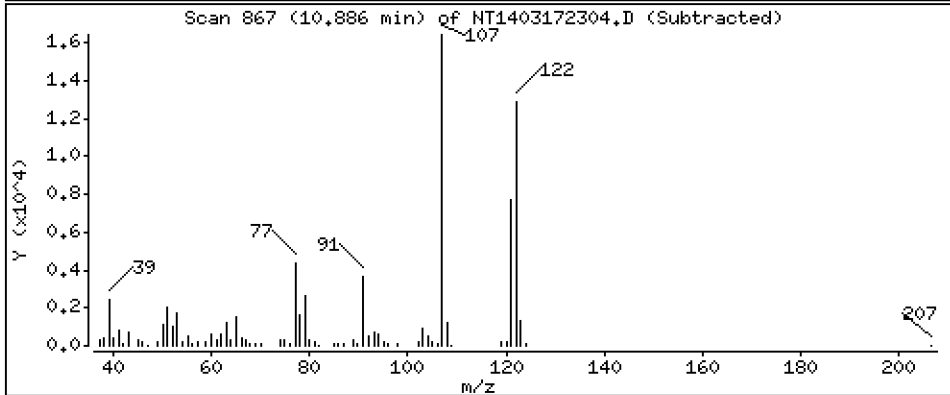
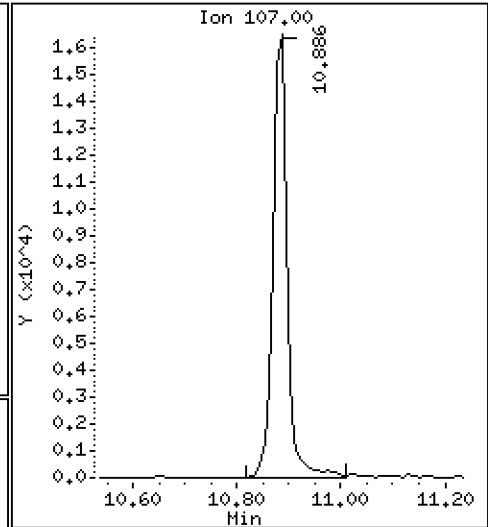
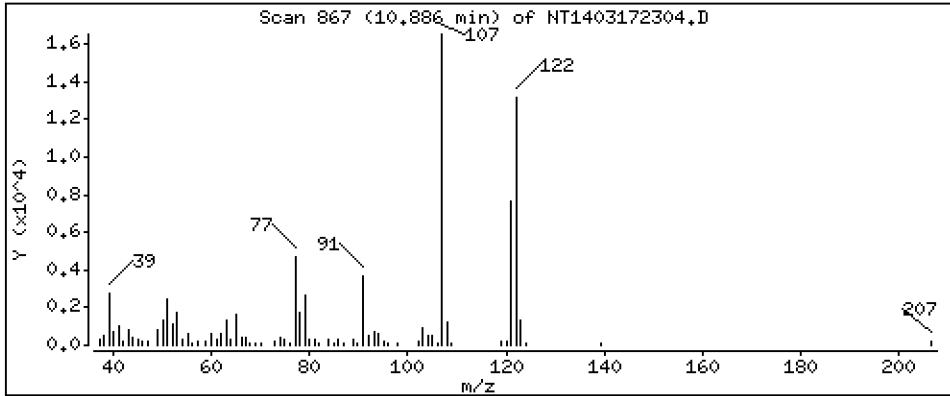
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,4112 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

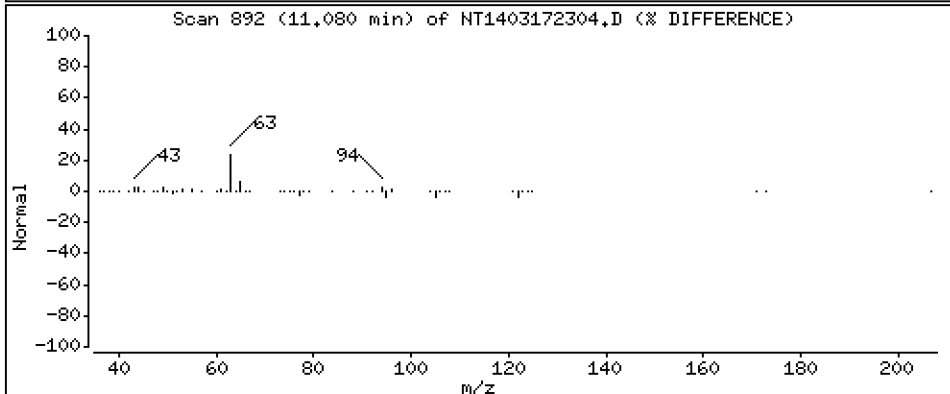
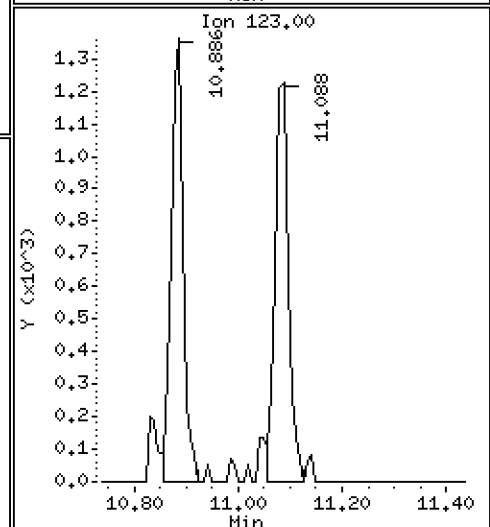
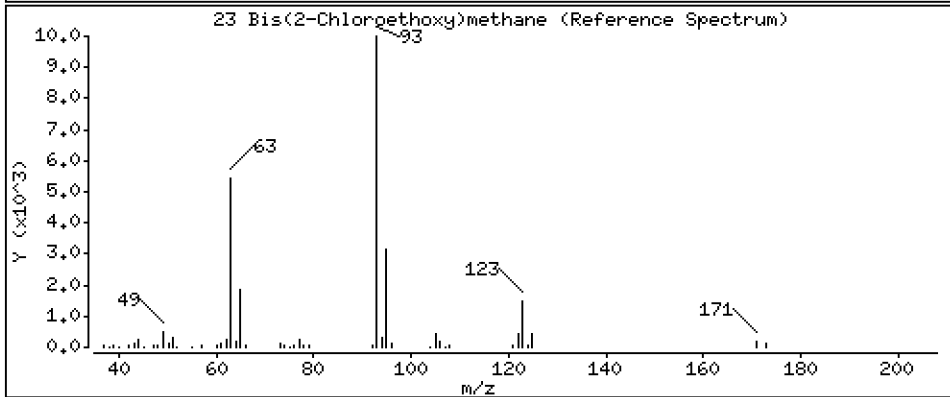
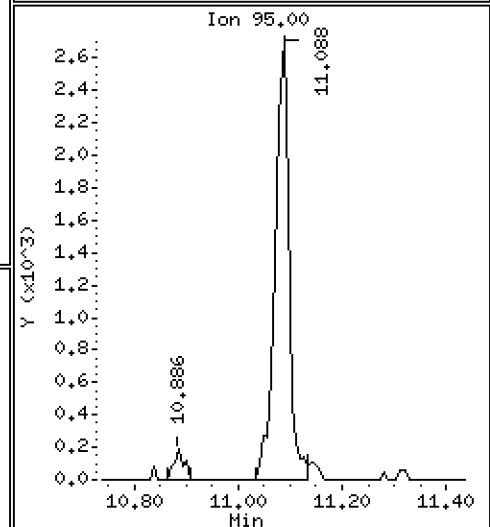
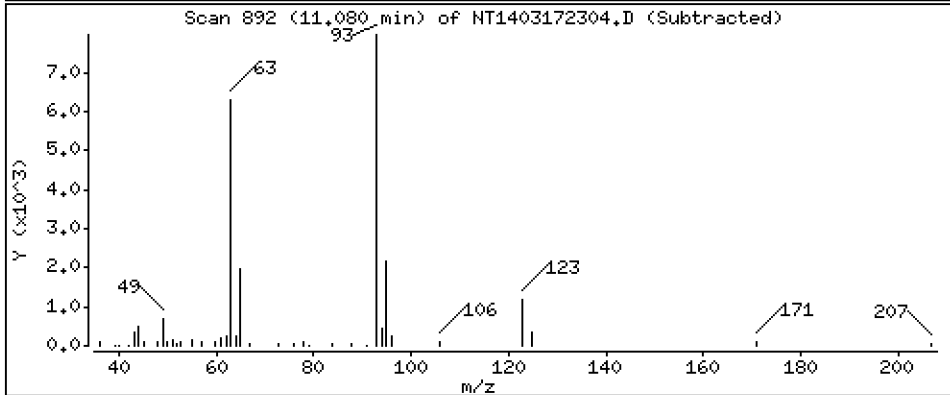
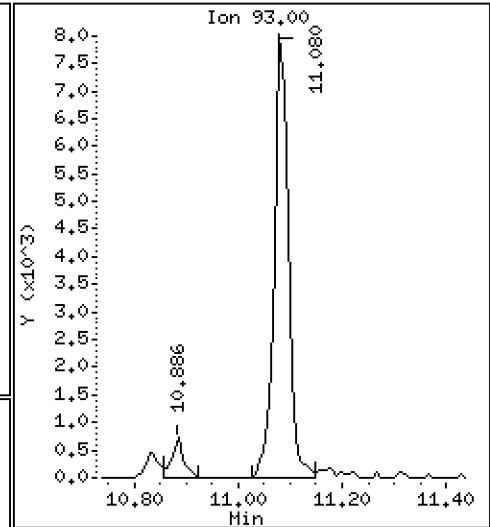
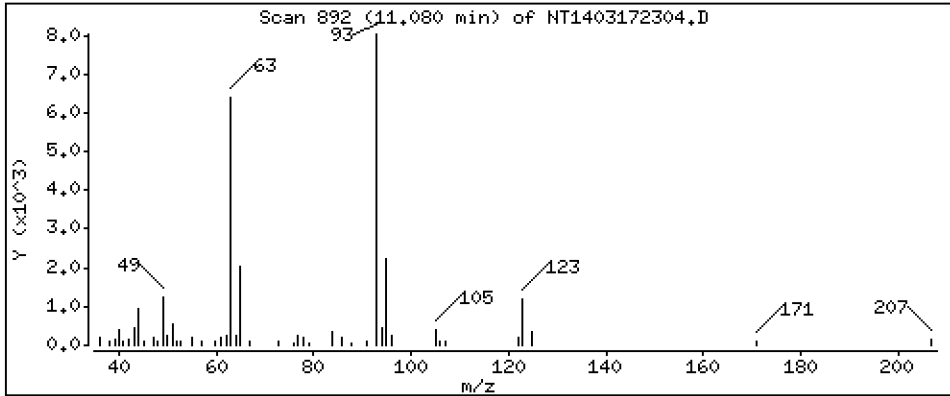
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

23 Bis(2-Chloroethoxy)methane

Concentration: 0.1847 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

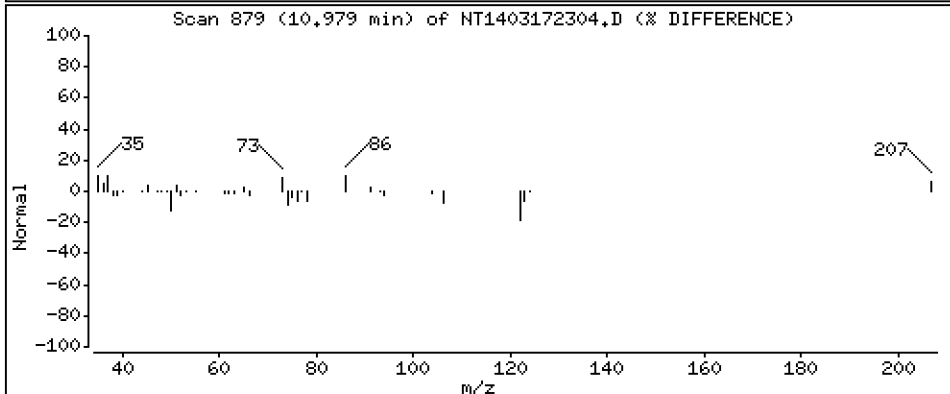
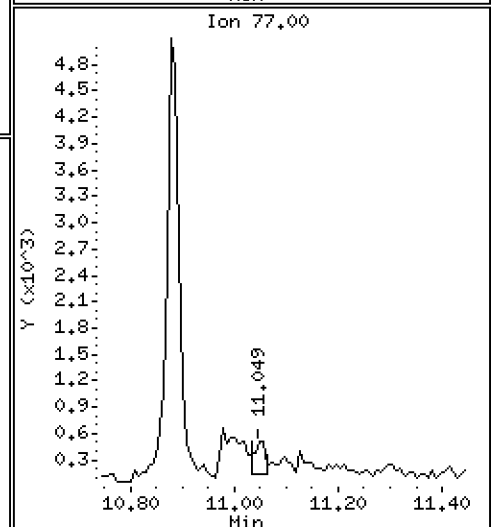
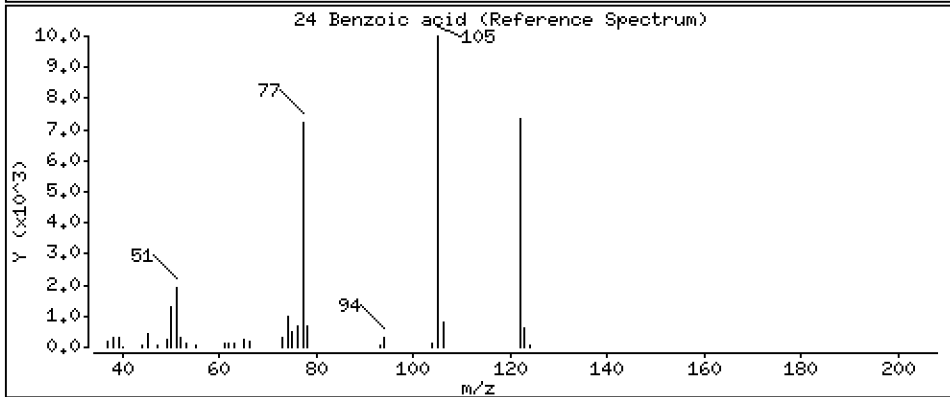
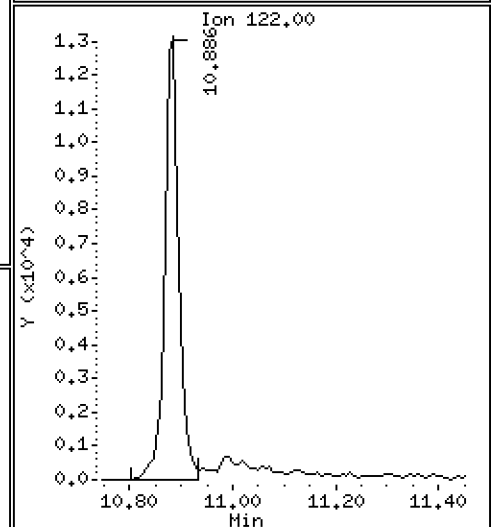
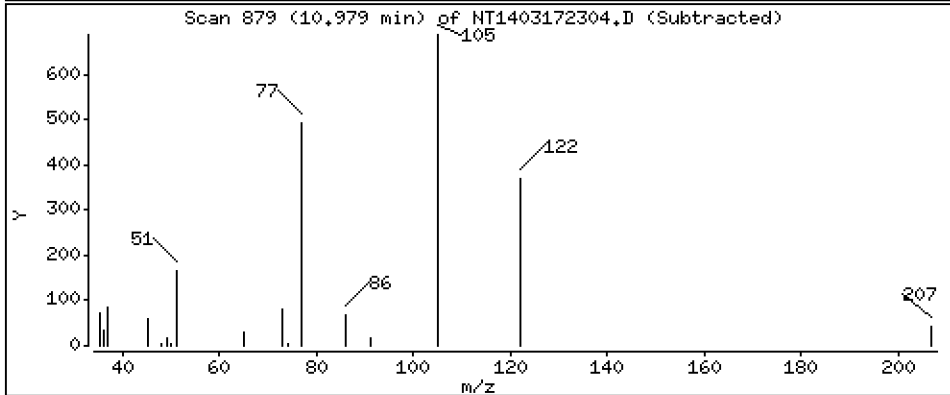
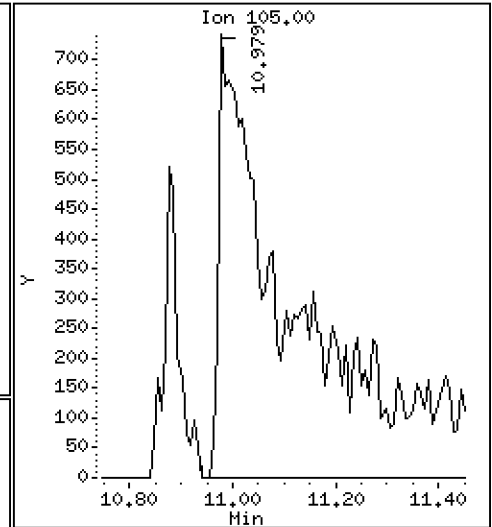
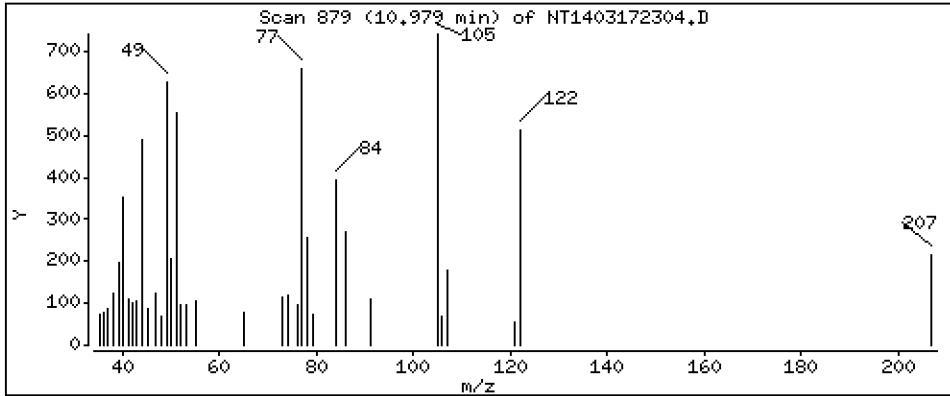
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1295 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

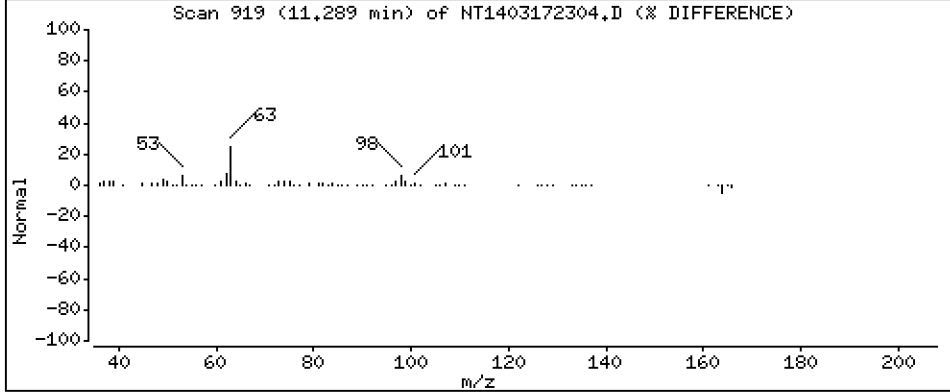
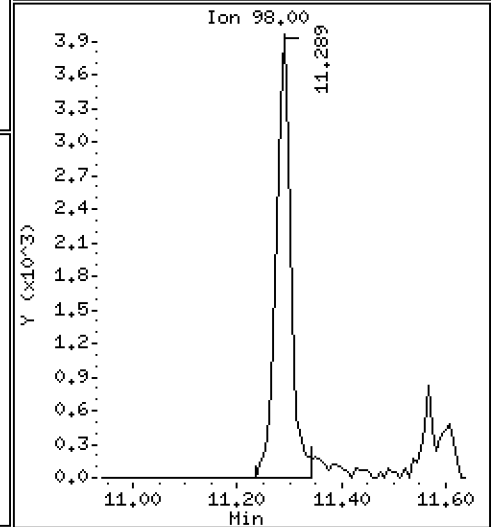
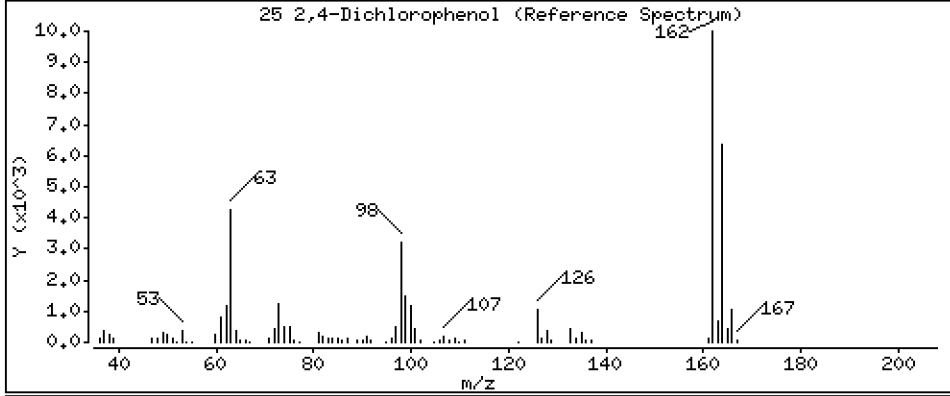
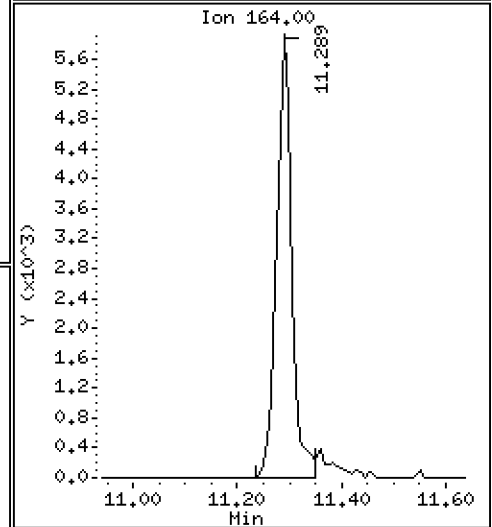
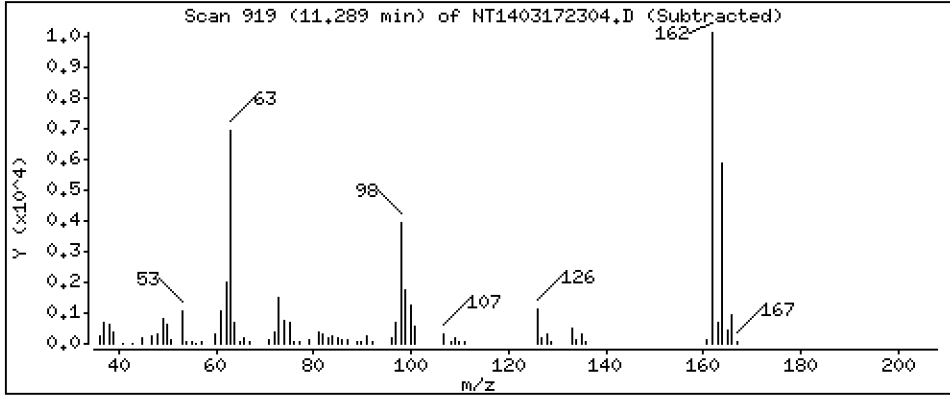
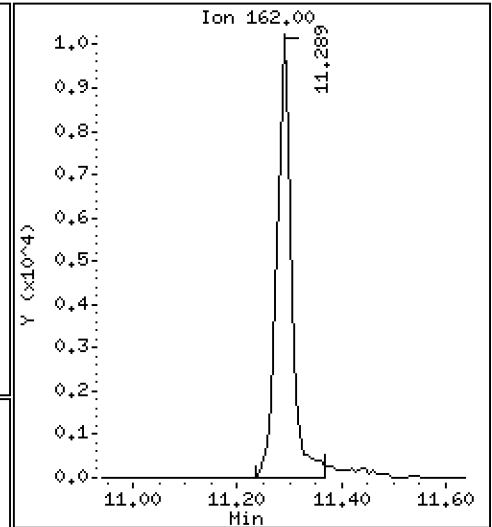
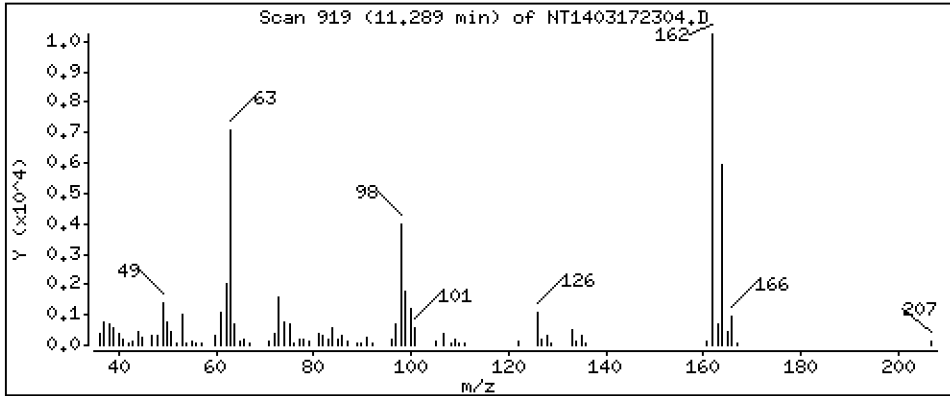
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3425 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

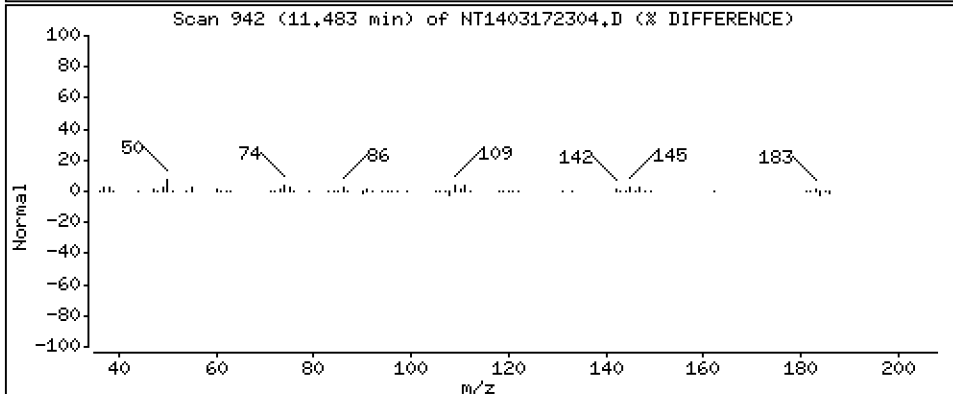
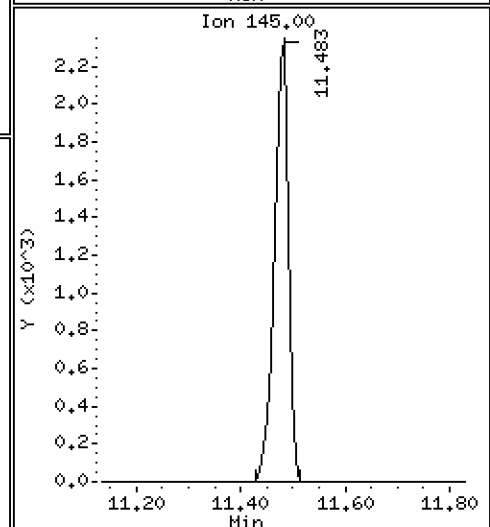
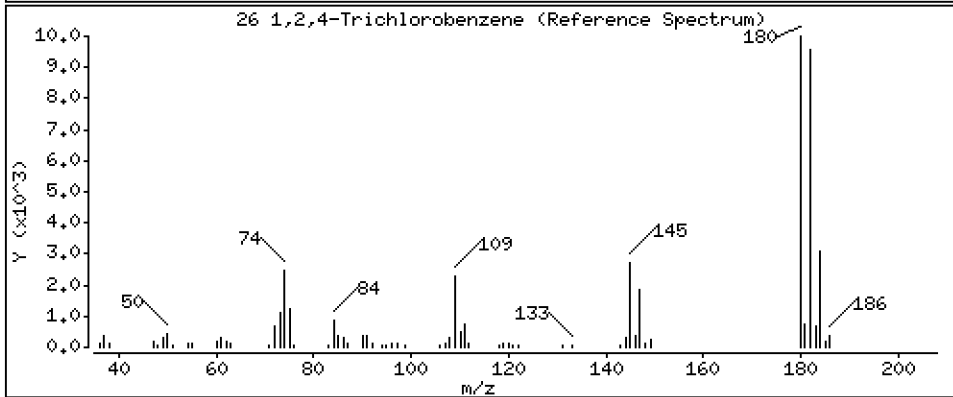
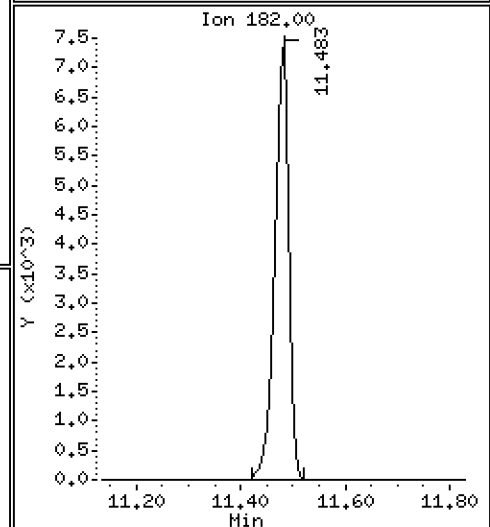
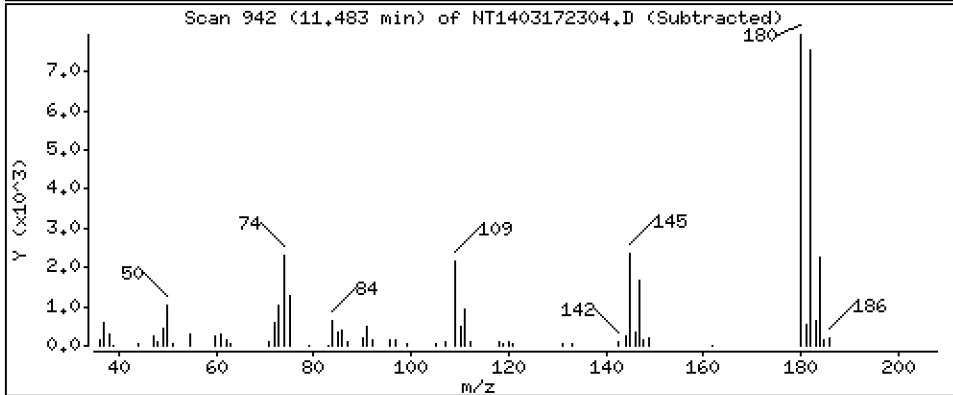
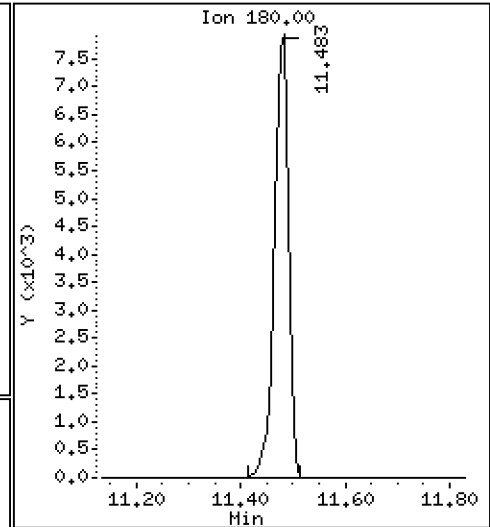
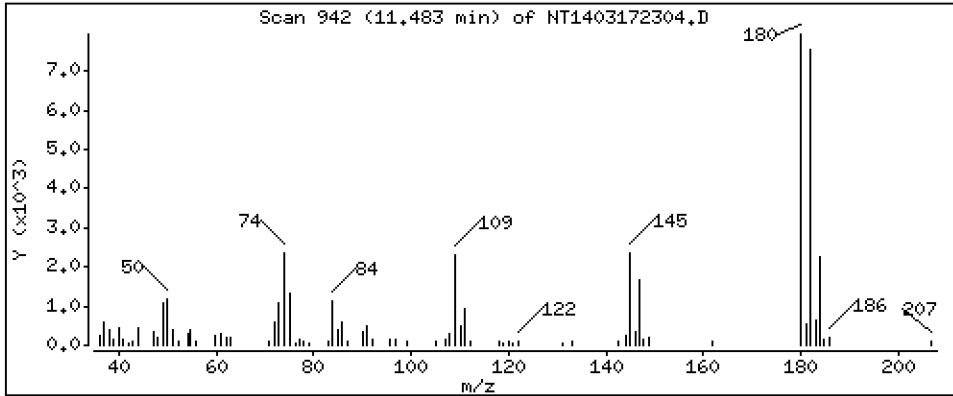
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2035 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

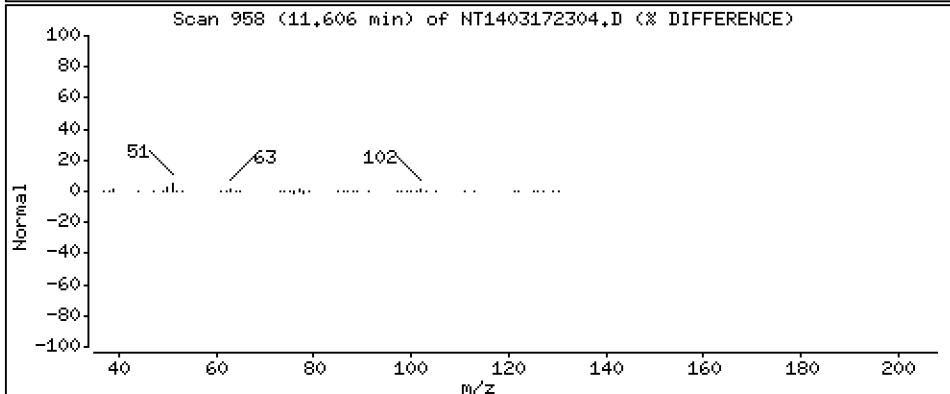
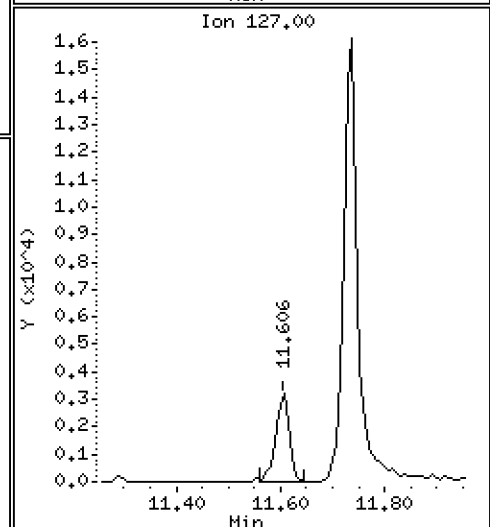
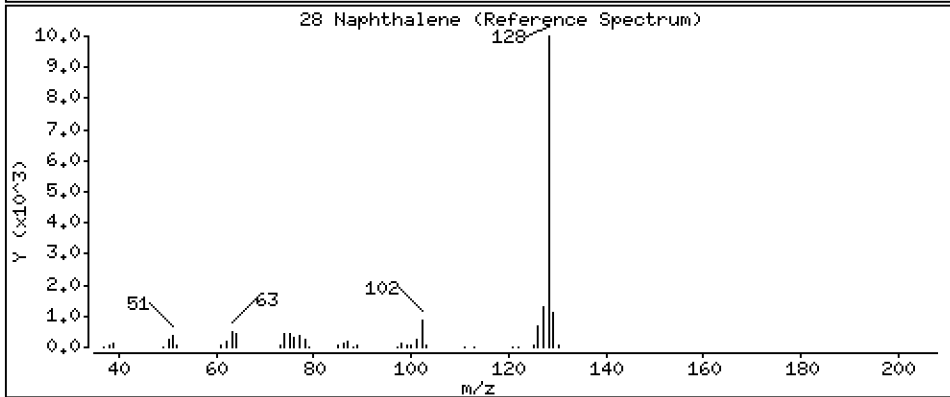
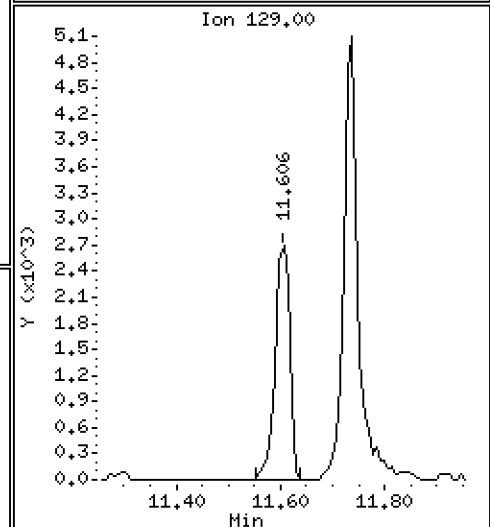
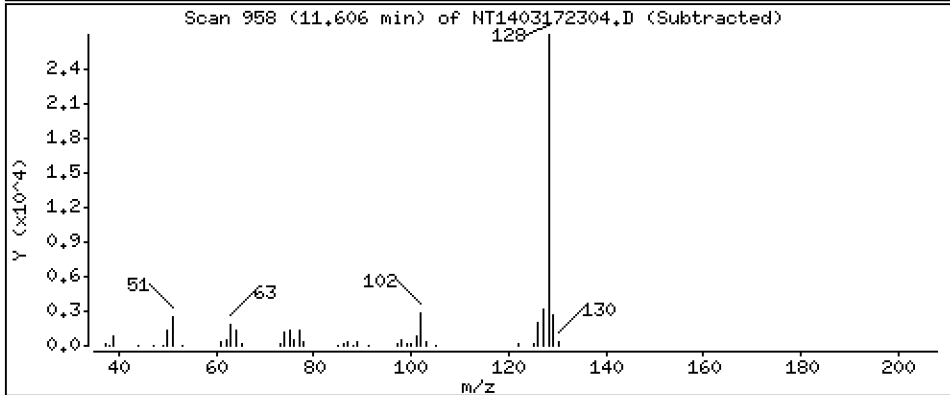
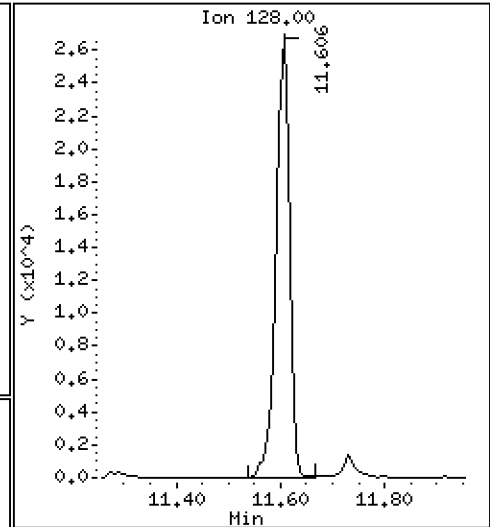
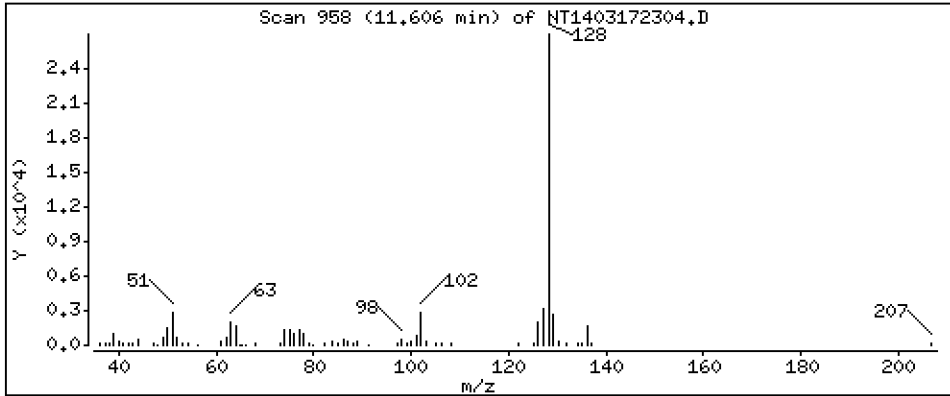
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.2085 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

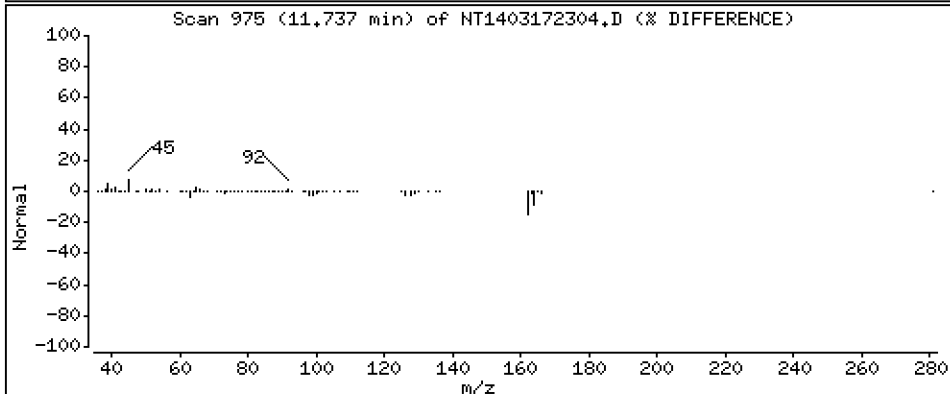
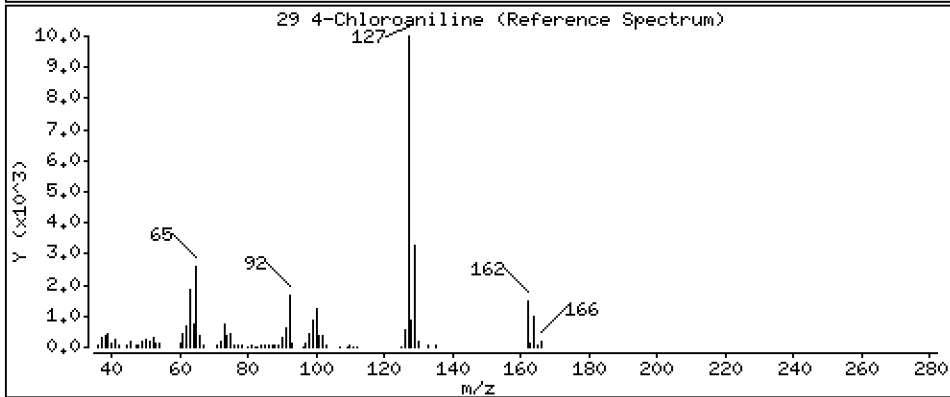
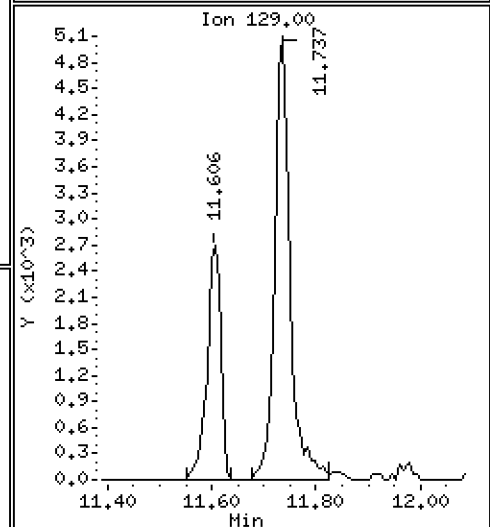
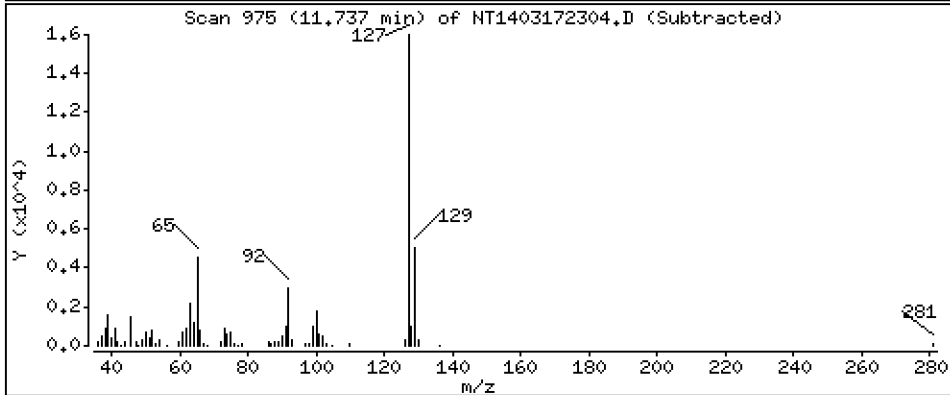
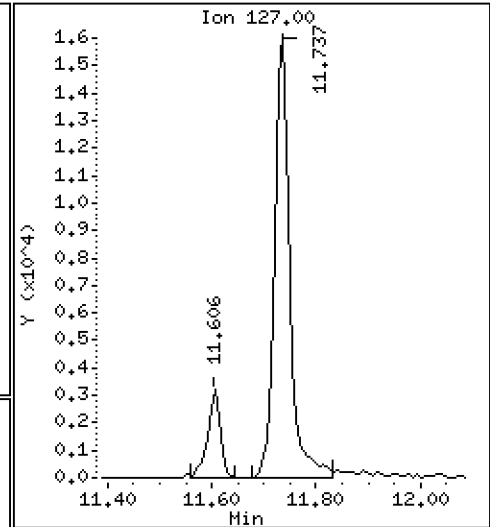
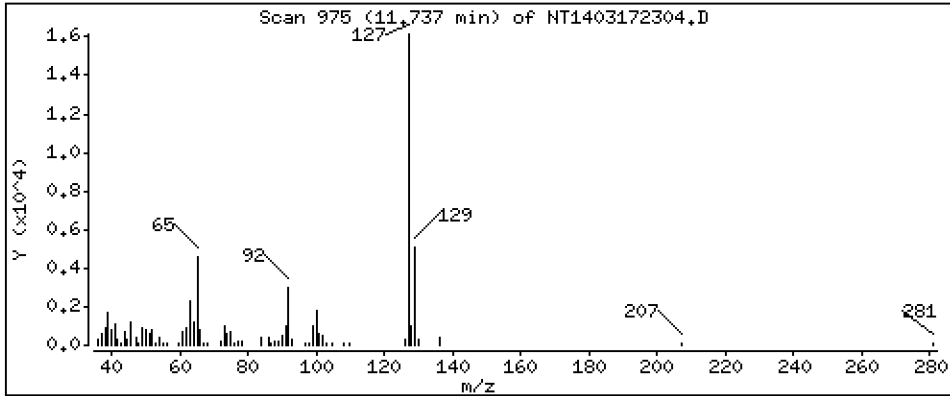
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,3382 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

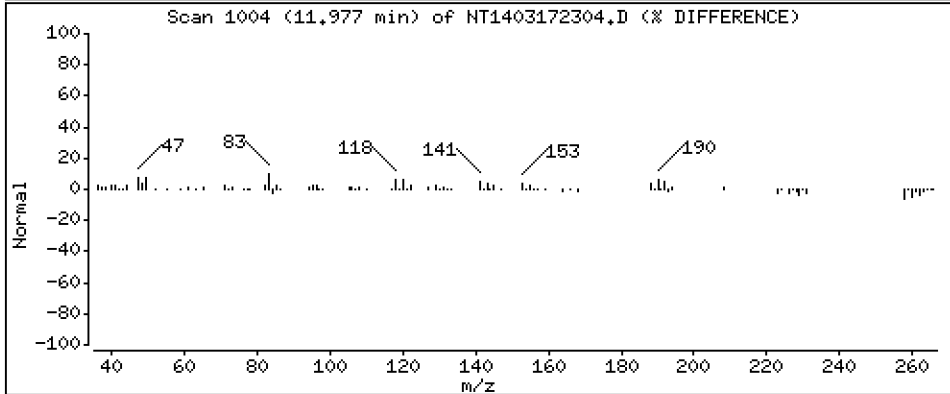
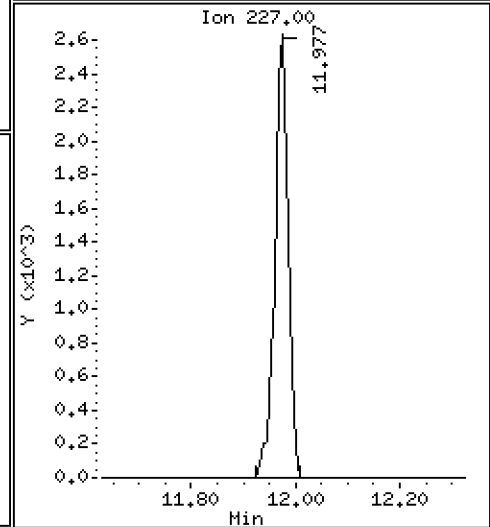
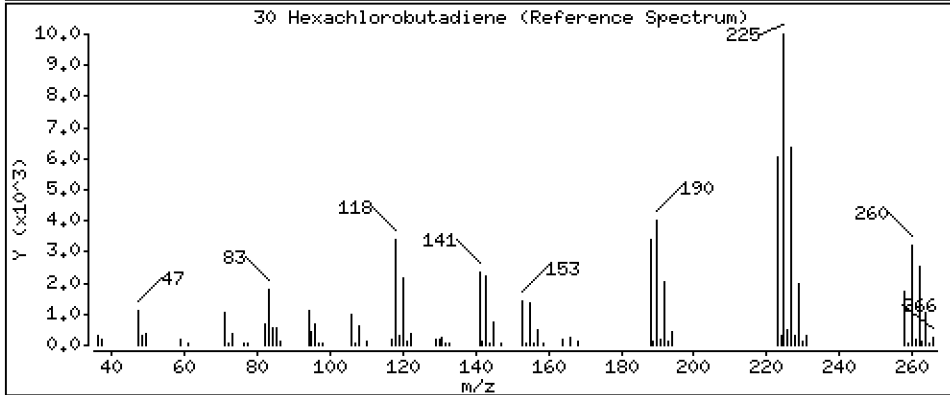
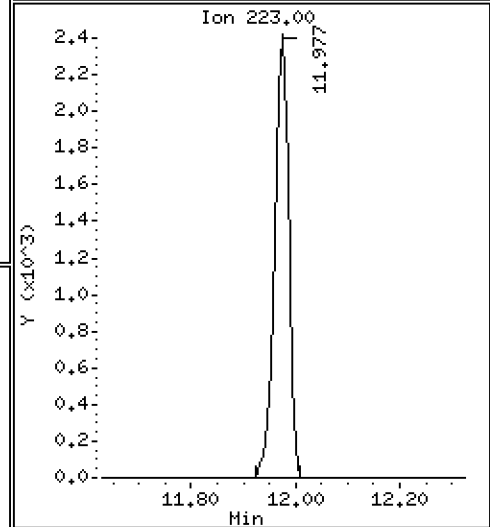
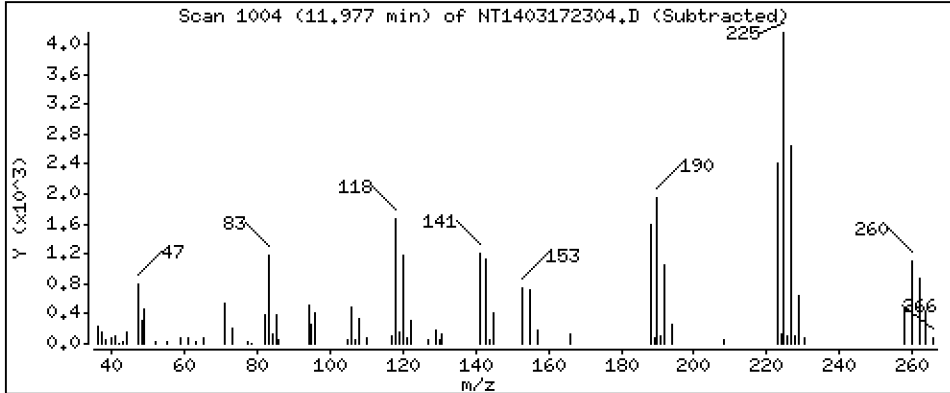
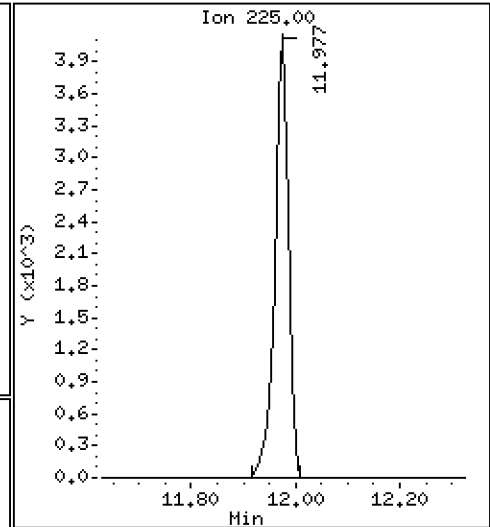
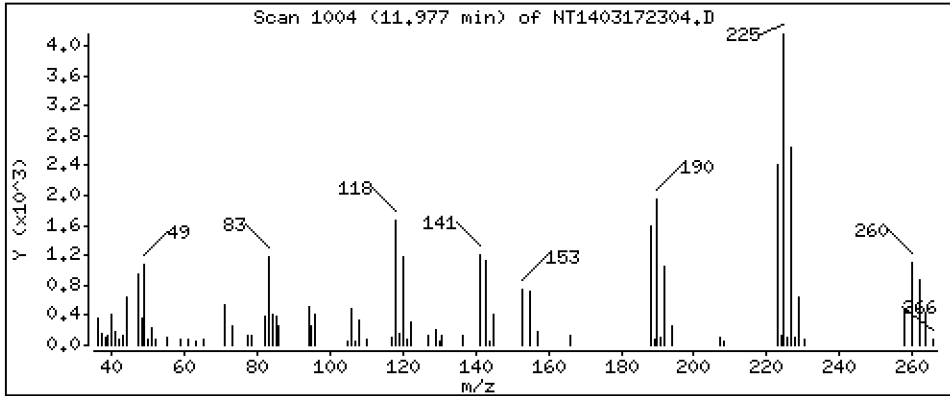
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2222 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

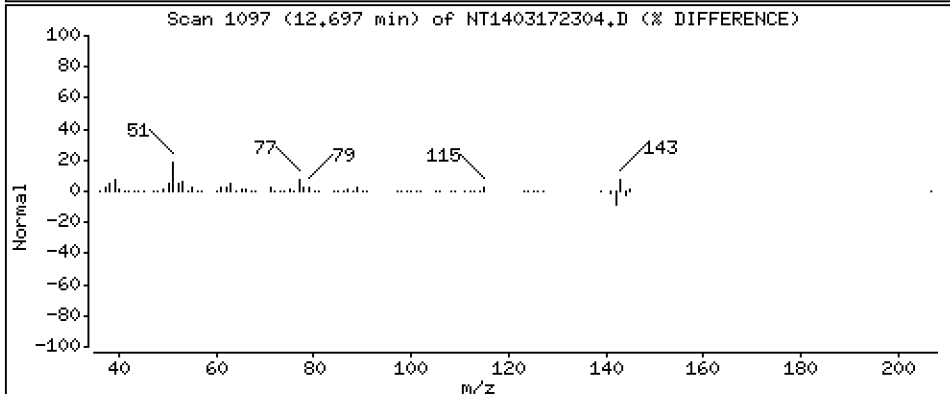
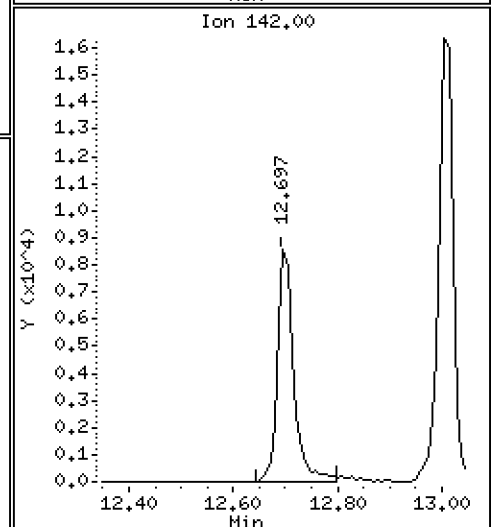
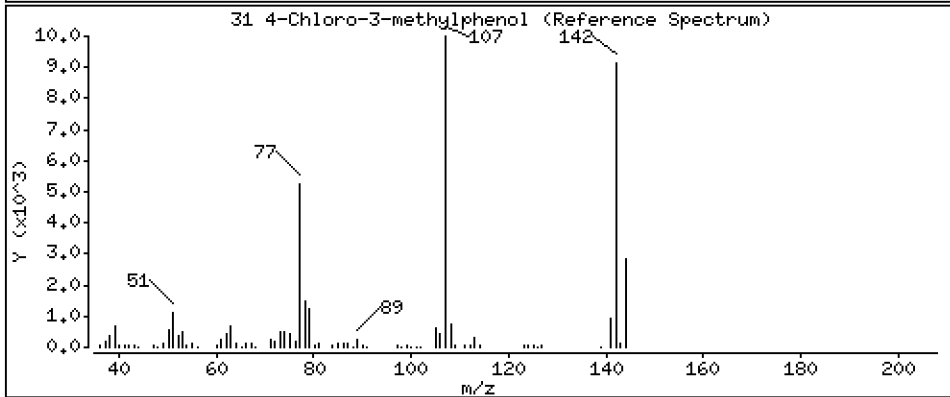
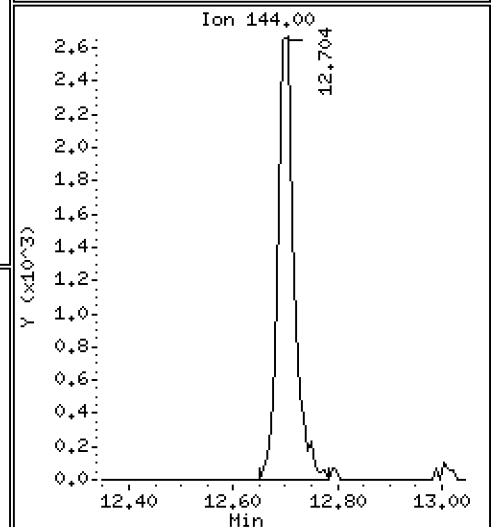
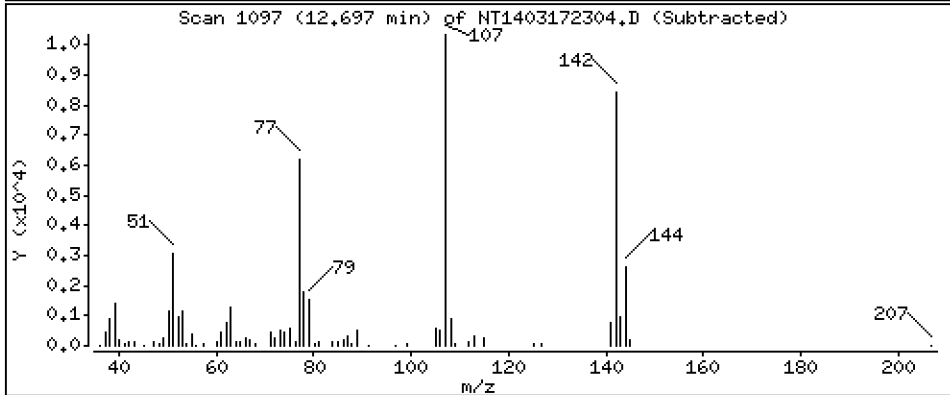
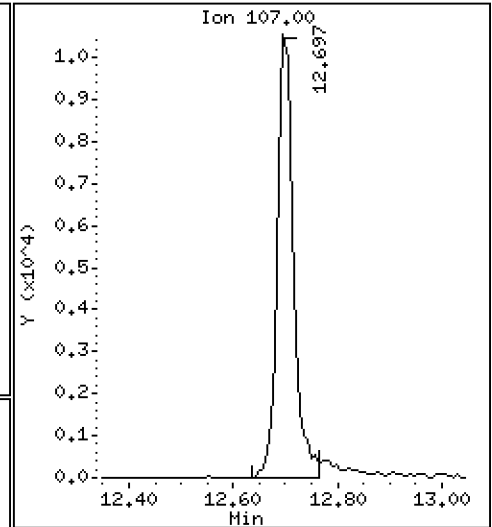
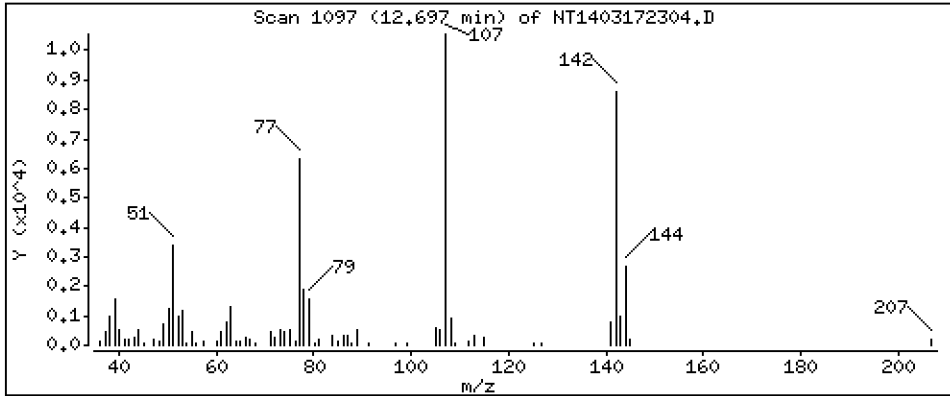
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.3158 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

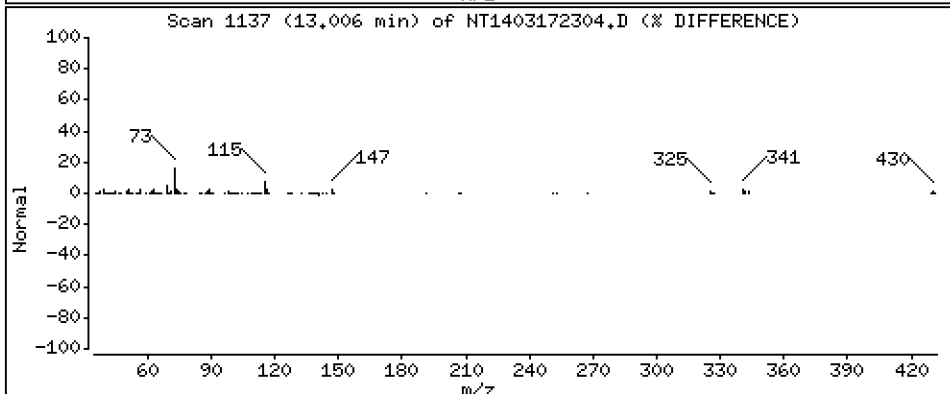
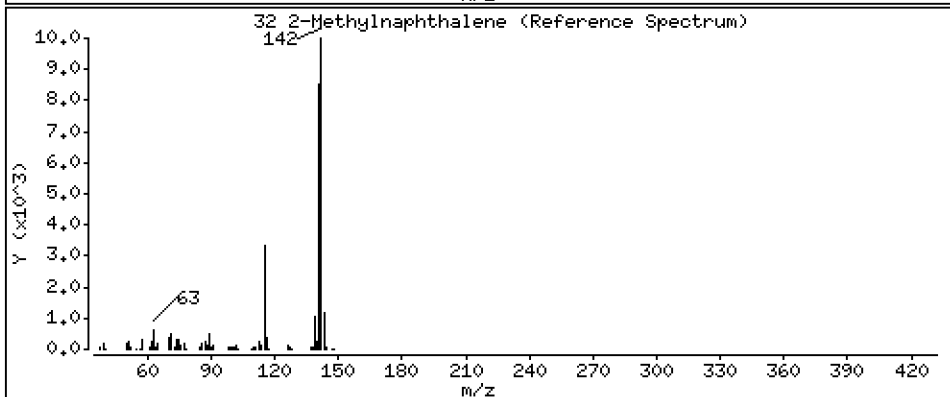
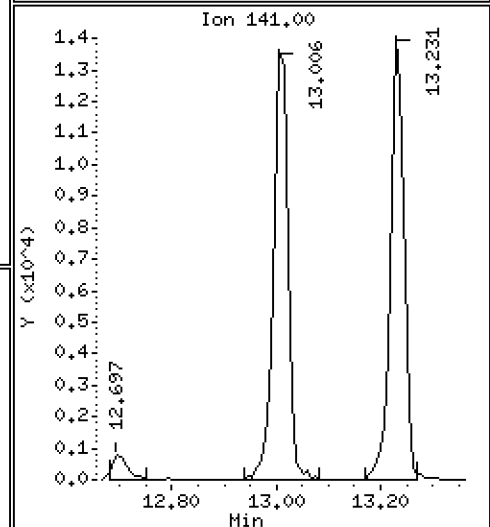
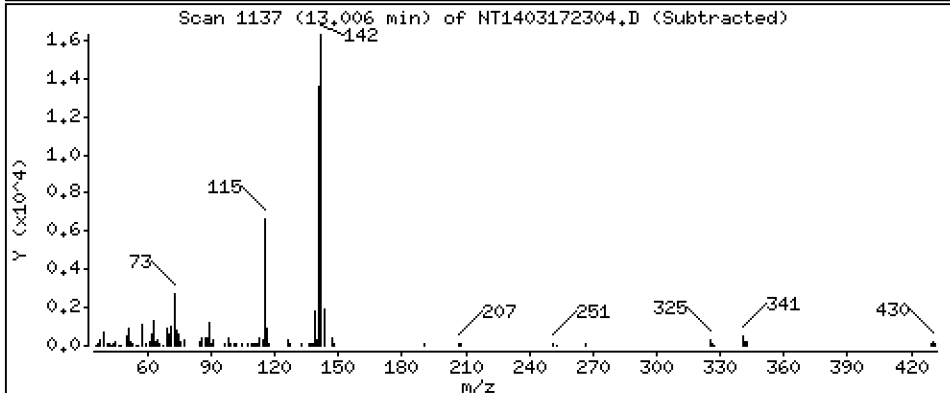
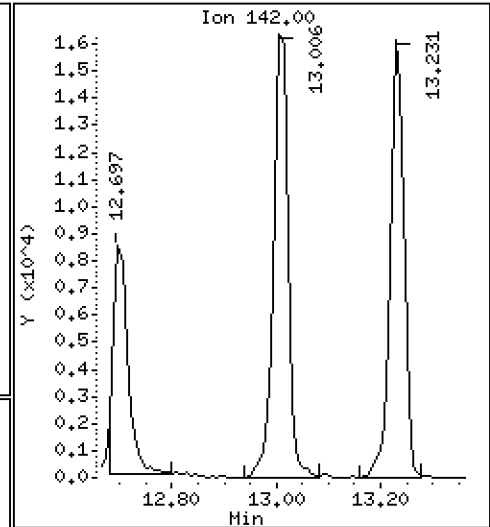
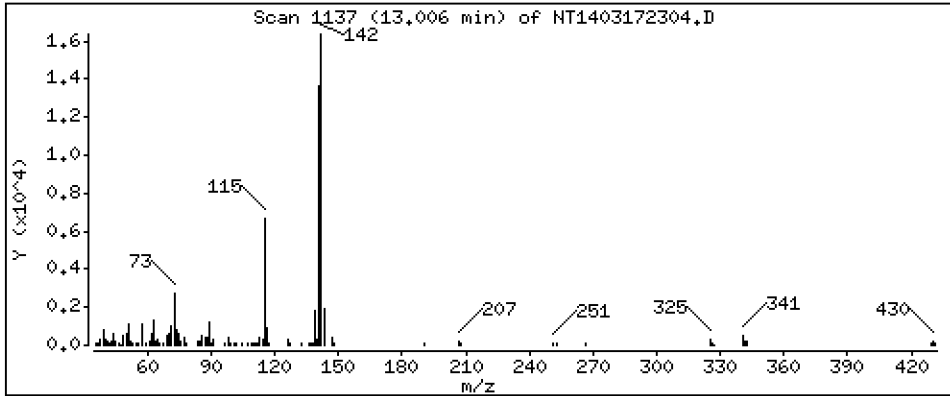
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1987 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

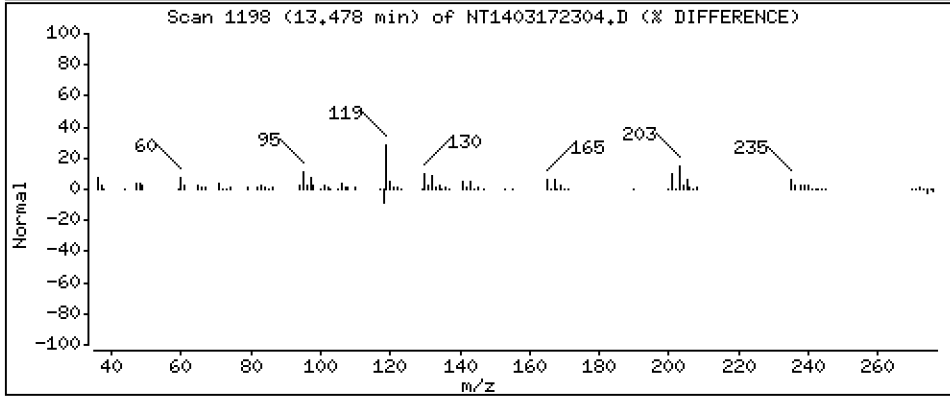
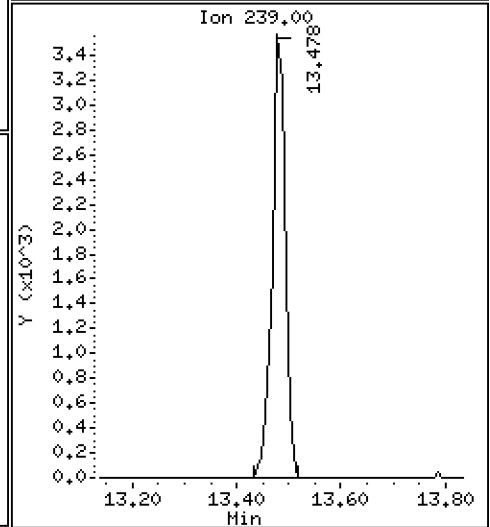
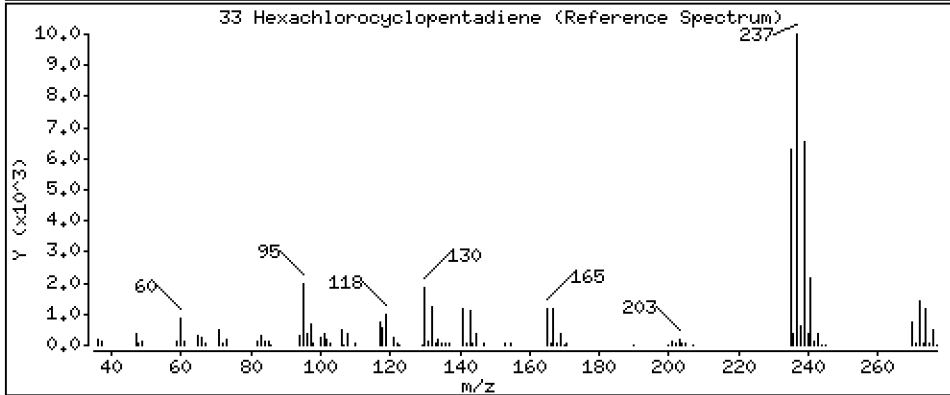
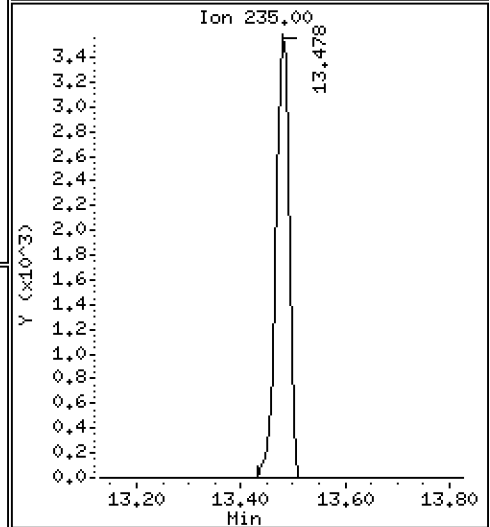
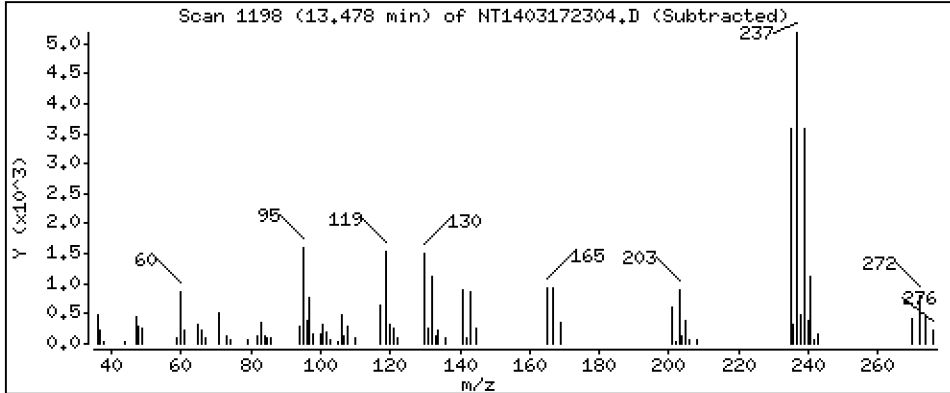
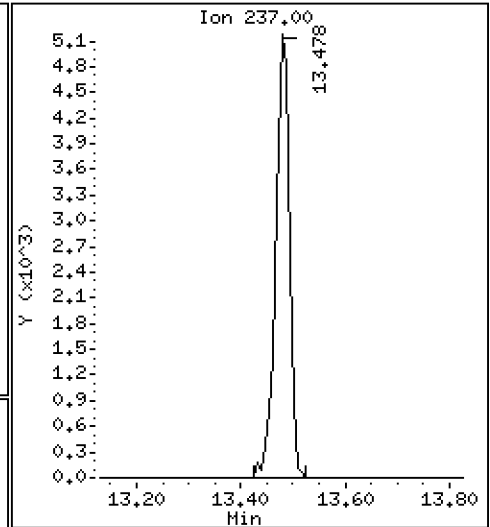
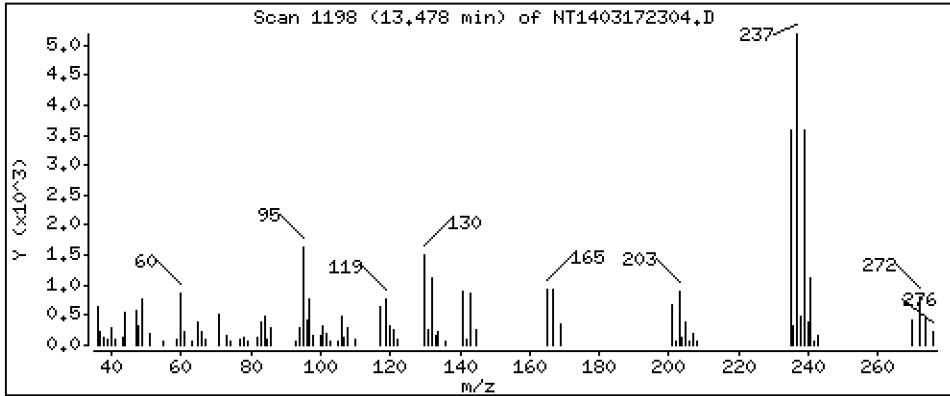
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 0,2606 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

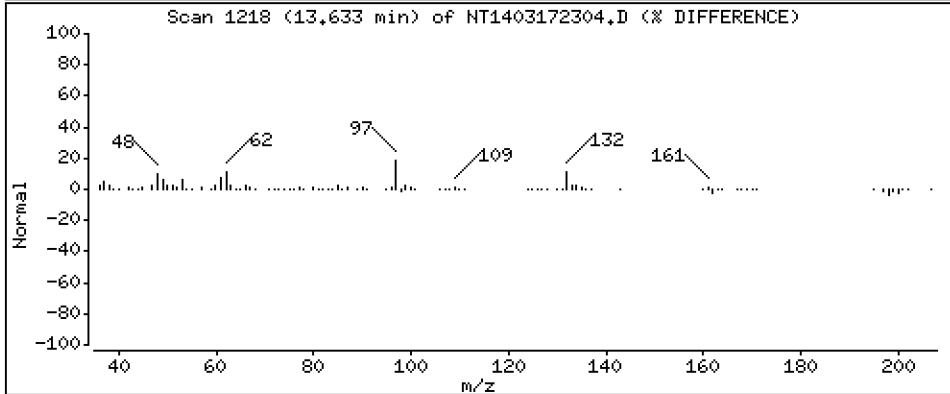
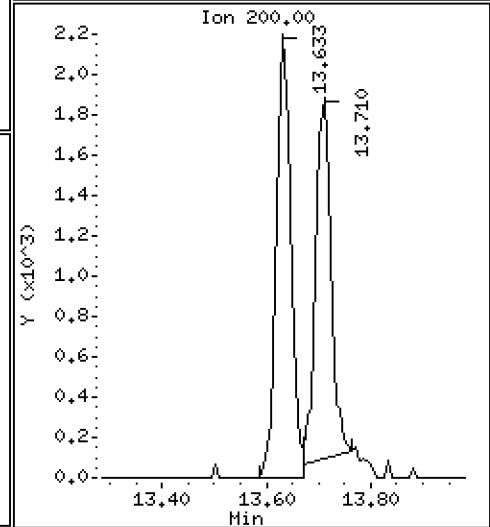
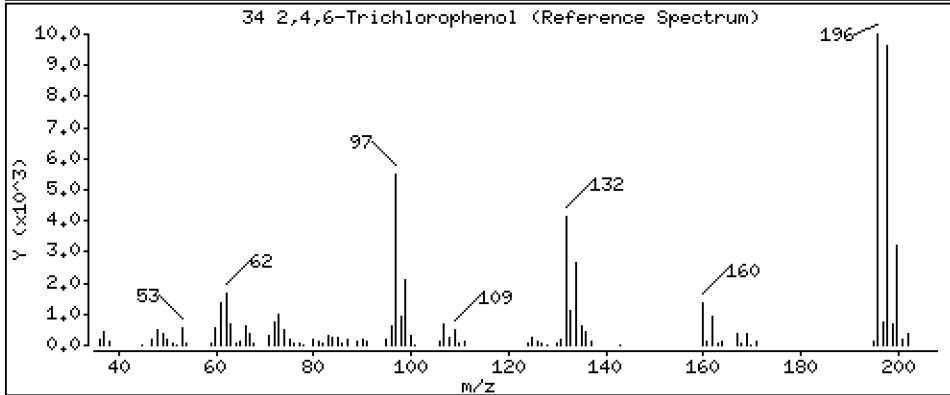
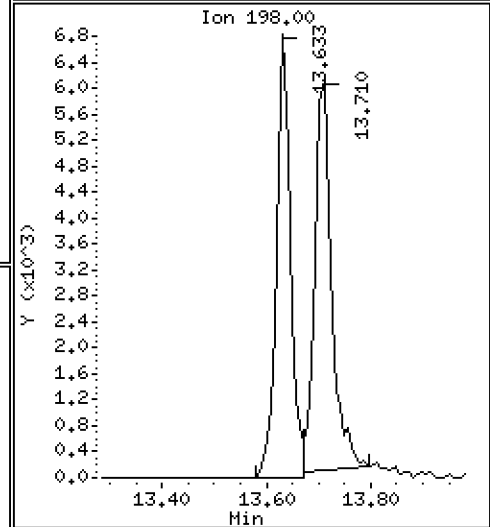
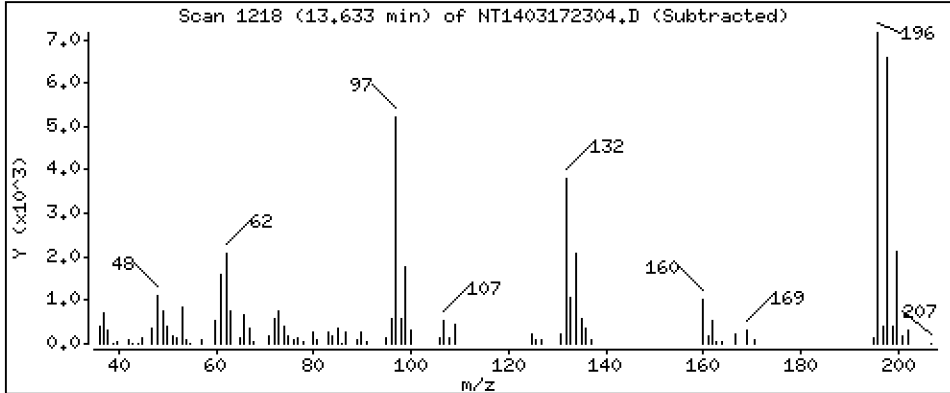
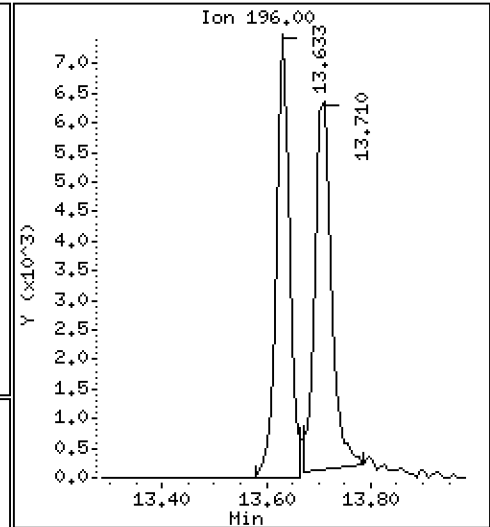
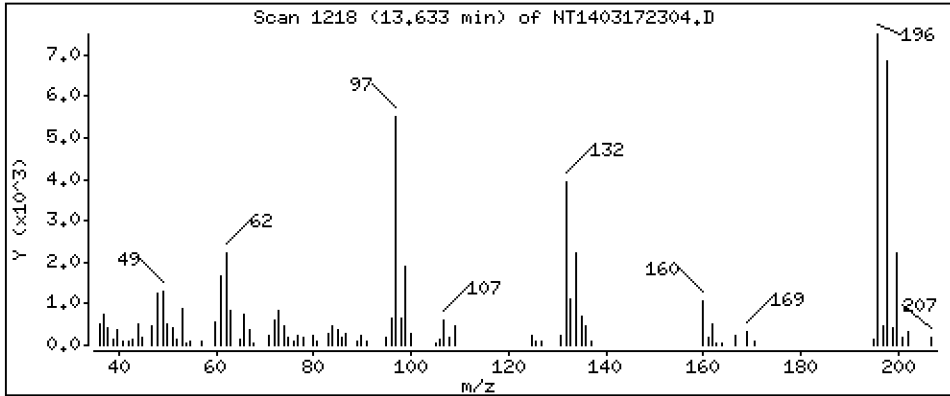
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

34 2,4,6-Trichlorophenol

Concentration: 0.2944 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

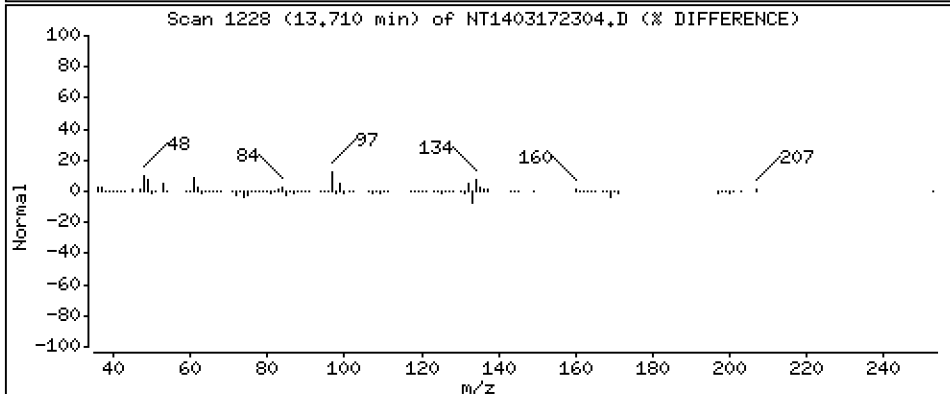
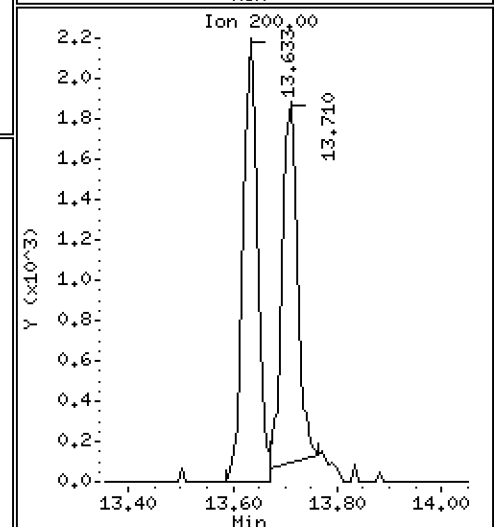
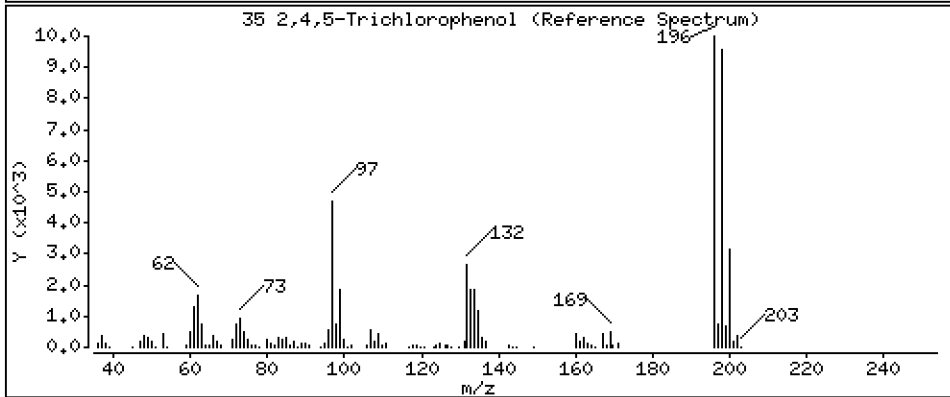
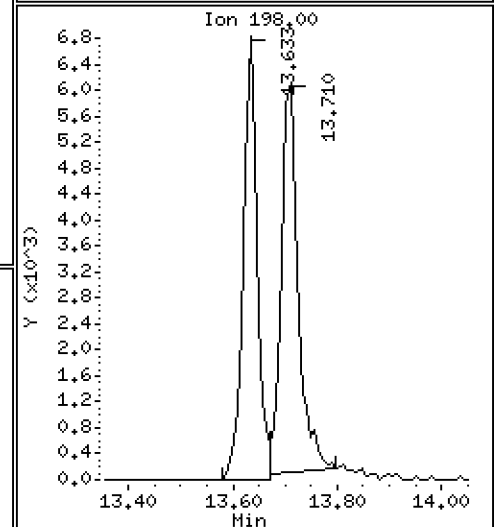
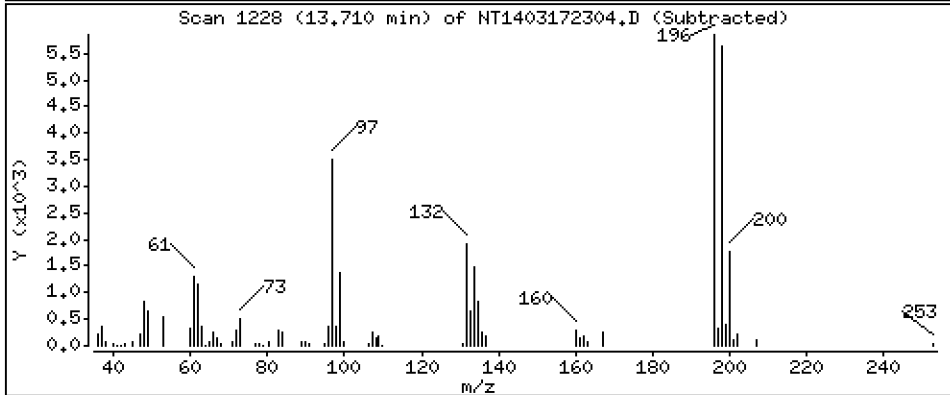
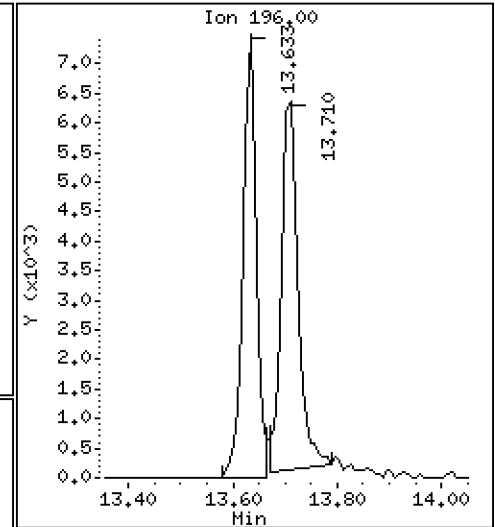
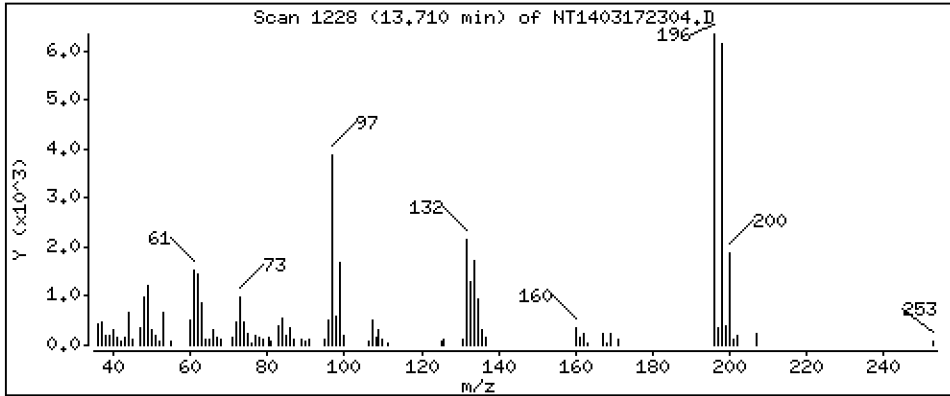
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2996 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

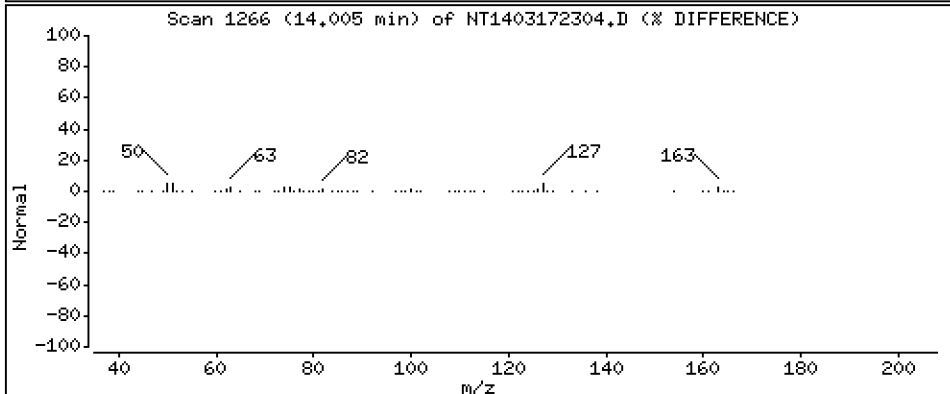
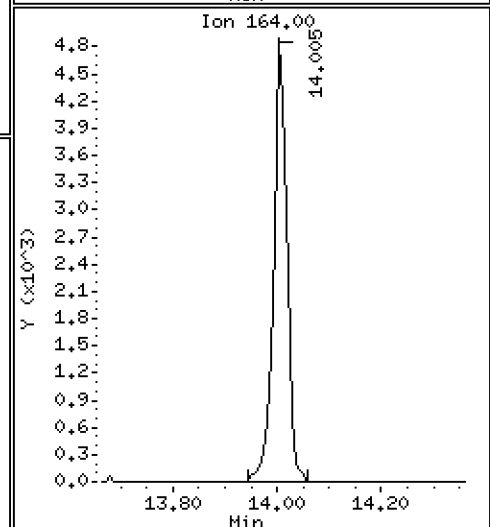
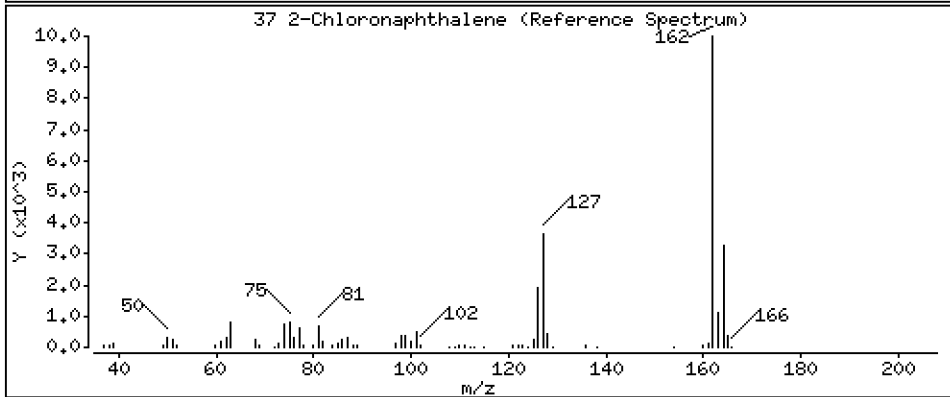
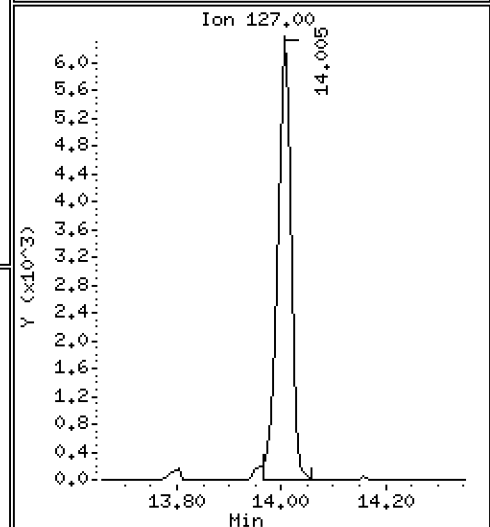
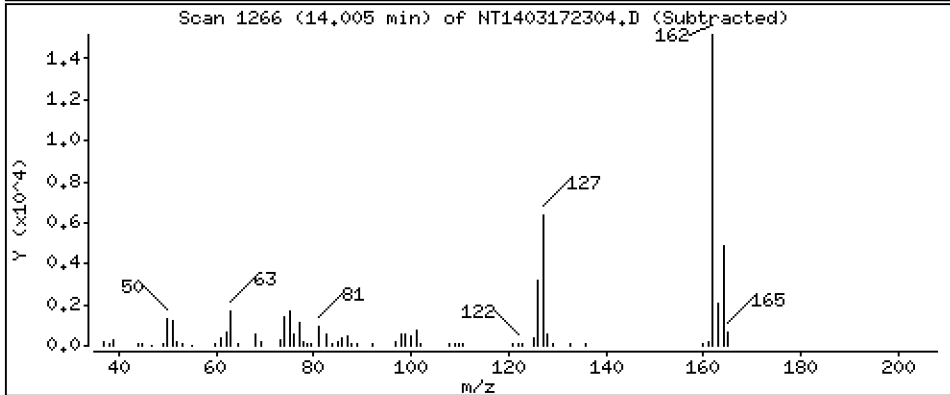
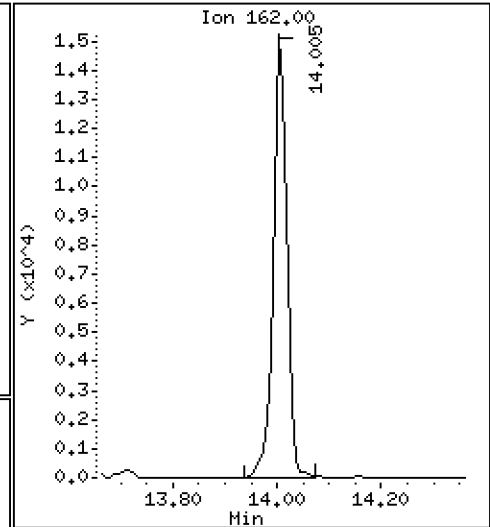
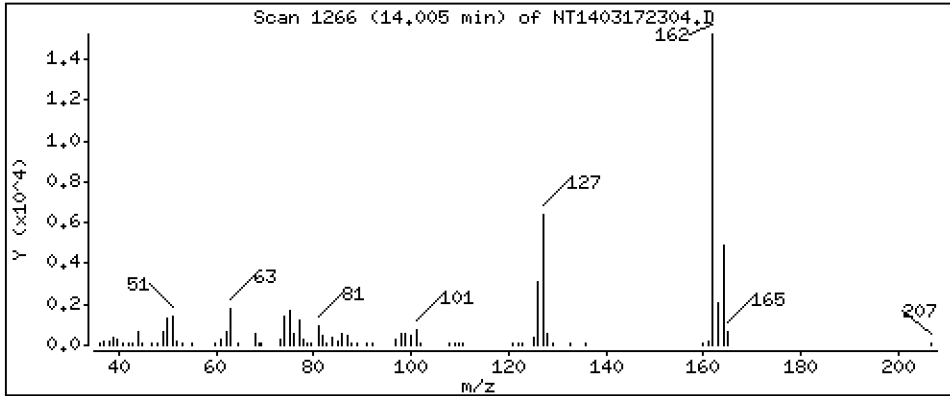
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2031 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

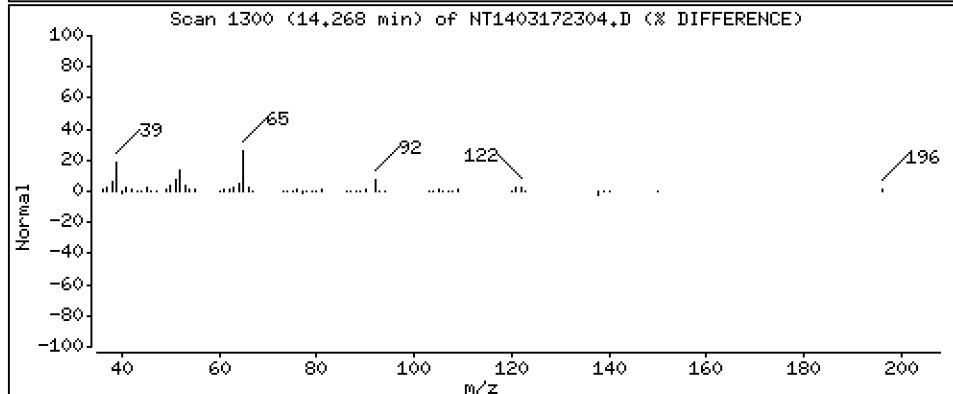
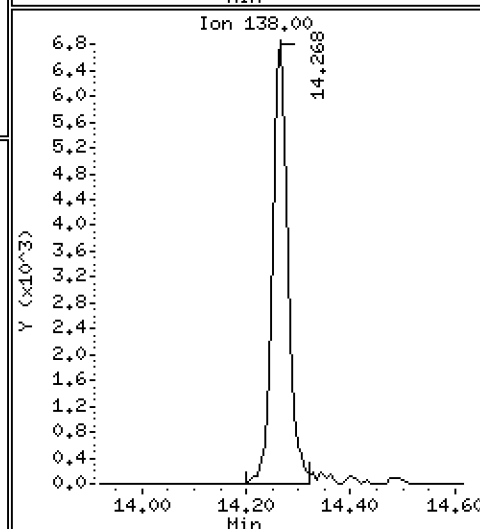
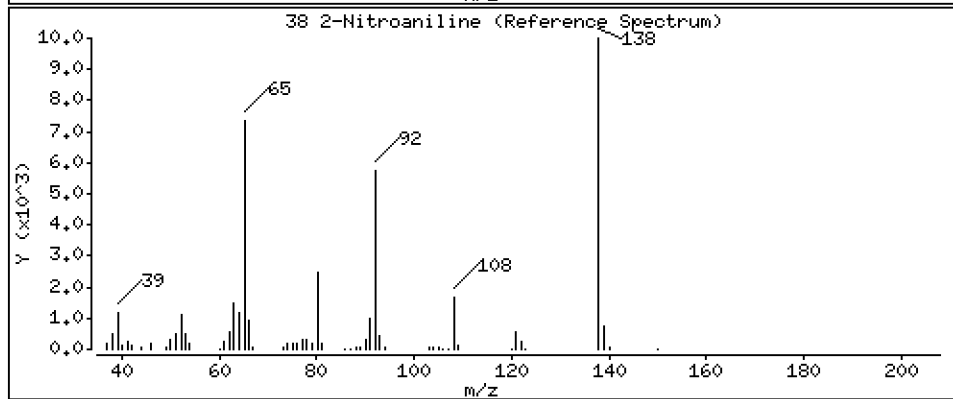
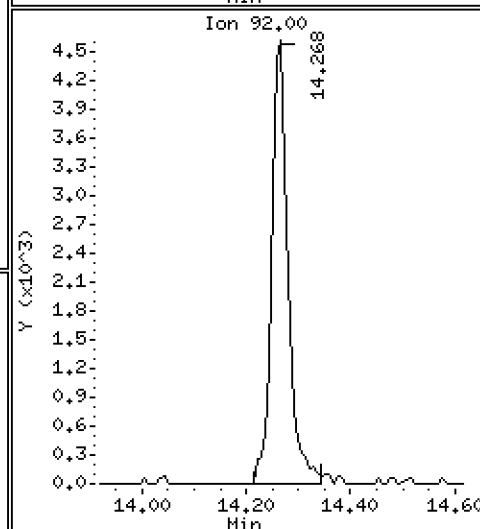
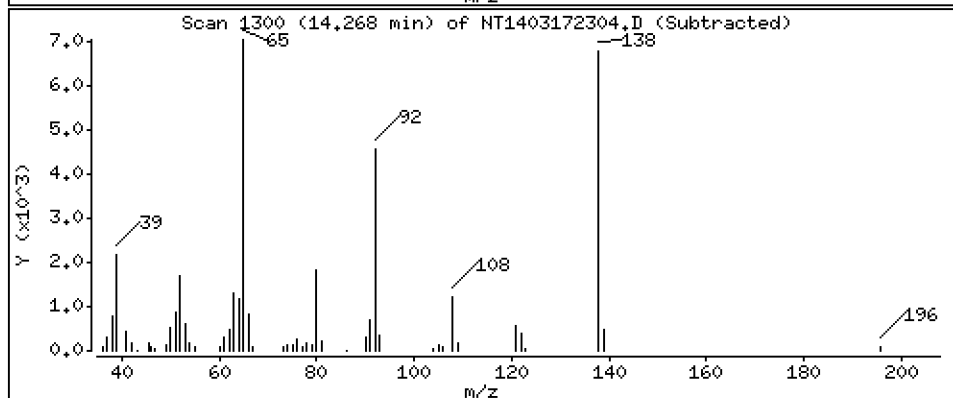
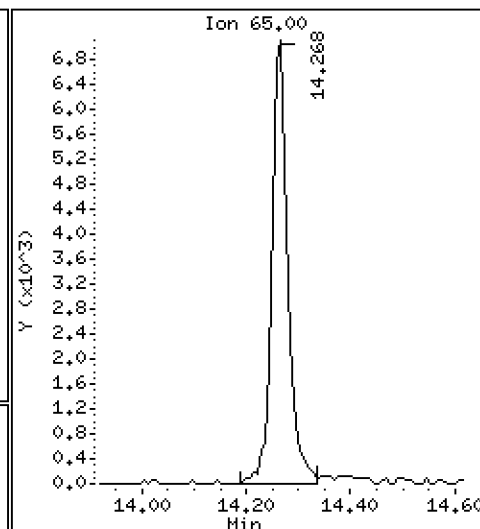
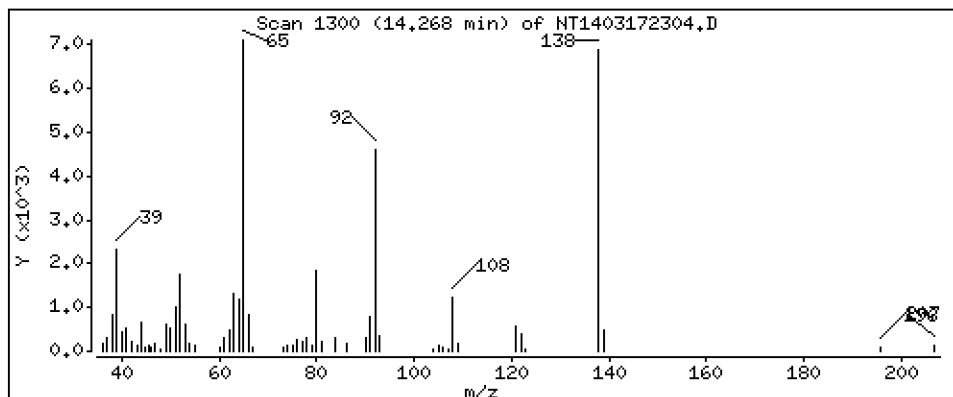
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2915 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

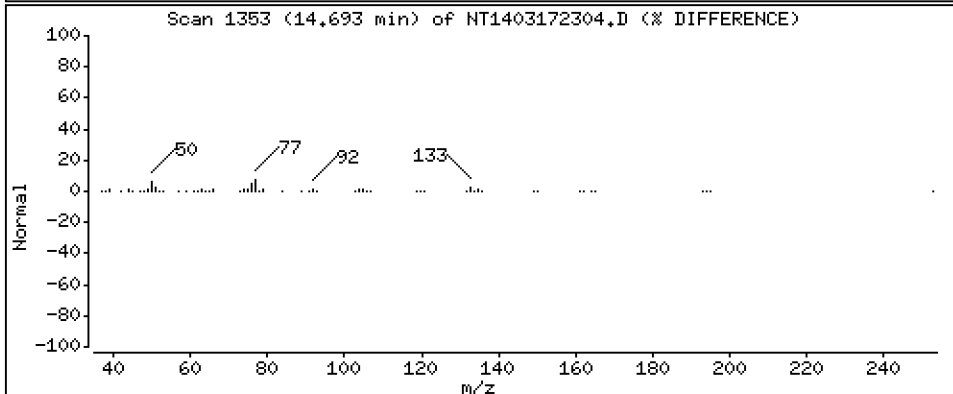
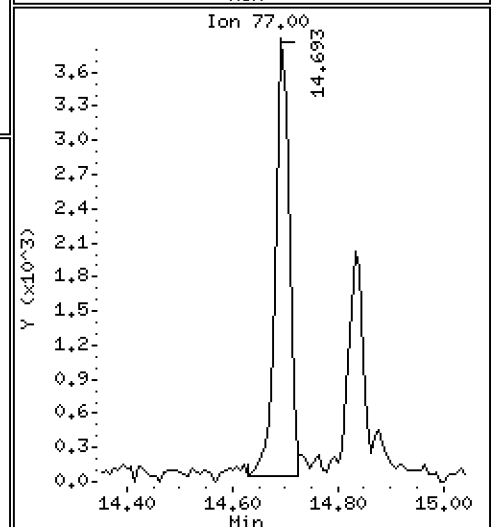
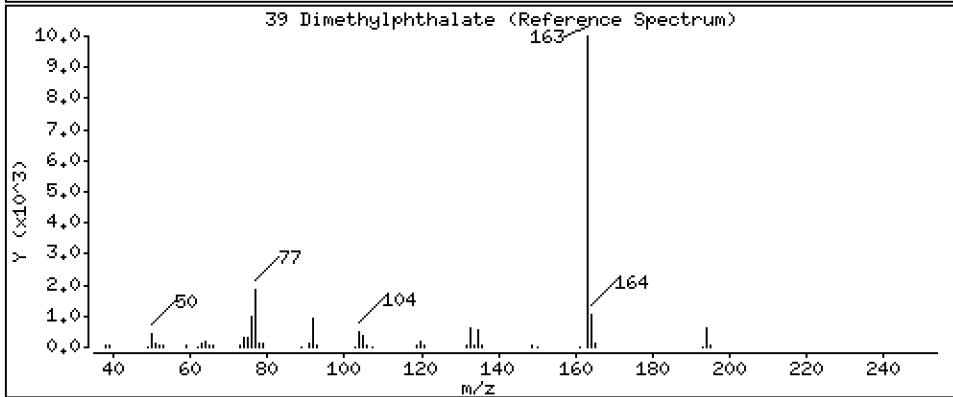
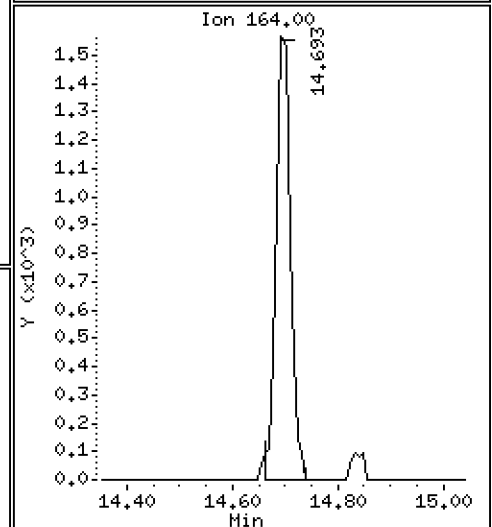
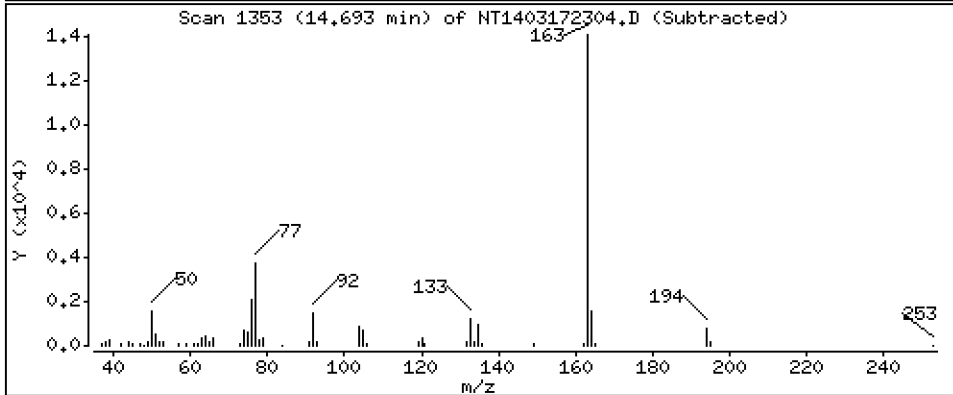
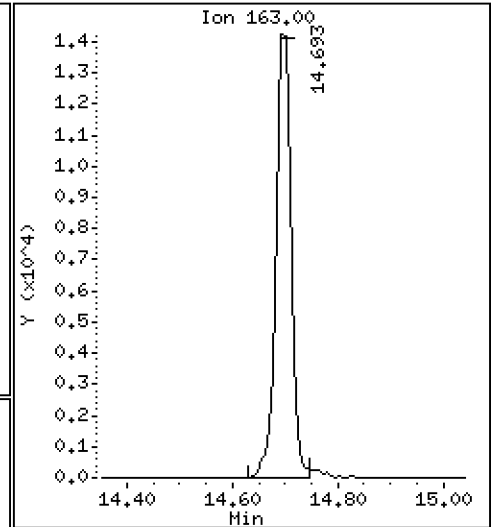
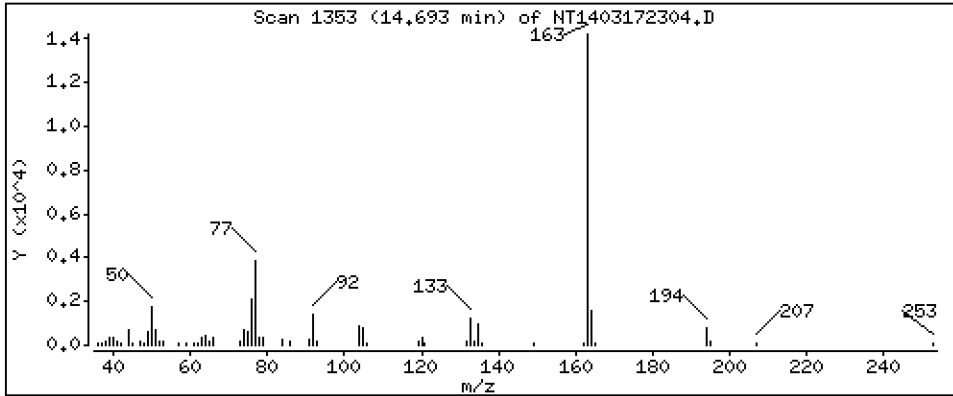
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1957 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

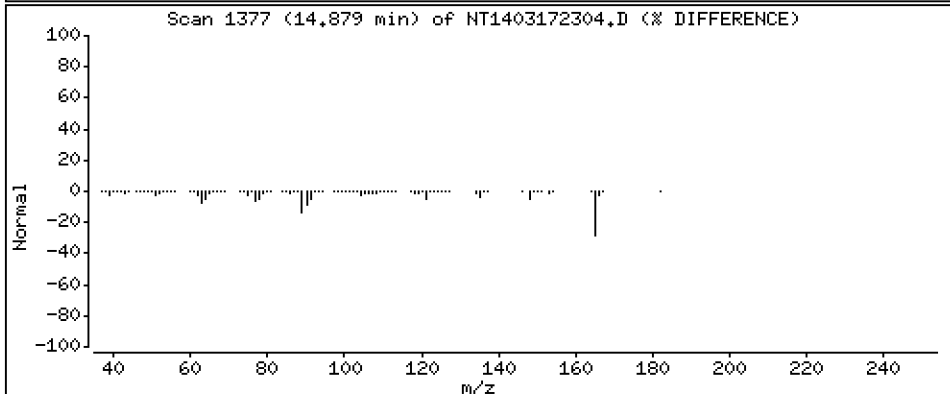
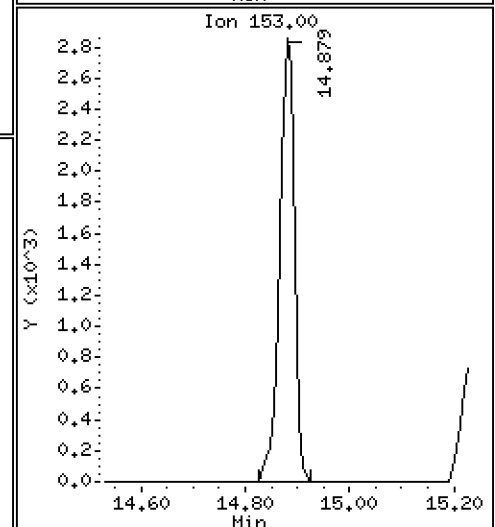
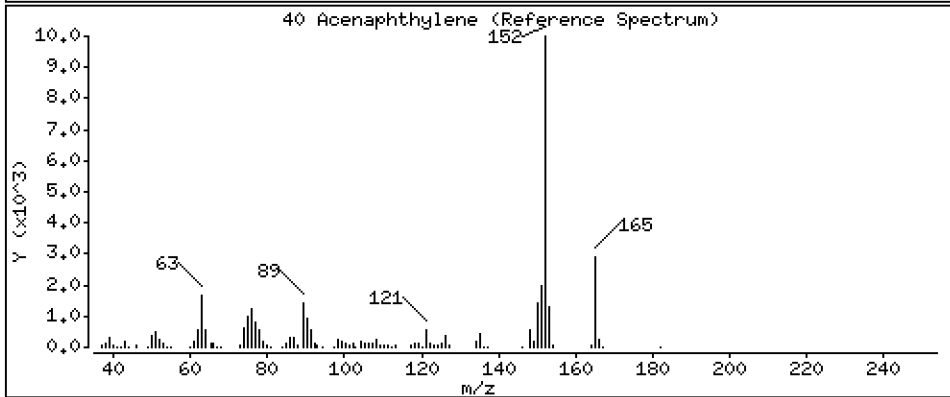
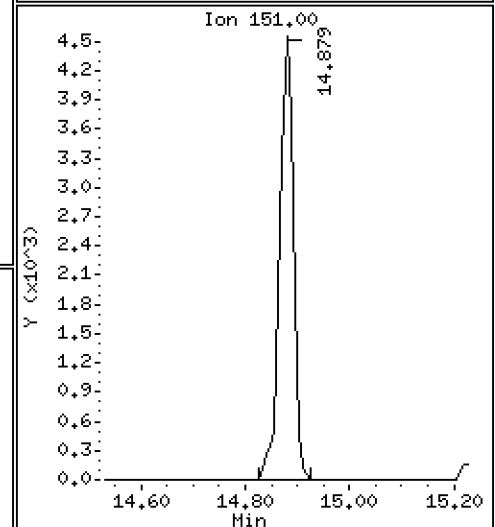
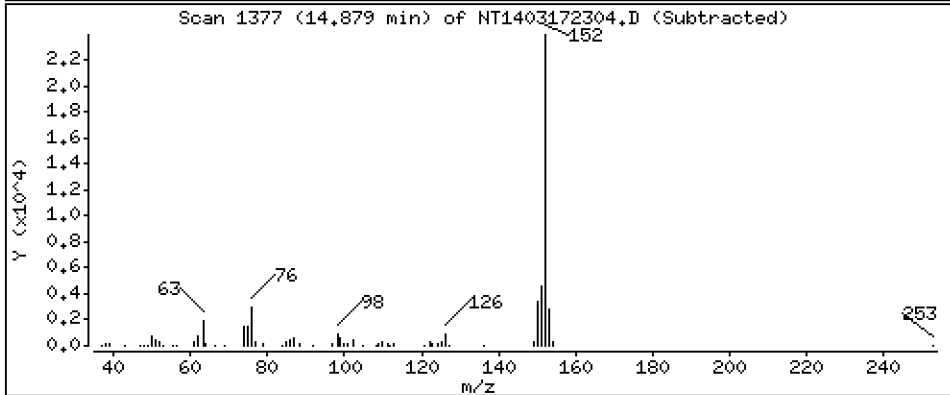
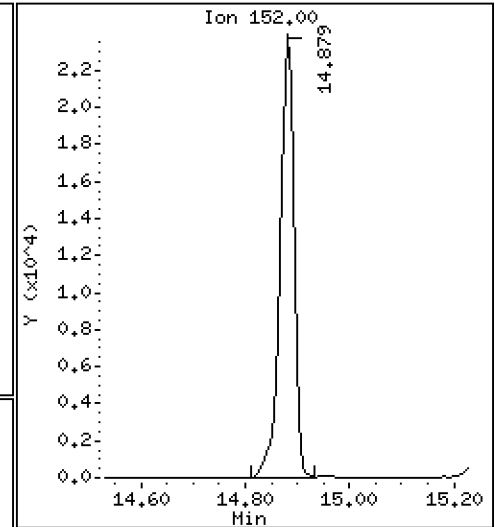
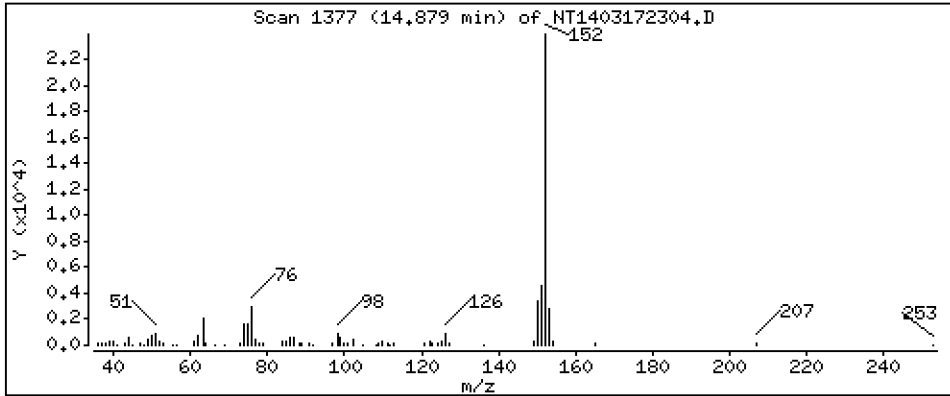
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1937 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

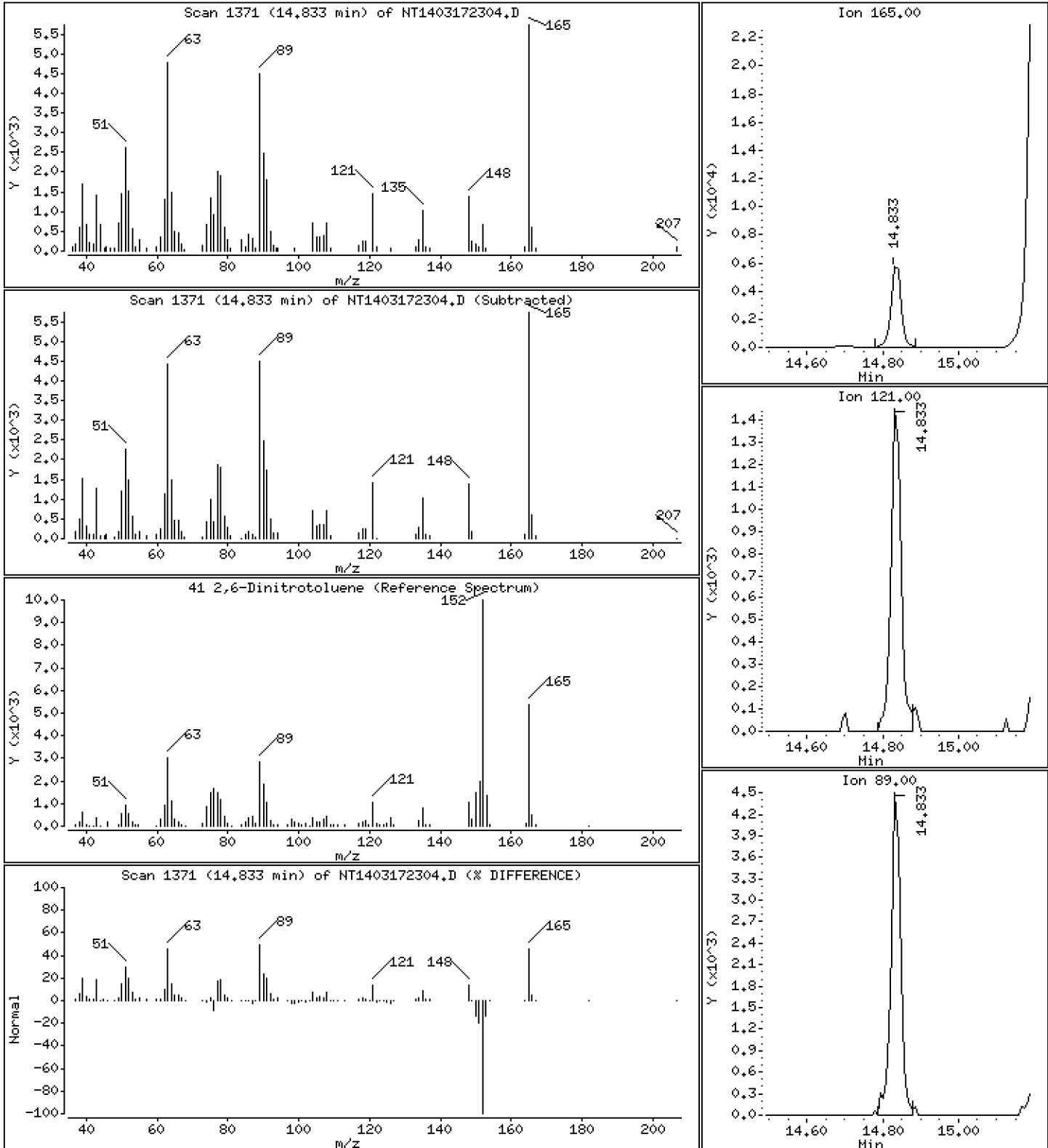
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,3165 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

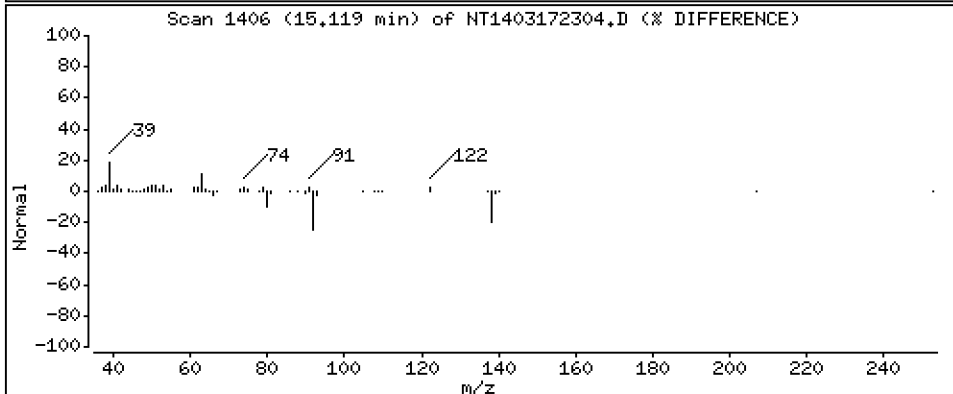
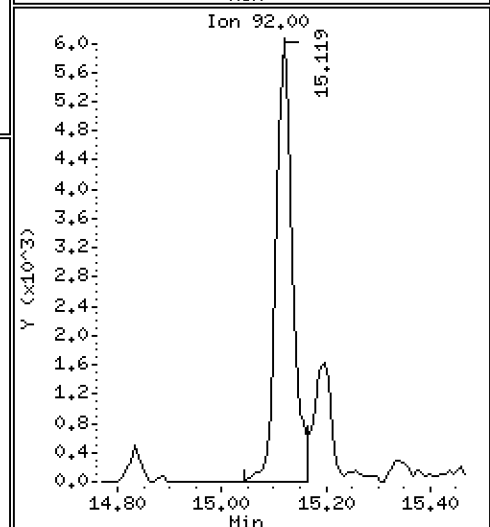
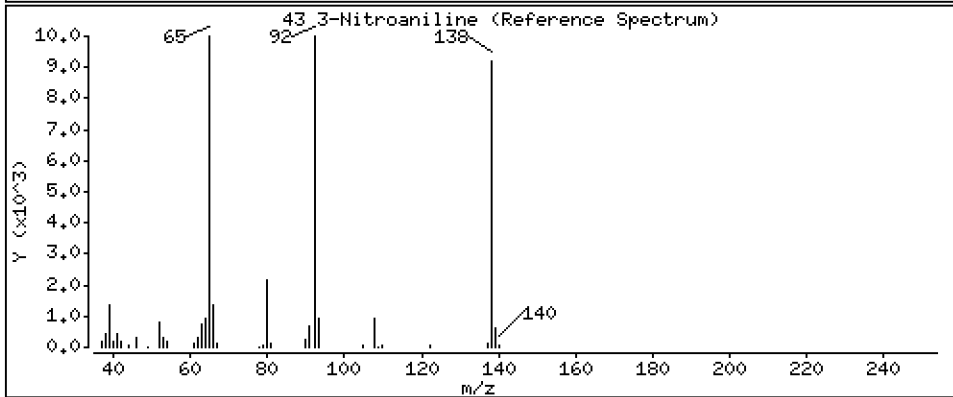
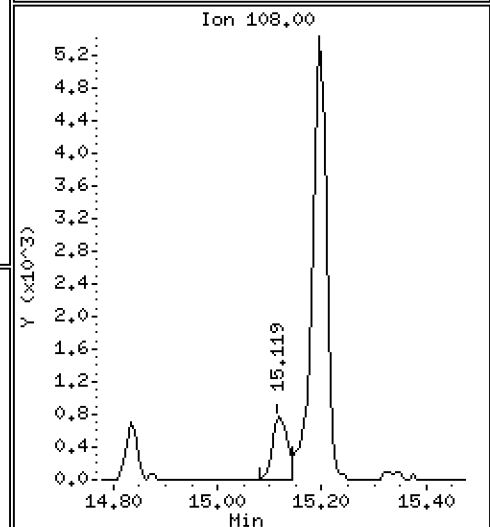
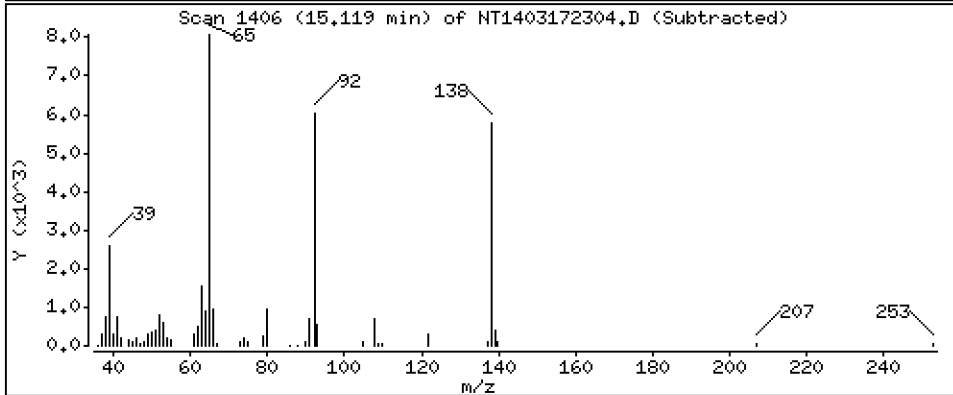
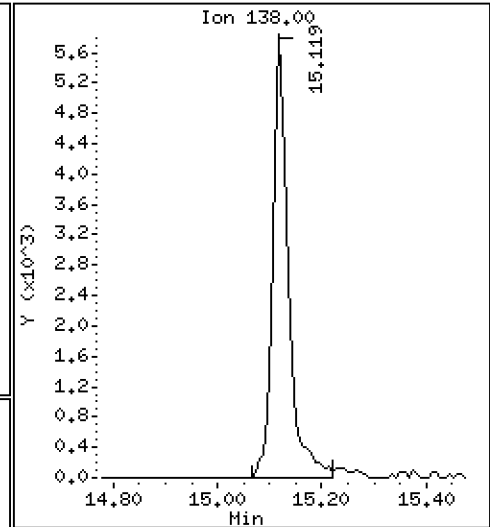
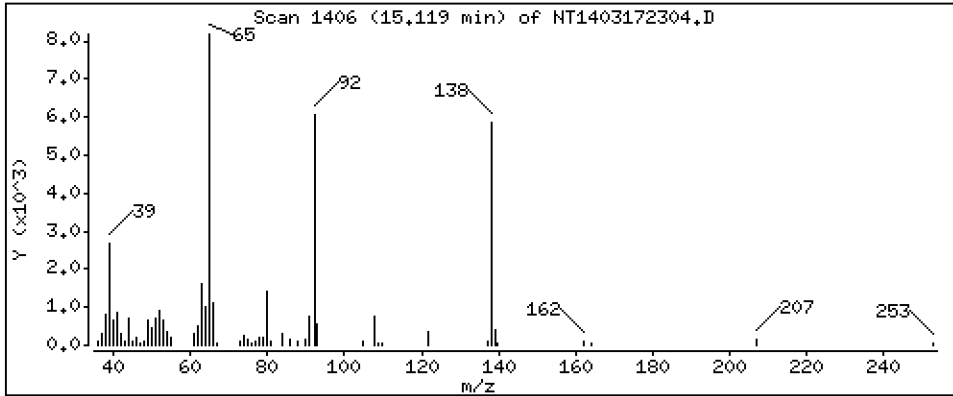
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,2595 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

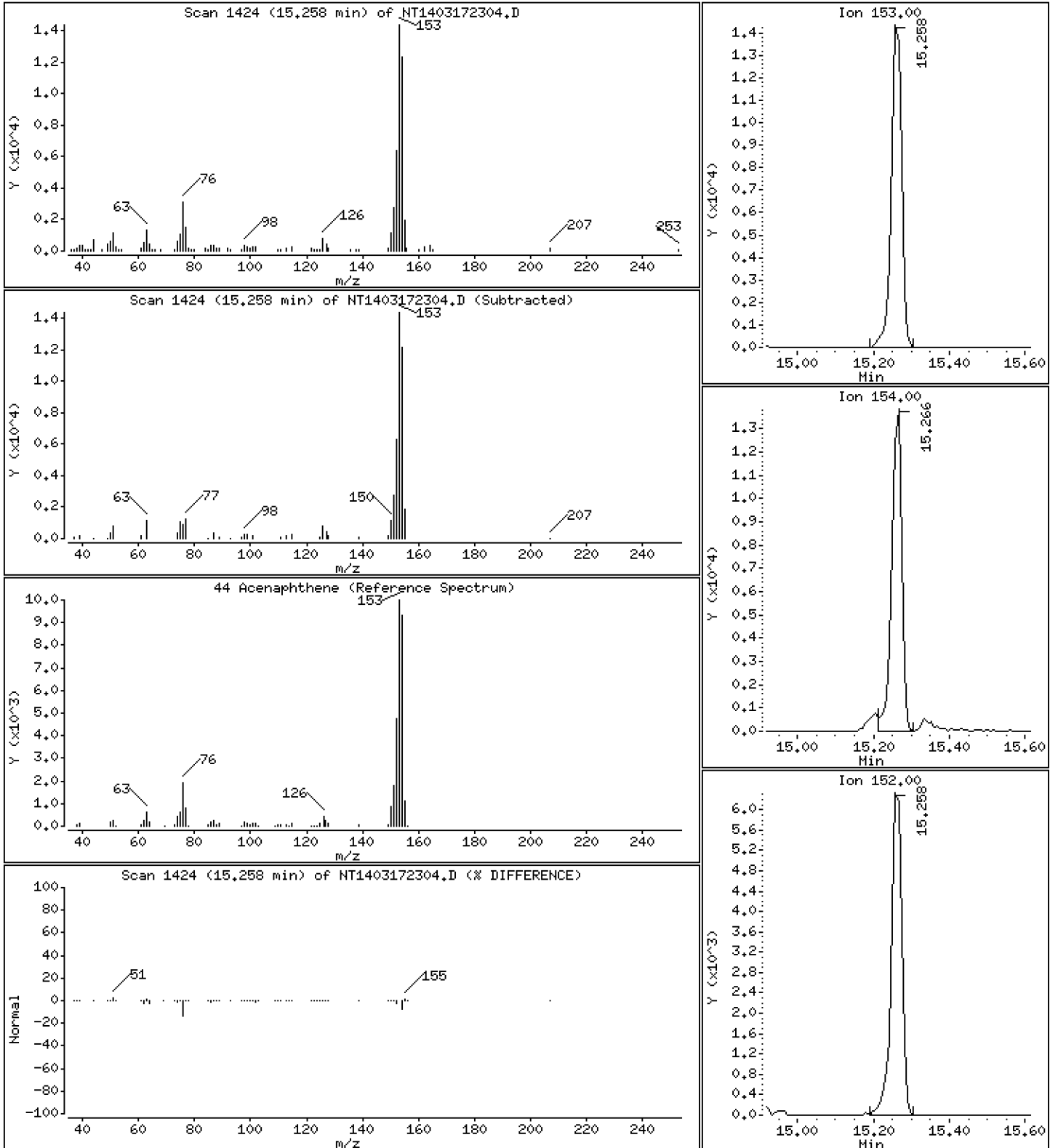
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,2025 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

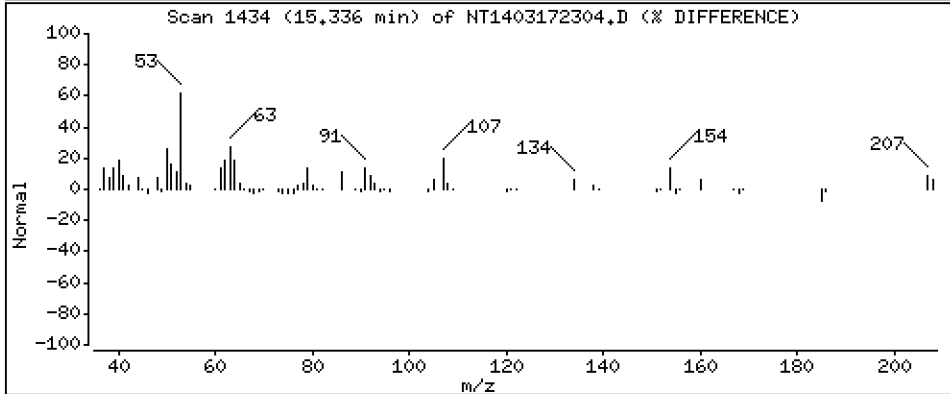
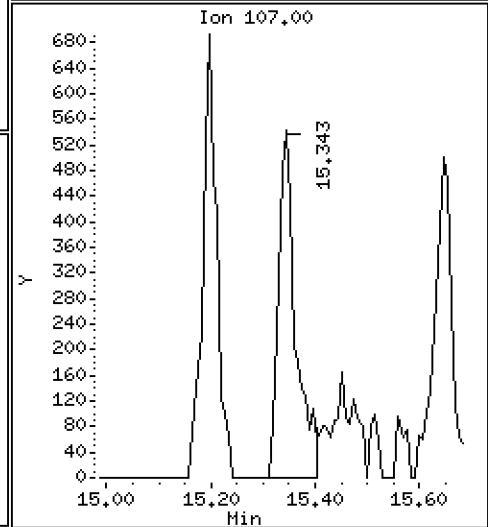
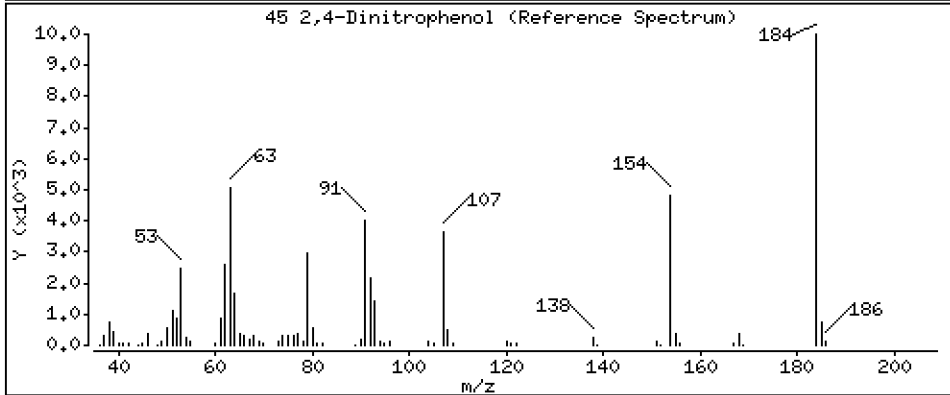
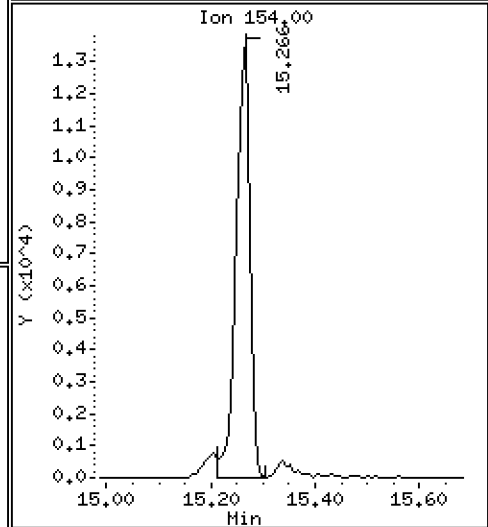
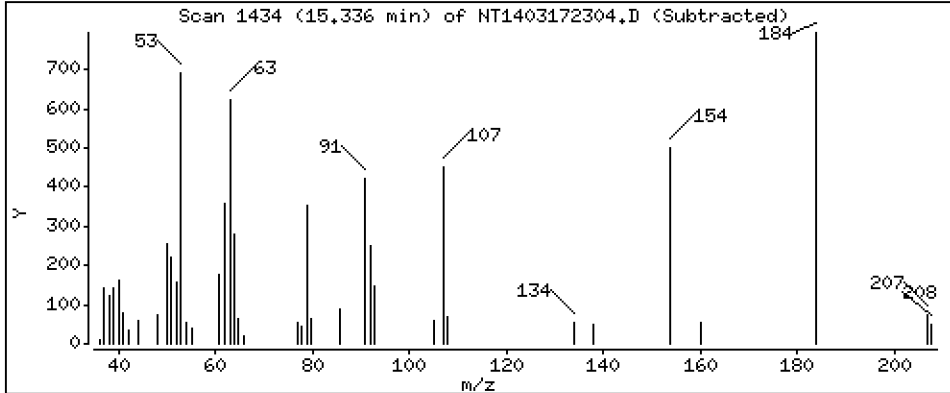
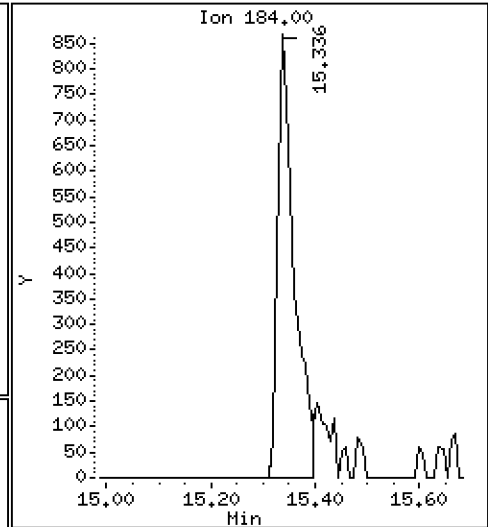
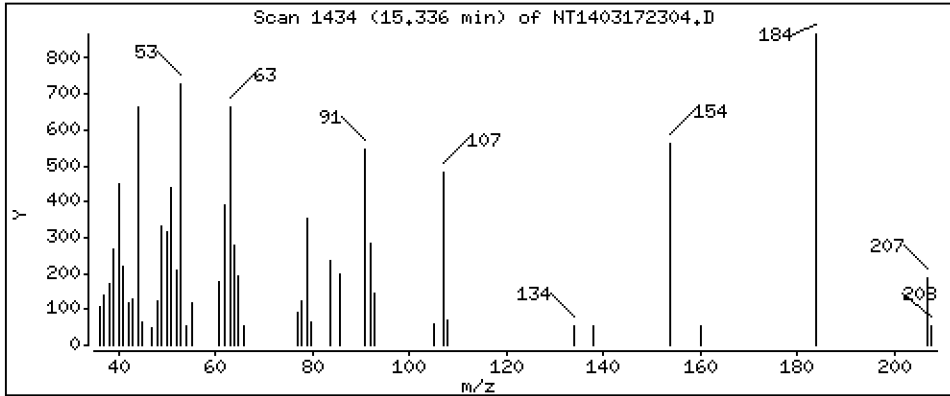
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,07503 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

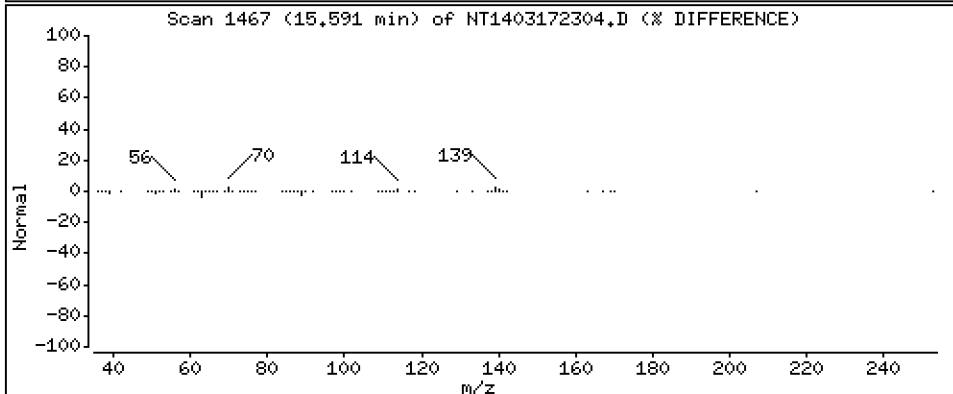
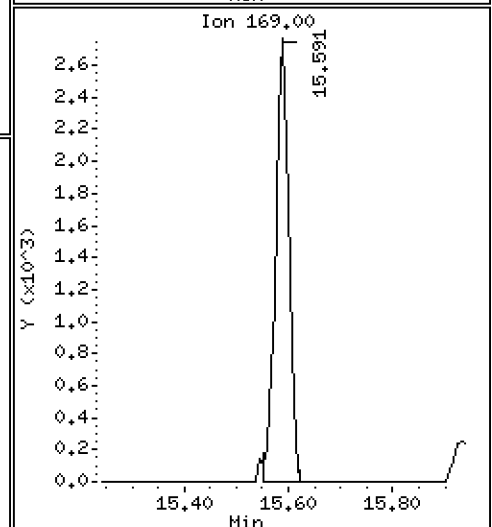
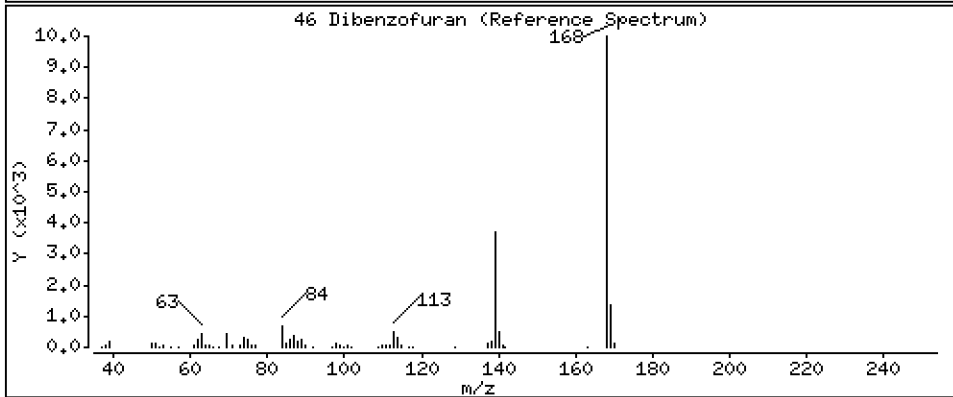
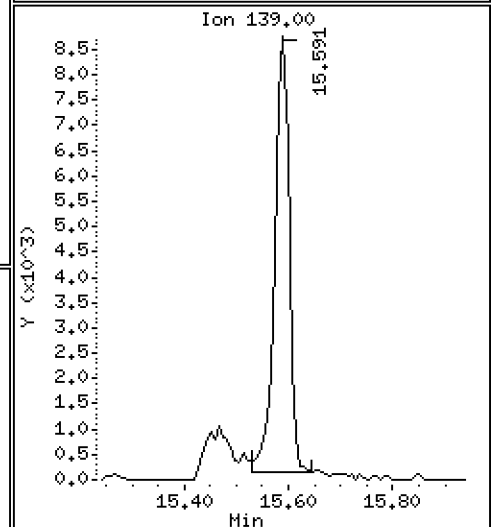
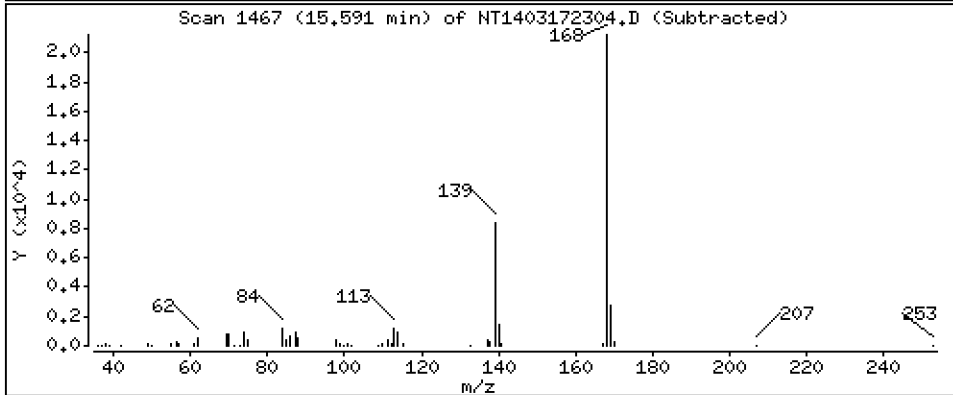
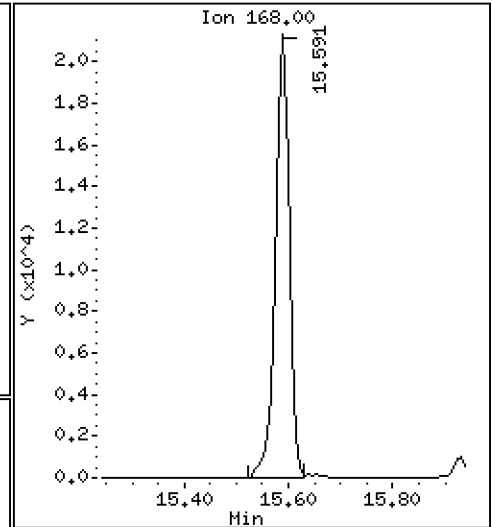
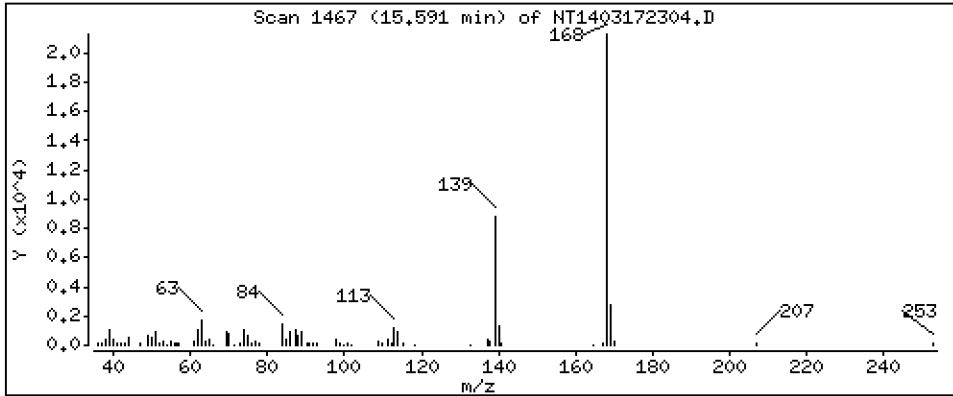
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2043 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

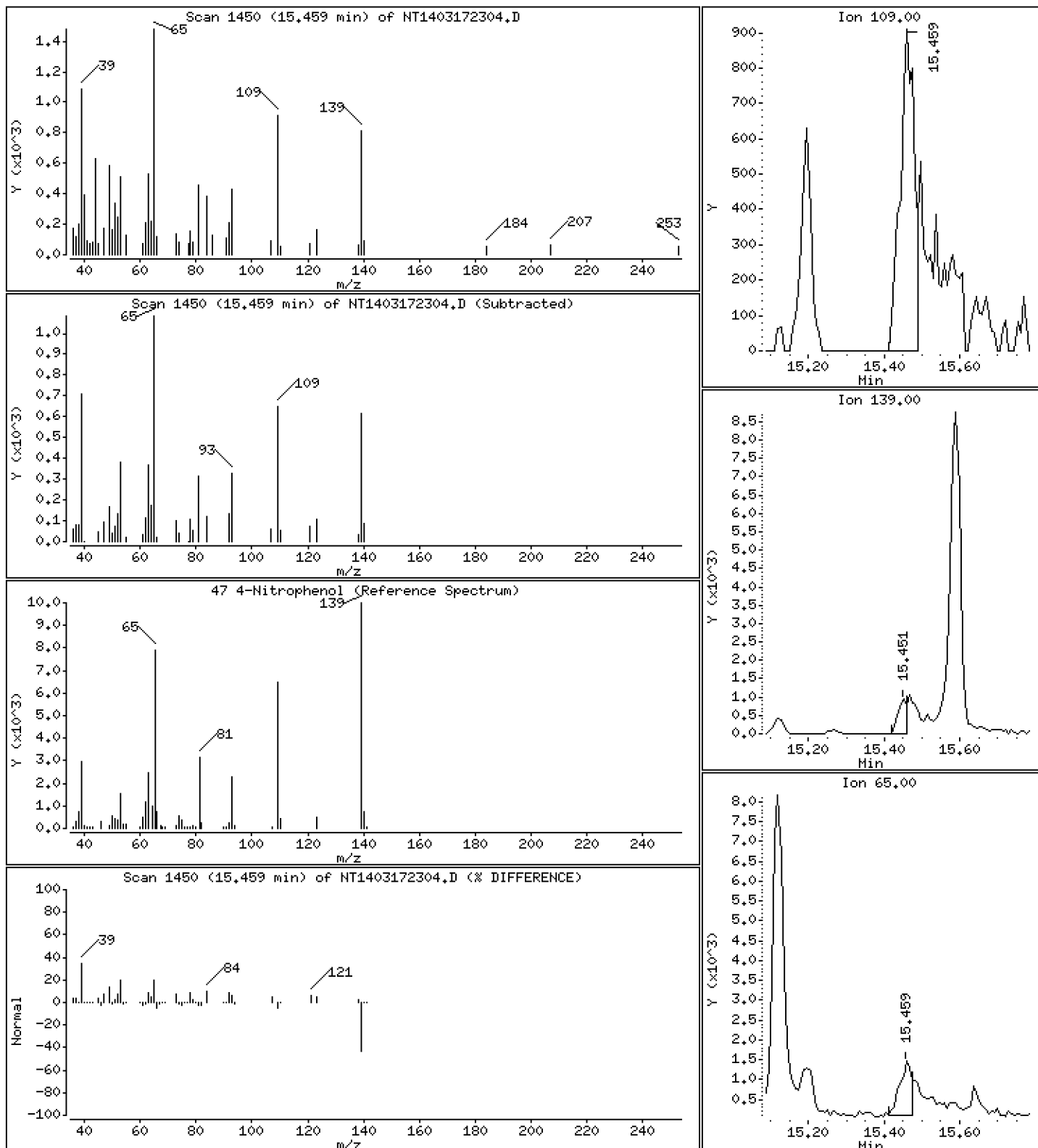
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 0,1020 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

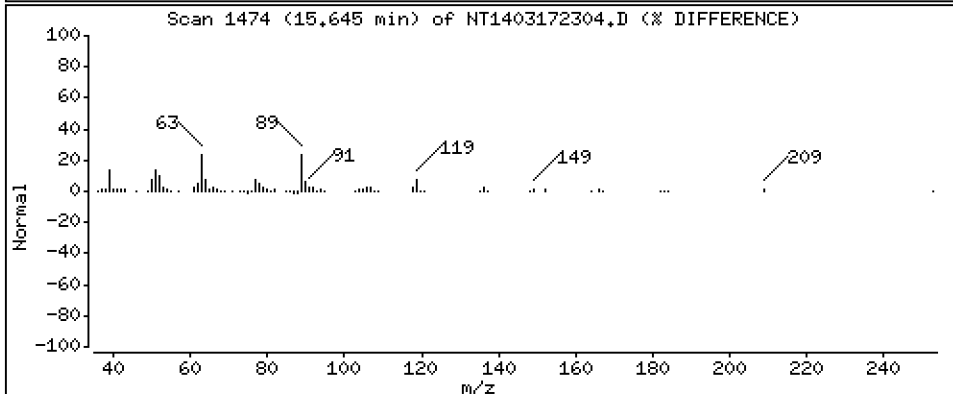
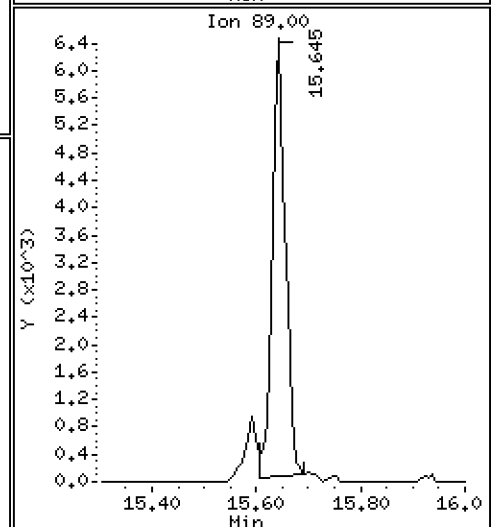
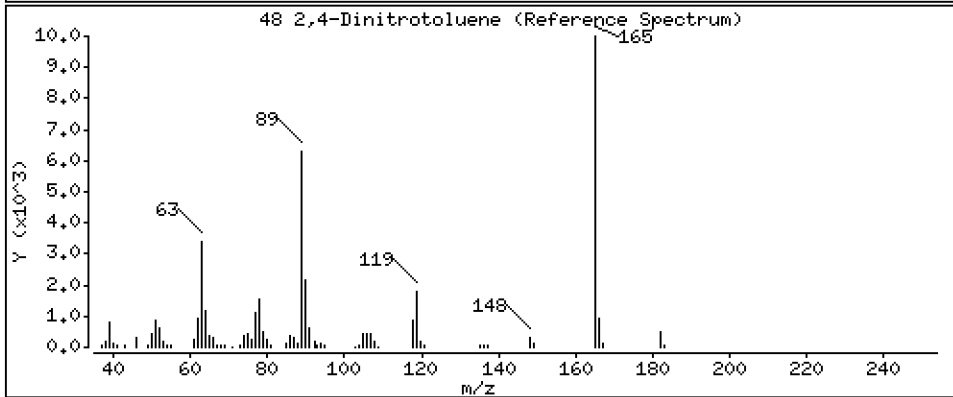
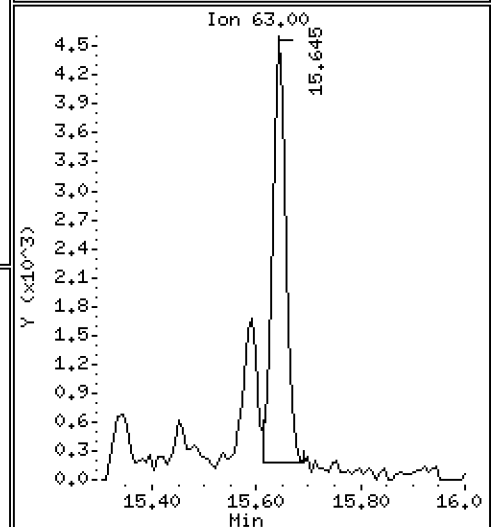
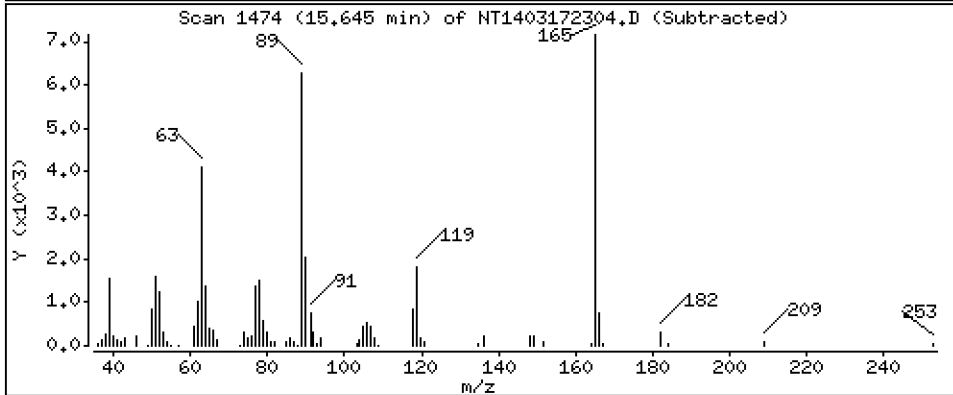
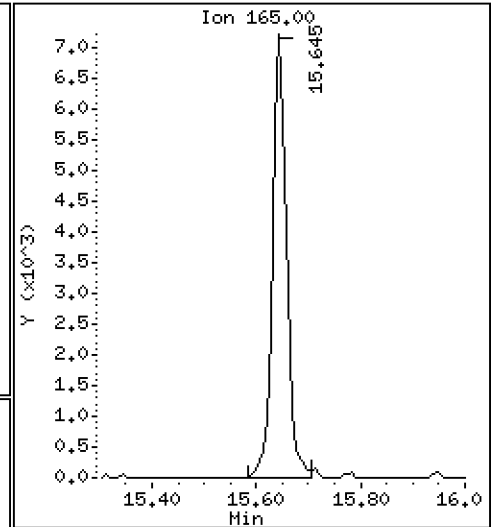
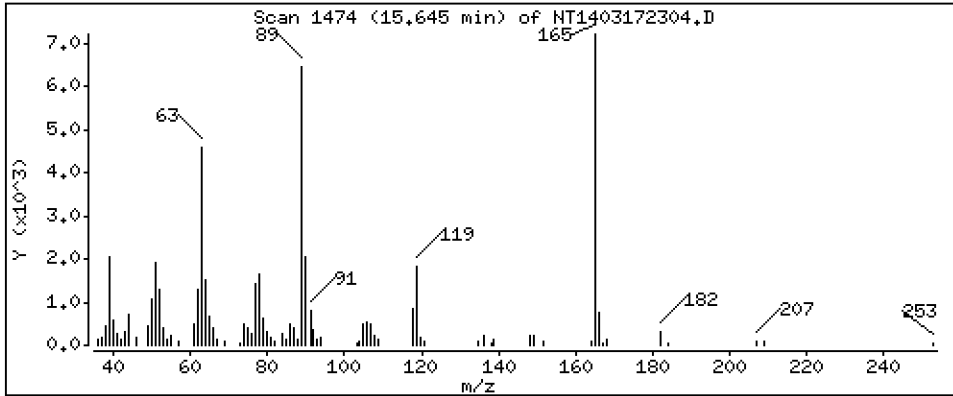
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

48 2,4-Dinitrotoluene

Concentration: 0.2865 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

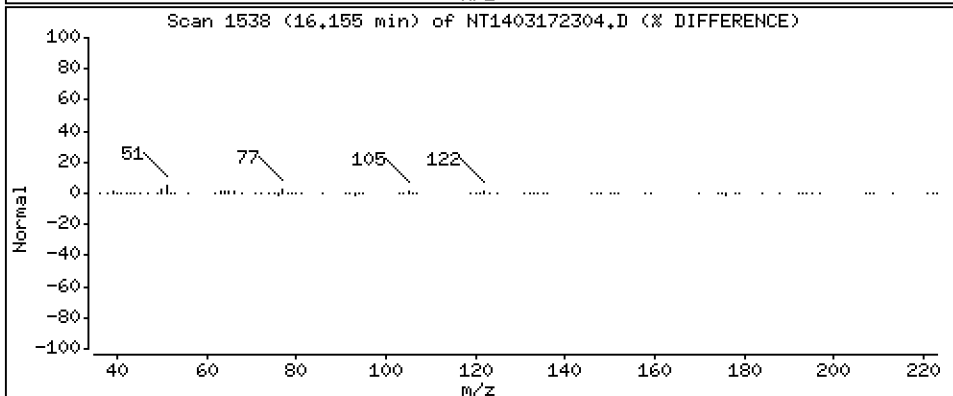
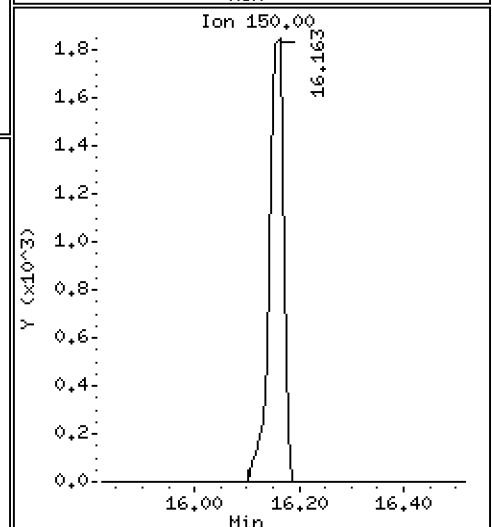
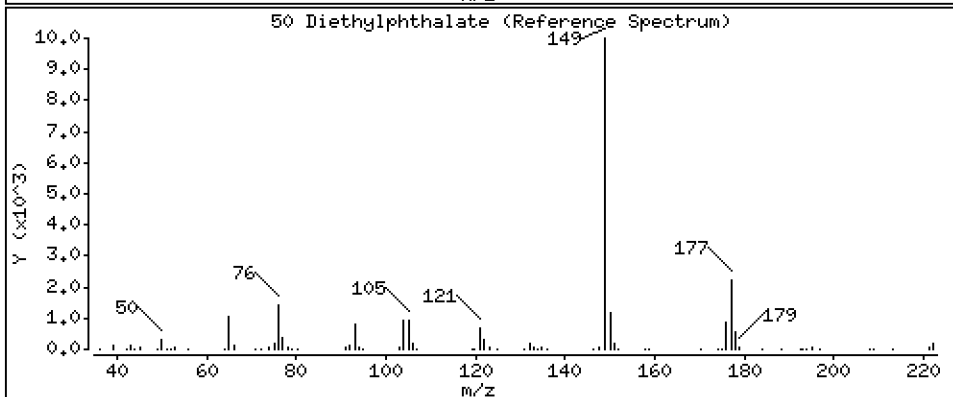
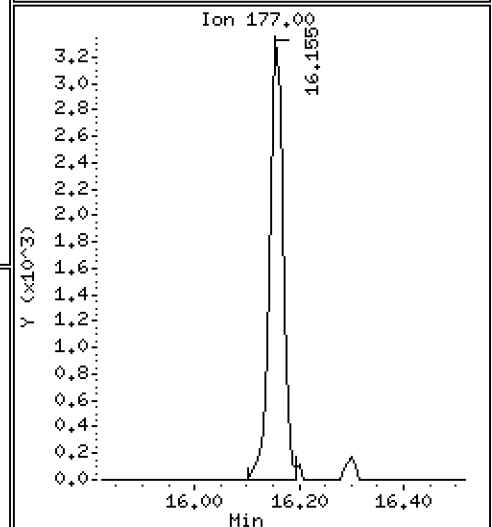
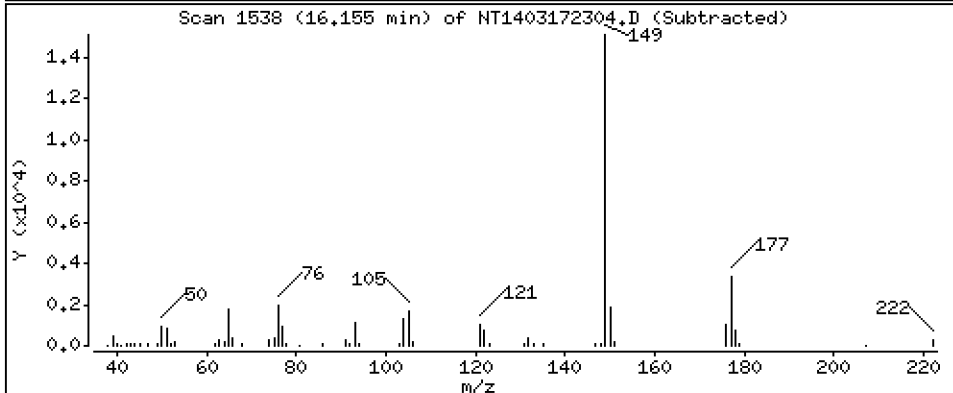
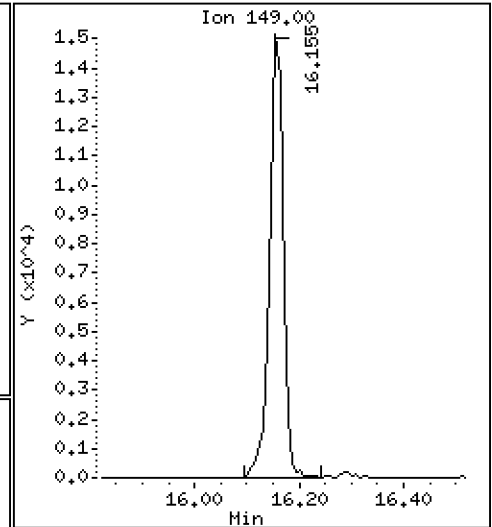
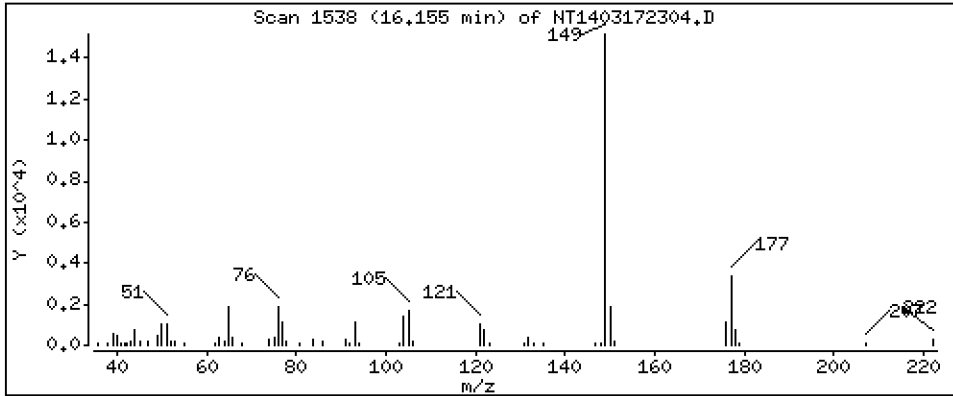
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2007 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

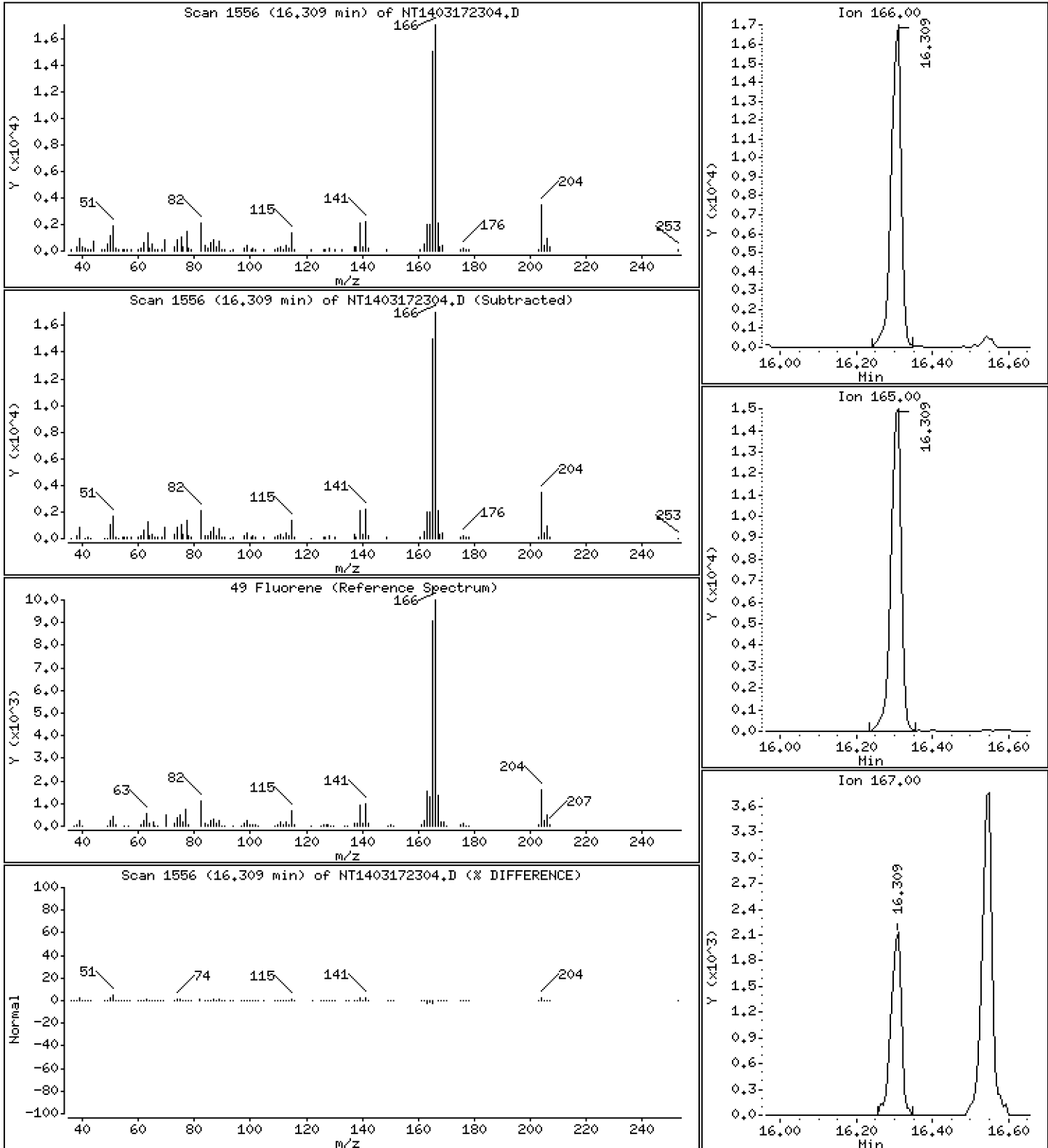
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1710 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

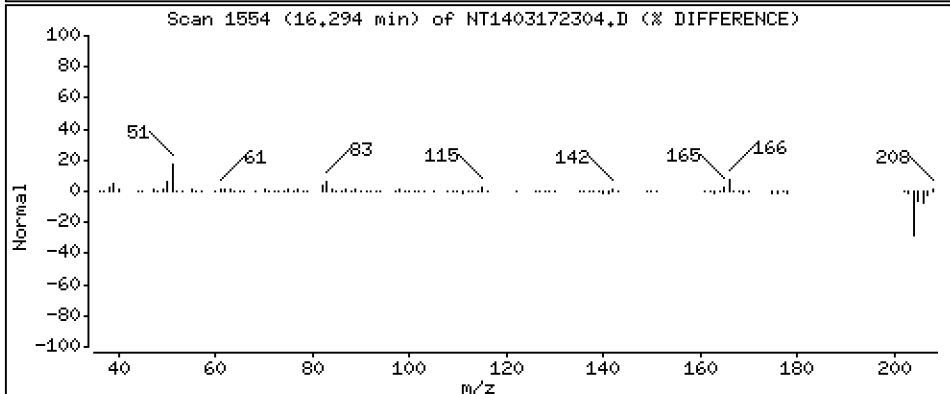
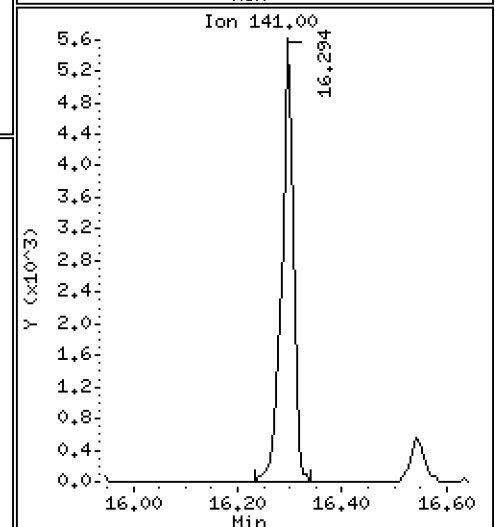
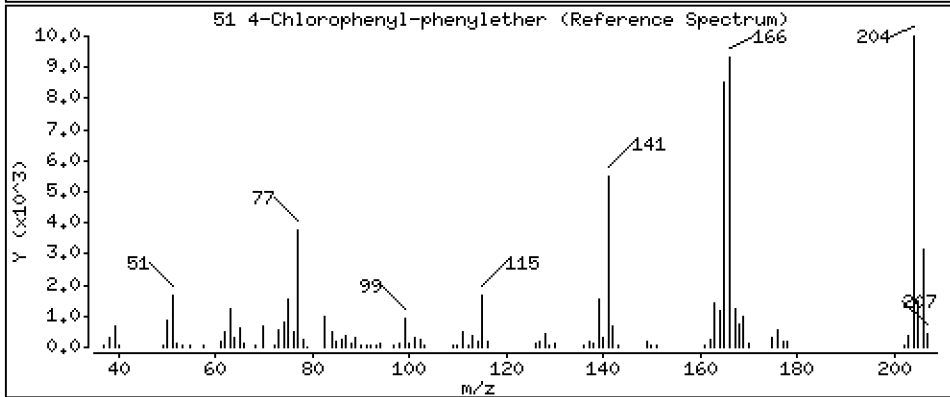
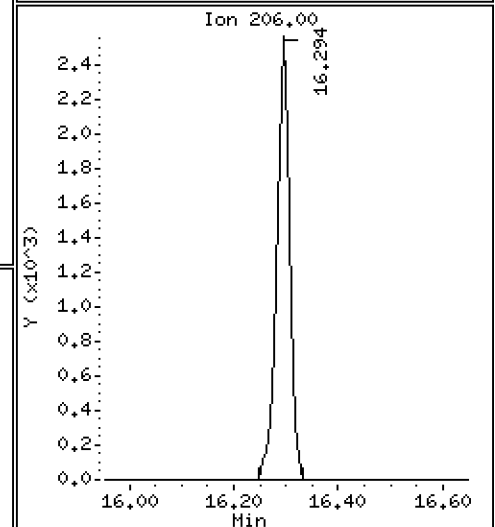
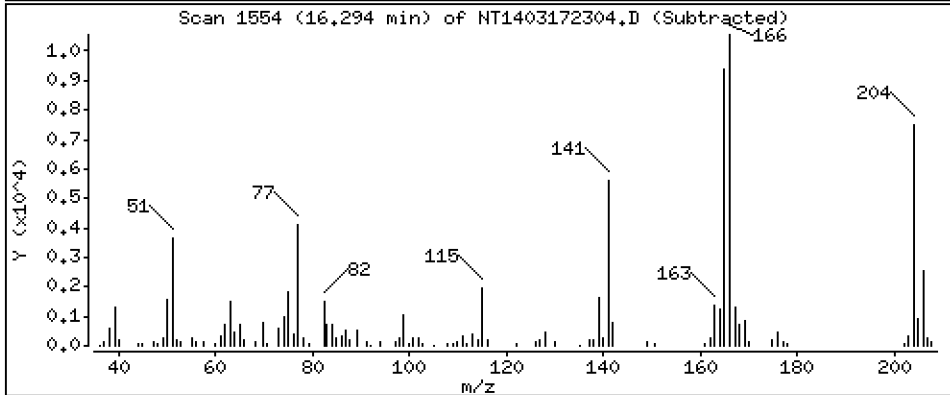
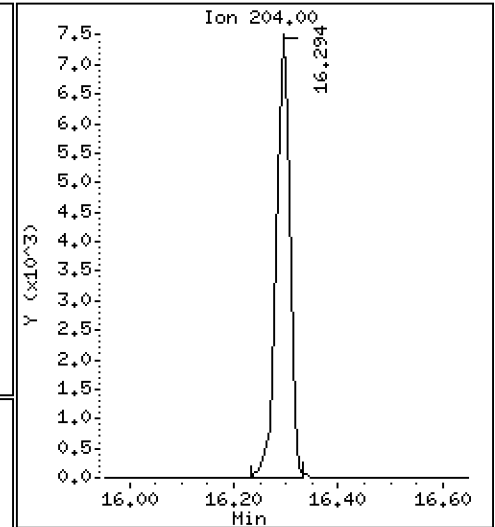
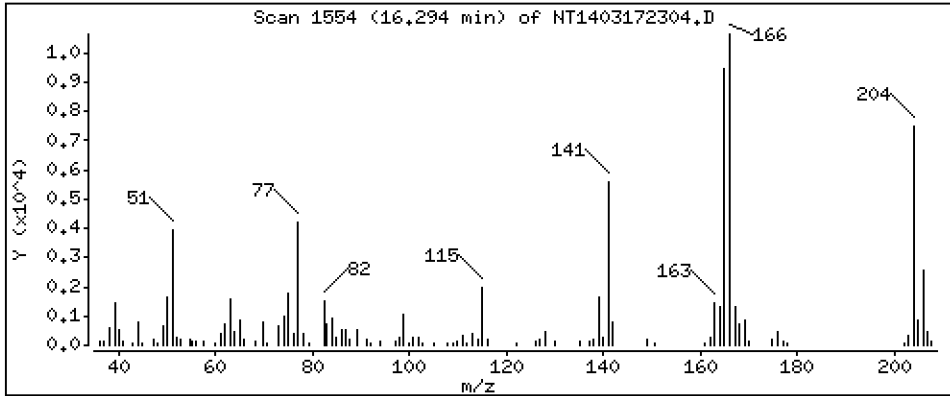
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,1743 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

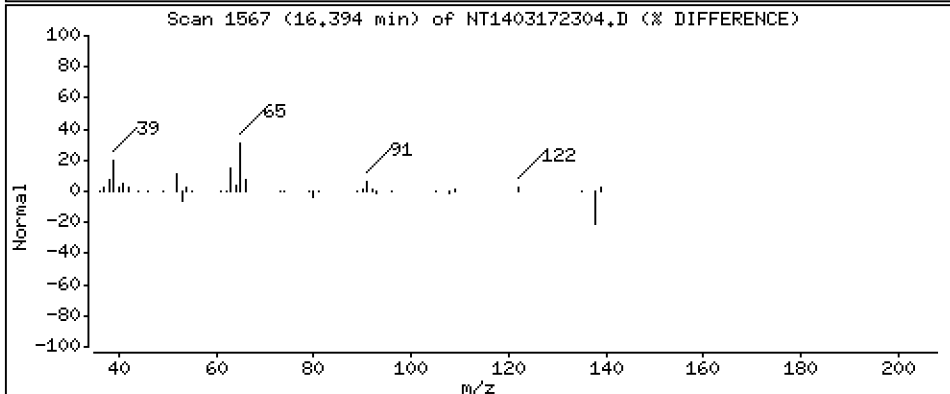
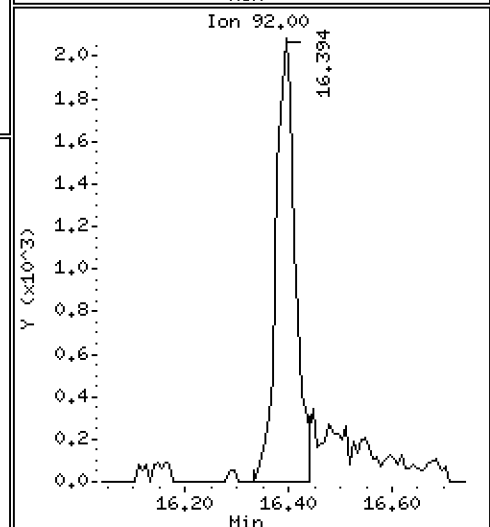
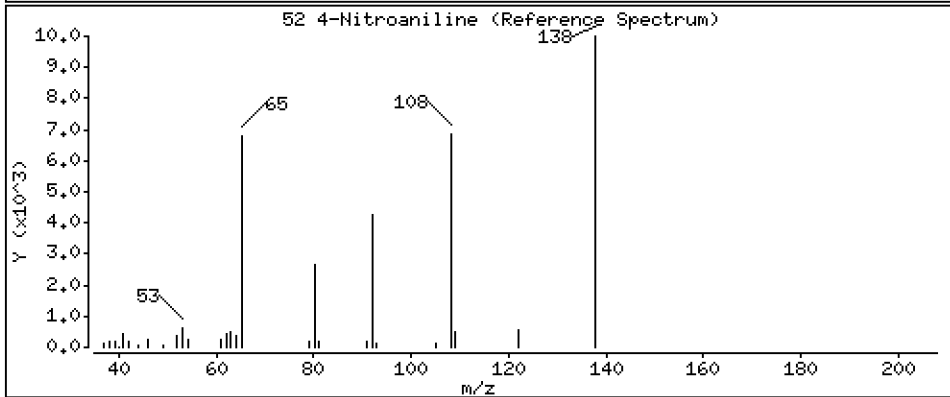
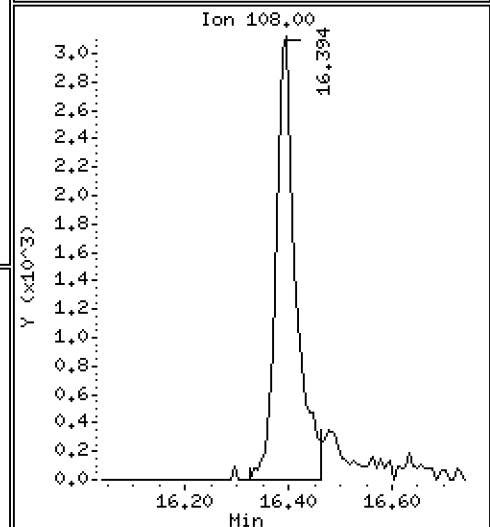
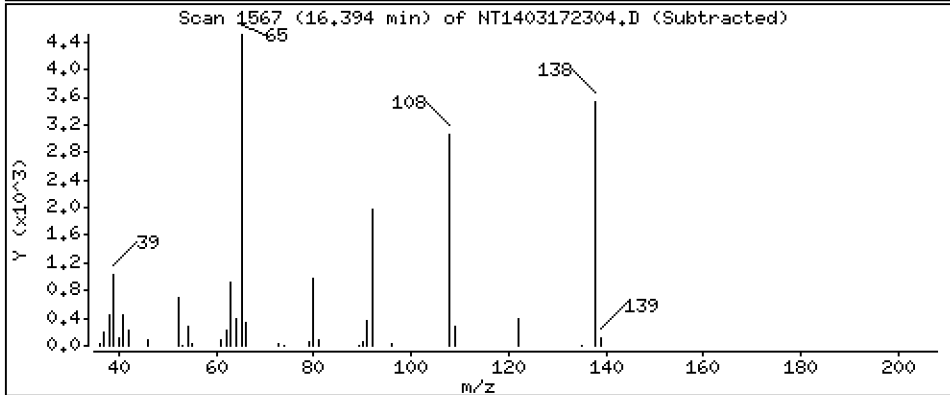
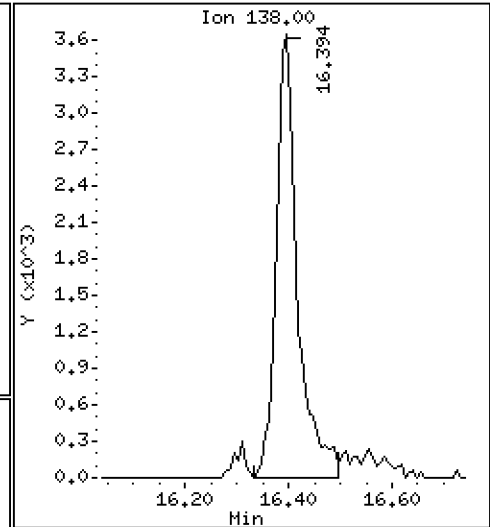
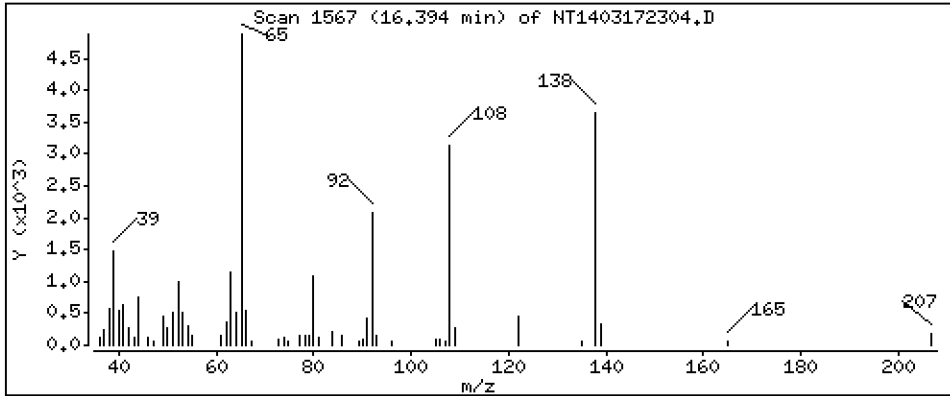
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 0,2615 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

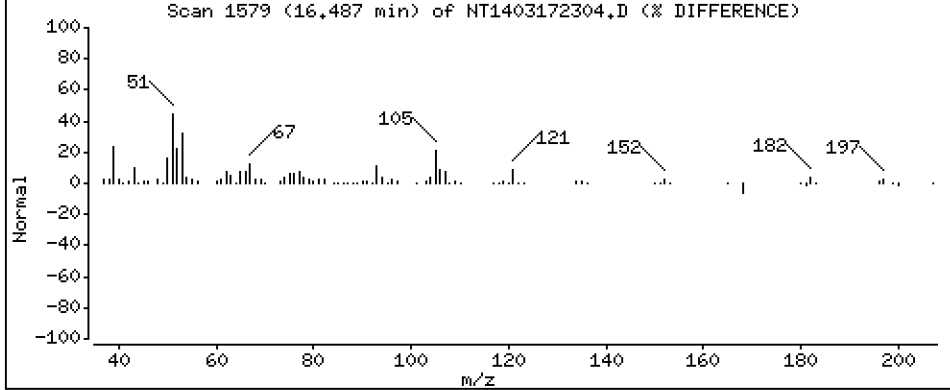
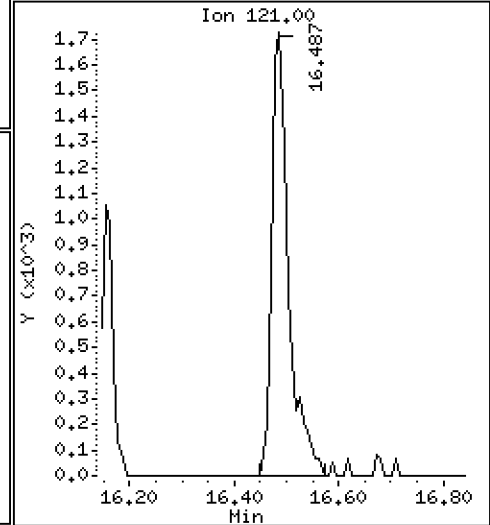
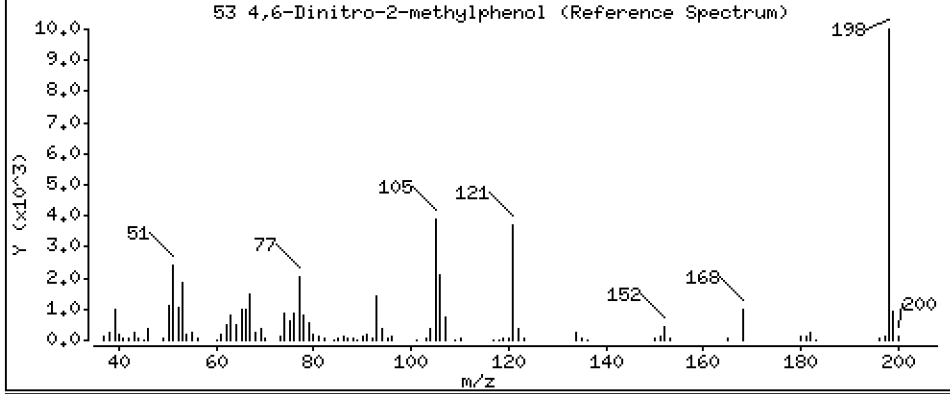
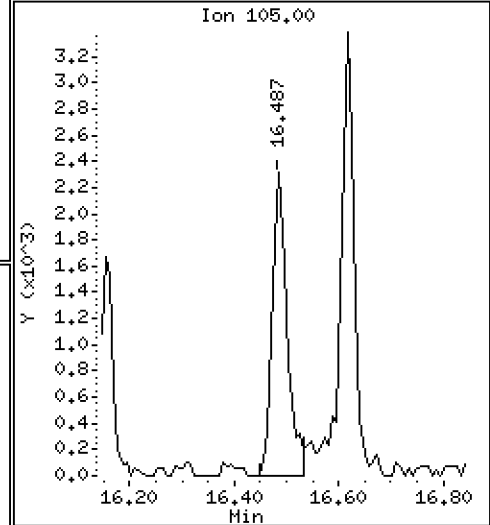
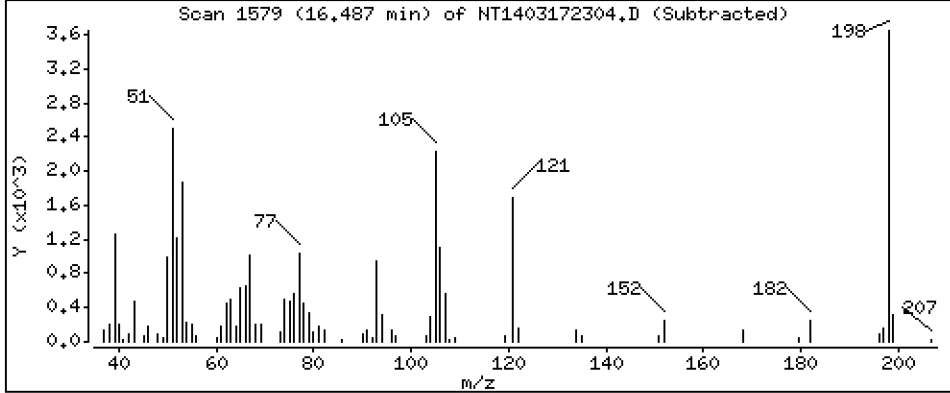
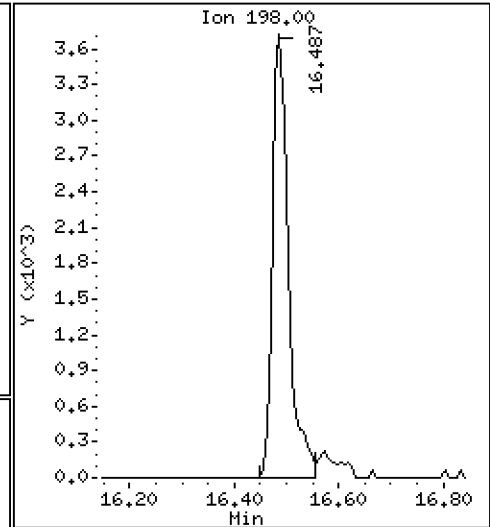
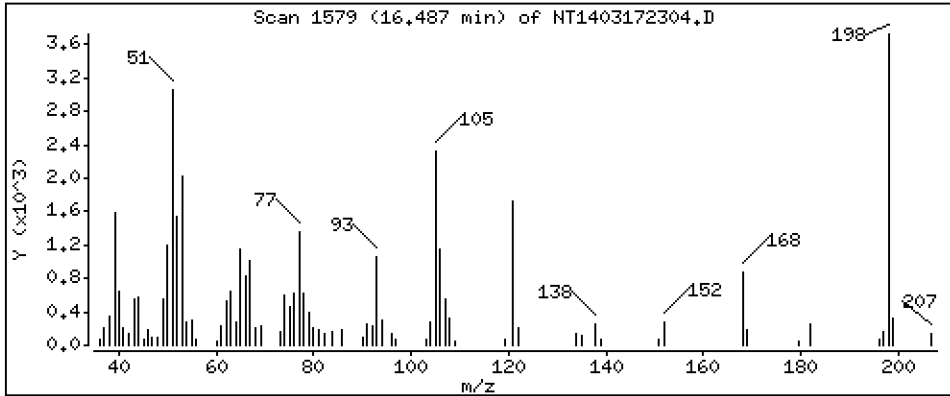
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2891 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

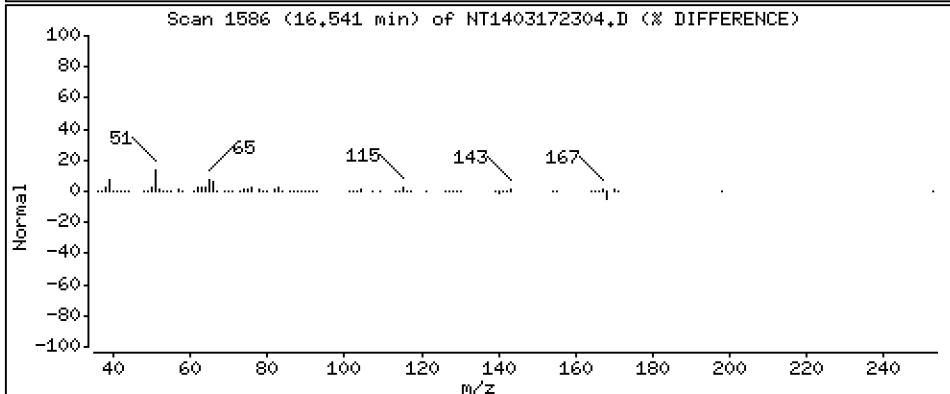
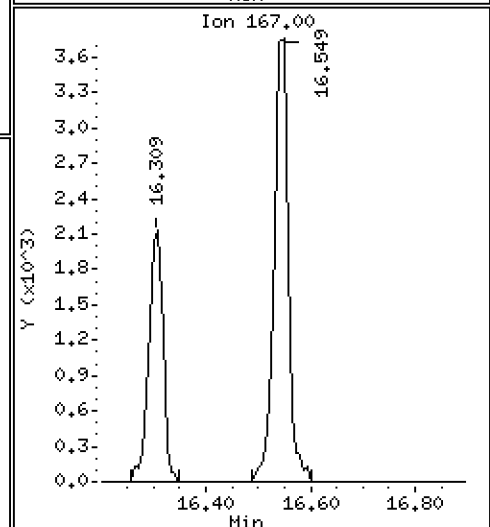
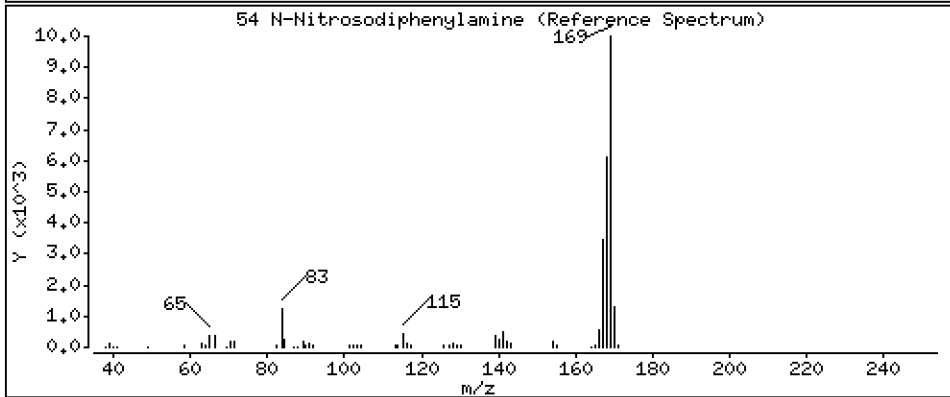
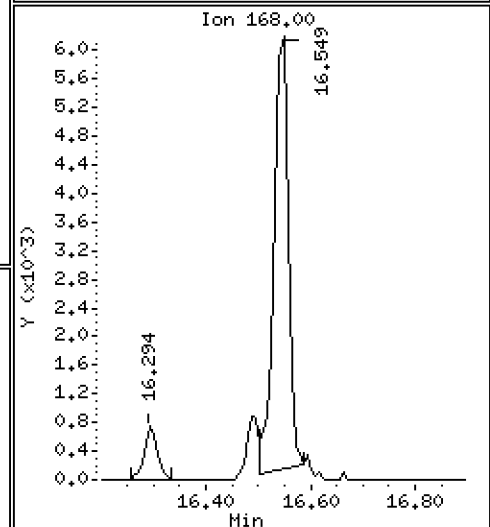
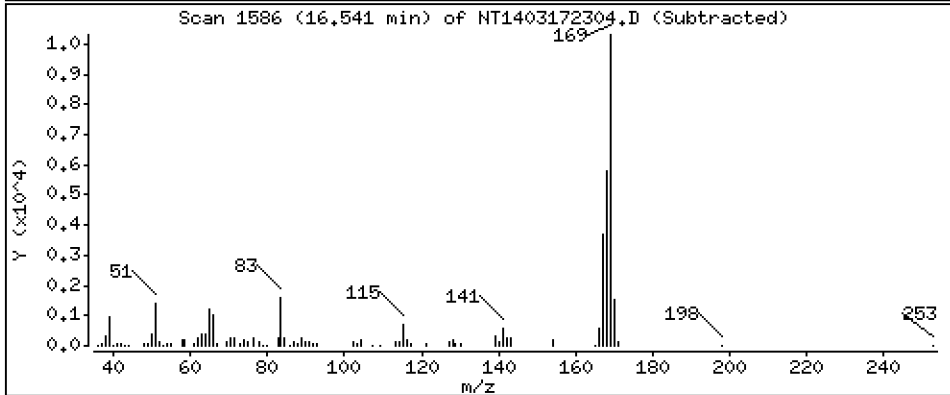
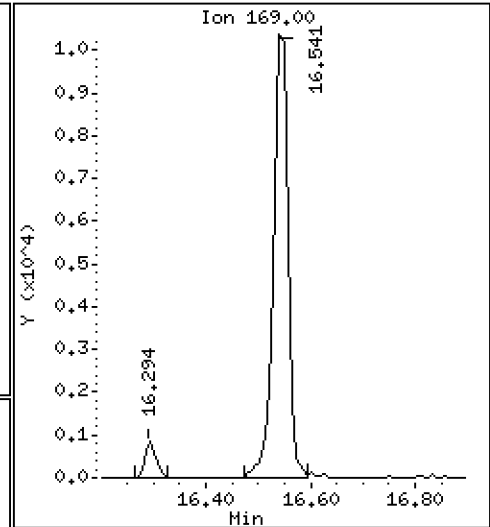
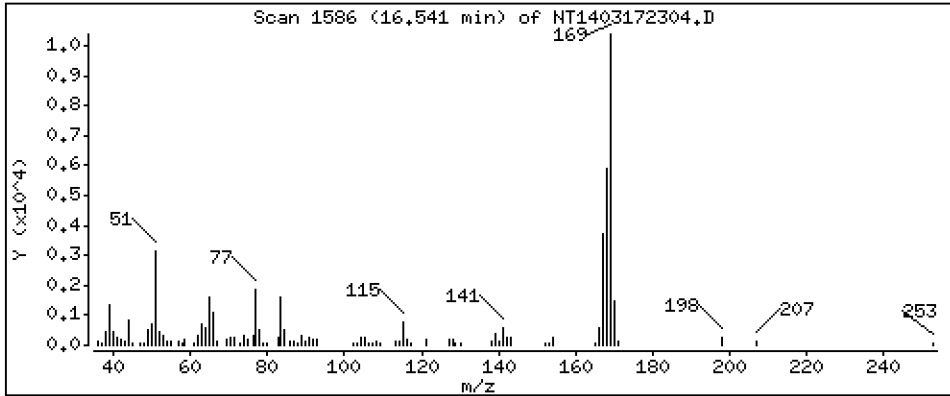
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,1883 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

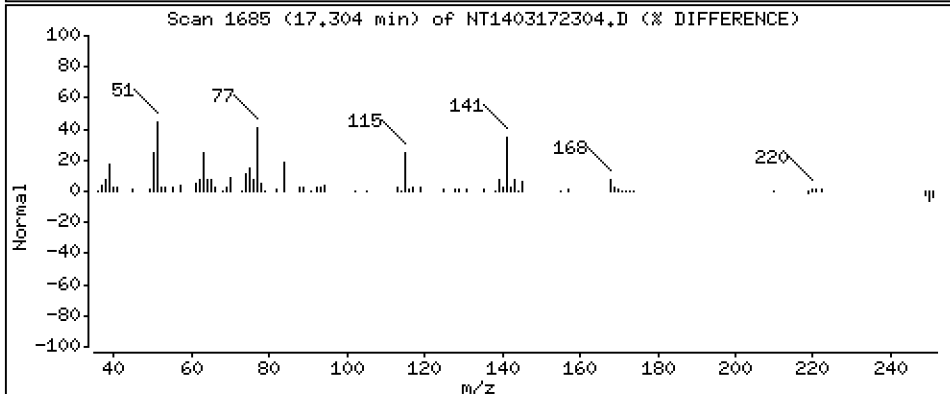
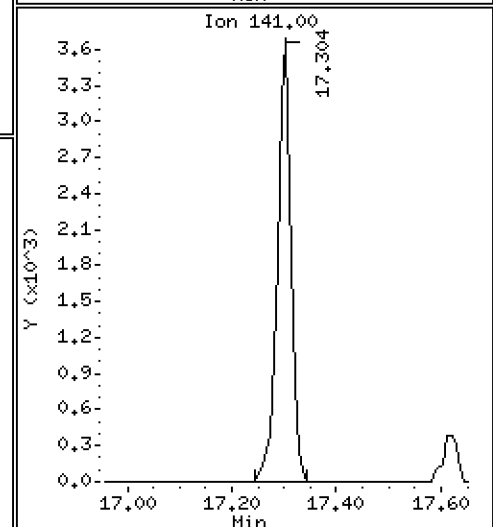
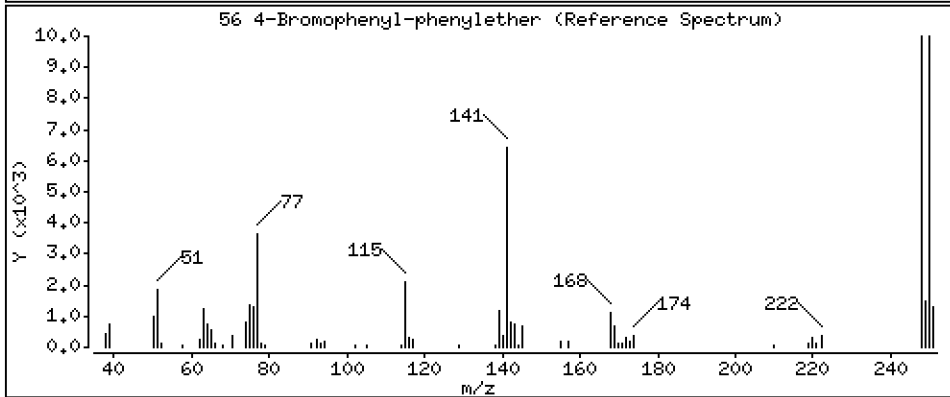
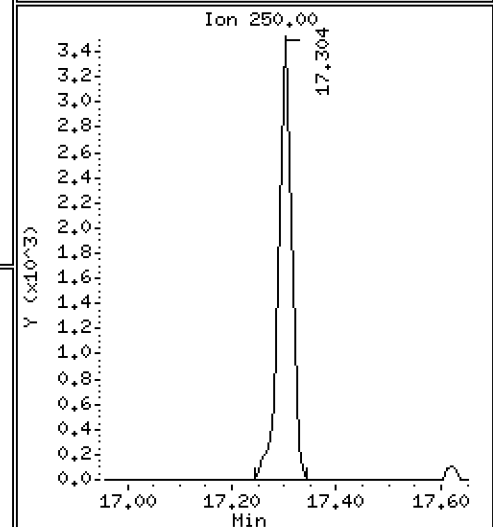
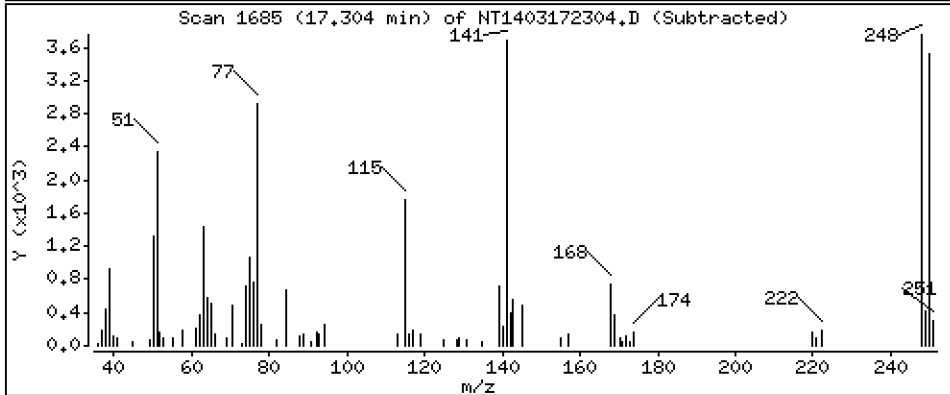
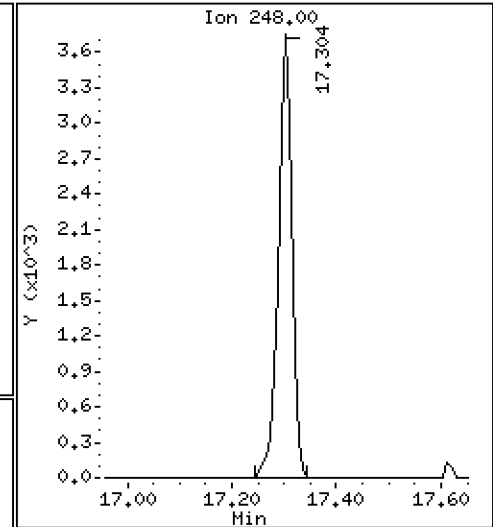
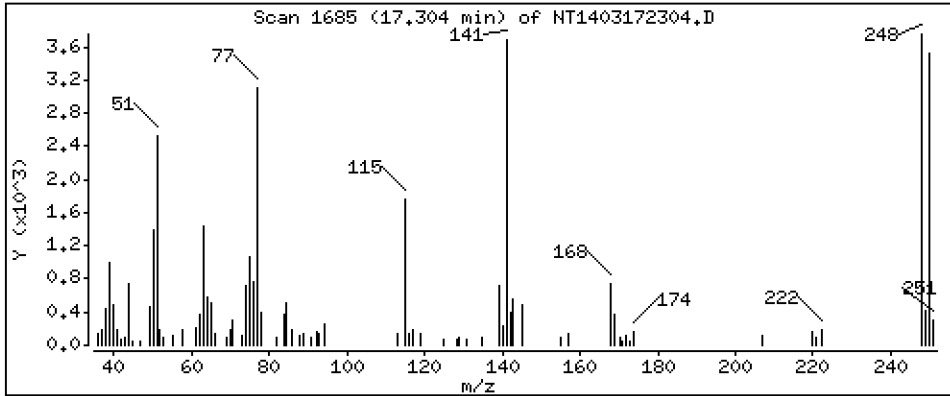
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1918 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

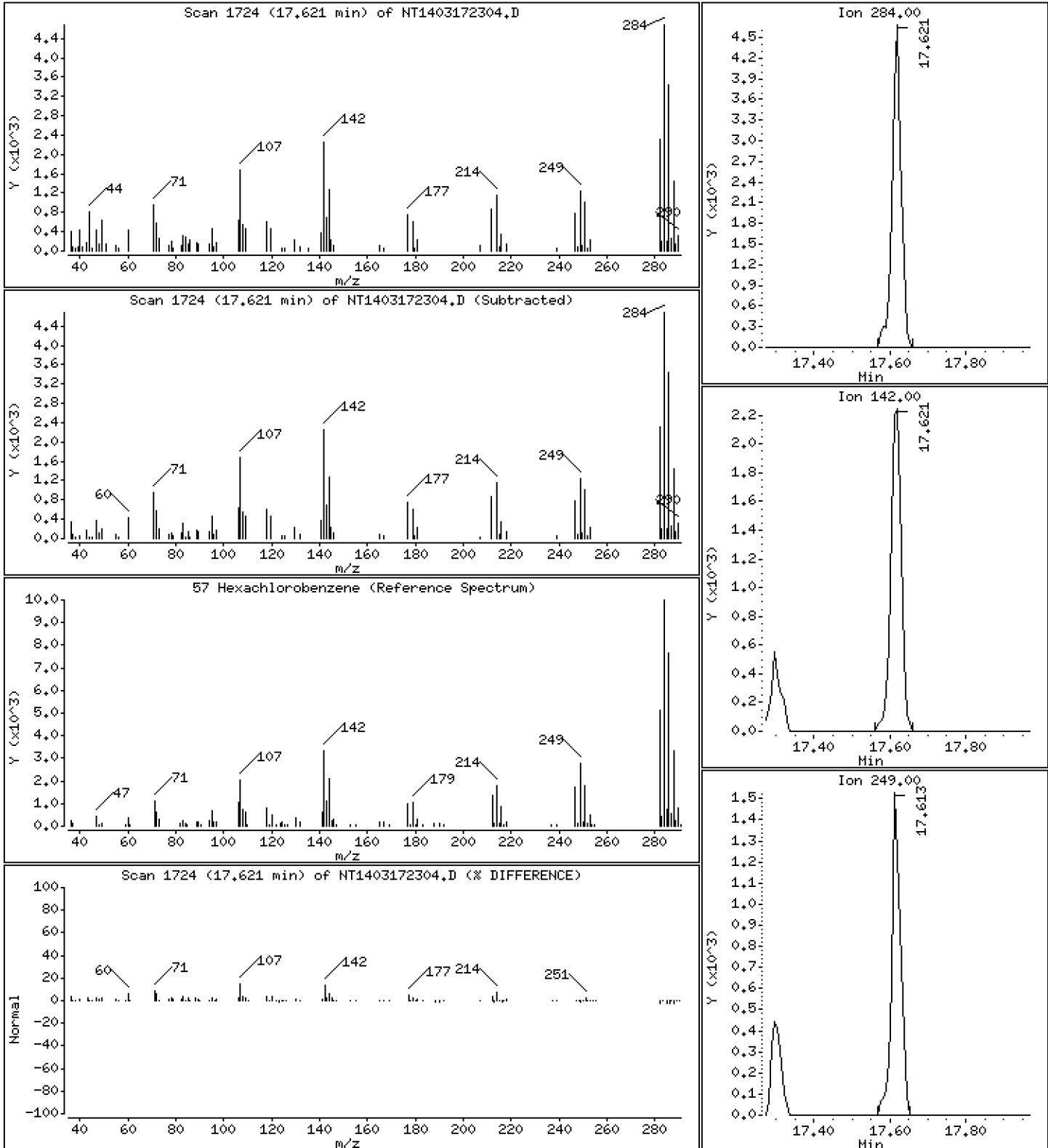
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2077 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

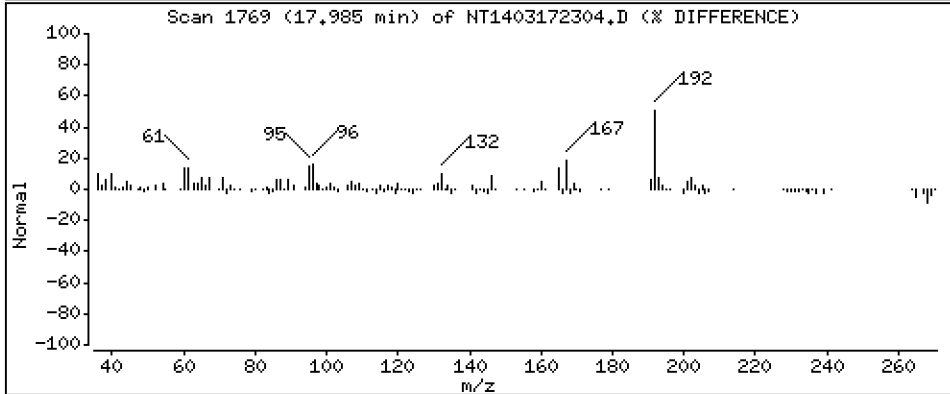
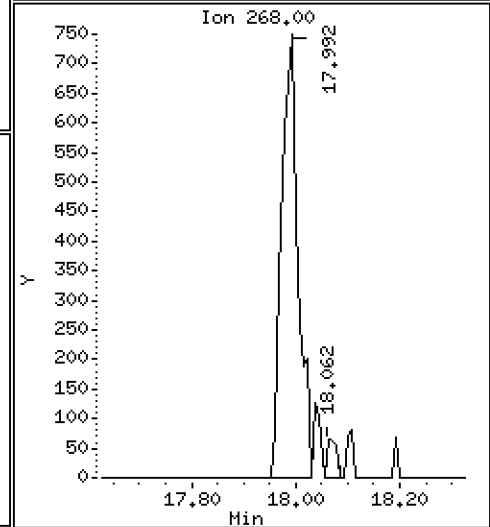
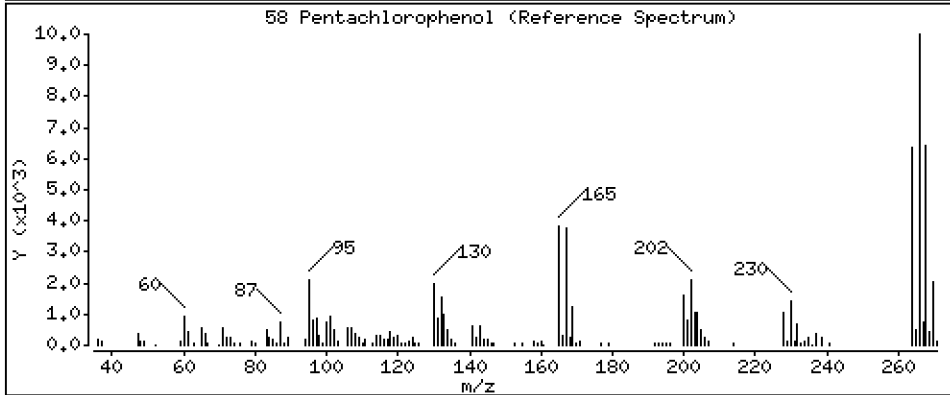
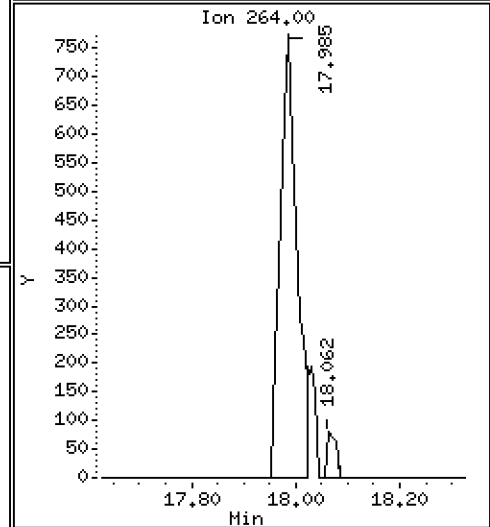
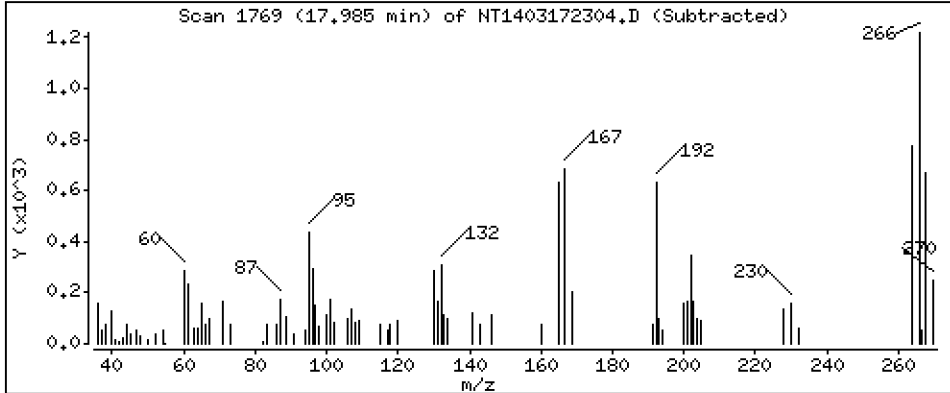
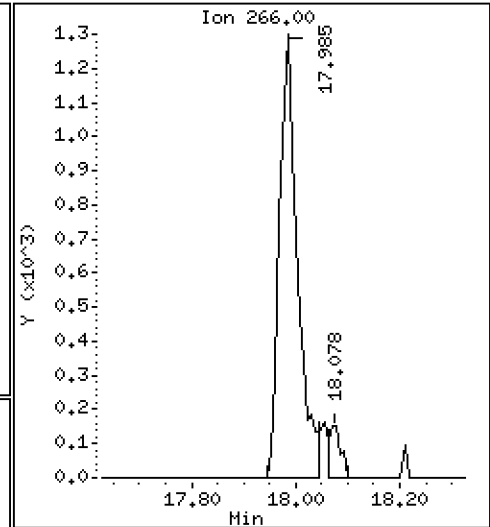
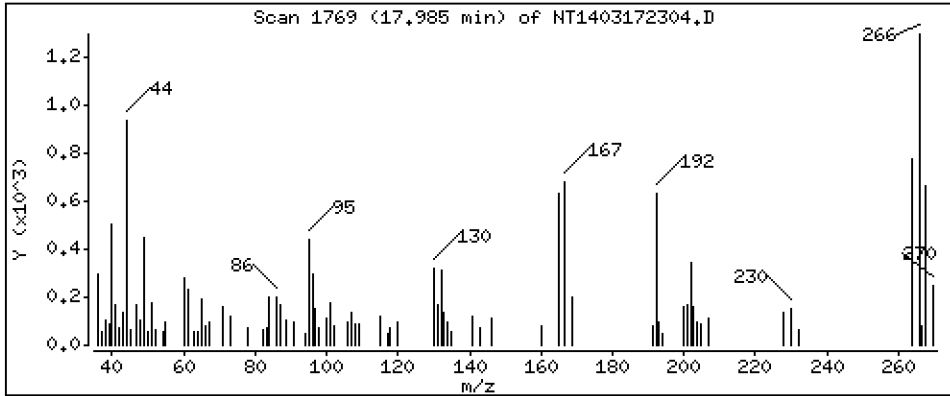
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1220 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

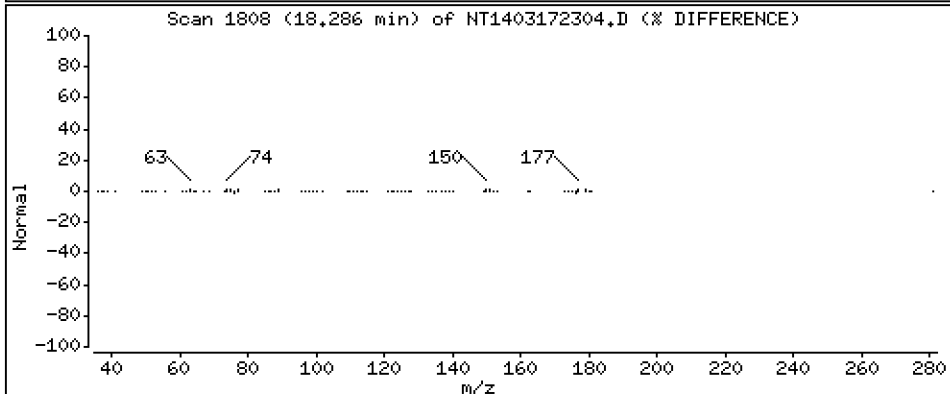
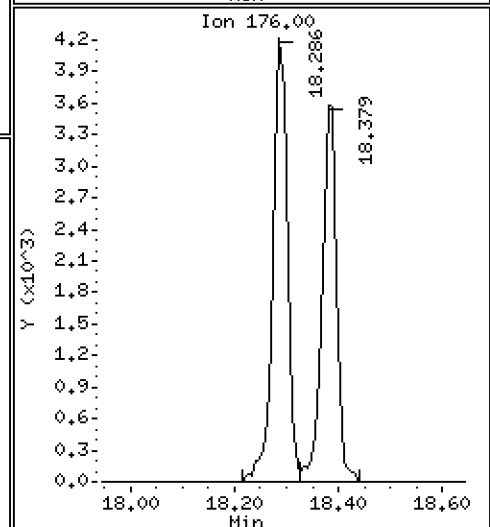
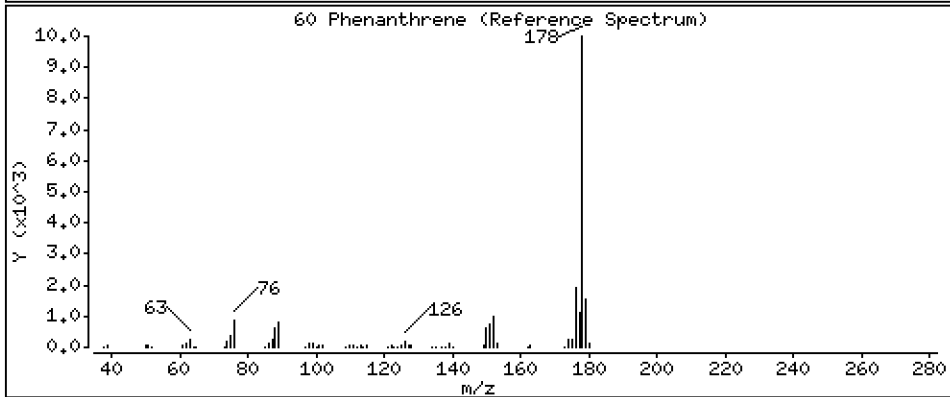
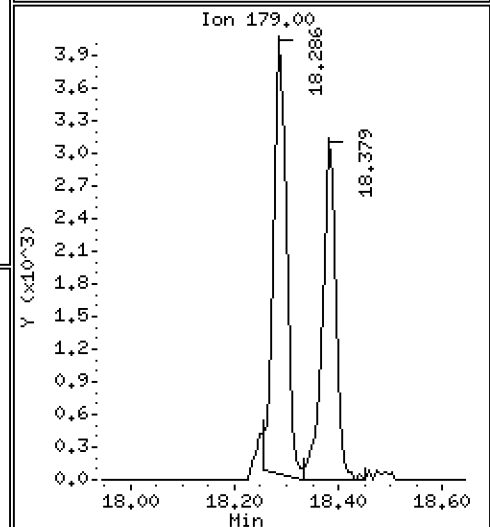
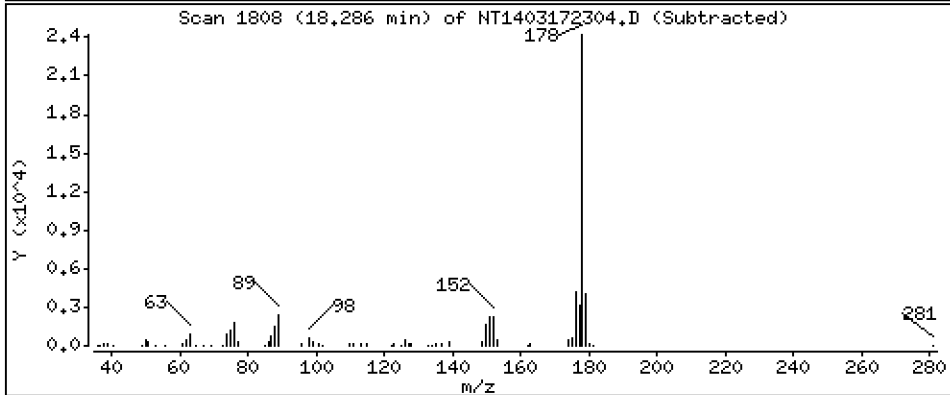
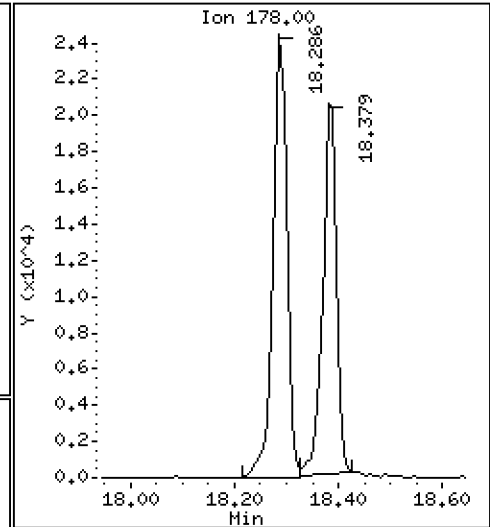
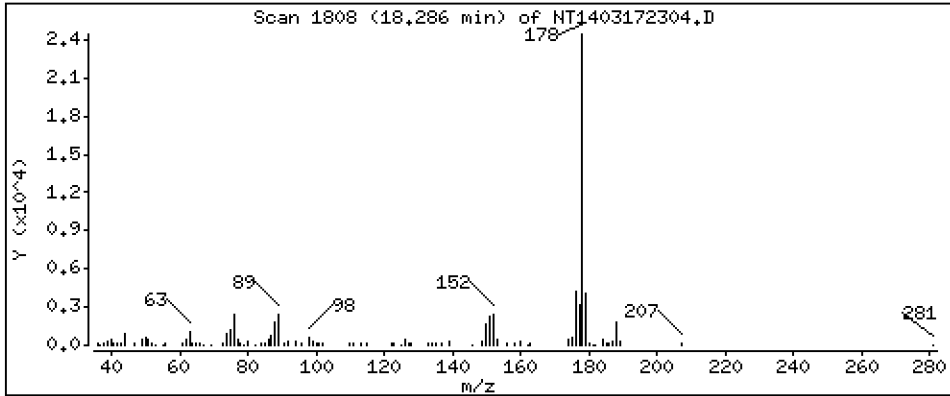
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,1994 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

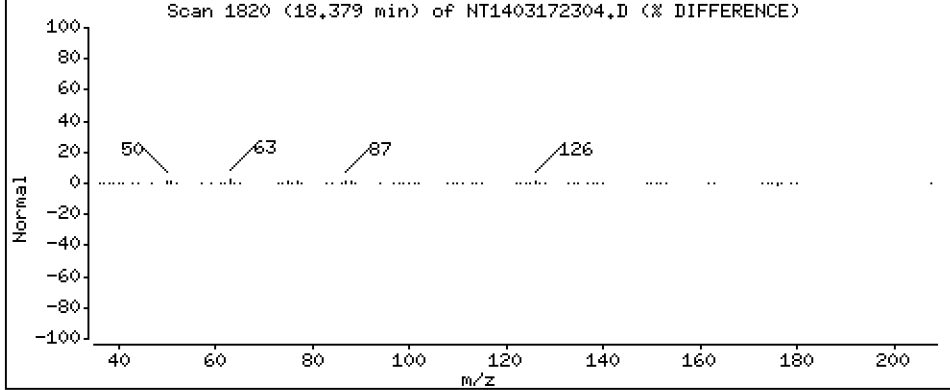
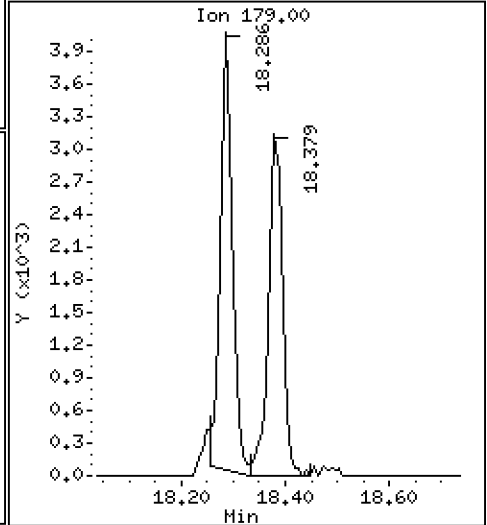
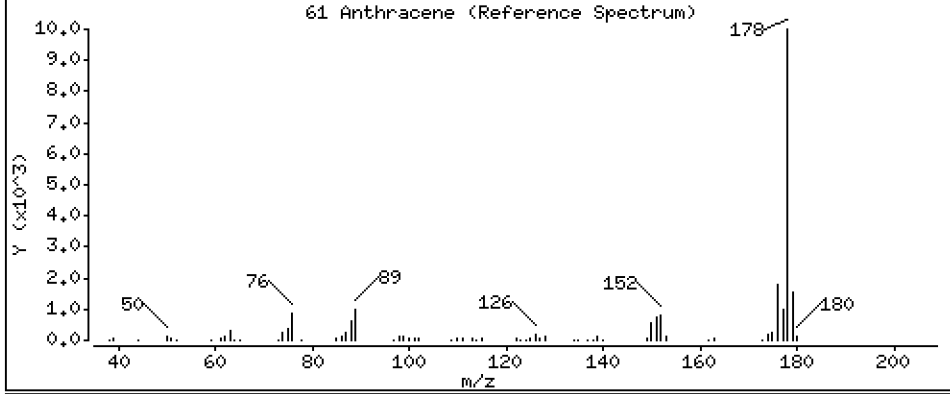
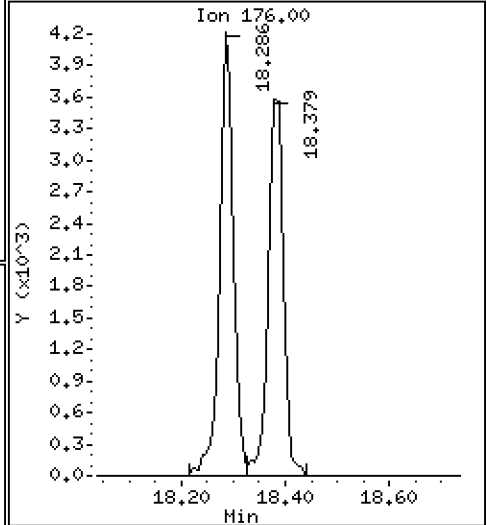
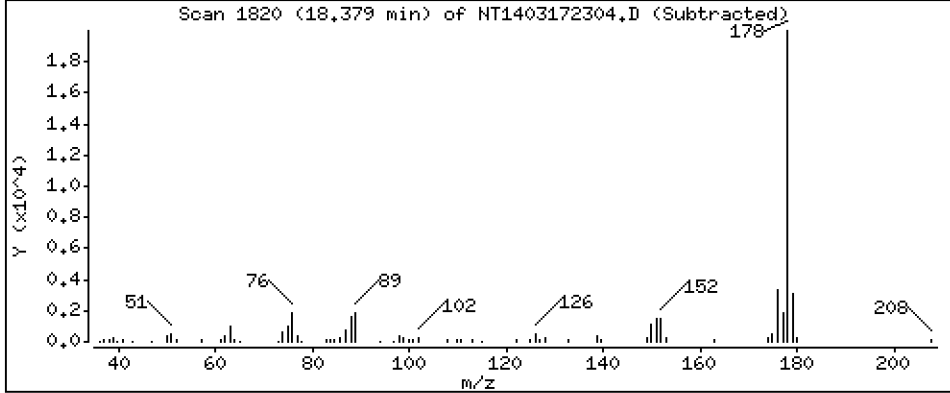
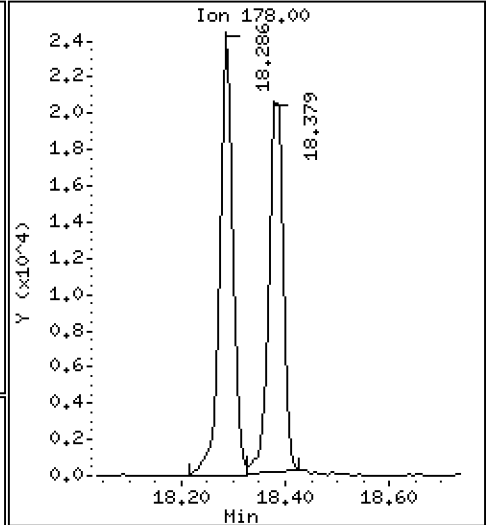
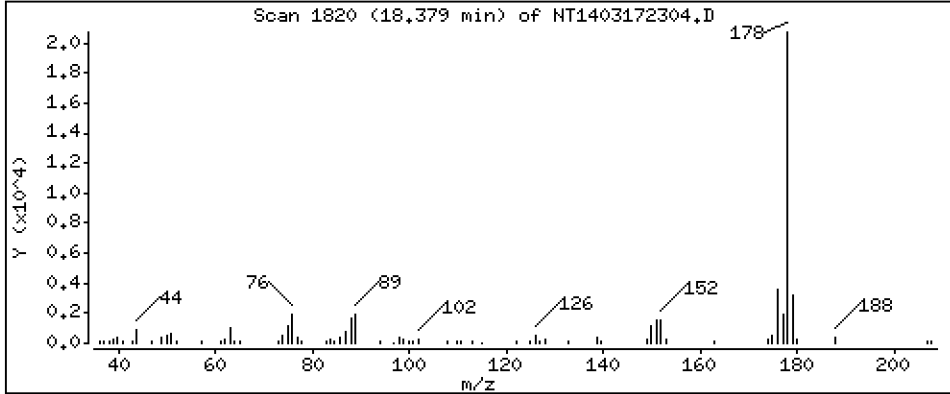
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1773 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

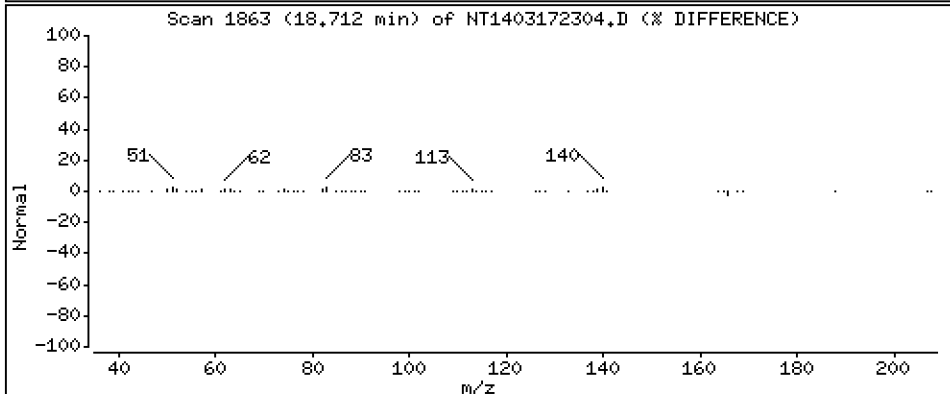
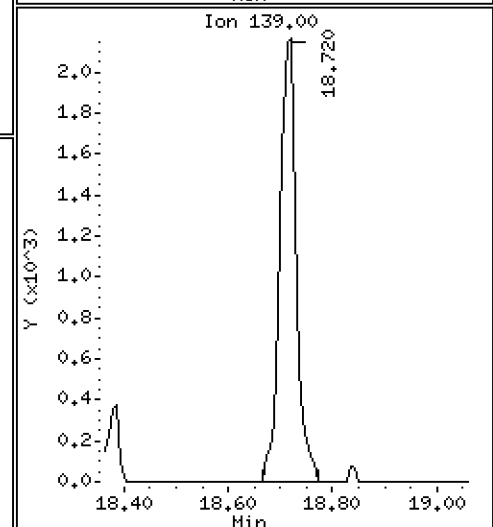
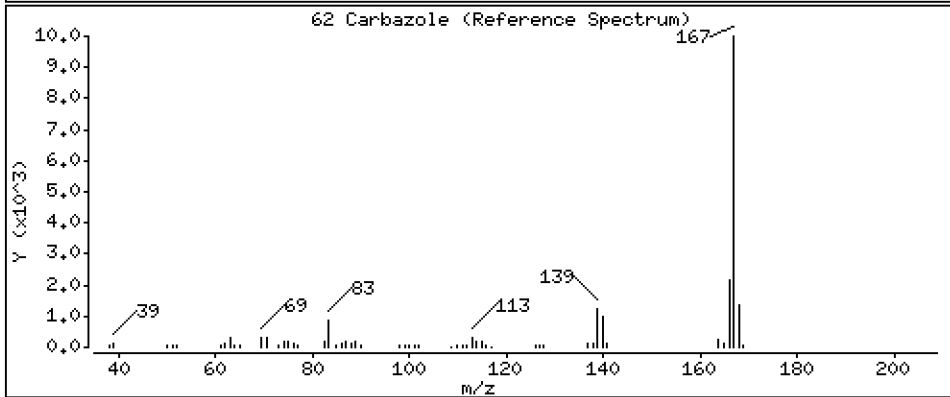
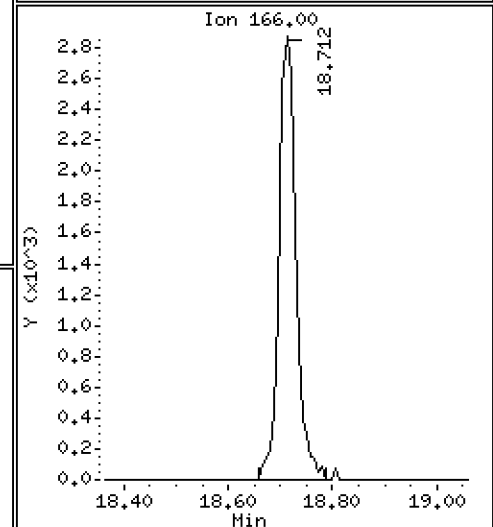
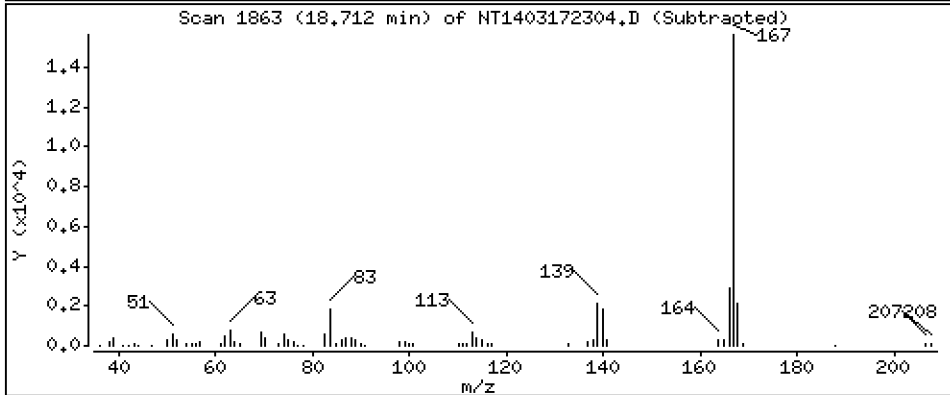
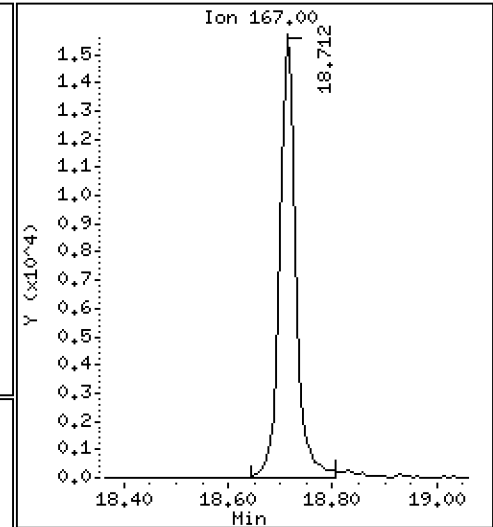
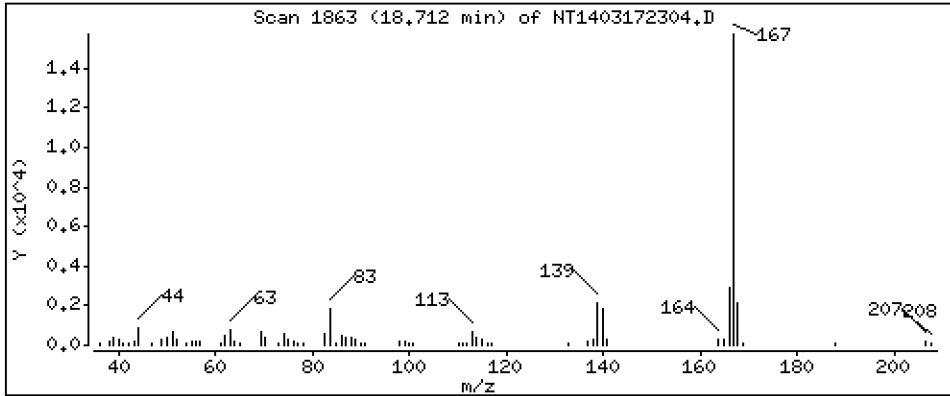
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1750 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

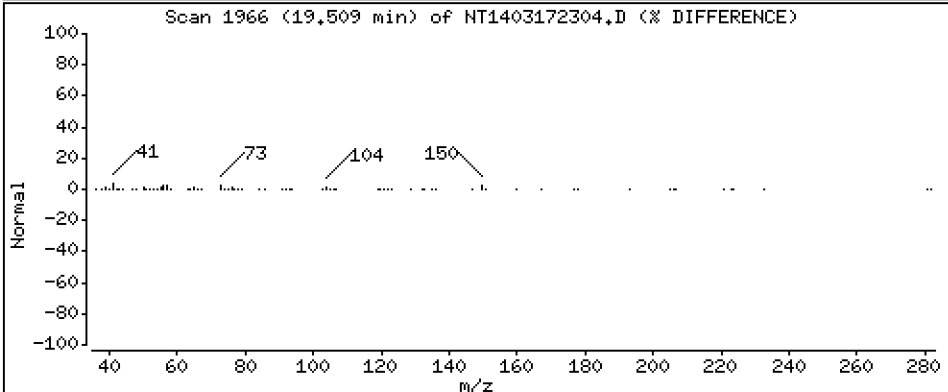
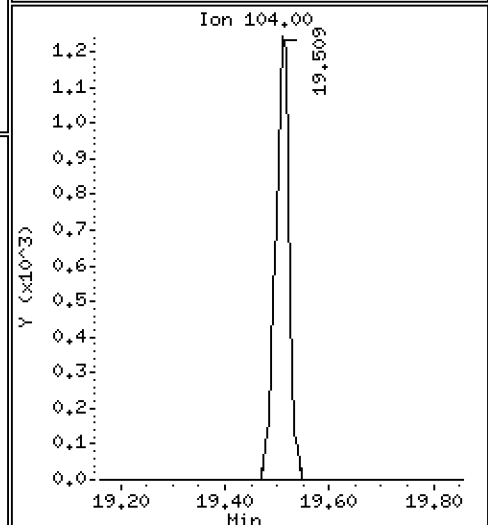
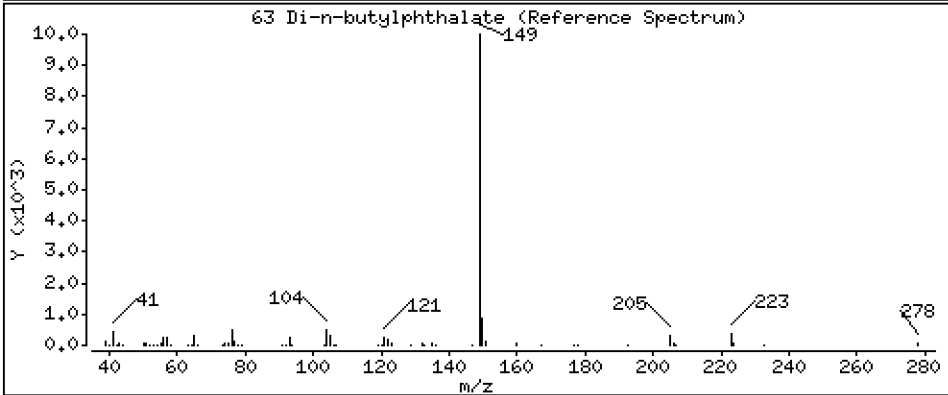
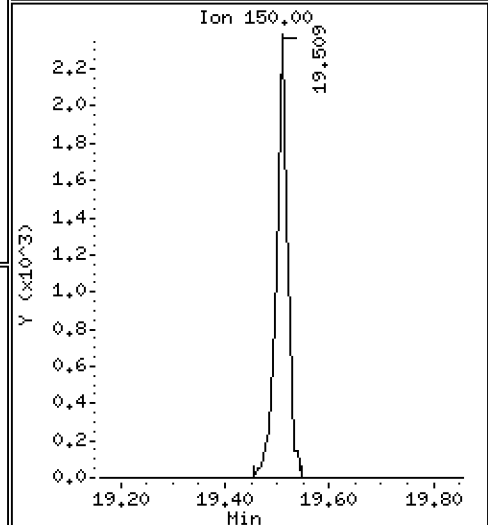
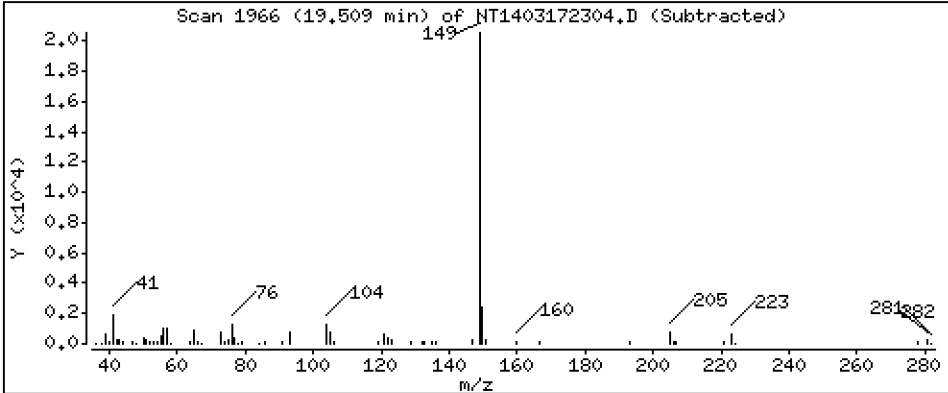
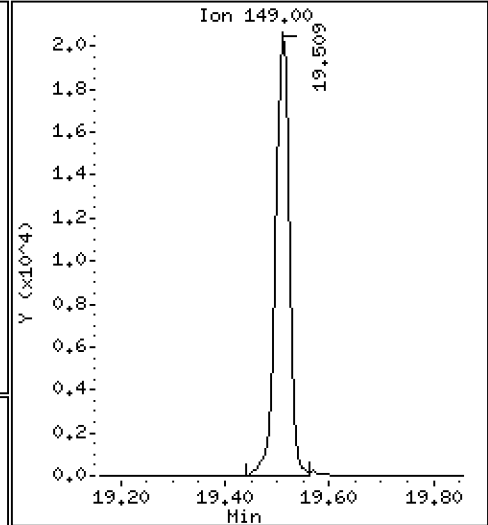
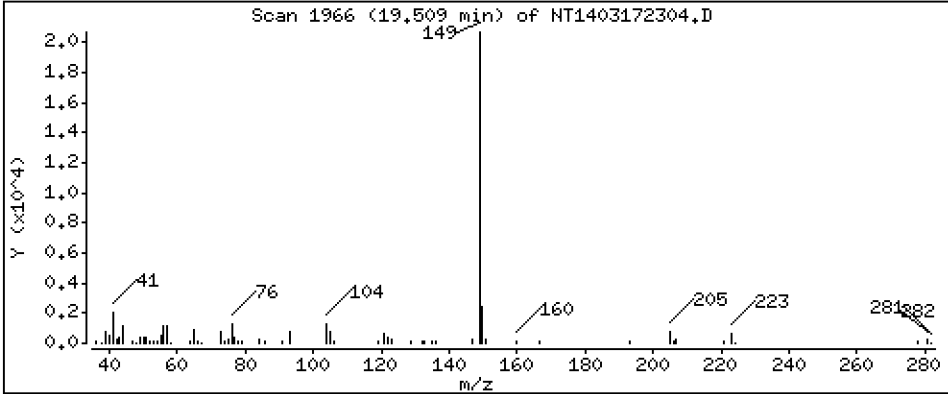
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,1543 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

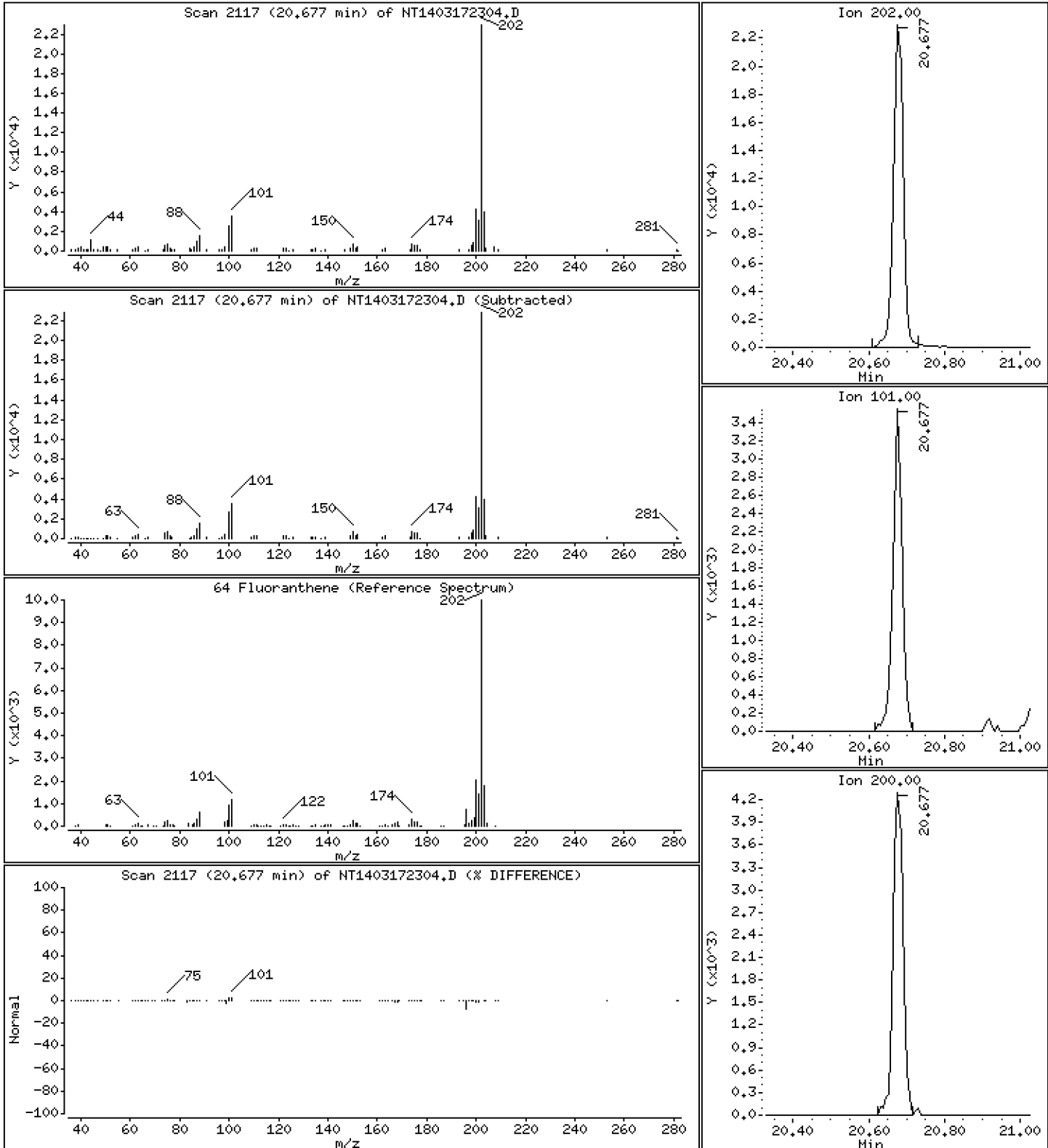
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,2091 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

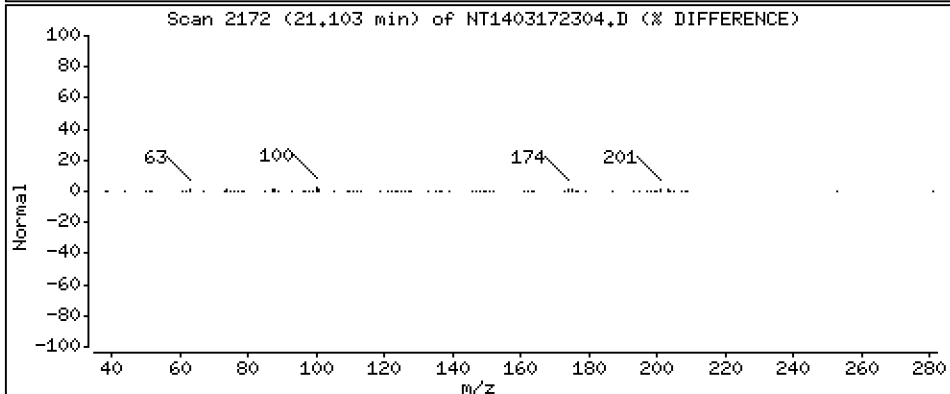
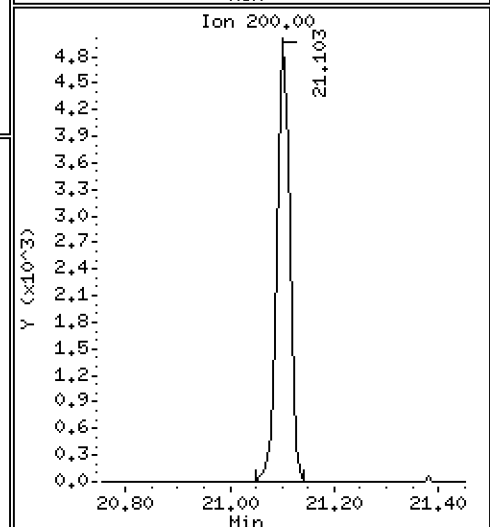
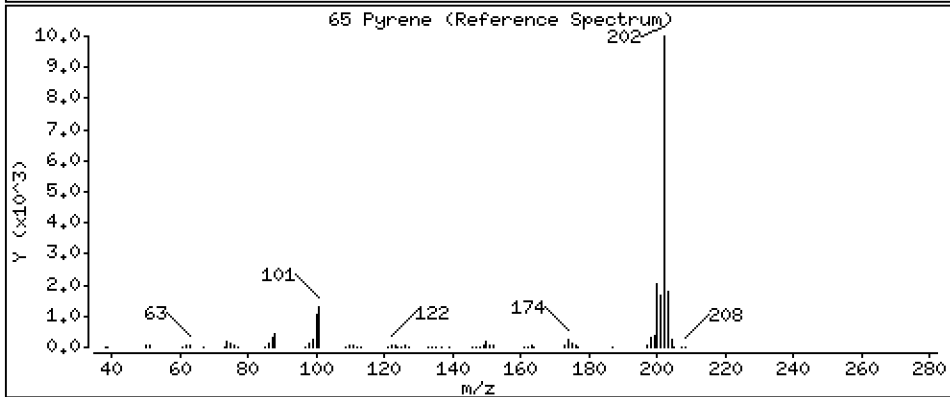
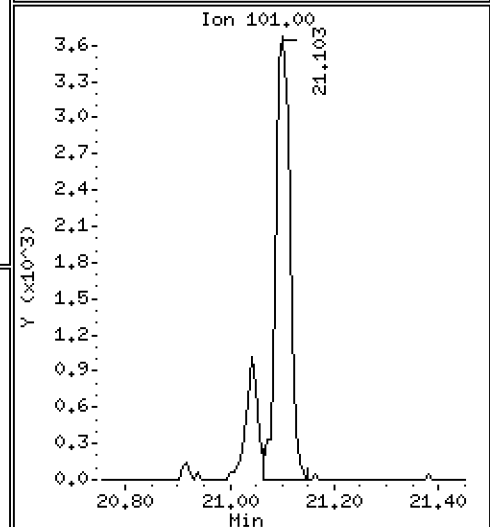
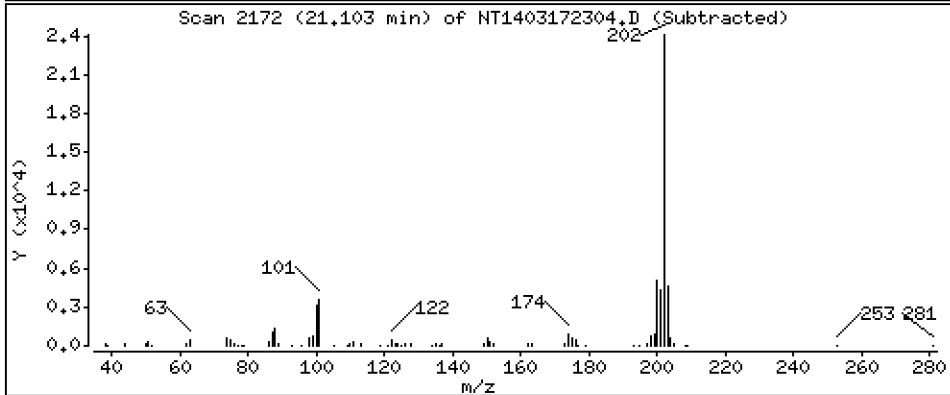
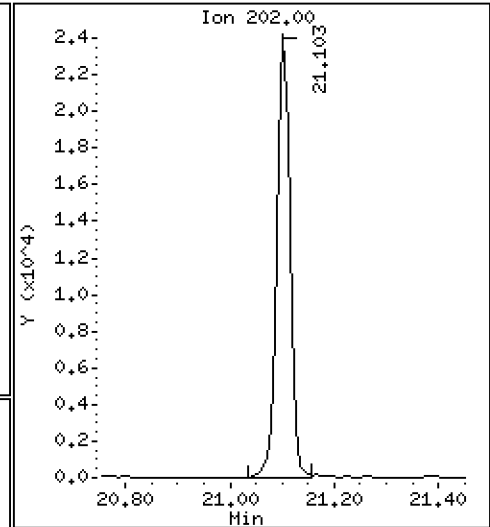
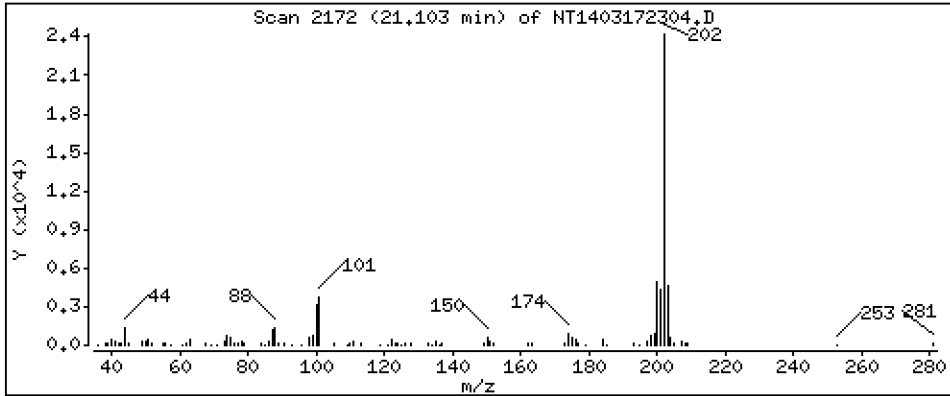
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,2132 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

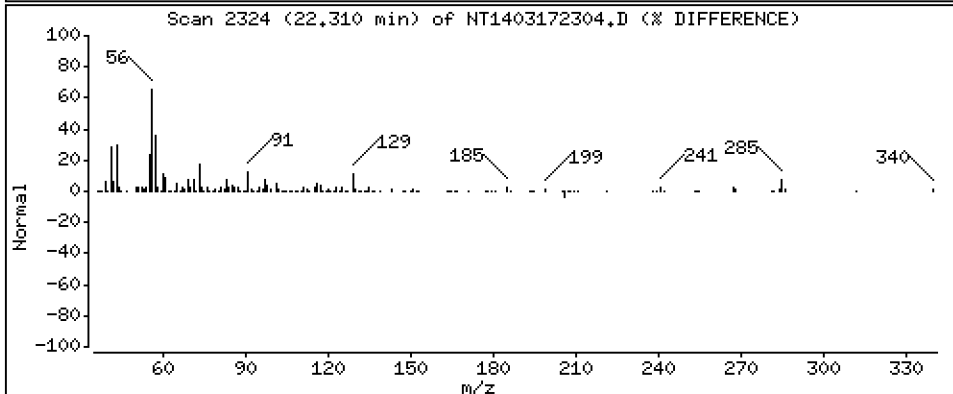
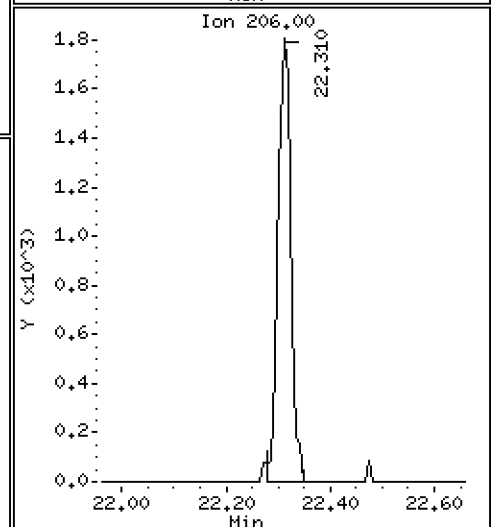
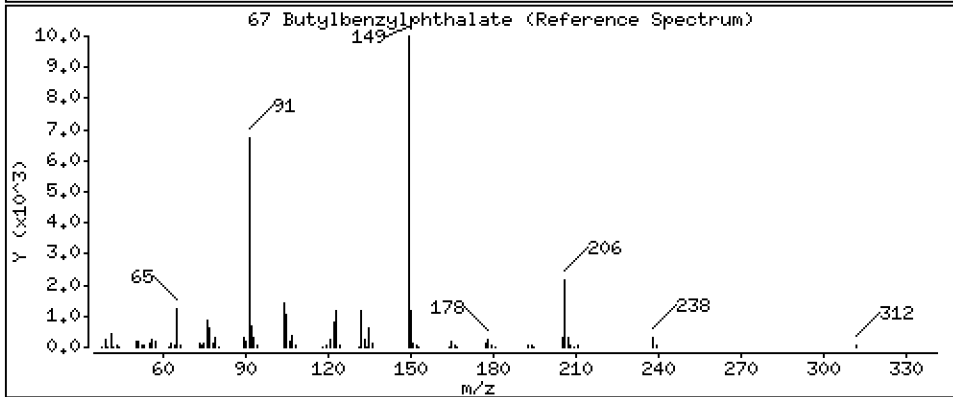
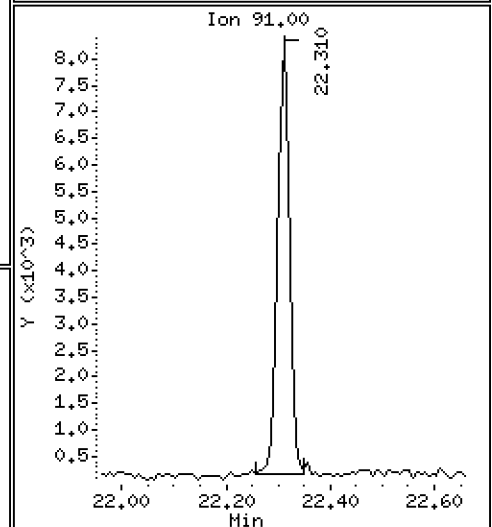
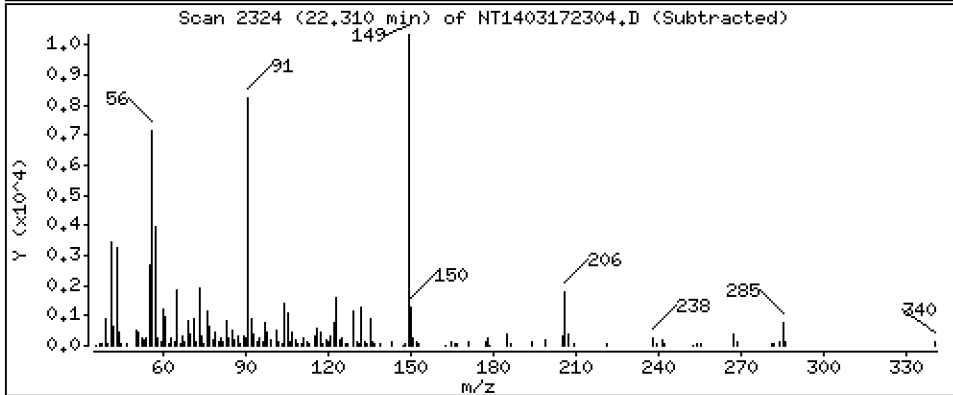
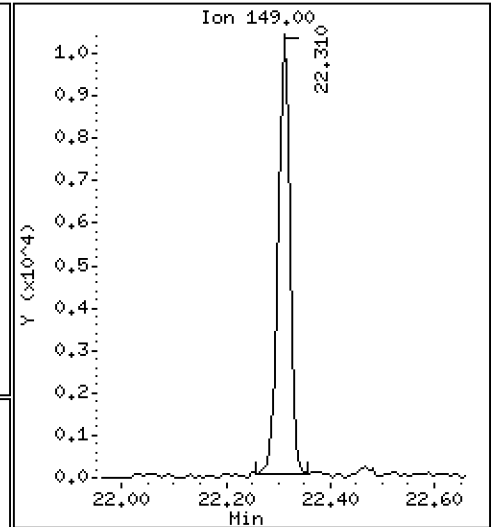
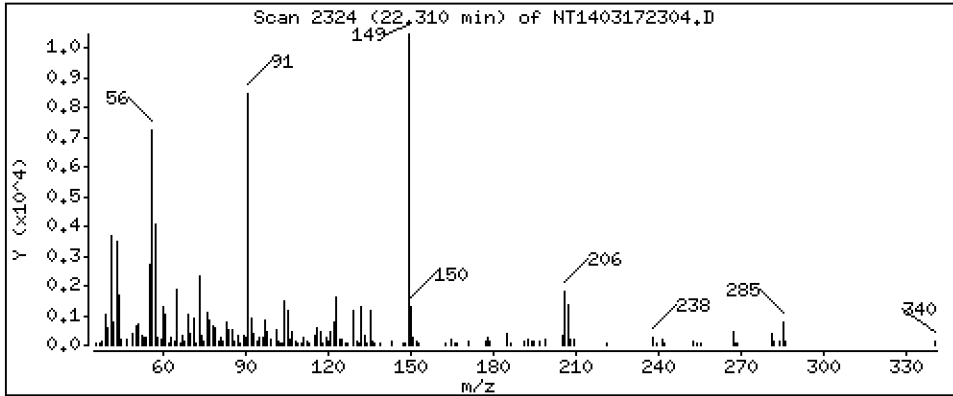
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1836 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

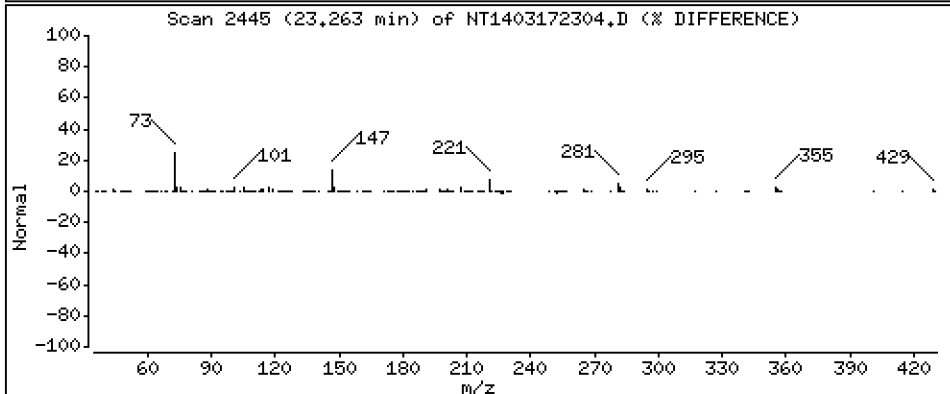
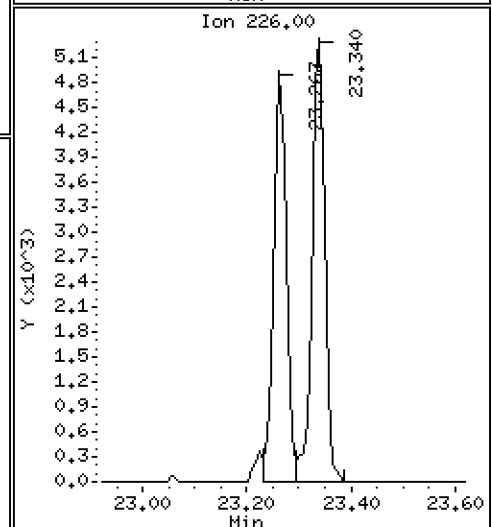
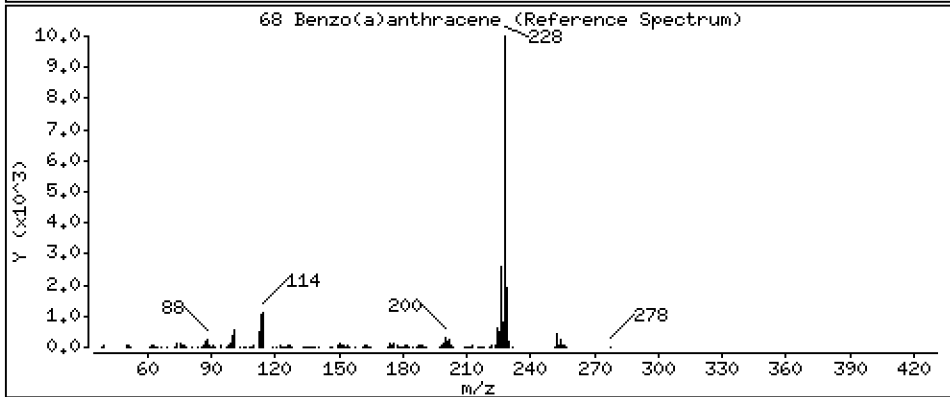
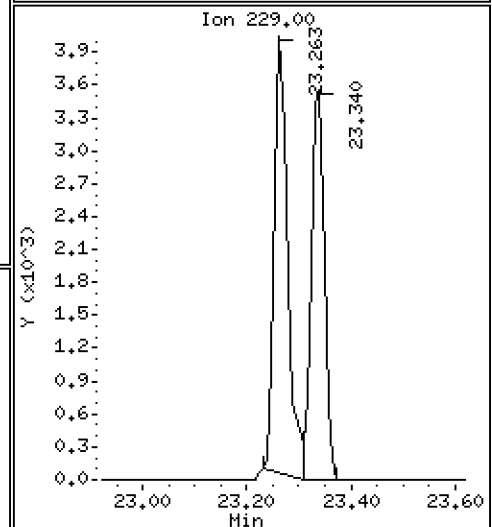
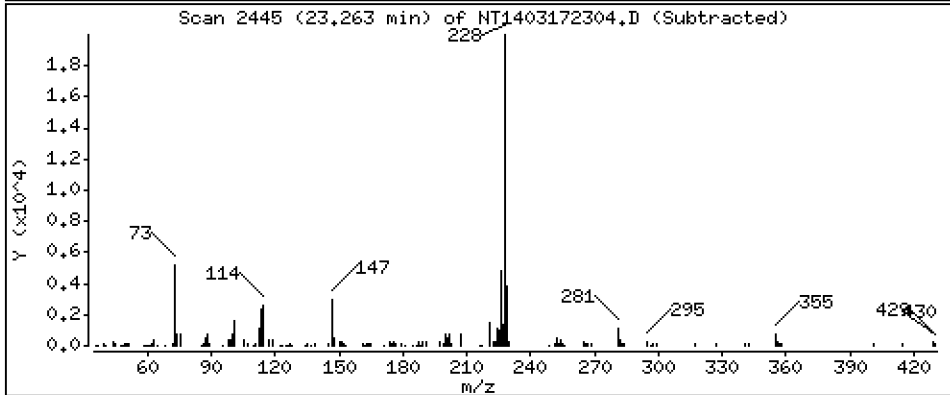
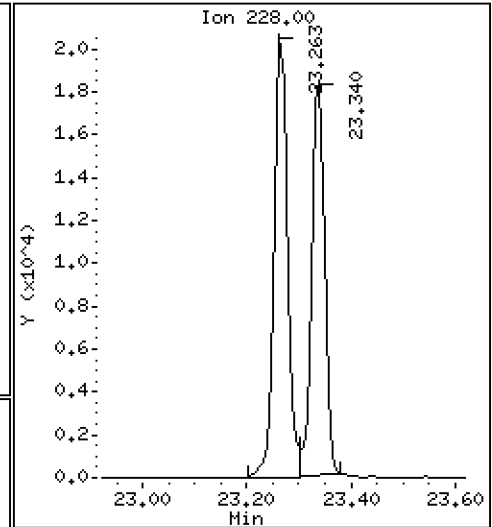
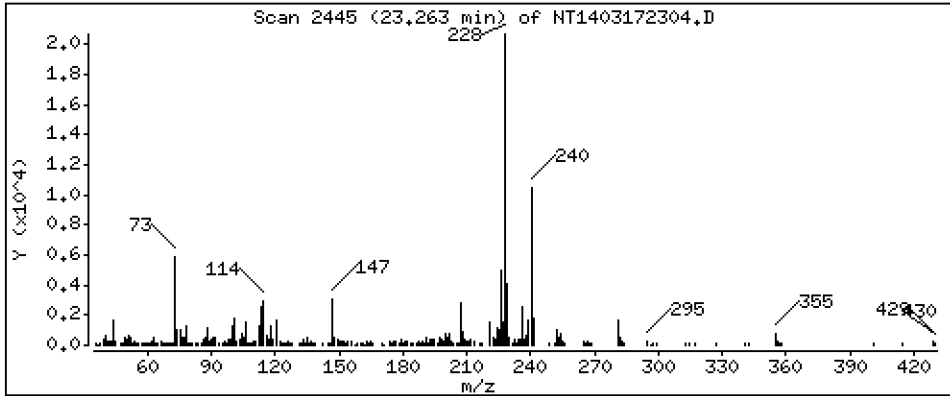
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,2082 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

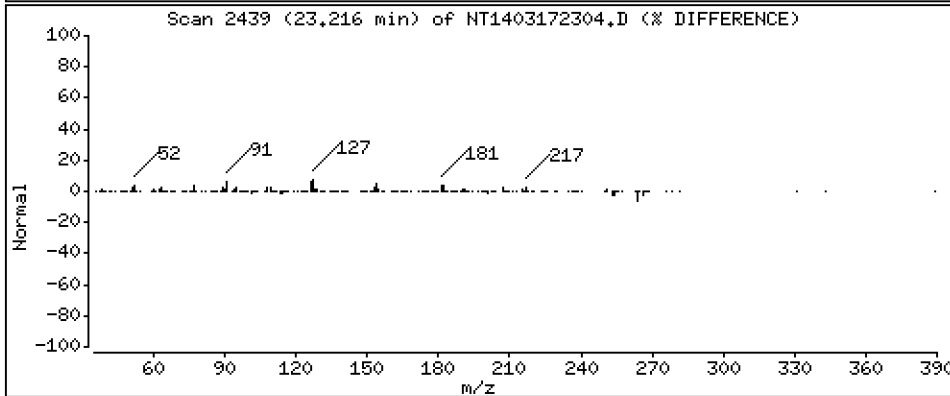
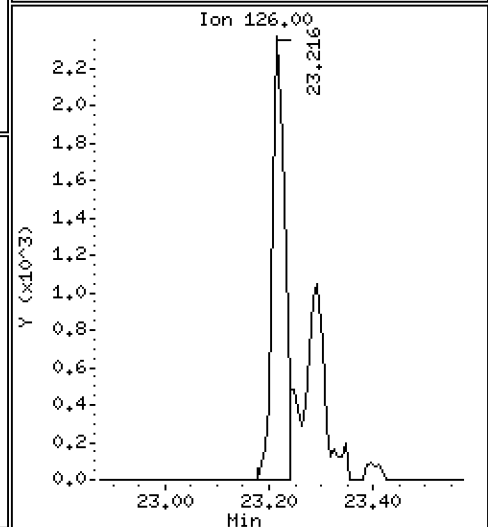
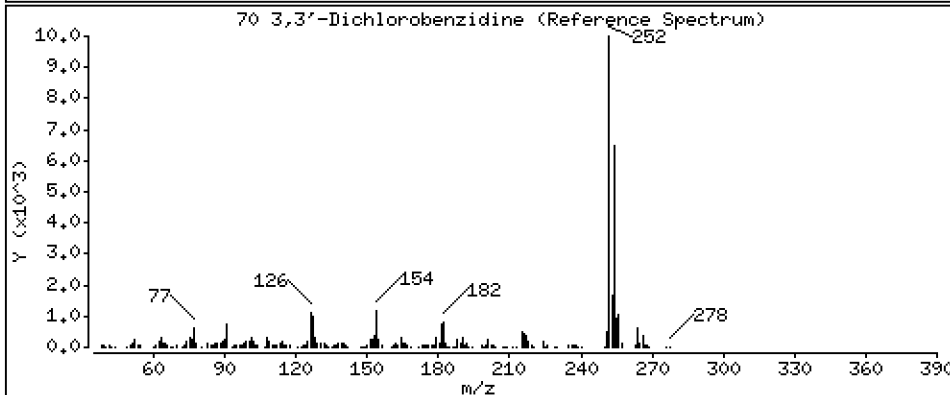
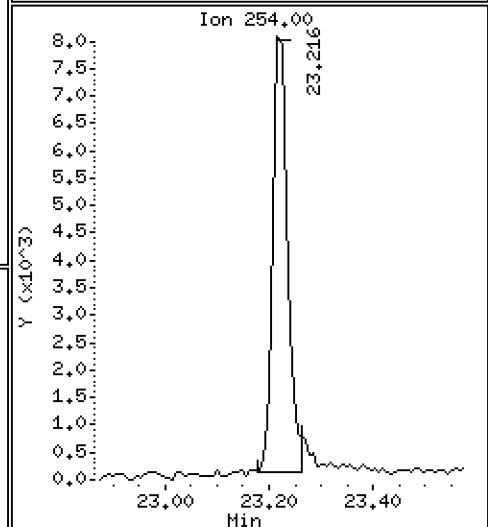
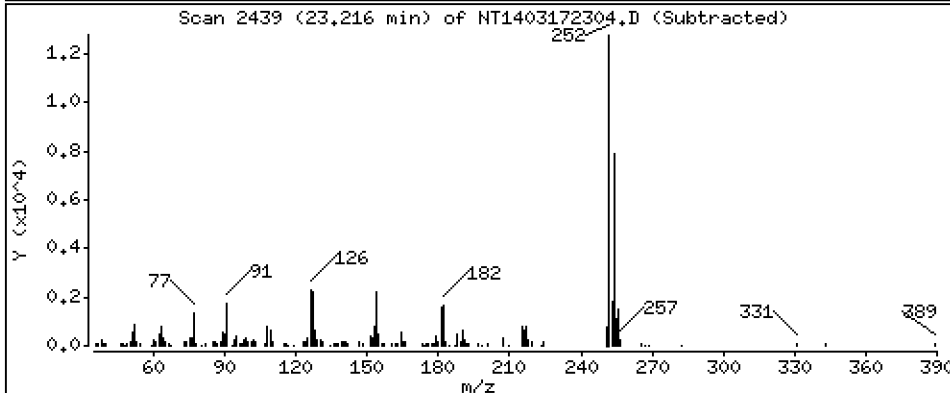
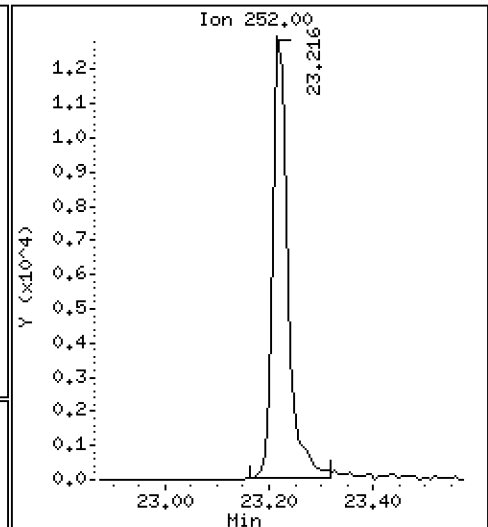
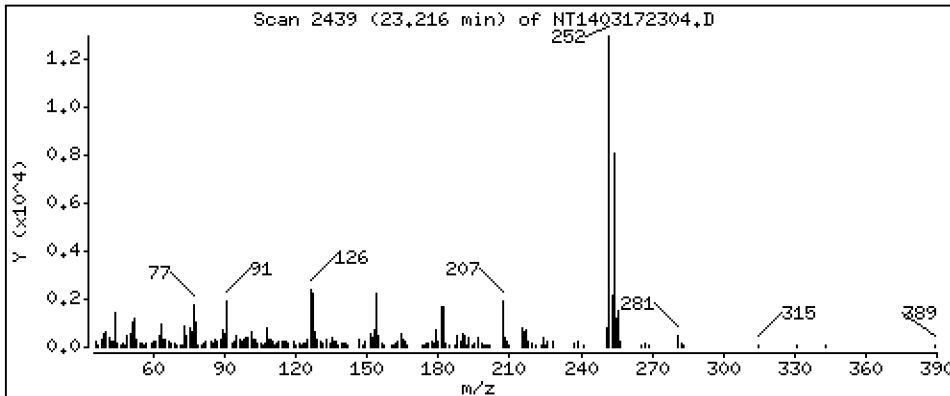
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,5150 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

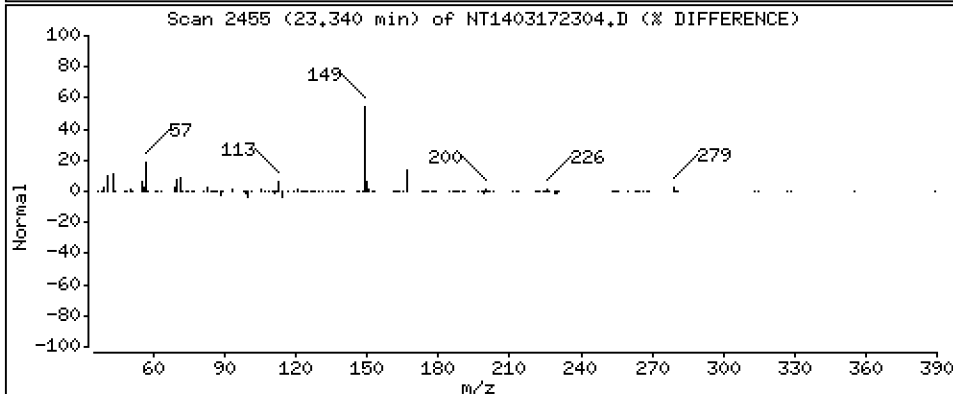
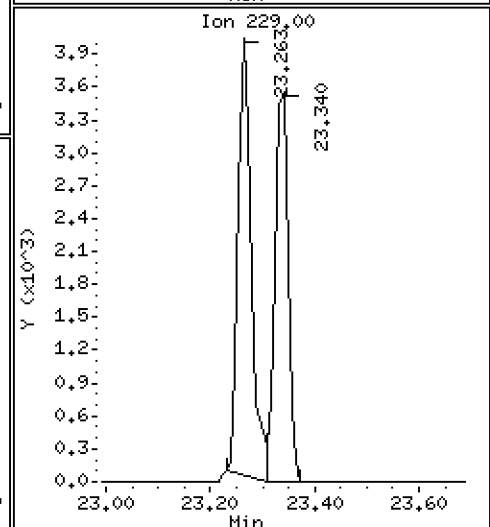
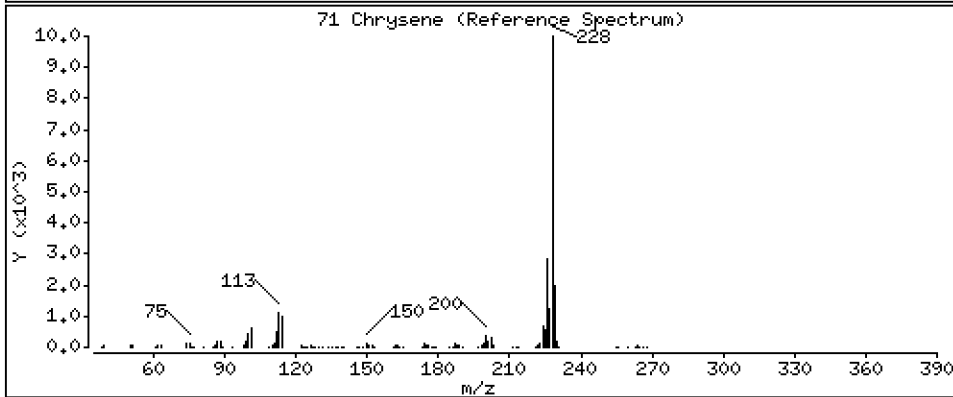
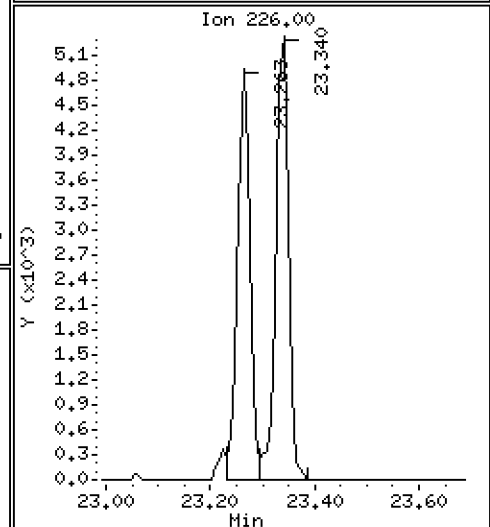
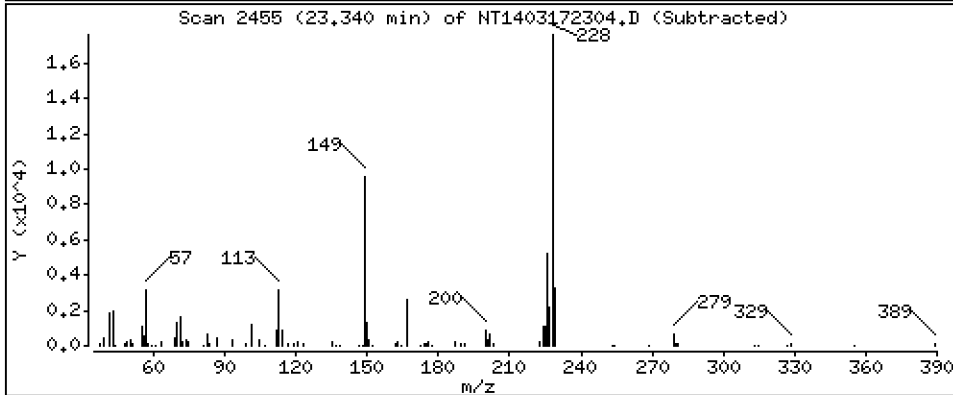
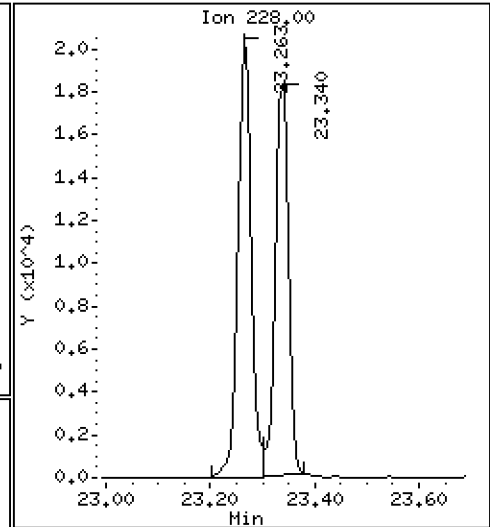
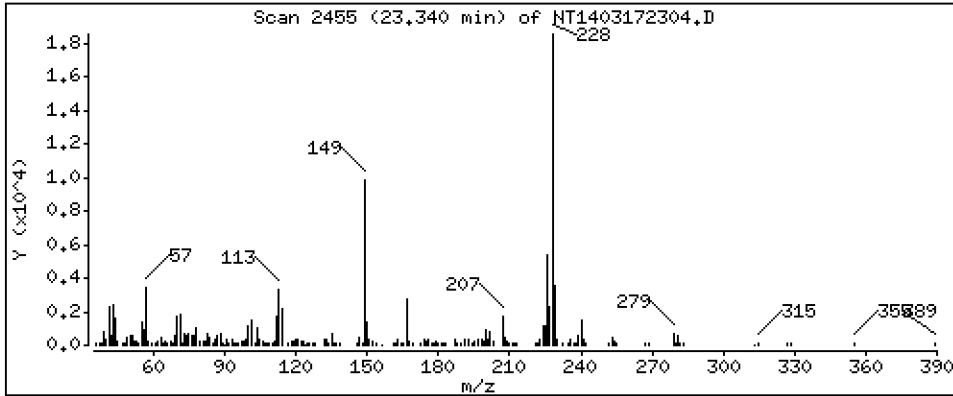
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2012 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

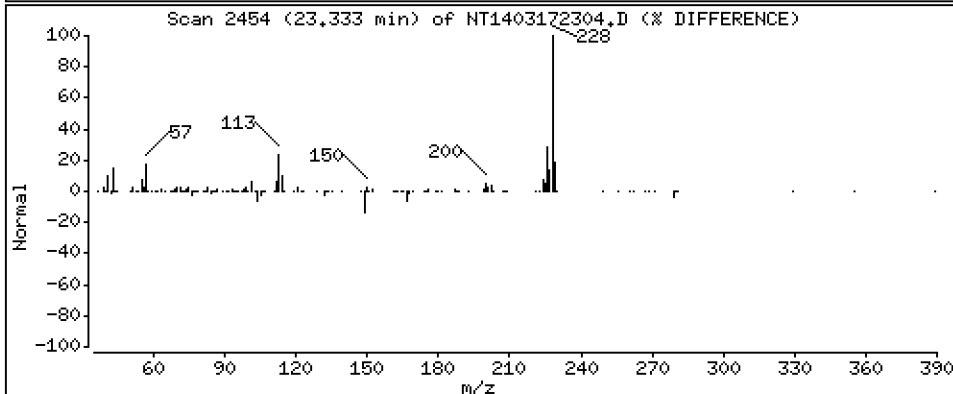
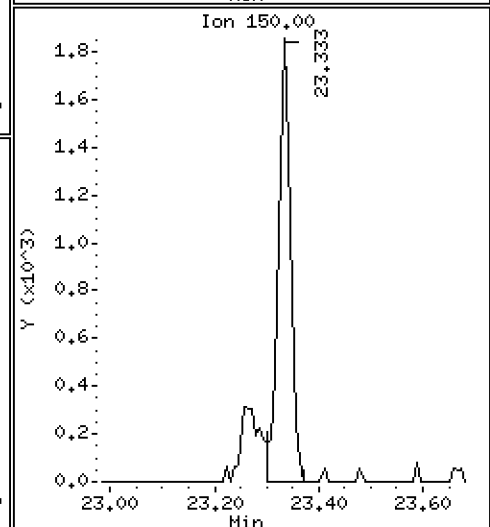
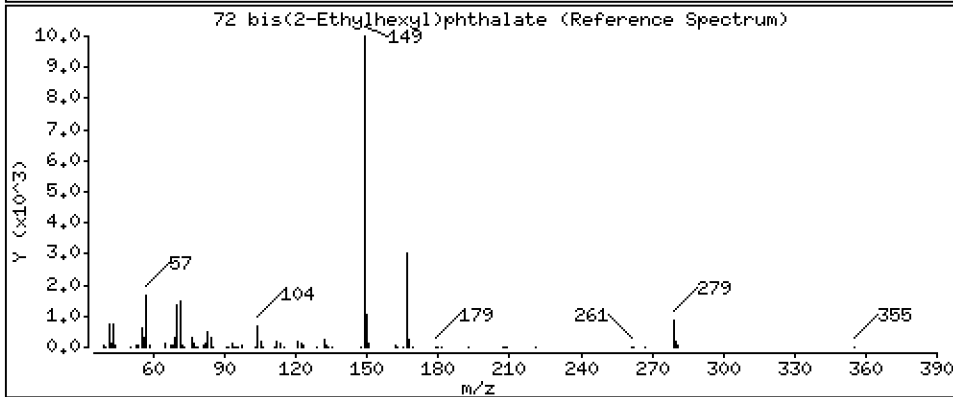
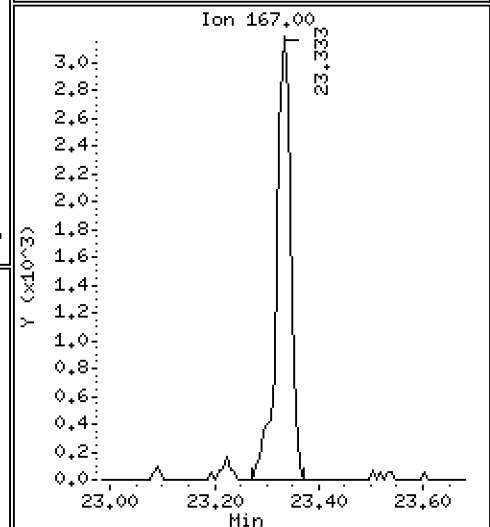
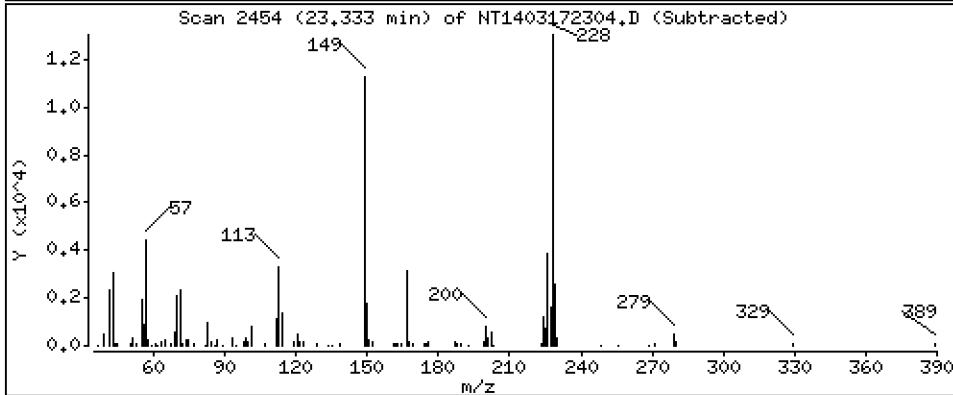
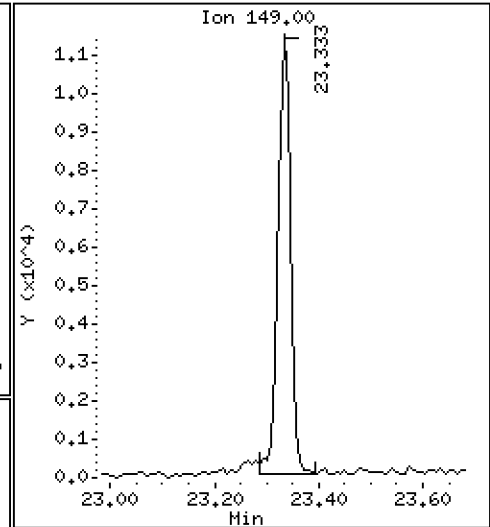
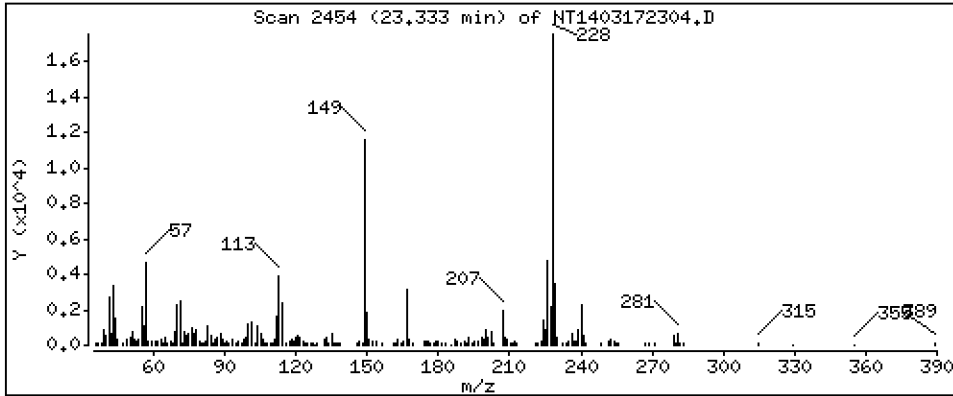
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,1958 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

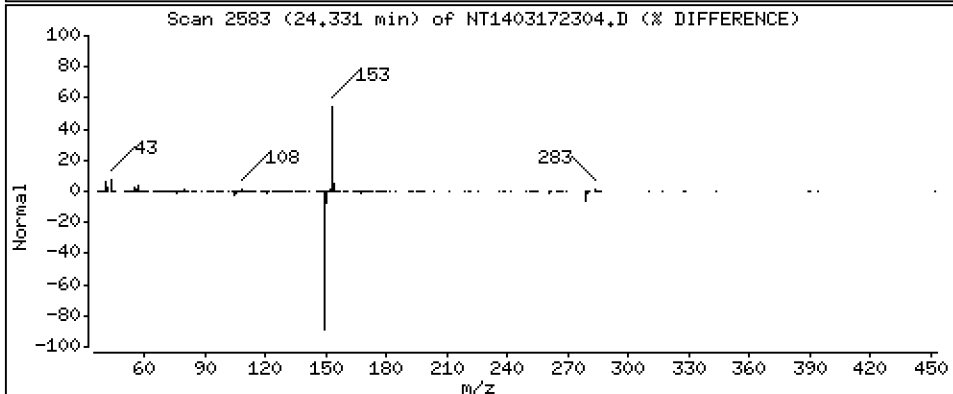
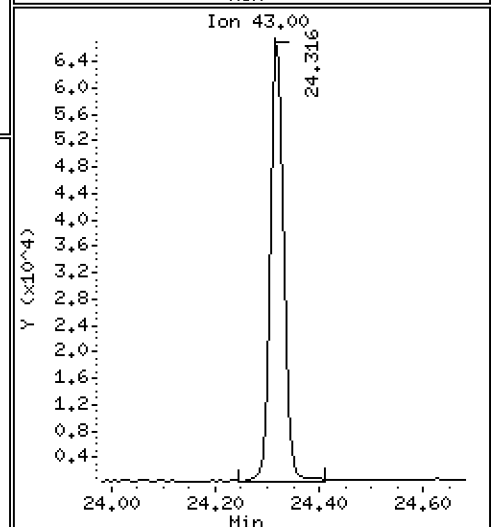
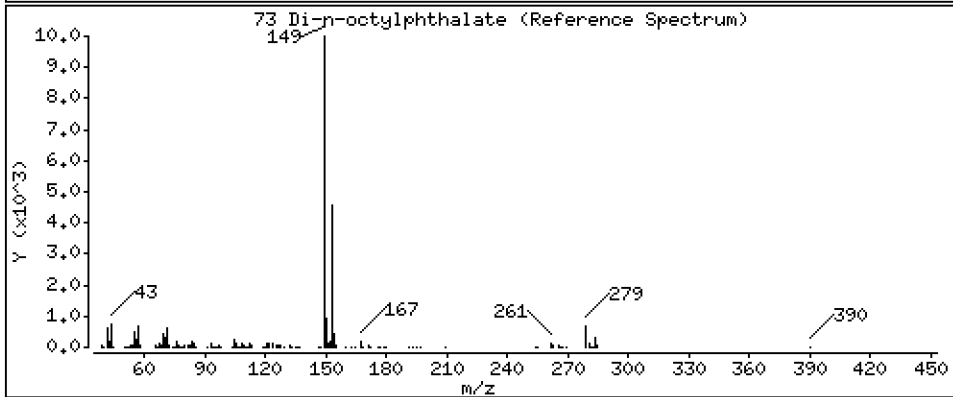
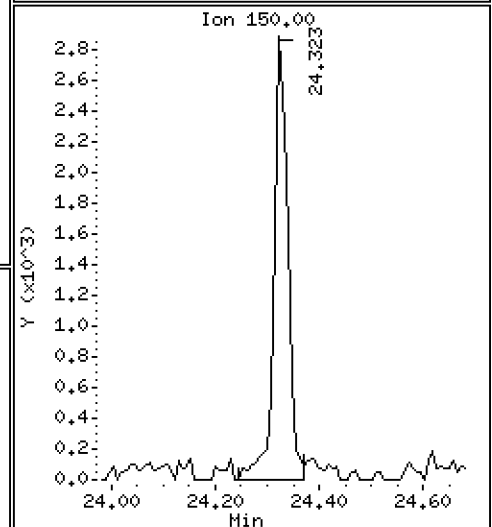
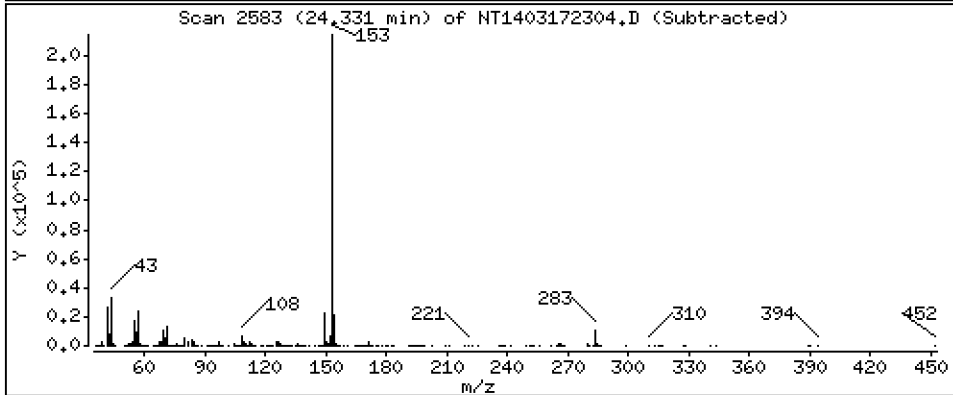
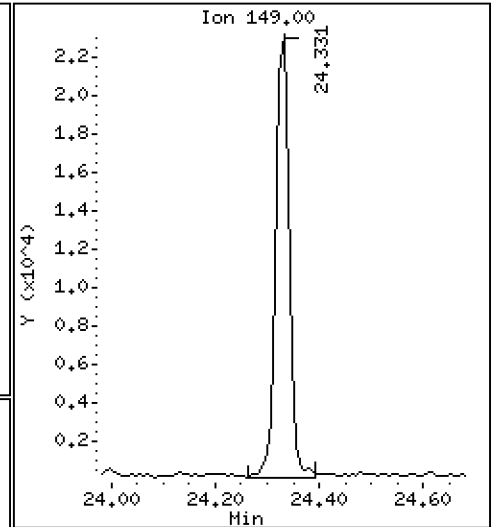
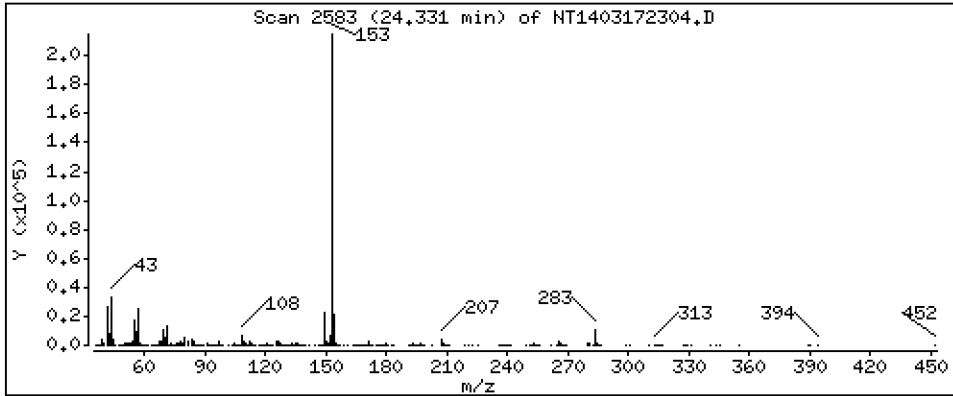
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2178 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

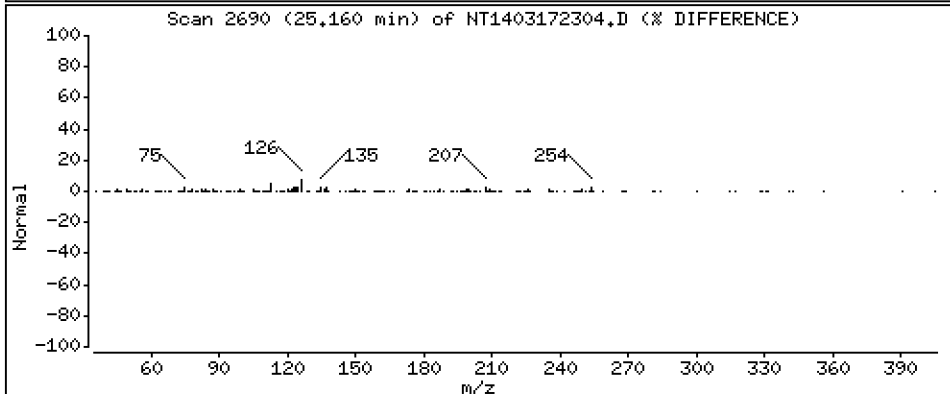
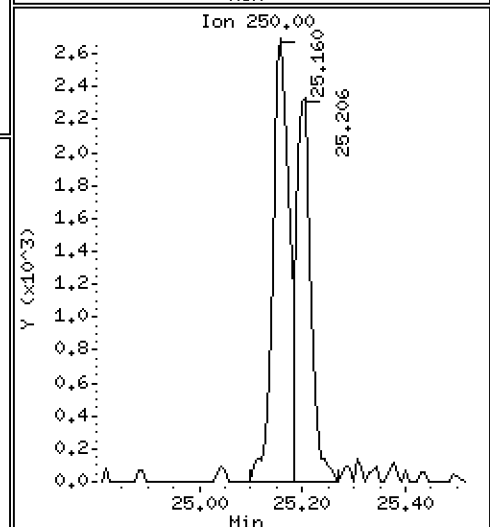
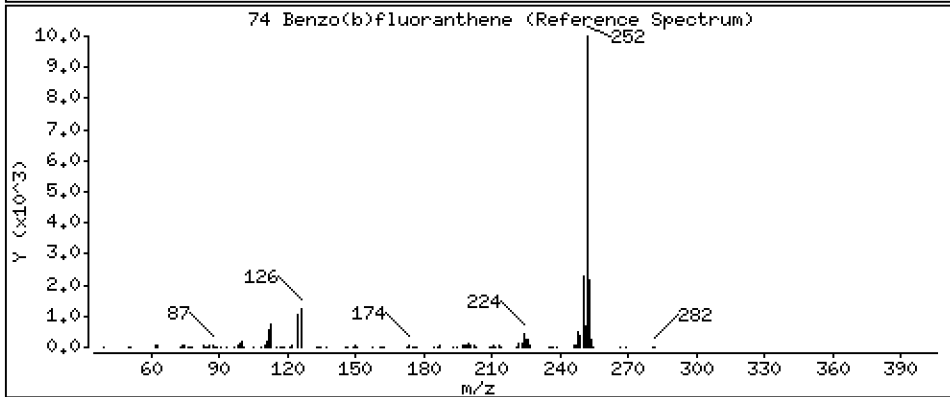
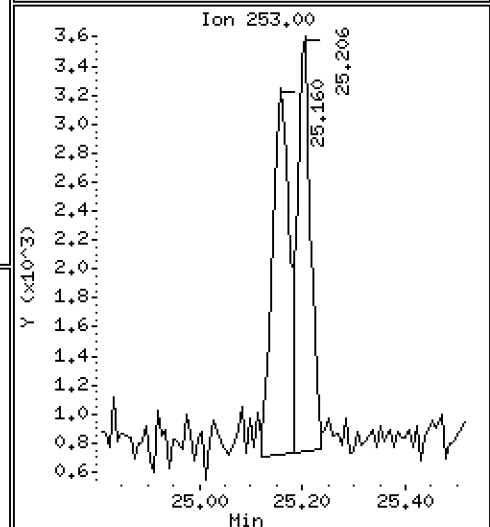
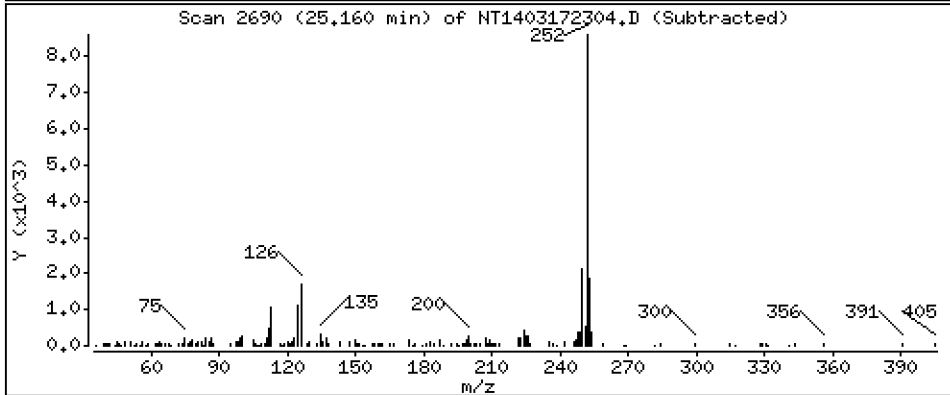
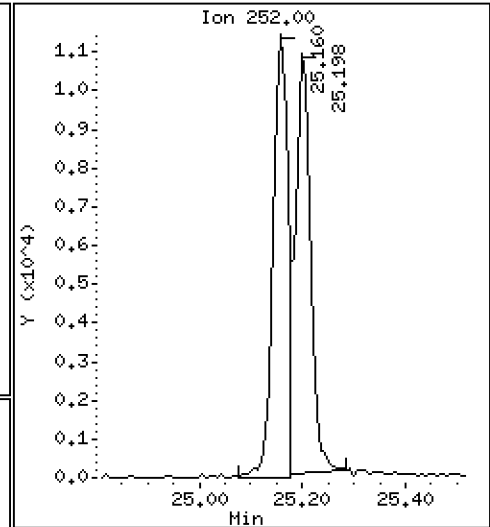
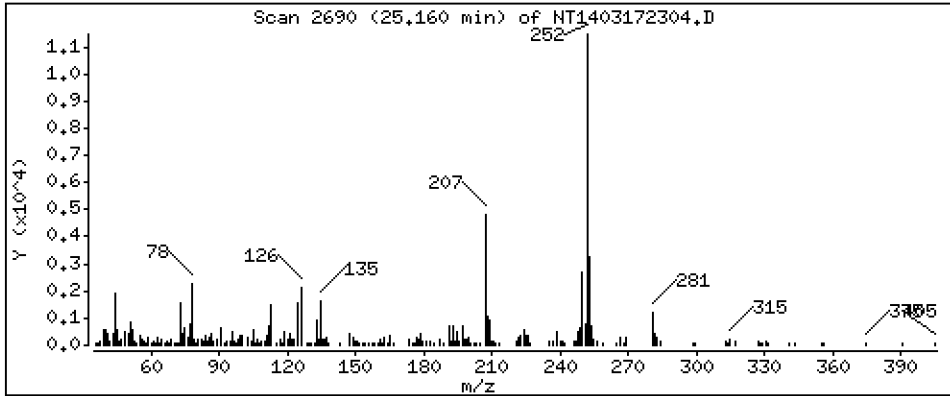
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1881 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

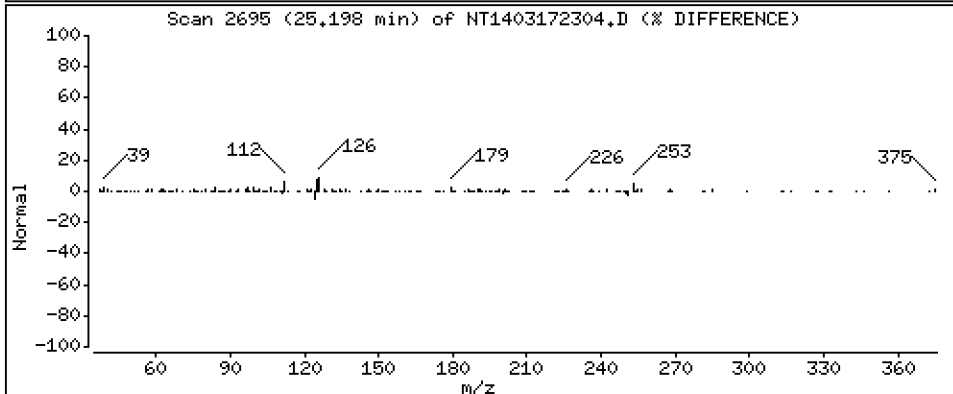
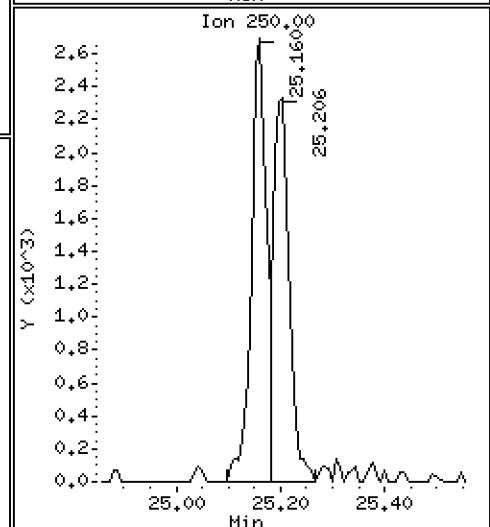
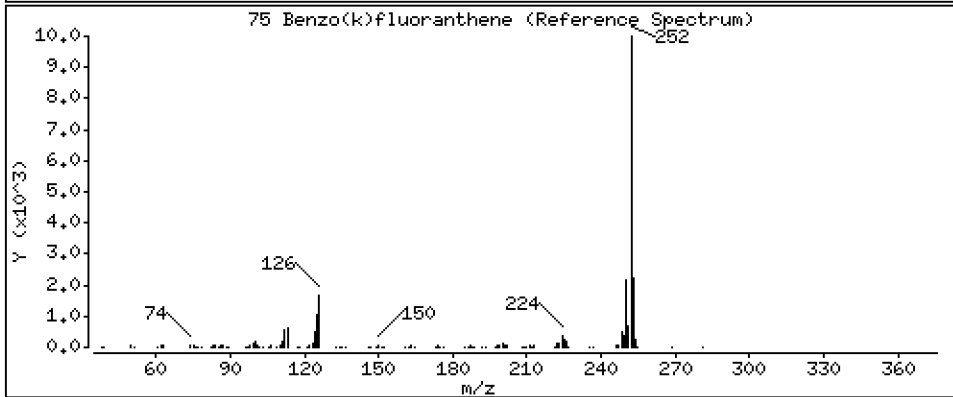
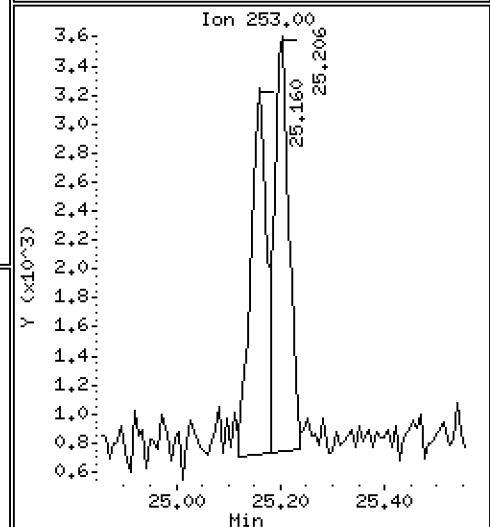
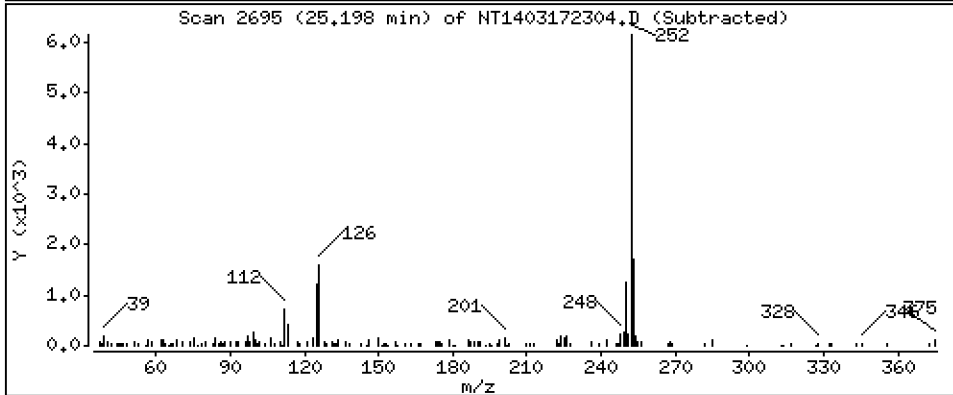
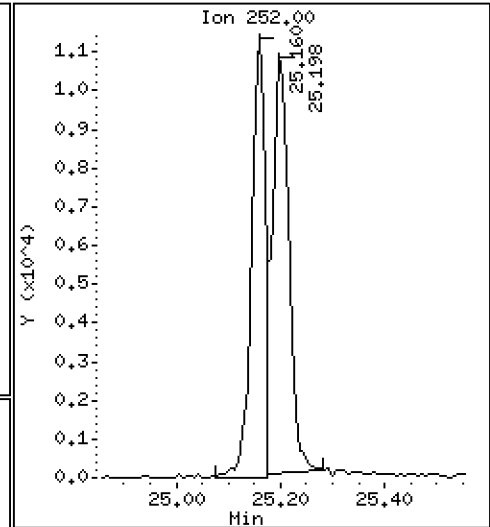
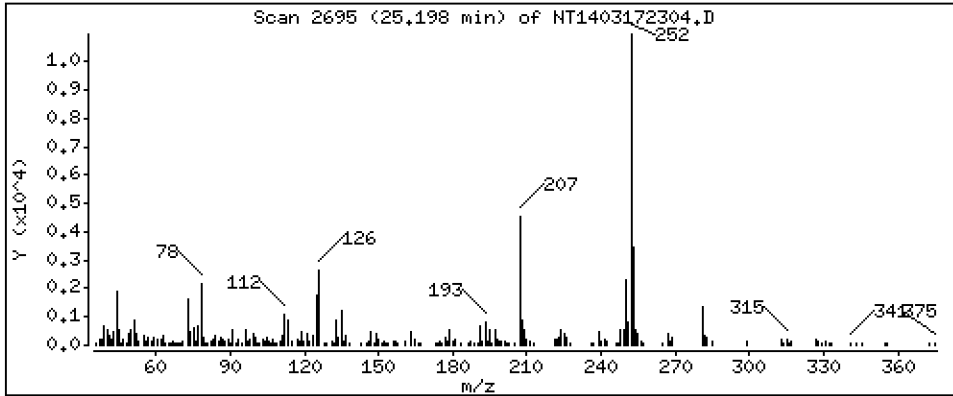
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,2144 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

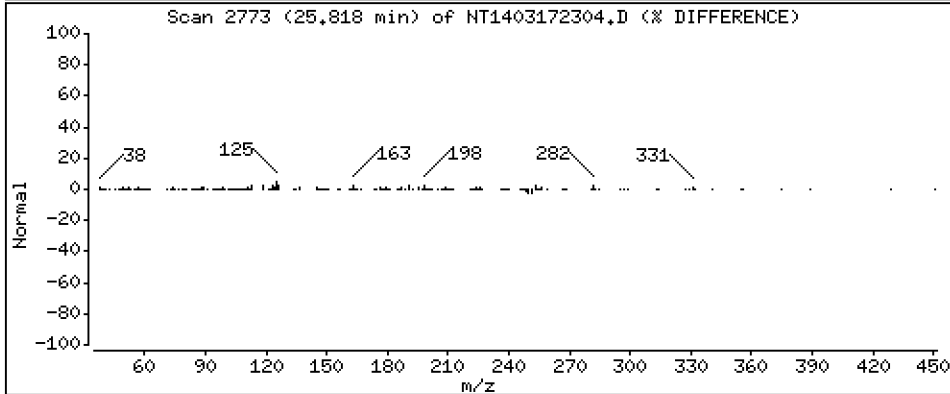
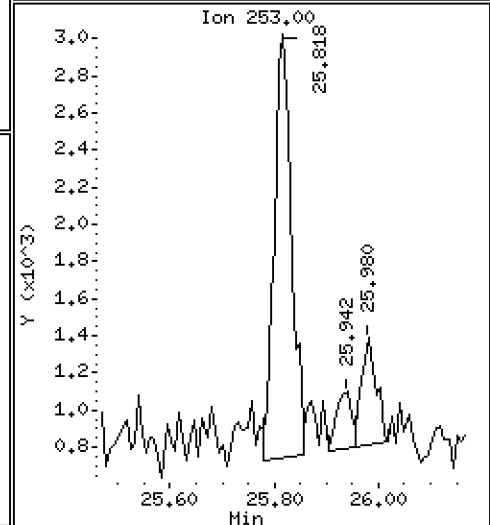
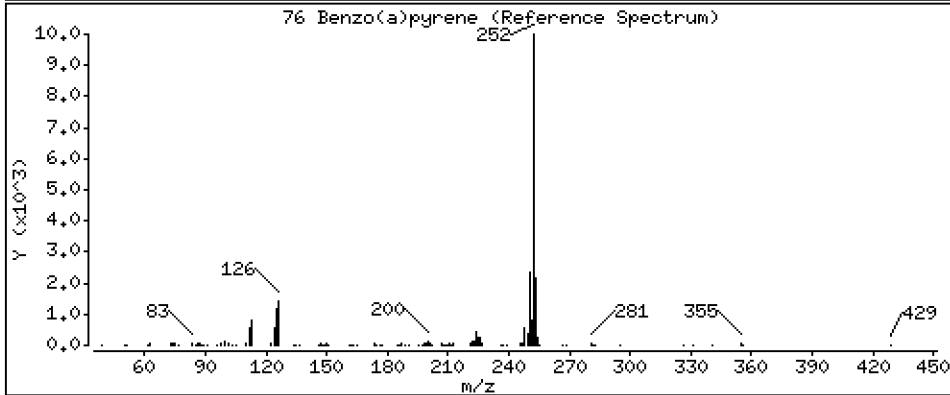
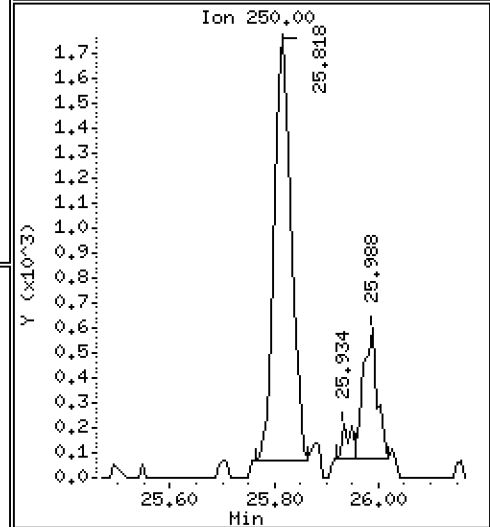
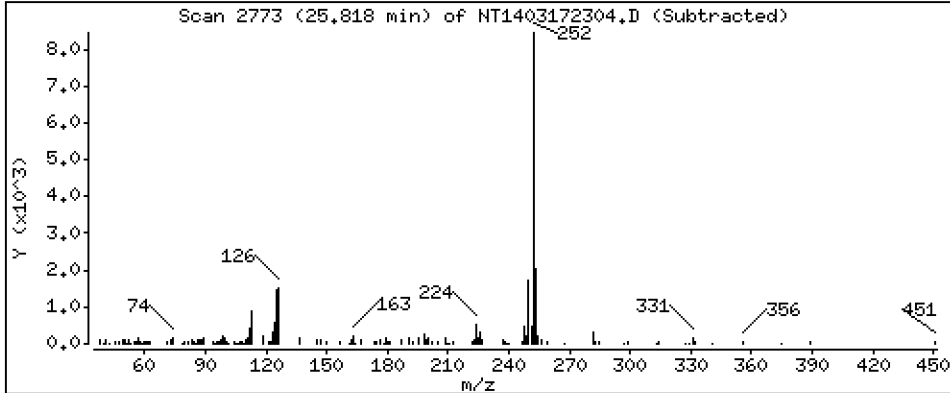
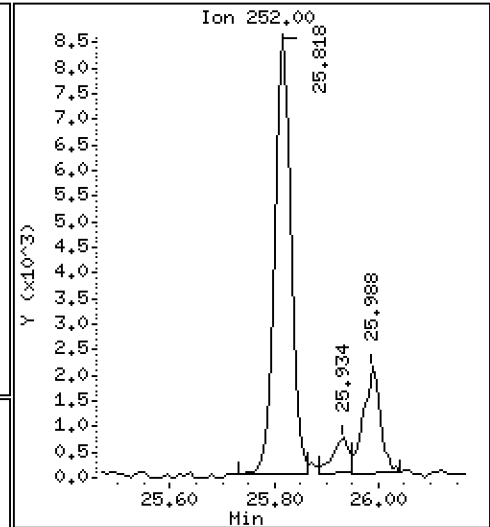
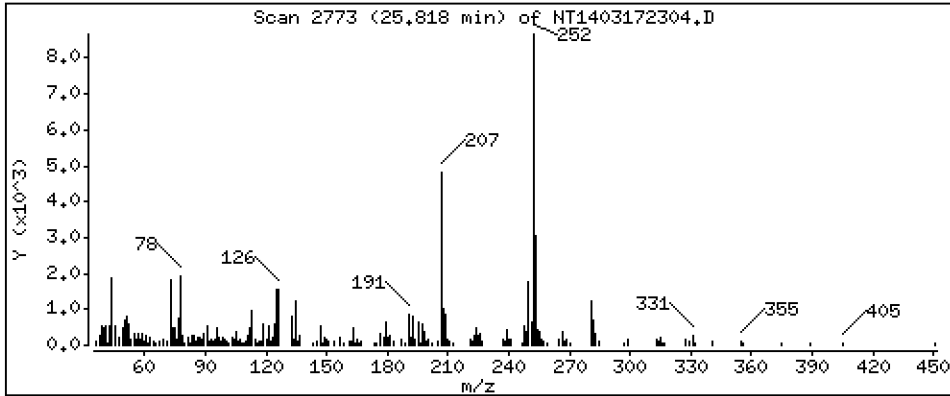
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1803 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

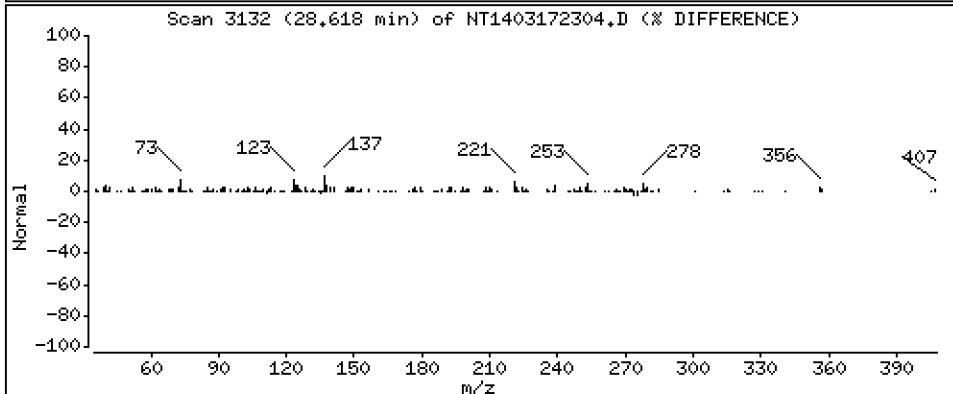
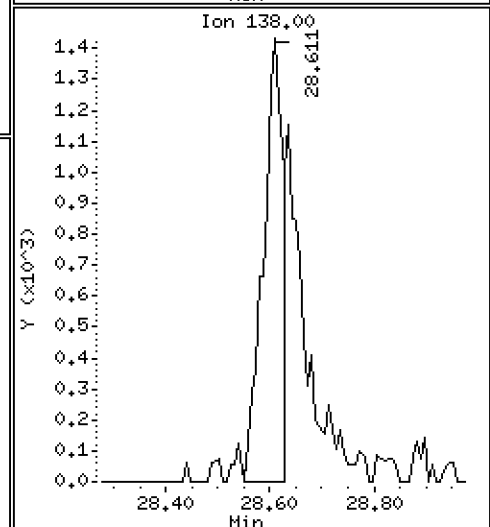
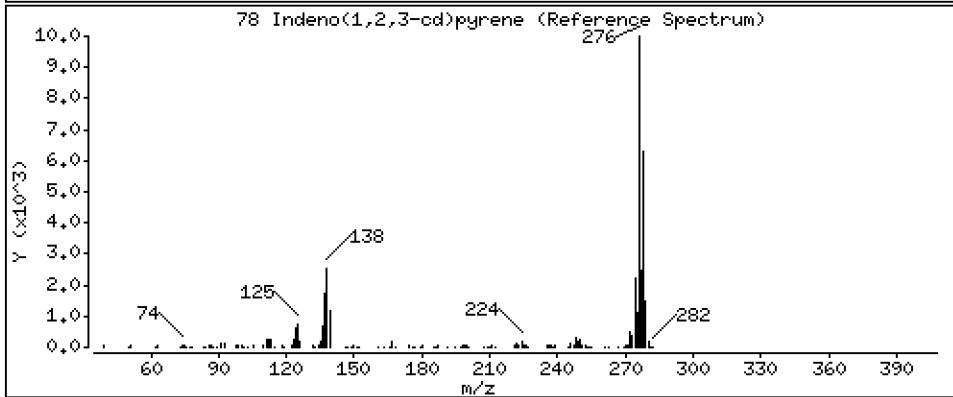
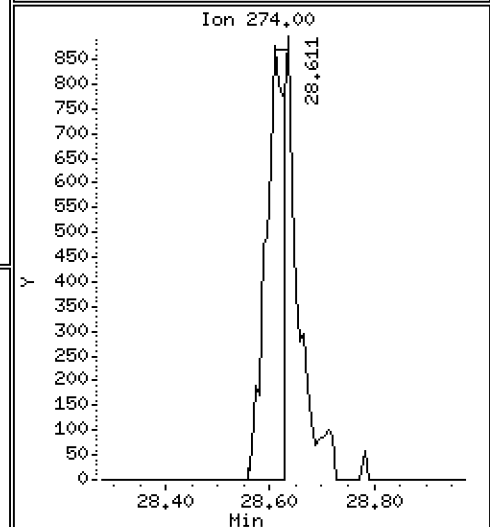
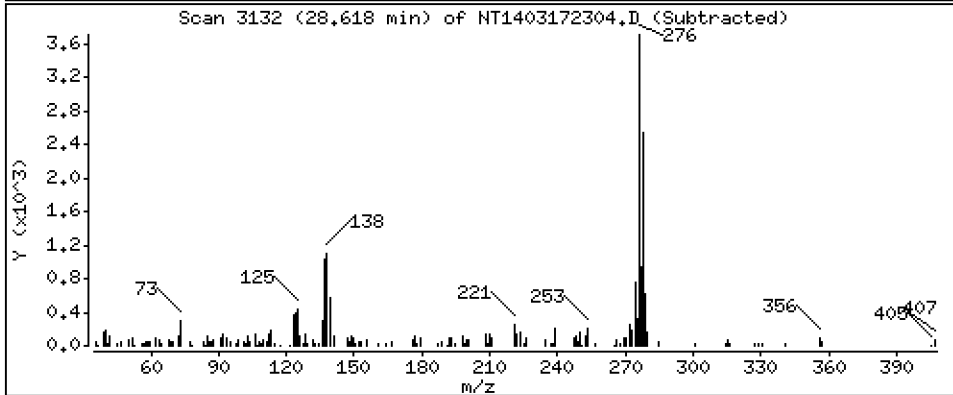
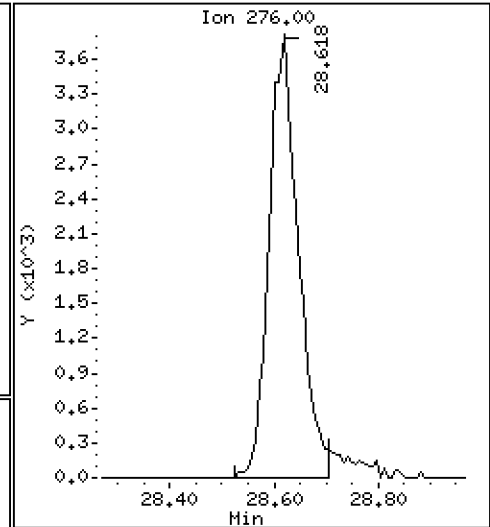
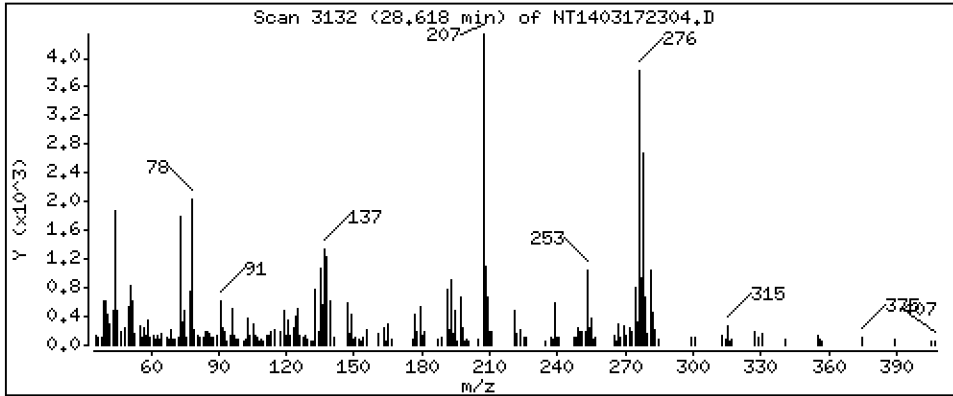
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1366 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

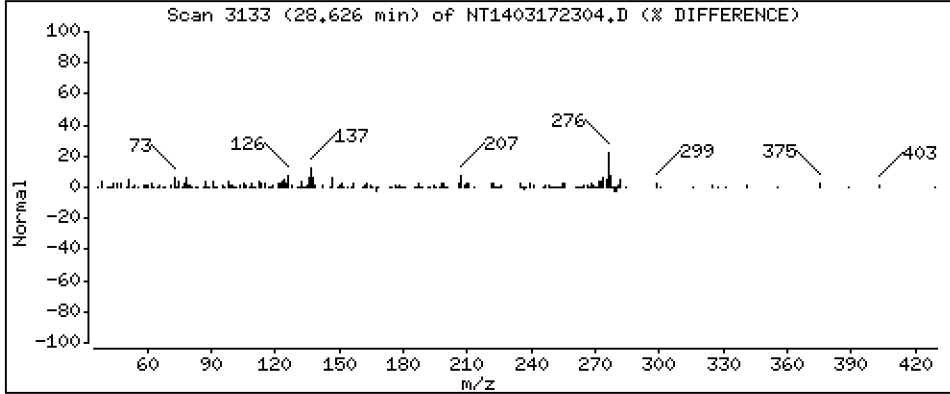
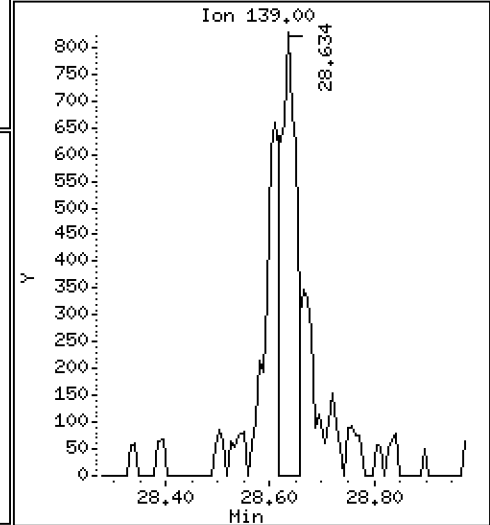
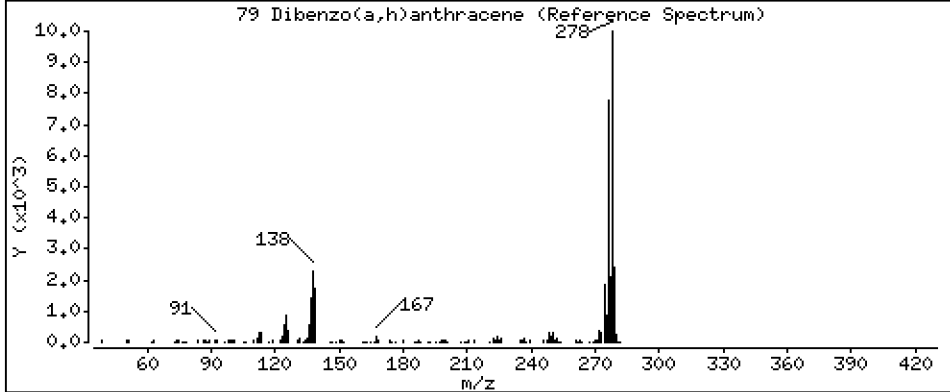
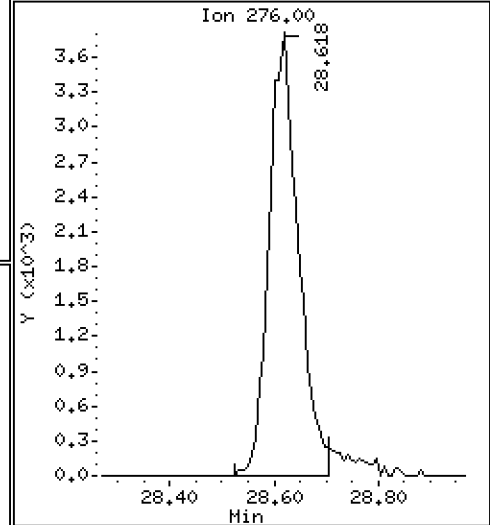
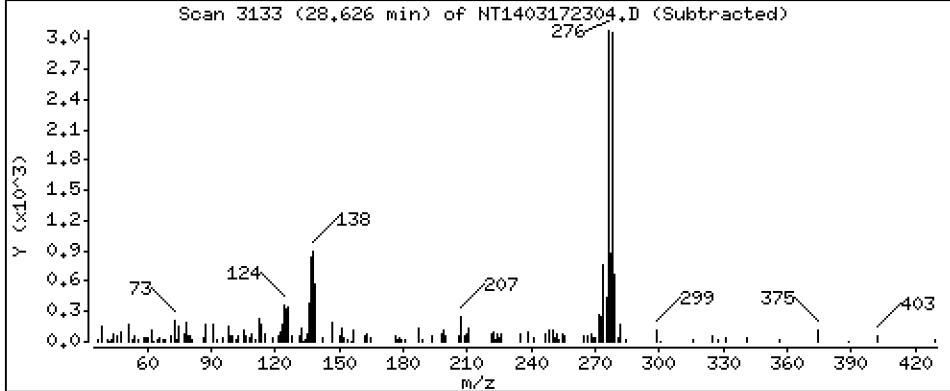
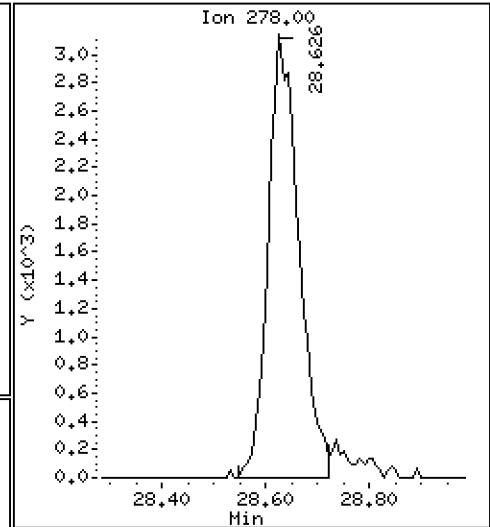
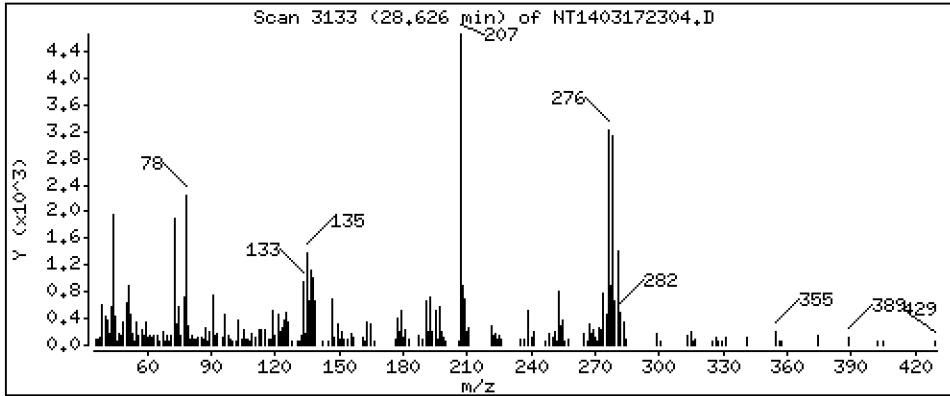
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1407 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

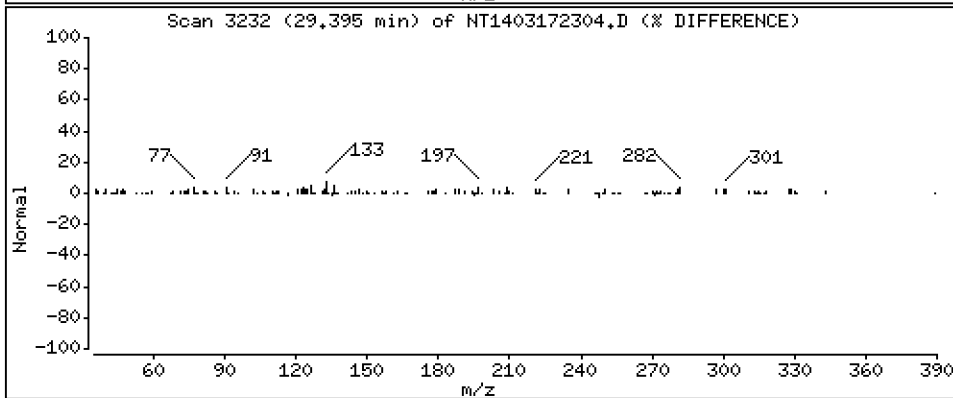
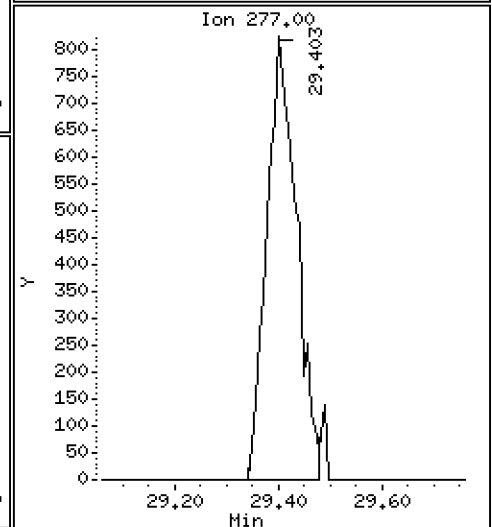
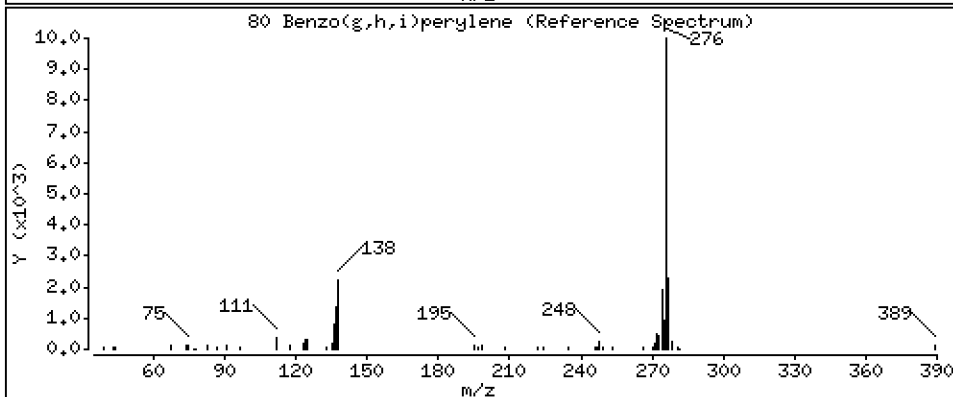
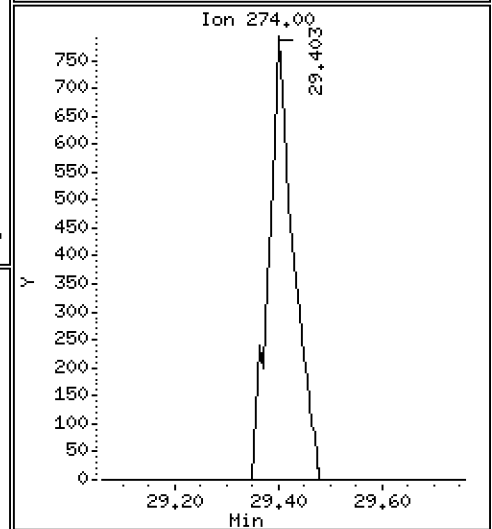
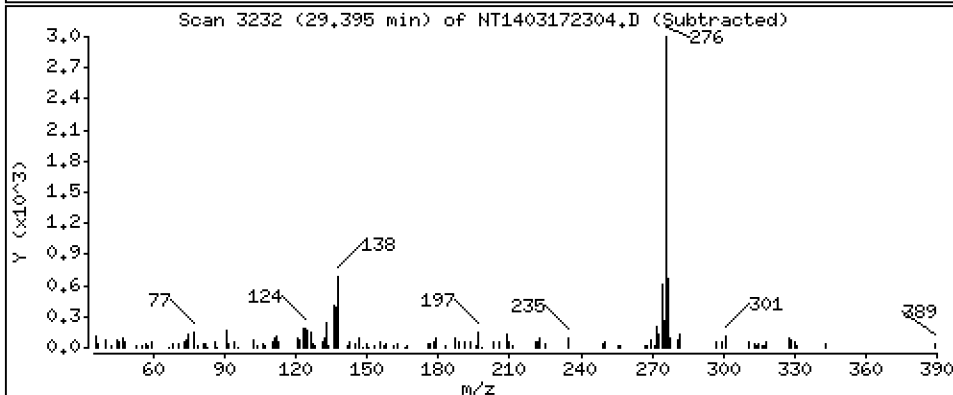
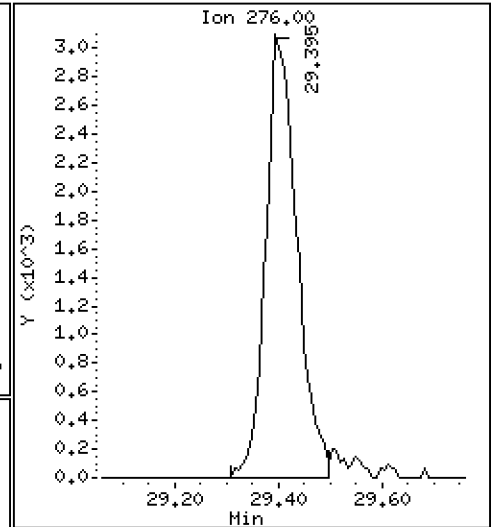
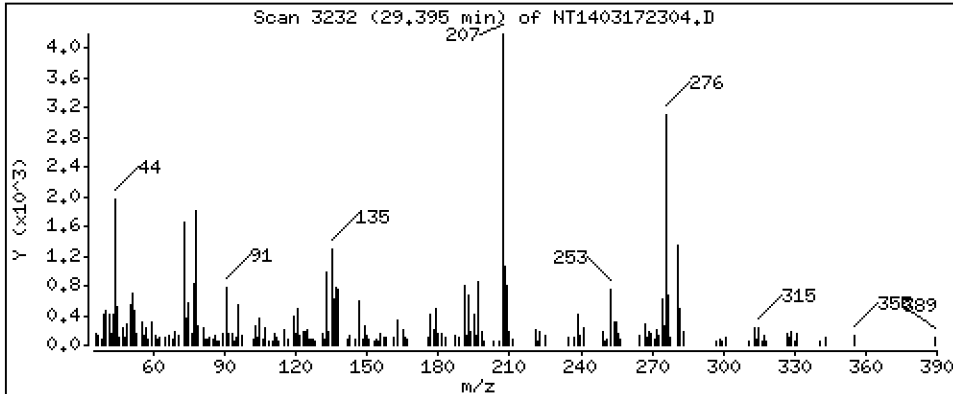
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1438 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

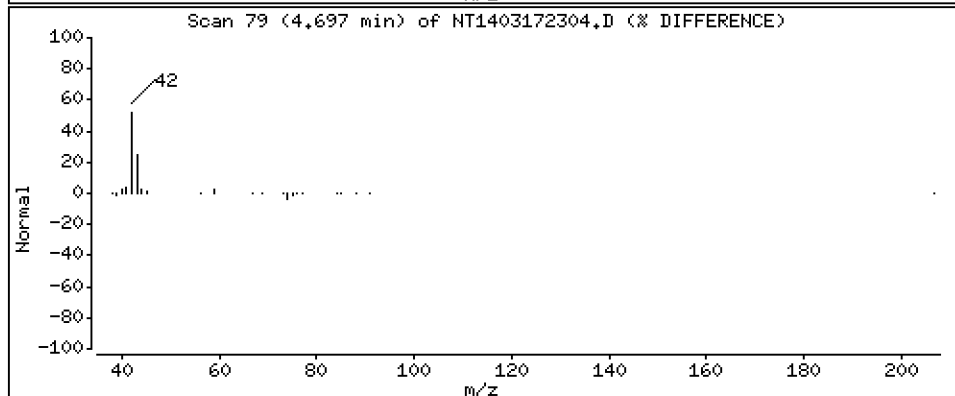
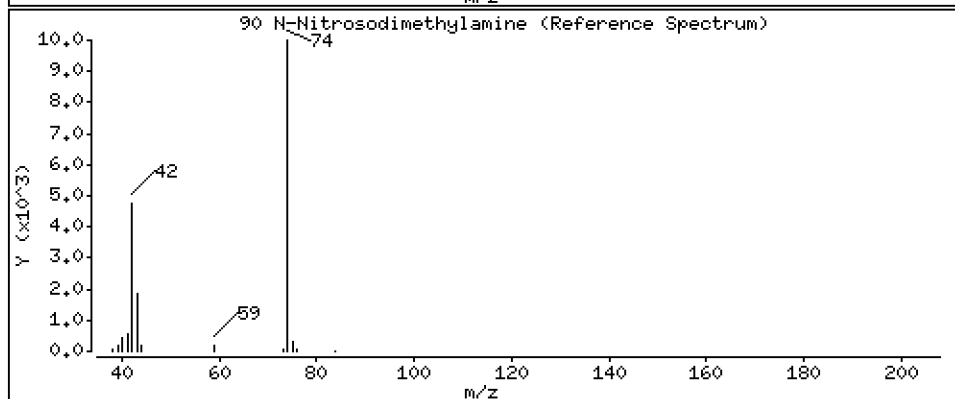
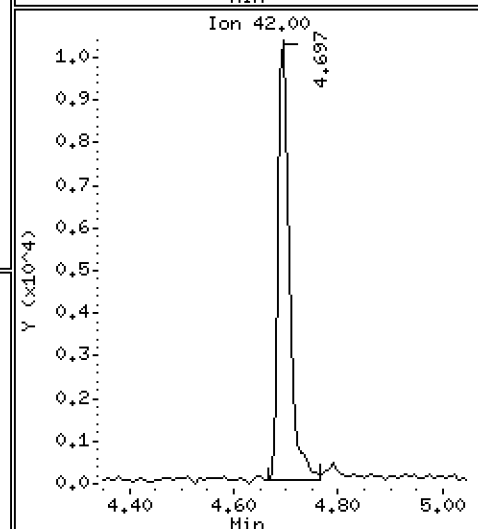
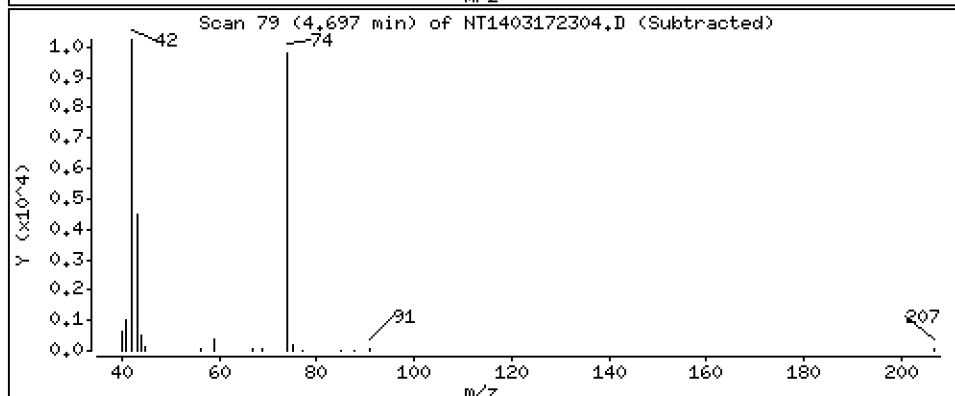
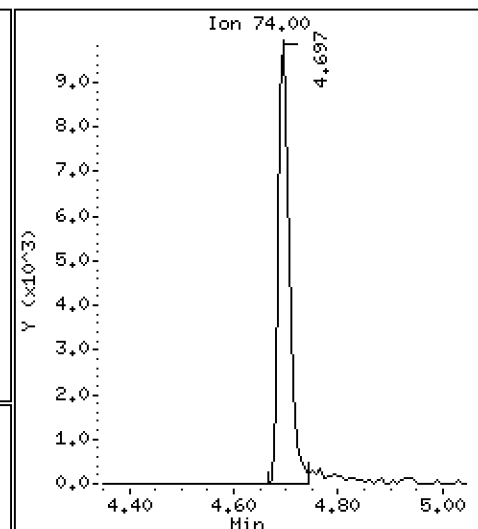
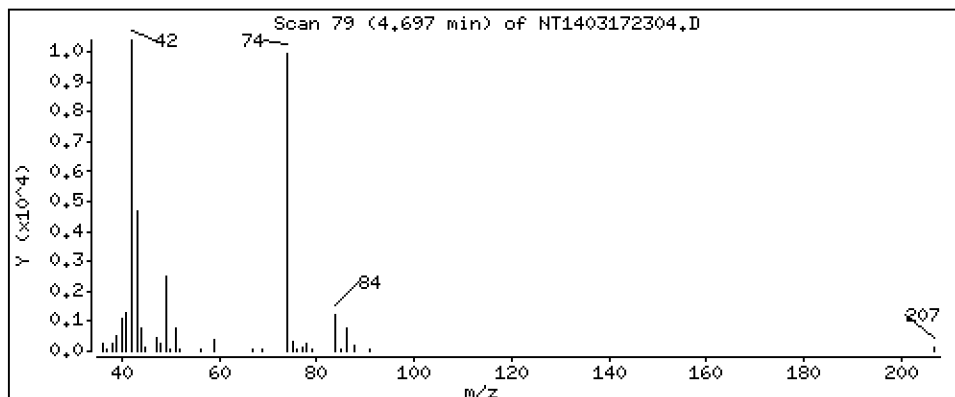
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2949 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

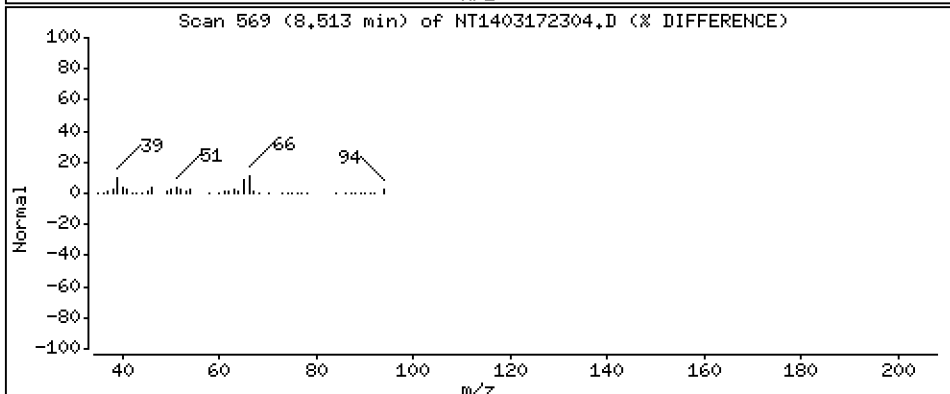
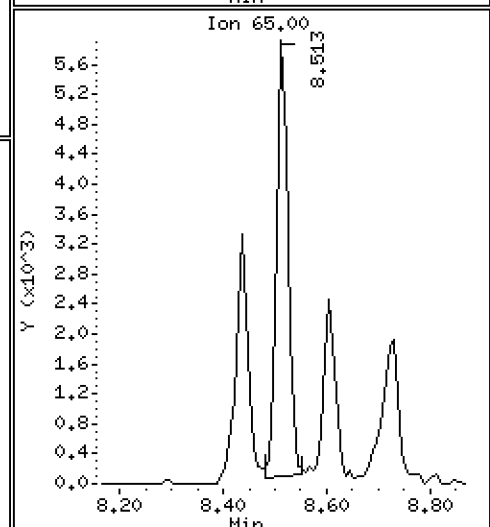
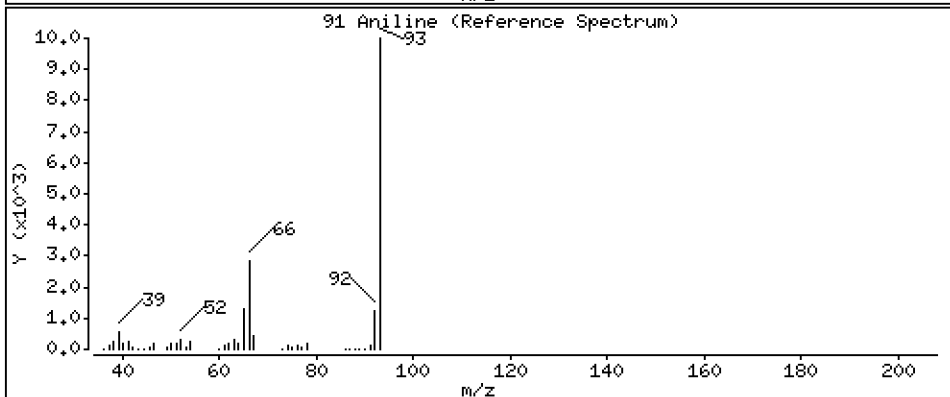
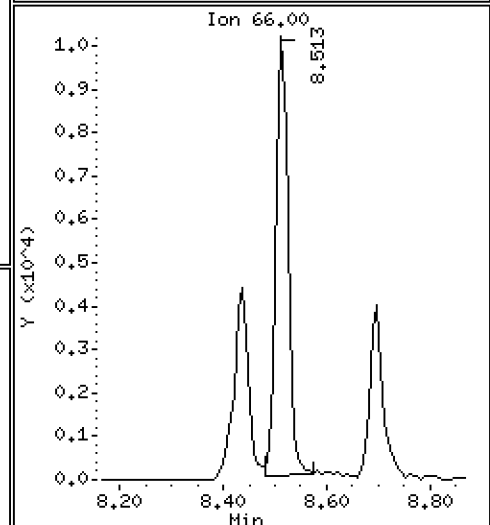
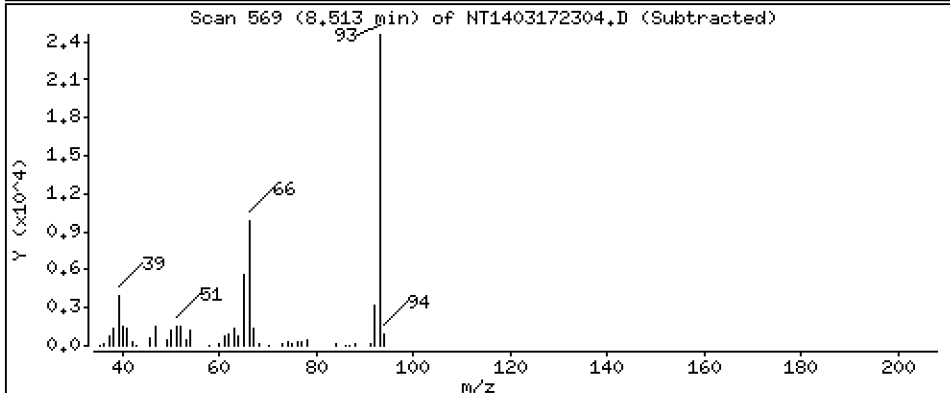
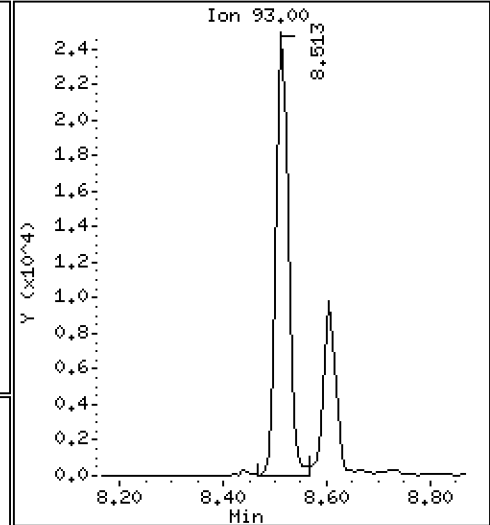
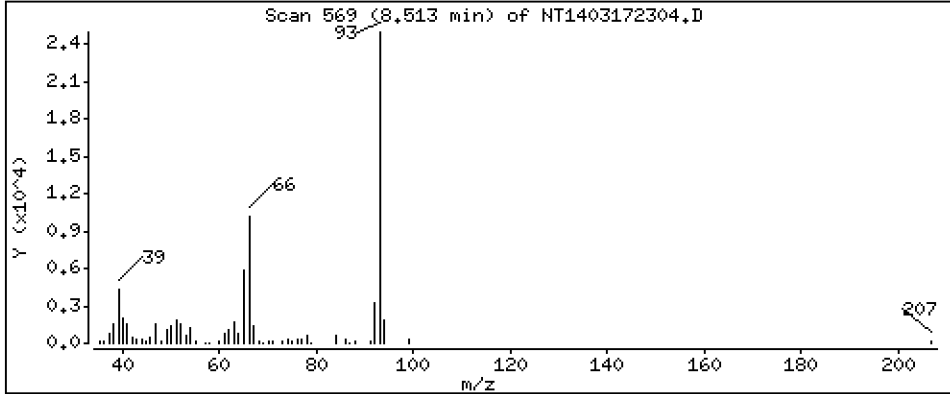
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 0.3769 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

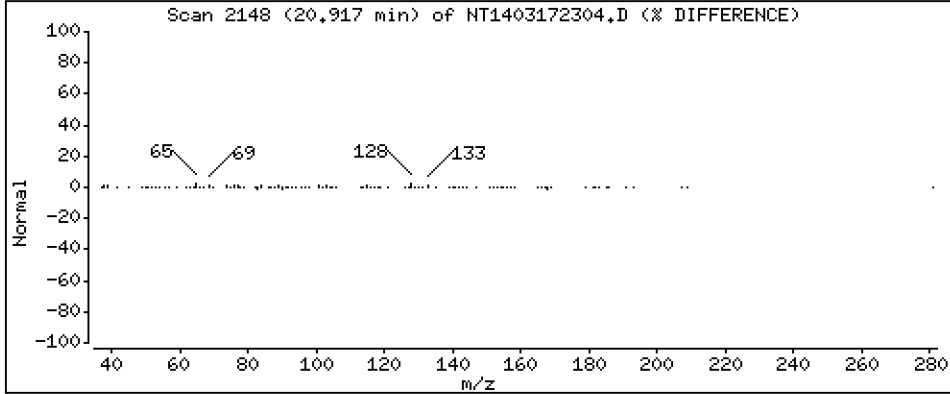
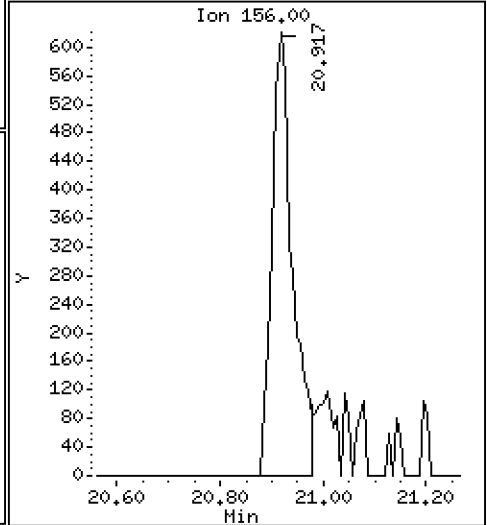
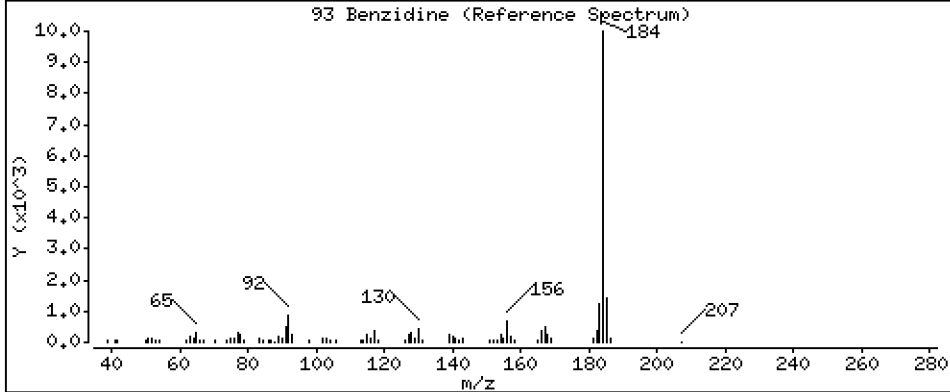
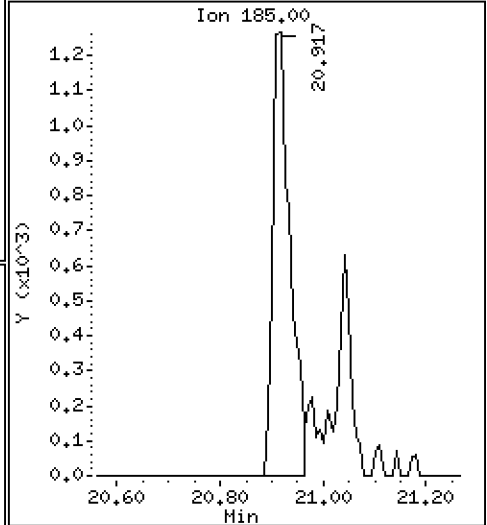
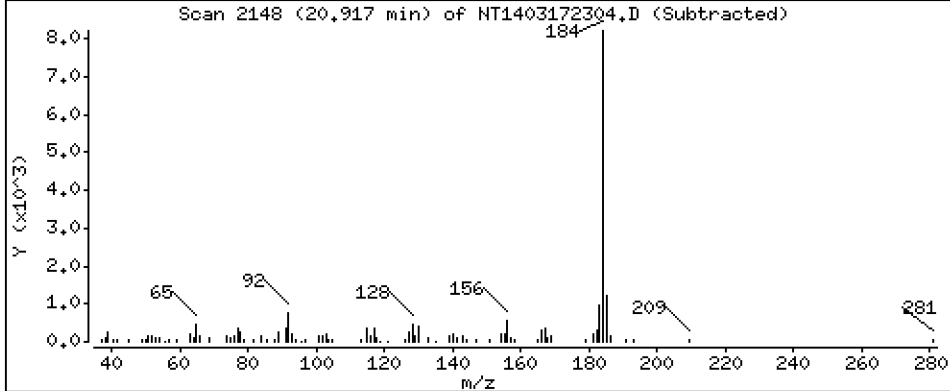
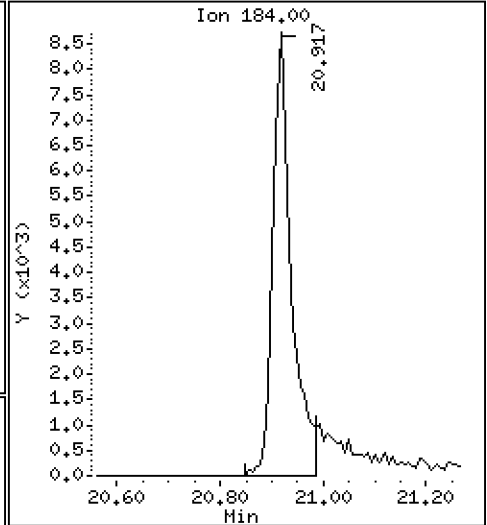
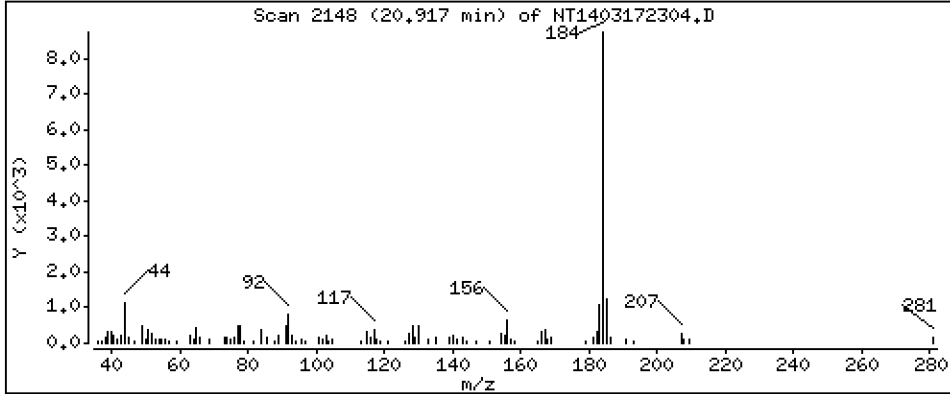
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,2853 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

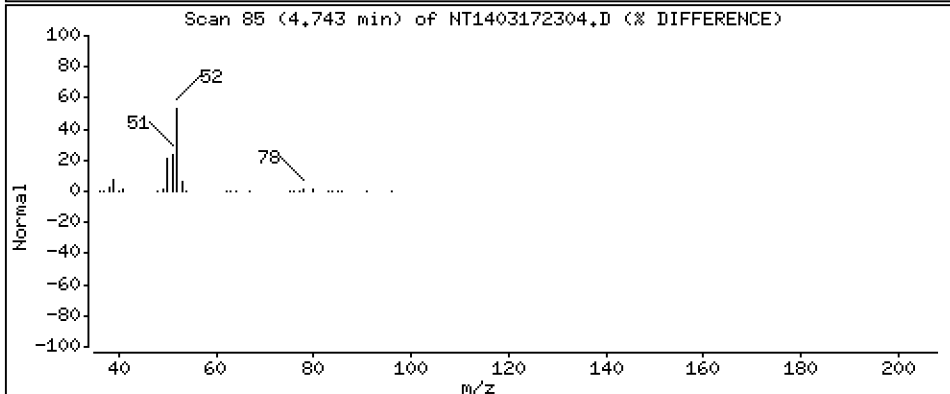
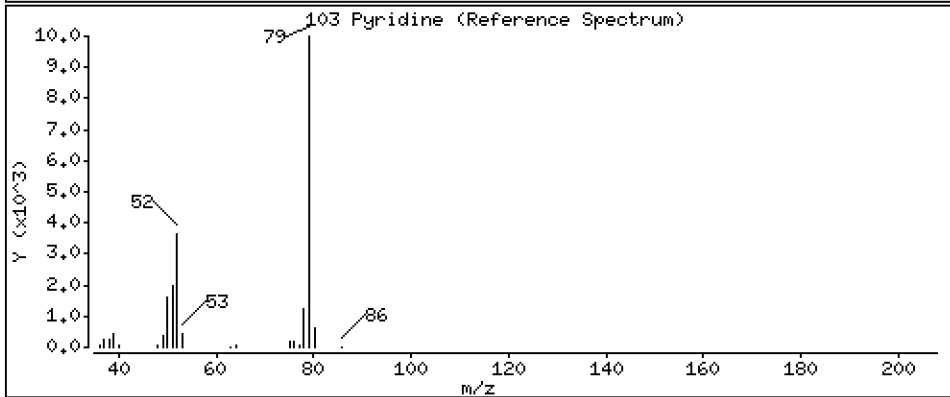
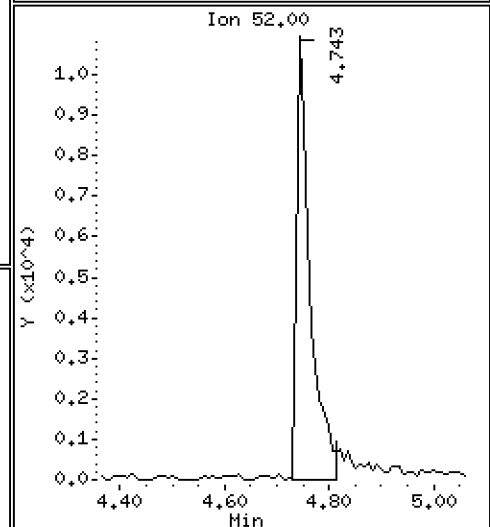
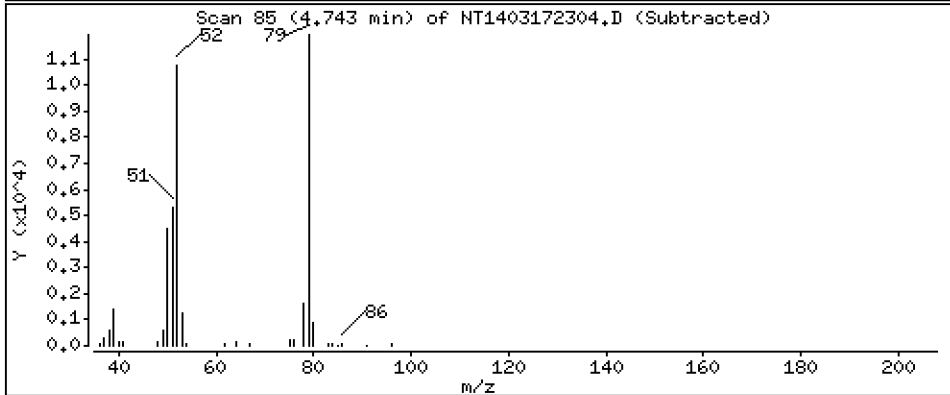
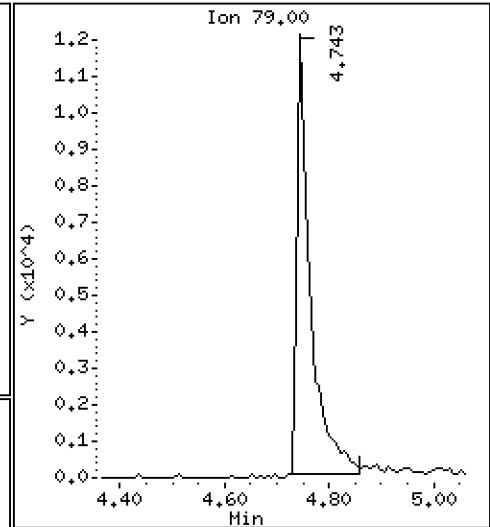
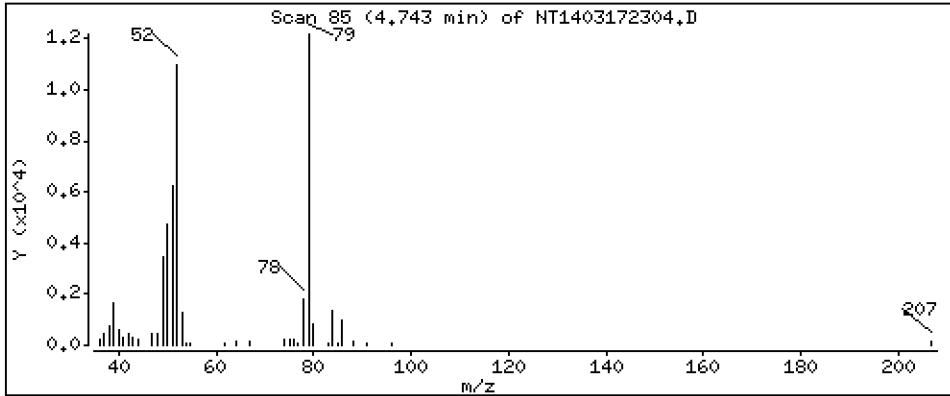
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,1554 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

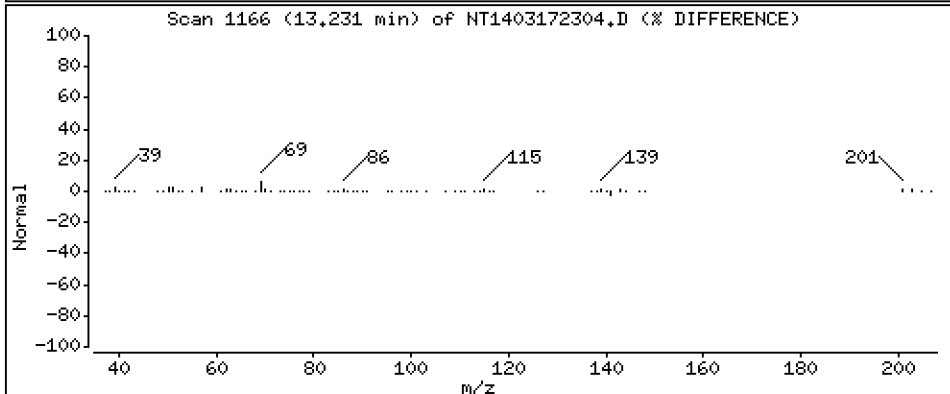
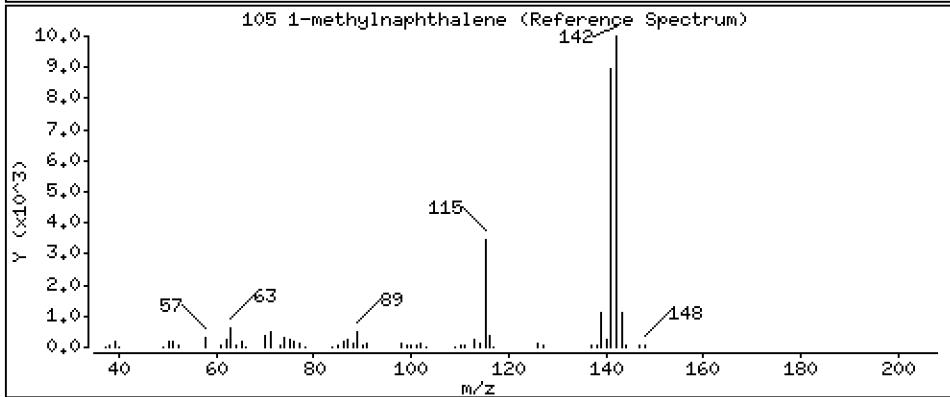
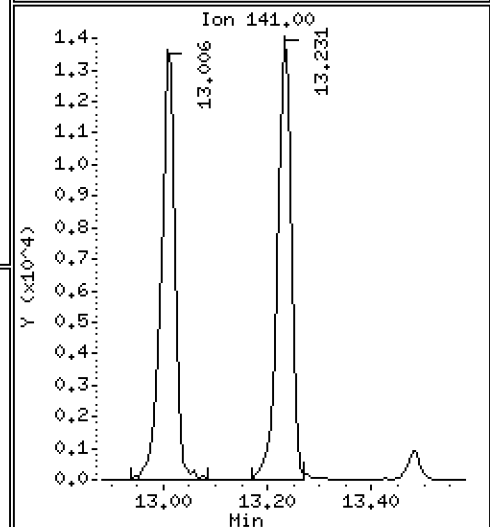
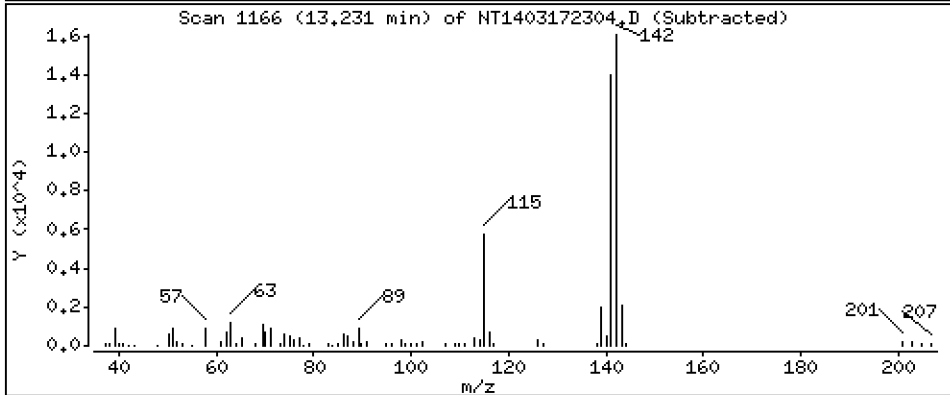
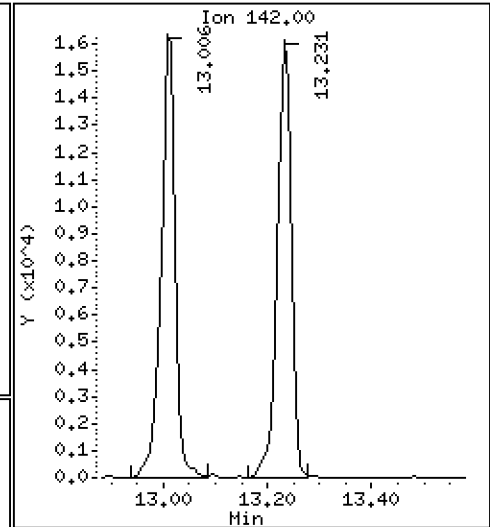
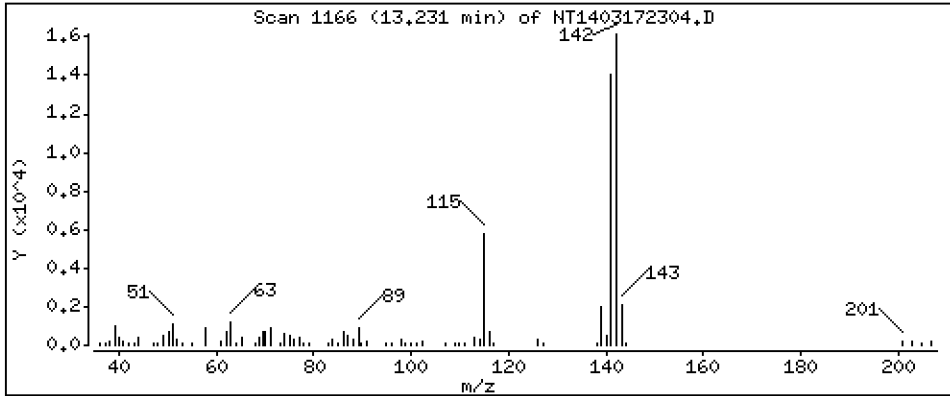
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2079 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

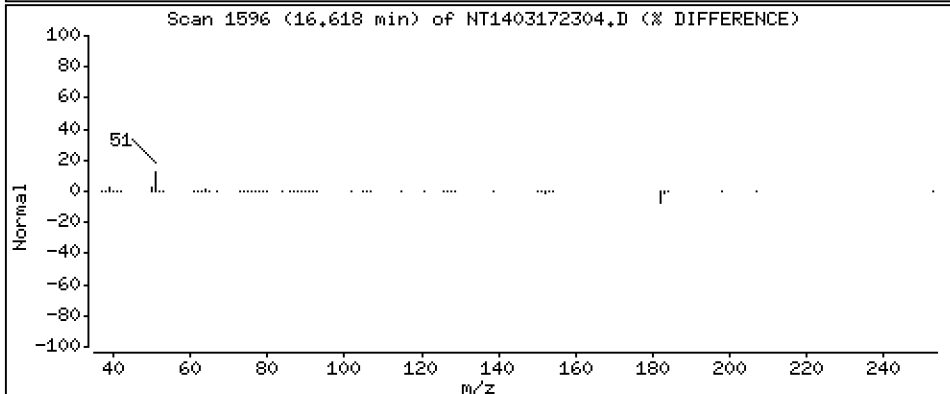
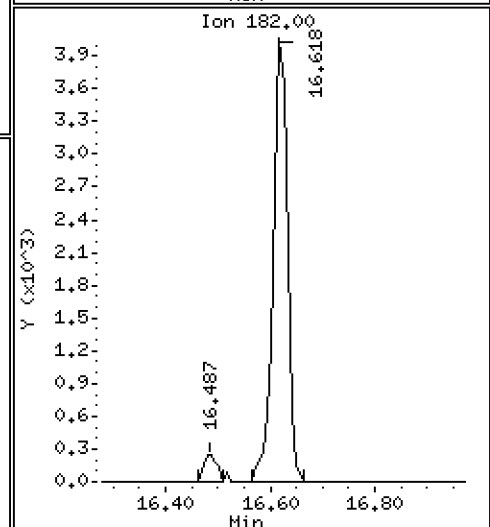
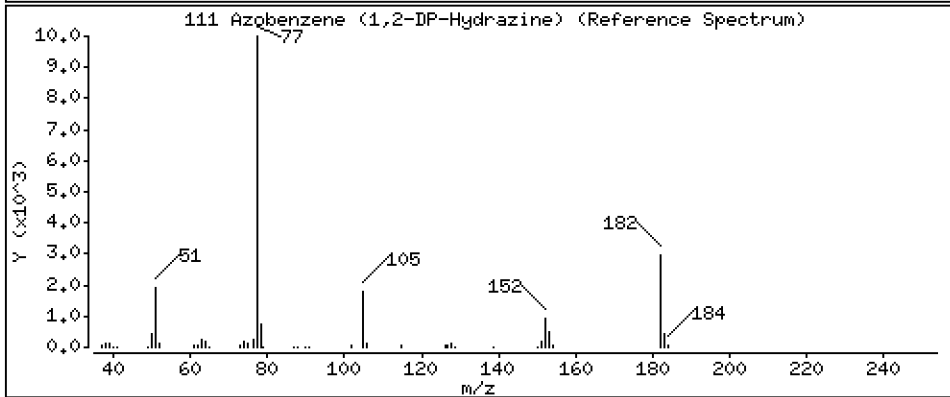
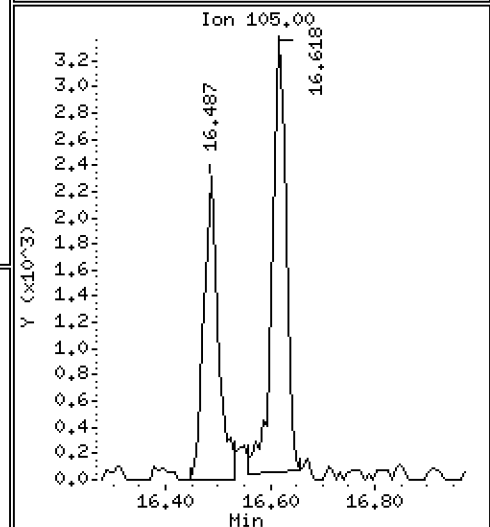
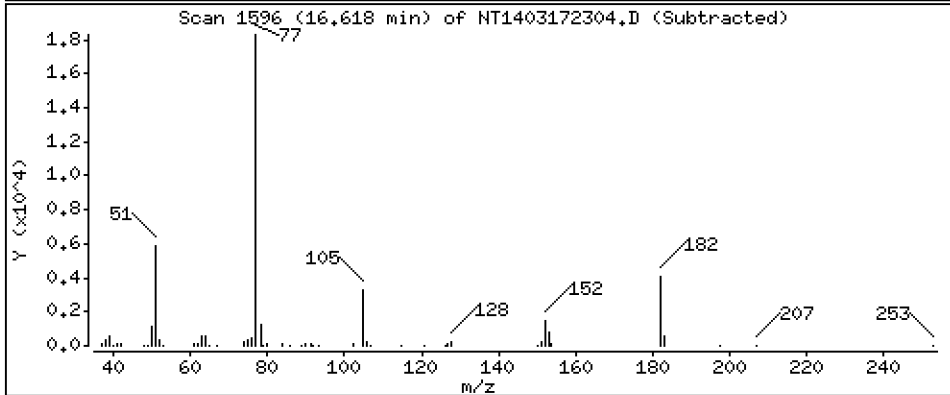
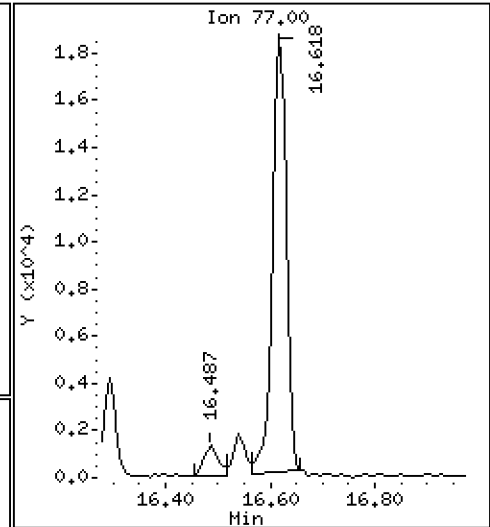
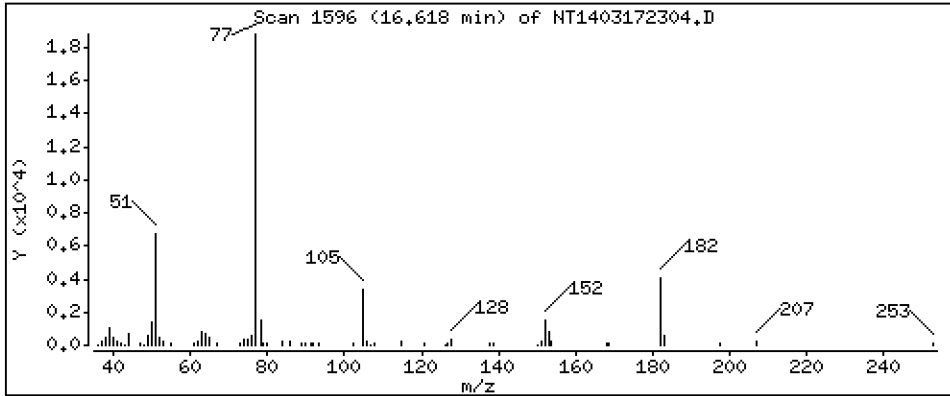
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1856 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

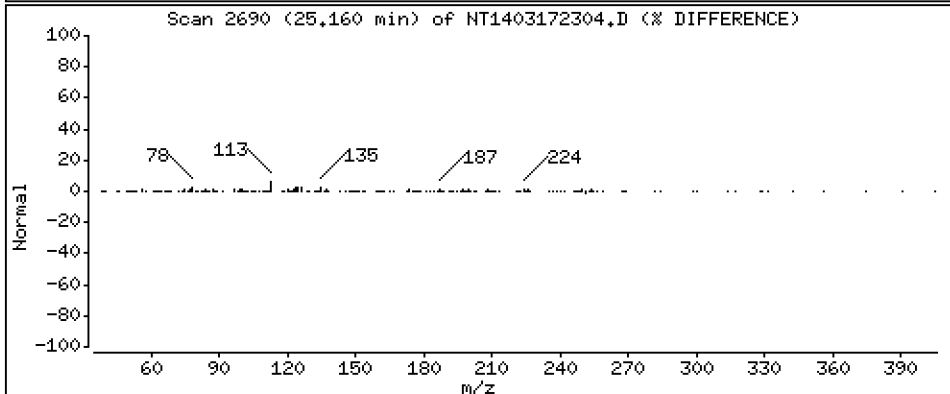
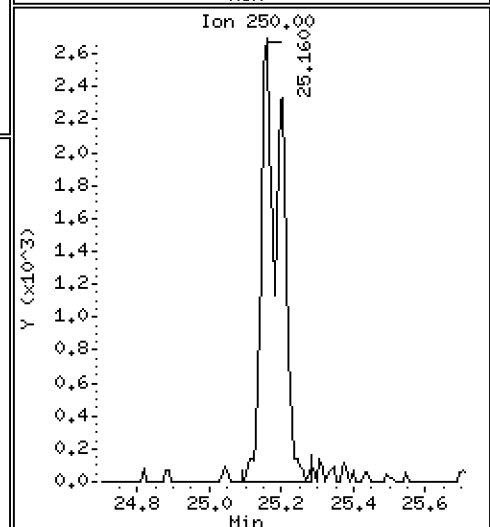
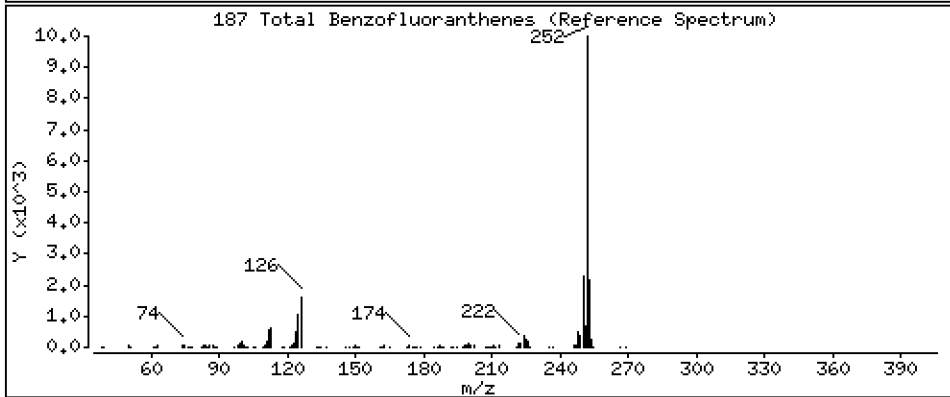
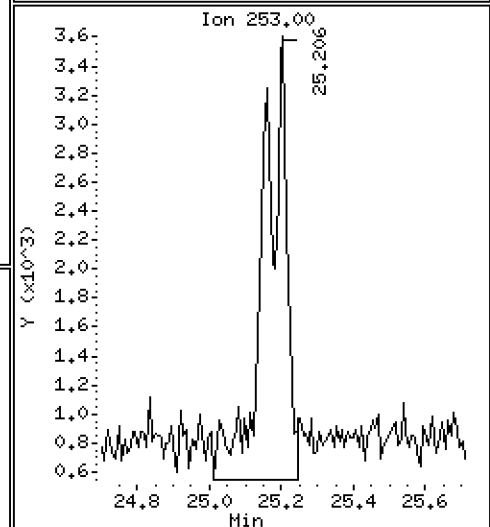
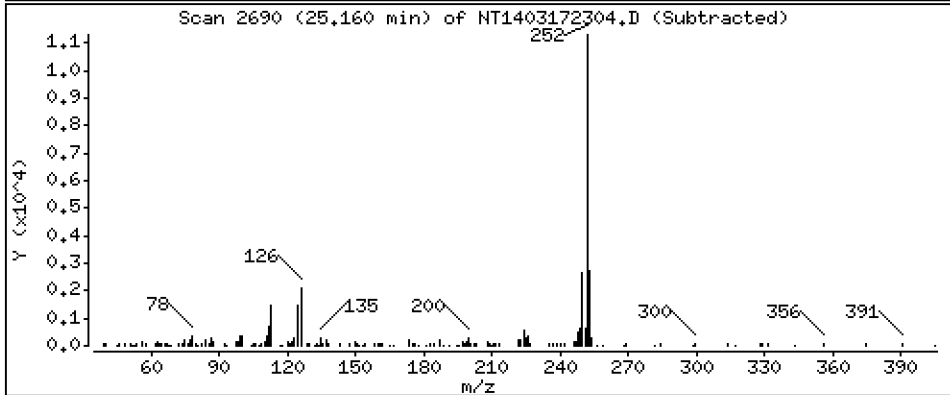
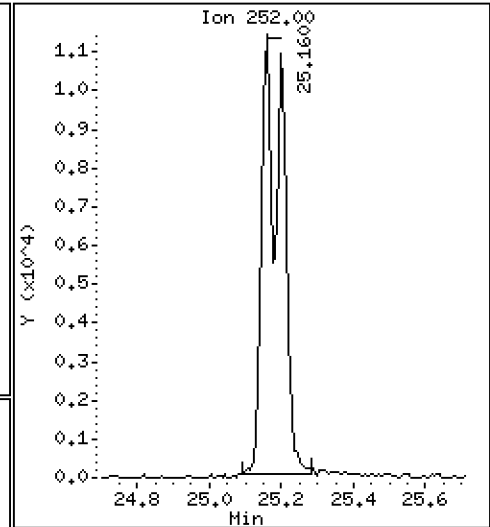
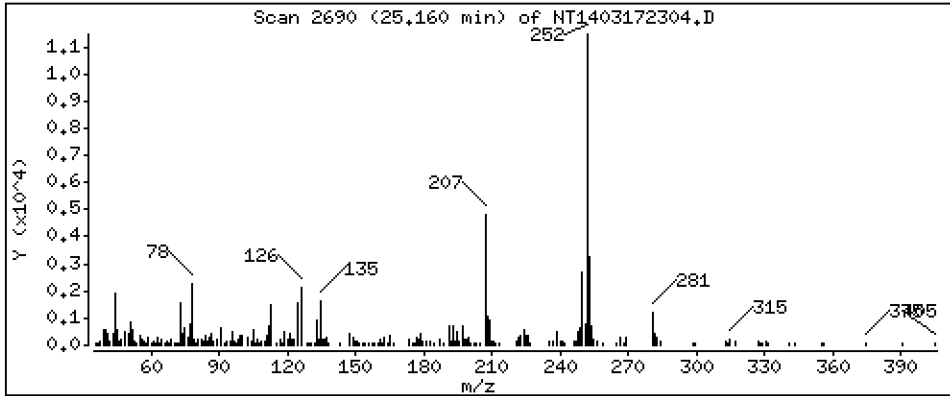
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3949 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV1

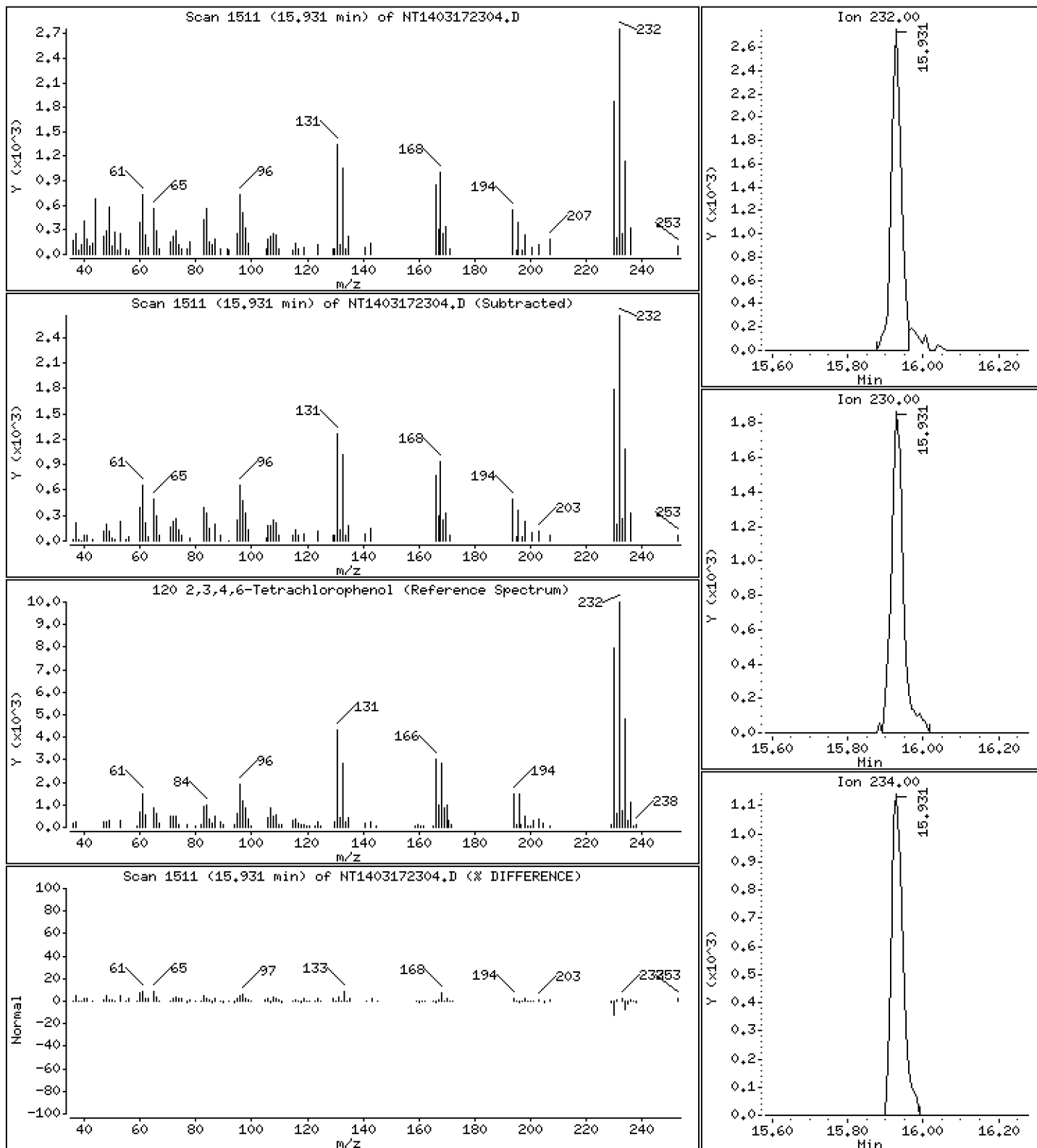
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0.1132 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172304.D
 Lab Smp Id: SLC0335-LCV1
 Inj Date : 17-MAR-2023 16:16 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:03 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.828	6.821	(1.000)	18594	0.25189	0.2519
\$ 2 Phenol-d5	99		8.412	8.412	(1.000)	24582	0.25293	0.2529
3 Phenol	94		8.435	8.435	(1.000)	16555	0.16028	0.1603
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	22189	0.28960	0.2896
4 Bis(2-Chloroethyl)ether	93		8.605	8.605	(1.000)	14905	0.20040	0.2004
6 2-Chlorophenol	128		8.729	8.729	(1.000)	15015	0.18470	0.1847
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	18302	0.22240	0.2224
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	217316	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	16921	0.21348	0.2135
\$ 10 1,2-Dichlorobenzene-d4	152		9.426	9.426	(1.000)	11108	0.21700	0.2170
12 1,2-Dichlorobenzene	146		9.458	9.450	(1.000)	16866	0.21528	0.2153
11 Benzyl alcohol	108		9.333	9.333	(1.000)	6933	0.14418	0.1442
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.644	(1.064)	4910	0.20770	0.2077 (M)
13 2-Methylphenol	108		9.558	9.558	(1.000)	12696	0.17386	0.1739
17 Hexachloroethane	117		10.055	10.055	(1.000)	6893	0.20334	0.2033
16 N-Nitroso-di-n-propylamine	70		9.900	9.900	(1.000)	9706	0.16882	0.1688
15 4-Methylphenol	108		9.830	9.830	(1.000)	13688	0.15831	0.1583
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	15853	0.18189	0.1819
19 Nitrobenzene	77		10.195	10.203	(0.881)	15610	0.18399	0.1840
20 Isophorone	82		10.653	10.653	(0.921)	17641	0.15229	0.1523
21 2-Nitrophenol	139		10.831	10.831	(0.936)	5816	0.12142	0.1214
22 2,4-Dimethylphenol	107		10.885	10.885	(0.941)	29837	0.41118	0.4112
23 Bis(2-Chloroethoxy)methane	93		11.079	11.087	(0.958)	14401	0.18466	0.1847
24 Benzoic acid	105		10.978	11.103	(0.949)	7828	0.12953	0.1295 (M)
25 2,4-Dichlorophenol	162		11.289	11.289	(0.976)	19763	0.34246	0.3425
26 1,2,4-Trichlorobenzene	180		11.482	11.482	(0.993)	14434	0.20346	0.2035
* 27 Naphthalene-d8	136		11.567	11.567	(1.000)	823606	4.00000	
28 Naphthalene	128		11.606	11.606	(1.003)	45873	0.20848	0.2085
29 4-Chloroaniline	127		11.737	11.737	(1.015)	31151	0.33819	0.3382
30 Hexachlorobutadiene	225		11.976	11.976	(1.035)	7118	0.22222	0.2222
31 4-Chloro-3-methylphenol	107		12.696	12.696	(1.098)	22025	0.31584	0.3158
32 2-Methylnaphthalene	142		13.006	13.013	(1.124)	30490	0.19870	0.1987
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	9116	0.26060	0.2606

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	12570	0.29444	0.2944
35 2,4,5-Trichlorophenol	196	13.710	13.702	(0.902)	13329	0.29962	0.2996
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	31403	0.20605	0.2060
37 2-Chloronaphthalene	162	14.004	14.012	(0.922)	26527	0.20308	0.2031
38 2-Nitroaniline	65	14.267	14.267	(0.939)	14704	0.29152	0.2915
39 Dimethylphthalate	163	14.693	14.701	(0.967)	27457	0.19566	0.1957
40 Acenaphthylene	152	14.879	14.879	(0.979)	42509	0.19375	0.1937
41 2,6-Dinitrotoluene	165	14.832	14.840	(0.976)	10259	0.31646	0.3165
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	420838	4.00000	
43 3-Nitroaniline	138	15.119	15.126	(0.995)	11607	0.25953	0.2595
44 Acenaphthene	153	15.258	15.265	(1.004)	25936	0.20247	0.2025
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	1883	0.07503	0.07503
46 Dibenzofuran	168	15.590	15.590	(1.026)	37357	0.20427	0.2043
47 4-Nitrophenol	109	15.459	15.435	(1.017)	2414	0.10197	0.1020
48 2,4-Dinitrotoluene	165	15.644	15.652	(1.030)	13166	0.28650	0.2865
50 Diethylphthalate	149	16.155	16.170	(1.063)	29117	0.20068	0.2007
49 Fluorene	166	16.309	16.309	(1.073)	29637	0.17096	0.1710
51 4-Chlorophenyl-phenylether	204	16.294	16.301	(1.072)	12967	0.17426	0.1743
52 4-Nitroaniline	138	16.394	16.394	(1.079)	10172	0.26150	0.2615
53 4,6-Dinitro-2-methylphenol	198	16.486	16.494	(0.904)	7582	0.28913	0.2891
54 N-Nitrosodiphenylamine	169	16.540	16.548	(0.907)	19386	0.18831	0.1883
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	3716	0.23258	0.2326
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	6658	0.19183	0.1918
57 Hexachlorobenzene	284	17.620	17.620	(0.966)	7606	0.20769	0.2077
58 Pentachlorophenol	266	17.984	17.976	(0.986)	3079	0.12204	0.1220
* 59 Phenanthrene-d10	188	18.240	18.247	(1.000)	757941	4.00000	
60 Phenanthrene	178	18.286	18.294	(1.003)	43188	0.19943	0.1994
61 Anthracene	178	18.379	18.387	(1.008)	36981	0.17725	0.1773
62 Carbazole	167	18.712	18.711	(1.026)	32491	0.17503	0.1750
63 Di-n-butylphthalate	149	19.508	19.508	(1.070)	36311	0.15432	0.1543
64 Fluoranthene	202	20.677	20.677	(0.888)	38705	0.20915	0.2091
65 Pyrene	202	21.102	21.102	(0.906)	40464	0.21322	0.2132
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	29120	0.22666	0.2267
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	15269	0.18364	0.1836
68 Benzo(a)anthracene	228	23.262	23.270	(0.999)	34915	0.20818	0.2082
* 69 Chrysene-d12	240	23.293	23.293	(1.000)	454867	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.224	(0.997)	24773	0.51505	0.5150
71 Chrysene	228	23.340	23.340	(1.002)	30534	0.20116	0.2012
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.960)	18300	0.19578	0.1958
* 134 Di-n-octylphthalate-d4	153	24.315	24.323	(1.000)	710040	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.001)	39746	0.21775	0.2178
74 Benzo(b)fluoranthene	252	25.159	25.159	(0.970)	21964	0.18808	0.1881
75 Benzo(k)fluoranthene	252	25.198	25.205	(0.972)	24822	0.21442	0.2144
76 Benzo(a)pyrene	252	25.817	25.817	(0.996)	18002	0.18027	0.1803
* 77 Perylene-d12	264	25.933	25.933	(1.000)	330470	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.618	28.618	(1.104)	14842	0.13656	0.1366
79 Dibenzo(a,h)anthracene	278	28.626	28.633	(1.104)	12885	0.14066	0.1407
80 Benzo(g,h,i)perylene	276	29.395	29.410	(1.133)	12878	0.14377	0.1438
90 N-Nitrosodimethylamine	74	4.697	4.697	(1.000)	13786	0.29487	0.2949
91 Aniline	93	8.513	8.513	(1.000)	39158	0.37694	0.3769
93 Benzidine	184	20.917	20.909	(0.898)	21244	0.28526	0.2853
103 Pyridine	79	4.743	4.712	(1.000)	22503	0.15542	0.1554
105 1-methylnaphthalene	142	13.230	13.230	(1.144)	28901	0.20789	0.2079
111 Azobenzene (1,2-DP-Hydrazine)	77	16.617	16.625	(1.094)	32160	0.18562	0.1856

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.159	25.205	(0.970)	43799	0.39492	0.3949
120 2,3,4,6-Tetrachlorophenol	232	15.930	15.930	(1.048)	4827	0.11321	0.1132

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172304.D Calibration Time: 15:03
 Lab Smp Id: SLC0335-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	221219	110610	442438	217316	-1.76
27 Naphthalene-d8	809500	404750	1619000	823606	1.74
42 Acenaphthene-d10	420689	210345	841378	420838	0.04
59 Phenanthrene-d10	757520	378760	1515040	757941	0.06
69 Chrysene-d12	450500	225250	901000	454867	0.97
134 Di-n-octylphthala	828388	414194	1656776	710040	-14.29
77 Perylene-d12	339914	169957	679828	330470	-2.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.24	-0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.03
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172304.D

Lab ID: SLC0335-LCV1
nt14.i, ABN.m, 17-MAR-2023 16:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.064	1.000	0.0642	2,2'-oxybis(1-Chloropropane)
0.949	0.960	-0.0107	Benzoic acid

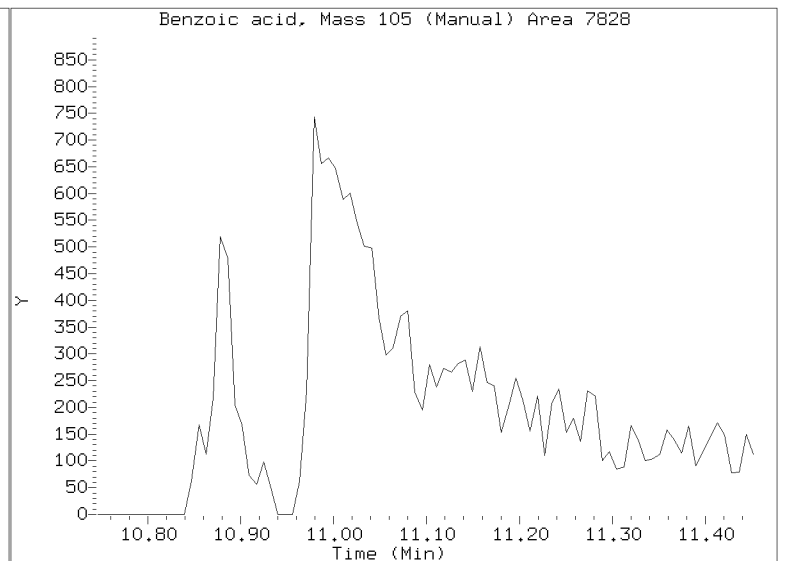
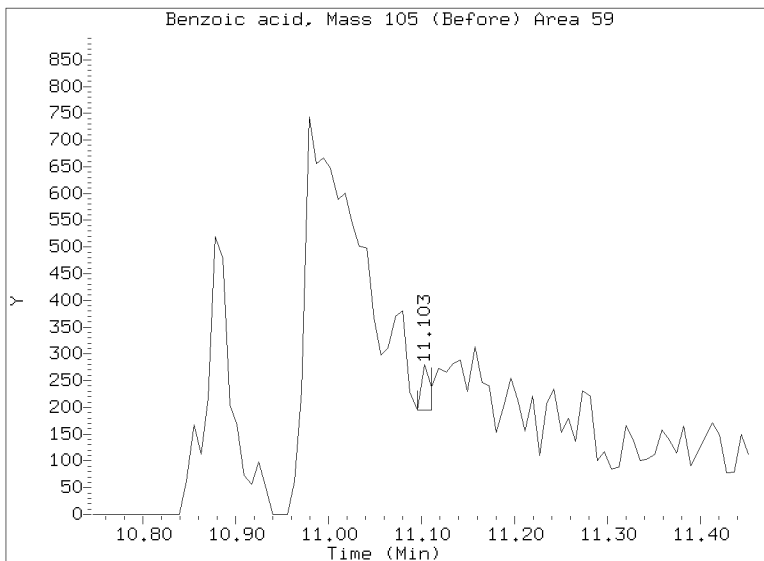
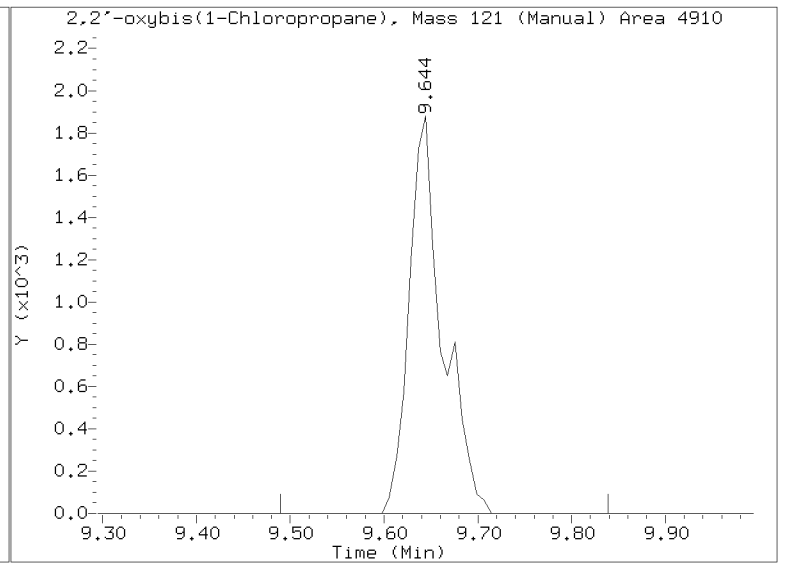
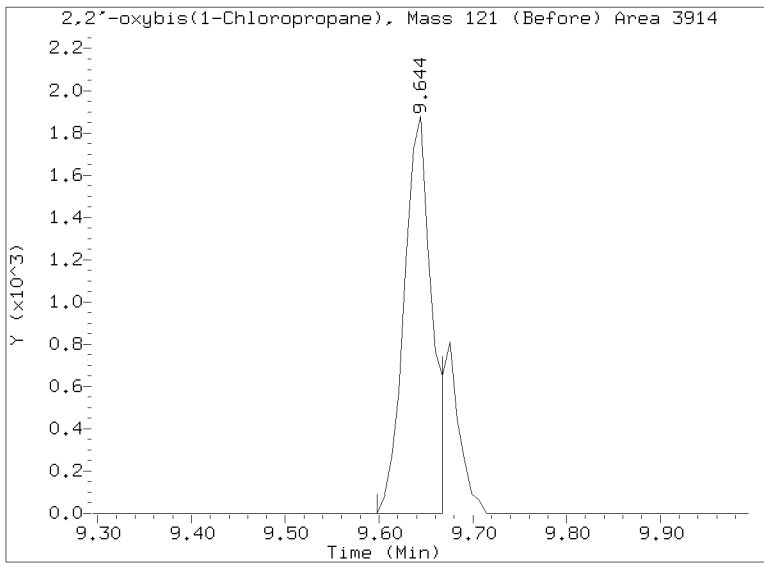
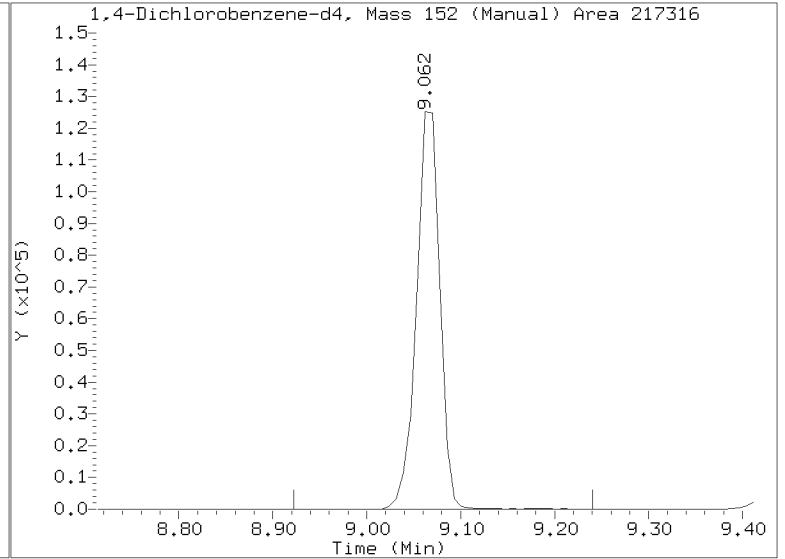
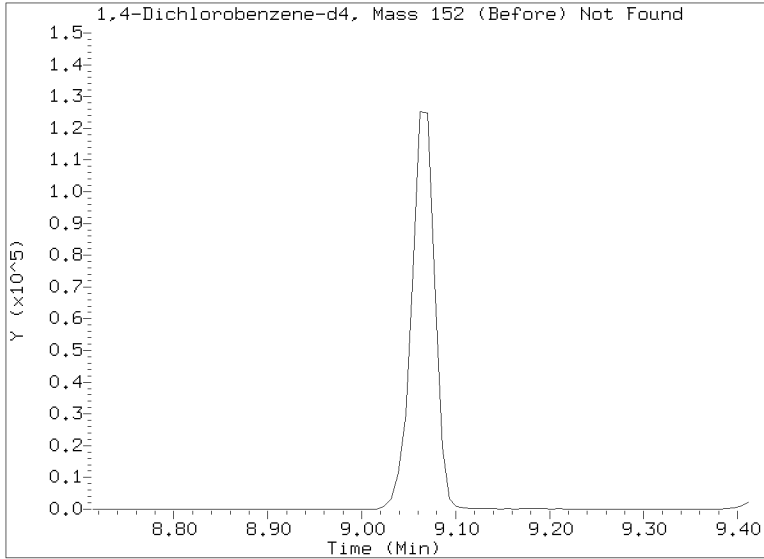
RRT check based on Ccal File: NT1403172302.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172304.D
Injection Date: 17-MAR-2023 16:16
Lab ID: SLC0335-LCV1 Client ID:
Report Date: 03/22/2023 08:11





**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403172318.D

Calibration Date: 03/15/2023

Sequence: SLC0335

Injection Date: 03/18/23

Lab Sample ID: SLC0335-LCV2

Injection Time: 00:43

Sequence Name: ABN 0.2

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.9011440	1.5375570		-19.1	+/-50
4-Methylphenol	A	0.20000	0.2	1.5914380	1.2553540		-21.1	+/-50
Naphthalene	A	0.20000	0.2	1.0686200	1.0790050		1.0	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7452524	0.7359876		-1.2	+/-50
Acenaphthylene	A	0.20000	0.2	2.0854140	2.0039590		-3.9	+/-50
Dimethylphthalate	A	0.20000	0.2	1.3338450	1.2684700		-4.9	+/-50
Acenaphthene	A	0.20000	0.2	1.2175690	1.1807150		-3.0	+/-50
Dibenzofuran	A	0.20000	0.2	1.7382550	1.7364800		-0.1	+/-50
Fluorene	A	0.20000	0.2	1.6477120	1.3972670		-15.2	+/-50
Phenanthrene	A	0.20000	0.2	1.1428510	1.1392190		-0.3	+/-50
Anthracene	A	0.20000	0.2	1.1010610	1.0090730		-8.4	+/-50
Fluoranthene	A	0.20000	0.2	1.6273660	1.8241820		12.1	+/-50
Pyrene	A	0.20000	0.2	1.6688810	1.9241690		15.3	+/-50
Butylbenzylphthalate	A	0.20000	0.2	0.7311588	0.7378407		0.9	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4748830	1.4646540		-0.7	+/-50
Chrysene	A	0.20000	0.2	1.3348290	1.2695880		-4.9	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5265649	0.5399425		2.5	+/-50
Benzo(a)fluoranthene, Total	A	0.40000	0.4	1.3424190	1.3999990		4.3	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2087150	1.0841260		-10.3	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.1	1.3155660	0.9532083		-27.5	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.1	1.1087420	0.7810990		-29.6	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.0842080	0.8244934		-24.0	+/-50
2-Fluorophenol	A	0.30000	0.231	1.3587350	1.0483670		-22.8	+/-50
Phenol-d5	A	0.30000	0.246	1.7888720	1.4661320		-18.0	+/-50
2-Chlorophenol-d4	A	0.30000	0.275	1.4103050	1.2921780		-8.4	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.224	0.9421955	1.0553920		12.0	+/-50
Nitrobenzene-d5	A	0.20000	0.183	0.4233007	0.3882789		-8.3	+/-50
2-Fluorobiphenyl	A	0.20000	0.209	1.4485960	1.5122800		4.4	+/-50
2,4,6-Tribromophenol	A	0.30000	0.191	0.1518639	0.0966850		-36.3	+/-50
p-Terphenyl-d14	A	0.20000	0.243	1.1297810	1.3747450		21.7	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\NT1403172318.D

Date: 18-MAR-2023 00:43

Client ID:

Sample Info: SLC0335-LCW2

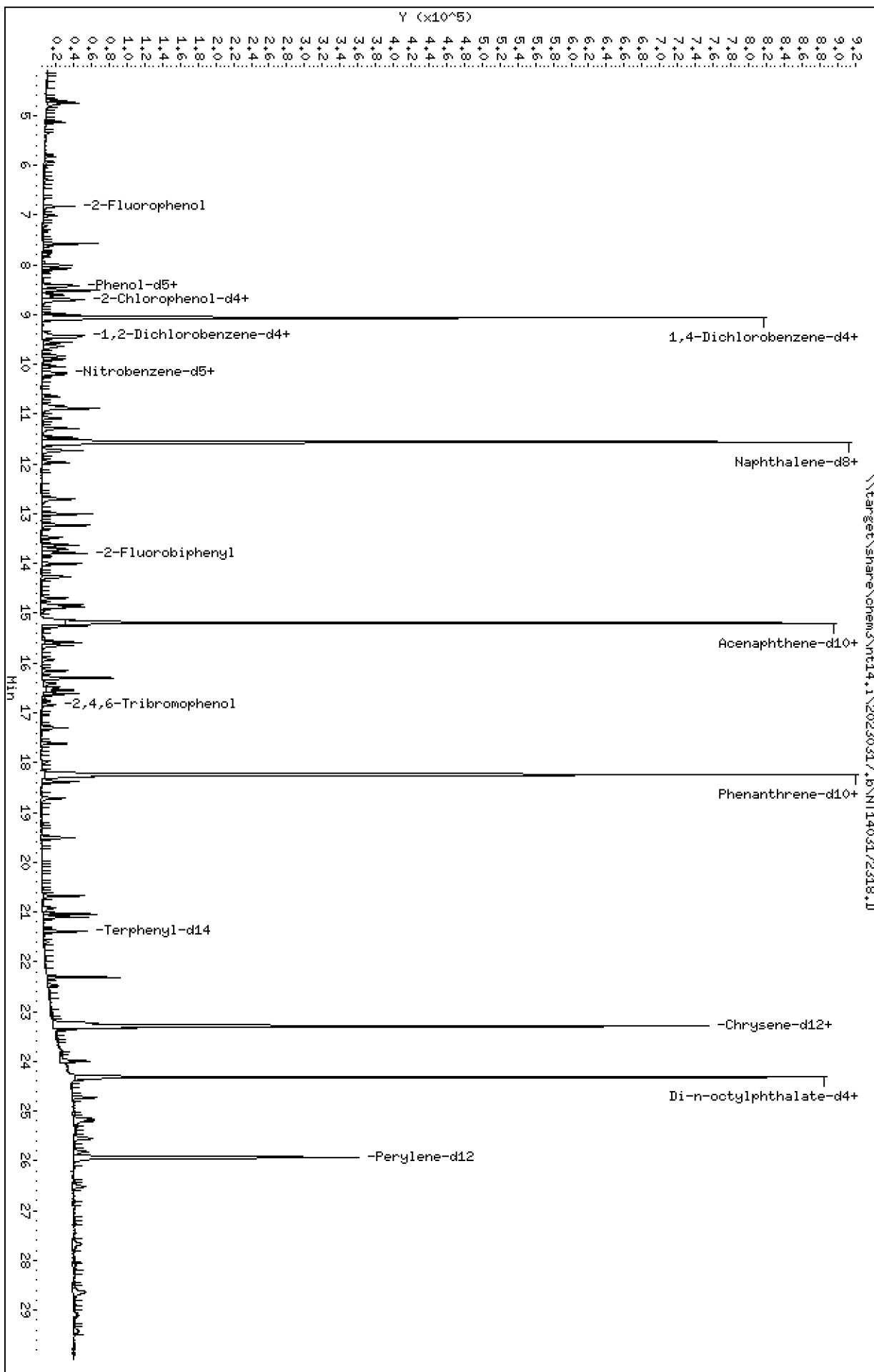
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

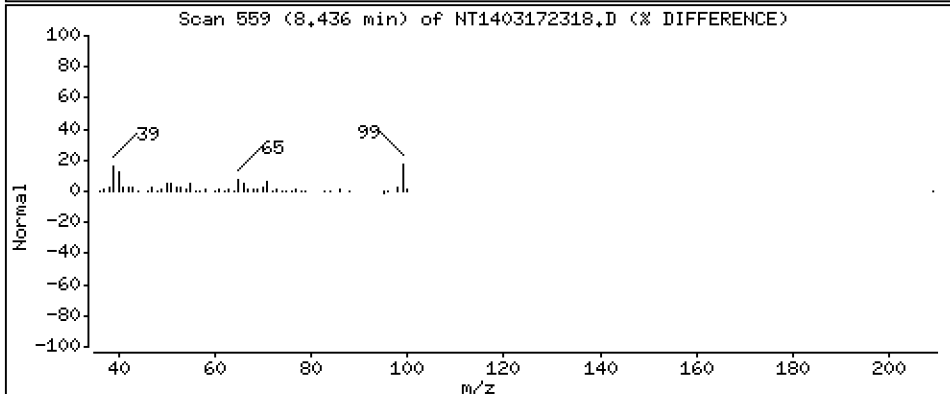
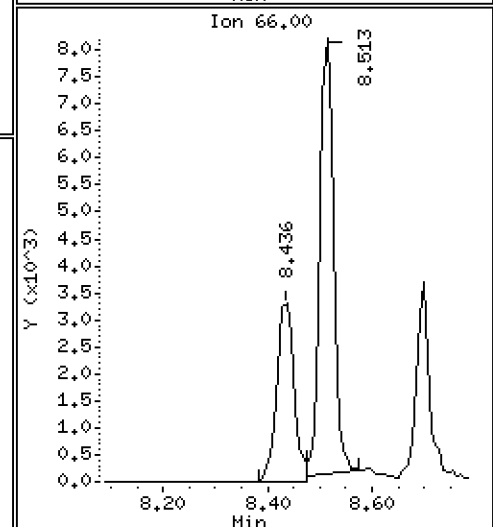
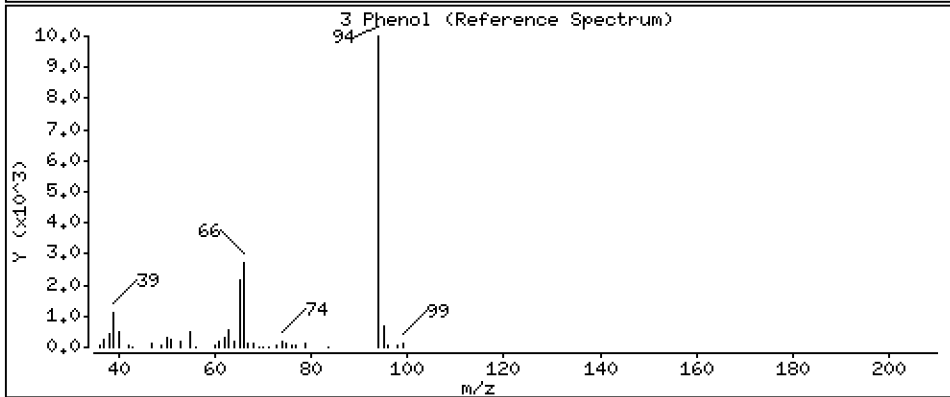
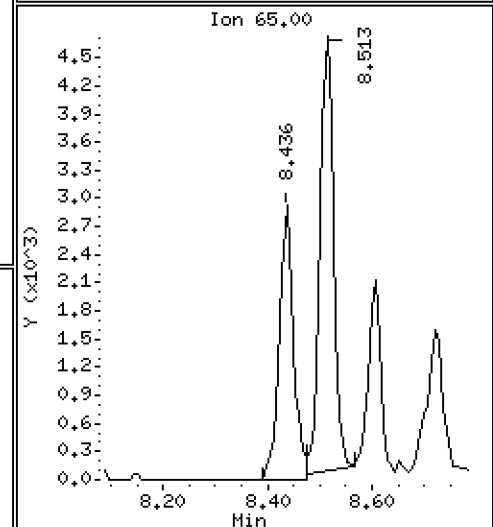
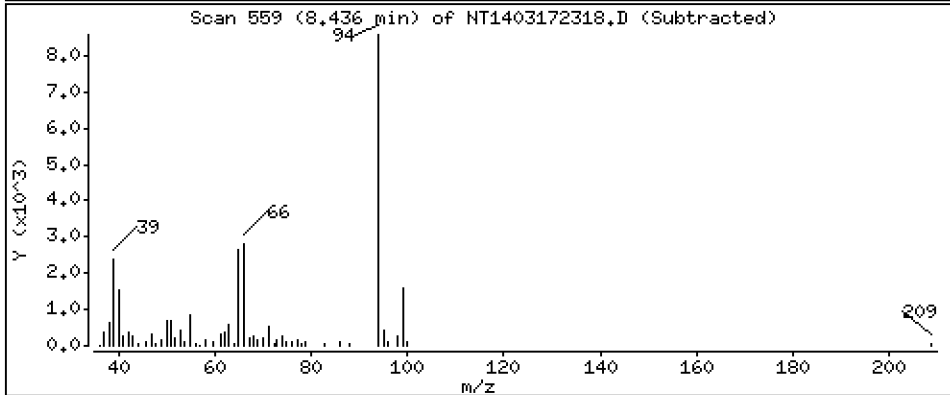
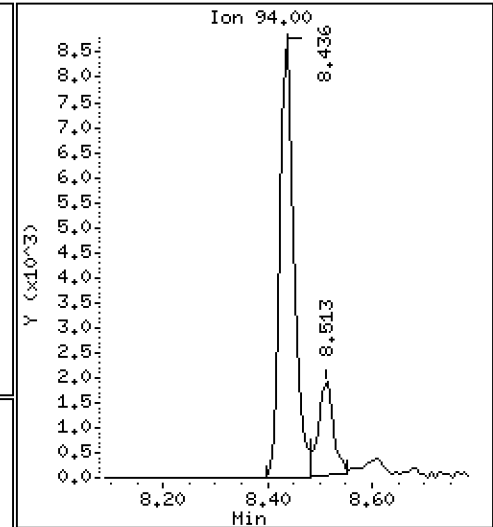
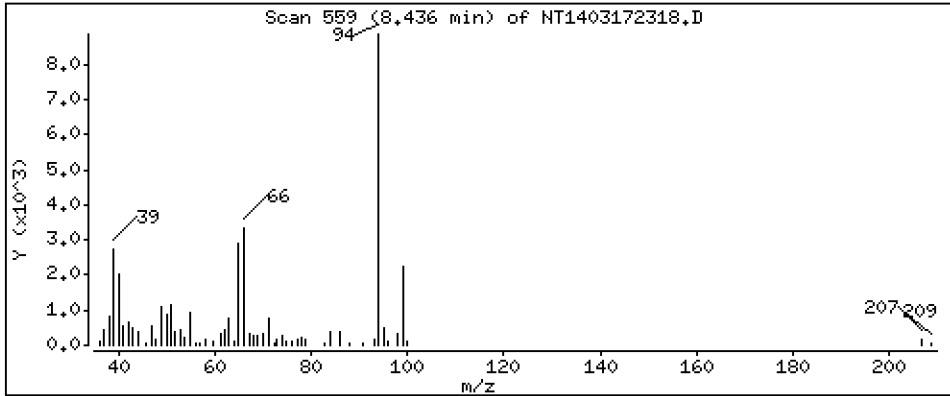
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1618 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

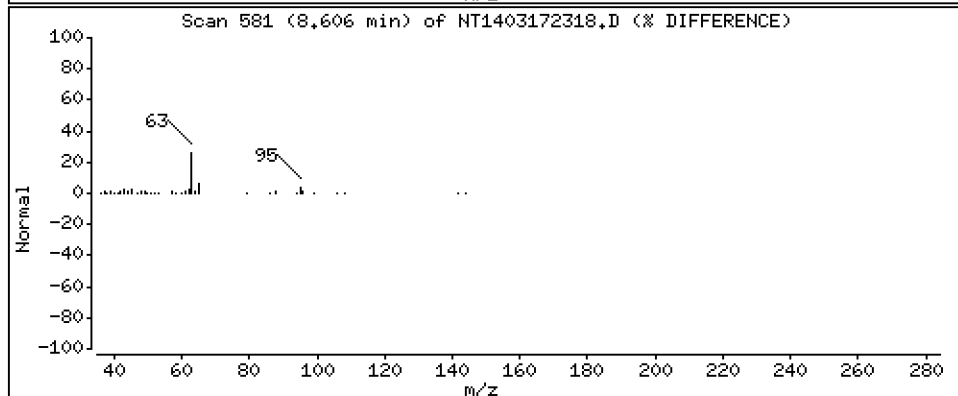
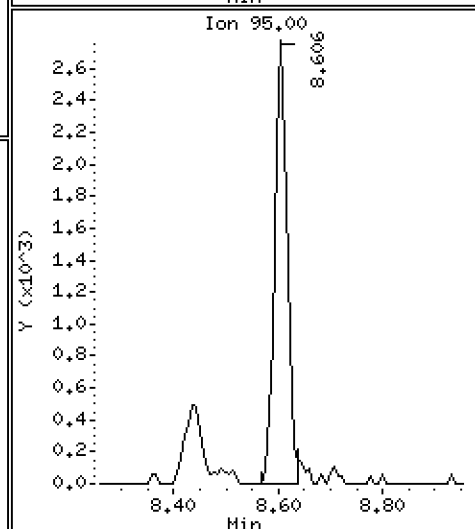
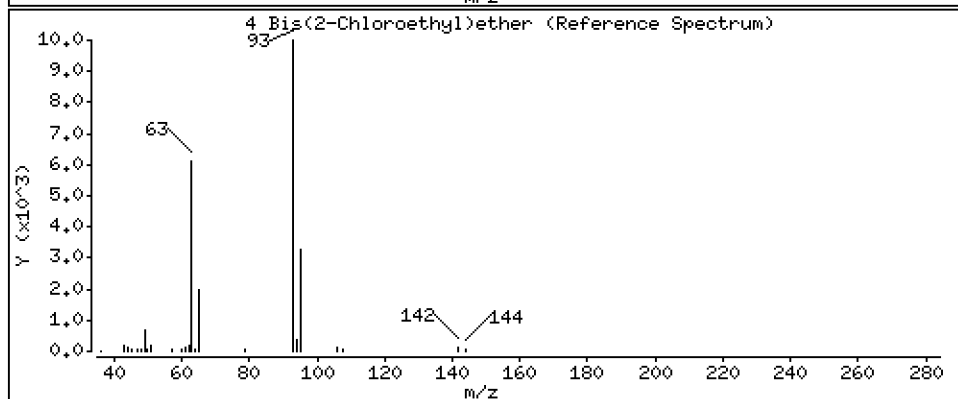
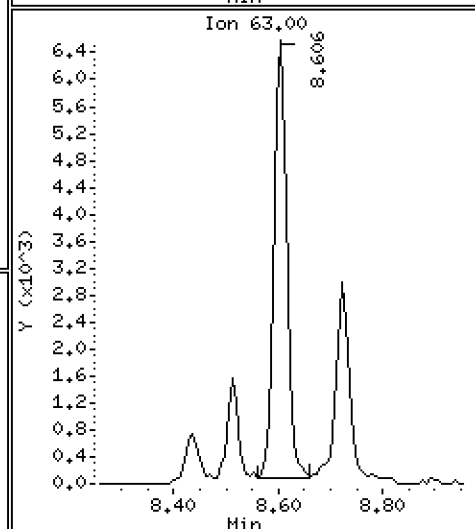
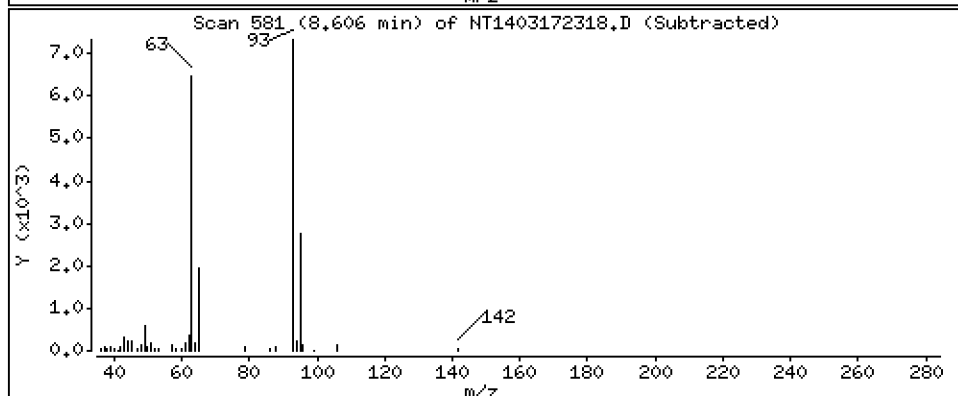
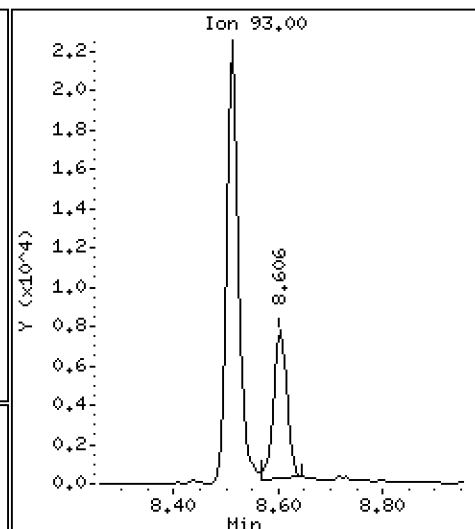
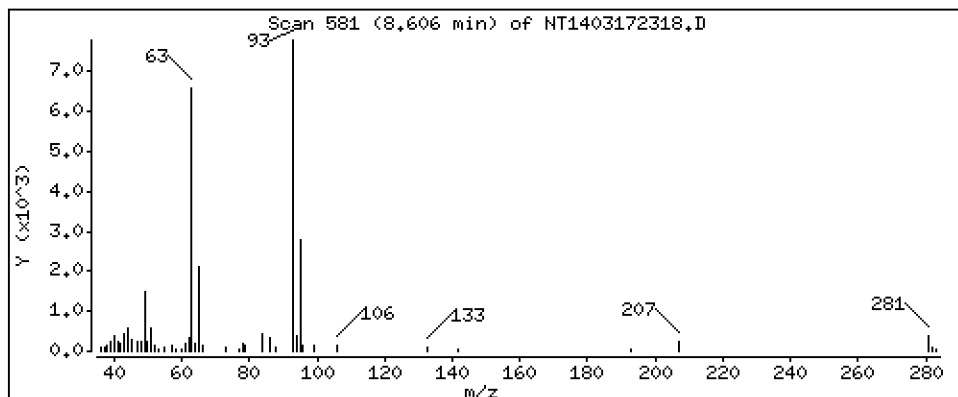
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,1837 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

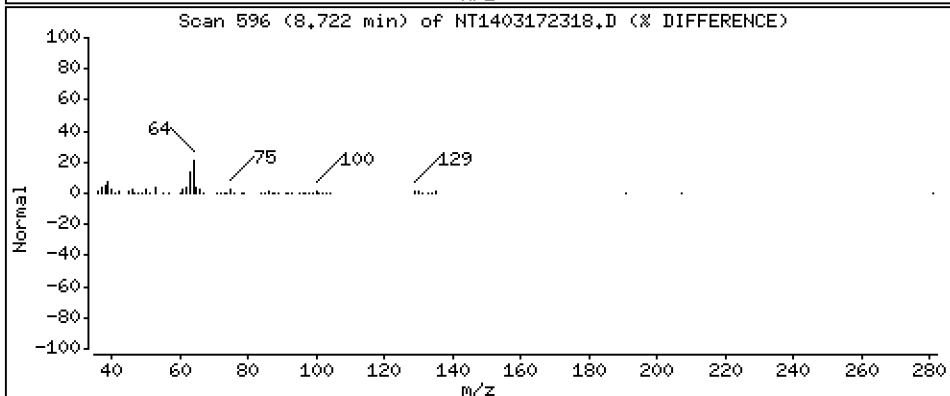
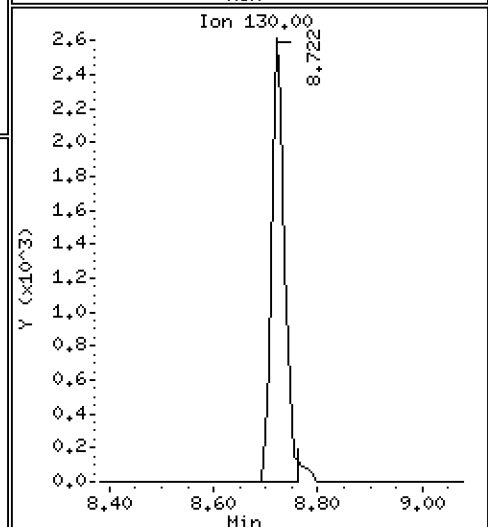
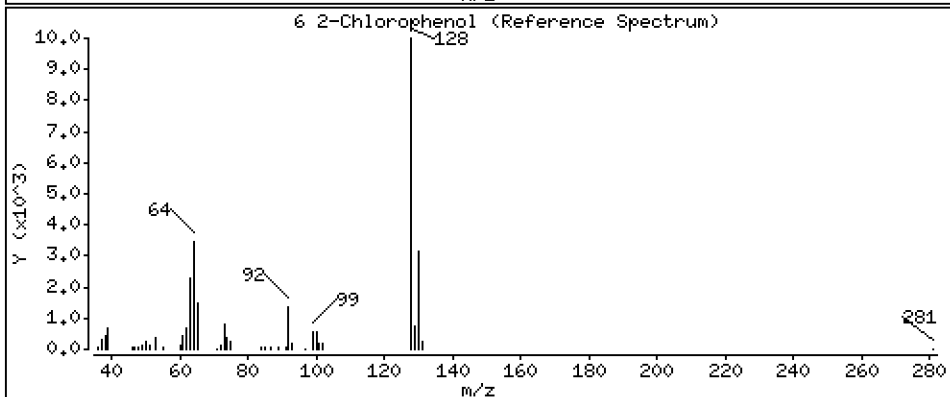
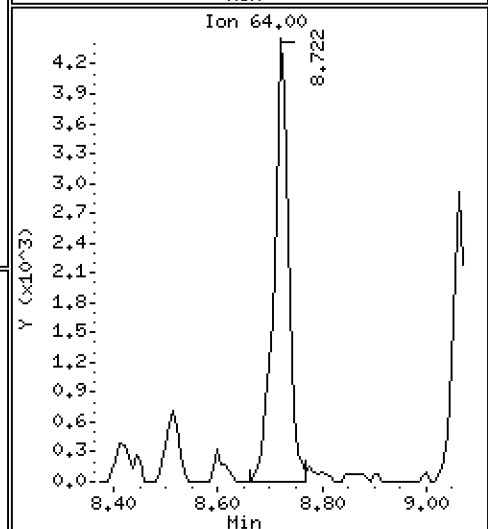
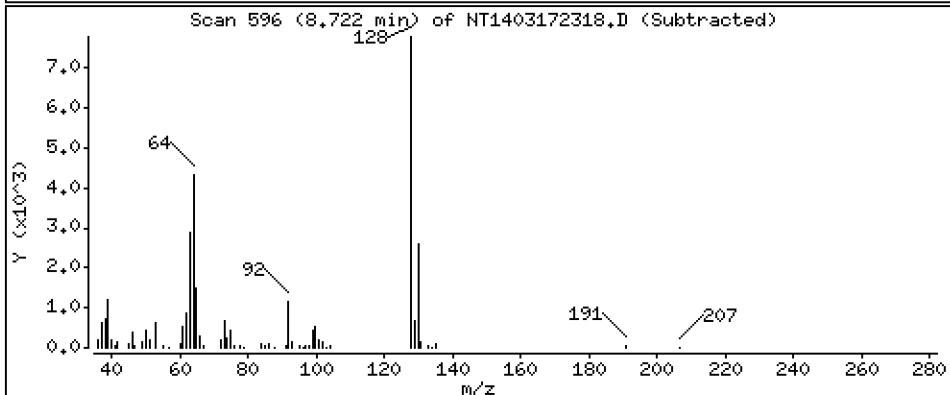
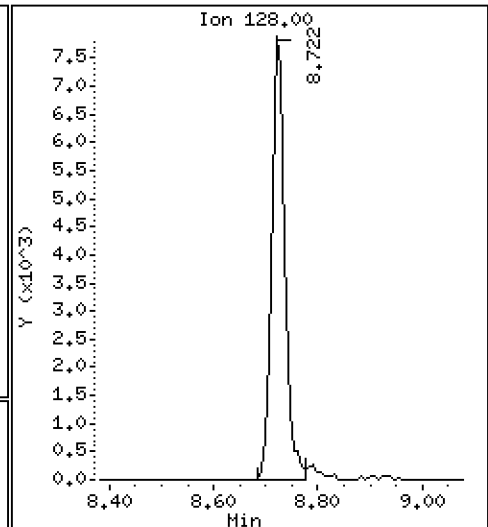
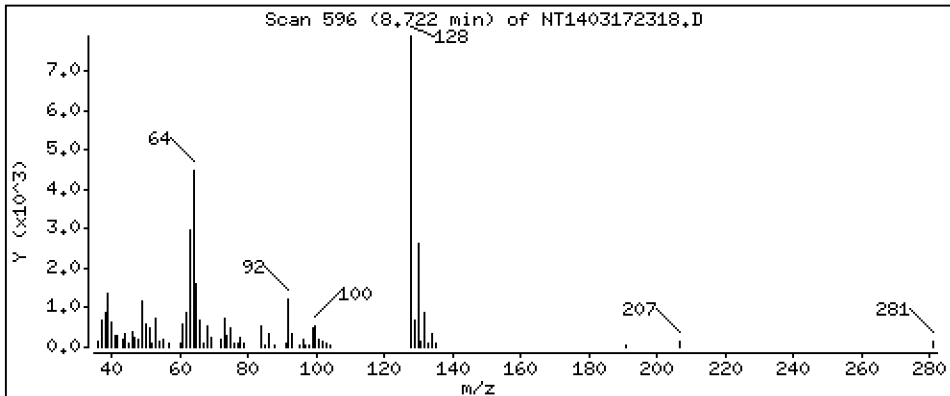
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1831 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

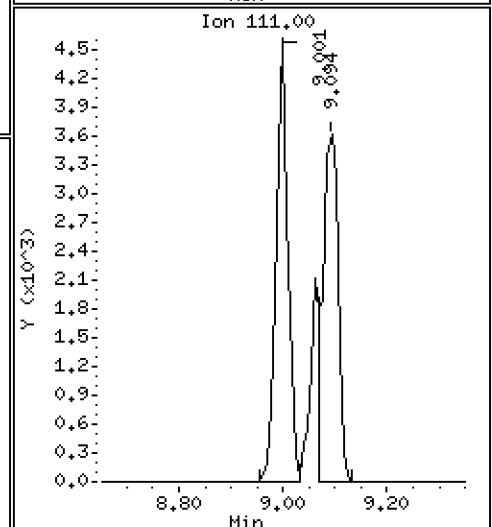
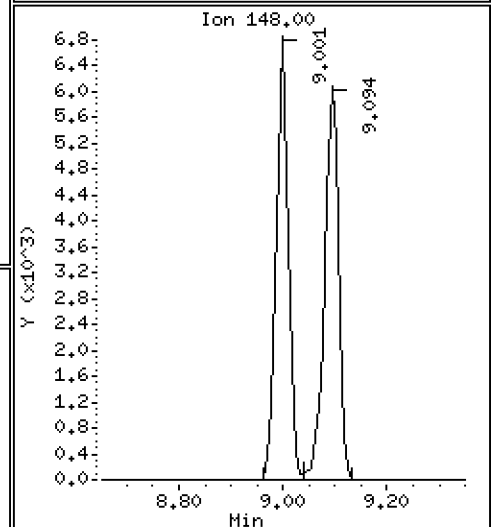
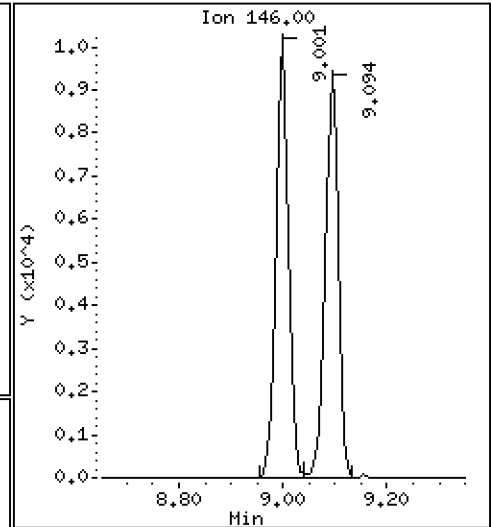
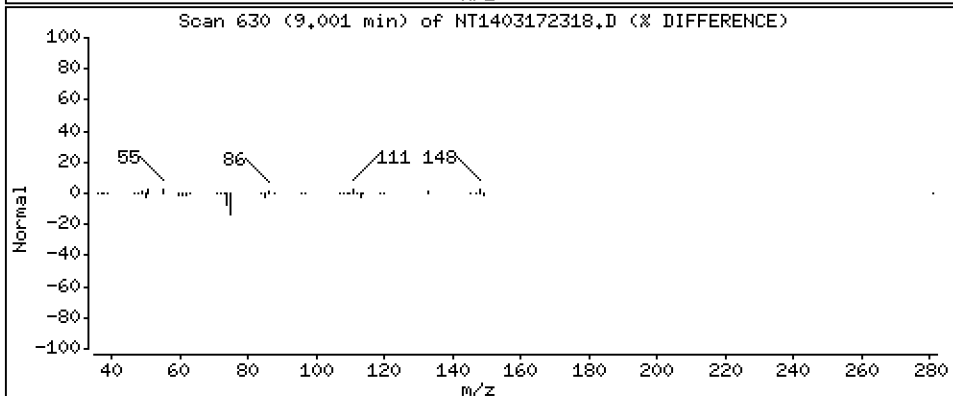
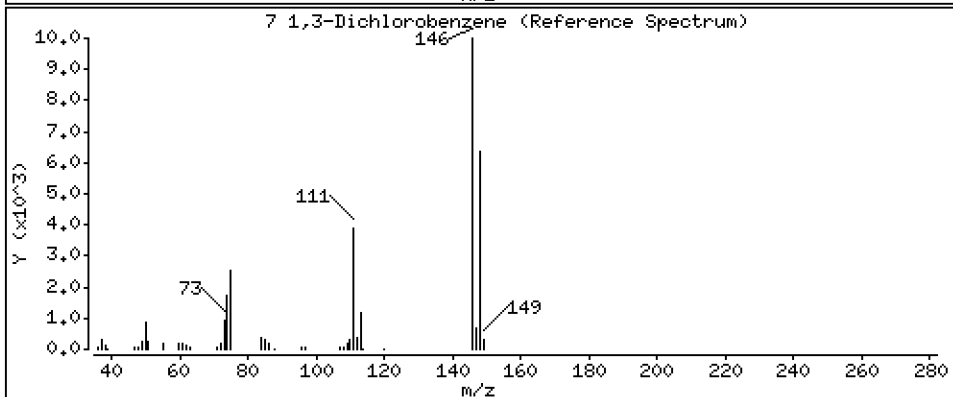
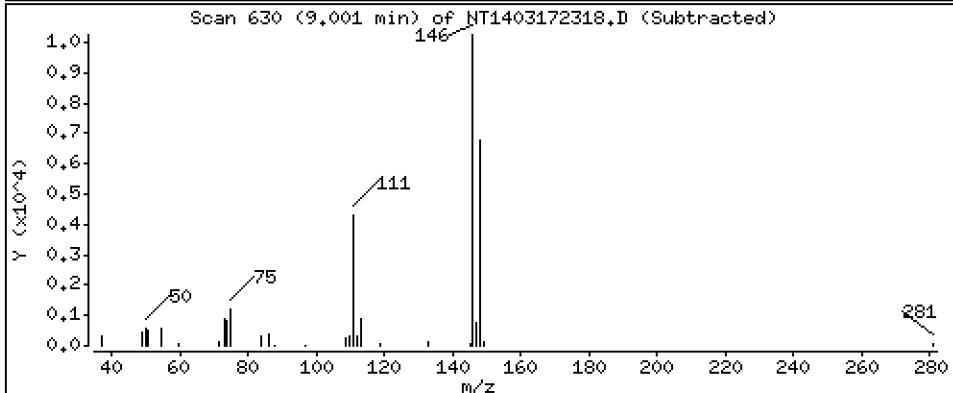
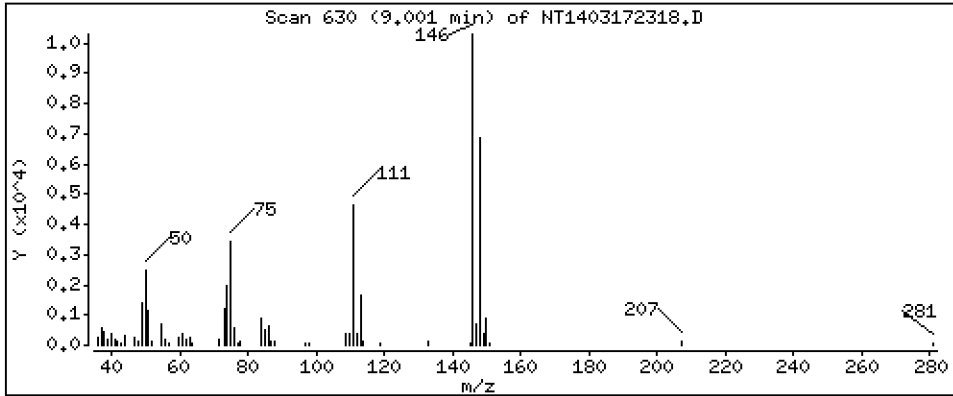
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2146 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

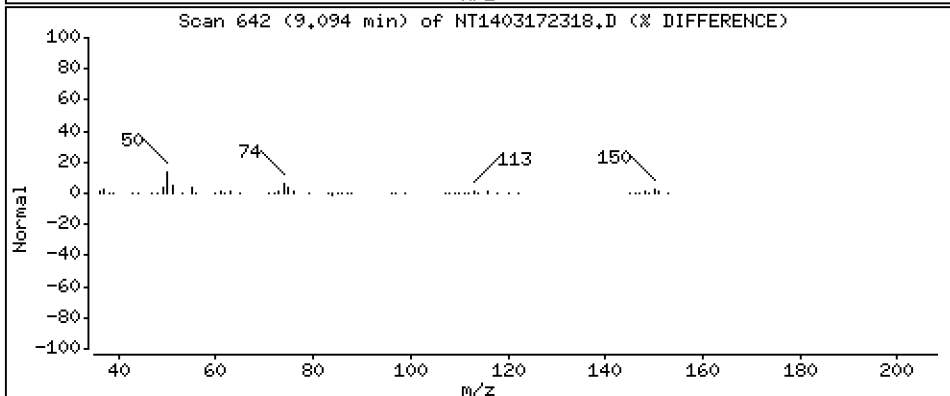
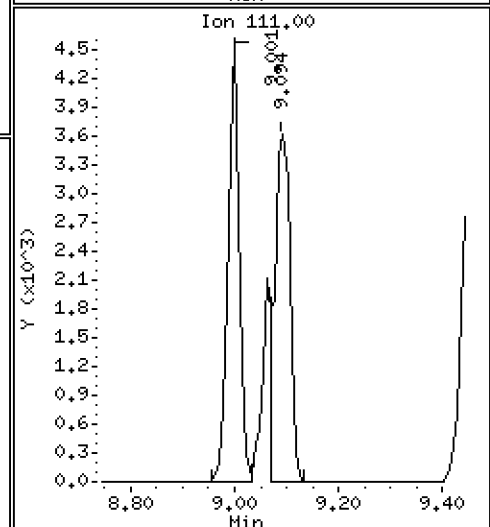
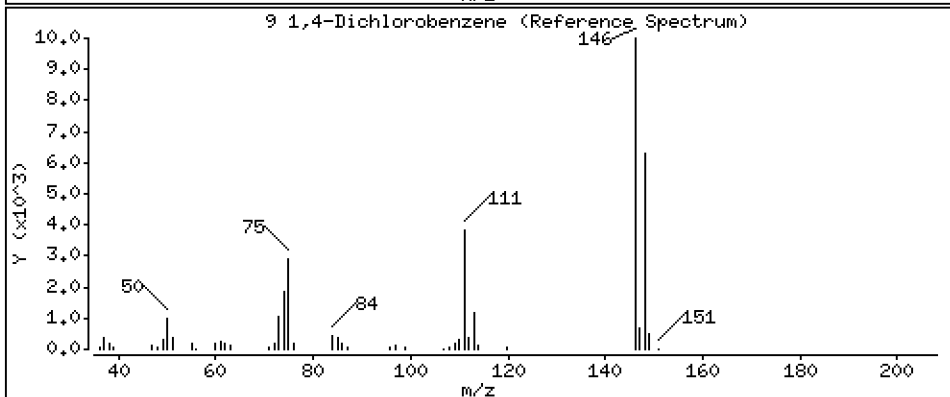
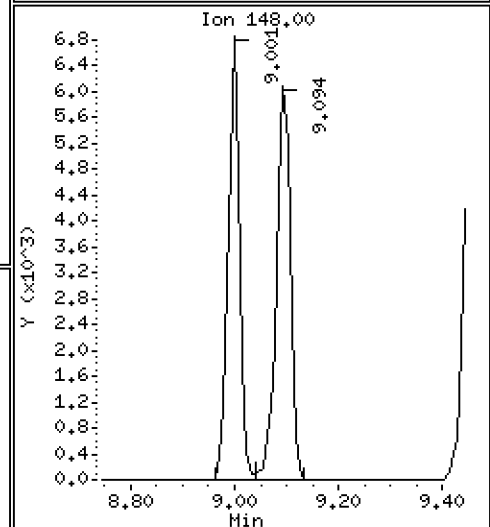
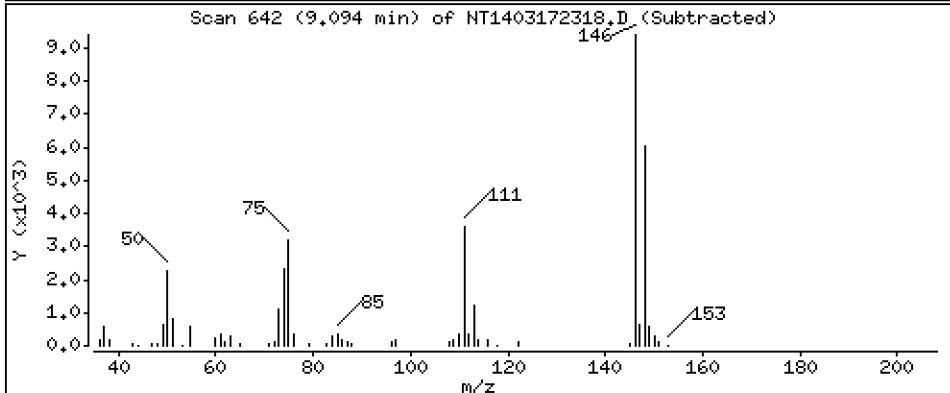
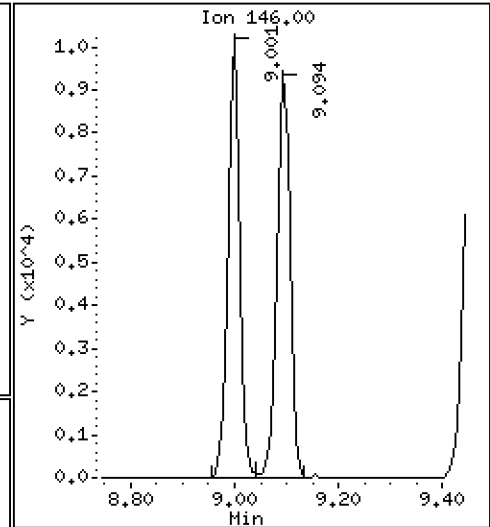
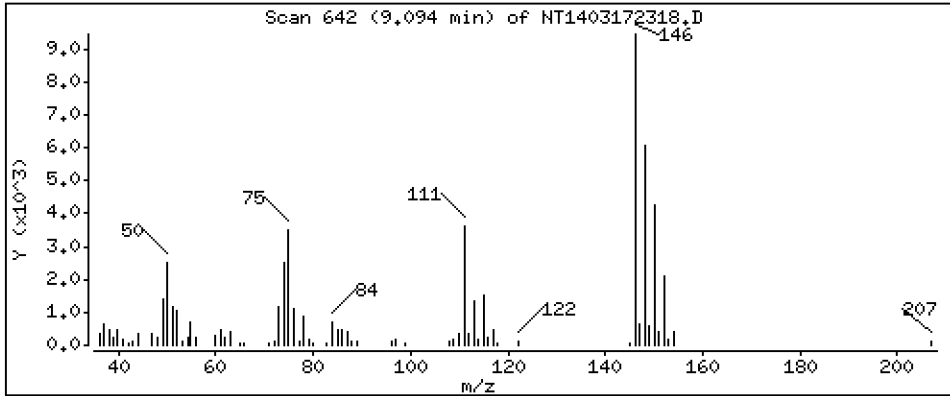
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2091 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

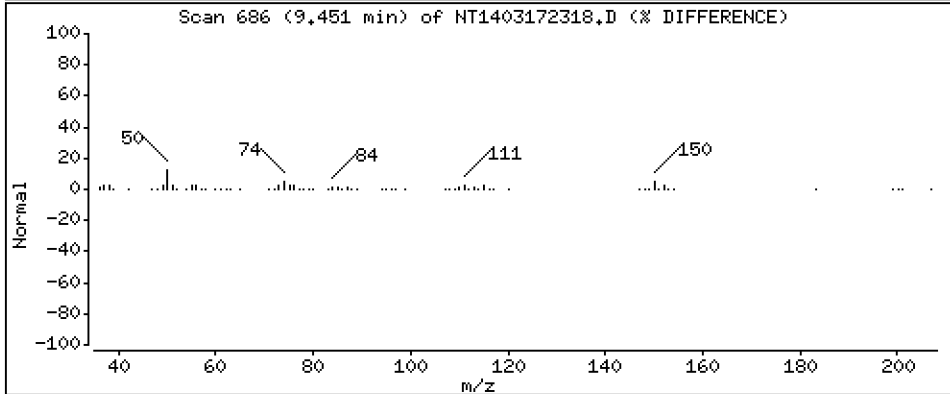
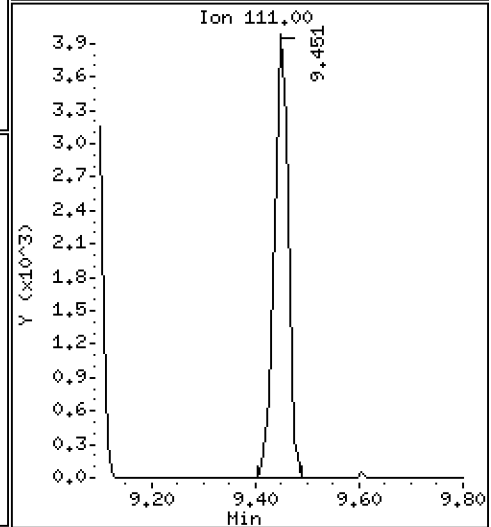
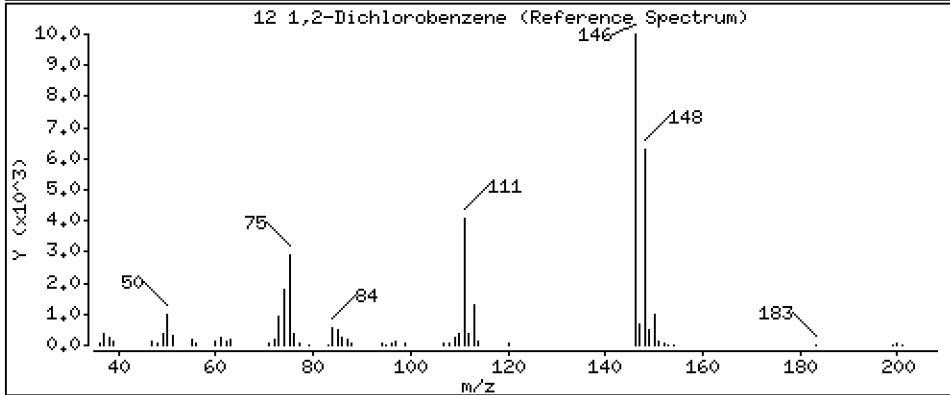
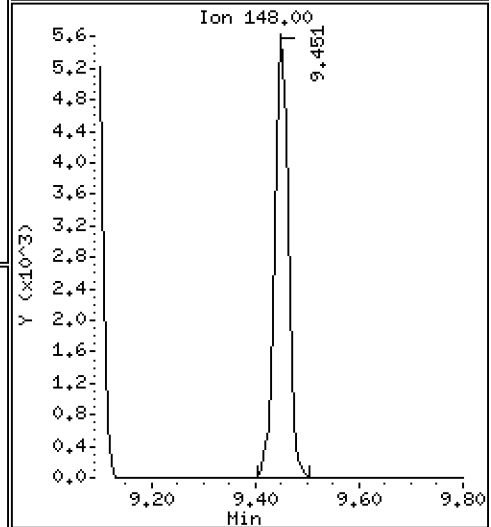
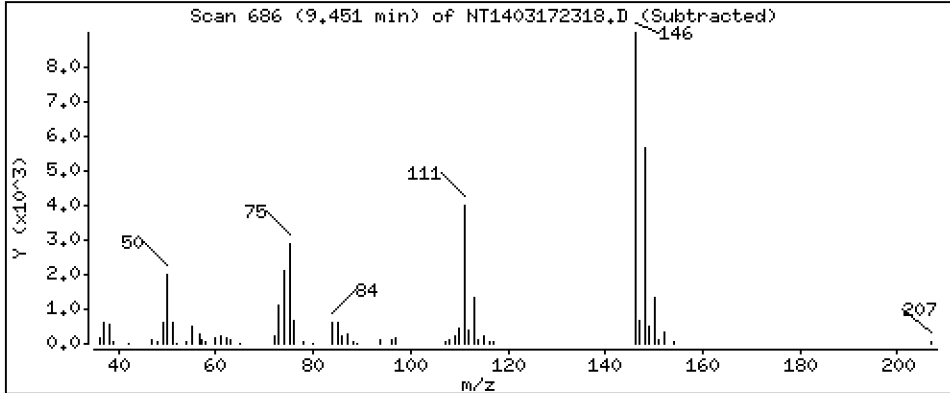
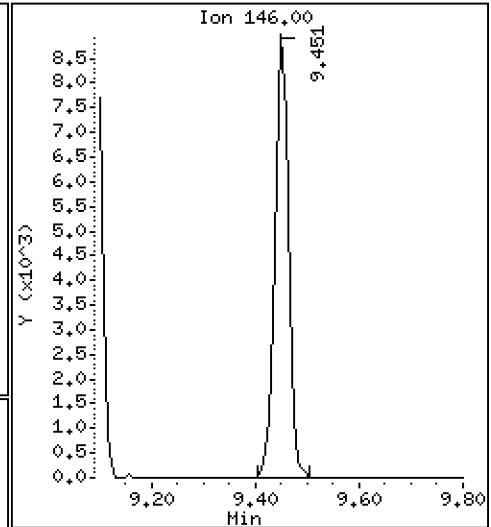
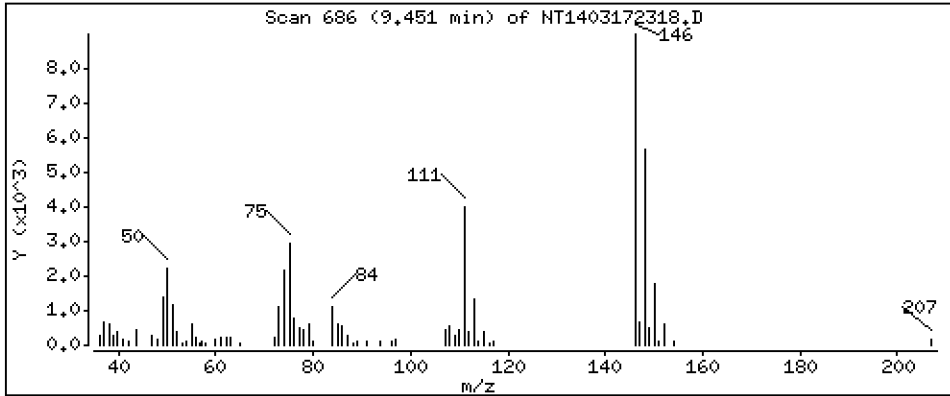
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2094 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

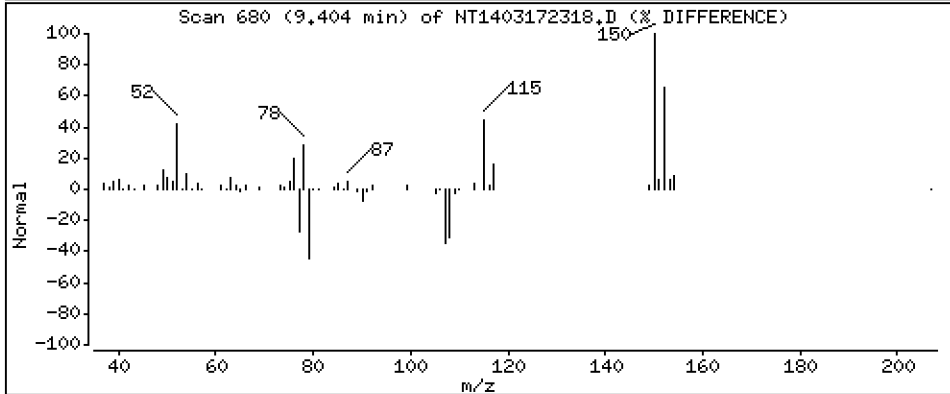
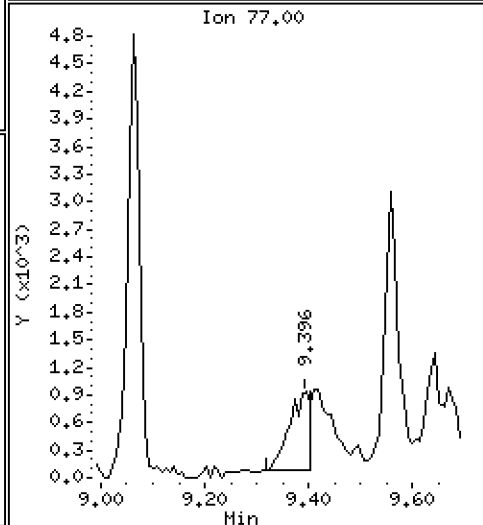
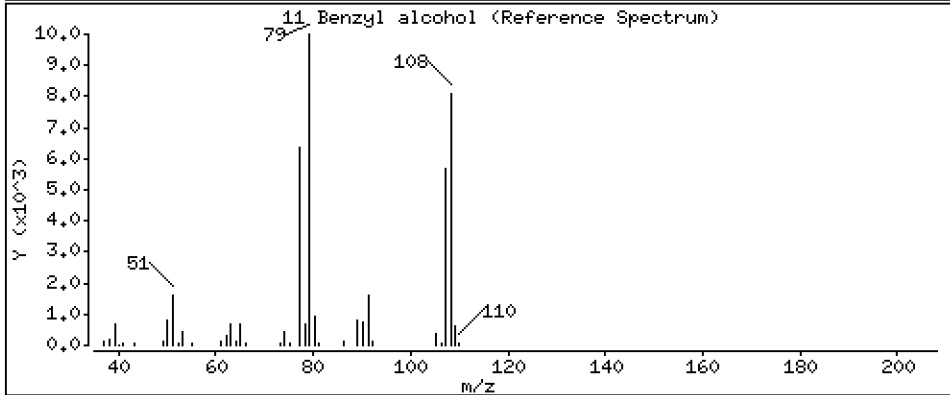
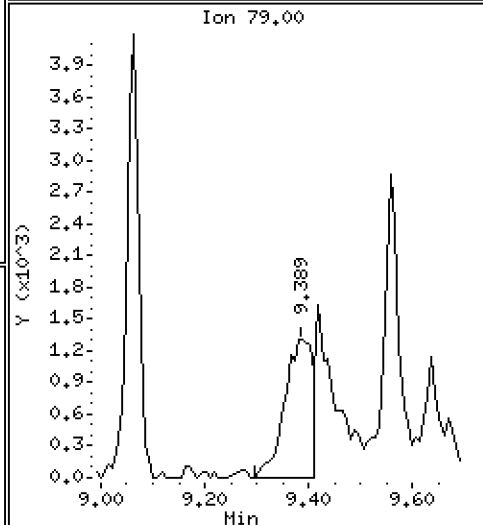
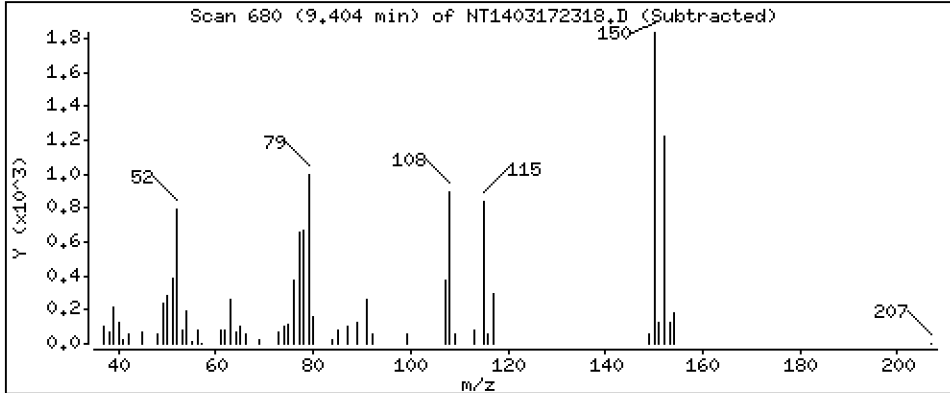
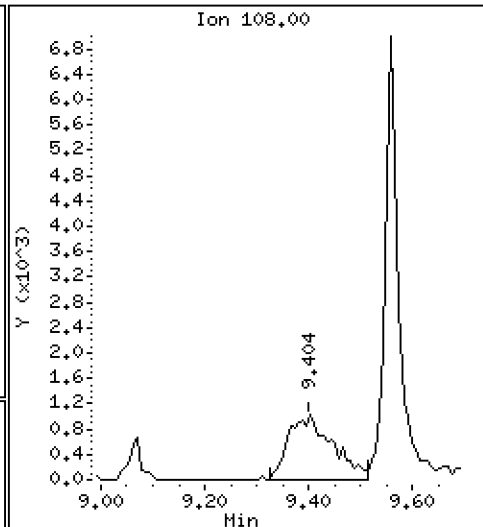
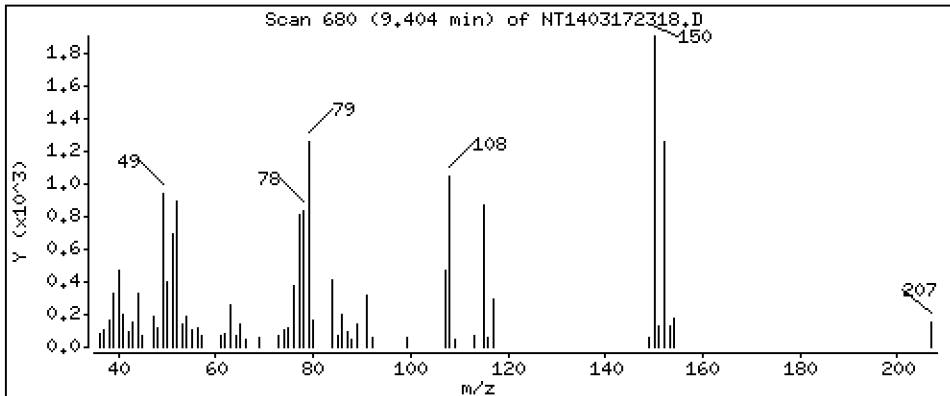
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1341 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

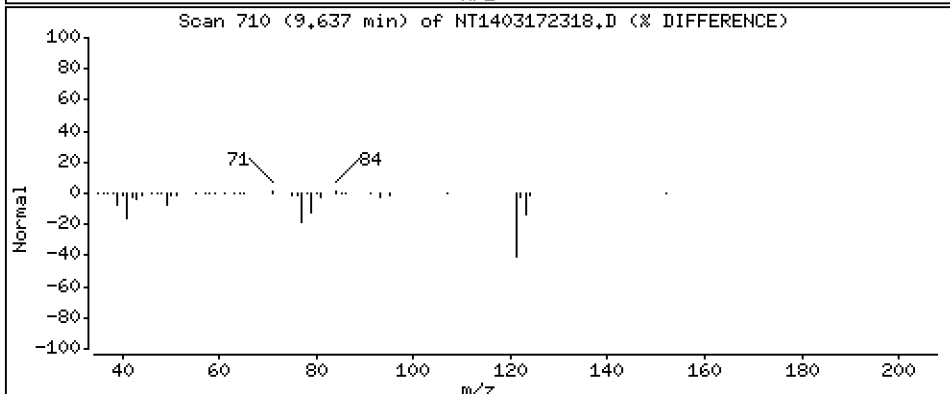
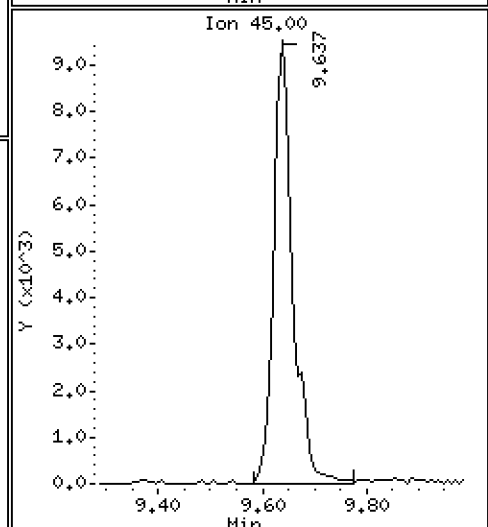
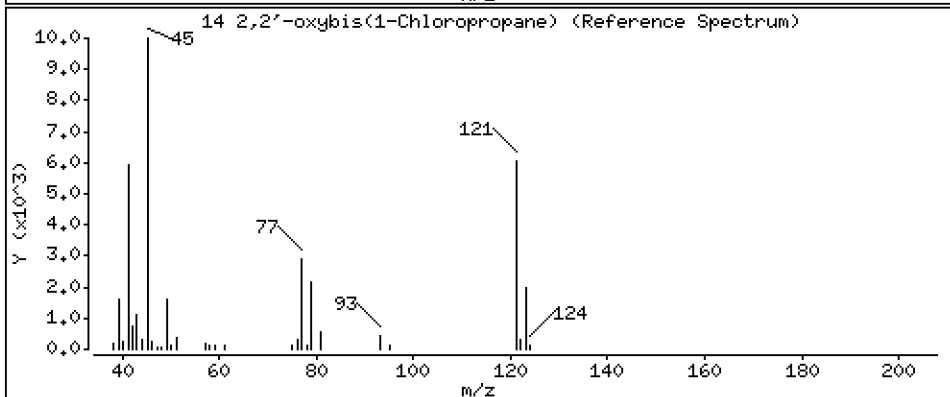
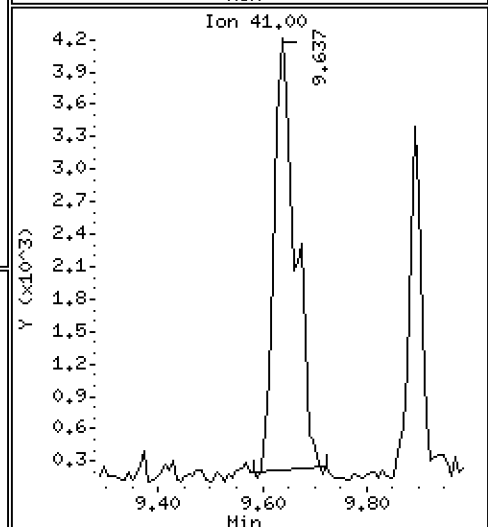
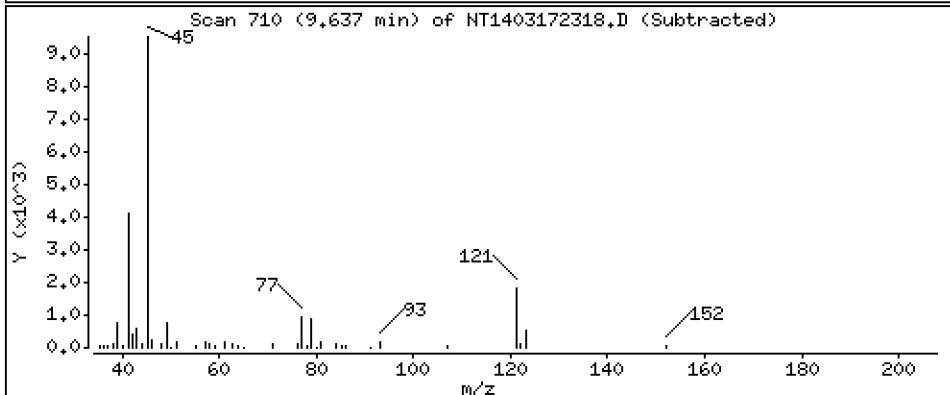
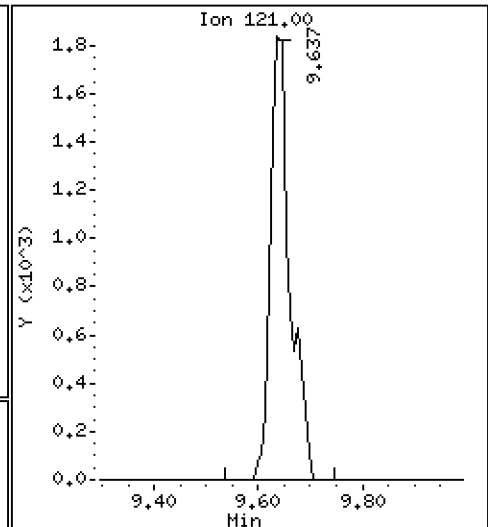
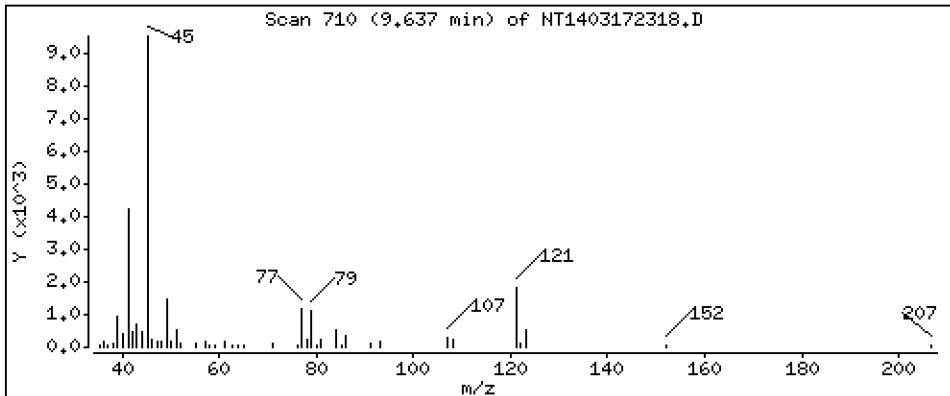
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2112 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

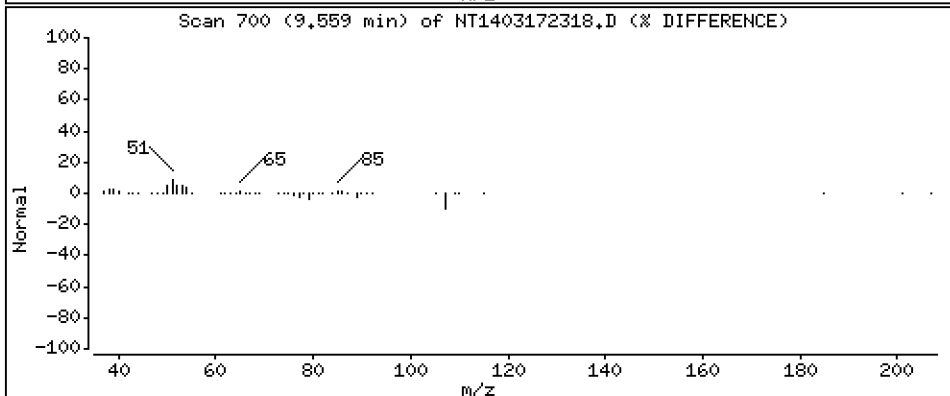
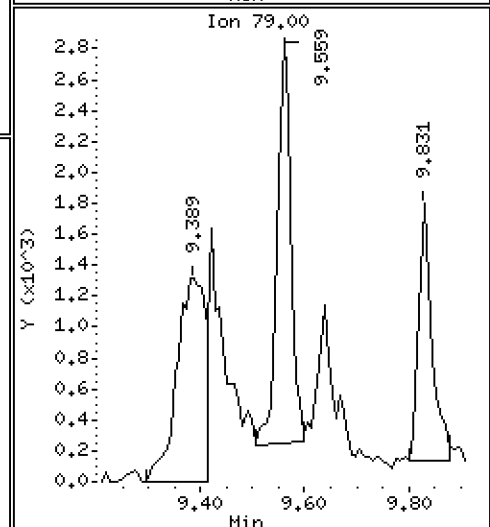
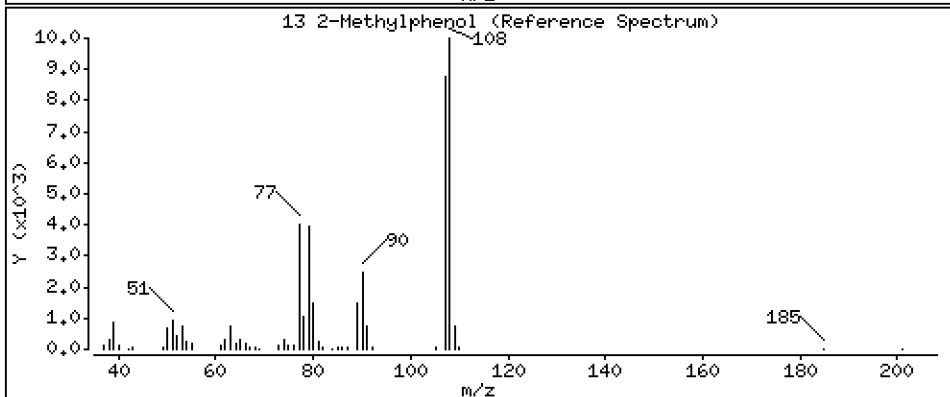
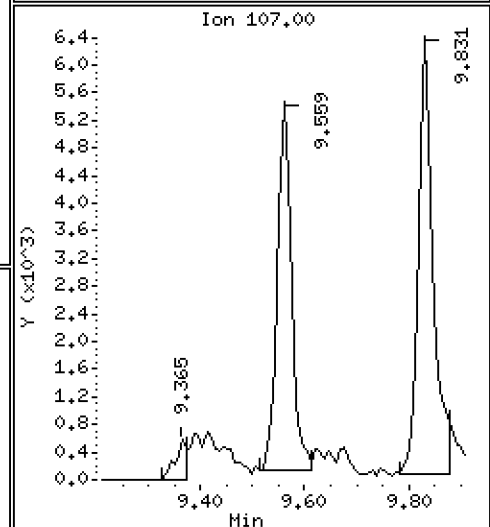
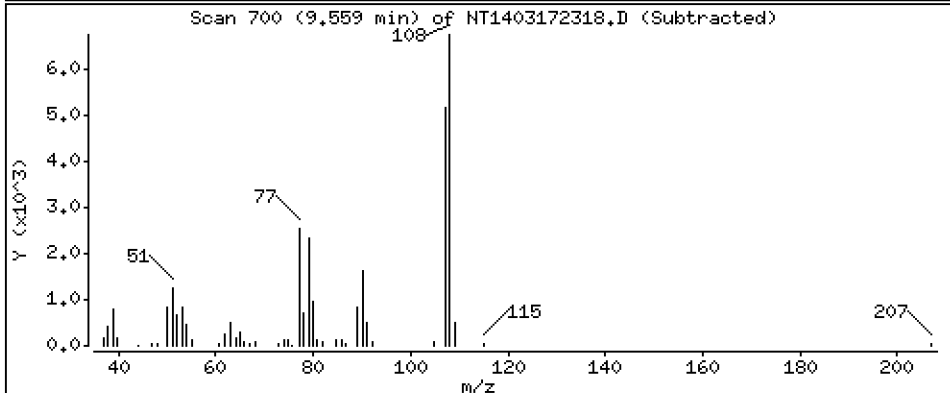
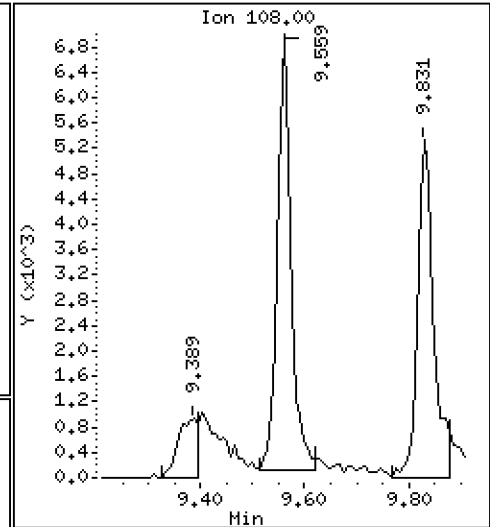
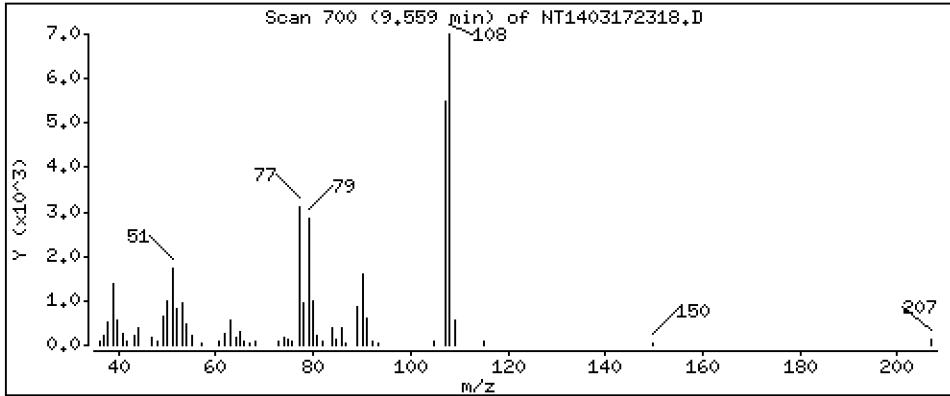
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.1749 ug/mL

13 2-Methylphenol



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

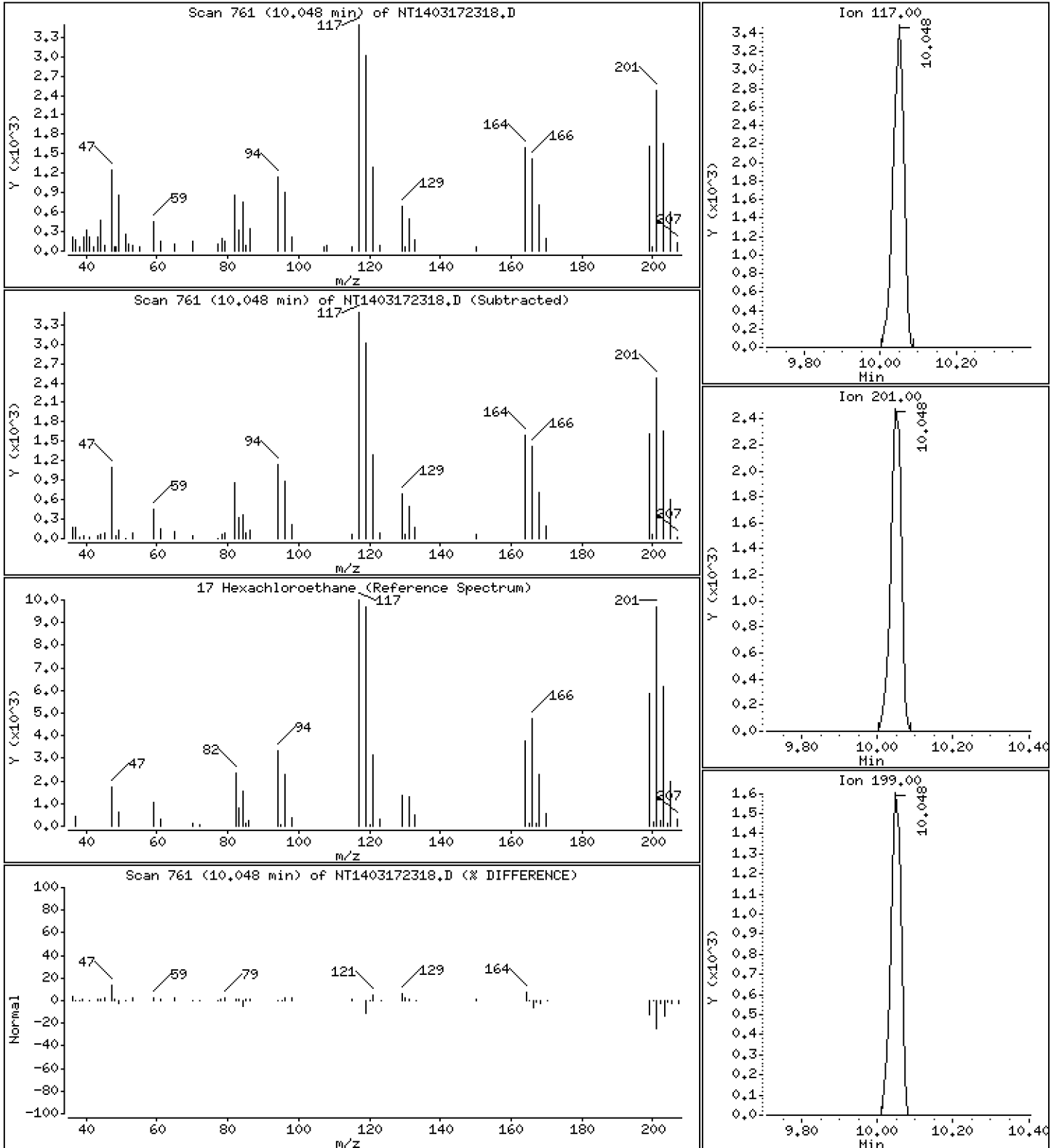
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,2068 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

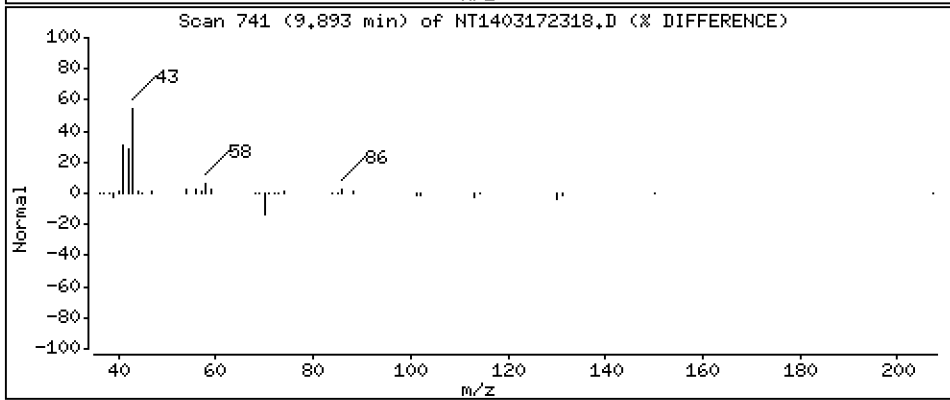
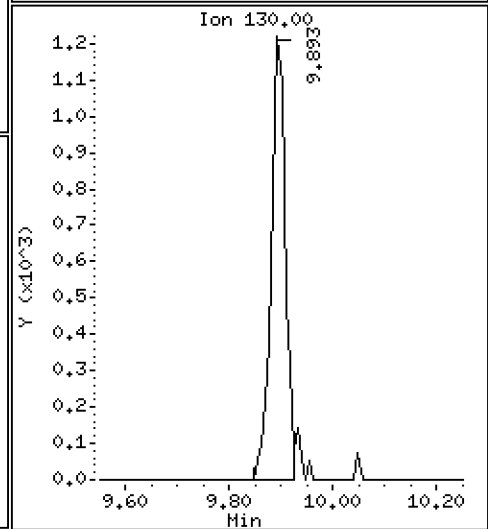
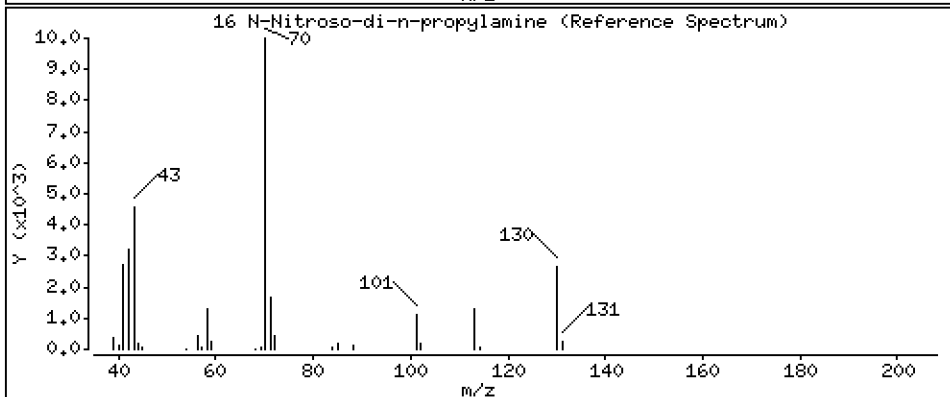
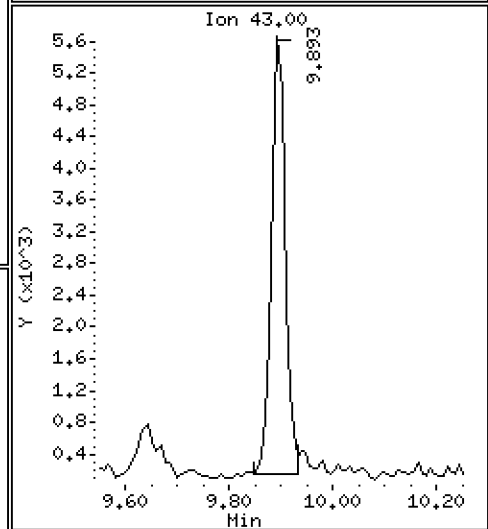
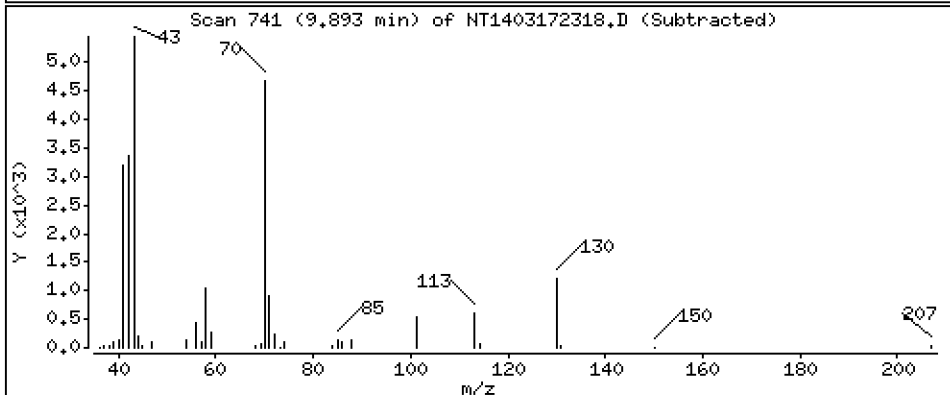
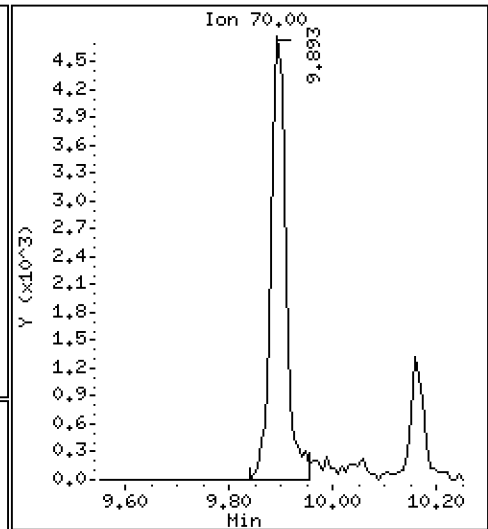
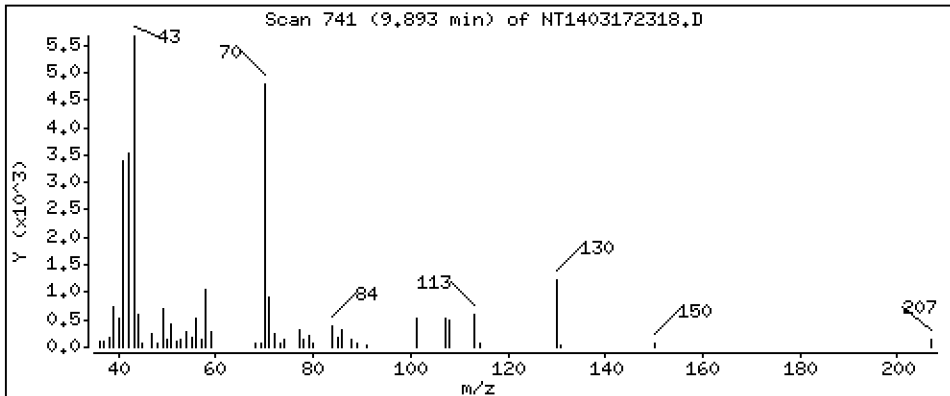
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.1717 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

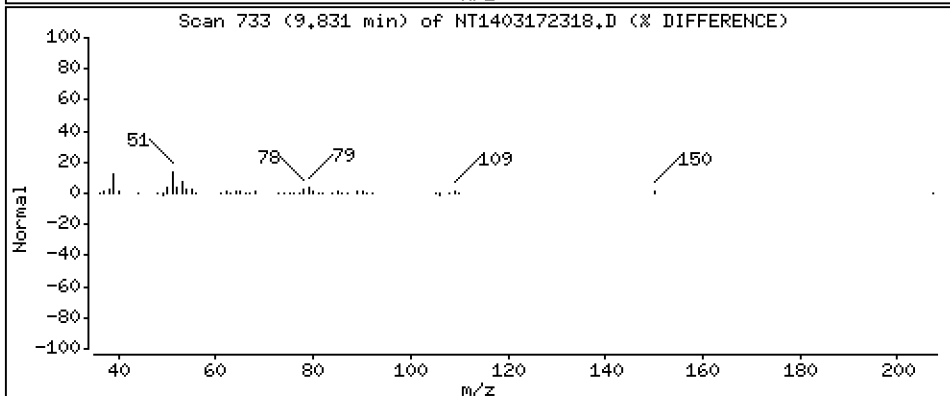
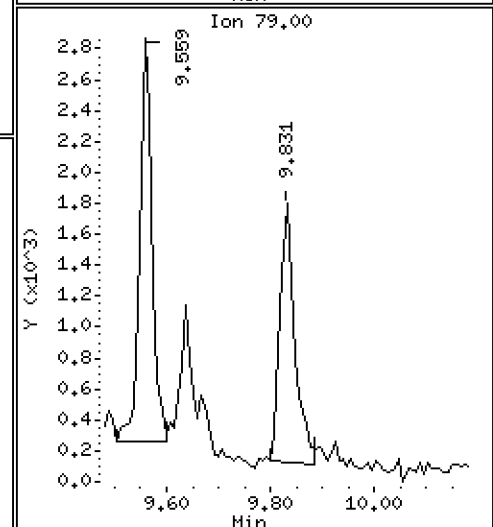
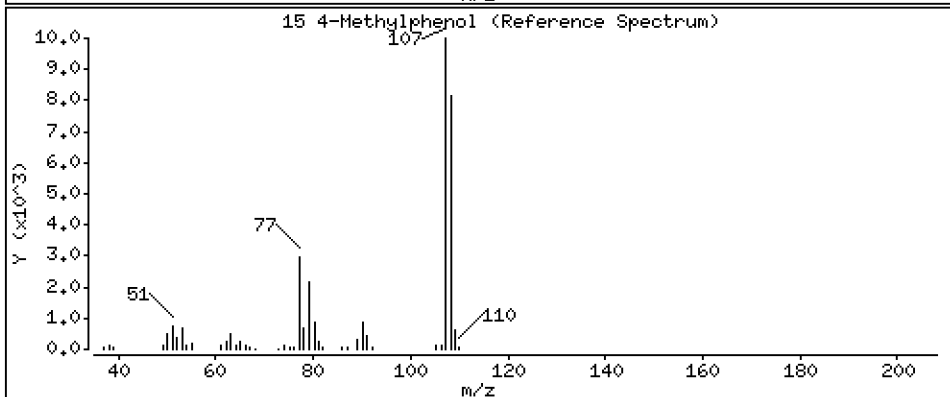
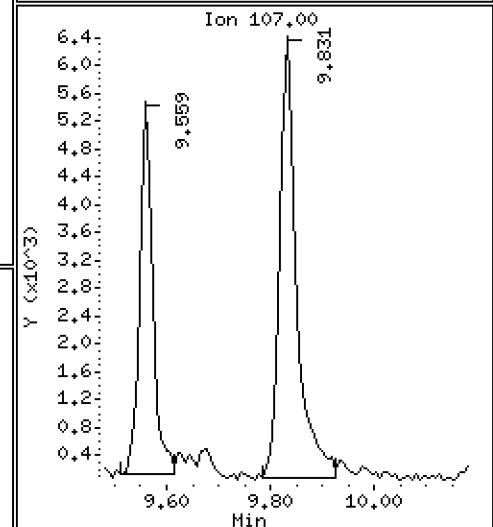
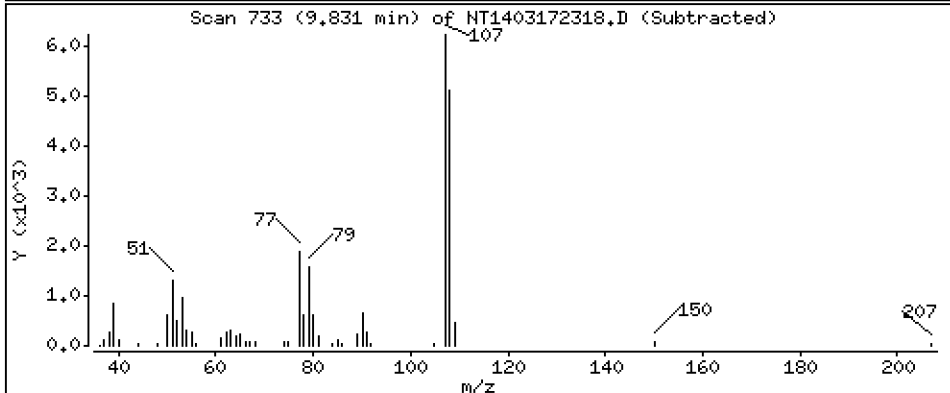
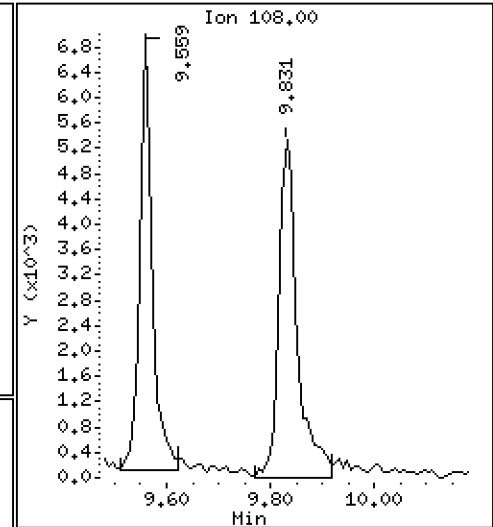
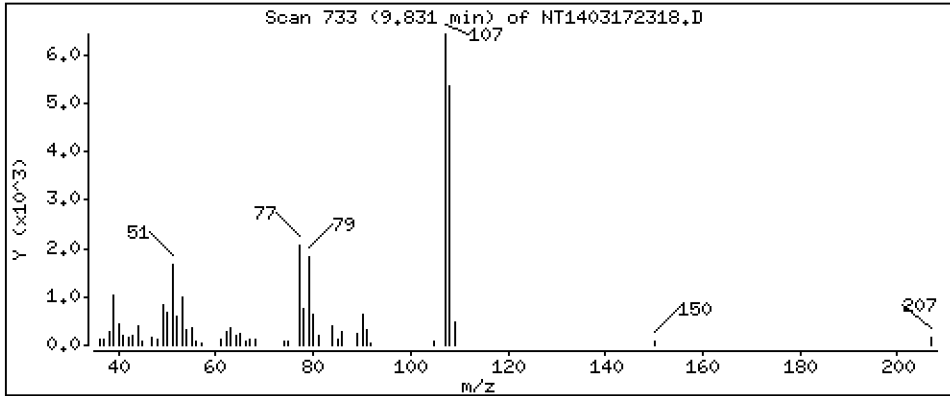
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1578 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

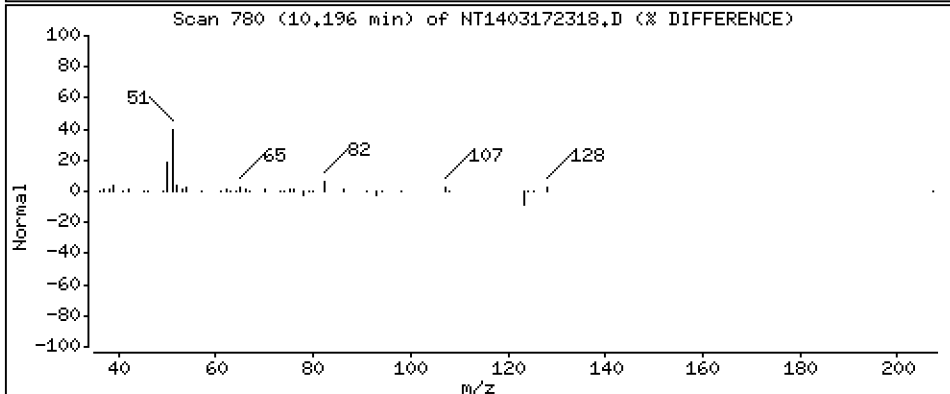
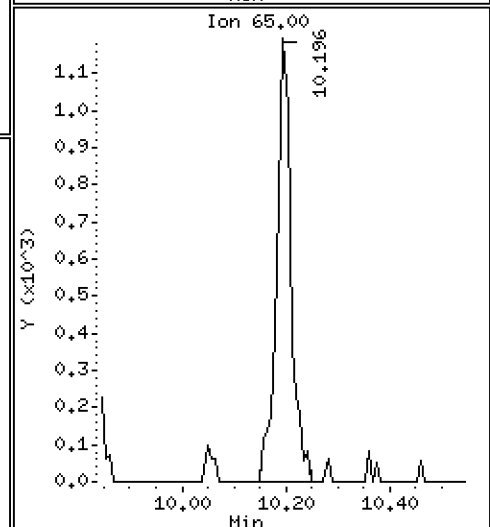
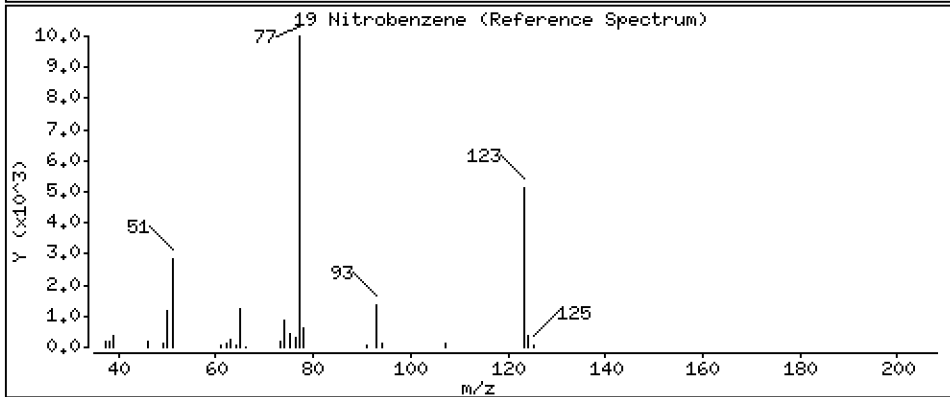
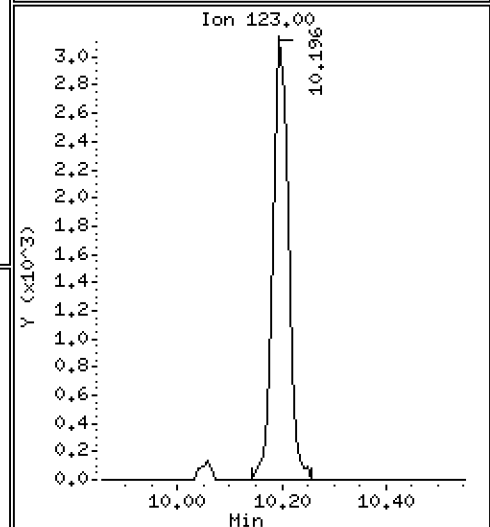
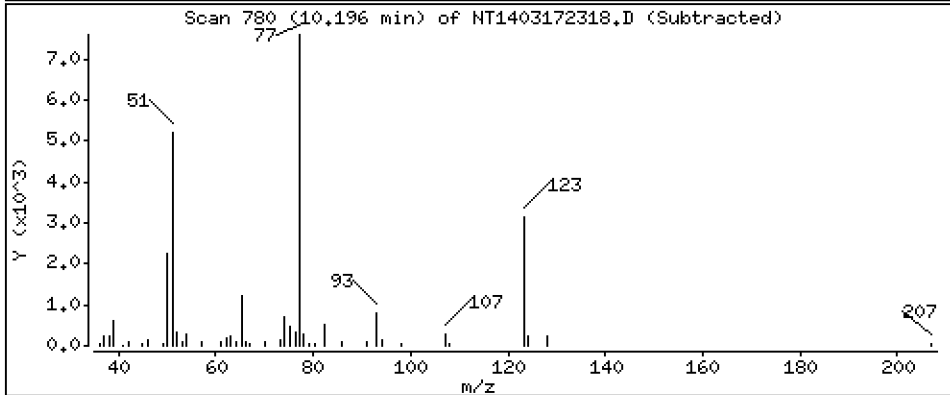
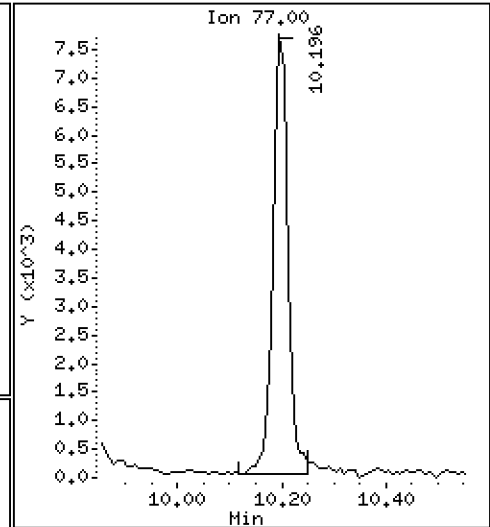
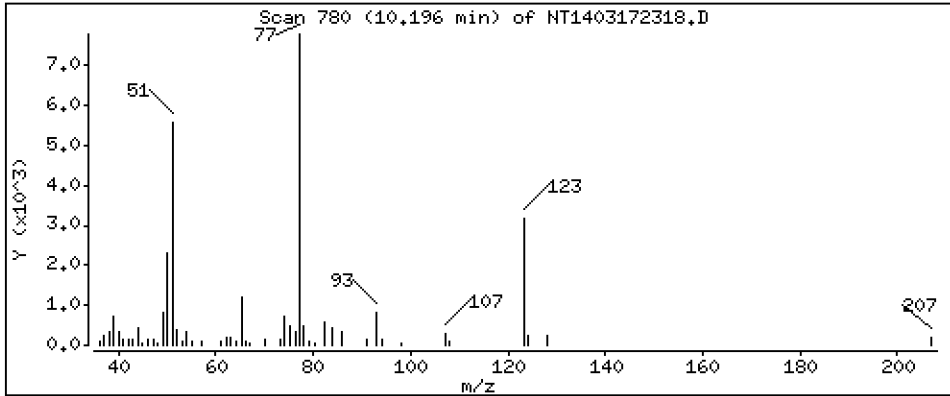
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,1856 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

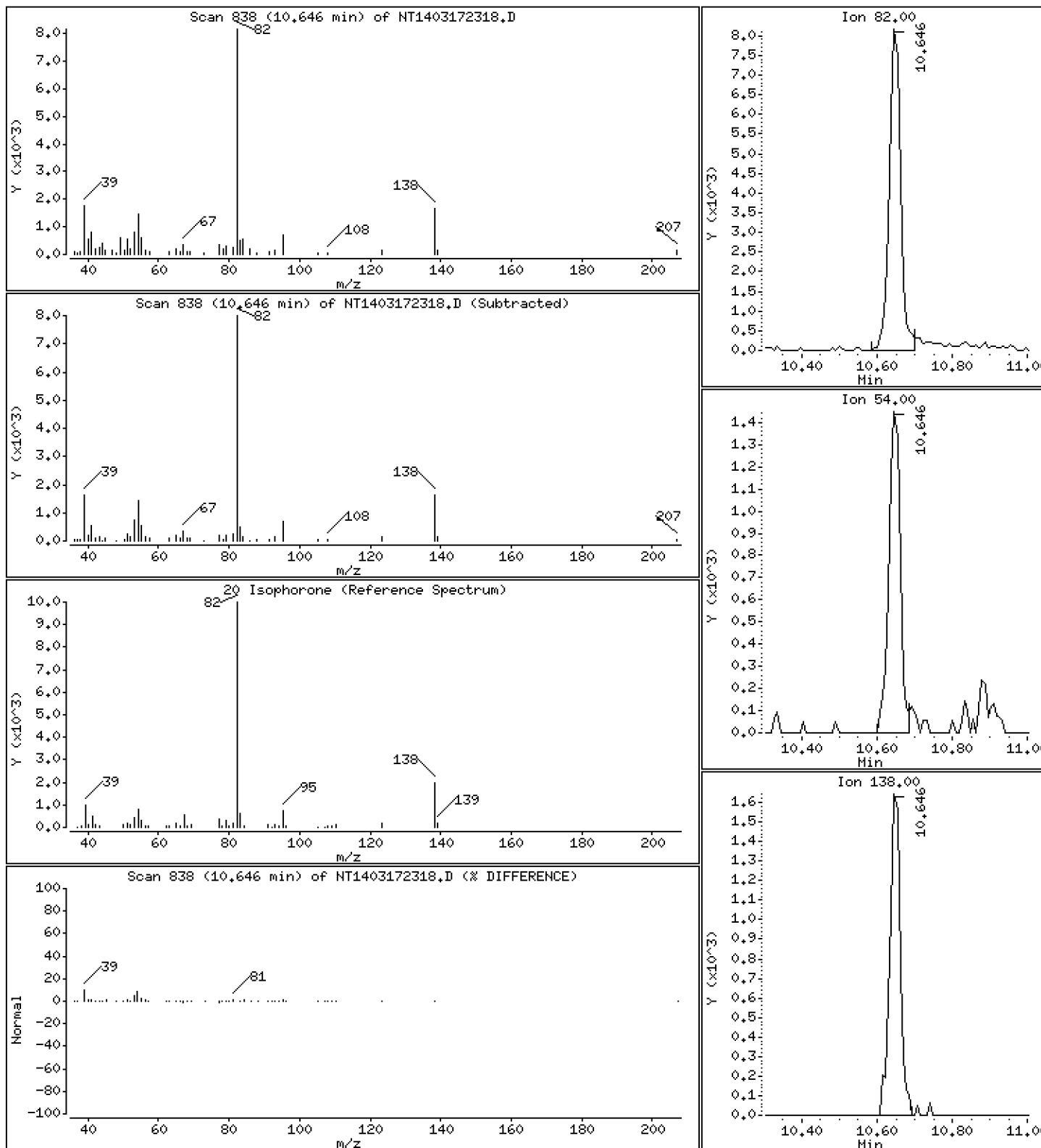
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1499 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

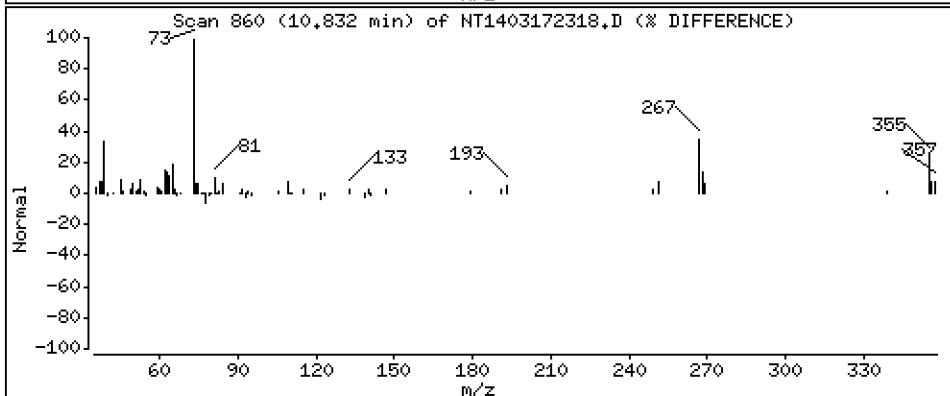
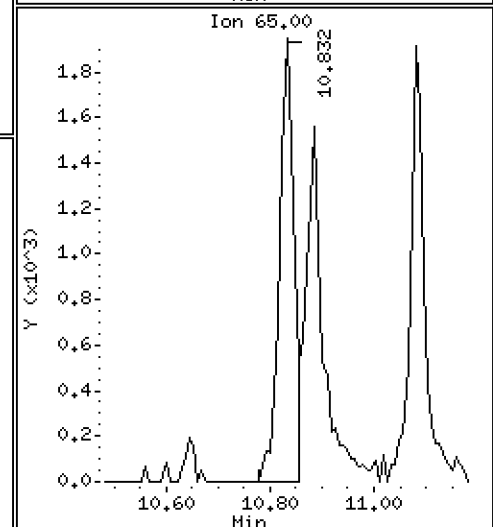
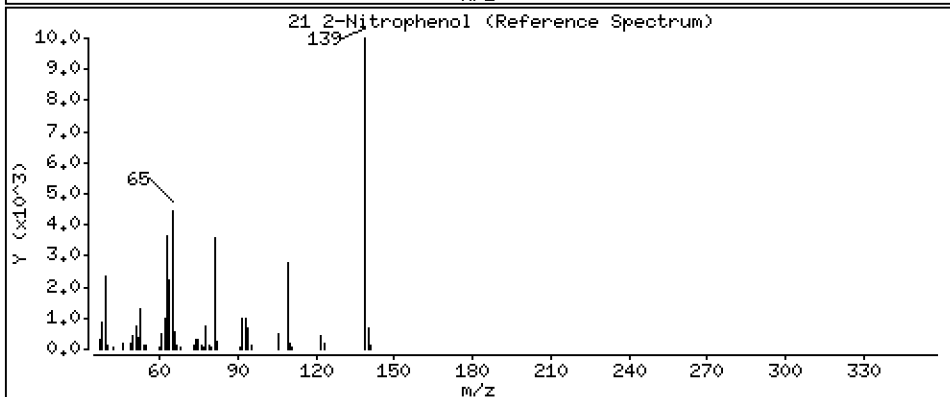
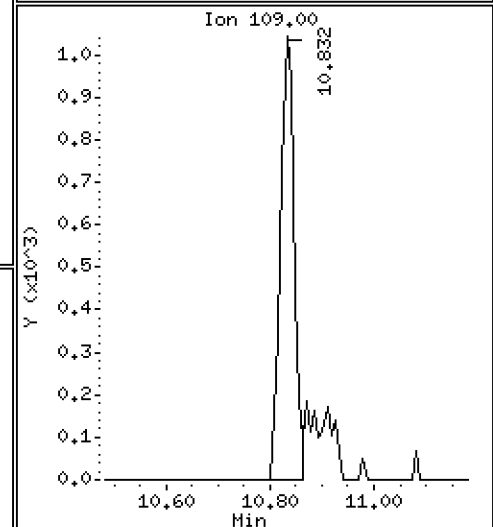
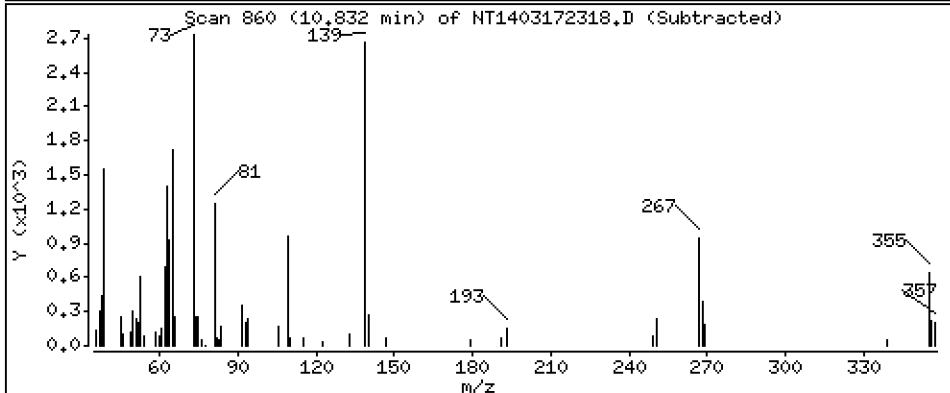
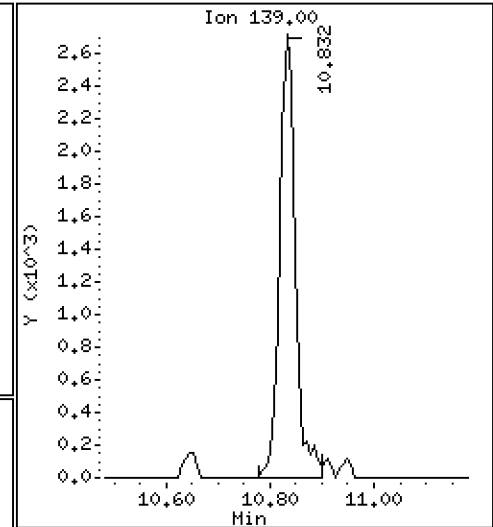
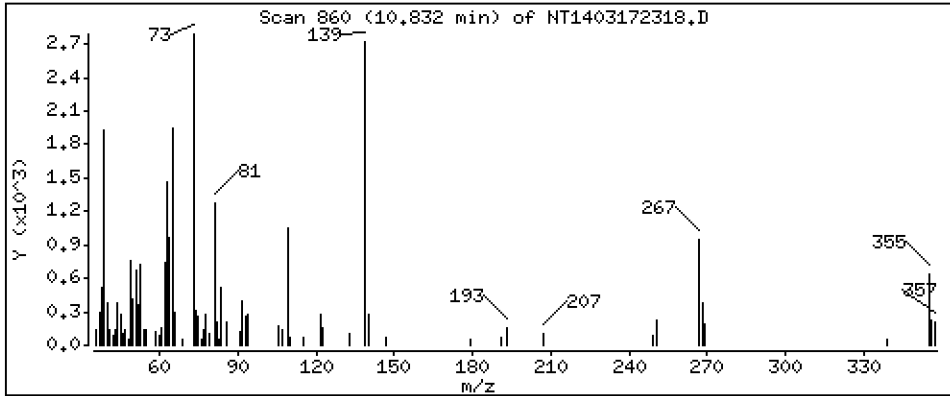
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1226 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

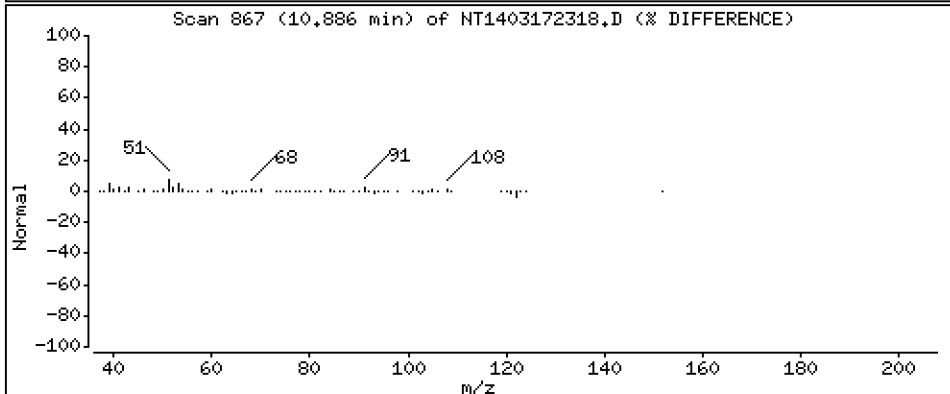
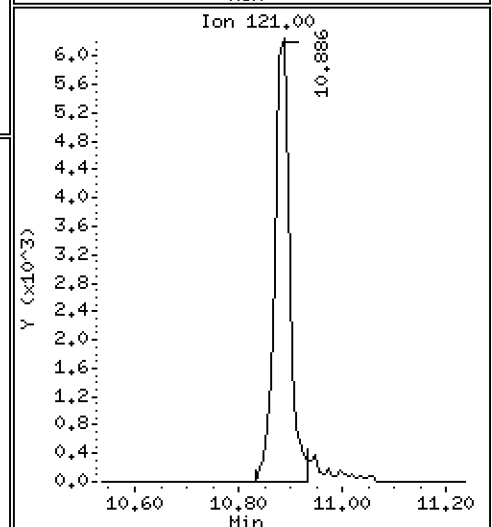
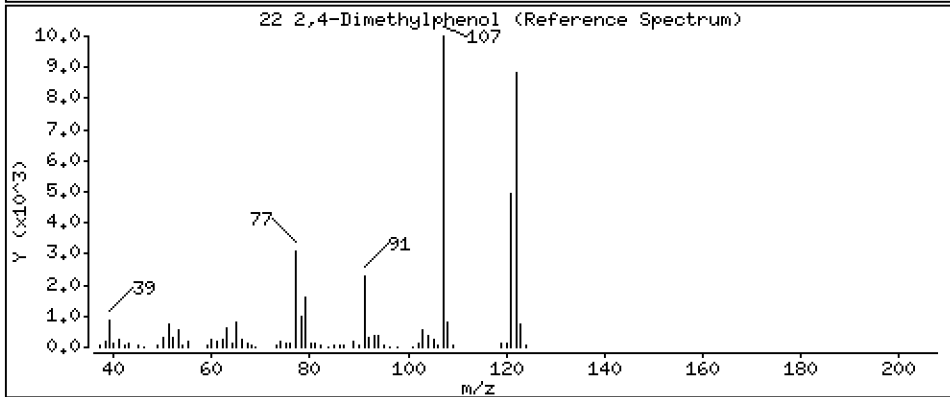
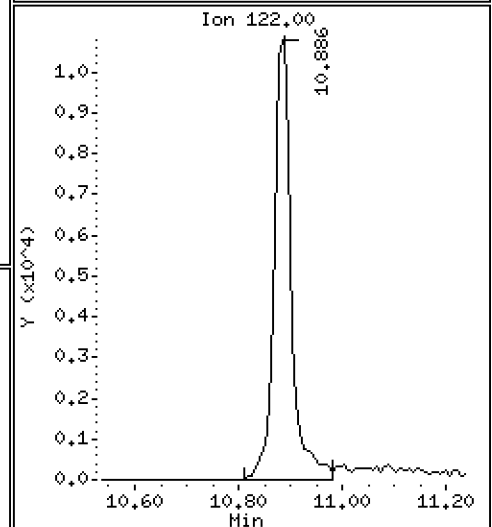
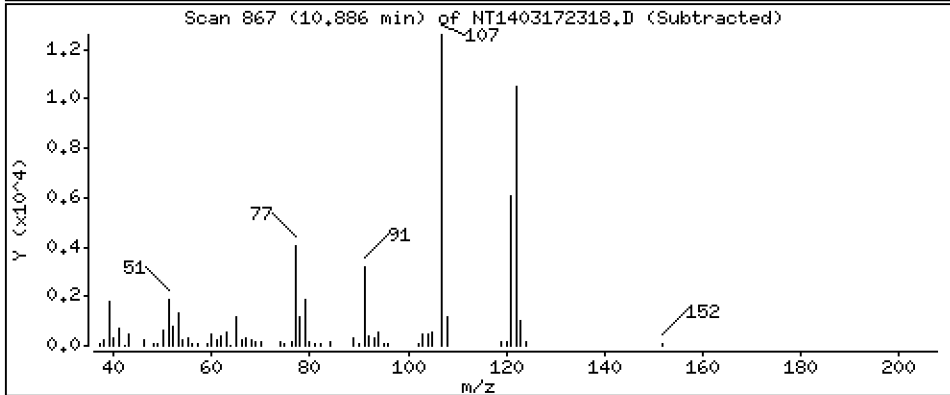
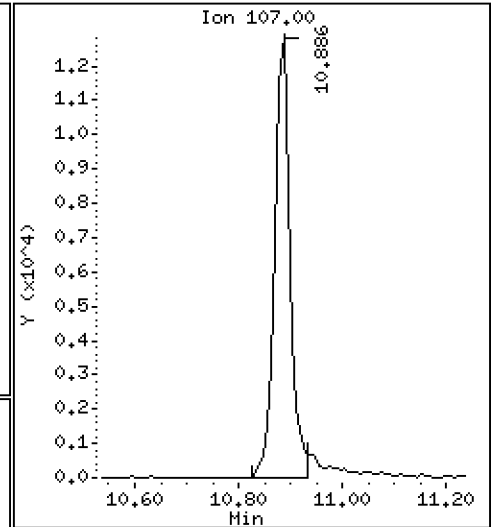
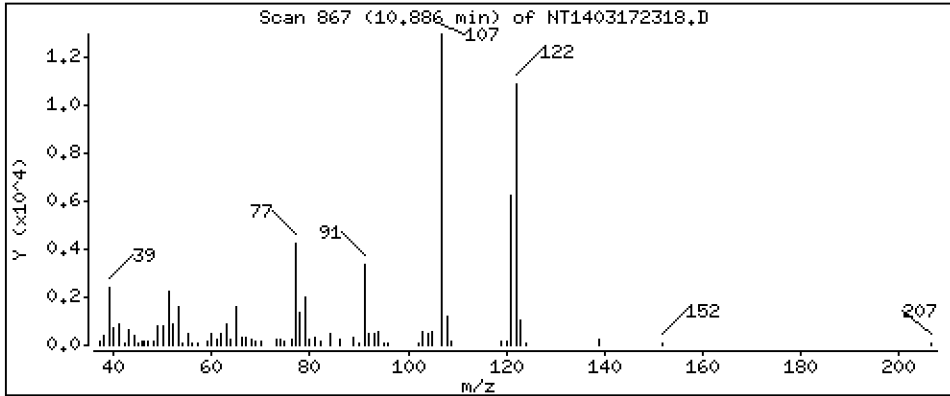
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3712 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

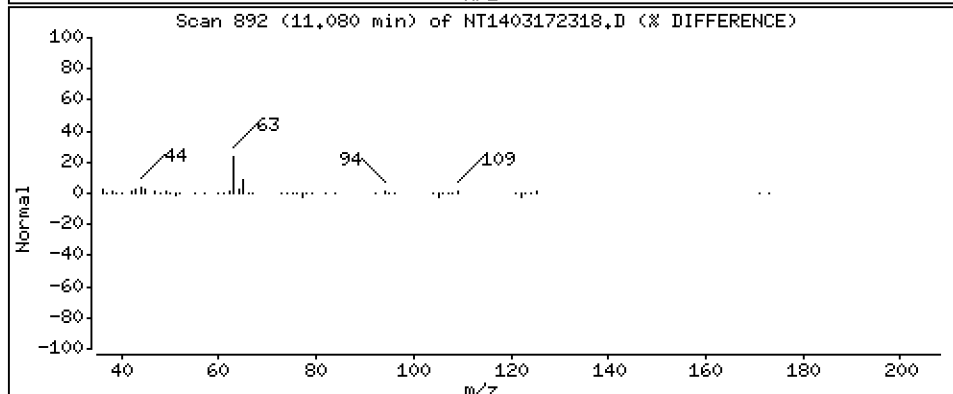
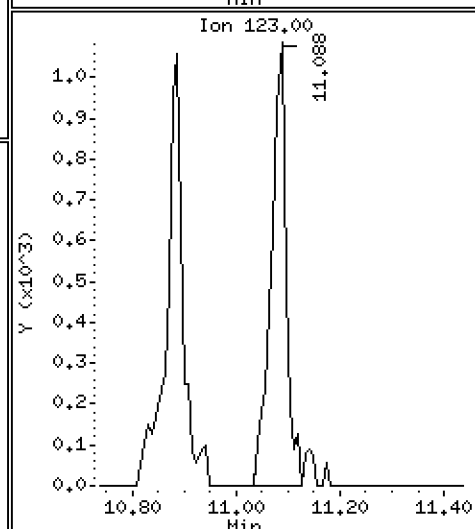
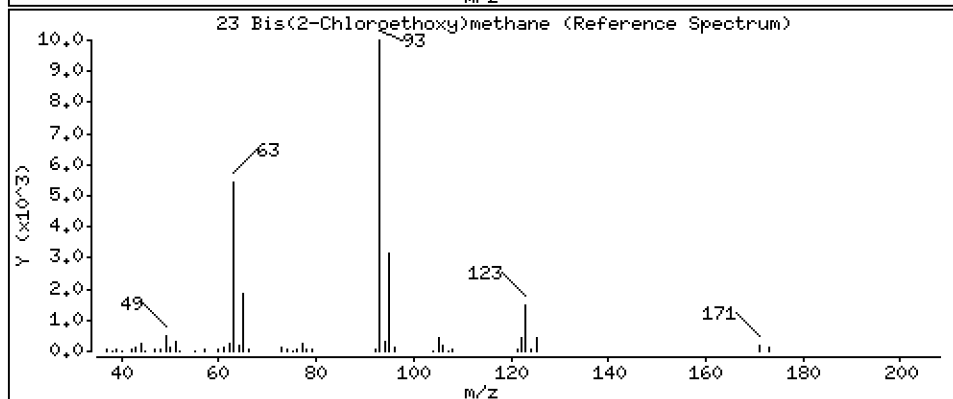
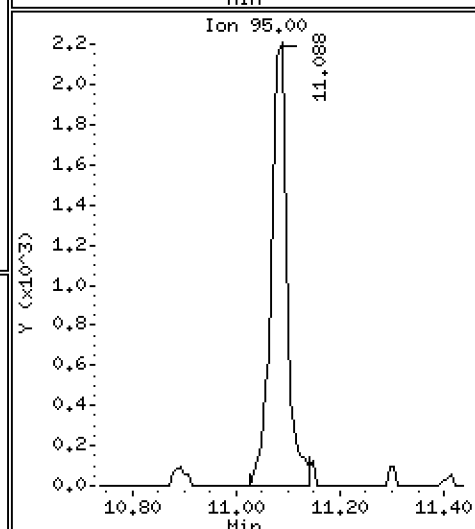
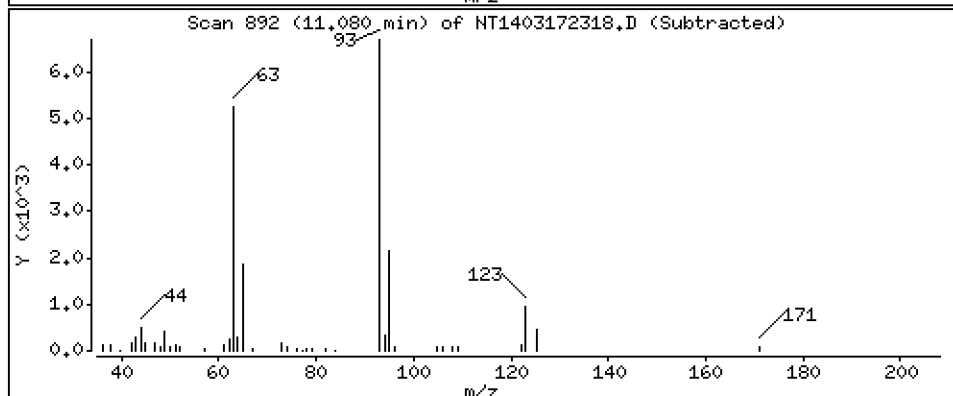
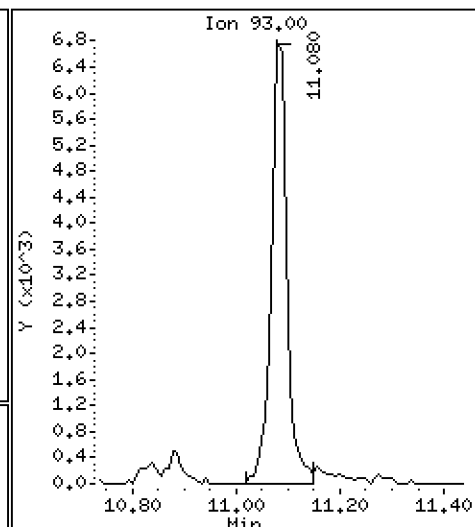
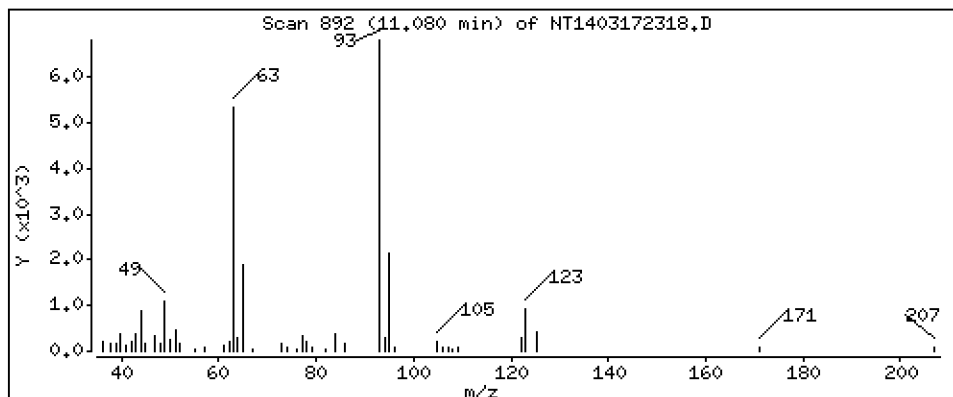
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 0,1857 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

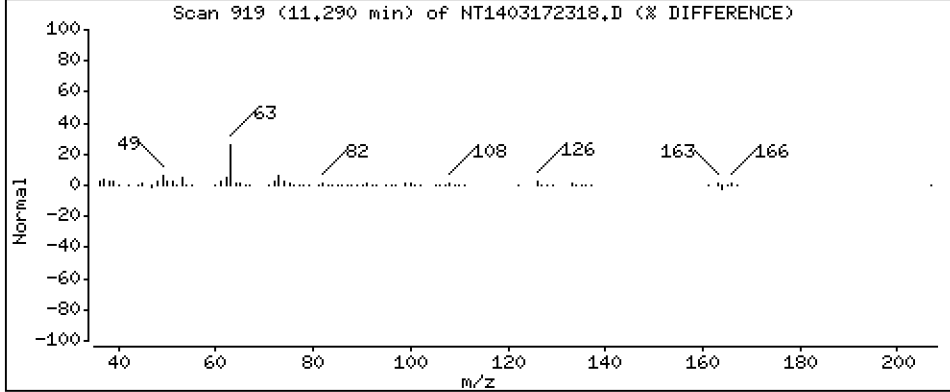
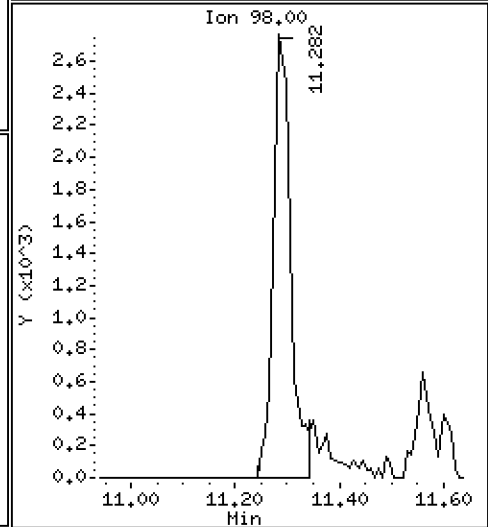
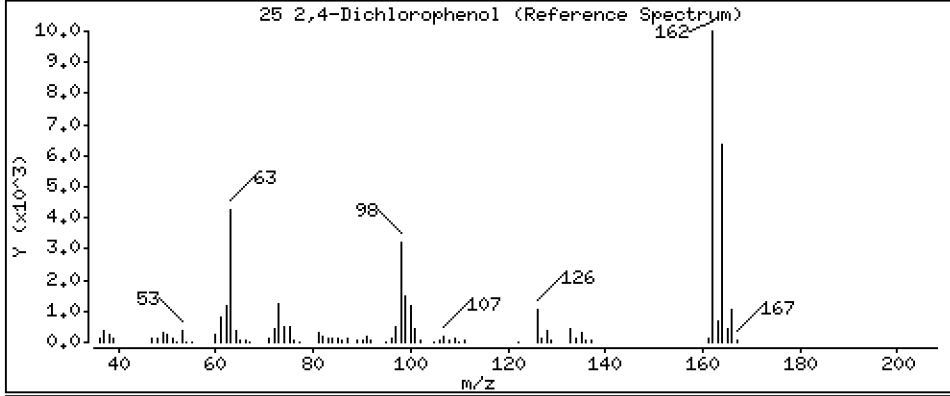
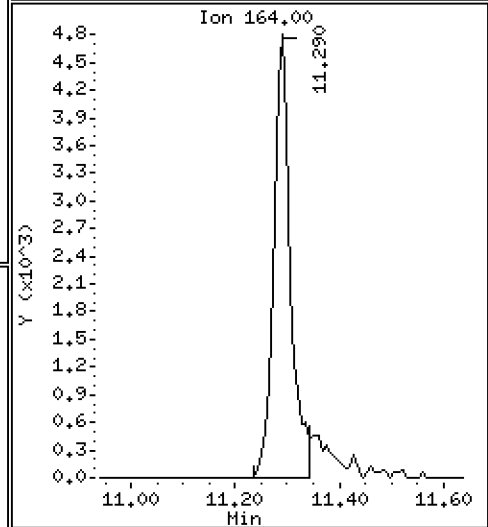
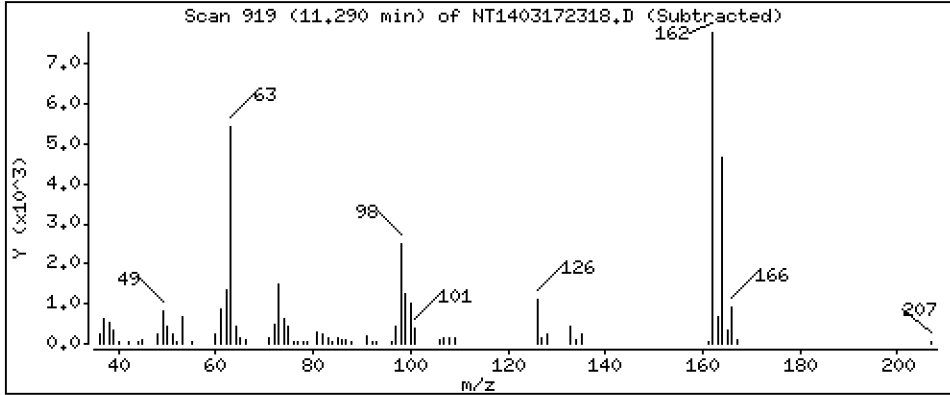
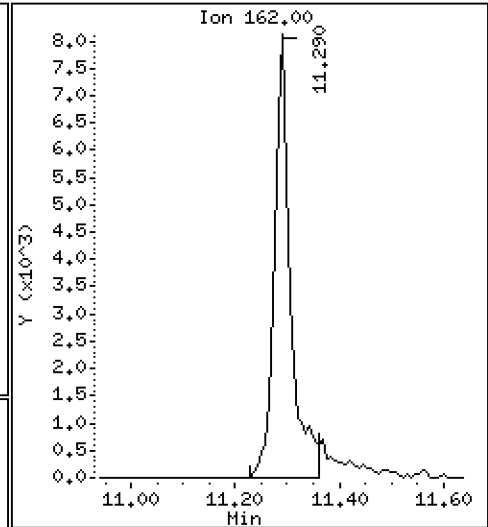
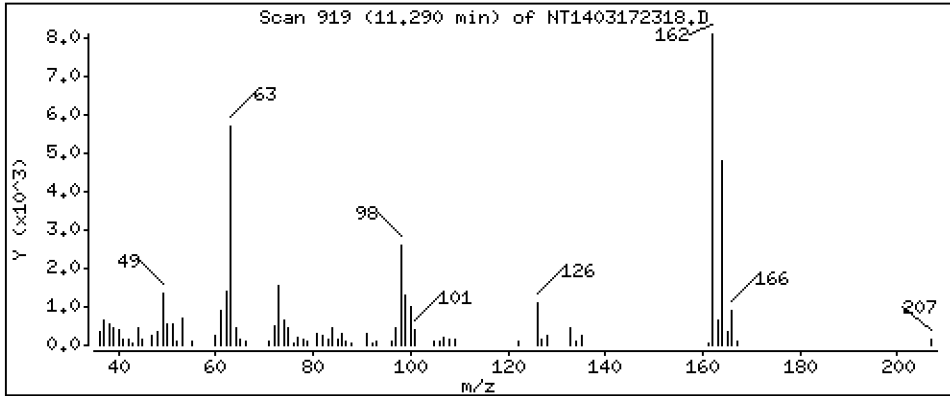
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3147 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

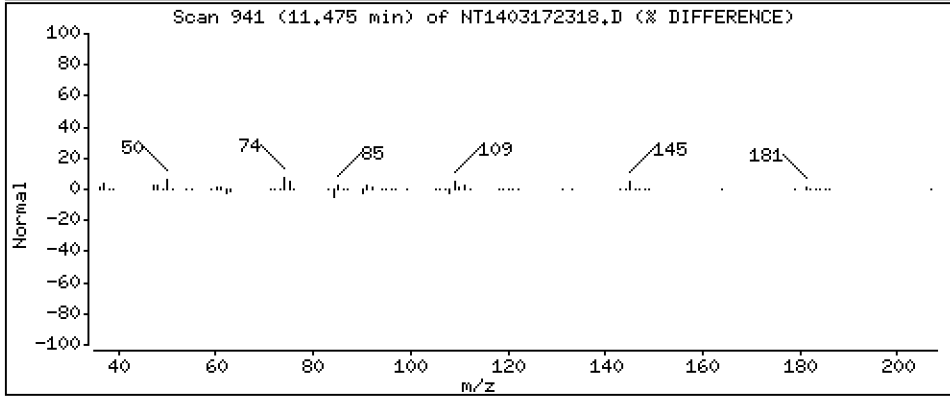
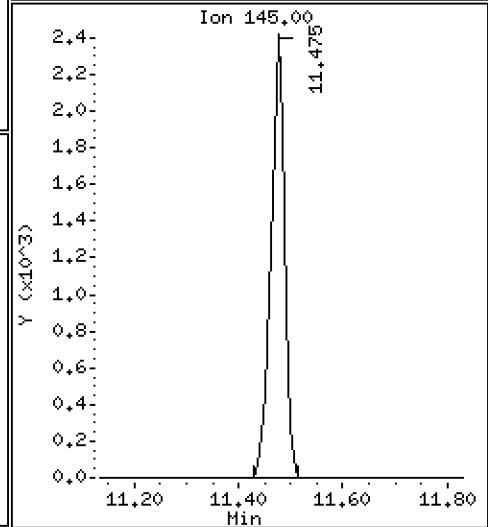
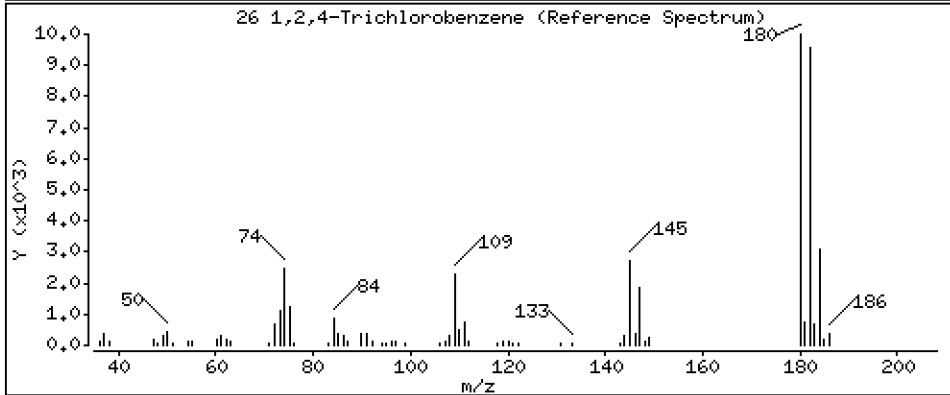
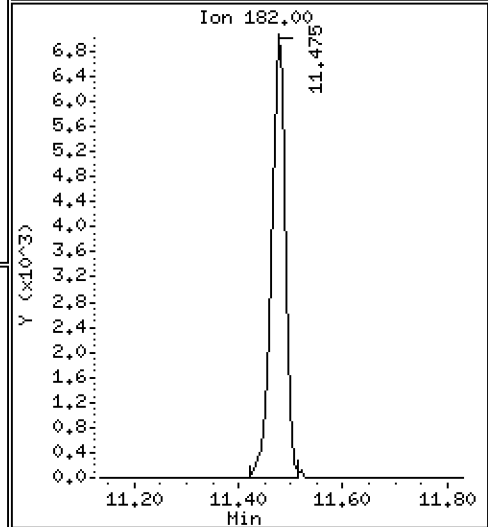
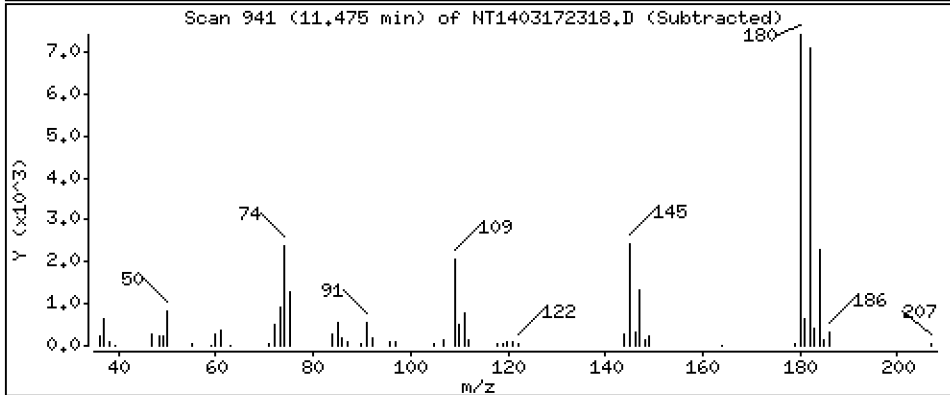
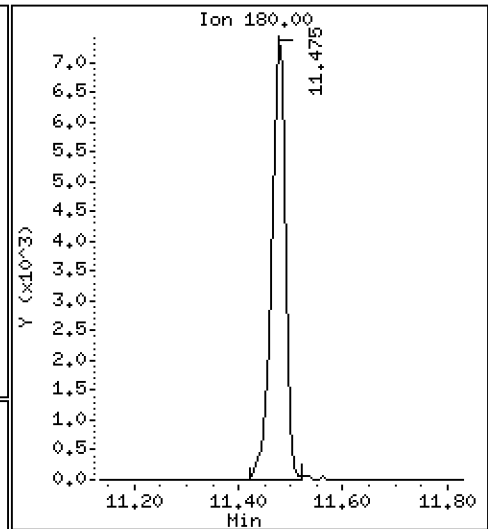
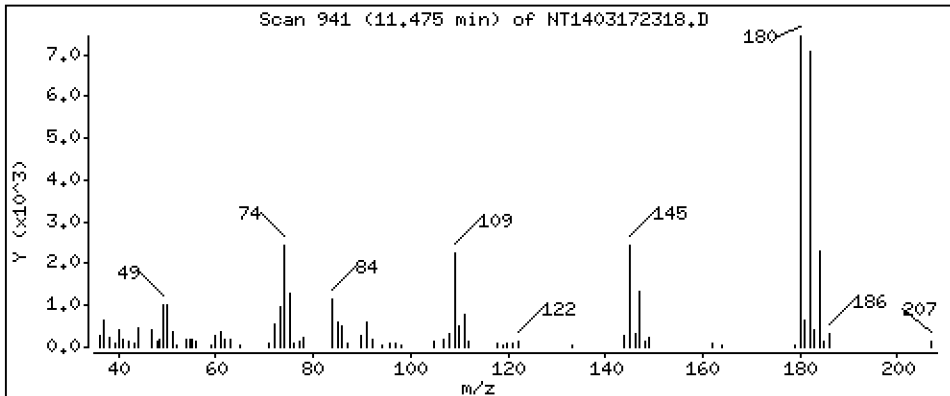
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,1956 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

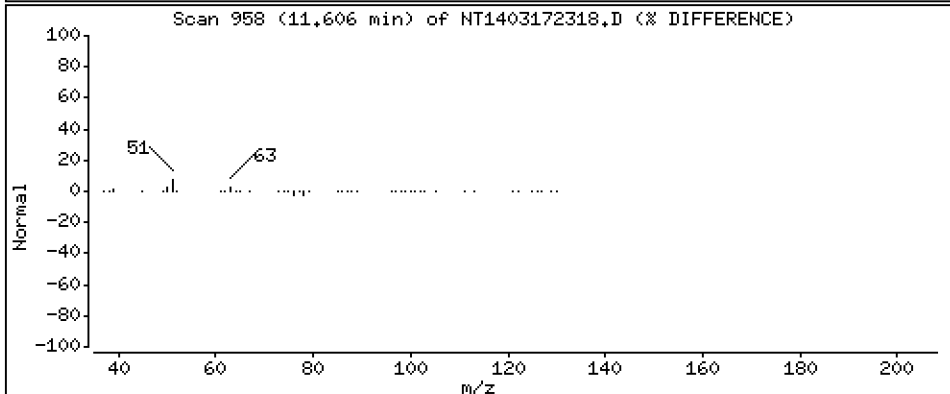
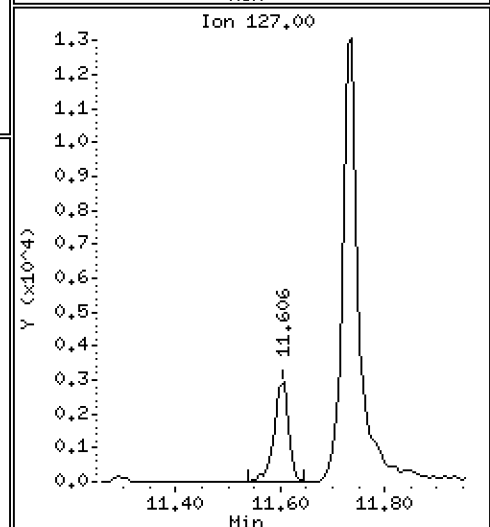
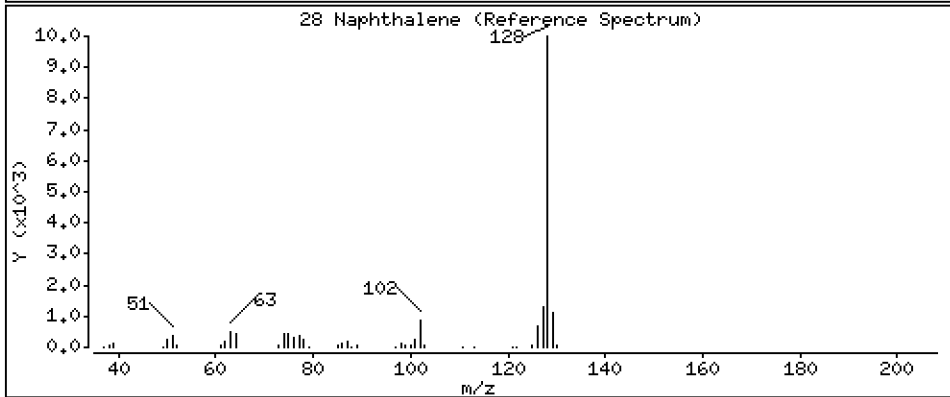
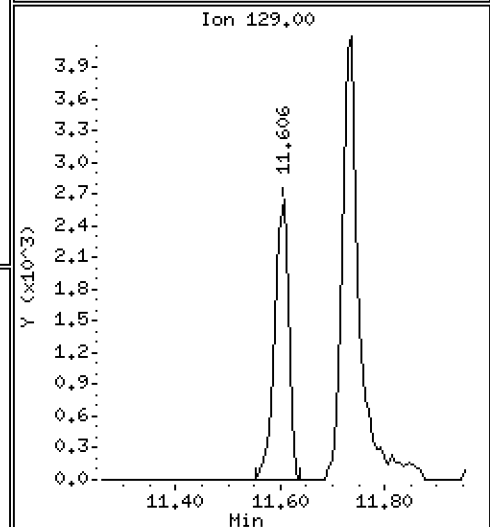
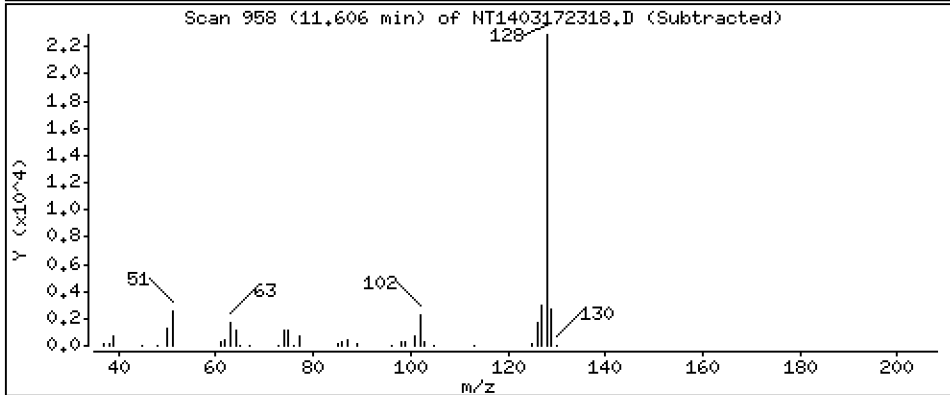
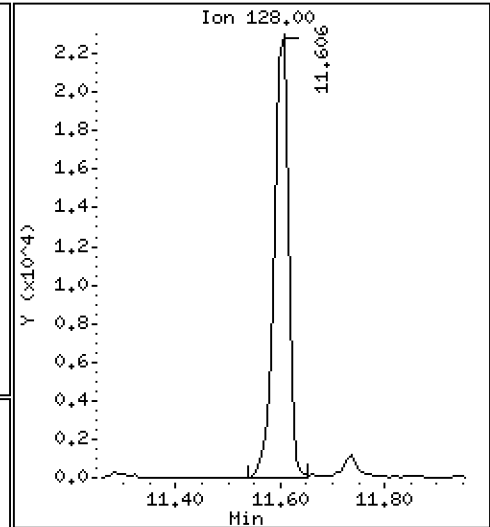
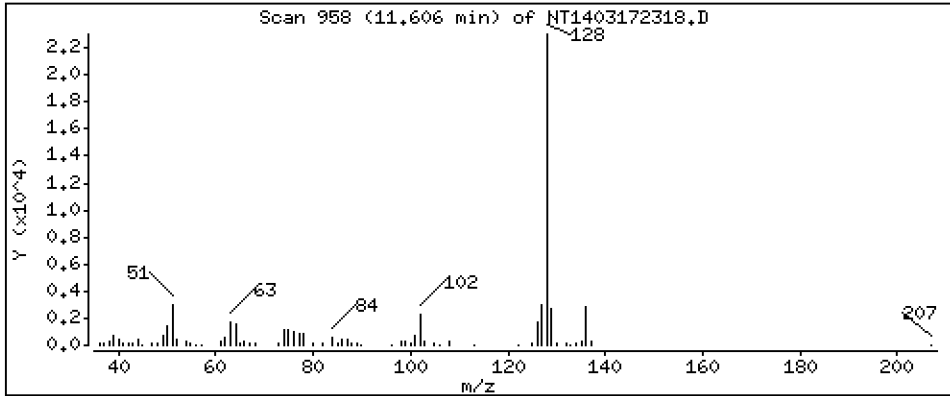
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2019 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

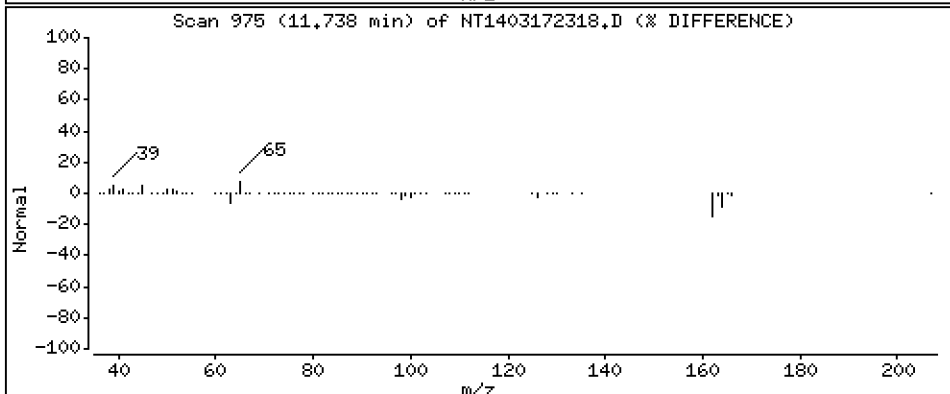
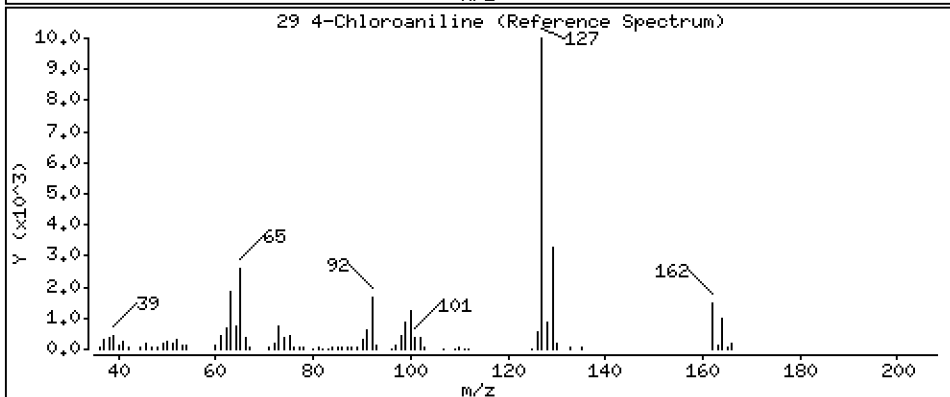
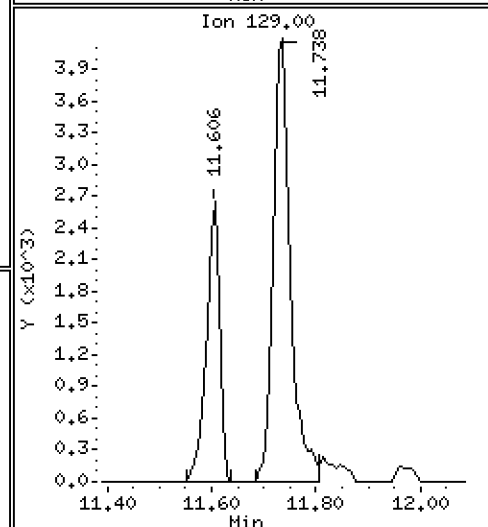
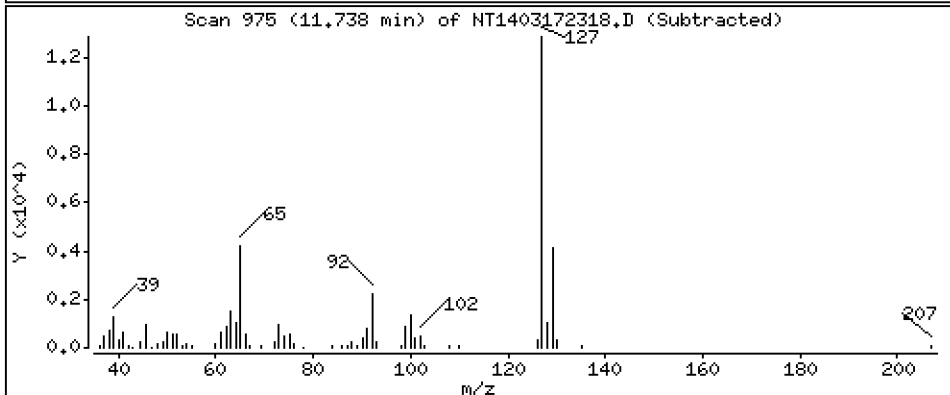
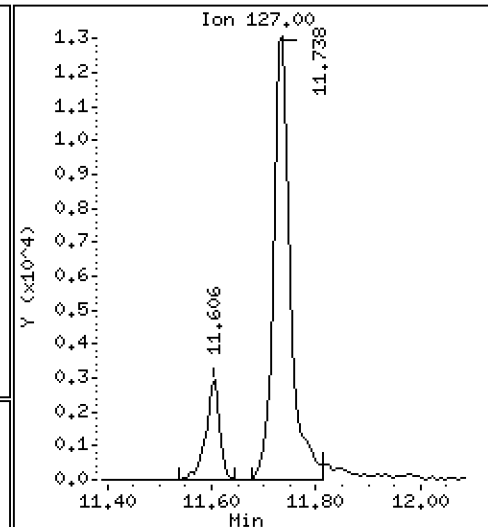
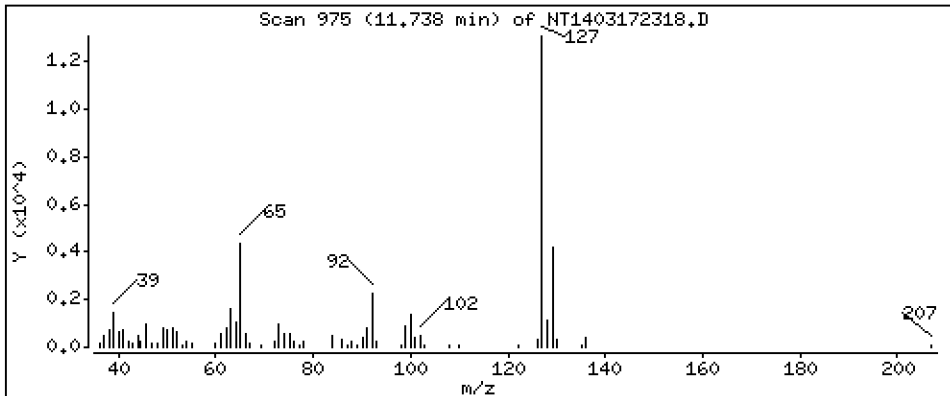
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,3283 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

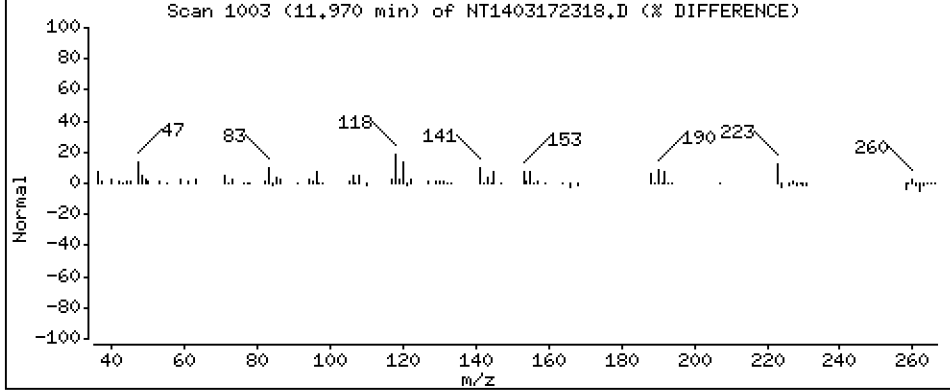
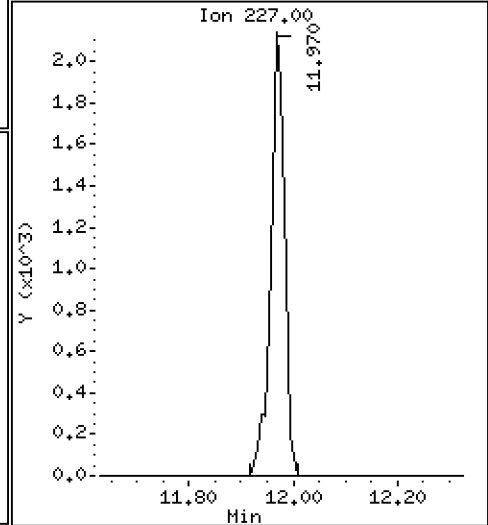
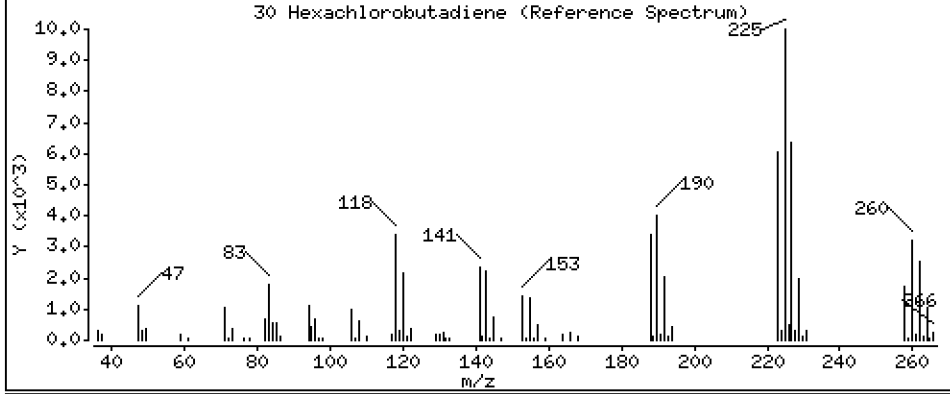
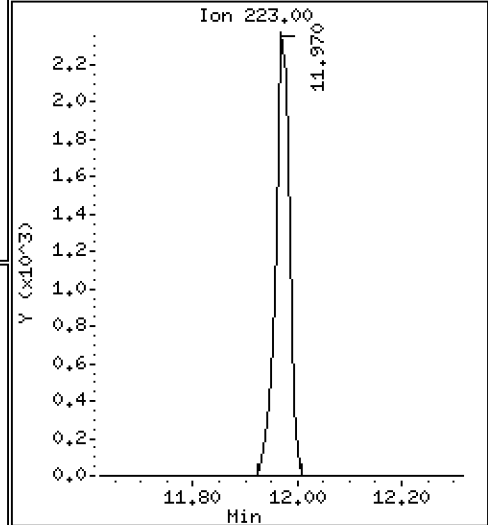
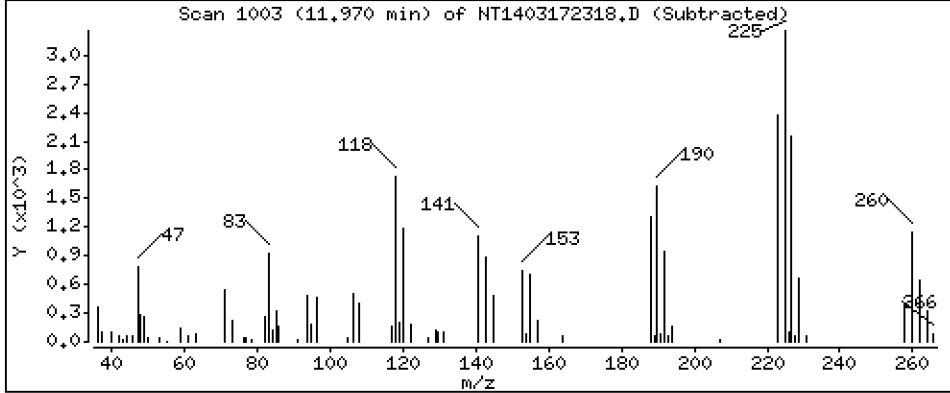
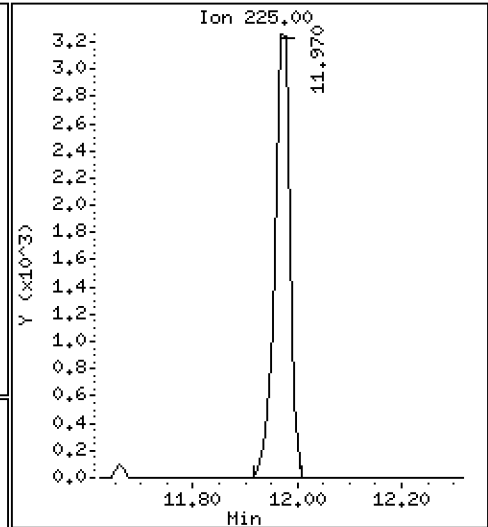
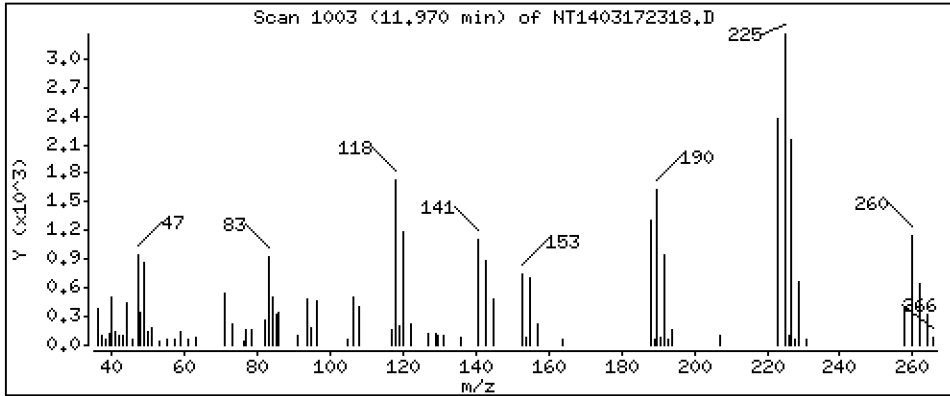
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2090 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

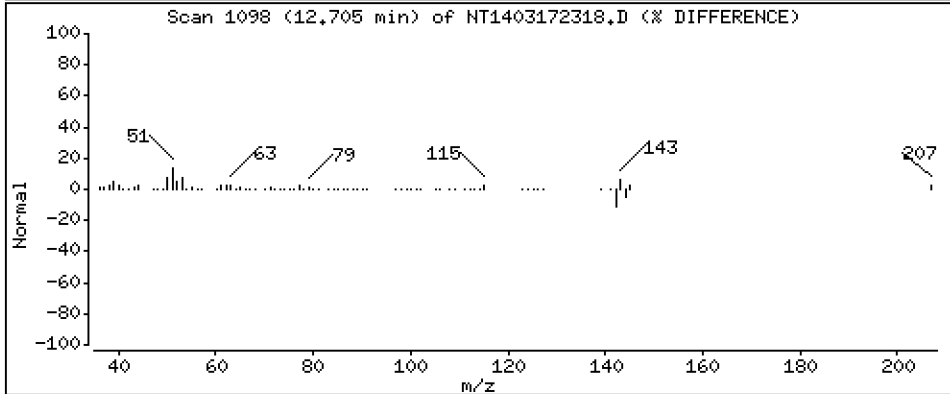
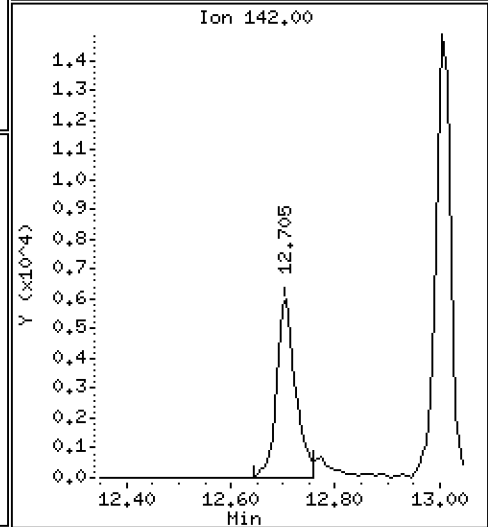
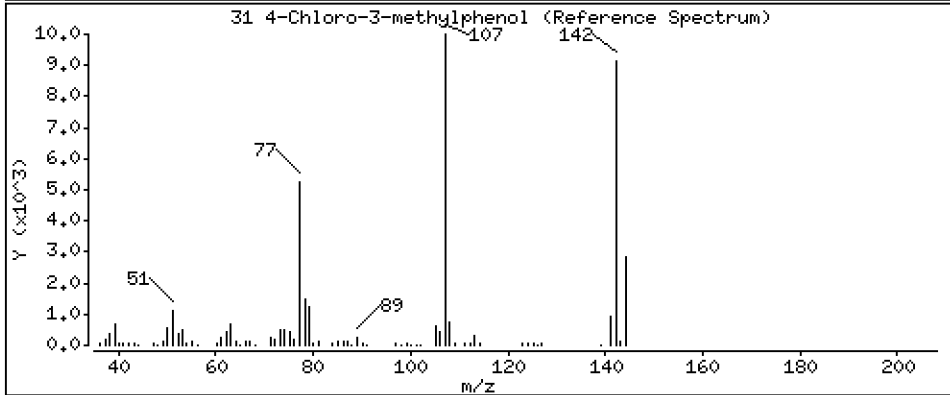
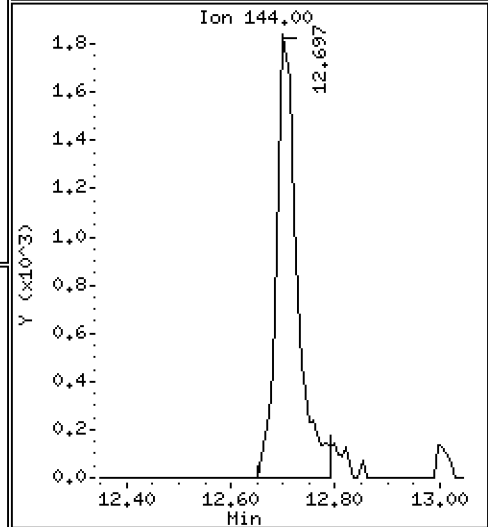
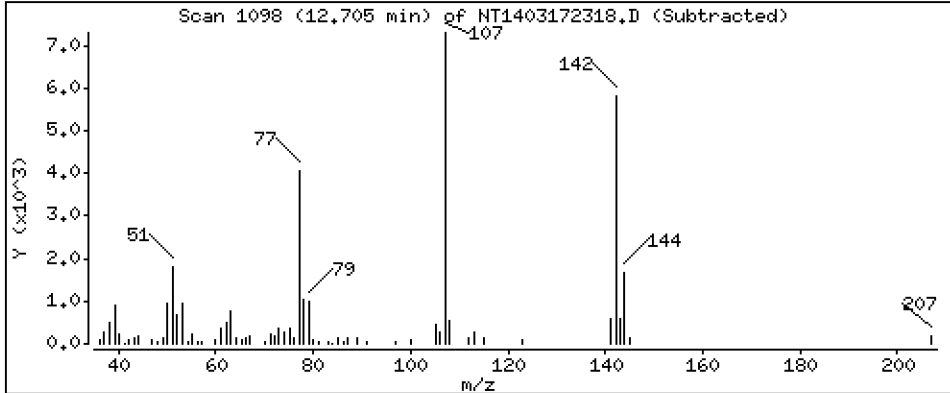
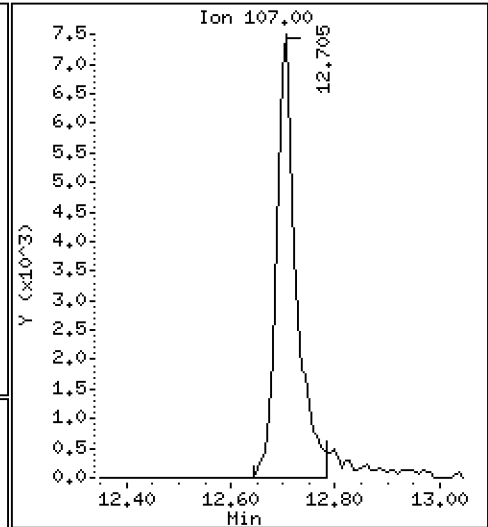
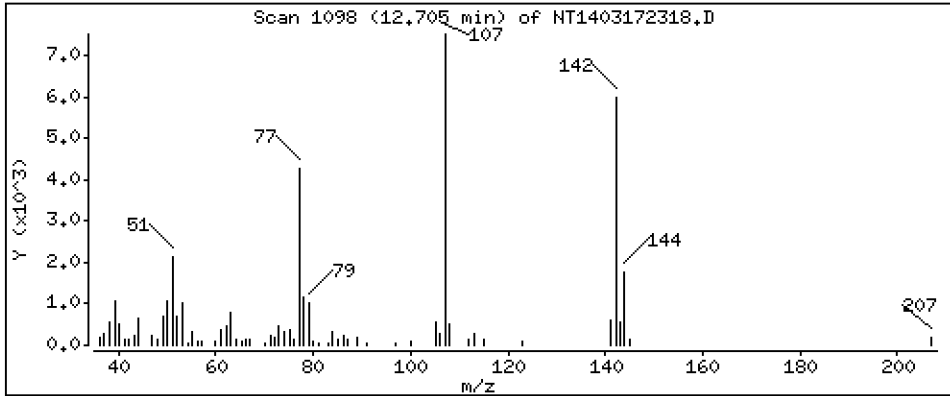
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 0,2961 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

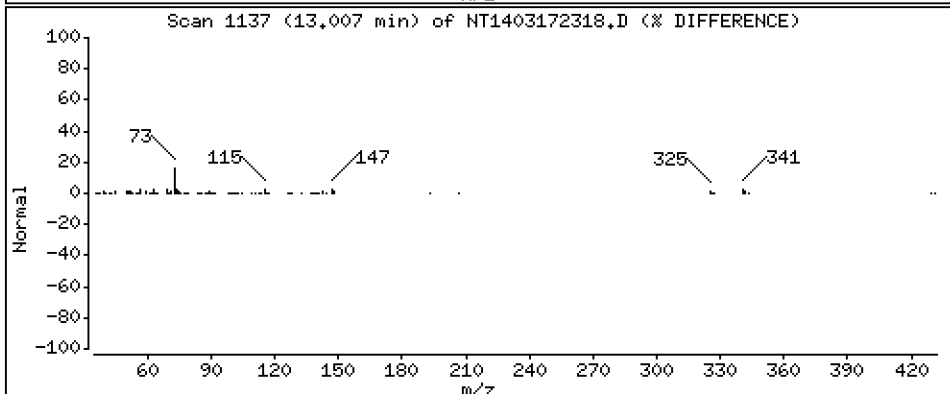
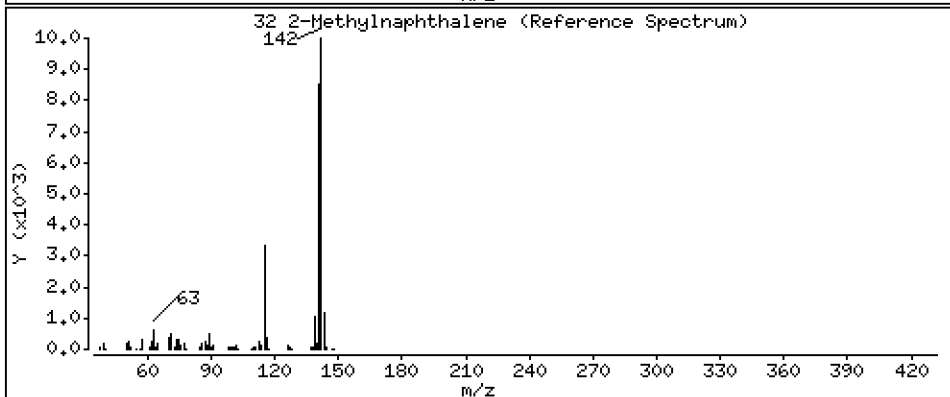
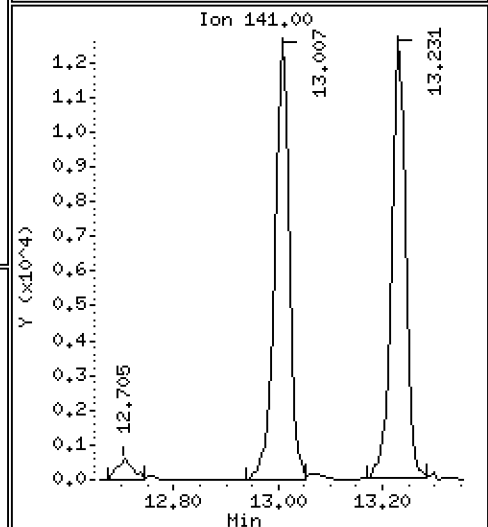
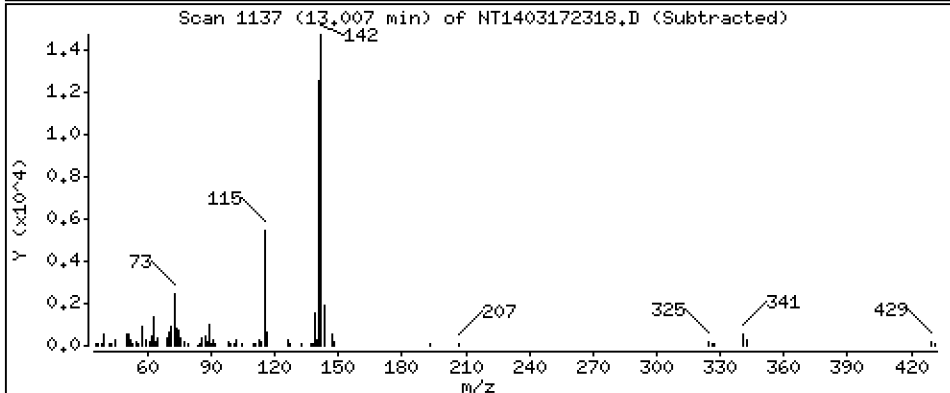
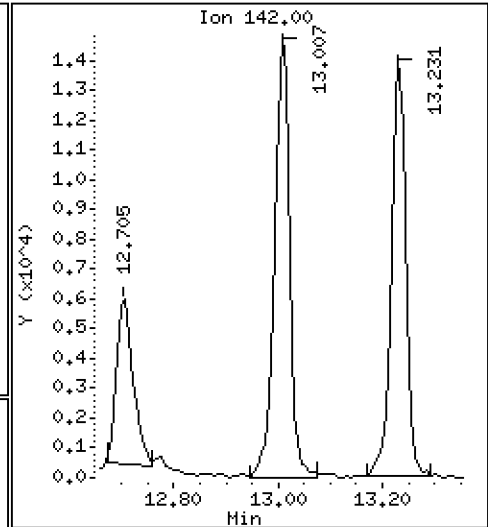
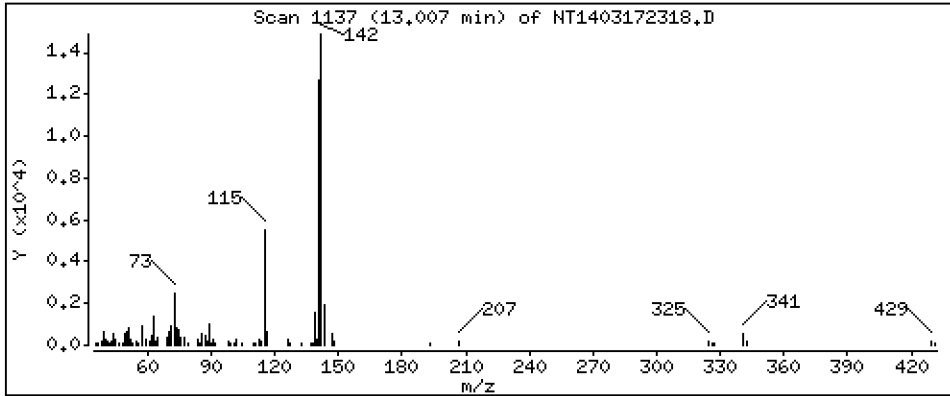
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1975 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

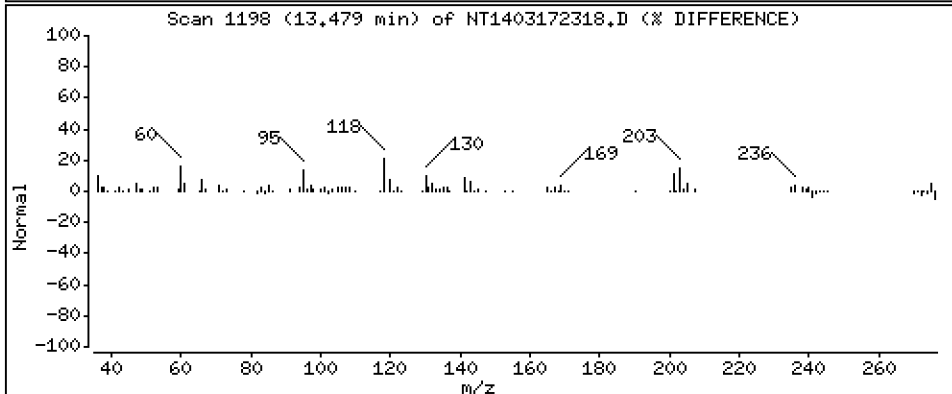
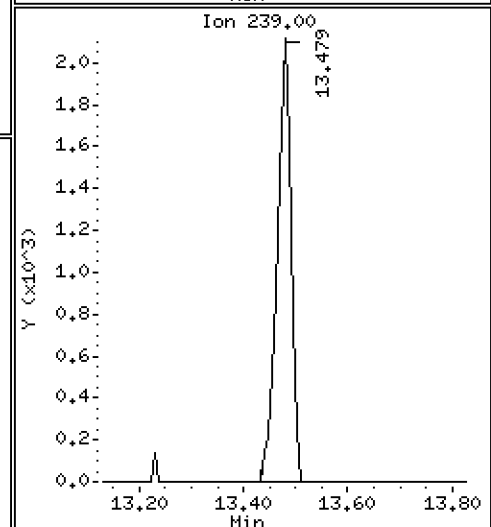
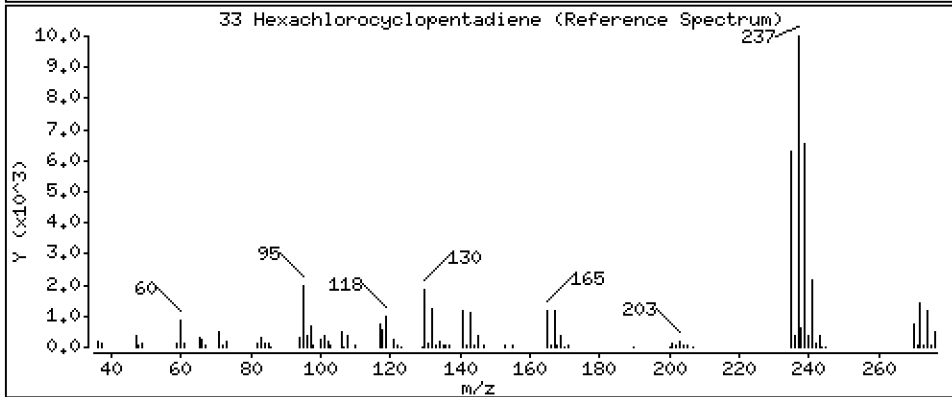
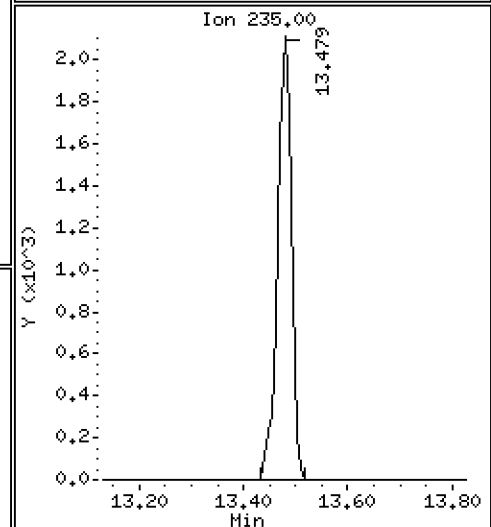
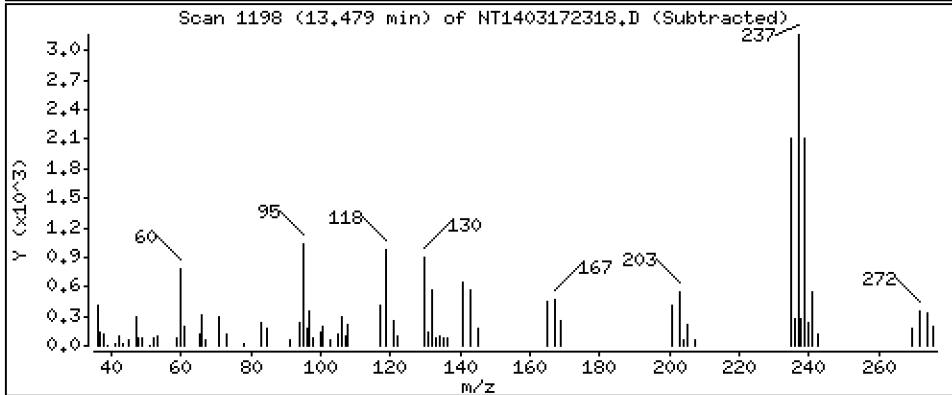
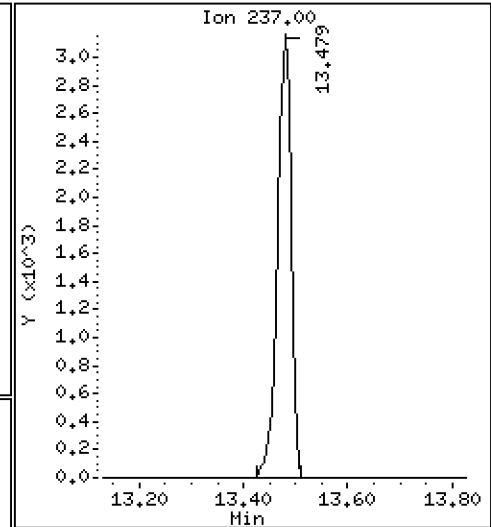
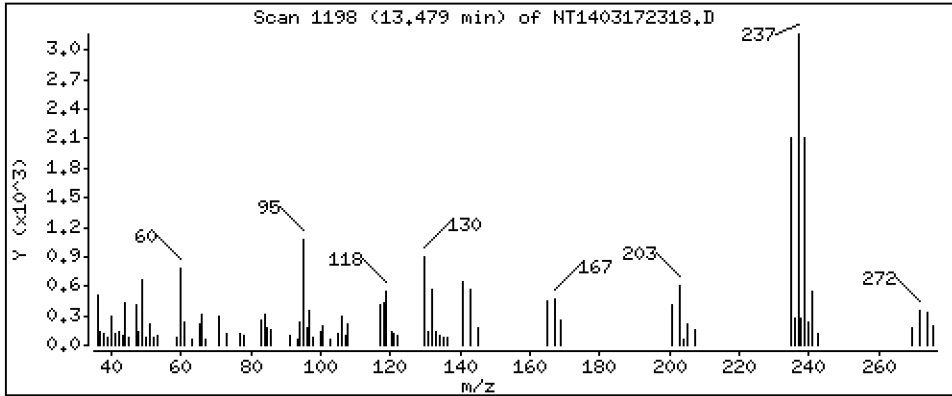
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

33 Hexachlorocyclopentadiene

Concentration: 0.1718 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

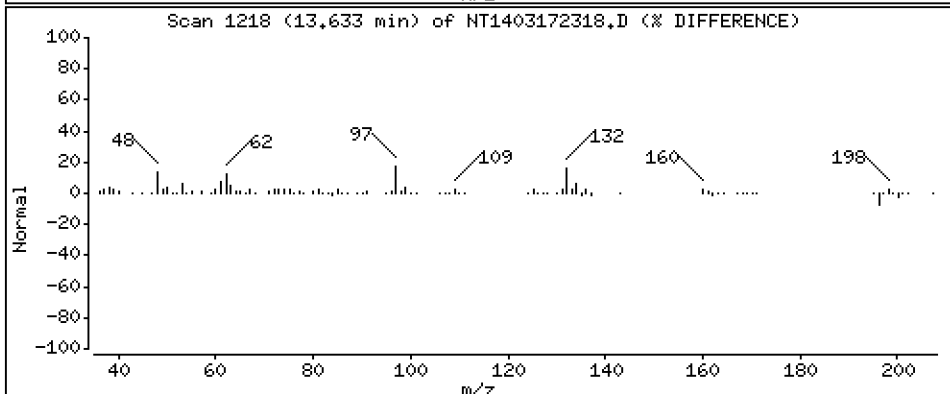
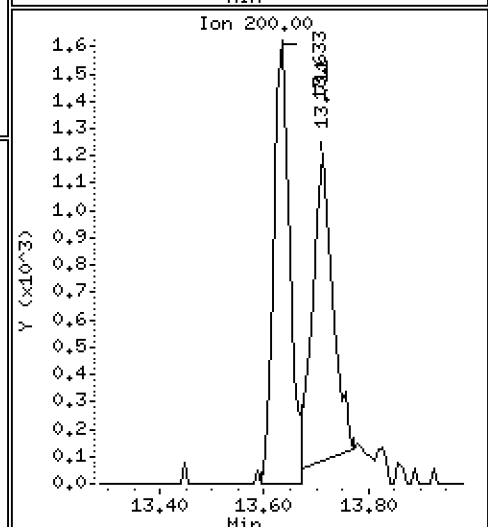
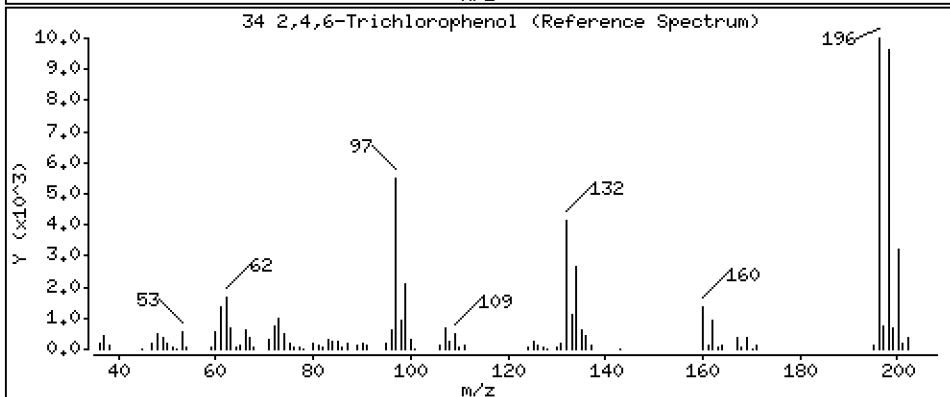
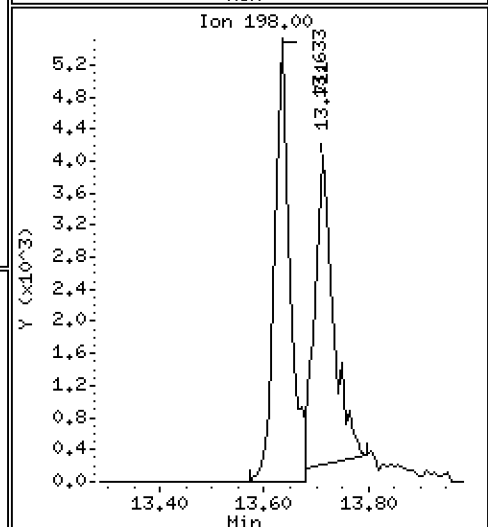
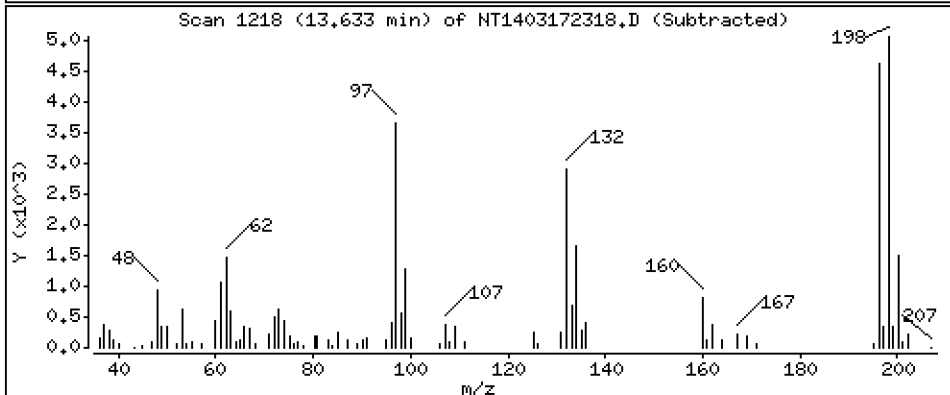
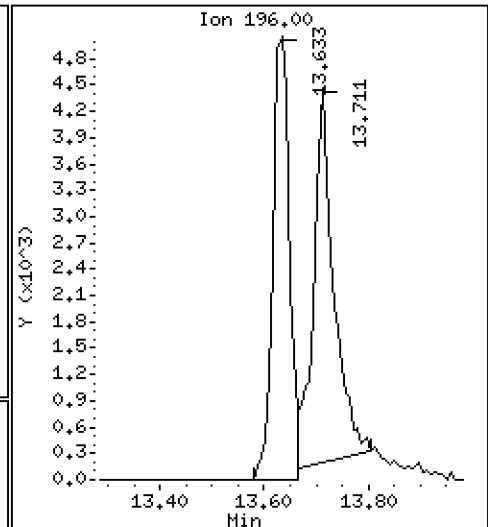
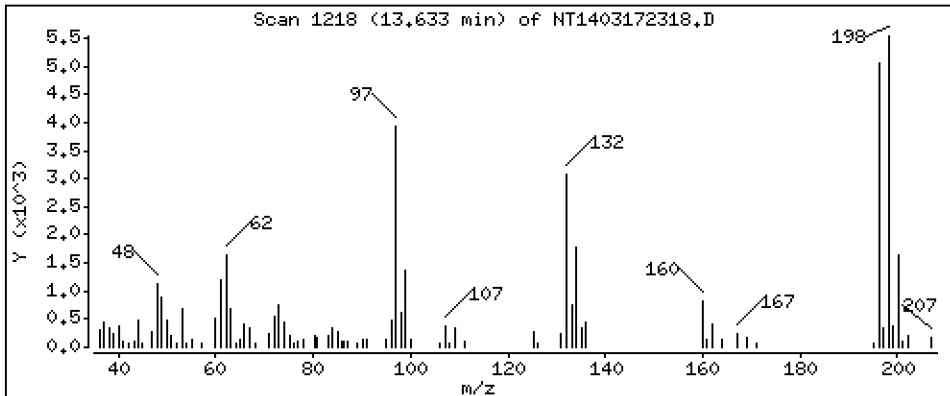
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,2769 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

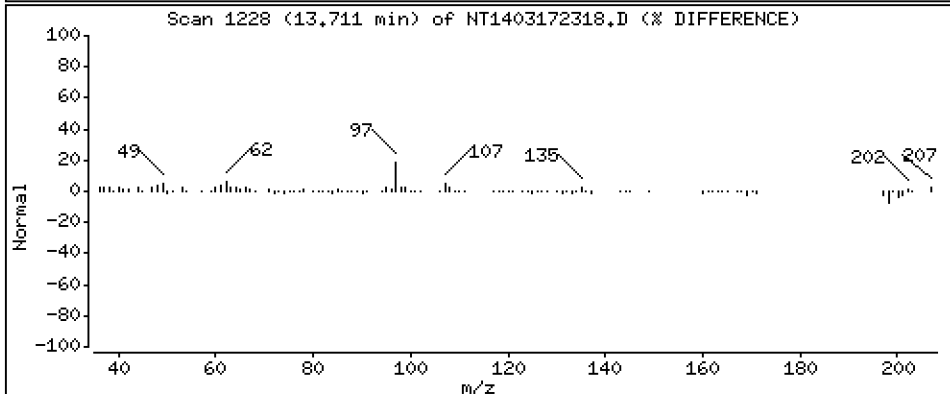
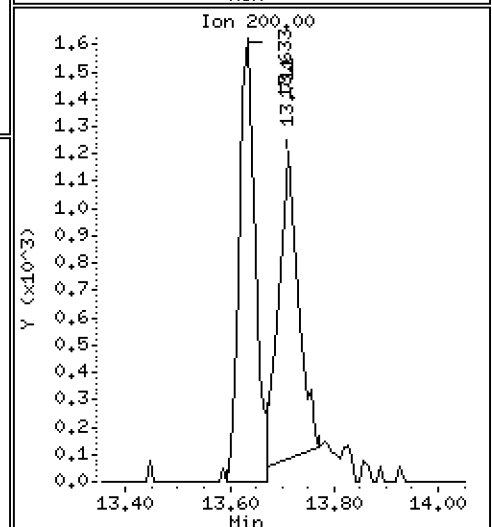
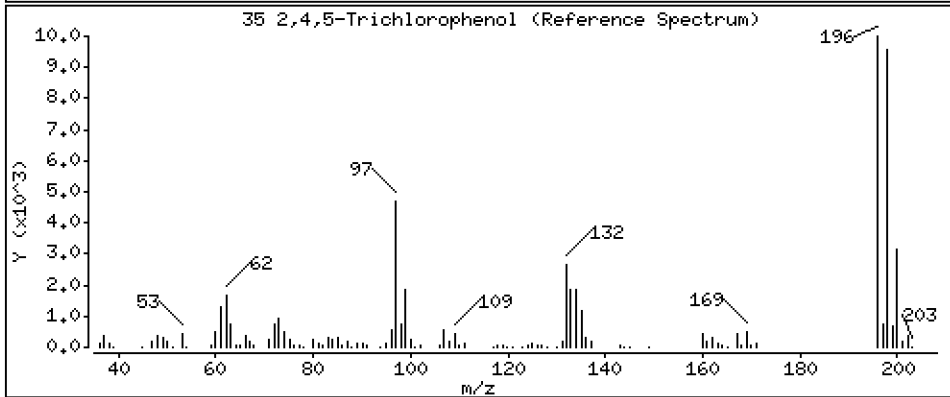
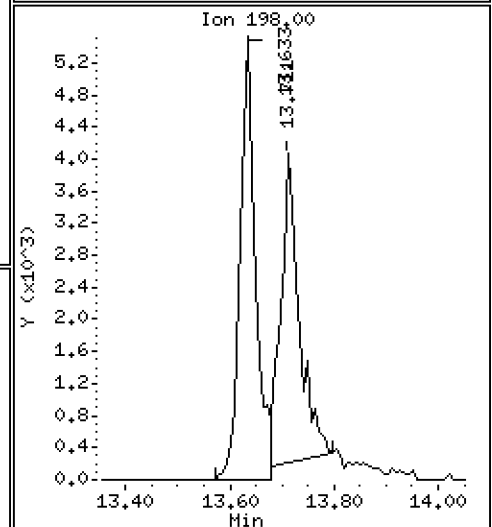
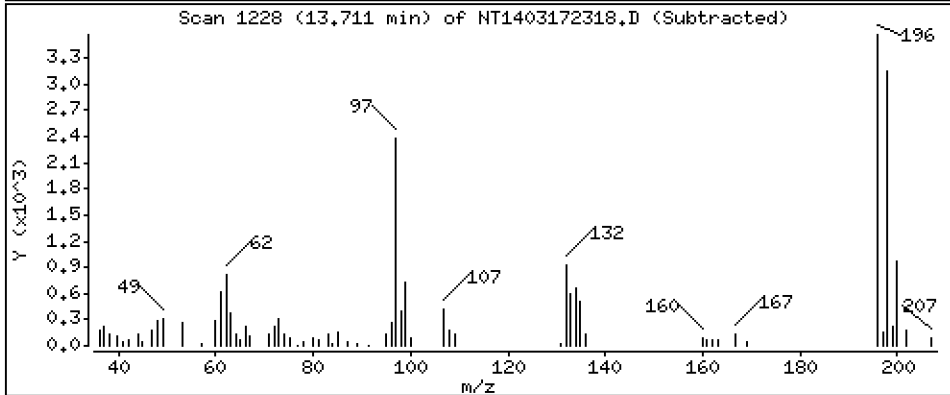
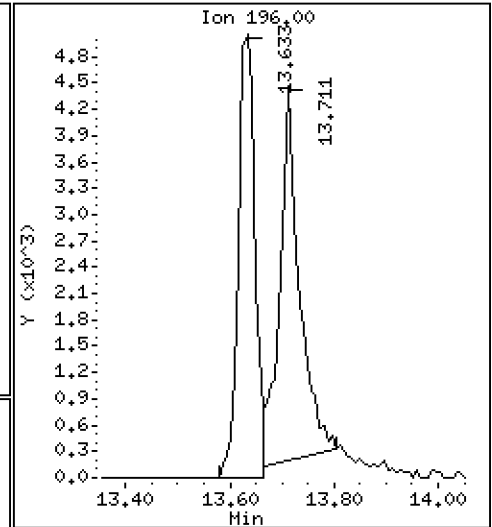
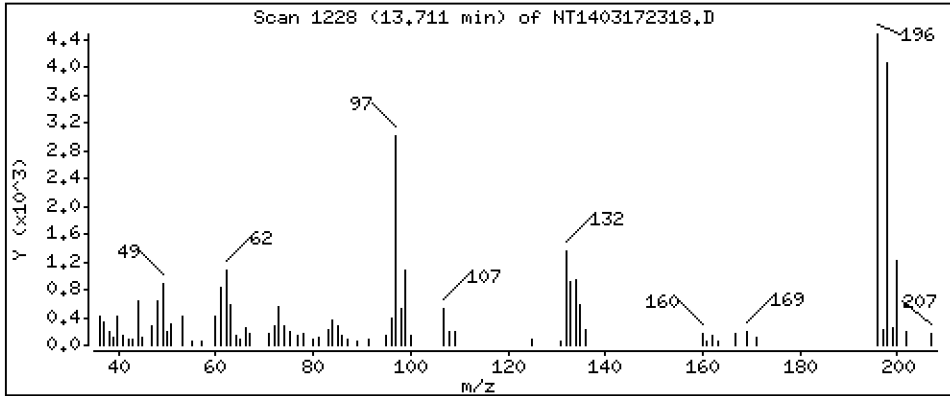
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2803 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

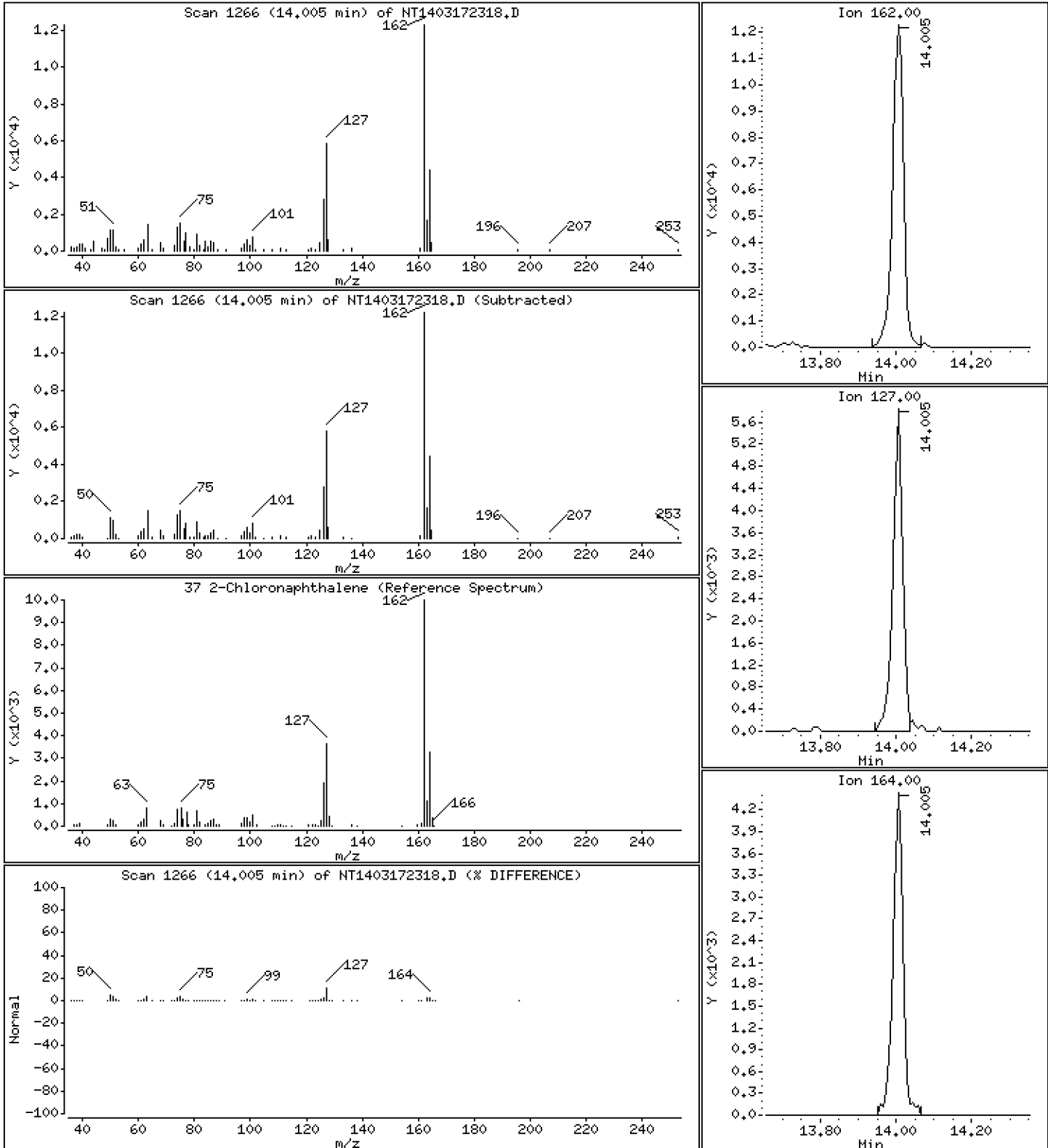
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2000 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

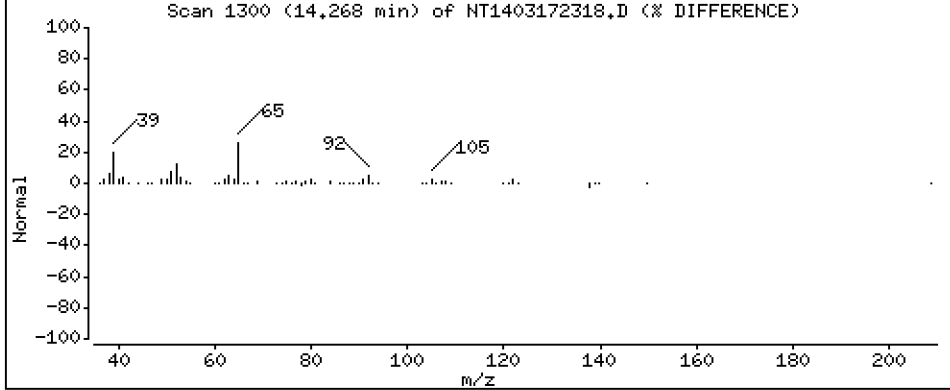
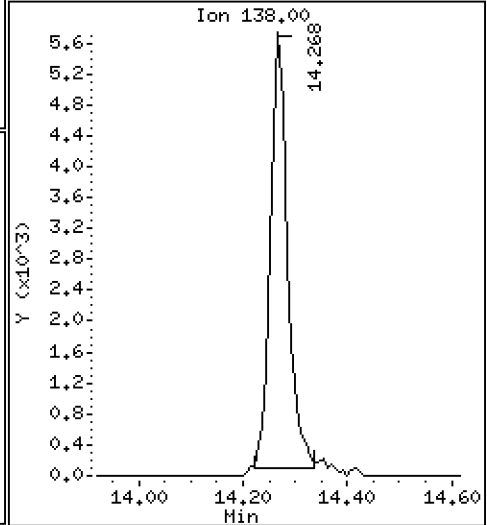
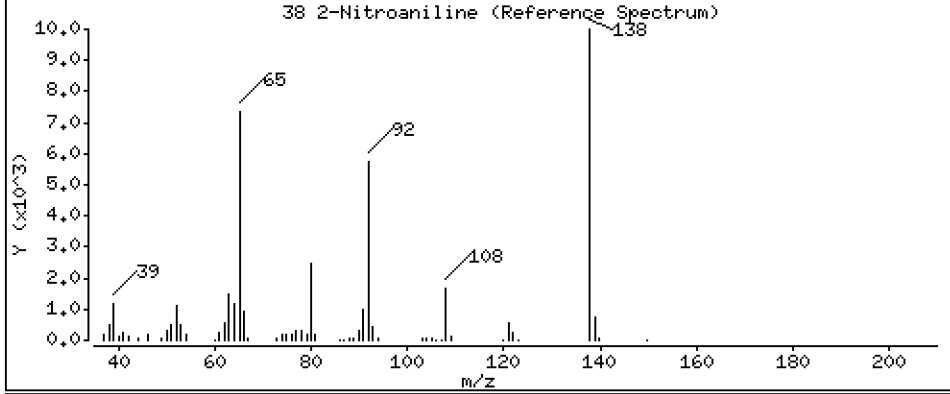
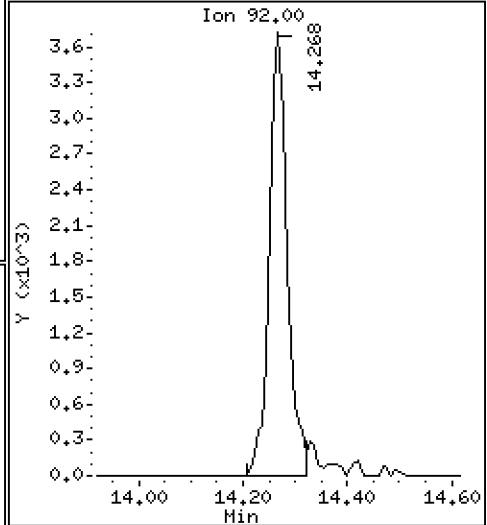
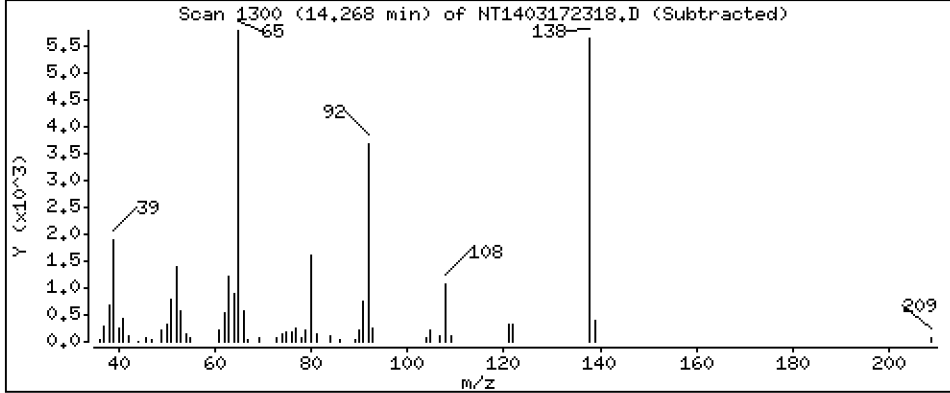
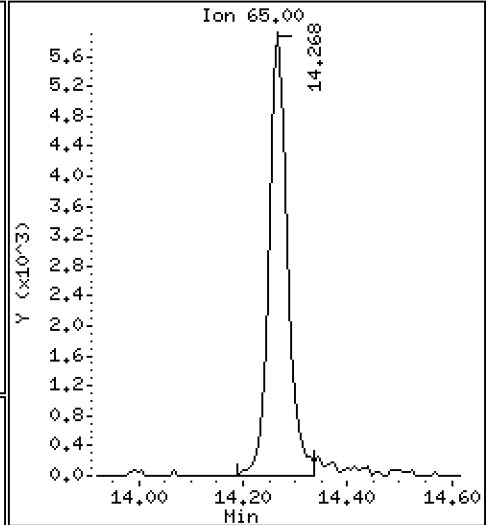
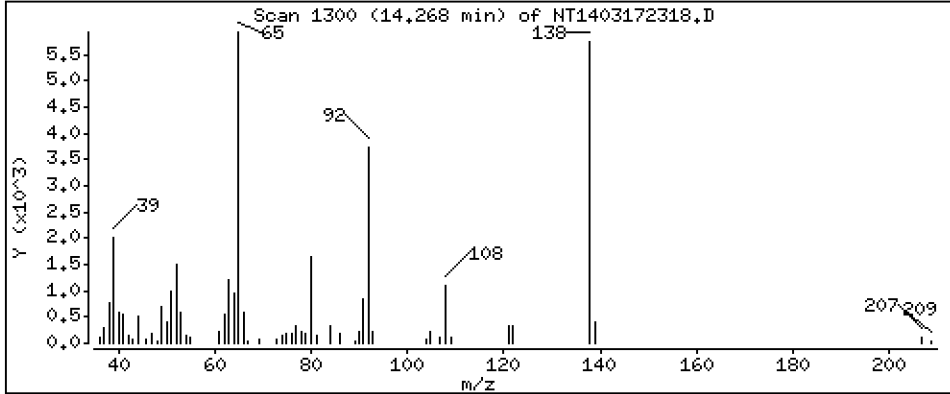
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,3073 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

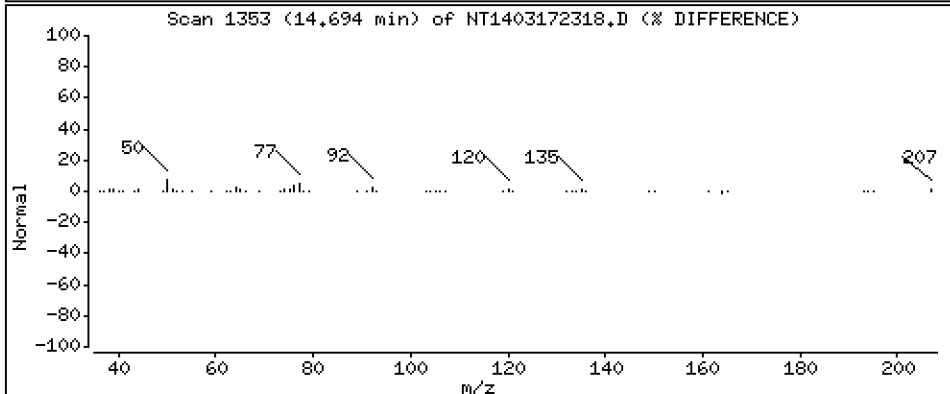
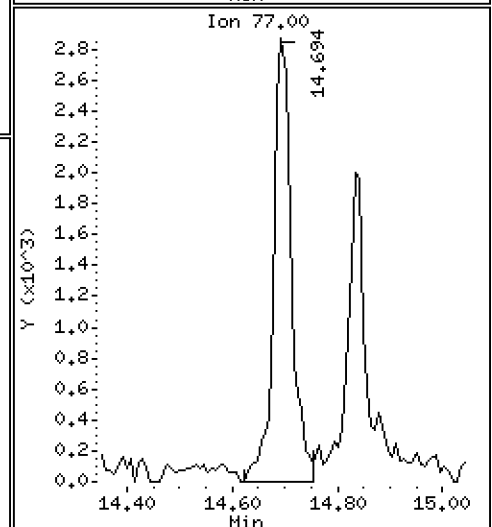
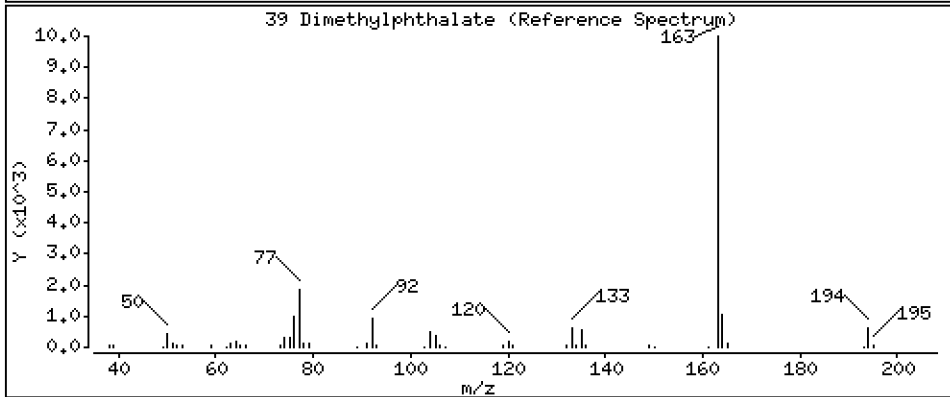
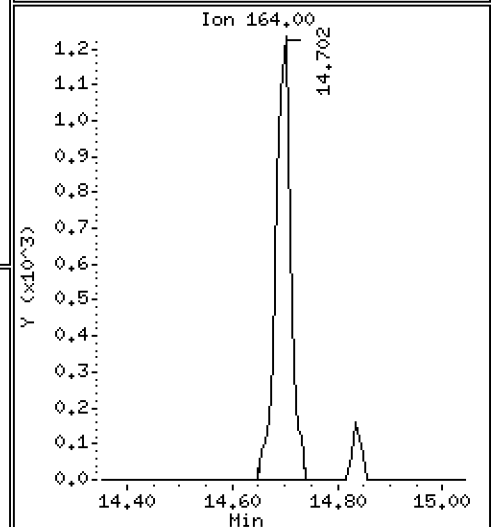
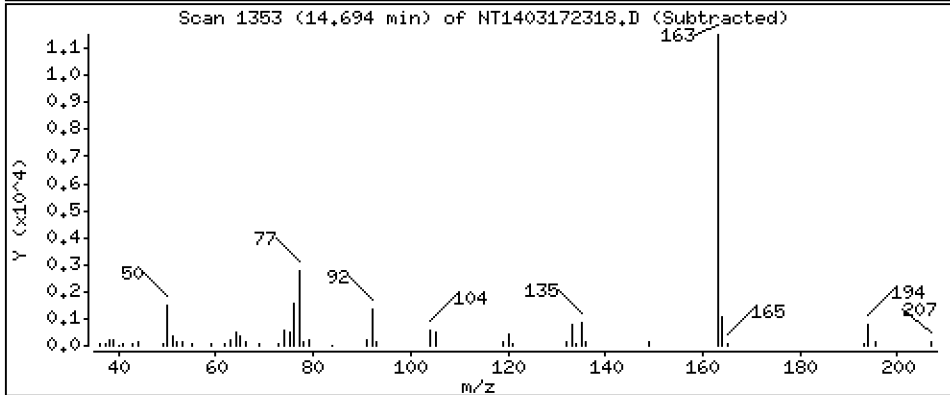
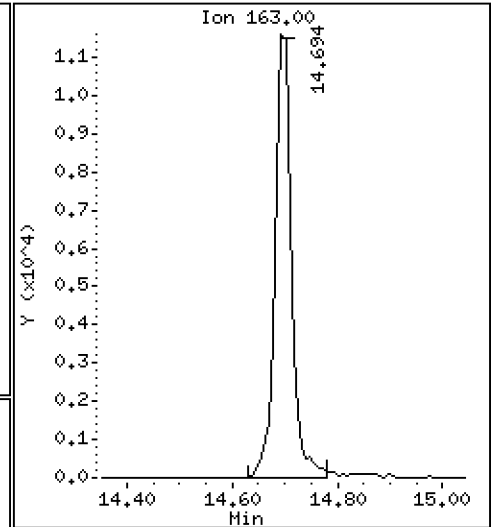
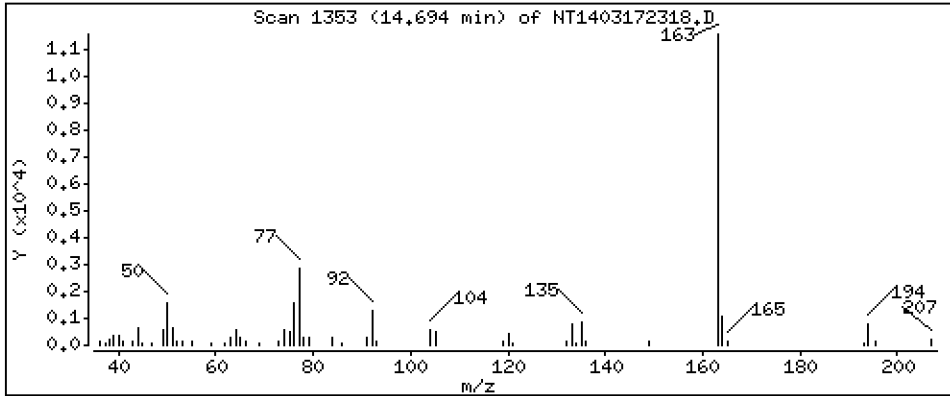
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1902 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

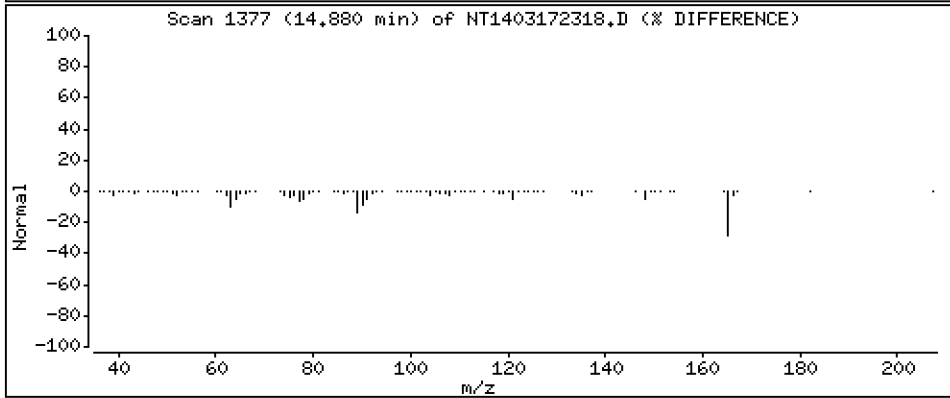
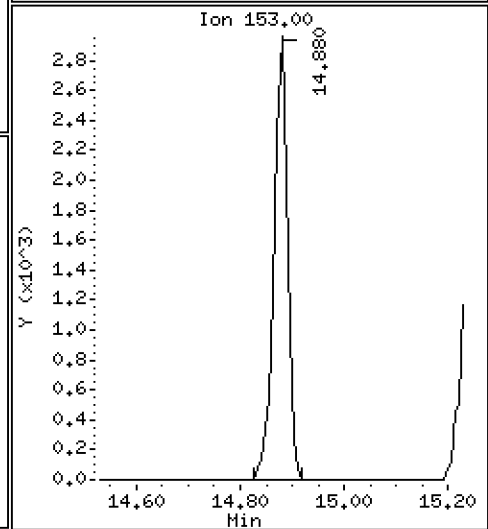
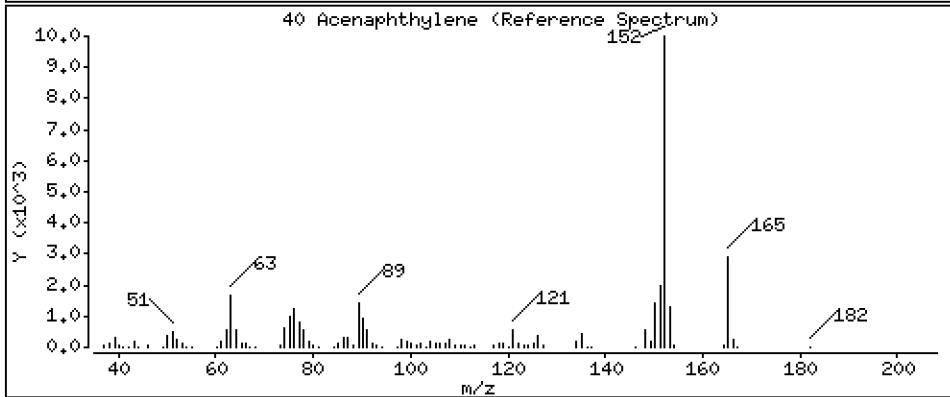
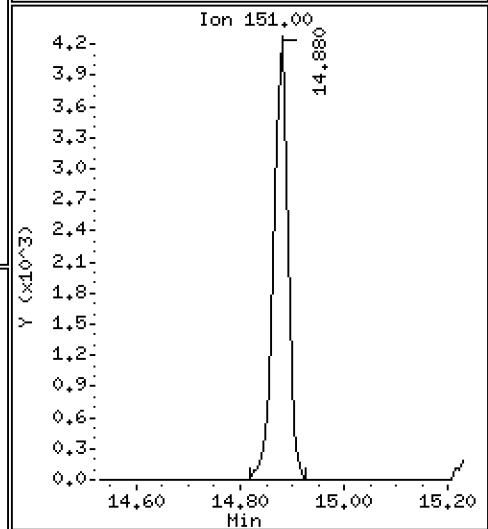
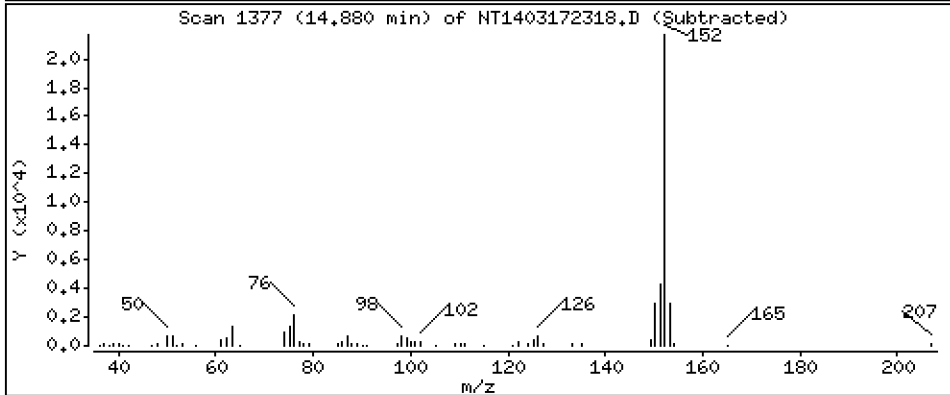
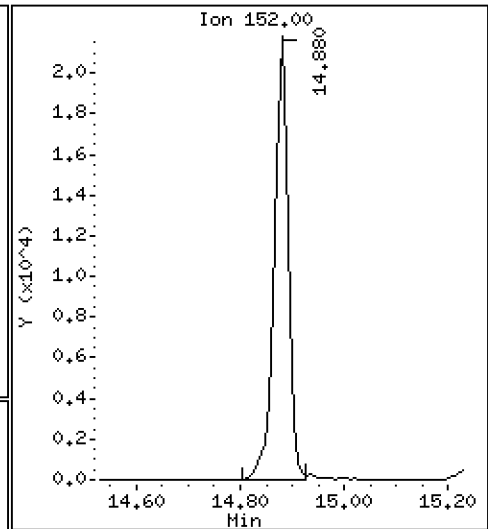
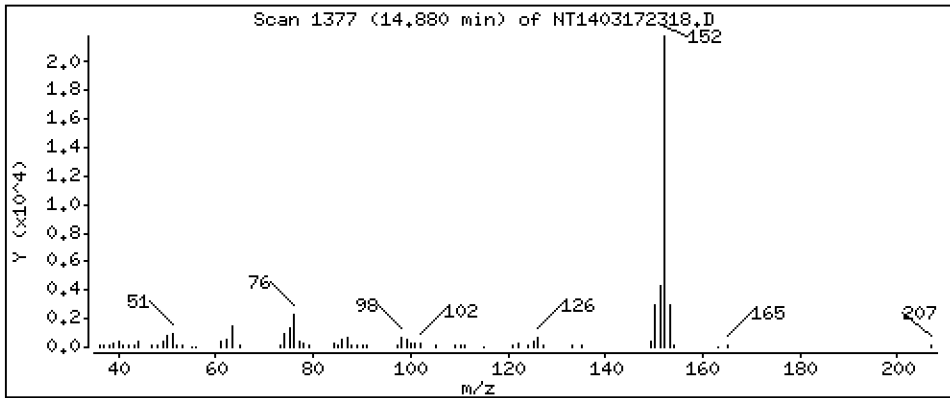
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1922 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

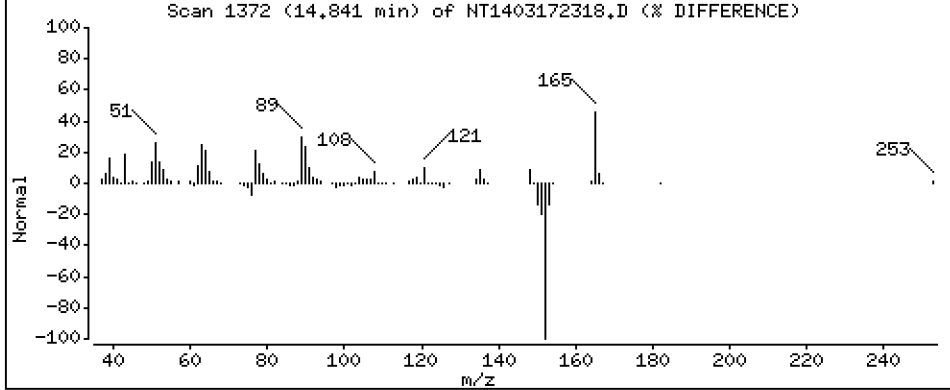
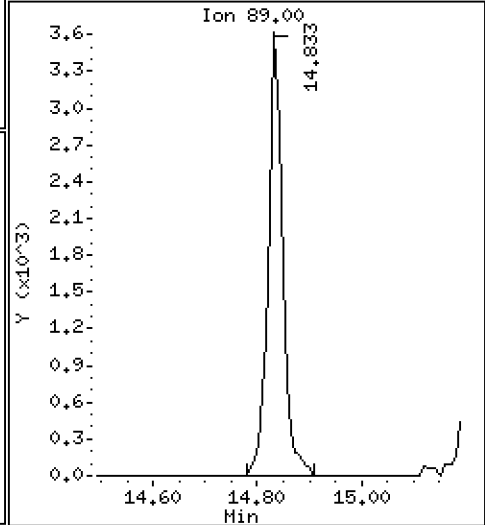
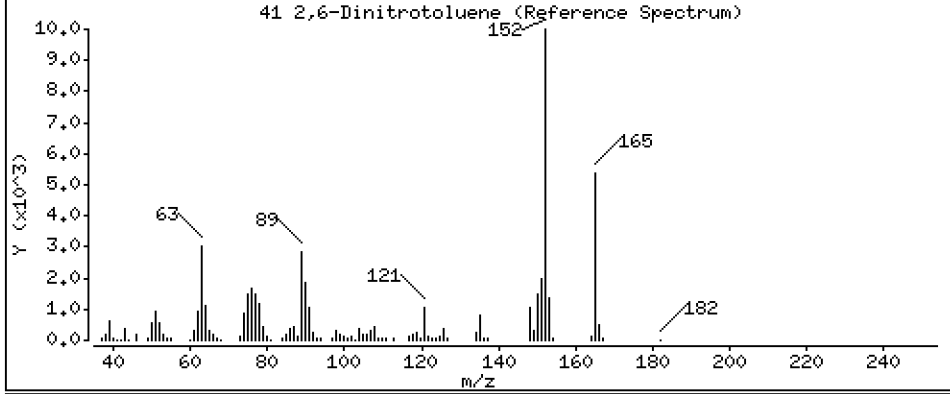
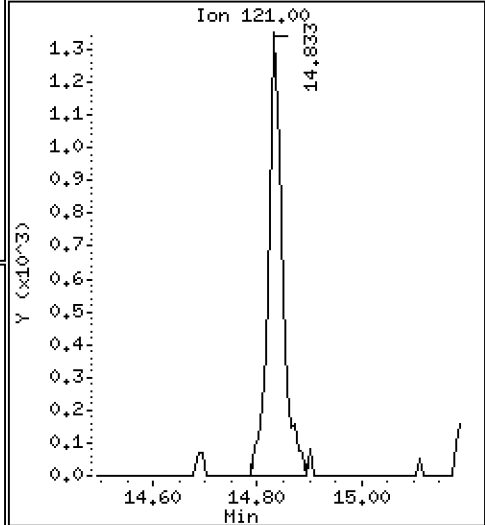
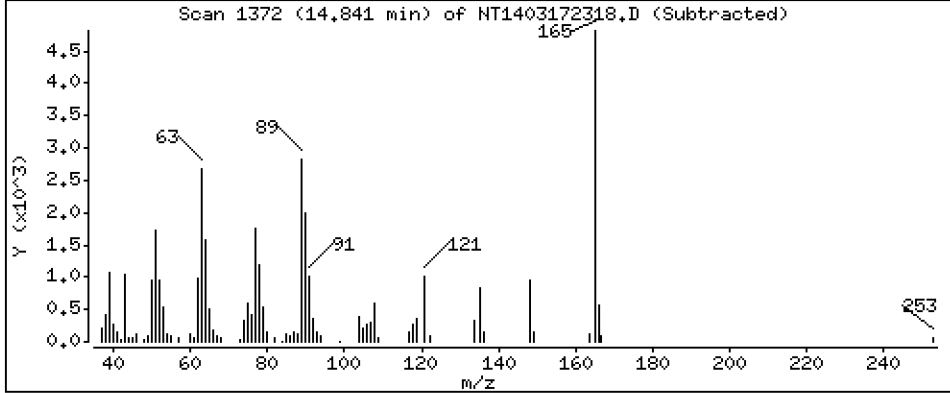
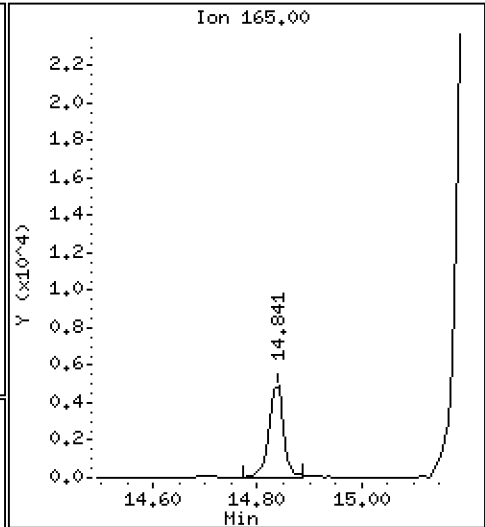
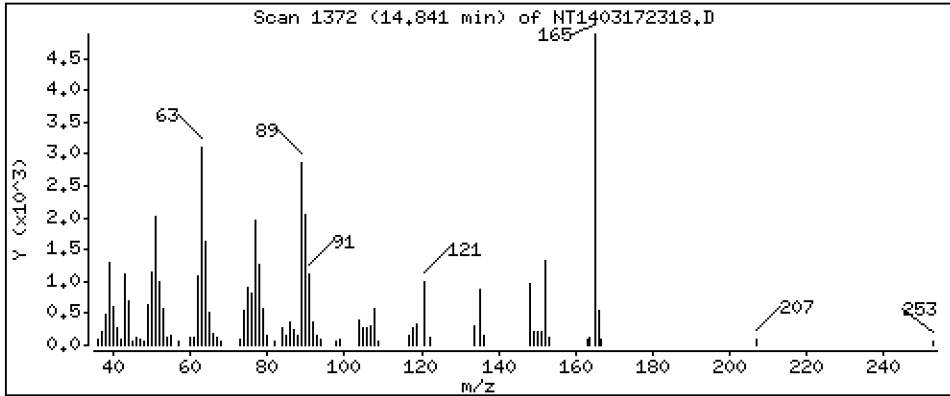
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 0.3118 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

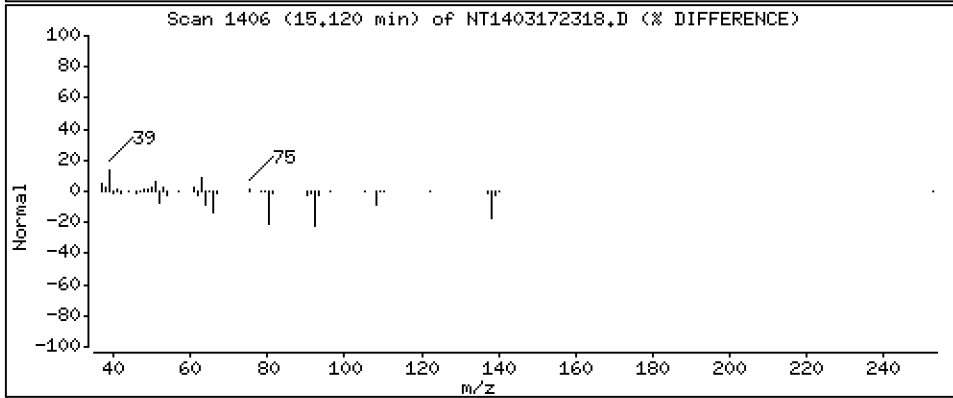
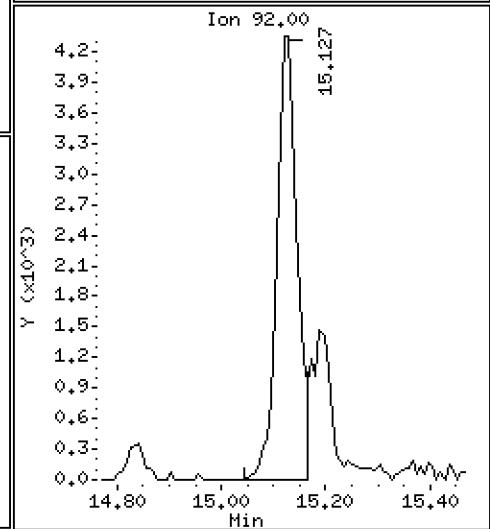
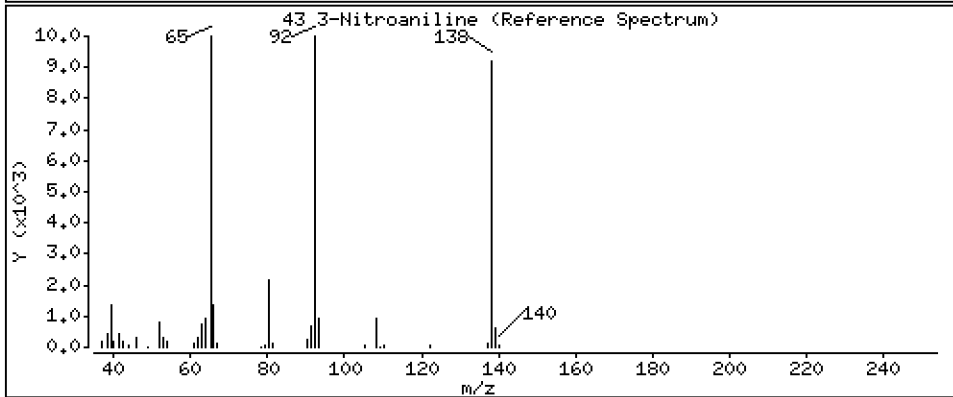
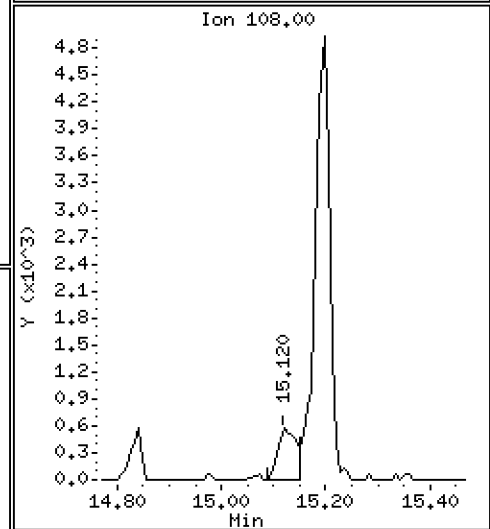
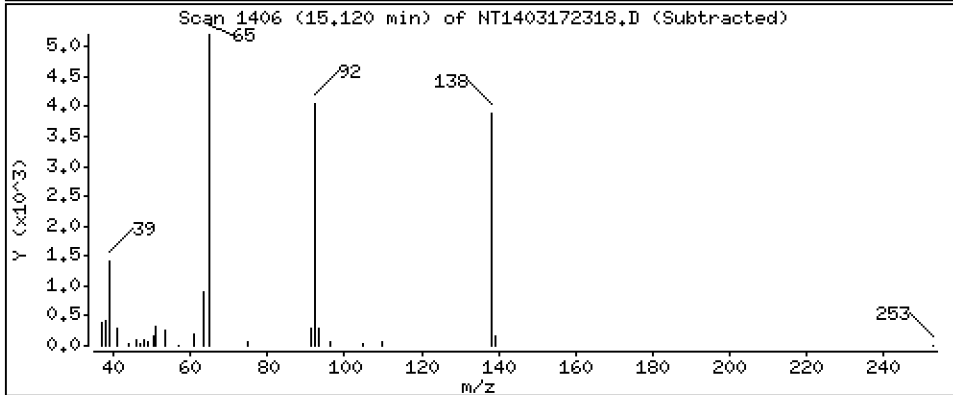
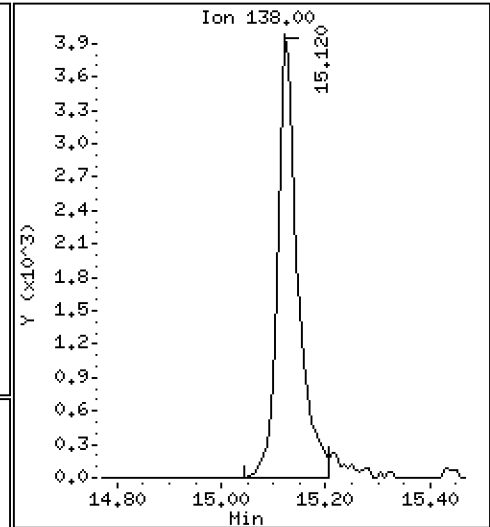
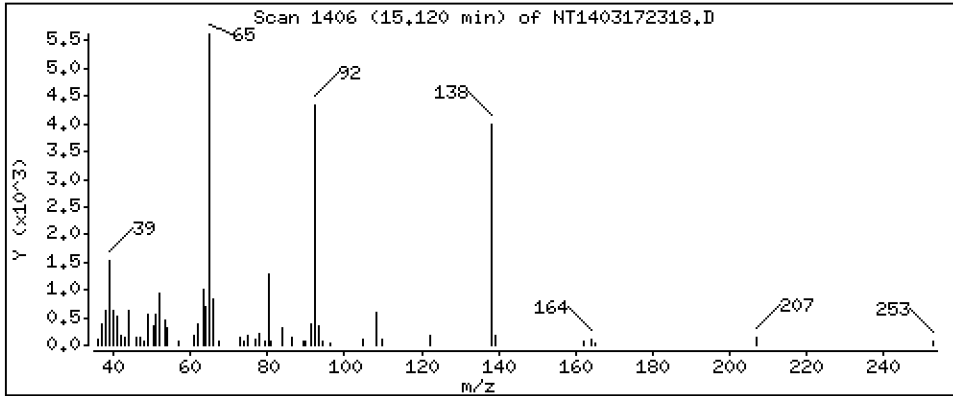
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,2816 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

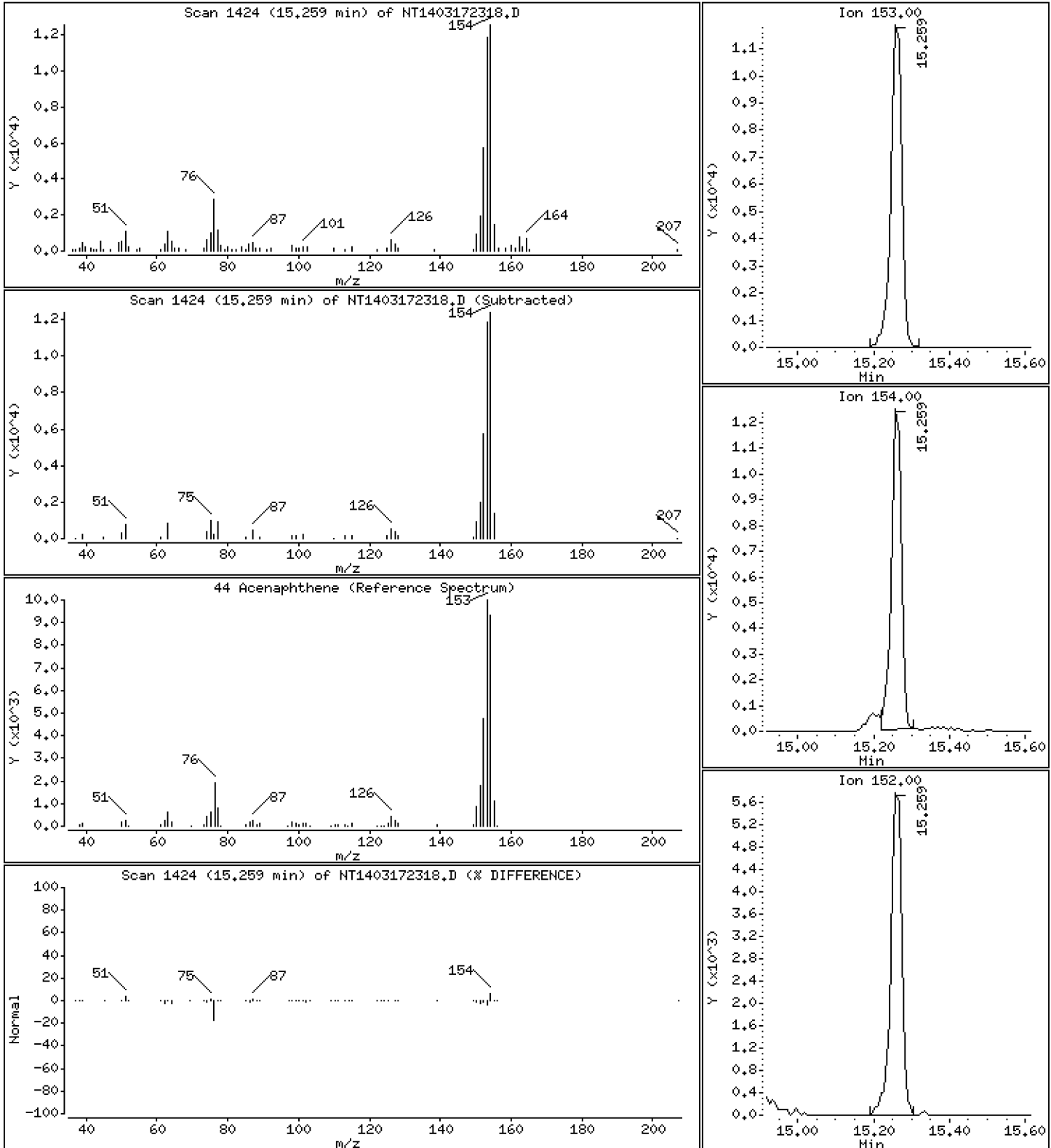
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1939 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

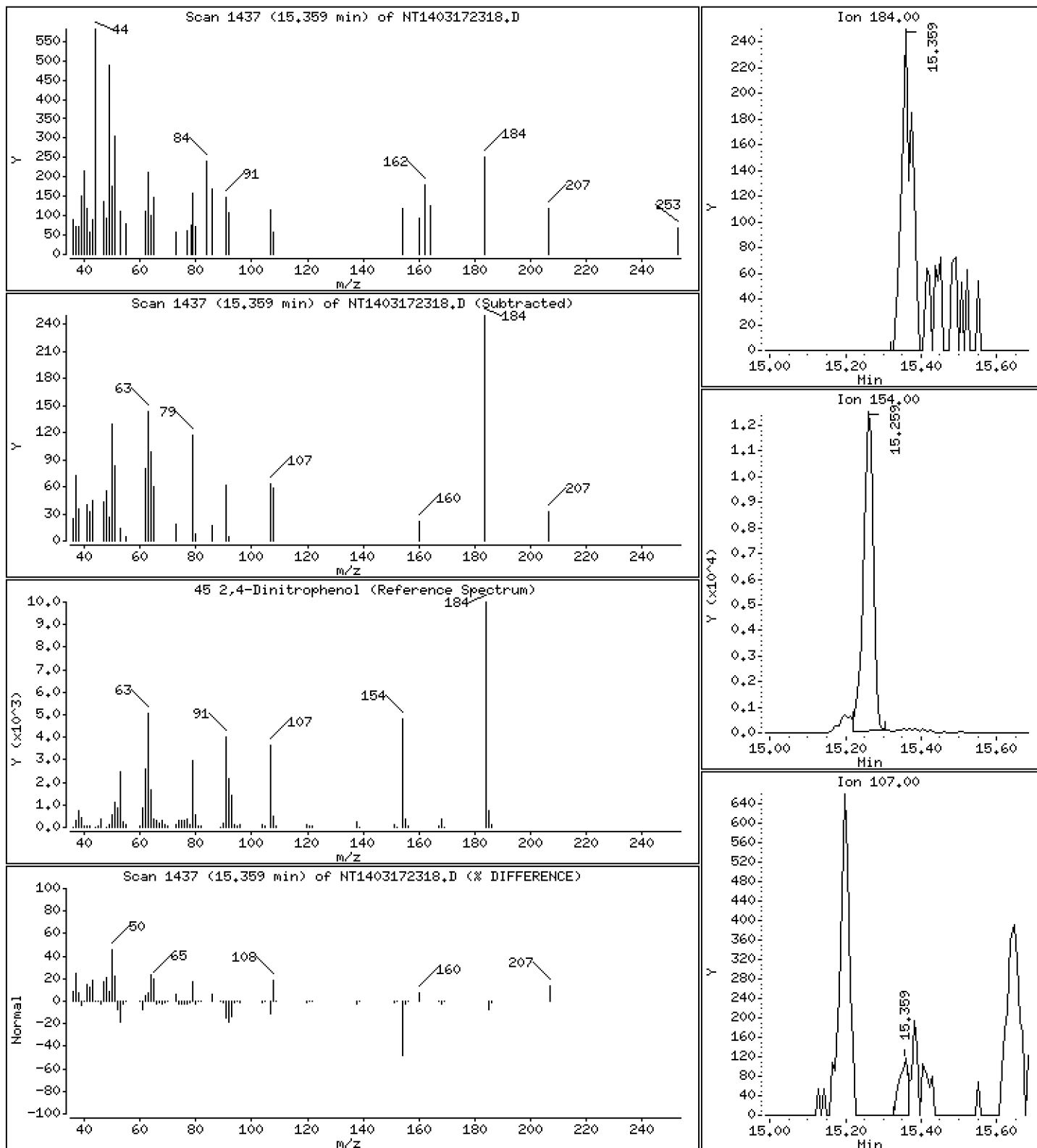
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,02168 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

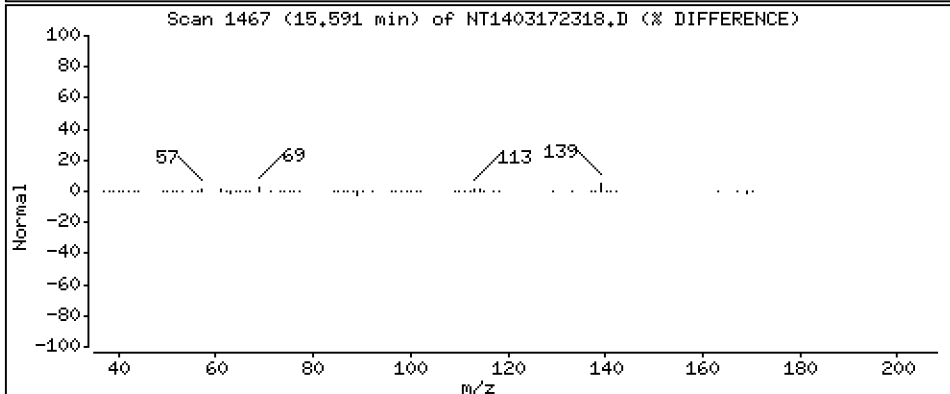
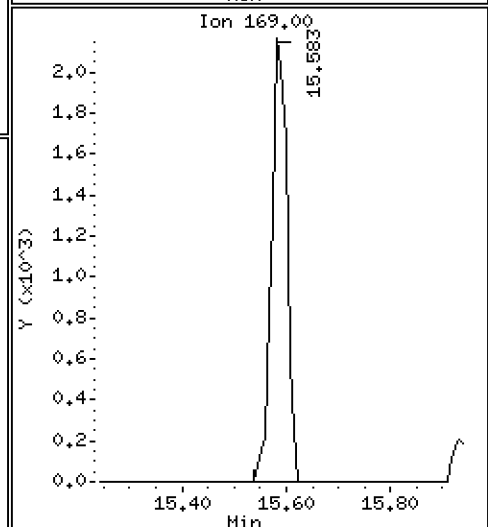
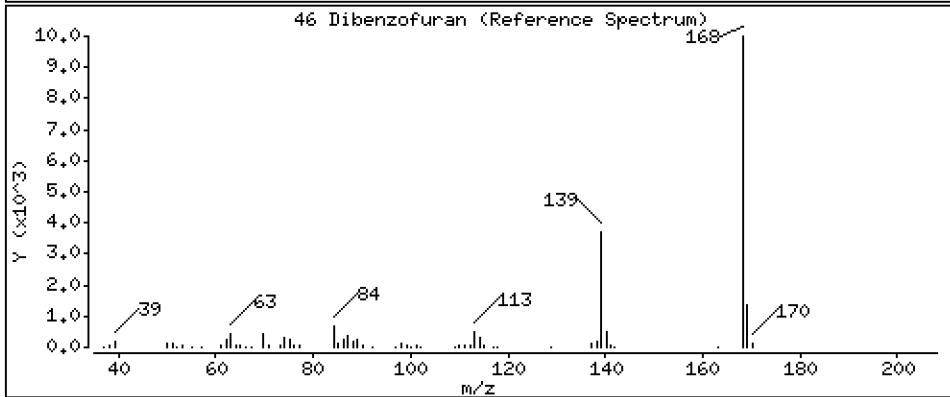
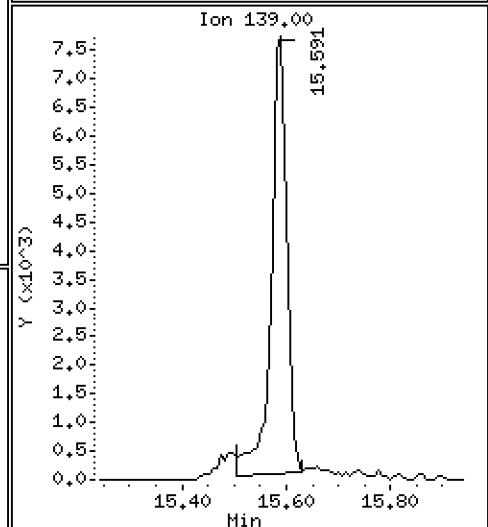
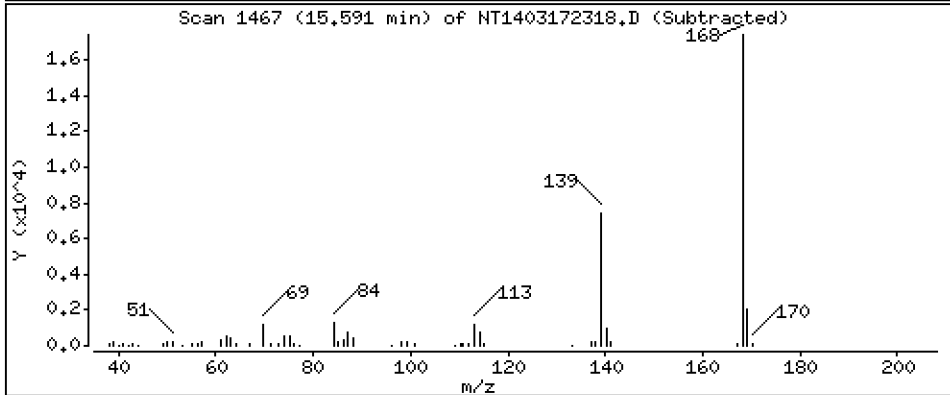
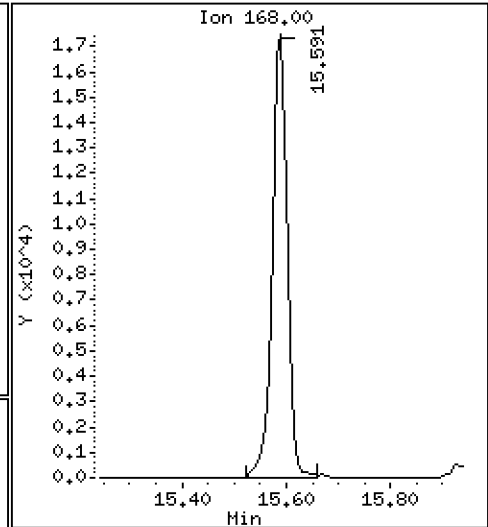
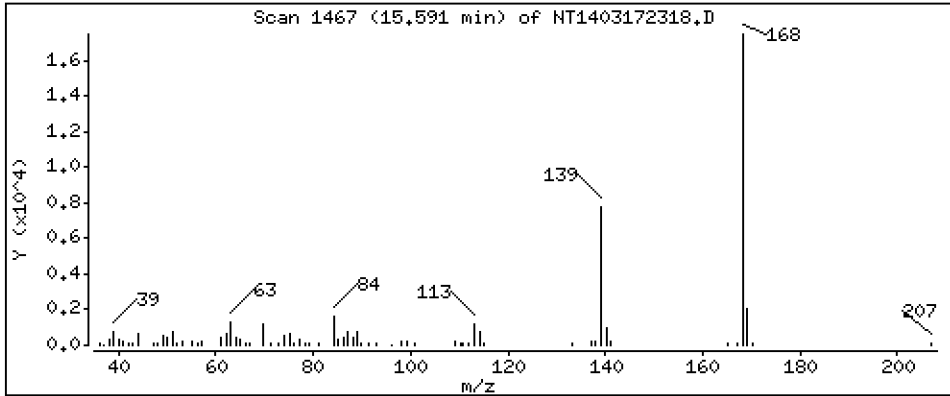
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1998 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

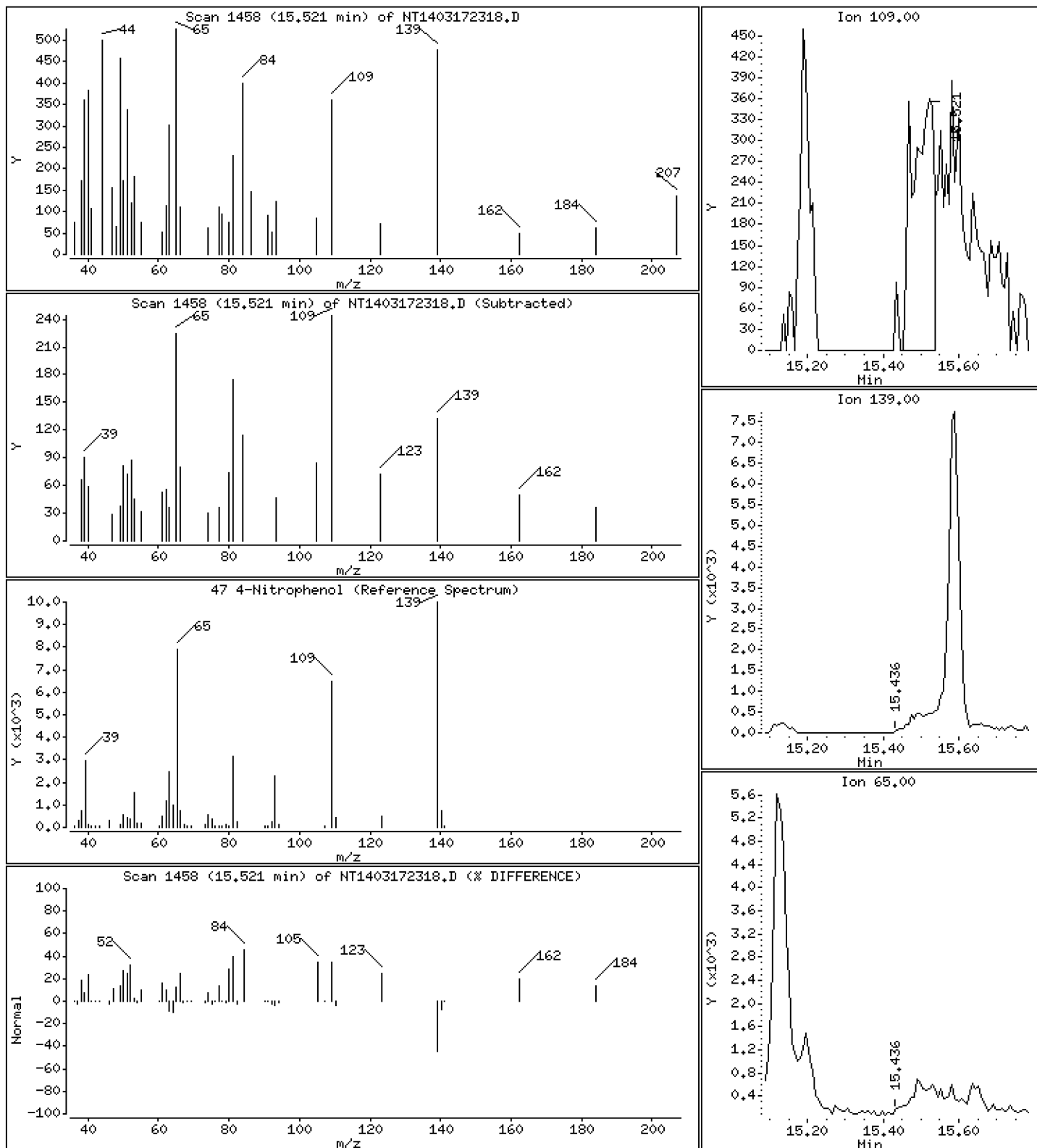
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

47 4-Nitrophenol

Concentration: 0.06483 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

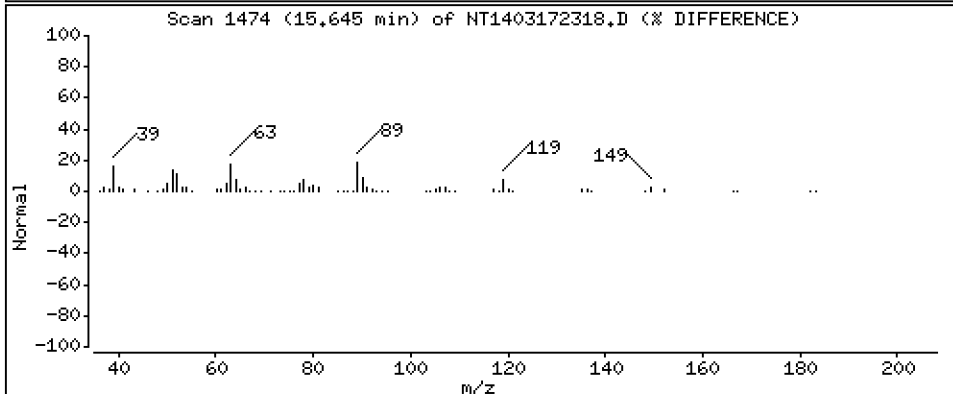
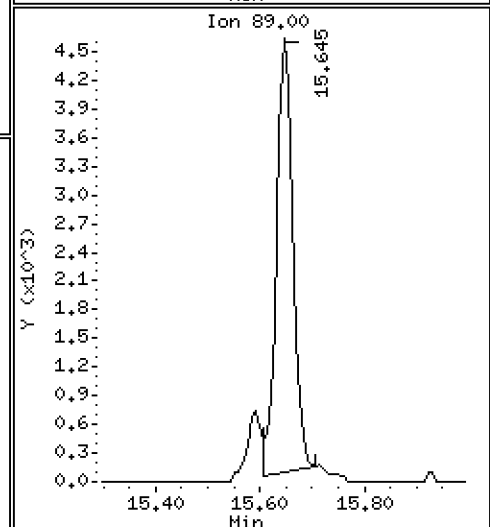
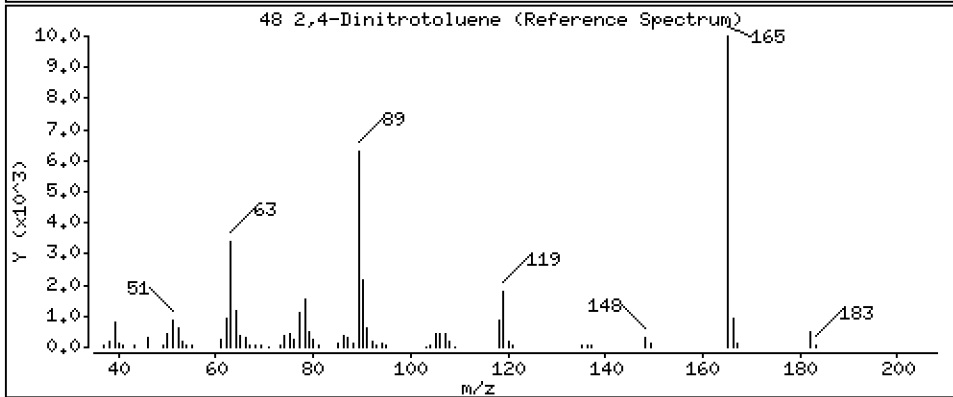
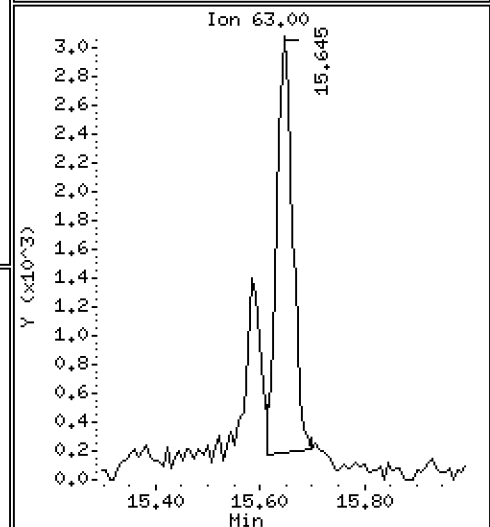
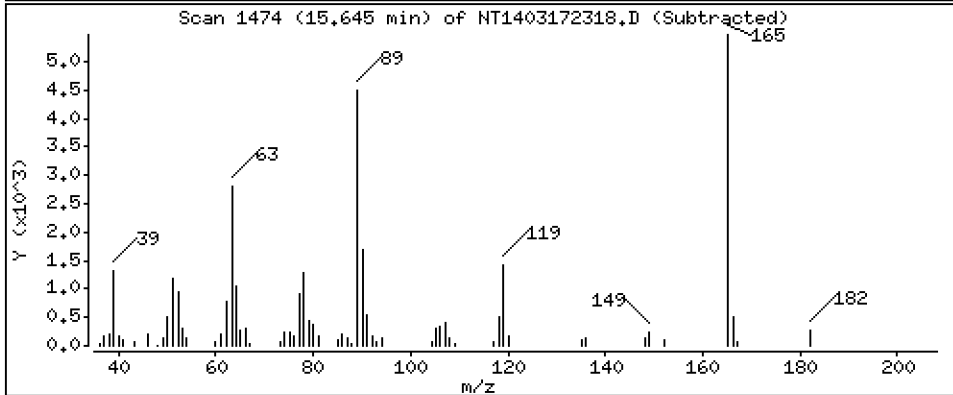
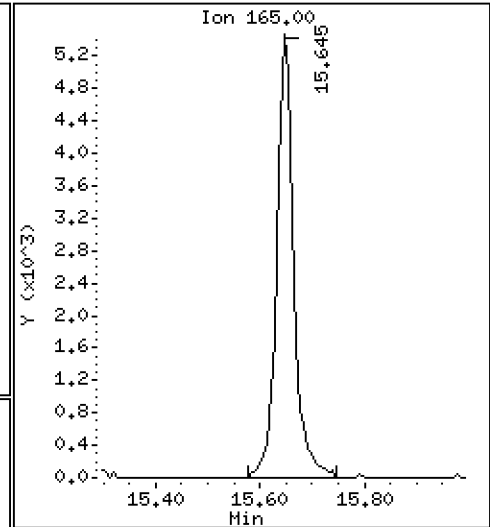
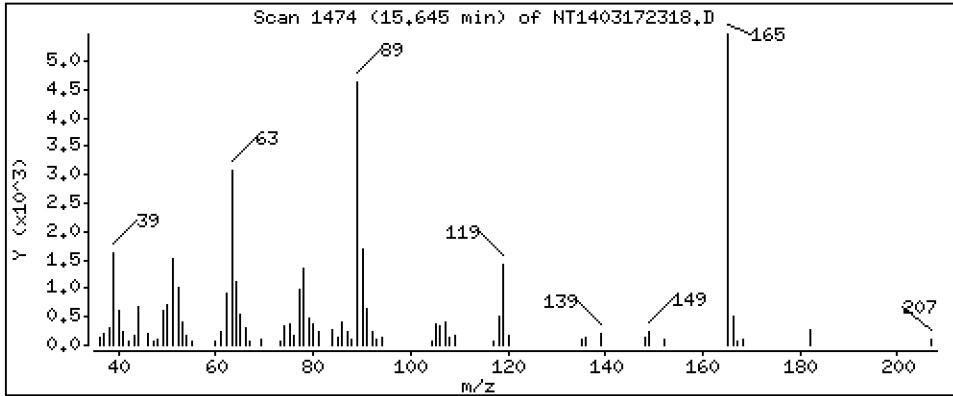
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2845 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

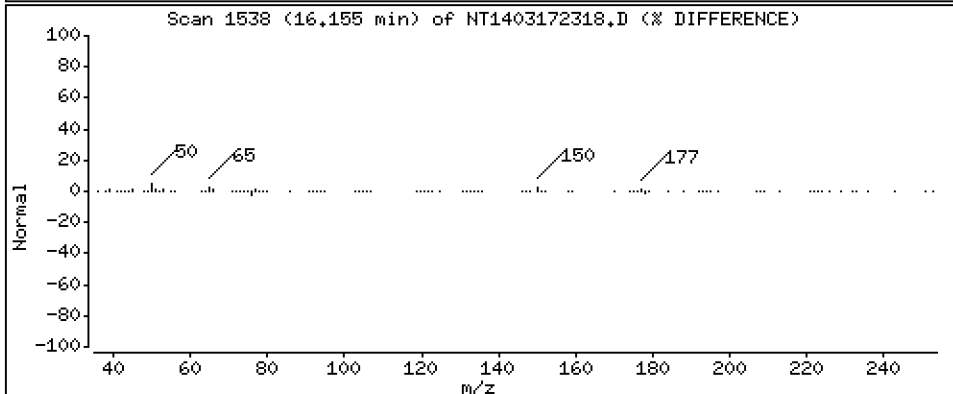
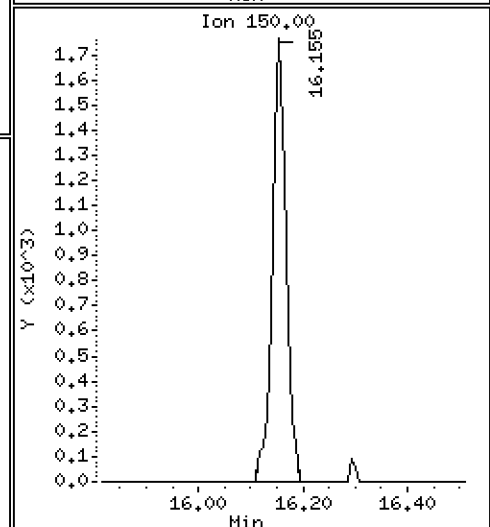
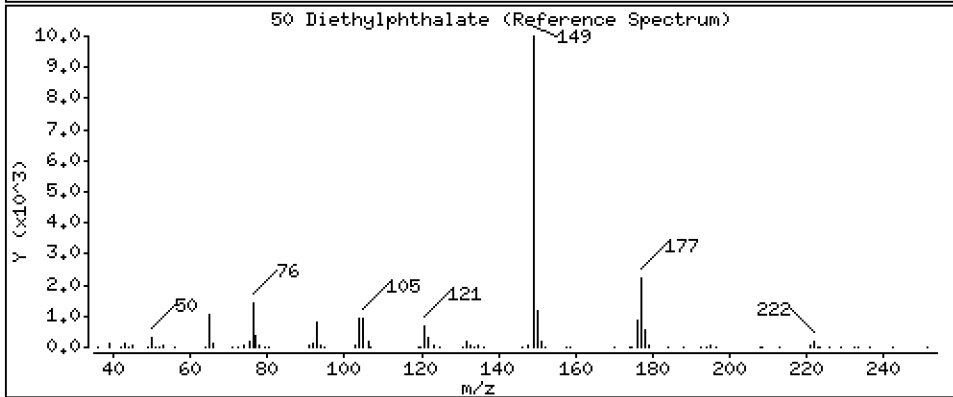
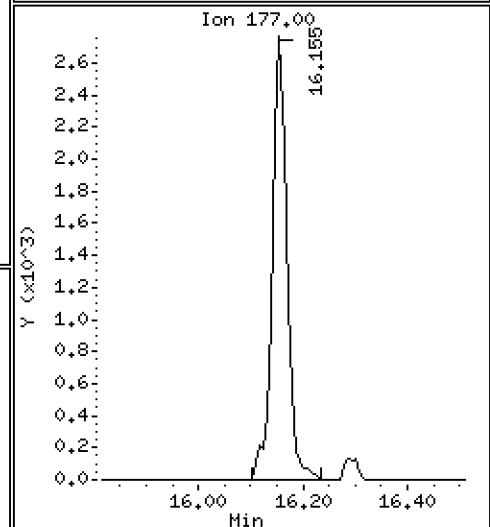
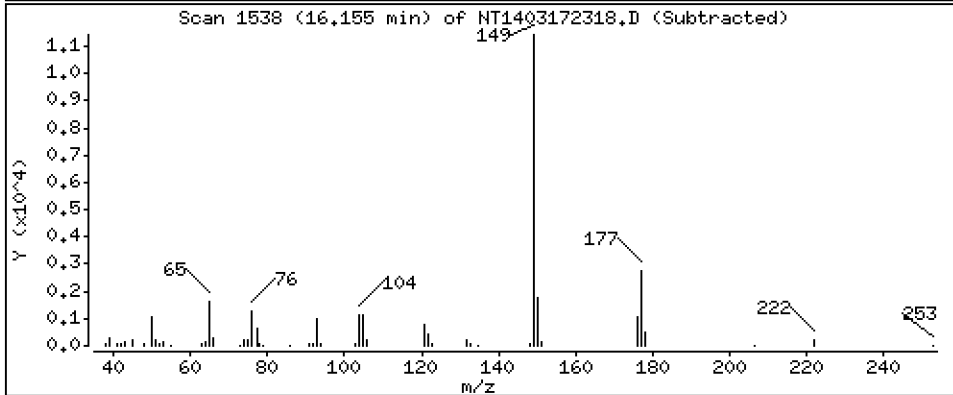
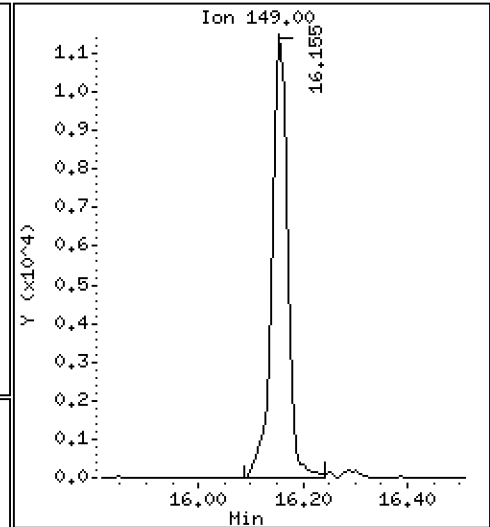
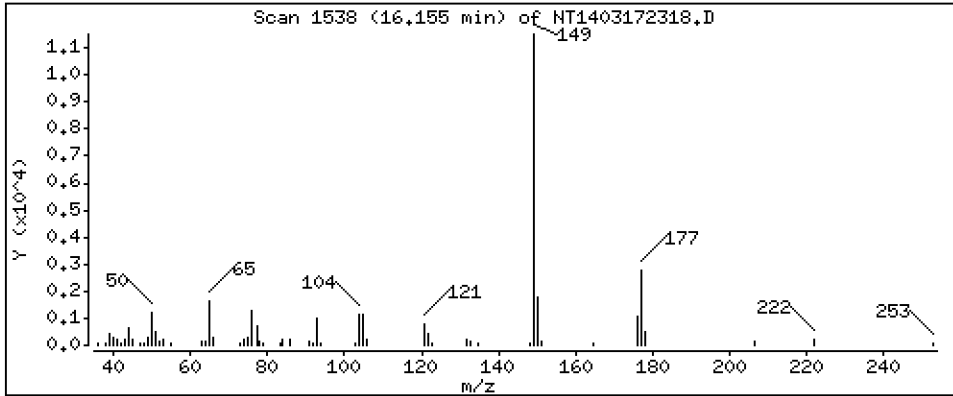
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1917 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

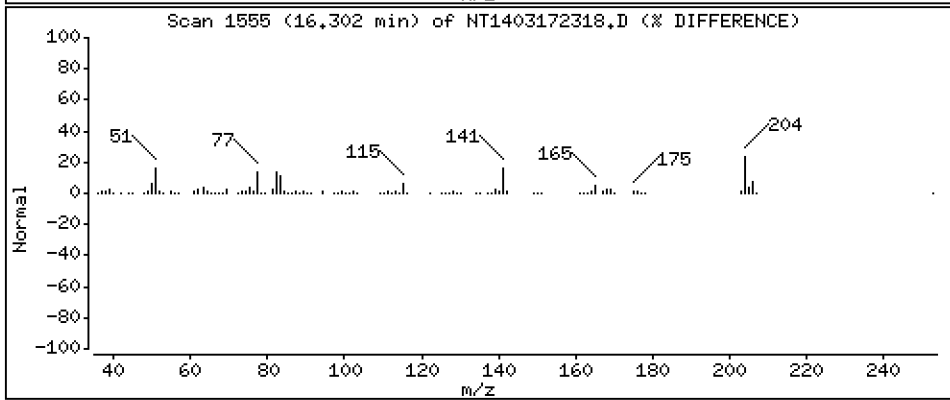
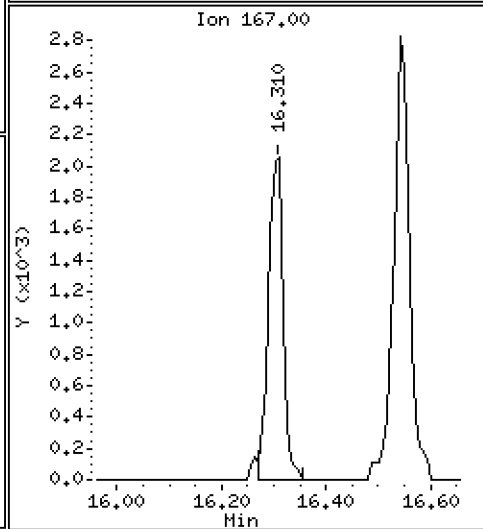
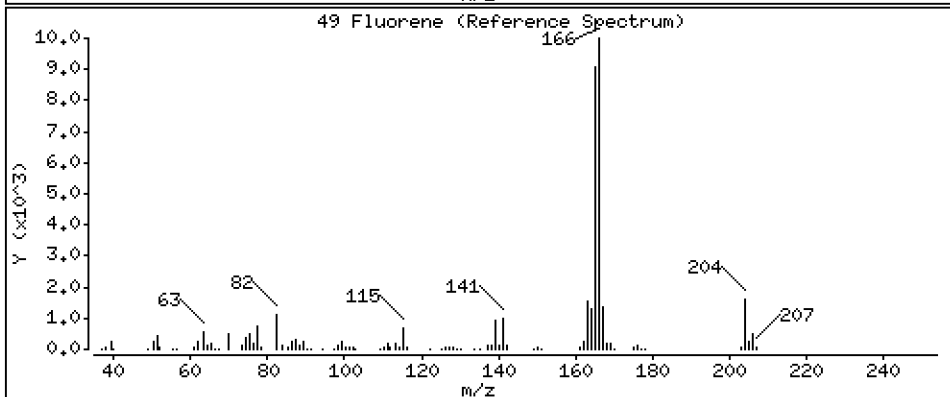
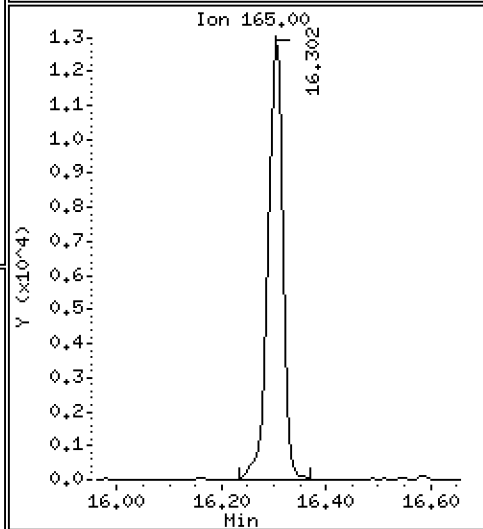
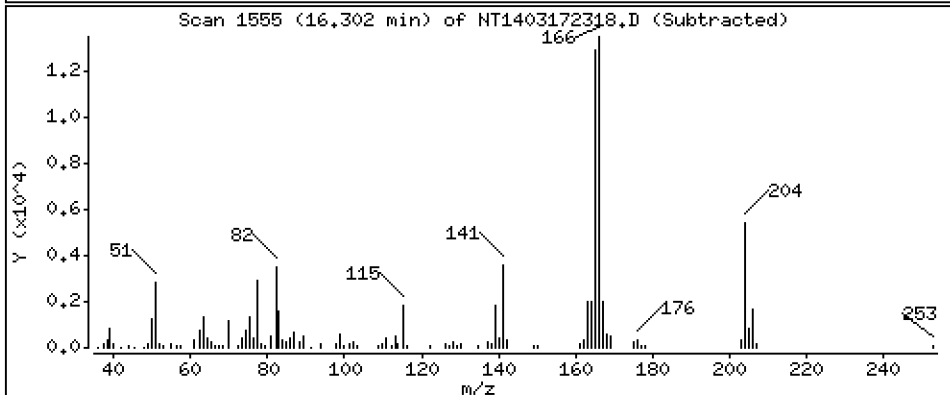
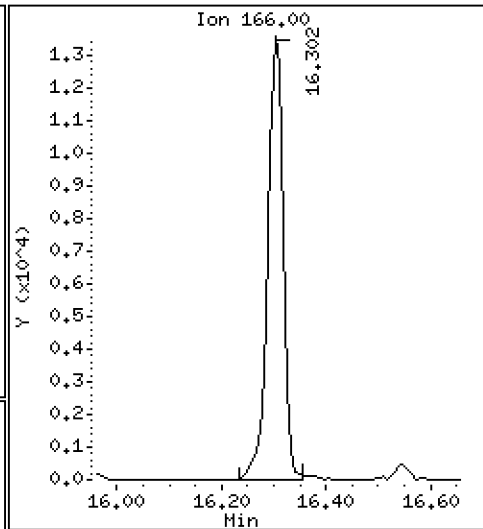
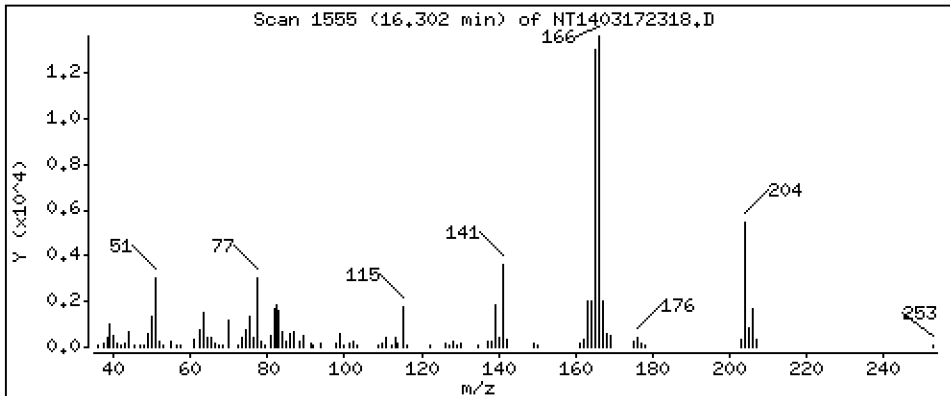
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1696 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

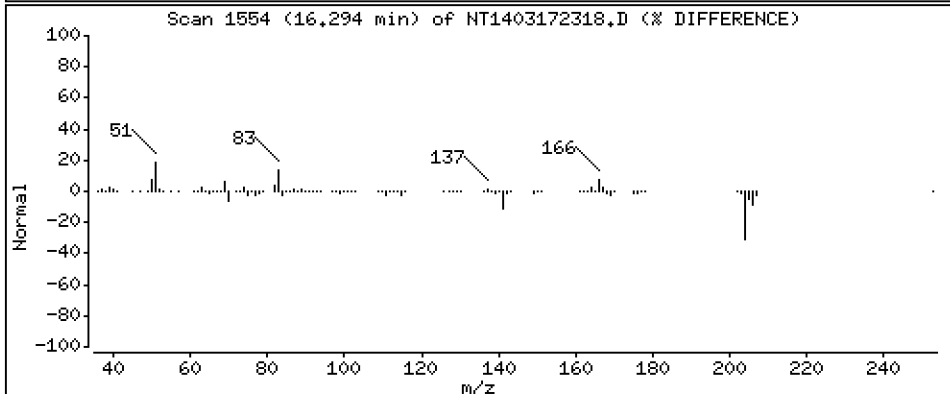
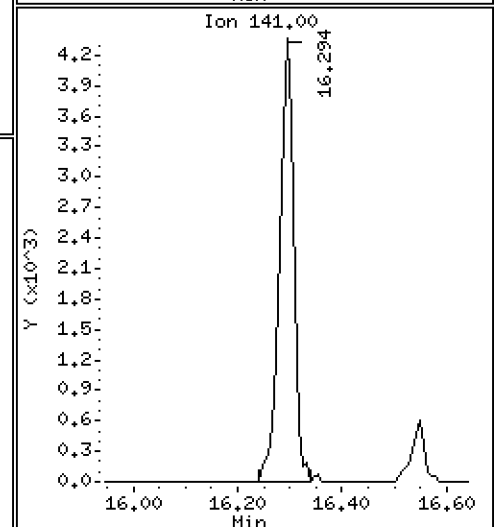
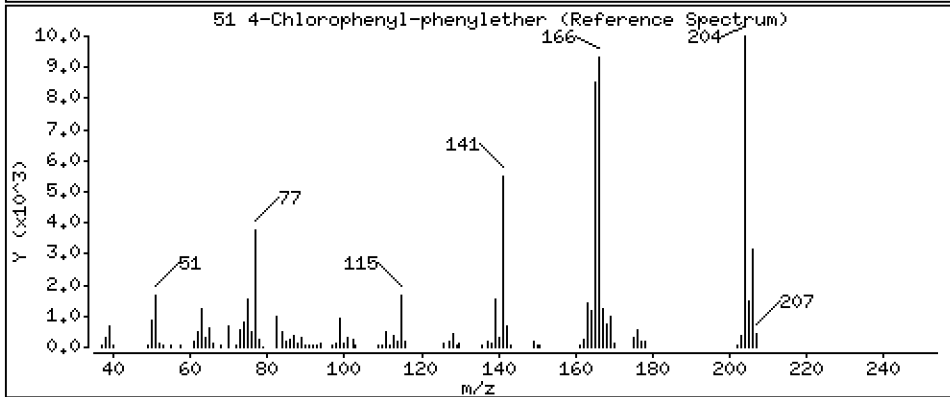
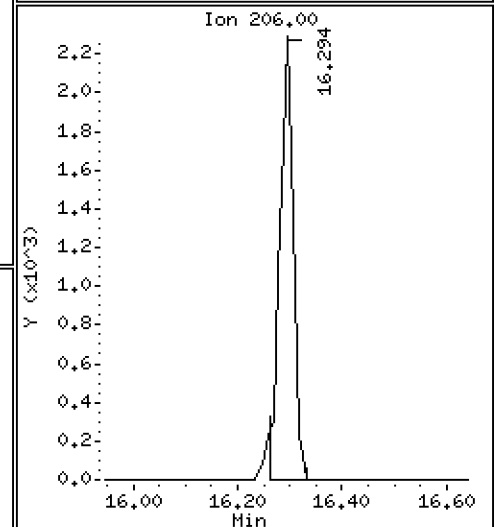
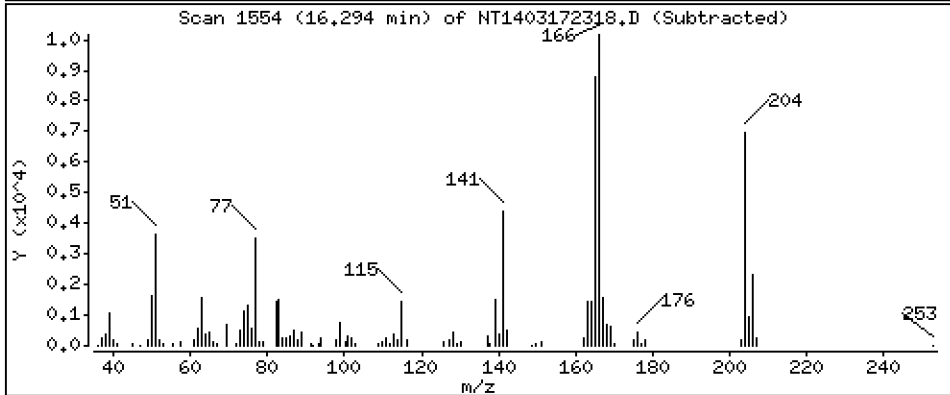
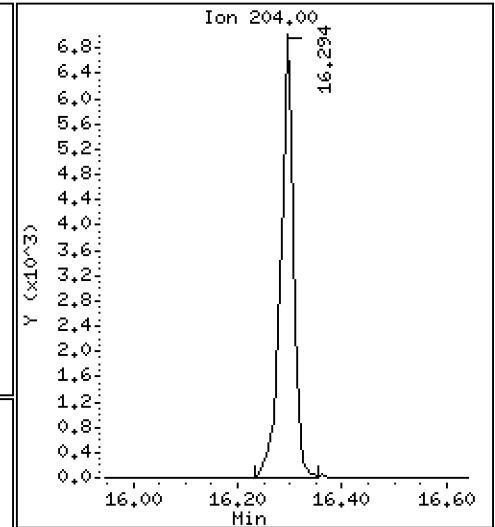
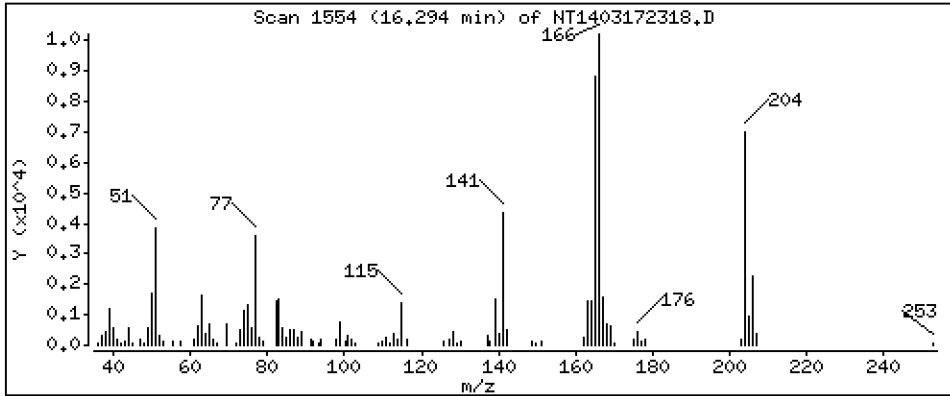
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,1733 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

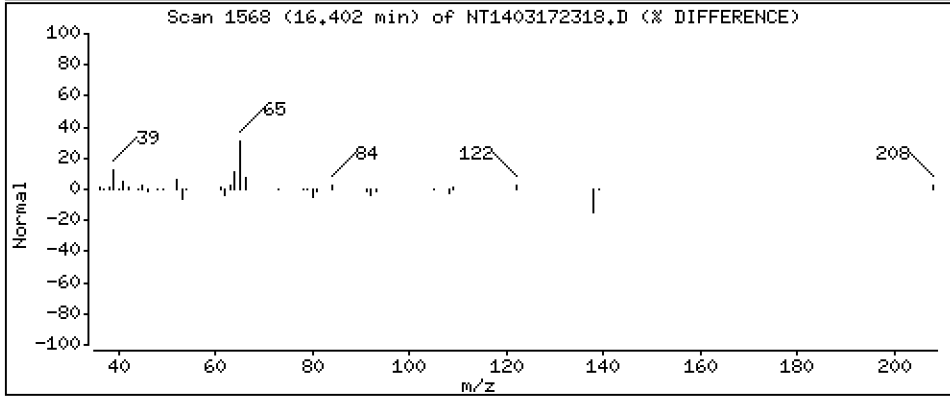
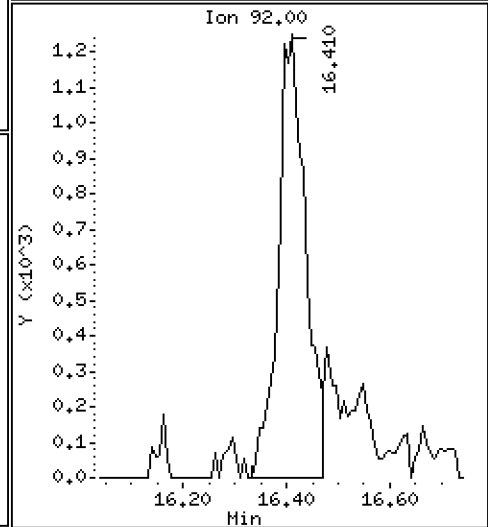
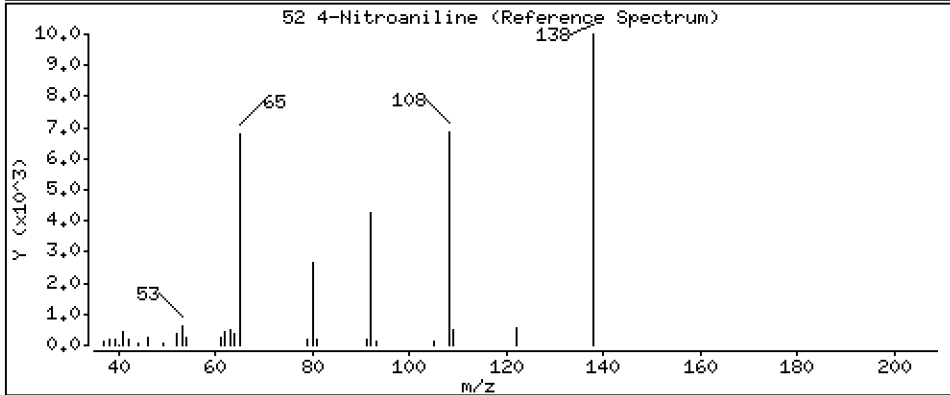
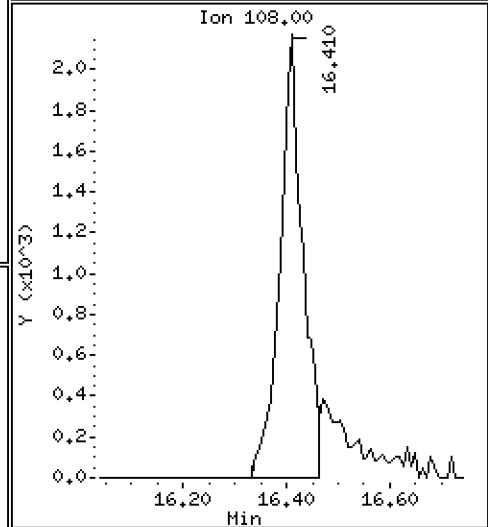
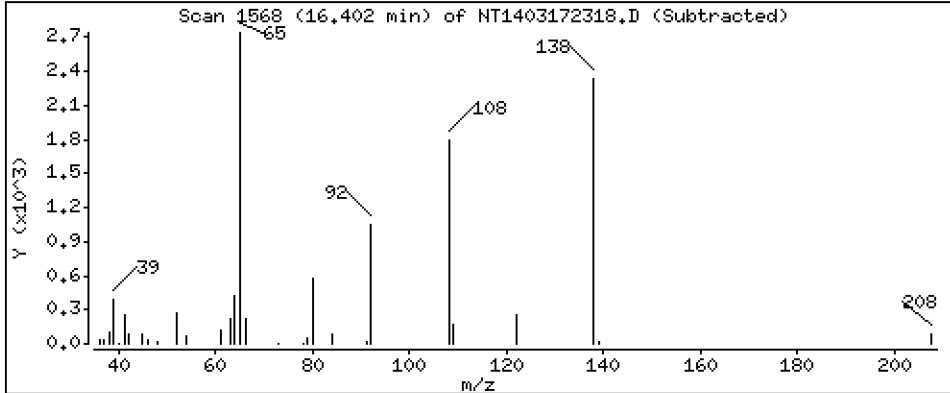
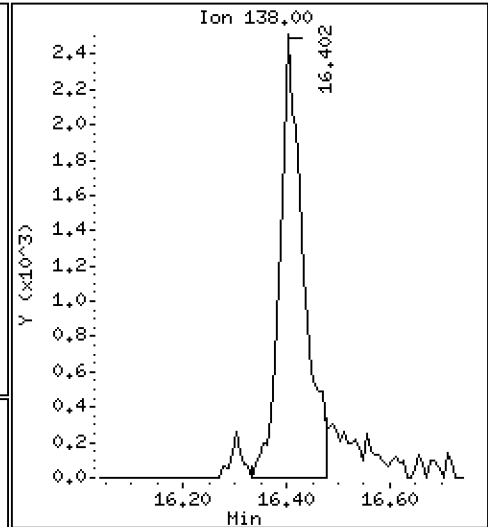
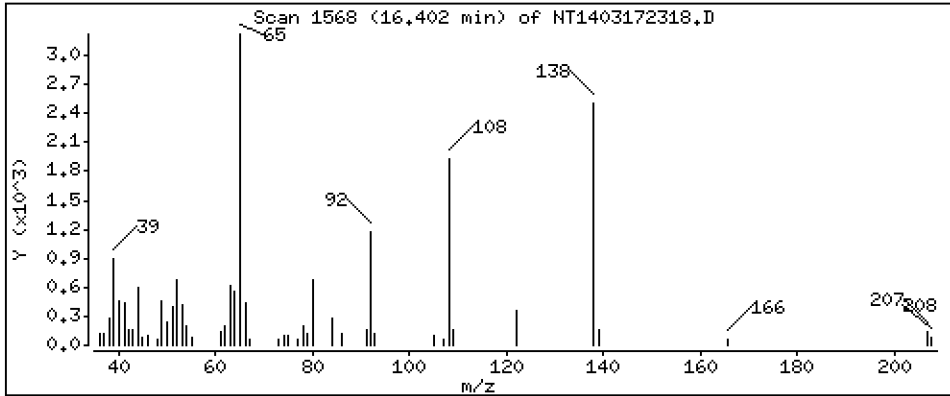
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.2262 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

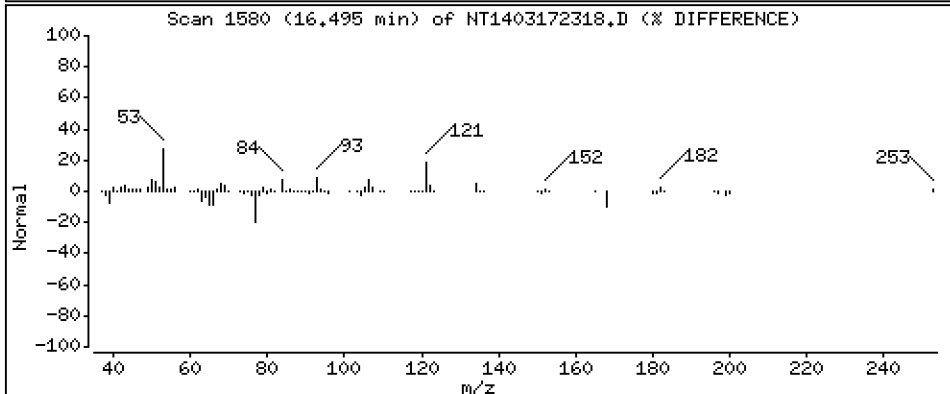
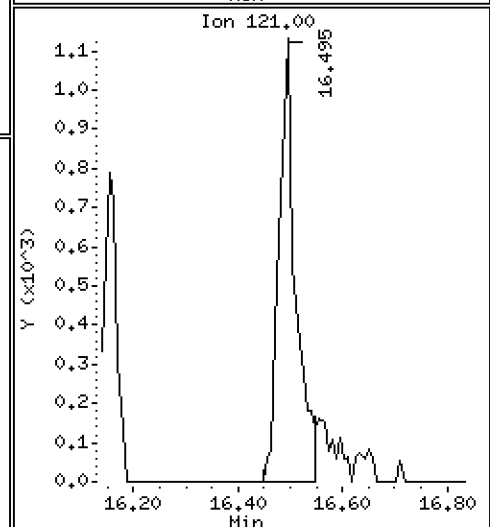
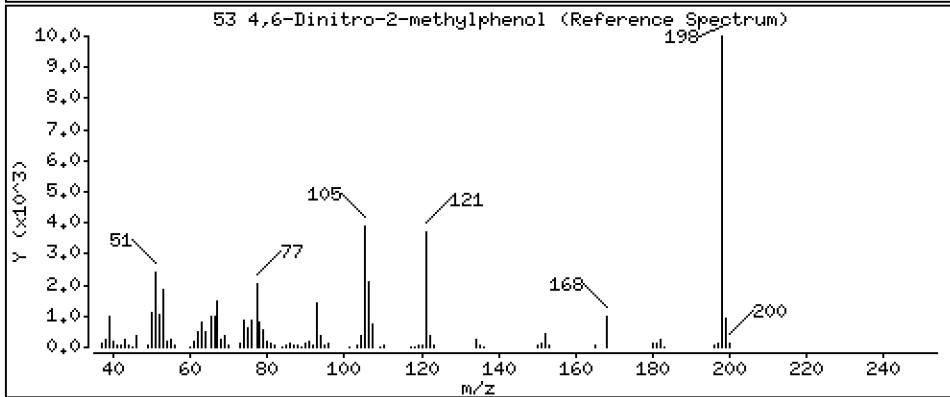
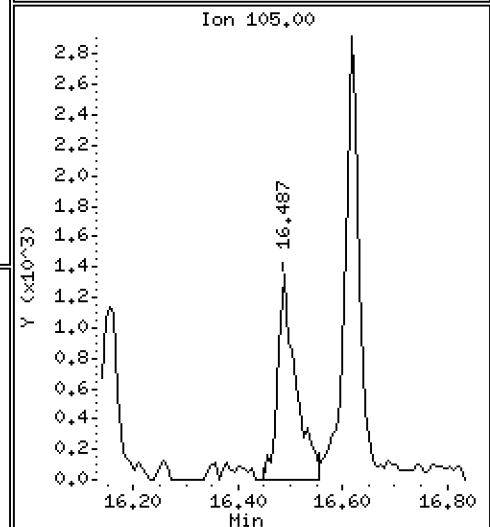
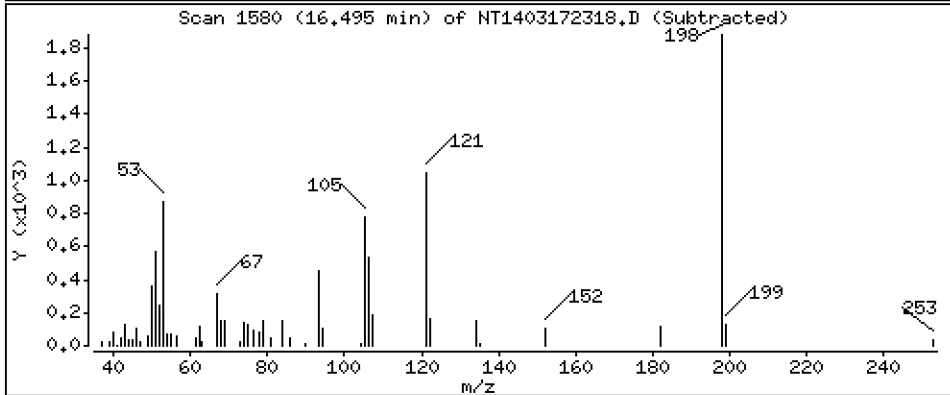
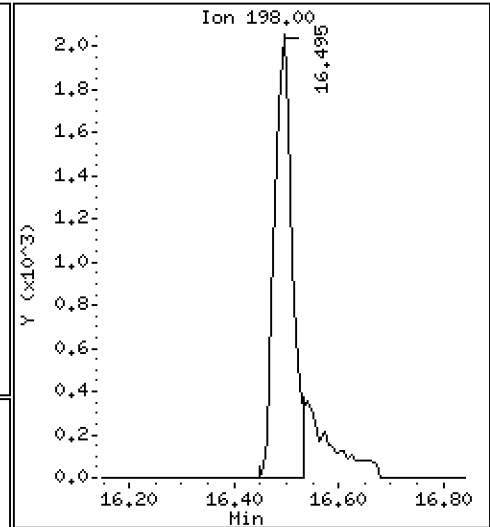
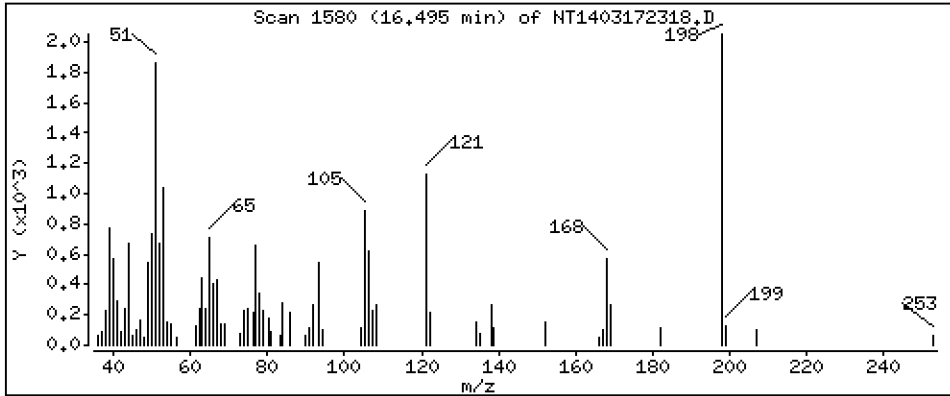
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2002 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

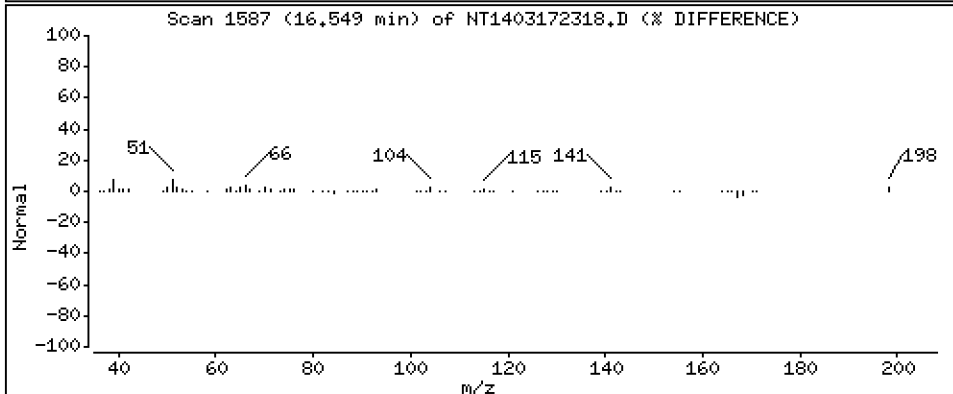
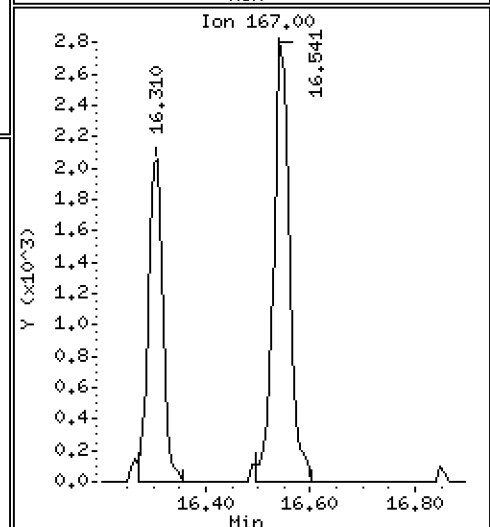
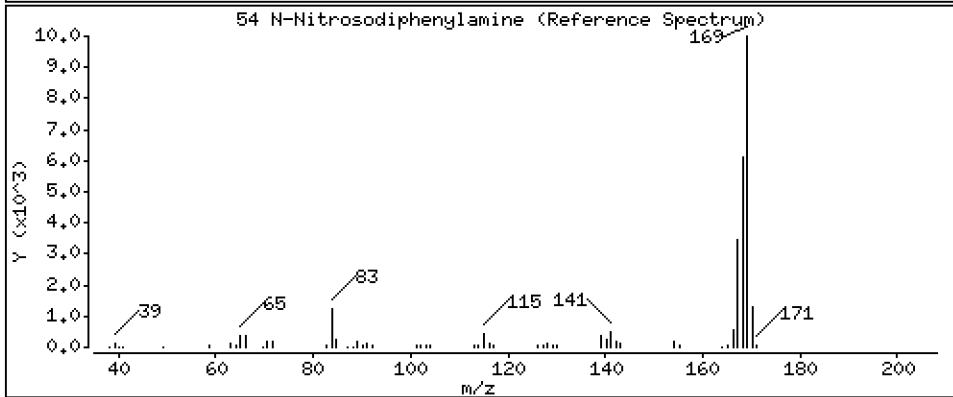
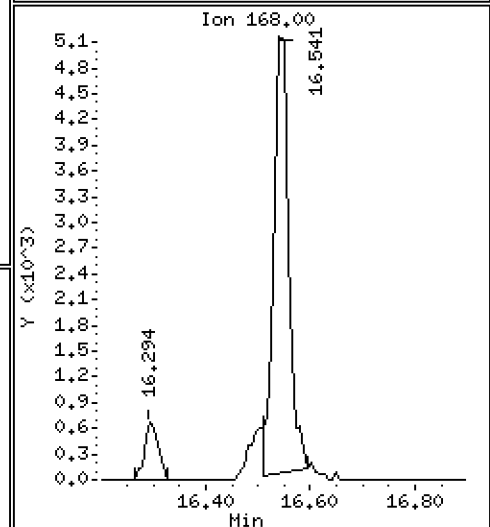
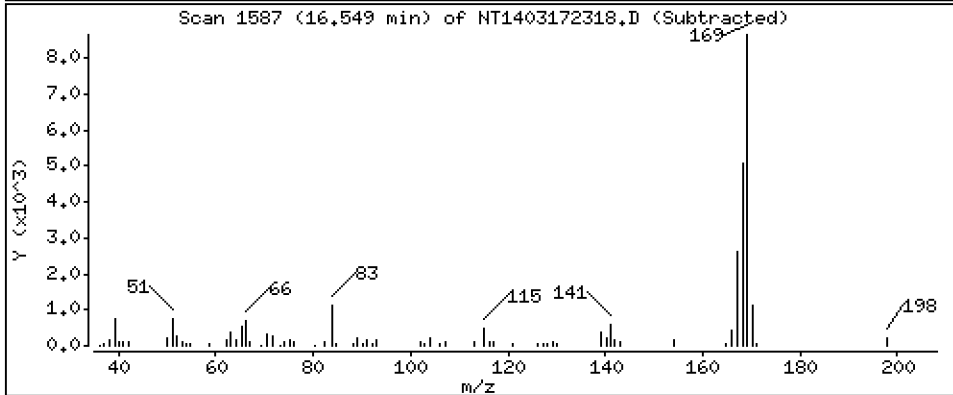
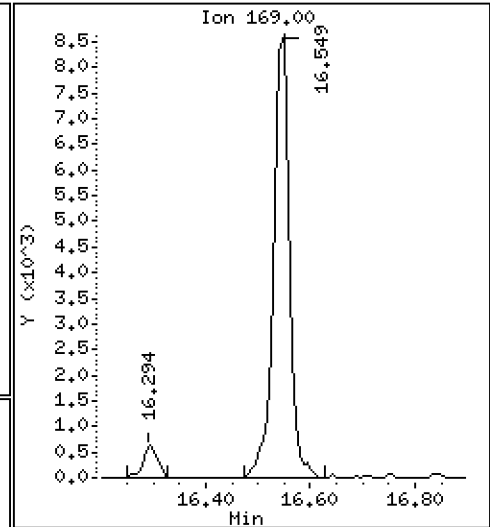
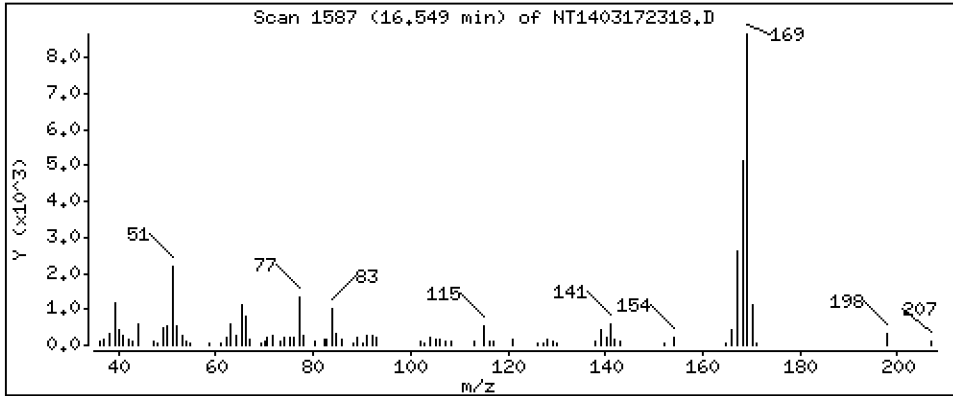
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.1901 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

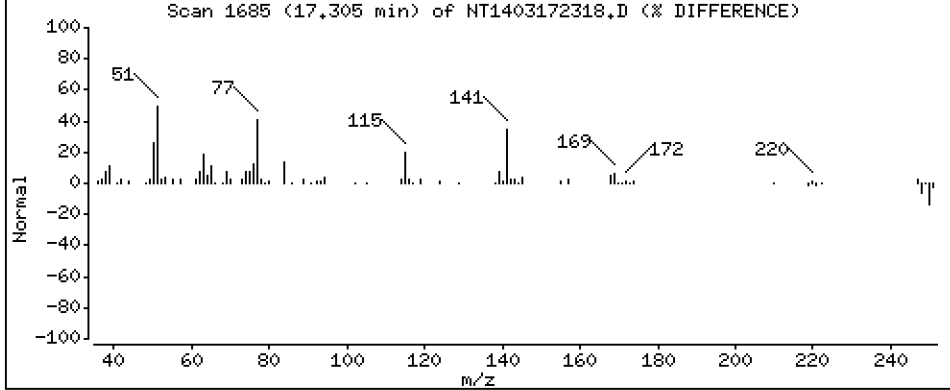
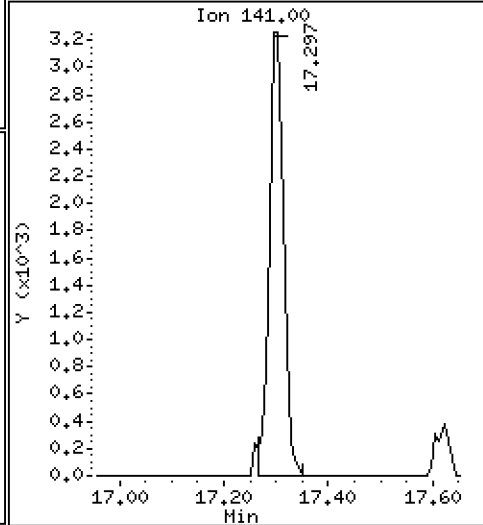
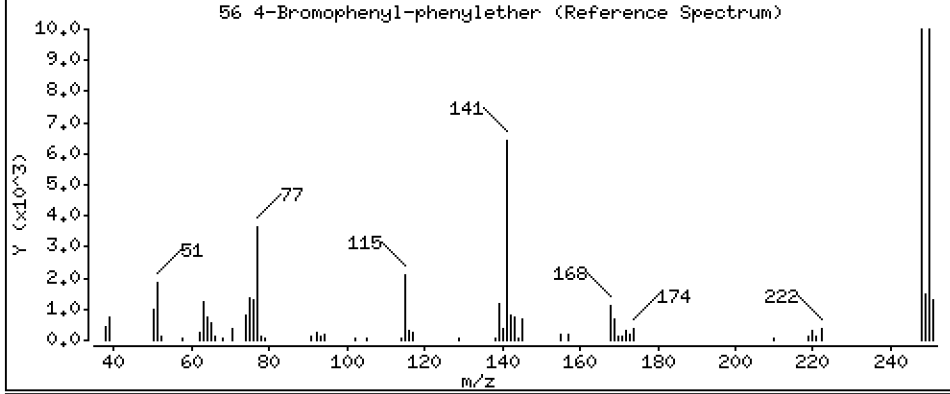
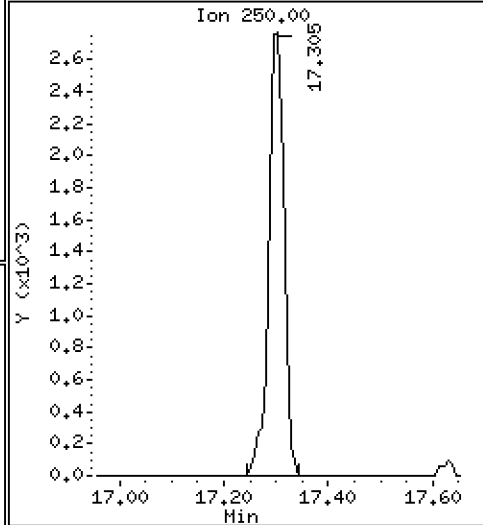
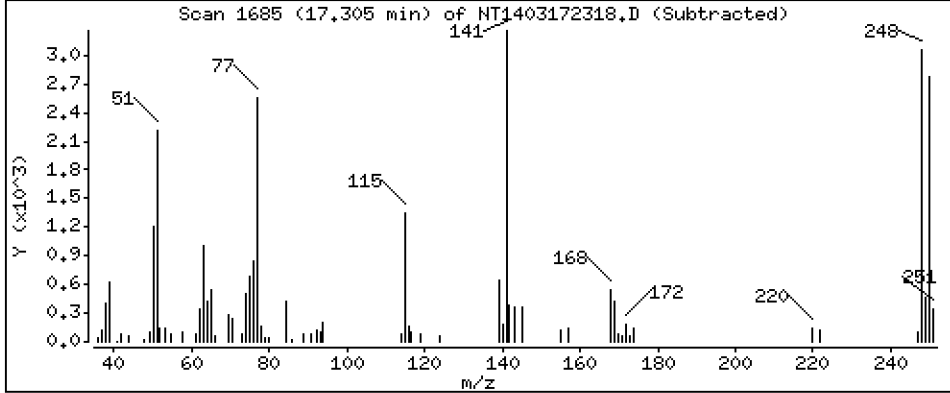
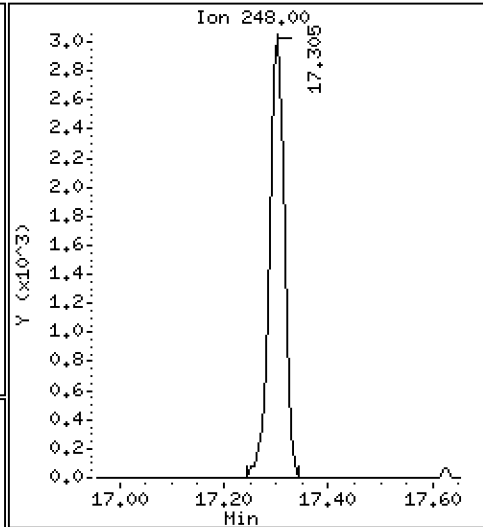
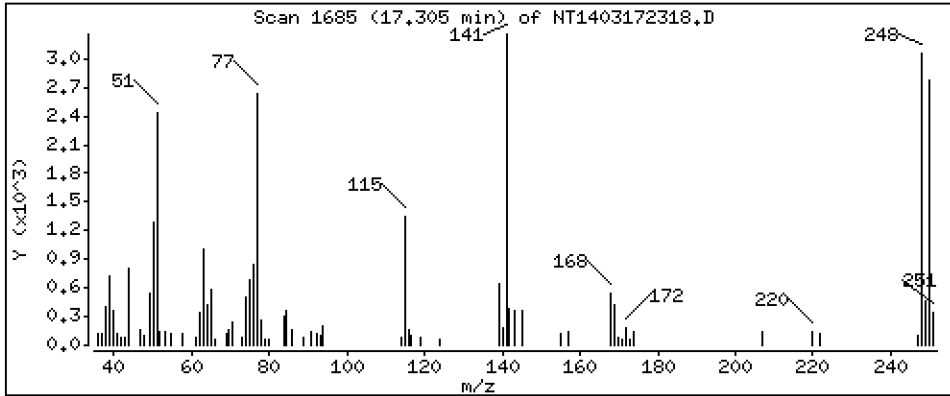
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1868 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

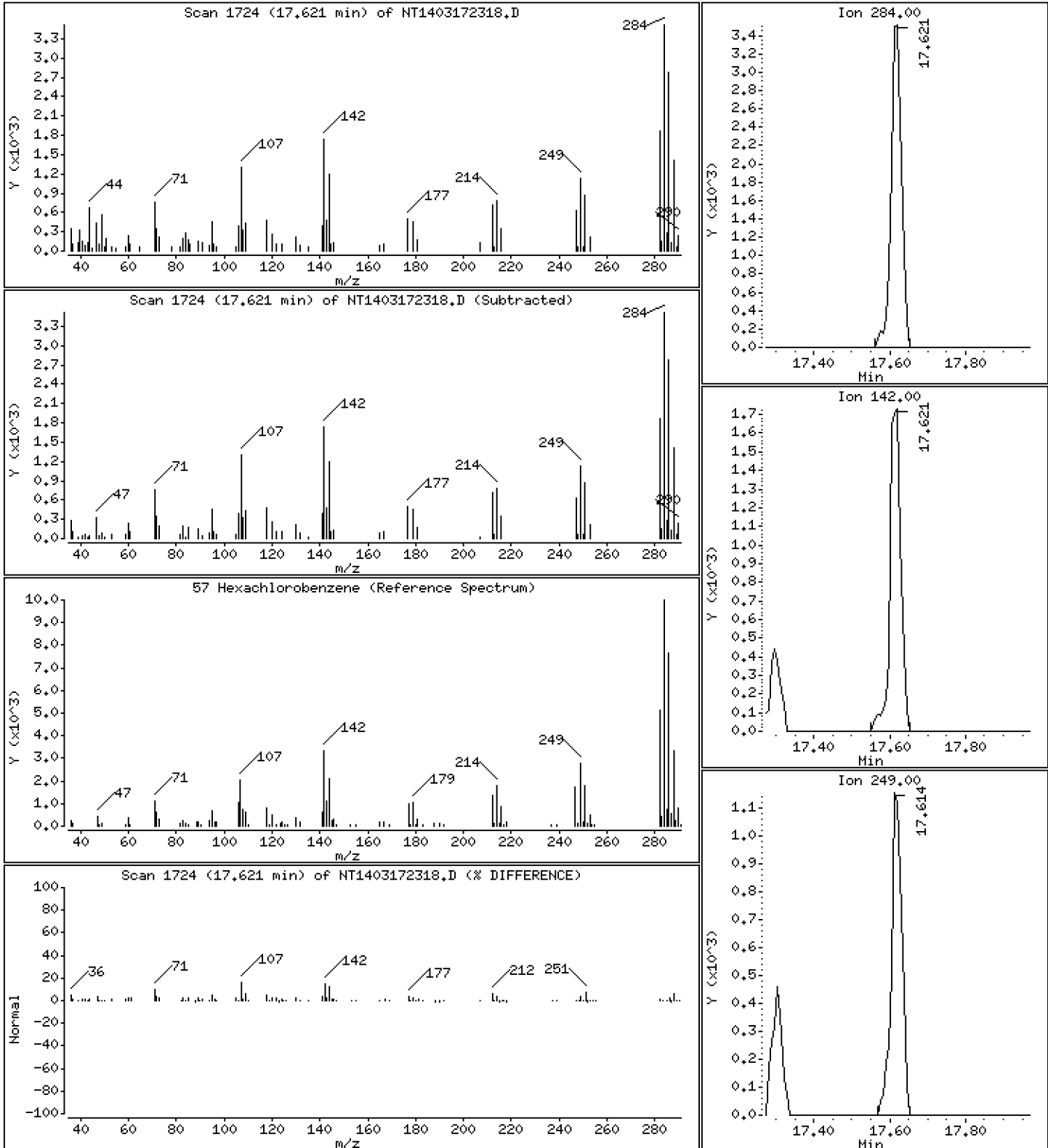
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2040 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

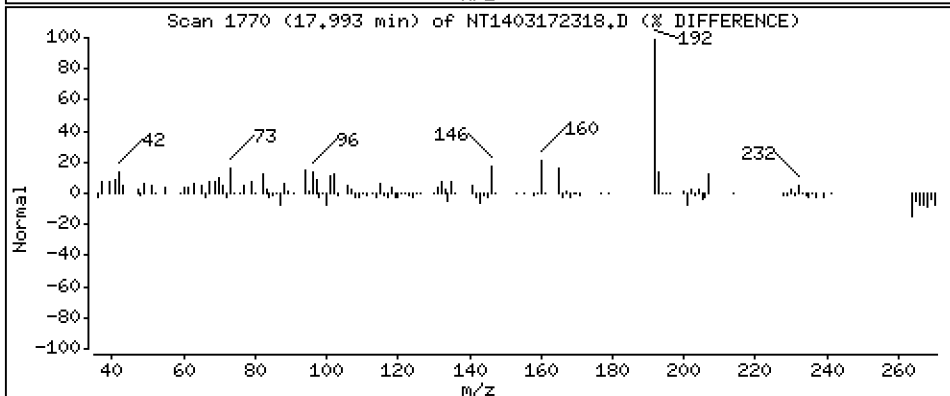
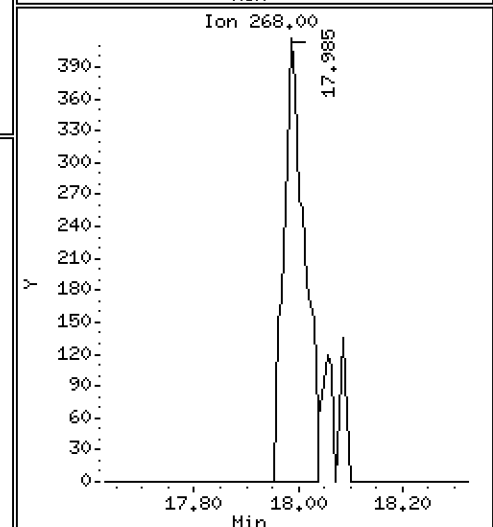
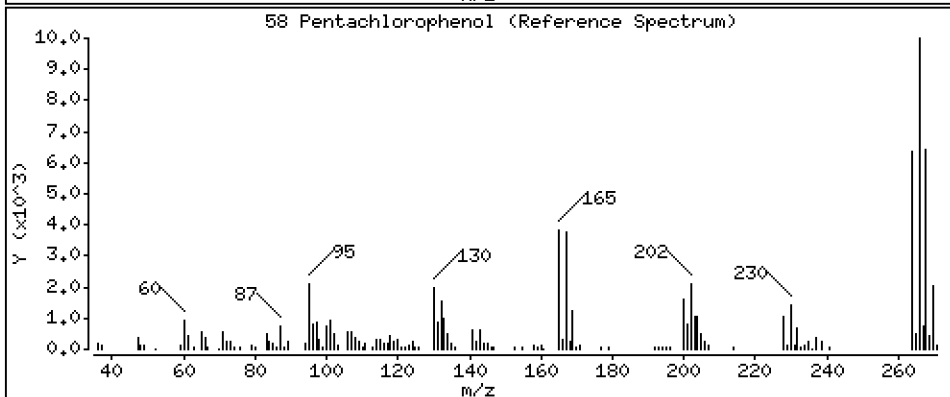
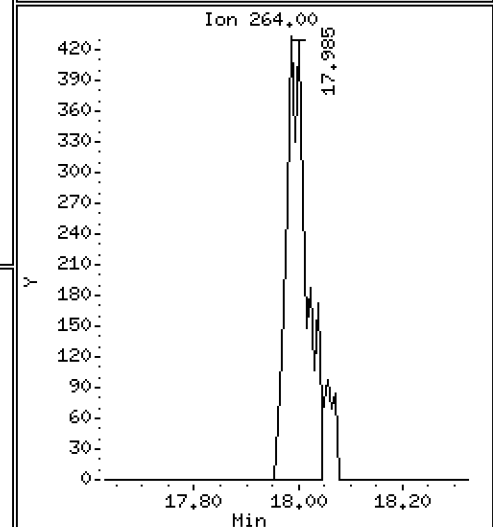
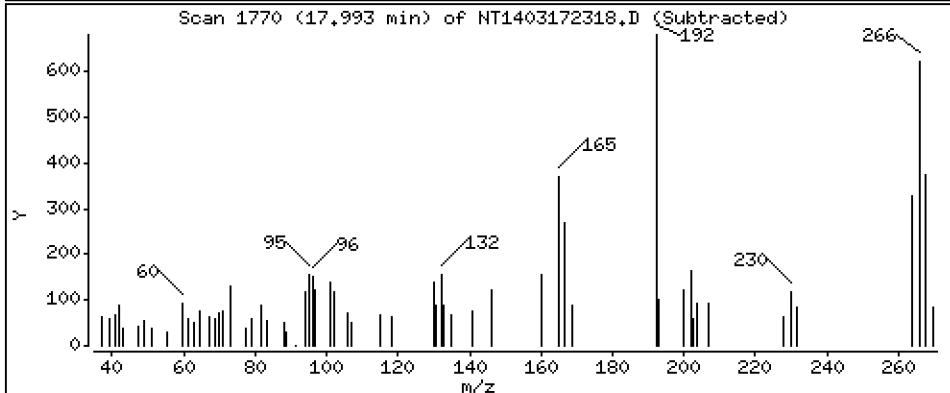
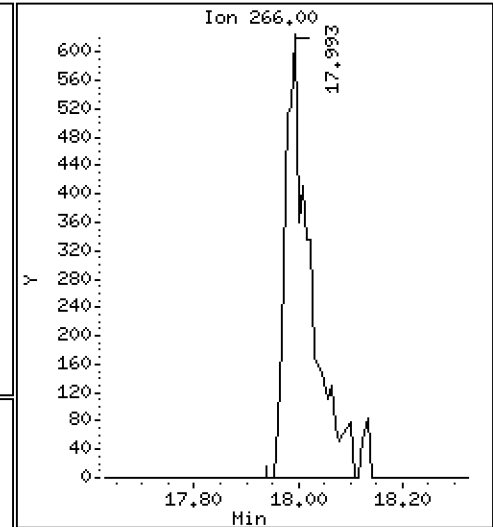
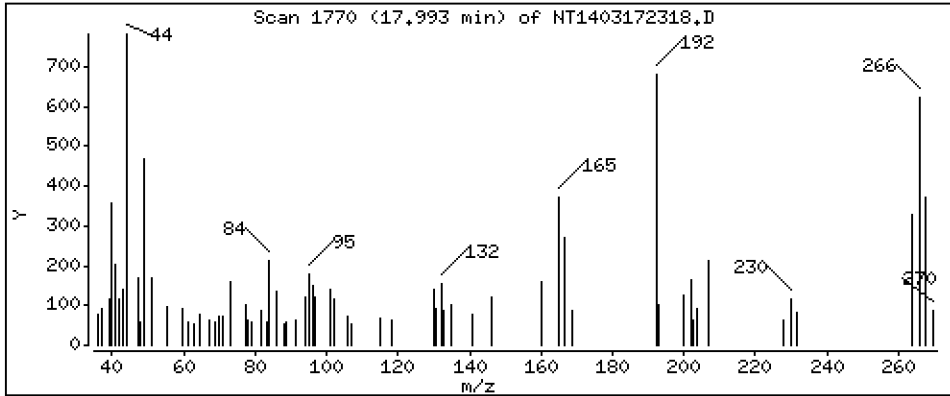
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,09107 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

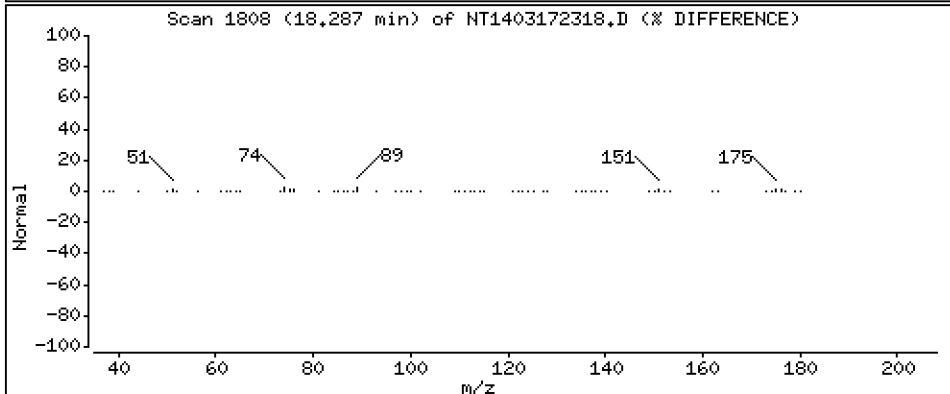
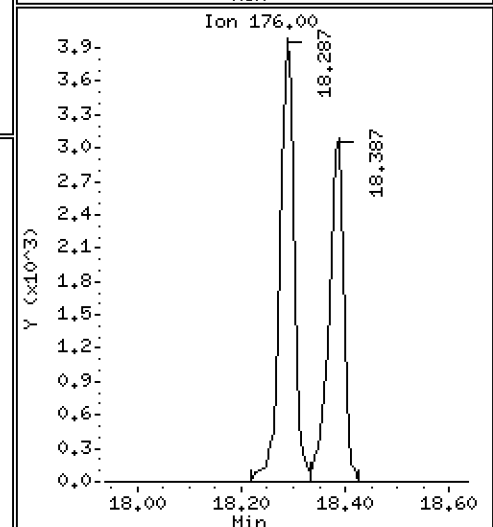
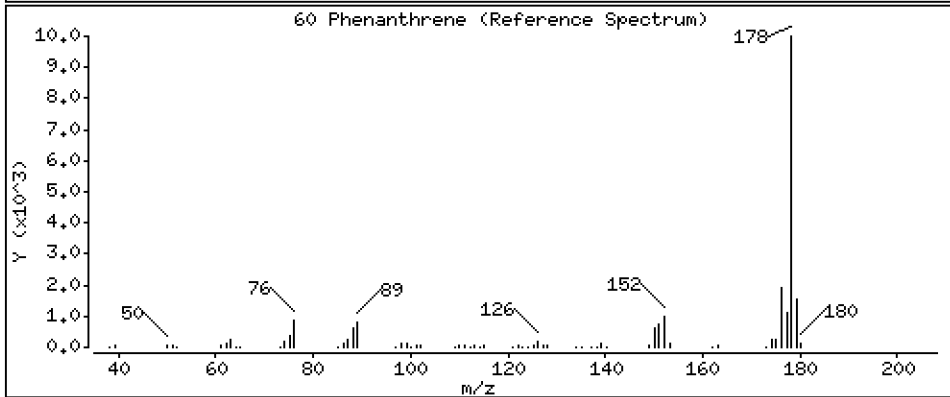
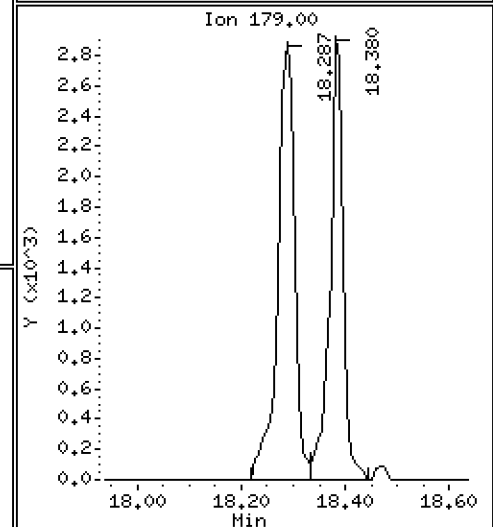
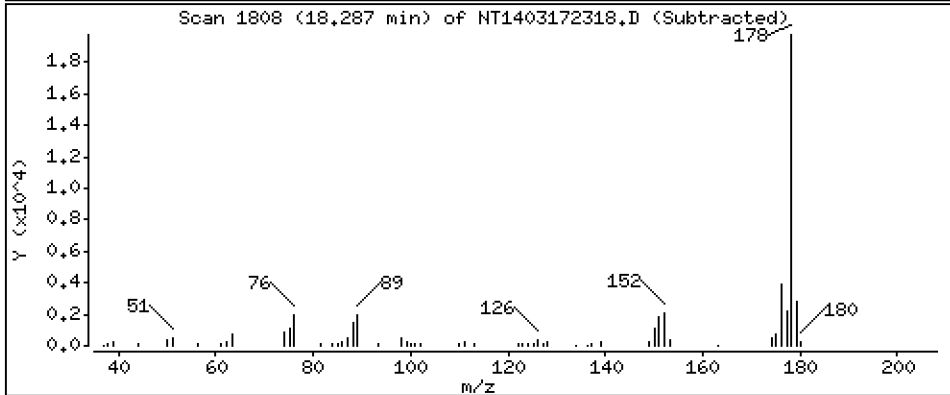
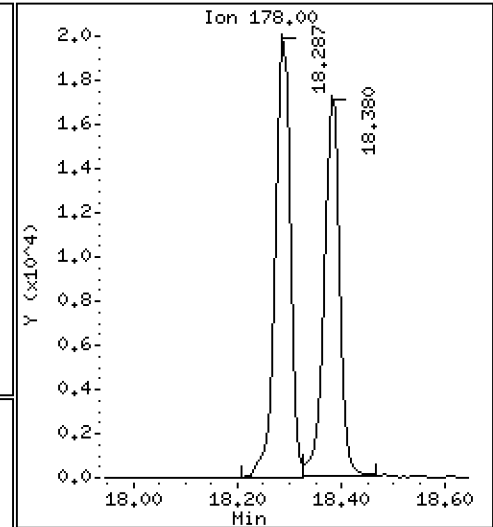
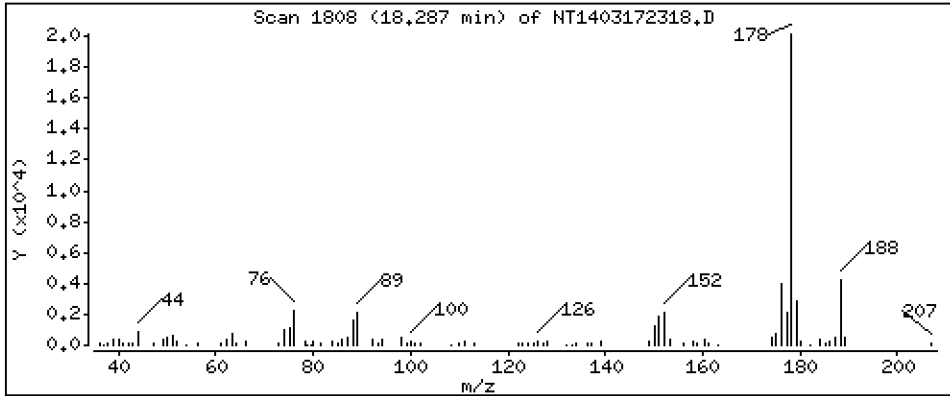
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1994 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

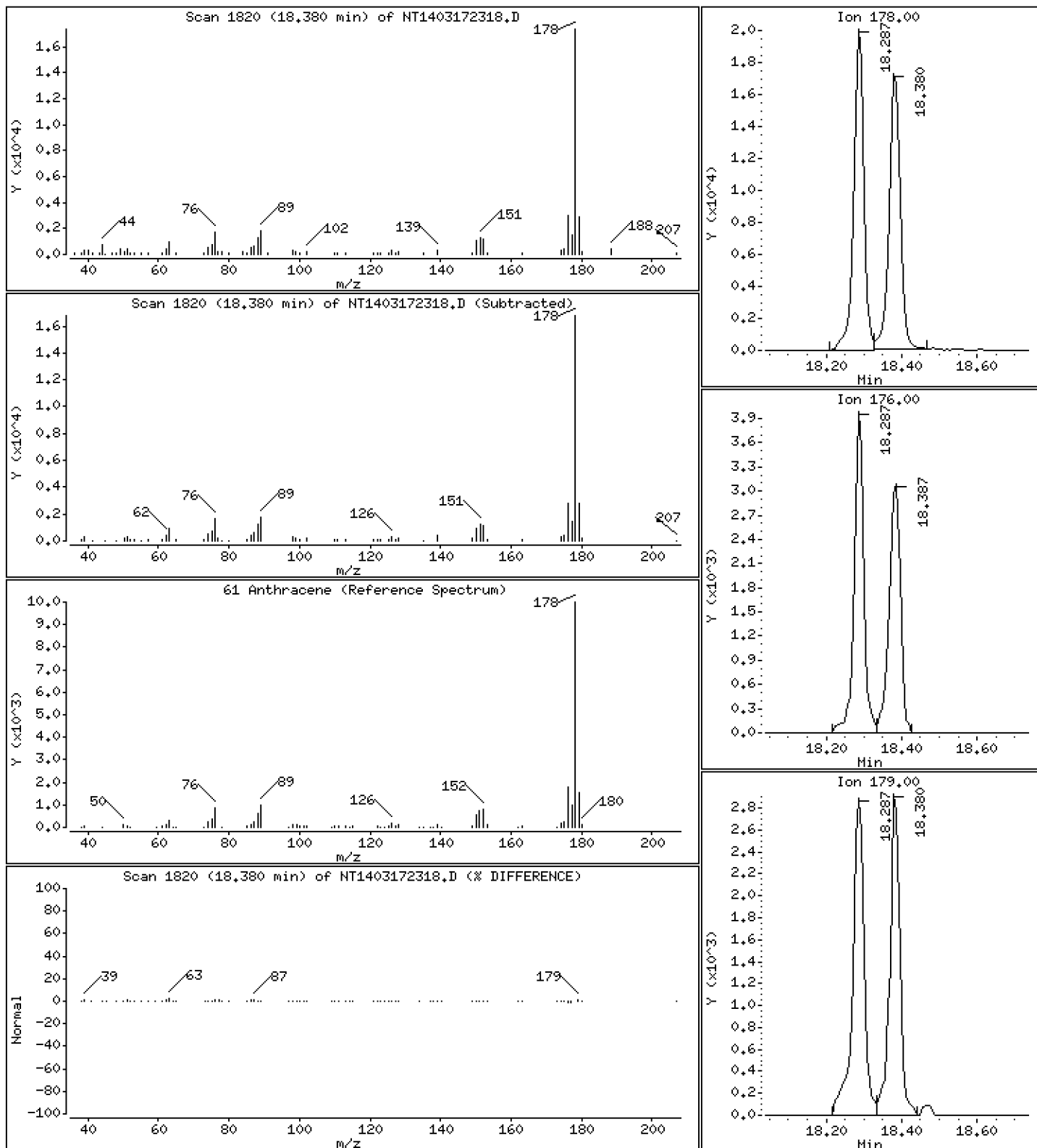
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1833 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

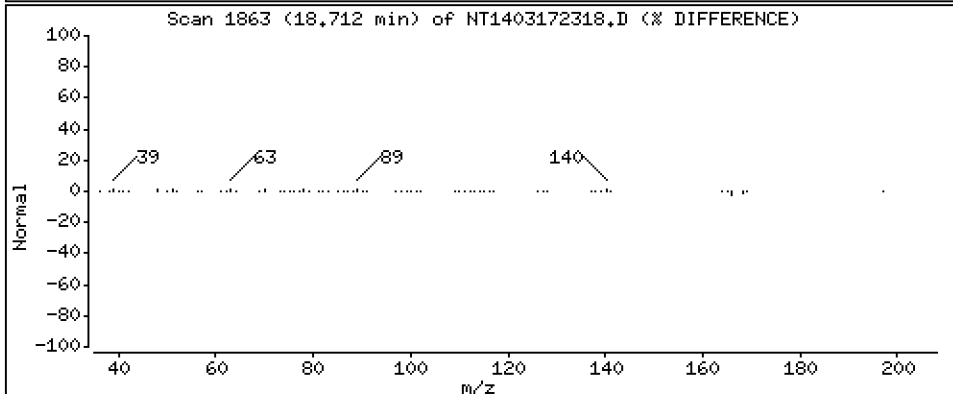
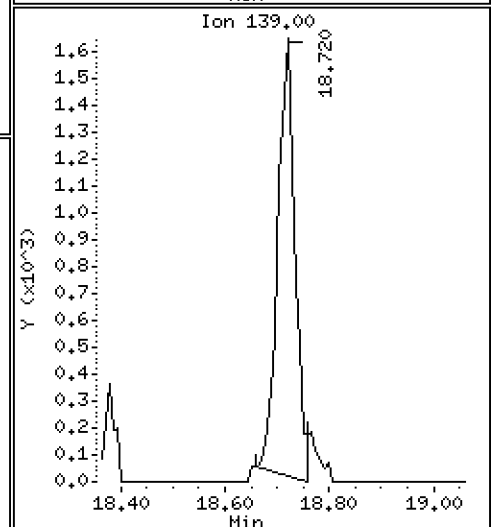
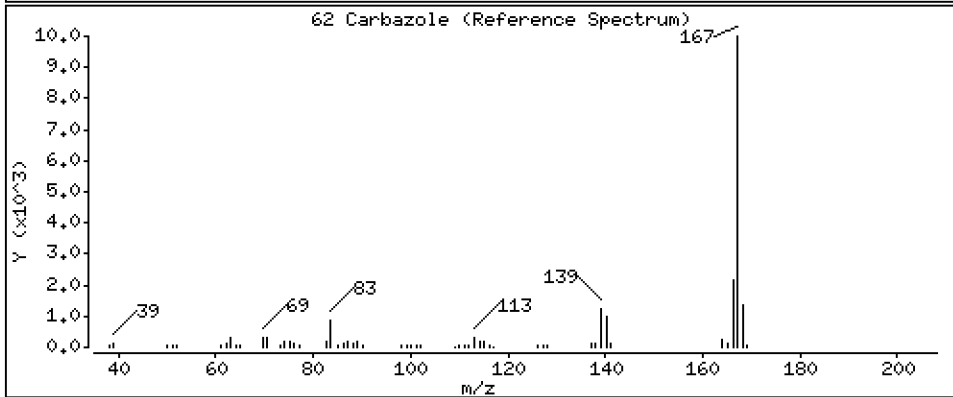
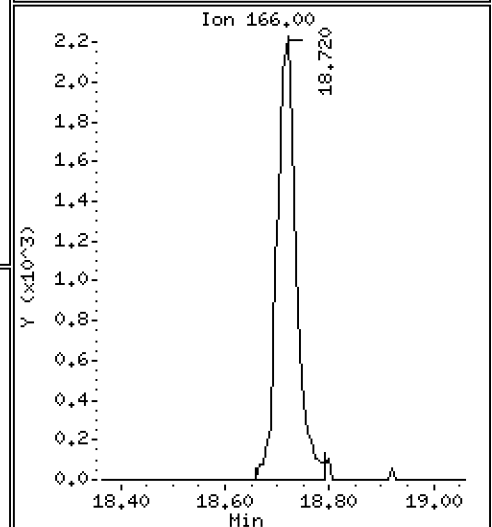
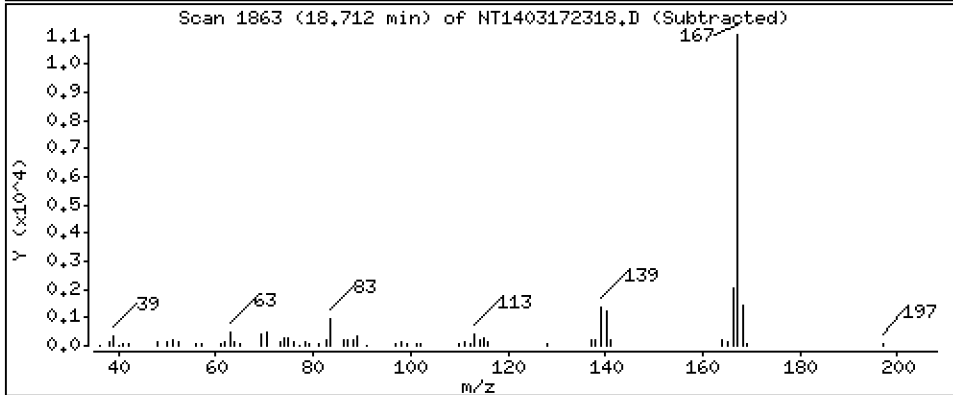
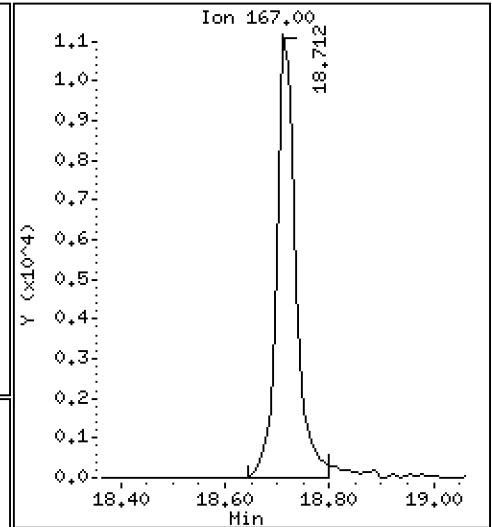
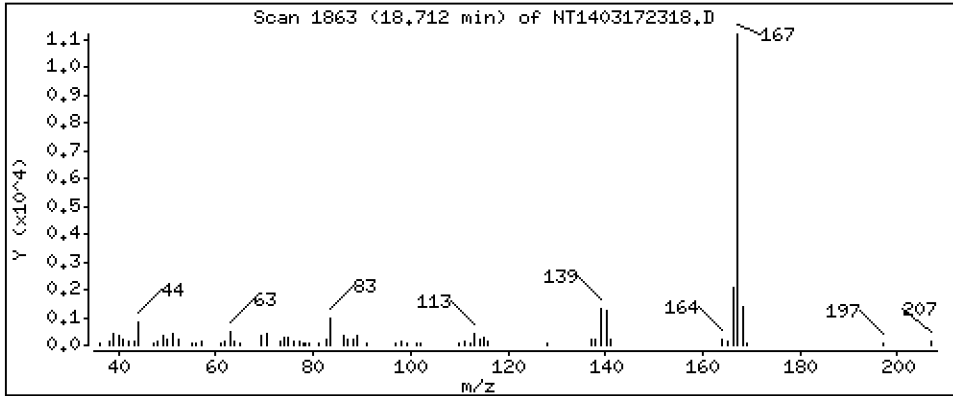
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1654 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

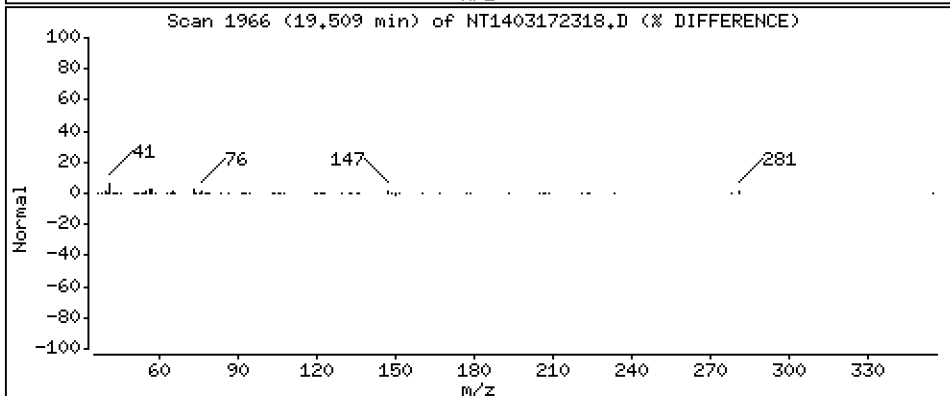
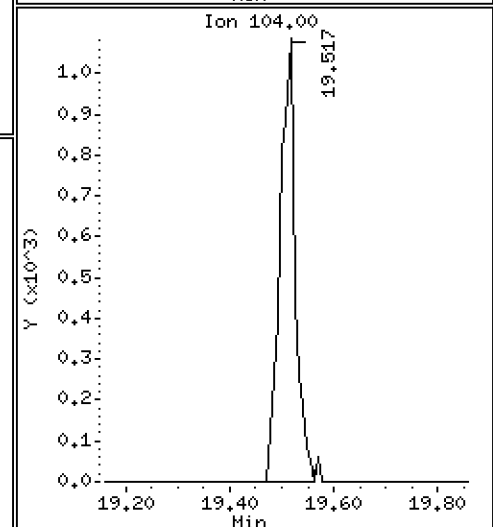
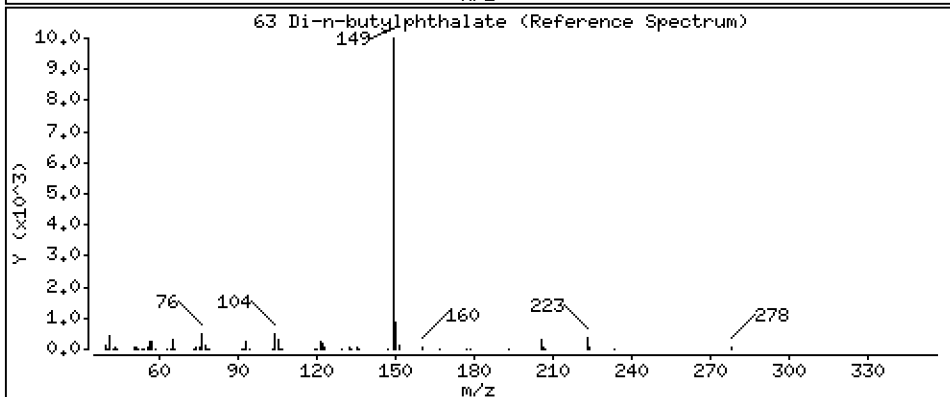
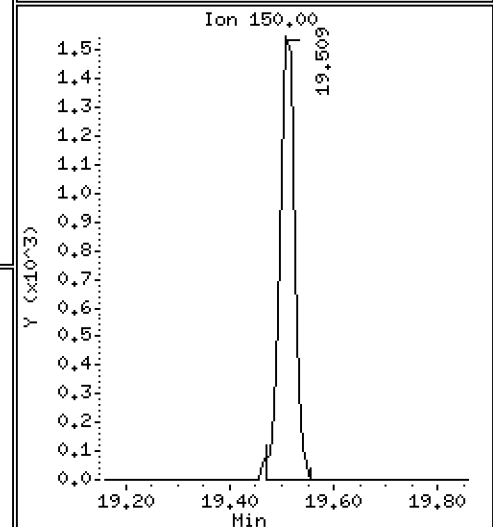
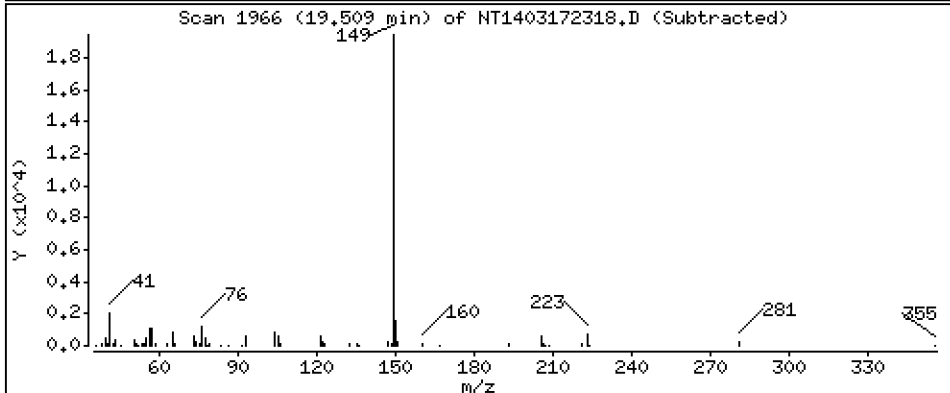
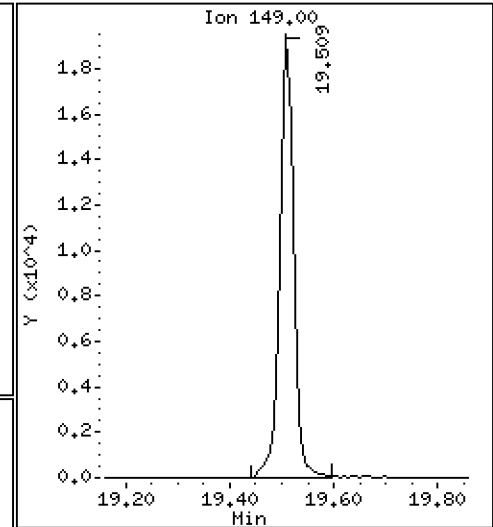
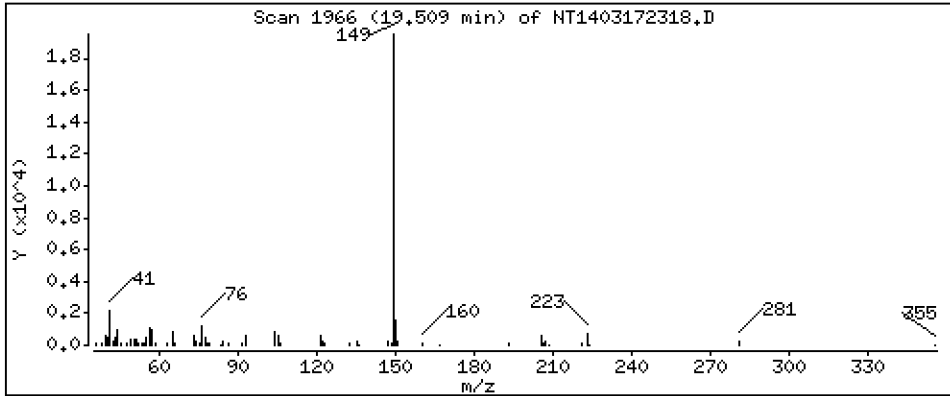
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1620 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

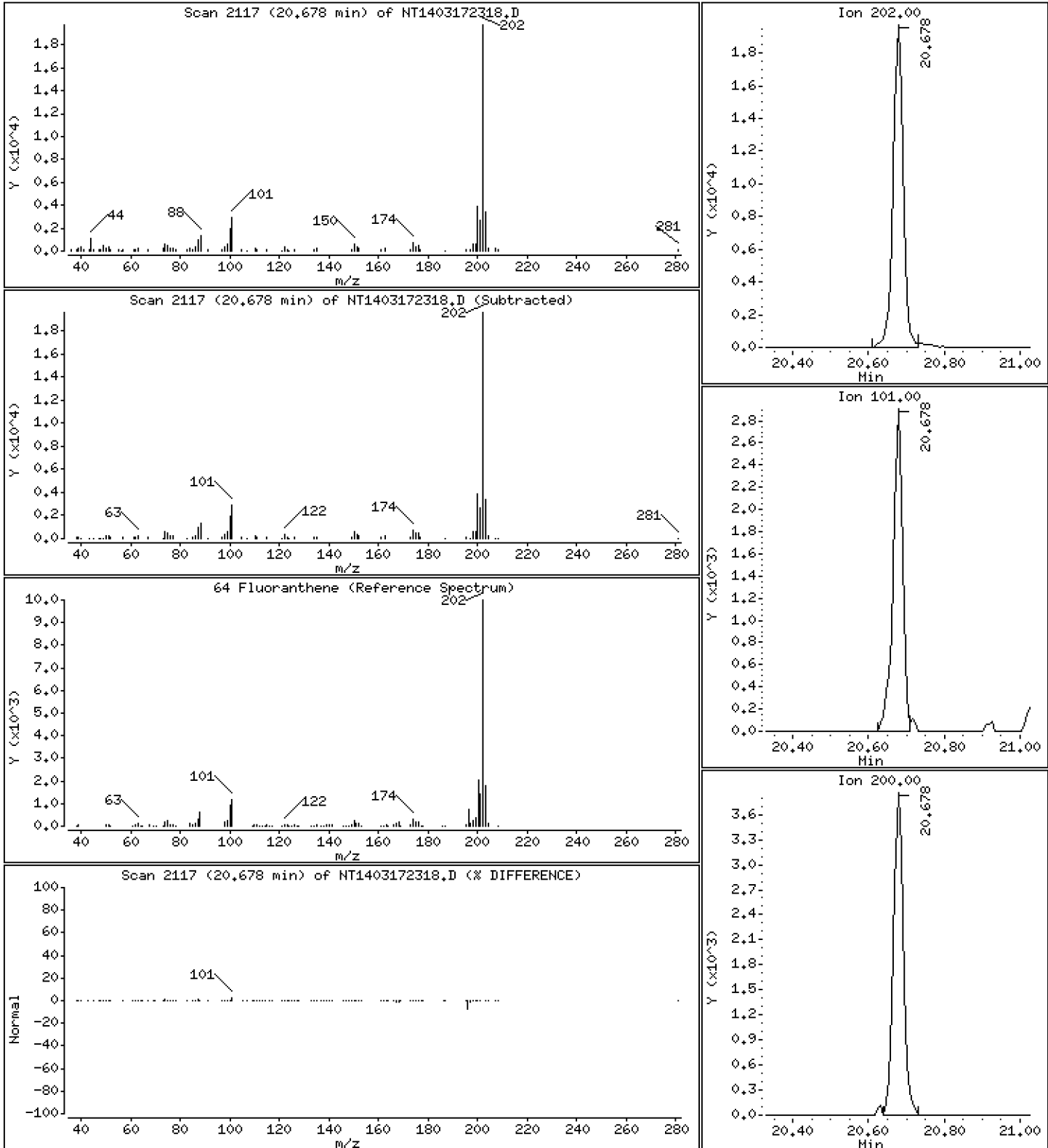
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,2242 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

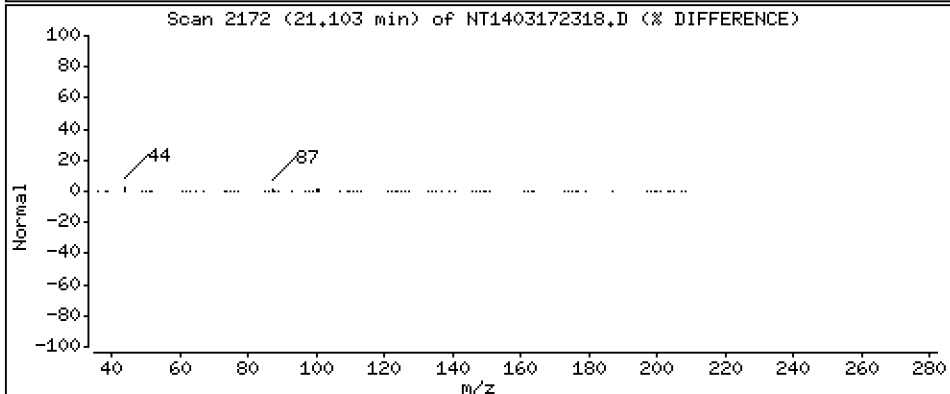
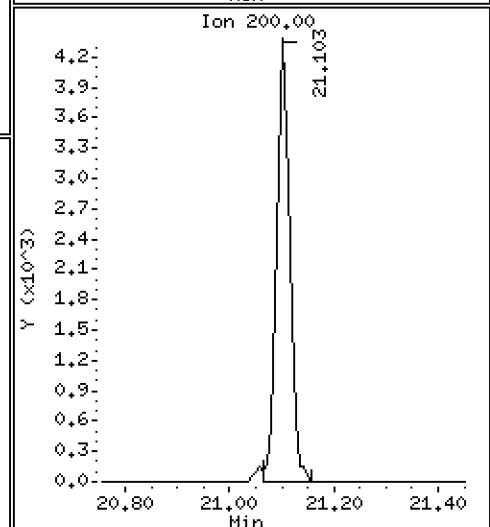
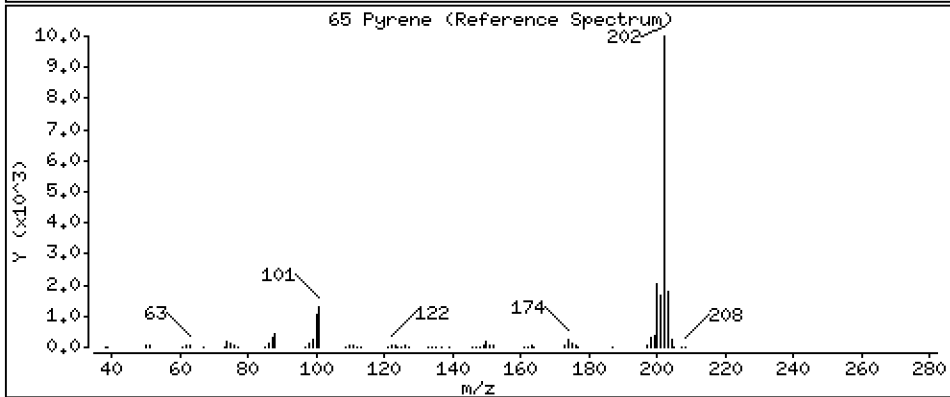
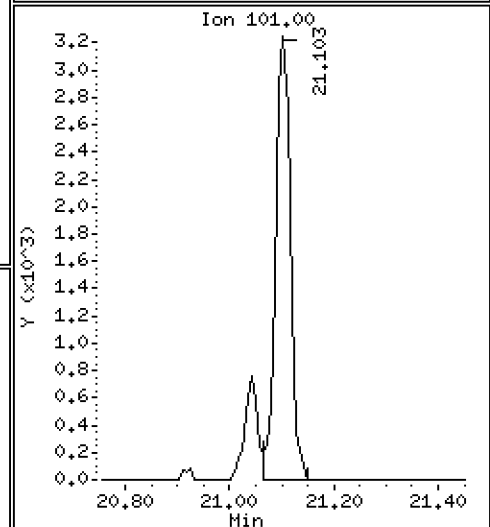
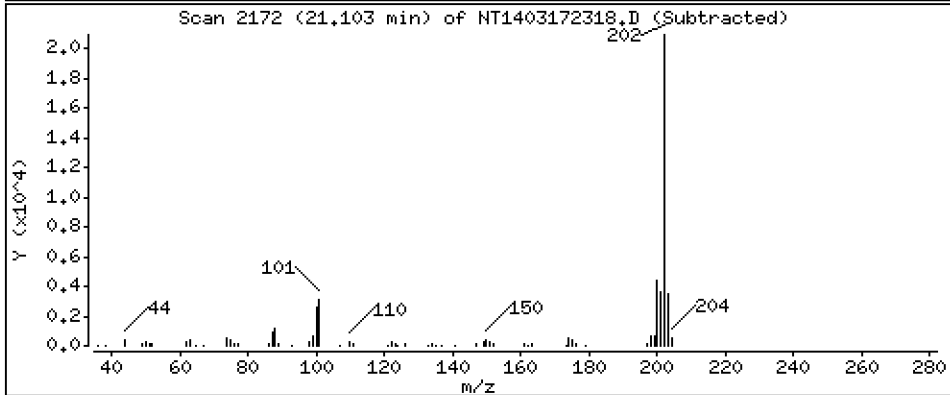
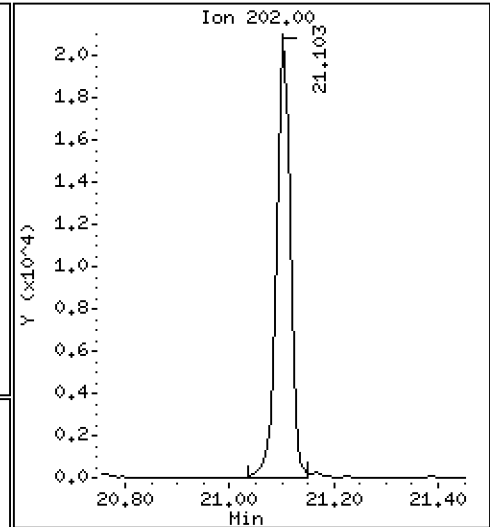
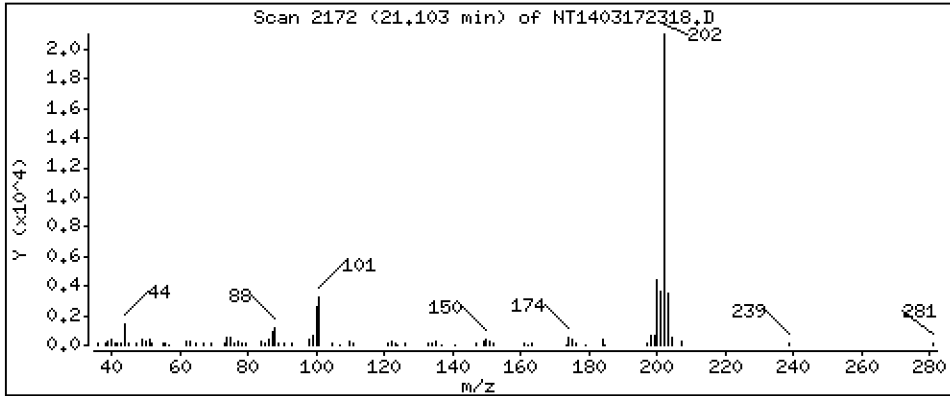
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,2306 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

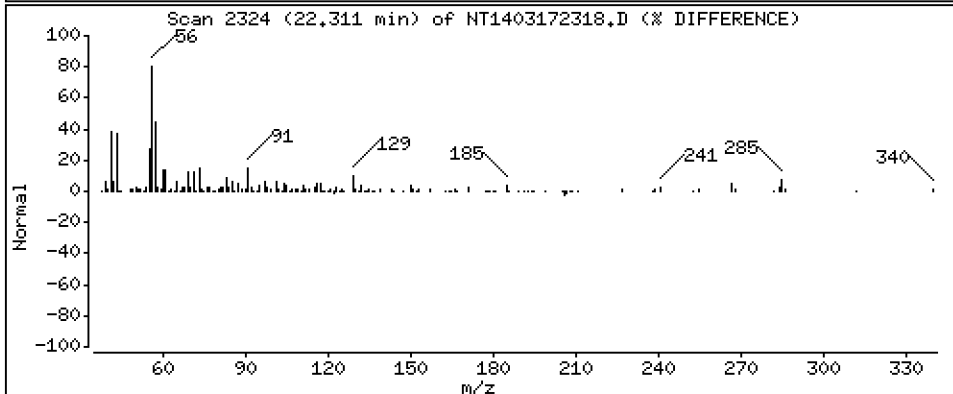
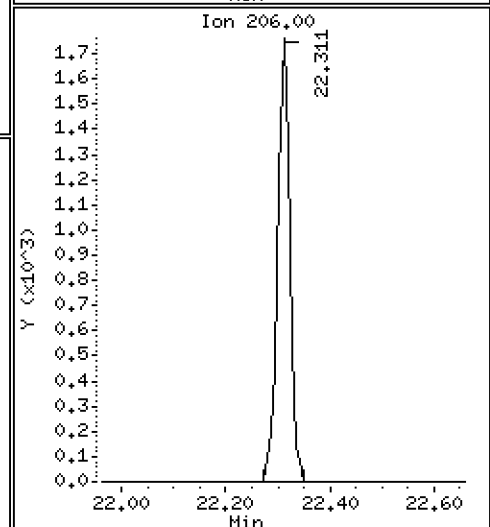
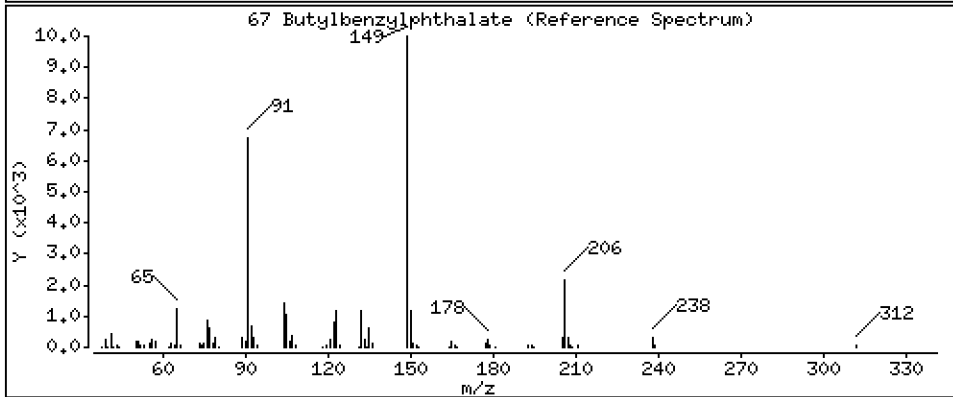
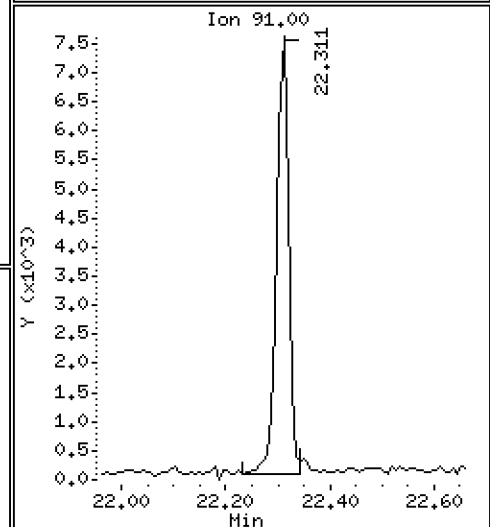
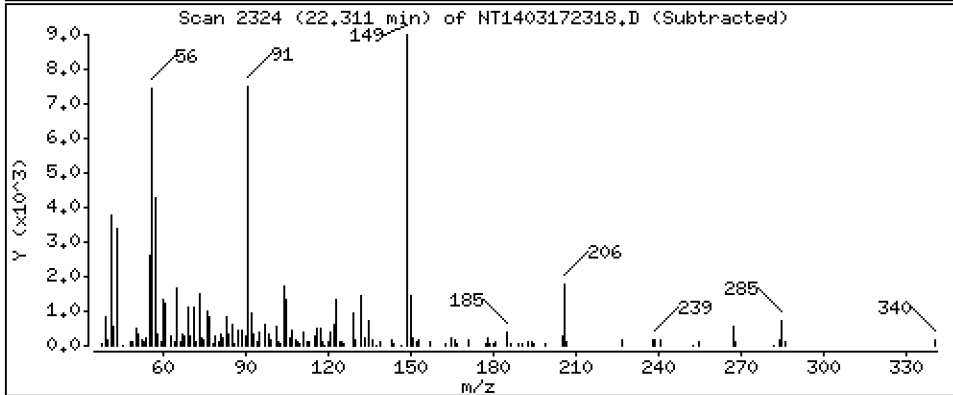
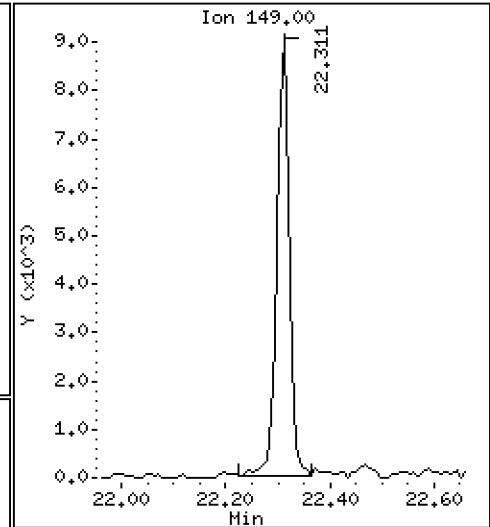
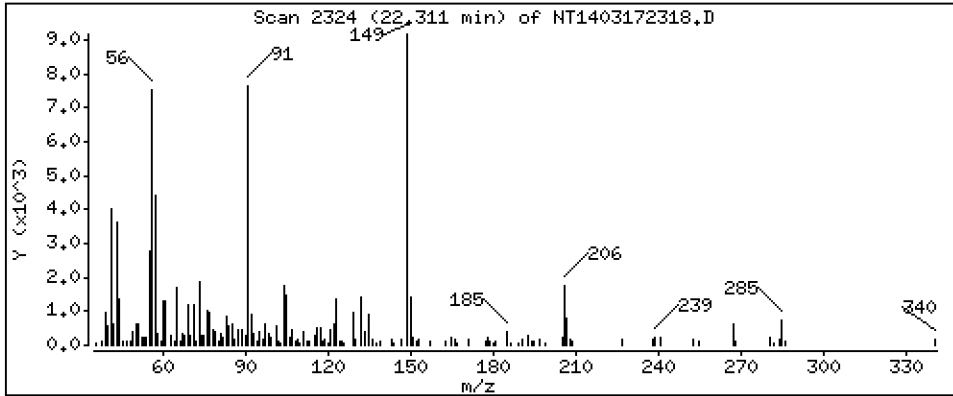
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.2018 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

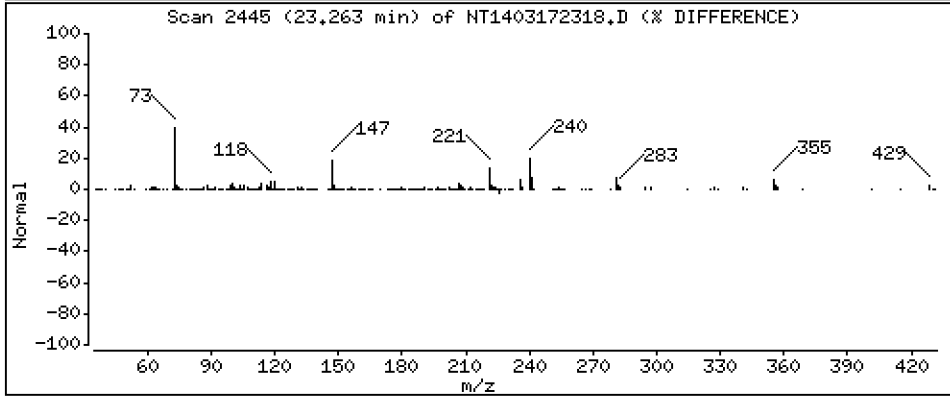
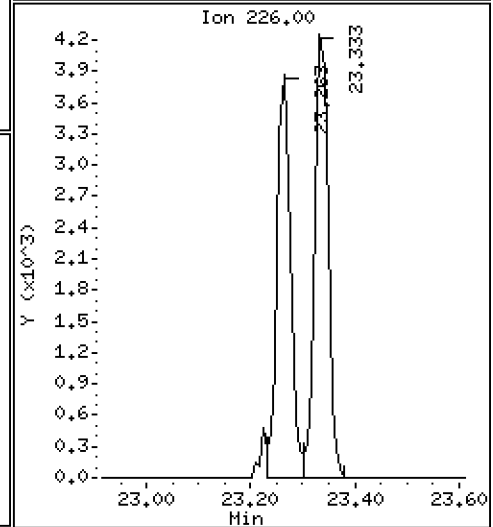
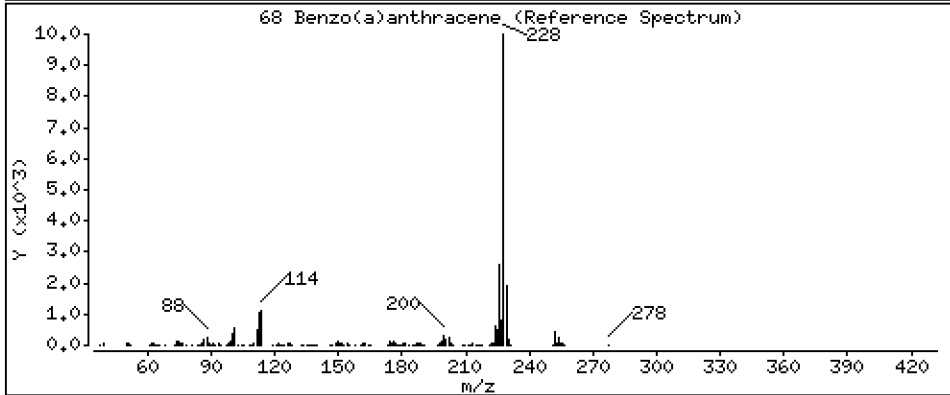
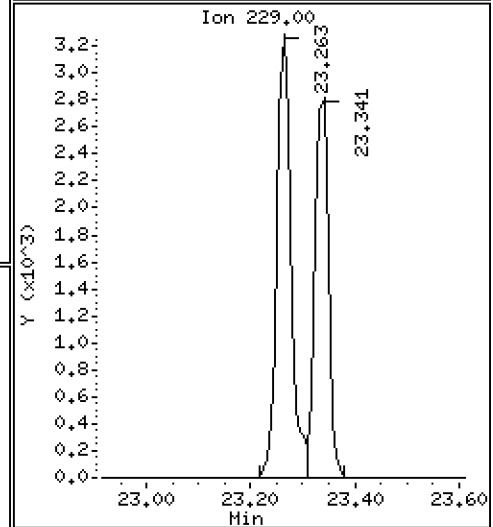
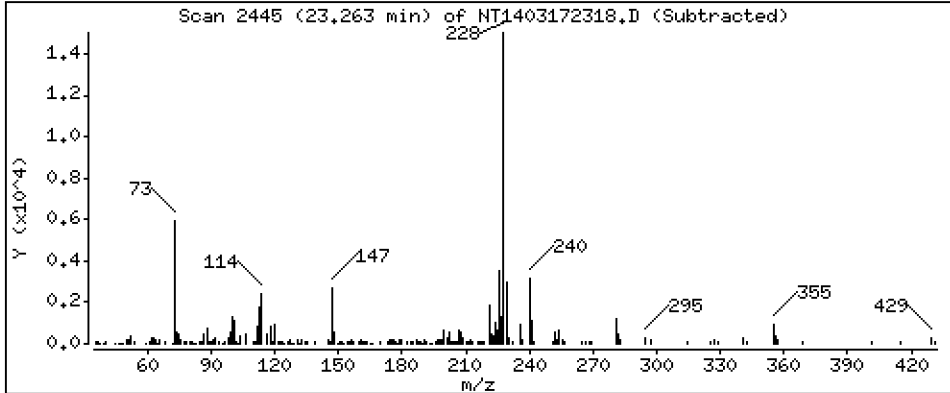
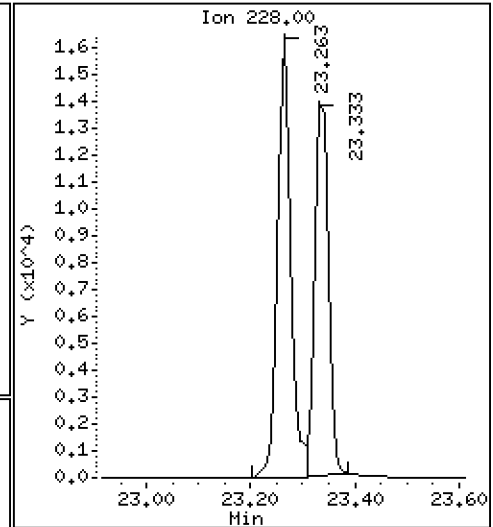
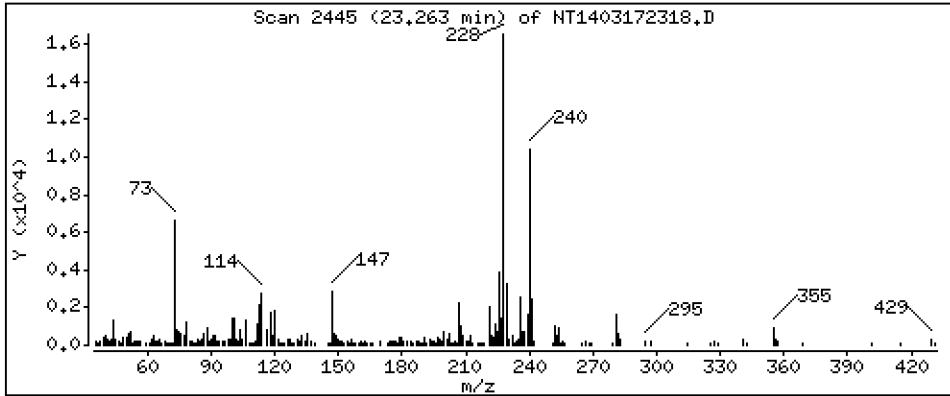
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,1986 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

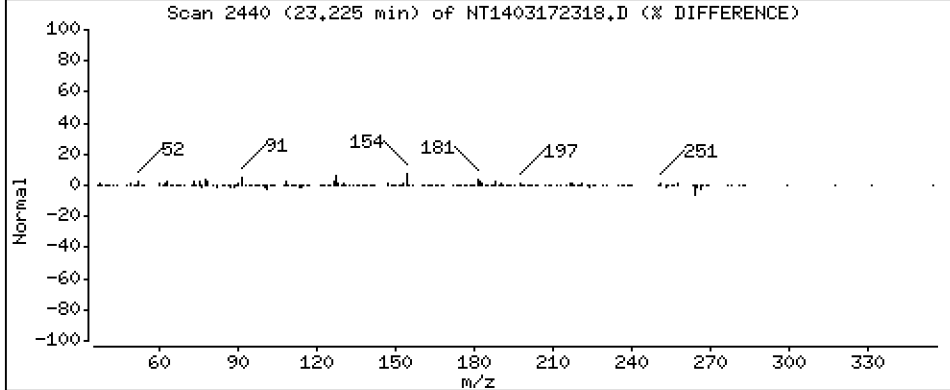
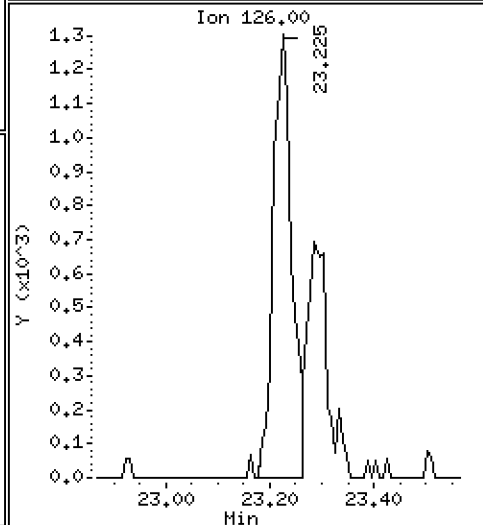
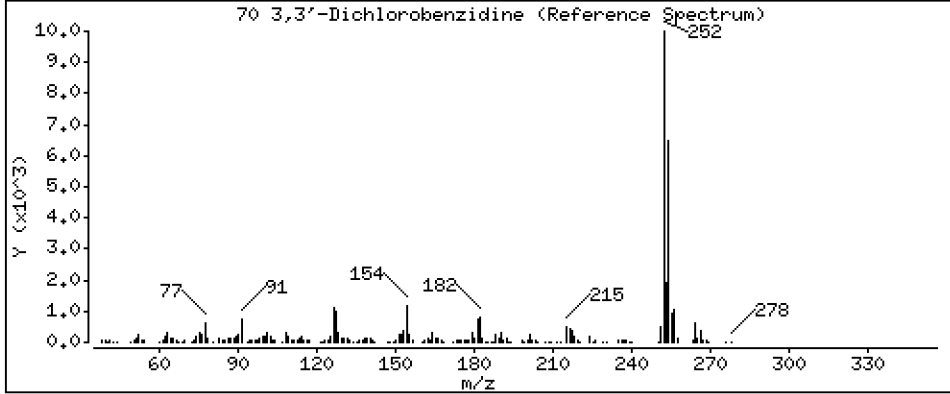
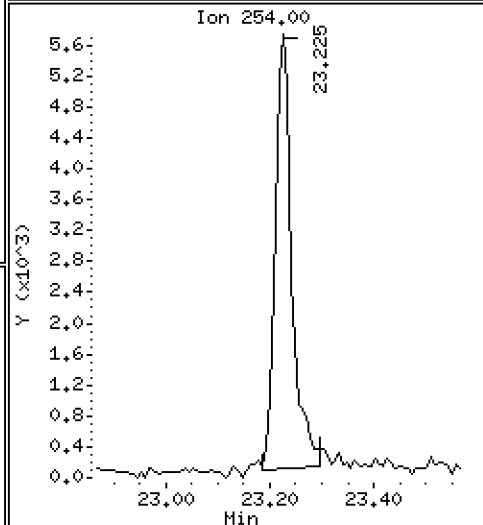
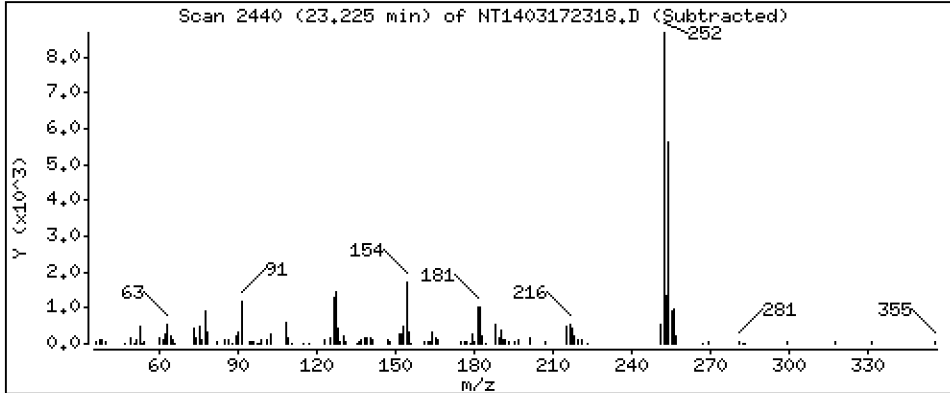
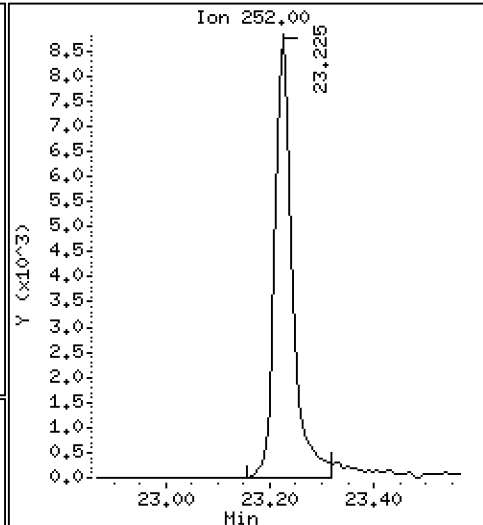
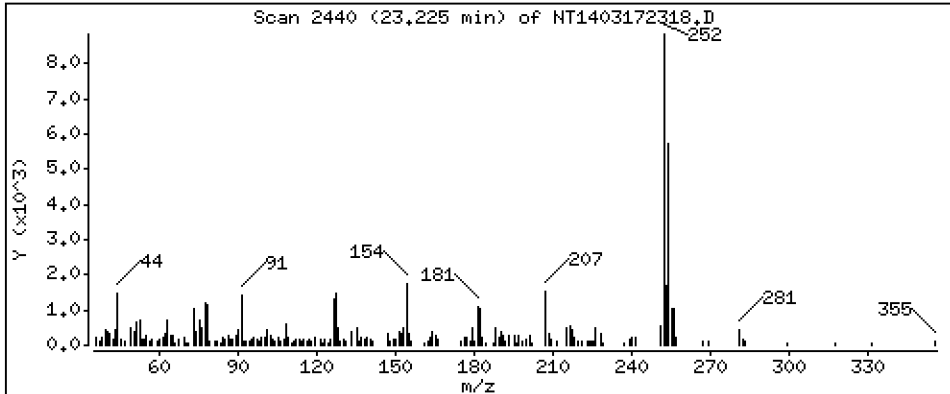
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,5100 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

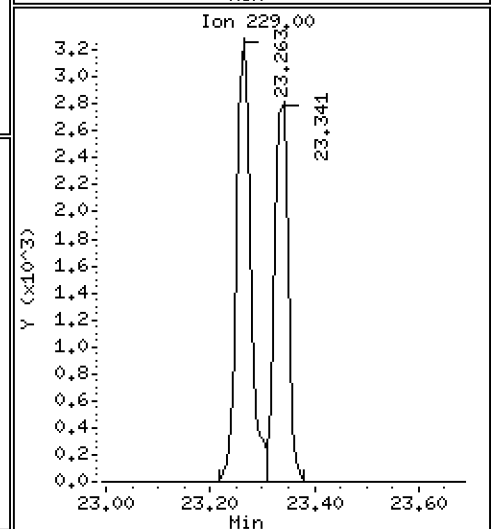
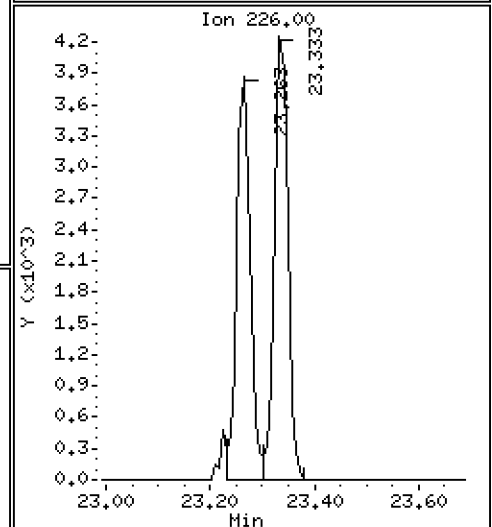
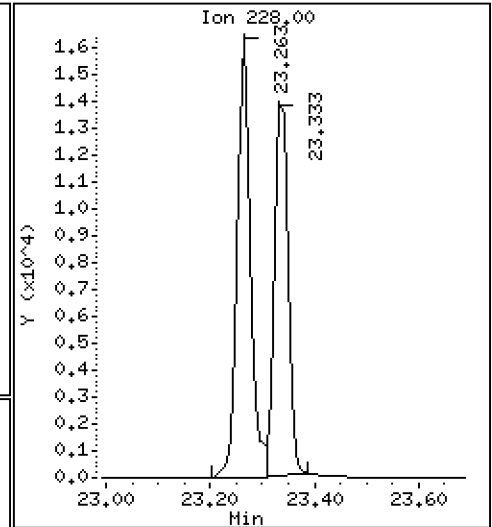
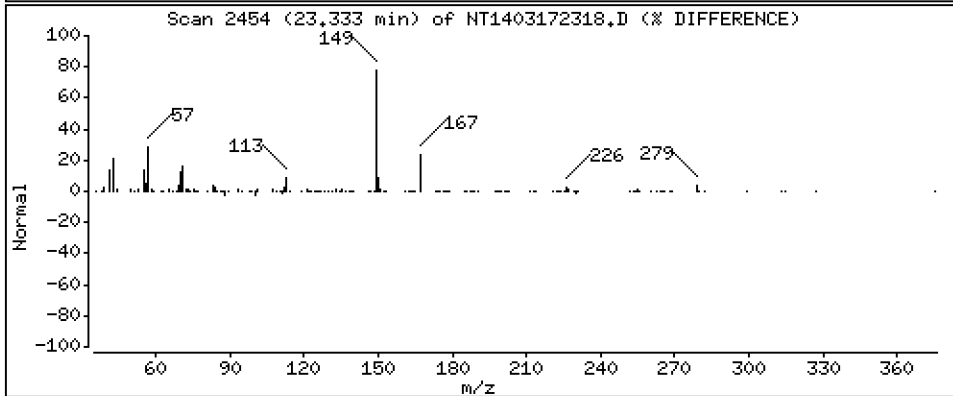
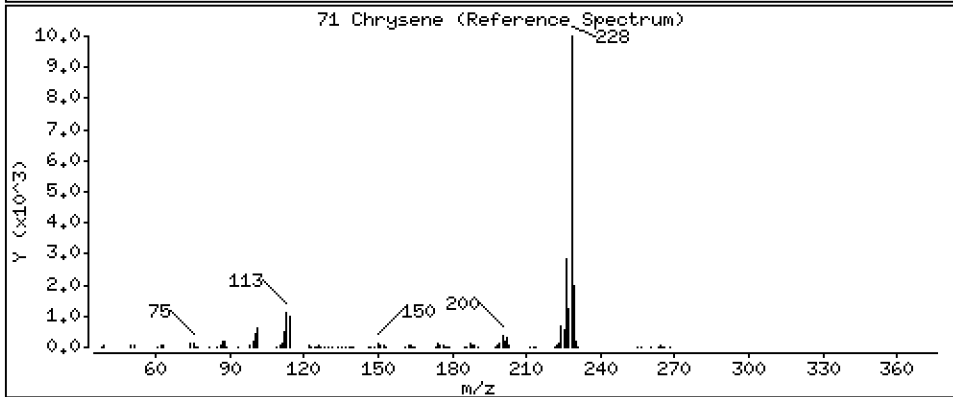
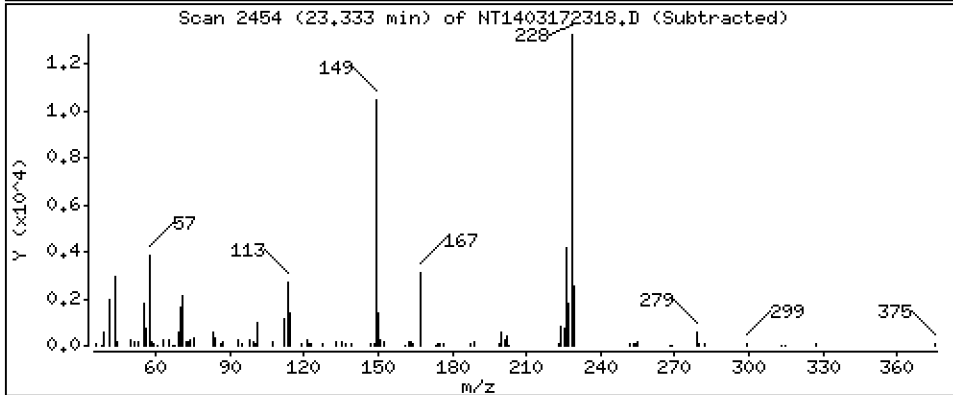
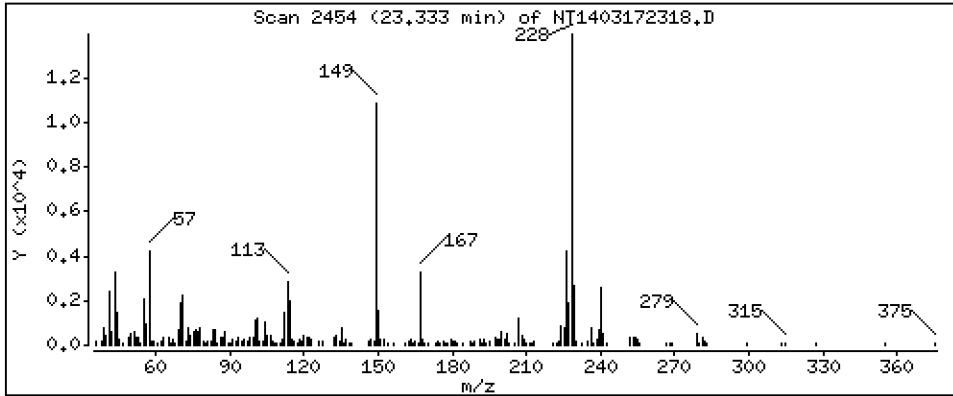
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,1902 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

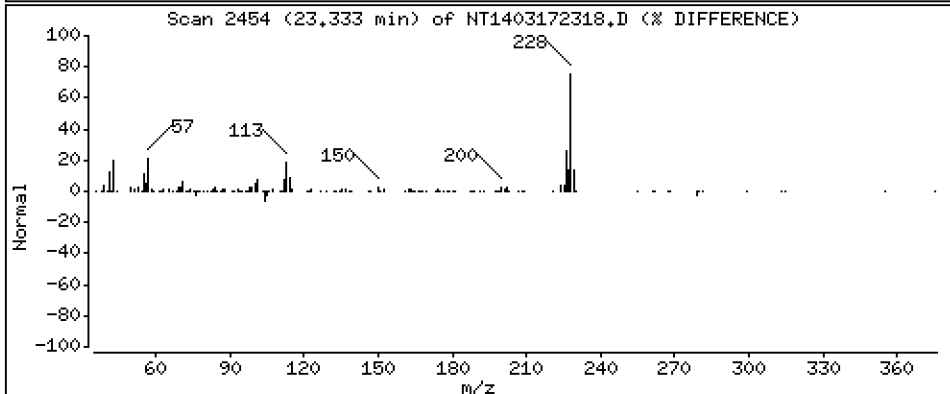
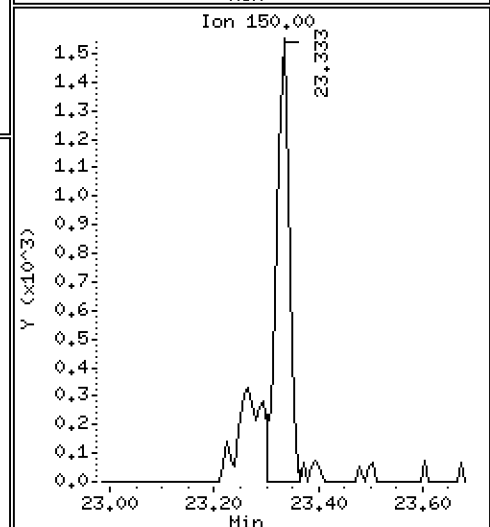
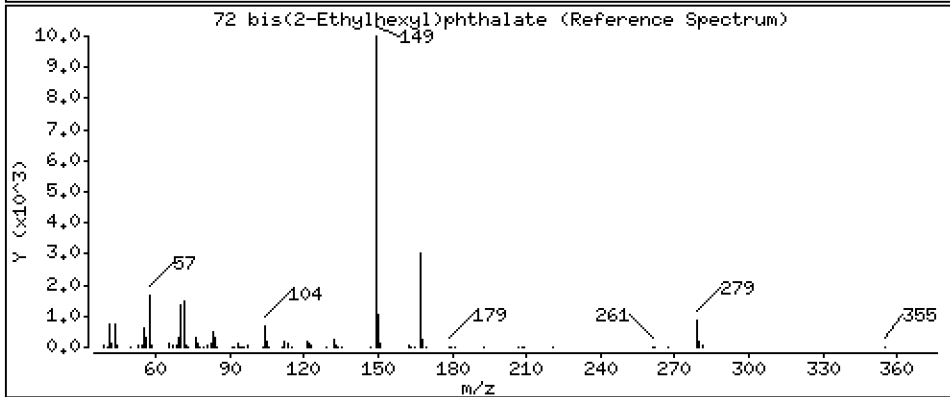
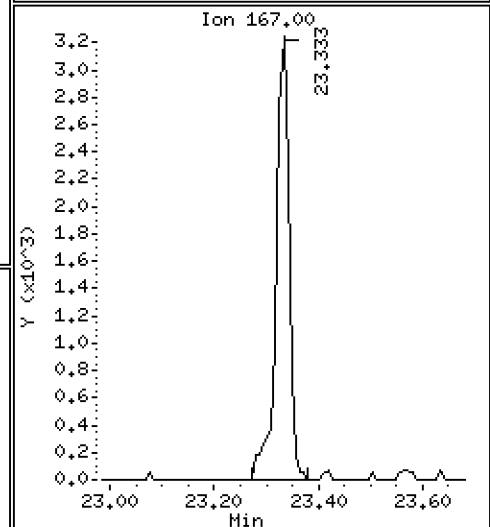
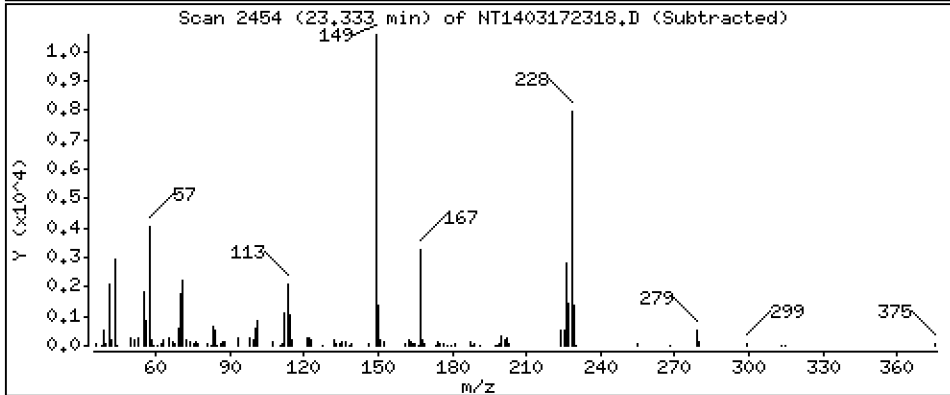
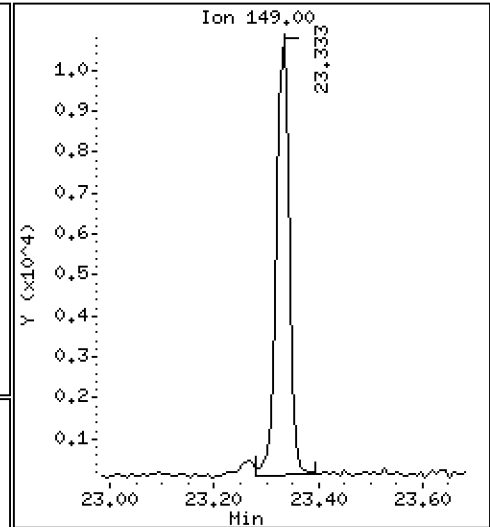
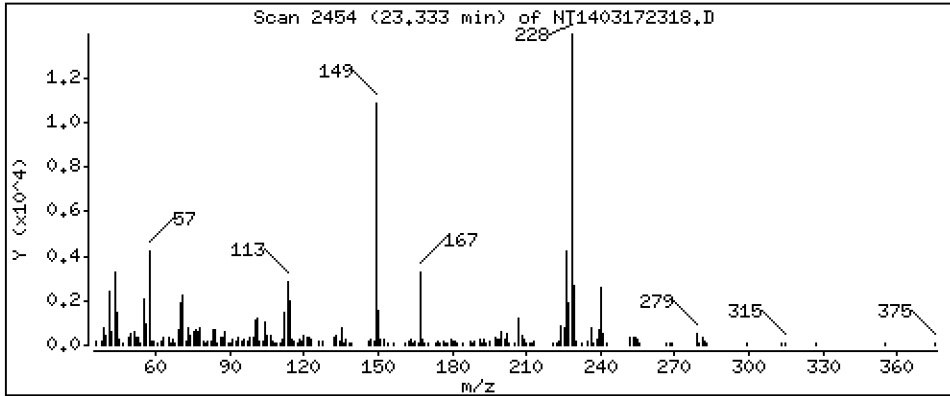
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,2051 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

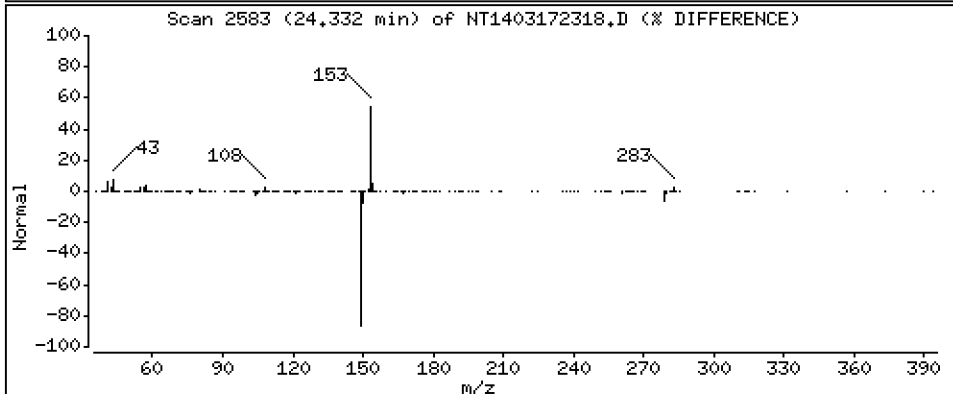
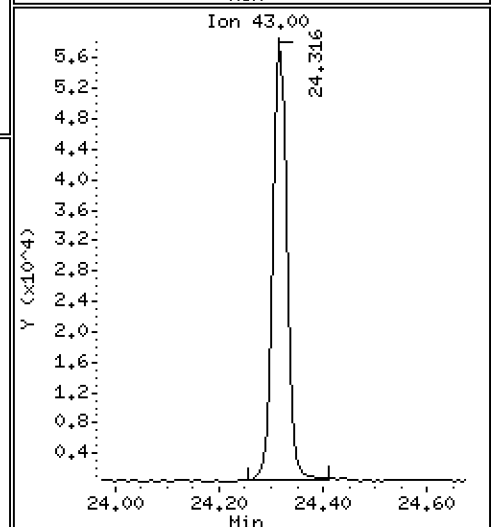
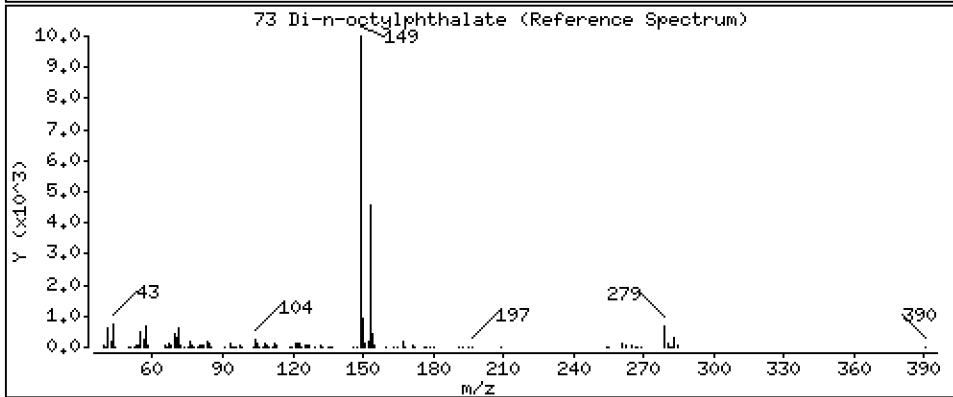
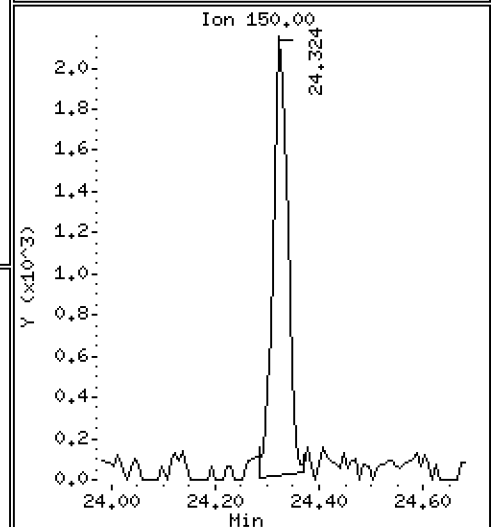
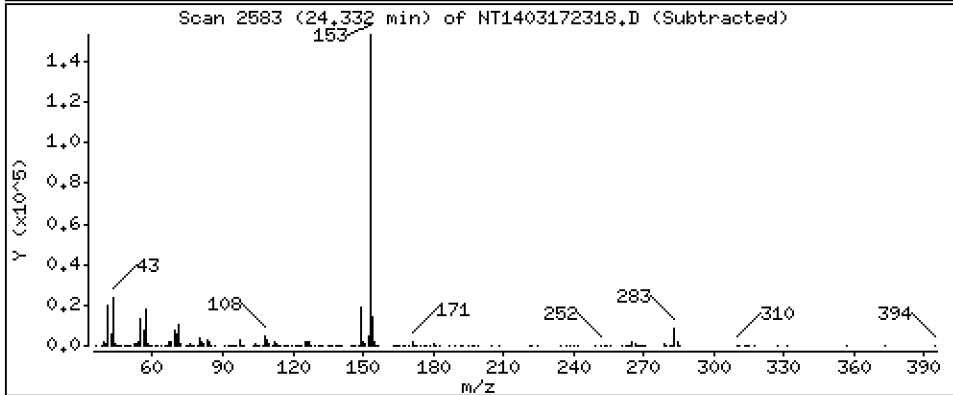
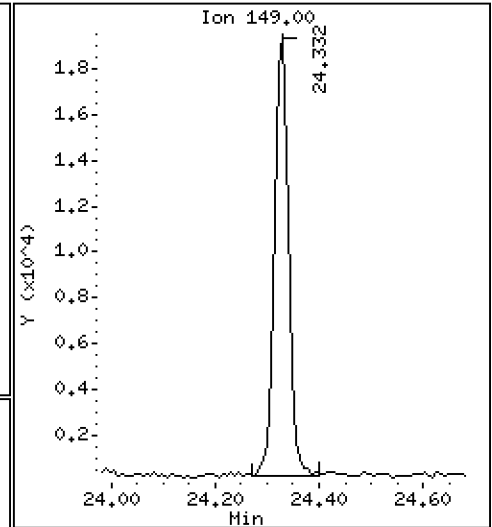
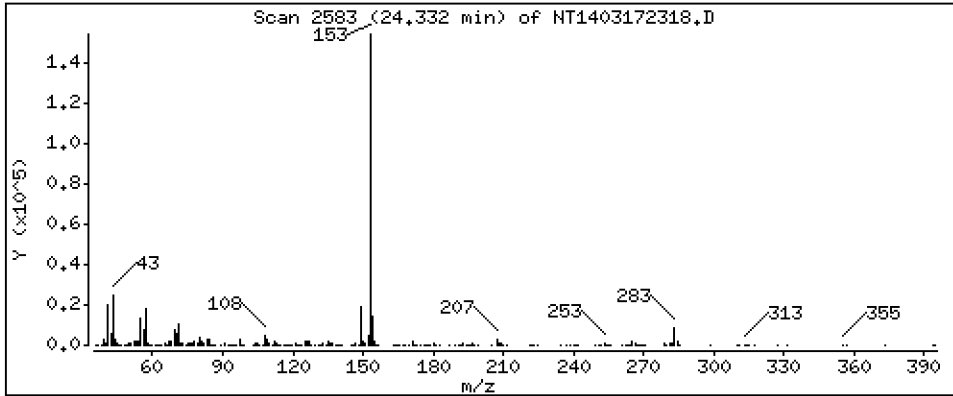
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2086 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

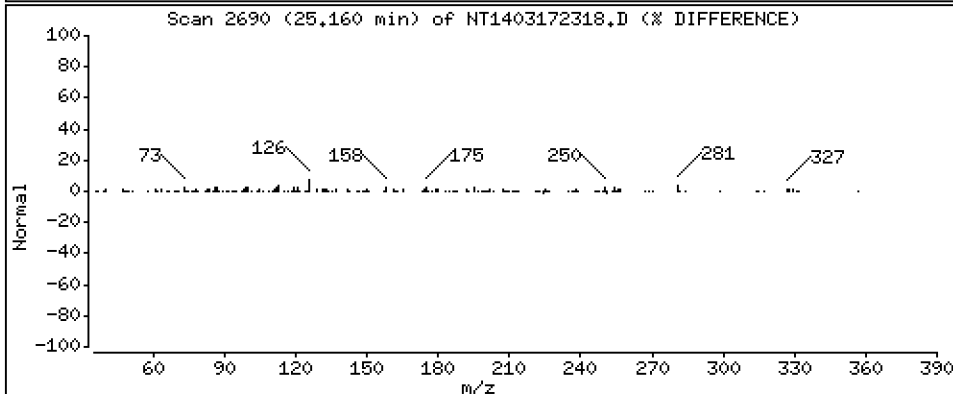
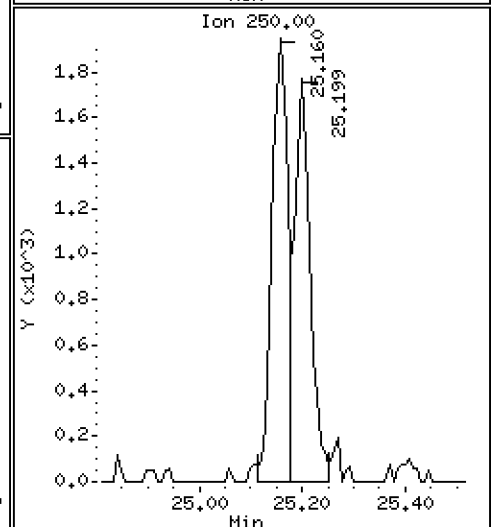
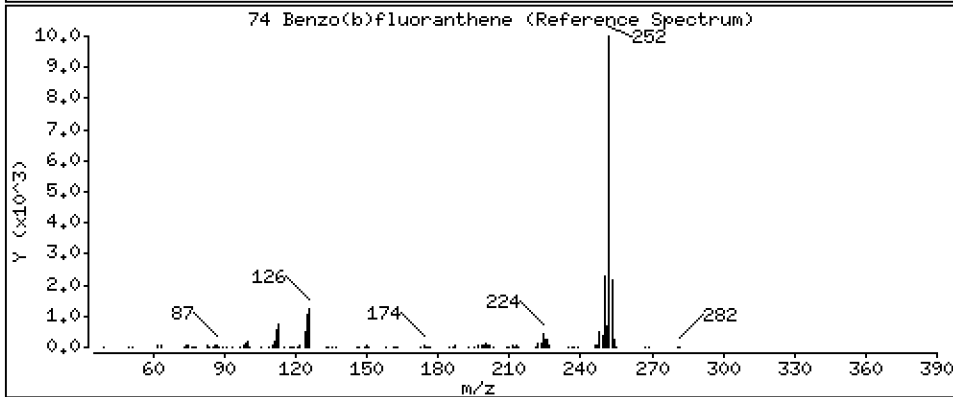
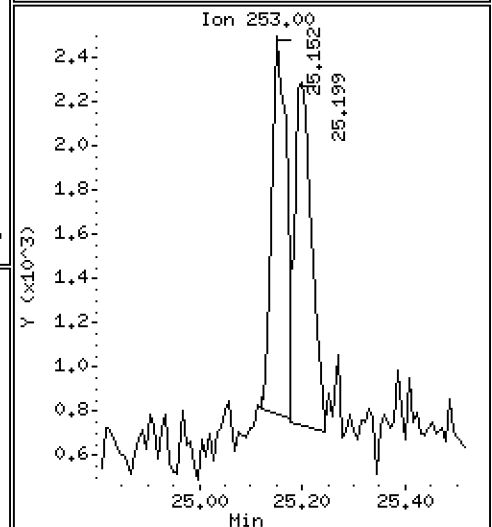
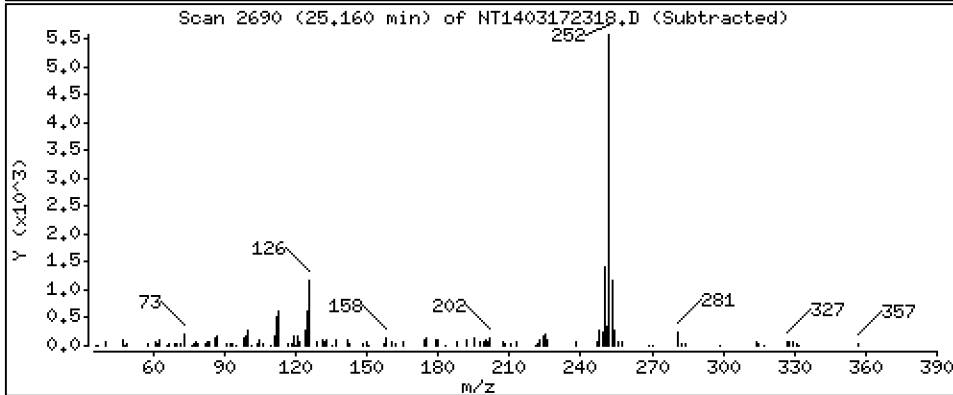
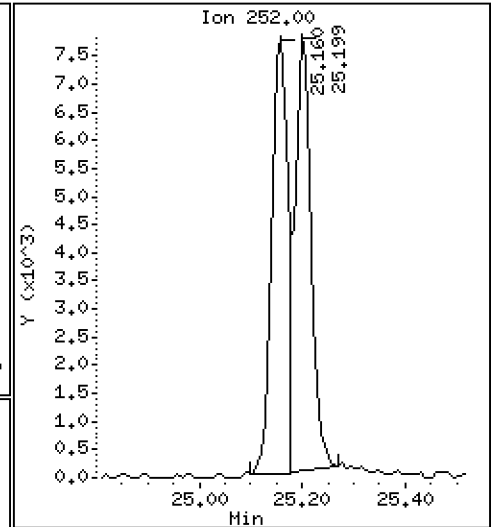
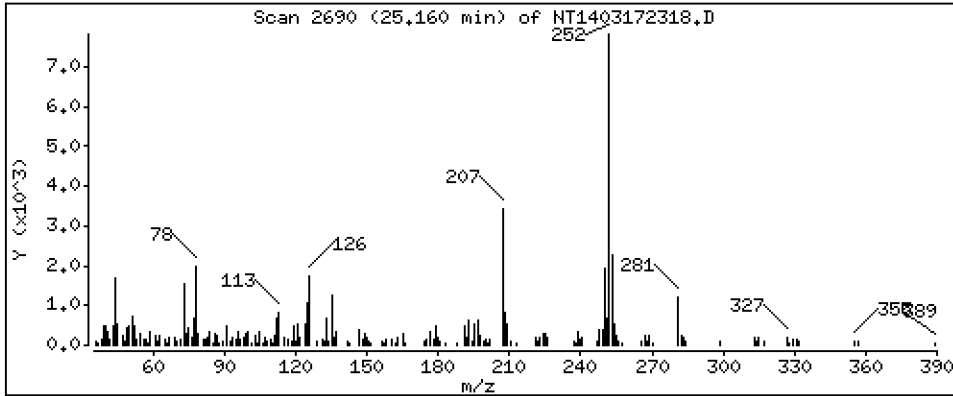
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1871 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

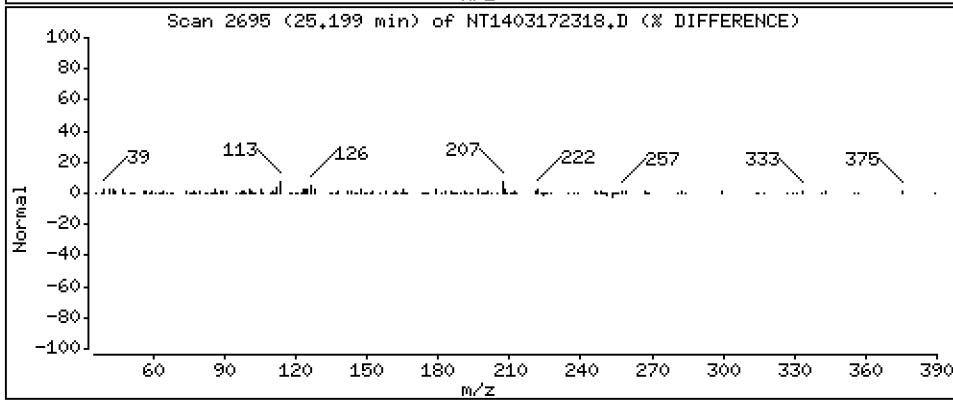
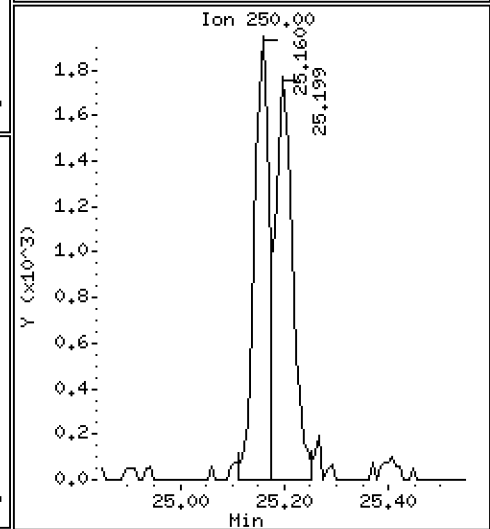
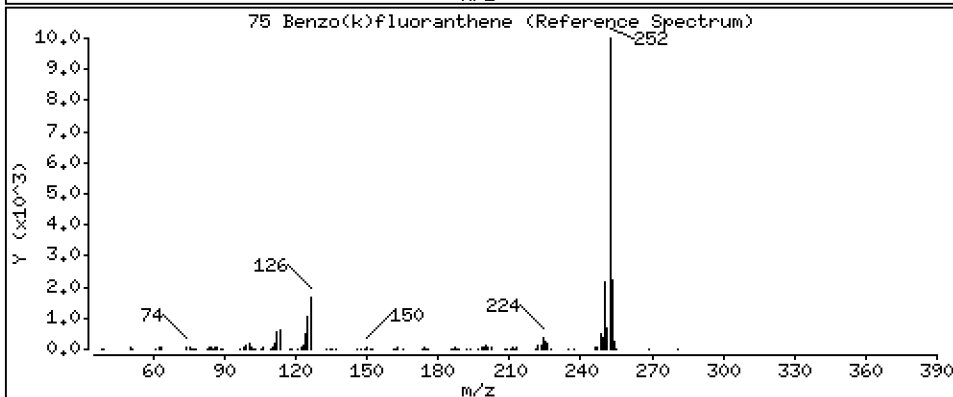
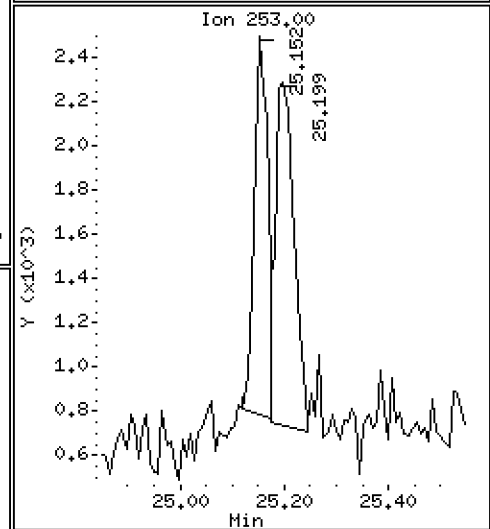
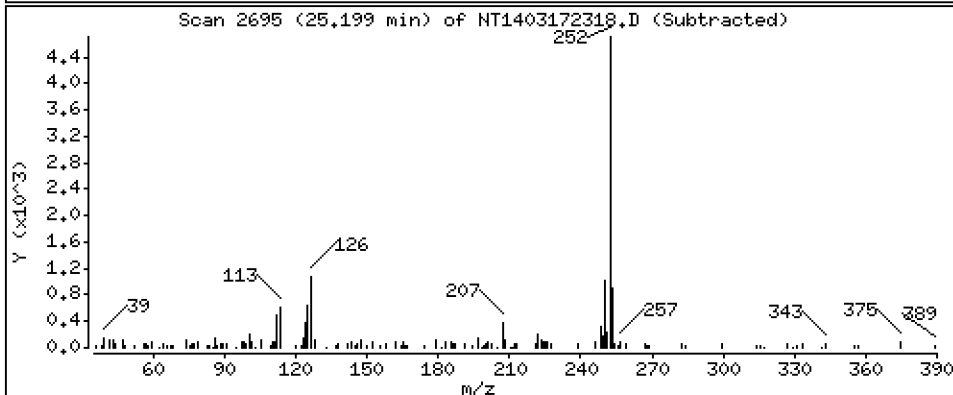
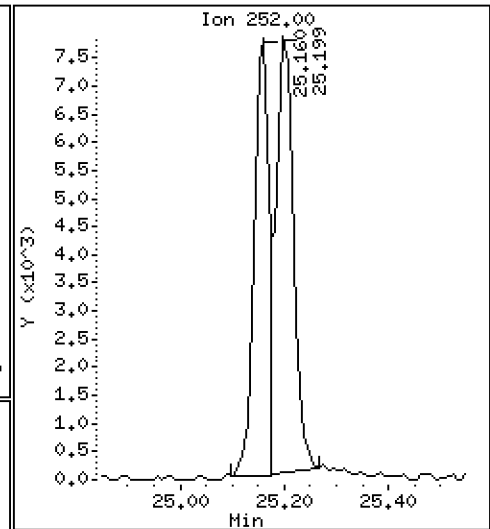
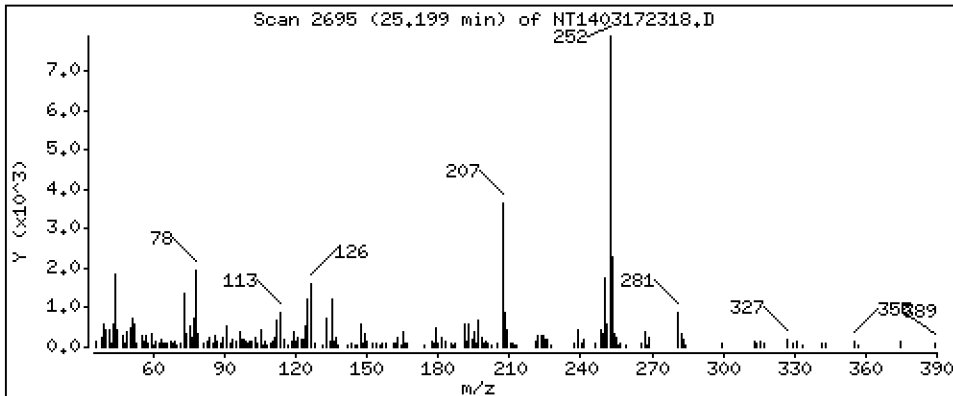
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,2162 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

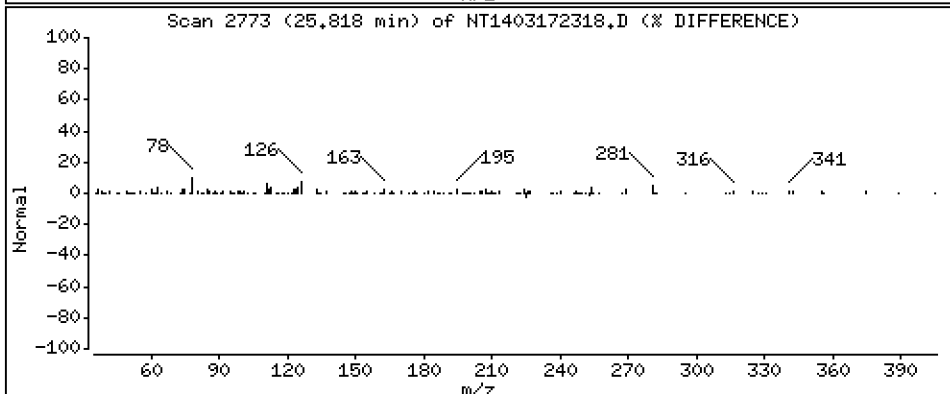
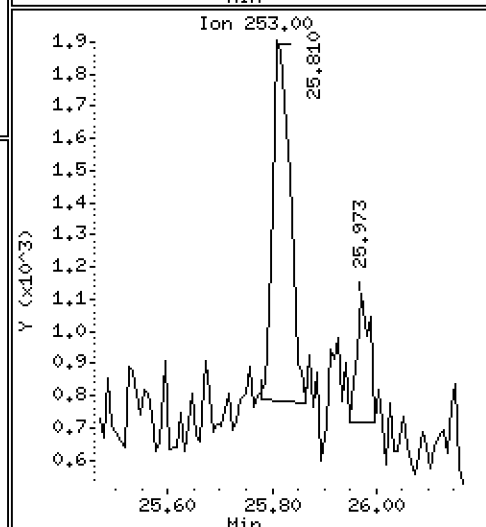
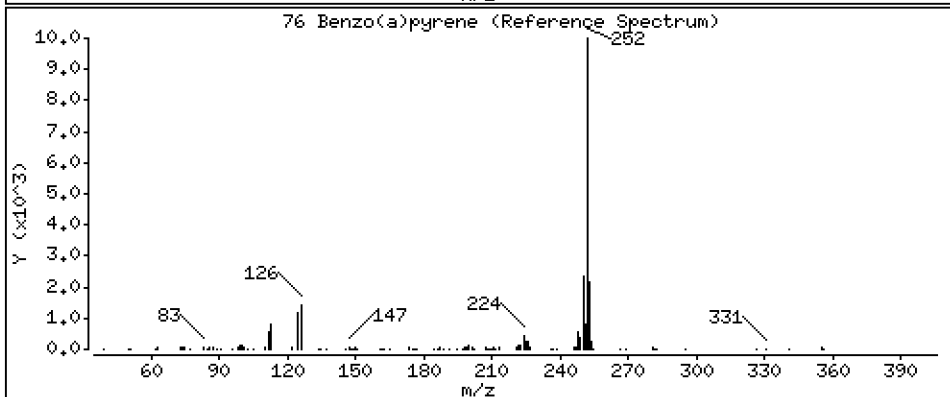
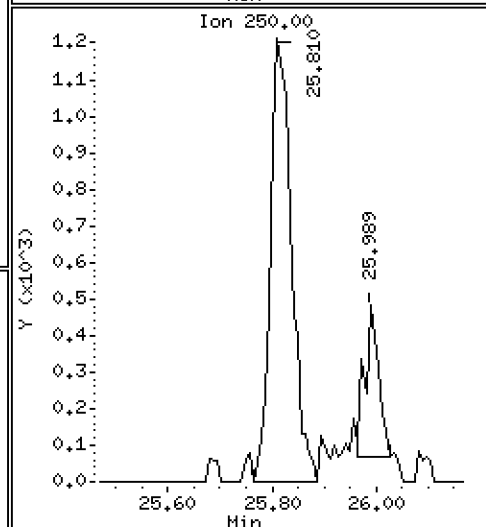
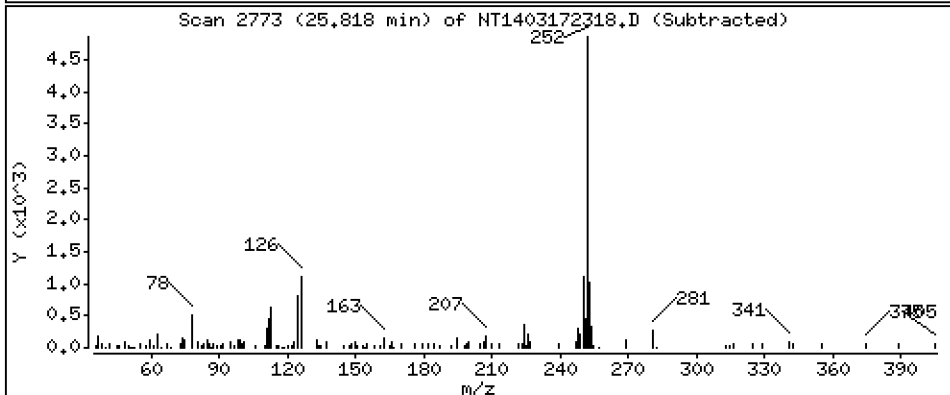
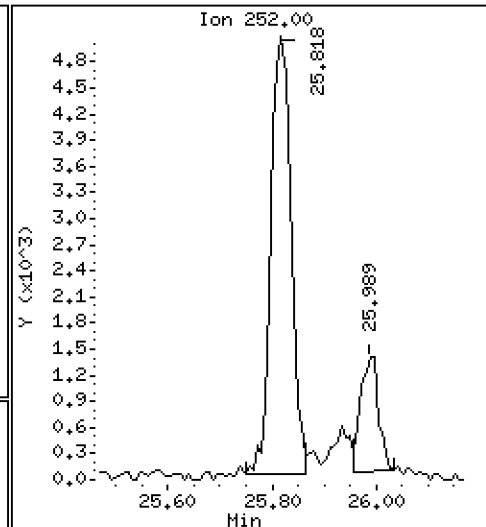
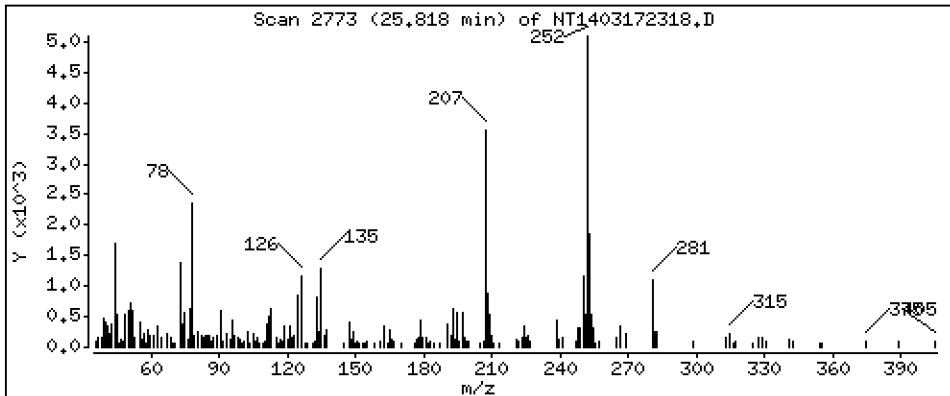
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1794 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

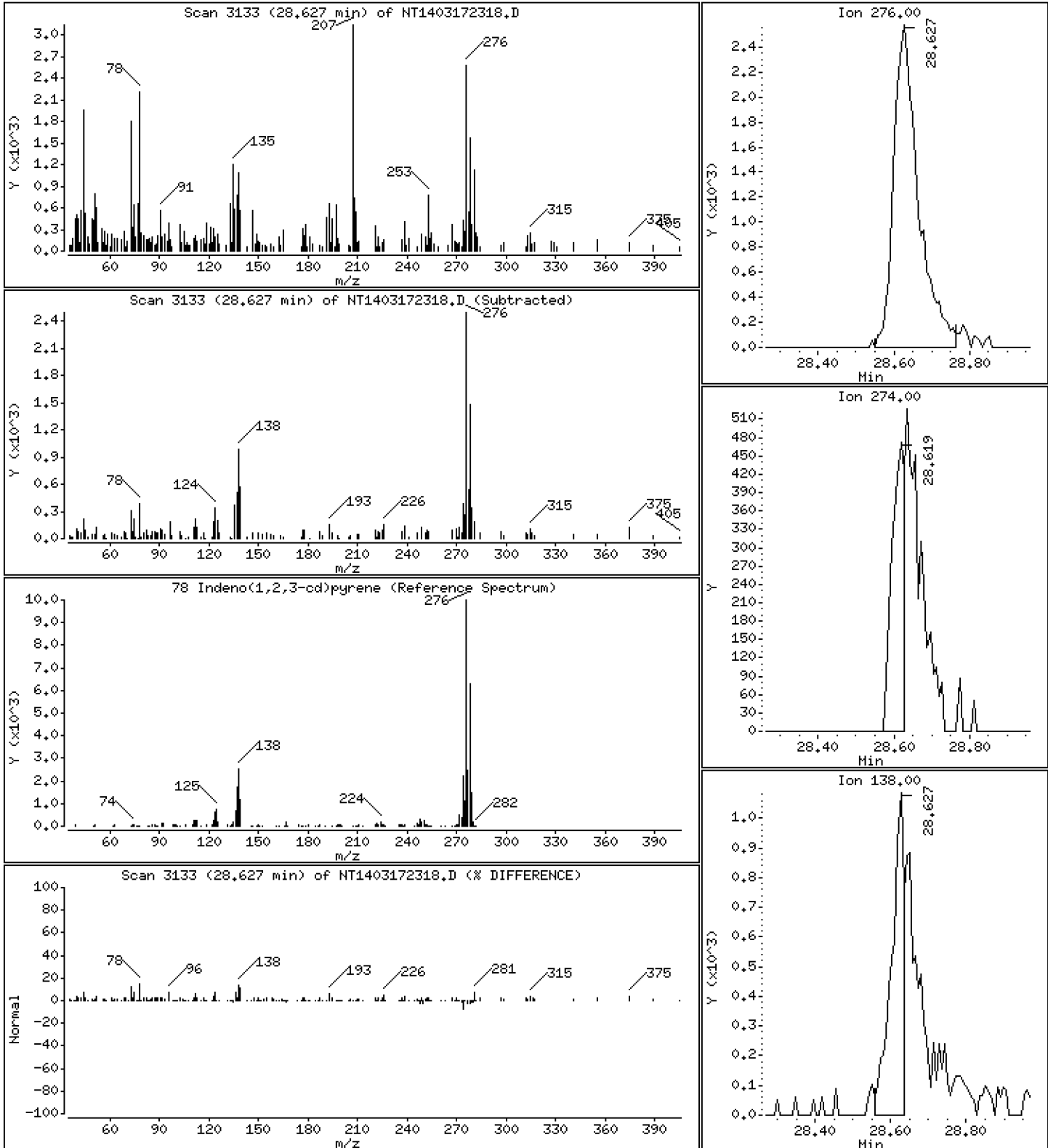
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1449 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

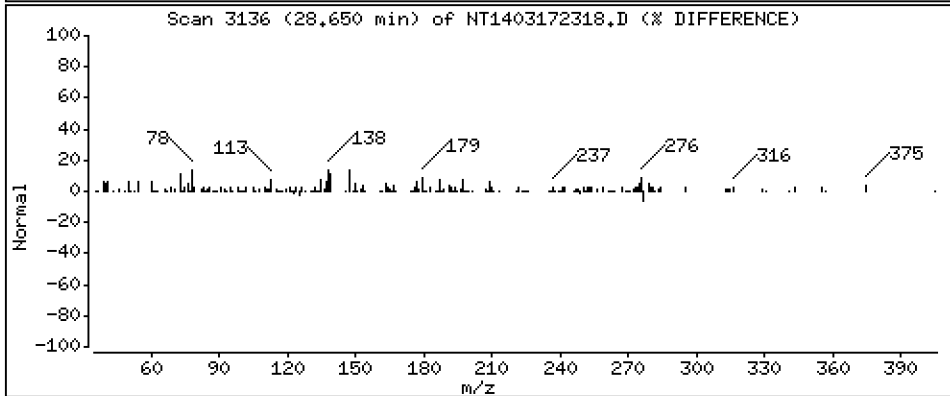
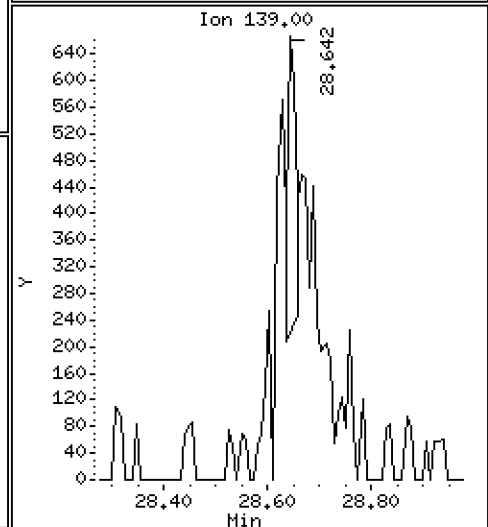
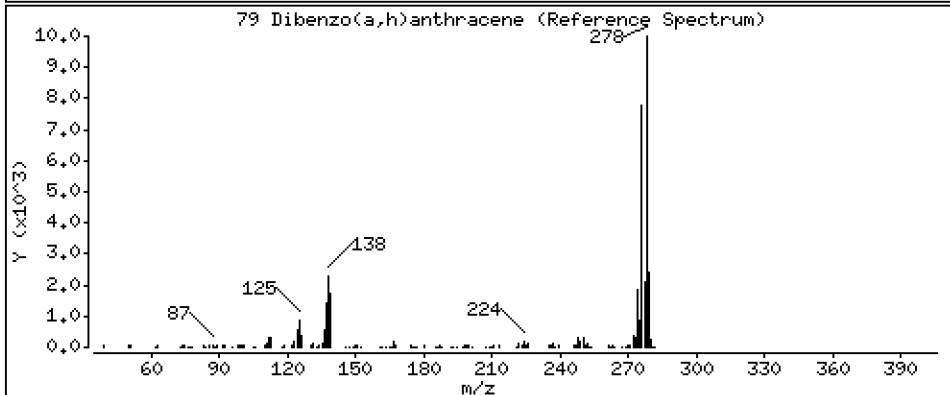
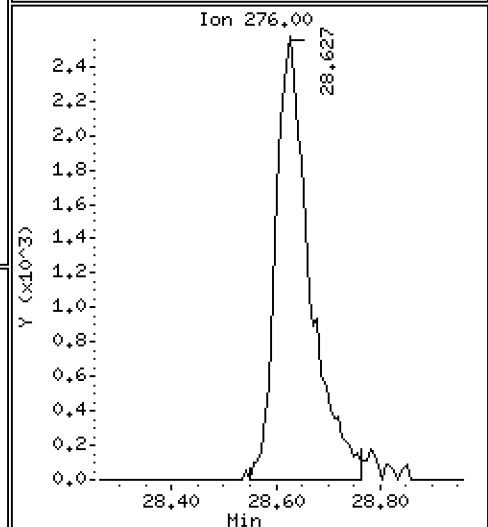
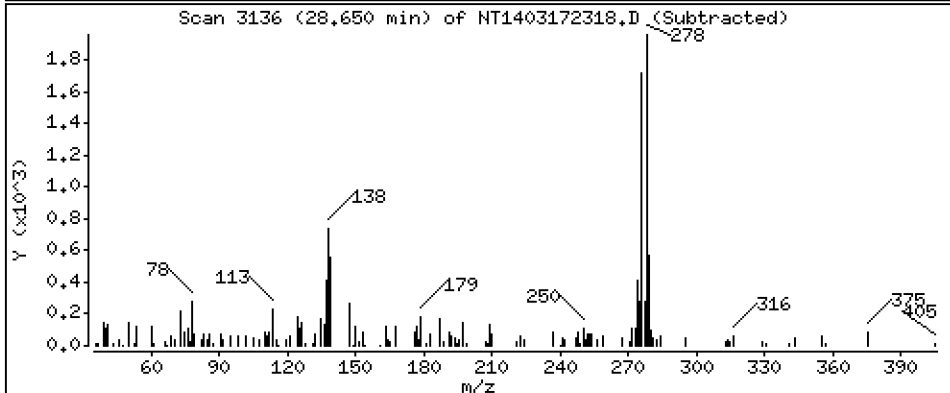
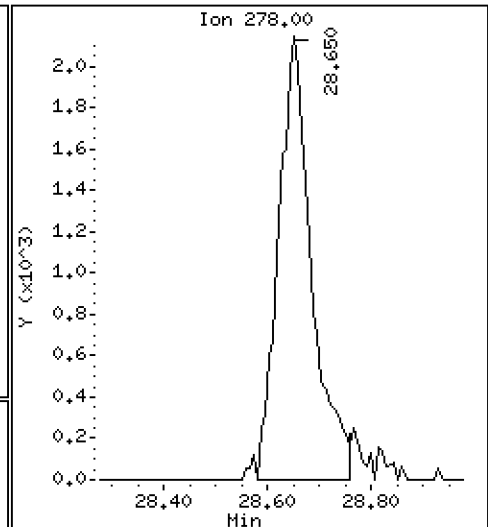
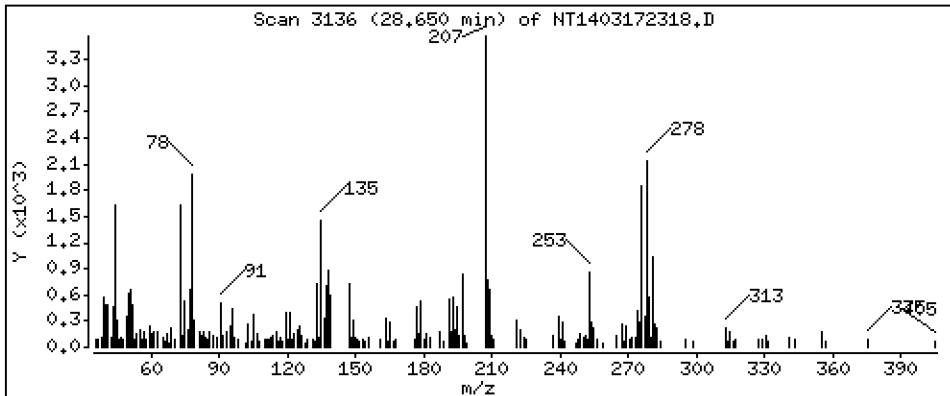
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1409 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

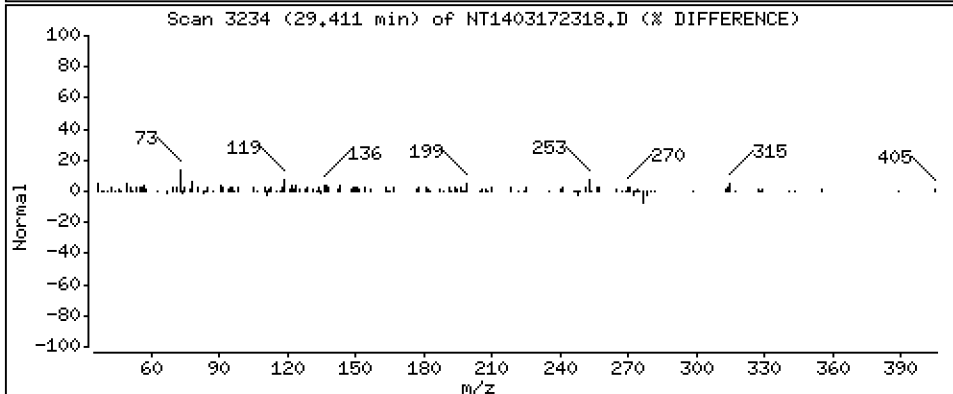
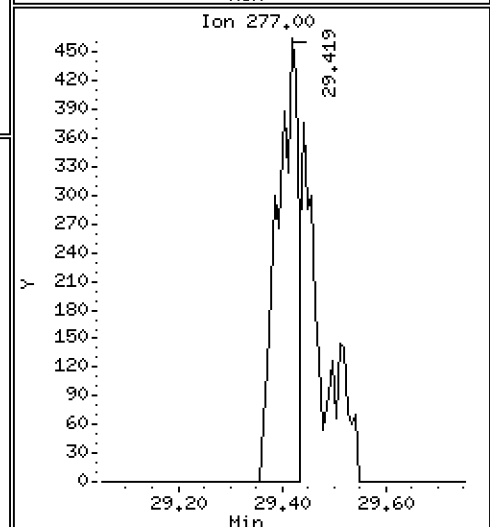
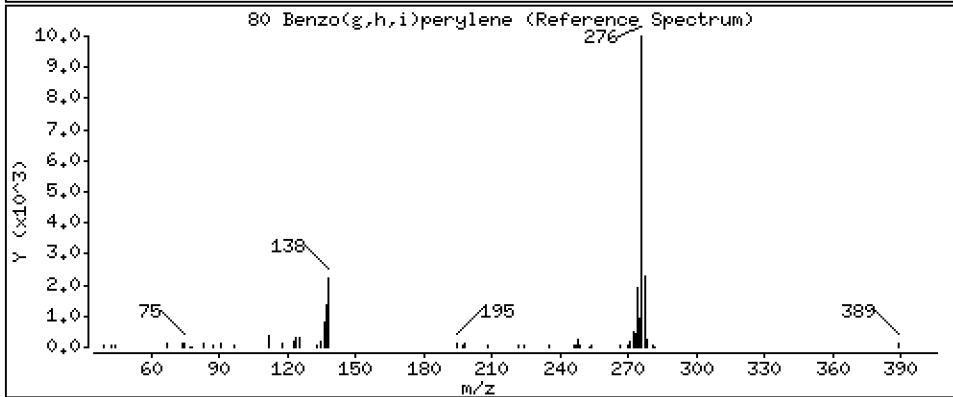
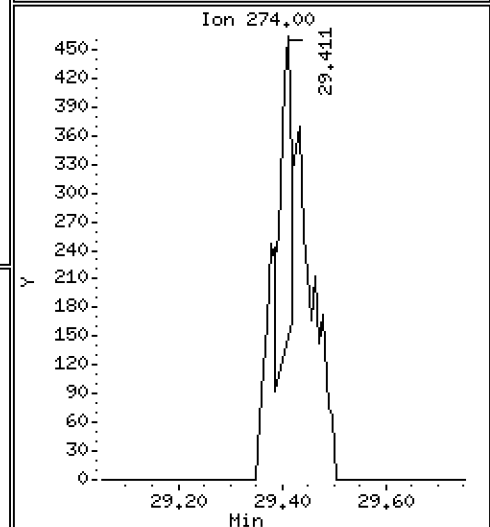
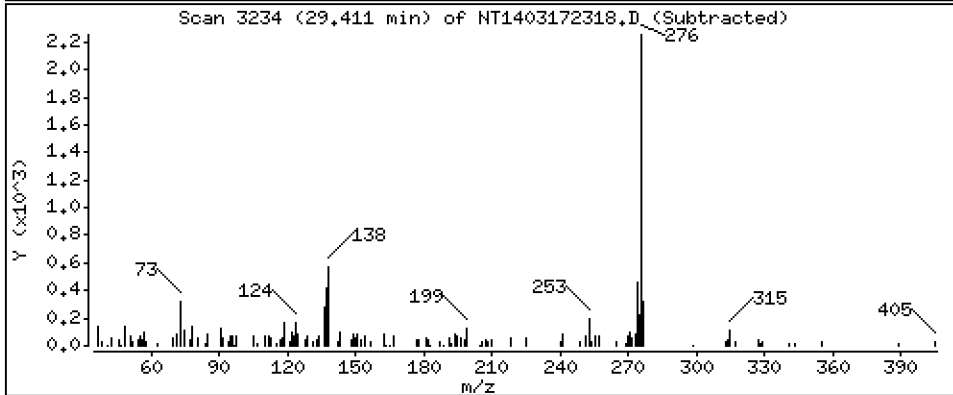
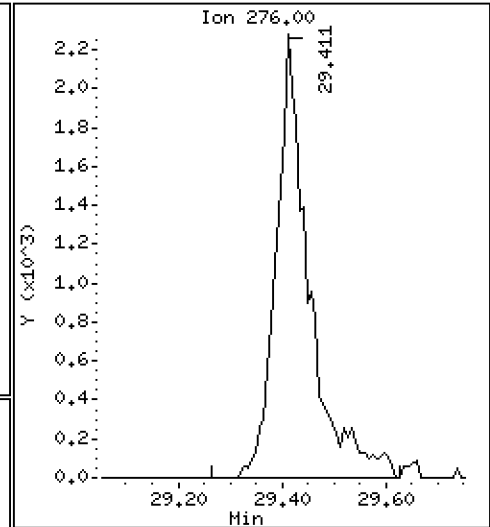
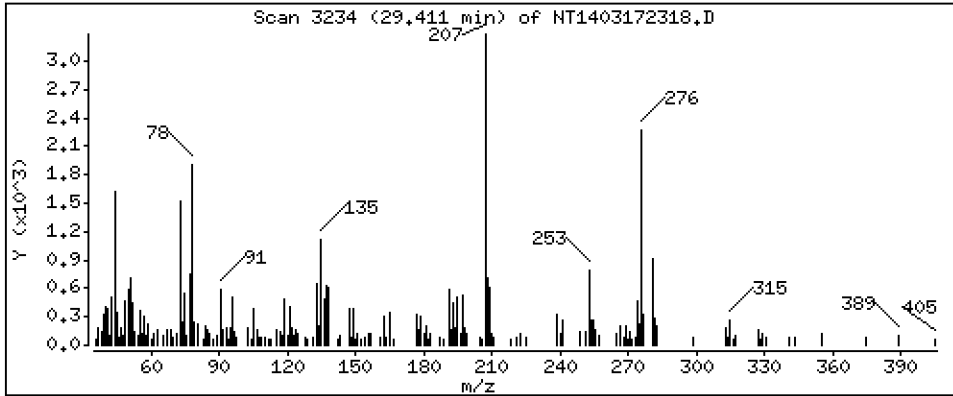
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1521 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

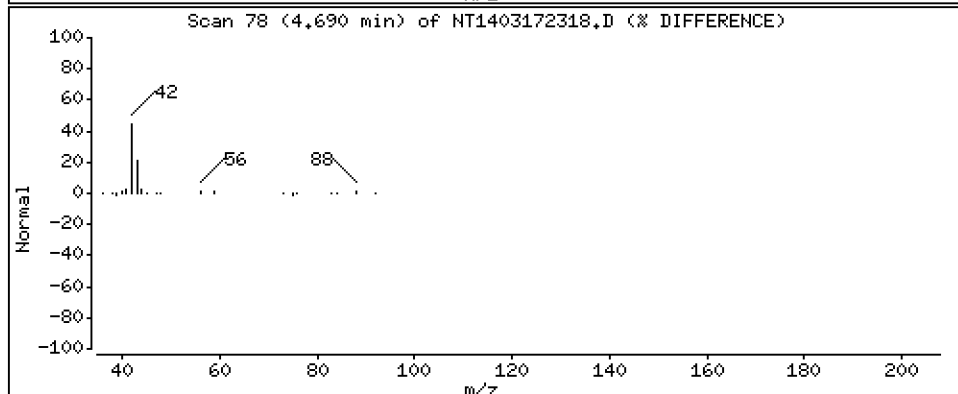
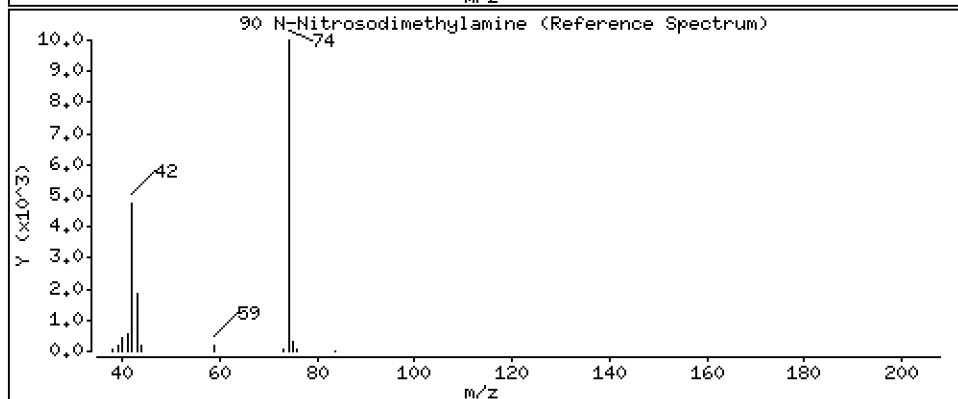
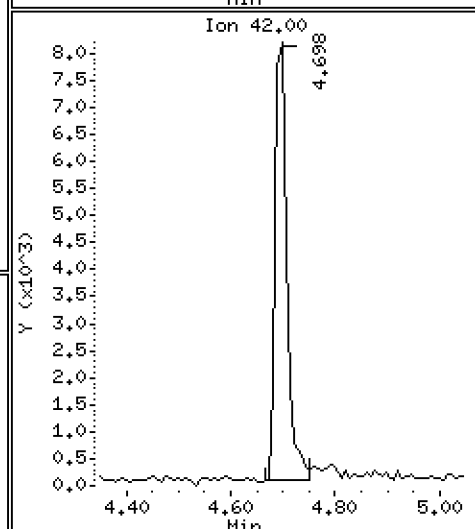
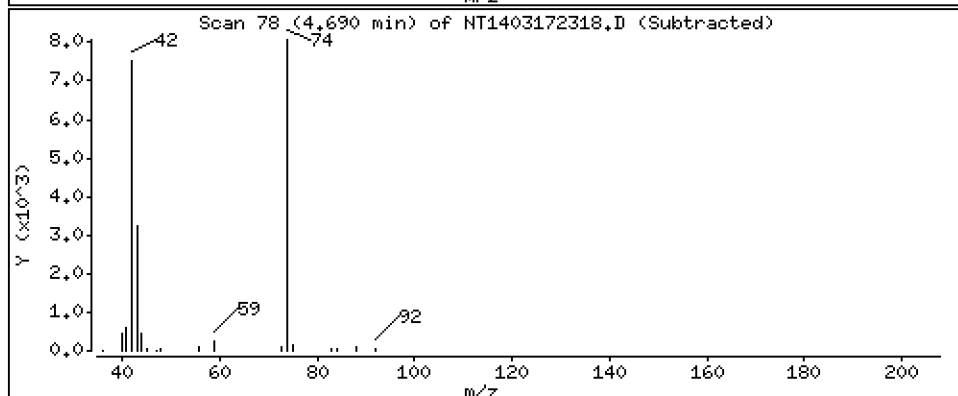
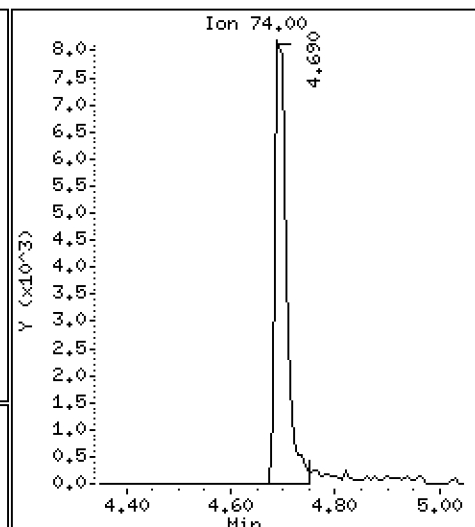
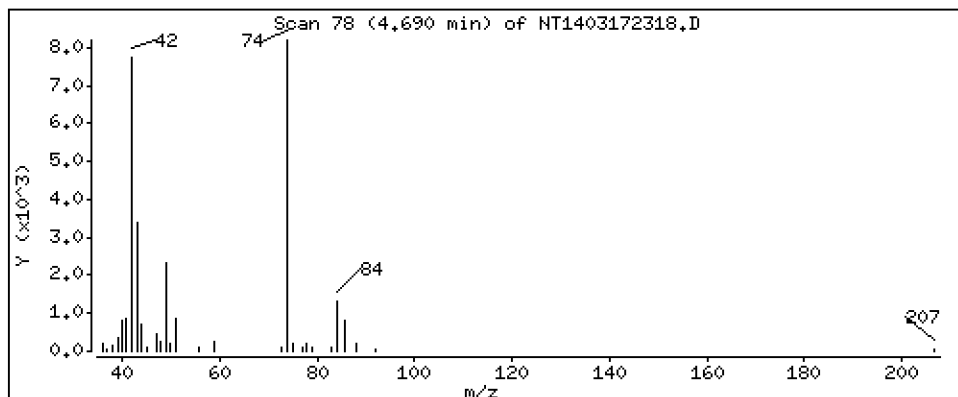
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2681 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

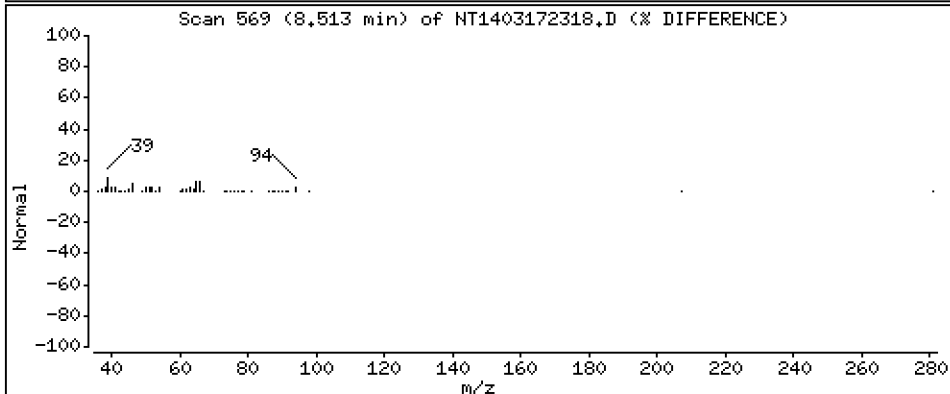
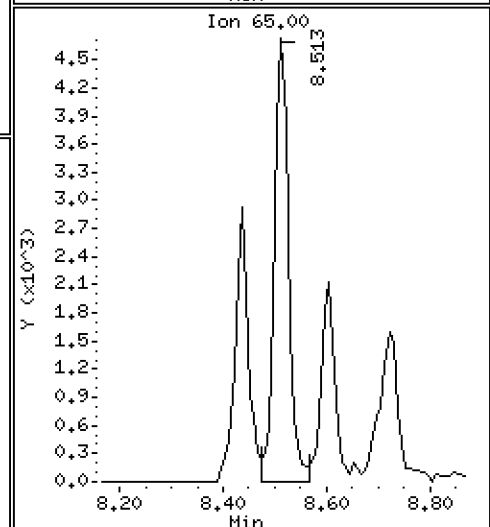
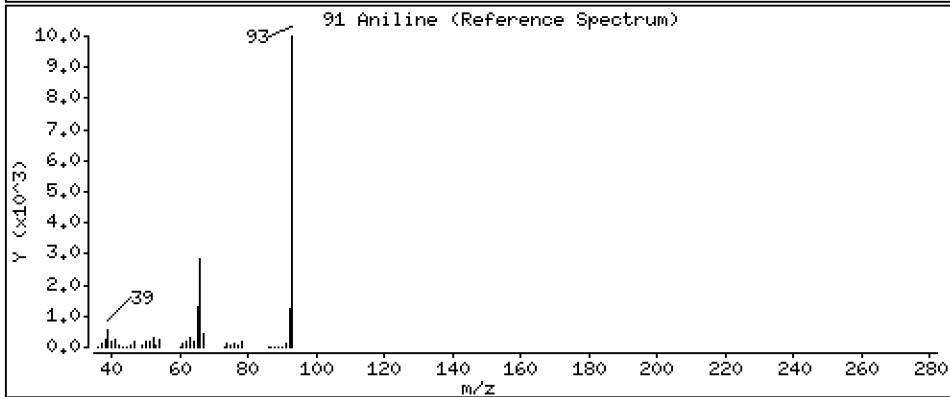
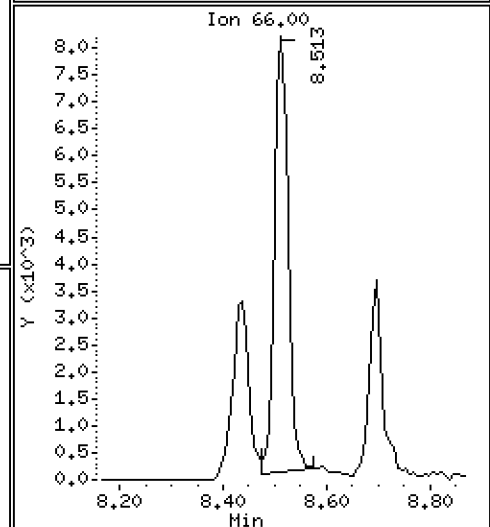
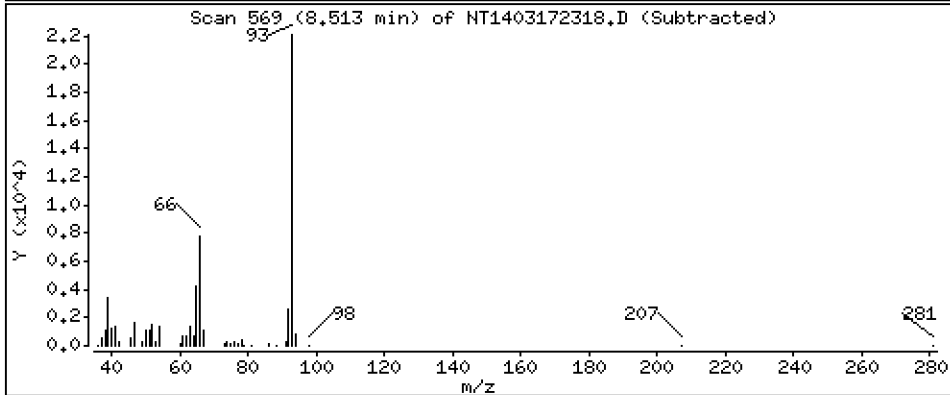
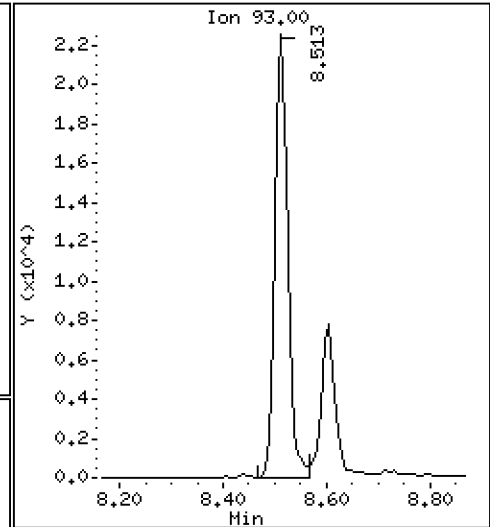
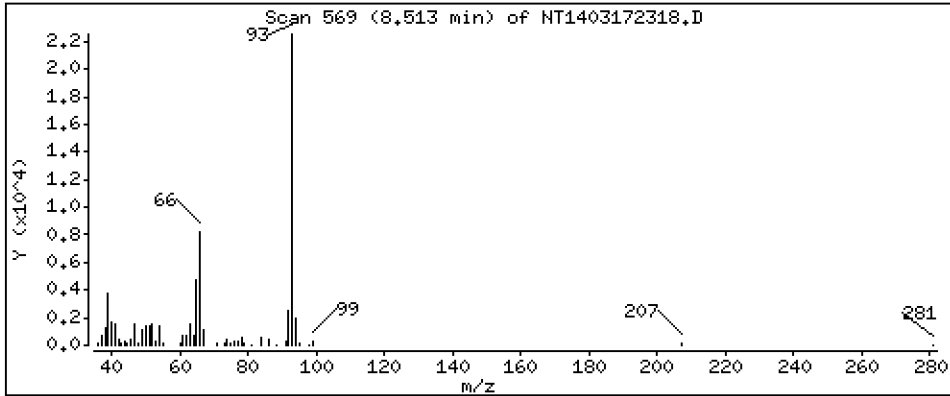
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3747 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

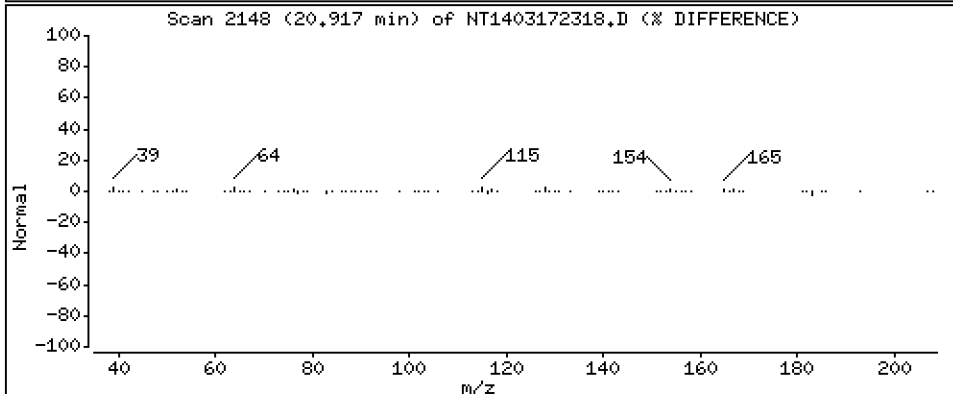
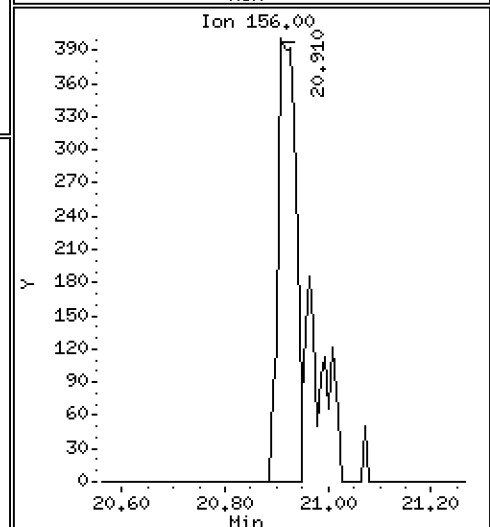
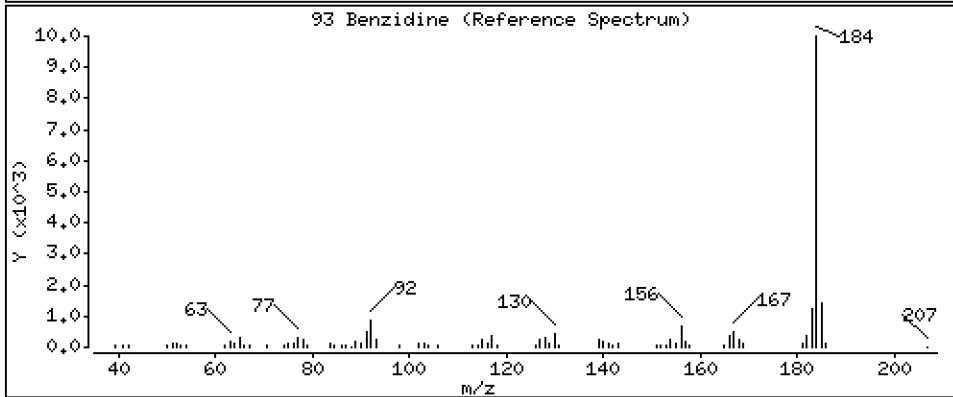
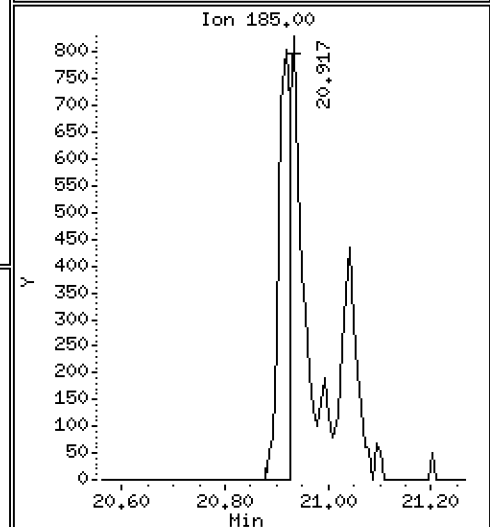
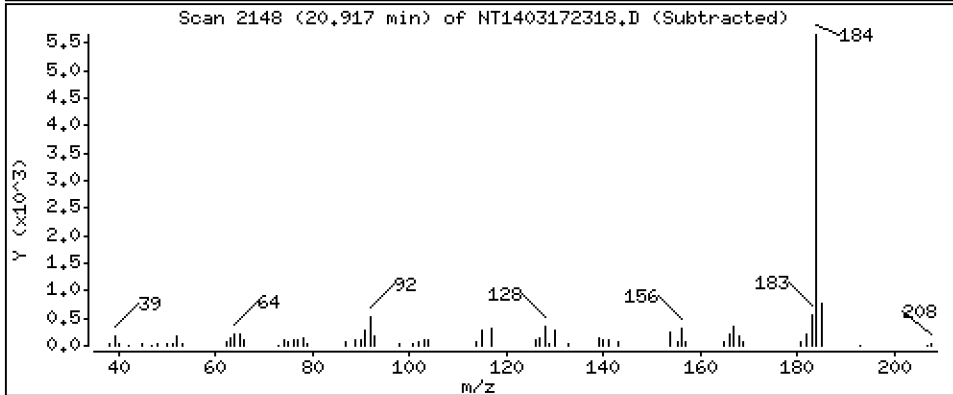
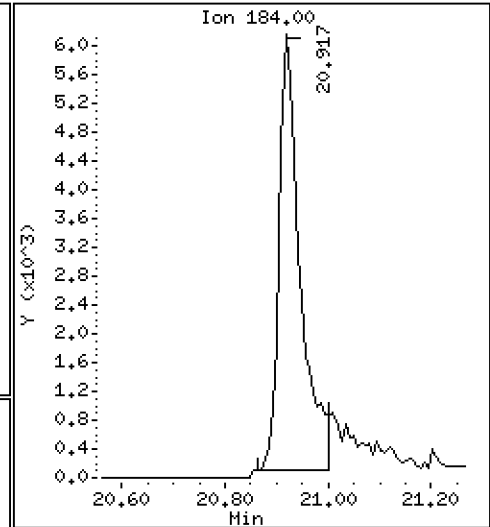
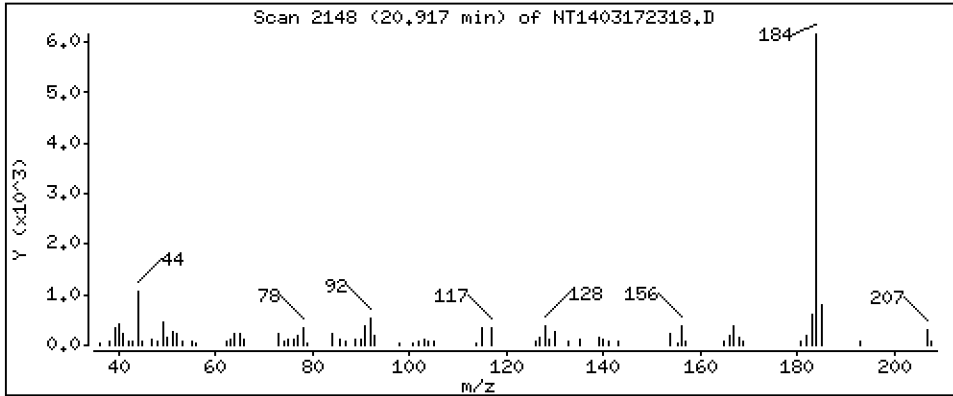
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,2724 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

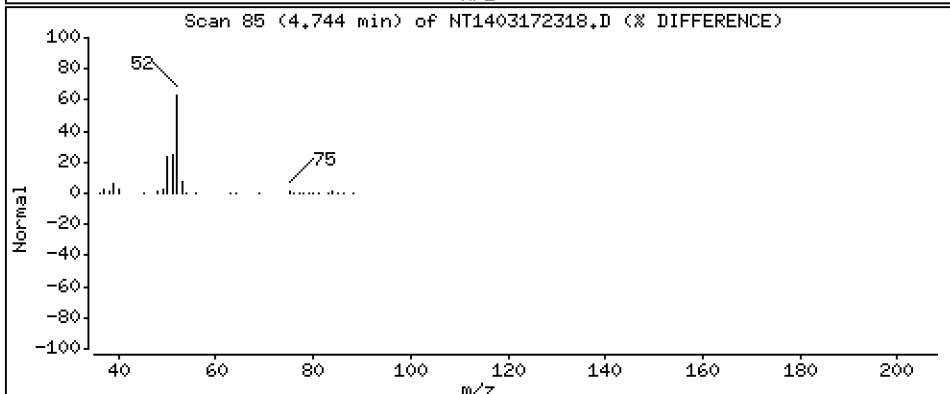
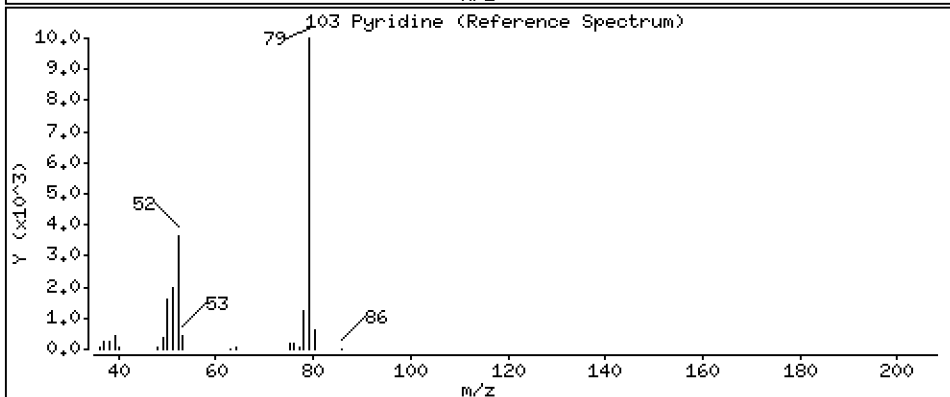
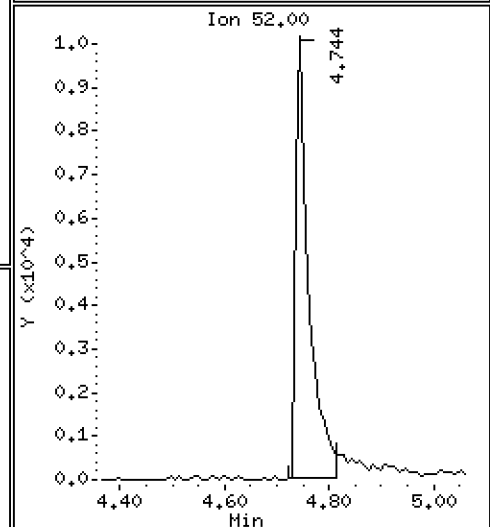
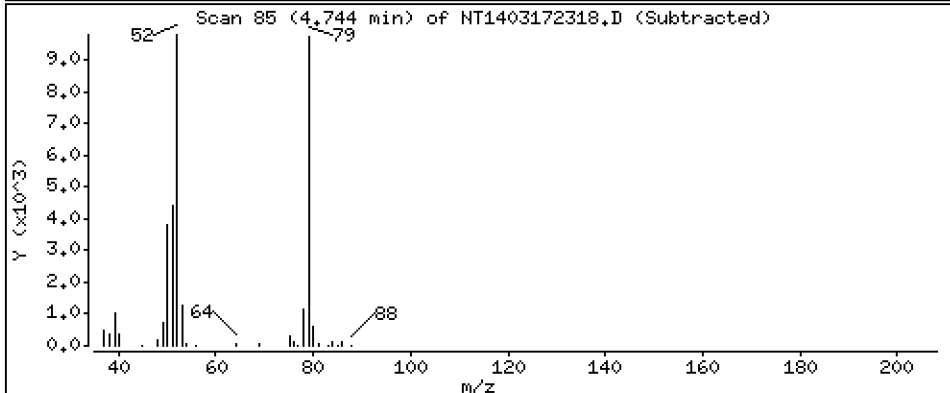
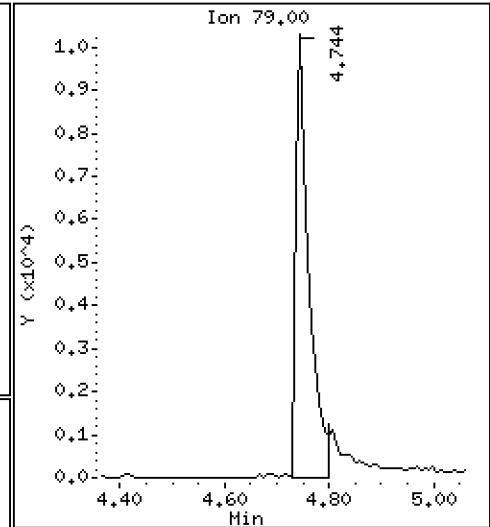
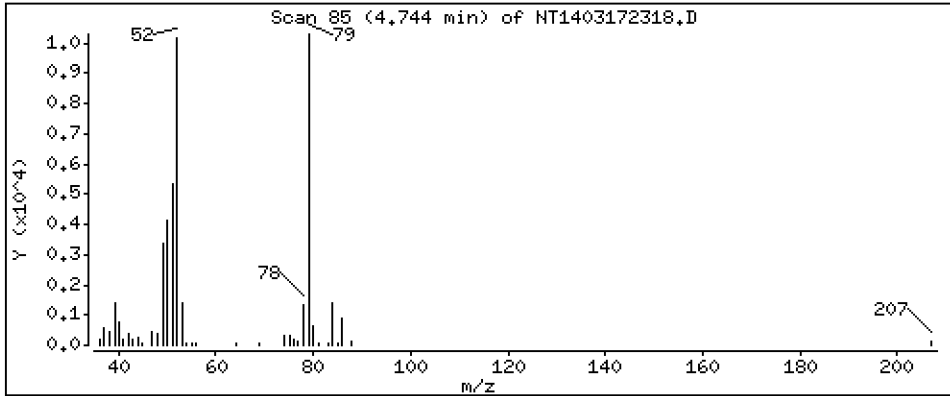
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,1356 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

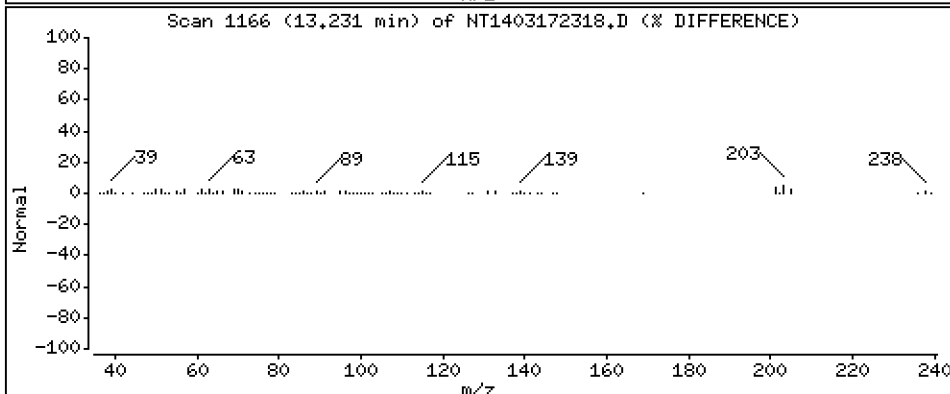
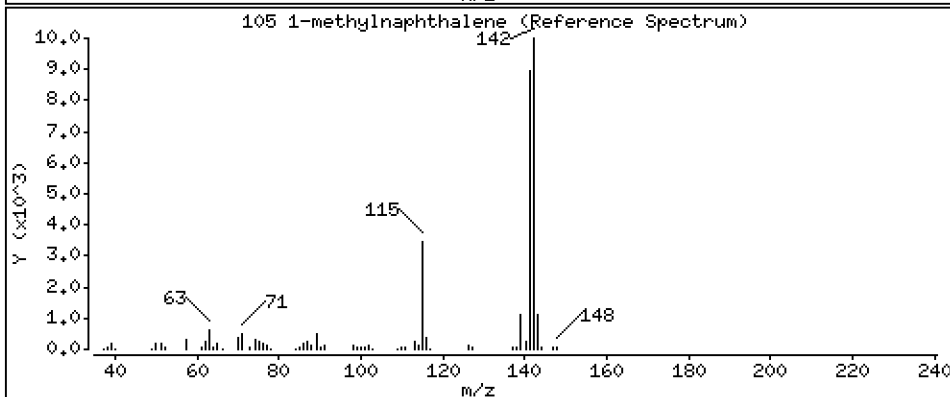
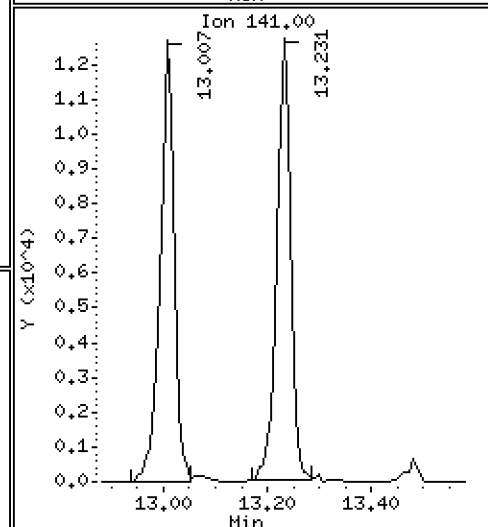
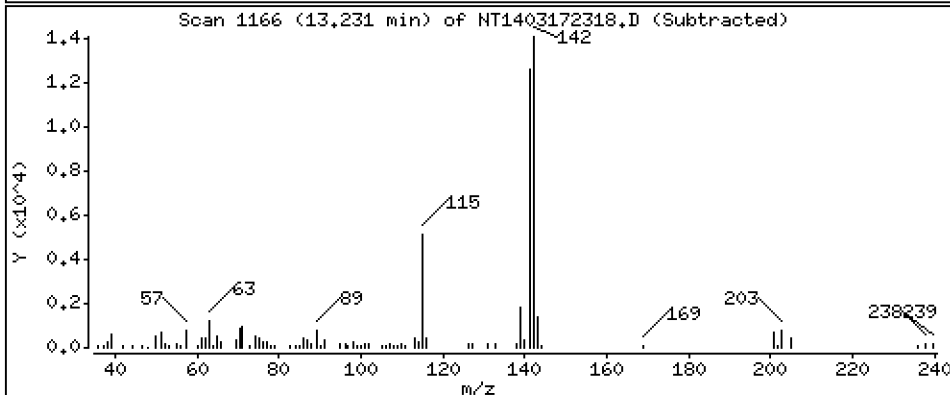
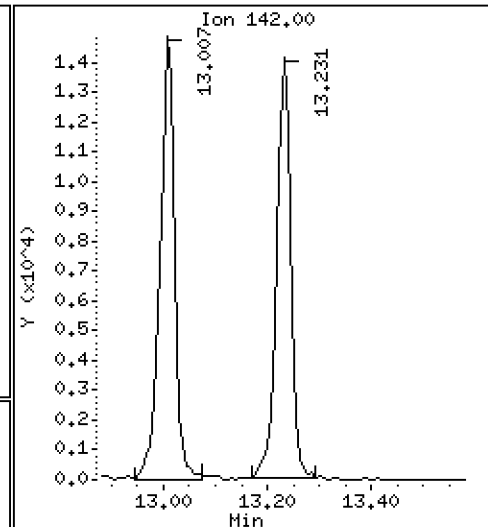
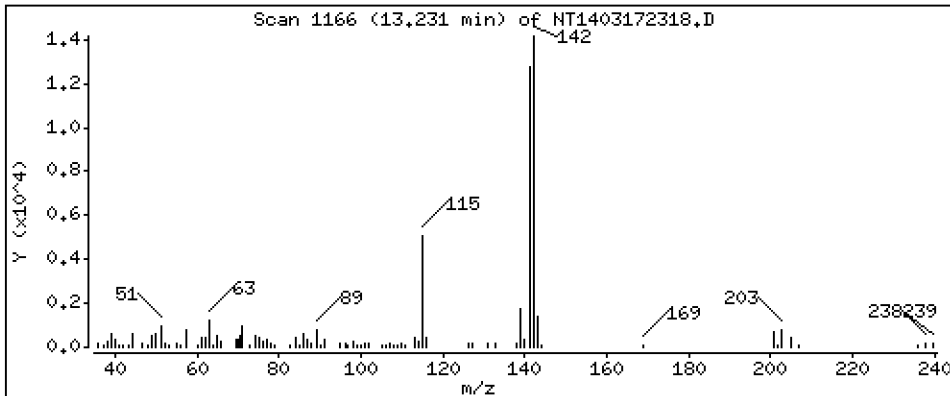
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1940 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

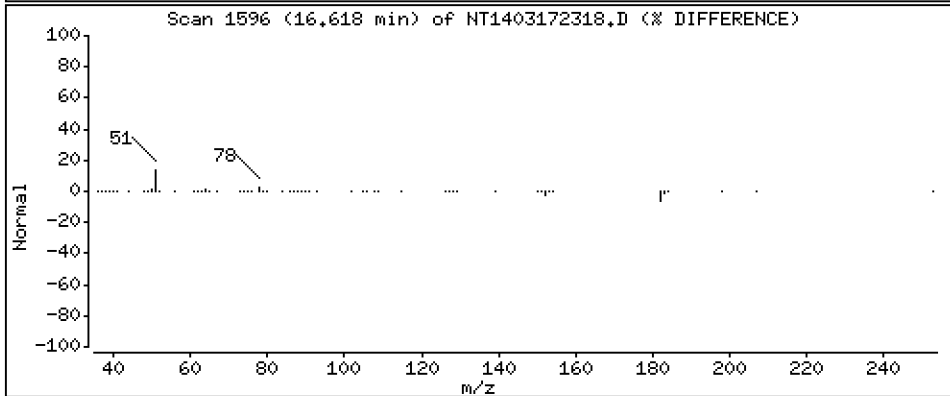
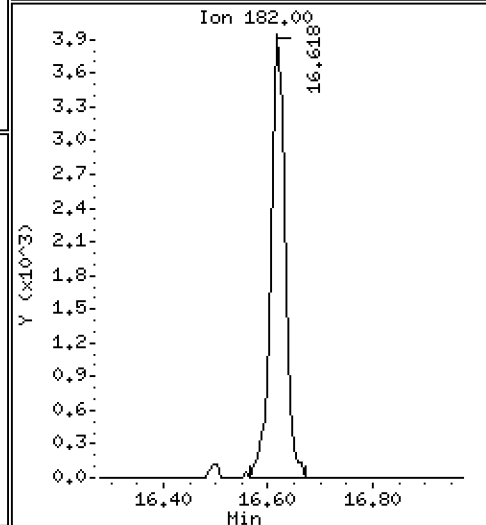
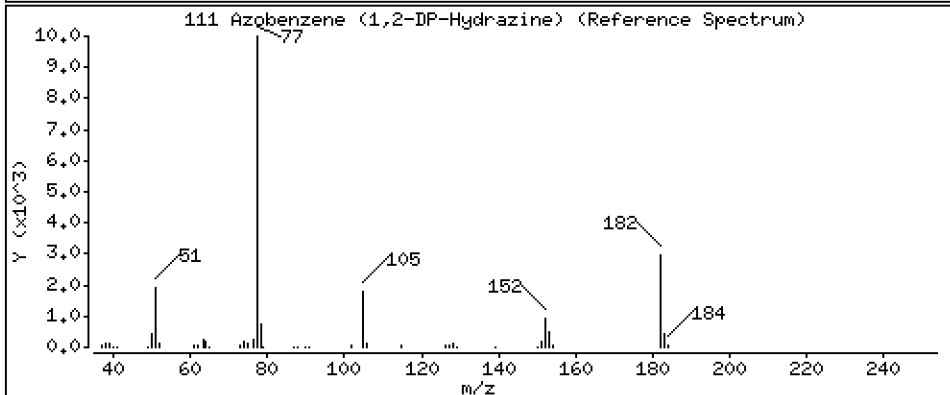
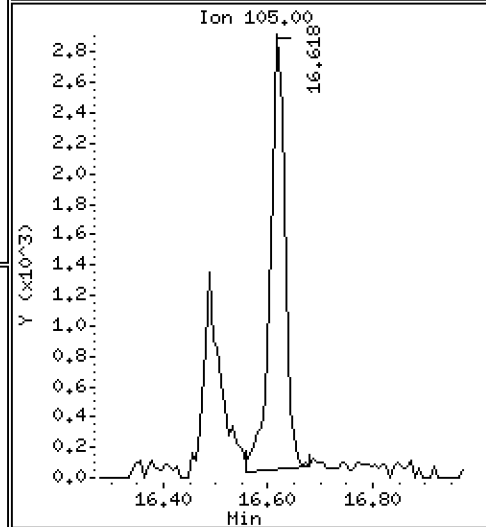
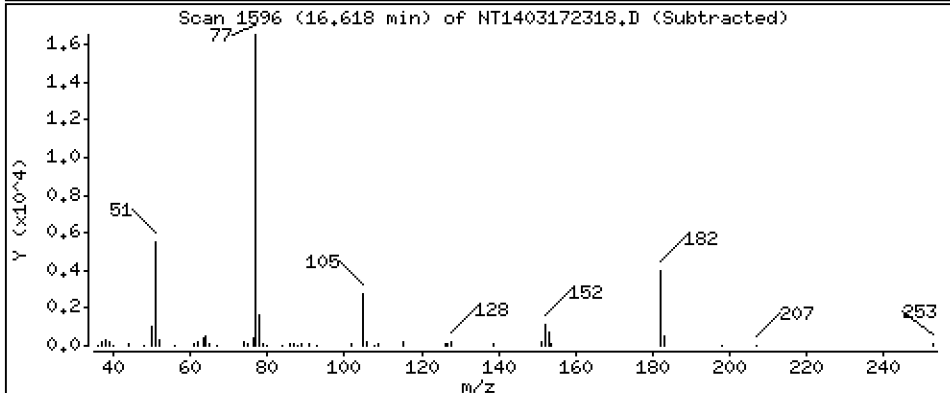
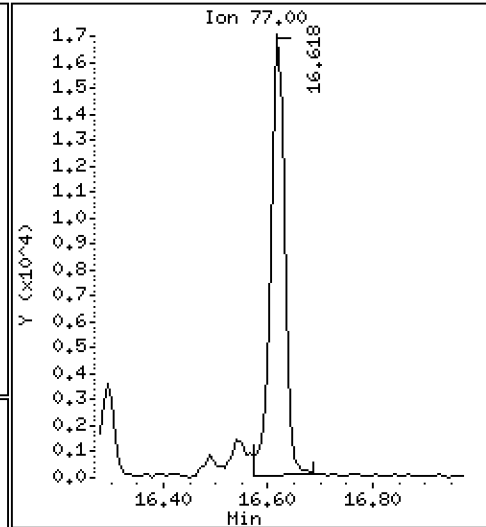
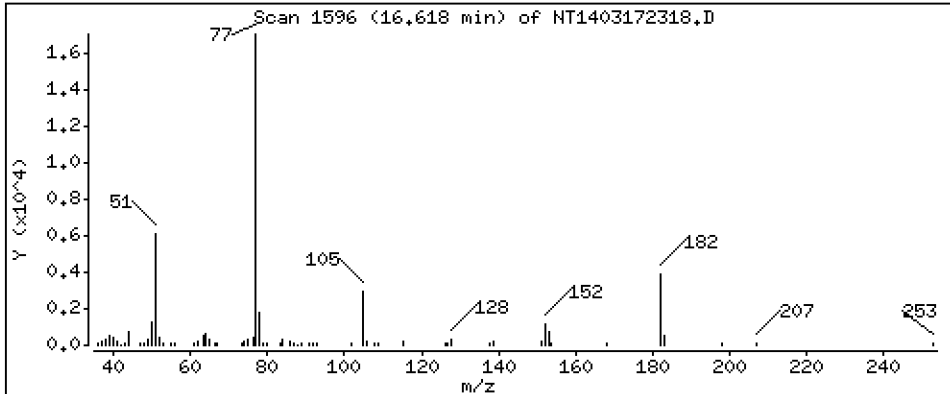
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1900 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

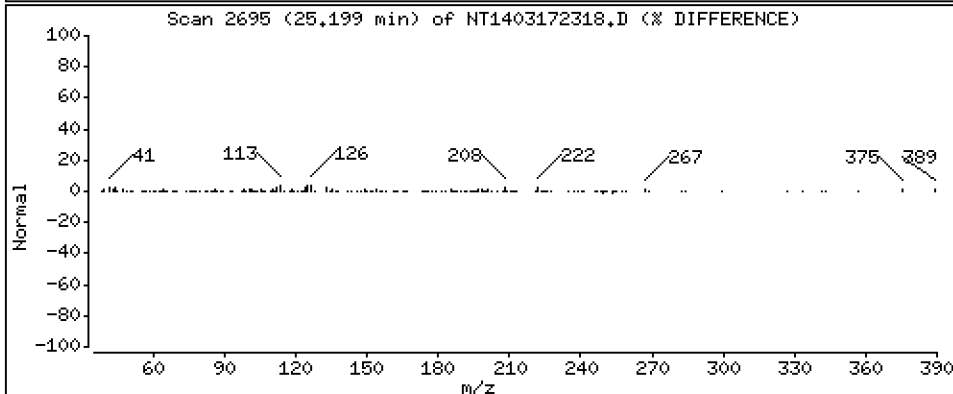
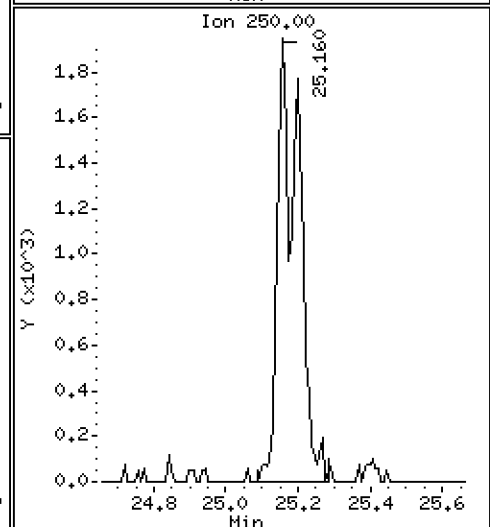
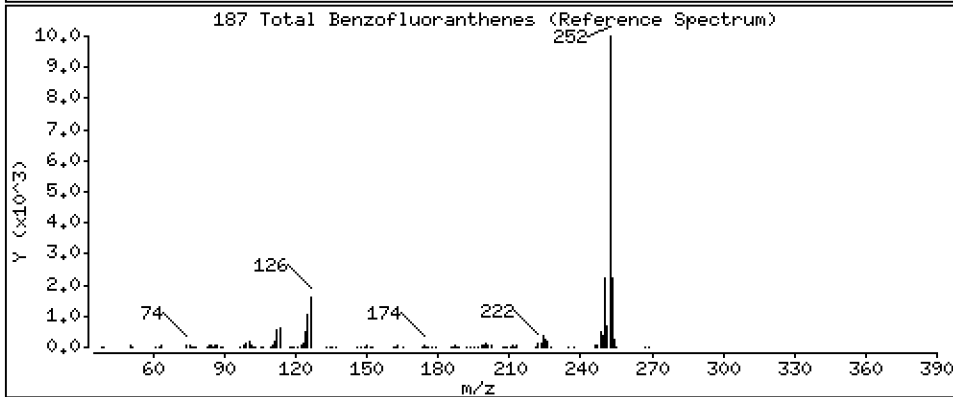
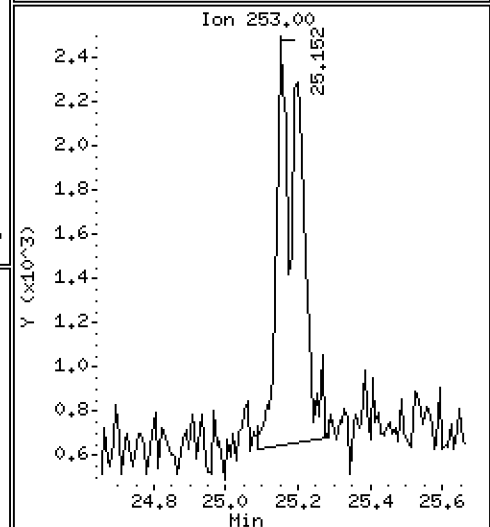
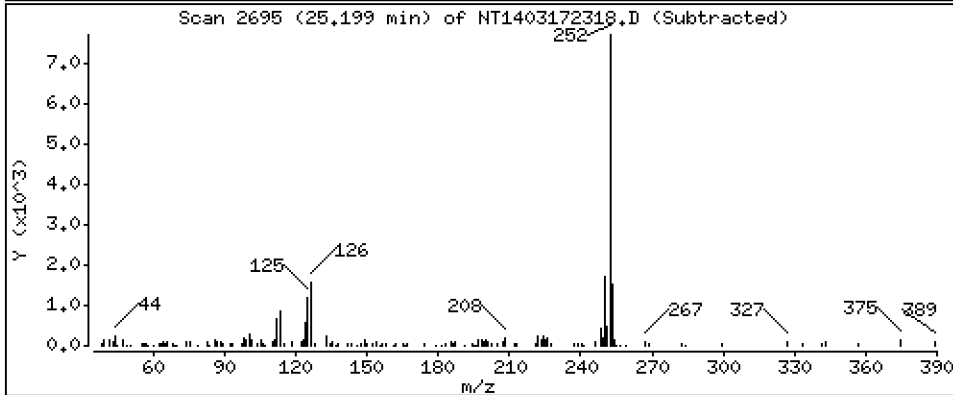
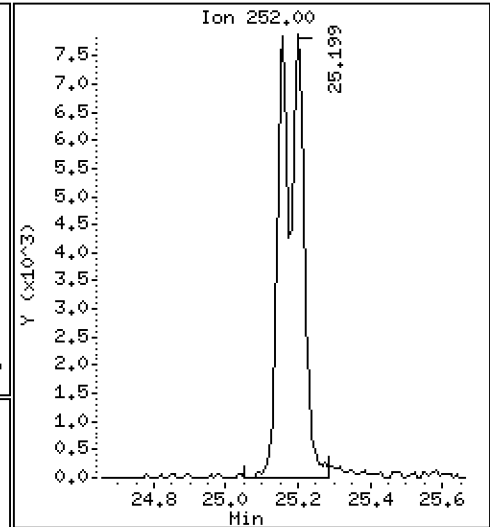
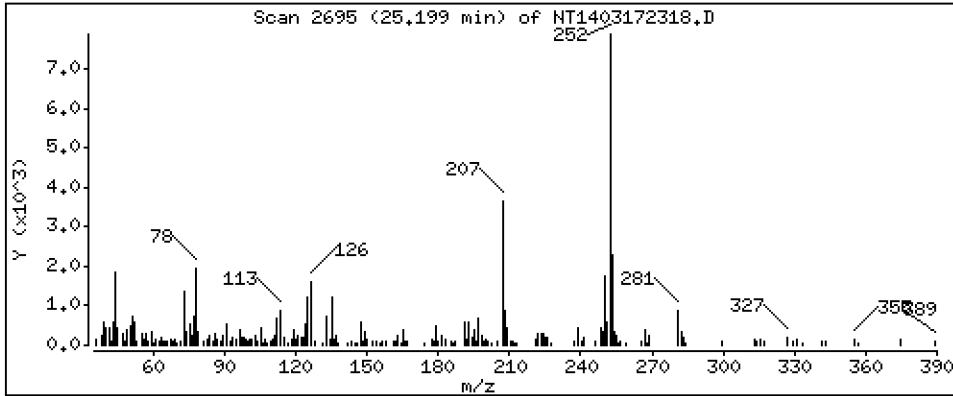
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,4172 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0335-LCV2

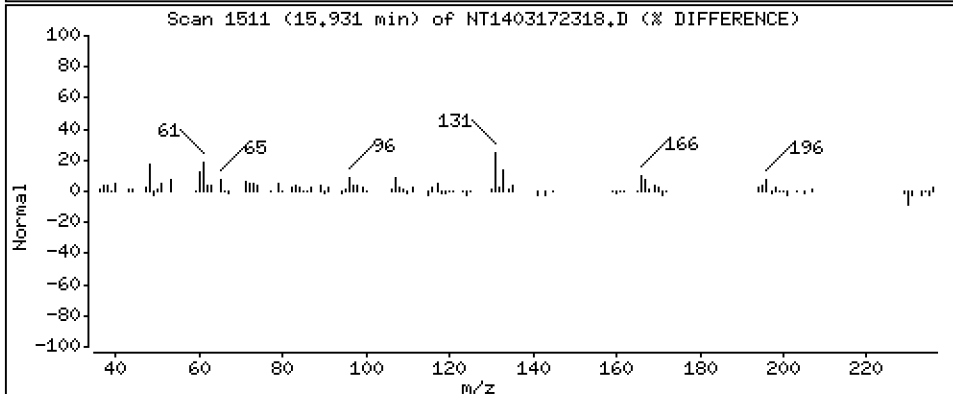
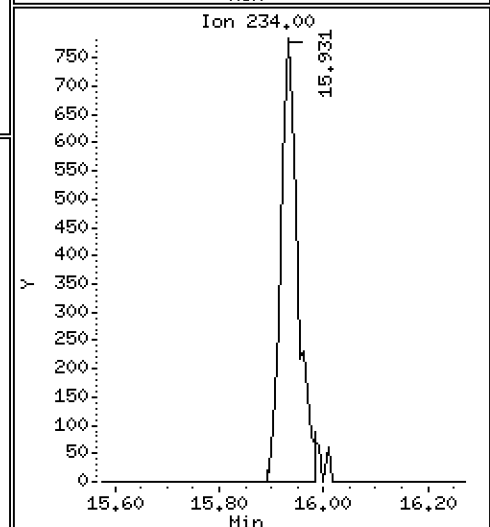
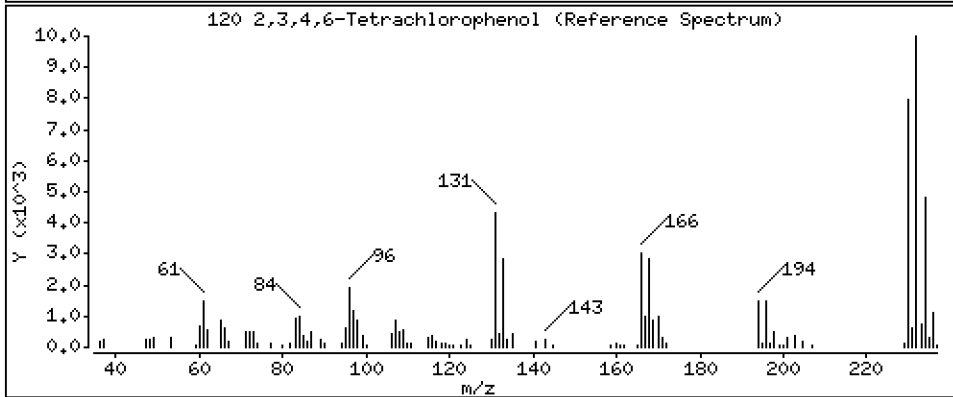
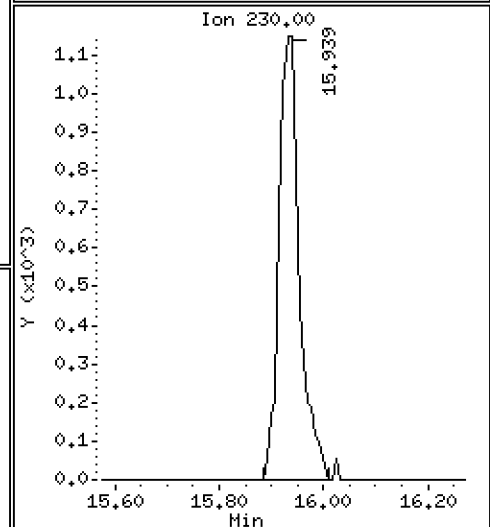
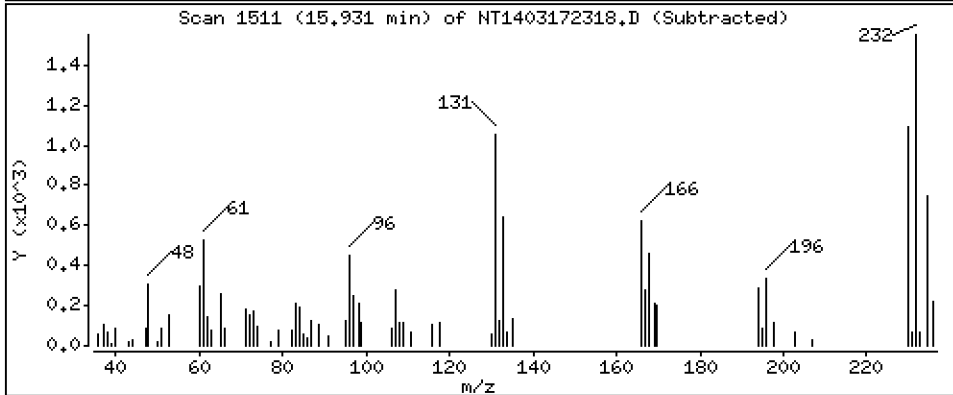
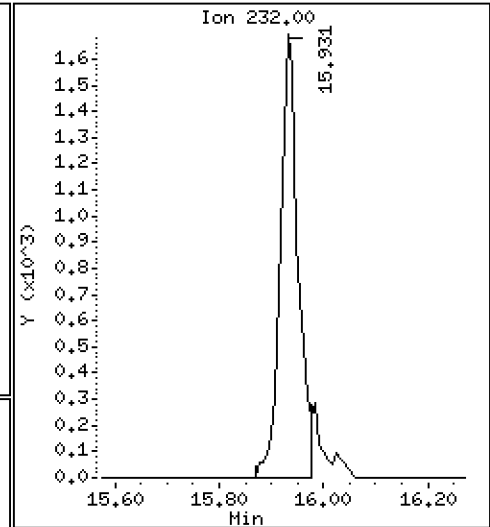
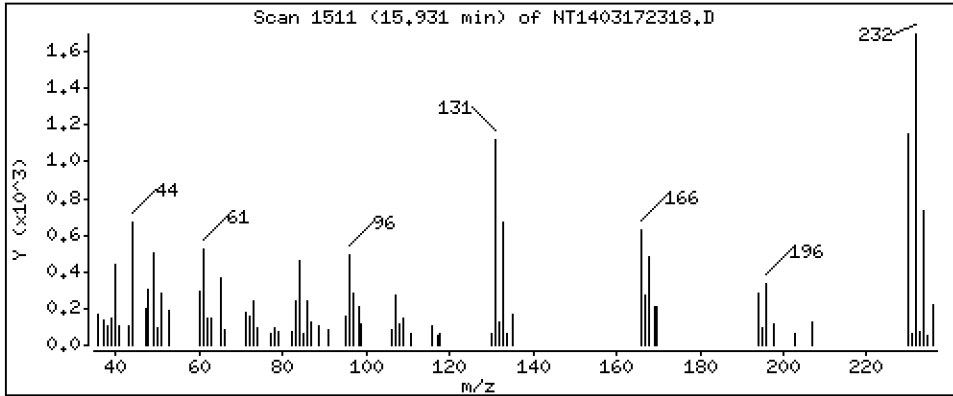
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,1003 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230317.b\NT1403172318.D
 Lab Smp Id: SLC0335-LCV2
 Inj Date : 18-MAR-2023 00:43 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0335-LCV2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Meth Date : 22-Mar-2023 08:57 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.821	6.821	(1.000)	16043	0.23147	0.2315
\$ 2 Phenol-d5	99		8.413	8.412	(1.000)	22436	0.24588	0.2459
3 Phenol	94		8.436	8.436	(1.000)	15686	0.16175	0.1618
\$ 5 2-Chlorophenol-d4	132		8.698	8.698	(1.000)	19774	0.27487	0.2749
4 Bis(2-Chloroethyl)ether	93		8.606	8.606	(1.000)	12828	0.18370	0.1837
6 2-Chlorophenol	128		8.722	8.729	(1.000)	13975	0.18309	0.1831
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	16579	0.21457	0.2146
* 8 1,4-Dichlorobenzene-d4	152		9.062	9.062	(1.000)	204038	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	15564	0.20914	0.2091
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	10767	0.22403	0.2240
12 1,2-Dichlorobenzene	146		9.450	9.450	(1.000)	15401	0.20937	0.2094
11 Benzyl alcohol	108		9.404	9.341	(1.038)	6056	0.13414	0.1341 (M)
14 2,2'-oxybis(1-Chloropropane)	121		9.637	9.644	(1.063)	4687	0.21117	0.2112 (M)
13 2-Methylphenol	108		9.559	9.559	(1.000)	11991	0.17489	0.1749
17 Hexachloroethane	117		10.048	10.048	(1.000)	6581	0.20677	0.2068
16 N-Nitroso-di-n-propylamine	70		9.893	9.900	(1.000)	9269	0.17171	0.1717
15 4-Methylphenol	108		9.831	9.830	(1.000)	12807	0.15776	0.1578
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	15064	0.18345	0.1835
19 Nitrobenzene	77		10.195	10.203	(0.882)	14833	0.18557	0.1856
20 Isophorone	82		10.645	10.653	(0.921)	16359	0.14989	0.1499
21 2-Nitrophenol	139		10.832	10.831	(0.937)	5533	0.12260	0.1226
22 2,4-Dimethylphenol	107		10.886	10.886	(0.942)	25374	0.37115	0.3712
23 Bis(2-Chloroethoxy)methane	93		11.080	11.087	(0.958)	13647	0.18574	0.1857
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.289	11.289	(0.977)	17112	0.31474	0.3147
26 1,2,4-Trichlorobenzene	180		11.475	11.482	(0.993)	13070	0.19555	0.1956
* 27 Naphthalene-d8	136		11.560	11.567	(1.000)	775937	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	41862	0.20194	0.2019
29 4-Chloroaniline	127		11.737	11.737	(1.015)	28494	0.32835	0.3283
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	6307	0.20900	0.2090
31 4-Chloro-3-methylphenol	107		12.704	12.696	(1.099)	19456	0.29614	0.2961
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	28554	0.19751	0.1975
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	5490	0.17179	0.1718

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	10802	0.27695	0.2769
35 2,4,5-Trichlorophenol	196	13.710	13.702	(0.902)	11391	0.28027	0.2803
§ 36 2-Fluorobiphenyl	172	13.795	13.795	(0.908)	29072	0.20879	0.2088
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	23866	0.19998	0.2000
38 2-Nitroaniline	65	14.268	14.267	(0.939)	14161	0.30730	0.3073
39 Dimethylphthalate	163	14.693	14.701	(0.967)	24385	0.19020	0.1902
40 Acenaphthylene	152	14.879	14.879	(0.979)	38524	0.19219	0.1922
41 2,6-Dinitrotoluene	165	14.840	14.840	(0.977)	9236	0.31184	0.3118
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	384479	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	11505	0.28158	0.2816
44 Acenaphthene	153	15.258	15.266	(1.004)	22698	0.19395	0.1939
45 2,4-Dinitrophenol	184	15.359	15.335	(1.011)	497	0.02168	0.02168 (M)
46 Dibenzofuran	168	15.591	15.590	(1.026)	33382	0.19980	0.1998
47 4-Nitrophenol	109	15.521	15.436	(1.021)	1402	0.06483	0.06483 (M)
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	11945	0.28452	0.2845
50 Diethylphthalate	149	16.155	16.163	(1.063)	25406	0.19167	0.1917
49 Fluorene	166	16.302	16.309	(1.073)	26861	0.16960	0.1696
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	11780	0.17328	0.1733
52 4-Nitroaniline	138	16.402	16.394	(1.079)	8037	0.22615	0.2262
53 4,6-Dinitro-2-methylphenol	198	16.494	16.494	(0.904)	4699	0.20016	0.2002
54 N-Nitrosodiphenylamine	169	16.548	16.548	(0.907)	17523	0.19011	0.1901
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	2788	0.19100	0.1910
56 4-Bromophenyl-phenylether	248	17.304	17.304	(0.949)	5805	0.18680	0.1868
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	6690	0.20403	0.2040
58 Pentachlorophenol	266	17.992	17.977	(0.986)	2057	0.09107	0.09107 (M)
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	678623	4.00000	
60 Phenanthrene	178	18.286	18.294	(1.003)	38655	0.19936	0.1994
61 Anthracene	178	18.379	18.387	(1.008)	34239	0.18329	0.1833
62 Carbazole	167	18.712	18.712	(1.026)	27483	0.16536	0.1654
63 Di-n-butylphthalate	149	19.509	19.509	(1.070)	34134	0.16203	0.1620
64 Fluoranthene	202	20.677	20.677	(0.888)	34573	0.22419	0.2242
65 Pyrene	202	21.103	21.103	(0.906)	36468	0.23059	0.2306
§ 66 Terphenyl-d14	244	21.389	21.389	(0.918)	26055	0.24336	0.2434
67 Butylbenzylphthalate	149	22.310	22.310	(0.958)	13984	0.20183	0.2018
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	27759	0.19861	0.1986
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	379052	4.00000	
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	20441	0.50999	0.5100
71 Chrysene	228	23.332	23.340	(1.002)	24062	0.19022	0.1902
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.332	(0.960)	17448	0.20508	0.2051
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	646291	4.00000	
73 Di-n-octylphthalate	149	24.331	24.331	(1.001)	34651	0.20856	0.2086
74 Benzo(b)fluoranthene	252	25.160	25.159	(0.970)	16214	0.18713	0.1871
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	18568	0.21618	0.2162
76 Benzo(a)pyrene	252	25.818	25.818	(0.996)	13291	0.17938	0.1794
* 77 Perylene-d12	264	25.934	25.934	(1.000)	245193	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.610	(1.104)	11686	0.14491	0.1449
79 Dibenzo(a,h)anthracene	278	28.649	28.626	(1.105)	9576	0.14090	0.1409
80 Benzo(g,h,i)perylene	276	29.411	29.403	(1.134)	10108	0.15209	0.1521 (M)
90 N-Nitrosodimethylamine	74	4.689	4.697	(1.000)	11768	0.26809	0.2681
91 Aniline	93	8.513	8.513	(1.000)	36551	0.37474	0.3747
93 Benzidine	184	20.917	20.909	(0.898)	16903	0.27237	0.2724
103 Pyridine	79	4.743	4.712	(1.000)	18433	0.13560	0.1356
105 1-methylnaphthalene	142	13.231	13.230	(1.145)	25403	0.19395	0.1940
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.625	(1.094)	30076	0.19001	0.1900

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.198	25.159	(0.972)	34327	0.41716	0.4172
120 2,3,4,6-Tetrachlorophenol	232	15.931	15.923	(1.048)	3906	0.10028	0.1003

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 17-MAR-2023
 Lab File ID: NT1403172318.D Calibration Time: 23:31
 Lab Smp Id: SLC0335-LCV2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	231017	115509	462034	204038	-11.68
27 Naphthalene-d8	843789	421895	1687578	775937	-8.04
42 Acenaphthene-d10	432455	216228	864910	384479	-11.09
59 Phenanthrene-d10	793780	396890	1587560	678623	-14.51
69 Chrysene-d12	411057	205529	822114	379052	-7.79
134 Di-n-octylphthala	799010	399505	1598020	646291	-19.11
77 Perylene-d12	254782	127391	509564	245193	-3.76

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.06	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.24	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172318.D

Lab ID: SLC0335-LCV2
nt14.i, ABN.m, 18-MAR-2023 00:43

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.038	1.000	0.0377	Benzyl alcohol
1.063	1.000	0.0634	2,2'-oxybis(1-Chloropropane)
1.021	1.016	0.0056	4-Nitrophenol

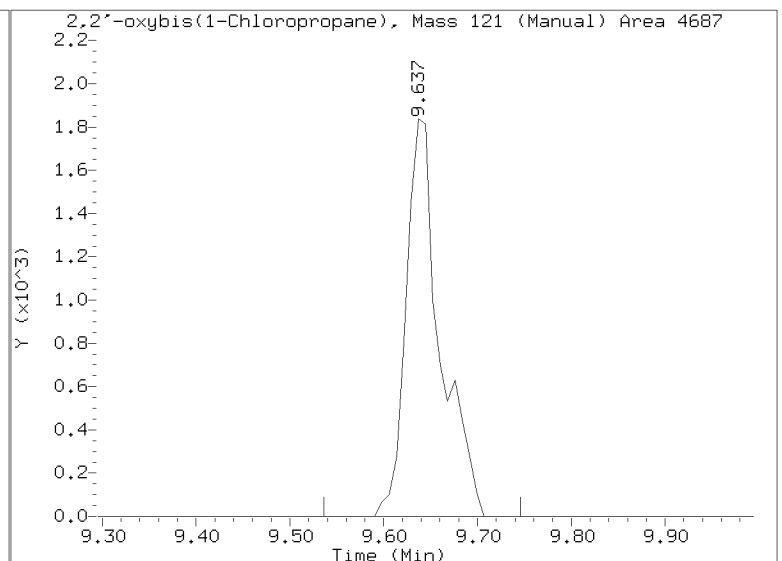
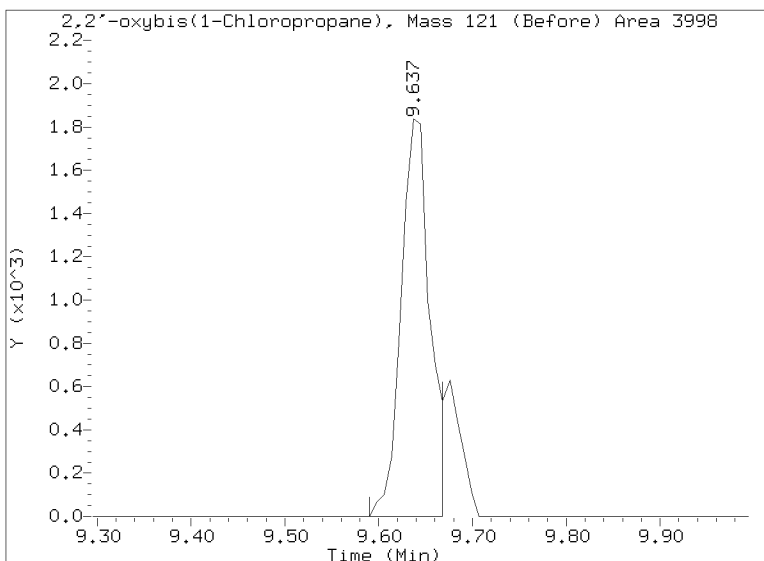
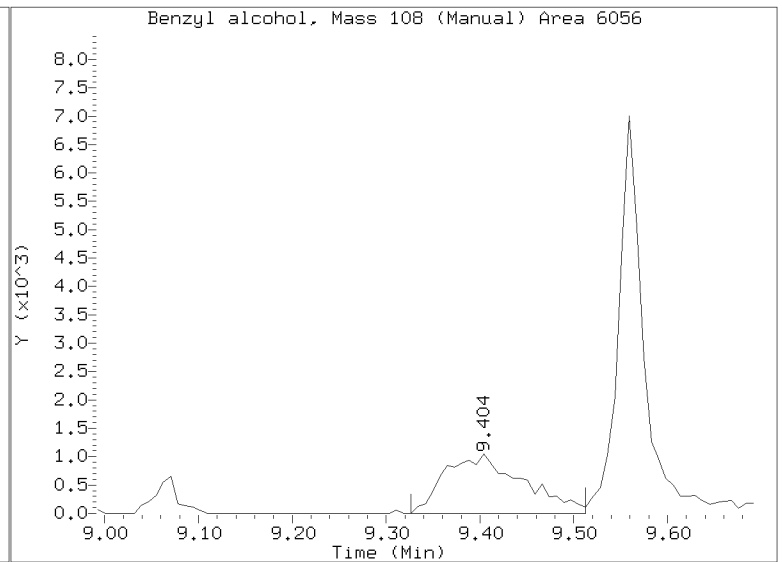
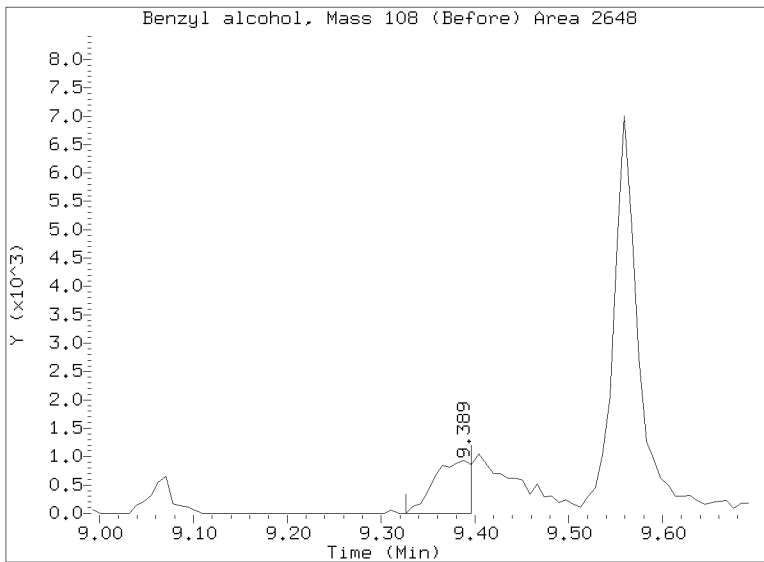
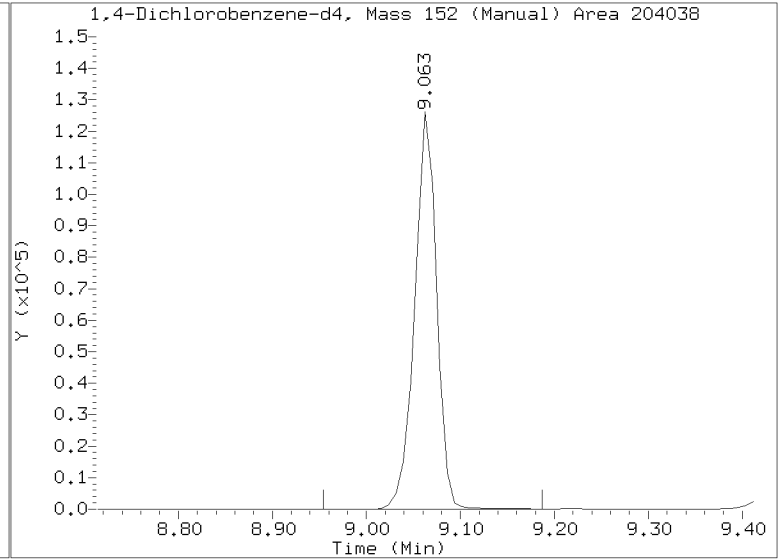
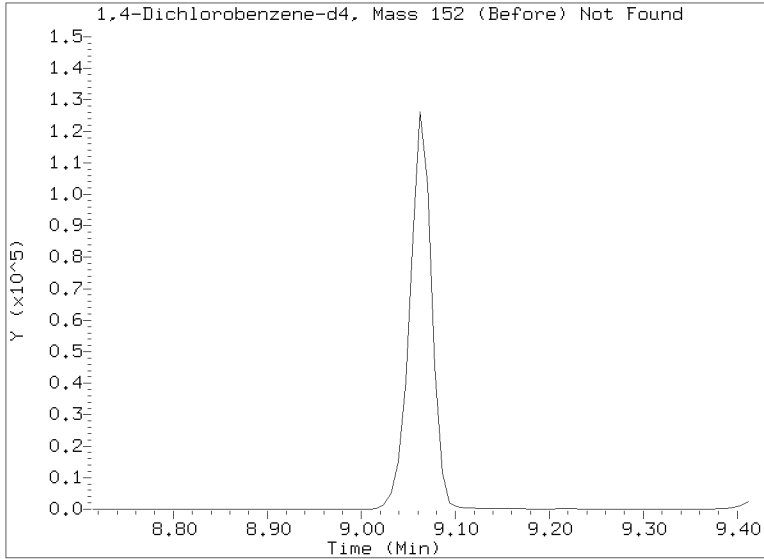
RRT check based on Ccal File: NT1403172316.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

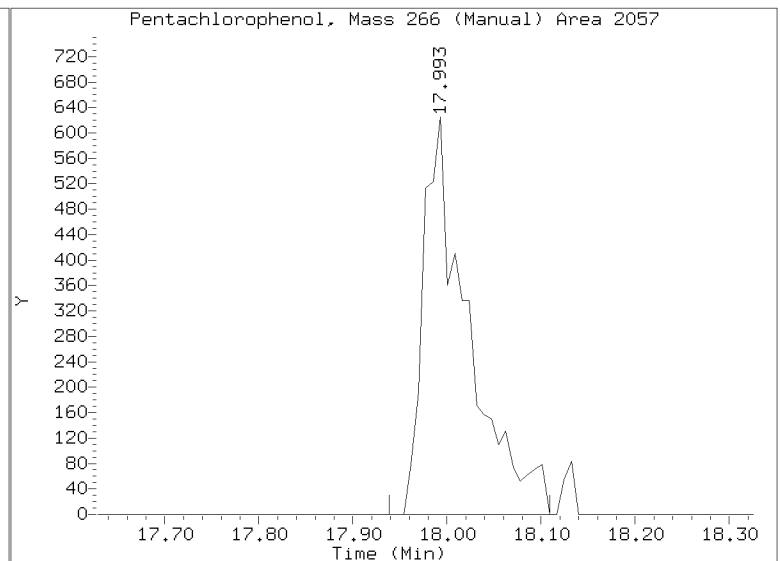
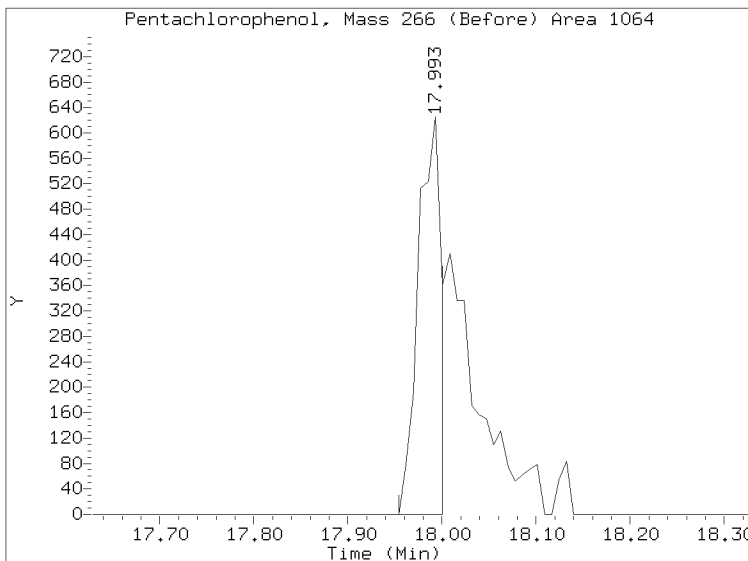
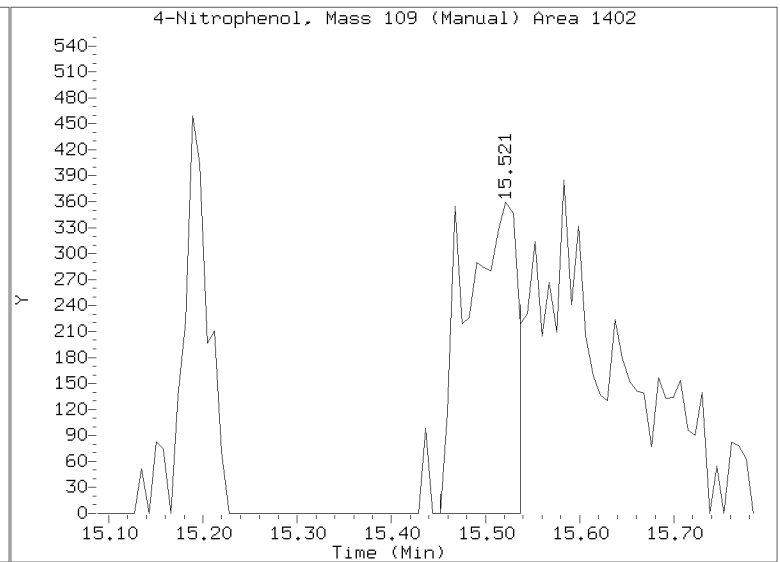
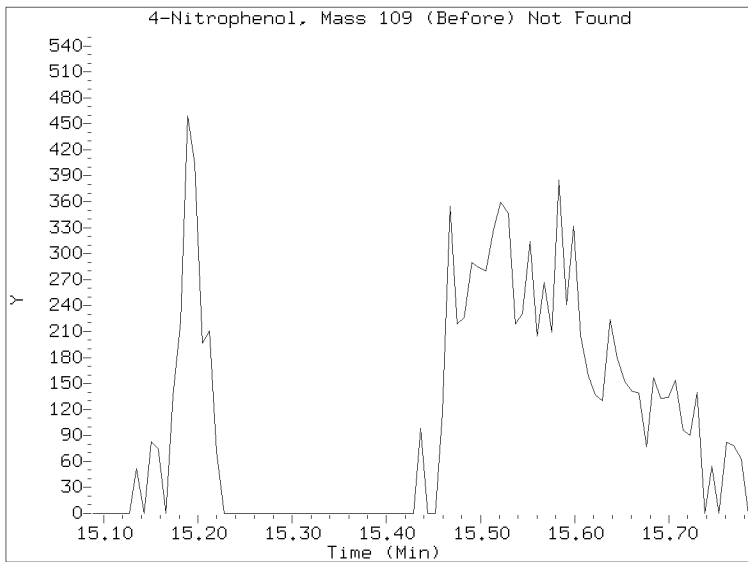
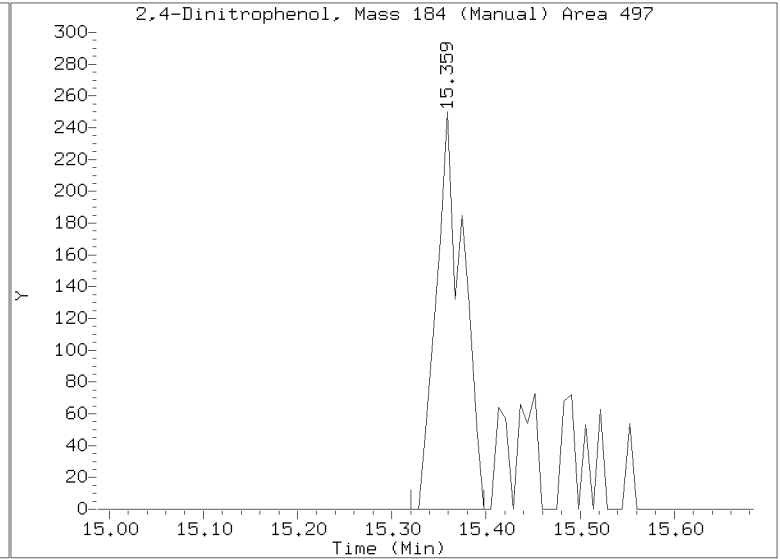
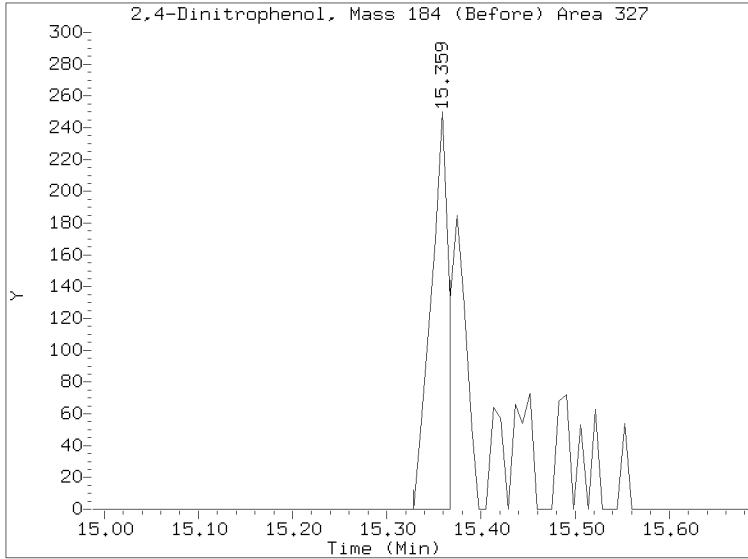
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172318.D
Injection Date: 18-MAR-2023 00:43
Lab ID:SLC0335-LCV2 Client ID:
Report Date: 03/22/2023 09:49



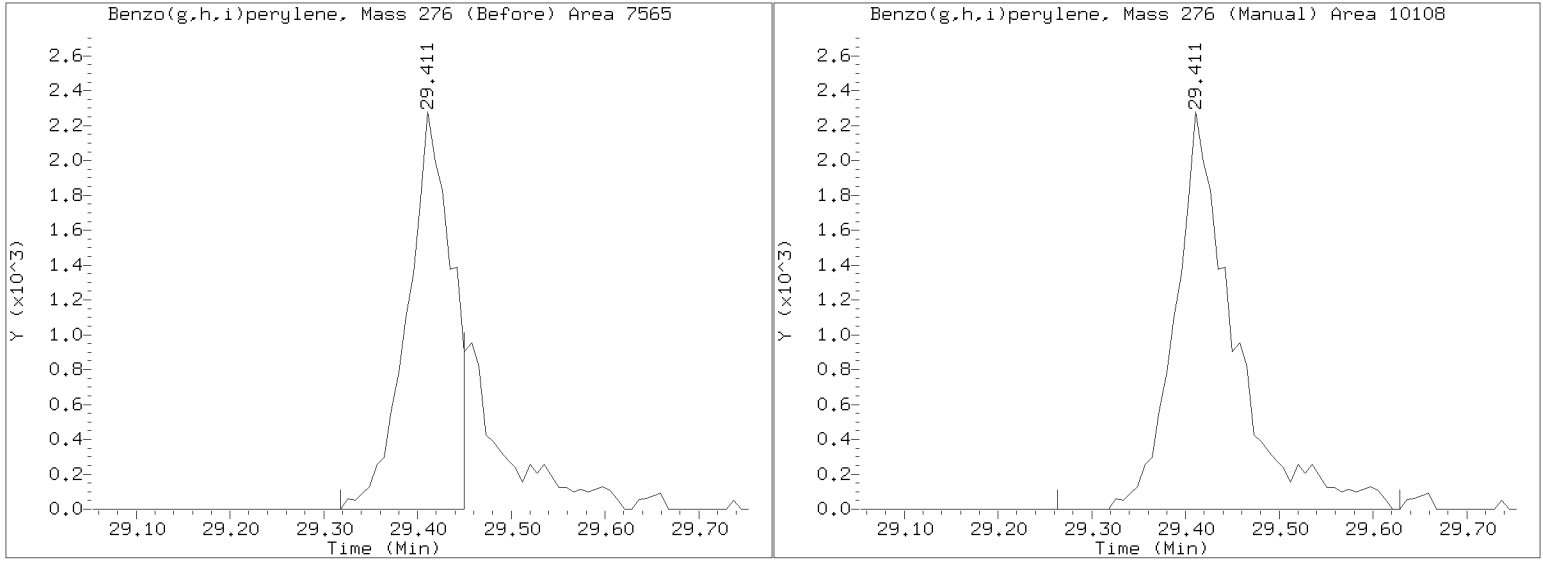
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172318.D
Injection Date: 18-MAR-2023 00:43
Lab ID: SLC0335-LCV2 Client ID:
Report Date: 03/22/2023 09:49



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/NT1403172318.D
Injection Date: 18-MAR-2023 00:43
Lab ID: SLC0335-LCV2 Client ID:
Report Date: 03/22/2023 09:49





CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403182331.D

Calibration Date: 03/15/2023

Sequence: SLC0355

Injection Date: 03/19/23

Lab Sample ID: SLC0355-CCV1

Injection Time: 11:04

Sequence Name: Calibration Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.7	1.9011440	1.7695660		-6.9	+/-50
4-Methylphenol	A	5.0000	4.4	1.5914380	1.4162900		-11.0	+/-50
Naphthalene	A	5.0000	4.9	1.0686200	1.0466850		-2.1	+/-50
2-Methylnaphthalene	A	5.0000	4.9	0.7452524	0.7337216		-1.5	+/-50
Acenaphthylene	A	5.0000	4.9	2.0854140	2.0372820		-2.3	+/-50
Dimethylphthalate	A	5.0000	4.9	1.3338450	1.3172800		-1.2	+/-50
Acenaphthene	A	5.0000	4.8	1.2175690	1.1772130		-3.3	+/-50
Dibenzofuran	A	5.0000	4.9	1.7382550	1.6992520		-2.2	+/-50
Fluorene	A	5.0000	4.7	1.6477120	1.5627290		-5.2	+/-50
Phenanthrene	A	5.0000	4.8	1.1428510	1.0896860		-4.7	+/-50
Anthracene	A	5.0000	5.0	1.1010610	1.0982380		-0.3	+/-50
Fluoranthene	A	5.0000	6.0	1.6273660	1.9475310		19.7	+/-50
Pyrene	A	5.0000	5.7	1.6688810	1.9101170		14.5	+/-50
Butylbenzylphthalate	A	5.0000	6.4	0.7311588	0.9384063		28.3	+/-50
Benzo(a)anthracene	A	5.0000	5.0	1.4748830	1.4620690		-0.9	+/-50
Chrysene	A	5.0000	5.1	1.3348290	1.3732190		2.9	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	5.5	0.5265649	0.5781474		9.8	+/-50
Benzo(a)fluoranthene, Total	A	10.0000	10.1	1.3424190	1.3489460		0.6	+/-50
Benzo(a)pyrene	A	5.0000	5.1	1.2087150	1.2369200		2.3	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	3.6	1.3155660	0.9463908		-28.1	+/-50
Dibenzo(a,h)anthracene	A	5.0000	3.9	1.1087420	0.8575581		-22.7	+/-50
Benzo(g,h,i)perylene	A	5.0000	2.9	1.0842080	0.6349836		-41.4	+/-50
2-Fluorophenol	A	7.5000	7.03	1.3587350	1.2742920		-6.2	+/-50
Phenol-d5	A	7.5000	7.17	1.7888720	1.7095500		-4.4	+/-50
2-Chlorophenol-d4	A	7.5000	7.49	1.4103050	1.4093630		-0.07	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.99	0.9421955	0.9407396		-0.2	+/-50
Nitrobenzene-d5	A	5.0000	4.97	0.4233007	0.4203513		-0.7	+/-50
2-Fluorobiphenyl	A	5.0000	4.96	1.4485960	1.4377130		-0.8	+/-50
2,4,6-Tribromophenol	A	7.5000	7.57	0.1518639	0.1587002		0.9	+/-50
p-Terphenyl-d14	A	5.0000	5.76	1.1297810	1.3025530		15.3	+/-50

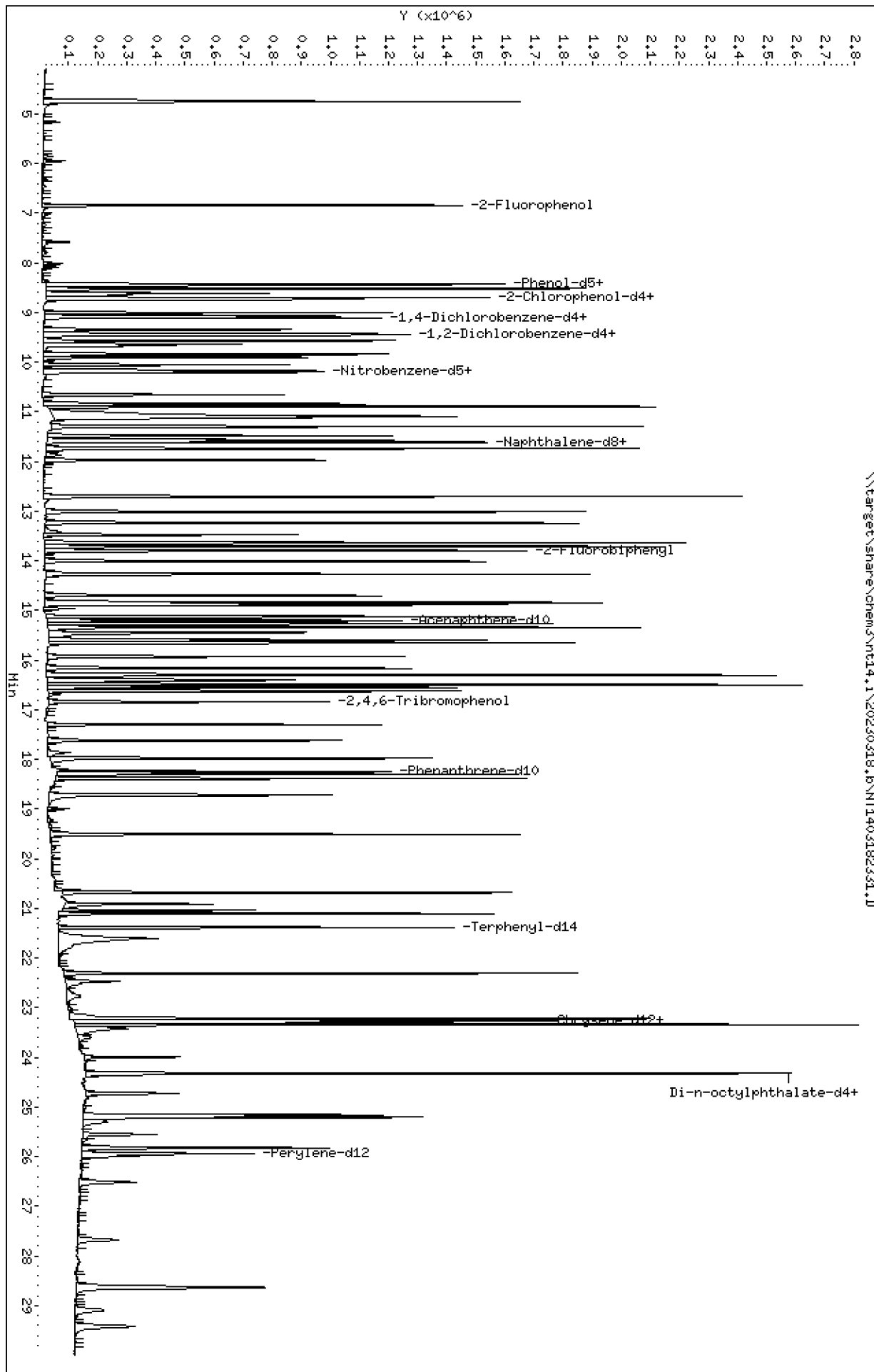
* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230318.16\NT1403182331.D
Date: 18-MAR-2023 11:04
Client ID:
Sample Info: SLC0385-CCW1
Column phase: ZB-5msi

Instrument: nt14.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt14.1\20230318.16\NT1403182331.D



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

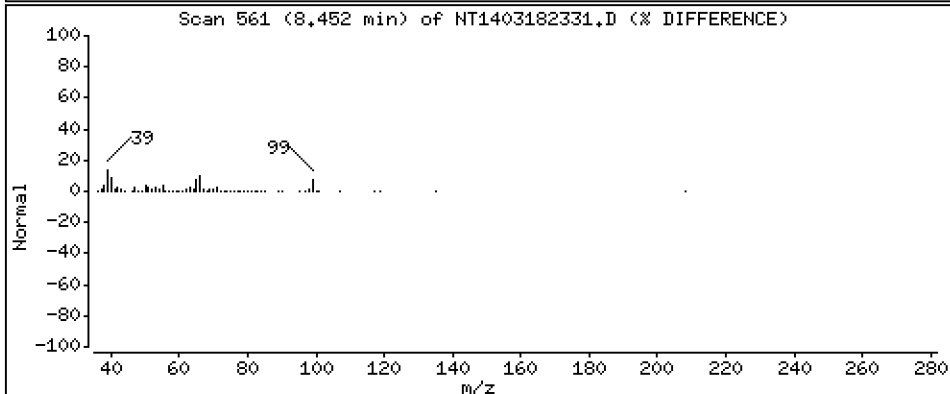
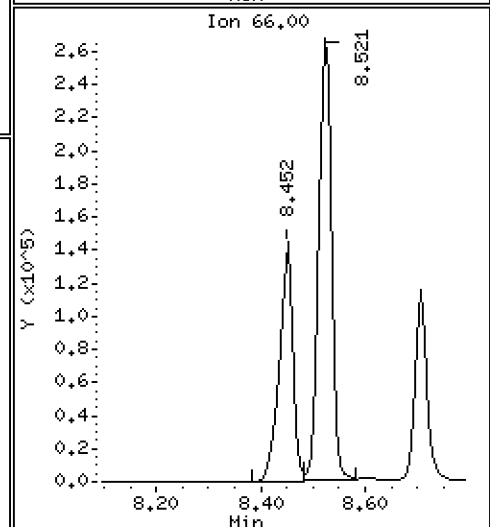
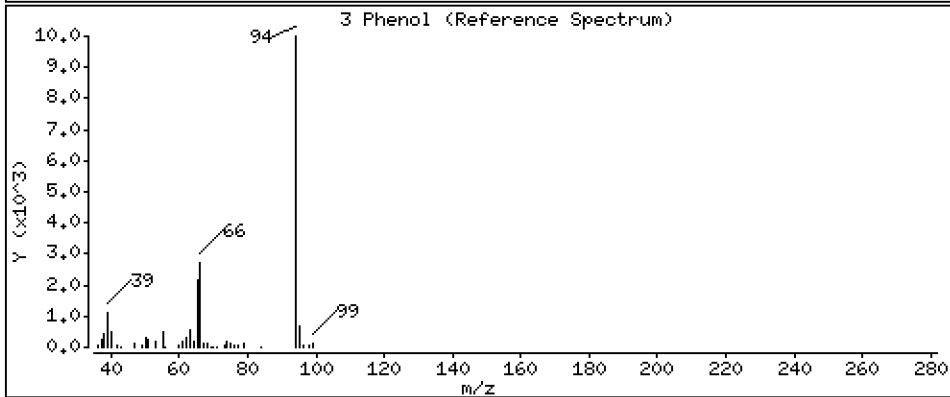
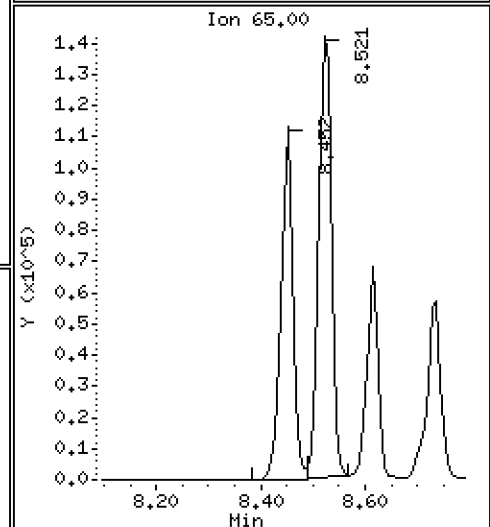
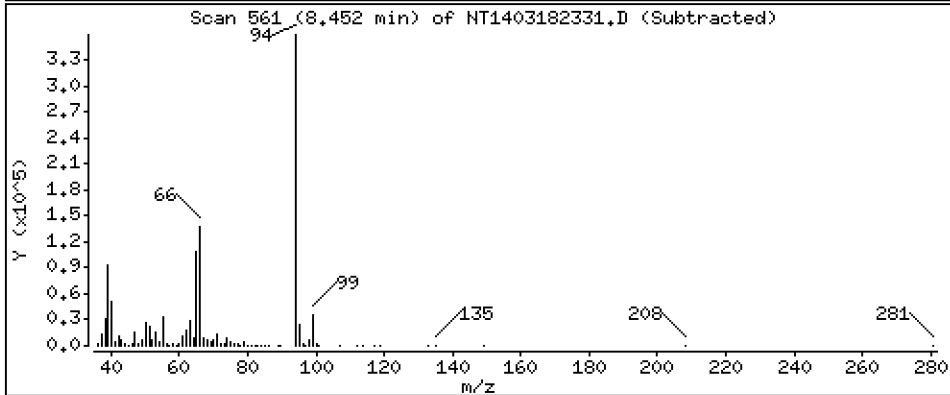
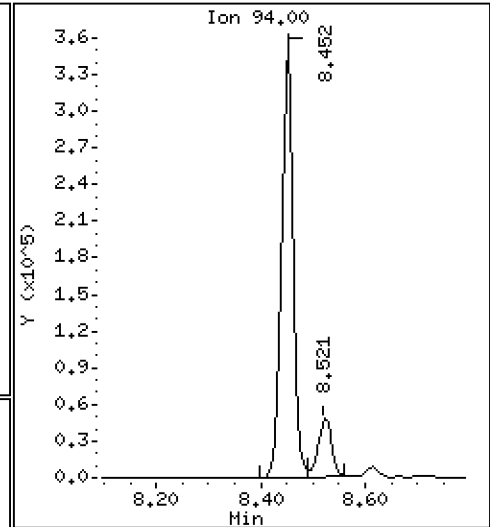
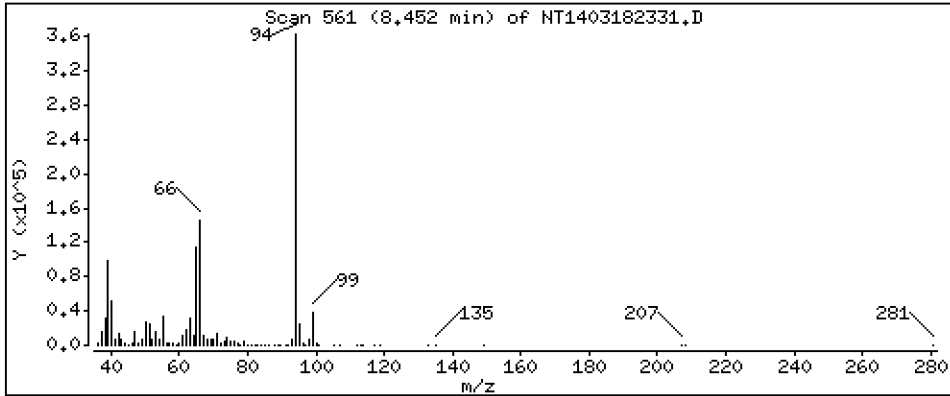
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,654 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

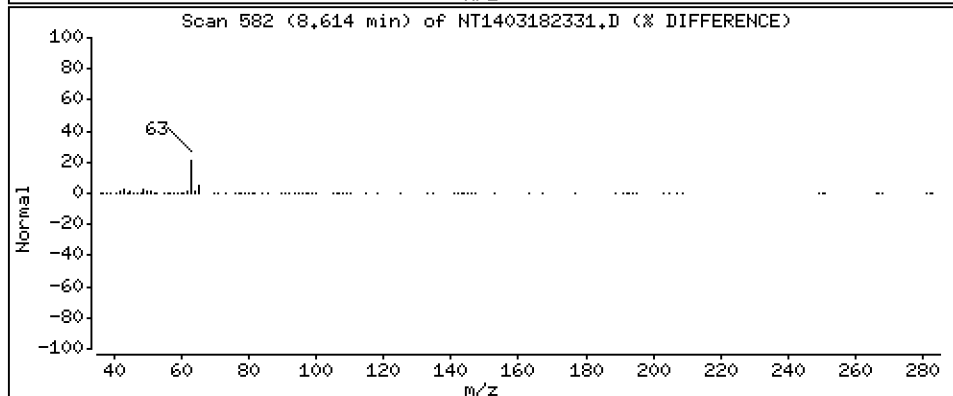
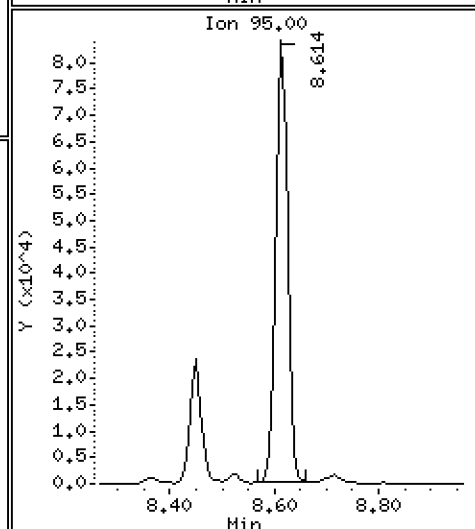
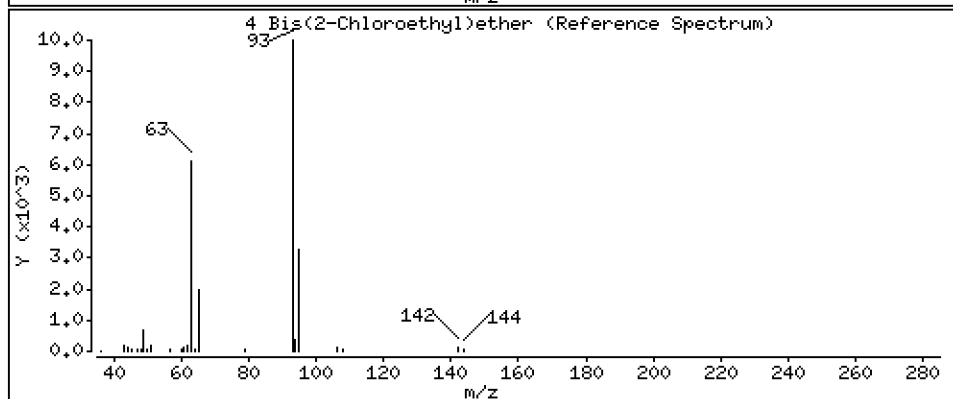
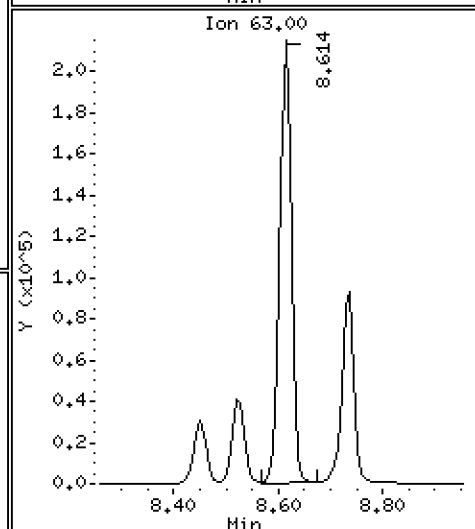
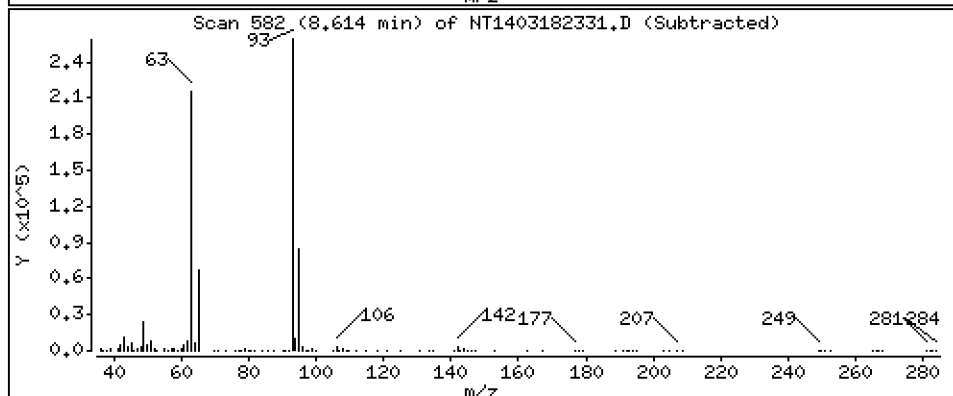
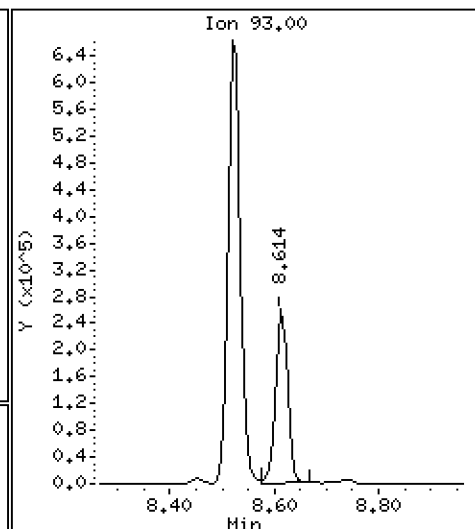
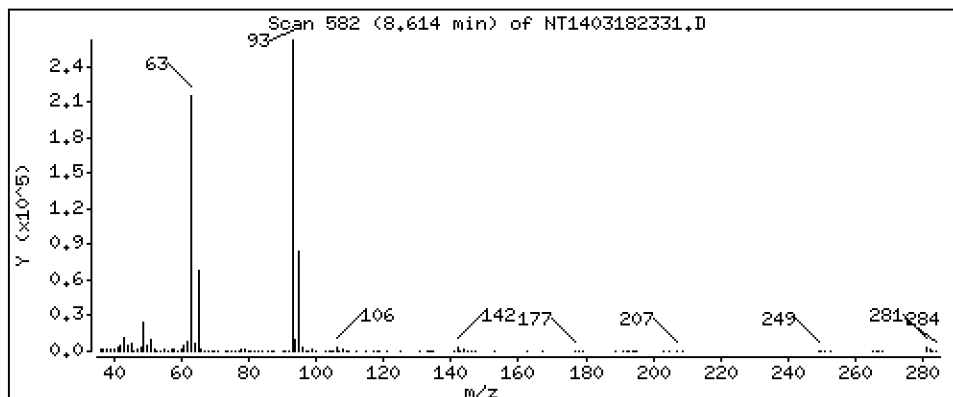
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 4,708 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

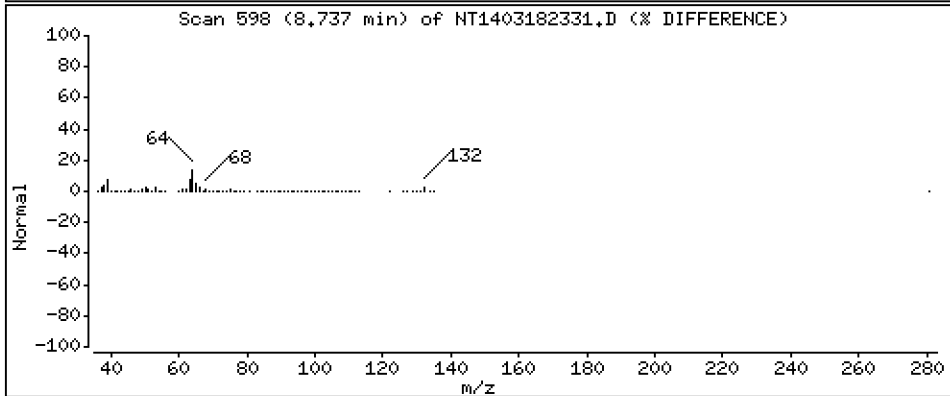
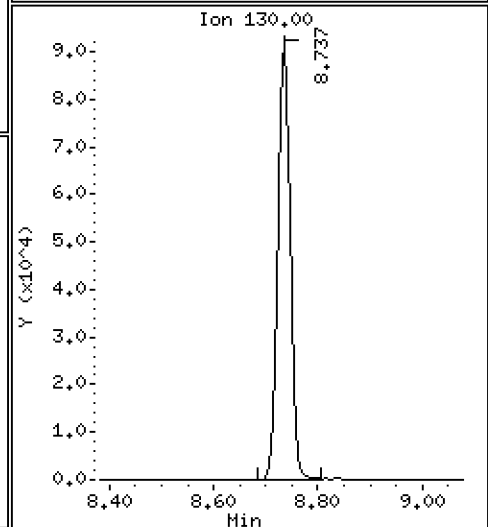
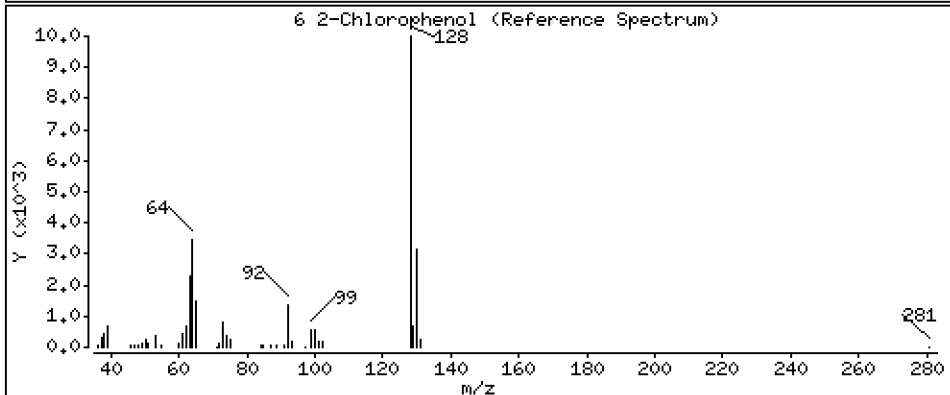
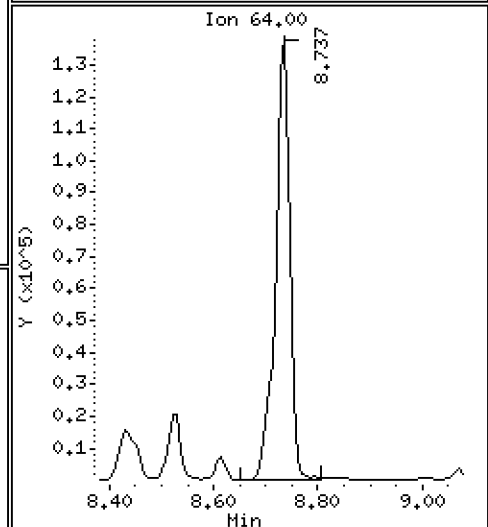
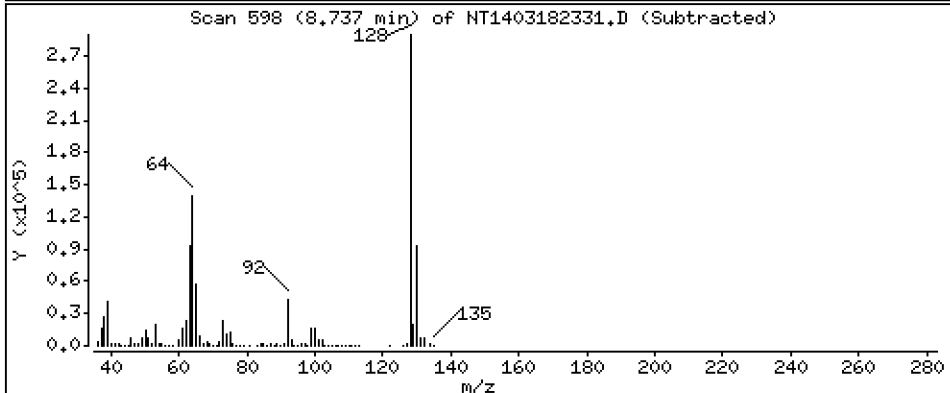
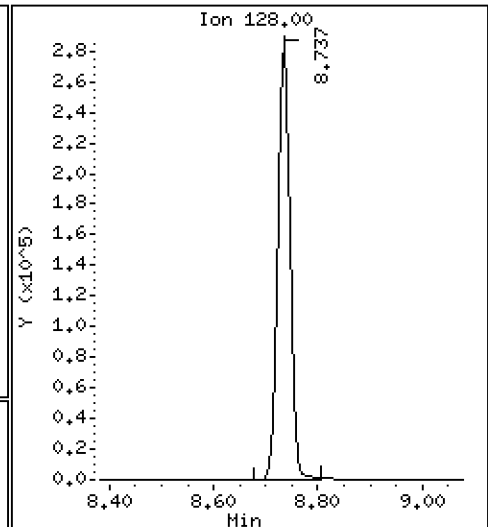
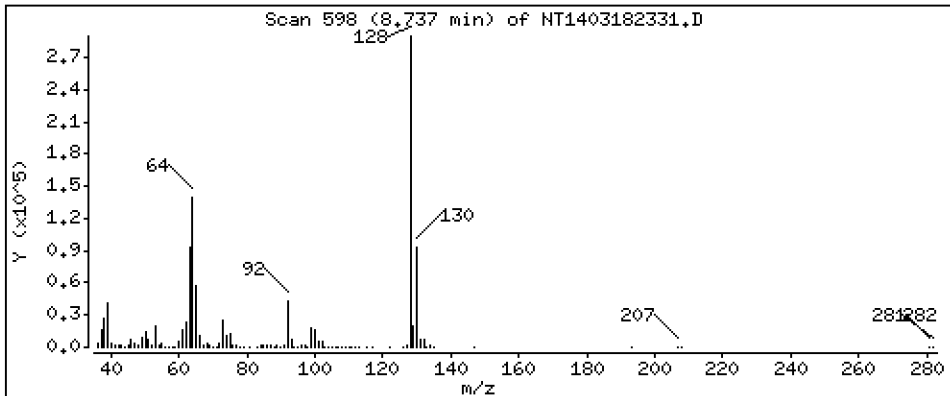
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,896 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

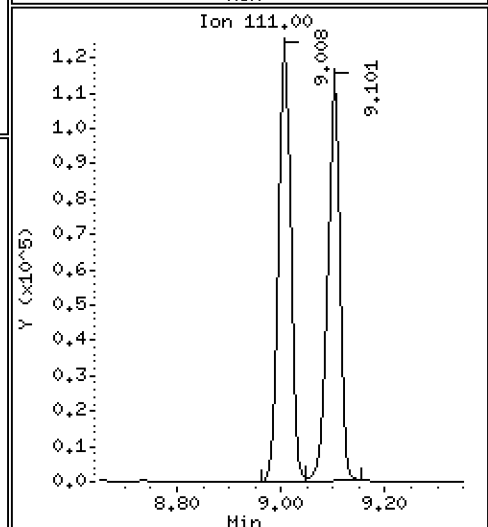
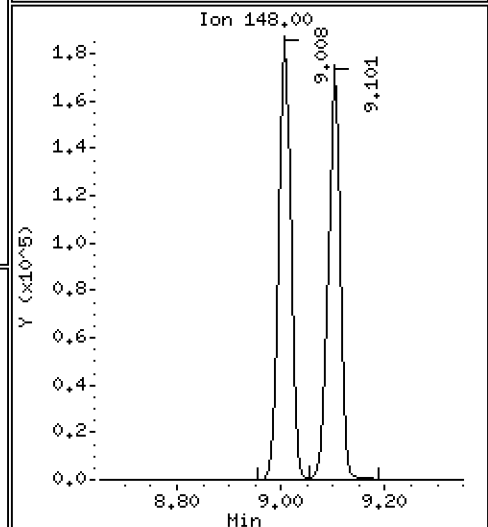
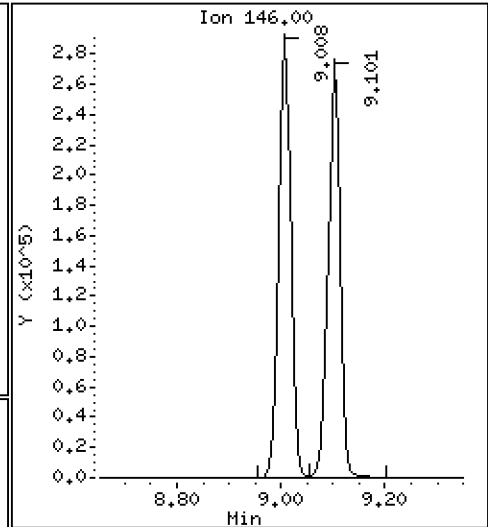
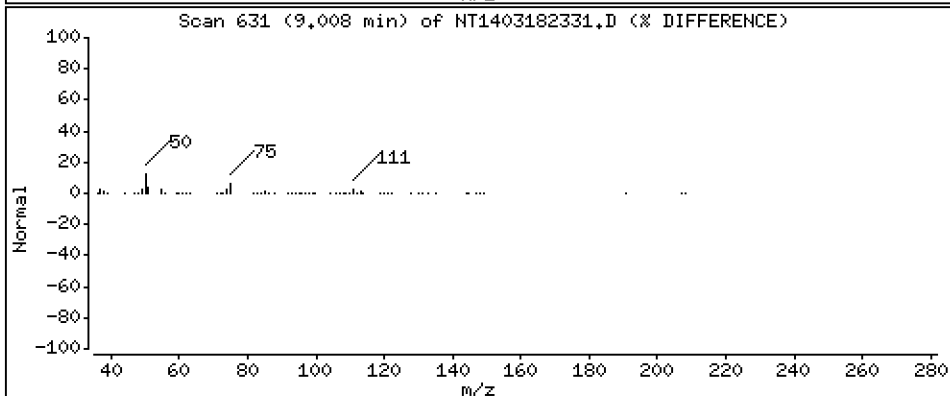
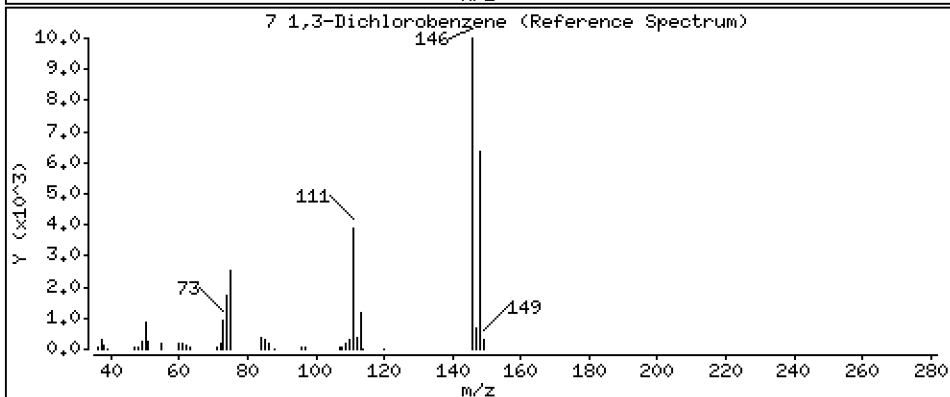
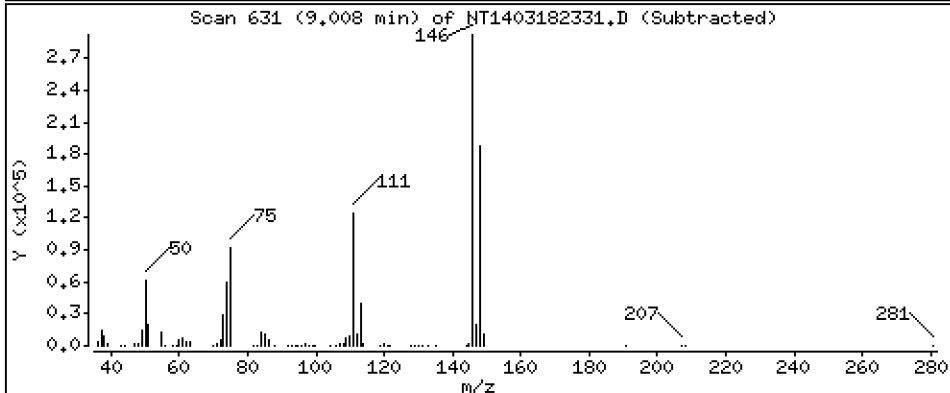
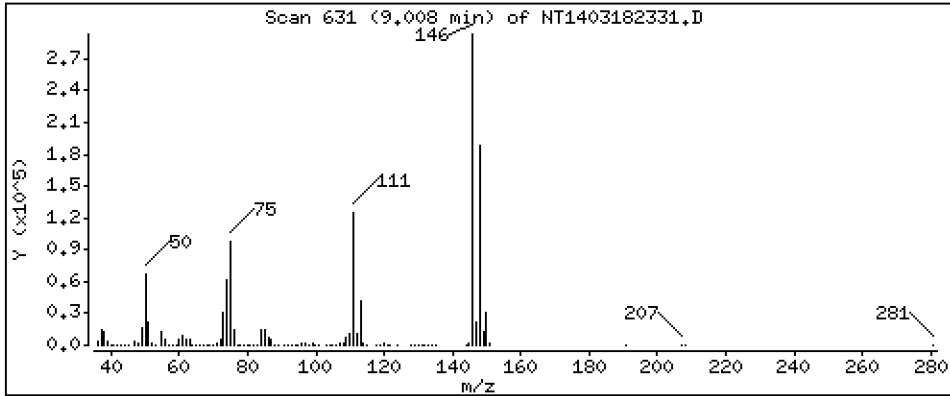
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.898 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

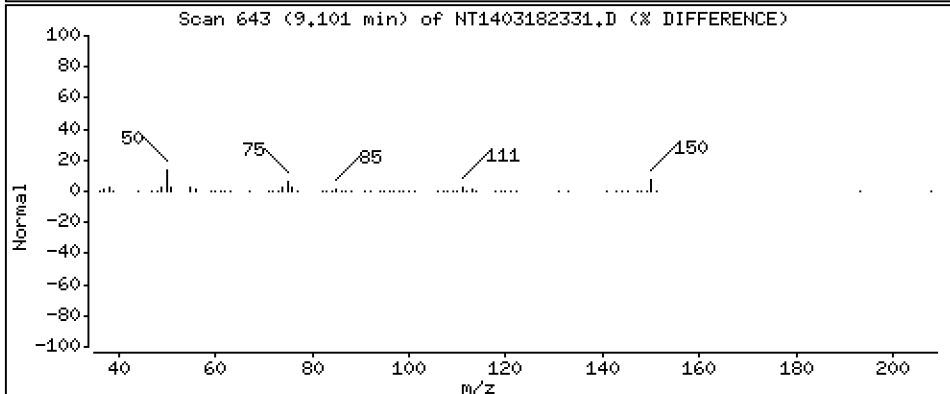
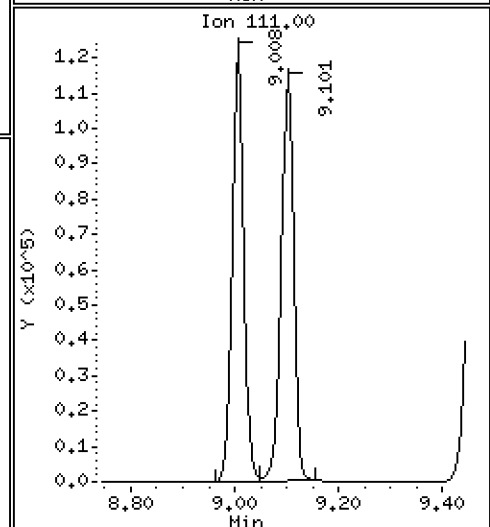
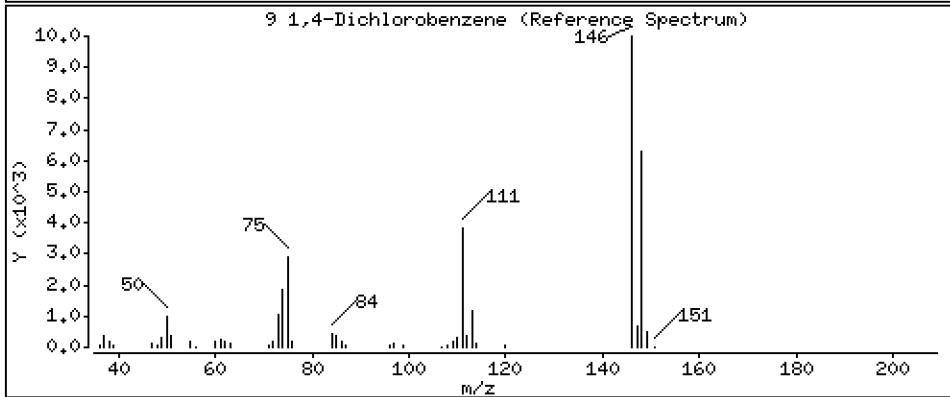
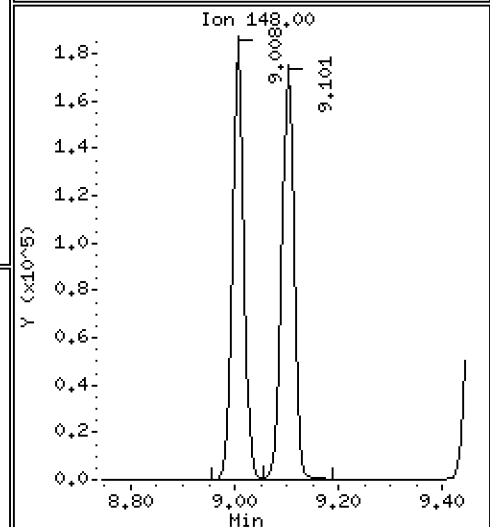
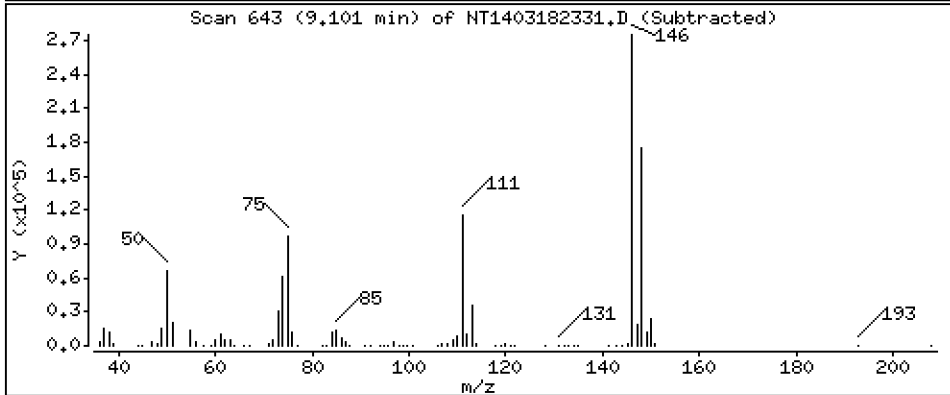
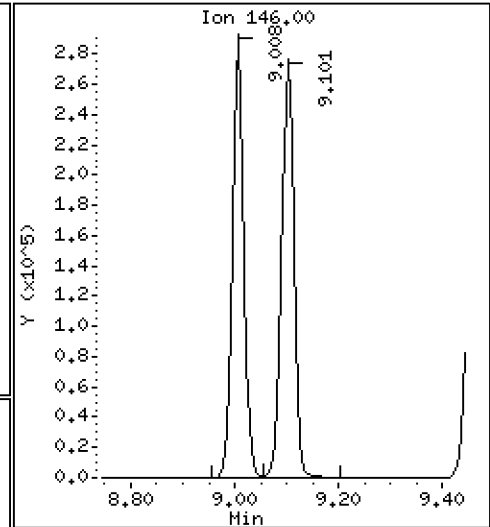
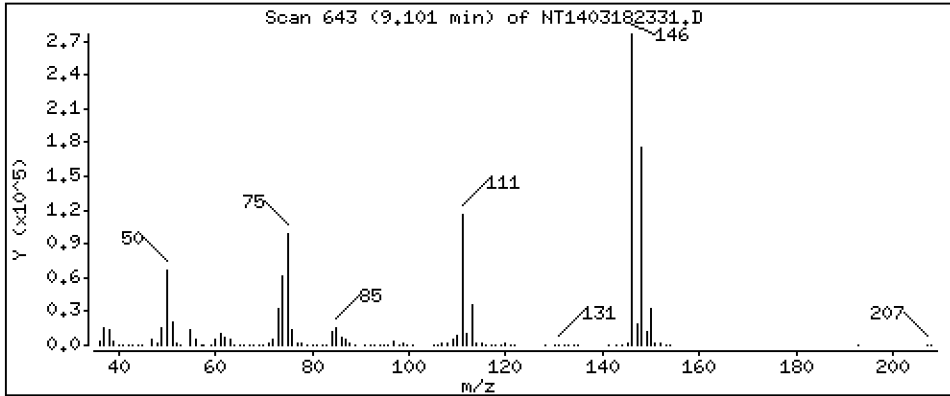
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.915 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

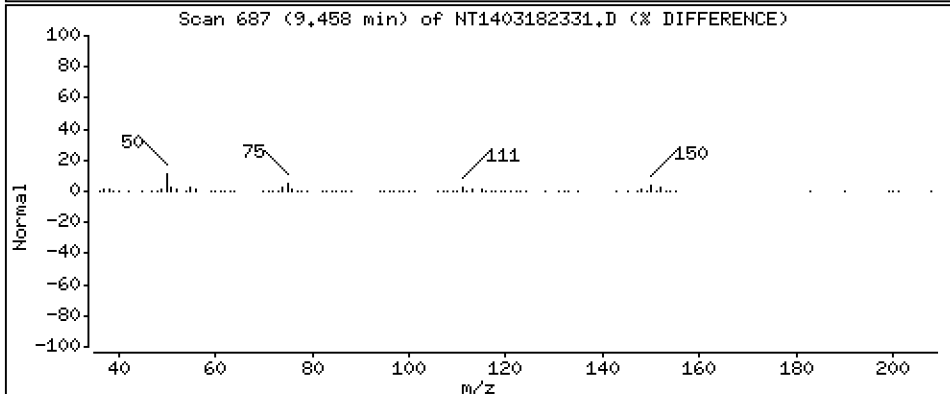
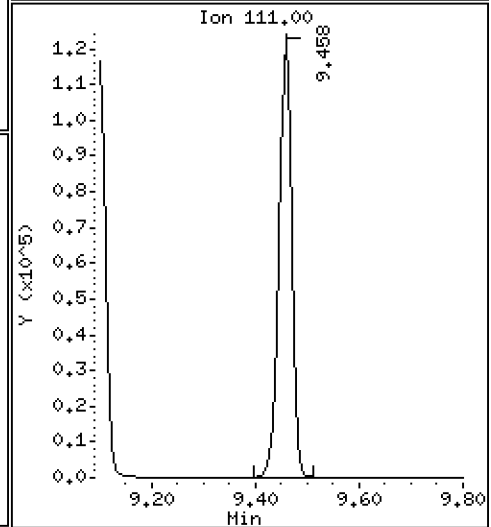
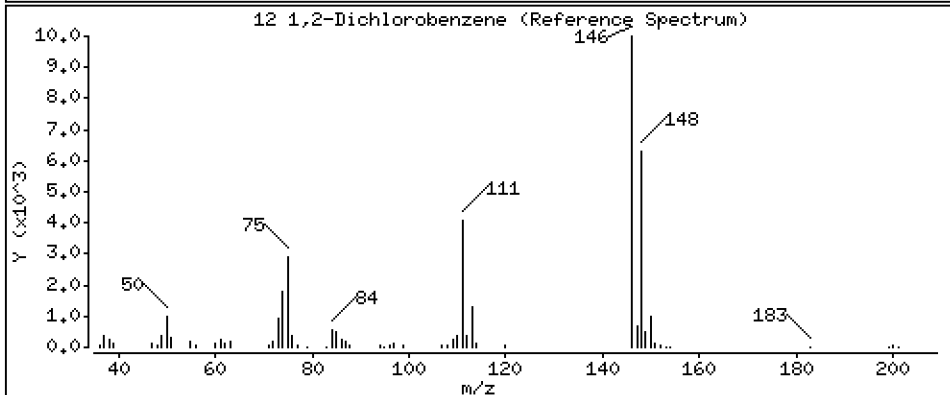
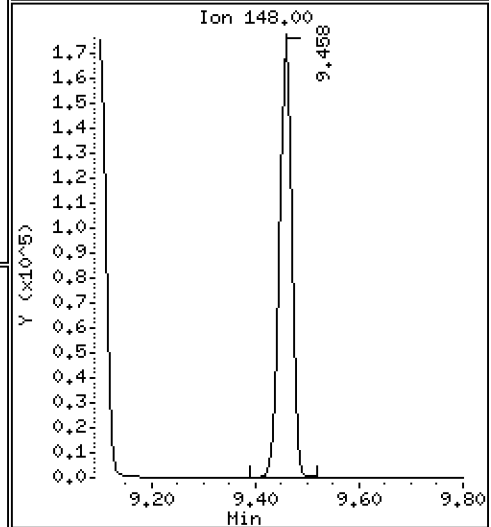
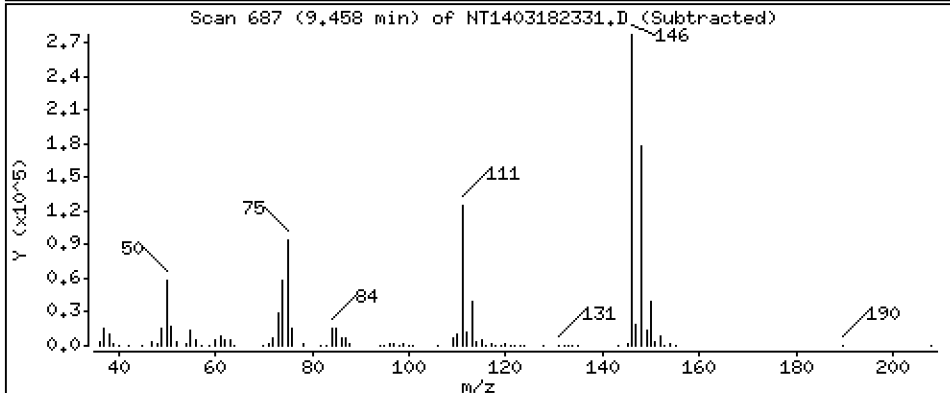
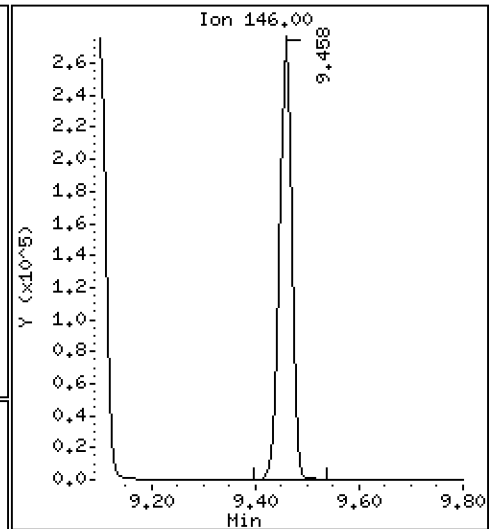
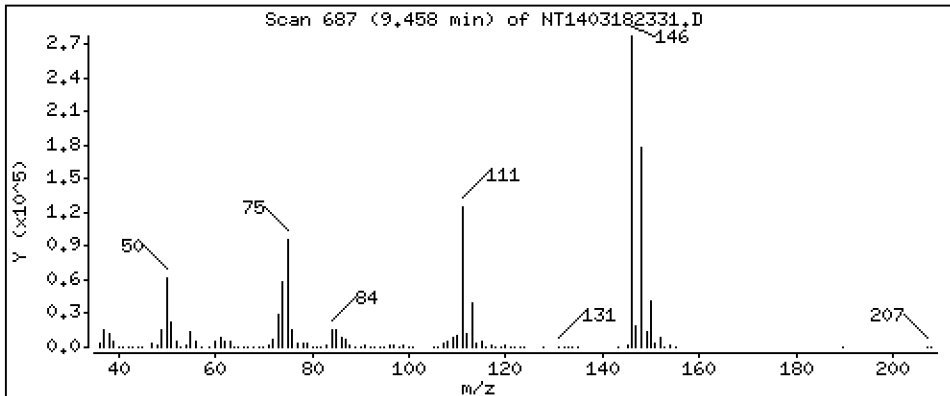
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,932 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

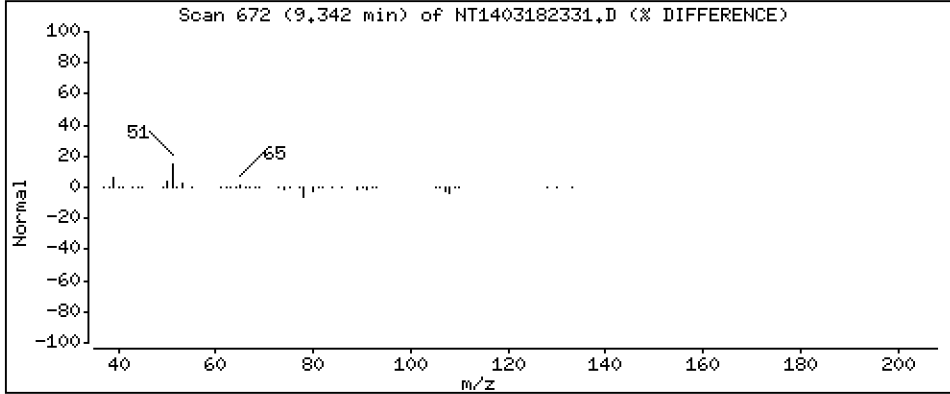
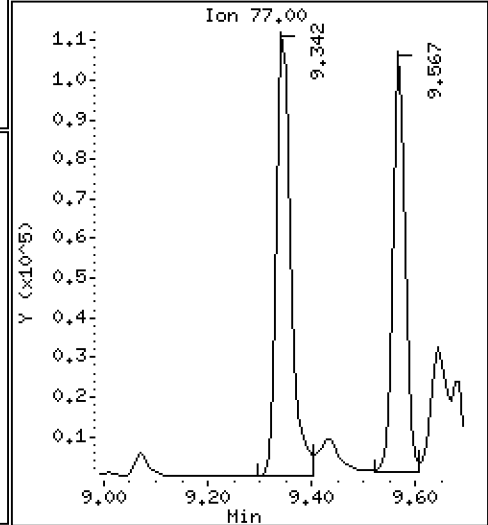
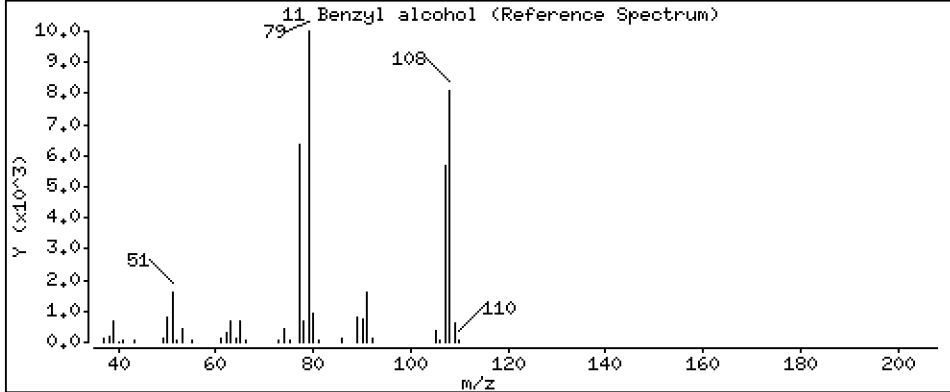
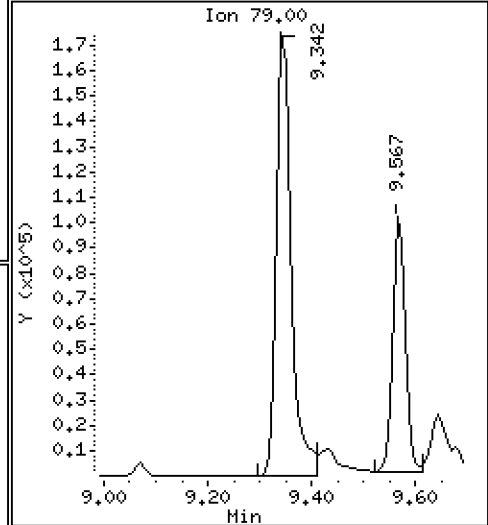
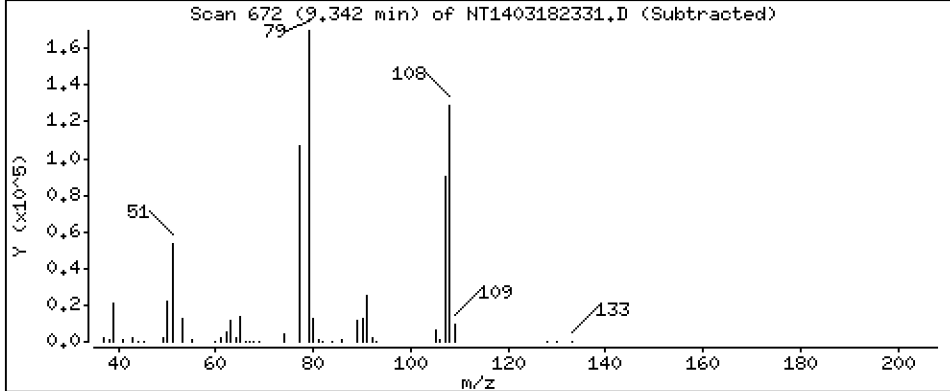
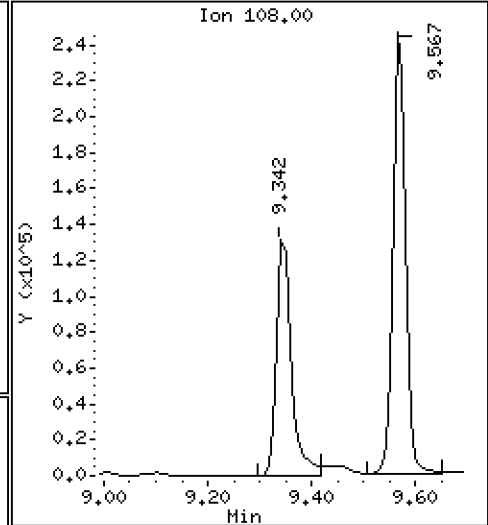
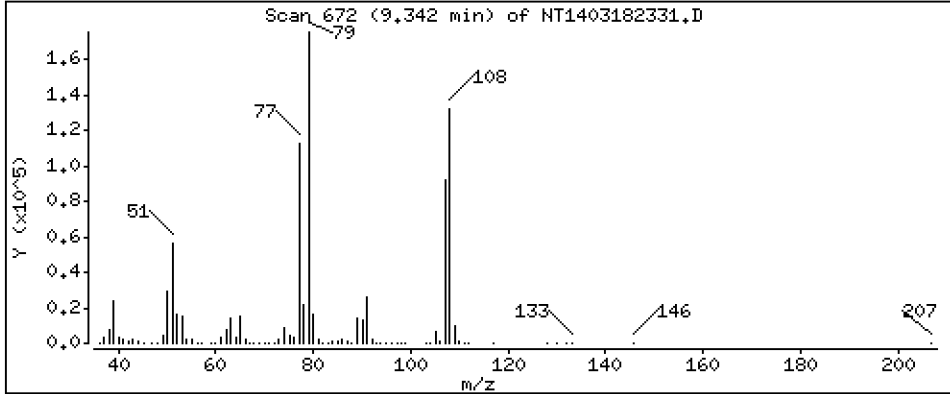
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.739 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

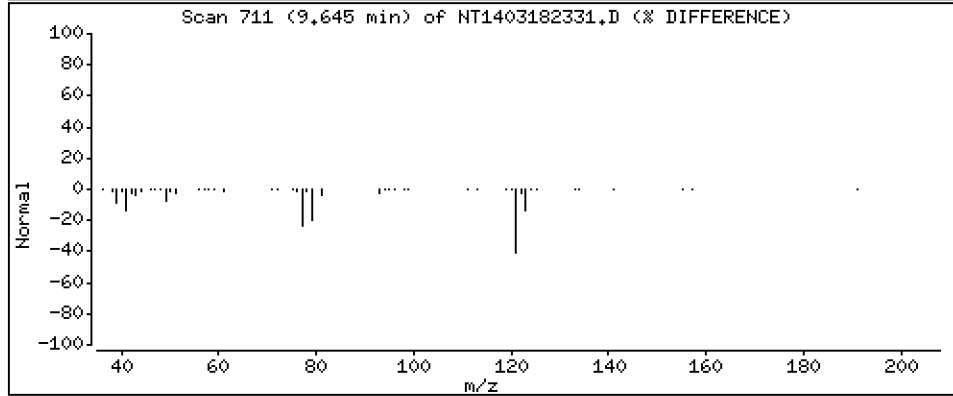
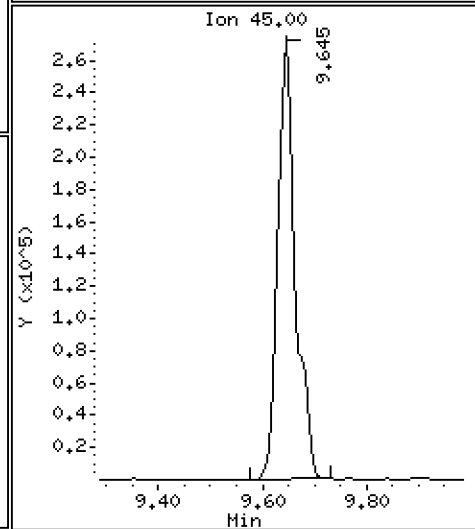
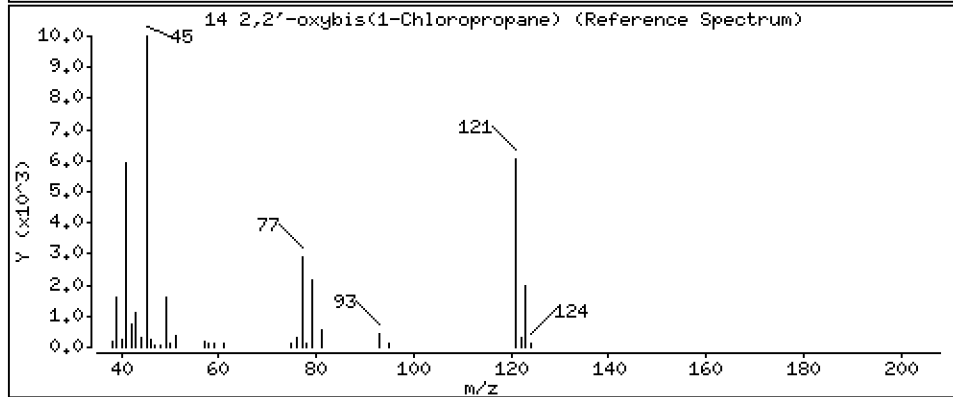
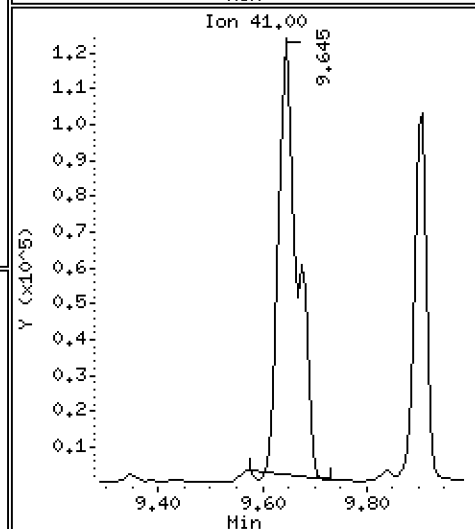
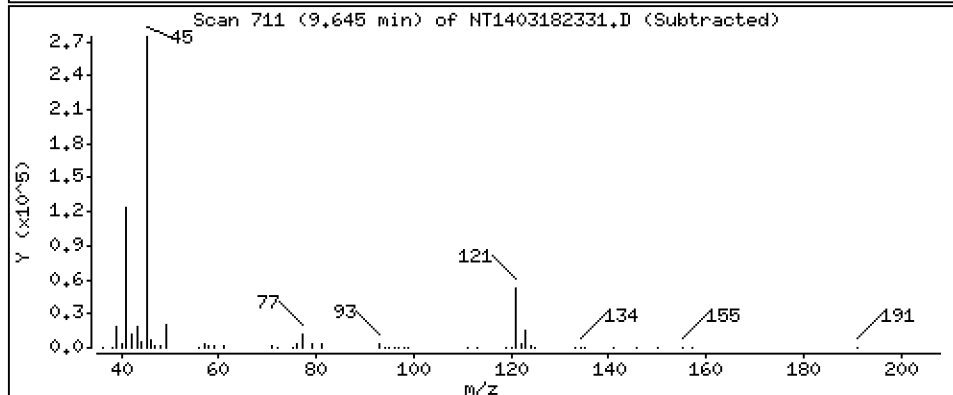
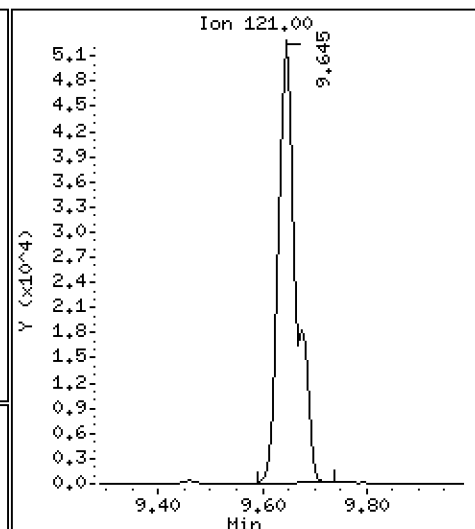
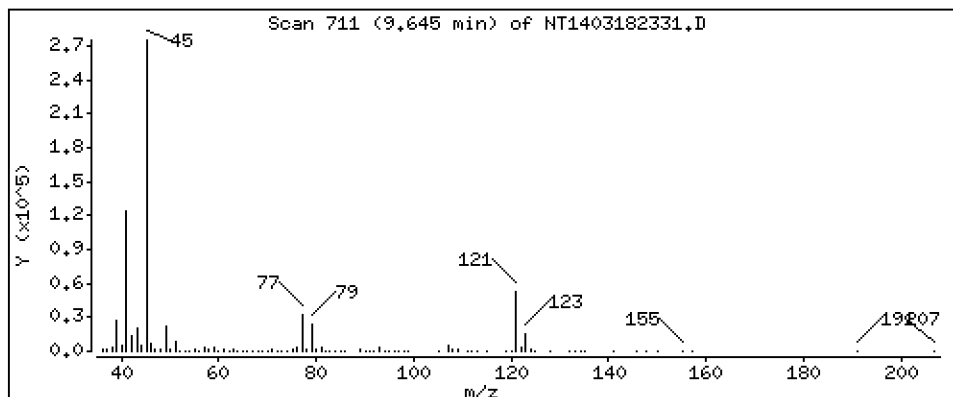
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 5.336 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

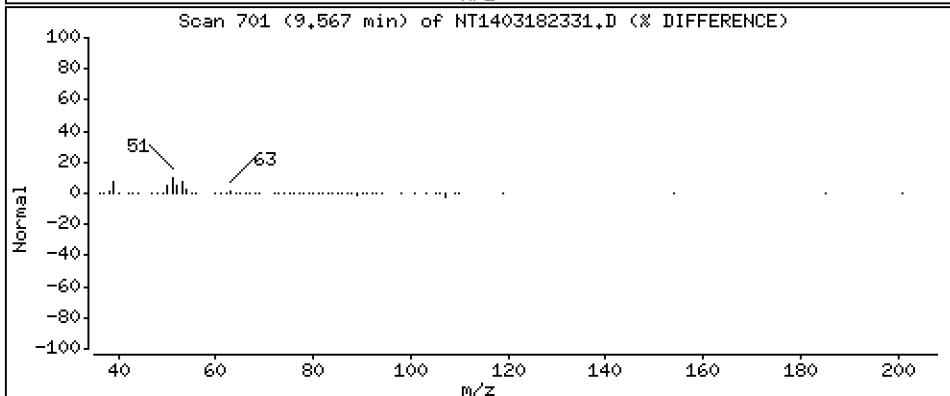
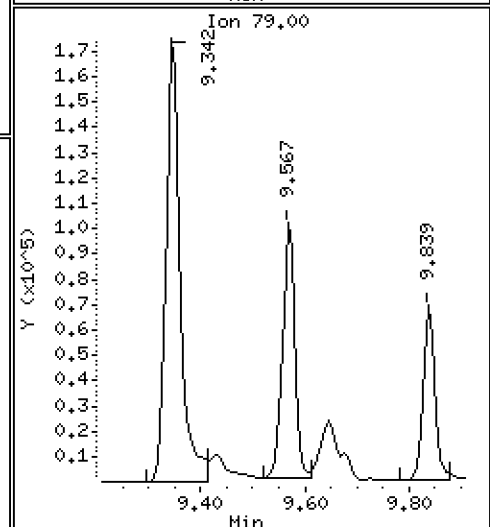
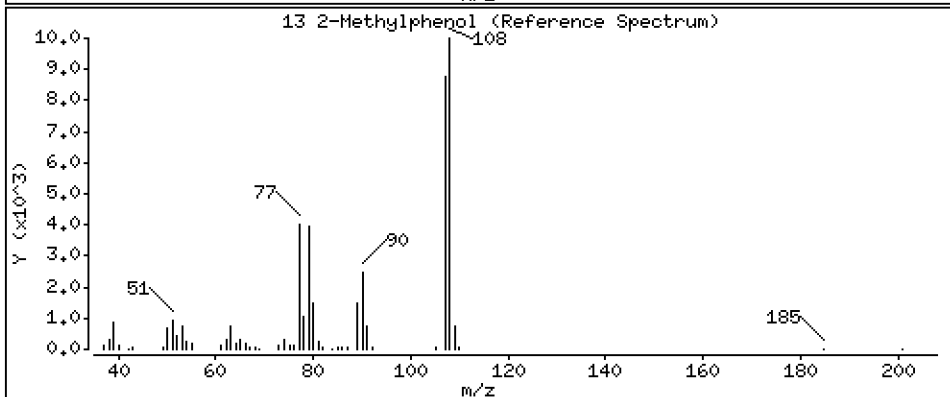
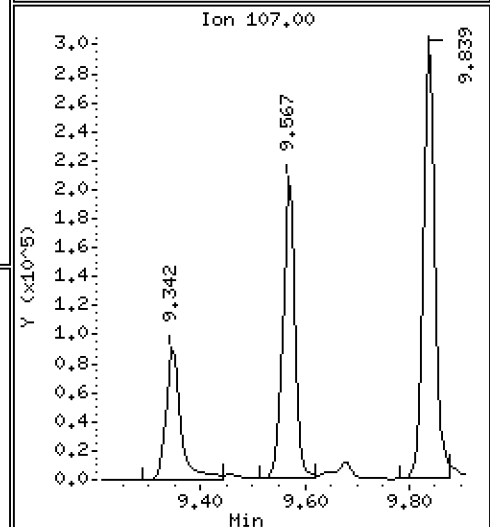
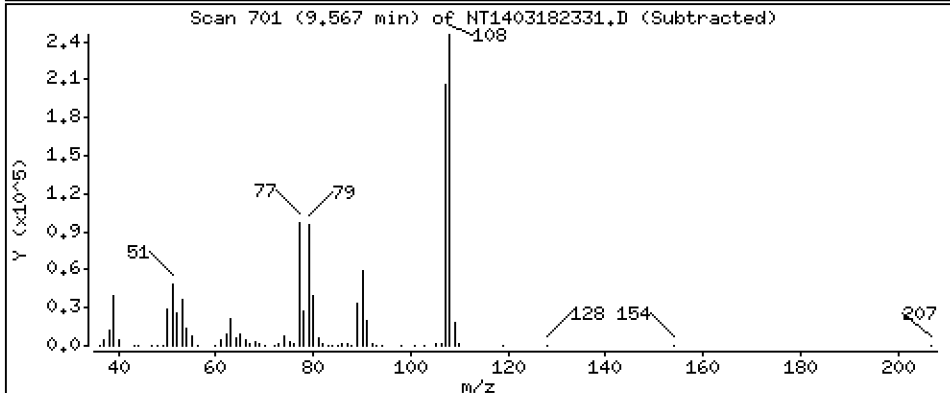
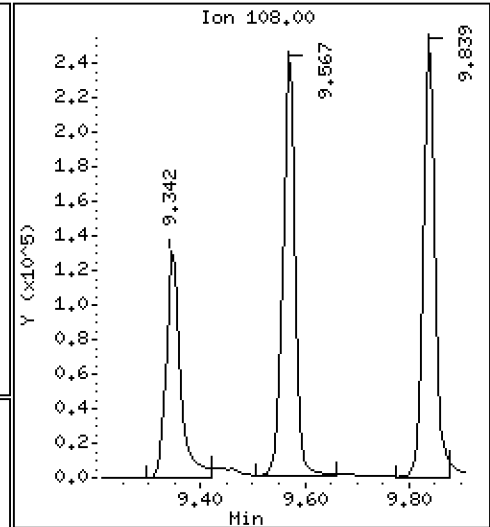
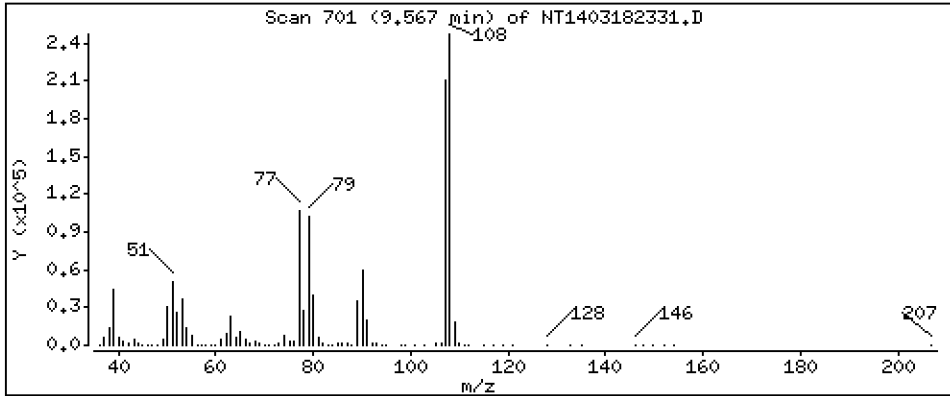
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.896 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

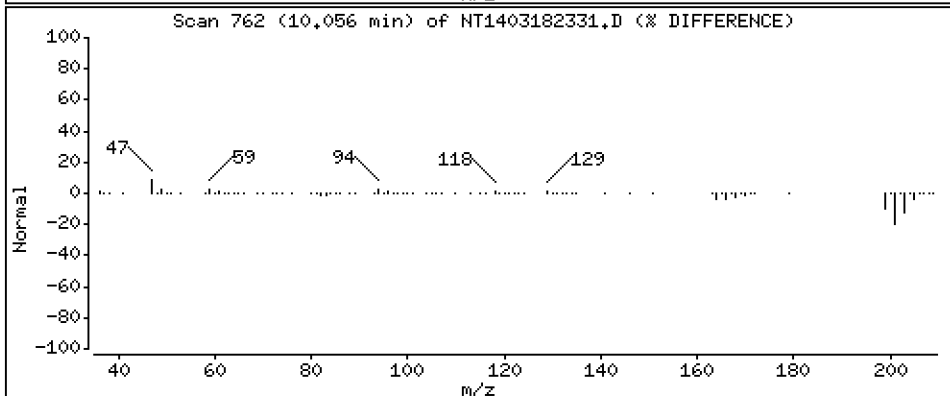
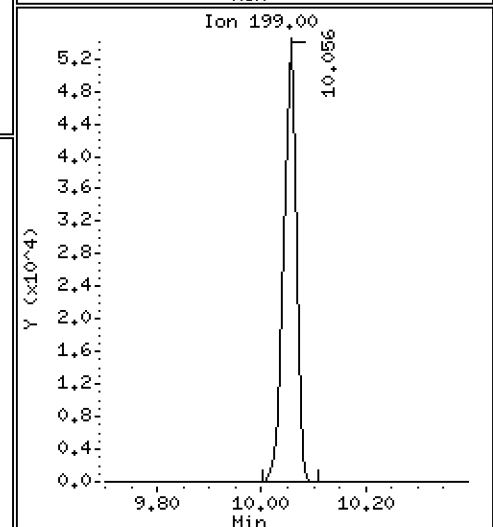
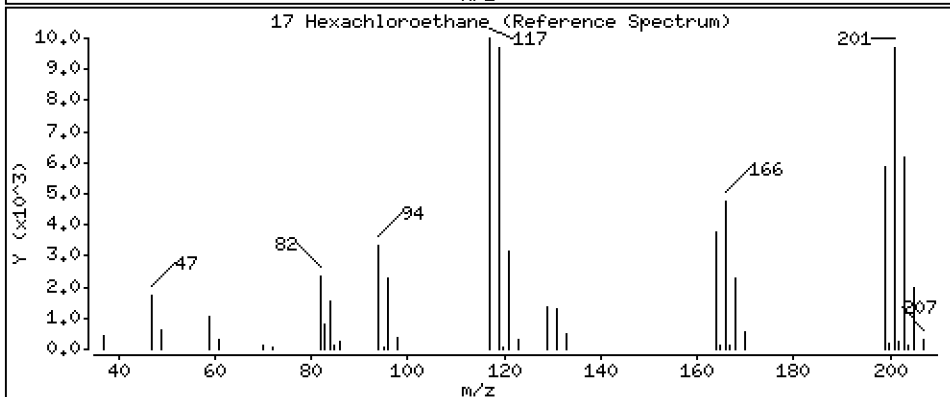
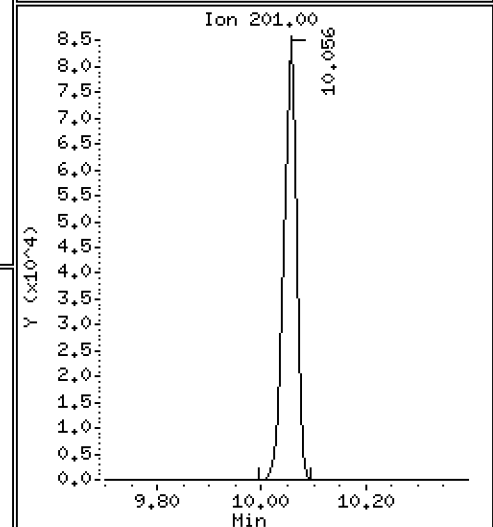
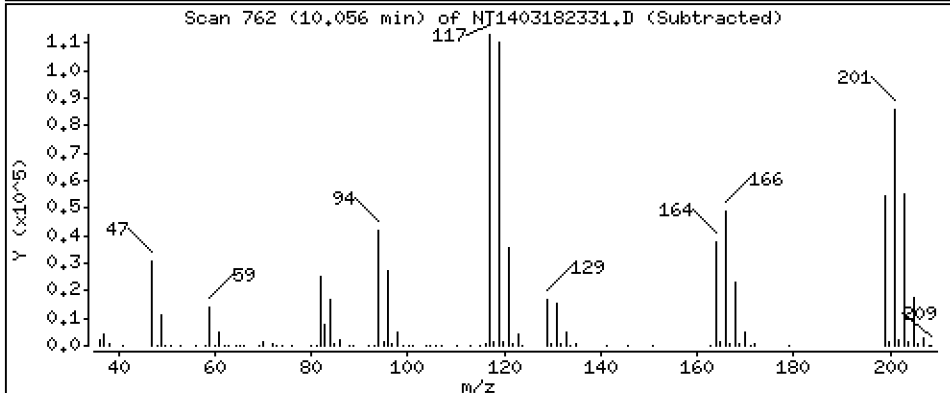
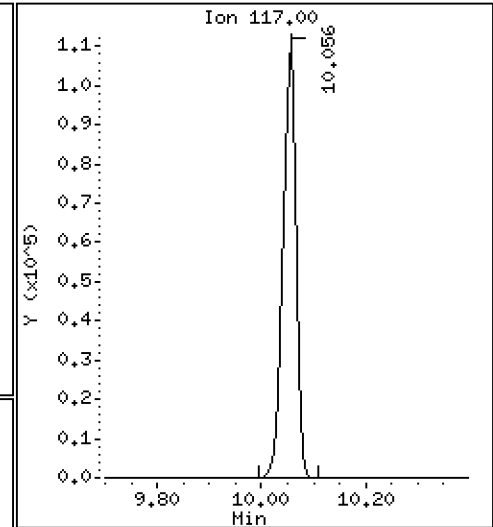
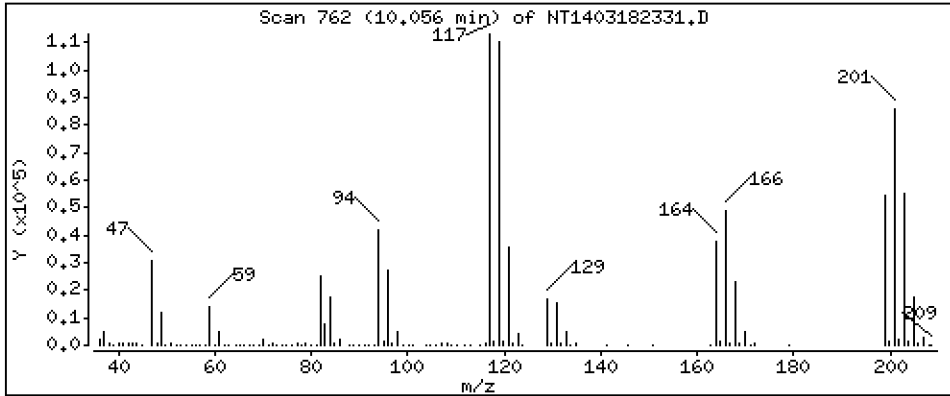
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 5,001 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

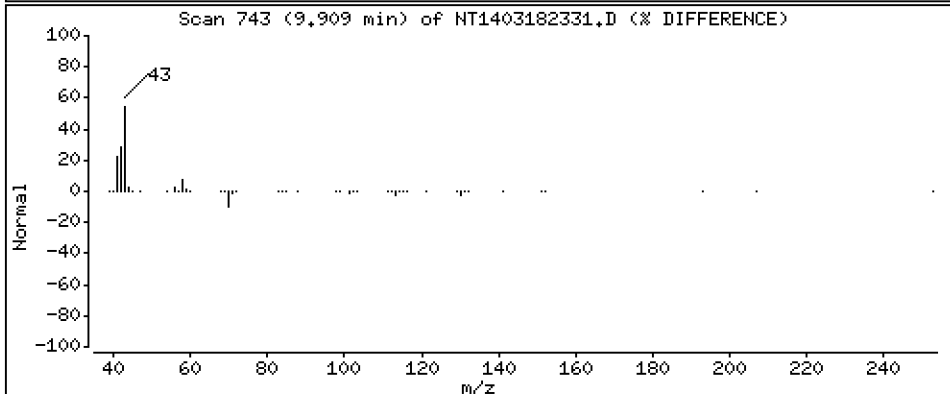
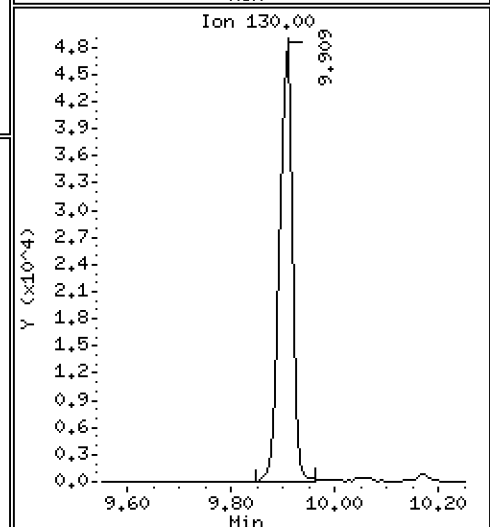
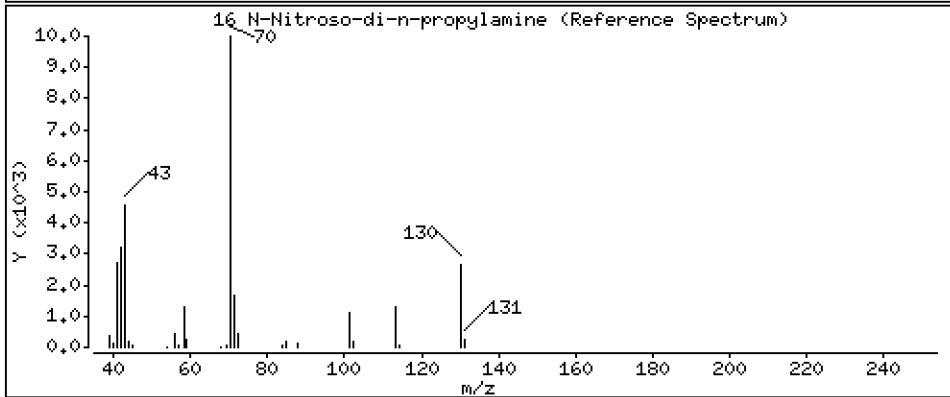
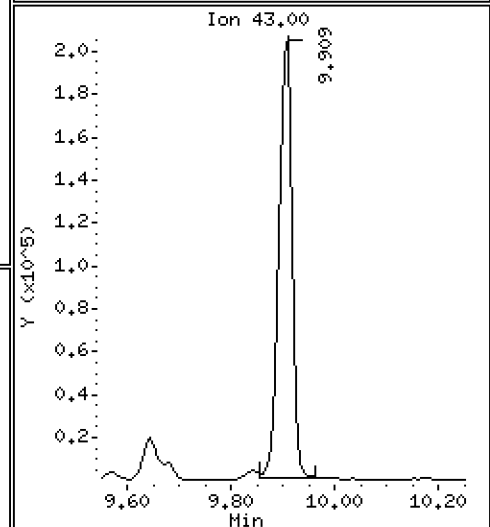
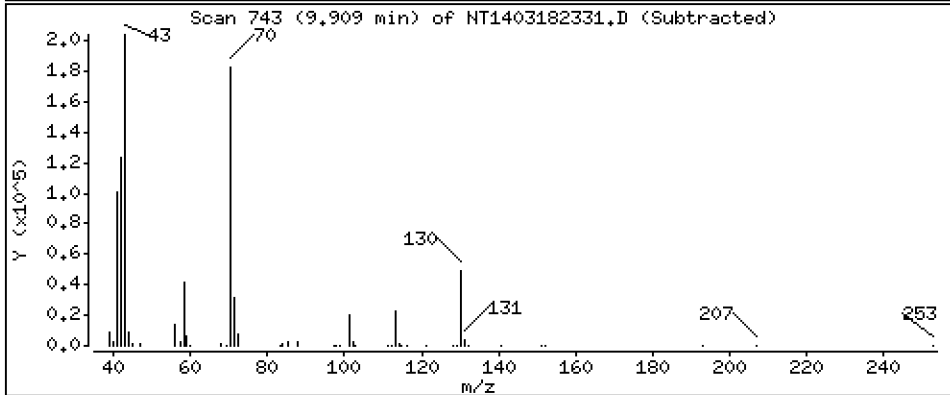
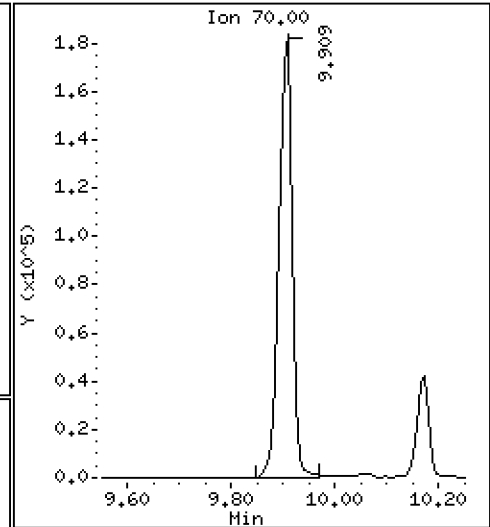
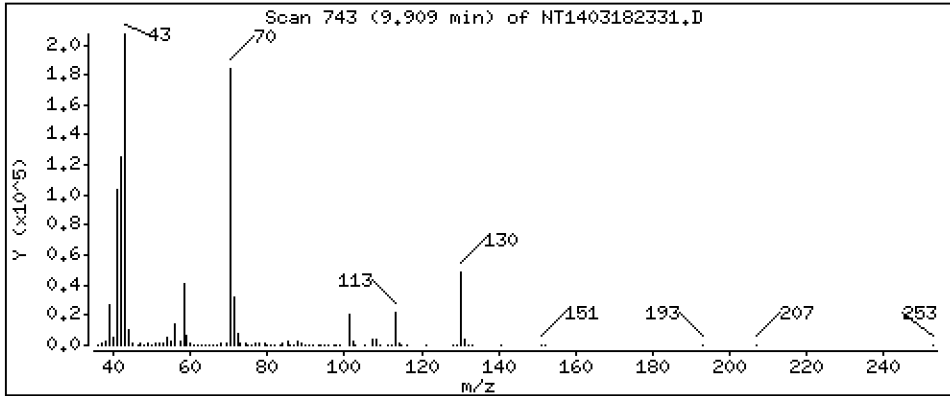
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,844 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

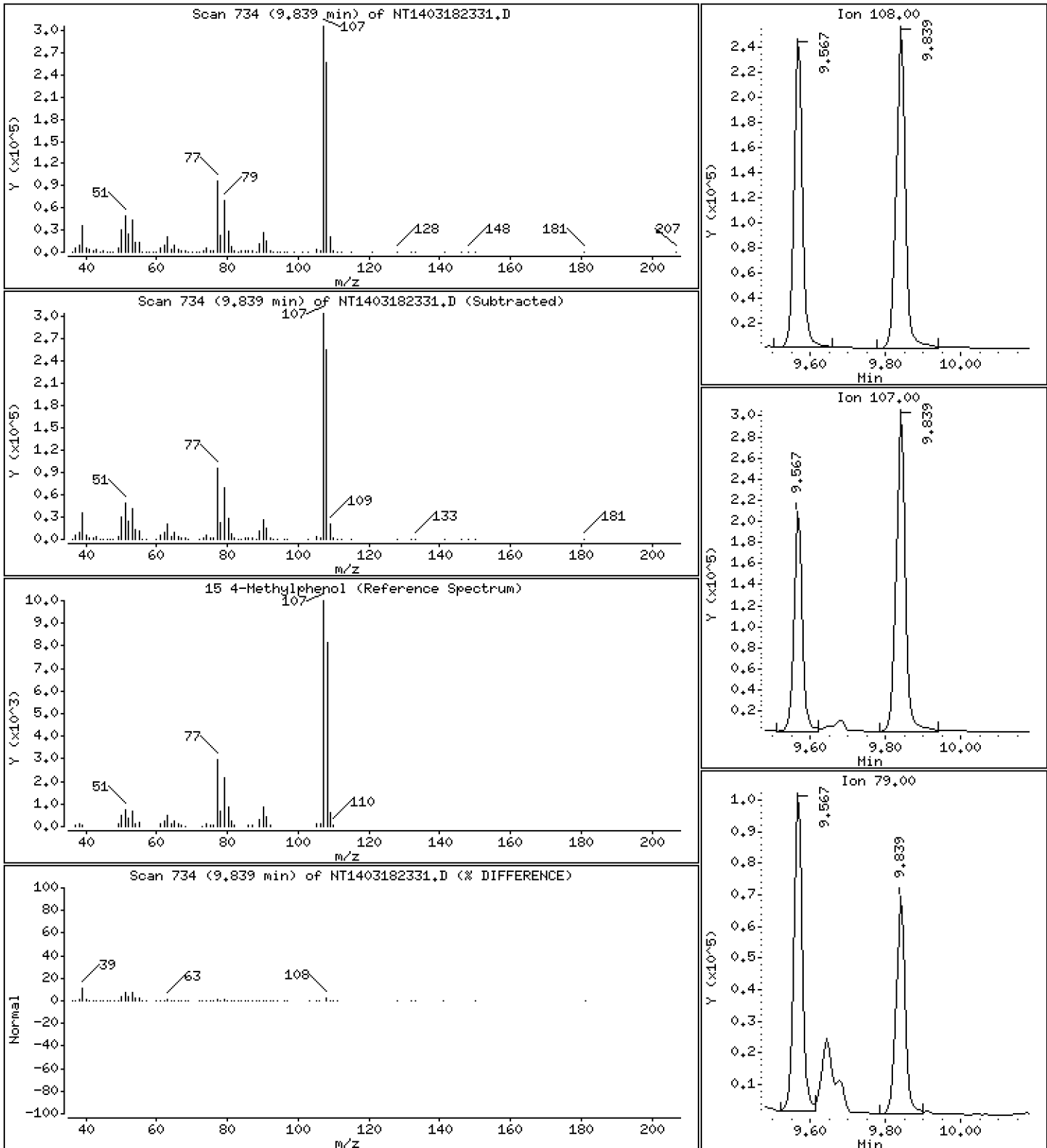
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.450 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

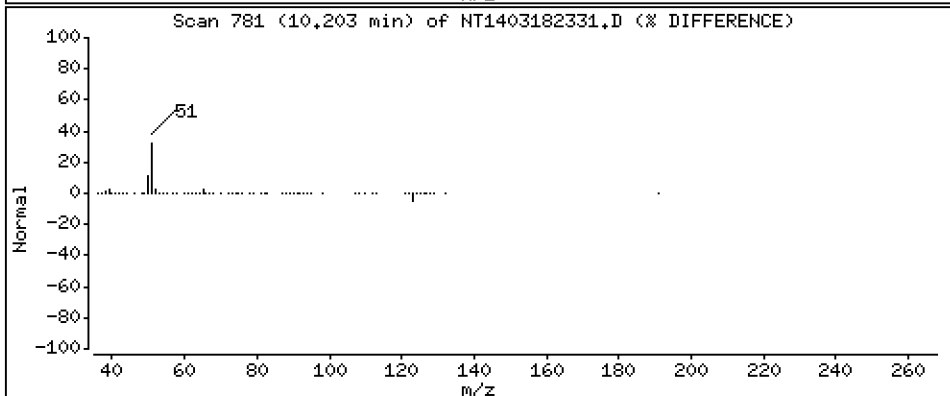
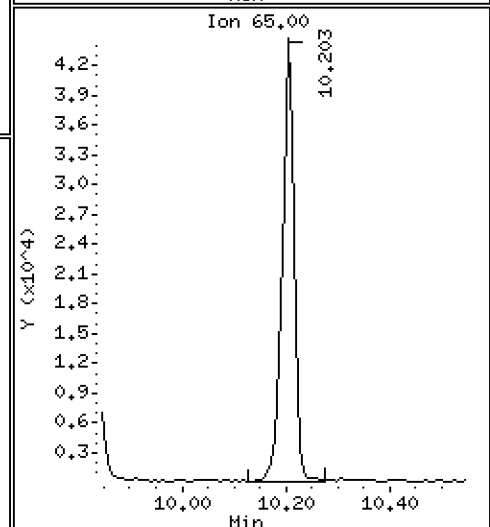
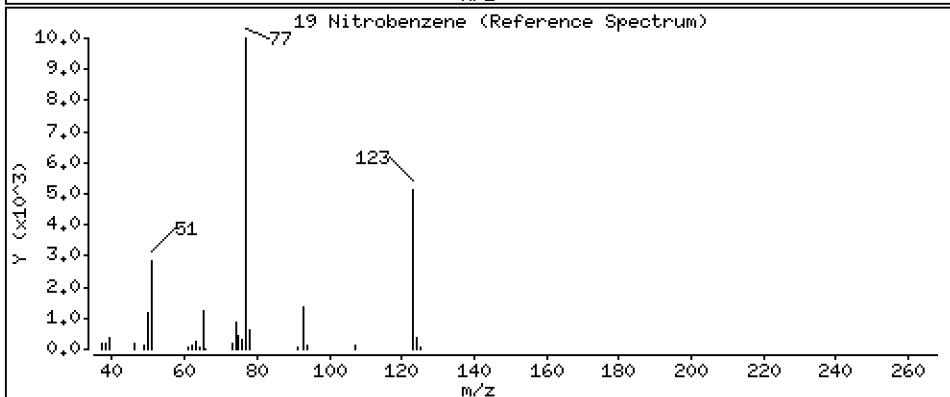
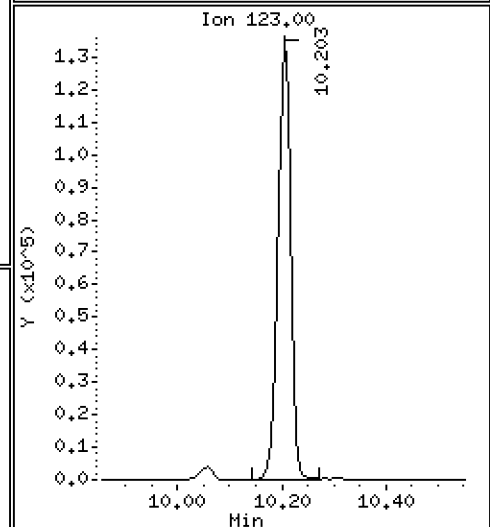
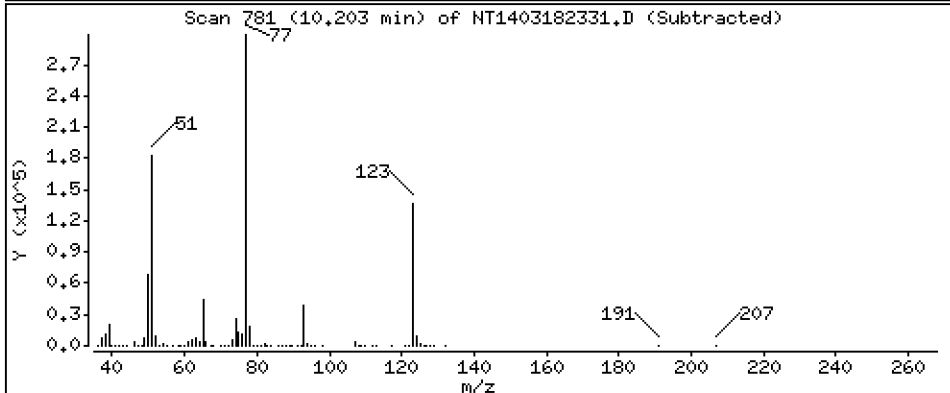
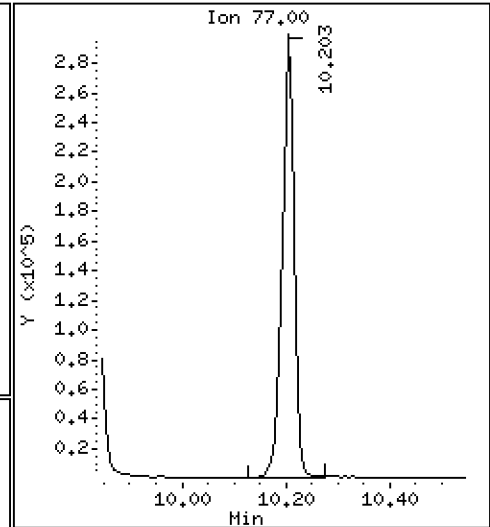
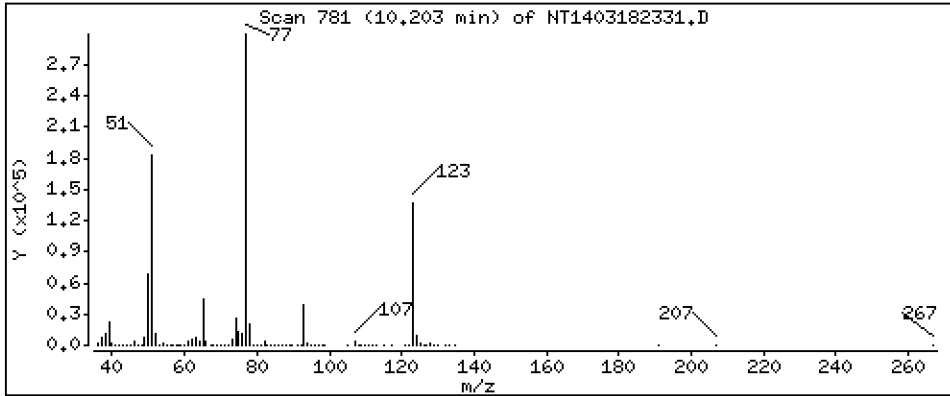
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 4,841 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

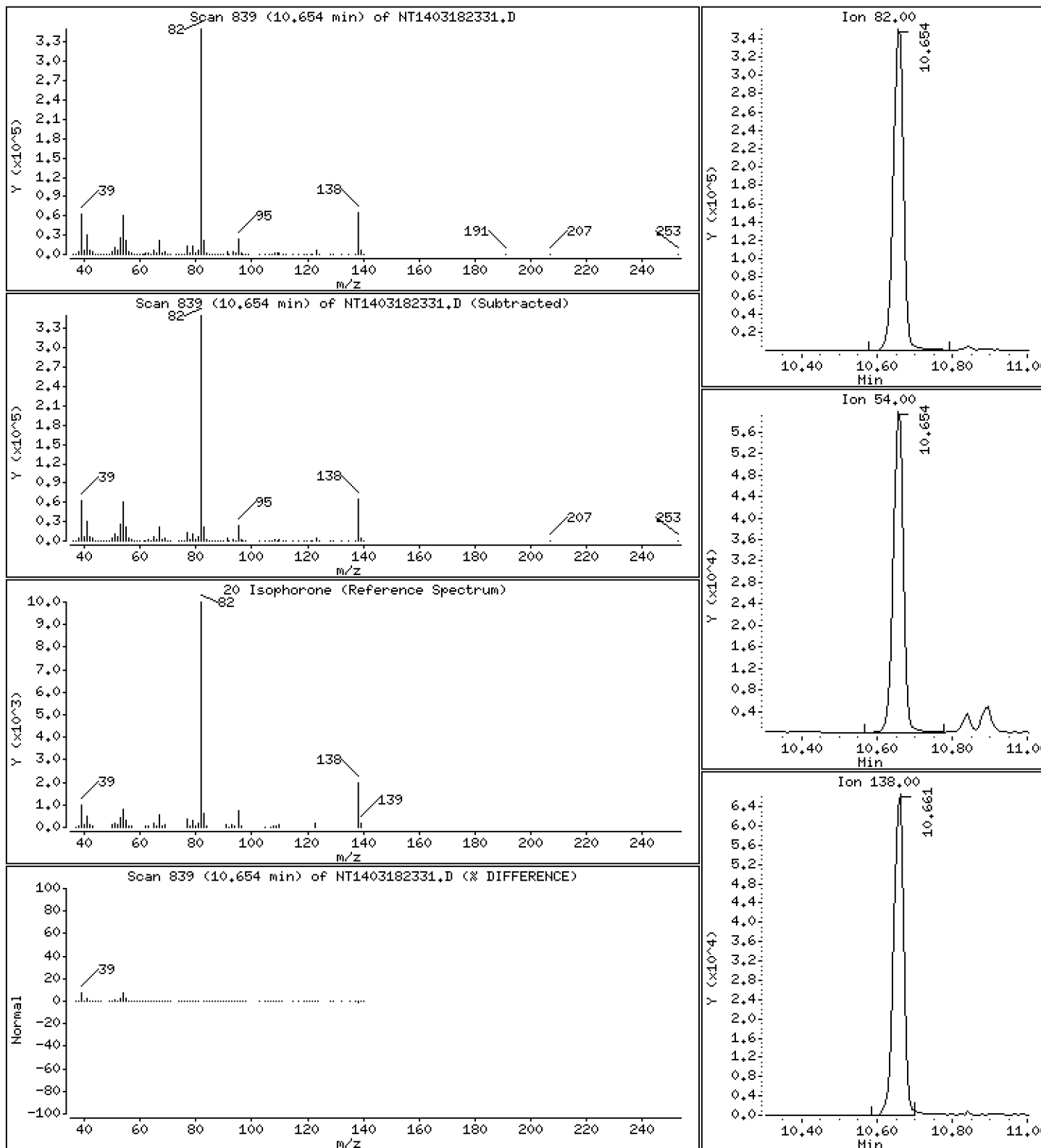
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 5,161 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

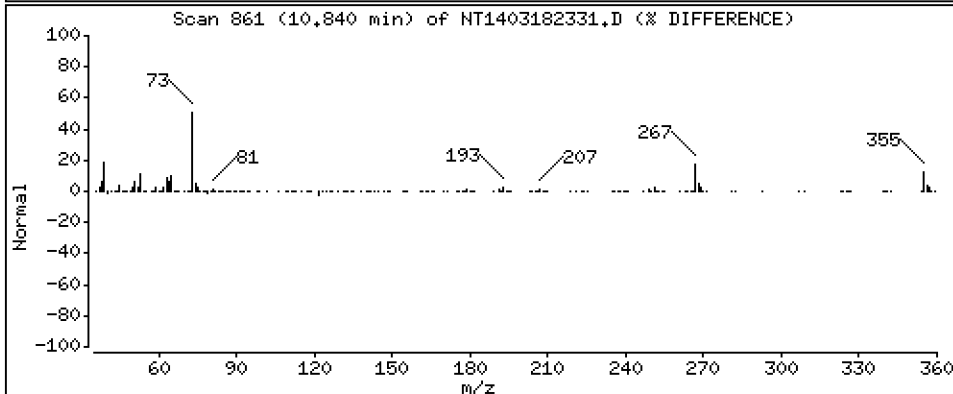
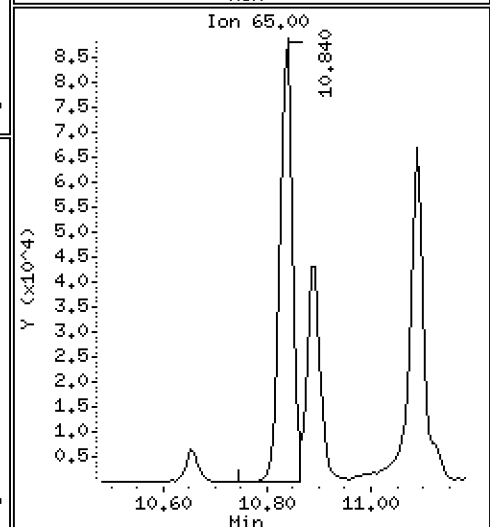
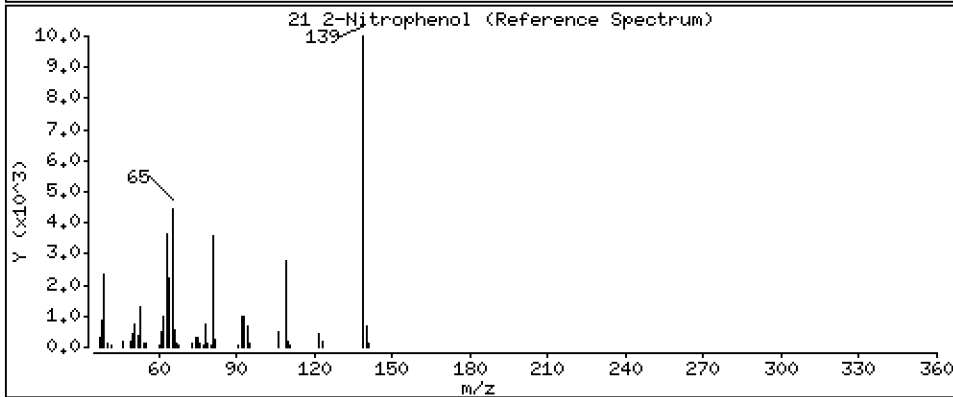
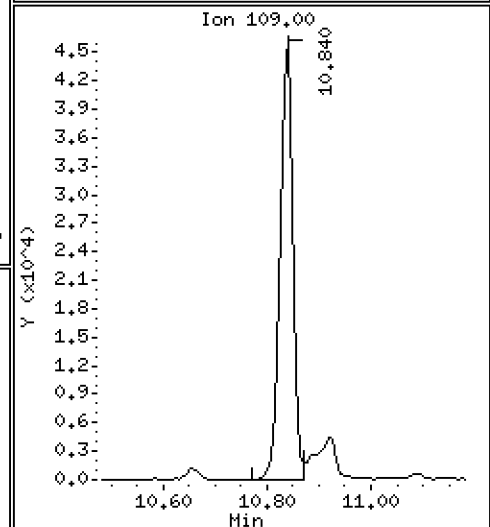
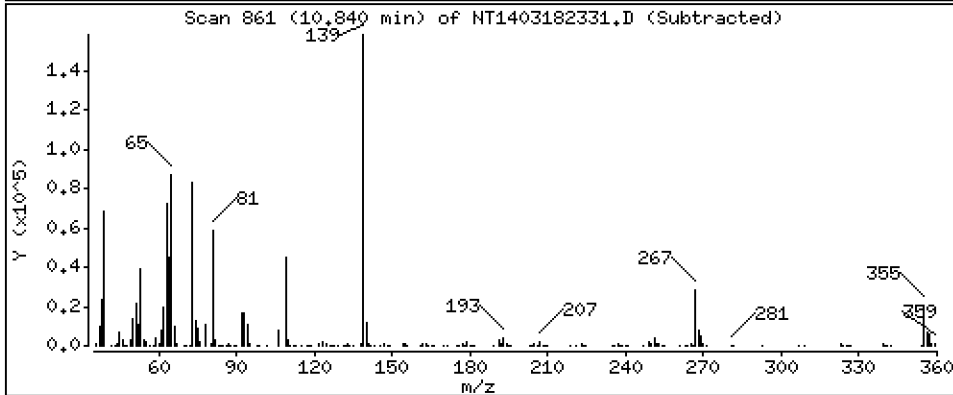
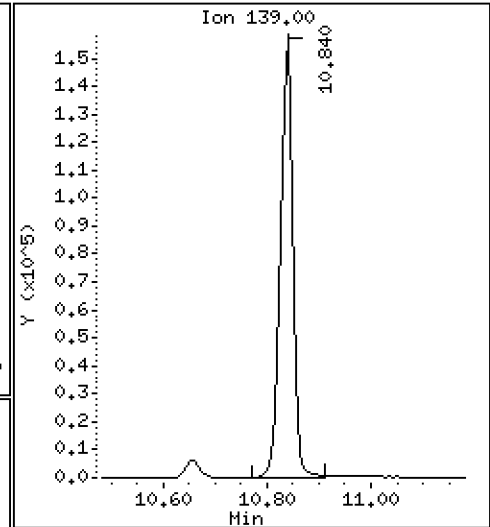
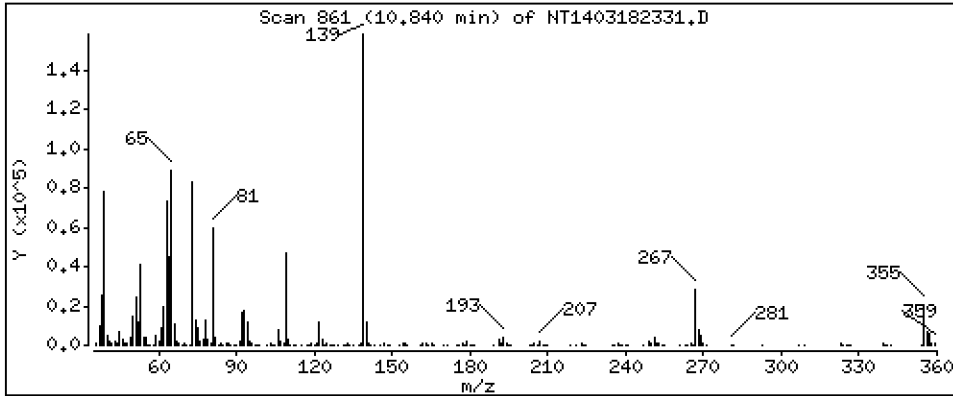
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,531 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

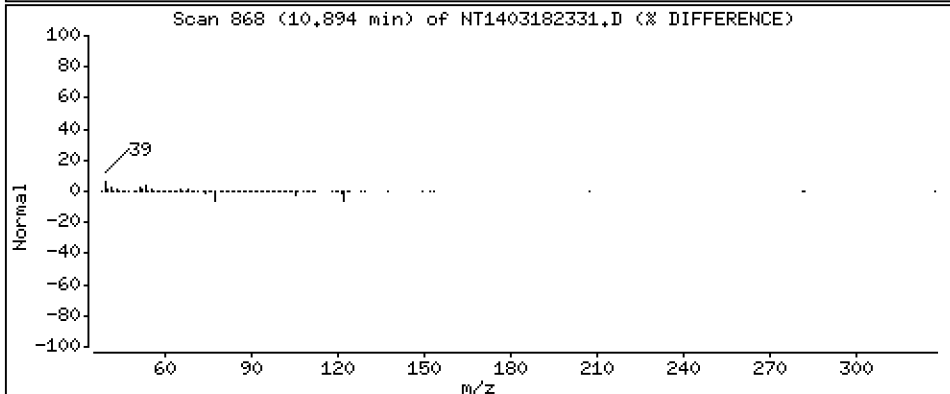
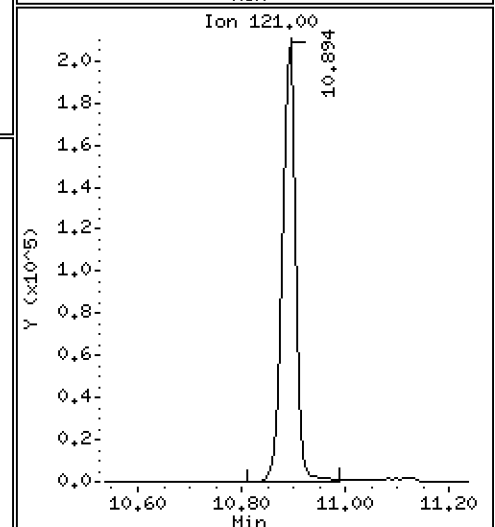
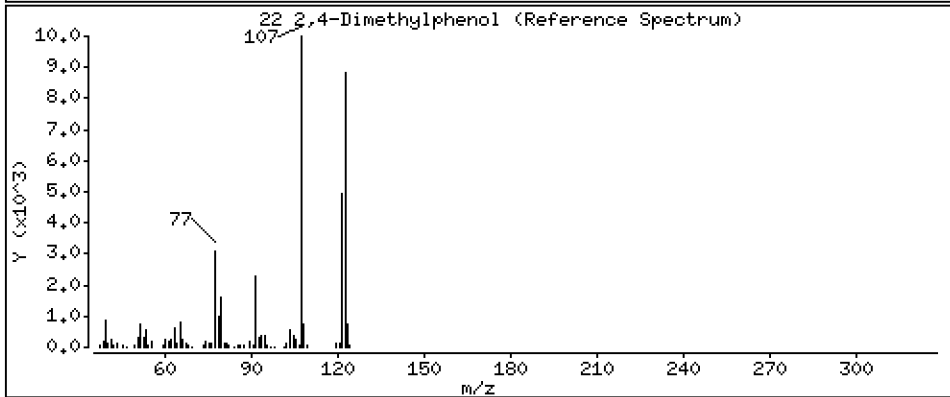
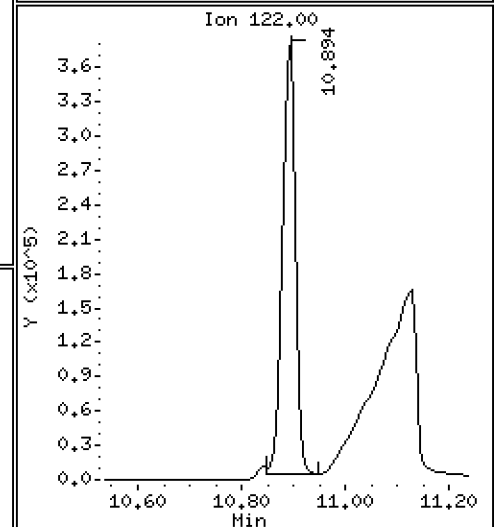
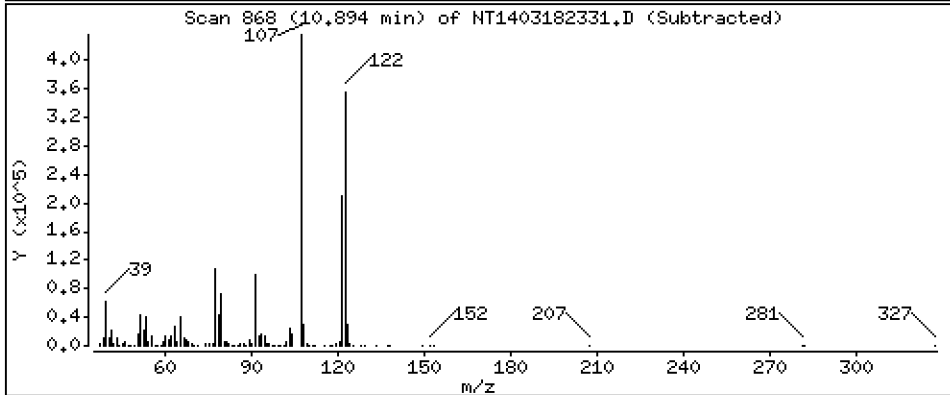
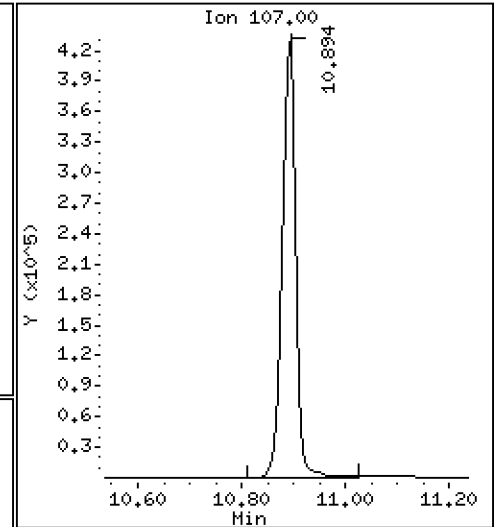
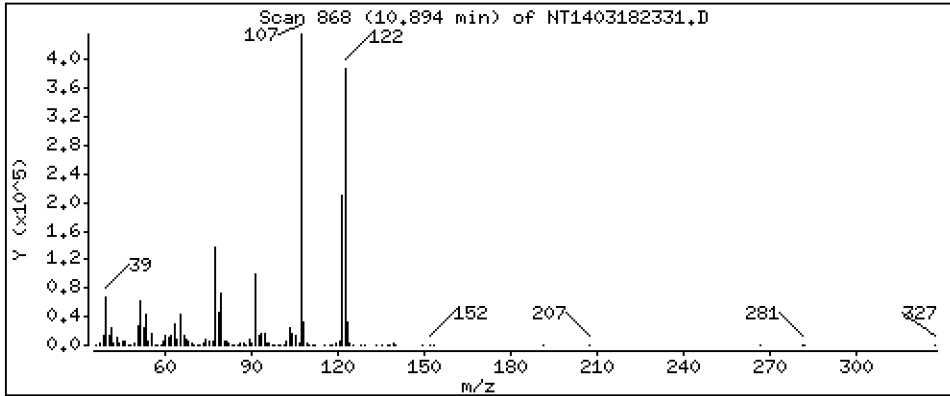
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 9,000 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

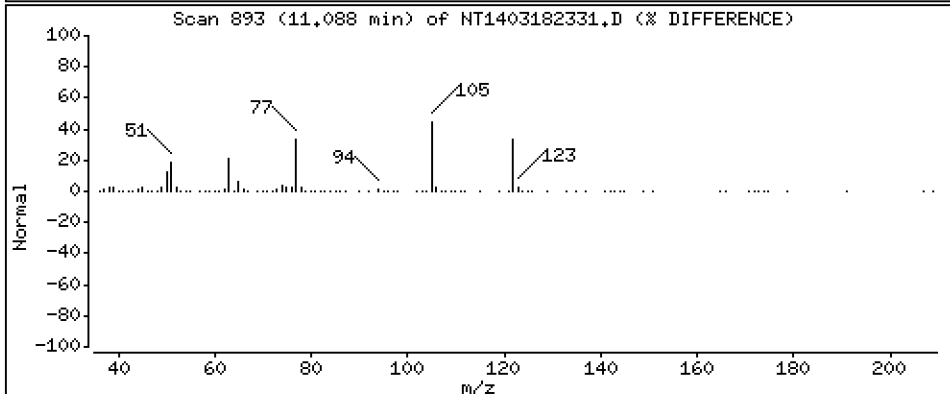
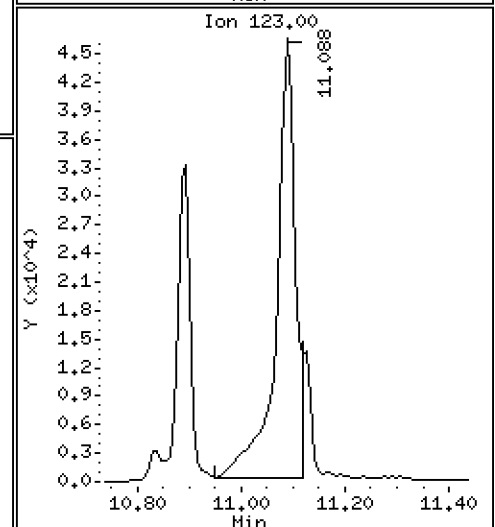
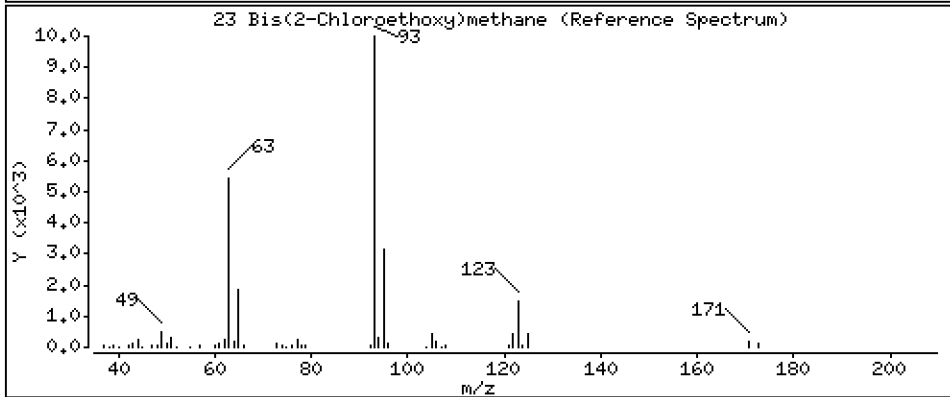
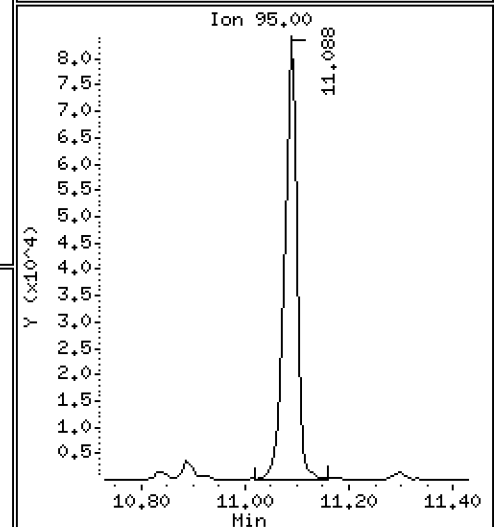
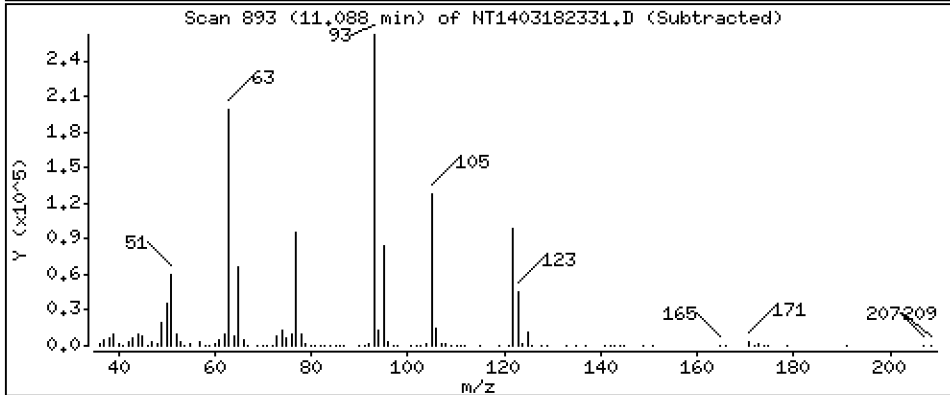
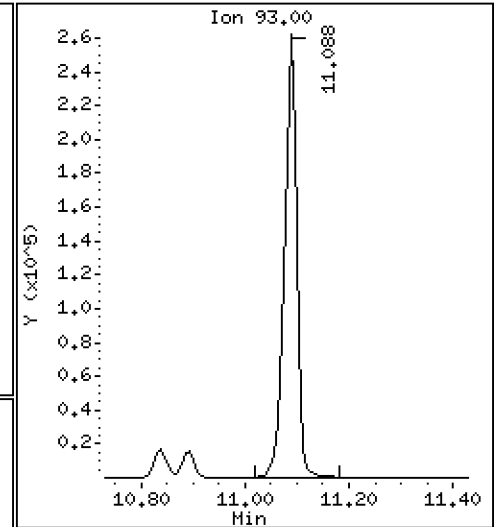
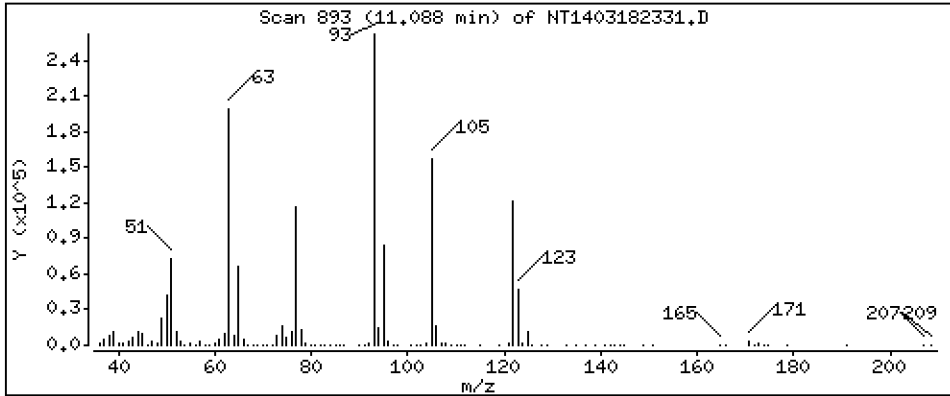
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 4,687 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

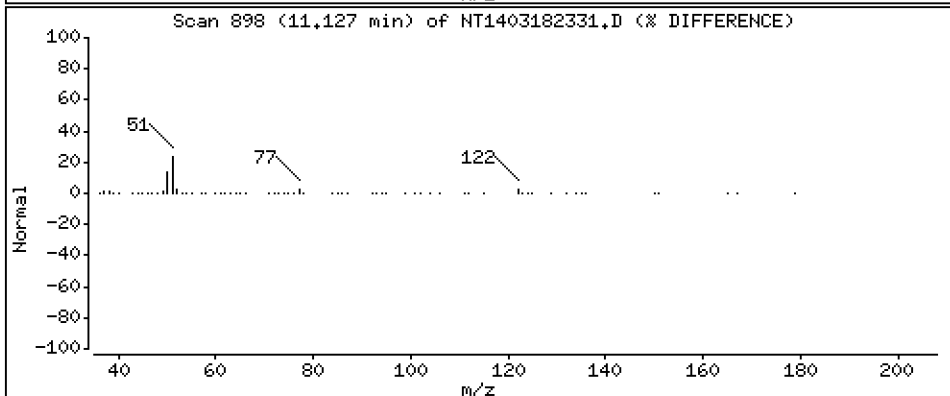
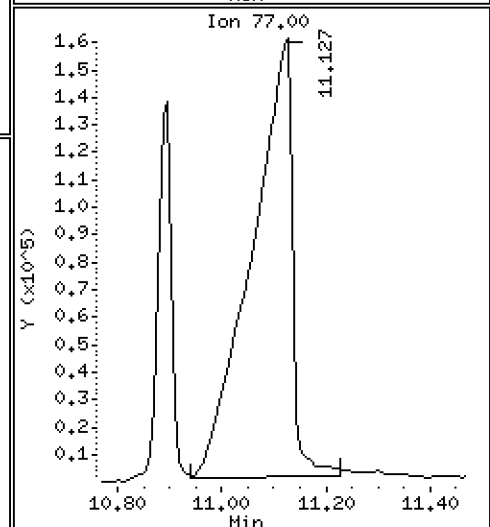
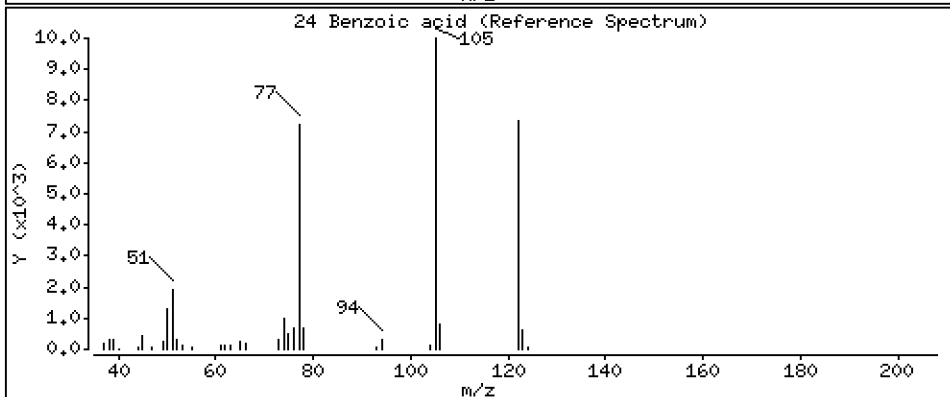
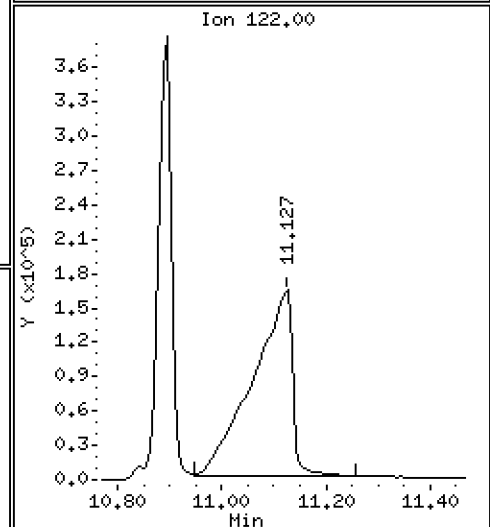
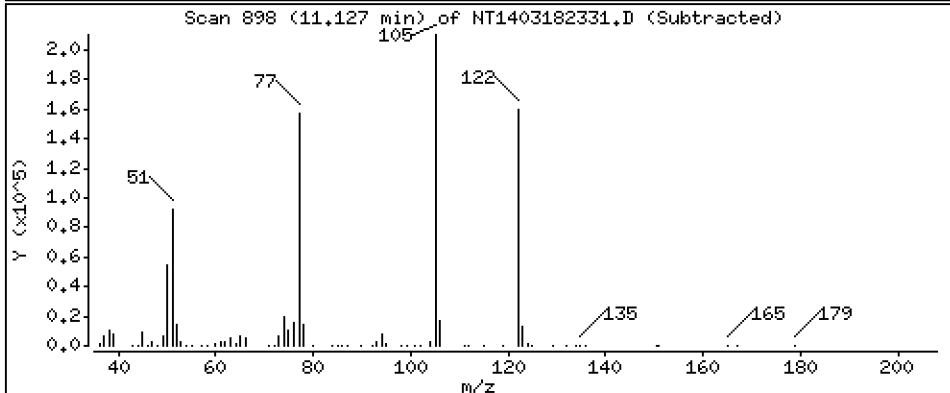
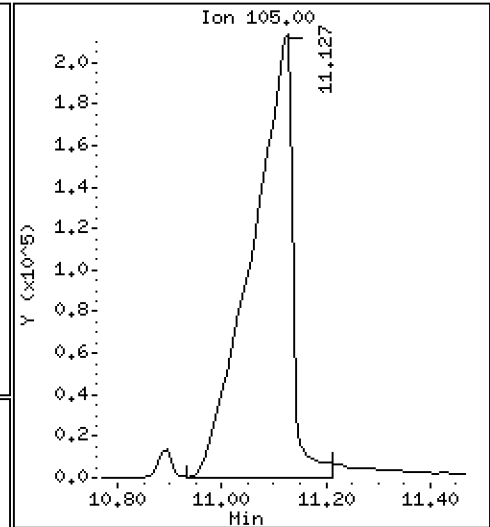
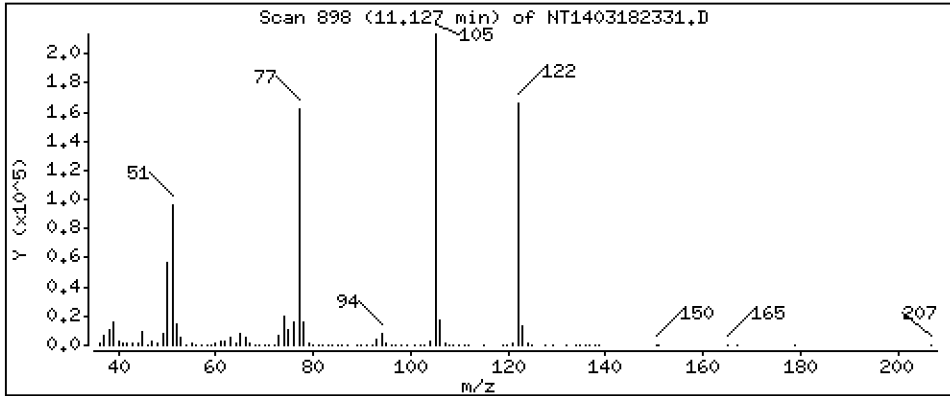
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 17,06 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

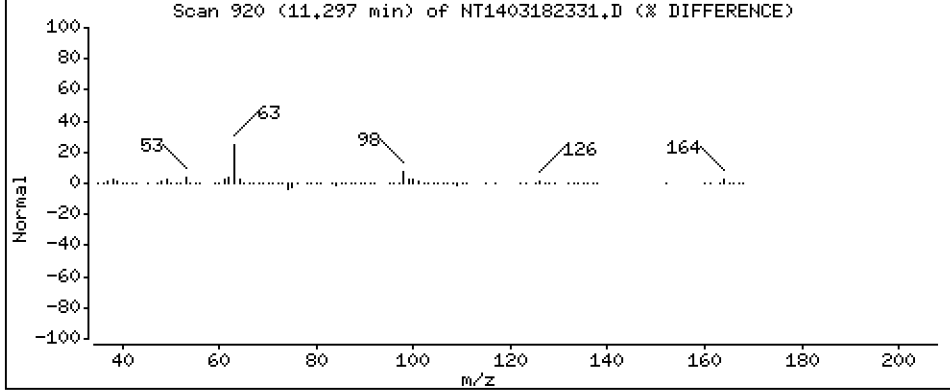
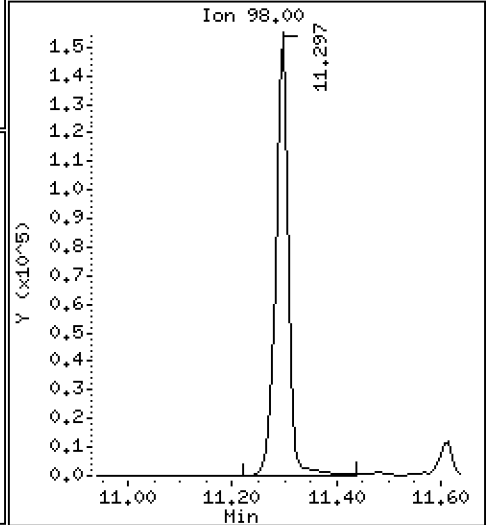
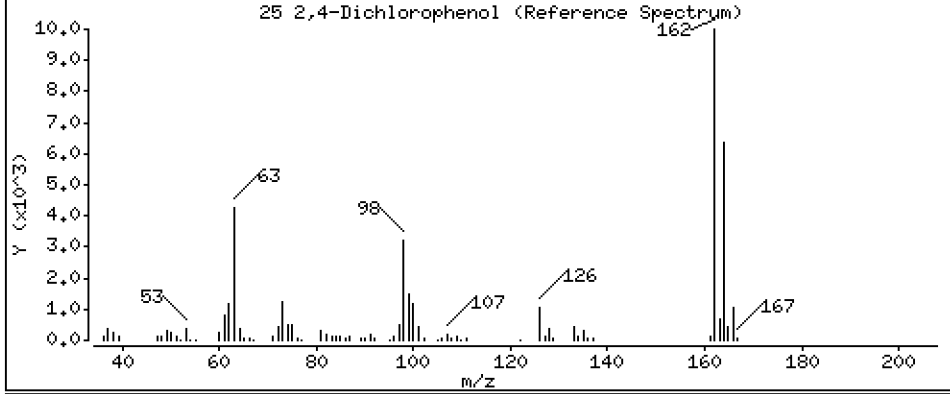
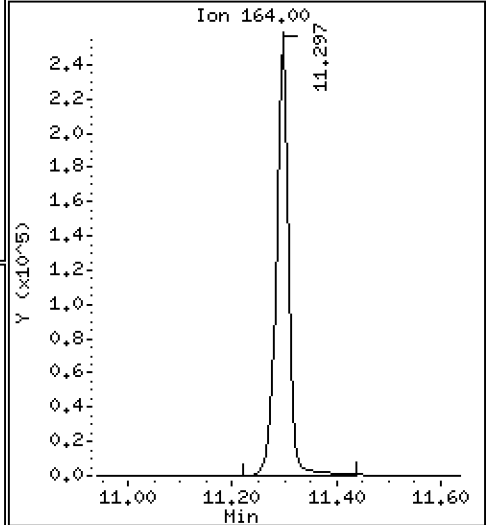
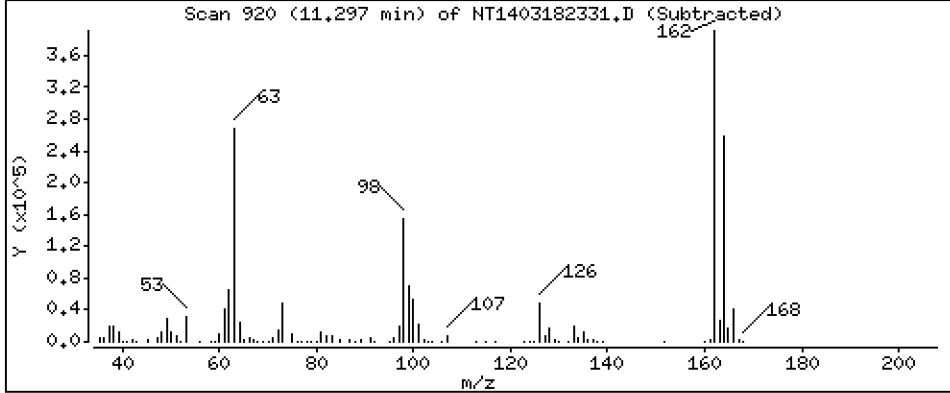
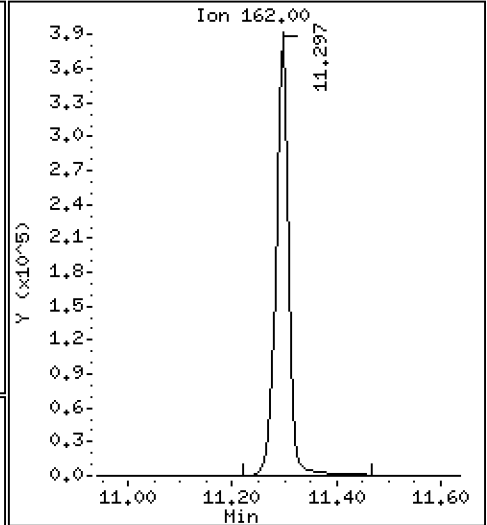
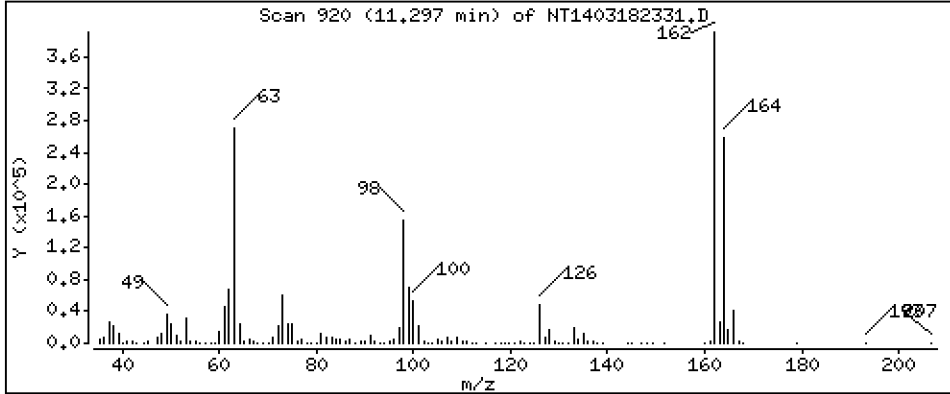
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 10,73 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

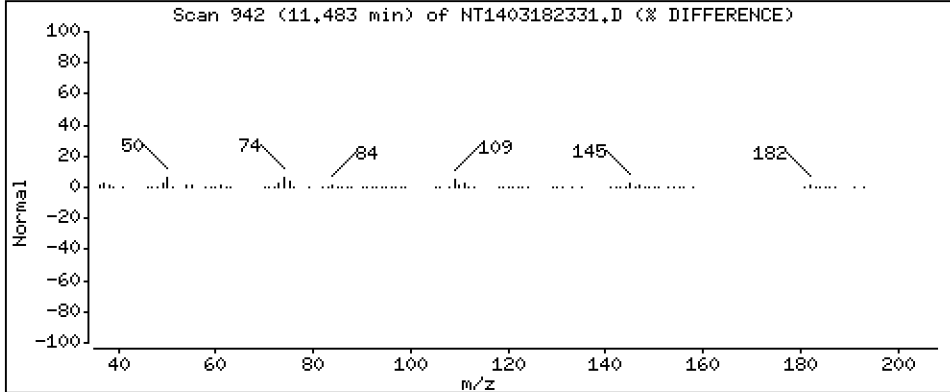
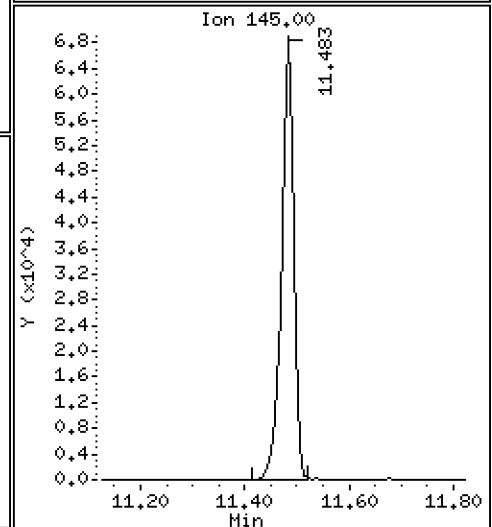
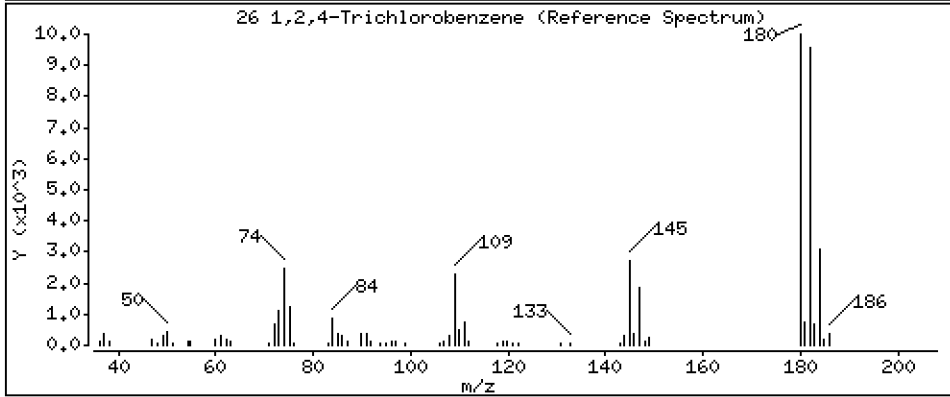
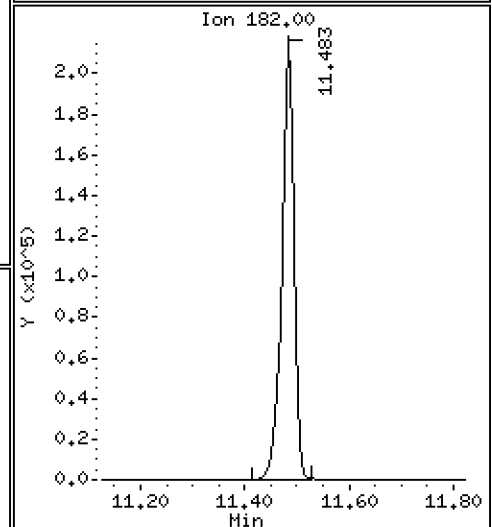
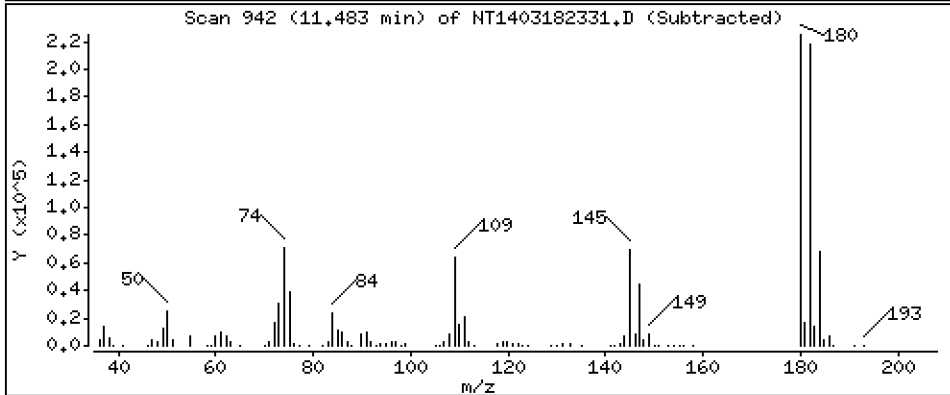
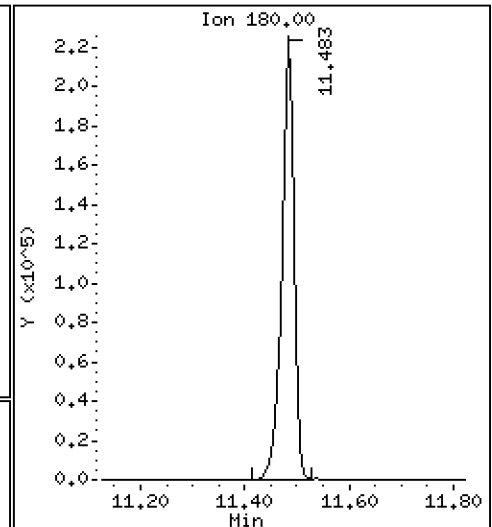
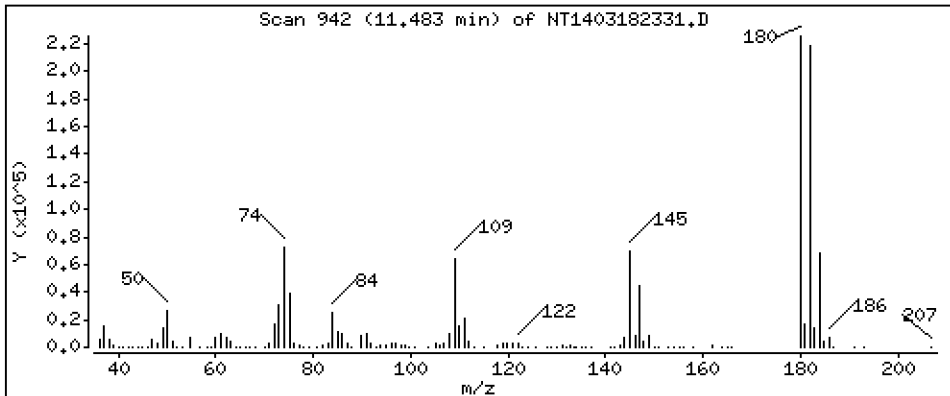
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,523 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

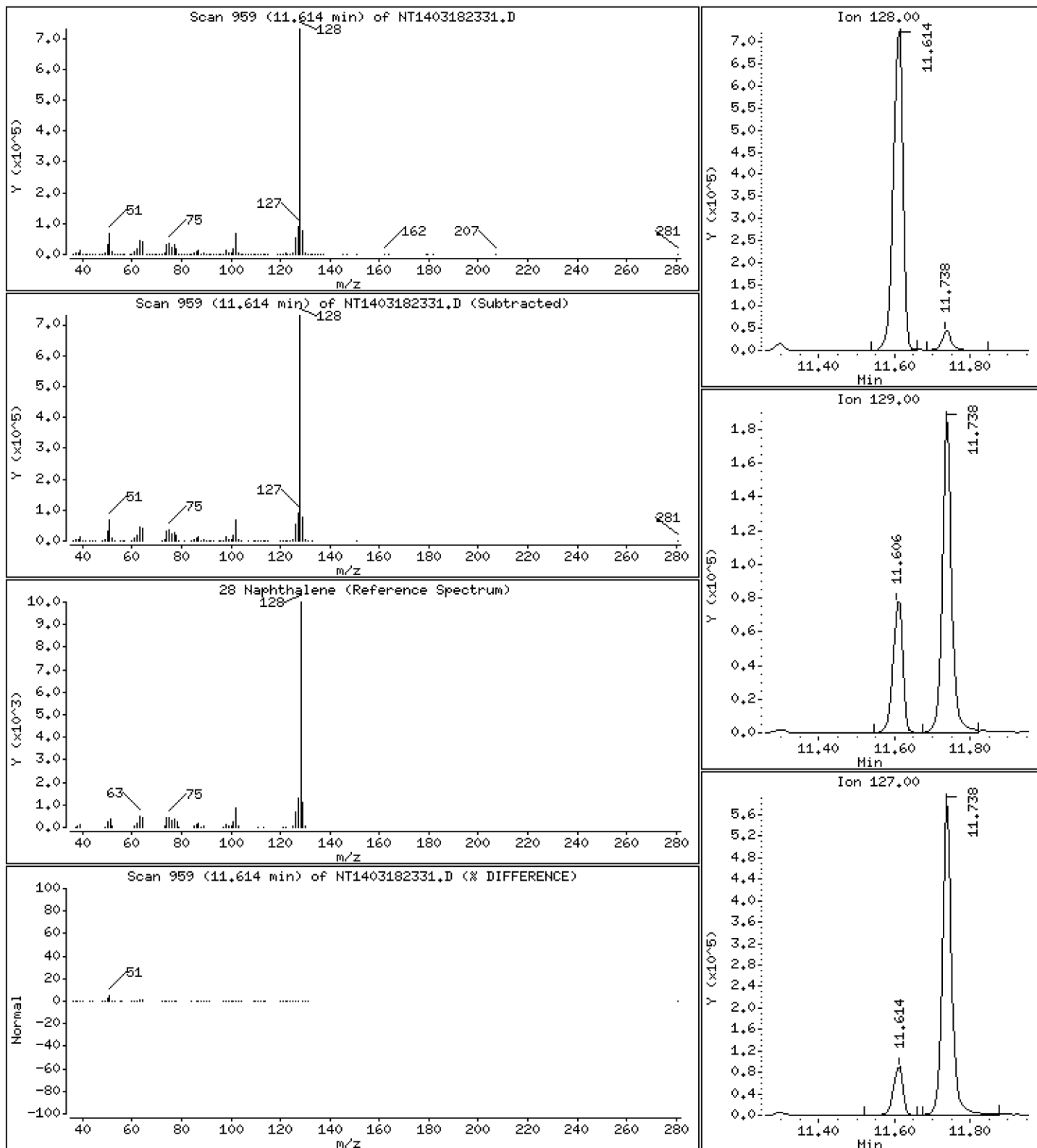
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,897 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

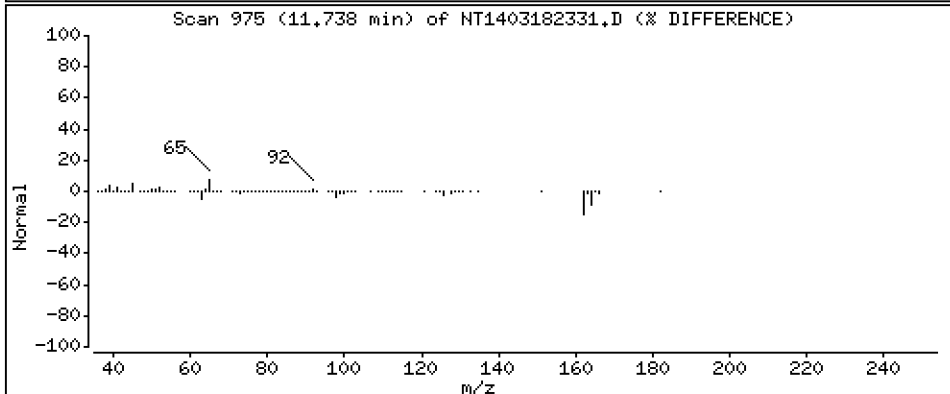
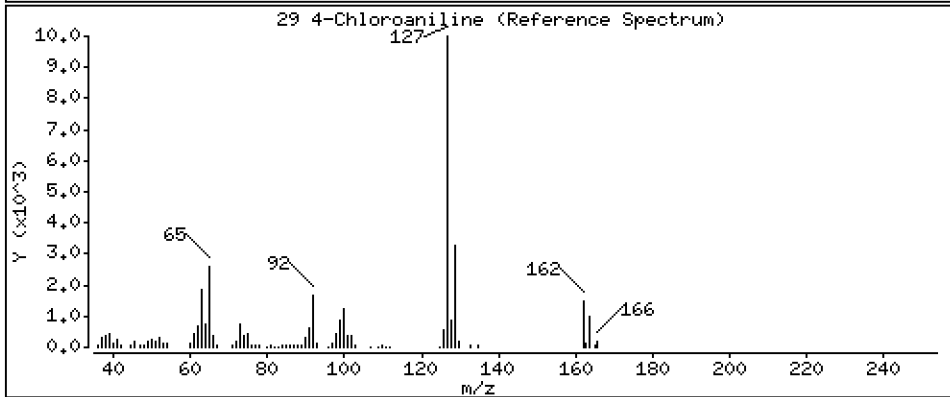
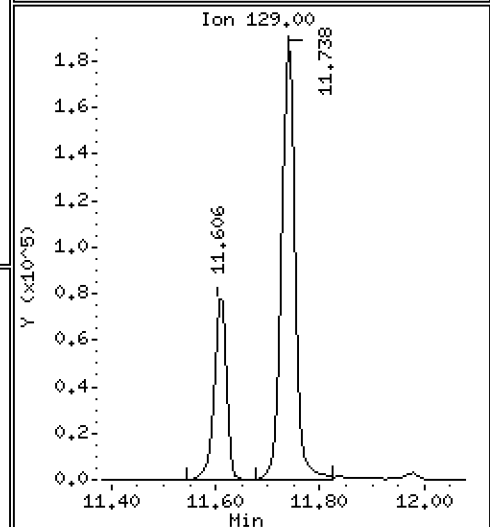
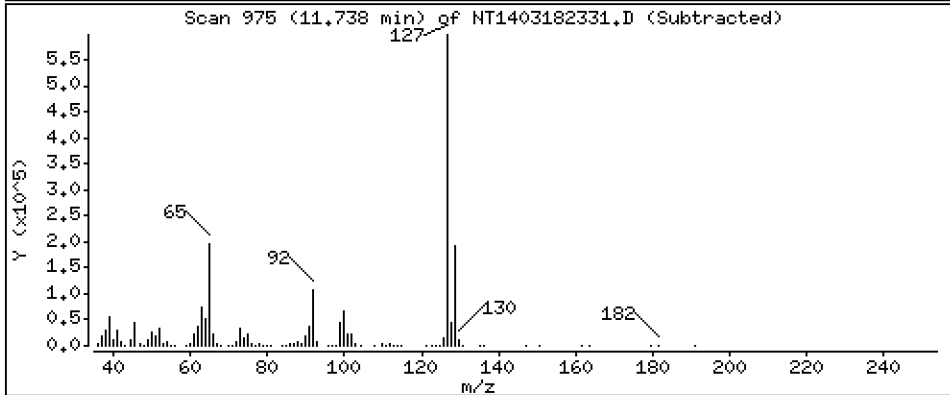
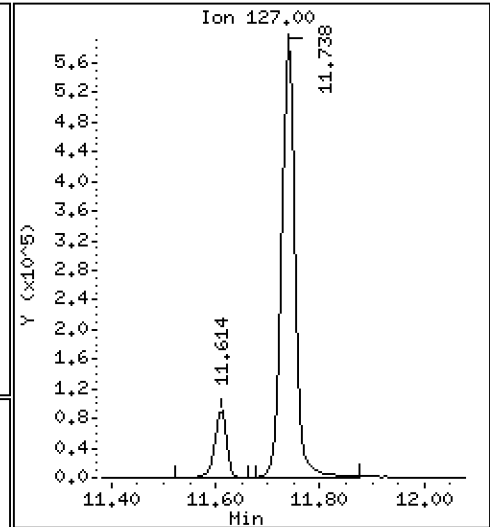
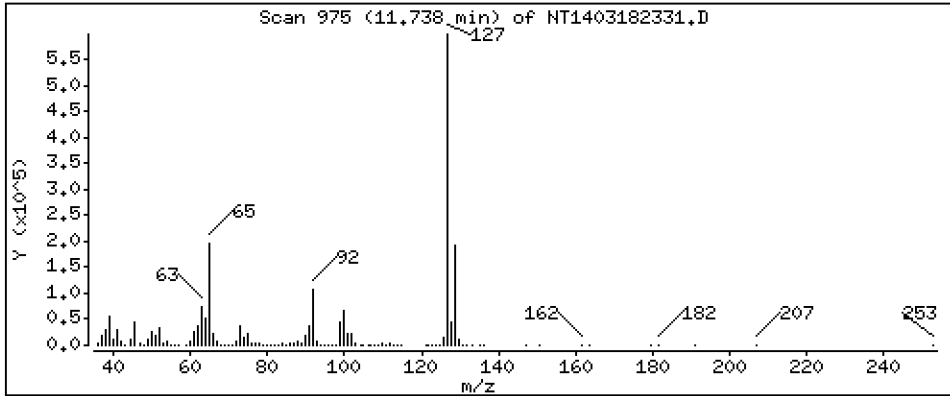
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 10,33 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

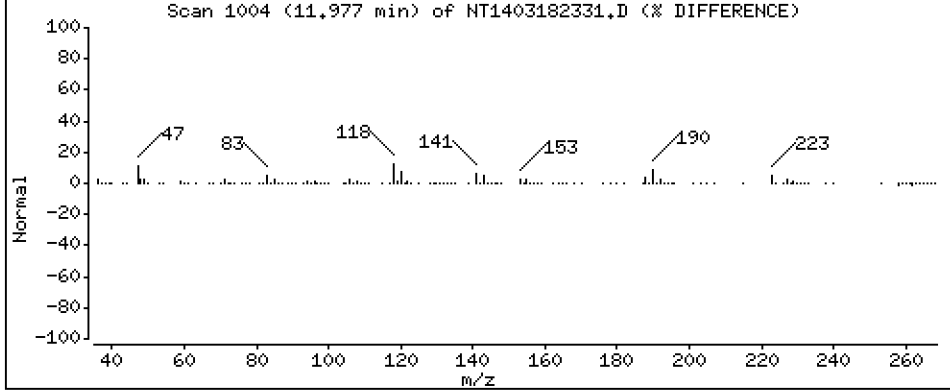
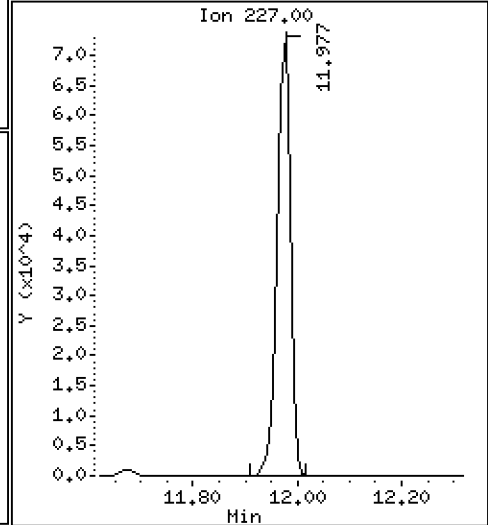
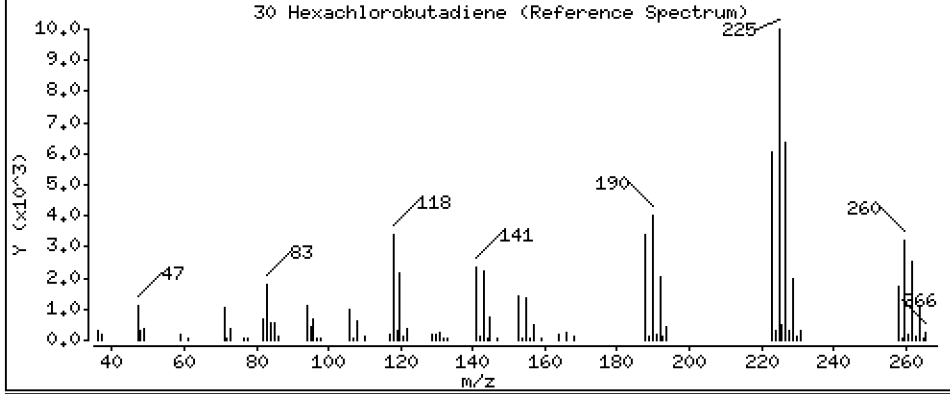
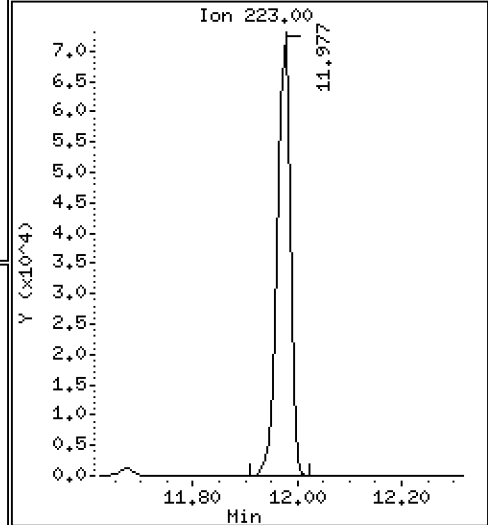
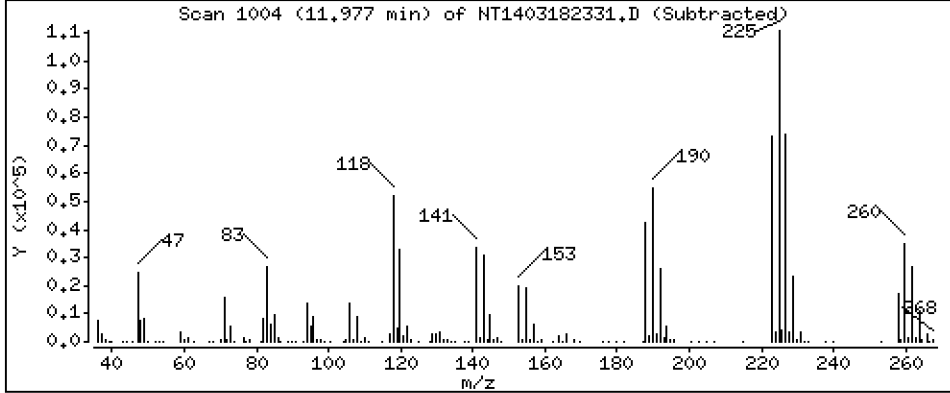
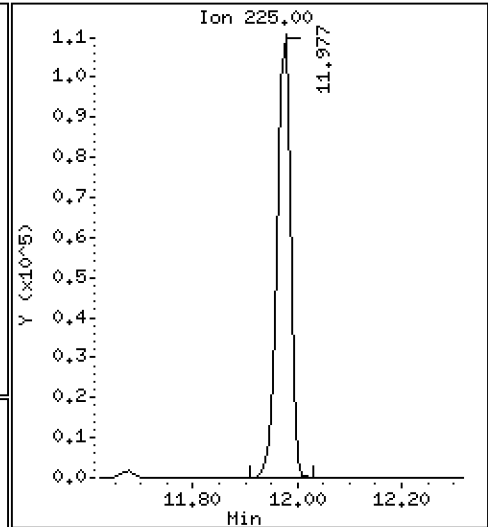
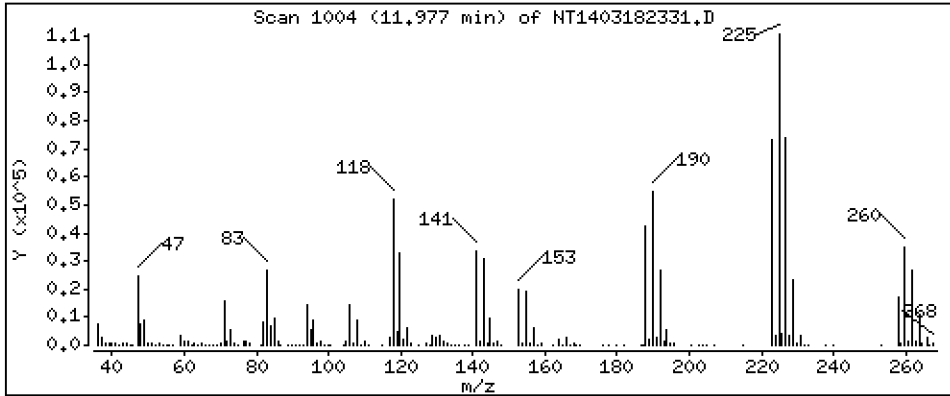
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,134 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

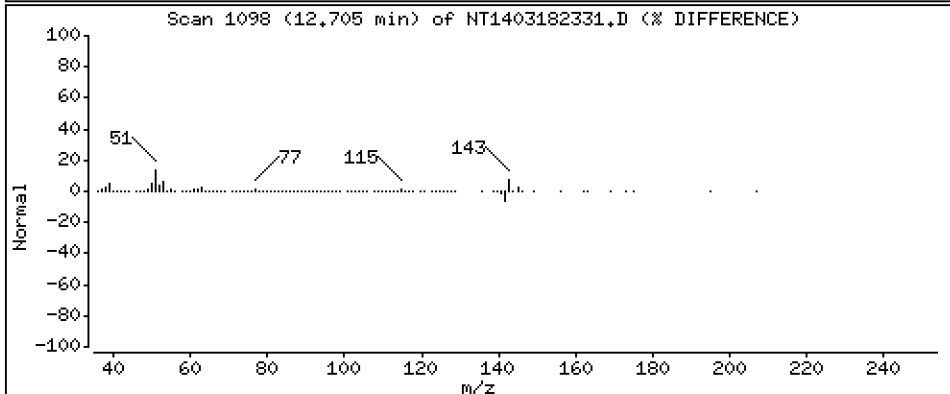
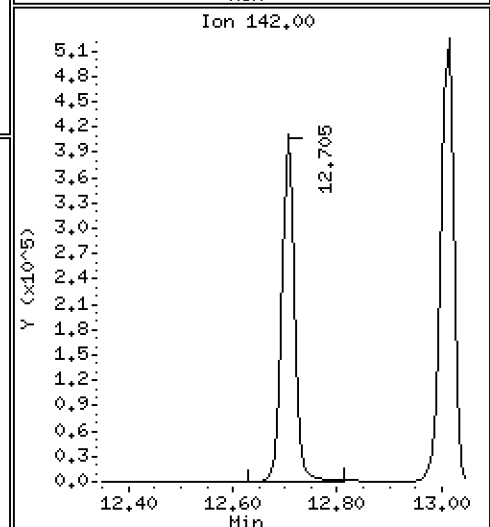
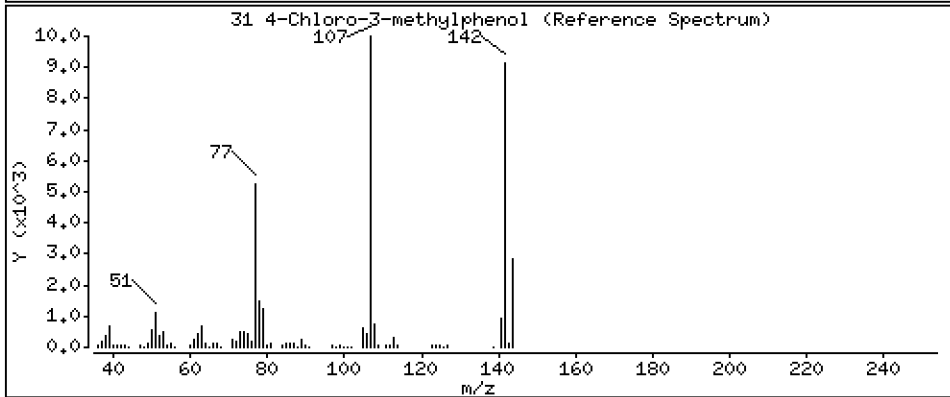
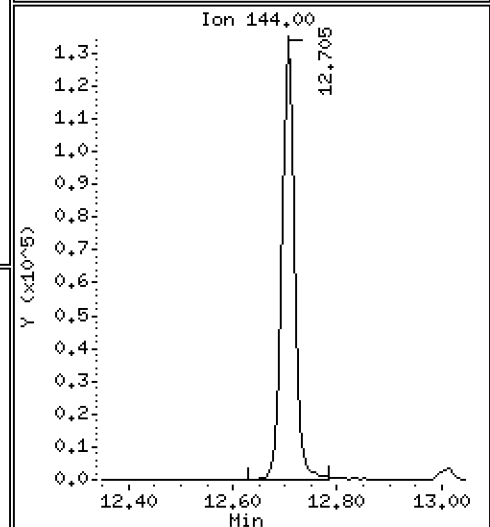
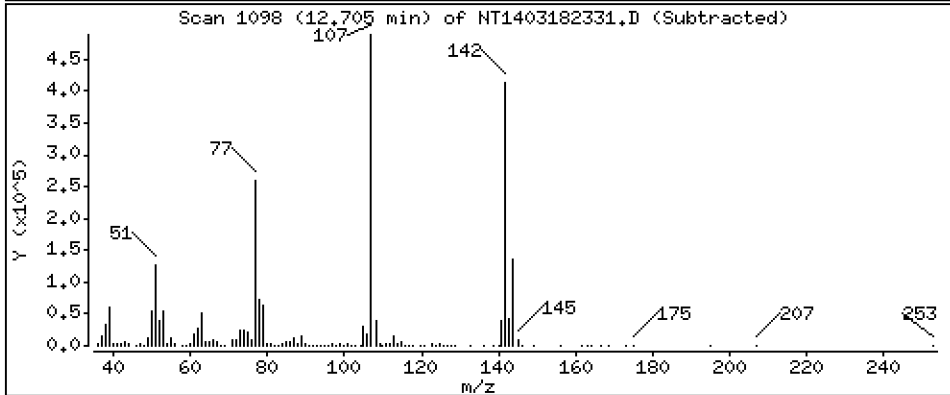
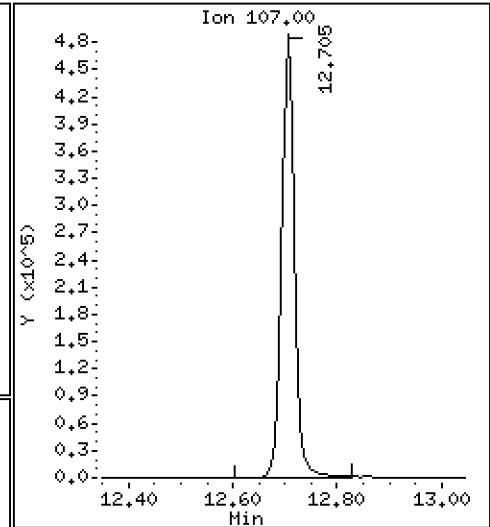
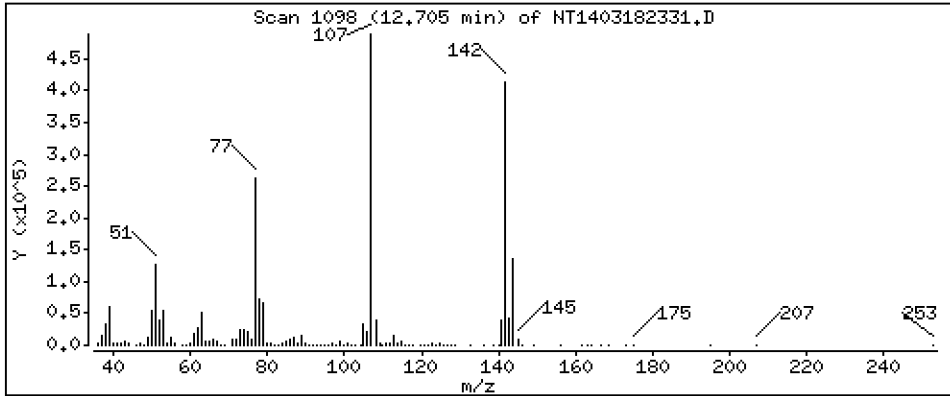
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 9,908 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

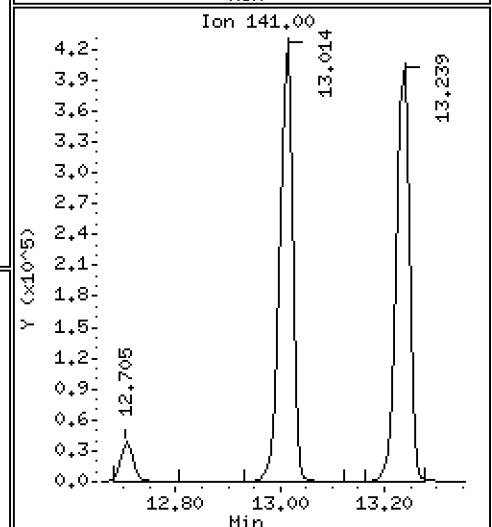
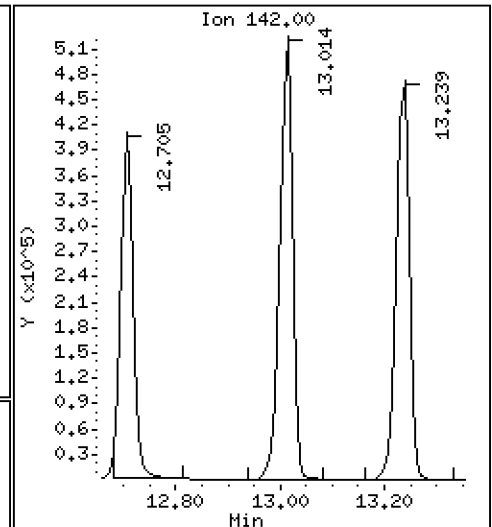
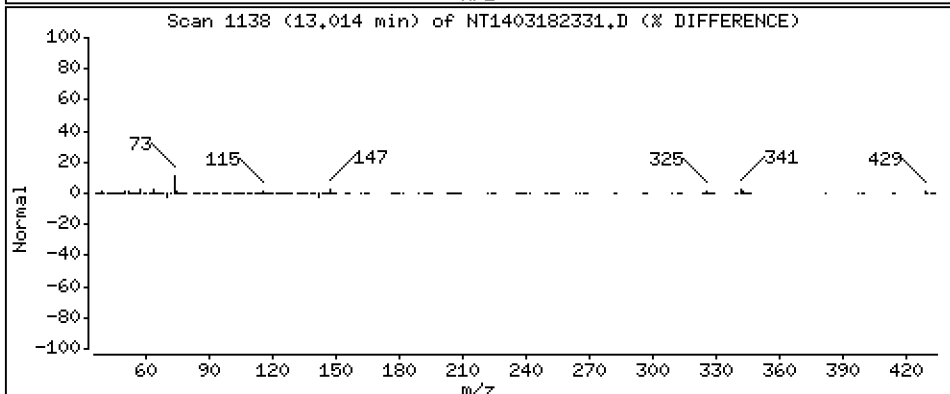
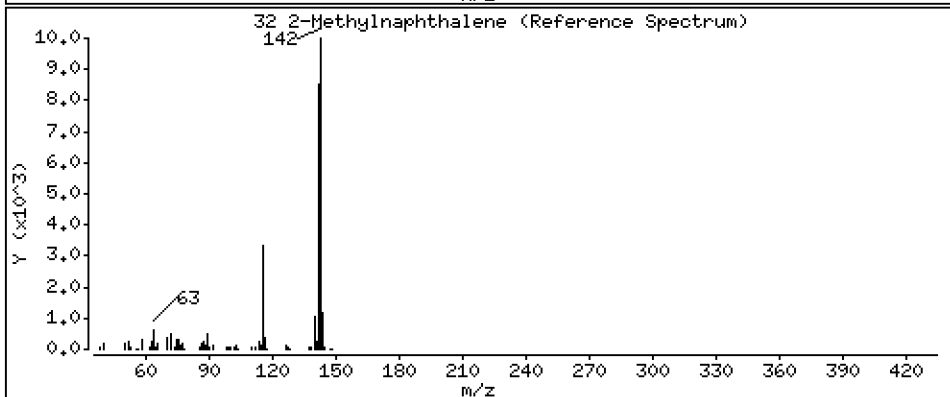
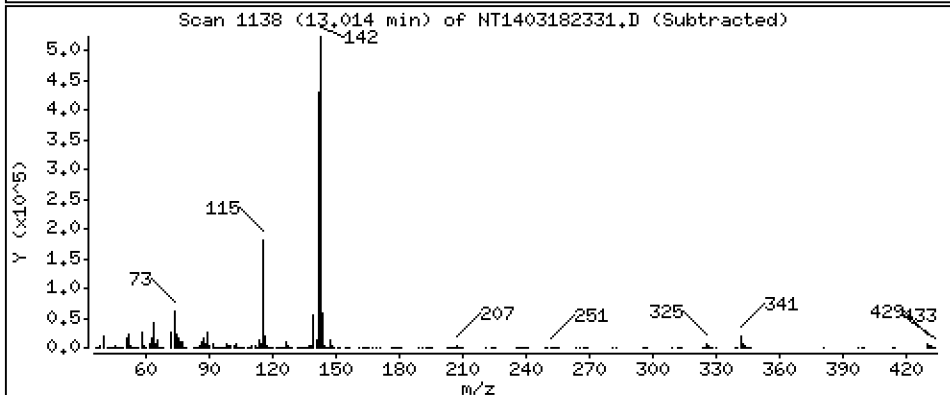
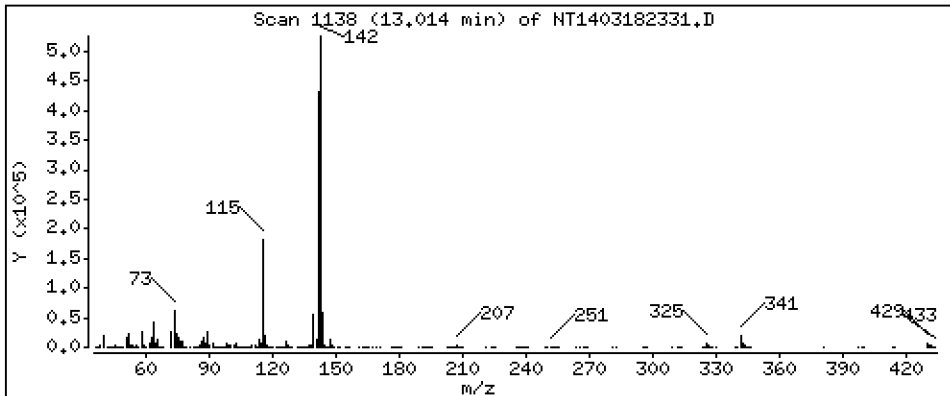
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,923 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

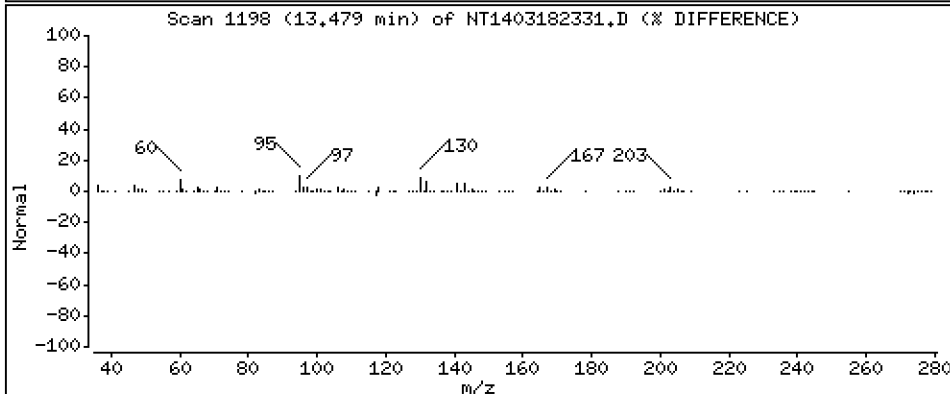
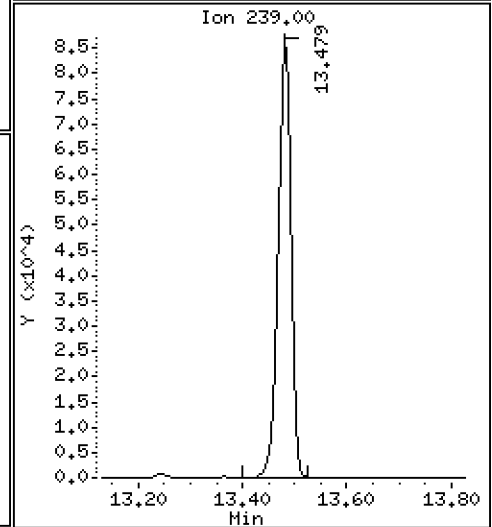
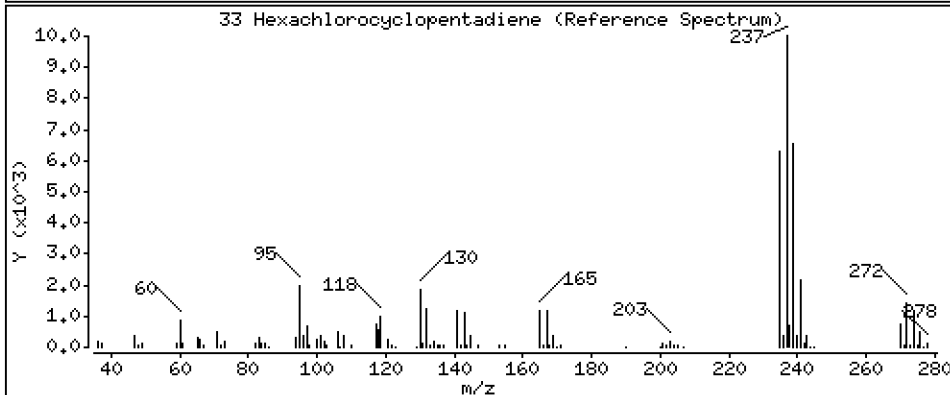
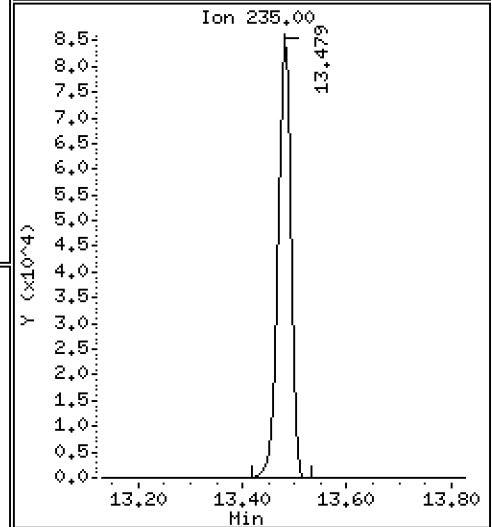
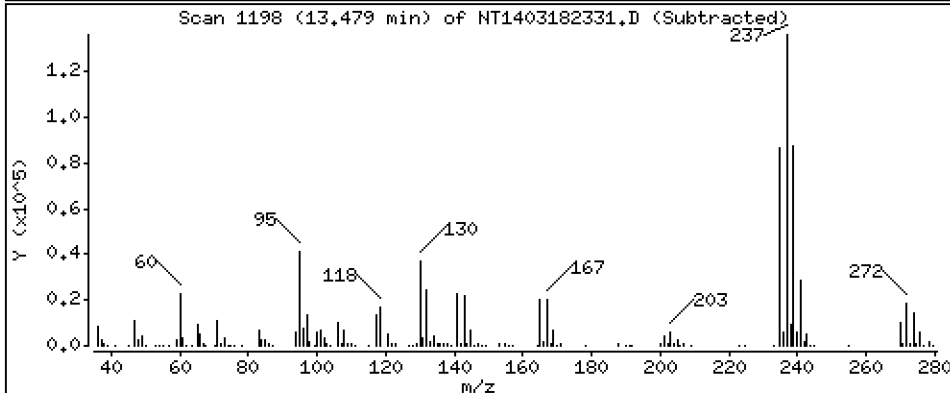
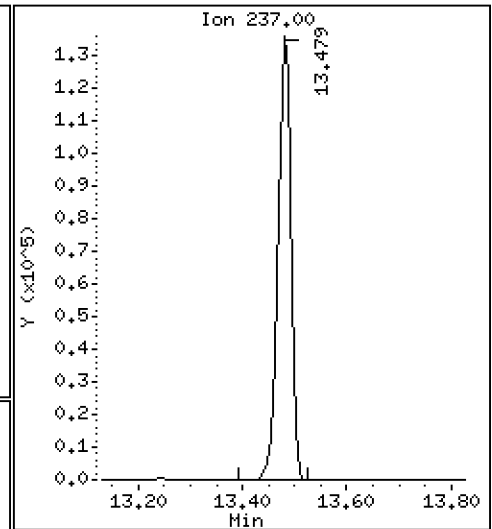
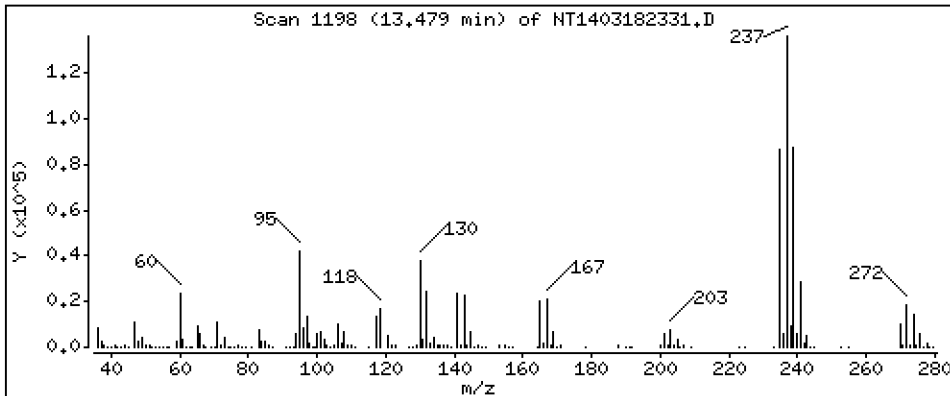
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 5,387 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

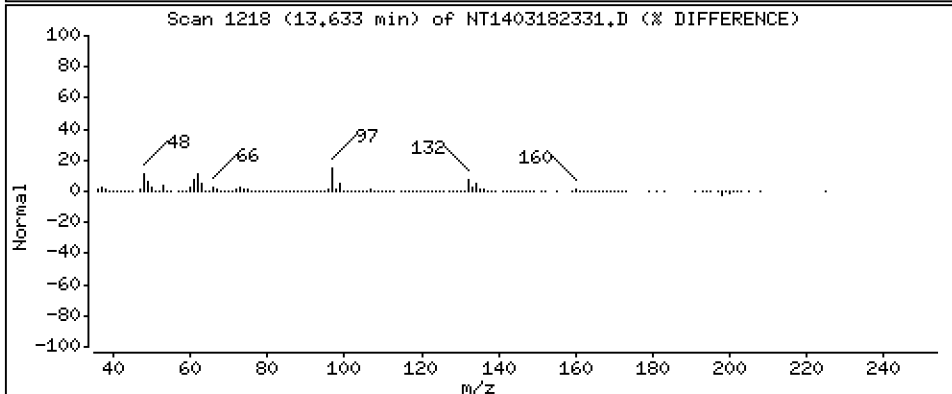
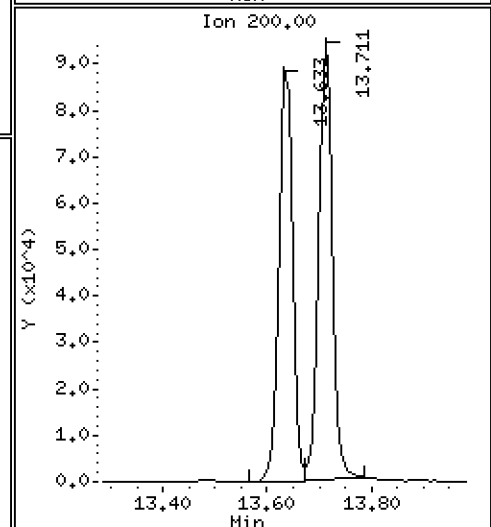
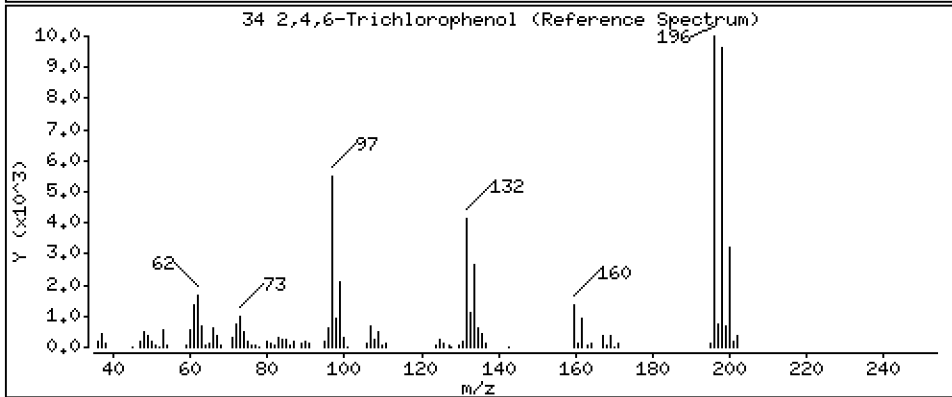
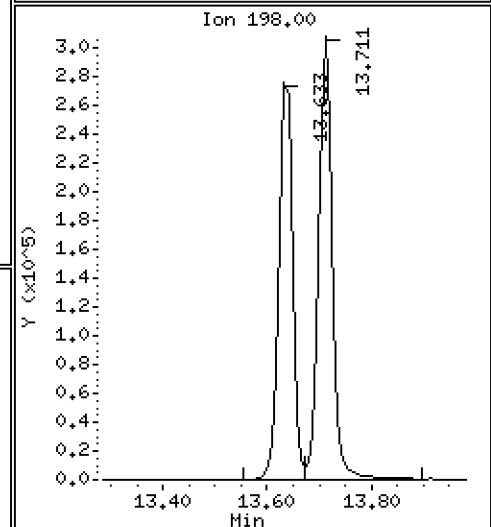
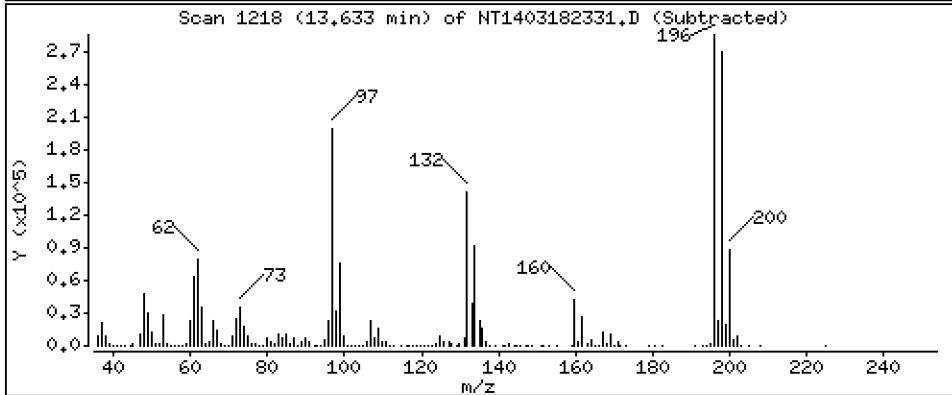
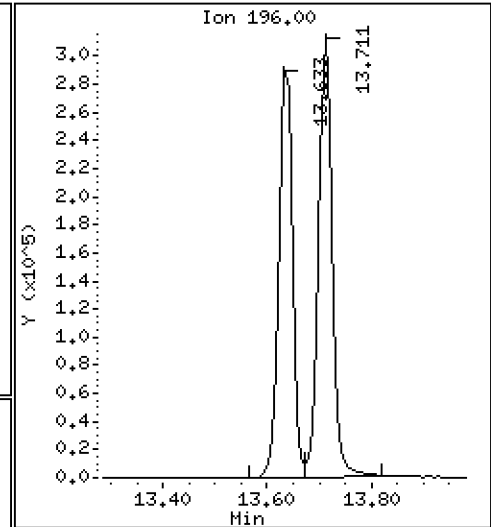
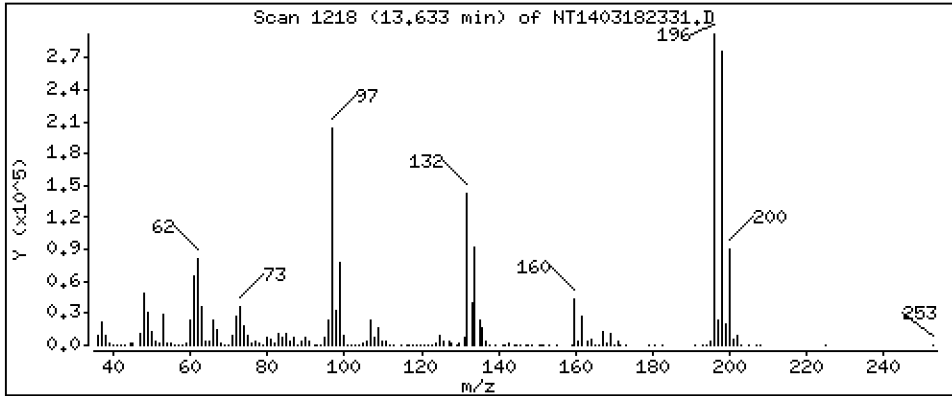
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 10,02 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

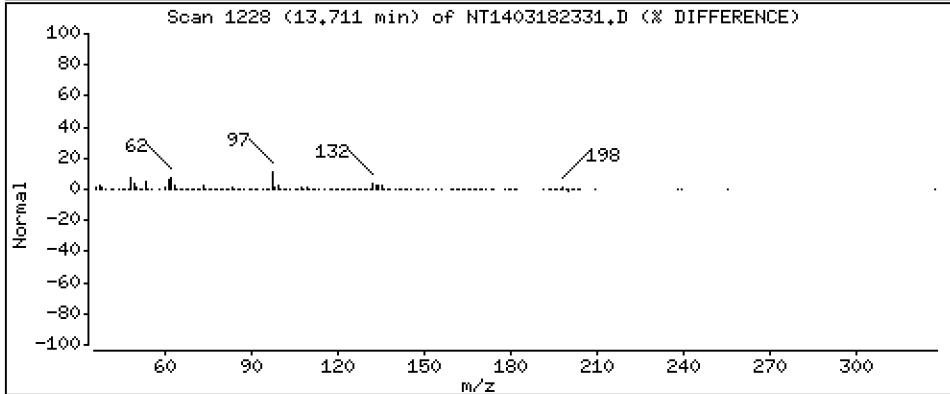
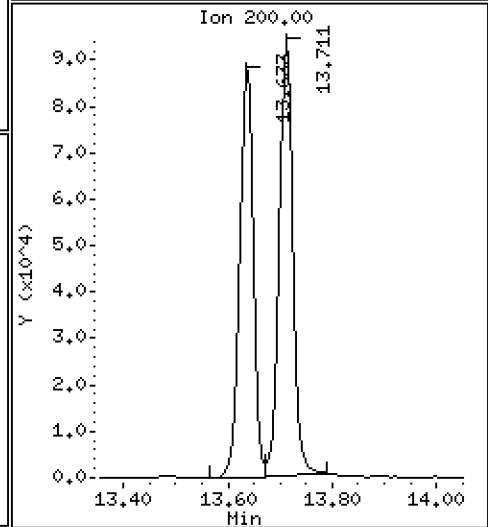
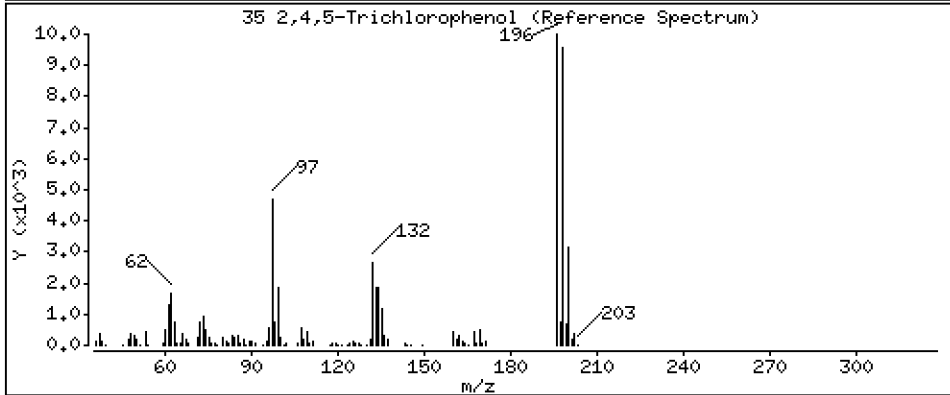
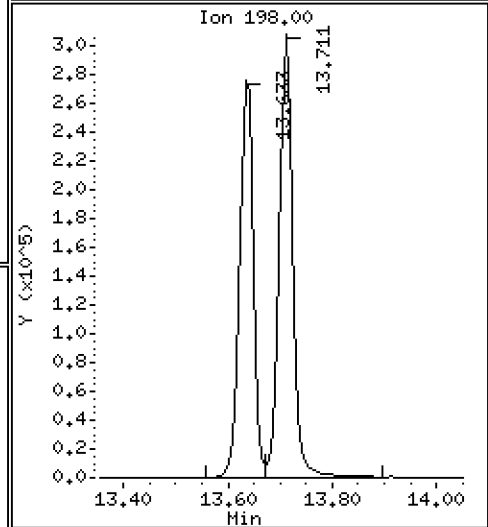
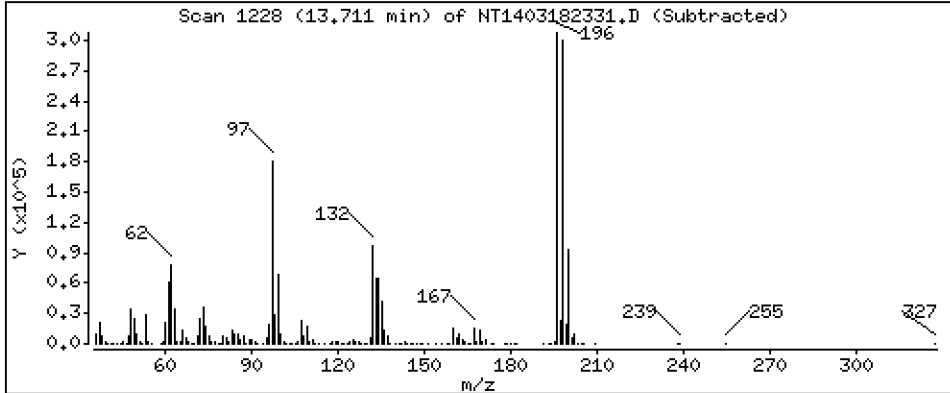
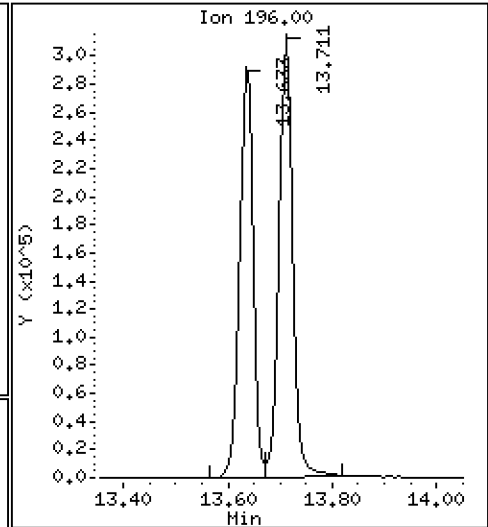
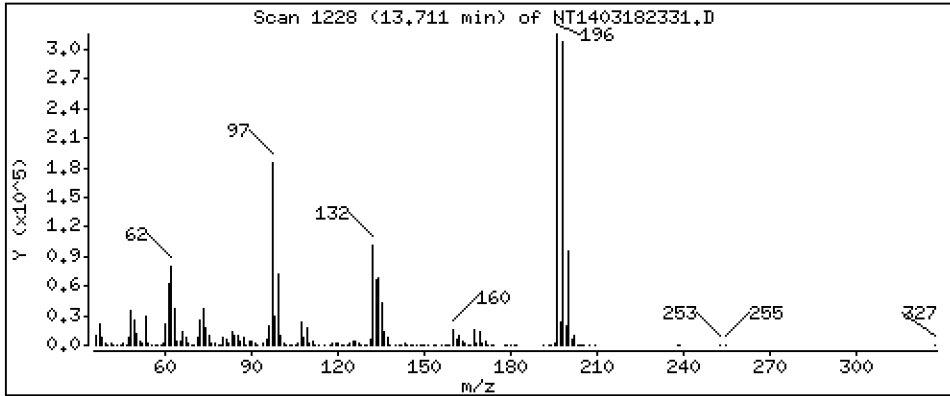
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 10,29 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

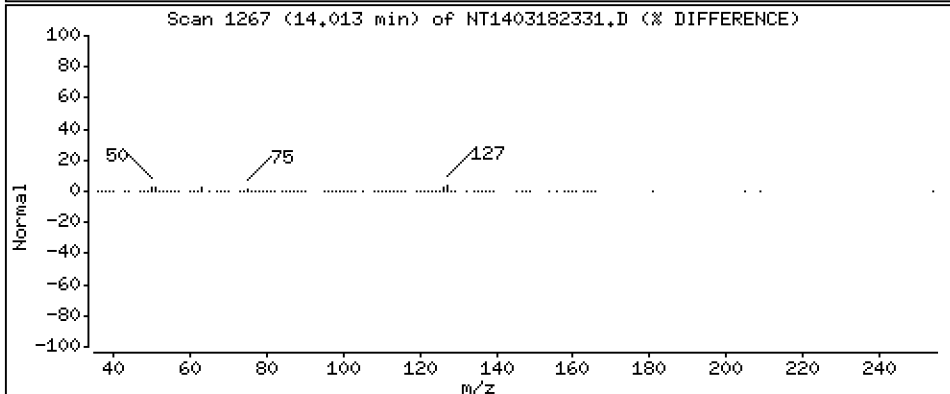
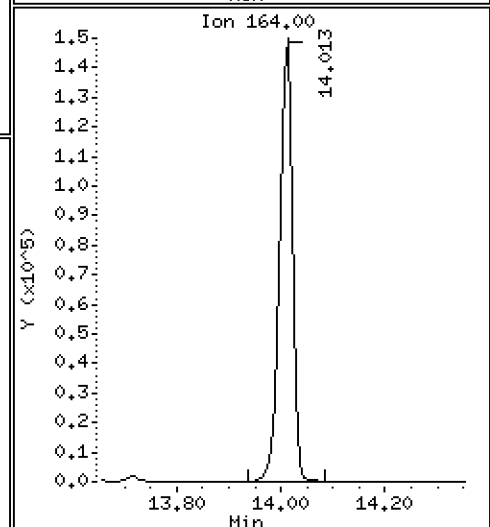
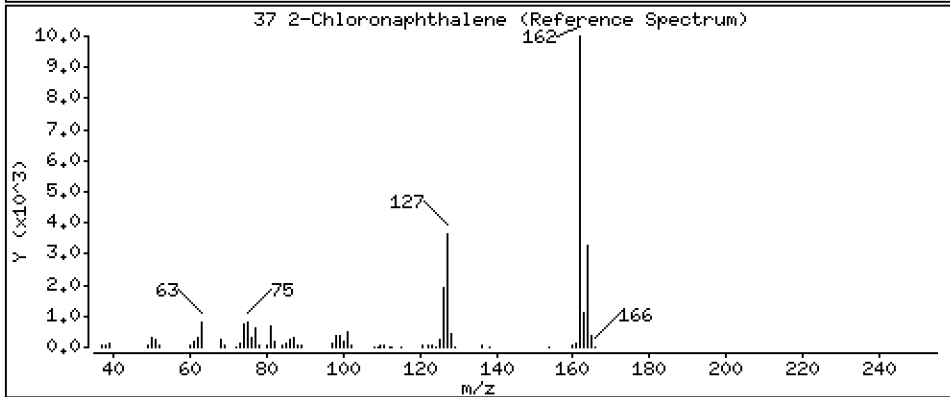
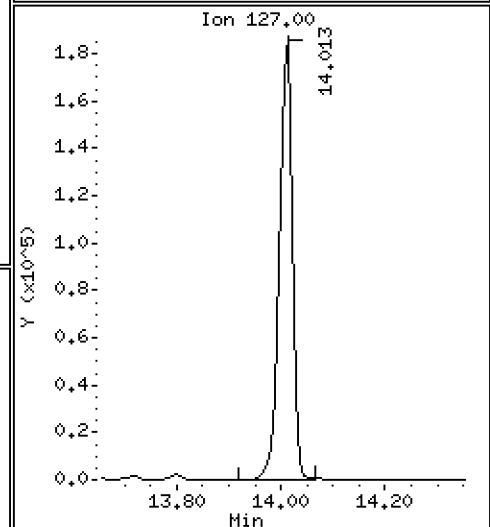
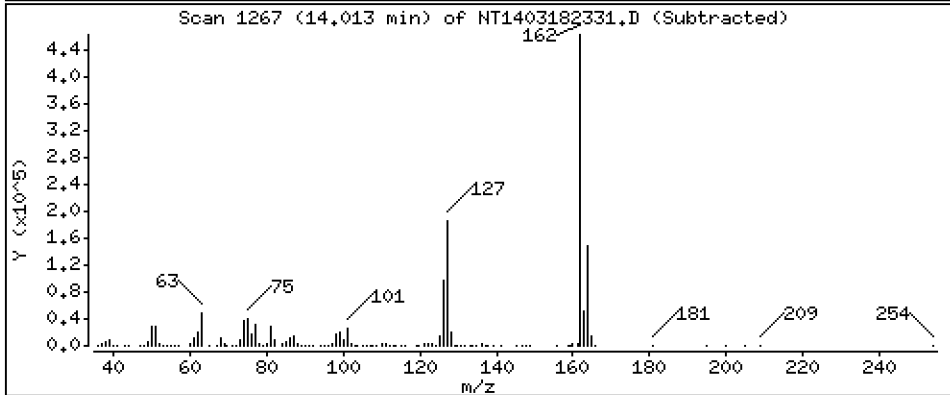
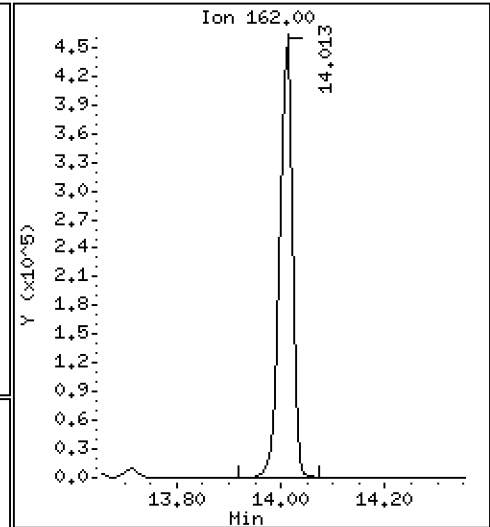
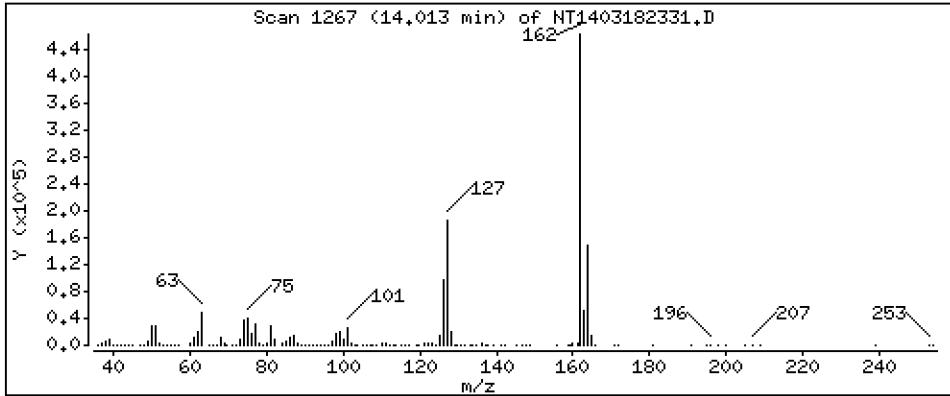
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

37 2-Chloronaphthalene

Concentration: 4.926 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

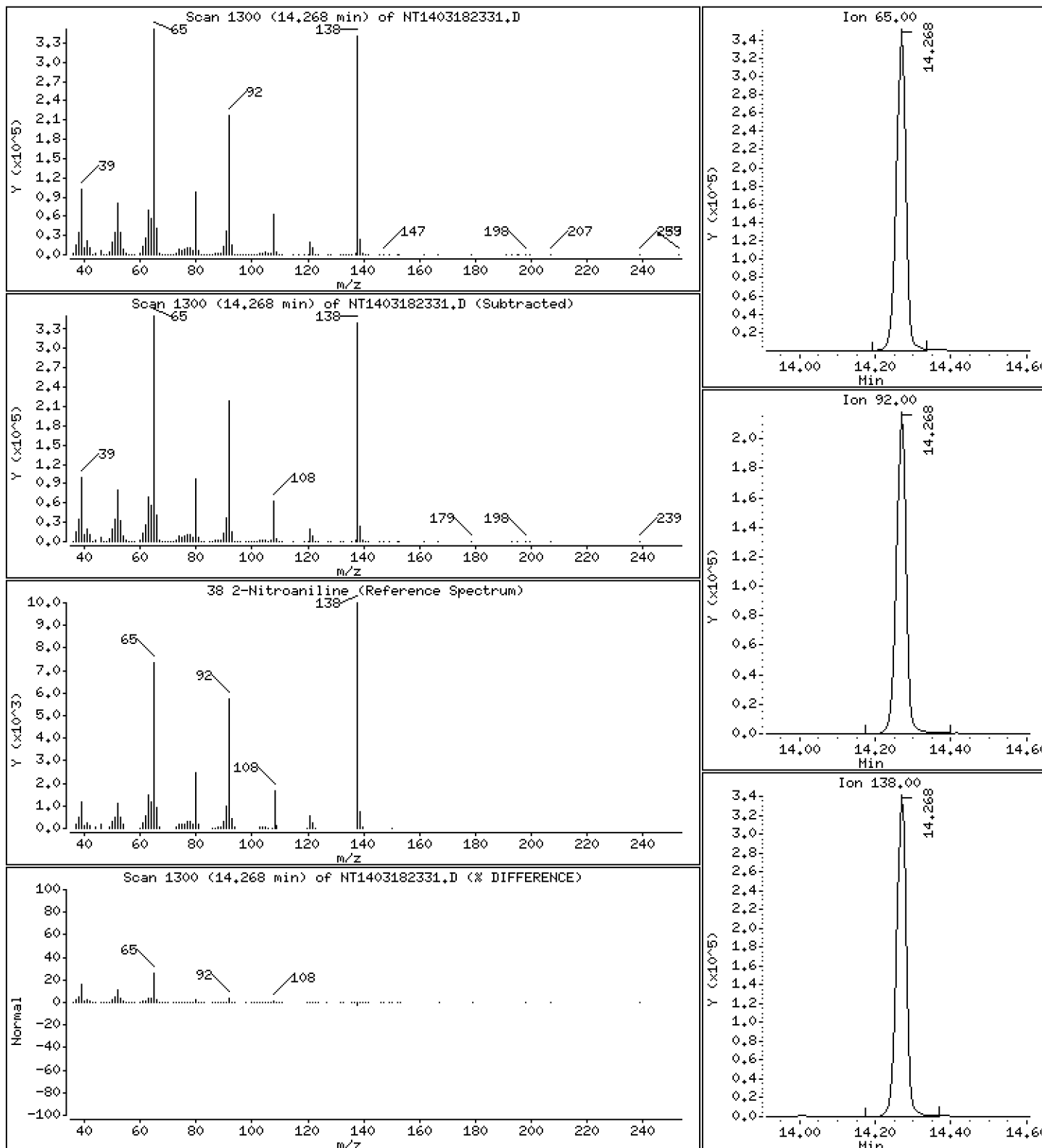
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 9,706 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

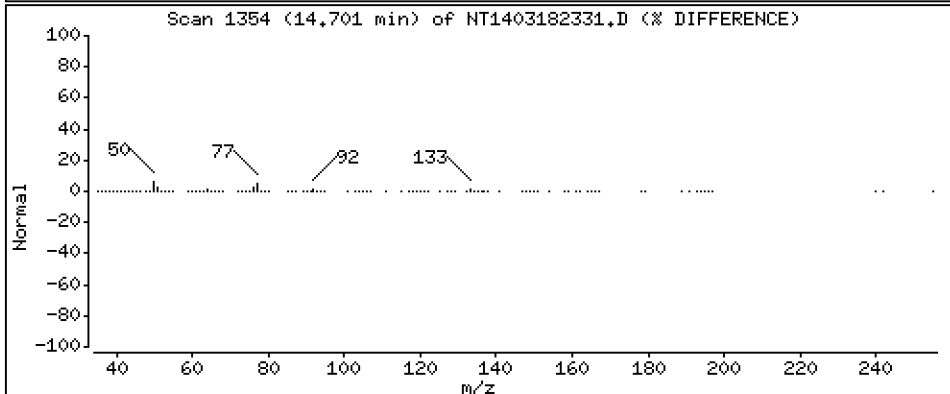
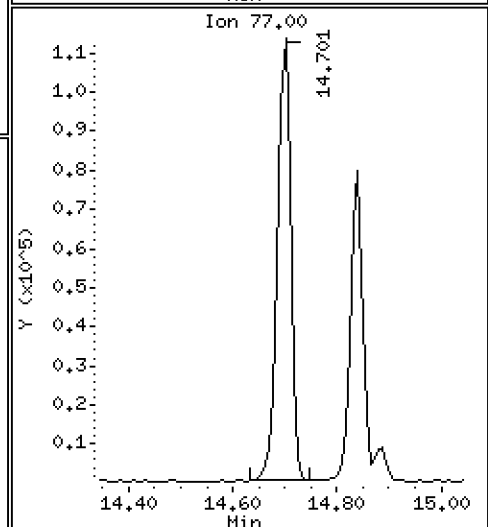
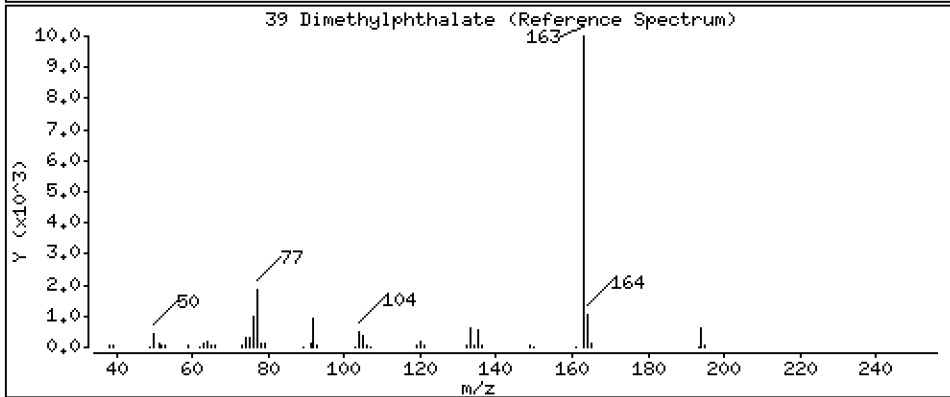
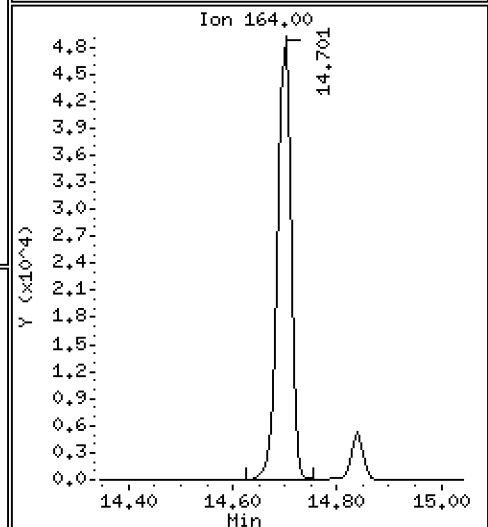
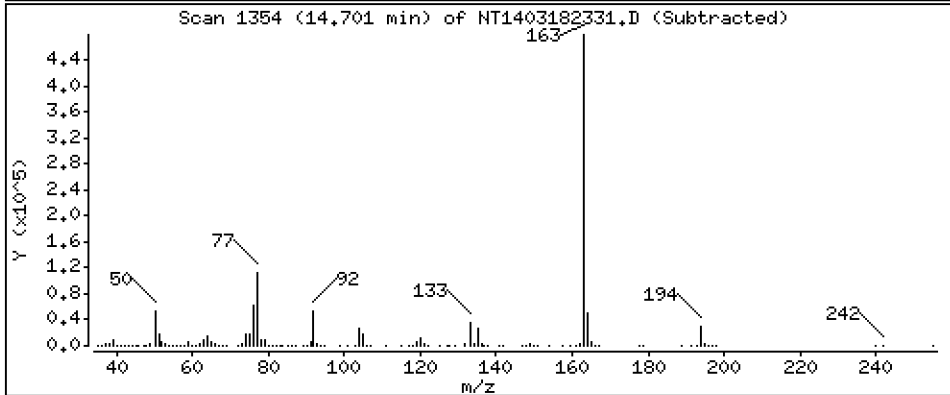
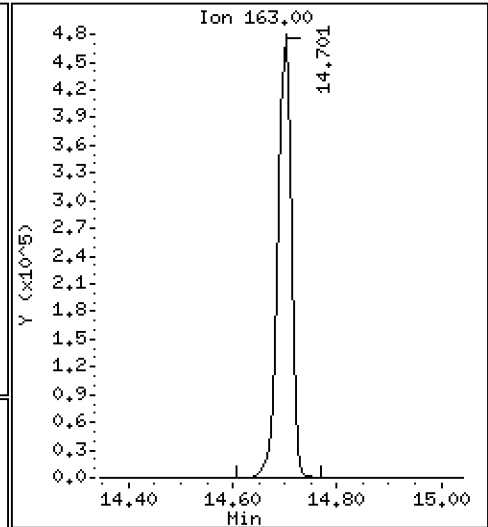
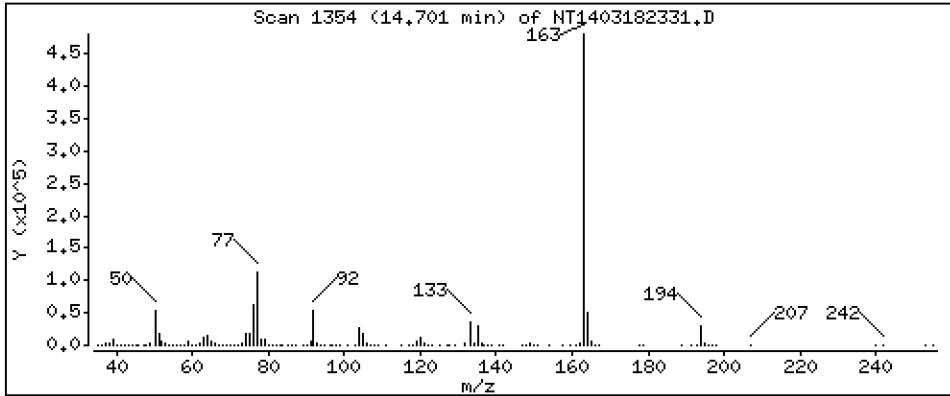
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,938 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

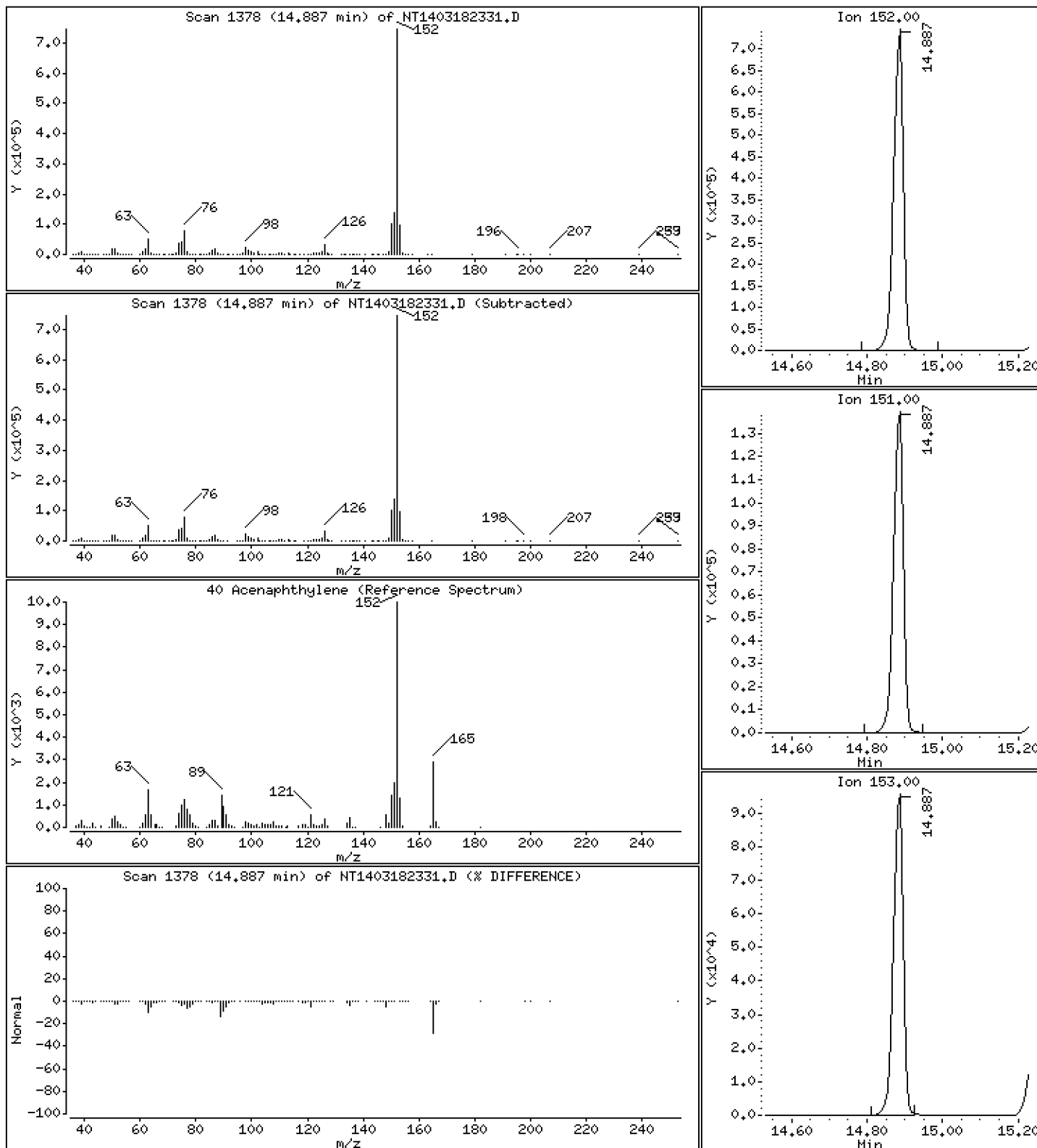
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,885 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

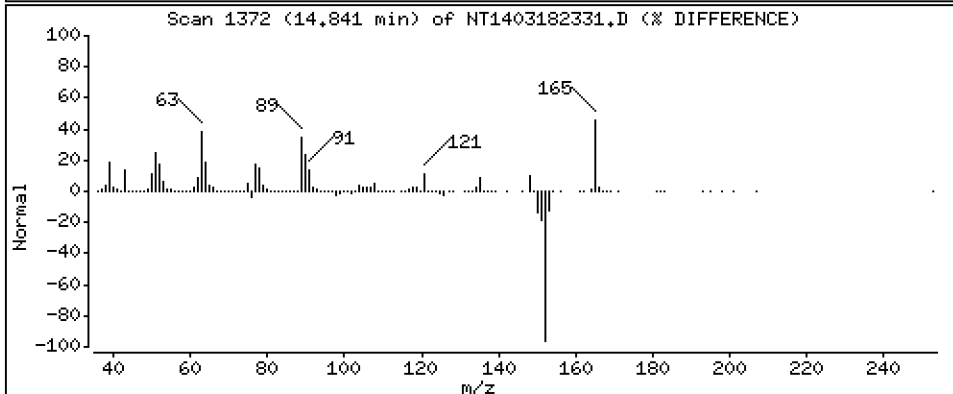
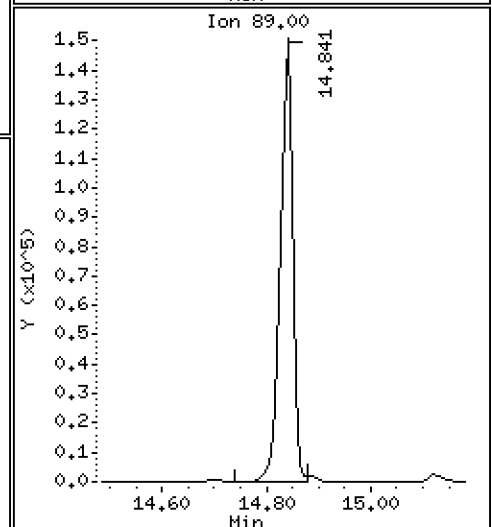
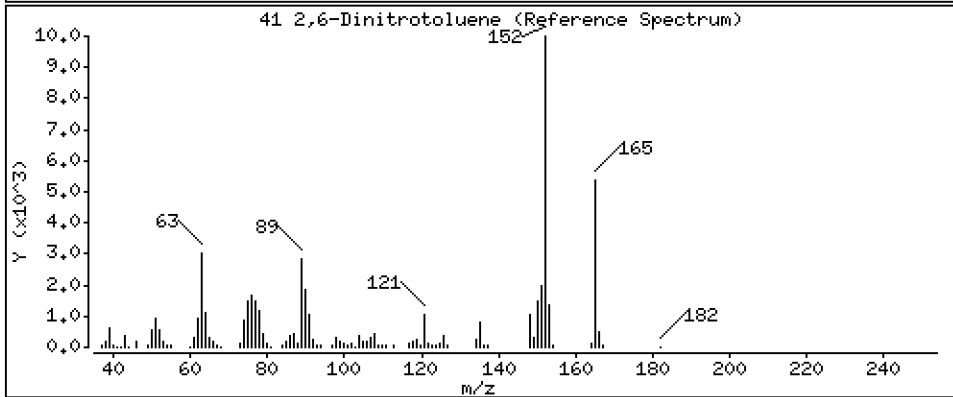
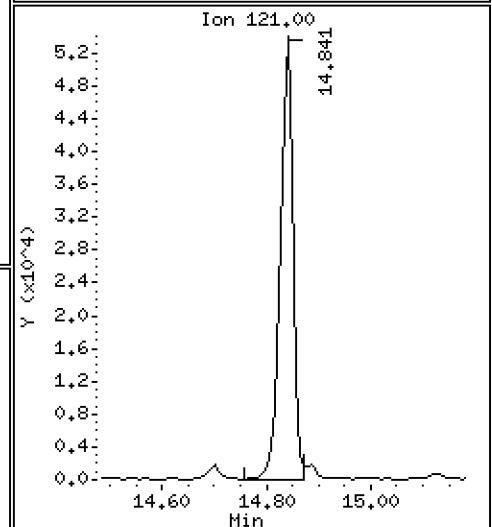
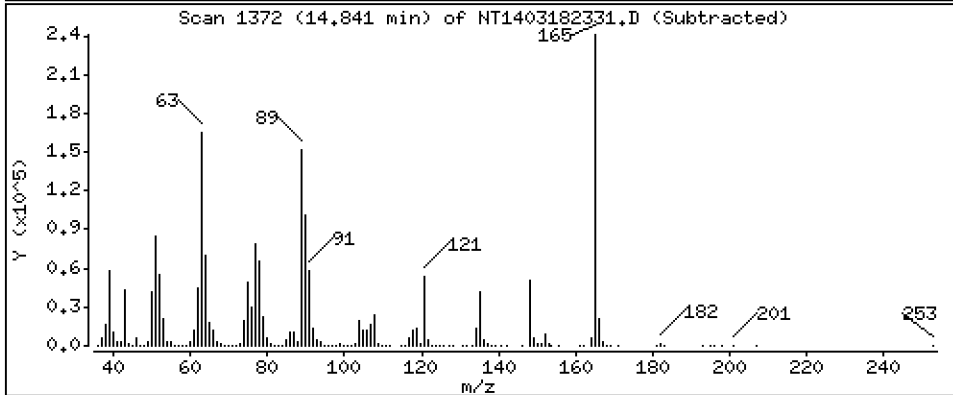
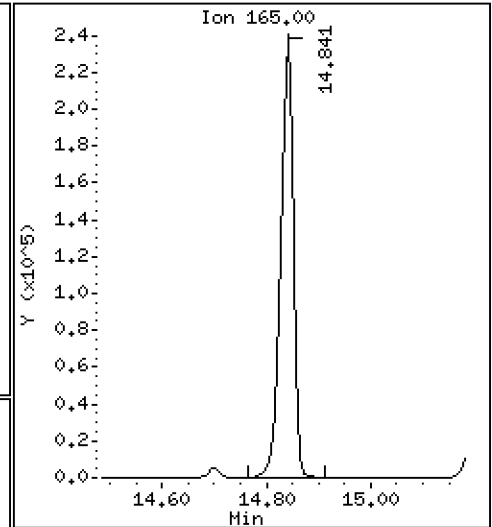
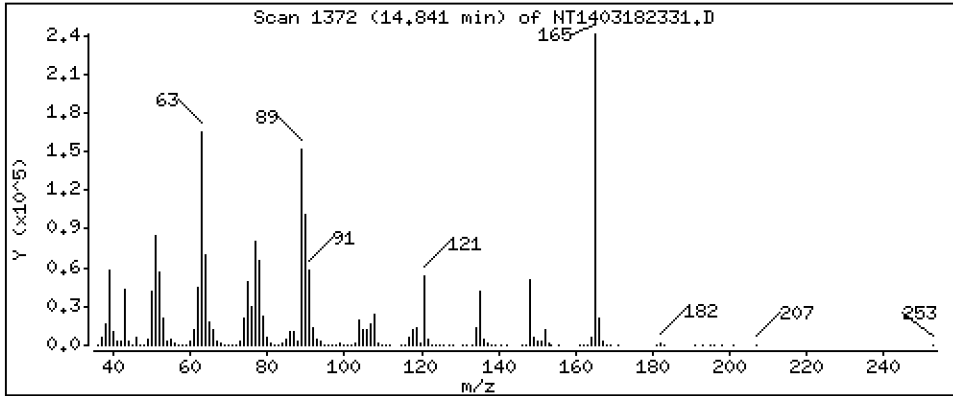
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 10,26 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

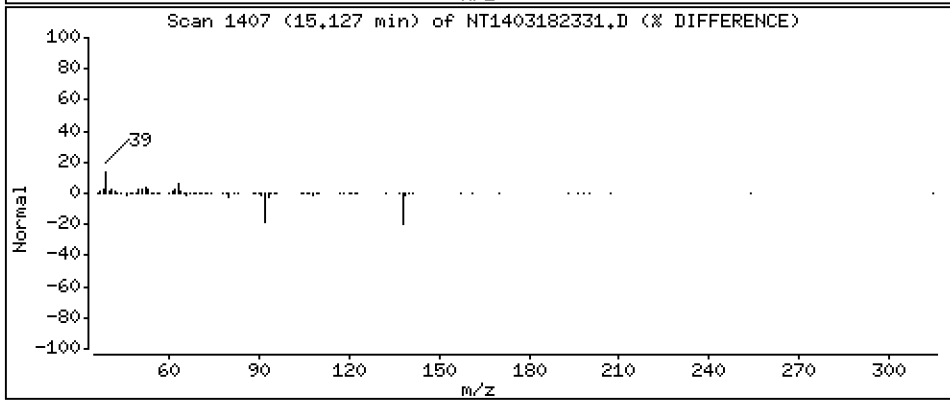
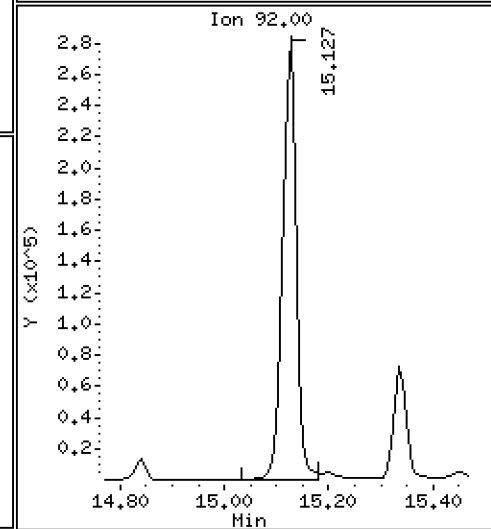
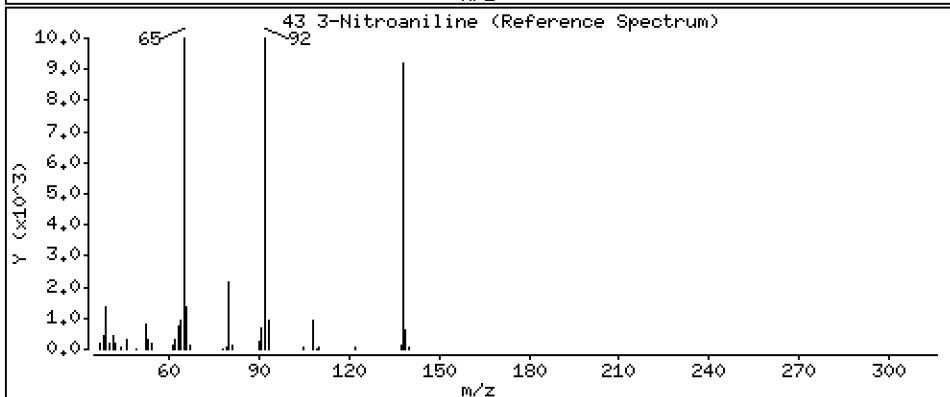
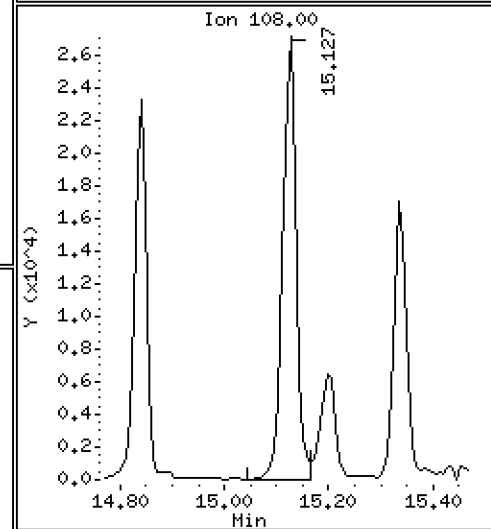
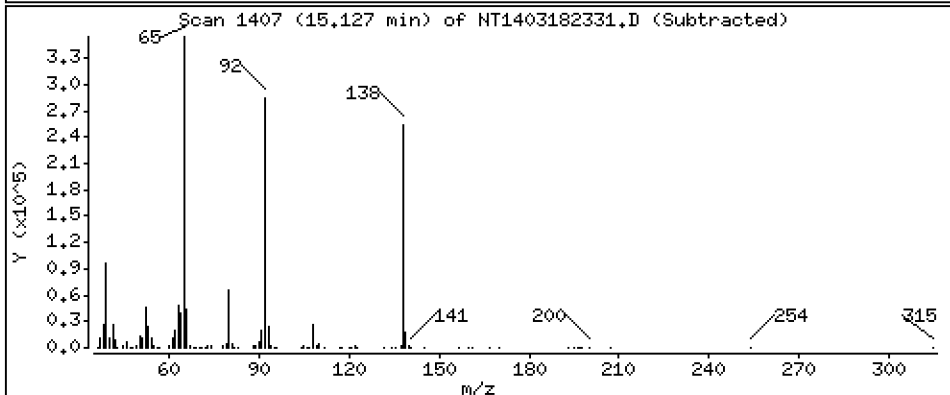
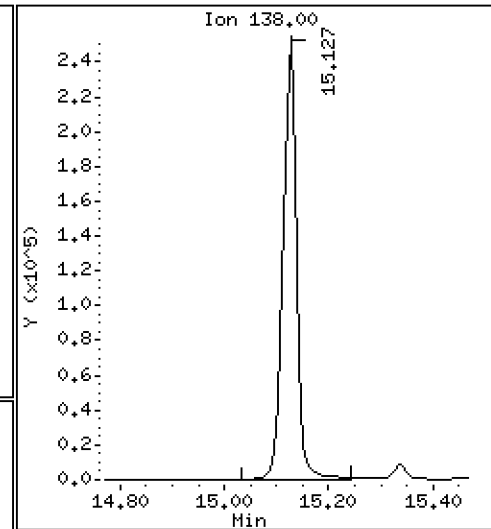
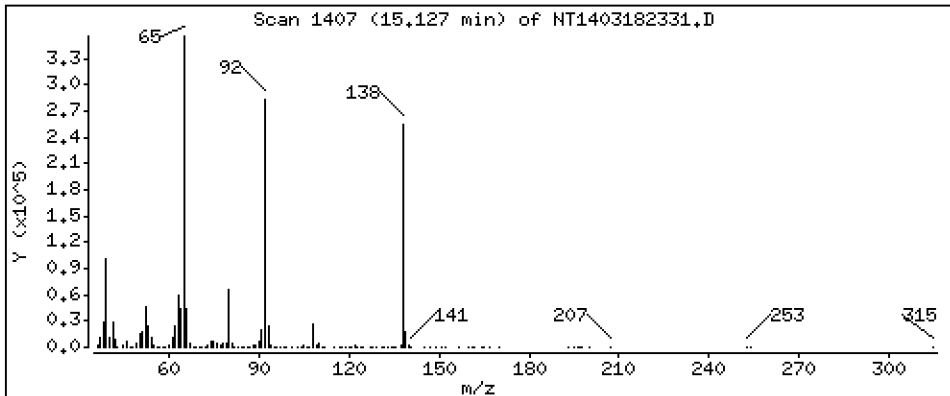
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 9,089 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

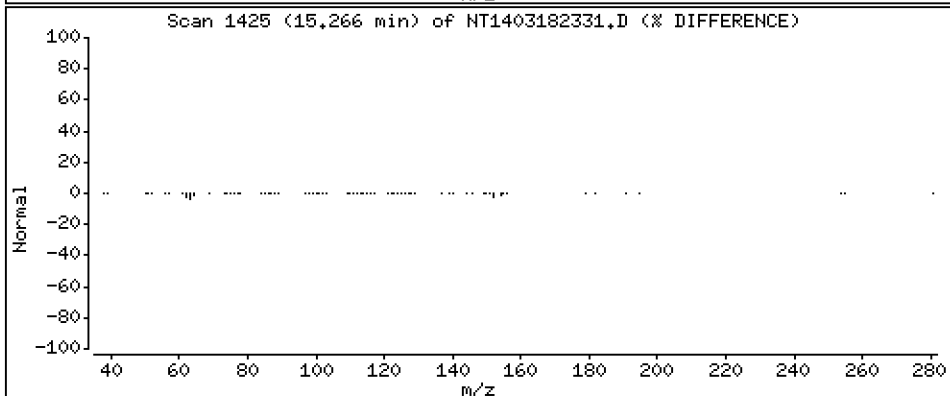
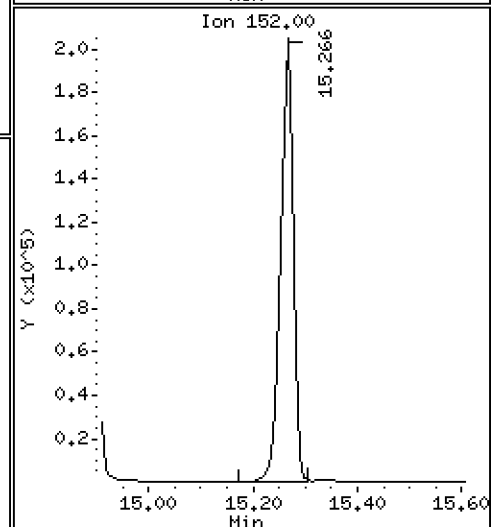
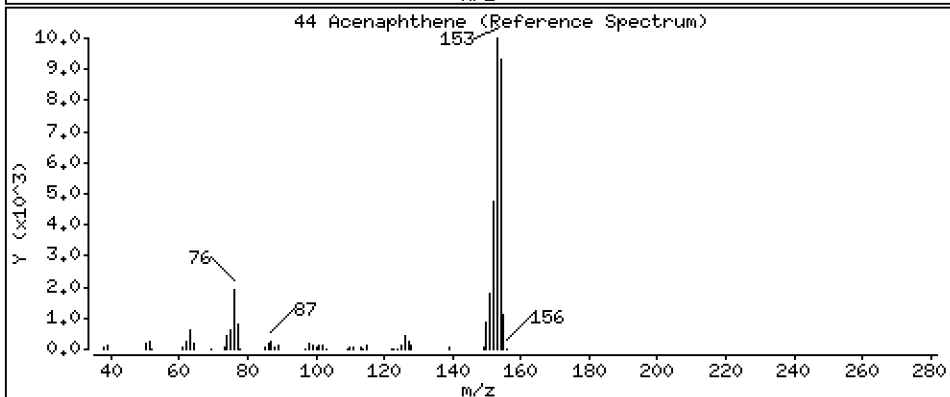
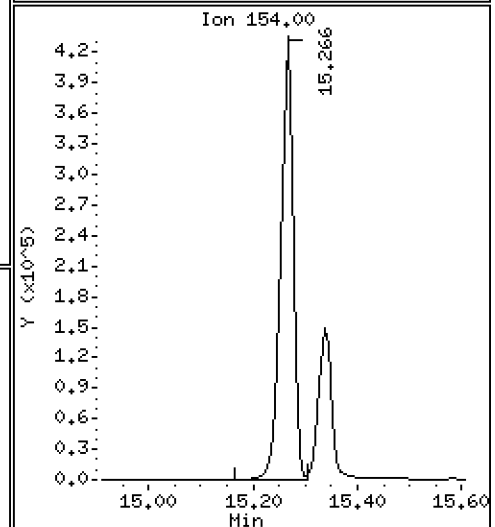
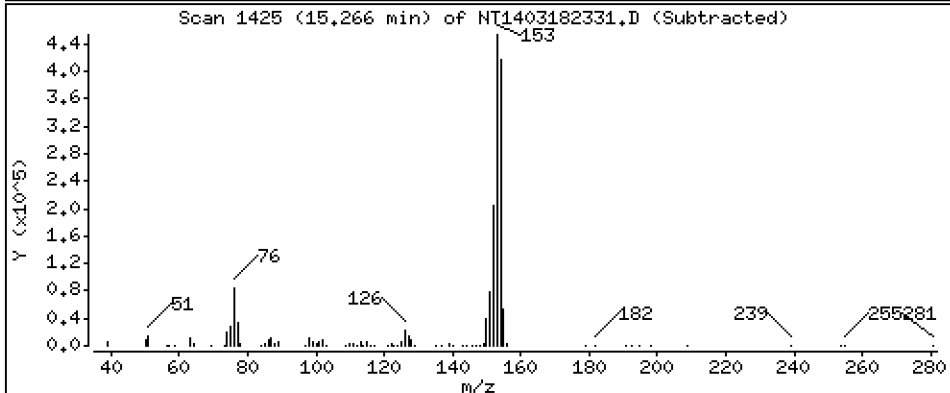
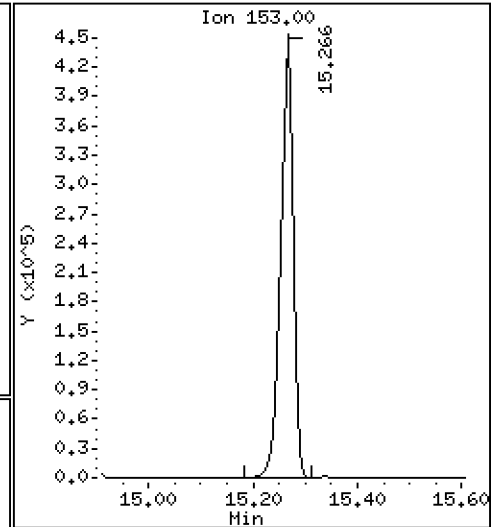
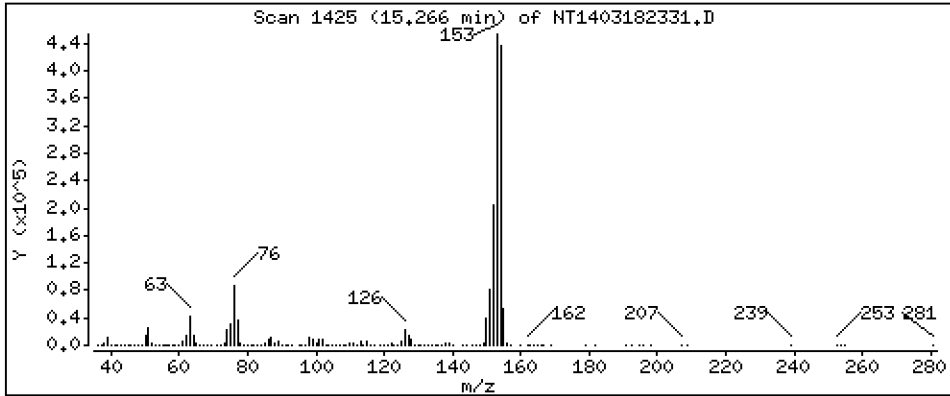
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,834 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

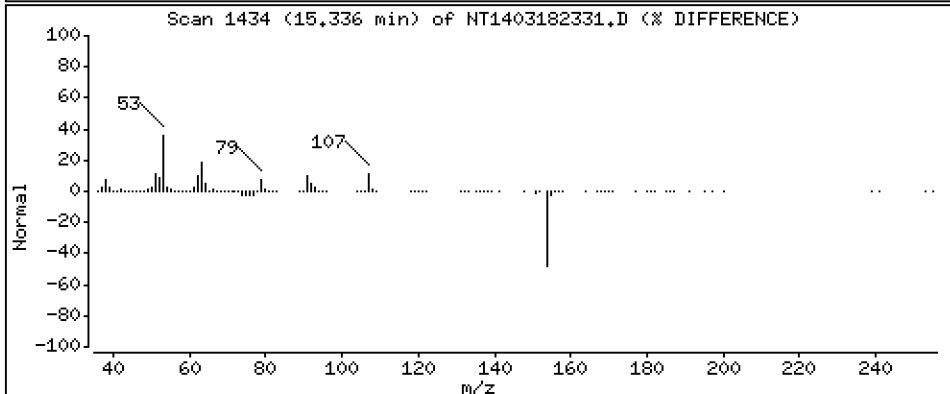
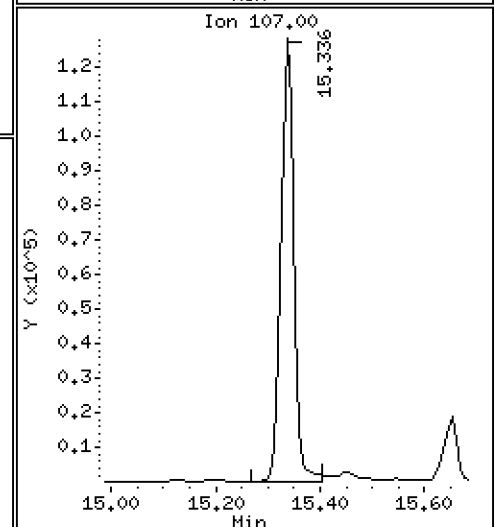
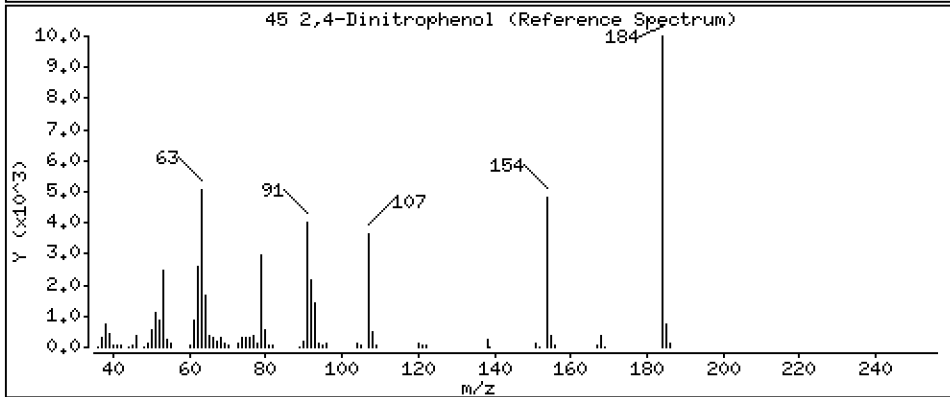
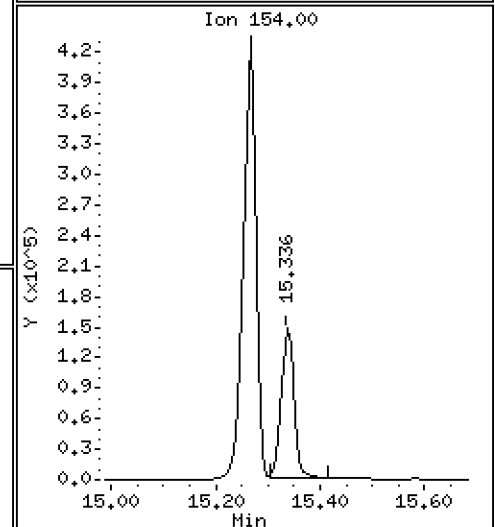
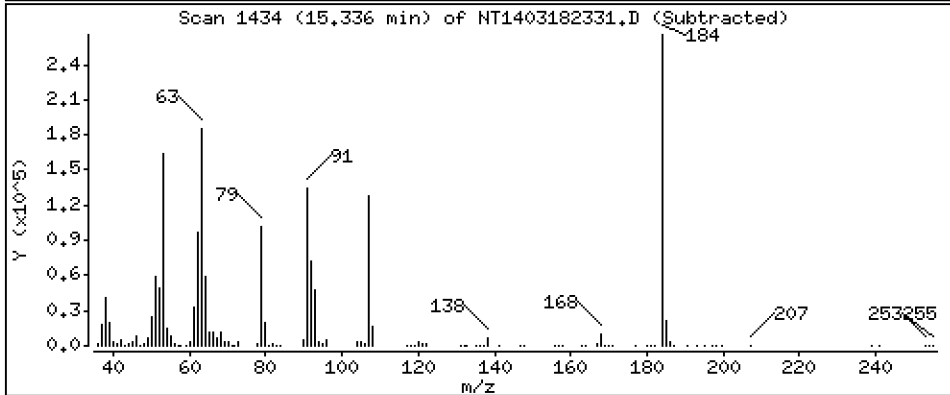
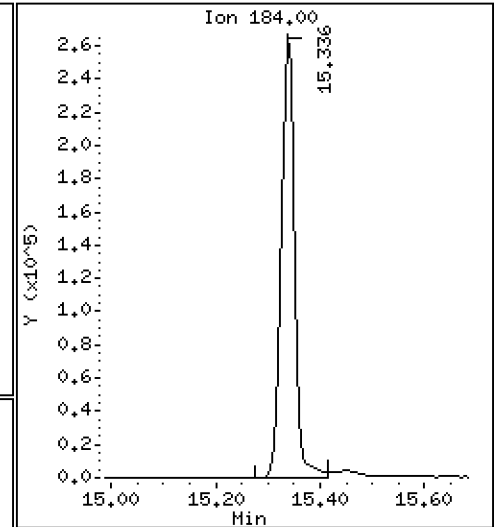
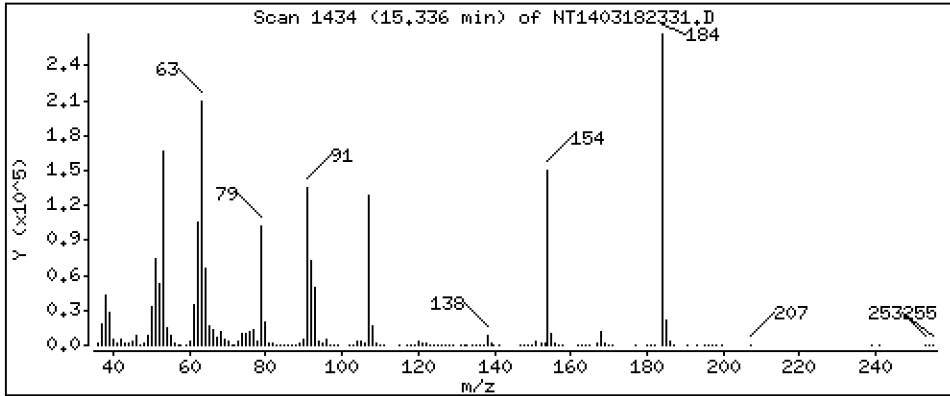
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 14,69 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

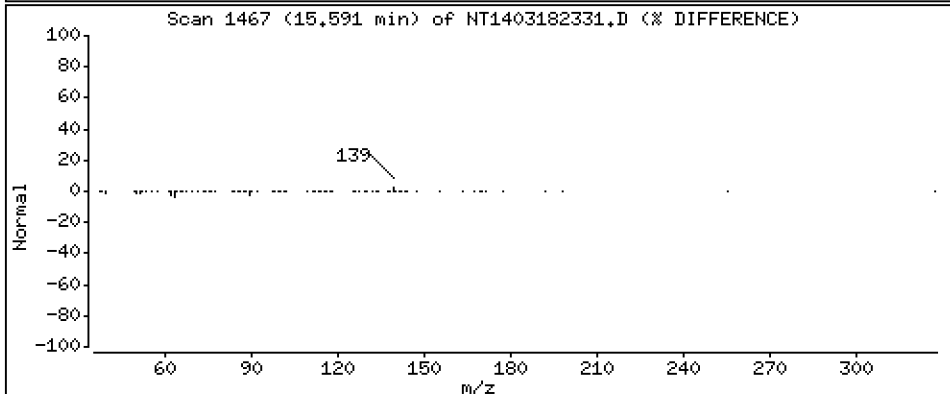
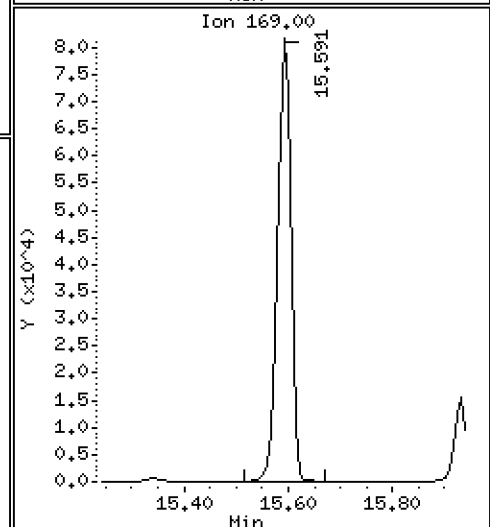
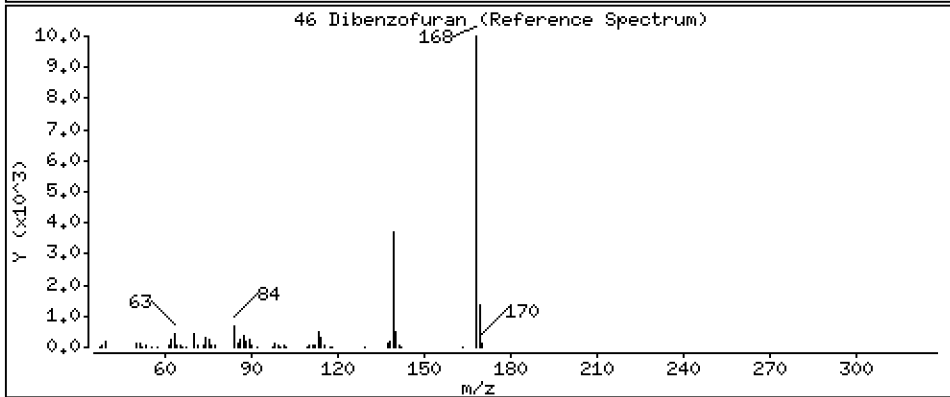
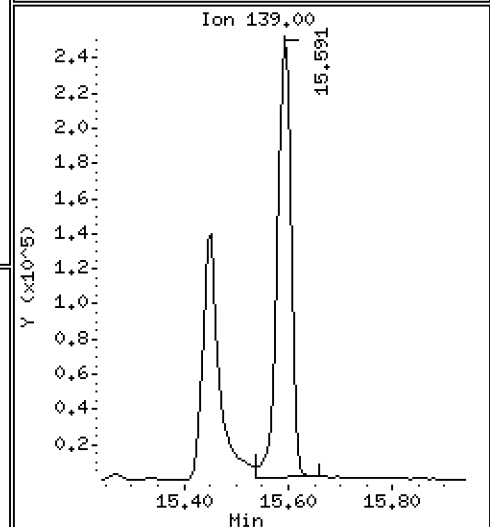
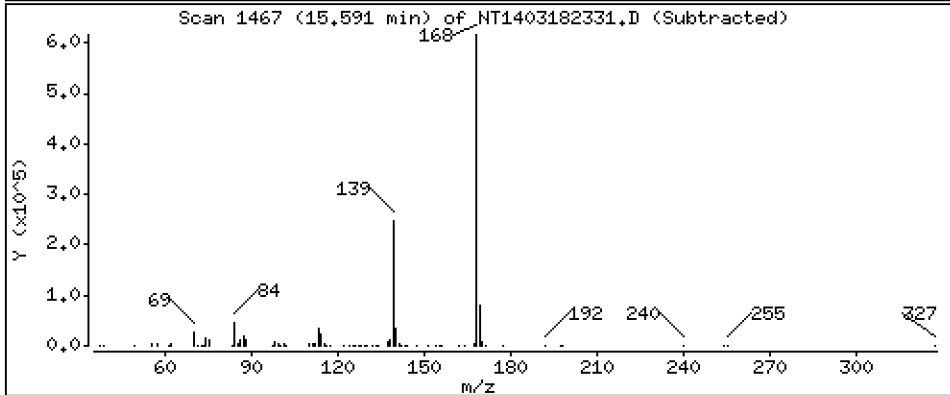
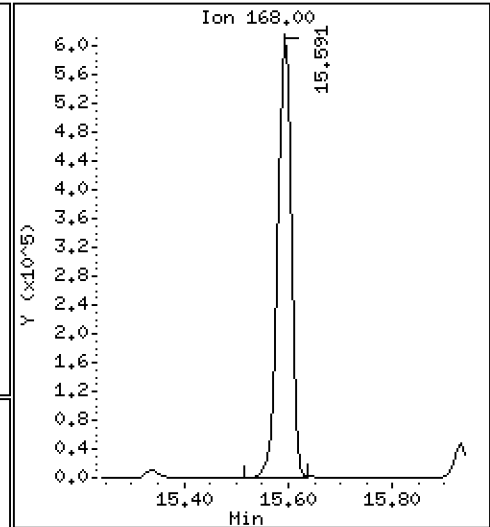
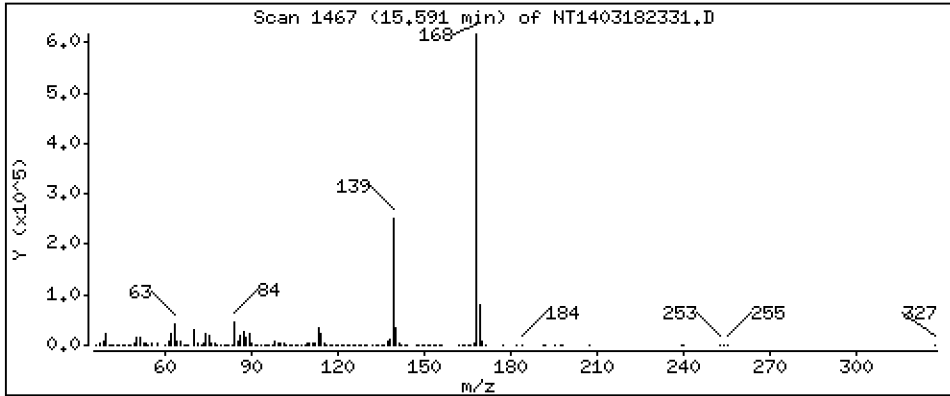
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,888 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

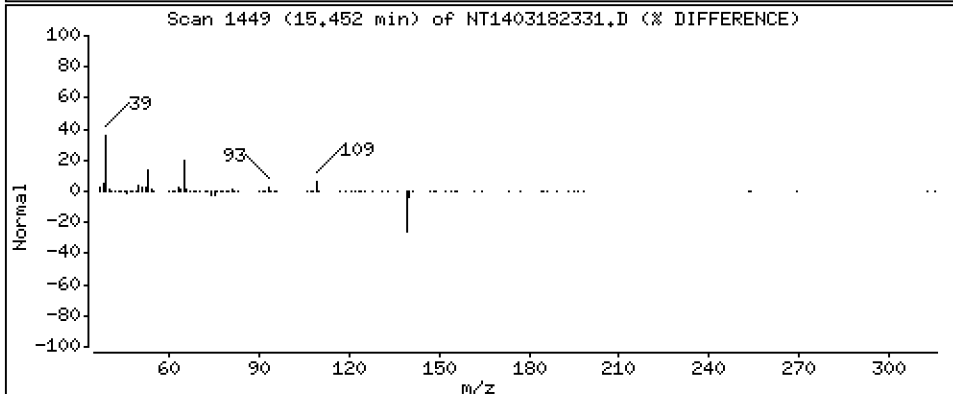
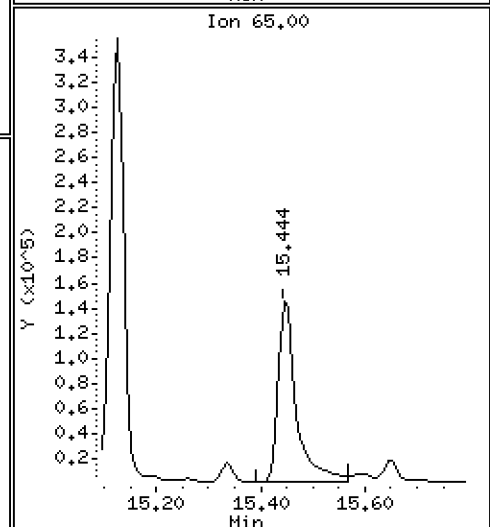
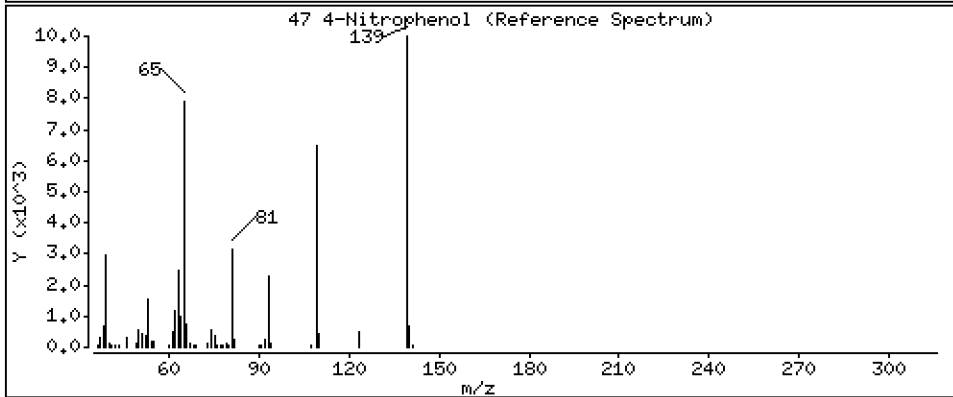
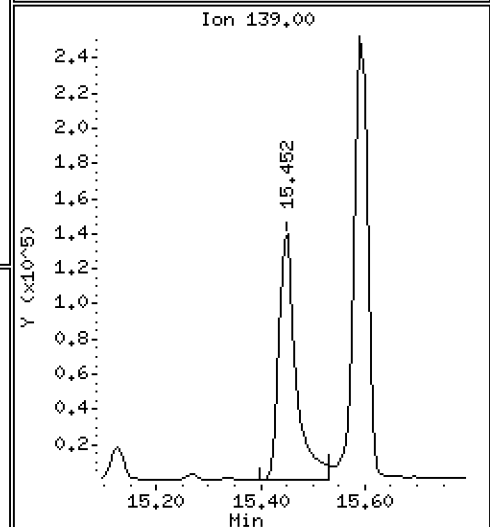
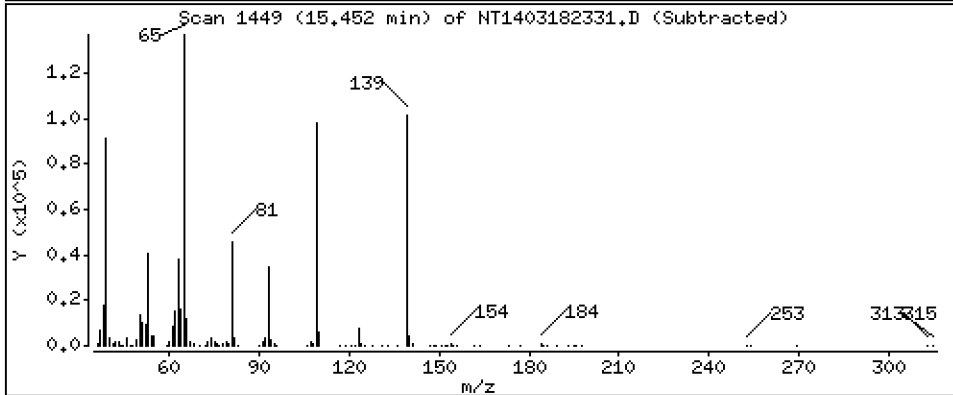
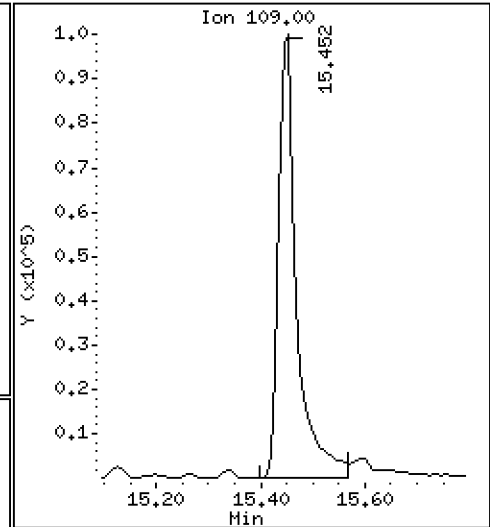
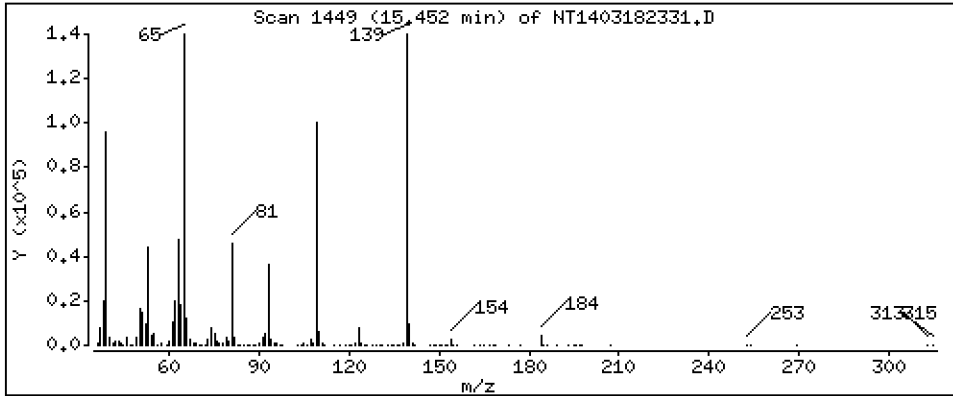
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 8,384 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

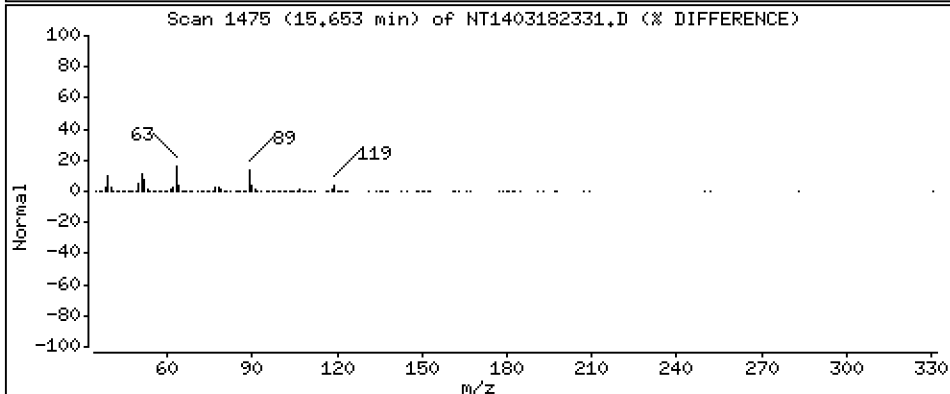
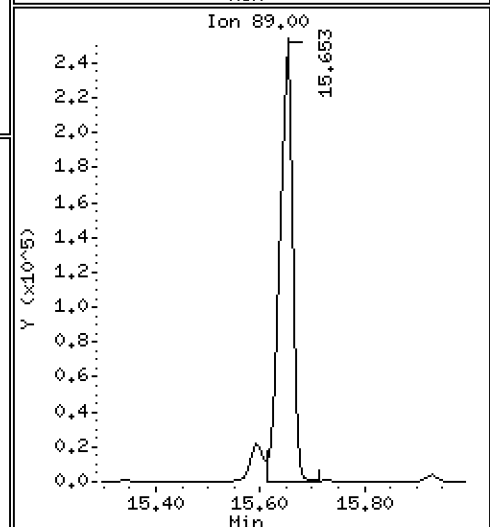
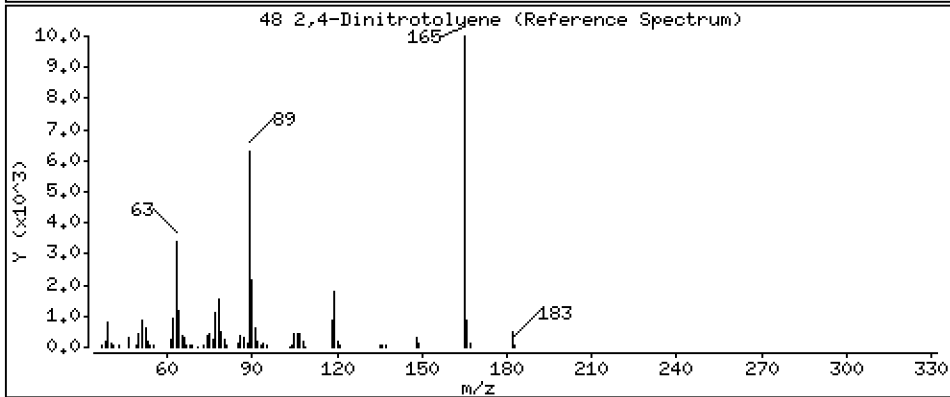
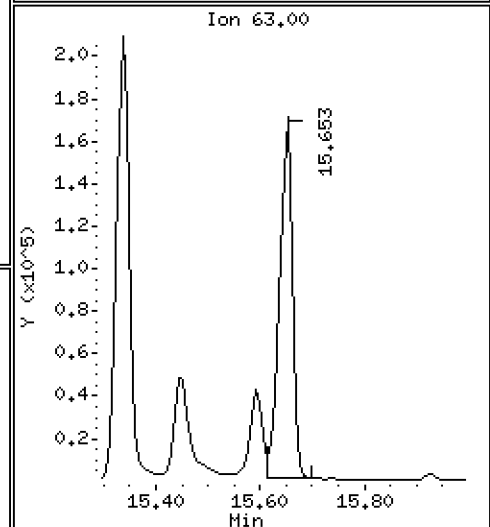
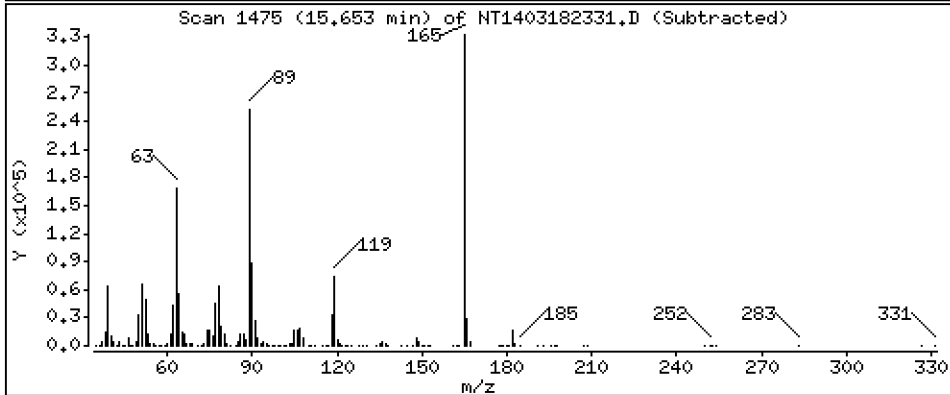
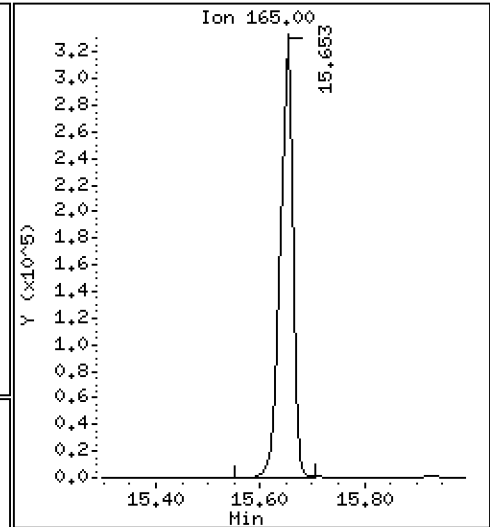
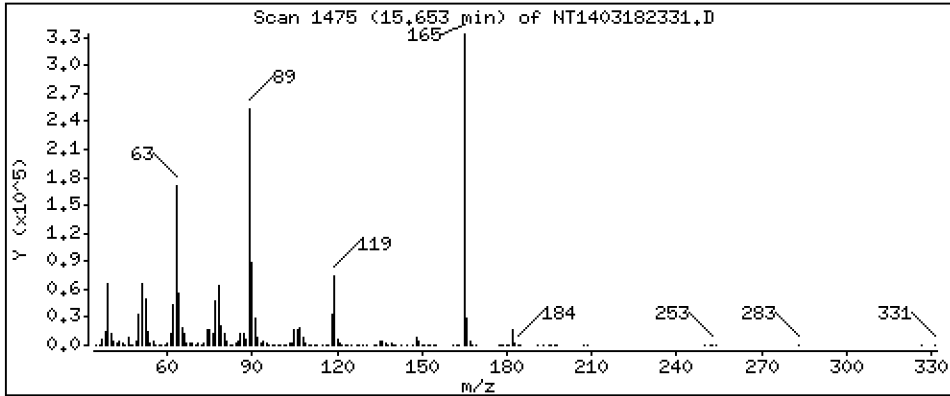
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 9,974 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

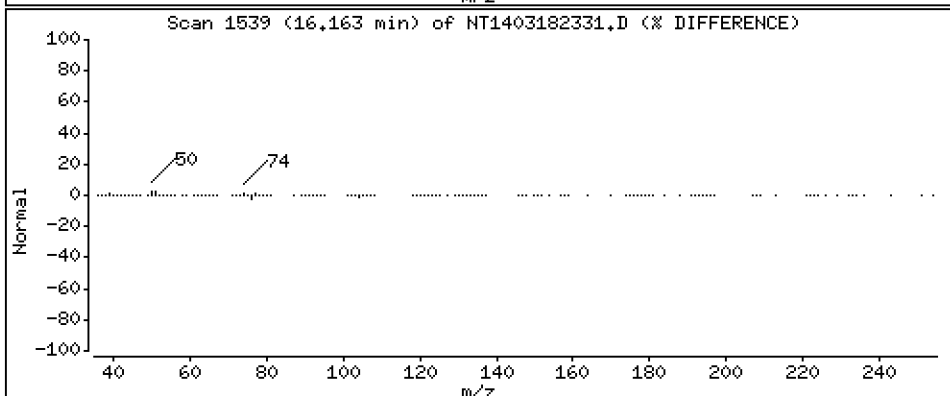
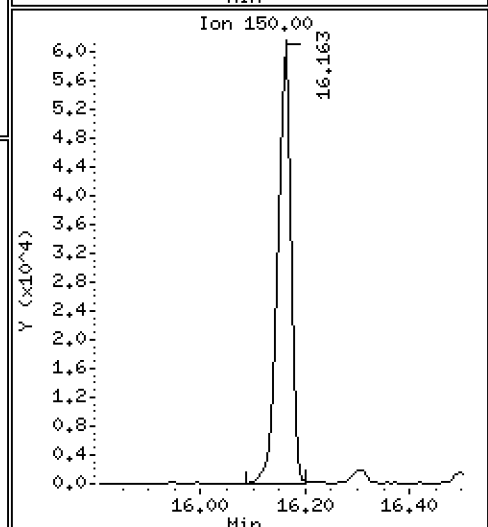
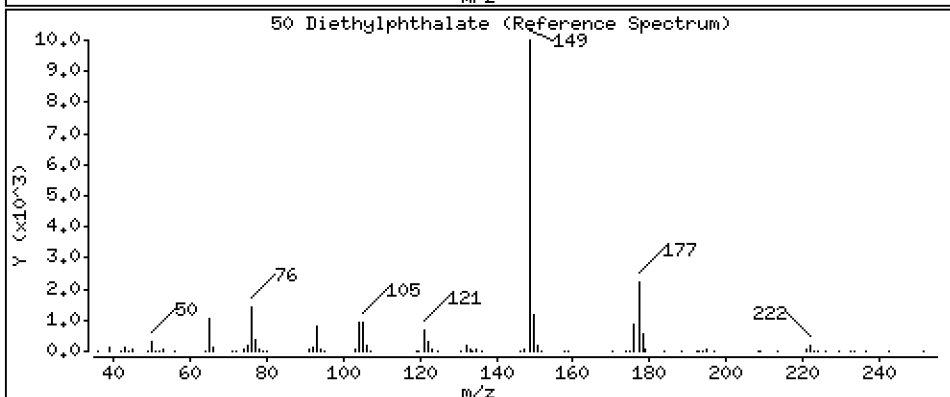
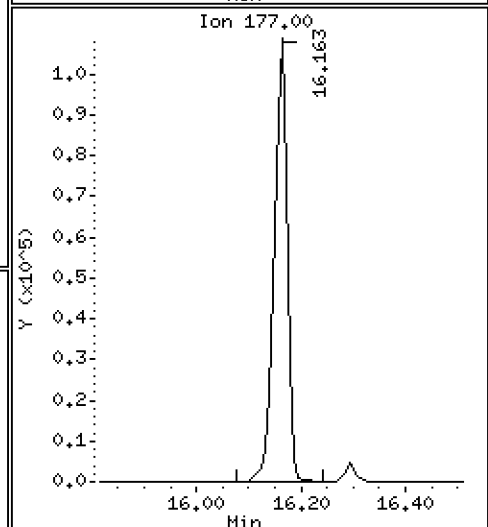
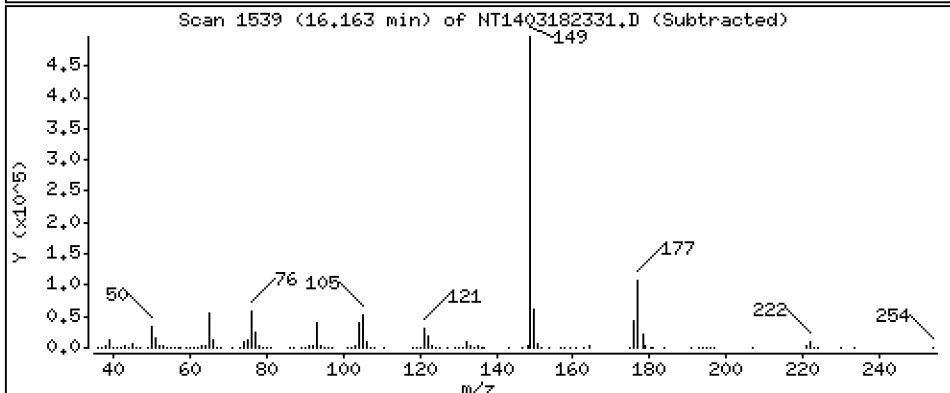
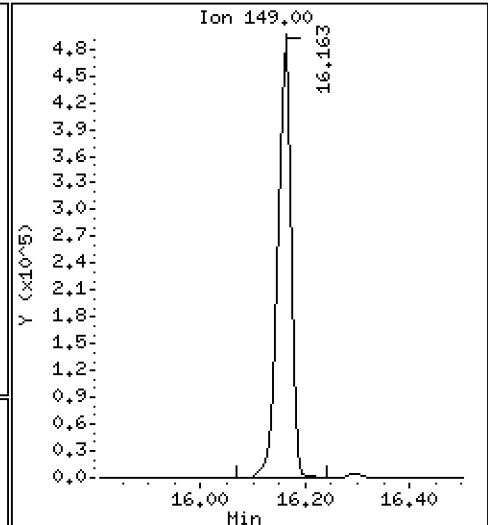
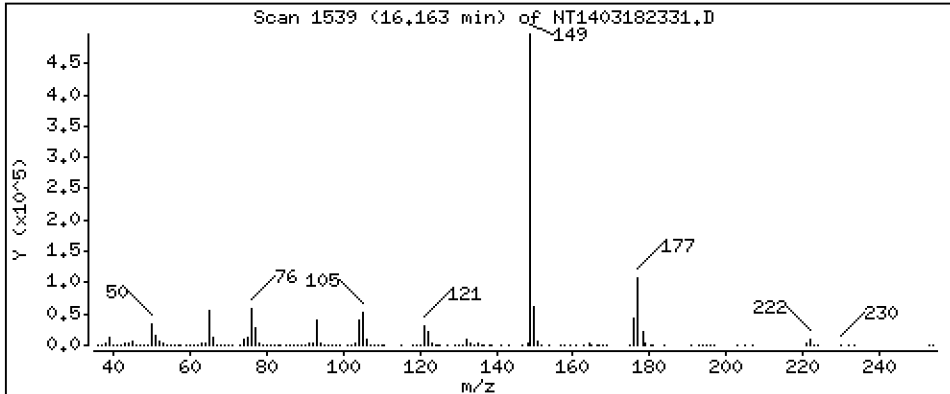
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,403 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

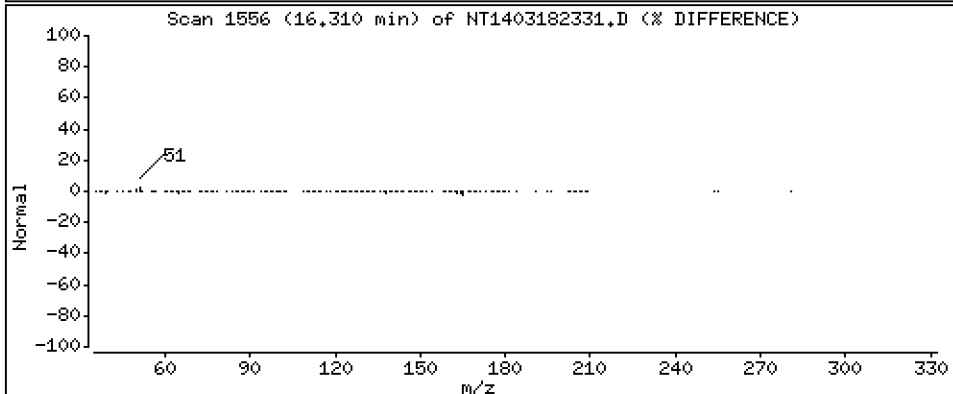
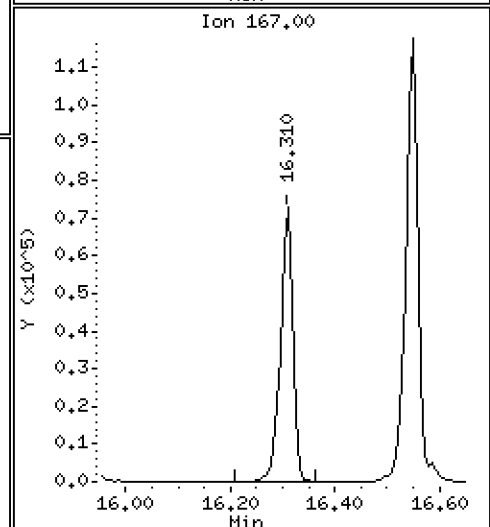
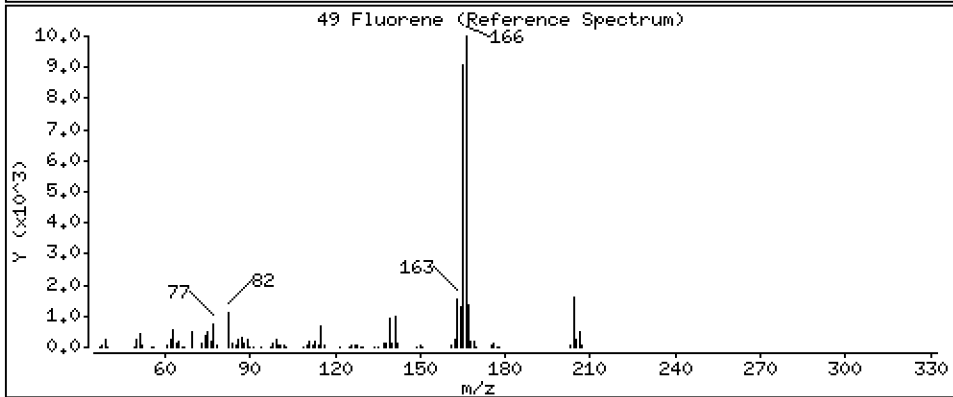
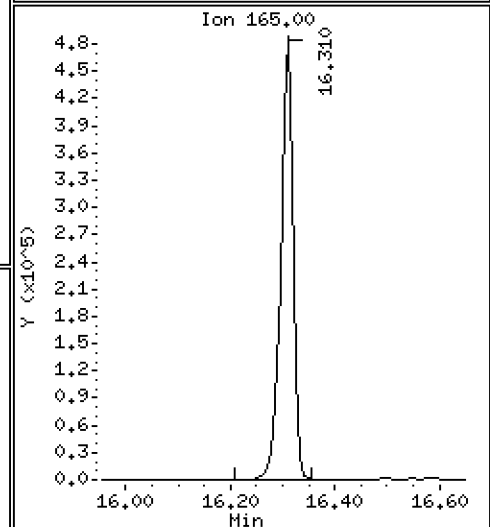
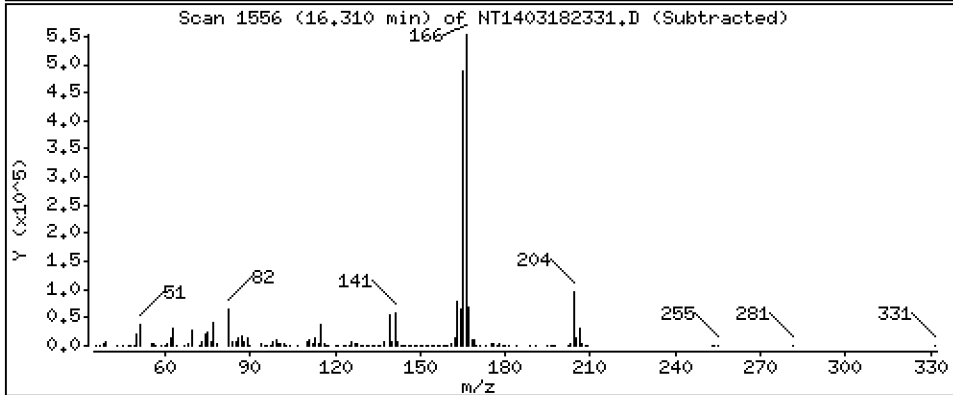
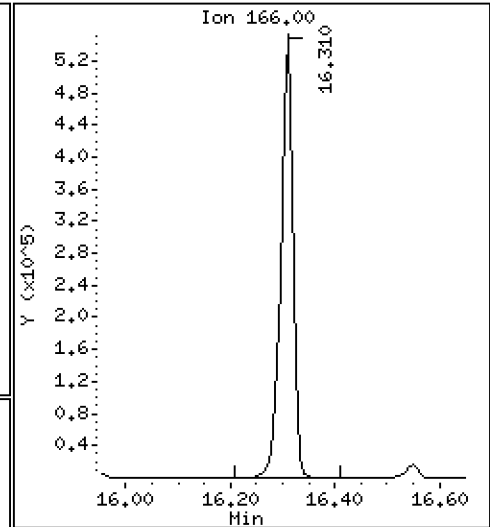
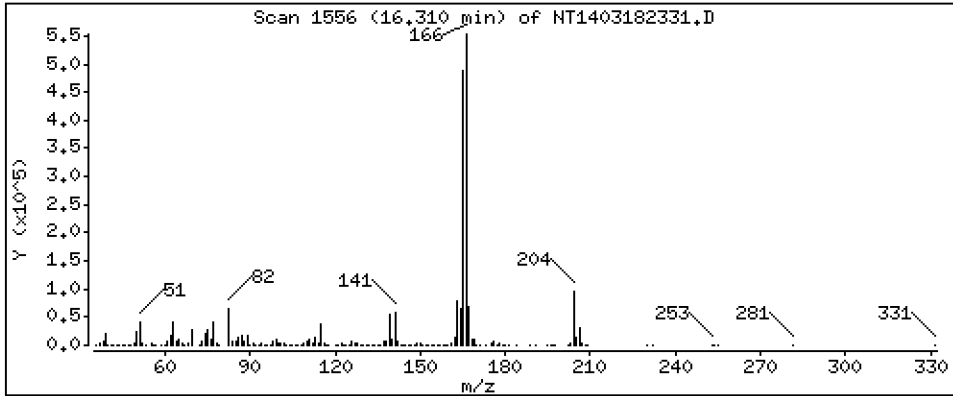
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,742 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

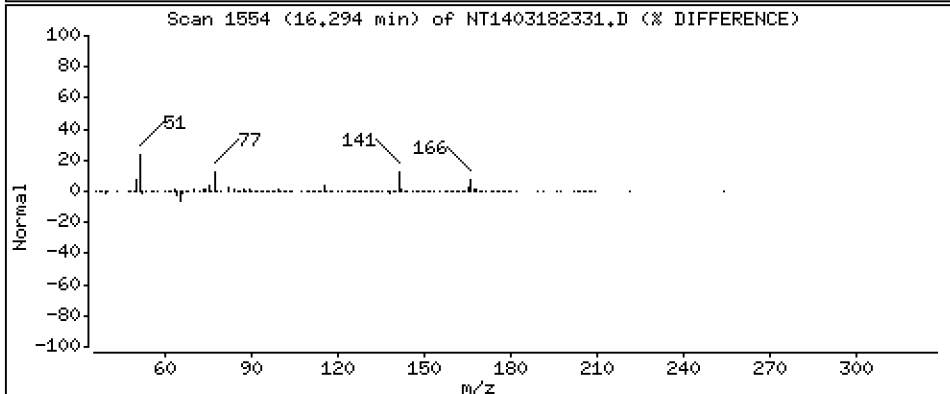
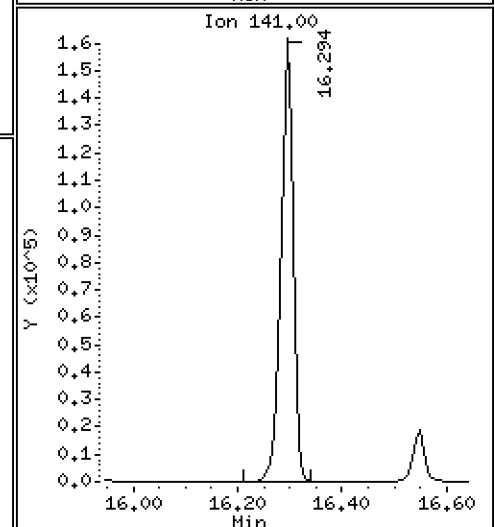
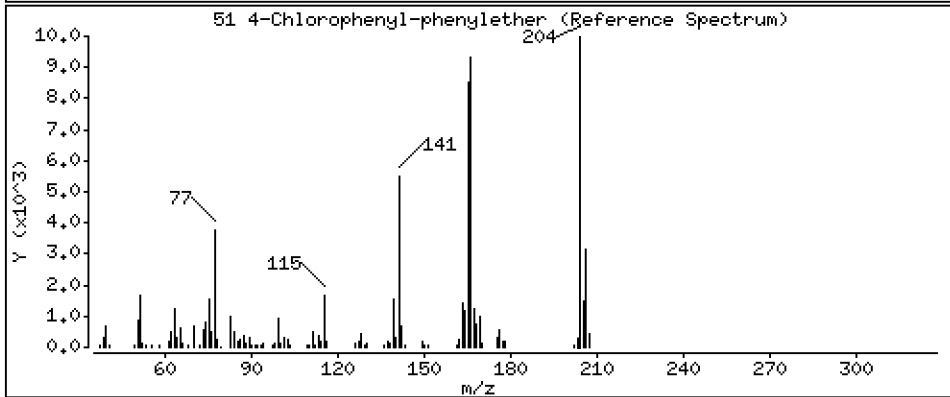
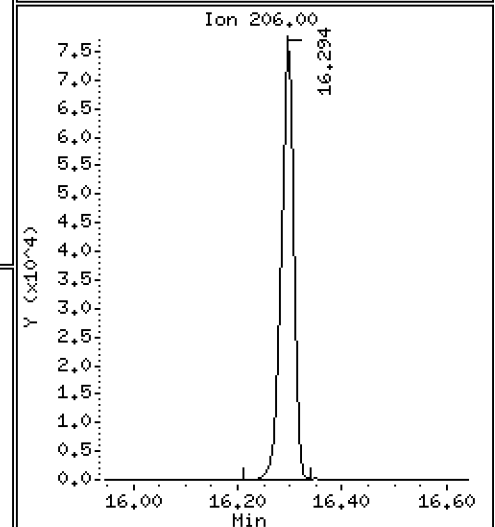
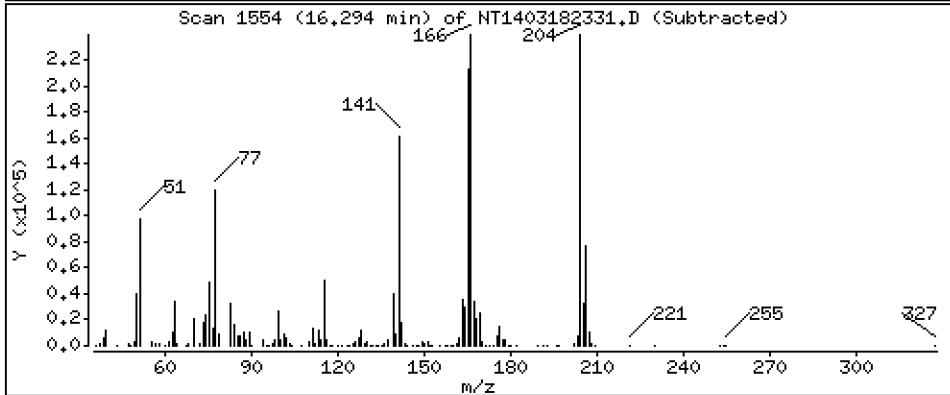
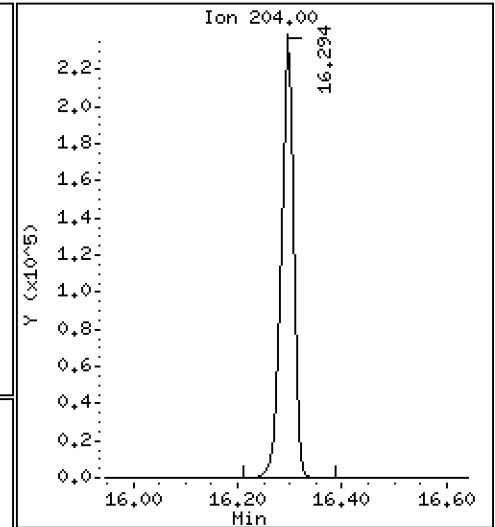
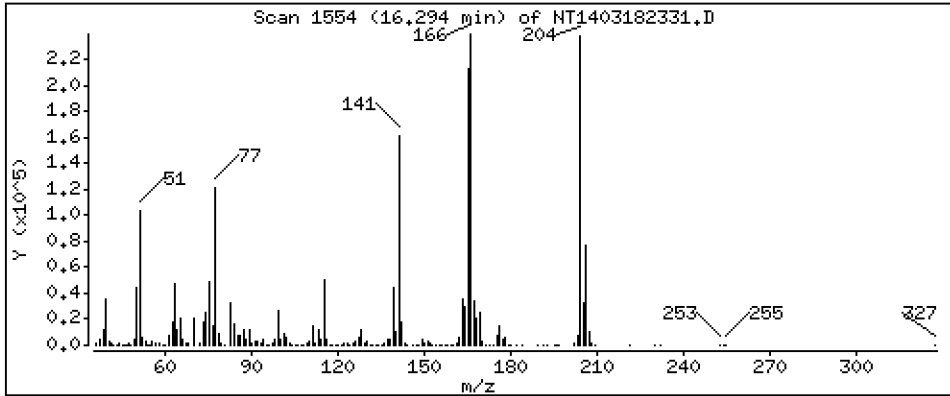
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,813 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

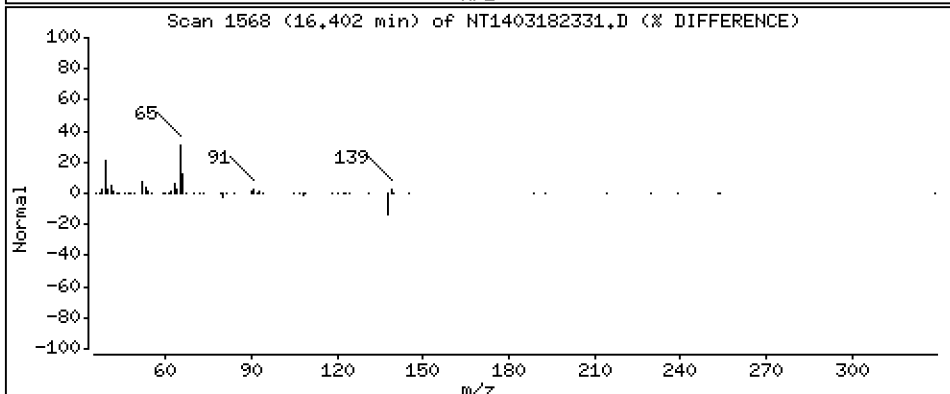
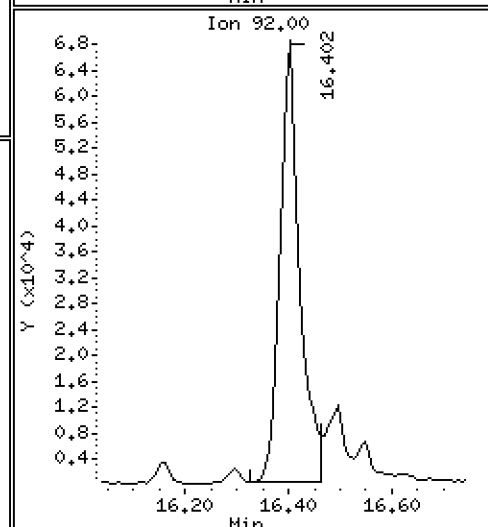
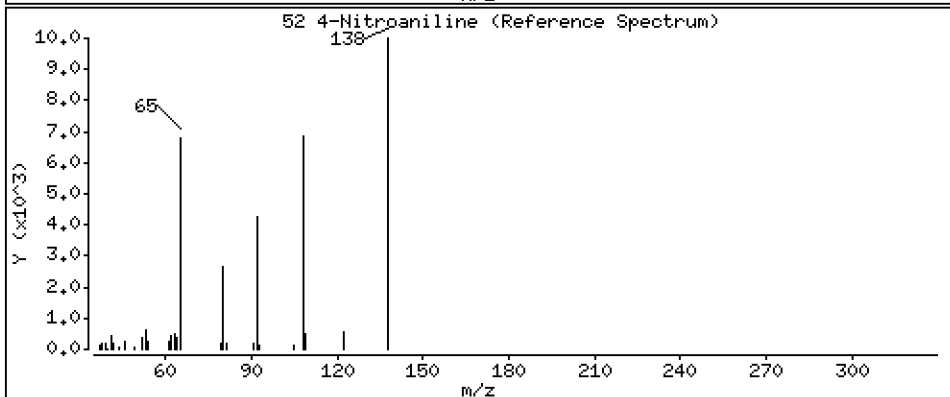
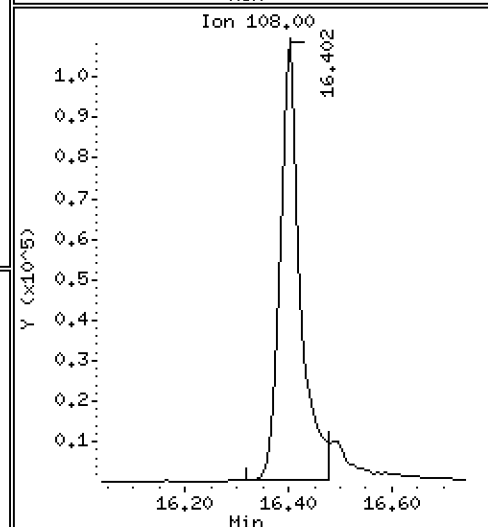
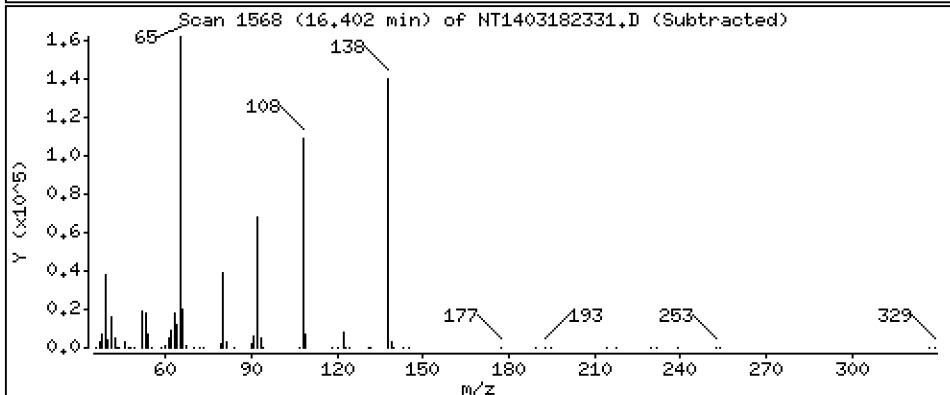
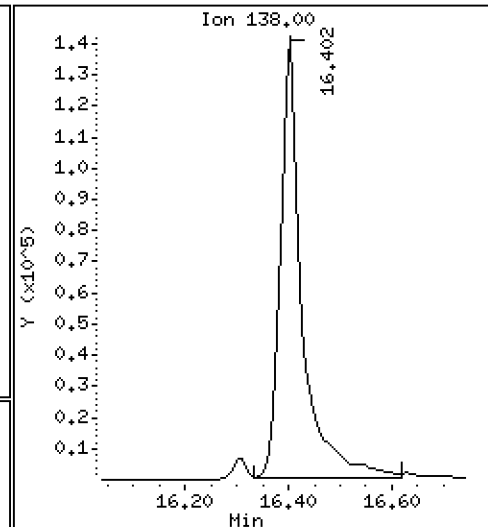
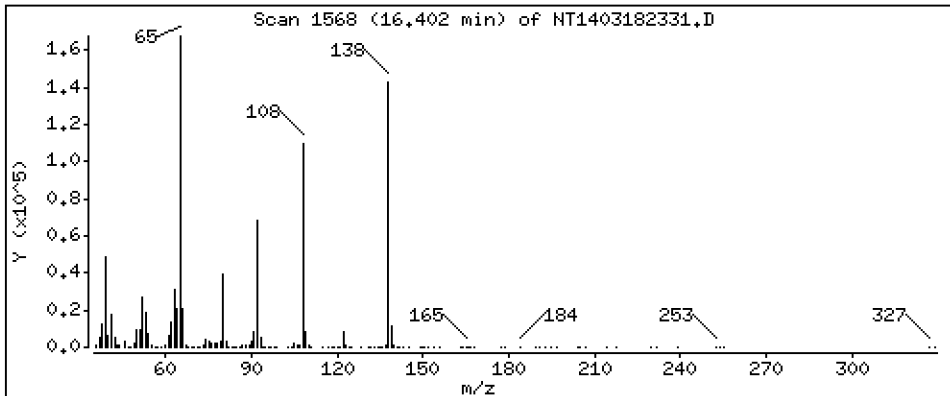
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 8,855 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

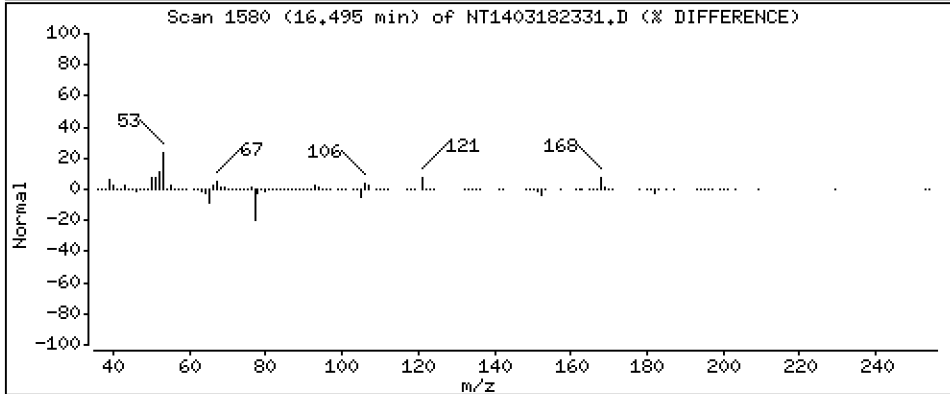
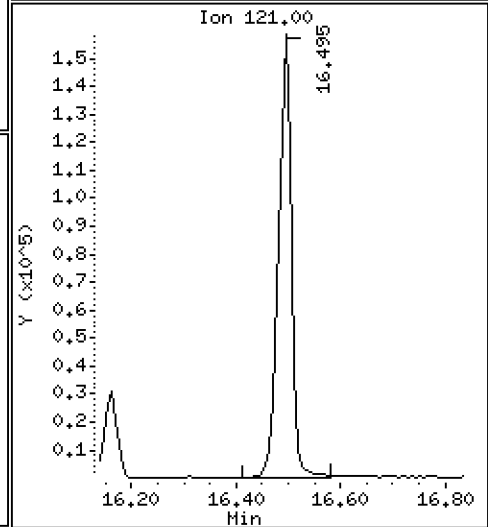
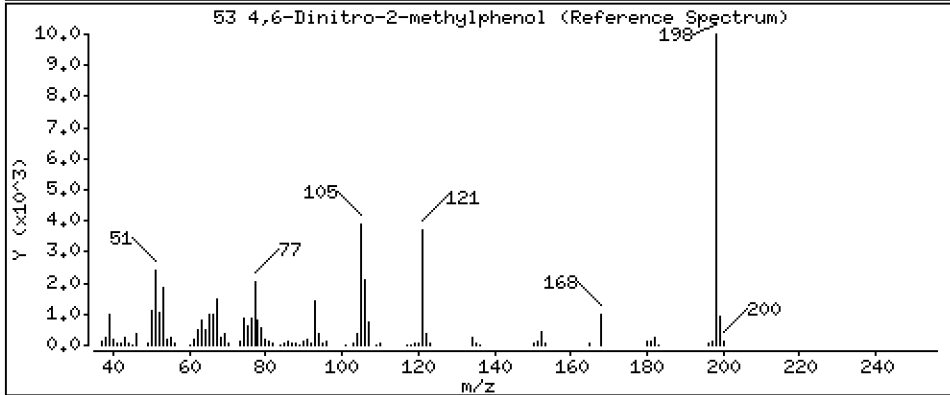
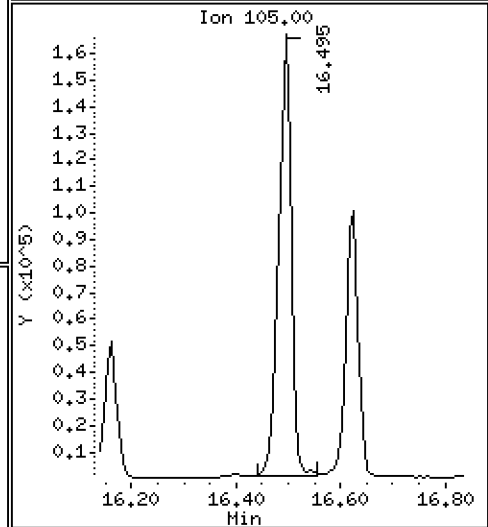
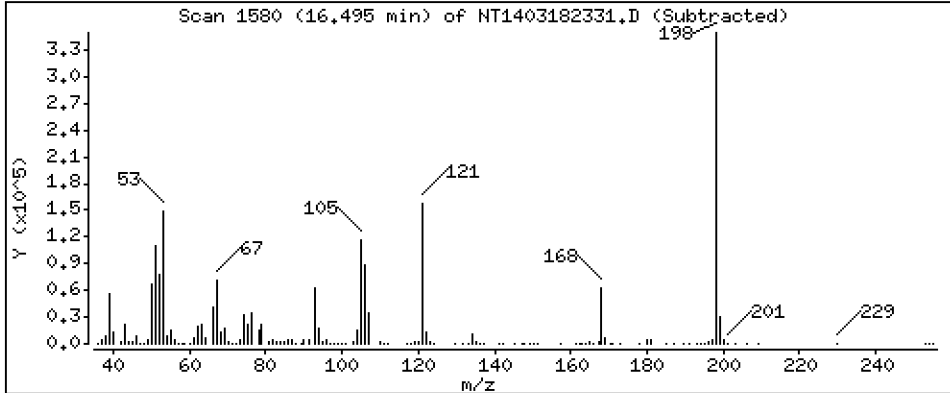
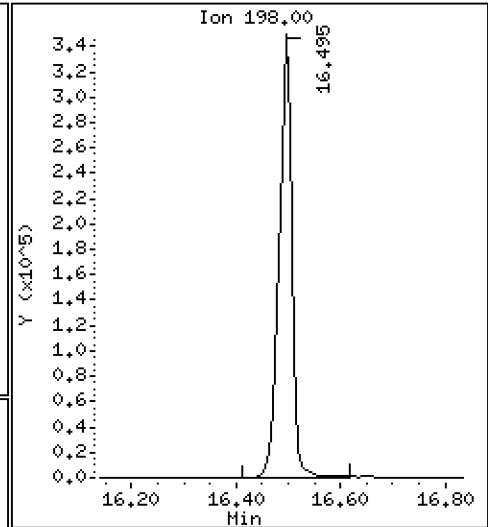
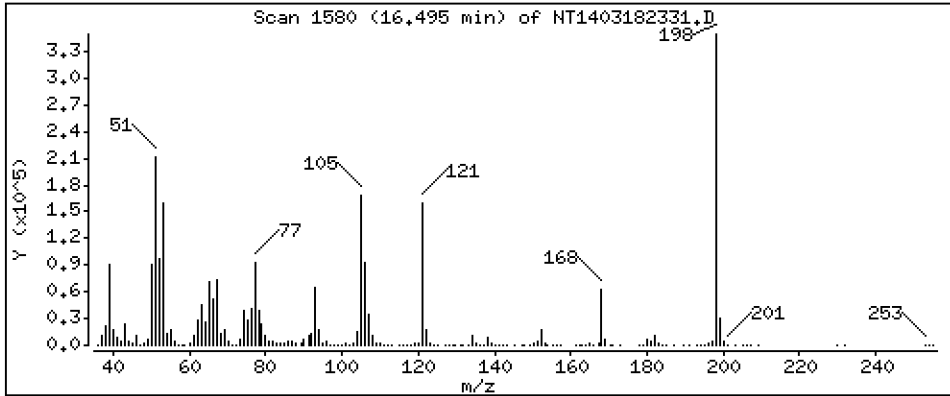
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 19,76 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

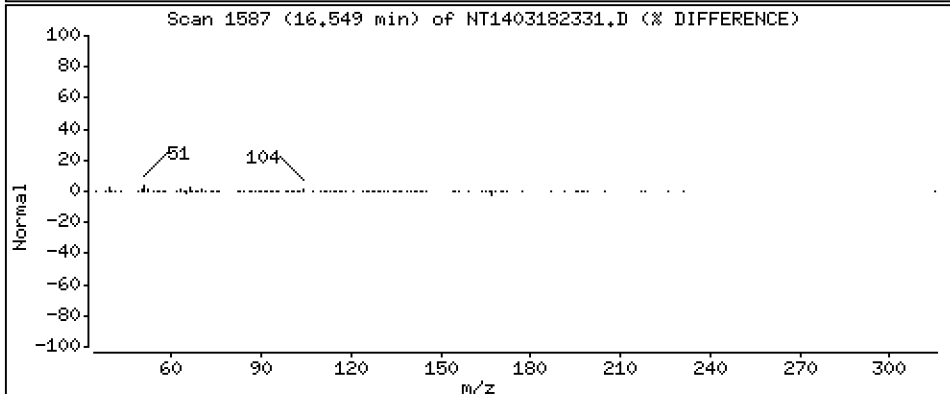
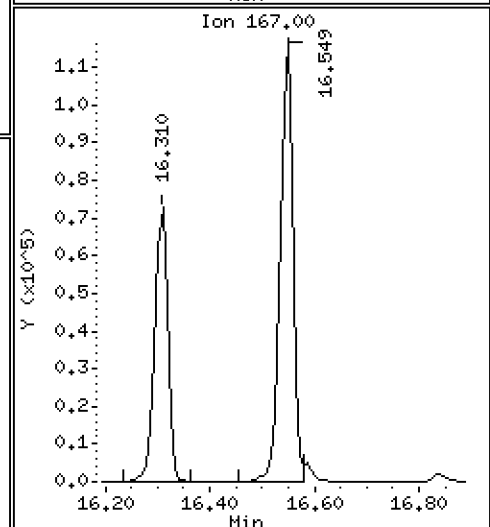
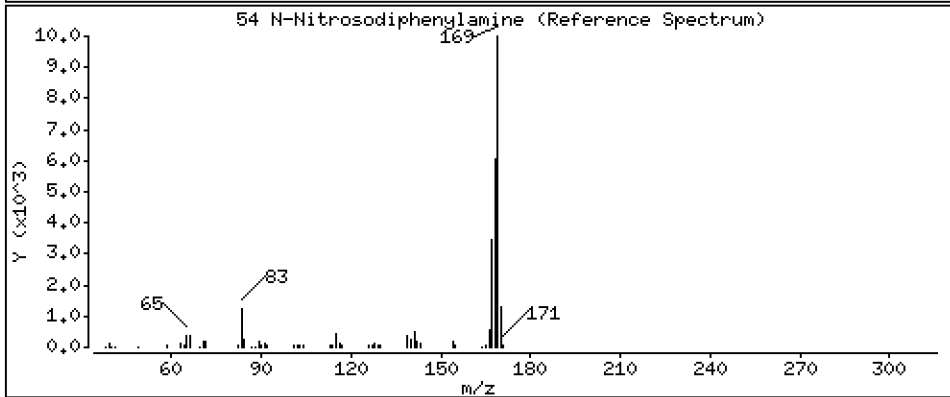
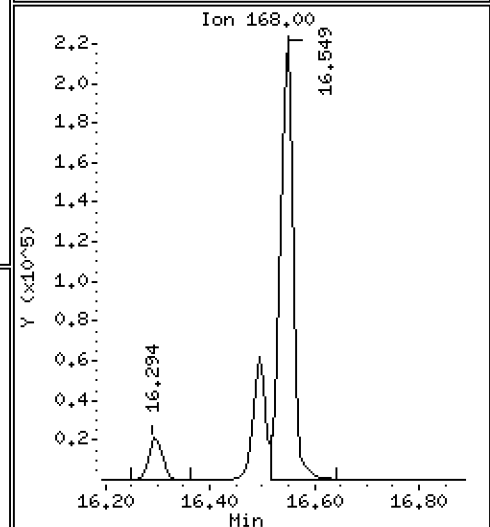
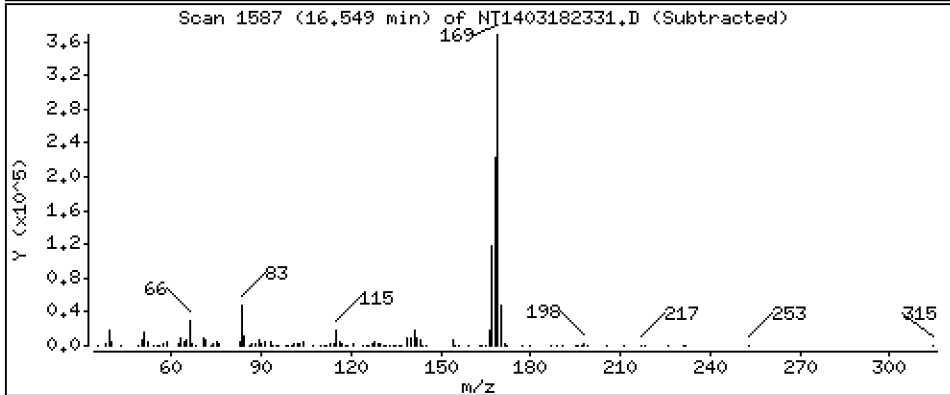
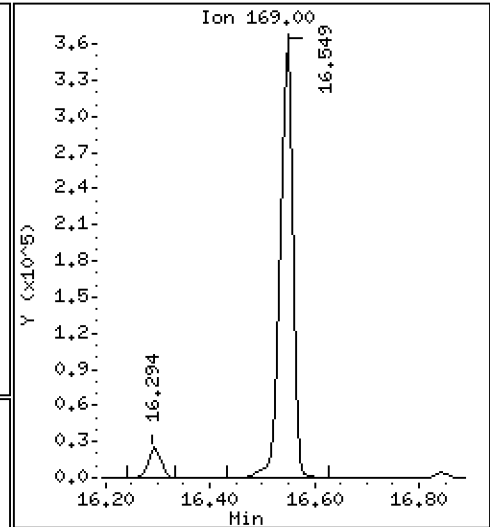
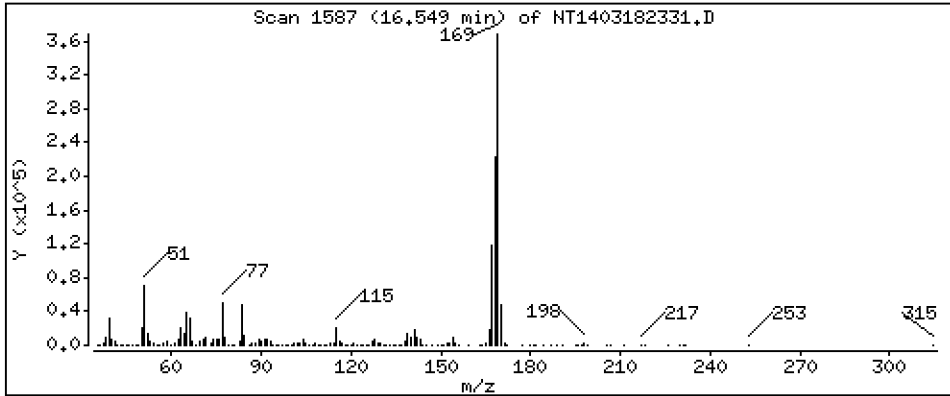
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,315 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

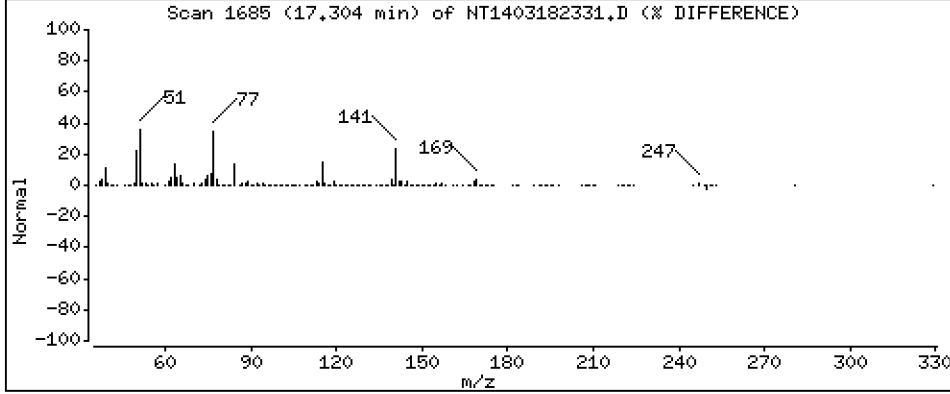
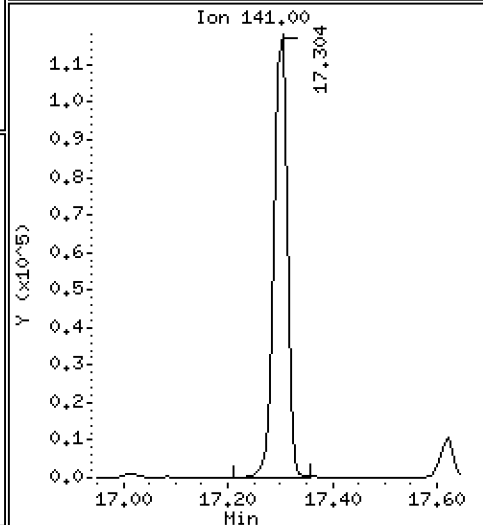
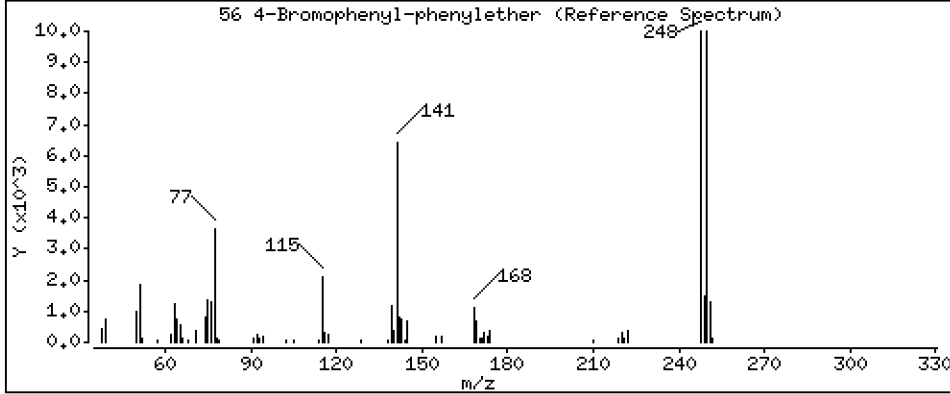
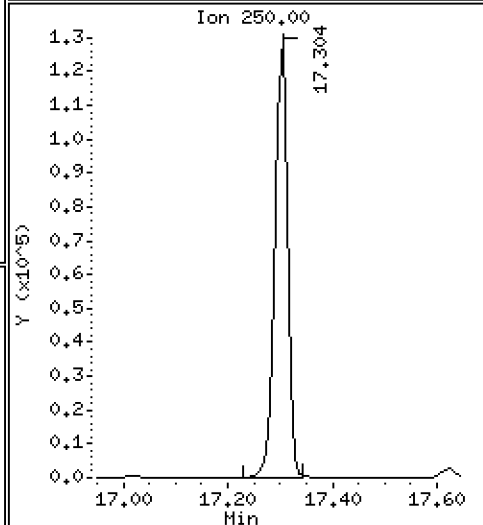
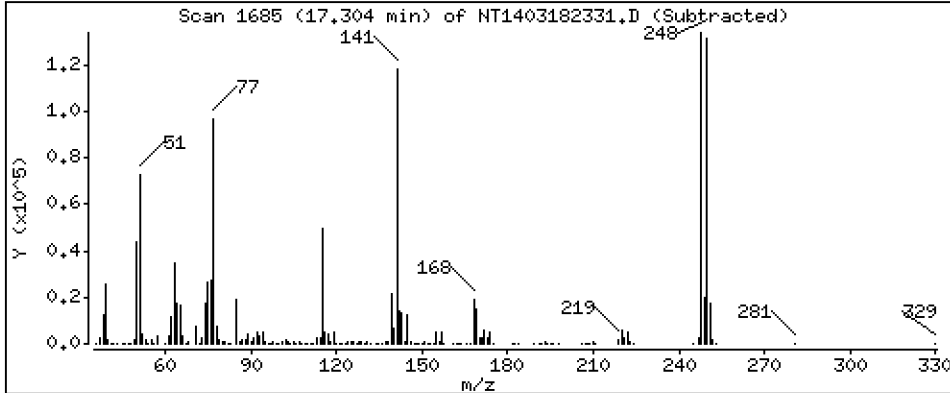
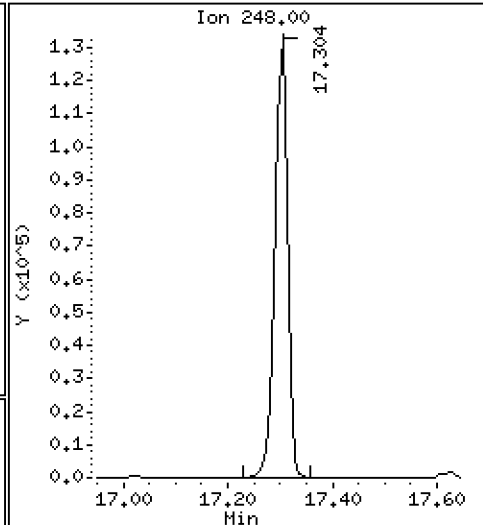
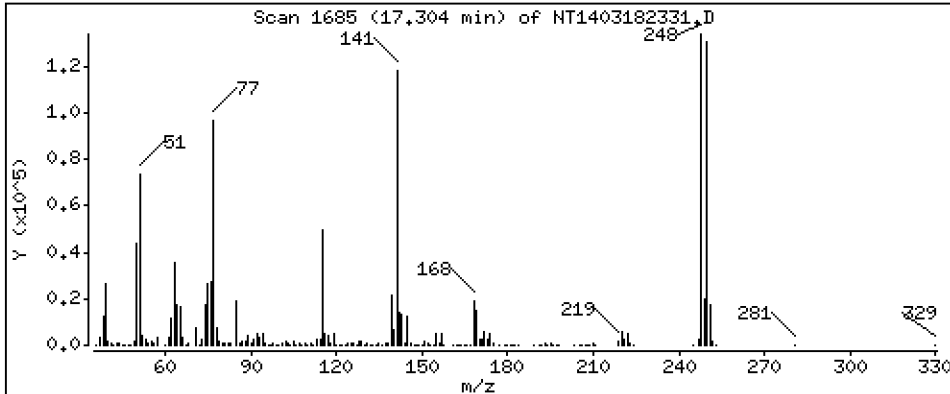
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,594 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

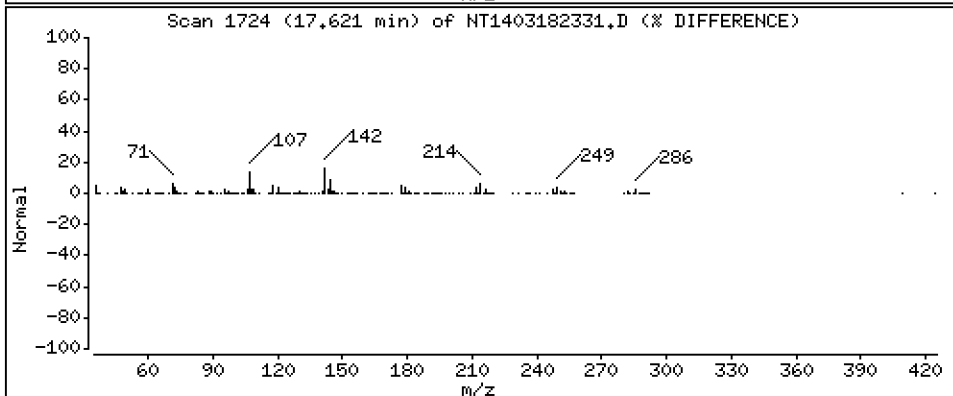
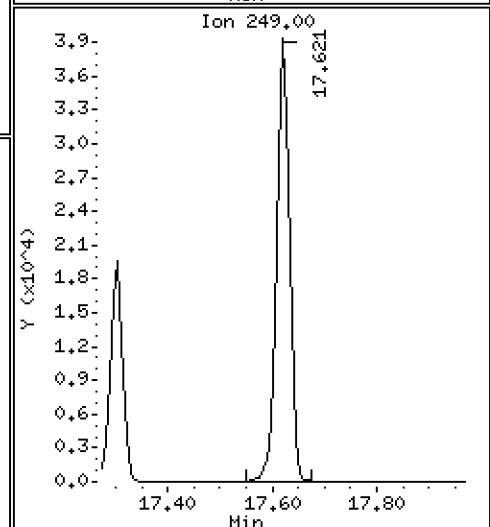
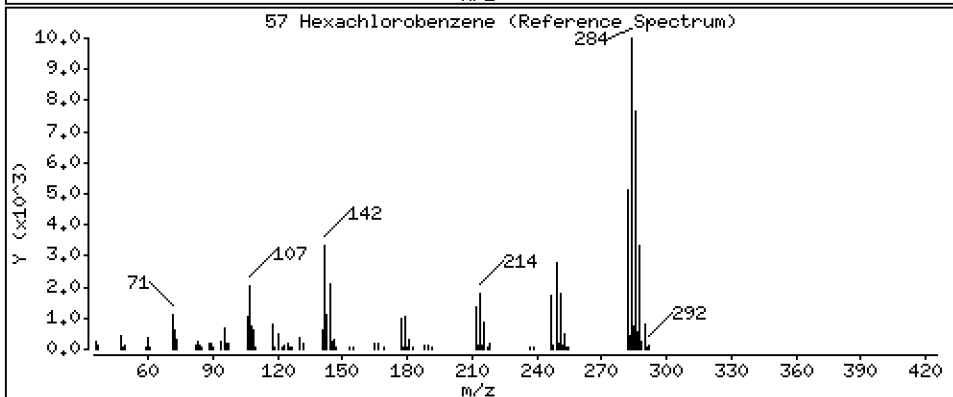
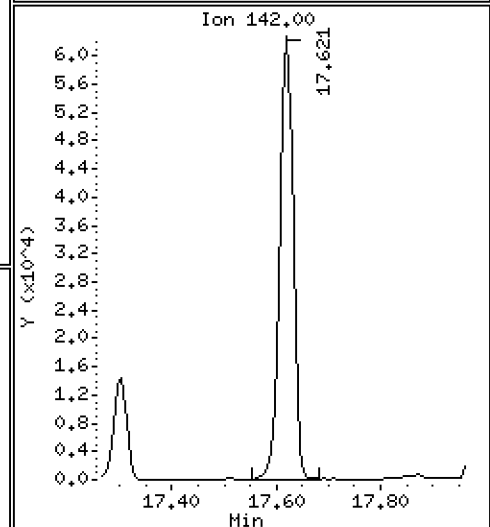
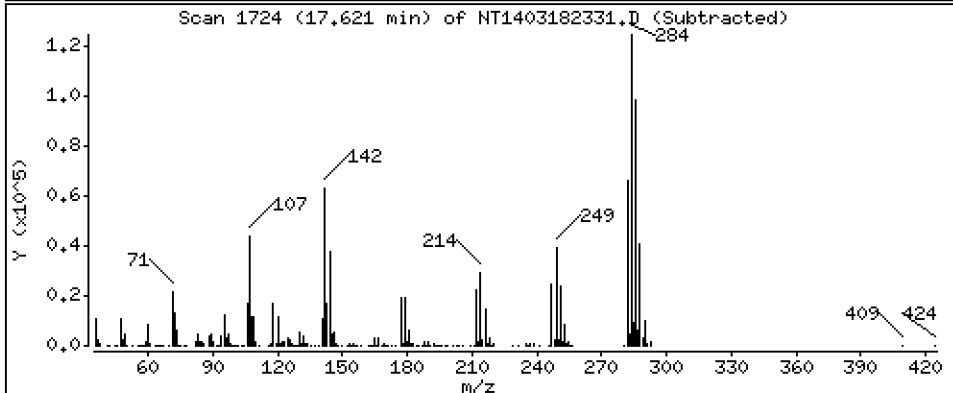
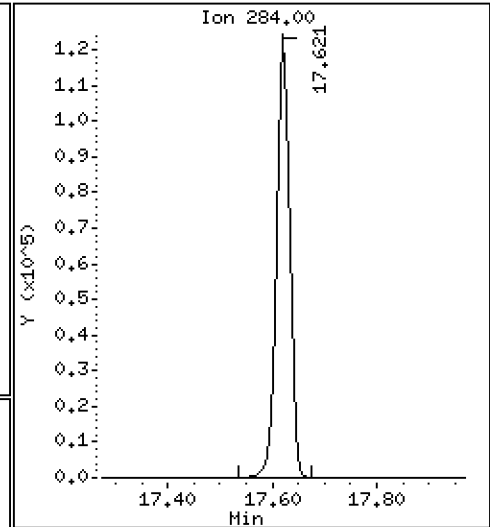
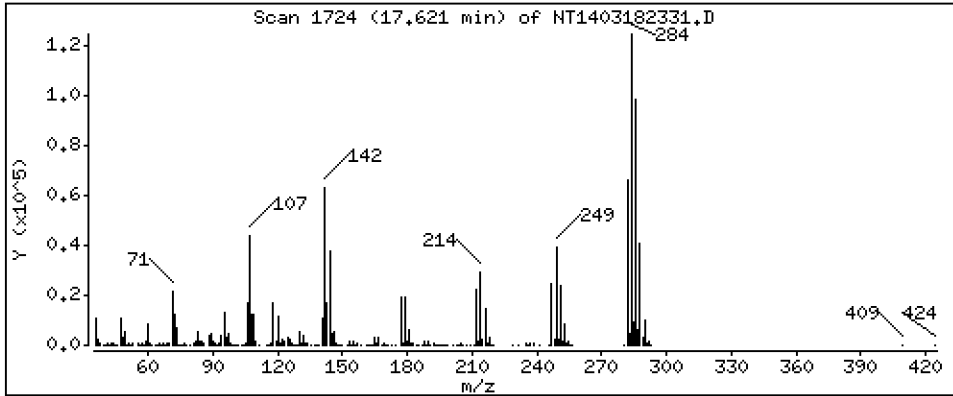
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,302 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

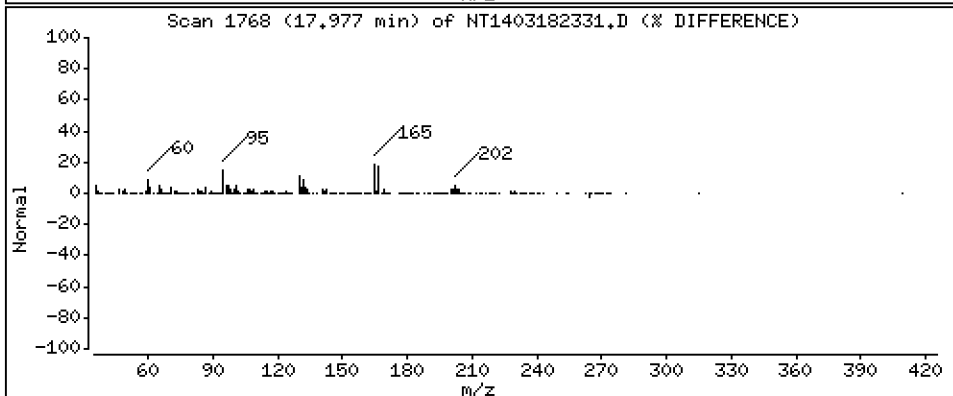
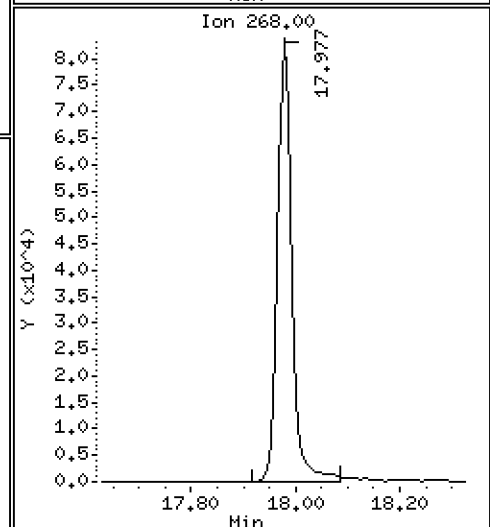
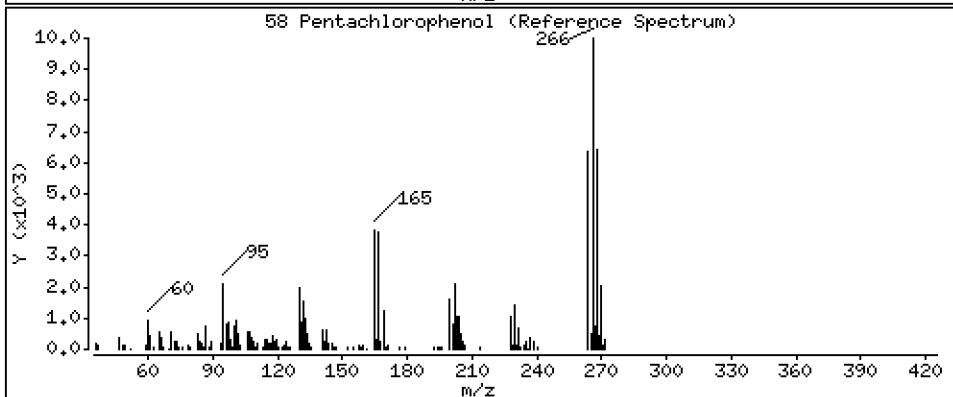
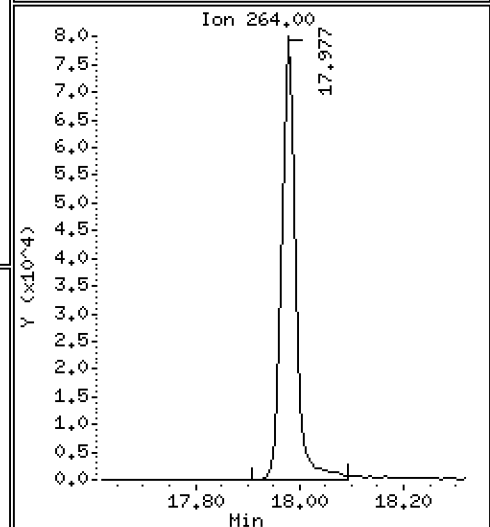
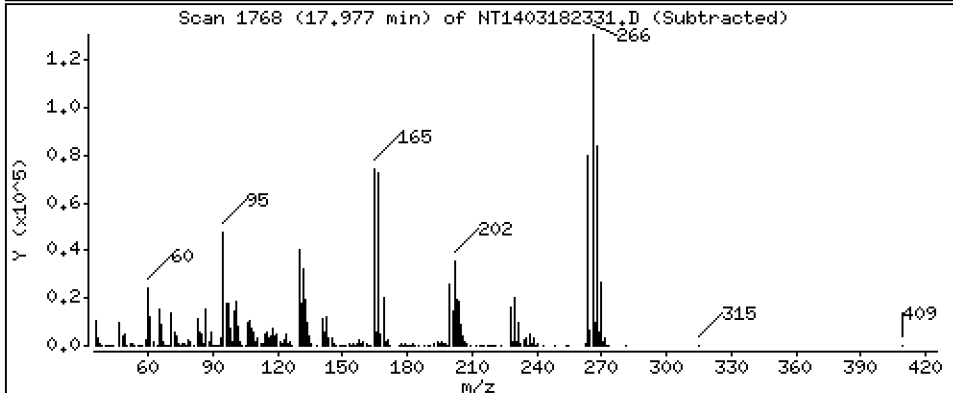
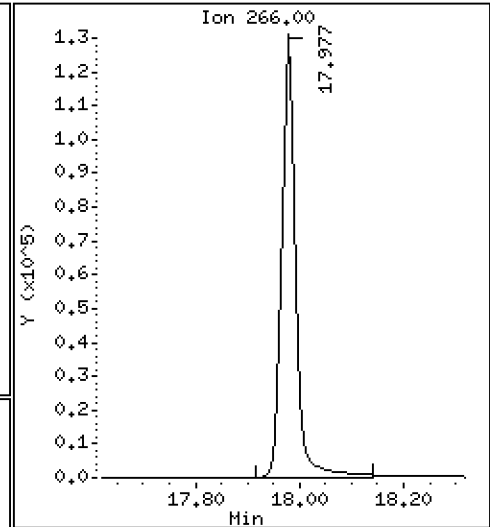
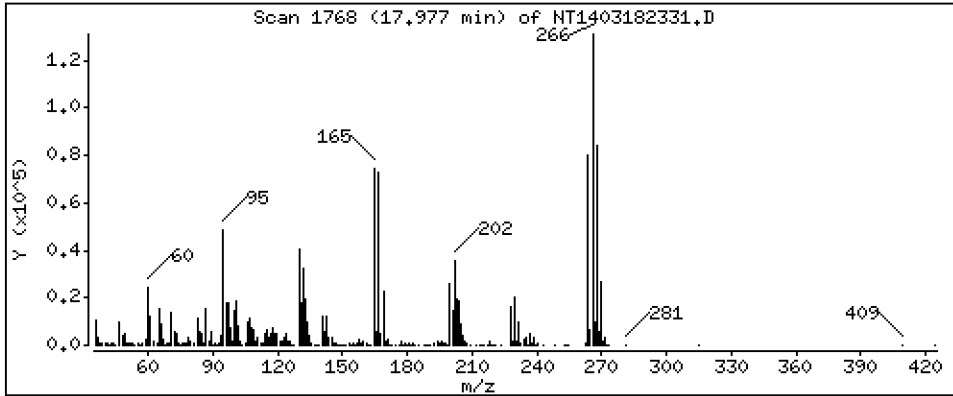
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 8,499 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

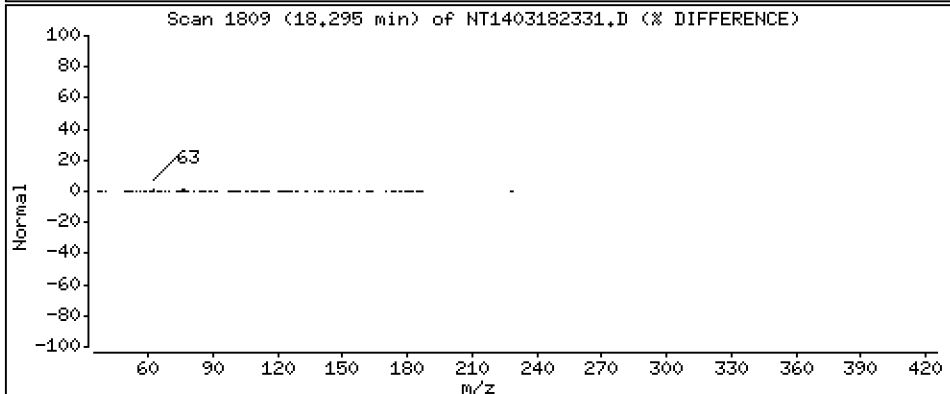
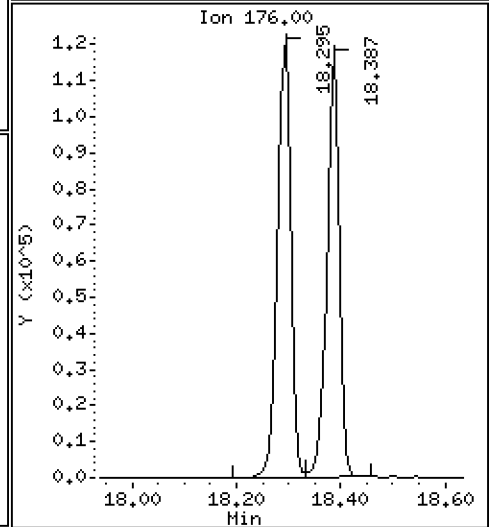
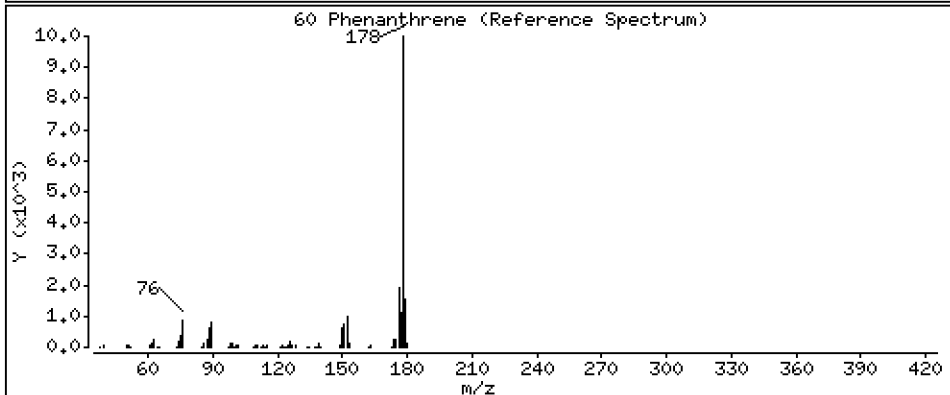
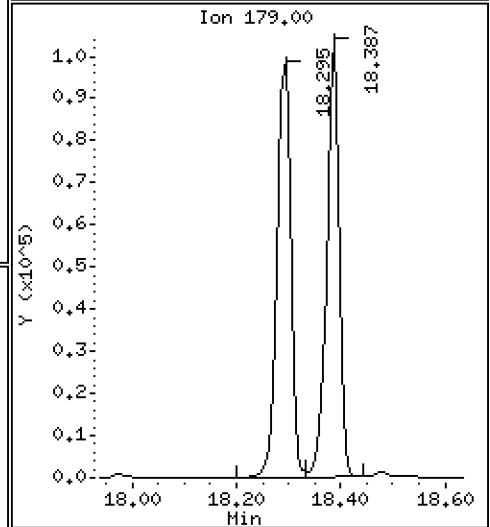
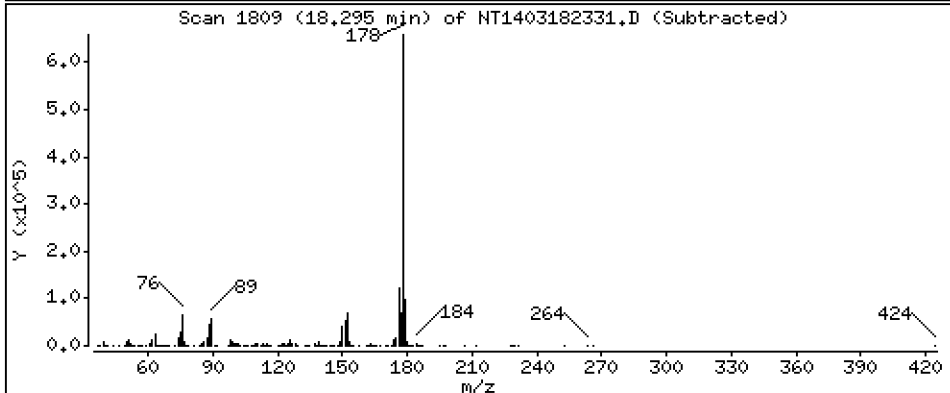
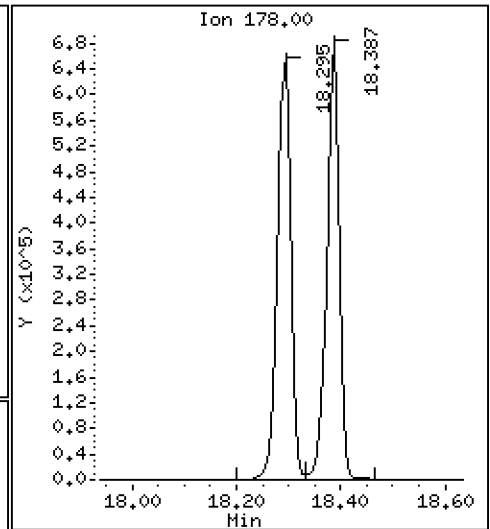
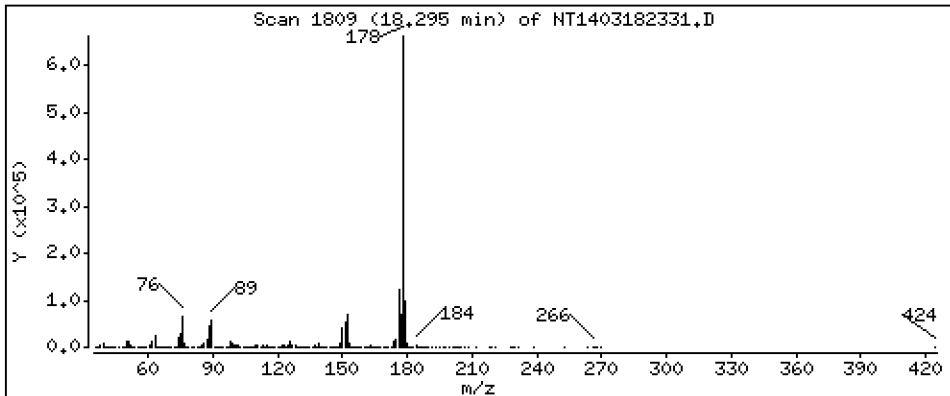
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,767 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

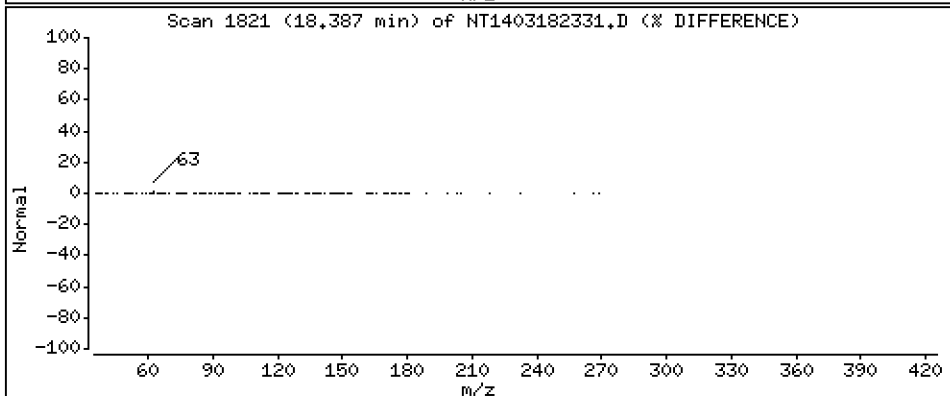
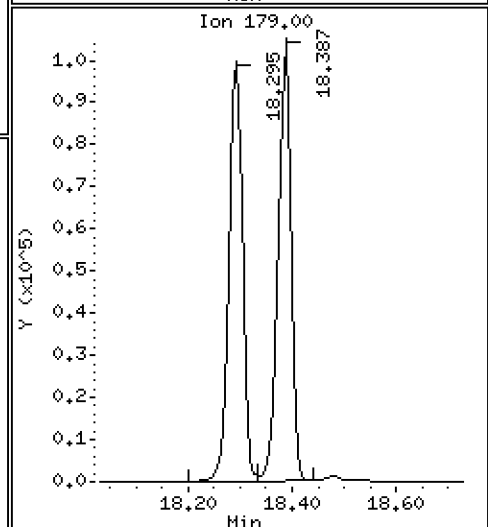
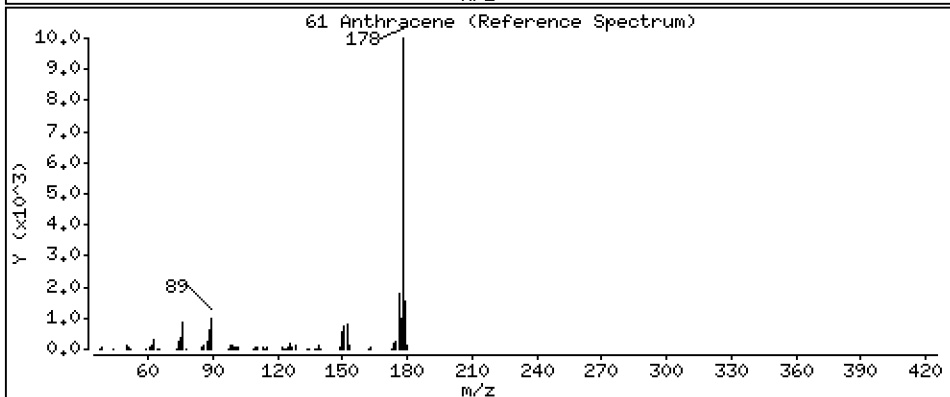
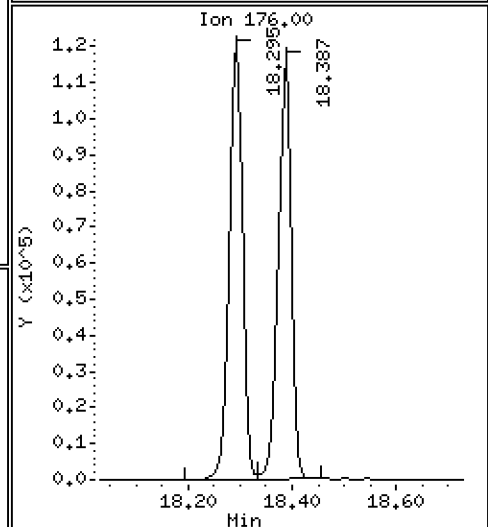
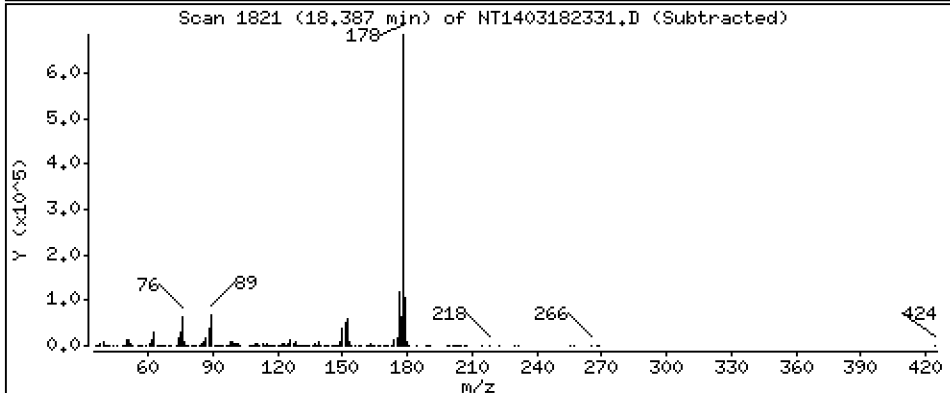
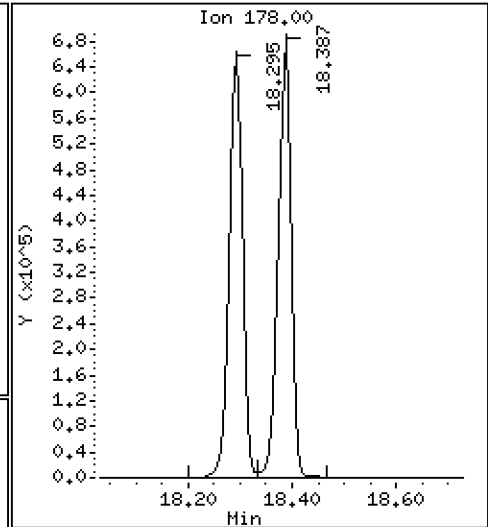
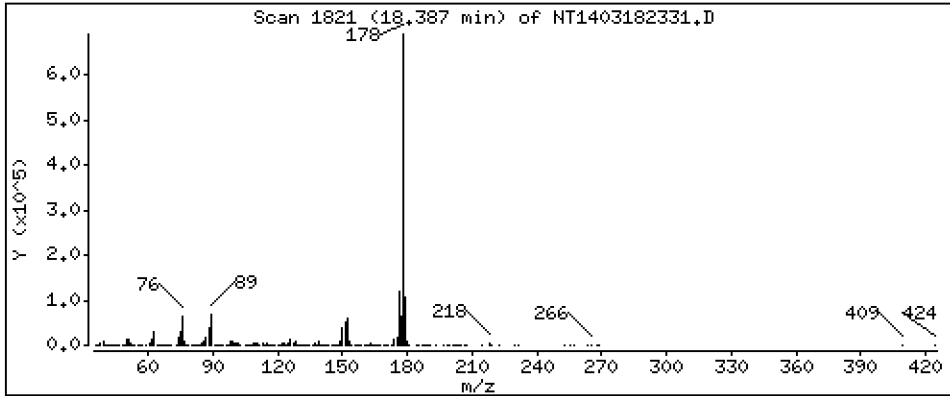
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,987 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

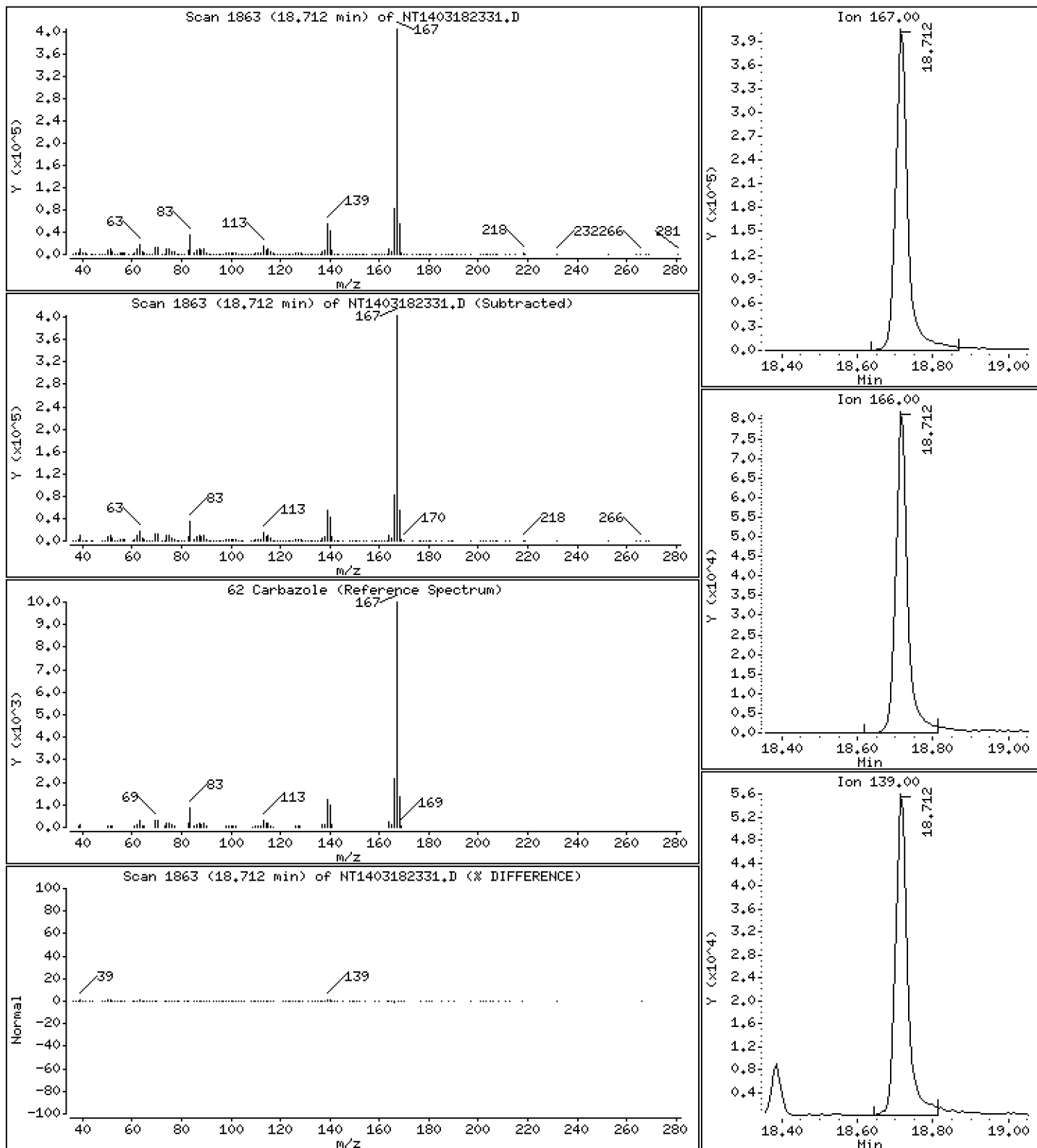
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,476 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

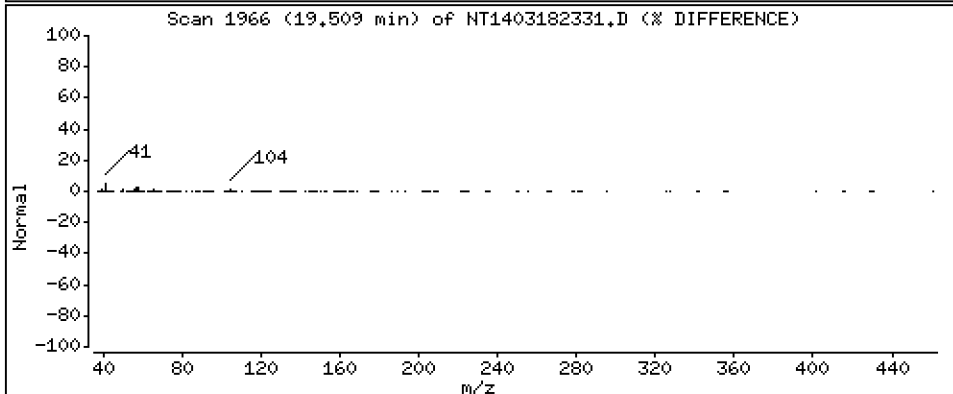
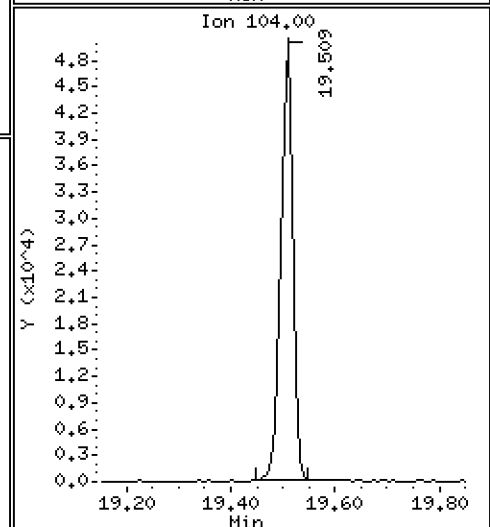
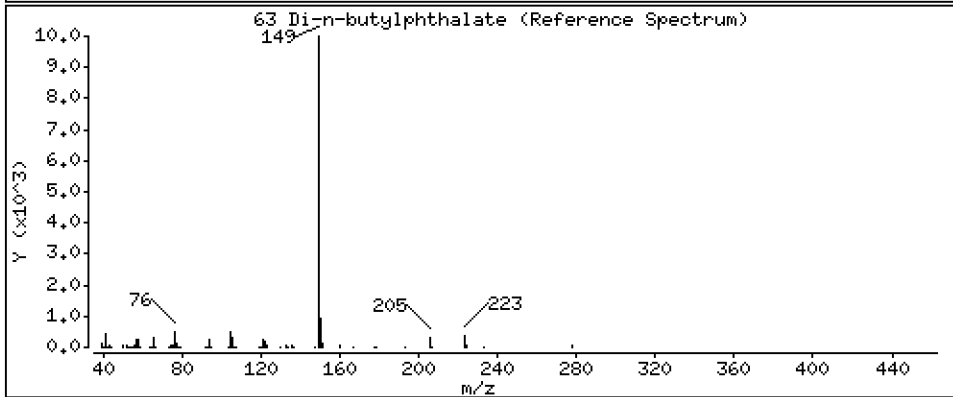
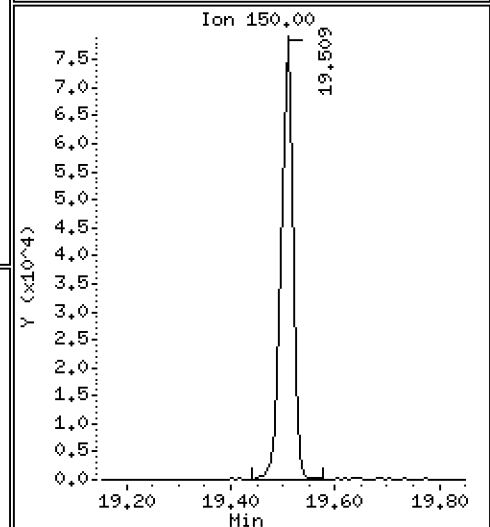
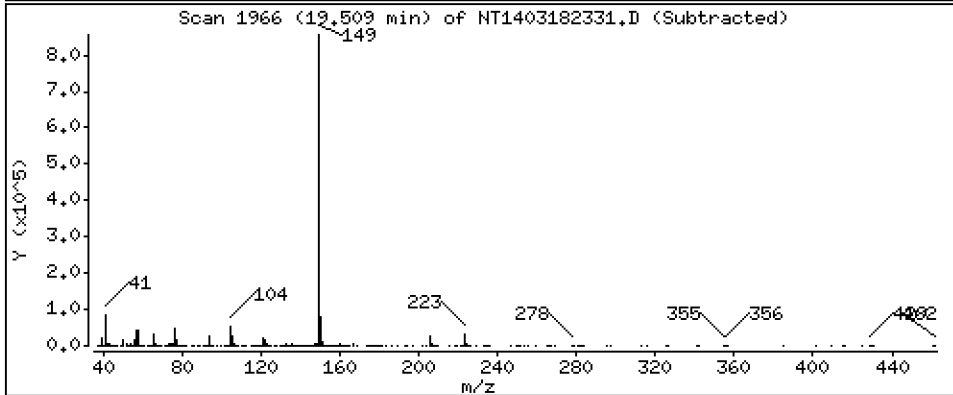
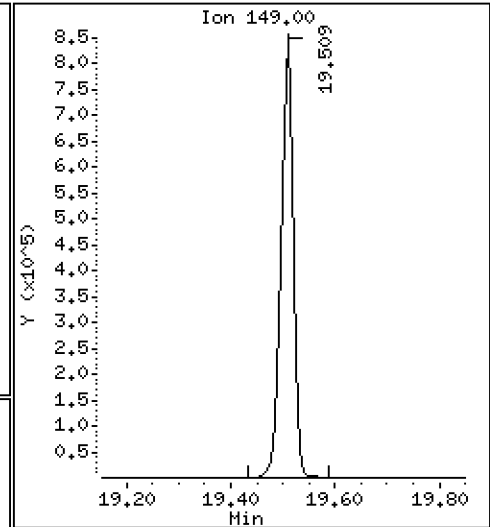
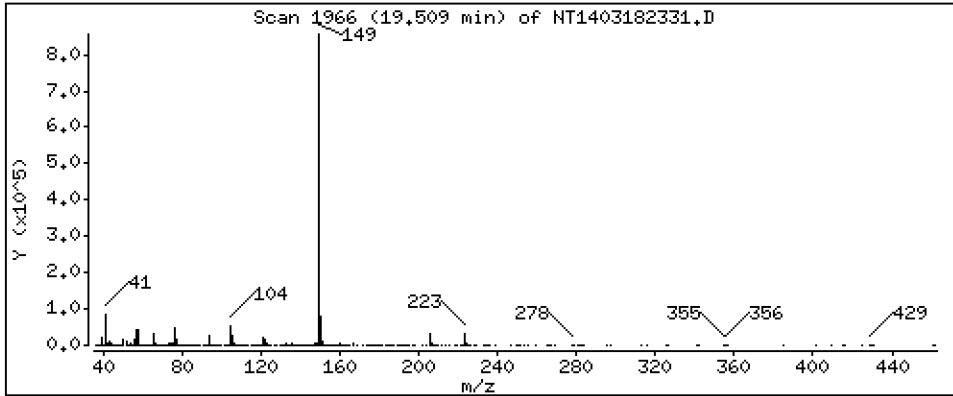
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,219 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

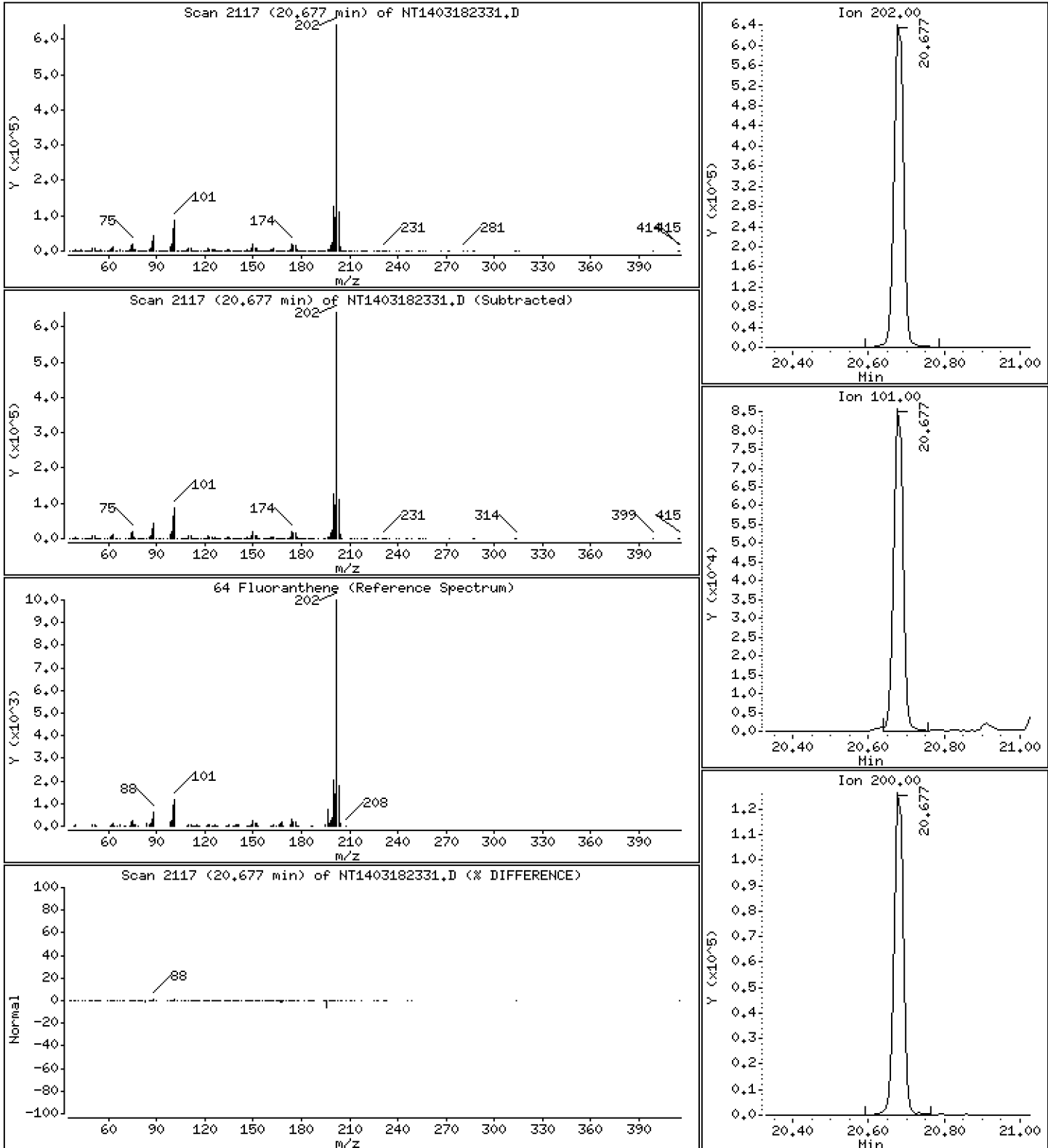
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 5,984 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

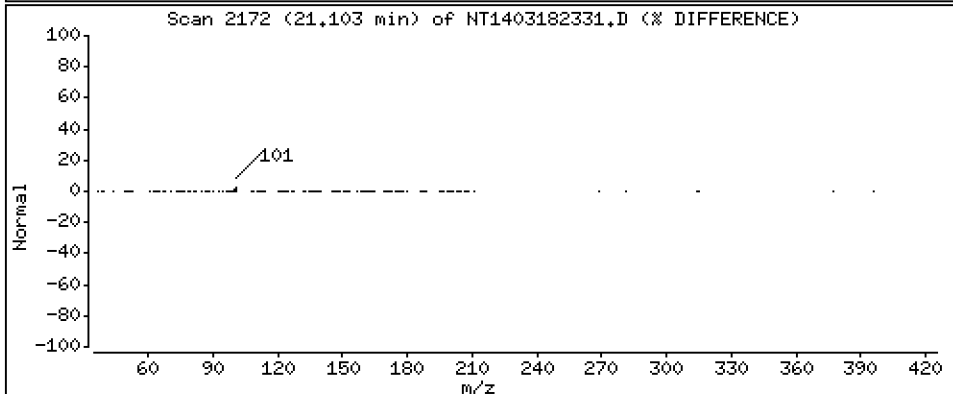
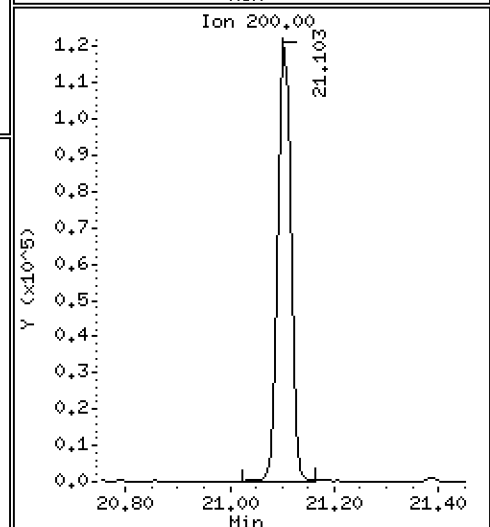
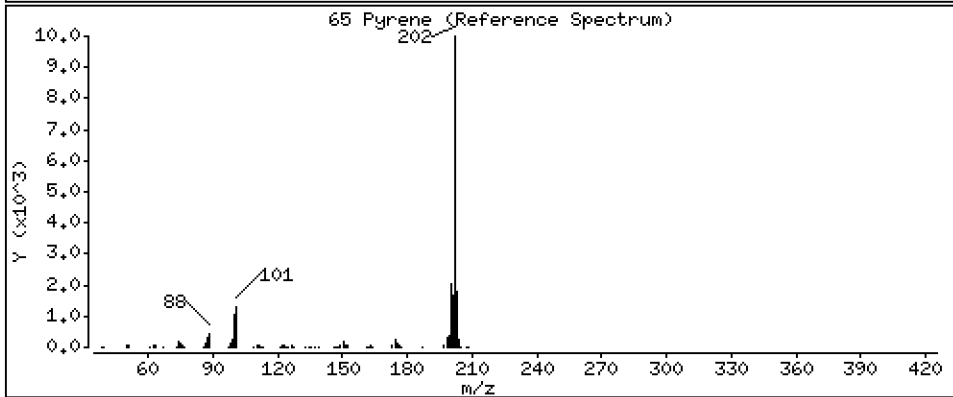
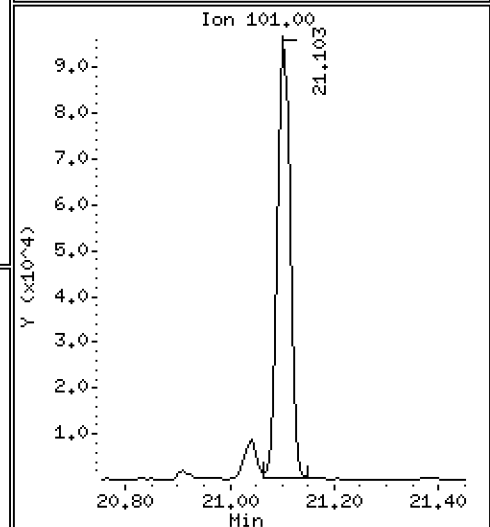
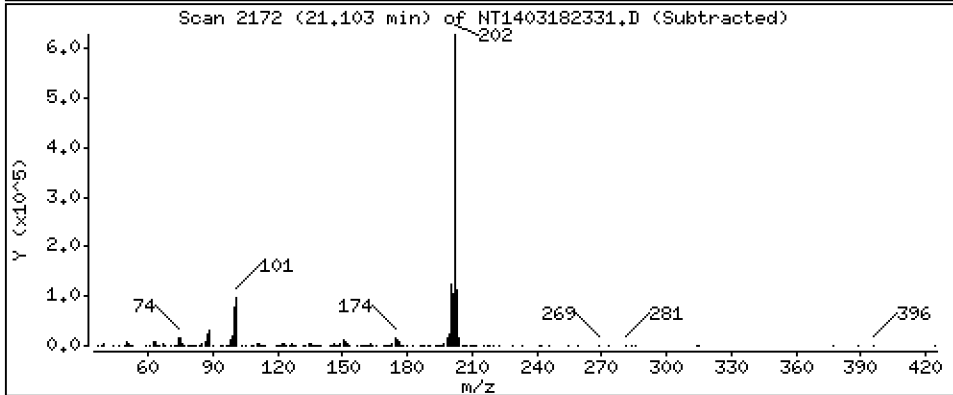
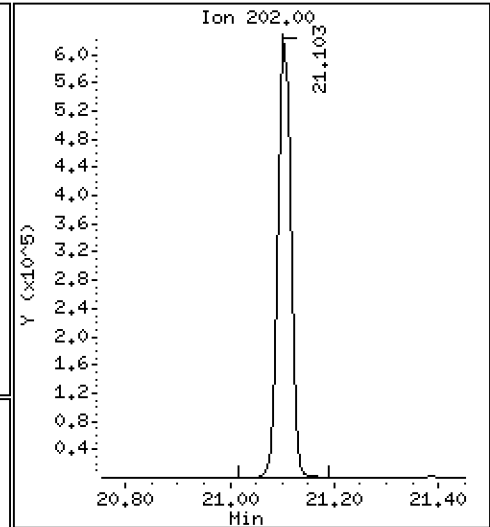
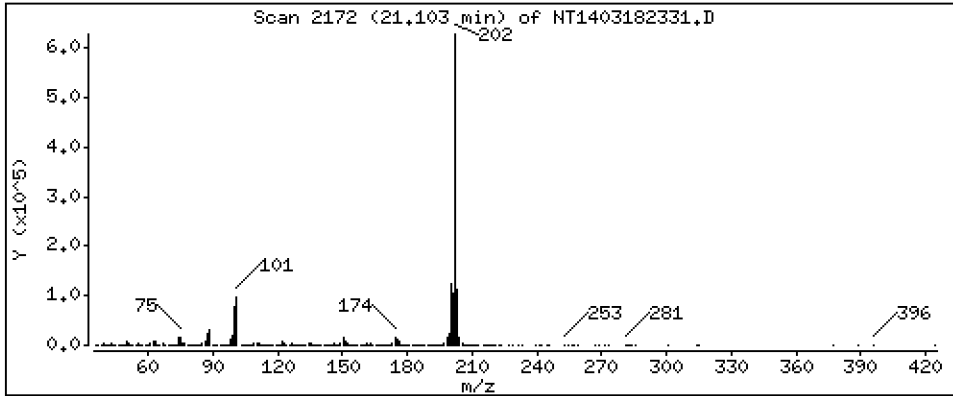
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 5,723 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

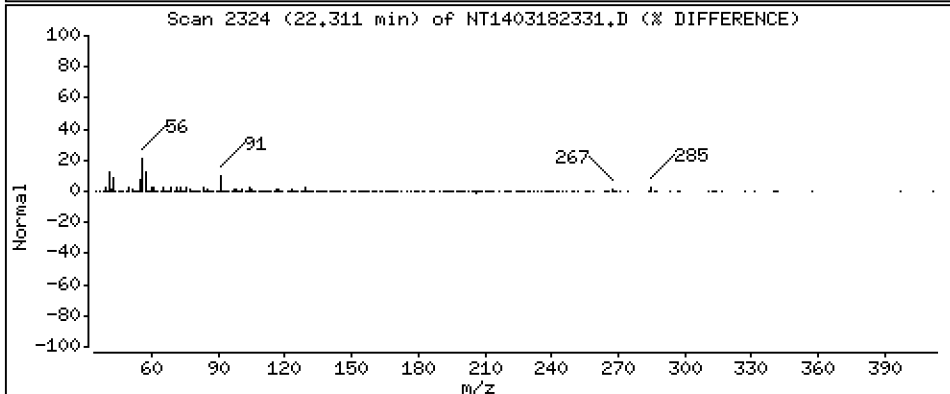
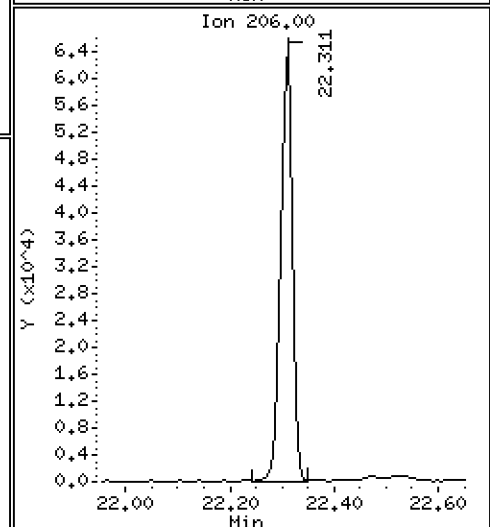
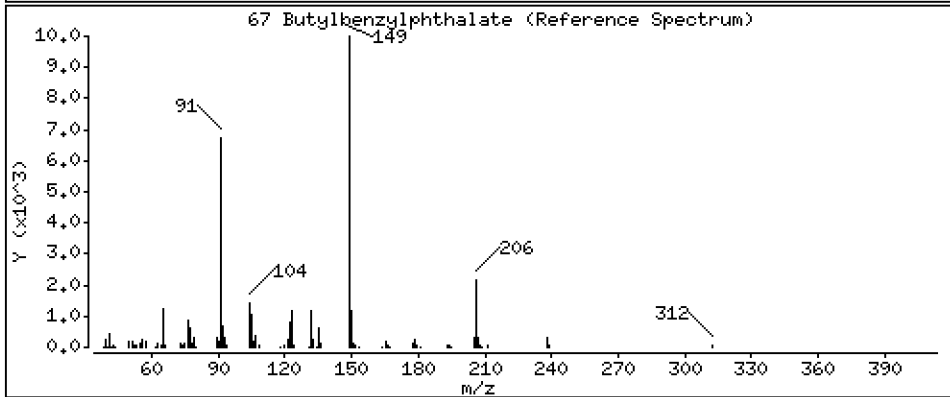
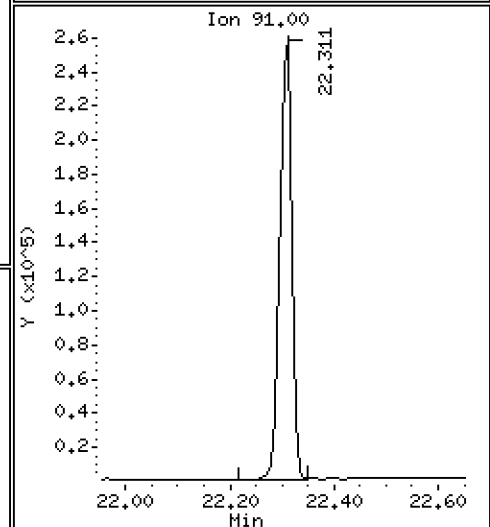
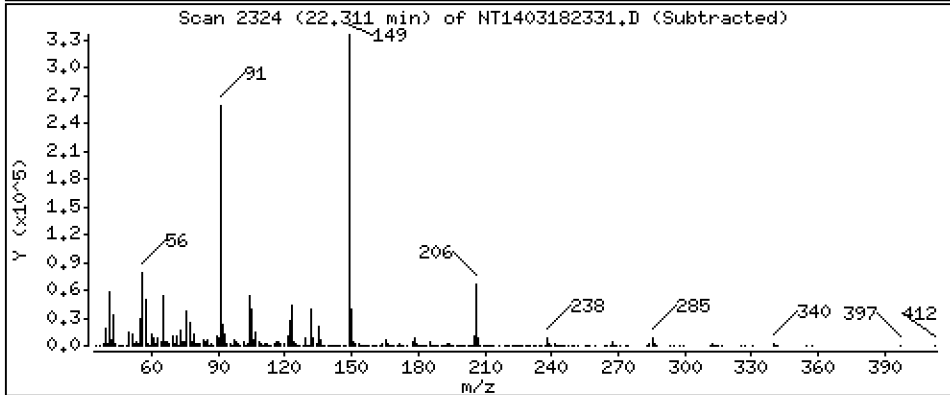
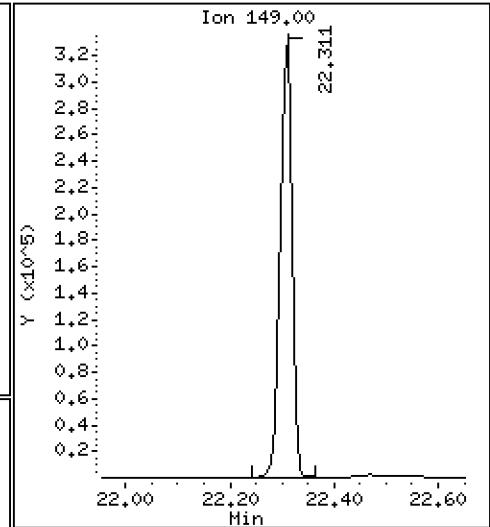
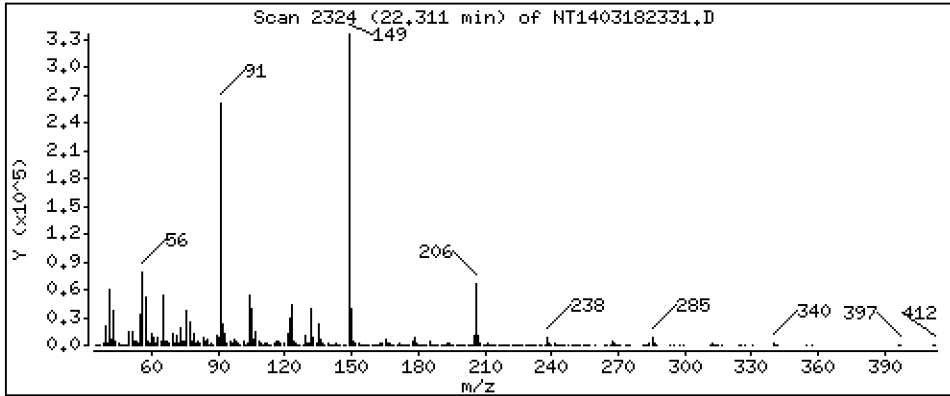
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 6.417 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

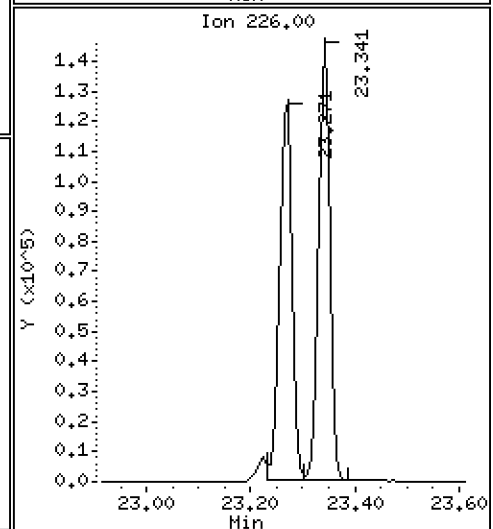
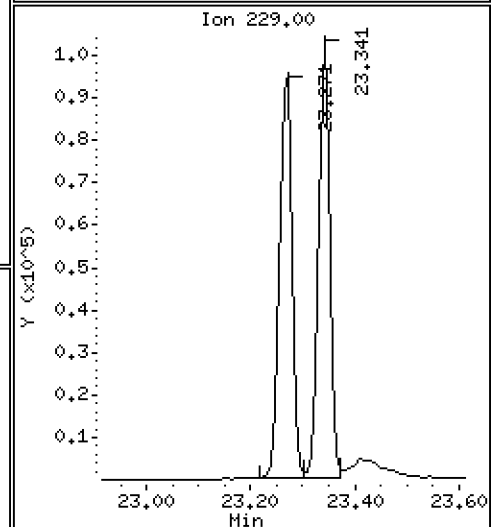
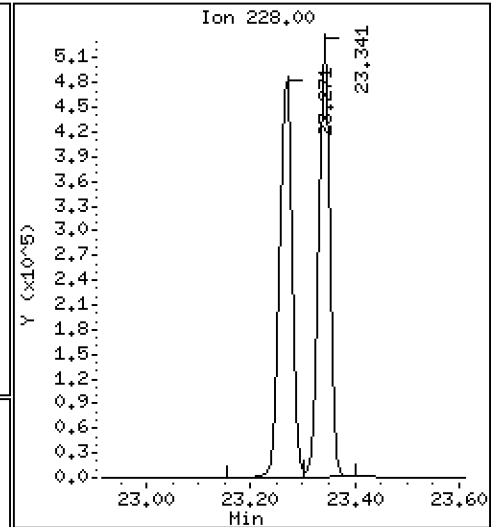
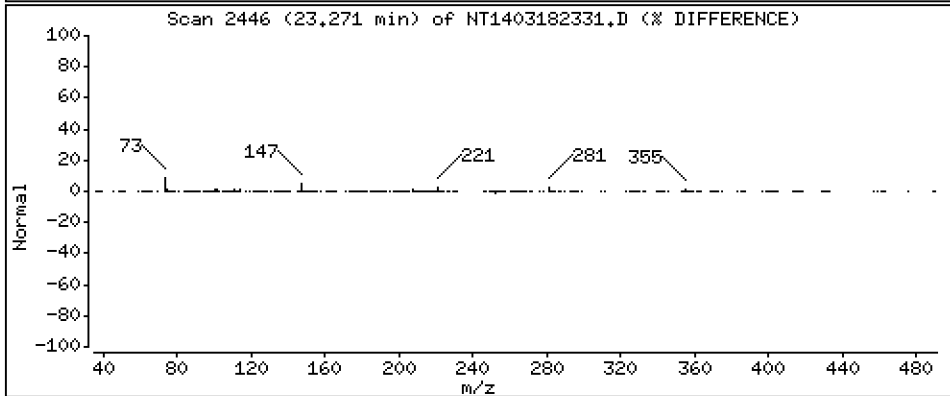
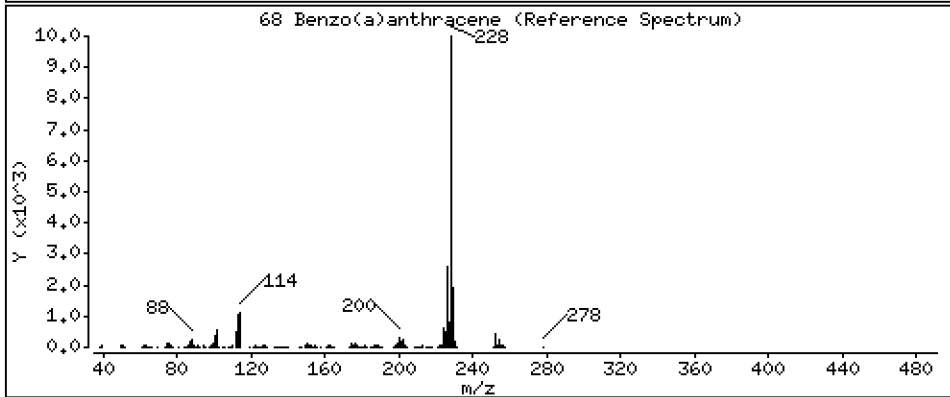
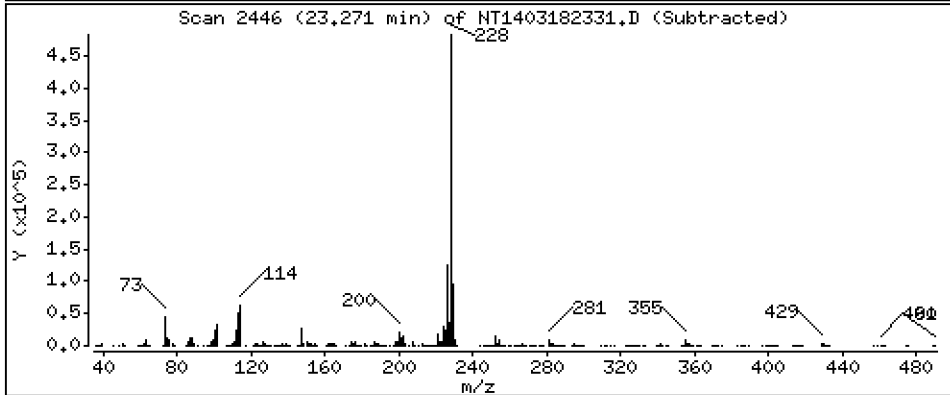
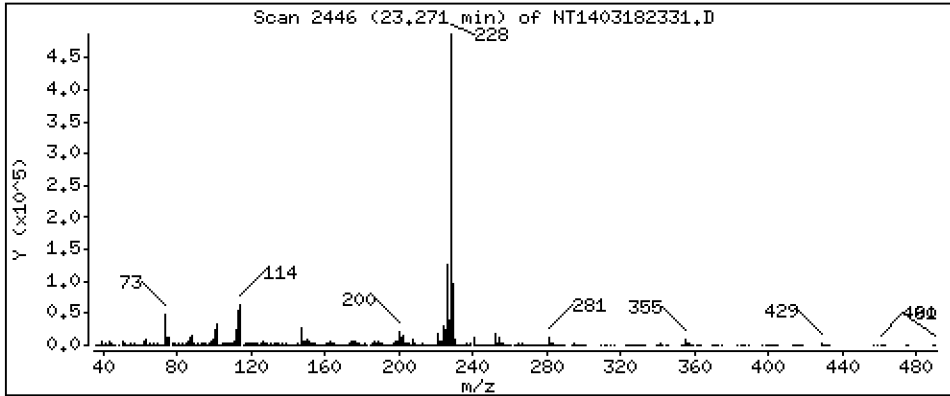
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,957 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

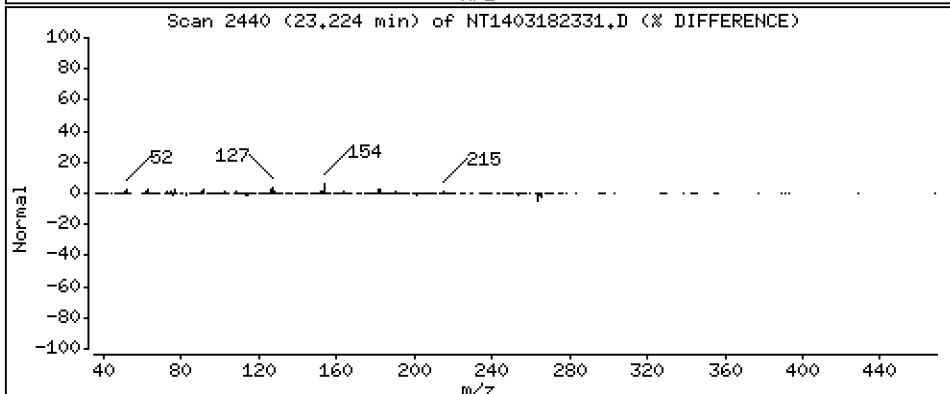
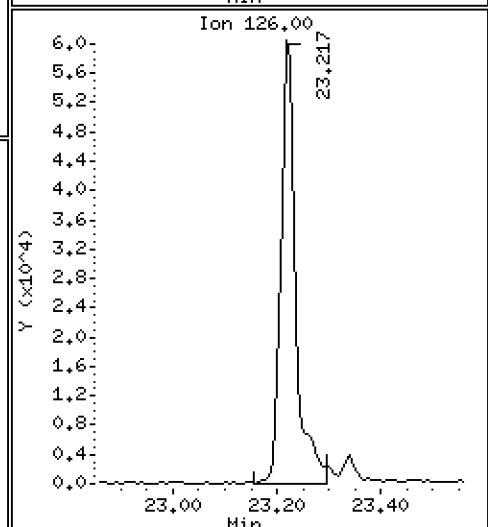
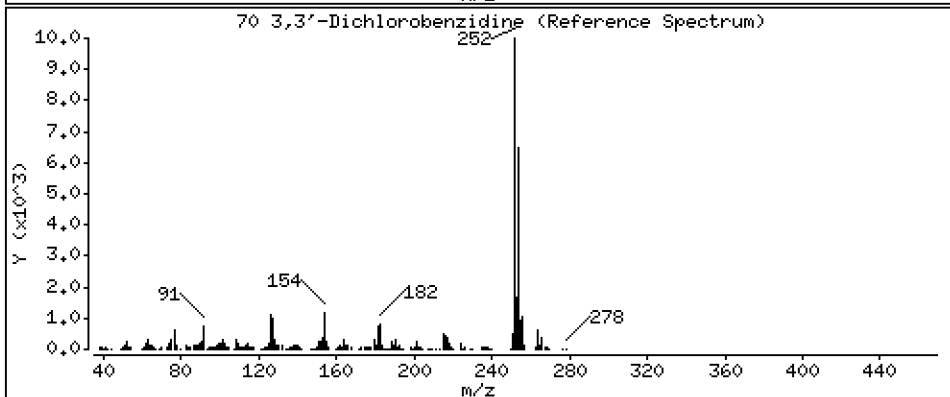
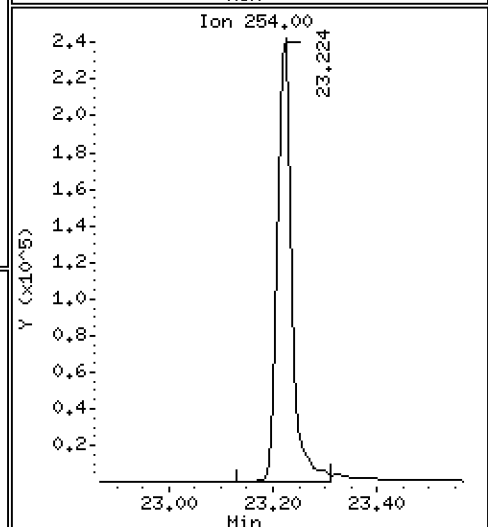
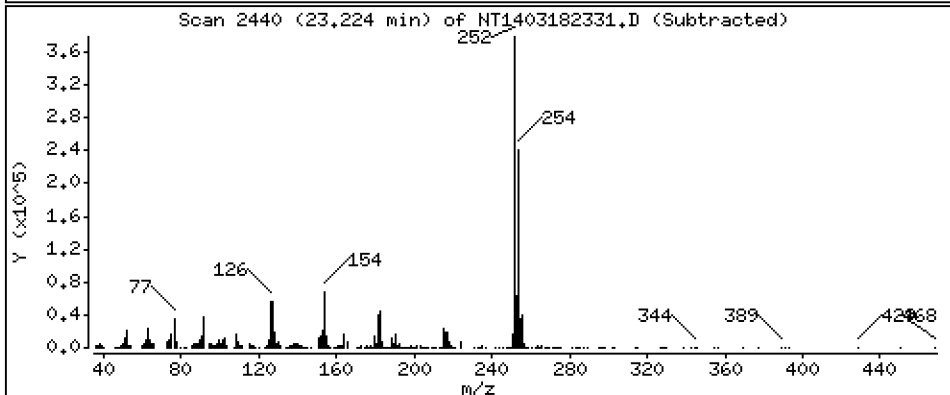
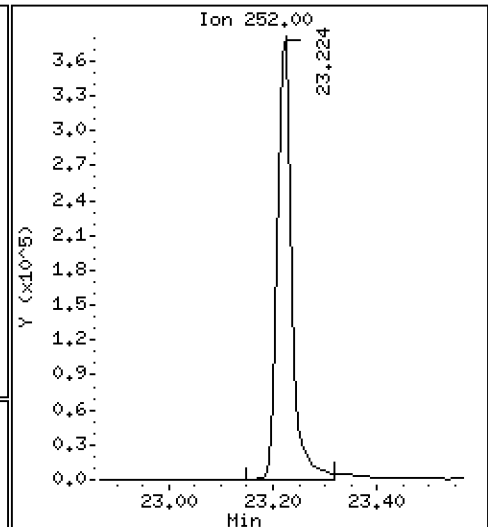
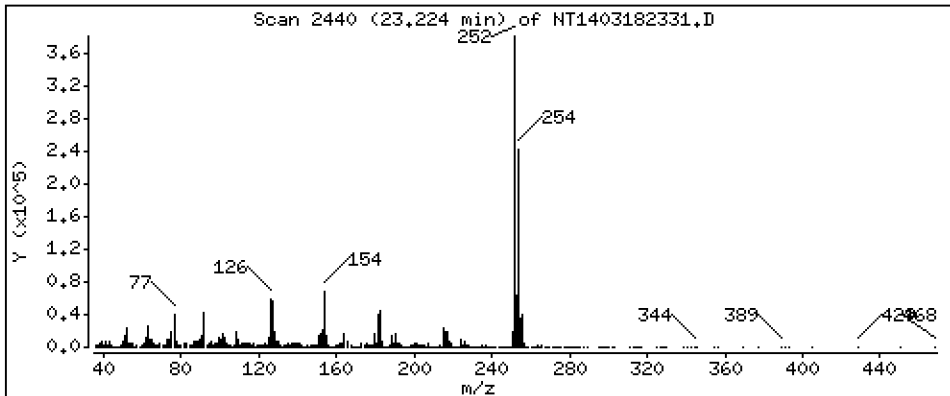
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 14,99 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

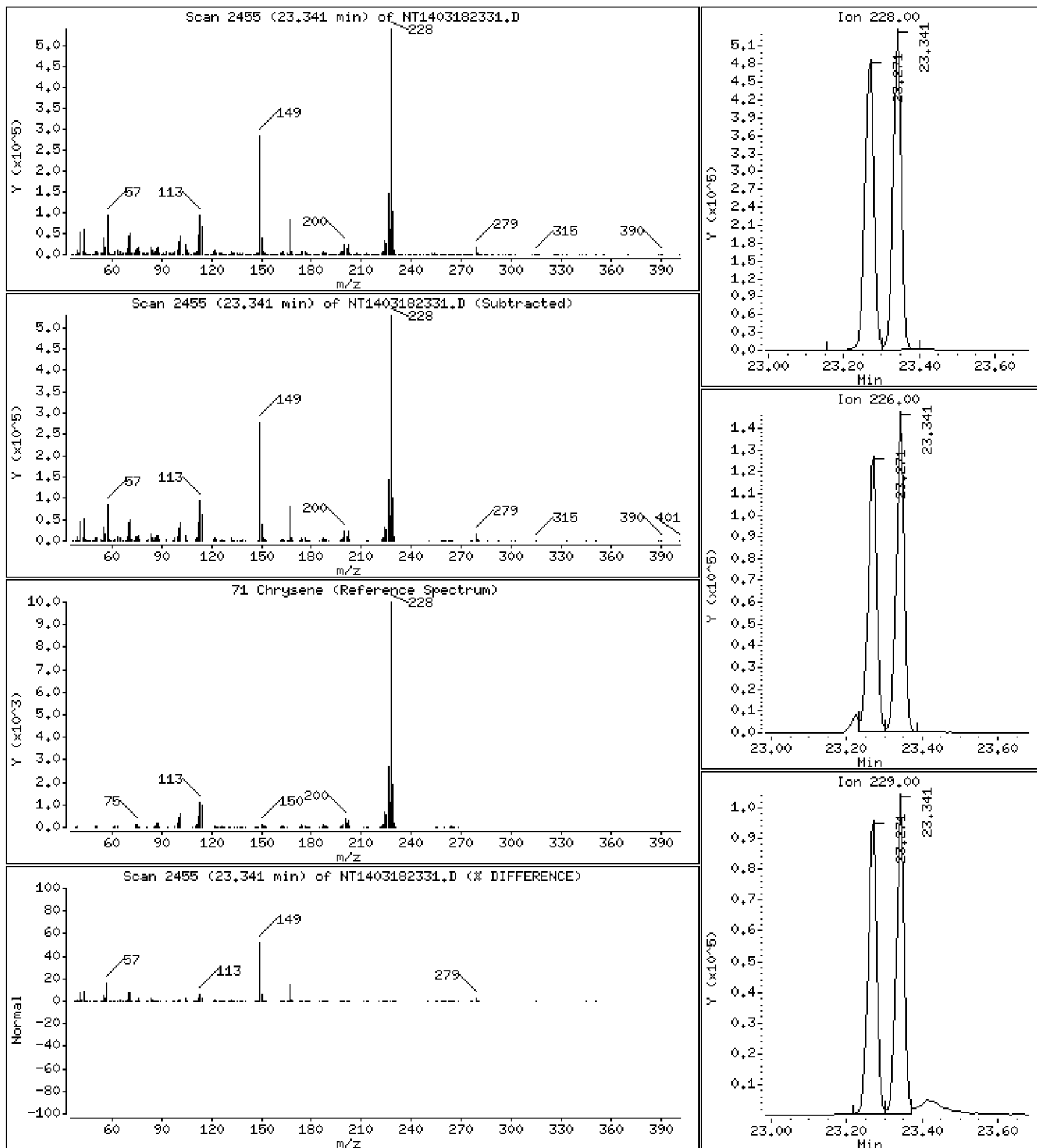
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 5,144 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

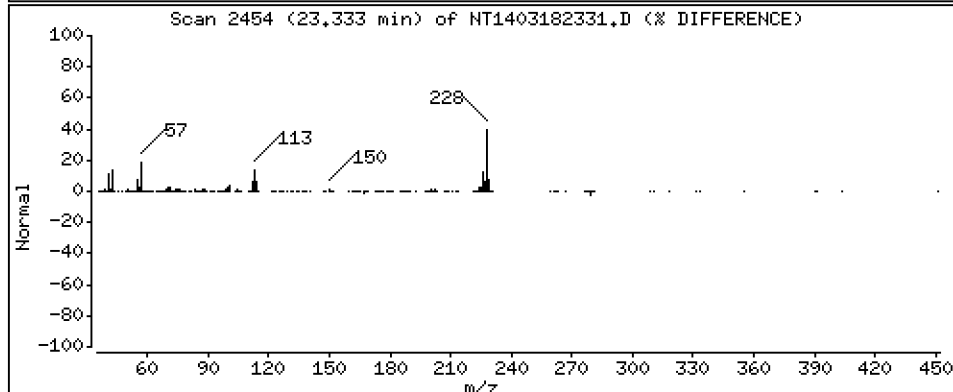
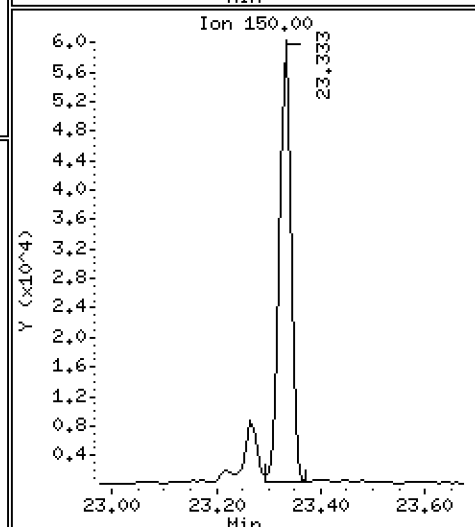
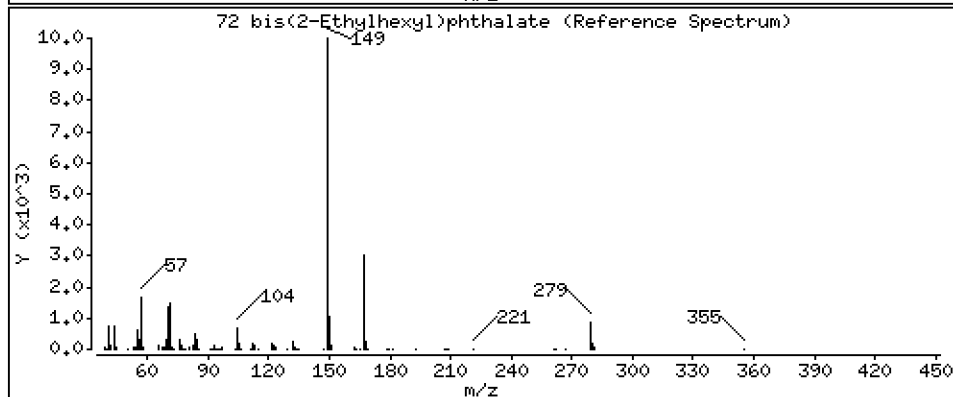
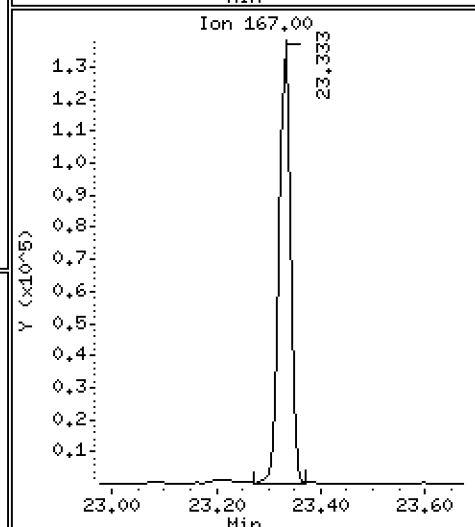
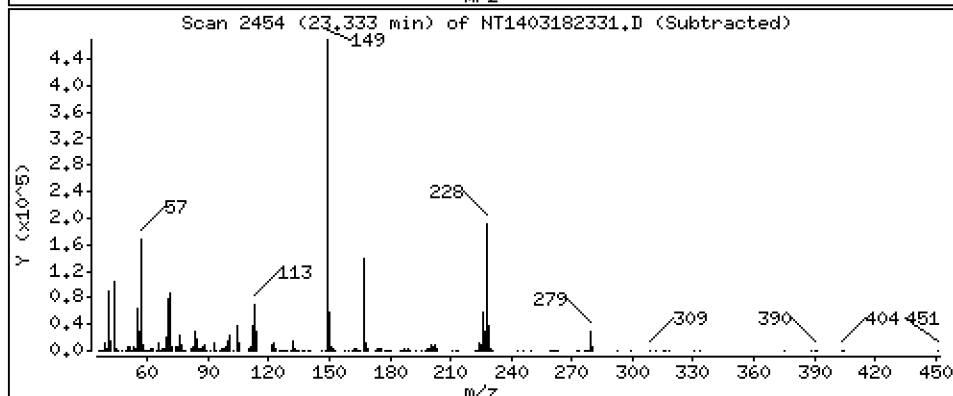
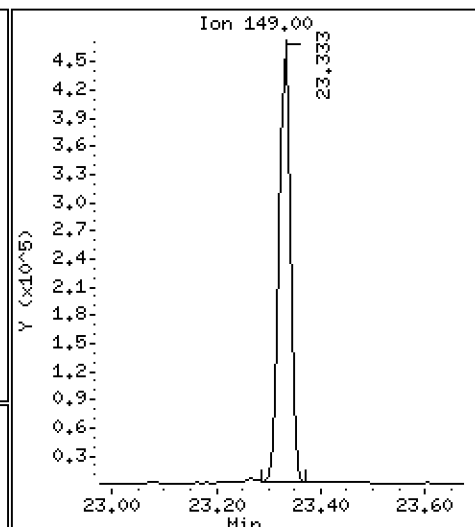
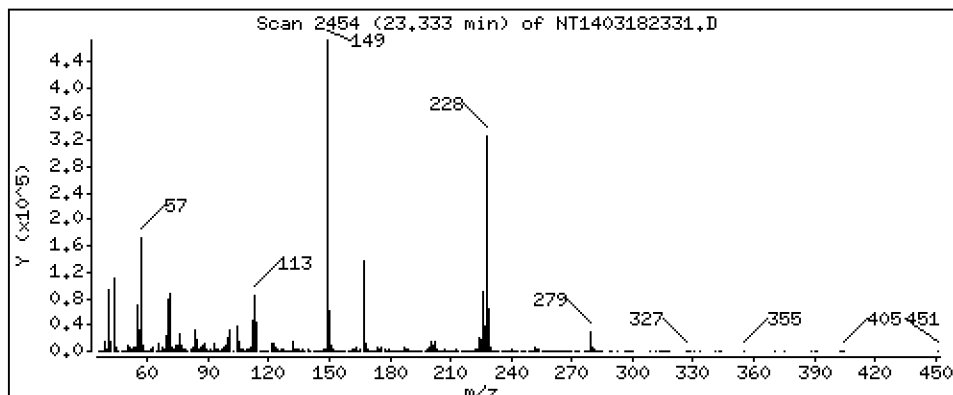
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 5,490 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

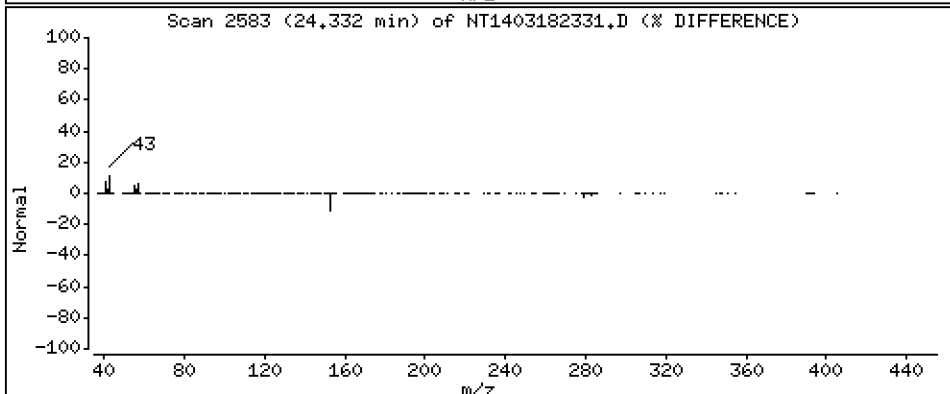
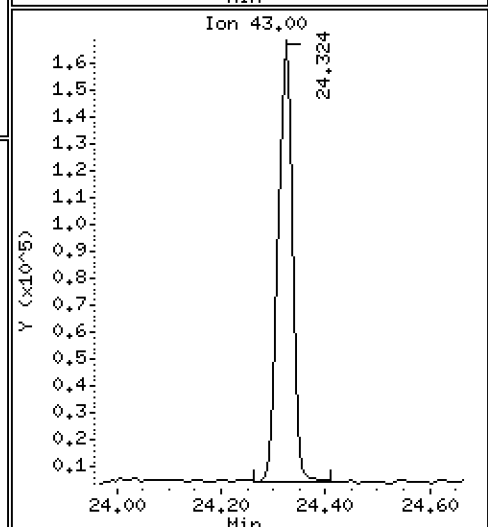
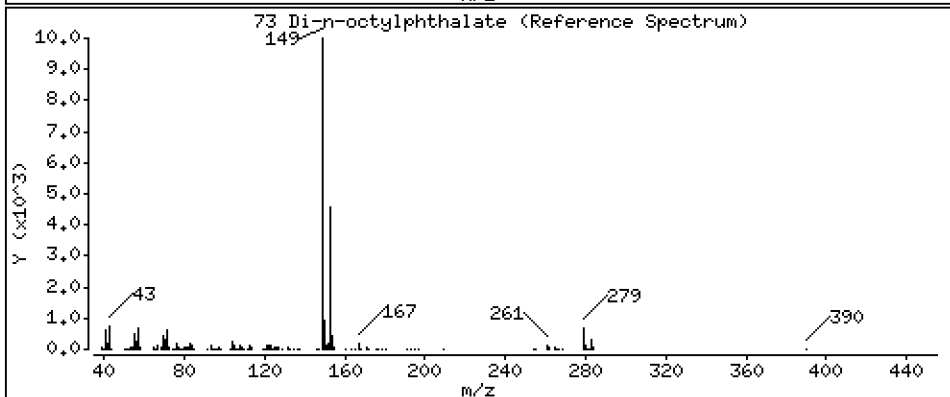
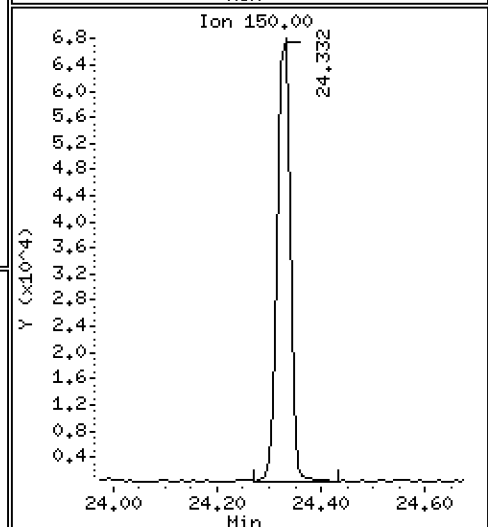
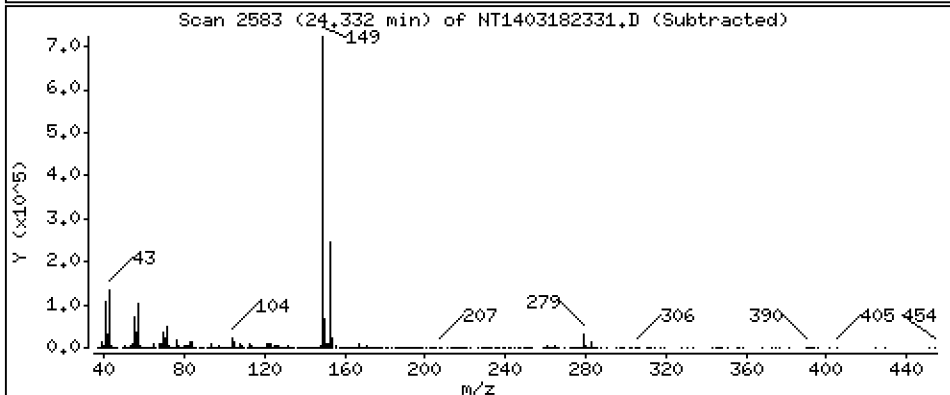
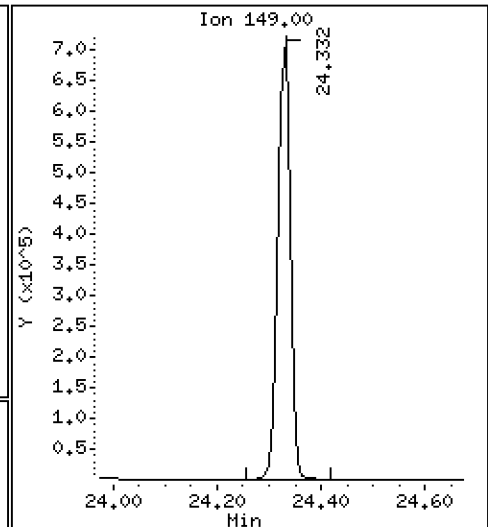
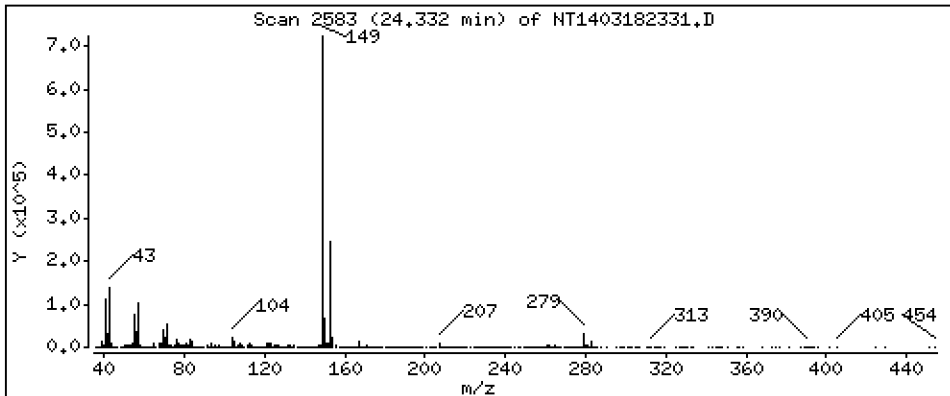
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 4,787 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

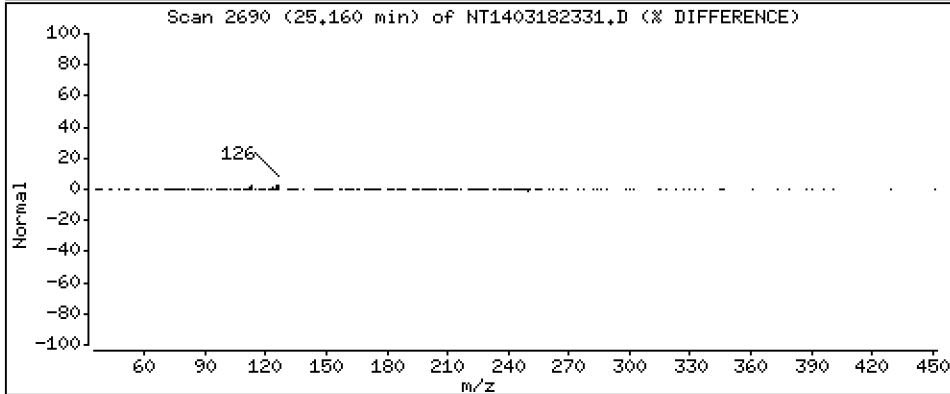
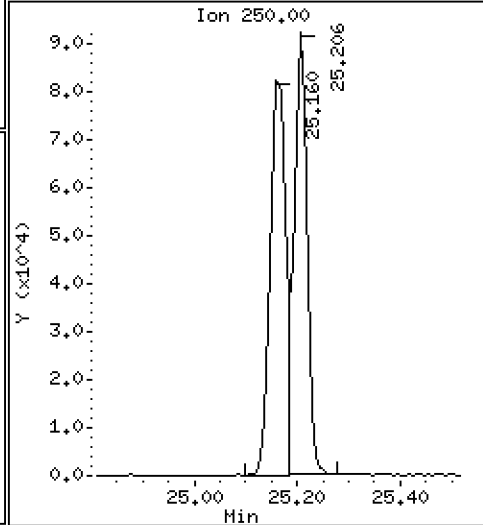
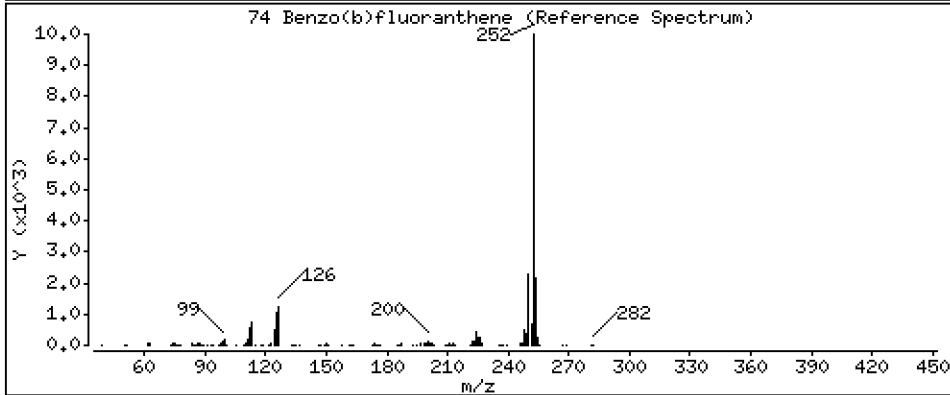
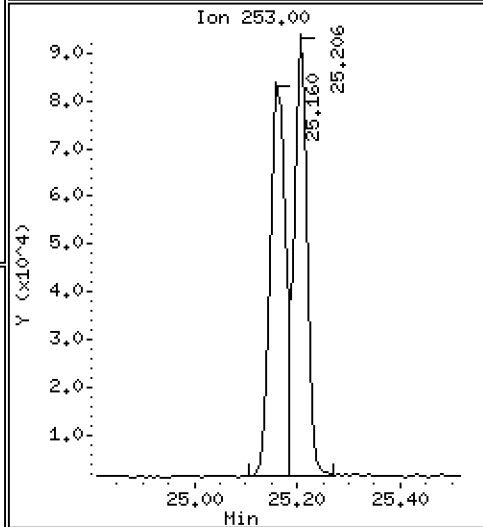
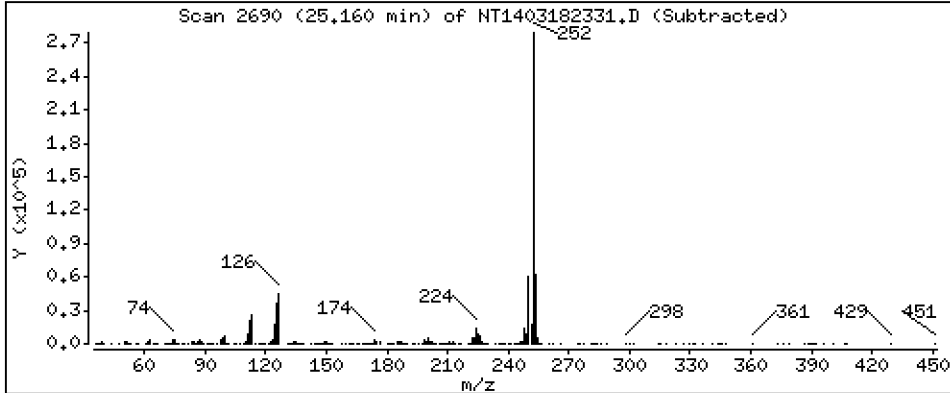
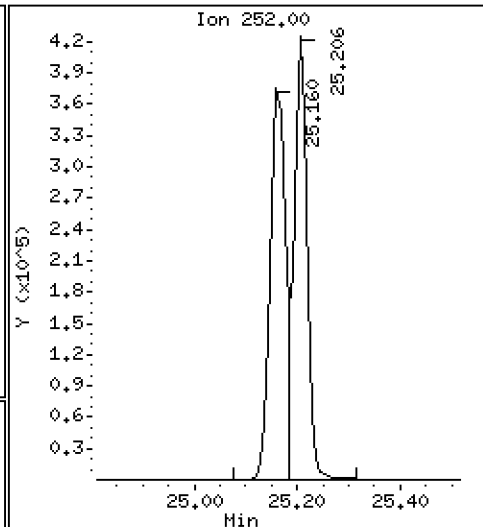
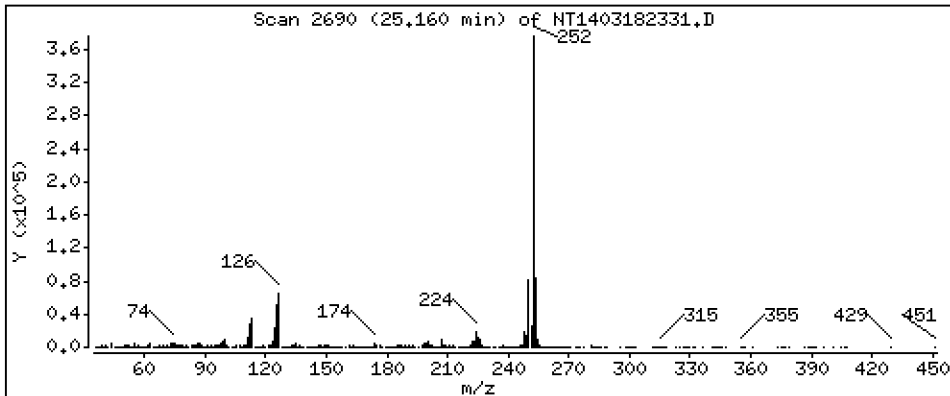
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,813 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

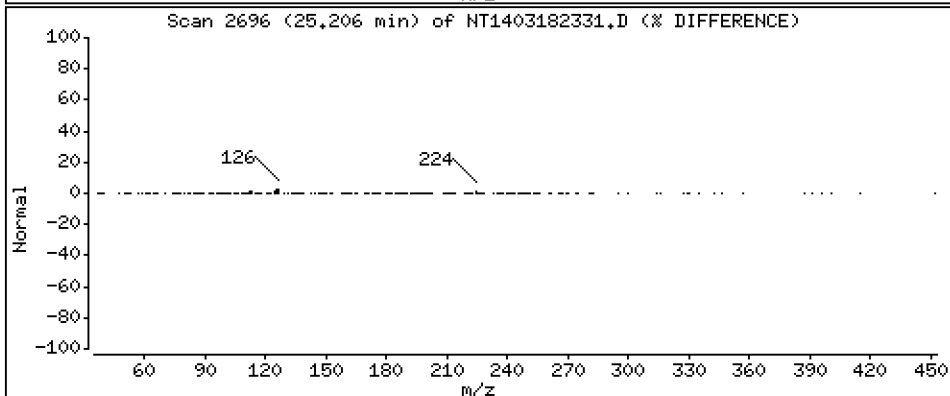
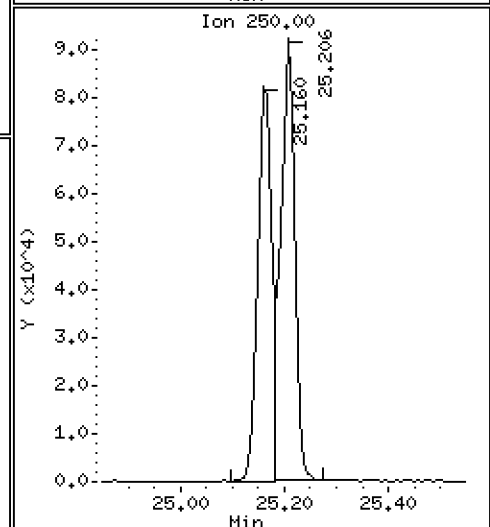
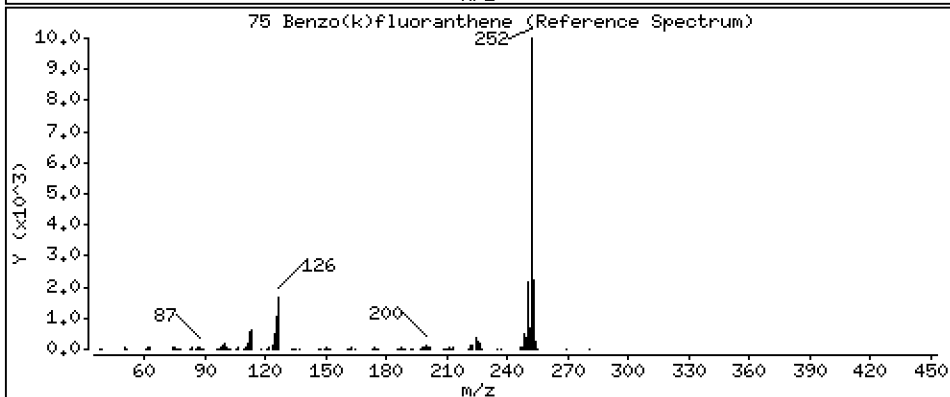
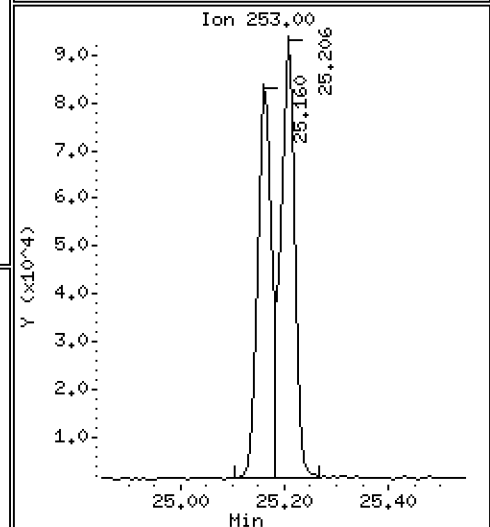
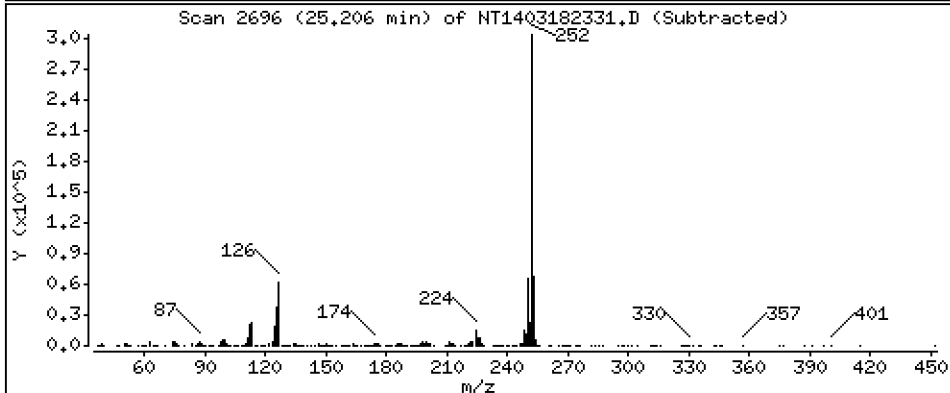
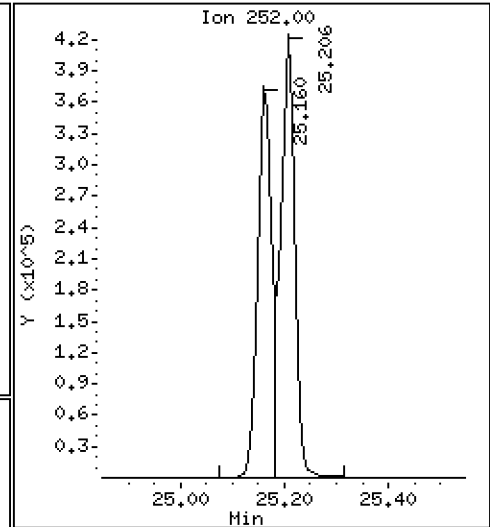
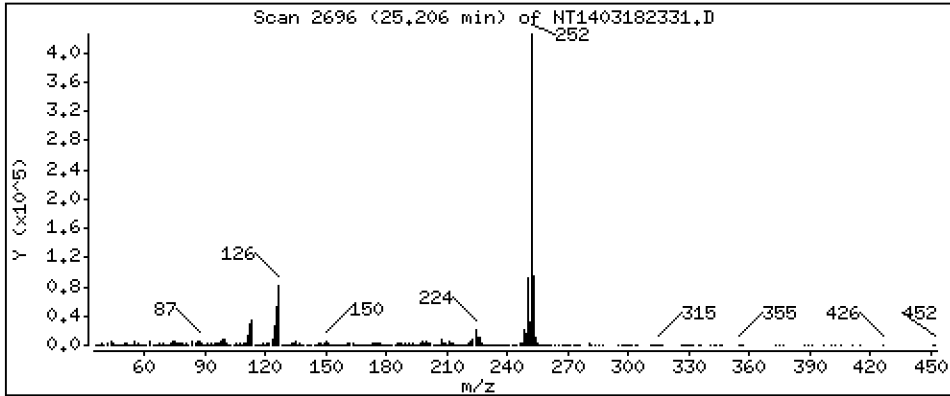
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 5,268 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

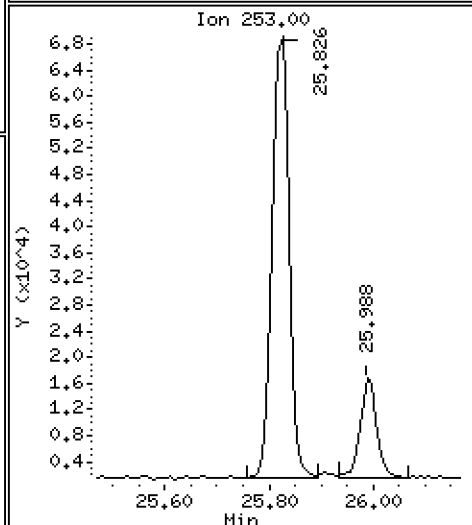
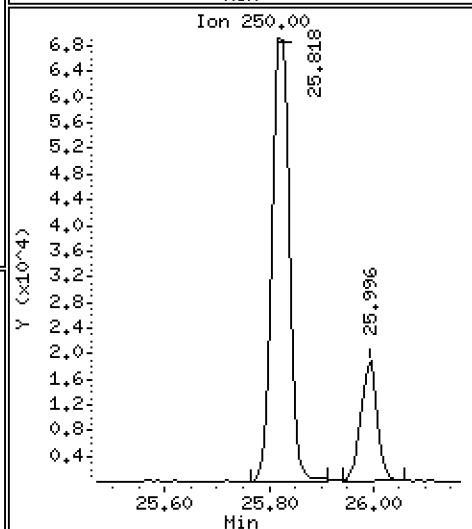
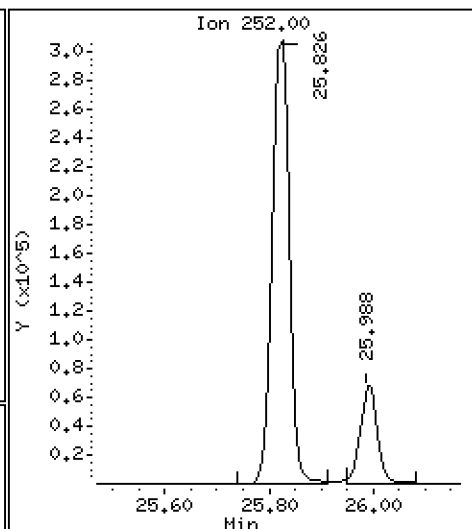
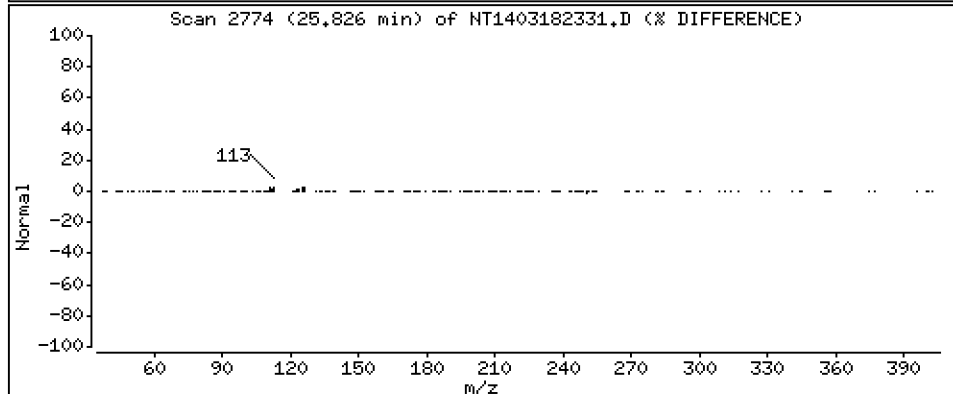
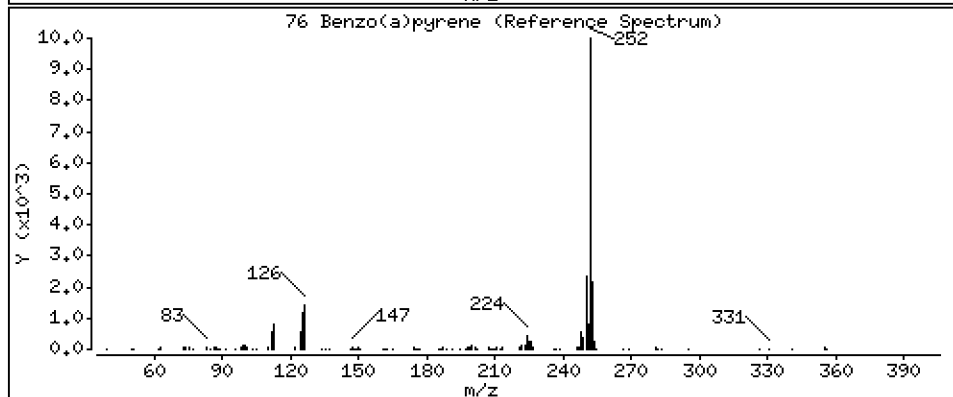
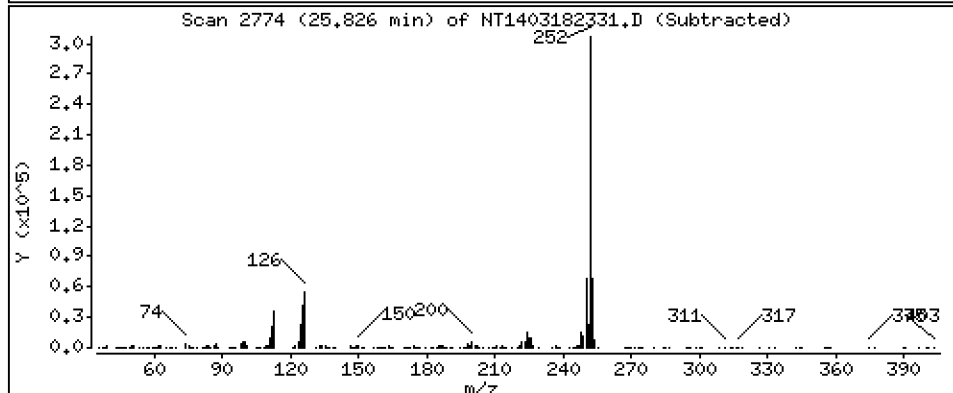
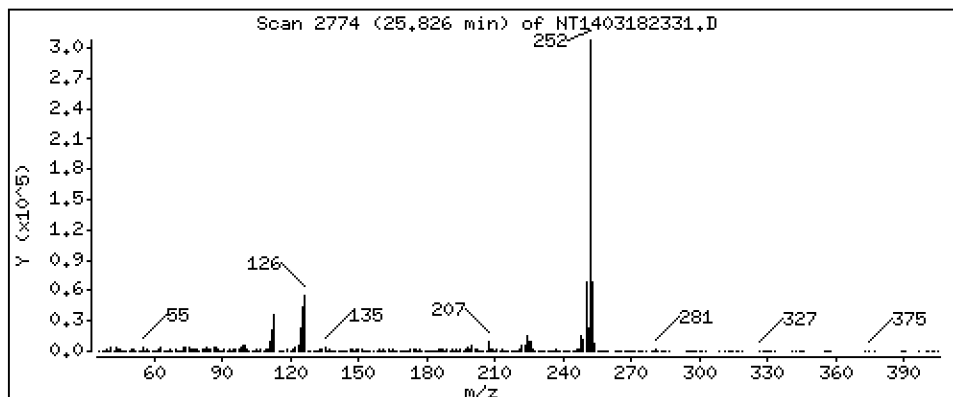
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 5,117 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

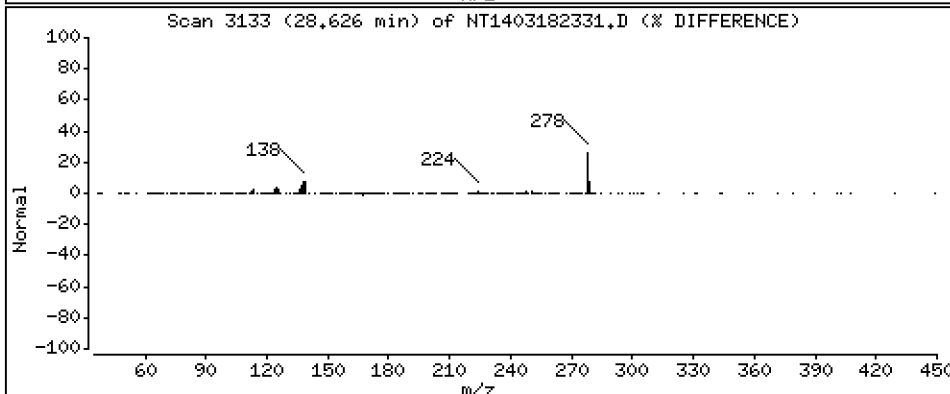
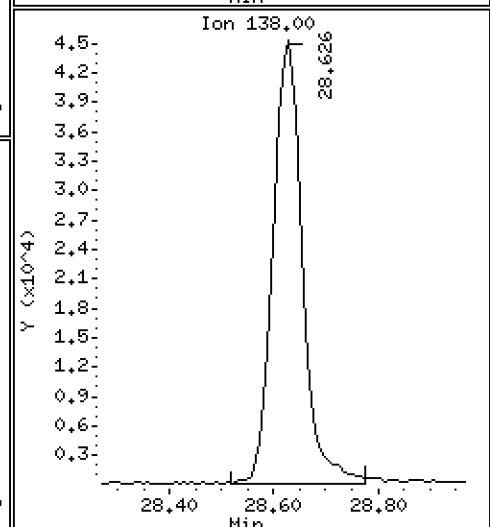
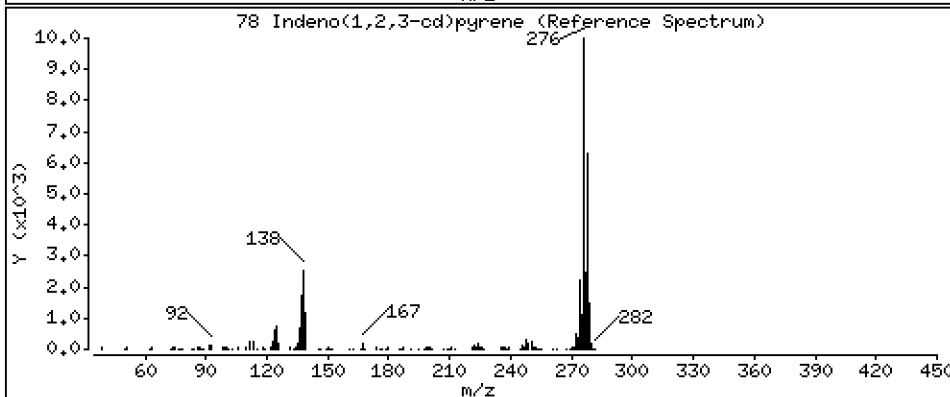
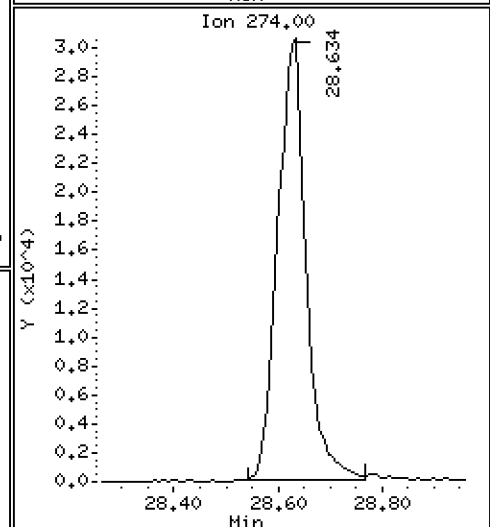
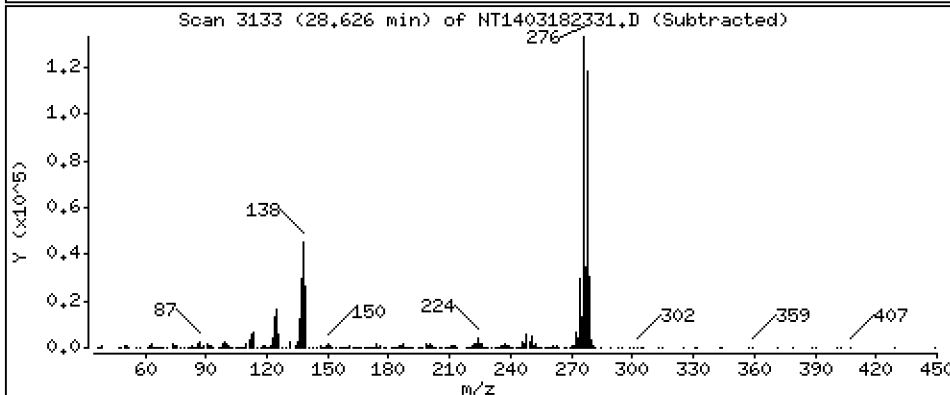
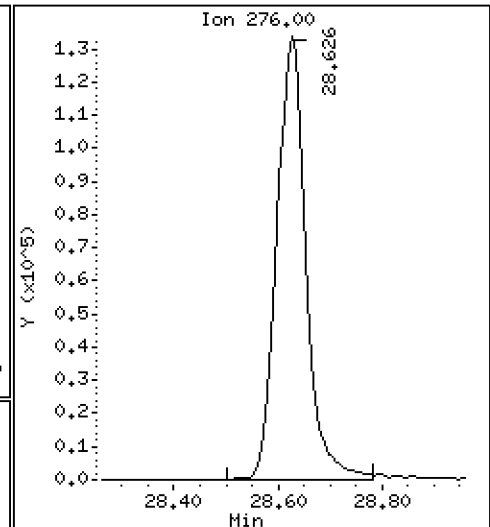
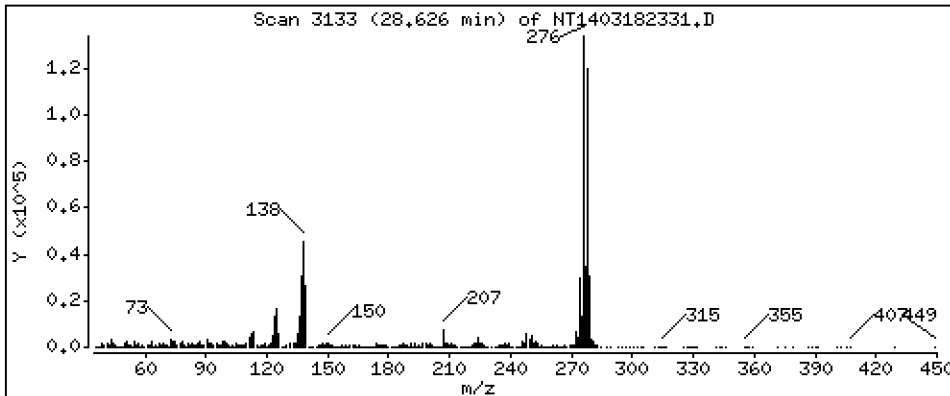
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 3,597 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

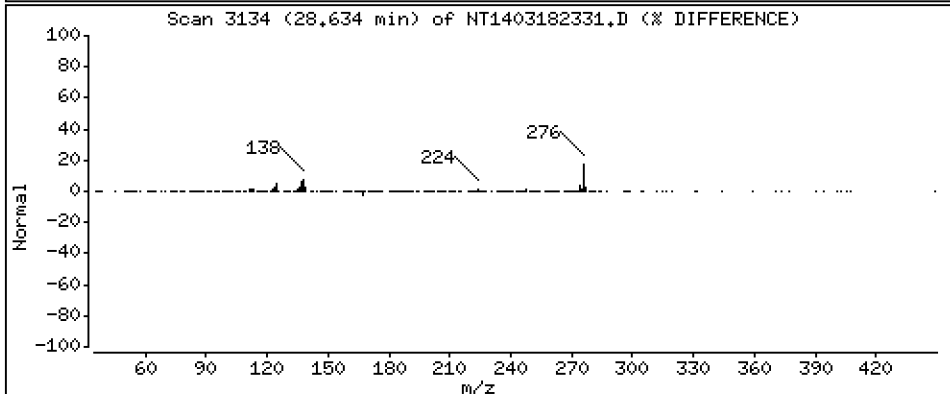
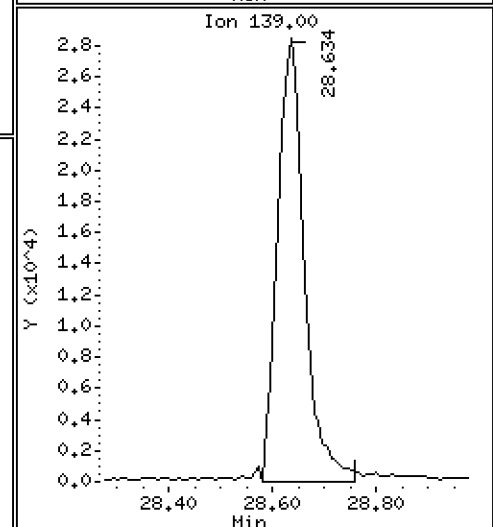
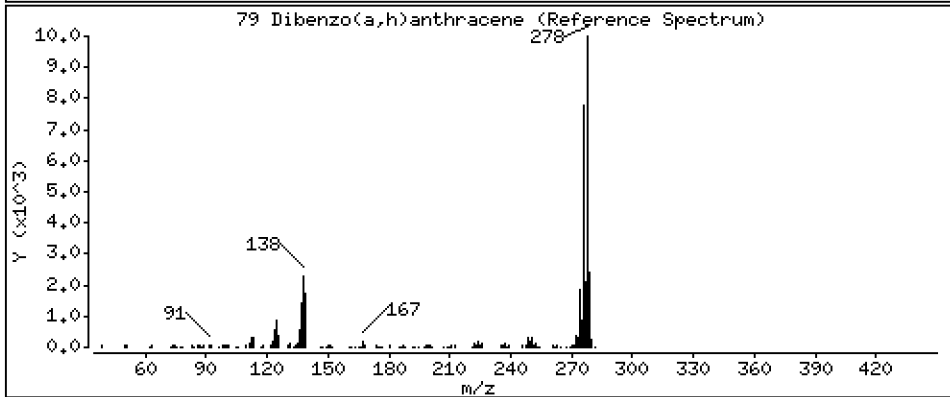
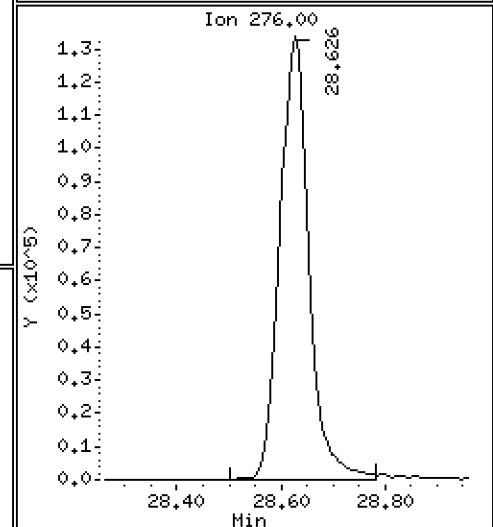
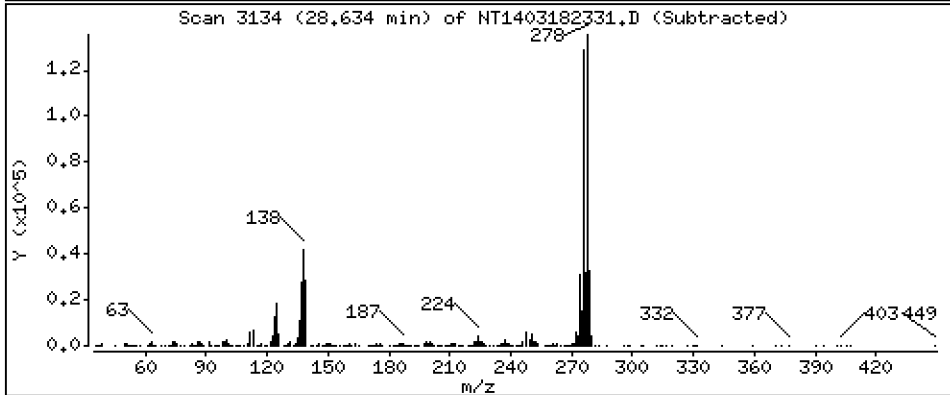
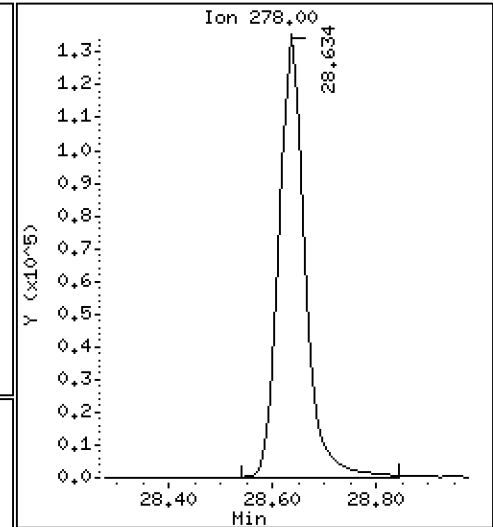
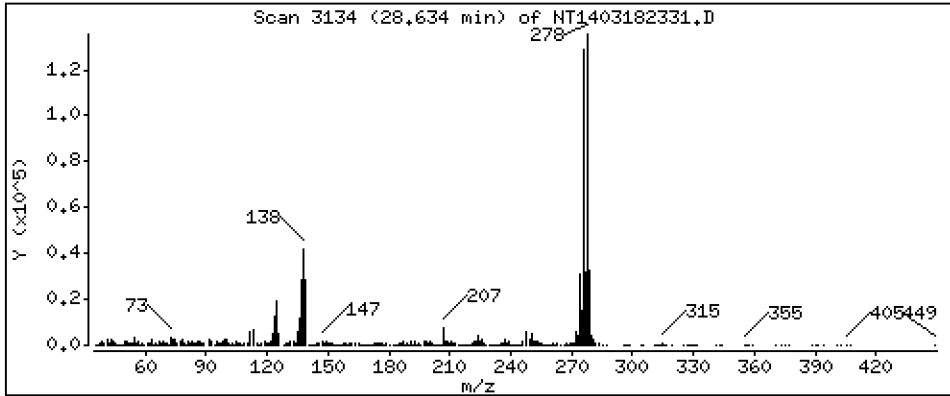
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 3,867 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

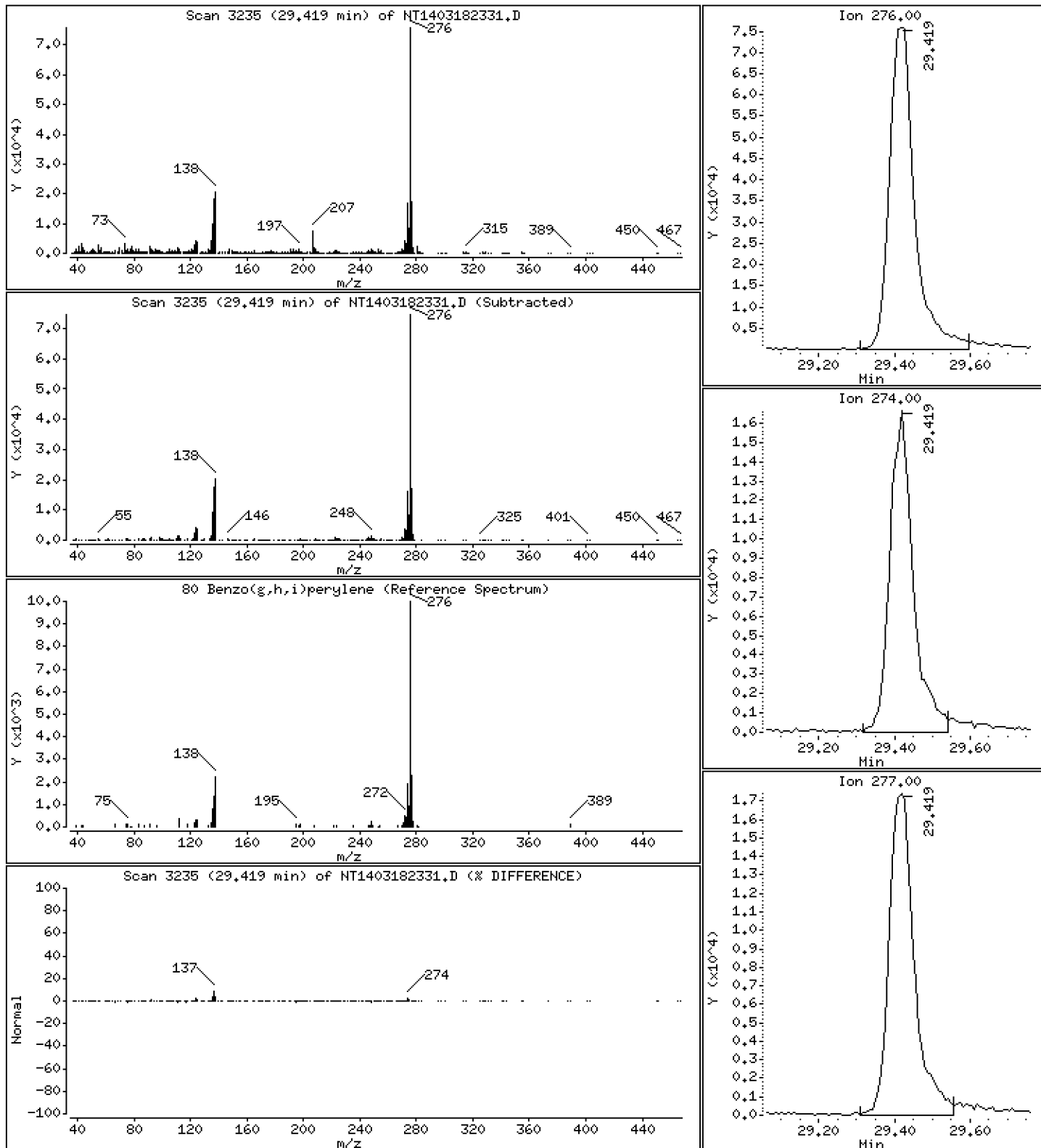
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 2,928 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

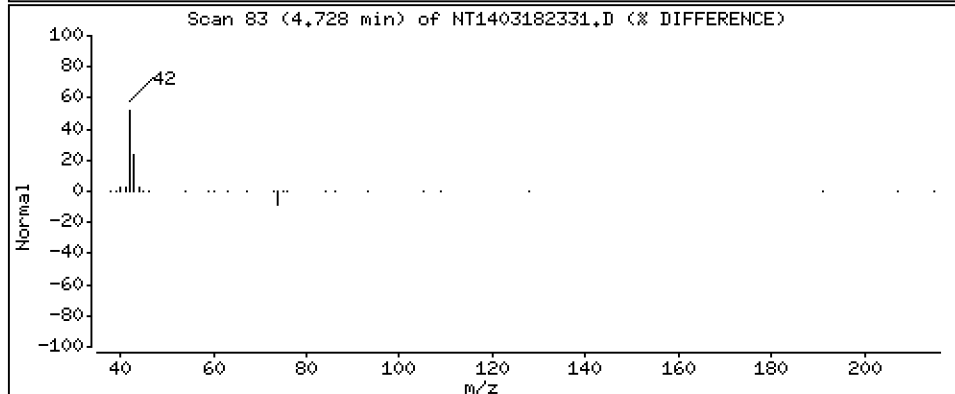
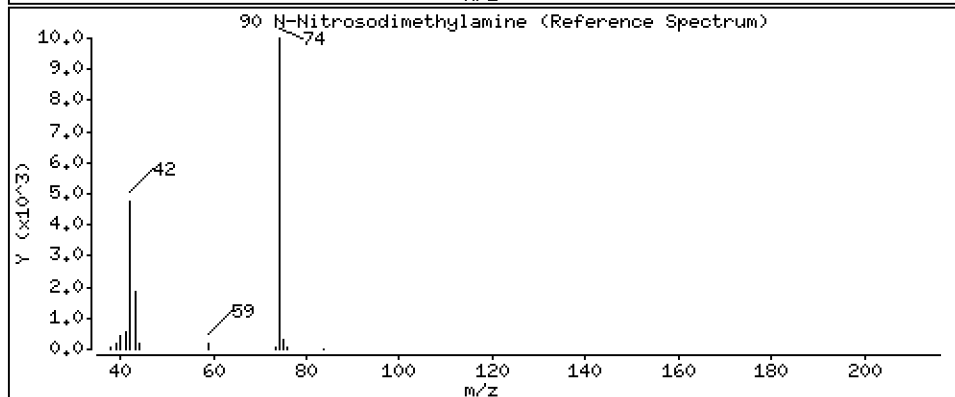
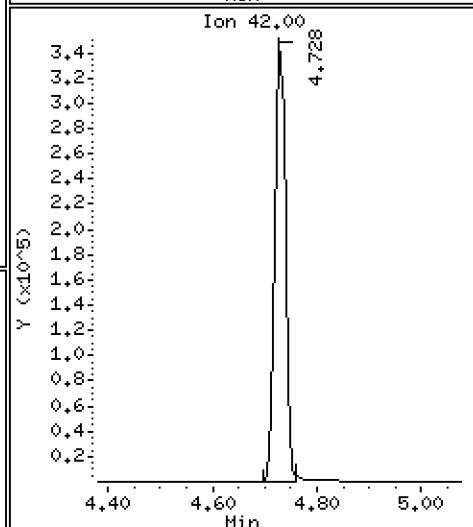
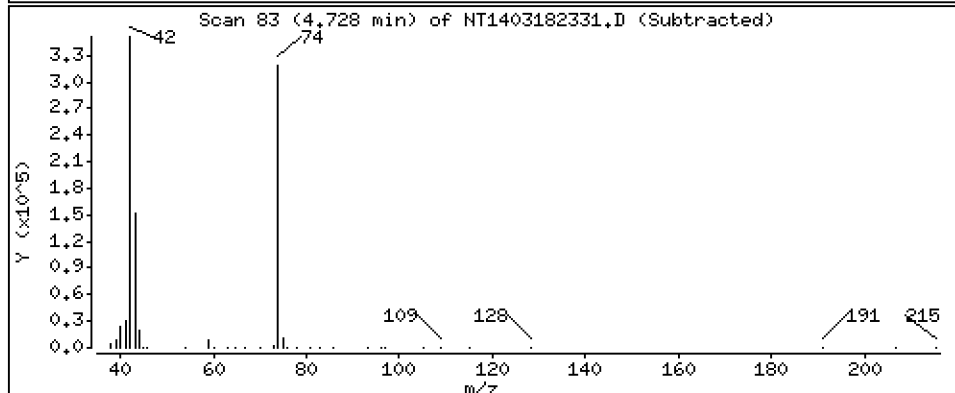
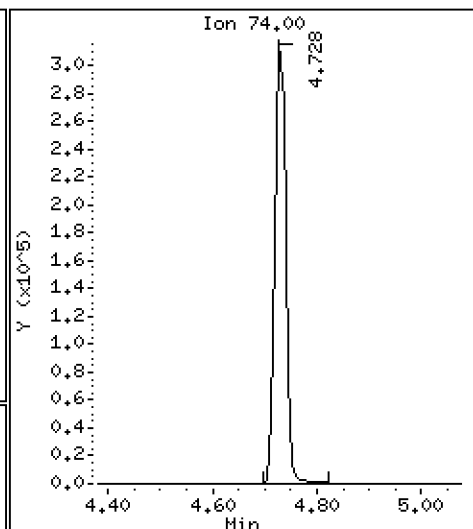
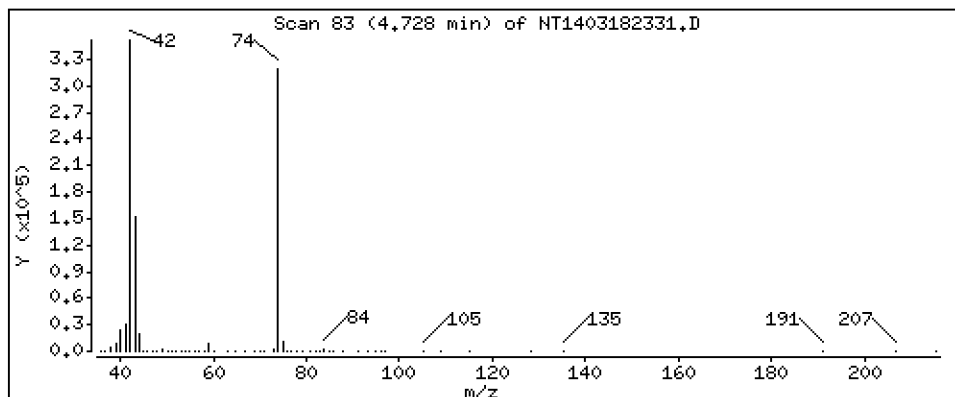
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 8,241 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

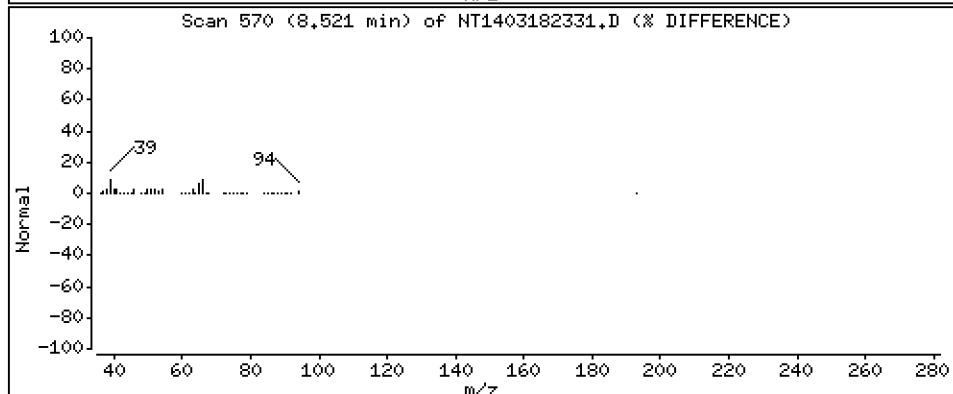
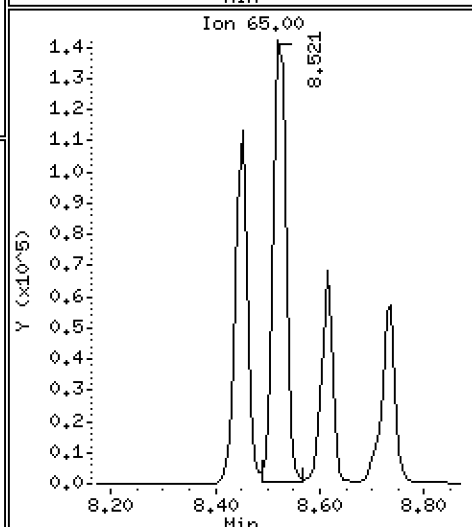
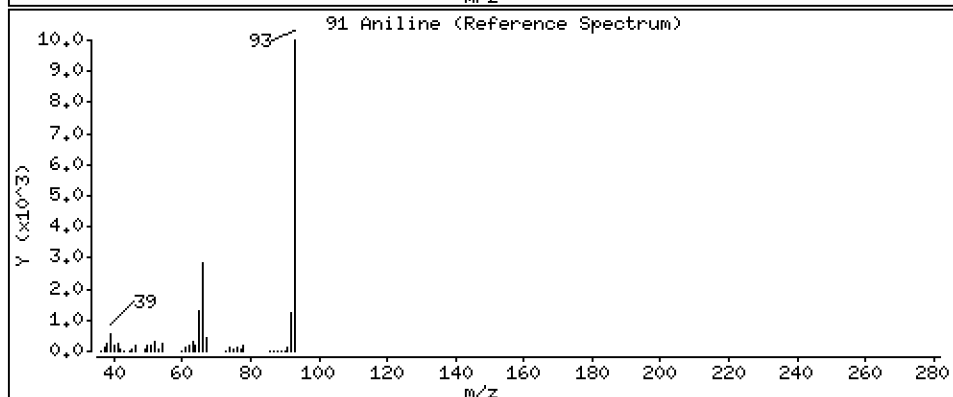
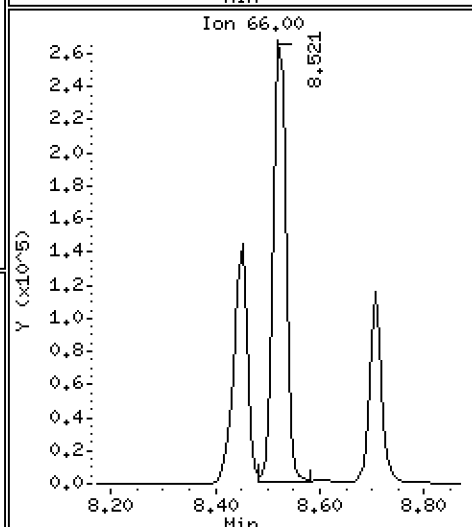
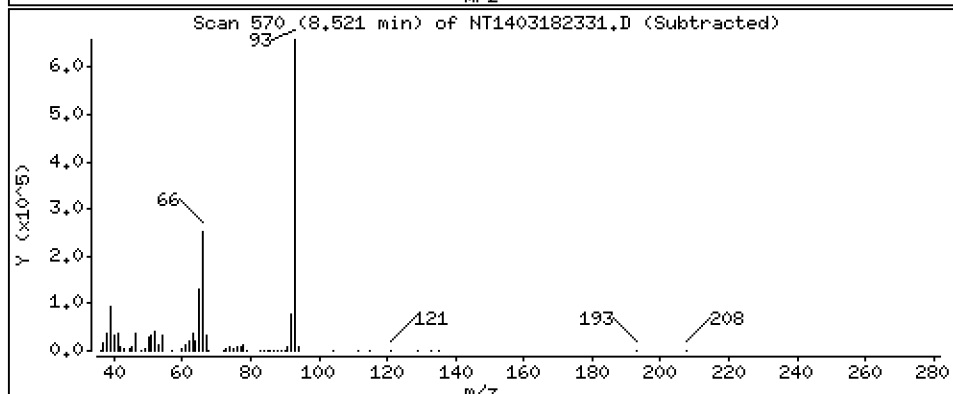
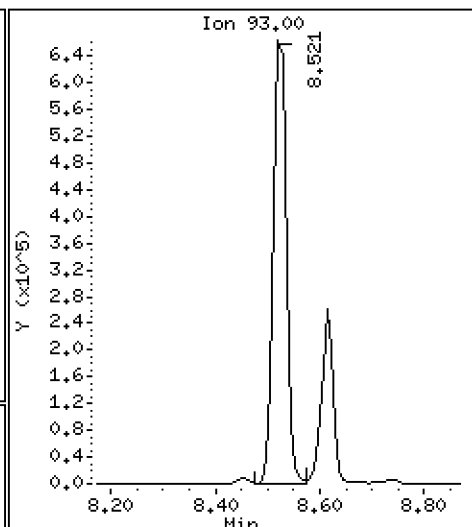
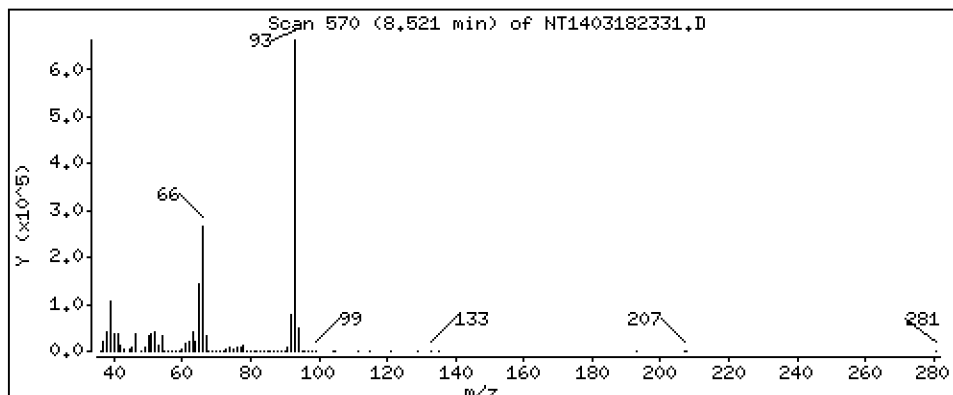
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 9,517 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

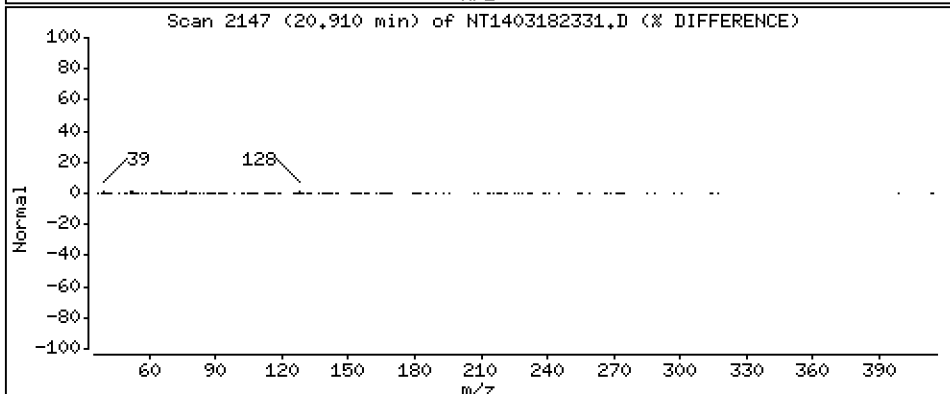
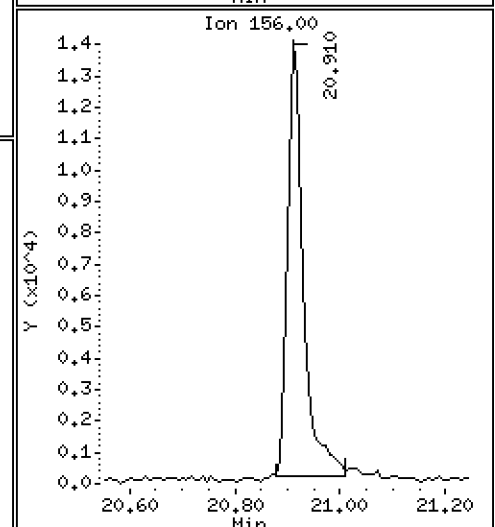
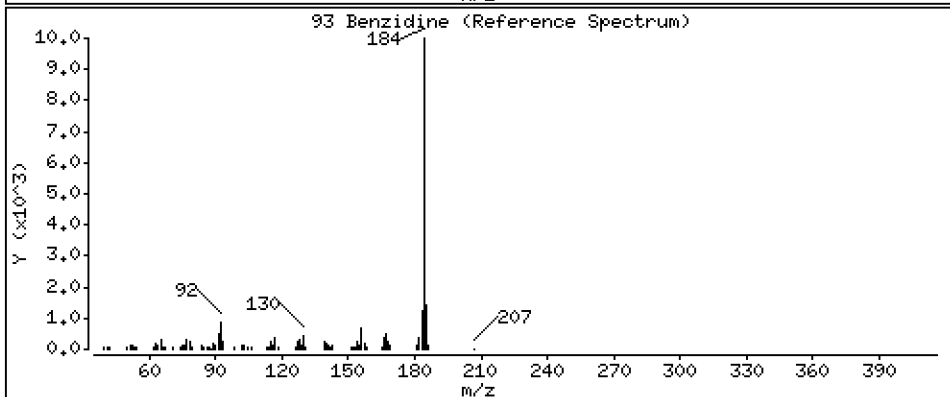
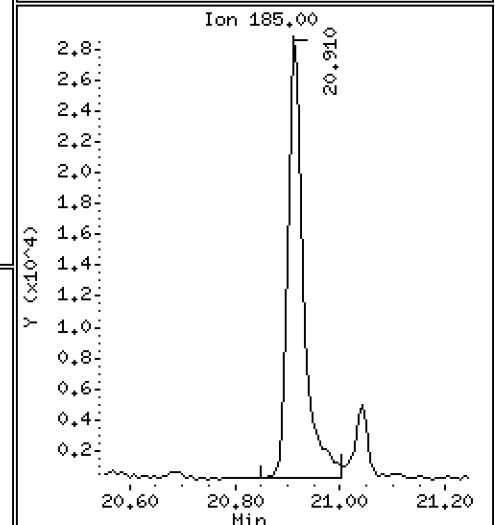
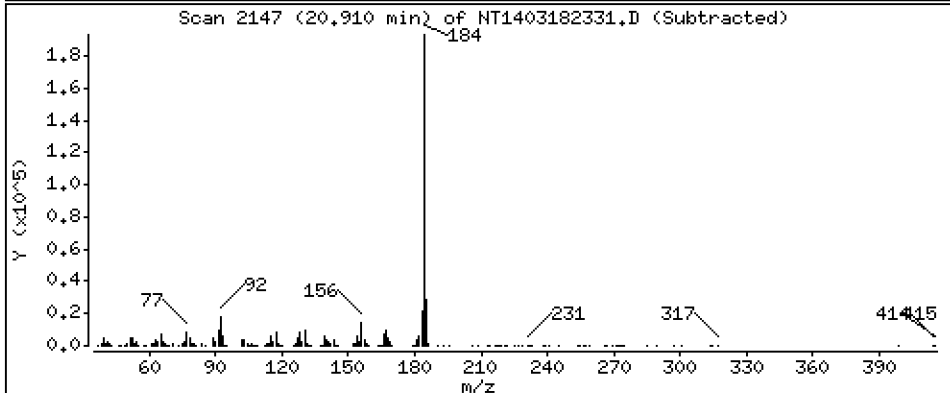
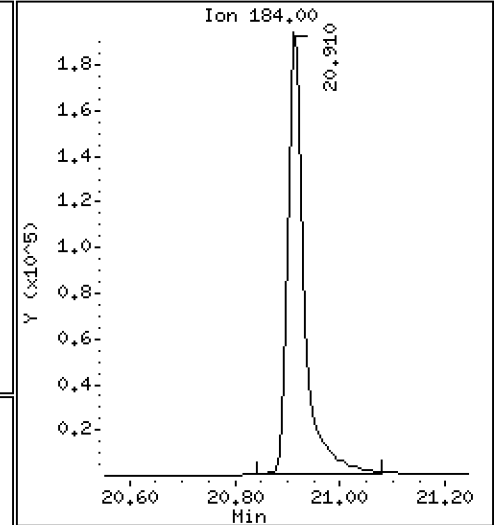
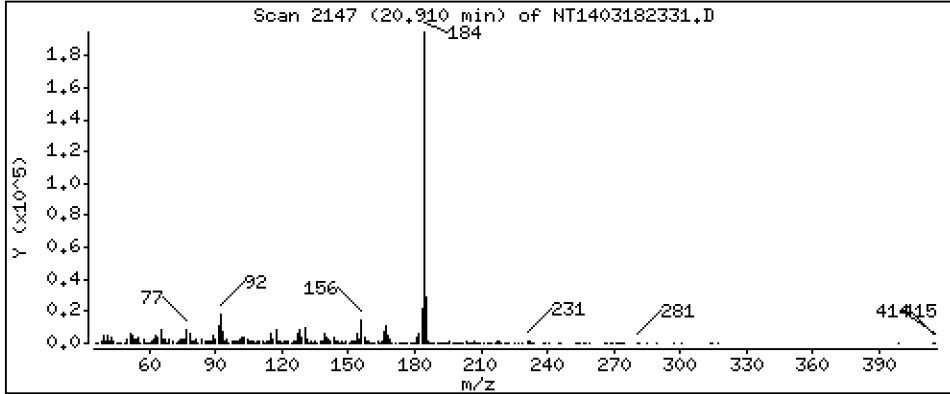
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 6,108 ug/mL

93 Benzidine



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

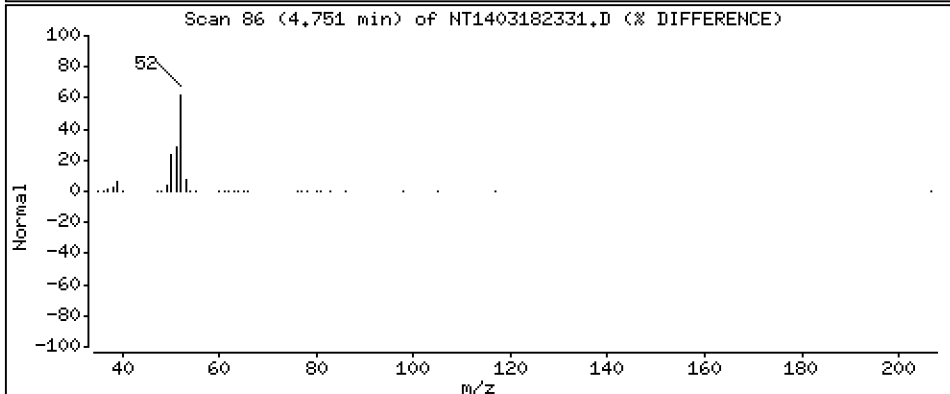
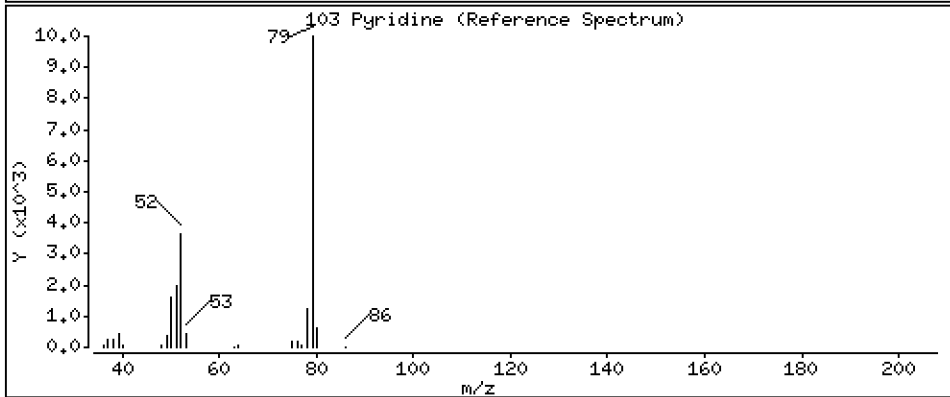
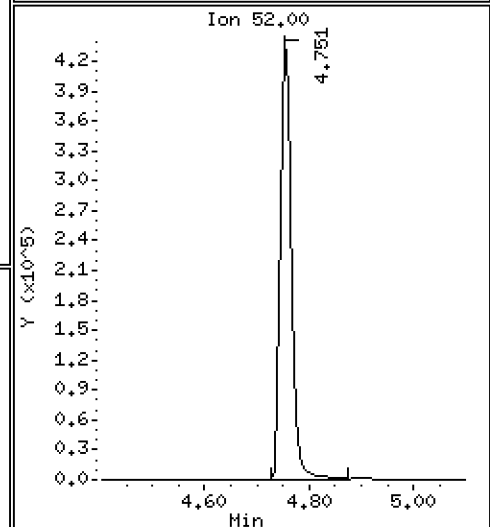
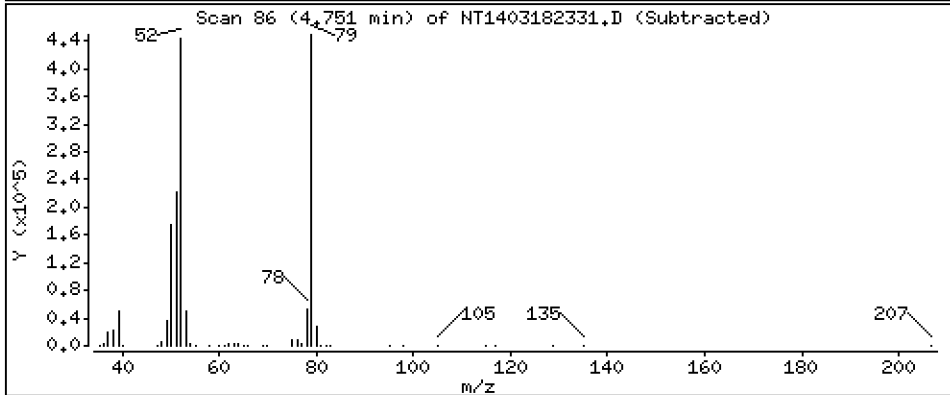
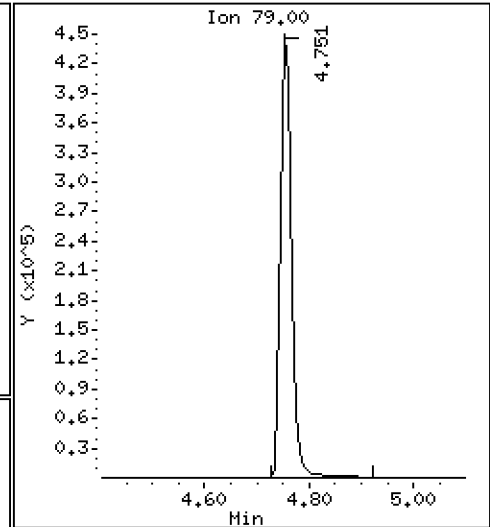
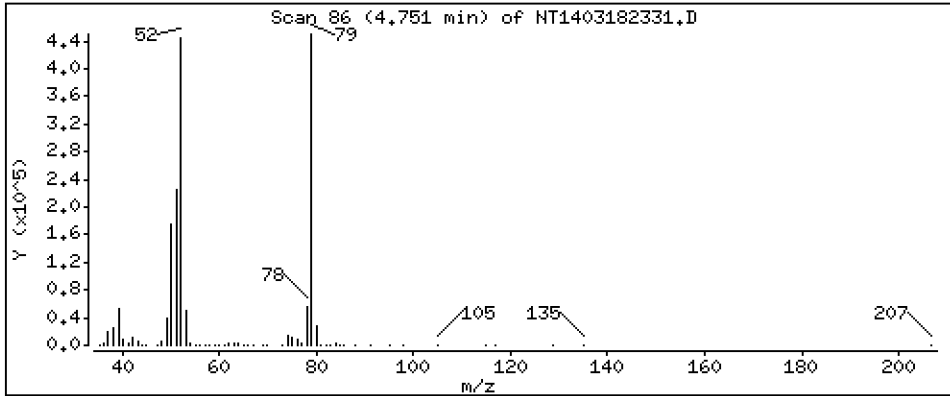
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 3,935 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

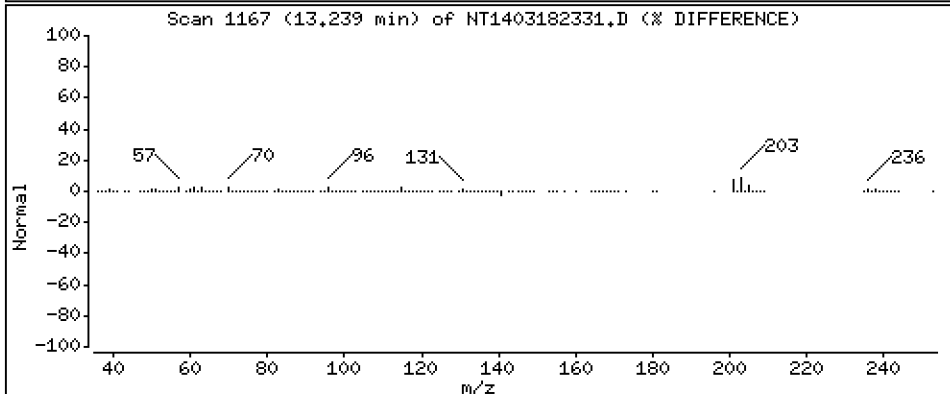
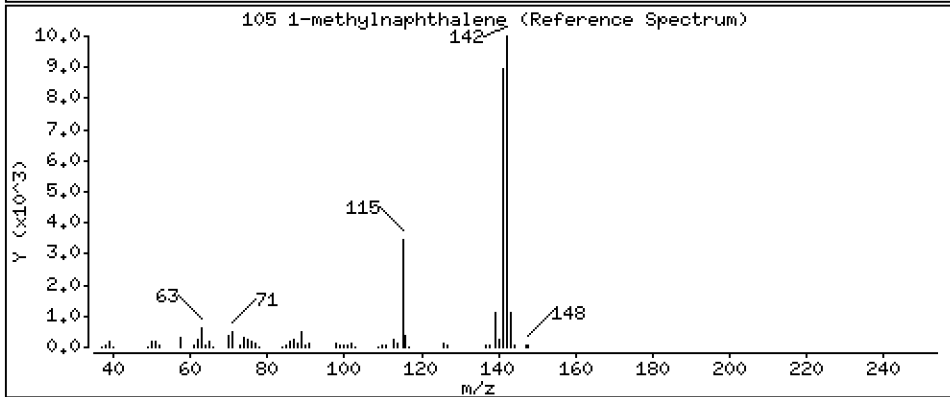
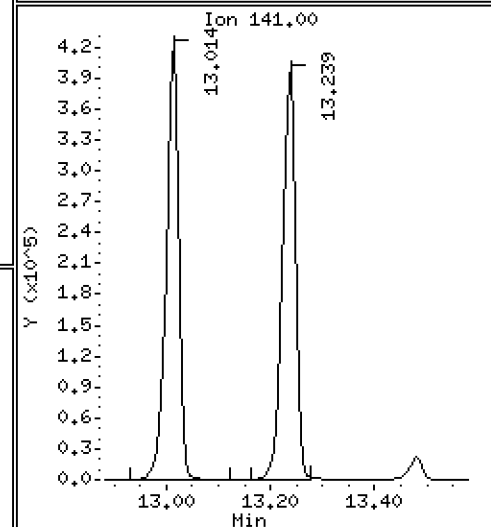
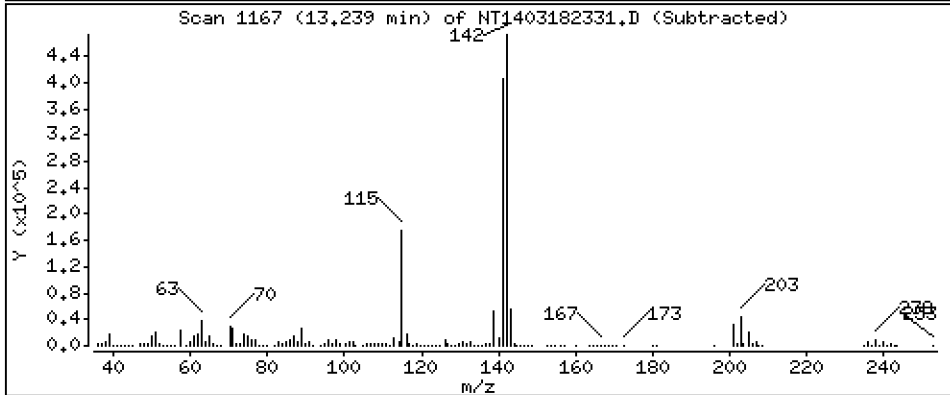
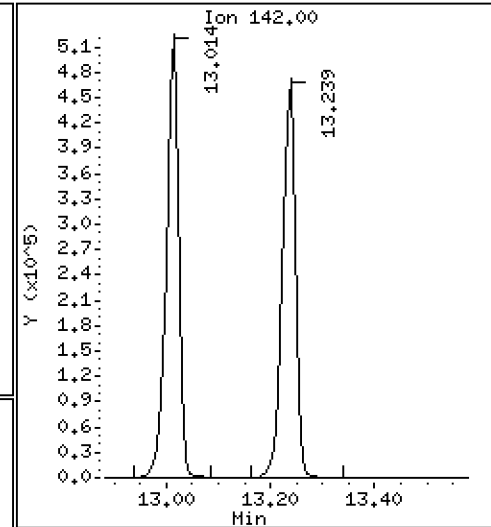
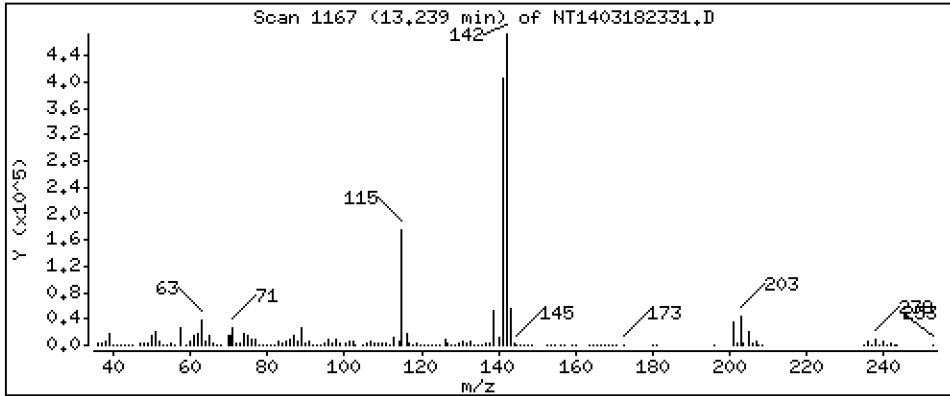
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,965 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

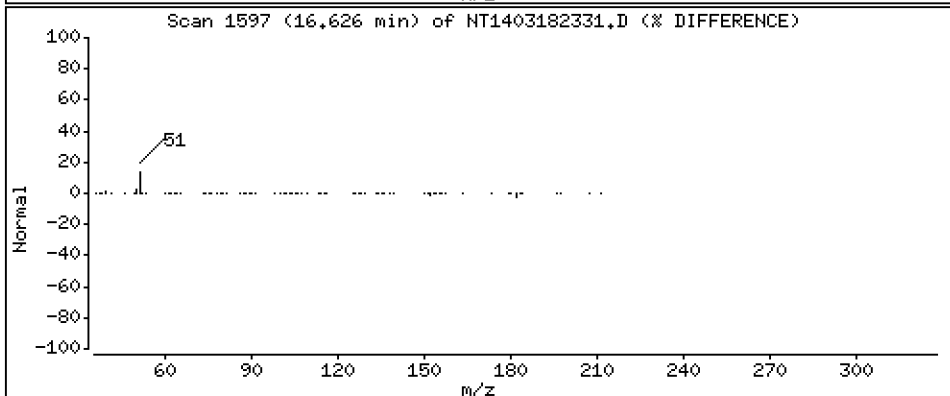
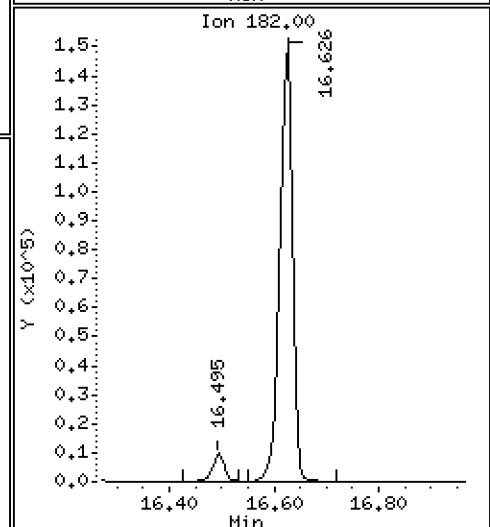
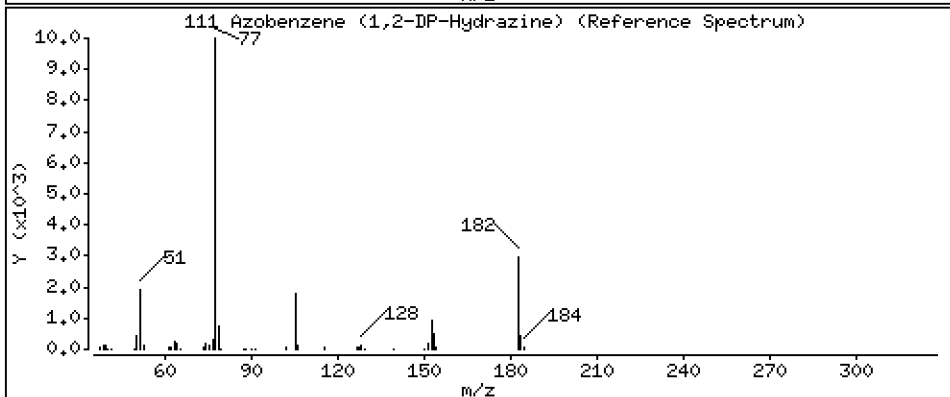
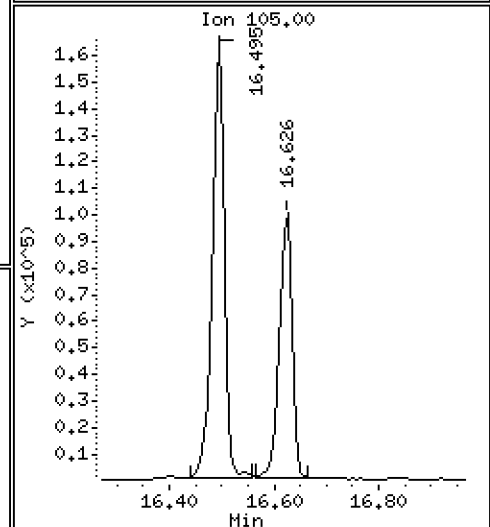
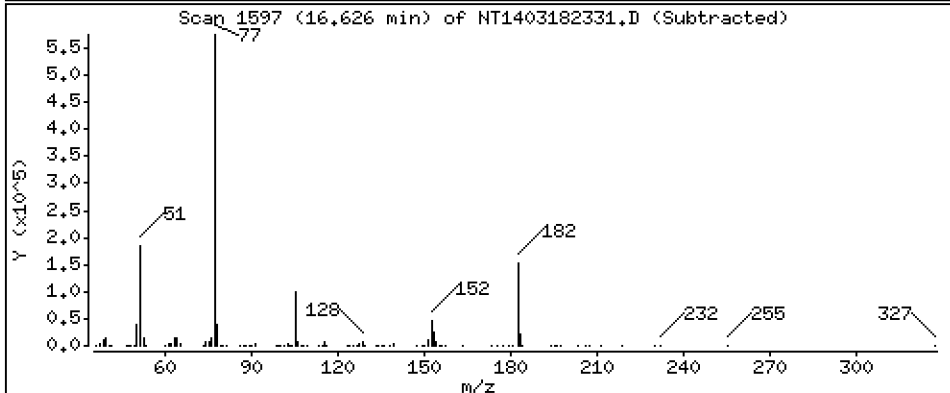
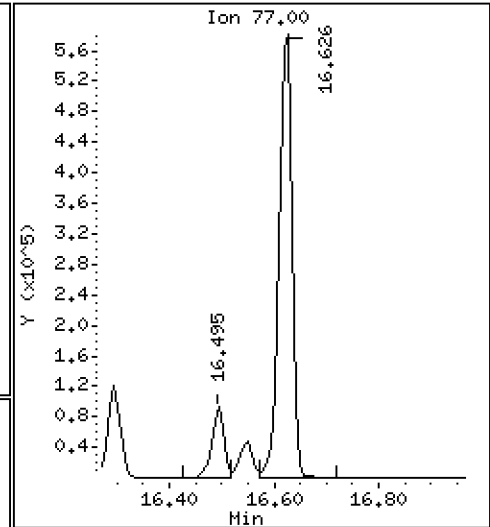
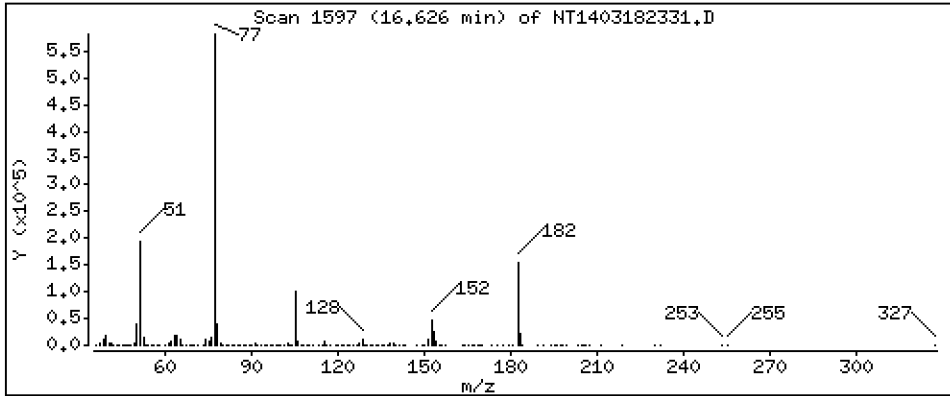
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,700 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

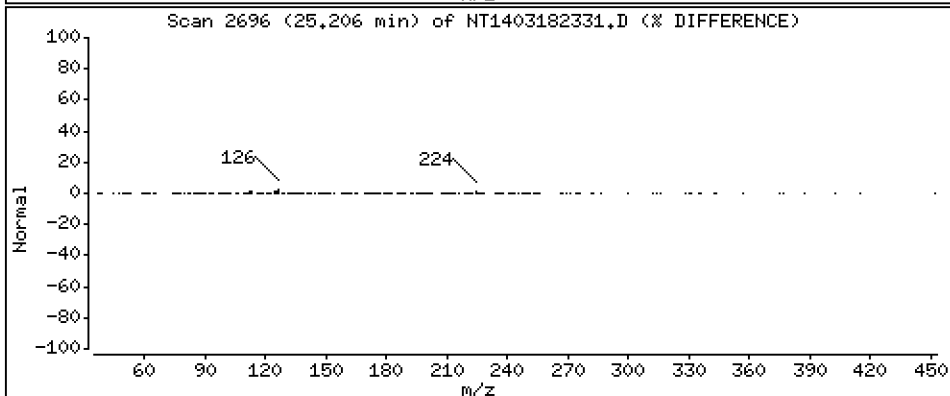
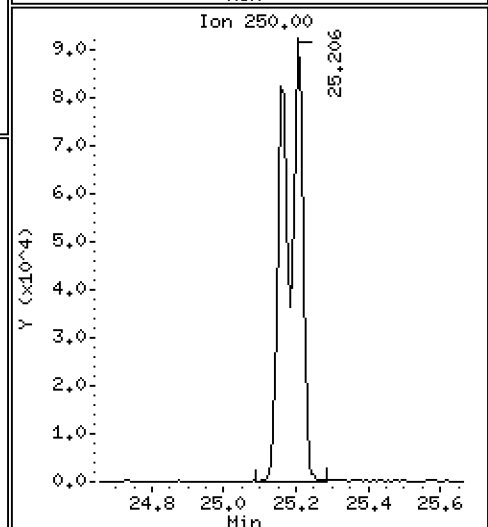
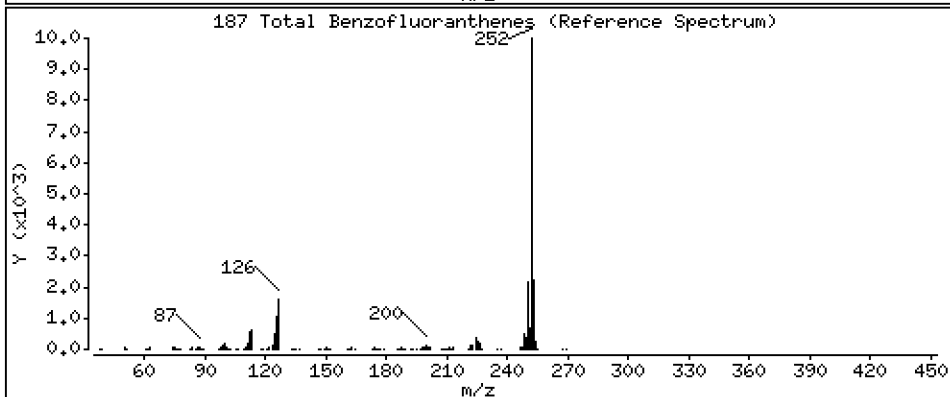
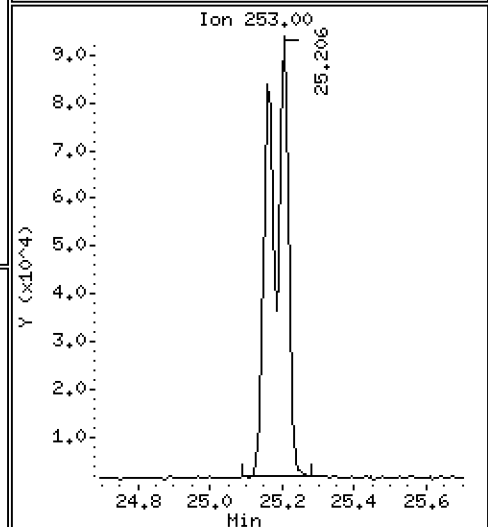
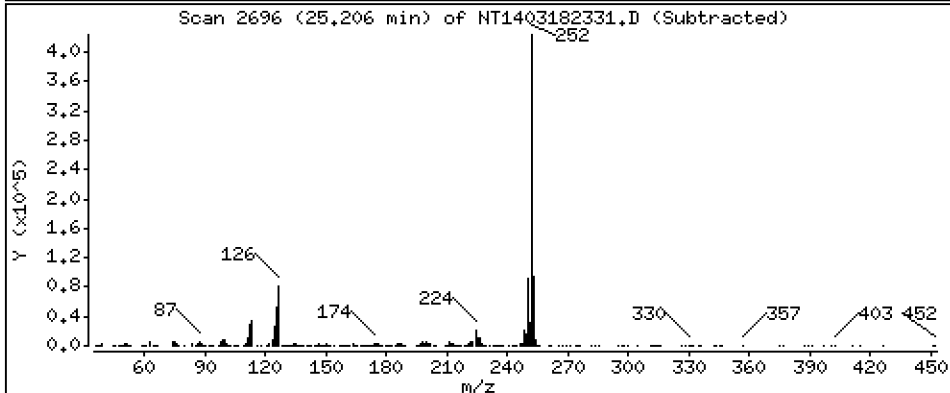
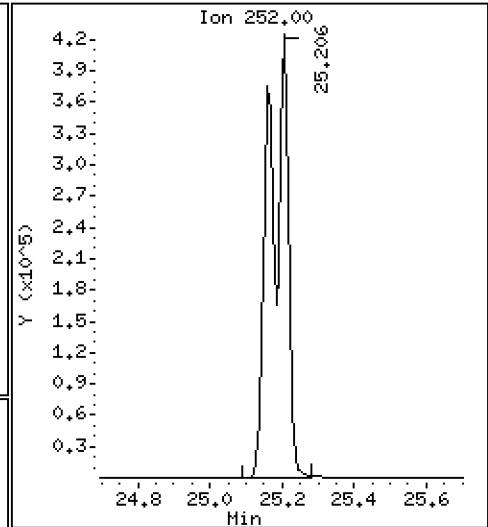
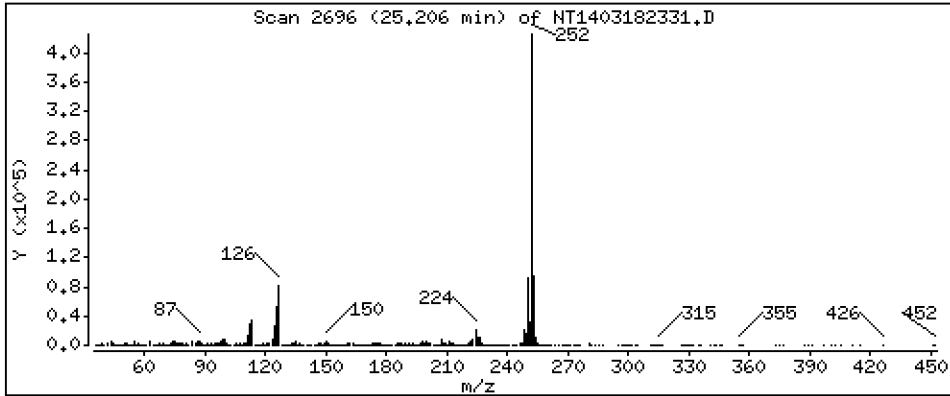
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 10,06 ug/mL



Date : 19-MAR-2023 11:04

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-CCV1

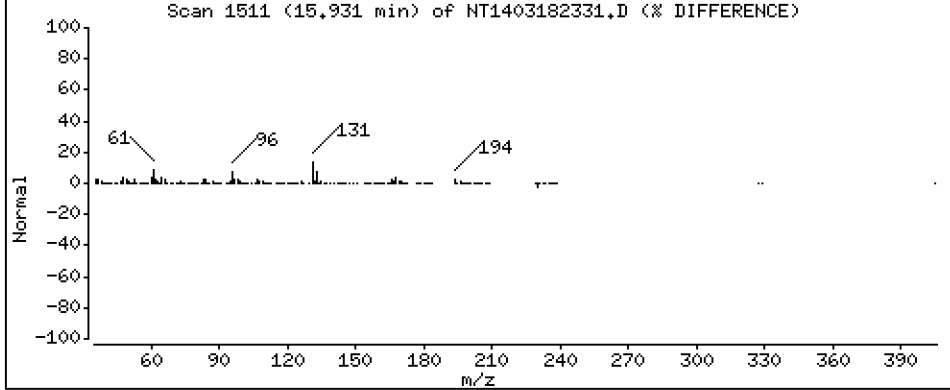
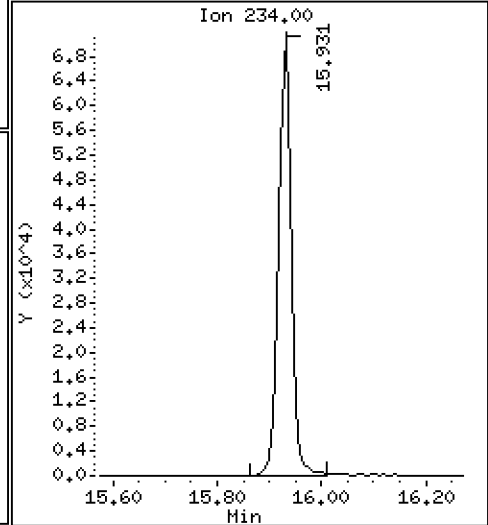
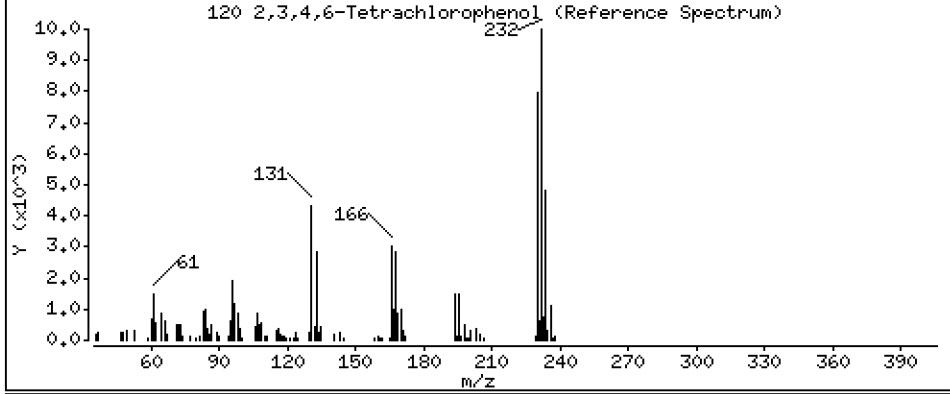
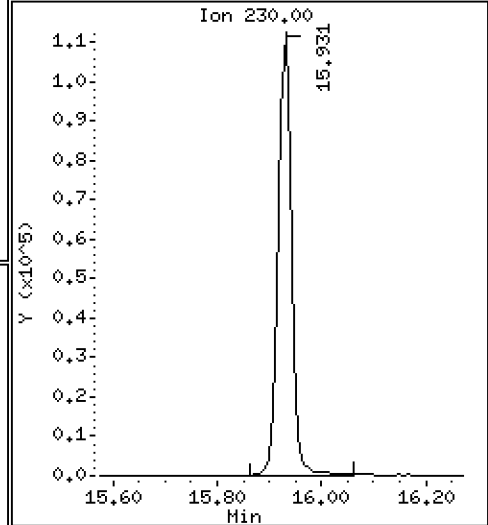
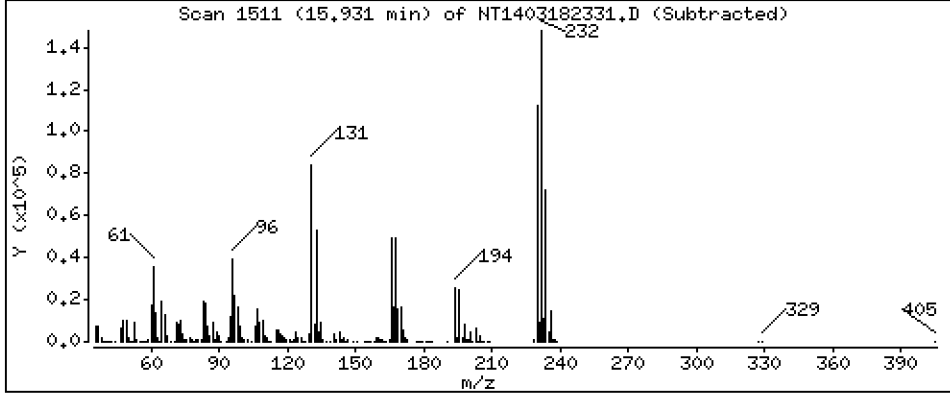
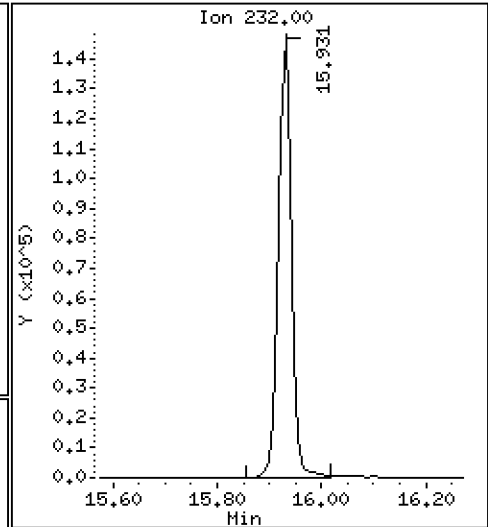
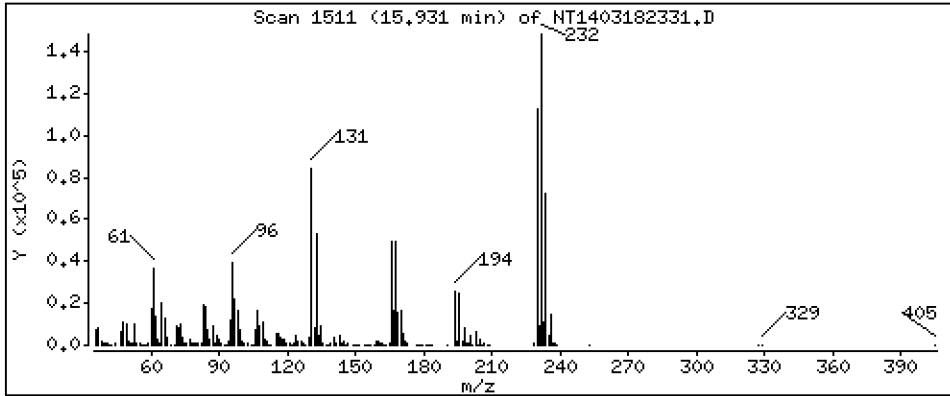
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 4,658 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182331.D
 Lab Smp Id: SLC0355-CCV1
 Inj Date : 19-MAR-2023 11:04 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0355-CCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 08:01 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.844	6.837	(1.000)	573379	7.03389	7.034
\$ 2 Phenol-d5	99		8.428	8.420	(1.000)	769227	7.16744	7.167
3 Phenol	94		8.451	8.444	(1.000)	530821	4.65395	4.654
\$ 5 2-Chlorophenol-d4	132		8.706	8.698	(1.000)	634155	7.49499	7.495
4 Bis(2-Chloroethyl)ether	93		8.613	8.613	(1.000)	386692	4.70817	4.708
6 2-Chlorophenol	128		8.737	8.729	(1.000)	439561	4.89640	4.896
7 1,3-Dichlorobenzene	146		9.008	9.000	(1.000)	445072	4.89766	4.898
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	239978	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.101	9.093	(1.000)	430157	4.91458	4.915
\$ 10 1,2-Dichlorobenzene-d4	152		9.435	9.427	(1.000)	282196	4.99227	4.992
12 1,2-Dichlorobenzene	146		9.458	9.450	(1.000)	426709	4.93225	4.932
11 Benzyl alcohol	108		9.341	9.342	(1.000)	251618	4.73866	4.739
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.637	(1.063)	125273	5.33571	5.336 (M)
13 2-Methylphenol	108		9.567	9.559	(1.000)	394829	4.89620	4.896
17 Hexachloroethane	117		10.056	10.048	(1.000)	187207	5.00092	5.001
16 N-Nitroso-di-n-propylamine	70		9.908	9.901	(1.000)	307515	4.84357	4.844
15 4-Methylphenol	108		9.838	9.831	(1.000)	424848	4.44972	4.450
\$ 18 Nitrobenzene-d5	82		10.172	10.164	(0.879)	495859	4.96516	4.965
19 Nitrobenzene	77		10.203	10.195	(0.882)	470588	4.84080	4.841
20 Isophorone	82		10.653	10.653	(0.921)	685034	5.16098	5.161
21 2-Nitrophenol	139		10.839	10.832	(0.937)	253280	4.53094	4.531
22 2,4-Dimethylphenol	107		10.894	10.886	(0.942)	748286	8.99960	9.000
23 Bis(2-Chloroethoxy)methane	93		11.087	11.080	(0.959)	418844	4.68715	4.687
24 Benzoic acid	105		11.126	11.118	(0.962)	1149481	17.0555	17.06
25 2,4-Dichlorophenol	162		11.297	11.289	(0.977)	709308	10.7269	10.73
26 1,2,4-Trichlorobenzene	180		11.482	11.475	(0.993)	367646	4.52275	4.523
* 27 Naphthalene-d8	136		11.567	11.560	(1.000)	943704	4.00000	
28 Naphthalene	128		11.614	11.606	(1.004)	1234701	4.89737	4.897
29 4-Chloroaniline	127		11.737	11.730	(1.015)	1089760	10.3253	10.33
30 Hexachlorobutadiene	225		11.977	11.969	(1.035)	188412	5.13363	5.134
31 4-Chloro-3-methylphenol	107		12.704	12.697	(1.098)	791723	9.90835	9.908
32 2-Methylnaphthalene	142		13.014	13.006	(1.125)	865520	4.92264	4.923
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	222489	5.38731	5.387

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	505014	10.0195	10.02
35 2,4,5-Trichlorophenol	196	13.710	13.703	(0.902)	540500	10.2909	10.29
§ 36 2-Fluorobiphenyl	172	13.795	13.796	(0.908)	892915	4.96244	4.962
37 2-Chloronaphthalene	162	14.012	14.004	(0.922)	759643	4.92570	4.926
38 2-Nitroaniline	65	14.267	14.260	(0.939)	577996	9.70602	9.706
39 Dimethylphthalate	163	14.701	14.693	(0.967)	818118	4.93791	4.938
40 Acenaphthylene	152	14.887	14.879	(0.980)	1265287	4.88460	4.885
41 2,6-Dinitrotoluene	165	14.840	14.833	(0.977)	392587	10.2573	10.26
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	496853	4.00000	
43 3-Nitroaniline	138	15.127	15.119	(0.995)	479907	9.08891	9.089
44 Acenaphthene	153	15.266	15.258	(1.005)	731127	4.83427	4.834
45 2,4-Dinitrophenol	184	15.335	15.335	(1.009)	446187	14.6857	14.69
46 Dibenzofuran	168	15.590	15.591	(1.026)	1055348	4.88781	4.888
47 4-Nitrophenol	109	15.451	15.444	(1.017)	234313	8.38370	8.384
48 2,4-Dinitrotoluene	165	15.652	15.645	(1.030)	541136	9.97402	9.974
50 Diethylphthalate	149	16.163	16.155	(1.064)	925464	5.40270	5.403
49 Fluorene	166	16.309	16.302	(1.073)	970558	4.74212	4.742
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	422800	4.81251	4.813
52 4-Nitroaniline	138	16.402	16.394	(1.079)	406661	8.85494	8.855
53 4,6-Dinitro-2-methylphenol	198	16.494	16.487	(0.904)	580615	19.7642	19.76
54 N-Nitrosodiphenylamine	169	16.548	16.541	(0.907)	596988	5.31549	5.315
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	147845	7.56827	7.568
56 4-Bromophenyl-phenylether	248	17.304	17.296	(0.948)	211818	5.59403	5.594
57 Hexachlorobenzene	284	17.621	17.621	(0.966)	211831	5.30195	5.302
58 Pentachlorophenol	266	17.977	17.969	(0.985)	239557	8.49906	8.499
* 59 Phenanthrene-d10	188	18.248	18.240	(1.000)	826898	4.00000	
60 Phenanthrene	178	18.294	18.286	(1.003)	1126324	4.76740	4.767
61 Anthracene	178	18.387	18.379	(1.008)	1135164	4.98718	4.987
62 Carbazole	167	18.712	18.704	(1.025)	906385	4.47563	4.476
63 Di-n-butylphthalate	149	19.509	19.501	(1.069)	1339723	5.21903	5.219
64 Fluoranthene	202	20.677	20.677	(0.888)	1045751	5.98369	5.984
65 Pyrene	202	21.103	21.103	(0.906)	1025661	5.72275	5.723
§ 66 Terphenyl-d14	244	21.389	21.381	(0.918)	699422	5.76463	5.765
67 Butylbenzylphthalate	149	22.310	22.303	(0.958)	503889	6.41725	6.417
68 Benzo(a)anthracene	228	23.270	23.263	(0.999)	785076	4.95656	4.957
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	429570	4.00000	
70 3,3'-Dichlorobenzidine	252	23.224	23.216	(0.997)	713079	14.9856	14.99
71 Chrysene	228	23.340	23.340	(1.002)	737367	5.14380	5.144
72 bis(2-Ethylhexyl)phthalate	149	23.332	23.325	(0.960)	660391	5.48980	5.490
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	913803	4.00000	
73 Di-n-octylphthalate	149	24.331	24.323	(1.001)	1124492	4.78691	4.787
74 Benzo(b)fluoranthene	252	25.159	25.160	(0.970)	748575	4.81314	4.813
75 Benzo(k)fluoranthene	252	25.206	25.198	(0.972)	812246	5.26838	5.268
76 Benzo(a)pyrene	252	25.825	25.818	(0.996)	680501	5.11668	5.117
* 77 Perylene-d12	264	25.934	25.934	(1.000)	440126	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.626	28.611	(1.104)	520664	3.59689	3.597
79 Dibenzo(a,h)anthracene	278	28.634	28.626	(1.104)	471792	3.86726	3.867
80 Benzo(g,h,i)perylene	276	29.418	29.411	(1.134)	349341	2.92833	2.928
90 N-Nitrosodimethylamine	74	4.728	4.728	(1.000)	425452	8.24064	8.241
91 Aniline	93	8.521	8.521	(1.000)	1091750	9.51679	9.517
93 Benzidine	184	20.909	20.902	(0.898)	429599	6.10826	6.108
103 Pyridine	79	4.751	4.751	(1.000)	629154	3.93508	3.935
105 1-methylnaphthalene	142	13.238	13.231	(1.144)	790880	4.96485	4.965
111 Azobenzene (1,2-DP-Hydrazine)	77	16.625	16.618	(1.094)	961418	4.70013	4.700

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.206	25.198	(0.972)	1484265	10.0645	10.06
120 2,3,4,6-Tetrachlorophenol	232	15.931	15.923	(1.048)	240956	4.65809	4.658

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 19-MAR-2023
 Lab File ID: NT1403182331.D Calibration Time: 03:16
 Lab Smp Id: SLC0355-CCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	237594	118797	475188	239978	1.00
27 Naphthalene-d8	944151	472076	1888302	943704	-0.05
42 Acenaphthene-d10	498100	249050	996200	496853	-0.25
59 Phenanthrene-d10	845417	422709	1690834	826898	-2.19
69 Chrysene-d12	410836	205418	821672	429570	4.56
134 Di-n-octylphthala	914780	457390	1829560	913803	-0.11
77 Perylene-d12	441517	220759	883034	440126	-0.32

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.07	0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403182331.D

Lab ID: SLC0355-CCV1
nt14.i, ABN.m, 19-MAR-2023 11:04

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

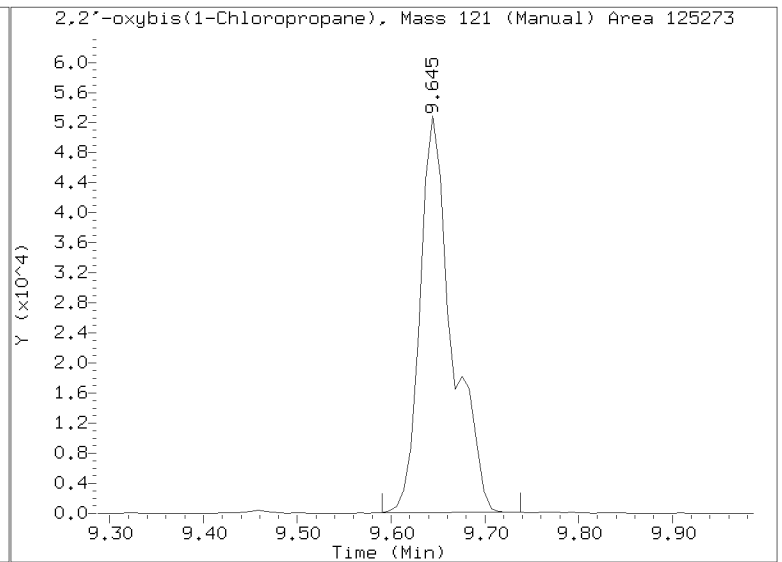
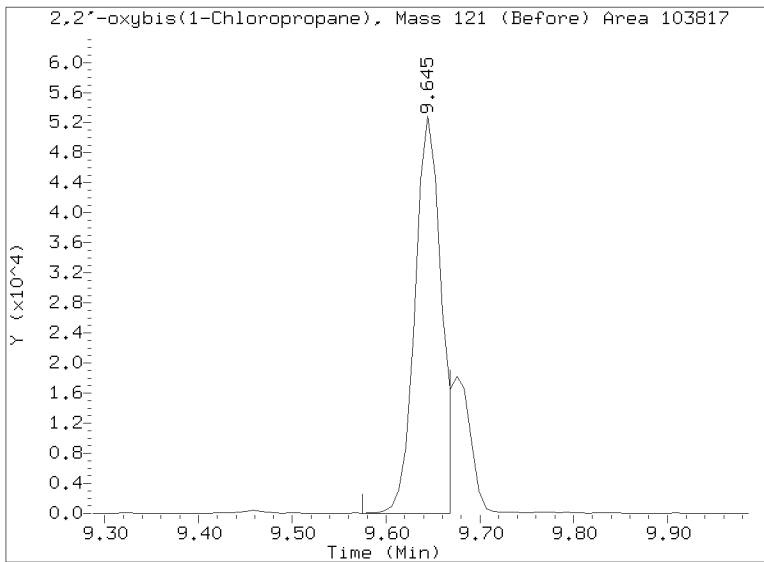
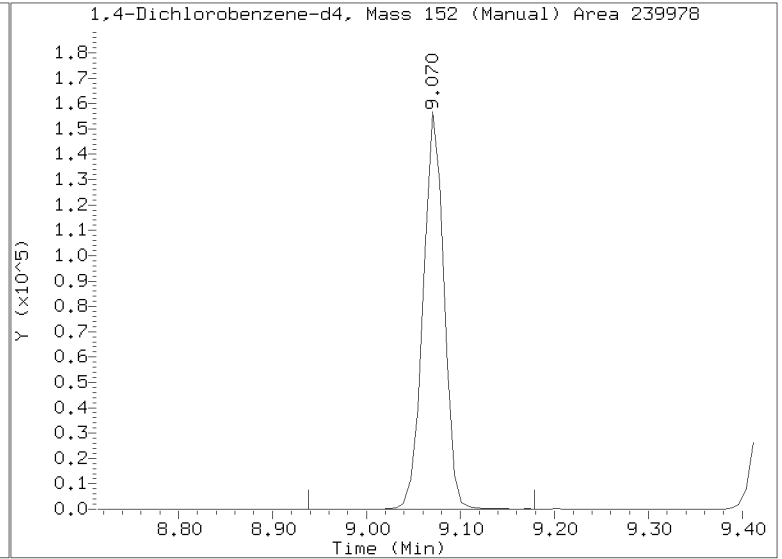
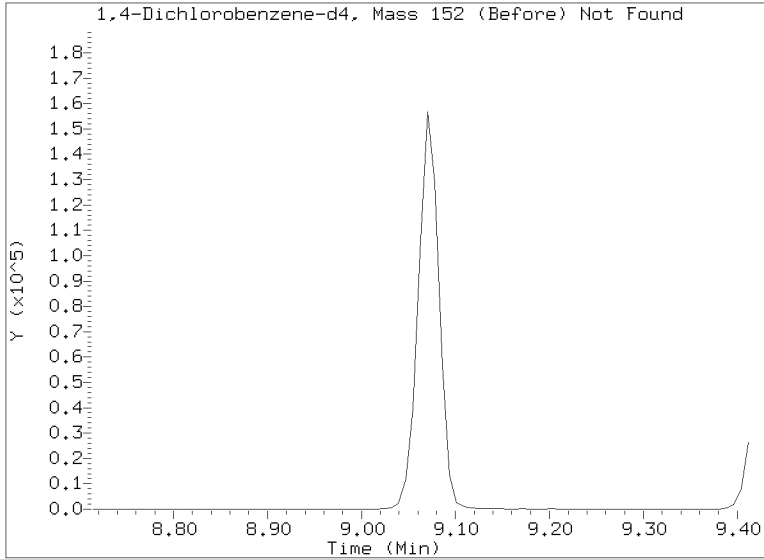
RRT check based on Ccal File: NT1403182318.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182331.D
Injection Date: 19-MAR-2023 11:04
Lab ID:SLC0355-CCV1 Client ID:
Report Date: 03/23/2023 08:03





**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00048

Lab File ID: NT1403182320.D

Calibration Date: 03/15/2023

Sequence: SLC0355

Injection Date: 03/19/23

Lab Sample ID: SLC0355-LCV2

Injection Time: 04:28

Sequence Name: ABN 0.2

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.9011440	1.6346640		-14.0	+/-50
4-Methylphenol	A	0.20000	0.1	1.5914380	1.1906820		-25.2	+/-50
Naphthalene	A	0.20000	0.2	1.0686200	1.1410650		6.8	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7452524	0.7485335		0.4	+/-50
Acenaphthylene	A	0.20000	0.2	2.0854140	2.1513560		3.2	+/-50
Dimethylphthalate	A	0.20000	0.2	1.3338450	1.3865300		4.0	+/-50
Acenaphthene	A	0.20000	0.2	1.2175690	1.2357740		1.5	+/-50
Dibenzofuran	A	0.20000	0.2	1.7382550	1.7731100		2.0	+/-50
Fluorene	A	0.20000	0.2	1.6477120	1.6727700		1.5	+/-50
Phenanthrene	A	0.20000	0.2	1.1428510	1.1373620		-0.5	+/-50
Anthracene	A	0.20000	0.2	1.1010610	1.0311580		-6.4	+/-50
Fluoranthene	A	0.20000	0.2	1.6273660	2.0011510		23.0	+/-50
Pyrene	A	0.20000	0.2	1.6688810	2.0115850		20.5	+/-50
Butylbenzylphthalate	A	0.20000	0.3	0.7311588	0.9601461		31.3	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4748830	1.5875010		7.6	+/-50
Chrysene	A	0.20000	0.2	1.3348290	1.3818910		3.5	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5265649	0.6014775		14.2	+/-50
Benzo(a)fluoranthene, Total	A	0.40000	0.4	1.3424190	1.2899610		-3.8	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2087150	1.2001850		-0.7	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.3155660	1.1669810		-11.3	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.1087420	1.0666840		-3.8	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.0842080	0.8480381		-21.8	+/-50
2-Fluorophenol	A	0.30000	0.276	1.3587350	1.2506810		-8.0	+/-50
Phenol-d5	A	0.30000	0.264	1.7888720	1.5714960		-12.2	+/-50
2-Chlorophenol-d4	A	0.30000	0.279	1.4103050	1.3126960		-6.9	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.210	0.9421955	0.9896292		5.0	+/-50
Nitrobenzene-d5	A	0.20000	0.200	0.4233007	0.4225032		-0.2	+/-50
2-Fluorobiphenyl	A	0.20000	0.212	1.4485960	1.5371220		6.1	+/-50
2,4,6-Tribromophenol	A	0.30000	0.238	0.1518639	0.1248638		-20.6	+/-50
p-Terphenyl-d14	A	0.20000	0.247	1.1297810	1.3970010		23.7	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt14,1\20230318,16\NT1403182320.D

Date: 18-MAR-2023 04:28

Client ID:

Sample Info: SLC0355-LCW2

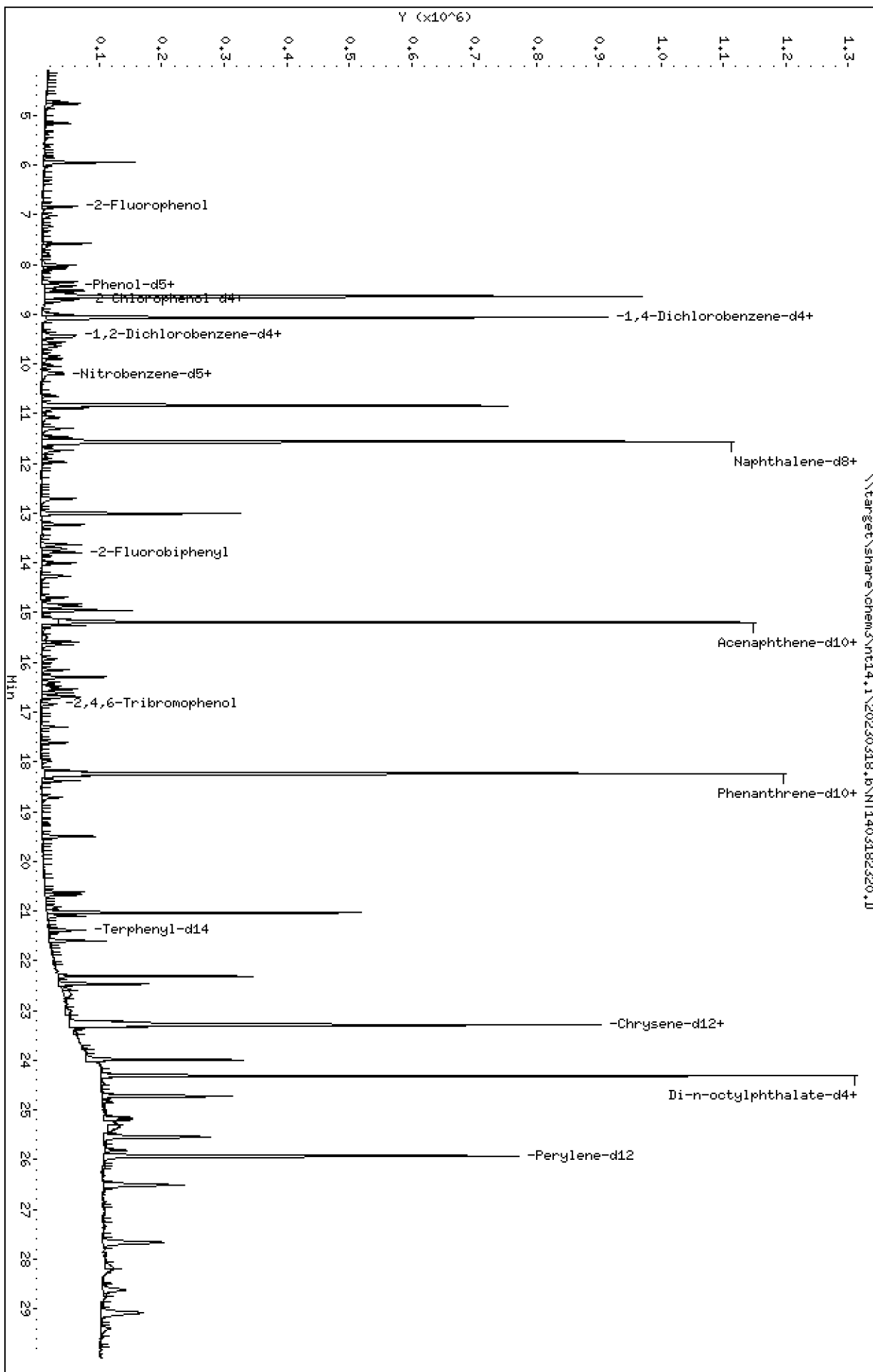
Column phase: ZB-5msi

Instrument: nt14,1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

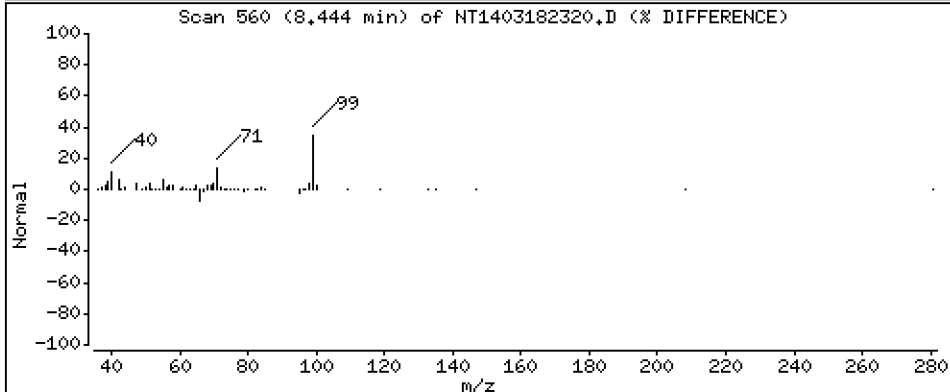
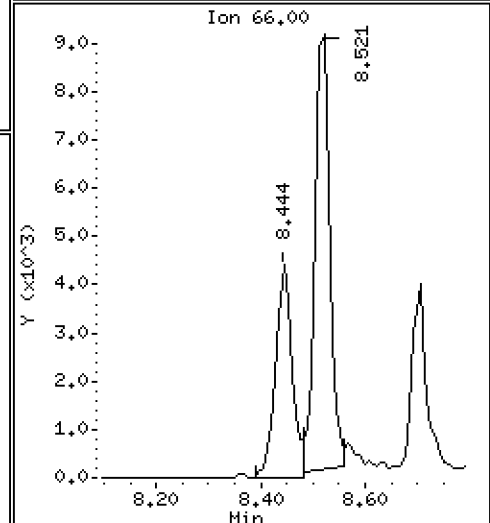
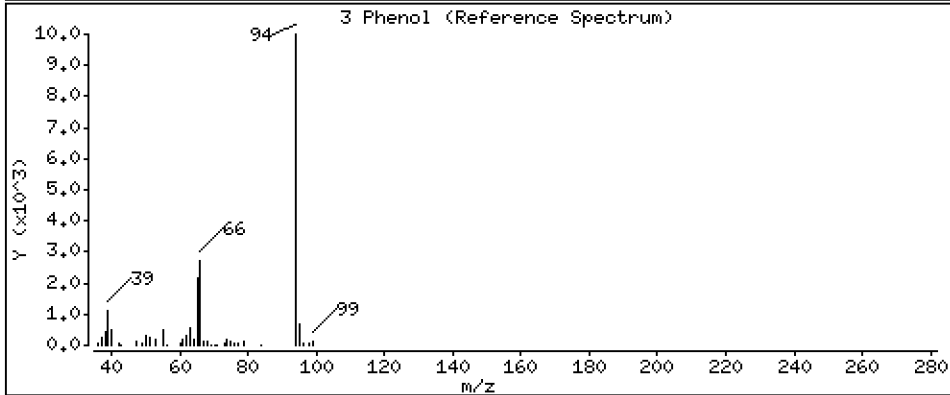
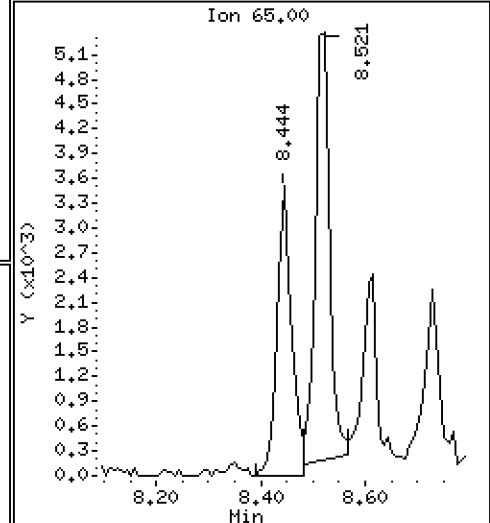
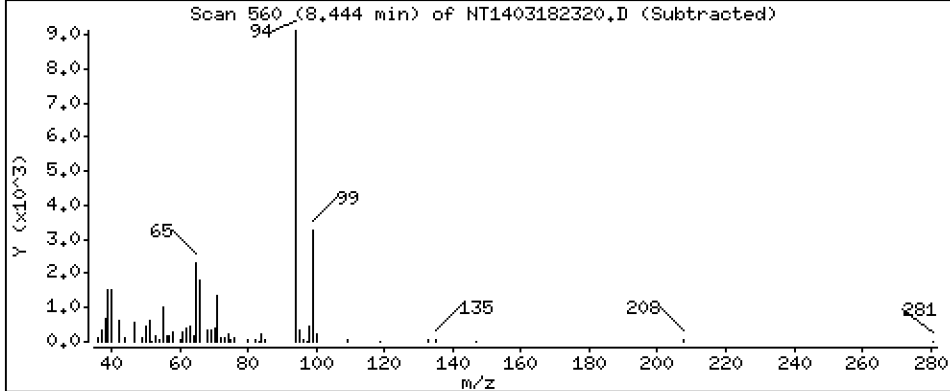
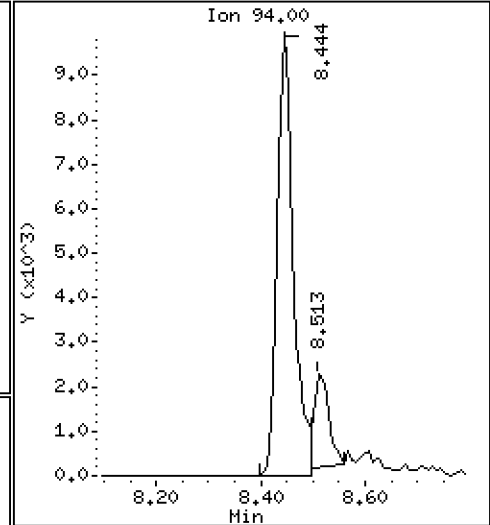
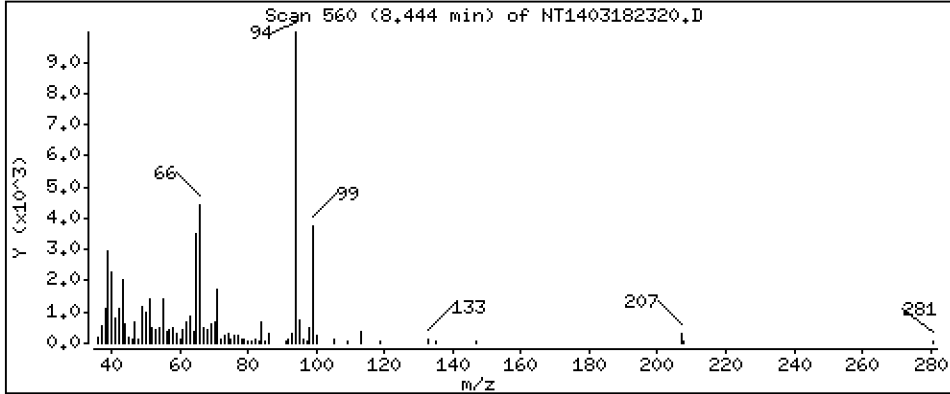
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1720 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

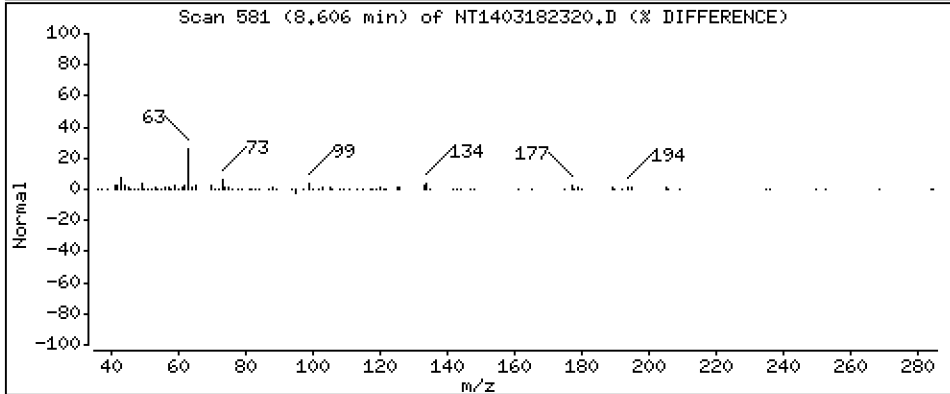
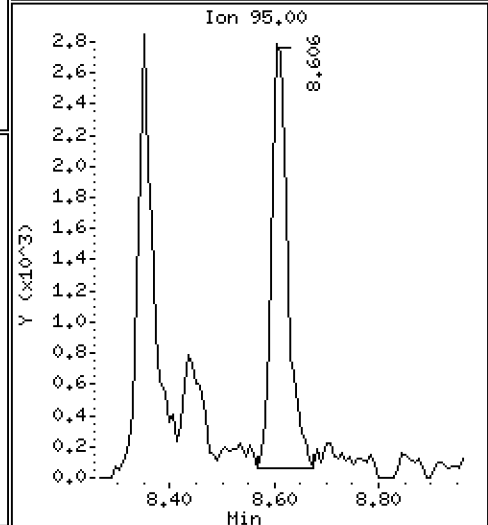
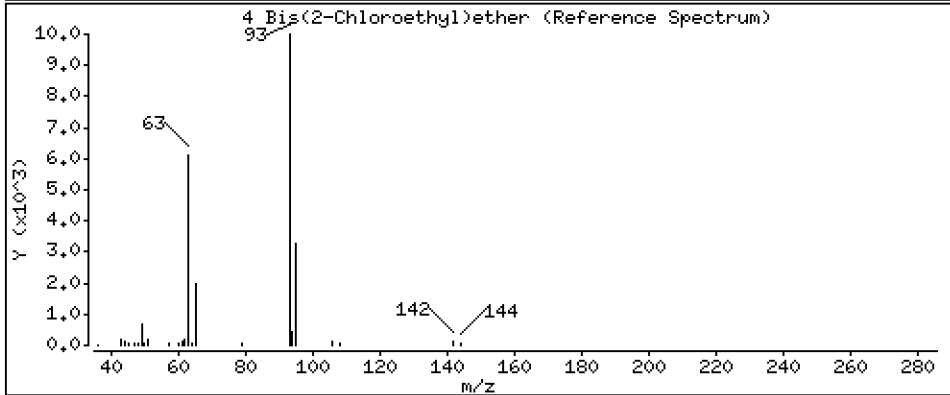
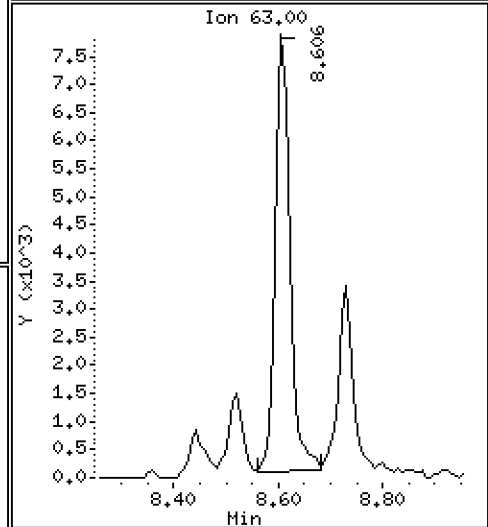
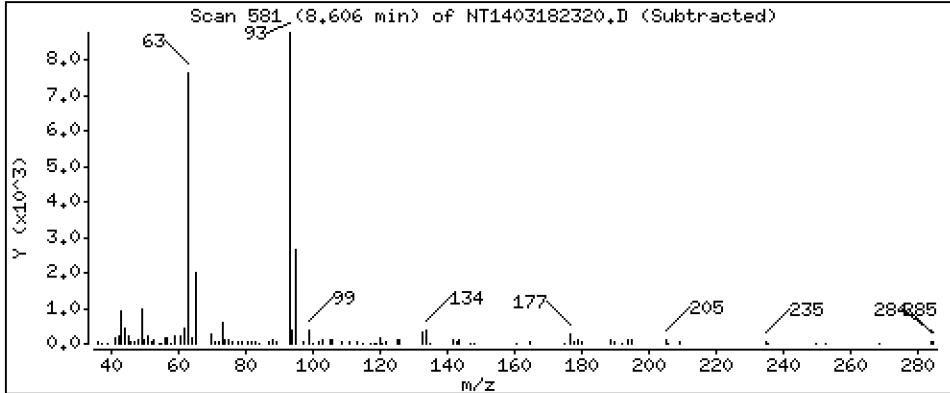
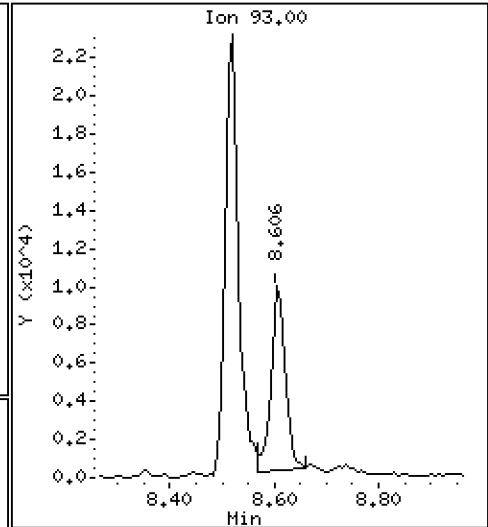
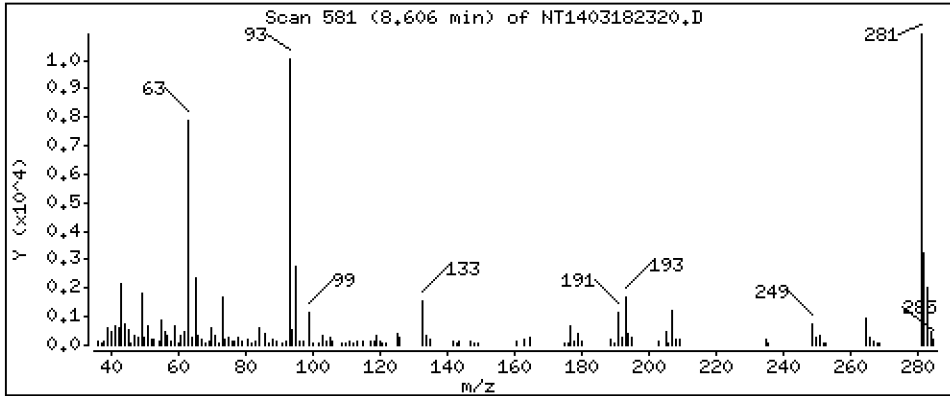
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,2035 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

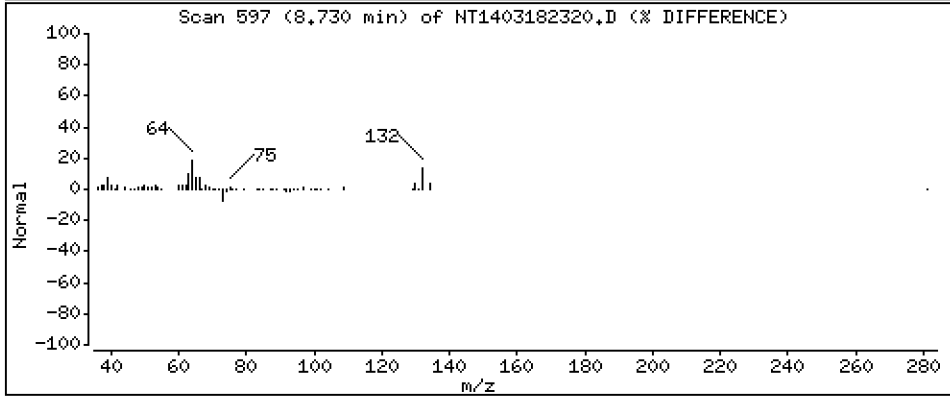
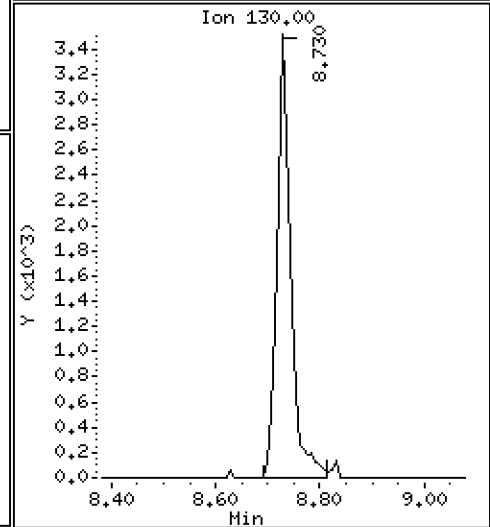
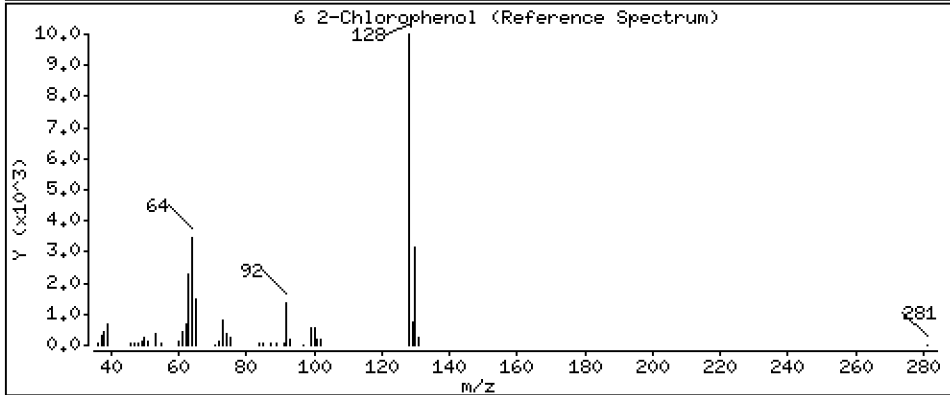
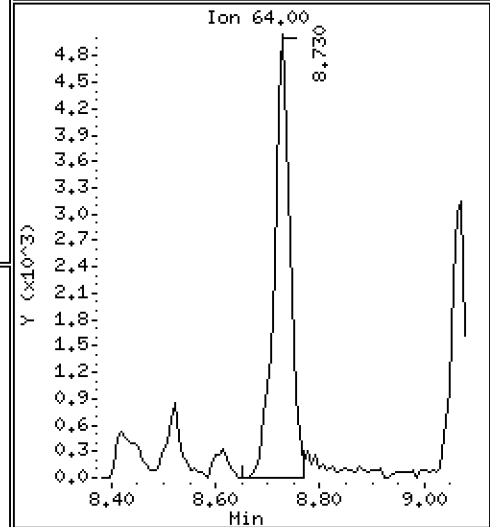
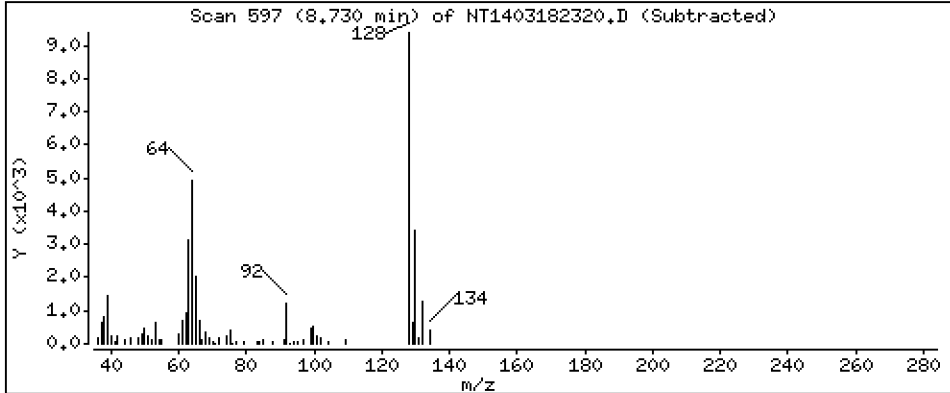
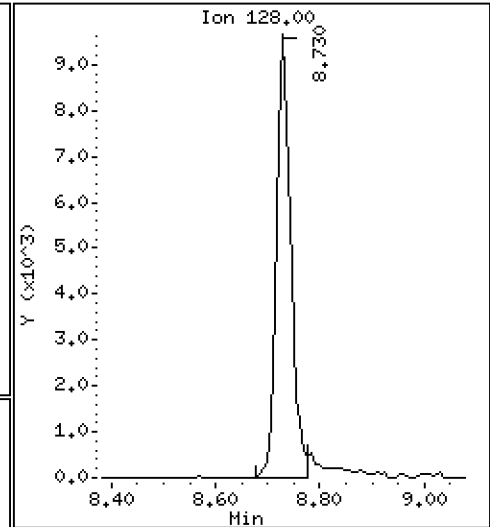
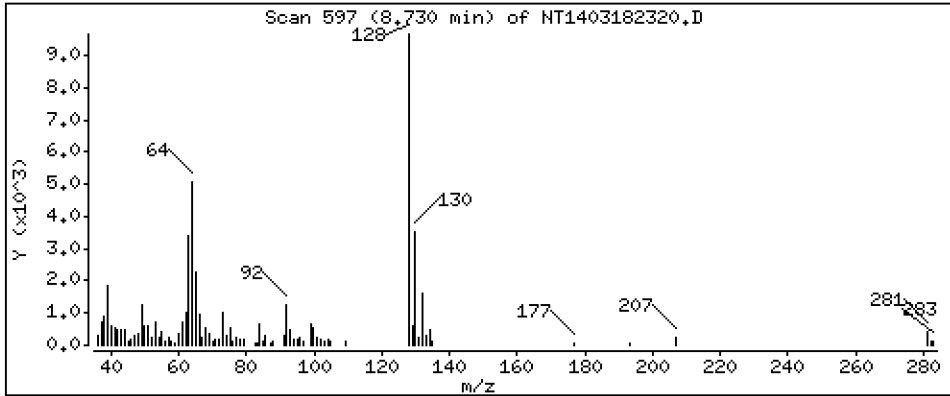
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1894 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

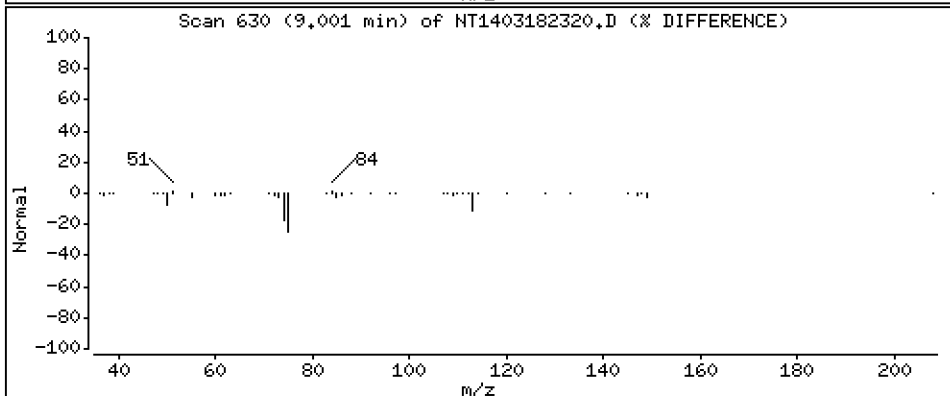
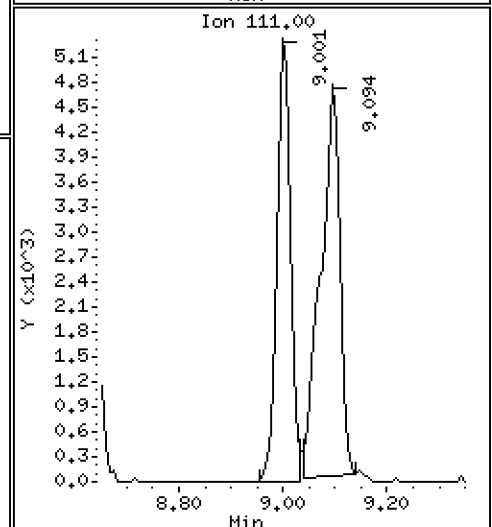
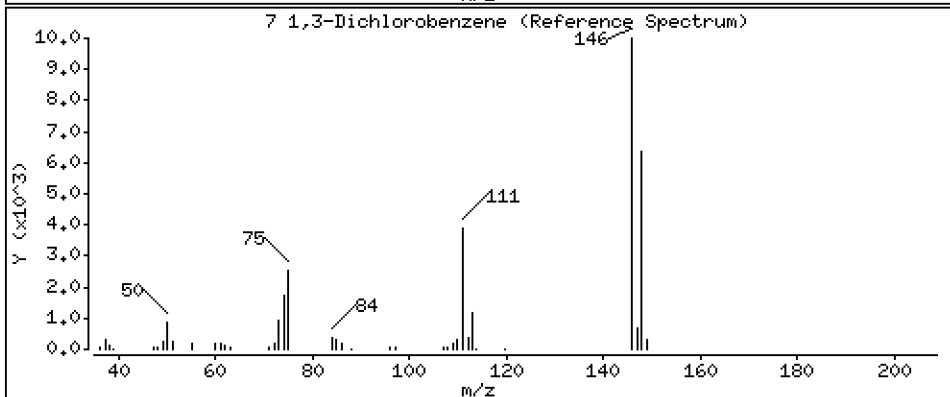
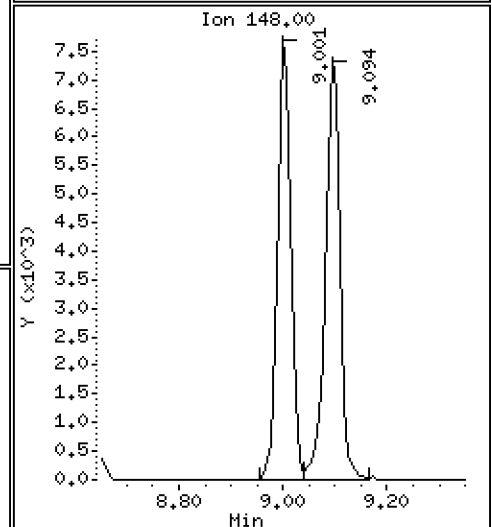
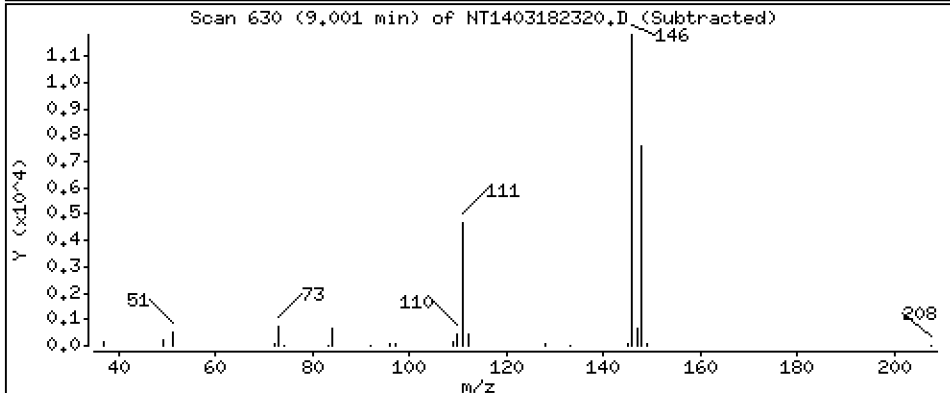
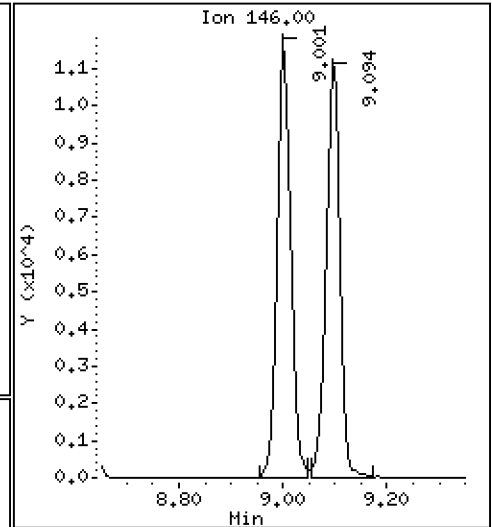
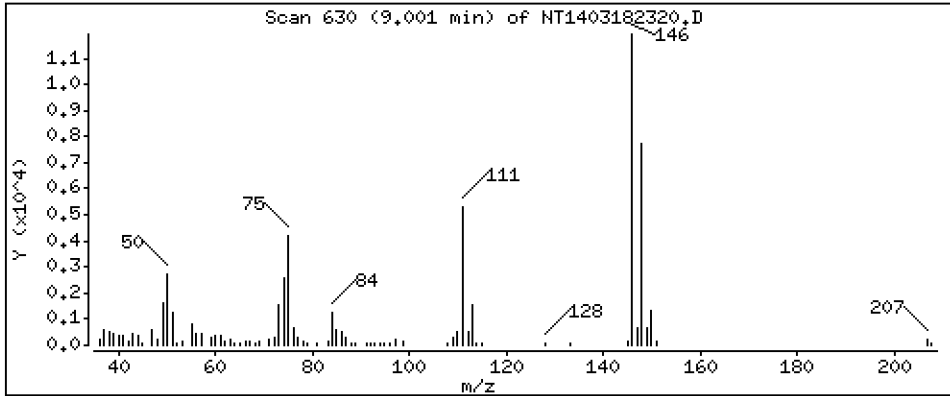
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2138 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

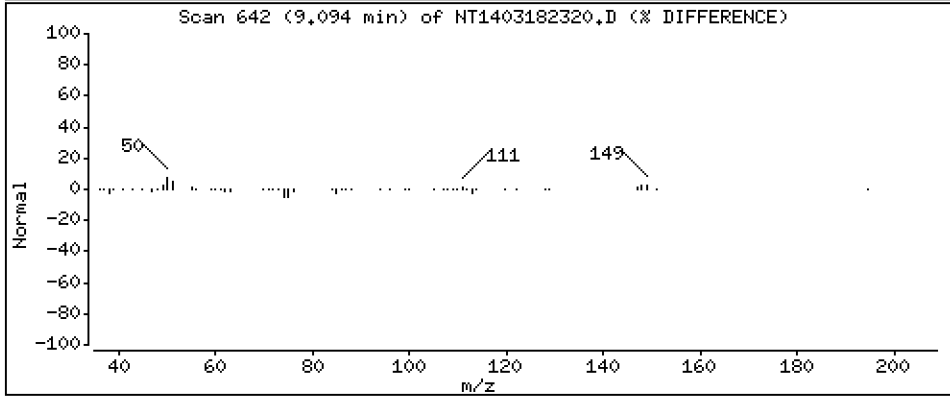
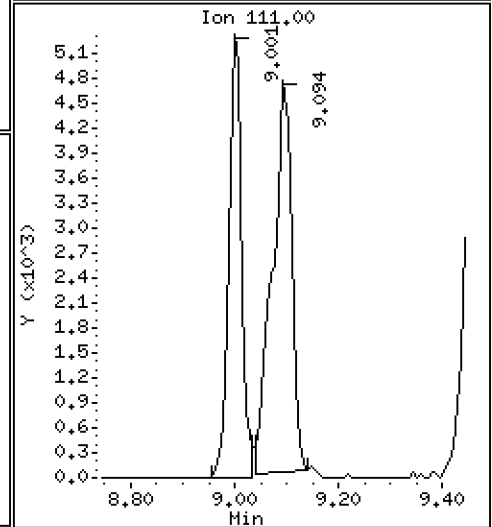
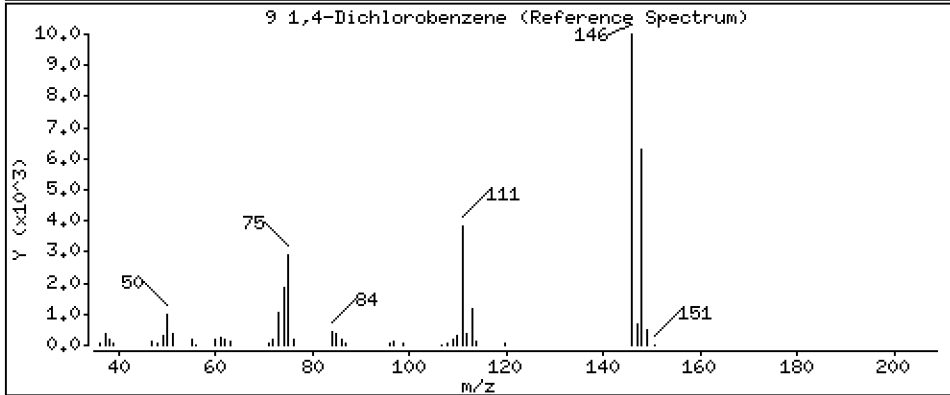
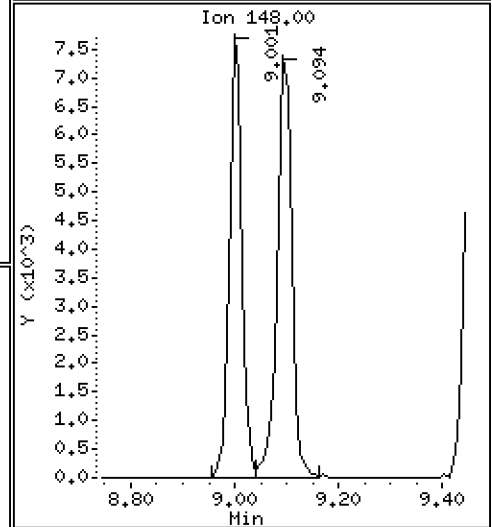
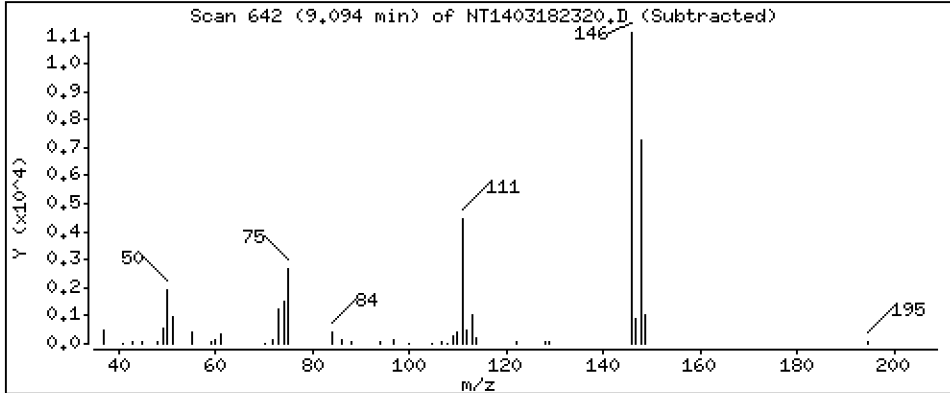
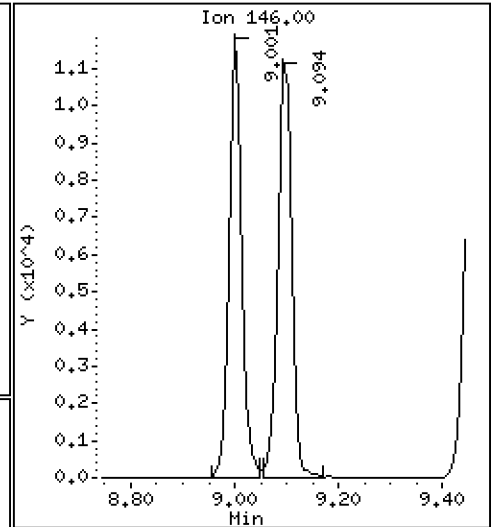
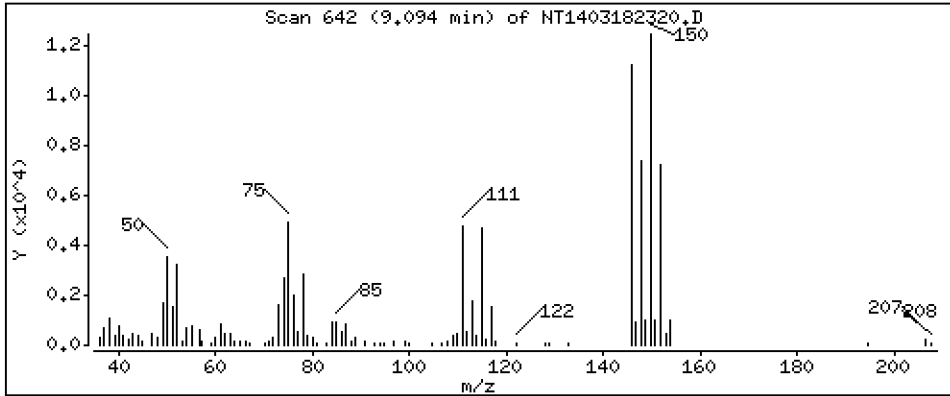
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2120 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

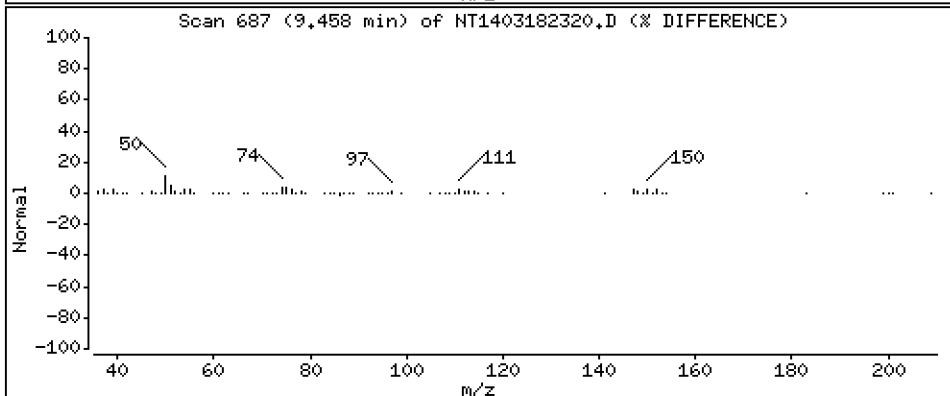
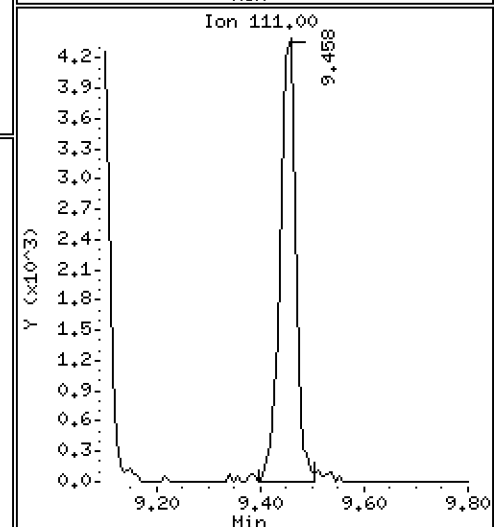
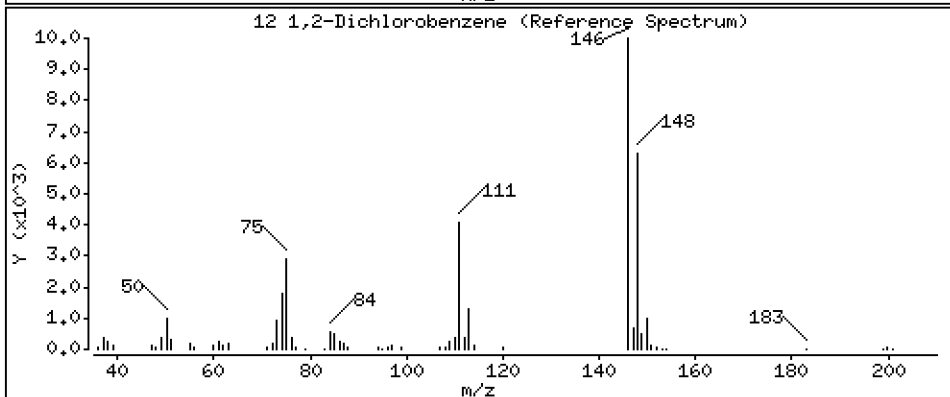
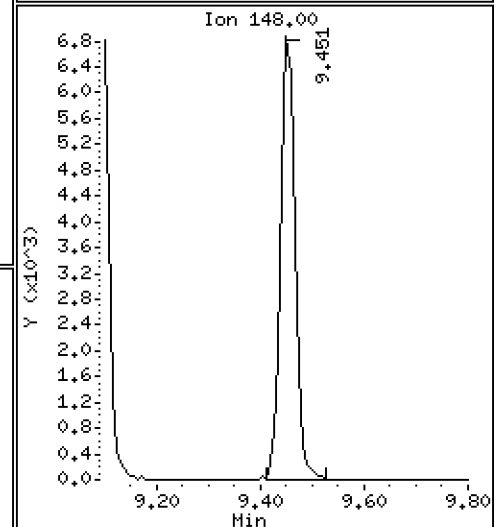
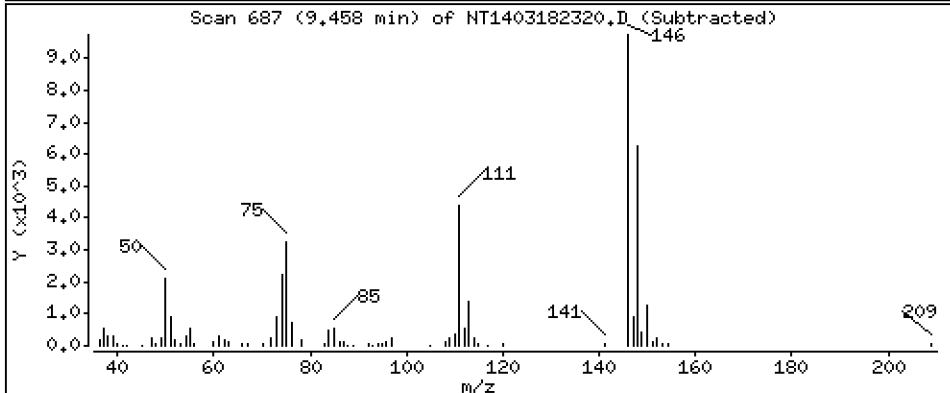
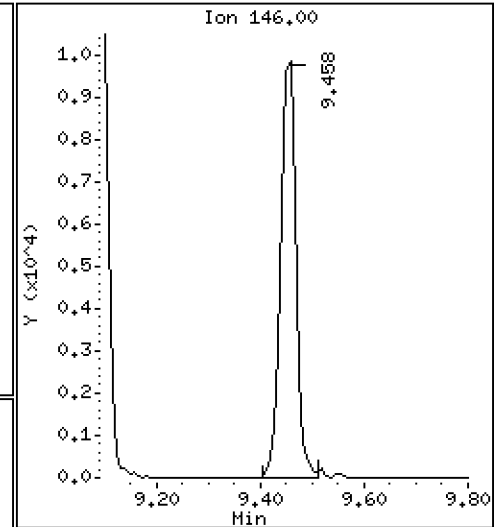
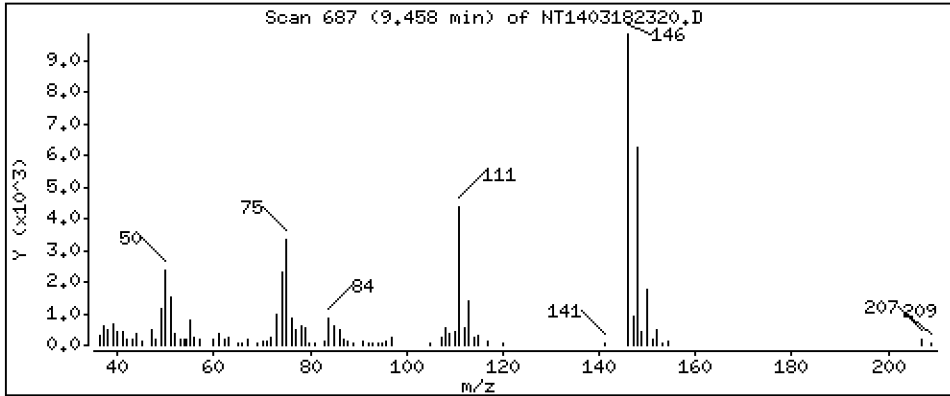
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2105 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

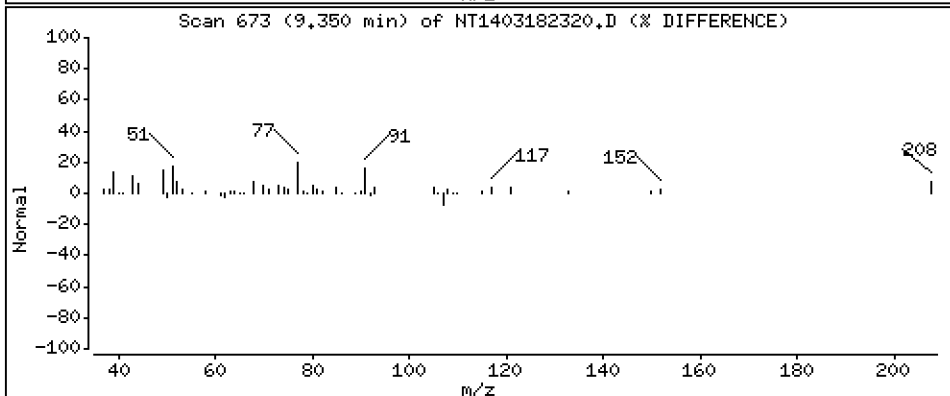
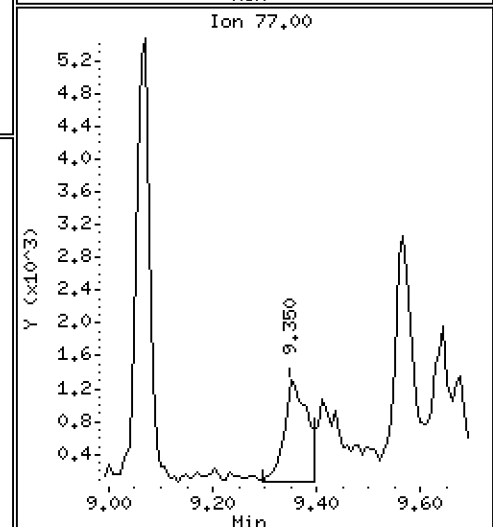
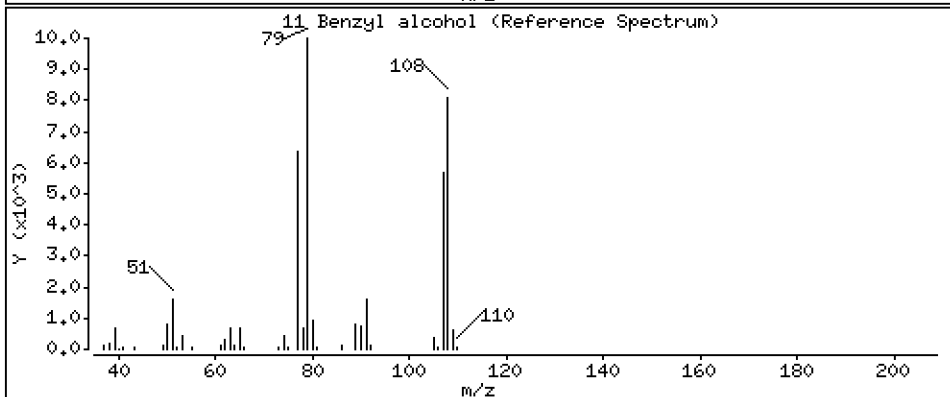
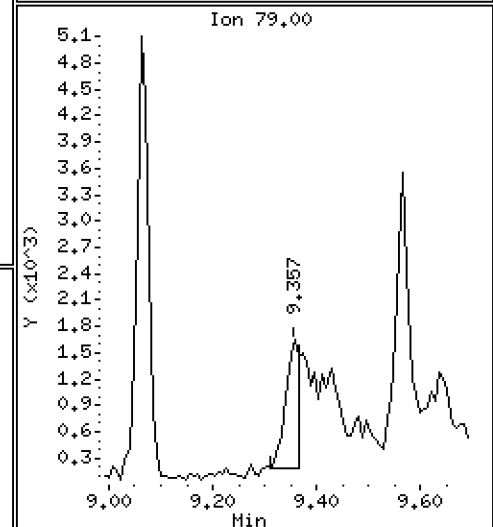
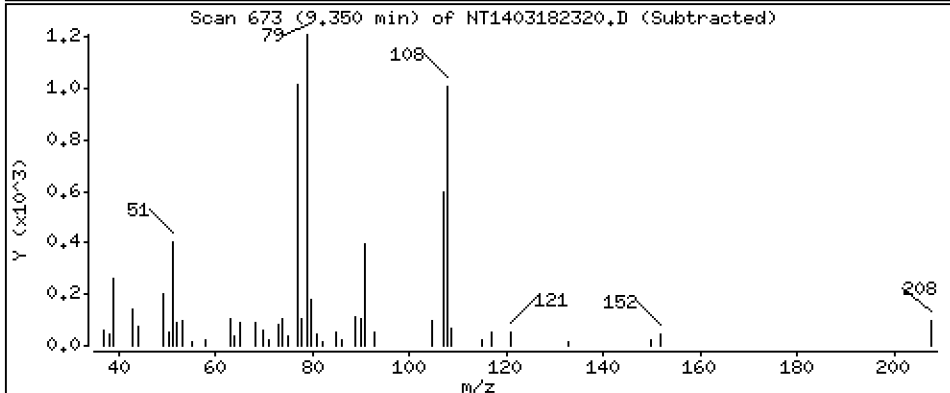
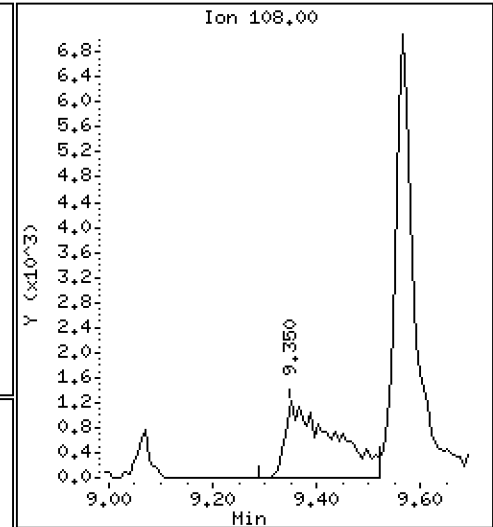
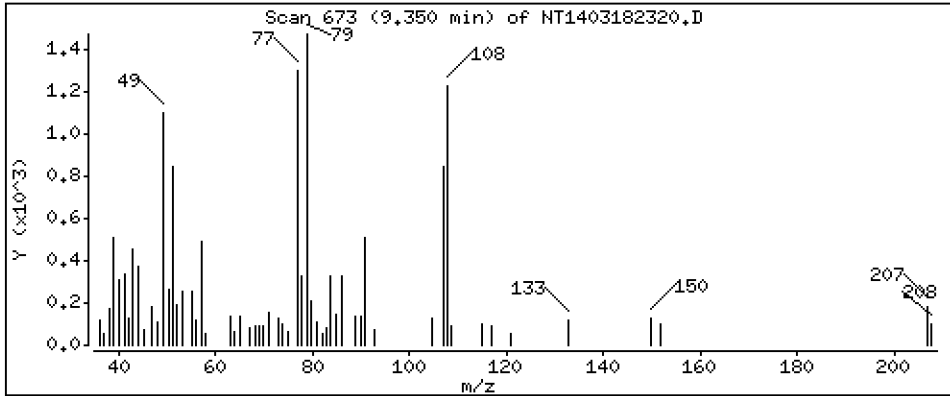
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1385 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

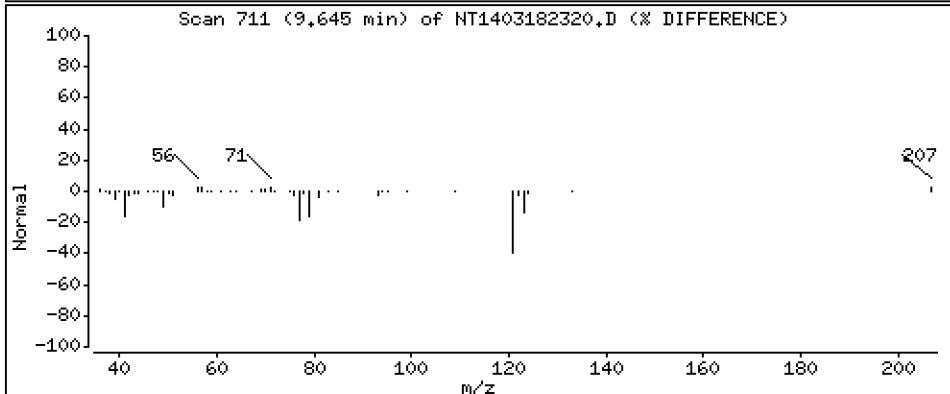
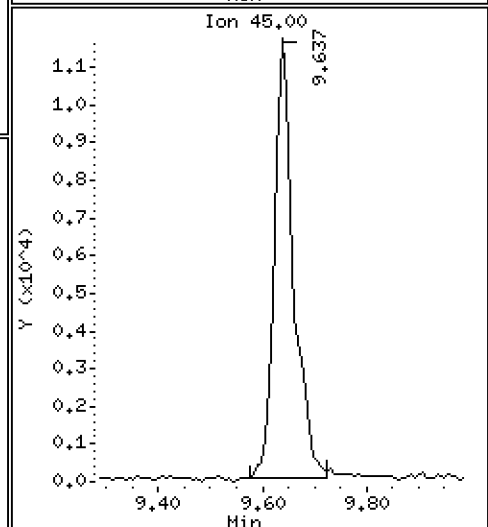
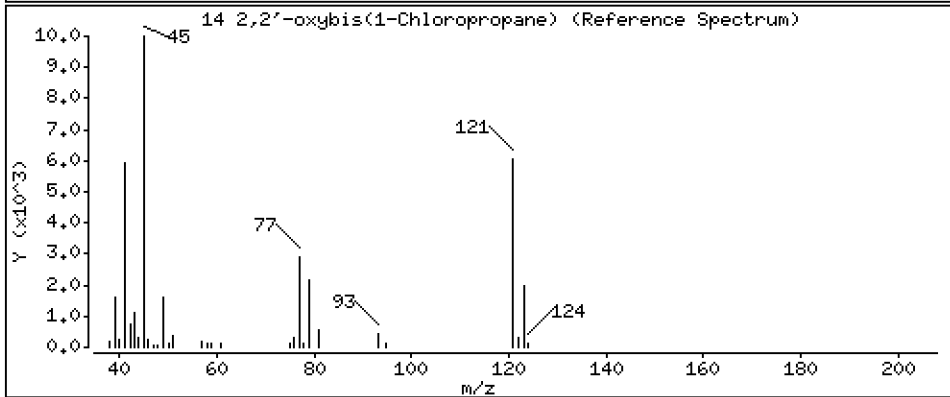
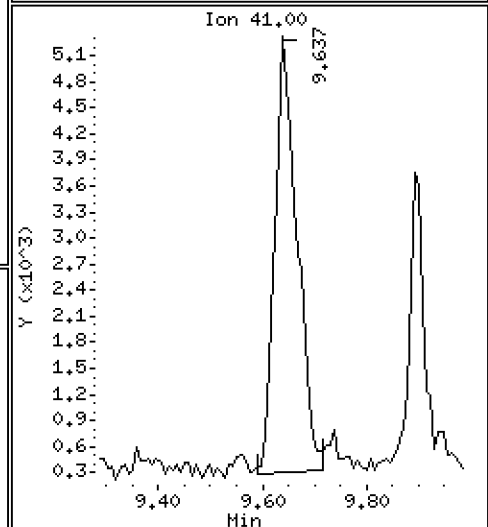
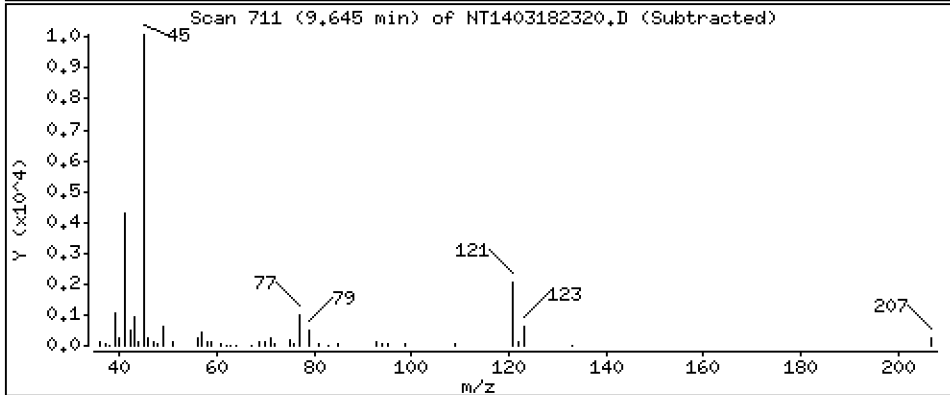
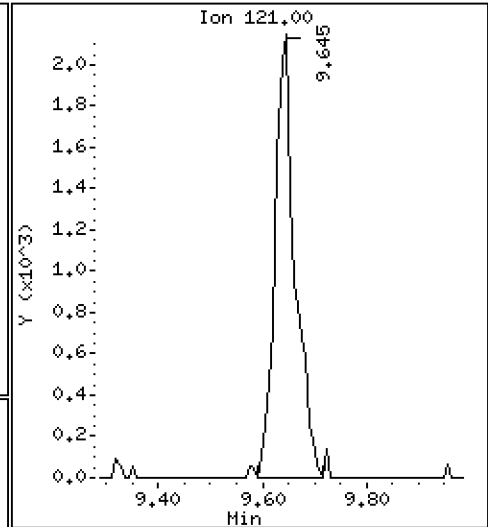
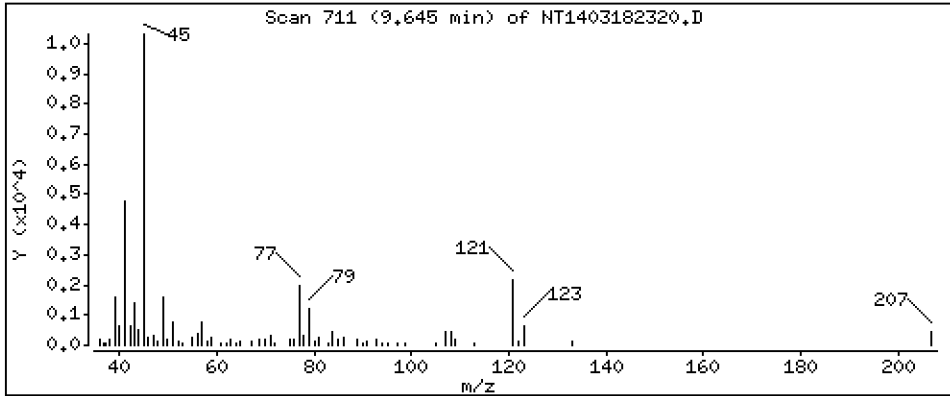
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 0.2283 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

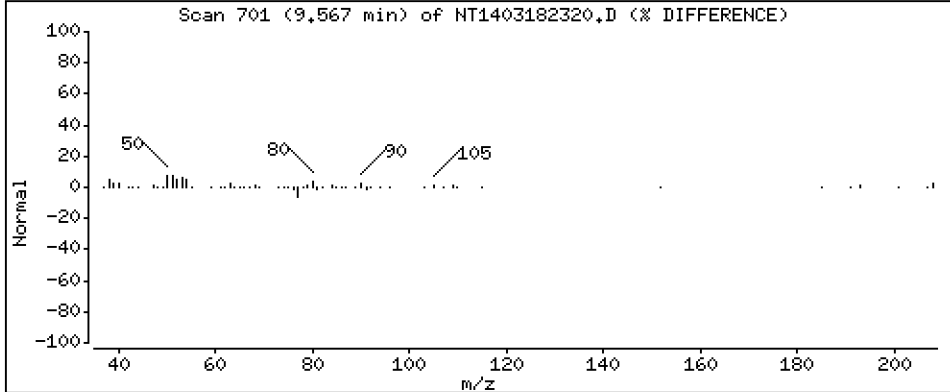
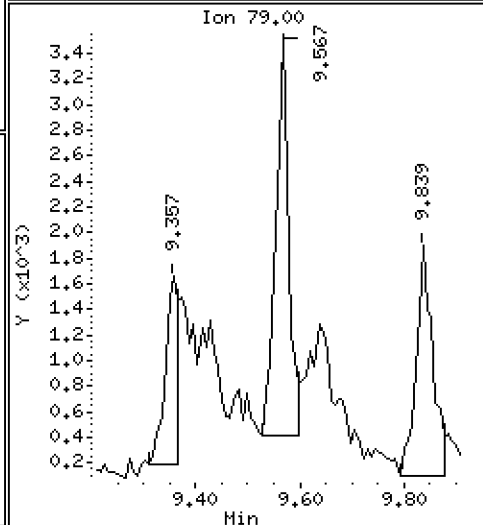
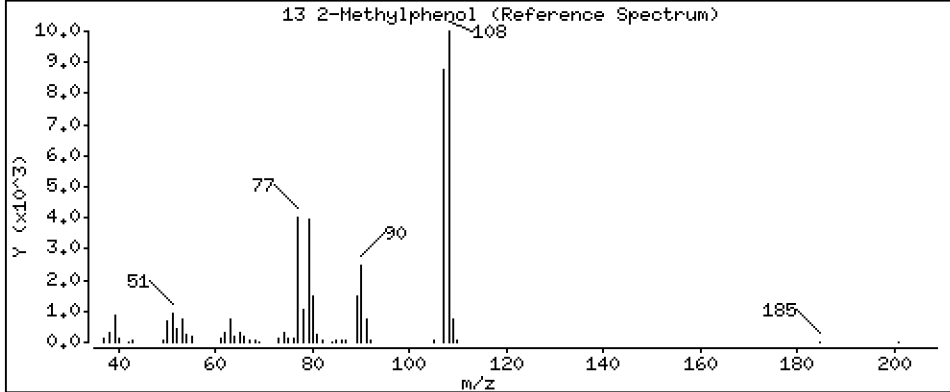
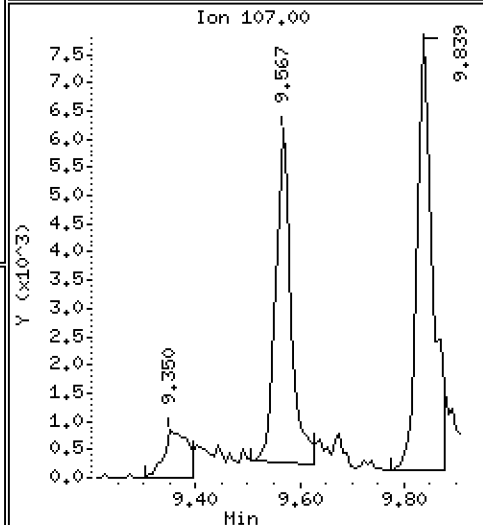
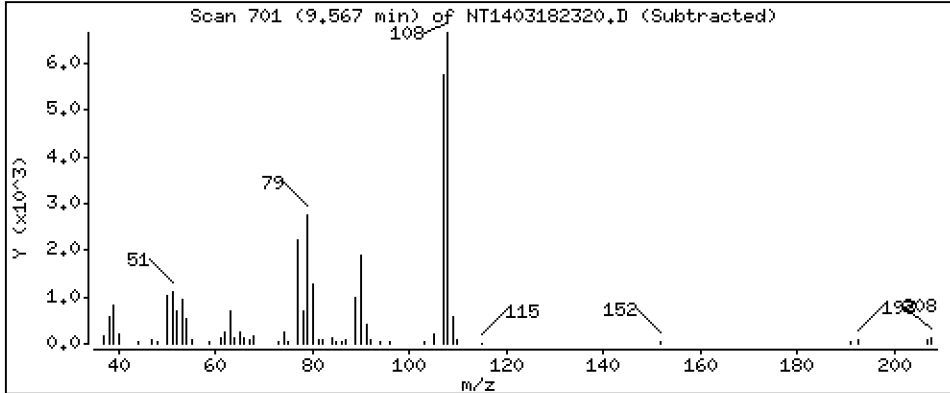
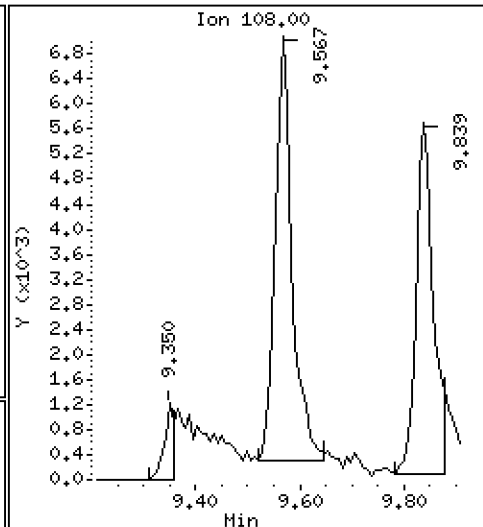
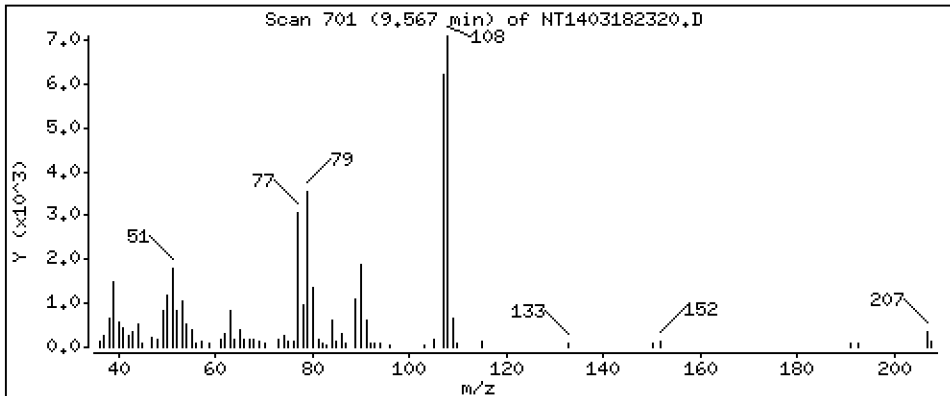
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1763 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

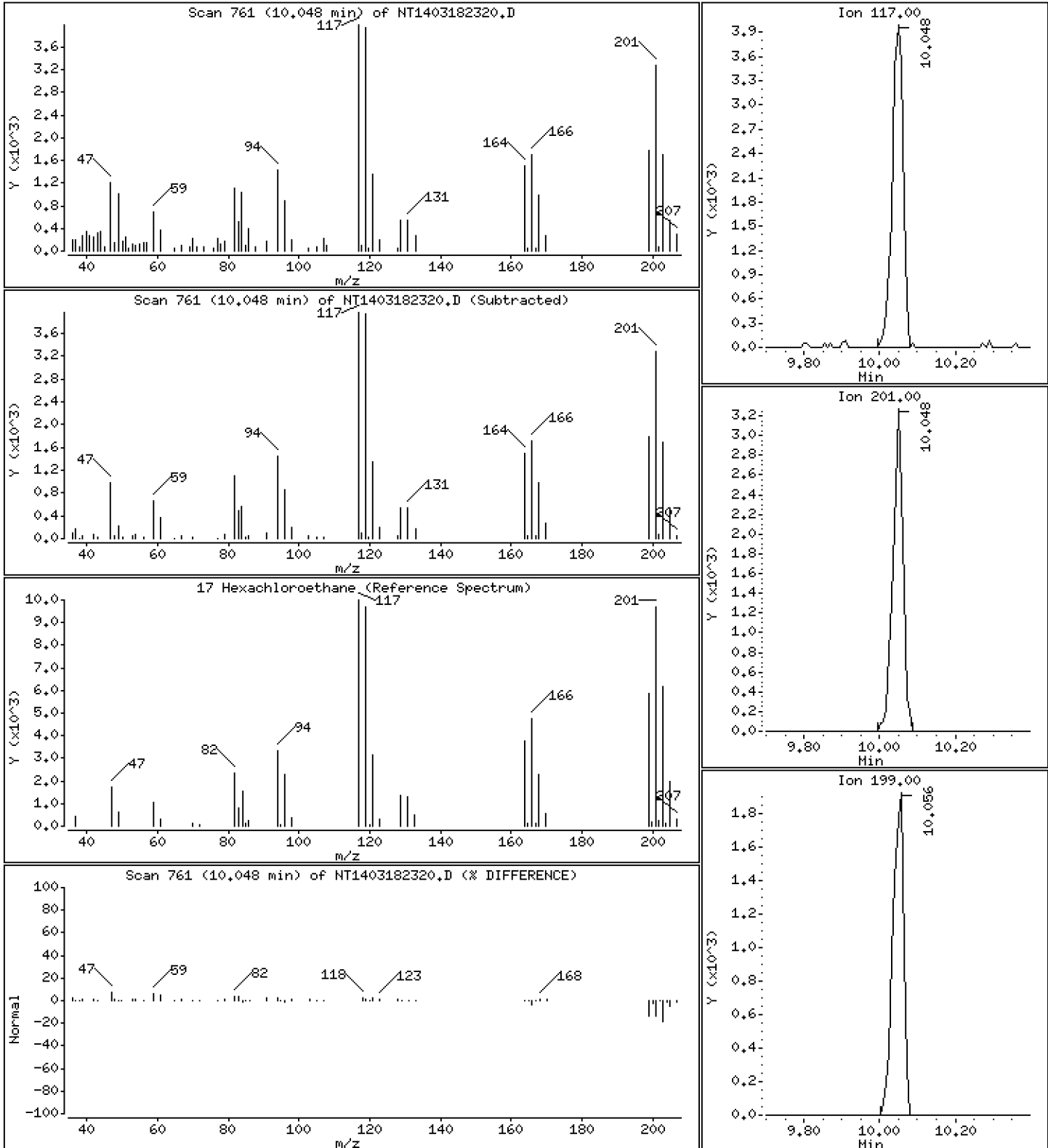
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

17 Hexachloroethane

Concentration: 0.1935 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

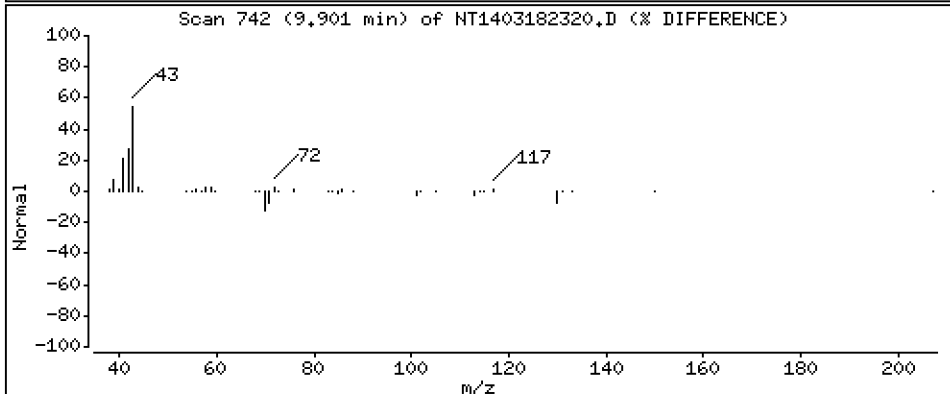
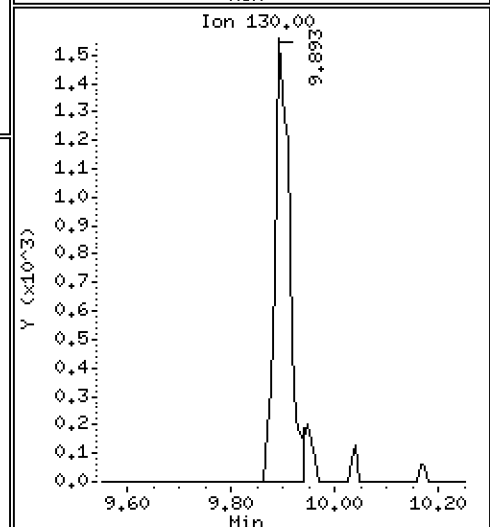
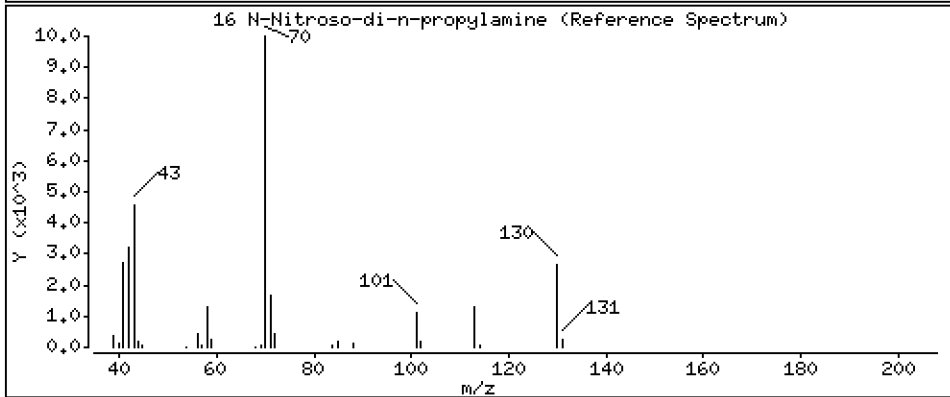
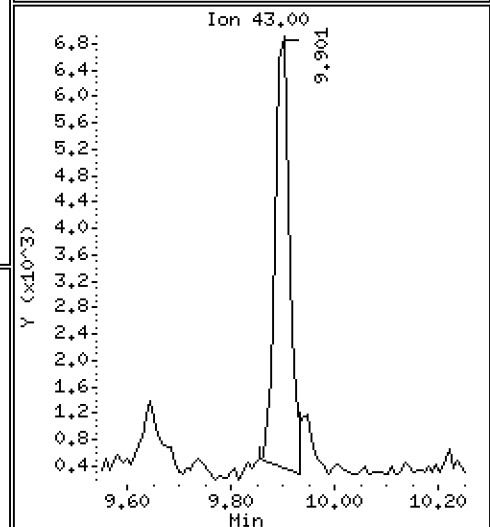
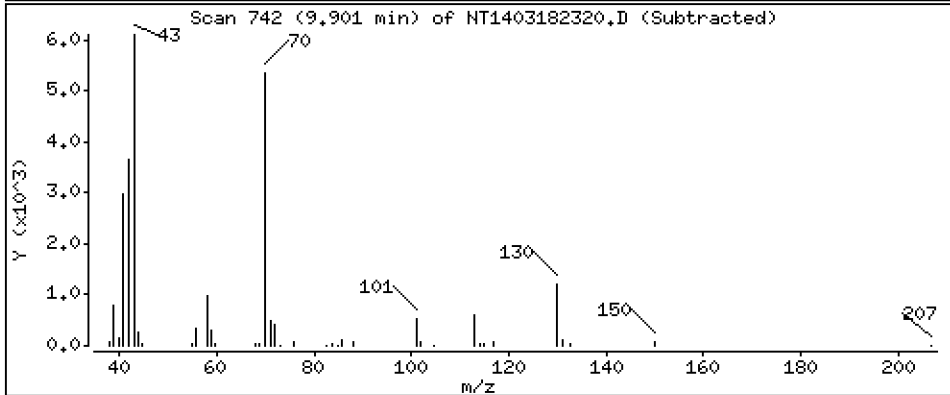
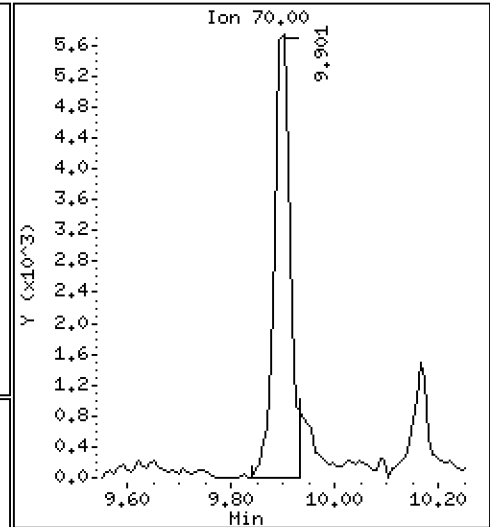
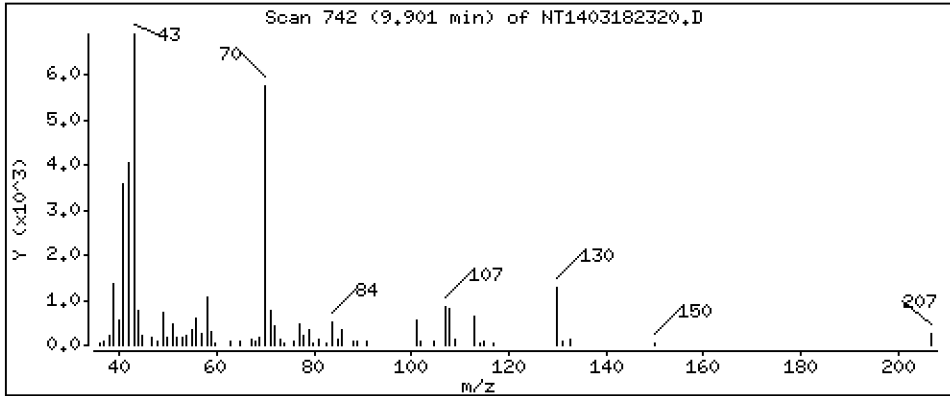
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,1756 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

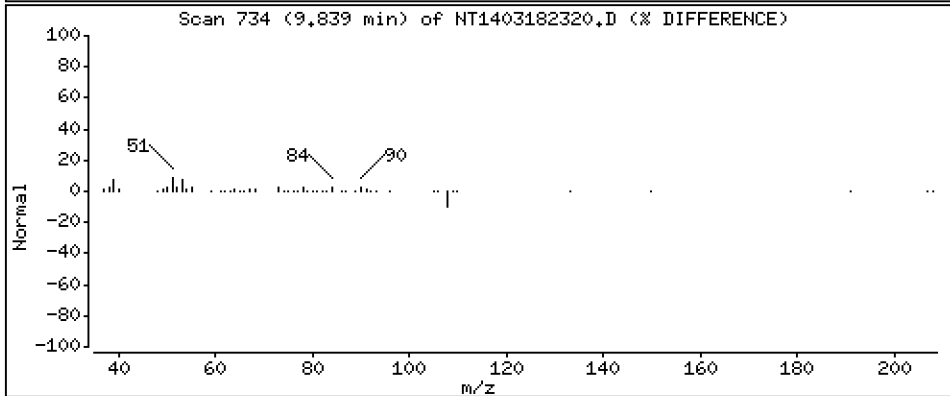
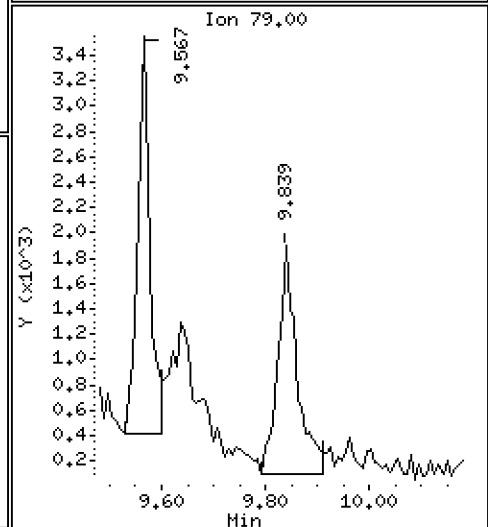
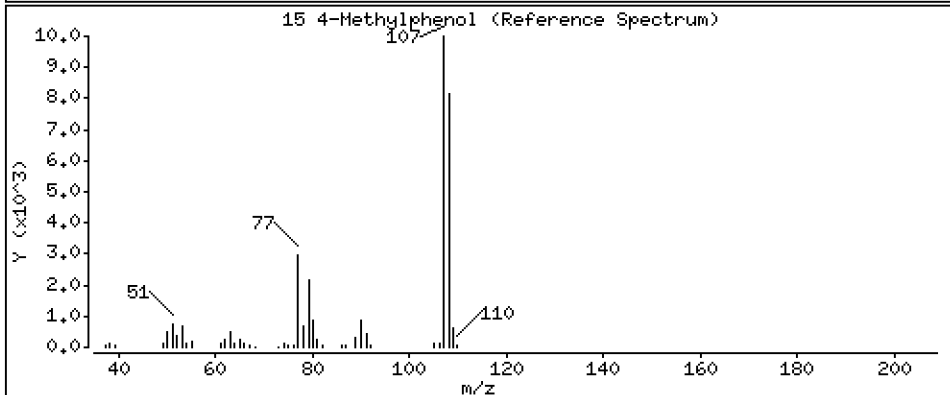
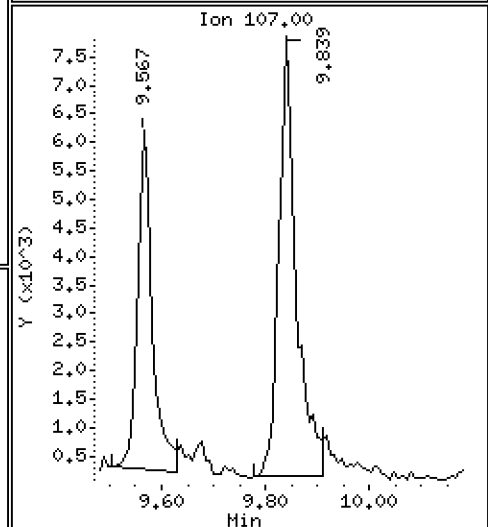
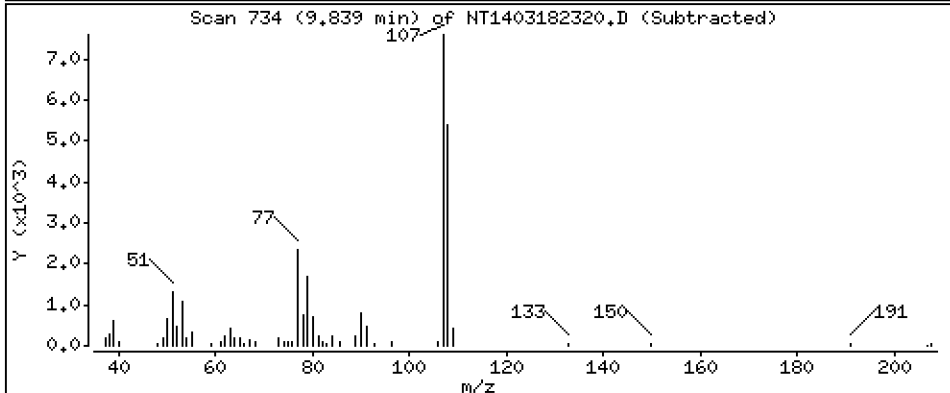
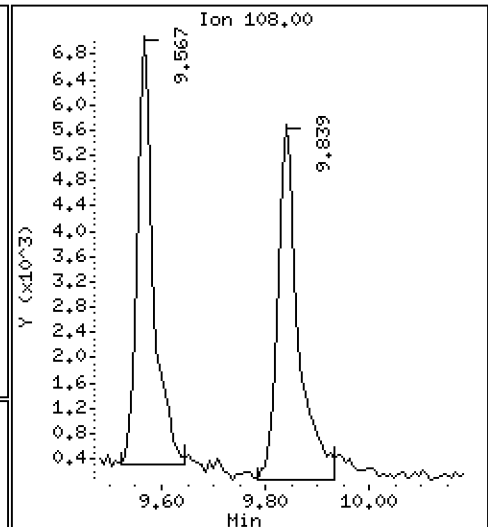
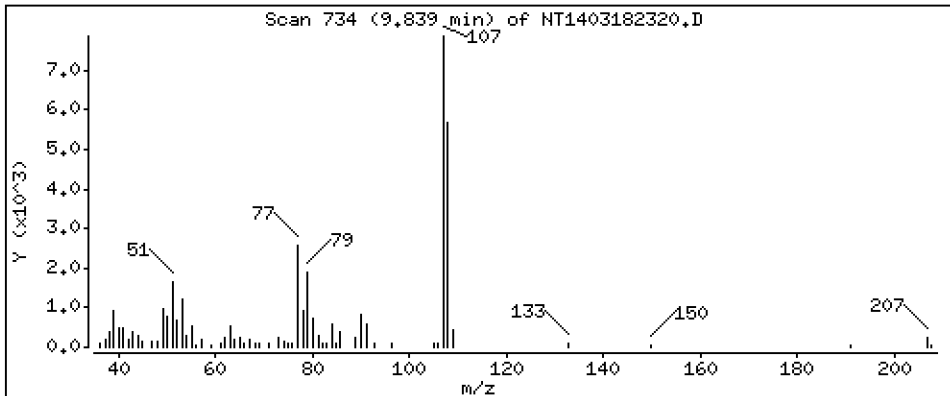
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1496 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

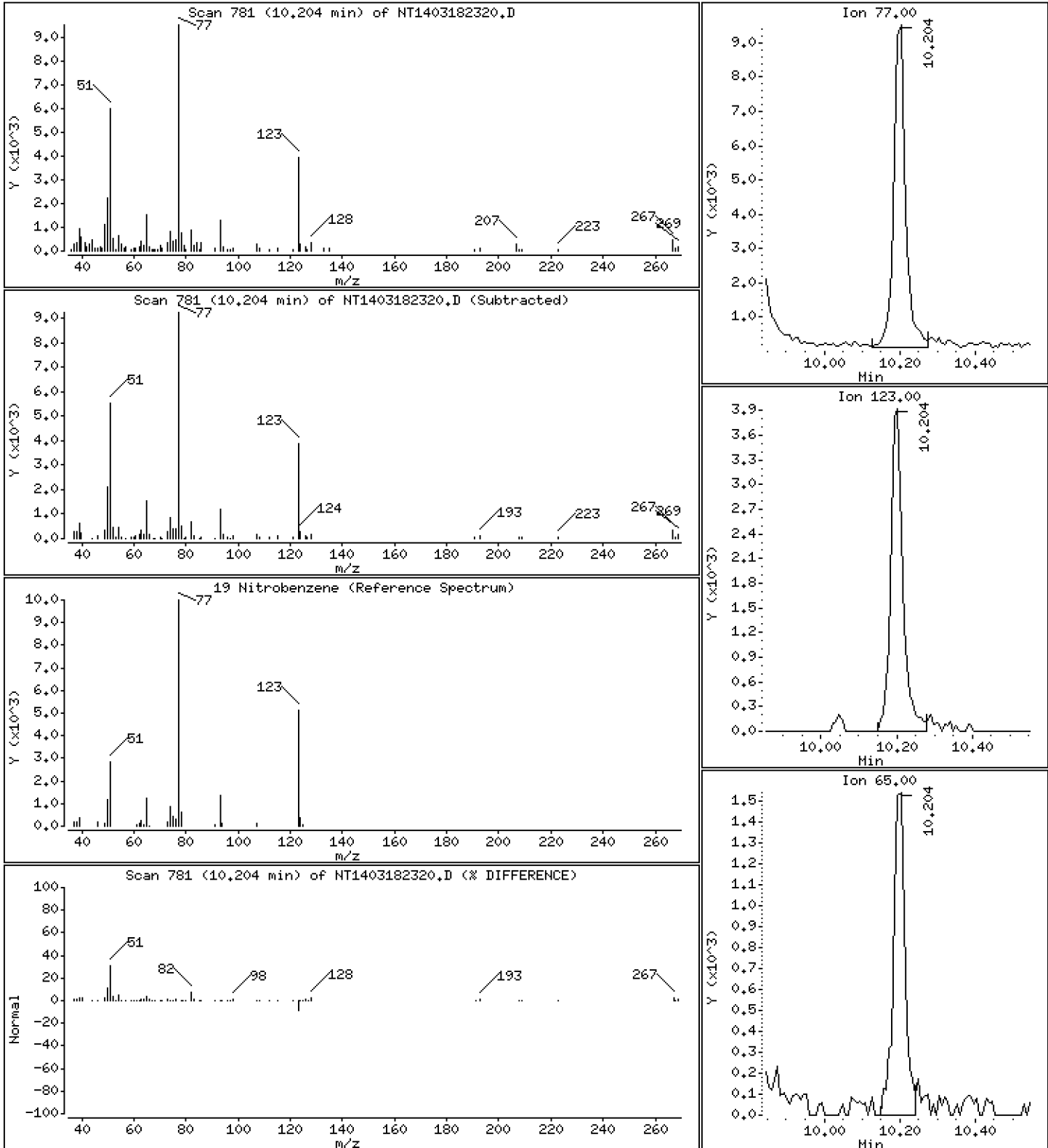
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 0,1949 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

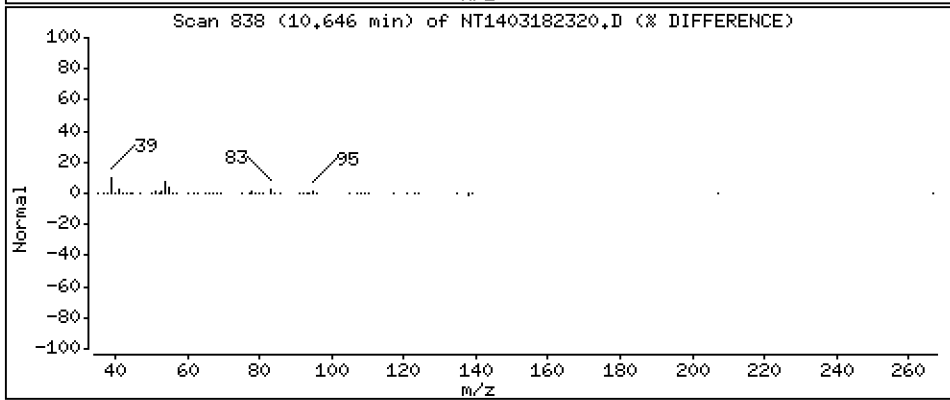
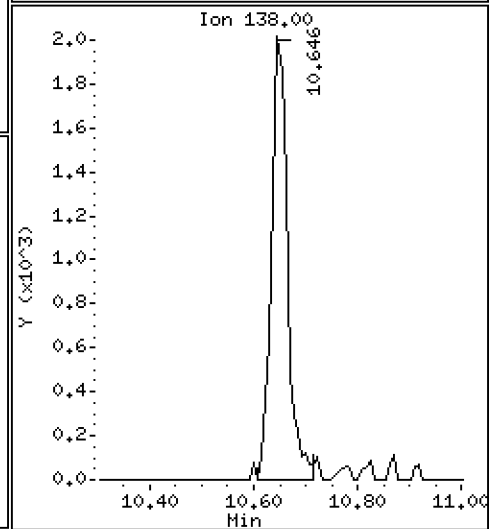
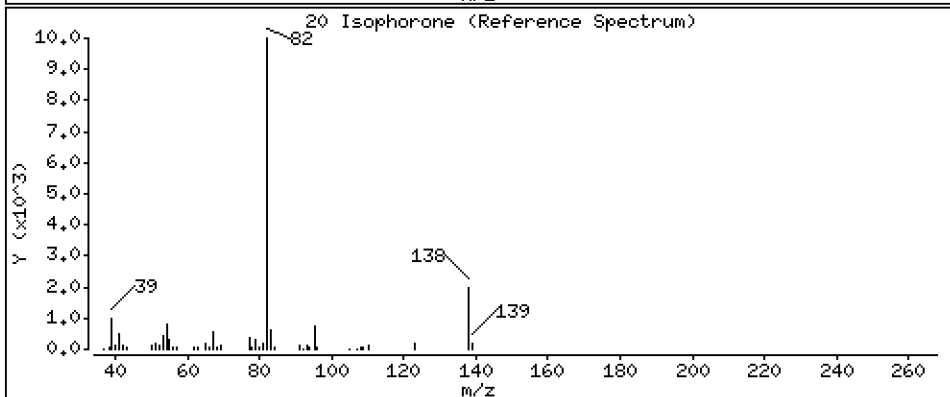
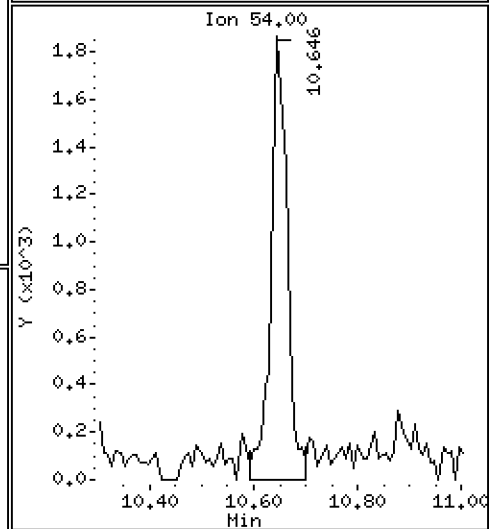
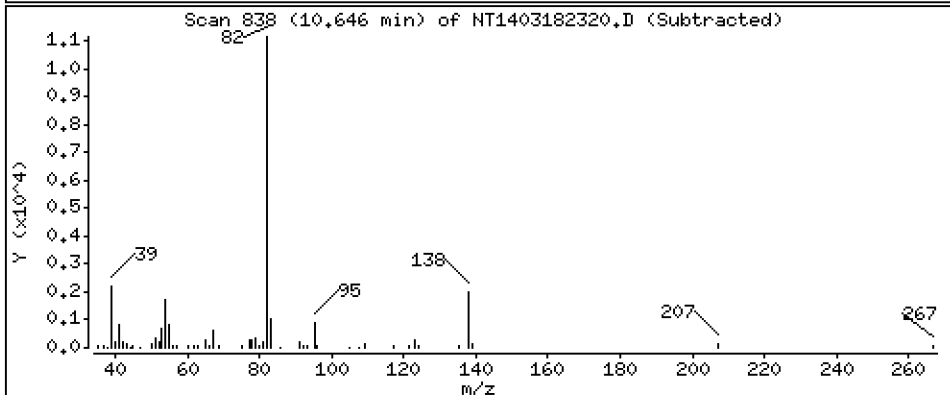
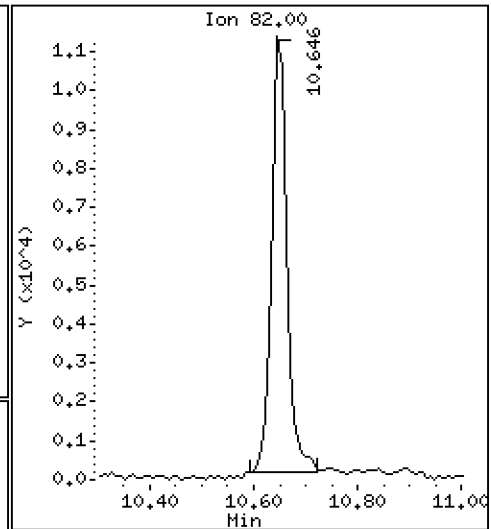
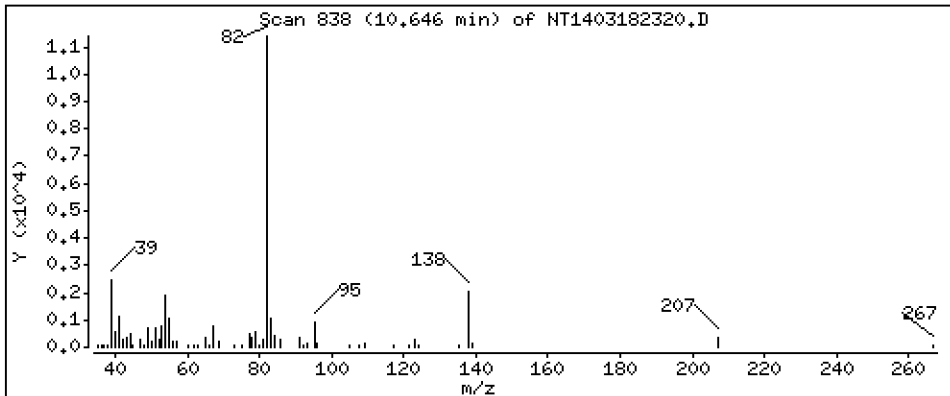
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1613 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

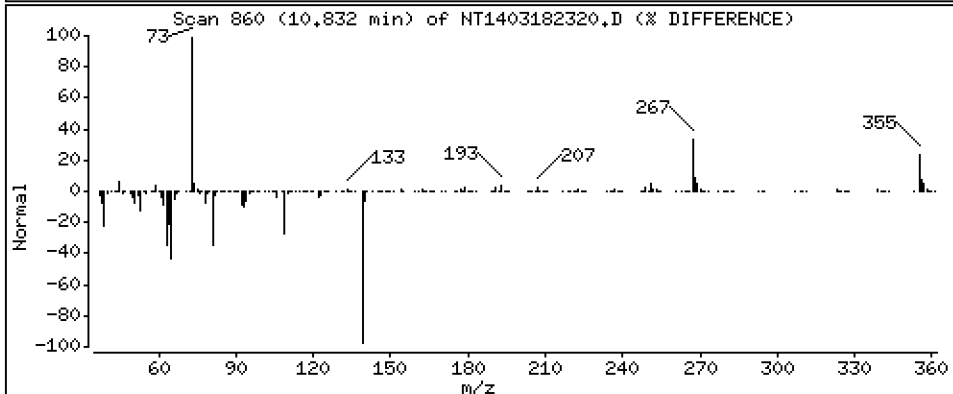
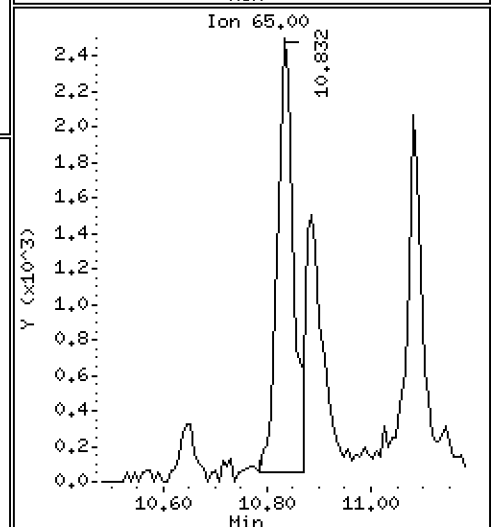
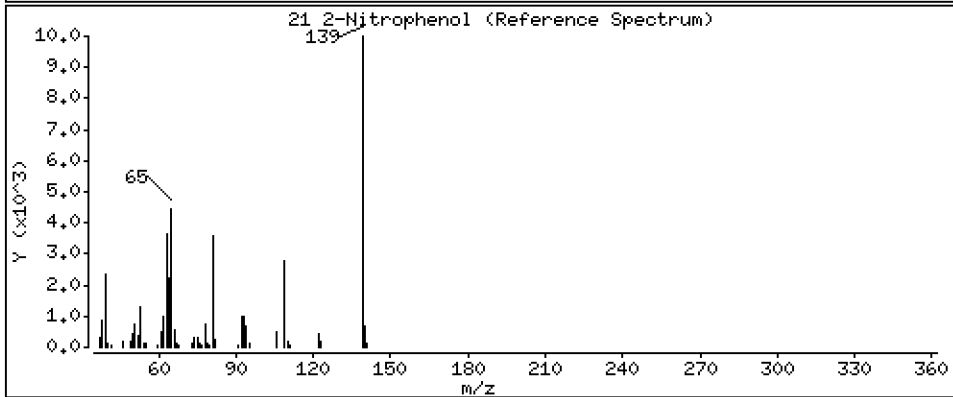
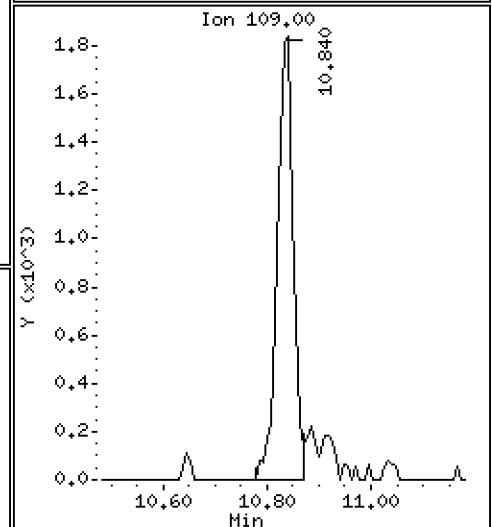
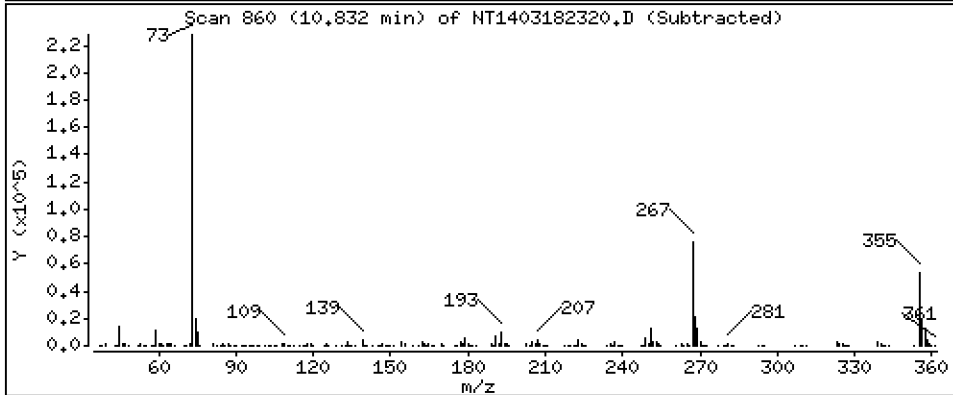
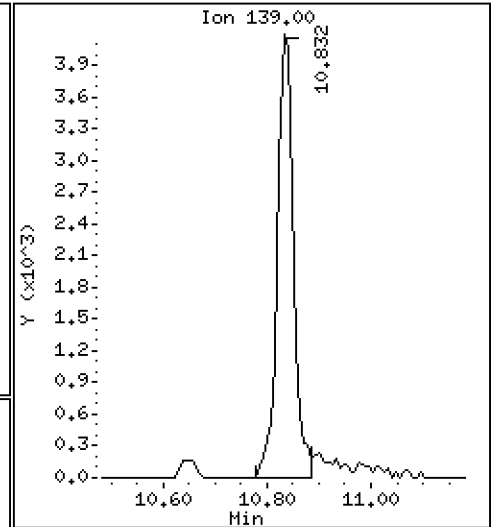
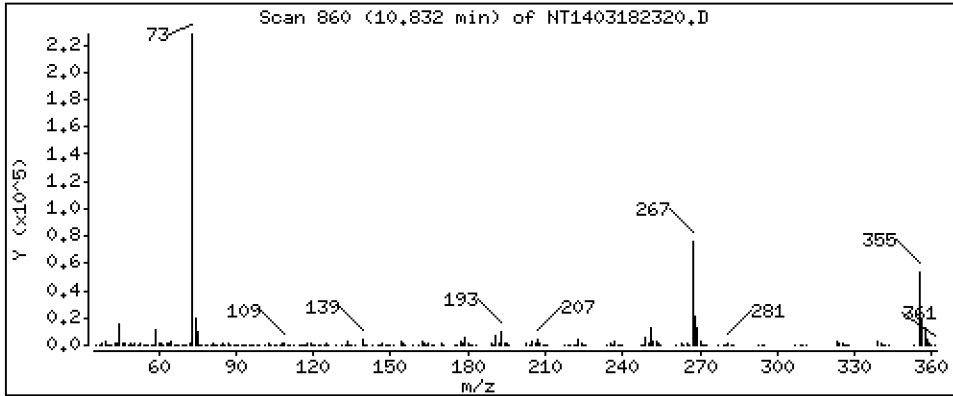
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1562 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

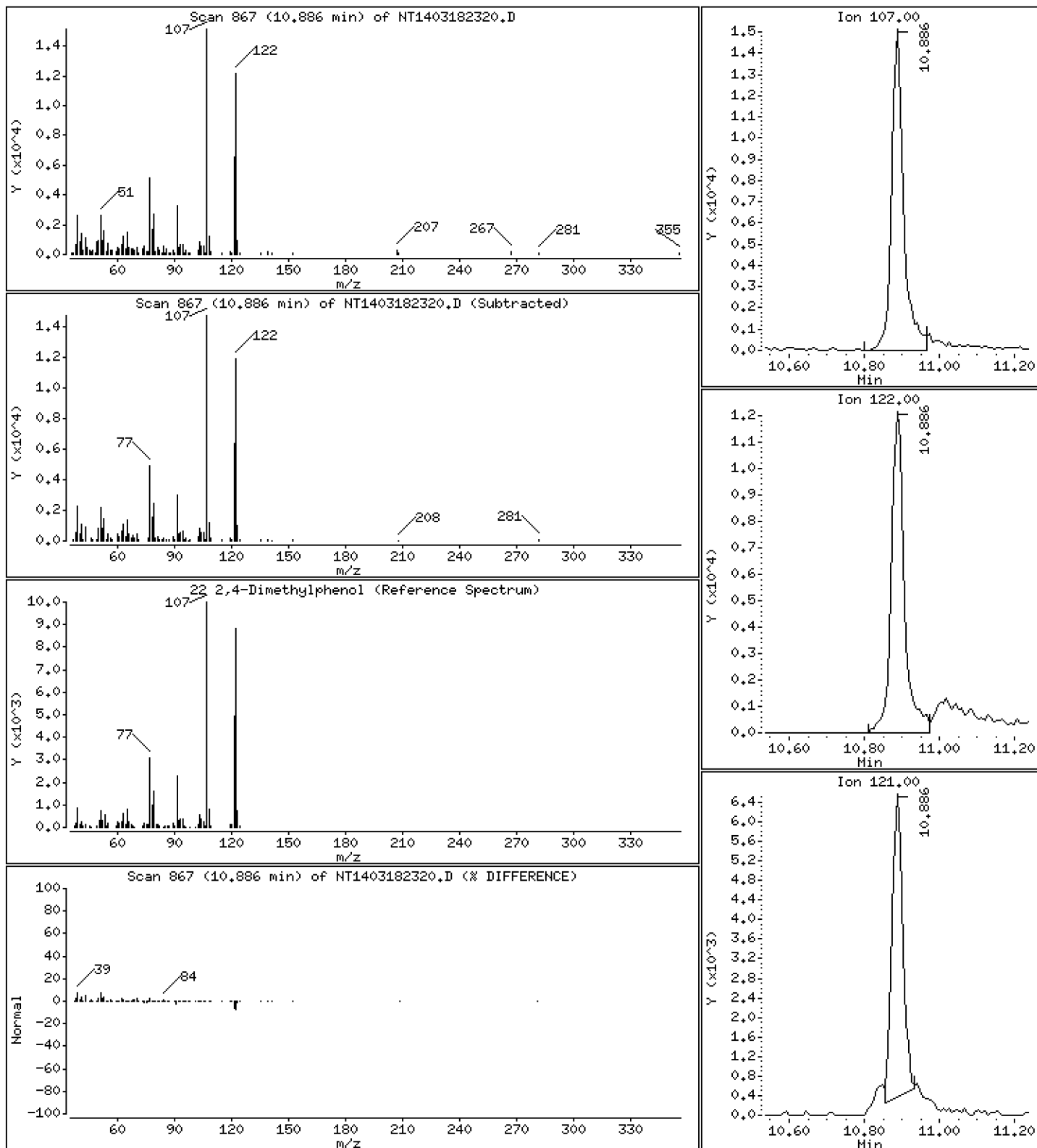
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.3789 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

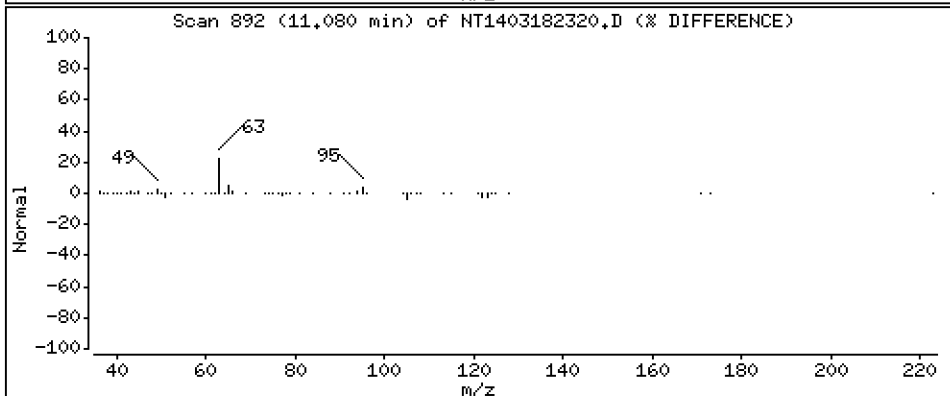
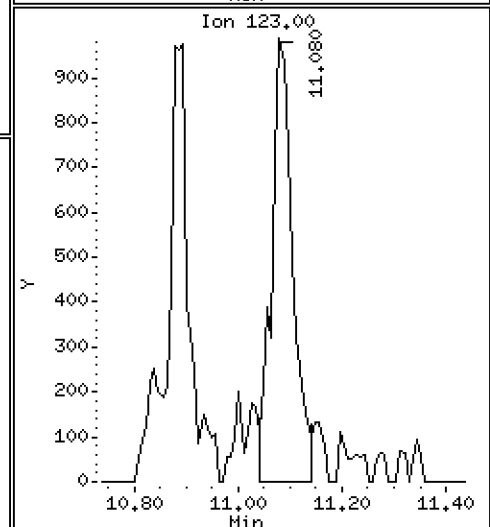
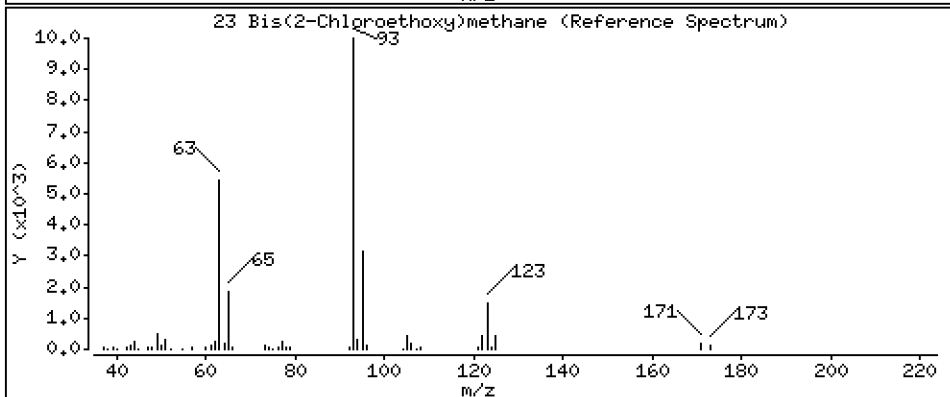
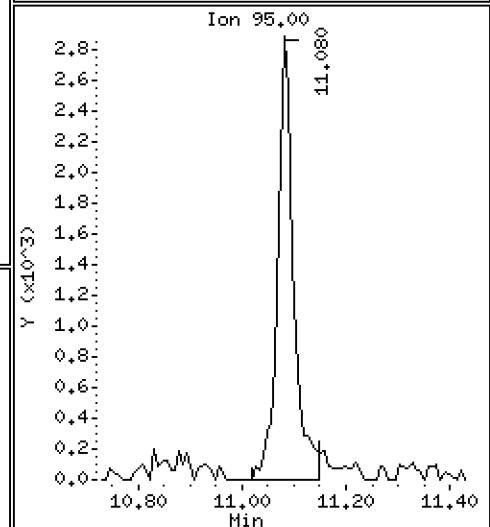
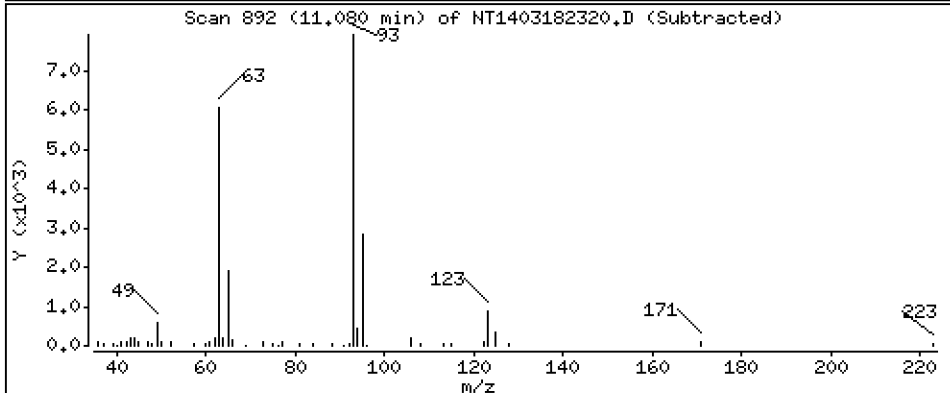
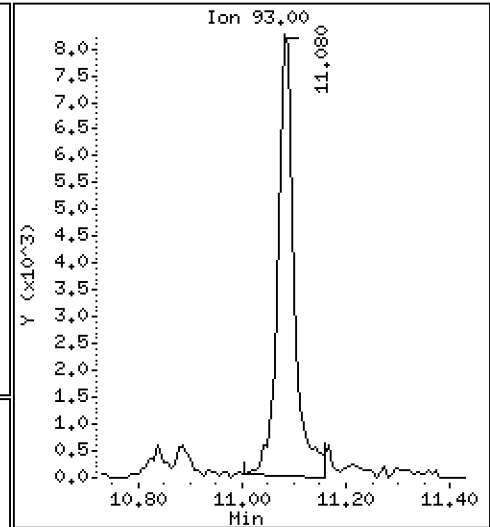
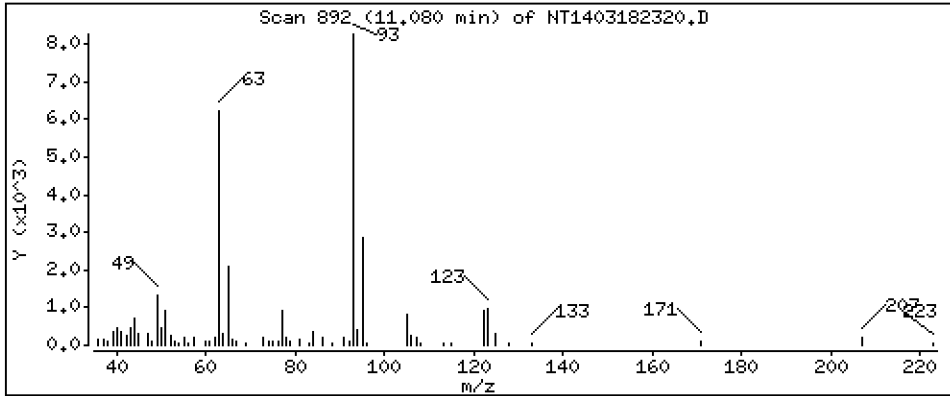
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

23 Bis(2-Chloroethoxy)methane

Concentration: 0.1909 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

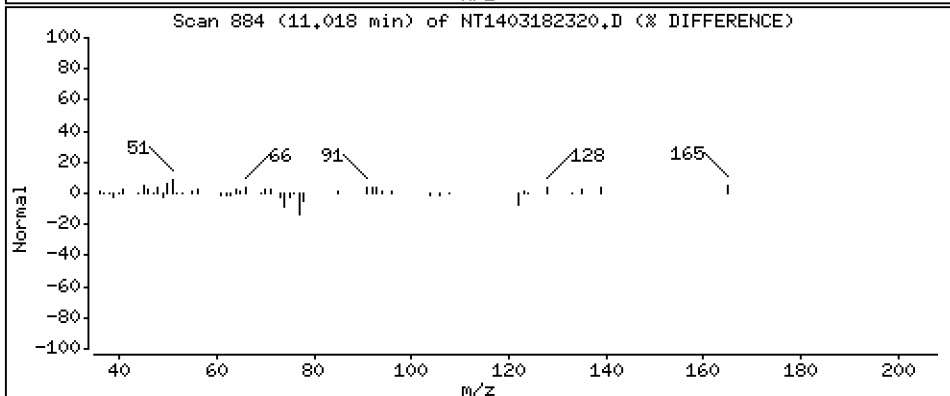
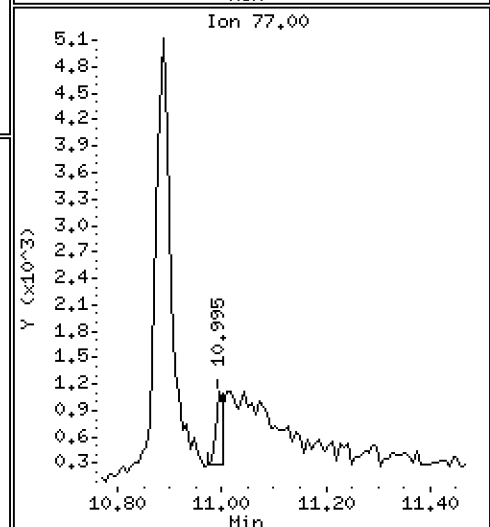
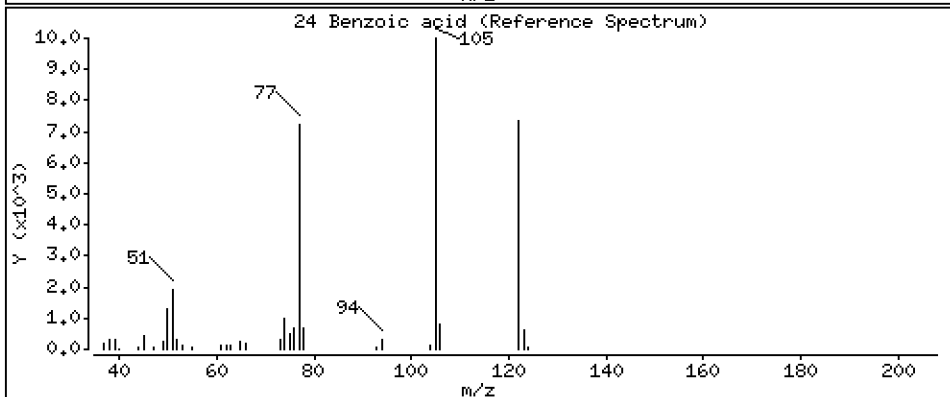
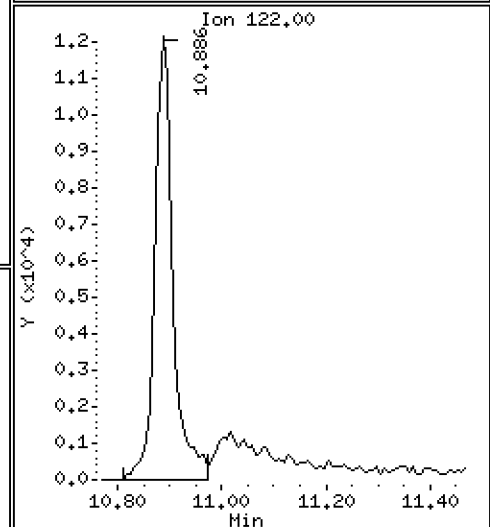
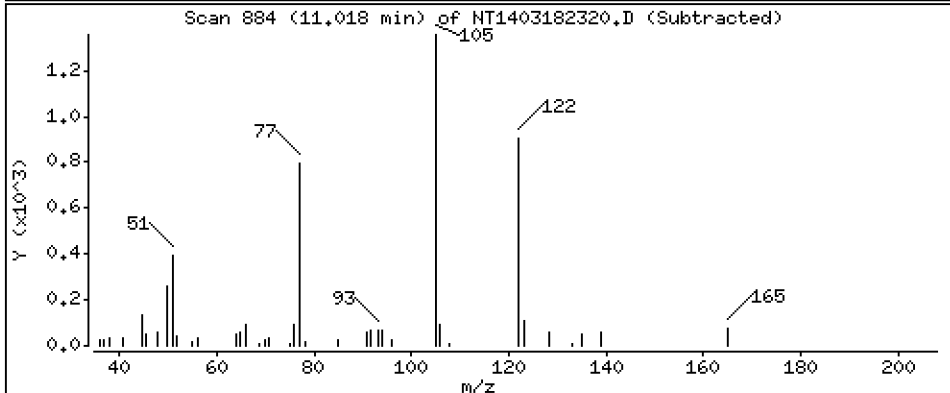
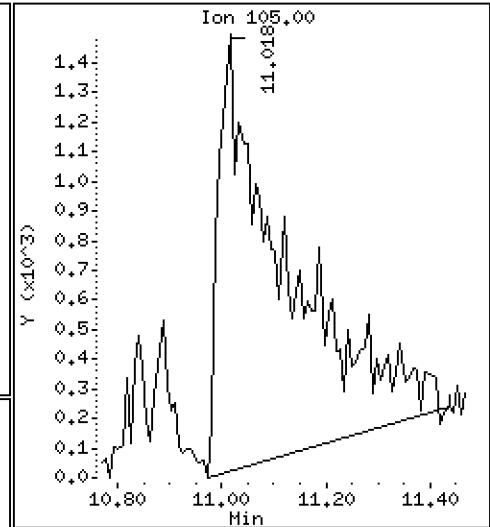
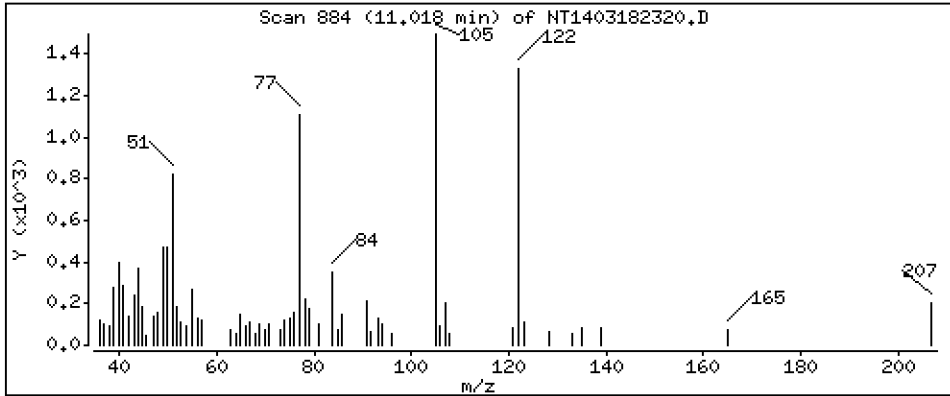
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1958 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

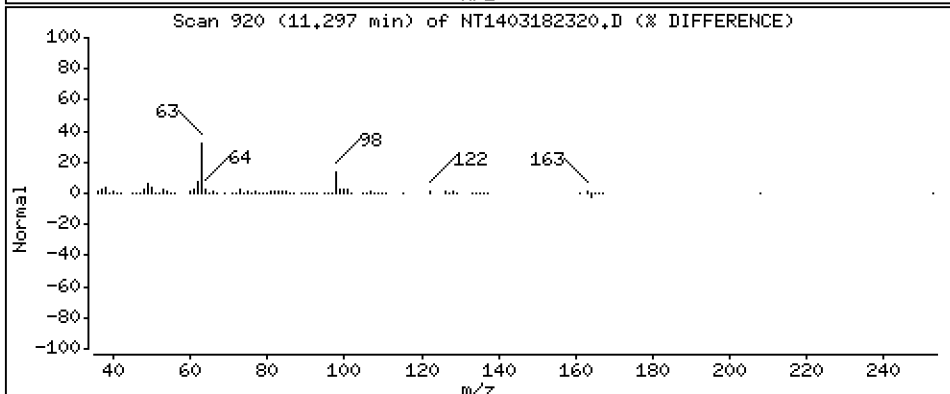
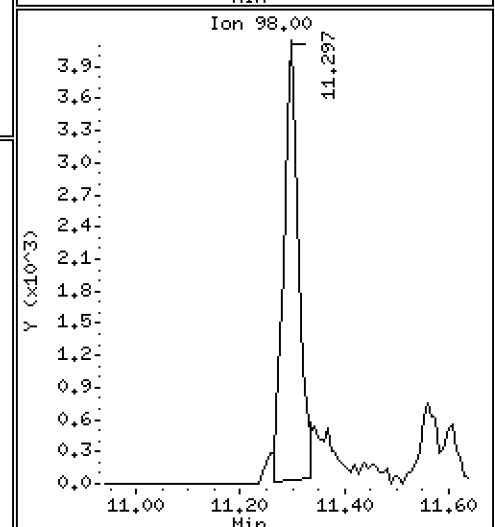
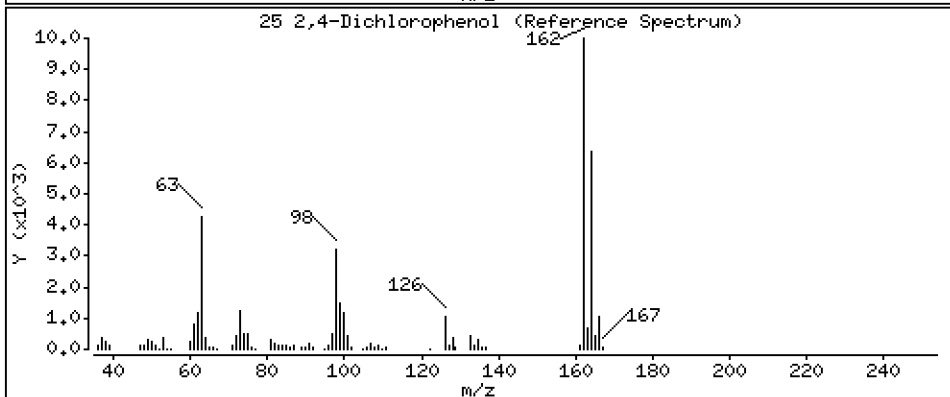
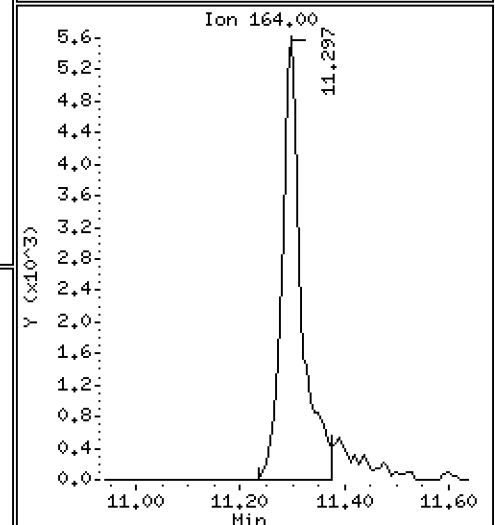
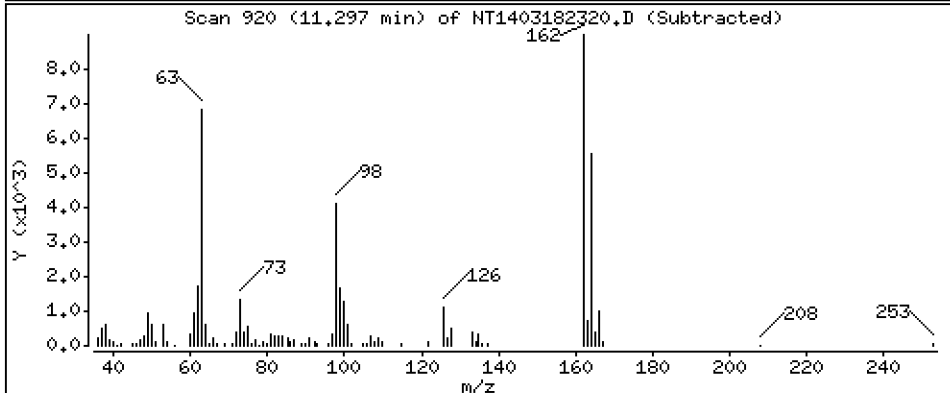
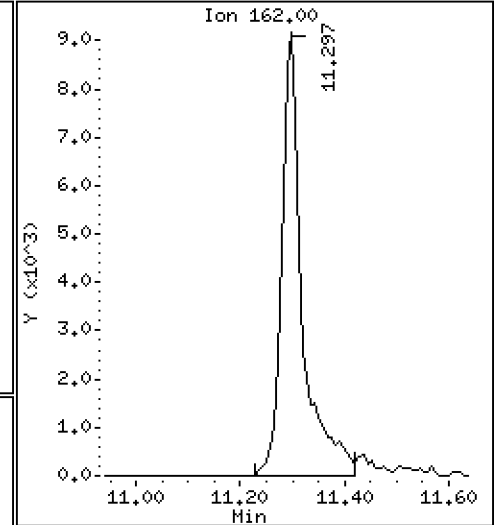
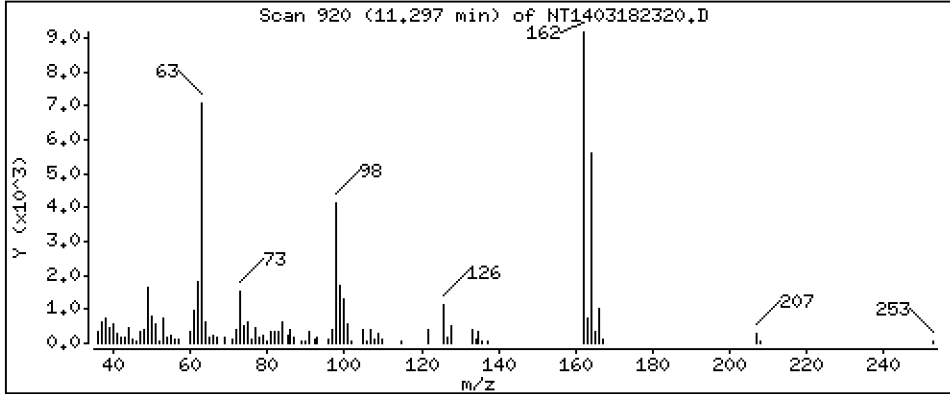
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3983 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

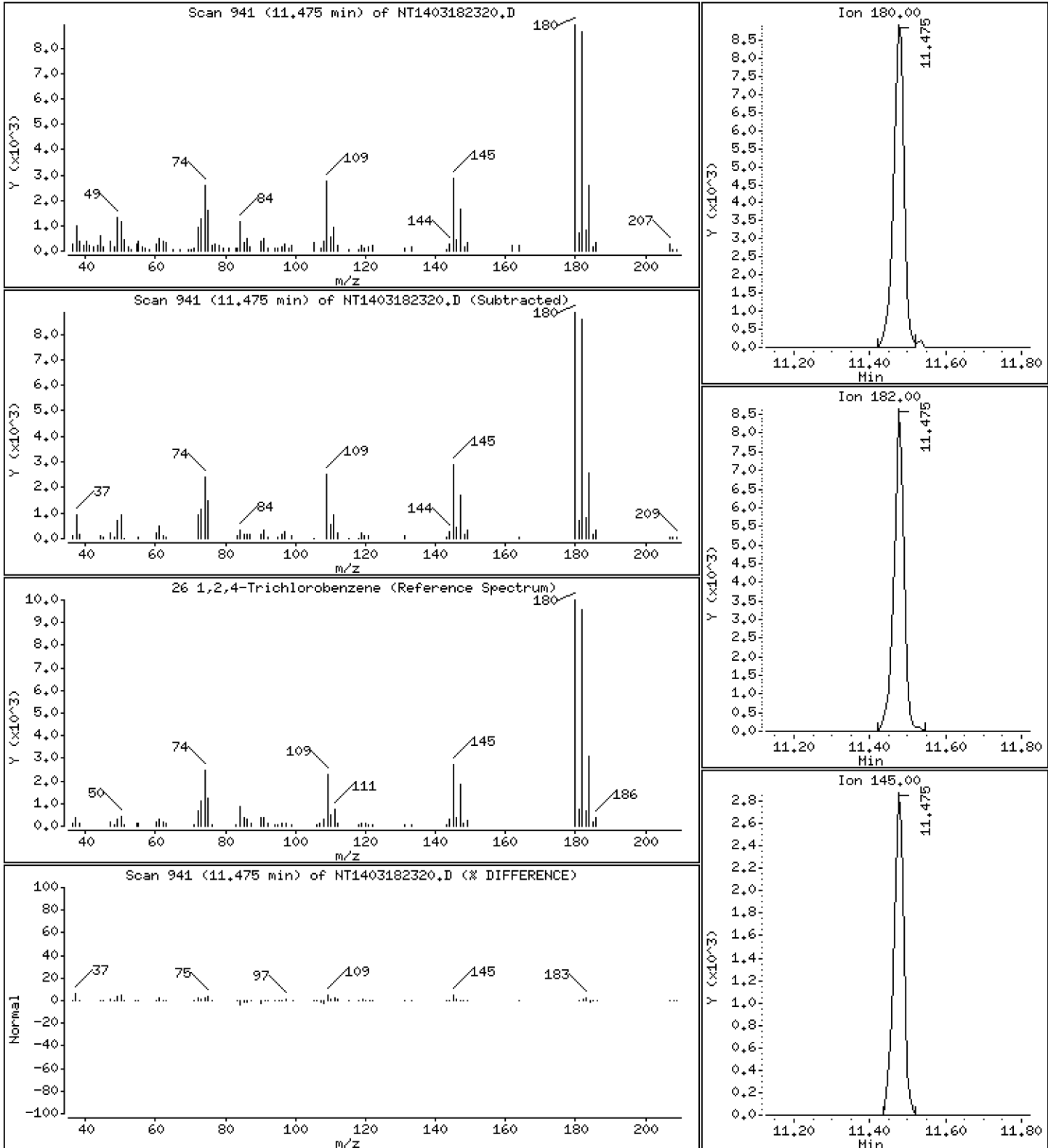
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 0.2039 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

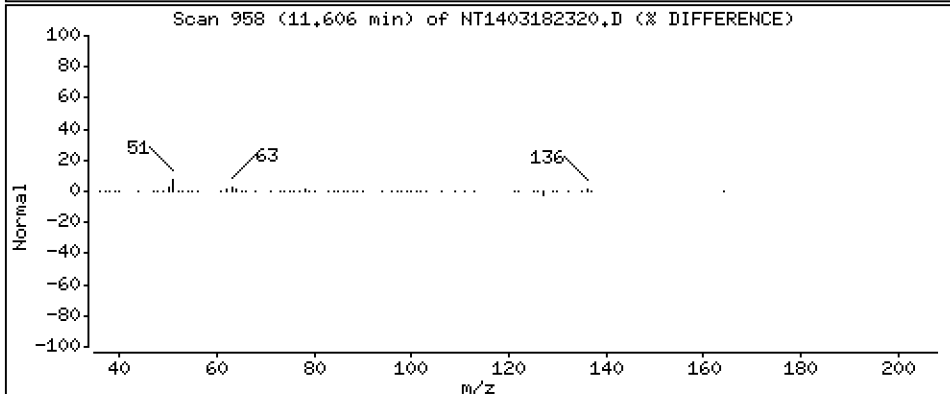
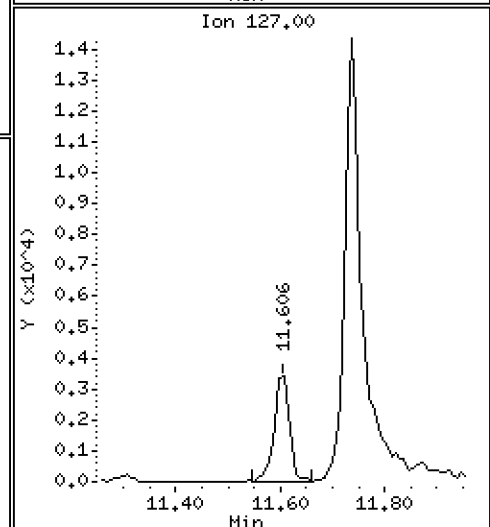
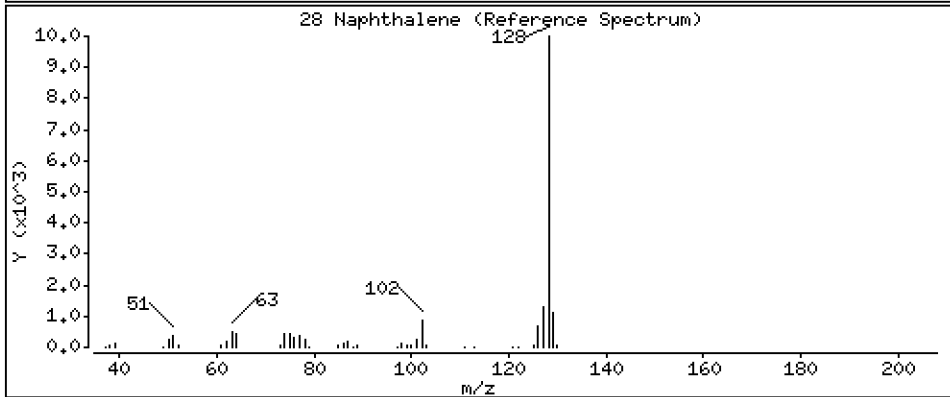
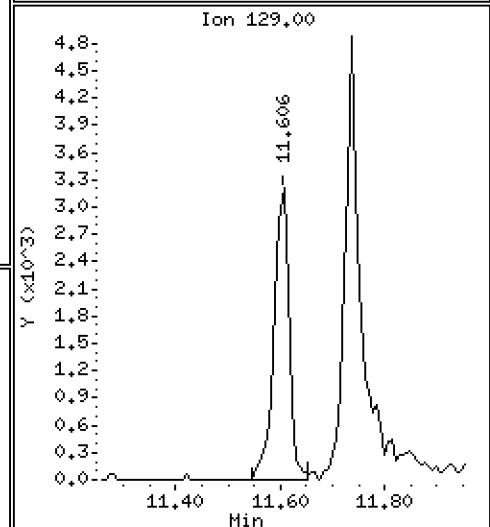
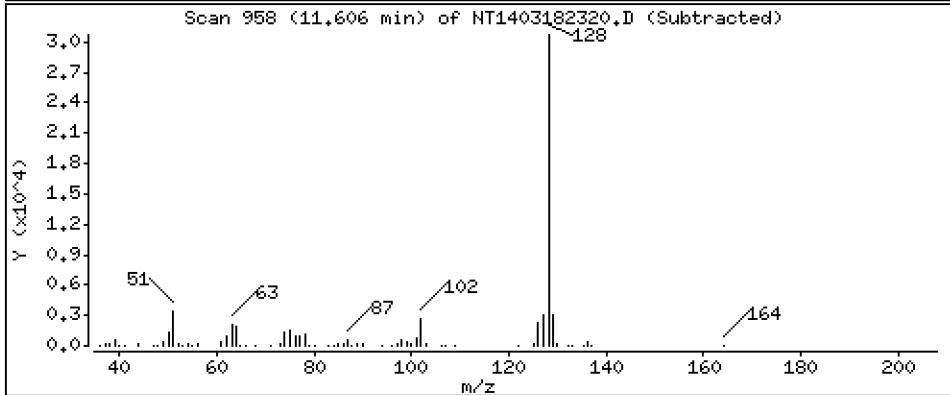
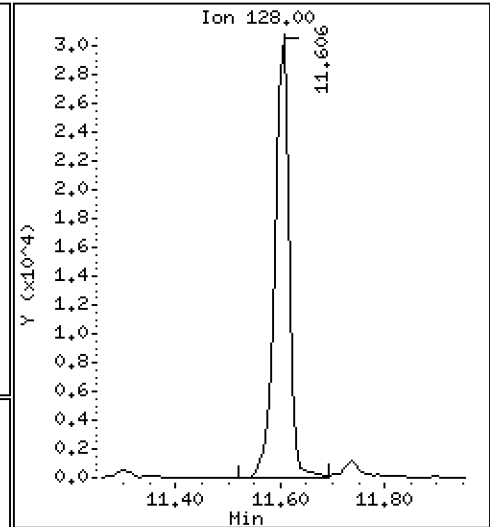
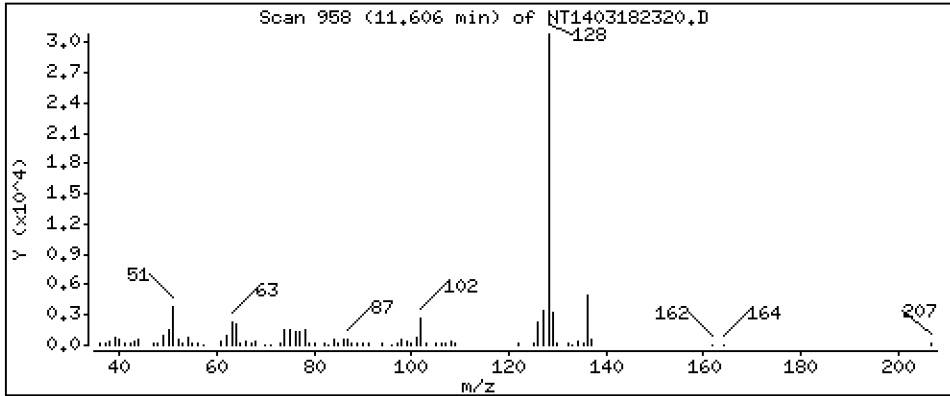
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2136 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

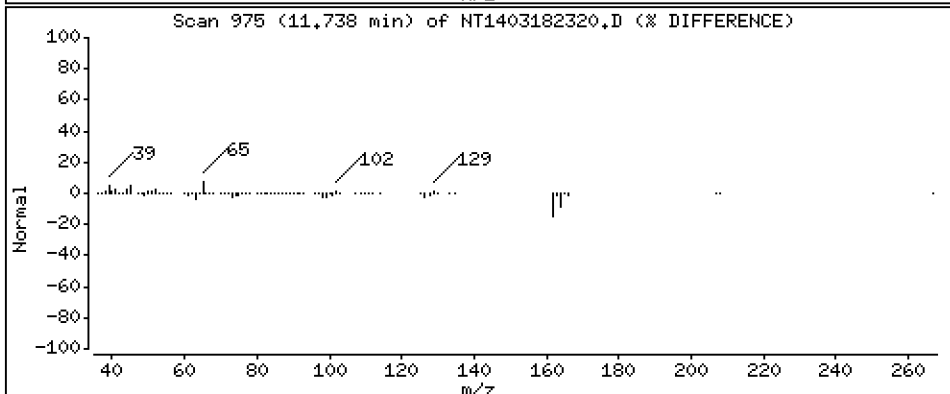
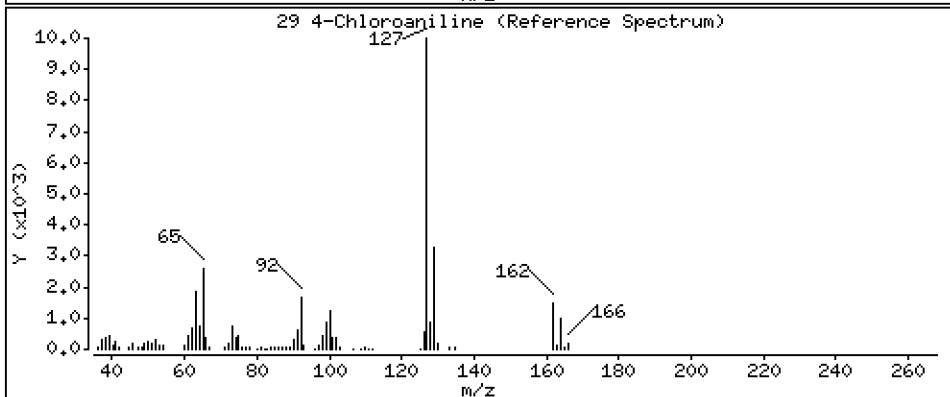
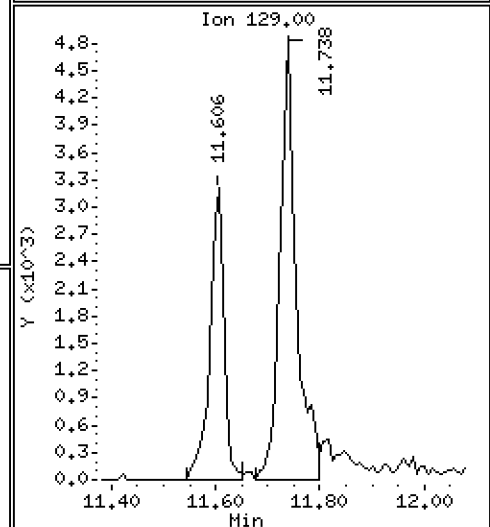
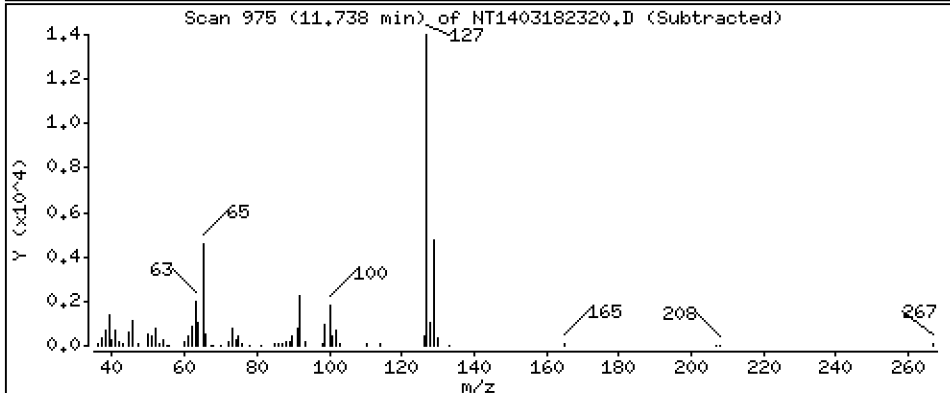
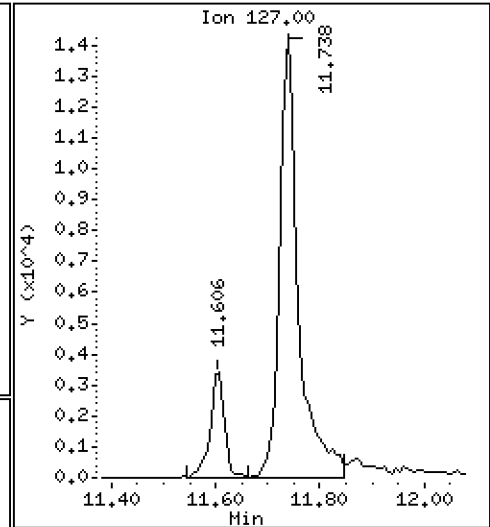
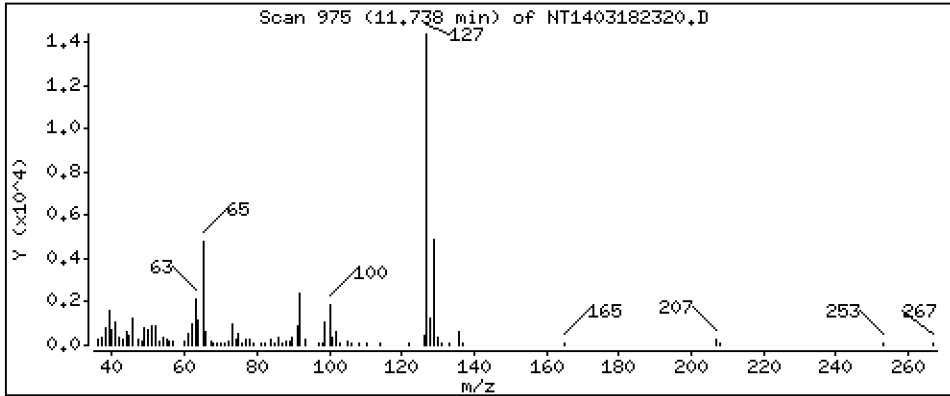
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,3212 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

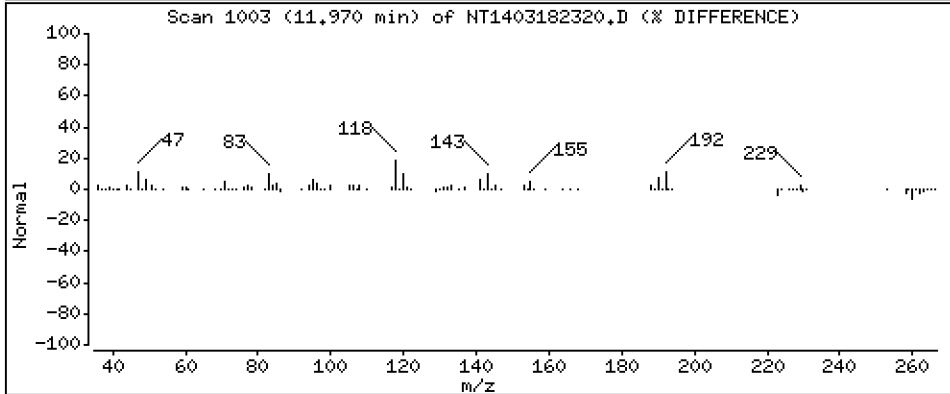
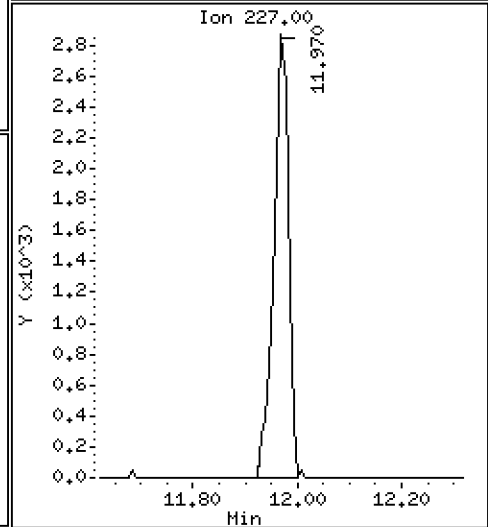
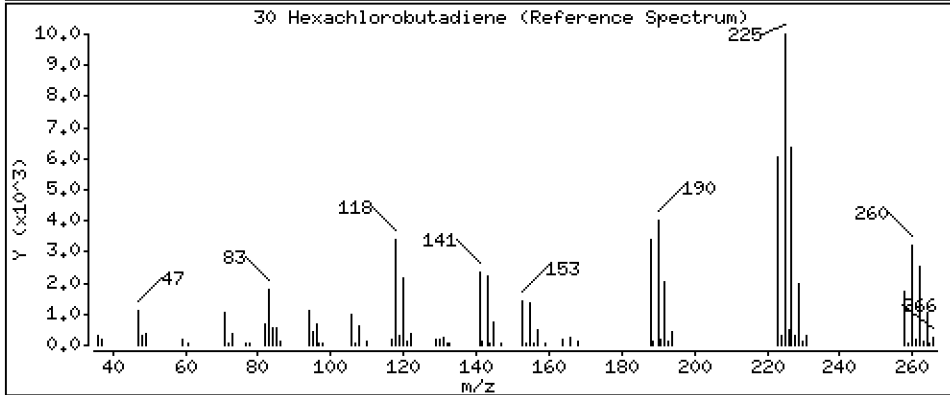
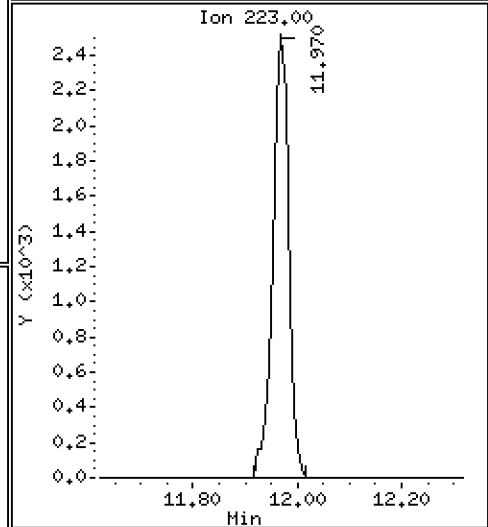
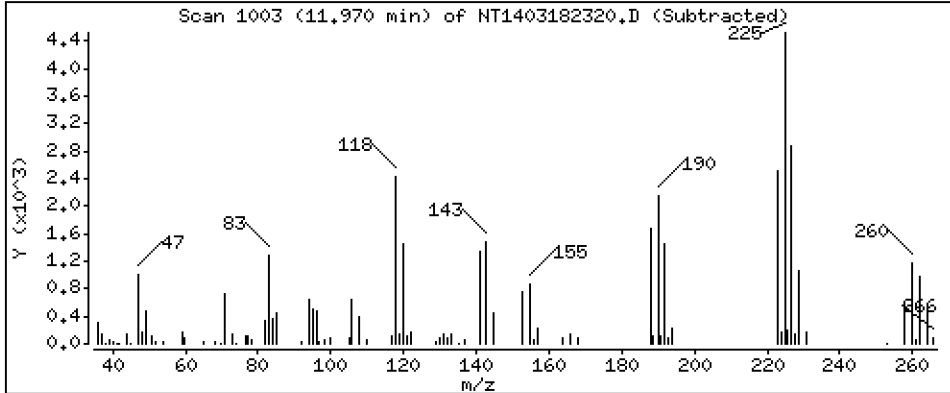
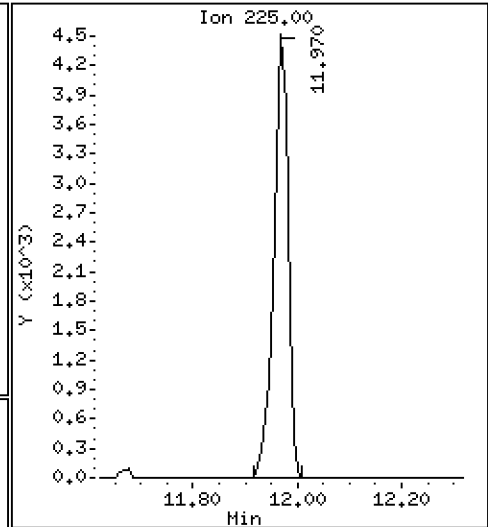
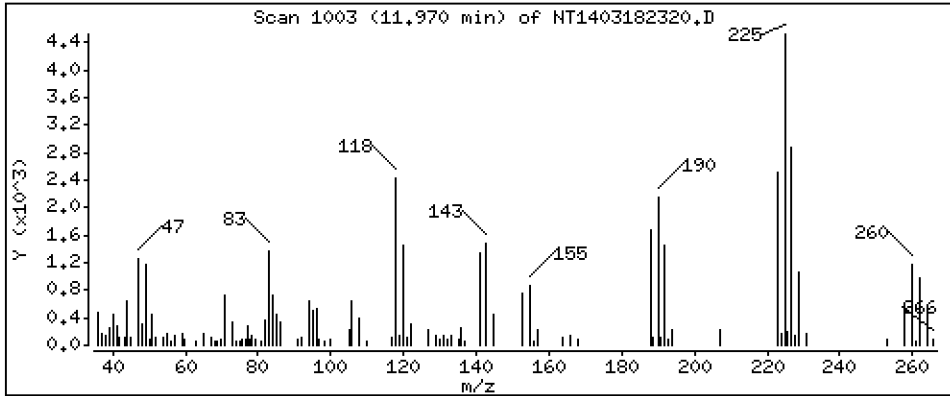
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2176 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

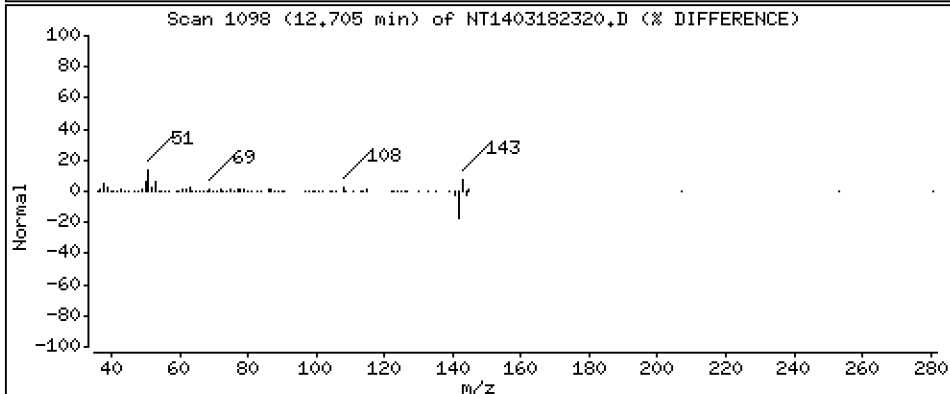
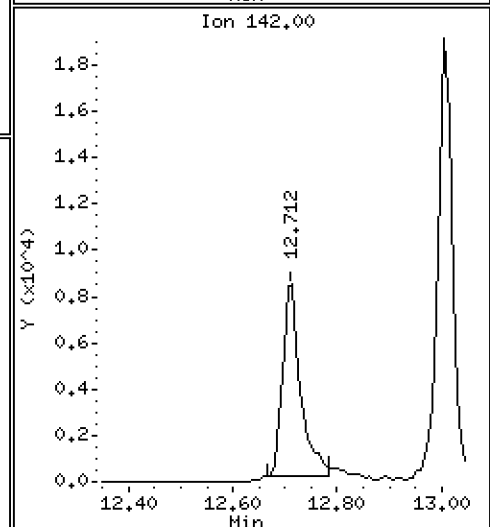
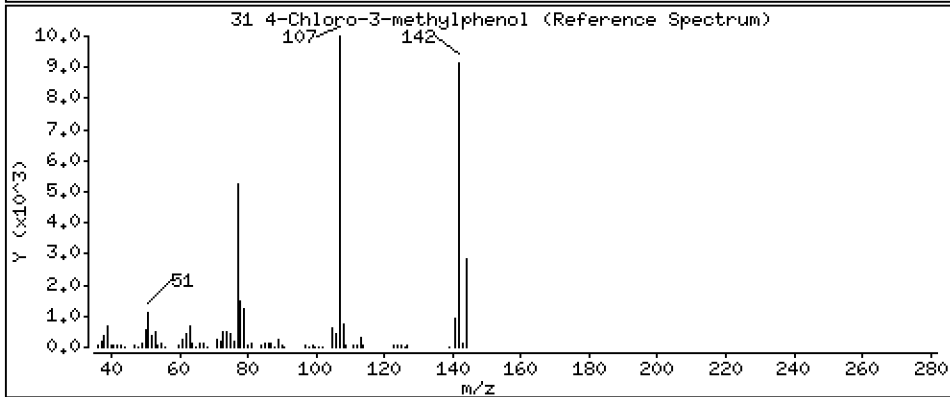
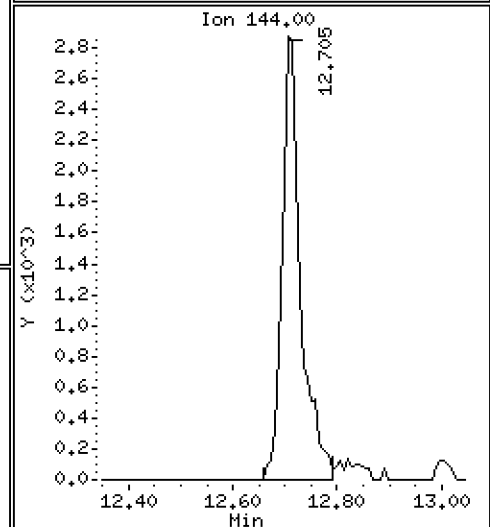
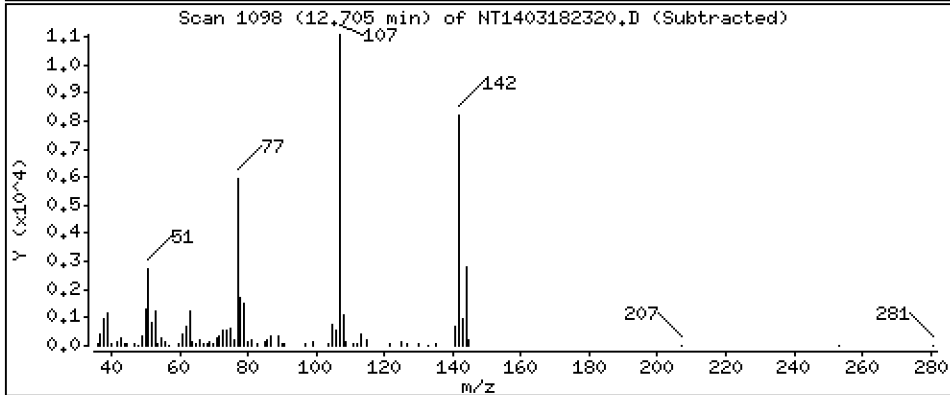
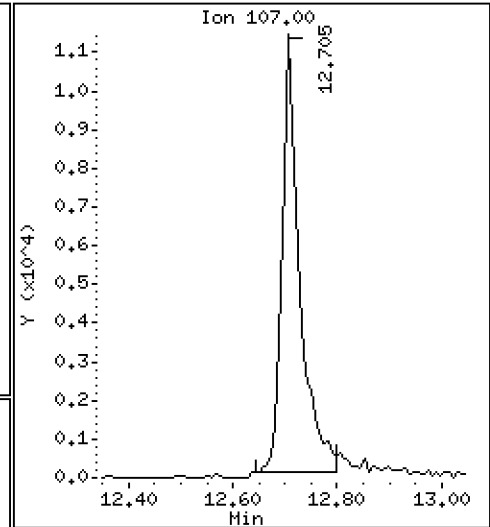
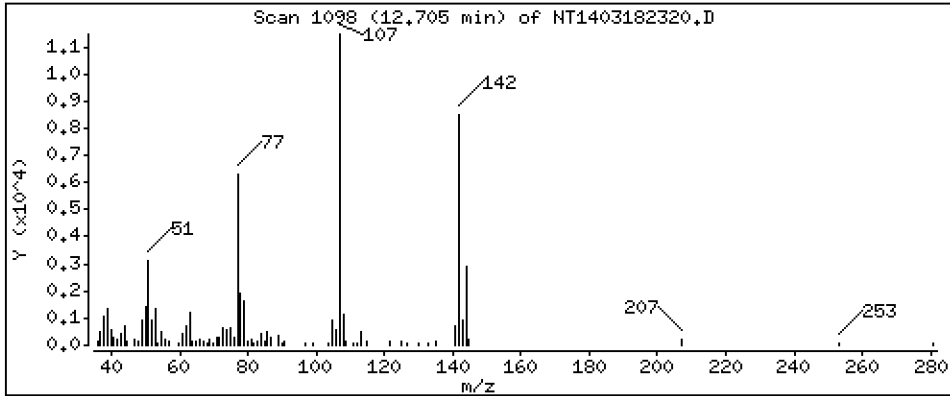
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.3256 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

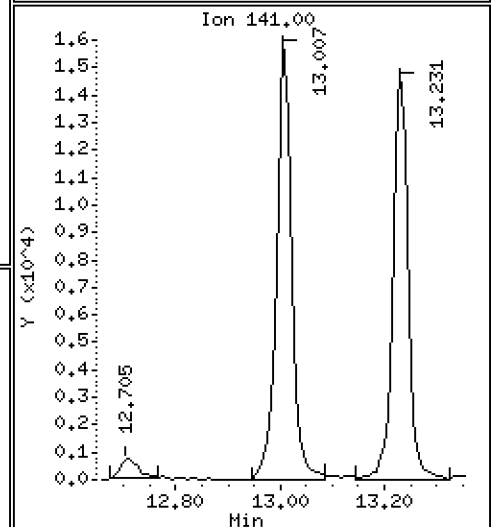
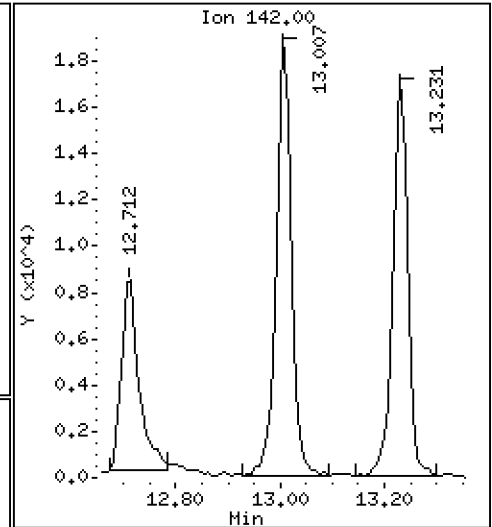
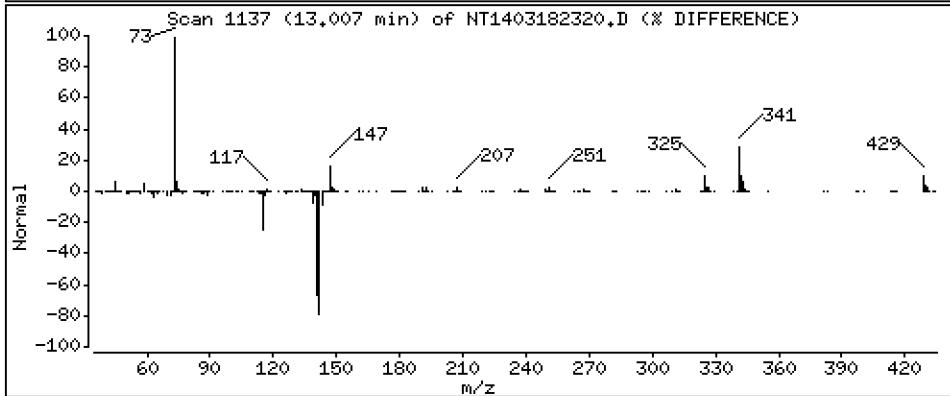
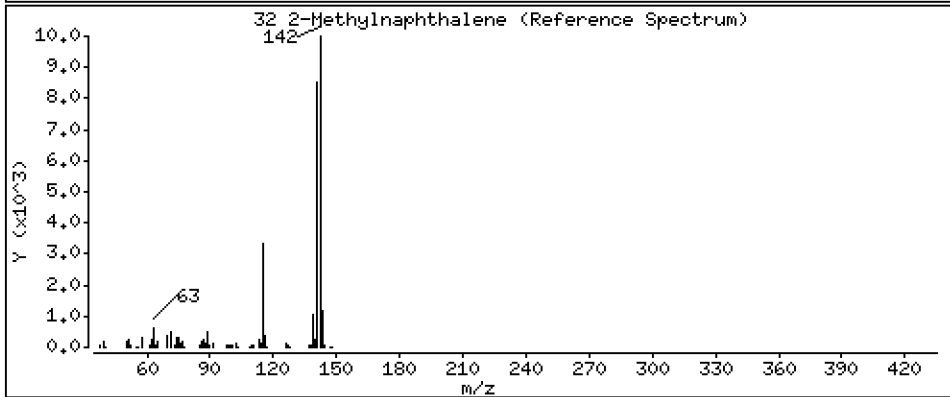
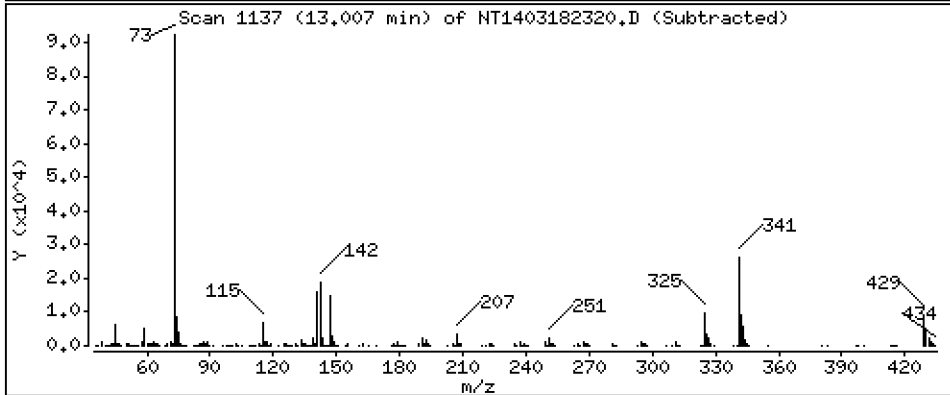
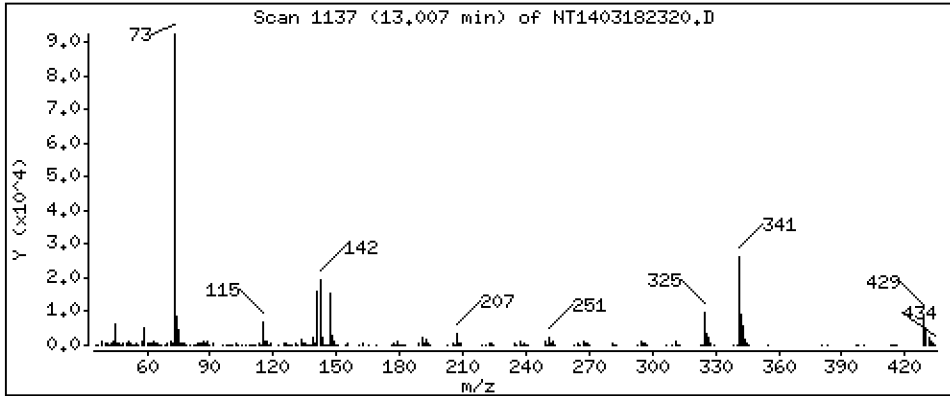
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,2009 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

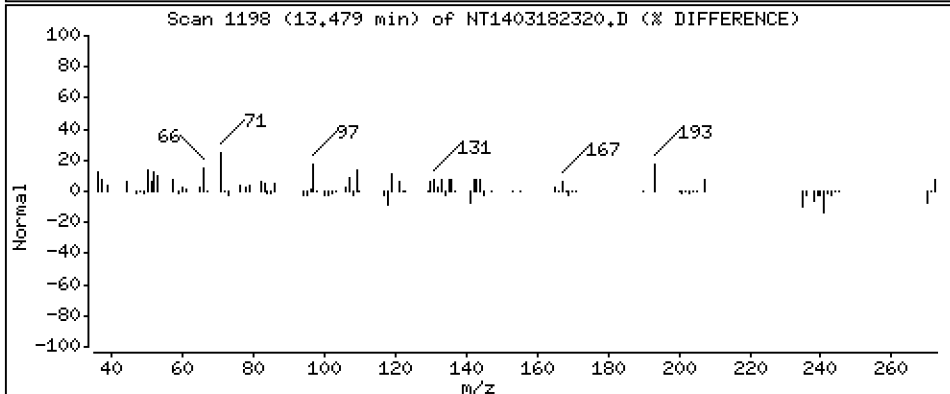
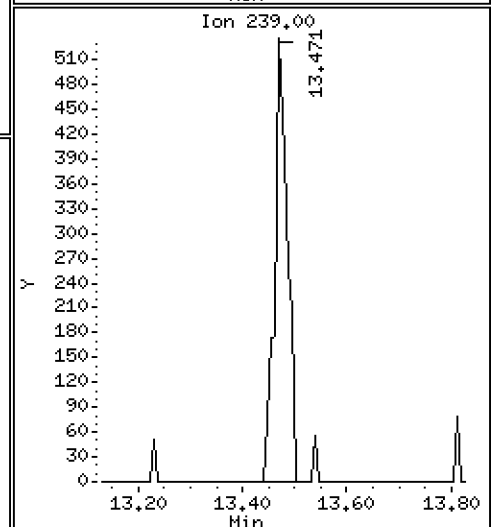
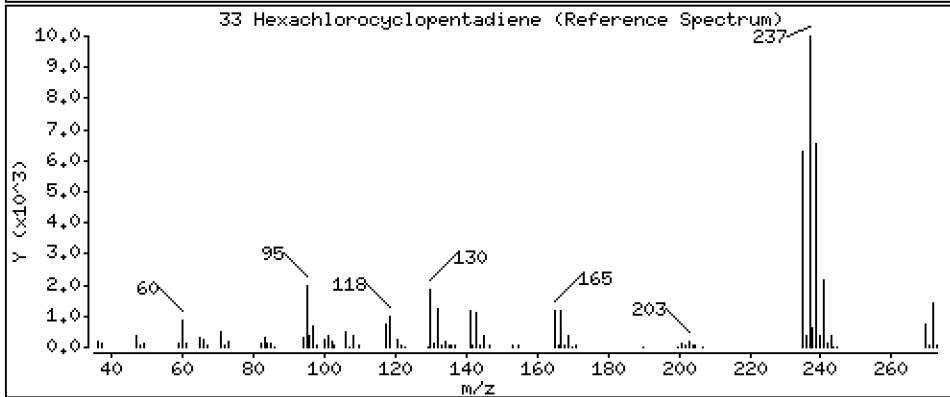
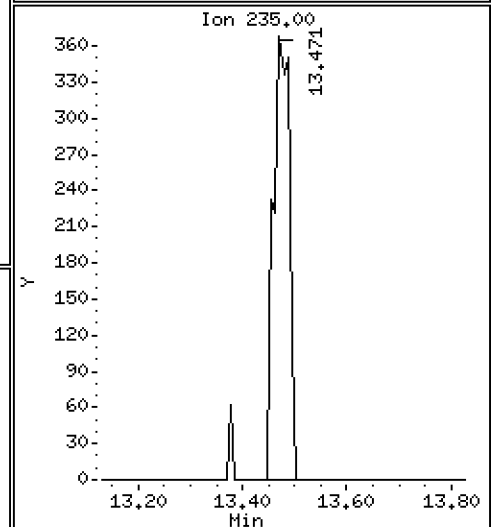
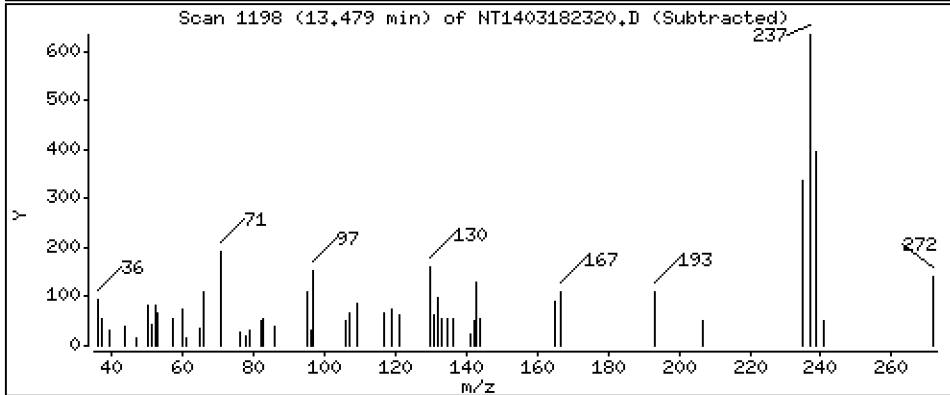
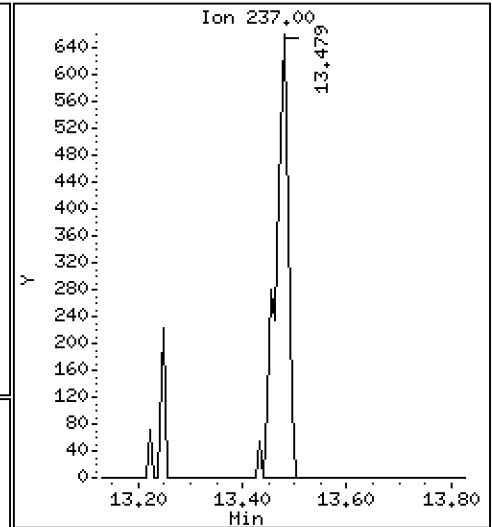
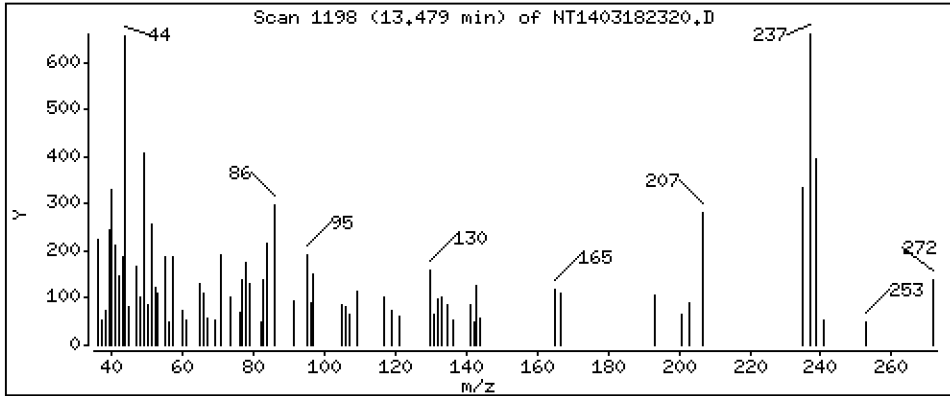
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 0,02526 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

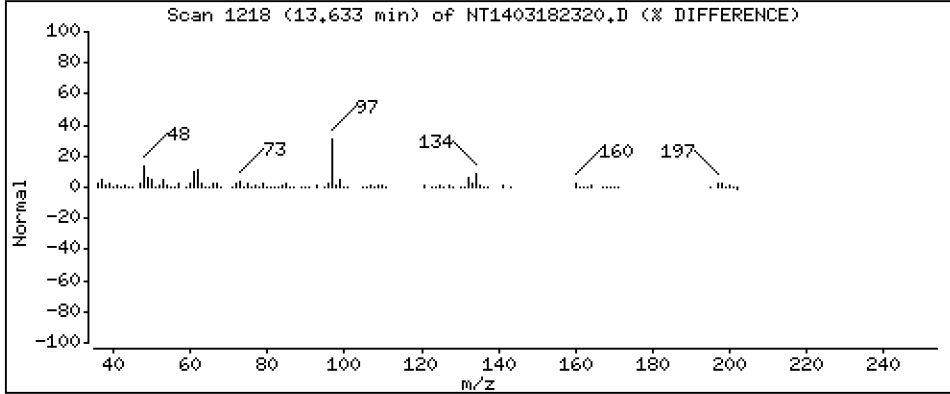
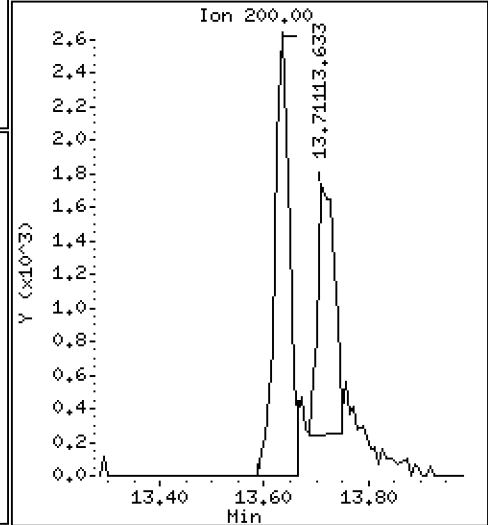
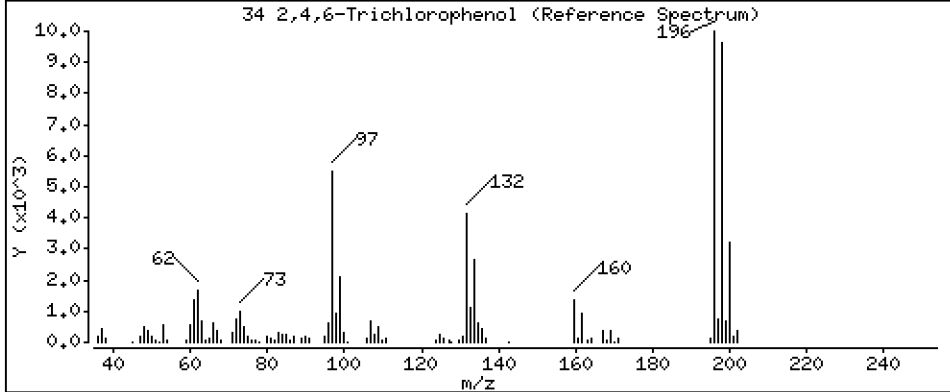
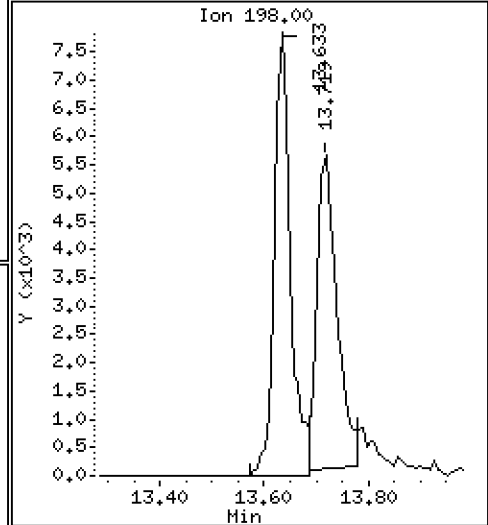
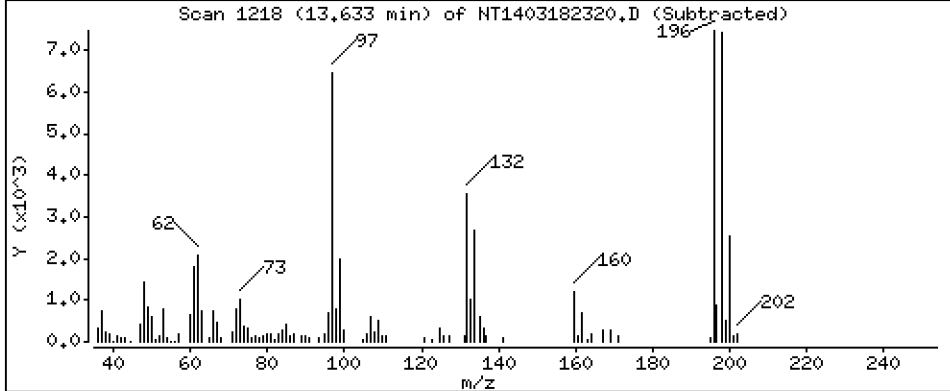
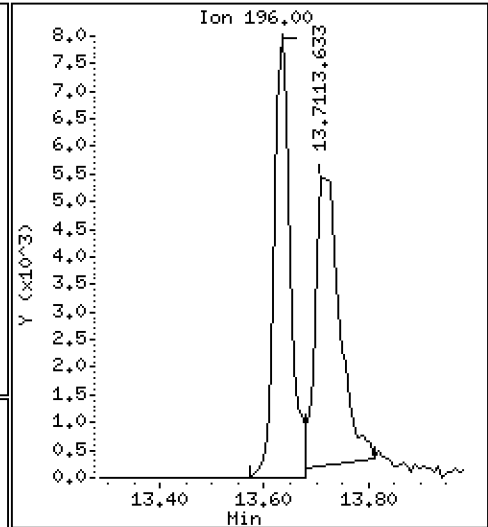
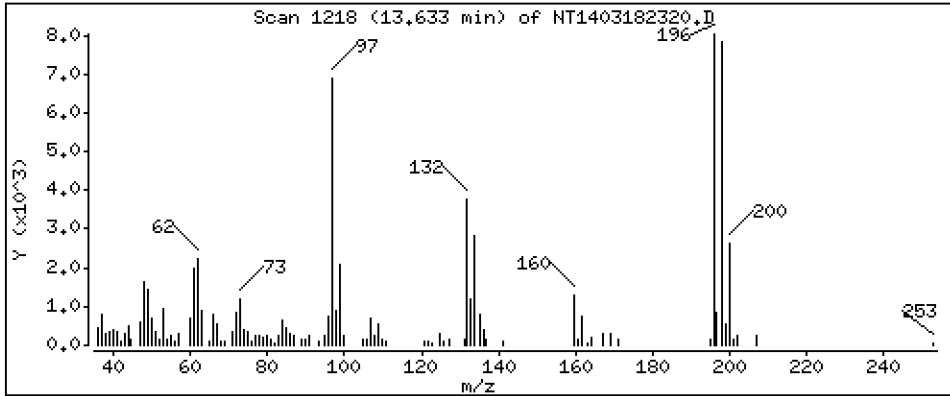
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,3390 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

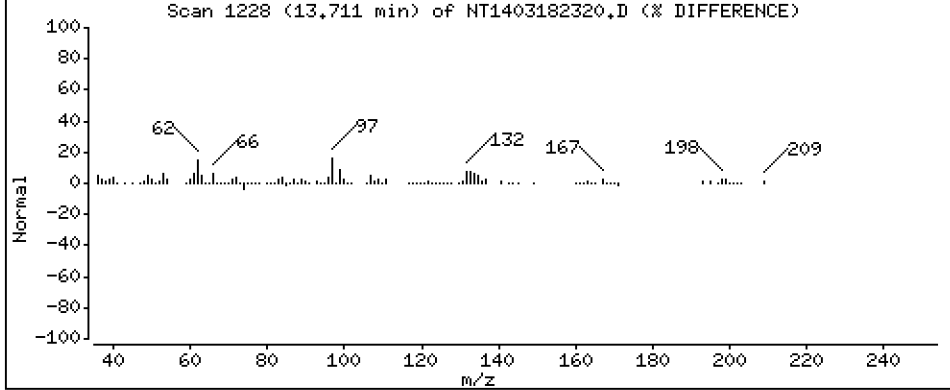
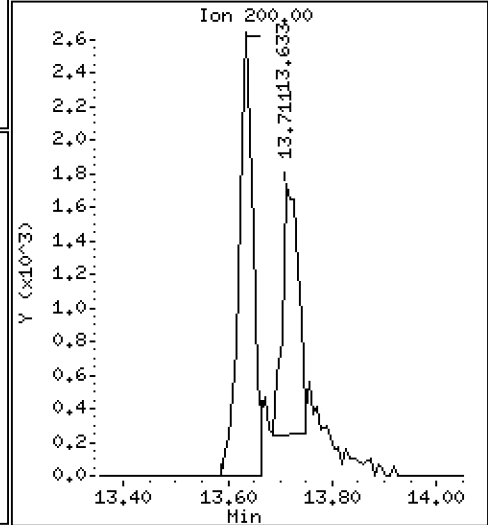
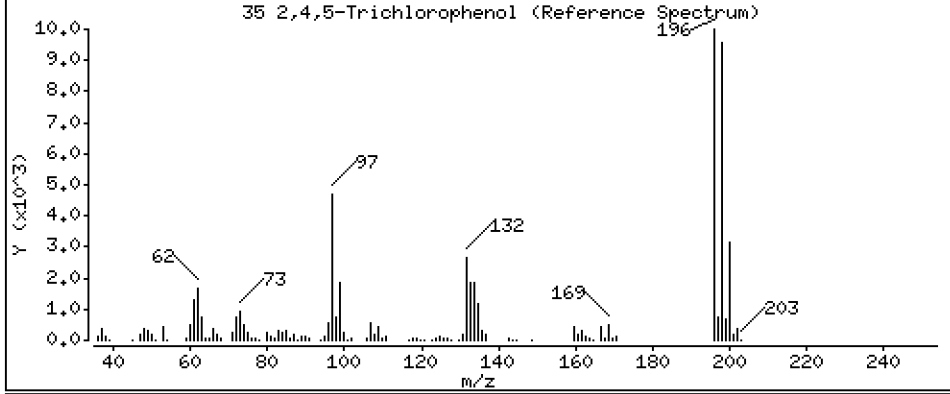
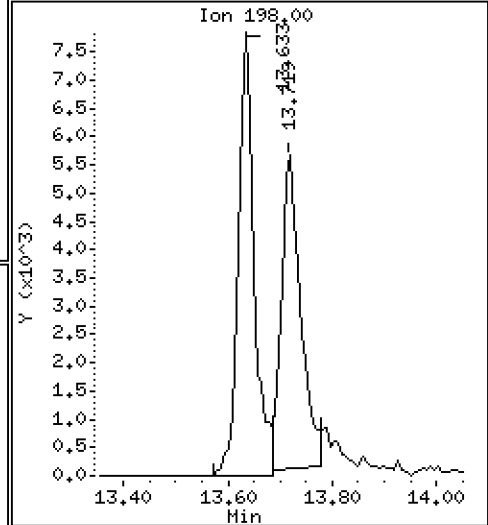
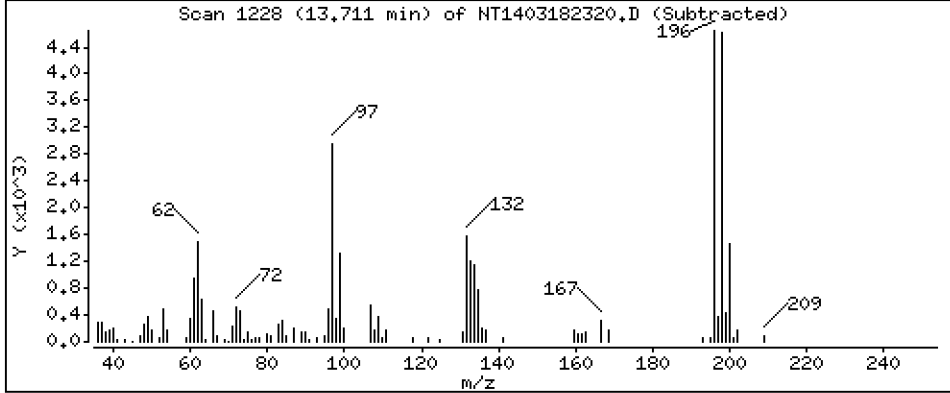
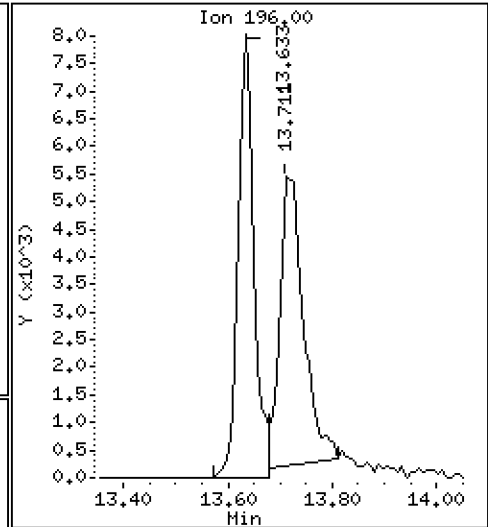
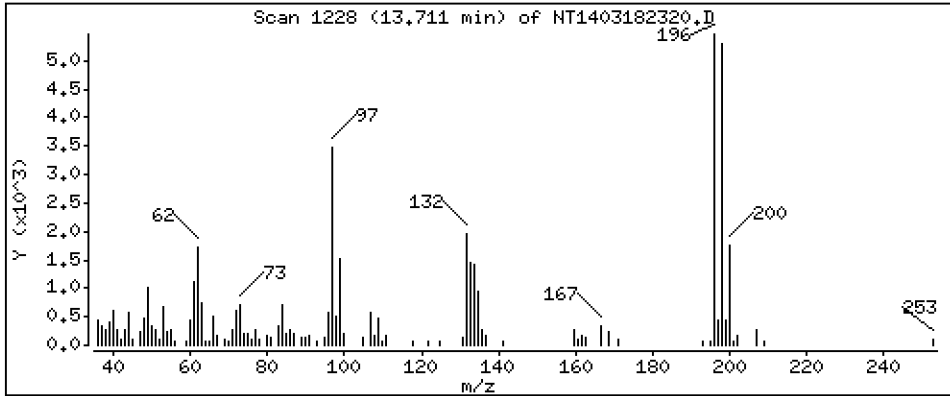
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,3283 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

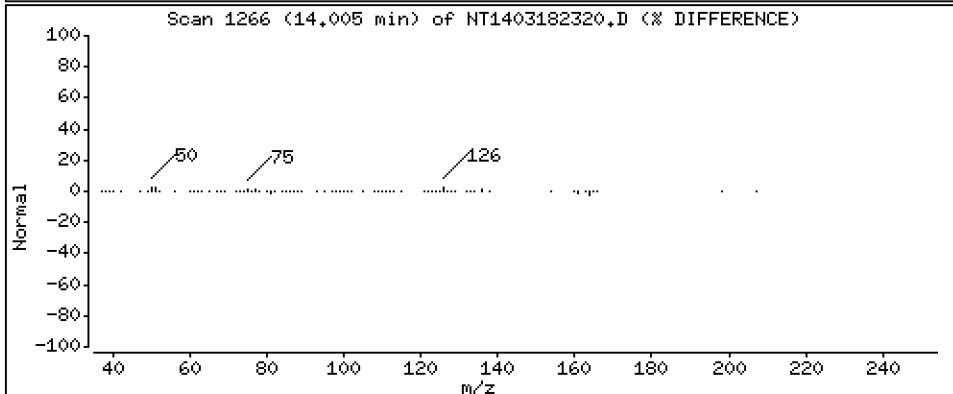
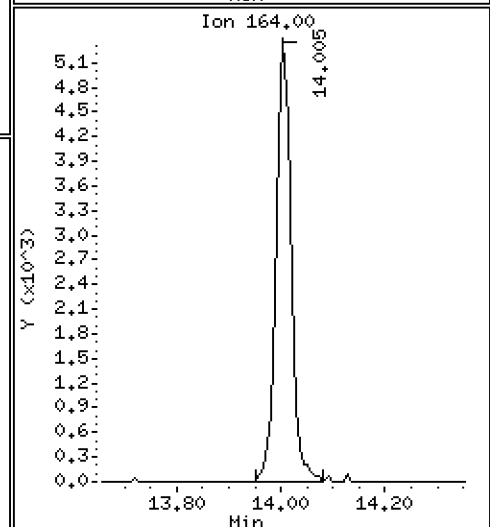
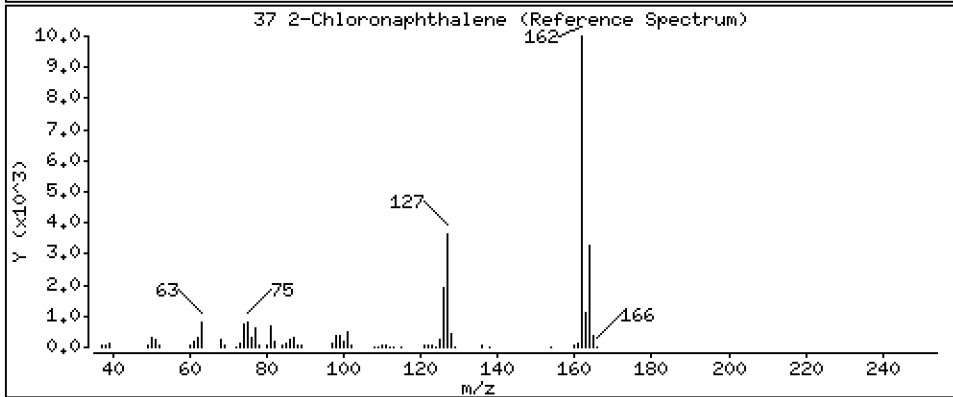
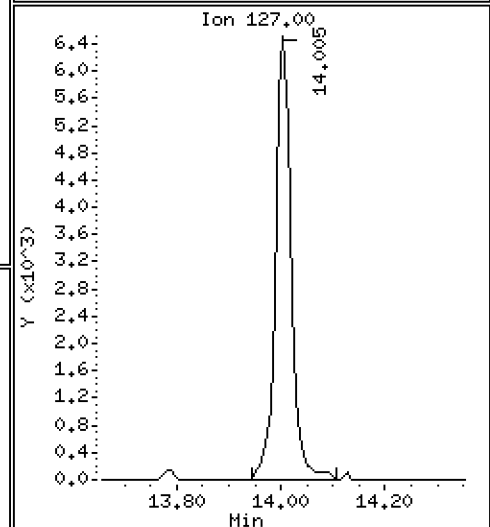
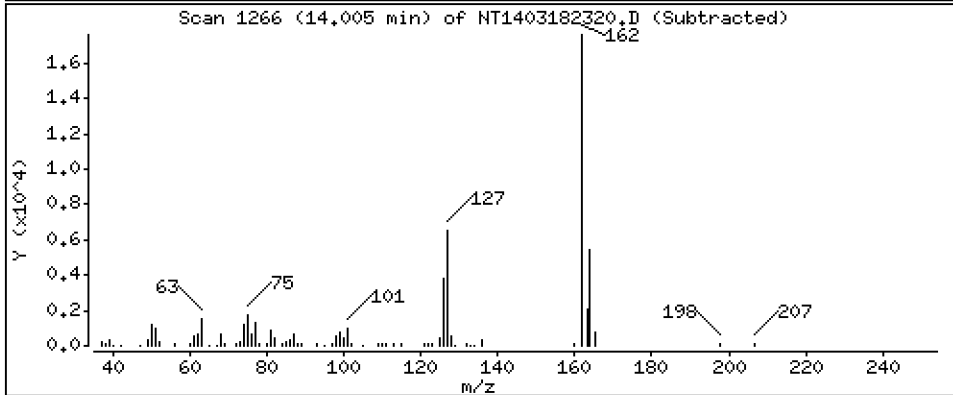
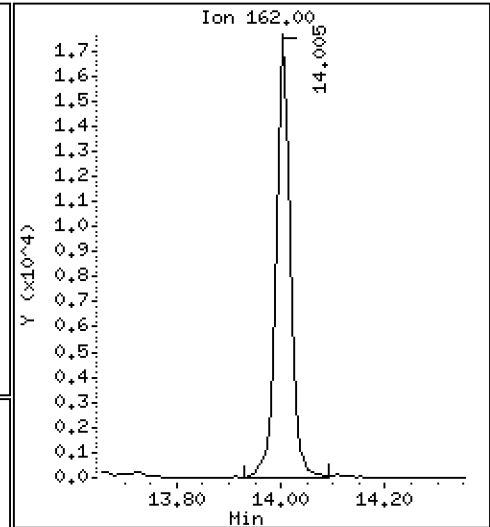
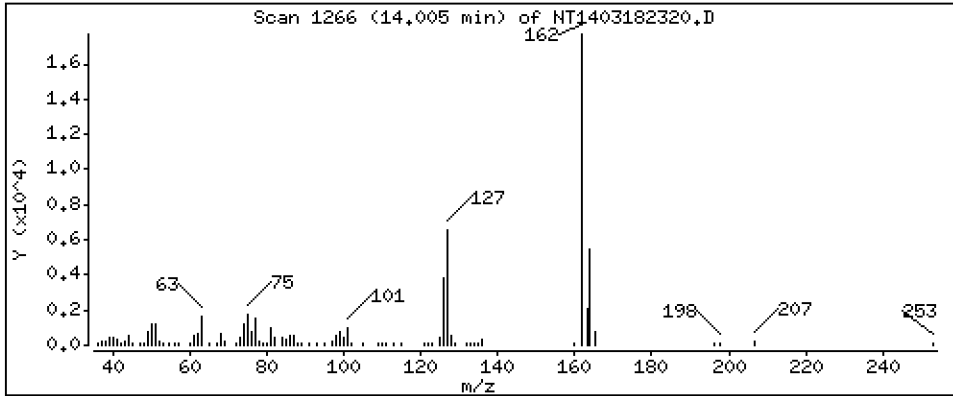
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2094 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

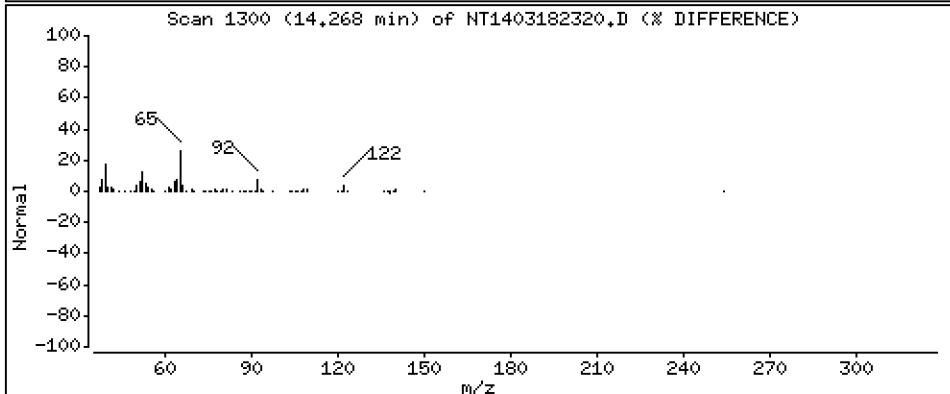
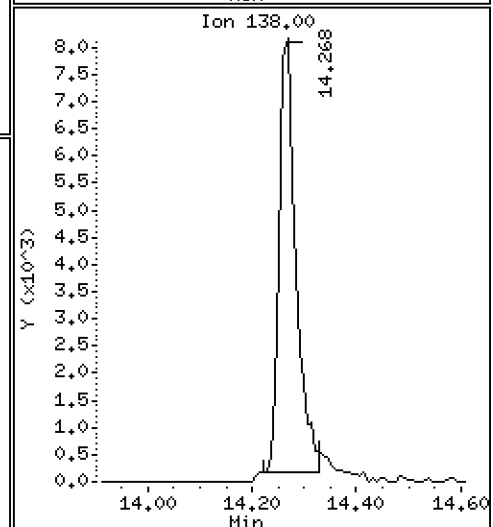
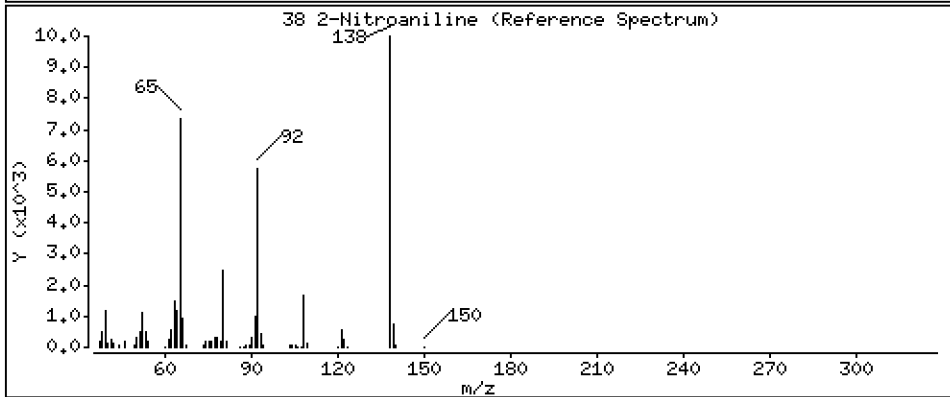
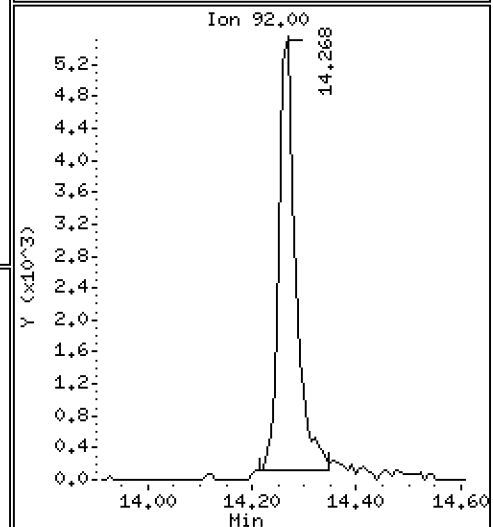
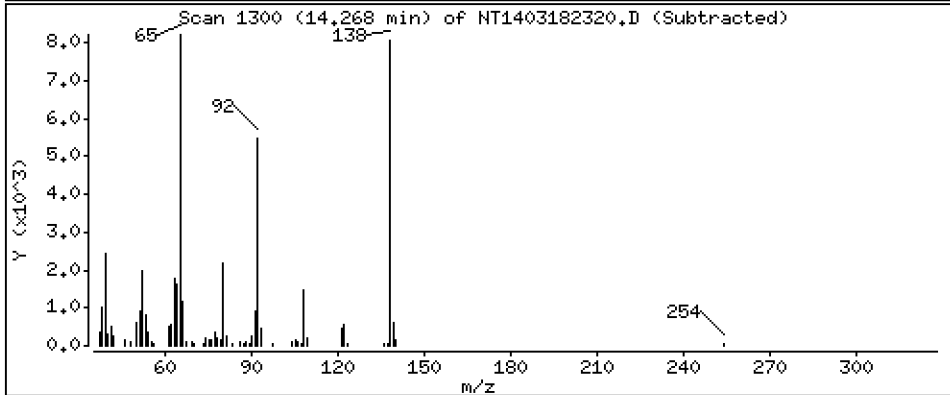
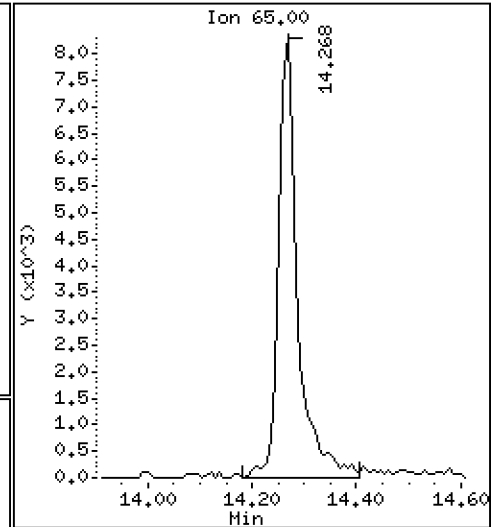
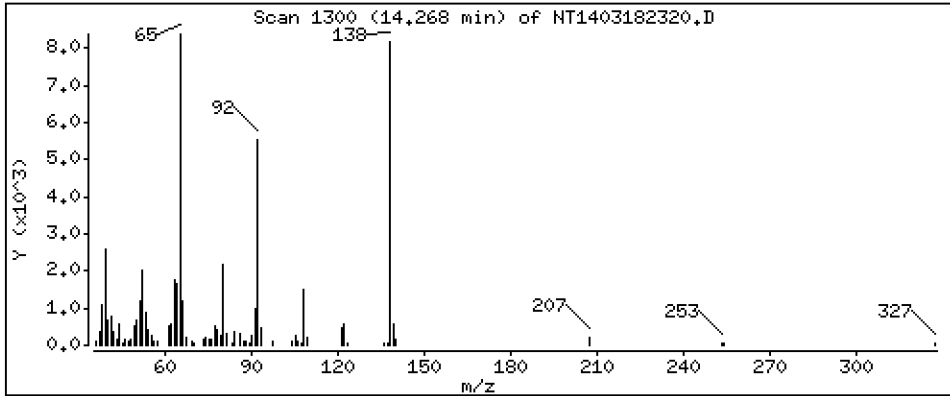
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,3533 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

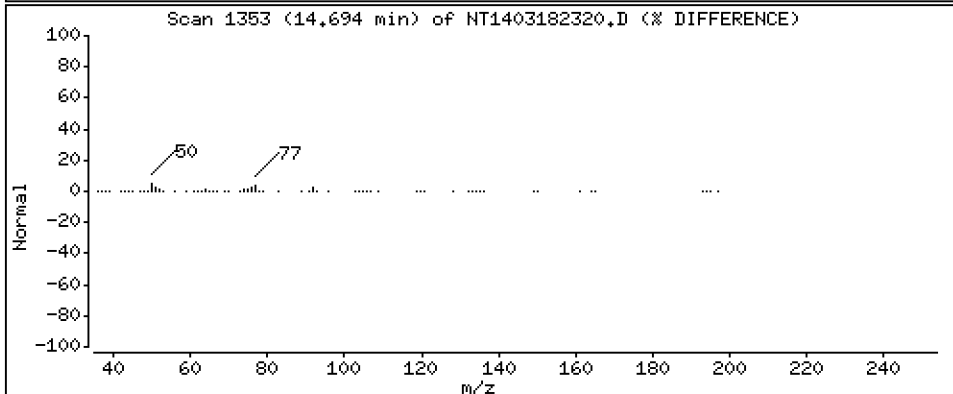
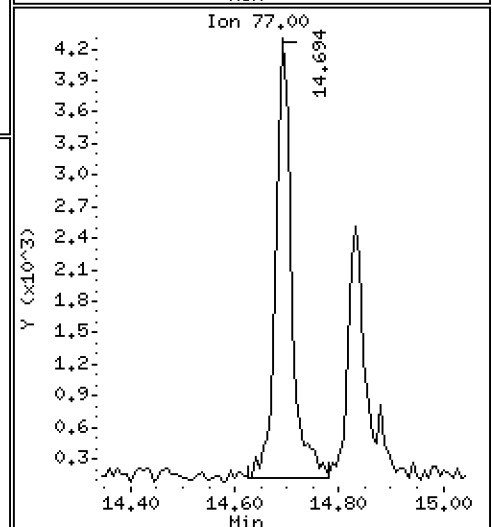
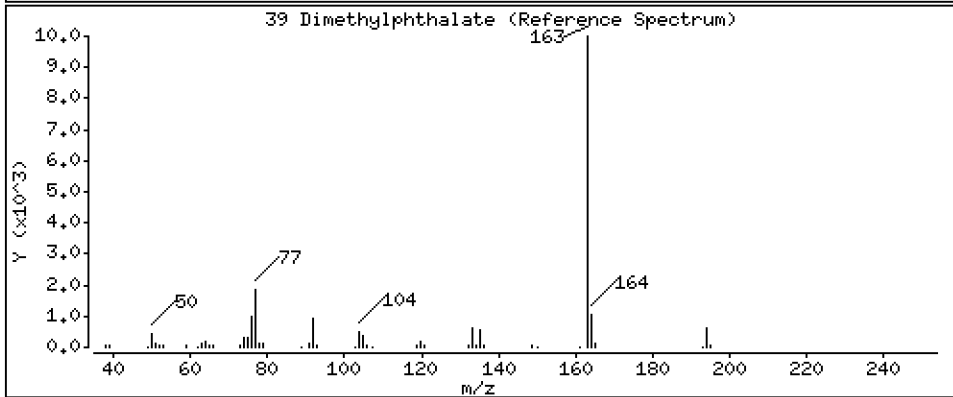
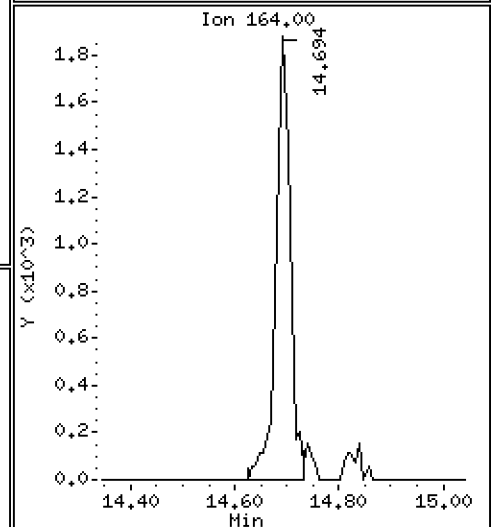
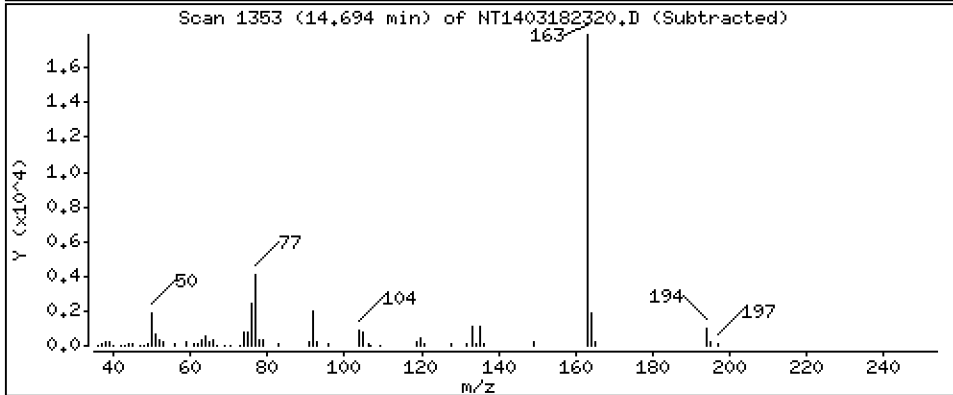
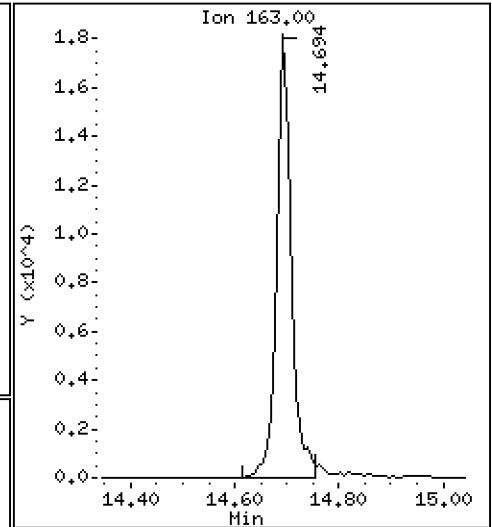
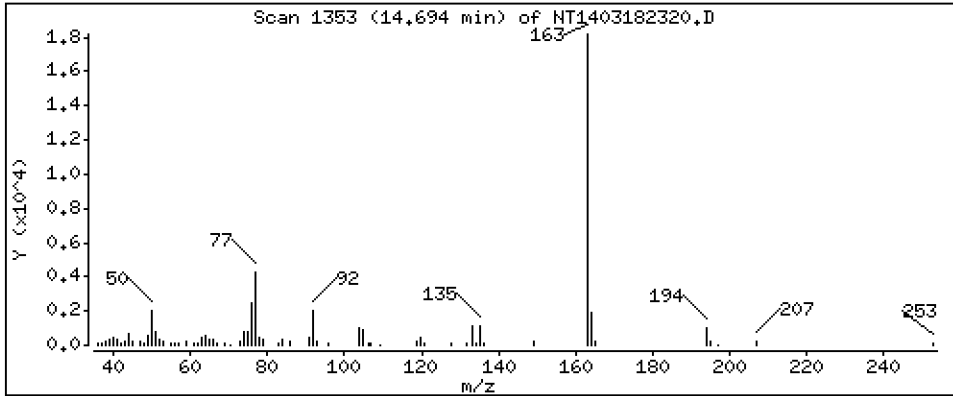
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.2079 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

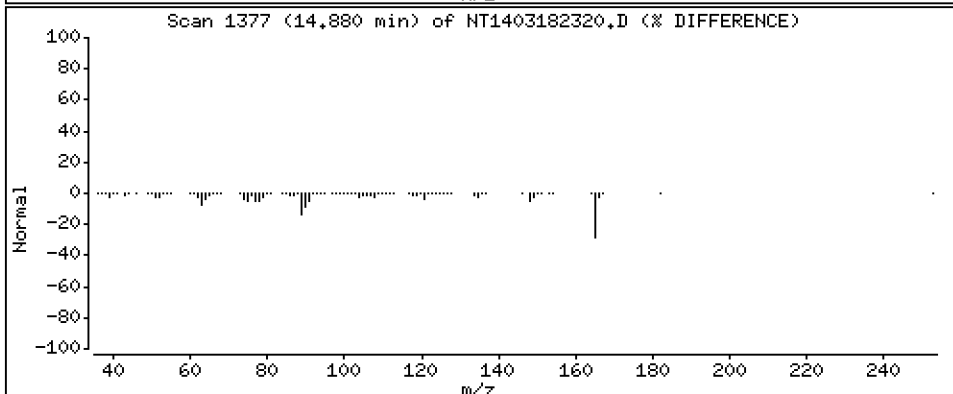
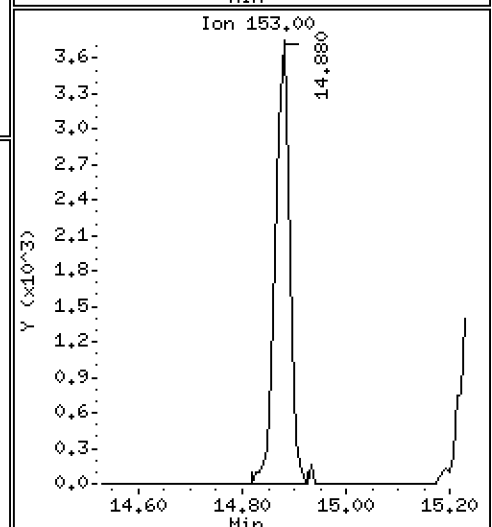
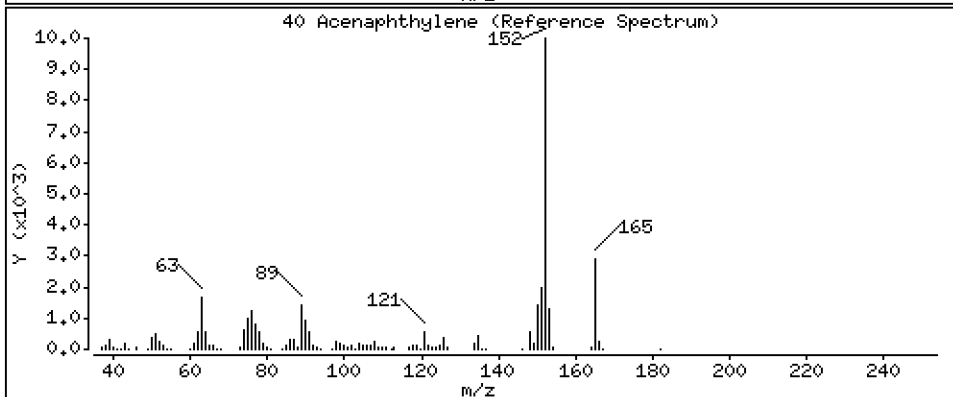
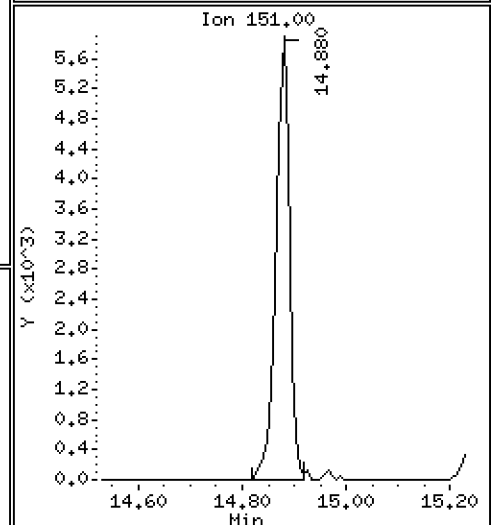
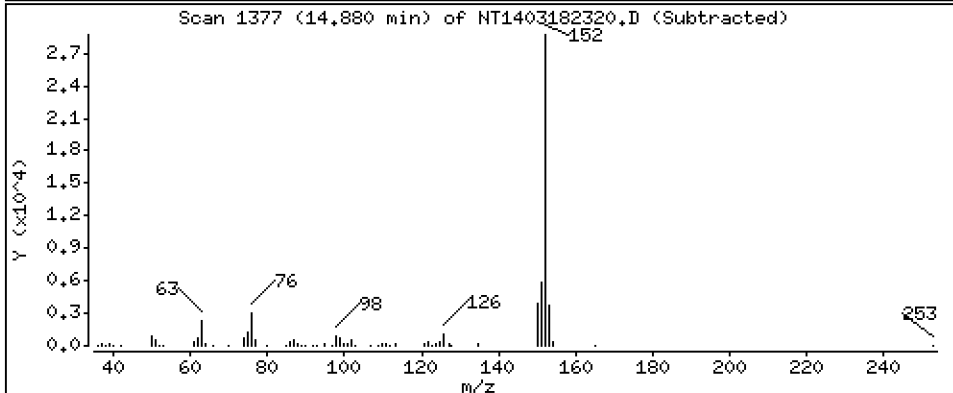
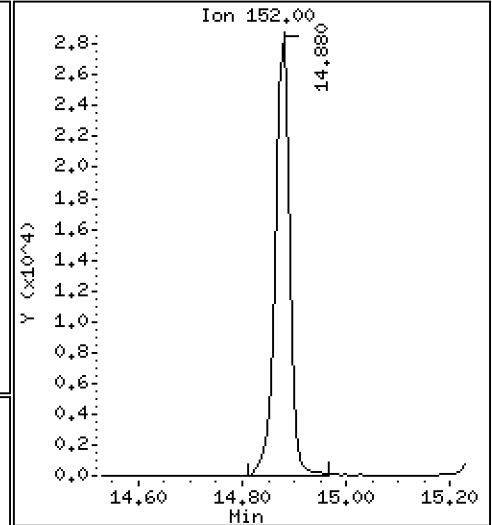
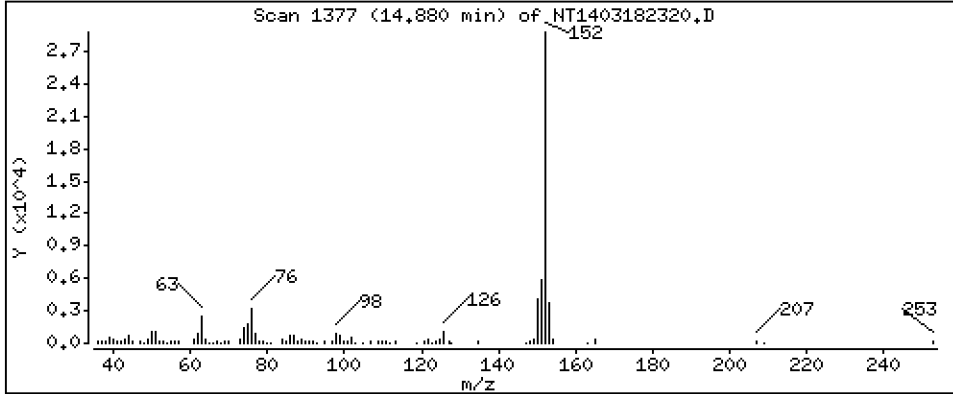
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,2063 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

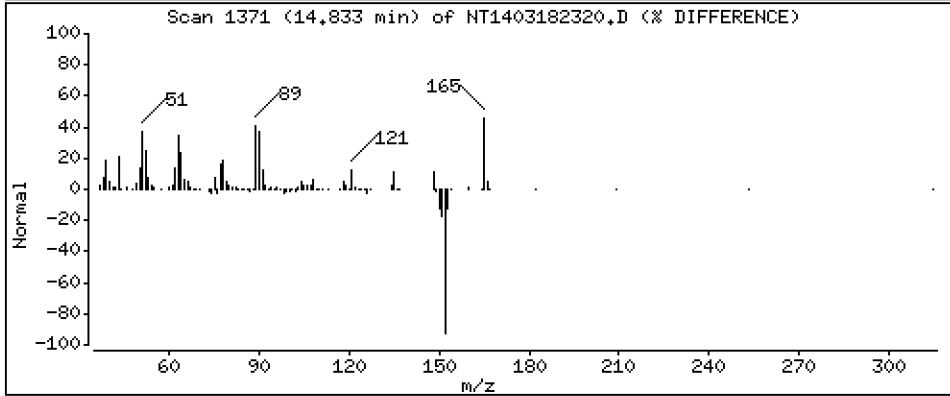
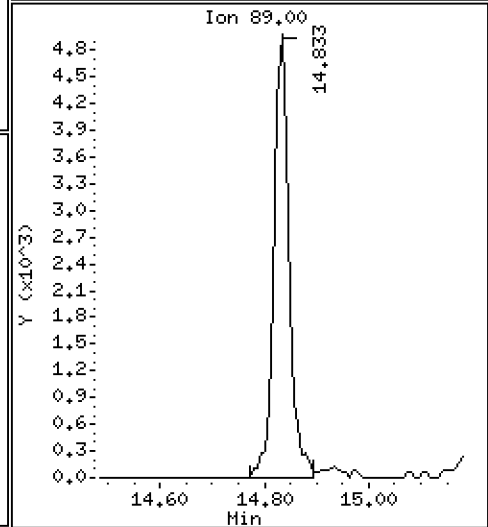
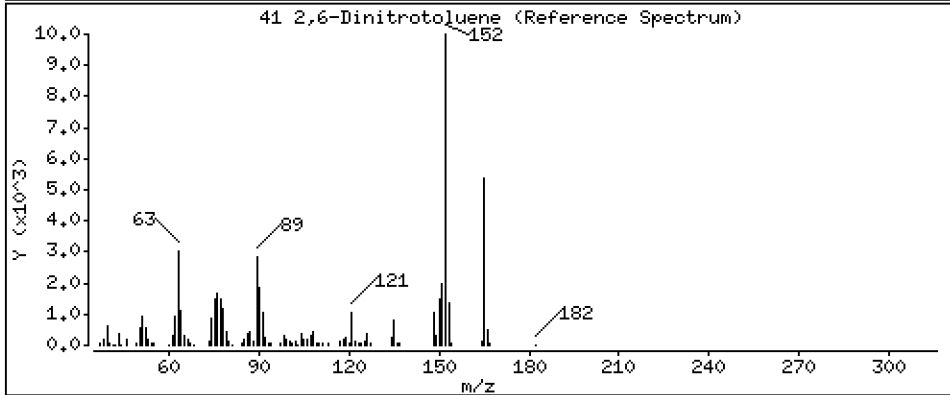
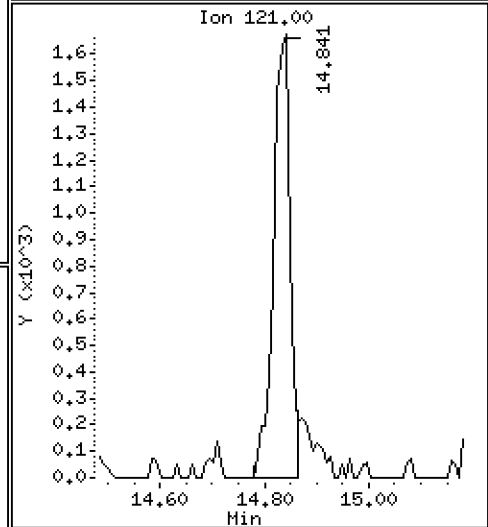
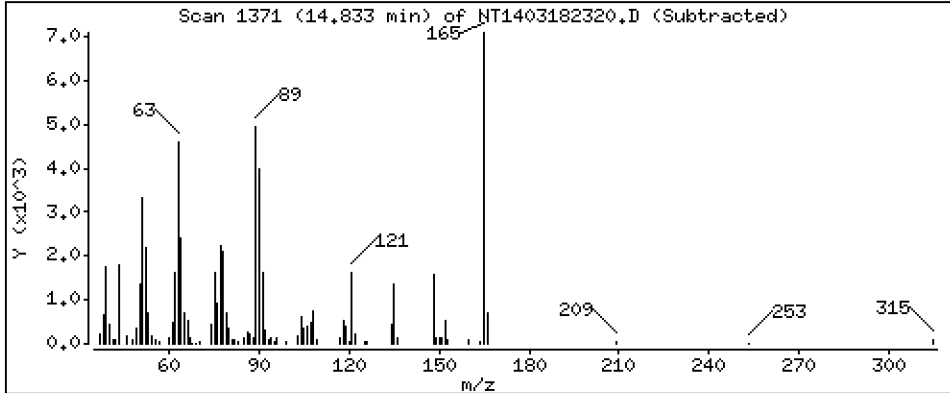
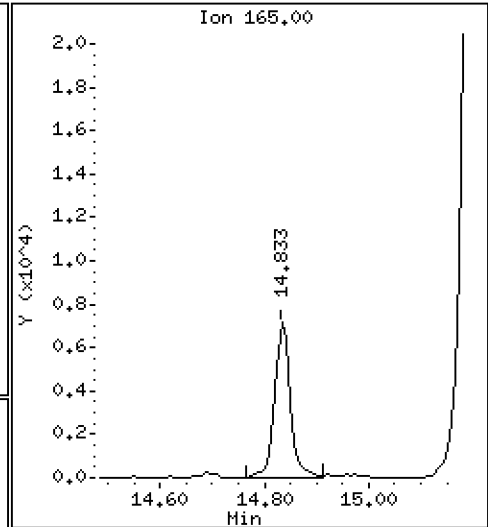
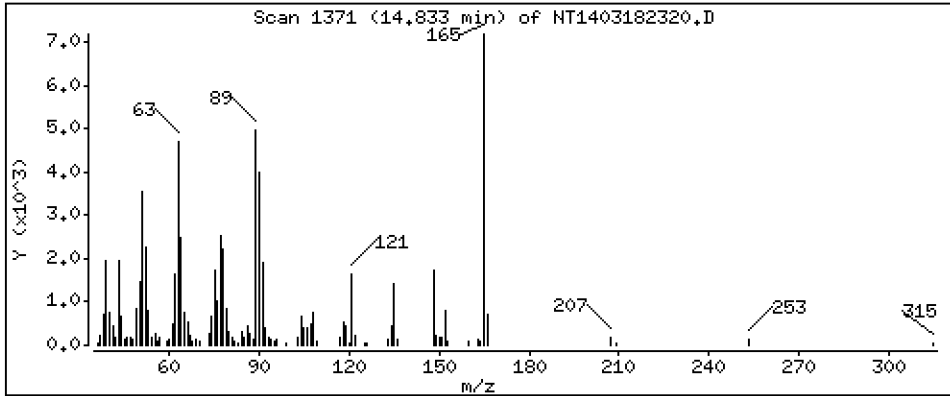
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 0.3859 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

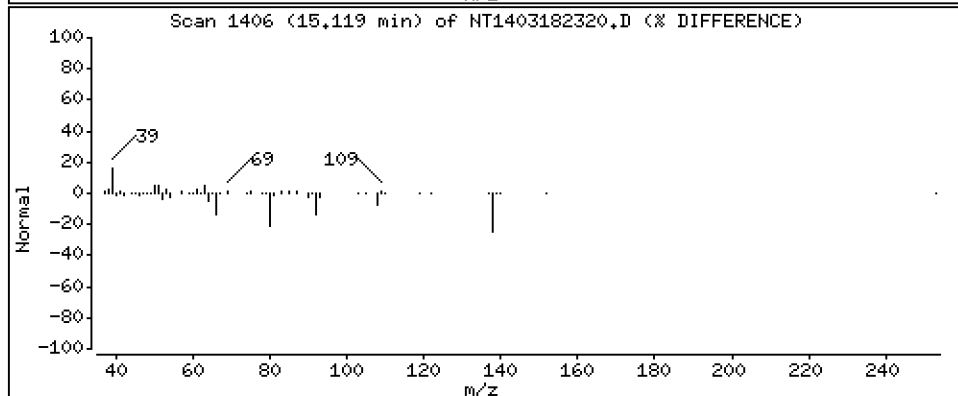
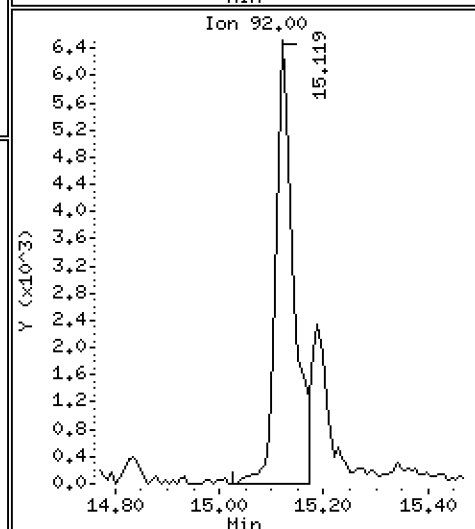
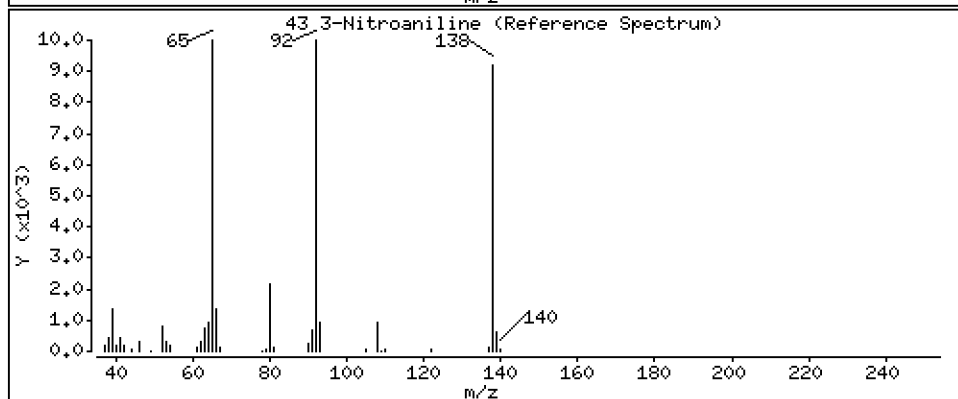
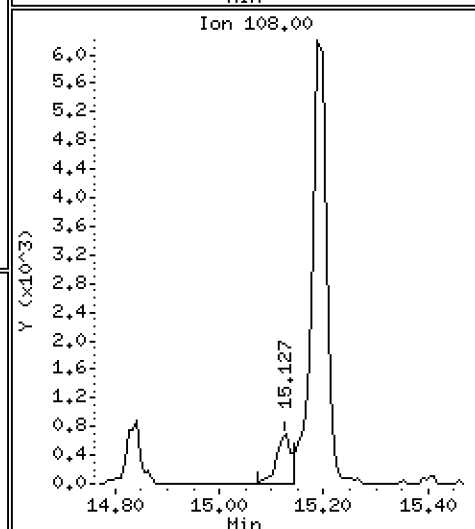
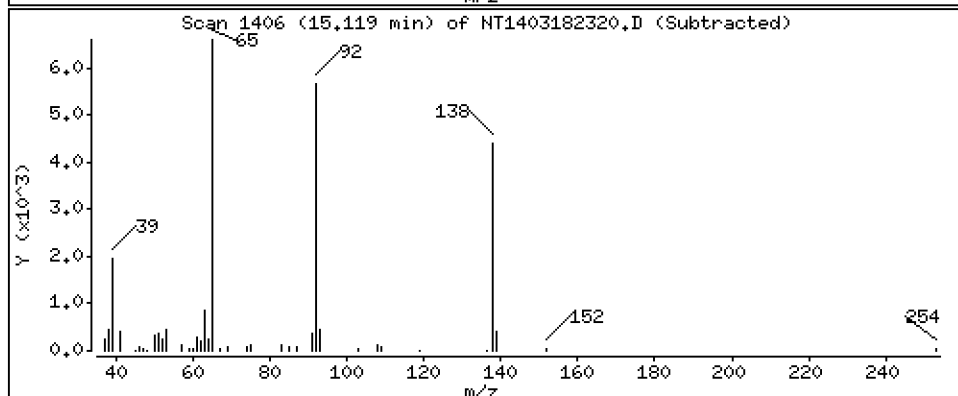
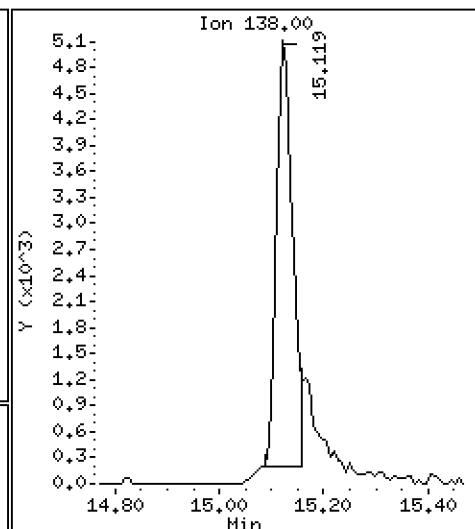
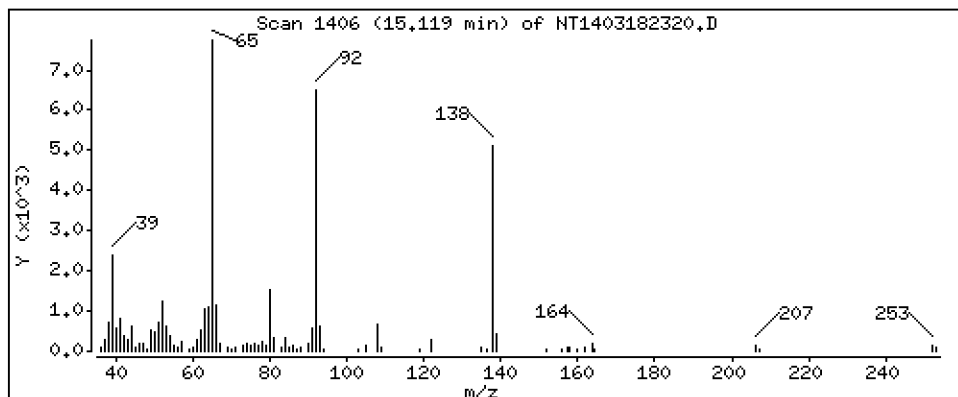
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,2002 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

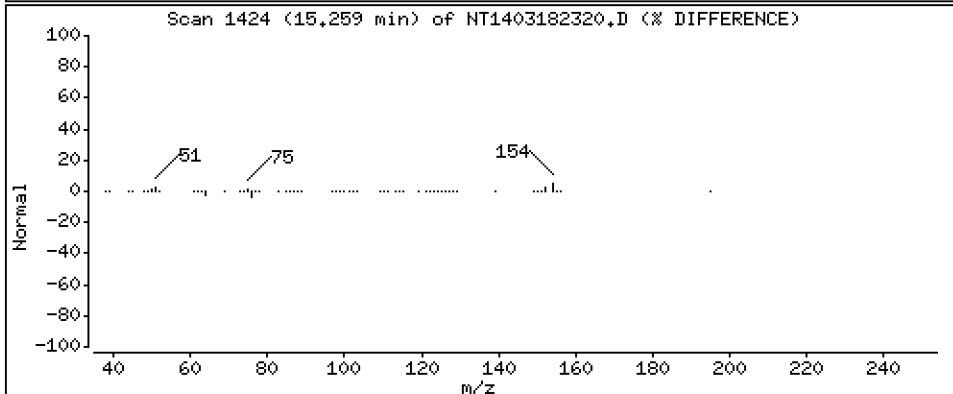
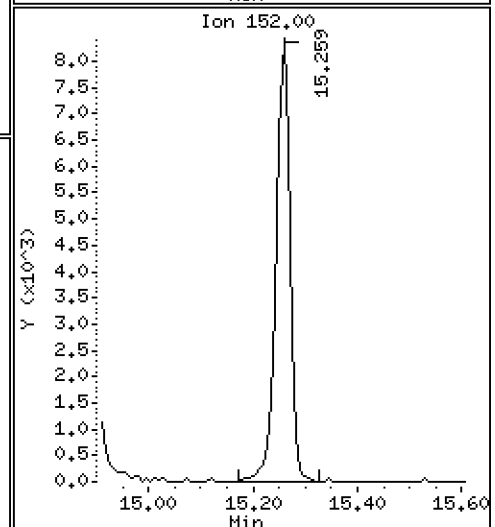
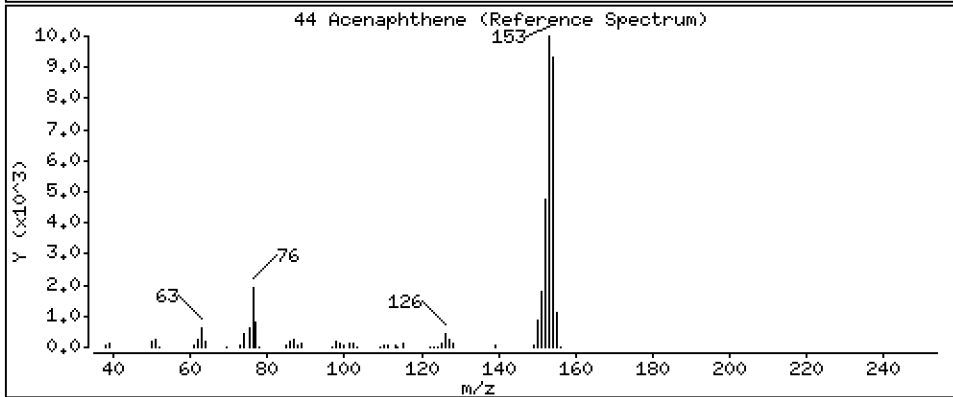
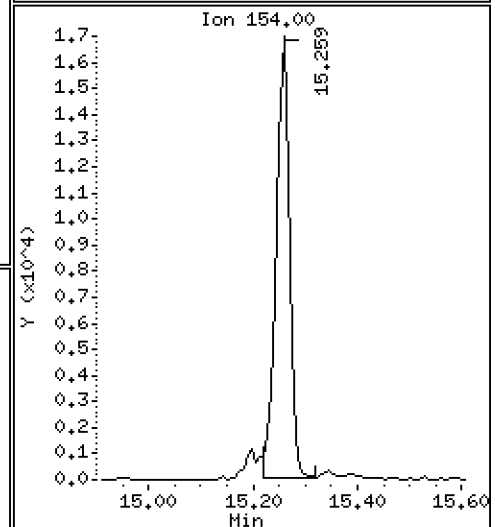
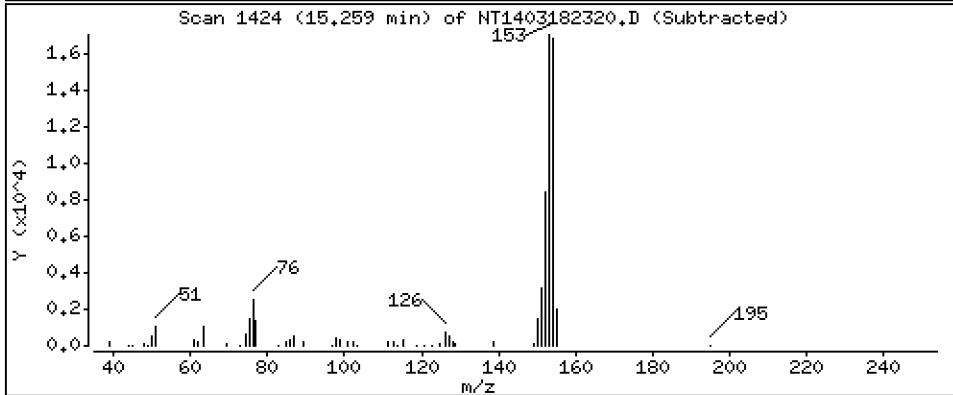
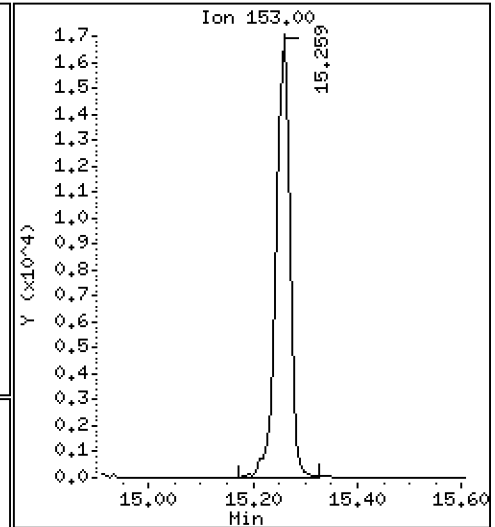
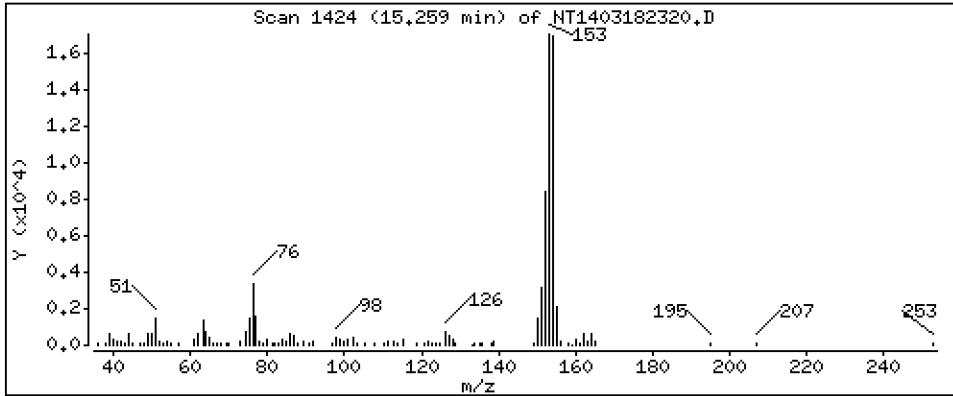
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,2030 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

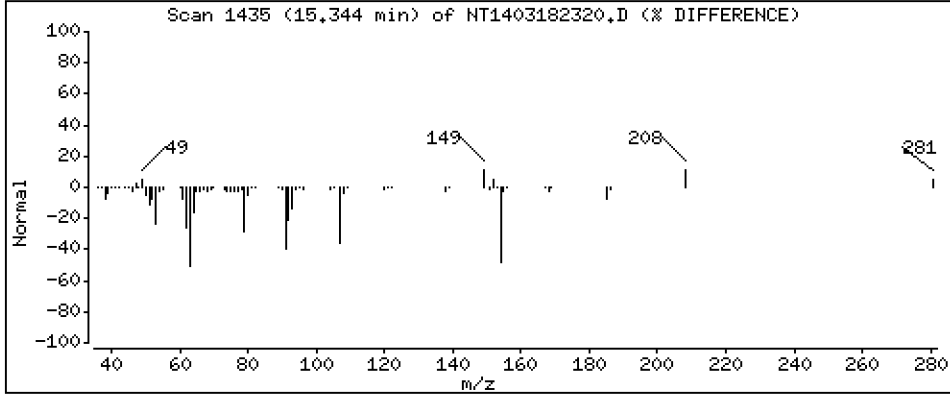
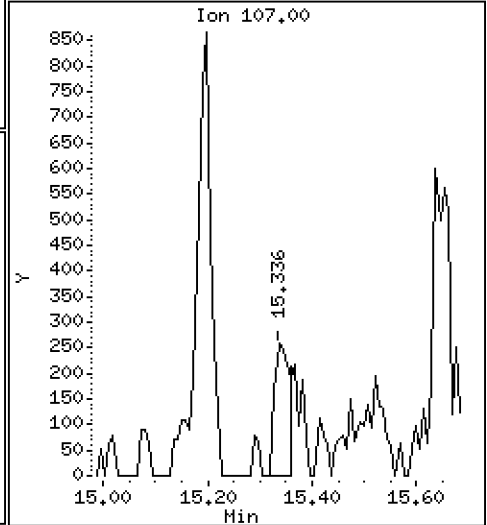
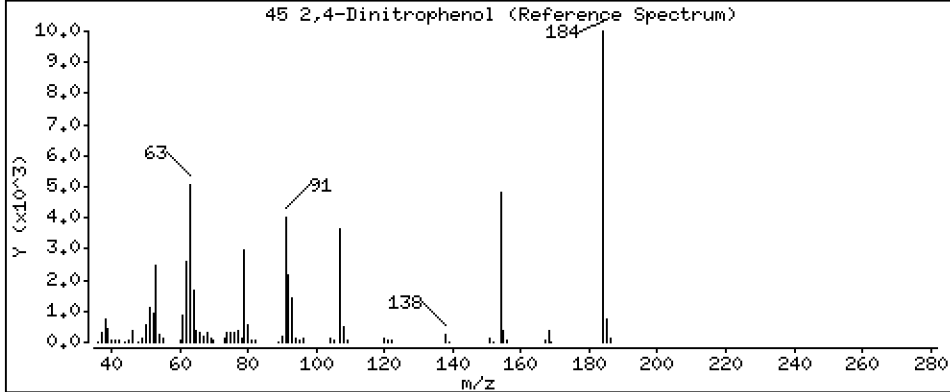
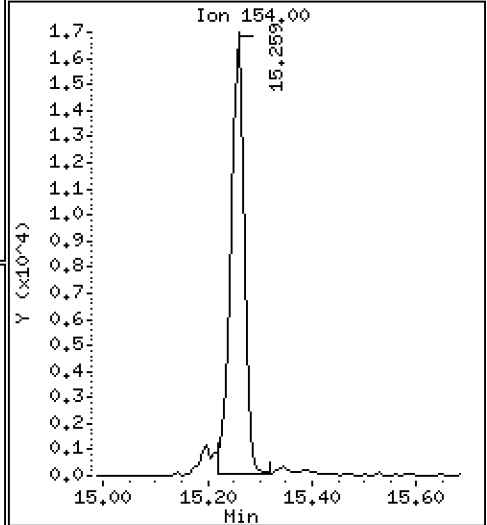
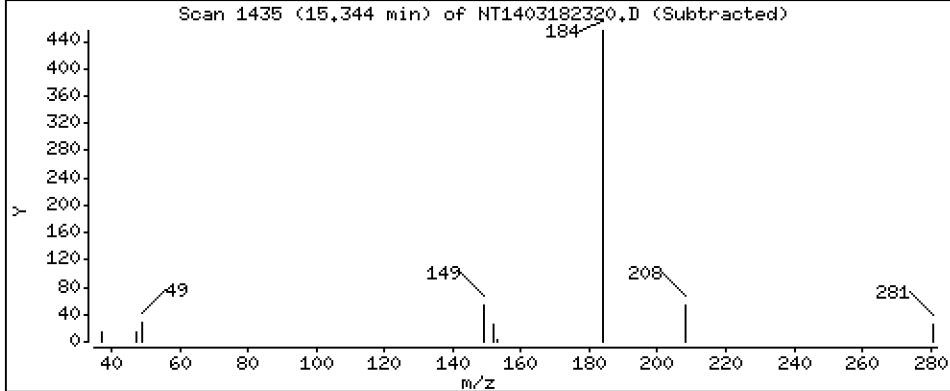
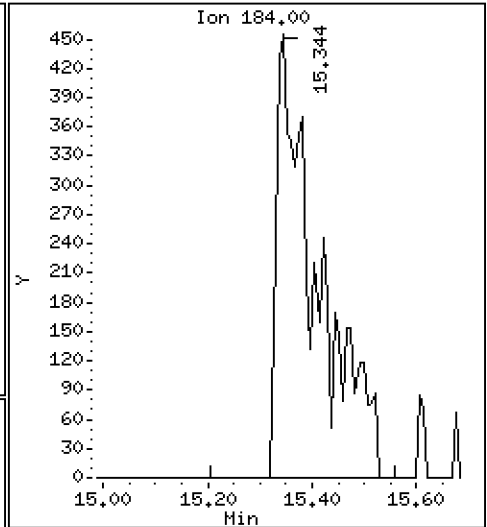
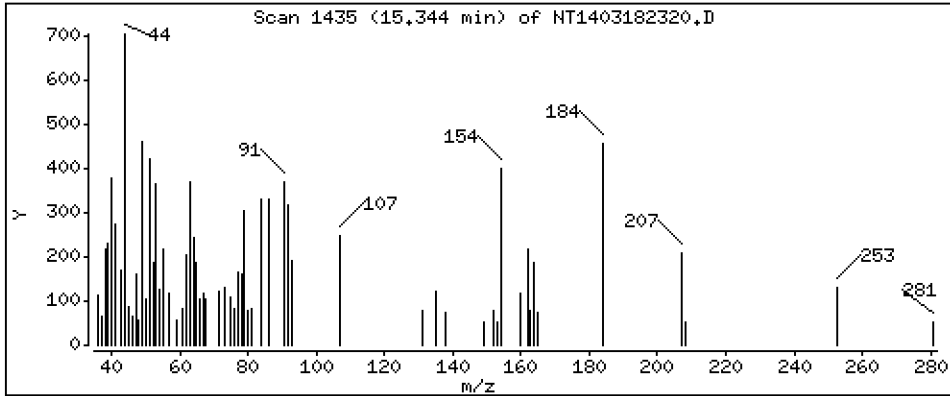
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

45 2,4-Dinitrophenol

Concentration: 0.08347 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

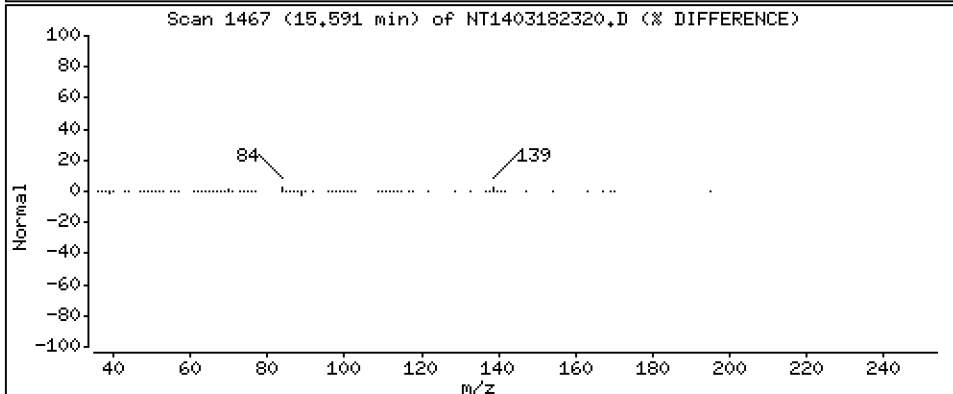
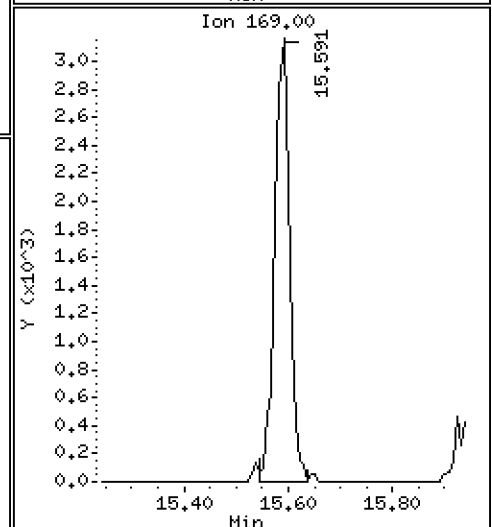
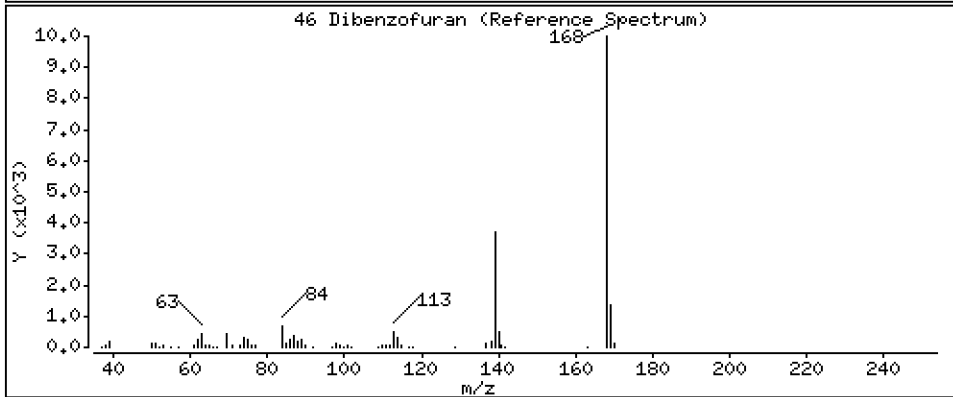
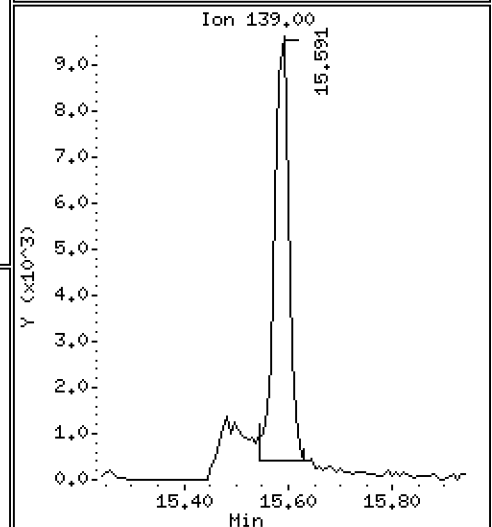
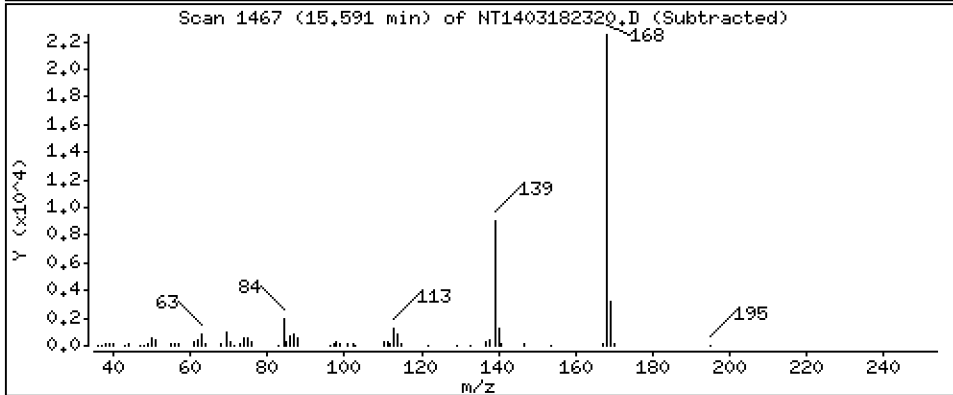
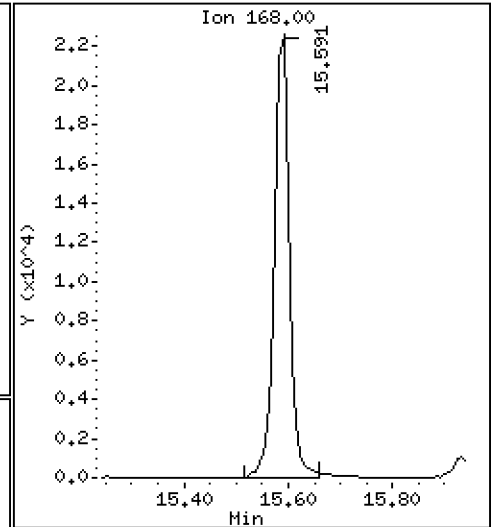
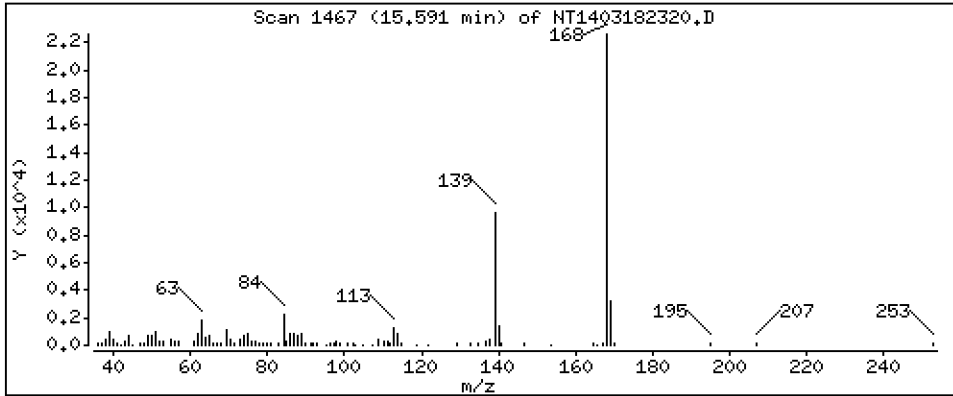
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2040 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

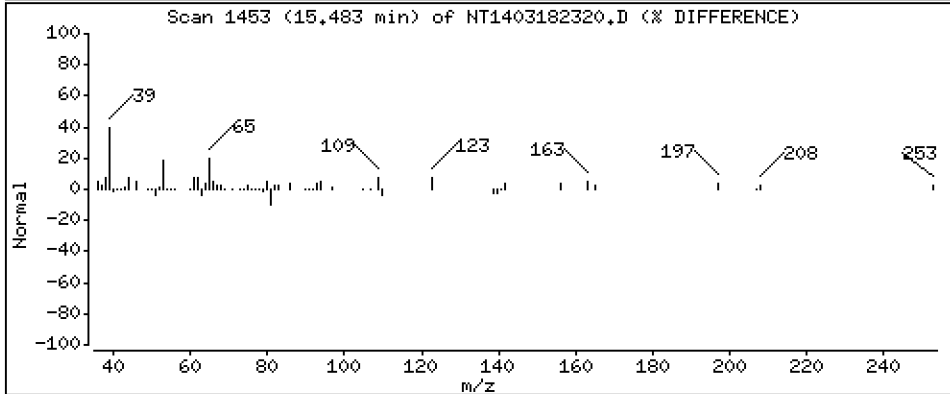
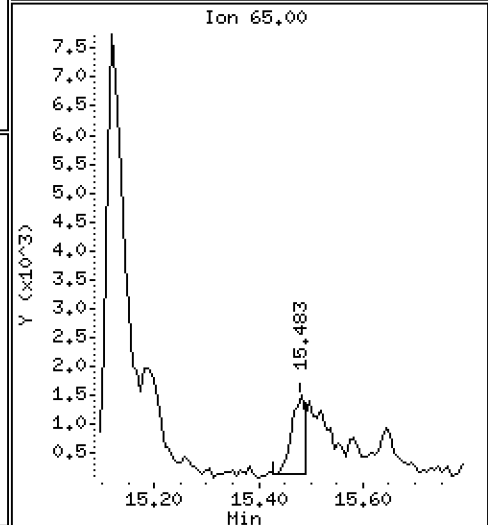
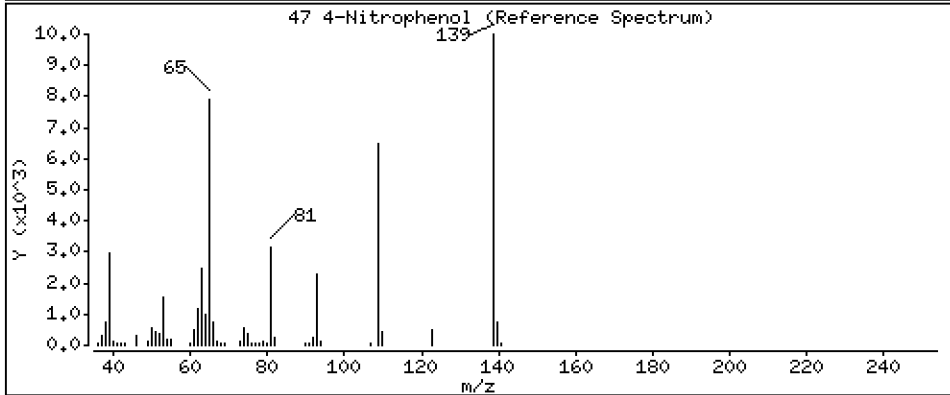
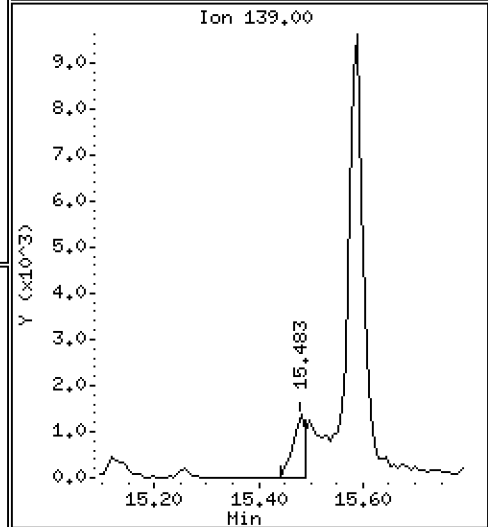
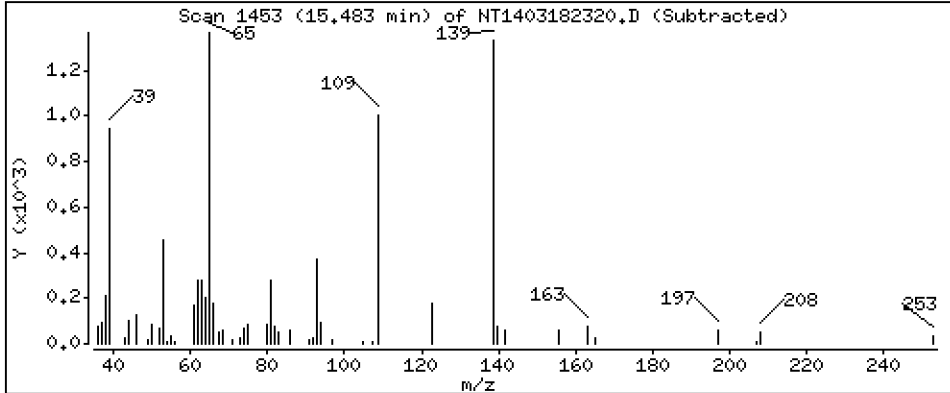
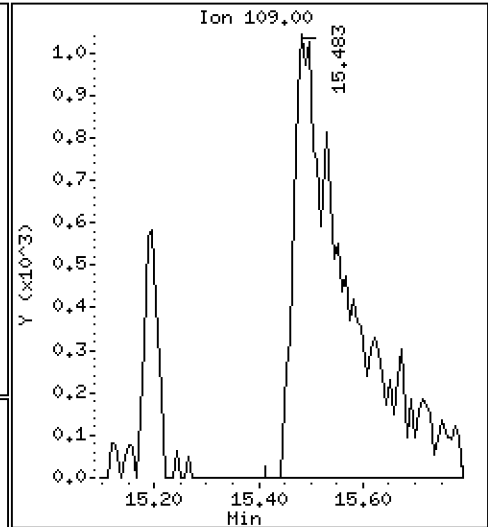
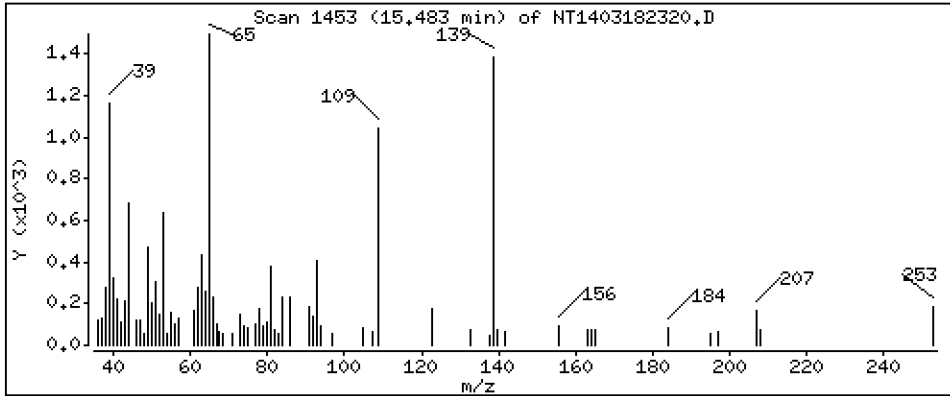
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 0,2784 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

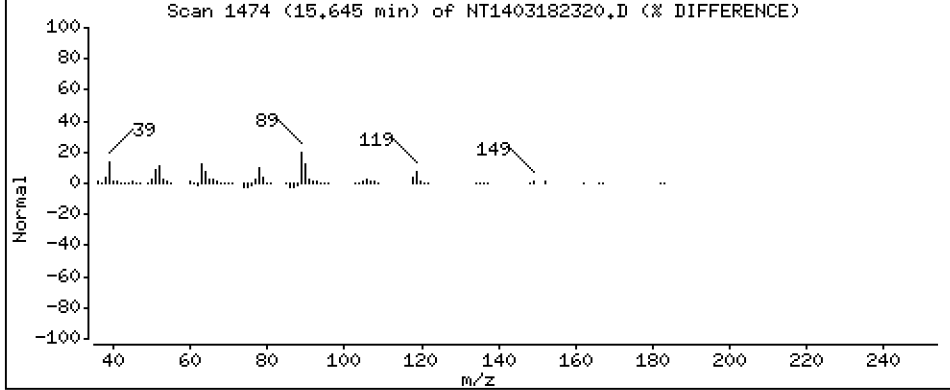
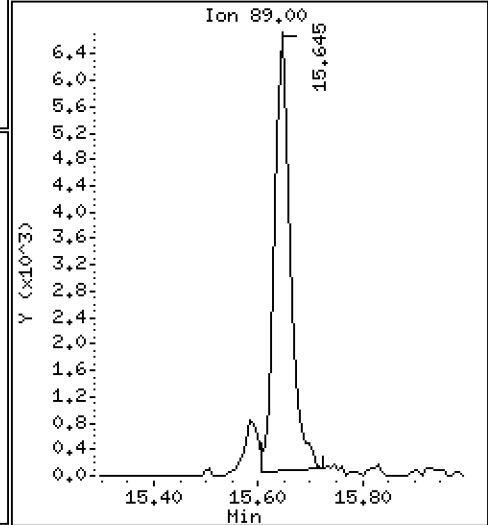
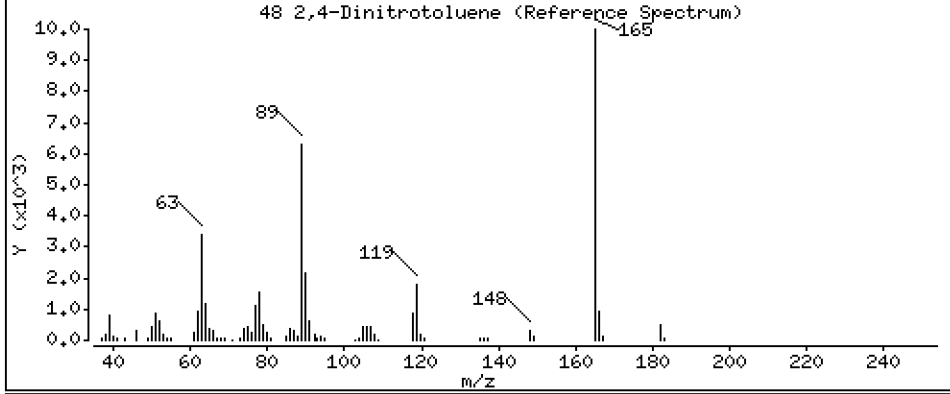
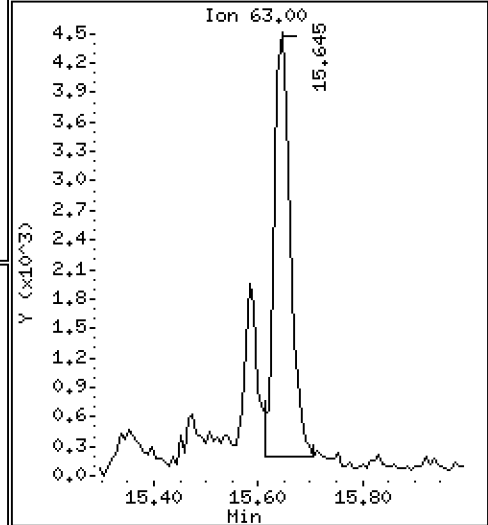
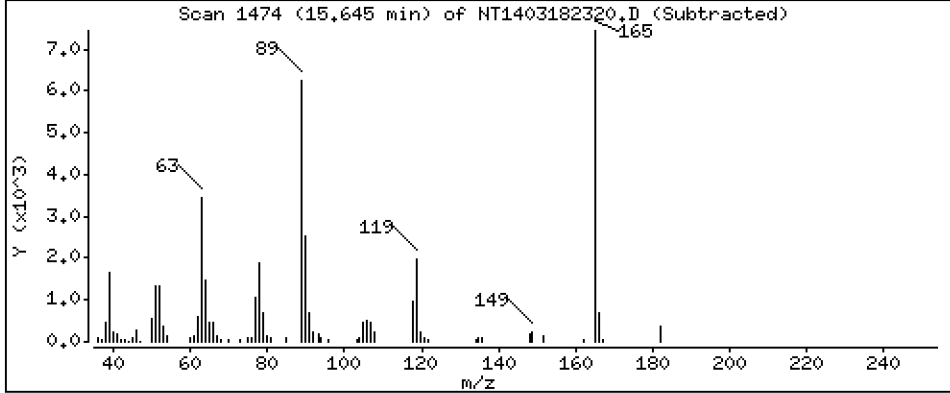
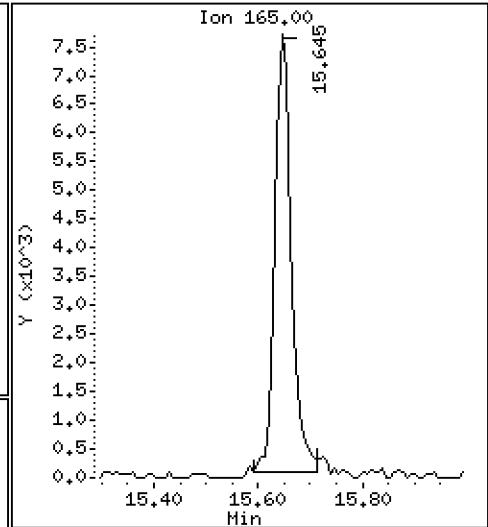
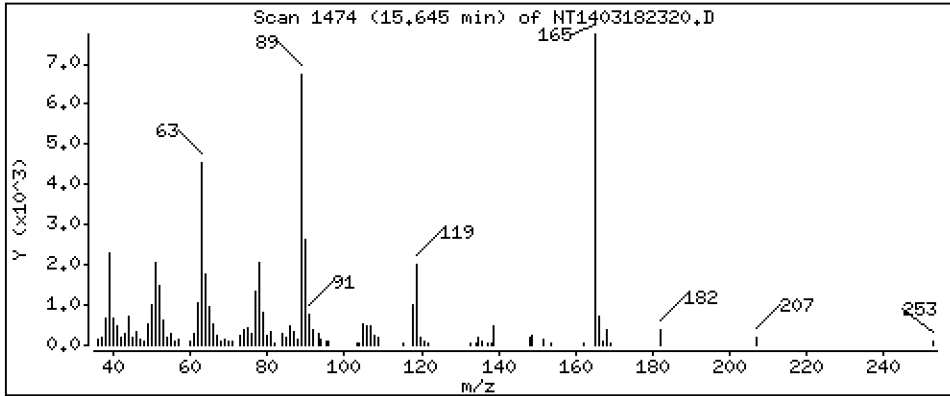
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,3045 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

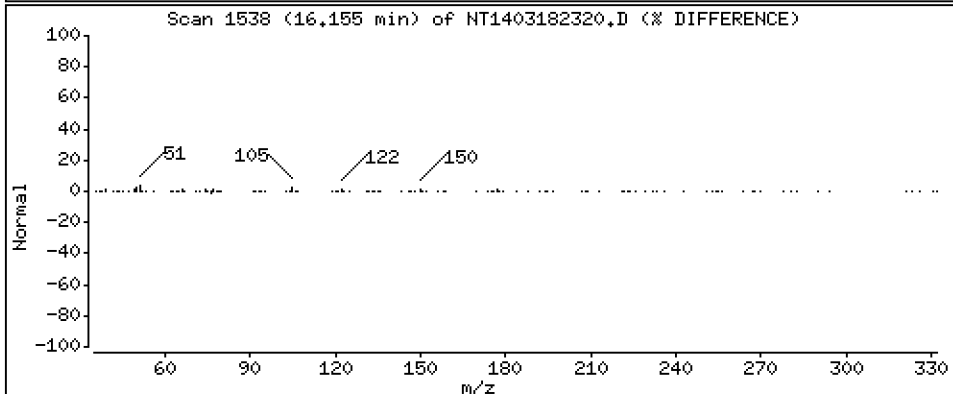
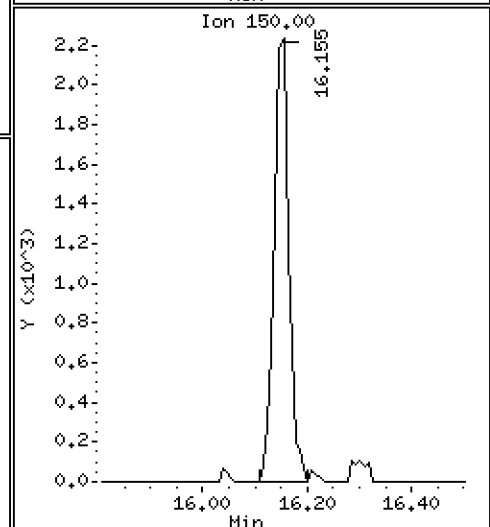
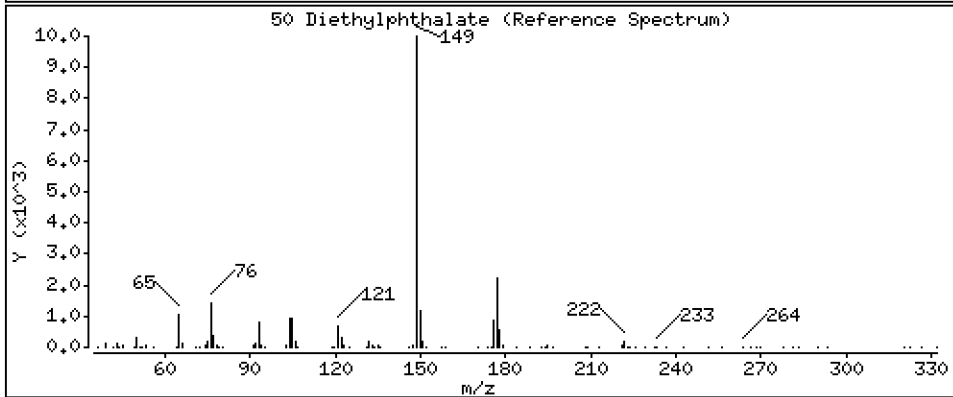
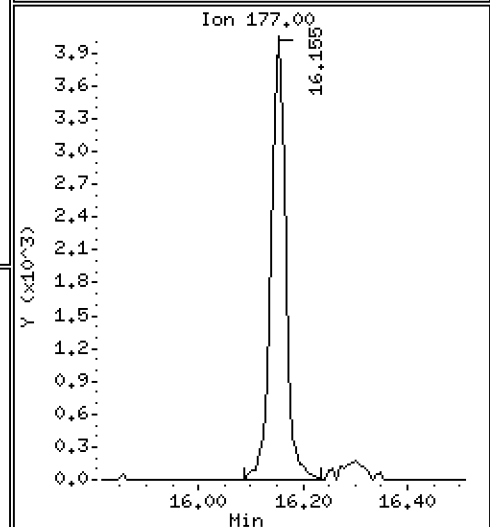
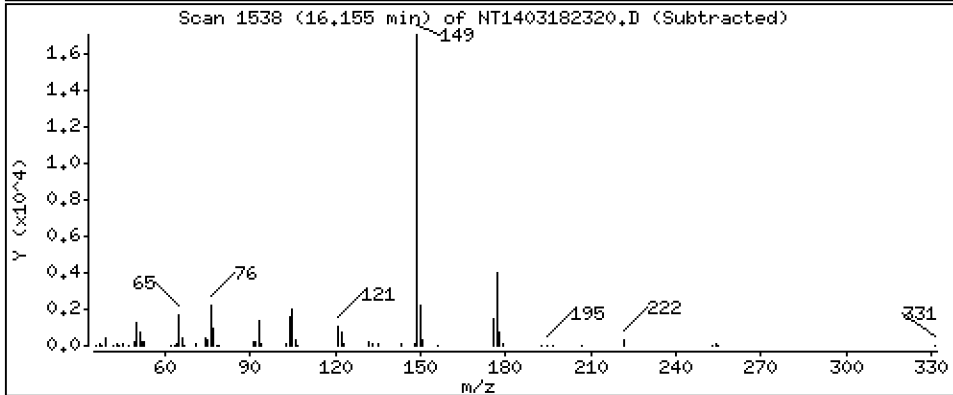
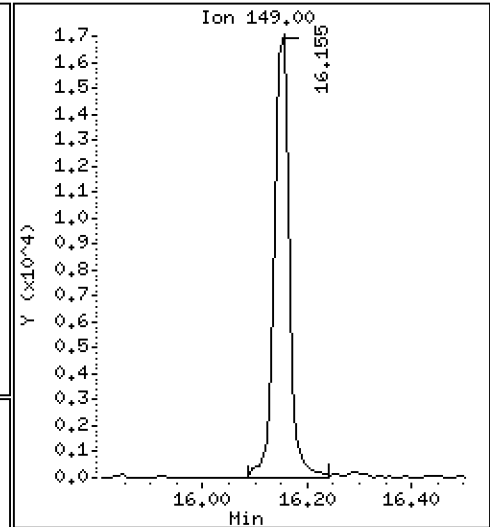
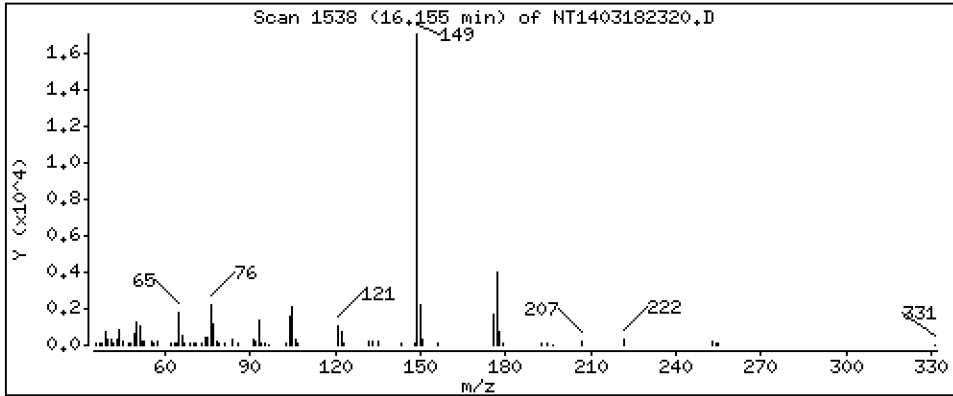
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.2157 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

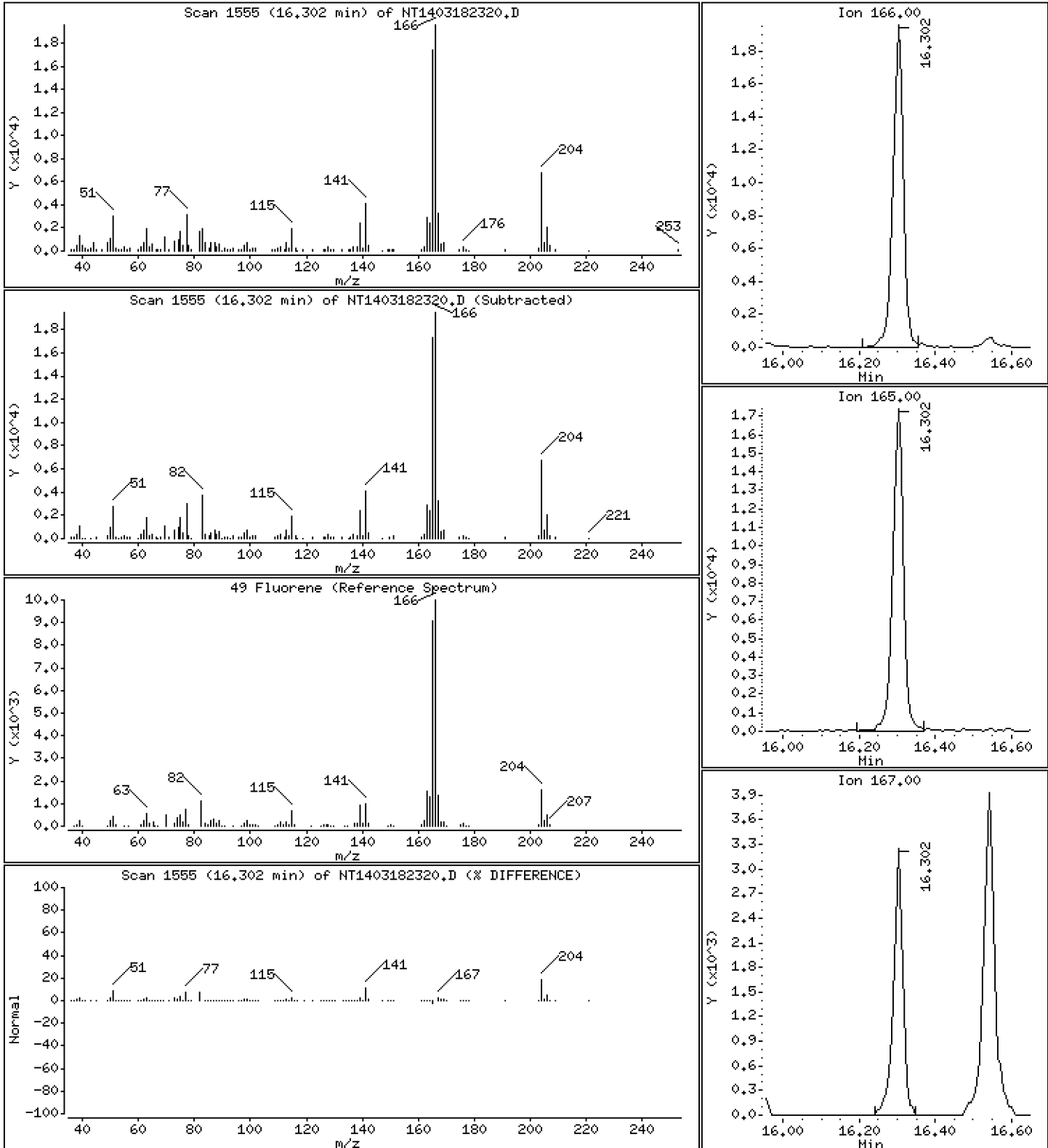
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,2030 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

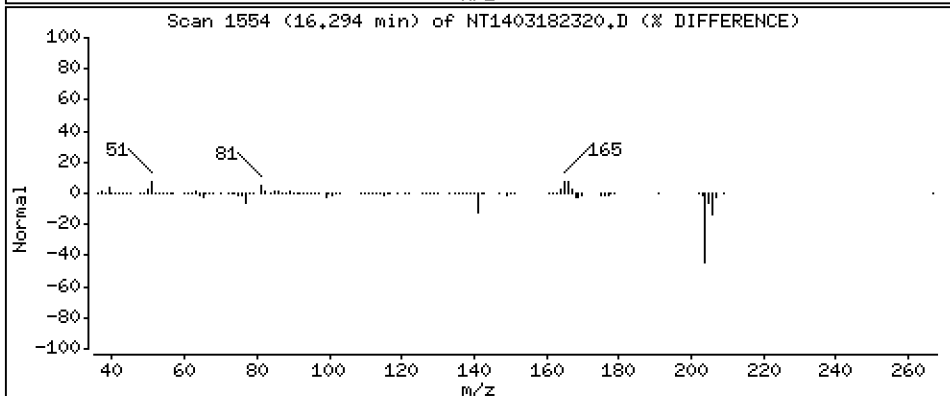
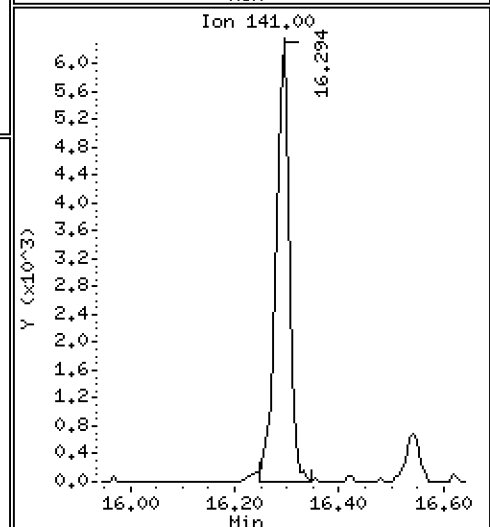
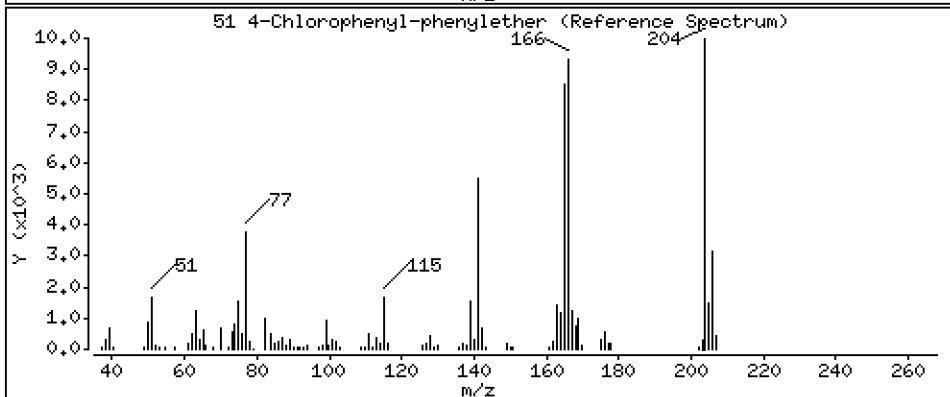
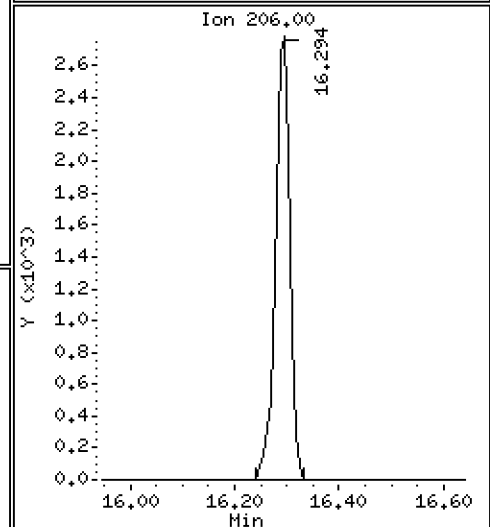
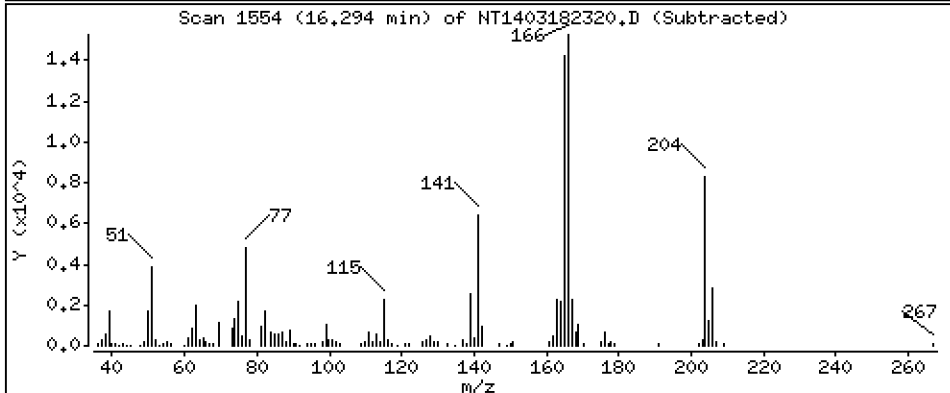
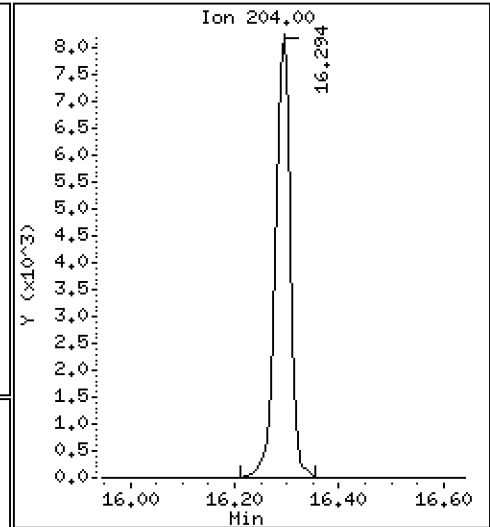
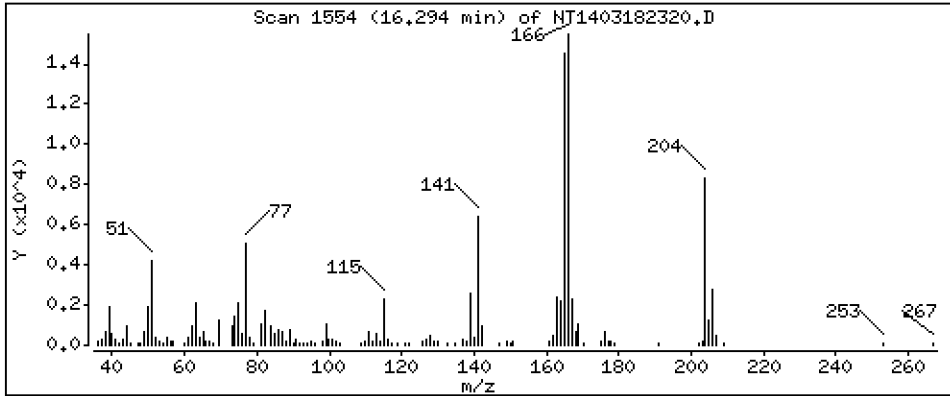
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2061 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

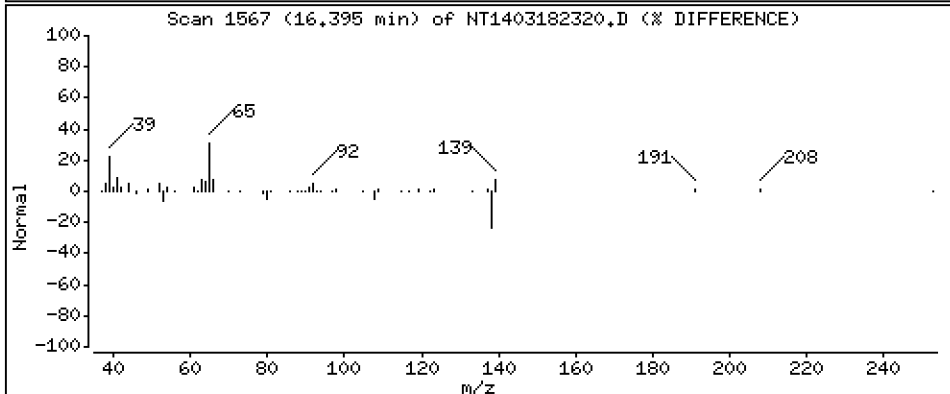
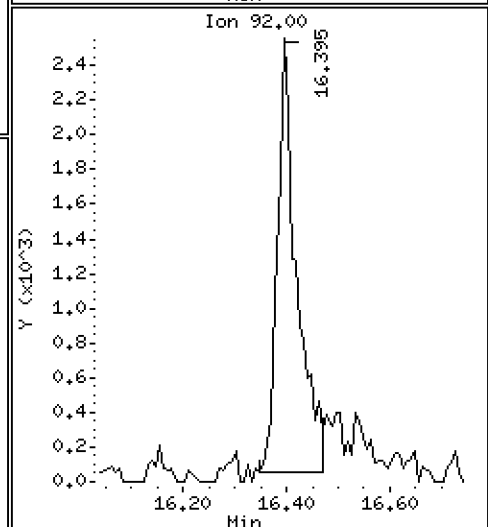
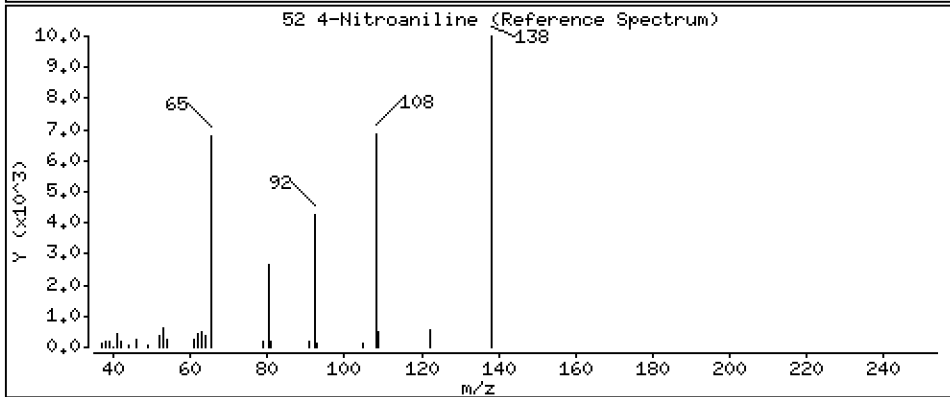
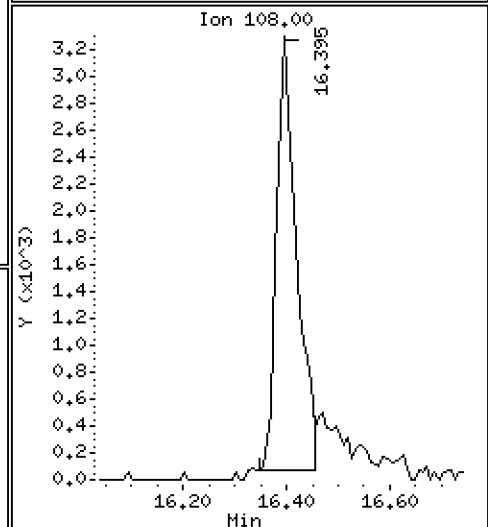
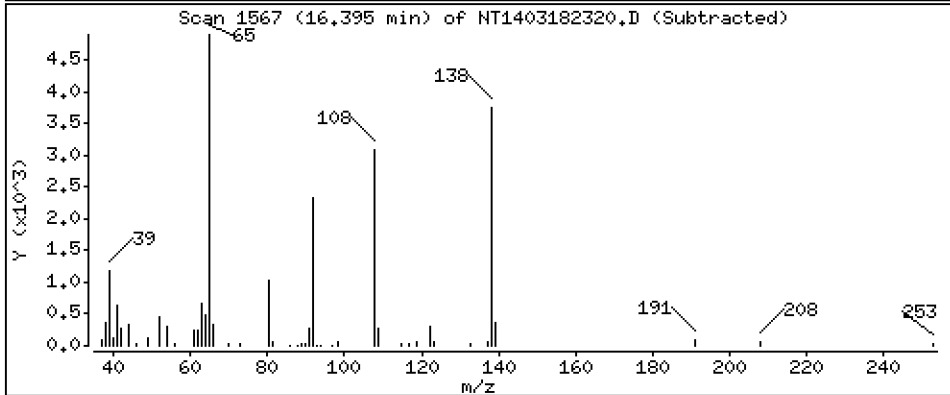
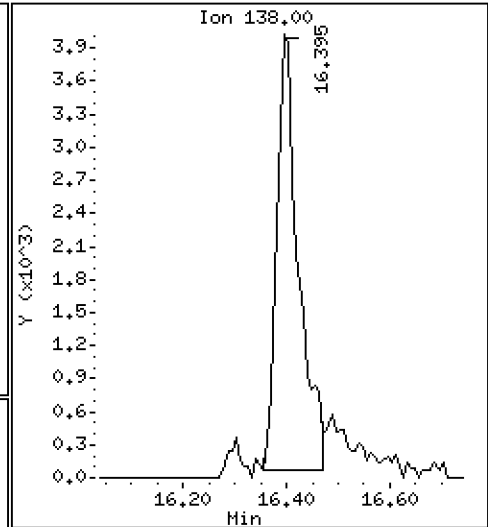
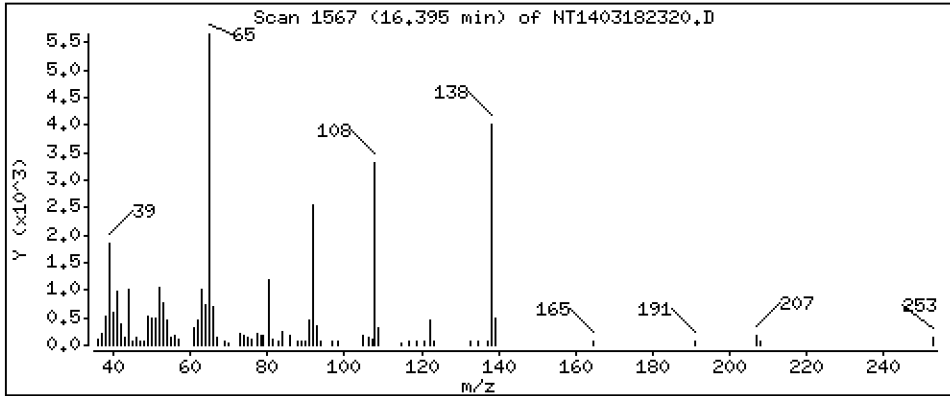
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.2532 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

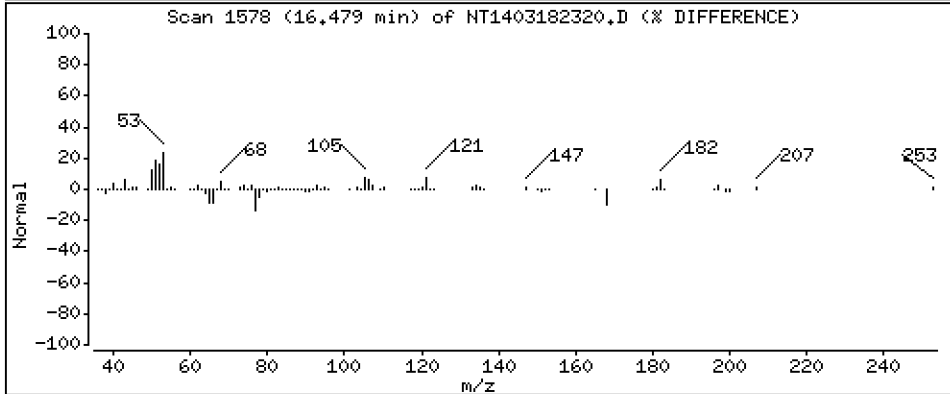
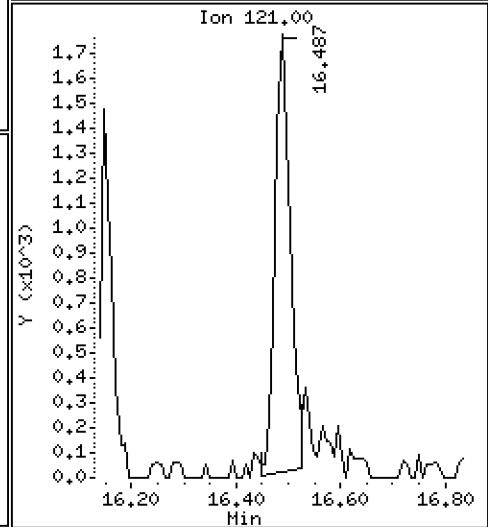
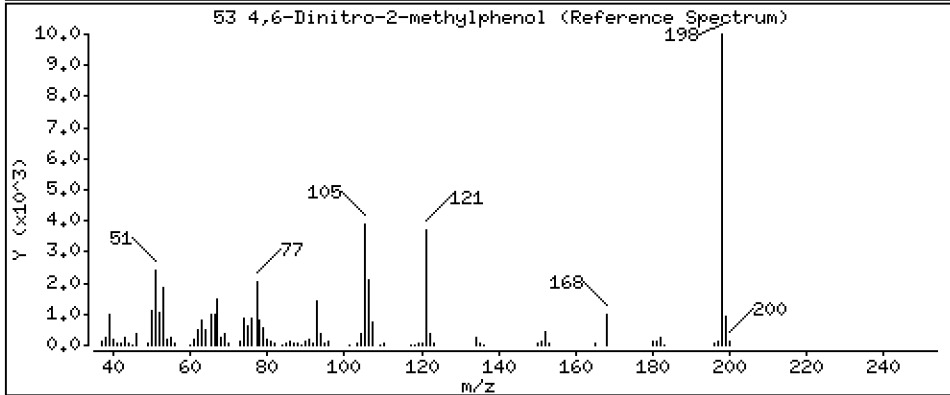
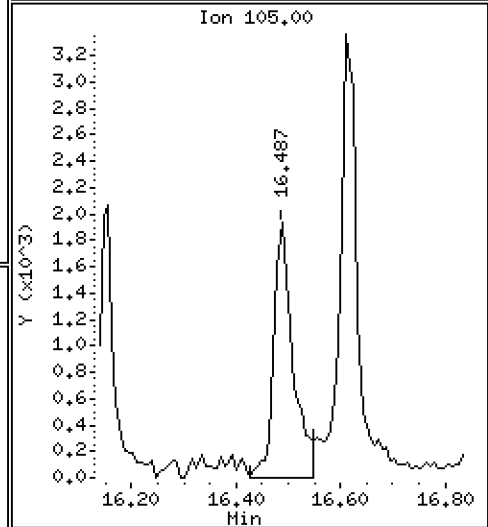
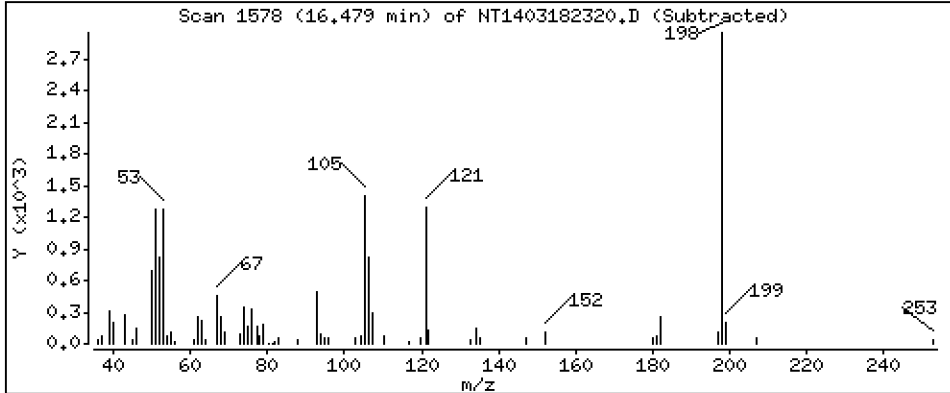
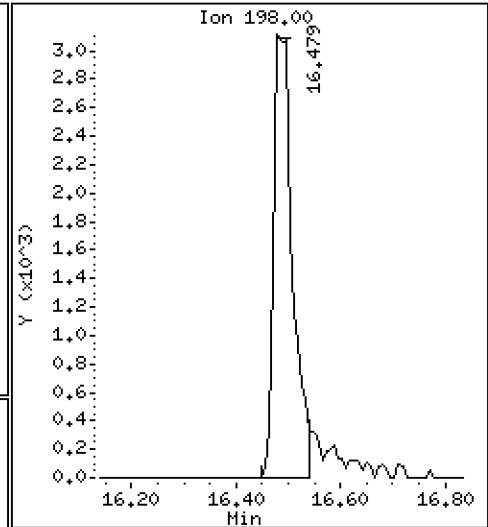
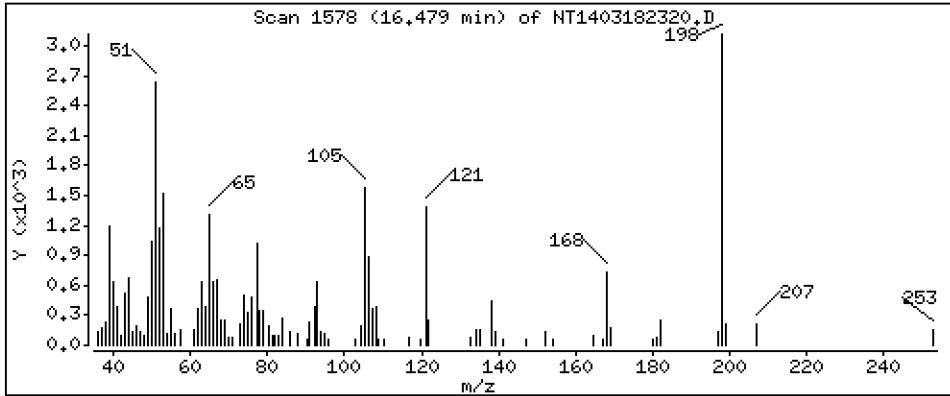
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2578 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

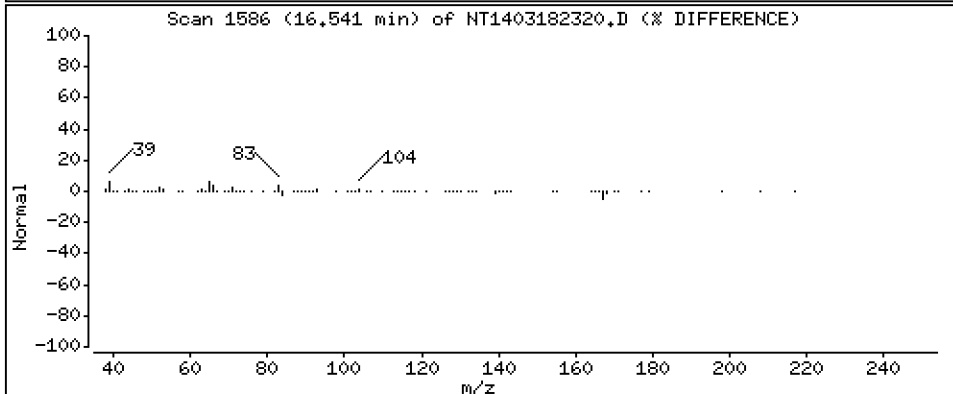
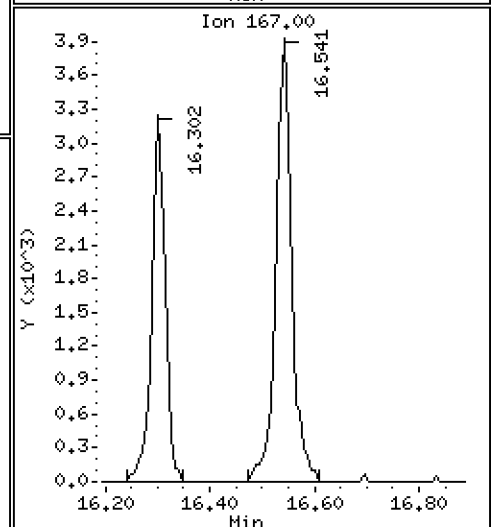
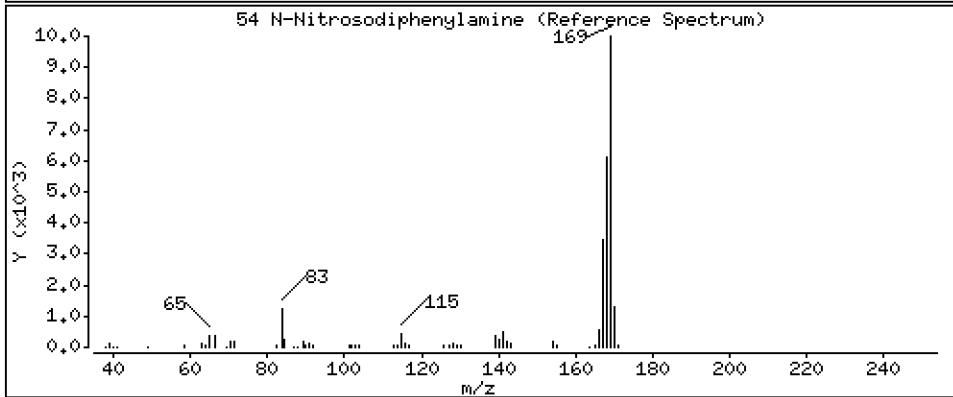
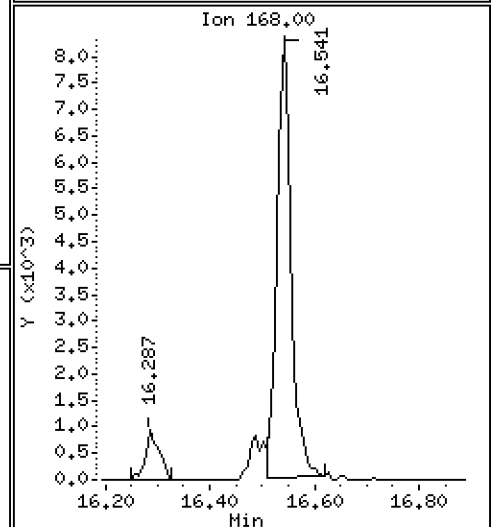
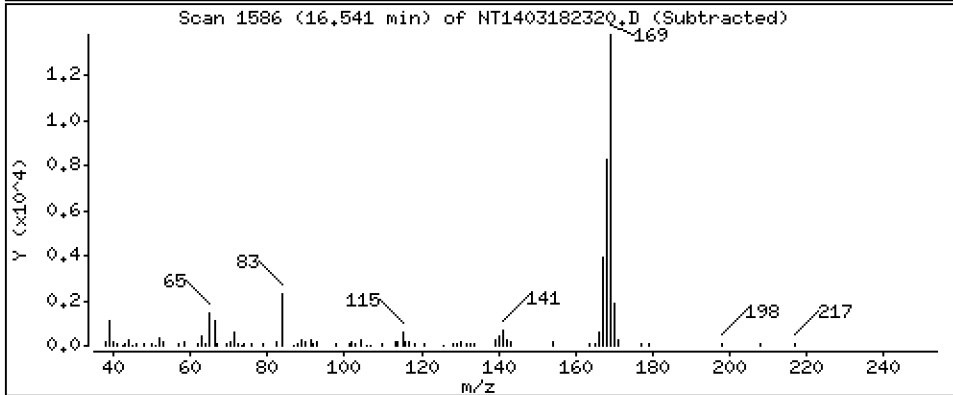
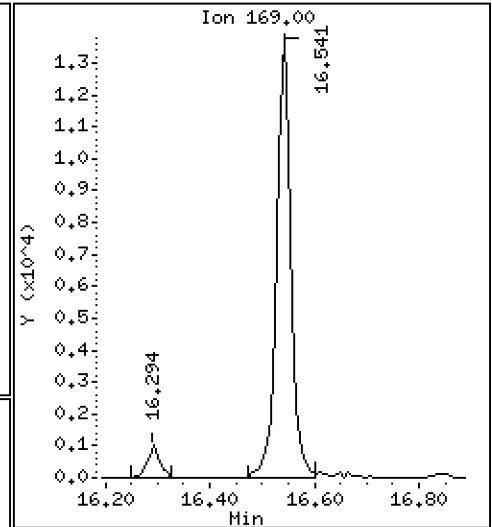
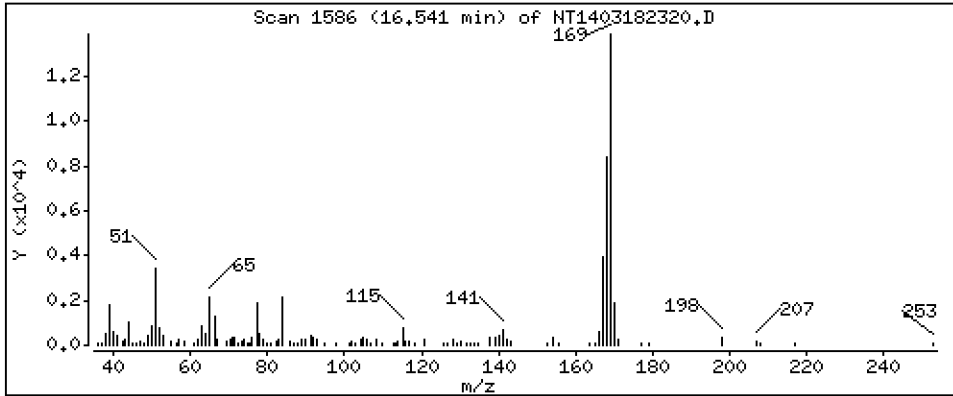
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,2130 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

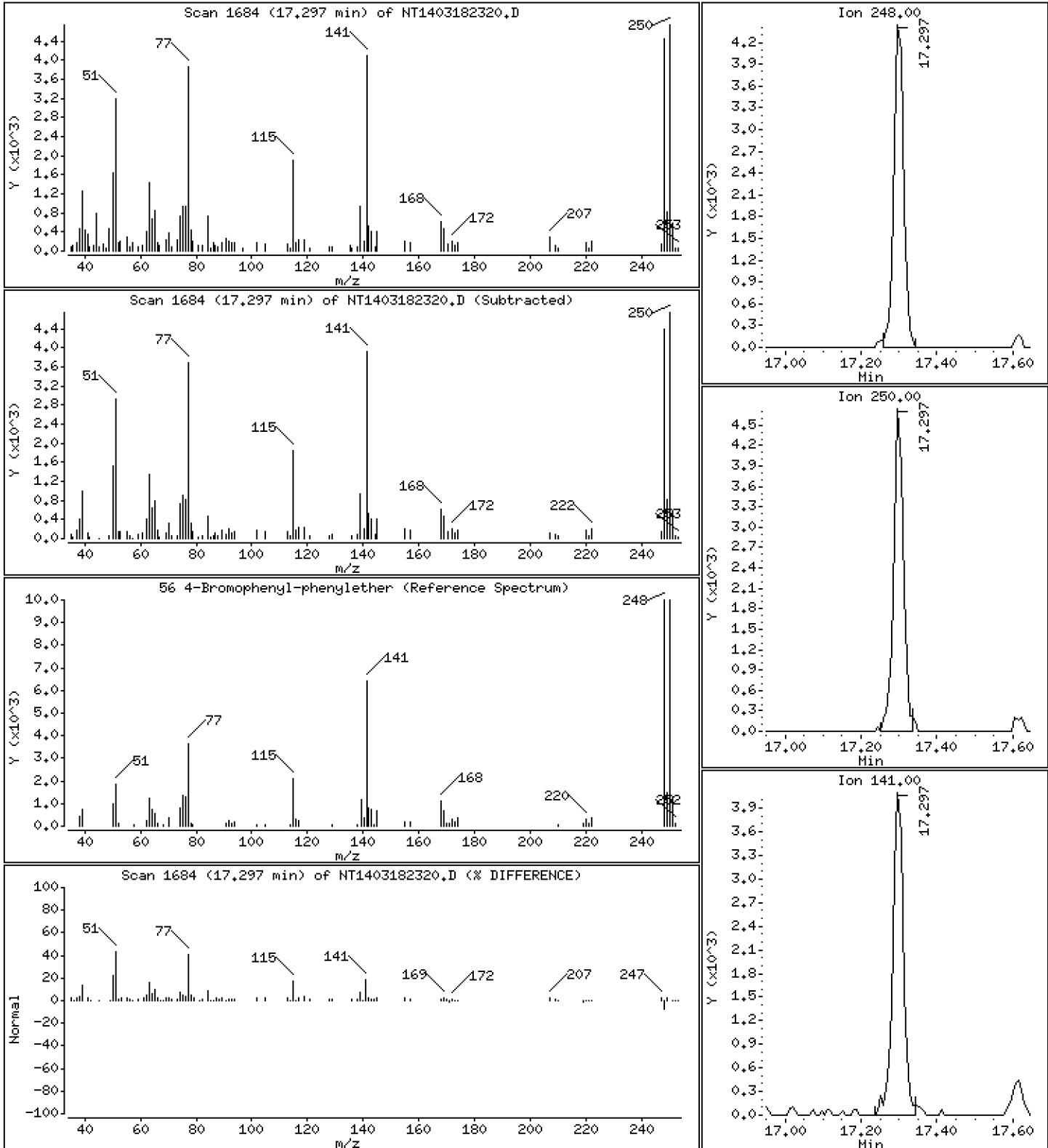
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1930 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

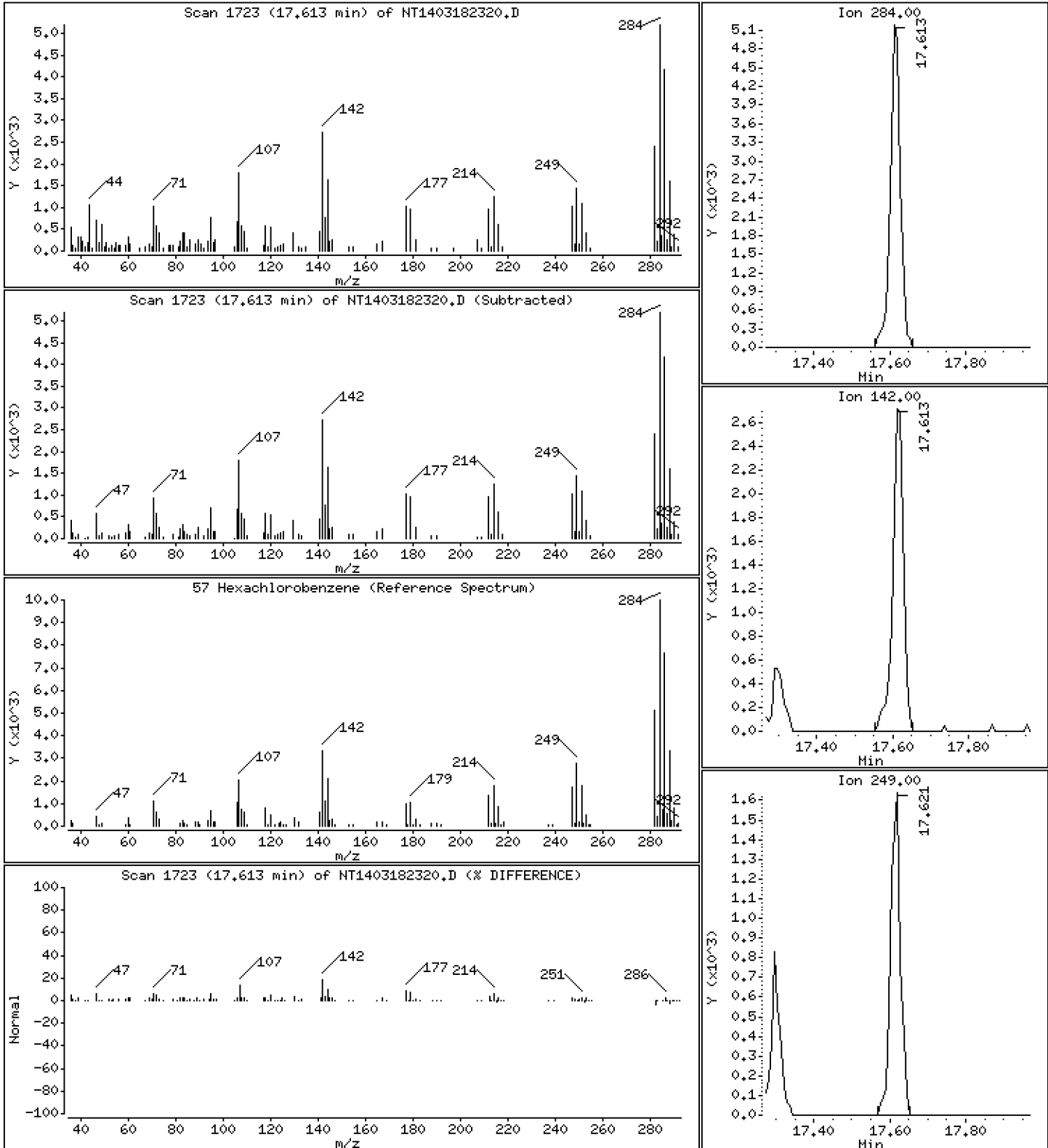
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2326 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

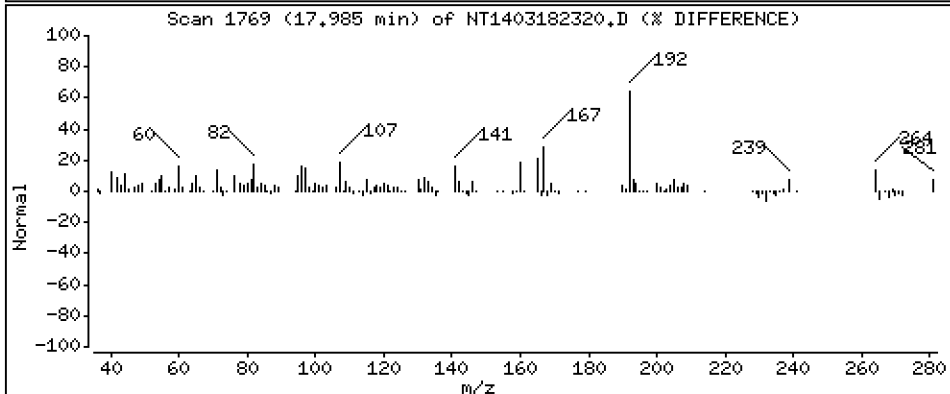
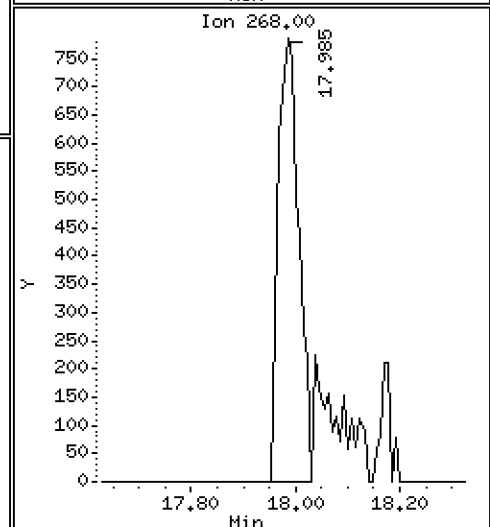
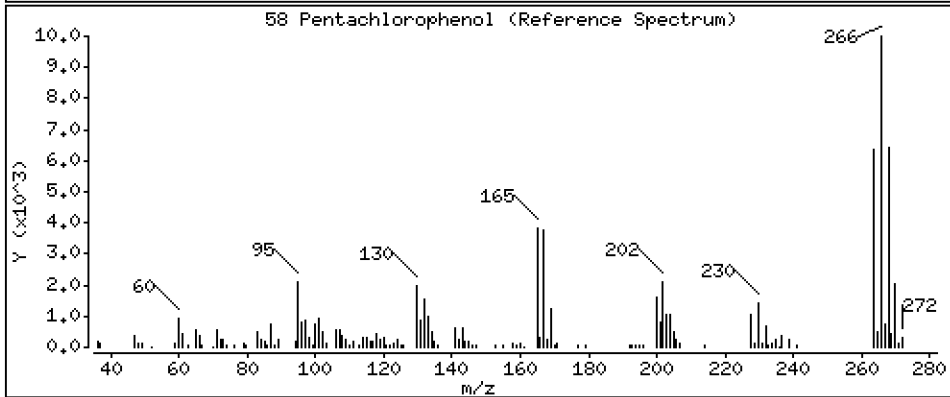
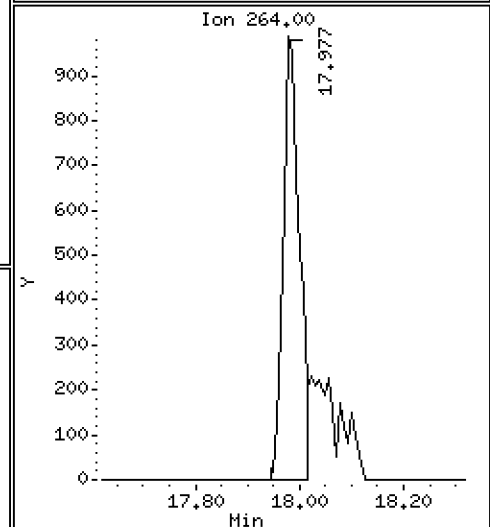
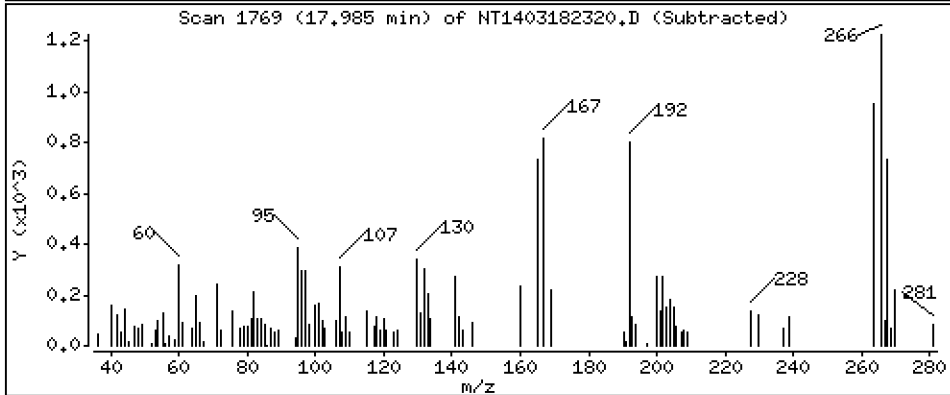
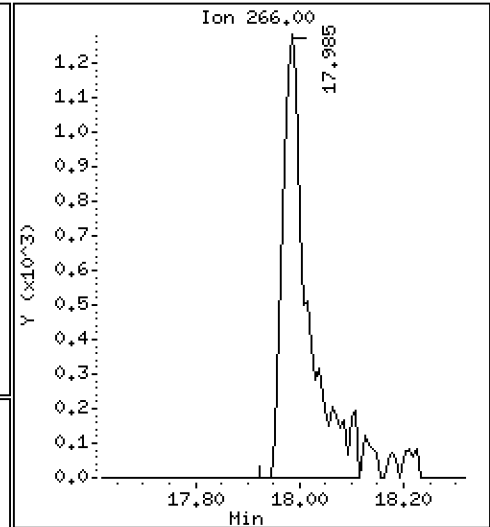
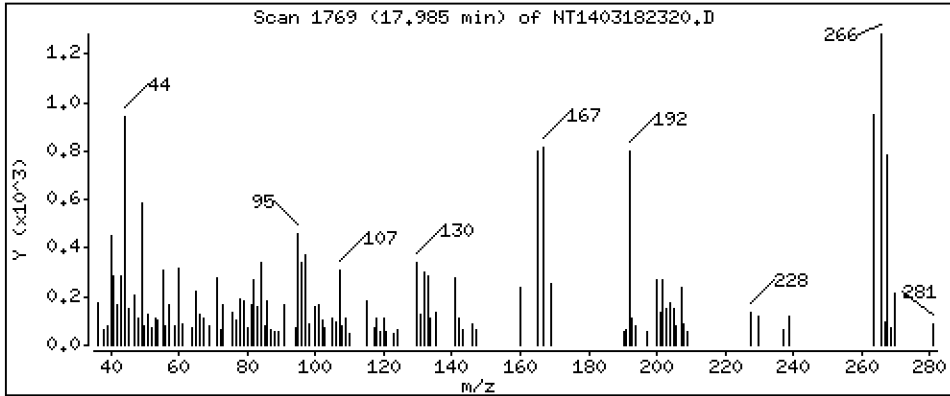
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

58 Pentachlorophenol

Concentration: 0.1516 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

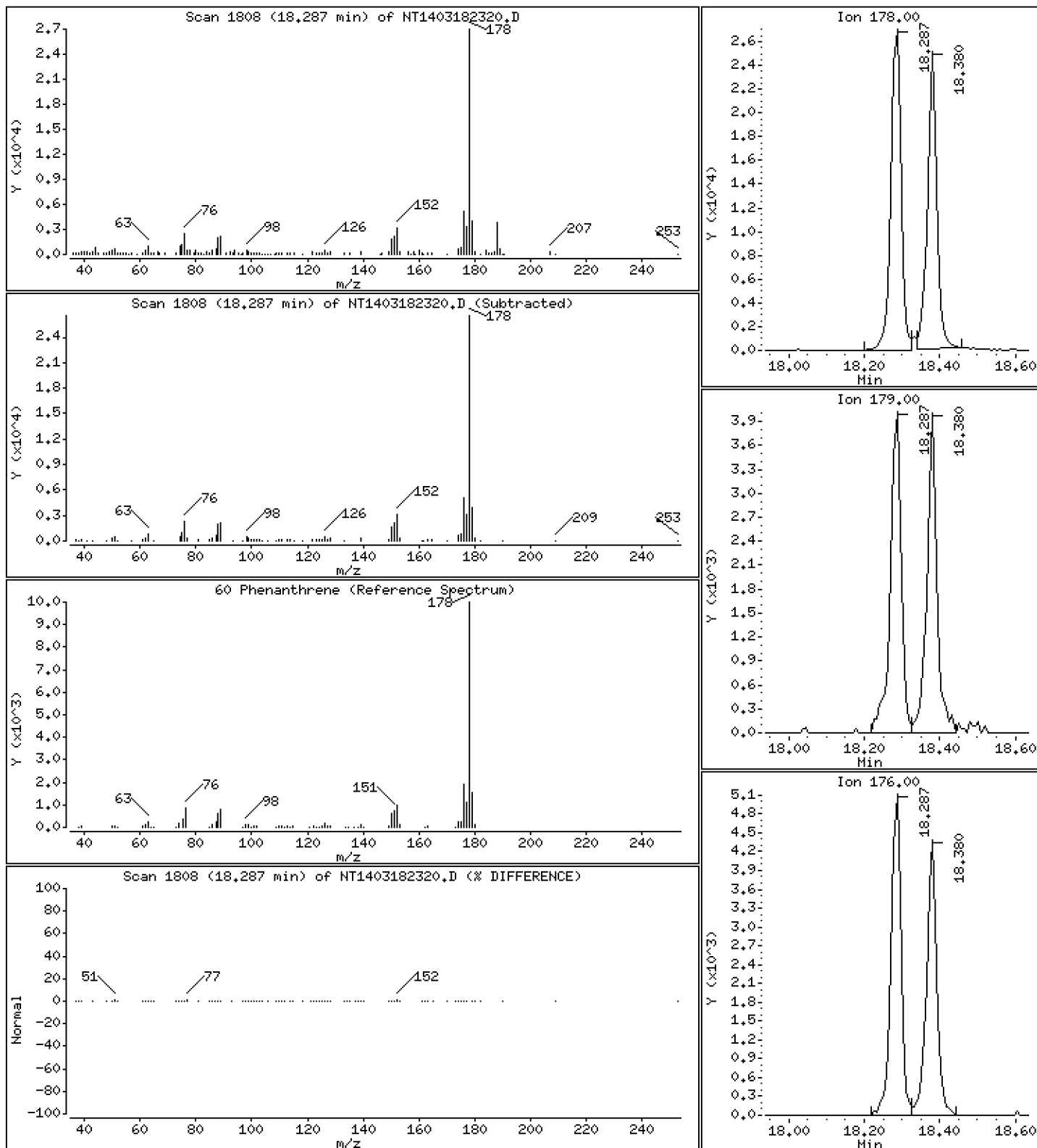
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1990 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

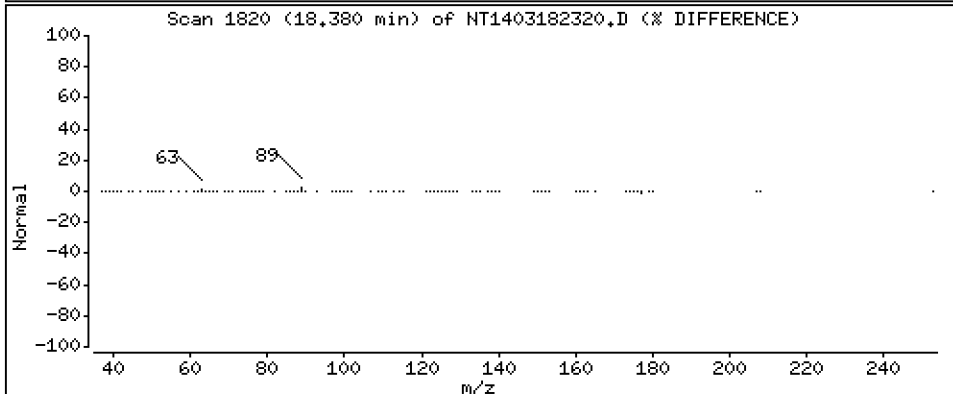
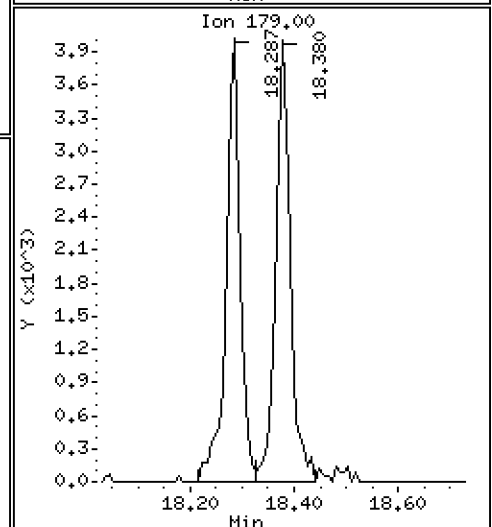
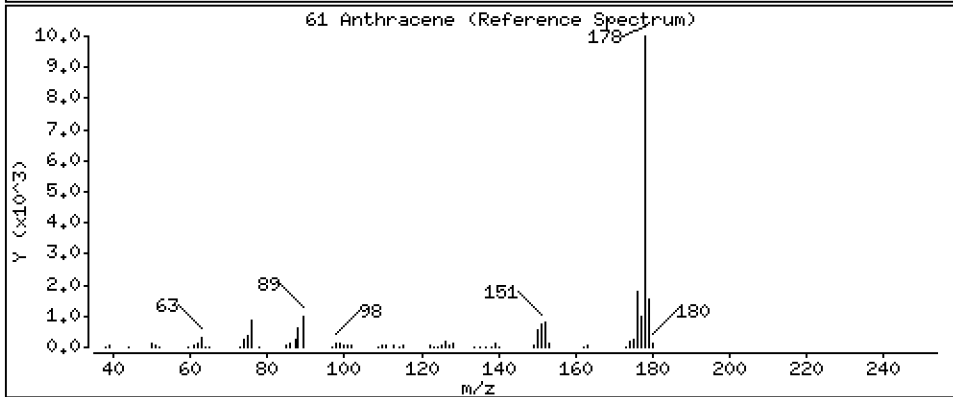
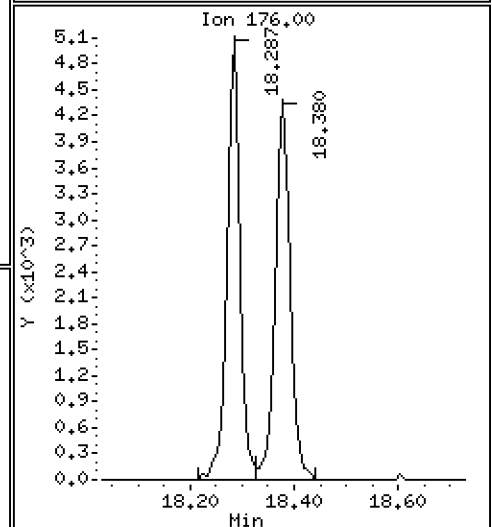
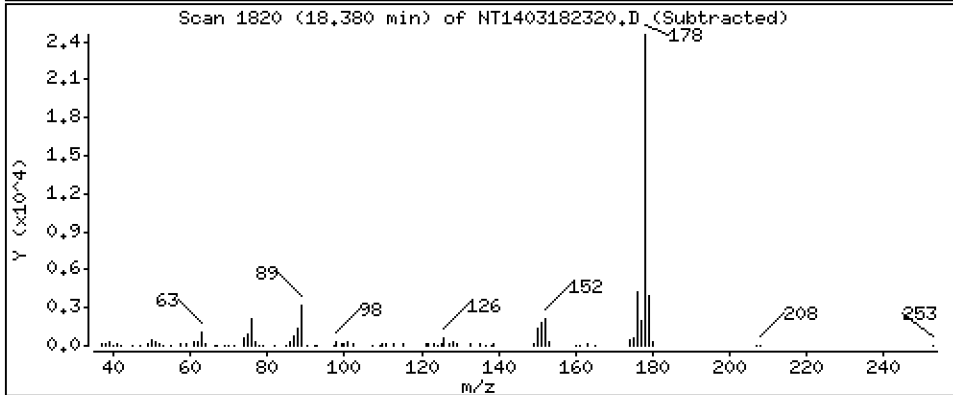
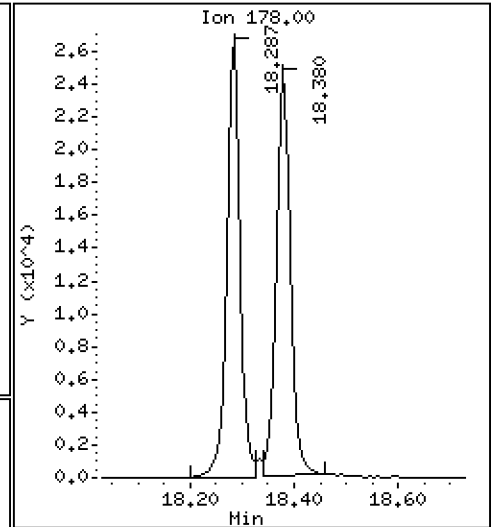
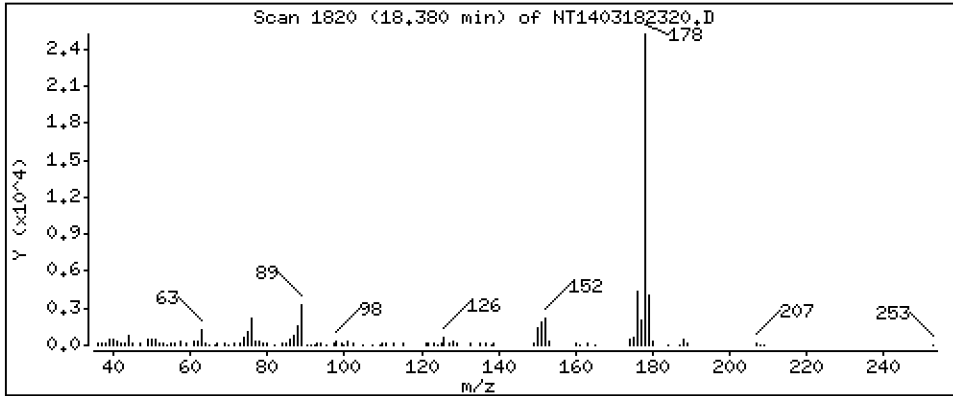
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1873 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

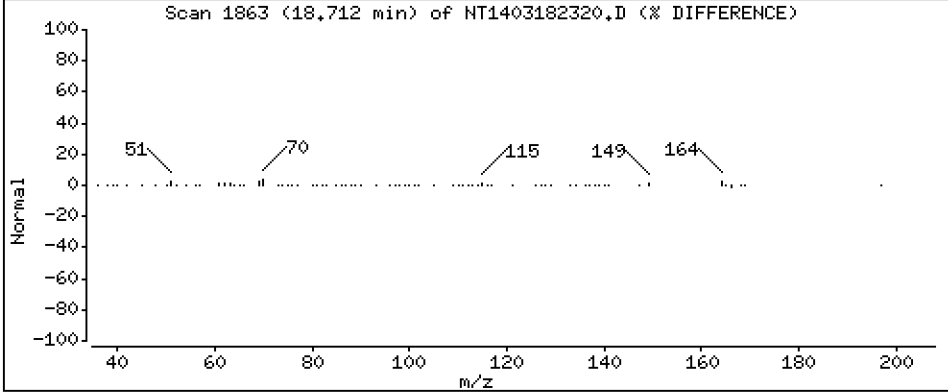
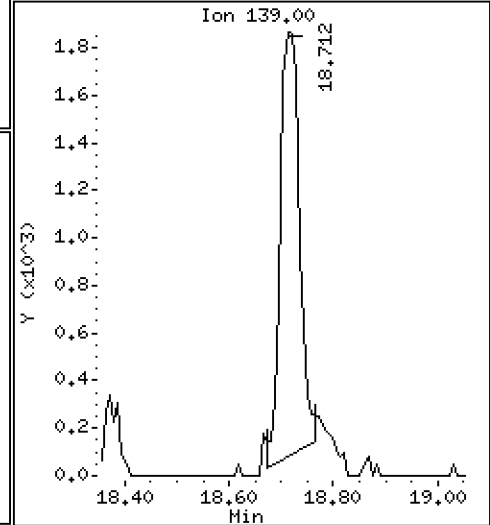
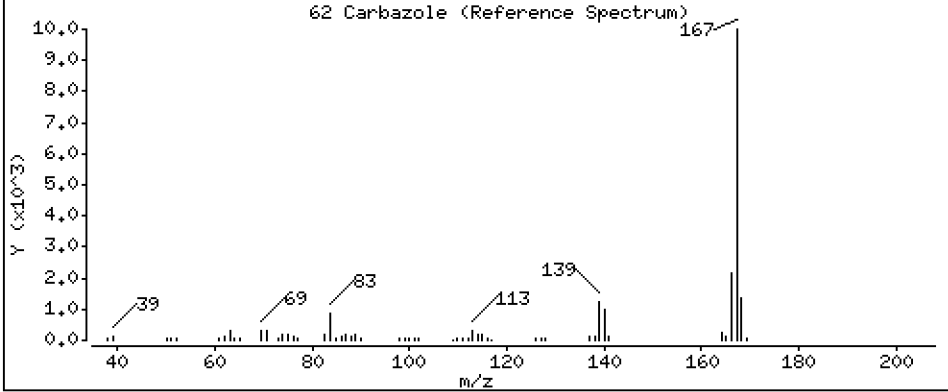
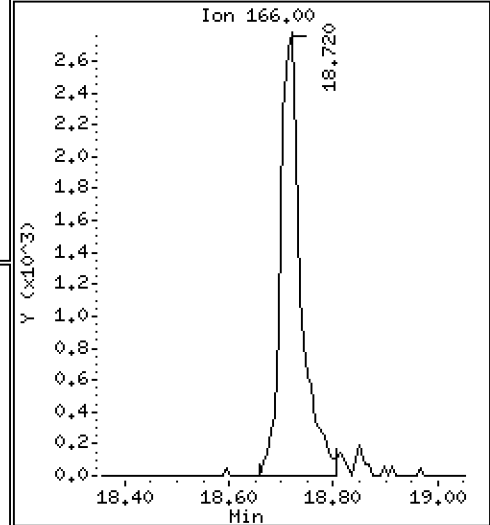
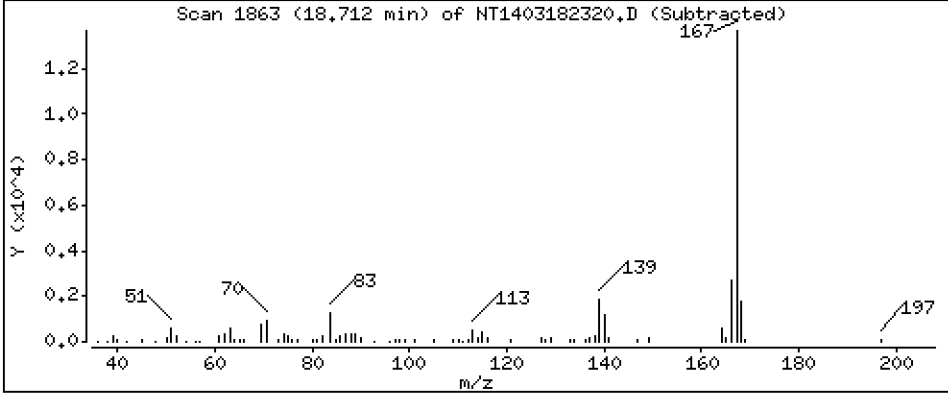
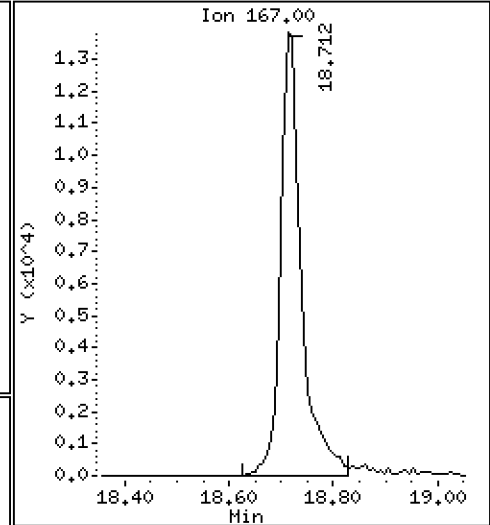
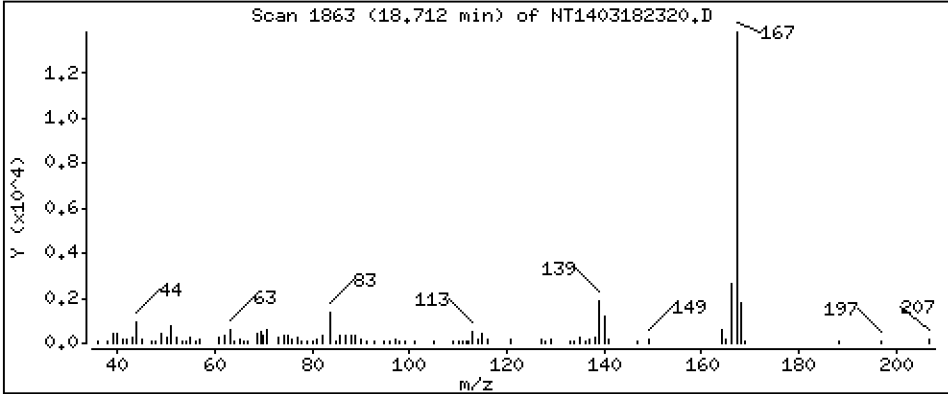
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1801 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

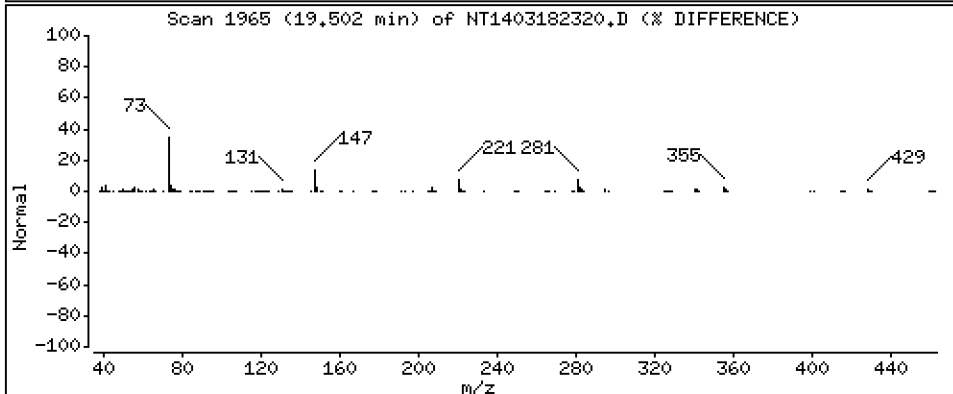
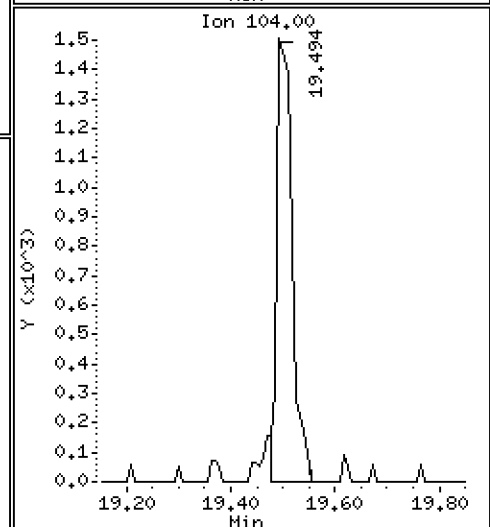
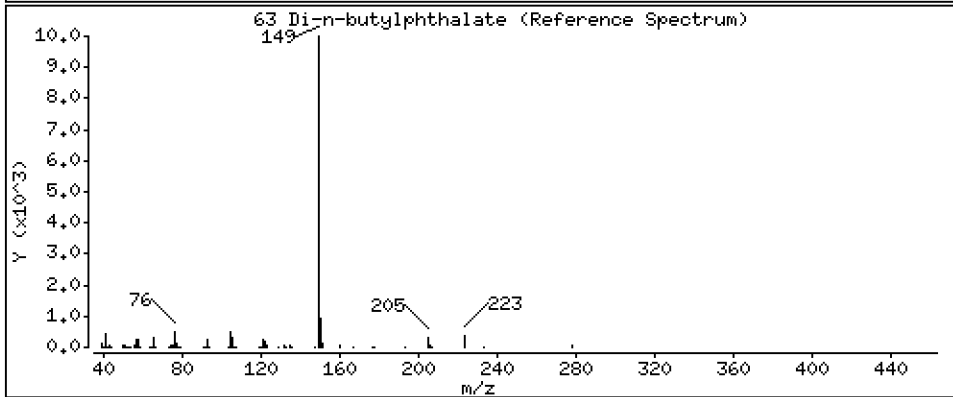
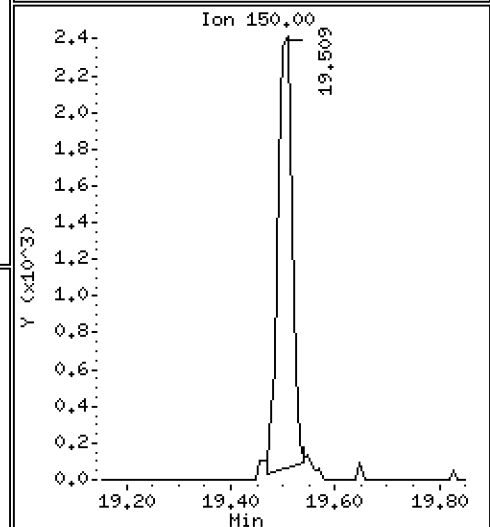
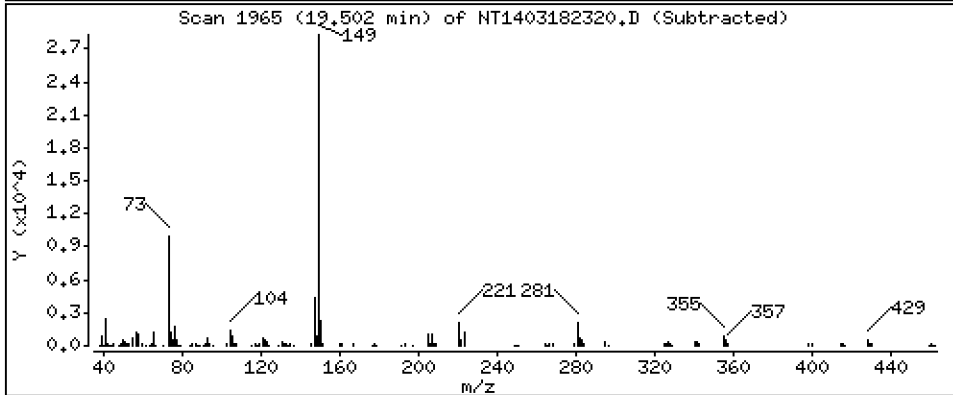
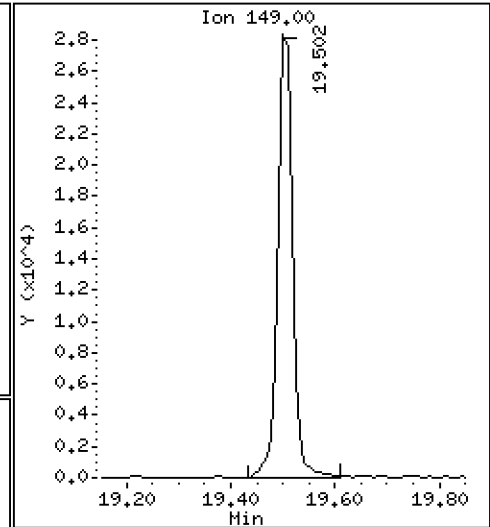
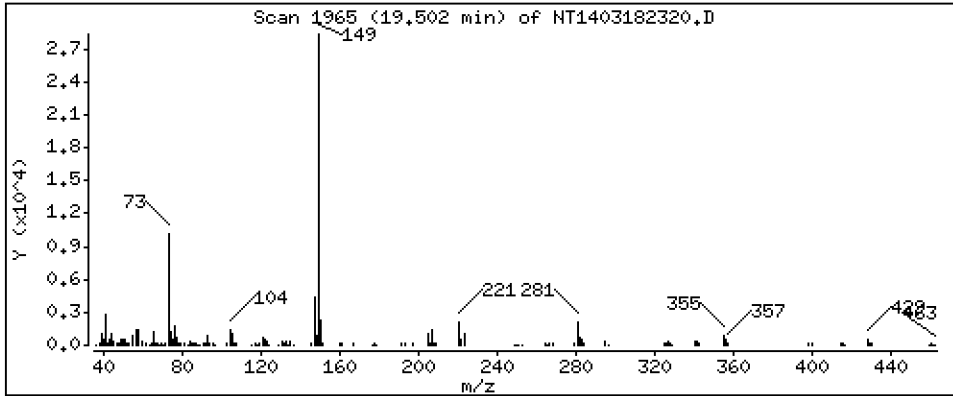
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,2032 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

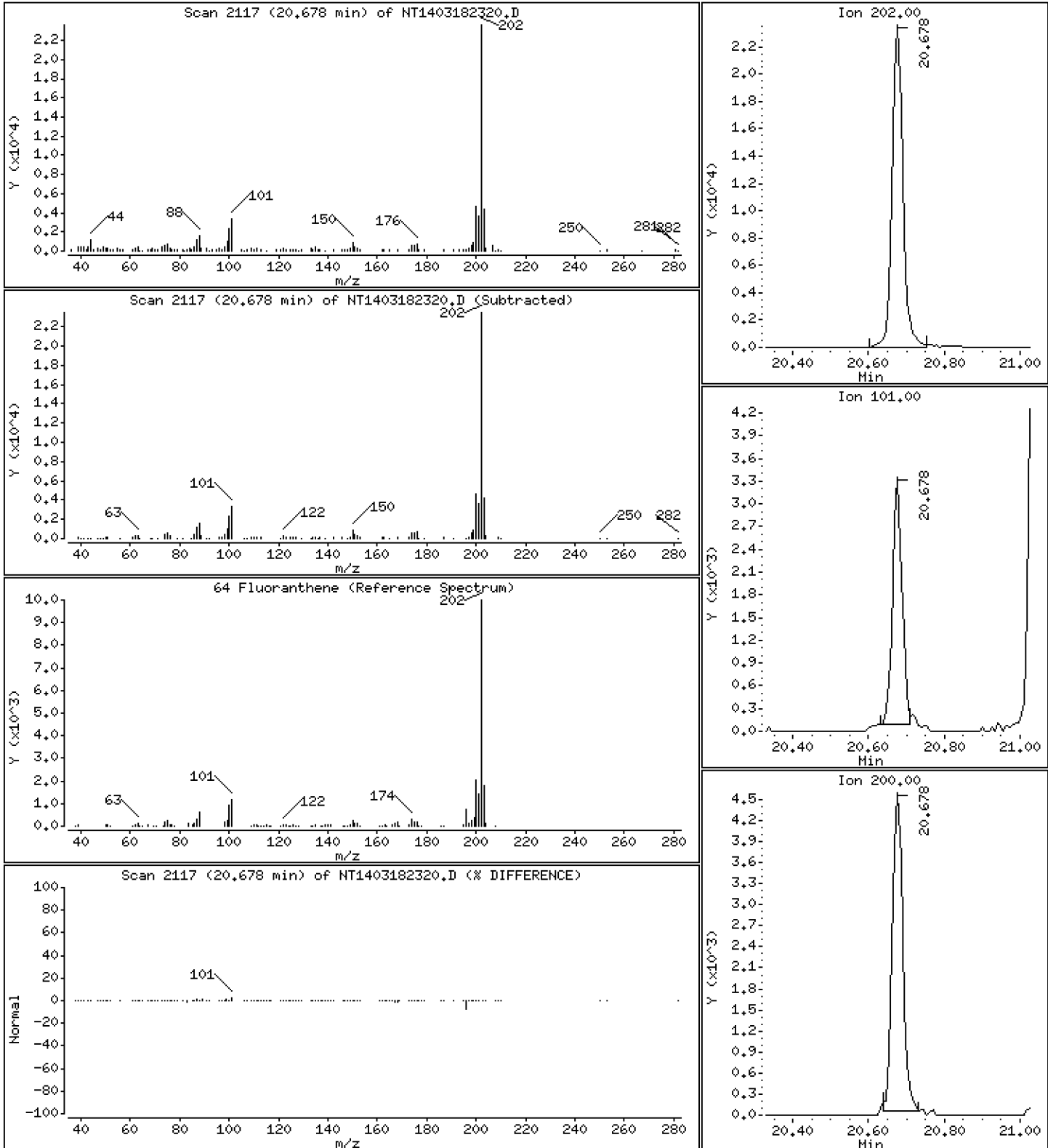
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,2459 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

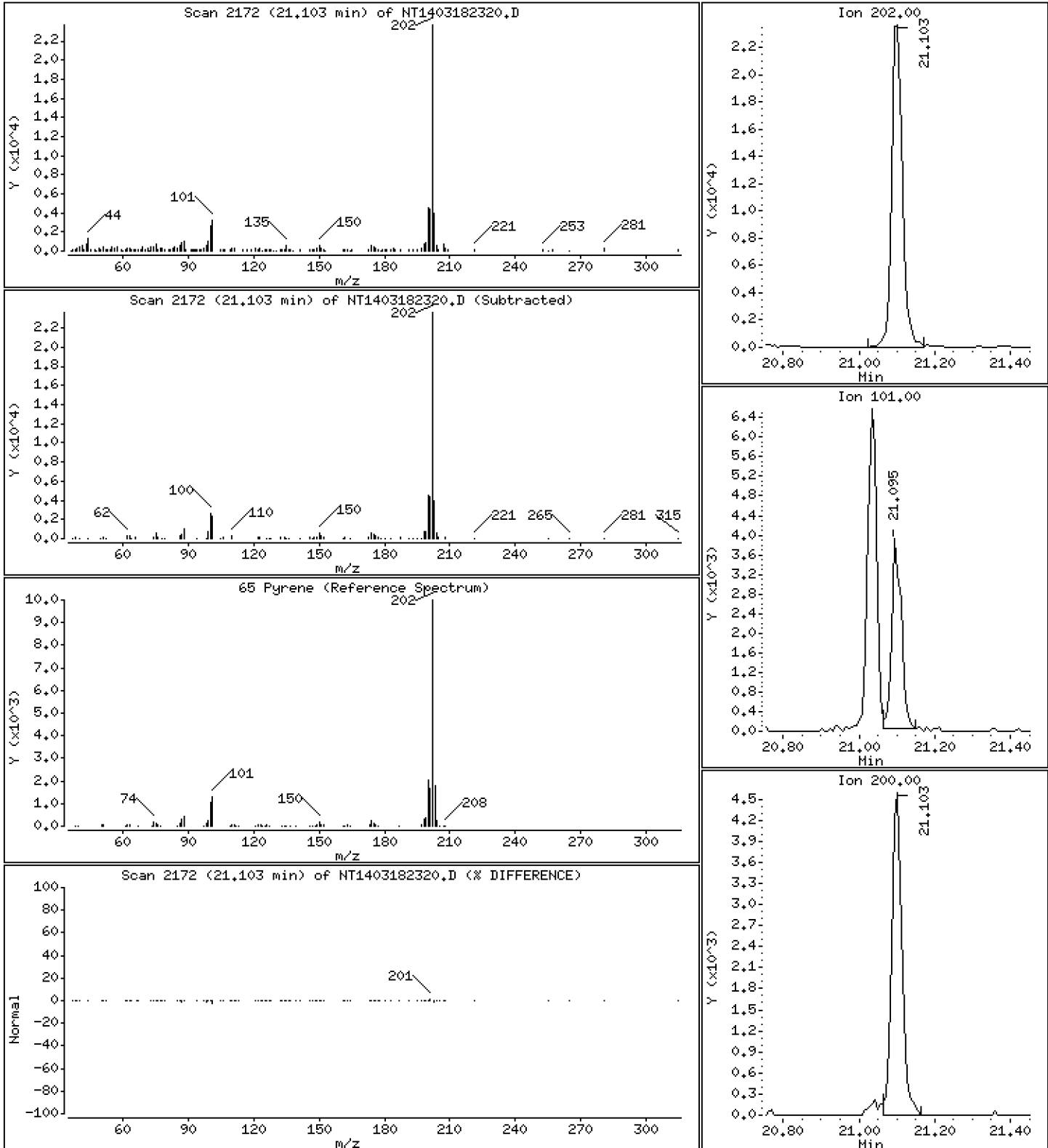
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,2411 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

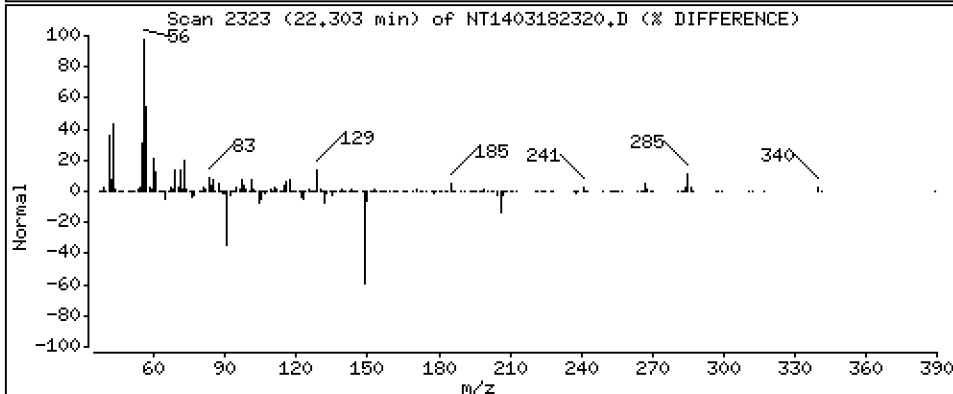
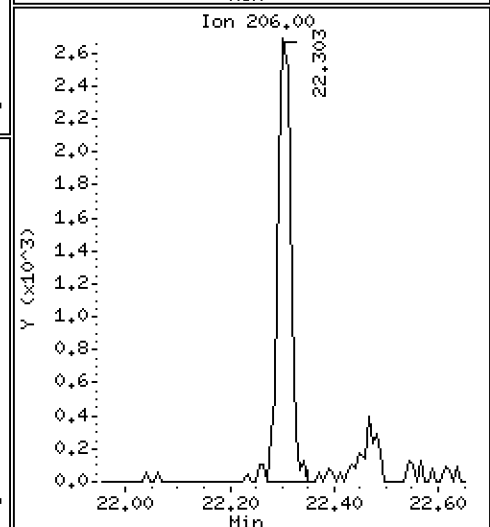
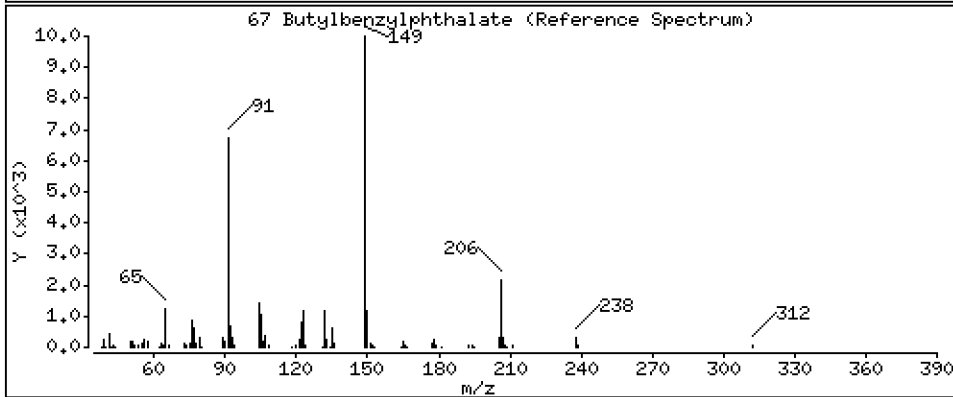
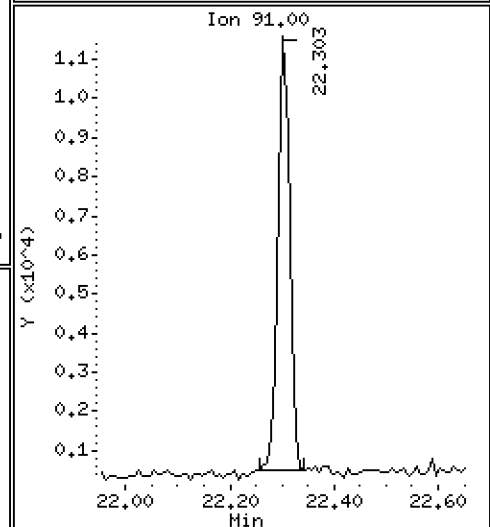
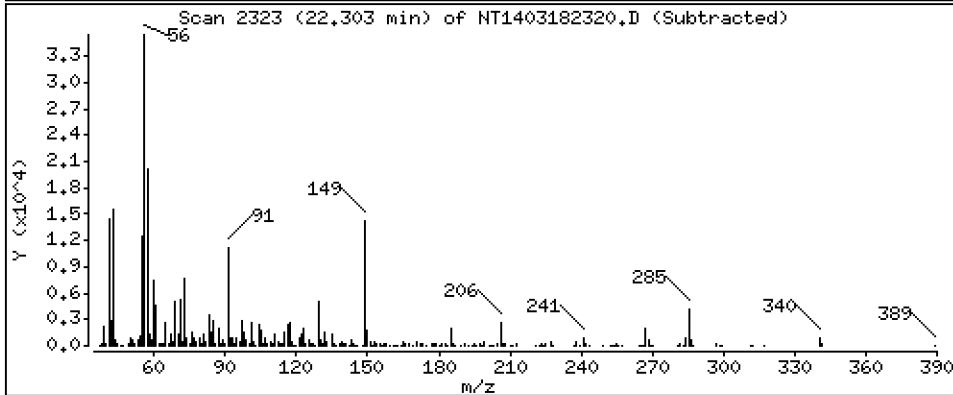
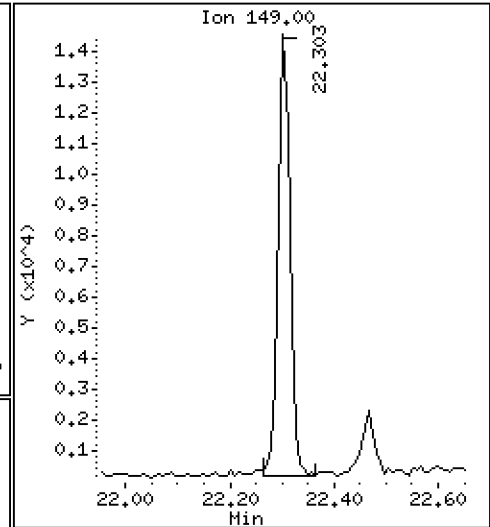
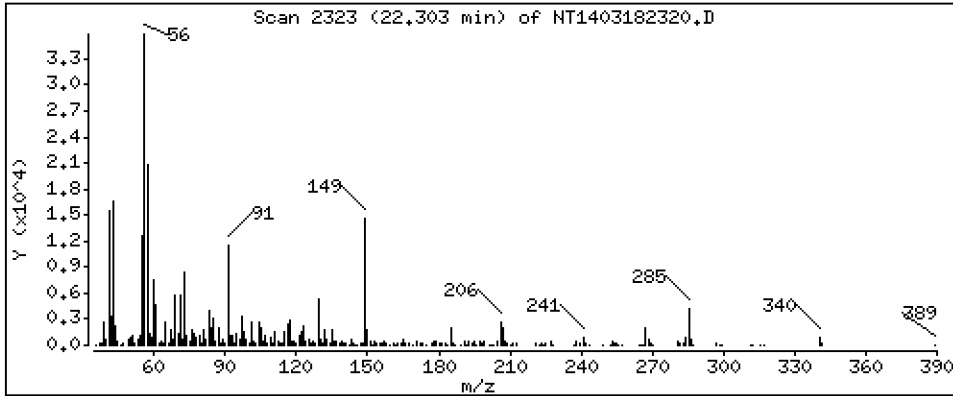
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2626 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

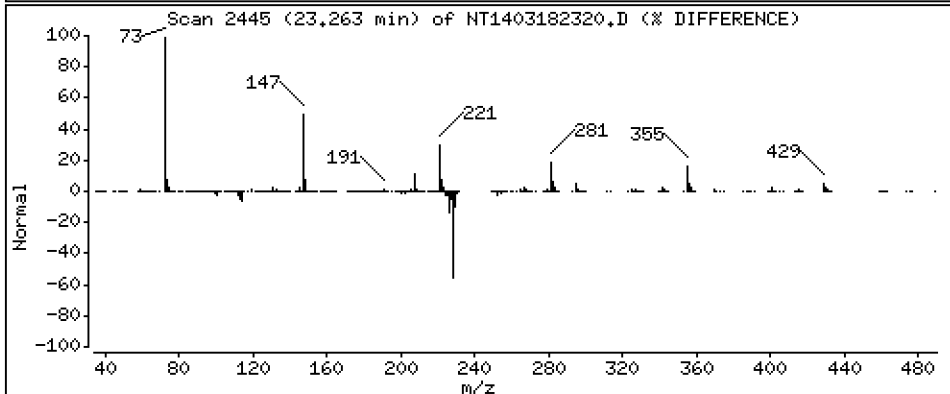
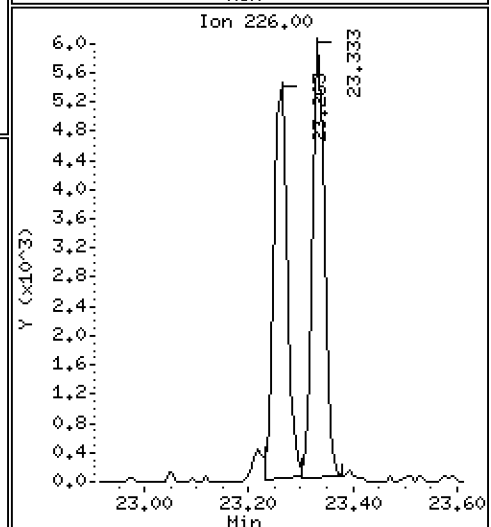
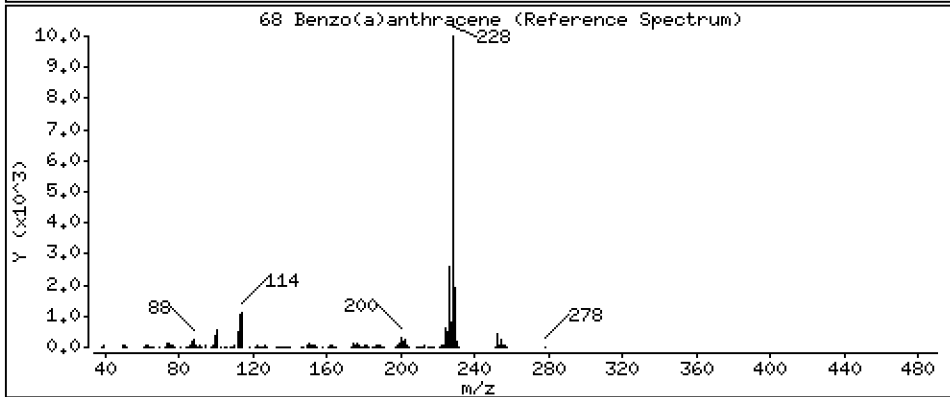
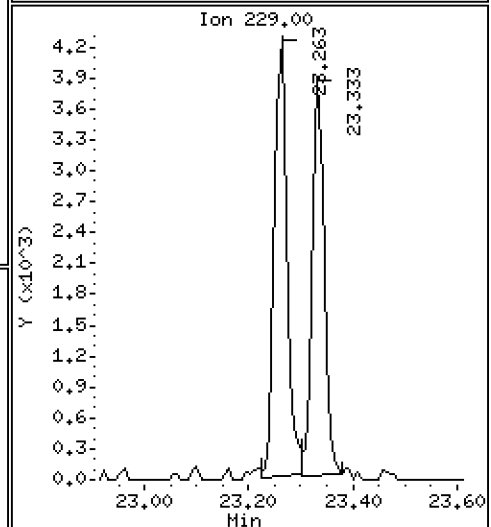
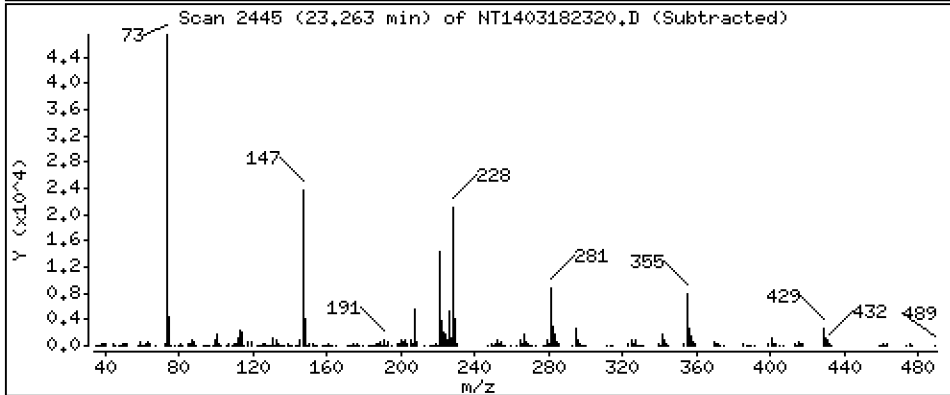
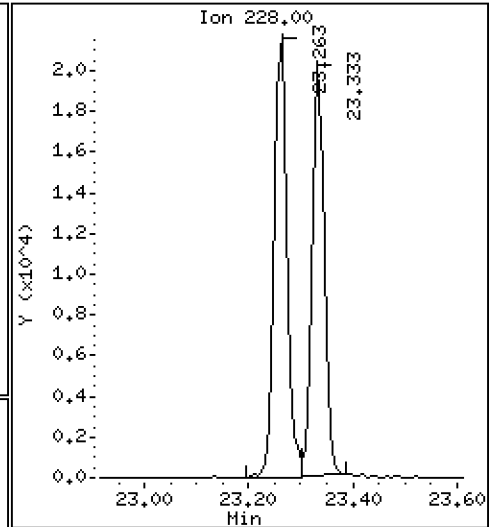
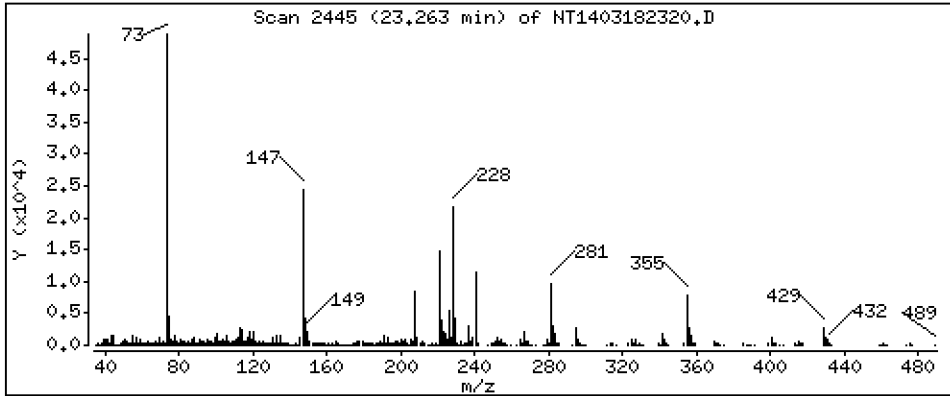
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,2153 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

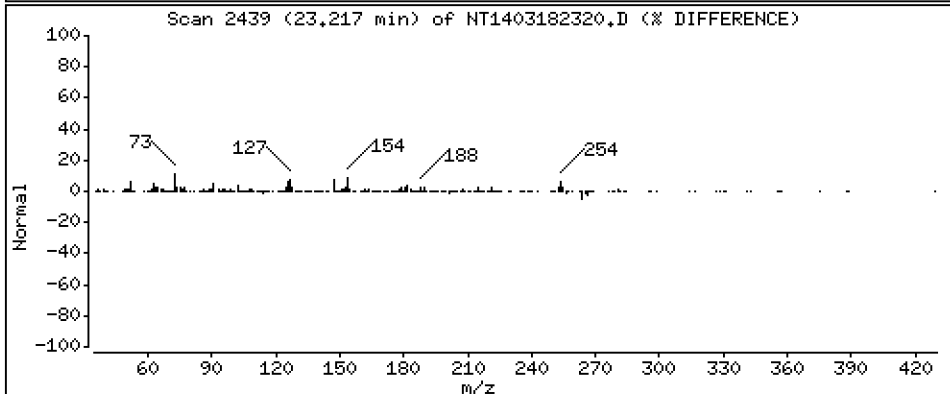
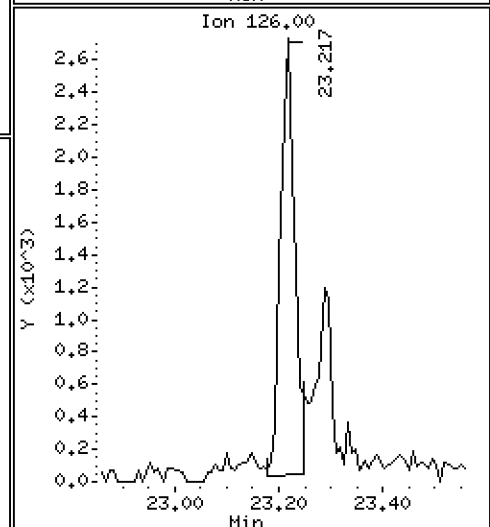
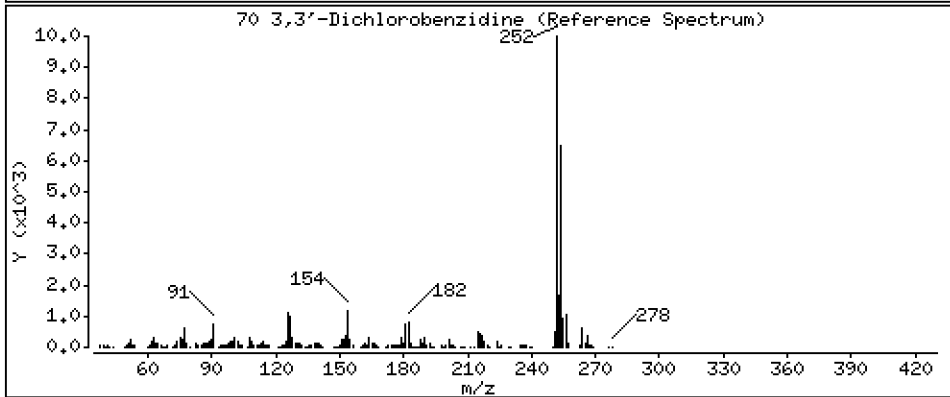
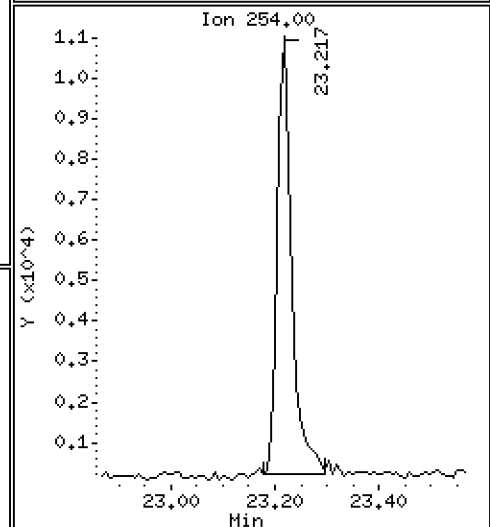
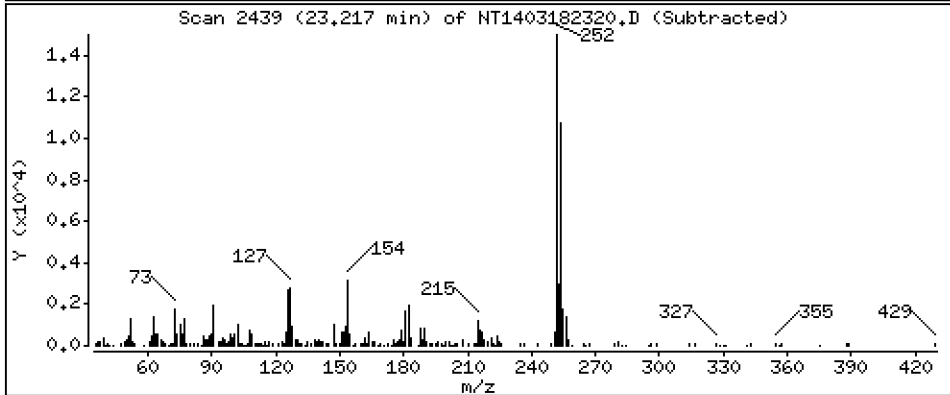
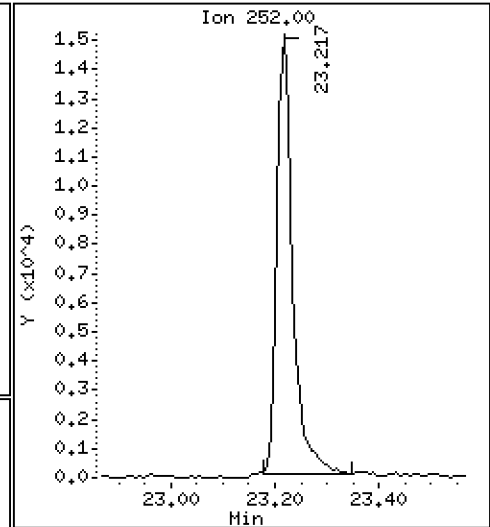
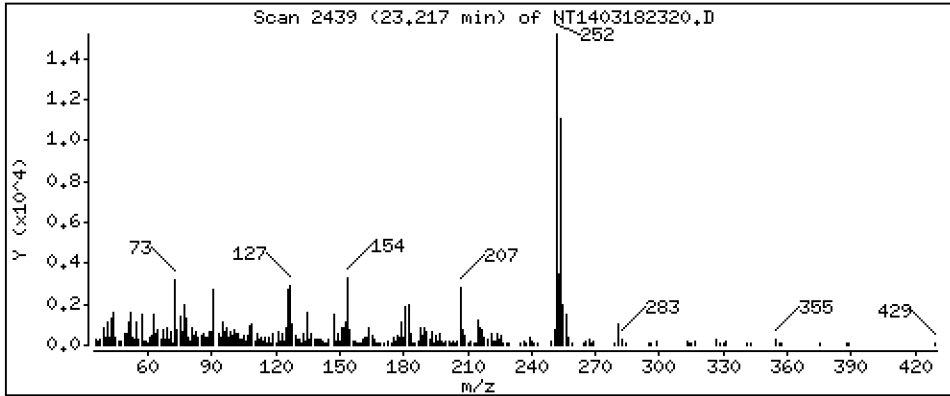
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,6487 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

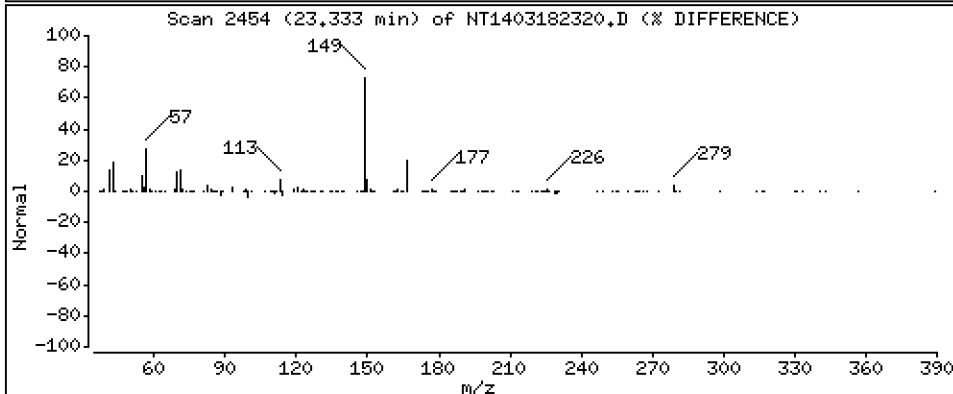
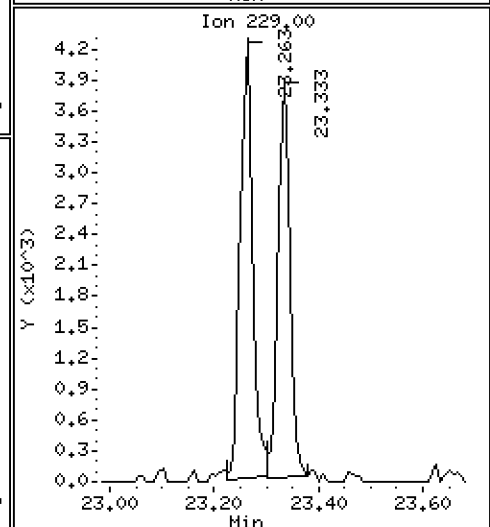
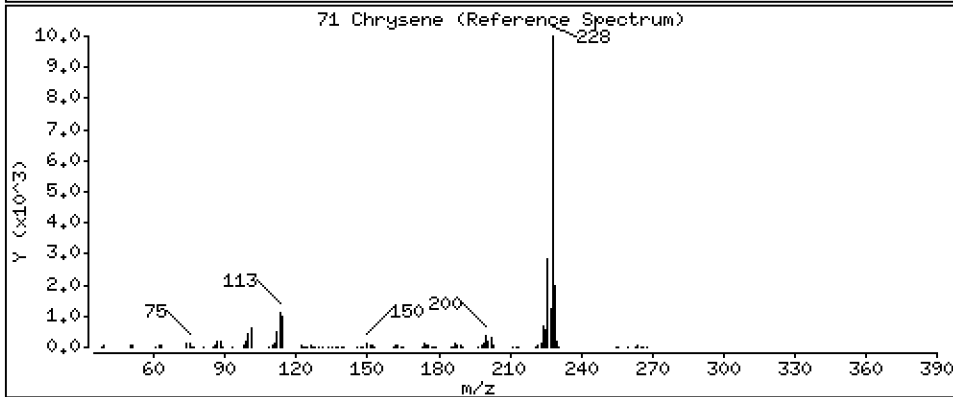
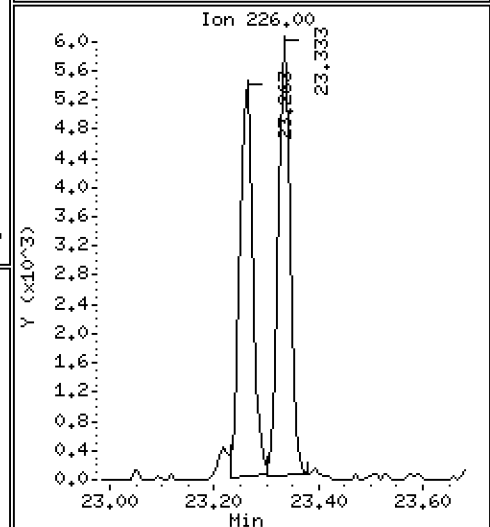
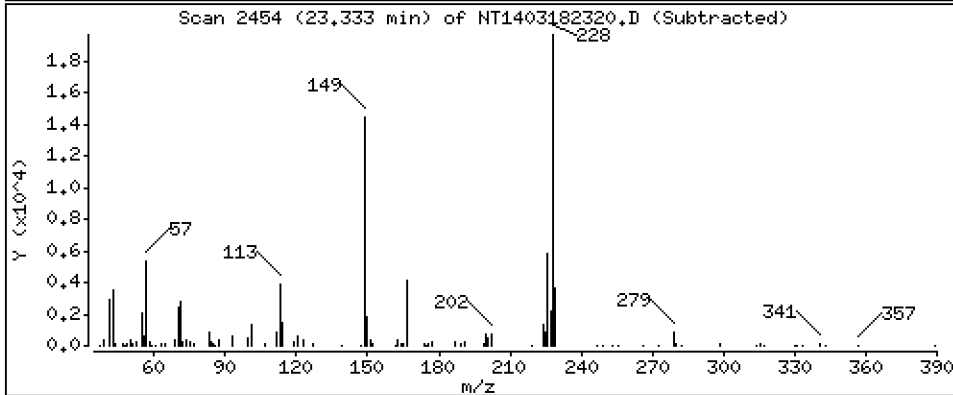
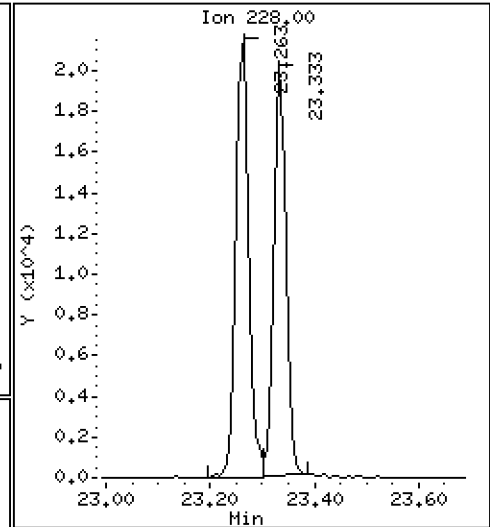
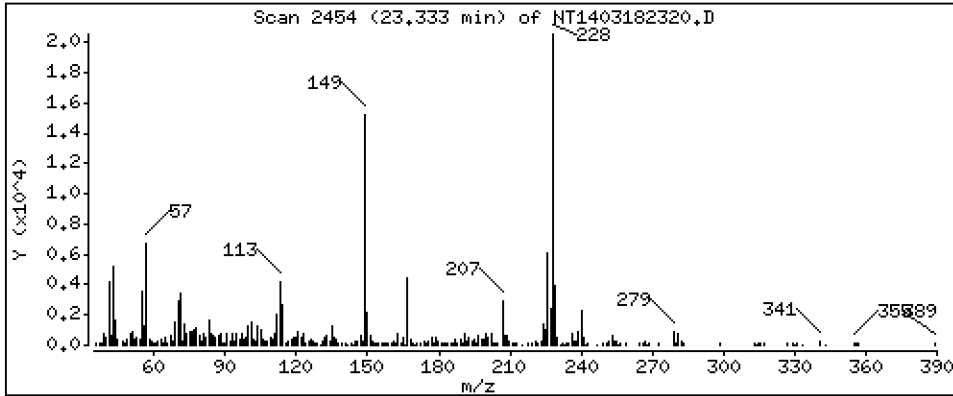
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2071 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

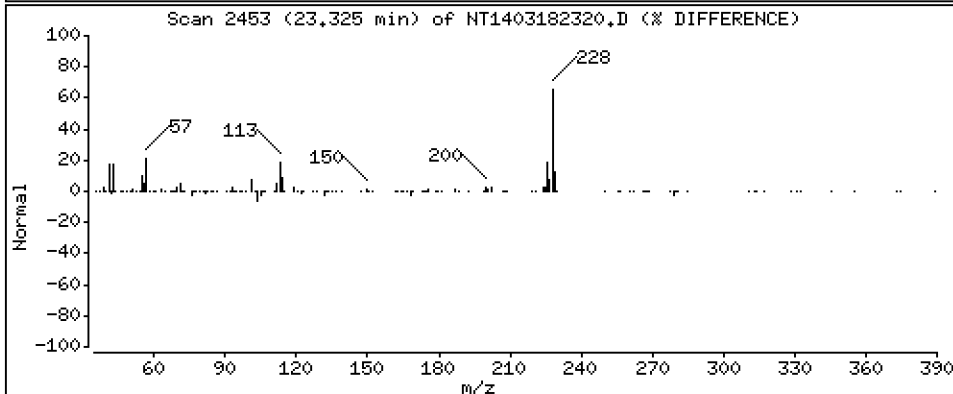
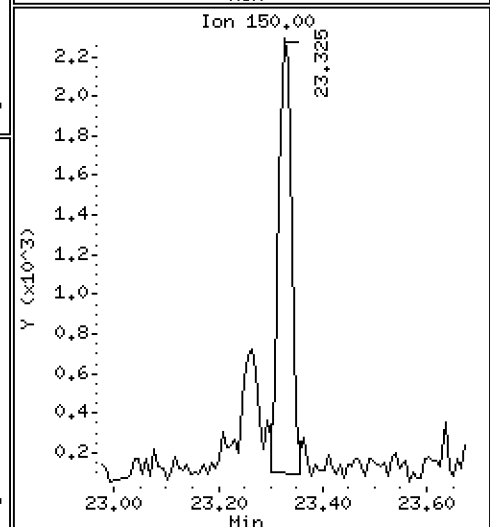
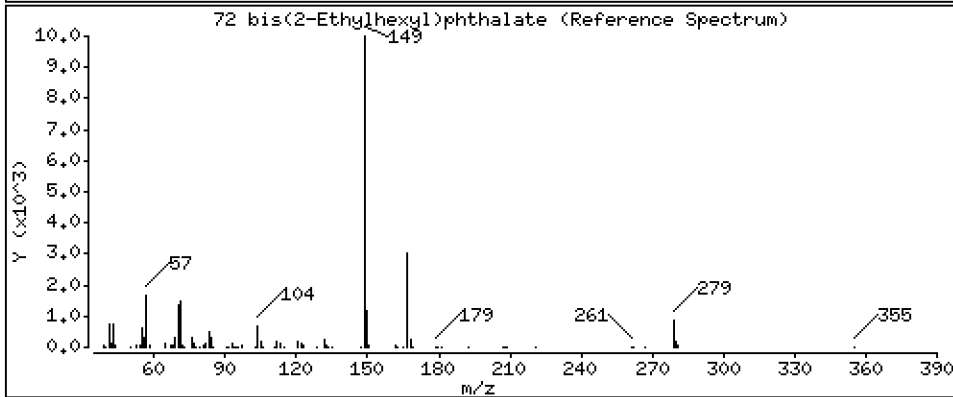
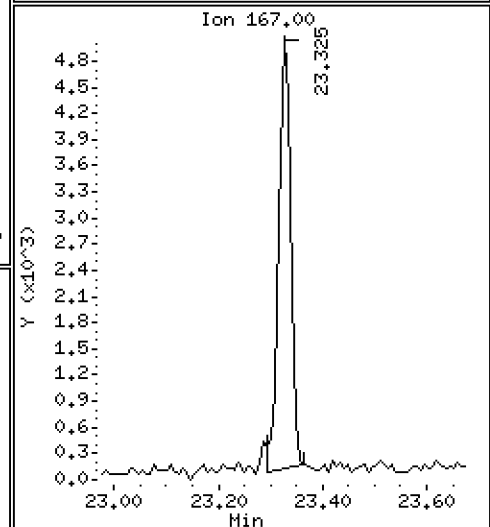
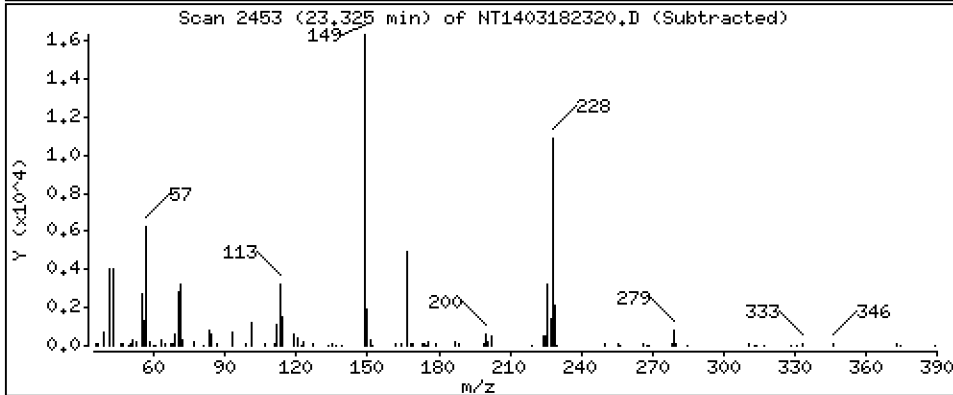
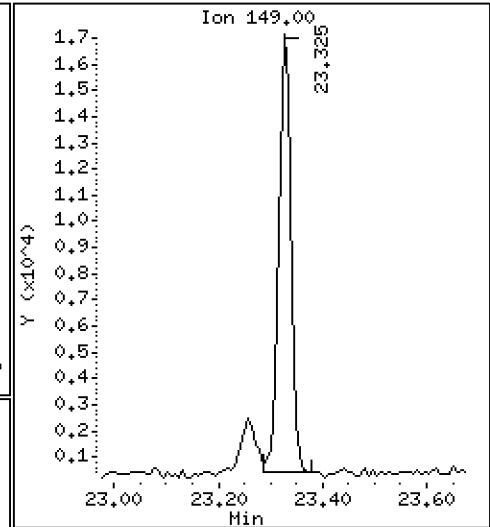
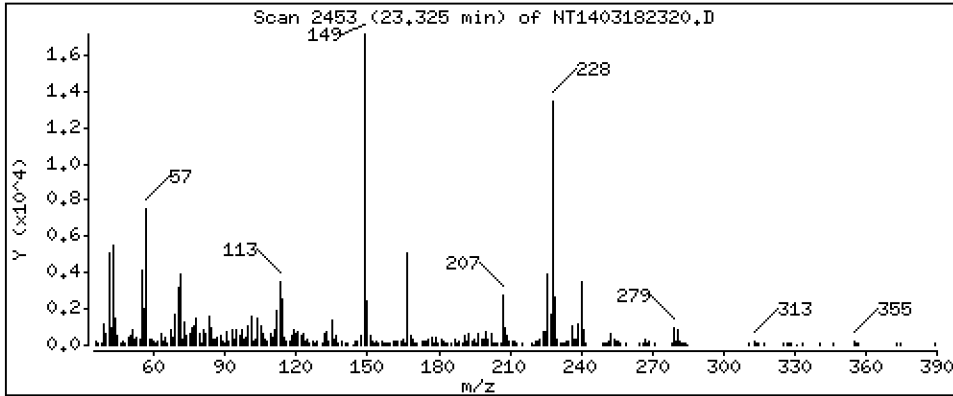
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,2285 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

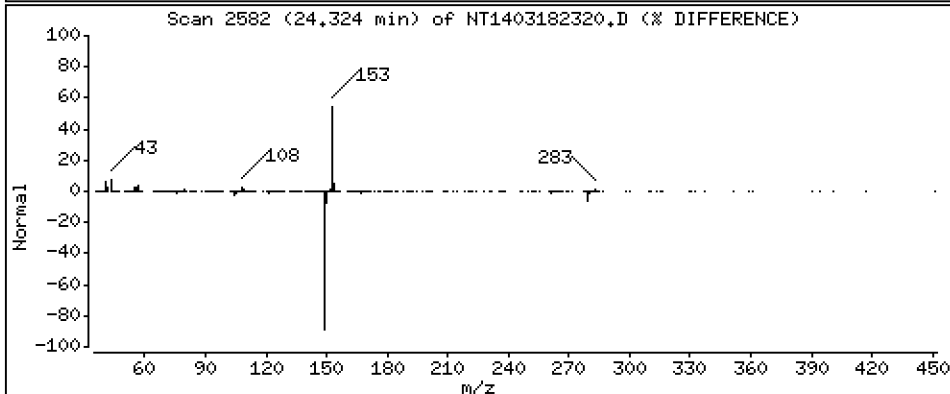
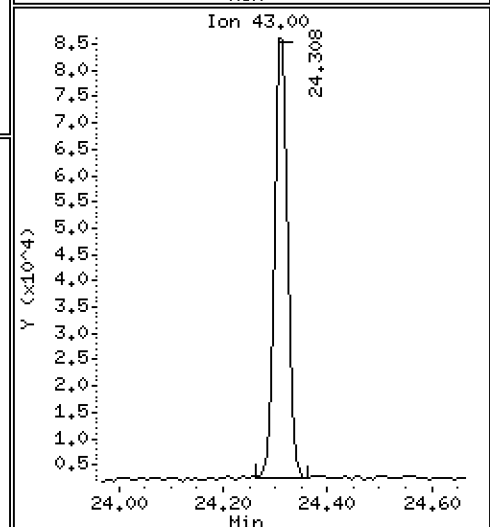
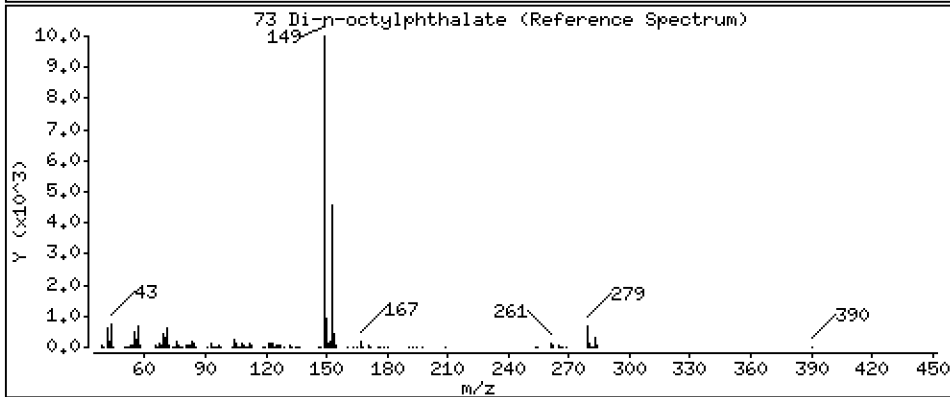
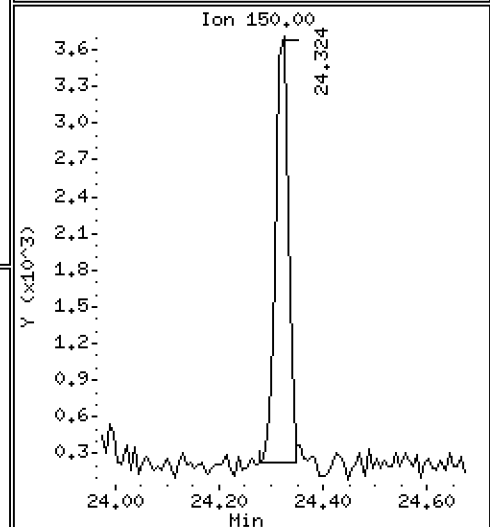
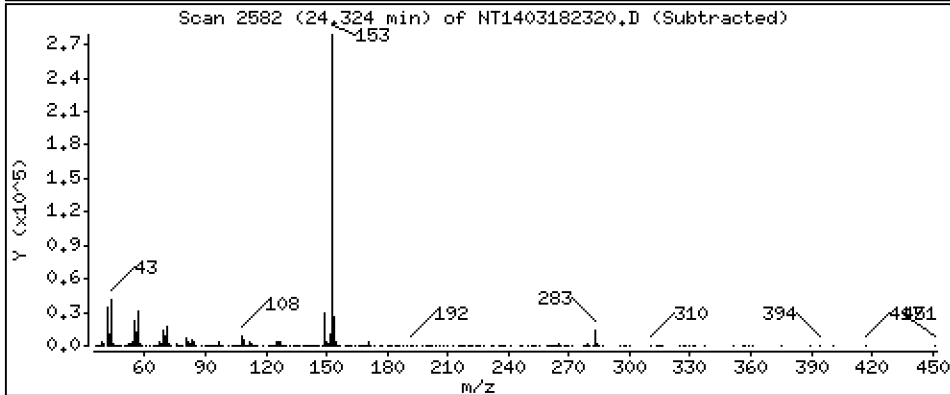
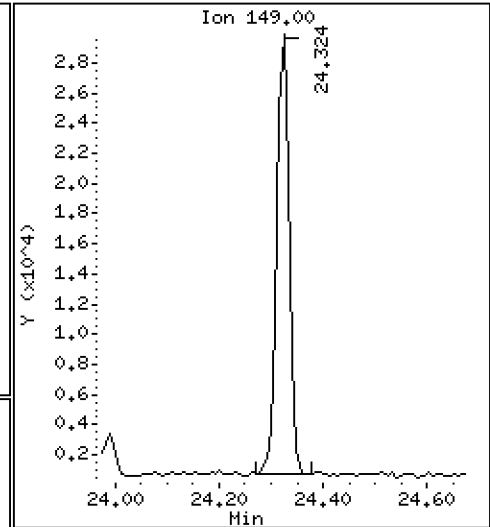
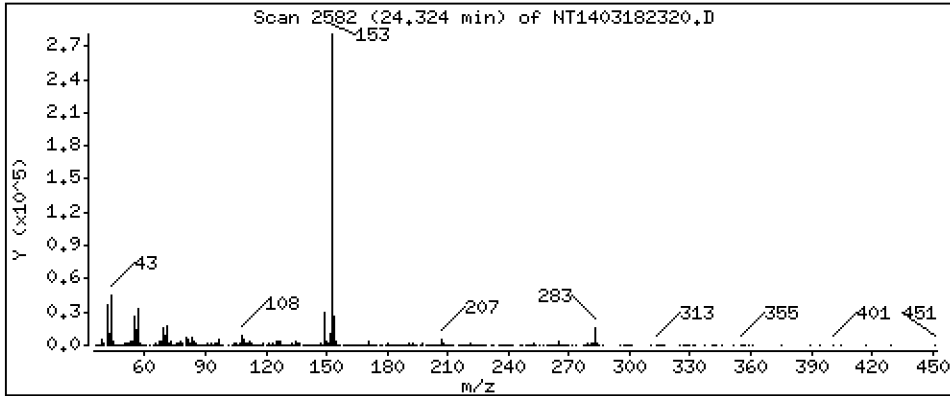
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

73 Di-n-octylphthalate

Concentration: 0.2058 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

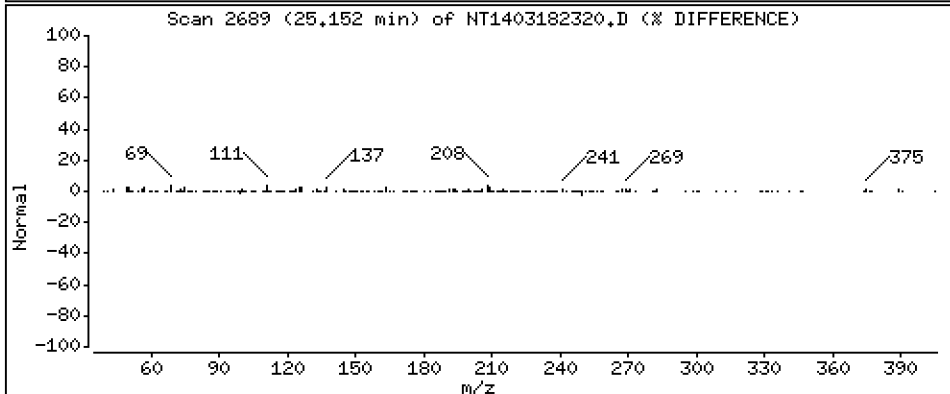
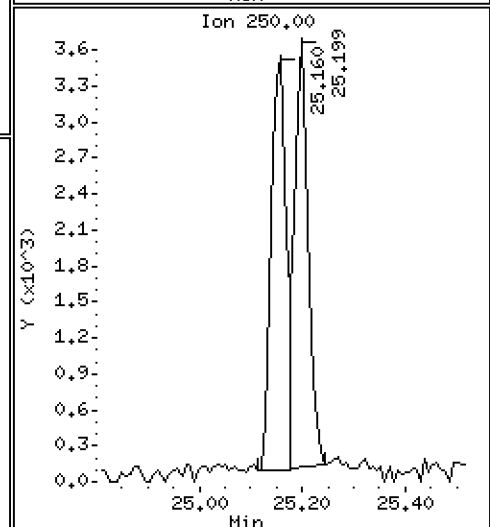
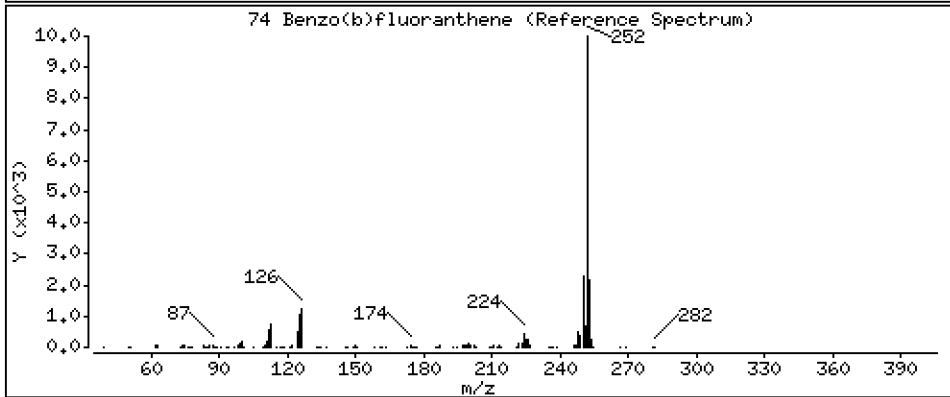
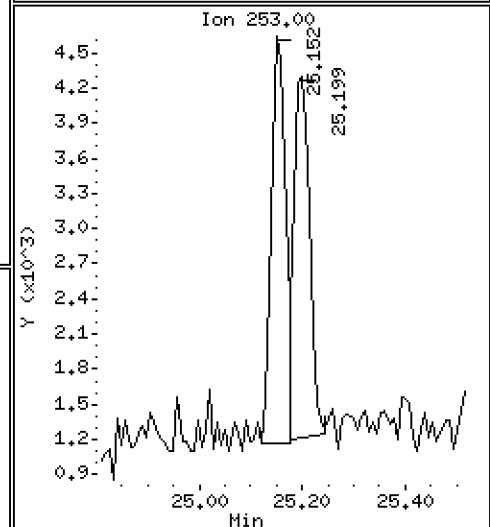
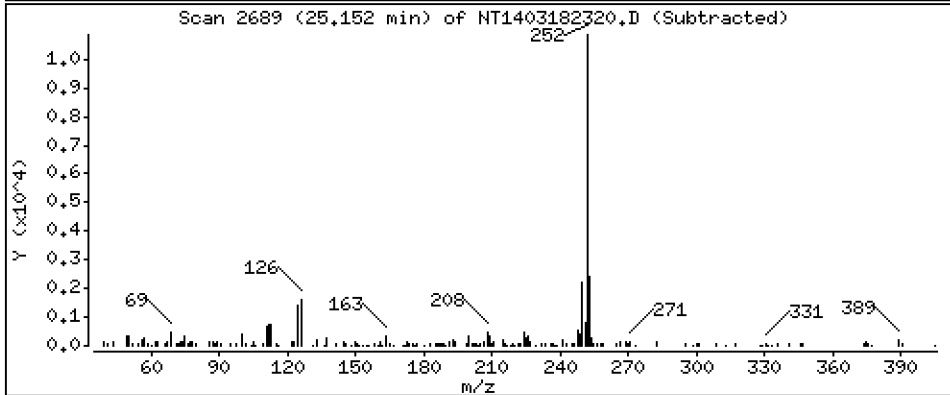
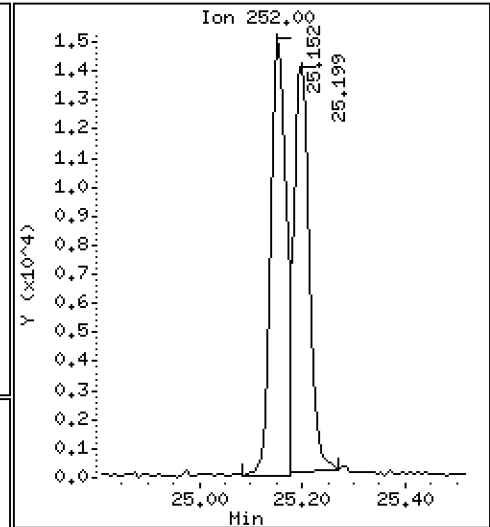
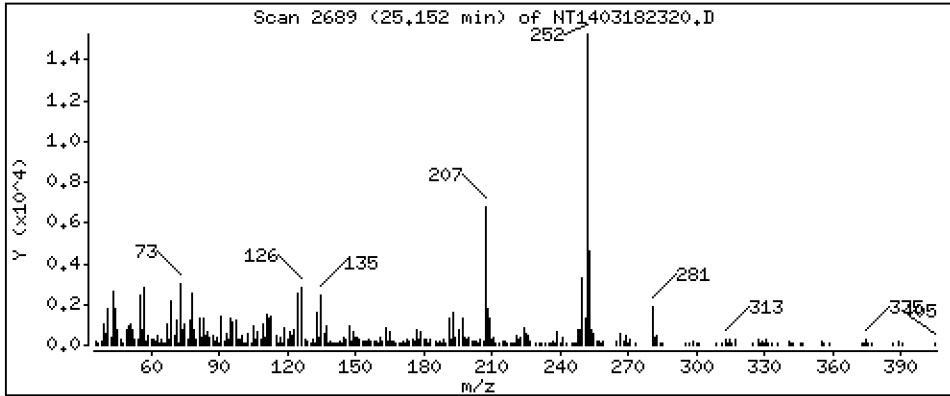
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1855 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

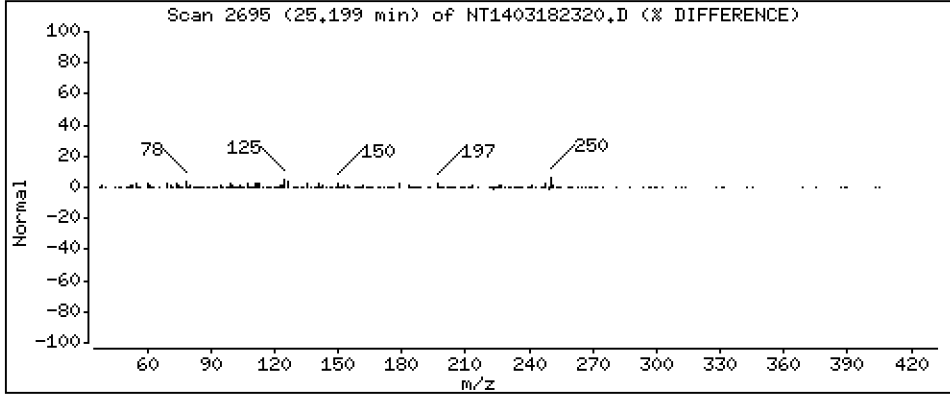
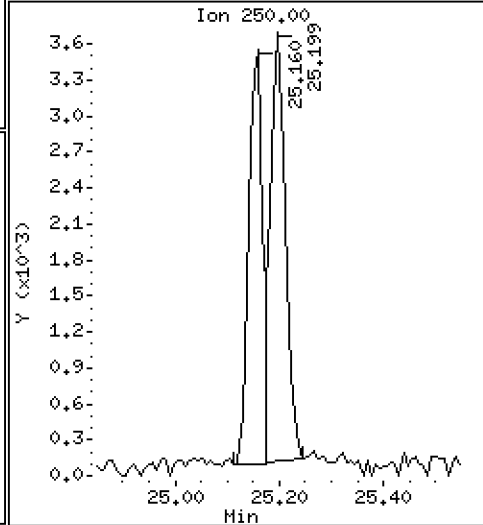
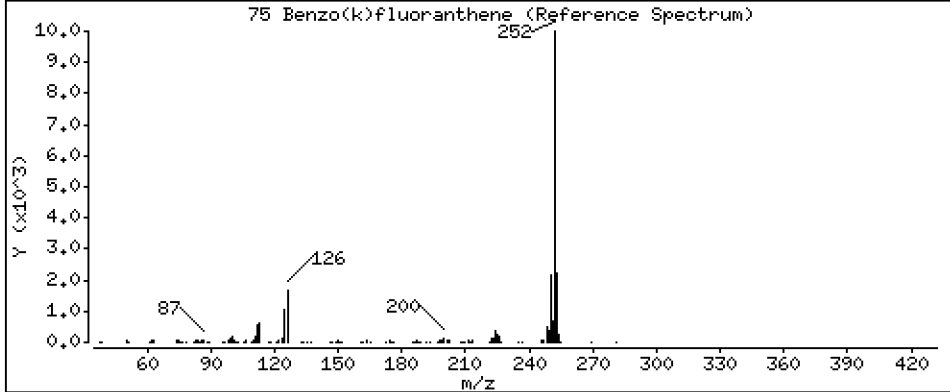
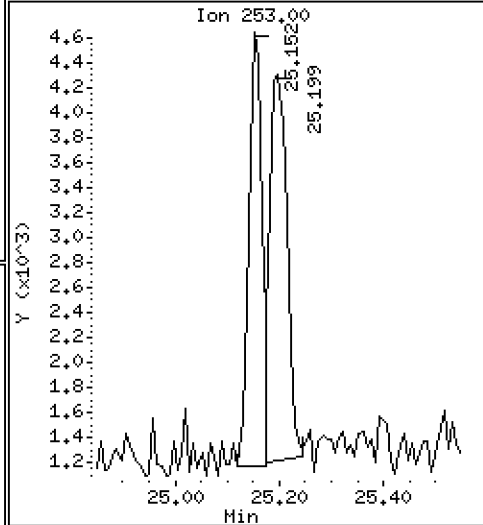
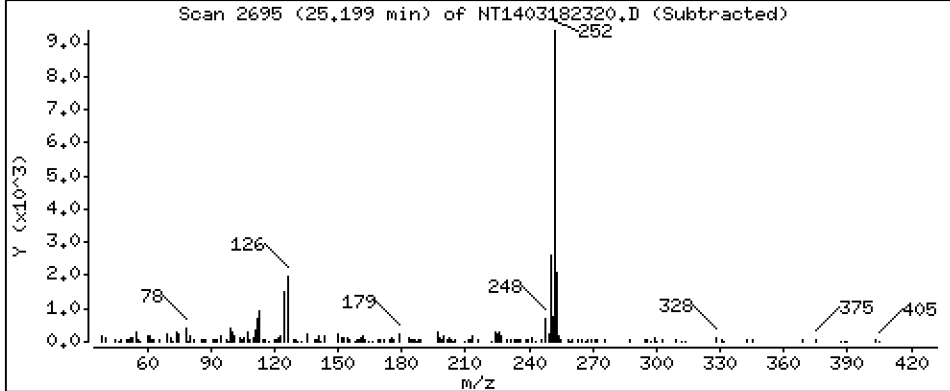
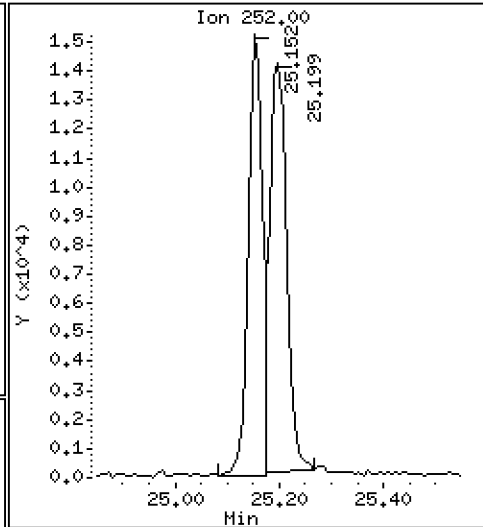
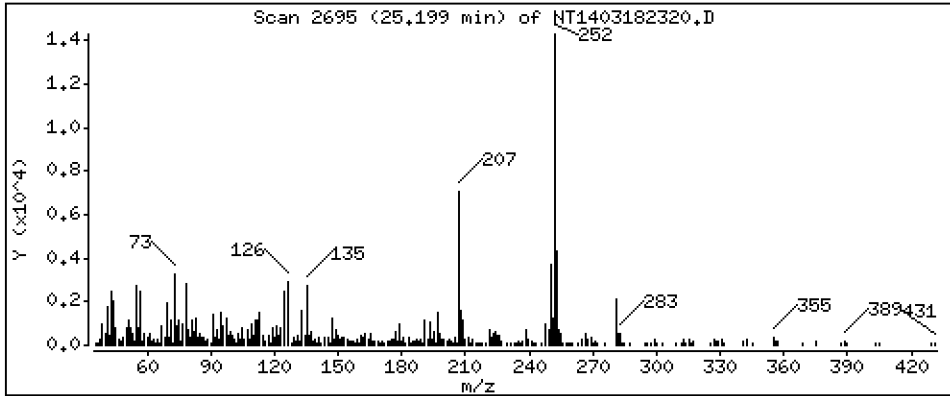
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,1949 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

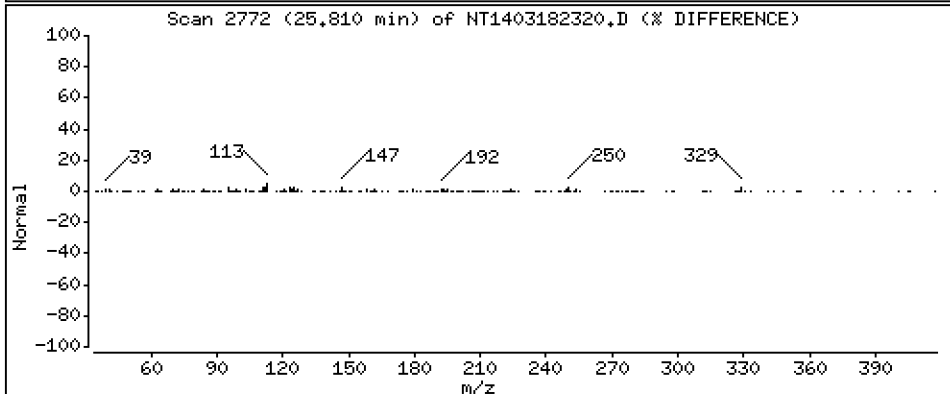
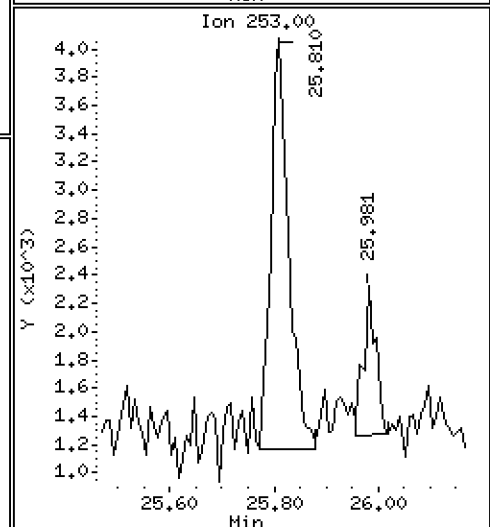
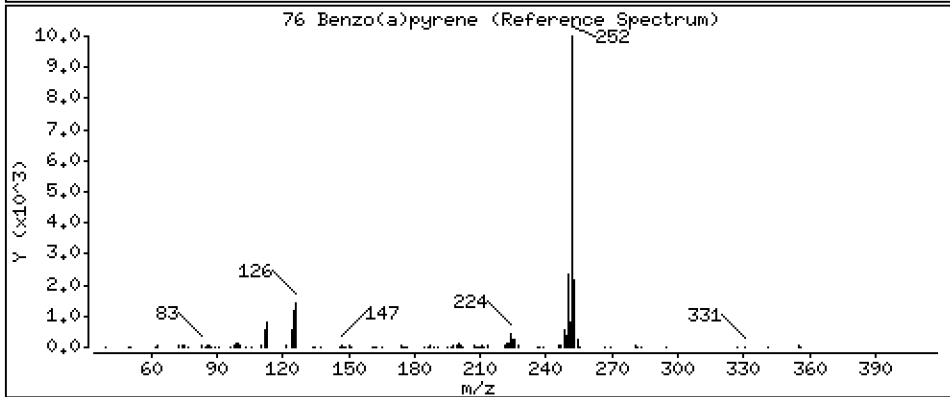
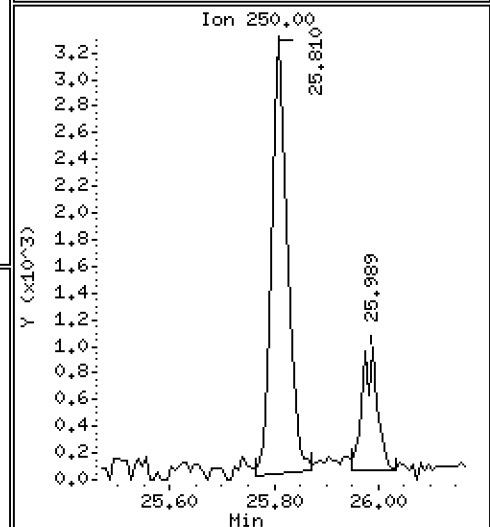
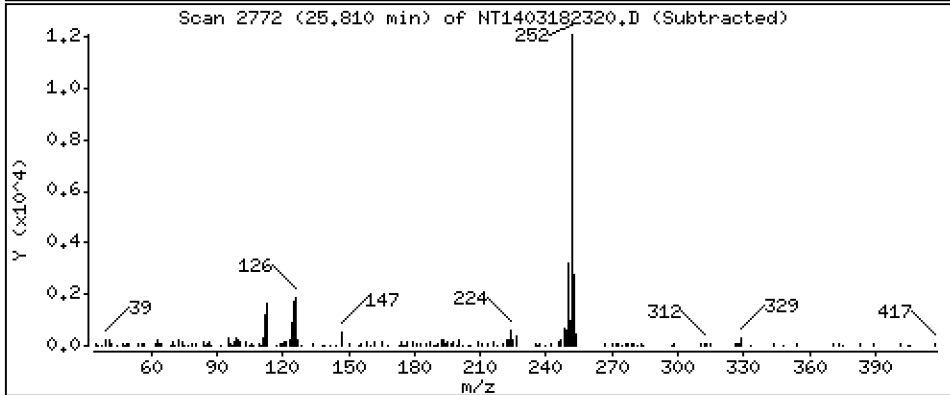
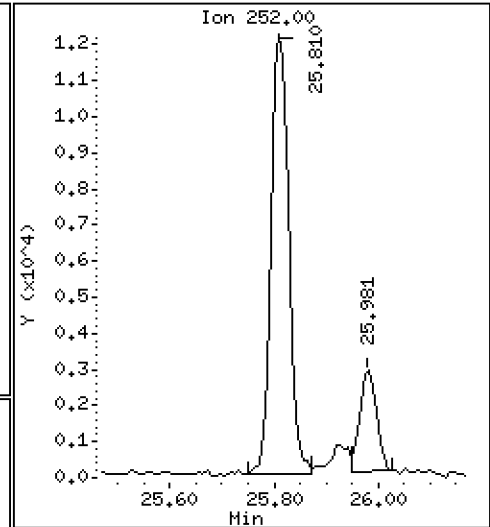
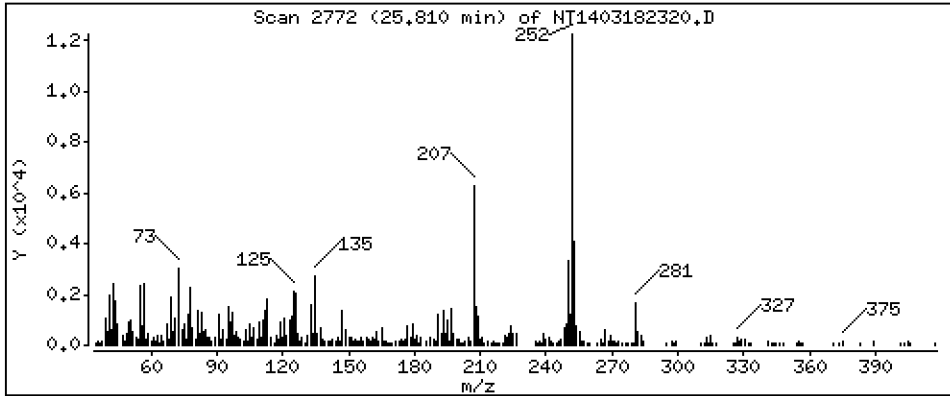
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1986 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

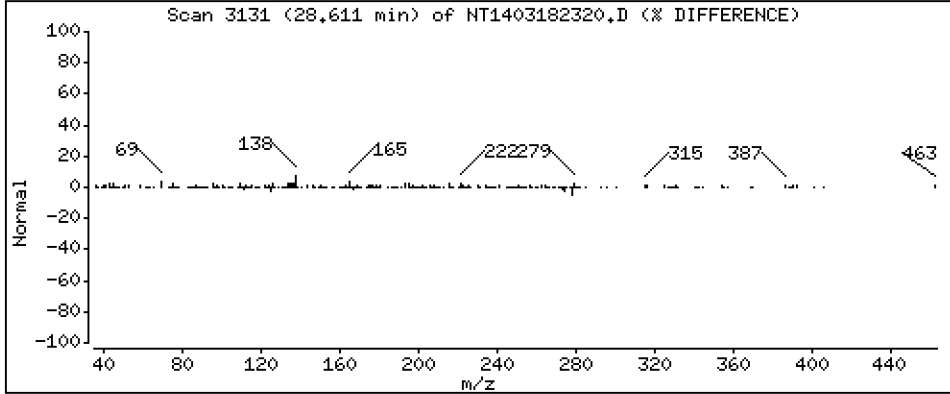
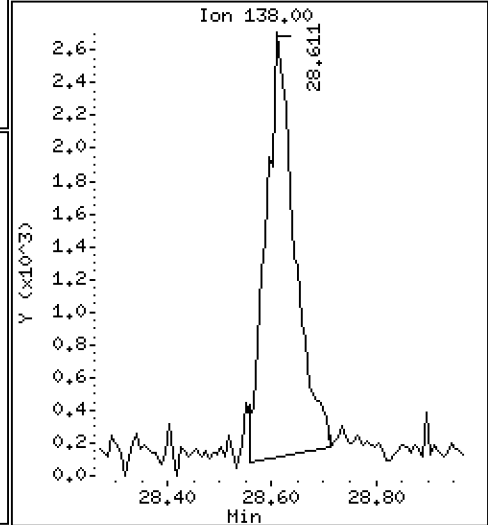
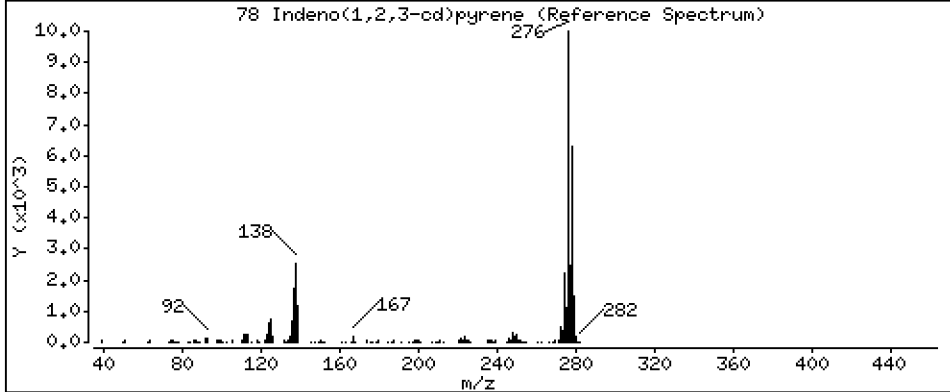
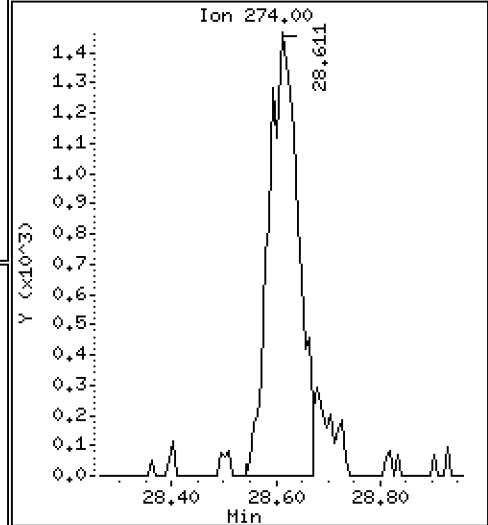
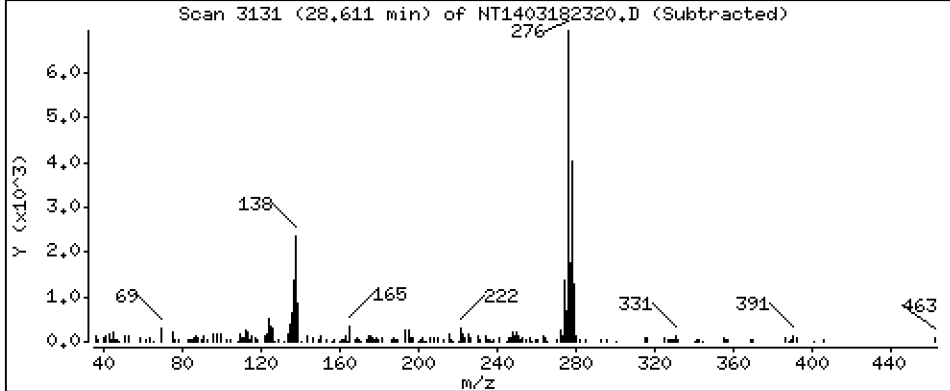
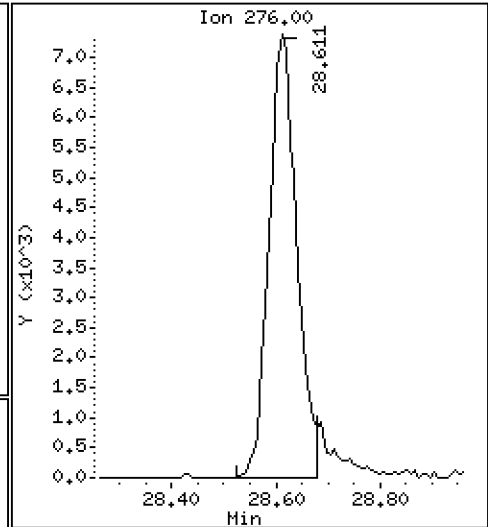
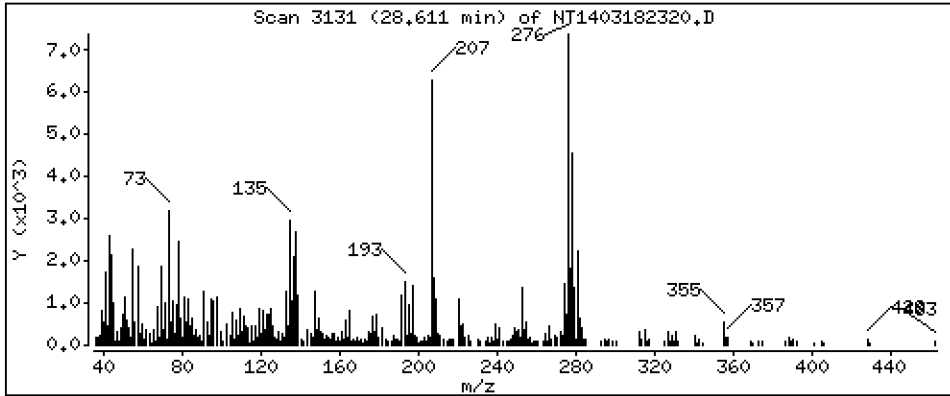
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1774 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

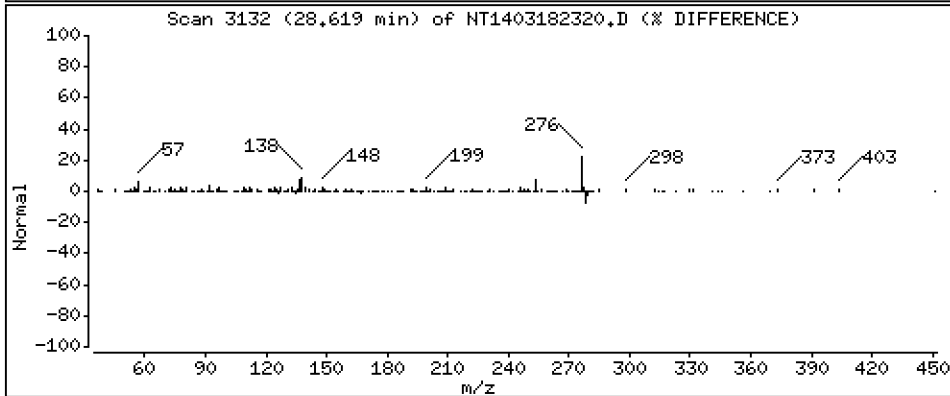
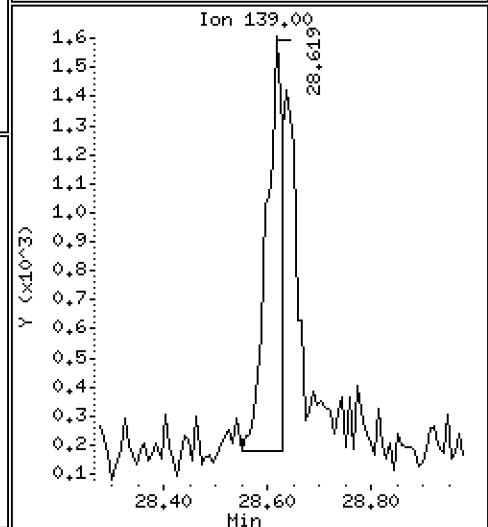
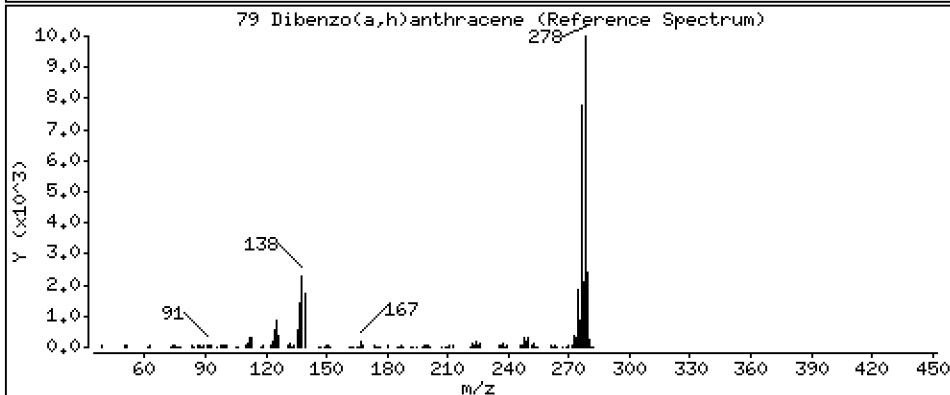
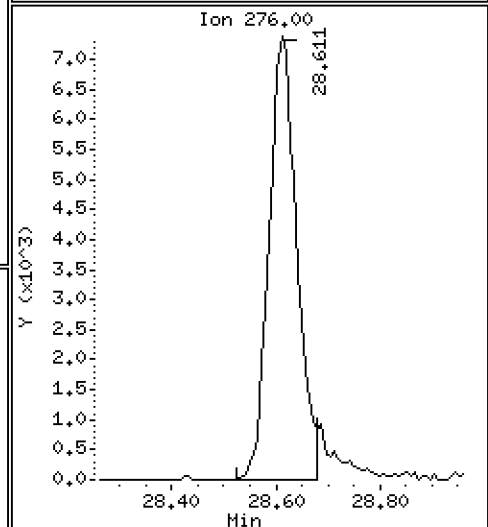
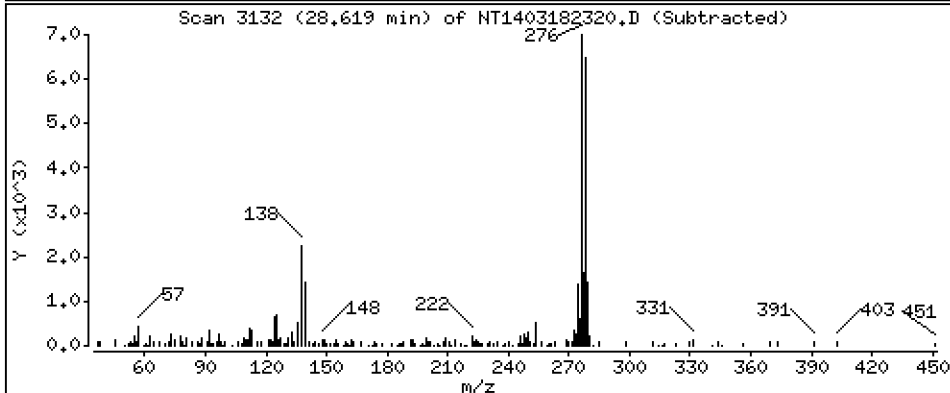
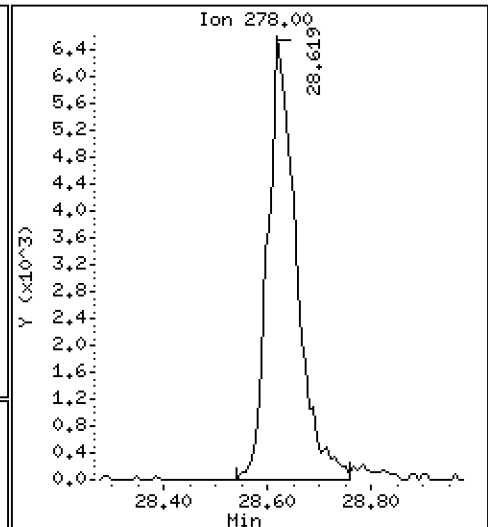
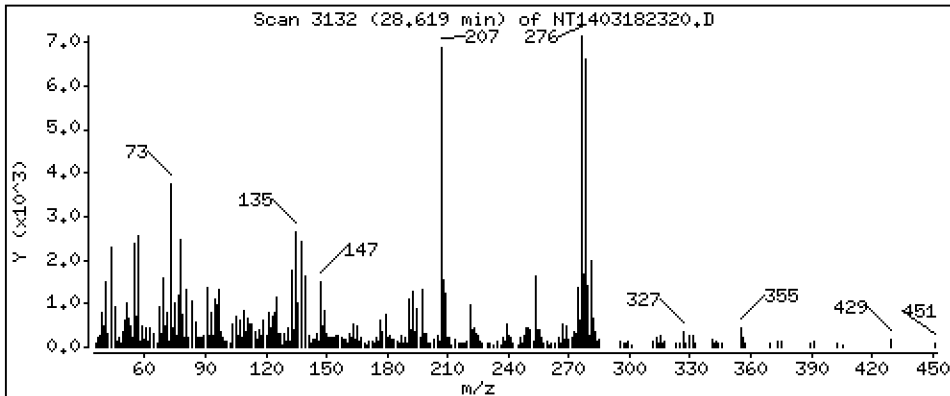
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1924 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

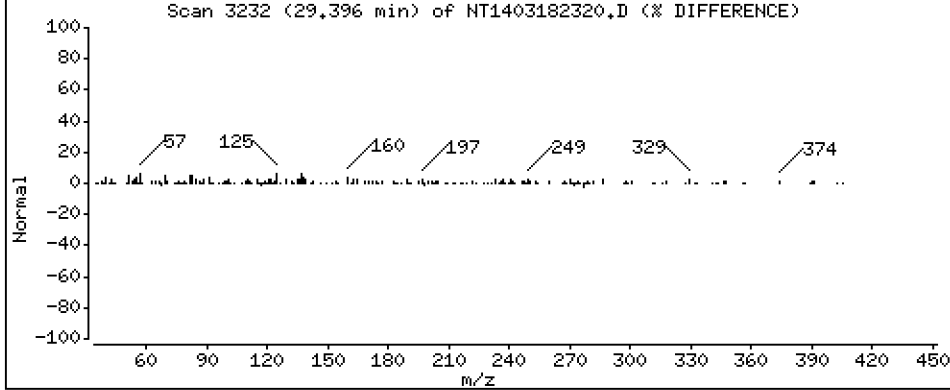
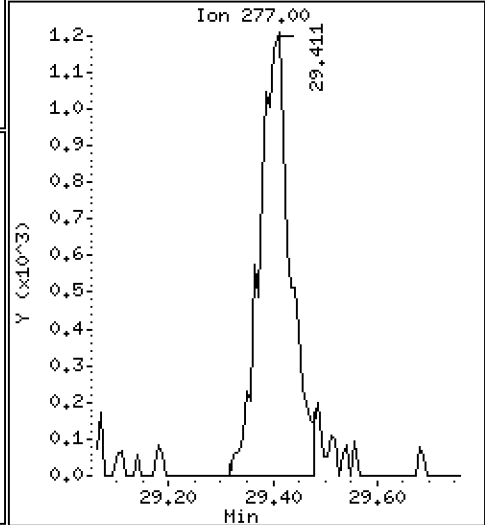
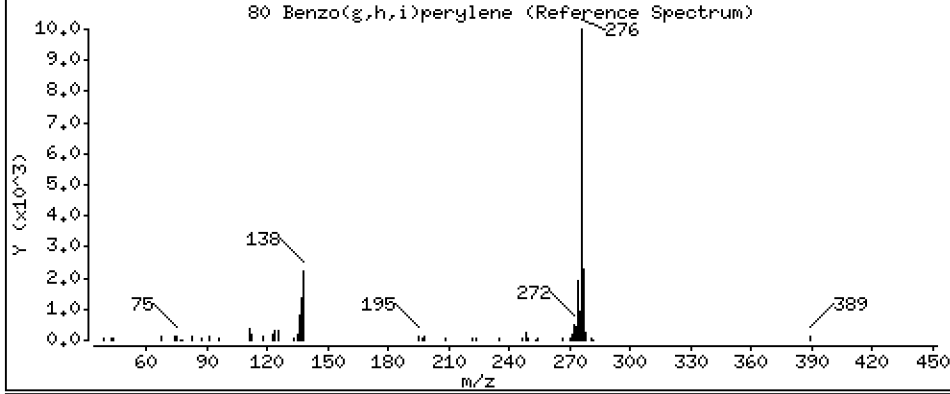
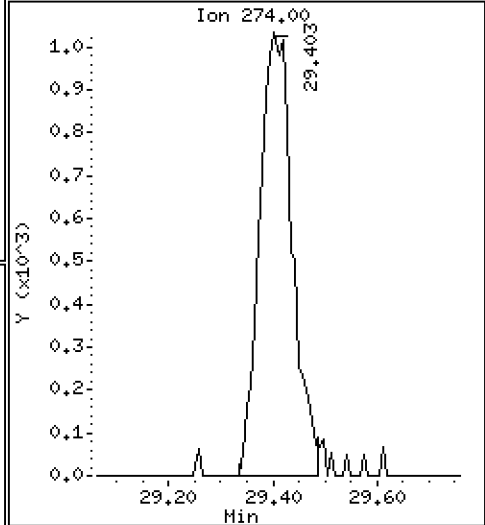
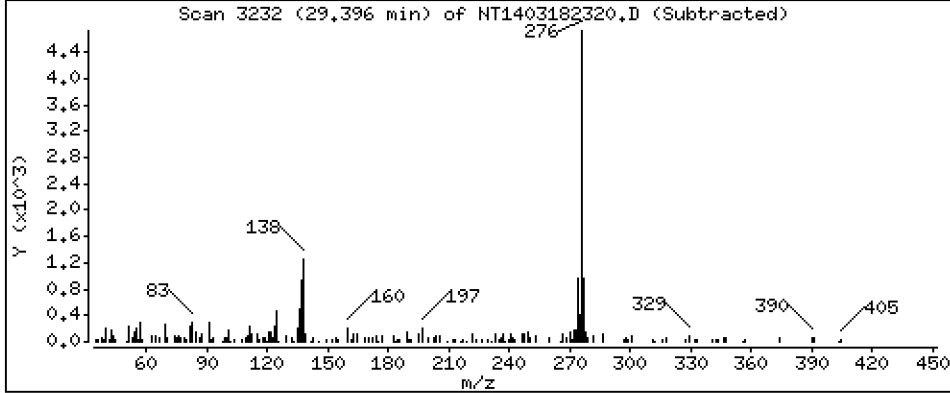
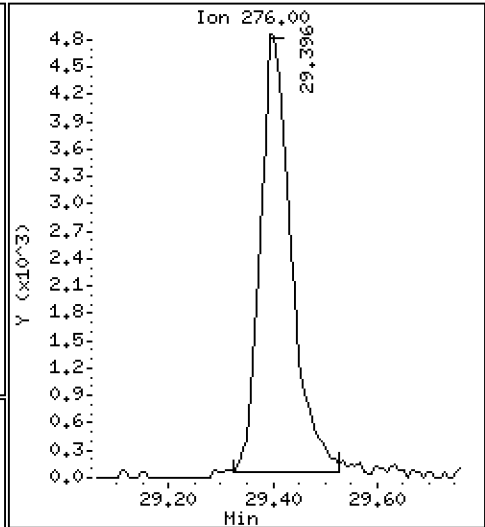
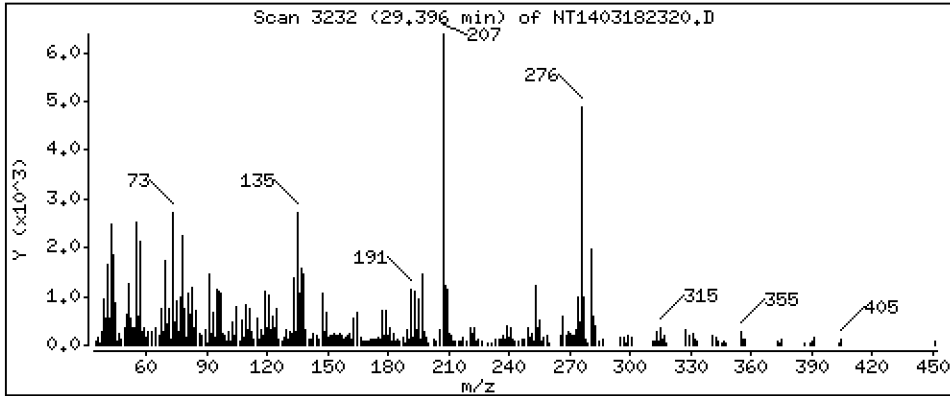
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1564 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

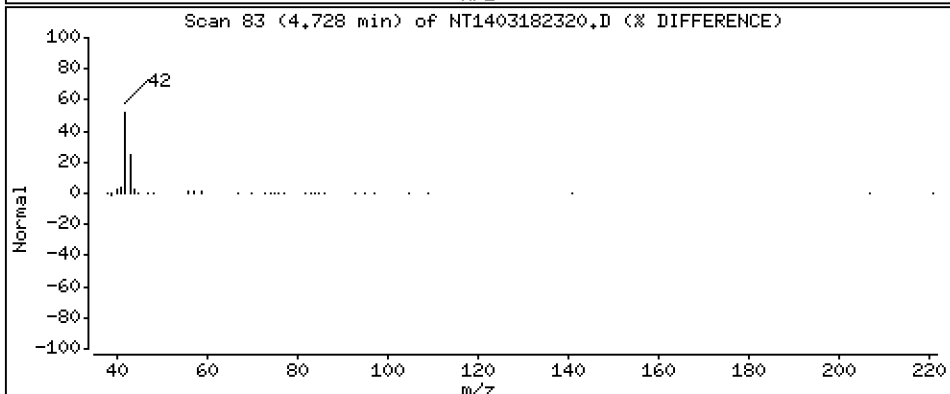
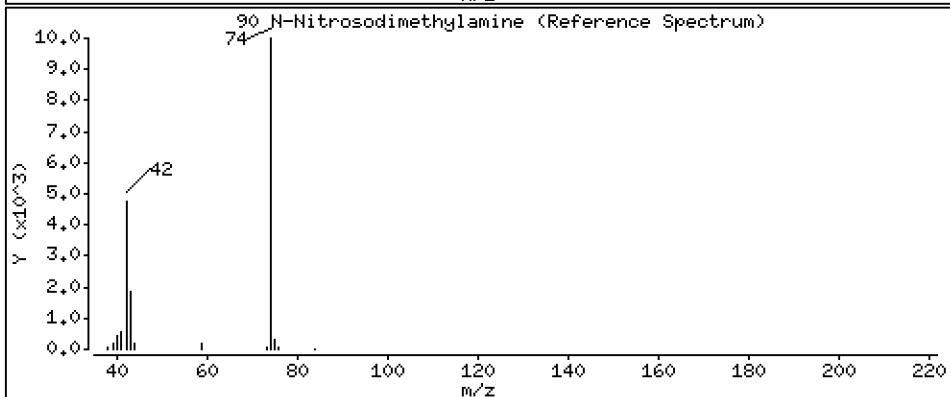
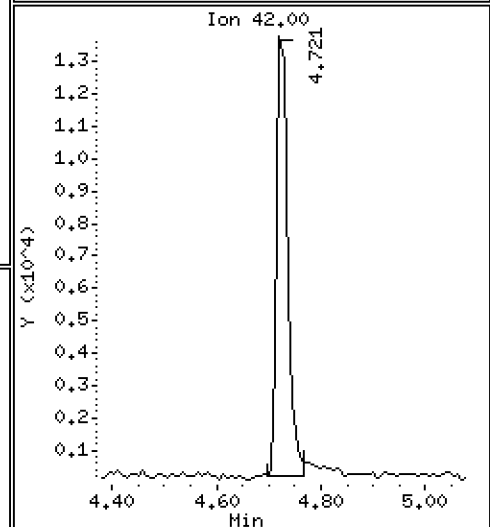
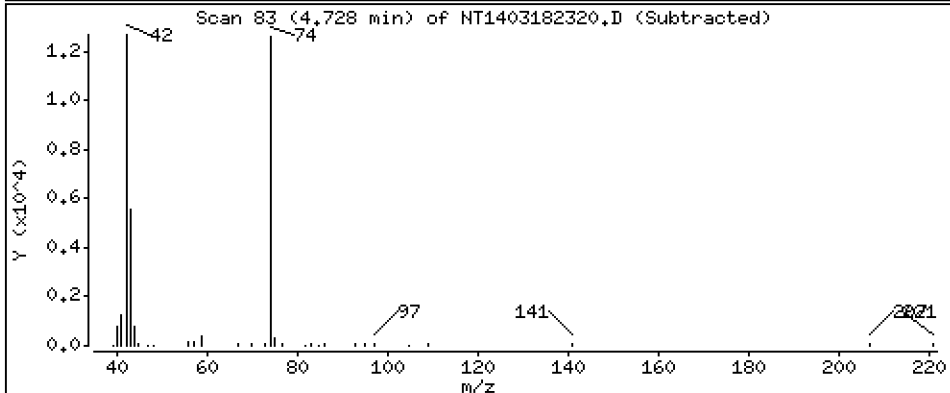
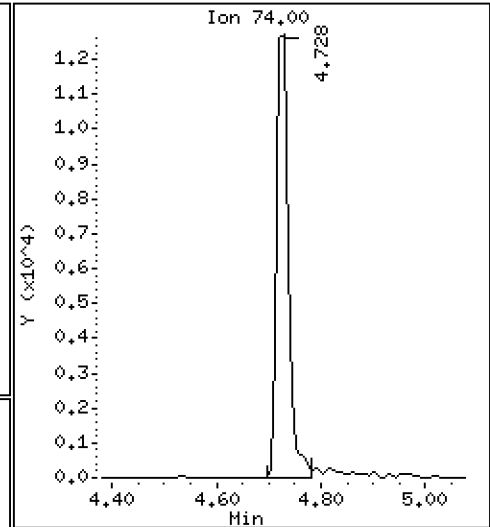
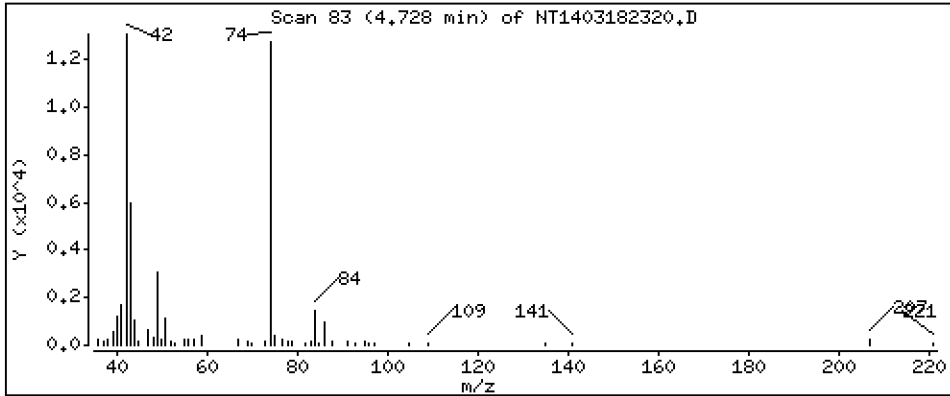
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,3433 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

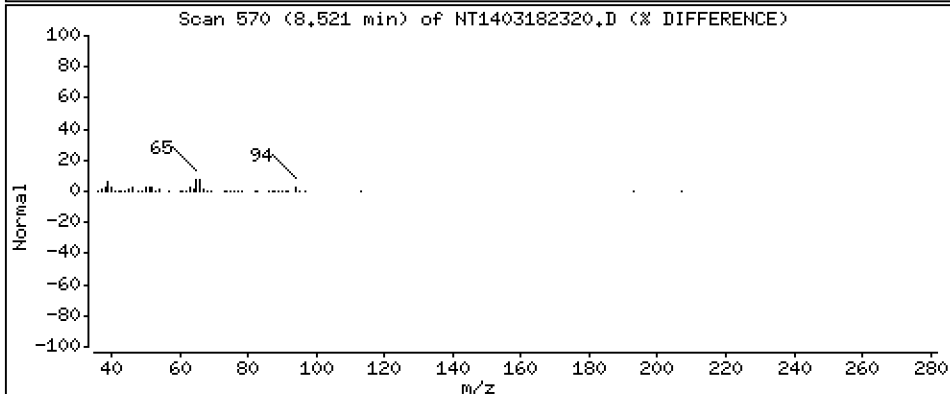
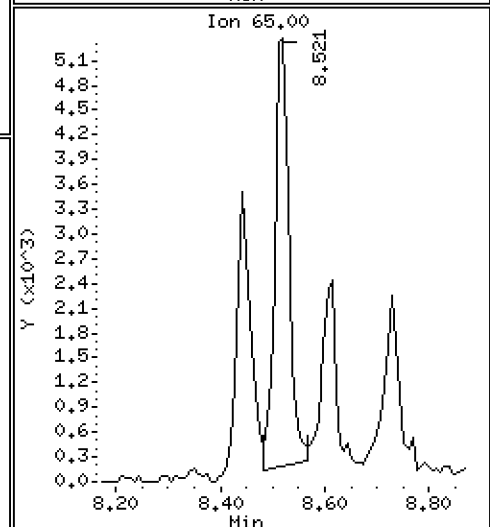
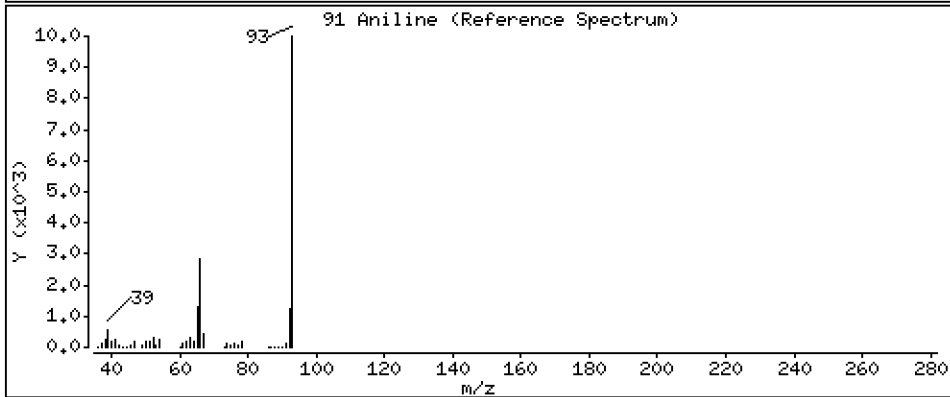
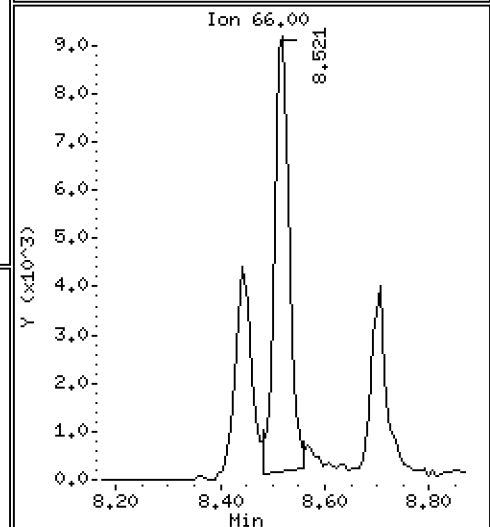
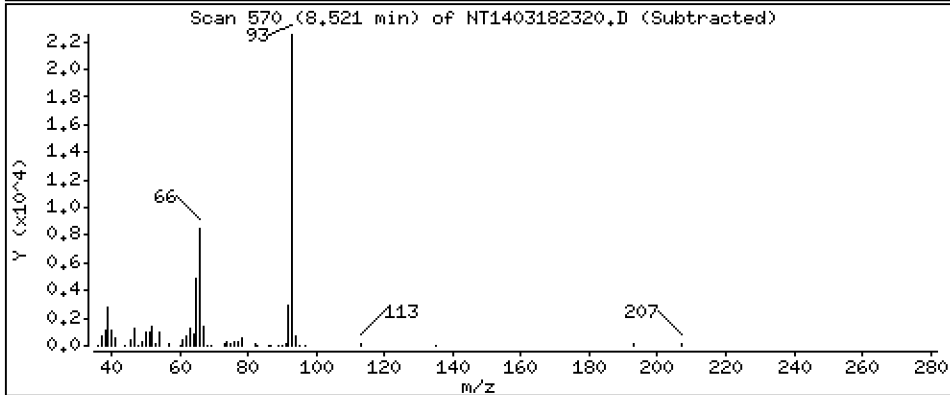
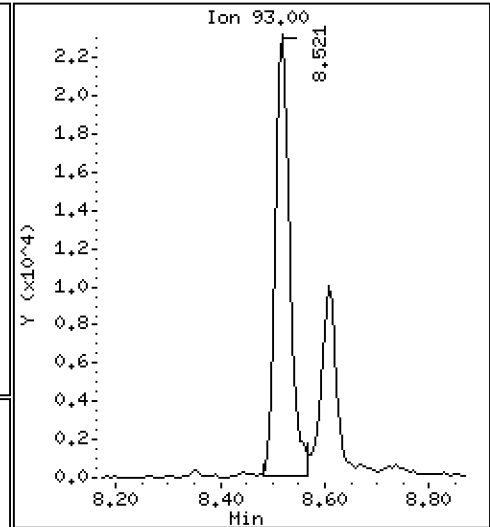
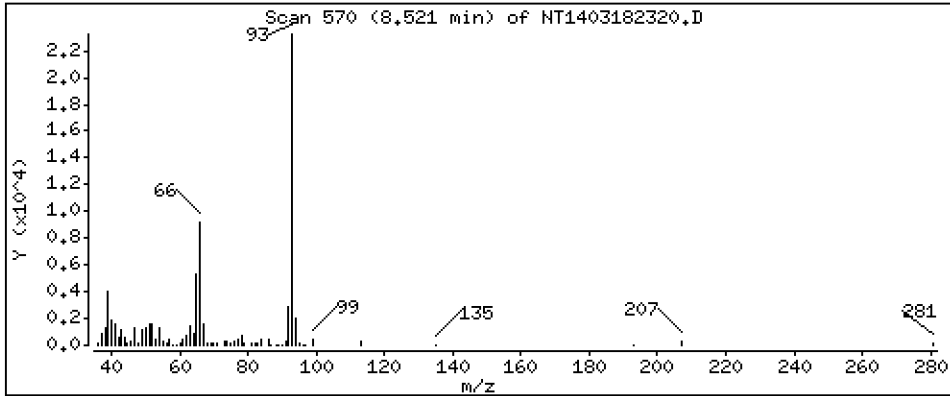
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3486 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

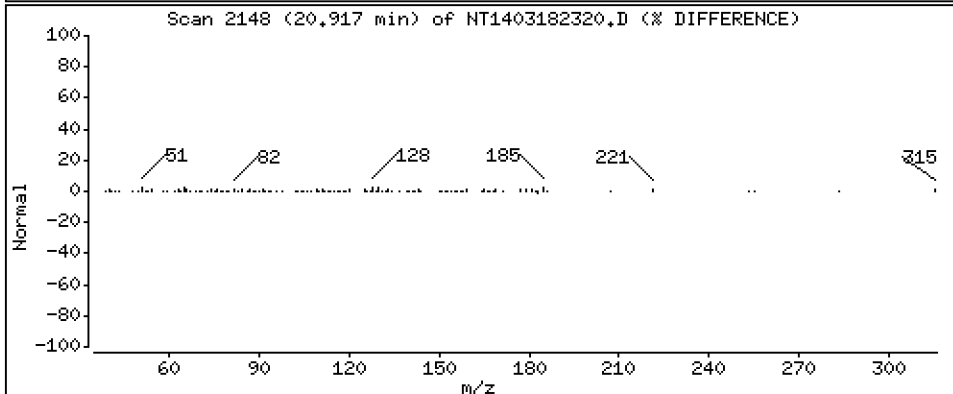
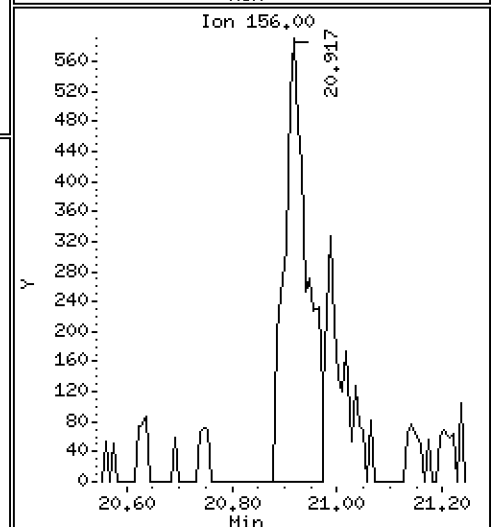
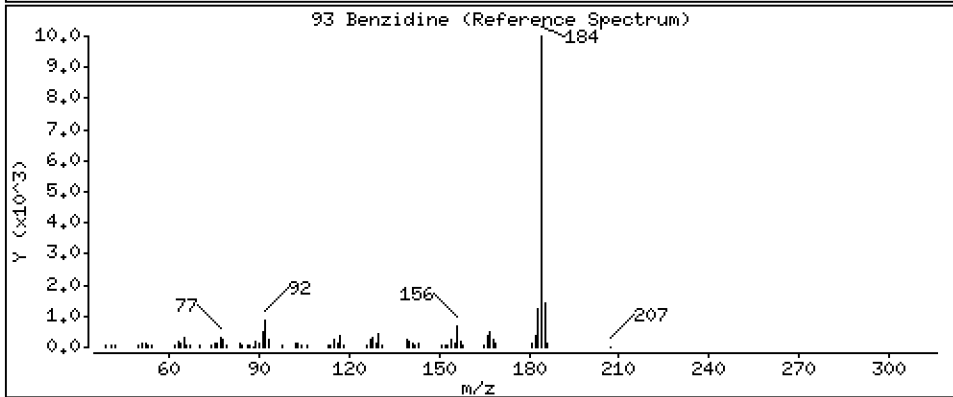
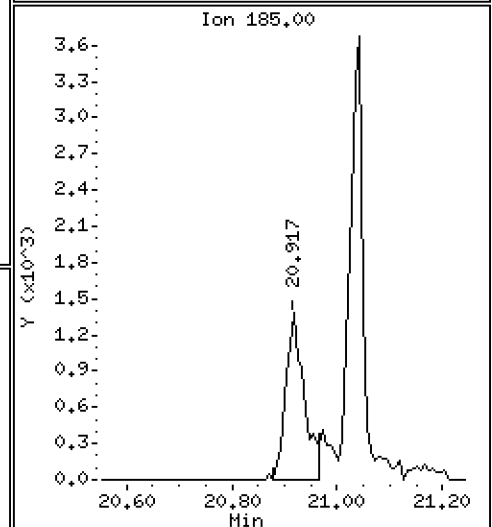
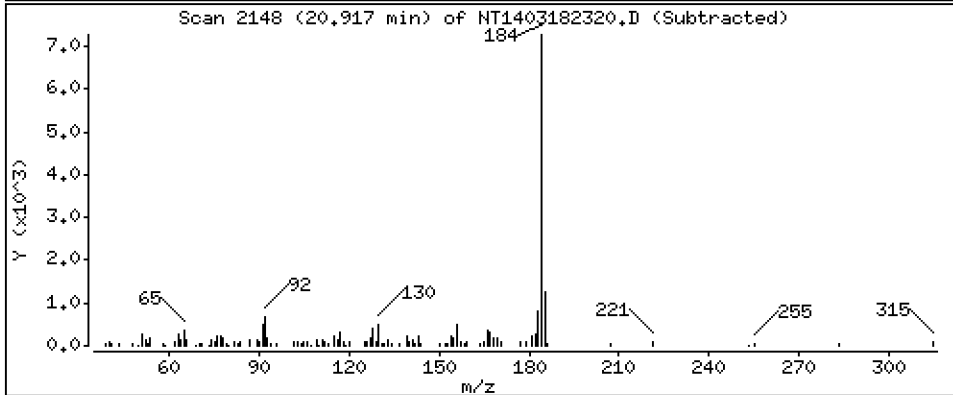
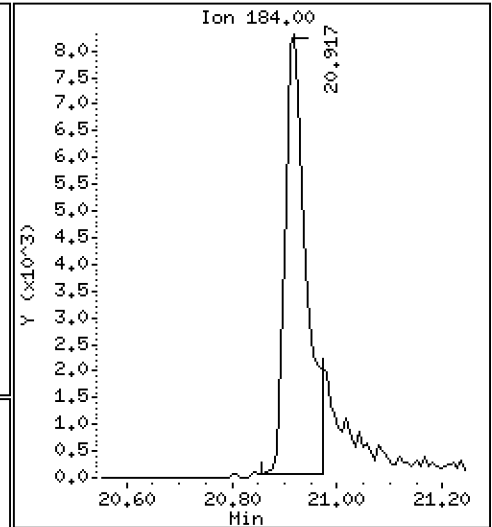
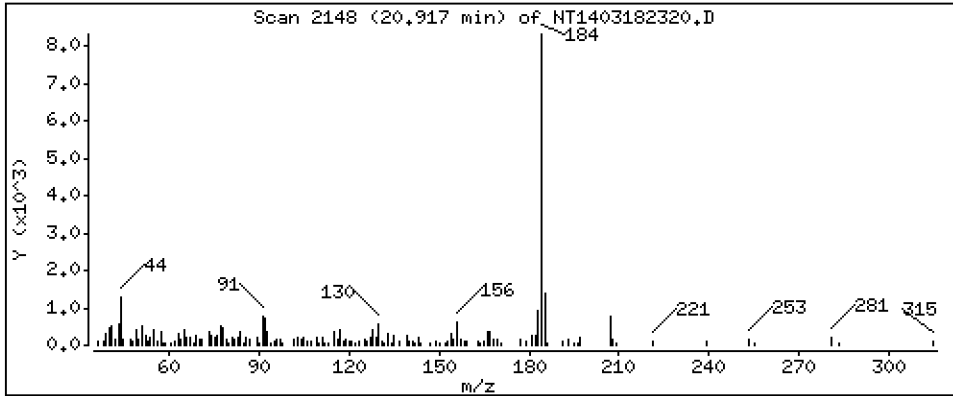
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,3153 ug/mL

93 Benzidine



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

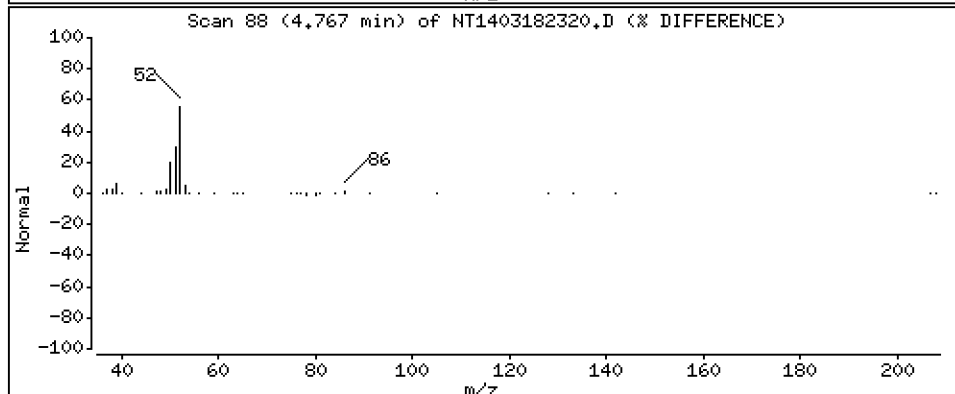
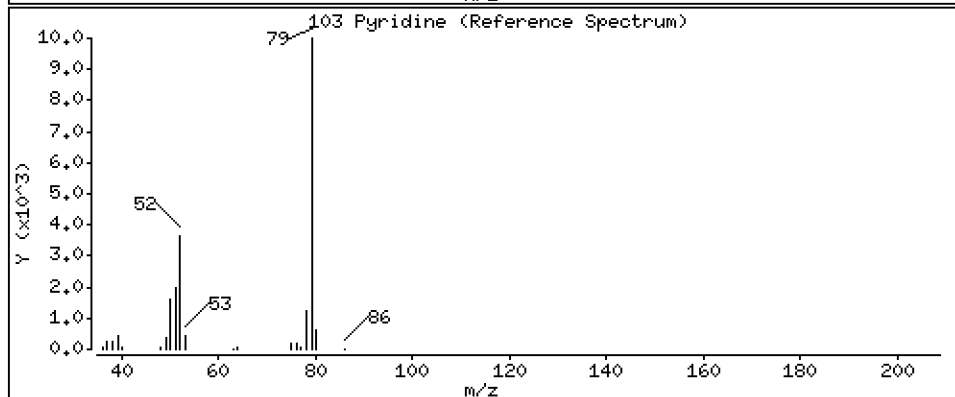
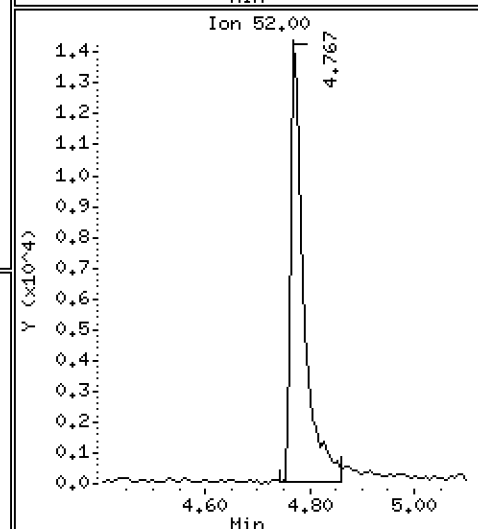
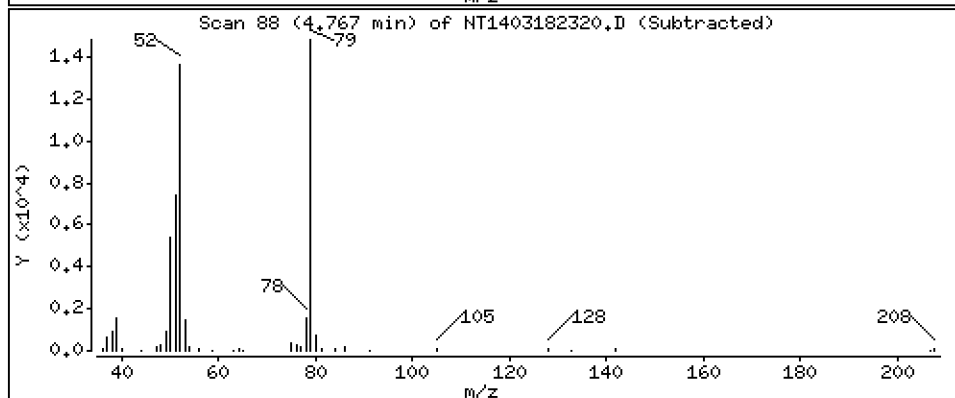
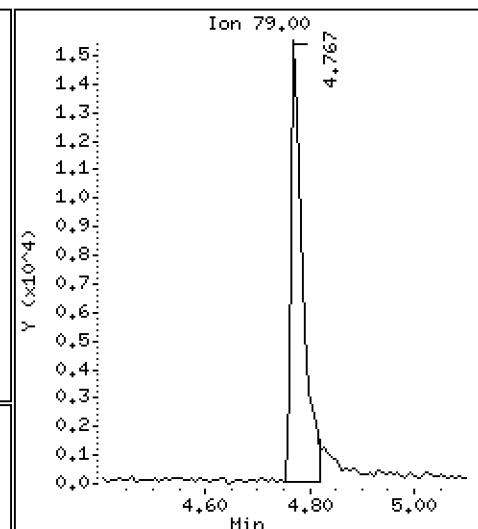
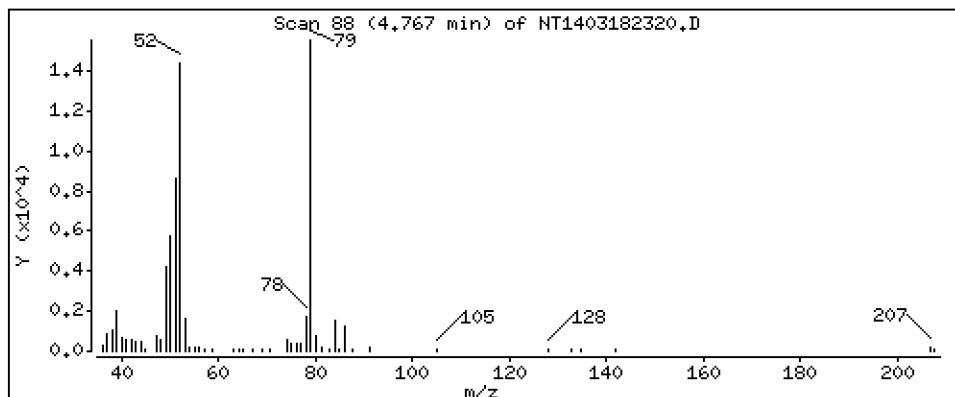
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,1486 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

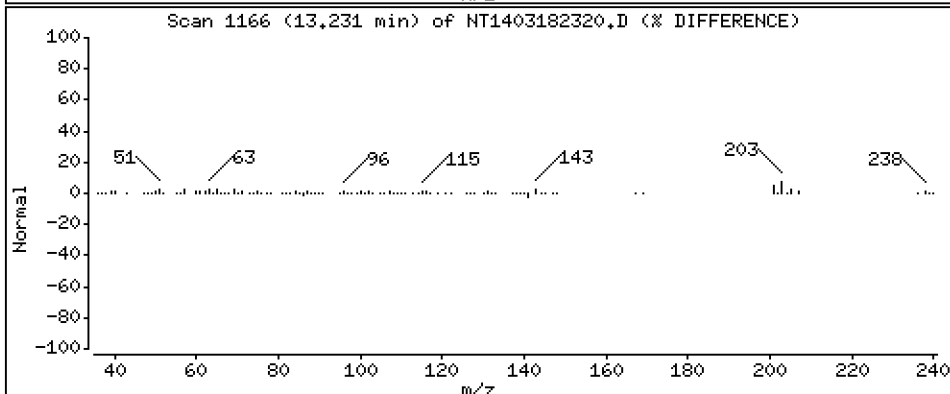
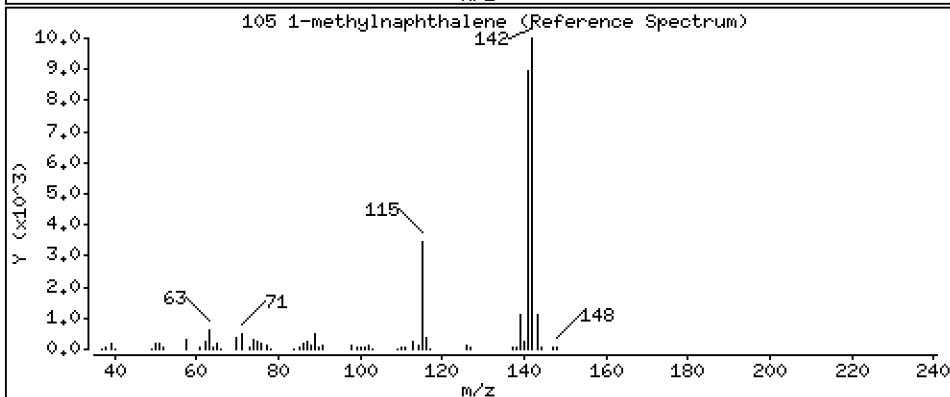
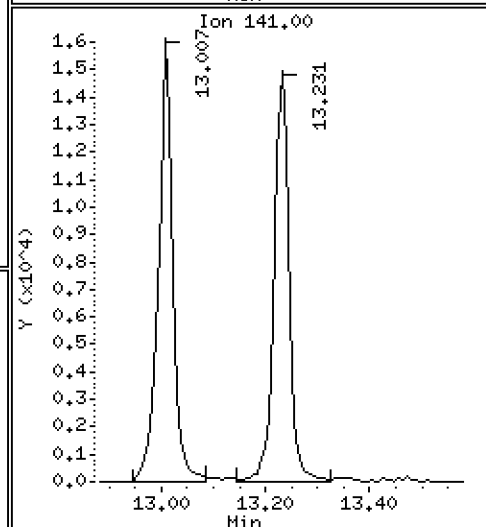
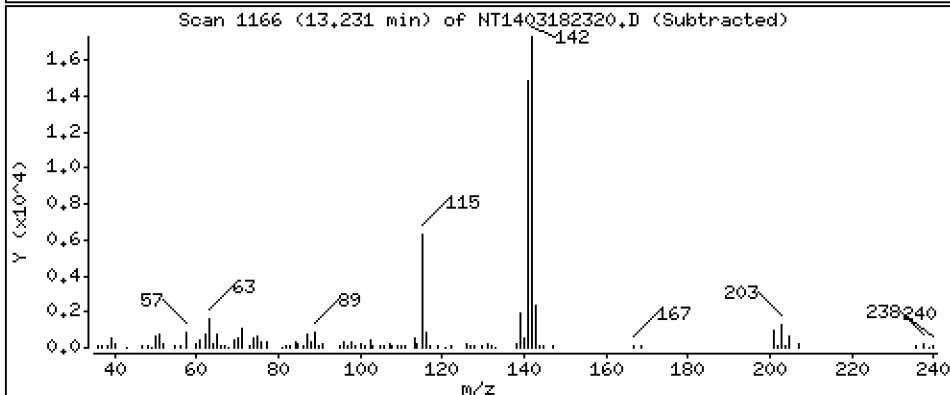
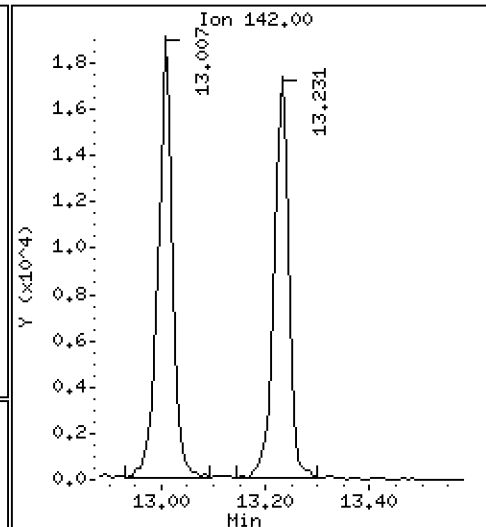
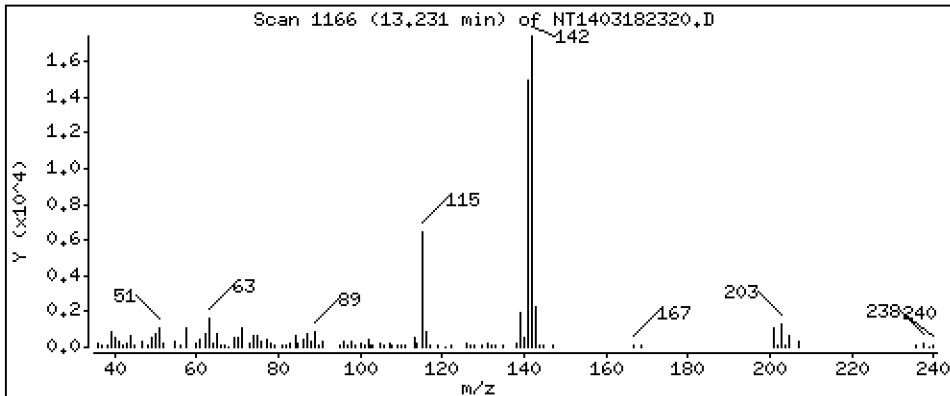
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1988 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

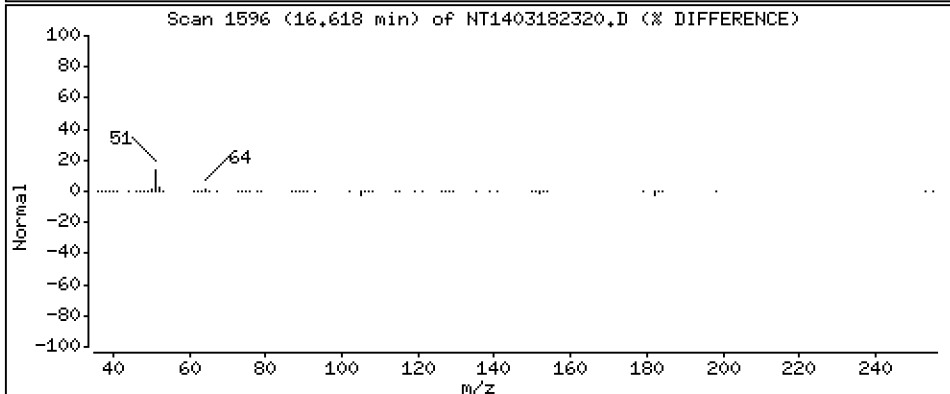
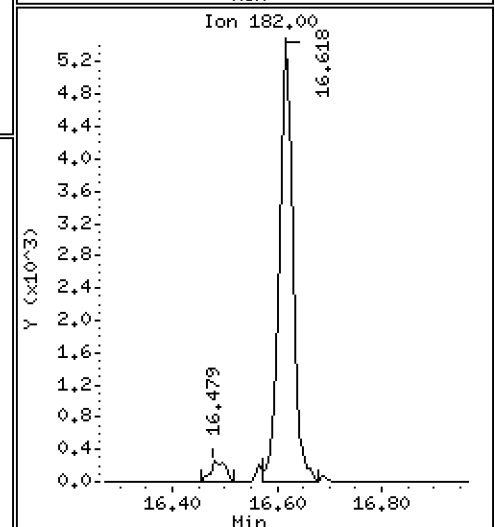
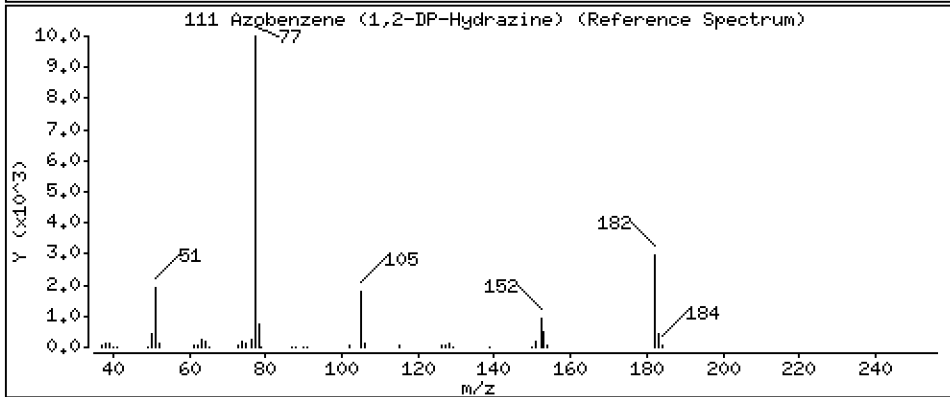
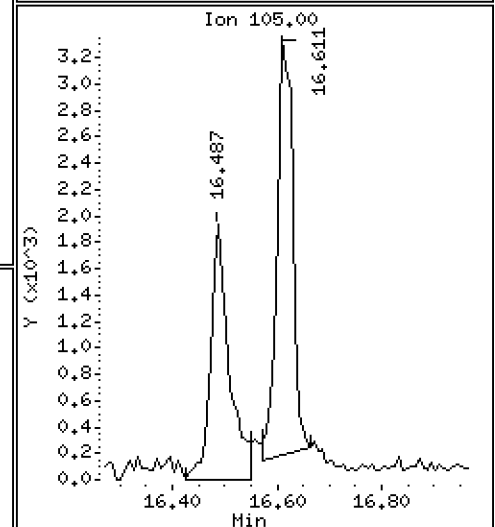
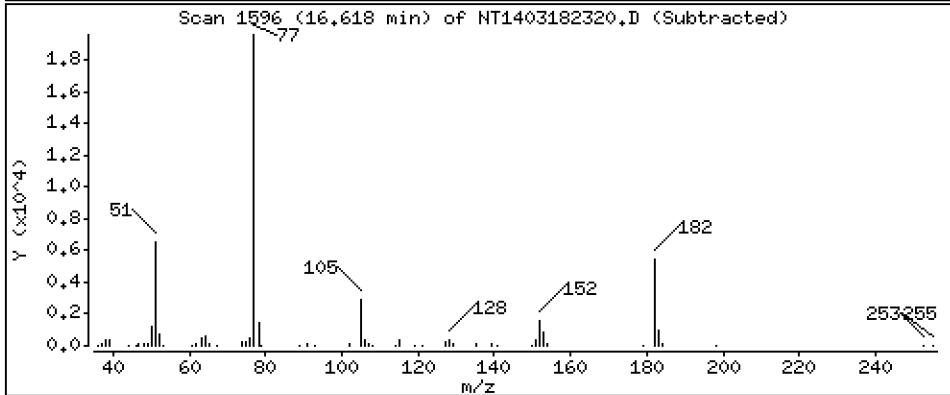
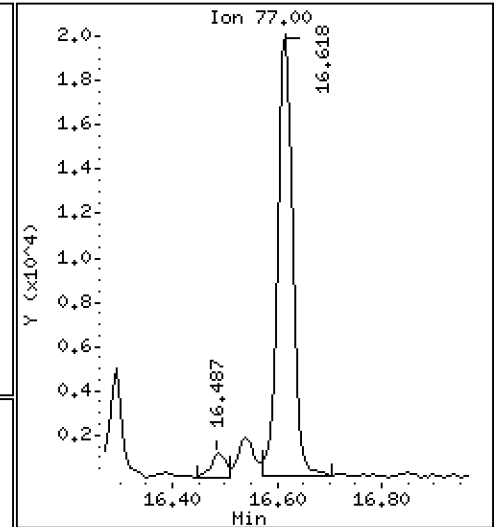
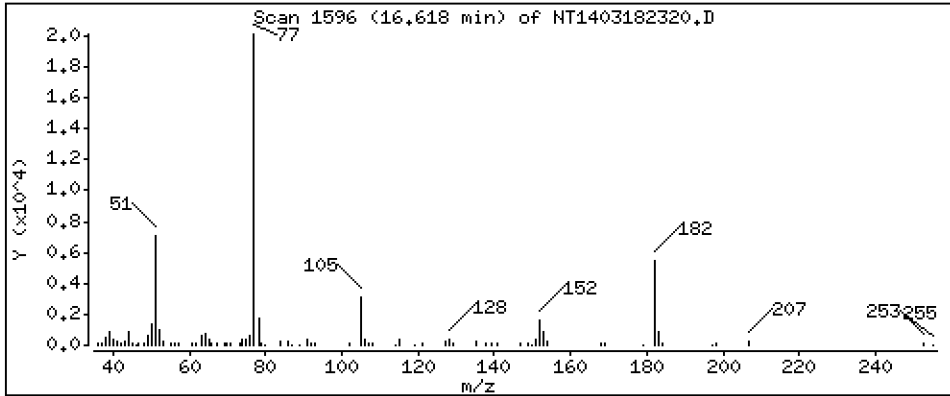
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0.1904 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

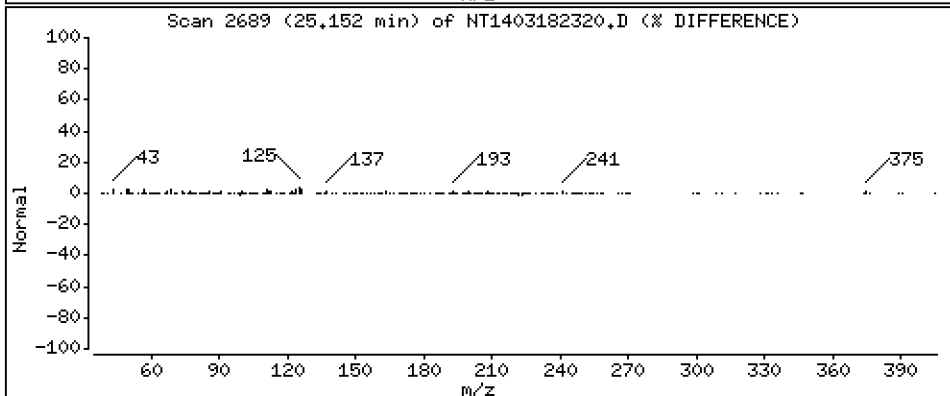
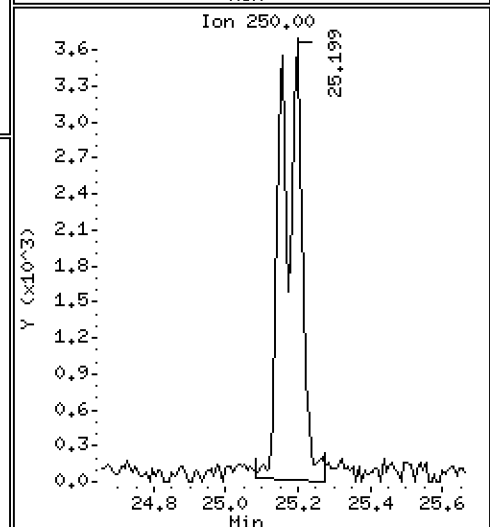
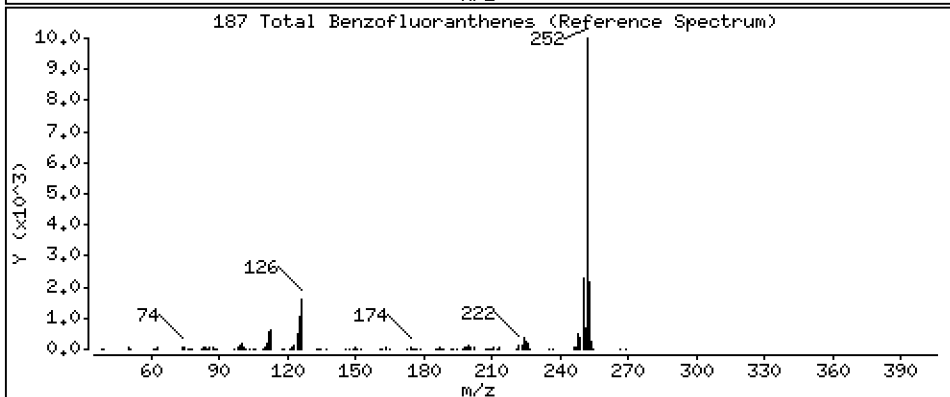
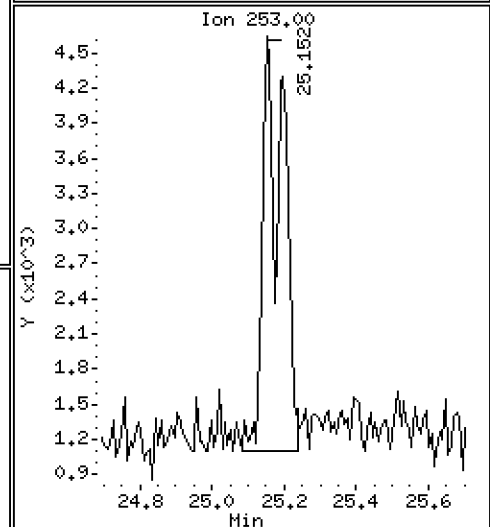
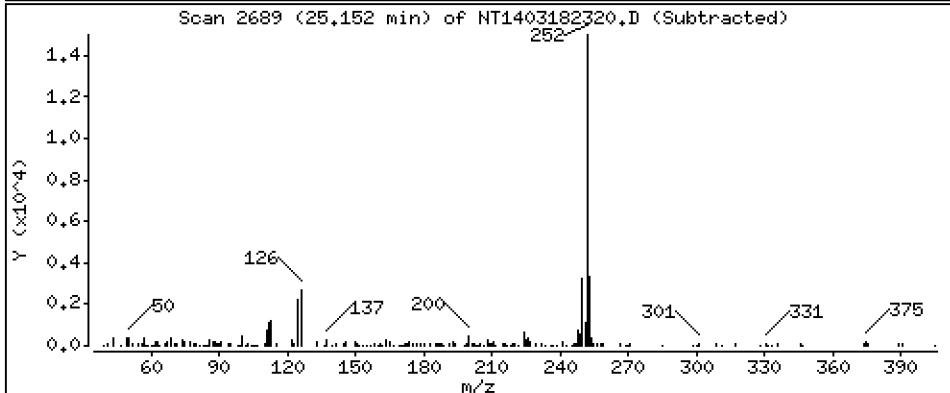
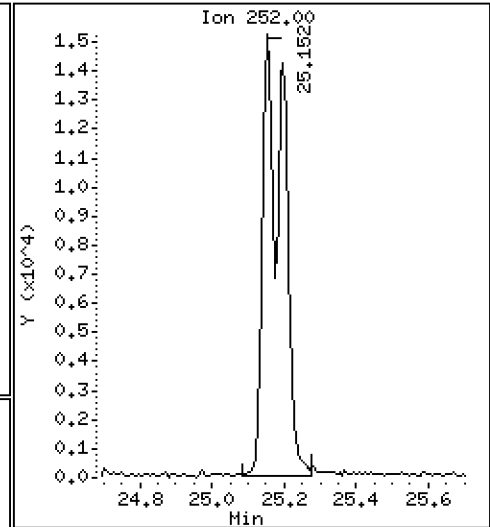
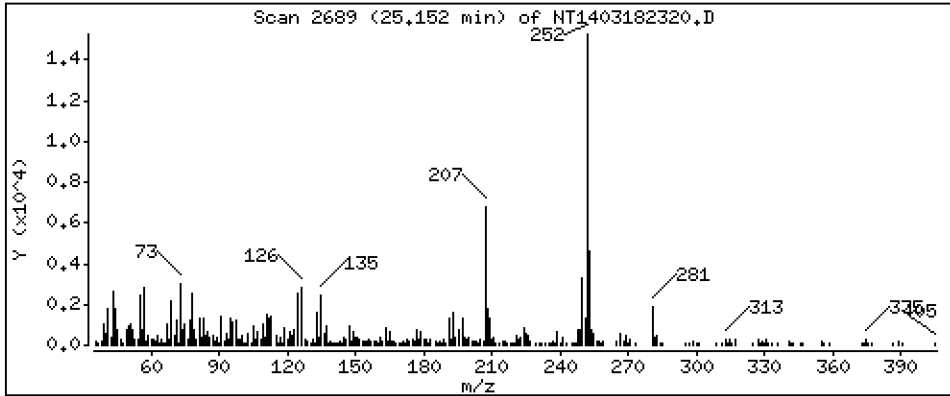
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3850 ug/mL



Date : 19-MAR-2023 04:28

Client ID:

Instrument: nt14.i

Sample Info: SLC0355-LCV2

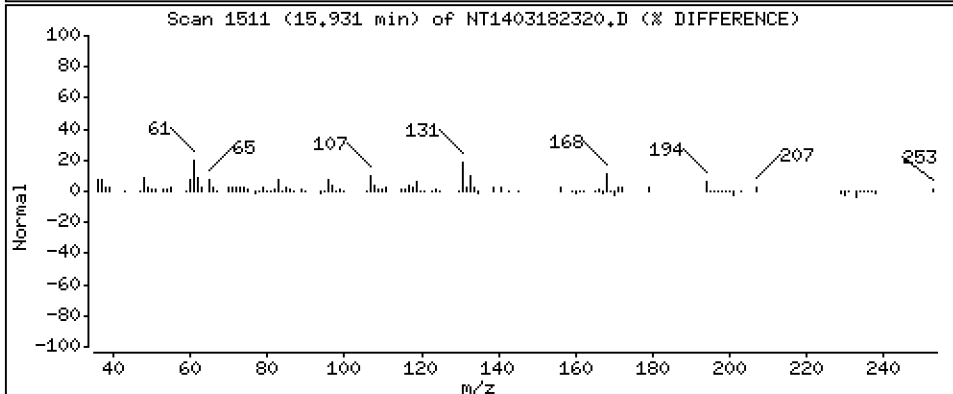
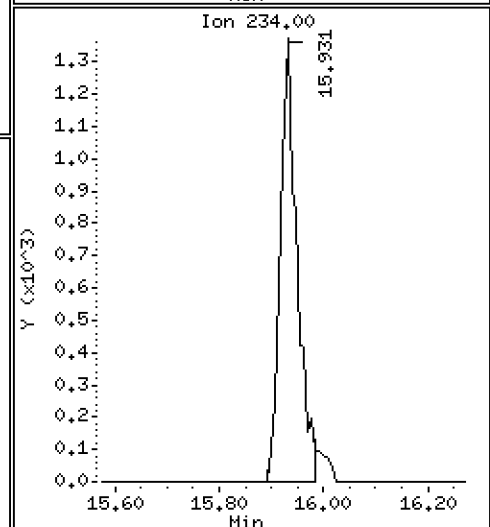
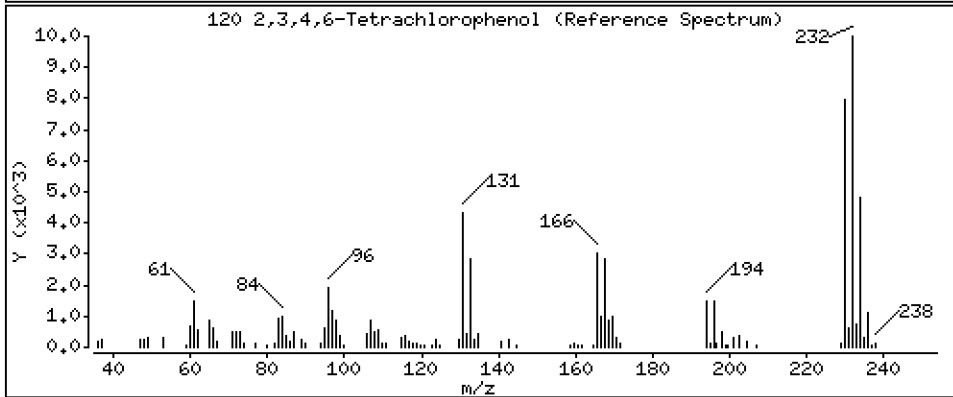
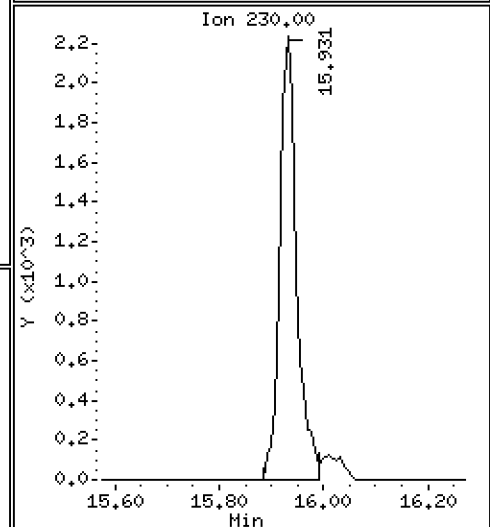
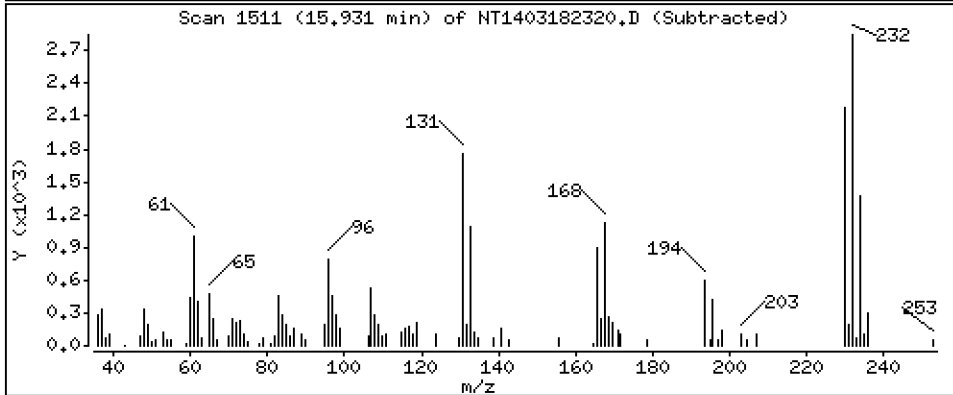
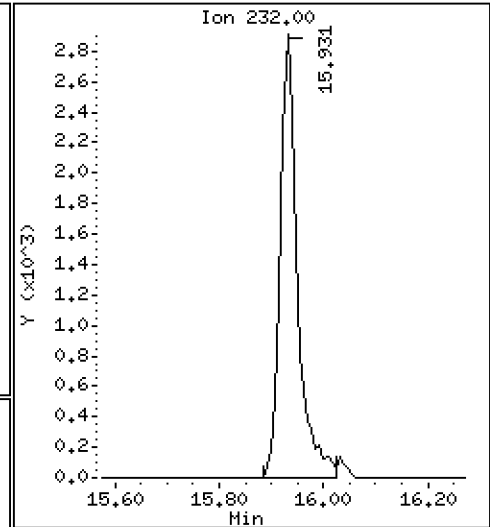
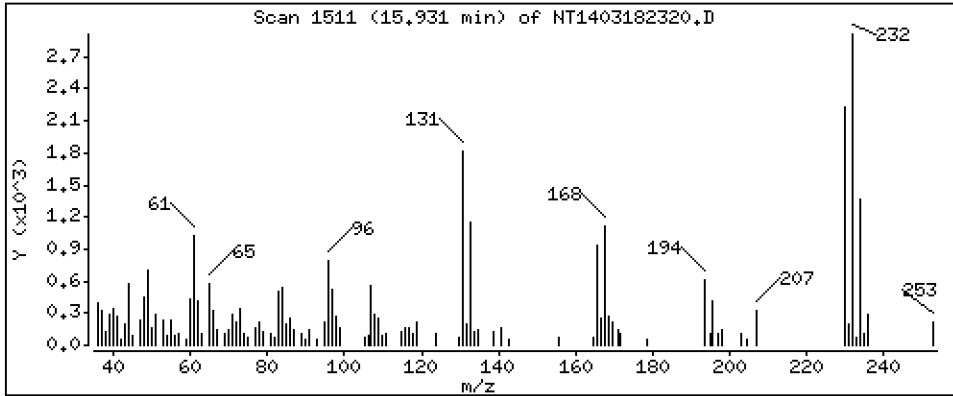
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,1312 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20230318.b\NT1403182320.D
 Lab Smp Id: SLC0355-LCV2
 Inj Date : 19-MAR-2023 04:28 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0355-LCV2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Meth Date : 23-Mar-2023 08:01 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ICAL.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.836	6.837	(1.000)	23878	0.27614	0.2761
\$ 2 Phenol-d5	99		8.420	8.420	(1.000)	30003	0.26355	0.2635
3 Phenol	94		8.443	8.444	(1.000)	20806	0.17197	0.1720
\$ 5 2-Chlorophenol-d4	132		8.706	8.698	(1.000)	25062	0.27924	0.2792
4 Bis(2-Chloroethyl)ether	93		8.606	8.613	(1.000)	17729	0.20349	0.2035
6 2-Chlorophenol	128		8.729	8.729	(1.000)	18038	0.18942	0.1894
7 1,3-Dichlorobenzene	146		9.000	9.000	(1.000)	20607	0.21377	0.2138
* 8 1,4-Dichlorobenzene-d4	152		9.070	9.062	(1.000)	254560	4.00000	(M)
9 1,4-Dichlorobenzene	146		9.093	9.093	(1.000)	19687	0.21204	0.2120
\$ 10 1,2-Dichlorobenzene-d4	152		9.427	9.427	(1.000)	12596	0.21007	0.2101
12 1,2-Dichlorobenzene	146		9.458	9.450	(1.000)	19314	0.21046	0.2105
11 Benzyl alcohol	108		9.349	9.342	(1.031)	7800	0.13848	0.1385 (M)
14 2,2'-oxybis(1-Chloropropane)	121		9.644	9.637	(1.000)	5687	0.22835	0.2283
13 2-Methylphenol	108		9.567	9.559	(1.000)	15079	0.17628	0.1763
17 Hexachloroethane	117		10.048	10.048	(1.000)	7682	0.19346	0.1935
16 N-Nitroso-di-n-propylamine	70		9.900	9.901	(1.000)	11827	0.17561	0.1756
15 4-Methylphenol	108		9.838	9.831	(1.000)	15155	0.14964	0.1496
\$ 18 Nitrobenzene-d5	82		10.164	10.164	(0.879)	20426	0.19962	0.1996
19 Nitrobenzene	77		10.203	10.195	(0.883)	19415	0.19492	0.1949
20 Isophorone	82		10.645	10.653	(0.921)	21931	0.16126	0.1613
21 2-Nitrophenol	139		10.832	10.832	(0.937)	8788	0.15625	0.1562
22 2,4-Dimethylphenol	107		10.886	10.886	(0.942)	32276	0.37887	0.3789
23 Bis(2-Chloroethoxy)methane	93		11.080	11.080	(0.958)	17477	0.19089	0.1909
24 Benzoic acid	105		11.018	11.118	(0.953)	13412	0.19576	0.1958 (M)
25 2,4-Dichlorophenol	162		11.297	11.289	(0.977)	26984	0.39829	0.3983
26 1,2,4-Trichlorobenzene	180		11.475	11.475	(0.993)	16986	0.20395	0.2039
* 27 Naphthalene-d8	136		11.560	11.560	(1.000)	966904	4.00000	
28 Naphthalene	128		11.606	11.606	(1.004)	55165	0.21356	0.2136
29 4-Chloroaniline	127		11.737	11.730	(1.015)	34733	0.32119	0.3212
30 Hexachlorobutadiene	225		11.969	11.969	(1.035)	8181	0.21756	0.2176
31 4-Chloro-3-methylphenol	107		12.704	12.697	(1.099)	26660	0.32564	0.3256
32 2-Methylnaphthalene	142		13.006	13.006	(1.125)	36188	0.20088	0.2009
33 Hexachlorocyclopentadiene	237		13.478	13.478	(0.887)	1023	0.02526	0.02526

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.633	13.633	(0.897)	16753	0.33900	0.3390
35 2,4,5-Trichlorophenol	196	13.710	13.703	(0.902)	16908	0.32834	0.3283
§ 36 2-Fluorobiphenyl	172	13.795	13.796	(0.908)	37440	0.21222	0.2122
37 2-Chloronaphthalene	162	14.004	14.004	(0.922)	31661	0.20939	0.2094
38 2-Nitroaniline	65	14.268	14.260	(0.939)	20628	0.35330	0.3533
39 Dimethylphthalate	163	14.693	14.693	(0.967)	33772	0.20790	0.2079
40 Acenaphthylene	152	14.879	14.879	(0.979)	52401	0.20632	0.2063
41 2,6-Dinitrotoluene	165	14.833	14.833	(0.976)	14481	0.38589	0.3859
* 42 Acenaphthene-d10	164	15.196	15.196	(1.000)	487144	4.00000	
43 3-Nitroaniline	138	15.119	15.119	(0.995)	10366	0.20023	0.2002
44 Acenaphthene	153	15.258	15.258	(1.004)	30100	0.20299	0.2030
45 2,4-Dinitrophenol	184	15.343	15.335	(1.010)	2425	0.08347	0.08347 (M)
46 Dibenzofuran	168	15.590	15.591	(1.026)	43188	0.20401	0.2040
47 4-Nitrophenol	109	15.482	15.444	(1.019)	7628	0.27837	0.2784 (M)
48 2,4-Dinitrotoluene	165	15.645	15.645	(1.030)	16198	0.30451	0.3045
50 Diethylphthalate	149	16.155	16.155	(1.063)	36219	0.21565	0.2157
49 Fluorene	166	16.302	16.302	(1.073)	40744	0.20304	0.2030
51 4-Chlorophenyl-phenylether	204	16.294	16.294	(1.072)	17751	0.20608	0.2061
52 4-Nitroaniline	138	16.394	16.394	(1.079)	11402	0.25322	0.2532
53 4,6-Dinitro-2-methylphenol	198	16.479	16.487	(0.903)	7625	0.25778	0.2578
54 N-Nitrosodiphenylamine	169	16.541	16.541	(0.907)	24729	0.21296	0.2130
§ 55 2,4,6-Tribromophenol	330	16.841	16.841	(1.108)	4562	0.23819	0.2382
56 4-Bromophenyl-phenylether	248	17.296	17.296	(0.948)	7556	0.19300	0.1930
57 Hexachlorobenzene	284	17.613	17.621	(0.966)	9608	0.23259	0.2326
58 Pentachlorophenol	266	17.985	17.969	(0.986)	4315	0.15161	0.1516 (M)
* 59 Phenanthrene-d10	188	18.240	18.240	(1.000)	854961	4.00000	
60 Phenanthrene	178	18.286	18.286	(1.003)	48620	0.19904	0.1990
61 Anthracene	178	18.379	18.379	(1.008)	44080	0.18730	0.1873
62 Carbazole	167	18.712	18.704	(1.026)	37716	0.18012	0.1801
63 Di-n-butylphthalate	149	19.501	19.501	(1.069)	53926	0.20318	0.2032
64 Fluoranthene	202	20.677	20.677	(0.888)	44498	0.24594	0.2459
65 Pyrene	202	21.103	21.103	(0.906)	44730	0.24107	0.2411
§ 66 Terphenyl-d14	244	21.381	21.381	(0.918)	31064	0.24730	0.2473
67 Butylbenzylphthalate	149	22.303	22.303	(0.957)	21350	0.26264	0.2626
68 Benzo(a)anthracene	228	23.263	23.263	(0.999)	35300	0.21527	0.2153
* 69 Chrysene-d12	240	23.294	23.294	(1.000)	444724	4.00000	
70 3,3'-Dichlorobenzidine	252	23.216	23.216	(0.997)	30519	0.64872	0.6487
71 Chrysene	228	23.332	23.340	(1.002)	30728	0.20705	0.2071
72 bis(2-Ethylhexyl)phthalate	149	23.325	23.325	(0.959)	25814	0.22845	0.2285
* 134 Di-n-octylphthalate-d4	153	24.316	24.316	(1.000)	858353	4.00000	
73 Di-n-octylphthalate	149	24.323	24.323	(1.000)	45409	0.20579	0.2058
74 Benzo(b)fluoranthene	252	25.152	25.160	(0.970)	30713	0.18547	0.1855
75 Benzo(k)fluoranthene	252	25.198	25.198	(0.972)	31989	0.19487	0.1949
76 Benzo(a)pyrene	252	25.810	25.818	(0.996)	28121	0.19859	0.1986
* 77 Perylene-d12	264	25.926	25.934	(1.000)	468611	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.610	28.611	(1.104)	27343	0.17741	0.1774
79 Dibenzo(a,h)anthracene	278	28.618	28.626	(1.104)	24993	0.19241	0.1924
80 Benzo(g,h,i)perylene	276	29.395	29.411	(1.134)	19870	0.15643	0.1564
90 N-Nitrosodimethylamine	74	4.728	4.728	(1.000)	18801	0.34330	0.3433
91 Aniline	93	8.521	8.521	(1.000)	42418	0.34858	0.3486
93 Benzidine	184	20.917	20.902	(0.898)	22954	0.31525	0.3153
103 Pyridine	79	4.766	4.751	(1.000)	25203	0.14860	0.1486
105 1-methylnaphthalene	142	13.230	13.231	(1.145)	32446	0.19880	0.1988
111 Azobenzene (1,2-DP-Hydrazine)	77	16.618	16.618	(1.094)	38191	0.19043	0.1904

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.152	25.198	(0.970)	60449	0.38498	0.3850
120 2,3,4,6-Tetrachlorophenol	232	15.931	15.923	(1.048)	6474	0.13116	0.1312

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i Calibration Date: 19-MAR-2023
 Lab File ID: NT1403182320.D Calibration Time: 03:16
 Lab Smp Id: SLC0355-LCV2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230318.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	237594	118797	475188	254560	7.14
27 Naphthalene-d8	944151	472076	1888302	966904	2.41
42 Acenaphthene-d10	498100	249050	996200	487144	-2.20
59 Phenanthrene-d10	845417	422709	1690834	854961	1.13
69 Chrysene-d12	410836	205418	821672	444724	8.25
134 Di-n-octylphthala	914780	457390	1829560	858353	-6.17
77 Perylene-d12	441517	220759	883034	468611	6.14

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.06	8.56	9.56	9.07	0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.56	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.24	17.74	18.74	18.24	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.00
134 Di-n-octylphthala	24.32	23.82	24.82	24.32	-0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403182320.D

Lab ID: SLC0355-LCV2
nt14.i, ABN.m, 19-MAR-2023 04:28

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.031	1.000	0.0308	Benzyl alcohol
1.000	1.063	-0.0634	2,2'-oxybis(1-Chloropropane)
0.953	0.962	-0.0087	Benzoic acid

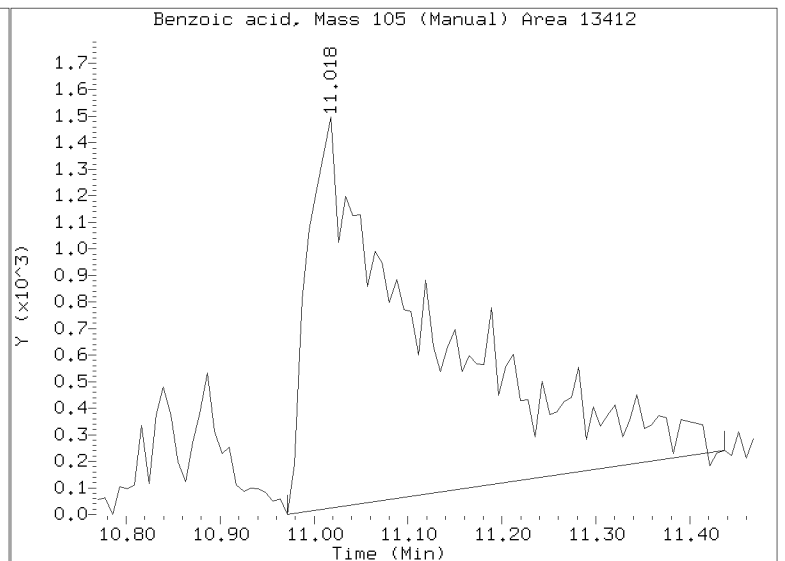
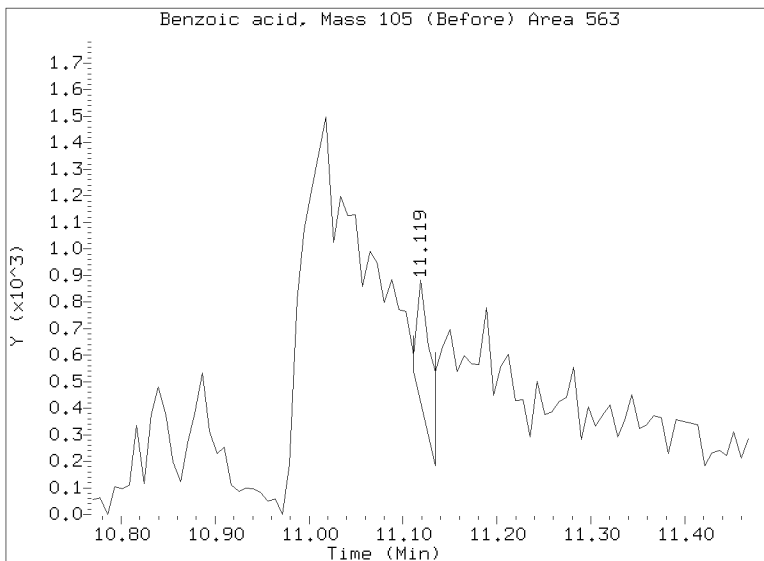
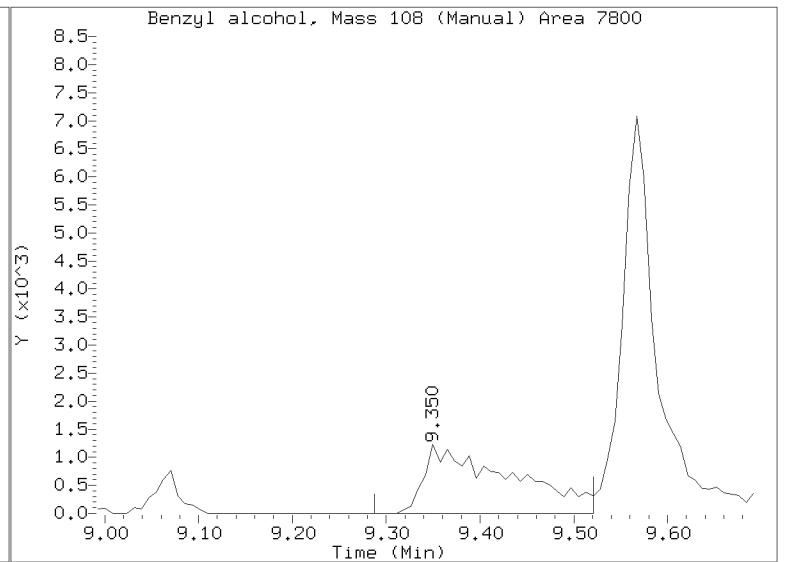
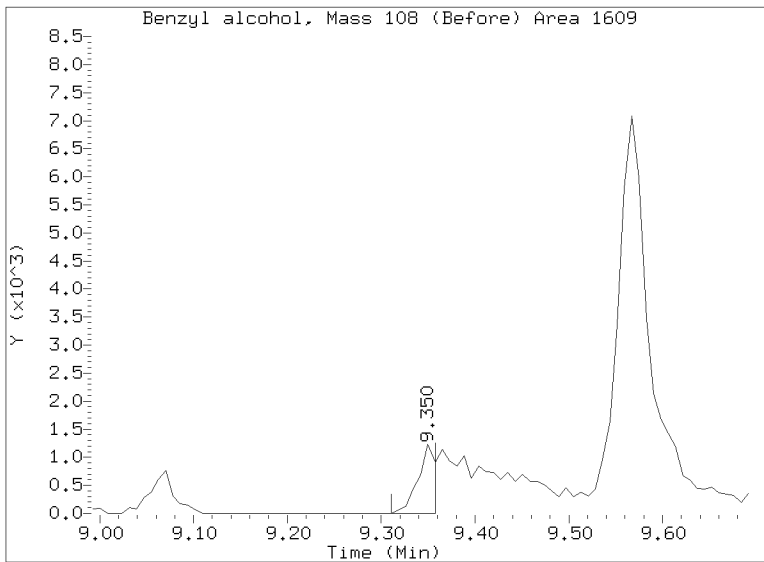
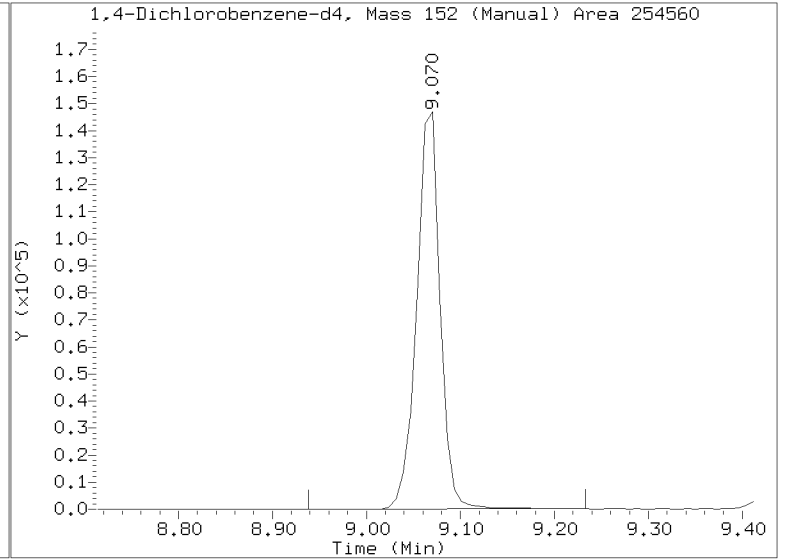
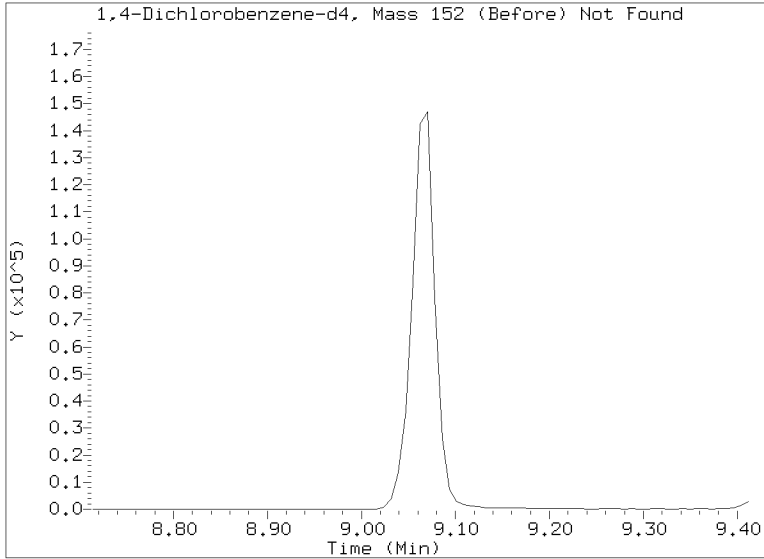
RRT check based on Ccal File: NT1403182318.D

On Column LOD for nt14.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182320.D
Injection Date: 19-MAR-2023 04:28
Lab ID: SLC0355-LCV2 Client ID:
Report Date: 03/23/2023 08:01



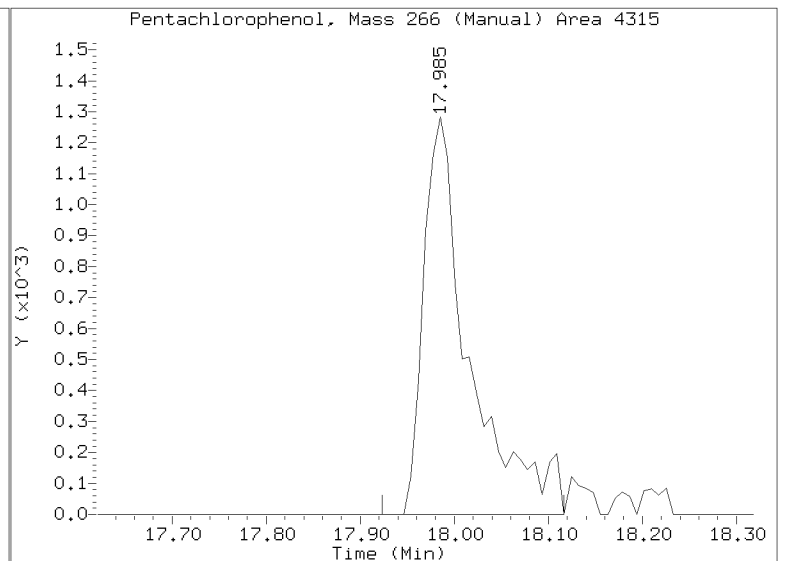
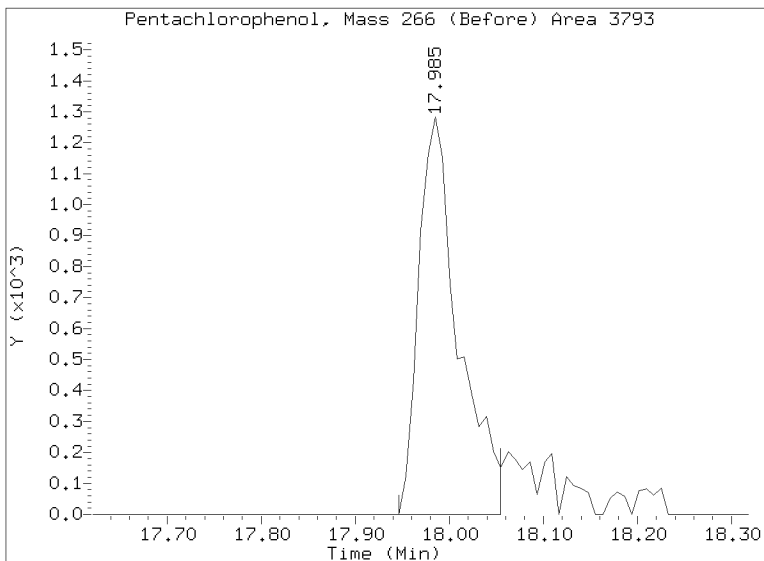
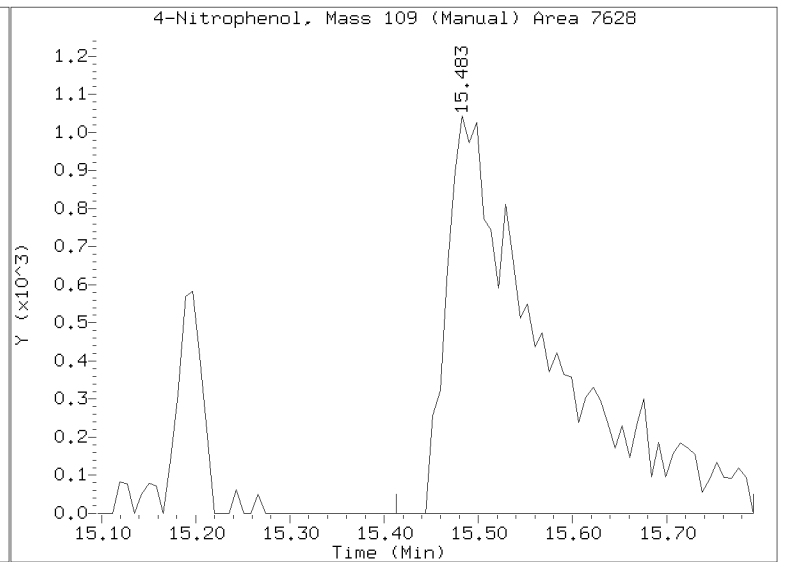
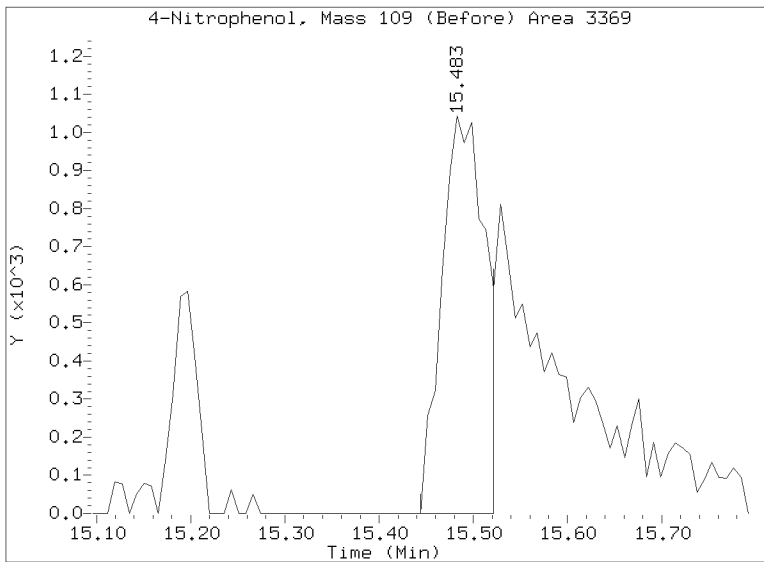
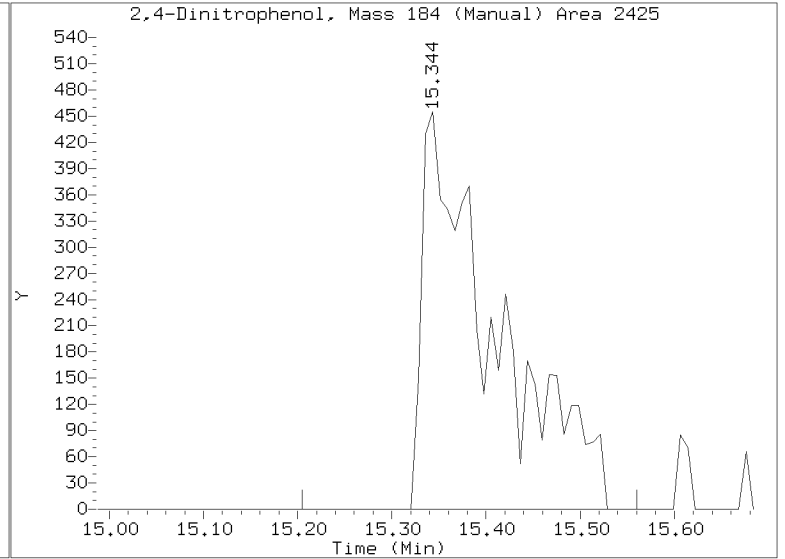
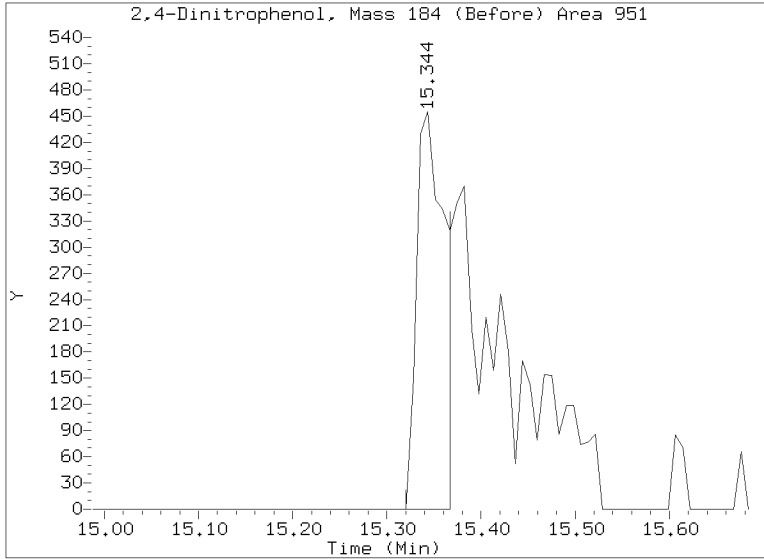
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230318.b/NT1403182320.D

Injection Date: 19-MAR-2023 04:28

Lab ID:SLC0355-LCV2 Client ID:

Report Date: 03/23/2023 08:01





ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0160

Instrument: NT14

Calibration: GC00048

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0160-TUN1	NT1403152301.D	NA	03/15/23 12:00
CAL 20	SLC0160-CAL7	NT1403152302.D	NA	03/15/23 12:13
CAL 10	SLC0160-CAL6	NT1403152303.D	NA	03/15/23 12:49
CAL 5	SLC0160-CAL5	NT1403152304.D	NA	03/15/23 13:26
CAL 2.5	SLC0160-CAL4	NT1403152305.D	NA	03/15/23 14:02
CAL 1.0	SLC0160-CAL3	NT1403152306.D	NA	03/15/23 14:38
CAL 0.5	SLC0160-CAL2	NT1403152307.D	NA	03/15/23 15:14
CAL 0.2	SLC0160-CAL1	NT1403152308.D	NA	03/15/23 15:50
SCV 5.0	SLC0160-SCV1	NT1403152311.D	NA	03/15/23 17:39
Initial Cal Blank	SLC0160-ICB1	NT1403152312.D	NA	03/15/23 18:15



ANALYSIS SEQUENCE

SLC0160

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00048 GCMS Column ID: ZB-5MS
MS EM Level: EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0160-TUN1	MS Tune	QC		1	K004775		03/15/2023 12:00	NT1403152301.D	JGR	
SLC0160-CAL5	CAL 5	QC		2	K011109	K010831	03/15/2023 13:26	NT1403152304.D	JGR	
SLC0160-CAL7	CAL 20	QC		3	K011111	K010831	03/15/2023 12:13	NT1403152302.D	JGR	
SLC0160-CAL1	CAL 0.2	QC		4	K011105	K010831	03/15/2023 15:50	NT1403152308.D	JGR	
SLC0160-CAL6	CAL 10	QC		5	K011110	K010831	03/15/2023 12:49	NT1403152303.D	JGR	
SLC0160-CAL2	CAL 0.5	QC		6	K011106	K010831	03/15/2023 15:14	NT1403152307.D	JGR	
SLC0160-CAL4	CAL 2.5	QC		7	K011108	K010831	03/15/2023 14:02	NT1403152305.D	JGR	
SLC0160-CAL3	CAL 1.0	QC		8	K011107	K010831	03/15/2023 14:38	NT1403152306.D	JGR	
SLC0160-ICB1	Initial Cal Blank	QC		9	K005156	K010831	03/15/2023 18:15	NT1403152312.D	JGR	
SLC0160-SCV1	SCV 5.0	QC		10	L002833	K010831	03/15/2023 17:39	NT1403152311.D	JGR	

Security Status Report

Date: 16-Mar-2023 15:26

NT1403152301.D	Data Locked	deenayd, 16-
NT1403152302.D	Data Locked	deenayd, 16-
NT1403152303.D	Data Locked	deenayd, 16-
NT1403152304.D	Data Locked	deenayd, 16-
NT1403152305.D	Data Locked	deenayd, 16-
NT1403152306.D	Data Locked	deenayd, 16-
NT1403152307.D	Data Locked	deenayd, 16-
NT1403152308.D	Data Locked	deenayd, 16-
NT1403152309.D	Data Locked	deenayd, 16-
NT1403152310.D	Data Locked	deenayd, 16-
NT1403152311.D	Data Locked	deenayd, 16-
NT1403152312.D	Data Locked	deenayd, 16-

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt14.i Date: 15-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1200	NT1403152301.D	SLC0160-TUN1		1	NO MANUAL INTEGRATION
1213	NT1403152302.D	SLC0160-CAL7		1	1,4-Dichlorobenzene-d4,
1249	NT1403152303.D	SLC0160-CAL6		1	1,4-Dichlorobenzene-d4,
1326	NT1403152304.D	SLC0160-CAL5		1	1,4-Dichlorobenzene-d4,
1402	NT1403152305.D	SLC0160-CAL4		1	1,4-Dichlorobenzene-d4,
1438	NT1403152306.D	SLC0160-CAL3		1	1,4-Dichlorobenzene-d4,
1514	NT1403152307.D	SLC0160-CAL2		1	1,4-Dichlorobenzene-d4,
1550	NT1403152308.D	SLC0160-CAL1		1	1,4-Dichlorobenzene-d4,
1626	NT1403152309.D	SLC0160-SIM2		1	NO MANUAL INTEGRATION
1703	NT1403152310.D	SLC0160-SIM1		1	NO MANUAL INTEGRATION
1739	NT1403152311.D	SLC0160-SCV1		1	1,4-Dichlorobenzene-d4,
1815	NT1403152312.D	SLC0160-ICB1		1	NO MANUAL INTEGRATION

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b

Time	Filename	LabID	ClientId	DF										
1	1213	NT1403152302.D	SLC0160-CAL7	1	|	9.07	167425||11.58	667689||15.21	359561||18.26	655798||23.31	488521||25.95	451011||24.33	951548|	
2	1249	NT1403152303.D	SLC0160-CAL6	1	|	9.07	180739||11.57	689021||15.20	362269||18.25	660604||23.30	480922||25.94	459466||24.32	940570|	
3	1326	NT1403152304.D	SLC0160-CAL5	1	|	9.07	194517||11.57	721321||15.20	379602||18.25	703194||23.30	504769||25.94	484073||24.32	978492|	
4	1402	NT1403152305.D	SLC0160-CAL4	1	|	9.07	192012||11.57	744883||15.20	388723||18.25	720279||23.29	512149||25.94	495048||24.32	952832|	
5	1438	NT1403152306.D	SLC0160-CAL3	1	|	9.07	203547||11.57	753702||15.20	389189||18.24	718213||23.29	516735||25.94	493304||24.32	933762|	
6	1514	NT1403152307.D	SLC0160-CAL2	1	|	9.07	214919||11.57	819372||15.20	418625||18.24	774369||23.29	554225||25.93	529322||24.32	988092|	
7	1550	NT1403152308.D	SLC0160-CAL1	1	|	9.06	203313||11.57	744014||15.20	379787||18.24	697726||23.29	506894||25.93	478496||24.32	862800|	
8	1739	NT1403152311.D	SLC0160-SCV1	1	|	9.07	197462||11.57	726125||15.20	382881||18.24	706616||23.30	504808||25.94	496785||24.32	988248|	
9	1815	NT1403152312.D	SLC0160-ICB1	1	|	9.06	193990||11.56	727843||15.20	367416||18.24	678407||23.29	476533||25.93	452165||24.32	799896|	



ANALYSIS SEQUENCE

SLC0160

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00048 GCMS Column ID: L002738
MS EM Level: 1847 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0160-TUN1	MS Tune	QC		1	K004775		03/15/2023 12:00	NT1403152301.D	JGR	
SLC0160-CAL7	CAL 20	QC		2	K011111	K010831	03/15/2023 12:13	NT1403152302.D	JGR	
SLC0160-CAL6	CAL 10	QC		3	K011110	K010831	03/15/2023 12:49	NT1403152303.D	JGR	
SLC0160-CAL5	CAL 5	QC		4	K011109	K010831	03/15/2023 13:26	NT1403152304.D	JGR	
SLC0160-CAL4	CAL 2.5	QC		5	K011108	K010831	03/15/2023 14:02	NT1403152305.D	JGR	
SLC0160-CAL3	CAL 1.0	QC		6	K011107	K010831	03/15/2023 14:38	NT1403152306.D	JGR	
SLC0160-CAL2	CAL 0.5	QC		7	K011106	K010831	03/15/2023 15:14	NT1403152307.D	JGR	
SLC0160-CAL1	CAL 0.2	QC		8	K011105	K010831	03/15/2023 15:50	NT1403152308.D	JGR	
SLC0160-SCV1	SCV 5.0	QC		9	L002833	K010831	03/15/2023 17:39	NT1403152311.D	JGR	
SLC0160-ICB1	Initial Cal Blank	QC		10	K005156	K010831	03/15/2023 18:15	NT1403152312.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b

Time	Filename	LabID	ClientId	DF															
1	1200	NT1403152301.D	SLC0160-TUN1	1	|NO	ISTDS	FOUND|	|											
2	1213	NT1403152302.D	SLC0160-CAL7	1	|	9.07	167425|	|11.58	667689|	|15.21	359561|	|18.26	655798|	|23.31	488521|	|25.95	451011|	|24.33	951548|
3	1249	NT1403152303.D	SLC0160-CAL6	1	|	9.07	180739|	|11.57	689021|	|15.20	362269|	|18.25	660604|	|23.30	480922|	|25.94	459466|	|24.32	940570|
4	1326	NT1403152304.D	SLC0160-CAL5	1	|	9.07	194517|	|11.57	721321|	|15.20	379602|	|18.25	703194|	|23.30	504769|	|25.94	484073|	|24.32	978492|
5	1402	NT1403152305.D	SLC0160-CAL4	1	|	9.07	192012|	|11.57	744883|	|15.20	388723|	|18.25	720279|	|23.29	512149|	|25.94	495048|	|24.32	952832|
6	1438	NT1403152306.D	SLC0160-CAL3	1	|	9.07	203547|	|11.57	753702|	|15.20	389189|	|18.24	718213|	|23.29	516735|	|25.94	493304|	|24.32	933762|
7	1514	NT1403152307.D	SLC0160-CAL2	1	|	9.07	214919|	|11.57	819372|	|15.20	418625|	|18.24	774369|	|23.29	554225|	|25.93	529322|	|24.32	988092|
8	1550	NT1403152308.D	SLC0160-CAL1	1	|	9.06	203313|	|11.57	744014|	|15.20	379787|	|18.24	697726|	|23.29	506894|	|25.93	478496|	|24.32	862800|
9	1626	NT1403152309.D	SLC0160-SIM2	1	|23.29		249|												
10	1703	NT1403152310.D	SLC0160-SIM1	1	|23.29		226|												
11	1739	NT1403152311.D	SLC0160-SCV1	1	|	9.07	197462|	|11.57	726125|	|15.20	382881|	|18.24	706616|	|23.30	504808|	|25.94	496785|	|24.32	988248|
12	1815	NT1403152312.D	SLC0160-ICB1	1	|	9.06	189234|	|11.56	727843|	|15.20	367416|	|18.24	678407|	|23.29	476533|	|25.93	452165|	|24.32	798655|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b

Instrument: nt14.i Date: 15-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1200	NT1403152301.D	SLC0160-TUN1	1	NO MANUAL INTEGRATION
1213	NT1403152302.D	SLC0160-CAL7	1	1,4-Dichlorobenzene-d4, Benzoic acid, Total Benzofluoranthenes,
1249	NT1403152303.D	SLC0160-CAL6	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Benzoic acid, Total Benzofluoranthenes,
1326	NT1403152304.D	SLC0160-CAL5	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Total Benzofluoranthenes,
1402	NT1403152305.D	SLC0160-CAL4	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Total Benzofluoranthenes,
1438	NT1403152306.D	SLC0160-CAL3	1	1,4-Dichlorobenzene-d4, Total Benzofluoranthenes,
1514	NT1403152307.D	SLC0160-CAL2	1	1,4-Dichlorobenzene-d4, Benzoic acid, Total Benzofluoranthenes,
1550	NT1403152308.D	SLC0160-CAL1	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Benzoic acid, Total Benzofluoranthenes,
1626	NT1403152309.D	SLC0160-SIM2	1	NO MANUAL INTEGRATION
1703	NT1403152310.D	SLC0160-SIM1	1	NO MANUAL INTEGRATION
1739	NT1403152311.D	SLC0160-SCV1	1	1,4-Dichlorobenzene-d4,
1815	NT1403152312.D	SLC0160-ICB1	1	1,4-Dichlorobenzene-d4, Di-n-octylphthalate-d4,

Security Status Report

Date: 21-Mar-2023 13:13

NT1403152301.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152302.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152303.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152304.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152305.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152306.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152307.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152308.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152309.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152310.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152311.D	Data Locked	van, 21-Mar-2023 13:12
NT1403152312.D	Data Locked	van, 21-Mar-2023 13:12



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0335-TUN1	NT1403172301.D	NA	03/17/23 14:49
SICV1	SLC0335-ICV1	NT1403172302.D	NA	03/17/23 15:03
ABN 0.2	SLC0335-LCV1	NT1403172304.D	NA	03/17/23 16:16
ZZZZZ	23A0417-14	NT1403172306.D	Solid	03/17/23 17:28
ZZZZZ	23A0417-15	NT1403172307.D	Solid	03/17/23 18:05
ZZZZZ	BLB0026-MS1	NT1403172308.D	Solid	03/17/23 18:41
ZZZZZ	BLB0026-MSD1	NT1403172309.D	Solid	03/17/23 19:18
ZZZZZ	23B0261-16RE1	NT1403172310.D	Solid	03/17/23 19:54
ZZZZZ	23B0261-28RE1	NT1403172311.D	Solid	03/17/23 20:30
Blank	BLB0424-BLK1	NT1403172312.D	Solid	03/17/23 21:06
LCS	BLB0424-BS1	NT1403172313.D	Solid	03/17/23 21:42
LCS Dup	BLB0424-BSD1	NT1403172314.D	Solid	03/17/23 22:19
Reference	BLB0424-SRM1	NT1403172315.D	Solid	03/17/23 22:55
SSTD005	SLC0335-ICV2	NT1403172316.D	NA	03/17/23 23:31
ABN 0.2	SLC0335-LCV2	NT1403172318.D	NA	03/18/23 00:43
ZZZZZ	23A0099-04	NT1403172320.D	Solid	03/18/23 01:55
LDW23-SS1236	23B0229-02	NT1403172321.D	Solid	03/18/23 02:31
LDW23-SS1237	23B0229-03	NT1403172322.D	Solid	03/18/23 03:07
LDW23-SS1150	23B0229-04	NT1403172323.D	Solid	03/18/23 03:42
LDW23-SS1008	23B0229-05	NT1403172324.D	Solid	03/18/23 04:18
LDW23-SC1008	23B0229-06	NT1403172325.D	Solid	03/18/23 04:54
LDW23-SC1013	23B0229-08	NT1403172326.D	Solid	03/18/23 05:30
ZZZZZ	23B0276-01	NT1403172327.D	Solid	03/18/23 06:06
Calibration Check	SLC0335-CCV1	NT1403172330.D	NA	03/18/23 07:54



ANALYSIS SEQUENCE

SLC0335

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00048 GCMS Column ID: L002738
MS EM Level: 1906 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0335-TUN1	MS Tune	QC		1	K004775		03/17/2023 14:49	NT1403172301.D	JGR	
SLC0335-ICV1	SICV1	QC		2	K011109	K010831	03/17/2023 15:03	NT1403172302.D	JGR	
SLC0335-LCV1	ABN 0.2	QC		3	K011105	K010831	03/17/2023 16:16	NT1403172304.D	JGR	
23A0417-14	LDW23-SS1074	20ug/kg solid or 0.2ug/L l	A 03	4		K010831	03/17/2023 17:28	NT1403172306.D	JGR	
23A0417-15	LDW23-SS1073	20ug/kg solid or 0.2ug/L l	A 03	5		K010831	03/17/2023 18:05	NT1403172307.D	JGR	
BLB0026-MS1	Matrix Spike	QC		6		K010831	03/17/2023 18:41	NT1403172308.D	JGR	
BLB0026-MSD1	Matrix Spike Dup	QC		7		K010831	03/17/2023 19:18	NT1403172309.D	JGR	
23B0261-16RE1	C-6	20ug/kg solid or 0.2ug/L l	A 02	8		K010831	03/17/2023 19:54	NT1403172310.D	JGR	Added 3/22/2023 by VTS
23B0261-28RE1	C-10	20ug/kg solid or 0.2ug/L l	A 02	9		K010831	03/17/2023 20:30	NT1403172311.D	JGR	Added 3/22/2023 by VTS
BLB0424-BLK1	Blank	QC		10		K010831	03/17/2023 21:06	NT1403172312.D	JGR	
BLB0424-BS1	LCS	QC		11		K010831	03/17/2023 21:42	NT1403172313.D	JGR	
BLB0424-BSD1	LCS Dup	QC		12		K010831	03/17/2023 22:19	NT1403172314.D	JGR	
BLB0424-SRM1	Reference	QC		13		K010831	03/17/2023 22:55	NT1403172315.D	JGR	
SLC0335-ICV2	SSTD005	QC		14	K011109	K010831	03/17/2023 23:31	NT1403172316.D	JGR	
SLC0335-LCV2	ABN 0.2	QC		15	K011105	K010831	03/18/2023 00:43	NT1403172318.D	JGR	
23A0099-04	LDW23-SC1186	20ug/kg solid or 0.2ug/L l	A 05	16		K010831	03/18/2023 01:55	NT1403172320.D	JGR	
23B0229-02	LDW23-SS1236	20ug/kg solid or 0.2ug/L l	A 03	17		K010831	03/18/2023 02:31	NT1403172321.D	JGR	
23B0229-03	LDW23-SS1237	20ug/kg solid or 0.2ug/L l	A 03	18		K010831	03/18/2023 03:07	NT1403172322.D	JGR	
23B0229-04	LDW23-SS1150	20ug/kg solid or 0.2ug/L l	A 03	19		K010831	03/18/2023 03:42	NT1403172323.D	JGR	
23B0229-05	LDW23-SS1008	20ug/kg solid or 0.2ug/L l	A 03	20		K010831	03/18/2023 04:18	NT1403172324.D	JGR	
23B0229-06	LDW23-SC1008	20ug/kg solid or 0.2ug/L l	A 03	21		K010831	03/18/2023 04:54	NT1403172325.D	JGR	
23B0229-08	LDW23-SC1013	20ug/kg solid or 0.2ug/L l	A 03	22		K010831	03/18/2023 05:30	NT1403172326.D	JGR	



ANALYSIS SEQUENCE

SLC0335

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00048 GCMS Column ID: L002738
MS EM Level: 1906 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
23B0276-01	LDW23-SC1150B	20ug/kg solid or 0.2ug/L l	A 03	23		K010831	03/18/2023 06:06	NT1403172327.D	JGR	
BLB0424-MS1	Matrix Spike	QC		24		K010831	03/18/2023 06:42	NT1403172328.D	JGR	
BLB0424-MSD1	Matrix Spike Dup	QC		25		K010831	03/18/2023 07:18	NT1403172329.D	JGR	
SLC0335-CCV1	Calibration Check	QC		26	K011109	K010831	03/18/2023 07:54	NT1403172330.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b

Time	Filename	LabID	ClientId	DF														
1	1449	NT1403172301.D	SEQ-TUN1	1	|NO ISTDs FOUND|													
2	1503	NT1403172302.D	SLC0335-ICV1	1	9.06	221219	11.57	809500	15.20	420689	18.25	757520	23.29	450500	25.93	339914	24.32	828388
3	1539	NT1403172303.D	SEQ-ICVSIM	1	11.57	735068	15.20	378336	18.24	687237	23.29	402142	25.93	292758	24.32	648277		
4	1616	NT1403172304.D	SLC0335-LCV1	1	9.06	217316	11.57	823606	15.20	420838	18.24	757941	23.29	454867	25.93	330470	24.32	710040
5	1652	NT1403172305.D	SEQ-SIM100	1	9.06	223497	11.57	849546	15.20	426820	18.24	753846	23.29	451675	25.93	343734	24.32	712111
6	1728	NT1403172306.D	23A0417-14	1	9.07	184187	11.57	707748	15.20	346039	18.25	646836	23.30	244423	25.94	174983	24.32	479613
7	1805	NT1403172307.D	23A0417-15	1	9.07	209962	11.57	824615	15.20	394932	18.25	656122	23.29	239629	25.94	183746	24.32	471146
8	1841	NT1403172308.D	BLB0026-MS1	1	9.07	183729	11.57	701565	15.20	349689	18.25	606450	23.30	228953	25.94	159534	24.32	462601
9	1918	NT1403172309.D	BLB0026-MSD1	1	9.07	186778	11.57	725112	15.20	367910	18.25	690455	23.30	294763	25.94	197250	24.32	589998
10	1954	NT1403172310.D	23B0261-16RE1	20	9.06	229616	11.57	893509	15.20	448677	18.24	761732	23.29	380801	25.93	275439	24.32	785560
11	2030	NT1403172311.D	23B0261-28RE1	4	9.06	219424	11.57	869472	15.20	437075	18.25	789983	23.29	394126	25.93	270254	24.32	804343
12	2106	NT1403172312.D	BLB0424-BLK1	1	9.06	220626	11.56	887622	15.20	442658	18.24	744696	23.29	383188	25.93	251086	24.32	740264
13	2142	NT1403172313.D	BLB0424-BS1	1	9.06	210794	11.57	812894	15.20	421466	18.24	705582	23.29	351965	25.93	230171	24.32	707847
14	2219	NT1403172314.D	BLB0424-BSD1	1	9.06	217090	11.57	838636	15.20	430703	18.24	719856	23.29	357294	25.93	233794	24.32	706831
15	2255	NT1403172315.D	BLB0424-SRM1	1	9.06	232565	11.56	889784	15.20	442664	18.24	747605	23.29	366287	25.93	232583	24.32	736461
16	2331	NT1403172316.D	SLC0335-ICV2	1	9.06	231017	11.57	843789	15.20	432455	18.24	793780	23.29	411057	25.93	254782	24.32	799010
17	0007	NT1403172317.D	SEQ-CCVSIM	1	11.56	742187	15.20	375705	18.24	661037	23.29	332529	25.93	213350	24.32	598672		
18	0043	NT1403172318.D	SLC0335-LCV2	1	9.06	204038	11.56	775937	15.20	384479	18.24	678623	23.29	379052	25.93	245193	24.32	646291
19	0119	NT1403172319.D	SEQ-SIM100	1	11.56	803931	15.20	397913	18.24	692470	23.29	339837	25.93	214097	24.32	570553		
20	0155	NT1403172320.D	23A0099-04	1	9.06	216744	11.56	842757	15.20	401289	18.25	703864	23.30	238385	25.94	171019	24.32	455526

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b

Time	Filename	LabID	ClientId	DF										
21	0231	NT1403172321.D	23B0229-02	1	| 9.06	210545||11.56	822847||15.20	384402||18.25	620504||23.29	207072||25.94	150614||24.32	411581|		
22	0307	NT1403172322.D	23B0229-03	1	| 9.06	213192||11.56	836044||15.20	410994||18.25	717073||23.30	227231||25.94	155623||24.32	465589|		
23	0342	NT1403172323.D	23B0229-04	1	| 9.06	223100||11.57	868361||15.20	418674||18.25	651987||23.30	202950||25.94	146928||24.32	410637|		
24	0418	NT1403172324.D	23B0229-05	1	| 9.06	207758||11.57	797455||15.20	382798||18.25	628064||23.30	197467||25.95	140459||24.32	394361|		
25	0454	NT1403172325.D	23B0229-06	1	| 9.06	203493||11.57	789039||15.20	384488||18.25	650423||23.30	200534||25.95	144200||24.32	411174|		
26	0530	NT1403172326.D	23B0229-08	1	| 9.07	214432||11.57	829944||15.20	403286||18.26	642247||23.30	184444||25.95	135619||24.32	377837|		
27	0606	NT1403172327.D	23B0276-01	1	| 9.07	216795||11.57	856195||15.20	420684||18.26	676256||23.30	191213||25.95	143085||24.32	412116|		
28	0642	NT1403172328.D	BLB0424-MS1	1	| 9.07	208566||11.57	823985||15.20	419326||18.26	693082||23.30	191184||25.95	145513||24.32	415588|		
29	0718	NT1403172329.D	BLB0424-MSD1	1	| 9.07	203782||11.57	795799||15.20	409102||18.26	739666||23.30	222079||25.95	153971||24.32	481674|		
30	0754	NT1403172330.D	SLC0335-CCV1	1	| 9.07	217562||11.57	844336||15.20	413736||18.25	640883||23.30	193927||25.94	141853||24.32	500053|		

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b

Instrument: nt14.i Date: 17-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1449	NT1403172301.D	SEQ-TUN1	1	NO MANUAL INTEGRATION
1503	NT1403172302.D	SLC0335-ICV1	1	1,4-Dichlorobenzene-d4,
1539	NT1403172303.D	SEQ-ICVSIM	1	NO MANUAL INTEGRATION
1616	NT1403172304.D	SLC0335-LCV1	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane), Benzoic acid,
1652	NT1403172305.D	SEQ-SIM100	1	1,4-Dichlorobenzene-d4,
1728	NT1403172306.D	23A0417-14	1	1,4-Dichlorobenzene-d4, Benzo(k)fluoranthene, Benzo(a)pyrene,
1805	NT1403172307.D	23A0417-15	1	1,4-Dichlorobenzene-d4, 2-Methylphenol, Benzoic acid, Fluoranthene, Benzo(k)fluoranthene,
1841	NT1403172308.D	BLB0026-MS1	1	1,4-Dichlorobenzene-d4,
1918	NT1403172309.D	BLB0026-MSD1	1	1,4-Dichlorobenzene-d4, bis(2-Ethylhexyl)phthalate,
1954	NT1403172310.D	23B0261-16RE1	20	1,4-Dichlorobenzene-d4, 4-Methylphenol, Anthracene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene,
2030	NT1403172311.D	23B0261-28RE1	4	1,4-Dichlorobenzene-d4, Benzo(k)fluoranthene,
2106	NT1403172312.D	BLB0424-BLK1	1	1,4-Dichlorobenzene-d4,
2142	NT1403172313.D	BLB0424-BS1	1	1,4-Dichlorobenzene-d4,
2219	NT1403172314.D	BLB0424-BSD1	1	1,4-Dichlorobenzene-d4,
2255	NT1403172315.D	BLB0424-SRM1	1	1,4-Dichlorobenzene-d4,
2331	NT1403172316.D	SLC0335-ICV2	1	1,4-Dichlorobenzene-d4,
0007	NT1403172317.D	SEQ-CCVSIM	1	NO MANUAL INTEGRATION

Instrument: nt14.i Date: 18-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
0043	NT1403172318.D	SLC0335-LCV2	1	1,4-Dichlorobenzene-d4, Benzyl alcohol, 2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol, 4-Nitrophenol, Benzo(g,h,i)perylene, Pentac
0119	NT1403172319.D	SEQ-SIM100	1	NO MANUAL INTEGRATION
0155	NT1403172320.D	23A0099-04	1	1,4-Dichlorobenzene-d4, 2-Methylphenol, Anthracene,
0231	NT1403172321.D	23B0229-02	1	1,4-Dichlorobenzene-d4, Di-n-butylphthalate,
0307	NT1403172322.D	23B0229-03	1	1,4-Dichlorobenzene-d4,
0342	NT1403172323.D	23B0229-04	1	1,4-Dichlorobenzene-d4, Benzo(k)fluoranthene,
0418	NT1403172324.D	23B0229-05	1	1,4-Dichlorobenzene-d4, Benzyl alcohol, 4-Methylphenol, Di-n-octylphthalate, Benzo(k)fluoranthene,
0454	NT1403172325.D	23B0229-06	1	1,4-Dichlorobenzene-d4, 1,4-Dichlorobenzene, Dibenzo(a,h)anthracene,
0530	NT1403172326.D	23B0229-08	1	1,4-Dichlorobenzene-d4, 1,4-Dichlorobenzene, Benzo(k)fluoranthene,
0606	NT1403172327.D	23B0276-01	1	1,4-Dichlorobenzene-d4, 1,4-Dichlorobenzene, Benzyl alcohol, Benzoic acid, Dibenzo(a,h)anthracene,
0642	NT1403172328.D	BLB0424-MS1	1	1,4-Dichlorobenzene-d4, 4-Chloroaniline,
0718	NT1403172329.D	BLB0424-MSD1	1	1,4-Dichlorobenzene-d4, 4-Chloroaniline,
0754	NT1403172330.D	SLC0335-CCV1	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 22-Mar-2023 11:37

NT1403172301.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172302.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172303.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172304.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172305.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172306.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172307.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172308.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172309.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172310.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172311.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172312.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172313.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172314.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172315.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172316.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172317.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172318.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172319.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172320.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172321.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172322.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172323.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172324.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172325.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172326.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172327.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172328.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172329.D	Data Locked	van,	22-Mar-2023	11:36
NT1403172330.D	Data Locked	van,	22-Mar-2023	11:36



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0355

Instrument: NT14

Calibration: GC00048

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0355-TUN1	NT1403182301.D	NA	03/18/23 17:23
SICV1	SLC0355-ICV1	NT1403182302.D	NA	03/18/23 17:38
Blank	BLB0424-BLK3	NT1403182306.D	Solid	03/18/23 20:03
ZZZZZ	23A0099-04RE1	NT1403182308.D	Solid	03/18/23 21:15
LDW23-SS1150	23B0229-04RE1	NT1403182311.D	Solid	03/18/23 23:04
LDW23-SS1008	23B0229-05RE1	NT1403182312.D	Solid	03/18/23 23:40
LDW23-SC1008	23B0229-06RE1	NT1403182313.D	Solid	03/19/23 00:16
LDW23-SC1013	23B0229-08RE1	NT1403182314.D	Solid	03/19/23 00:52
SSTD005	SLC0355-ICV2	NT1403182318.D	NA	03/19/23 03:16
ABN 0.2	SLC0355-LCV2	NT1403182320.D	NA	03/19/23 04:28
ZZZZZ	BLB0669-BLK1	NT1403182322.D	Solid	03/19/23 05:40
ZZZZZ	BLB0669-BS1	NT1403182323.D	Solid	03/19/23 06:15
ZZZZZ	BLB0669-BSD1	NT1403182324.D	Solid	03/19/23 06:51
ZZZZZ	BLB0669-SRM1	NT1403182325.D	Solid	03/19/23 07:27
ZZZZZ	22K0306-01	NT1403182326.D	Solid	03/19/23 08:03
ZZZZZ	22K0306-02	NT1403182327.D	Solid	03/19/23 08:39
ZZZZZ	BLB0669-MS1	NT1403182328.D	Solid	03/19/23 09:15
ZZZZZ	BLB0669-MSD1	NT1403182329.D	Solid	03/19/23 09:51
ZZZZZ	22K0306-03	NT1403182330.D	Solid	03/19/23 10:27
Calibration Check	SLC0355-CCV1	NT1403182331.D	NA	03/19/23 11:04



ANALYSIS SEQUENCE

SLC0355

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00048 GCMS Column ID: L002738
MS EM Level: 1953 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0355-TUN1	MS Tune	QC		1	K004775		03/18/2023 17:23	NT1403182301.D	JGR	
SLC0355-ICV1	SICV1	QC		2	K011109	K010831	03/18/2023 17:38	NT1403182302.D	JGR	
BLB0424-BLK3	Blank	QC		3		K010831	03/18/2023 20:03	NT1403182306.D	JGR	
23A0099-04RE1	LDW23-SC1186	20ug/kg solid or 0.2ug/L l	A 05	4		K010831	03/18/2023 21:15	NT1403182308.D	JGR	Added 3/22/2023 by VTS
23B0229-04RE1	LDW23-SS1150	20ug/kg solid or 0.2ug/L l	A 03	5		K010831	03/18/2023 23:04	NT1403182311.D	JGR	Added 3/22/2023 by VTS
23B0229-05RE1	LDW23-SS1008	20ug/kg solid or 0.2ug/L l	A 03	6		K010831	03/18/2023 23:40	NT1403182312.D	JGR	Added 3/22/2023 by VTS
23B0229-06RE1	LDW23-SC1008	20ug/kg solid or 0.2ug/L l	A 03	7		K010831	03/19/2023 00:16	NT1403182313.D	JGR	Added 3/22/2023 by VTS
23B0229-08RE1	LDW23-SC1013	20ug/kg solid or 0.2ug/L l	A 03	8		K010831	03/19/2023 00:52	NT1403182314.D	JGR	Added 3/22/2023 by VTS
SLC0355-ICV2	SSTD005	QC		9	K011109	K010831	03/19/2023 03:16	NT1403182318.D	JGR	
SLC0355-LCV2	ABN 0.2	QC		10	K011105	K010831	03/19/2023 04:28	NT1403182320.D	JGR	
BLB0669-BLK1	Blank	QC		11		K010831	03/19/2023 05:40	NT1403182322.D	JGR	
BLB0669-BS1	LCS	QC		12		K010831	03/19/2023 06:15	NT1403182323.D	JGR	
BLB0669-BSD1	LCS Dup	QC		13		K010831	03/19/2023 06:51	NT1403182324.D	JGR	
BLB0669-SRM1	Reference	QC		14		K010831	03/19/2023 07:27	NT1403182325.D	JGR	
22K0306-01	OSDS-1-COMP	20ug/kg solid or 0.2ug/L l	A 02	15		K010831	03/19/2023 08:03	NT1403182326.D	JGR	
22K0306-02	OSDS-2-COMP	20ug/kg solid or 0.2ug/L l	A 02	16		K010831	03/19/2023 08:39	NT1403182327.D	JGR	
BLB0669-MS1	Matrix Spike	QC		17		K010831	03/19/2023 09:15	NT1403182328.D	JGR	
BLB0669-MSD1	Matrix Spike Dup	QC		18		K010831	03/19/2023 09:51	NT1403182329.D	JGR	
22K0306-03	OSDS-3-COMP	20ug/kg solid or 0.2ug/L l	A 02	19		K010831	03/19/2023 10:27	NT1403182330.D	JGR	
SLC0355-CCV1	Calibration Check	QC		20	K011109	K010831	03/19/2023 11:04	NT1403182331.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230318.b

Time	Filename	LabID	ClientId	DF														
1	1723	NT1403182301.D	SEQ-TUN1	1	|NO ISTDs FOUND||													
2	1738	NT1403182302.D	SLC0355-ICV1	1	9.06	247621	11.56	955275	15.19	510589	18.23	920812	23.29	546688	25.93	445520	24.32	1067789
3	1814	NT1403182303.D	SEQ-ICVSIM	1	11.56	1012949	15.19	535724	18.23	987923	23.29	569065	25.93	503465	24.31	1064073|		
4	1850	NT1403182304.D	SLC0355-LCV1	1	9.06	260824	11.56	1008814	15.19	521365	18.23	967789	23.29	567800	25.93	480377	24.31	987023
5	1927	NT1403182305.D	SEQ-LCV100	1	11.56	980016	15.19	498472	18.23	874179	23.29	515302	25.92	439932	24.31	885413|		
6	2003	NT1403182306.D	BLB0424-BLK3	1	9.06	264303	11.56	1057352	15.19	539181	18.23	935636	23.29	591932	25.92	463088	24.31	1034580
7	2039	NT1403182307.D	BLB0026-MS1	4	11.56	1063572	15.19	555439	18.23	1016707	23.29	515540	25.93	458816	24.31	1059426|		
8	2115	NT1403182308.D	23A0099-04RE1	4	9.06	304181	11.56	1184722	15.19	587646	18.23	1069227	23.29	498742	25.93	529639	24.32	1090465
9	2152	NT1403182309.D	23B0229-02RE1	4	9.06	308629	11.56	1215142	15.19	601442	18.23	1035311	23.29	474232	25.93	504061	24.31	1071991
10	2228	NT1403182310.D	23B0229-03RE1	4	9.06	309646	11.56	1206945	15.19	611036	18.24	1041227	23.29	469241	25.93	509241	24.32	1072375
11	2304	NT1403182311.D	23B0029-04RE1	4	9.06	304268	11.56	1188710	15.19	589954	18.24	996660	23.29	471870	25.93	524412	24.31	1071397
12	2340	NT1403182312.D	23B0229-05RE1	4	9.06	294135	11.56	1143681	15.19	561150	18.24	917402	23.29	469557	25.93	529419	24.32	1049117
13	0016	NT1403182313.D	23B0229-06RE1	4	9.06	305654	11.56	1201889	15.19	612542	18.24	1063558	23.29	480731	25.93	542713	24.32	1085158
14	0052	NT1403182314.D	23B0229-08RE1	4	9.06	309196	11.56	1198501	15.20	600645	18.24	1046836	23.29	488047	25.93	565653	24.32	1076657
15	0128	NT1403182315.D	23B0276-01RE1	4	9.06	302255	11.56	1182255	15.20	605007	18.24	1049043	23.29	469401	25.93	545962	24.32	1037753
16	0204	NT1403182316.D	BLB0424-MS1	4	9.06	293709	11.56	1138427	15.20	598474	18.24	1082200	23.29	469125	25.93	547306	24.32	1041943
17	0240	NT1403182317.D	BLB0424-MSD1	4	9.06	300023	11.56	1187411	15.20	613836	18.24	1139635	23.29	494783	25.93	565981	24.32	1087611
18	0316	NT1403182318.D	SLC0355-ICV2	1	9.06	237594	11.56	944151	15.20	498100	18.24	845417	23.29	410836	25.93	441517	24.32	914780
19	0352	NT1403182319.D	SEQ-CCVSIM	1	11.56	1004246	15.20	520315	18.24	925285	23.29	437364	25.93	461180	24.32	918440|		
20	0428	NT1403182320.D	SLC0355-LCV2	1	9.07	254560	11.56	966904	15.20	487144	18.24	854961	23.29	444724	25.93	468611	24.32	858353

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230318.b

Time	Filename	LabID	ClientId	DF										
21	0504	NT1403182321.D	SEQ-LCV100		1	| 11.56	974792||15.20	482932||18.24	832018||23.29	427457||25.93	446531||24.32	821900|		
22	0540	NT1403182322.D	BLB0669-BLK1		1	| 9.06	278614||11.56	1115566||15.19	569330||18.24	968661||23.29	542332||25.93	534543||24.32	1065089|	
23	0615	NT1403182323.D	BLB0669-BS1		1	| 9.07	270713||11.57	1081756||15.20	575641||18.24	977160||23.29	543903||25.93	560951||24.32	1105437|	
24	0651	NT1403182324.D	BLB0669-BSD1		1	| 9.07	278181||11.57	1112988||15.20	589240||18.24	995631||23.29	560097||25.93	565749||24.32	1141909|	
25	0727	NT1403182325.D	BLB0669-SRM1		1	| 9.07	286011||11.57	1110329||15.20	558960||18.24	928158||23.29	517029||25.93	527909||24.32	1125666|	
26	0803	NT1403182326.D	22K0306-01		1	| 9.07	285730||11.56	1122493||15.20	554763||18.24	916554||23.29	462502||25.93	520504||24.32	1015414|	
27	0839	NT1403182327.D	22K0306-02		1	| 9.07	295146||11.57	1161524||15.20	566933||18.24	920358||23.29	457774||25.93	515667||24.32	1011252|	
28	0915	NT1403182328.D	BLB0669-MS1		1	| 9.07	270938||11.57	1059223||15.20	533783||18.25	871292||23.29	457377||25.94	516678||24.32	992732|	
29	0951	NT1403182329.D	BLB0669-MSD1		1	| 9.07	273639||11.57	1085227||15.20	553998||18.25	915974||23.29	460590||25.94	512052||24.32	1020752|	
30	1027	NT1403182330.D	22K0306-03		1	| 9.07	305252||11.57	1133663||15.20	565753||18.25	911146||23.29	459367||25.93	500749||24.32	1012679|	
31	1104	NT1403182331.D	SLC0355-CCV1		1	| 9.07	239978||11.57	943704||15.20	496853||18.25	826898||23.29	429570||25.93	440126||24.32	913803|	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230318.b

Instrument: nt14.i Date: 18-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1723	NT1403182301.D	SEQ-TUN1	1	NO MANUAL INTEGRATION
1738	NT1403182302.D	SLC0355-ICV1	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane),
1814	NT1403182303.D	SEQ-ICVSIM	1	NO MANUAL INTEGRATION
1850	NT1403182304.D	SLC0355-LCV1	1	1,4-Dichlorobenzene-d4, Benzyl alcohol, Benzoic acid, 2,4,5-Trichlorophenol, 4-Nitrophenol,
1927	NT1403182305.D	SEQ-LCV100	1	NO MANUAL INTEGRATION
2003	NT1403182306.D	BLB0424-BLK3	1	1,4-Dichlorobenzene-d4,
2039	NT1403182307.D	BLB0026-MS1	4	NO MANUAL INTEGRATION
2115	NT1403182308.D	23A0099-04RE1	4	1,4-Dichlorobenzene-d4, Benzoic acid,
2152	NT1403182309.D	23B0229-02RE1	4	1,4-Dichlorobenzene-d4, Benzyl alcohol, Benzoic acid, Benzo(k)fluoranthene,
2228	NT1403182310.D	23B0229-03RE1	4	1,4-Dichlorobenzene-d4, Benzoic acid, Benzo(k)fluoranthene,
2304	NT1403182311.D	23B0029-04RE1	4	1,4-Dichlorobenzene-d4, Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
2340	NT1403182312.D	23B0229-05RE1	4	1,4-Dichlorobenzene-d4, Benzoic acid, Benzo(k)fluoranthene,
0016	NT1403182313.D	23B0229-06RE1	4	1,4-Dichlorobenzene-d4, Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0052	NT1403182314.D	23B0229-08RE1	4	1,4-Dichlorobenzene-d4, Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0128	NT1403182315.D	23B0276-01RE1	4	1,4-Dichlorobenzene-d4,
0204	NT1403182316.D	BLB0424-MS1	4	1,4-Dichlorobenzene-d4,
0240	NT1403182317.D	BLB0424-MSD1	4	1,4-Dichlorobenzene-d4,

Instrument: nt14.i Date: 19-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
0316	NT1403182318.D	SLC0355-ICV2	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane),
0352	NT1403182319.D	SEQ-CCVSIM	1	NO MANUAL INTEGRATION
0428	NT1403182320.D	SLC0355-LCV2	1	1,4-Dichlorobenzene-d4, Benzyl alcohol, Benzoic acid, 2,4-Dinitrophenol, 4-Nitrophenol, Pentachlorophenol,
0504	NT1403182321.D	SEQ-LCV100	1	NO MANUAL INTEGRATION
0540	NT1403182322.D	BLB0669-BLK1	1	1,4-Dichlorobenzene-d4,
0615	NT1403182323.D	BLB0669-BS1	1	1,4-Dichlorobenzene-d4,
0651	NT1403182324.D	BLB0669-BSD1	1	1,4-Dichlorobenzene-d4,
0727	NT1403182325.D	BLB0669-SRM1	1	1,4-Dichlorobenzene-d4,
0803	NT1403182326.D	22K0306-01	1	1,4-Dichlorobenzene-d4, Benzyl alcohol, 2-Methylphenol, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Benzo(g), Total Benzofluoranthenes,
0839	NT1403182327.D	22K0306-02	1	1,4-Dichlorobenzene-d4, Benzo(a)anthracene, Chrysene, Benzo(k)fluoranthene,
0915	NT1403182328.D	BLB0669-MS1	1	1,4-Dichlorobenzene-d4, 4-Nitroaniline,
0951	NT1403182329.D	BLB0669-MSD1	1	1,4-Dichlorobenzene-d4, 4-Chloroaniline,
1027	NT1403182330.D	22K0306-03	1	1,4-Dichlorobenzene-d4, Benzo(a)anthracene, Chrysene, Benzo(k)fluoranthene, Benzo(a)pyrene,
1104	NT1403182331.D	SLC0355-CCV1	1	1,4-Dichlorobenzene-d4, 2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 23-Mar-2023 11:56

NT1403182301.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182302.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182303.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182304.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182305.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182306.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182307.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182308.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182309.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182310.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182311.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182312.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182313.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182314.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182315.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182316.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182317.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182318.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182319.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182320.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182321.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182322.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182323.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182324.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182325.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182326.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182327.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182328.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182329.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182330.D	Data Locked	van, 23-Mar-2023 11:56
NT1403182331.D	Data Locked	van, 23-Mar-2023 11:56



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23B0229</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0160</u>	Instrument:	<u>NT14</u>
Calibration:	<u>GC00048</u>	Calibration Date:	<u>03/15/2023</u>

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0160-ICB1 (Water)		Lab File ID: NT1403152312.D			Analyzed: 03/15/23 18:15			
2-Fluorophenol	7.5000	98.5	30 - 160	6.829	6.828857	0.0001	N/A	
Phenol-d5	7.5000	98.6	30 - 160	8.412	8.419	-0.0070	N/A	
2-Chlorophenol-d4	7.5000	101	30 - 160	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	5.0000	99.9	30 - 160	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	5.0000	99.9	30 - 160	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	5.0000	99.6	30 - 160	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	7.5000	92.2	30 - 160	16.833	16.84343	-0.0104	N/A	
p-Terphenyl-d14	5.0000	103	30 - 160	21.389	21.39014	-0.0011	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0335-ICV1 (Solid) Lab File ID: NT1403172302.D Analyzed: 03/17/23 15:03								
2-Fluorophenol	7.5000	97.7	80 - 120	6.821	6.828857	-0.0079	N/A	
Phenol-d5	7.5000	96.3	80 - 120	8.412	8.419	-0.0070	N/A	
2-Chlorophenol-d4	7.5000	97.2	80 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.0	80 - 120	9.426	9.430429	-0.0044	N/A	
Nitrobenzene-d5	5.0000	102	80 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	5.0000	99.9	80 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	7.5000	98.9	80 - 120	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	5.0000	114	80 - 120	21.389	21.39014	-0.0011	N/A	
SLC0335-LCV1 (Solid) Lab File ID: NT1403172304.D Analyzed: 03/17/23 16:16								
2-Fluorophenol	0.30000	84.0	50 - 150	6.828	6.828857	-0.0009	N/A	
Phenol-d5	0.30000	84.3	50 - 150	8.412	8.419	-0.0070	N/A	
2-Chlorophenol-d4	0.30000	96.5	50 - 150	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	0.20000	109	50 - 150	9.426	9.430429	-0.0044	N/A	
Nitrobenzene-d5	0.20000	90.9	50 - 150	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	0.20000	103	50 - 150	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	0.30000	77.5	50 - 150	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	0.20000	113	50 - 150	21.389	21.39014	-0.0011	N/A	
BLB0424-BLK1 (Solid) Lab File ID: NT1403172312.D Analyzed: 03/17/23 21:06								
2-Fluorophenol	750.00	54.5	27 - 120	6.836	6.828857	0.0071	N/A	
Phenol-d5	750.00	60.3	29 - 120	8.412	8.419	-0.0070	N/A	
2-Chlorophenol-d4	750.00	67.3	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	500.00	77.5	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	500.00	79.2	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	500.00	80.6	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	750.00	45.9	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	500.00	114	37 - 120	21.389	21.39014	-0.0011	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0424-BS1 (Solid)		Lab File ID: NT1403172313.D			Analyzed: 03/17/23 21:42			
2-Fluorophenol	750.00	81.5	27 - 120	6.837	6.828857	0.0081	N/A	
Phenol-d5	750.00	79.2	29 - 120	8.413	8.419	-0.0060	N/A	
2-Chlorophenol-d4	750.00	86.4	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	500.00	83.3	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	500.00	88.8	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	500.00	87.2	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	750.00	95.6	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	500.00	128	37 - 120	21.389	21.39014	-0.0011	N/A	*
BLB0424-BSD1 (Solid)		Lab File ID: NT1403172314.D			Analyzed: 03/17/23 22:19			
2-Fluorophenol	750.00	80.7	27 - 120	6.837	6.828857	0.0081	N/A	
Phenol-d5	750.00	80.3	29 - 120	8.413	8.419	-0.0060	N/A	
2-Chlorophenol-d4	750.00	86.0	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	500.00	81.4	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	500.00	87.9	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	500.00	86.9	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	750.00	90.8	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	500.00	124	37 - 120	21.389	21.39014	-0.0011	N/A	*
BLB0424-SRM1 (Solid)		Lab File ID: NT1403172315.D			Analyzed: 03/17/23 22:55			
2-Fluorophenol	7500.0	75.6	27 - 120	6.836	6.828857	0.0071	N/A	
Phenol-d5	7500.0	73.9	29 - 120	8.413	8.419	-0.0060	N/A	
2-Chlorophenol-d4	7500.0	78.8	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	5000.0	75.2	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	5000.0	80.8	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	5000.0	83.3	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	7500.0	86.1	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	5000.0	110	37 - 120	21.389	21.39014	-0.0011	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0335-ICV2 (Solid) Lab File ID: NT1403172316.D Analyzed: 03/17/23 23:31								
2-Fluorophenol	7.5000	93.9	80 - 120	6.821	6.828857	-0.0079	N/A	
Phenol-d5	7.5000	94.5	80 - 120	8.412	8.419	-0.0070	N/A	
2-Chlorophenol-d4	7.5000	96.5	80 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	5.0000	95.5	80 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	5.0000	102	80 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	5.0000	100	80 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	7.5000	103	80 - 120	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	5.0000	125	80 - 120	21.389	21.39014	-0.0011	N/A	*
SLC0335-LCV2 (Solid) Lab File ID: NT1403172318.D Analyzed: 03/18/23 00:43								
2-Fluorophenol	0.30000	77.2	50 - 150	6.821	6.828857	-0.0079	N/A	
Phenol-d5	0.30000	82.0	50 - 150	8.413	8.419	-0.0060	N/A	
2-Chlorophenol-d4	0.30000	91.6	50 - 150	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	0.20000	112	50 - 150	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	0.20000	91.7	50 - 150	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	0.20000	104	50 - 150	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	0.30000	63.7	50 - 150	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	0.20000	122	50 - 150	21.389	21.39014	-0.0011	N/A	
23B0229-02 (Solid) Lab File ID: NT1403172321.D Analyzed: 03/18/23 02:31								
2-Fluorophenol	761.53	42.6	27 - 120	6.837	6.828857	0.0081	N/A	
Phenol-d5	761.53	58.1	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	761.53	58.3	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	507.68	71.2	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	507.68	75.1	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	507.68	83.6	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	761.53	25.2	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	507.68	123	37 - 120	21.389	21.39014	-0.0011	N/A	*



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0335
Calibration: GC00048

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23B0229-03 (Solid) Lab File ID: NT1403172322.D Analyzed: 03/18/23 03:07								
2-Fluorophenol	741.66	53.0	27 - 120	6.844	6.828857	0.0151	N/A	
Phenol-d5	741.66	67.0	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	741.66	68.6	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	494.44	76.2	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	494.44	81.6	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	494.44	87.8	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	741.66	41.7	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	494.44	144	37 - 120	21.389	21.39014	-0.0011	N/A	*
23B0229-04 (Solid) Lab File ID: NT1403172323.D Analyzed: 03/18/23 03:42								
2-Fluorophenol	740.03	63.2	27 - 120	6.844	6.828857	0.0151	N/A	
Phenol-d5	740.03	69.9	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	740.03	73.8	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	493.36	73.6	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	493.36	78.9	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	493.36	84.5	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	740.03	62.4	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	493.36	134	37 - 120	21.389	21.39014	-0.0011	N/A	*
23B0229-05 (Solid) Lab File ID: NT1403172324.D Analyzed: 03/18/23 04:18								
2-Fluorophenol	732.45	60.2	27 - 120	6.844	6.828857	0.0151	N/A	
Phenol-d5	732.45	62.7	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	732.45	69.8	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	488.30	67.1	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	488.30	73.7	30 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	488.30	80.7	35 - 120	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	732.45	70.2	24 - 134	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	488.30	126	37 - 120	21.389	21.39014	-0.0011	N/A	*



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q	
23B0229-06 (Solid)		Lab File ID: NT1403172325.D				Analyzed: 03/18/23 04:54			
2-Fluorophenol	742.34	64.4	27 - 120	6.837	6.828857	0.0081	N/A		
Phenol-d5	742.34	65.2	29 - 120	8.42	8.419	0.0010	N/A		
2-Chlorophenol-d4	742.34	72.9	31 - 120	8.698	8.701429	-0.0034	N/A		
1,2-Dichlorobenzene-d4	494.89	68.2	32 - 120	9.427	9.430429	-0.0034	N/A		
Nitrobenzene-d5	494.89	74.2	30 - 120	10.164	10.16743	-0.0034	N/A		
2-Fluorobiphenyl	494.89	81.7	35 - 120	13.796	13.79871	-0.0027	N/A		
2,4,6-Tribromophenol	742.34	81.4	24 - 134	16.849	16.84343	0.0056	N/A		
p-Terphenyl-d14	494.89	131	37 - 120	21.397	21.39014	0.0069	N/A	*	
23B0229-08 (Solid)		Lab File ID: NT1403172326.D				Analyzed: 03/18/23 05:30			
2-Fluorophenol	726.50	72.8	27 - 120	6.844	6.828857	0.0151	N/A		
Phenol-d5	726.50	75.7	29 - 120	8.428	8.419	0.0090	N/A		
2-Chlorophenol-d4	726.50	82.1	31 - 120	8.706	8.701429	0.0046	N/A		
1,2-Dichlorobenzene-d4	484.33	76.1	32 - 120	9.427	9.430429	-0.0034	N/A		
Nitrobenzene-d5	484.33	84.1	30 - 120	10.164	10.16743	-0.0034	N/A		
2-Fluorobiphenyl	484.33	92.5	35 - 120	13.796	13.79871	-0.0027	N/A		
2,4,6-Tribromophenol	726.50	89.1	24 - 134	16.849	16.84343	0.0056	N/A		
p-Terphenyl-d14	484.33	149	37 - 120	21.397	21.39014	0.0069	N/A	*	
SLC0335-CCV1 (Solid)		Lab File ID: NT1403172330.D				Analyzed: 03/18/23 07:54			
2-Fluorophenol	7.5000	96.0	50 - 150	6.829	6.828857	0.0001	N/A		
Phenol-d5	7.5000	97.1	50 - 150	8.428	8.419	0.0090	N/A		
2-Chlorophenol-d4	7.5000	101	50 - 150	8.706	8.701429	0.0046	N/A		
1,2-Dichlorobenzene-d4	5.0000	103	50 - 150	9.434	9.430429	0.0036	N/A		
Nitrobenzene-d5	5.0000	102	50 - 150	10.164	10.16743	-0.0034	N/A		
2-Fluorobiphenyl	5.0000	104	50 - 150	13.803	13.79871	0.0043	N/A		
2,4,6-Tribromophenol	7.5000	94.9	50 - 150	16.849	16.84343	0.0056	N/A		
p-Terphenyl-d14	5.0000	165	50 - 150	21.389	21.39014	-0.0011	N/A	*	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0355
Calibration: GC00048

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0355-ICV1 (Solid) Lab File ID: NT1403182302.D Analyzed: 03/18/23 17:38								
2-Fluorophenol	7.5000	96.0	80 - 120	6.829	6.828857	0.0001	N/A	
Phenol-d5	7.5000	97.6	80 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	7.5000	101	80 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	5.0000	99.6	80 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	5.0000	101	80 - 120	10.156	10.16743	-0.0114	N/A	
2-Fluorobiphenyl	5.0000	98.8	80 - 120	13.787	13.79871	-0.0117	N/A	
2,4,6-Tribromophenol	7.5000	101	80 - 120	16.833	16.84343	-0.0104	N/A	
p-Terphenyl-d14	5.0000	112	80 - 120	21.381	21.39014	-0.0091	N/A	
BLB0424-BLK3 (Solid) Lab File ID: NT1403182306.D Analyzed: 03/18/23 20:03								
2-Fluorophenol	750.00	55.1	27 - 120	6.844	6.828857	0.0151	N/A	
Phenol-d5	750.00	60.4	29 - 120	8.412	8.419	-0.0070	N/A	
2-Chlorophenol-d4	750.00	66.7	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	500.00	78.0	32 - 120	9.419	9.430429	-0.0114	N/A	
Nitrobenzene-d5	500.00	78.5	30 - 120	10.156	10.16743	-0.0114	N/A	
2-Fluorobiphenyl	500.00	80.2	35 - 120	13.788	13.79871	-0.0107	N/A	
2,4,6-Tribromophenol	750.00	46.9	24 - 134	16.834	16.84343	-0.0094	N/A	
p-Terphenyl-d14	500.00	98.1	37 - 120	21.381	21.39014	-0.0091	N/A	
23B0229-04RE1 (Solid) Lab File ID: NT1403182311.D Analyzed: 03/18/23 23:04								
2-Fluorophenol	740.03	66.2	27 - 120	6.836	6.828857	0.0071	N/A	
Phenol-d5	740.03	68.9	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	740.03	74.7	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	493.36	73.8	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	493.36	77.3	30 - 120	10.156	10.16743	-0.0114	N/A	
2-Fluorobiphenyl	493.36	84.5	35 - 120	13.788	13.79871	-0.0107	N/A	
2,4,6-Tribromophenol	740.03	68.5	24 - 134	16.834	16.84343	-0.0094	N/A	
p-Terphenyl-d14	493.36	110	37 - 120	21.381	21.39014	-0.0091	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0355
Calibration: GC00048

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23B0229-05RE1 (Solid) Lab File ID: NT1403182312.D Analyzed: 03/18/23 23:40								
2-Fluorophenol	732.45	63.3	27 - 120	6.836	6.828857	0.0071	N/A	
Phenol-d5	732.45	64.0	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	732.45	70.6	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	488.30	71.8	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	488.30	74.3	30 - 120	10.156	10.16743	-0.0114	N/A	
2-Fluorobiphenyl	488.30	81.7	35 - 120	13.788	13.79871	-0.0107	N/A	
2,4,6-Tribromophenol	732.45	64.7	24 - 134	16.834	16.84343	-0.0094	N/A	
p-Terphenyl-d14	488.30	99.4	37 - 120	21.381	21.39014	-0.0091	N/A	
23B0229-06RE1 (Solid) Lab File ID: NT1403182313.D Analyzed: 03/19/23 00:16								
2-Fluorophenol	742.34	66.4	27 - 120	6.836	6.828857	0.0071	N/A	
Phenol-d5	742.34	66.9	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	742.34	73.6	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	494.89	70.1	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	494.89	73.7	30 - 120	10.156	10.16743	-0.0114	N/A	
2-Fluorobiphenyl	494.89	79.5	35 - 120	13.788	13.79871	-0.0107	N/A	
2,4,6-Tribromophenol	742.34	79.0	24 - 134	16.834	16.84343	-0.0094	N/A	
p-Terphenyl-d14	494.89	106	37 - 120	21.381	21.39014	-0.0091	N/A	
23B0229-08RE1 (Solid) Lab File ID: NT1403182314.D Analyzed: 03/19/23 00:52								
2-Fluorophenol	726.50	74.9	27 - 120	6.837	6.828857	0.0081	N/A	
Phenol-d5	726.50	75.2	29 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	726.50	82.8	31 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	484.33	77.2	32 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	484.33	83.2	30 - 120	10.157	10.16743	-0.0104	N/A	
2-Fluorobiphenyl	484.33	91.3	35 - 120	13.788	13.79871	-0.0107	N/A	
2,4,6-Tribromophenol	726.50	90.2	24 - 134	16.834	16.84343	-0.0094	N/A	
p-Terphenyl-d14	484.33	117	37 - 120	21.381	21.39014	-0.0091	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0355

Instrument: NT14

Calibration: GC00048

Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0355-ICV2 (Solid)		Lab File ID: NT1403182318.D			Analyzed: 03/19/23 03:16			
2-Fluorophenol	7.5000	95.1	80 - 120	6.837	6.828857	0.0081	N/A	
Phenol-d5	7.5000	98.8	80 - 120	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	7.5000	101	80 - 120	8.698	8.701429	-0.0034	N/A	
1,2-Dichlorobenzene-d4	5.0000	101	80 - 120	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	5.0000	99.9	80 - 120	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	5.0000	99.2	80 - 120	13.796	13.79871	-0.0027	N/A	
2,4,6-Tribromophenol	7.5000	101	80 - 120	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	5.0000	121	80 - 120	21.381	21.39014	-0.0091	N/A	*
SLC0355-LCV2 (Solid)		Lab File ID: NT1403182320.D			Analyzed: 03/19/23 04:28			
2-Fluorophenol	0.30000	92.0	50 - 150	6.836	6.828857	0.0071	N/A	
Phenol-d5	0.30000	87.9	50 - 150	8.42	8.419	0.0010	N/A	
2-Chlorophenol-d4	0.30000	93.1	50 - 150	8.706	8.701429	0.0046	N/A	
1,2-Dichlorobenzene-d4	0.20000	105	50 - 150	9.427	9.430429	-0.0034	N/A	
Nitrobenzene-d5	0.20000	99.8	50 - 150	10.164	10.16743	-0.0034	N/A	
2-Fluorobiphenyl	0.20000	106	50 - 150	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	0.30000	79.4	50 - 150	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	0.20000	124	50 - 150	21.381	21.39014	-0.0091	N/A	
SLC0355-CCV1 (Solid)		Lab File ID: NT1403182331.D			Analyzed: 03/19/23 11:04			
2-Fluorophenol	7.5000	93.8	50 - 150	6.844	6.828857	0.0151	N/A	
Phenol-d5	7.5000	95.6	50 - 150	8.428	8.419	0.0090	N/A	
2-Chlorophenol-d4	7.5000	99.9	50 - 150	8.706	8.701429	0.0046	N/A	
1,2-Dichlorobenzene-d4	5.0000	99.8	50 - 150	9.435	9.430429	0.0046	N/A	
Nitrobenzene-d5	5.0000	99.3	50 - 150	10.172	10.16743	0.0046	N/A	
2-Fluorobiphenyl	5.0000	99.2	50 - 150	13.795	13.79871	-0.0037	N/A	
2,4,6-Tribromophenol	7.5000	101	50 - 150	16.841	16.84343	-0.0024	N/A	
p-Terphenyl-d14	5.0000	115	50 - 150	21.389	21.39014	-0.0011	N/A	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0160

SDG: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0160-SCV1)		(Water)	Lab File ID: NT1403152311.D			Analyzed: 03/15/23 17:39			
1,4-Dichlorobenzene-d4	197462	9.07	194517	9.07	102	50 - 200	0.000	+/-0.50	
Naphthalene-d8	726125	11.567	721321	11.567	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	382881	15.196	379602	15.204	101	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	706616	18.24	703194	18.248	100	50 - 200	-0.008	+/-0.50	
Chrysene-d12	504808	23.301	504769	23.302	100	50 - 200	-0.001	+/-0.50	
Di-n-Octylphthalate-d4	988248	24.323	978492	24.323	101	50 - 200	0.000	+/-0.50	
Perylene-d12	496785	25.941	484073	25.942	103	50 - 200	-0.001	+/-0.50	
Initial Cal Blank (SLC0160-ICB1)		(Water)	Lab File ID: NT1403152312.D			Analyzed: 03/15/23 18:15			
1,4-Dichlorobenzene-d4	189234	9.062	194517	9.07	97	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	727843	11.559	721321	11.567	101	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	367416	15.196	379602	15.204	97	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	678407	18.24	703194	18.248	96	50 - 200	-0.008	+/-0.50	
Chrysene-d12	476533	23.293	504769	23.302	94	50 - 200	-0.009	+/-0.50	
Di-n-Octylphthalate-d4	798655	24.323	978492	24.323	82	50 - 200	0.000	+/-0.50	
Perylene-d12	452165	25.934	484073	25.942	93	50 - 200	-0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0335

SDG: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0335-ICV1)		(Solid)	Lab File ID: NT1403172302.D			Analyzed: 03/17/23 15:03			
1,4-Dichlorobenzene-d4	221219	9.062	221219	9.062	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	809500	11.567	809500	11.567	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	420689	15.196	420689	15.196	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	757520	18.247	757520	18.247	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	450500	23.293	450500	23.293	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	828388	24.323	828388	24.323	100	50 - 200	0.000	+/-0.50	
Perylene-d12	339914	25.933	339914	25.933	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0335-LCV1)		(Solid)	Lab File ID: NT1403172304.D			Analyzed: 03/17/23 16:16			
1,4-Dichlorobenzene-d4	217316	9.062	221219	9.062	98	50 - 200	0.000	+/-0.50	
Naphthalene-d8	823606	11.567	809500	11.567	102	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	420838	15.196	420689	15.196	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	757941	18.24	757520	18.247	100	50 - 200	-0.007	+/-0.50	
Chrysene-d12	454867	23.293	450500	23.293	101	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	710040	24.315	828388	24.323	86	50 - 200	-0.008	+/-0.50	
Perylene-d12	330470	25.933	339914	25.933	97	50 - 200	0.000	+/-0.50	
Blank (BLB0424-BLK1)		(Solid)	Lab File ID: NT1403172312.D			Analyzed: 03/17/23 21:06			
1,4-Dichlorobenzene-d4	220626	9.062	221219	9.062	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	887622	11.559	809500	11.567	110	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	442658	15.196	420689	15.196	105	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	744696	18.24	757520	18.247	98	50 - 200	-0.007	+/-0.50	
Chrysene-d12	383188	23.294	450500	23.293	85	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	740264	24.315	828388	24.323	89	50 - 200	-0.008	+/-0.50	
Perylene-d12	251086	25.934	339914	25.933	74	50 - 200	0.001	+/-0.50	
LCS (BLB0424-BS1)		(Solid)	Lab File ID: NT1403172313.D			Analyzed: 03/17/23 21:42			
1,4-Dichlorobenzene-d4	210794	9.062	221219	9.062	95	50 - 200	0.000	+/-0.50	
Naphthalene-d8	812894	11.567	809500	11.567	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	421466	15.196	420689	15.196	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	705582	18.24	757520	18.247	93	50 - 200	-0.007	+/-0.50	
Chrysene-d12	351965	23.294	450500	23.293	78	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	707847	24.316	828388	24.323	85	50 - 200	-0.007	+/-0.50	
Perylene-d12	230171	25.934	339914	25.933	68	50 - 200	0.001	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLB0424-BSD1)		(Solid)	Lab File ID: NT1403172314.D			Analyzed: 03/17/23 22:19			
1,4-Dichlorobenzene-d4	217090	9.062	221219	9.062	98	50 - 200	0.000	+/-0.50	
Naphthalene-d8	838636	11.567	809500	11.567	104	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	430703	15.196	420689	15.196	102	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	719856	18.24	757520	18.247	95	50 - 200	-0.007	+/-0.50	
Chrysene-d12	357294	23.294	450500	23.293	79	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	706831	24.316	828388	24.323	85	50 - 200	-0.007	+/-0.50	
Perylene-d12	233794	25.934	339914	25.933	69	50 - 200	0.001	+/-0.50	
Reference (BLB0424-SRM1)		(Solid)	Lab File ID: NT1403172315.D			Analyzed: 03/17/23 22:55			
1,4-Dichlorobenzene-d4	232565	9.062	221219	9.062	105	50 - 200	0.000	+/-0.50	
Naphthalene-d8	889784	11.56	809500	11.567	110	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	442664	15.196	420689	15.196	105	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	747605	18.24	757520	18.247	99	50 - 200	-0.007	+/-0.50	
Chrysene-d12	366287	23.294	450500	23.293	81	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	736461	24.316	828388	24.323	89	50 - 200	-0.007	+/-0.50	
Perylene-d12	232583	25.934	339914	25.933	68	50 - 200	0.001	+/-0.50	
Initial Cal Check (SLC0335-ICV2)		(Solid)	Lab File ID: NT1403172316.D			Analyzed: 03/17/23 23:31			
1,4-Dichlorobenzene-d4	231017	9.062	231017	9.062	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	843789	11.567	843789	11.567	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	432455	15.196	432455	15.196	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	793780	18.24	793780	18.24	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	411057	23.294	411057	23.294	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	799010	24.316	799010	24.316	100	50 - 200	0.000	+/-0.50	
Perylene-d12	254782	25.934	254782	25.934	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0335-LCV2)		(Solid)	Lab File ID: NT1403172318.D			Analyzed: 03/18/23 00:43			
1,4-Dichlorobenzene-d4	204038	9.062	231017	9.062	88	50 - 200	0.000	+/-0.50	
Naphthalene-d8	775937	11.56	843789	11.567	92	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	384479	15.196	432455	15.196	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	678623	18.24	793780	18.24	85	50 - 200	0.000	+/-0.50	
Chrysene-d12	379052	23.294	411057	23.294	92	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	646291	24.316	799010	24.316	81	50 - 200	0.000	+/-0.50	
Perylene-d12	245193	25.934	254782	25.934	96	50 - 200	0.000	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1236 (23B0229-02)		(Solid)	Lab File ID: NT1403172321.D			Analyzed: 03/18/23 02:31			
1,4-Dichlorobenzene-d4	210545	9.062	231017	9.062	91	50 - 200	0.000	+/-0.50	
Naphthalene-d8	822847	11.56	843789	11.567	98	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	384402	15.196	432455	15.196	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	620504	18.248	793780	18.24	78	50 - 200	0.008	+/-0.50	
Chrysene-d12	207072	23.294	411057	23.294	50	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	411581	24.323	799010	24.316	52	50 - 200	0.007	+/-0.50	
Perylene-d12	150614	25.942	254782	25.934	59	50 - 200	0.008	+/-0.50	
LDW23-SS1237 (23B0229-03)		(Solid)	Lab File ID: NT1403172322.D			Analyzed: 03/18/23 03:07			
1,4-Dichlorobenzene-d4	213192	9.062	231017	9.062	92	50 - 200	0.000	+/-0.50	
Naphthalene-d8	836044	11.56	843789	11.567	99	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	410994	15.196	432455	15.196	95	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	717073	18.248	793780	18.24	90	50 - 200	0.008	+/-0.50	
Chrysene-d12	227231	23.301	411057	23.294	55	50 - 200	0.007	+/-0.50	
Di-n-Octylphthalate-d4	465589	24.323	799010	24.316	58	50 - 200	0.007	+/-0.50	
Perylene-d12	155623	25.942	254782	25.934	61	50 - 200	0.008	+/-0.50	
LDW23-SS1150 (23B0229-04)		(Solid)	Lab File ID: NT1403172323.D			Analyzed: 03/18/23 03:42			
1,4-Dichlorobenzene-d4	223100	9.062	231017	9.062	97	50 - 200	0.000	+/-0.50	
Naphthalene-d8	868361	11.567	843789	11.567	103	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	418674	15.196	432455	15.196	97	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	651987	18.247	793780	18.24	82	50 - 200	0.007	+/-0.50	
Chrysene-d12	202950	23.301	411057	23.294	49	50 - 200	0.007	+/-0.50	*
Di-n-Octylphthalate-d4	410637	24.323	799010	24.316	51	50 - 200	0.007	+/-0.50	
Perylene-d12	146928	25.941	254782	25.934	58	50 - 200	0.007	+/-0.50	
LDW23-SS1008 (23B0229-05)		(Solid)	Lab File ID: NT1403172324.D			Analyzed: 03/18/23 04:18			
1,4-Dichlorobenzene-d4	207758	9.062	231017	9.062	90	50 - 200	0.000	+/-0.50	
Naphthalene-d8	797455	11.567	843789	11.567	95	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	382798	15.204	432455	15.196	89	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	628064	18.247	793780	18.24	79	50 - 200	0.007	+/-0.50	
Chrysene-d12	197467	23.301	411057	23.294	48	50 - 200	0.007	+/-0.50	*
Di-n-Octylphthalate-d4	394361	24.323	799010	24.316	49	50 - 200	0.007	+/-0.50	*
Perylene-d12	140459	25.949	254782	25.934	55	50 - 200	0.015	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0335

Instrument: NT14

Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1008 (23B0229-06)		(Solid)	Lab File ID: NT1403172325.D			Analyzed: 03/18/23 04:54			
1,4-Dichlorobenzene-d4	203493	9.062	231017	9.062	88	50 - 200	0.000	+/-0.50	
Naphthalene-d8	789039	11.567	843789	11.567	94	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	384488	15.204	432455	15.196	89	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	650423	18.248	793780	18.24	82	50 - 200	0.008	+/-0.50	
Chrysene-d12	200534	23.302	411057	23.294	49	50 - 200	0.008	+/-0.50	*
Di-n-Octylphthalate-d4	411174	24.323	799010	24.316	51	50 - 200	0.007	+/-0.50	
Perylene-d12	144200	25.949	254782	25.934	57	50 - 200	0.015	+/-0.50	
LDW23-SC1013 (23B0229-08)		(Solid)	Lab File ID: NT1403172326.D			Analyzed: 03/18/23 05:30			
1,4-Dichlorobenzene-d4	214432	9.07	231017	9.062	93	50 - 200	0.008	+/-0.50	
Naphthalene-d8	829944	11.567	843789	11.567	98	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	403286	15.204	432455	15.196	93	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	642247	18.256	793780	18.24	81	50 - 200	0.016	+/-0.50	
Chrysene-d12	184444	23.302	411057	23.294	45	50 - 200	0.008	+/-0.50	*
Di-n-Octylphthalate-d4	377837	24.323	799010	24.316	47	50 - 200	0.007	+/-0.50	*
Perylene-d12	135619	25.949	254782	25.934	53	50 - 200	0.015	+/-0.50	
Calibration Check (SLC0335-CCV1)		(Water)	Lab File ID: NT1403172330.D			Analyzed: 03/18/23 07:54			
1,4-Dichlorobenzene-d4	217562	9.07	231017	9.062	94	50 - 200	0.008	+/-0.50	
Naphthalene-d8	844336	11.567	843789	11.567	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	413736	15.204	432455	15.196	96	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	640883	18.248	793780	18.24	81	50 - 200	0.008	+/-0.50	
Chrysene-d12	193927	23.301	411057	23.294	47	50 - 200	0.007	+/-0.50	*
Di-n-Octylphthalate-d4	500053	24.323	799010	24.316	63	50 - 200	0.007	+/-0.50	
Perylene-d12	141853	25.941	254782	25.934	56	50 - 200	0.007	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0355

SDG: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0355-ICV1)		(Solid)	Lab File ID: NT1403182302.D			Analyzed: 03/18/23 17:38			
1,4-Dichlorobenzene-d4	247621	9.062	247621	9.062	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	955275	11.559	955275	11.559	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	510589	15.188	510589	15.188	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	920812	18.232	920812	18.232	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	546688	23.294	546688	23.294	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1067789	24.315	1067789	24.315	100	50 - 200	0.000	+/-0.50	
Perylene-d12	445520	25.926	445520	25.926	100	50 - 200	0.000	+/-0.50	
Blank (BLB0424-BLK3)		(Solid)	Lab File ID: NT1403182306.D			Analyzed: 03/18/23 20:03			
1,4-Dichlorobenzene-d4	264303	9.062	247621	9.062	107	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1057352	11.559	955275	11.559	111	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	539181	15.188	510589	15.188	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	935636	18.232	920812	18.232	102	50 - 200	0.000	+/-0.50	
Chrysene-d12	591932	23.286	546688	23.294	108	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1034580	24.308	1067789	24.315	97	50 - 200	-0.007	+/-0.50	
Perylene-d12	463088	25.918	445520	25.926	104	50 - 200	-0.008	+/-0.50	
LDW23-SS1150 (23B0229-04RE1)		(Solid)	Lab File ID: NT1403182311.D			Analyzed: 03/18/23 23:04			
1,4-Dichlorobenzene-d4	304268	9.062	247621	9.062	123	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1188710	11.56	955275	11.559	124	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	589954	15.189	510589	15.188	116	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	996660	18.24	920812	18.232	108	50 - 200	0.008	+/-0.50	
Chrysene-d12	471870	23.286	546688	23.294	86	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1071397	24.308	1067789	24.315	100	50 - 200	-0.007	+/-0.50	
Perylene-d12	524412	25.934	445520	25.926	118	50 - 200	0.008	+/-0.50	
LDW23-SS1008 (23B0229-05RE1)		(Solid)	Lab File ID: NT1403182312.D			Analyzed: 03/18/23 23:40			
1,4-Dichlorobenzene-d4	294135	9.062	247621	9.062	119	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1143681	11.56	955275	11.559	120	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	561150	15.188	510589	15.188	110	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	917402	18.24	920812	18.232	100	50 - 200	0.008	+/-0.50	
Chrysene-d12	469557	23.286	546688	23.294	86	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1049117	24.316	1067789	24.315	98	50 - 200	0.001	+/-0.50	
Perylene-d12	529419	25.934	445520	25.926	119	50 - 200	0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0355

Instrument: NT14

Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1008 (23B0229-06RE1)		(Solid)	Lab File ID: NT1403182313.D			Analyzed: 03/19/23 00:16			
1,4-Dichlorobenzene-d4	305654	9.062	247621	9.062	123	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1201889	11.56	955275	11.559	126	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	612542	15.189	510589	15.188	120	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	1063558	18.24	920812	18.232	116	50 - 200	0.008	+/-0.50	
Chrysene-d12	480731	23.294	546688	23.294	88	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1085158	24.316	1067789	24.315	102	50 - 200	0.001	+/-0.50	
Perylene-d12	542713	25.934	445520	25.926	122	50 - 200	0.008	+/-0.50	
LDW23-SC1013 (23B0229-08RE1)		(Solid)	Lab File ID: NT1403182314.D			Analyzed: 03/19/23 00:52			
1,4-Dichlorobenzene-d4	309196	9.062	247621	9.062	125	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1198501	11.56	955275	11.559	125	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	600645	15.196	510589	15.188	118	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1046836	18.24	920812	18.232	114	50 - 200	0.008	+/-0.50	
Chrysene-d12	488047	23.294	546688	23.294	89	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1076657	24.316	1067789	24.315	101	50 - 200	0.001	+/-0.50	
Perylene-d12	565653	25.934	445520	25.926	127	50 - 200	0.008	+/-0.50	
Initial Cal Check (SLC0355-ICV2)		(Solid)	Lab File ID: NT1403182318.D			Analyzed: 03/19/23 03:16			
1,4-Dichlorobenzene-d4	237594	9.062	237594	9.062	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	944151	11.56	944151	11.56	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	498100	15.196	498100	15.196	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	845417	18.24	845417	18.24	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	410836	23.294	410836	23.294	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	914780	24.316	914780	24.316	100	50 - 200	0.000	+/-0.50	
Perylene-d12	441517	25.934	441517	25.934	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0355-LCV2)		(Solid)	Lab File ID: NT1403182320.D			Analyzed: 03/19/23 04:28			
1,4-Dichlorobenzene-d4	254560	9.07	237594	9.062	107	50 - 200	0.008	+/-0.50	
Naphthalene-d8	966904	11.56	944151	11.56	102	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	487144	15.196	498100	15.196	98	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	854961	18.24	845417	18.24	101	50 - 200	0.000	+/-0.50	
Chrysene-d12	444724	23.294	410836	23.294	108	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	858353	24.316	914780	24.316	94	50 - 200	0.000	+/-0.50	
Perylene-d12	468611	25.926	441517	25.934	106	50 - 200	-0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0355

Instrument: NT14

Calibration: GC00048

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (SLC0355-CCV1)		(Water)	Lab File ID: NT1403182331.D			Analyzed: 03/19/23 11:04			
1,4-Dichlorobenzene-d4	239978	9.07	237594	9.062	101	50 - 200	0.008	+/-0.50	
Naphthalene-d8	943704	11.567	944151	11.56	100	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	496853	15.196	498100	15.196	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	826898	18.248	845417	18.24	98	50 - 200	0.008	+/-0.50	
Chrysene-d12	429570	23.294	410836	23.294	105	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	913803	24.316	914780	24.316	100	50 - 200	0.000	+/-0.50	
Perylene-d12	440126	25.934	441517	25.934	100	50 - 200	0.000	+/-0.50	



HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 02:31	28	40	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 03:07	29	40	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 03:42	29	40	
LDW23-SS1150 23B0229-04RE1	02/08/23 12:11	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 23:04	29	40	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 04:18	29	40	
LDW23-SS1008 23B0229-05RE1	02/08/23 12:45	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 23:40	29	40	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 04:54	29	40	
LDW23-SC1008 23B0229-06RE1	02/08/23 13:30	02/08/23 16:47	02/17/23 15:00	9	14	03/19/23 00:16	29	40	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	02/17/23 15:00	8	14	03/18/23 05:30	29	40	
LDW23-SC1013 23B0229-08RE1	02/08/23 15:25	02/08/23 16:47	02/17/23 15:00	8	14	03/19/23 00:52	29	40	

* Indicates hold time exceedance.



METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: NT14

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dimethylphthalate	4.4	20.0	ug/kg
Acenaphthene	5.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	5.5	50.0	ug/kg
Benzo(a)fluoranthene, Total	10.0	40.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg



Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941

SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: 644 5021

Purity: 90.29%

Analyst: AB



Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945

SVOC Benzoic Acid
Expires 12/31/2029

Prepared By Jianqing Zhou 12/31/2012

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0224339

Purity: 98%

Analyst: AB



Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948

SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: RB



Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL



B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 62-53

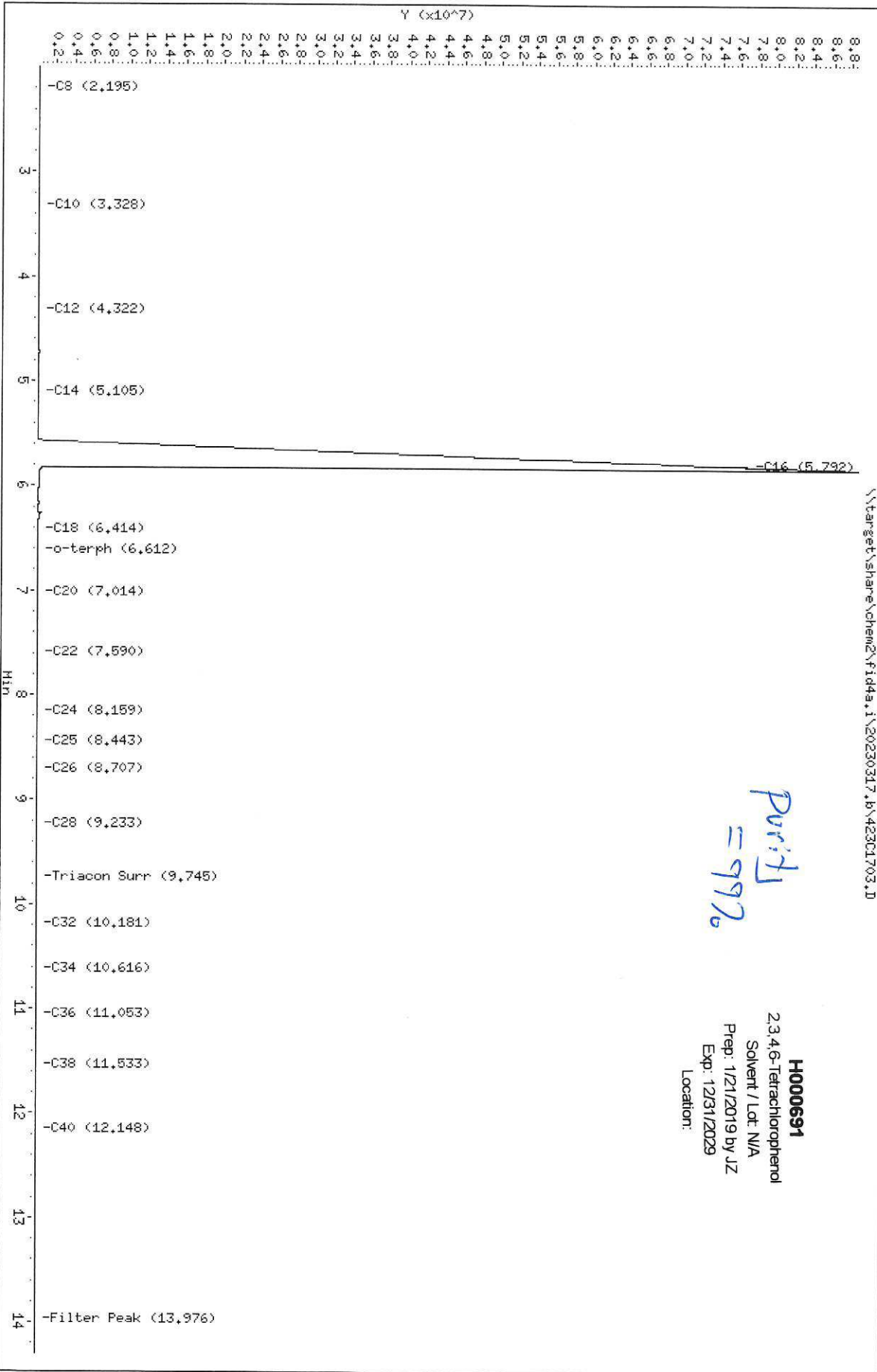
Purity: 99%

Analyst: AB

Data File: \\target\share\chem2\fid4a,1\20230317,1\42301703.D
Date: 17-MAR-2023 10:46
Client ID:
Sample Info: K007226

Column phase: RTX-1

Instrument: fid4a,1
Operator: AA
Column diameter: 0.25



Purity
= 99.7%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

H000691

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
 Lab Smp Id: K007226
 Inj Date : 17-MAR-2023 10:46
 Operator : AA Inst ID: fid4a.i
 Smp Info : K007226
 Misc Info :
 Comment :
 Method : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
 Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
 Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: Falcon+ Compound Sublist: tph.sub
 Target Version: 4.14
 Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
 Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	\$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	\$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
===== 677340272	===== 268782821	===== 100.000			

Total unknown % area = 25.478

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005199

SVOA-ABN BASE STOCK-200-800ug/ml
 Expires 5/31/2023
 Prepared By Jiangqing Zhou 5/18/2021

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

12-May-2021



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005200
 SVOA-ABN ACID STOCK-200-800ug/ml
 Solvent / Lot: DCM
 Prep: 5/18/2021 by JZ
 Exp: 5/31/2023
 Location:

 5/18/21

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.



Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Issue Date: 11-Jun-2020

Lot Number: 0006540449

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/



ISO 17025 Cert
No. AT-1937



Certificate of Analysis

Product Number: US-106N-1

Lot Number: 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 2 of 2

www.agilent.com/quality/



ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL16062

Description: Benzidines Standard

Certification Date: November 19, 2020

Storage: 4 °C

Expiration Date: November 30, 2030

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310

Benzidines std @2000ug/ml

Expires 11/30/2030

Prepared By Van Spohn 8/12/2021

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL16693

Description: Benzoic Acid

Certification Date: May 6, 2021

Storage: 4 °C

Expiration Date: April 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



A Phenomenex
Company

Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®] A Phenomenex
Company
Certified Reference Materials

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443

Lot Number: CL17696

Description: Aniline

Certification Date: December 14, 2021

Storage: 4 °C

Expiration Date: December 31, 2029

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	Units	Certified ^{1,4} Value
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values



Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	Units	Suggested Acceptance Windows	Standard Deviation
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4°C.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4°C. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4°C.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

1 Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH ISO/IEC 17025:2017 (ANAB Cert AT-1467) and ISO 17034:2016 (ANAB Cert AR-1470).



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certification Date January 05, 2021
Version 0-152021



Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291

Lot Number: CL11000

Description: GC/MS Tuning Mix

Certification Date: May 9, 2014

Storage: 4 °C

Expiration Date: December 31, 2023

Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Revision Date: August 5, 2015

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891

GC/MS Tune solution-1000ug/ml

Solvent / Lot: CL11000

Prep: 4/22/2022 by VS

Exp: 12/31/2023

Location:



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL11110612_us



Reference Materials Producer
Cert #2495.01



Certificate of Analysis



Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number:	ECS-A-030	Lot No.	AA210126005
Description:	Base/Neutrals Mix 1	Manufactured Date:	1-26-2021
Matrix:	Methylene Chloride	Expiration Date:	1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Mave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$ where k=2 is the coverage factor at the 95% confidence level
- $u_c =$ combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributed By SPEX CertiPrep

SPEX CertiPrep 

Your Science is Our Passion.®

203 Norcross Ave. Metuchen, NJ 08840

www.spexcertiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647





Certificate of Analysis

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nove

Report of Certification

Catalog Number:	ECS-A-030	Lot No.	AA210126005
Description:	Base/Neutrals Mix 1		
Matrix:	Methylene Chloride	Manufactured Date:	1-26-2021
		Expiration Date:	1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- | | |
|--|--|
| <ul style="list-style-type: none"> - ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS - ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA - ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA - ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels - ISO Guide 35:2006: Reference Materials - General and statistical principals for certification | <ul style="list-style-type: none"> - Guide to the Expression of Uncertainty in Measurement 1997 - EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition - ASTM Guide D6362-98 - NIST Technical Note 1297 - ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers - ISO/REMCO N280 |
|--|--|

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25 µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = \bar{x} \pm U$ where \bar{x} =certified value, U =expanded uncertainty, \bar{x} =property value
- $U = k u_c$, where $k=2$ is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributed By SPEX CertiPrep

SPEX CertiPrep 

Your Science is Our Passion.[®]

203 Norcross Ave. Metuchen NJ 08840

www.spexcertiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647





Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1

Lot Issue Date: 02-Jul-2021

Lot Number: 0006620643

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544

toxic sub mix#2

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 7/31/2023

Location:

JZ 05/11/22



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 31493 Lot No.: A0181243
Description: CLP 04.1 BNA Surrogate Mix
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: October 31, 2025 Storage: 10°C or colder
Handling: Sonicate prior to use. Ship: Ambient

Handwritten signature and date: 05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Table with 7 columns: Elution Order, Compound, CAS #, Purity, Weight, Concentration, and Method. Contains 7 rows of data for various compounds like 2-Fluorophenol, Phenol-d6, 2-Chlorophenol-d4, etc.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL17953

Description: Benzoic Acid

Certification Date: January 31, 2022

Storage: 4 °C

Expiration Date: January 31, 2032

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603

Benzoic Acid @2000ug/ml

Solvent / Lot: N/A

Prep: 5/13/2022 by JZ

Exp: 1/31/2032

Location: GC

5/13/22



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL17662

Description: Benzidines Standard

Certification Date: December 2, 2021

Storage: 4 °C

Expiration Date: November 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604

Benzidines std @2000ug/ml
Solvent / Lot: Mecl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

JZ 5/13/22



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

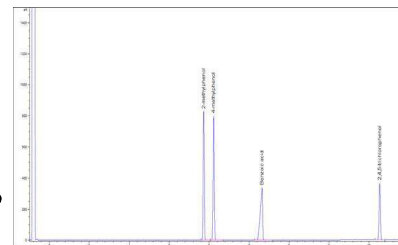


Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

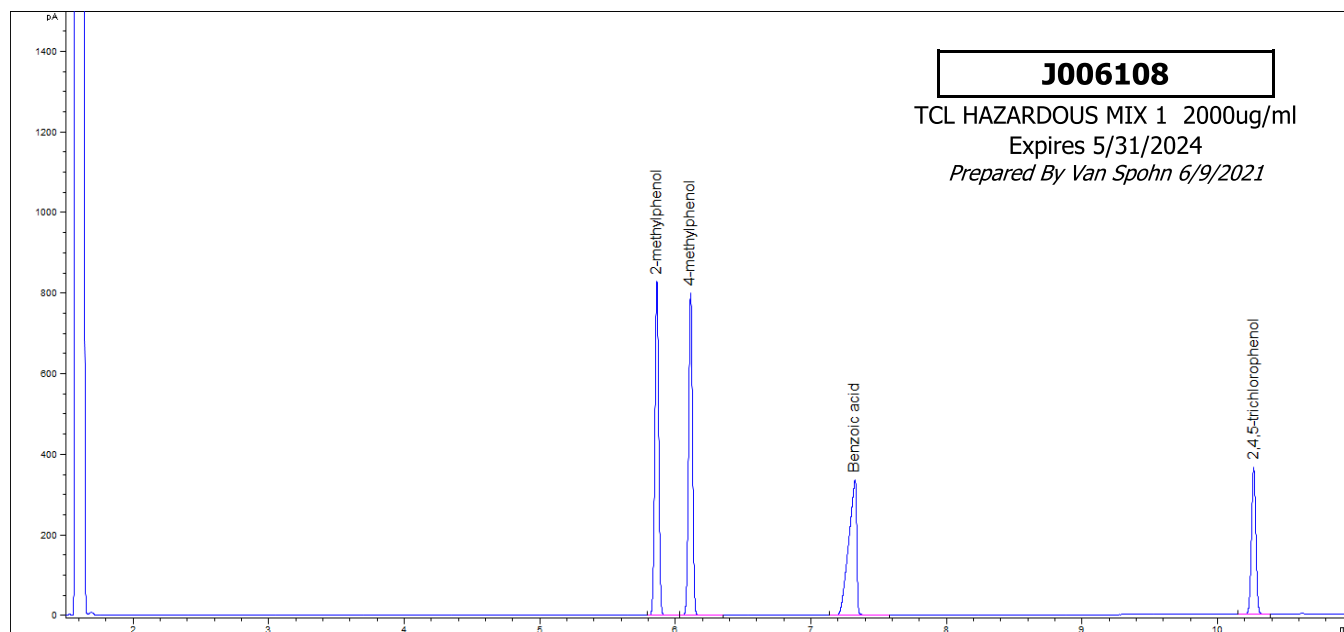
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Elution order	Raw Material Lot
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:

Analytical Method Parameters:
 Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
 Carrier Gas: H₂, Flow: 4.5 mL/min
 Inlet Temperature: 170 °C, Injection Volume: 1 µL
 Injection Mode: Split, Split Ratio: 20:1



Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021



Handwritten signature of Andy Ommen in black ink.

Andy Ommen - QC Manager

Handwritten signature of Mark Pooler in black ink.

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

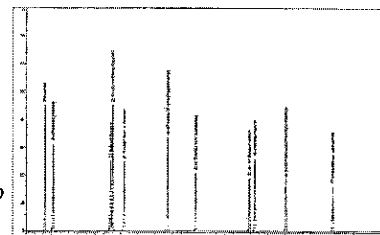
The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

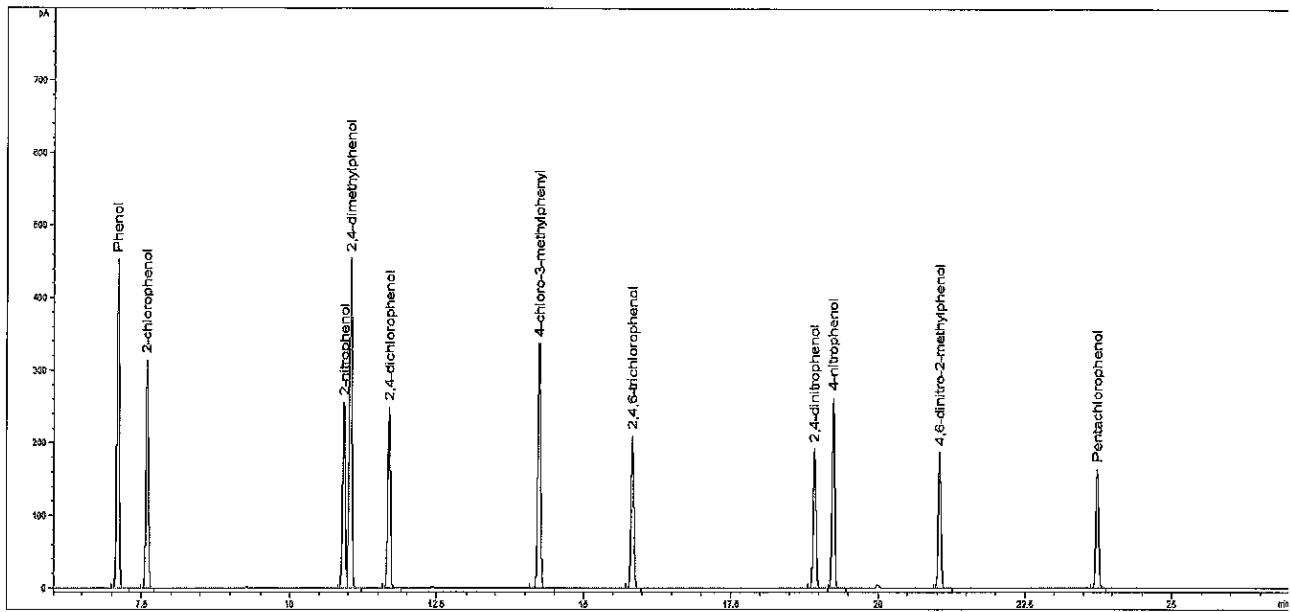
Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597

TCL Phenols Mix 2000ug/ml
 Solvent / Lot: LRAD0139
 Prep: 12/30/2021 by VS
 Exp: 7/31/2024
 Location:





METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m x 0.53 mm I.D., 1.5 µm film thickness

Carrier Gas: H₂ Flow Rate: 4.5 mL/min

Inlet Temperature: 200 °C Injection Volume: 1.0 µL

Injection Mode: 25:1

Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)

Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorophenol
6	14.242	4-chloro-3-methylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021



Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability:

This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty:

Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment:

Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

K007995

SVOA-8270 LCS MIX 1000ug/ml

Solvent / Lot: N/A

Prep: 8/29/2022 by JZ

Exp: 8/31/2023

Location: FREEZER 44



Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444 **Lot Number:** CL18355
Description: 8270 Calibration Standard **Certification Date:** July 25, 2022
Storage: -18 °C **Expiration Date:** August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroisopropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

03 JUN 2022



Andy Ommen - QC Manager



Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-02 A

SDG: 23B0229

Sampled: 02/08/23 11:28

Prepared: 02/17/23 15:00

File ID: NT1403172321S.D

% Solids: 55.99

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 02:31

Batch: BLB0424

Sequence: SLC0376

Initial/Final: 17.59 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00050

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.4	J	0.6	5.1
95-50-1	1,2-Dichlorobenzene	1	5.1	U	0.8	5.1
100-51-6	Benzyl Alcohol	1	51.7		2.5	20.3
65-85-0	Benzoic acid	1	114	Q	13.6	102
105-67-9	2,4-Dimethylphenol	1	3.6	J	2.2	20.3
120-82-1	1,2,4-Trichlorobenzene	1	5.1	U	2.7	5.1
86-30-6	N-Nitrosodiphenylamine	1	5.1	U	1.3	5.1
87-86-5	Pentachlorophenol	1	20.3	U	2.2	20.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	761.53	312	41.0	27 - 120	
p-Terphenyl-d14	507.68	709	140	37 - 120	*,Q

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723215.D

Date: 18-MAR-2023 02:31

Client ID:

Sample Info: 23B0229-02

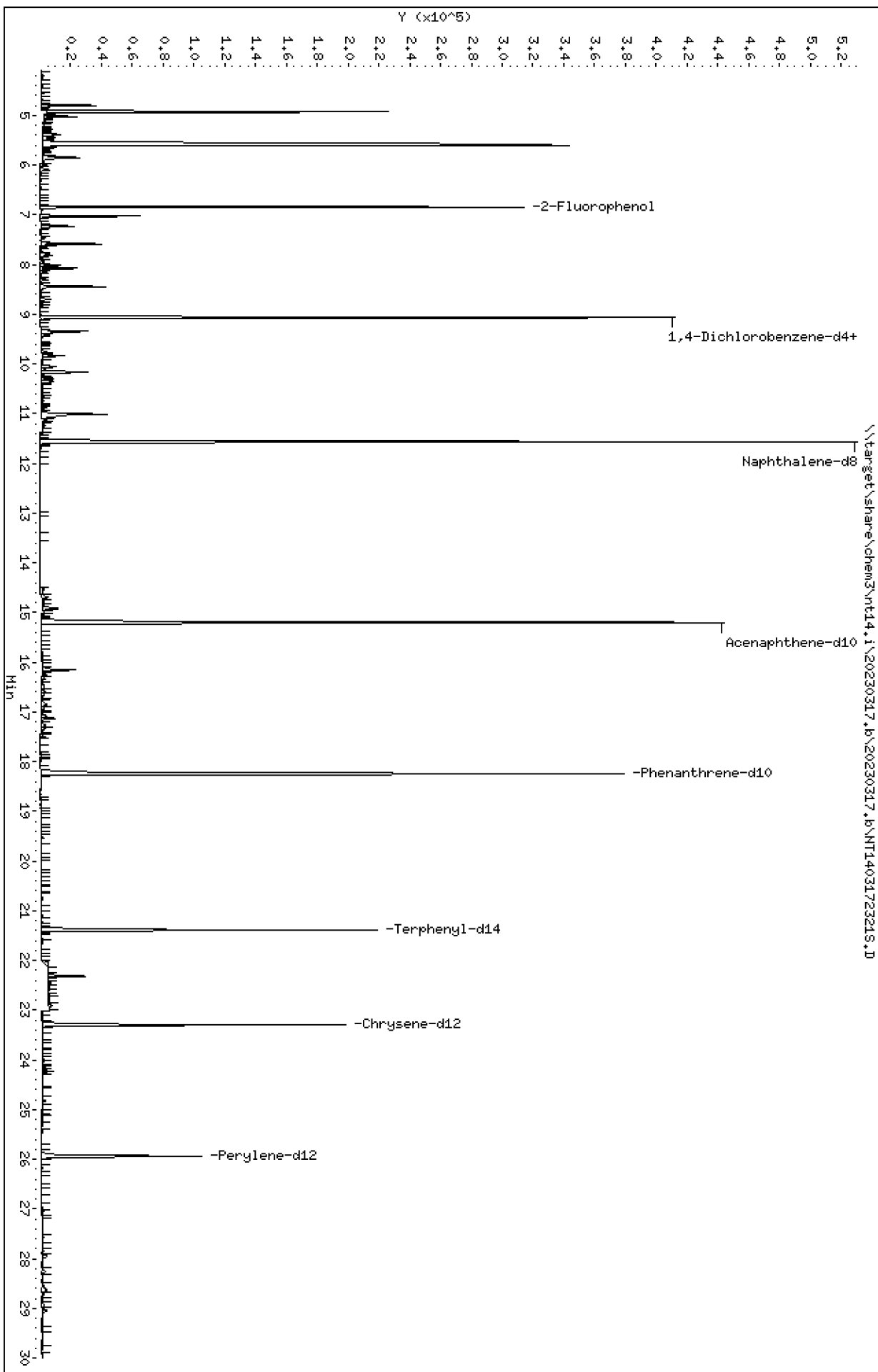
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723215.D



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

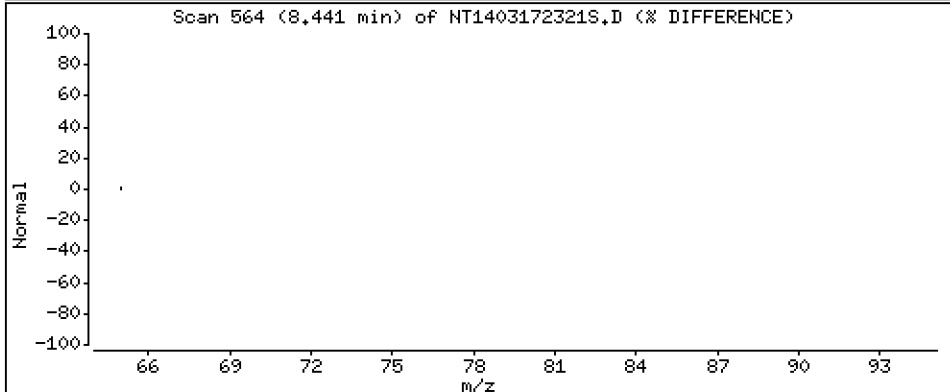
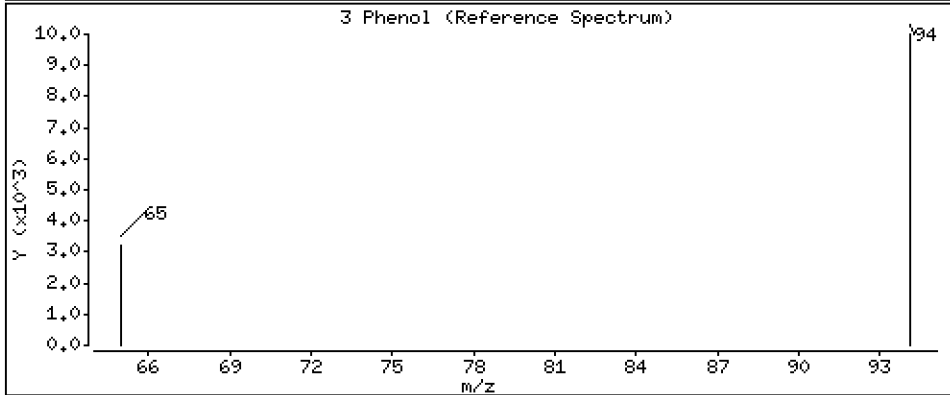
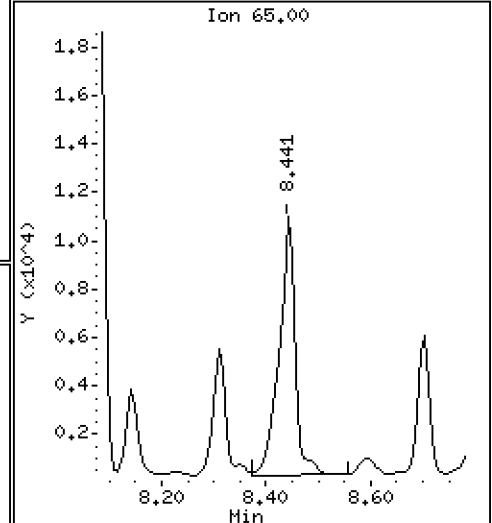
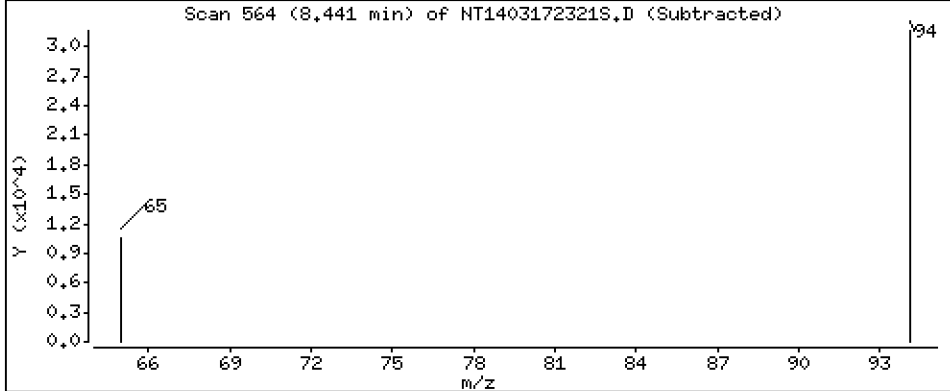
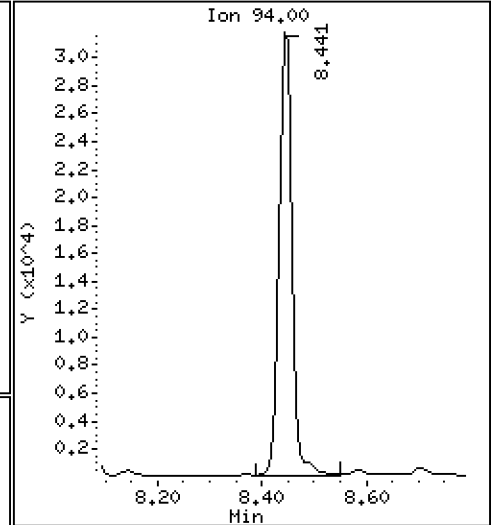
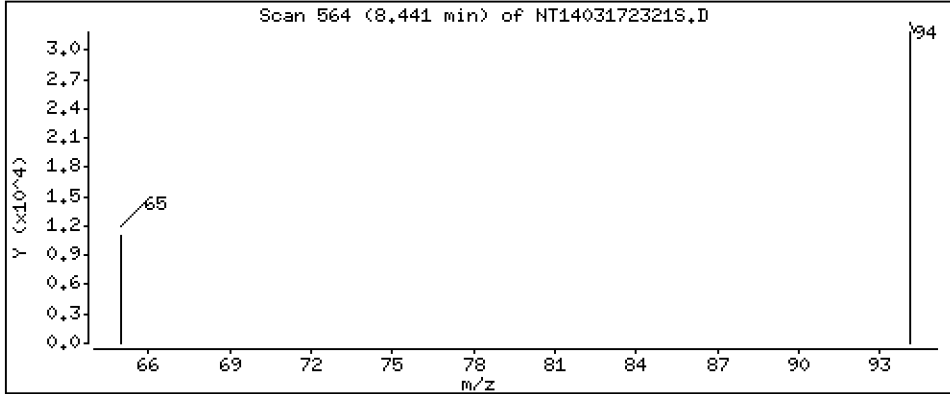
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,4570 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

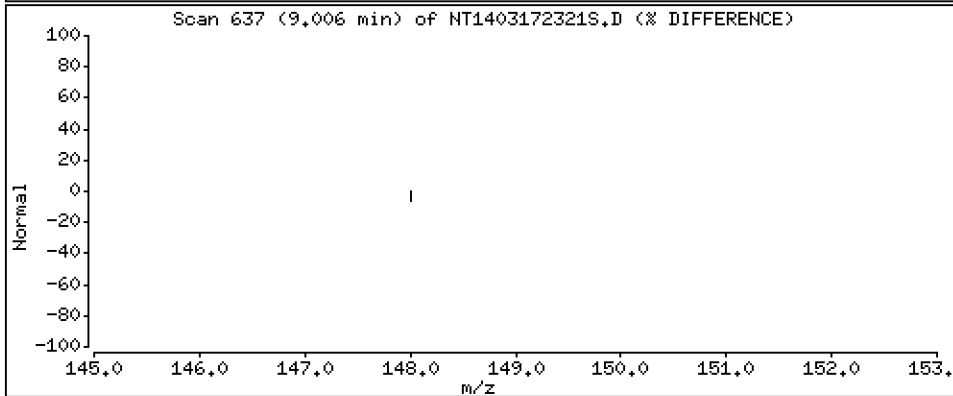
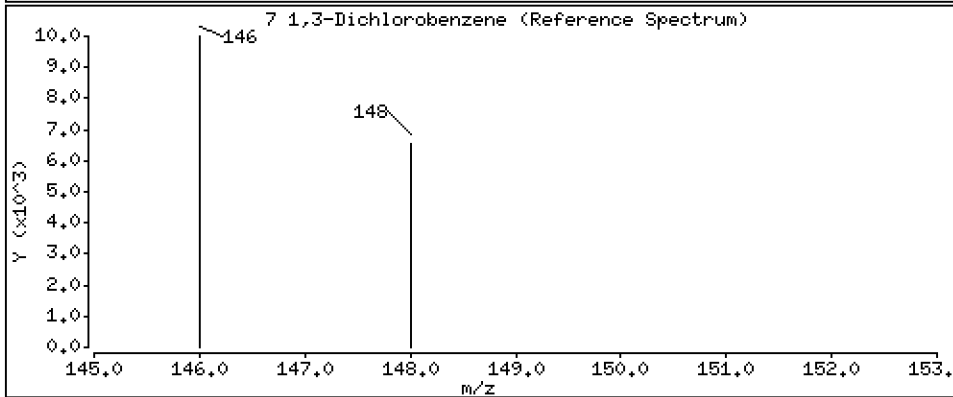
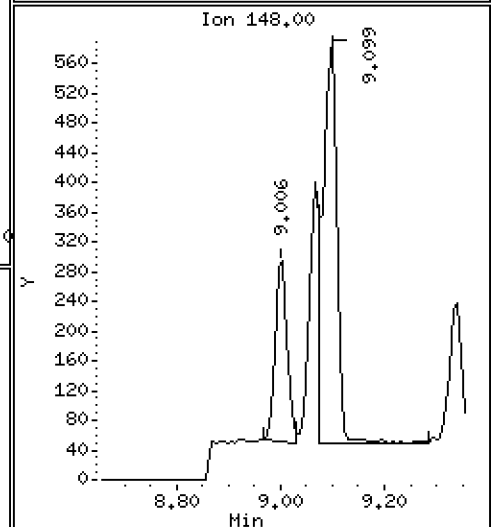
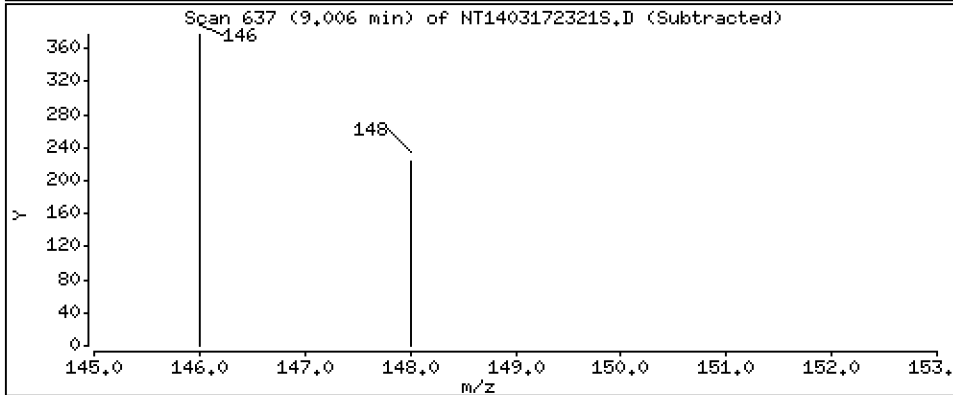
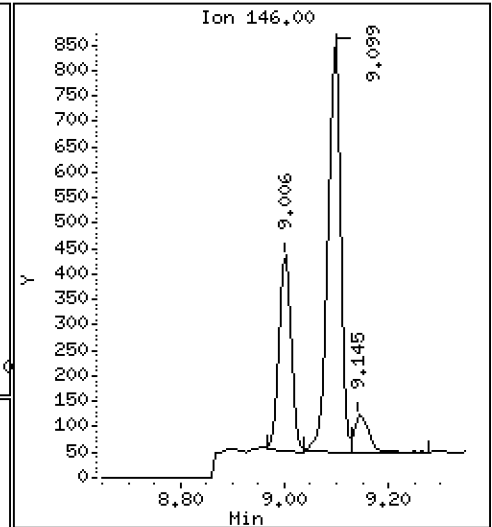
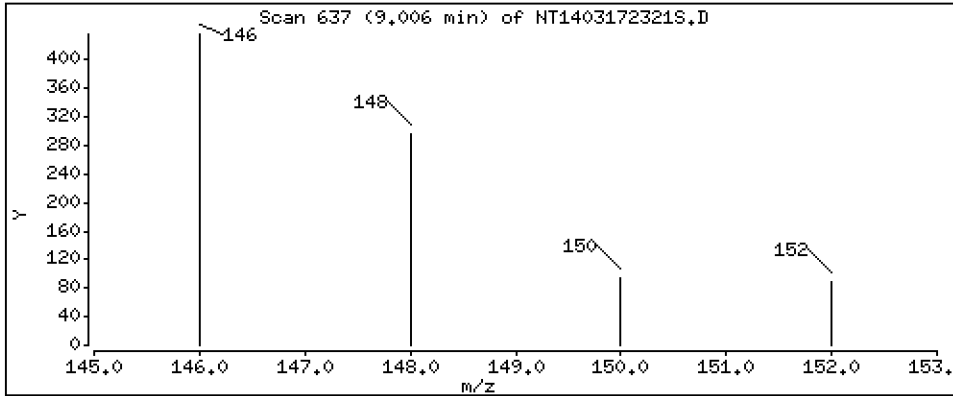
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,006208 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

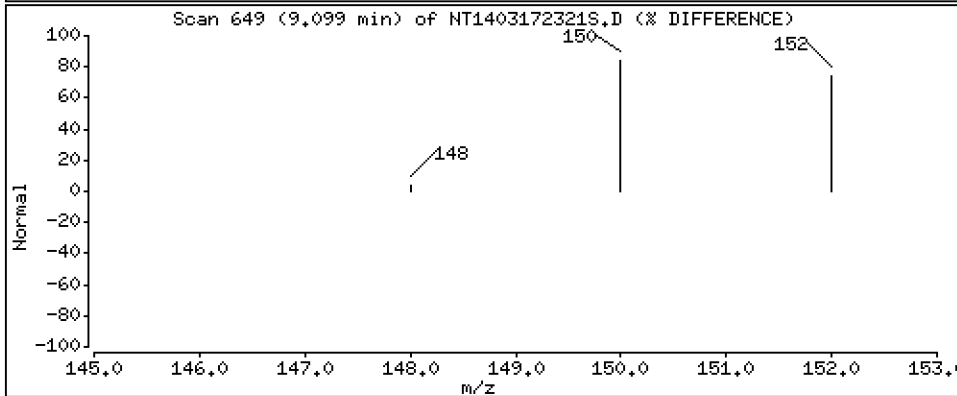
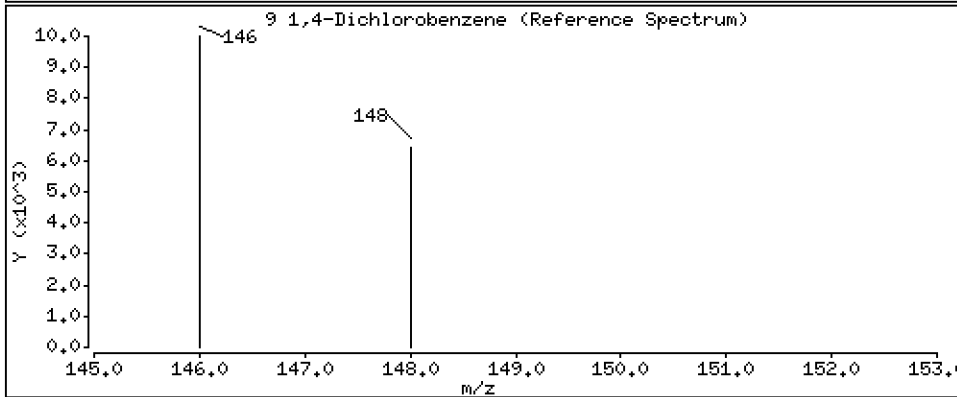
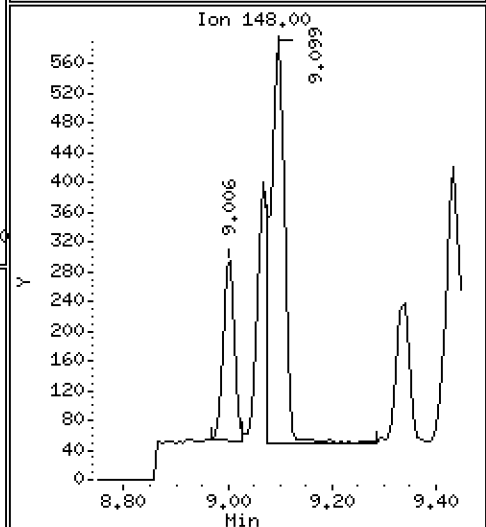
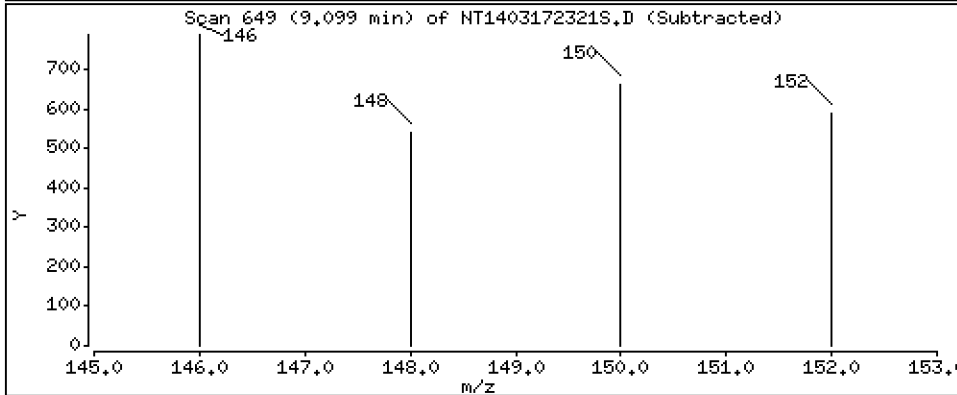
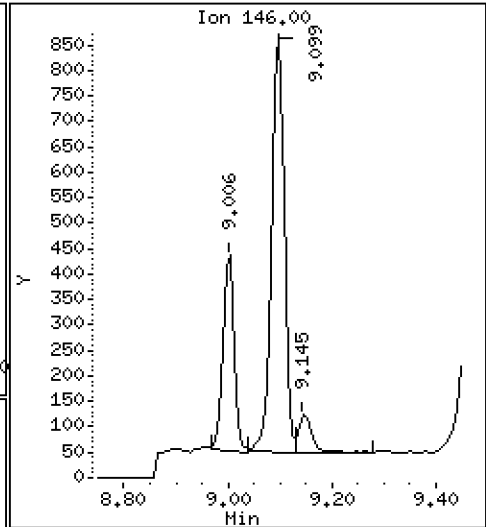
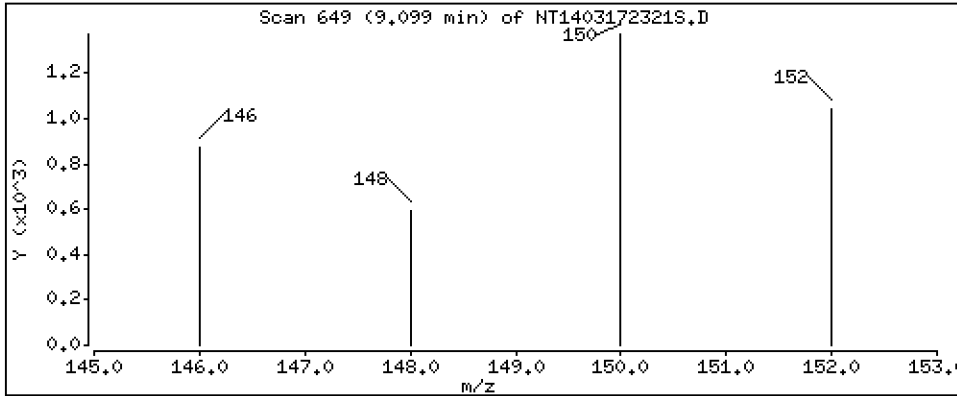
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,01390 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

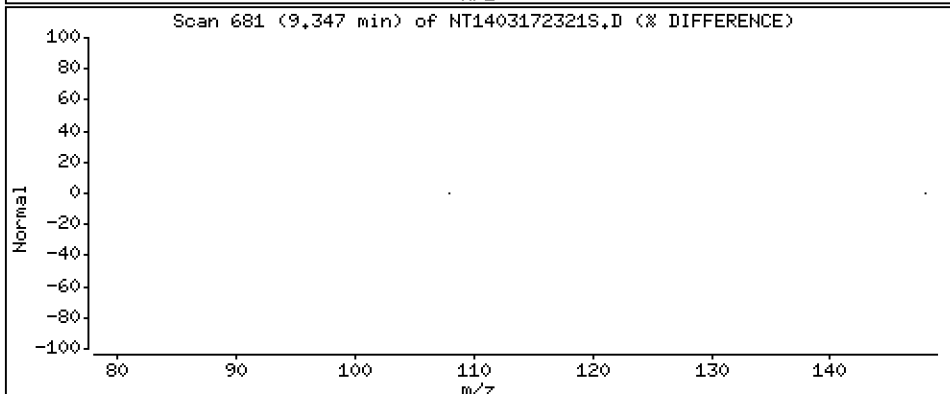
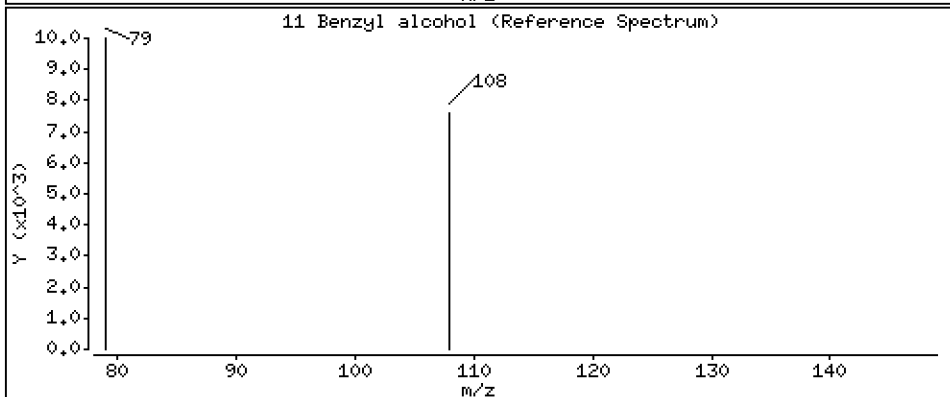
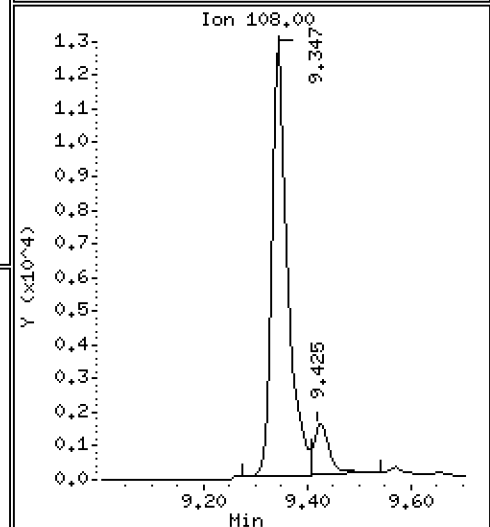
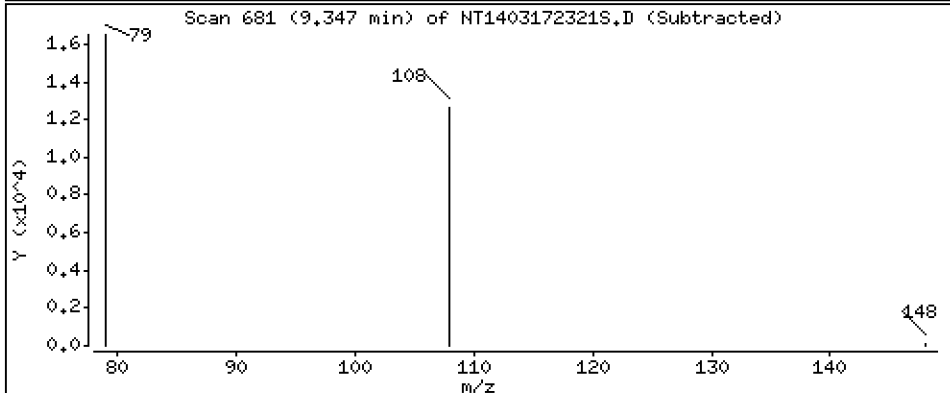
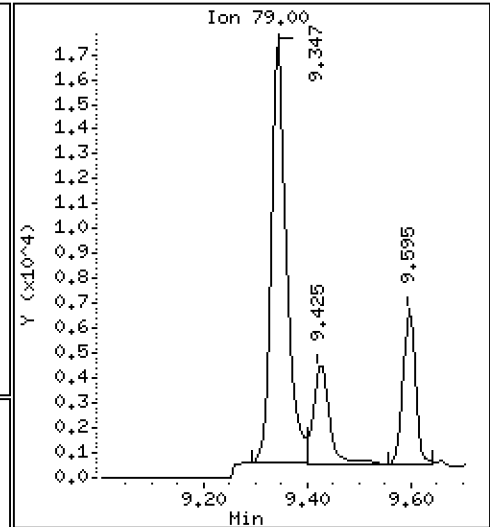
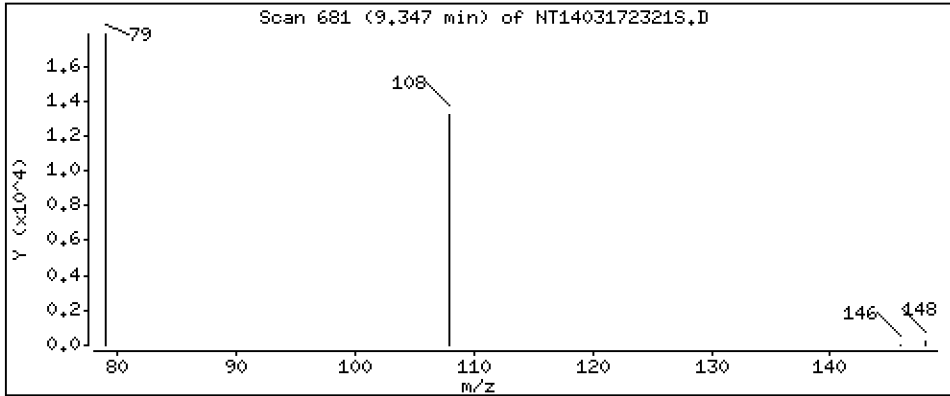
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.5090 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

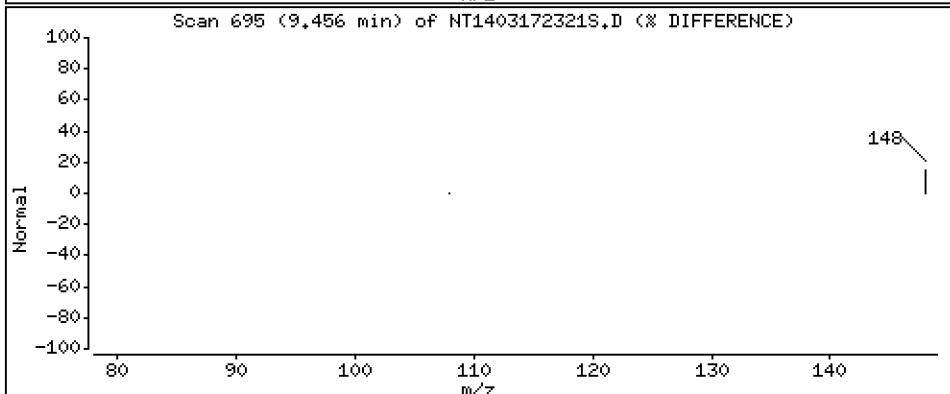
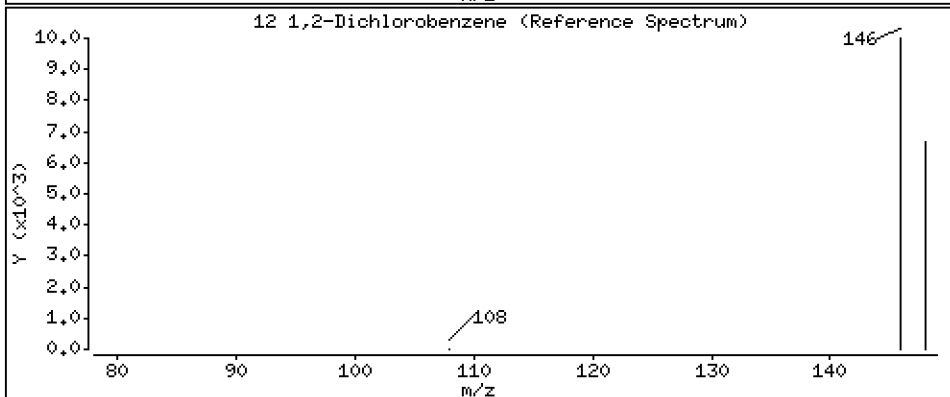
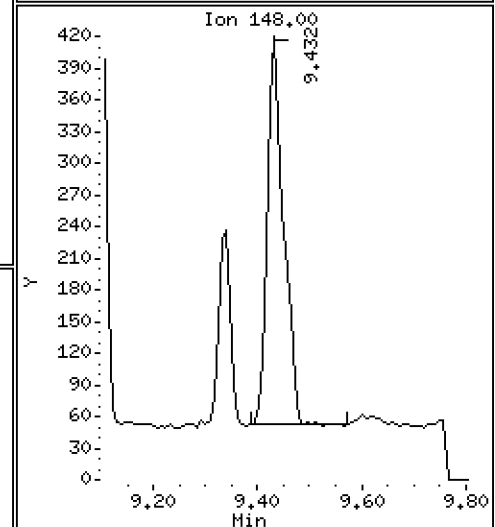
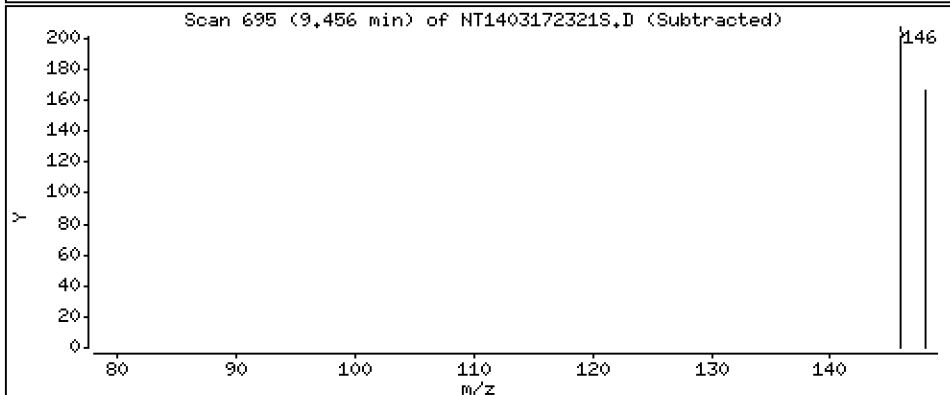
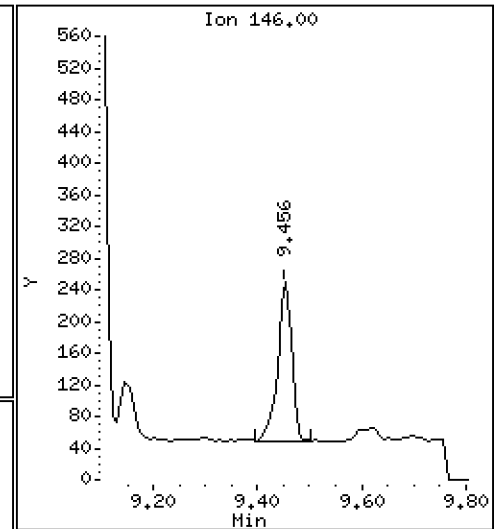
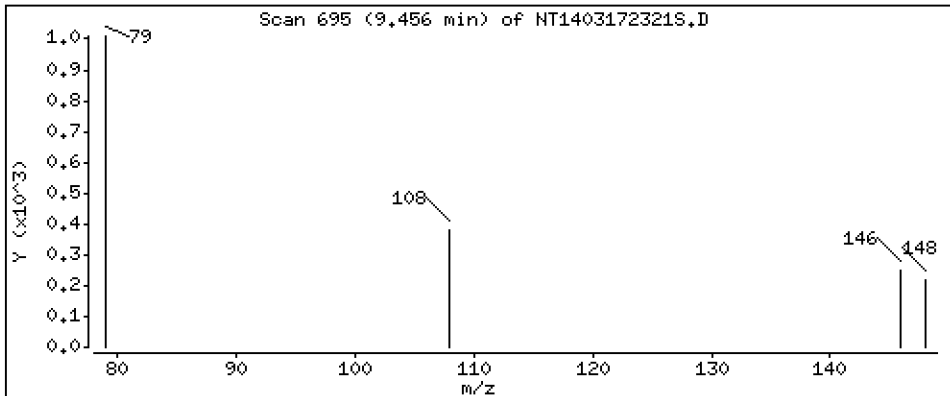
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,003857 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

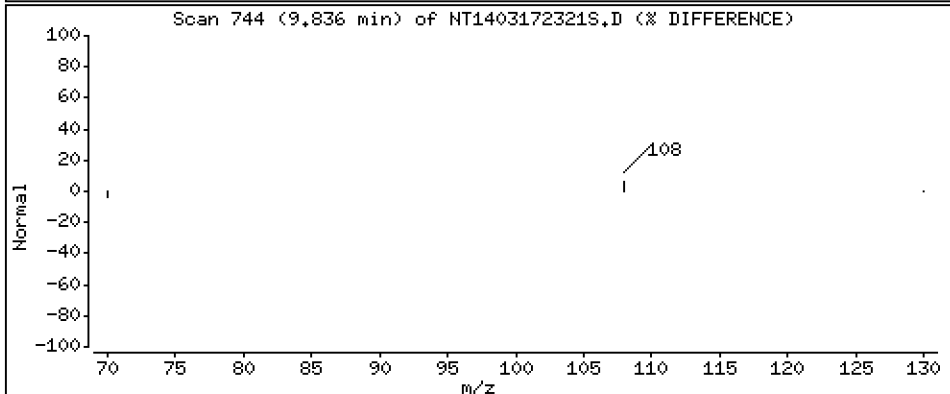
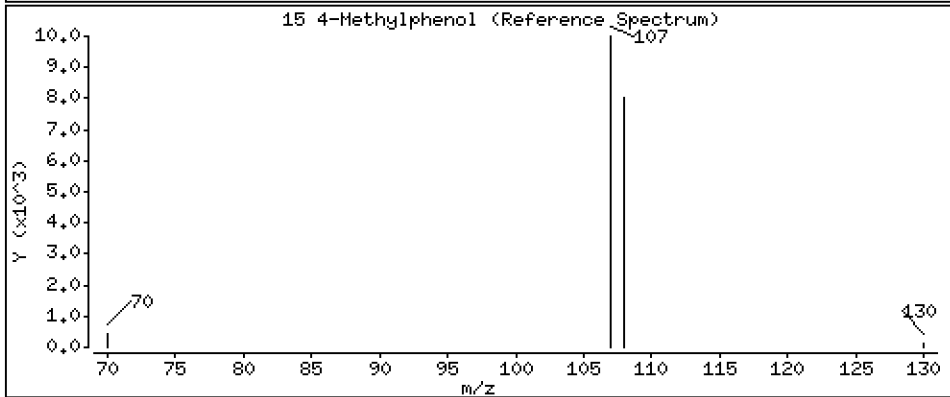
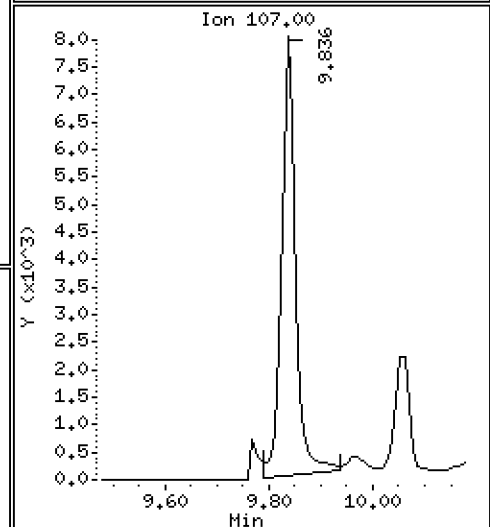
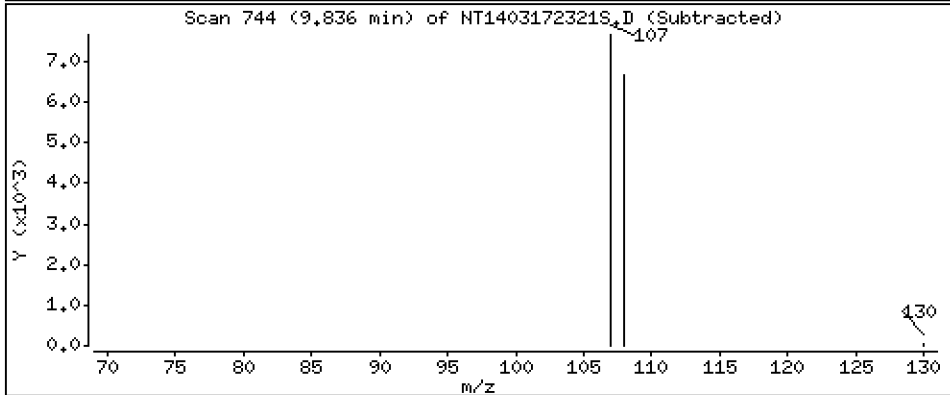
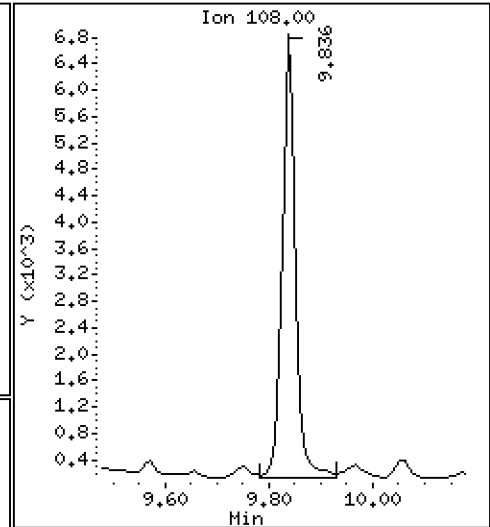
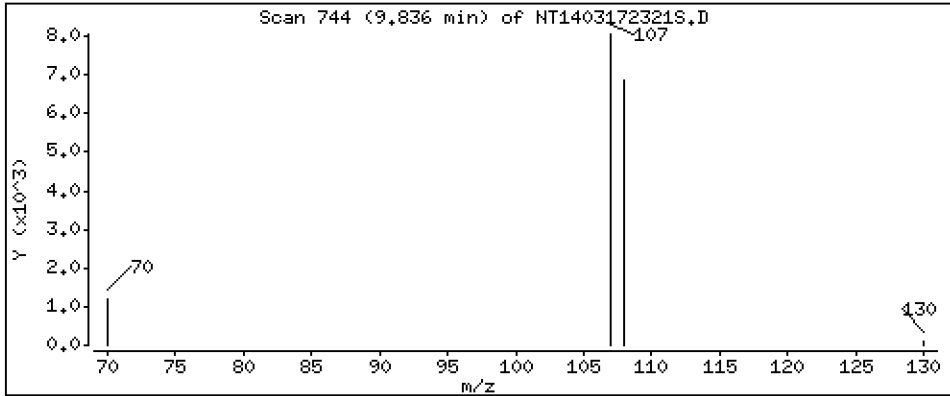
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1388 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

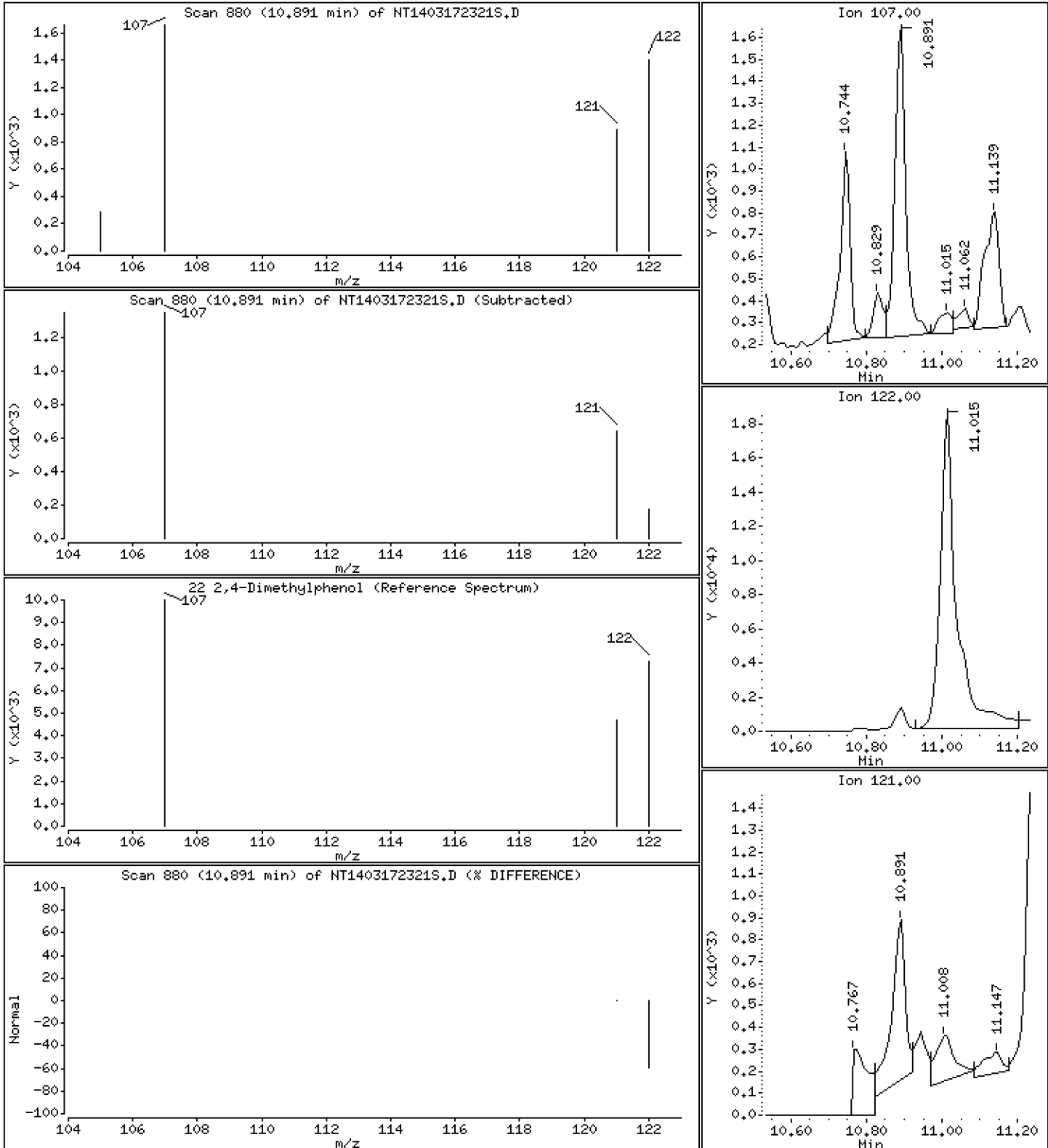
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.03527 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

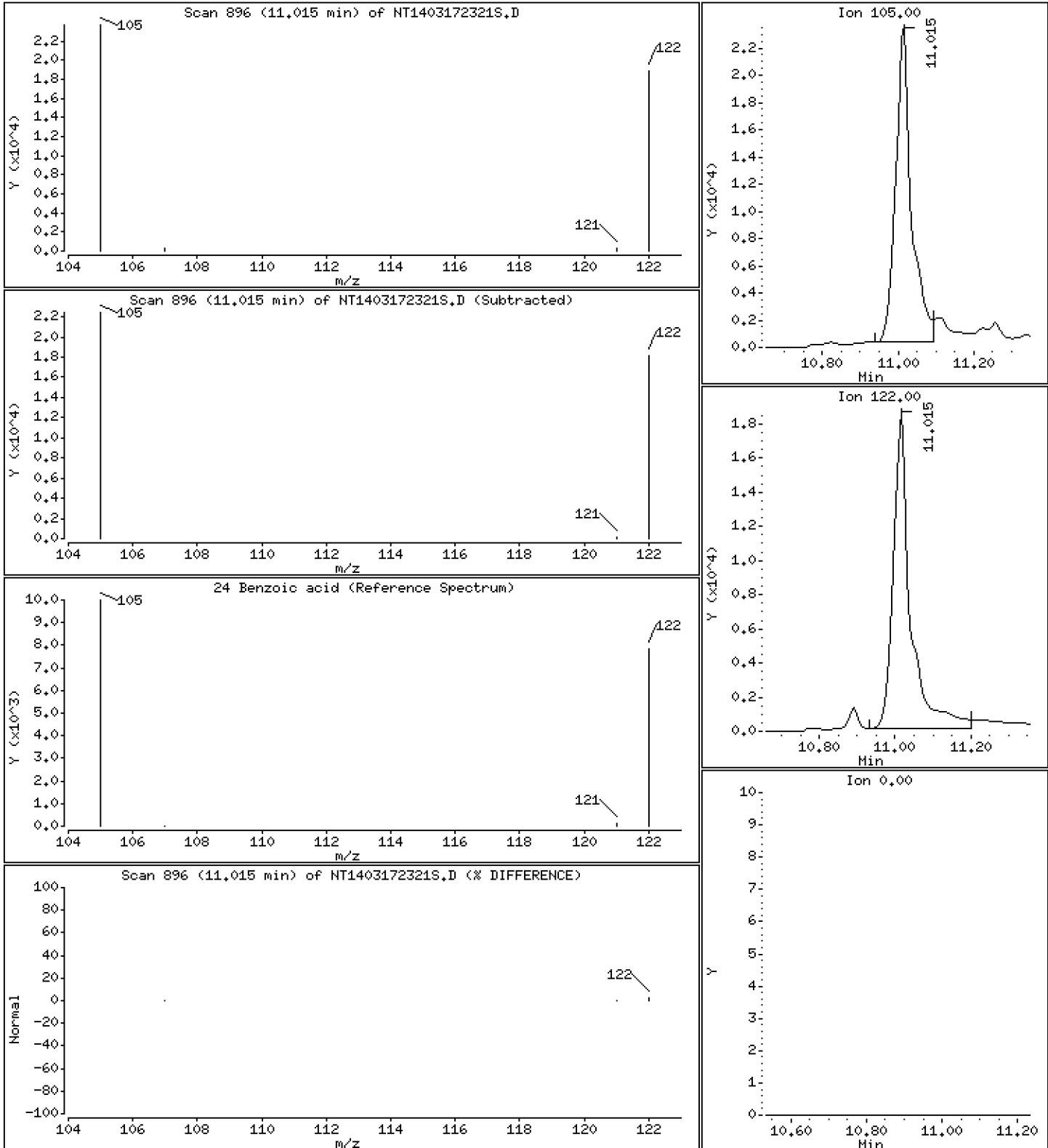
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,119 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

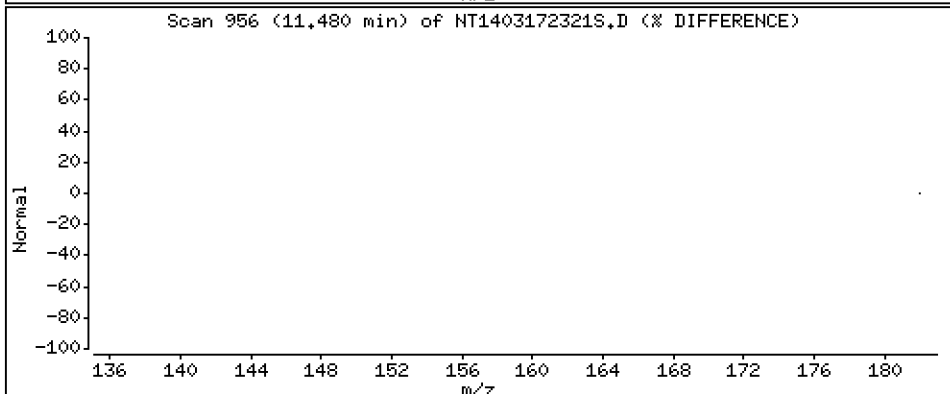
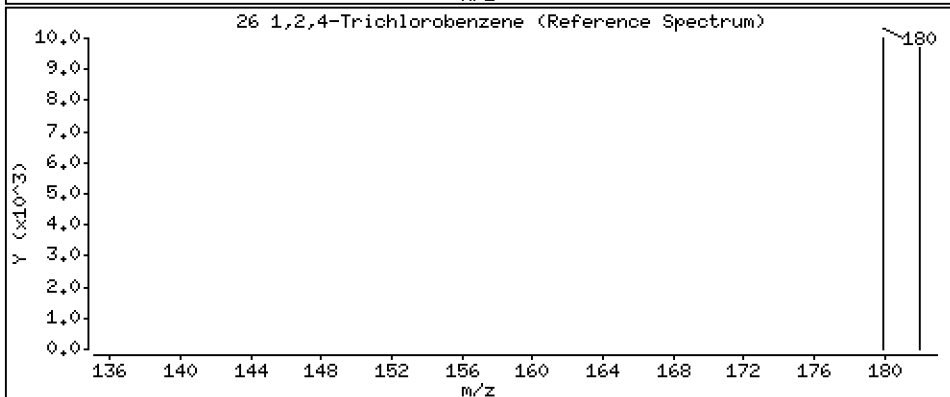
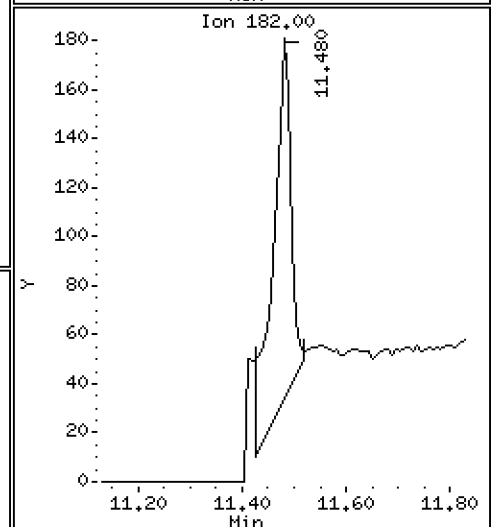
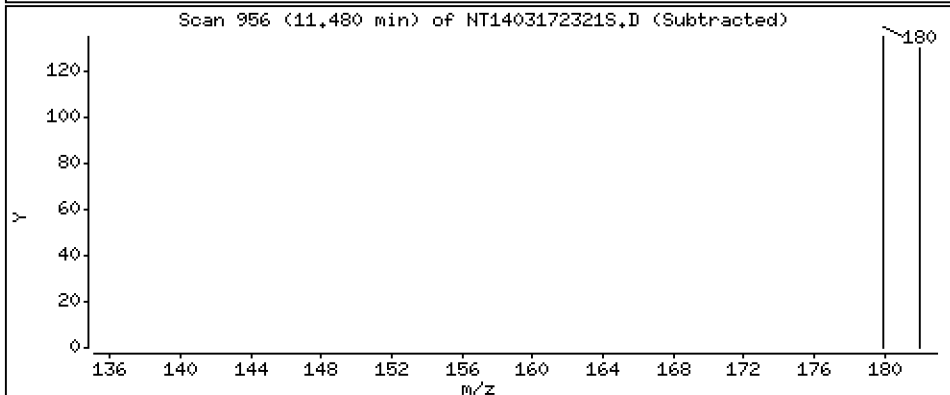
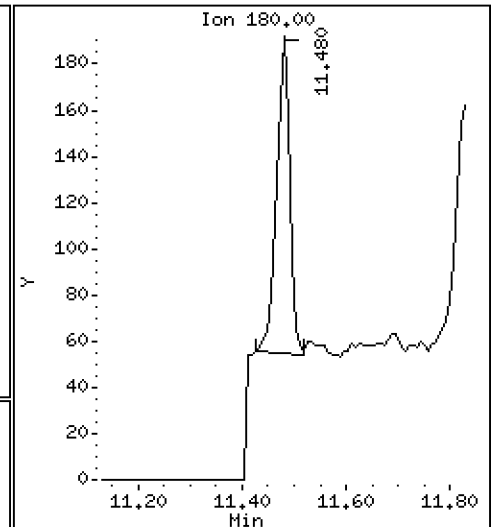
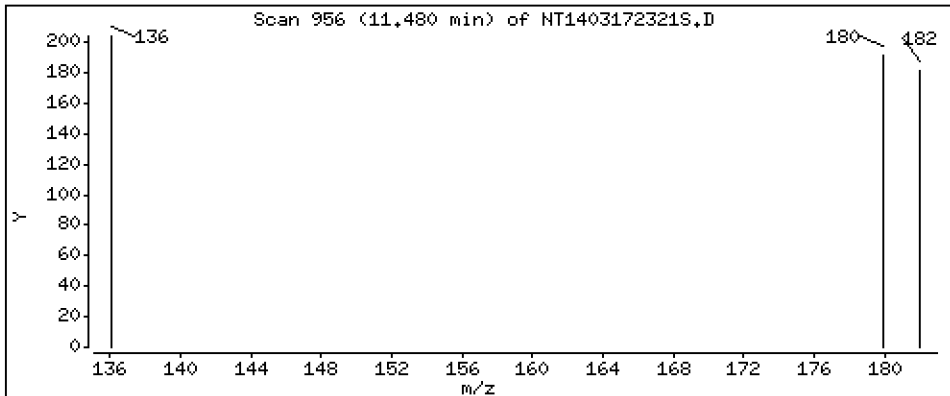
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,003021 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

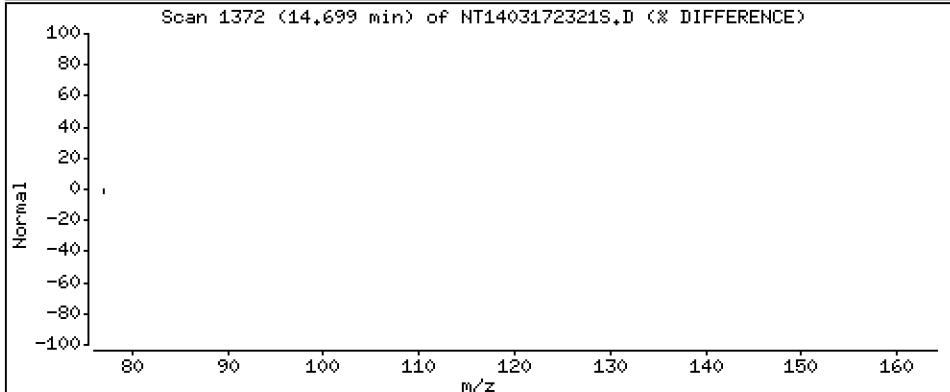
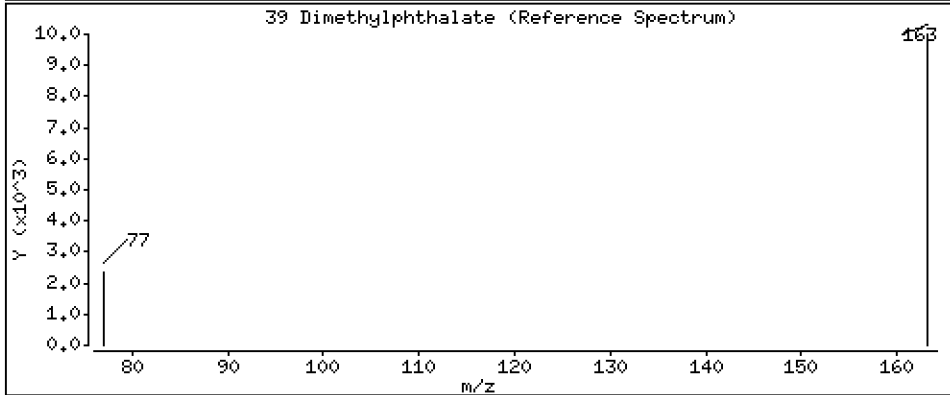
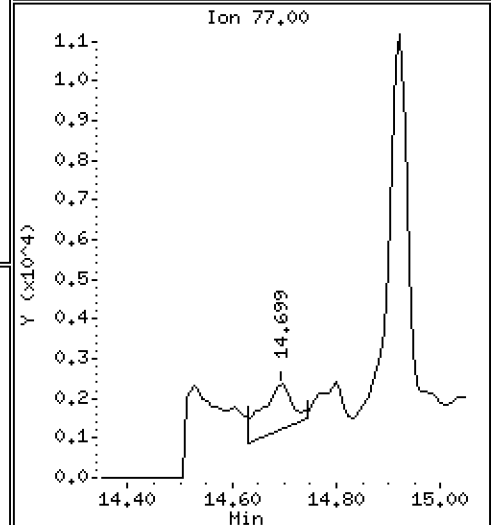
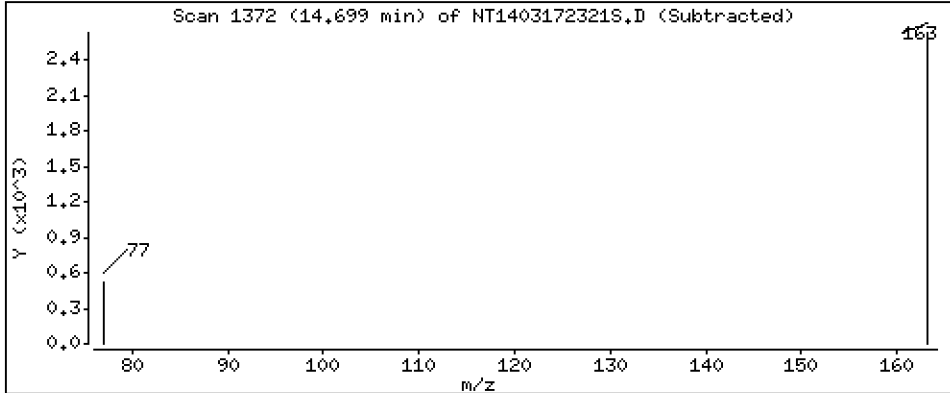
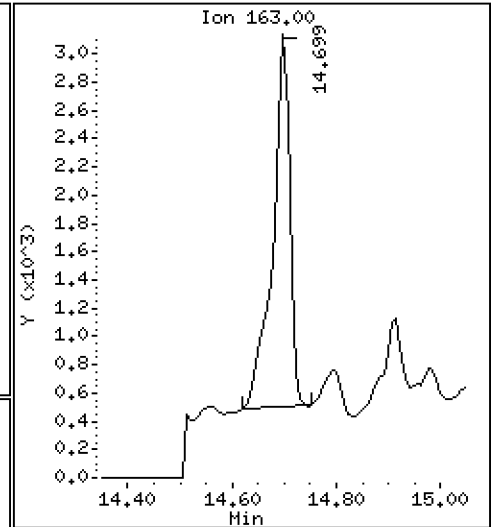
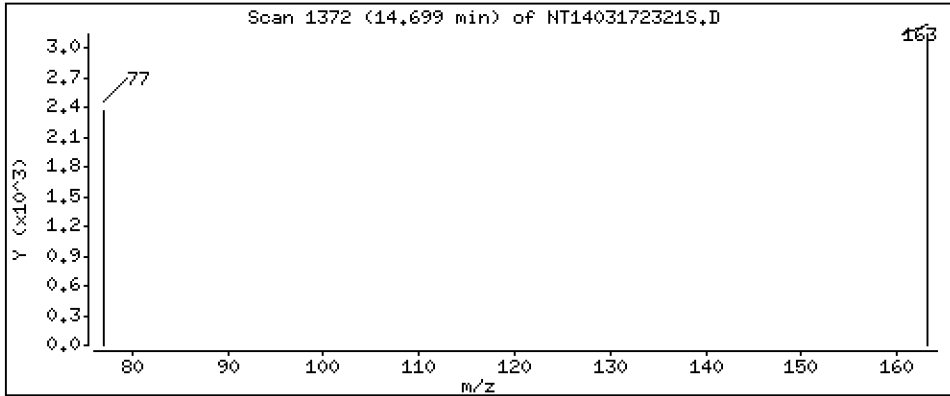
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.04131 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

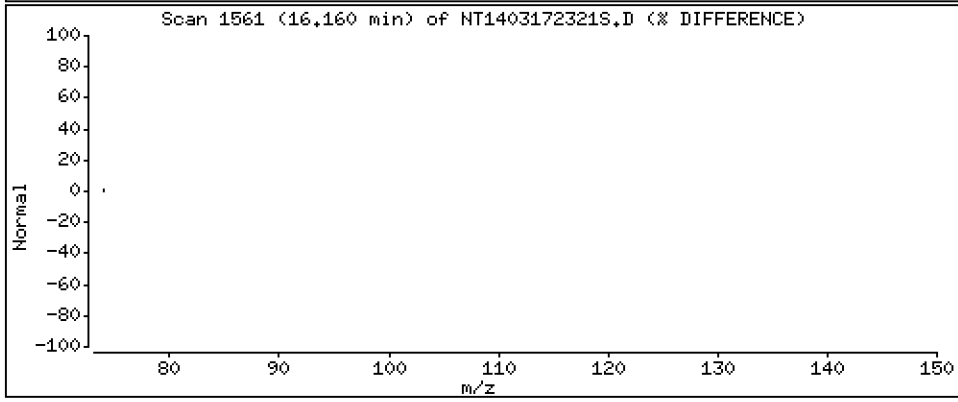
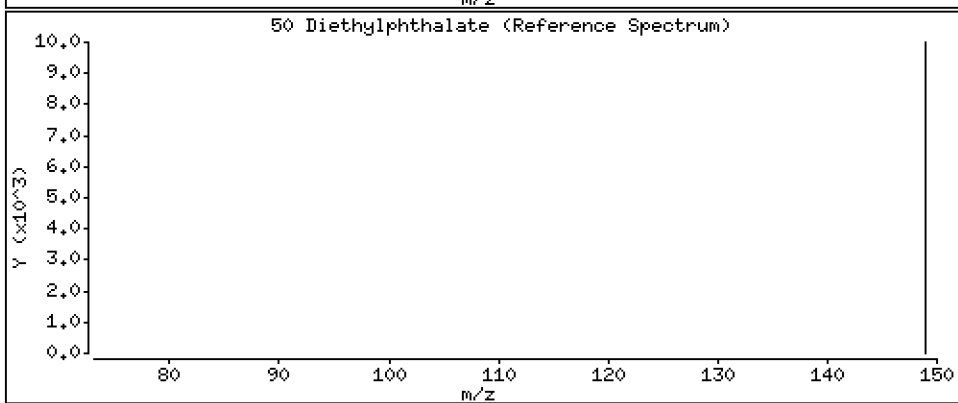
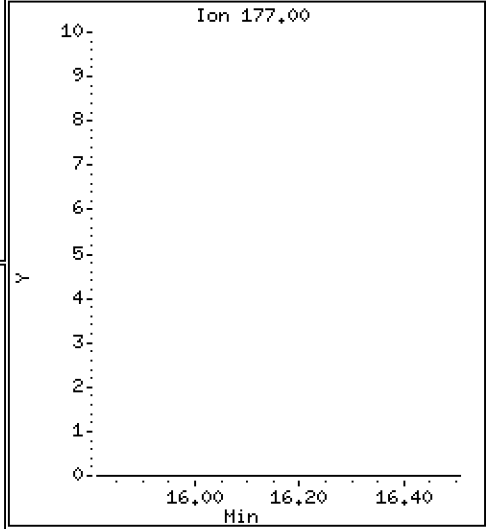
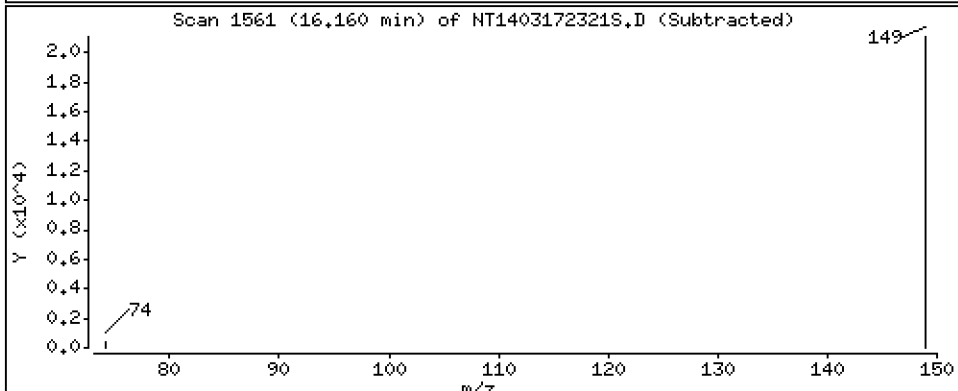
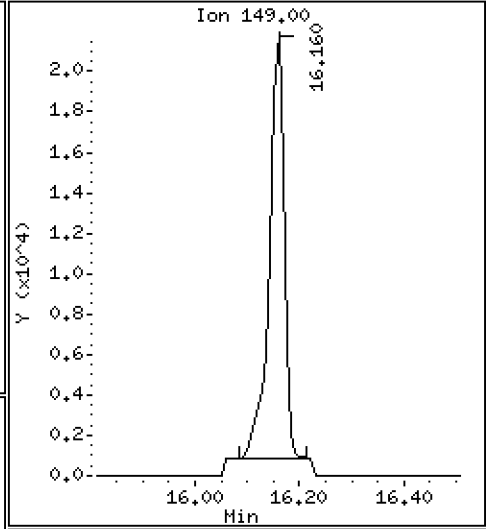
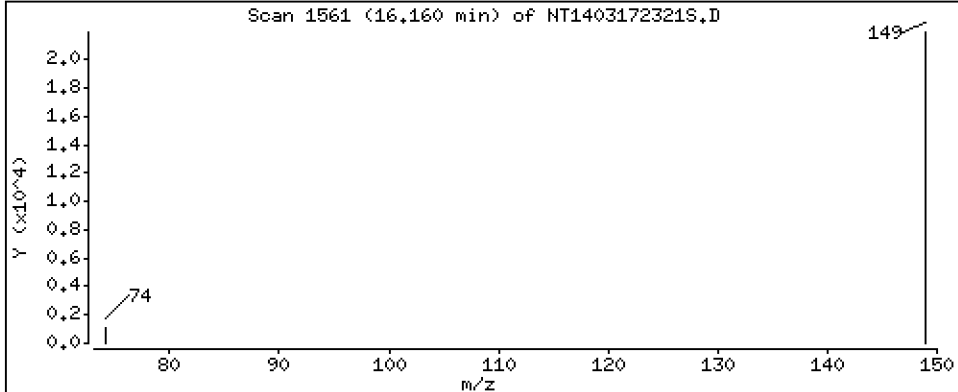
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2652 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

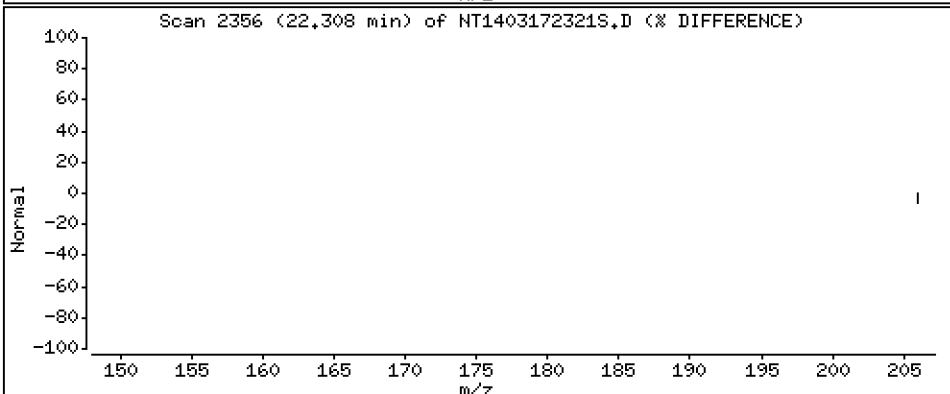
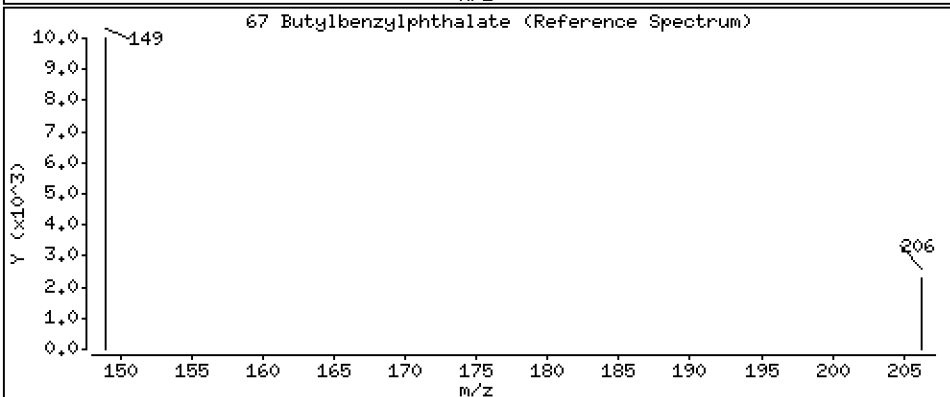
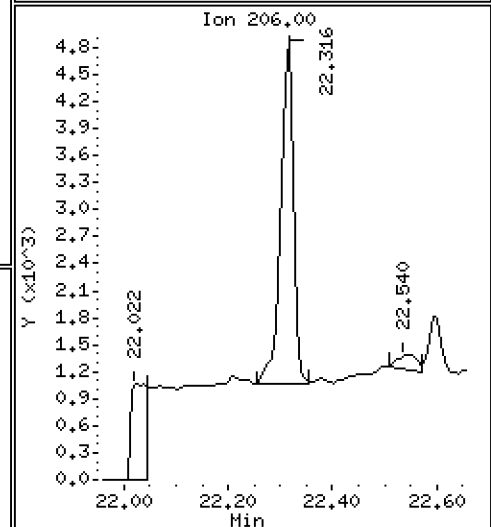
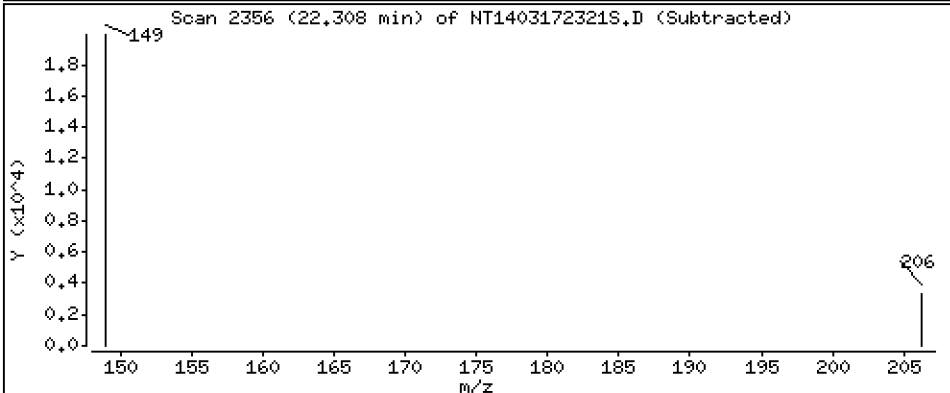
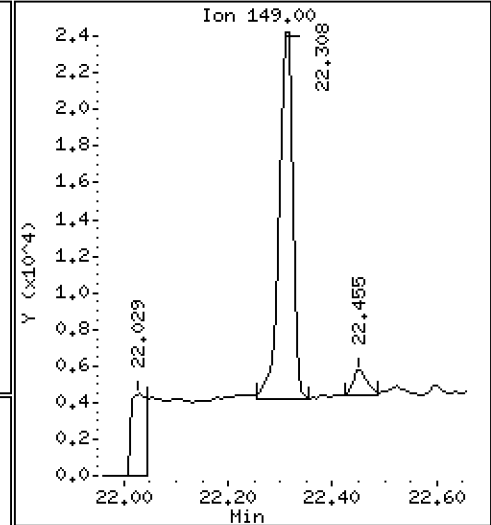
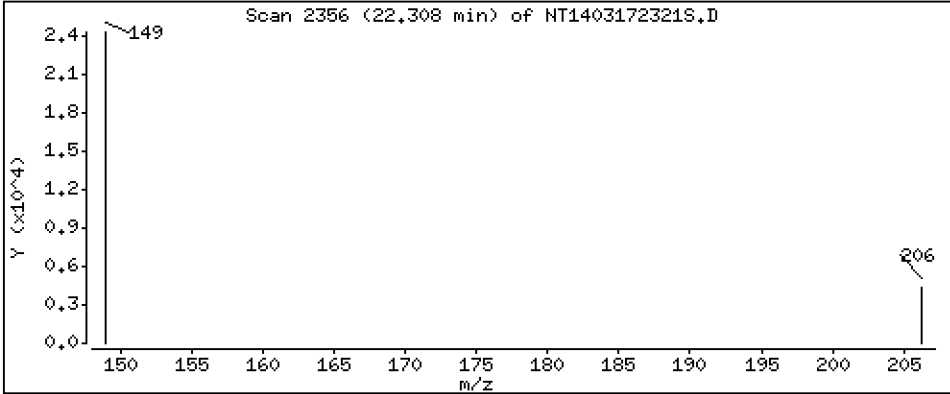
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,7723 ug/mL



Date : 18-MAR-2023 02:31

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-02

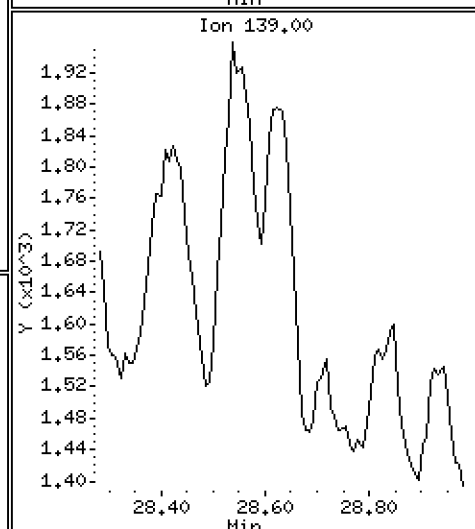
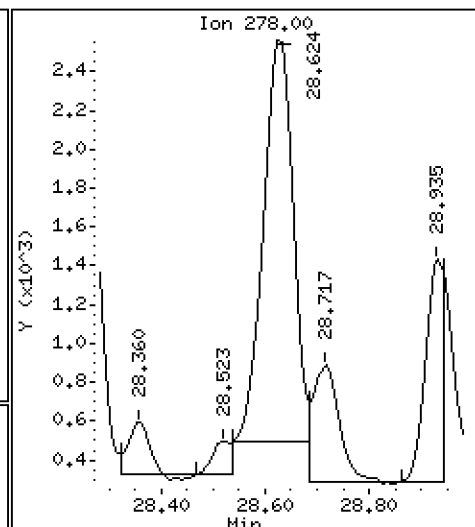
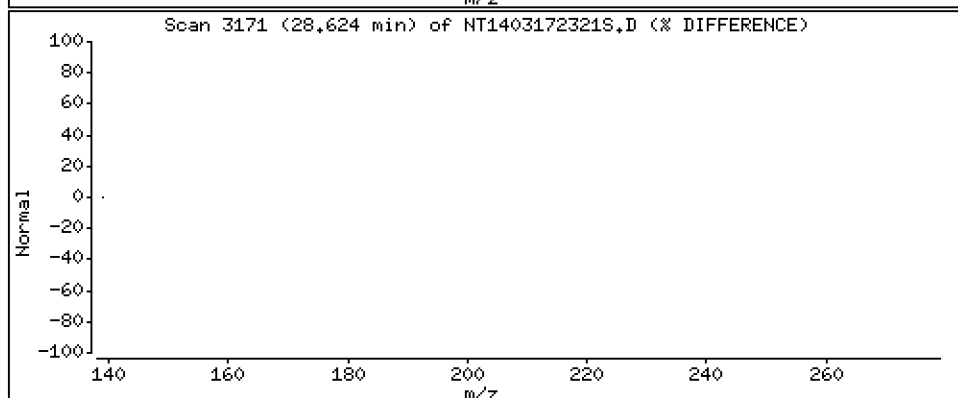
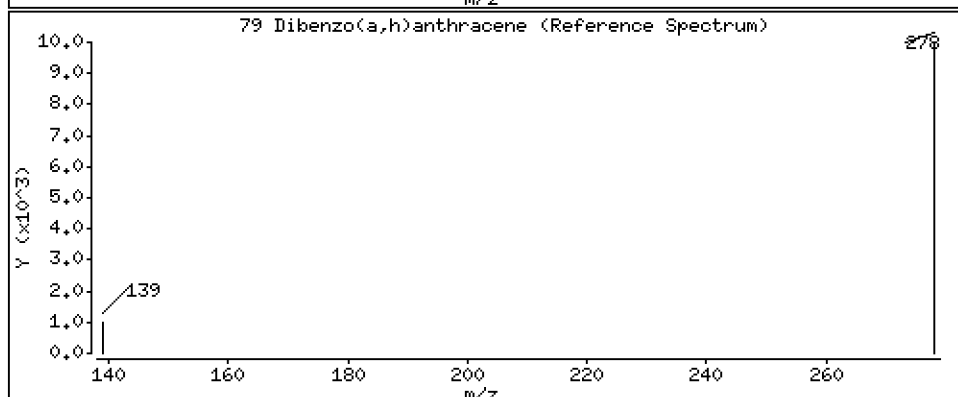
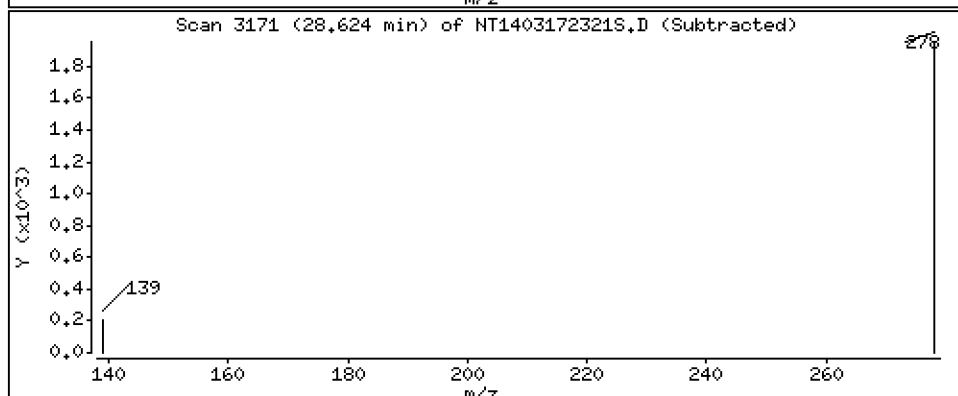
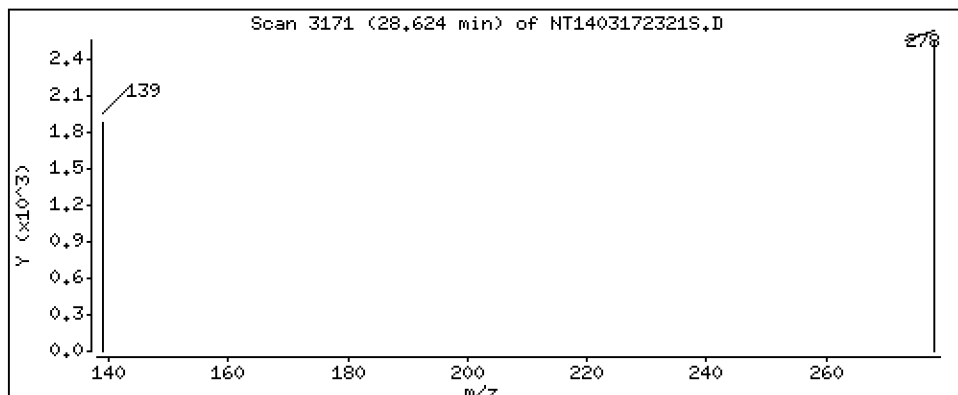
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1664 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172321S.D
 Lab Smp Id: 23B0229-02
 Inj Date : 18-MAR-2023 02:31 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-02
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.842	6.826	(0.755)	255691	3.07226	3.072 (R)
3 Phenol	94		8.441	8.441	(0.931)	52298	0.45696	0.4570
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	608	0.00621	0.006208
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	245187	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	1317	0.01390	0.01390
11 Benzyl alcohol	79		9.347	9.354	(1.031)	34146	0.50901	0.5090
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	356	0.00386	0.003857 (M)
13 2-Methylphenol	108		Compound Not Detected.					
15 4-Methylphenol	108		9.836	9.828	(1.085)	11593	0.13880	0.1388
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		10.891	10.883	(0.942)	2776	0.03527	0.03527
24 Benzoic acid	105		11.015	10.999	(0.952)	66920	1.11939	1.119
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	233	0.00302	0.003021
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	915475	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.698	14.698	(0.967)	5762	0.04131	0.04131 (M)
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	408415	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	39380	0.26519	0.2652
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	726429	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.386	(0.918)	310979	6.97782	6.978 (R)
67 Butylbenzylphthalate	149		22.308	22.308	(0.957)	34903	0.77227	0.7723
* 69 Chrysene-d12	240		23.299	23.291	(1.000)	258515	4.00000	
* 77 Perylene-d12	264		25.939	25.931	(1.000)	195534	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.631	(1.103)	8248	0.16639	0.1664
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172321S.D
 Lab Smp Id: 23B0229-02
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	245187	8.87
27 Naphthalene-d8	830434	415217	1660868	915475	10.24
42 Acenaphthene-d10	389907	194954	779814	408415	4.75
59 Phenanthrene-d10	763679	381840	1527358	726429	-4.88
69 Chrysene-d12	415791	207896	831582	258515	-37.83
77 Perylene-d12	274872	137436	549744	195534	-28.86

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172321S.D

Lab ID: 23B0229-02

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 02:31

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

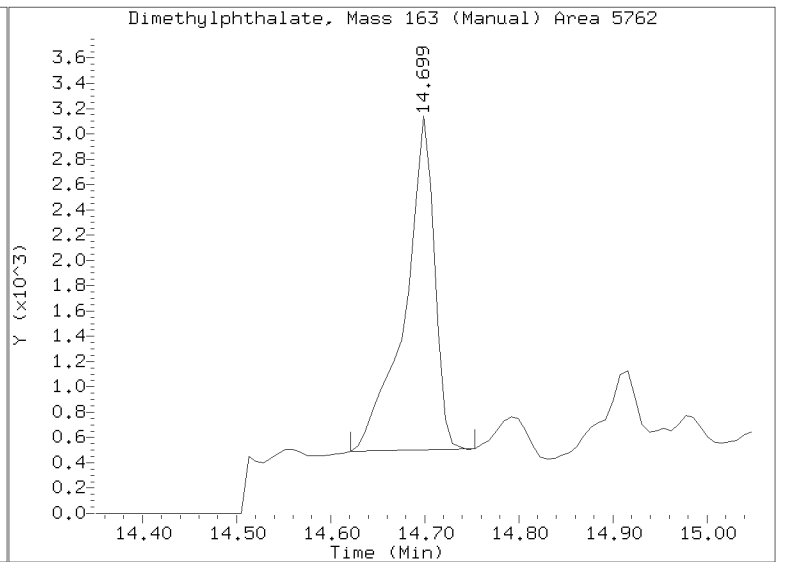
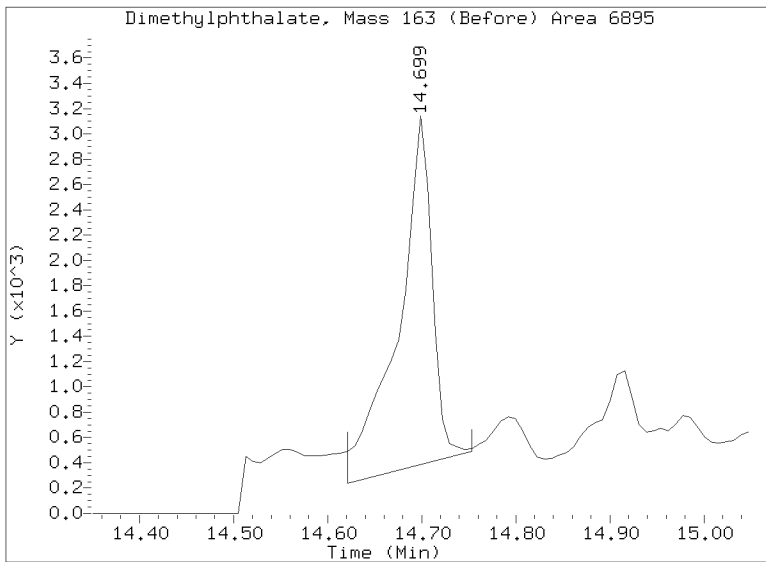
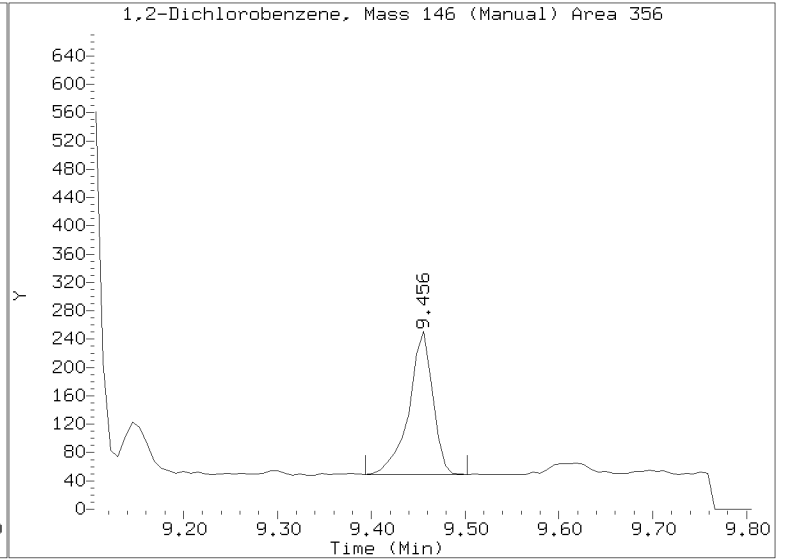
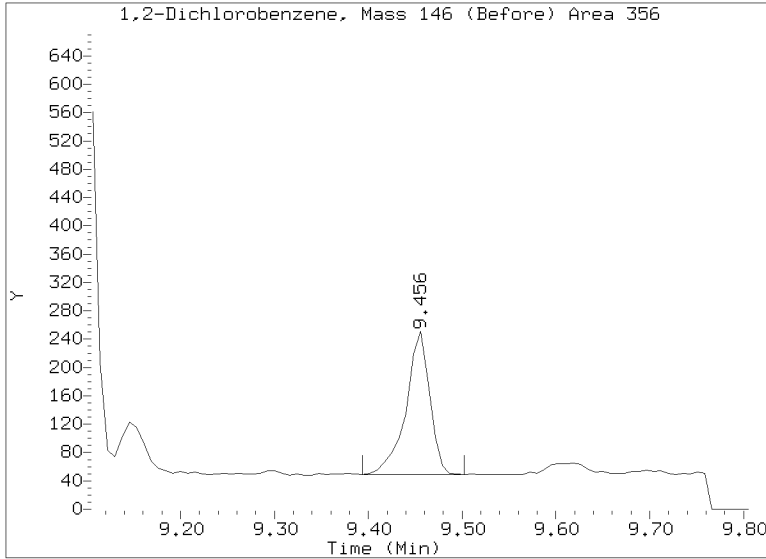
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172321S.D
Injection Date: 18-MAR-2023 02:31
Lab ID:23B0229-02 Client ID:
Report Date: 03/23/2023 16:56





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-03 A

SDG: 23B0229

Sampled: 02/08/23 11:52

Prepared: 02/17/23 15:00

File ID: NT1403172322S.D

% Solids: 54.81

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 03:07

Batch: BLB0424

Sequence: SLC0376

Initial/Final: 18.45 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00050

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	17.4		0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	56.1		2.5	19.8
65-85-0	Benzoic acid	1	113	Q	13.3	98.9
105-67-9	2,4-Dimethylphenol	1	19.8	U	2.1	19.8
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.7	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	19.8	U	2.1	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	741.66	379	51.1	27 - 120	
p-Terphenyl-d14	494.44	772	156	37 - 120	*,Q

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723225.D

Date: 18-MAR-2023 03:07

Client ID:

Sample Info: 23B0229-03

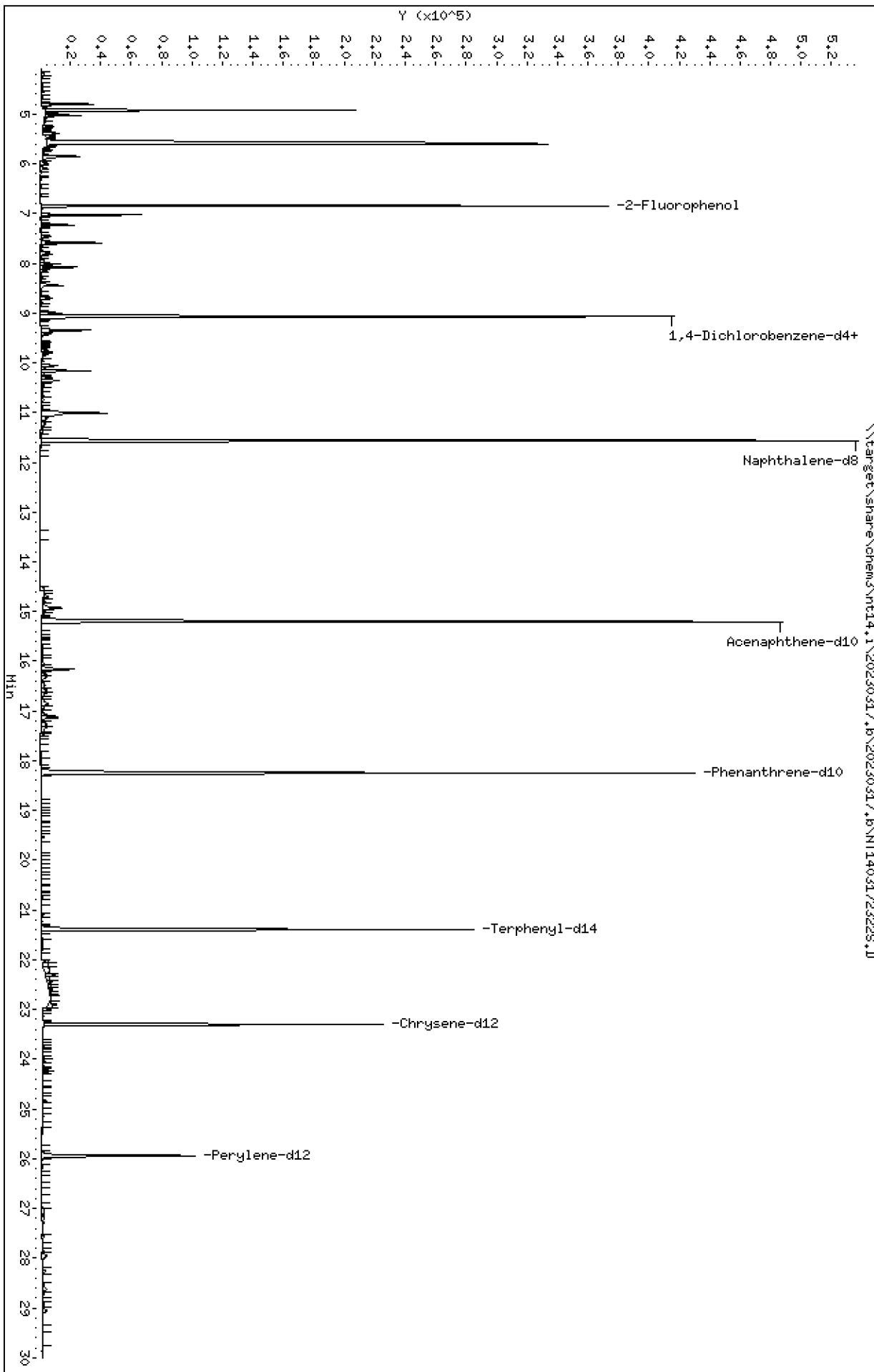
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723225.D



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

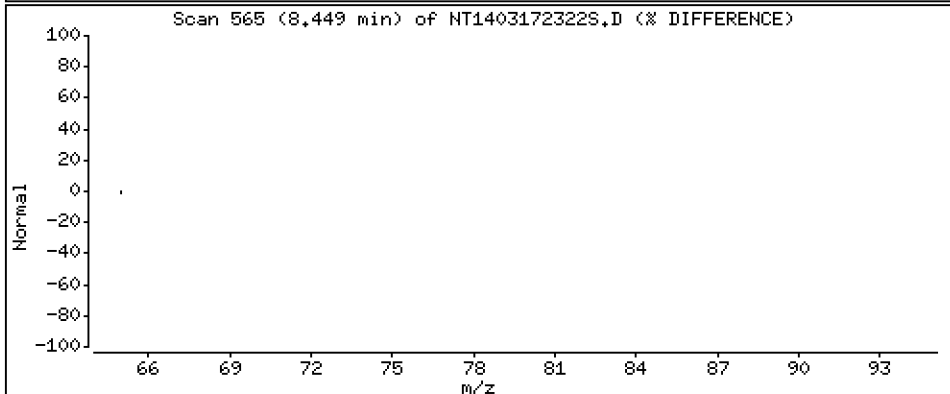
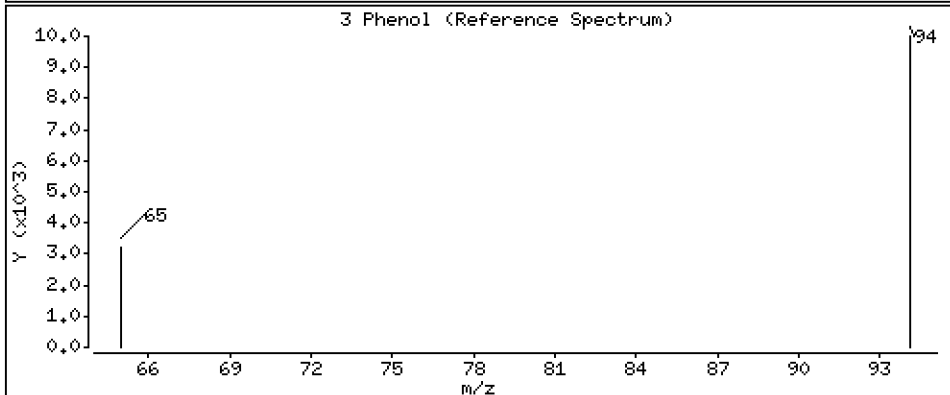
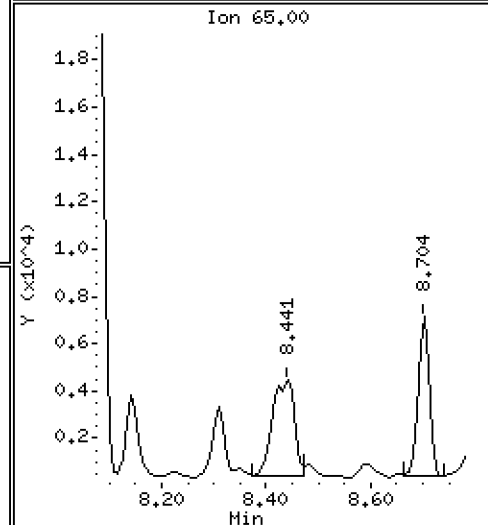
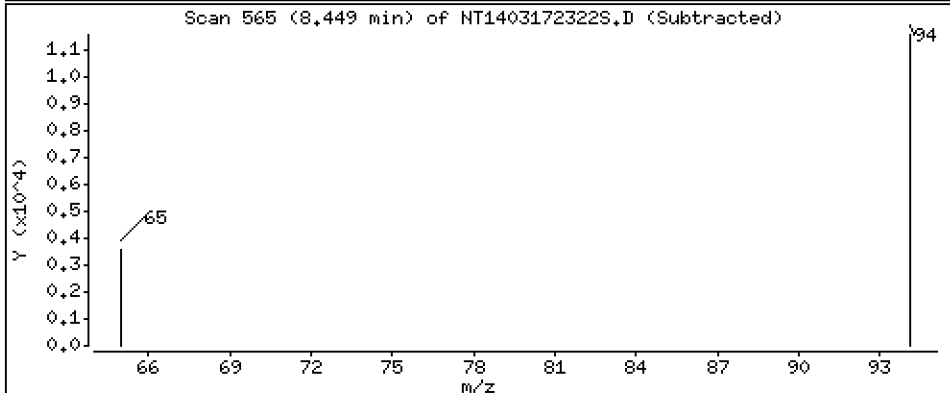
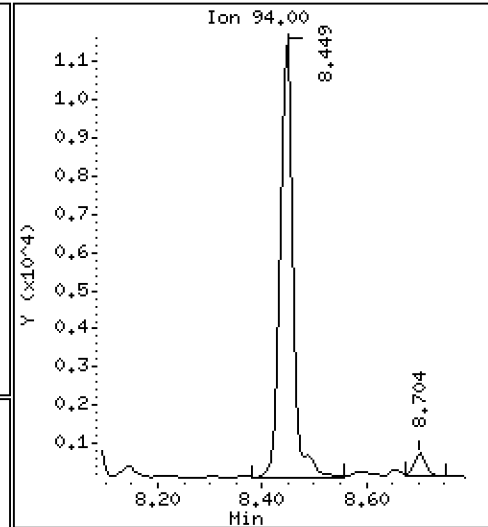
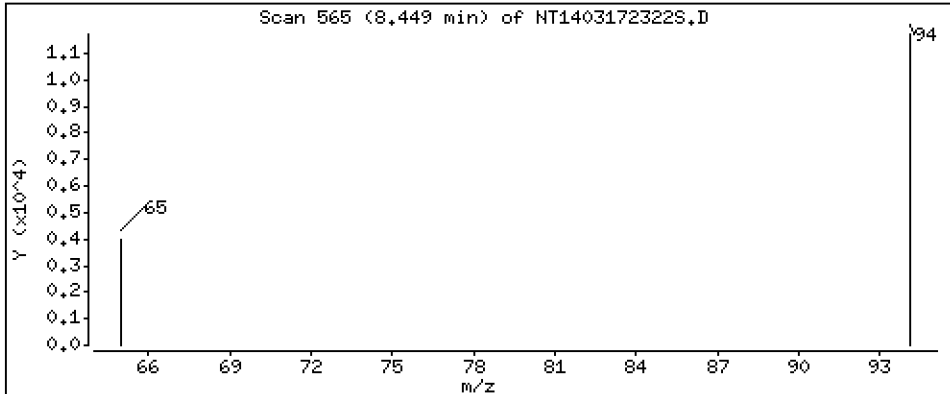
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1643 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

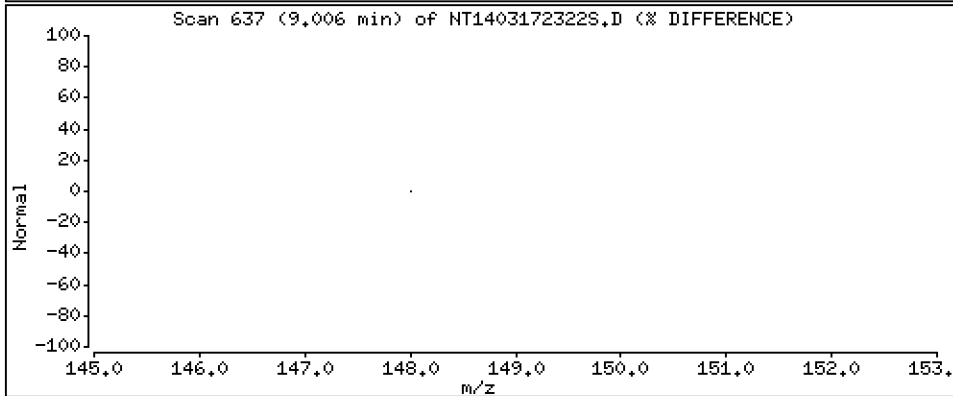
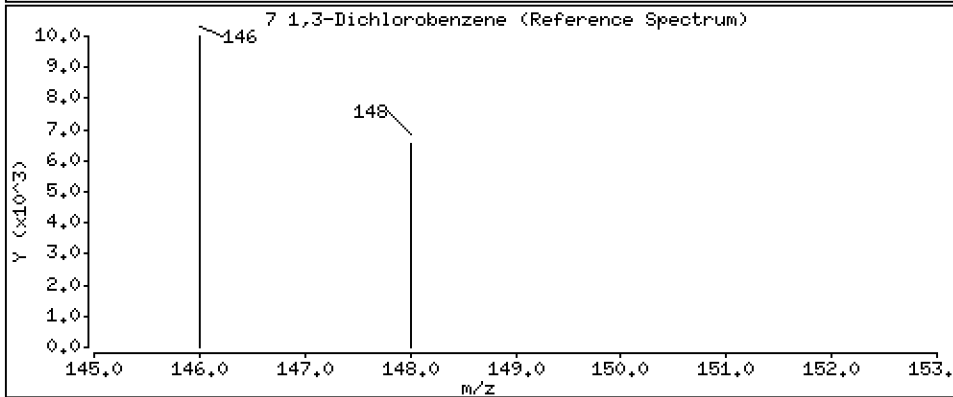
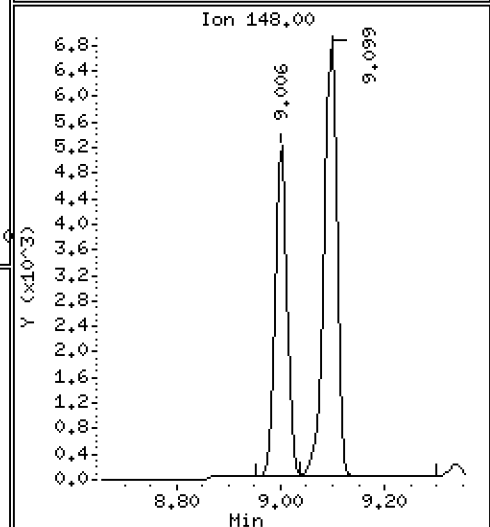
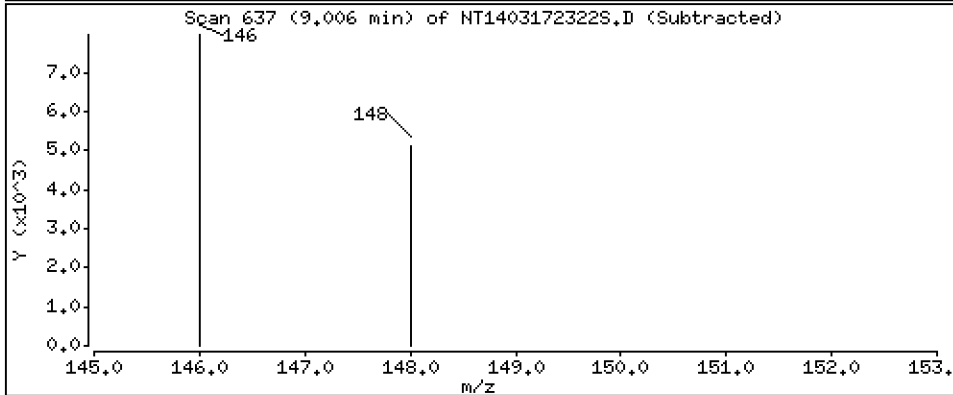
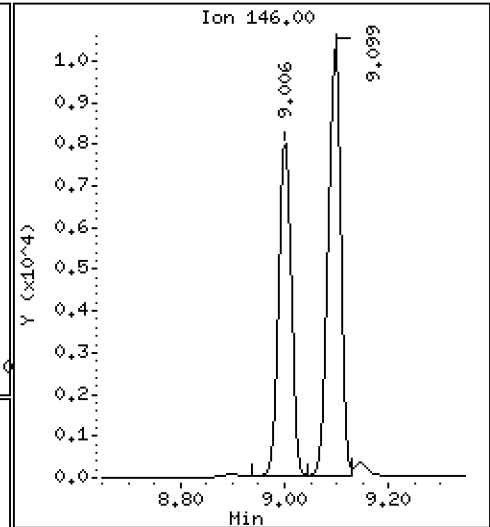
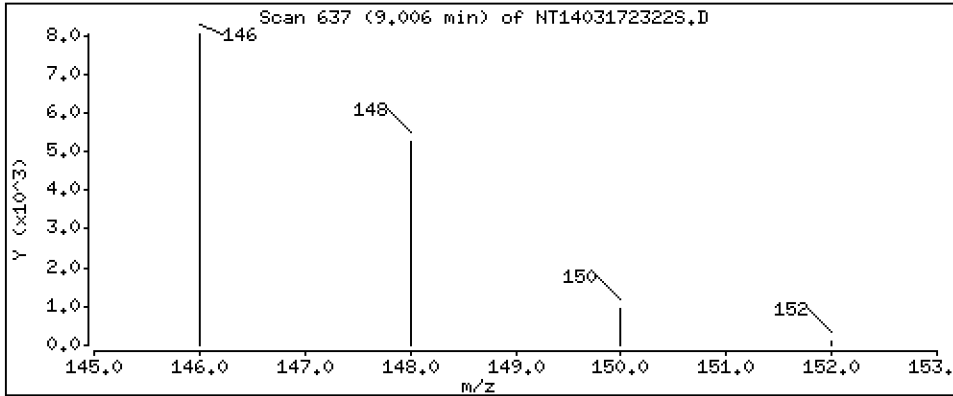
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.1322 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

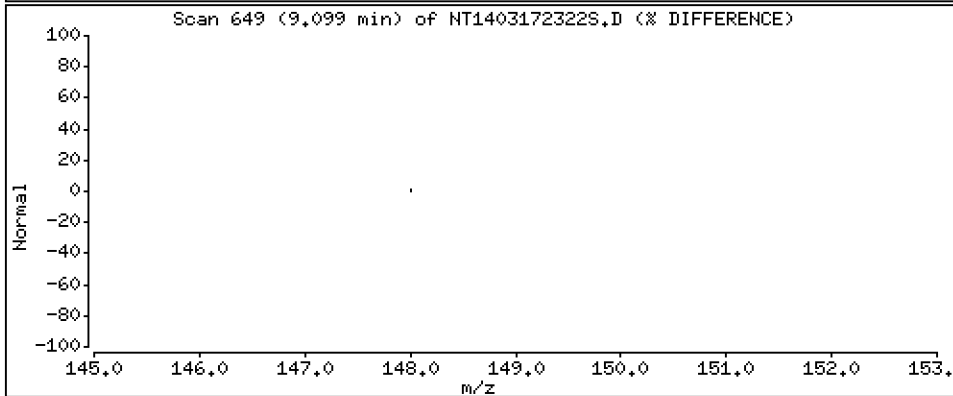
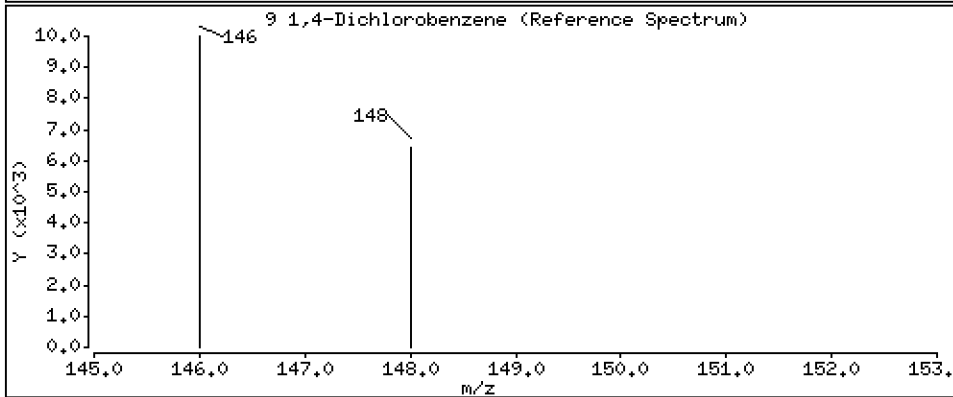
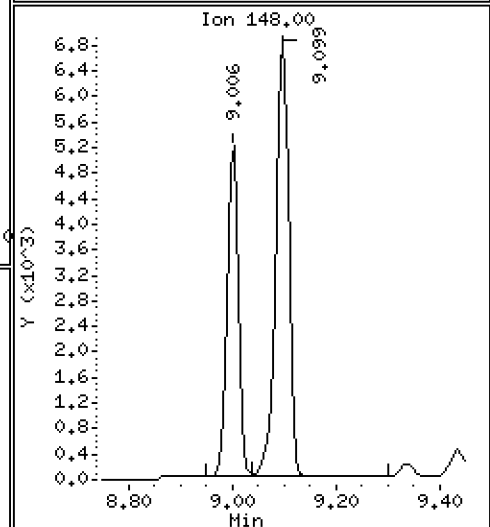
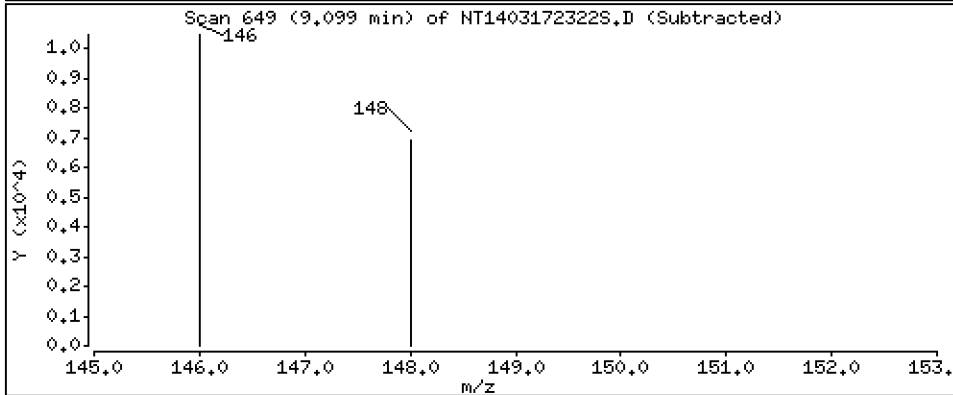
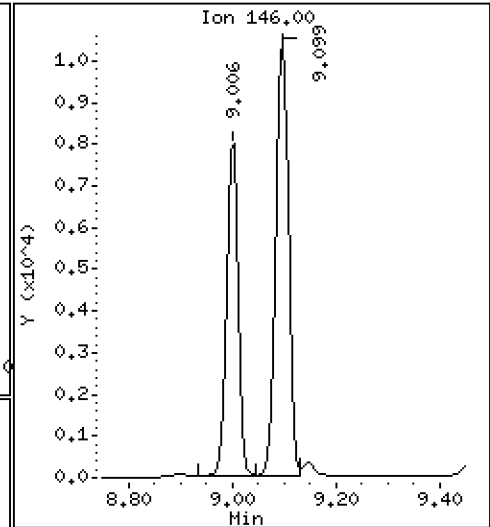
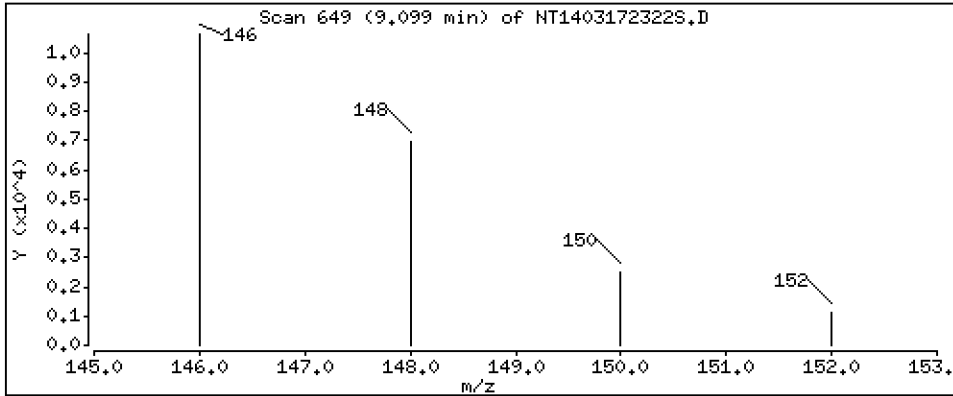
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1760 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

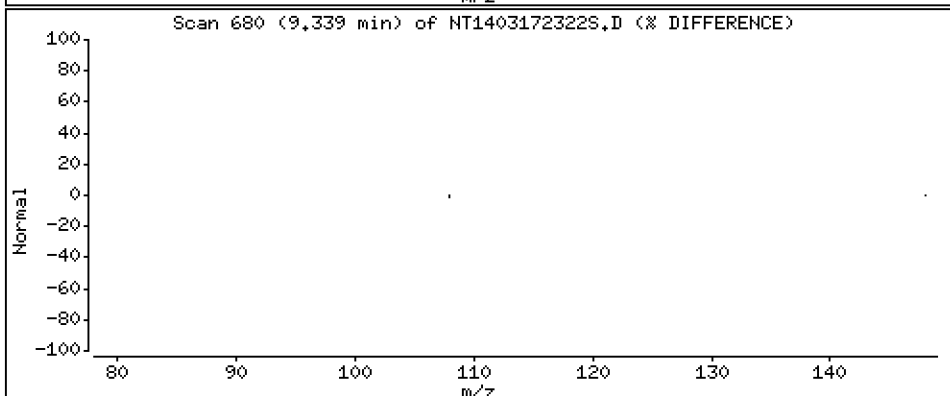
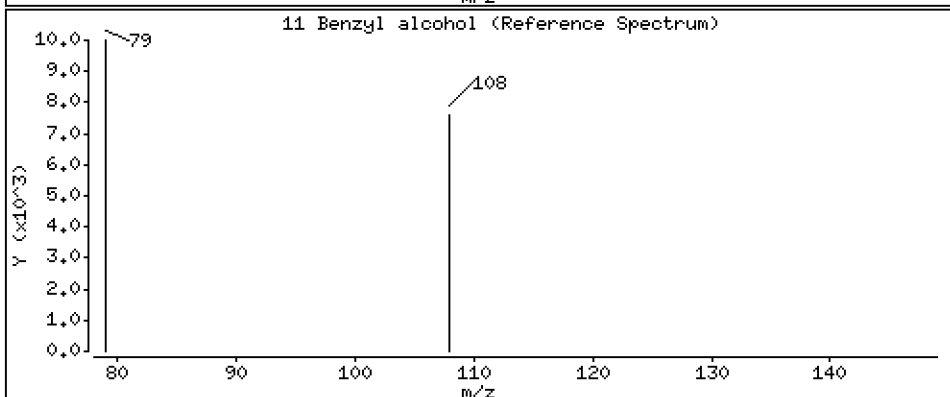
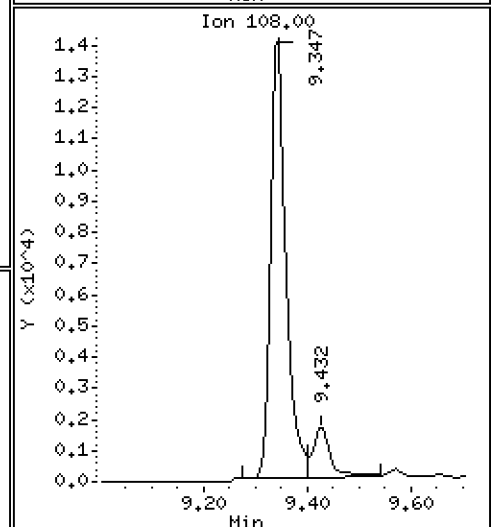
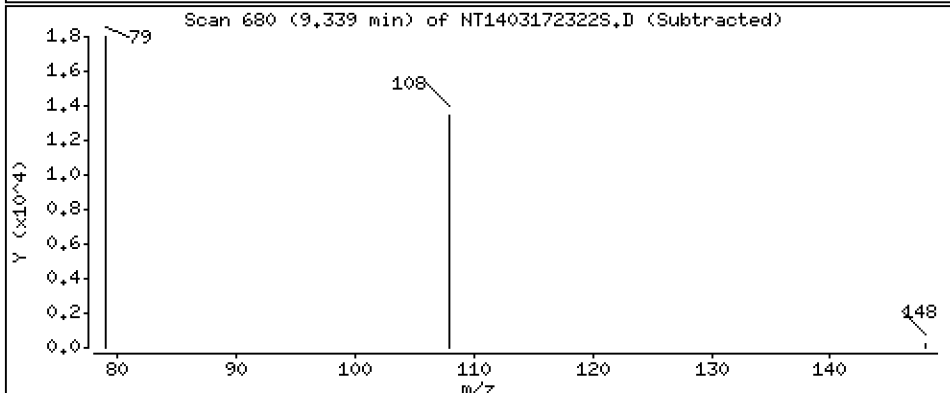
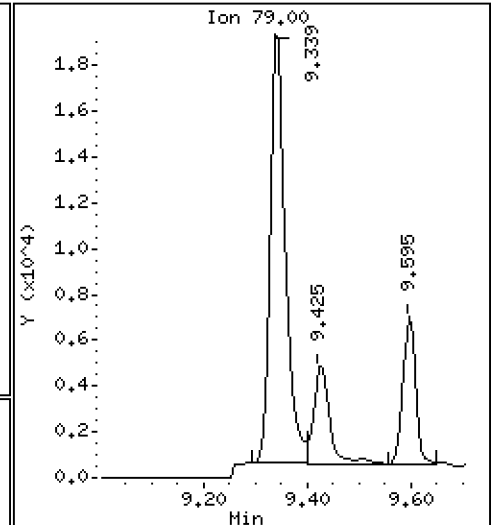
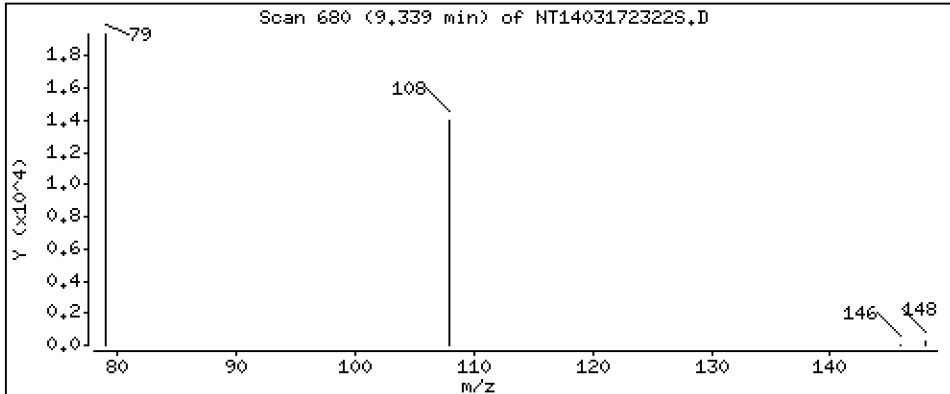
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.5677 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

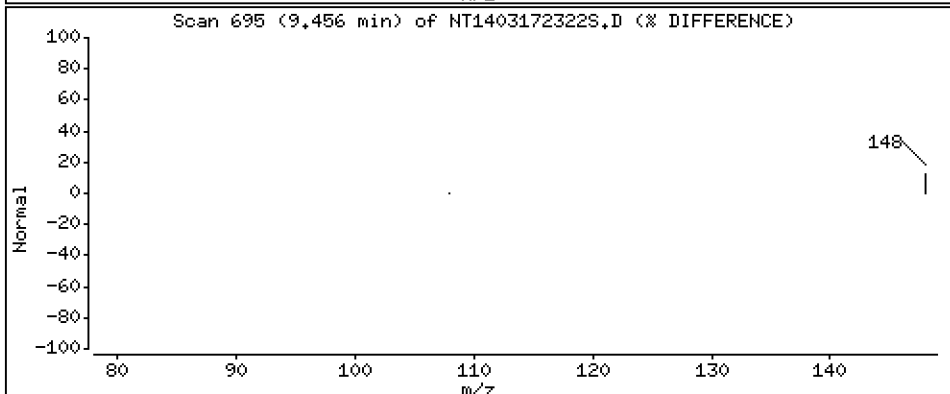
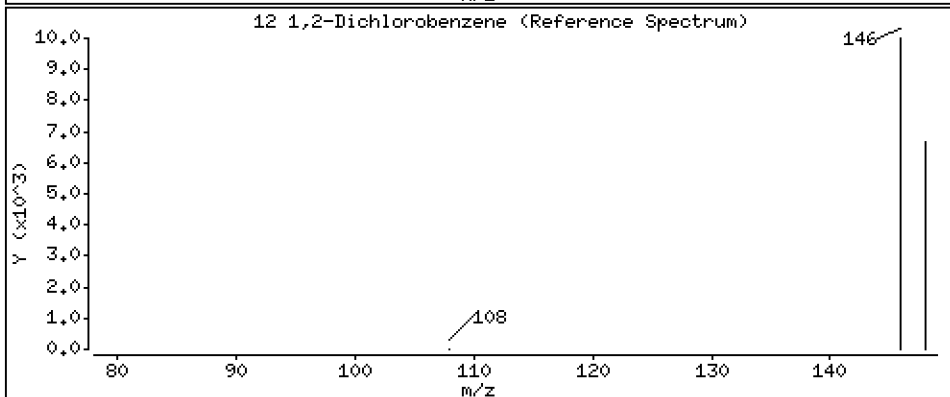
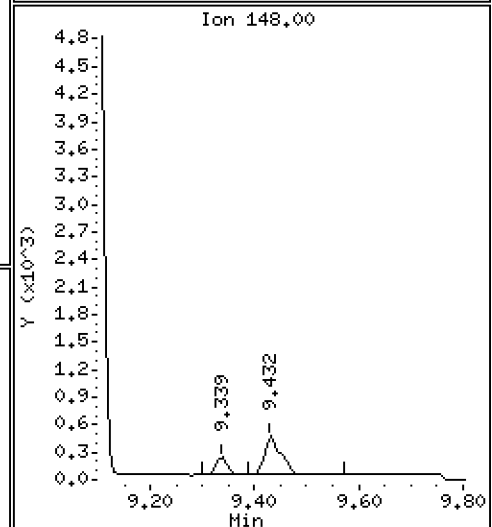
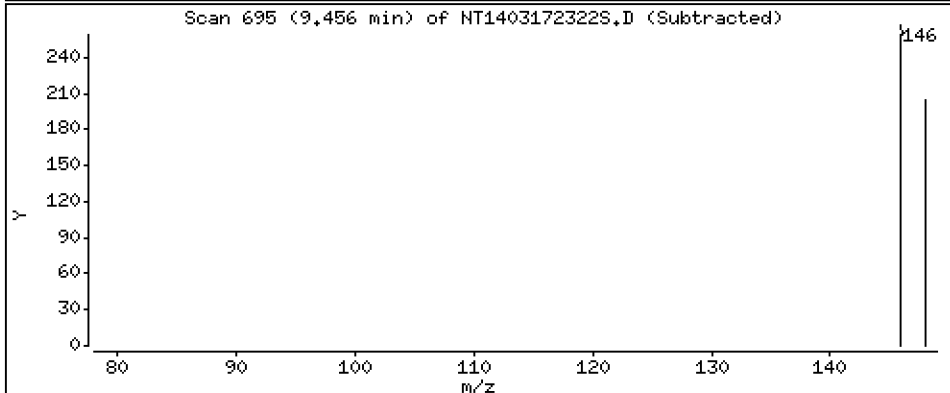
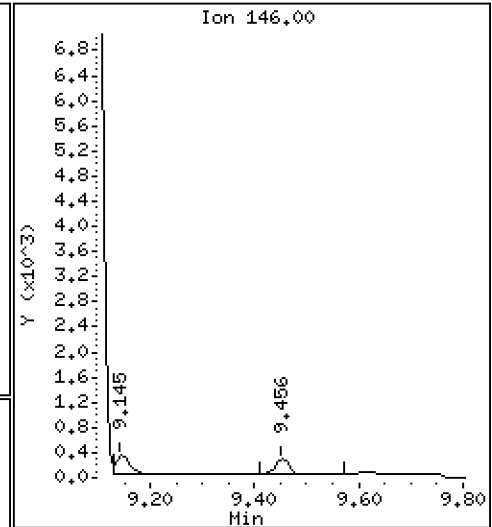
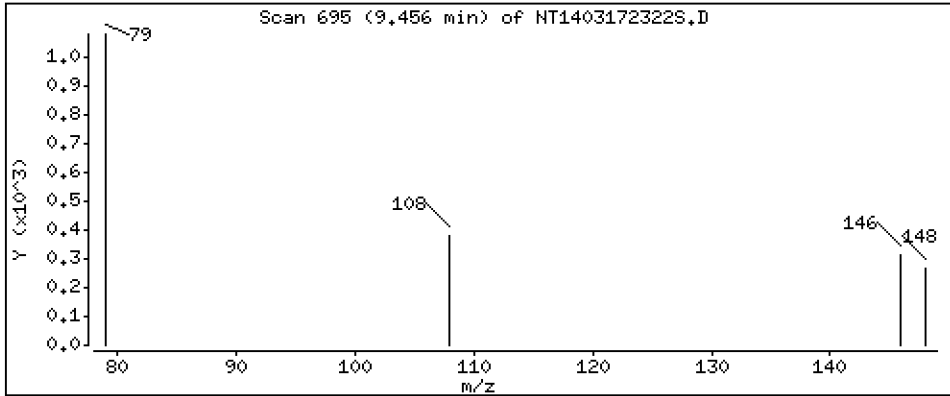
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,004737 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

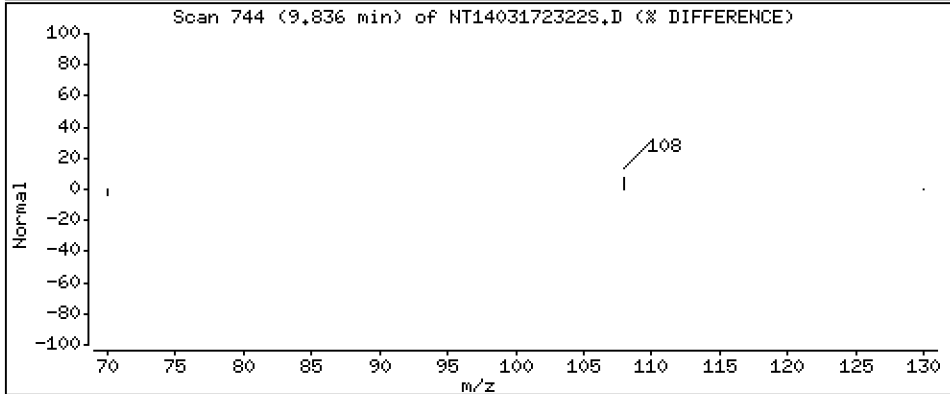
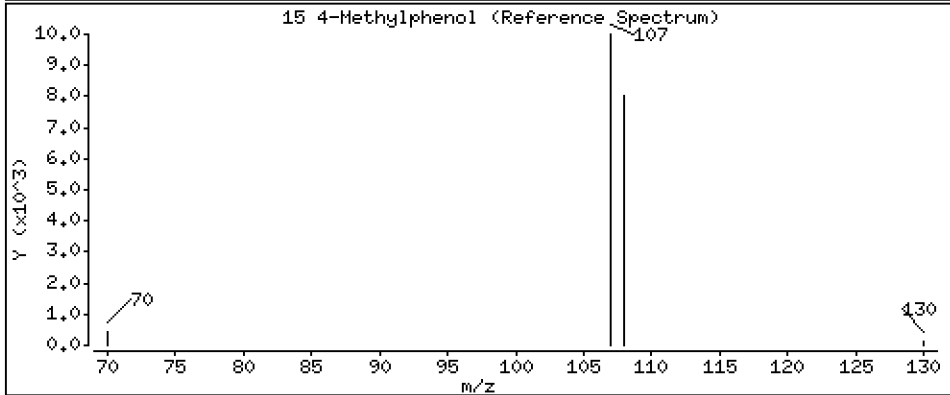
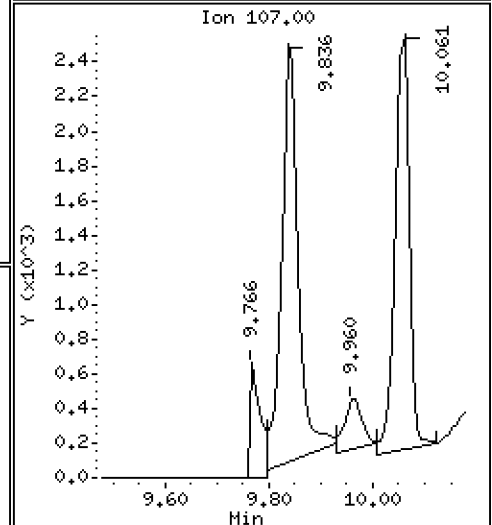
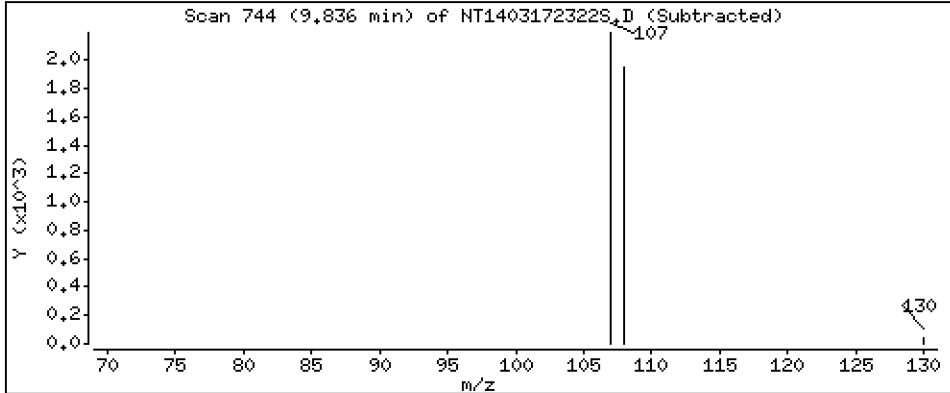
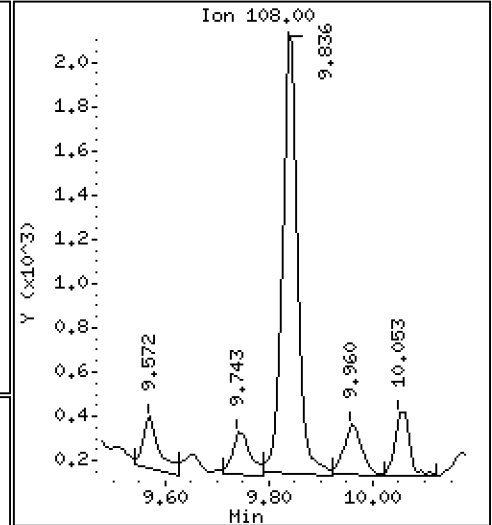
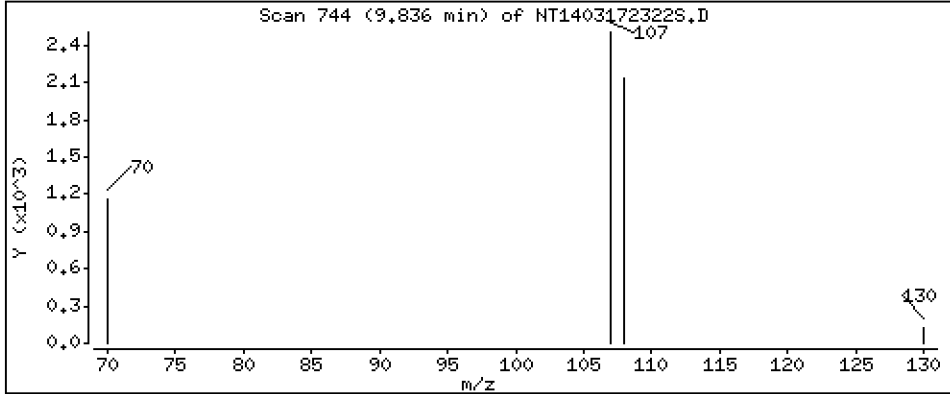
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.04774 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

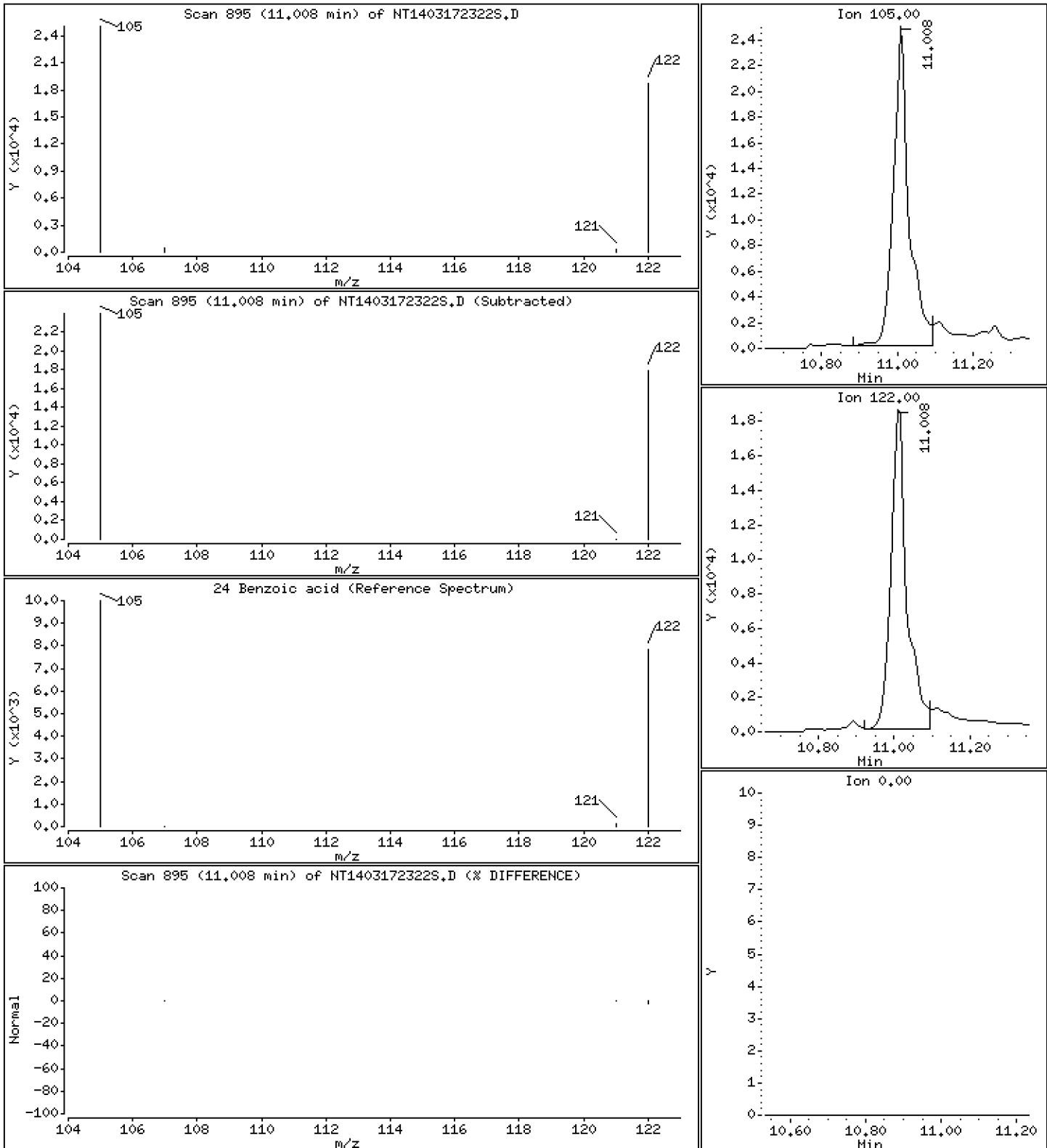
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 1.142 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

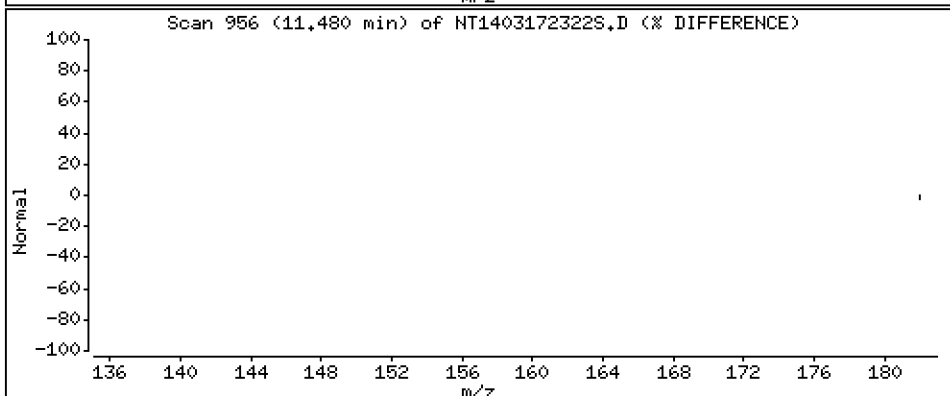
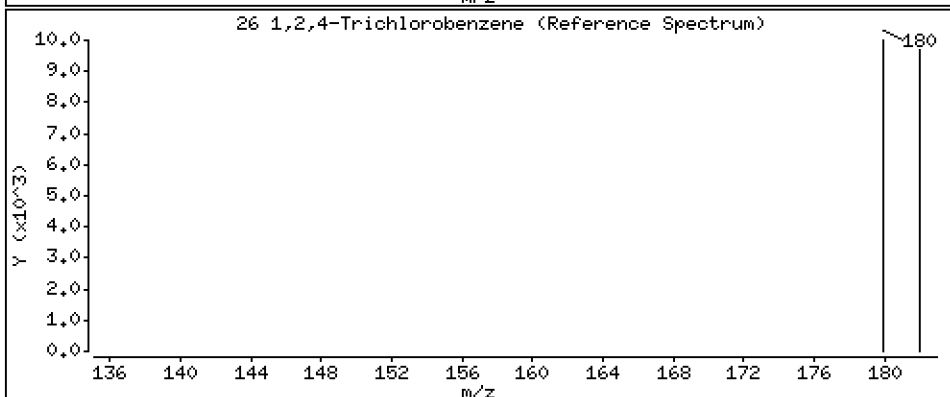
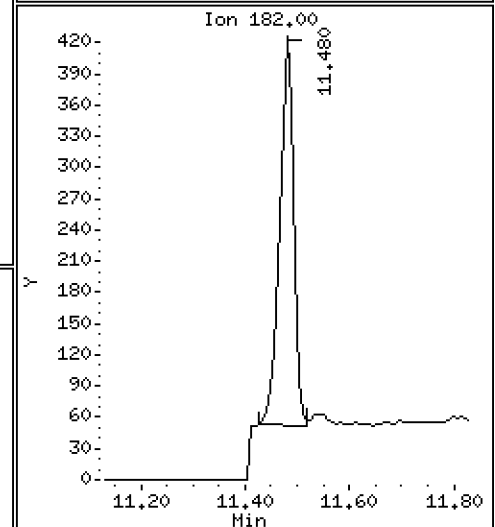
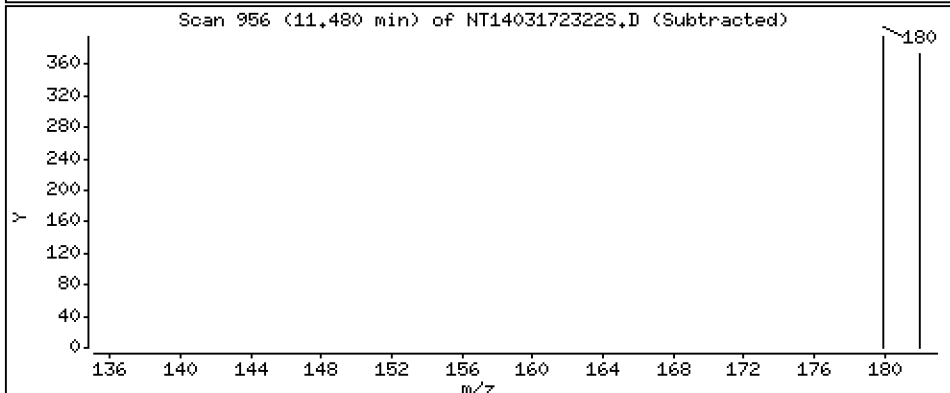
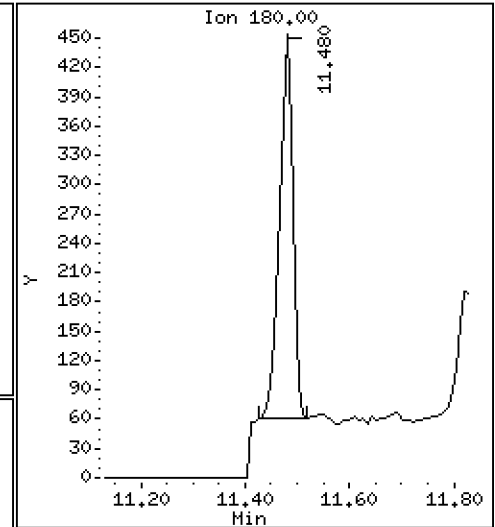
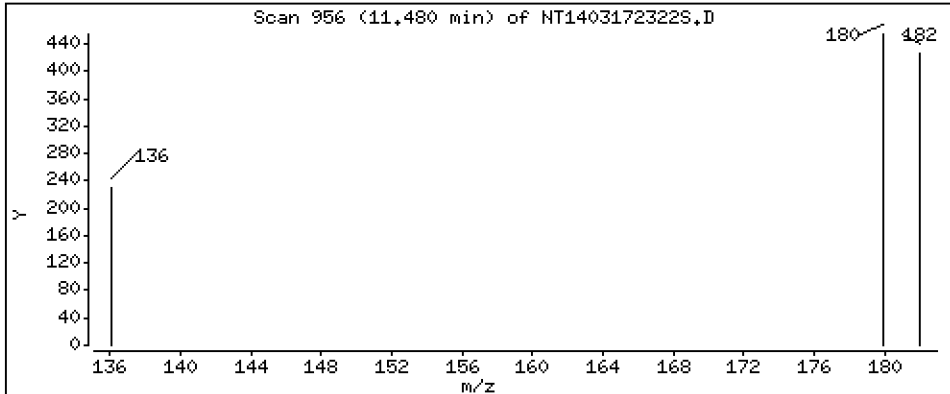
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,008640 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

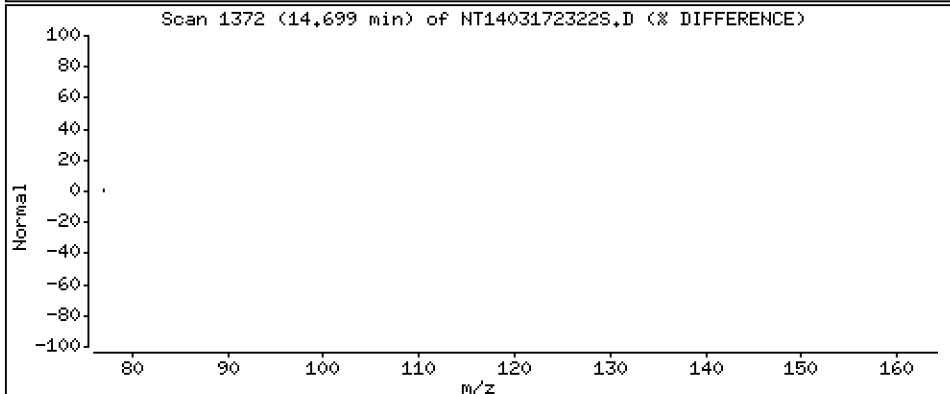
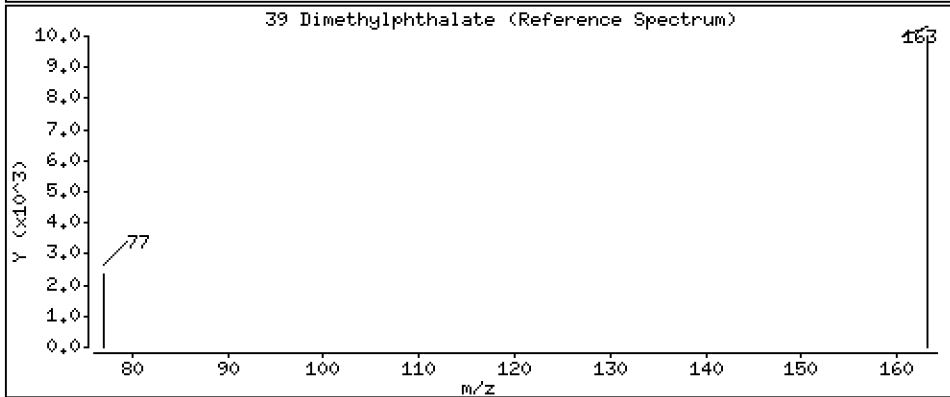
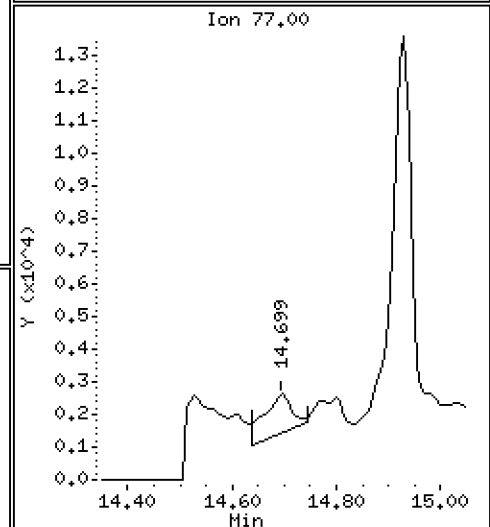
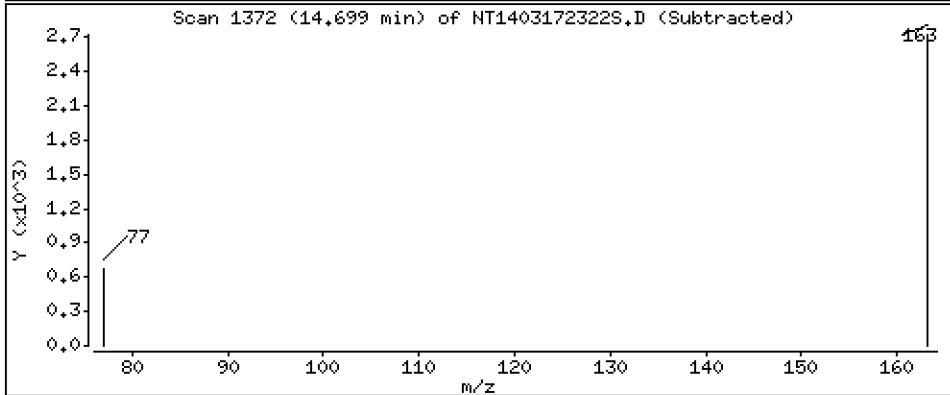
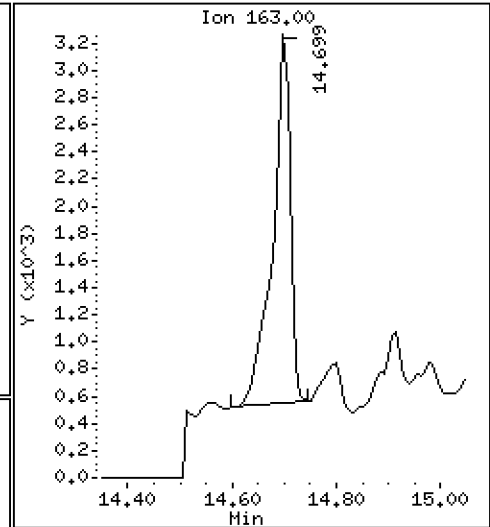
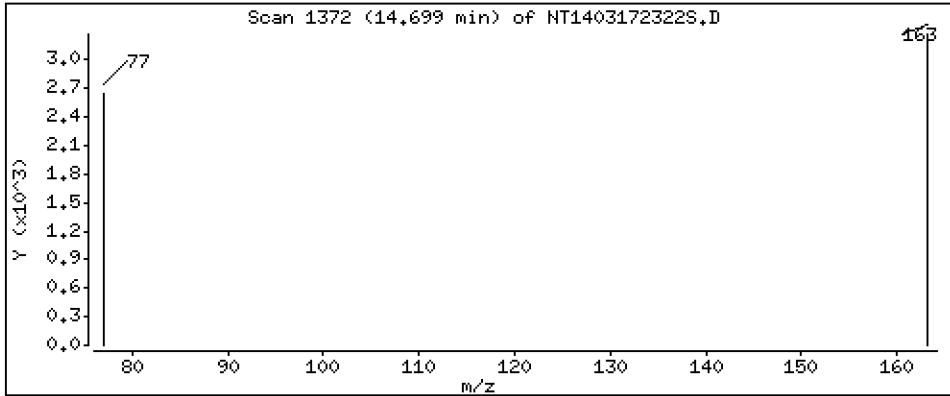
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.04156 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

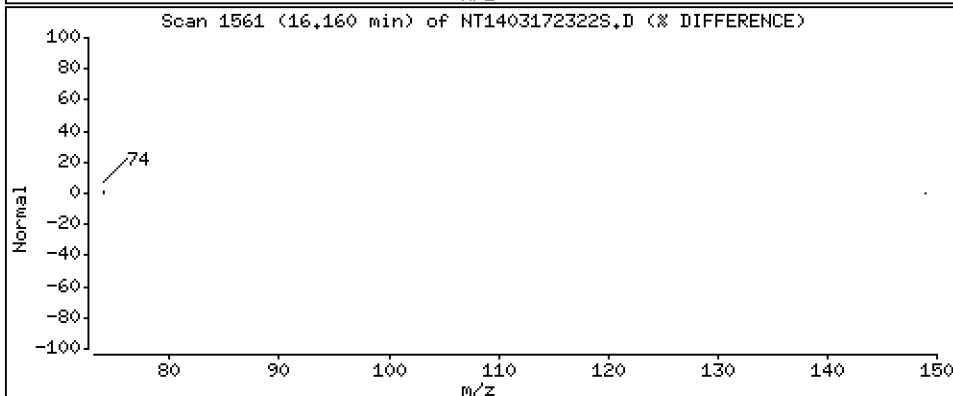
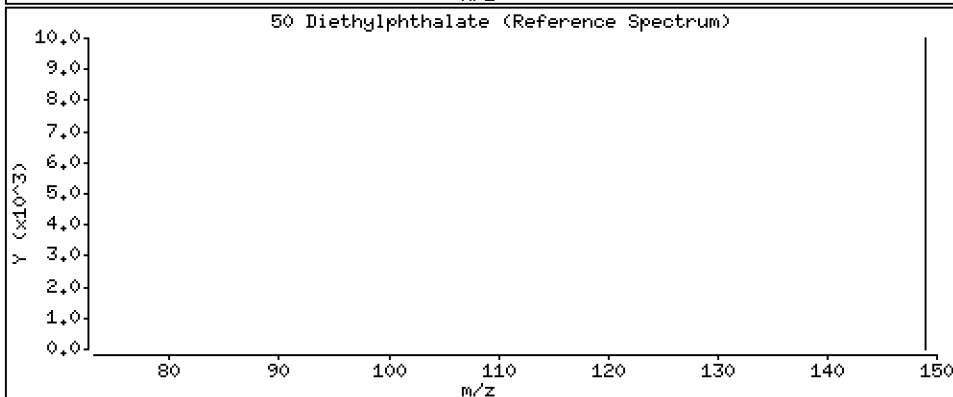
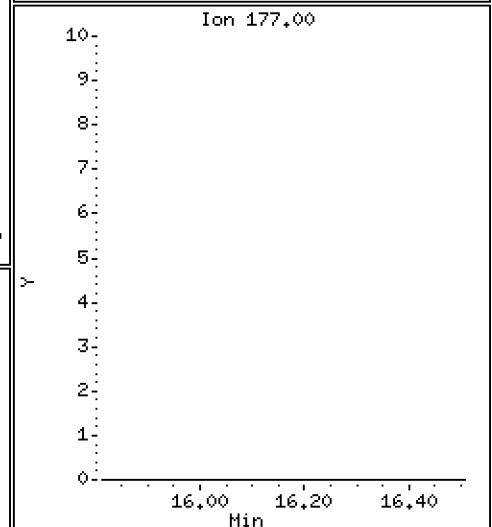
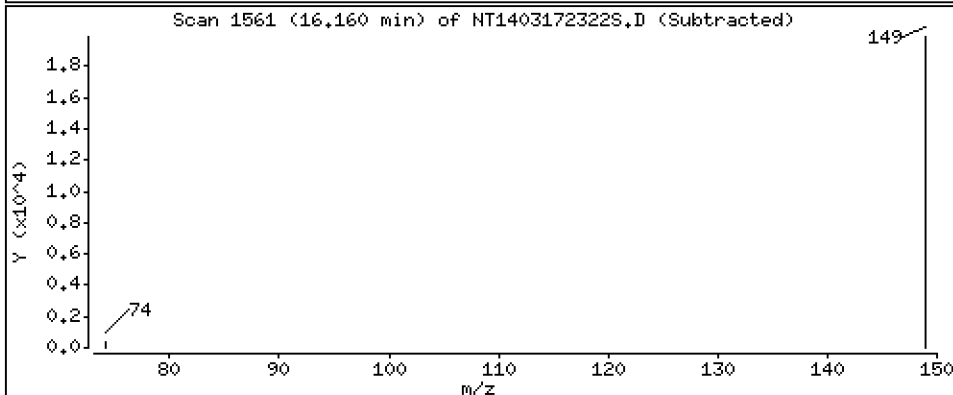
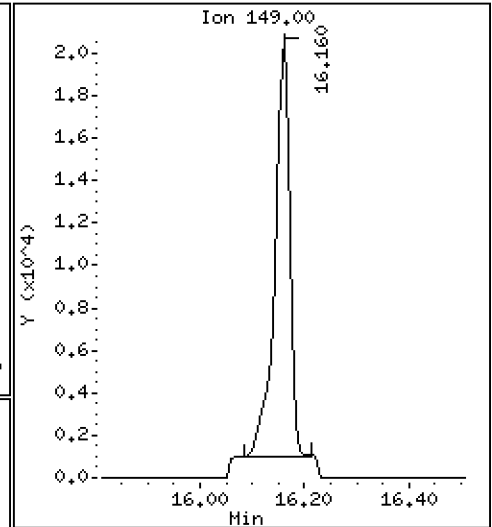
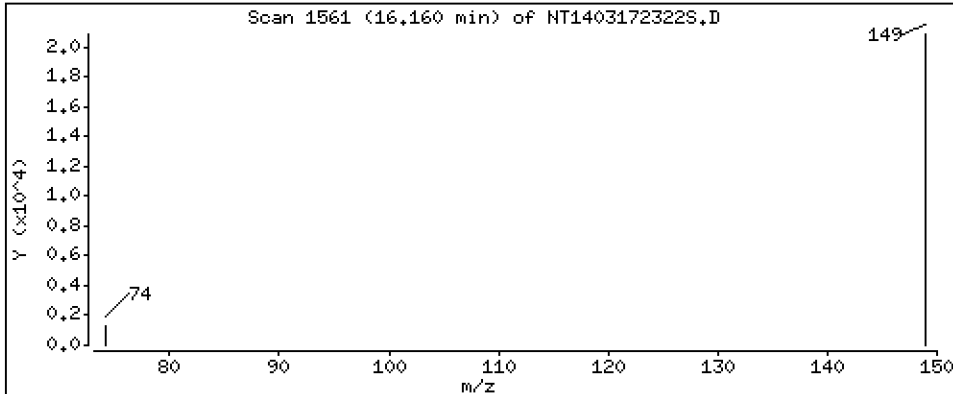
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2381 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

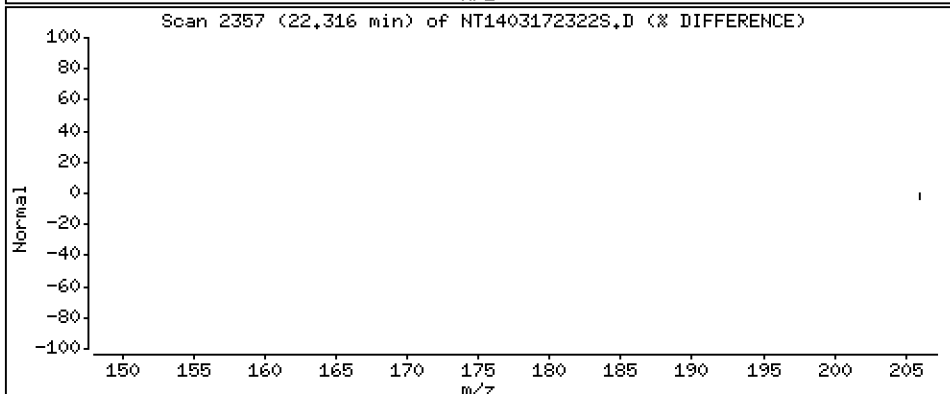
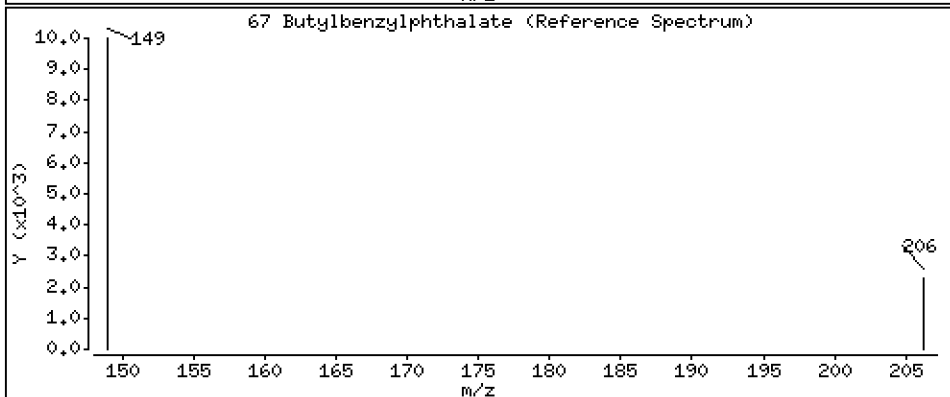
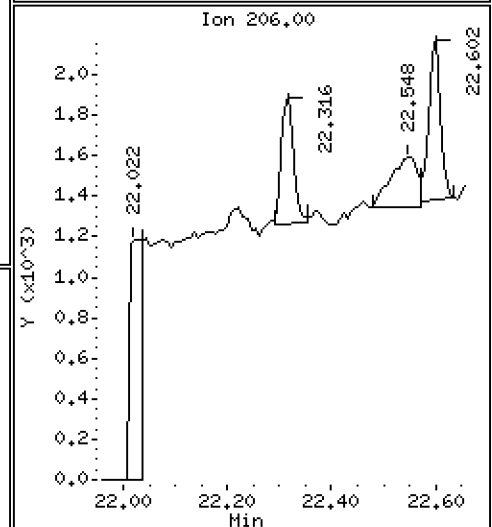
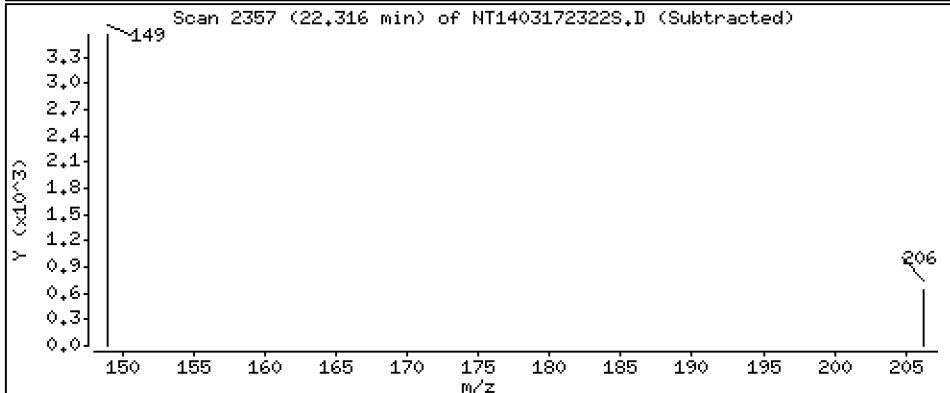
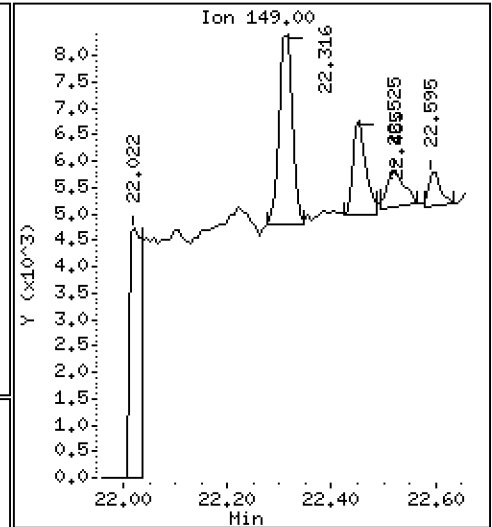
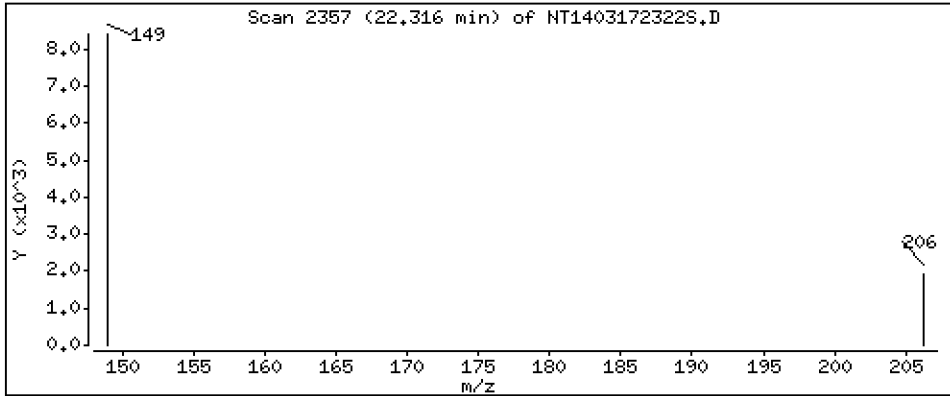
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1177 ug/mL



Date : 18-MAR-2023 03:07

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-03

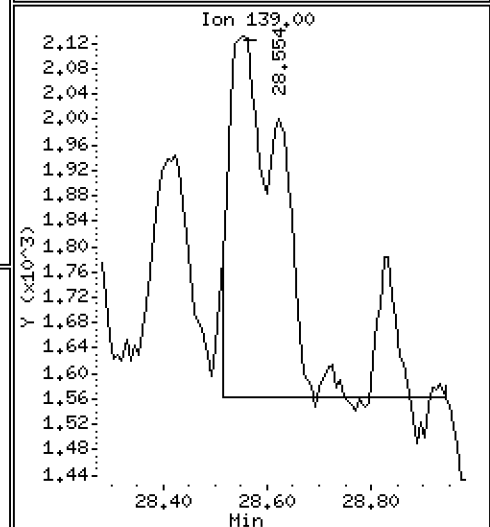
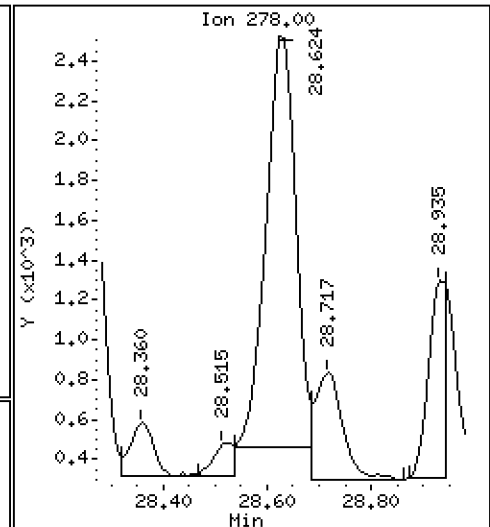
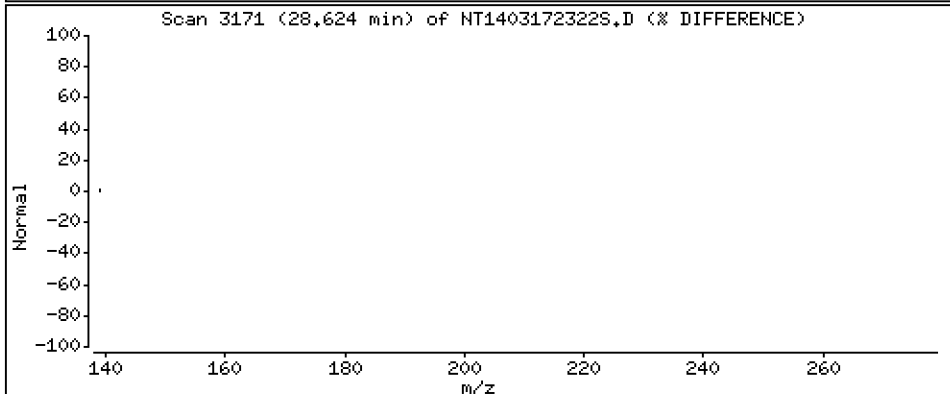
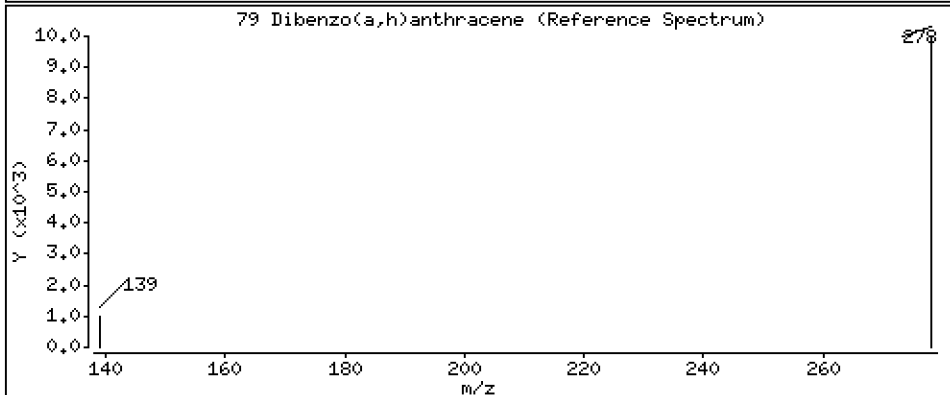
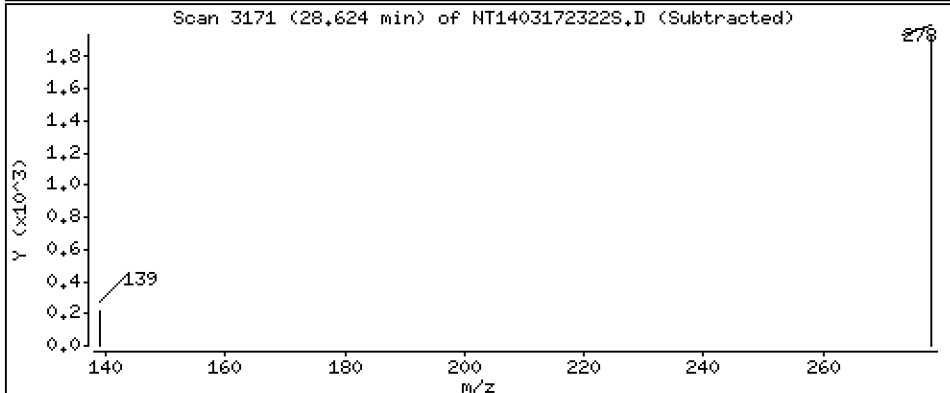
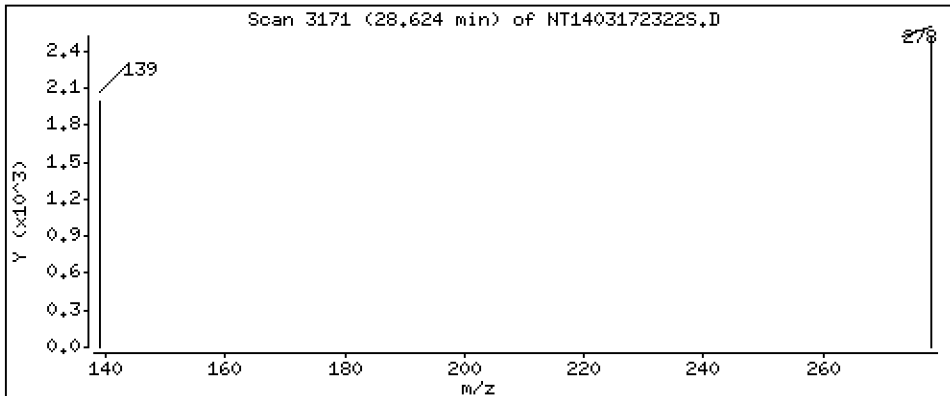
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1620 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172322S.D
 Lab Smp Id: 23B0229-03
 Inj Date : 18-MAR-2023 03:07 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-03
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSSDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.842	6.826	(0.755)	320090	3.83065	3.831 (R)
3 Phenol	94		8.448	8.441	(0.932)	18880	0.16430	0.1643
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	13003	0.13223	0.1322
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	246172	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	16748	0.17601	0.1760
11 Benzyl alcohol	79		9.339	9.354	(1.030)	38235	0.56769	0.5677
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	439	0.00474	0.004737
13 2-Methylphenol	108		Compound Not Detected.					
15 4-Methylphenol	108		9.836	9.828	(1.085)	4003	0.04774	0.04774
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		11.007	10.999	(0.952)	70180	1.14204	1.142
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	685	0.00864	0.008640
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	940950	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.698	14.698	(0.967)	6104	0.04156	0.04156 (M)
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	430030	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	37224	0.23807	0.2381
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	830545	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.386	(0.918)	389334	7.81152	7.812 (R)
67 Butylbenzylphthalate	149		22.315	22.308	(0.958)	5944	0.11768	0.1177
* 69 Chrysene-d12	240		23.299	23.291	(1.000)	289109	4.00000	
* 77 Perylene-d12	264		25.947	25.931	(1.000)	198771	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.631	(1.103)	8161	0.16196	0.1620
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172322S.D
 Lab Smp Id: 23B0229-03
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	246172	9.30
27 Naphthalene-d8	830434	415217	1660868	940950	13.31
42 Acenaphthene-d10	389907	194954	779814	430030	10.29
59 Phenanthrene-d10	763679	381840	1527358	830545	8.76
69 Chrysene-d12	415791	207896	831582	289109	-30.47
77 Perylene-d12	274872	137436	549744	198771	-27.69

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172322S.D

Lab ID: 23B0229-03

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 03:07

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

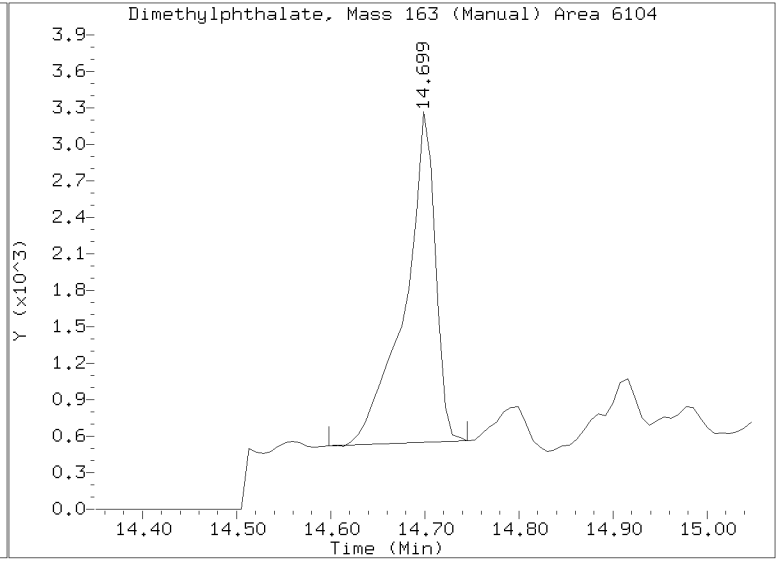
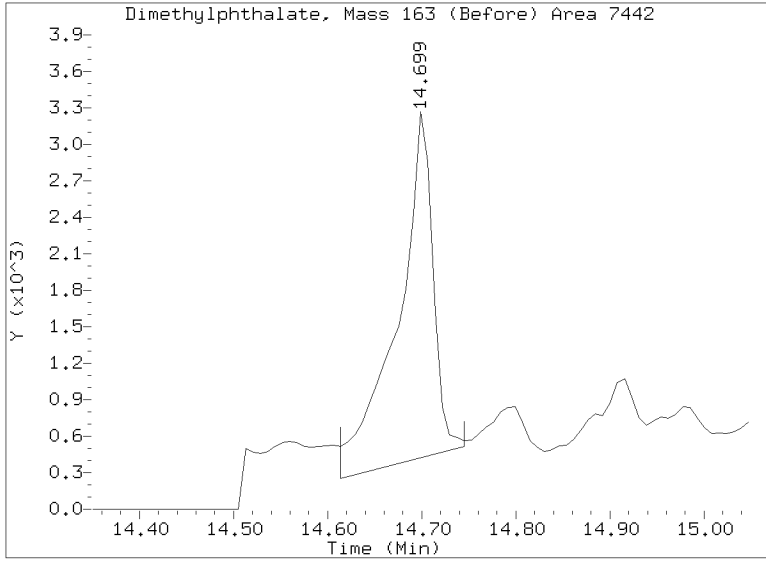
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172322S.D
Injection Date: 18-MAR-2023 03:07
Lab ID:23B0229-03 Client ID:
Report Date: 03/23/2023 16:56





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-04 A

SDG: 23B0229

Sampled: 02/08/23 12:11

Prepared: 02/17/23 15:00

File ID: NT1403172323S.D

% Solids: 52.16

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 03:42

Batch: BLB0424

Sequence: SLC0376

Initial/Final: 19.43 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00050

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.8	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	74.5		2.4	19.7
65-85-0	Benzoic acid	1	146	Q	13.2	98.7
105-67-9	2,4-Dimethylphenol	1	19.7	U	2.1	19.7
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	19.7	U	2.1	19.7

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	740.03	451	61.0	27 - 120	
p-Terphenyl-d14	493.36	750	152	37 - 120	*,Q

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723235.D

Date: 18-MAR-2023 03:42

Client ID:

Sample Info: 23B0229-04

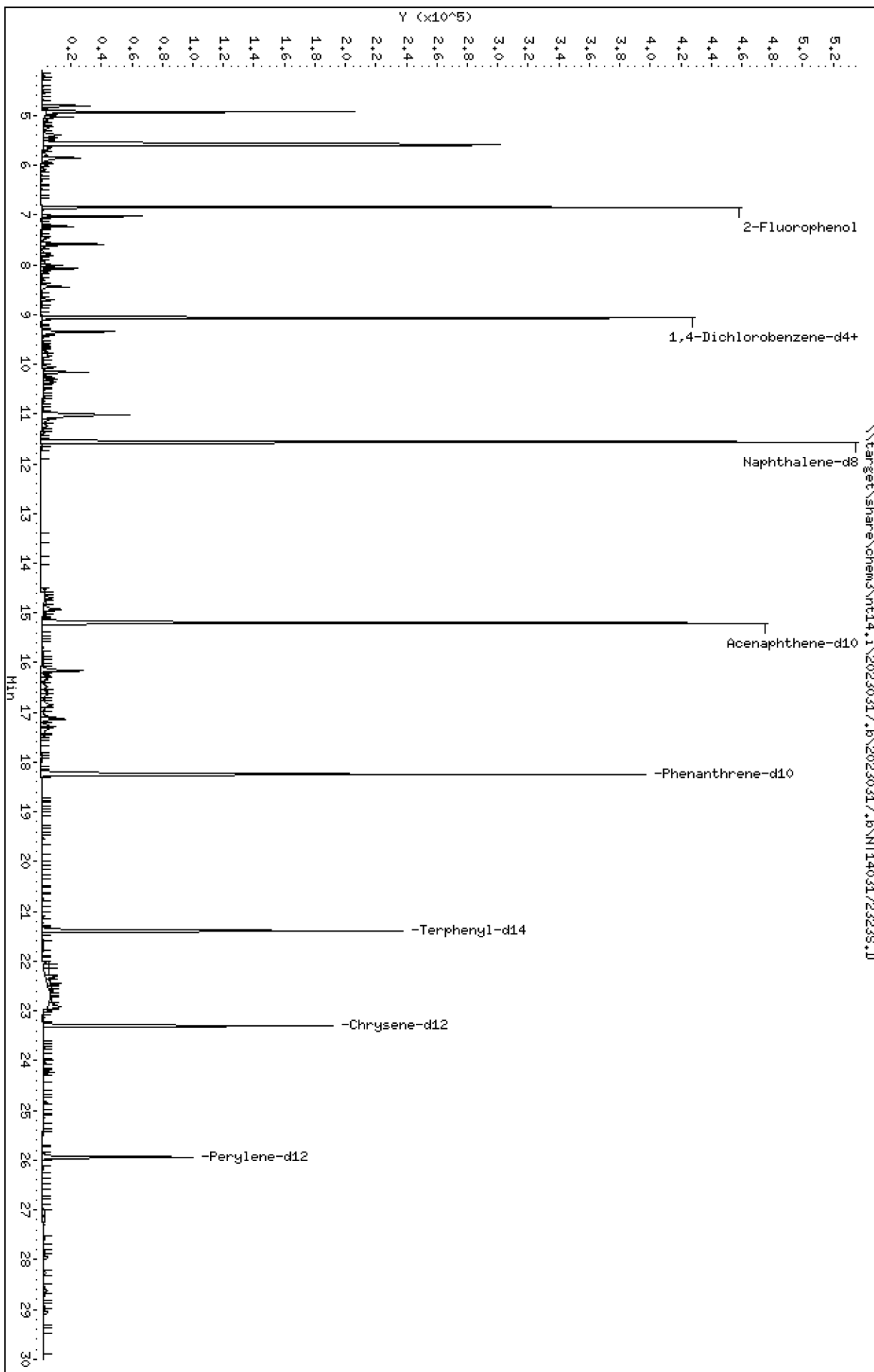
Page 1

Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

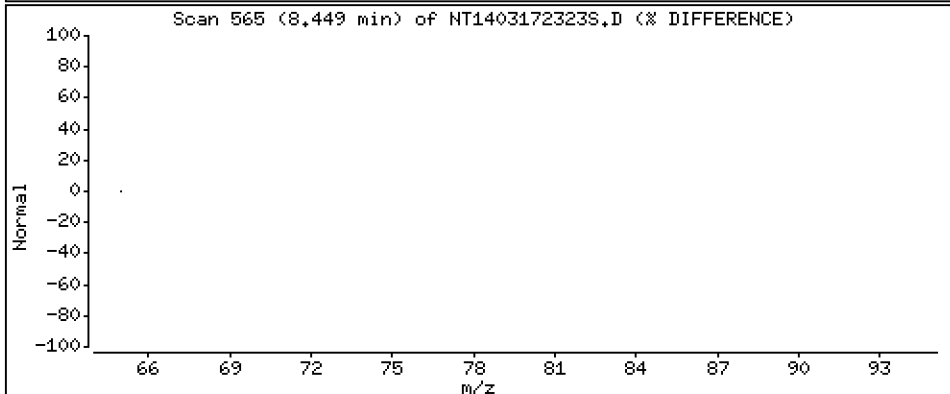
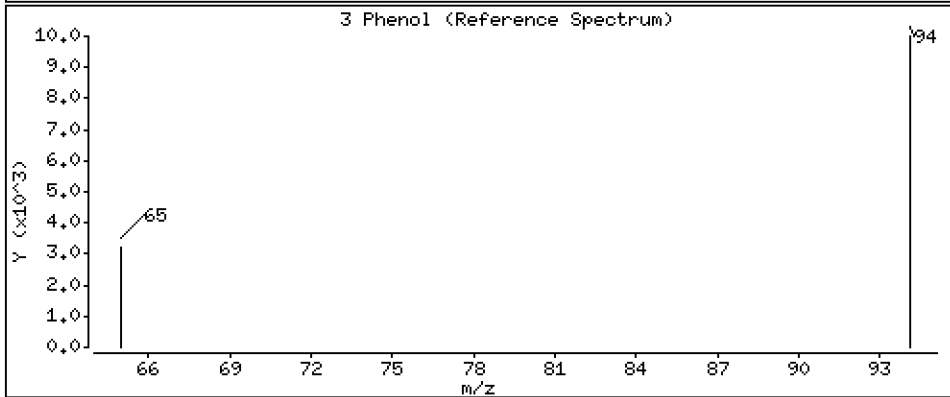
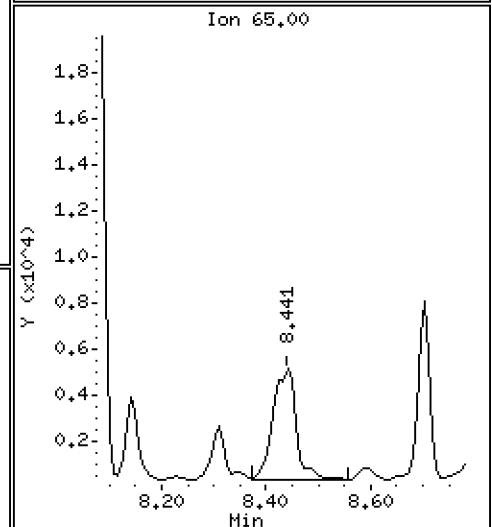
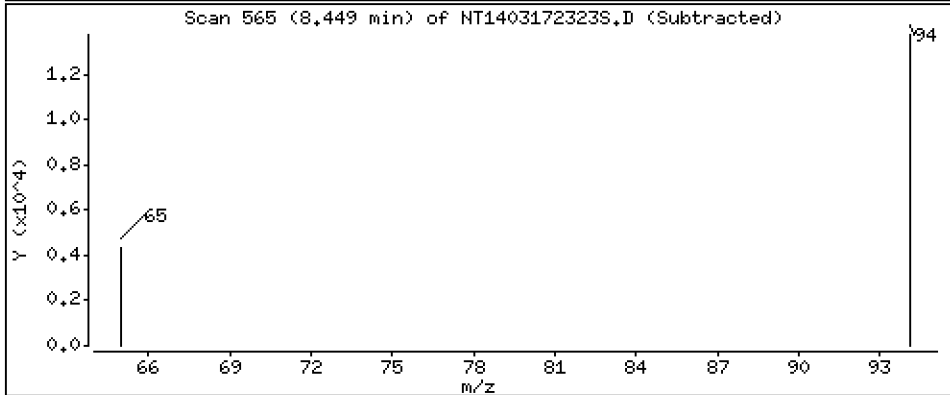
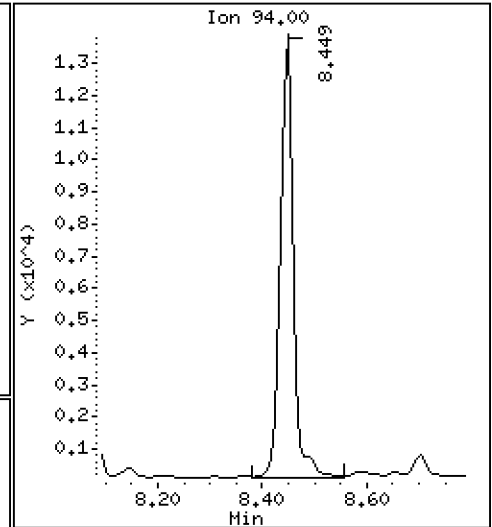
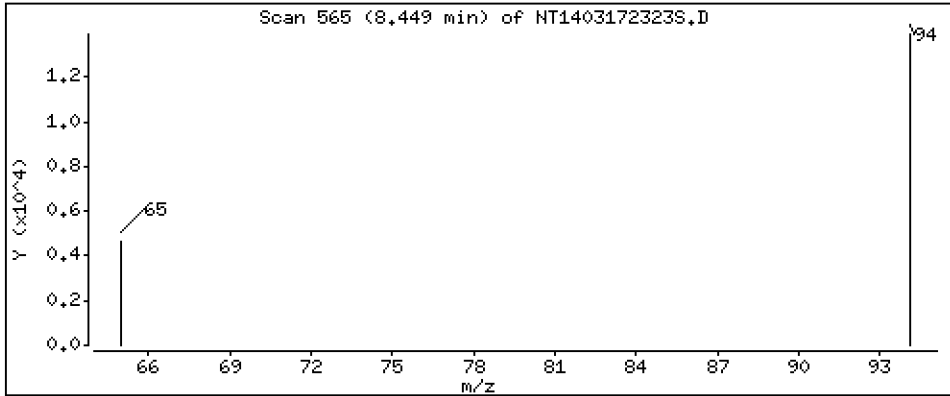
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1888 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

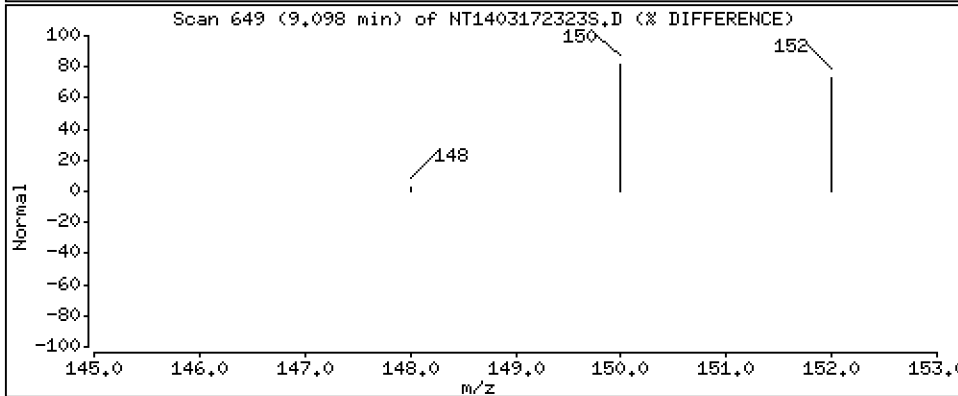
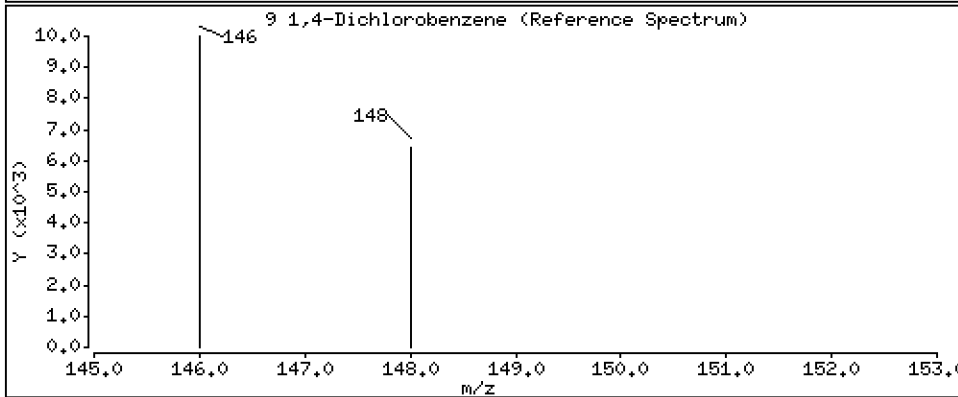
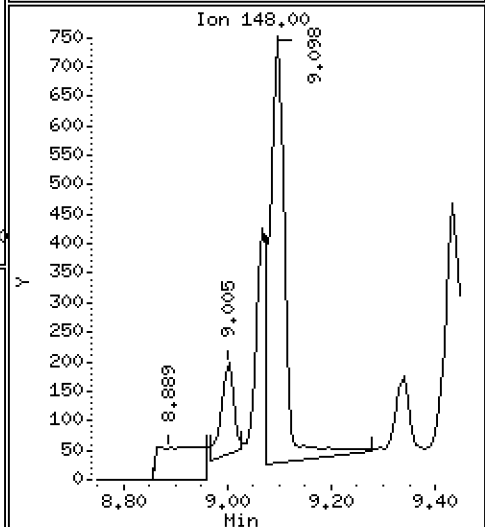
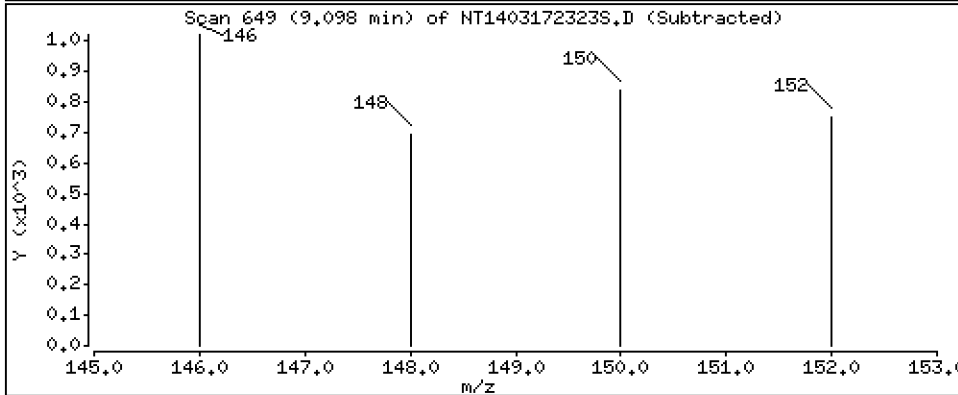
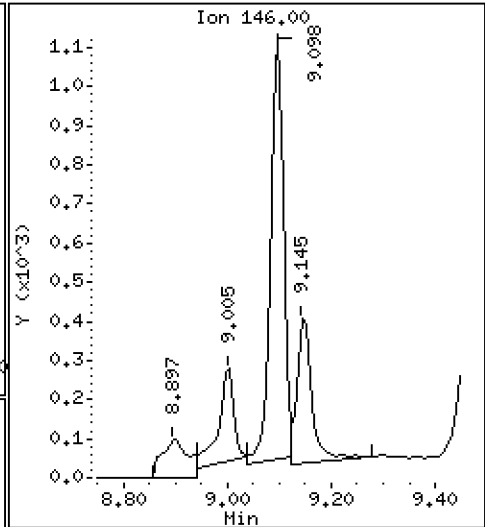
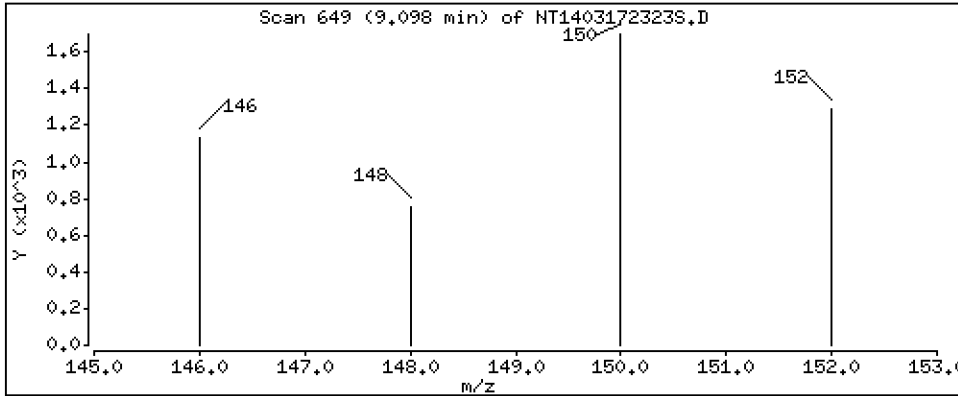
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,01775 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

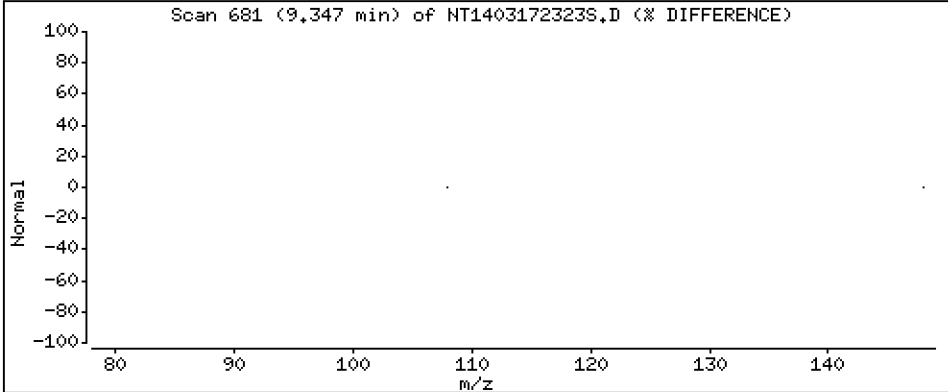
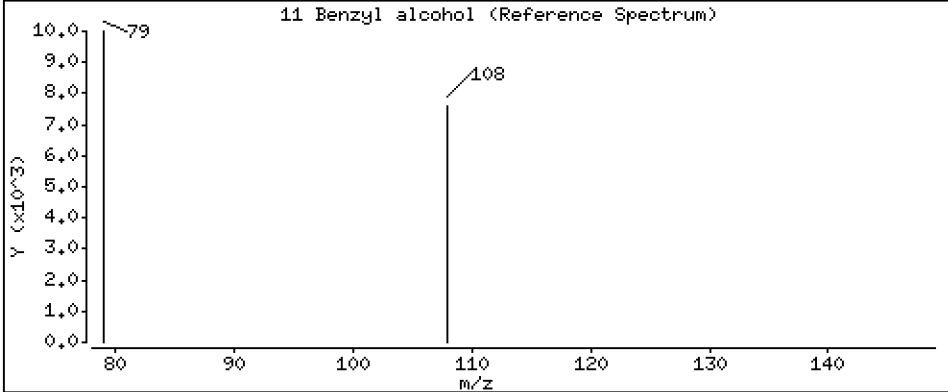
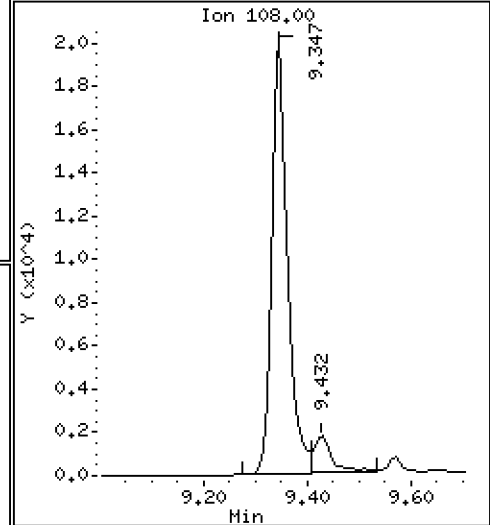
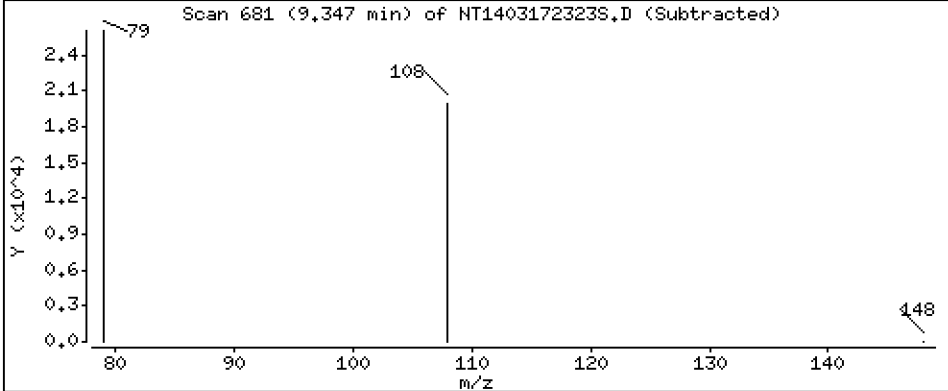
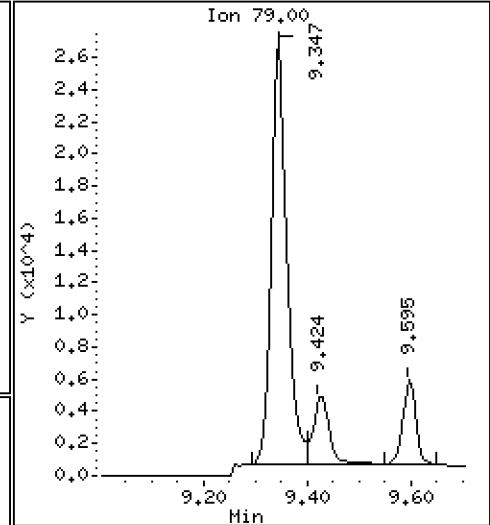
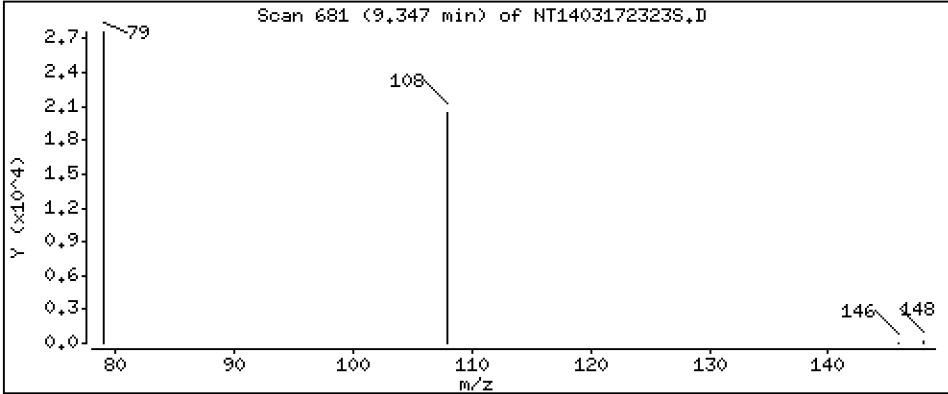
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.7554 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

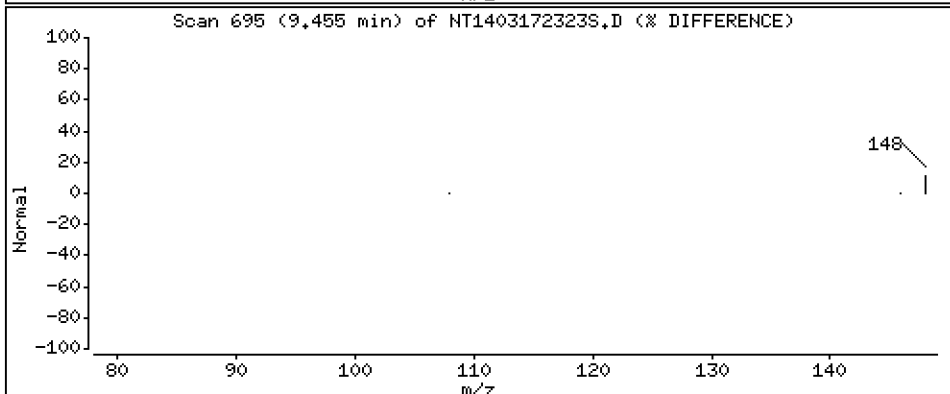
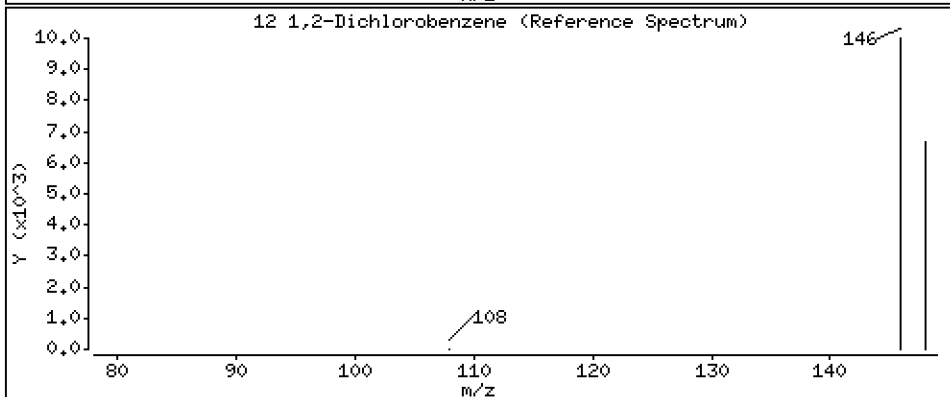
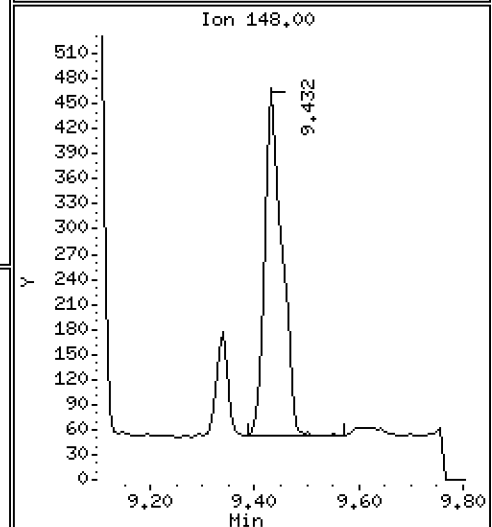
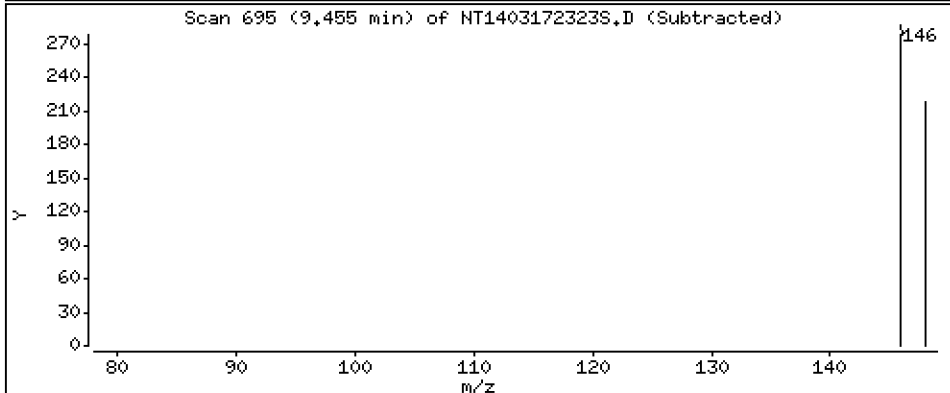
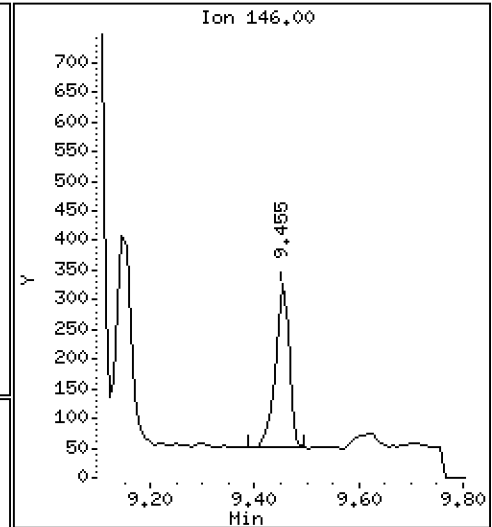
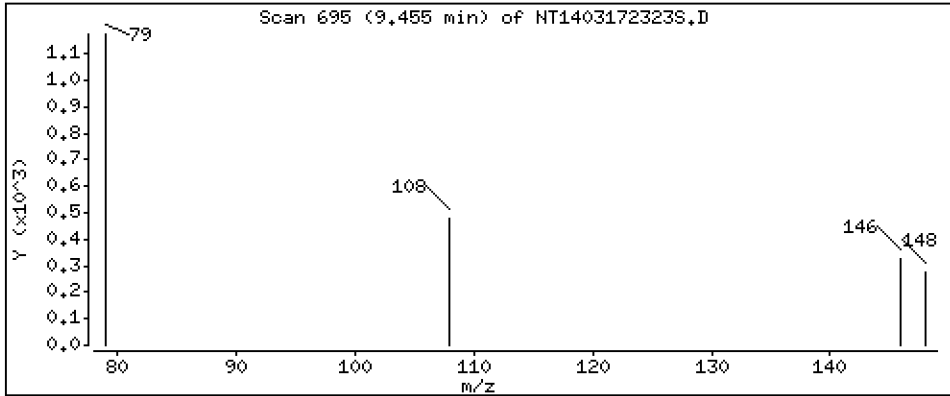
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,004823 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

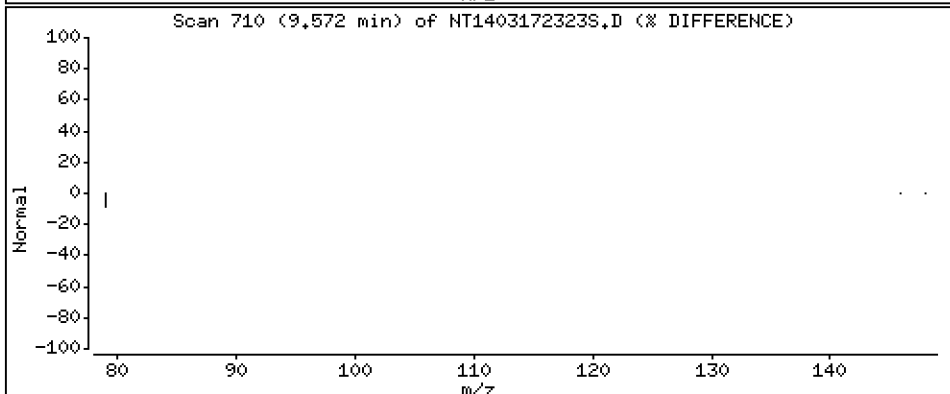
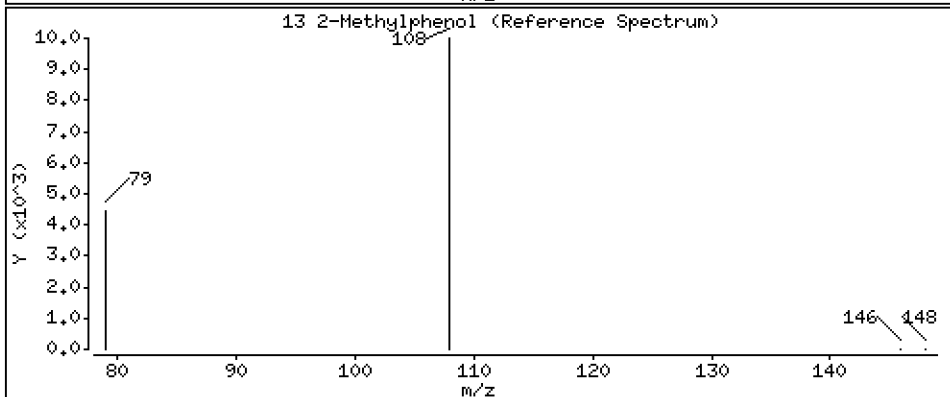
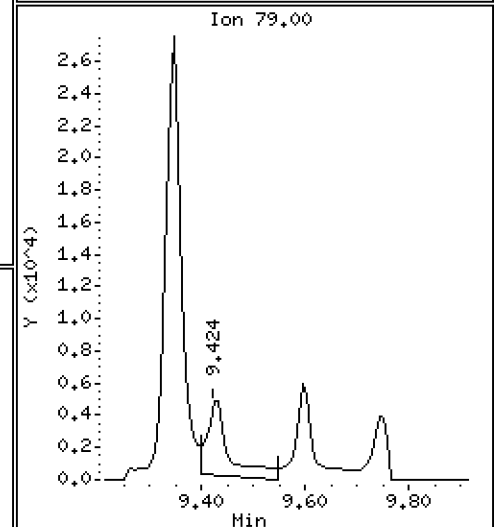
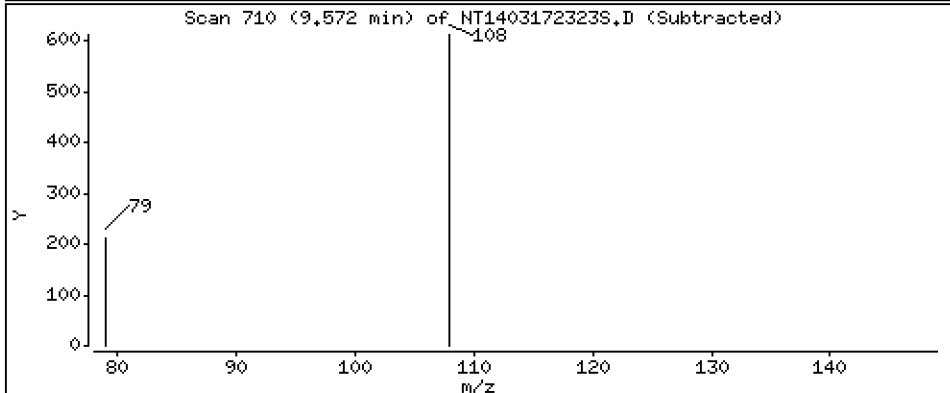
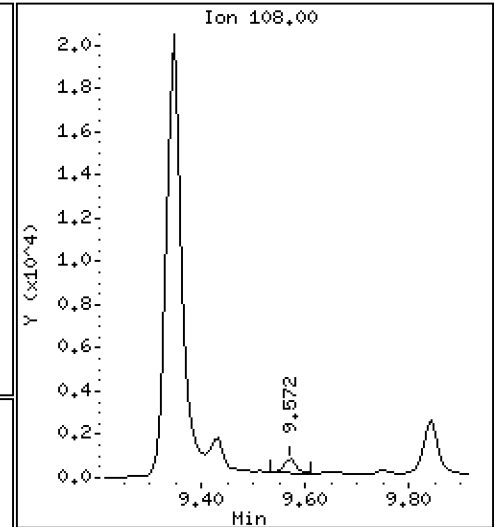
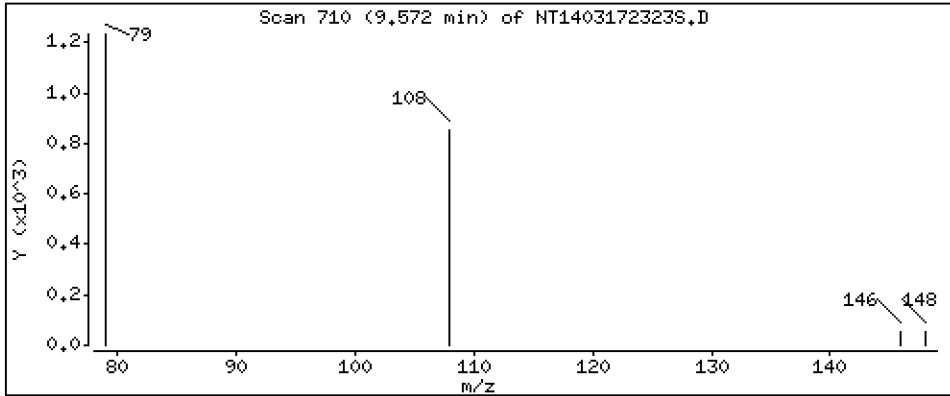
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.01138 ug/mL

13 2-Methylphenol



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

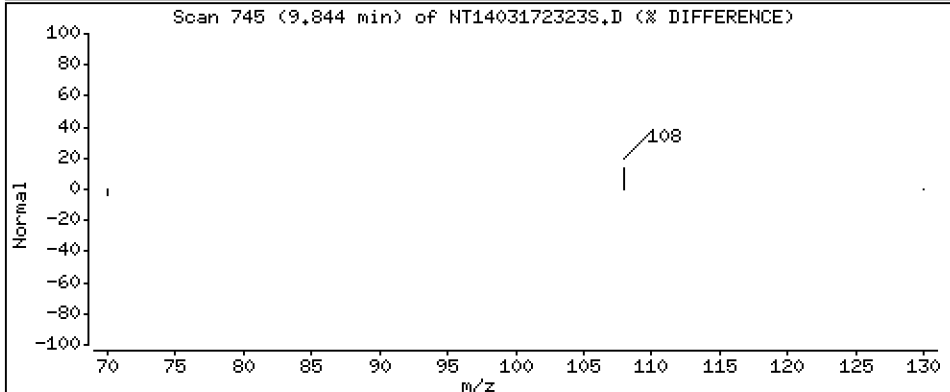
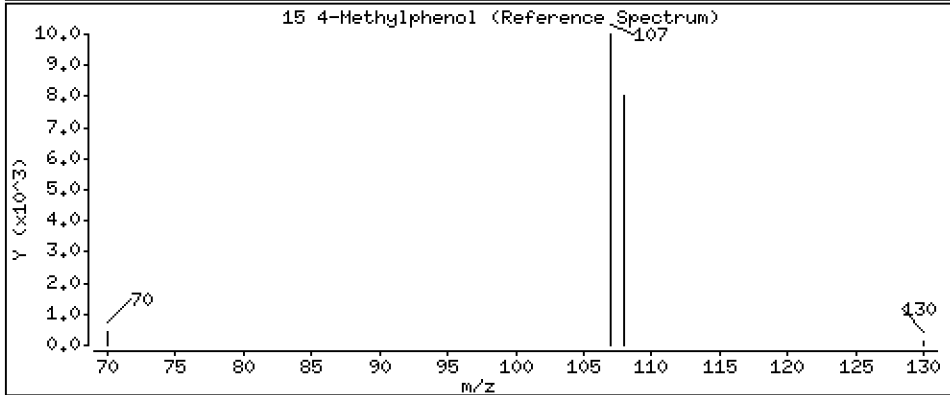
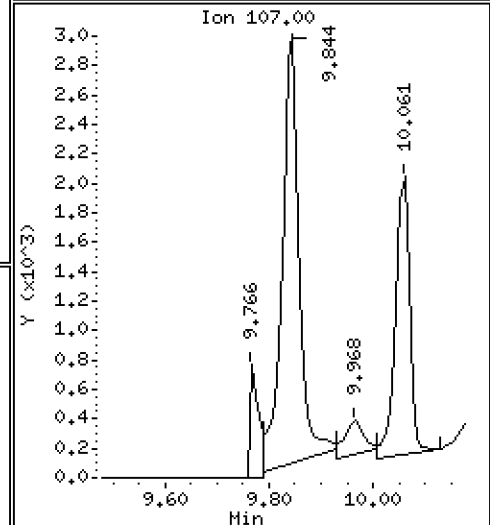
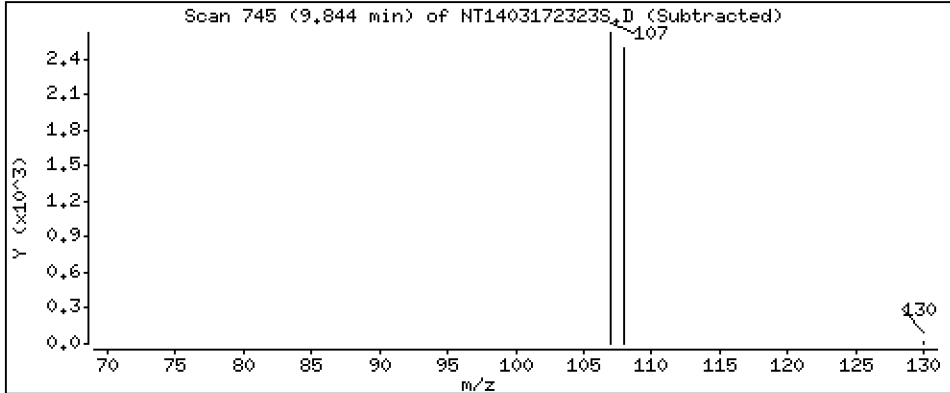
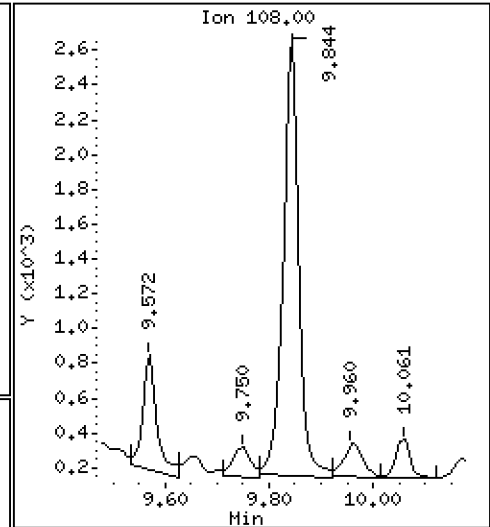
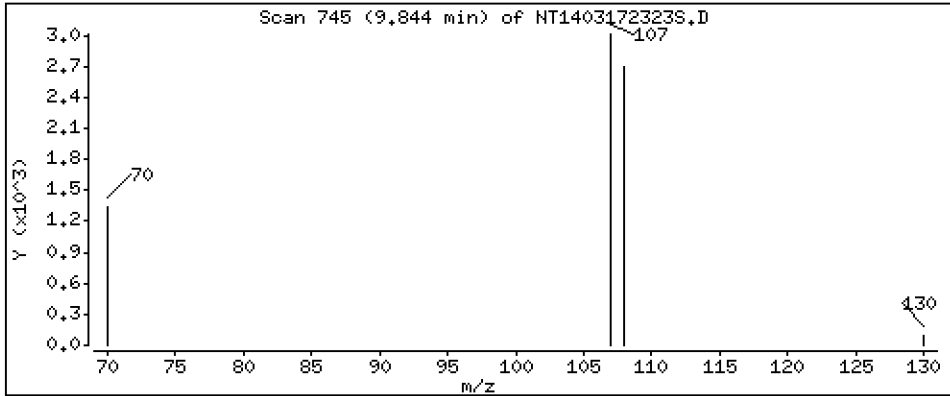
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.05954 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

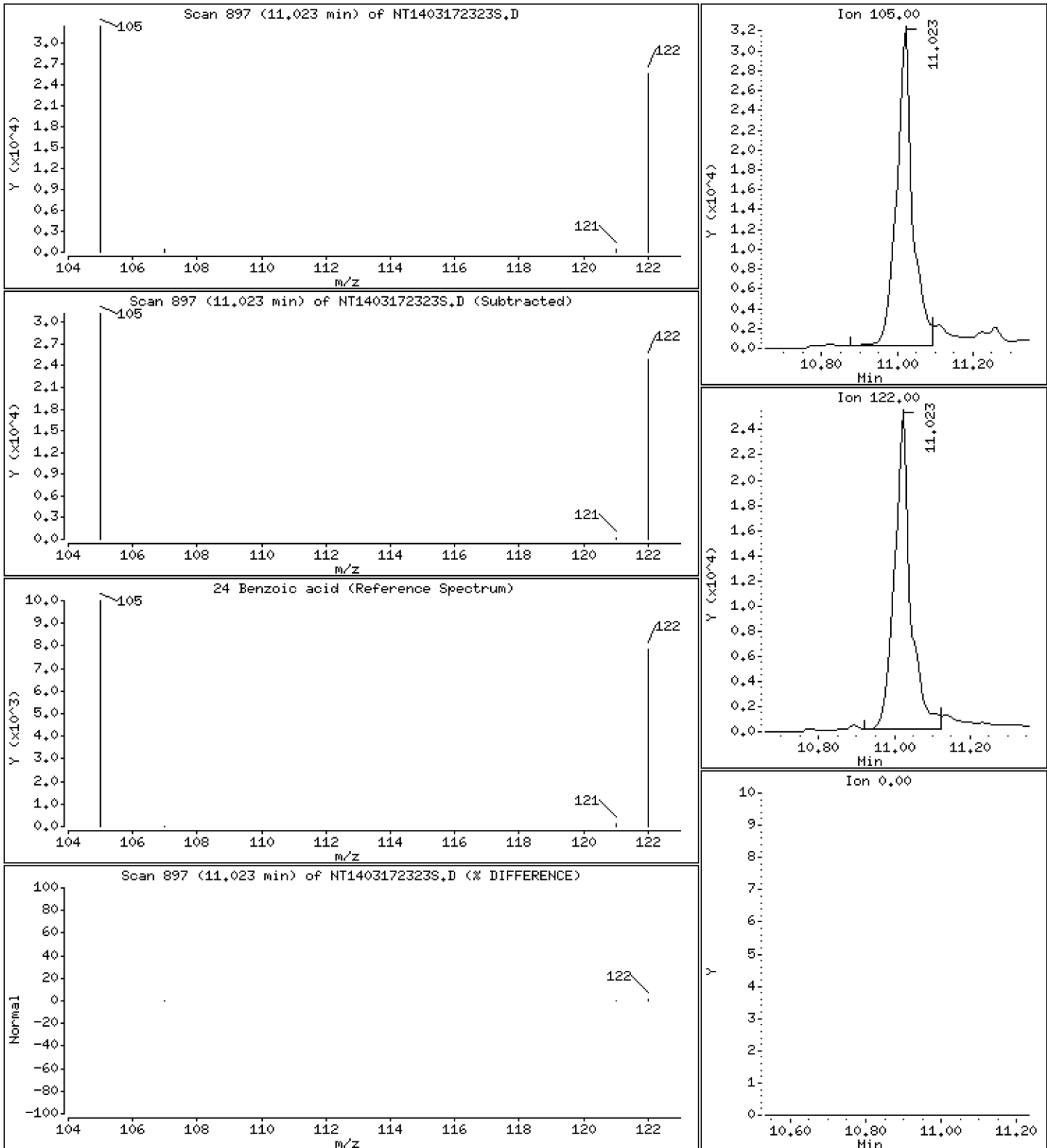
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,482 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

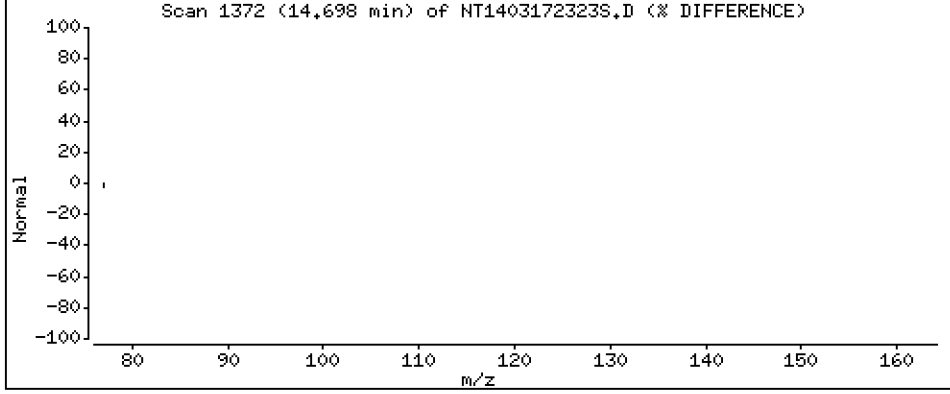
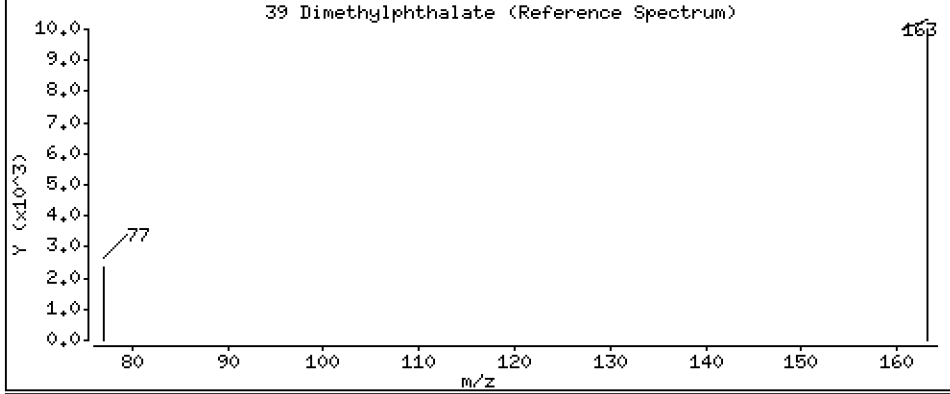
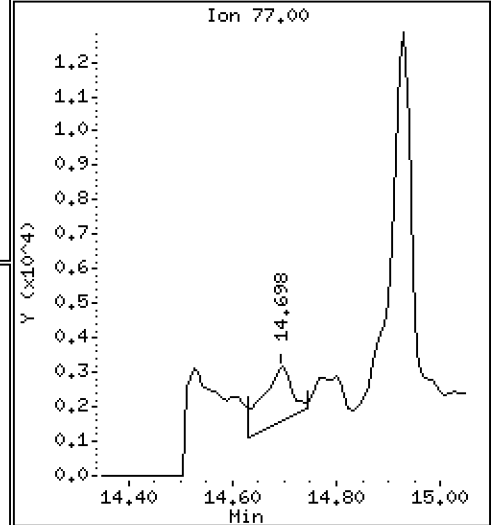
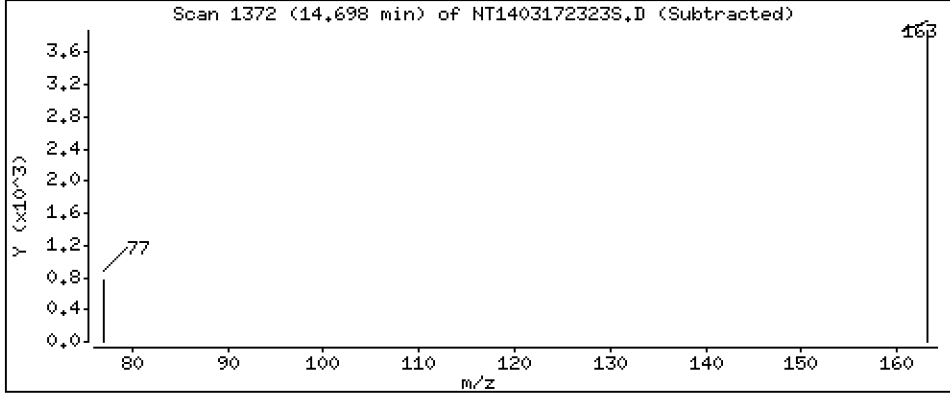
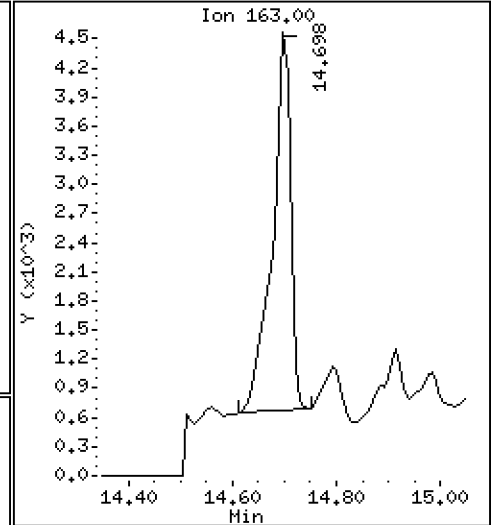
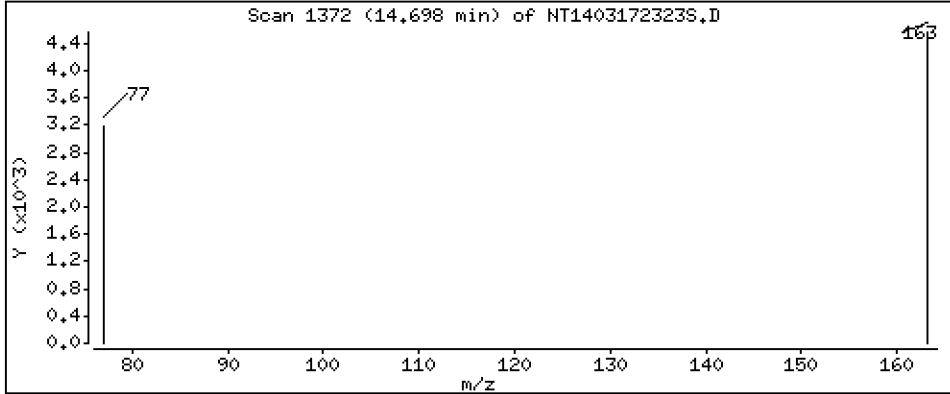
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,06219 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

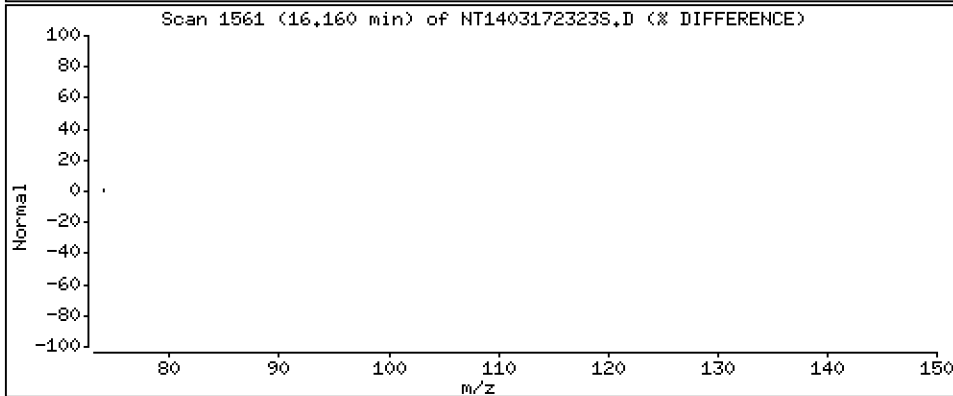
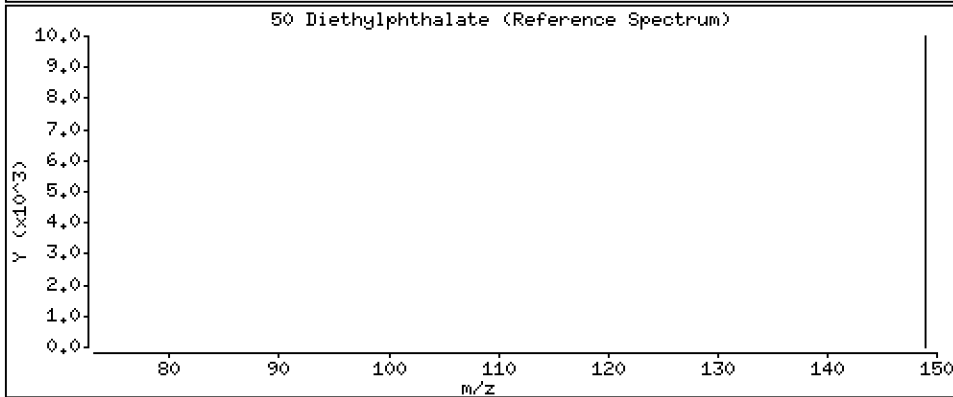
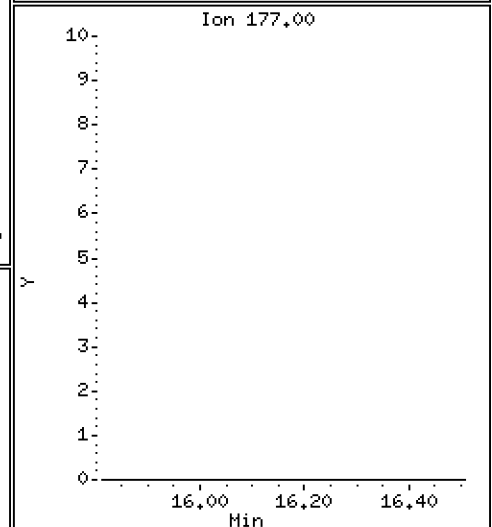
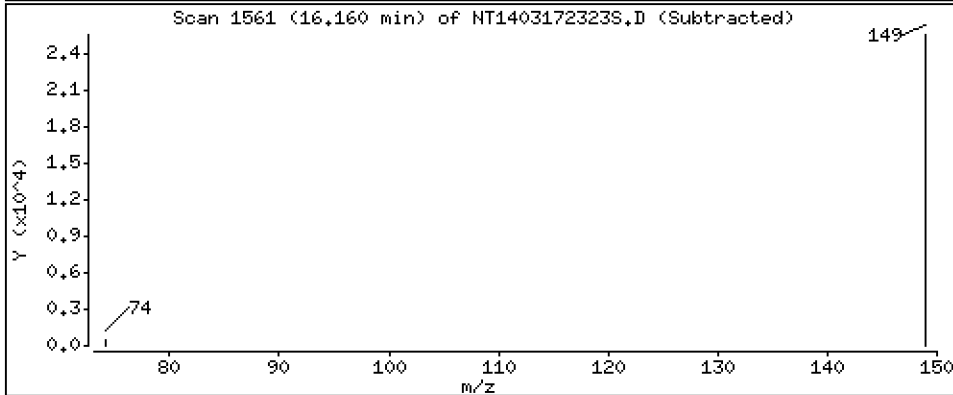
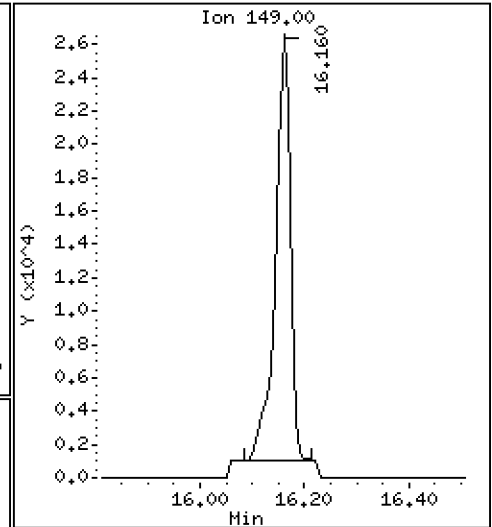
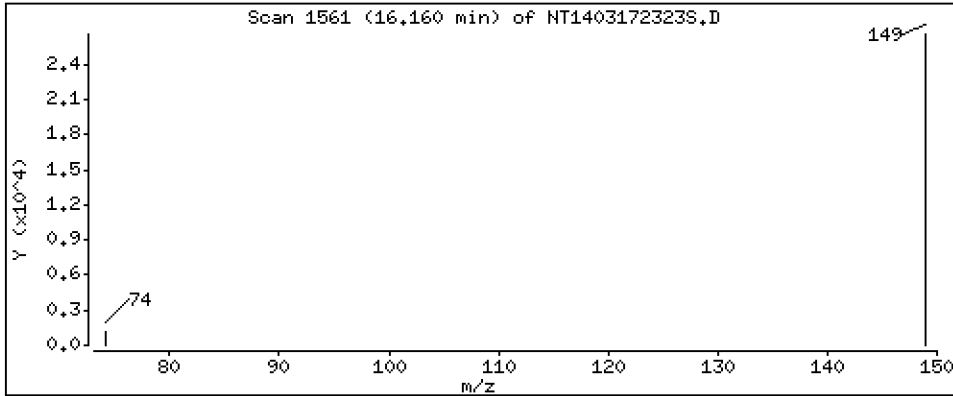
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3105 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

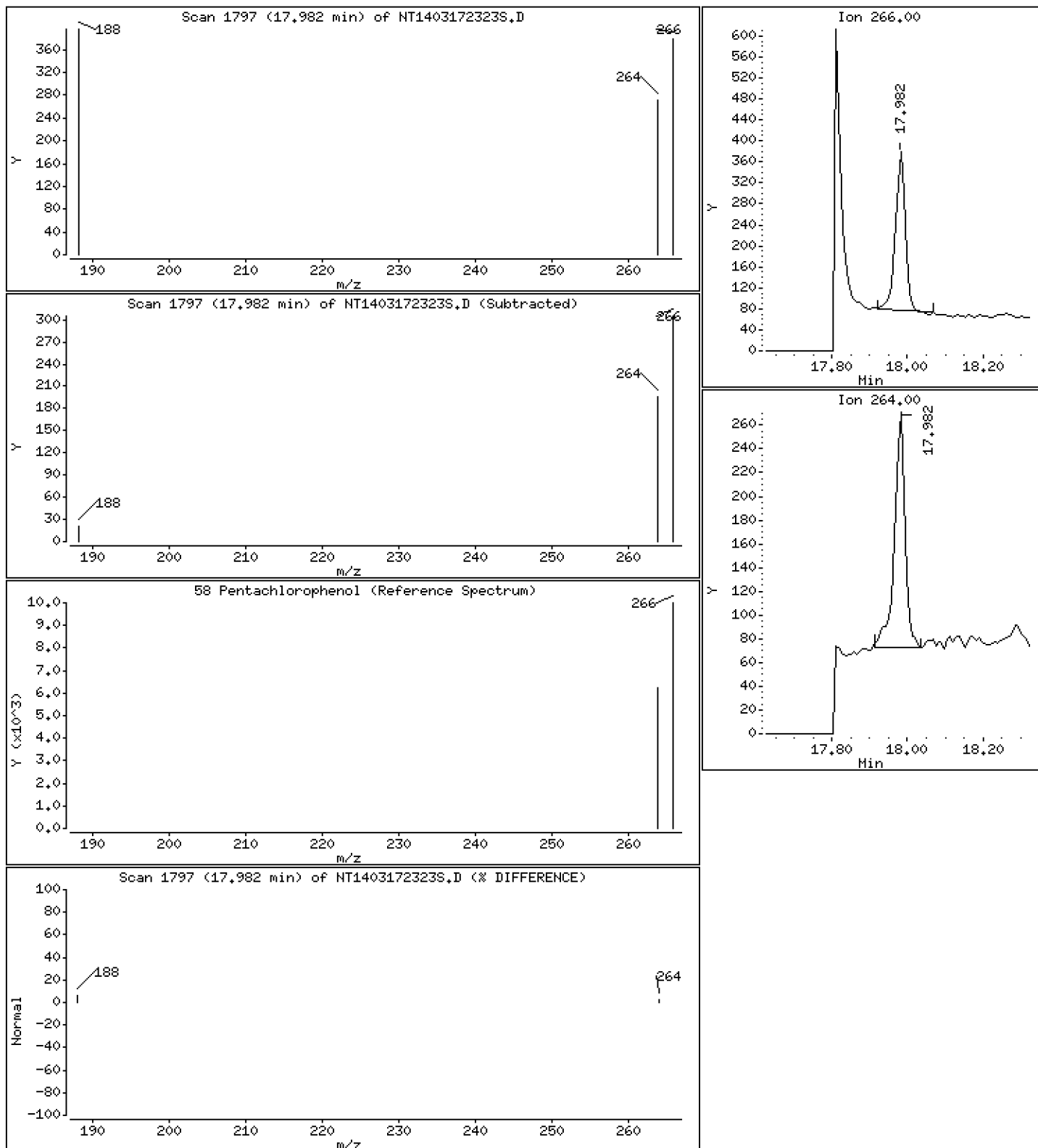
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,01979 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

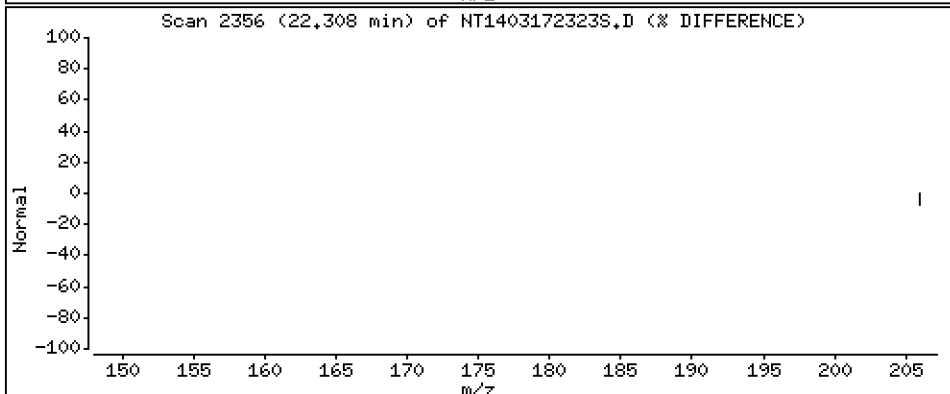
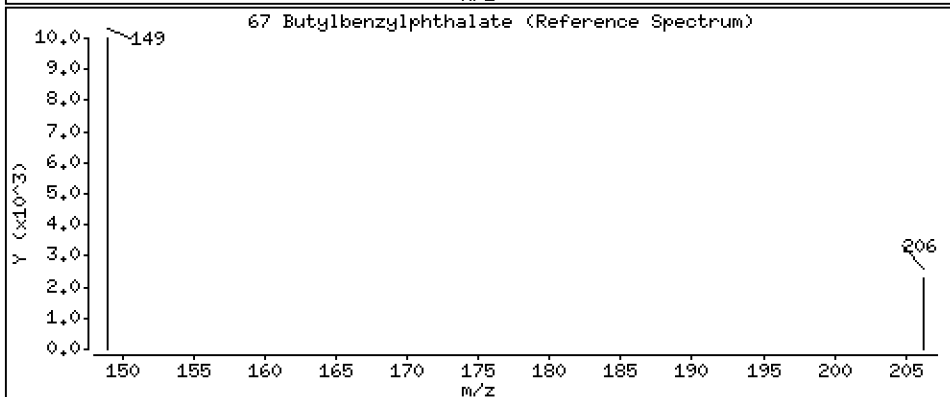
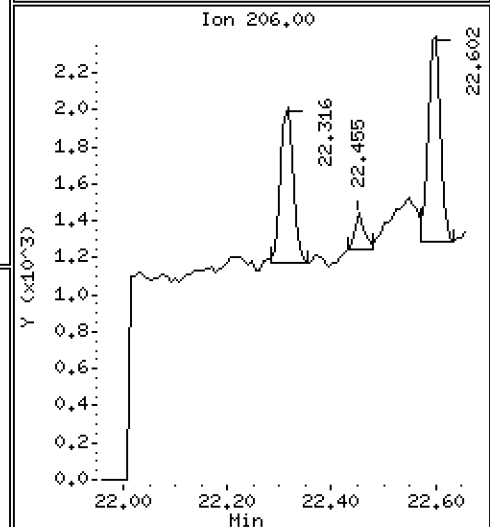
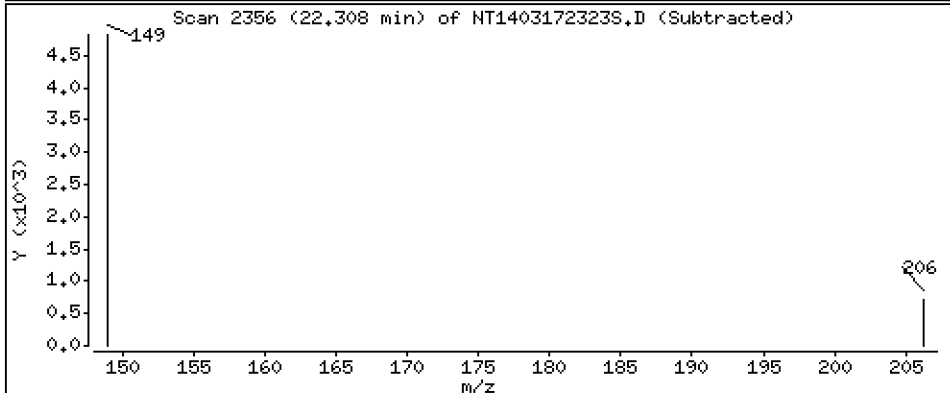
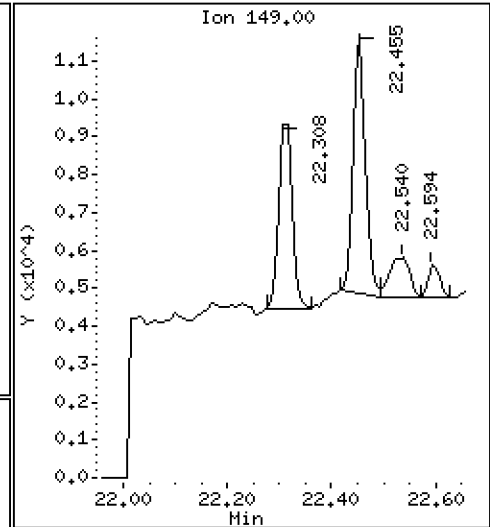
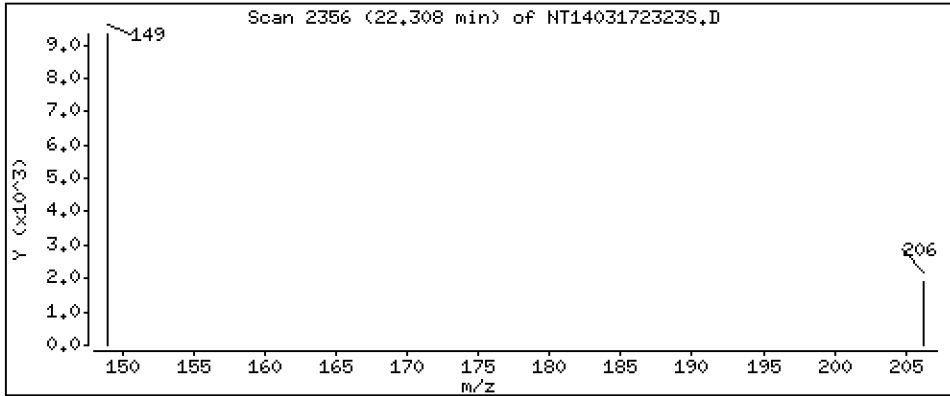
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1841 ug/mL



Date : 18-MAR-2023 03:42

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-04

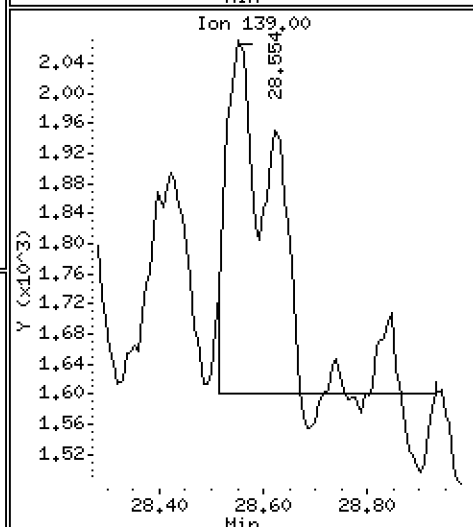
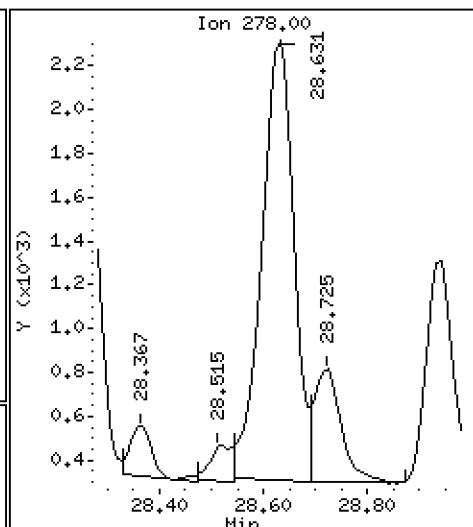
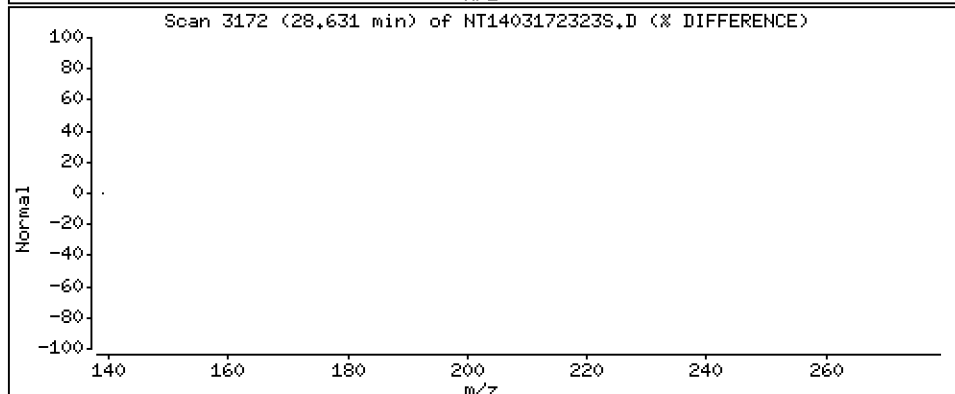
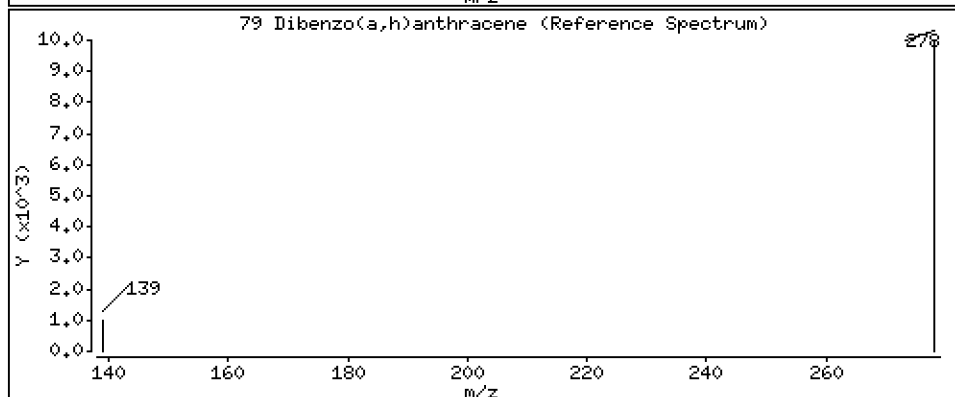
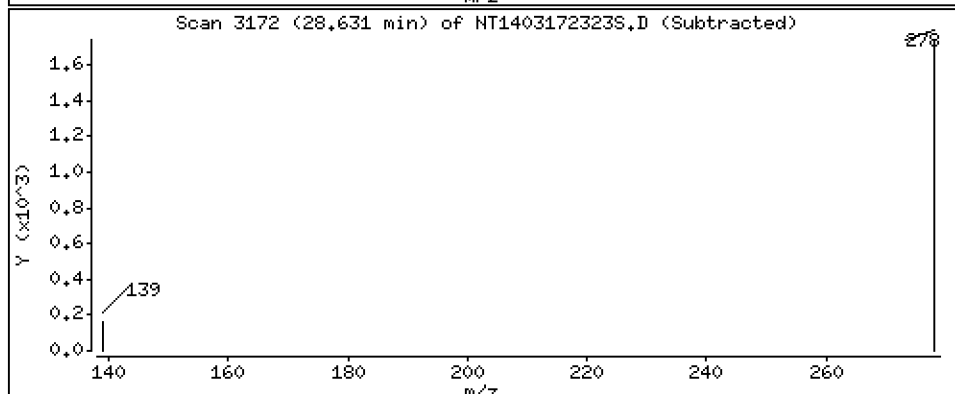
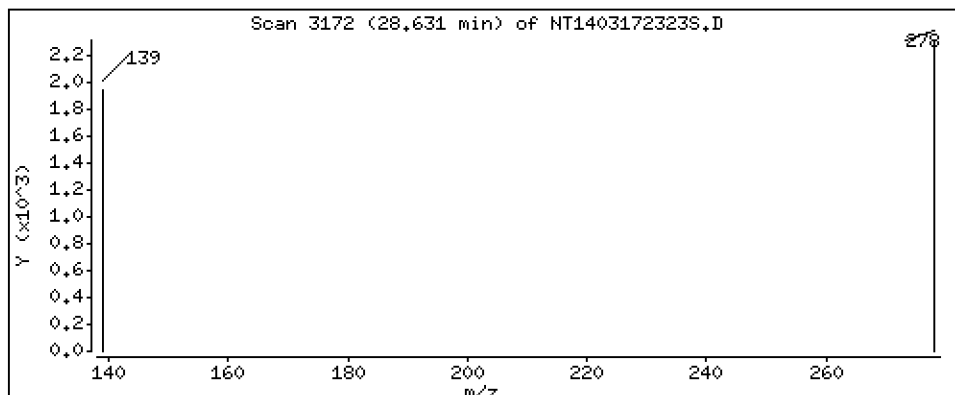
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1829 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172323S.D
 Lab Smp Id: 23B0229-04
 Inj Date : 18-MAR-2023 03:42 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-04
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.849	6.826	(0.755)	402903	4.57566	4.576 (R)
3 Phenol	94		8.448	8.441	(0.932)	22858	0.18877	0.1888
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	259410	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	1780	0.01775	0.01775
11 Benzyl alcohol	79		9.346	9.354	(1.031)	53615	0.75542	0.7554
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	471	0.00482	0.004823 (M)
13 2-Methylphenol	108		9.571	9.564	(1.056)	952	0.01138	0.01138 (M)
15 4-Methylphenol	108		9.843	9.828	(1.086)	5261	0.05954	0.05954
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		11.022	10.999	(0.953)	94801	1.48202	1.482
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.564	11.565	(1.000)	978160	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.698	14.698	(0.967)	9160	0.06219	0.06219 (M)
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	431277	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	48686	0.31048	0.3105
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		17.982	17.974	(0.986)	529	0.01979	0.01979 (M)
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	761577	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.386	(0.918)	330981	7.60280	7.603 (R)
67 Butylbenzylphthalate	149		22.307	22.308	(0.957)	8125	0.18415	0.1841
* 69 Chrysene-d12	240		23.299	23.291	(1.000)	252525	4.00000	
* 77 Perylene-d12	264		25.939	25.931	(1.000)	188068	4.00000	
79 Dibenzo(a,h)anthracene	278		28.631	28.631	(1.104)	8719	0.18288	0.1829
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172323S.D
 Lab Smp Id: 23B0229-04
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	259410	15.18
27 Naphthalene-d8	830434	415217	1660868	978160	17.79
42 Acenaphthene-d10	389907	194954	779814	431277	10.61
59 Phenanthrene-d10	763679	381840	1527358	761577	-0.28
69 Chrysene-d12	415791	207896	831582	252525	-39.27
77 Perylene-d12	274872	137436	549744	188068	-31.58

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172323S.D

Lab ID: 23B0229-04

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 03:42

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

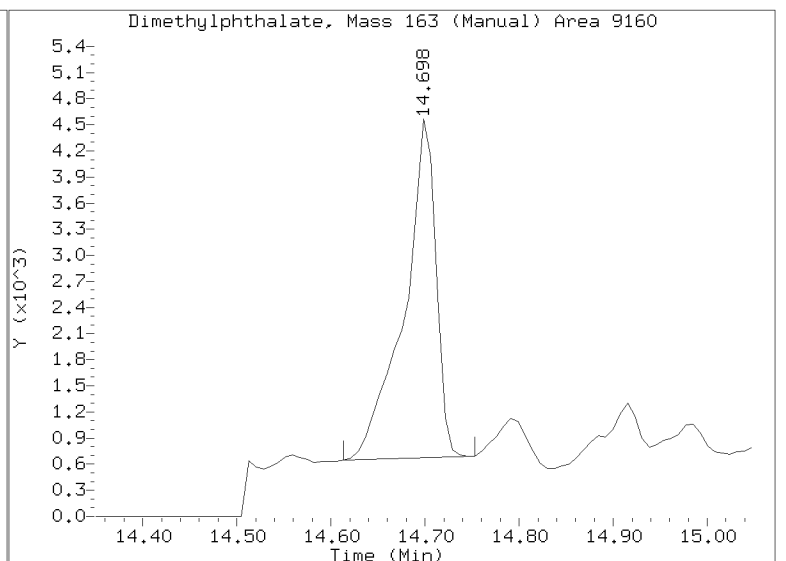
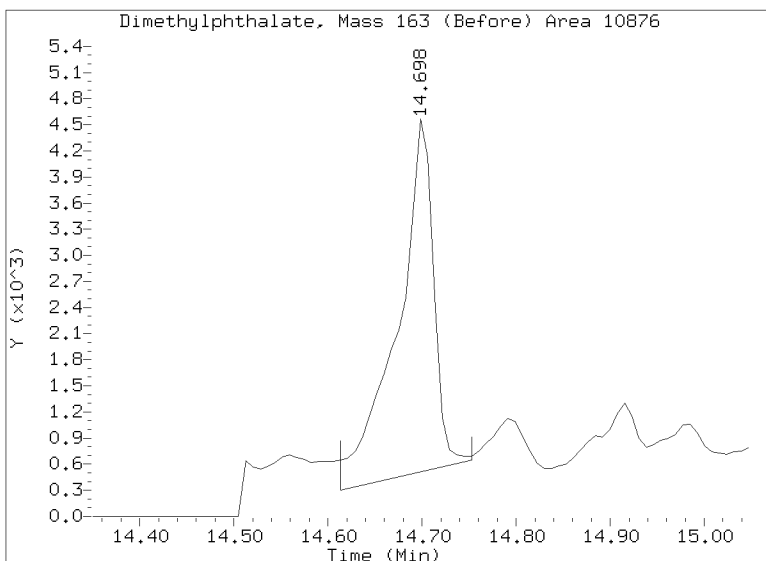
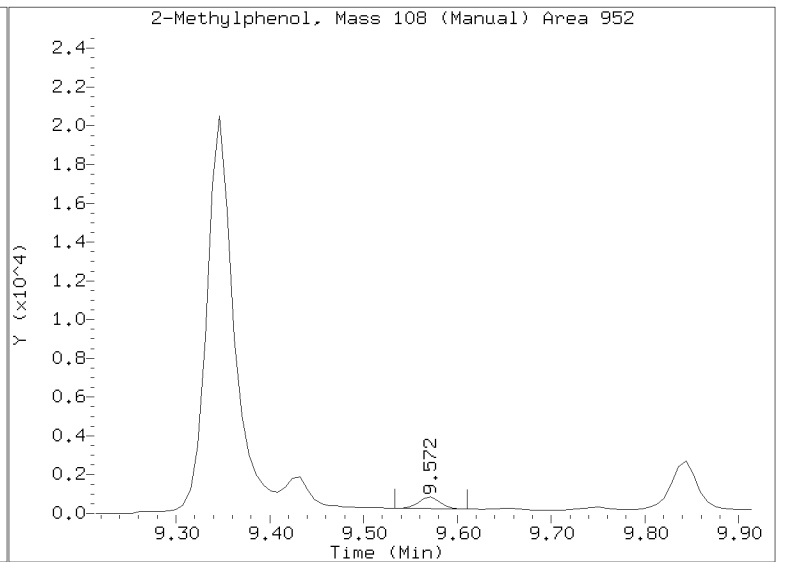
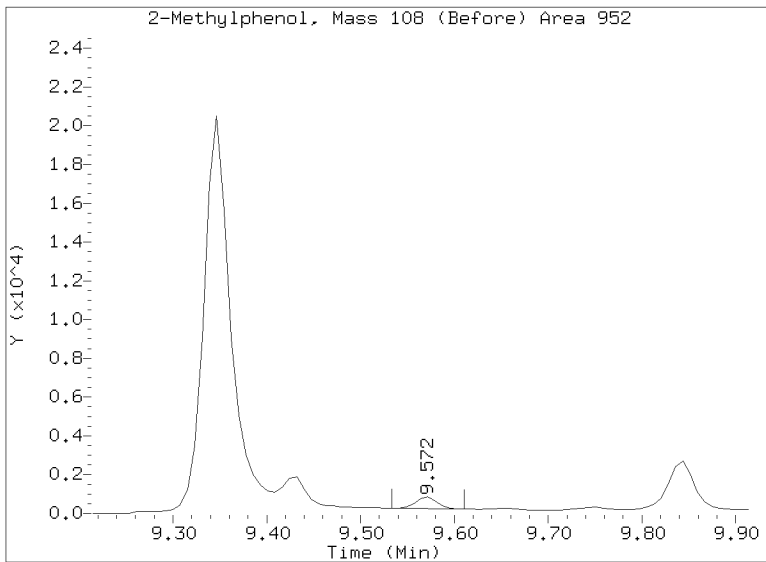
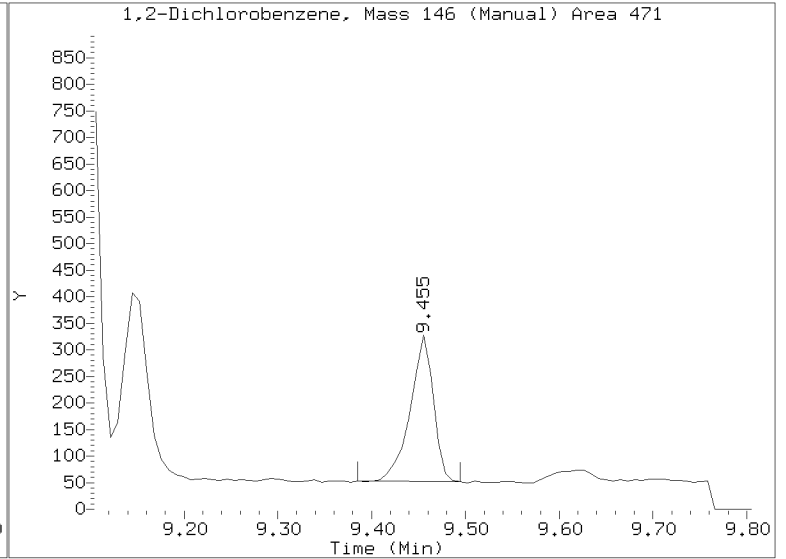
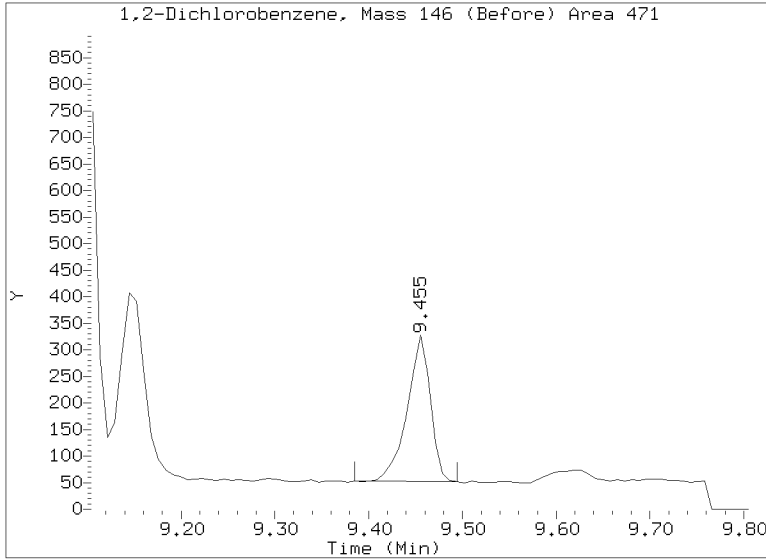
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

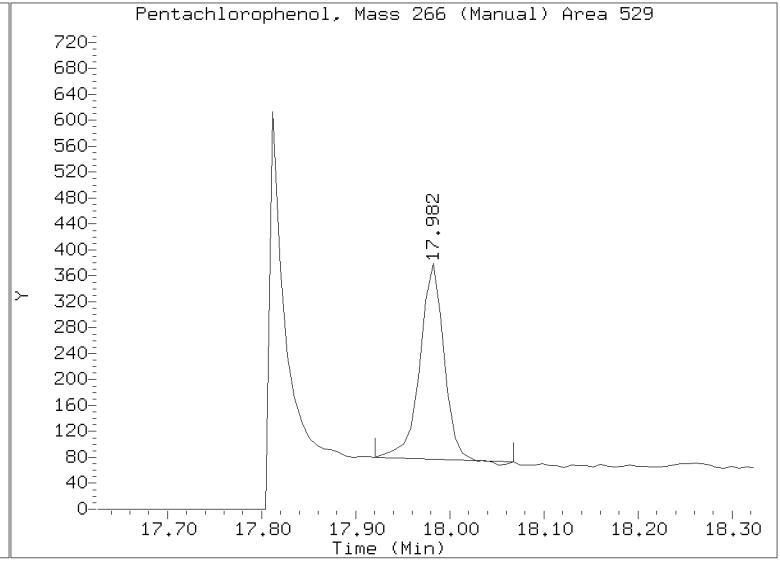
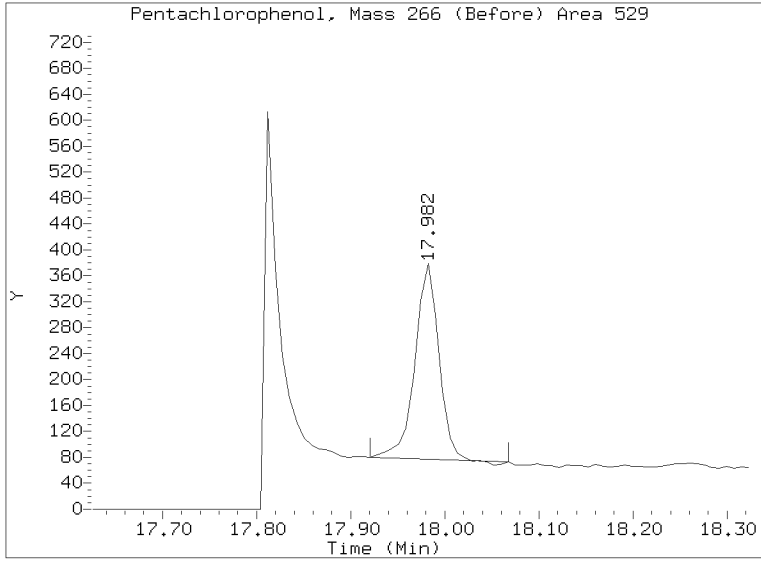
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172323S.D
Injection Date: 18-MAR-2023 03:42
Lab ID:23B0229-04 Client ID:
Report Date: 03/23/2023 16:56



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172323S.D
Injection Date: 18-MAR-2023 03:42
Lab ID:23B0229-04 Client ID:
Report Date: 03/23/2023 16:56





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-05 A

SDG: 23B0229

Sampled: 02/08/23 12:45

Prepared: 02/17/23 15:00

File ID: NT1403172324S.D

% Solids: 44.93

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 04:18

Batch: BLB0424

Sequence: SLC0376

Initial/Final: 22.79 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00050

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.7	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	1.0	J	0.7	4.9
100-51-6	Benzyl Alcohol	1	86.7		2.4	19.5
65-85-0	Benzoic acid	1	147	Q	13.1	97.7
105-67-9	2,4-Dimethylphenol	1	19.5	U	2.1	19.5
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	4.4	J	2.1	19.5

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	732.45	430	58.7	27 - 120	
p-Terphenyl-d14	488.30	693	142	37 - 120	*,Q

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723245.D

Date: 18-MAR-2023 04:18

Client ID:

Sample Info: 23B0229-05

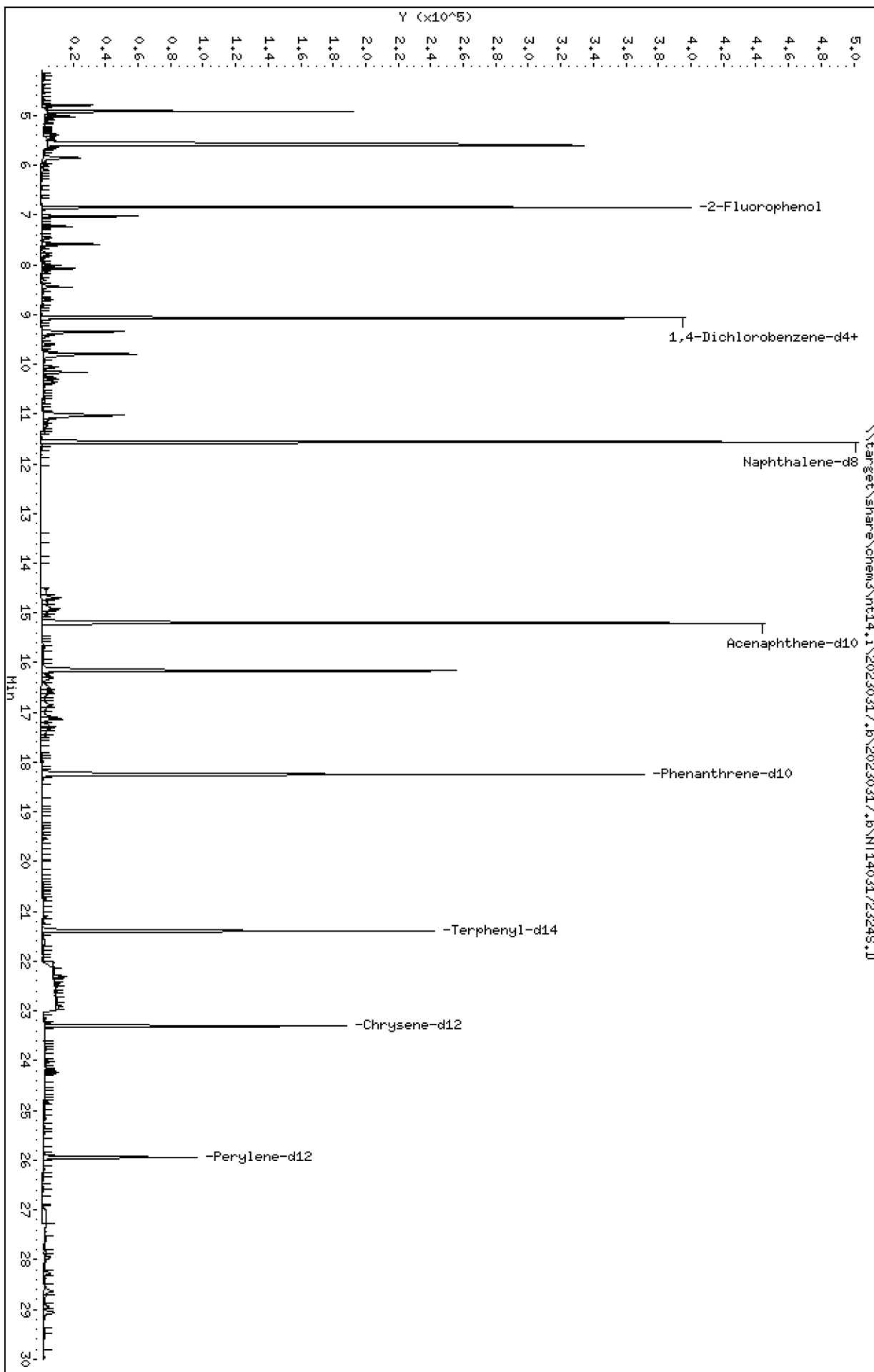
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

Page 1



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

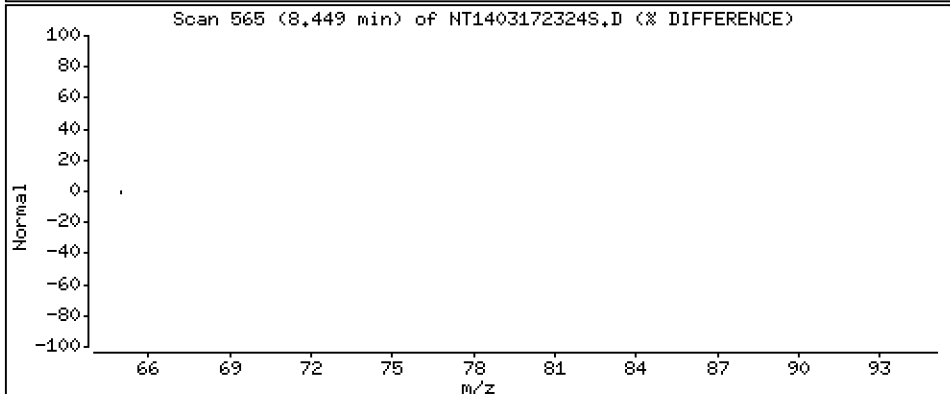
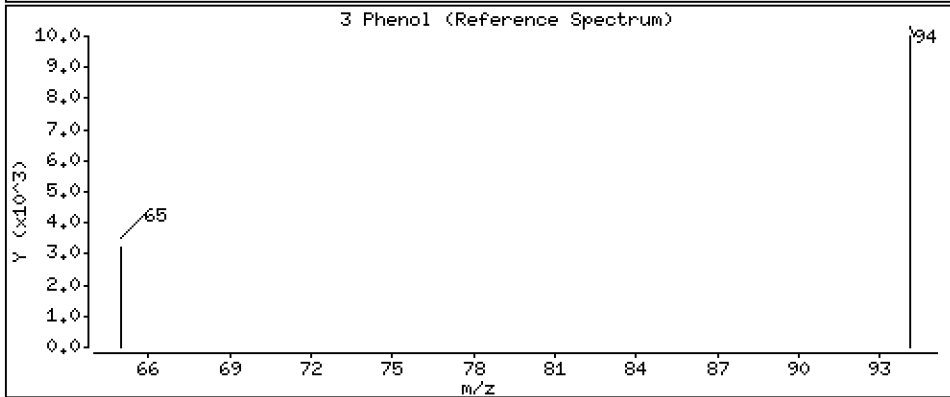
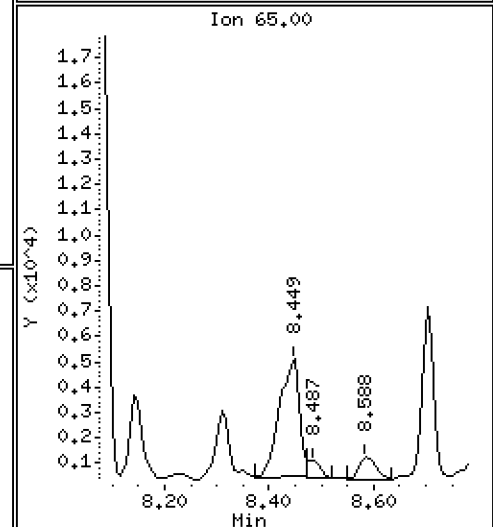
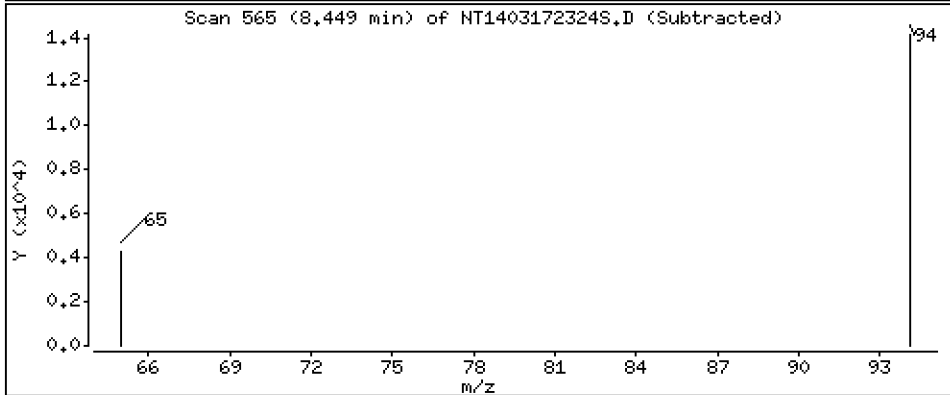
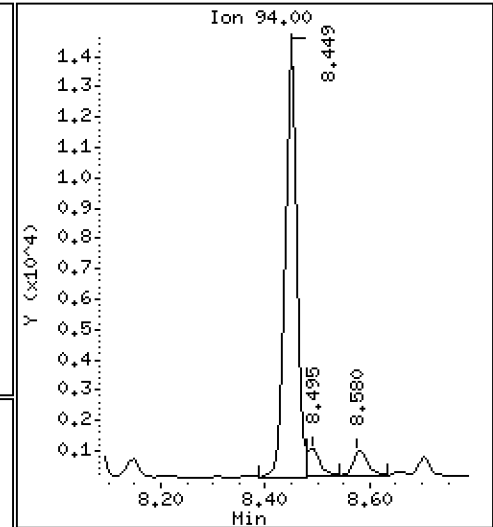
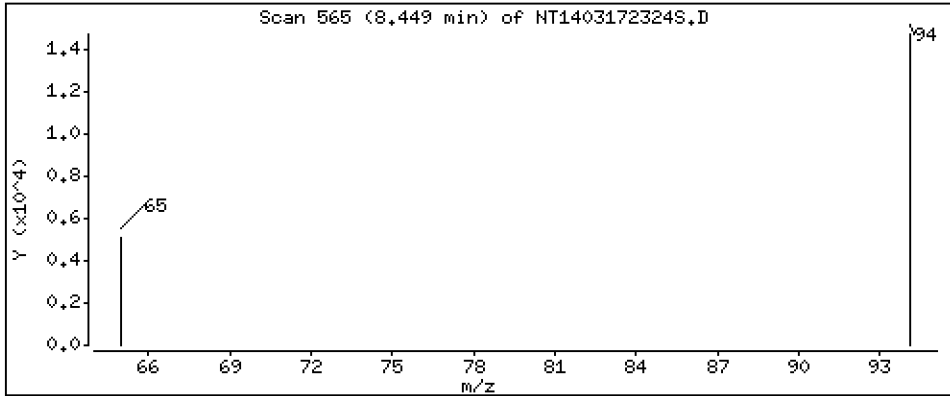
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1974 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

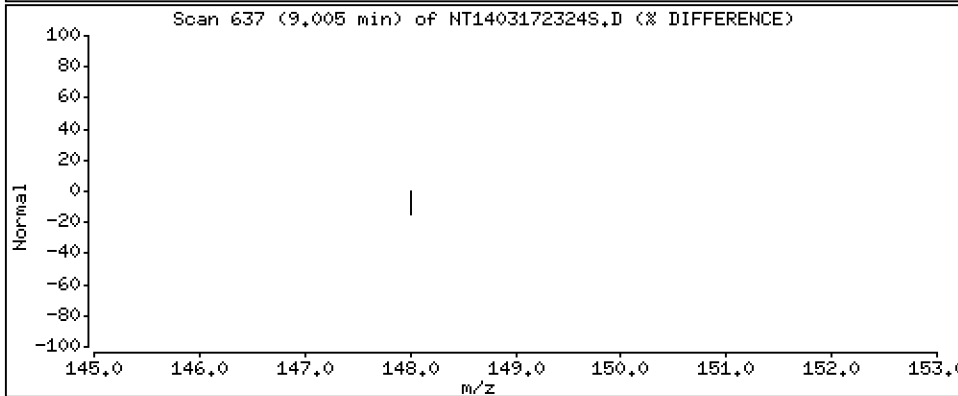
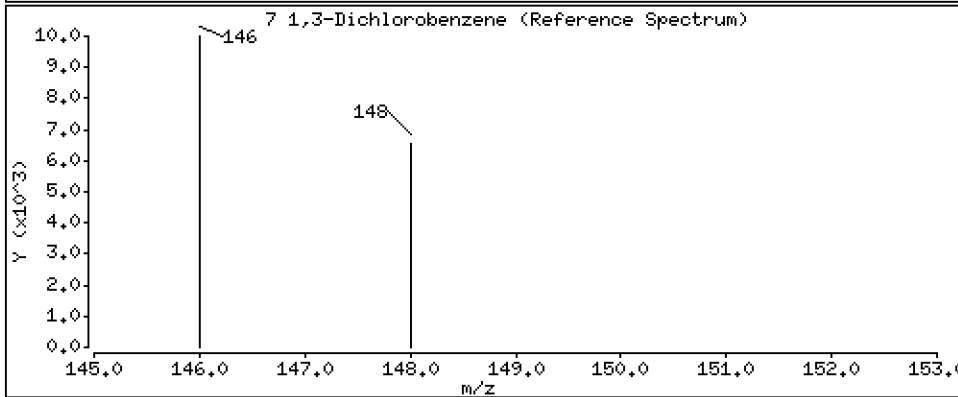
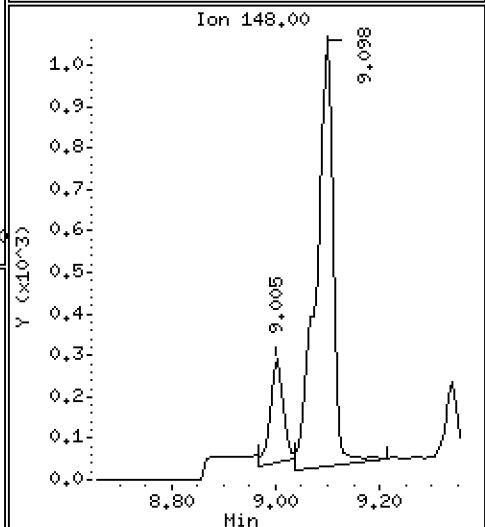
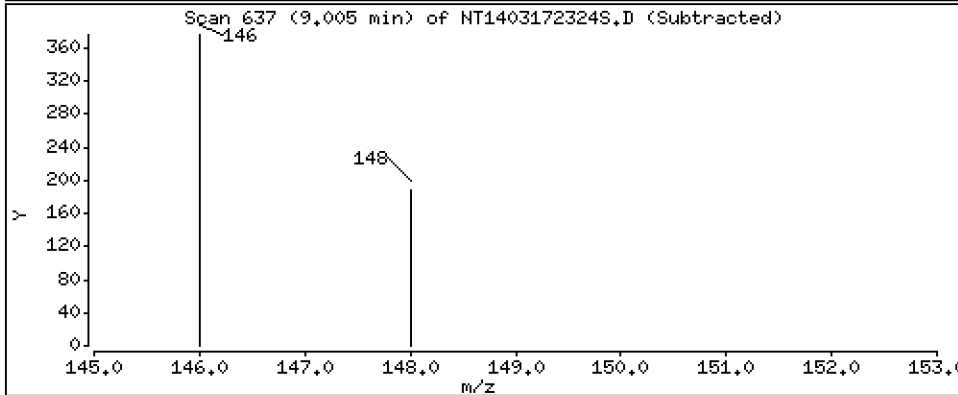
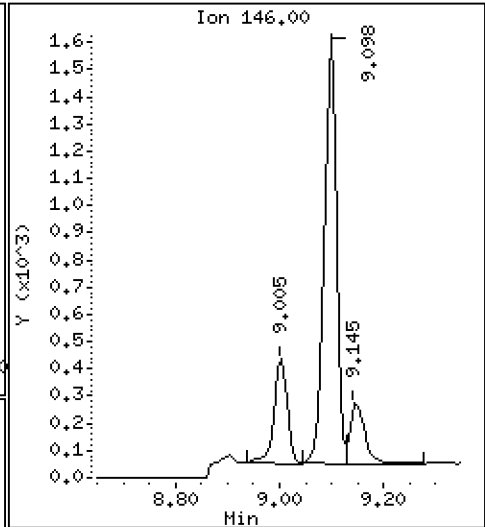
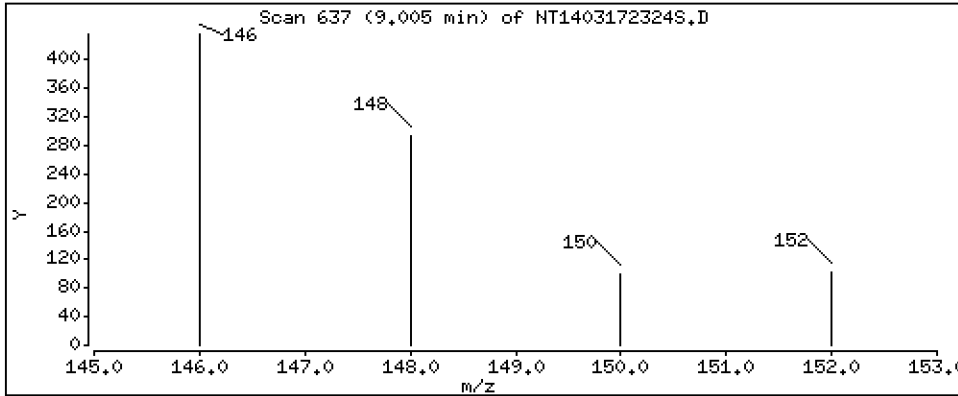
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.006851 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

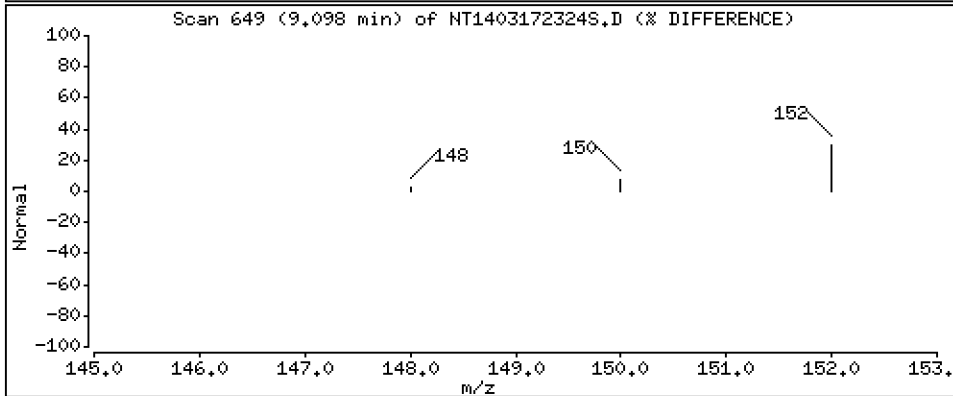
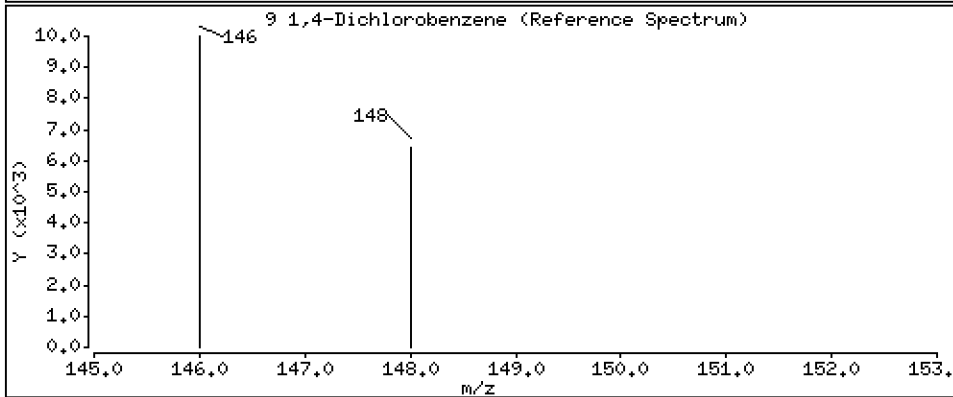
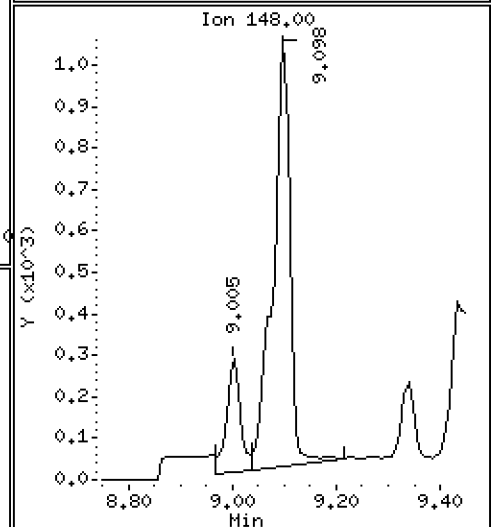
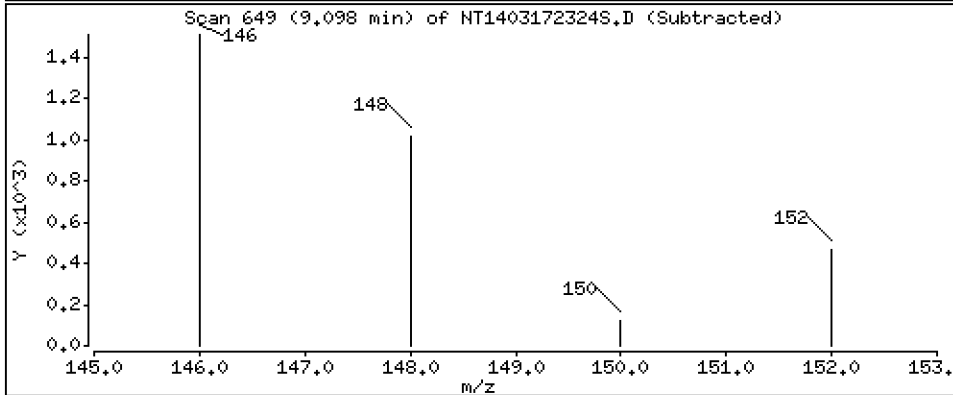
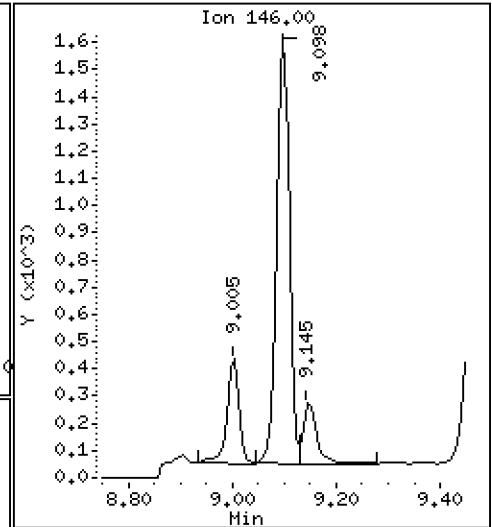
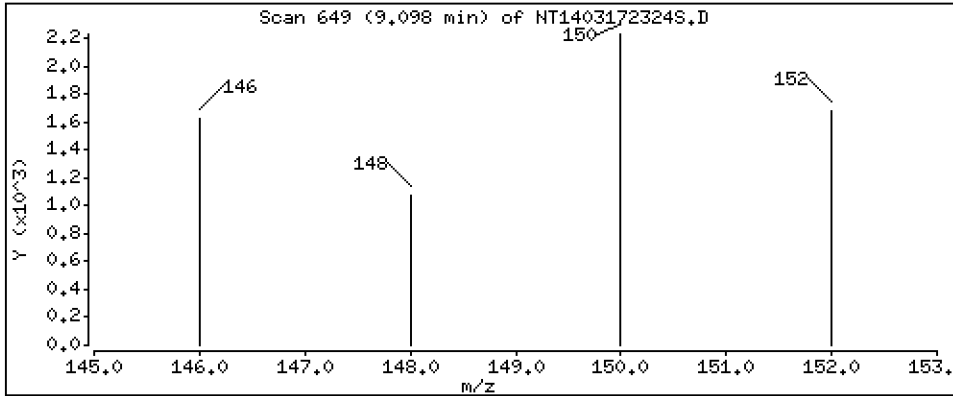
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.02744 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

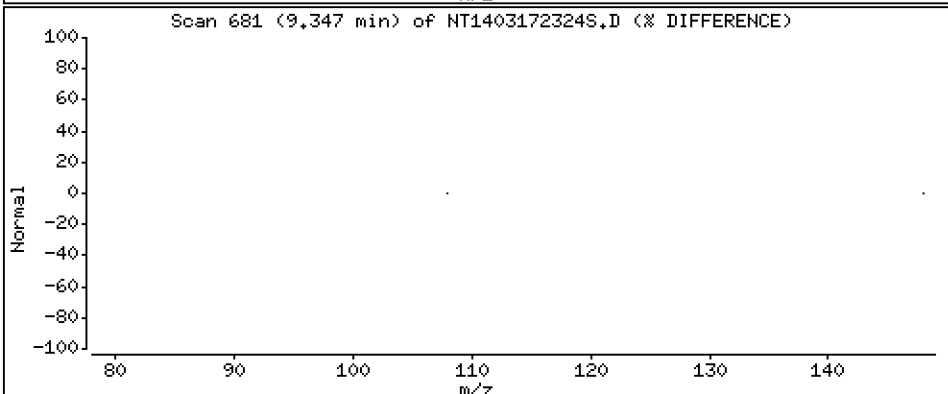
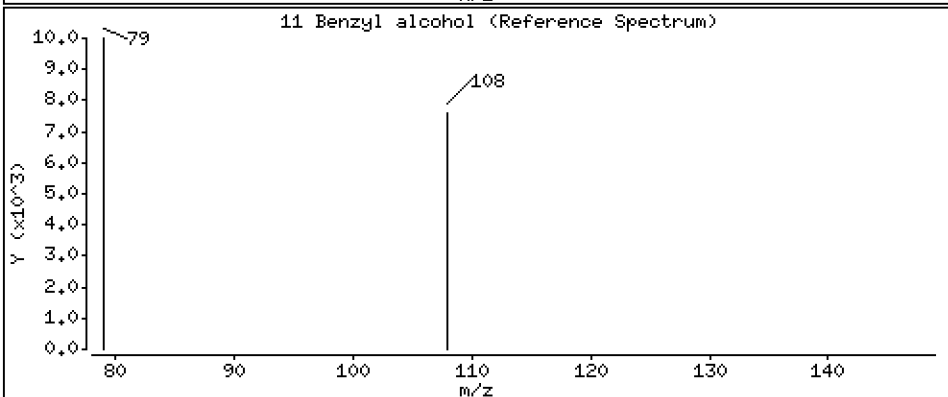
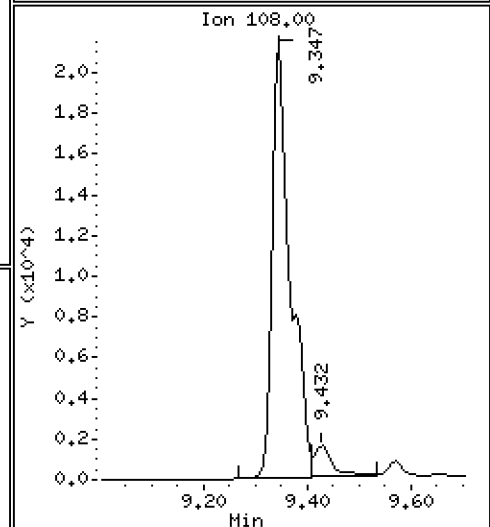
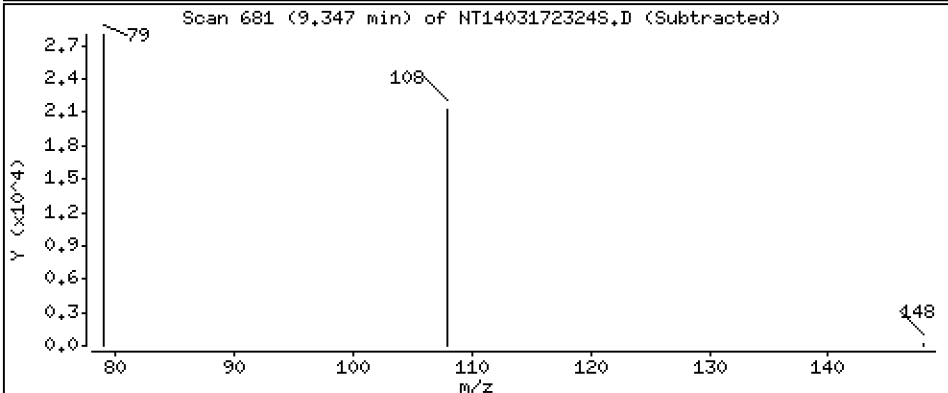
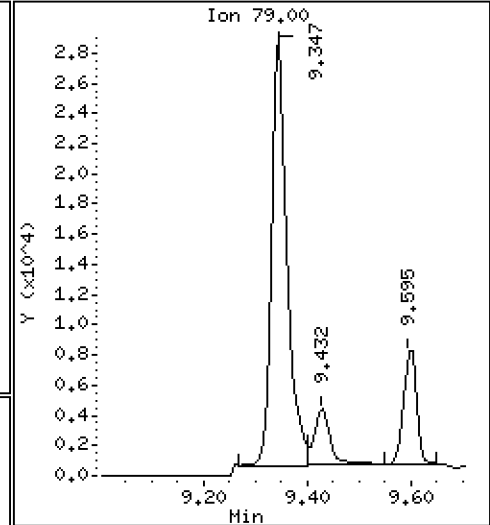
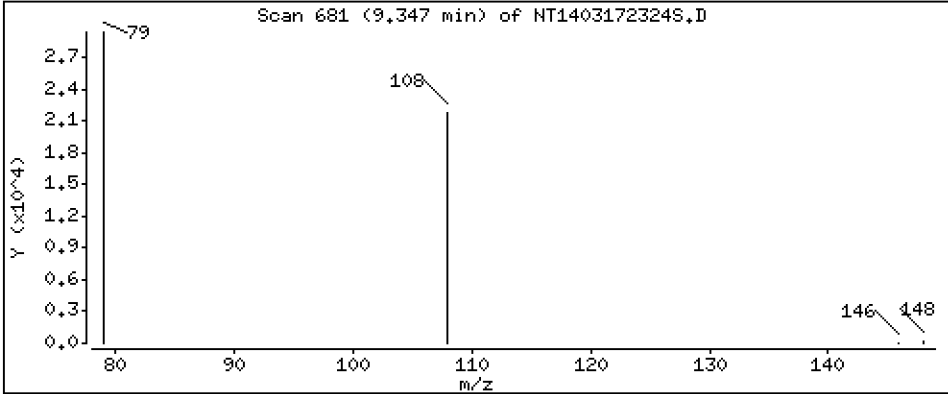
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,8873 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

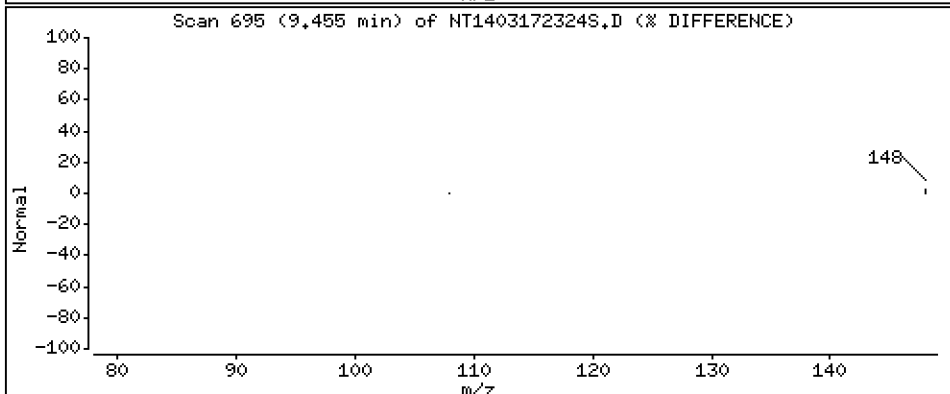
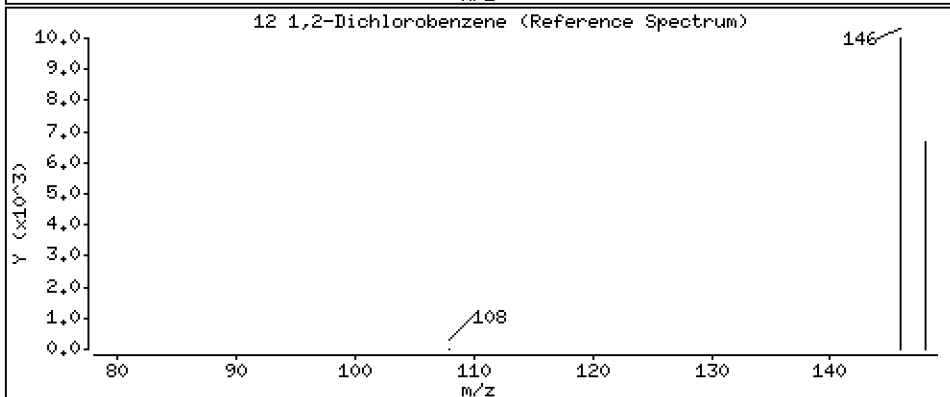
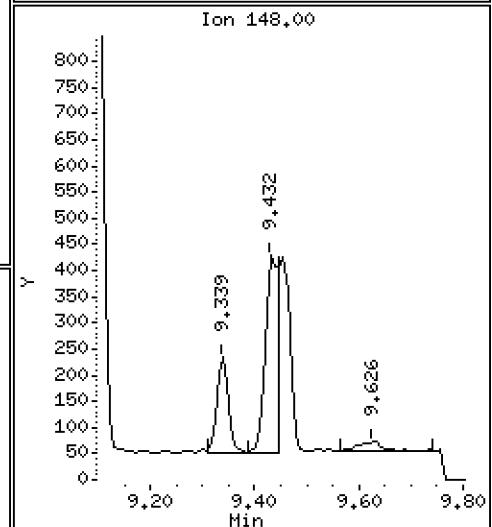
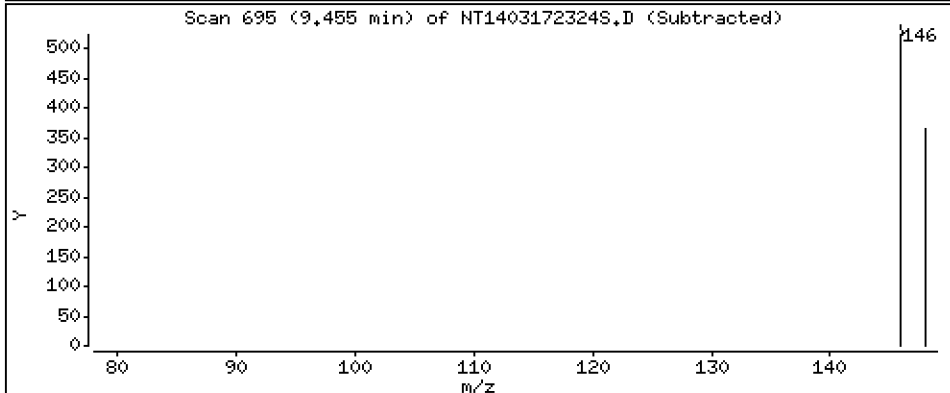
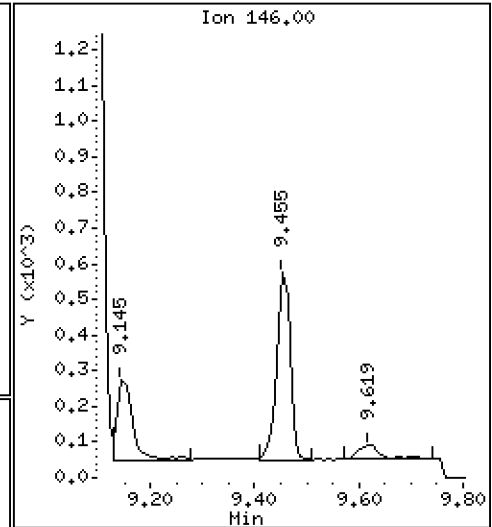
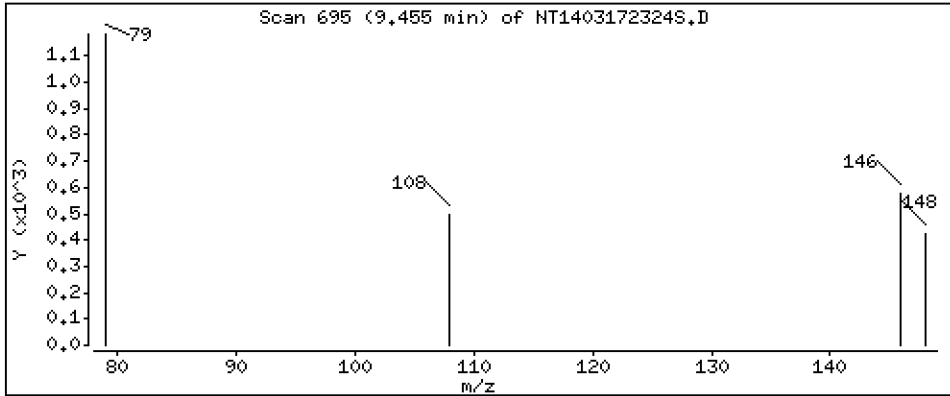
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,009939 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

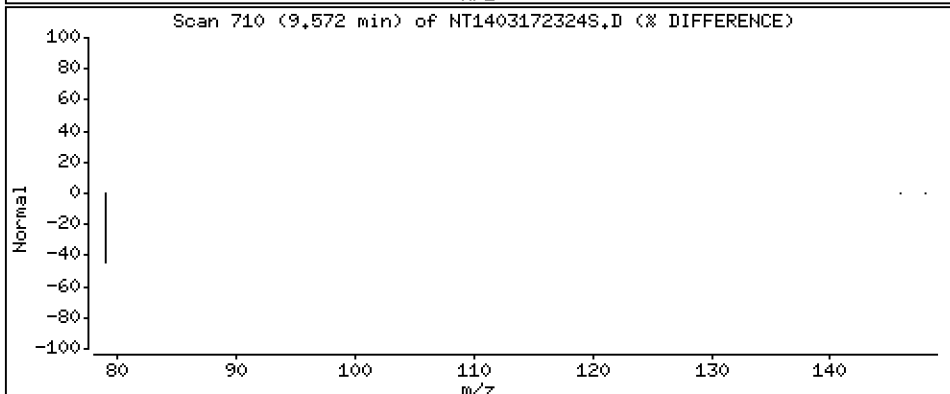
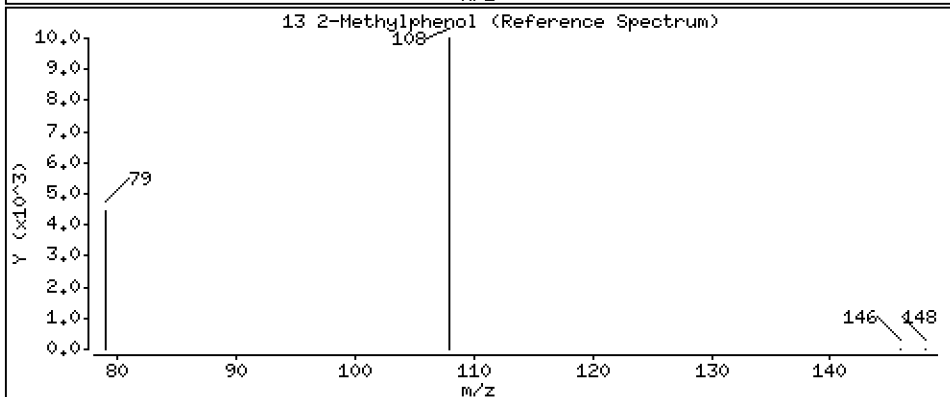
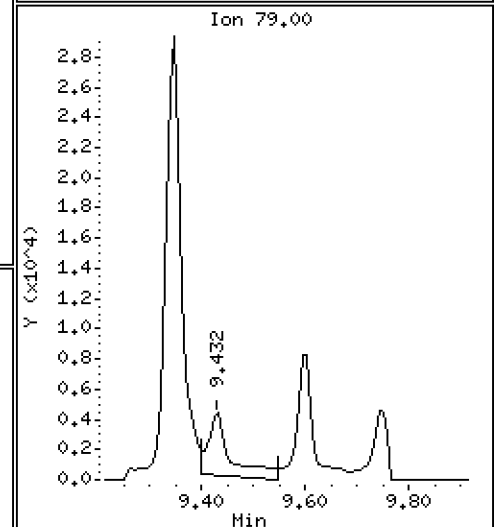
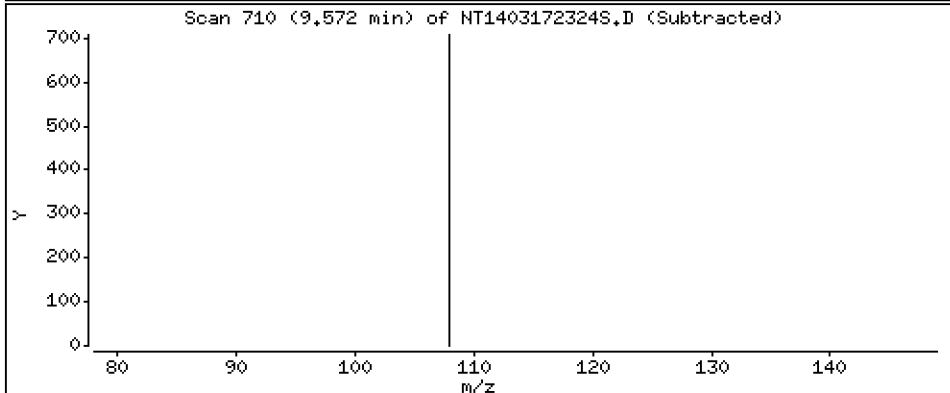
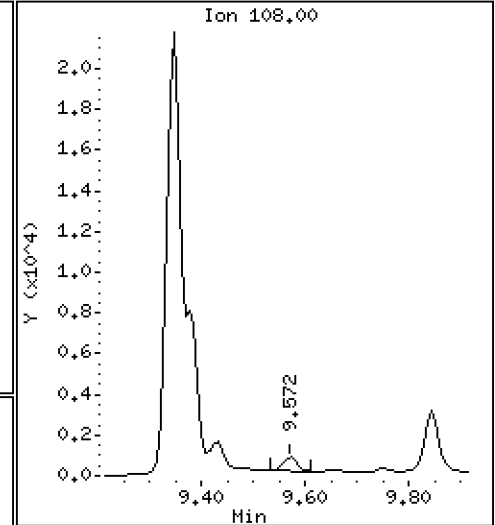
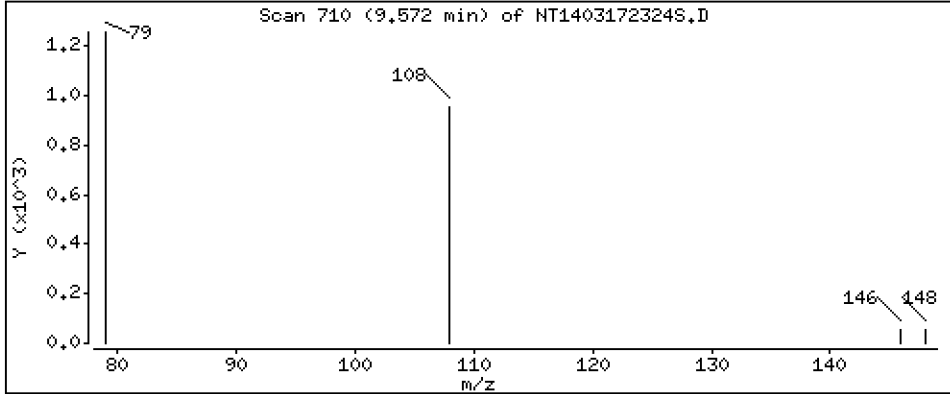
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.01494 ug/mL

13 2-Methylphenol



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

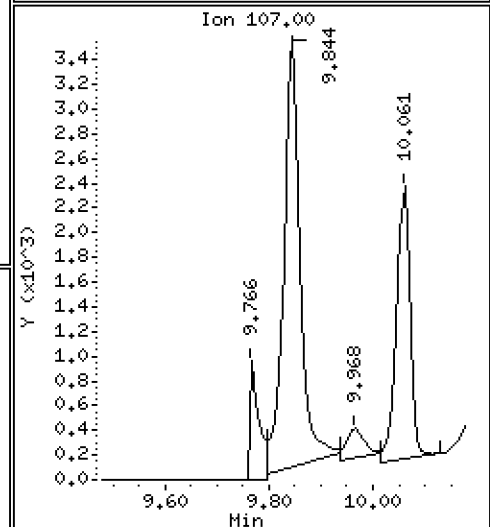
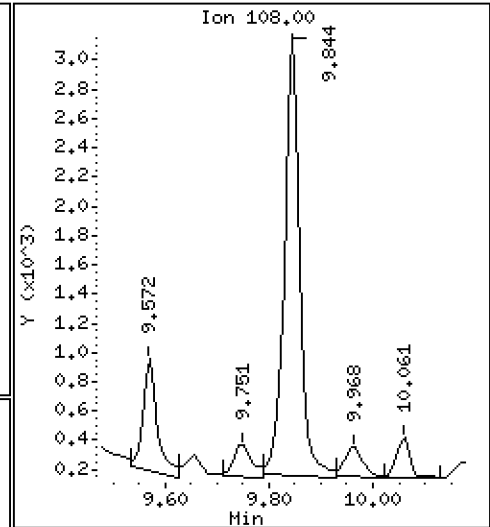
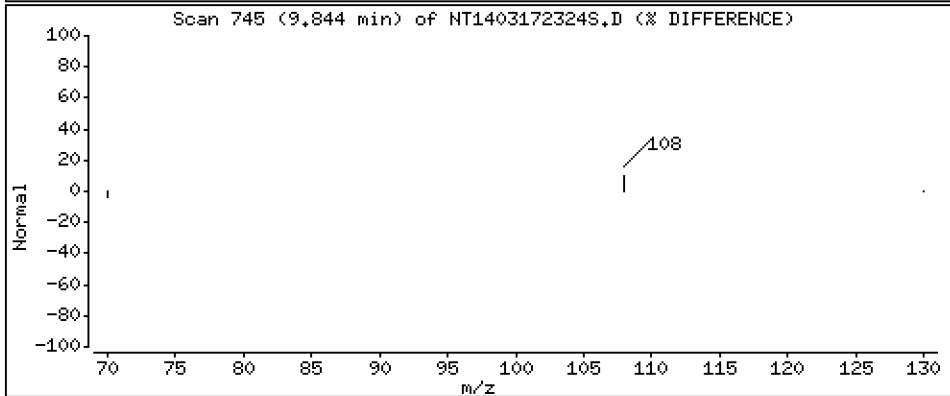
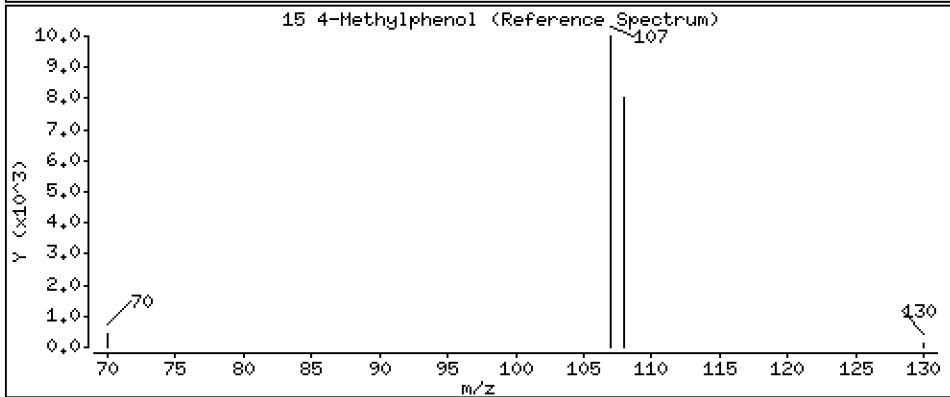
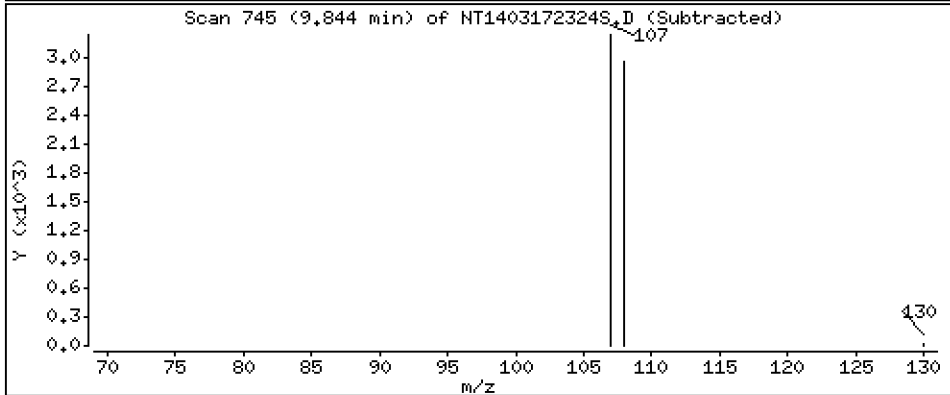
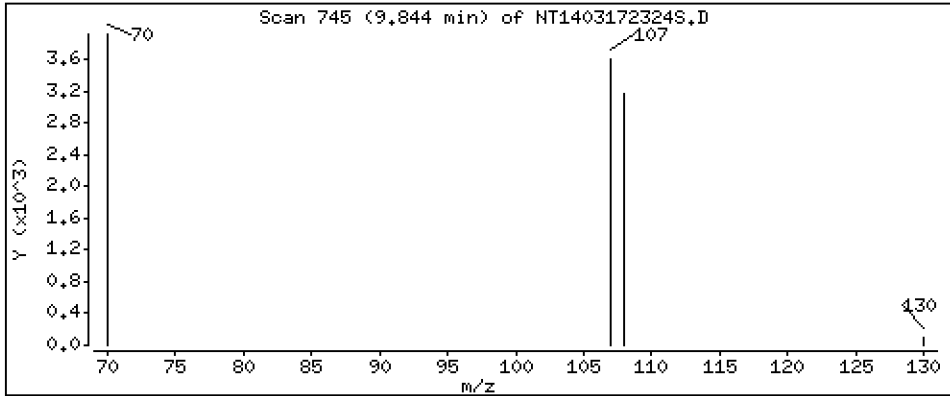
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.07744 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

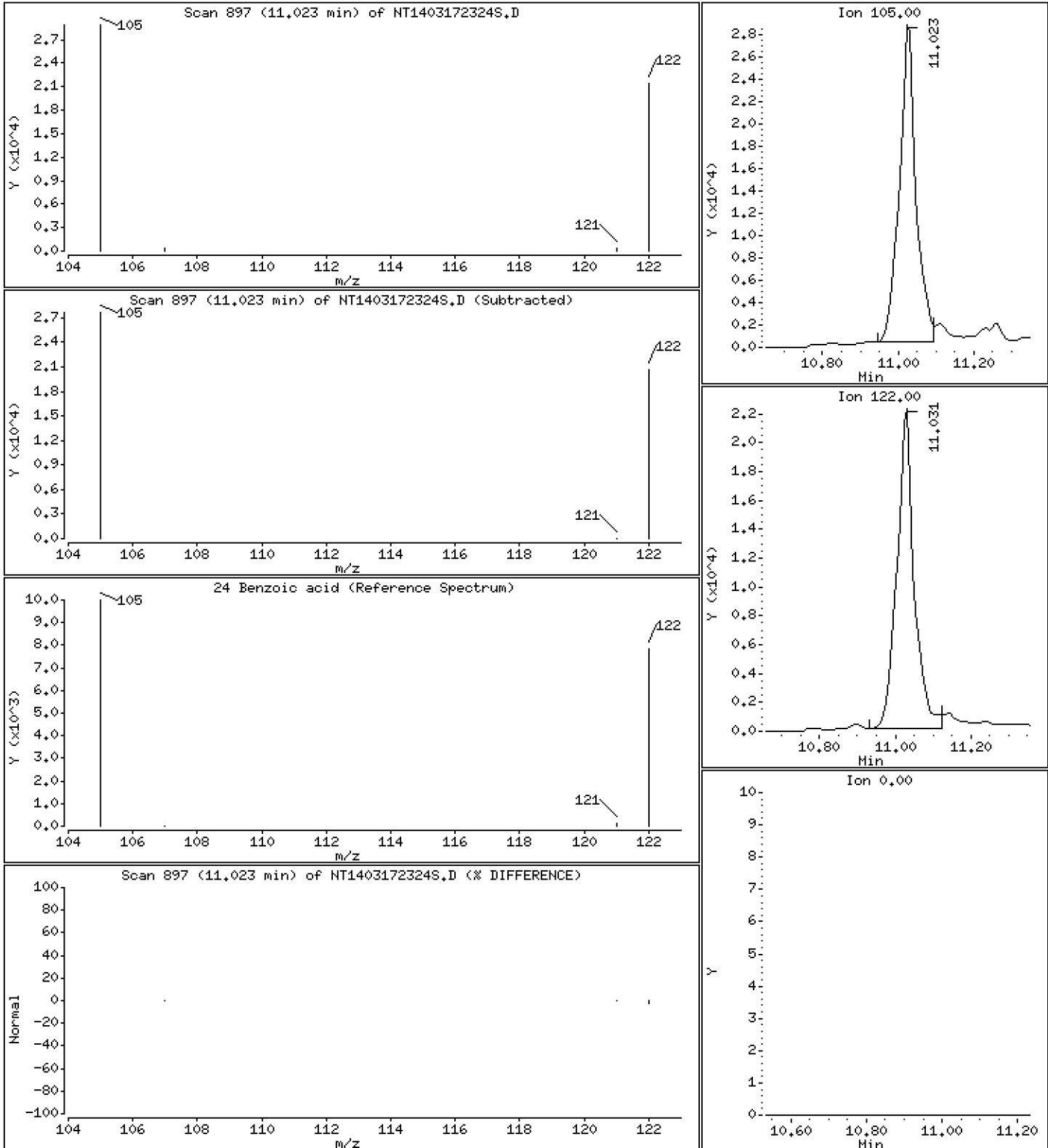
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,505 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

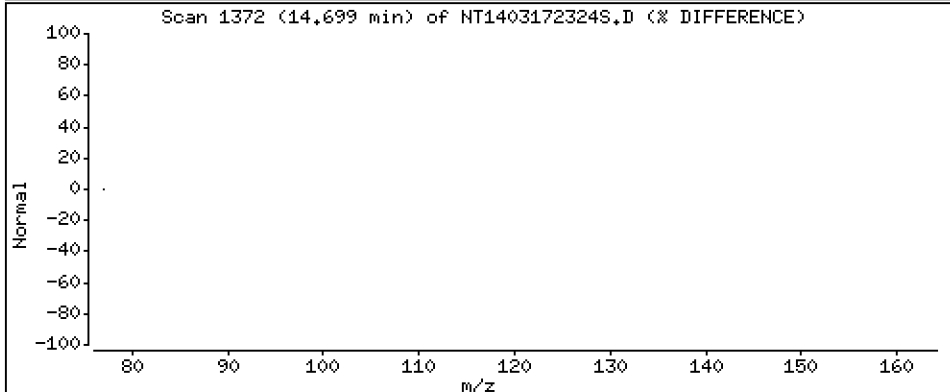
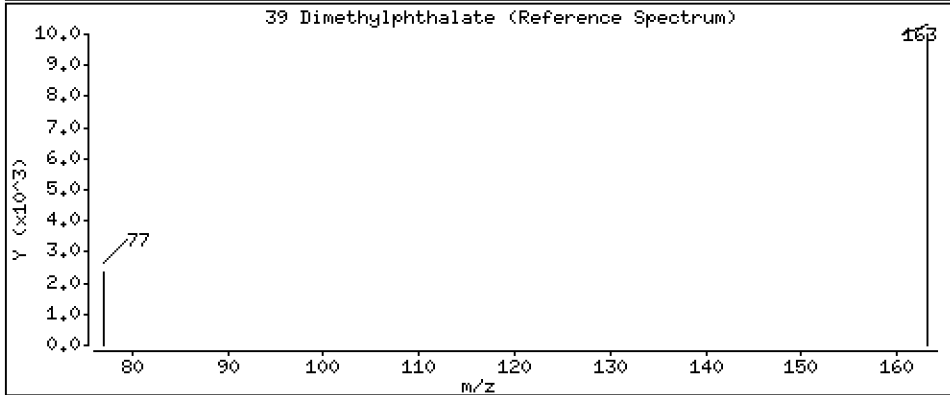
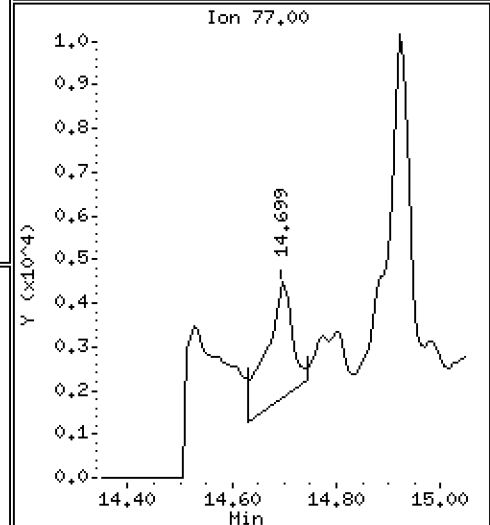
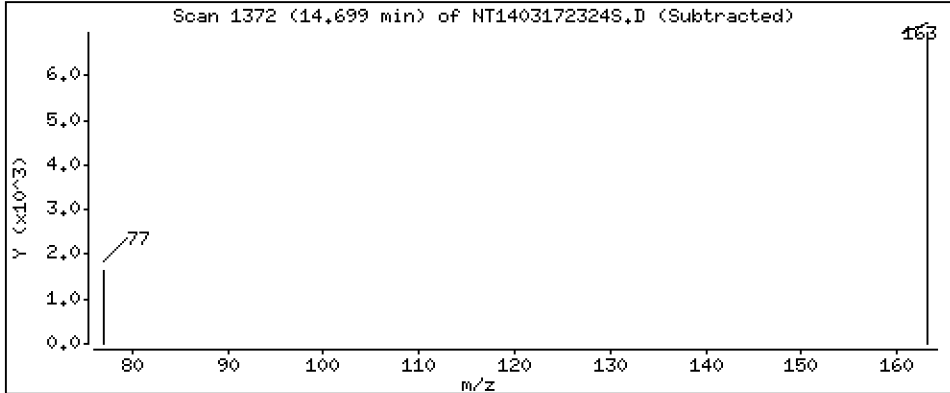
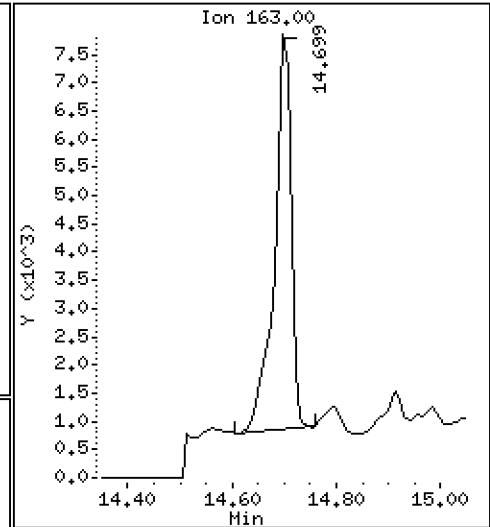
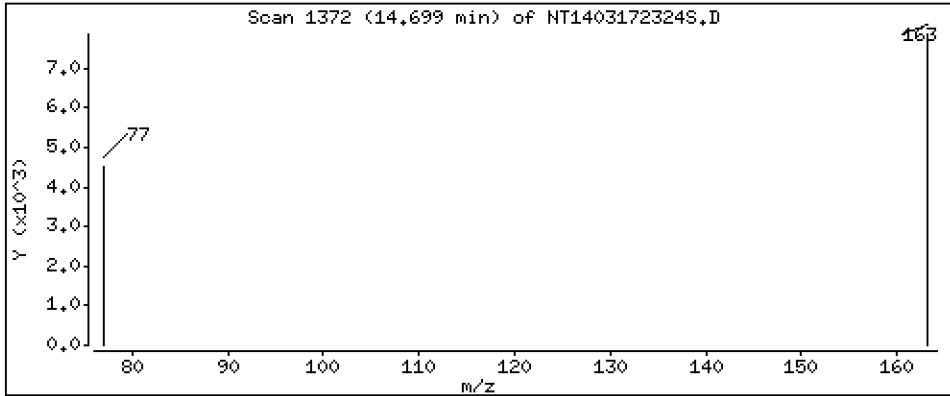
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1087 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

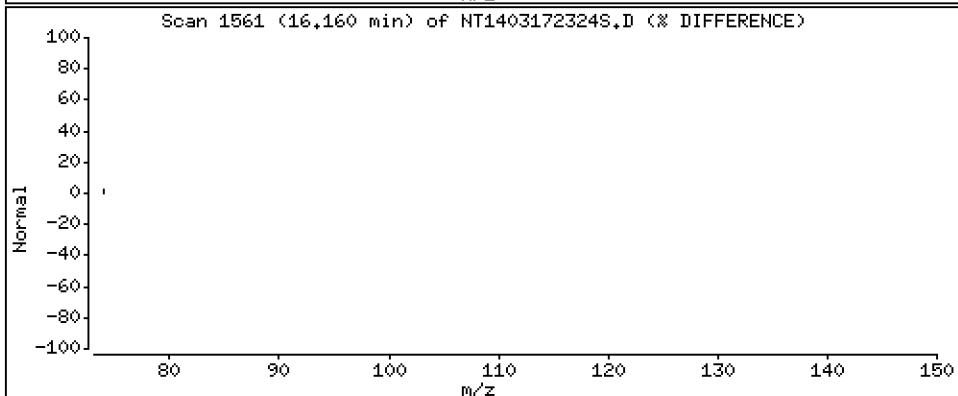
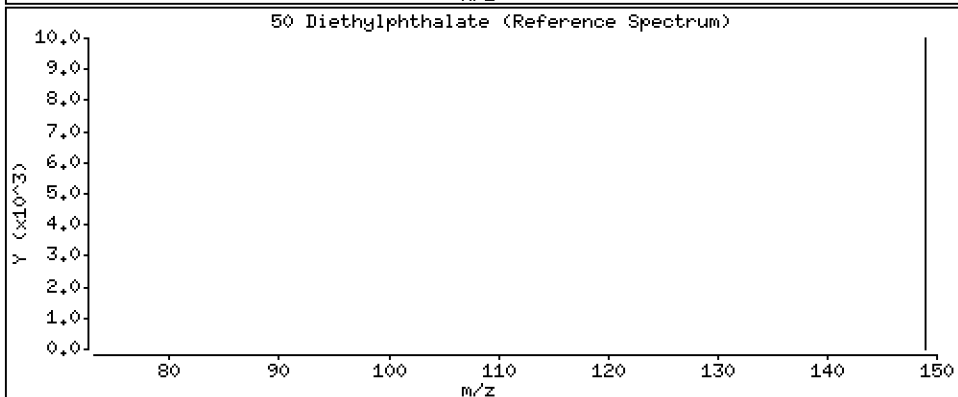
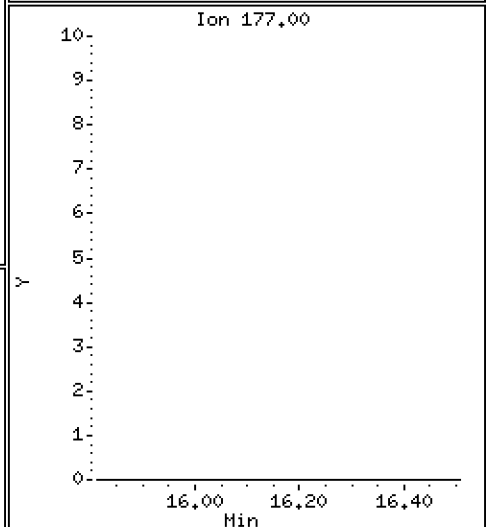
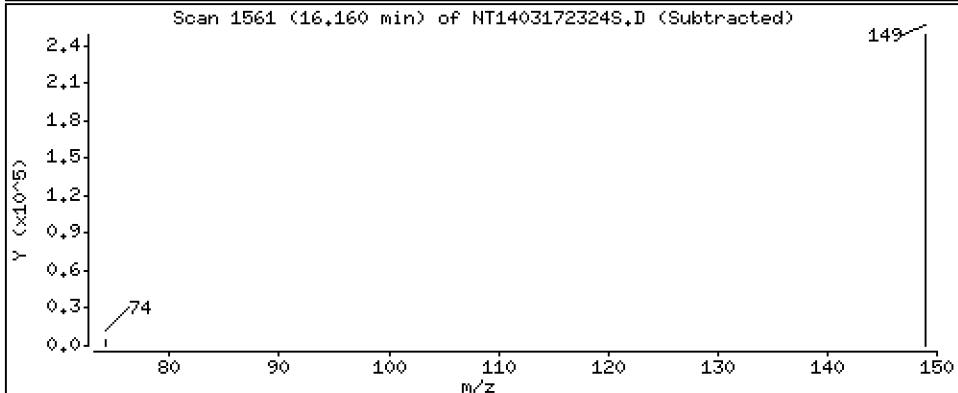
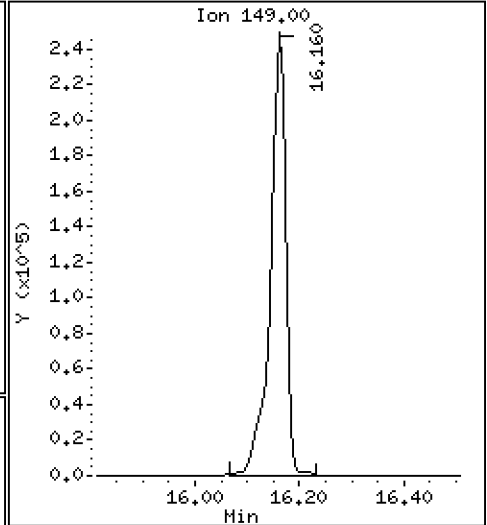
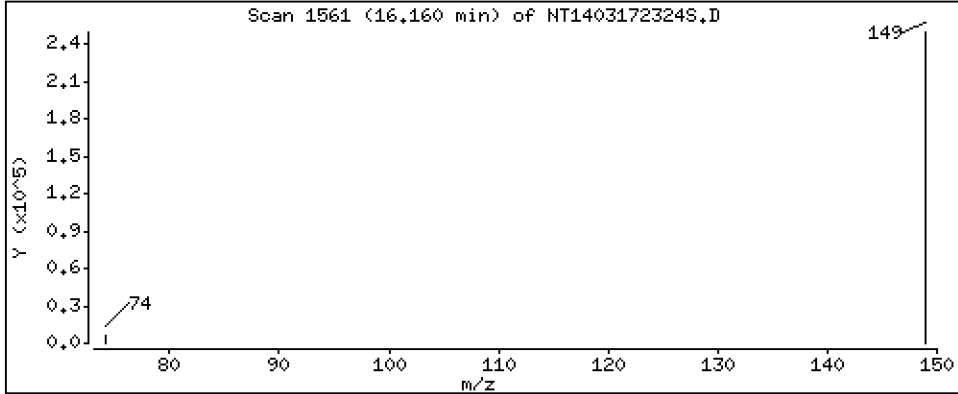
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 3,386 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

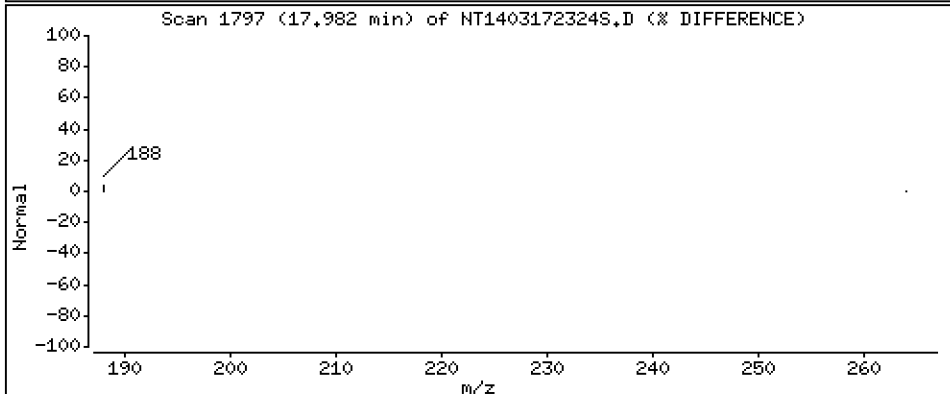
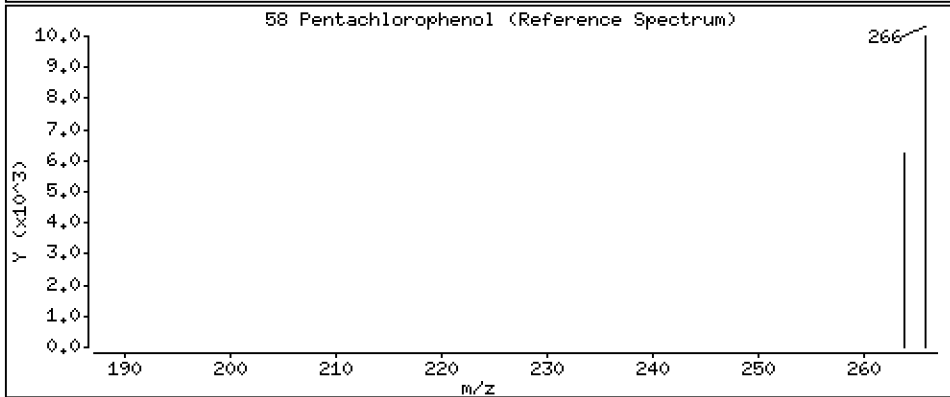
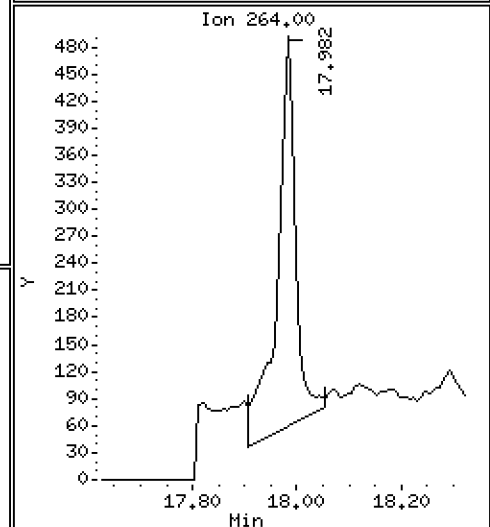
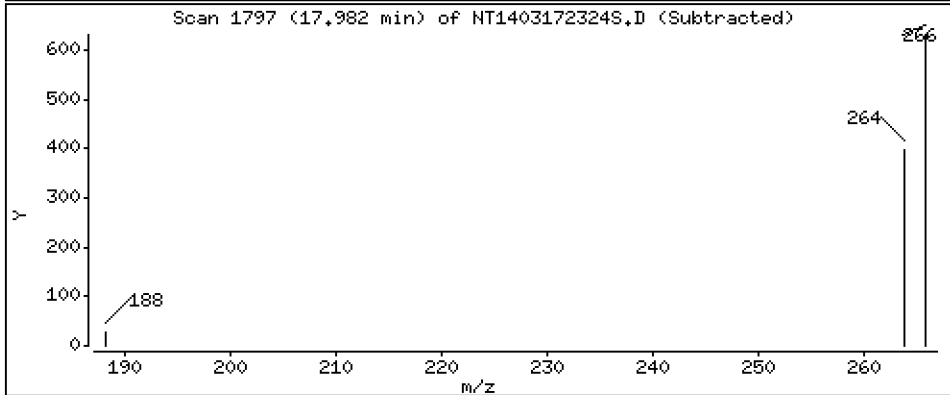
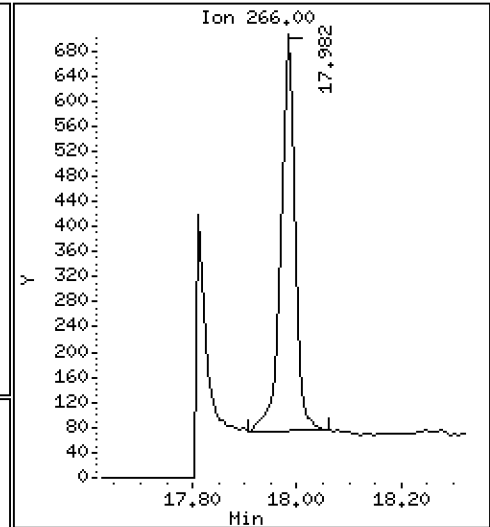
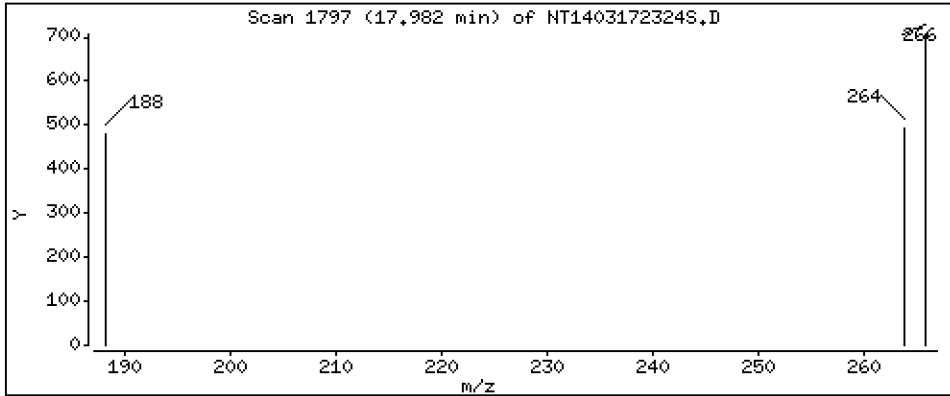
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,04517 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

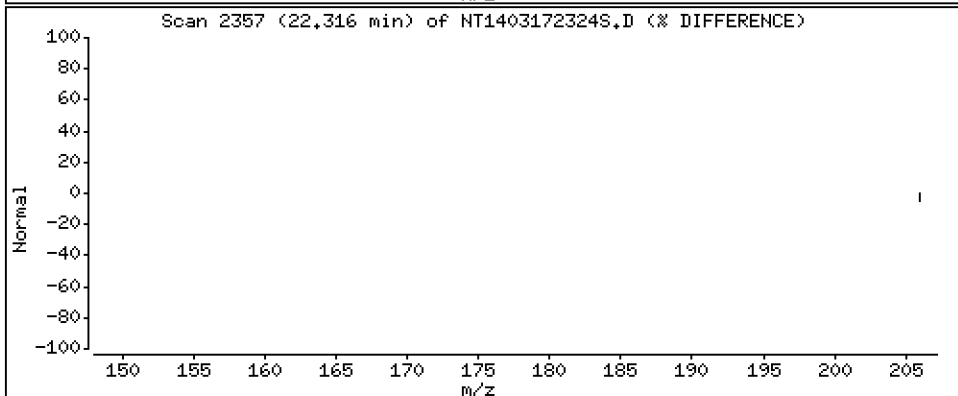
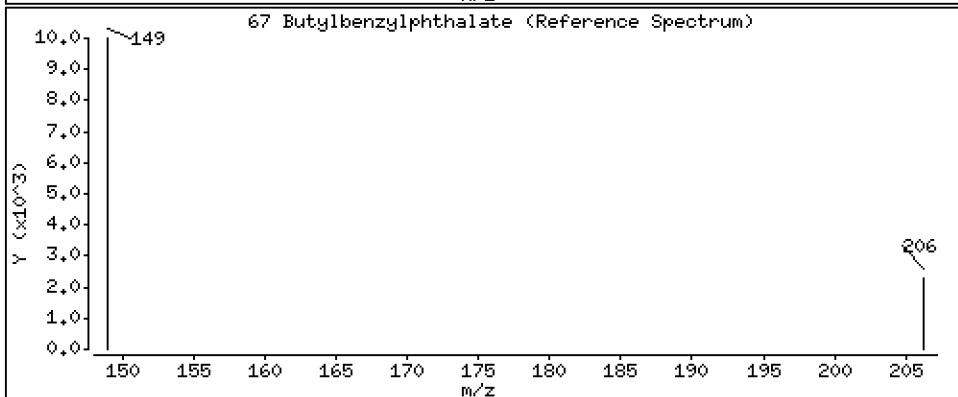
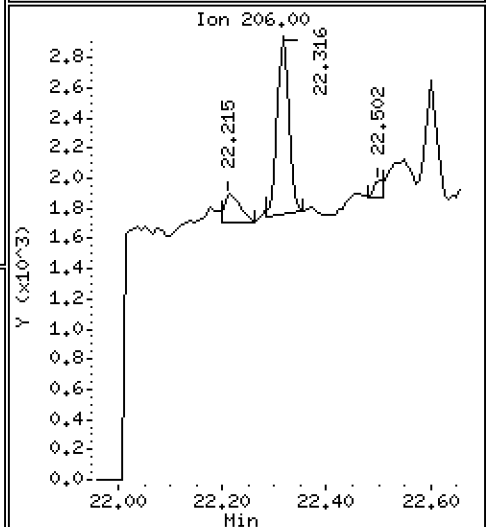
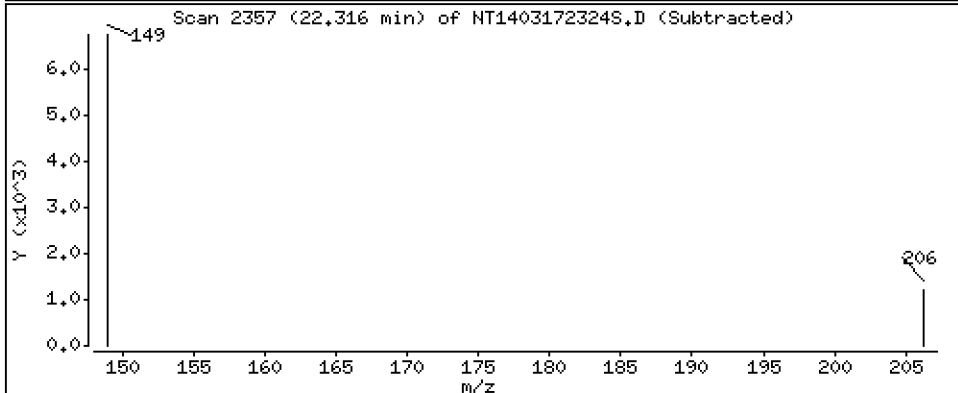
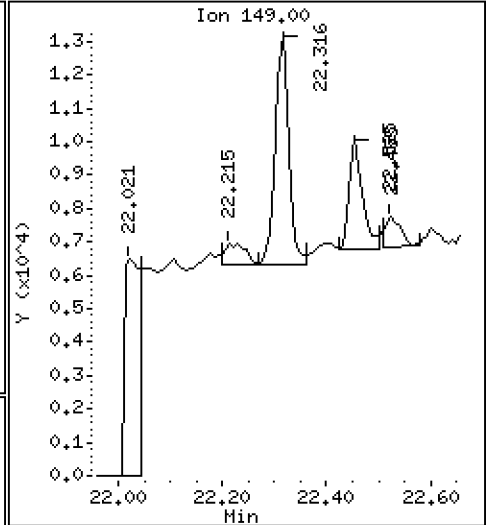
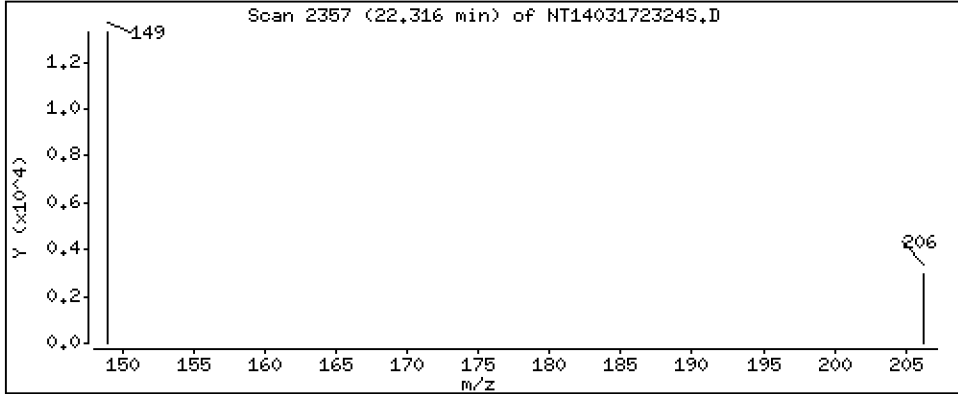
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.2678 ug/mL



Date : 18-MAR-2023 04:18

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-05

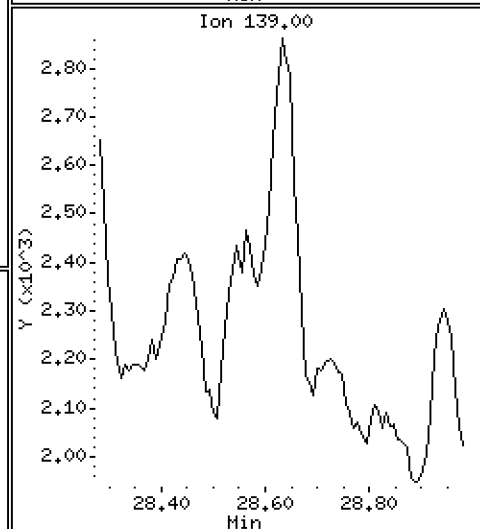
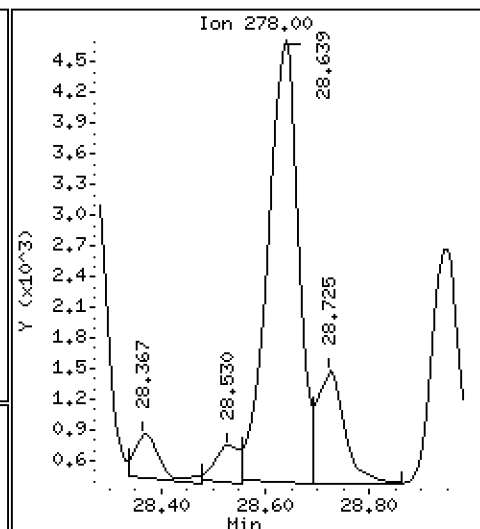
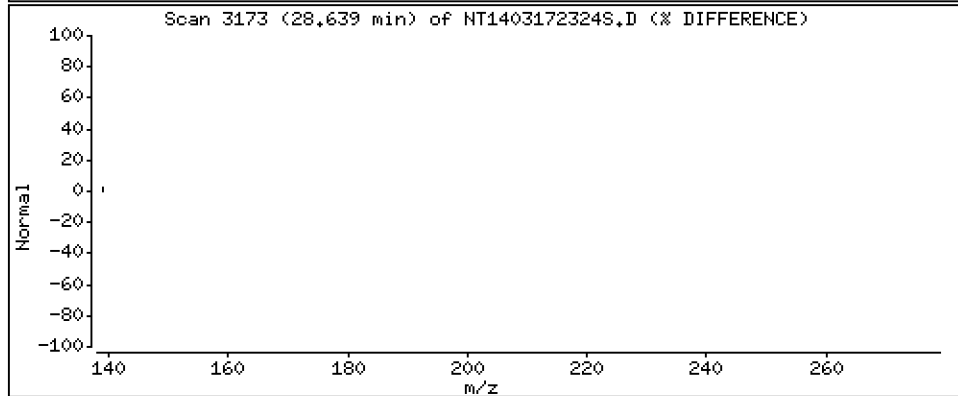
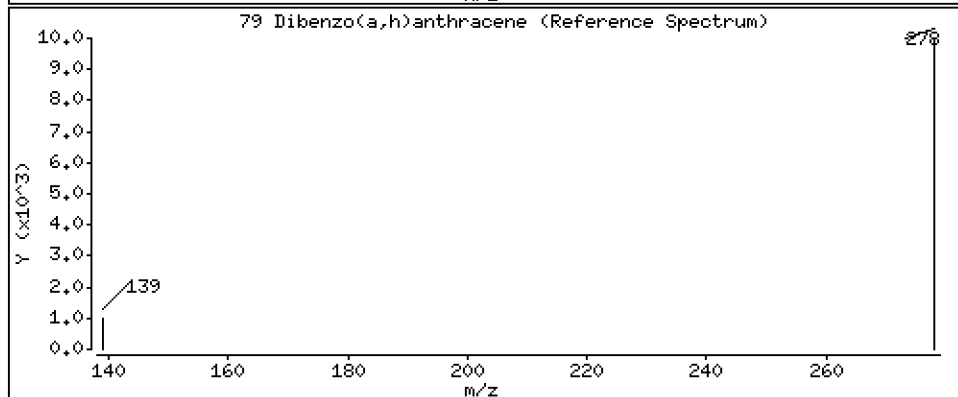
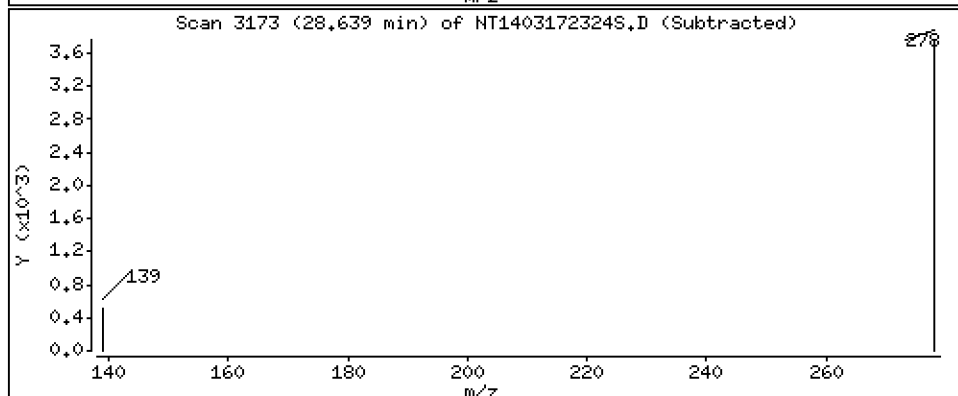
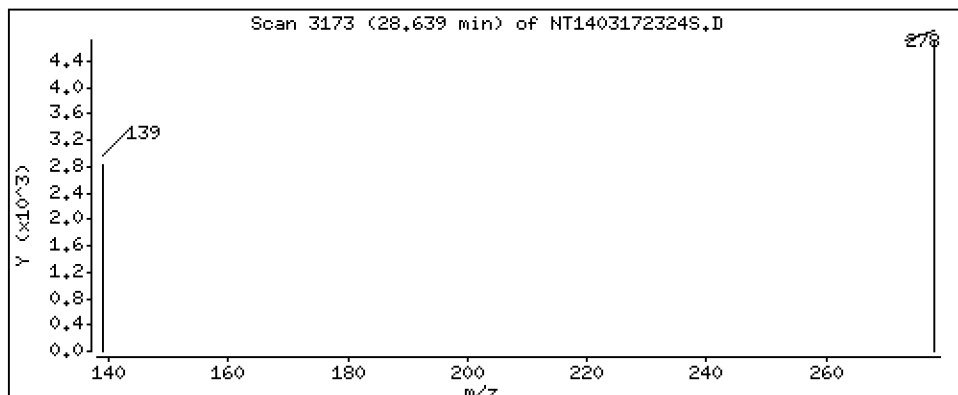
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,3903 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172324S.D
 Lab Smp Id: 23B0229-05
 Inj Date : 18-MAR-2023 04:18 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-05
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.849	6.826	(0.755)	353845	4.40256	4.403 (R)
3 Phenol	94		8.448	8.441	(0.932)	21814	0.19737	0.1974
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	648	0.00685	0.006851
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	236781	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	2511	0.02744	0.02744
11 Benzyl alcohol	79		9.346	9.354	(1.031)	57481	0.88729	0.8873
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	886	0.00994	0.009939
13 2-Methylphenol	108		9.571	9.564	(1.056)	1141	0.01494	0.01494 (M)
15 4-Methylphenol	108		9.843	9.828	(1.086)	6246	0.07744	0.07744
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		11.022	10.999	(0.953)	87863	1.50488	1.505
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.564	11.565	(1.000)	892726	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.698	14.698	(0.967)	14810	0.10872	0.1087 (M)
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	398891	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	491127	3.38630	3.386
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		17.982	17.974	(0.986)	1159	0.04517	0.04517 (M)
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	730854	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.386	(0.918)	308031	7.09941	7.099 (R)
67 Butylbenzylphthalate	149		22.315	22.308	(0.957)	11777	0.26780	0.2678
* 69 Chrysene-d12	240		23.306	23.291	(1.000)	251679	4.00000	
* 77 Perylene-d12	264		25.946	25.931	(1.000)	181024	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.631	(1.104)	17913	0.39034	0.3903
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172324S.D
 Lab Smp Id: 23B0229-05
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	236781	5.13
27 Naphthalene-d8	830434	415217	1660868	892726	7.50
42 Acenaphthene-d10	389907	194954	779814	398891	2.30
59 Phenanthrene-d10	763679	381840	1527358	730854	-4.30
69 Chrysene-d12	415791	207896	831582	251679	-39.47
77 Perylene-d12	274872	137436	549744	181024	-34.14

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.31	0.07
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172324S.D

Lab ID: 23B0229-05

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 04:18

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

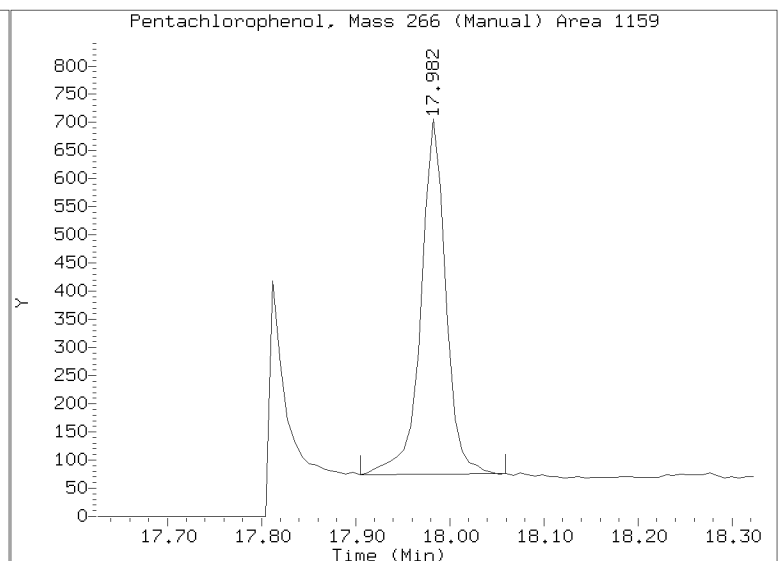
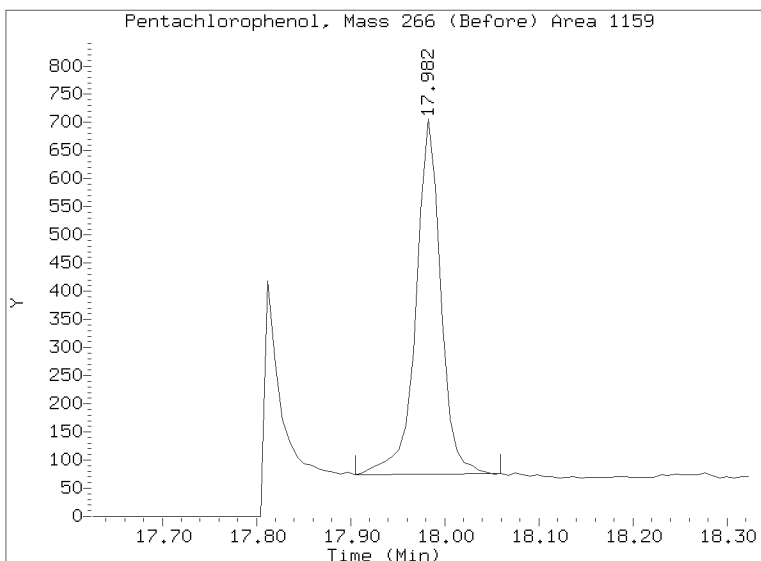
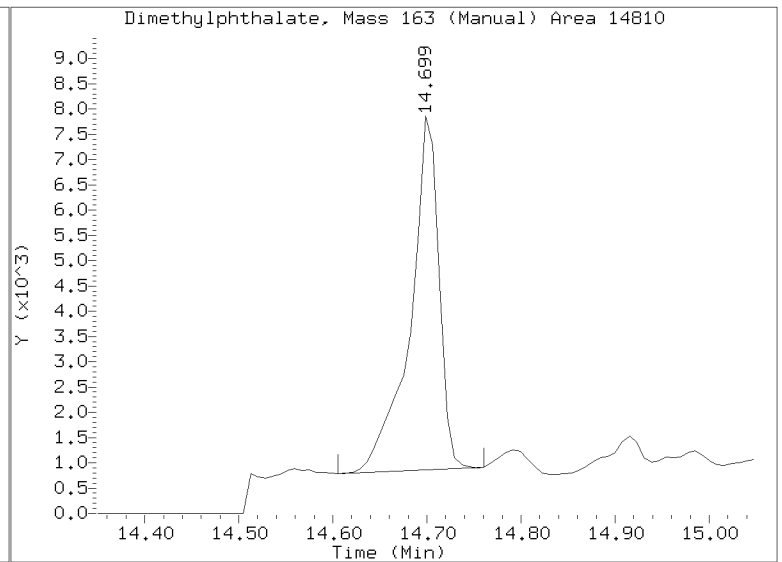
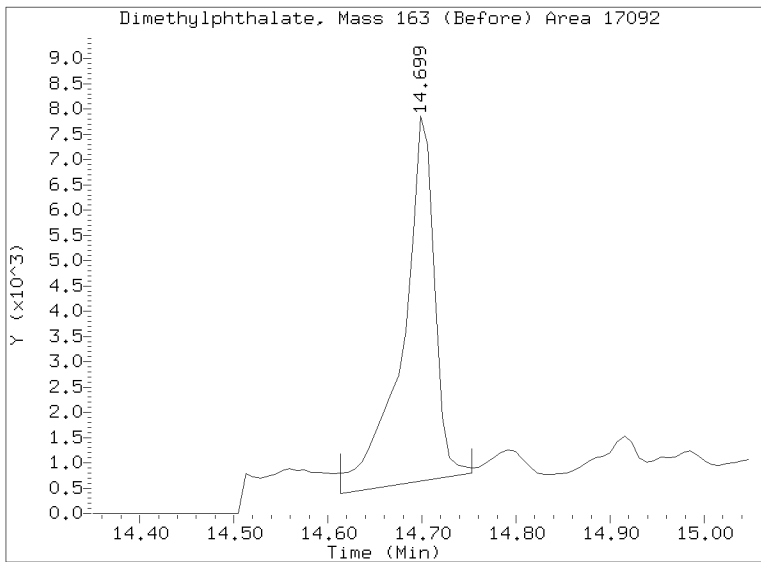
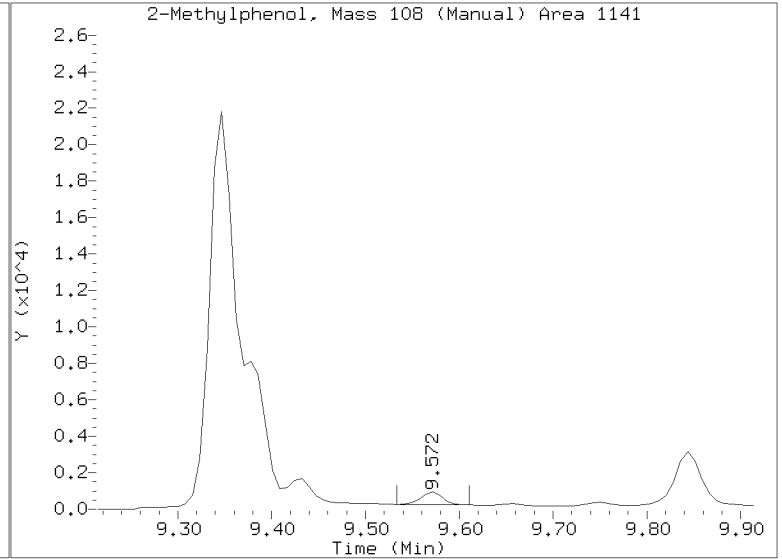
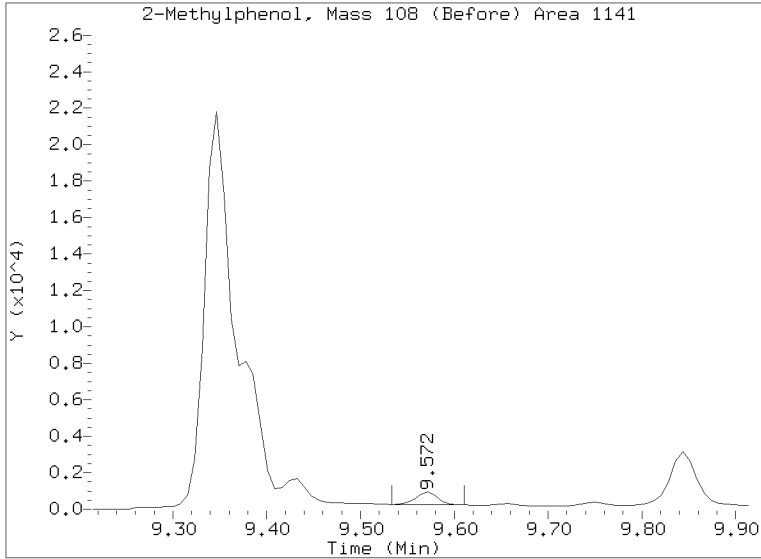
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172324S.D
Injection Date: 18-MAR-2023 04:18
Lab ID:23B0229-05 Client ID:
Report Date: 03/23/2023 16:56





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-06 A

SDG: 23B0229

Sampled: 02/08/23 13:30

Prepared: 02/17/23 15:00

File ID: NT1403172325S.D

% Solids: 48.62

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 04:54

Batch: BLB0424

Sequence: SLC0376

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00050

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	3.7	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	1.2	J	0.7	4.9
100-51-6	Benzyl Alcohol	1	87.9		2.5	19.8
65-85-0	Benzoic acid	1	99.5	Q	13.3	99.0
105-67-9	2,4-Dimethylphenol	1	19.8	U	2.1	19.8
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.7	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	4.7	J	2.1	19.8

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	742.34	456	61.4	27 - 120	
p-Terphenyl-d14	494.89	717	145	37 - 120	*,Q

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723255.D

Date: 18-MAR-2023 04:54

Client ID:

Sample Info: 23B0229-06

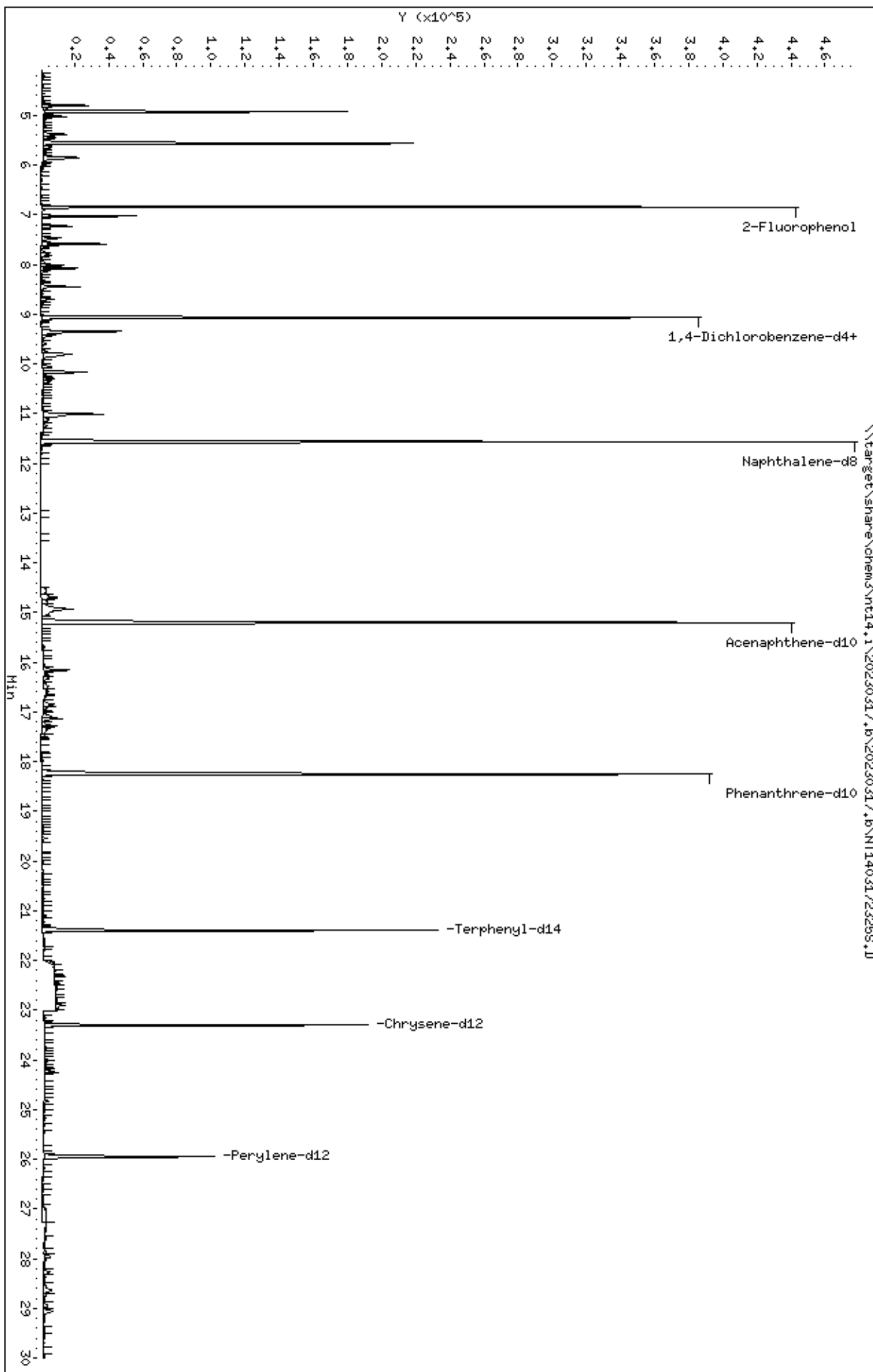
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

Page 1



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

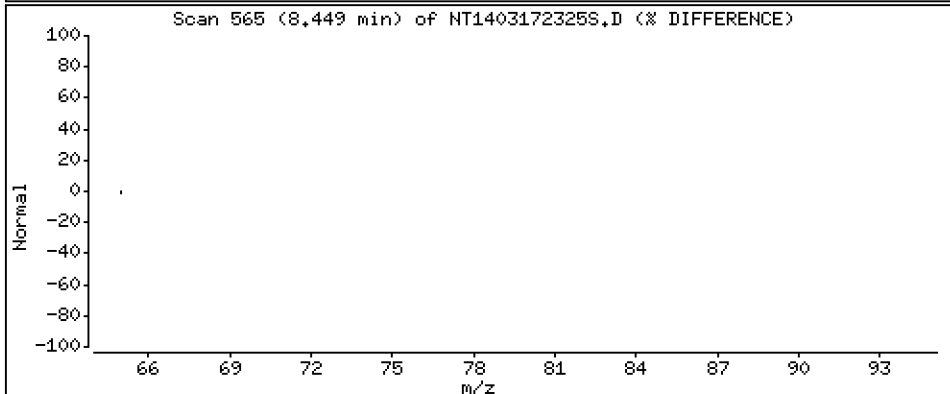
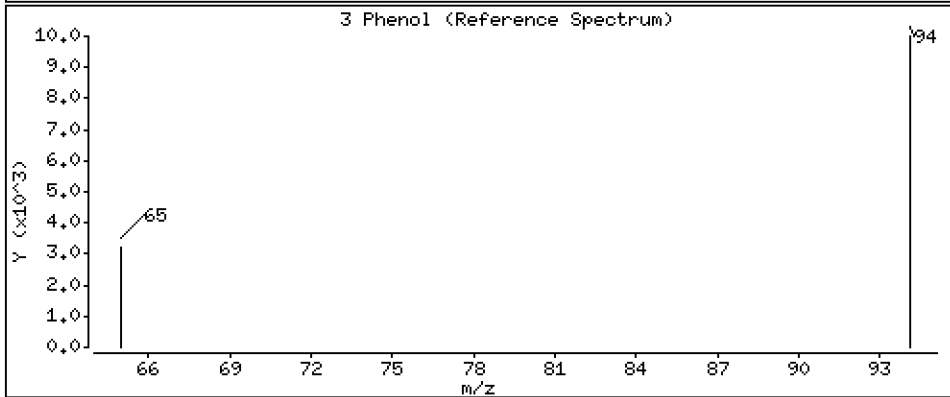
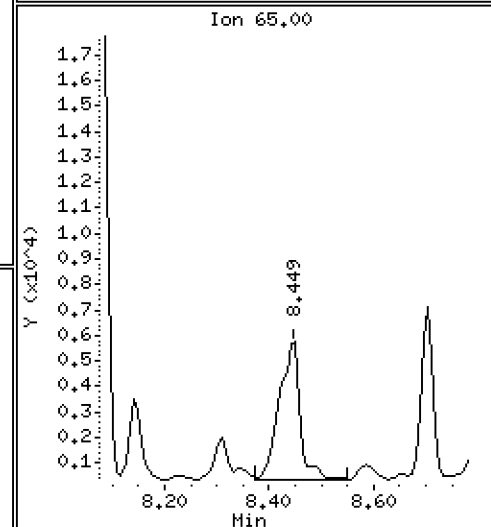
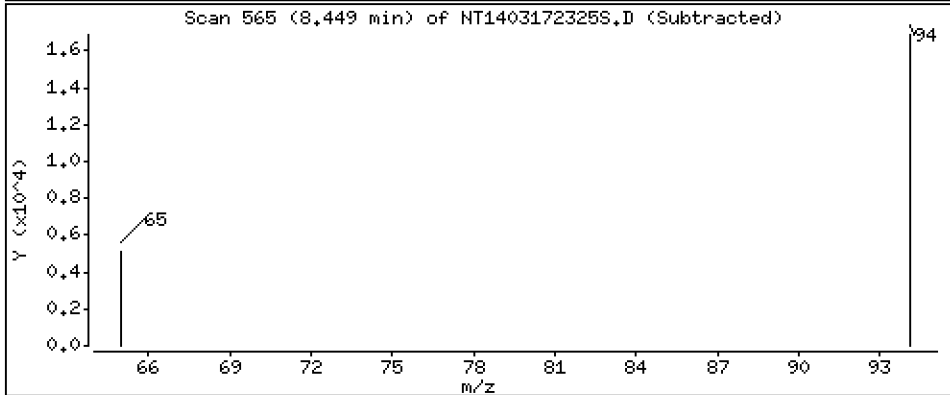
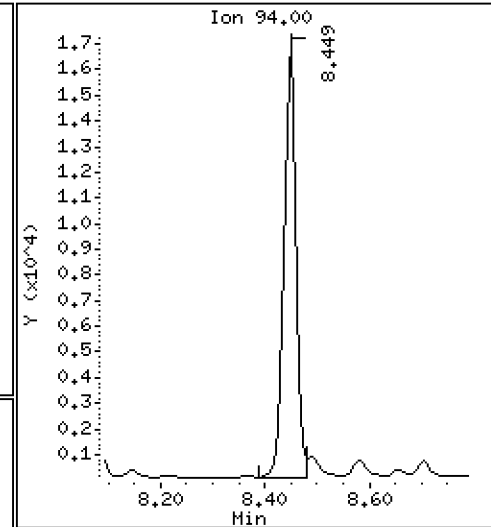
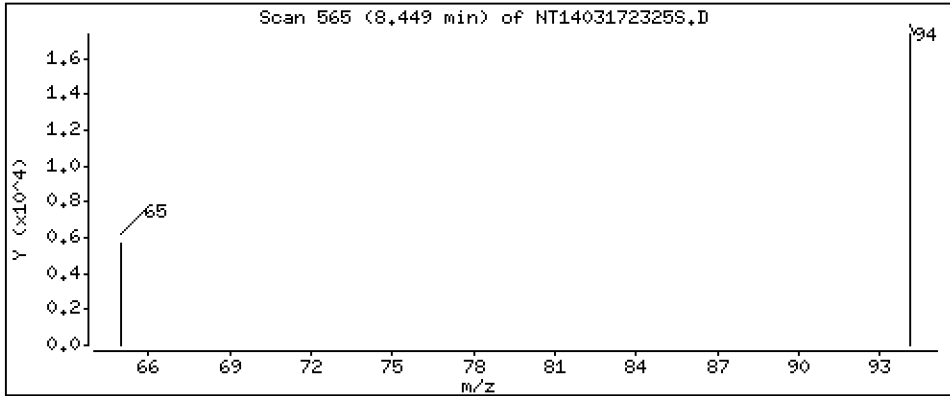
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.2364 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

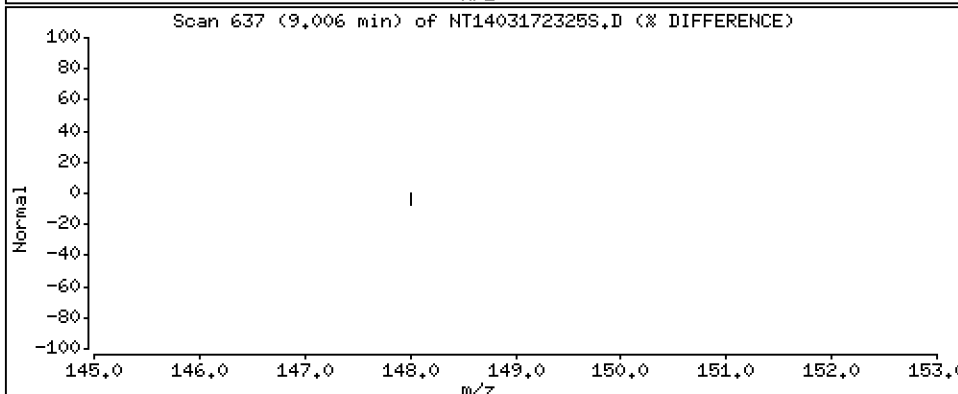
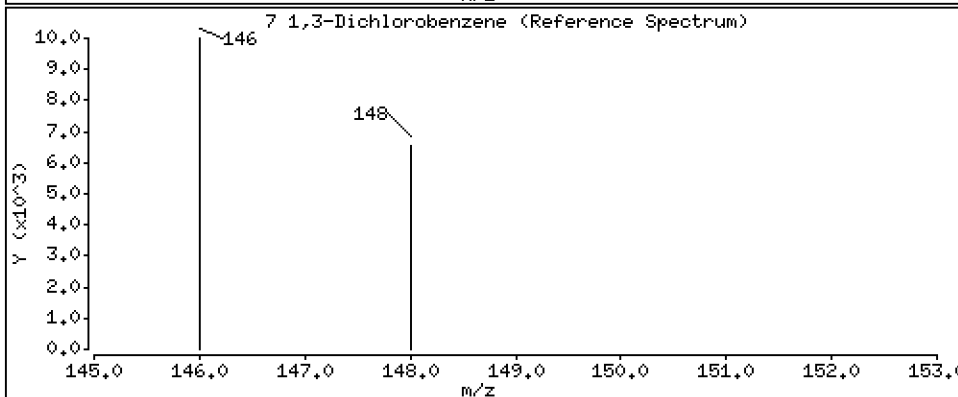
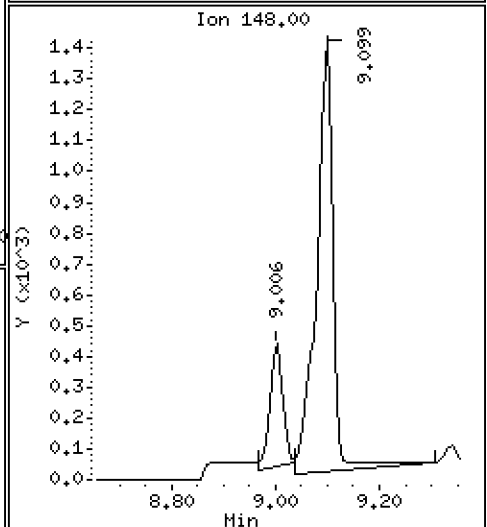
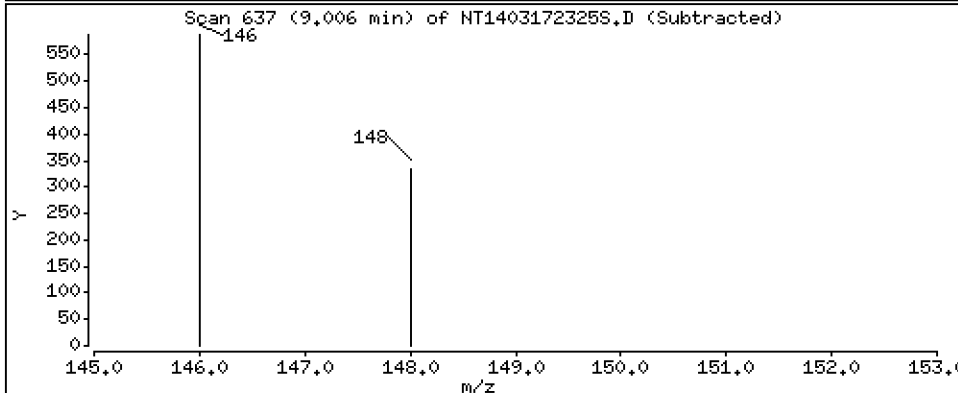
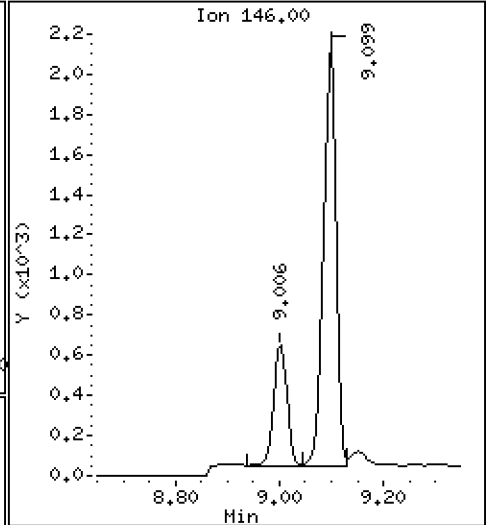
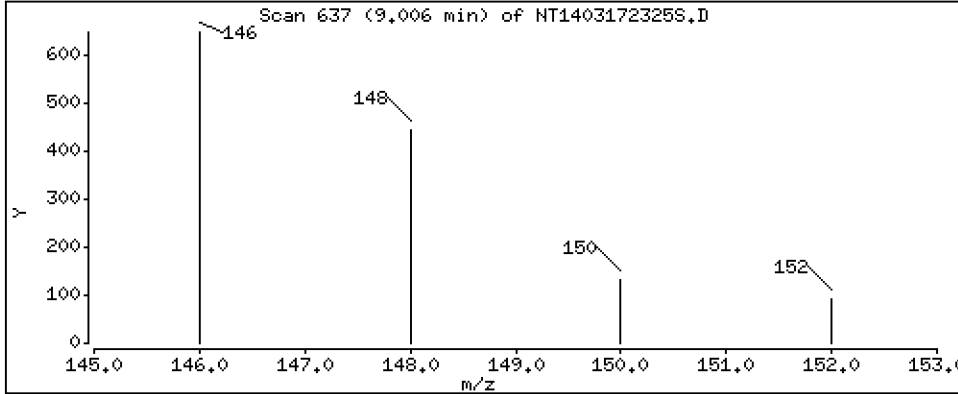
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.01085 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

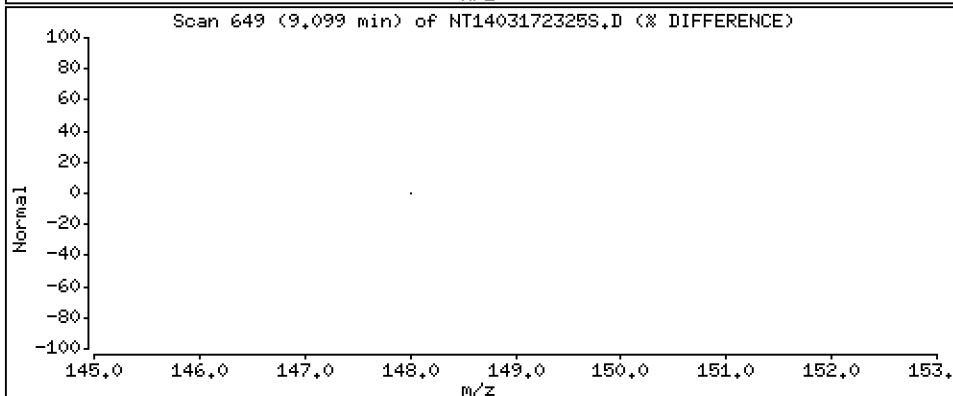
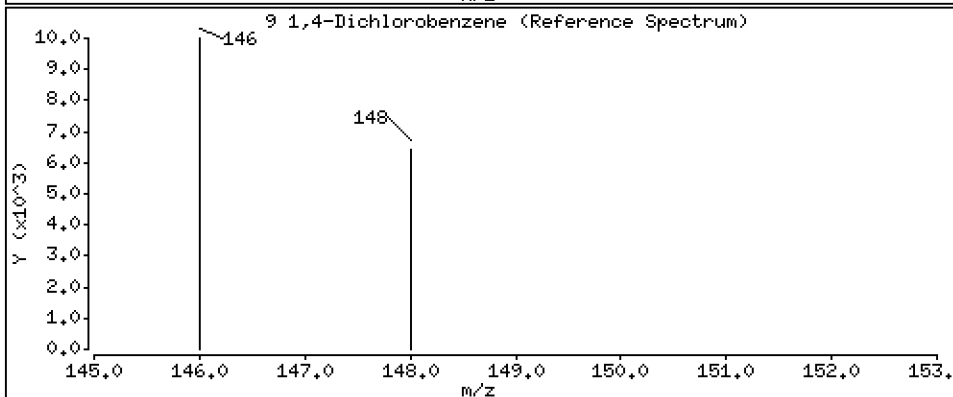
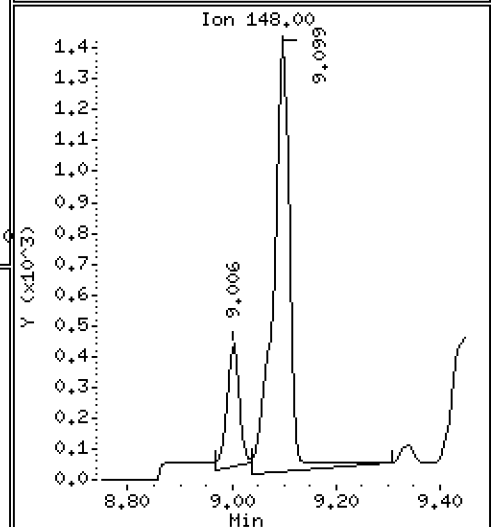
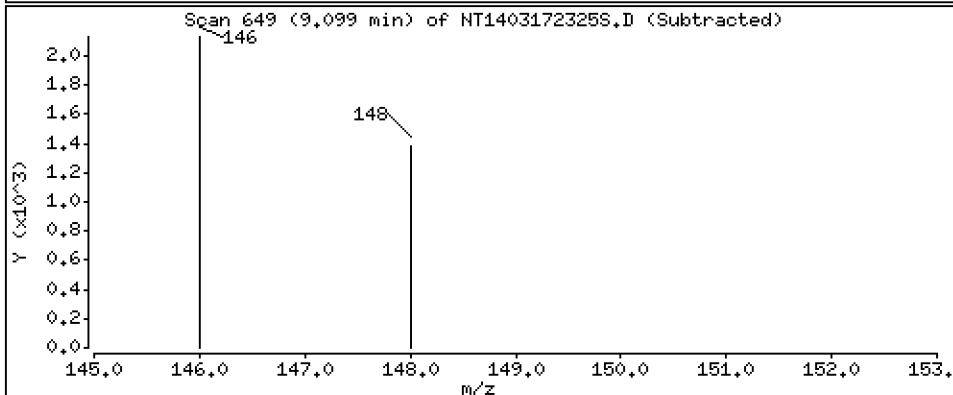
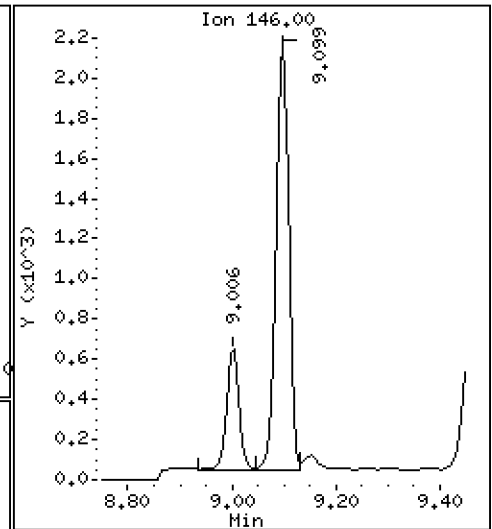
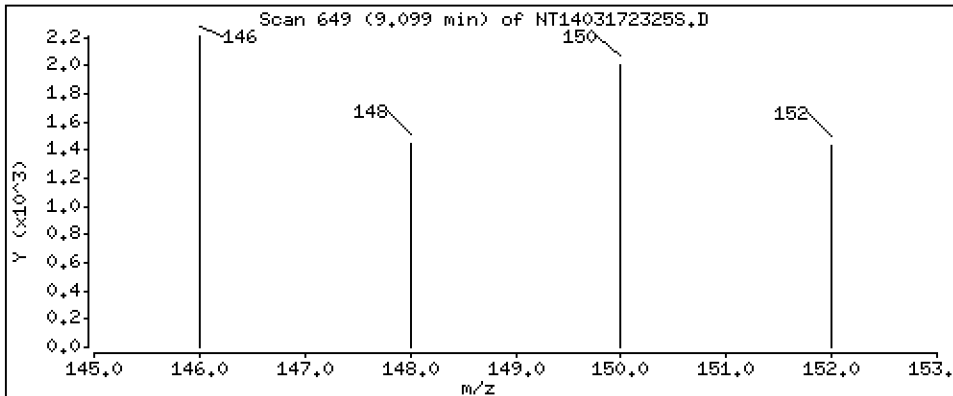
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.03744 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

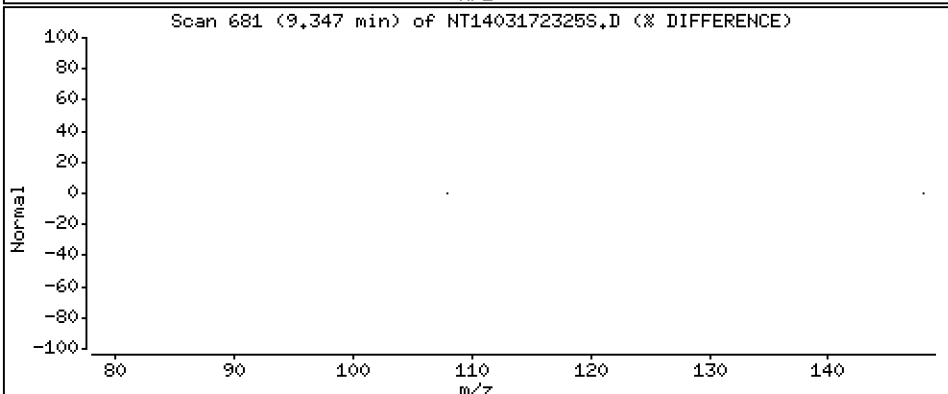
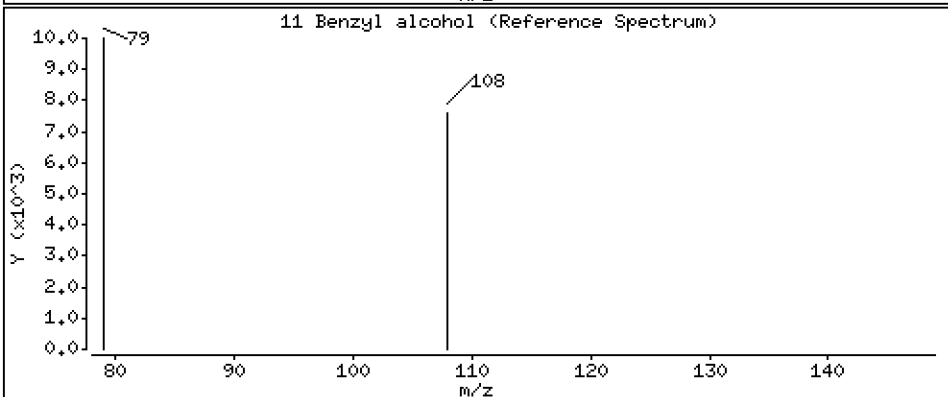
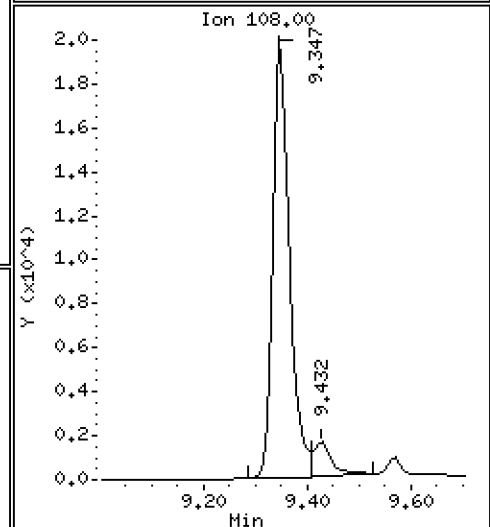
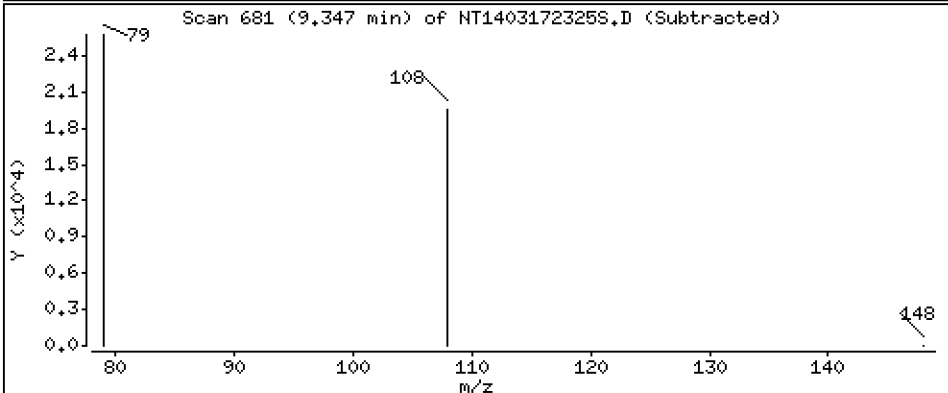
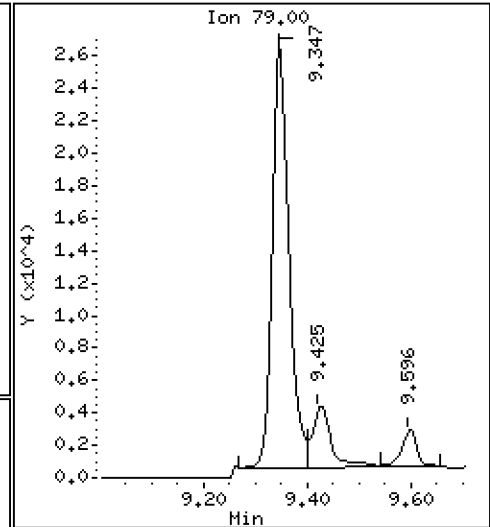
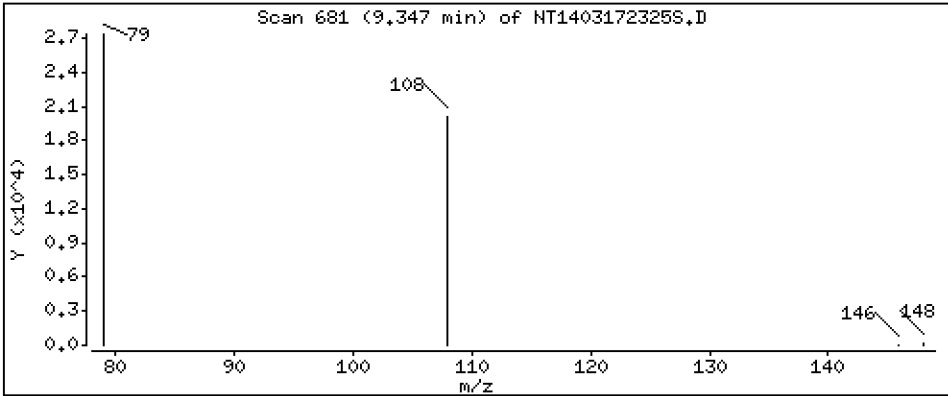
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.8880 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

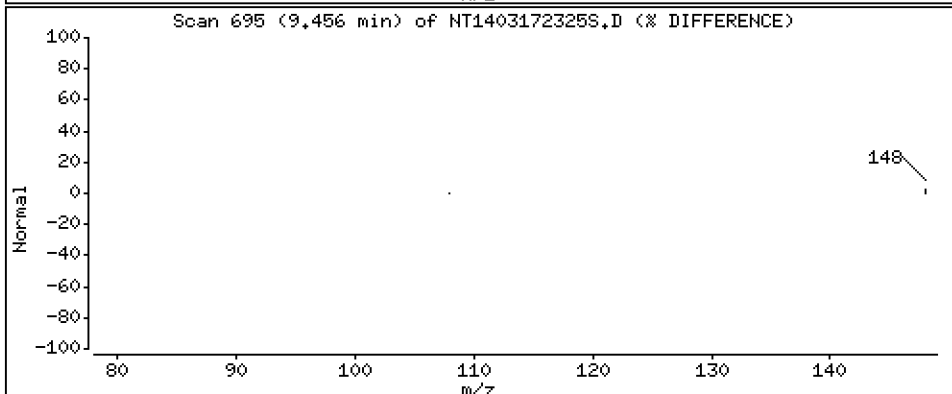
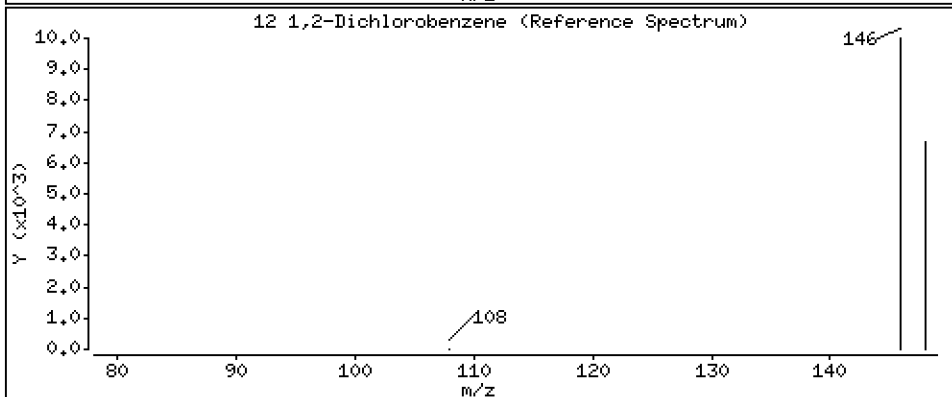
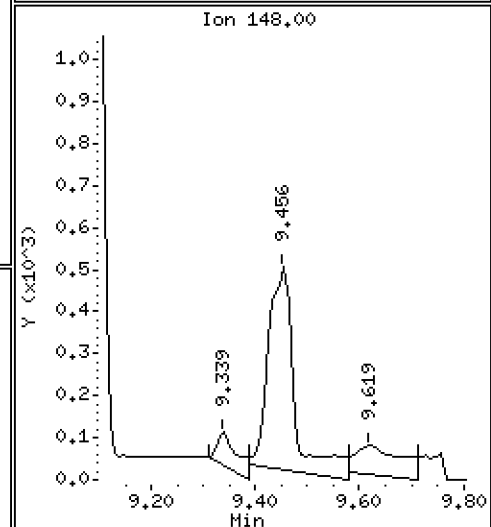
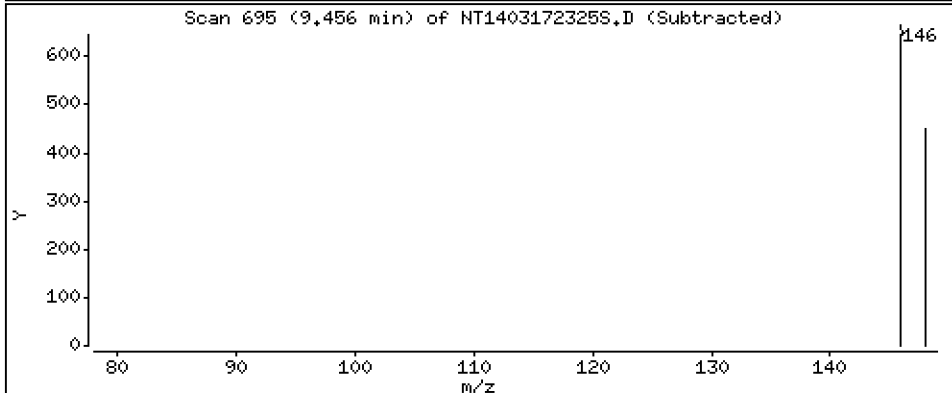
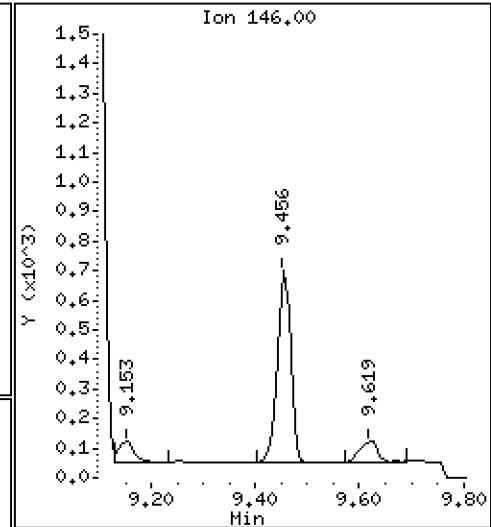
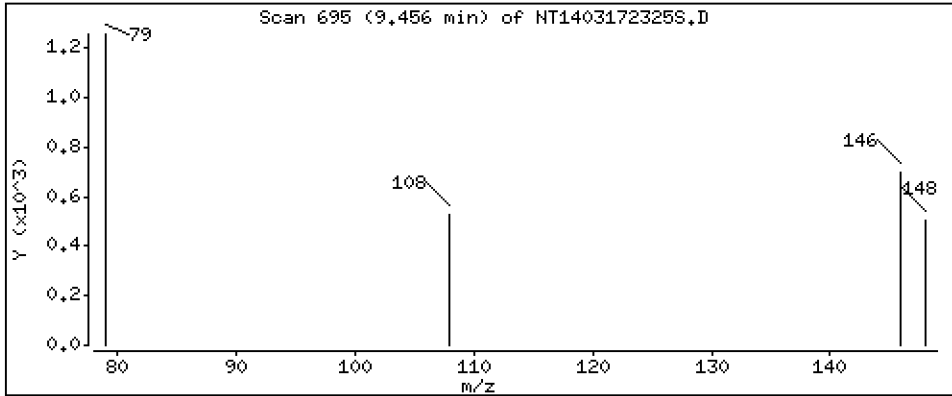
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,01234 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

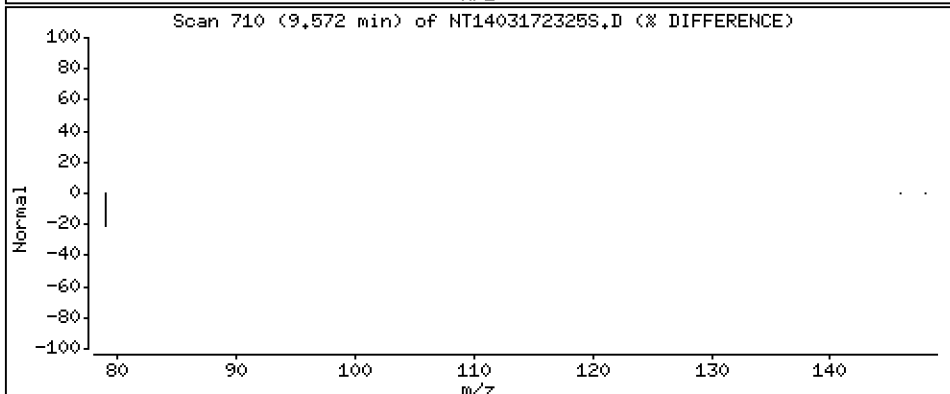
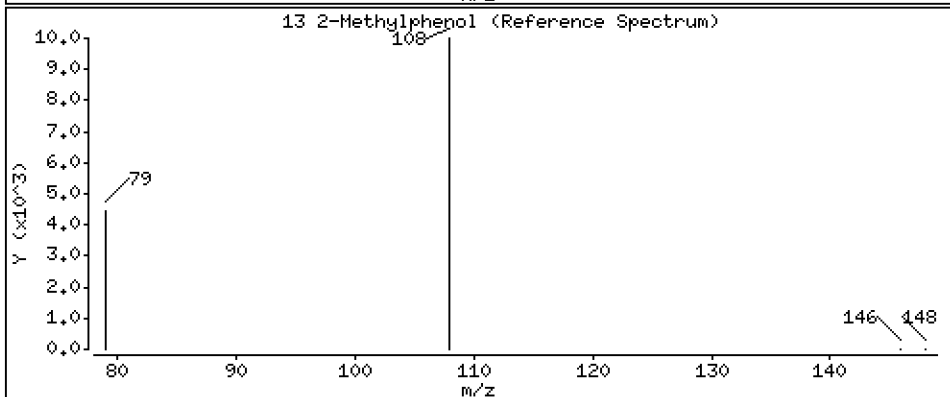
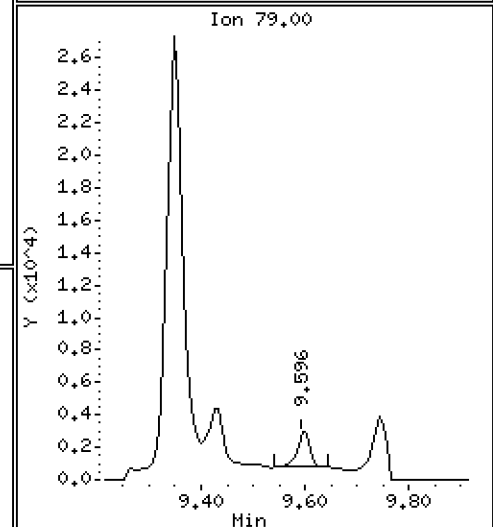
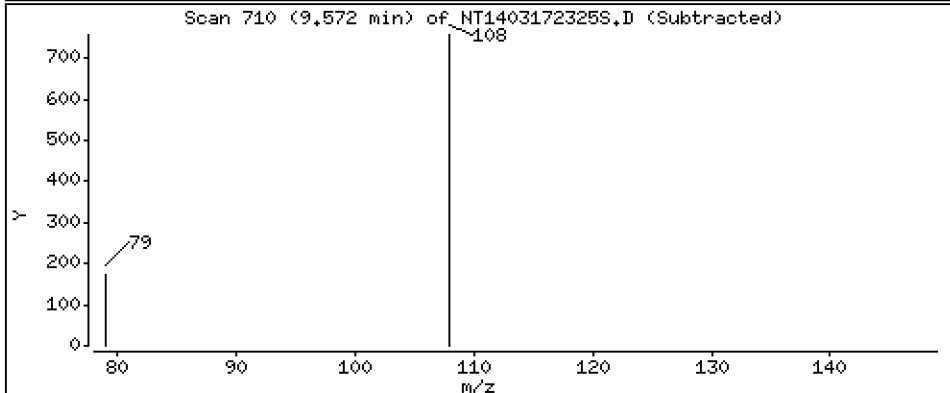
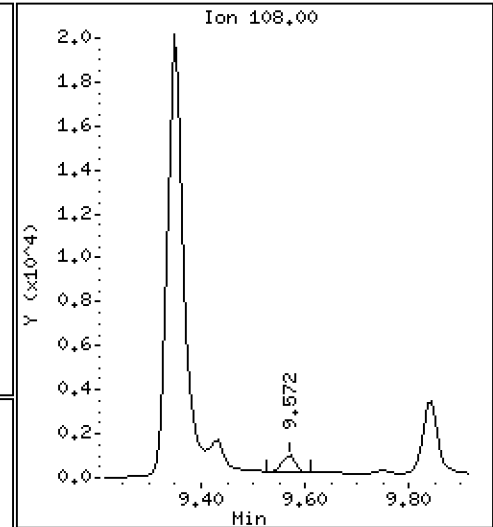
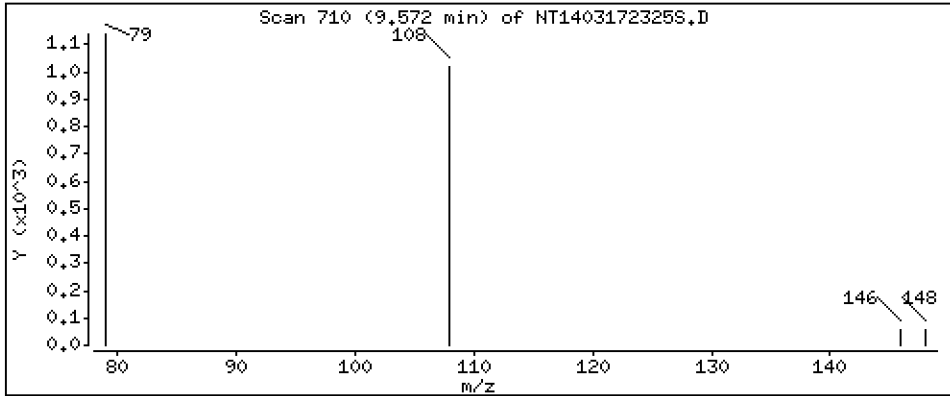
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.01732 ug/mL

13 2-Methylphenol



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

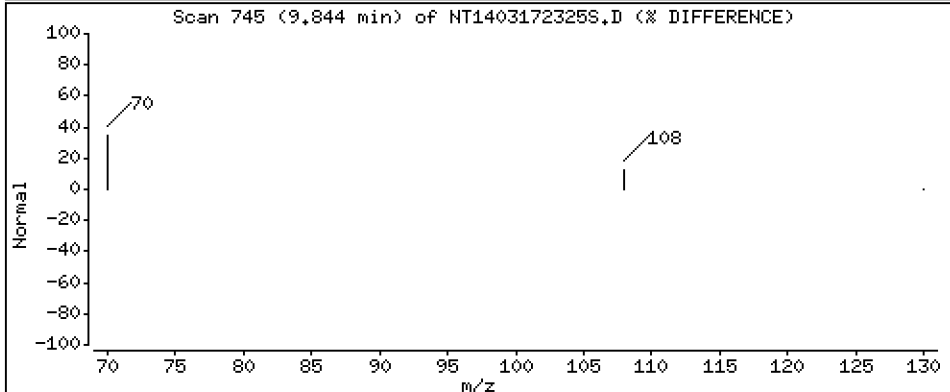
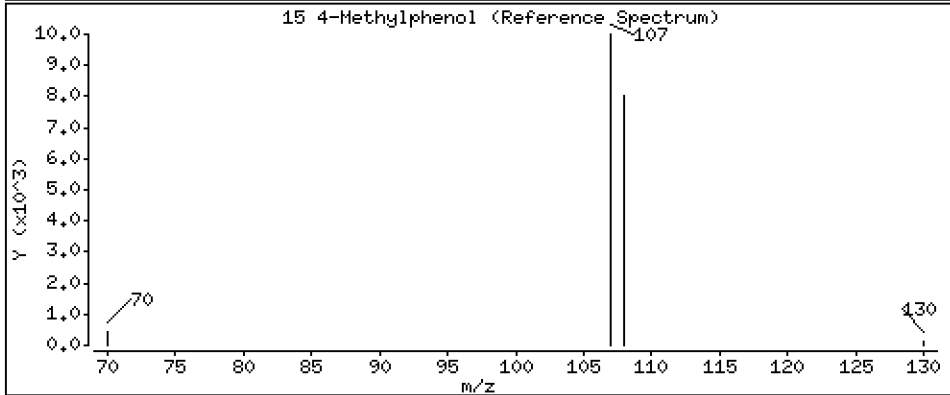
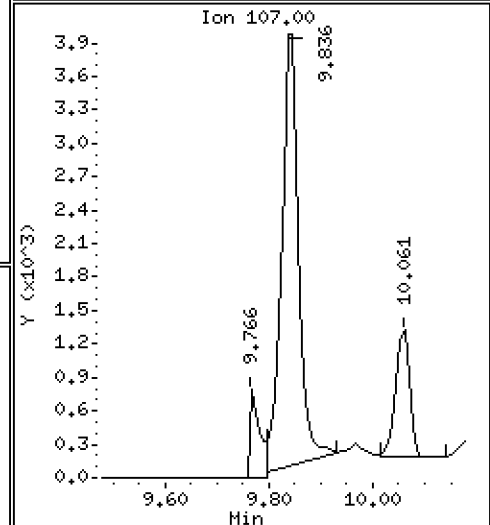
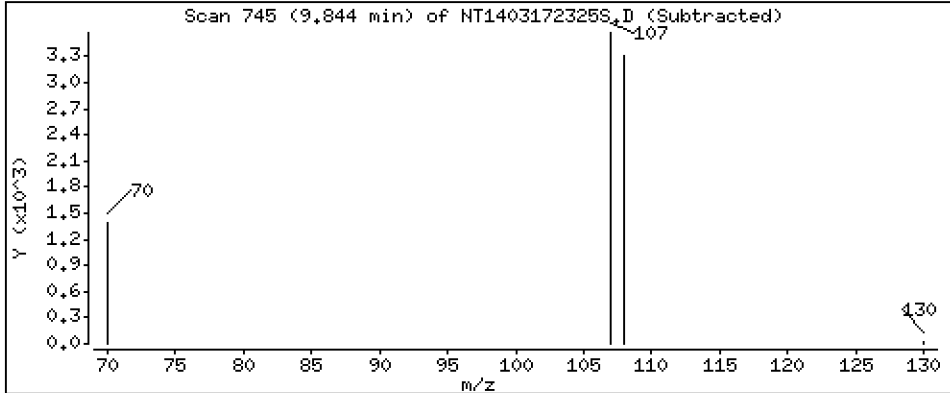
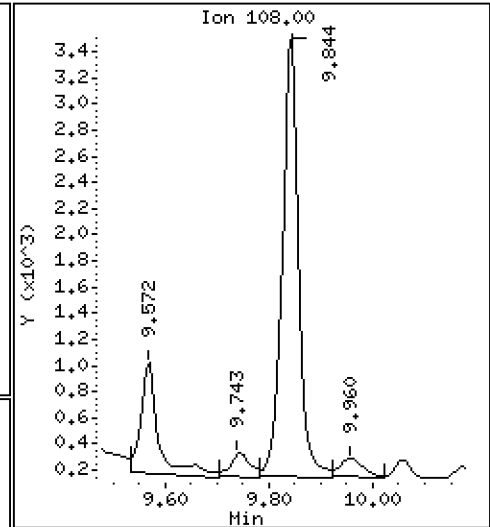
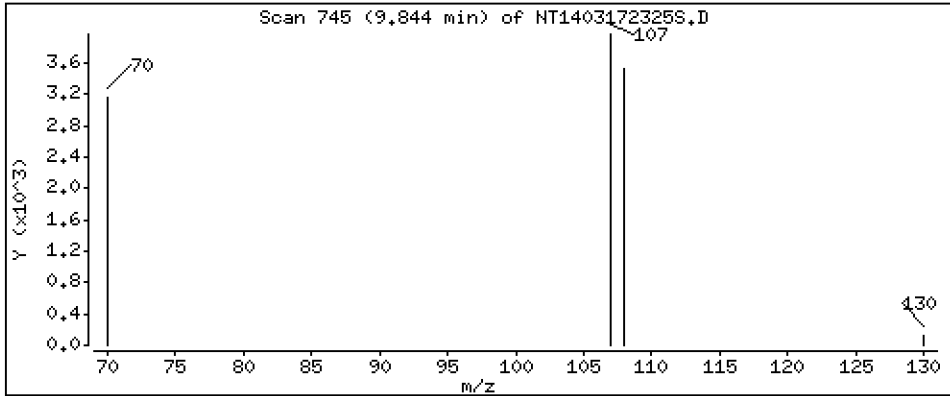
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.09164 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

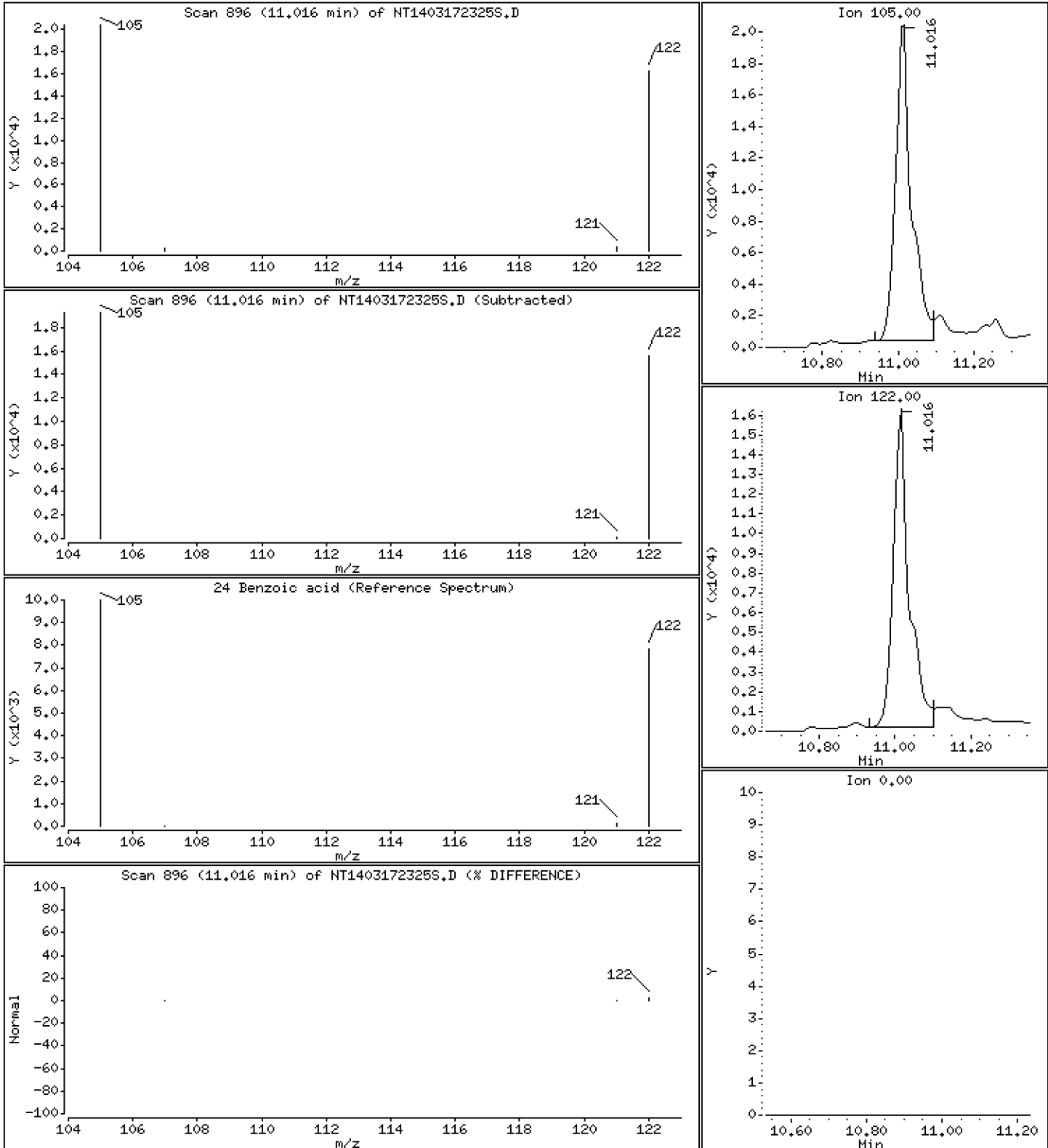
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,005 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

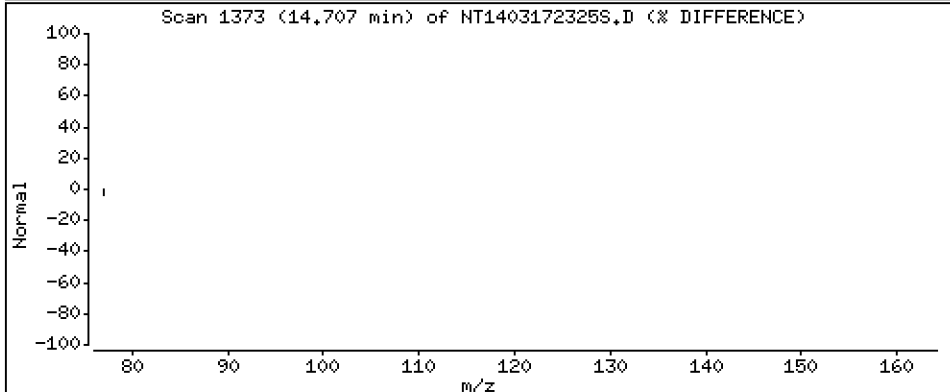
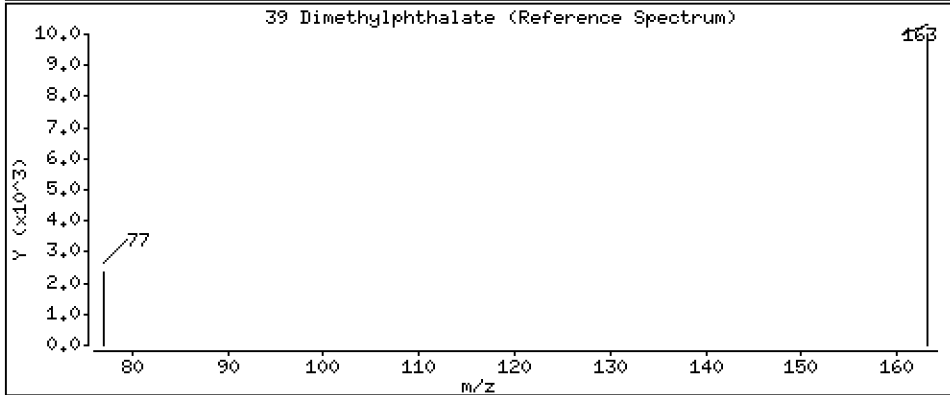
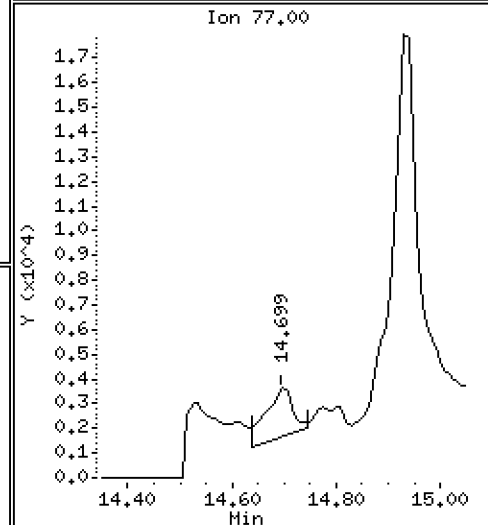
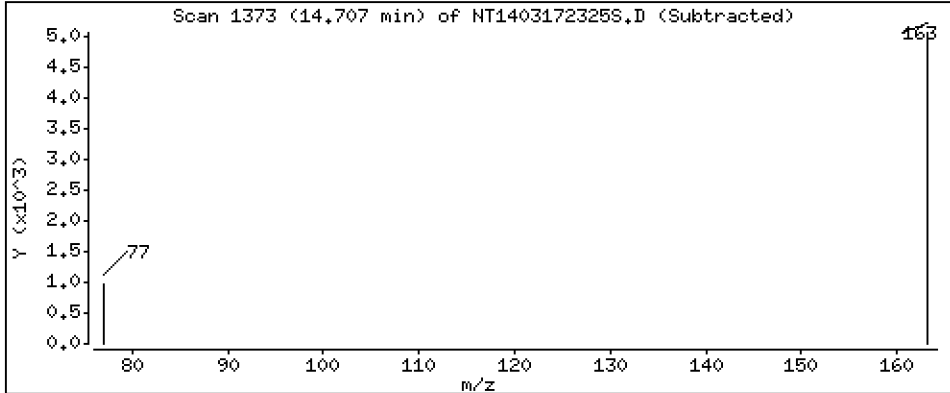
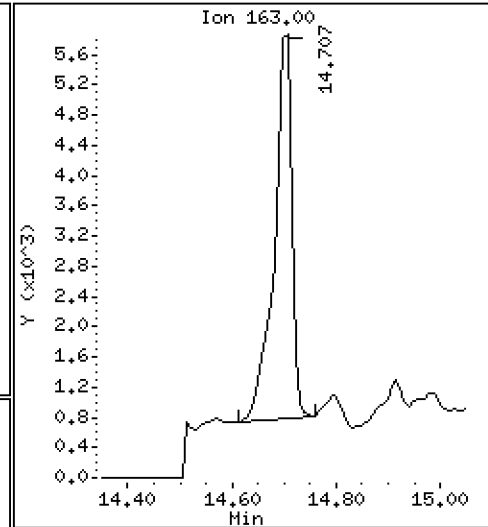
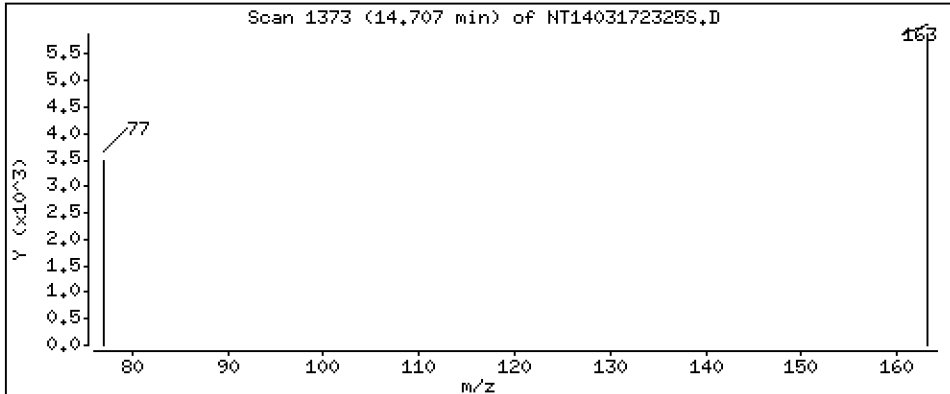
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,08310 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

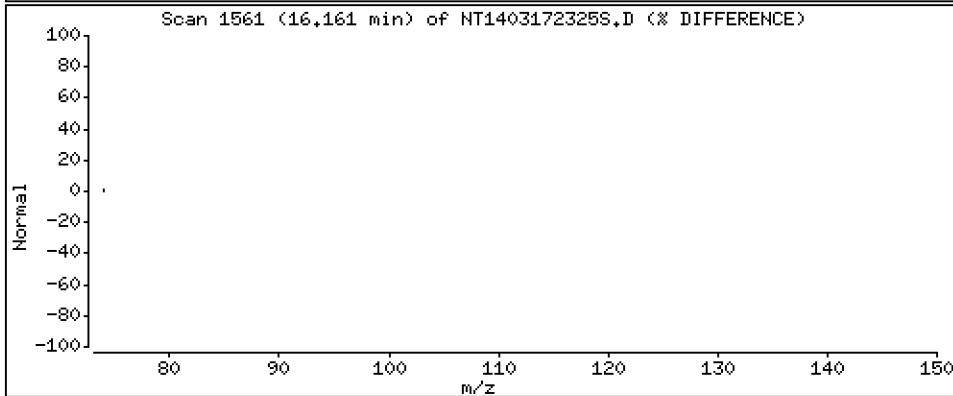
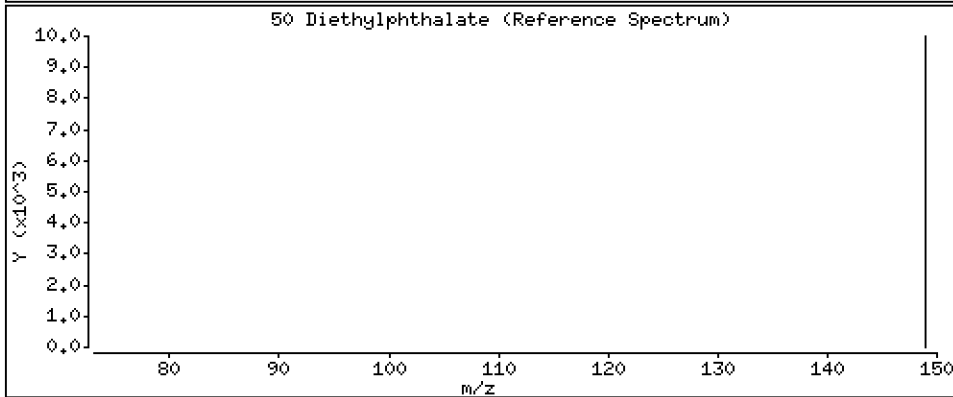
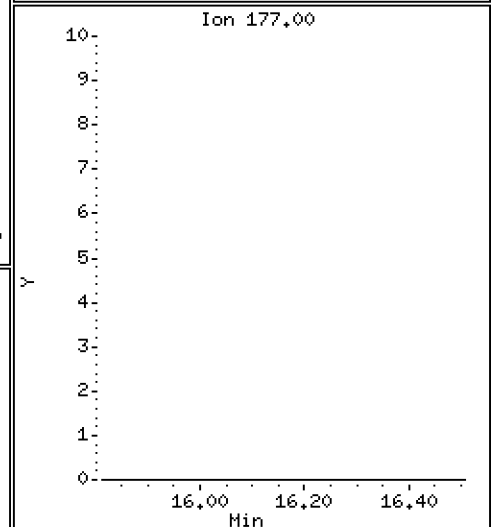
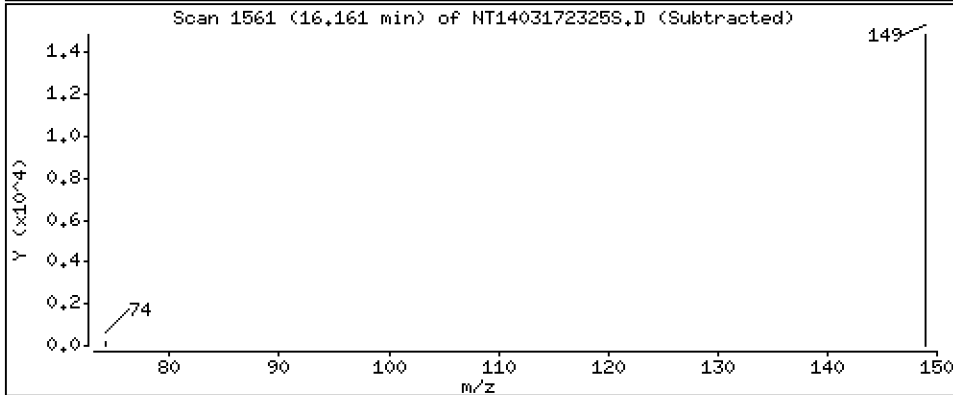
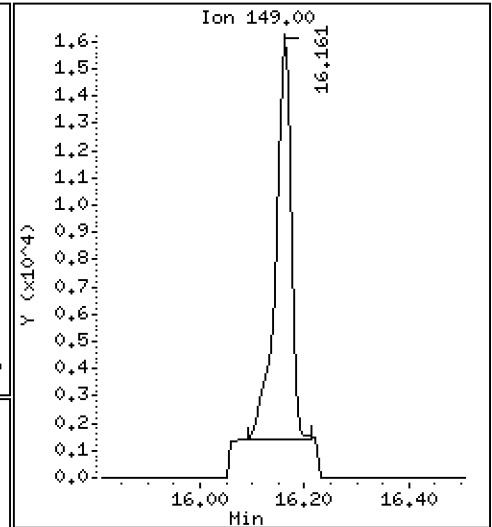
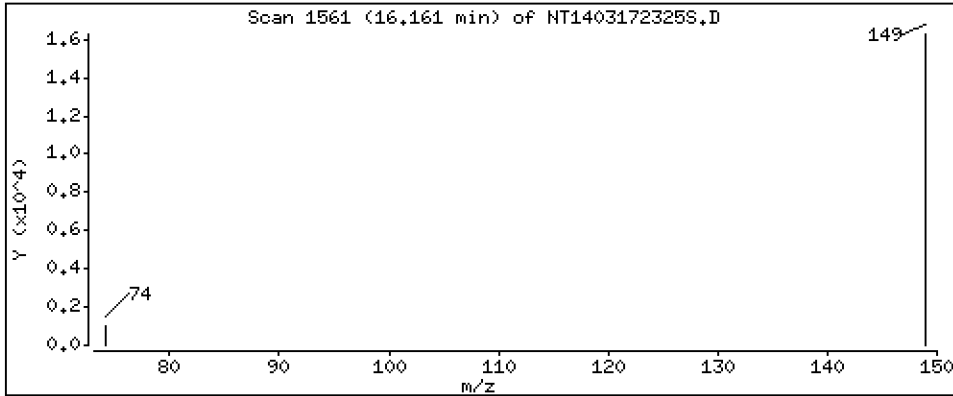
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1990 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

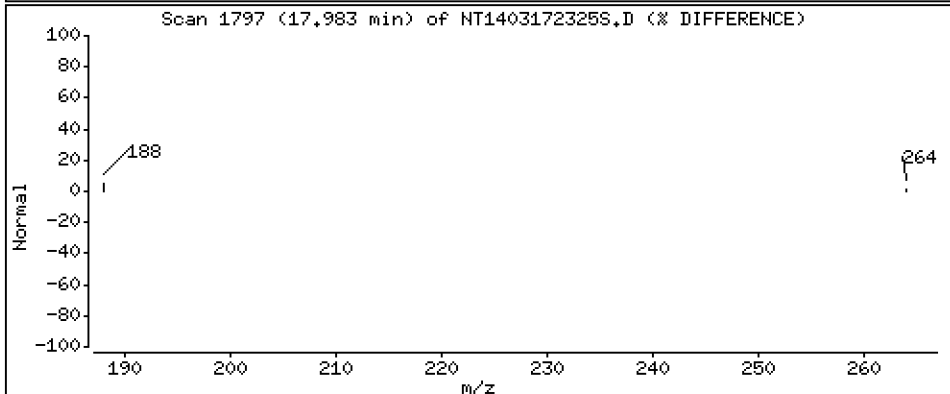
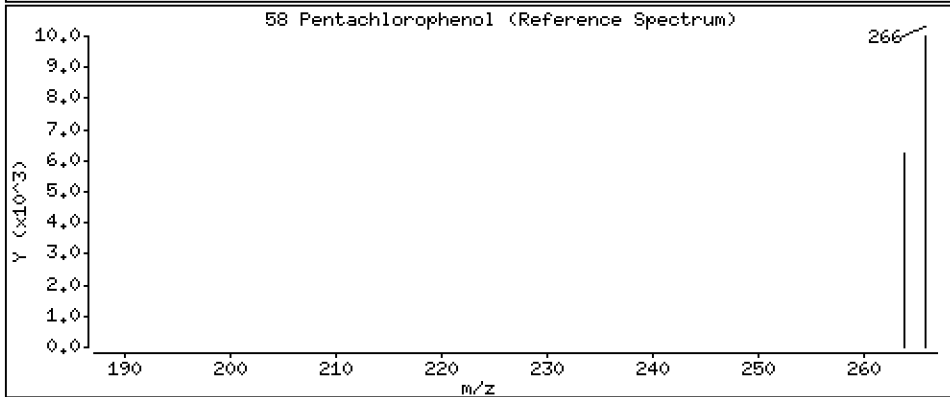
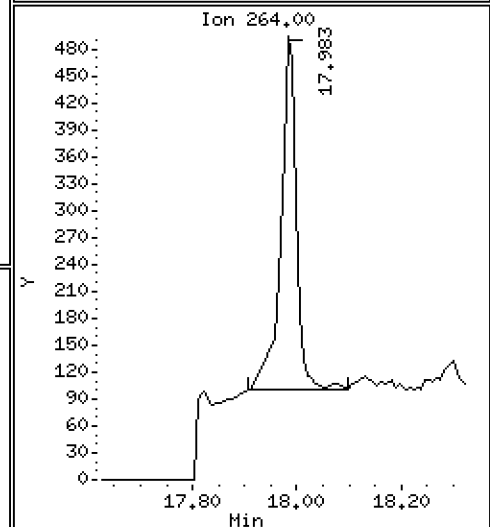
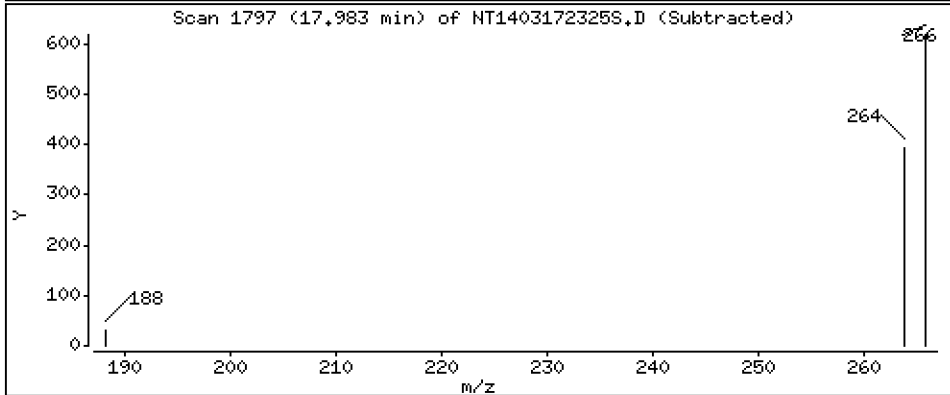
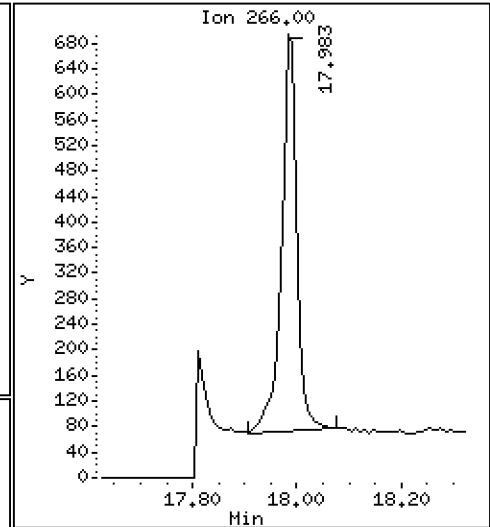
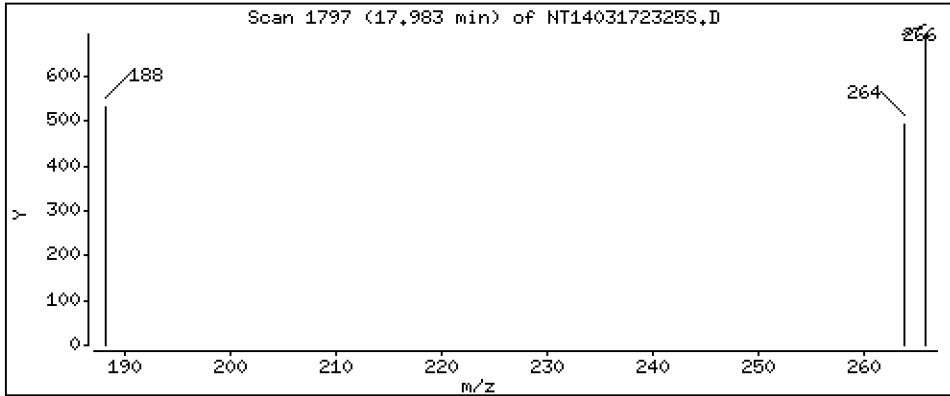
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,04740 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

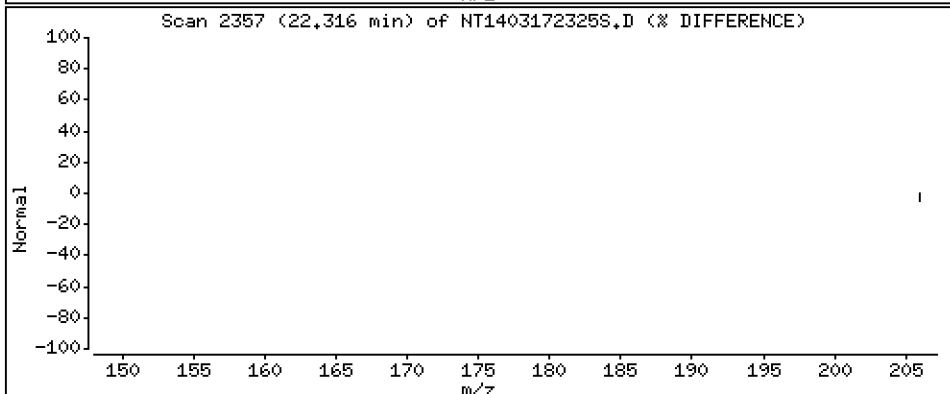
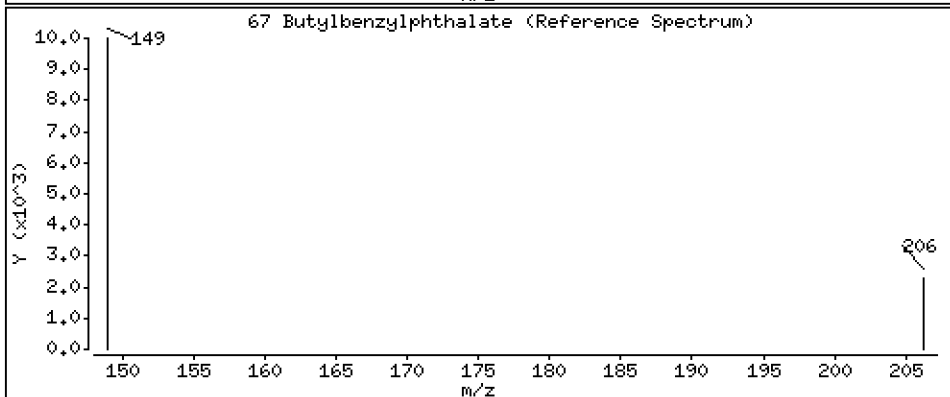
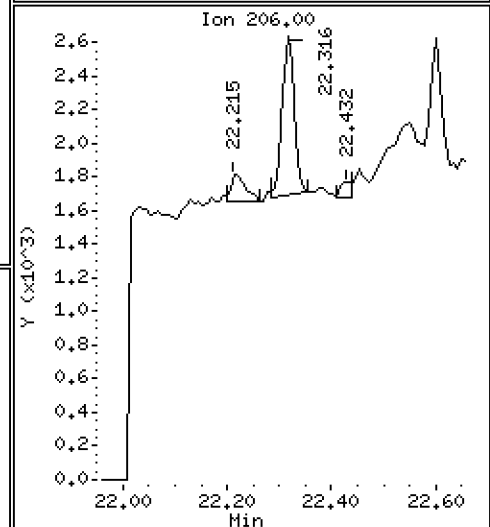
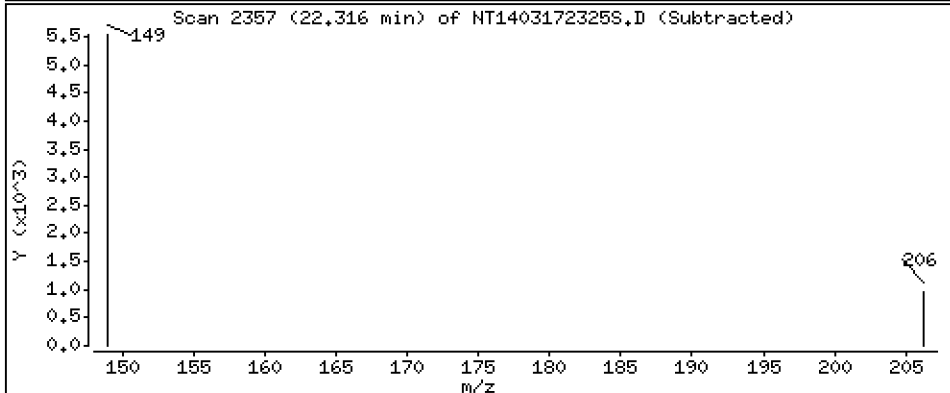
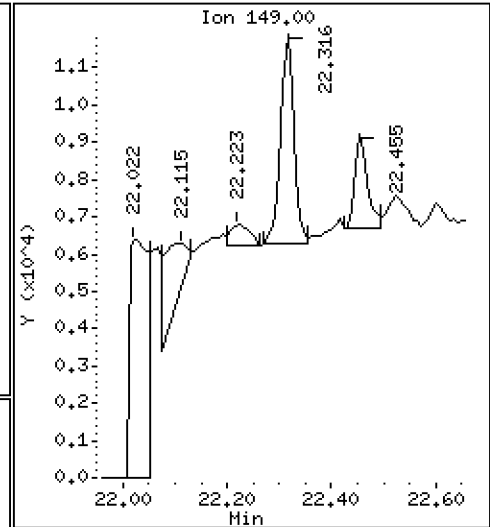
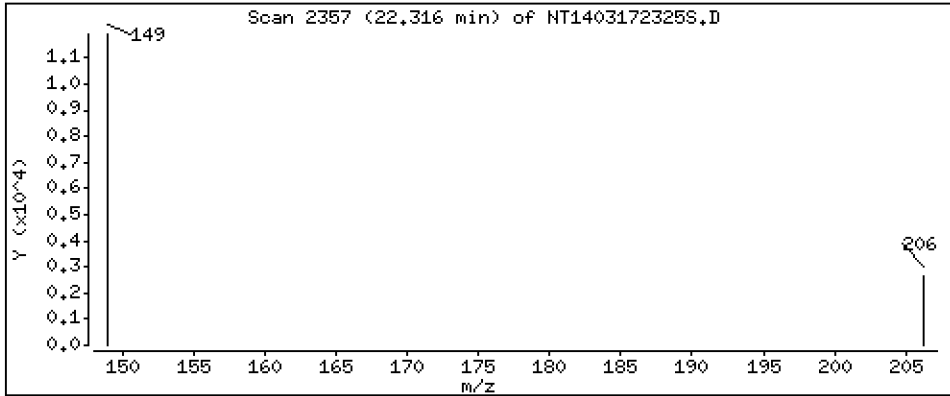
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2125 ug/mL



Date : 18-MAR-2023 04:54

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-06

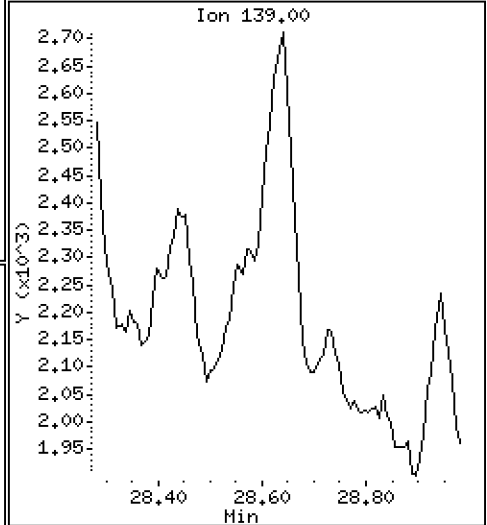
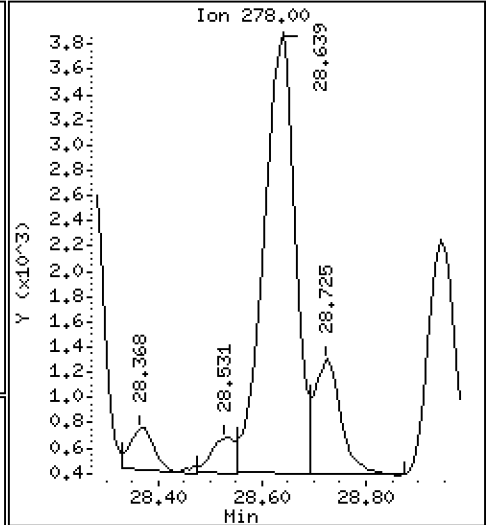
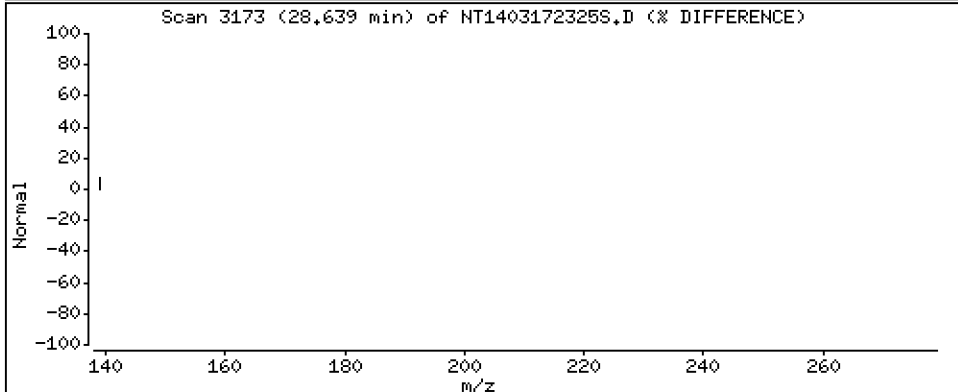
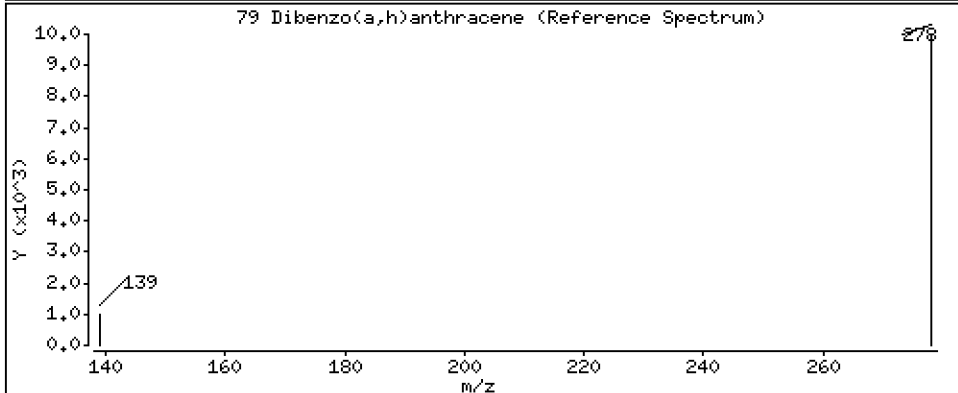
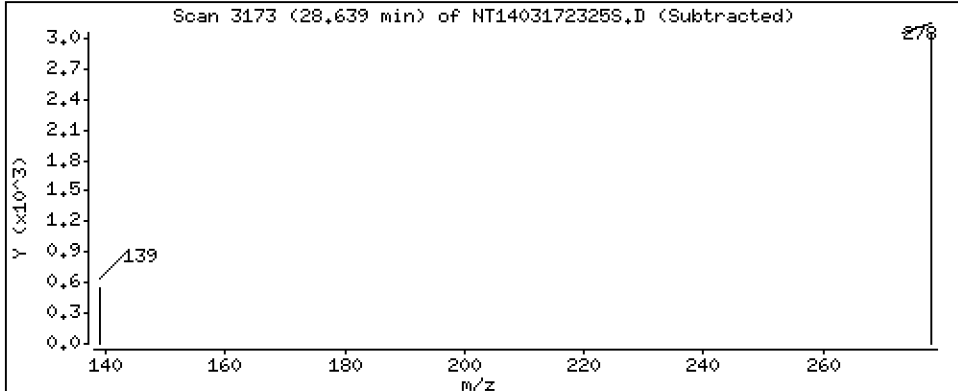
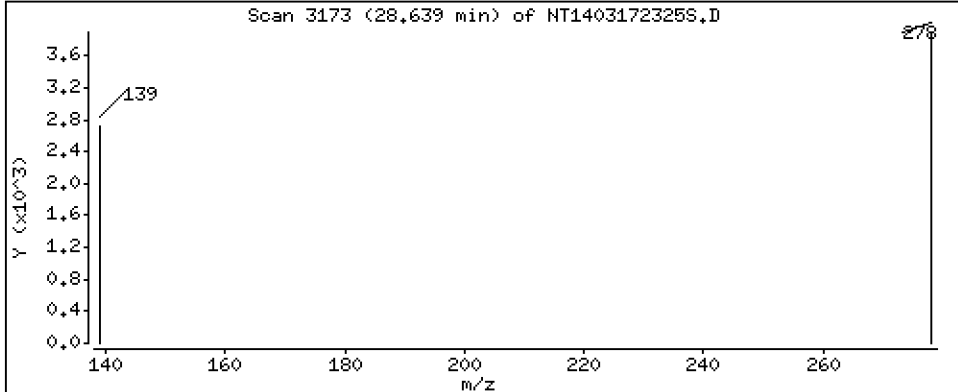
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,3137 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172325S.D
 Lab Smp Id: 23B0229-06
 Inj Date : 18-MAR-2023 04:54 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-06
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.842	6.826	(0.755)	367369	4.60336	4.603 (R)
3 Phenol	94		8.449	8.441	(0.932)	25947	0.23643	0.2364
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	1019	0.01085	0.01085
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	235108	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	3402	0.03744	0.03744
11 Benzyl alcohol	79		9.347	9.354	(1.031)	57120	0.88799	0.8880
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	1092	0.01234	0.01234
13 2-Methylphenol	108		9.572	9.564	(1.056)	1313	0.01732	0.01732 (M)
15 4-Methylphenol	108		9.843	9.828	(1.086)	7339	0.09164	0.09164
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		11.015	10.999	(0.952)	58537	1.00534	1.005
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	892040	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.706	14.698	(0.967)	11360	0.08310	0.08310 (M)
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	400304	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	28965	0.19901	0.1990
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		17.982	17.974	(0.985)	1251	0.04740	0.04740 (M)
* 59 Phenanthrene-d10	188		18.253	18.245	(1.000)	751806	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.386	(0.918)	318897	7.23902	7.239 (R)
67 Butylbenzylphthalate	149		22.315	22.308	(0.957)	9486	0.21246	0.2125
* 69 Chrysene-d12	240		23.307	23.291	(1.000)	255532	4.00000	
* 77 Perylene-d12	264		25.947	25.931	(1.000)	185509	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.631	(1.104)	14753	0.31371	0.3137
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172325S.D
 Lab Smp Id: 23B0229-06
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	235108	4.39
27 Naphthalene-d8	830434	415217	1660868	892040	7.42
42 Acenaphthene-d10	389907	194954	779814	400304	2.67
59 Phenanthrene-d10	763679	381840	1527358	751806	-1.55
69 Chrysene-d12	415791	207896	831582	255532	-38.54
77 Perylene-d12	274872	137436	549744	185509	-32.51

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.31	0.07
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172325S.D

Lab ID: 23B0229-06

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 04:54

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

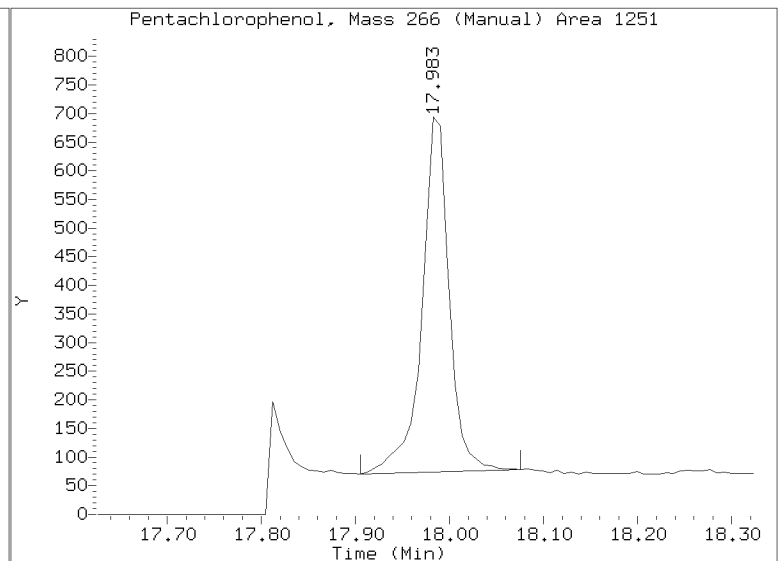
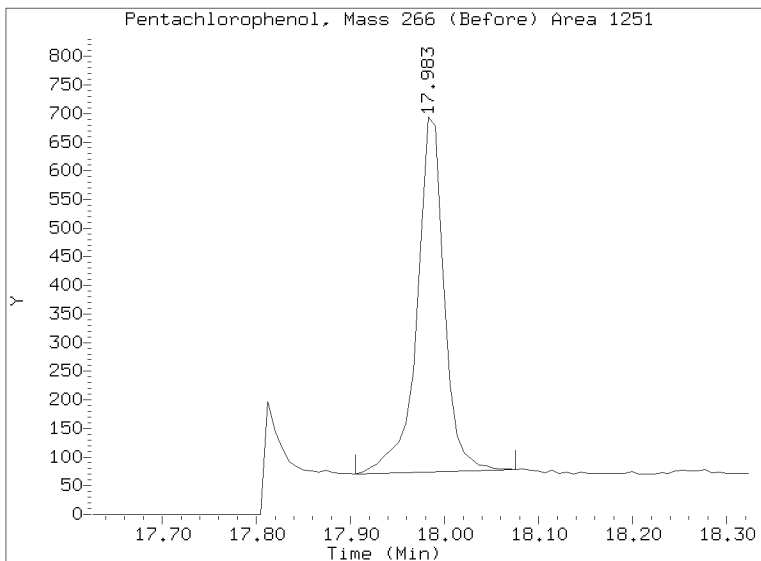
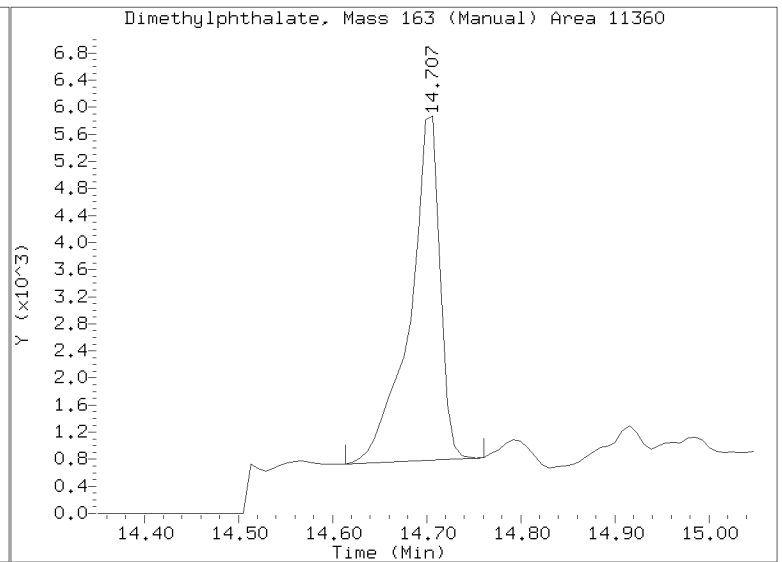
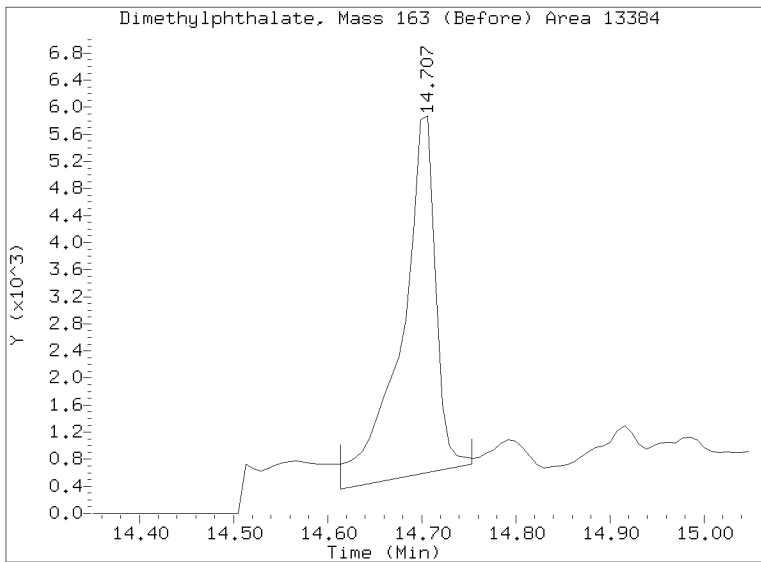
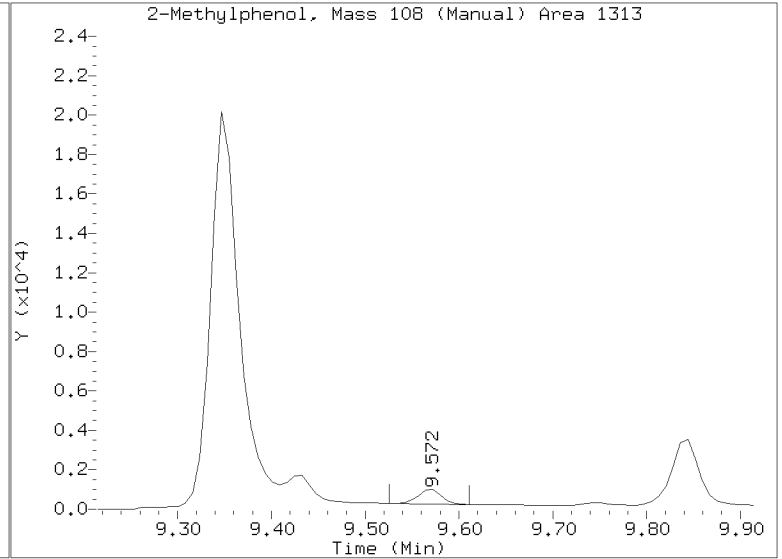
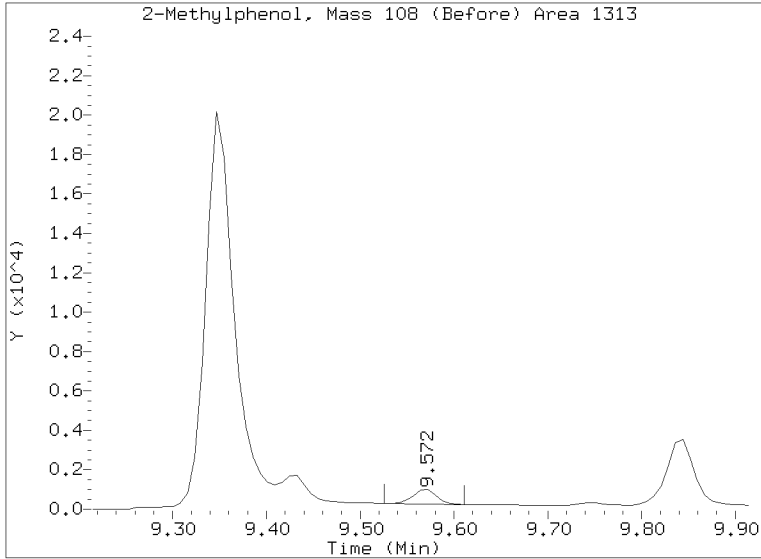
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172325S.D
Injection Date: 18-MAR-2023 04:54
Lab ID:23B0229-06 Client ID:
Report Date: 03/23/2023 16:56





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-08 A

SDG: 23B0229

Sampled: 02/08/23 15:25

Prepared: 02/17/23 15:00

File ID: NT1403172326S.D

% Solids: 49.68

Preparation: EPA 3546 (Microwave)

Analyzed: 03/18/23 05:30

Batch: BLB0424

Sequence: SLC0376

Initial/Final: 20.78 g Wet / 1 mL

Instrument: NT14

Column: ZB-5MS

Calibration: GC00050

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.8	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	1.1	J	0.7	4.8
100-51-6	Benzyl Alcohol	1	76.8		2.4	19.4
65-85-0	Benzoic acid	1	147	Q	13.0	96.9
105-67-9	2,4-Dimethylphenol	1	19.4	U	2.1	19.4
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.8	U	1.3	4.8
87-86-5	Pentachlorophenol	1	3.1	J	2.1	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	726.50	512	70.5	27 - 120	
p-Terphenyl-d14	484.33	812	168	37 - 120	*,Q

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723265.D

Date: 18-MAR-2023 05:30

Client ID:

Sample Info: 23B0229-08

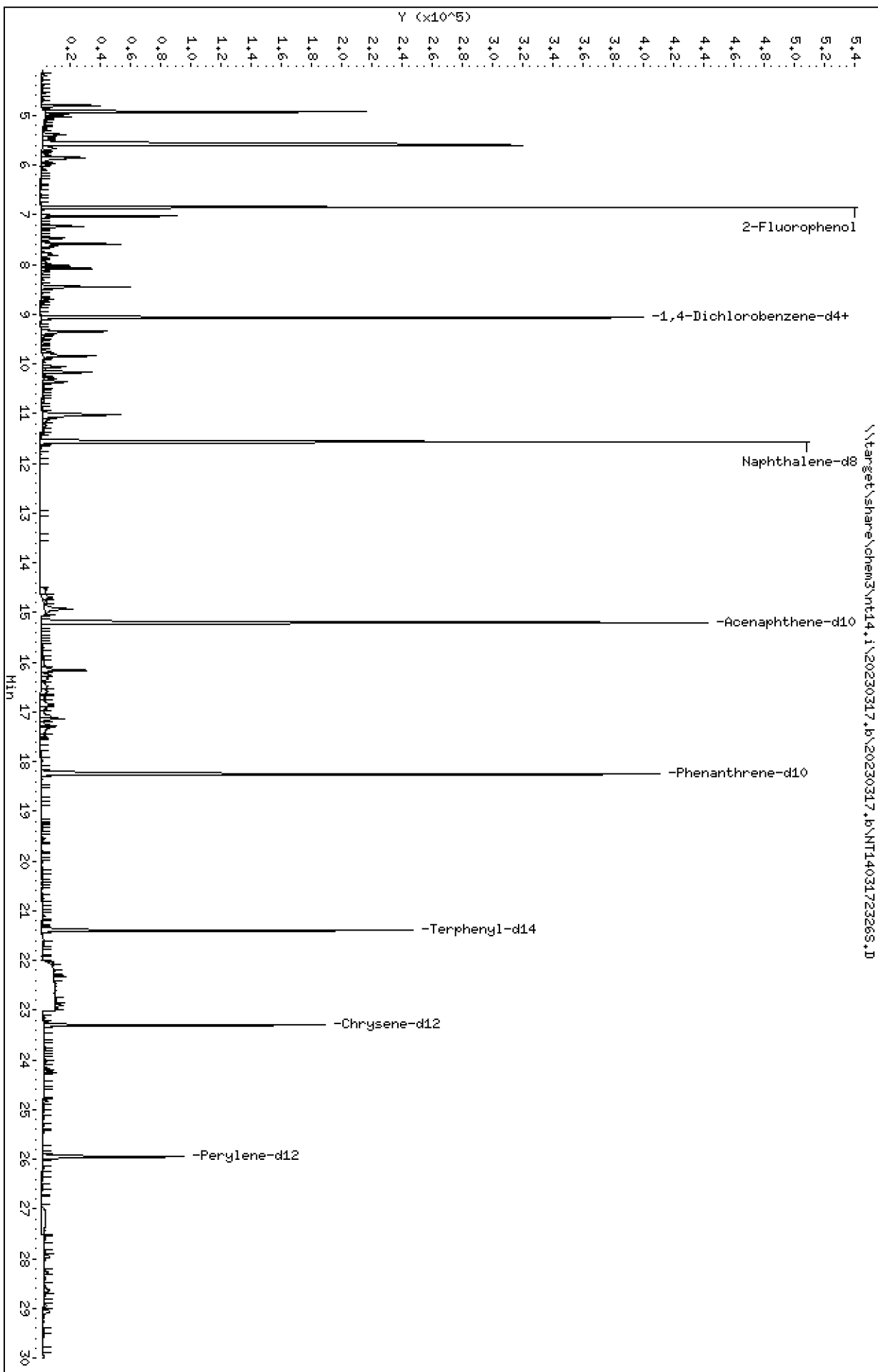
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723265.D



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

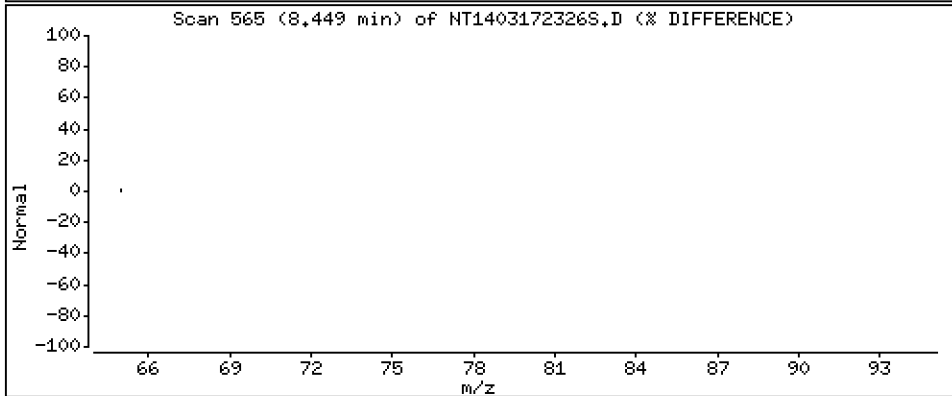
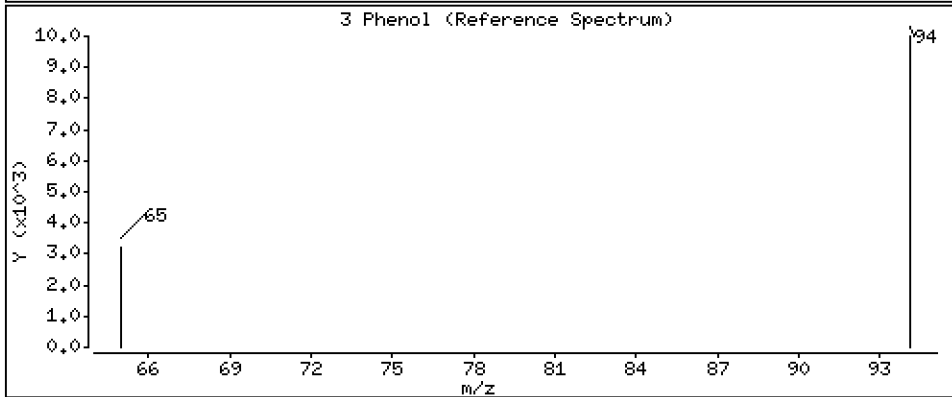
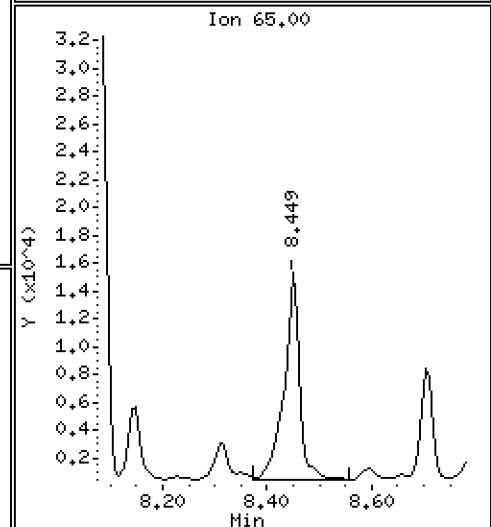
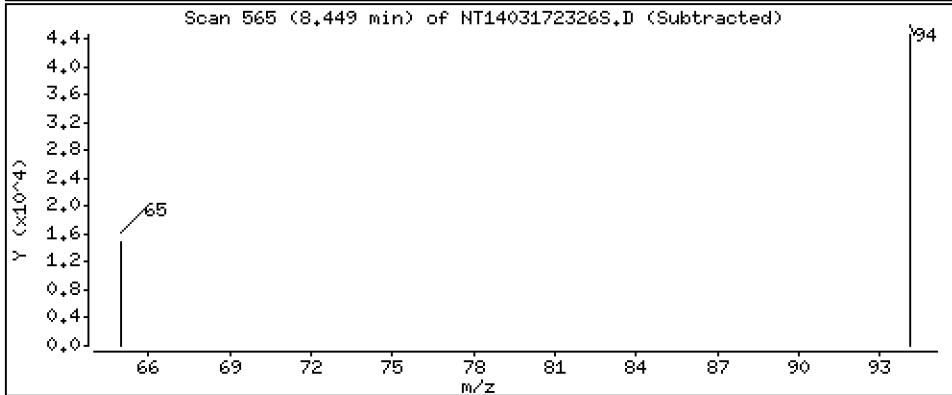
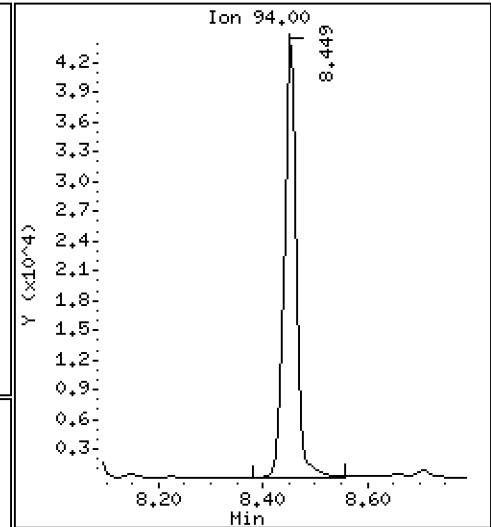
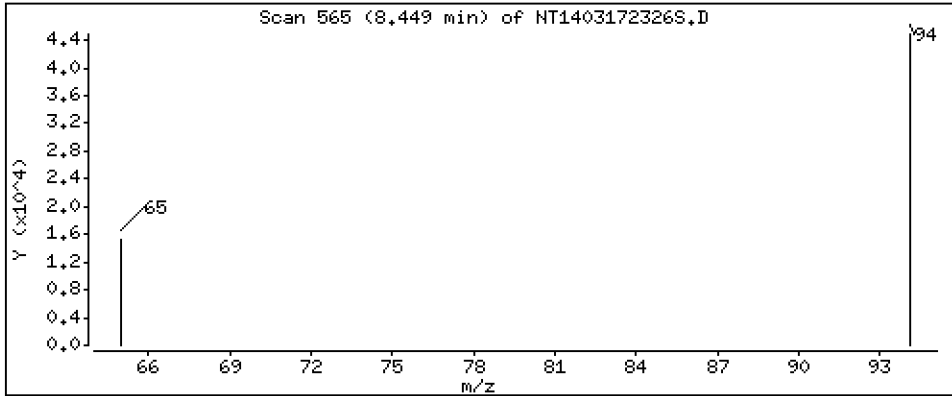
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,6202 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

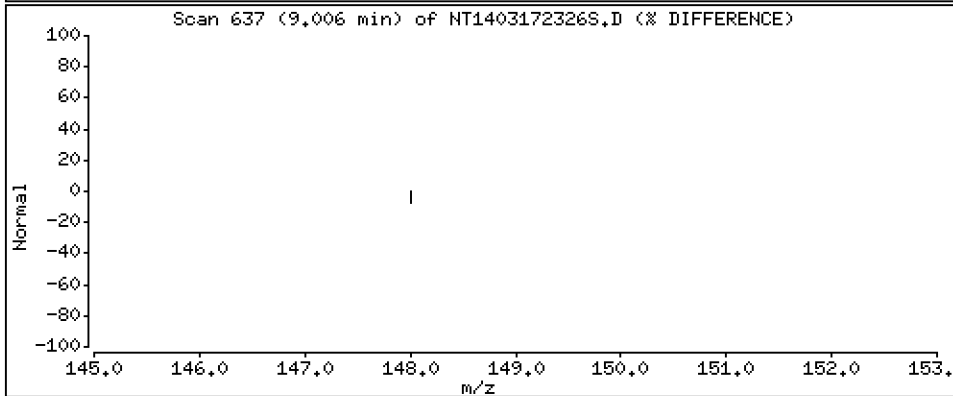
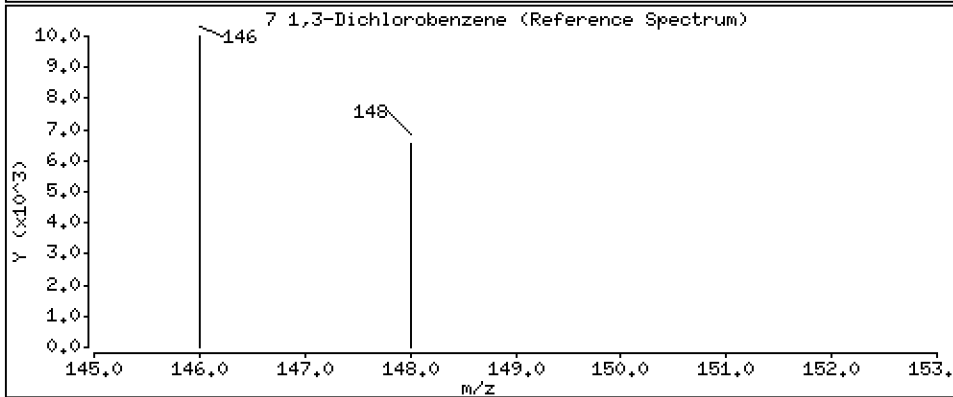
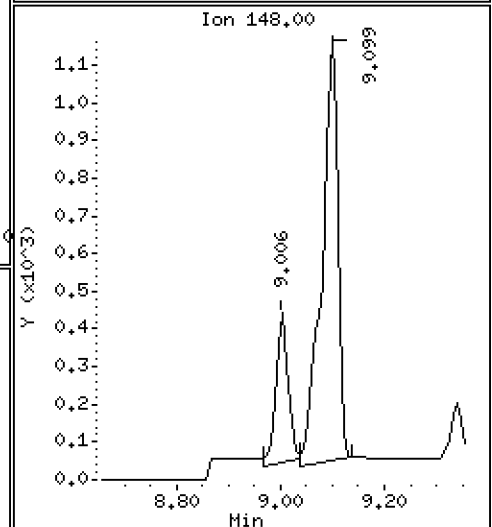
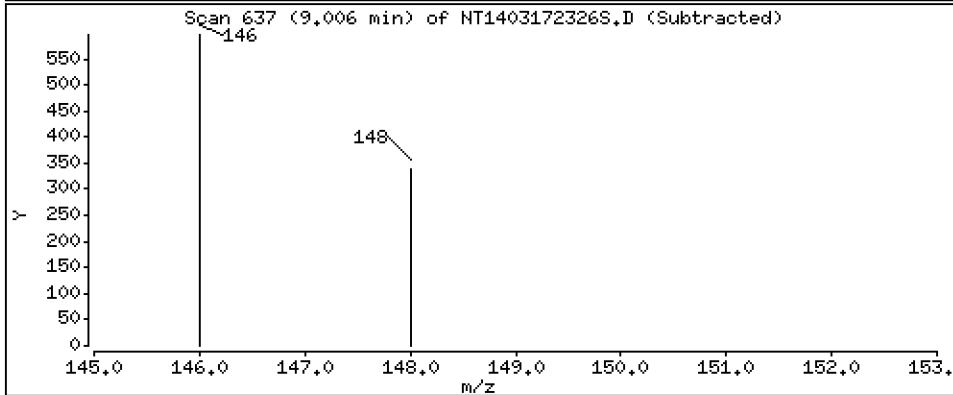
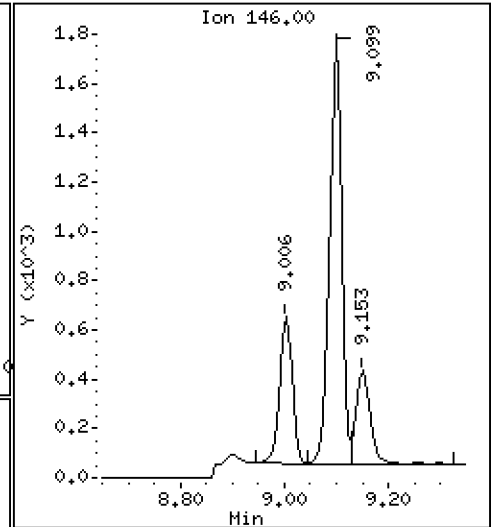
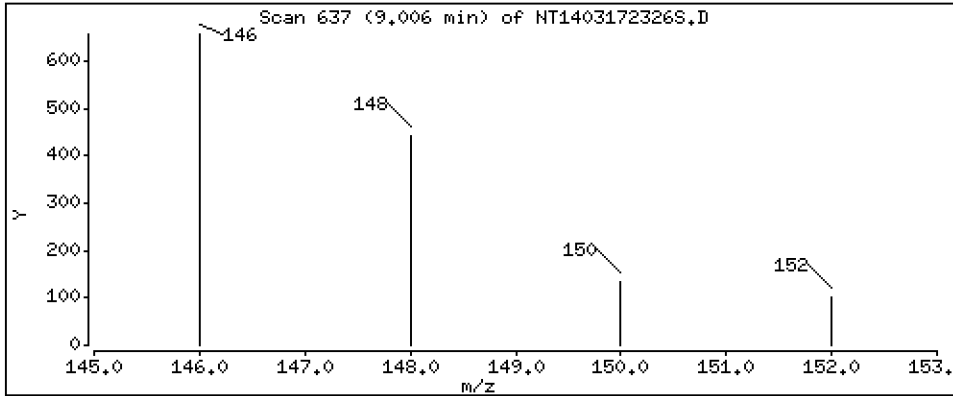
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,009838 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

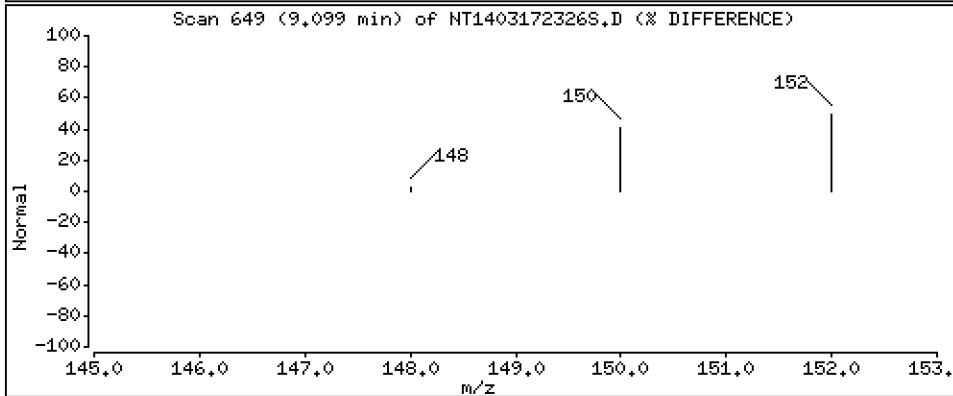
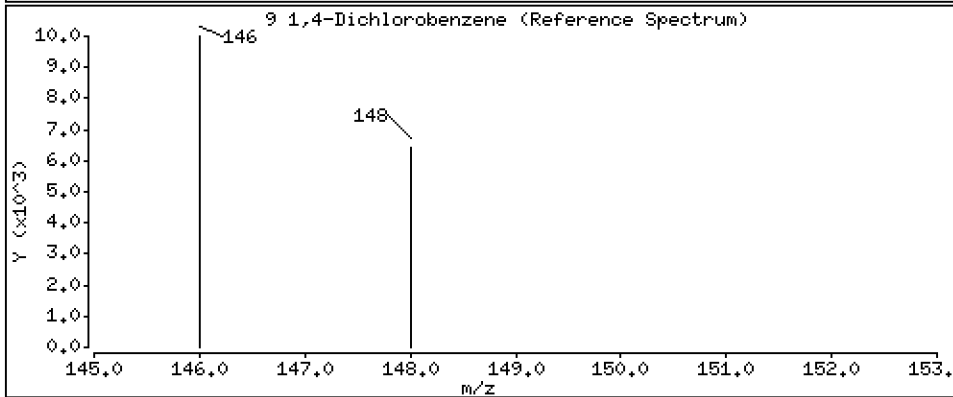
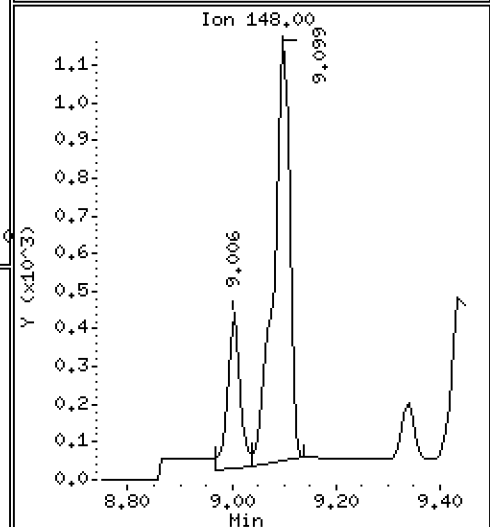
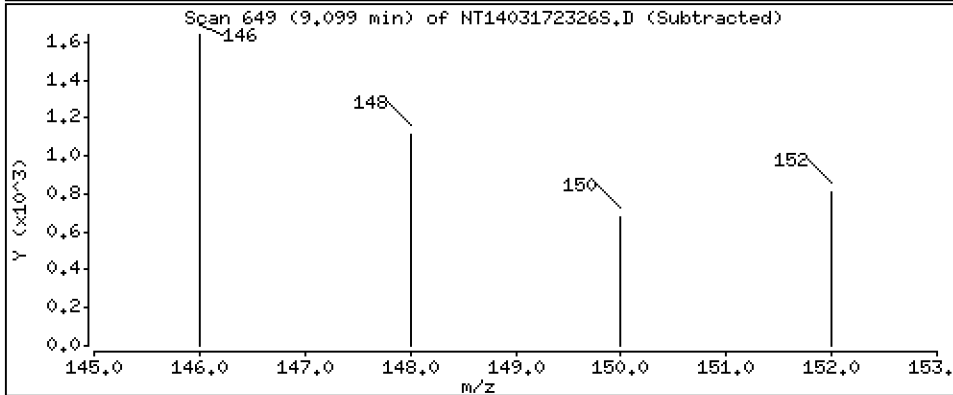
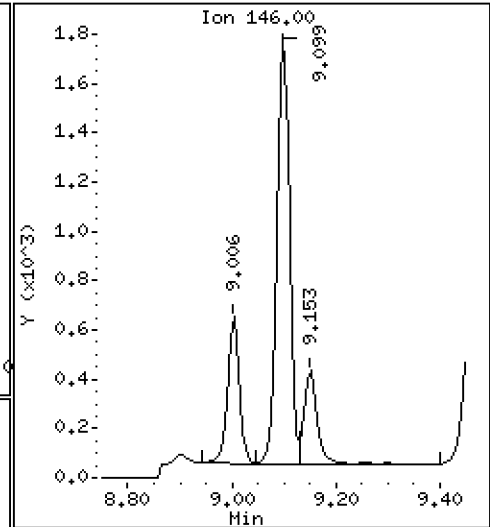
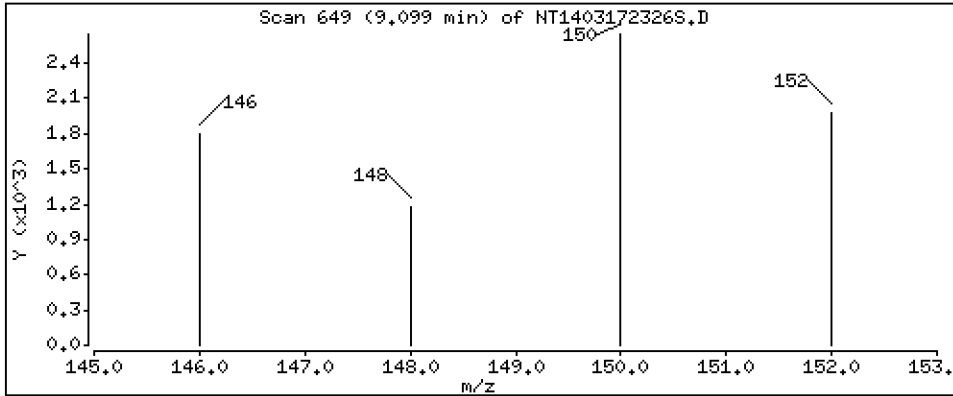
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.02910 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

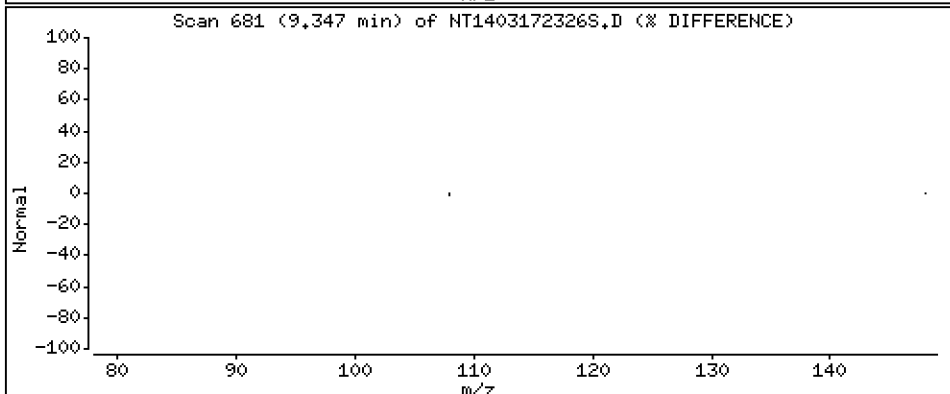
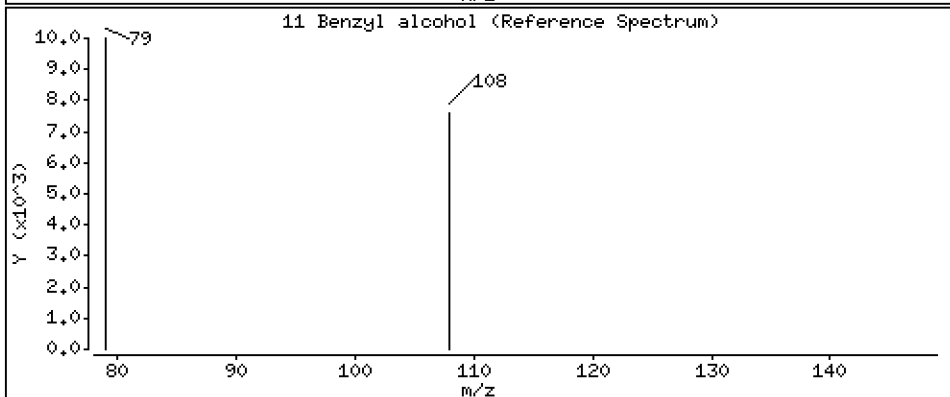
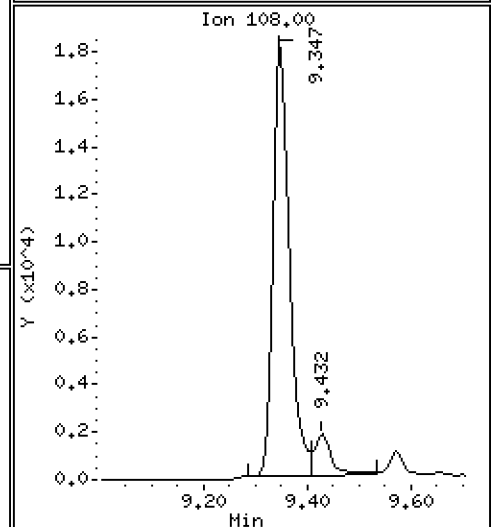
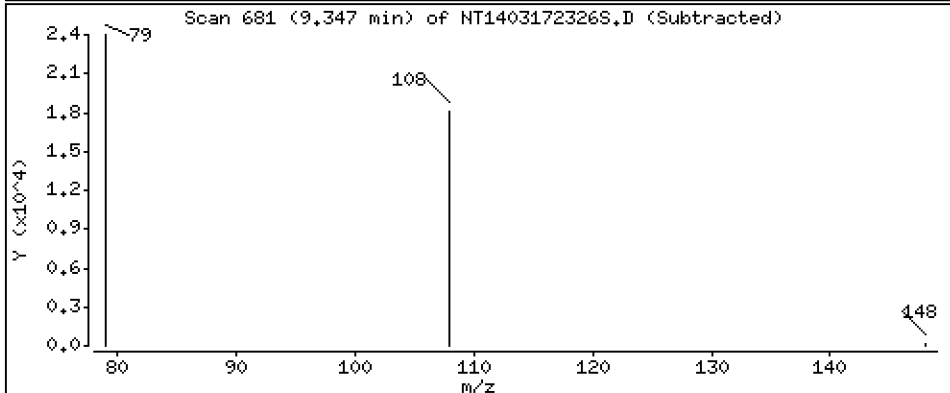
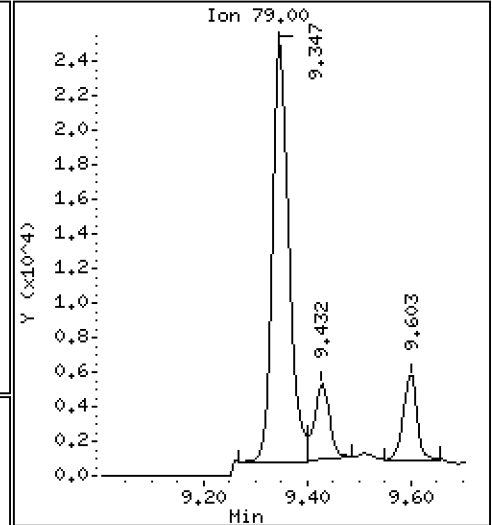
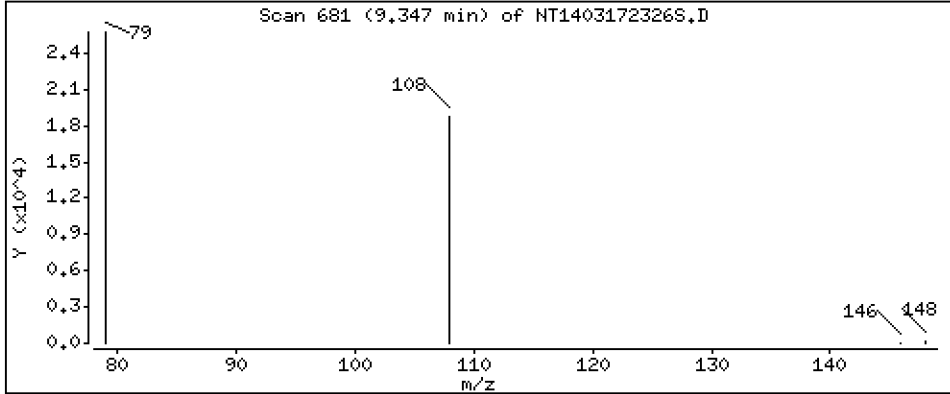
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.7930 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

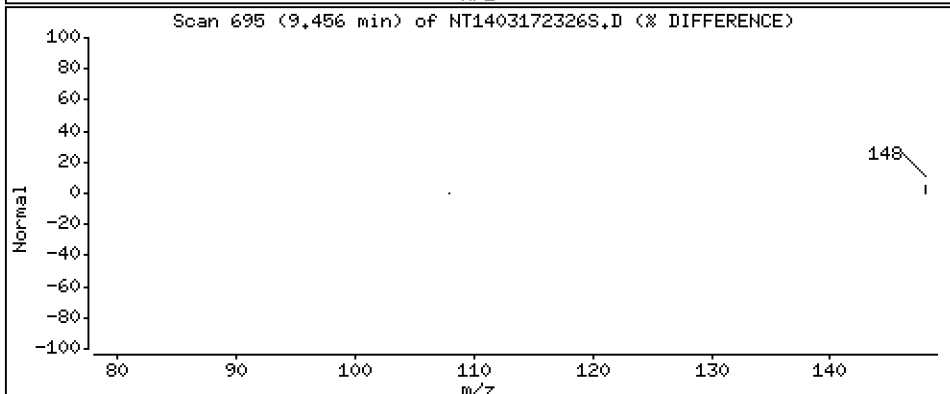
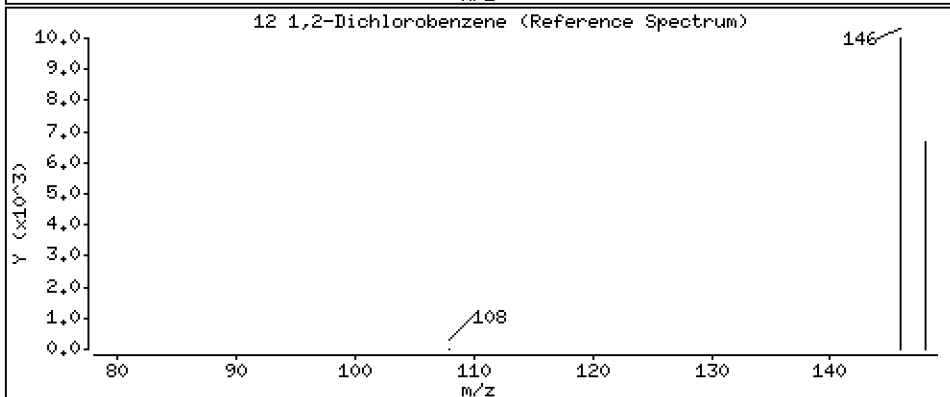
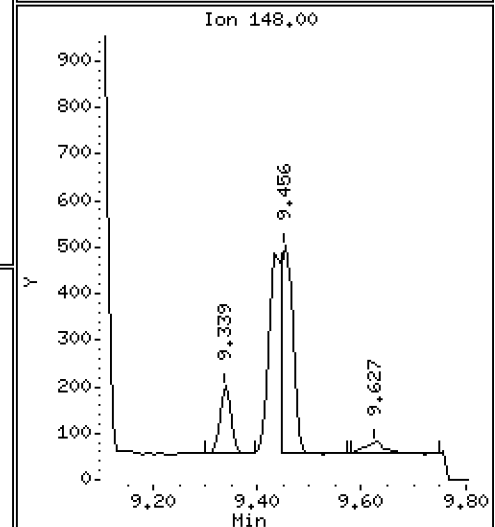
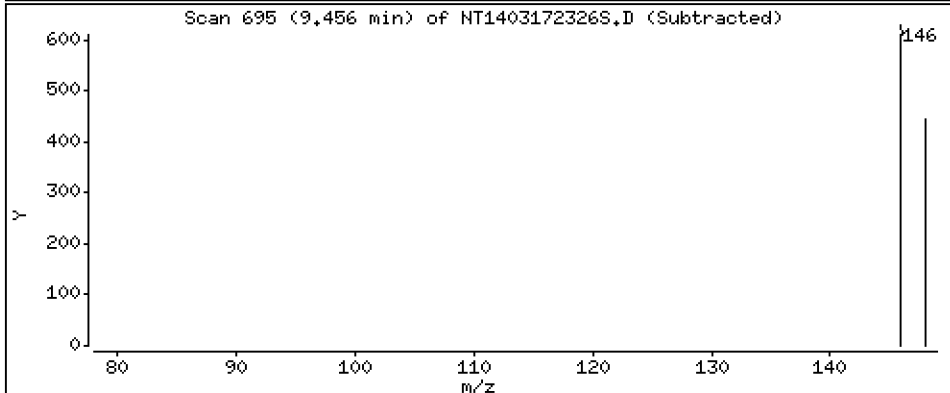
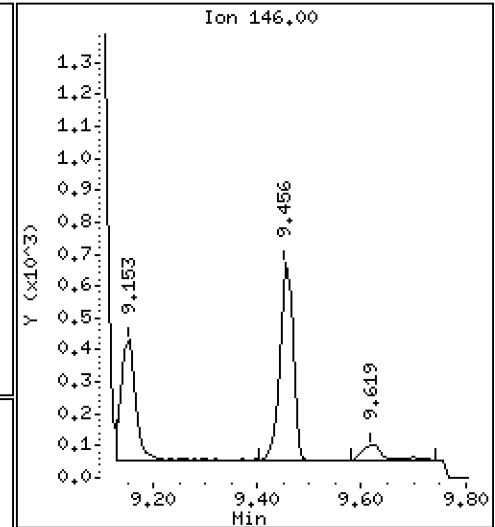
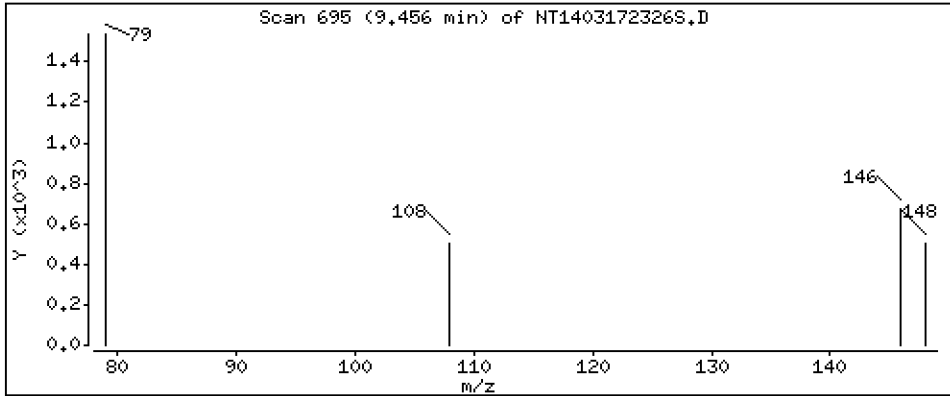
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.01092 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

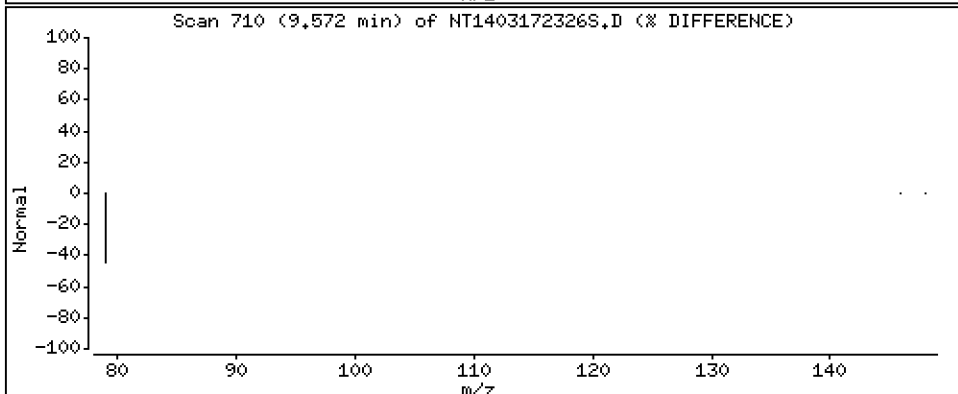
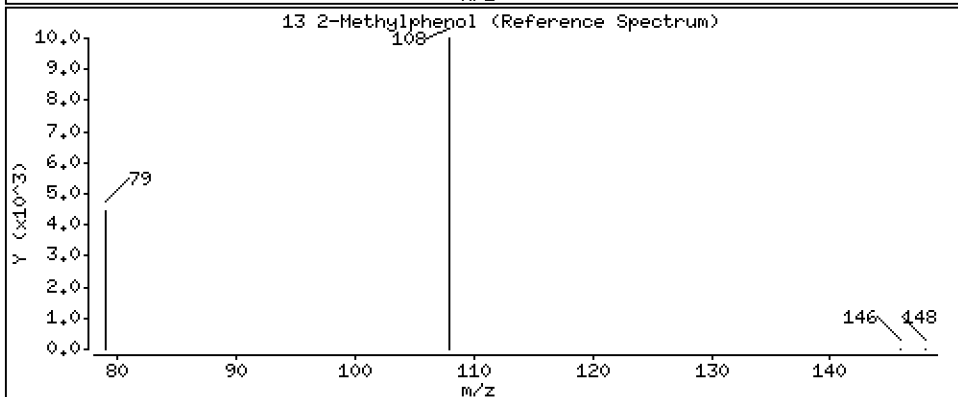
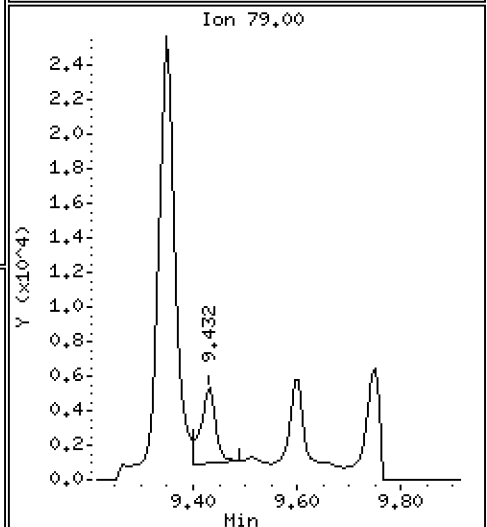
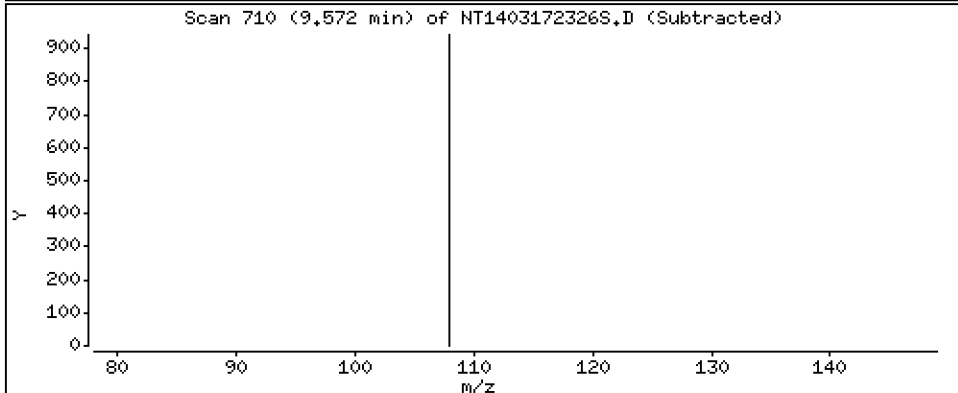
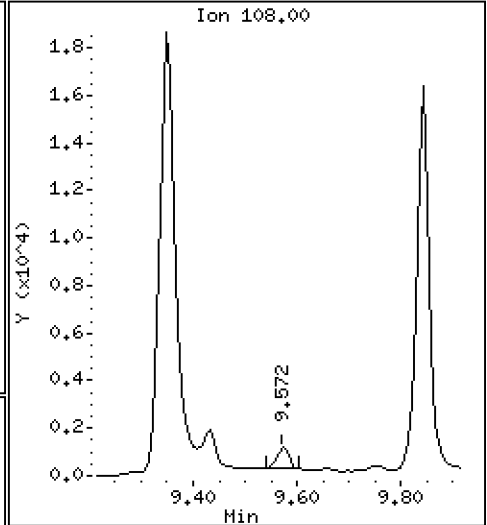
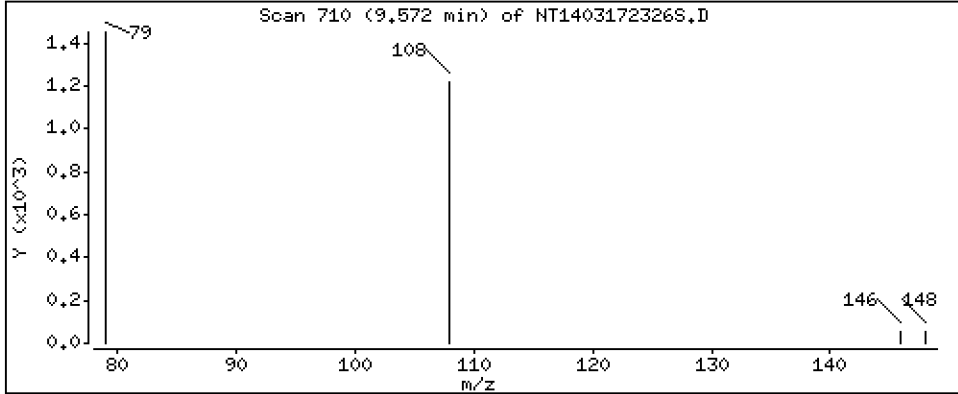
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,01778 ug/mL

13 2-Methylphenol



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

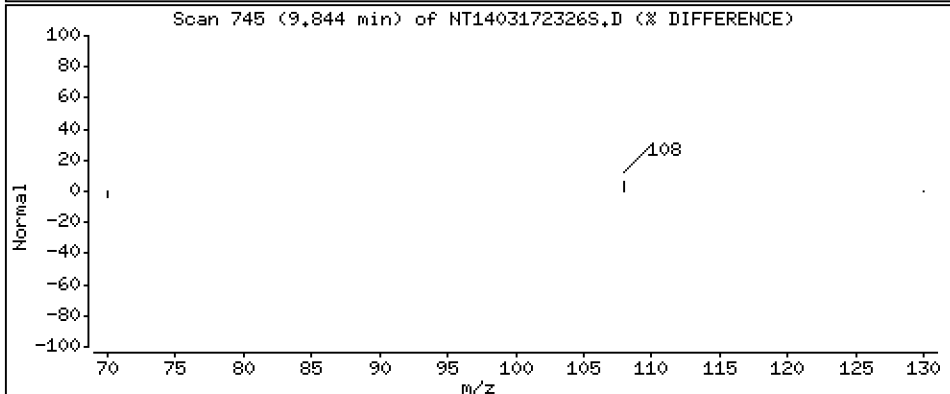
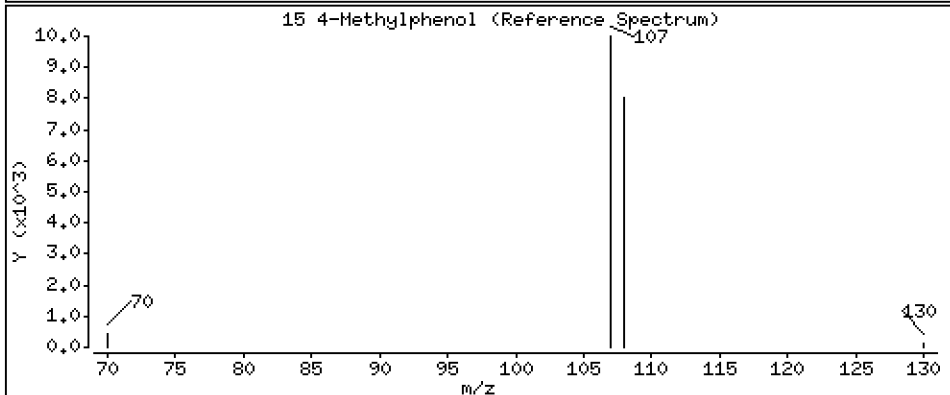
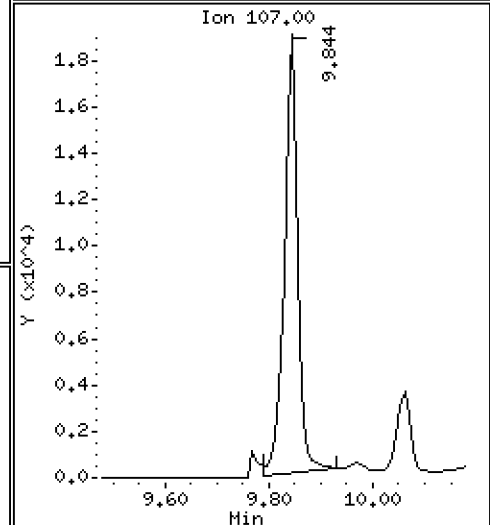
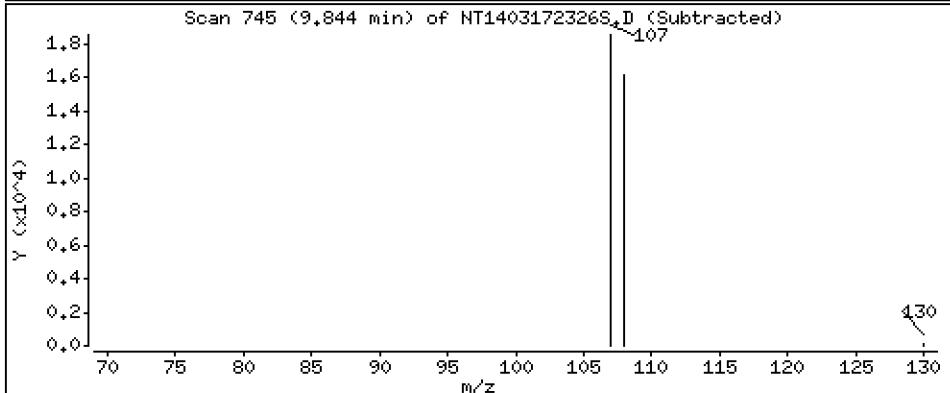
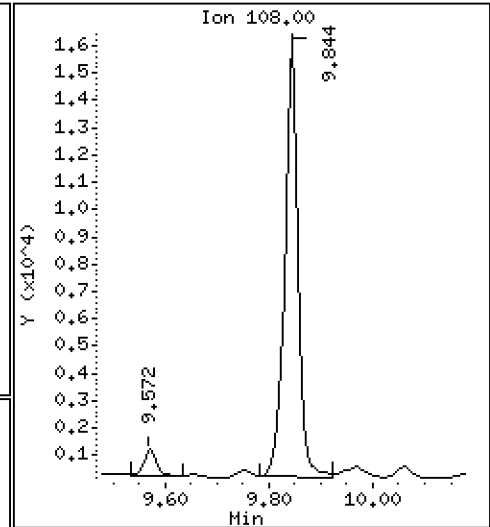
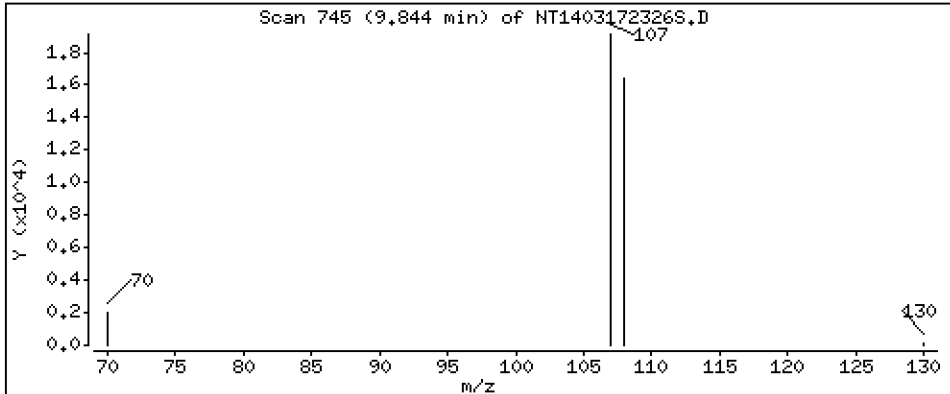
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,3380 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

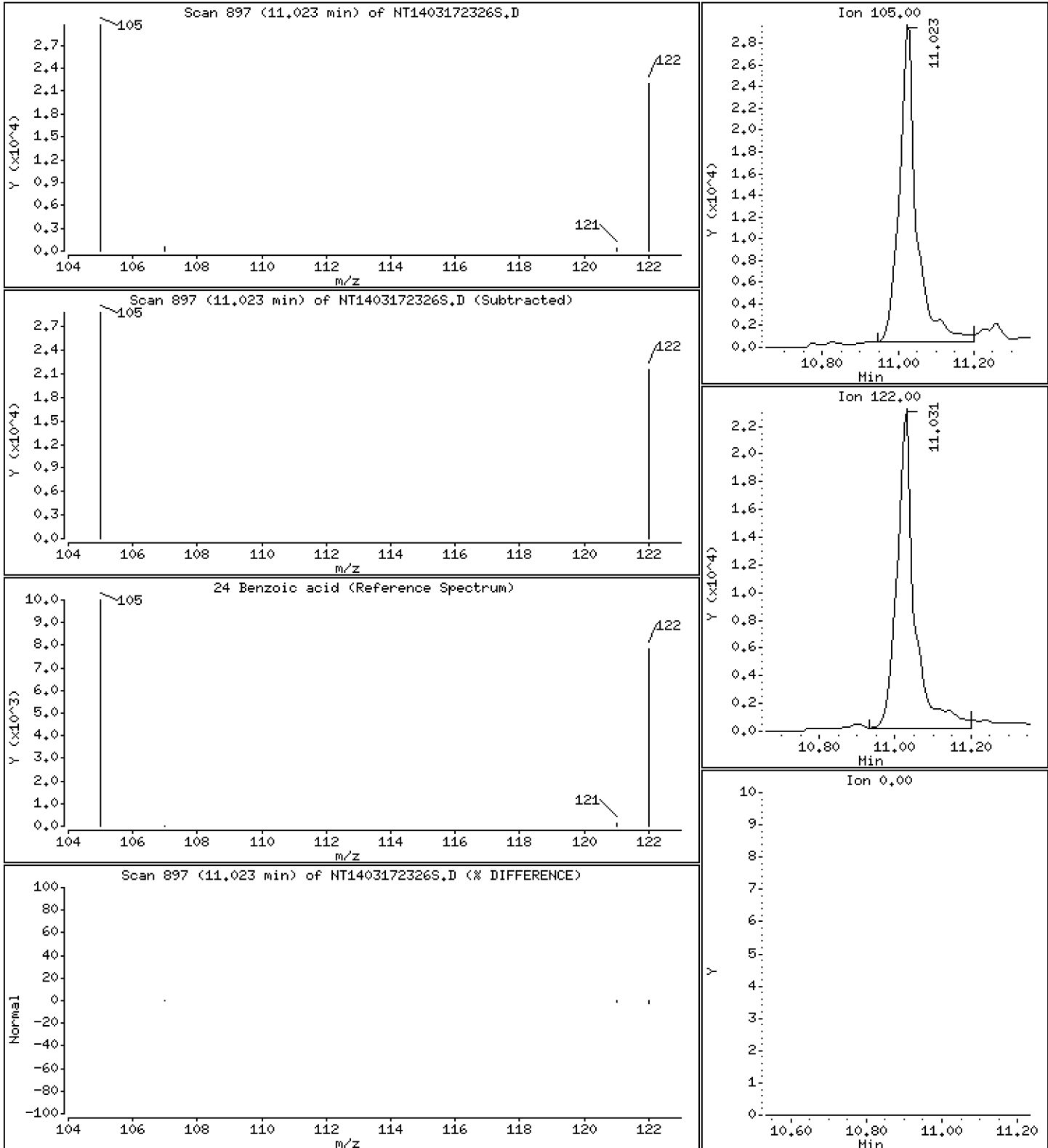
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 1,517 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

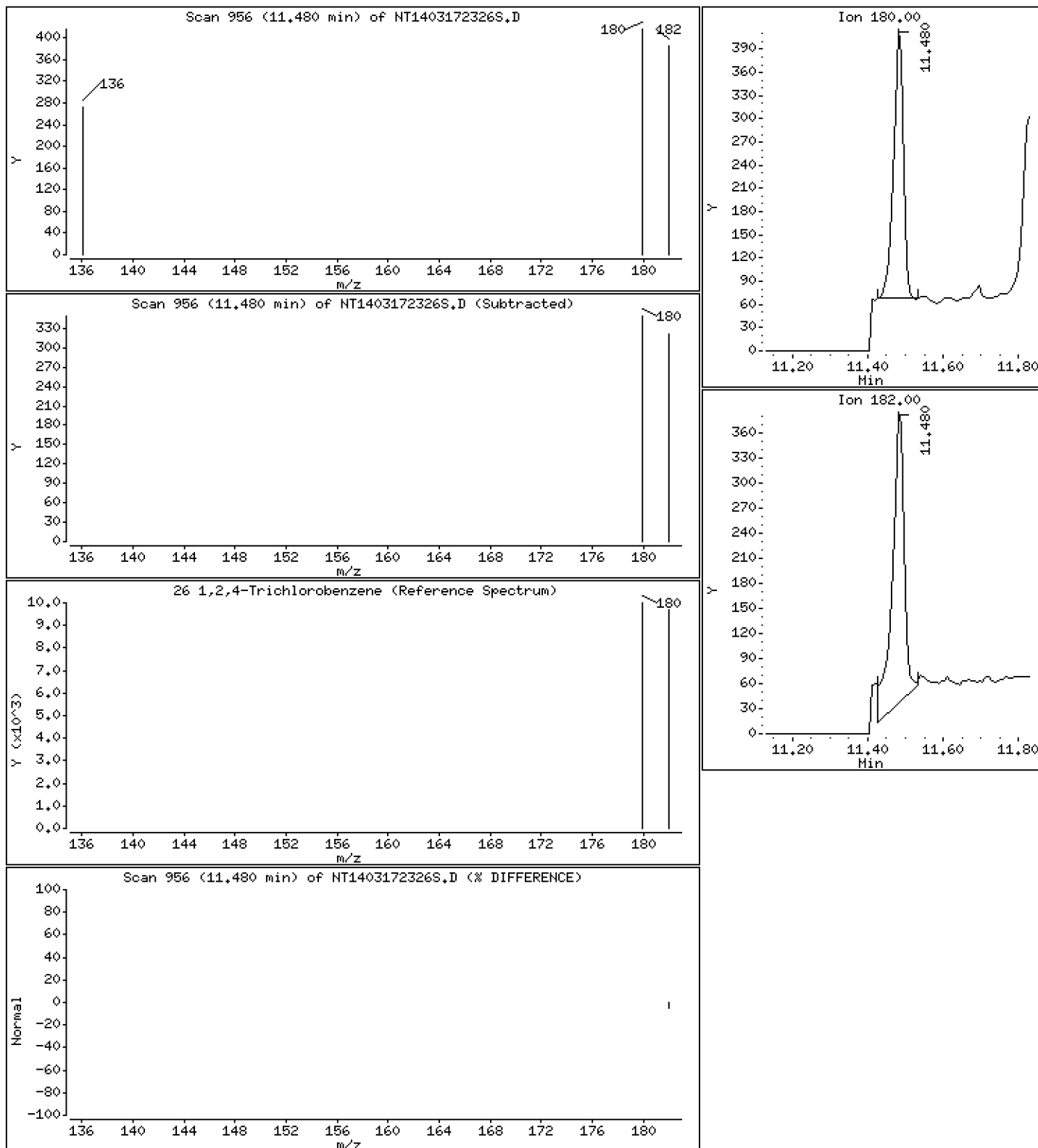
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,007761 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

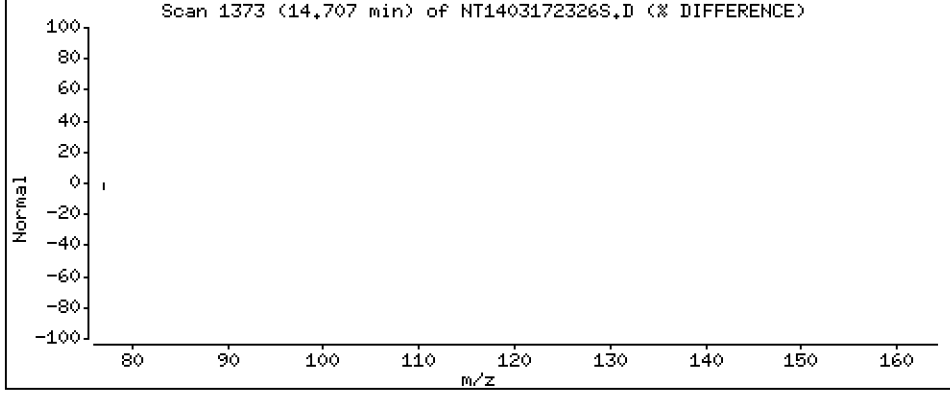
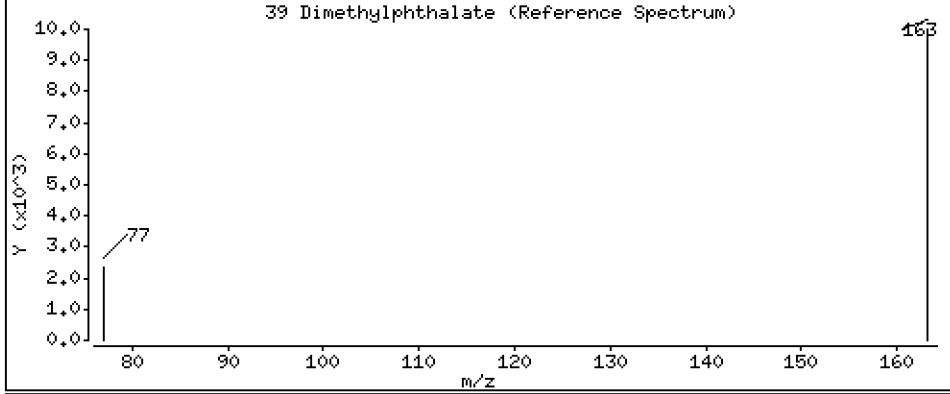
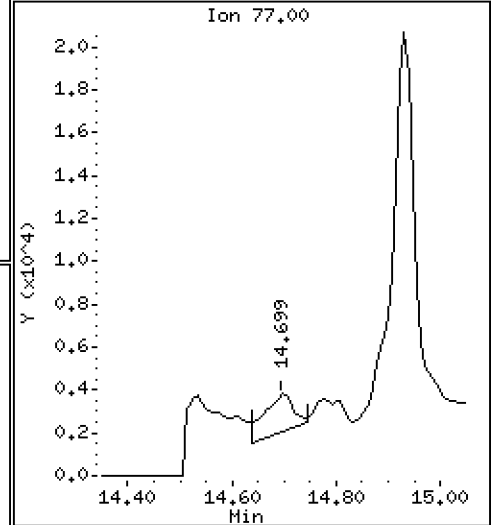
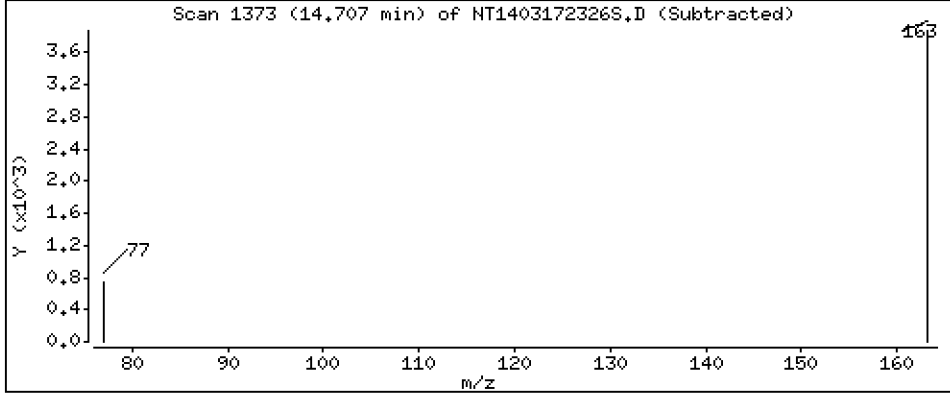
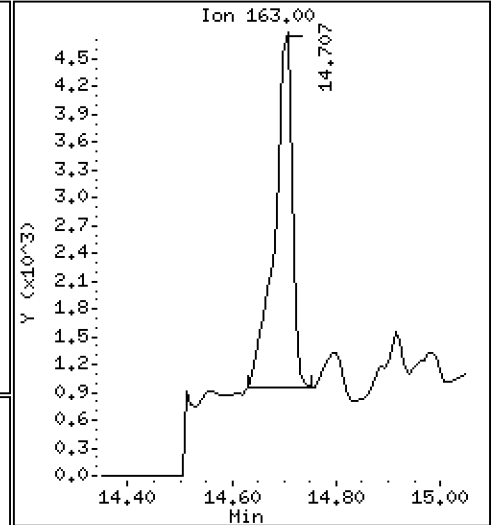
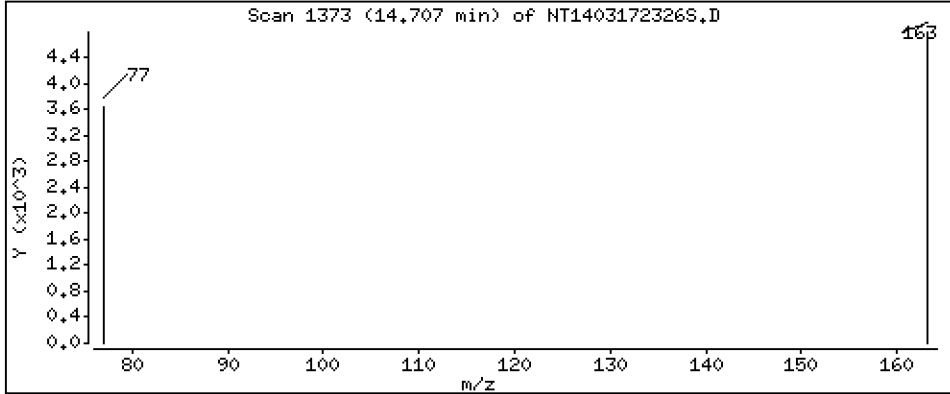
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,06087 ug/mL

39 Dimethylphthalate



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

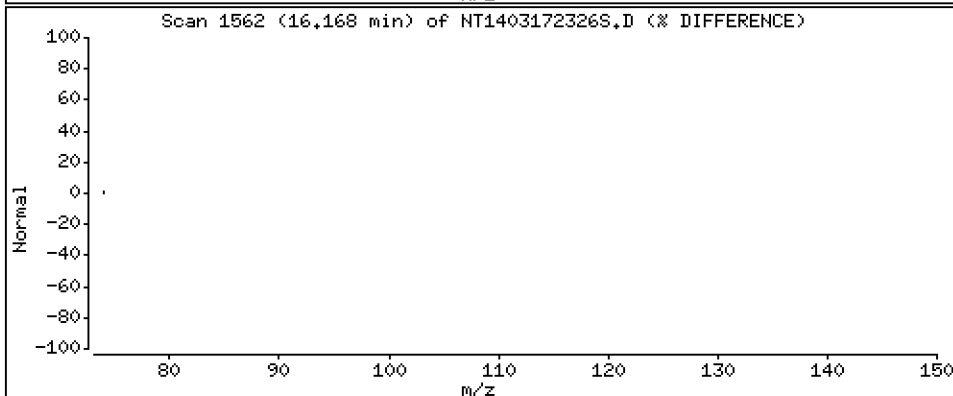
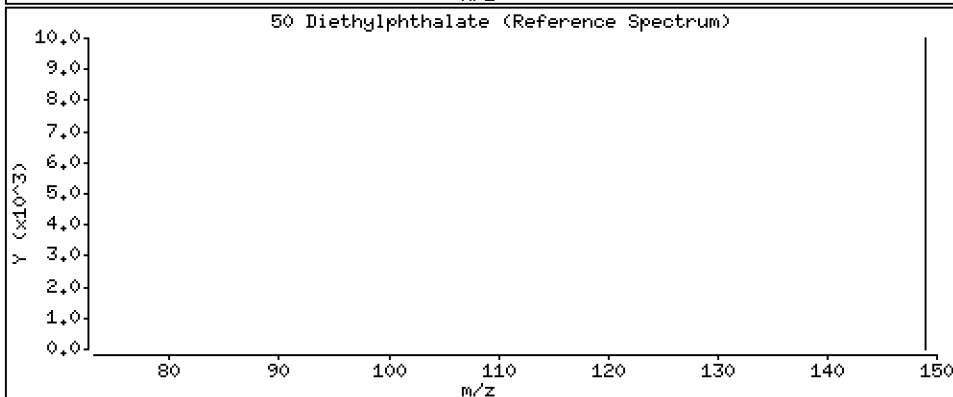
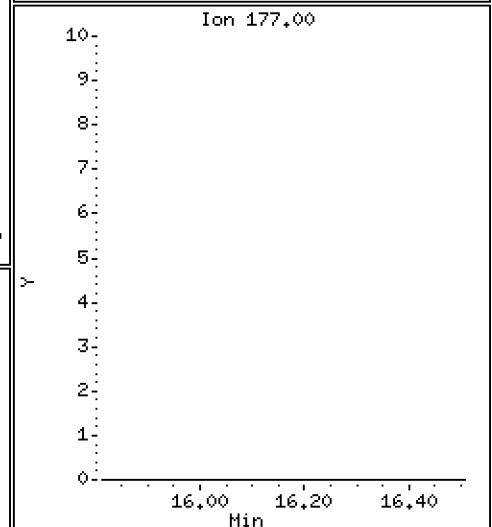
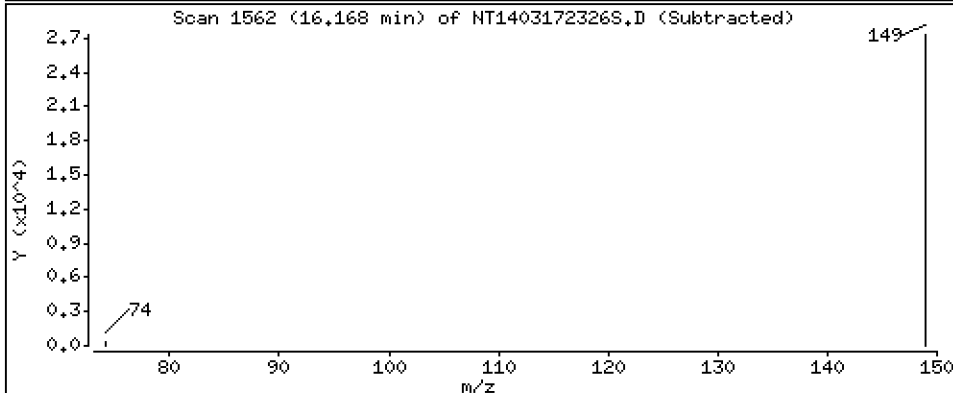
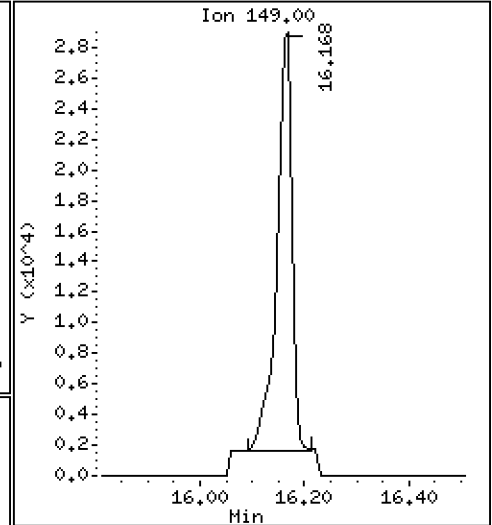
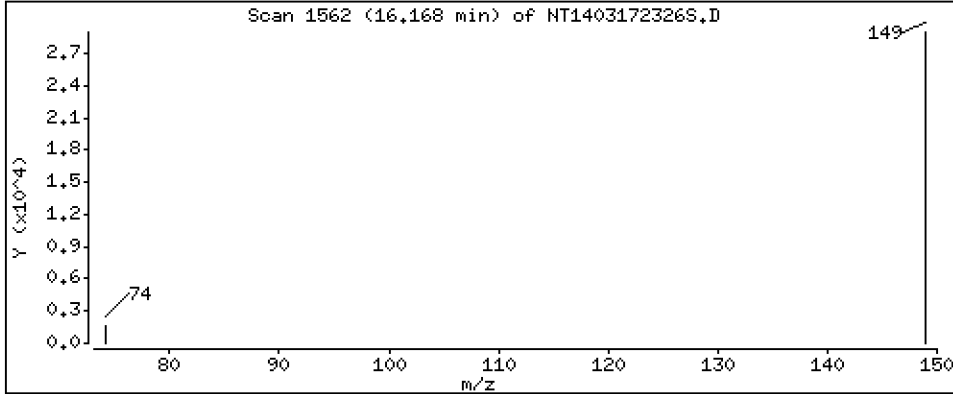
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3510 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

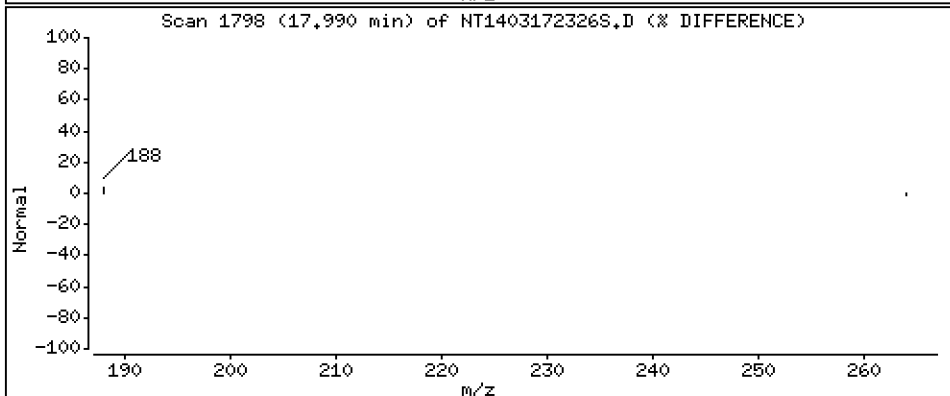
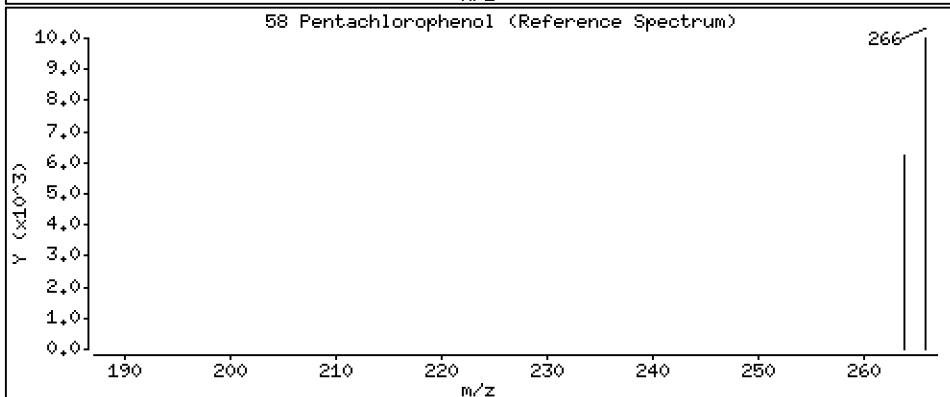
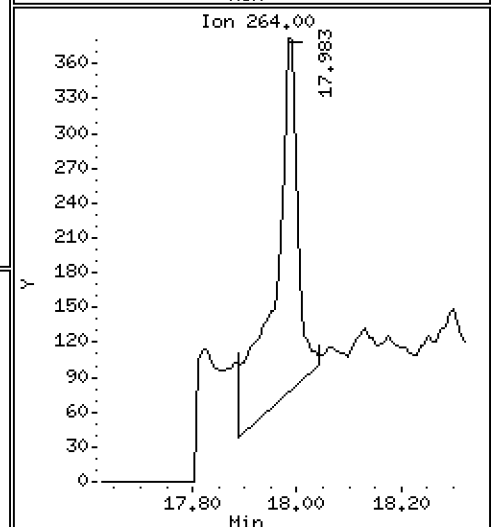
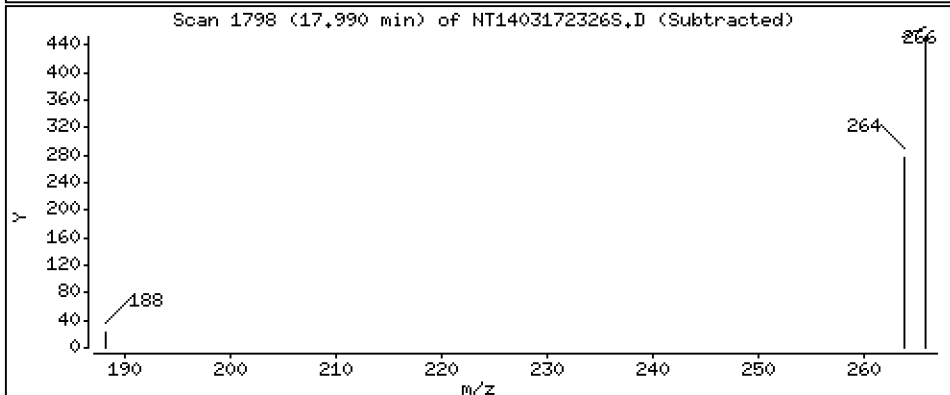
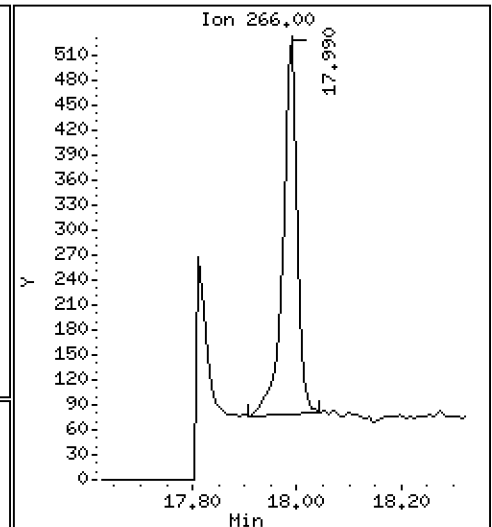
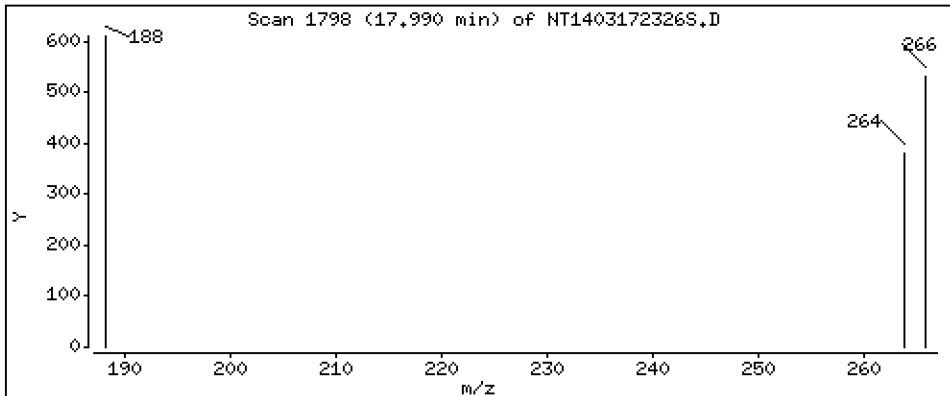
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,03229 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

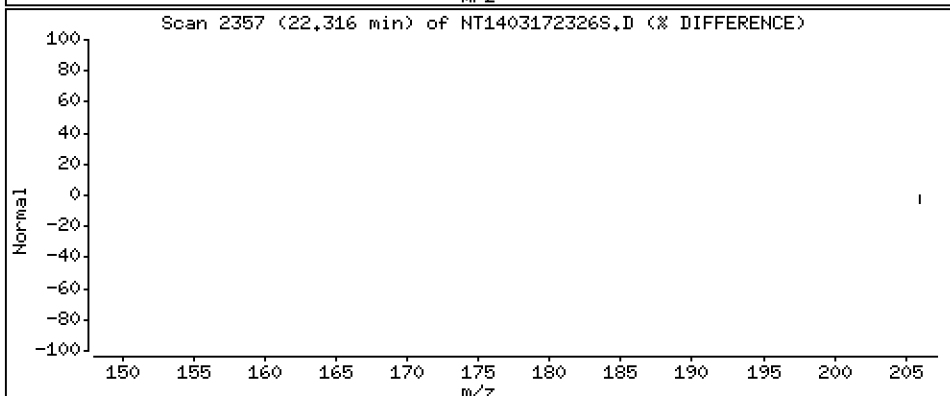
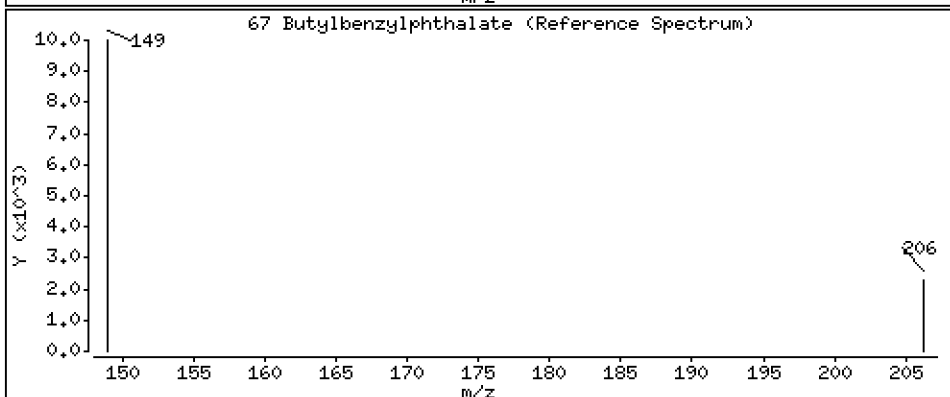
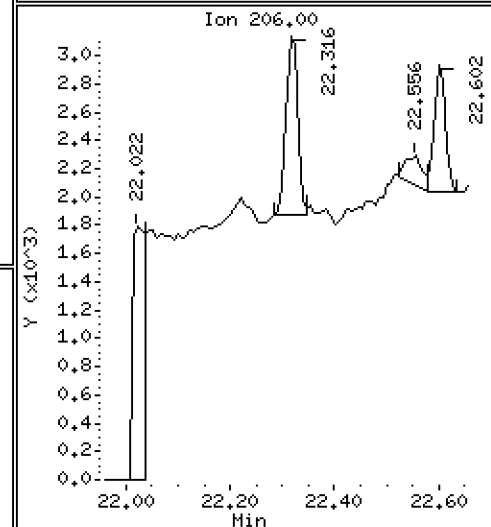
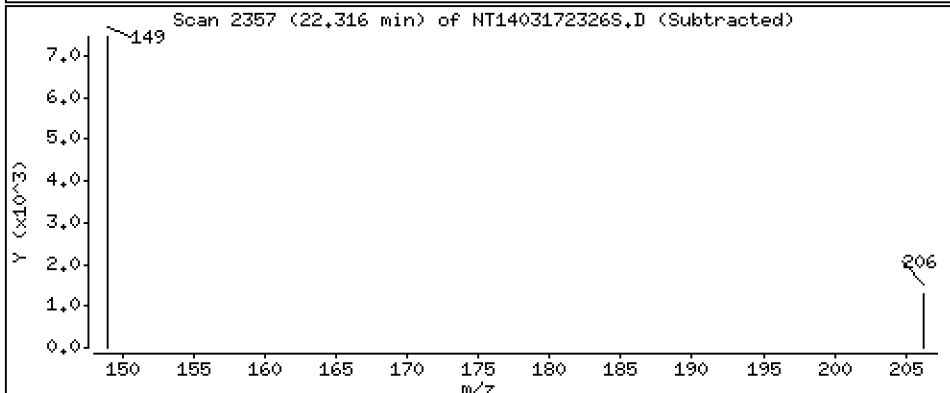
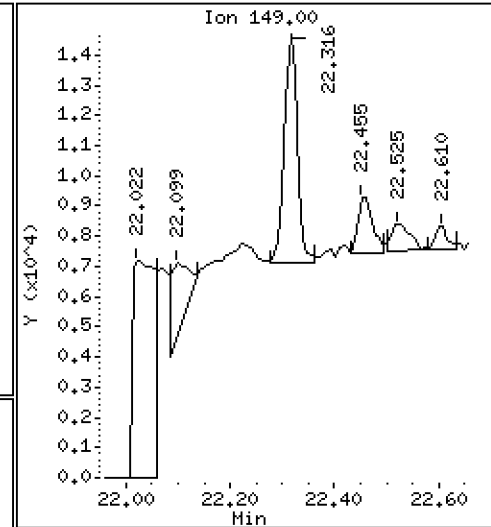
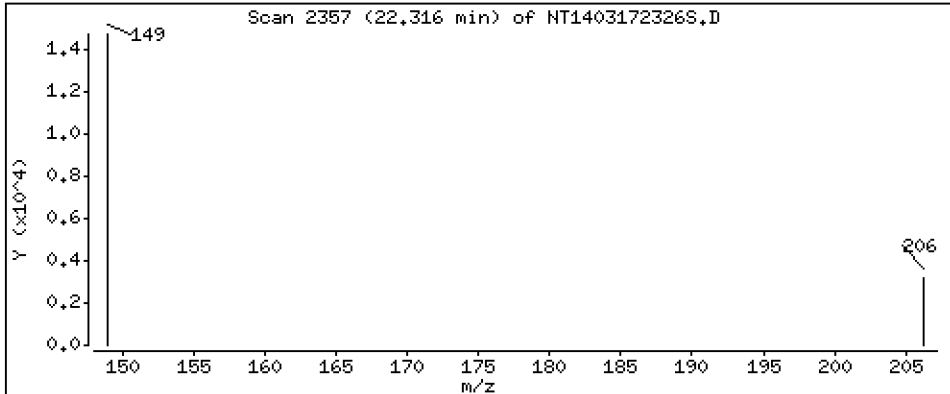
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2977 ug/mL



Date : 18-MAR-2023 05:30

Client ID:

Instrument: nt14.i

Sample Info: 23B0229-08

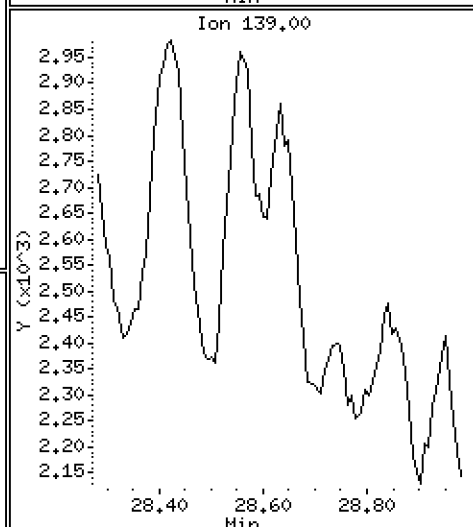
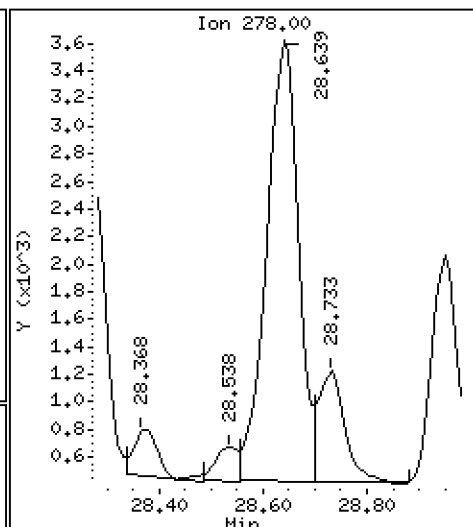
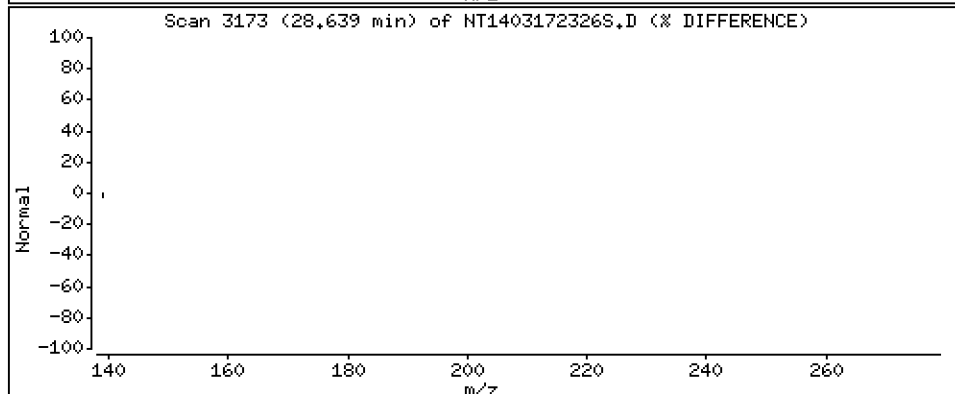
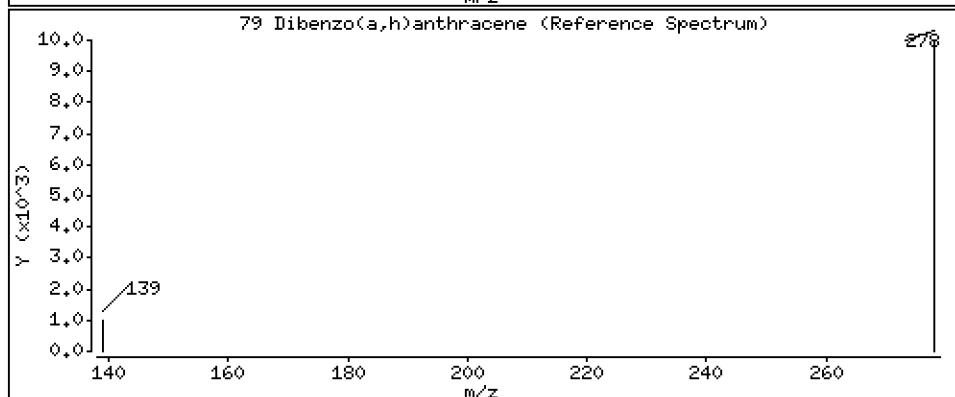
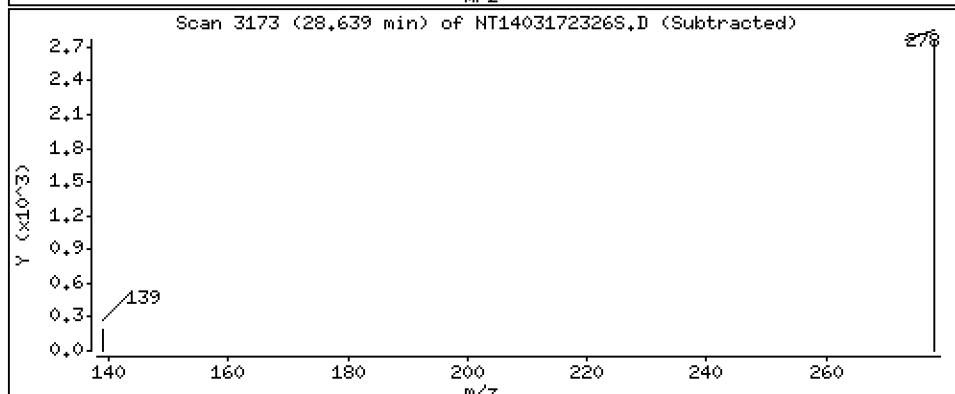
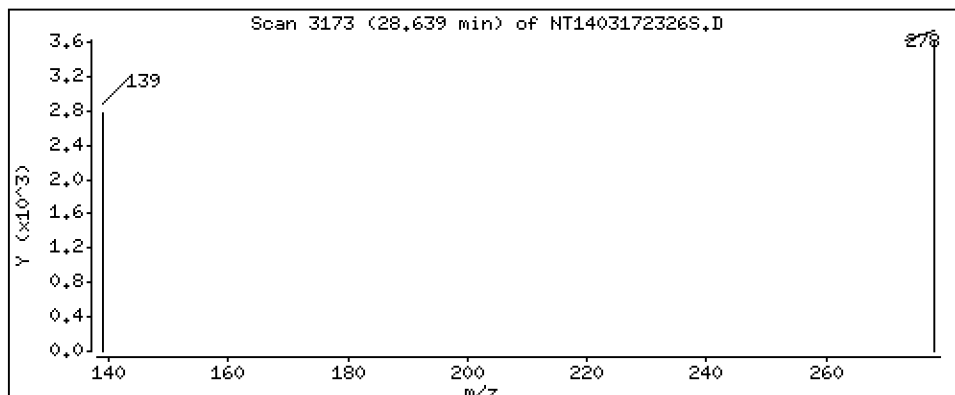
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,3068 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172326S.D
 Lab Smp Id: 23B0229-08
 Inj Date : 18-MAR-2023 05:30 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : 23B0229-08
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.849	6.826	(0.755)	440471	5.28985	5.290 (R)
3 Phenol	94		8.449	8.441	(0.932)	71011	0.62015	0.6202
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	964	0.00984	0.009838
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	245309	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	2759	0.02910	0.02910
11 Benzyl alcohol	79		9.347	9.354	(1.031)	53221	0.79297	0.7930
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	1009	0.01092	0.01092
13 2-Methylphenol	108		9.572	9.564	(1.056)	1406	0.01778	0.01778 (M)
15 4-Methylphenol	108		9.843	9.828	(1.086)	28244	0.33800	0.3380
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		11.023	10.999	(0.953)	93016	1.51708	1.517
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	613	0.00776	0.007761
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	937432	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.706	14.698	(0.967)	8629	0.06087	0.06087 (M)
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	415064	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	52967	0.35098	0.3510
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		17.990	17.974	(0.986)	855	0.03229	0.03229 (M)
* 59 Phenanthrene-d10	188		18.253	18.245	(1.000)	754279	4.00000	
\$ 66 Terphenyl-d14	244		21.402	21.386	(0.918)	341902	8.38078	8.381 (R)
67 Butylbenzylphthalate	149		22.315	22.308	(0.957)	12310	0.29769	0.2977
* 69 Chrysene-d12	240		23.307	23.291	(1.000)	236642	4.00000	
* 77 Perylene-d12	264		25.954	25.931	(1.000)	176821	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.631	(1.103)	13753	0.30681	0.3068
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172326S.D
 Lab Smp Id: 23B0229-08
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	245309	8.92
27 Naphthalene-d8	830434	415217	1660868	937432	12.88
42 Acenaphthene-d10	389907	194954	779814	415064	6.45
59 Phenanthrene-d10	763679	381840	1527358	754279	-1.23
69 Chrysene-d12	415791	207896	831582	236642	-43.09
77 Perylene-d12	274872	137436	549744	176821	-35.67

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.04
69 Chrysene-d12	23.29	22.79	23.79	23.31	0.07
77 Perylene-d12	25.93	25.43	26.43	25.95	0.09

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

REVIEW SUMMARY FOR FILE - NT1403172326S.D

Lab ID: 23B0229-08

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 05:30

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

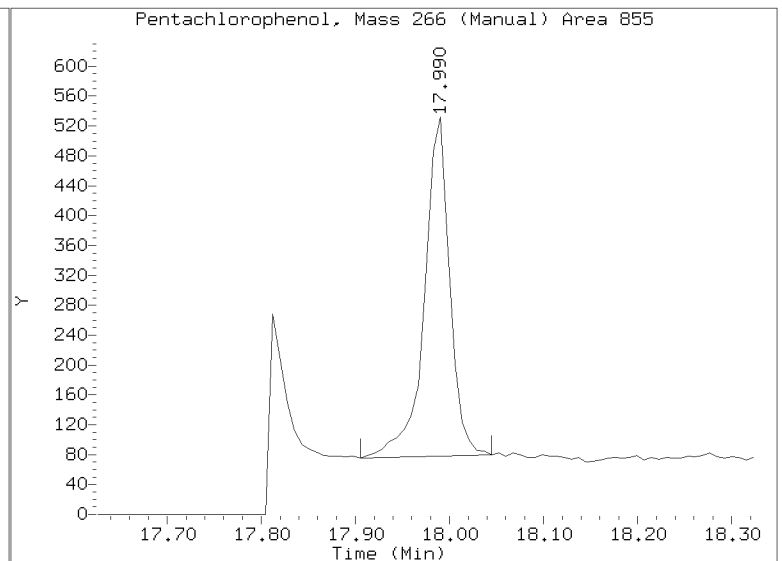
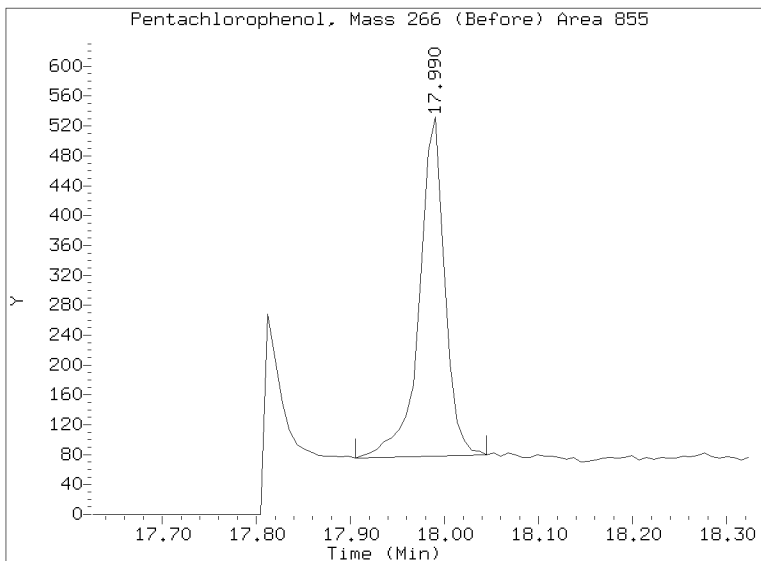
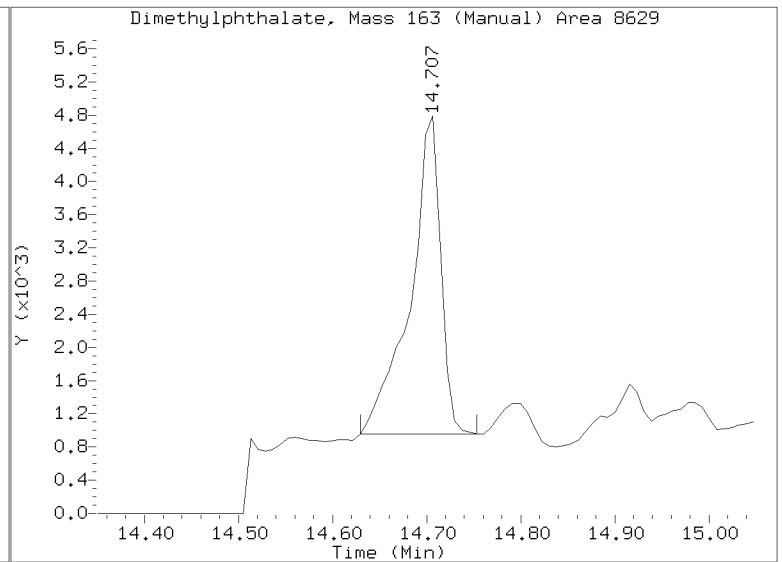
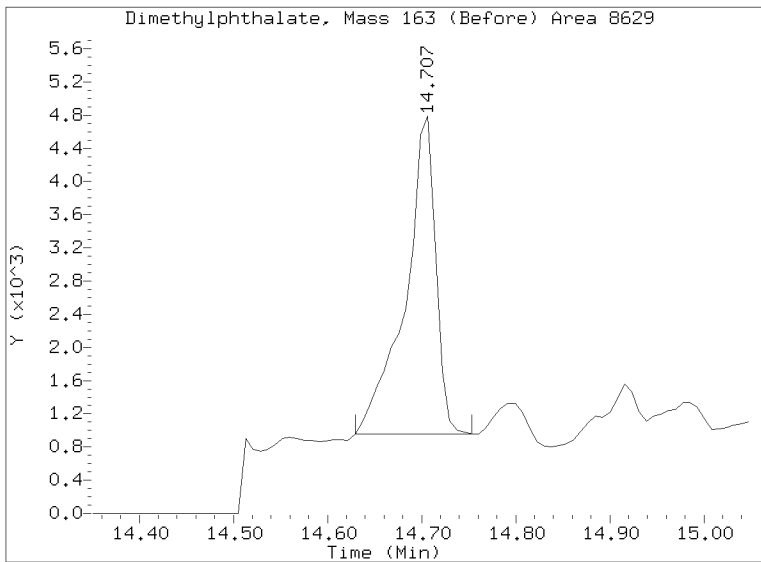
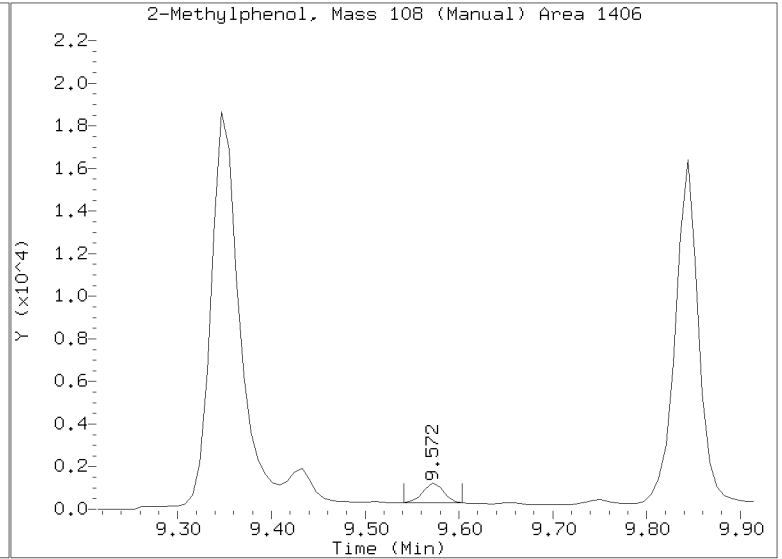
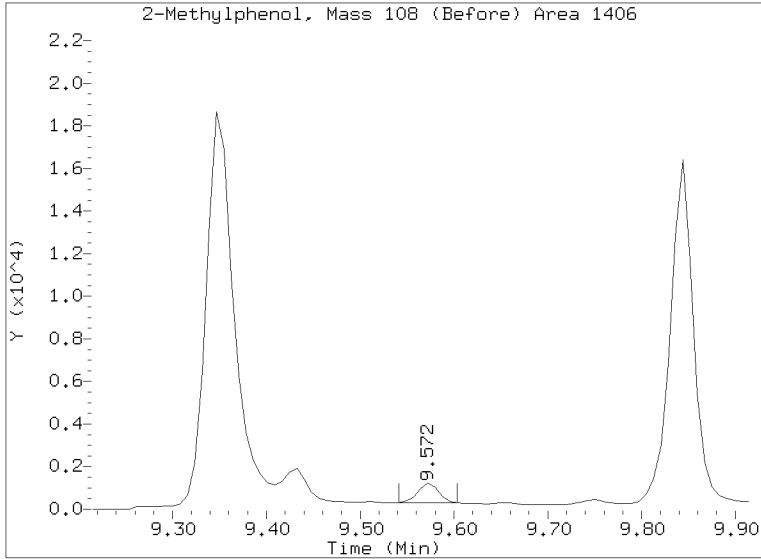
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172326S.D
Injection Date: 18-MAR-2023 05:30
Lab ID:23B0229-08 Client ID:
Report Date: 03/23/2023 16:56





PREPARATION BATCH SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLB0424 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1236	23B0229-02	NT1403172321S.D	02/17/23 15:00	
LDW23-SS1237	23B0229-03	NT1403172322S.D	02/17/23 15:00	
LDW23-SS1150	23B0229-04	NT1403172323S.D	02/17/23 15:00	
LDW23-SS1008	23B0229-05	NT1403172324S.D	02/17/23 15:00	
LDW23-SC1008	23B0229-06	NT1403172325S.D	02/17/23 15:00	
LDW23-SC1013	23B0229-08	NT1403172326S.D	02/17/23 15:00	
Blank	BLB0424-BLK2	NT1403172312S.D	02/17/23 15:00	
LCS	BLB0424-BS2	NT1403172313S.D	02/17/23 15:00	
LCS Dup	BLB0424-BSD2	NT1403172314S.D	02/17/23 15:00	
Reference	BLB0424-SRM2	NT1403172315S.D	02/17/23 15:00	



Batch: BLB0424

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid

Date Prepared: 2/17/23

Balance ID: B139298002 Set Up By: CTO 2/16/23

WO Comments

23A0099: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g)		(REQ) GPC C/U (1:1) <u>1 2 3</u>	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 10 (Wet)	Actual					
23A0099-04 A	54.8	(18.26)	<u>18.71</u>	(1:1)	1mL	1 _____	0.5 _____	From BLA0288 by CTO on 16-Feb-2023
23B0229-02 A	56.0	(17.86)	<u>17.89</u>	(1:1)	1mL	1 _____	0.5 _____	
23B0229-03 A	54.8	(18.25)	<u>18.45</u>	(1:1)	1mL	1 _____	0.5 _____	
23B0229-04 A	52.2	(19.17)	<u>19.43</u>	(1:1)	1mL	1 _____	0.5 _____	
23B0229-05 A	44.9	(22.26)	<u>22.74</u>	(1:1)	1mL	1 _____	0.5 _____	
23B0229-06 A	48.6	(20.57)	<u>20.78</u>	(1:1)	1mL	1 _____	0.5 _____	
23B0229-08 A	49.7	(20.13)	<u>20.78</u>	(1:1)	1mL	1 _____	0.5 _____	
23B0276-01 A	63.6	(15.72)	<u>15.72</u>	(1:1)	1mL	1 _____	0.5 _____	

Batch QC

Lab Number	% Solids	Initial (g)		(REQ) GPC C/U (1:1) <u>1 2 3</u>	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 10 (Wet)	Actual					
BLB0424-BLK1	100.0	(10.00)	<u>10.00</u>	(1:1)	1mL	1 _____	0.5 _____	Use 5g Neutral Sodium Sulfate for Blanks
BLB0424-BS1	100.0	(10.00)	<u>10.00</u>	(1:1)	1mL	1 _____	0.5 _____	Use 5g Neutral Sodium Sulfate for Blanks
BLB0424-BSD1	100.0	(10.00)	<u>10.00</u>	(1:1)	1mL	1 _____	0.5 _____	Use 5g Neutral Sodium Sulfate for Blanks
BLB0424-MS1	63.6	(15.72)	<u>15.72</u>	(1:1)	1mL	1 _____	0.5 _____	Use 23B0276-01
BLB0424-MSD1	63.6	(15.72)	<u>15.72</u>	(1:1)	1mL	1 _____	0.5 _____	Use 23B0276-01
BLB0424-SRM1	100.0	(10.00) ^(1.00)	<u>1.00</u>	(1:1)	1mL	1 _____	0.5 _____	Use K003477

+1g DI WATER

OR
Client ID verified By

2/17/23
Date

MRS
Preparation Reviewed By

2/20/23
Date

2/17/23 15:00
Extraction Date and Time



Batch: BLB0424

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0099: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Please push this to front of LDW line of samples

Prep Steps

Reagents Used

Surrogates & Spike Standards Used

Microwave	Station/Reagent	Standard ID
① 2 3 R 2/17 Analyst/Date	Microwave	
	Analyst: R/CR Date: 2/17/23	
Pre-GPC KD 100°C Exchange to Hexane (add 10 mL to KD)	Anhydrous Sodium Sulfate	L0001285
	1:1 Methylene Chloride/Acetone	L0001416
	Methylene Chloride	L0008088
④ 2 4 ⑤ 6 NRBS 2/18/23 Analyst/Date	Pre-Deactivated Glass Wool	L0008252
	Pre GPC KD	
TurboVap Pre GPC 1 2 3 ④ 5 TWC 2/18/23 Analyst/Date	Pre-Deactivated Glass Wool	N/A
	Anhydrous Sodium Sulfate	L000980
	Methylene Chloride	K005941
Post GPC KD 80-85°C ⑦ ④ ⑤ ⑥ LO 2-20 Analyst/Date	Hexane	L000899
	GPC Filter Prep	
TurboVap 1 2 3 ④ 5 NRBS 2/20/23 Analyst/Date	Analyst: TWC Date: 2/18/23	
	Methylene Chloride	K005941
Water Wash NRBS 2/20/23 Analyst/Date	GPC Filter	
	GPC	
Analyst: TWC Date: 2/18/23	Methylene Chloride	K005941
	GPC Calibration File	CLB0132-GPC2
Post GPC KD Analyst: LO Date: 2-20-23	Methylene Chloride	K005941
	Vialing	
Analyst: NRBS Date: 2/20/23	Methylene Chloride	K005941

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	A K010466	50µL		
100/150µg/mL	Exp Date: 8/1/23		CT	Y
Full List Spike (Freezer)	7 K011369 (V)	50µL		
100µg/mL	Exp Date: K011297 8/31/23		CT	Y
Base Spike	56 K011369 (V)	50µL		
200µg/mL	Exp Date: K003759 7/19/23		CT	Y
Acid Spike	38 K011369 (V)	50µL		
100/200µg/mL	Exp Date: K003760 4/19/23		CT	Y

MANUALLY ENTER EXPIRATION DATES!

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

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



WO Comments

23A0099: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

Prep Instructions

SPECIAL INSTRUCTIONS:

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

A. Need Total Solids Y N

B. Archive/Freeze Y N



Extraction Parameter: SLOA Extraction Batch RLB0424

Total Solids Batch: RLB0338 Work Order(s): 23B0261, 276

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= ^{of} $\phi 1, \phi 4, \phi 7, \phi 13, \phi 16, \phi 19, \phi 22, \phi 276 = \phi 1$	<u>Y</u> $\phi 2/14/23$
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= ^{23B0261} $\phi 1, \phi 4, \phi 7, \phi 13, \phi 16, \phi 19, \phi 22, \phi 25, \phi 28, \phi 31, \phi 34$	<u>Y</u> $\phi 2/14/23$
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors= ²⁷⁶ $\phi 1$	<u>Y</u> $\phi 2/14/23$
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input checked="" type="checkbox"/> Other (Details)= <u>shell pieces = 10.0% = 25, 28, 31, 34.</u>	<u>Y</u> $\phi 2/14/23$
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/N	<u>Y</u> $\phi 2/14/23$
<input checked="" type="checkbox"/> Multiple Jars Y/N	<u>Y</u> $\phi 2/14/23$
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Extraction Parameter: SWA Extraction Batch BLB0340

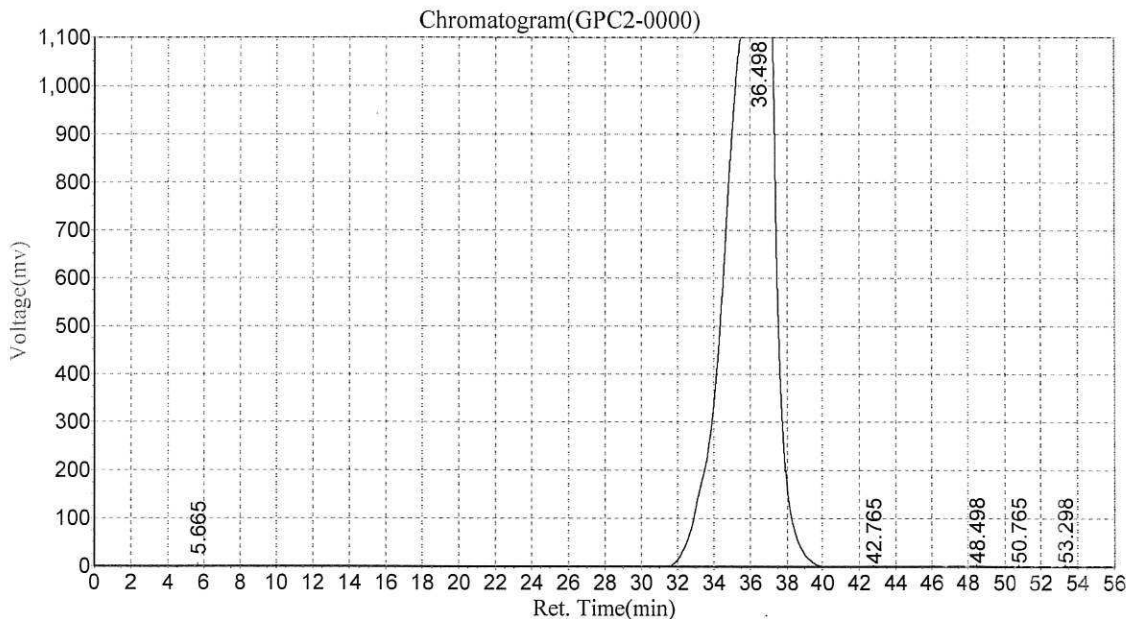
Total Solids Batch: BLB0340 Work Order(s): 23B0229 01-08

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>01-08</u>	<u>UR 2/15/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>01-08</u>	<u>UR 2/15/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input checked="" type="checkbox"/> Previously Frozen = <u>01-08</u>	<u>UR 2/15/23</u>
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input checked="" type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions). <u>- lost 5% when transferring to KD 229 08</u>	<u>MKB 2/18/23</u>
<input checked="" type="checkbox"/> Share Samples Y / <input checked="" type="checkbox"/> N	<u>UR 2/15/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y / <input checked="" type="checkbox"/> N	<u>UR 2/15/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,2:39:32 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0000
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-18,2:39:33 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		5.665	1631.788	107198.344	0.0444
2		36.498	1230302.750	240853856.000	99.7231
3		42.765	2088.653	154681.250	0.0640
4		48.498	1457.462	110338.313	0.0457
5		50.765	2106.192	187223.906	0.0775
6		53.298	1412.538	109227.227	0.0452
Total			1238999.383	241522525.039	100.000

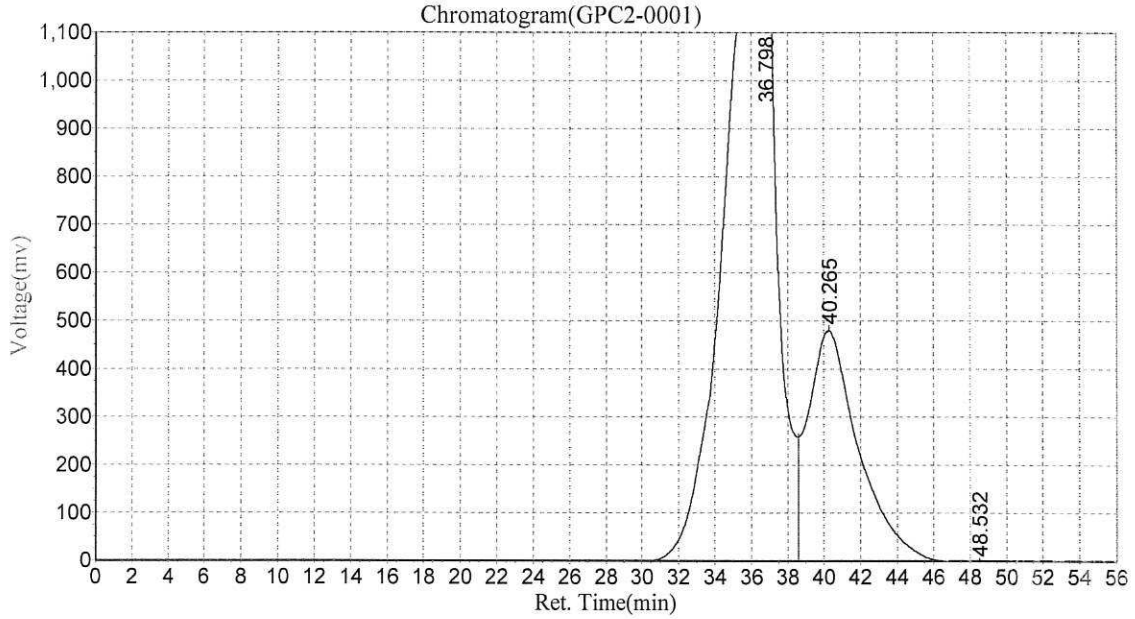
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,3:37:17 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0001
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,3:37:17 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		36.798	1253720.750	266495296.000	73.7152
2		40.265	484494.875	94906336.000	26.2520
3		48.532	1706.172	118466.180	0.0328
Total			1739921.797	361520098.180	100.000

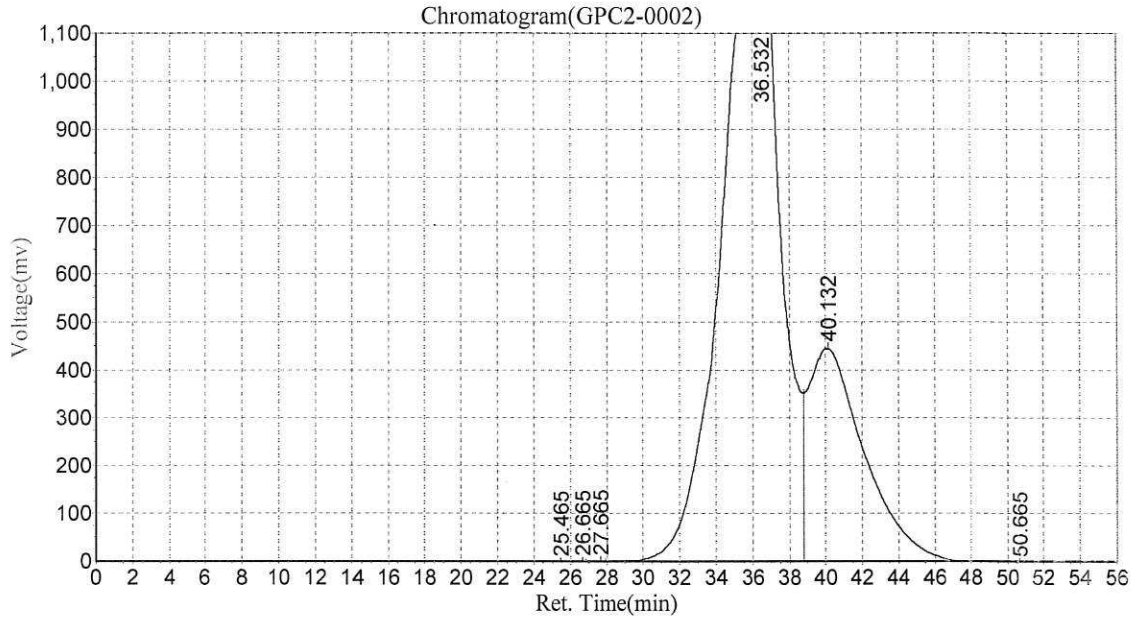
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,4:34:58 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0002
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,4:34:59 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		25.465	2937.737	160704.563	0.0408
2		26.665	4304.507	230034.438	0.0584
3		27.665	5633.149	315938.625	0.0802
4		36.532	1254572.500	294632704.000	74.7901
5		40.132	451142.813	98411416.000	24.9809
6		50.665	2140.918	195131.297	0.0495
Total			1720731.624	393945928.922	100.000

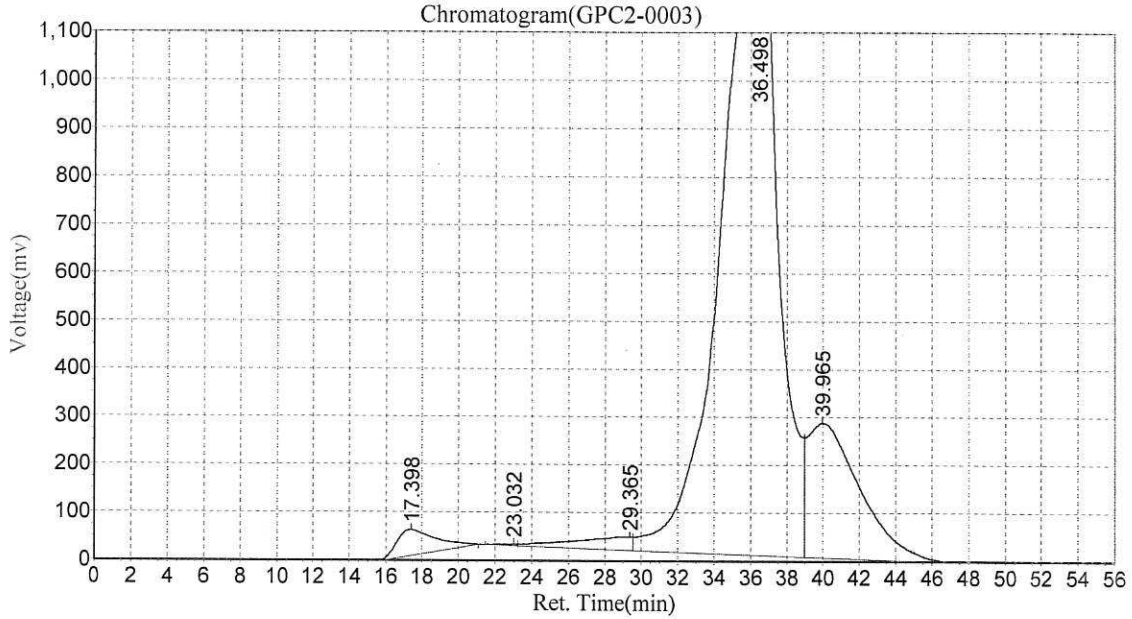
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,5:32:42 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0003
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,5:32:43 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	53985.484	7958088.000	2.2576
2		23.032	3286.524	187231.641	0.0531
3		29.365	27916.904	5955562.500	1.6895
4		36.498	1211286.375	281602848.000	79.8879
5		39.965	281303.063	56793604.000	16.1118
Total			1577778.350	352497334.141	100.000

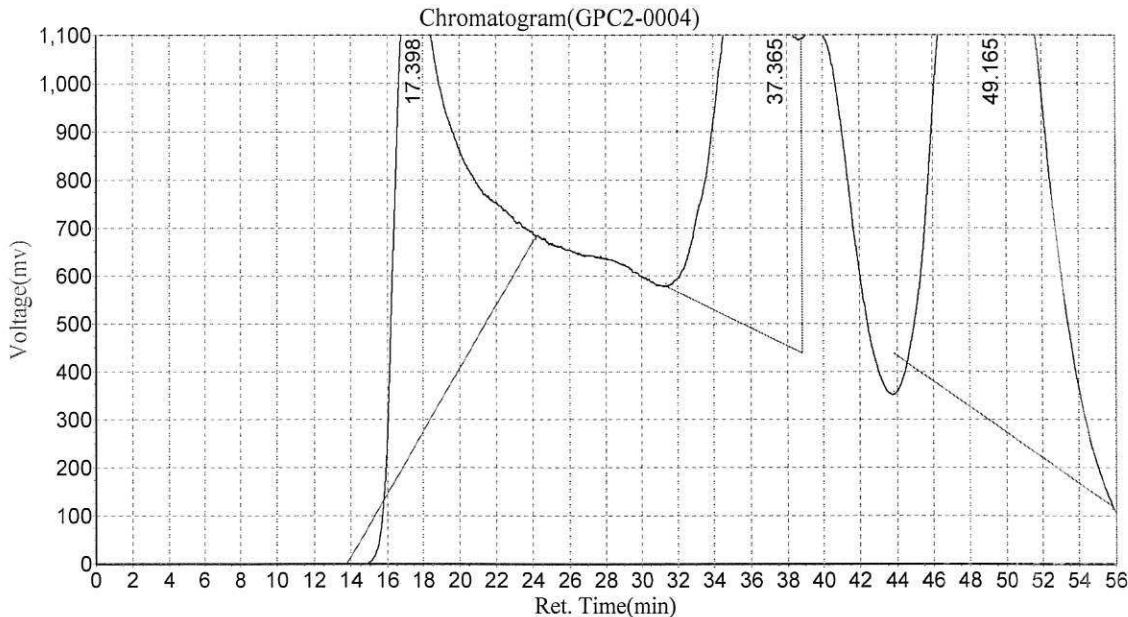
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,6:30:23 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0004
 Method File:E:\GPC2_InHouse.mtd

Analyst:TW
 Date/Time:2023-02-18,6:30:24 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	1016836.250	225737472.000	25.5168
2		37.365	783191.938	222387792.000	25.1382
3		49.165	1003920.063	436537216.000	49.3451
Total			2803948.250	884662480.000	100.000

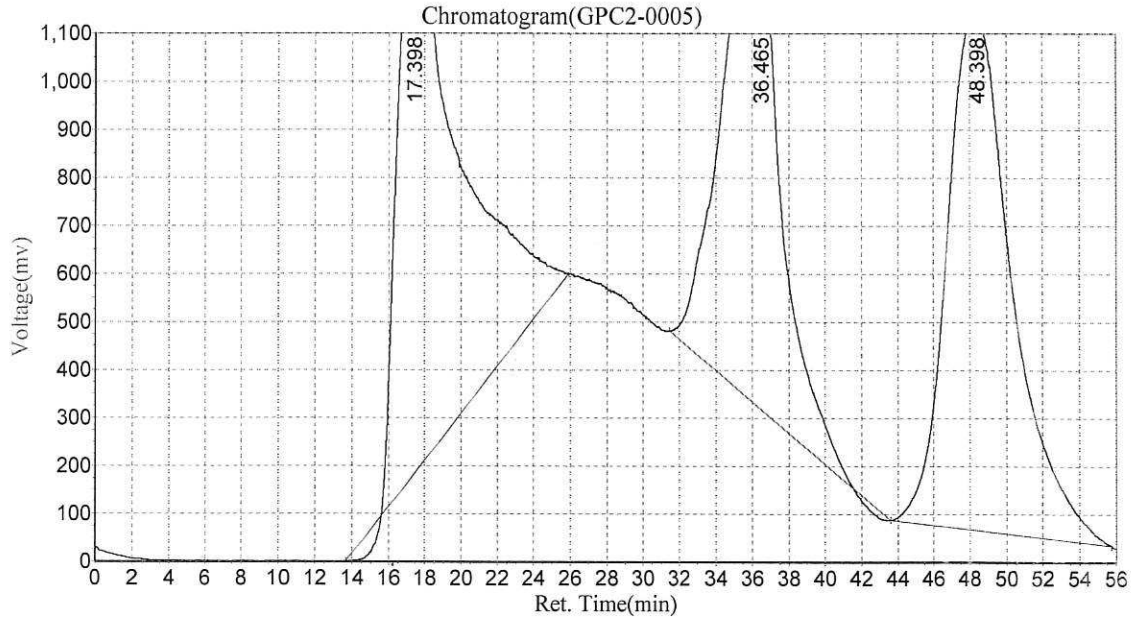
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,7:28:06 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0005
 Method File:E:\GPC2_InHouse.mtd

Analyst:TWTC
 Date/Time:2023-02-18,7:28:07 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	1071547.750	277728192.000	36.1965
2		36.465	929063.625	223717056.000	29.1572
3		48.398	1069004.500	265834128.000	34.6463
Total			3069615.875	767279376.000	100.000

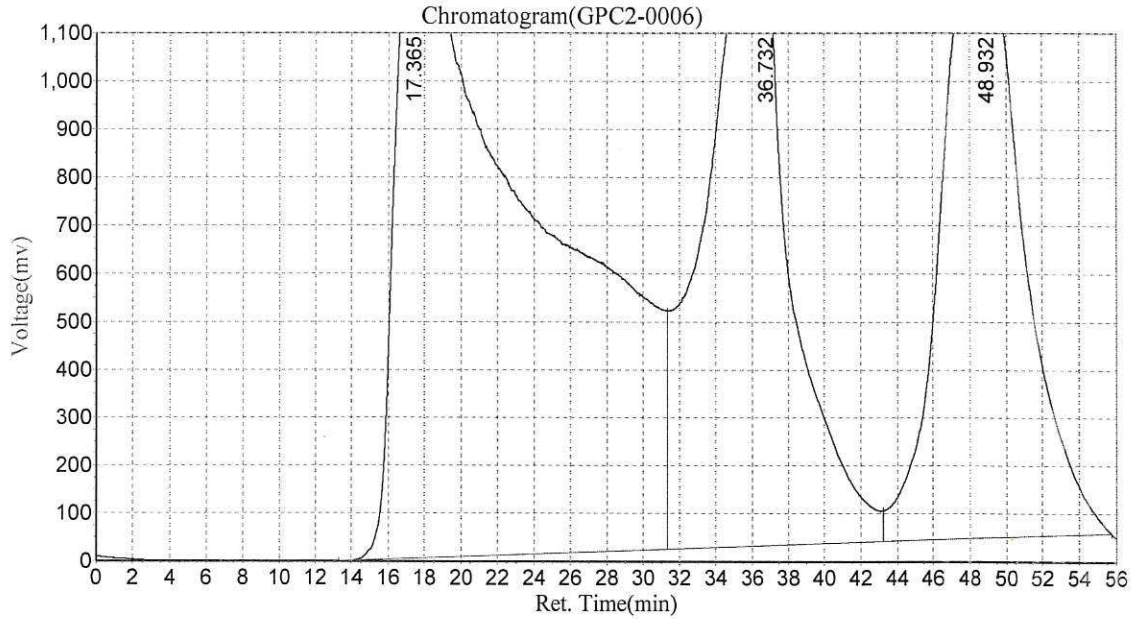
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,8:25:52 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0006
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-18,8:25:53 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1248008.875	738091264.000	47.7380
2		36.732	1214440.000	424203680.000	27.4365
3		48.932	1192651.500	383834848.000	24.8255
Total			3655100.375	1546129792.000	100.000

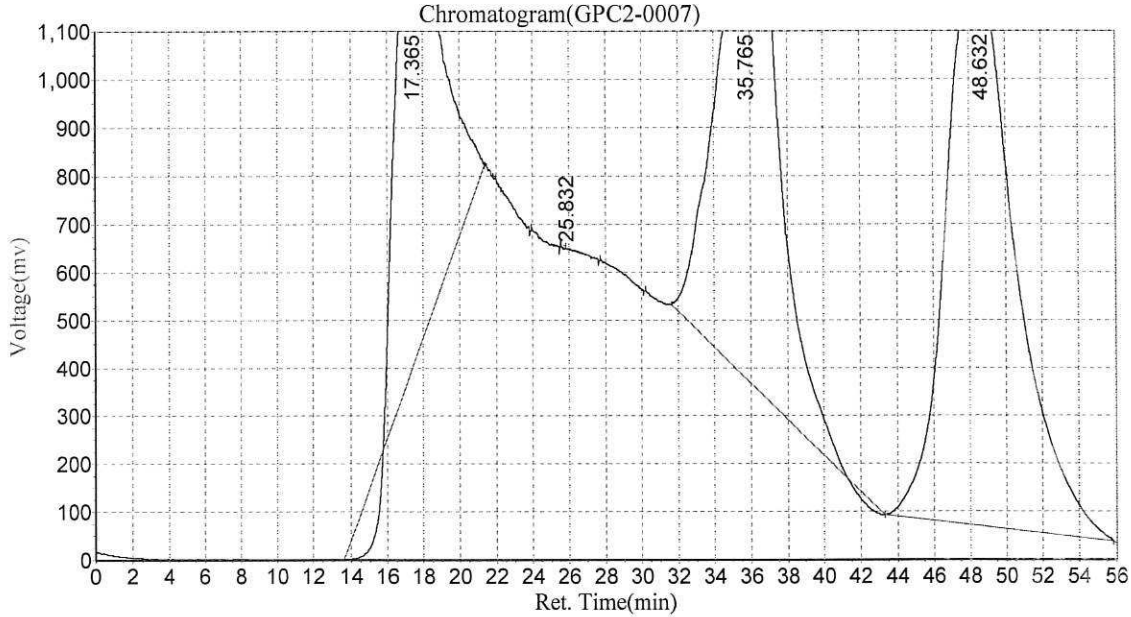
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,9:23:35 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0007
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-18,9:23:36 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	857413.500	153276576.000	22.1687
2		25.832	1384.370	176419.594	0.0255
3		35.765	869755.750	231706384.000	33.5122
4		48.632	1129357.875	306249568.000	44.2936
Total			2857911.495	691408947.594	100.000

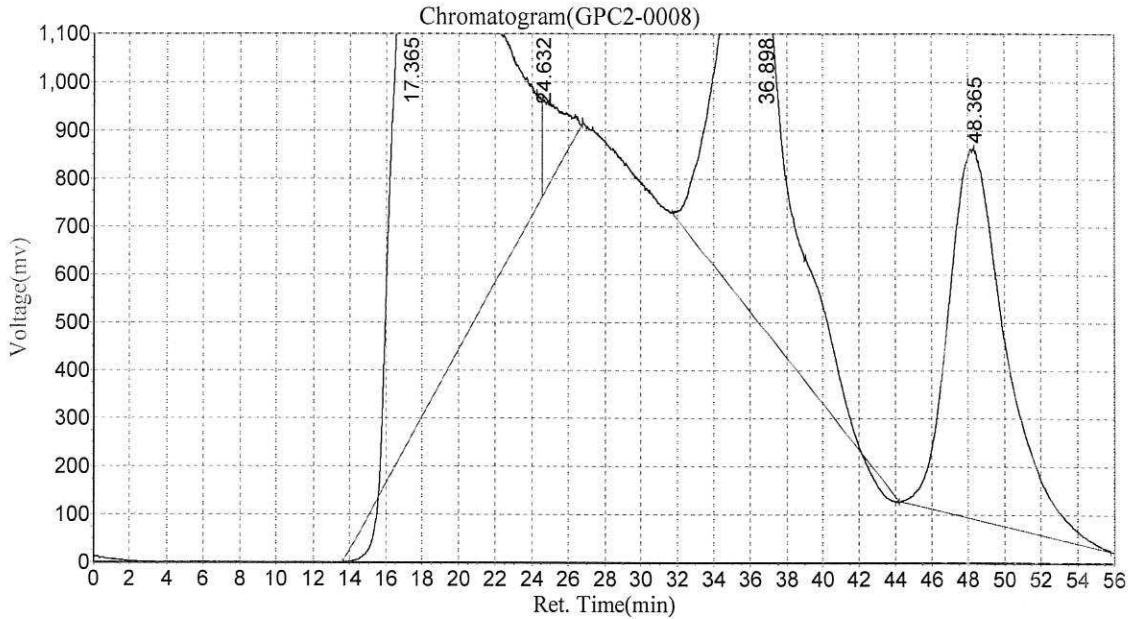
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,10:21:16 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0008
 Method File:E:\GPC2_InHouse.mtd

Analyst:ETWC
 Date/Time:2023-02-18,10:21:17 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	994261.438	351921824.000	47.0272
2		24.632	200525.750	13799422.000	1.8440
3		36.898	769164.750	213070368.000	28.4725
4		48.365	768088.563	169545696.000	22.6563
Total			2732040.500	748337310.000	100.000

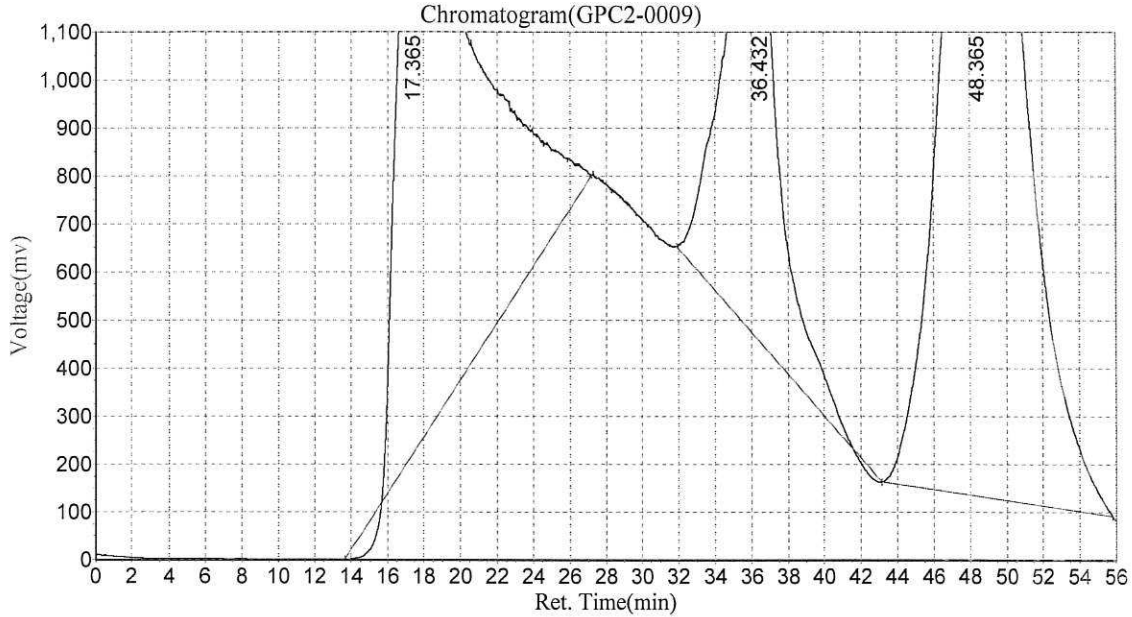
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-18,11:19:04 PM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0009
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-18,11:19:05 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1033673.438	358779936.000	36.5983
2		36.432	791781.375	188223424.000	19.2002
3		48.365	1114773.125	433315712.000	44.2015
Total			2940227.938	980319072.000	100.000

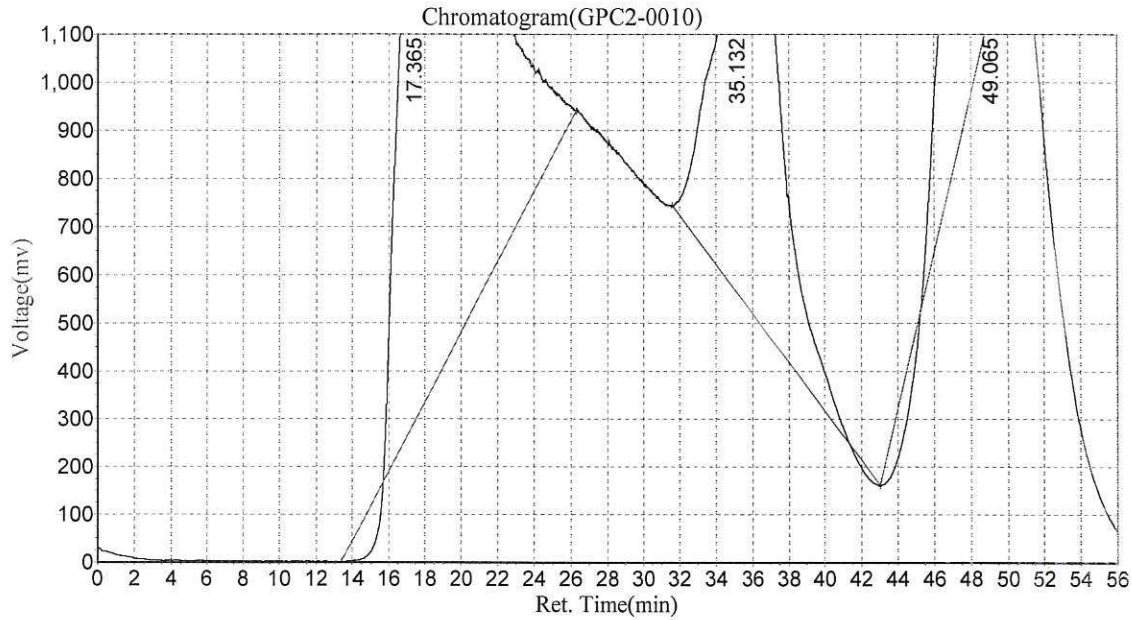
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-19,12:16:45 AM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0010
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-19,12:16:46 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	965013.063	341510112.000	56.3145
2		35.132	683606.250	205736944.000	33.9257
3		49.065	109773.992	59186188.000	9.7597
Total			1758393.305	606433244.000	100.000

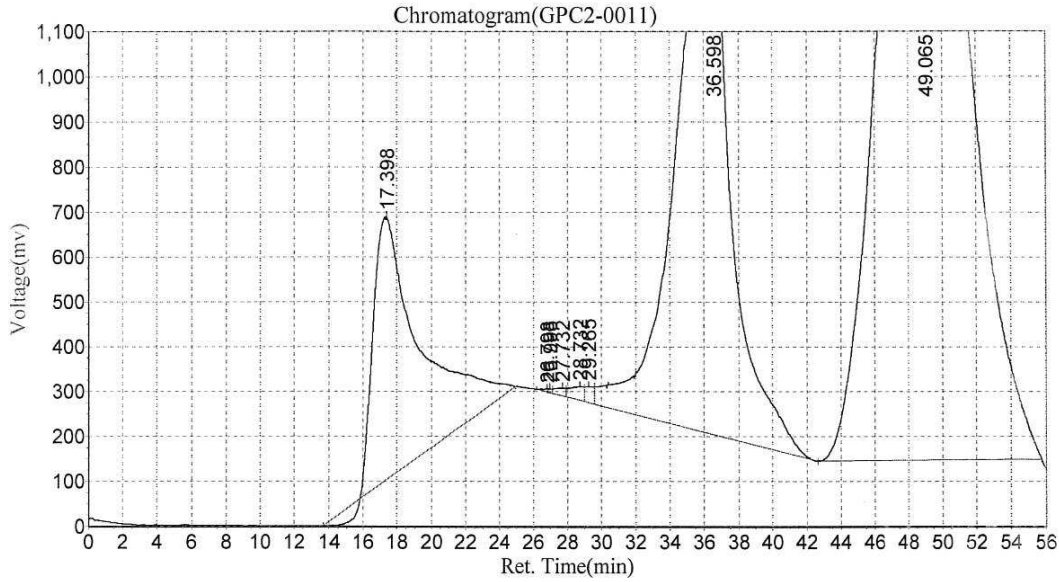
Ingredient Table

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

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-19,1:14:29 AM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0011
 Method File:E:\GPC2_InHouse.mtd

AnalystE*TWC
 Date/Time2023-02-19,1:14:30 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	585885.438	109560784.000	12.7080
2		26.798	6820.461	147395.281	0.0171
3		26.998	8978.615	139675.344	0.0162
4		27.732	17683.846	729162.625	0.0846
5		28.732	31140.615	1715067.375	0.1989
6		29.265	36273.691	1307129.250	0.1516
7		36.598	1034882.000	256462240.000	29.7471
8		49.065	1100757.625	492080384.000	57.0765
Total			2822422.292	862141837.875	100.000

Ingredient Table

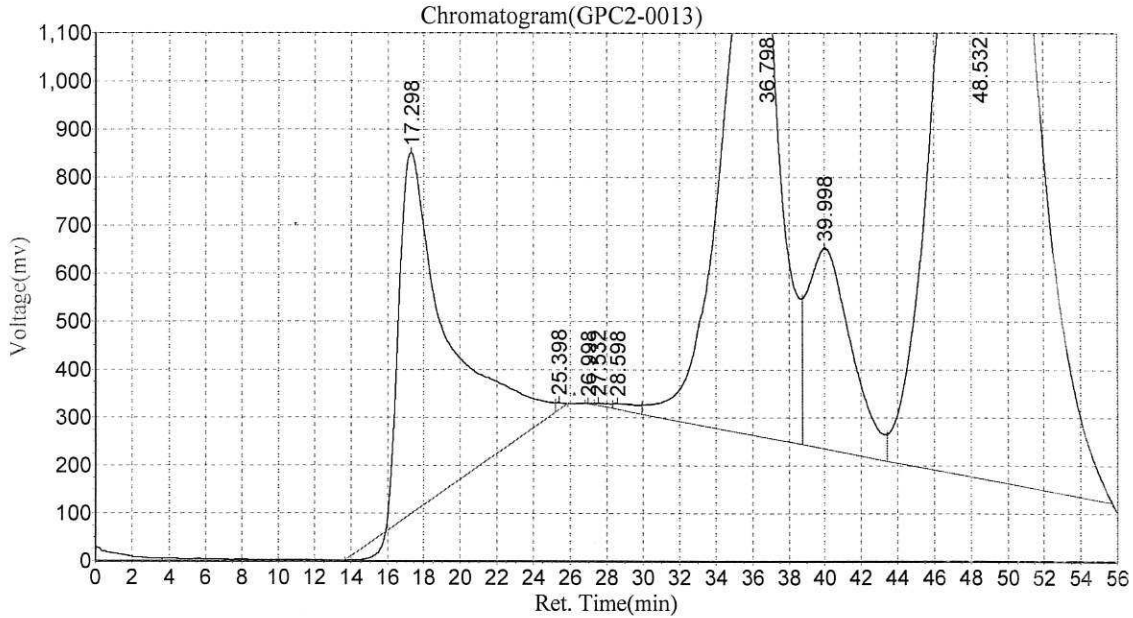
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

MSDI

BLA0424/BLB0429 23A0099/23B0229/276/263/278 SVOC

Date:2023-02-19,3:09:58 AM
 Data File:c:\n2000\data\gpc2\021823\GPC2-0013
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-19,3:09:59 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.298	751568.625	142783888.000	15.4520
2		25.398	14418.507	396625.563	0.0429
3		26.998	5714.335	188218.094	0.0204
4		27.532	9444.761	654233.875	0.0708
5		28.598	16321.611	1752119.750	0.1896
6		36.798	991074.875	236902912.000	25.6374
7		39.998	416866.469	70516224.000	7.6312
8		48.532	1076129.250	470856704.000	50.9557
Total			3281538.433	924050925.281	100.000

Ingredient Table

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



Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLB0424-BLK2</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/17/23 15:00</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLB0424</u>	Sequence:	<u>SLC0376</u>
Instrument:	<u>NT14</u>	Column:	<u>ZB-5MS</u>
		File ID:	<u>NT1403172312S.D</u>
		Analyzed:	<u>03/17/23 21:06</u>
		Initial/Final:	<u>10 g / 1 mL</u>
		Calibration:	<u>GC00050</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	0.8	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	20.0	U	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	389	51.9	27 - 120	
p-Terphenyl-d14	500.00	598	120	37 - 120	Q

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723125.D

Date: 17-MAR-2023 21:06

Client ID:

Sample Info: BLB0424-BLK2

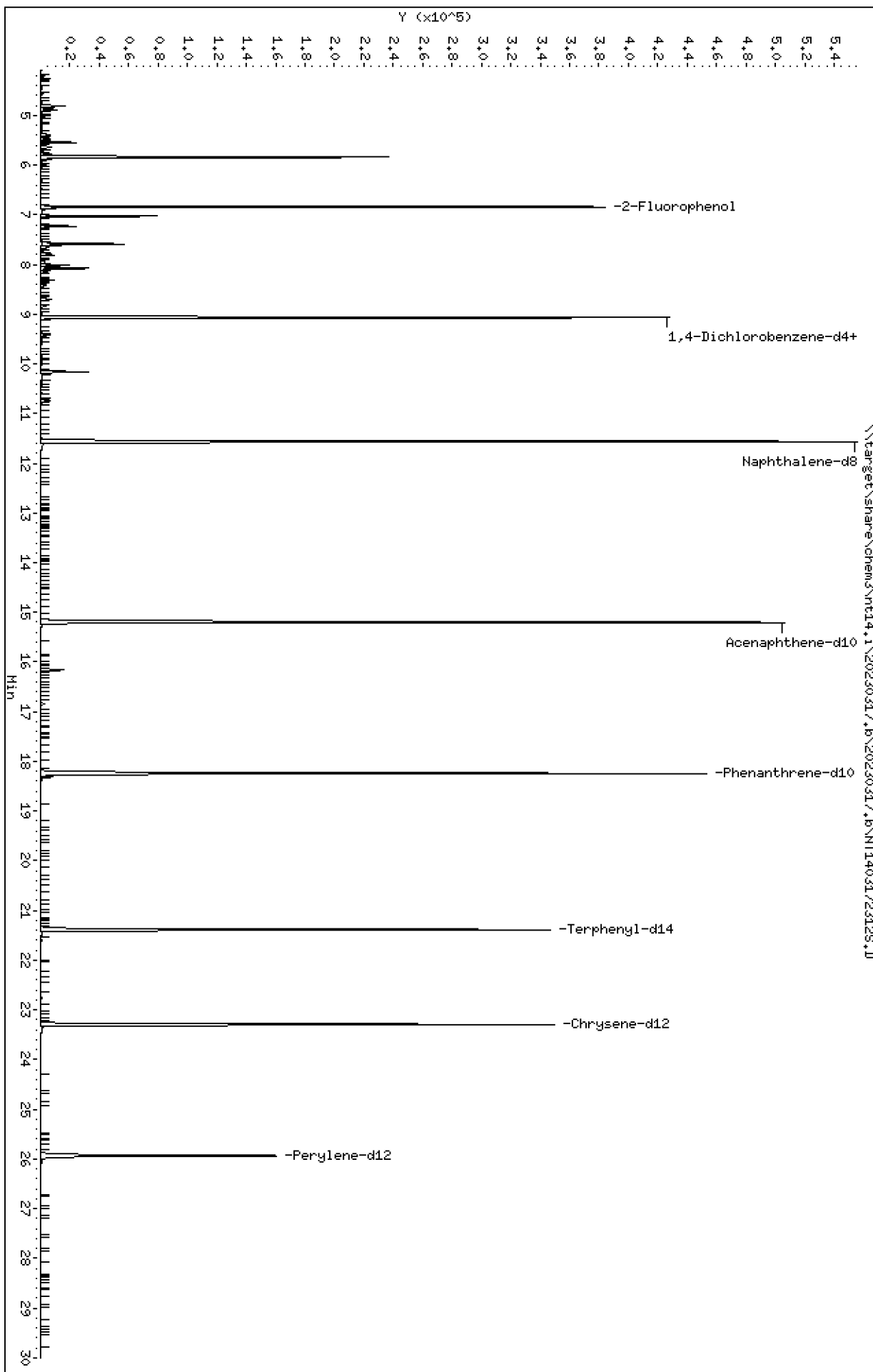
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK2

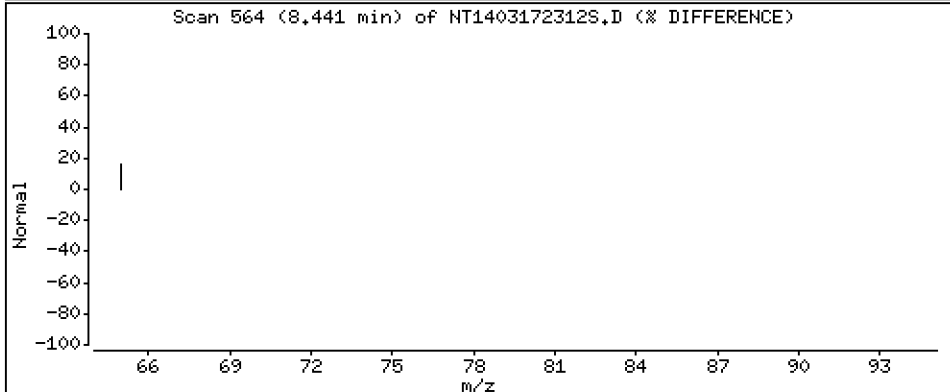
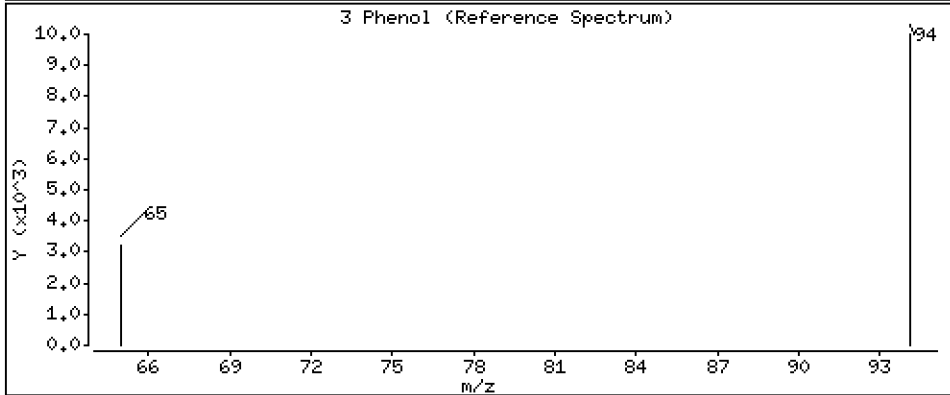
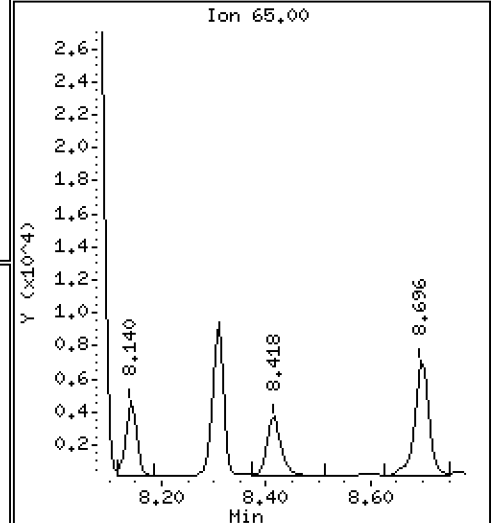
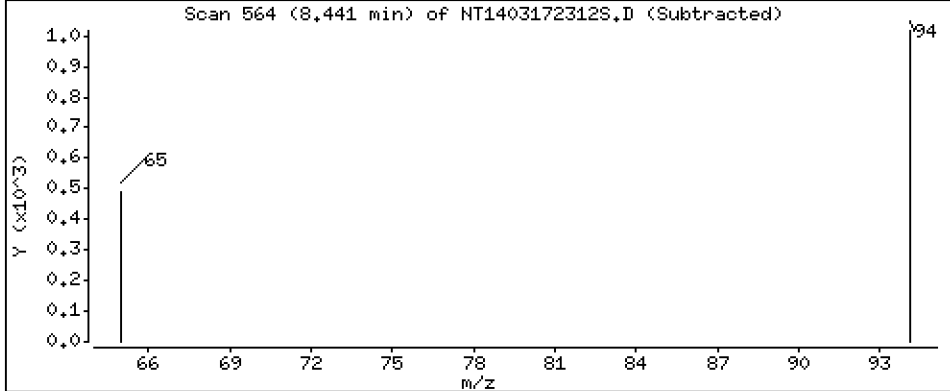
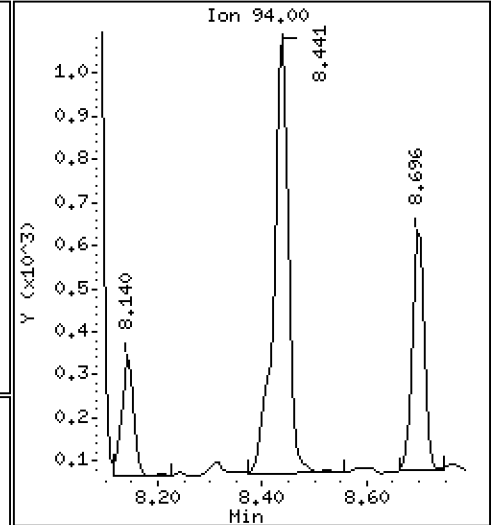
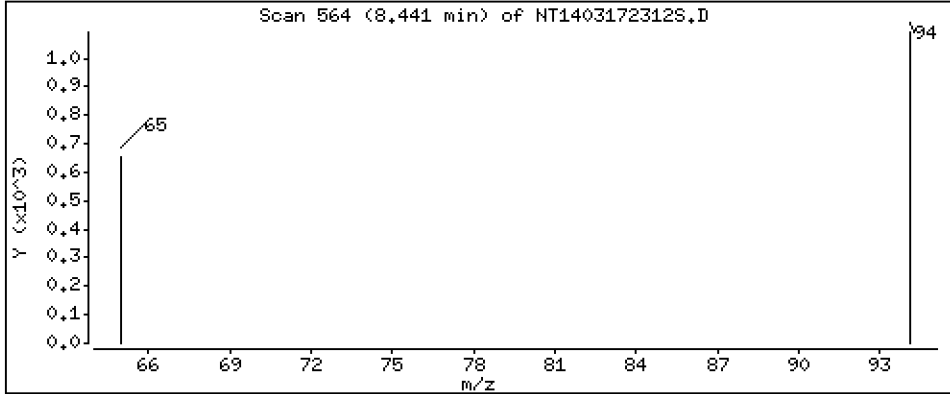
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,01603 ug/mL



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK2

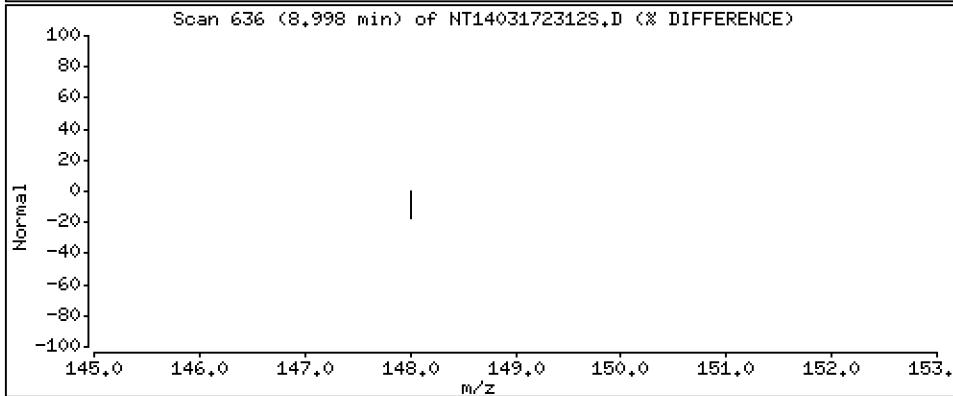
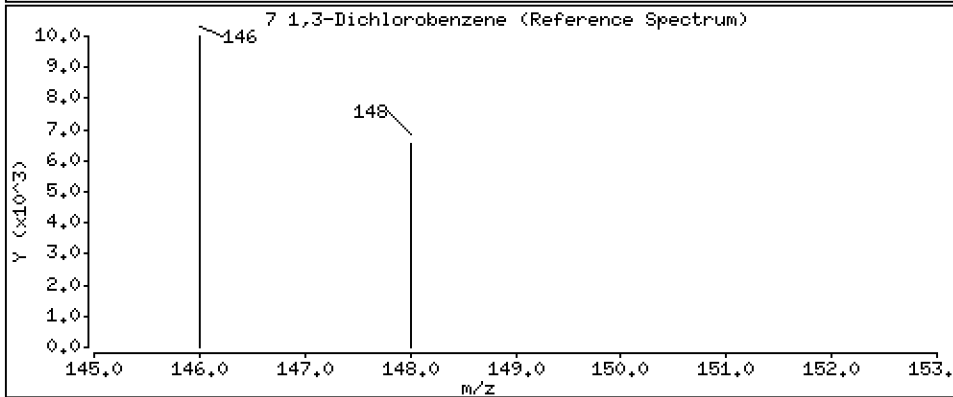
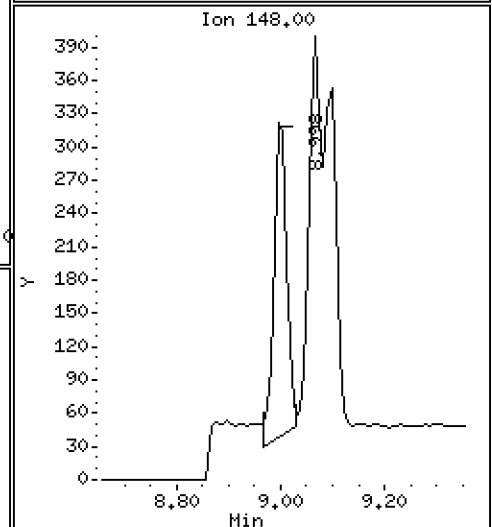
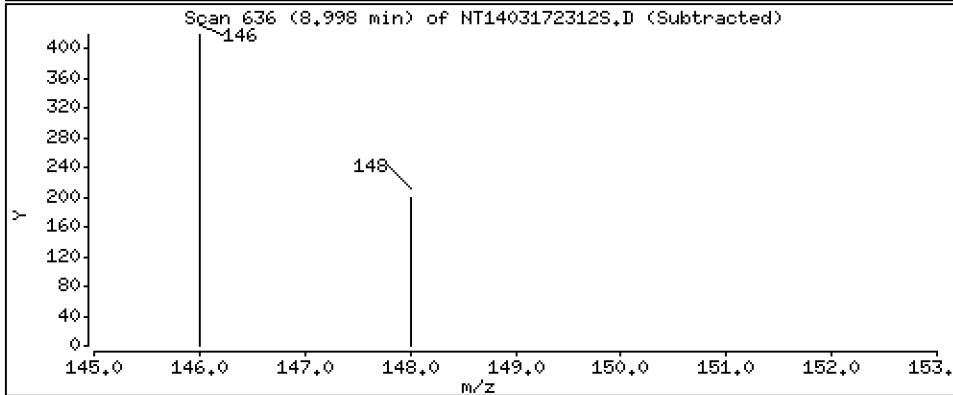
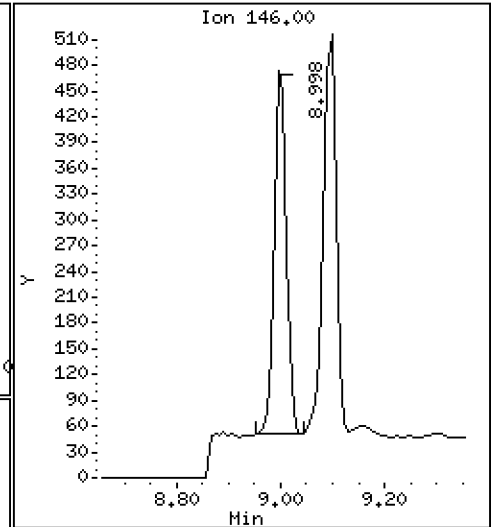
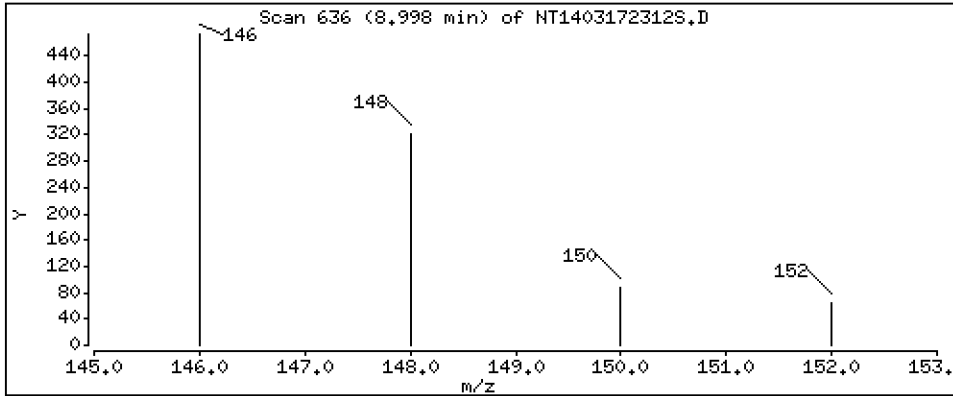
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,006640 ug/mL



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK2

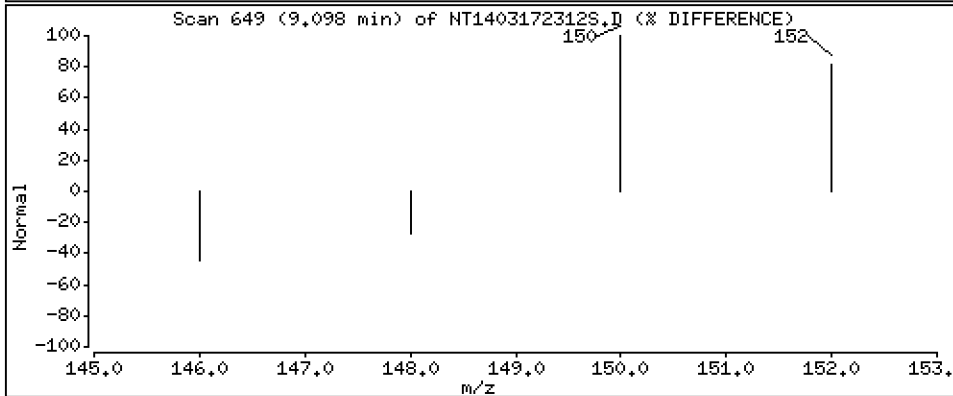
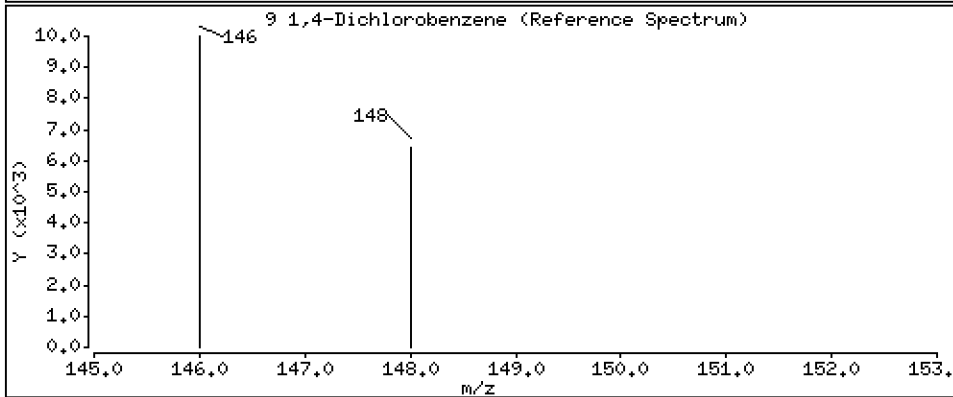
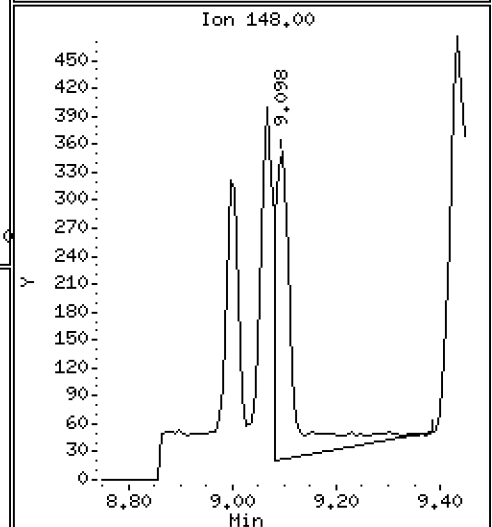
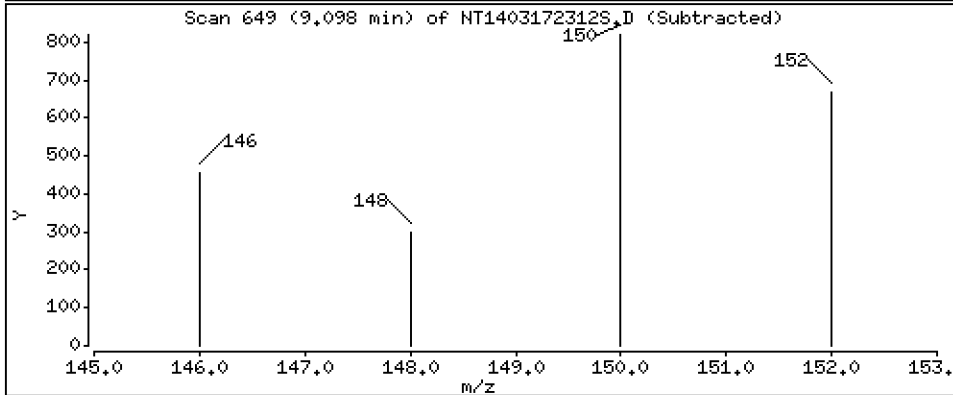
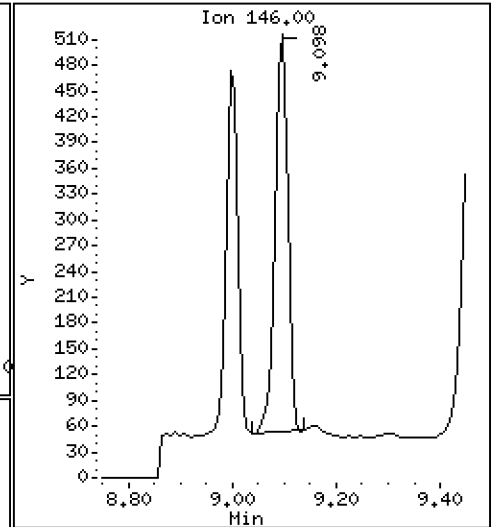
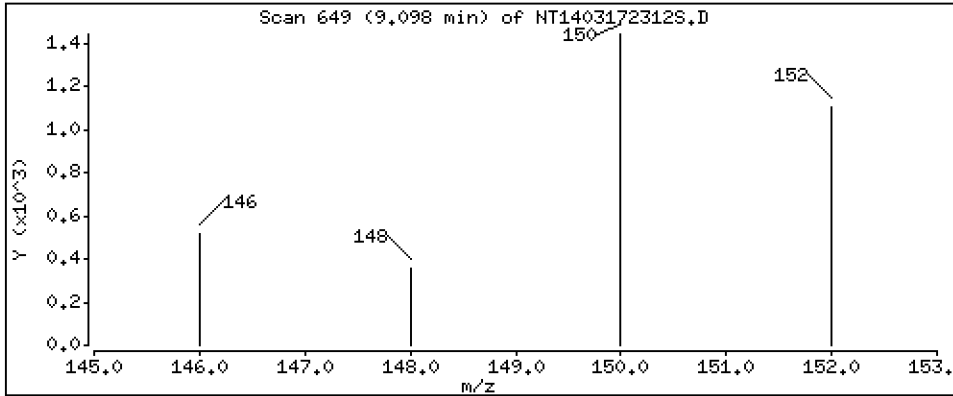
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,007579 ug/mL



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK2

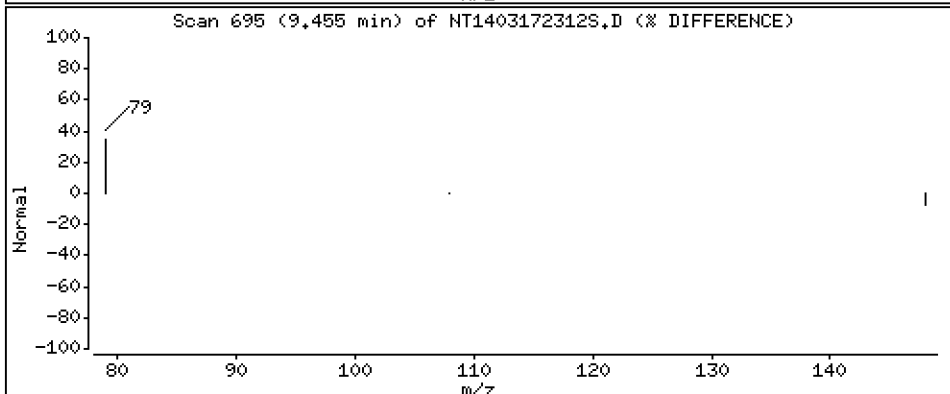
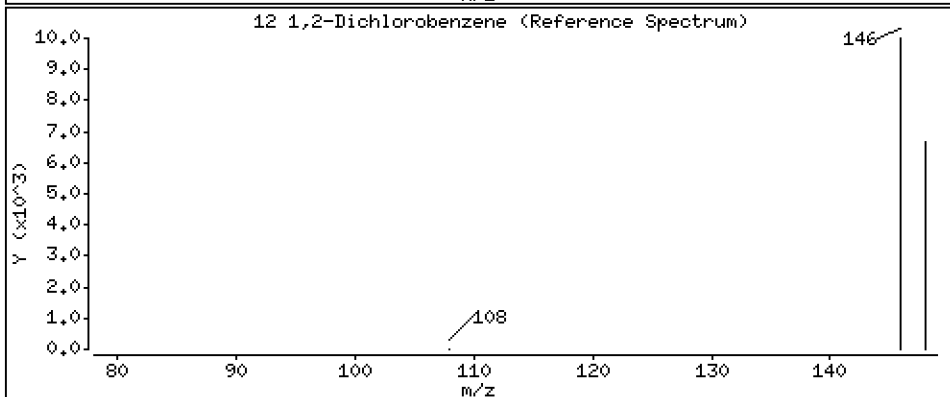
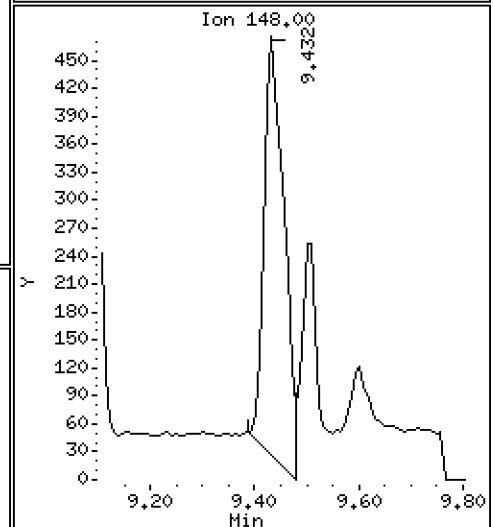
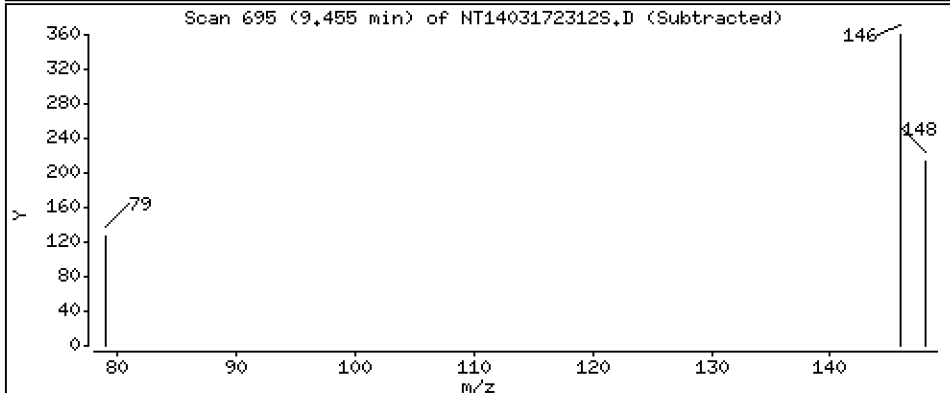
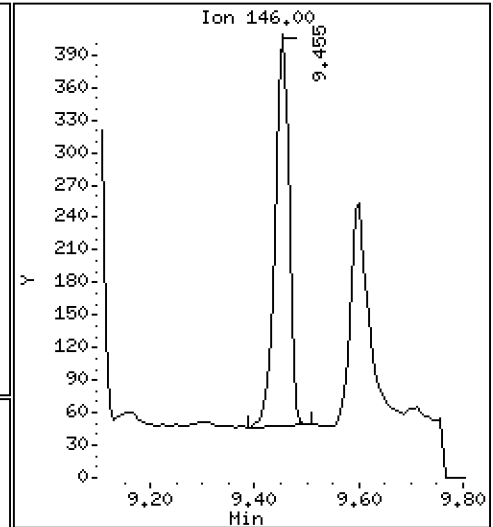
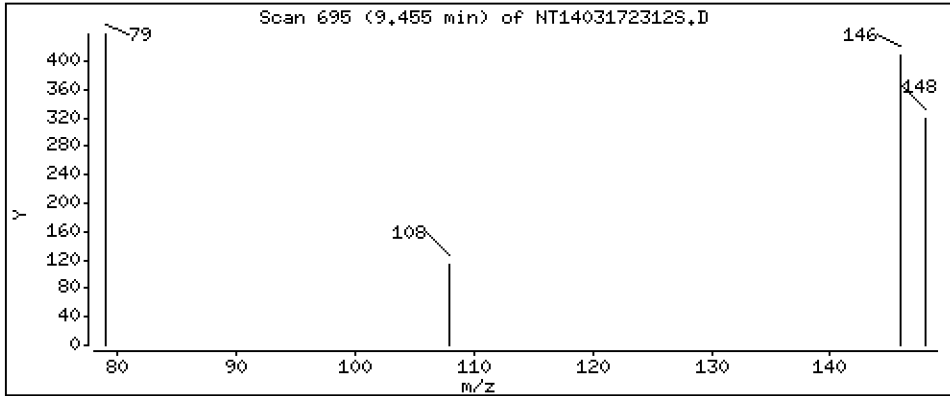
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,006630 ug/mL



Date : 17-MAR-2023 21:06

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BLK2

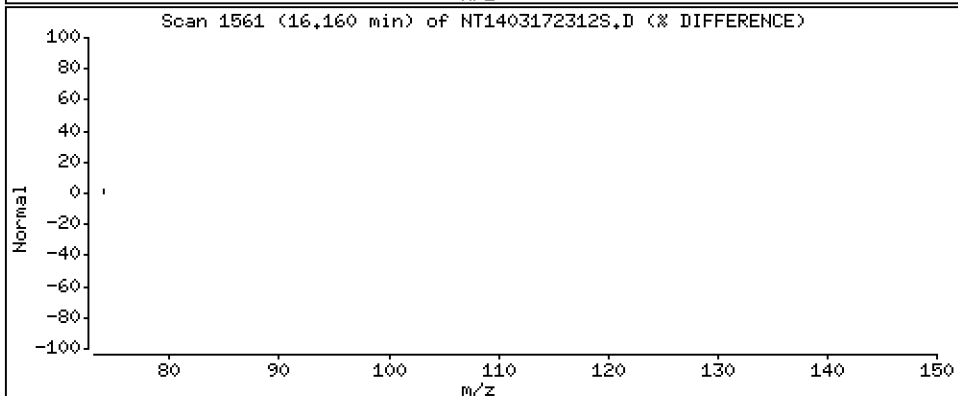
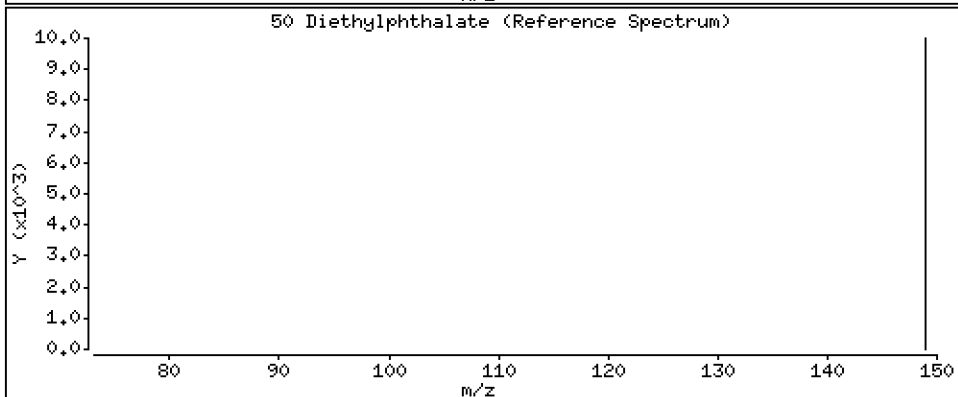
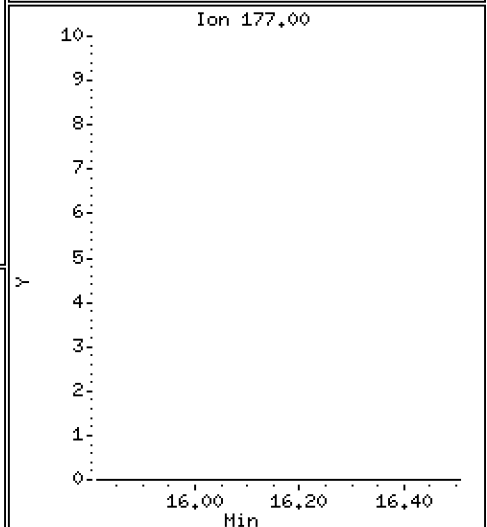
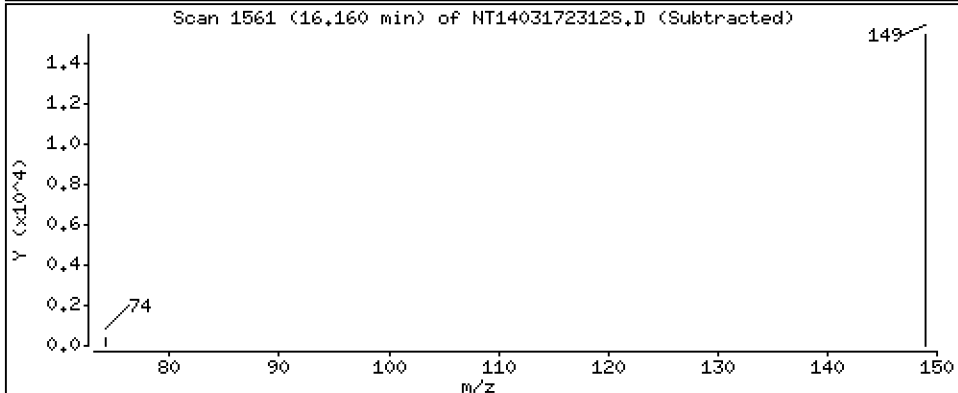
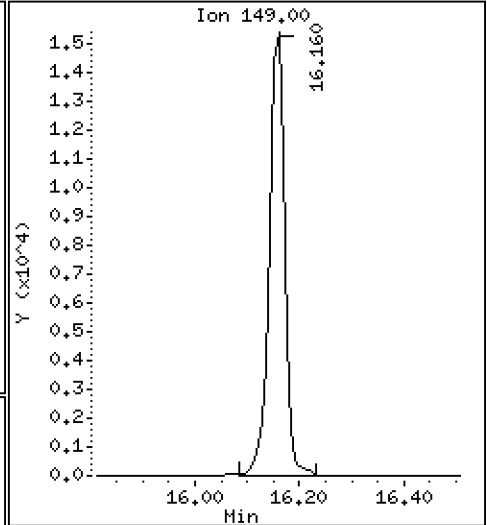
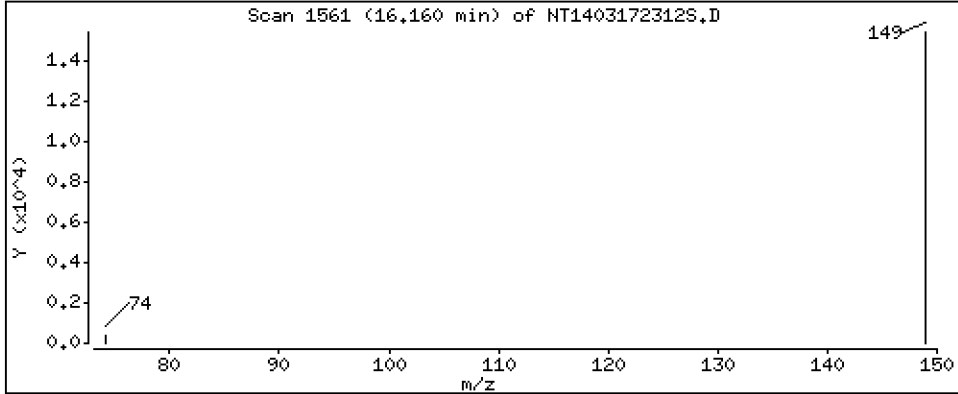
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1827 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172312S.D
 Lab Smp Id: BLB0424-BLK2
 Inj Date : 17-MAR-2023 21:06 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BLK2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.841	6.826	(0.755)	338293	3.89291	3.893(R)
3 Phenol	94		8.441	8.440	(0.931)	1916	0.01603	0.01603
7 1,3-Dichlorobenzene	146		8.997	9.005	(0.992)	679	0.00664	0.006640(M)
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	256011	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	750	0.00758	0.007579(M)
11 Benzyl alcohol	79		Compound Not Detected.					
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	639	0.00663	0.006630(M)
13 2-Methylphenol	108		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.564	11.564	(1.000)	992862	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		Compound Not Detected.					
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	455611	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	30262	0.18268	0.1827
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	866949	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	494059	5.97984	5.980(R)
67 Butylbenzylphthalate	149		Compound Not Detected.					
* 69 Chrysene-d12	240		23.299	23.298	(1.000)	479252	4.00000	
* 77 Perylene-d12	264		25.939	25.938	(1.000)	323704	4.00000	
79 Dibenzo(a,h)anthracene	278		Compound Not Detected.					
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172312S.D
 Lab Smp Id: BLB0424-BLK2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	256011	14.07
27 Naphthalene-d8	825617	412809	1651234	992862	20.26
42 Acenaphthene-d10	392947	196474	785894	455611	15.95
59 Phenanthrene-d10	789887	394944	1579774	866949	9.76
69 Chrysene-d12	494007	247004	988014	479252	-2.99
77 Perylene-d12	375441	187721	750882	323704	-13.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172312S.D

Lab ID: BLB0424-BLK2

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 21:06

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172303S.D

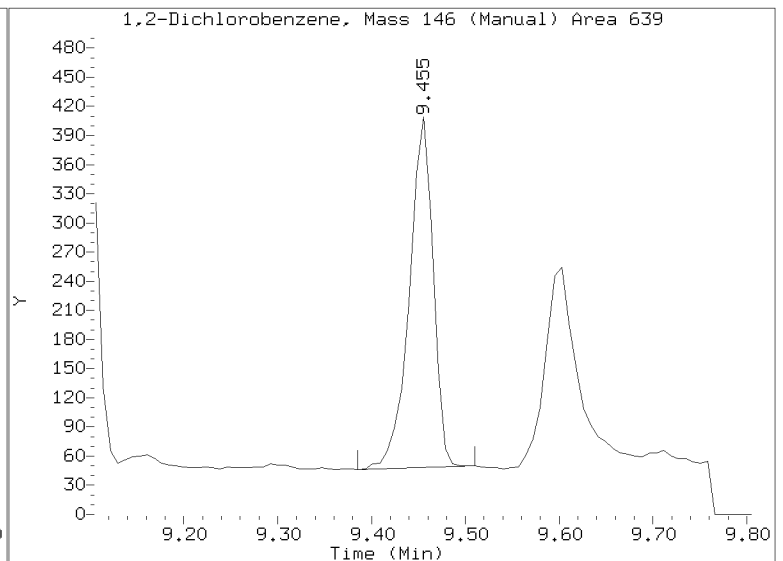
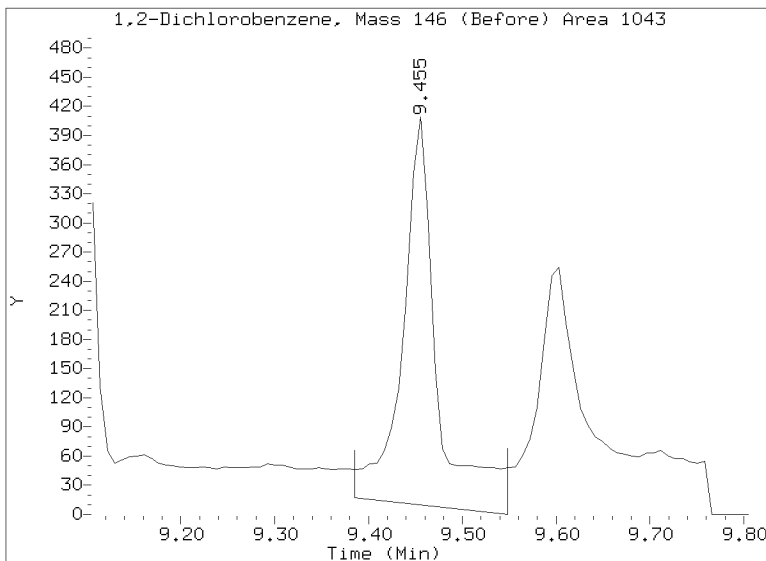
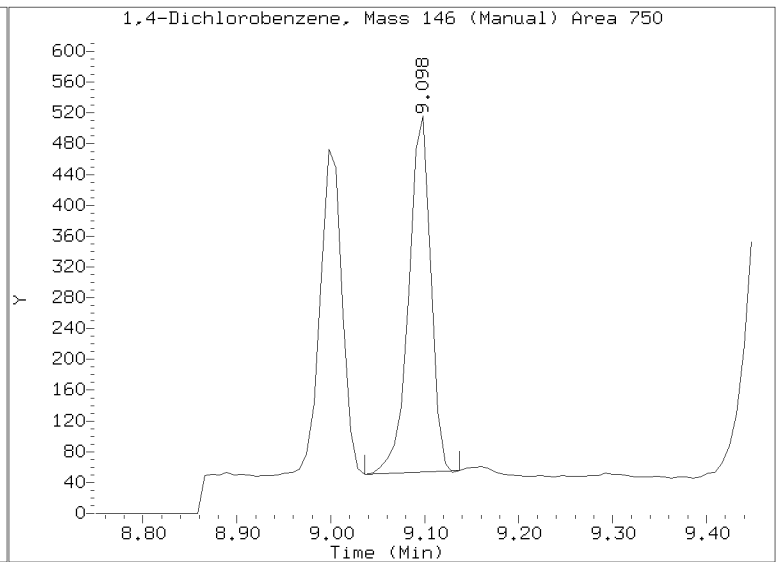
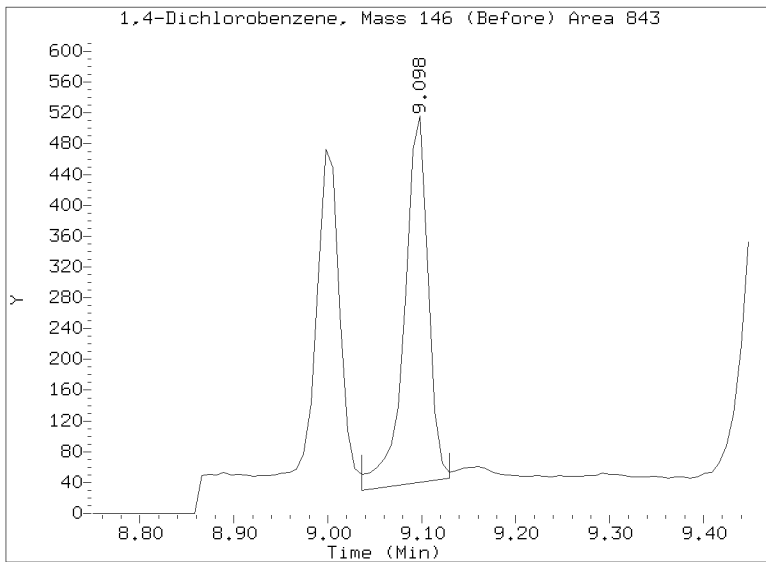
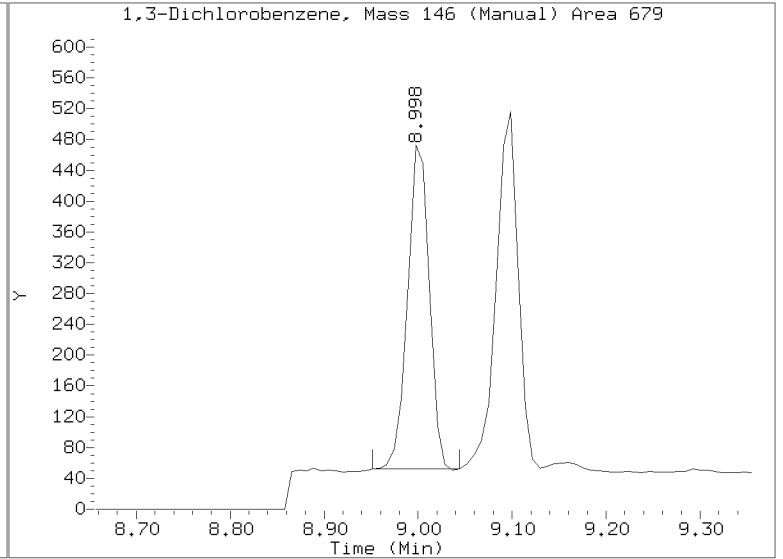
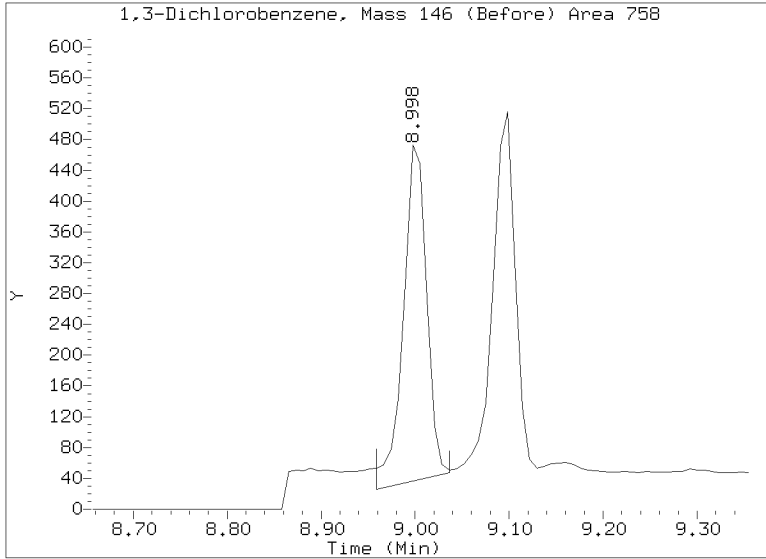
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172312S.D
Injection Date: 17-MAR-2023 21:06
Lab ID:BLB0424-BLK2 Client ID:
Report Date: 03/23/2023 16:54





LCS / LCS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/17/23 21:42

Batch: BLB0424

Laboratory ID: BLB0424-BS2

Preparation: EPA 3546 (Microwave)

Sequence Name: LCS

Initial/Final: 10 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	378		75.6	36 - 120
1,2-Dichlorobenzene	500	385		77.0	36 - 120
Benzyl Alcohol	500	418		83.6	25 - 123
Benzoic acid	2300	2230	Q	97.0	10 - 160
2,4-Dimethylphenol	1300	807		62.1	10 - 120
1,2,4-Trichlorobenzene	500	390		78.1	35 - 120
N-Nitrosodiphenylamine	500	420		84.0	27 - 120
Pentachlorophenol	1300	1440	Q	111	26 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
1,4-Dichlorobenzene	500	392		78.5	3.74	30	36 - 120
1,2-Dichlorobenzene	500	398		79.5	3.27	30	36 - 120
Benzyl Alcohol	500	437		87.5	4.58	30	25 - 123
Benzoic acid	2300	2410	Q	105	7.90	30	10 - 160
2,4-Dimethylphenol	1300	355	*	27.3	77.9 *	30	10 - 120
1,2,4-Trichlorobenzene	500	403		80.7	3.30	30	35 - 120
N-Nitrosodiphenylamine	500	418		83.6	0.430	30	27 - 120
Pentachlorophenol	1300	1520	Q	117	5.16	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723135.D

Page 1

Date : 17-MAR-2023 21:42

Client ID:

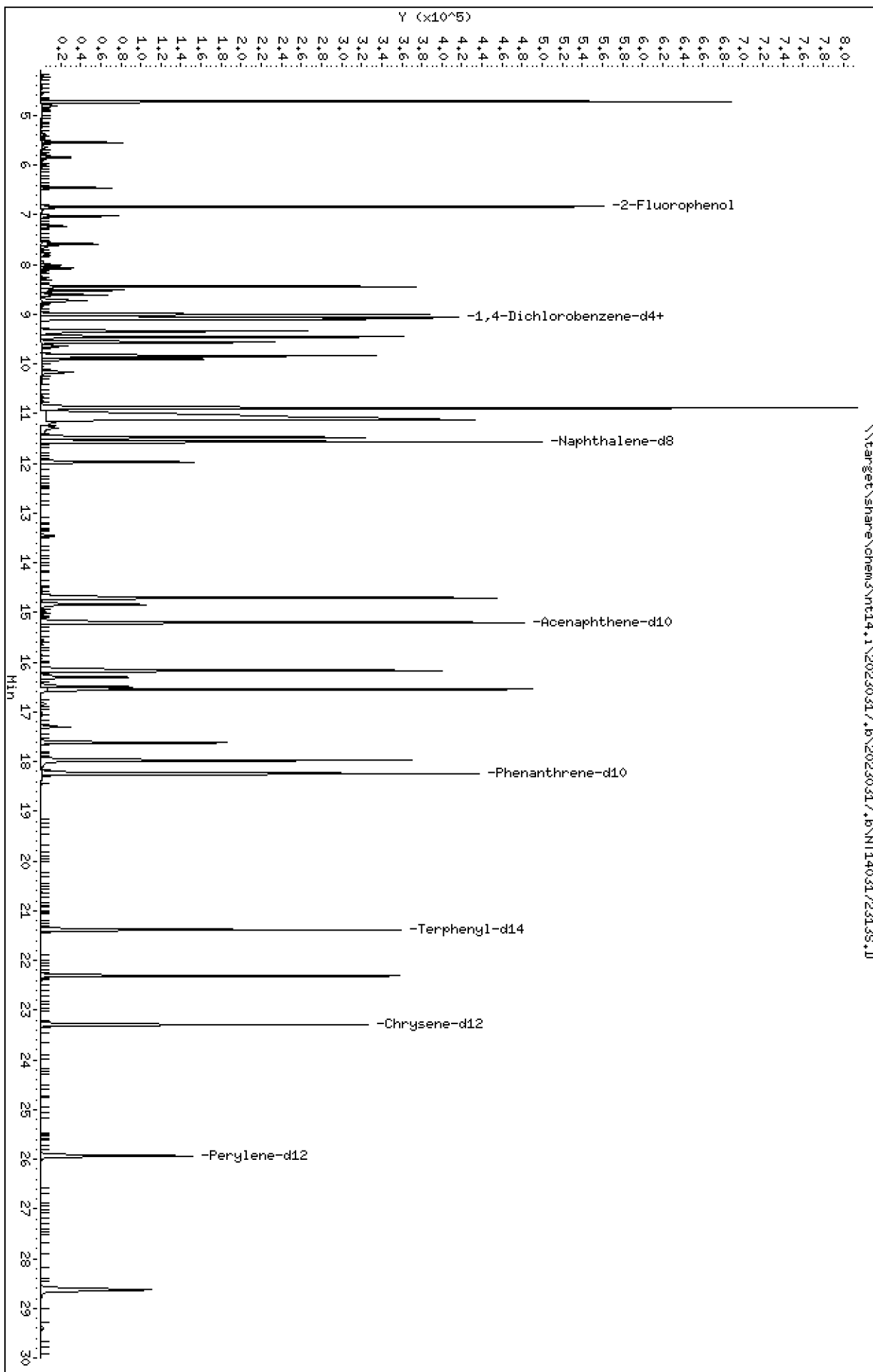
Instrument: nt14.1

Sample Info: BLB0424-B52

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

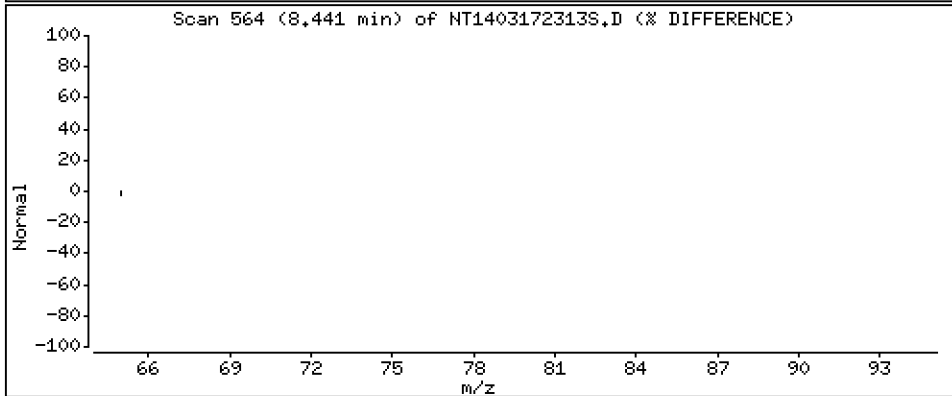
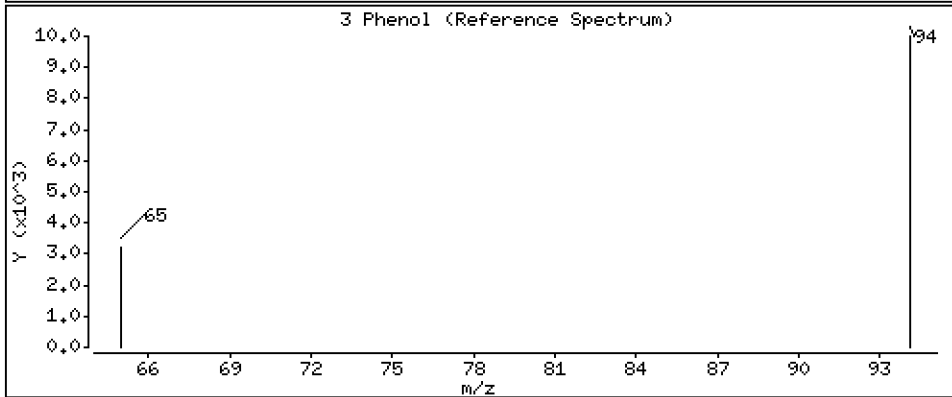
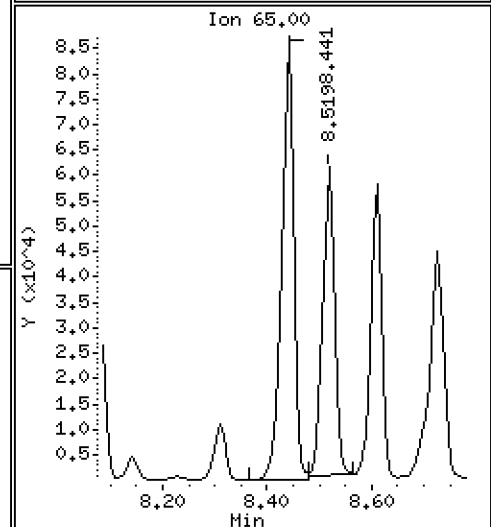
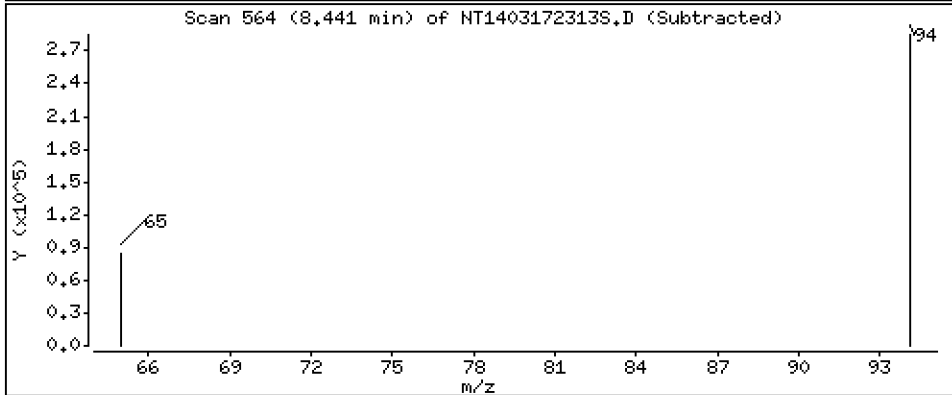
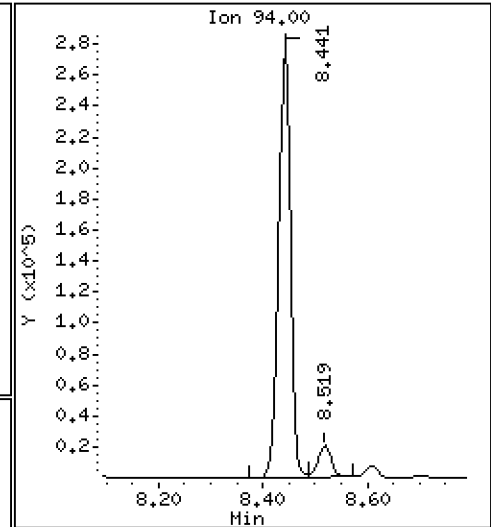
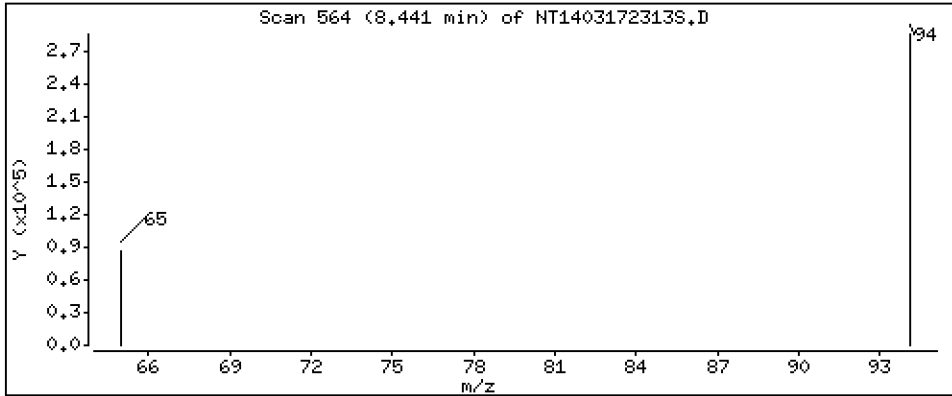
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 3,655 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

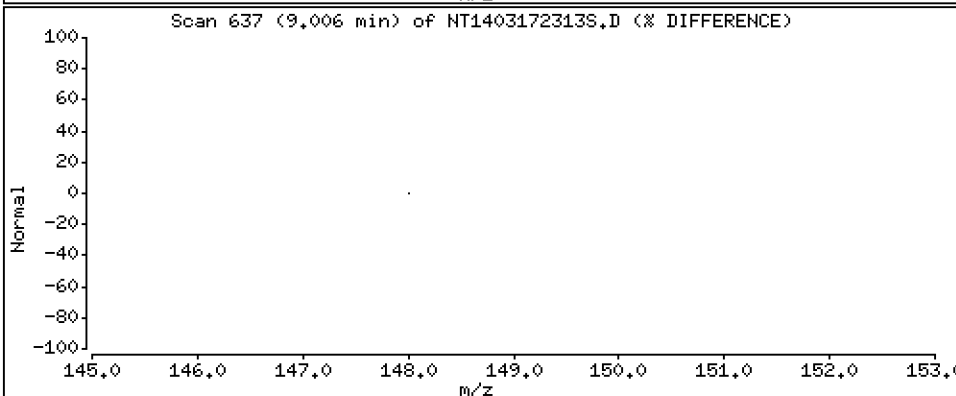
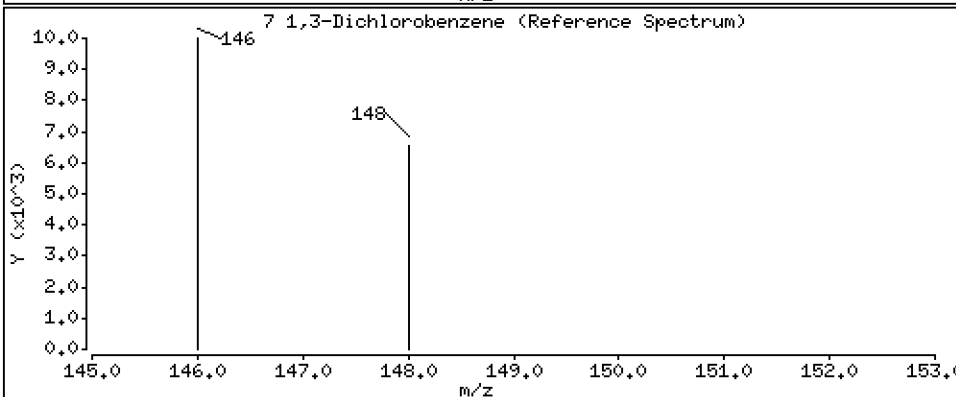
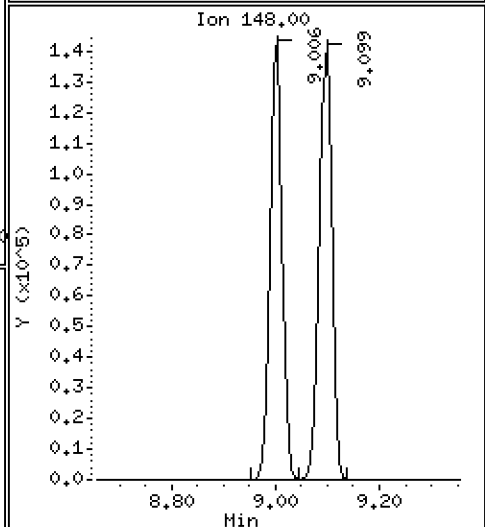
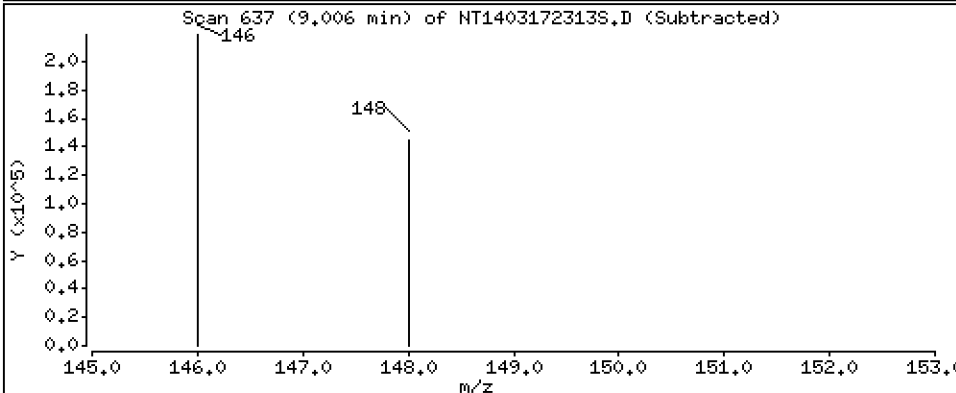
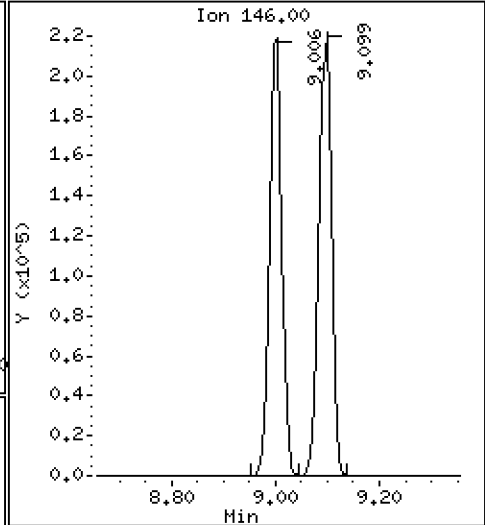
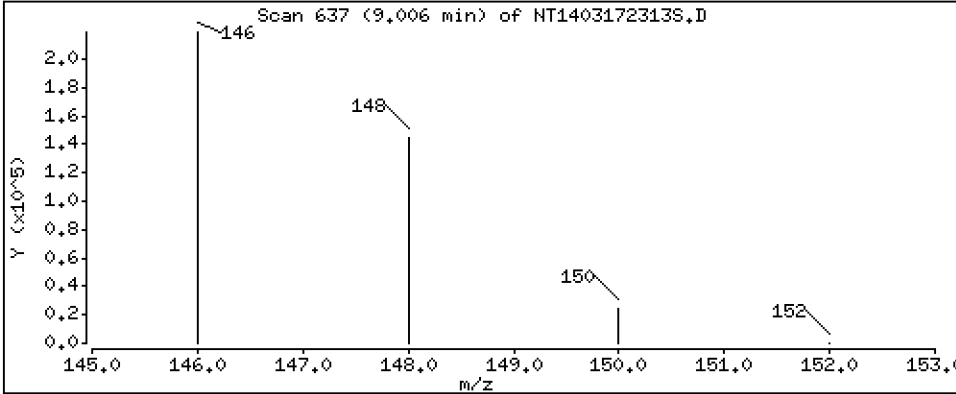
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 3,705 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

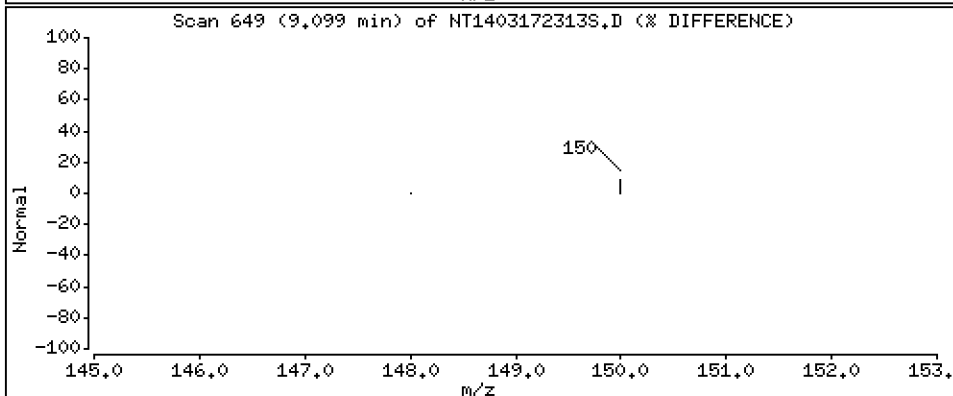
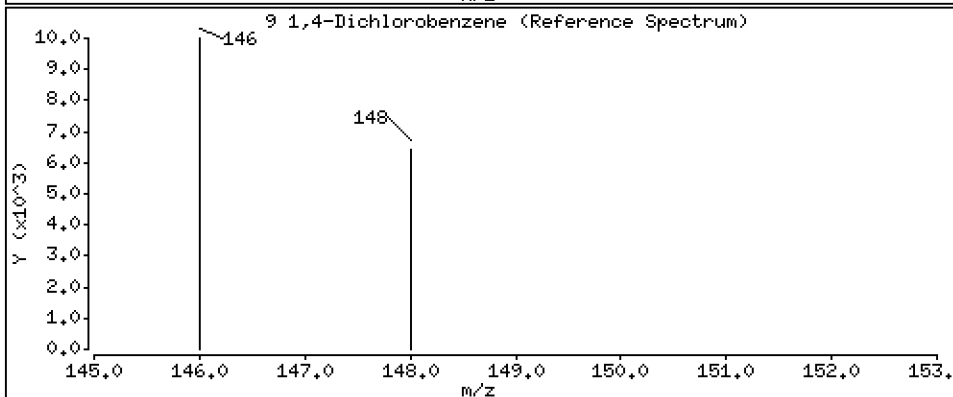
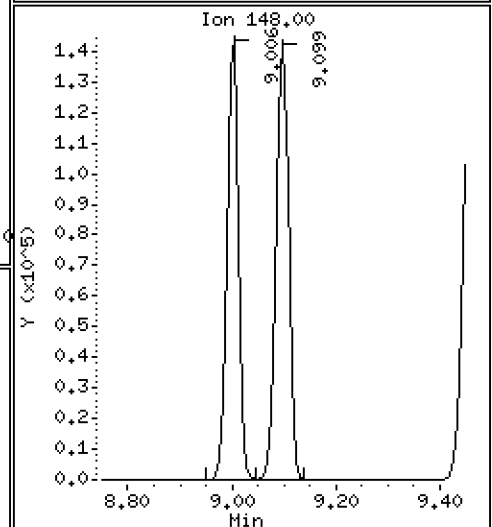
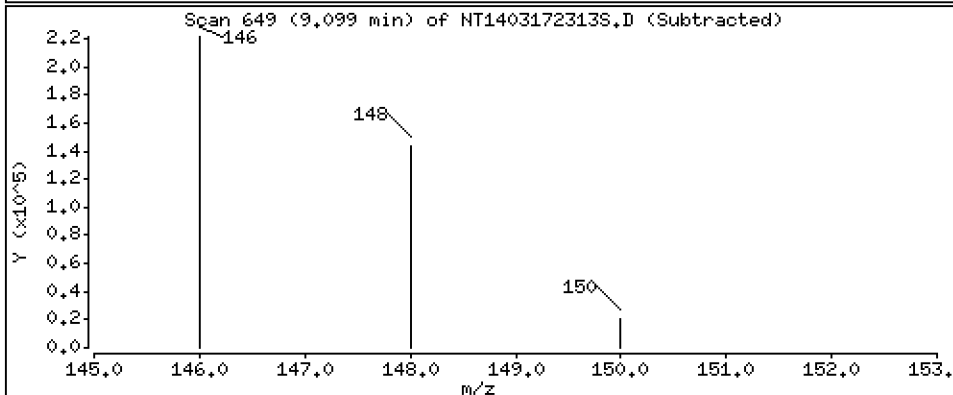
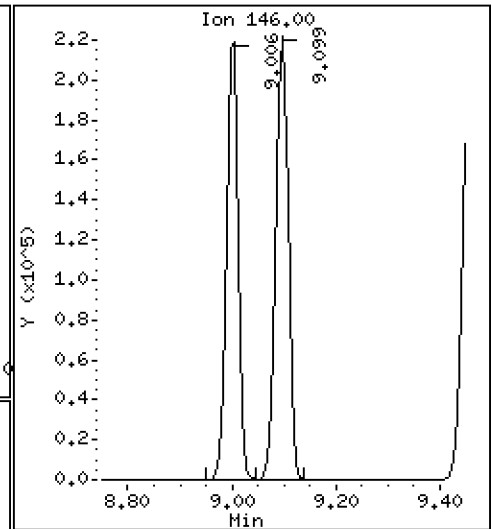
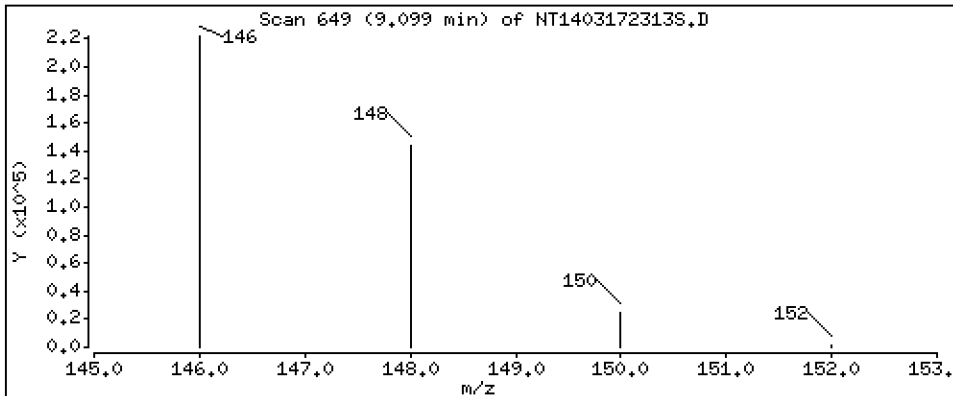
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 3,779 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

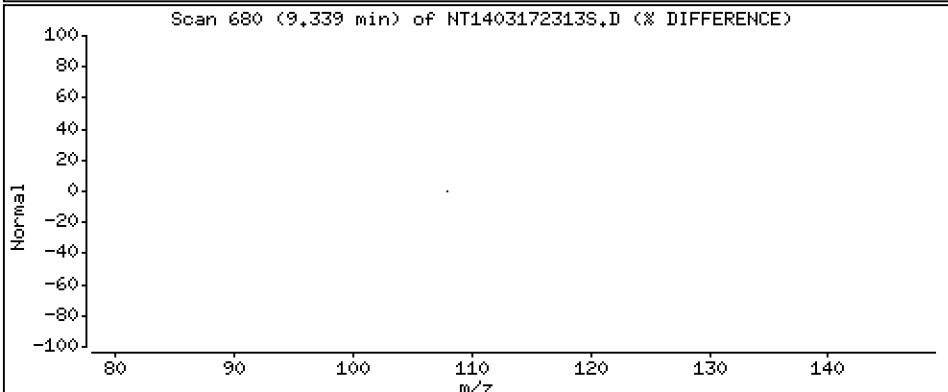
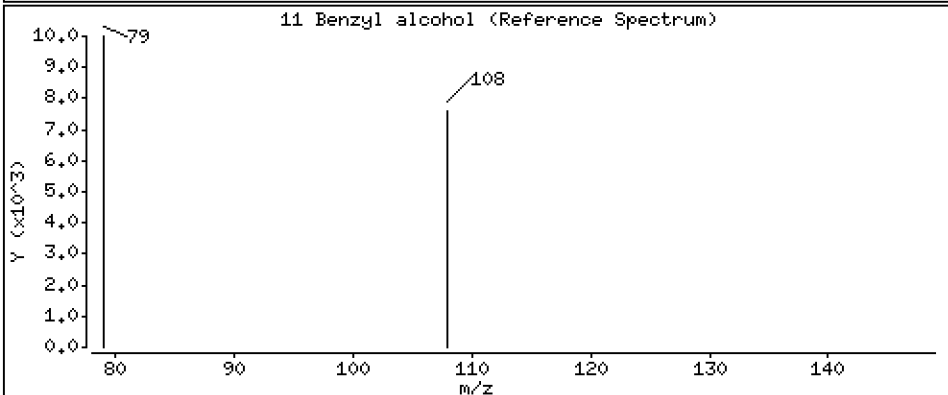
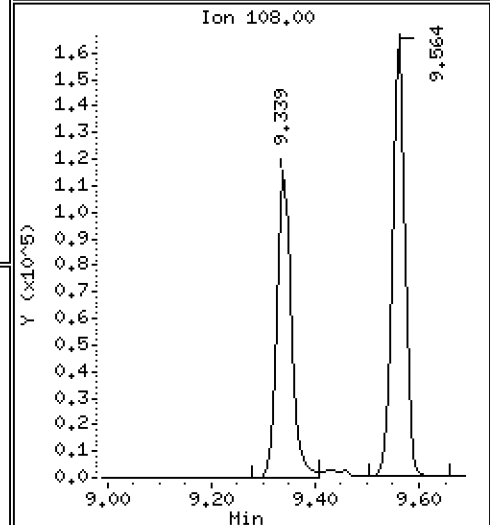
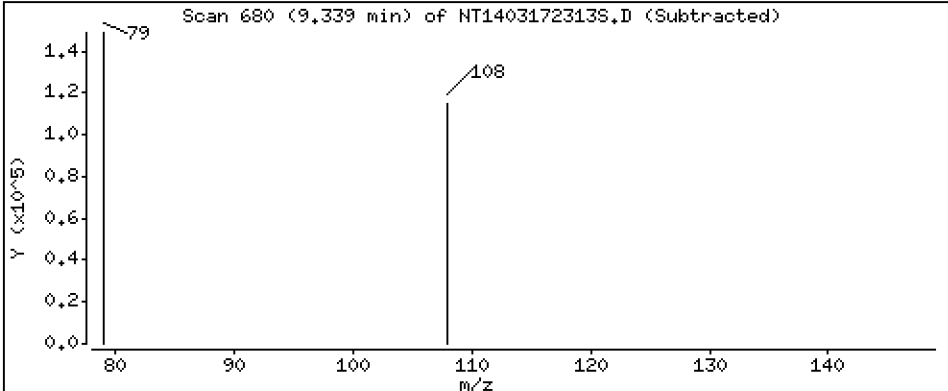
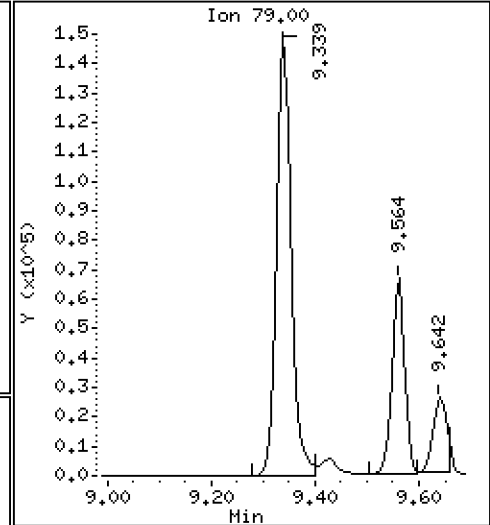
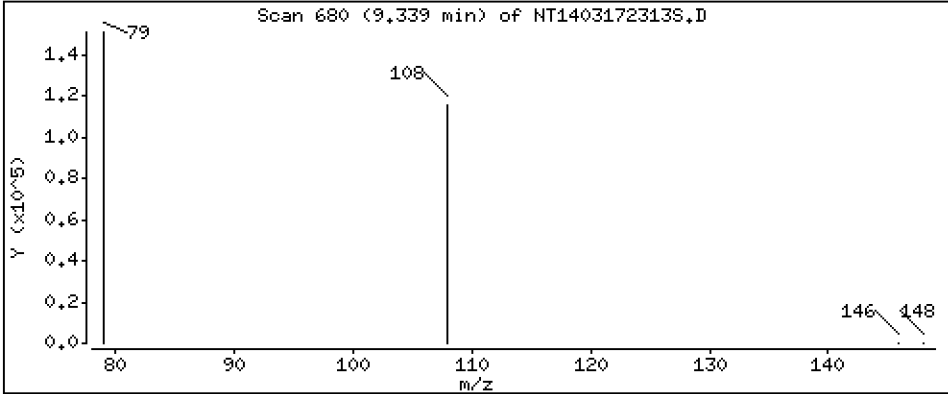
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.179 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

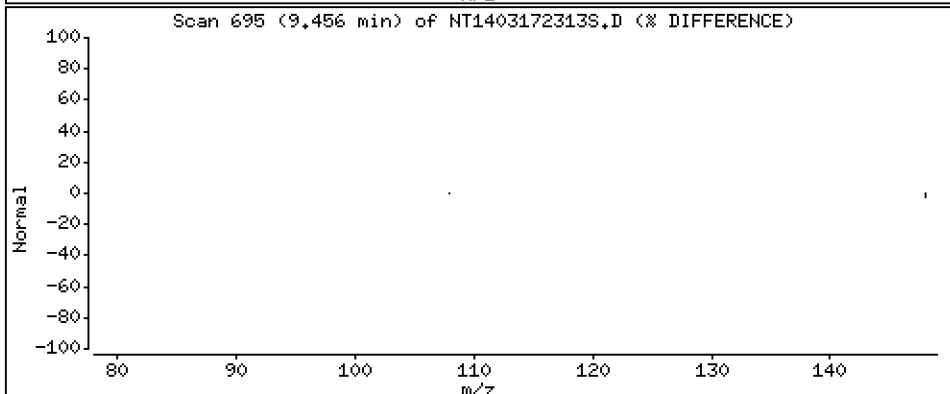
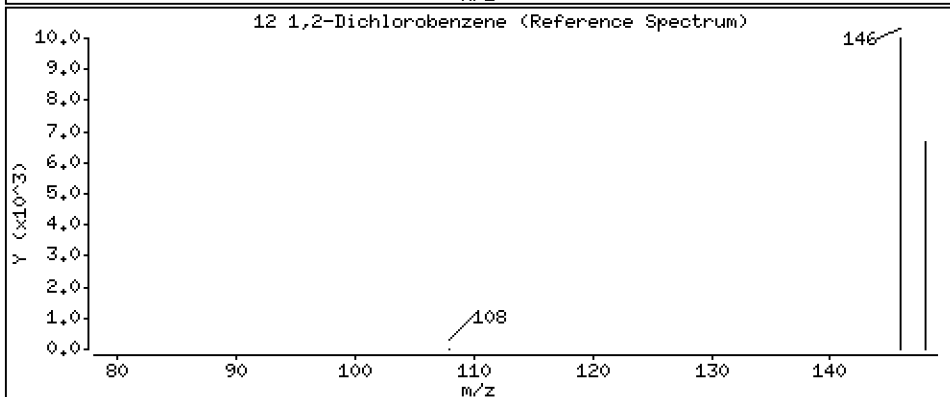
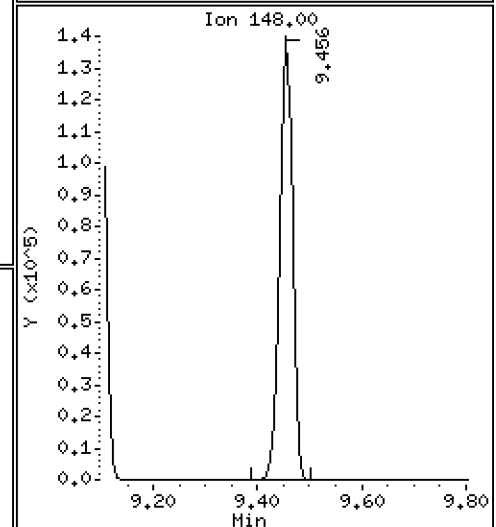
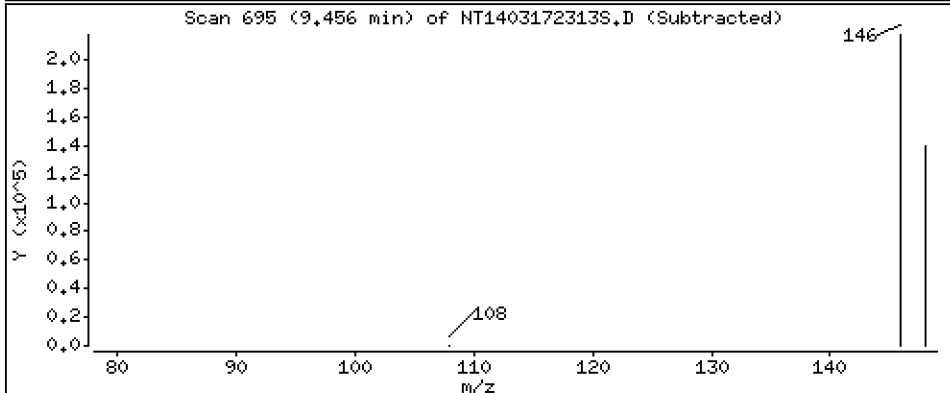
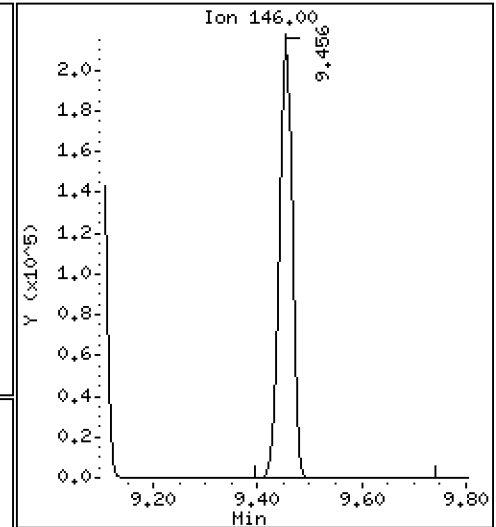
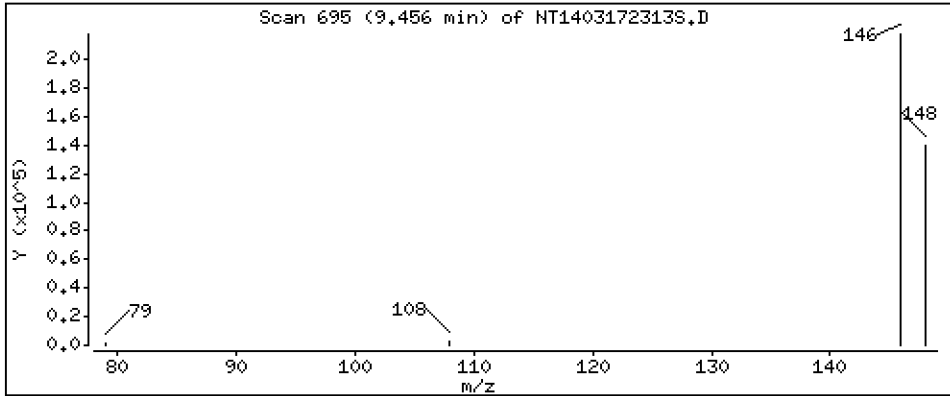
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 3,849 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

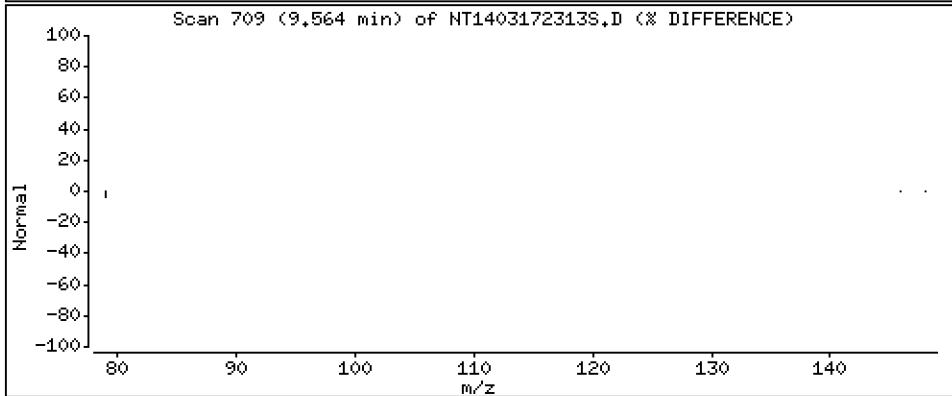
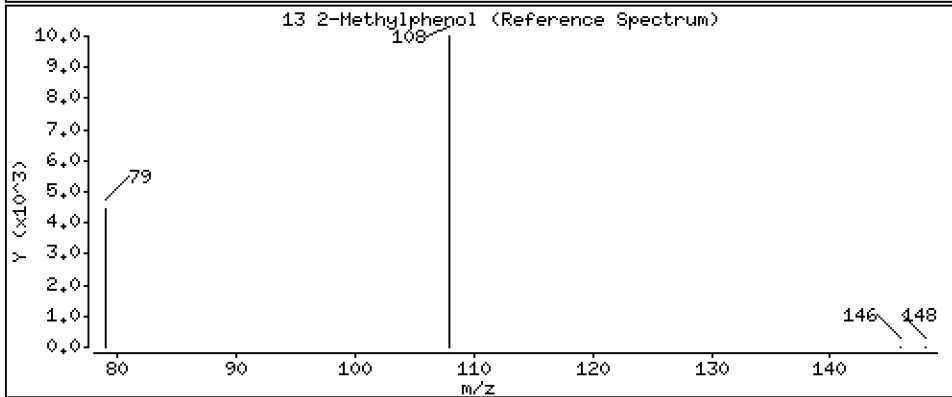
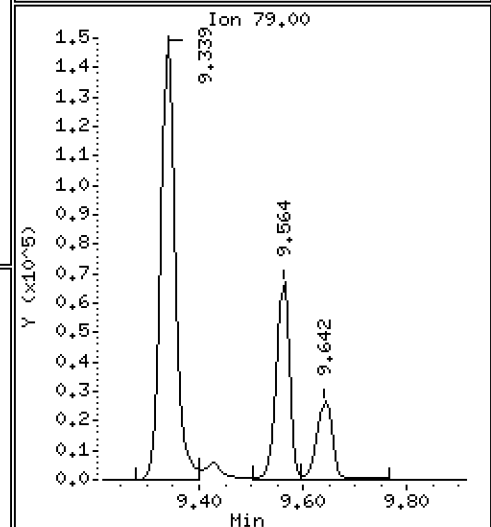
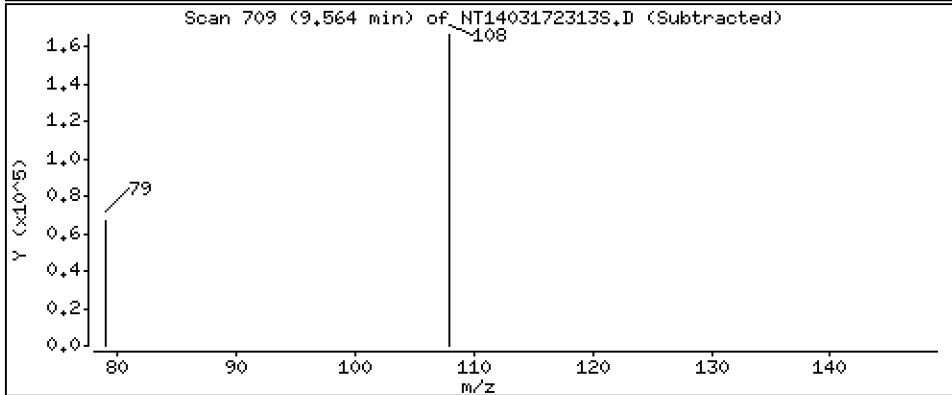
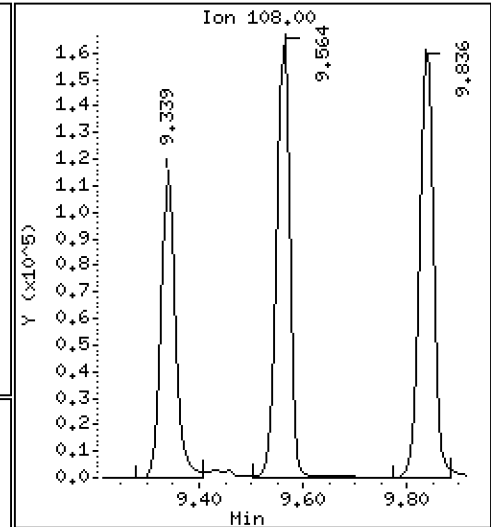
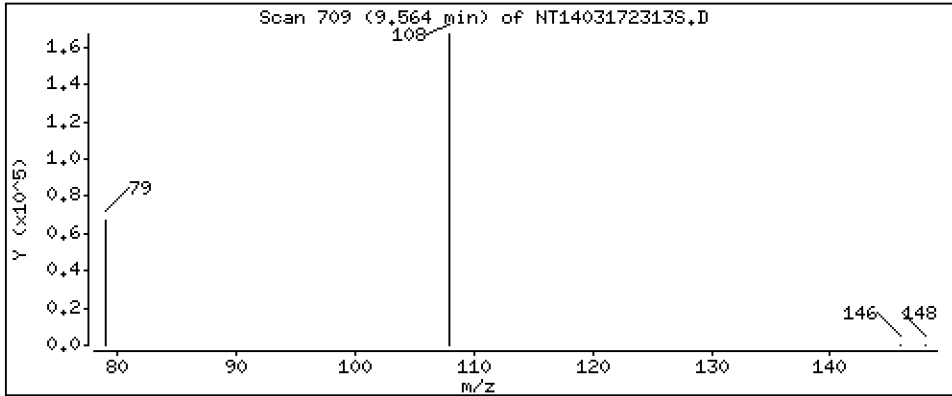
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.545 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

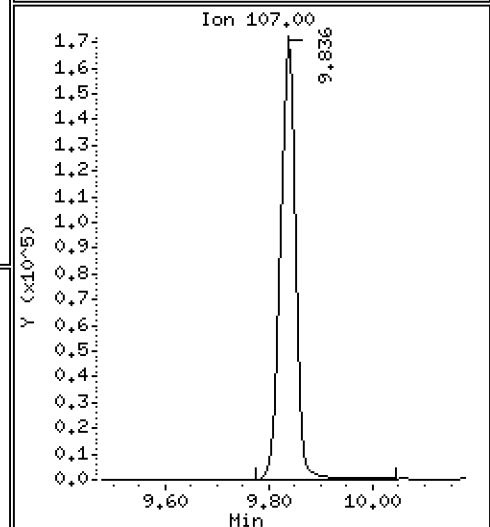
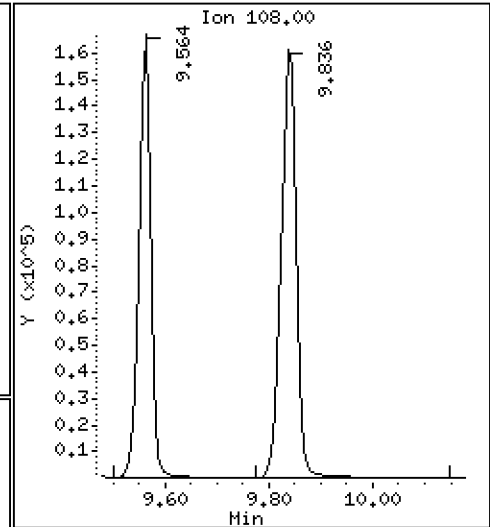
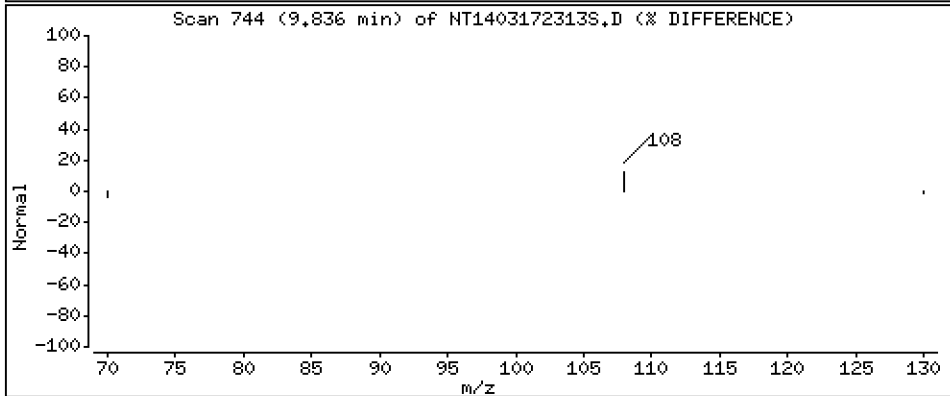
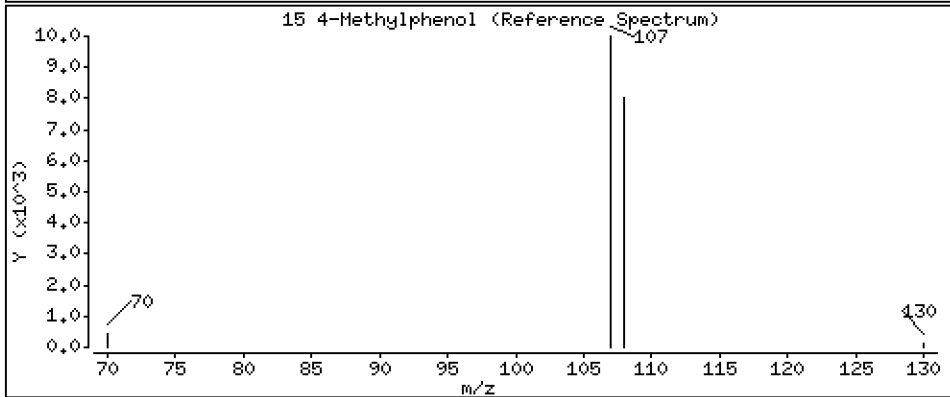
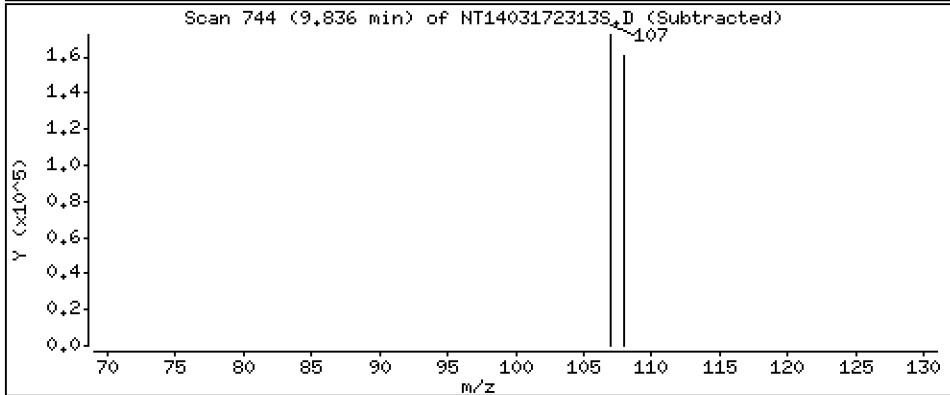
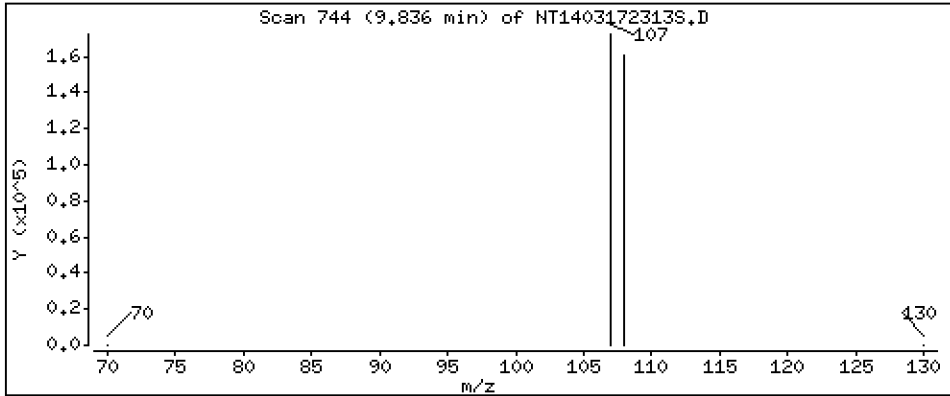
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 3,915 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

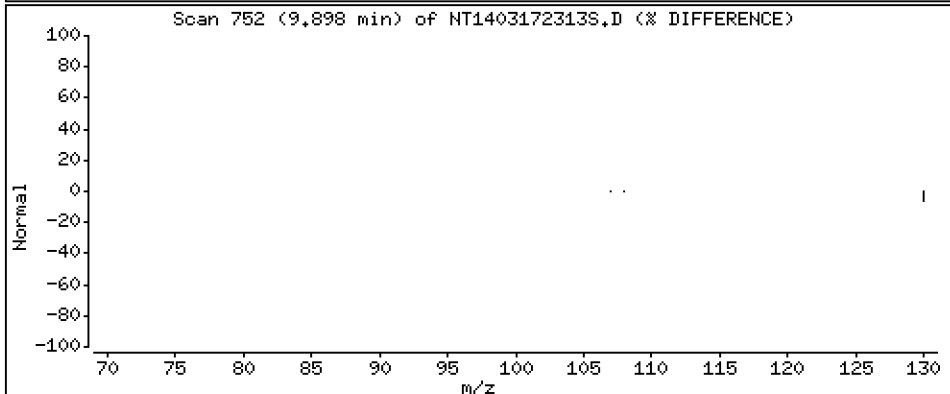
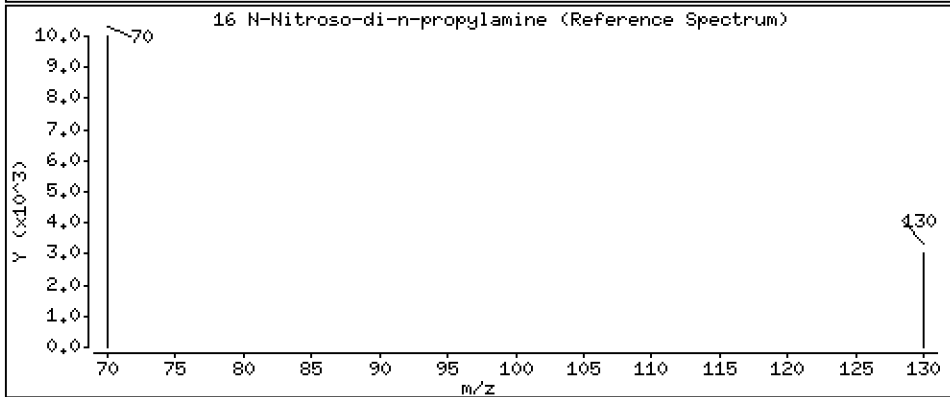
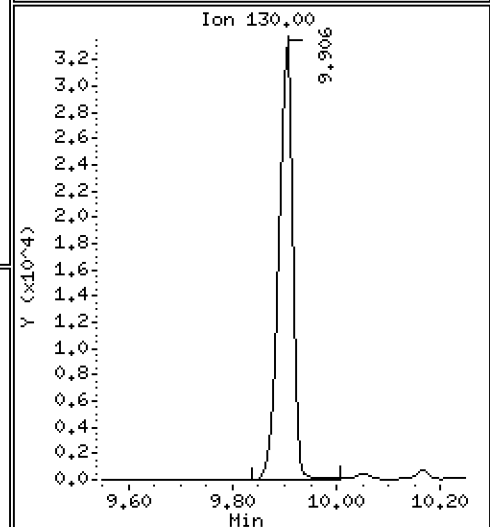
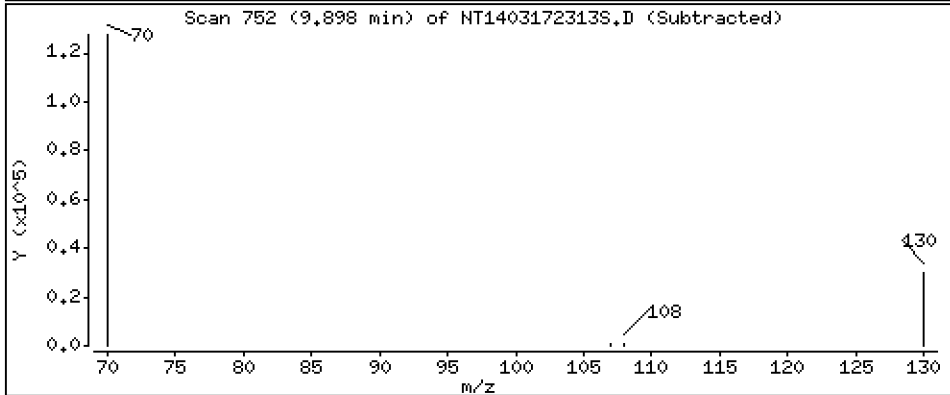
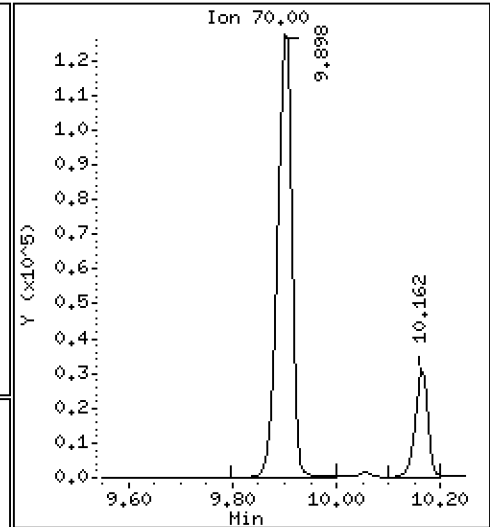
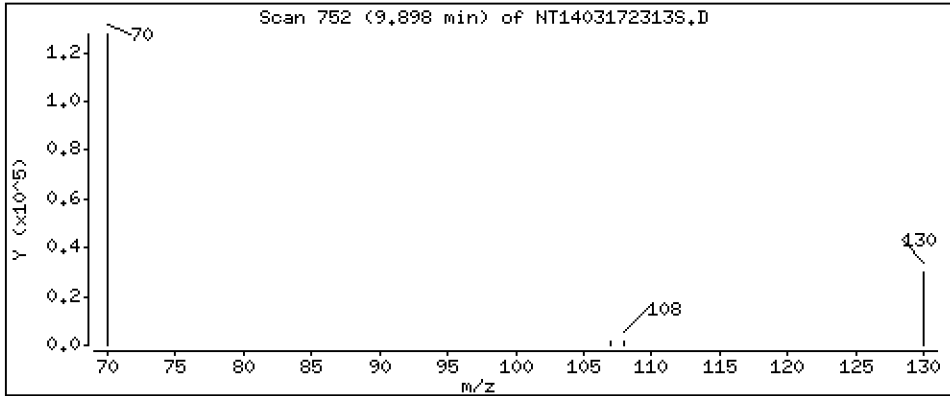
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,044 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

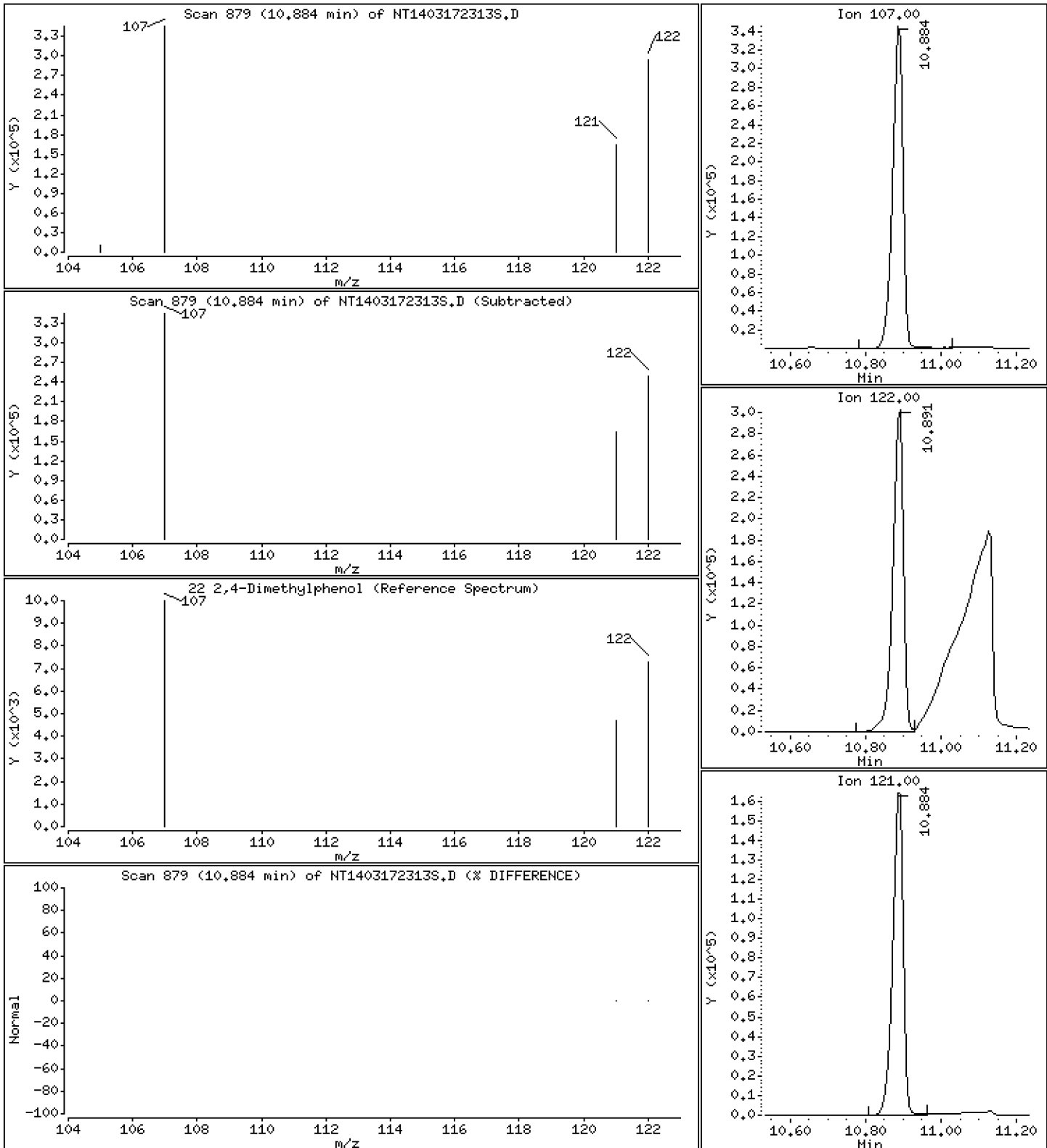
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 8.070 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

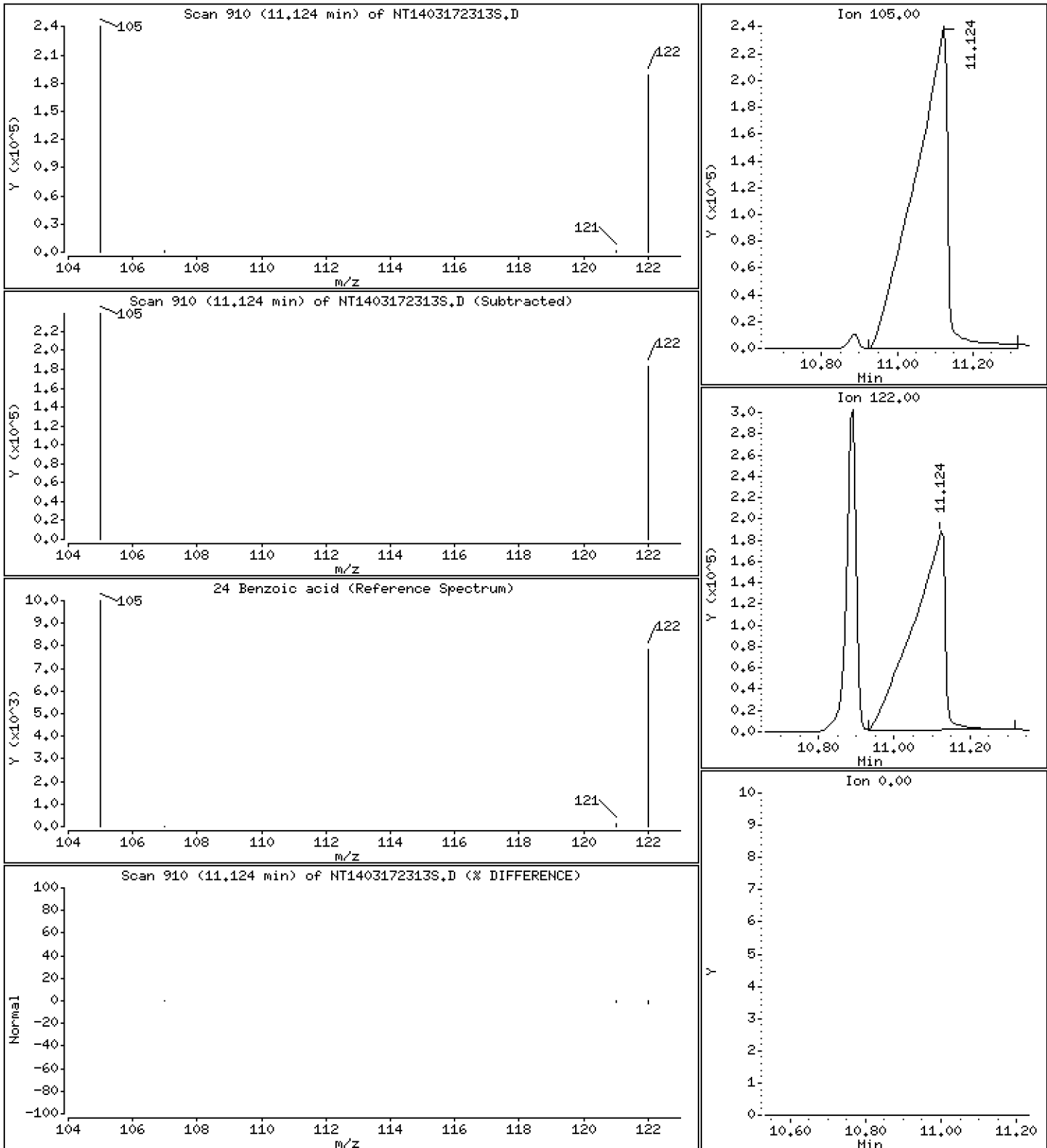
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 22,31 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

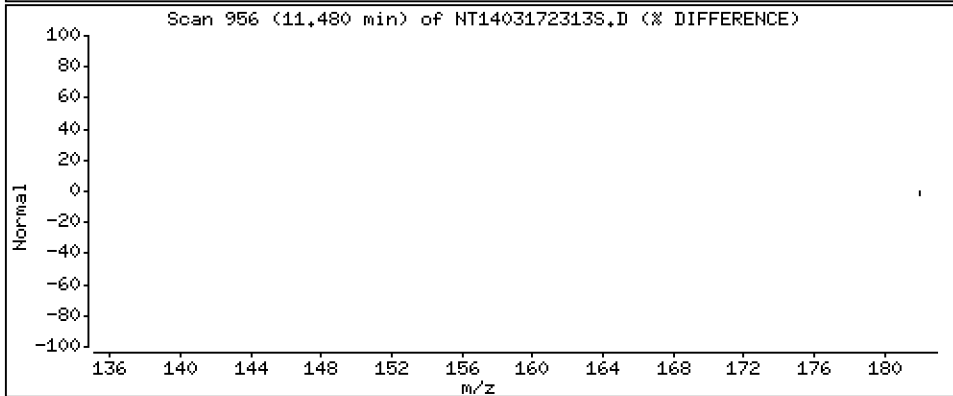
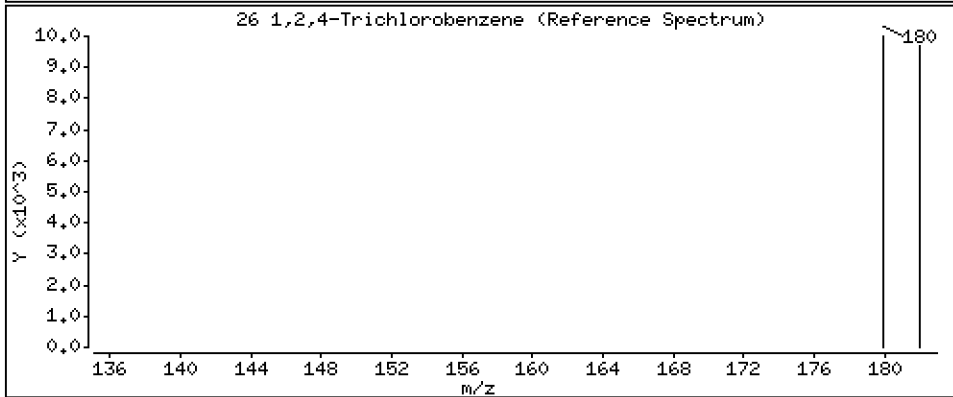
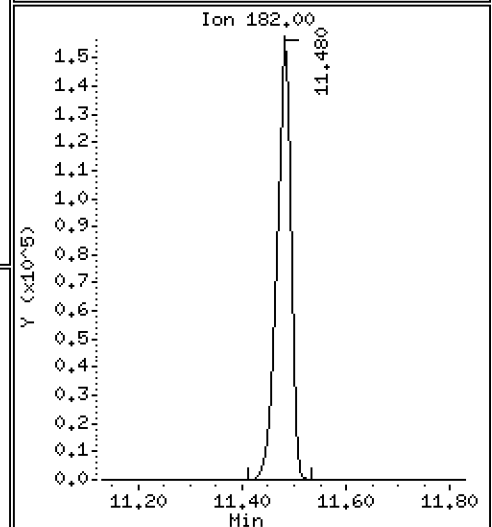
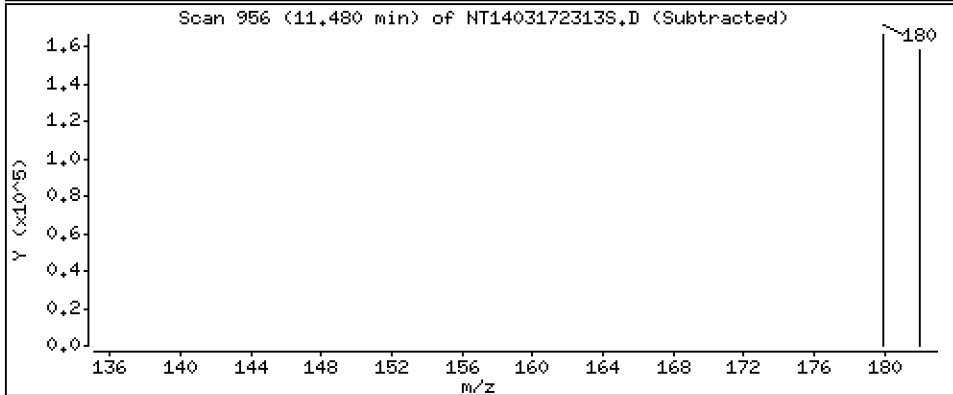
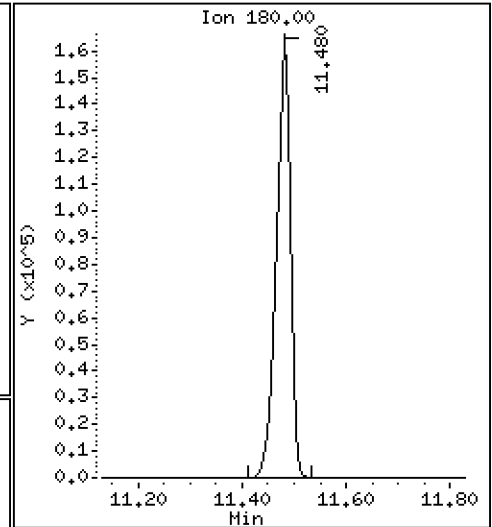
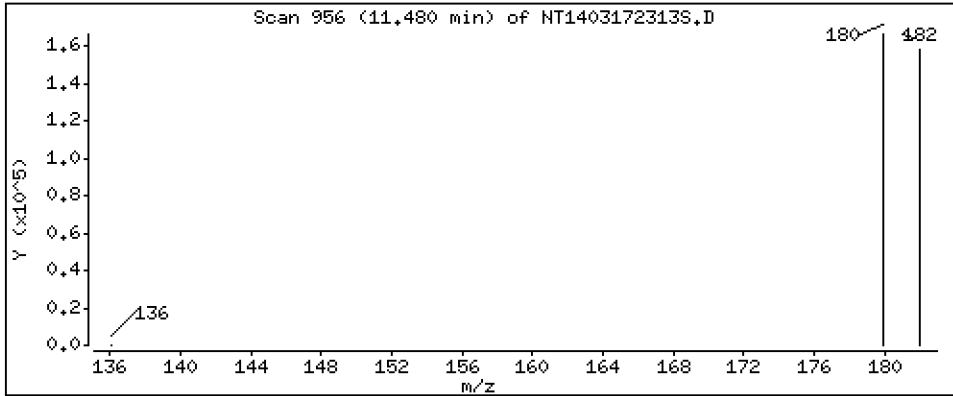
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 3,903 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

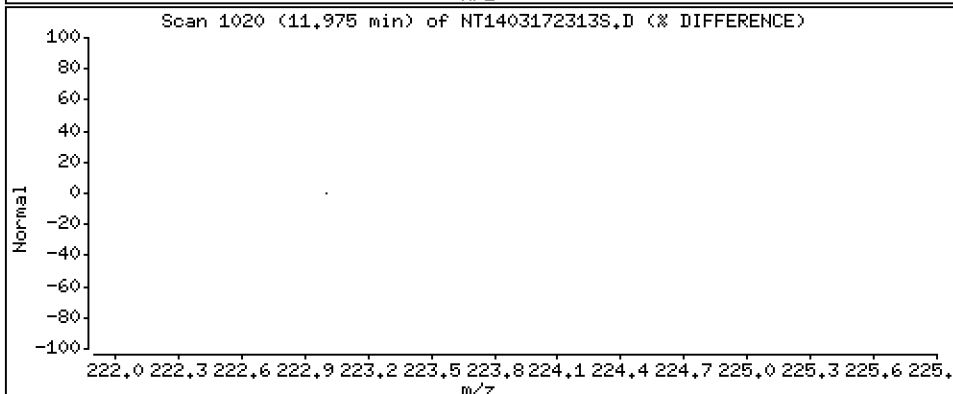
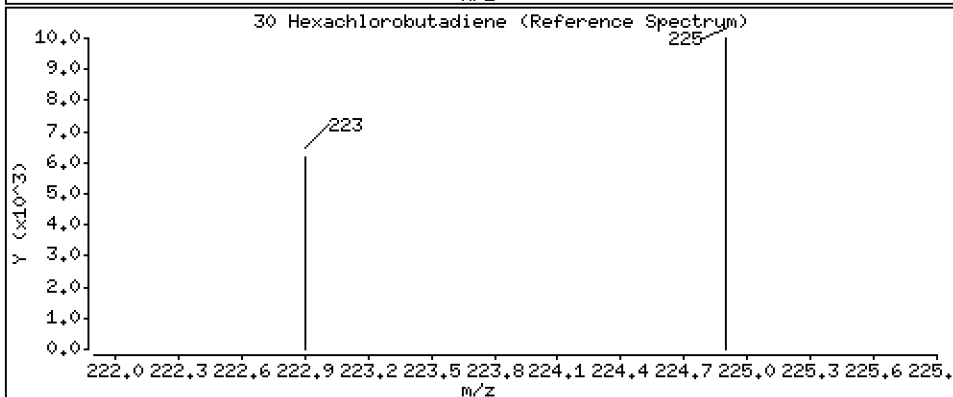
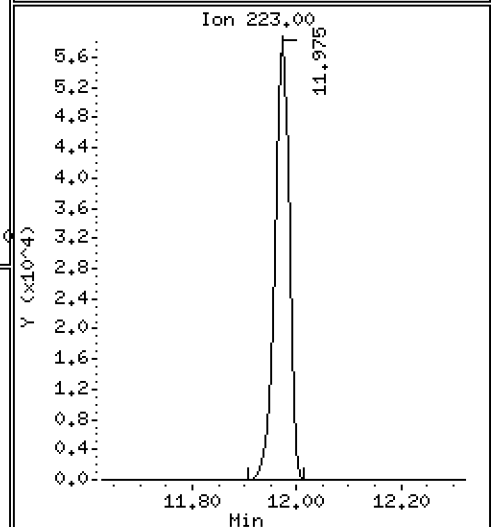
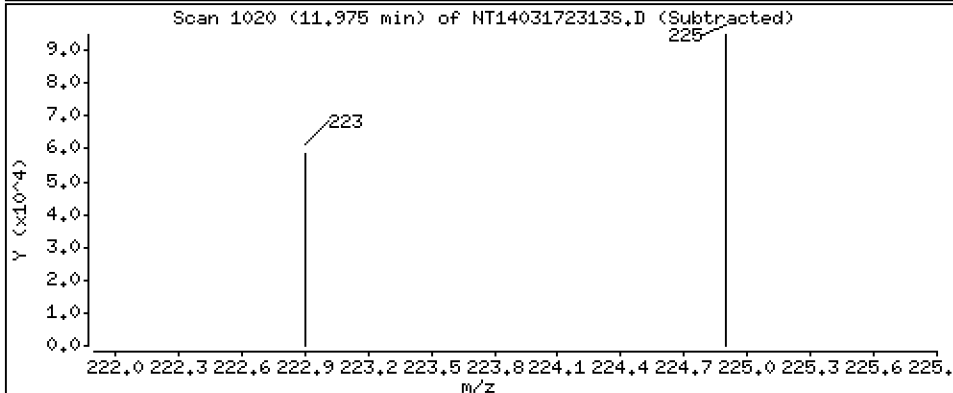
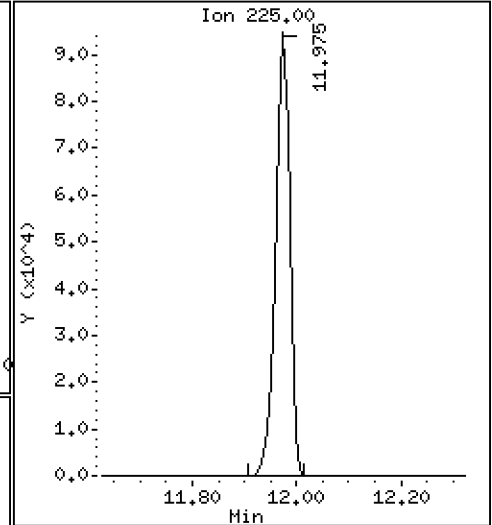
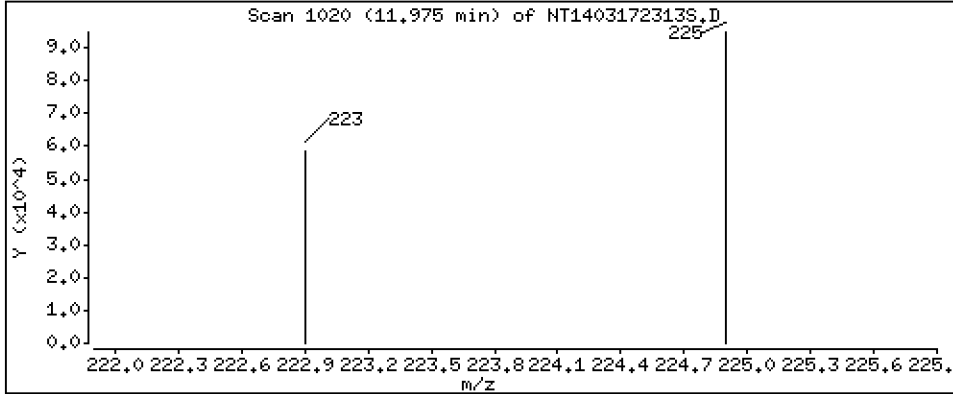
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,371 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

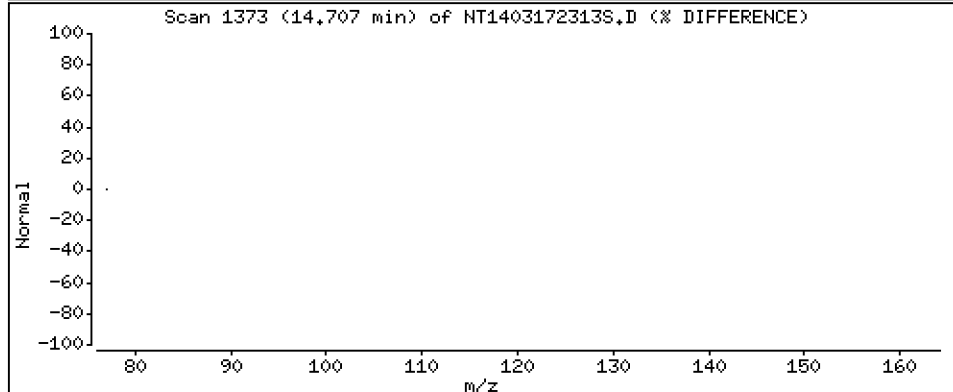
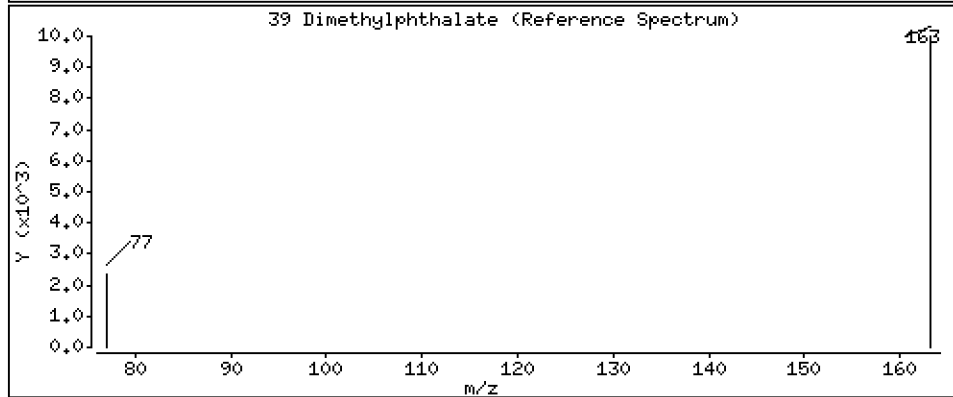
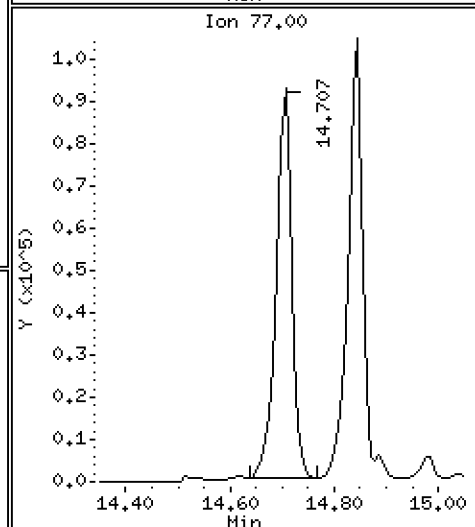
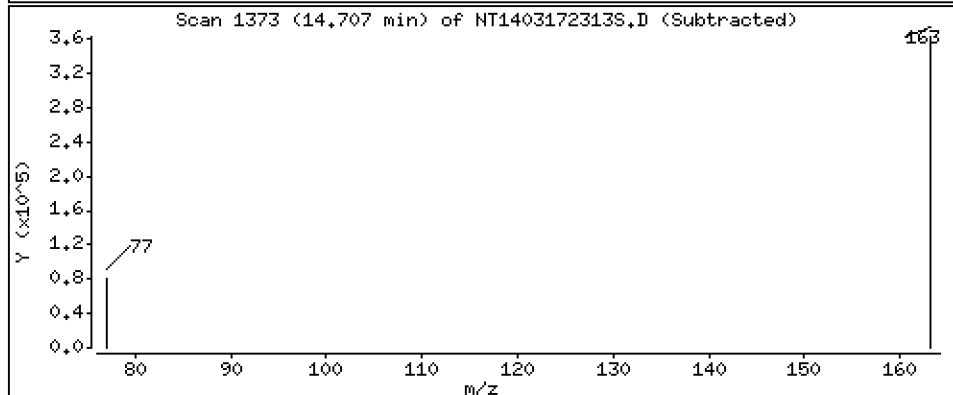
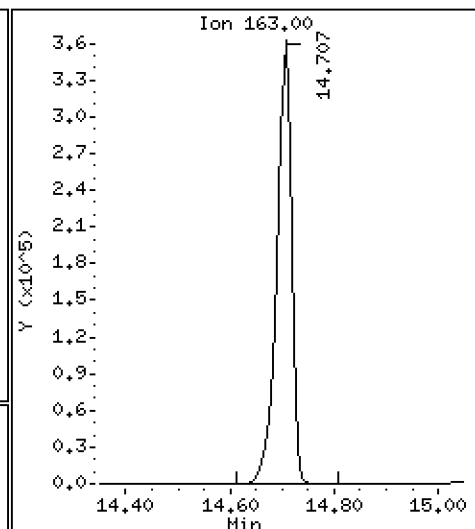
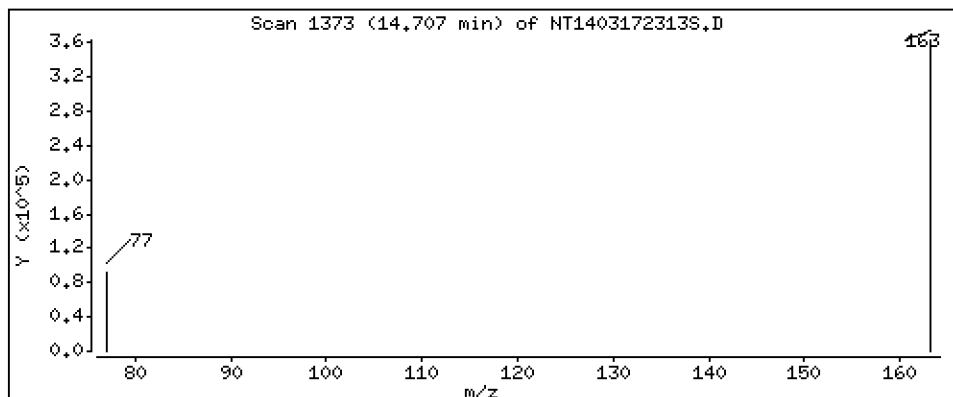
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,621 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

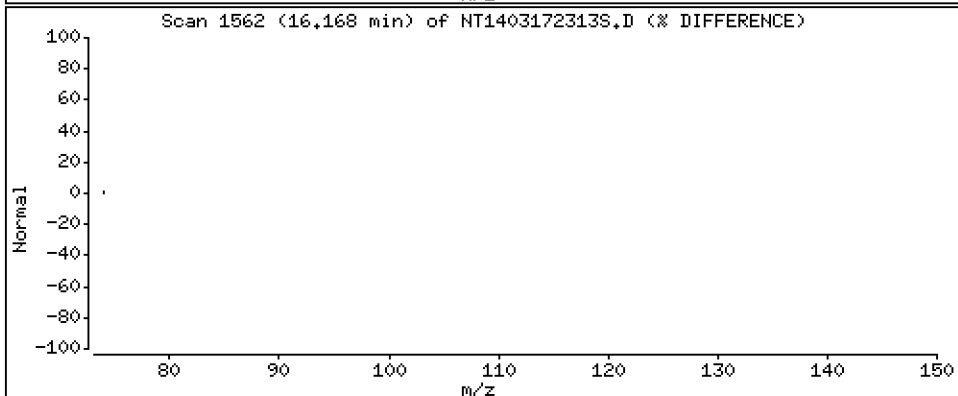
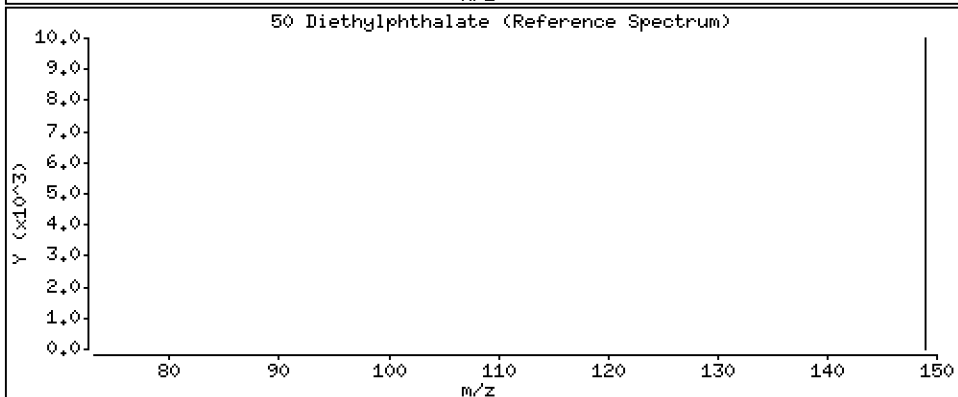
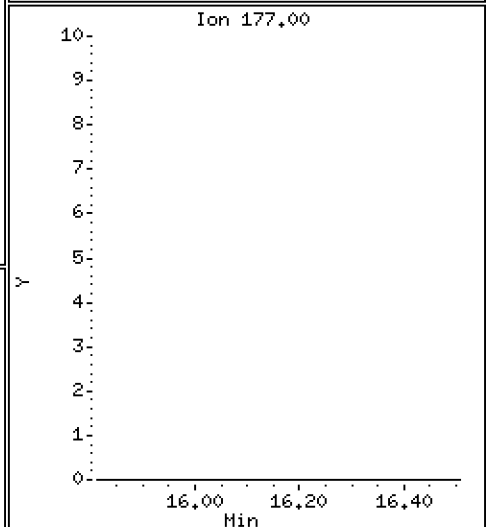
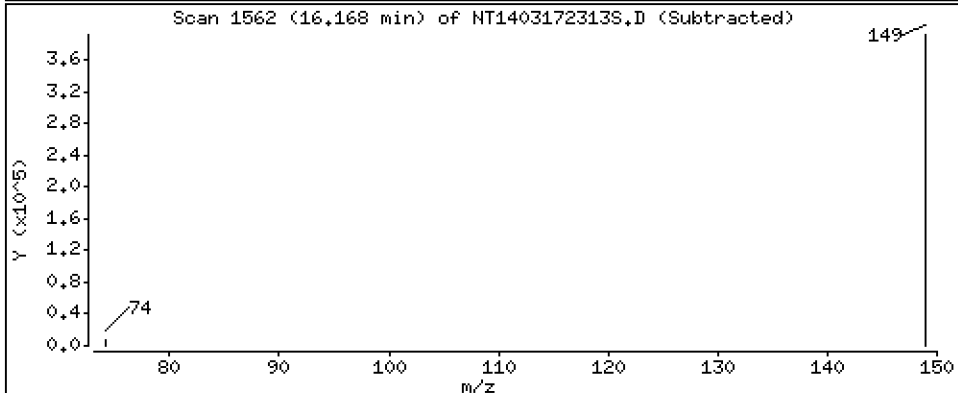
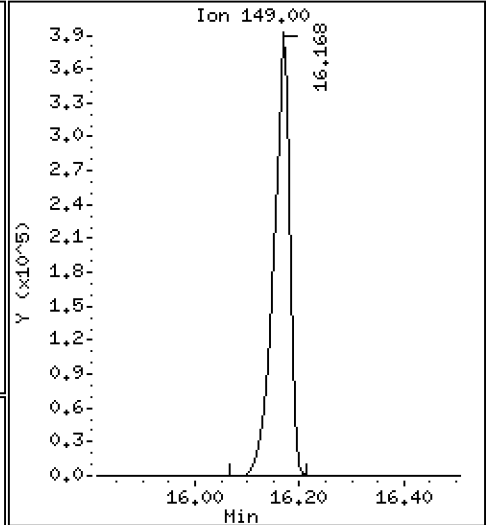
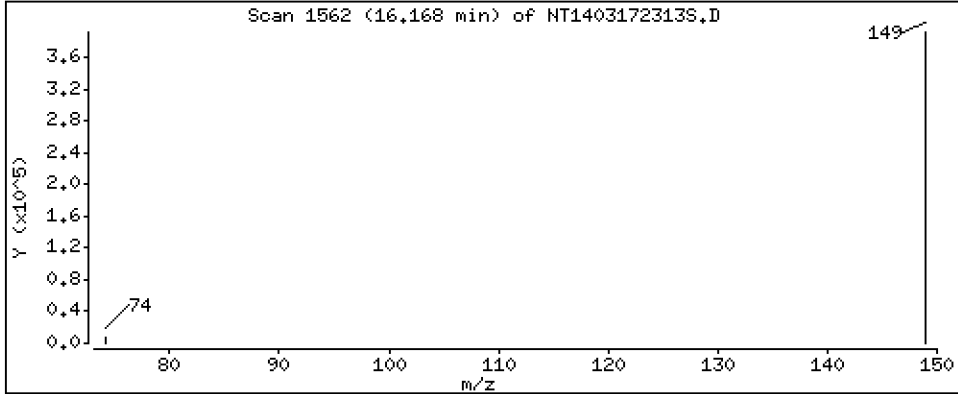
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,223 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

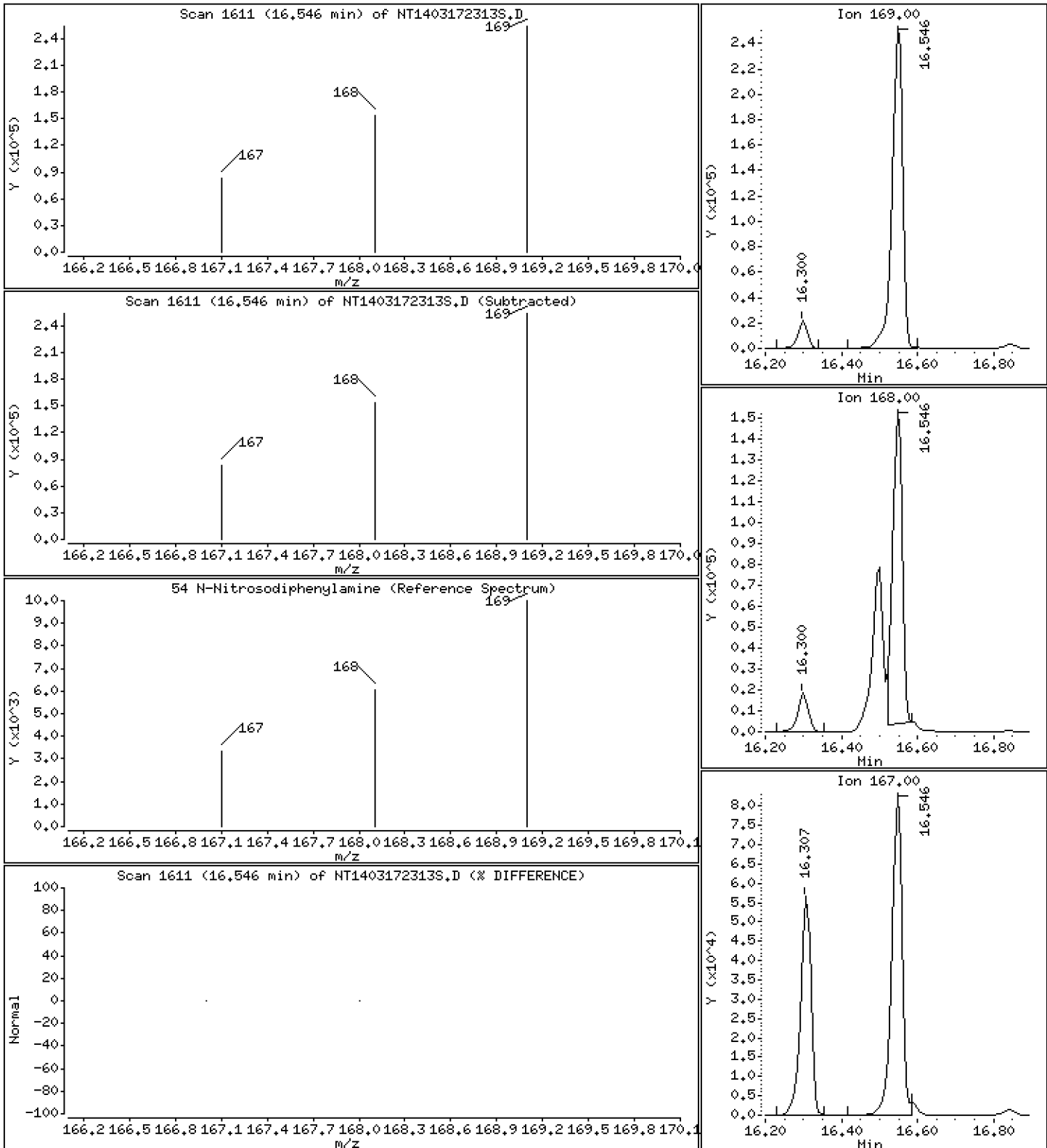
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,198 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

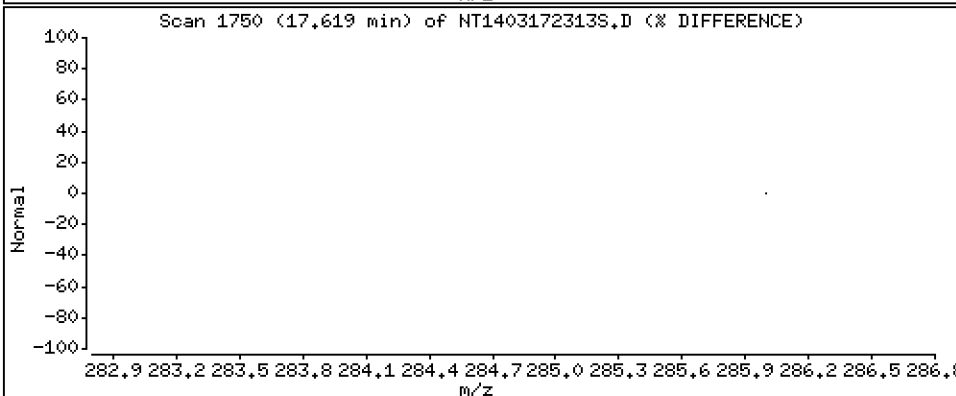
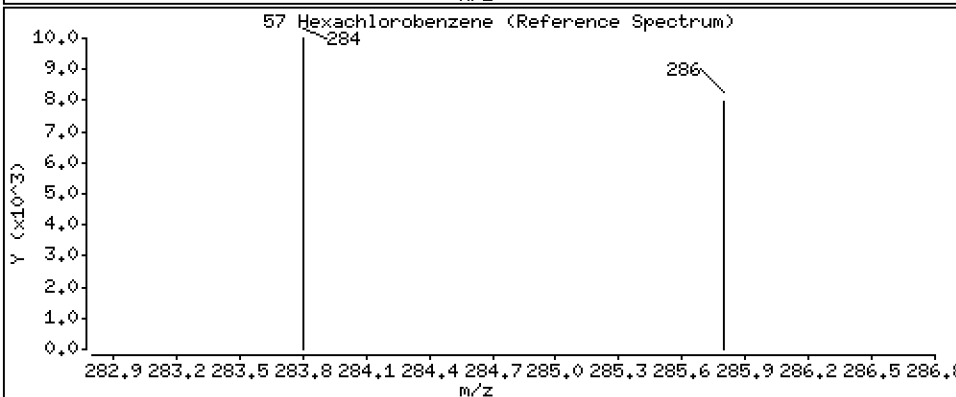
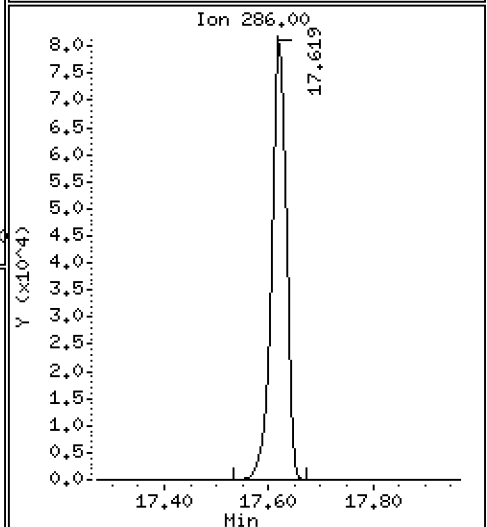
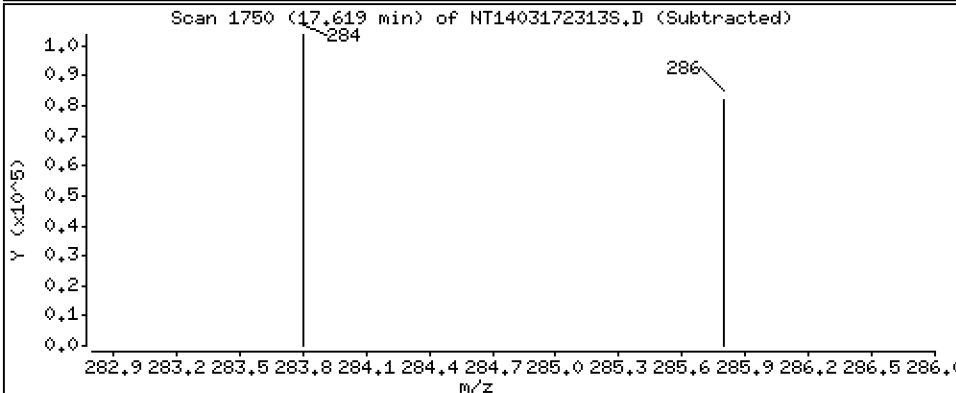
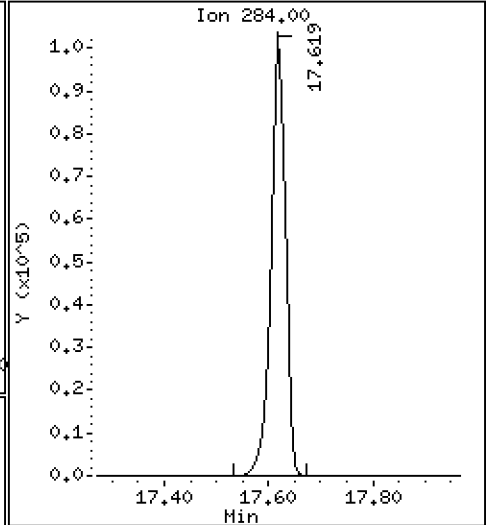
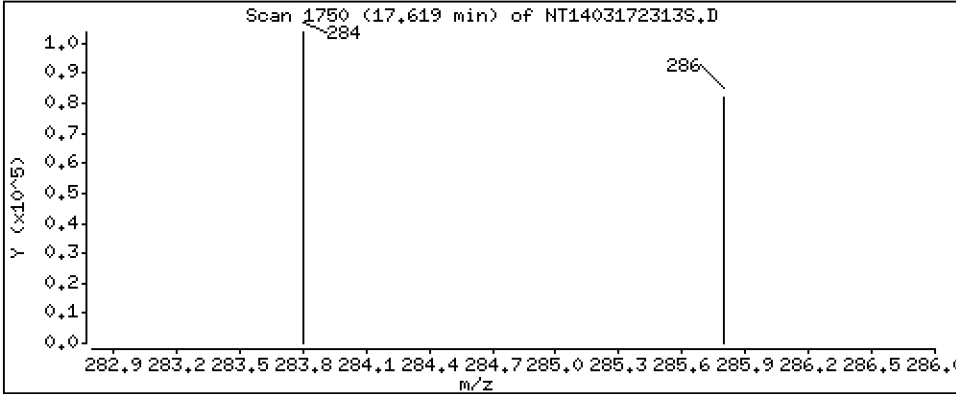
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,510 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

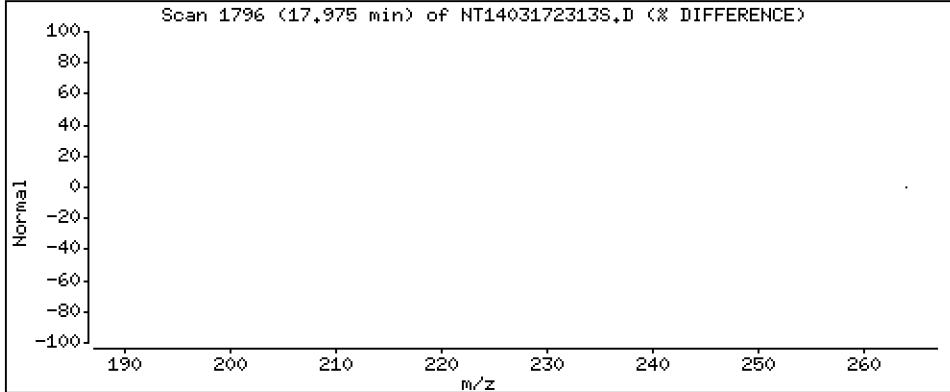
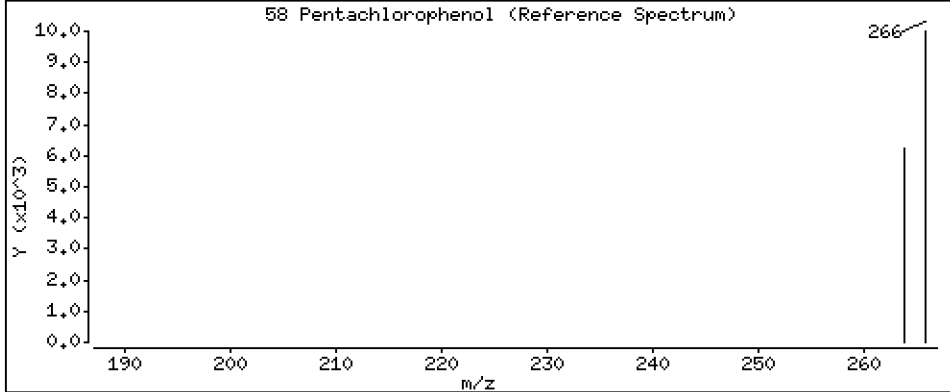
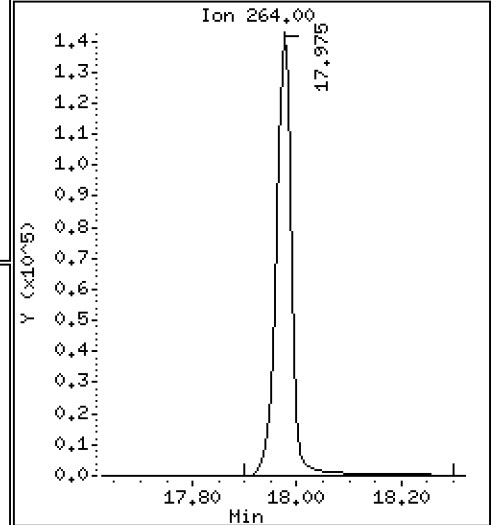
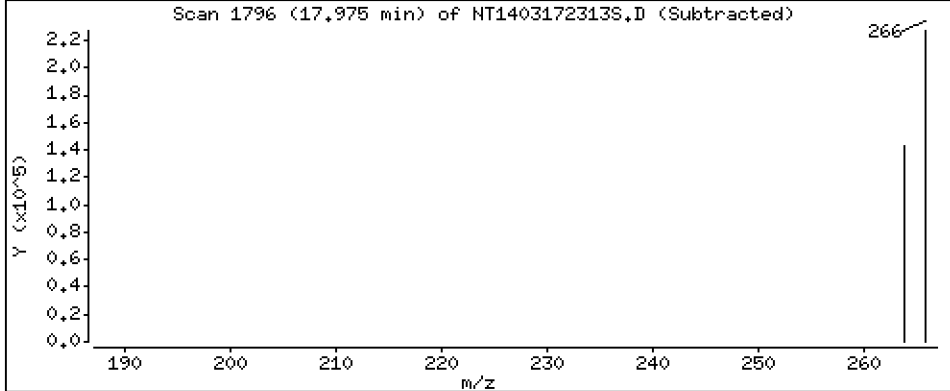
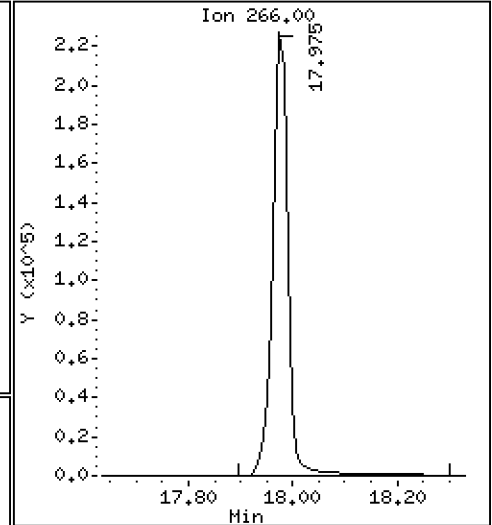
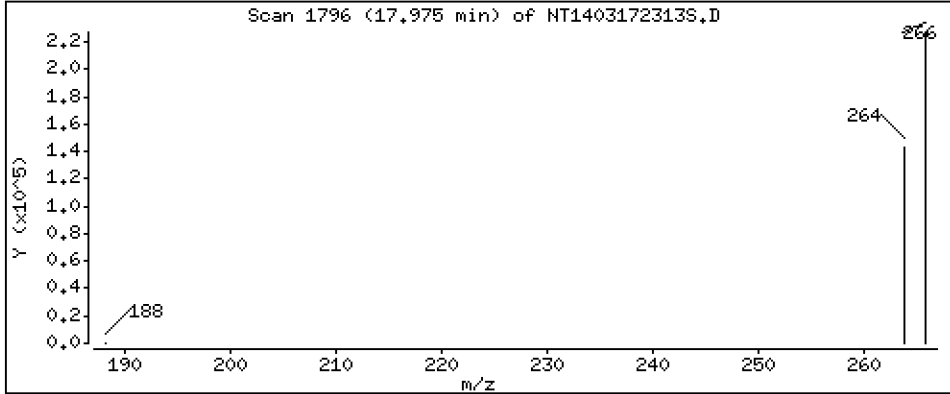
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 14,40 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

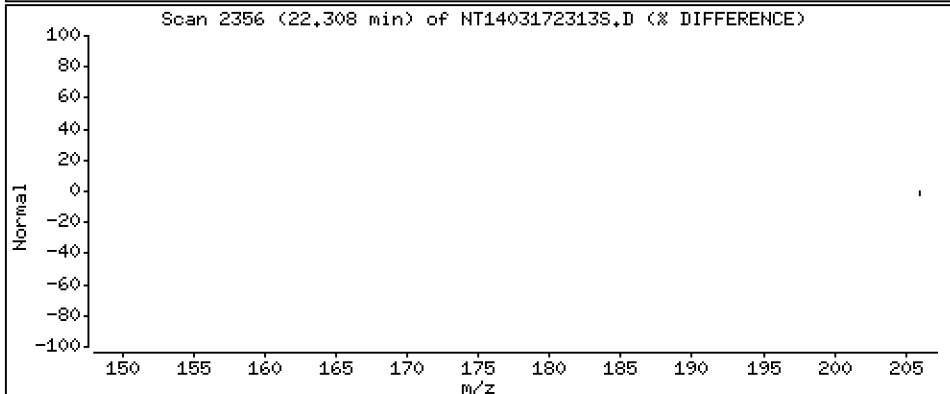
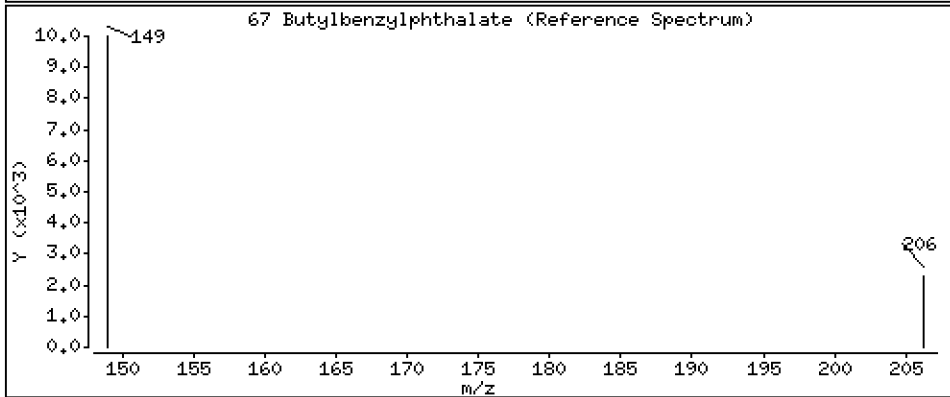
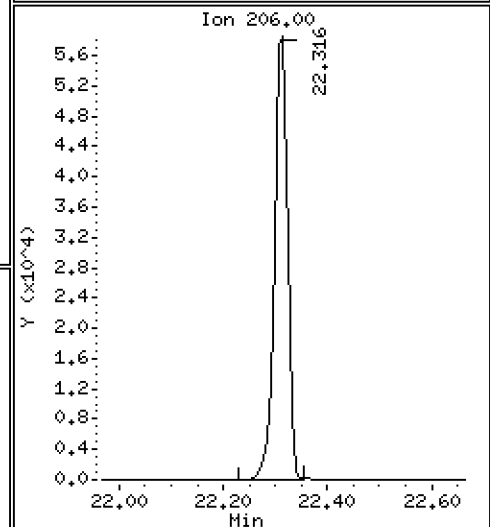
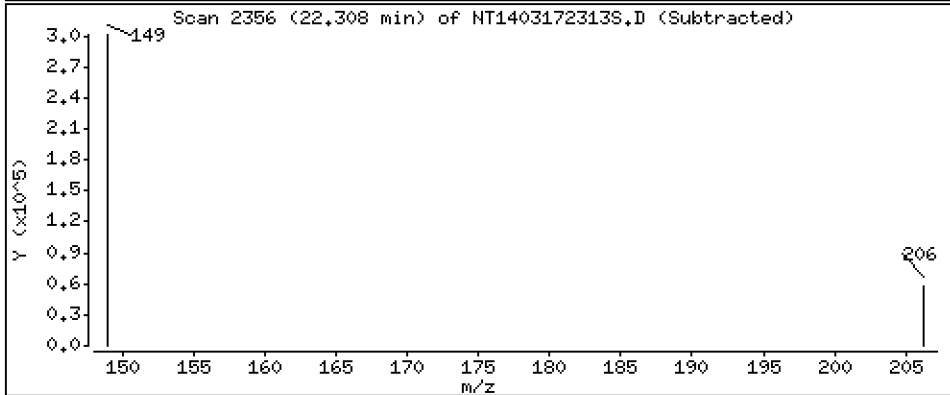
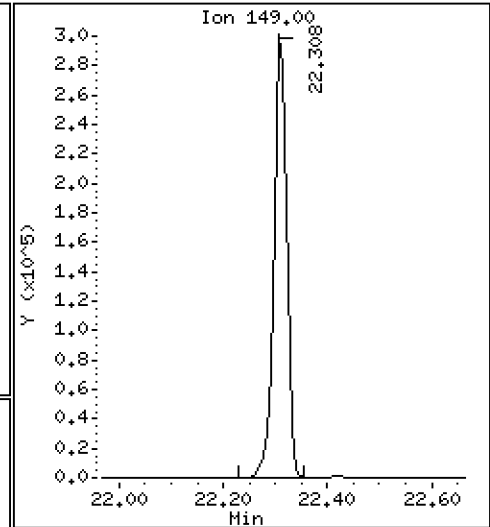
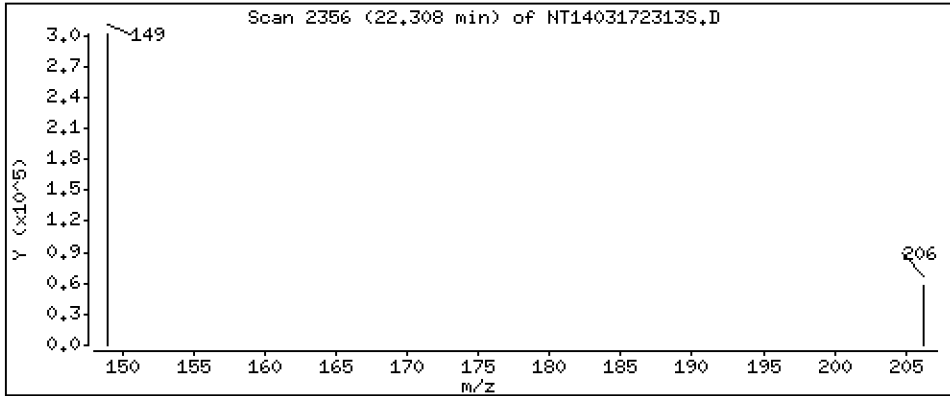
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 6,321 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

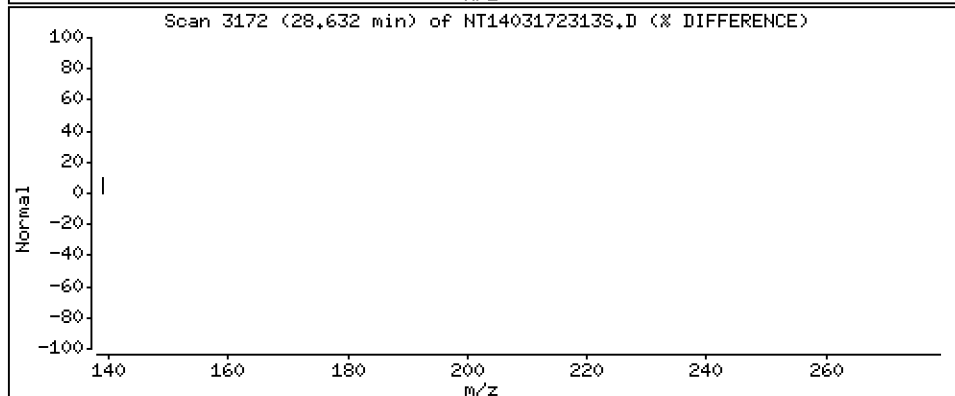
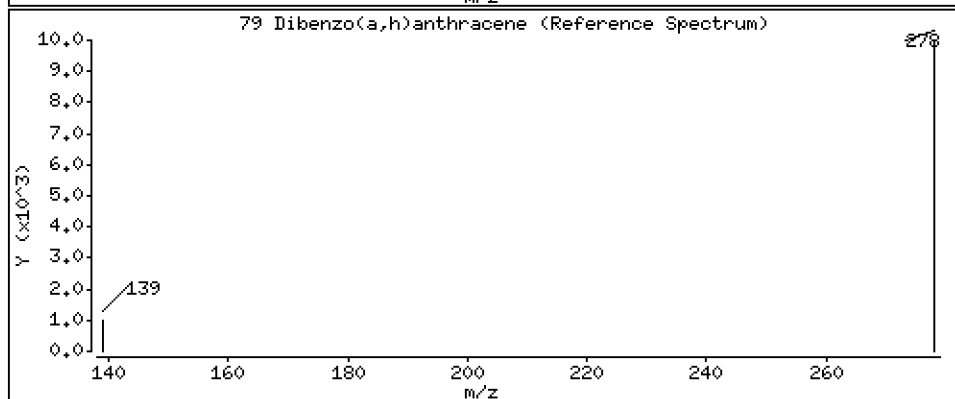
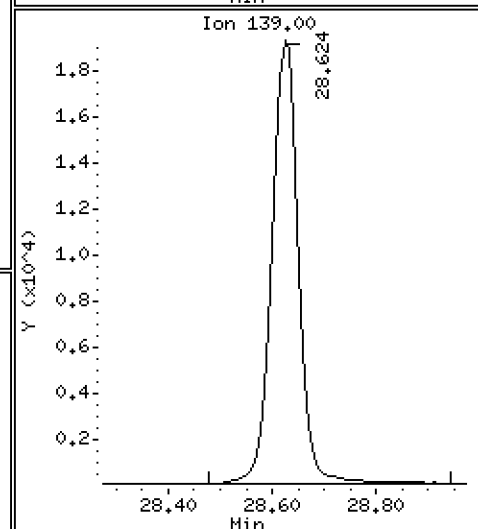
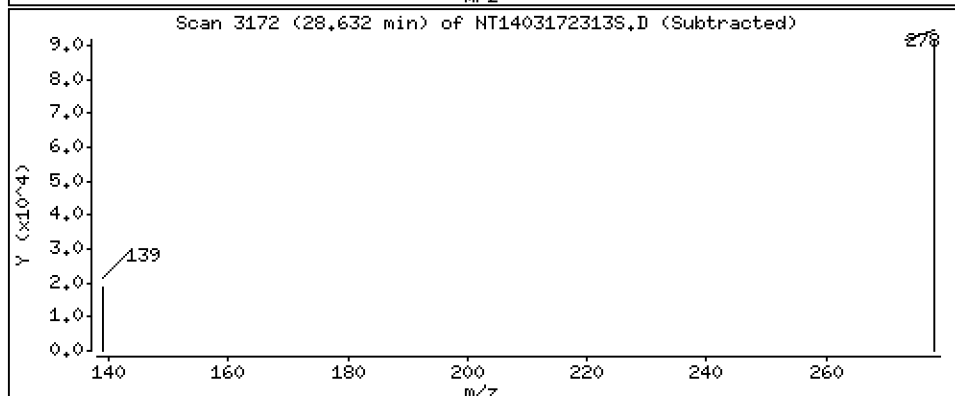
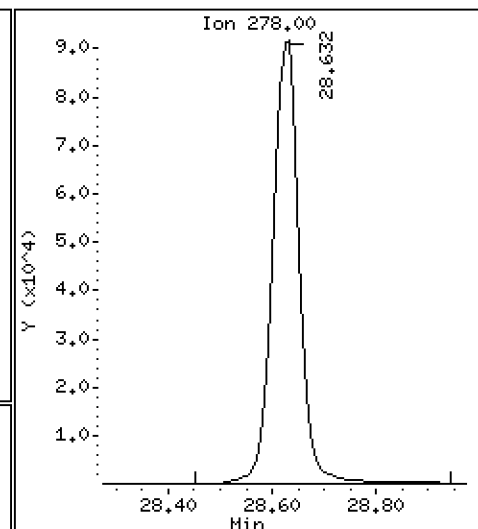
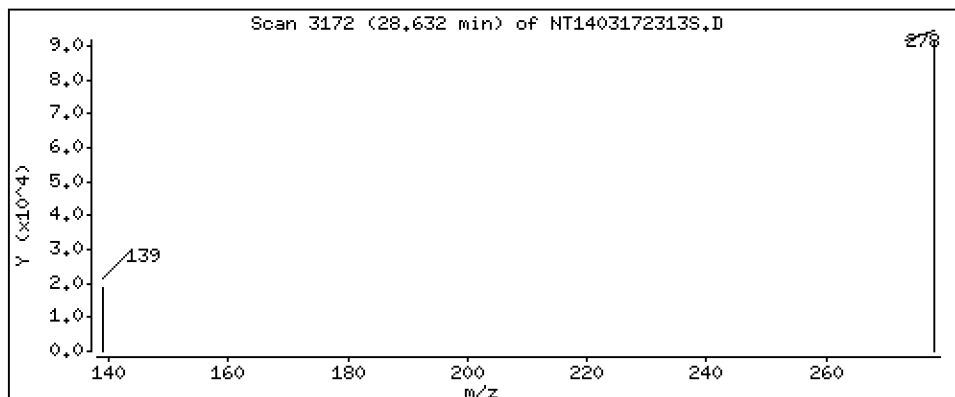
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,317 ug/mL



Date : 17-MAR-2023 21:42

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BS2

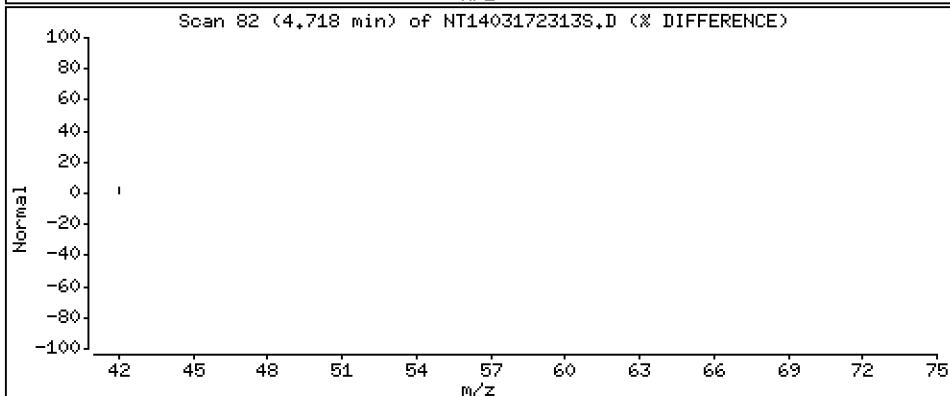
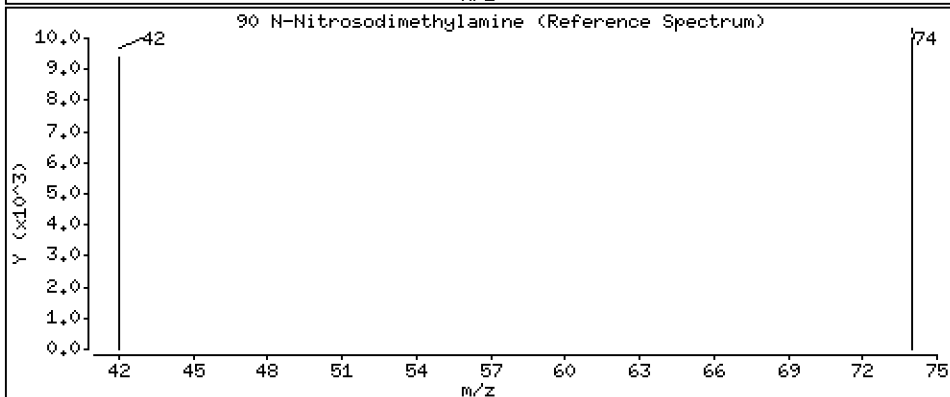
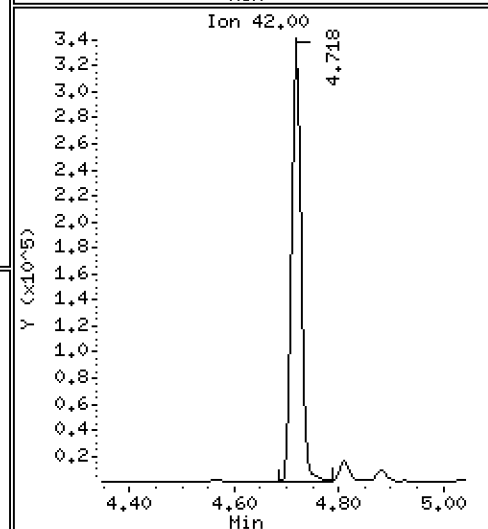
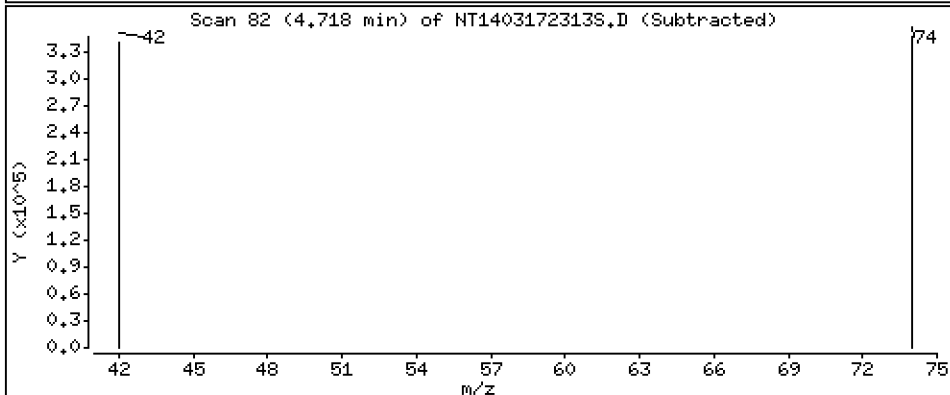
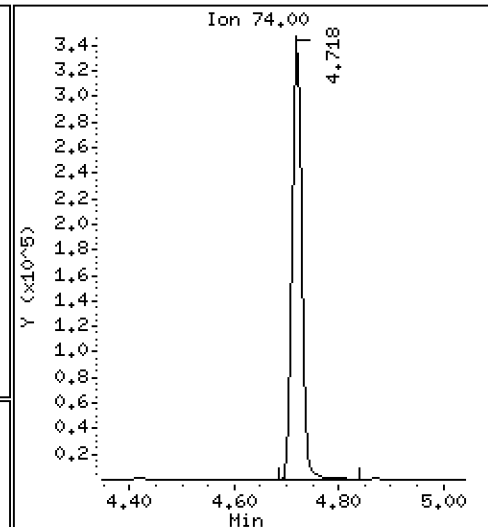
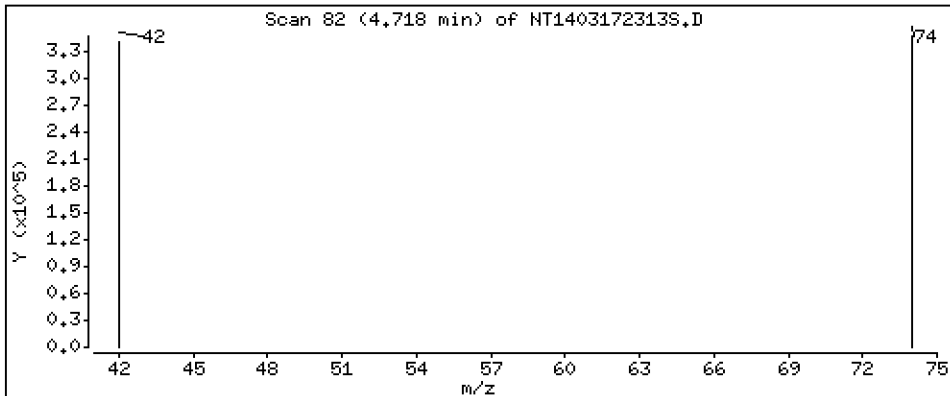
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 9.320 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172313S.D
 Lab Smp Id: BLB0424-BS2
 Inj Date : 17-MAR-2023 21:42 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BS2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	486270	5.90847	5.908 (R)
3 Phenol	94		8.441	8.440	(0.931)	413673	3.65512	3.655
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	358803	3.70472	3.705
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	242461	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	354155	3.77894	3.779
11 Benzyl alcohol	79		9.339	9.338	(1.030)	277212	4.17884	4.179
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	351317	3.84858	3.849
13 2-Methylphenol	108		9.564	9.563	(1.055)	277167	3.54524	3.545
15 4-Methylphenol	108		9.836	9.827	(1.085)	323324	3.91468	3.915
16 N-Nitroso-di-n-propylamine	70		9.898	9.897	(1.092)	236161	4.04421	4.044
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	633726	8.06977	8.070
24 Benzoic acid	105		11.123	10.999	(0.962)	1465332	22.3141	22.31
26 1,2,4-Trichlorobenzene	180		11.480	11.479	(0.993)	300387	3.90271	3.903
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	913509	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	170270	4.37137	4.371
39 Dimethylphthalate	163		14.706	14.698	(0.967)	679707	4.62110	4.621
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	430694	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	817931	5.22317	5.223
54 N-Nitrosodiphenylamine	169		16.546	16.545	(0.907)	465481	4.19800	4.198
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	192106	4.50986	4.510
58 Pentachlorophenol	266		17.974	17.982	(0.985)	445586	14.3981	14.40
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	818351	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	512059	6.72298	6.723 (R)
67 Butylbenzylphthalate	149		22.308	22.315	(0.957)	491027	6.32135	6.321
* 69 Chrysene-d12	240		23.299	23.298	(1.000)	441807	4.00000	
* 77 Perylene-d12	264		25.931	25.938	(1.000)	296844	4.00000	
79 Dibenzo(a,h)anthracene	278		28.631	28.623	(1.104)	324850	4.31685	4.317
90 N-Nitrosodimethylamine	74		4.717	4.694	(0.520)	468623	9.32050	9.320

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172313S.D
 Lab Smp Id: BLB0424-BS2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	242461	8.03
27 Naphthalene-d8	825617	412809	1651234	913509	10.65
42 Acenaphthene-d10	392947	196474	785894	430694	9.61
59 Phenanthrene-d10	789887	394944	1579774	818351	3.60
69 Chrysene-d12	494007	247004	988014	441807	-10.57
77 Perylene-d12	375441	187721	750882	296844	-20.93

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403172313S.D

Lab ID: BLB0424-BS2

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 21:42

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.962	0.951	0.0107	Benzoic acid

RRT check based on Ccal File: 20230317.b/NT1403172303S.D

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723145.D

Date: 17-MAR-2023 22:19

Client ID:

Sample Info: BLB0424-BSM2

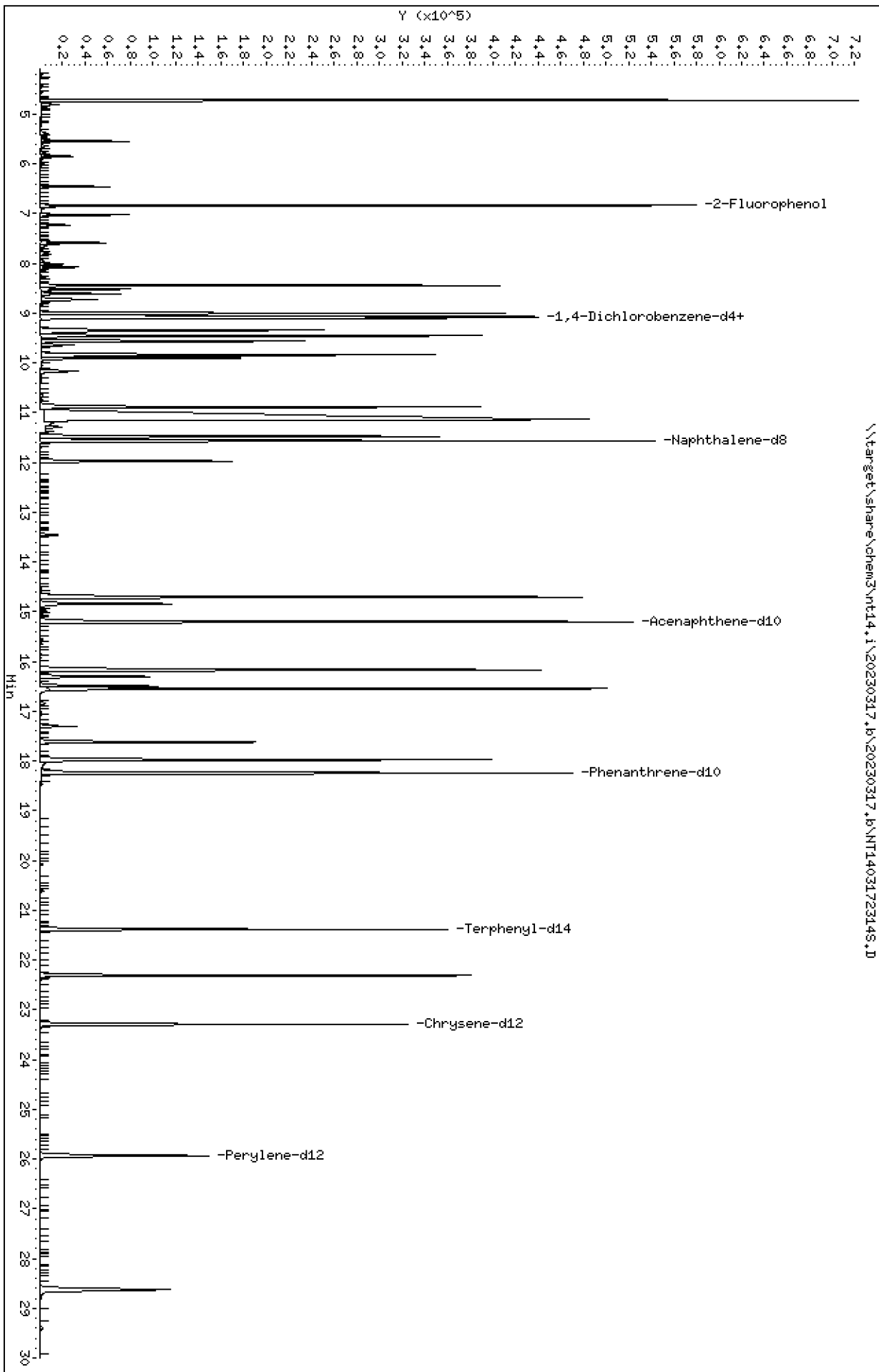
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723145.D



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

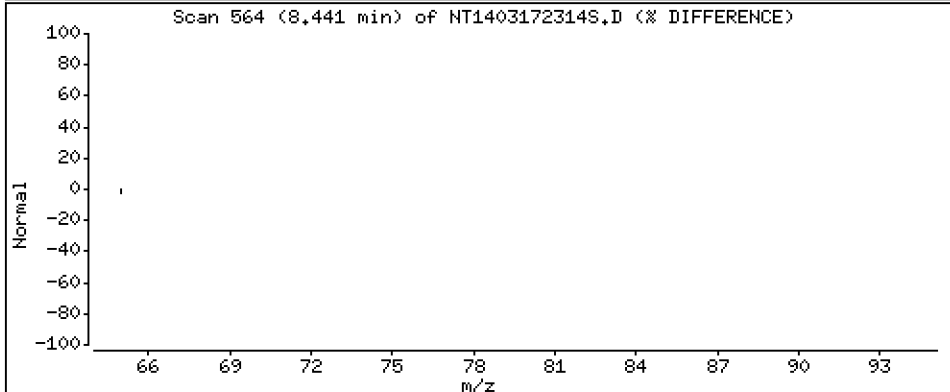
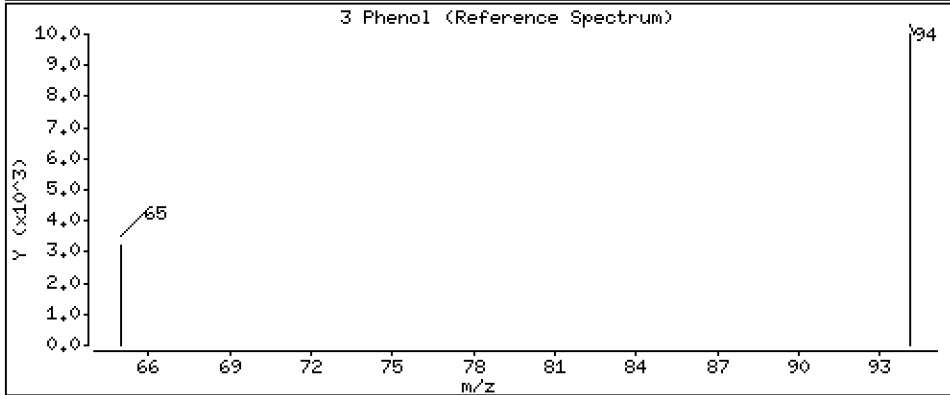
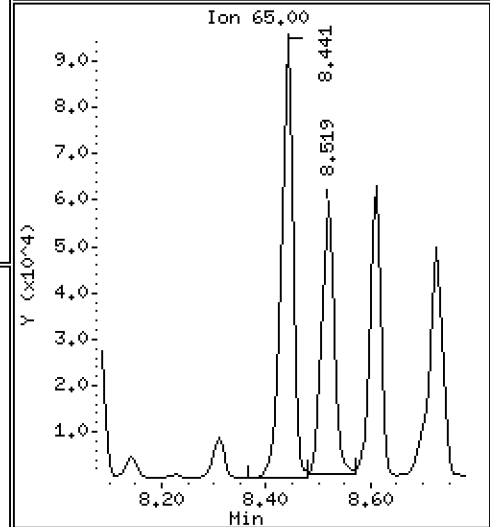
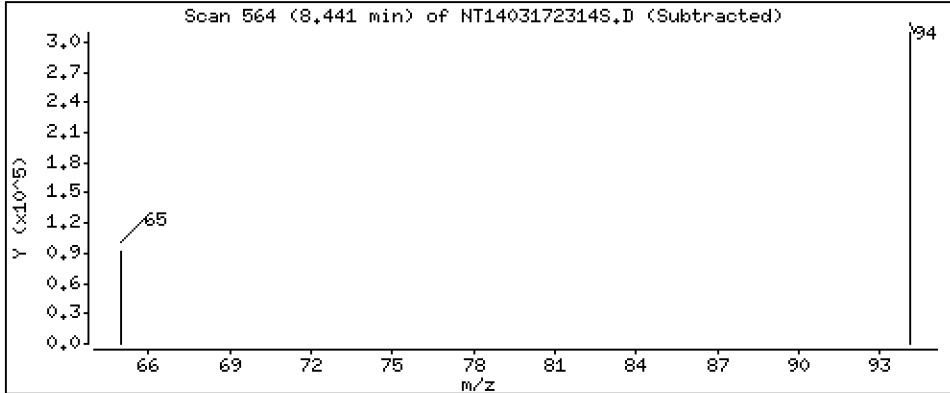
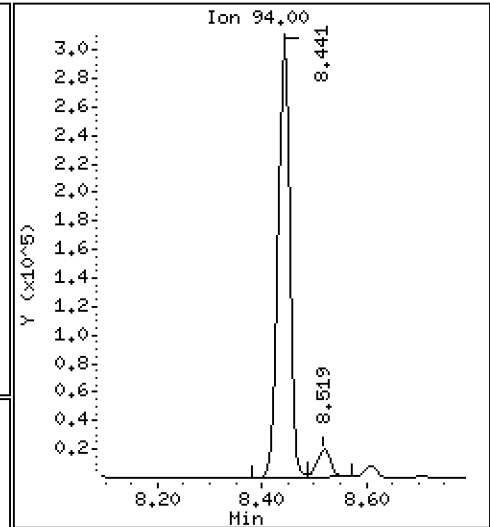
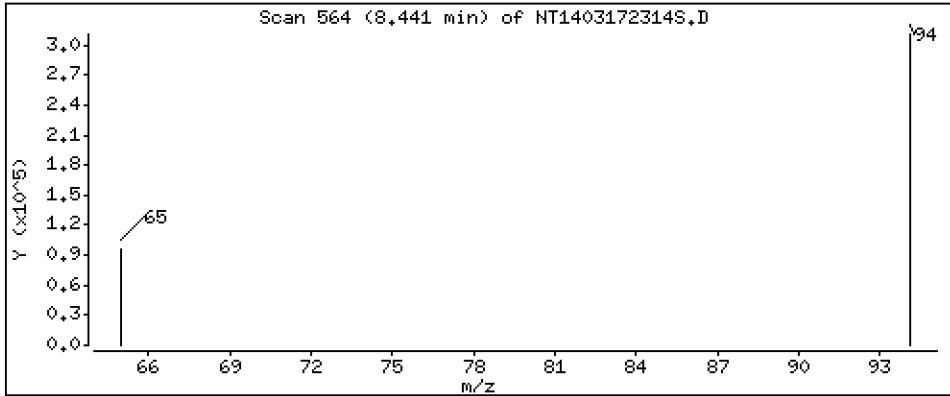
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 3,882 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

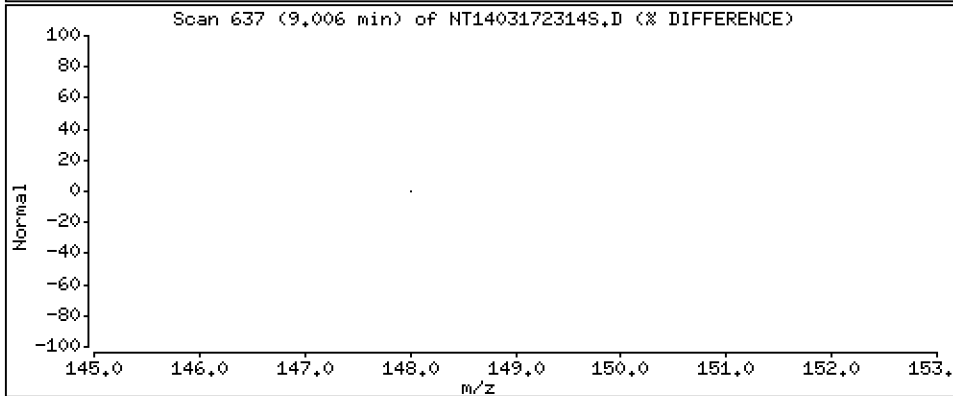
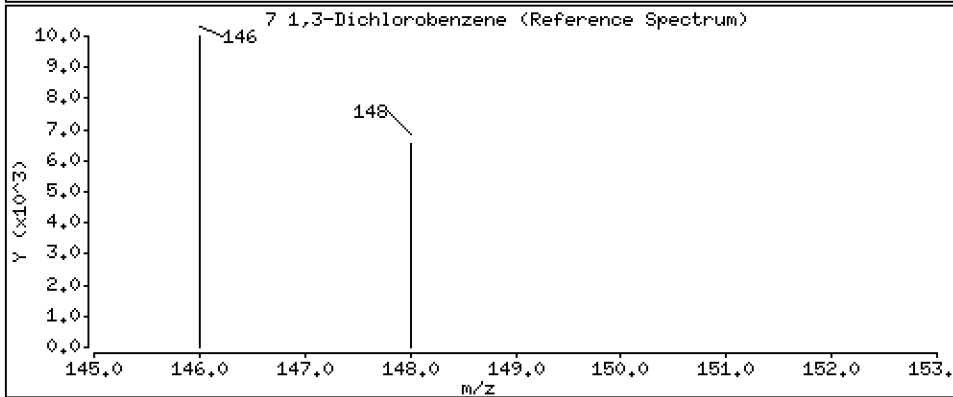
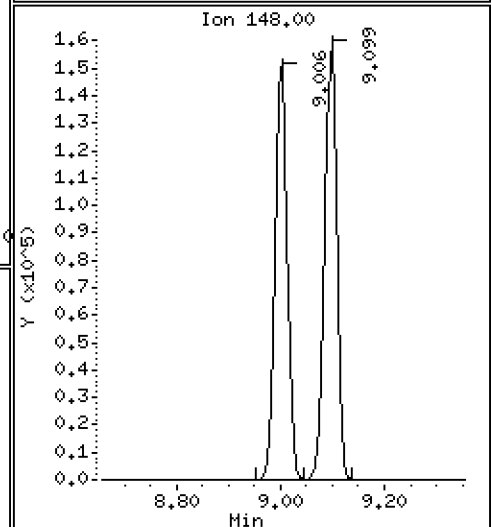
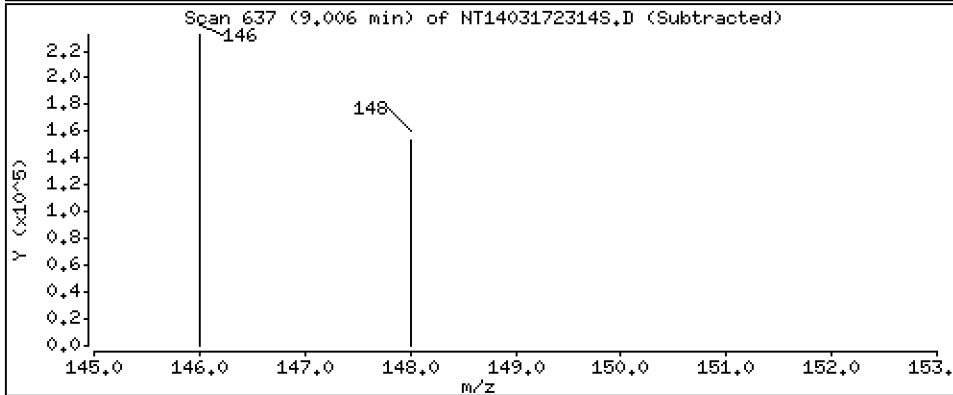
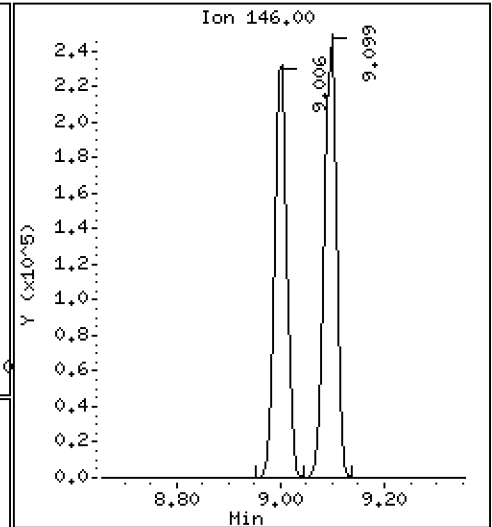
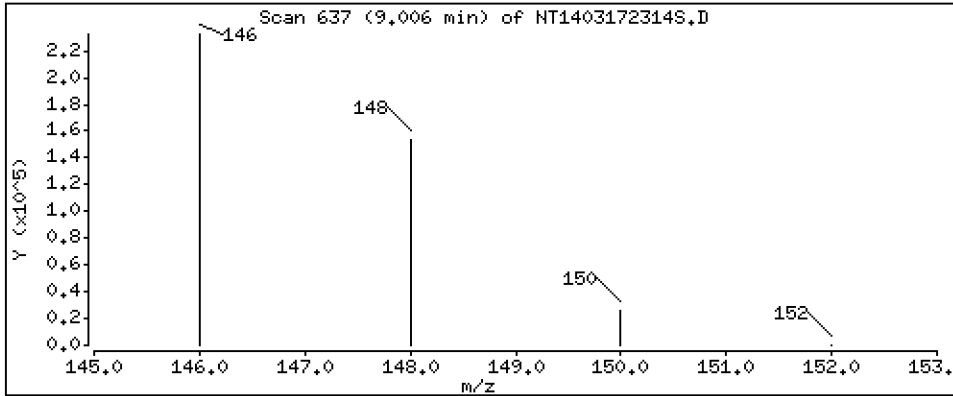
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 3.847 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

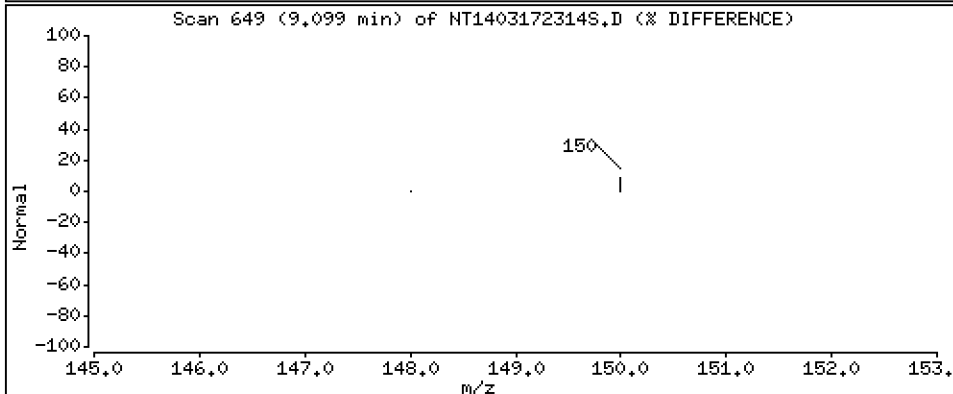
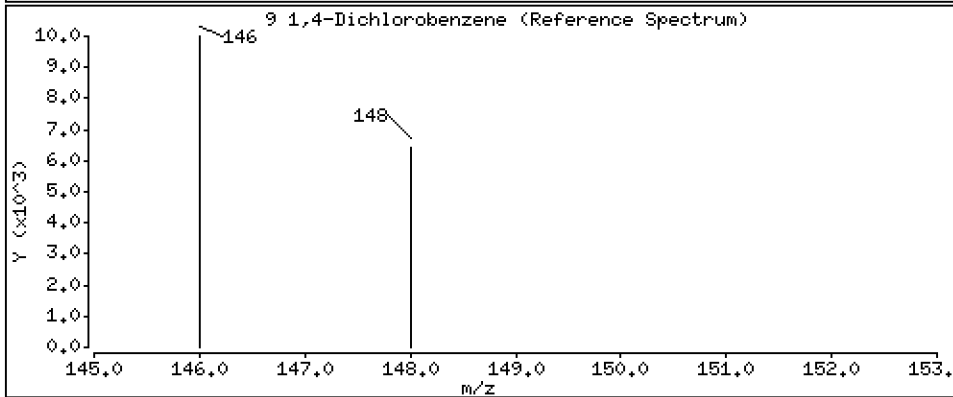
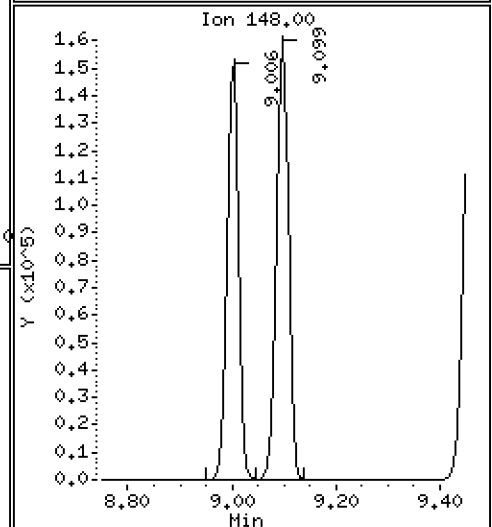
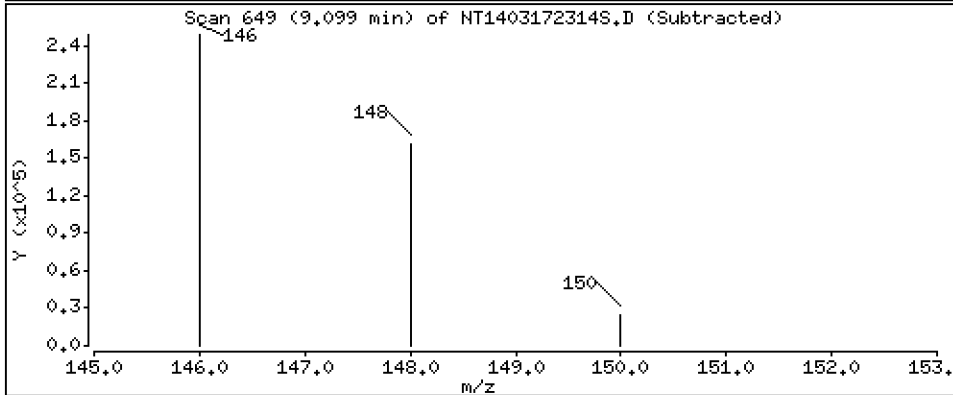
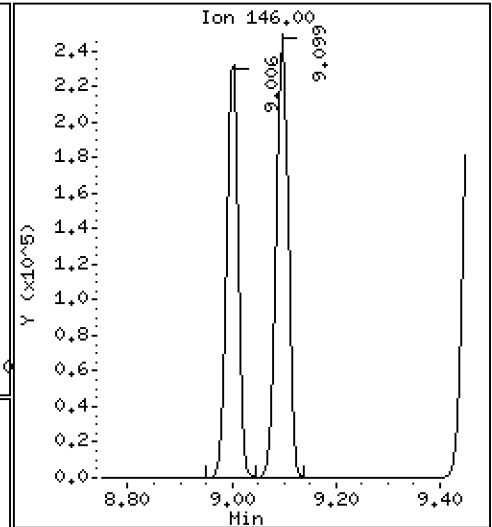
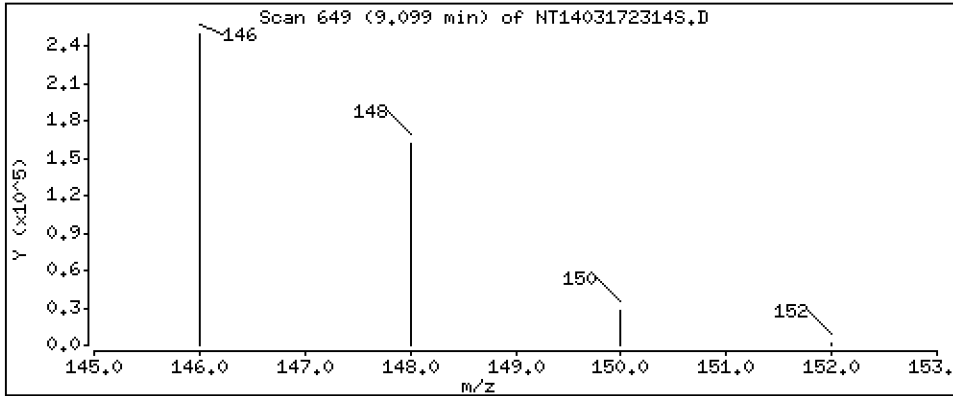
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 3,923 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

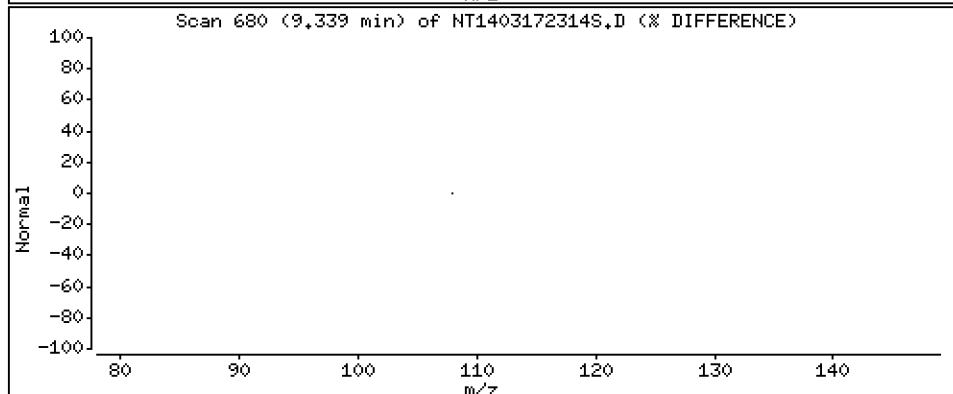
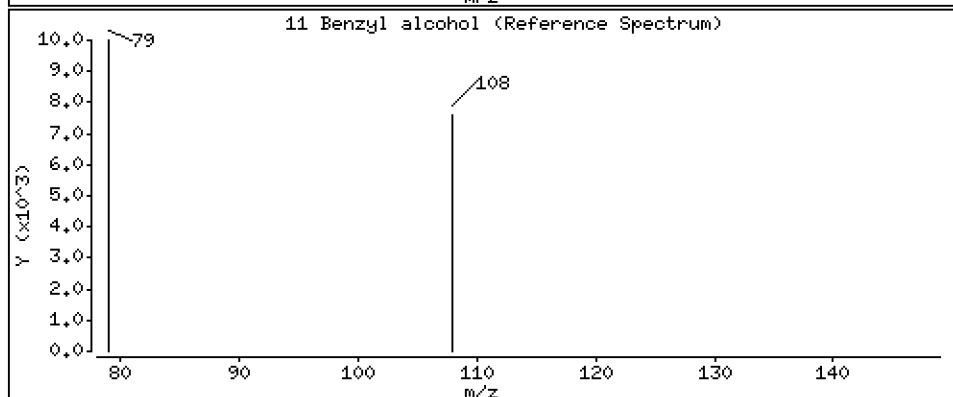
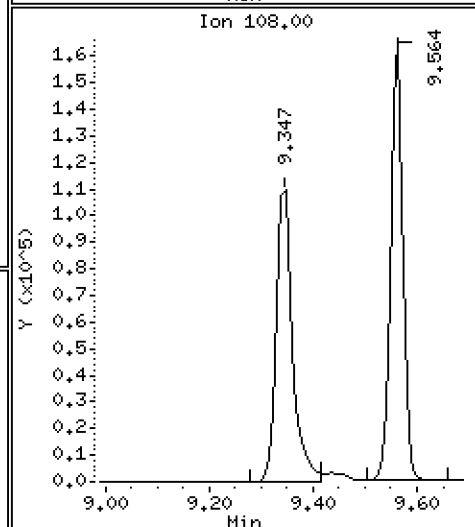
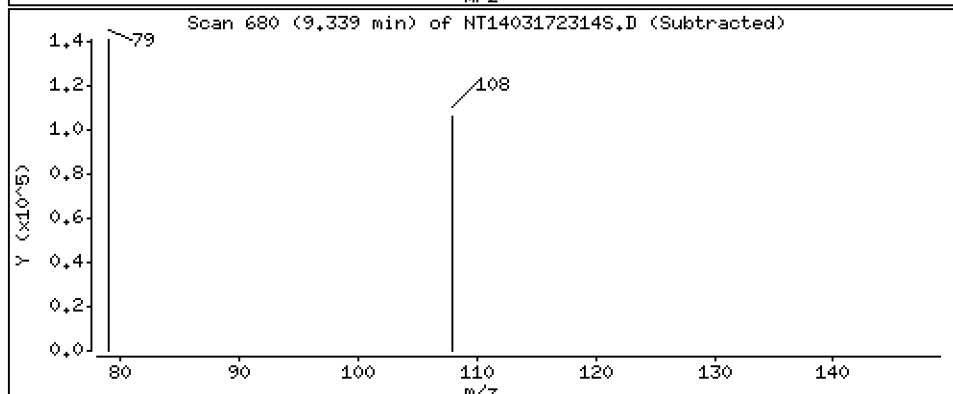
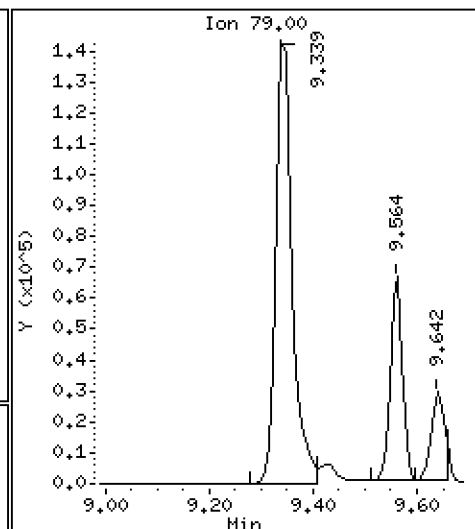
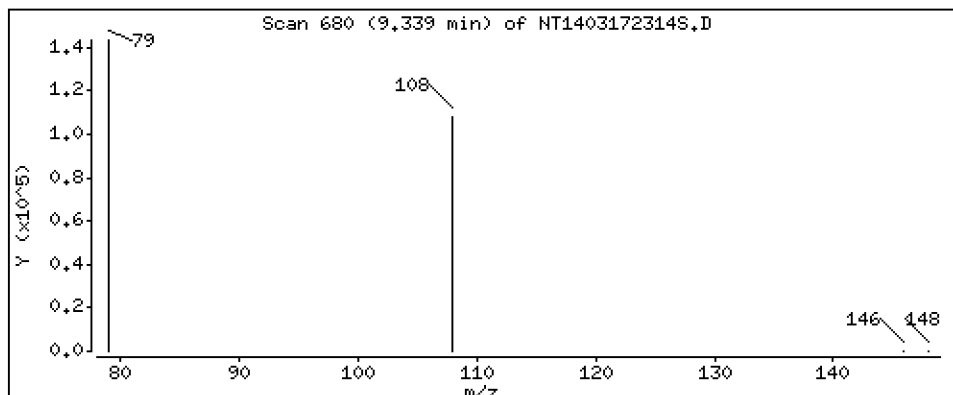
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.375 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

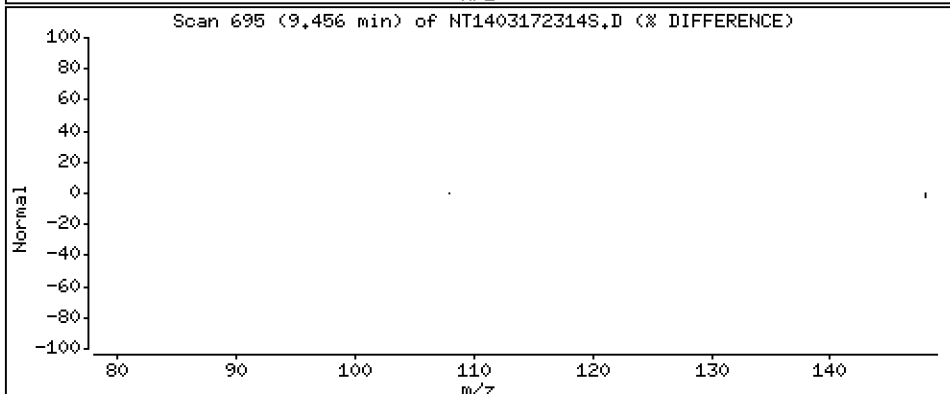
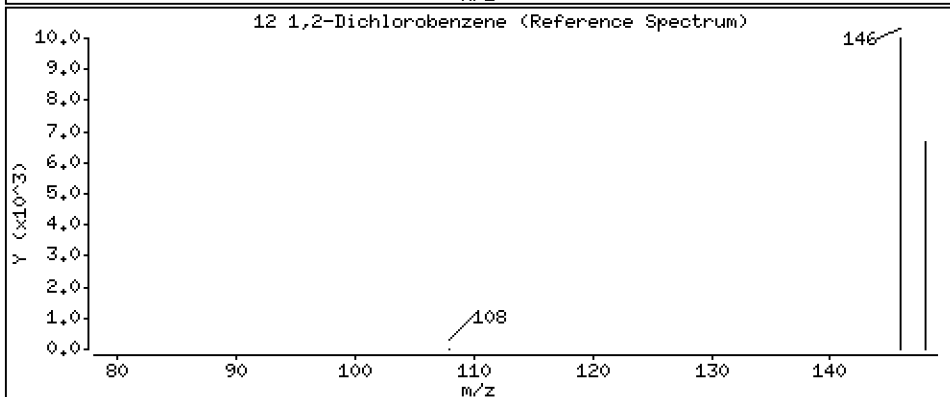
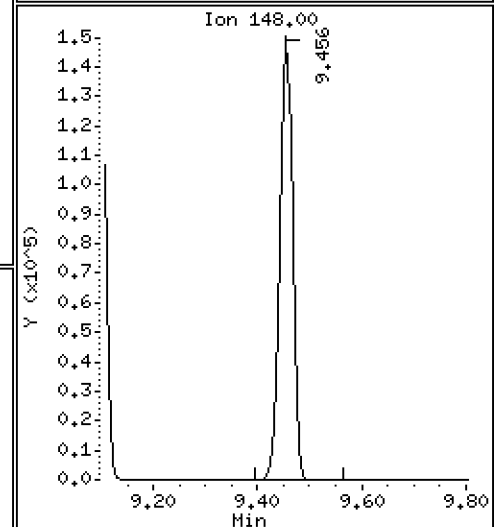
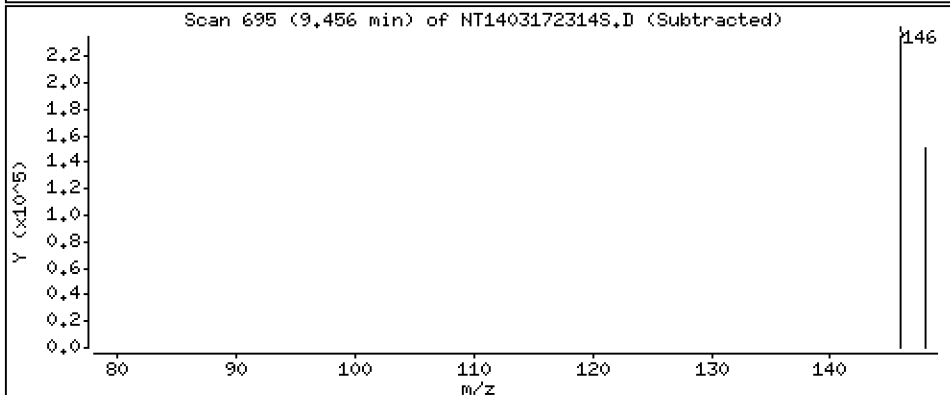
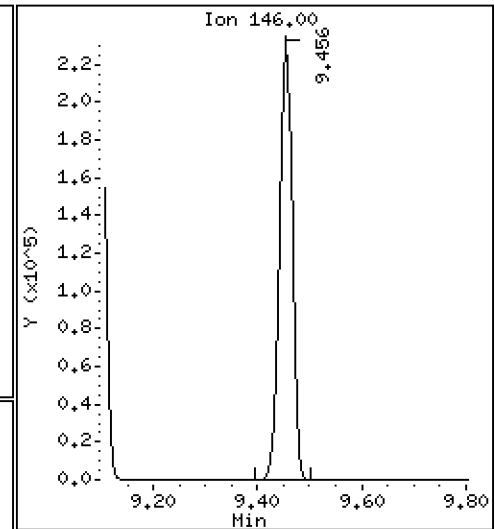
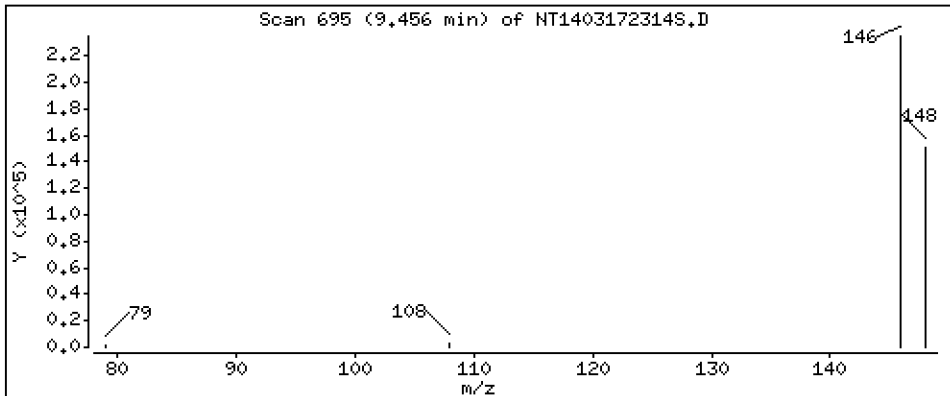
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 3,976 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

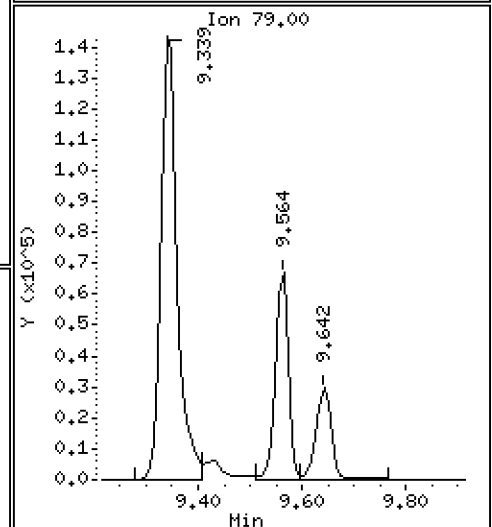
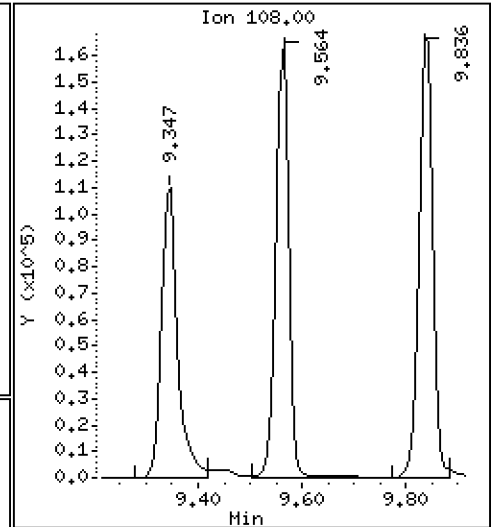
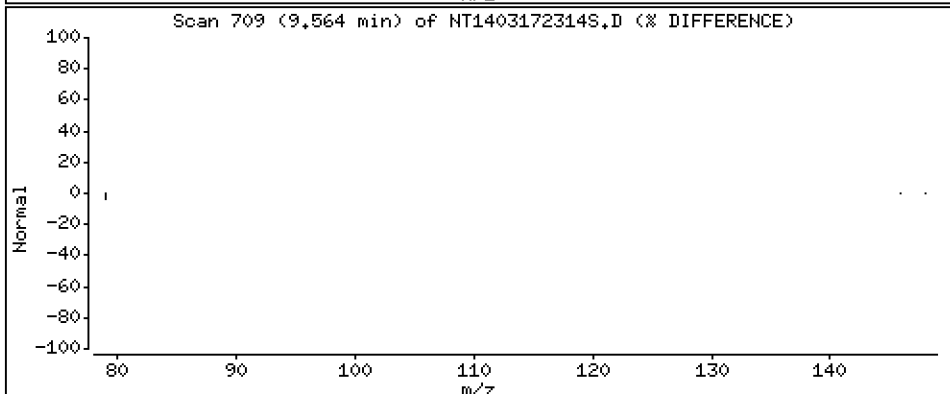
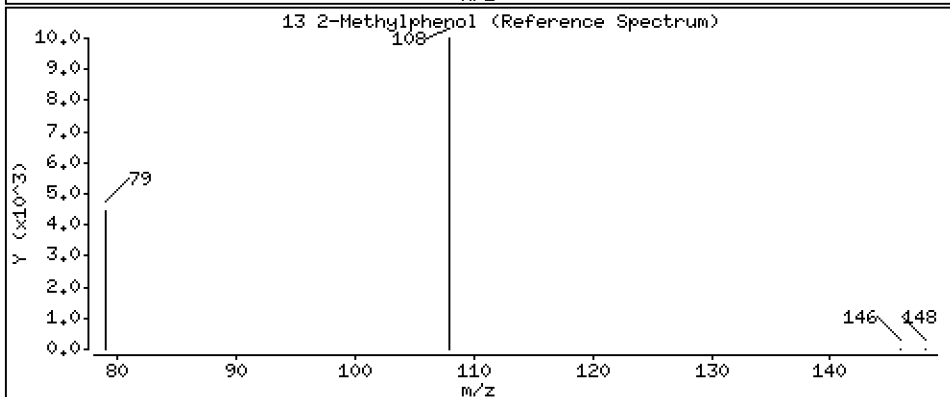
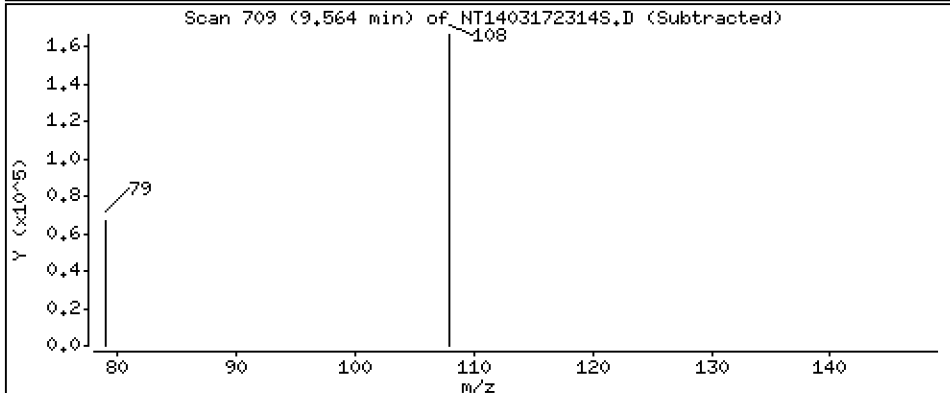
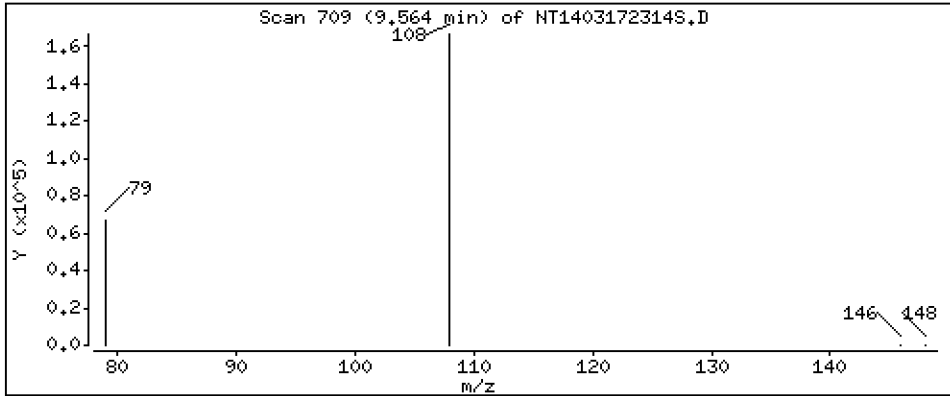
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.319 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

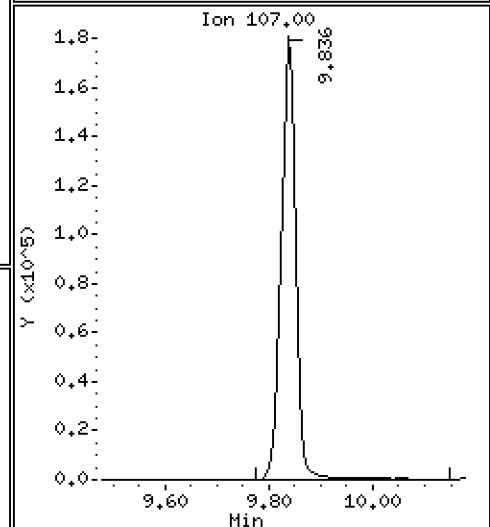
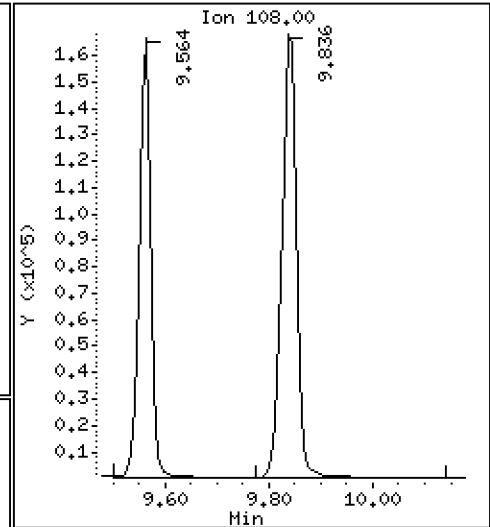
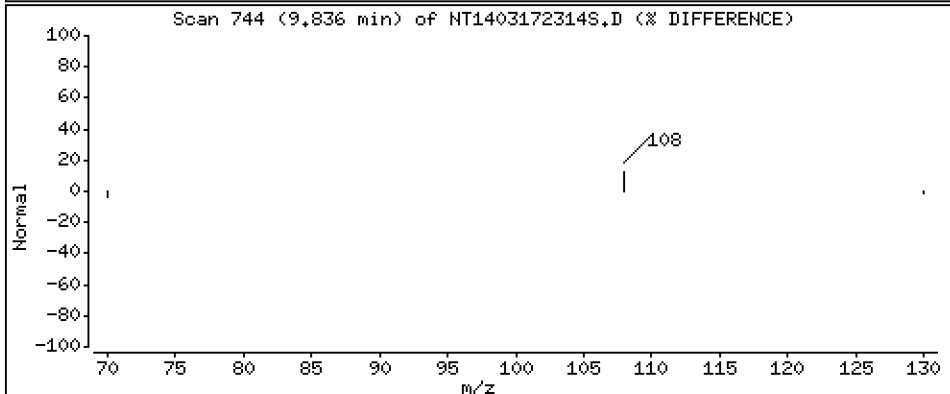
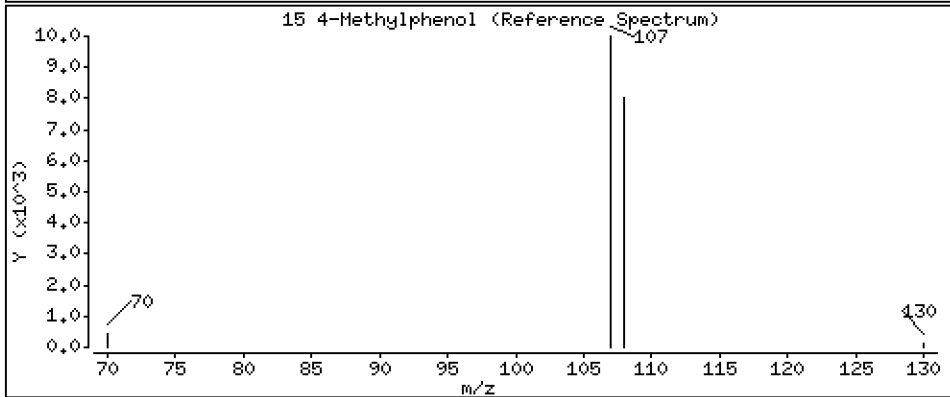
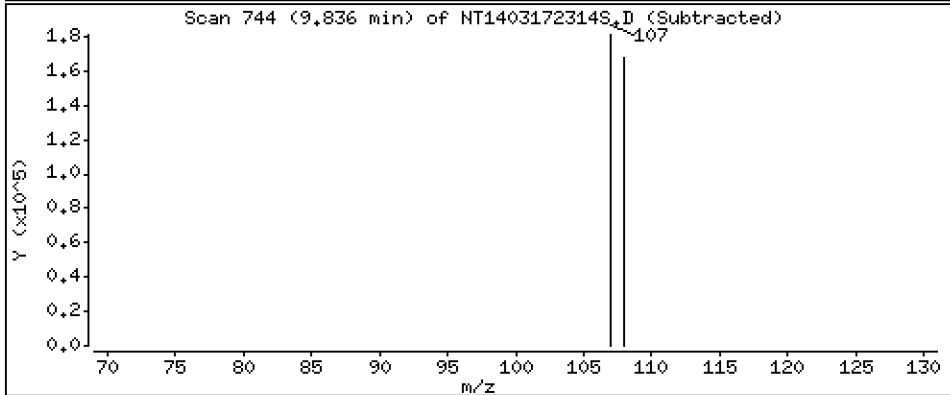
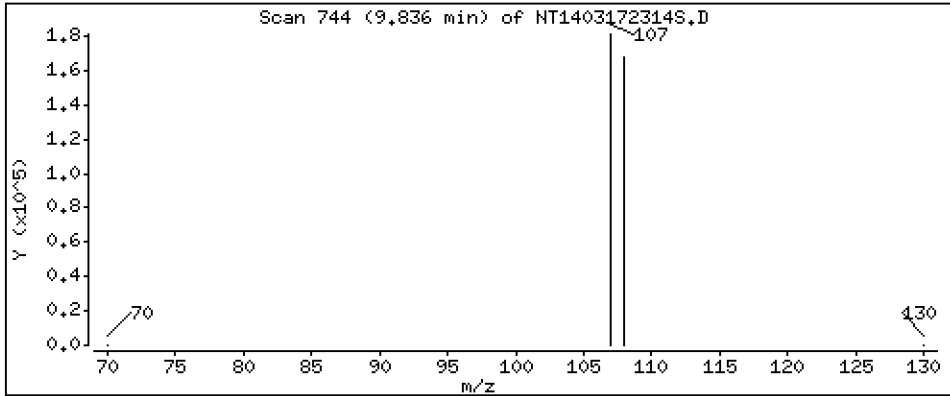
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 3,857 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

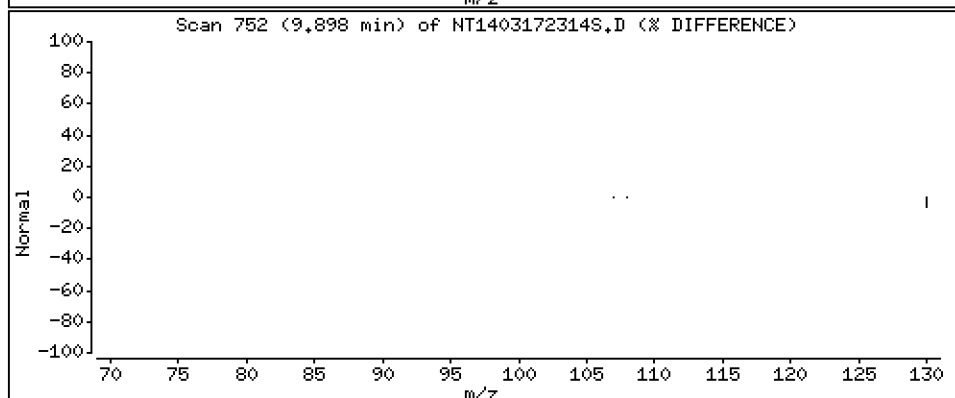
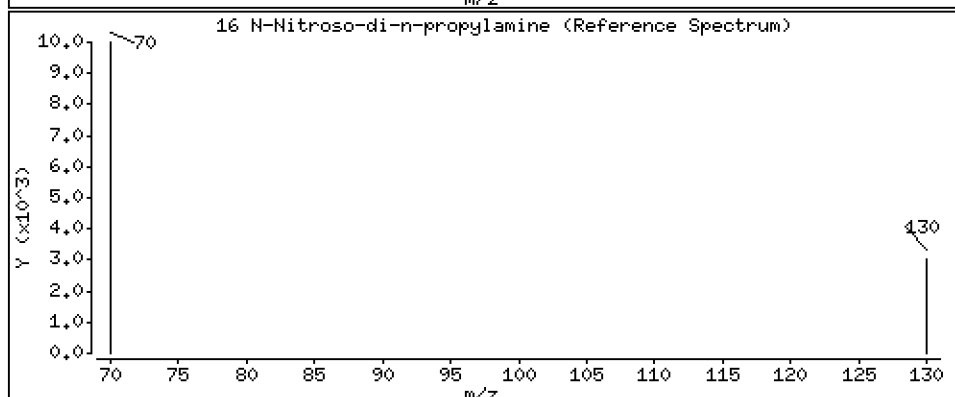
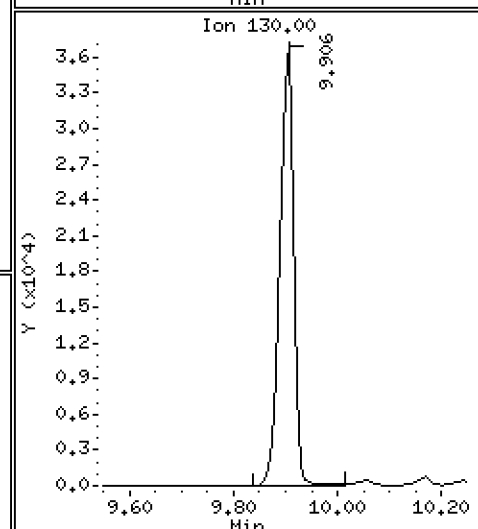
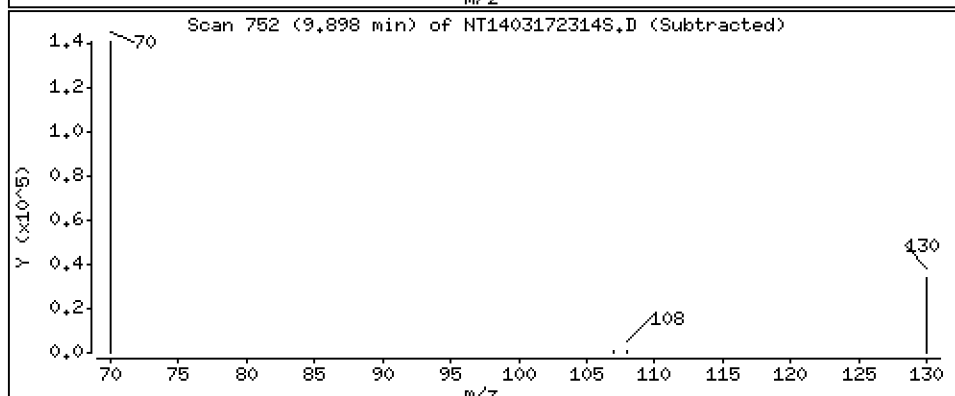
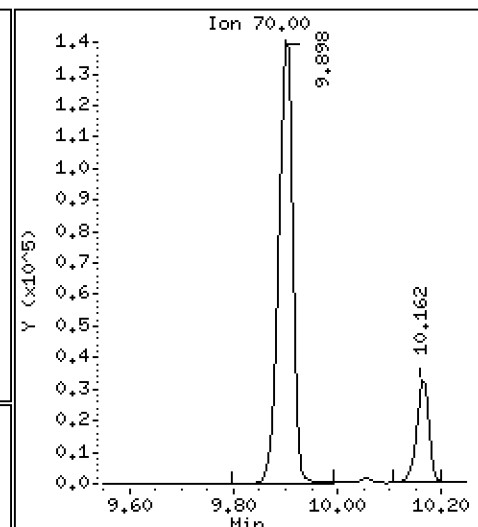
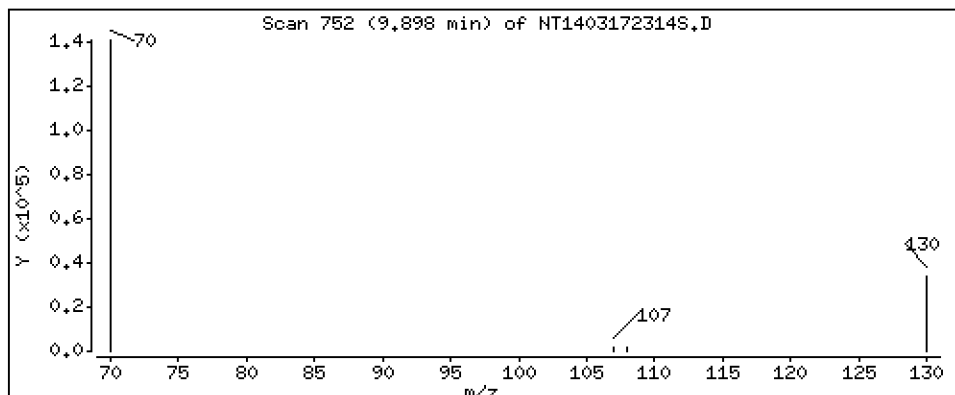
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,228 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

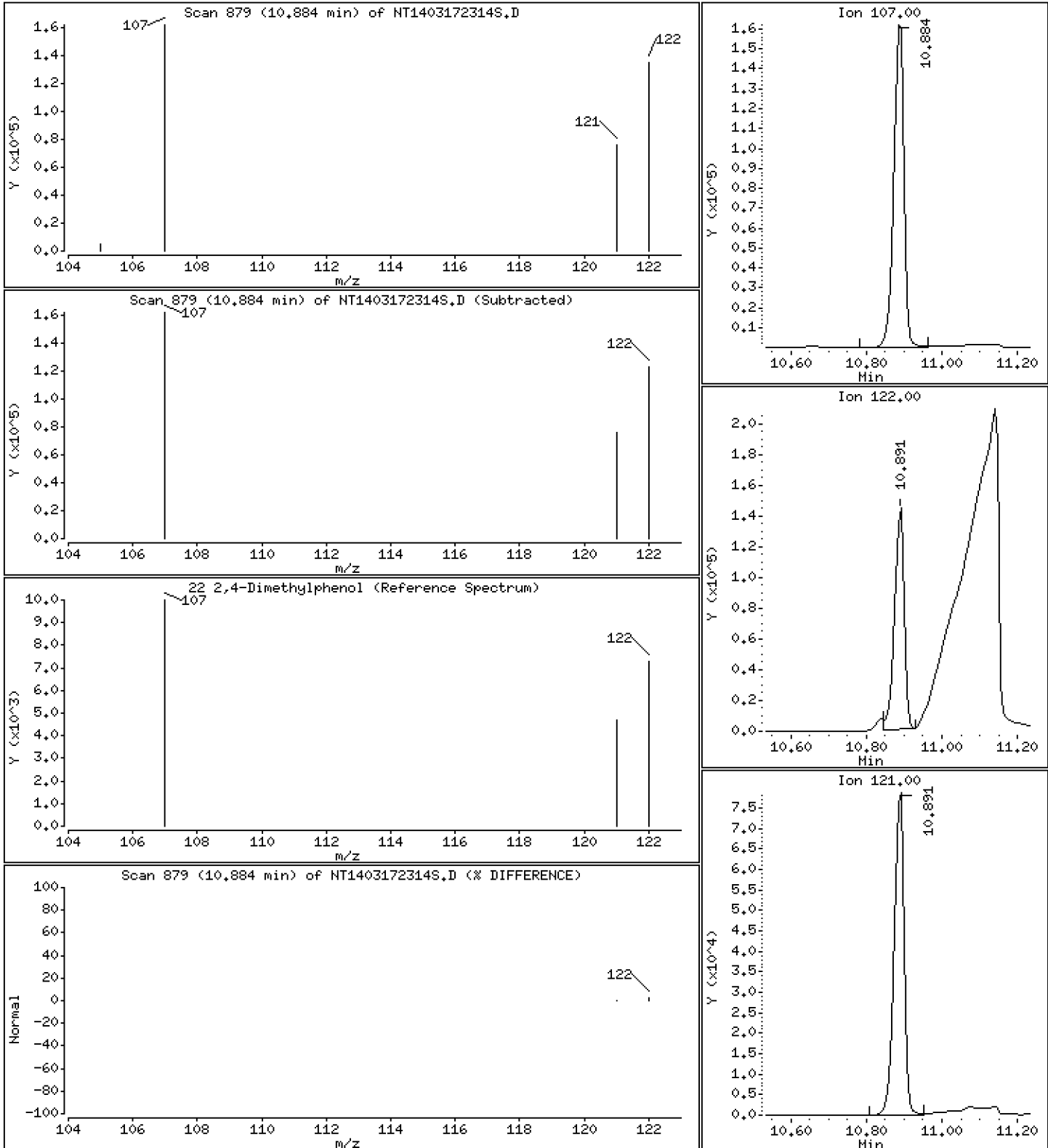
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 3,546 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

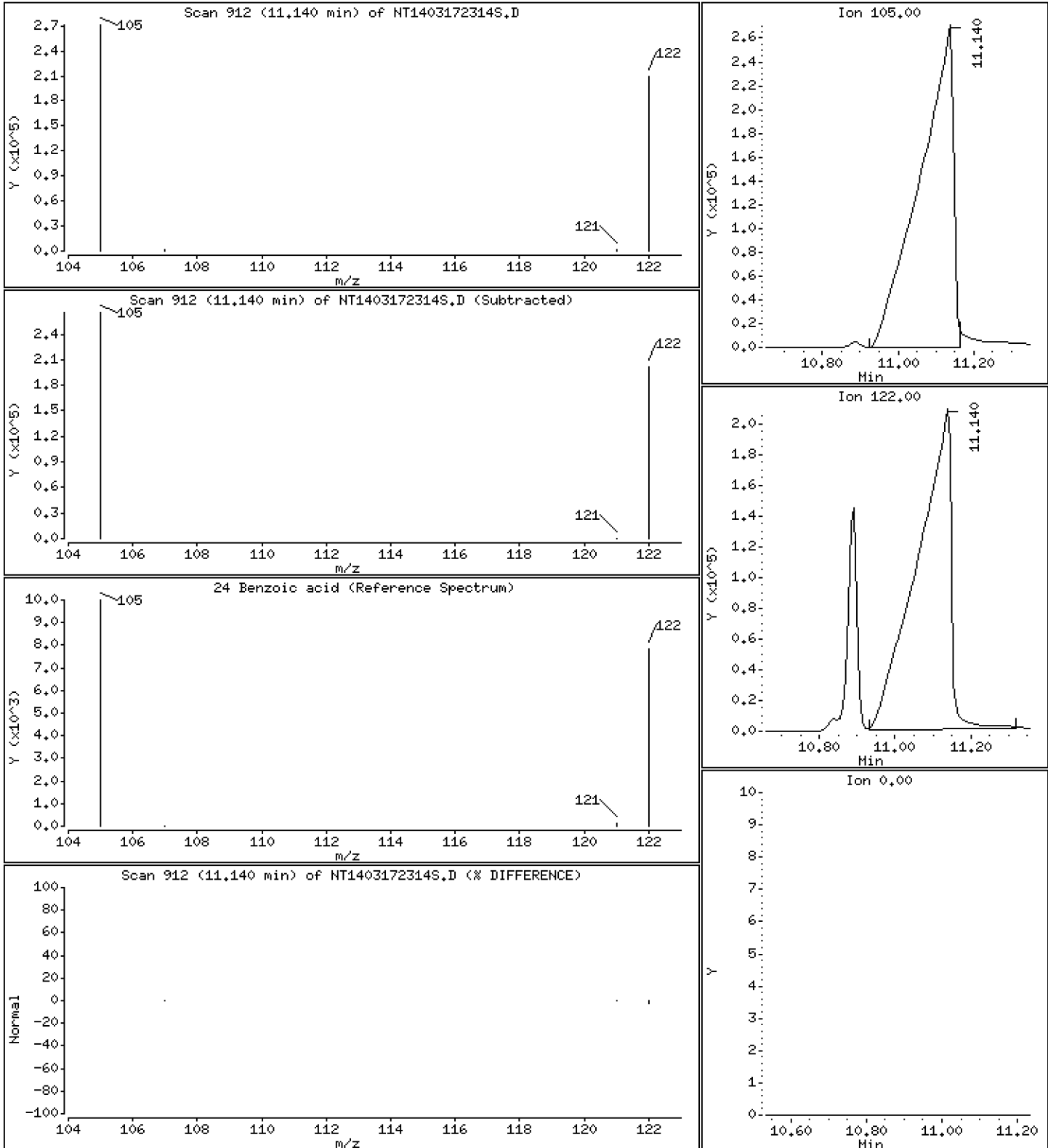
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 24,15 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

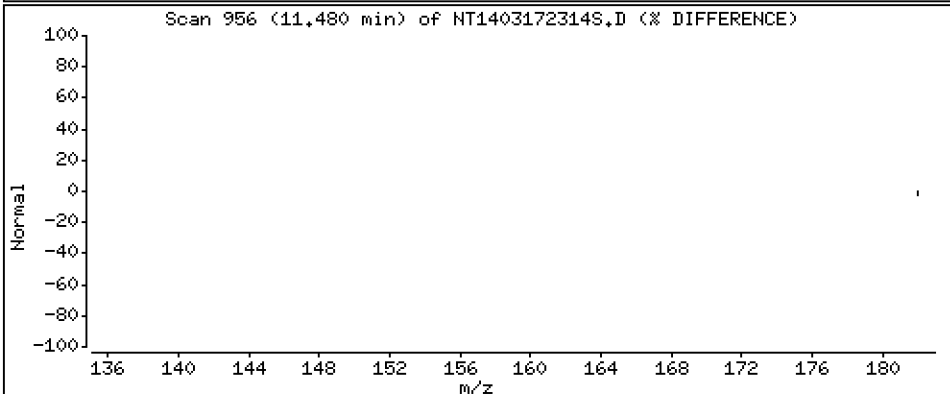
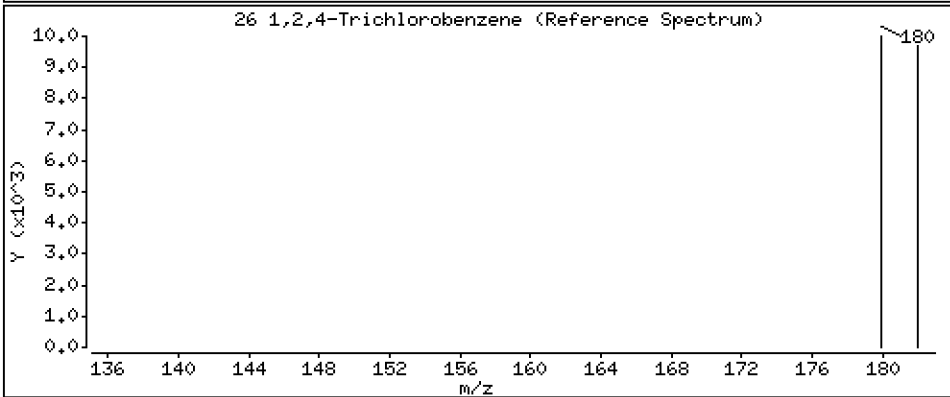
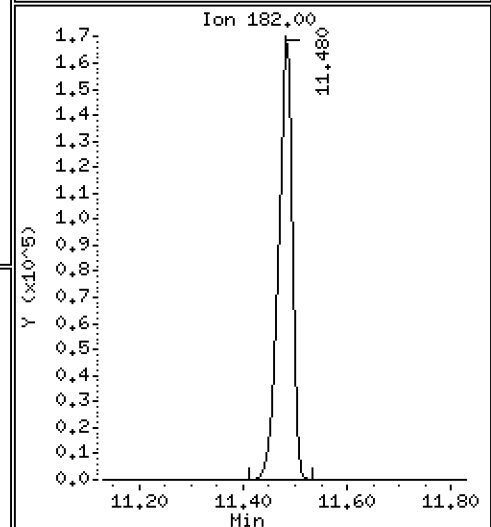
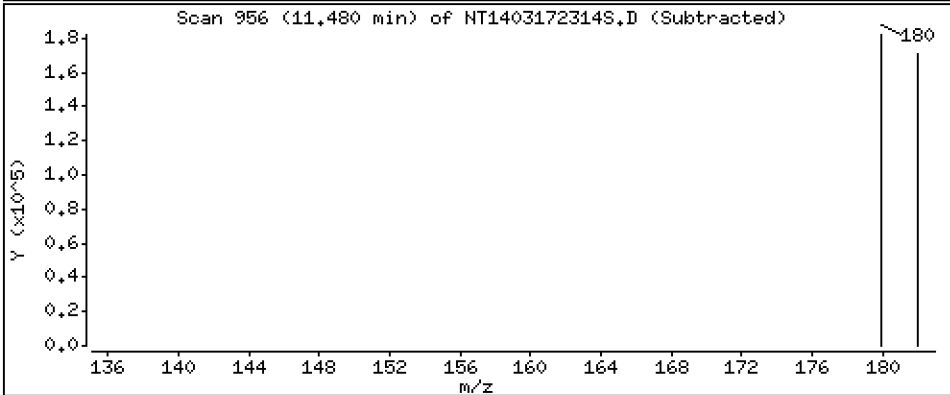
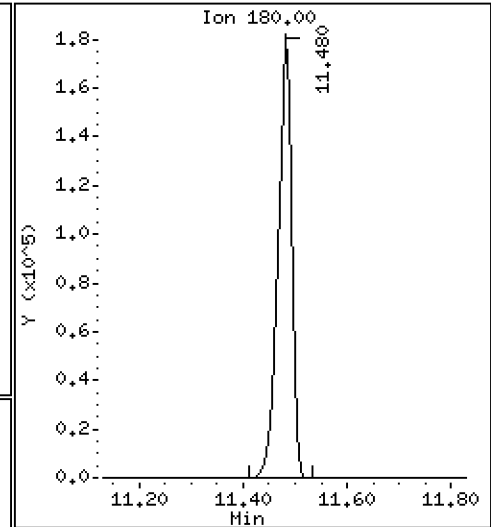
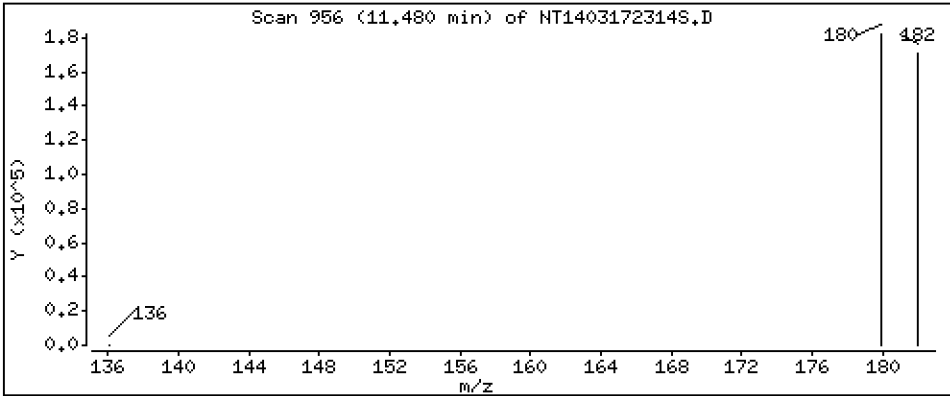
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,034 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

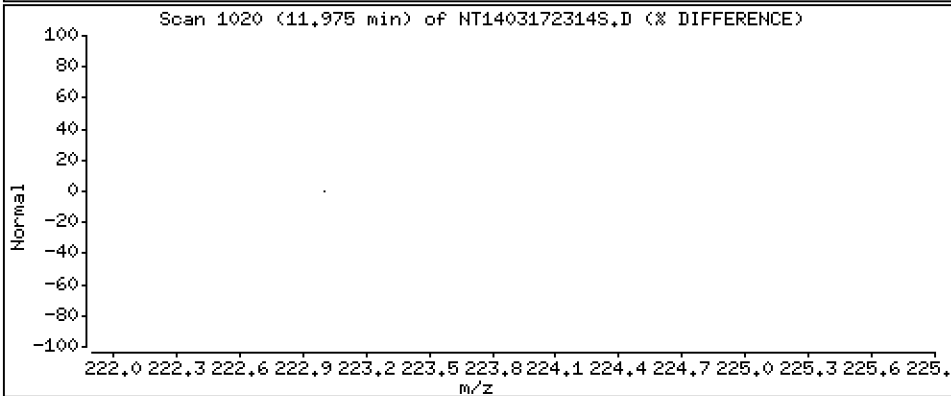
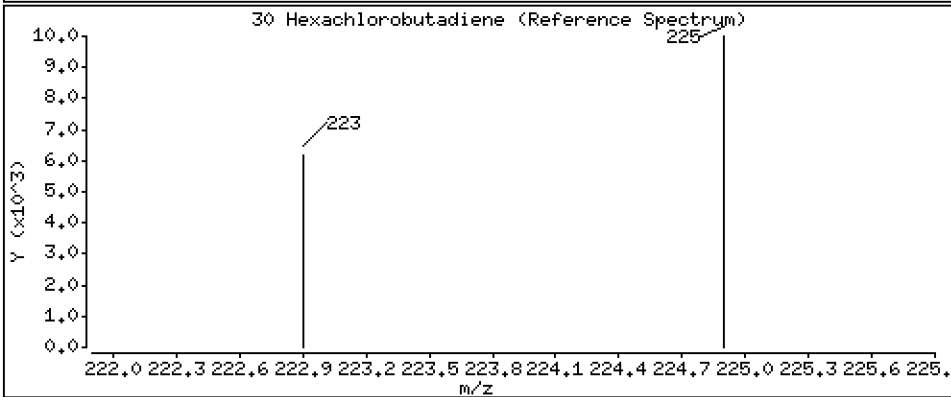
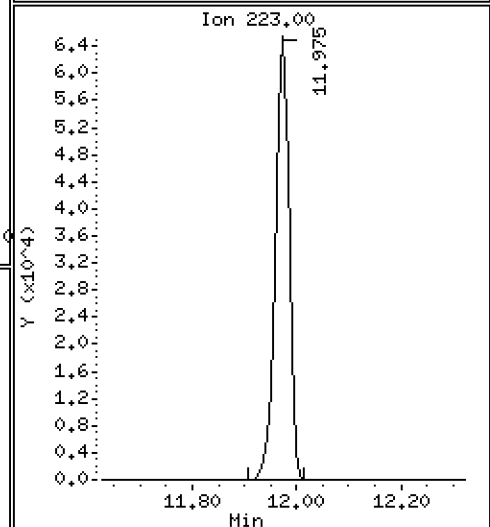
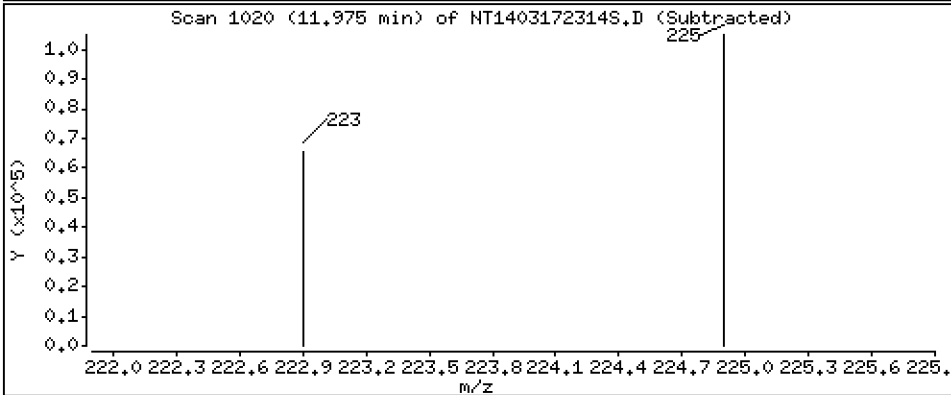
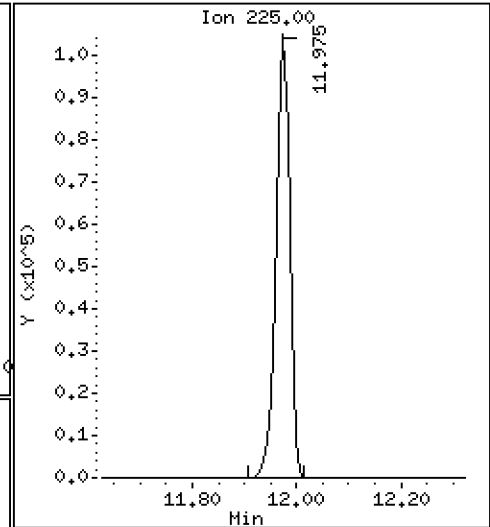
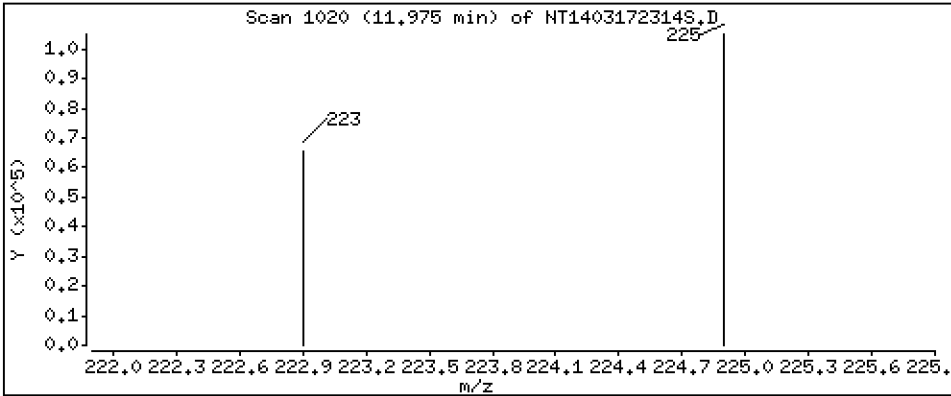
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,491 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

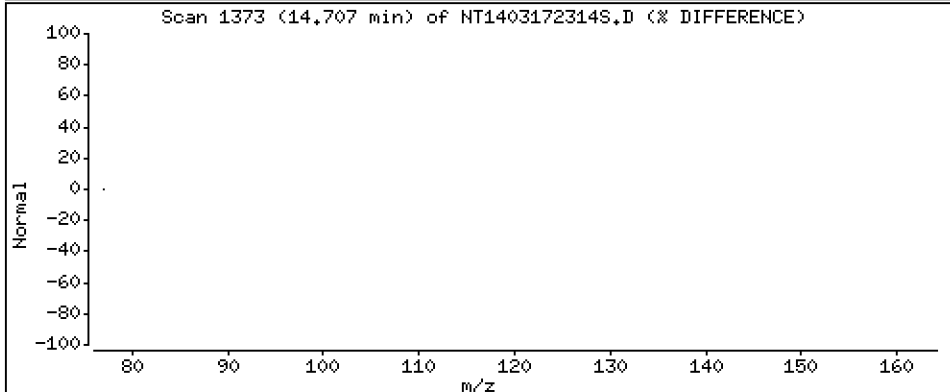
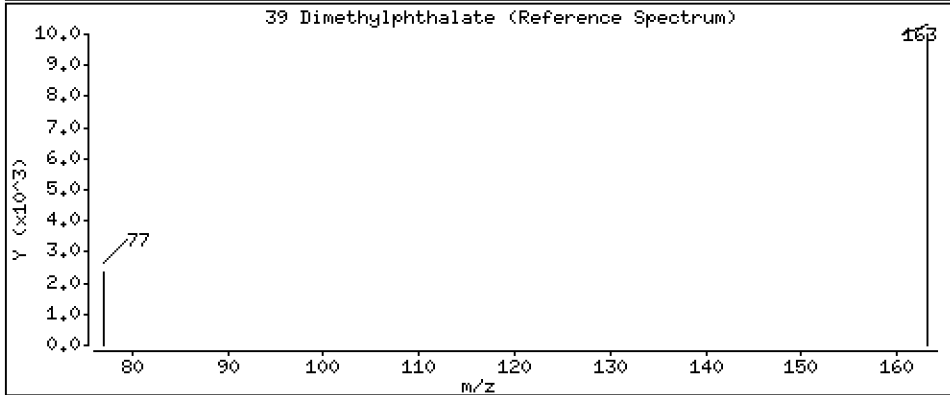
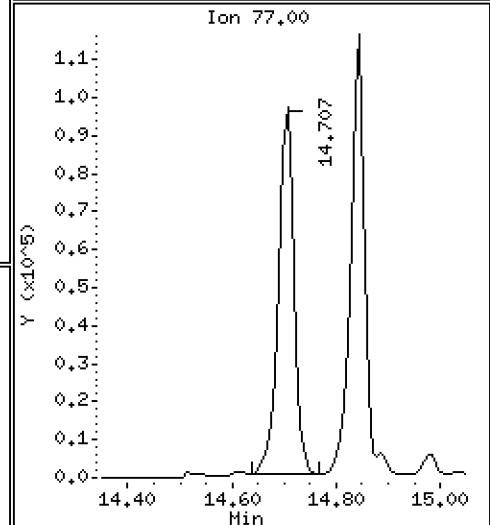
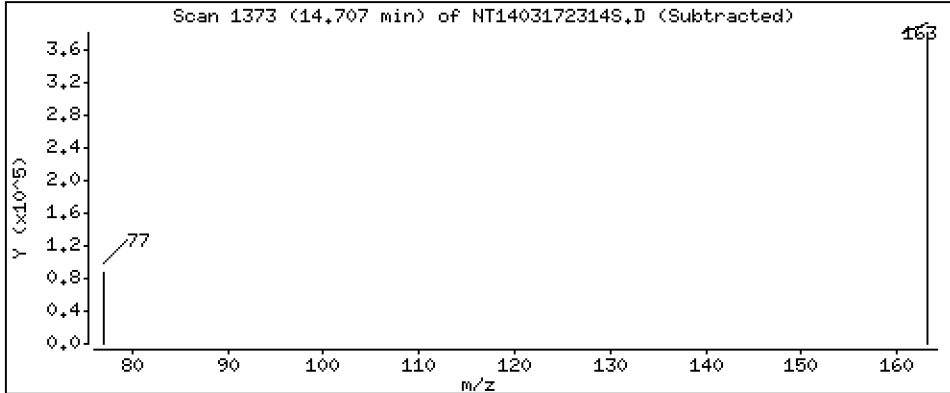
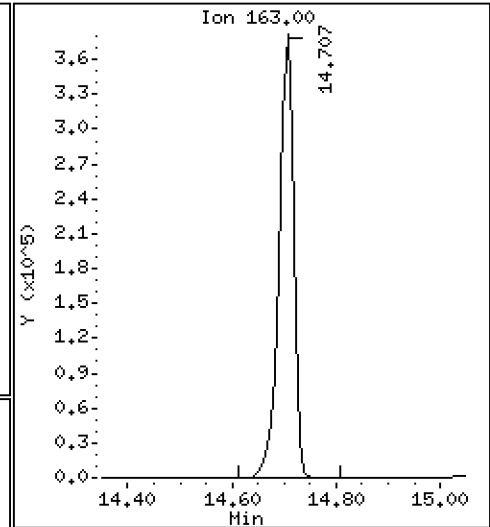
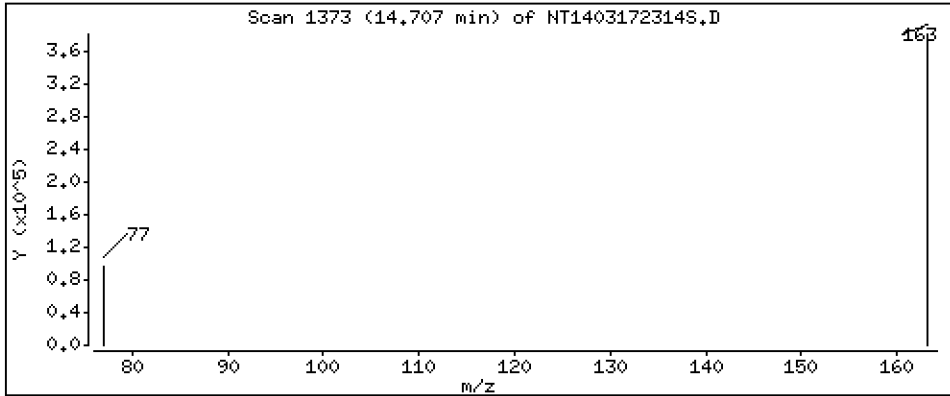
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,740 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

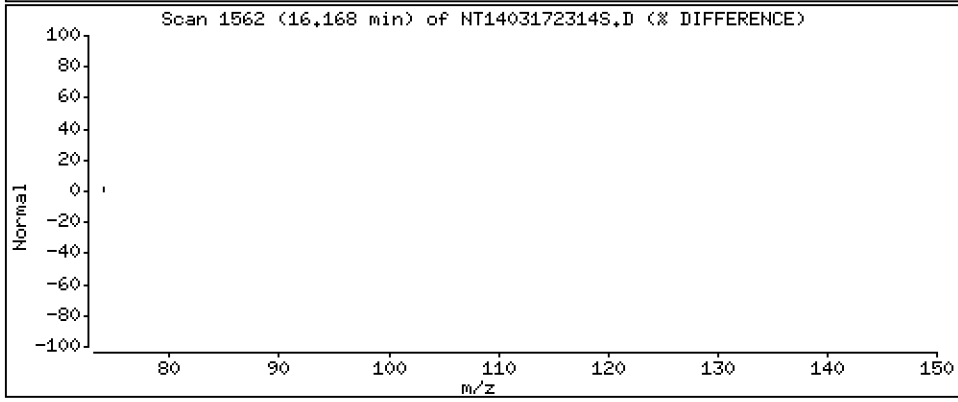
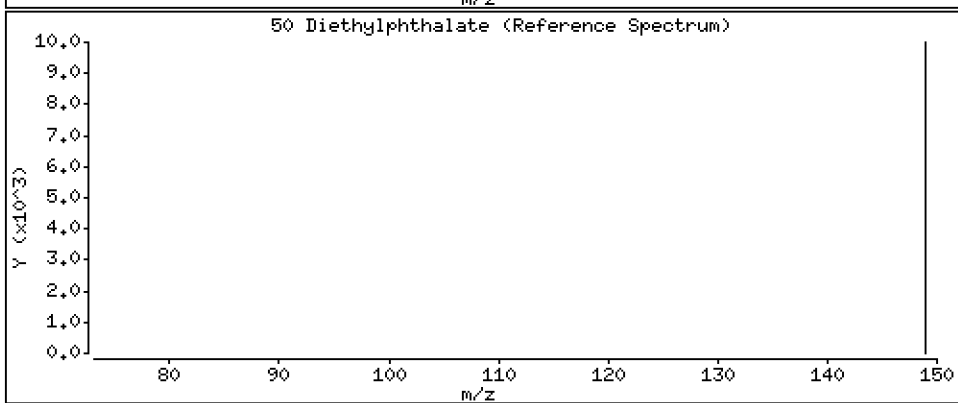
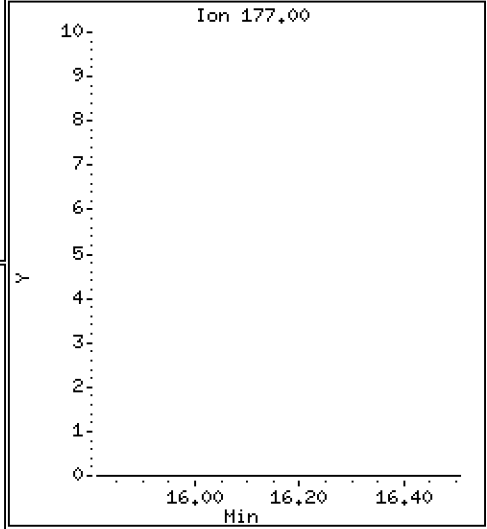
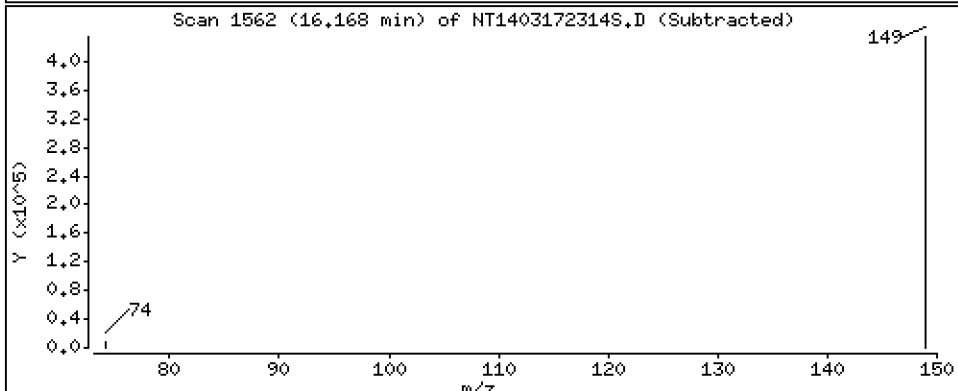
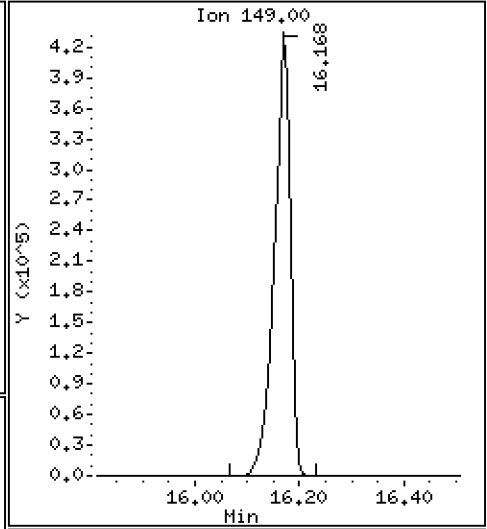
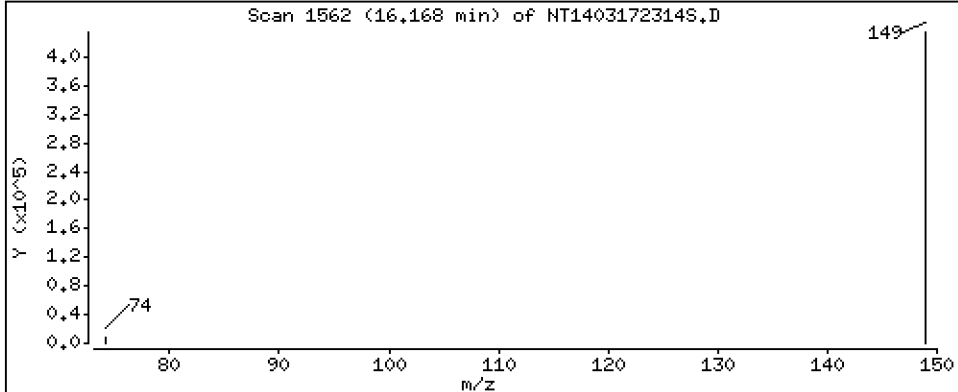
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,670 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

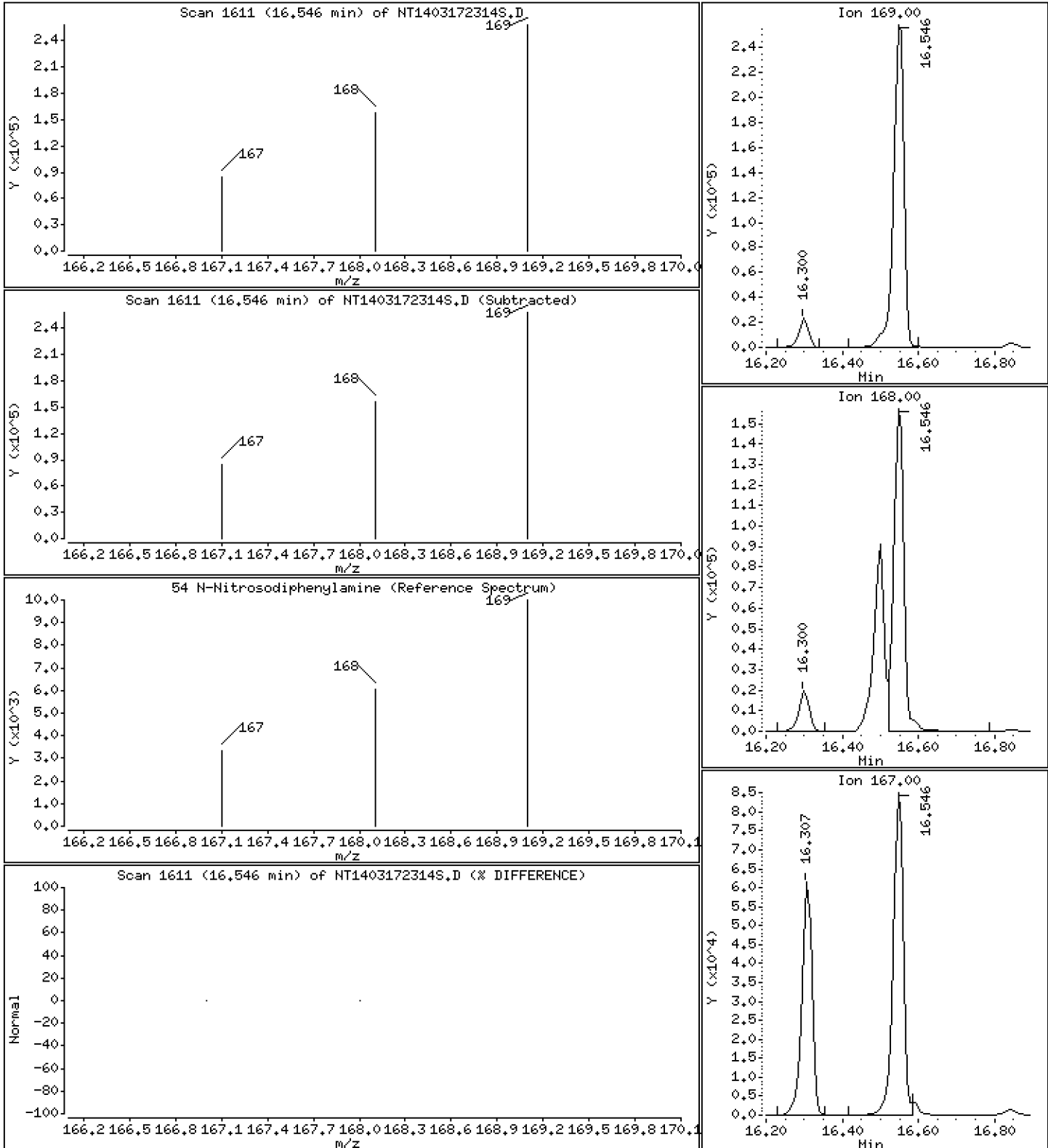
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,180 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

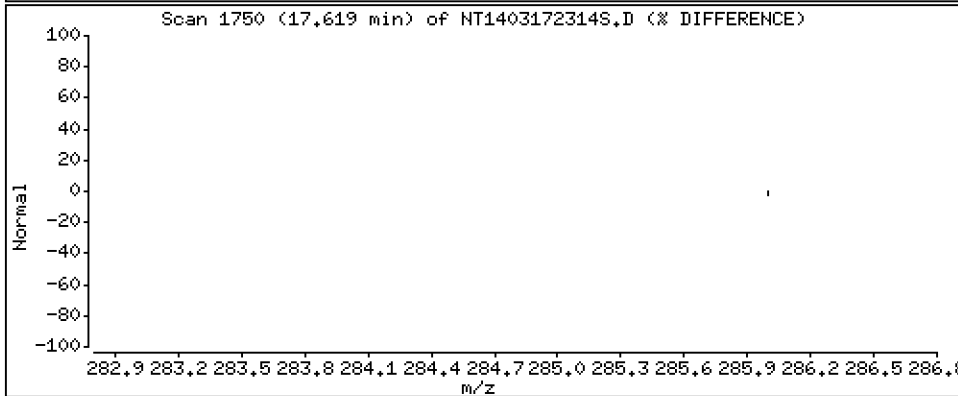
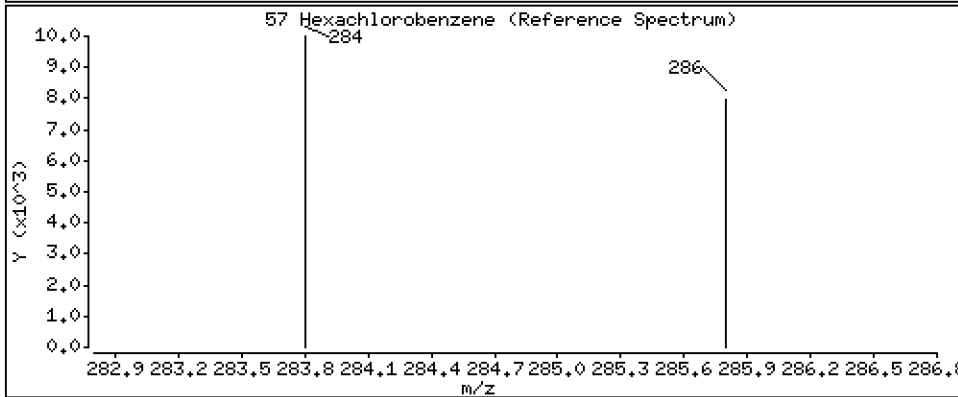
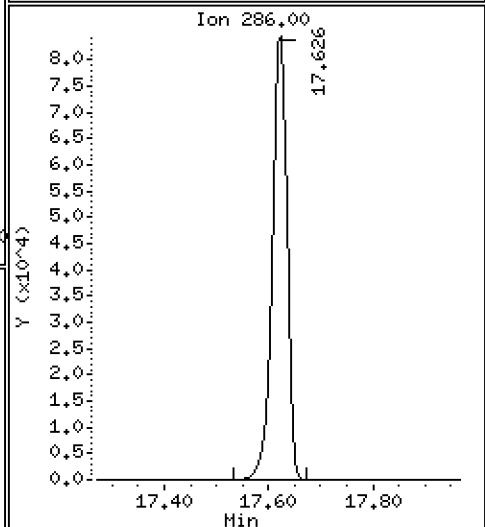
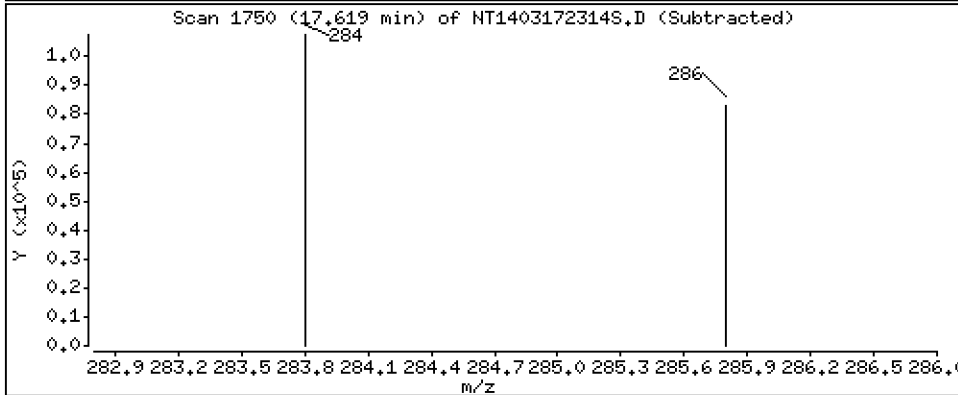
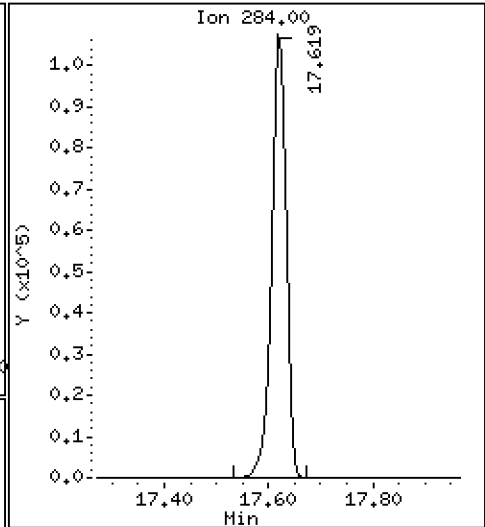
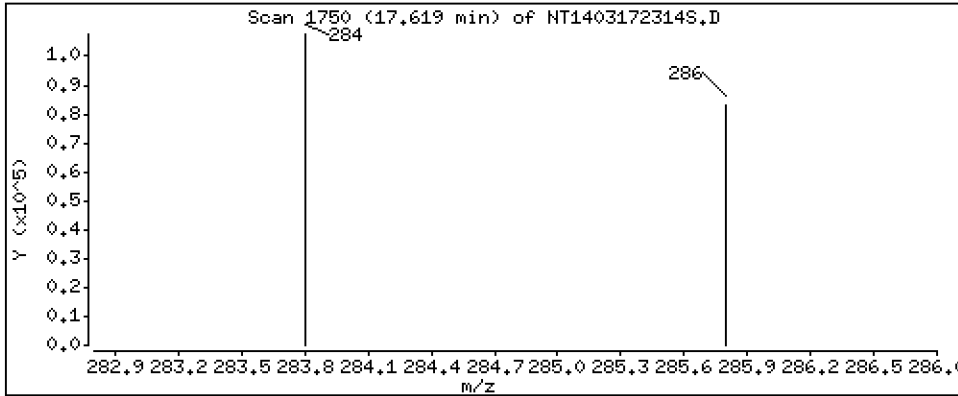
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,654 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

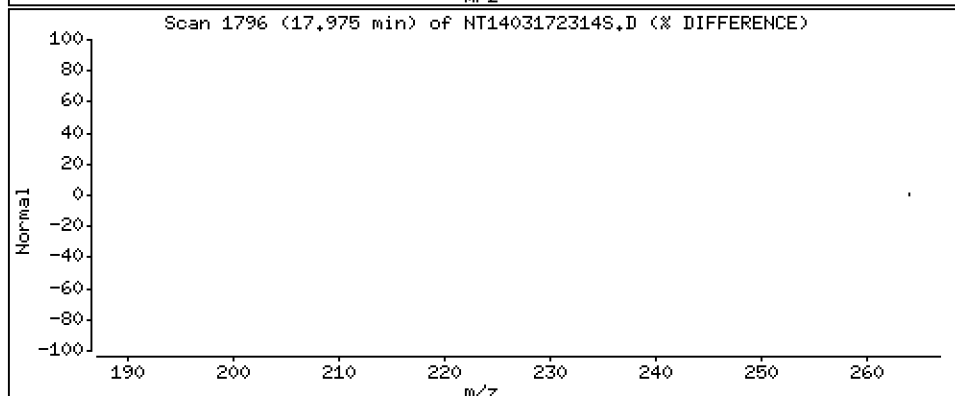
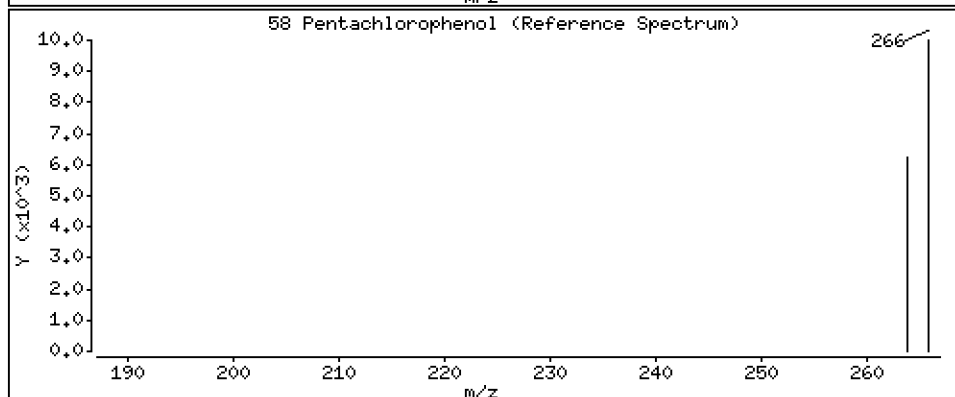
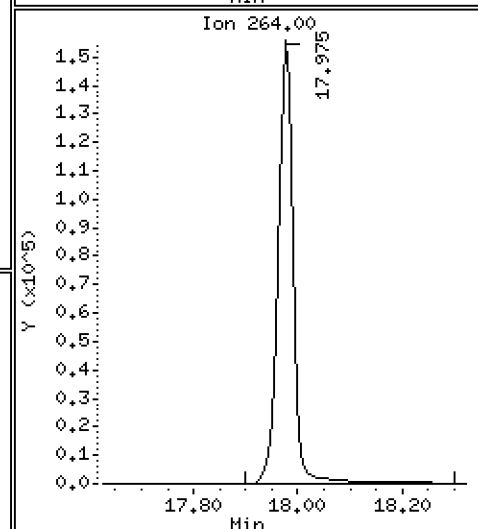
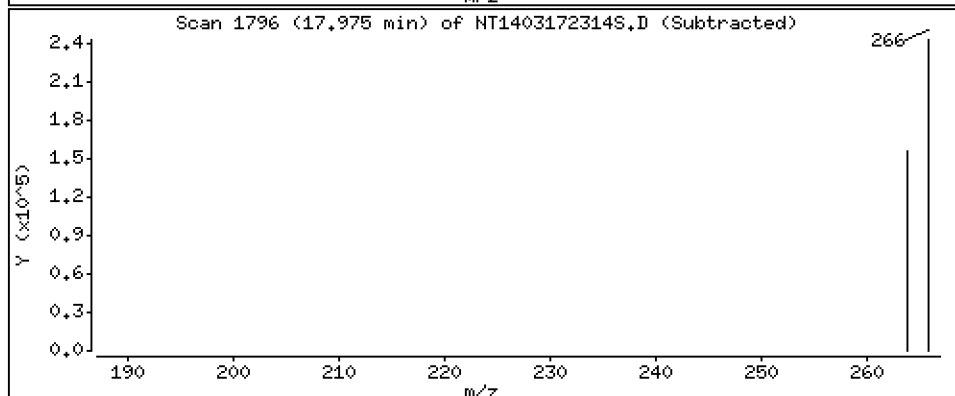
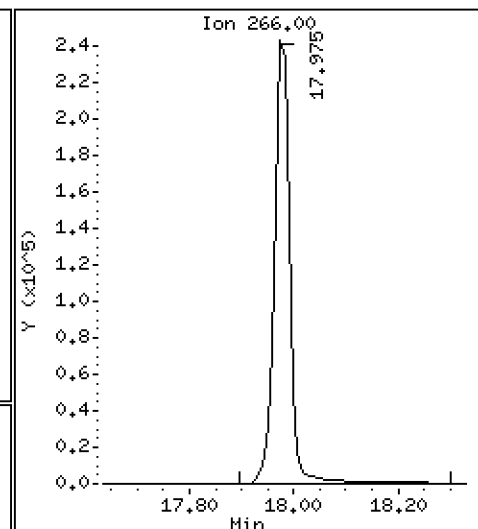
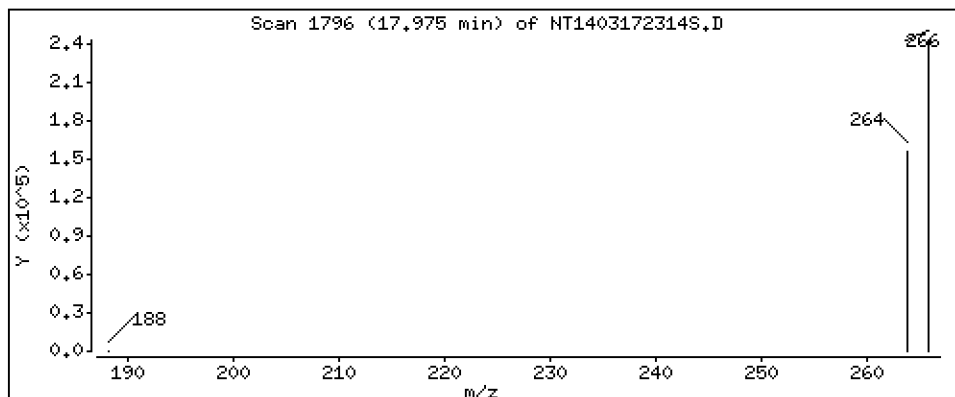
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 15,16 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

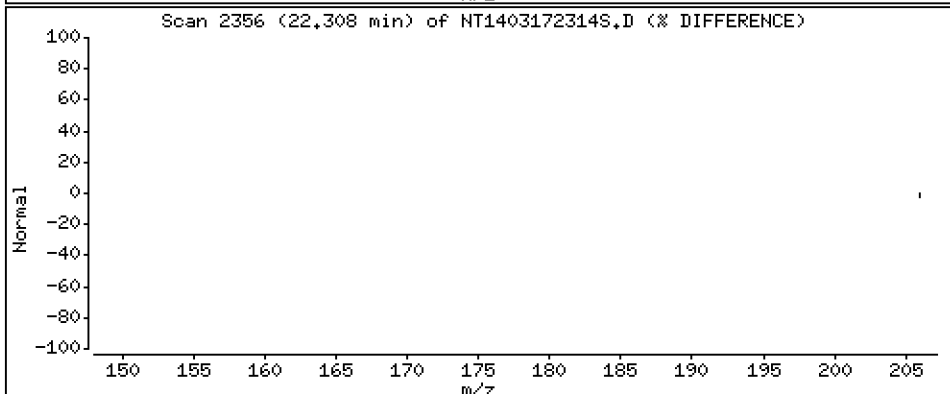
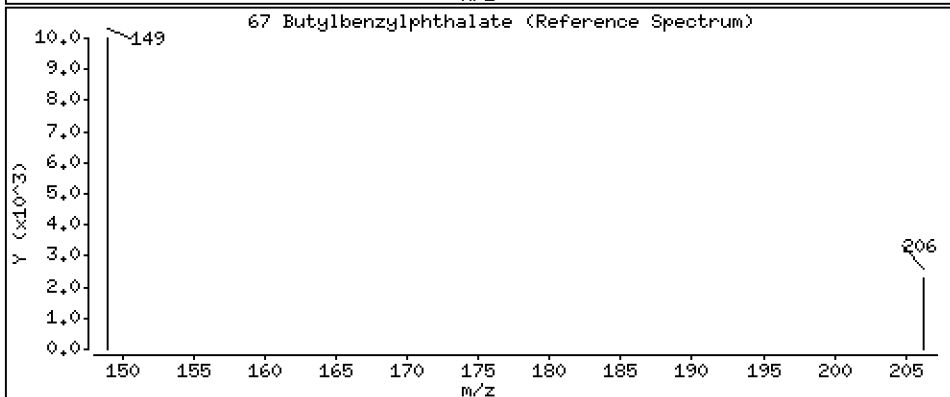
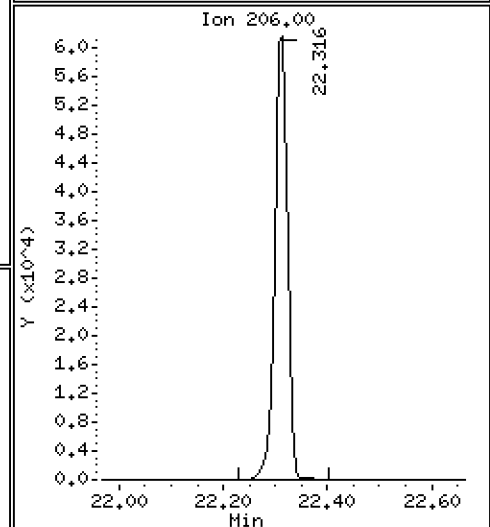
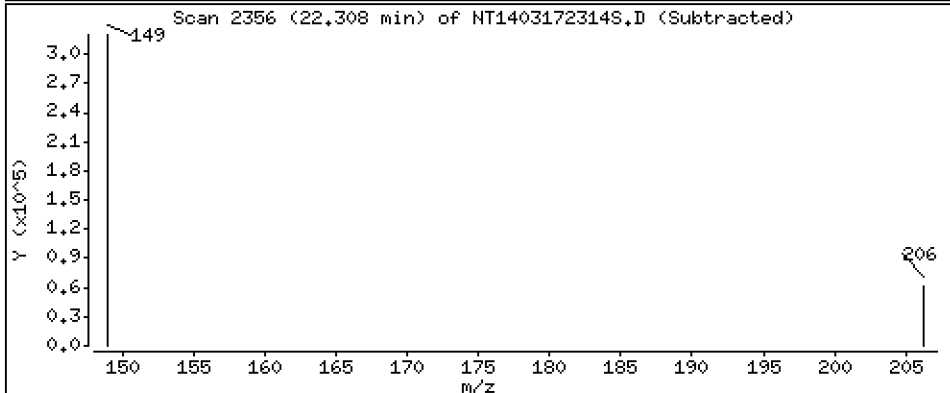
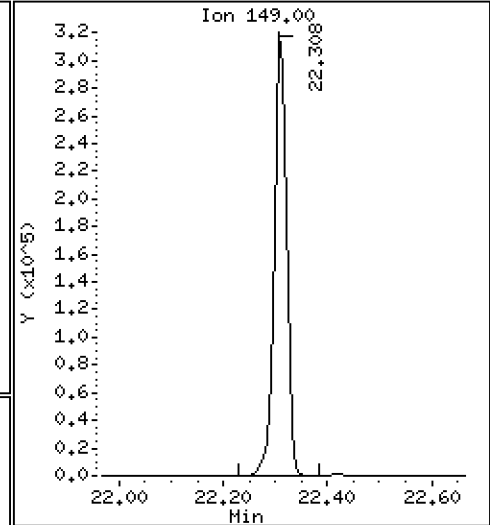
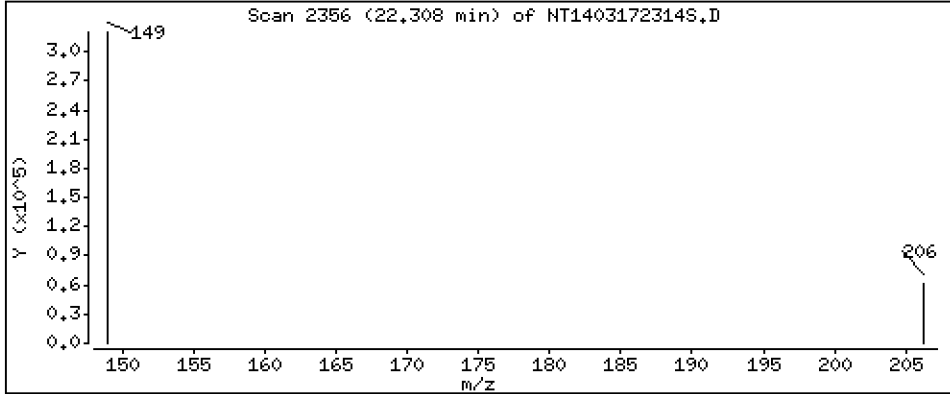
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 6,390 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

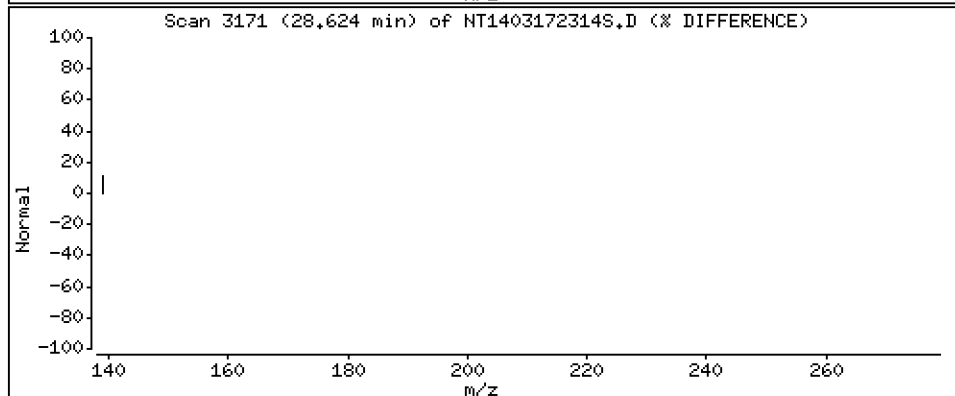
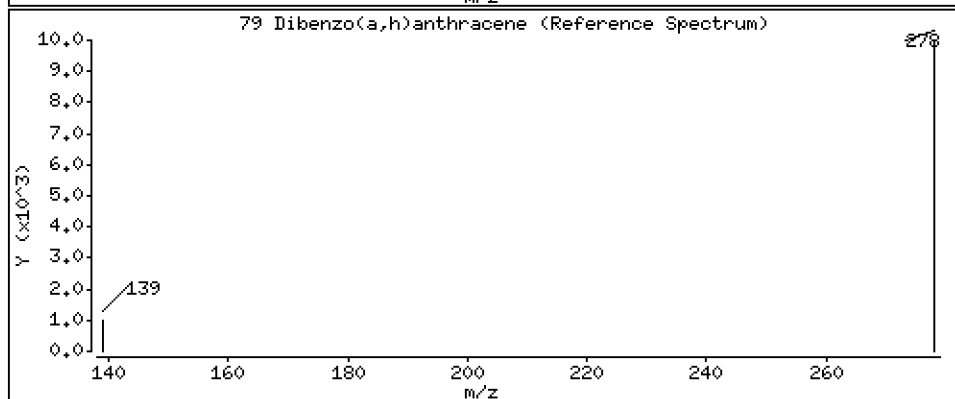
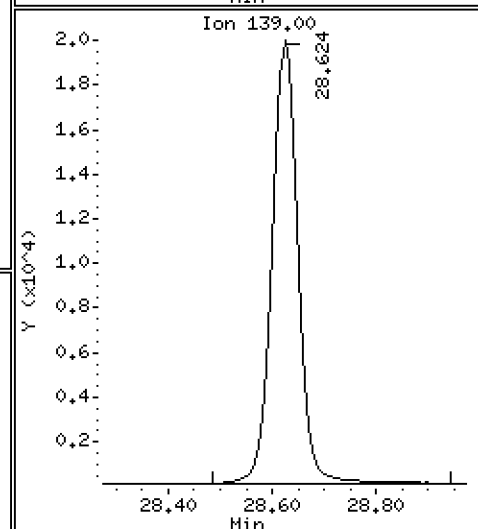
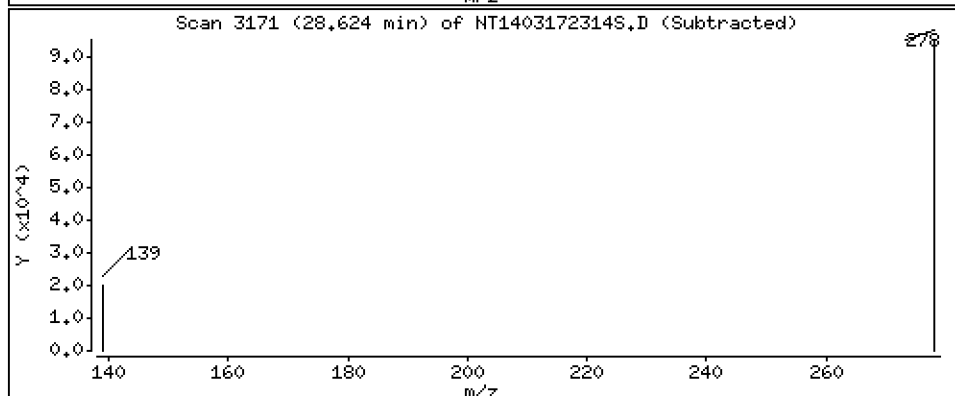
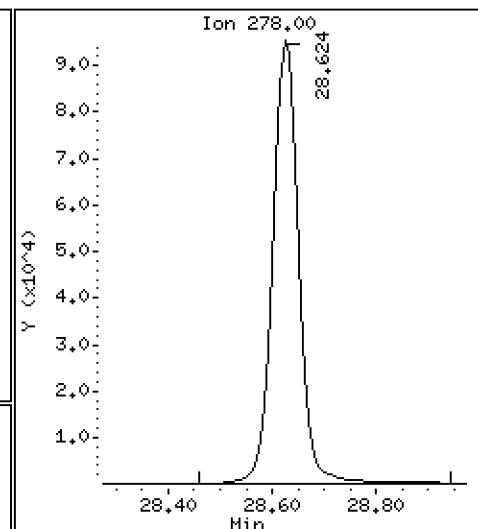
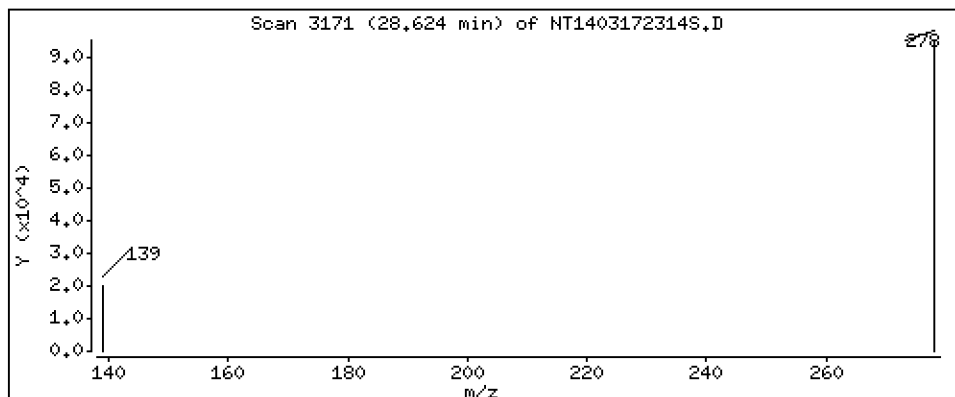
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,357 ug/mL



Date : 17-MAR-2023 22:19

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-BSD2

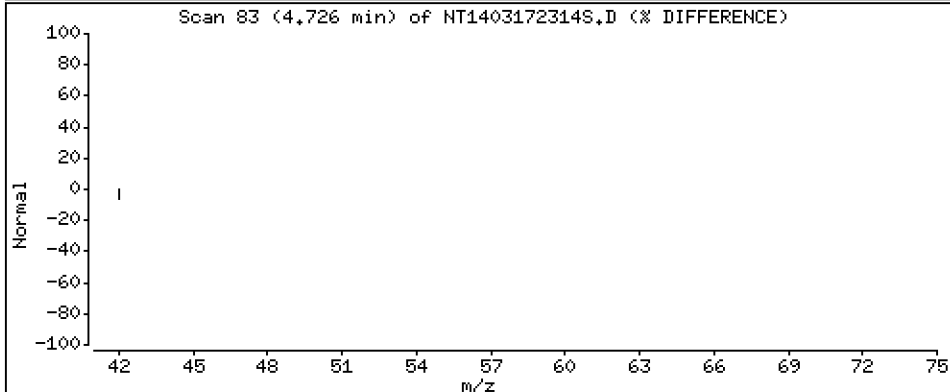
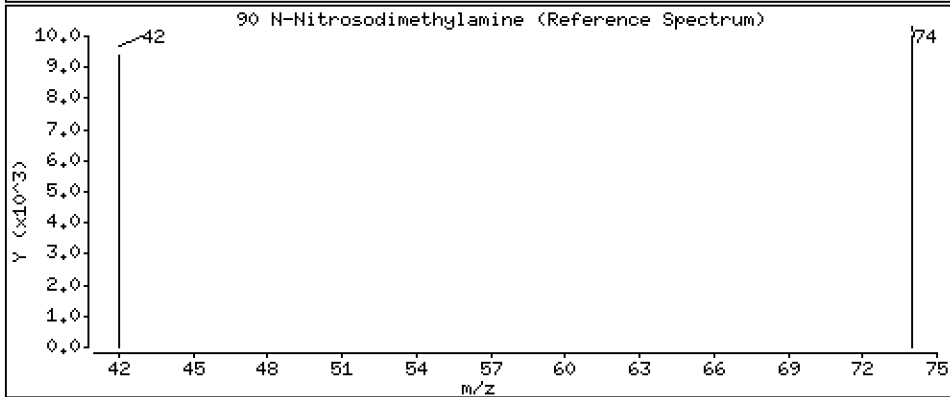
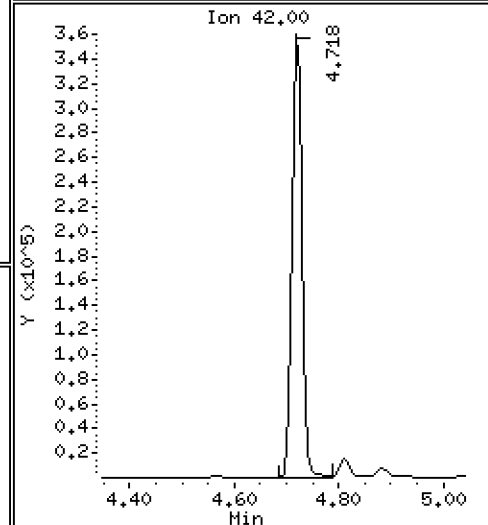
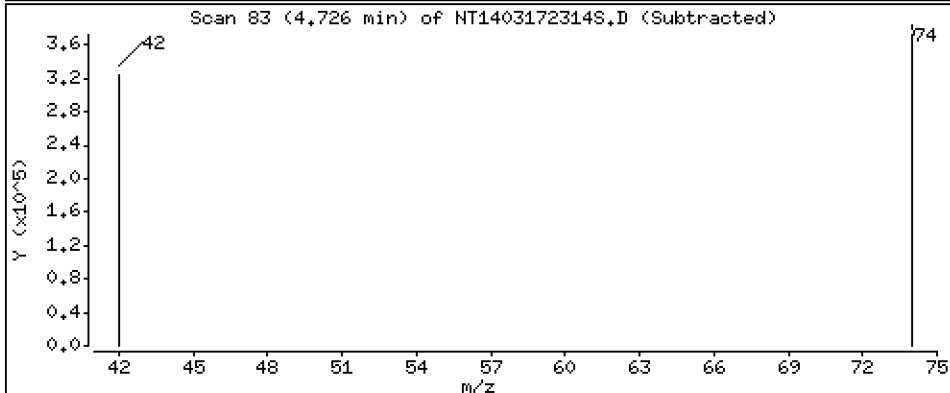
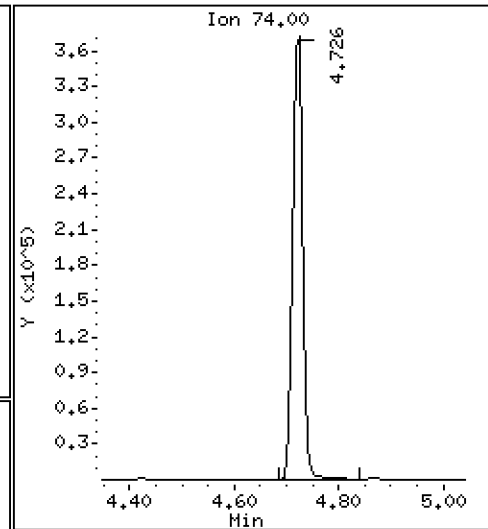
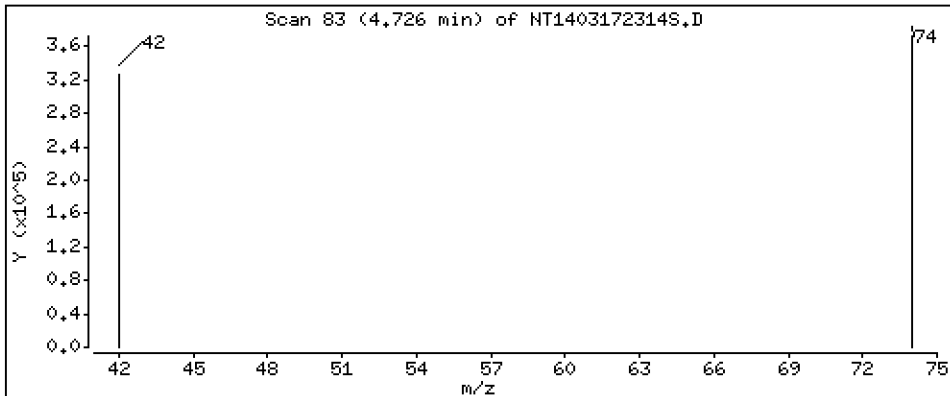
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 10,22 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172314S.D
 Lab Smp Id: BLB0424-BSD2
 Inj Date : 17-MAR-2023 22:19 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-BSD2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	493236	5.81727	5.817 (R)
3 Phenol	94		8.441	8.440	(0.931)	452687	3.88249	3.882
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	383856	3.84711	3.847
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	249790	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	378769	3.92299	3.923
11 Benzyl alcohol	79		9.339	9.338	(1.030)	298964	4.37452	4.375
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	373961	3.97644	3.976
13 2-Methylphenol	108		9.564	9.563	(1.055)	267348	3.31931	3.319
15 4-Methylphenol	108		9.836	9.827	(1.085)	328148	3.85651	3.857
16 N-Nitroso-di-n-propylamine	70		9.898	9.897	(1.092)	254381	4.22841	4.228
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	288768	3.54623	3.546
24 Benzoic acid	105		11.139	10.999	(0.963)	1660609	24.1482	24.15
26 1,2,4-Trichlorobenzene	180		11.480	11.479	(0.993)	321930	4.03371	4.034
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	947229	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	181380	4.49083	4.491
39 Dimethylphthalate	163		14.706	14.698	(0.967)	710975	4.74034	4.740
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	439174	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	905392	5.67004	5.670
54 N-Nitrosodiphenylamine	169		16.546	16.545	(0.907)	471416	4.18000	4.180
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	201644	4.65414	4.654
58 Pentachlorophenol	266		17.974	17.982	(0.985)	479354	15.1607	15.16
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	832353	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	493797	6.41272	6.413 (R)
67 Butylbenzylphthalate	149		22.308	22.315	(0.957)	501881	6.39038	6.390
* 69 Chrysene-d12	240		23.299	23.298	(1.000)	446664	4.00000	
* 77 Perylene-d12	264		25.939	25.938	(1.000)	299018	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	330305	4.35743	4.357
90 N-Nitrosodimethylamine	74		4.725	4.694	(0.521)	529461	10.2215	10.22

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172314S.D
 Lab Smp Id: BLB0424-BSD2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	249790	11.30
27 Naphthalene-d8	825617	412809	1651234	947229	14.73
42 Acenaphthene-d10	392947	196474	785894	439174	11.76
59 Phenanthrene-d10	789887	394944	1579774	832353	5.38
69 Chrysene-d12	494007	247004	988014	446664	-9.58
77 Perylene-d12	375441	187721	750882	299018	-20.36

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172314S.D

Lab ID: BLB0424-BSD2

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 22:19

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.963	0.951	0.0121	Benzoic acid

RRT check based on Ccal File: 20230317.b/NT1403172303S.D

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLB0424-SRM2

Batch: BLB0424

Initial/Final: 1 g / 1 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 03/17/2023 22:55

Standard ID: K003477

Expires: 01/31/2024

Standard Lot#: CRM 143 (LRAC8918)

Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	3730	21.7	200		58.7	0 - 220
1,2,4-Trichlorobenzene	1477.0	675	26.8	50.0		45.7	10 - 193
N-Nitrosodiphenylamine	2854.0	2910	13.1	50.0		102	40 - 160
Pentachlorophenol	3411.0	3110	21.3	200	Q	91.2	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723155.D

Date: 17-MAR-2023 22:55

Client ID:

Sample Info: BLB0424-SRM2

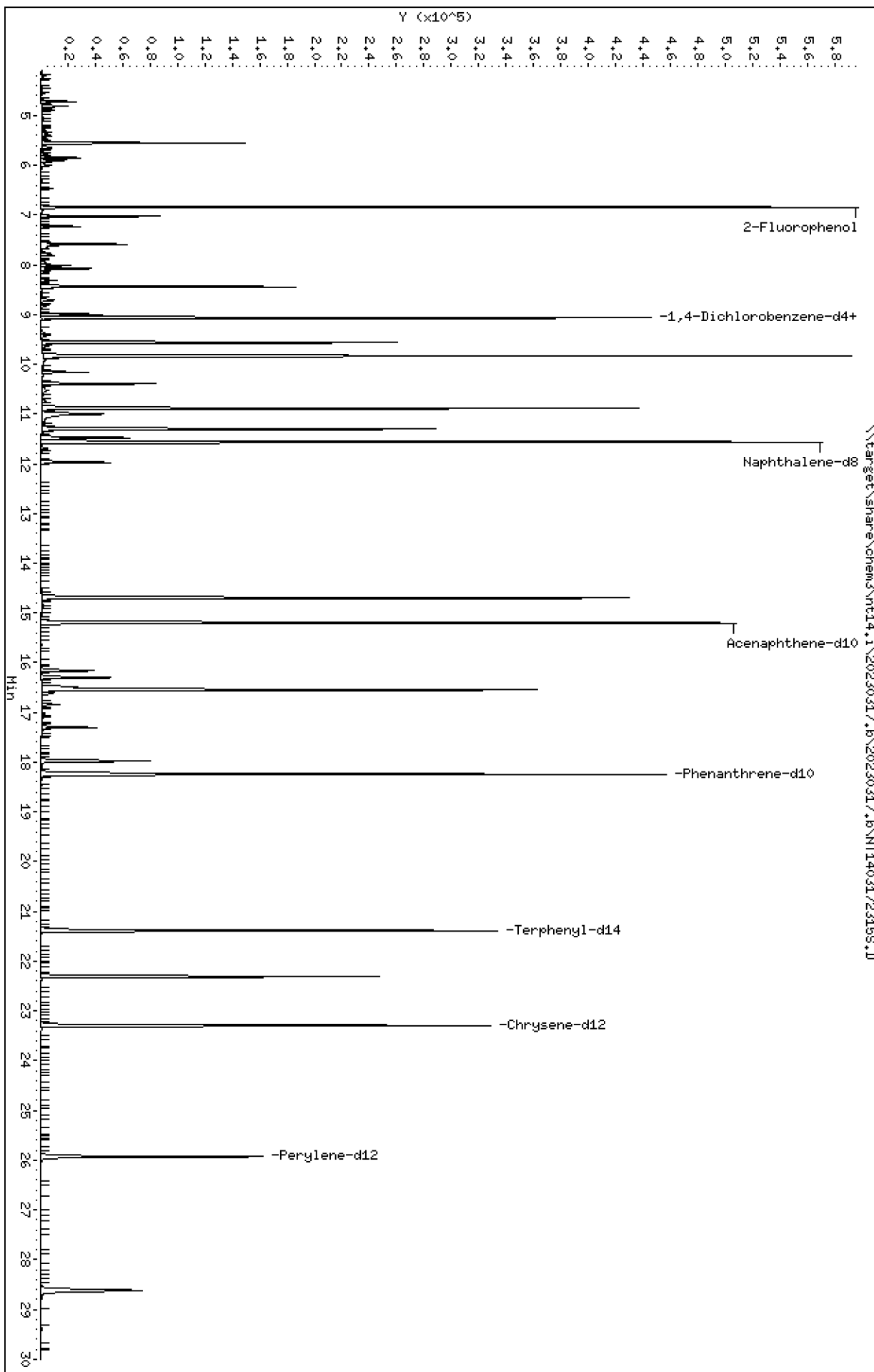
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

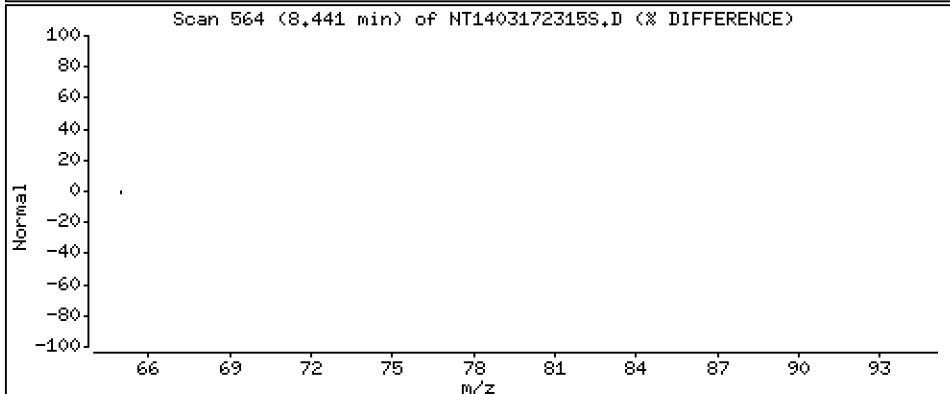
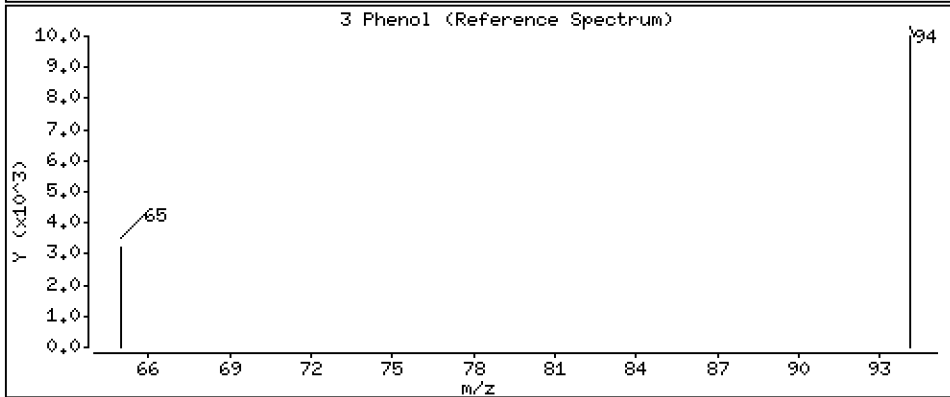
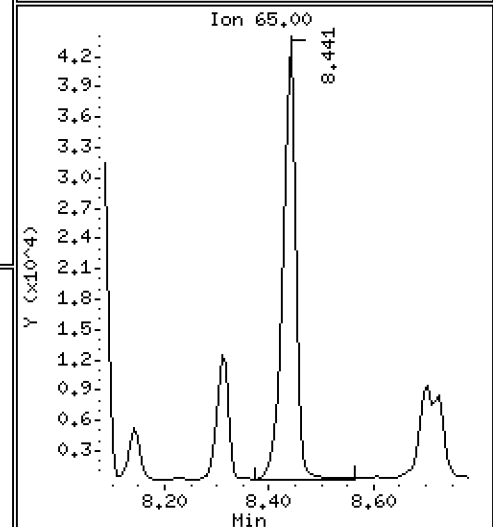
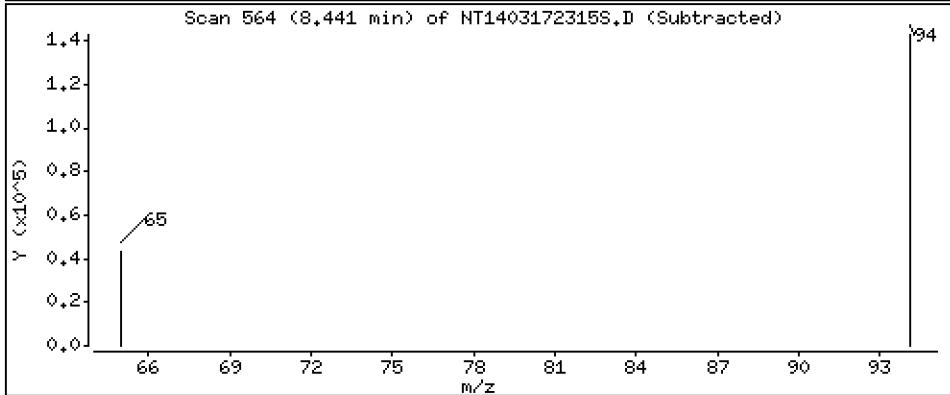
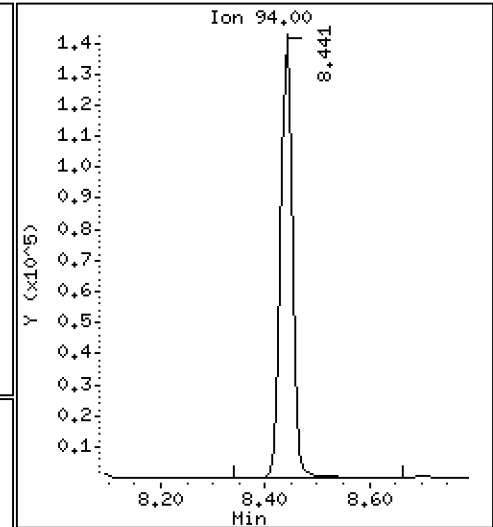
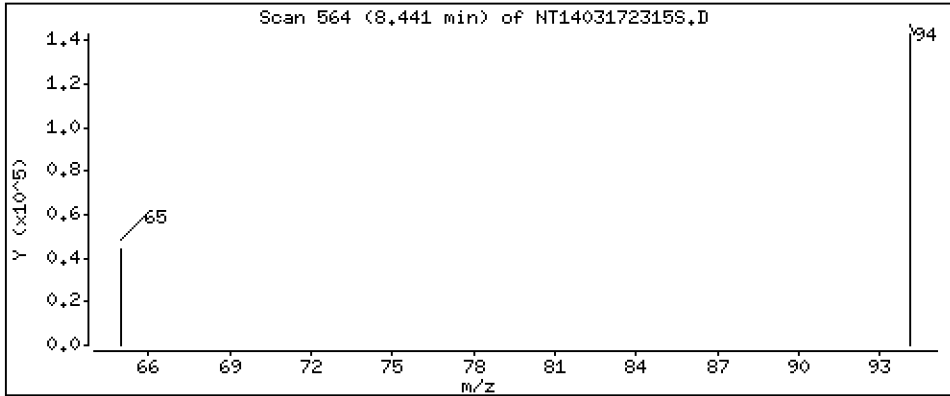
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 1,689 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

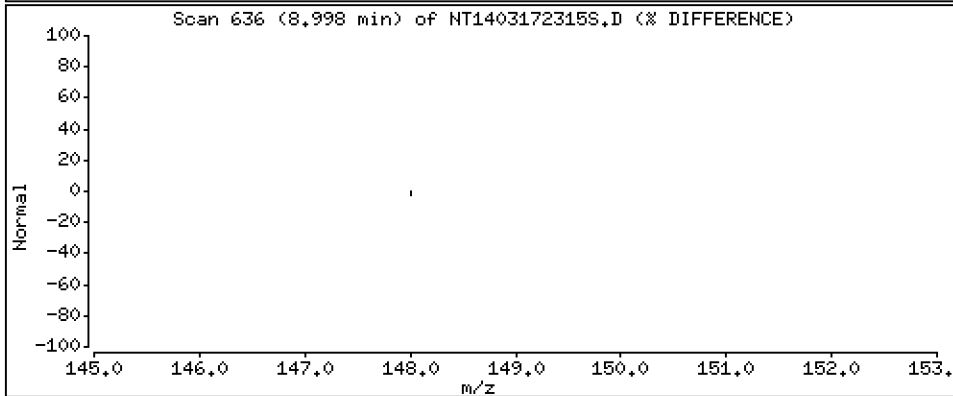
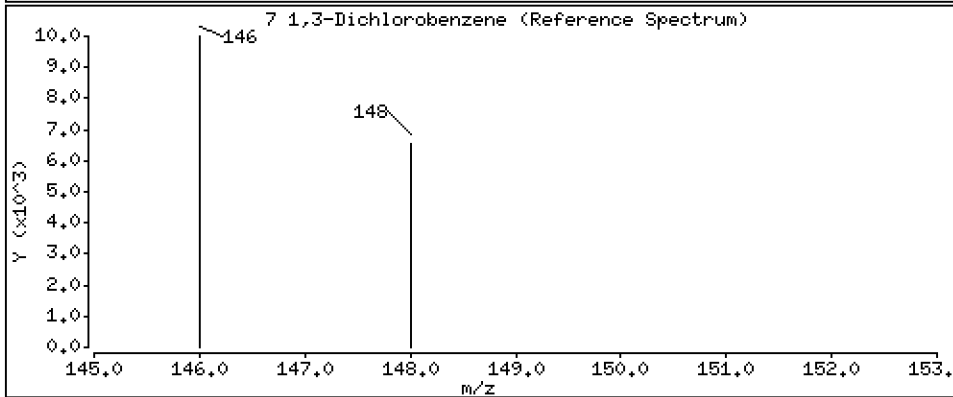
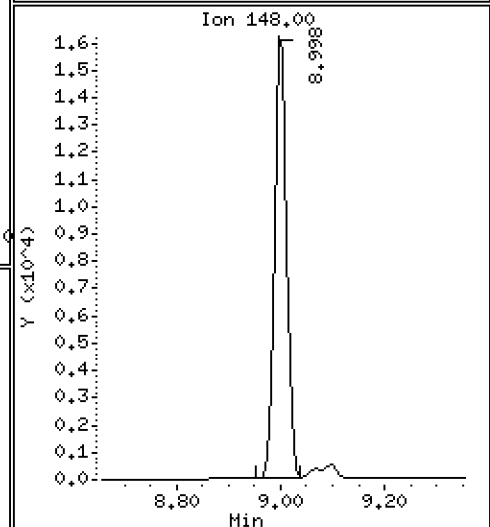
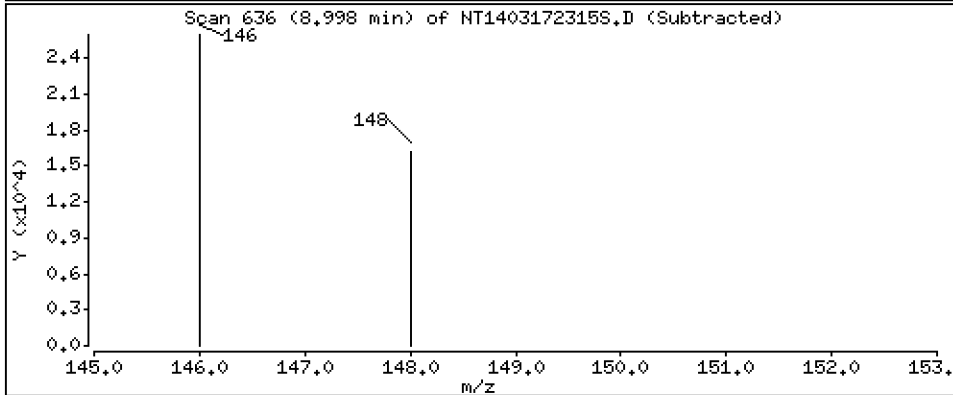
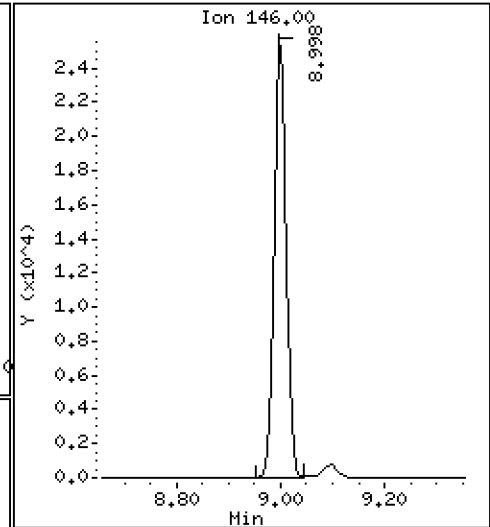
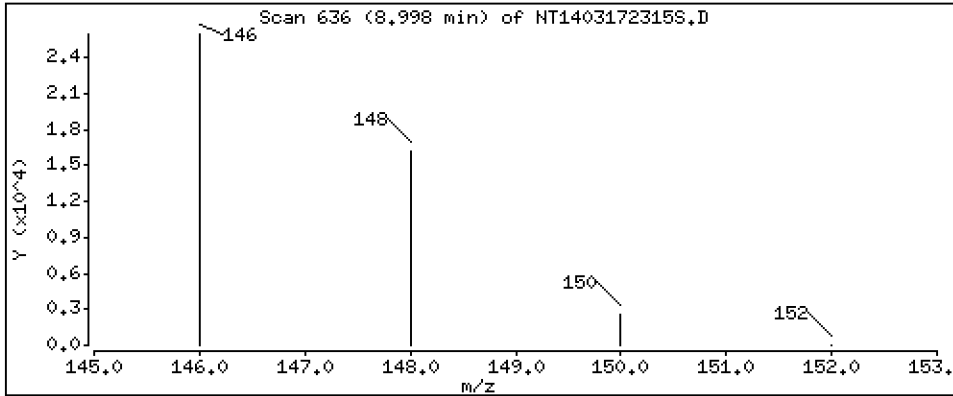
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,3823 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

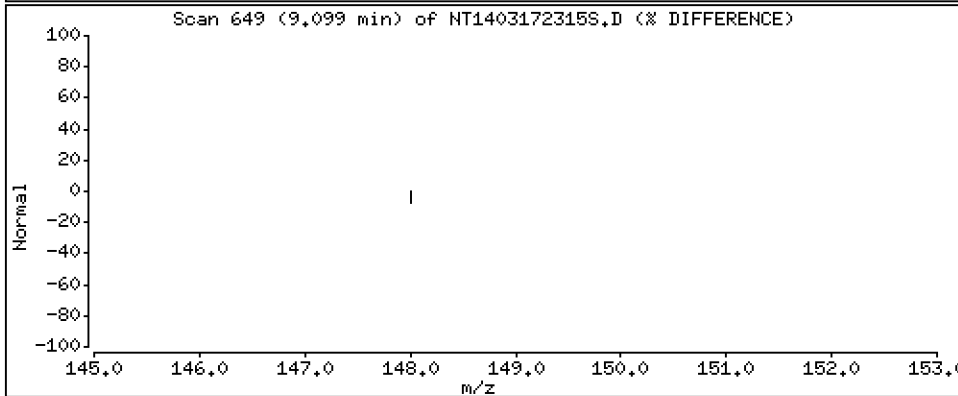
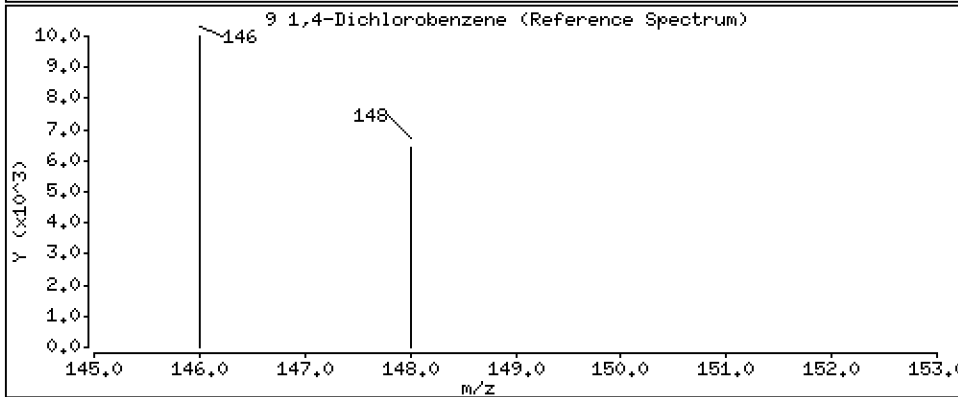
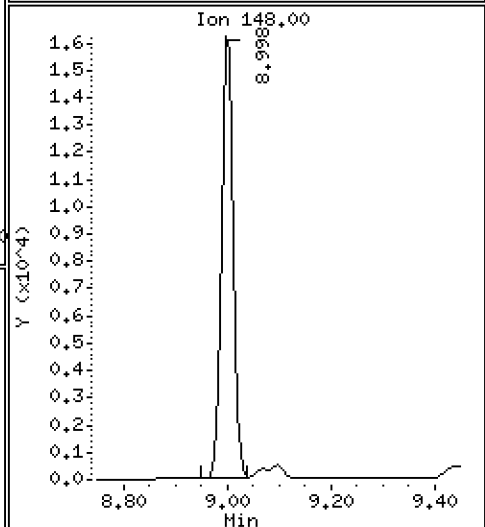
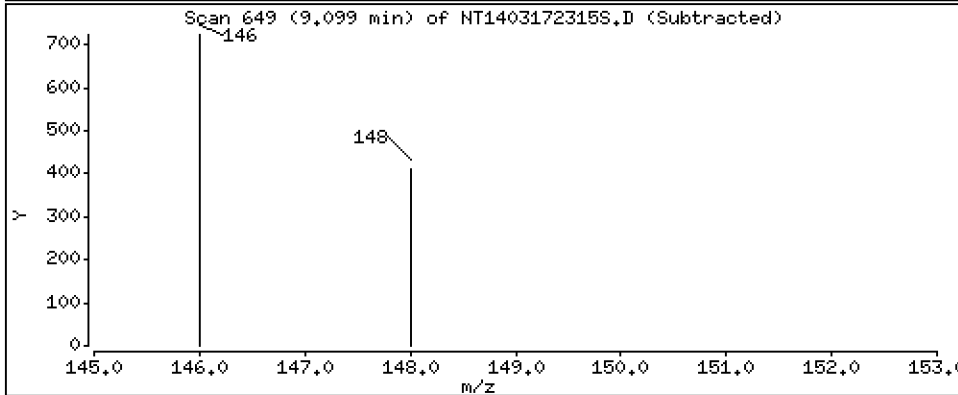
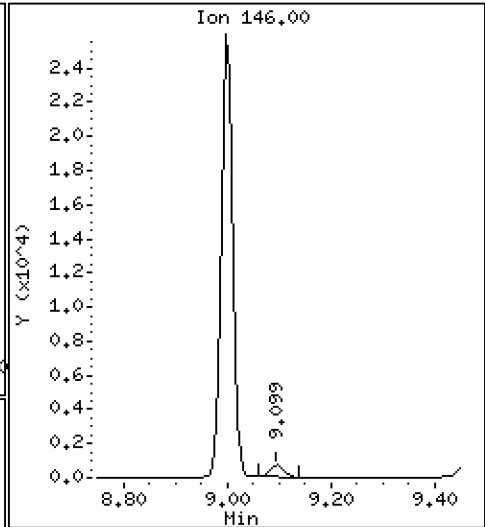
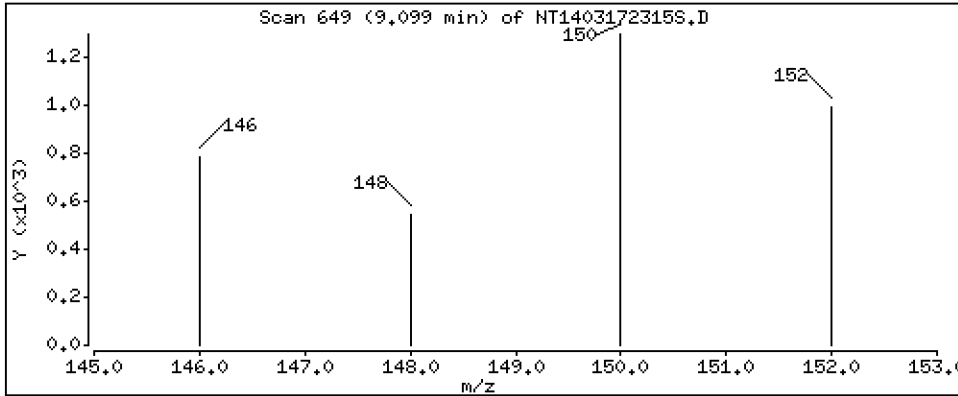
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,01062 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

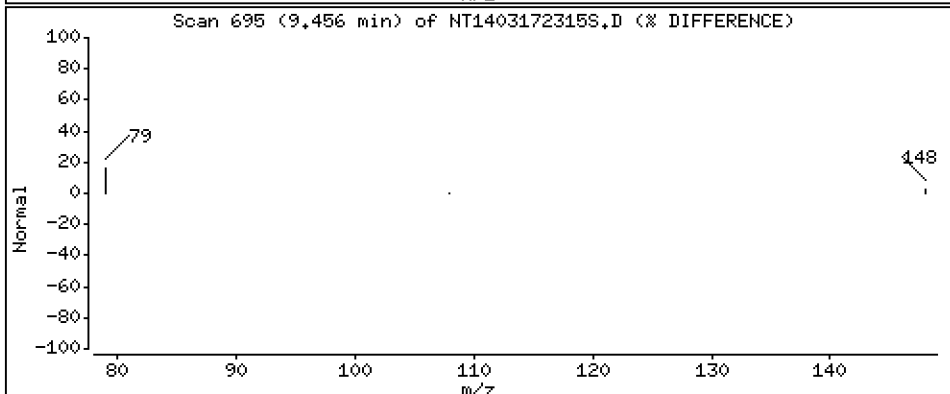
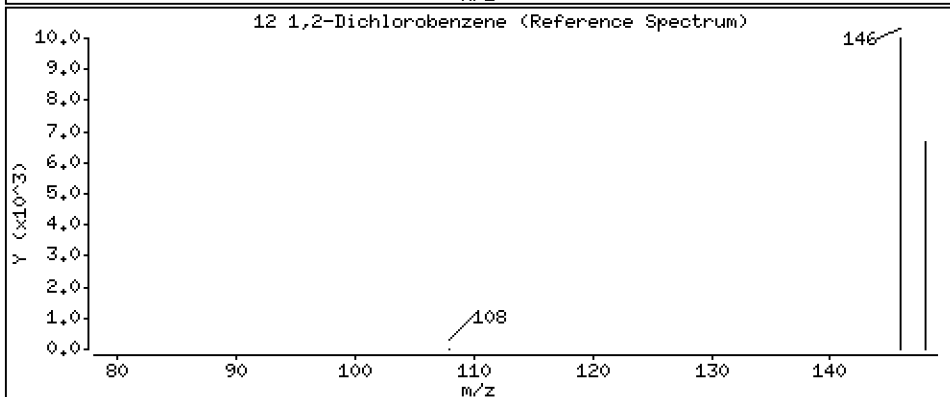
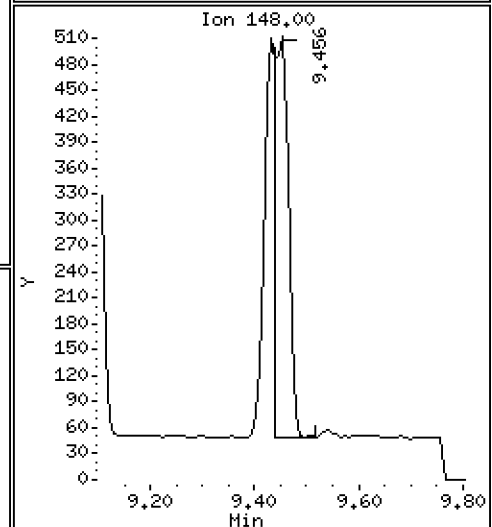
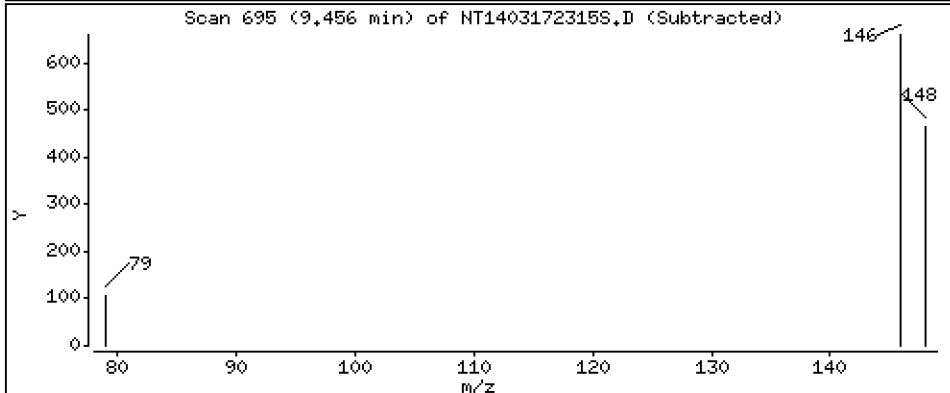
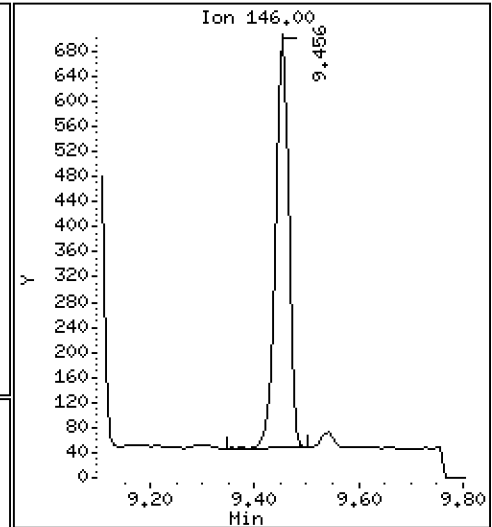
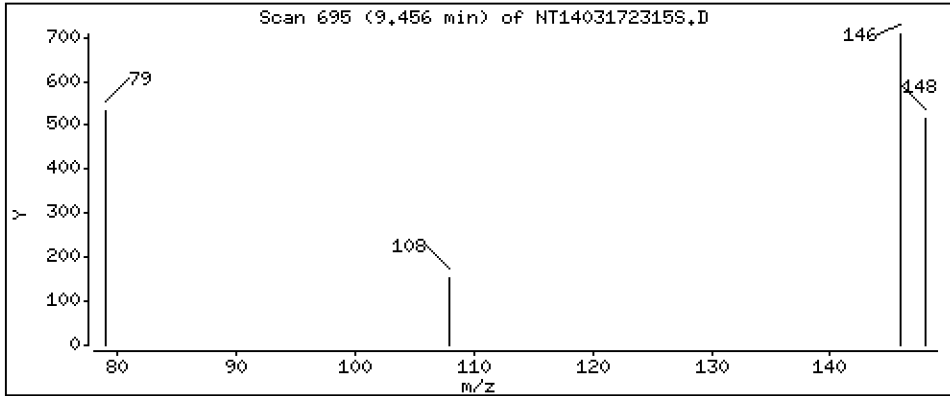
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,01079 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

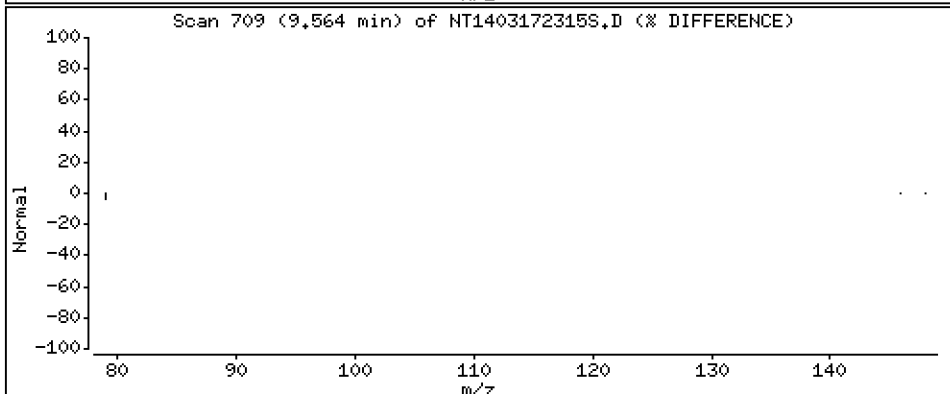
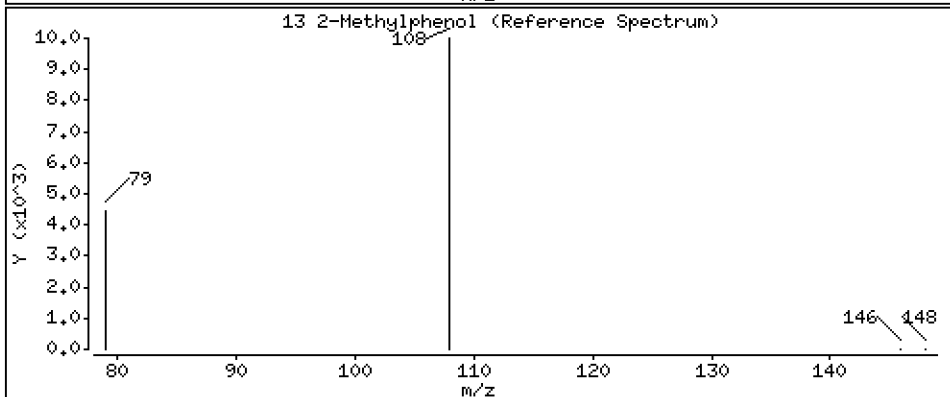
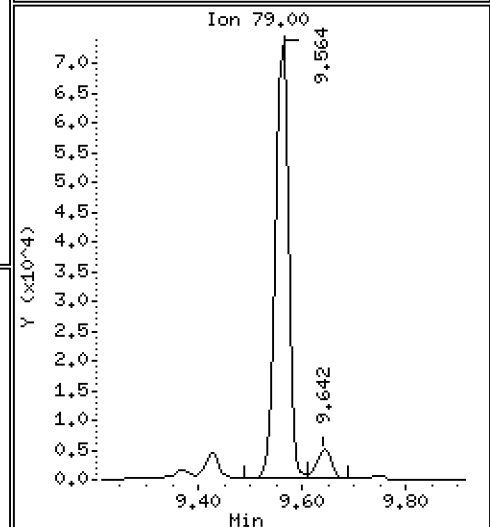
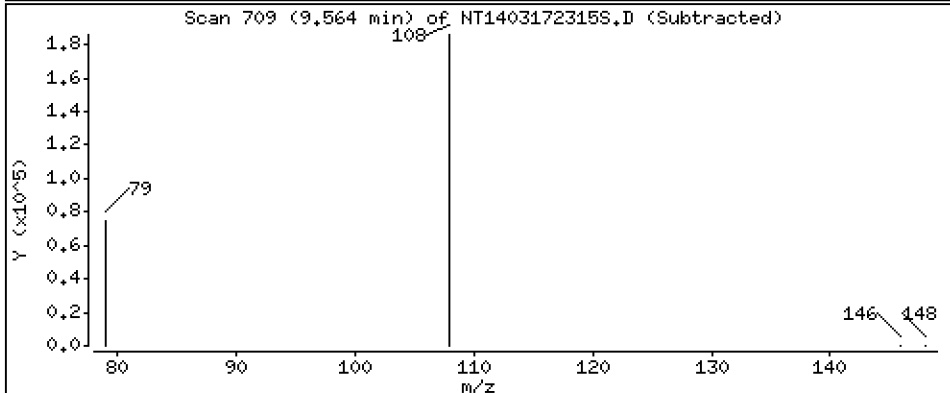
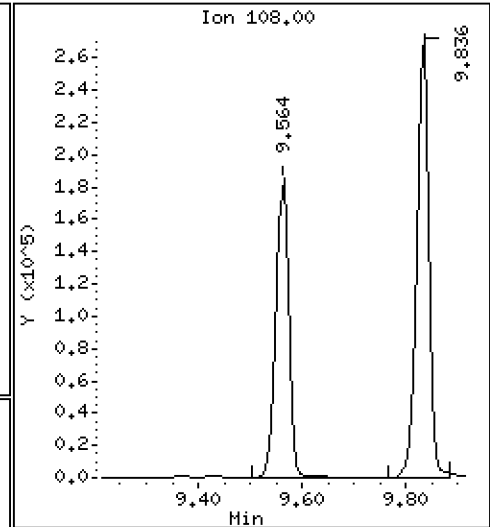
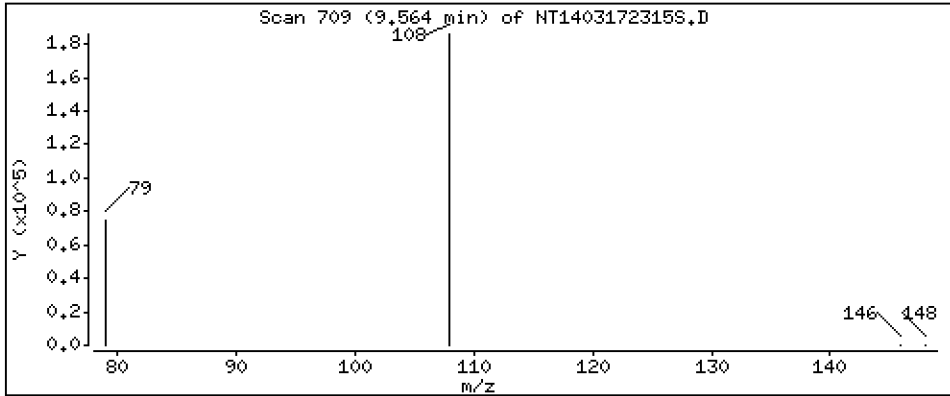
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.525 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

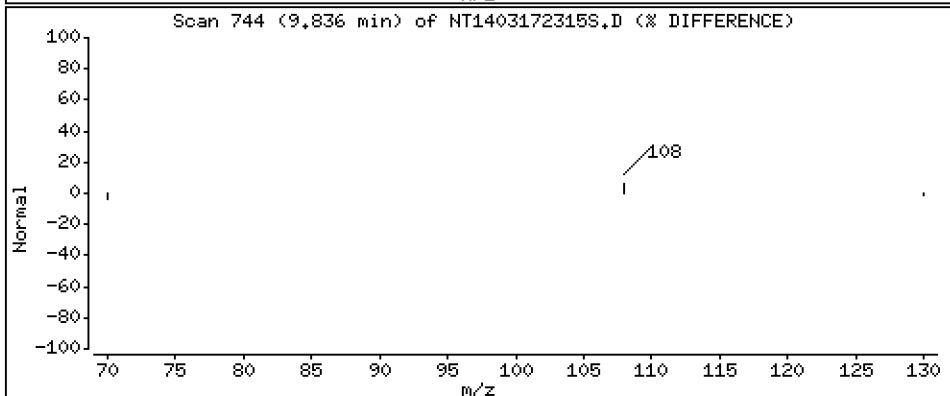
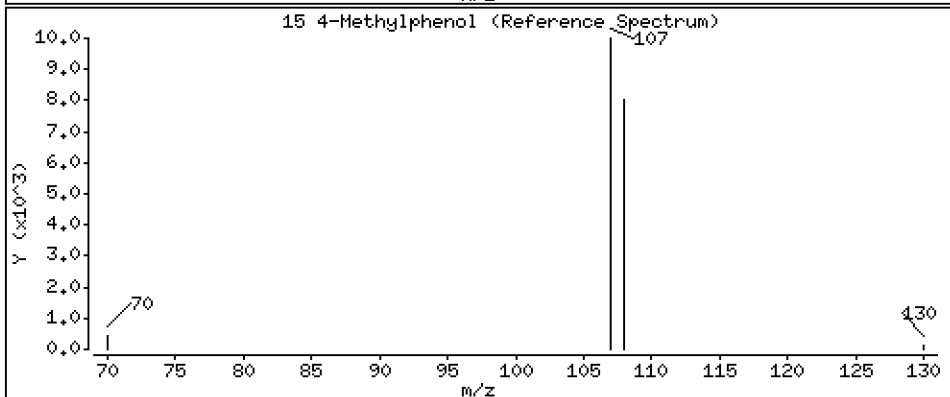
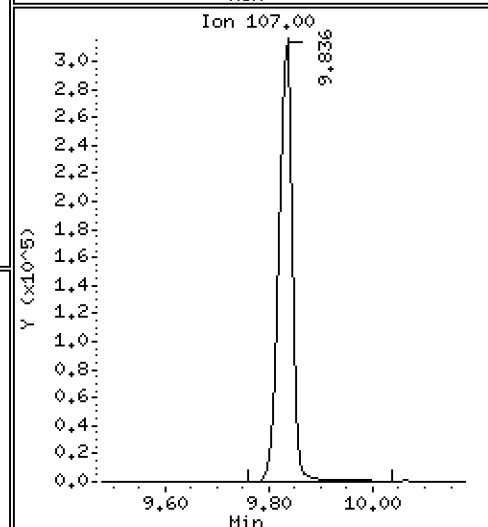
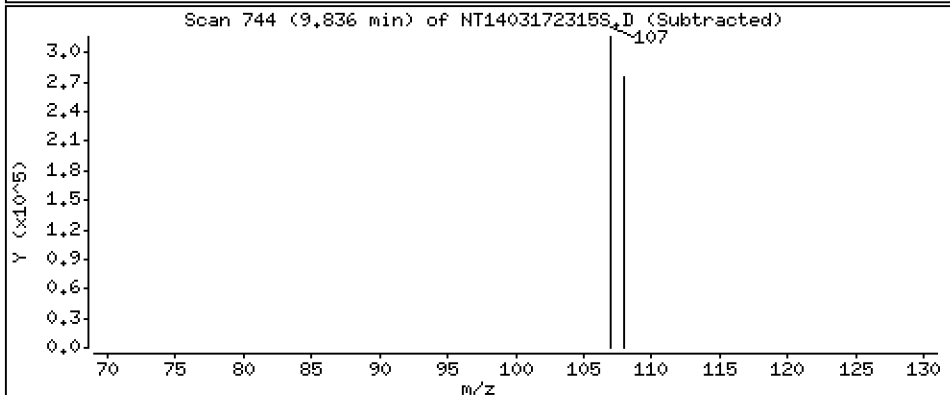
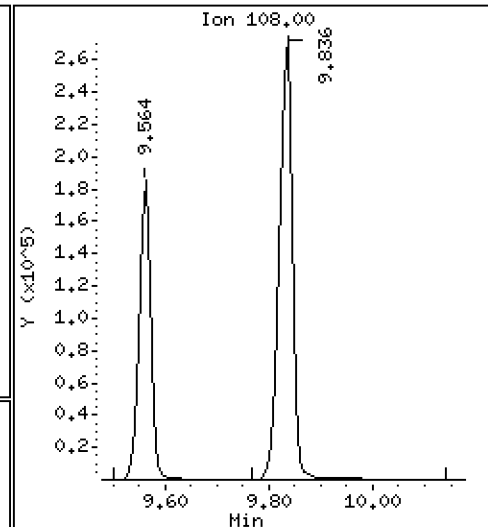
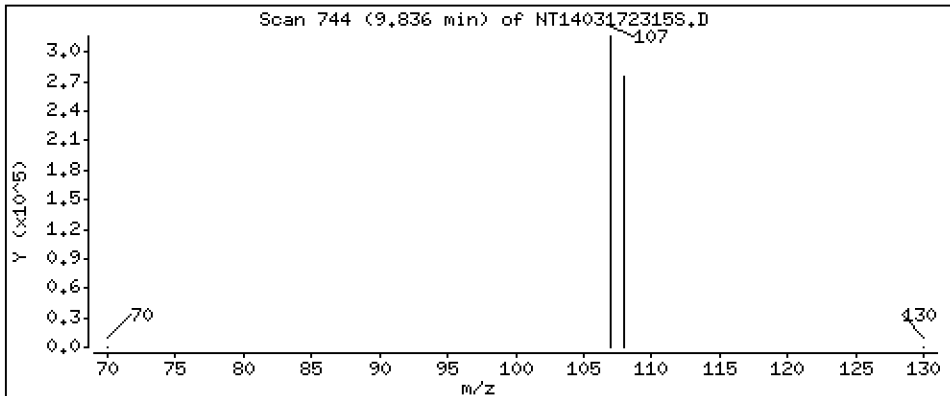
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 5.104 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

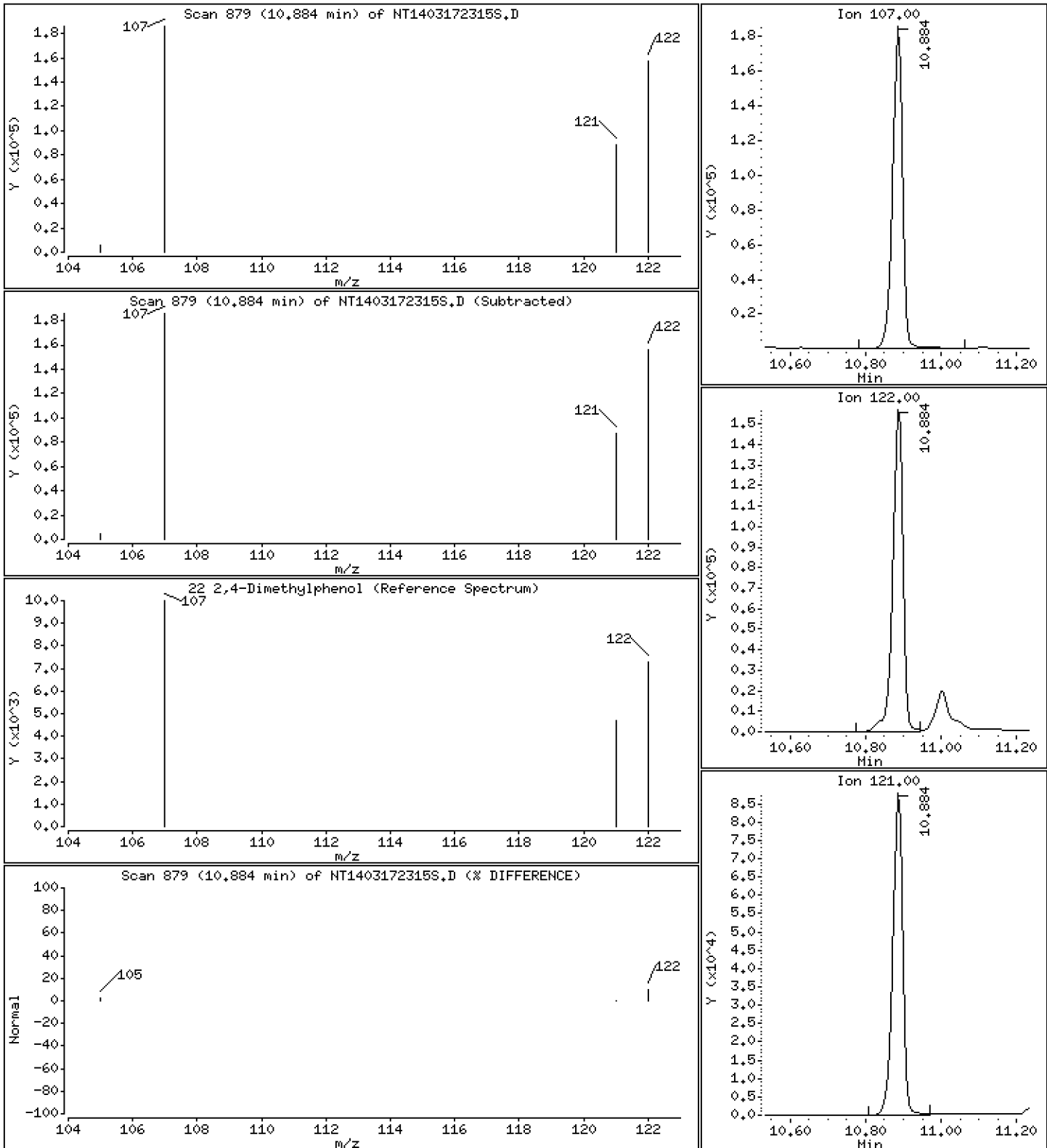
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 3.731 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

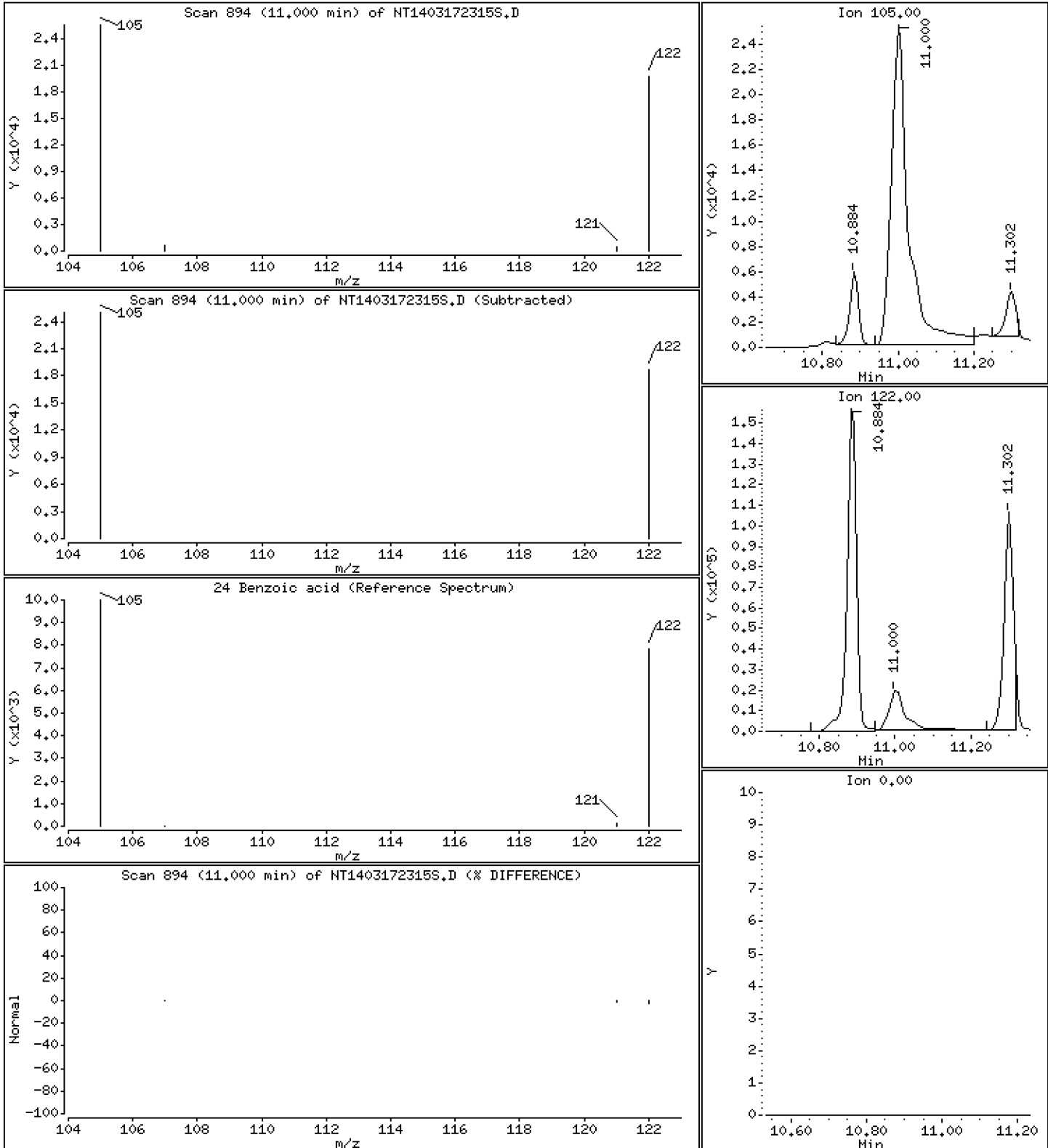
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 1.201 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

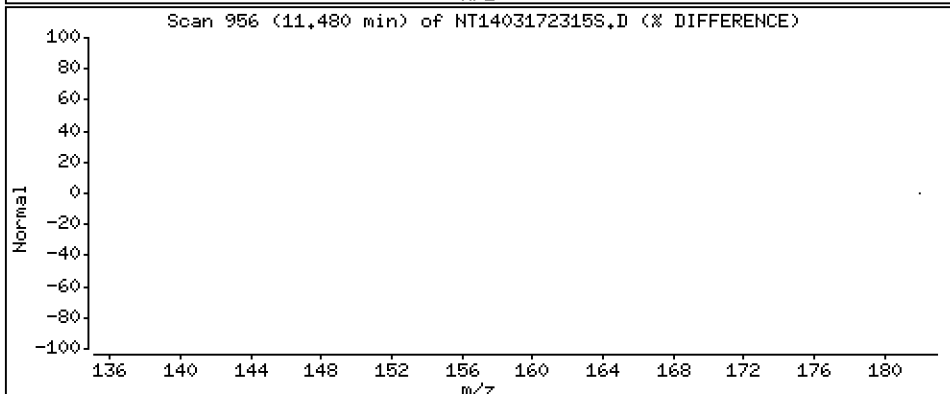
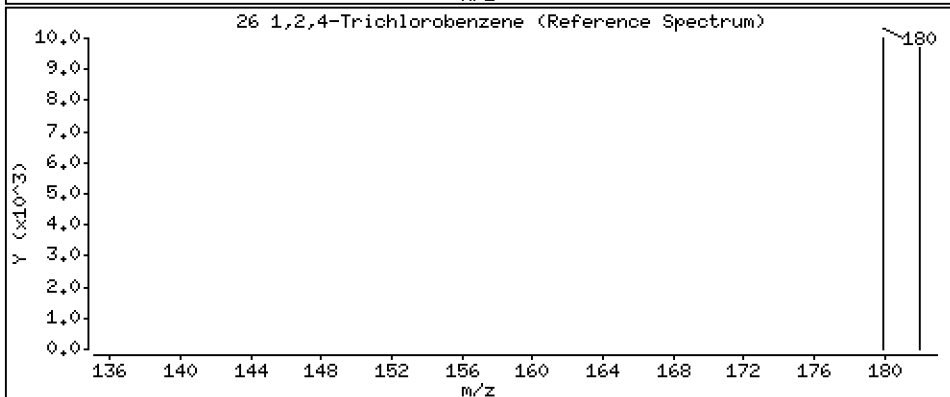
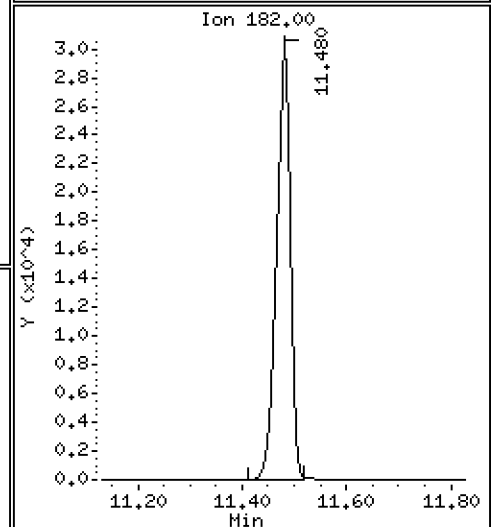
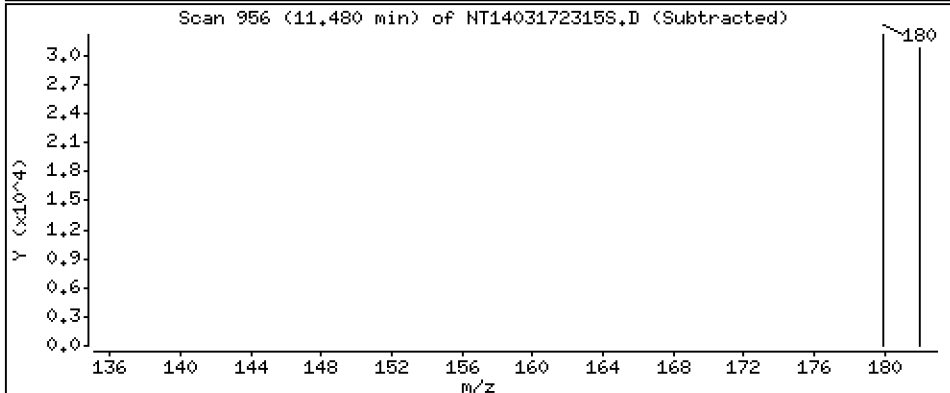
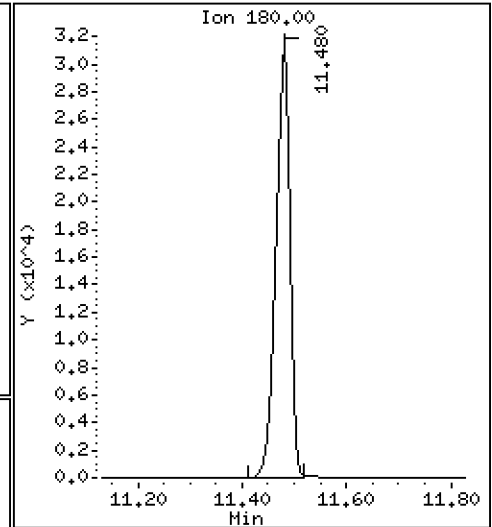
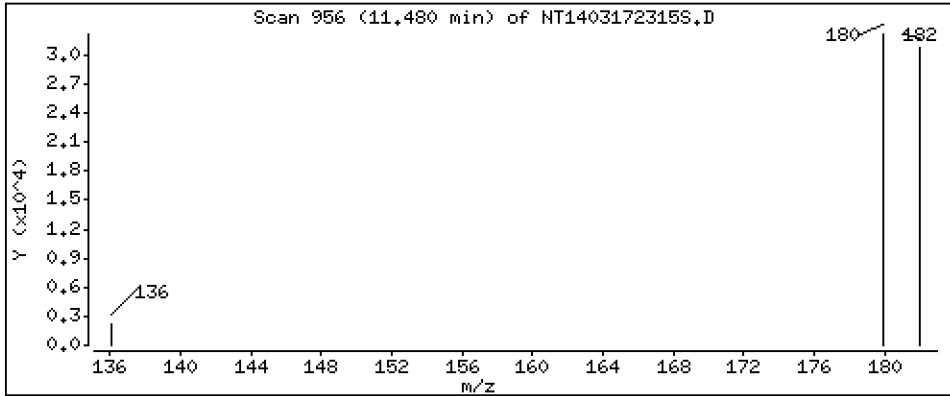
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,6755 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

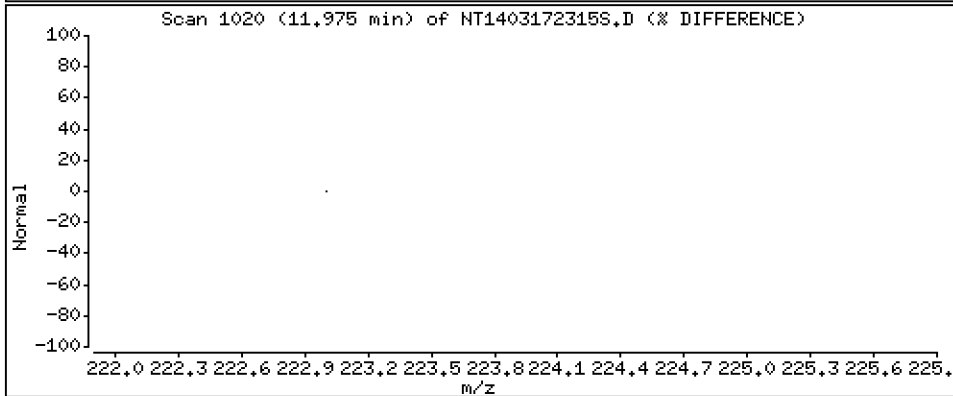
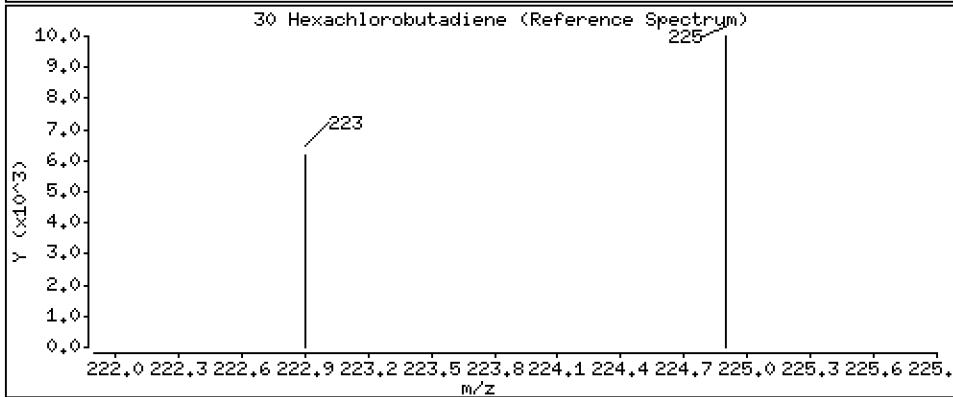
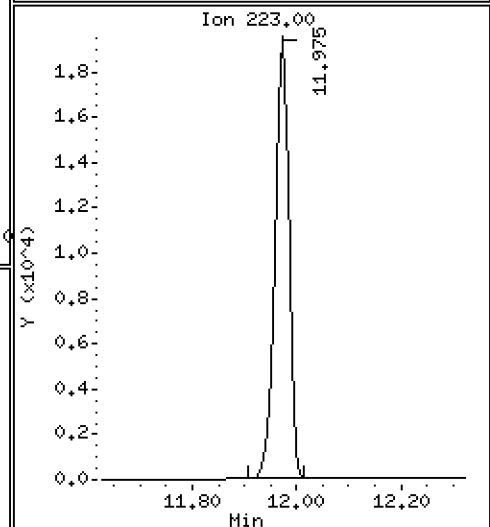
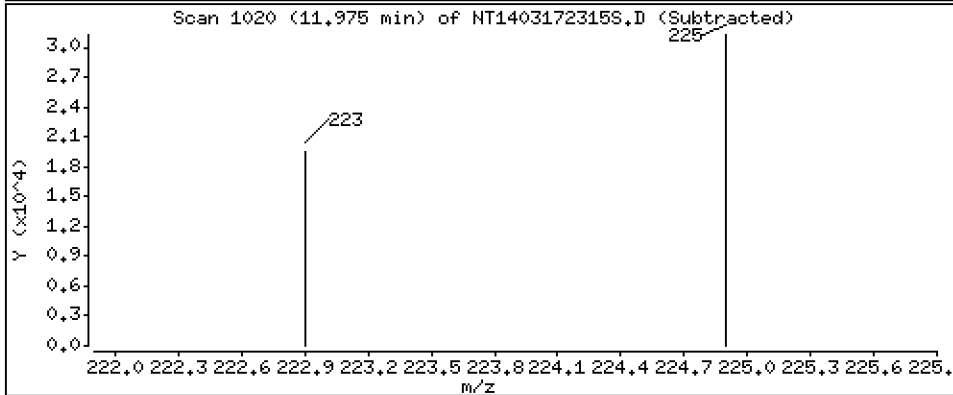
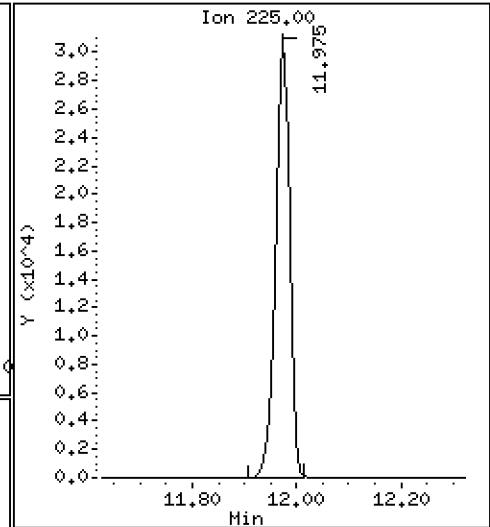
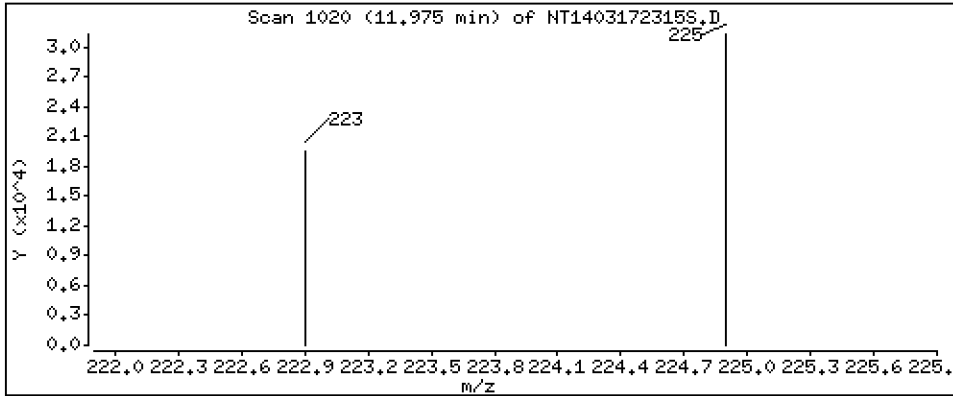
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,288 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

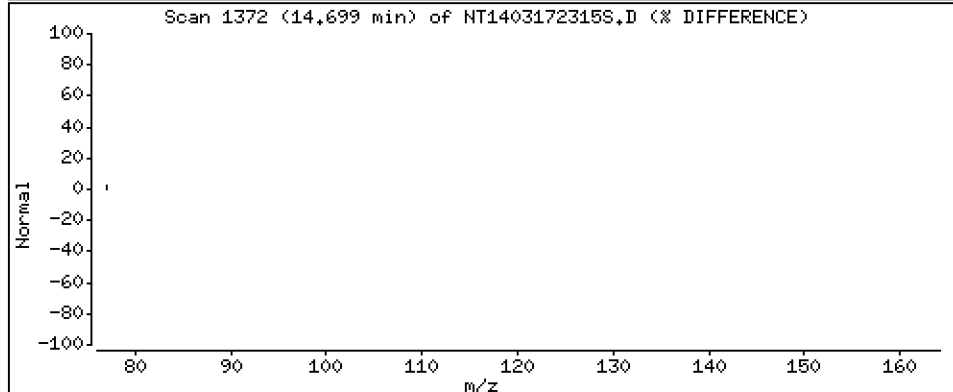
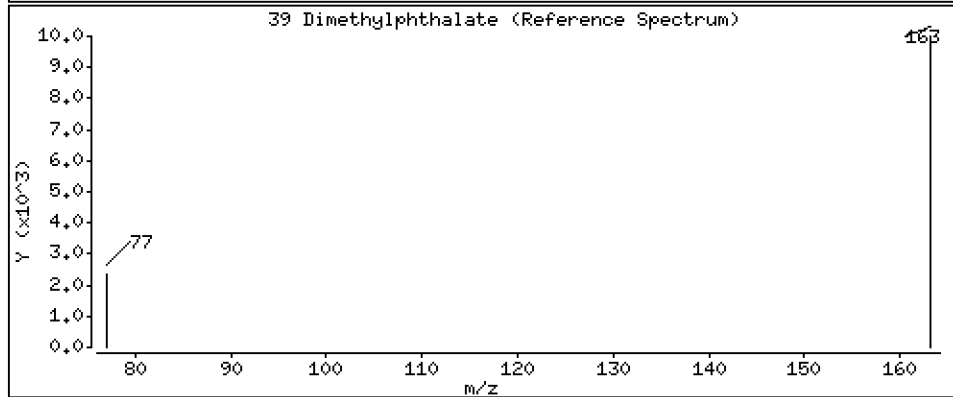
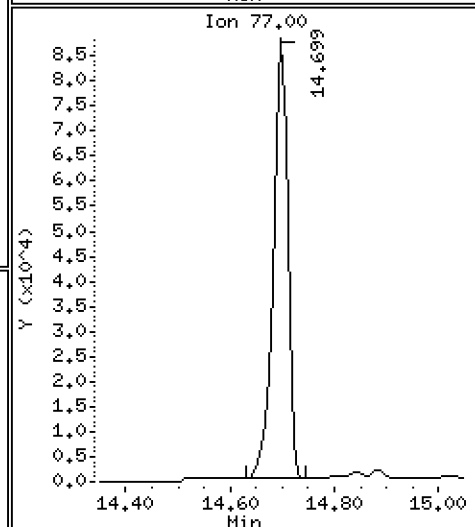
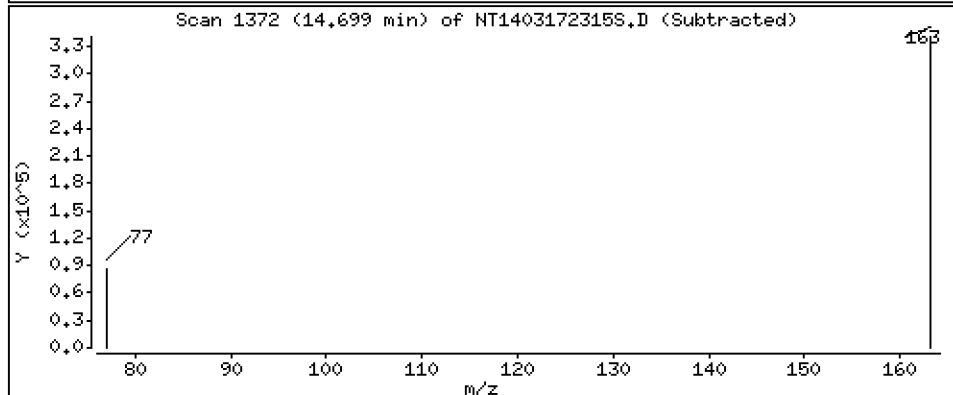
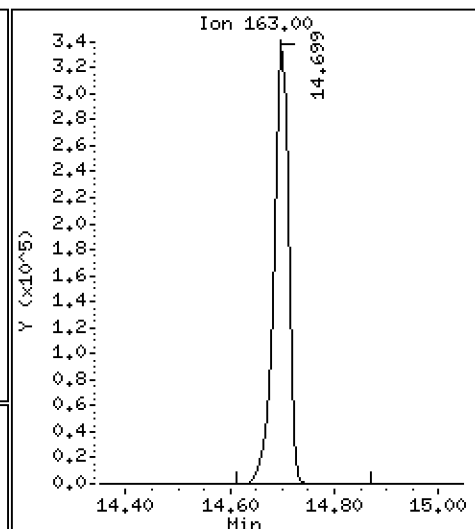
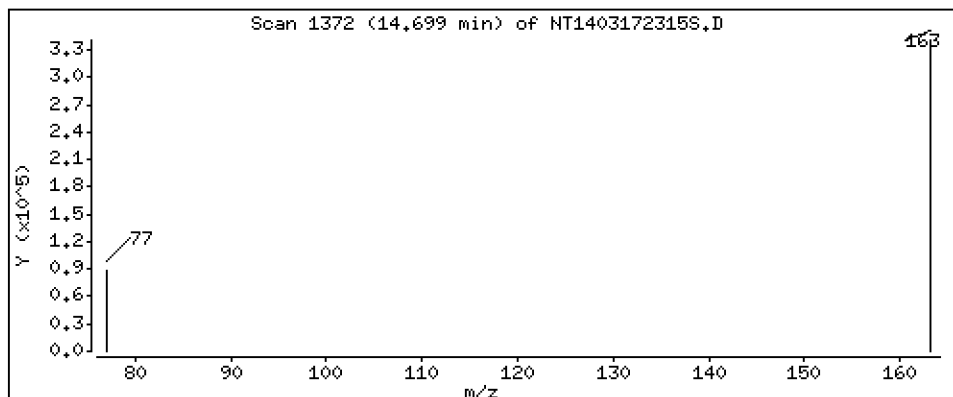
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,022 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

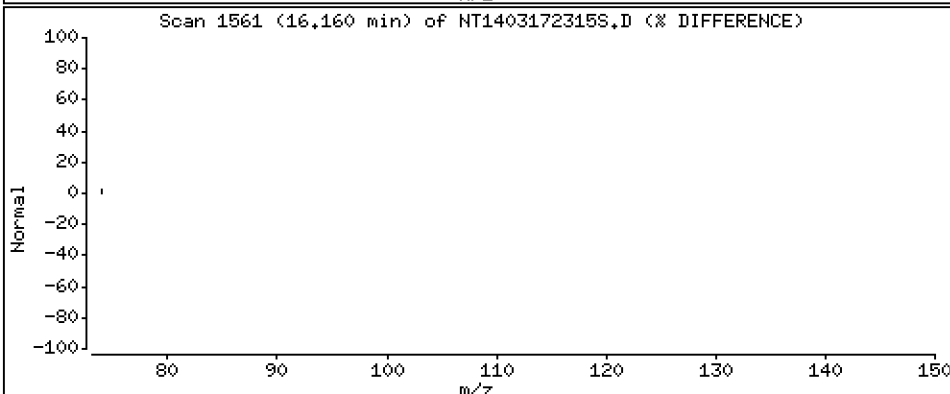
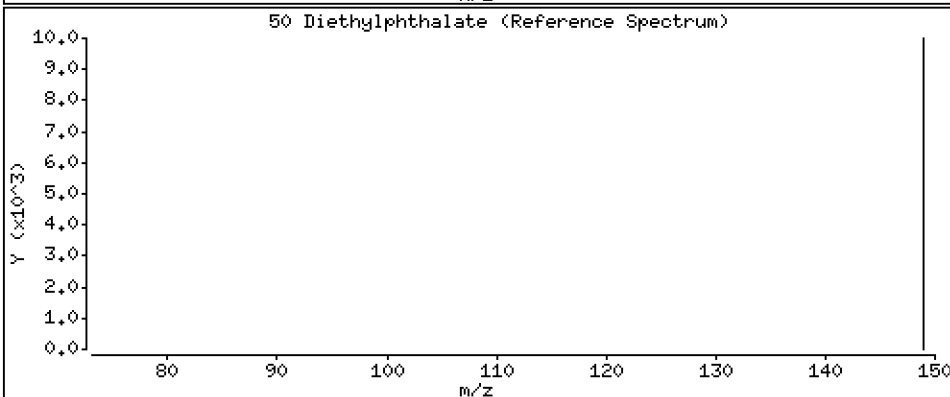
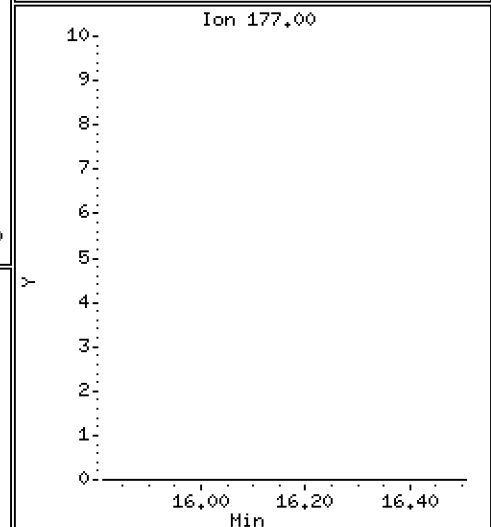
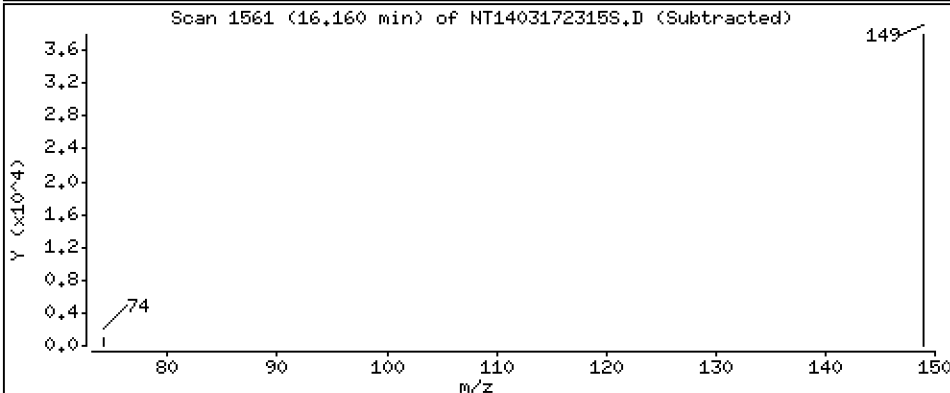
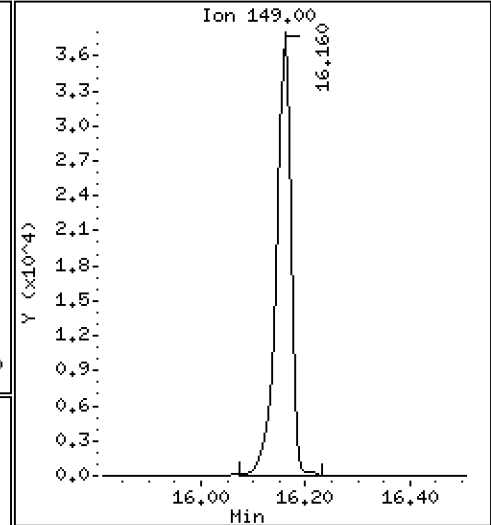
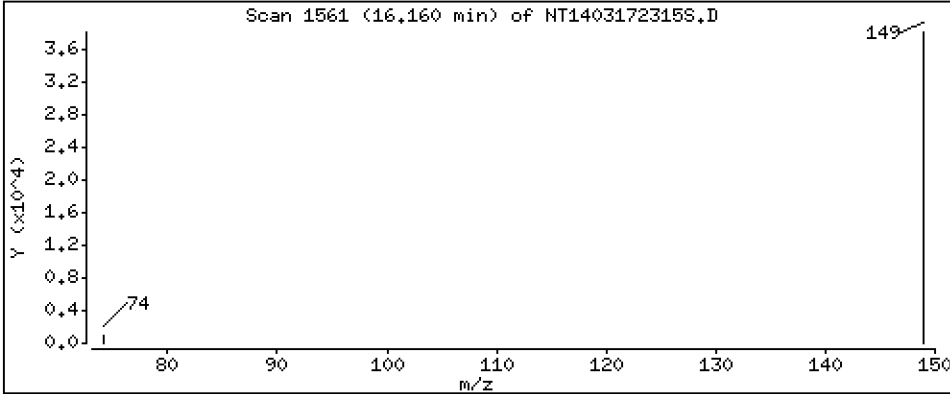
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,4262 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

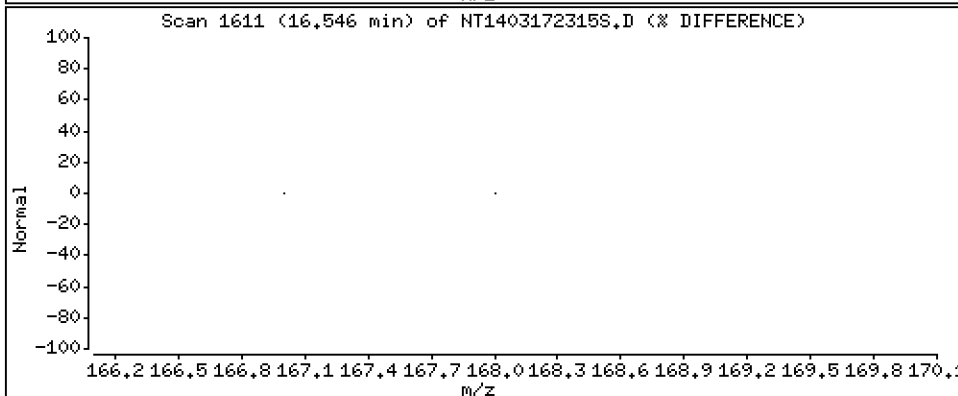
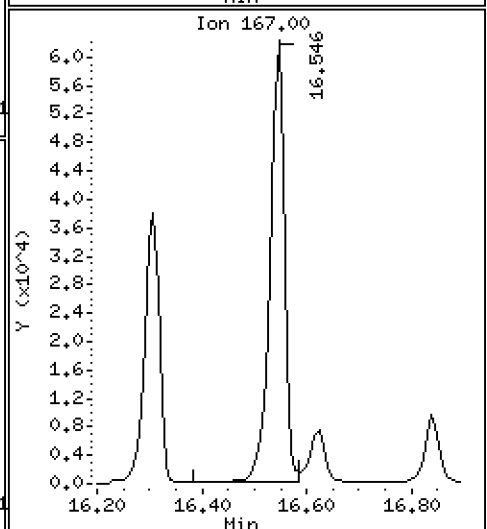
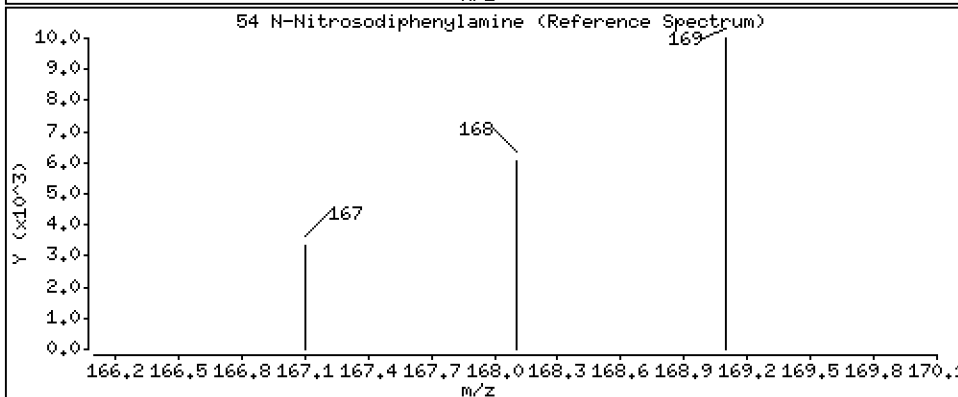
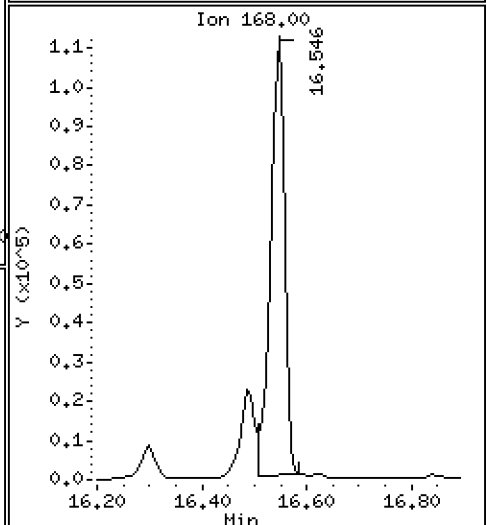
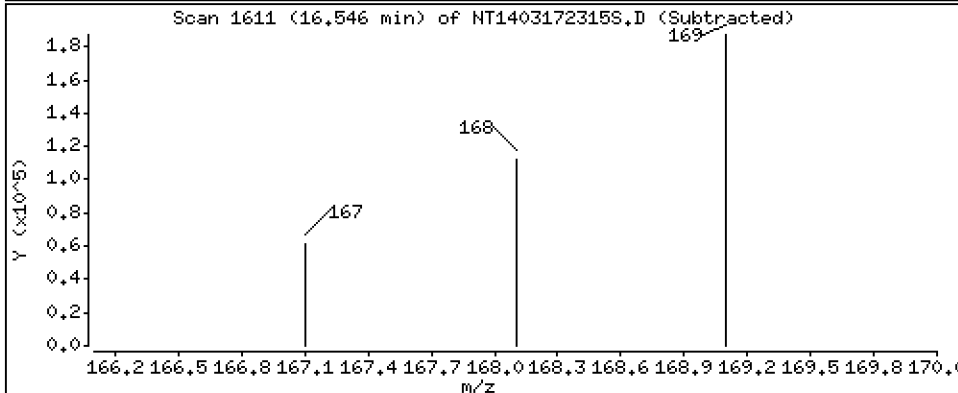
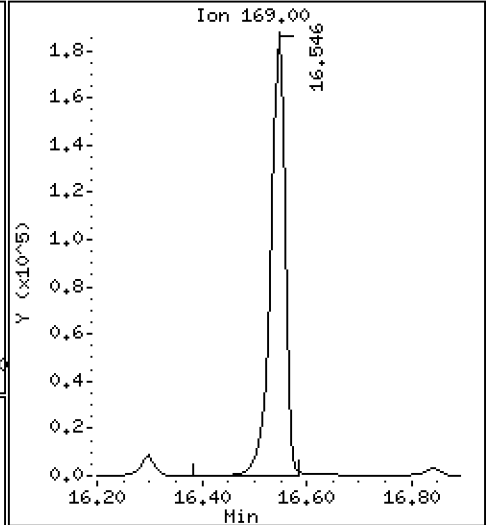
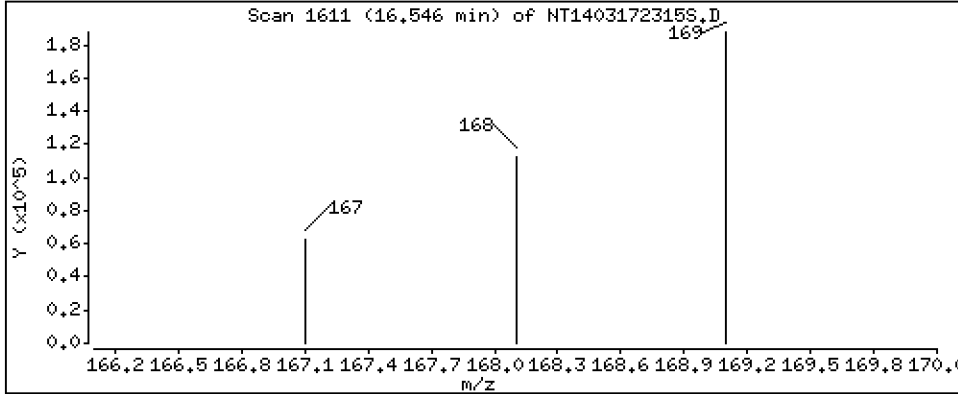
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 2,909 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

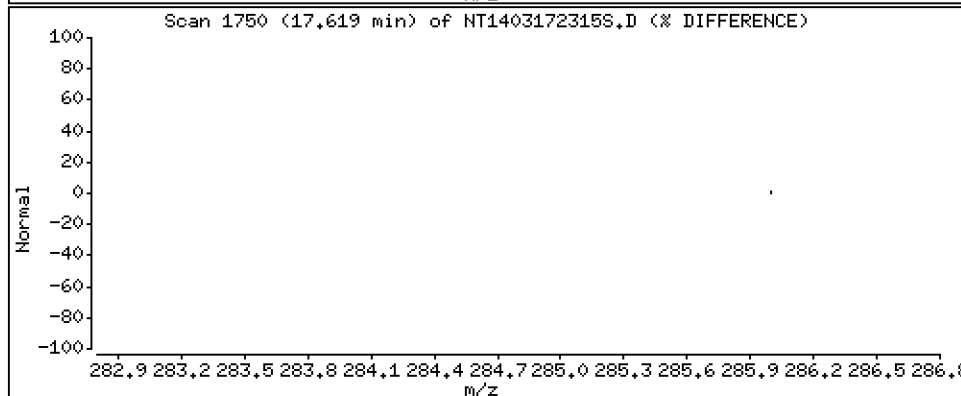
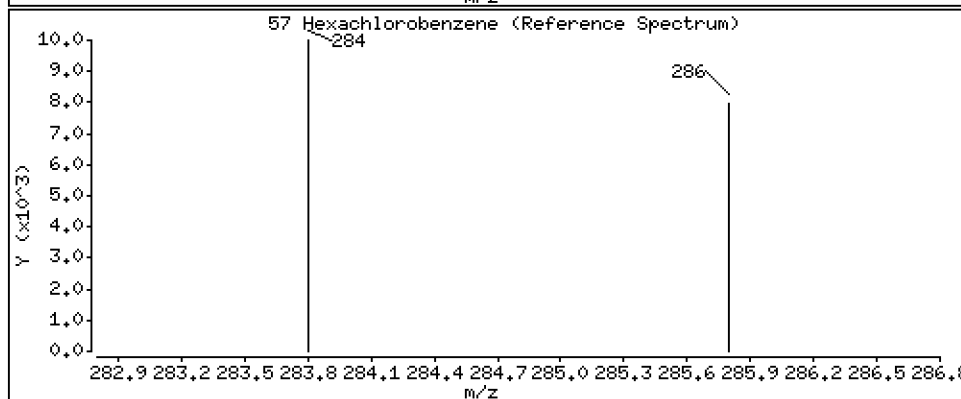
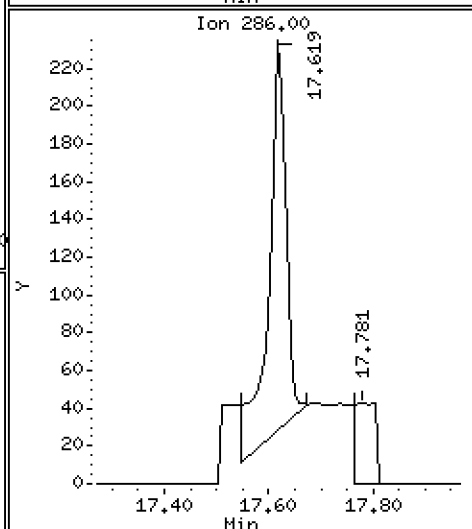
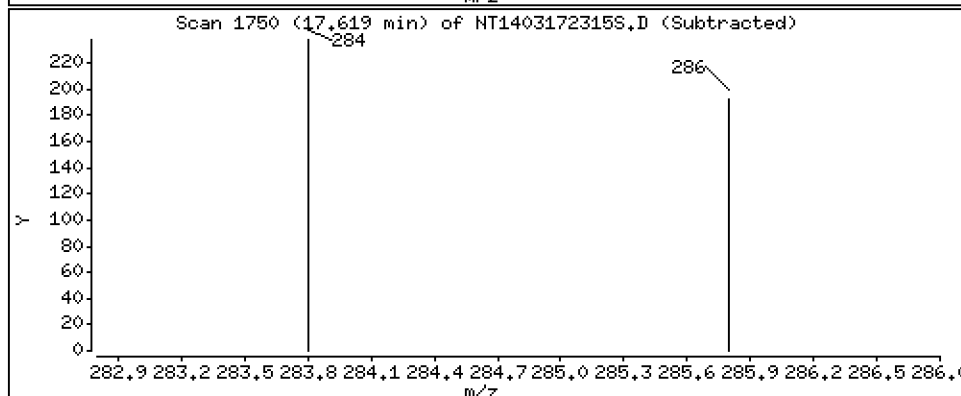
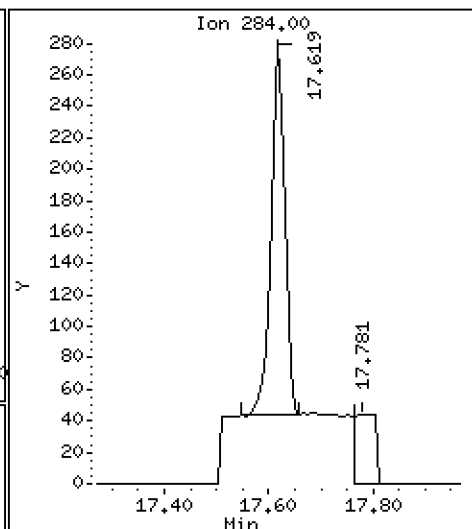
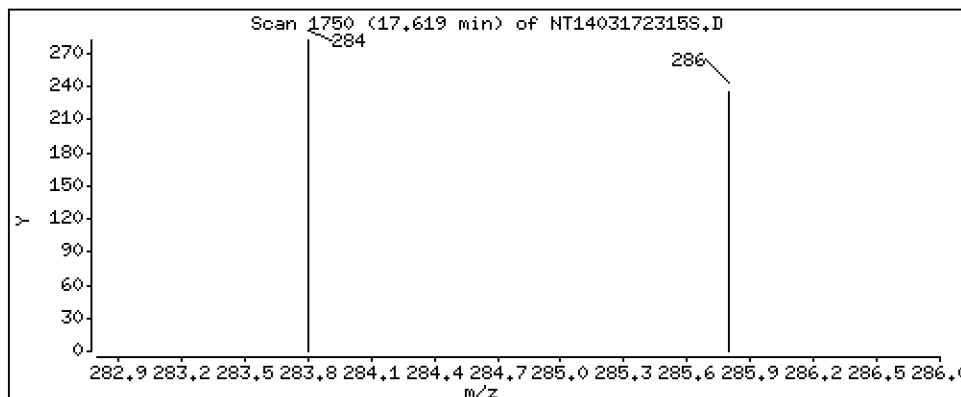
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,009246 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

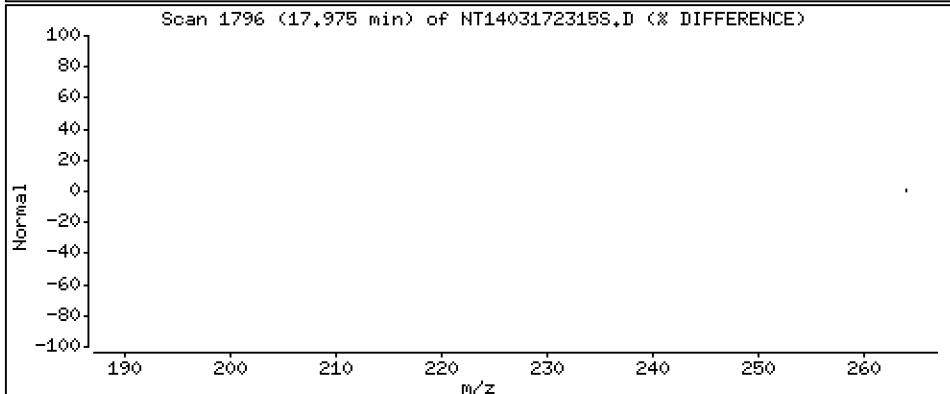
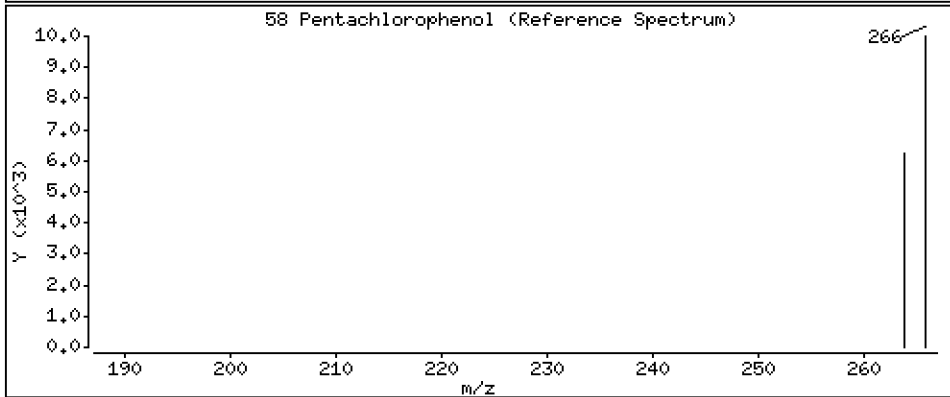
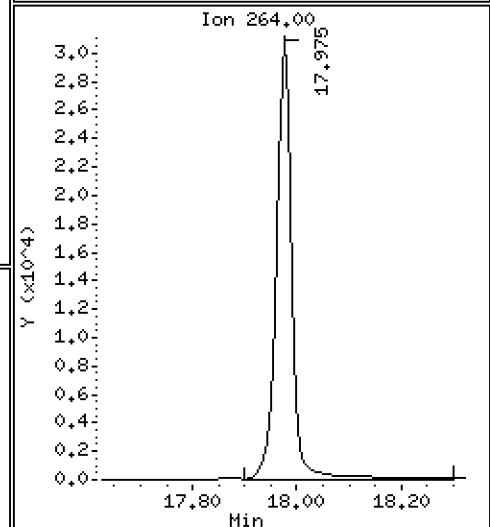
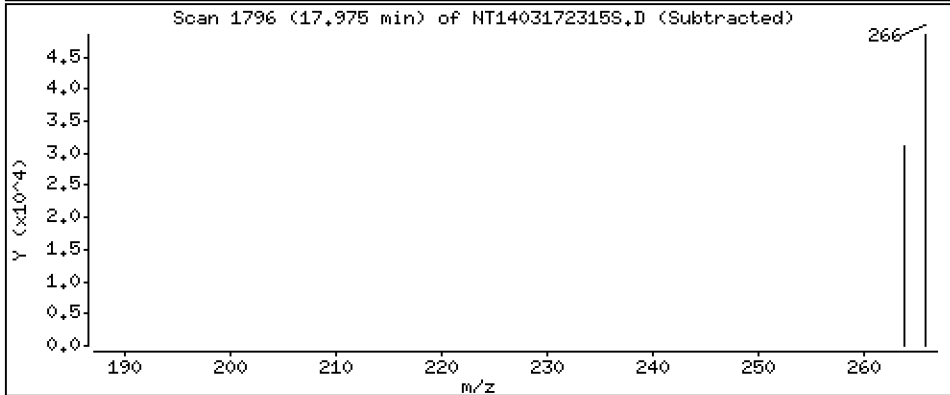
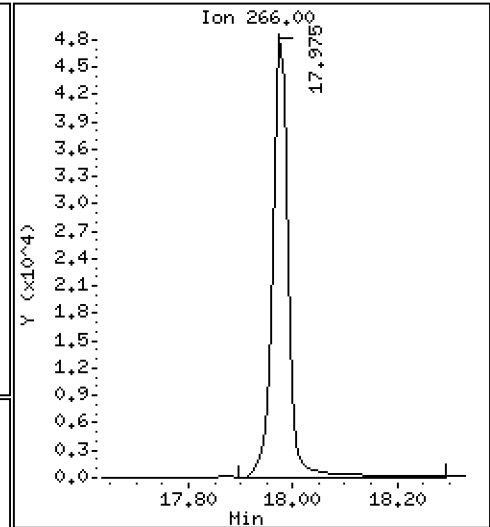
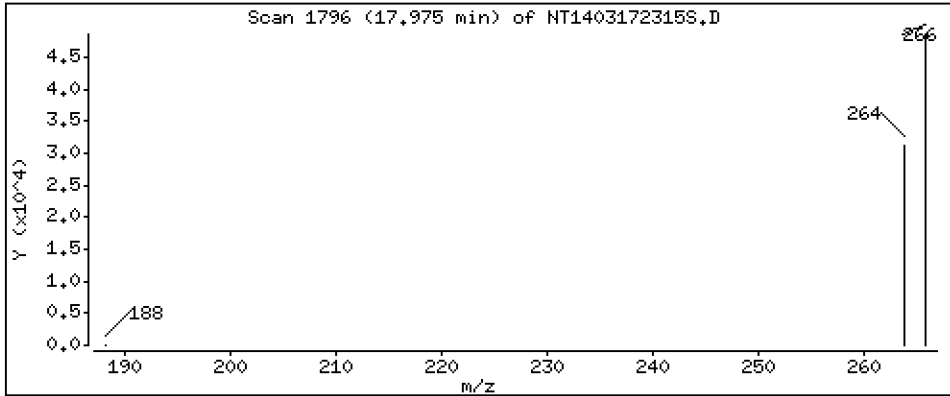
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,109 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

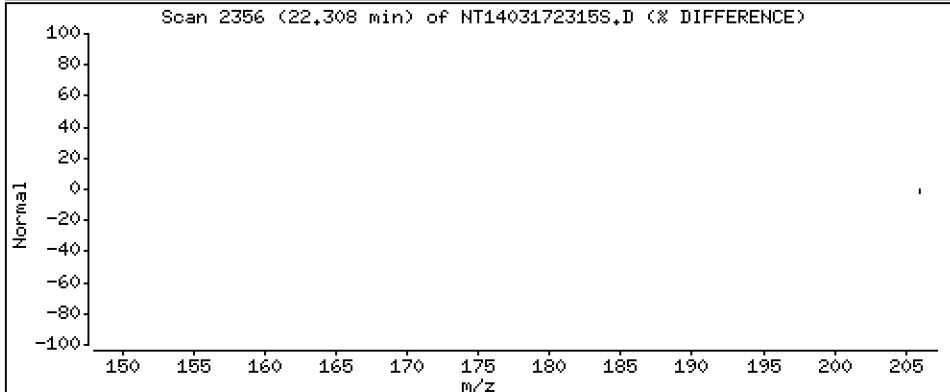
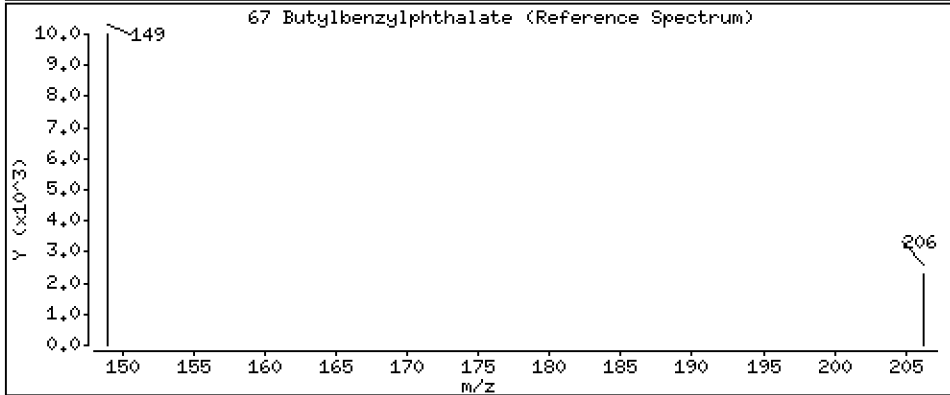
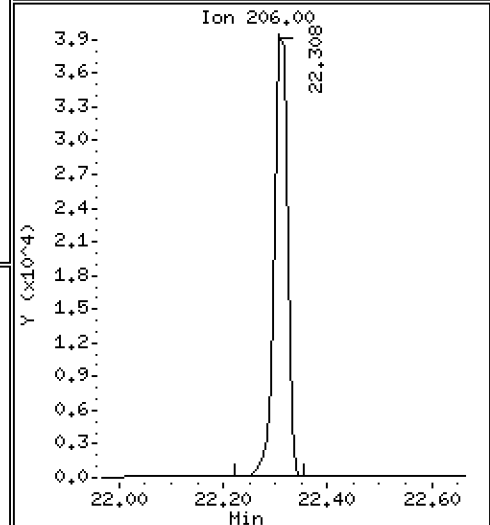
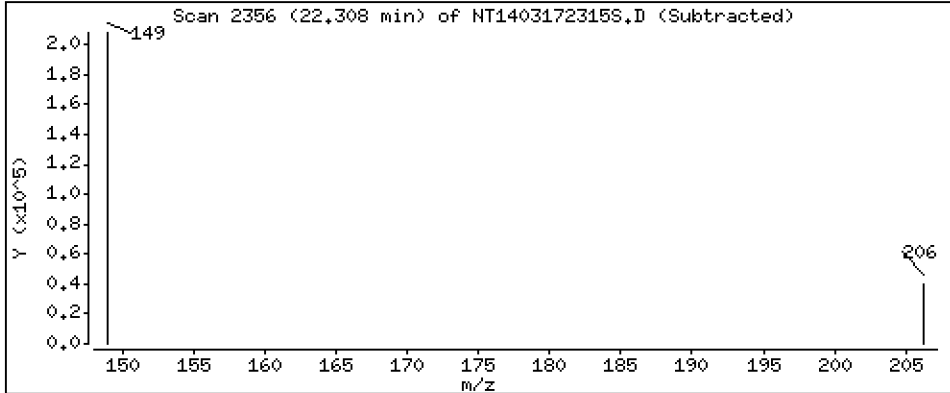
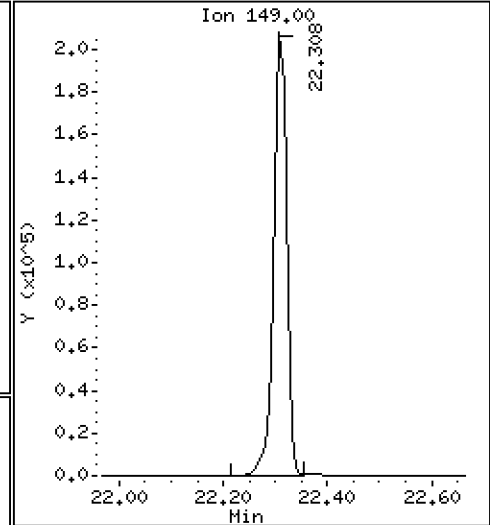
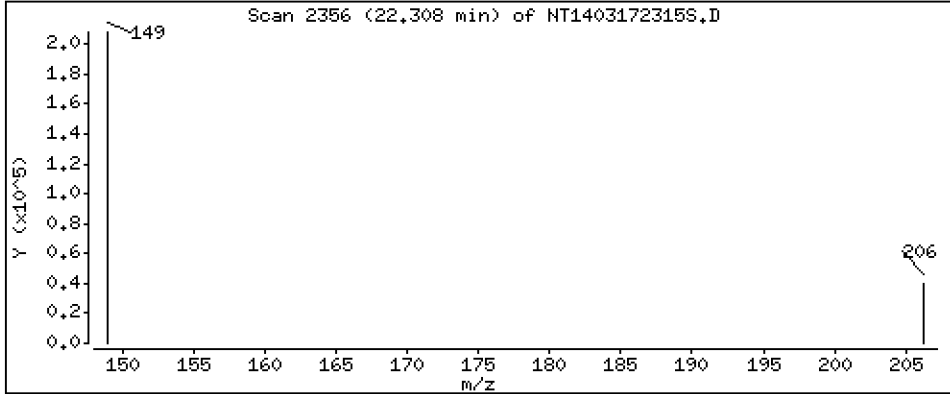
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,195 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

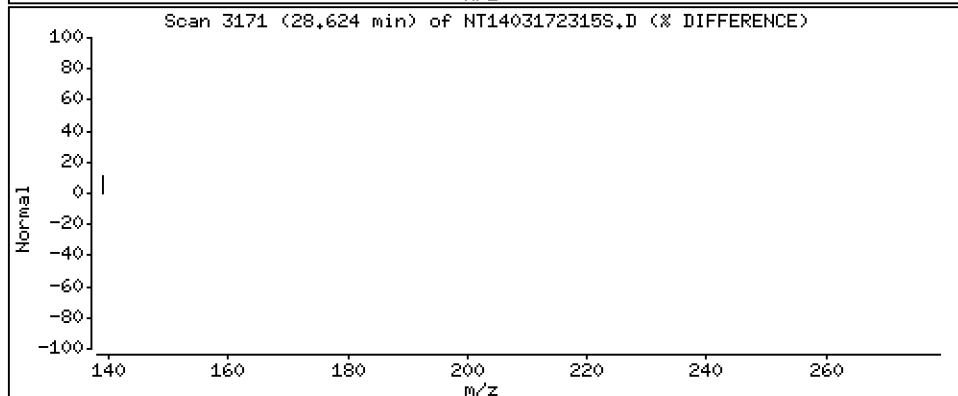
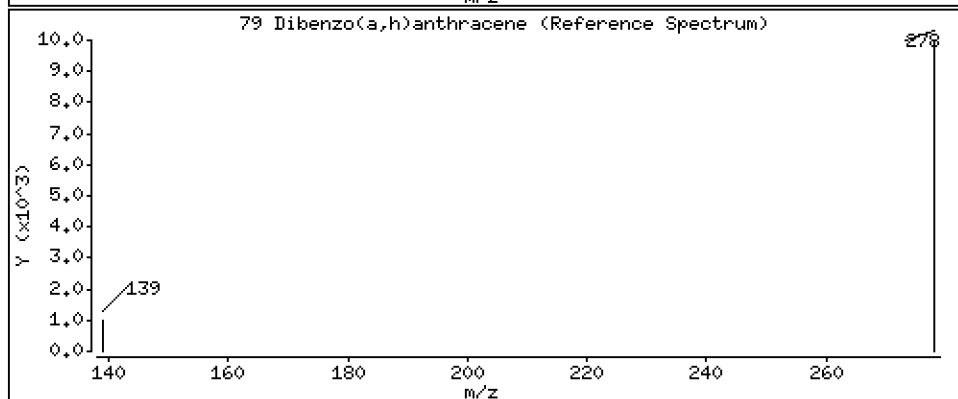
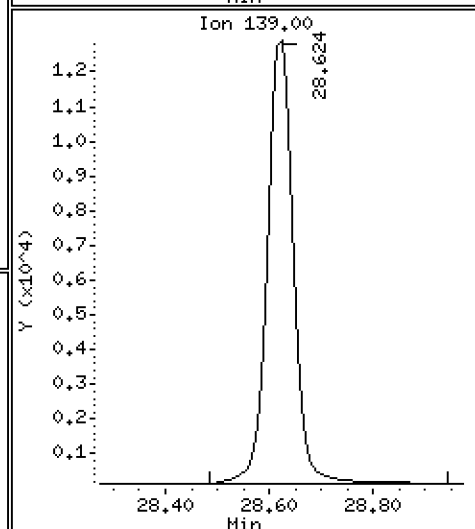
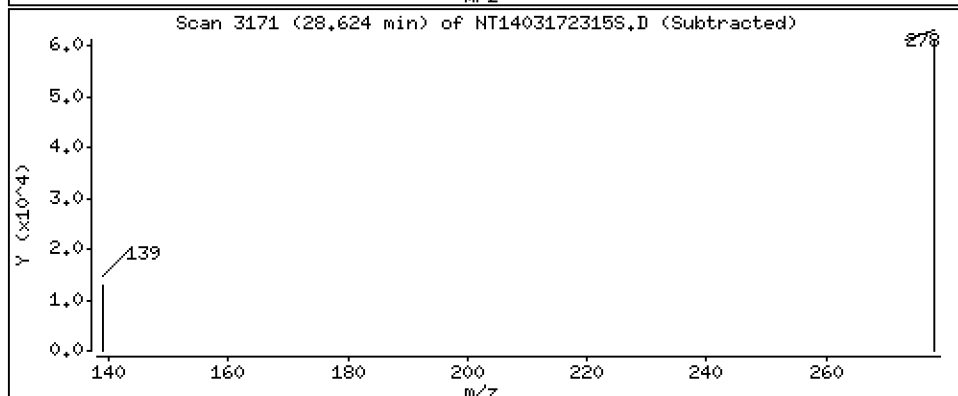
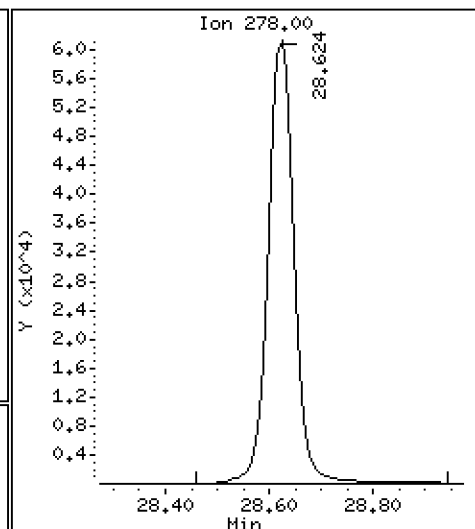
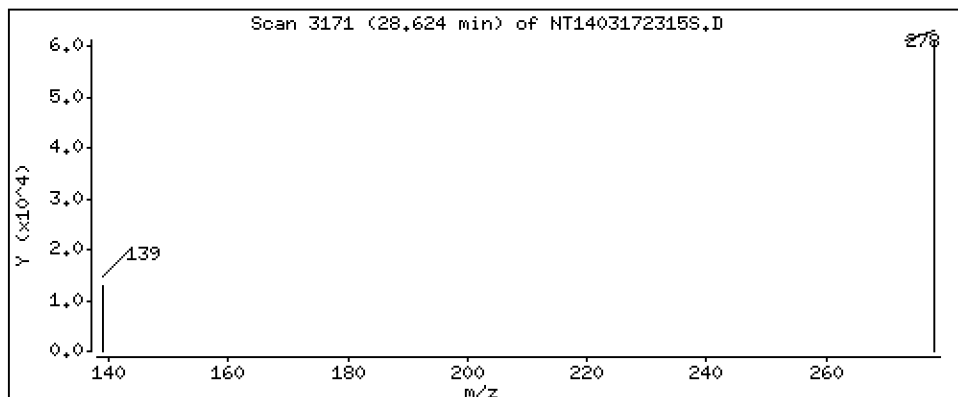
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 2,786 ug/mL



Date : 17-MAR-2023 22:55

Client ID:

Instrument: nt14.i

Sample Info: BLB0424-SRM2

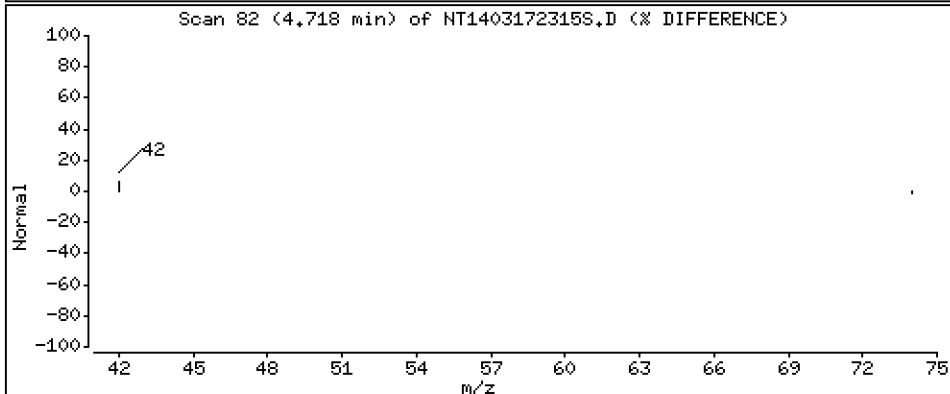
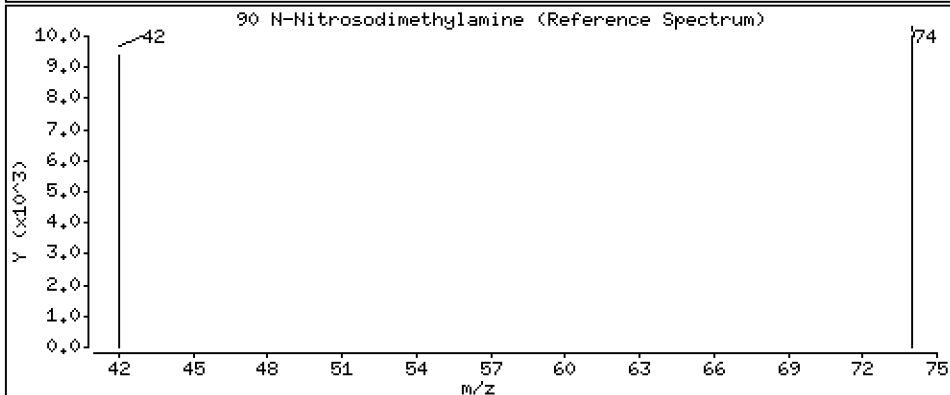
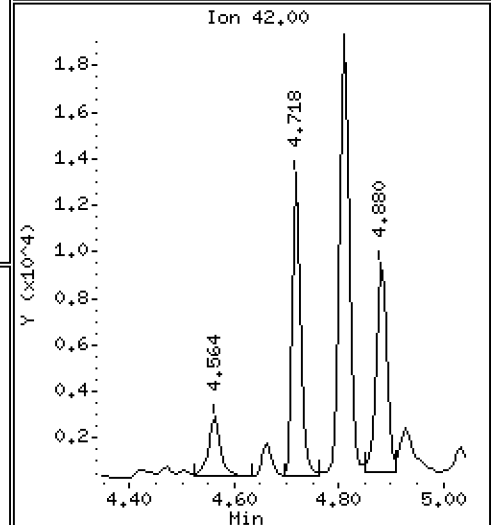
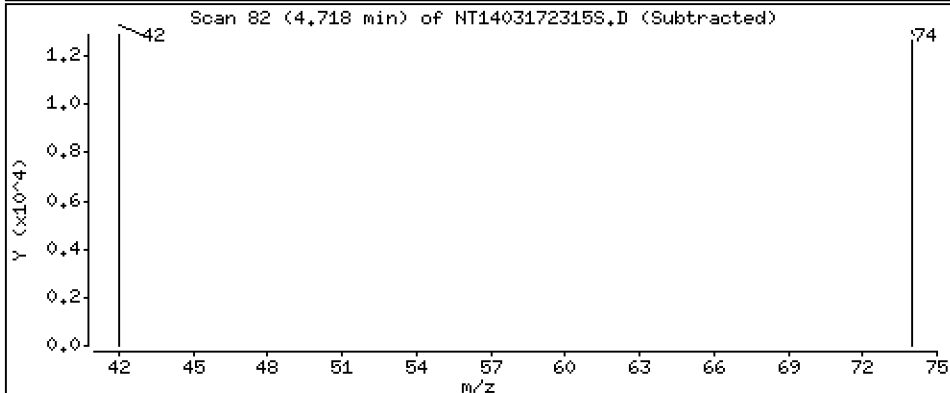
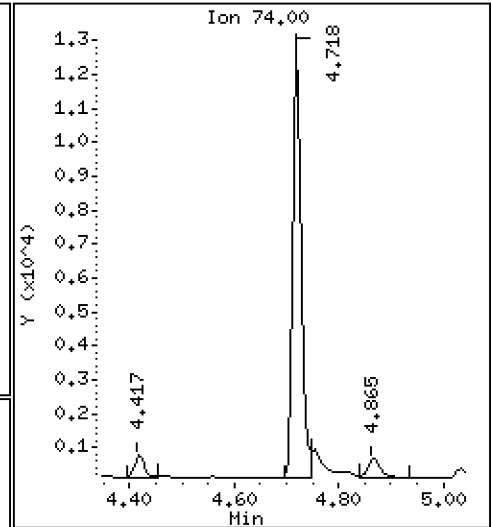
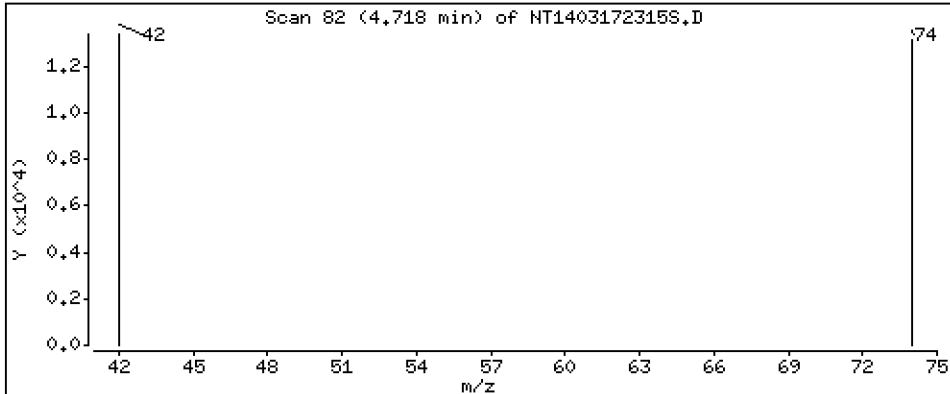
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2751 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172315S.D
 Lab Smp Id: BLB0424-SRM2
 Inj Date : 17-MAR-2023 22:55 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : BLB0424-SRM2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.842	6.826	(0.755)	495710	5.45186	5.452 (R)
3 Phenol	94		8.441	8.440	(0.931)	211184	1.68898	1.689
7 1,3-Dichlorobenzene	146		8.997	9.005	(0.992)	40902	0.38226	0.3823
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	267869	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	1100	0.01062	0.01062 (M)
11 Benzyl alcohol	79		Compound Not Detected.					
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	1088	0.01079	0.01079 (M)
13 2-Methylphenol	108		9.564	9.563	(1.055)	304438	3.52470	3.525
15 4-Methylphenol	108		9.836	9.827	(1.085)	465773	5.10448	5.104
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	319219	3.73083	3.731
24 Benzoic acid	105		10.999	10.999	(0.951)	78085	1.20100	1.201
26 1,2,4-Trichlorobenzene	180		11.480	11.479	(0.993)	56645	0.67547	0.6755
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	995304	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	54658	1.28792	1.288
39 Dimethylphthalate	163		14.698	14.698	(0.967)	629064	4.02185	4.022
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	457995	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	70965	0.42616	0.4262
54 N-Nitrosodiphenylamine	169		16.546	16.545	(0.907)	341550	2.90928	2.909
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	417	0.00925	0.009246
58 Pentachlorophenol	266		17.974	17.982	(0.985)	95960	3.10913	3.109
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	866459	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	468619	5.95220	5.952 (R)
67 Butylbenzylphthalate	149		22.308	22.315	(0.957)	336084	4.19483	4.195
* 69 Chrysene-d12	240		23.299	23.298	(1.000)	456685	4.00000	
* 77 Perylene-d12	264		25.931	25.938	(1.000)	299254	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.104)	211359	2.78608	2.786
90 N-Nitrosodimethylamine	74		4.717	4.694	(0.520)	15282	0.27512	0.2751

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172315S.D
 Lab Smp Id: BLB0424-SRM2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	267869	19.35
27 Naphthalene-d8	825617	412809	1651234	995304	20.55
42 Acenaphthene-d10	392947	196474	785894	457995	16.55
59 Phenanthrene-d10	789887	394944	1579774	866459	9.69
69 Chrysene-d12	494007	247004	988014	456685	-7.55
77 Perylene-d12	375441	187721	750882	299254	-20.29

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403172315S.D

Lab ID: BLB0424-SRM2

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 22:55

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172303S.D

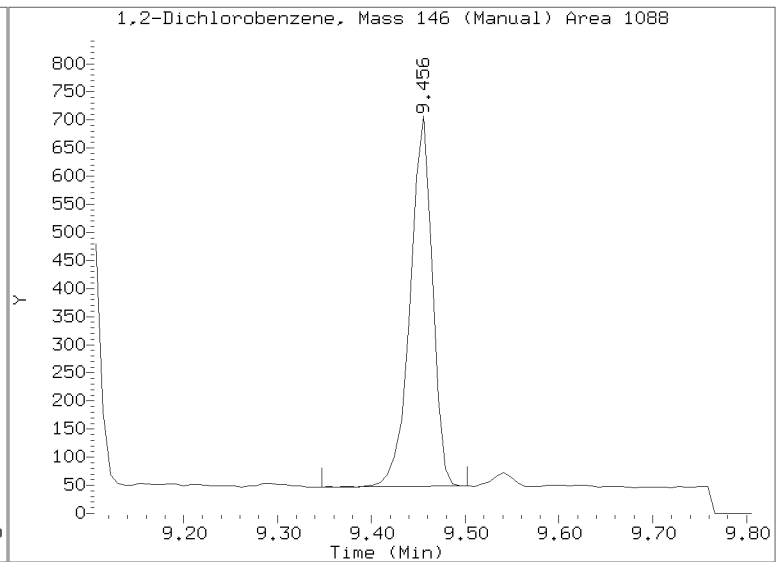
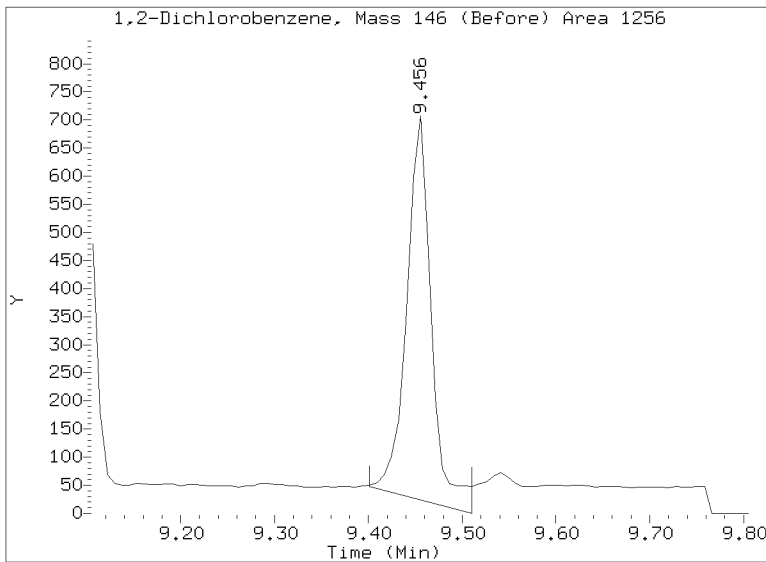
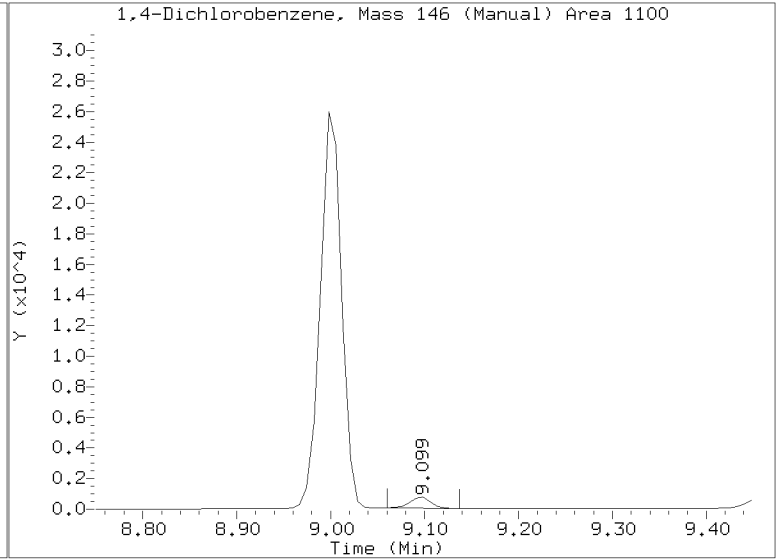
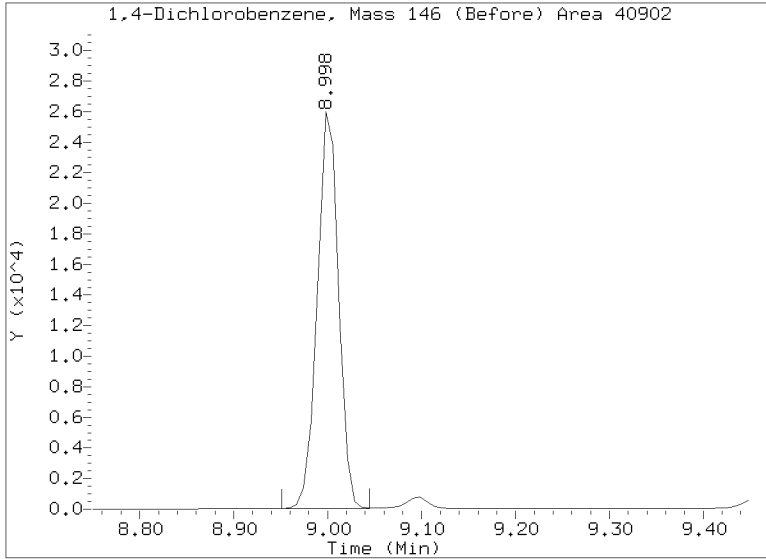
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172315S.D
Injection Date: 17-MAR-2023 22:55
Lab ID: BLB0424-SRM2 Client ID:
Report Date: 03/23/2023 16:55





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

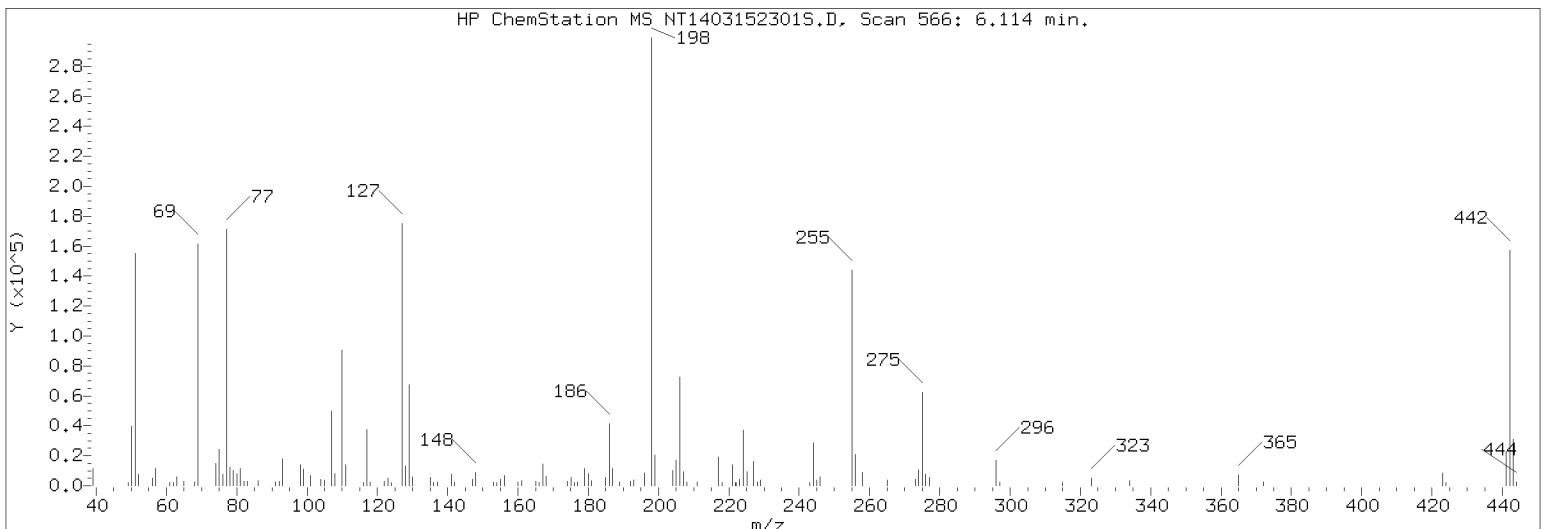
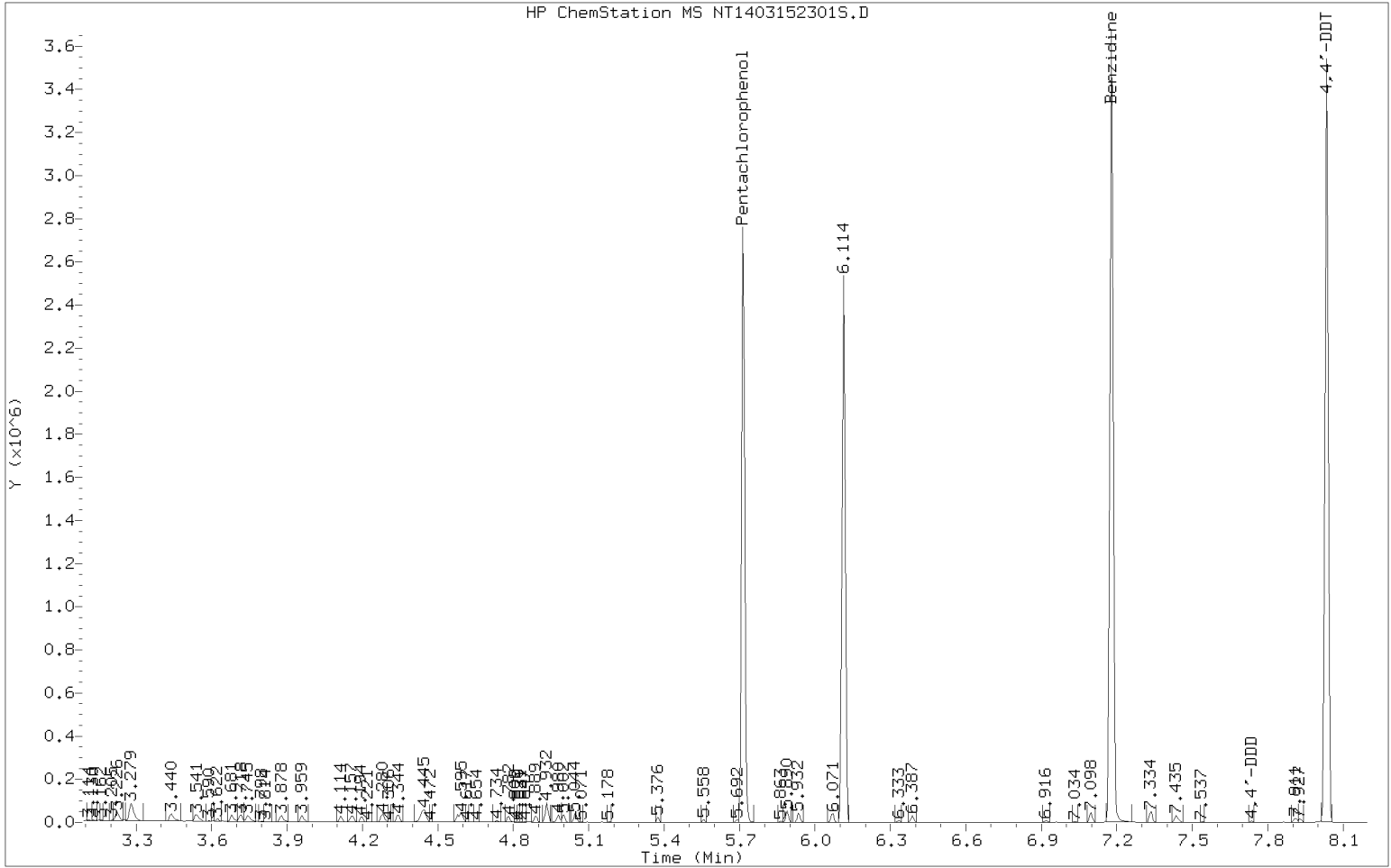
Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Lab File ID:	<u>NT1403152301S.D</u>	Injection Date:	<u>03/15/23</u>
Instrument ID:	<u>NT14</u>	Injection Time:	<u>12:00</u>
Sequence:	<u>SLC0242</u>	Lab Sample ID:	<u>SLC0242-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.674	PASS
69	Less than 100% of 198	53.4	PASS
70	Less than 2% of 69	0	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.72	PASS
365	1 - 100% of 198	2.71	PASS
441	Less than 150% of 443	72.2	PASS
442	1 - 200% of 198	58.3	PASS
443	15 - 24% of 442	19.2	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Less than 200% of		

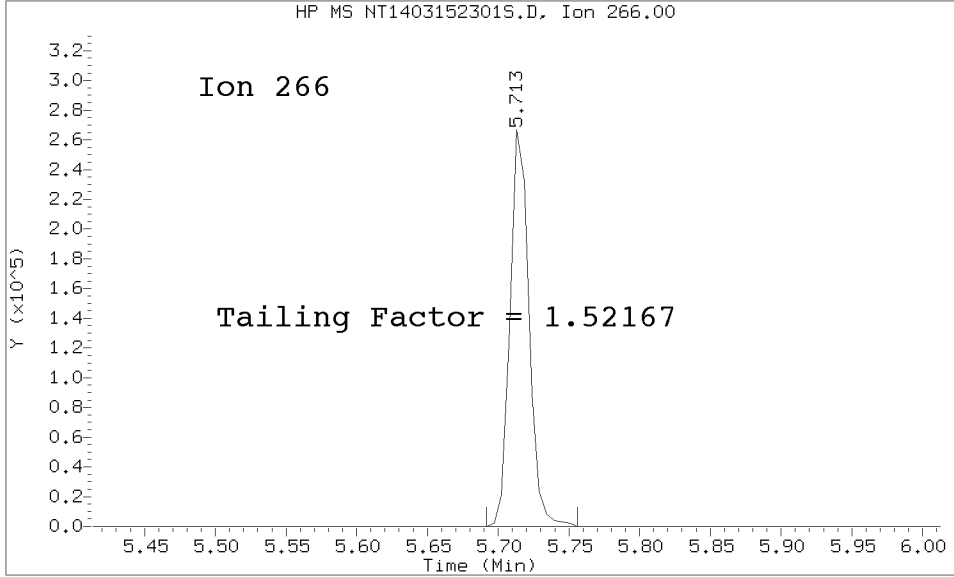
Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0242-TUN1	NT1403152301S.D	03/15/2023	12:00
Cal Standard	SLC0242-CAL8	NT1403152303S.D	03/15/2023	12:49
Cal Standard	SLC0242-CAL7	NT1403152304S.D	03/15/2023	13:26
Cal Standard	SLC0242-CAL6	NT1403152305S.D	03/15/2023	14:02
Cal Standard	SLC0242-CAL5	NT1403152306S.D	03/15/2023	14:38
Cal Standard	SLC0242-CAL4	NT1403152307S.D	03/15/2023	15:14
Cal Standard	SLC0242-CAL3	NT1403152308S.D	03/15/2023	15:50
Cal Standard	SLC0242-CAL2	NT1403152309S.D	03/15/2023	16:26
Cal Standard	SLC0242-CAL1	NT1403152310S.D	03/15/2023	17:03
Secondary Cal Check	SLC0242-SCV1	NT1403152311S.D	03/15/2023	17:39
Initial Cal Blank	SLC0242-ICB1	NT1403152312S.D	03/15/2023	18:15

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/20230315.b/NT1403152301S.D/NT1403152301S.D
 Method Used: \20230315.b\20230315.b\DFTPP8270E.m Inst: nt14
 Injection Date: 15-MAR-2023 12:00 Operator: JGR
 Sample Info: SLC0242-TUN1 SLC0242-TUN1
 Report Date: 03/22/2023 12:12



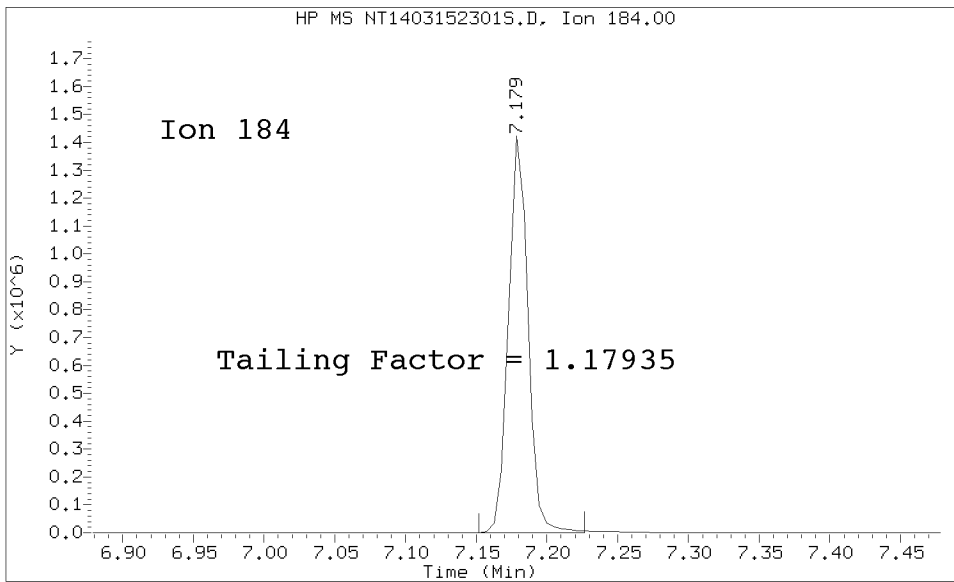
Datafile Analyzed: /20230315.b/20230315.b/NT1403152301S.D/NT1403152301S.D
Method Used: \20230315.b\20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 15-MAR-2023 12:00 Operator: JGR
Sample Info: SLC0160-TUN1
Report Date: 03/22/2023 12:12



Pentachlorophenol

=====
Exp. RT = 5.681
Found RT = 5.713

Tail Factor = 1.522 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.146
Found RT = 7.179

Tail Factor = 1.179 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.5216693	2.000	PASS
Benzidine	1.1793548	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	570011			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	2915	0.5	20.0	PASS
4,4-DDD + DDE	2915	0.5	20.0	PASS

Tuning Sample, nt14.i/20230315.b/20230315.b/NT1403152301S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.36 (0.67)
69	Mass 69 relative abundance	53.44
70	Less than 2.00% of mass 69	0.00 (0.00)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
365	1.00 - 100.00% of mass 198	2.71
441	Less than 150.00% of mass 443	8.08 (72.22)
442	Less than 200.00% of mass 198	58.28
443	15.00 - 24.00% of mass 442	11.19 (19.20)

Data File: NT1403152301S.D
 Spectrum: Avg. Scans 565-567 (6.11), Background Scan 560
 Location of Maximum: 198.00
 Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	9069	105.00	2863	168.00	5614	228.00	794
49.00	671	107.00	39032	174.00	2579	229.00	2862
50.00	30976	108.00	6346	175.00	4842	243.00	696
51.00	125768	110.00	71896	176.00	720	244.00	22688
52.00	6453	111.00	11106	177.00	2298	245.00	3011
56.00	4179	116.00	757	179.00	9119	246.00	4609
57.00	8934	117.00	29992	180.00	6294	255.00	114968
61.00	717	118.00	874	181.00	2818	256.00	16984
62.00	680	122.00	2529	185.00	4402	258.00	7242
63.00	4715	123.00	4032	186.00	32272	265.00	2218
65.00	1773	124.00	773	187.00	9241	273.00	3465
68.00	849	127.00	138368	189.00	1636	274.00	8836
69.00	126008	128.00	10413	192.00	2615	275.00	49816
74.00	11539	129.00	53960	193.00	3054	276.00	6361
75.00	19136	130.00	4541	196.00	6505	277.00	4187
76.00	6049	135.00	4342	198.00	235776	296.00	14150
77.00	134016	136.00	766	199.00	15852	297.00	810
78.00	9331	137.00	800	204.00	8038	315.00	707
79.00	8099	141.00	6361	205.00	13686	323.00	4245
80.00	6487	142.00	869	206.00	57704	334.00	2072
81.00	9538	147.00	3337	207.00	7569	365.00	6386
82.00	1806	148.00	7192	208.00	1530	372.00	1786
83.00	1759	153.00	830	211.00	1585	423.00	7390
86.00	2890	154.00	714	217.00	15135	424.00	1369
91.00	1612	155.00	3489	218.00	723	441.00	19048
92.00	1761	156.00	5350	221.00	10741	442.00	137408
93.00	14267	160.00	806	222.00	1546	443.00	26376
98.00	10738	161.00	2807	223.00	3284	444.00	1928
99.00	8546	165.00	1720	224.00	30088		
101.00	5073	166.00	753	225.00	7730		
104.00	3305	167.00	9750	227.00	12951		



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00050	Instrument:	NT14
Calibration Date:	03/15/2023	Column (1):	ZB-5MS

Calibration Comments: 8270E SIM Dual SCAN ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	0.05	1.800835	0.1	1.606899	0.2	1.58946	0.5	1.490529	1	1.530549	2.5	1.42723
1,2-Dichlorobenzene	0.05	1.639381	0.1	1.570394	0.2	1.564925	0.5	1.470085	1	1.504008	2.5	1.415024
Benzyl Alcohol					0.2	0.9892346	0.5	1.033319	1	1.119457	2.5	1.10552
Benzoic acid	0.2	1.493164E-02	0.4	3.155742E-02	0.8	7.595256E-02	2	0.1679705	4	0.2404936	10	0.2706196
2,4-Dimethylphenol	0.1	0.328019	0.2	0.3431435	0.4	0.3553447	1	0.355034	2	0.3655859	5	0.3396291
1,2,4-Trichlorobenzene	0.05	0.387841	0.1	0.3651319	0.2	0.3499598	0.5	0.327545	1	0.3328415	2.5	0.3111387
N-Nitrosodiphenylamine	0.05	0.5004329	0.1	0.523182	0.2	0.5557836	0.5	0.5562821	1	0.579356	2.5	0.5390842
Pentachlorophenol	0.1	5.070694E-02	0.2	6.320046E-02	0.4	8.637945E-02	1	0.110743	2	0.1332021	5	0.1404612
2-Fluorophenol	0.075	1.484432	0.15	1.363771	0.3	1.322891	0.75	1.322239	1.5	1.397138	3.75	1.325771
p-Terphenyl-d14	0.05	0.7606202	0.1	0.6993271	0.2	0.670321	0.5	0.6723224	1	0.7201413	2.5	0.6755183



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00050	Instrument:	NT14
Calibration Date:	03/15/2023	Column (1):	ZB-5MS

Calibration Comments: 8270E SIM Dual SCAN ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	5	1.446684	10	1.476733								
1,2-Dichlorobenzene	5	1.43364	10	1.450316								
Benzyl Alcohol	5	1.149721	10	1.169115								
Benzoic acid	20	0.2871317	40	0.3213461								
2,4-Dimethylphenol	10	0.3369217	20	0.3272378								
1,2,4-Trichlorobenzene	5	0.3110433	10	0.3106966								
N-Nitrosodiphenylamine	5	0.5363527	10	0.5453358								
Pentachlorophenol	10	0.1499898	20	0.1563192								
2-Fluorophenol	7.5	1.32519	15	1.320584								
p-Terphenyl-d14	5	0.6678868	10	0.6505114								



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00050	Instrument:	NT14
Calibration Date:	03/15/2023	Column (1):	ZB-5MS

Calibration Comments: 8270E SIM Dual SCAN ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
1,4-Dichlorobenzene	1.546115	7.8			RSD (15)	
1,2-Dichlorobenzene	1.505972	5.2			RSD (15)	
Benzyl Alcohol	1.094394	6.4			RSD (15)	
Benzoic acid	0.1762504	69.0		0.9992	QCOD (0.99)	
2,4-Dimethylphenol	0.3438645	4.0			RSD (15)	
1,2,4-Trichlorobenzene	0.3370247	8.5			RSD (15)	
N-Nitrosodiphenylamine	0.5419762	4.4			RSD (15)	
Pentachlorophenol	0.1113753	36.3		0.9996	QCOD (0.99)	
2-Fluorophenol	1.357752	4.3			RSD (15)	
p-Terphenyl-d14	0.6895811	5.2			RSD (15)	



ANALYSIS SEQUENCE

SLC0242

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00050 GCMS Column ID: L002738
MS EM Level: 1847 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0242-TUN1	MS Tune	QC		1	L002618		03/15/2023 12:00	NT1403152301S.D	JGR	
SLC0242-CAL8	ABN 10.0	QC		2	K011110	K010831	03/15/2023 12:49	NT1403152303S.D	JGR	
SLC0242-CAL7	ABN 5.0	QC		3	K011109	K010831	03/15/2023 13:26	NT1403152304S.D	JGR	
SLC0242-CAL6	ABN 2.5	QC		4	K011108	K010831	03/15/2023 14:02	NT1403152305S.D	JGR	
SLC0242-CAL5	ABN 1.0	QC		5	K011107	K010831	03/15/2023 14:38	NT1403152306S.D	JGR	
SLC0242-CAL4	ABN 0.5	QC		6	K011106	K010831	03/15/2023 15:14	NT1403152307S.D	JGR	
SLC0242-CAL3	ABN 0.2	QC		7	K011105	K010831	03/15/2023 15:50	NT1403152308S.D	JGR	
SLC0242-CAL2	ABN 0.1	QC		8	L002877	K010831	03/15/2023 16:26	NT1403152309S.D	JGR	
SLC0242-CAL1	ABN 0.05	QC		9	L002878	K010831	03/15/2023 17:03	NT1403152310S.D	JGR	
SLC0242-SCV1	SCV 5.0	QC		10	K010066	K010831	03/15/2023 17:39	NT1403152311S.D	JGR	
SLC0242-ICB1	Initial Cal Blank	QC		11	K005156	K010831	03/15/2023 18:15	NT1403152312S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b\20230315.b

Time	Filename	LabID	ClientId	DF																									
1	1200	NT1403152301S.D	SLC0242-TUN1		1	|	NO ISTDS FOUND	|																					
2	1213	NT1403152302S.D	SLC0242-CAL9		1	|	9.08	|	193189	|	11.58	|	746194	|	15.22	|	372879	|	18.25	|	755327	|	23.31	|	598001	|	25.95	|	566994
3	1249	NT1403152303S.D	SLC0242-CAL8		1	|	9.08	|	199100	|	11.57	|	763281	|	15.21	|	374468	|	18.25	|	756122	|	23.31	|	588196	|	25.95	|	568824
4	1326	NT1403152304S.D	SLC0242-CAL7		1	|	9.08	|	210618	|	11.57	|	802273	|	15.20	|	393217	|	18.25	|	796801	|	23.30	|	615139	|	25.94	|	604825
5	1402	NT1403152305S.D	SLC0242-CAL6		1	|	9.08	|	220094	|	11.57	|	828379	|	15.20	|	403583	|	18.25	|	810171	|	23.30	|	624805	|	25.94	|	615084
6	1438	NT1403152306S.D	SLC0242-CAL5		1	|	9.08	|	223201	|	11.56	|	832937	|	15.20	|	403175	|	18.25	|	814822	|	23.30	|	625755	|	25.94	|	614085
7	1514	NT1403152307S.D	SLC0242-CAL4		1	|	9.07	|	244579	|	11.57	|	905671	|	15.20	|	432686	|	18.25	|	872507	|	23.30	|	672118	|	25.94	|	660787
8	1550	NT1403152308S.D	SLC0242-CAL3		1	|	9.07	|	224982	|	11.57	|	833810	|	15.20	|	394134	|	18.25	|	791855	|	23.30	|	613885	|	25.94	|	596641
9	1626	NT1403152309S.D	SLC0242-CAL2		1	|	9.07	|	226822	|	11.57	|	834986	|	15.20	|	395938	|	18.25	|	787336	|	23.30	|	609729	|	25.94	|	588547
10	1703	NT1403152310S.D	SLC0242-CAL1		1	|	9.07	|	225451	|	11.56	|	838488	|	15.20	|	392849	|	18.25	|	771492	|	23.30	|	602035	|	25.94	|	580071
11	1739	NT1403152311S.D	SLC0242-SCV1		1	|	9.07	|	214548	|	11.57	|	807045	|	15.20	|	400955	|	18.25	|	801298	|	23.30	|	624454	|	25.94	|	623001
12	1815	NT1403152312S.D	SLC0242-ICB1		1	|	9.07	|	212376	|	11.56	|	811708	|	15.19	|	379238	|	18.25	|	759480	|	23.30	|	583854	|	25.94	|	563750

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b\20230315.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt14.i Date: 15-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1200	NT1403152301S.D	SLC0242-TUN1		1	NO MANUAL INTEGRATION
1213	NT1403152302S.D	SLC0242-CAL9		1	NO MANUAL INTEGRATION
1249	NT1403152303S.D	SLC0242-CAL8		1	NO MANUAL INTEGRATION
1326	NT1403152304S.D	SLC0242-CAL7		1	NO MANUAL INTEGRATION
1402	NT1403152305S.D	SLC0242-CAL6		1	NO MANUAL INTEGRATION
1438	NT1403152306S.D	SLC0242-CAL5		1	NO MANUAL INTEGRATION
1514	NT1403152307S.D	SLC0242-CAL4		1	NO MANUAL INTEGRATION
1550	NT1403152308S.D	SLC0242-CAL3		1	NO MANUAL INTEGRATION
1626	NT1403152309S.D	SLC0242-CAL2		1	NO MANUAL INTEGRATION
1703	NT1403152310S.D	SLC0242-CAL1		1	NO MANUAL INTEGRATION
1739	NT1403152311S.D	SLC0242-SCV1		1	NO MANUAL INTEGRATION
1815	NT1403152312S.D	SLC0242-ICB1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 16-Mar-2023 15:20

NT1403152301S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152302S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152303S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152304S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152305S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152306S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152307S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152308S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152309S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152310S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152311S.D	Data Locked	deenayd, 16-Mar-2023 15:20
NT1403152312S.D	Data Locked	deenayd, 16-Mar-2023 15:20

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Calibration File Names:

Level 1: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152308.D
 Level 2: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152307.D
 Level 3: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152306.D
 Level 4: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152305.D
 Level 5: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152304.D
 Level 6: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152303.D
 Level 7: \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152302.D
 Level 8: \\target\share\chem3\nt14.i\20230228.b\20230228.b\NT1423022803.D

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
140 Diallyte A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
141 Diallate B	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
142 1,2-Dibromo-3-Chloropropane	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
135 2,3,5,6-Tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
136 2,3,4,5-tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
137 NewCpnd_131	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
133 Butylatedhydroxytoluene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
132 3,6-Dimethylphenanthrene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
127 2-Isopropyl-naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	1.80403	1.83298	1.89375	1.86642	1.94990	1.84326					
	1.86471	1.88194					AVRG		1.86712		2.35237
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.77422	1.66915	1.65498	1.55523	1.59752	1.50328					
	1.50392	1.52399					AVRG		1.59779		6.00742
9 1,4-Dichlorobenzene	1.80083	1.60690	1.58946	1.49053	1.53055	1.42723					
	1.44668	1.47673					AVRG		1.54611		7.83122

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
11 Benzyl alcohol	++++	++++	0.98923	1.03332	1.11946	1.10552					
	1.14972	1.16912					AVRG		1.09439		6.35498
12 1,2-Dichlorobenzene	1.63938	1.57039	1.56493	1.47009	1.50401	1.41502					
	1.43364	1.45032					AVRG		1.50597		5.22347
13 2-Methylphenol	1.22386	1.24944	1.29406	1.27174	1.33080	1.29151					
	1.31320	1.34362					AVRG		1.28978		3.13567
14 2,2'-oxybis(1-Chloropropane)	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	1.23237	1.27148	1.33824	1.36345	1.44055	1.39181					
	1.42639	1.43629					AVRG		1.36257		5.70398
16 N-Nitroso-di-n-propylamine	0.99853	0.90503	0.94390	0.94998	1.00139	0.95822					
	0.96668	0.98323					AVRG		0.96337		3.30047
17 Hexachloroethane	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	0.32802	0.34314	0.35534	0.35503	0.36559	0.33963					
	0.33692	0.32724					AVRG		0.34386		3.99734
23 Bis(2-Chloroethoxy)methane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	+++++	+++++	12666	76063	200316	560439					
	1151790	2452774					QUAD	0.000e+000	3.84509	-0.22902	0.99971
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
26 1,2,4-Trichlorobenzene	0.38784	0.36513	0.34996	0.32754	0.33284	0.31114					
	0.31104	0.31070					AVRG		0.33702		8.45600
28 Naphthalene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.17947	0.17624	0.17440	0.16687	0.17058	0.16318					
	0.16533	0.16838					AVRG		0.17056		3.33540
31 4-Chloro-3-methylphenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
39 Dimethylphthalate	1.41551|	1.33475|	1.37806|	1.37141|	1.42379|	1.33971|					
	1.34195|	1.32325|					|AVRG|		|1.36605|		|2.77217|
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
50 Diethylphthalate	++++	++++	1.42444	1.43206	1.52217	1.43943					
	1.45720	1.45091					AVRG		1.45437		2.42775
51 4-Chlorophenyl-phenylether	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	0.50043	0.52318	0.55578	0.55628	0.57936	0.53908					
	0.53635	0.54534					AVRG		0.54198		4.36791
56 4-Bromophenyl-phenylether	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.21921	0.21160	0.22065	0.20576	0.20820	0.19714					
	0.19989	0.20322					AVRG		0.20821		4.09875

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
58 Pentachlorophenol	++++	2488	6840	24156	54268	142247					
	298780	590982					QUAD	0.000e+000	7.12244	-0.93967	0.99983
60 Phenanthrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
61 Anthracene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
62 Carbazole	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
63 Di-n-butylphthalate	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
64 Fluoranthene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
65 Pyrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2		
	5.0000	10.0000										
	Level 7	Level 8										
67 Butylbenzylphthalate	3175| 543386|	7477| 1037644|	17499|	51154|	110003|	270783|		|QUAD|	|0.000e+000|	|1.43111|	| -0.00826|	|0.99995|
68 Benzo(a)anthracene	++++| ++++|	++++| ++++|	++++|	++++|	++++|	++++|		|AVRG|	|0.000e+000|			|0.000e+000|
70 3,3'-Dichlorobenzidine	++++| ++++|	++++| ++++|	++++|	++++|	++++|	++++|		|AVRG|	|0.000e+000|			|0.000e+000|
71 Chrysene	++++| ++++|	++++| ++++|	++++|	++++|	++++|	++++|		|AVRG|	|0.000e+000|			|0.000e+000|
72 bis(2-Ethylhexyl)phthalate	++++| ++++|	++++| ++++|	++++|	++++|	++++|	++++|		|AVRG|	|0.000e+000|			|0.000e+000|
73 Di-n-octylphthalate	++++| ++++|	++++| ++++|	++++|	++++|	++++|	++++|		|AVRG|	|0.000e+000|			|0.000e+000|
74 Benzo(b)fluoranthene	++++| ++++|	++++| ++++|	++++|	++++|	++++|	++++|		|AVRG|	|0.000e+000|			|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
75 Benzo(k)fluoranthene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	0.84996	0.89916	0.96752	1.00635	1.09182	1.06653					
	1.09822	1.13261					AVRG		1.01402		10.02175
80 Benzo(g,h,i)perylene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.83513	0.83502	0.85029	0.83348	0.86639	0.81357					
	0.80944	0.79248					AVRG		0.82947		2.84461
91 Aniline	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
101 Cholesterol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
103 Pyridine	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 1 2-Fluorophenol	1.48443	1.36377	1.32289	1.32224	1.39714	1.32577					
	1.32519	1.32058					AVRG		1.35775		4.27434
\$ 145 d8-1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 2 Phenol-d5	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 5 2-Chlorophenol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
\$ 10 1,2-Dichlorobenzene-d4	80.00000	40.00000	20.00000	8.00000	4.00000	1.60000					
	0.80000	++++					AVRG		22.05714		132<-
\$ 18 Nitrobenzene-d5	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 36 2-Fluorobiphenyl	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 55 2,4,6-Tribromophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 66 Terphenyl-d14	0.76062	0.69933	0.67032	0.67232	0.72014	0.67552					
	0.66789	0.65051					AVRG		0.68958		5.18219
\$ 85 p-Cresol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 86 Anthracene-d10	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 15-MAR-2023 17:03
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Last Edit : 20-Mar-2023 09:22 deenayd

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
\$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
\$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 15-MAR-2023 17:03
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 20-Mar-2023 09:22 deenayd

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07 RT08
FILENAME: NT1403152303S NT1403152304S NT1403152305S NT1403152306S NT1403152307S NT1403152308S NT1403152309S NT1403152310S
INJ. DATE: 15-MAR-2023 15-MAR-2023 15-MAR-2023 15-MAR-2023 15-MAR-2023 15-MAR-2023 15-MAR-2023 15-MAR-2023
INJ. TIME: 12:49 13:26 14:02 14:38 15:14 15:50 16:26 17:03

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, RT08, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like 2-Fluorophenol, Chlorobenzilate, Isodrin, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
| 127 2-Isopropyl-naphthalene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 23.349|	| 22.849-23.849 |	| +++++|	| +++++|
| 126 N-Tetradecane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 22.474|	| 21.974-22.974 |	| +++++|	| +++++|
| 144 alpha-Terpineol	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 11.191|	| 10.691-11.691 |	| +++++|	| +++++|
| 125 Safrole	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 17.779|	| 17.279-18.279 |	| +++++|	| +++++|
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
| 124 3,4-Dimethylphenol	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 16.310|	| 15.810-16.810 |	| +++++|	| +++++|
| 123 Acetophenone	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 17.707|	| 17.207-18.207 |	| +++++|	| +++++|
| 122 Furfuraldehyde	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 8.921|	| 8.421-9.421 |	| +++++|	| +++++|
| 143 1,4-Dioxane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 3.736|	| 3.236-4.236 |	| +++++|	| +++++|
| \$ 145 d8-1,4-Dioxane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 2.914|	| 2.414-3.414 |	| +++++|	| +++++|
| 121 Quinoline	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 20.148|	| 19.648-20.648 |	| +++++|	| +++++|
| 120 2,3,4,6-Tetrachlorophe	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 15.588|	| 15.088-16.088 |	| +++++|	| +++++|
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
| 119 7,12-Dimethylbenz(a)an	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 38.587|	| 38.087-39.087 |	| +++++|	| +++++|
| 118 Triphenyl Phosphate	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 20.382|	| 19.882-20.882 |	| +++++|	| +++++|
| 117 Butyl Diphenyl Phospha	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 18.734|	| 18.234-19.234 |	| +++++|	| +++++|
| 116 Dibutyl Phenyl Phospha	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 16.987|	| 16.487-17.487 |	| +++++|	| +++++|
| 115 Tributyl Phosphate	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 15.204|	| 14.704-15.704 |	| +++++|	| +++++|
| 114 Beta-Pinene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 14.540|	| 14.040-15.040 |	| +++++|	| +++++|
| 113 Diphenyl Oxide	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 21.586|	| 21.086-22.086 |	| +++++|	| +++++|
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
| 112 Biphenyl	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 17.692|	| 17.192-18.192 |	| +++++|	| +++++|
| 111 Azobenzene (1,2-DP-Hyd	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 16.268|	| 15.768-16.768 |	| +++++|	| +++++|
| 110 Tetrachloroguaiacol	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 18.055|	| 17.555-18.555 |	| +++++|	| +++++|
| 109 3,4,5-Trichloroguaiacol	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 17.228|	| 16.728-17.728 |	| +++++|	| +++++|

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
\$ 2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
3 Phenol	8.449	8.441	8.441	8.433	8.434	8.433	8.433	8.433	8.449	7.949-8.949	8.437	0.006
4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
\$ 5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
7 1,3-Dichlorobenzene	9.006	9.006	9.006	9.005	9.006	9.006	9.006	9.005	9.006	8.506-9.506	9.006	0.000
* 8 1,4-Dichlorobenzene-d4	9.075	9.076	9.075	9.075	9.068	9.068	9.068	9.067	9.075	8.575-9.575	9.071	0.004
9 1,4-Dichlorobenzene	9.106	9.099	9.099	9.098	9.099	9.099	9.099	9.098	9.106	8.606-9.606	9.100	0.003
\$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.068	8.568-9.568	+++++	+++++
11 Benzyl alcohol	9.347	9.339	9.339	9.339	9.339	9.339	9.339	9.339	9.347	8.847-9.847	9.340	0.003
12 1,2-Dichlorobenzene	9.463	9.464	9.456	9.455	9.456	9.456	9.456	9.456	9.463	8.963-9.963	9.458	0.004
13 2-Methylphenol	9.564	9.565	9.564	9.556	9.557	9.557	9.557	9.556	9.564	9.064-10.064	9.559	0.004
14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
15 4-Methylphenol	9.844	9.836	9.828	9.828	9.828	9.828	9.828	9.828	9.844	9.344-10.344	9.831	0.006
16 N-Nitroso-di-n-propyla	9.921	9.906	9.906	9.898	9.898	9.898	9.898	9.898	9.921	9.421-10.421	9.903	0.008
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
\$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
22 2,4-Dimethylphenol	10.891	10.891	10.884	10.883	10.884	10.884	10.884	10.883	10.891	10.391-11.391	10.885	0.004
23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
24 Benzoic acid	11.201	11.124	11.070	11.015	10.992	10.969	10.977	10.883	11.201	10.701-11.701	11.029	0.100
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
26 1,2,4-Trichlorobenzene	11.488	11.488	11.480	11.480	11.480	11.480	11.480	11.480	11.488	10.988-11.988	11.482	0.004
* 27 Naphthalene-d8	11.573	11.573	11.565	11.565	11.565	11.565	11.565	11.565	11.573	11.073-12.073	11.567	0.004
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
30 Hexachlorobutadiene	11.982	11.975	11.975	11.974	11.975	11.975	11.974	11.974	11.982	11.482-12.482	11.975	0.003
31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
\$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
39 Dimethylphthalate	14.714	14.707	14.706	14.698	14.699	14.699	14.699	14.699	14.714	14.214-15.214	14.703	0.006
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
* 42 Acenaphthene-d10	15.210	15.202	15.202	15.202	15.202	15.202	15.202	15.202	15.210	14.710-15.710	15.203	0.003
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.621	15.121-16.121	+++++	+++++
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
50 Diethylphthalate	16.184	16.168	16.168	16.160	16.161	16.160	16.160	16.160	16.184	15.684-16.684	16.165	0.008
51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
54 N-Nitrosodiphenylamine	16.562	16.554	16.546	16.546	16.546	16.546	16.546	16.546	16.562	16.062-17.062	16.549	0.006
55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
57 Hexachlorobenzene	17.626	17.626	17.626	17.618	17.619	17.618	17.618	17.618	17.626	17.126-18.126	17.621	0.004
58 Pentachlorophenol	17.982	17.975	17.975	17.974	17.975	17.975	17.975	17.982	17.982	17.482-18.482	17.977	0.004
59 Phenanthrene-d10	18.253	18.246	18.245	18.245	18.246	18.245	18.245	18.245	18.253	17.753-18.753	18.246	0.003
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
66 Terphenyl-d14	21.394	21.395	21.387	21.386	21.387	21.387	21.387	21.387	21.394	20.894-21.894	21.389	0.004
67 Butylbenzylphthalate	22.316	22.316	22.316	22.316	22.316	22.316	22.316	22.316	22.316	21.816-22.816	22.316	0.000
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 69 Chrysene-d12	23.307	23.299	23.299	23.299	23.299	23.299	23.299	23.299	23.307	22.807-23.807	23.300	0.003
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.997	22.497-23.497	+++++	+++++
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
* 77 Perylene-d12	25.947	25.940	25.939	25.939	25.940	25.939	25.939	25.939	25.947	25.447-26.447	25.940	0.003
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
79 Dibenzo(a,h)anthracene	28.663	28.639	28.632	28.624	28.624	28.624	28.624	28.624	28.663	28.163-29.163	28.632	0.014
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
\$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
\$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
\$ 88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
90 N-Nitrosodimethylamine	4.741	4.726	4.726	4.718	4.718	4.726	4.726	4.733	4.741	4.241-5.241	4.727	0.008
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
\$ 95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

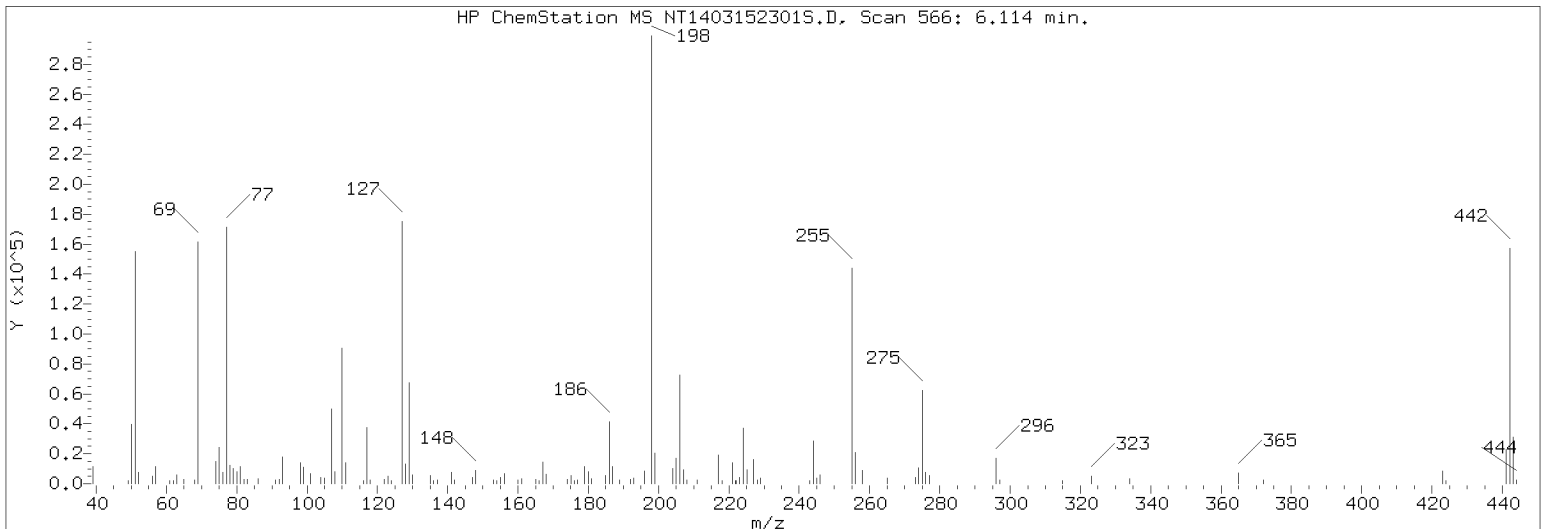
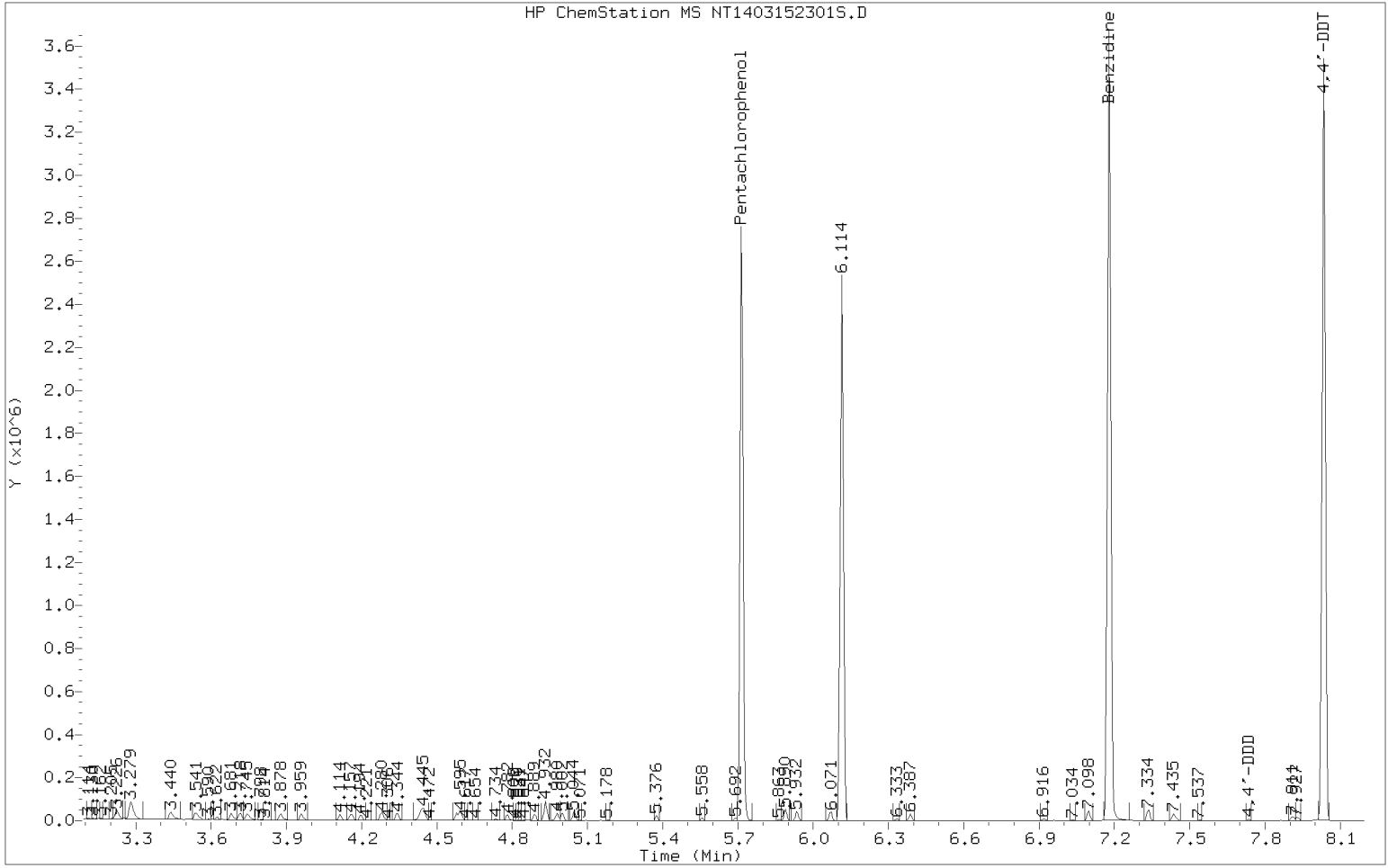
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt14.i\20230315.b\20230315.b
Inst ID: nt14.i

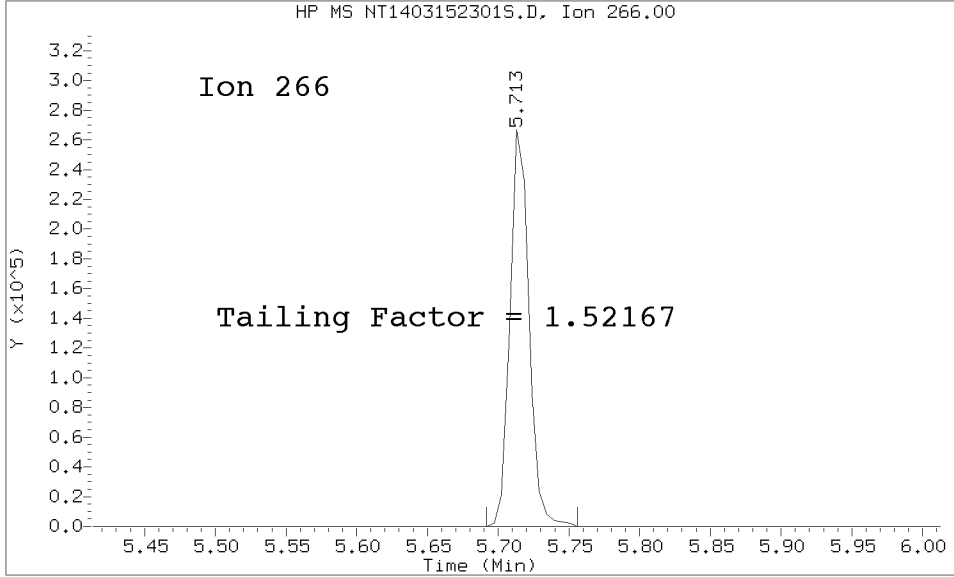
Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/20230315.b/NT1403152301S.D/NT1403152301S.D
 Method Used: \20230315.b\20230315.b\DFTPP8270E.m Inst: nt14
 Injection Date: 15-MAR-2023 12:00 Operator: JGR
 Sample Info: SLC0242-TUN1 SLC0242-TUN1
 Report Date: 03/22/2023 12:12



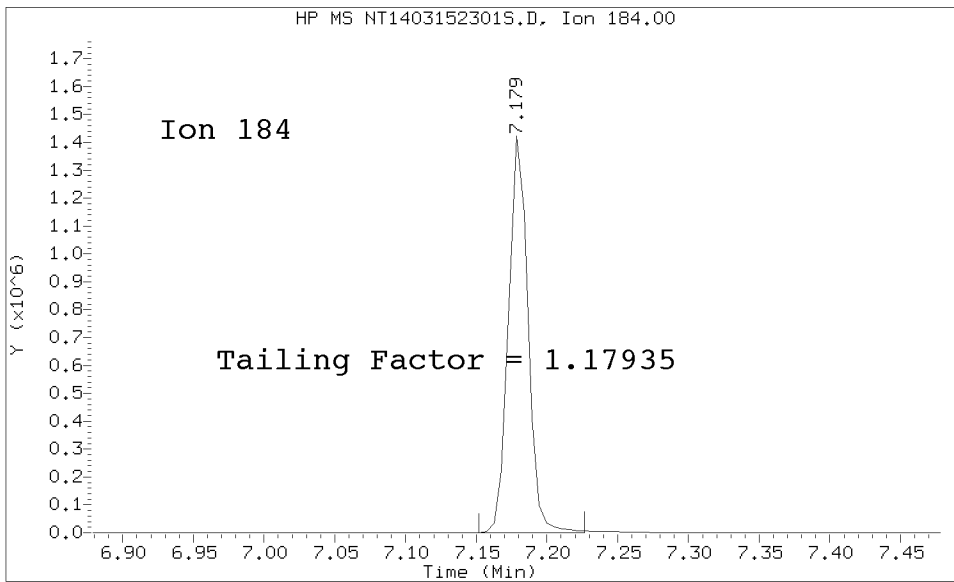
Datafile Analyzed: /20230315.b/20230315.b/NT1403152301S.D/NT1403152301S.D
Method Used: \20230315.b\20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 15-MAR-2023 12:00 Operator: JGR
Sample Info: SLC0160-TUN1
Report Date: 03/22/2023 12:12



Pentachlorophenol

=====
Exp. RT = 5.681
Found RT = 5.713

Tail Factor = 1.522 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.146
Found RT = 7.179

Tail Factor = 1.179 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.5216693	2.000	PASS
Benzidine	1.1793548	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	570011			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	2915	0.5	20.0	PASS
4,4-DDD + DDE	2915	0.5	20.0	PASS

Tuning Sample, nt14.i/20230315.b/20230315.b/NT1403152301S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.36 (0.67)
69	Mass 69 relative abundance	53.44
70	Less than 2.00% of mass 69	0.00 (0.00)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
365	1.00 - 100.00% of mass 198	2.71
441	Less than 150.00% of mass 443	8.08 (72.22)
442	Less than 200.00% of mass 198	58.28
443	15.00 - 24.00% of mass 442	11.19 (19.20)

Data File: NT1403152301S.D
 Spectrum: Avg. Scans 565-567 (6.11), Background Scan 560
 Location of Maximum: 198.00
 Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	9069	105.00	2863	168.00	5614	228.00	794
49.00	671	107.00	39032	174.00	2579	229.00	2862
50.00	30976	108.00	6346	175.00	4842	243.00	696
51.00	125768	110.00	71896	176.00	720	244.00	22688
52.00	6453	111.00	11106	177.00	2298	245.00	3011
56.00	4179	116.00	757	179.00	9119	246.00	4609
57.00	8934	117.00	29992	180.00	6294	255.00	114968
61.00	717	118.00	874	181.00	2818	256.00	16984
62.00	680	122.00	2529	185.00	4402	258.00	7242
63.00	4715	123.00	4032	186.00	32272	265.00	2218
65.00	1773	124.00	773	187.00	9241	273.00	3465
68.00	849	127.00	138368	189.00	1636	274.00	8836
69.00	126008	128.00	10413	192.00	2615	275.00	49816
74.00	11539	129.00	53960	193.00	3054	276.00	6361
75.00	19136	130.00	4541	196.00	6505	277.00	4187
76.00	6049	135.00	4342	198.00	235776	296.00	14150
77.00	134016	136.00	766	199.00	15852	297.00	810
78.00	9331	137.00	800	204.00	8038	315.00	707
79.00	8099	141.00	6361	205.00	13686	323.00	4245
80.00	6487	142.00	869	206.00	57704	334.00	2072
81.00	9538	147.00	3337	207.00	7569	365.00	6386
82.00	1806	148.00	7192	208.00	1530	372.00	1786
83.00	1759	153.00	830	211.00	1585	423.00	7390
86.00	2890	154.00	714	217.00	15135	424.00	1369
91.00	1612	155.00	3489	218.00	723	441.00	19048
92.00	1761	156.00	5350	221.00	10741	442.00	137408
93.00	14267	160.00	806	222.00	1546	443.00	26376
98.00	10738	161.00	2807	223.00	3284	444.00	1928
99.00	8546	165.00	1720	224.00	30088		
101.00	5073	166.00	753	225.00	7730		
104.00	3305	167.00	9750	227.00	12951		

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523115.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0242-SCV1

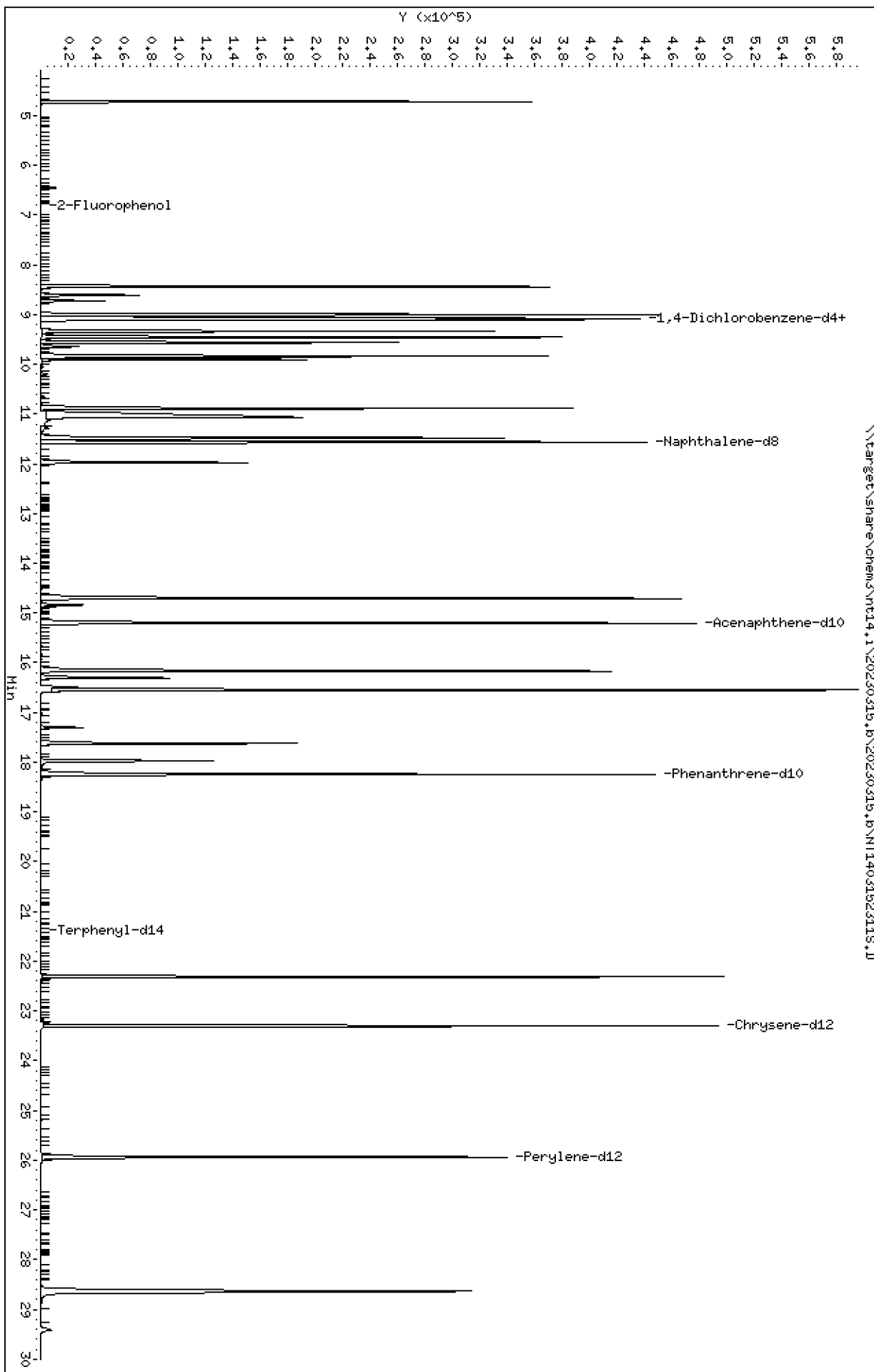
Instrument: nt14.1

Page 1

Column phase: ZB-5msi

Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523115.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

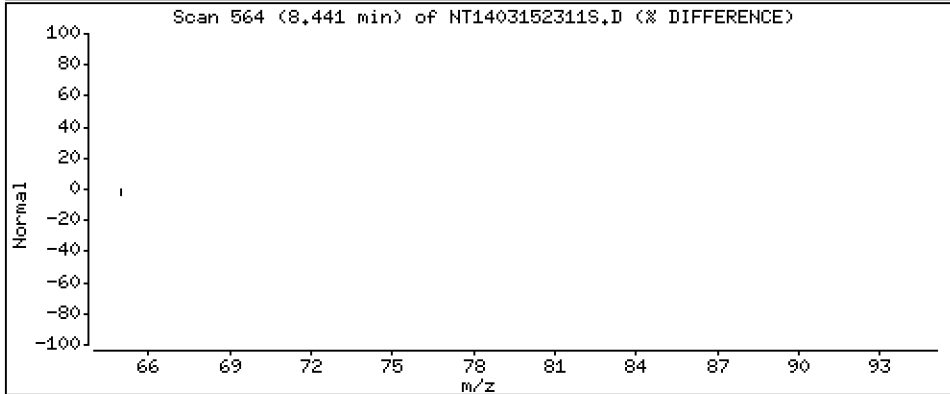
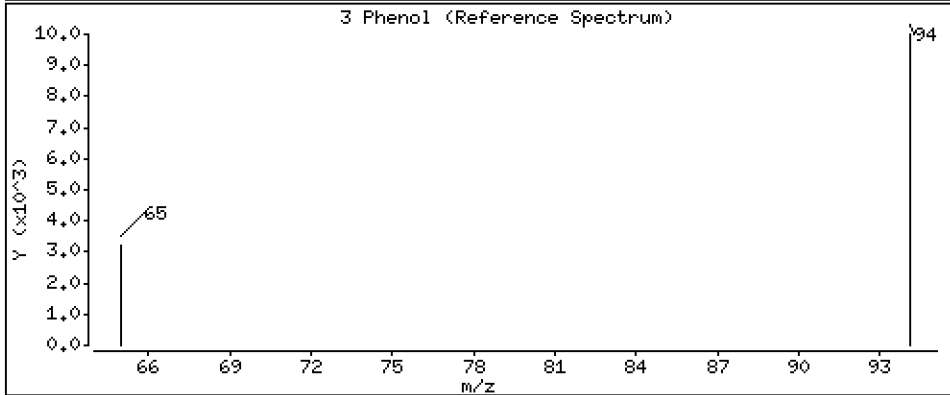
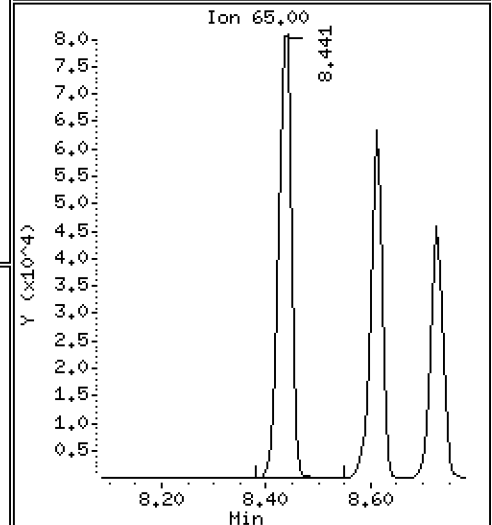
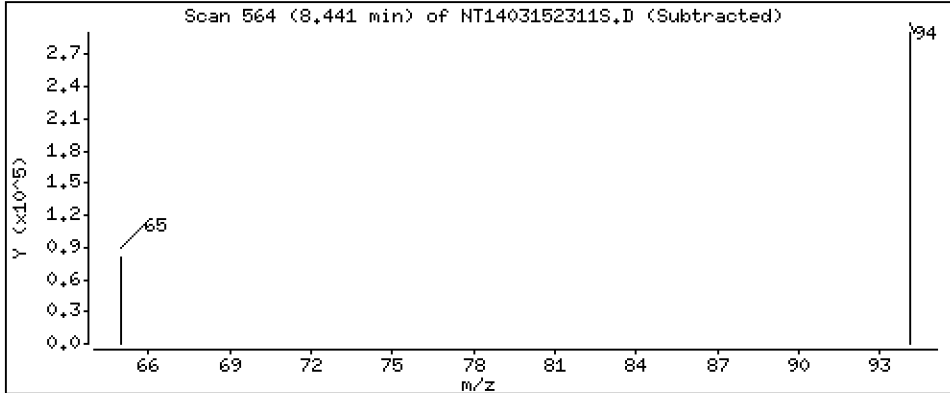
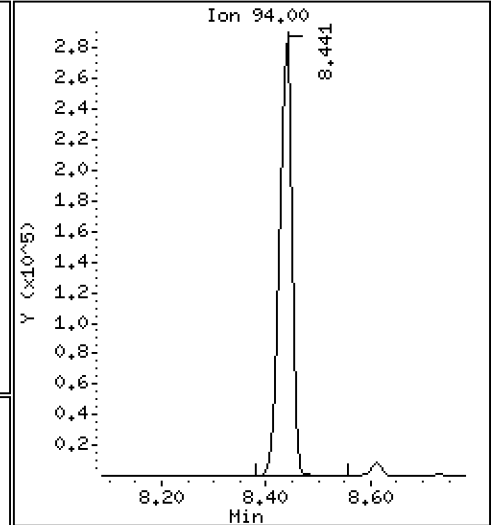
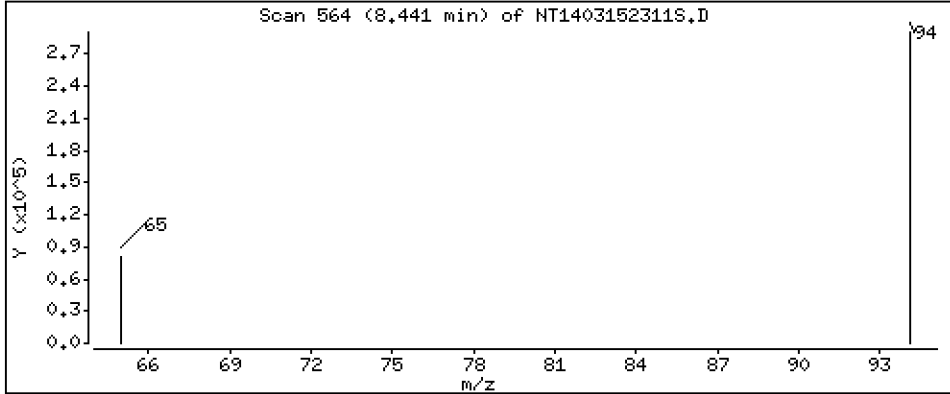
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,542 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

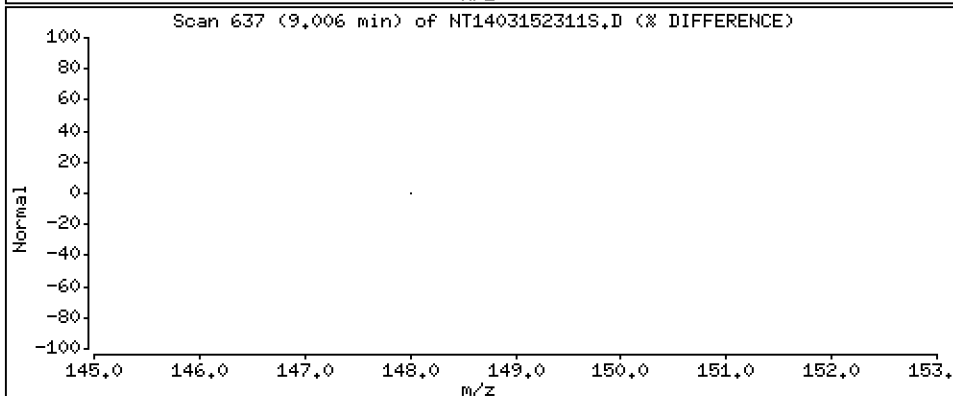
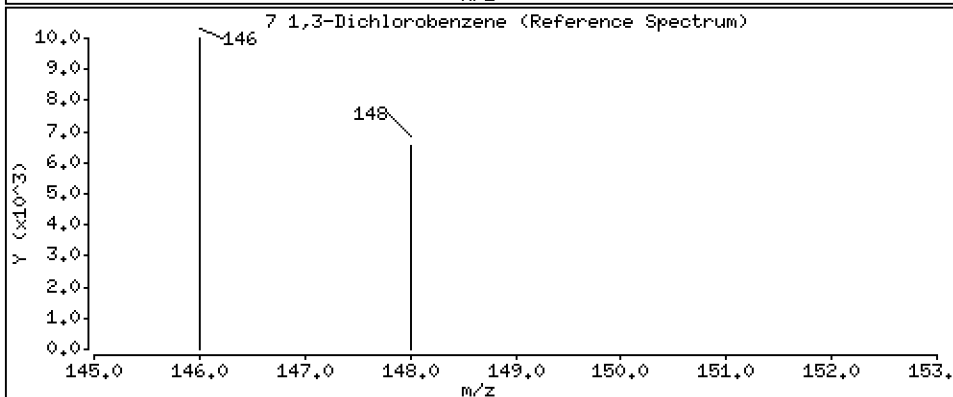
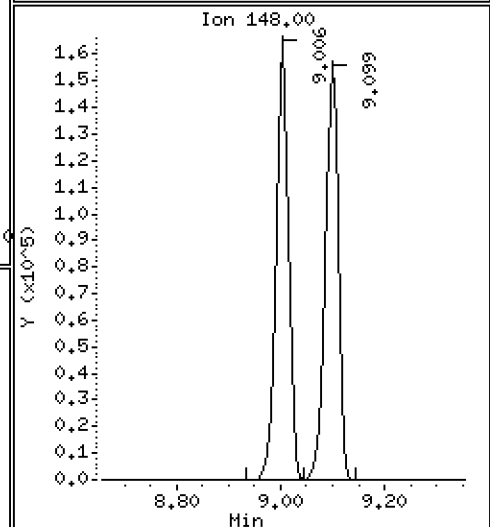
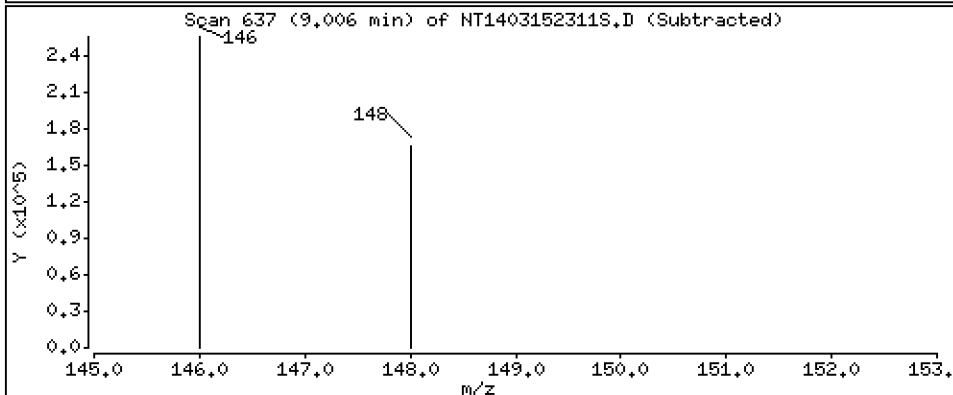
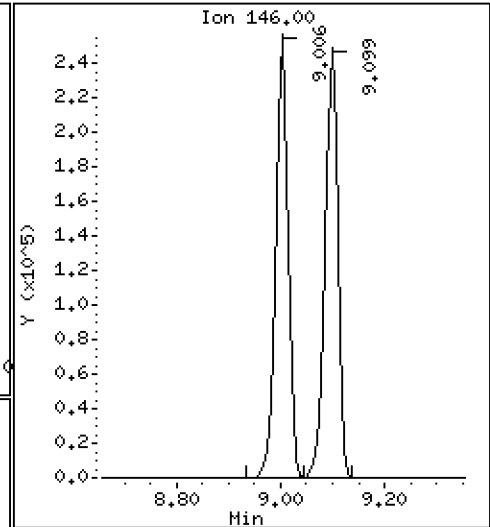
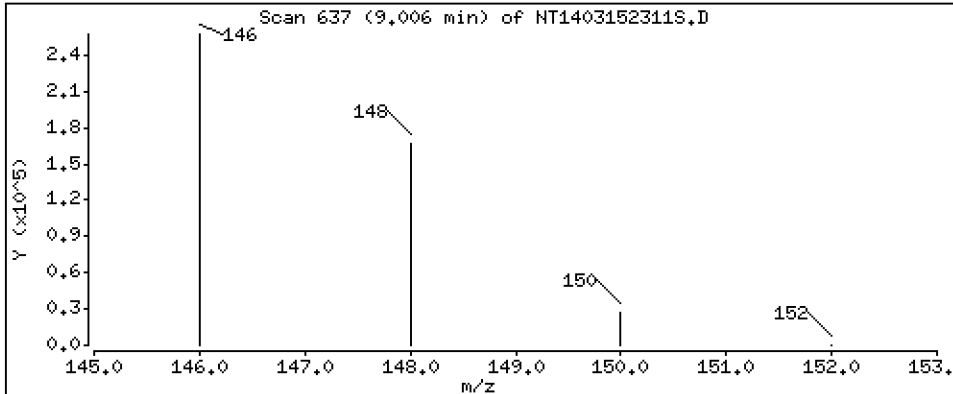
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,839 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

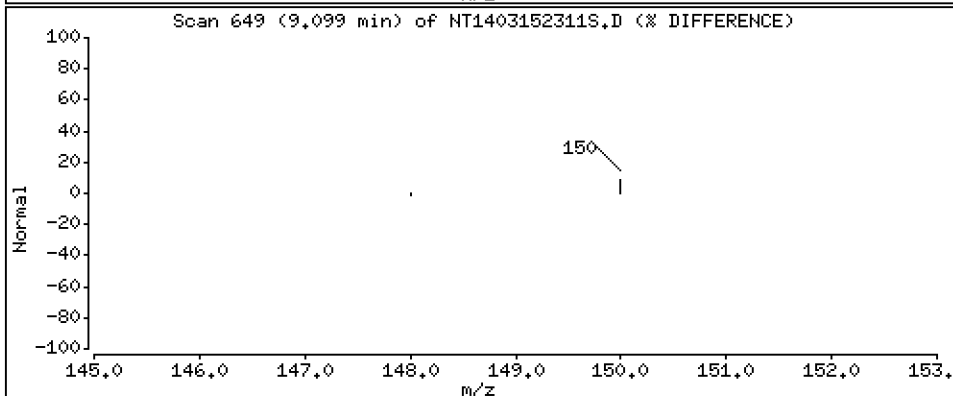
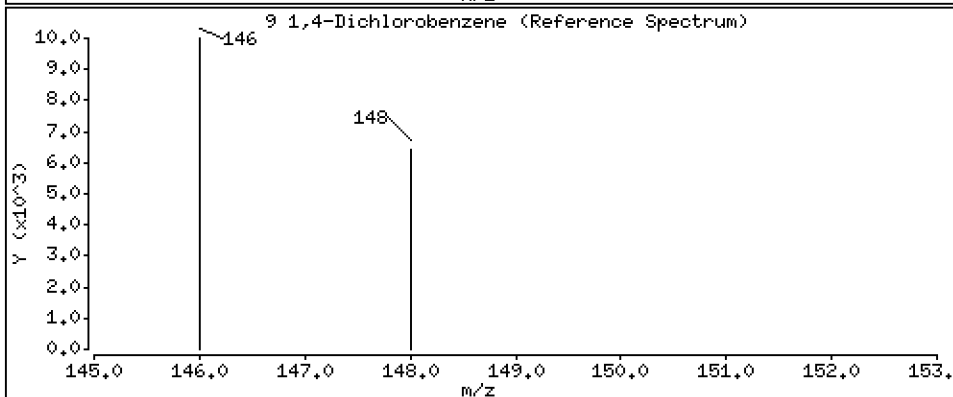
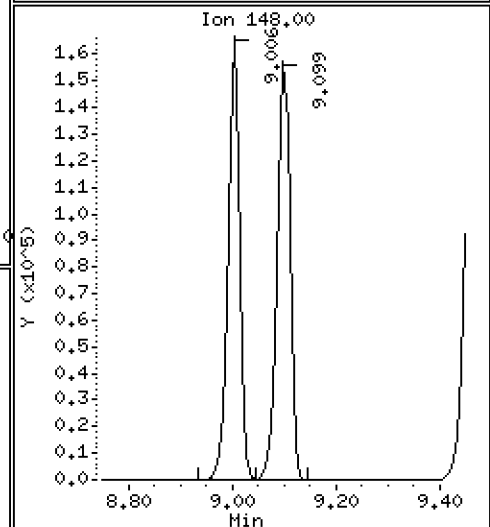
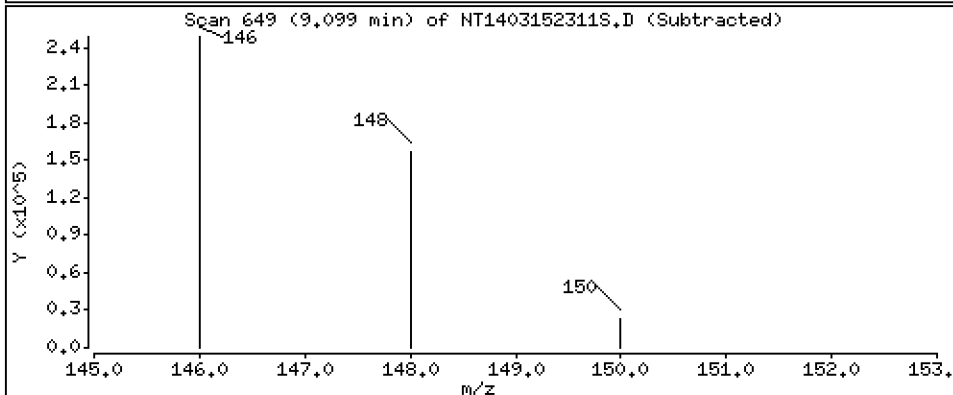
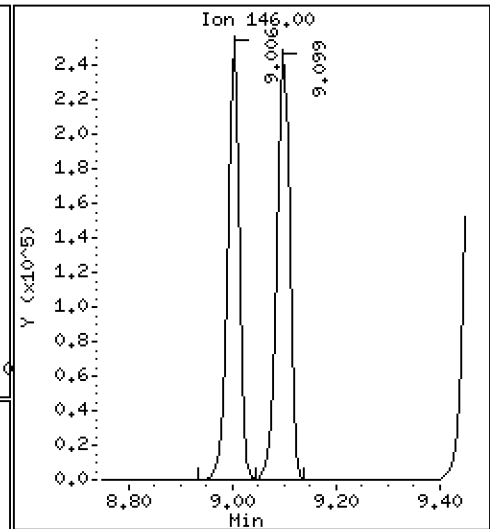
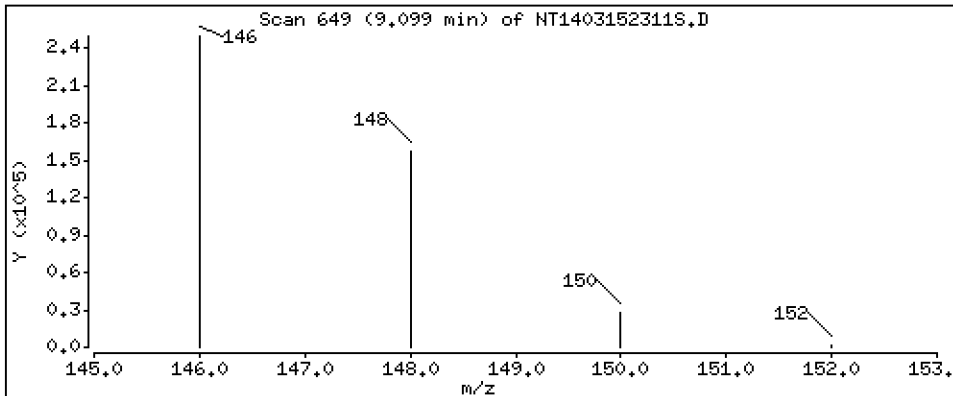
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.848 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

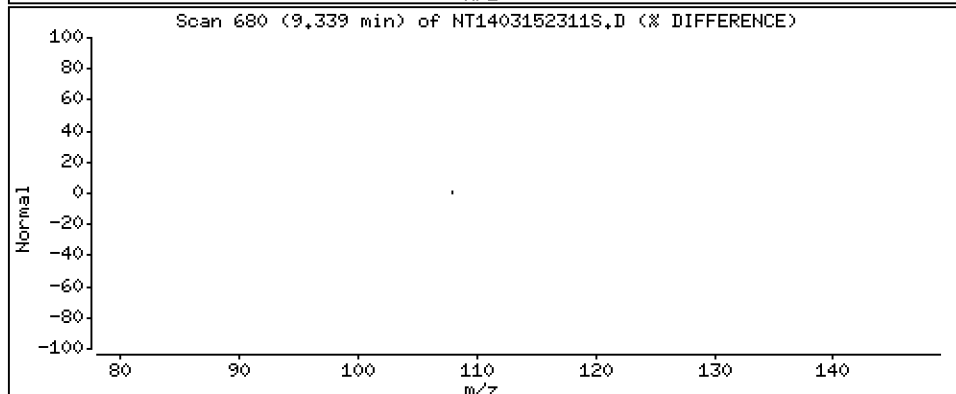
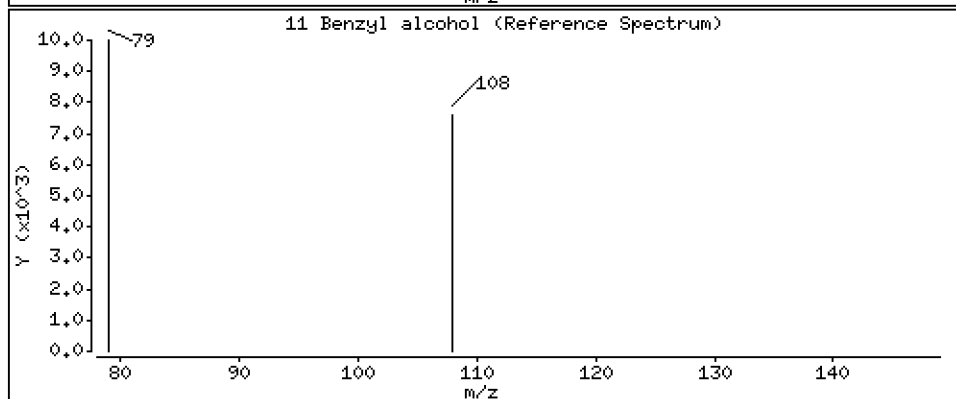
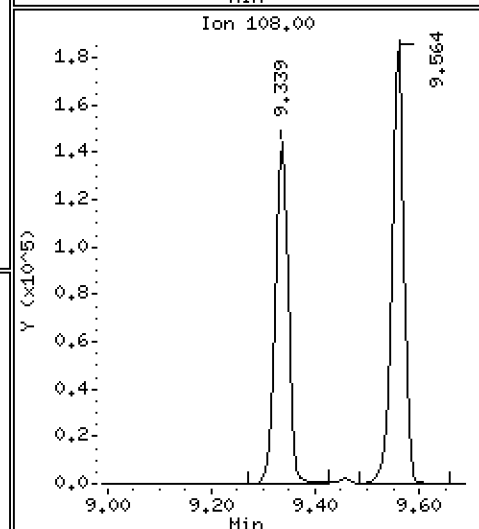
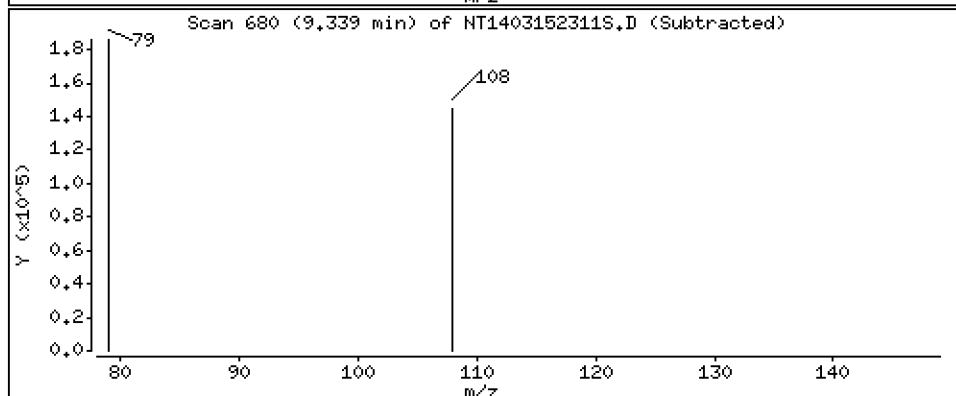
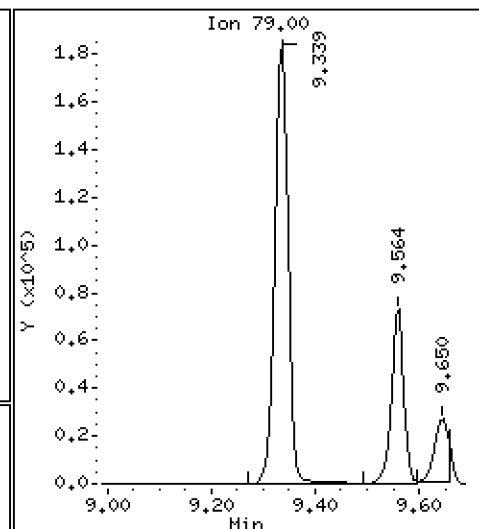
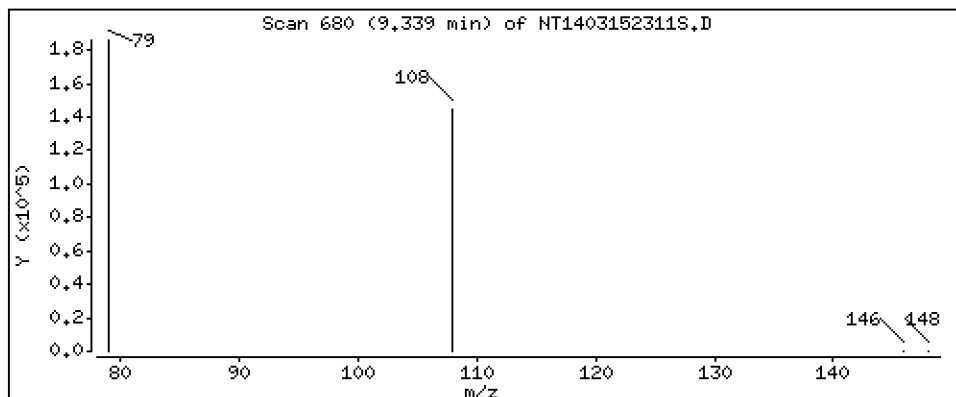
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 5,343 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

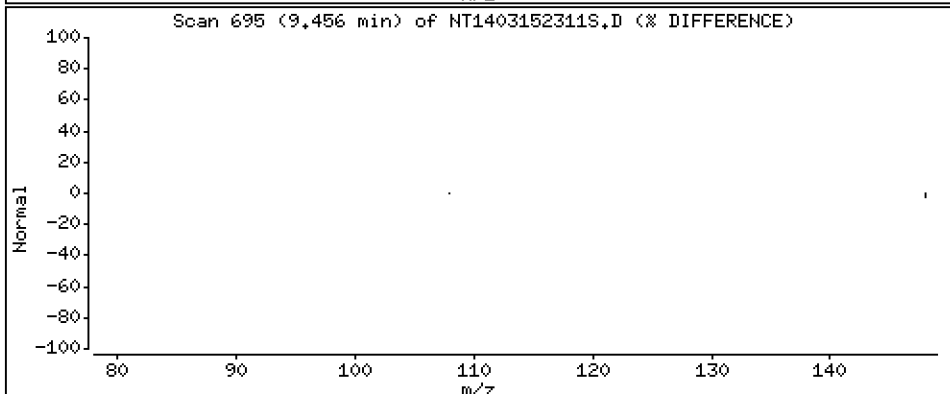
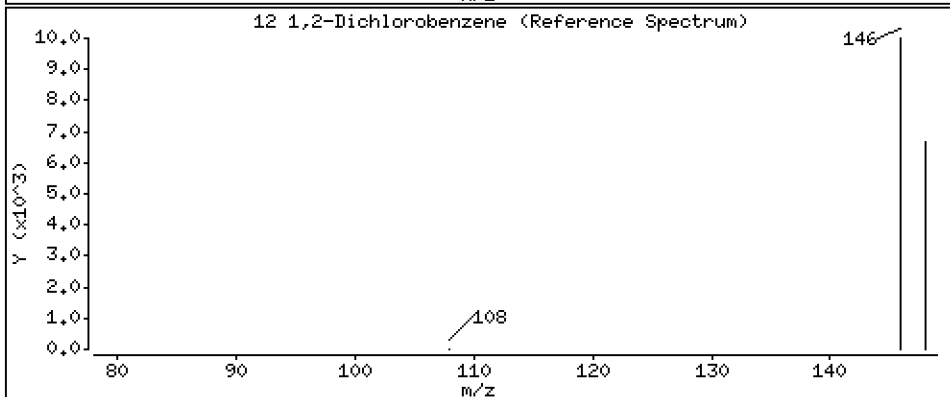
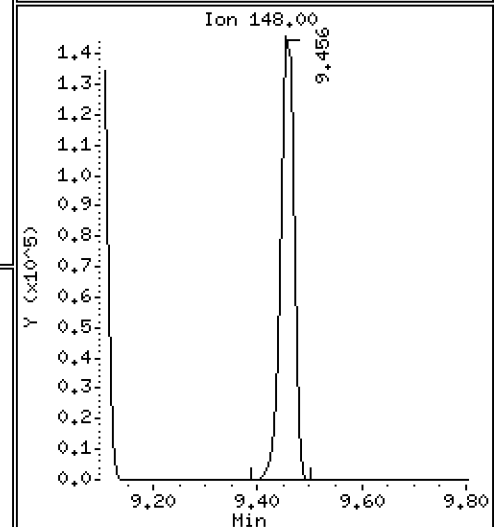
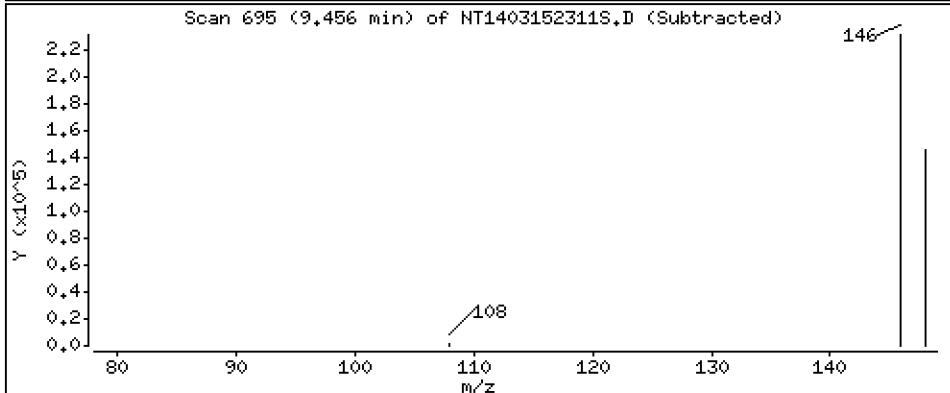
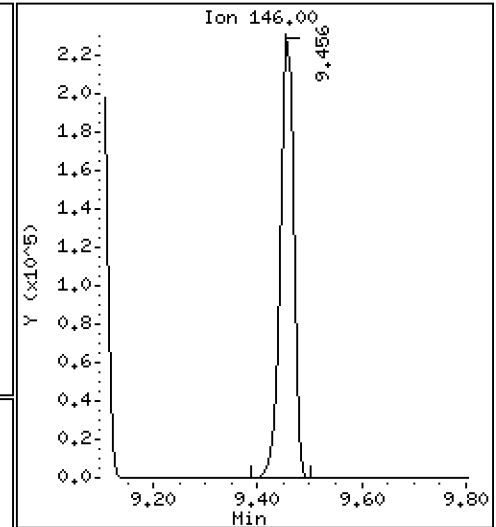
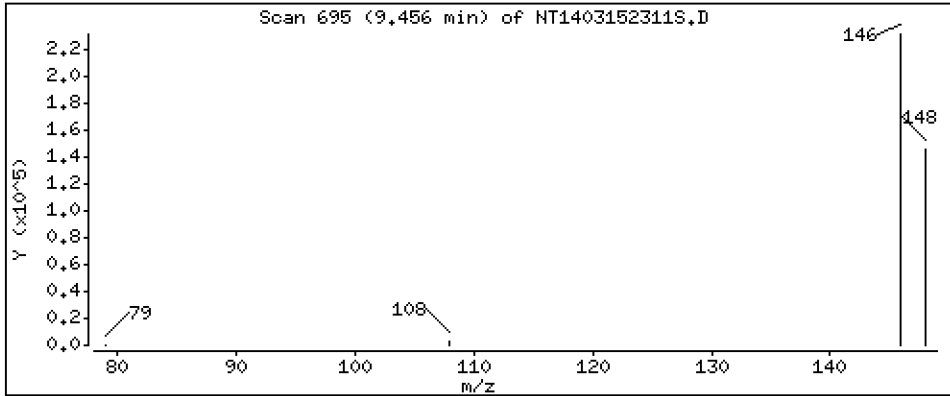
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,822 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

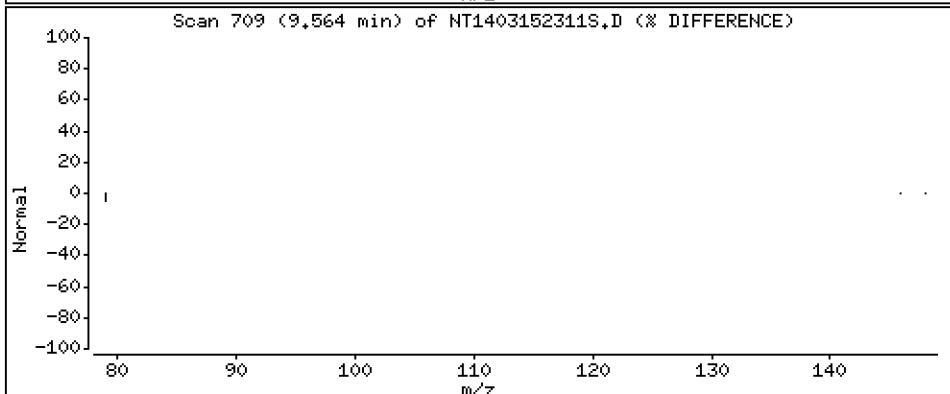
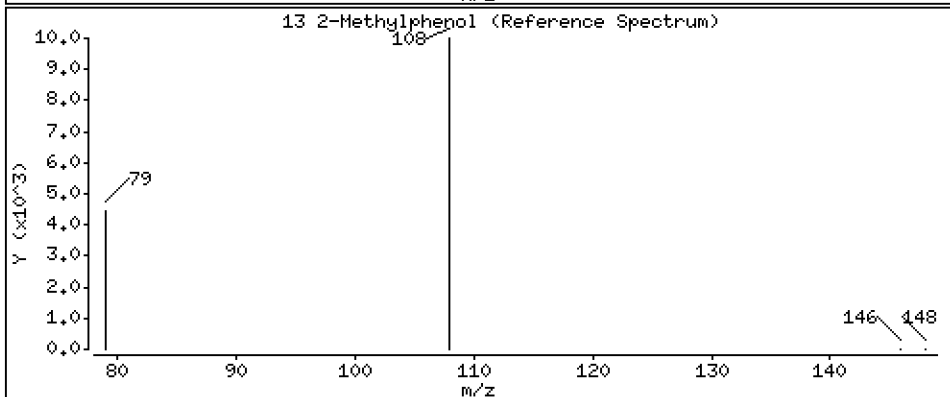
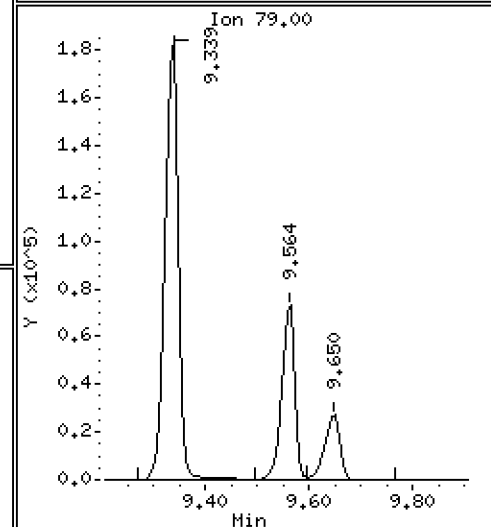
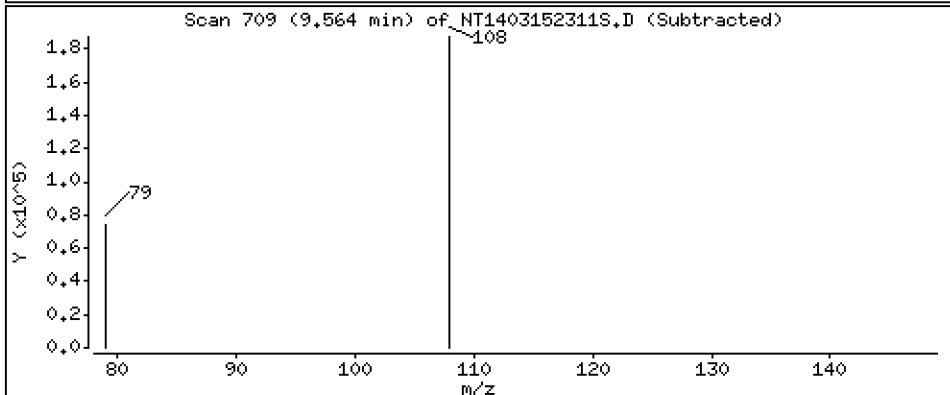
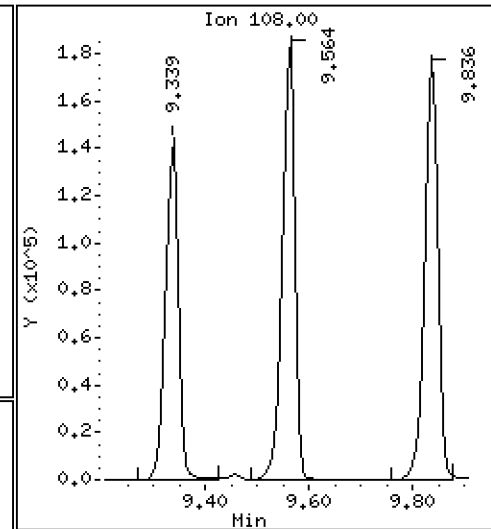
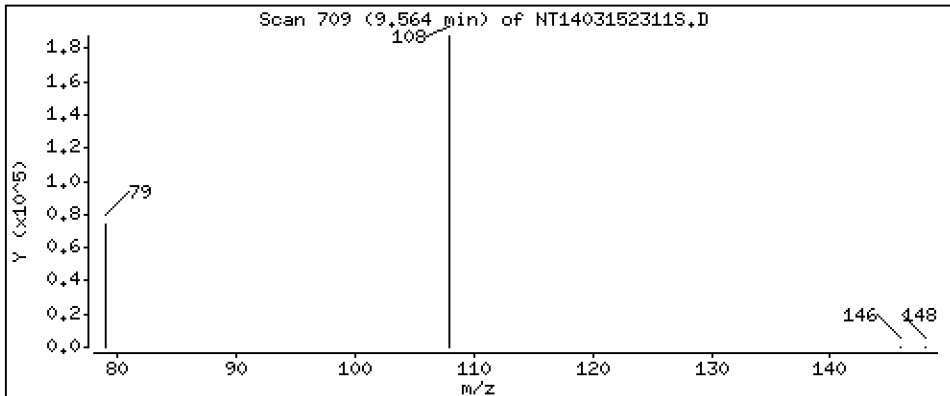
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 4,288 ug/mL

13 2-Methylphenol



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

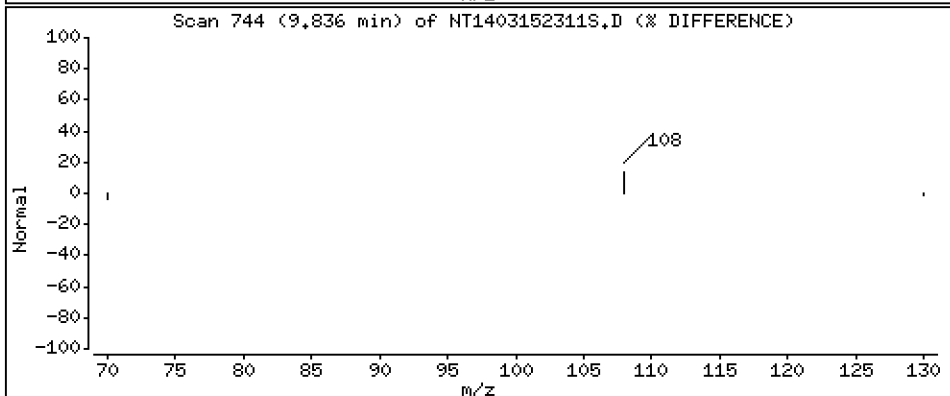
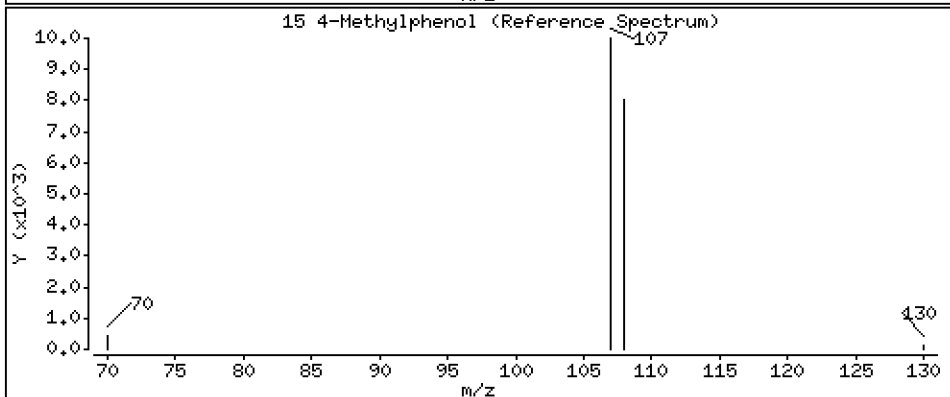
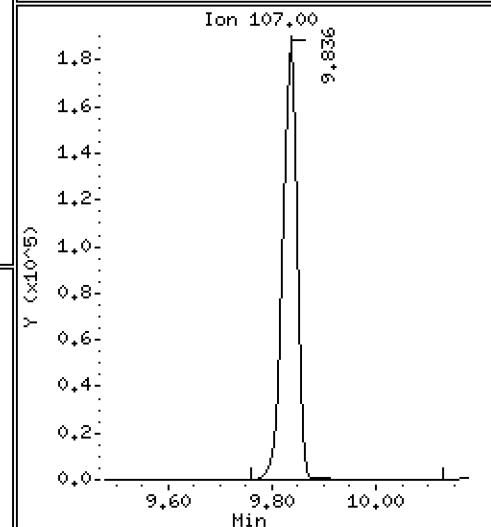
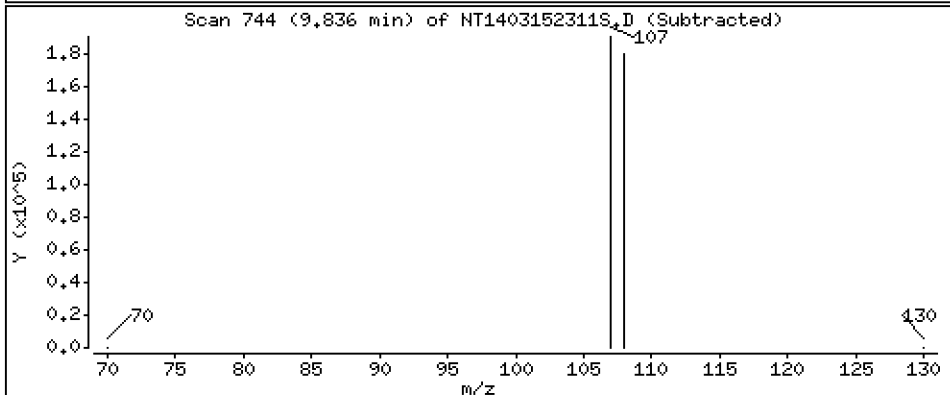
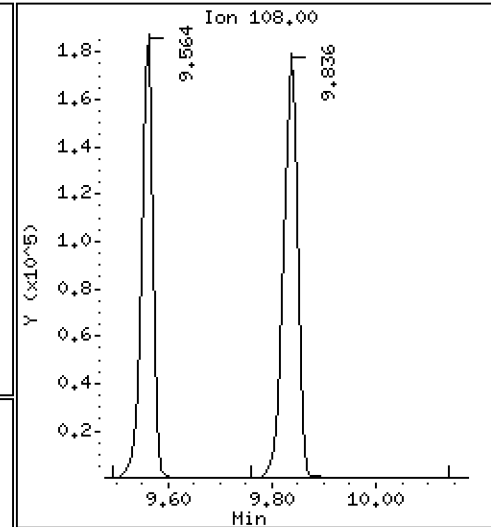
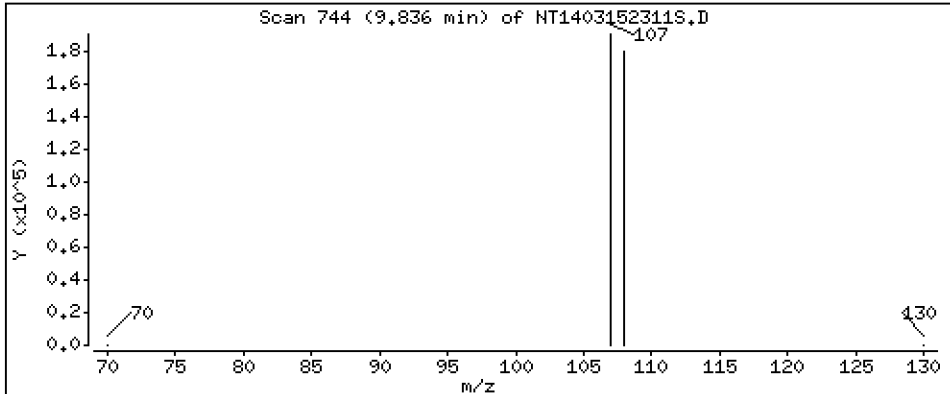
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,539 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

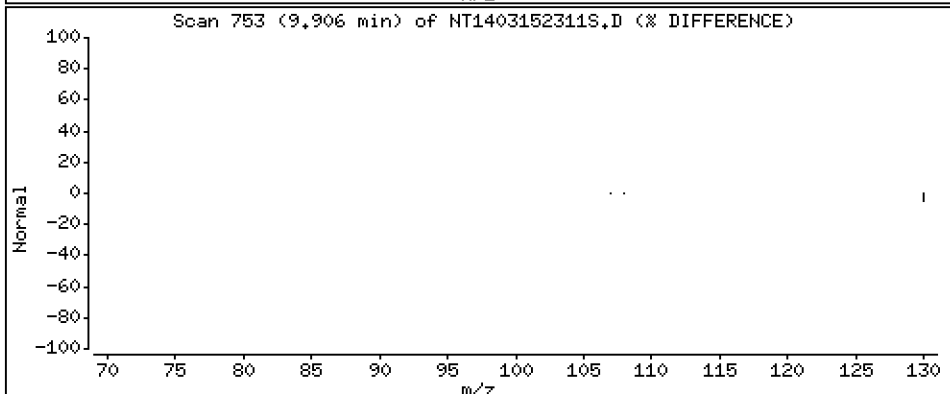
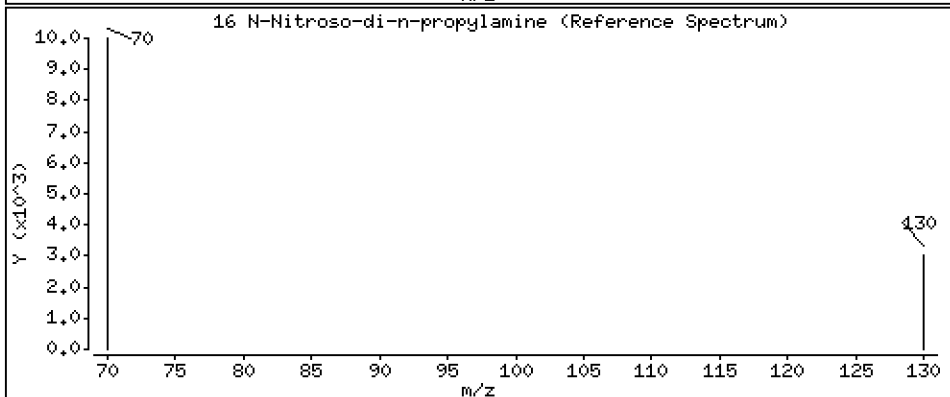
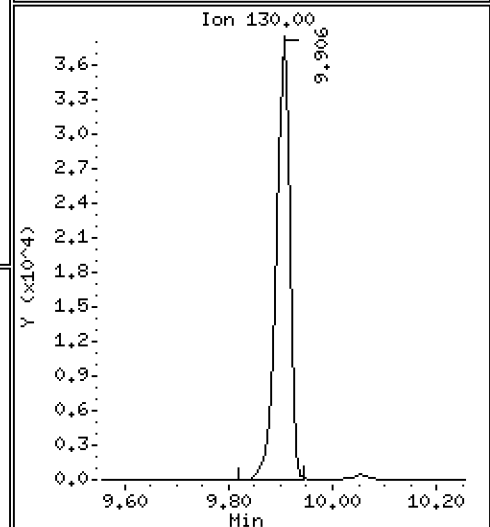
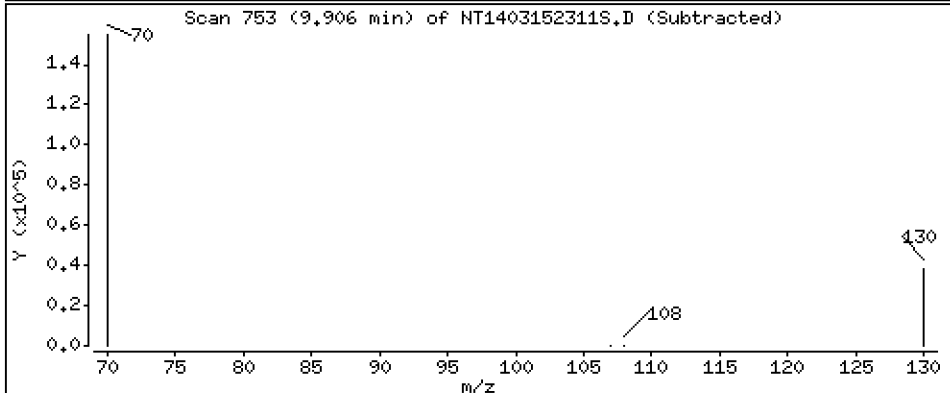
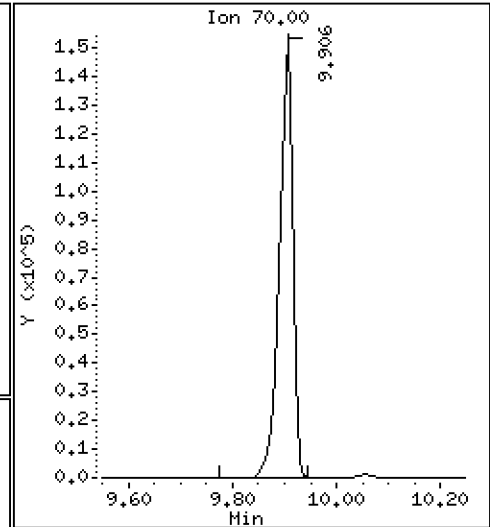
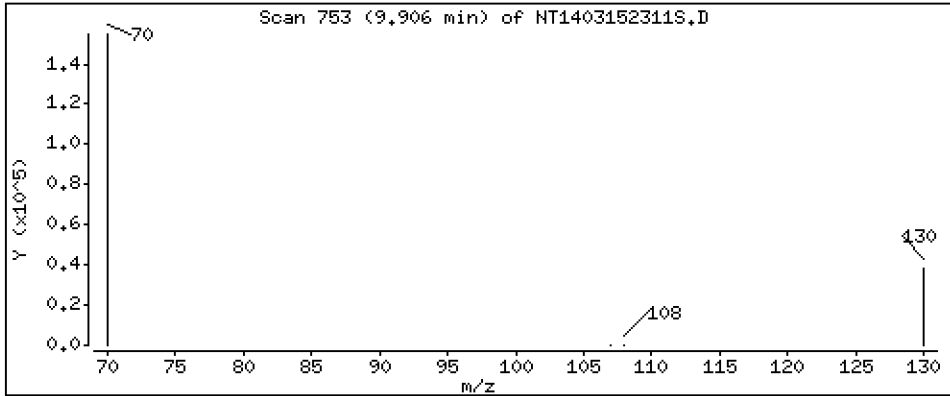
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,137 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

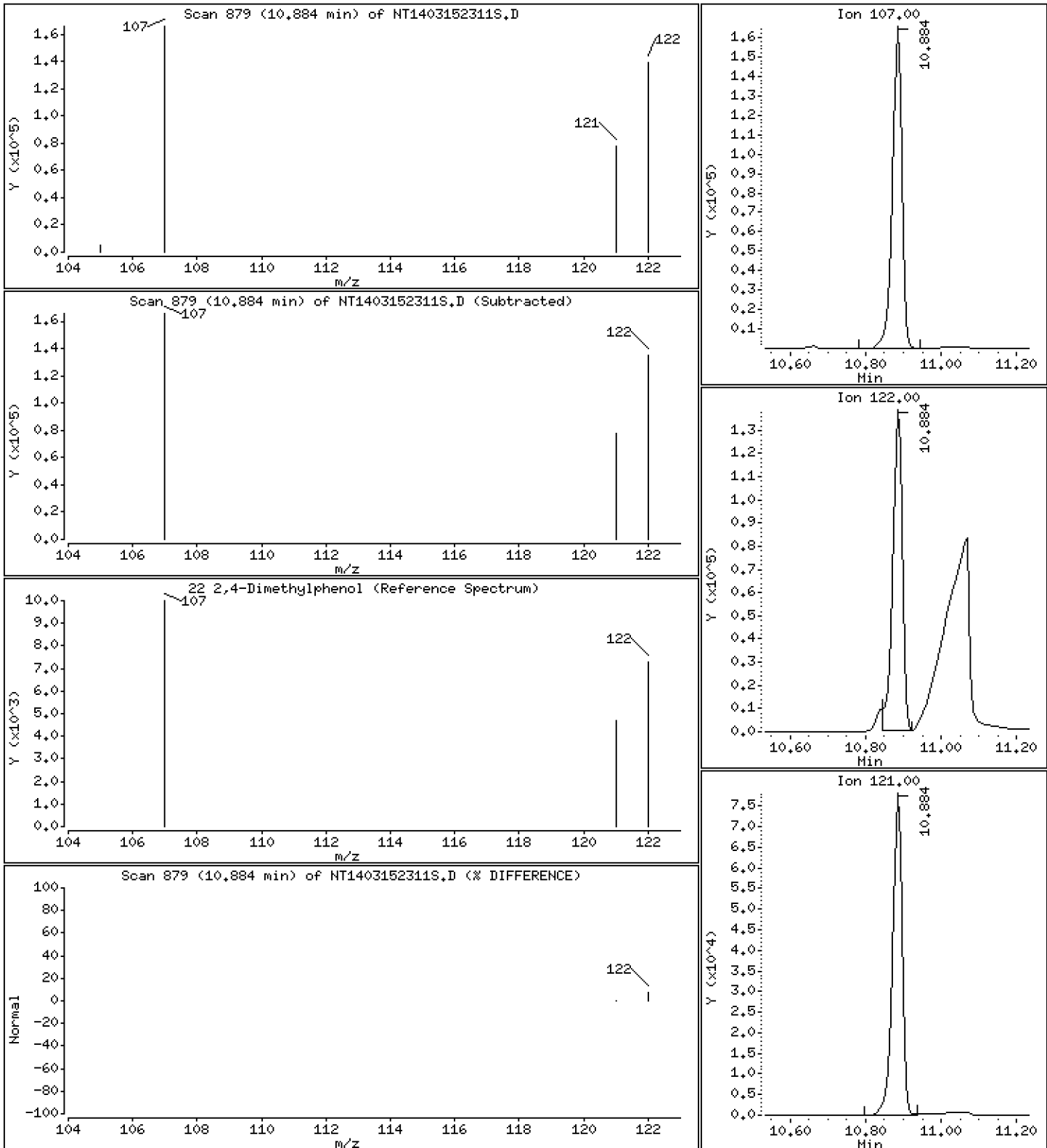
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,934 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

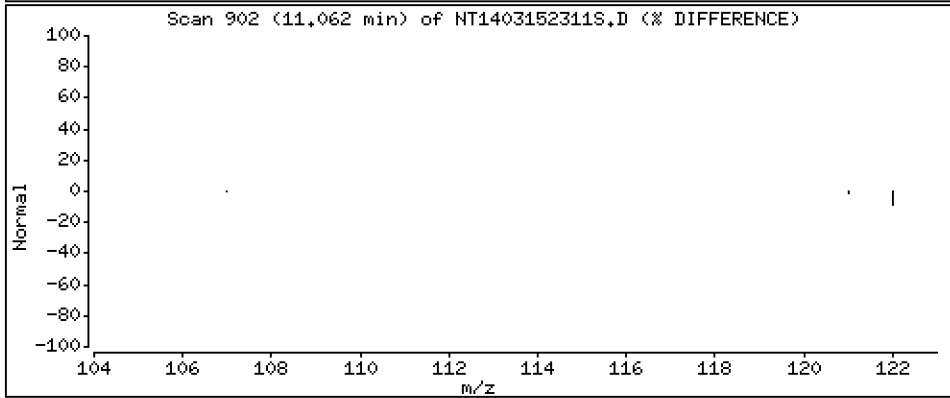
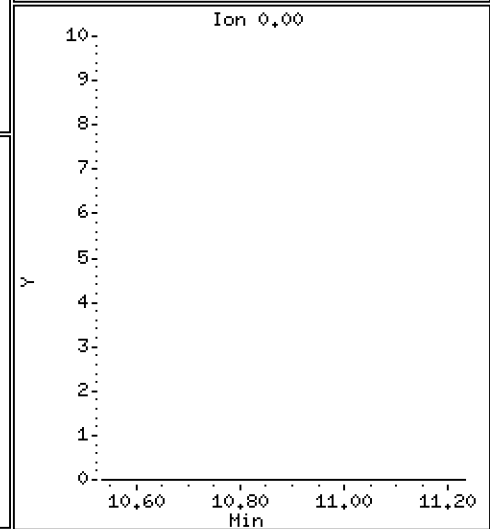
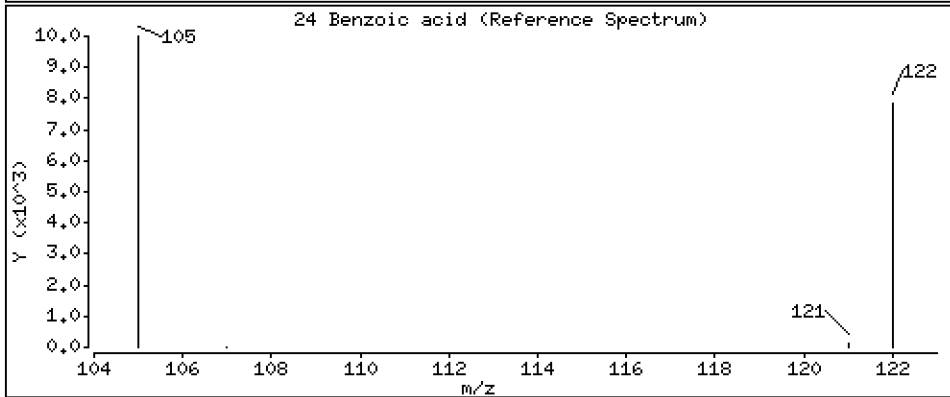
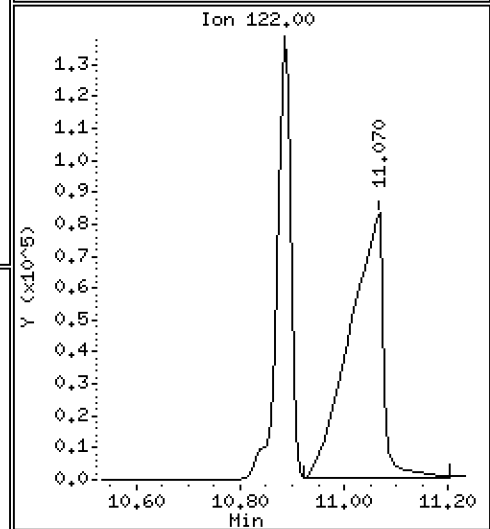
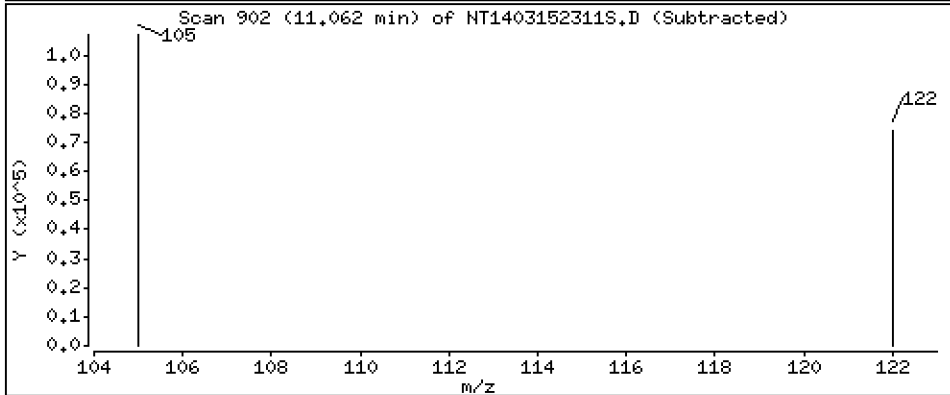
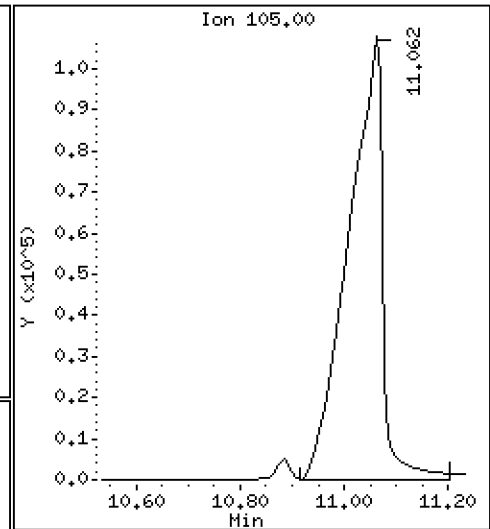
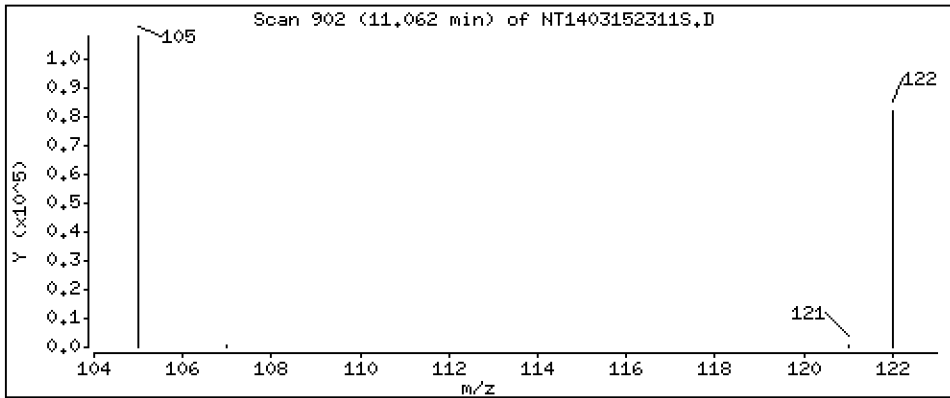
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 9.081 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

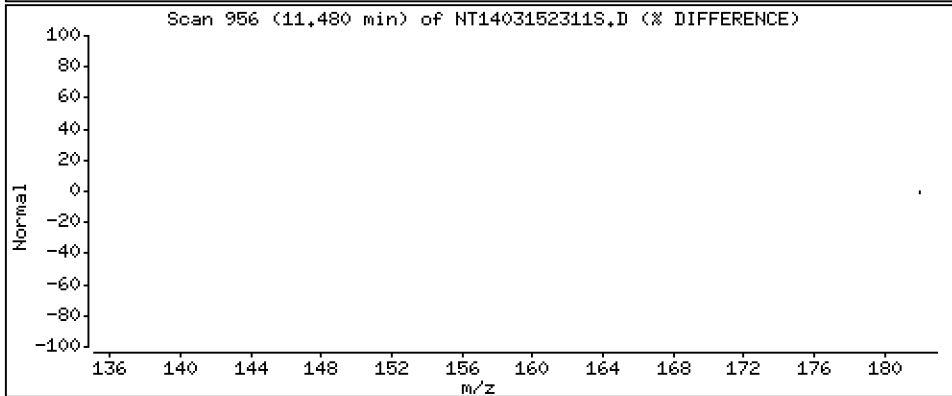
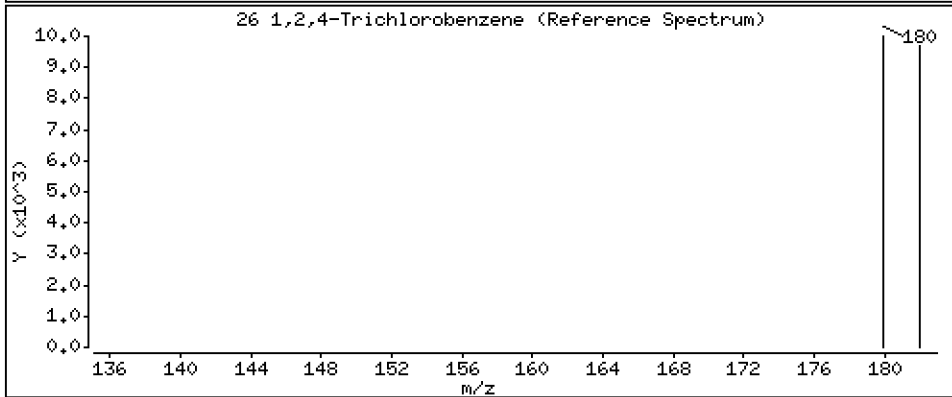
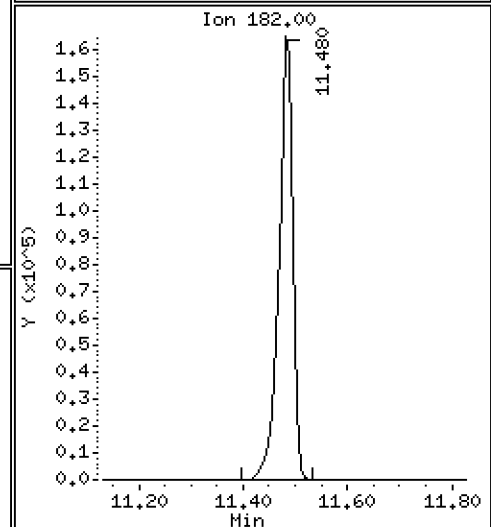
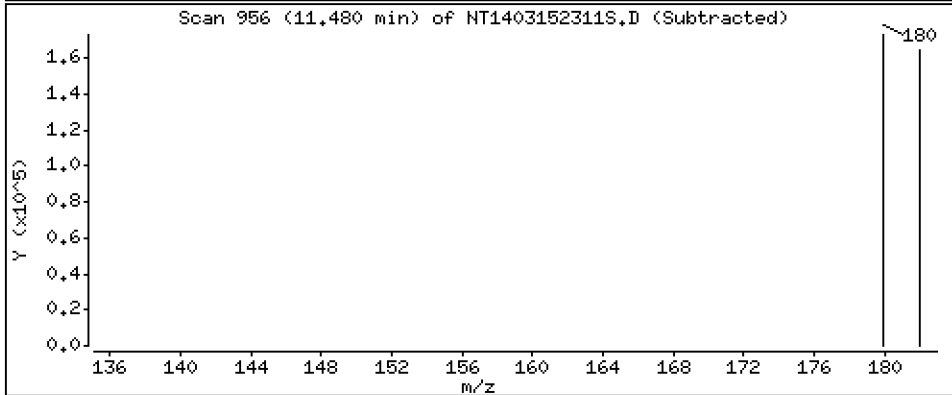
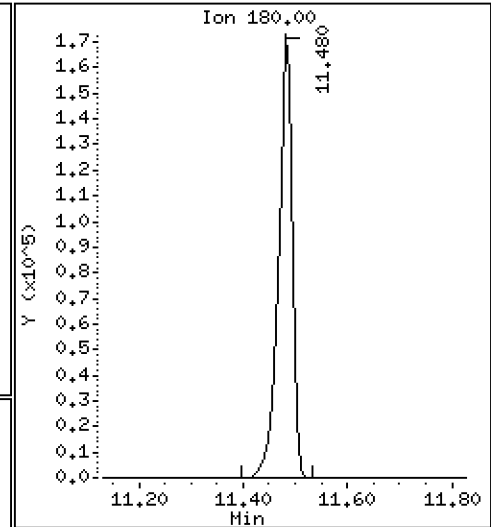
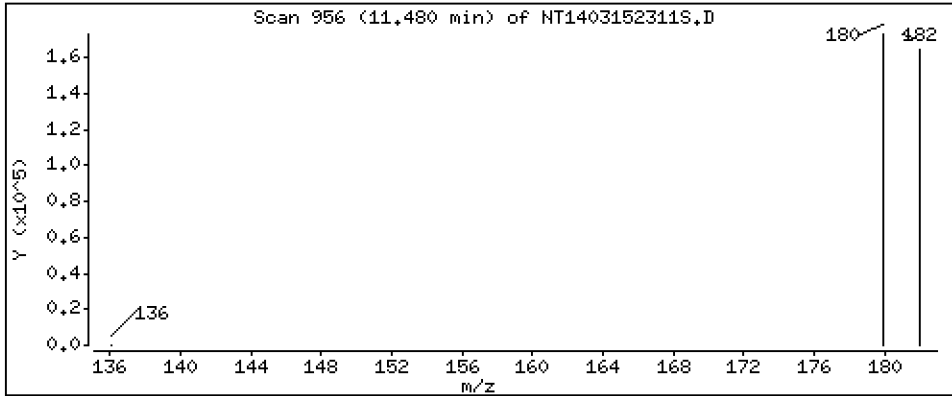
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,574 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

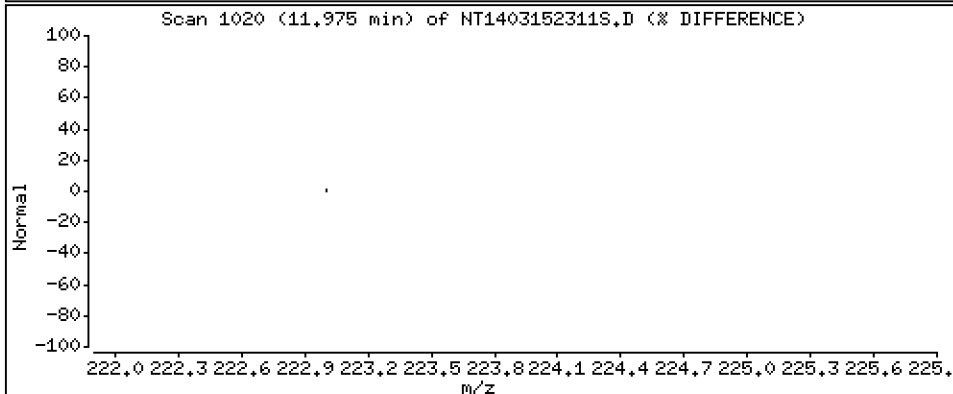
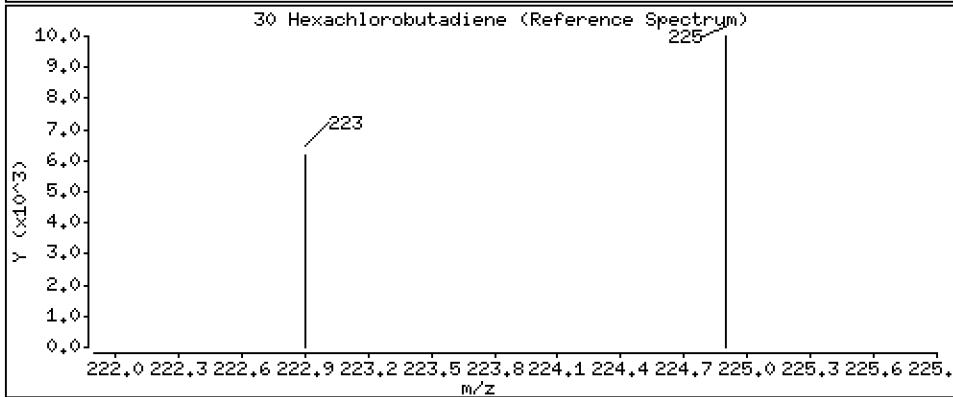
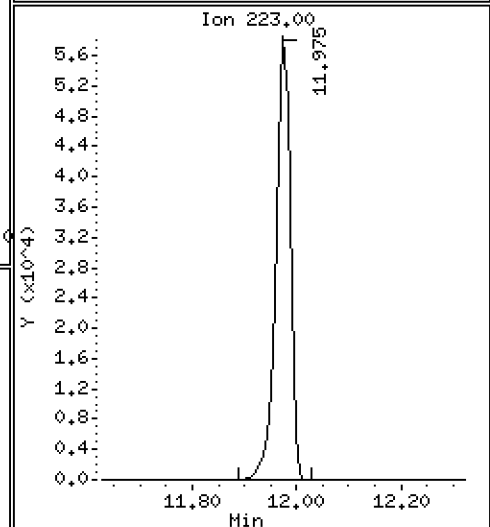
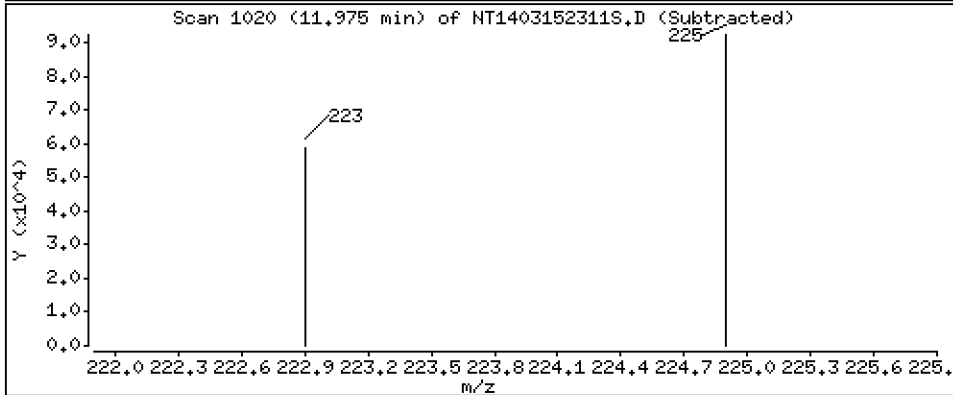
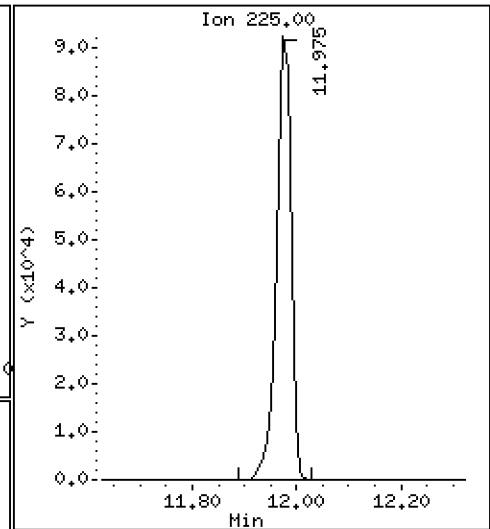
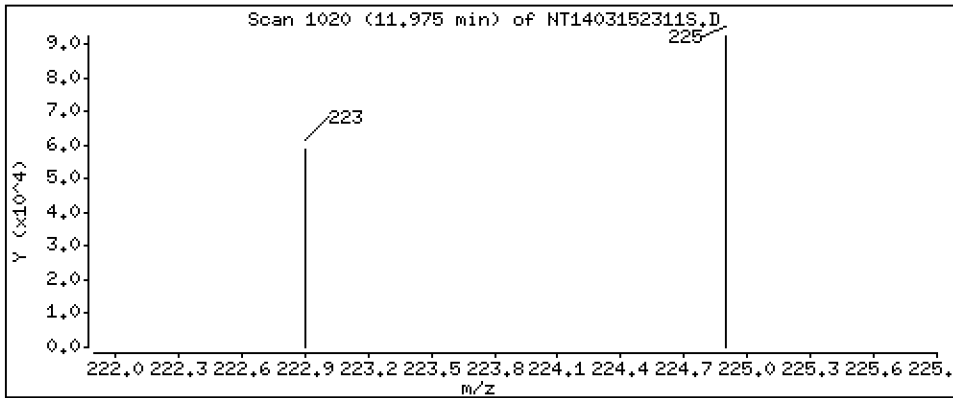
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,973 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

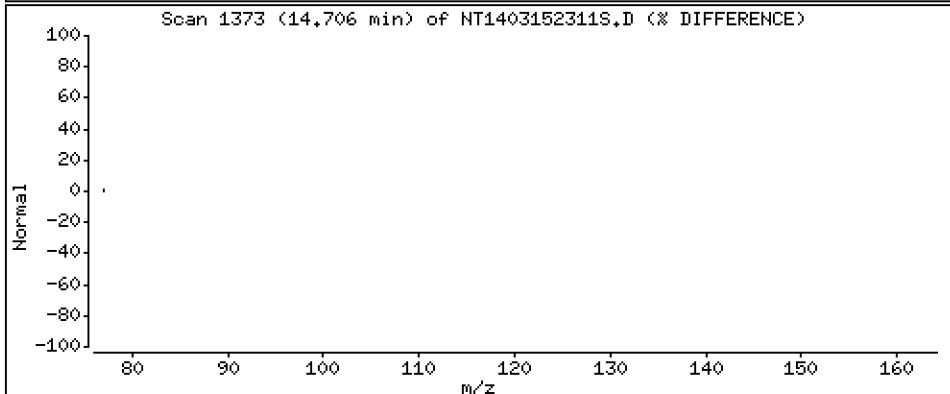
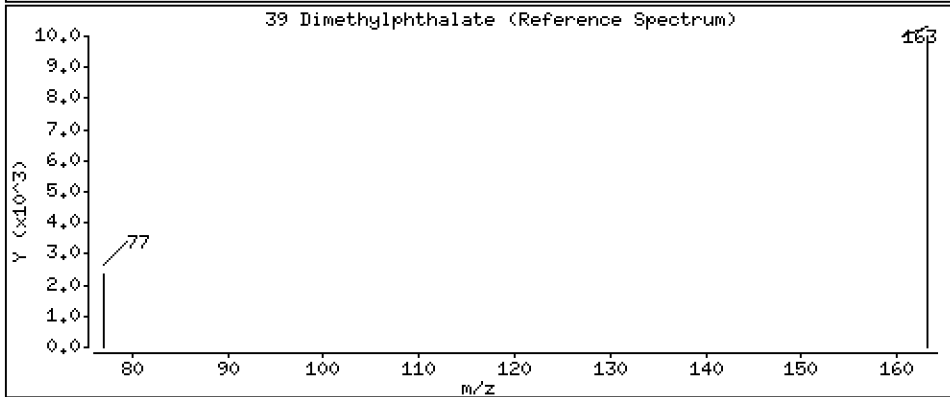
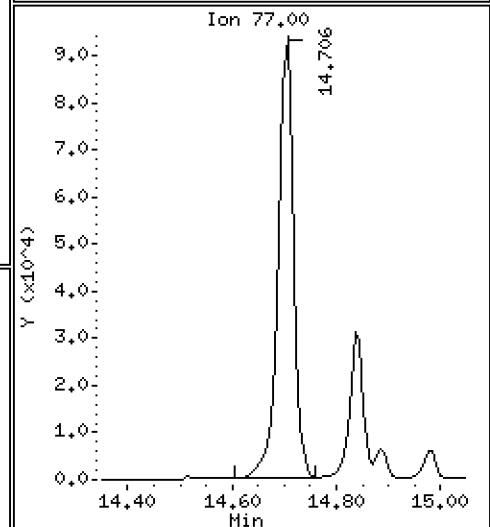
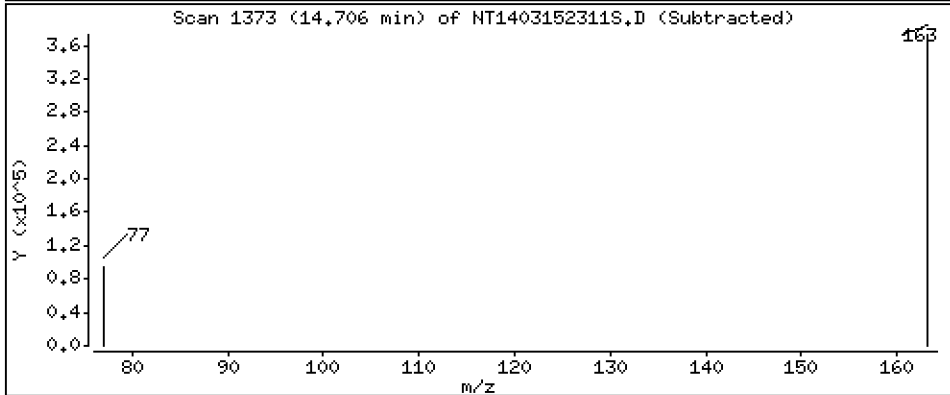
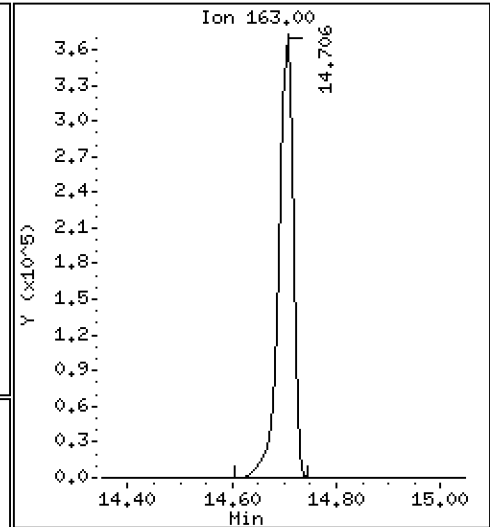
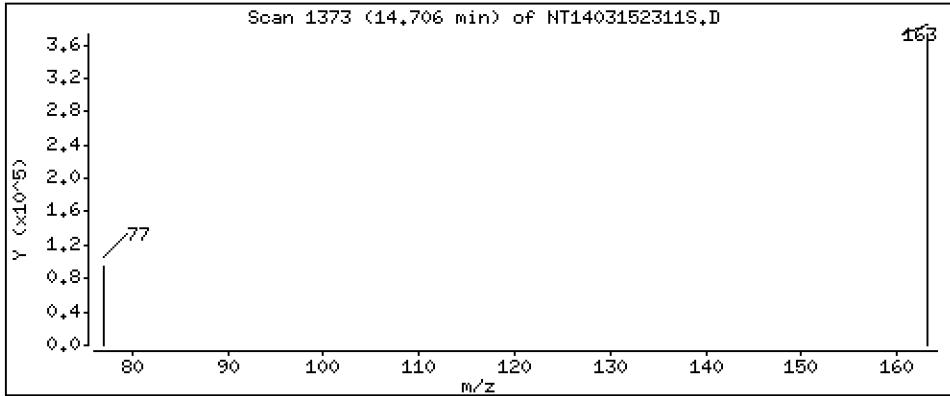
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,995 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

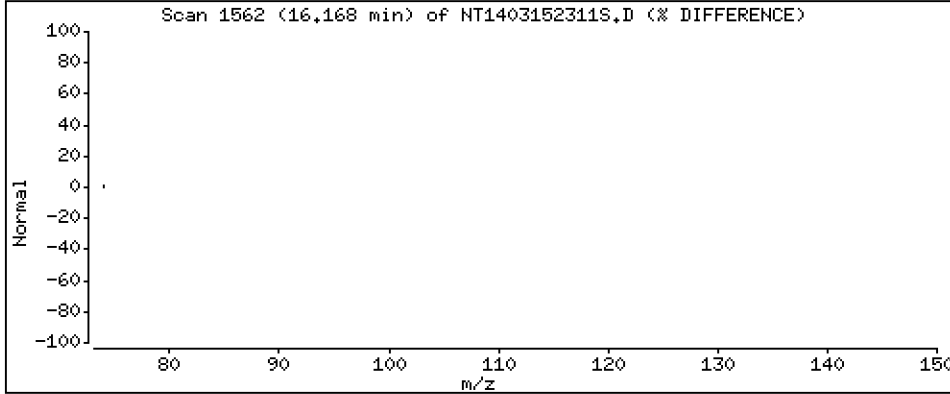
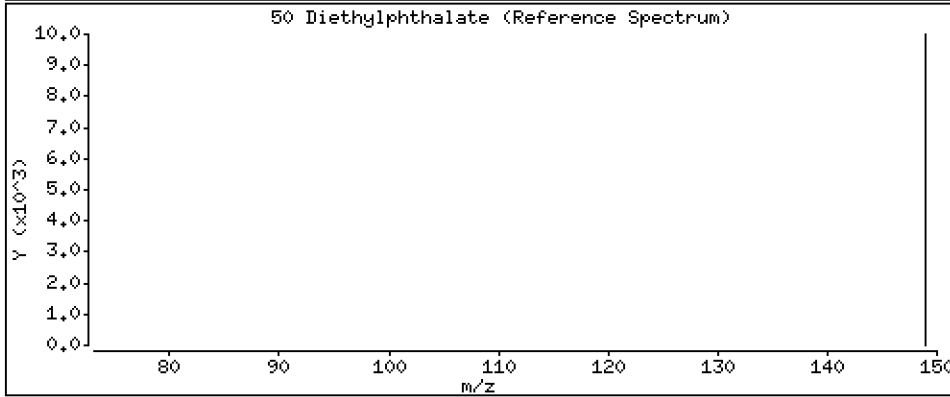
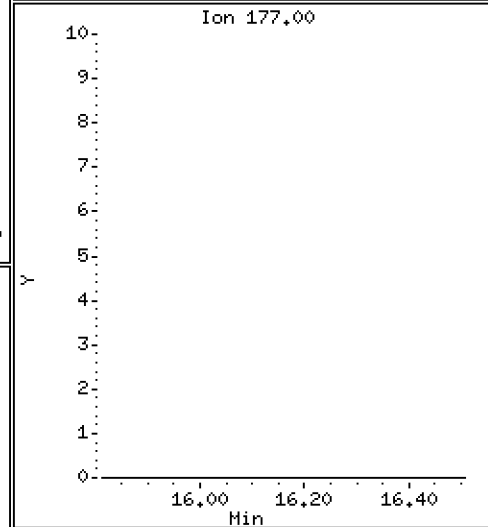
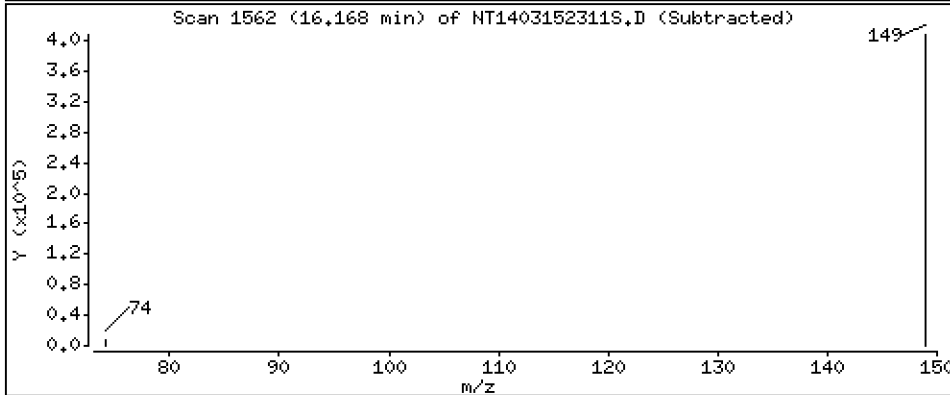
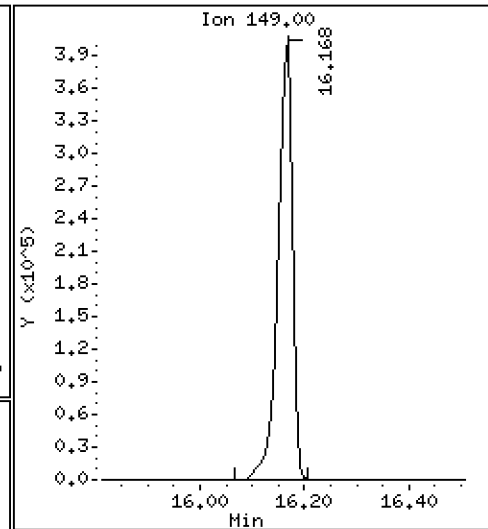
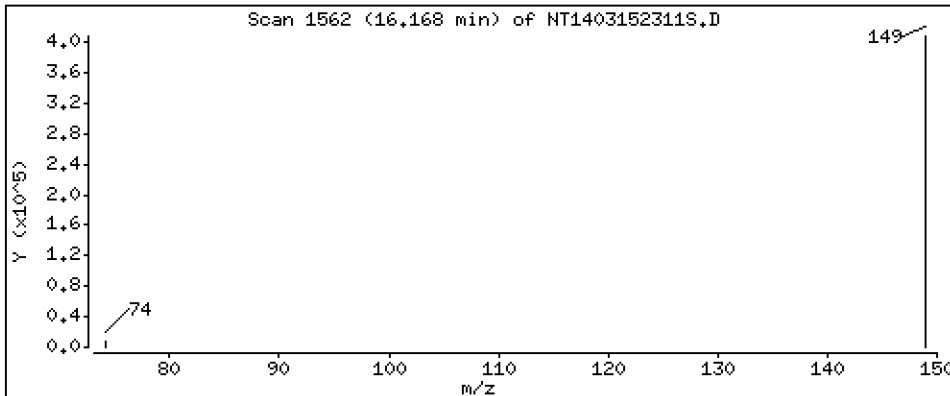
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,174 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

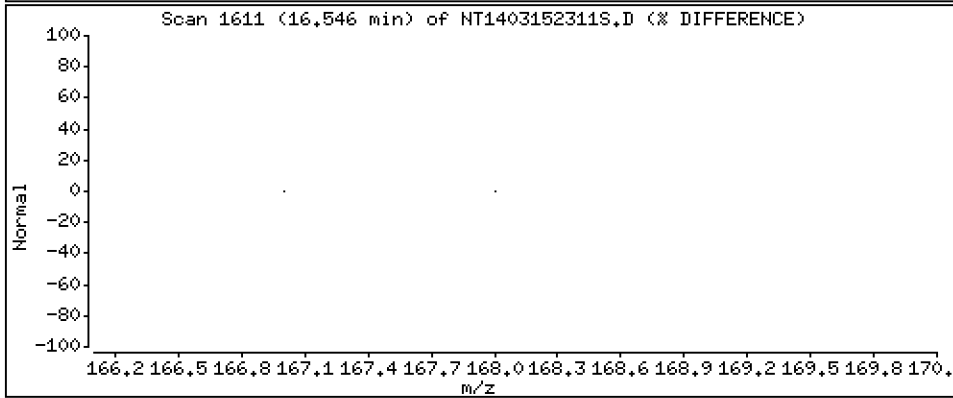
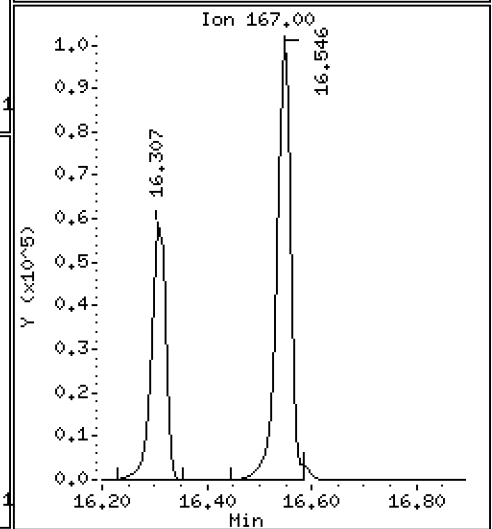
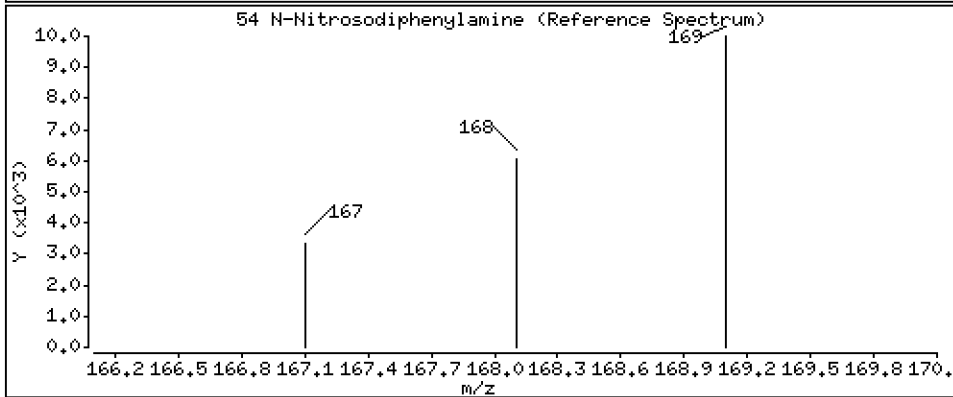
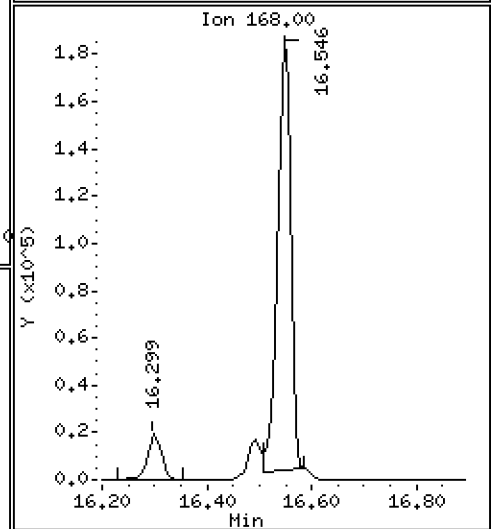
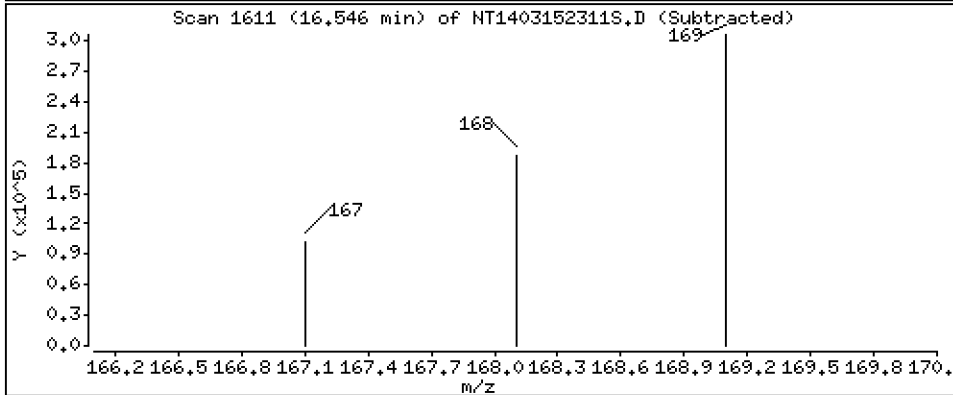
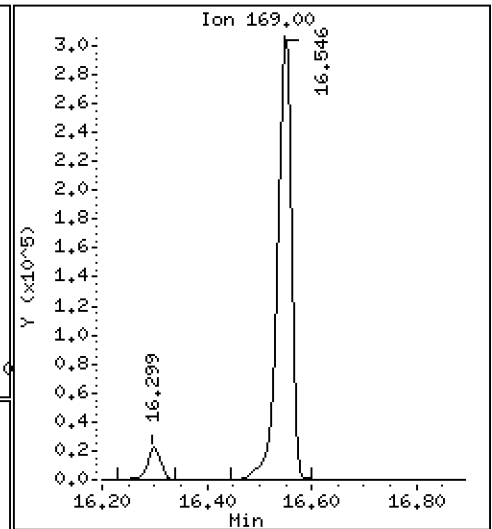
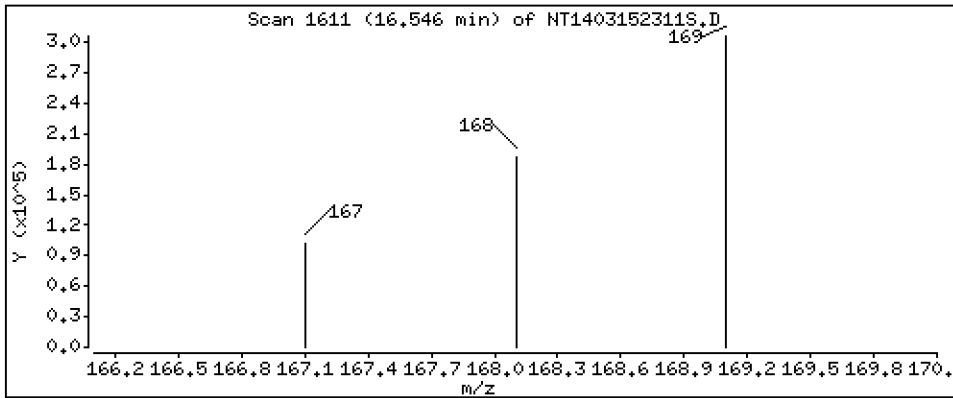
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,019 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

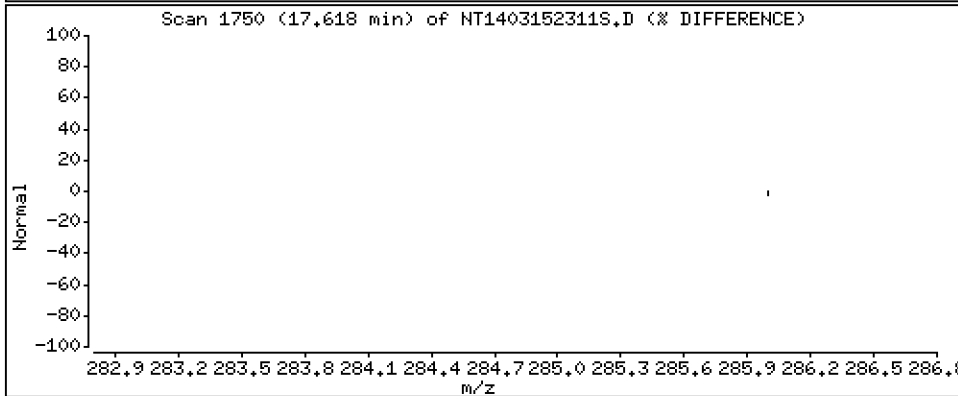
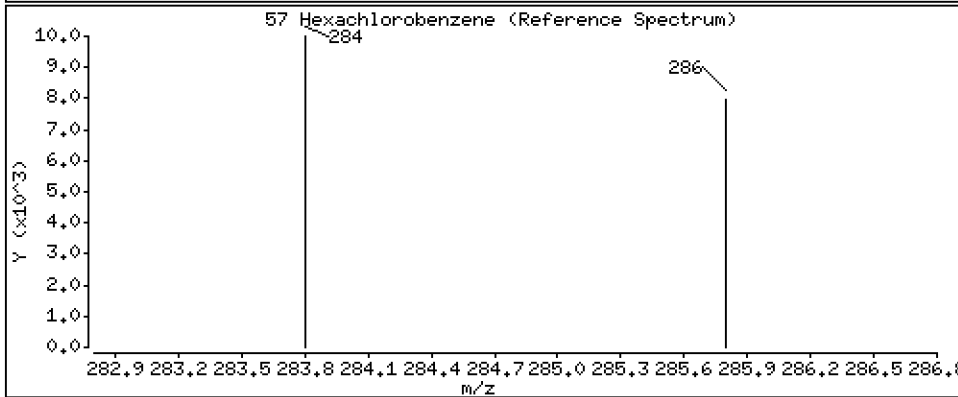
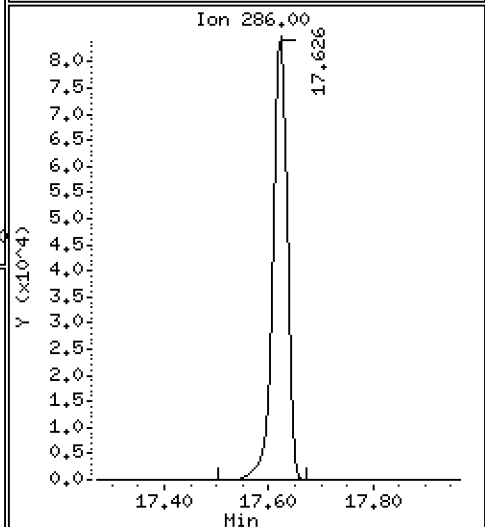
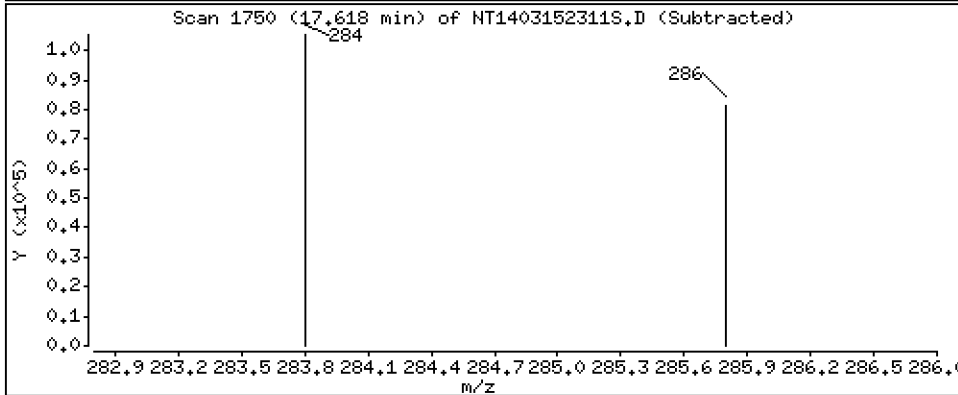
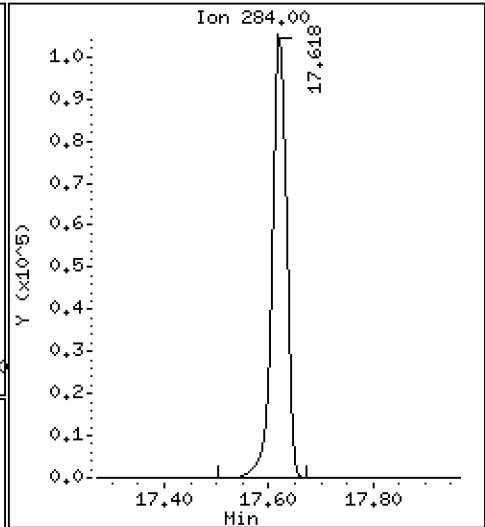
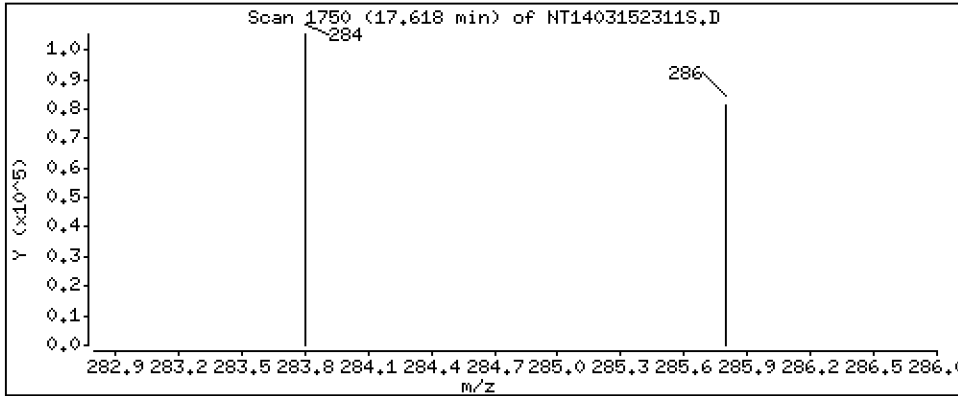
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,693 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

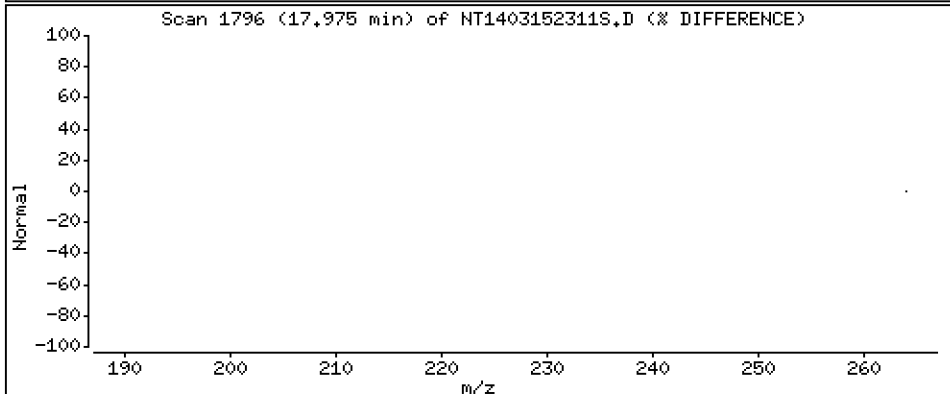
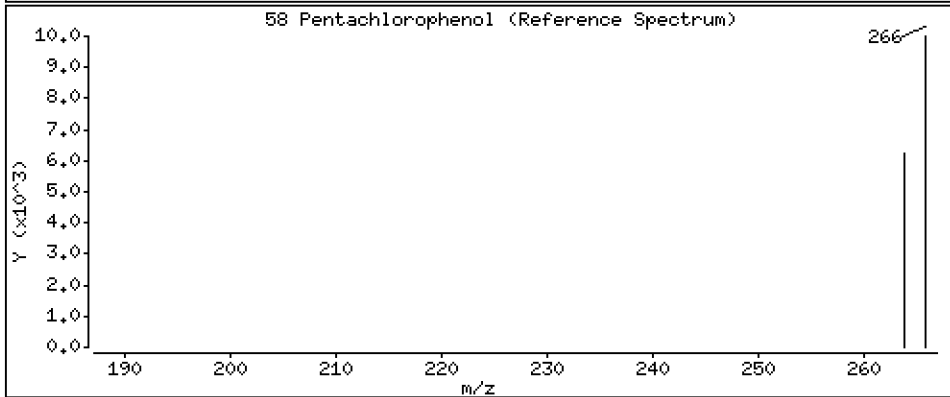
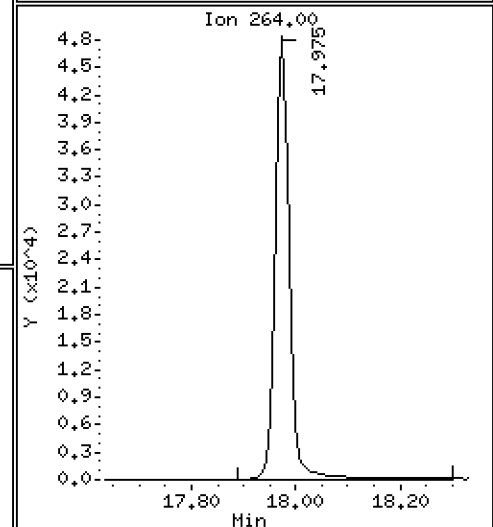
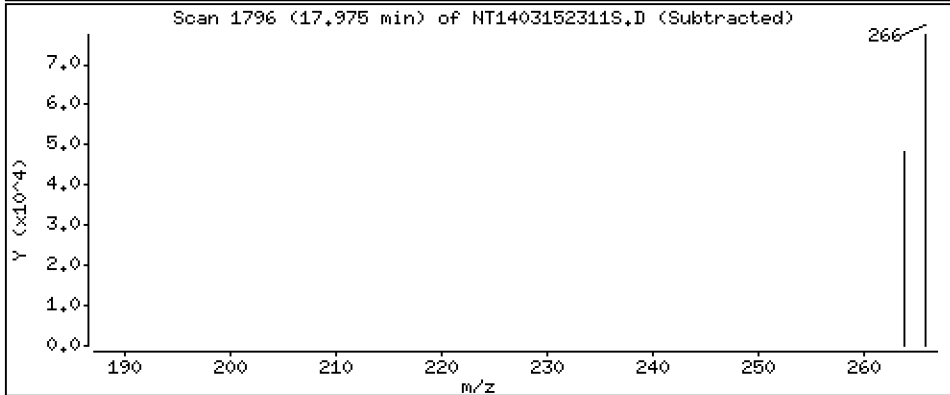
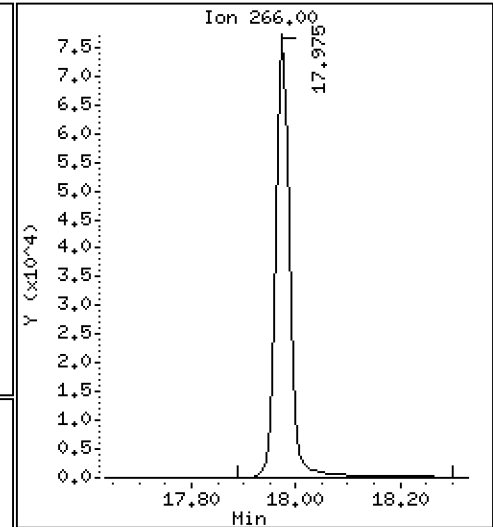
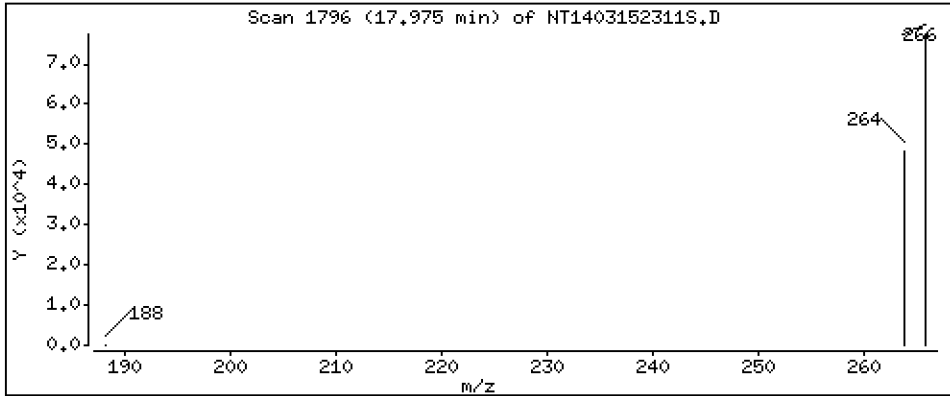
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,800 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

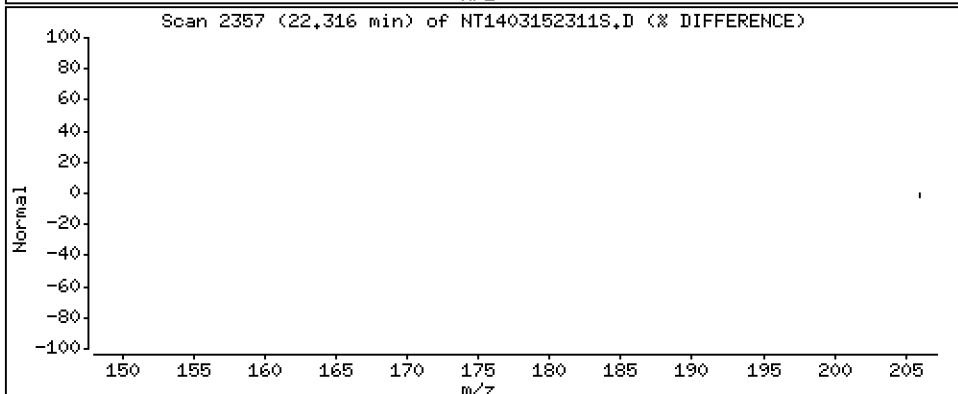
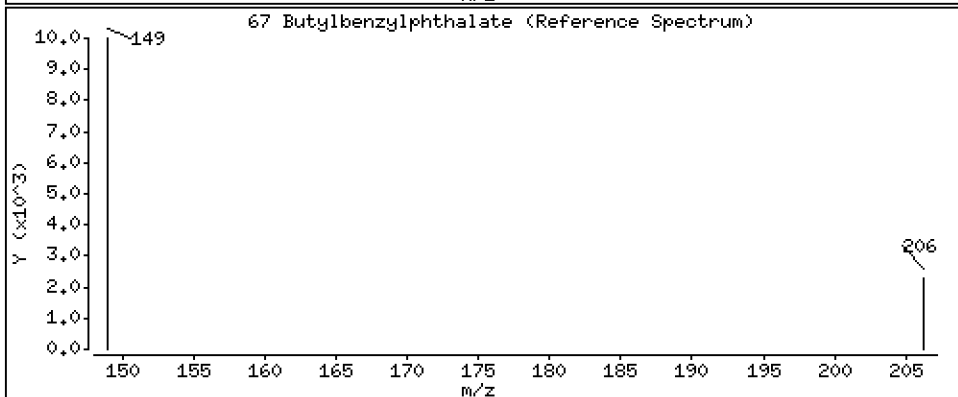
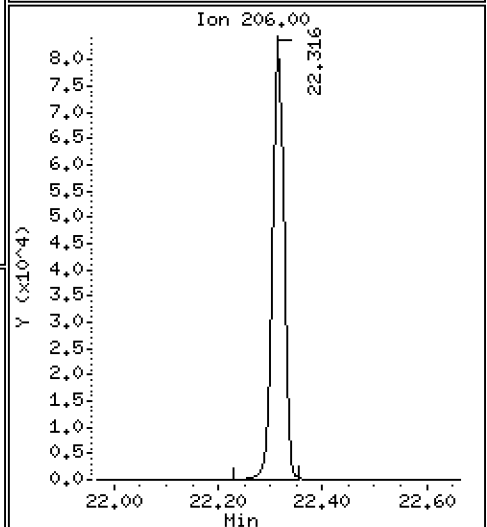
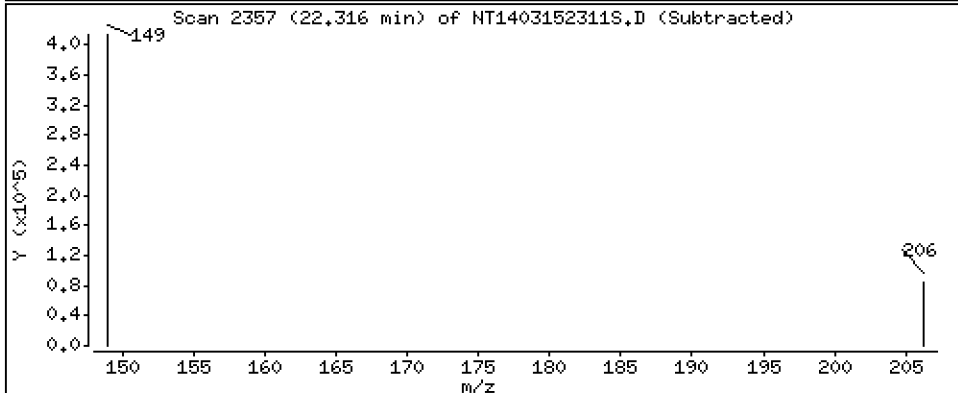
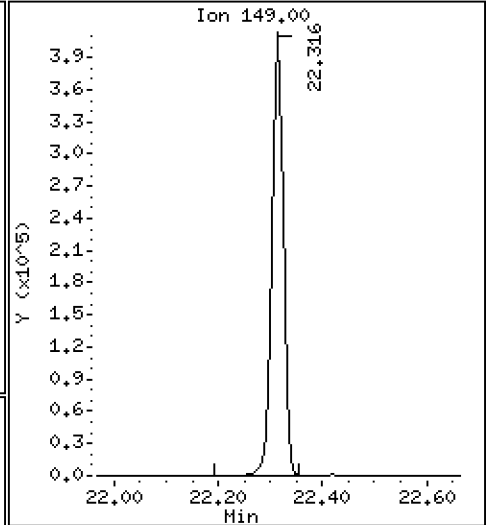
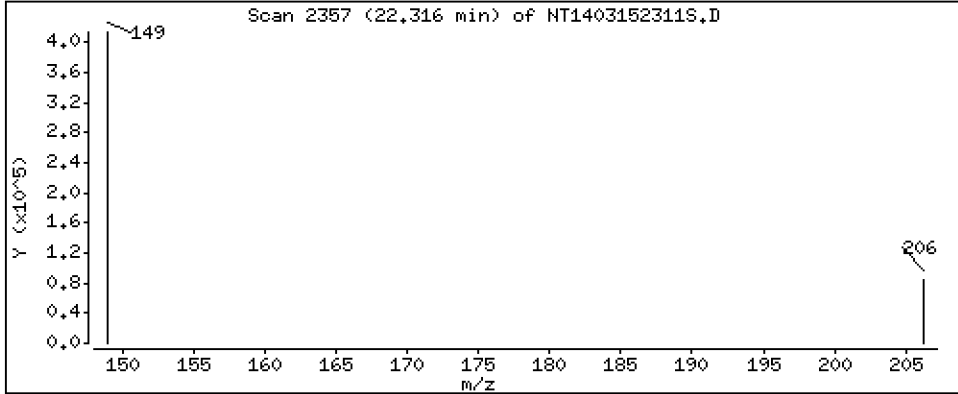
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,366 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

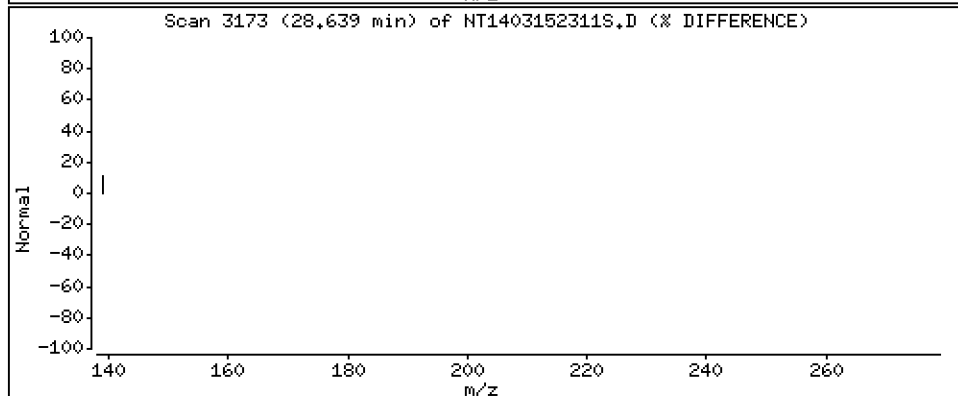
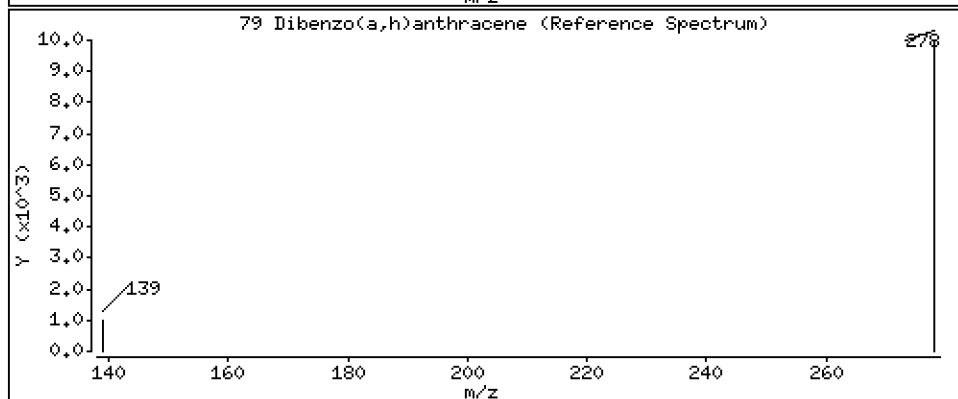
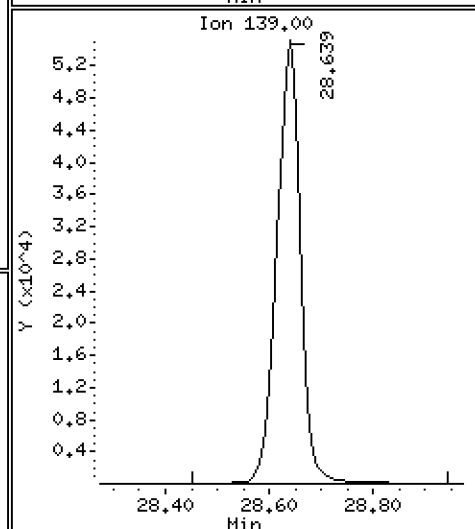
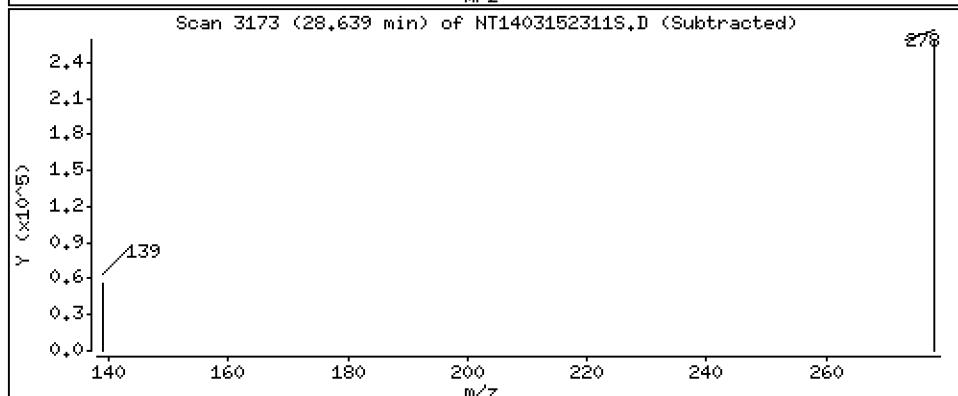
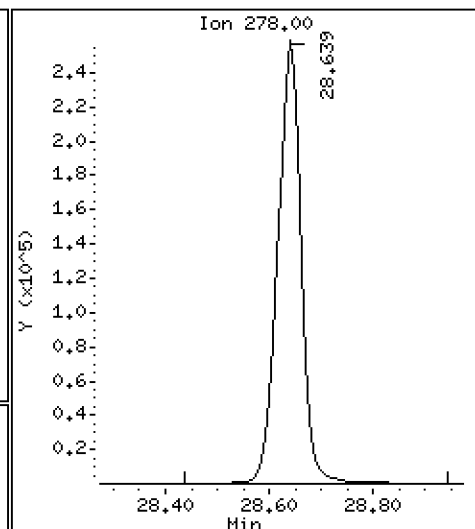
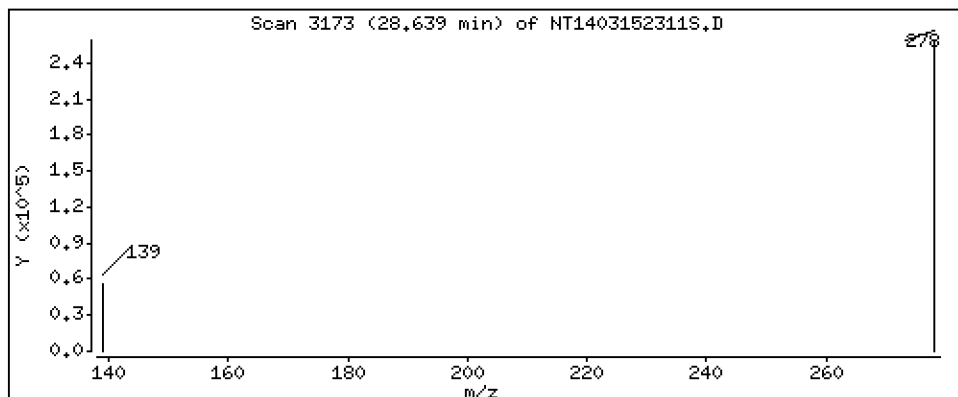
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,166 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

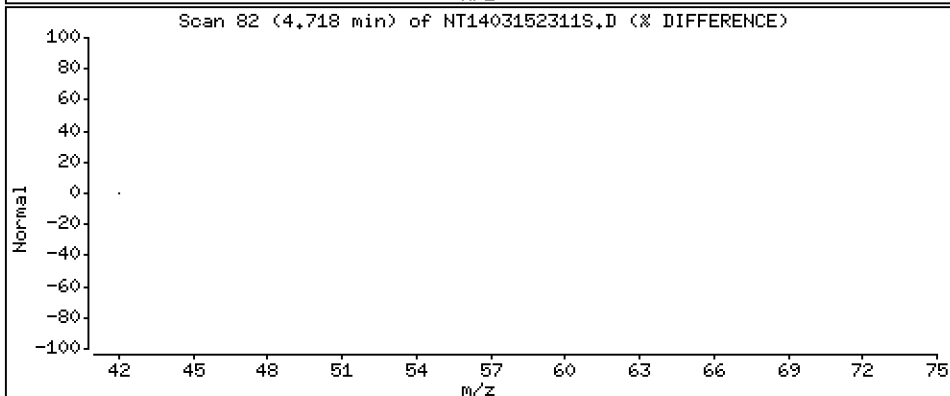
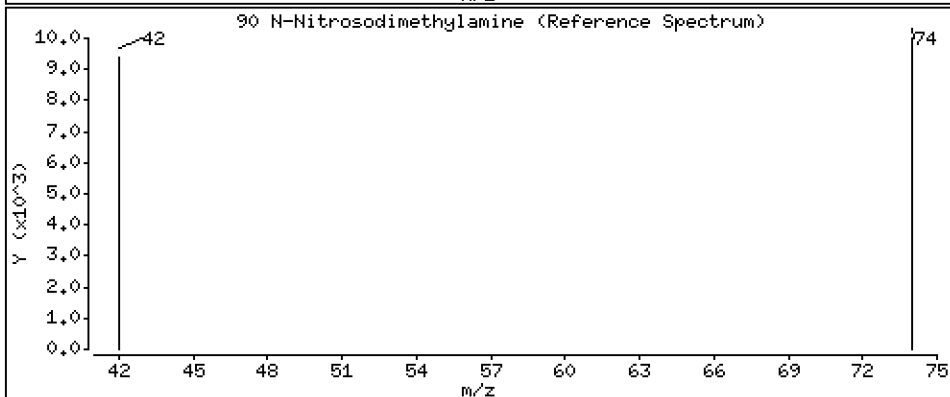
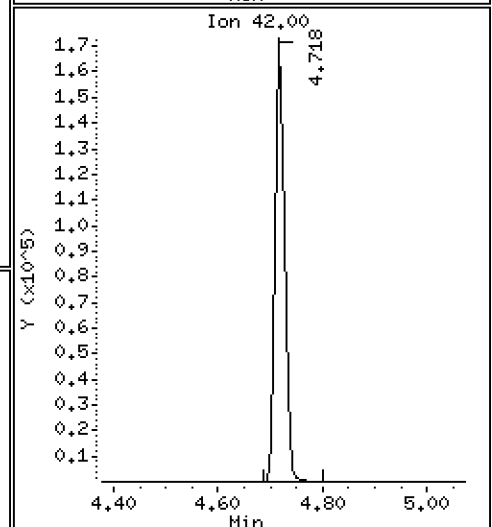
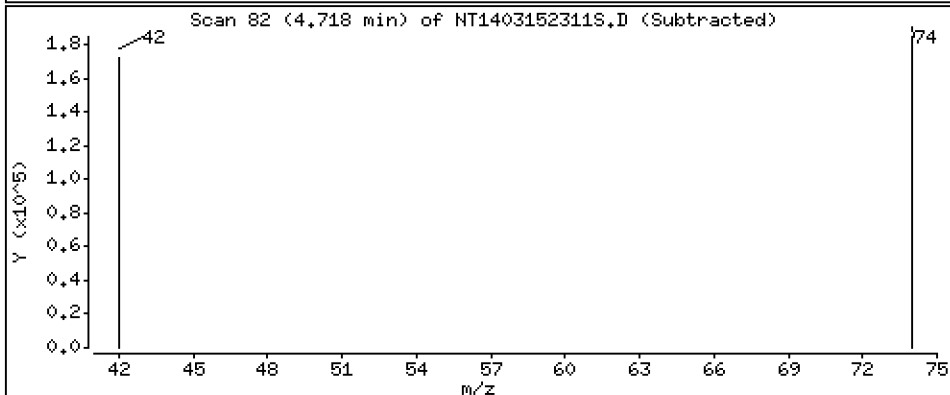
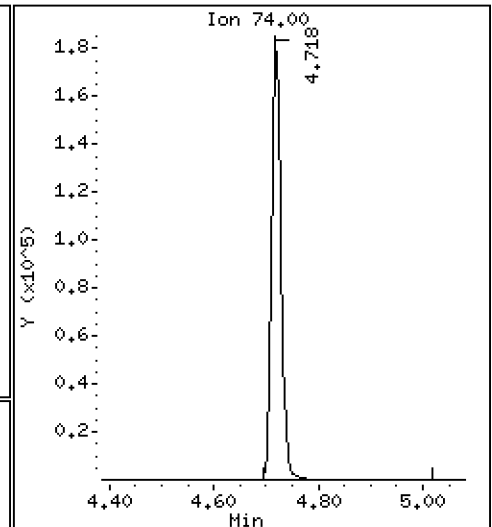
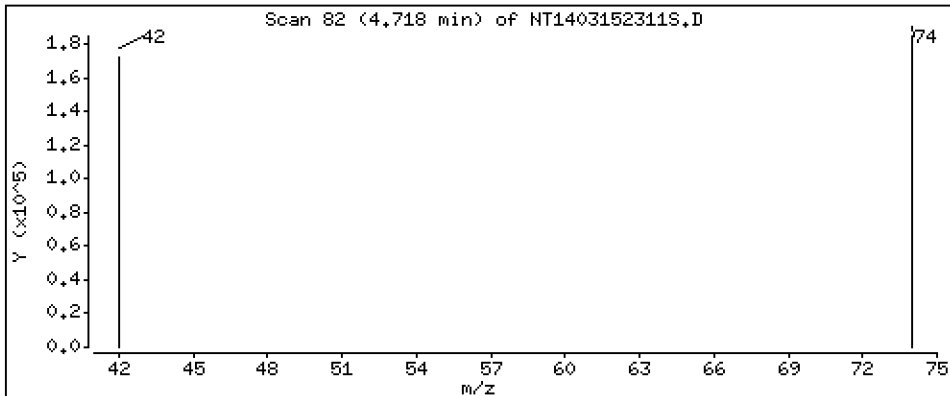
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.261 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	131	0.00180	0.001799 (R)
3 Phenol	94		8.441	8.433	(0.931)	454904	4.54237	4.542
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	414667	4.83856	4.839
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	214548	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	402045	4.84807	4.848
11 Benzyl alcohol	79		9.339	9.339	(1.030)	313629	5.34291	5.343
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	389531	4.82237	4.822
13 2-Methylphenol	108		9.564	9.556	(1.055)	296655	4.28818	4.288
15 4-Methylphenol	108		9.836	9.828	(1.085)	331703	4.53863	4.539
16 N-Nitroso-di-n-propylamine	70		9.905	9.898	(1.092)	265440	5.13699	5.137
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	272931	3.93394	3.934
24 Benzoic acid	105		11.061	10.883	(0.956)	494569	9.08128	9.081
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	311017	4.57388	4.574
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	807045	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	171122	4.97279	4.973
39 Dimethylphthalate	163		14.706	14.698	(0.967)	683967	4.99496	4.995
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	400955	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	754333	5.17432	5.174
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	544923	5.01904	5.019
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	195732	4.69277	4.693
58 Pentachlorophenol	266		17.974	17.982	(0.985)	138145	4.79996	4.800
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	801298	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	546	0.00507	0.005072 (R)
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	588546	5.36591	5.366
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	624454	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	623001	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.623	(1.104)	815876	5.16593	5.166
90 N-Nitrosodimethylamine	74		4.717	4.733	(0.520)	234083	5.26142	5.261

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	214548	-3.88
27 Naphthalene-d8	832937	416469	1665874	807045	-3.11
42 Acenaphthene-d10	403175	201588	806350	400955	-0.55
59 Phenanthrene-d10	814822	407411	1629644	801298	-1.66
69 Chrysene-d12	625755	312878	1251510	624454	-0.21
77 Perylene-d12	614085	307043	1228170	623001	1.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311S.D

Lab ID: SLC0242-SCV1

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523125.D

Date: 15-MAR-2023 18:15

Client ID:

Sample Info: SLC0242-ICB1

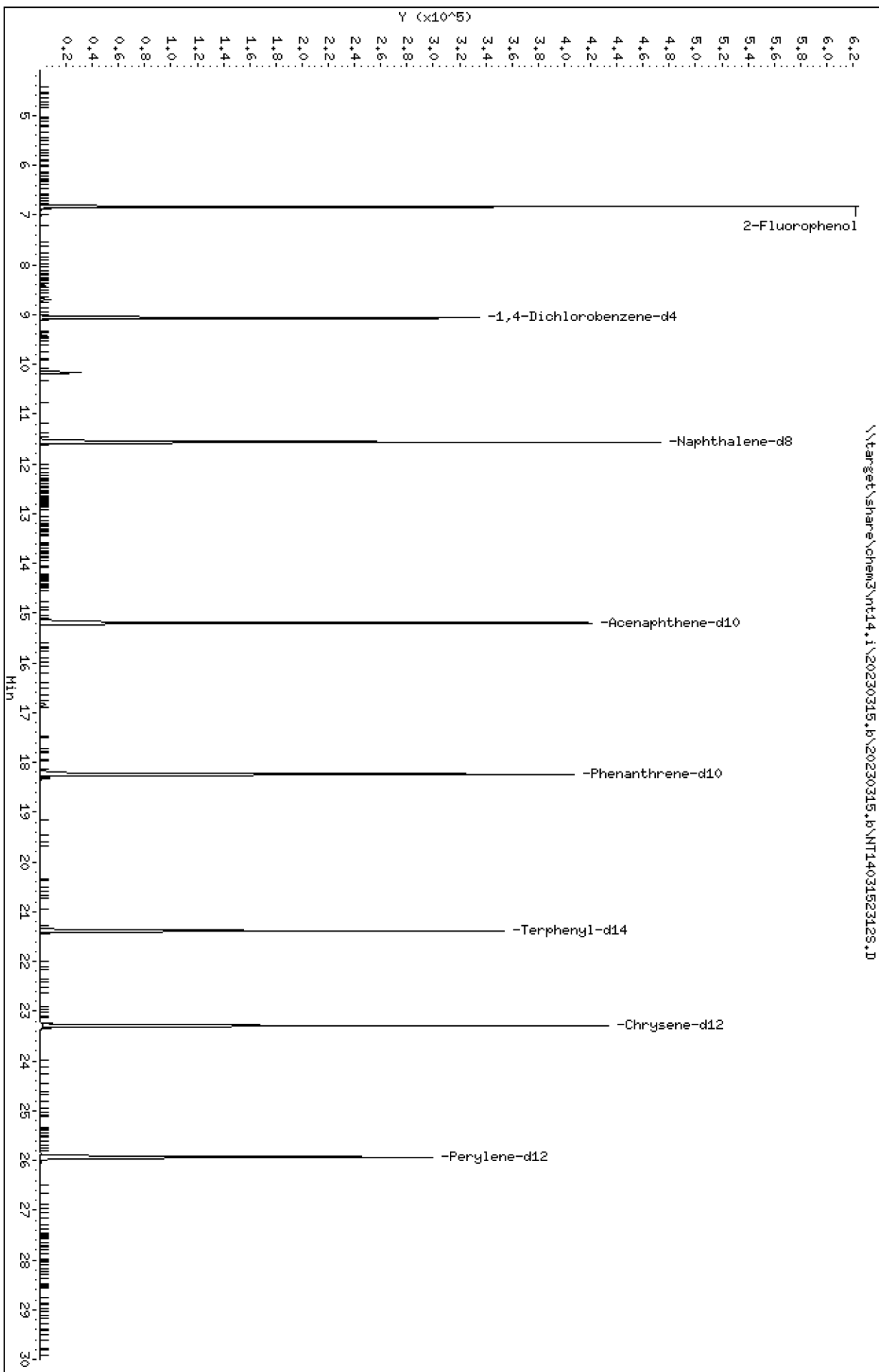
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523125.D



Date : 15-MAR-2023 18:15

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-ICB1

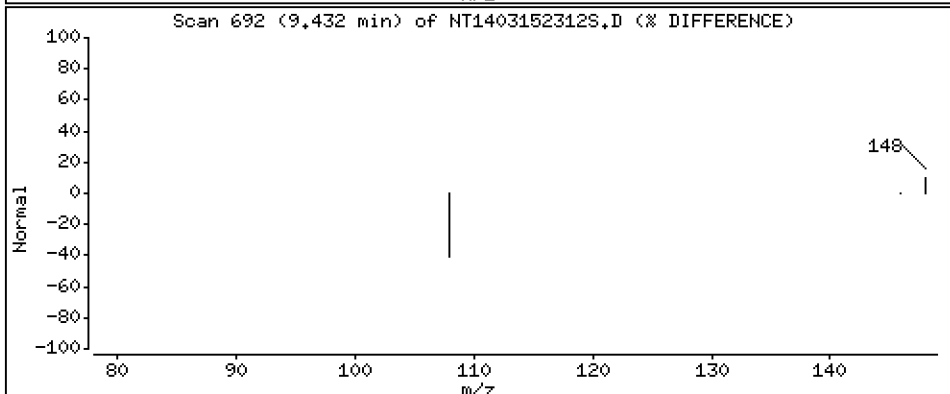
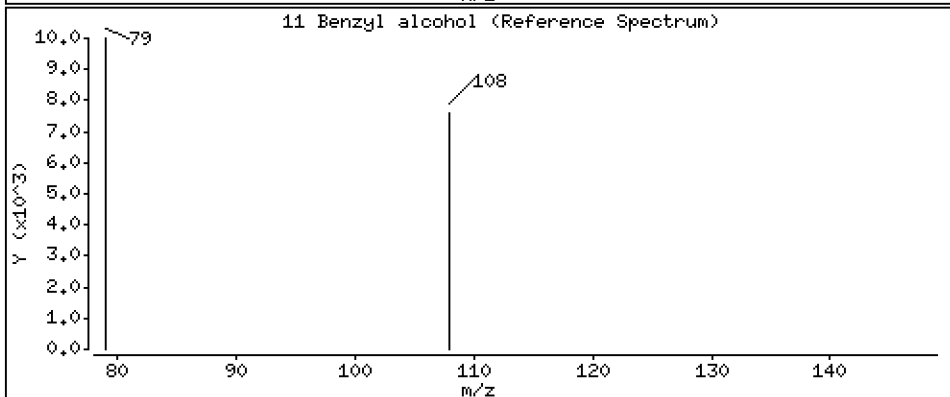
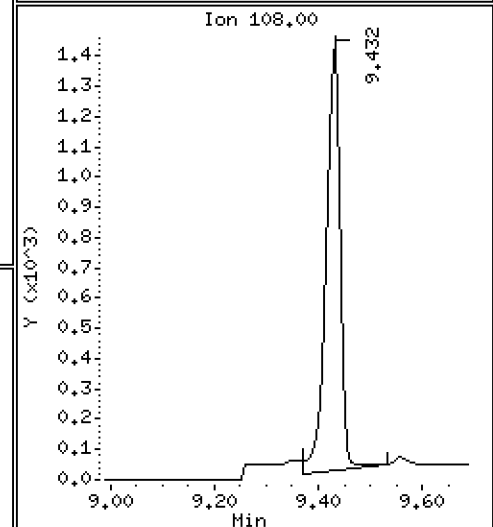
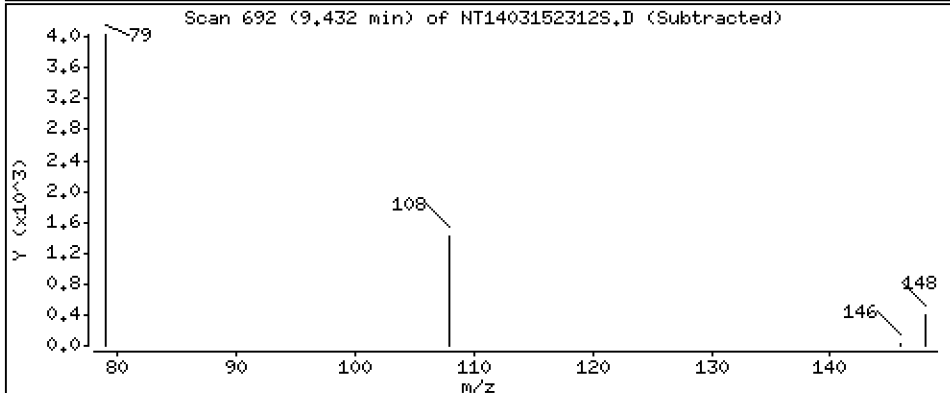
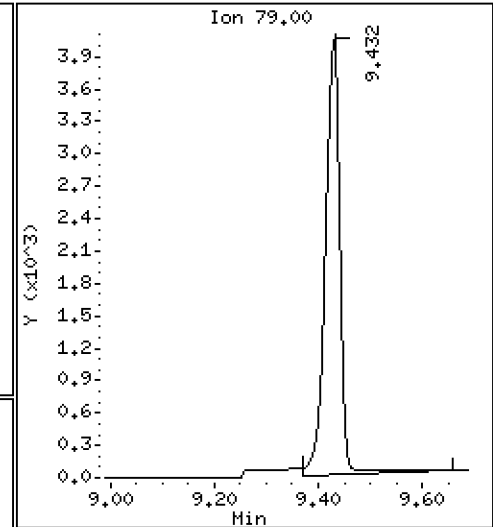
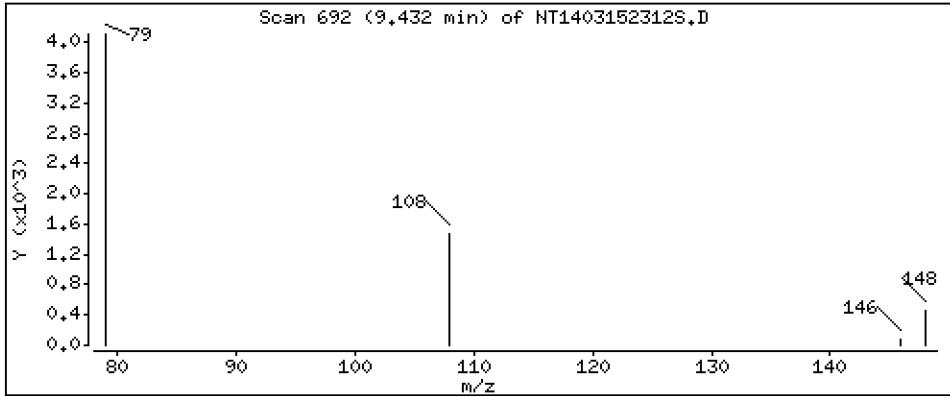
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1313 ug/mL



Date : 15-MAR-2023 18:15

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-ICB1

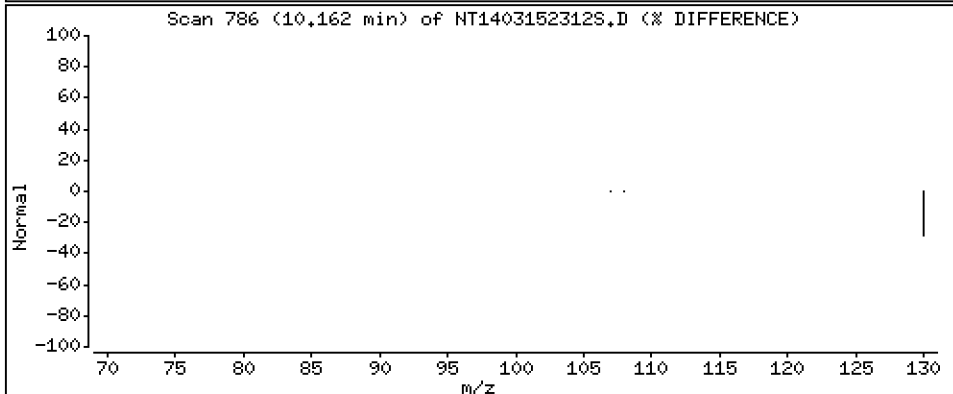
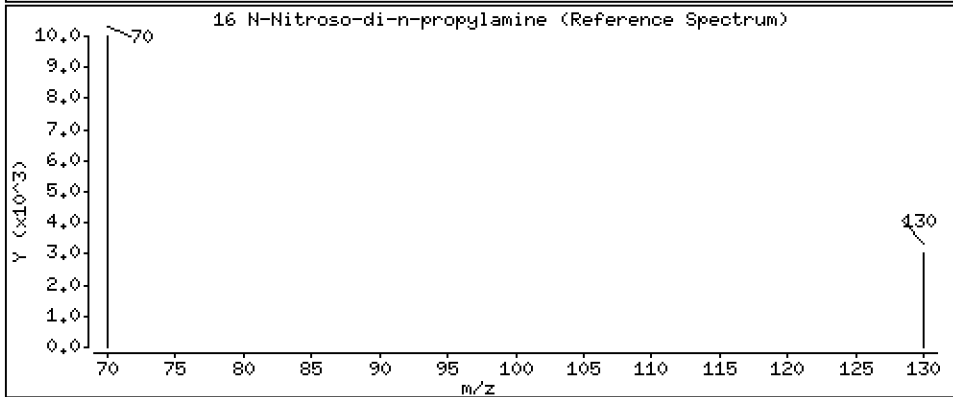
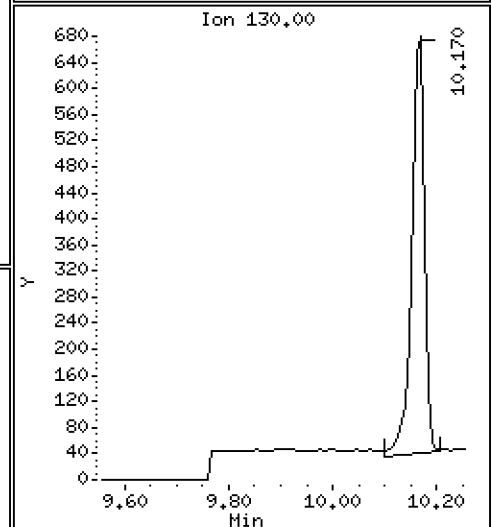
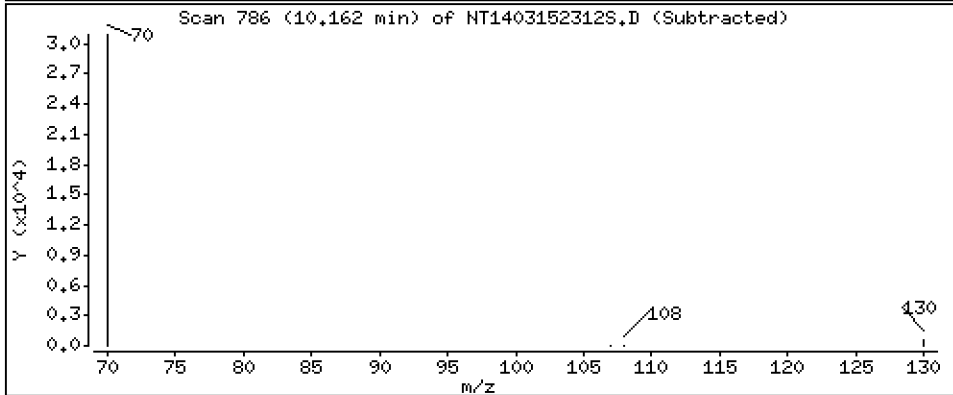
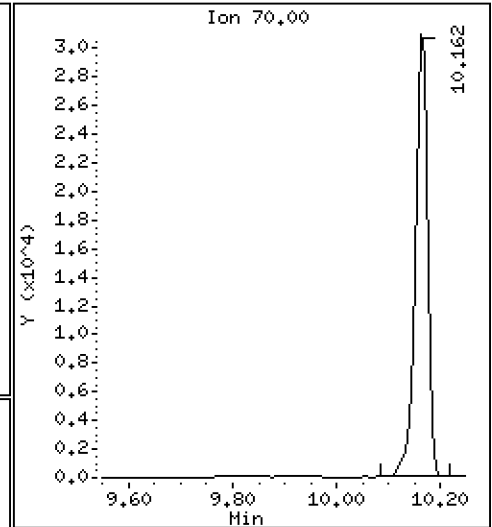
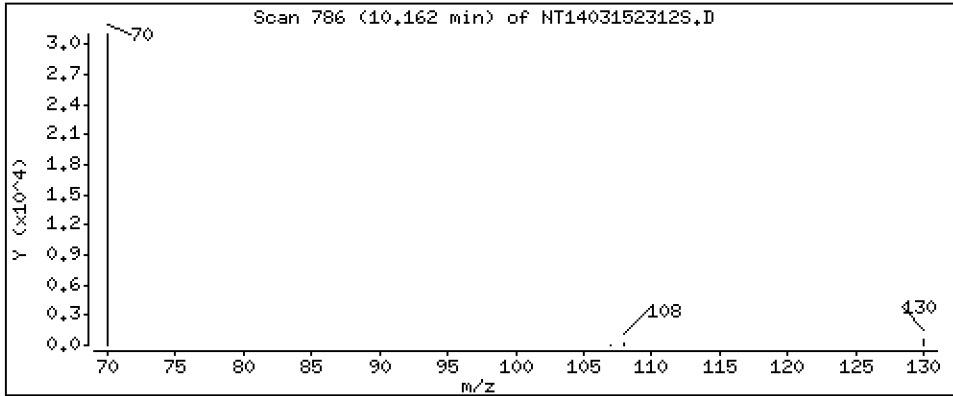
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 1,046 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152312S.D
 Lab Smp Id: SLC0242-ICB1
 Inj Date : 15-MAR-2023 18:15 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-ICB1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	516989	7.17159	7.172 (R)
3 Phenol	94		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	212376	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	79		9.432	9.339	(1.040)	7629	0.13130	0.1313
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		10.161	9.898	(1.121)	53500	1.04596	1.046
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.564	11.564	(1.000)	811708	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		Compound Not Detected.					
* 42 Acenaphthene-d10	162		15.193	15.201	(1.000)	379238	4.00000	
50 Diethylphthalate	149		Compound Not Detected.					
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	759480	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	489288	4.86110	4.861 (R)
67 Butylbenzylphthalate	149		Compound Not Detected.					
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	583854	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	563750	4.00000	
79 Dibenzo(a,h)anthracene	278		Compound Not Detected.					
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152312S.D
 Lab Smp Id: SLC0242-ICB1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	212376	-4.85
27 Naphthalene-d8	832937	416469	1665874	811708	-2.55
42 Acenaphthene-d10	403175	201588	806350	379238	-5.94
59 Phenanthrene-d10	814822	407411	1629644	759480	-6.79
69 Chrysene-d12	625755	312878	1251510	583854	-6.70
77 Perylene-d12	614085	307043	1228170	563750	-8.20

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.09
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.19	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152312S.D

Lab ID: SLC0242-ICB1

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 18:15

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523105.D

Date: 15-MAR-2023 17:03

Client ID:

Sample Info: SLC0242-CAL1

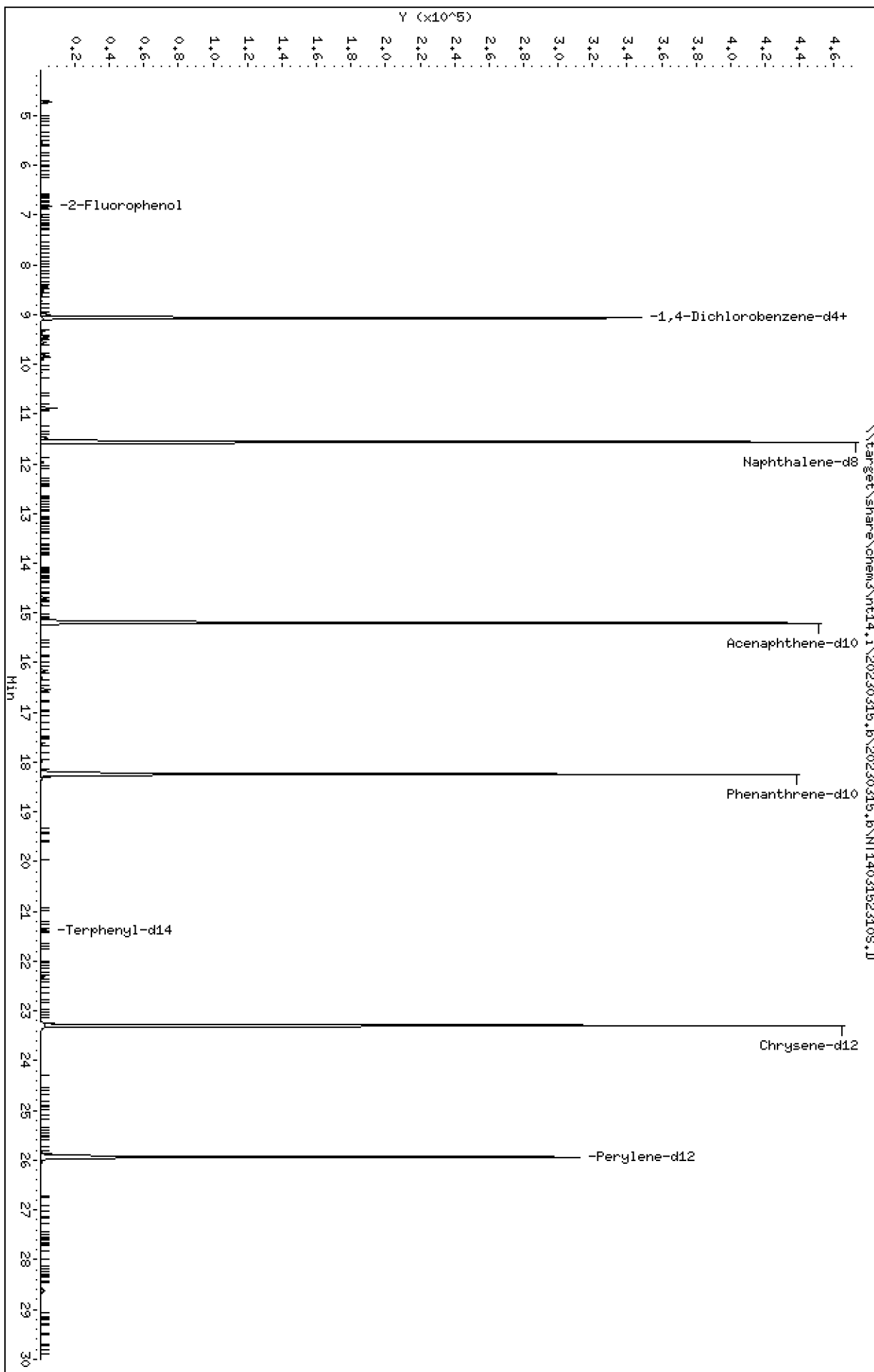
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-Smsi

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152310S.D
 Lab Smp Id: SLC0242-CAL1
 Inj Date : 15-MAR-2023 17:03 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 10 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	6275	0.07500	0.08200
3 Phenol	94		8.433	8.433	(0.930)	5084	0.05000	0.04831
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	5000	0.05000	0.05552
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	225451	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	5075	0.05000	0.05824
11 Benzyl alcohol	79		9.339	9.339	(1.030)	2403	0.05000	0.03896
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	4620	0.05000	0.05443
13 2-Methylphenol	108		9.556	9.556	(1.054)	3449	0.05000	0.04744
15 4-Methylphenol	108		9.828	9.828	(1.084)	3473	0.05000	0.04522
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	2814	0.05000	0.05182
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	6876	0.10000	0.09539
24 Benzoic acid	105		10.883	10.883	(0.941)	626	0.20000	0.01148
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	4065	0.05000	0.05754
* 27 Naphthalene-d8	136		11.564	11.564	(1.000)	838488	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	1881	0.05000	0.05261
39 Dimethylphthalate	163		14.698	14.698	(0.967)	6951	0.05000	0.05181
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	392849	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	6226	0.05000	0.04359
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	4826	0.05000	0.04617
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	2114	0.05000	0.05264
58 Pentachlorophenol	266		17.982	17.982	(0.986)	978	0.10000	0.03611
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	771492	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	5724	0.05000	0.05515
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	3175	0.05000	0.03019
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	602035	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	580071	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	6163	0.05000	0.04191
90 N-Nitrosodimethylamine	74		4.733	4.733	(0.522)	4707	0.10000	0.1007

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152310S.D
 Lab Smp Id: SLC0242-CAL1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	225451	1.01
27 Naphthalene-d8	832937	416469	1665874	838488	0.67
42 Acenaphthene-d10	403175	201588	806350	392849	-2.56
59 Phenanthrene-d10	814822	407411	1629644	771492	-5.32
69 Chrysene-d12	625755	312878	1251510	602035	-3.79
77 Perylene-d12	614085	307043	1228170	580071	-5.54

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152310S.D

Lab ID: SLC0242-CAL1

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 17:03

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523095.D

Date: 15-MAR-2023 16:26

Client ID:

Sample Info: SLC0242-CAL2

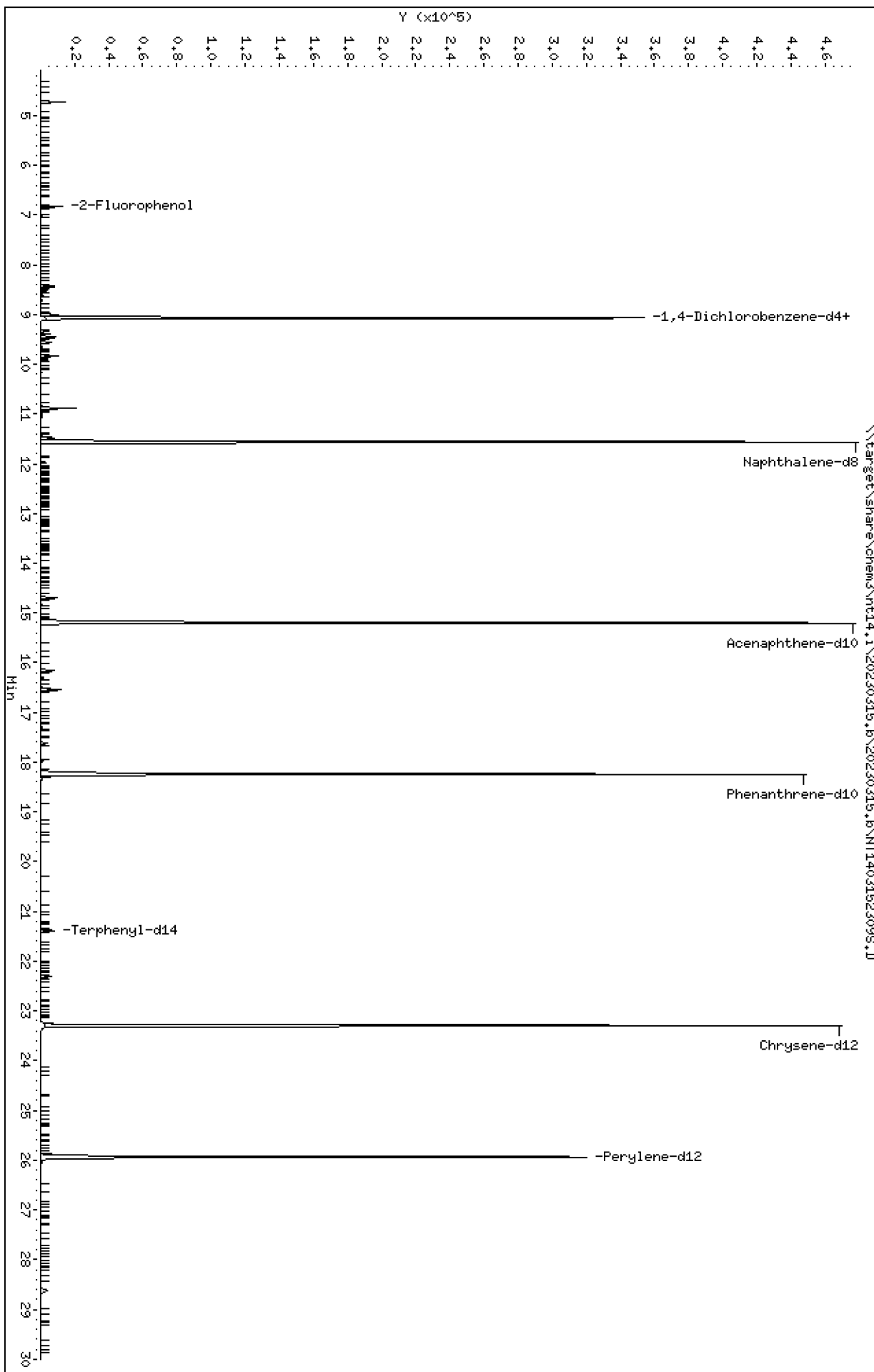
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152309S.D
 Lab Smp Id: SLC0242-CAL2
 Inj Date : 15-MAR-2023 16:26 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:14 Cal File: NT1403152307.D
 Als bottle: 9 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.834	(0.754)	11600	0.15000	0.1507
3 Phenol	94		8.433	8.433	(0.930)	10394	0.10000	0.09817
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	9465	0.10000	0.1045
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	226822	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	9112	0.10000	0.1039
11 Benzyl alcohol	79		9.339	9.339	(1.030)	5289	0.10000	0.08523
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	8905	0.10000	0.1043
13 2-Methylphenol	108		9.556	9.556	(1.054)	7085	0.10000	0.09687
15 4-Methylphenol	108		9.828	9.828	(1.084)	7210	0.10000	0.09331
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	5132	0.10000	0.09394
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	14326	0.20000	0.1996
24 Benzoic acid	105		10.976	10.976	(0.949)	2635	0.40000	0.04853
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	7622	0.10000	0.1083
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	834986	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	3679	0.10000	0.1033
39 Dimethylphthalate	163		14.698	14.698	(0.967)	13212	0.10000	0.09771
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	395938	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	13538	0.10000	0.09404
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	10298	0.10000	0.09653
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	4165	0.10000	0.1016
58 Pentachlorophenol	266		17.974	17.974	(0.985)	2488	0.20000	0.08999
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	787336	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	10660	0.10000	0.1014
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	7477	0.10000	0.07019
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	609729	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	588547	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	13230	0.10000	0.08867
90 N-Nitrosodimethylamine	74		4.725	4.725	(0.521)	9470	0.20000	0.2013

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152309S.D
 Lab Smp Id: SLC0242-CAL2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	226822	1.62
27 Naphthalene-d8	832937	416469	1665874	834986	0.25
42 Acenaphthene-d10	403175	201588	806350	395938	-1.80
59 Phenanthrene-d10	814822	407411	1629644	787336	-3.37
69 Chrysene-d12	625755	312878	1251510	609729	-2.56
77 Perylene-d12	614085	307043	1228170	588547	-4.16

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152309S.D

Lab ID: SLC0242-CAL2

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 16:26

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523085.D

Date: 15-MAR-2023 15:50

Client ID:

Sample Info: SLC0242-CAL3

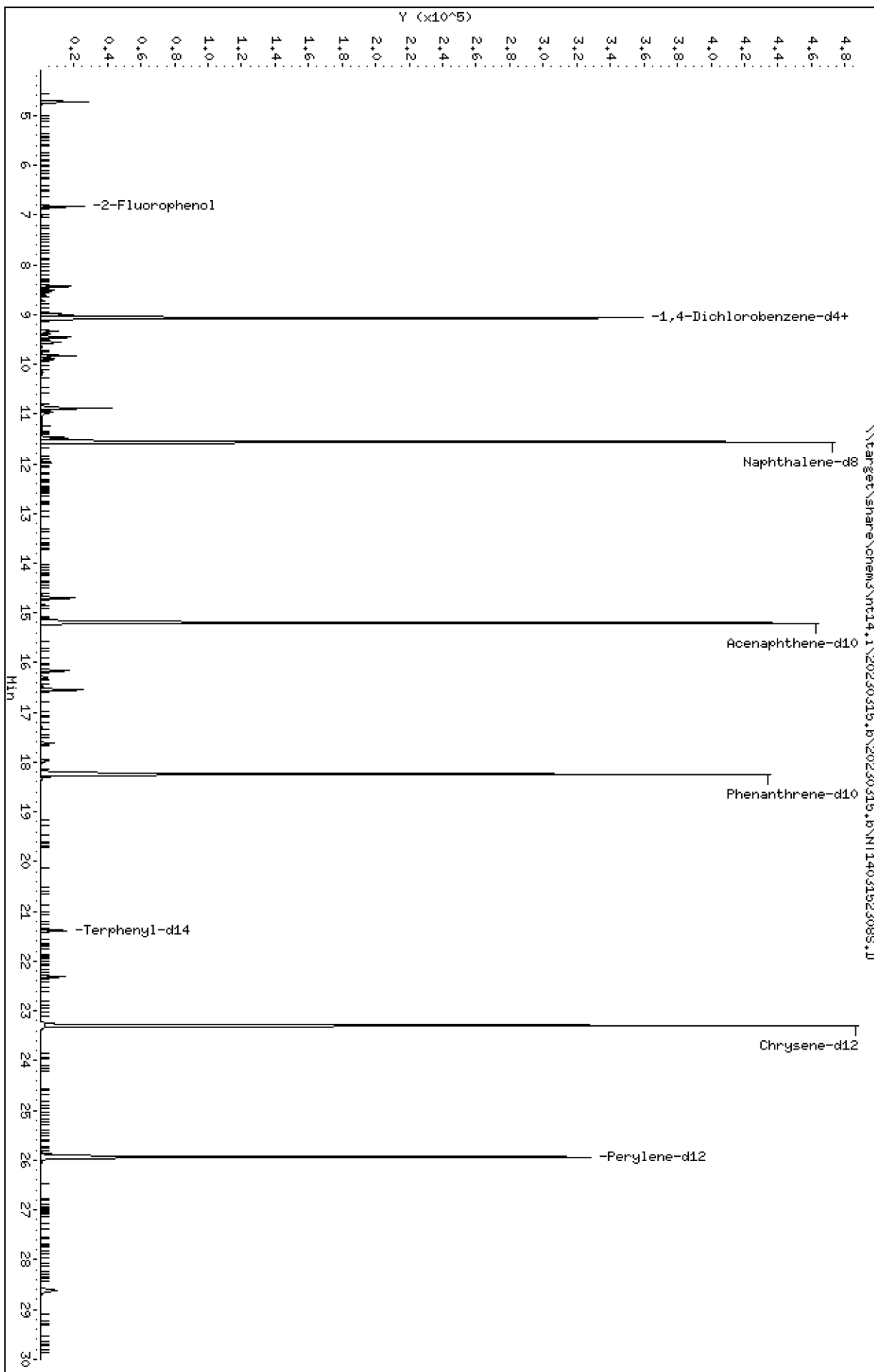
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152308S.D
 Lab Smp Id: SLC0242-CAL3
 Inj Date : 15-MAR-2023 15:50 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL3
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 14:38 Cal File: NT1403152306.D
 Als bottle: 8 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	22322	0.30000	0.2923
3 Phenol	94		8.433	8.433	(0.930)	21303	0.20000	0.2029
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	18617	0.20000	0.2072
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	224982	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	17880	0.20000	0.2056
11 Benzyl alcohol	79		9.339	9.339	(1.030)	11128	0.20000	0.1808
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	17604	0.20000	0.2078
13 2-Methylphenol	108		9.556	9.556	(1.054)	14557	0.20000	0.2007
15 4-Methylphenol	108		9.828	9.828	(1.084)	15054	0.20000	0.1964
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	10618	0.20000	0.1960
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	29629	0.40000	0.4134
24 Benzoic acid	105		10.968	10.968	(0.948)	12666	0.80000	0.2334
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	14590	0.20000	0.2077
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	833810	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	7271	0.20000	0.2045
39 Dimethylphthalate	163		14.698	14.698	(0.967)	27157	0.20000	0.2018
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	394134	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	28071	0.20000	0.1959
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	22005	0.20000	0.2051
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	8736	0.20000	0.2119
58 Pentachlorophenol	266		17.974	17.974	(0.985)	6840	0.40000	0.2458
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	791855	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	20575	0.20000	0.1944
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	17499	0.20000	0.1631
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	613885	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	596641	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	28863	0.20000	0.1908
90 N-Nitrosodimethylamine	74		4.725	4.725	(0.521)	19130	0.40000	0.4100

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152308S.D
 Lab Smp Id: SLC0242-CAL3
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	224982	0.80
27 Naphthalene-d8	832937	416469	1665874	833810	0.10
42 Acenaphthene-d10	403175	201588	806350	394134	-2.24
59 Phenanthrene-d10	814822	407411	1629644	791855	-2.82
69 Chrysene-d12	625755	312878	1251510	613885	-1.90
77 Perylene-d12	614085	307043	1228170	596641	-2.84

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152308S.D

Lab ID: SLC0242-CAL3

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 15:50

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.6\20230315.6\NT14031523075.D

Date: 15-MAR-2023 15:14

Client ID:

Sample Info: SLC0242-CAL4

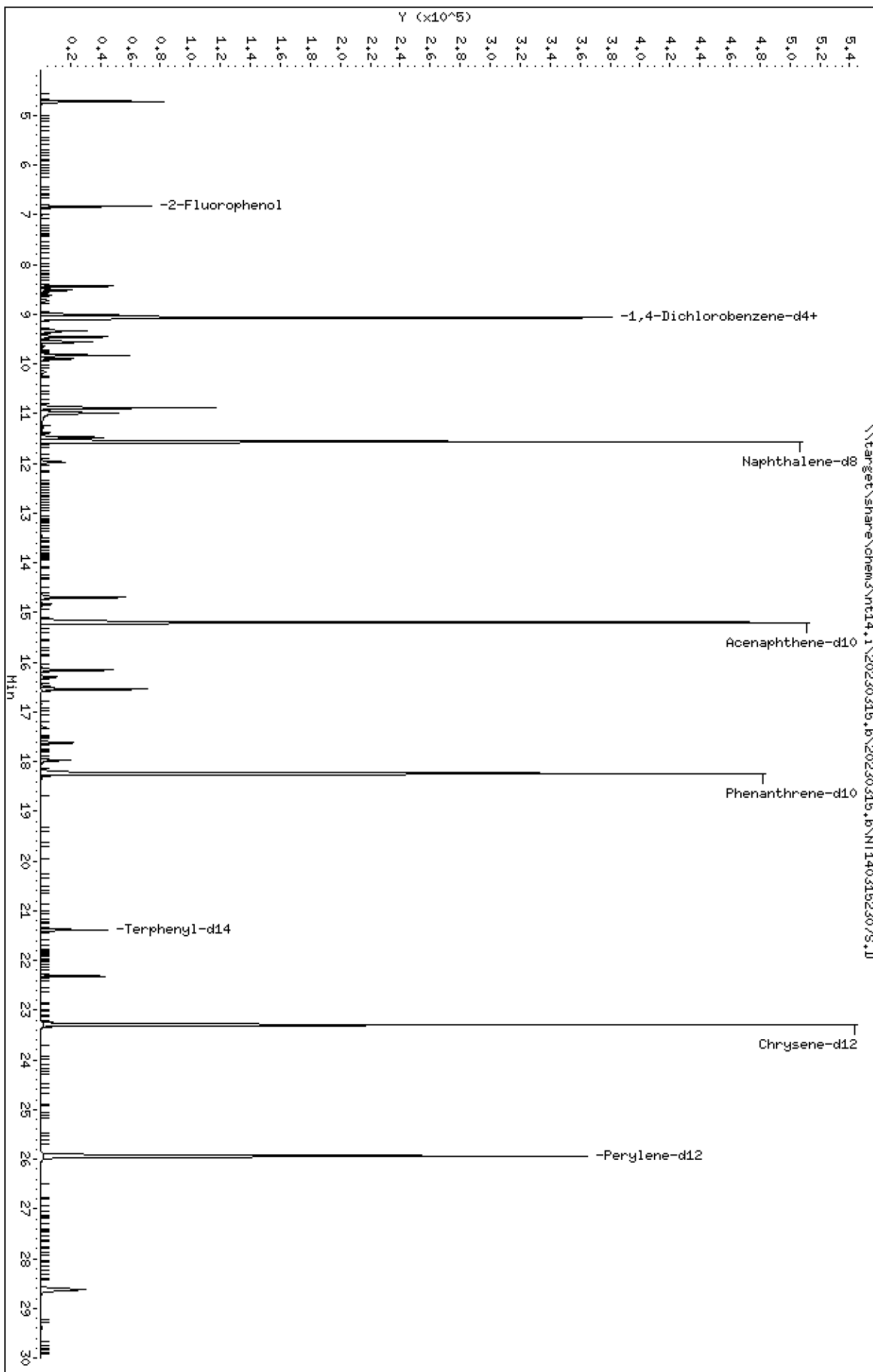
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-Smsi

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152307S.D
 Lab Smp Id: SLC0242-CAL4
 Inj Date : 15-MAR-2023 15:14 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL4
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 14:02 Cal File: NT1403152305.D
 Als bottle: 7 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	60636	0.75000	0.7304
3 Phenol	94		8.433	8.433	(0.930)	57061	0.50000	0.4998
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	47547	0.50000	0.4867
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	244579	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	45569	0.50000	0.4820
11 Benzyl alcohol	79		9.339	9.339	(1.030)	31591	0.50000	0.4721
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	44944	0.50000	0.4881
13 2-Methylphenol	108		9.556	9.556	(1.054)	38880	0.50000	0.4930
15 4-Methylphenol	108		9.828	9.828	(1.084)	41684	0.50000	0.5003
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	29043	0.50000	0.4930
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	80386	1.00000	1.032
24 Benzoic acid	105		10.992	10.992	(0.950)	76063	2.00000	1.285
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	37081	0.50000	0.4859
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	905671	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	18891	0.50000	0.4892
39 Dimethylphthalate	163		14.698	14.698	(0.967)	74174	0.50000	0.5020
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	432686	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	77454	0.50000	0.4923
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	60670	0.50000	0.5132
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	22441	0.50000	0.4941
58 Pentachlorophenol	266		17.974	17.974	(0.985)	24156	1.00000	0.7859
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	872507	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	56485	0.50000	0.4875
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	51154	0.50000	0.4355
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	672118	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	660787	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	83123	0.50000	0.4962
90 N-Nitrosodimethylamine	74		4.718	4.718	(0.520)	50963	1.00000	1.005

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152307S.D
 Lab Smp Id: SLC0242-CAL4
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	244579	9.58
27 Naphthalene-d8	832937	416469	1665874	905671	8.73
42 Acenaphthene-d10	403175	201588	806350	432686	7.32
59 Phenanthrene-d10	814822	407411	1629644	872507	7.08
69 Chrysene-d12	625755	312878	1251510	672118	7.41
77 Perylene-d12	614085	307043	1228170	660787	7.61

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152307S.D

Lab ID: SLC0242-CAL4

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 15:14

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523065.D

Date: 15-MAR-2023 14:38

Client ID:

Sample Info: SLC0242-CALS

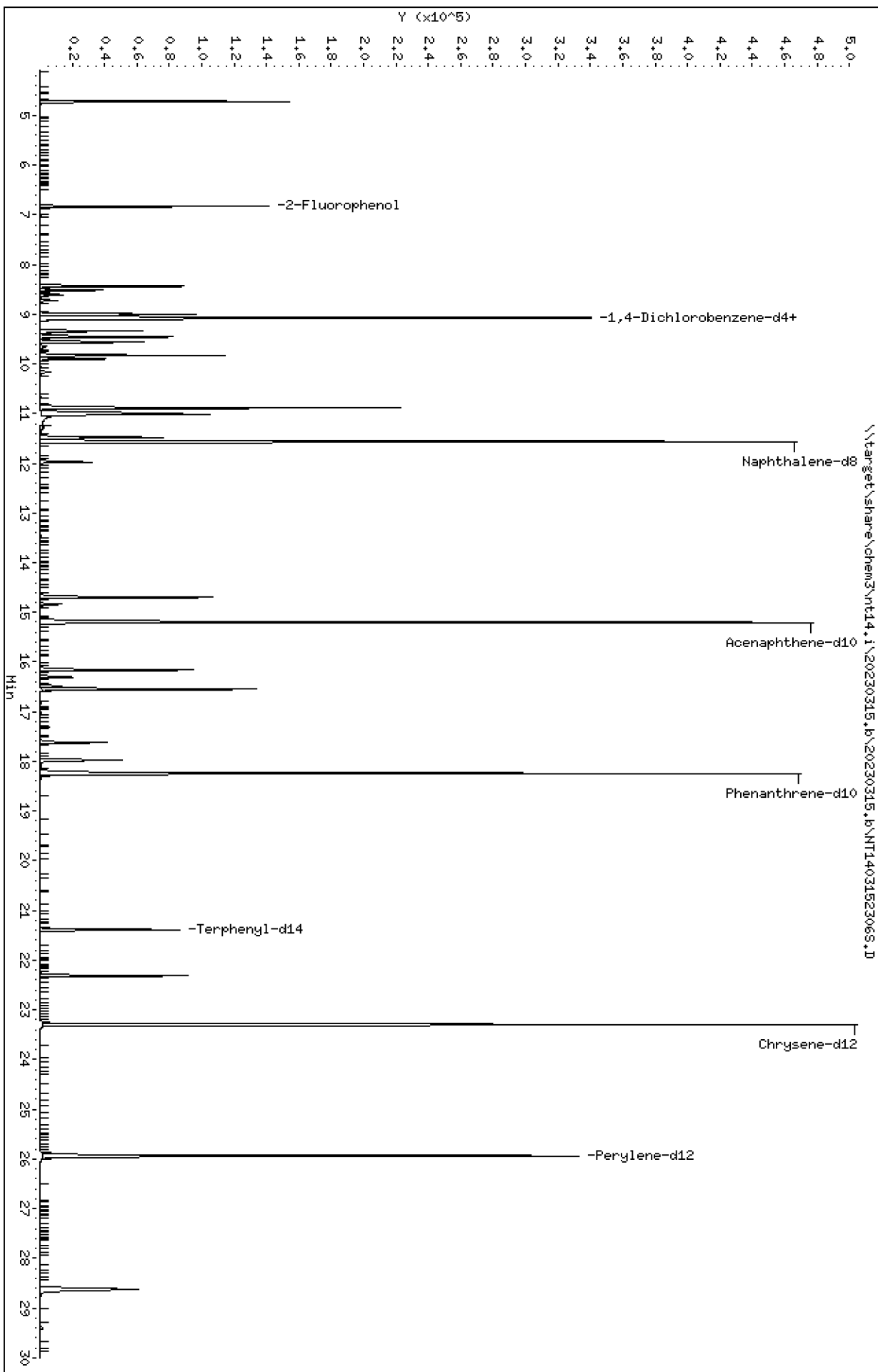
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-Smsi

\\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523065.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152306S.D
 Lab Smp Id: SLC0242-CAL5
 Inj Date : 15-MAR-2023 14:38 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL5
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 13:26 Cal File: NT1403152304.D
 Als bottle: 6 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.752)	116941	1.50000	1.544
3 Phenol	94		8.433	8.433	(0.929)	108805	1.00000	1.044
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.992)	89142	1.00000	0.9998
* 8 1,4-Dichlorobenzene-d4	152		9.075	9.075	(1.000)	223201	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	85405	1.00000	0.9899
11 Benzyl alcohol	79		9.338	9.338	(1.029)	62466	1.00000	1.023
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.042)	83924	1.00000	0.9987
13 2-Methylphenol	108		9.556	9.556	(1.053)	74259	1.00000	1.032
15 4-Methylphenol	108		9.828	9.828	(1.083)	80383	1.00000	1.057
16 N-Nitroso-di-n-propylamine	70		9.897	9.897	(1.091)	55878	1.00000	1.039
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	152255	2.00000	2.126
24 Benzoic acid	105		11.015	11.015	(0.952)	200316	4.00000	3.646
26 1,2,4-Trichlorobenzene	180		11.479	11.479	(0.993)	69309	1.00000	0.9876
* 27 Naphthalene-d8	136		11.564	11.564	(1.000)	832937	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	35520	1.00000	1.000
39 Dimethylphthalate	163		14.698	14.698	(0.967)	143509	1.00000	1.042
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	403175	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	153425	1.00000	1.047
54 N-Nitrosodiphenylamine	169		16.545	16.545	(0.907)	118018	1.00000	1.069
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	42411	1.00000	0.9999
58 Pentachlorophenol	266		17.974	17.974	(0.985)	54268	2.00000	1.881
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	814822	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	112658	1.00000	1.044
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	110003	1.00000	1.005
* 69 Chrysene-d12	240		23.298	23.298	(1.000)	625755	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	614085	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	167617	1.00000	1.077
90 N-Nitrosodimethylamine	74		4.717	4.717	(0.520)	96689	2.00000	2.089

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152306S.D
 Lab Smp Id: SLC0242-CAL5
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	223201	0.00
27 Naphthalene-d8	832937	416469	1665874	832937	0.00
42 Acenaphthene-d10	403175	201588	806350	403175	0.00
59 Phenanthrene-d10	814822	407411	1629644	814822	0.00
69 Chrysene-d12	625755	312878	1251510	625755	0.00
77 Perylene-d12	614085	307043	1228170	614085	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152306S.D

Lab ID: SLC0242-CAL5

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 14:38

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230315.b/NT1403152306S.D

On Column LOD for nt14.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523055.D

Date: 15-MAR-2023 14:02

Client ID:

Sample Info: SLC0242-CAL6

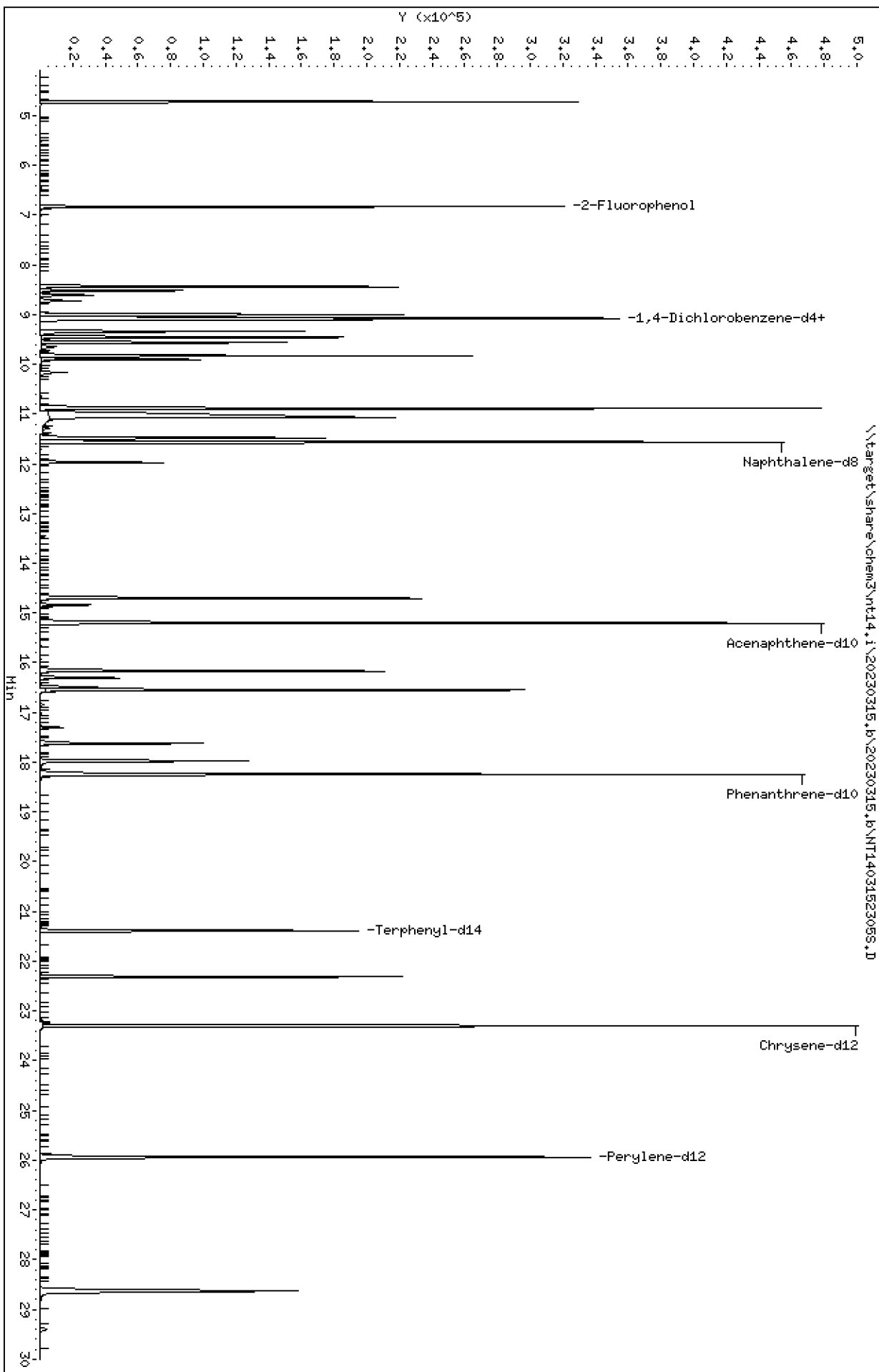
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-Sms1

\\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523055.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152305S.D
 Lab Smp Id: SLC0242-CAL6
 Inj Date : 15-MAR-2023 14:02 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL6
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 12:49 Cal File: NT1403152303.D
 Als bottle: 5 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.752)	273557	3.75000	3.662
3 Phenol	94		8.441	8.441	(0.930)	253556	2.50000	2.468
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.992)	206789	2.50000	2.352
* 8 1,4-Dichlorobenzene-d4	152		9.075	9.075	(1.000)	220094	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	196328	2.50000	2.308
11 Benzyl alcohol	79		9.339	9.339	(1.029)	152074	2.50000	2.525
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.042)	194649	2.50000	2.349
13 2-Methylphenol	108		9.564	9.564	(1.054)	177658	2.50000	2.503
15 4-Methylphenol	108		9.828	9.828	(1.083)	191456	2.50000	2.554
16 N-Nitroso-di-n-propylamine	70		9.905	9.905	(1.092)	131811	2.50000	2.487
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	351677	5.00000	4.938
24 Benzoic acid	105		11.069	11.069	(0.957)	560439	10.0000	9.986
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	161088	2.50000	2.308
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	828379	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	84486	2.50000	2.392
39 Dimethylphthalate	163		14.706	14.706	(0.967)	337928	2.50000	2.452
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	403583	4.00000	
50 Diethylphthalate	149		16.168	16.168	(1.064)	363080	2.50000	2.474
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	272969	2.50000	2.487
57 Hexachlorobenzene	284		17.626	17.626	(0.966)	99825	2.50000	2.367
58 Pentachlorophenol	266		17.974	17.974	(0.985)	142247	5.00000	4.886
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	810171	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	263792	2.50000	2.449
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	270783	2.50000	2.475
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	624805	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	615084	4.00000	
79 Dibenzo(a,h)anthracene	278		28.631	28.631	(1.104)	410004	2.50000	2.629
90 N-Nitrosodimethylamine	74		4.725	4.725	(0.521)	223827	5.00000	4.904

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152305S.D
 Lab Smp Id: SLC0242-CAL6
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	220094	-1.39
27 Naphthalene-d8	832937	416469	1665874	828379	-0.55
42 Acenaphthene-d10	403175	201588	806350	403583	0.10
59 Phenanthrene-d10	814822	407411	1629644	810171	-0.57
69 Chrysene-d12	625755	312878	1251510	624805	-0.15
77 Perylene-d12	614085	307043	1228170	615084	0.16

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152305S.D

Lab ID: SLC0242-CAL6

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 14:02

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523045.D

Date: 15-MAR-2023 13:26

Client ID:

Sample Info: SLC0242-CAL7

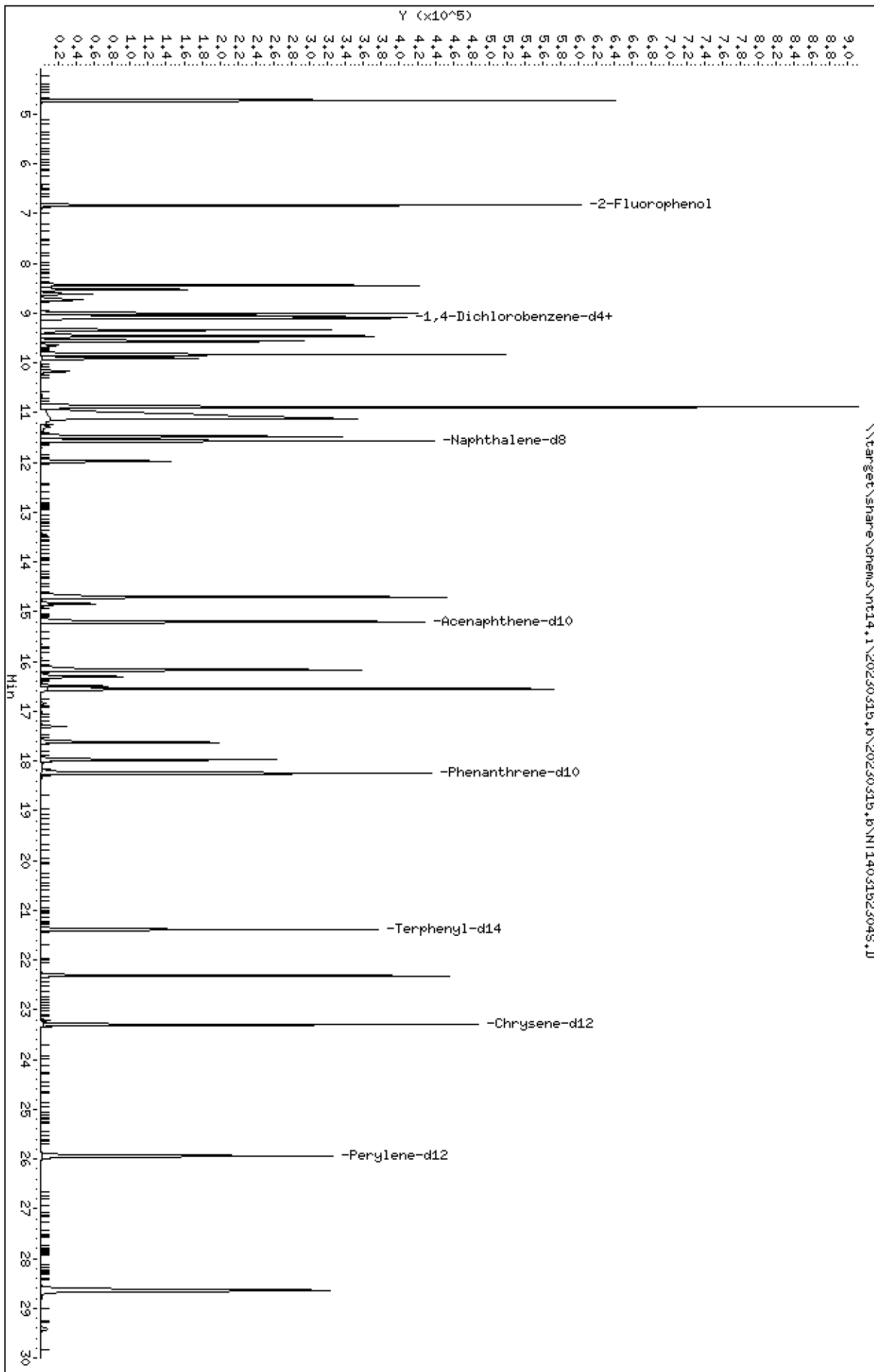
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152304S.D
 Lab Smp Id: SLC0242-CAL7
 Inj Date : 15-MAR-2023 13:26 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL7
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 12:13 Cal File: NT1403152302.D
 Als bottle: 4 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.752)	523329	7.50000	7.320
3 Phenol	94		8.441	8.441	(0.930)	490926	5.00000	4.994
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.992)	395940	5.00000	4.706
* 8 1,4-Dichlorobenzene-d4	152		9.075	9.075	(1.000)	210618	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	380872	5.00000	4.678
11 Benzyl alcohol	79		9.339	9.339	(1.029)	302690	5.00000	5.253
12 1,2-Dichlorobenzene	146		9.463	9.463	(1.043)	377438	5.00000	4.760
13 2-Methylphenol	108		9.564	9.564	(1.054)	345729	5.00000	5.091
15 4-Methylphenol	108		9.836	9.836	(1.084)	375528	5.00000	5.234
16 N-Nitroso-di-n-propylamine	70		9.906	9.906	(1.092)	254500	5.00000	5.017
22 2,4-Dimethylphenol	107		10.891	10.891	(0.941)	675758	10.0000	9.798
24 Benzoic acid	105		11.124	11.124	(0.961)	1151790	20.0000	20.19
26 1,2,4-Trichlorobenzene	180		11.488	11.488	(0.993)	311927	5.00000	4.615
* 27 Naphthalene-d8	136		11.573	11.573	(1.000)	802273	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	165800	5.00000	4.847
39 Dimethylphthalate	163		14.706	14.706	(0.967)	659596	5.00000	4.912
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	393217	4.00000	
50 Diethylphthalate	149		16.168	16.168	(1.064)	716243	5.00000	5.010
54 N-Nitrosodiphenylamine	169		16.554	16.554	(0.907)	534208	5.00000	4.948
57 Hexachlorobenzene	284		17.626	17.626	(0.966)	199090	5.00000	4.800
58 Pentachlorophenol	266		17.974	17.974	(0.985)	298780	10.0000	10.15
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	796801	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.394	(0.918)	513554	5.00000	4.843
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	543386	5.00000	5.031
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	615139	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	604825	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.639	(1.104)	830285	5.00000	5.415
90 N-Nitrosodimethylamine	74		4.725	4.725	(0.521)	426208	10.0000	9.759

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152304S.D
 Lab Smp Id: SLC0242-CAL7
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	210618	-5.64
27 Naphthalene-d8	832937	416469	1665874	802273	-3.68
42 Acenaphthene-d10	403175	201588	806350	393217	-2.47
59 Phenanthrene-d10	814822	407411	1629644	796801	-2.21
69 Chrysene-d12	625755	312878	1251510	615139	-1.70
77 Perylene-d12	614085	307043	1228170	604825	-1.51

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152304S.D

Lab ID: SLC0242-CAL7

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 13:26

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523035.D

Date: 15-MAR-2023 12:49

Client ID:

Sample Info: SLC0242-CAL8

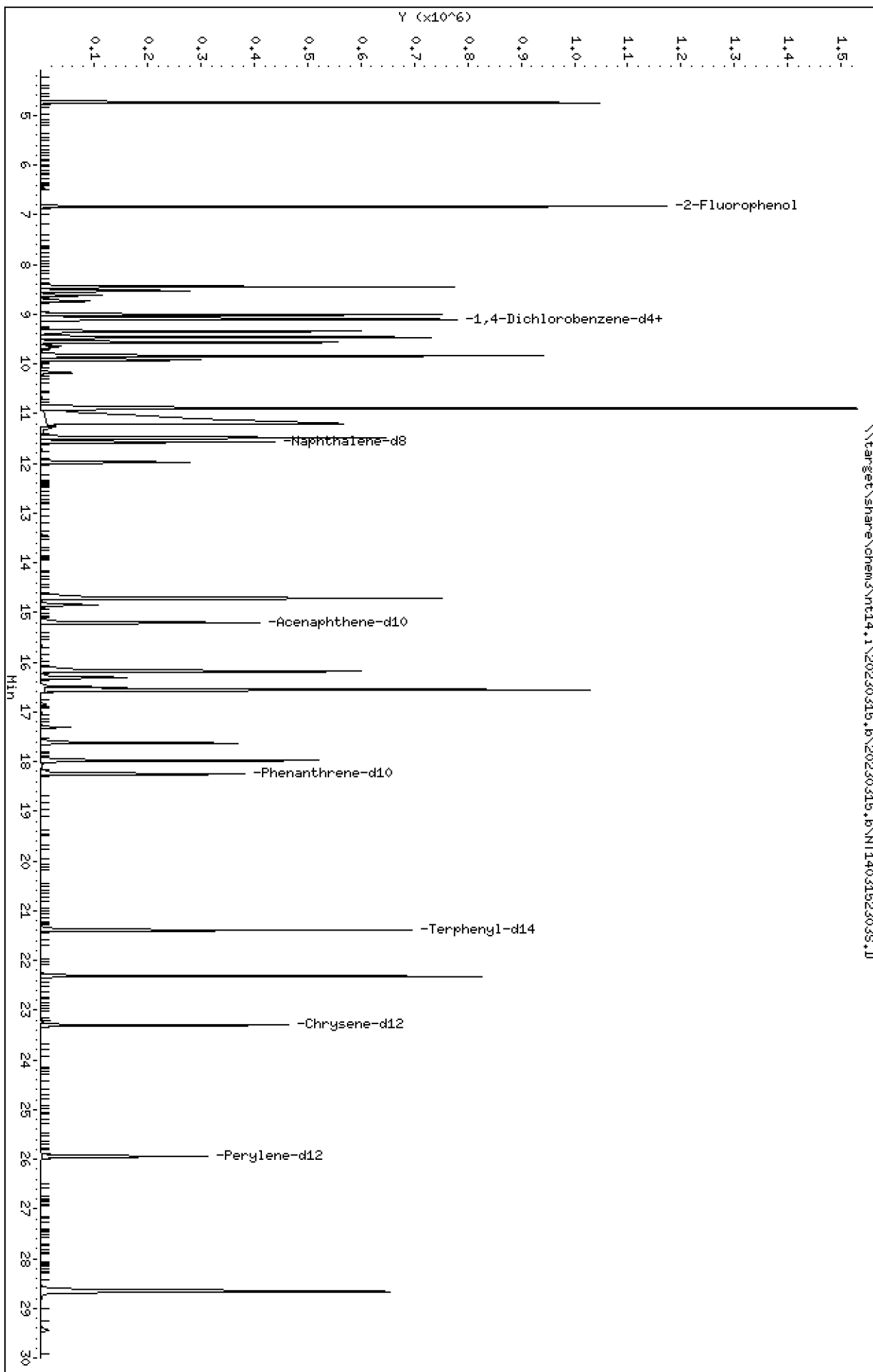
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152303S.D
 Lab Smp Id: SLC0242-CAL8
 Inj Date : 15-MAR-2023 12:49 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-CAL8
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 28-FEB-2023 12:15 Cal File: NT1423022803.D
 Als bottle: 3 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.834	(0.753)	985981	15.0000	14.59
3 Phenol	94		8.448	8.448	(0.931)	936738	10.0000	10.08
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.992)	758568	10.0000	9.538
* 8 1,4-Dichlorobenzene-d4	152		9.075	9.075	(1.000)	199100	4.00000	
9 1,4-Dichlorobenzene	146		9.106	9.106	(1.003)	735044	10.0000	9.551
11 Benzyl alcohol	79		9.346	9.346	(1.030)	581927	10.0000	10.68
12 1,2-Dichlorobenzene	146		9.463	9.463	(1.043)	721895	10.0000	9.630
13 2-Methylphenol	108		9.564	9.564	(1.054)	668785	10.0000	10.42
15 4-Methylphenol	108		9.843	9.843	(1.085)	714914	10.0000	10.54
16 N-Nitroso-di-n-propylamine	70		9.921	9.921	(1.093)	489405	10.0000	10.21
22 2,4-Dimethylphenol	107		10.891	10.891	(0.941)	1248872	20.0000	19.03
24 Benzoic acid	105		11.201	11.201	(0.968)	2452774	40.0000	39.96
26 1,2,4-Trichlorobenzene	180		11.487	11.487	(0.993)	592872	10.0000	9.219
* 27 Naphthalene-d8	136		11.572	11.572	(1.000)	763281	4.00000	
30 Hexachlorobutadiene	225		11.982	11.982	(1.035)	321302	10.0000	9.872
39 Dimethylphthalate	163		14.714	14.714	(0.967)	1238786	10.0000	9.687
* 42 Acenaphthene-d10	162		15.209	15.209	(1.000)	374468	4.00000	
50 Diethylphthalate	149		16.183	16.183	(1.064)	1358298	10.0000	9.976
54 N-Nitrosodiphenylamine	169		16.561	16.561	(0.907)	1030851	10.0000	10.06
57 Hexachlorobenzene	284		17.626	17.626	(0.966)	384146	10.0000	9.760
58 Pentachlorophenol	266		17.982	17.982	(0.985)	590982	20.0000	19.97
* 59 Phenanthrene-d10	188		18.253	18.253	(1.000)	756122	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.394	(0.918)	956751	10.0000	9.433
67 Butylbenzylphthalate	149		22.315	22.315	(0.957)	1037644	10.0000	9.994
* 69 Chrysene-d12	240		23.307	23.307	(1.000)	588307	4.00000	
* 77 Perylene-d12	264		25.947	25.947	(1.000)	568829	4.00000	
79 Dibenzo(a,h)anthracene	278		28.662	28.662	(1.105)	1610657	10.0000	11.17
90 N-Nitrosodimethylamine	74		4.741	4.741	(0.522)	788915	20.0000	19.11

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152303S.D
 Lab Smp Id: SLC0242-CAL8
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	199100	-10.80
27 Naphthalene-d8	832937	416469	1665874	763281	-8.36
42 Acenaphthene-d10	403175	201588	806350	374468	-7.12
59 Phenanthrene-d10	814822	407411	1629644	756122	-7.20
69 Chrysene-d12	625755	312878	1251510	588307	-5.98
77 Perylene-d12	614085	307043	1228170	568829	-7.37

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.07
42 Acenaphthene-d10	15.20	14.70	15.70	15.21	0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.04
69 Chrysene-d12	23.30	22.80	23.80	23.31	0.03
77 Perylene-d12	25.94	25.44	26.44	25.95	0.03

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

REVIEW SUMMARY FOR FILE - NT1403152303S.D

Lab ID: SLC0242-CAL8

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 12:49

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00050

Laboratory ID: SLC0242-SCV1

Sequence: SLC0242

Sequence Name: SCV 5.0

Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	4.8	-3.0	20.00
1,2-Dichlorobenzene	5.0000	4.8	-3.6	20.00
Benzyl Alcohol	5.0000	5.3	6.9	20.00
Benzoic acid	10.000	9.1	-9.2	20.00
2,4-Dimethylphenol	5.0000	3.9	-21.3	20.00
1,2,4-Trichlorobenzene	5.0000	4.6	-8.5	20.00
N-Nitrosodiphenylamine	5.0000	5.0	0.4	20.00
Pentachlorophenol	5.0000	4.8	-4.0	20.00
2-Fluorophenol	7.5000	0.00180	-100	
p-Terphenyl-d14	5.0000	0.00507	-99.9	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230315.16\20230315.16\NT14031523115.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0242-SCV1

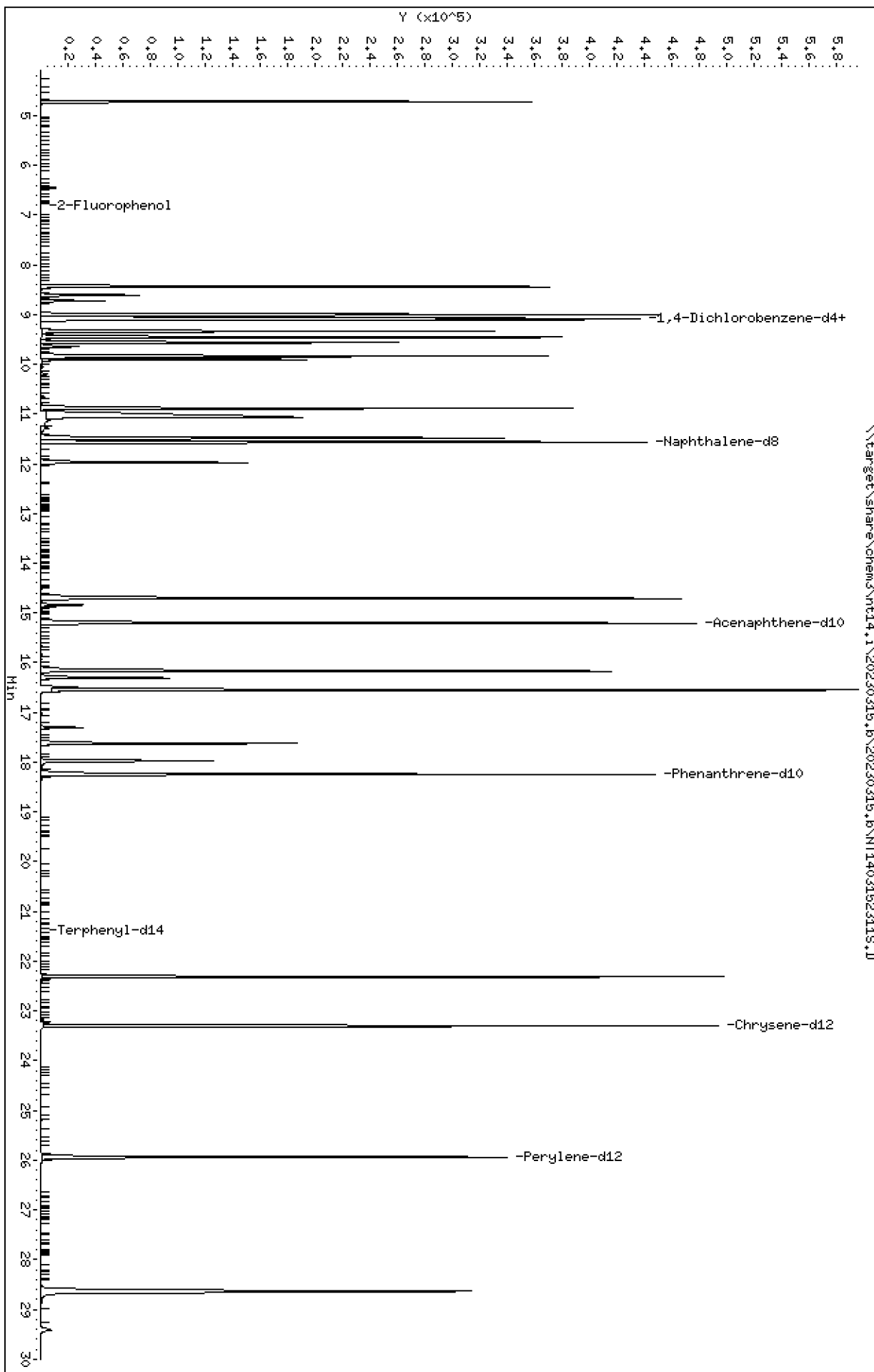
Instrument: nt14.1

Column phase: ZB-5msi

Operator: JGR

Column diameter: 0.25

\\target\share\chem3\nt14.1\20230315.16\20230315.16\NT14031523115.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

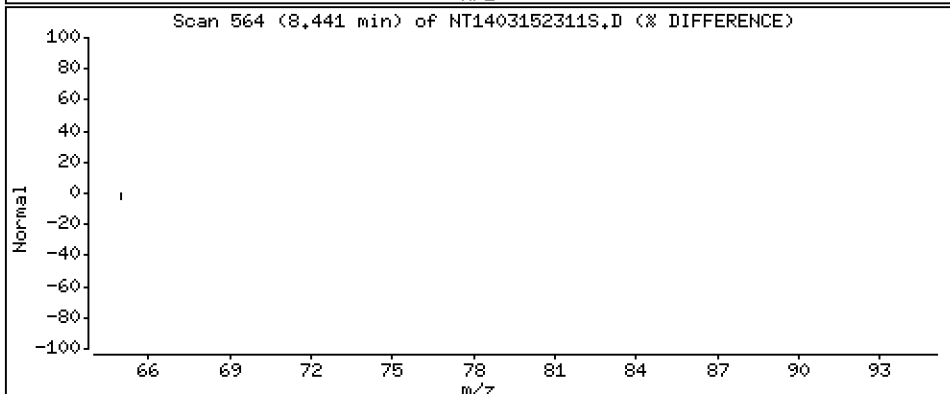
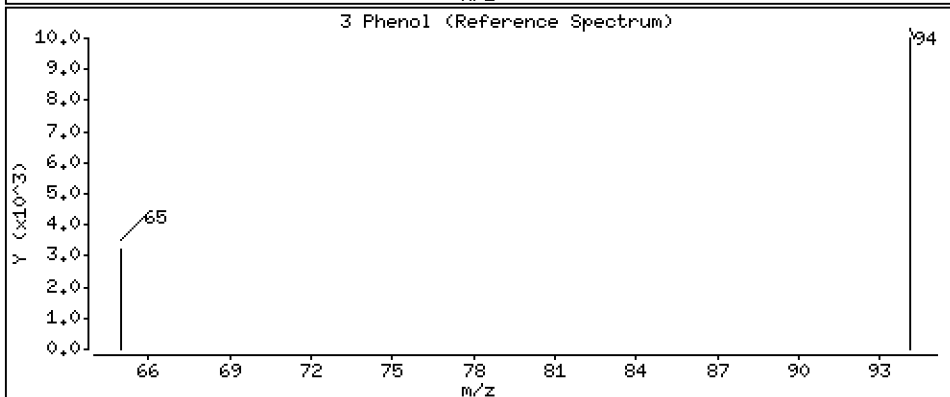
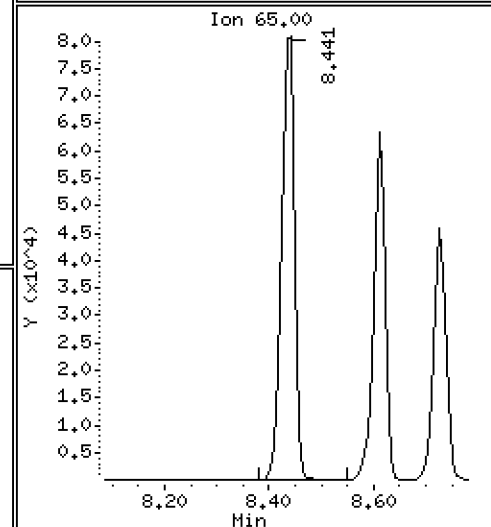
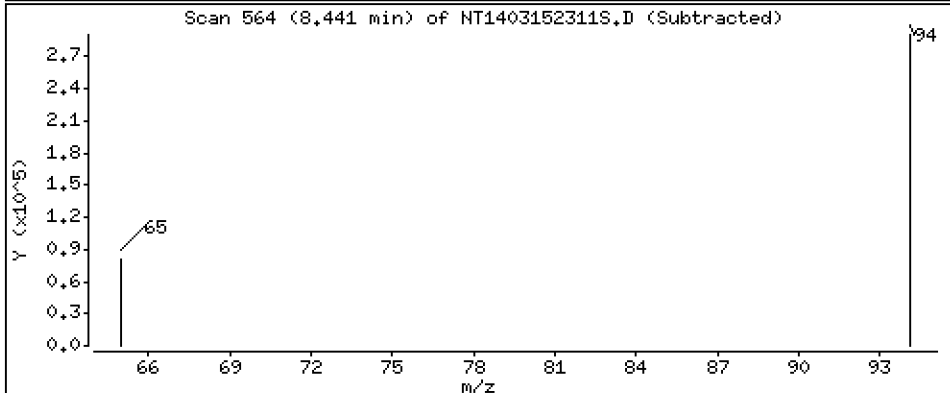
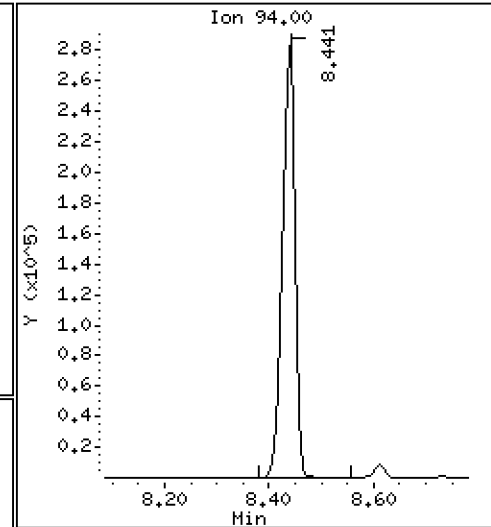
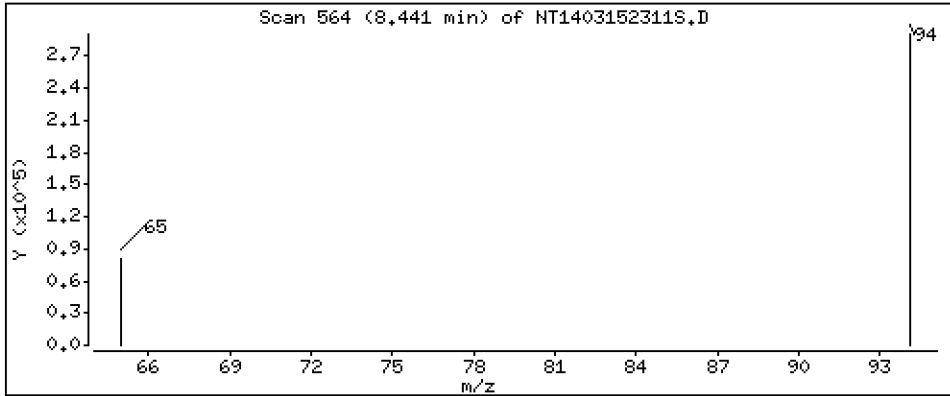
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,542 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

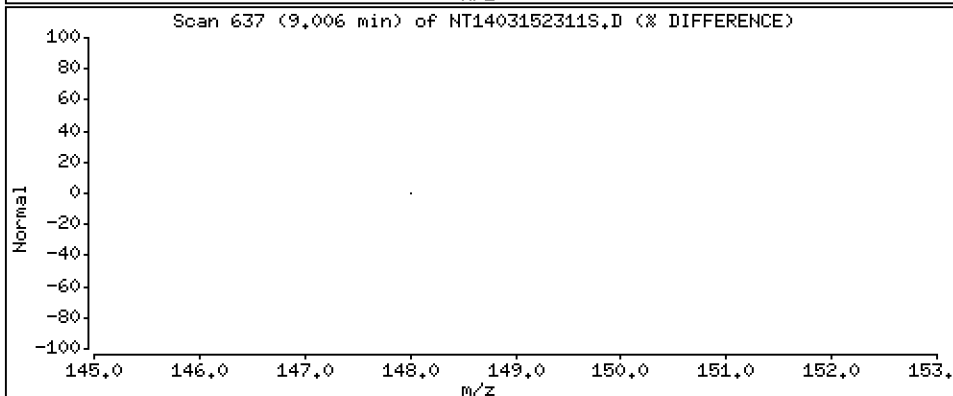
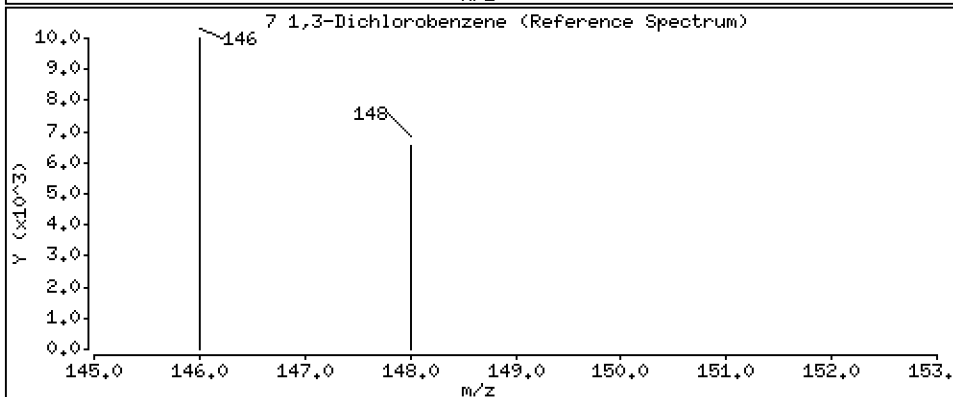
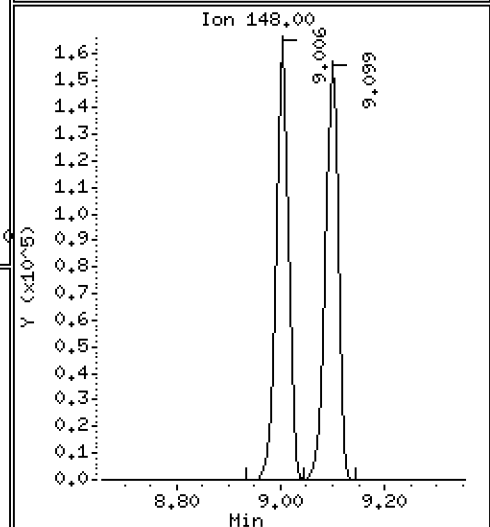
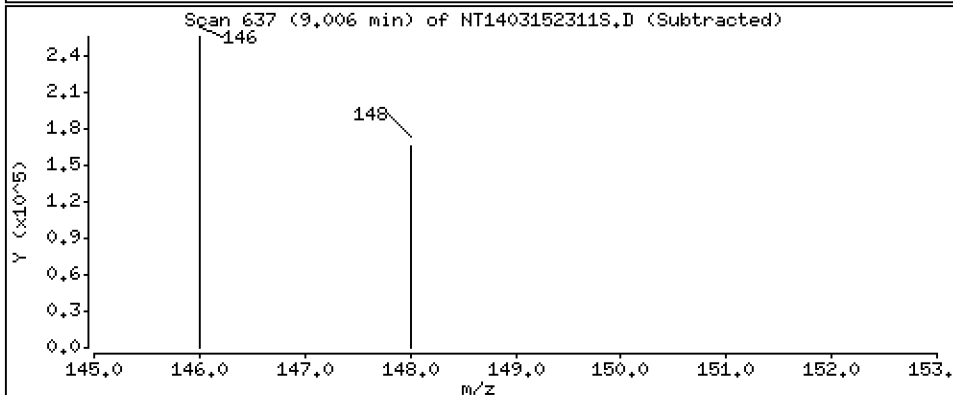
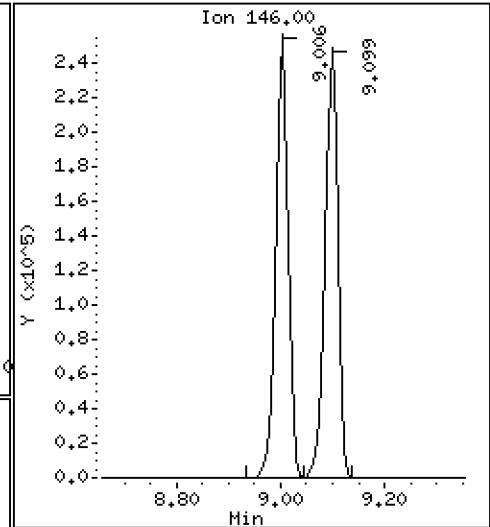
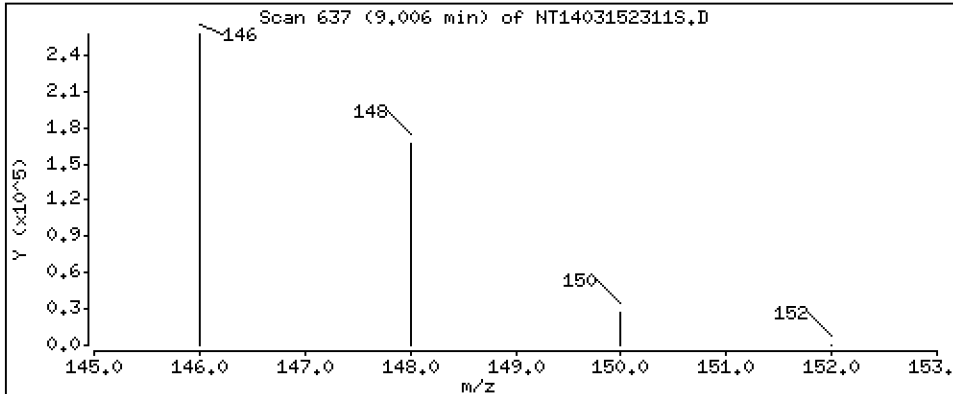
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.839 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

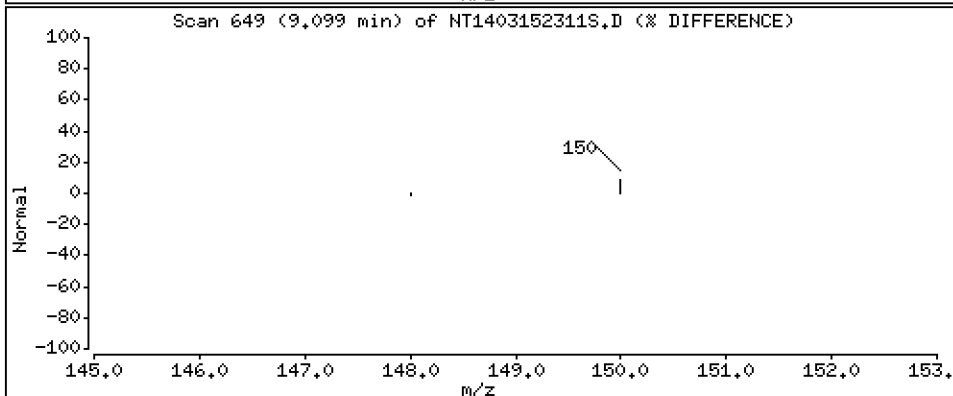
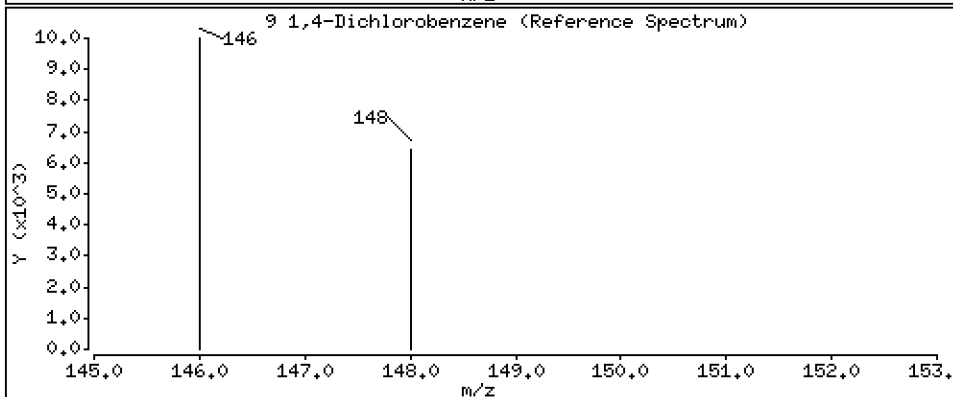
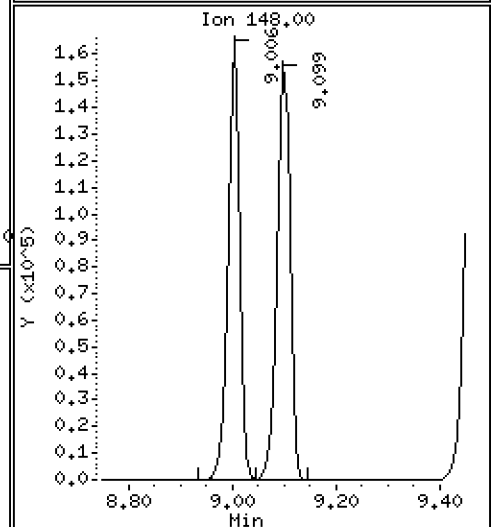
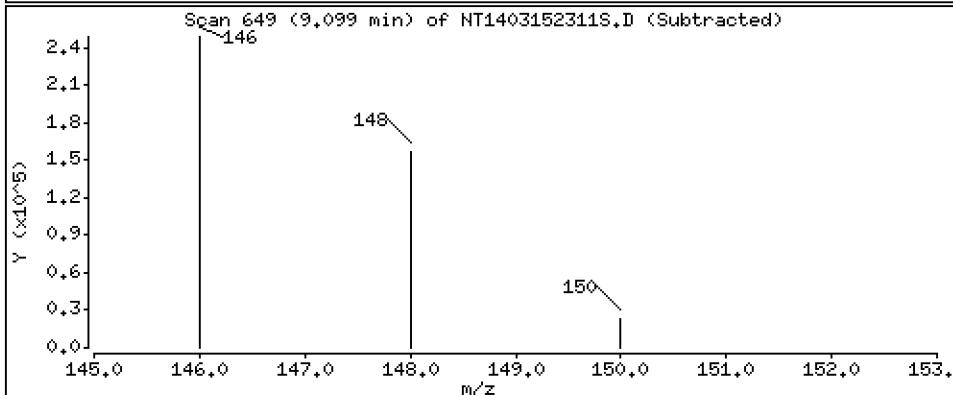
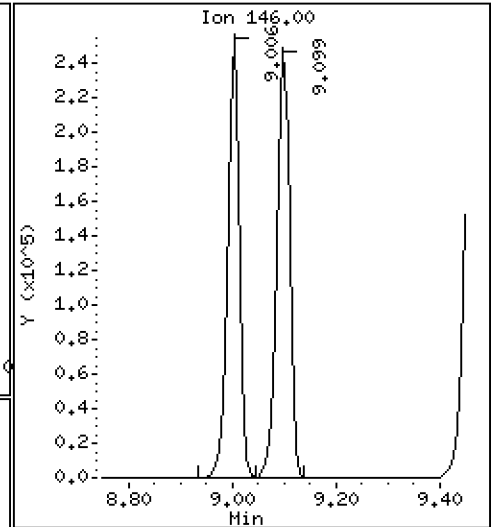
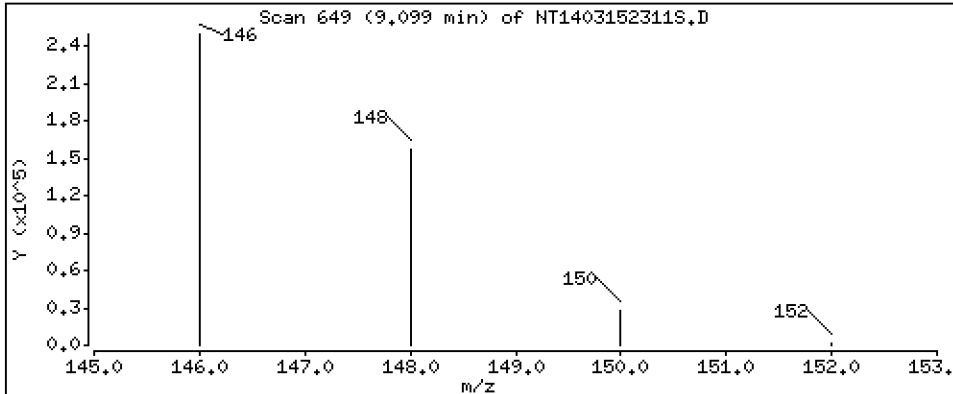
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.848 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

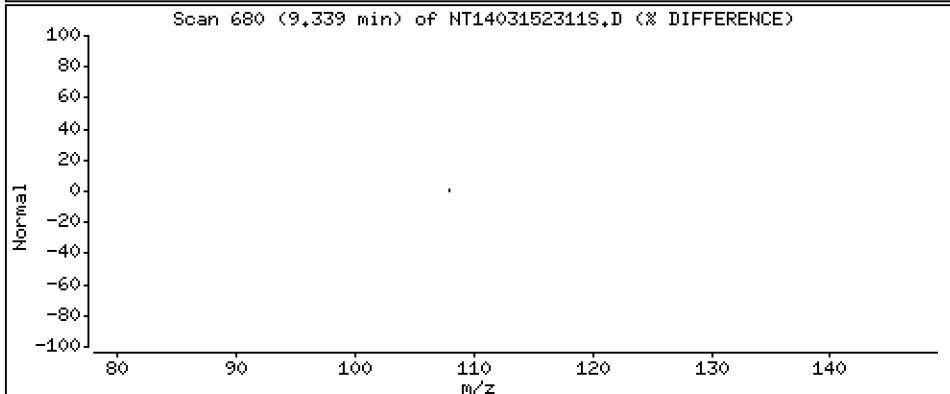
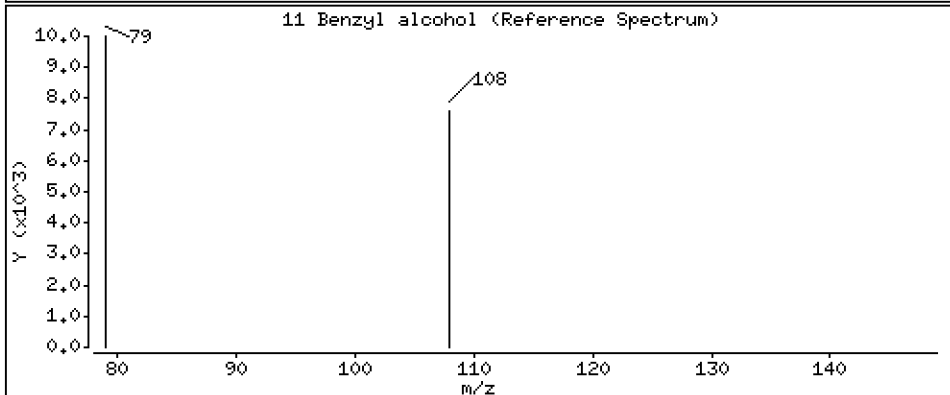
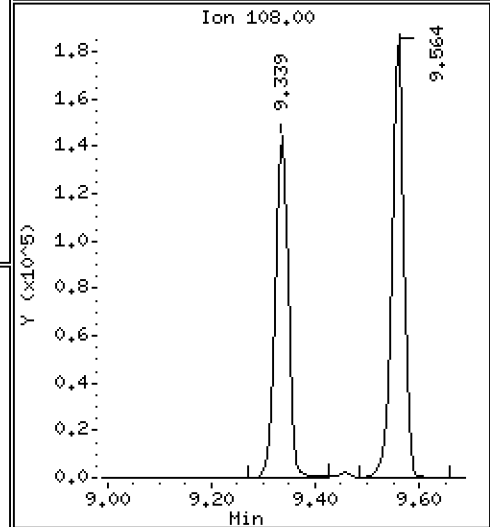
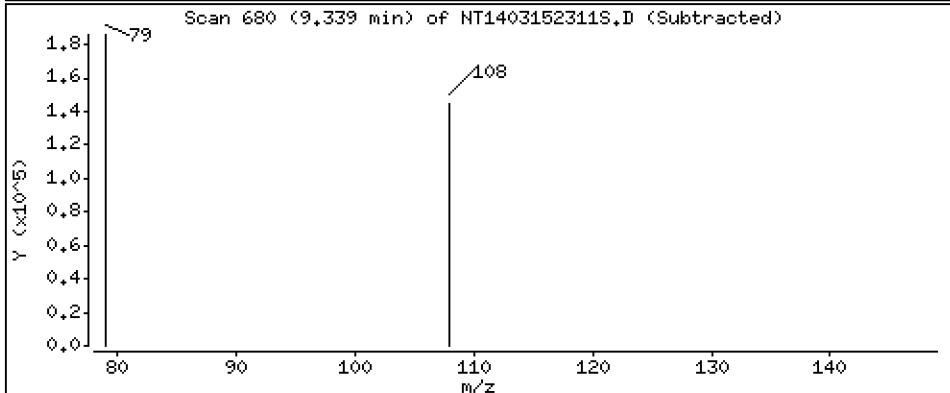
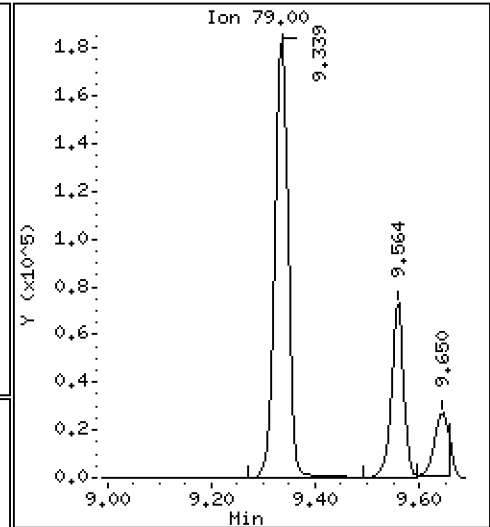
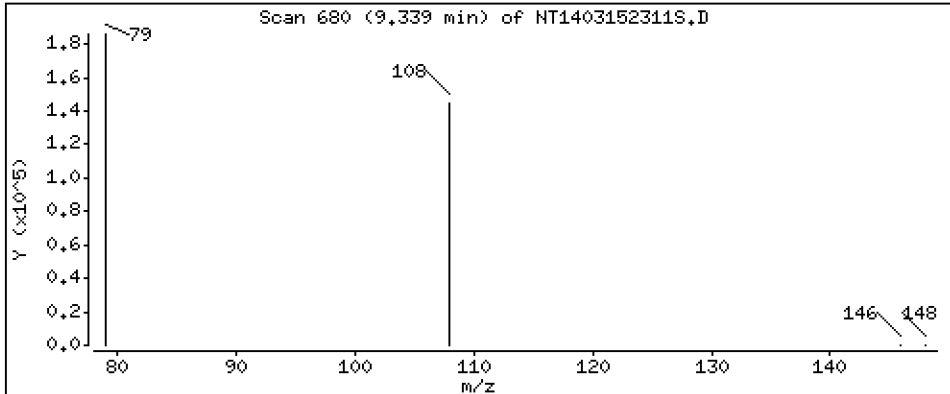
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 5,343 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

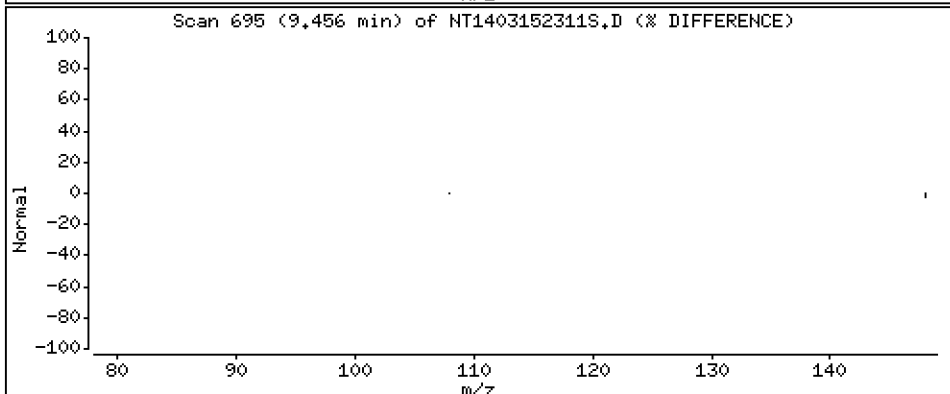
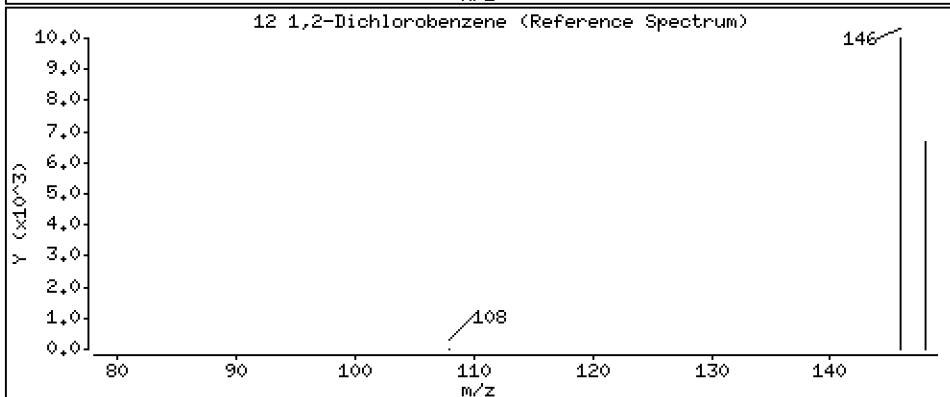
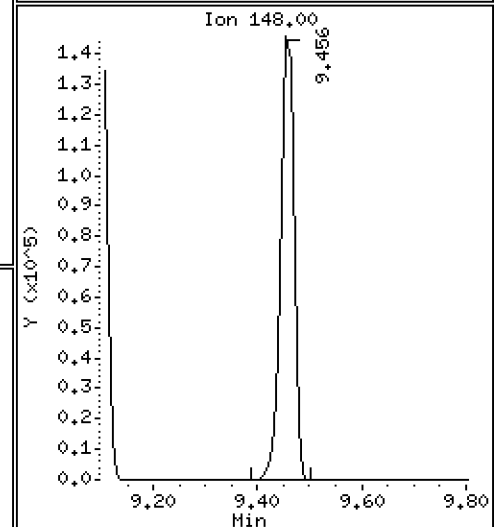
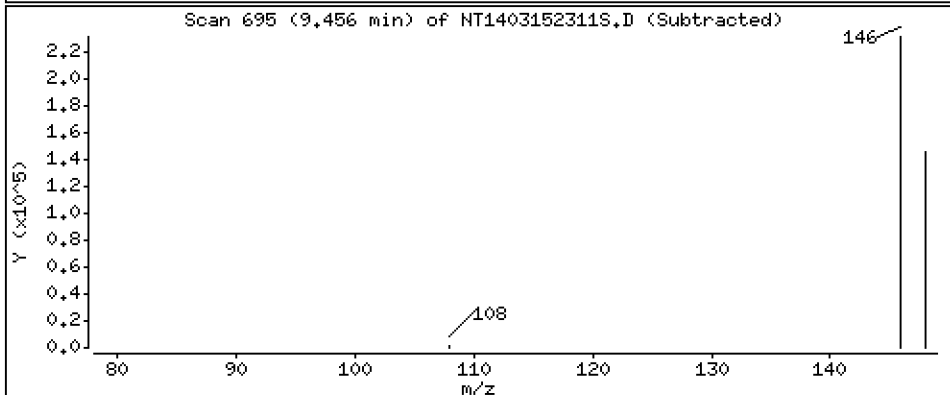
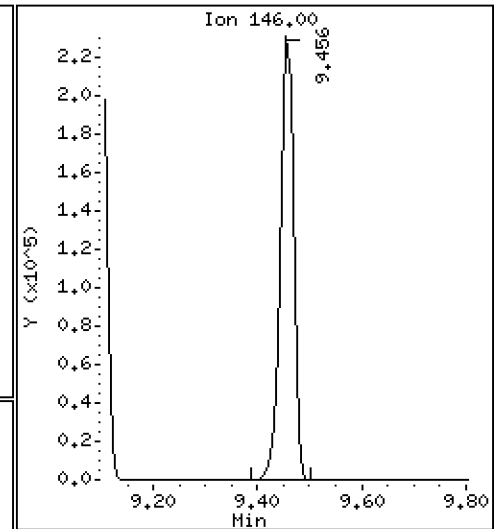
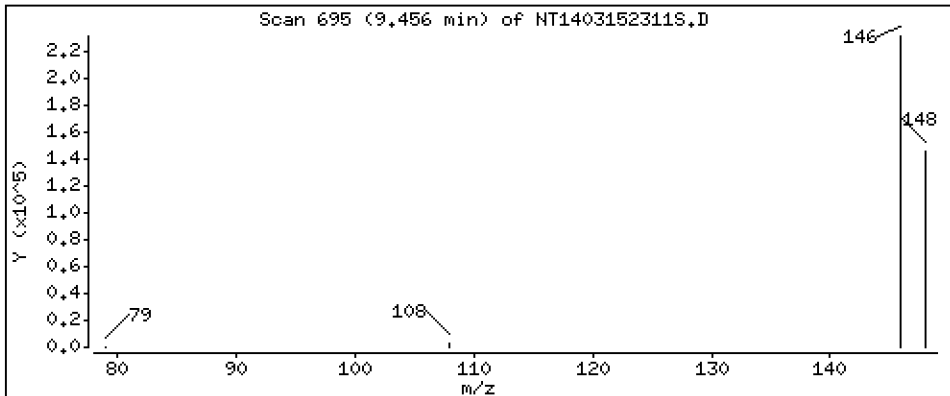
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,822 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

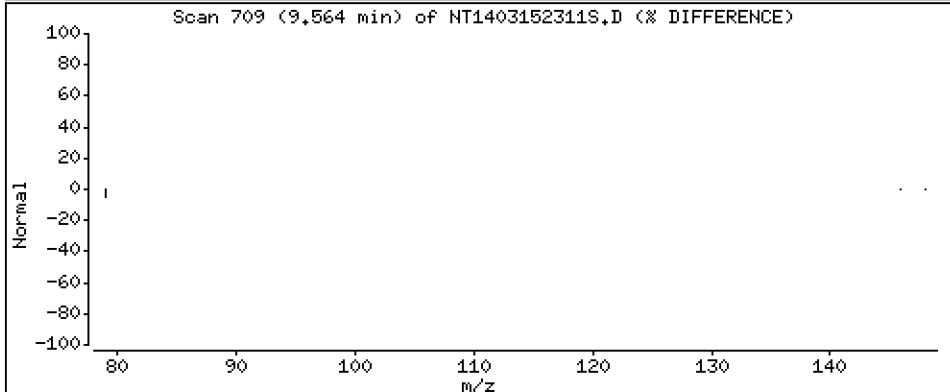
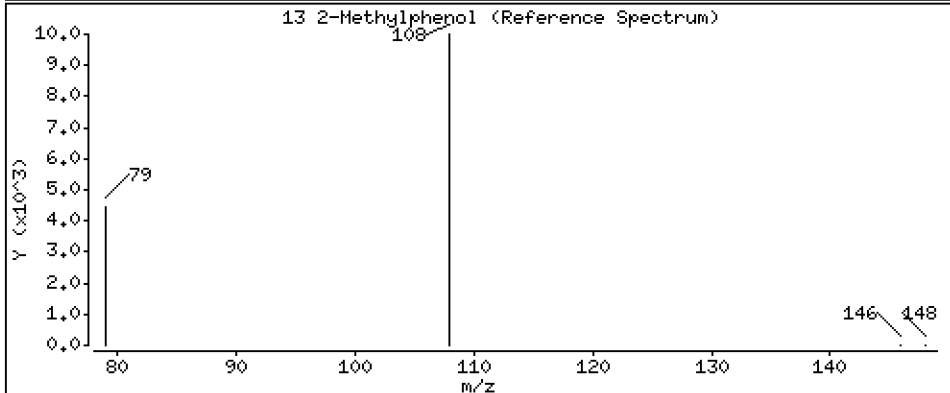
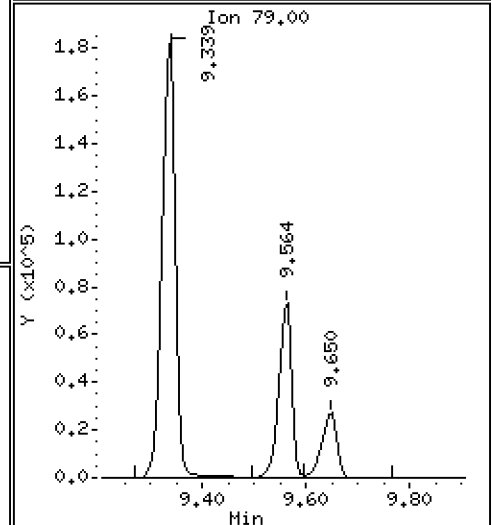
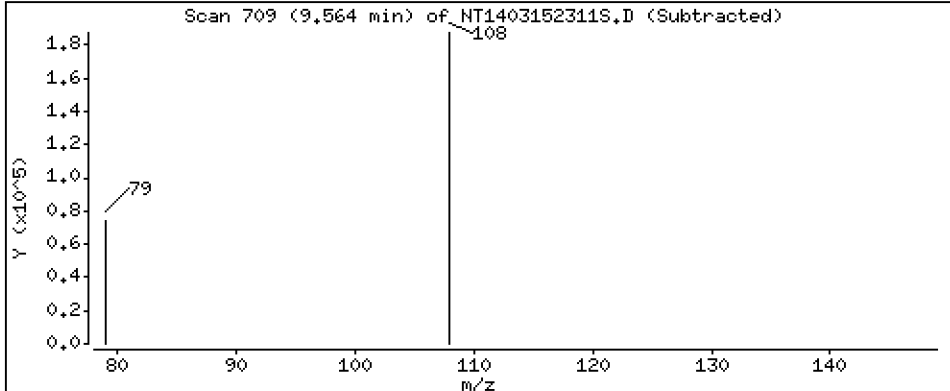
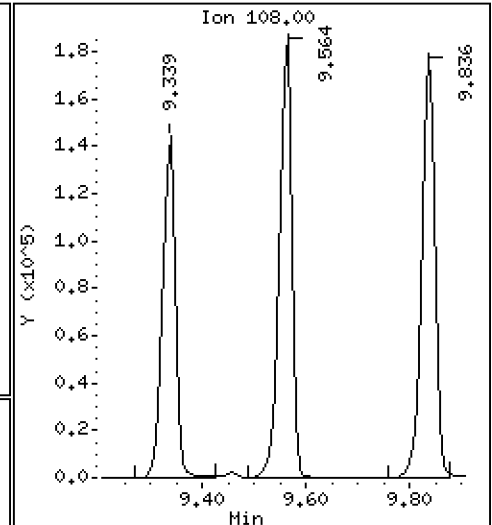
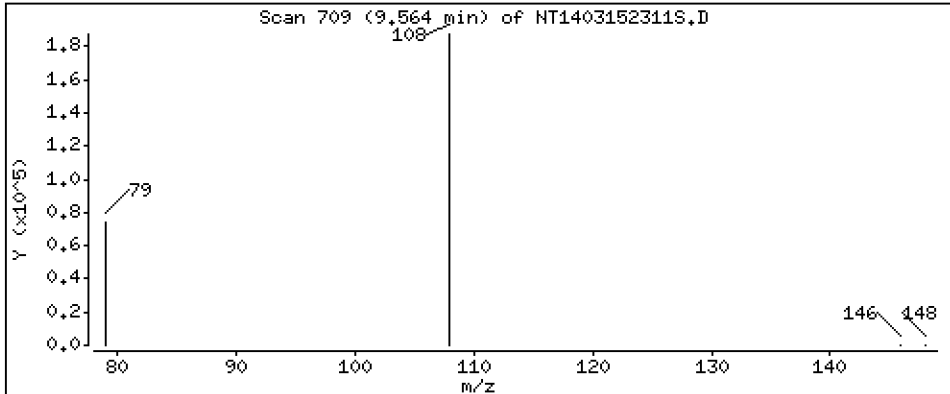
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.288 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

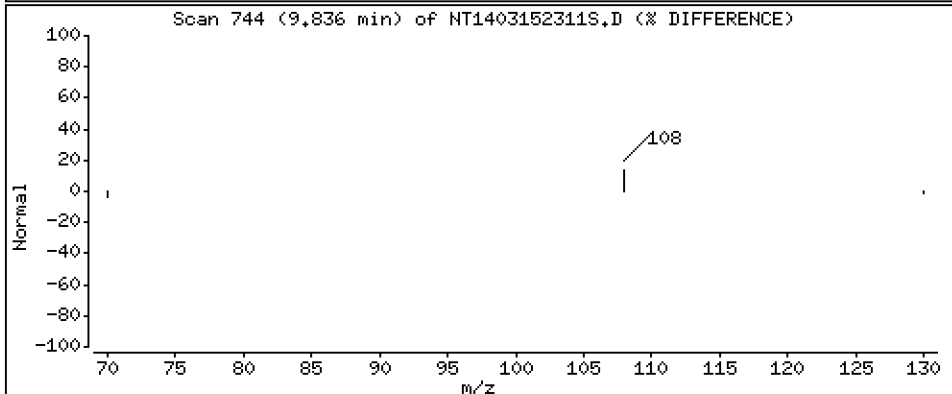
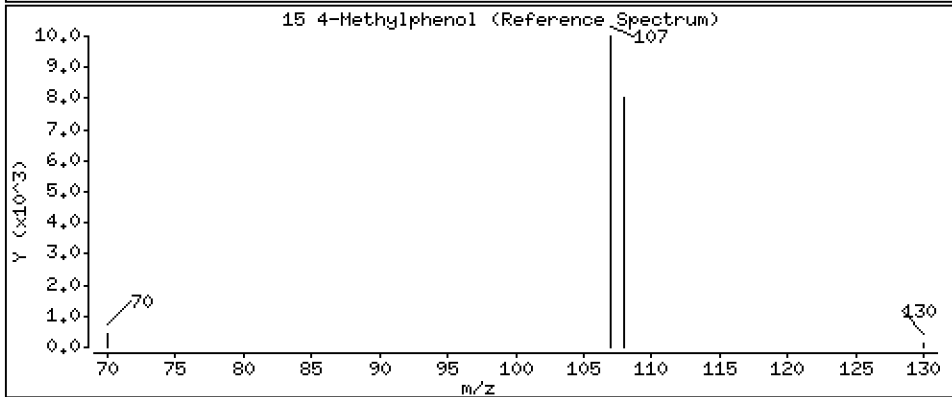
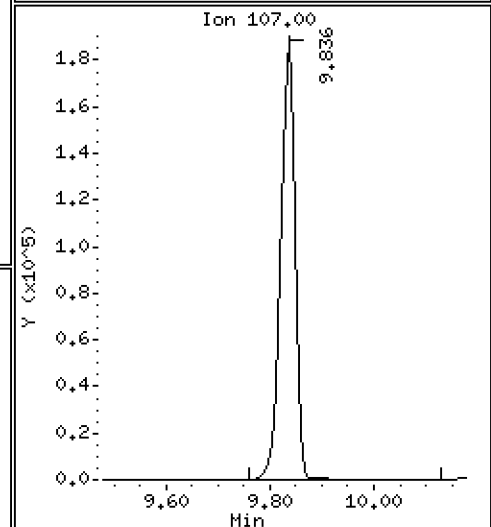
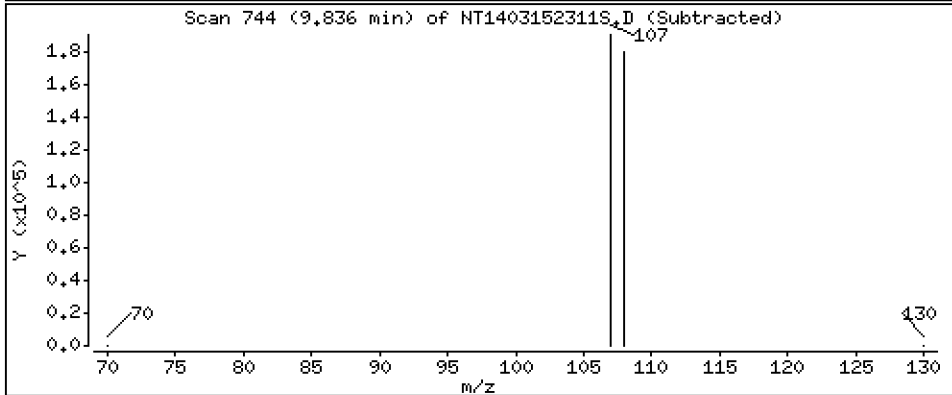
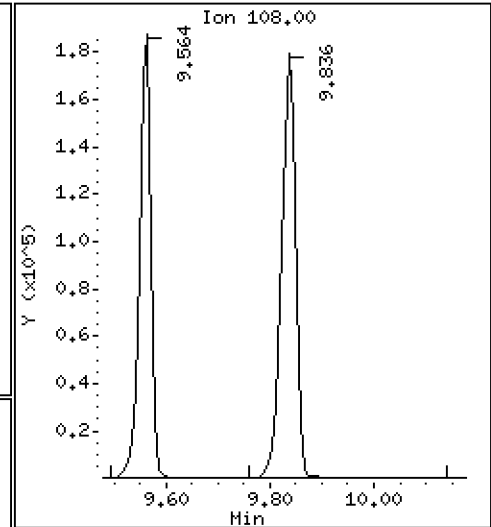
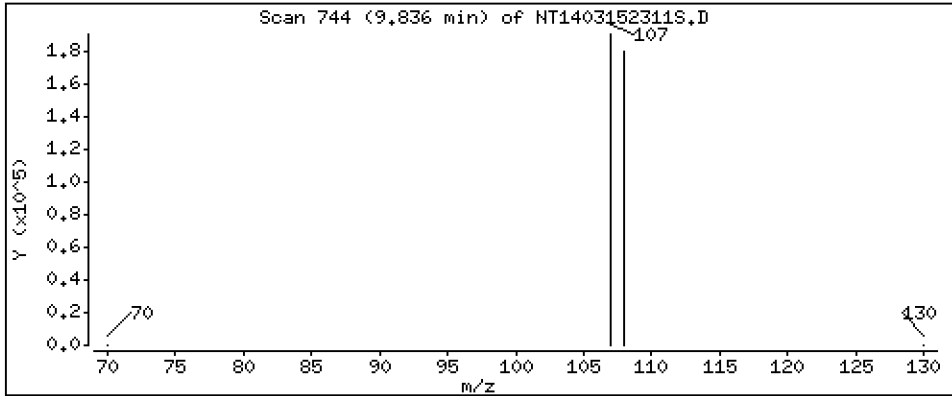
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,539 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

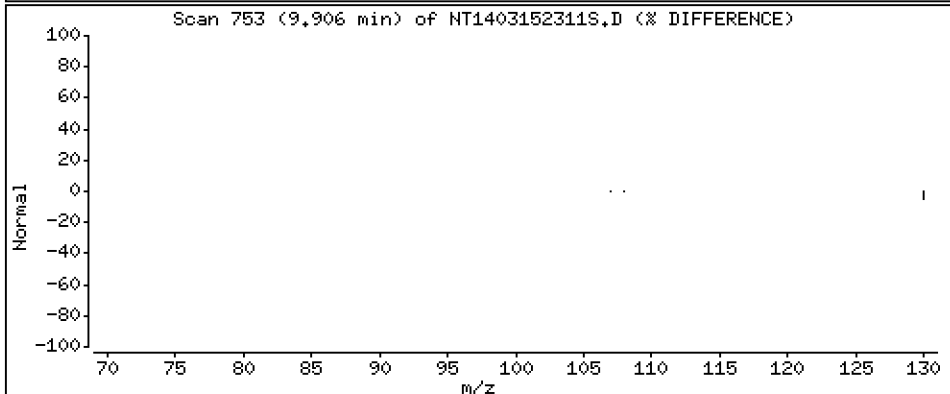
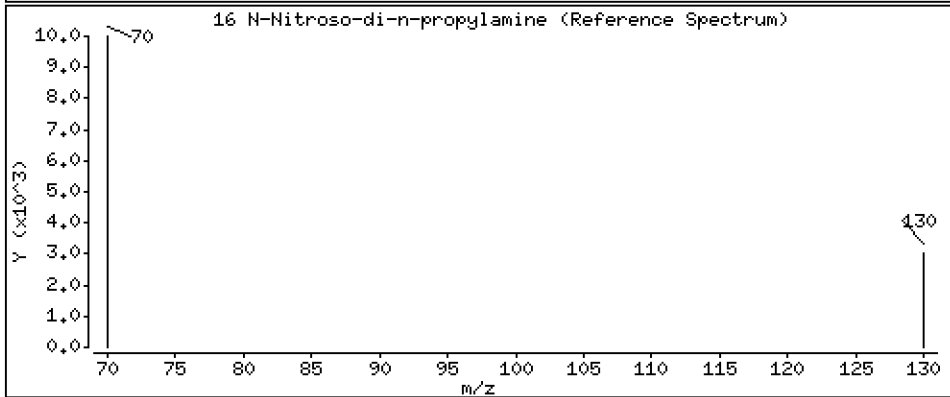
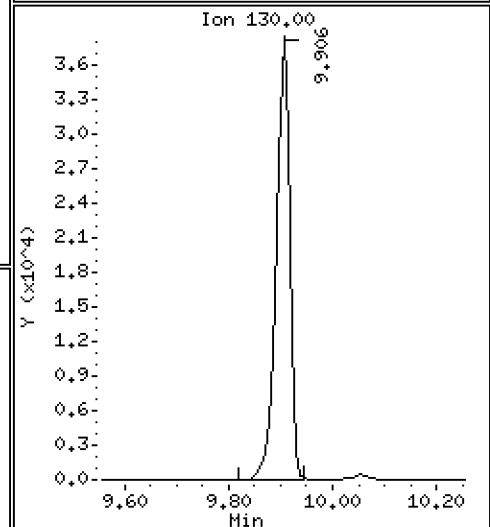
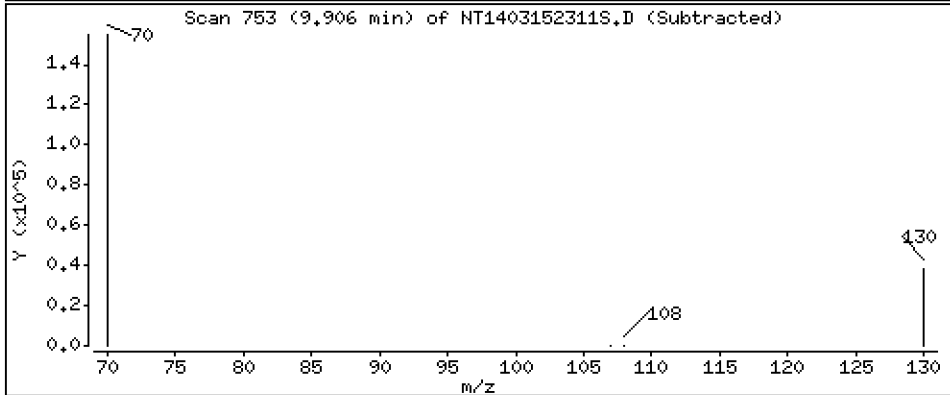
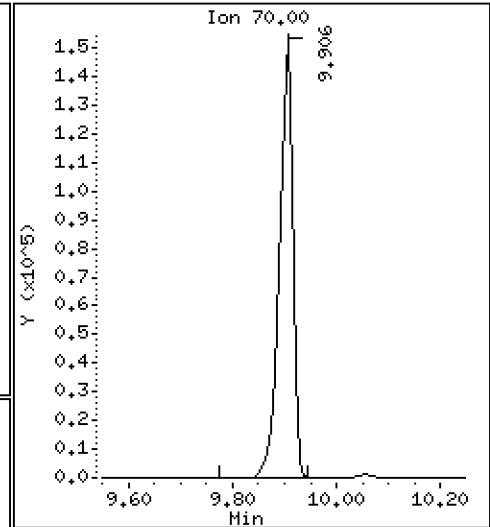
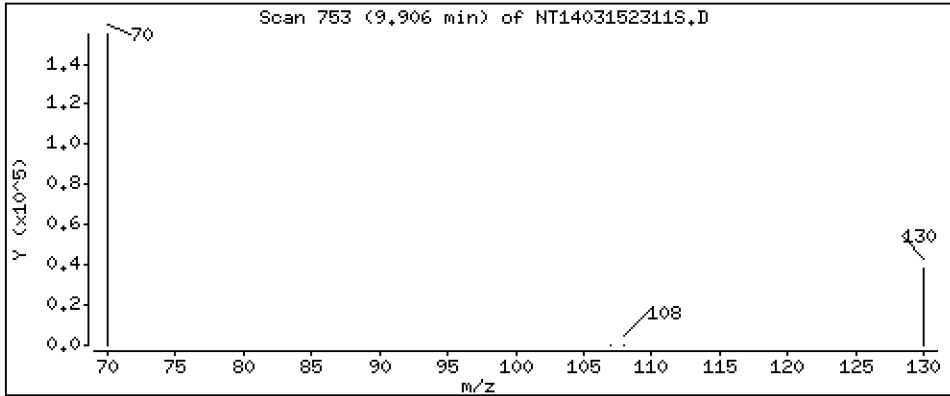
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,137 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

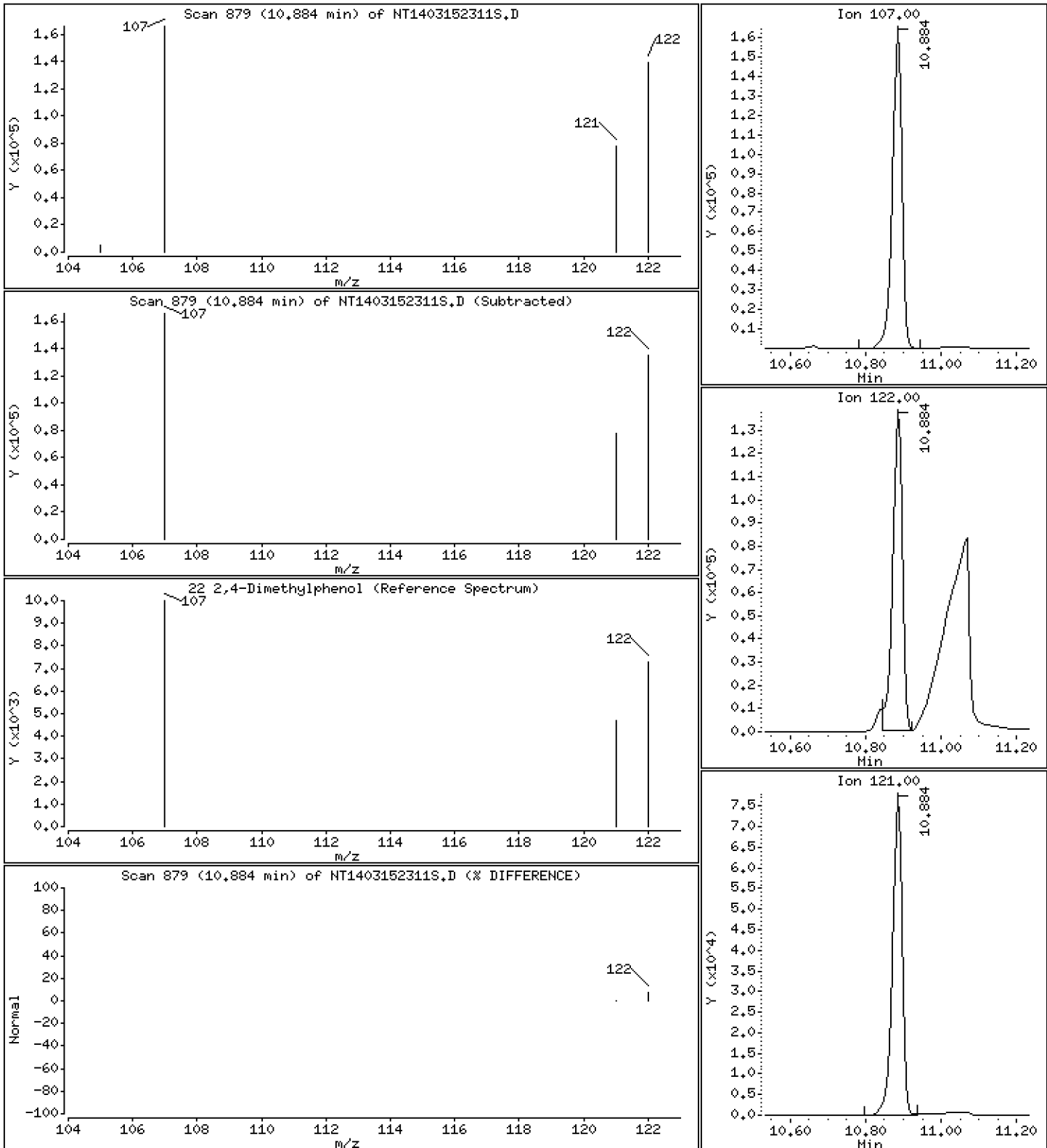
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,934 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

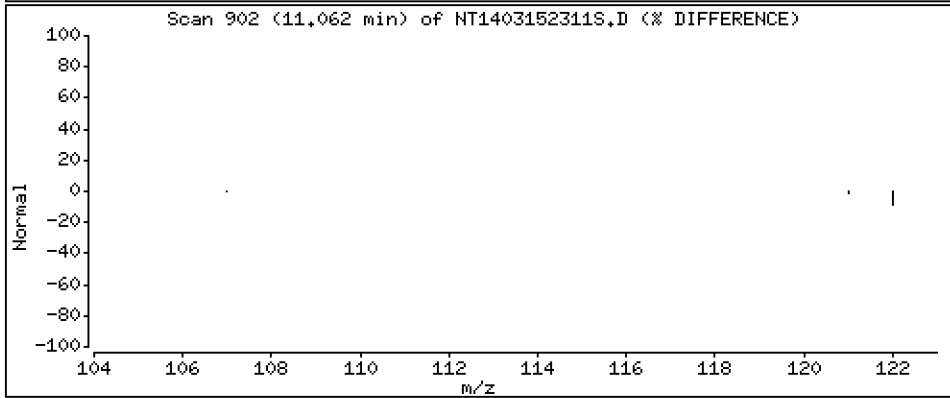
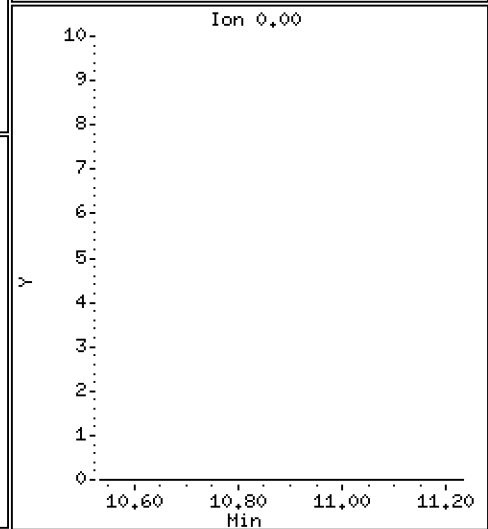
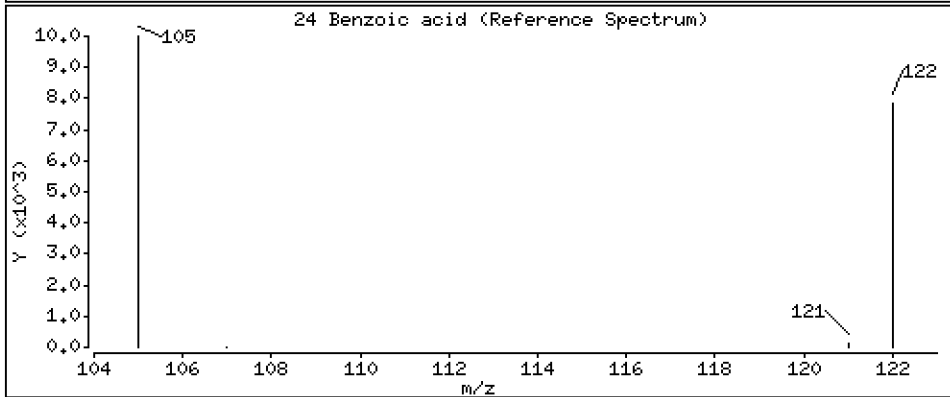
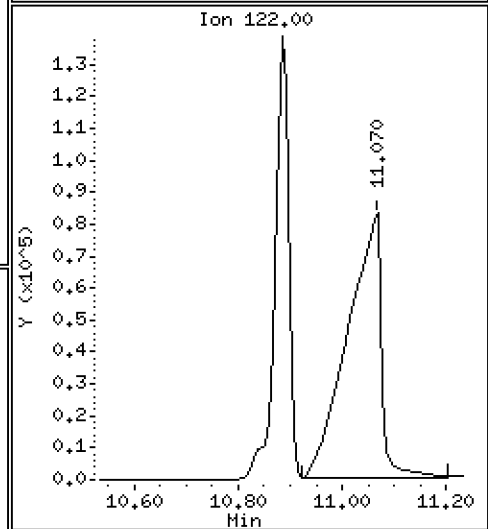
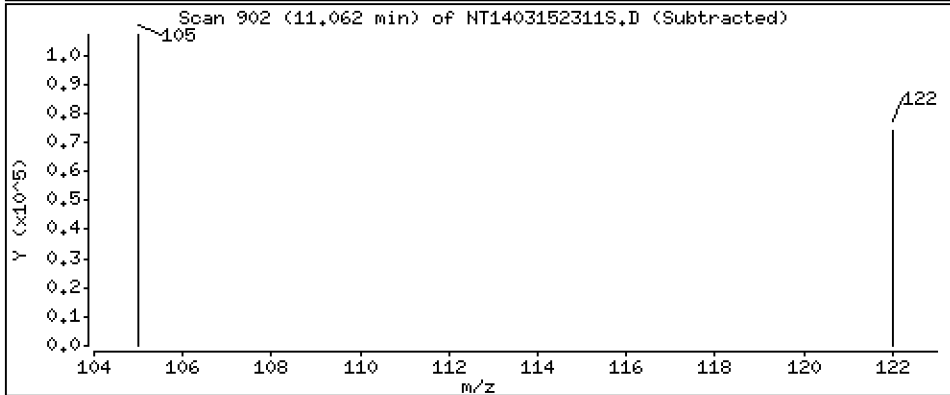
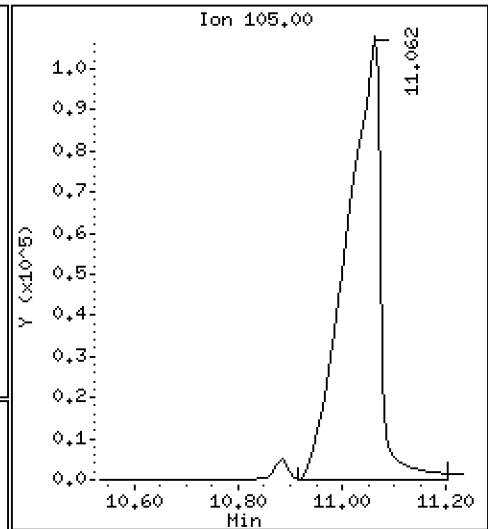
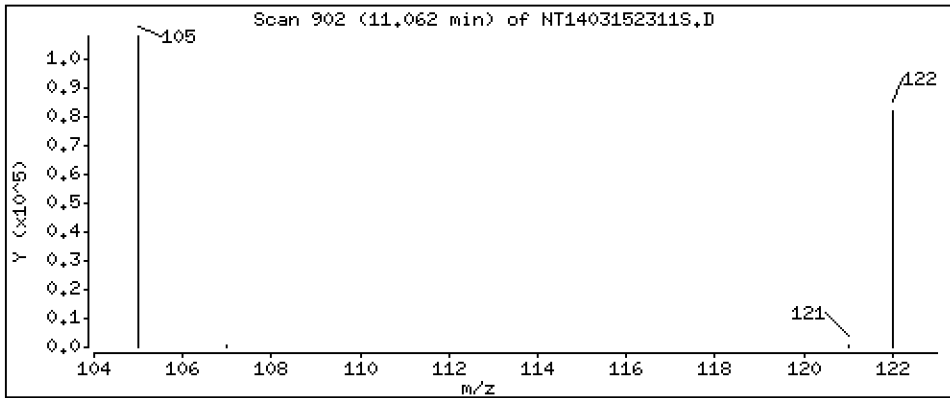
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 9.081 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

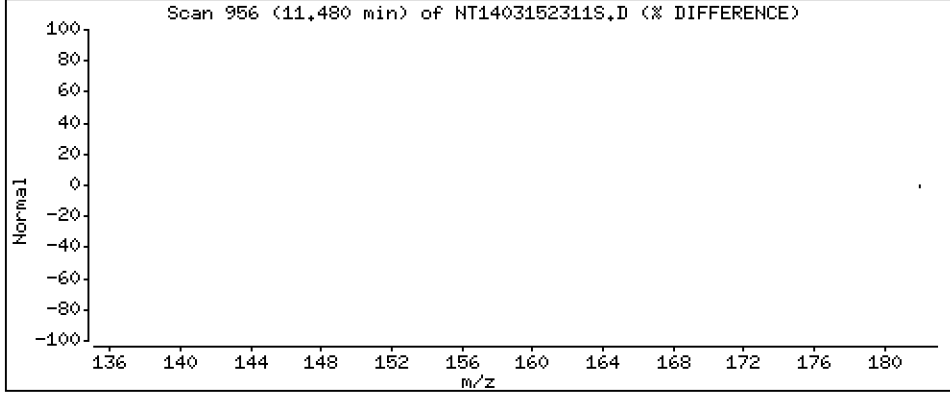
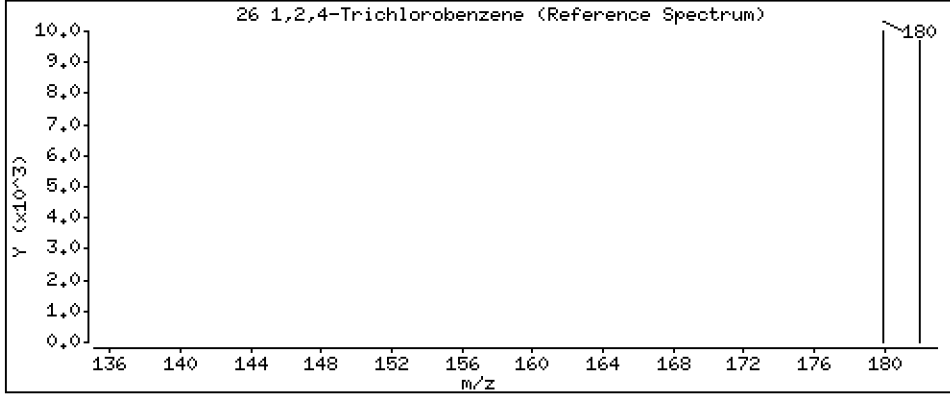
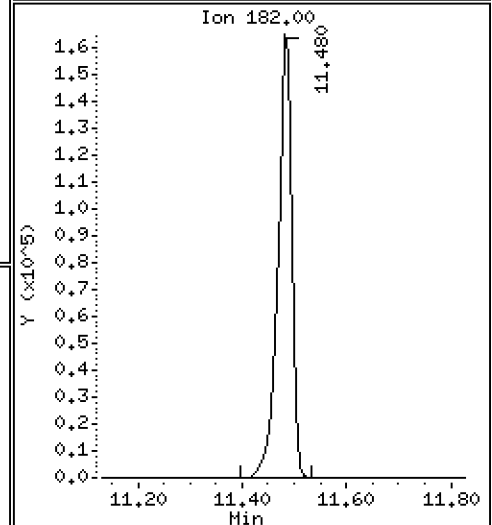
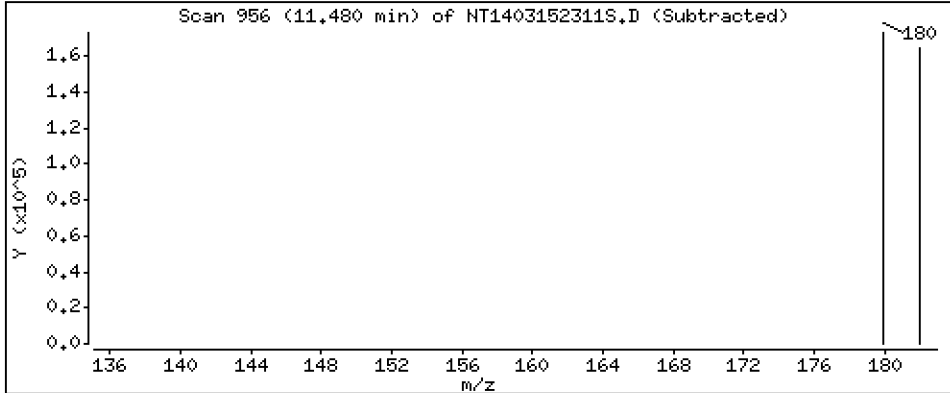
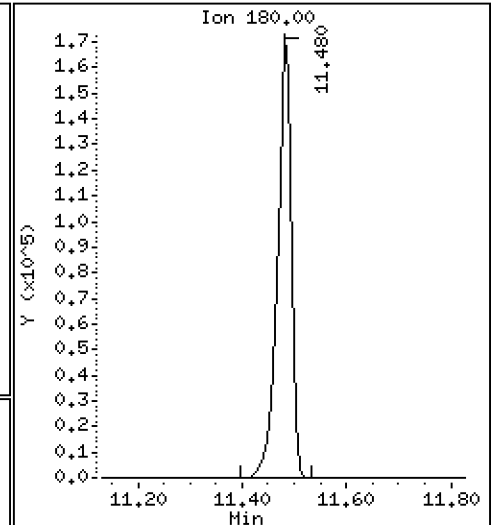
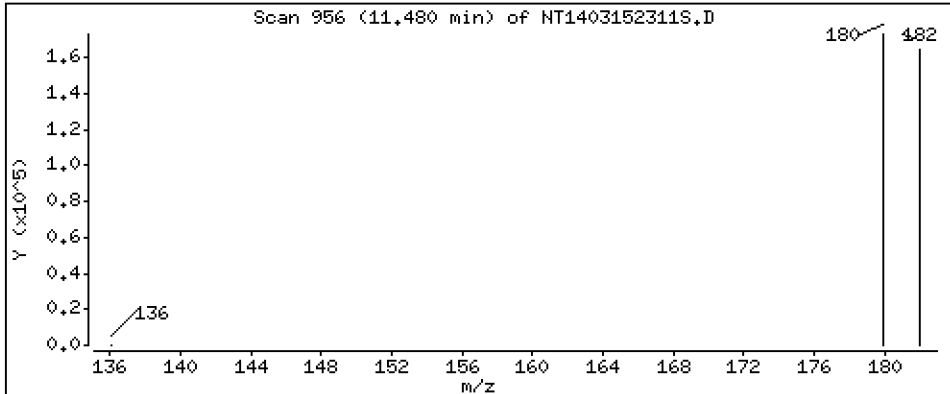
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,574 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

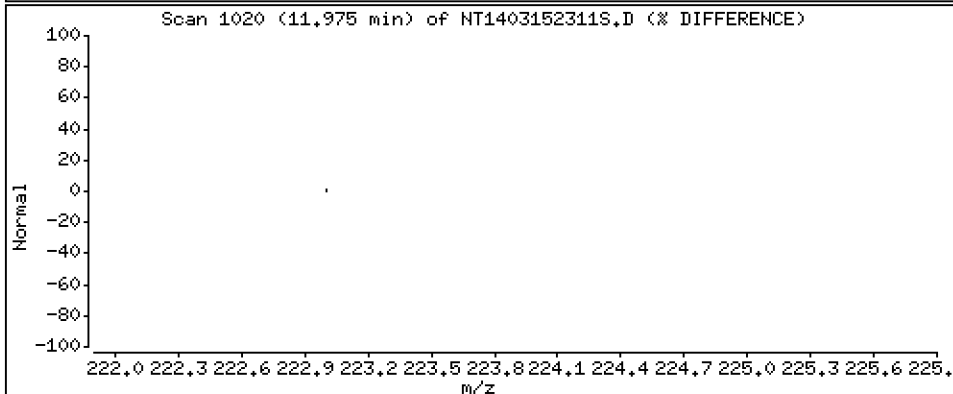
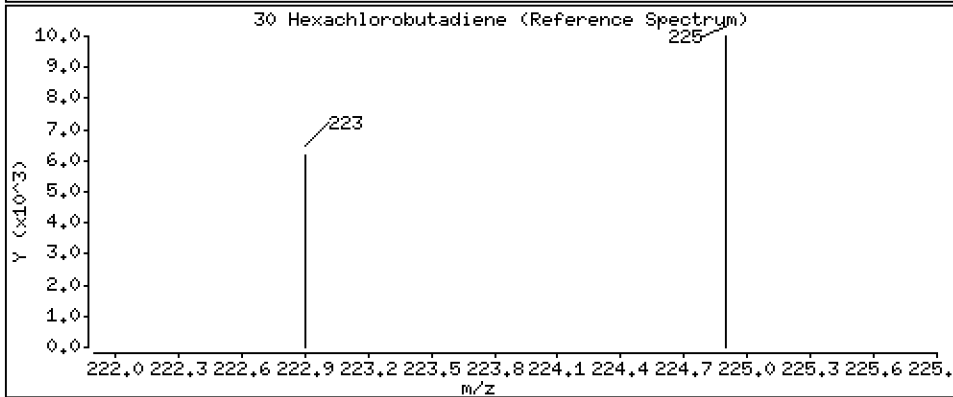
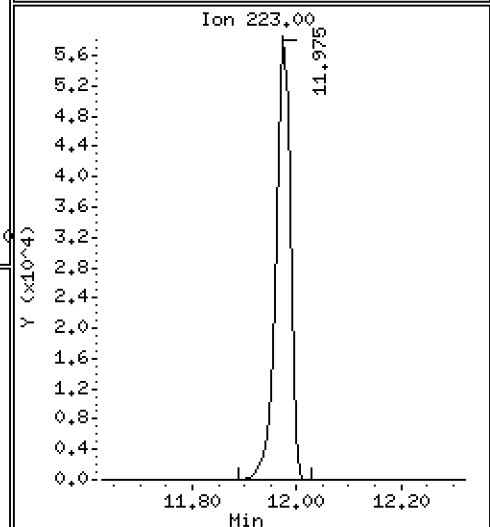
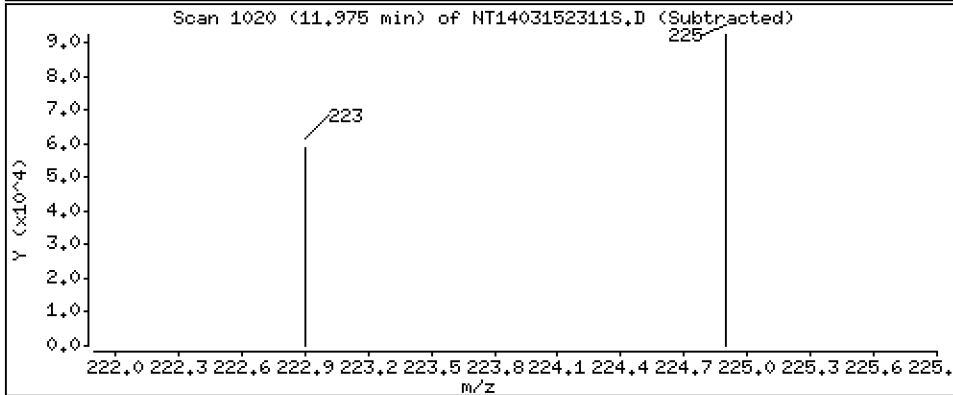
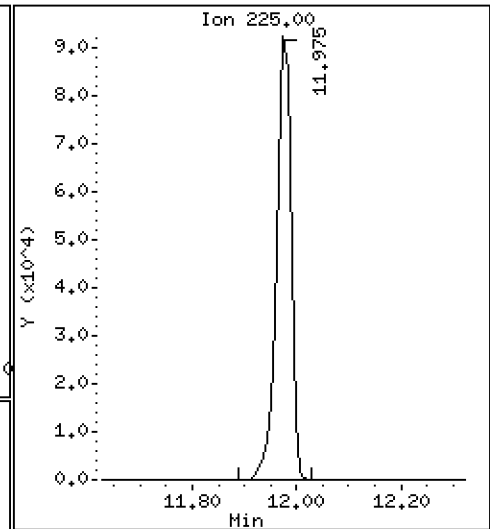
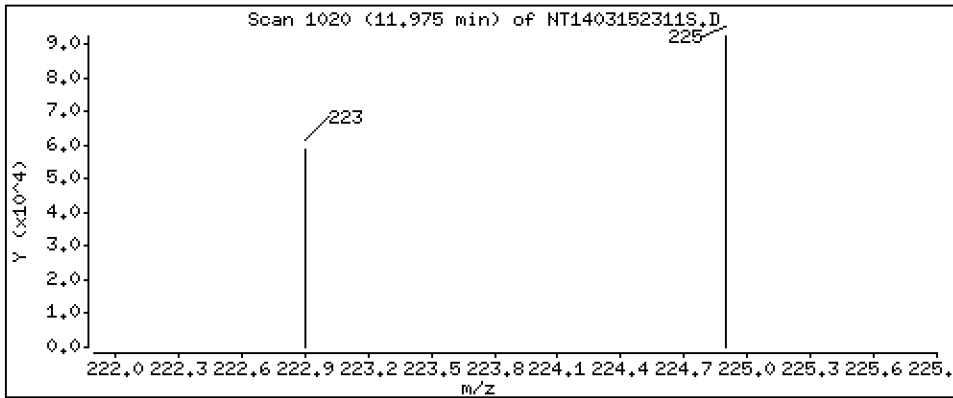
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,973 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

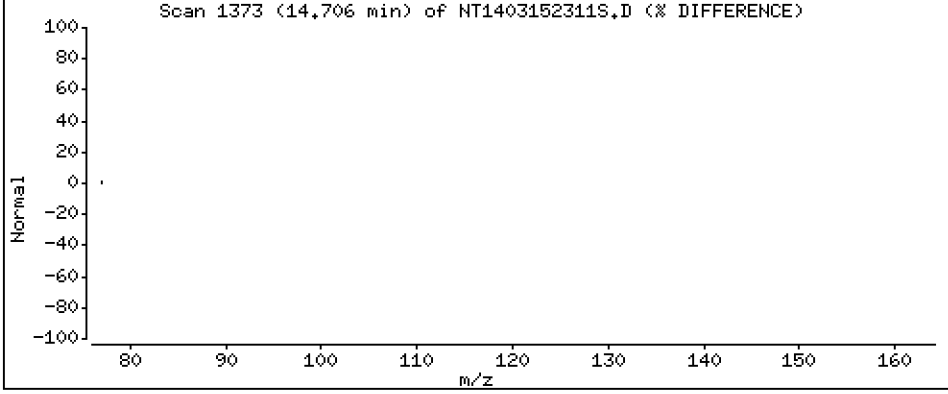
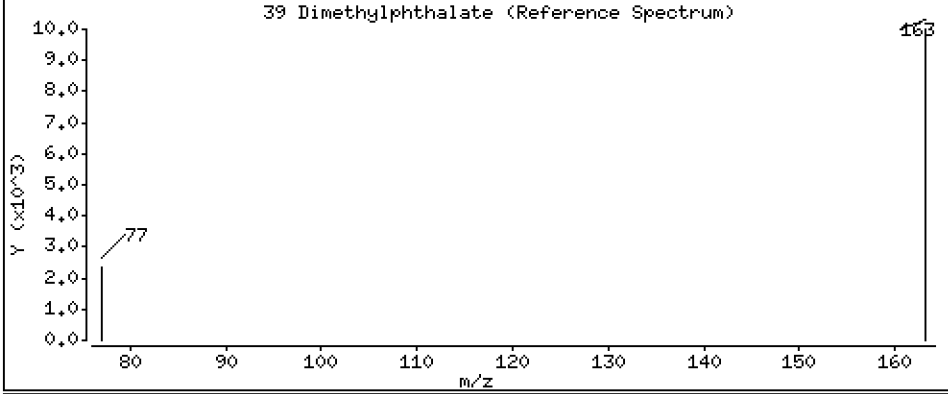
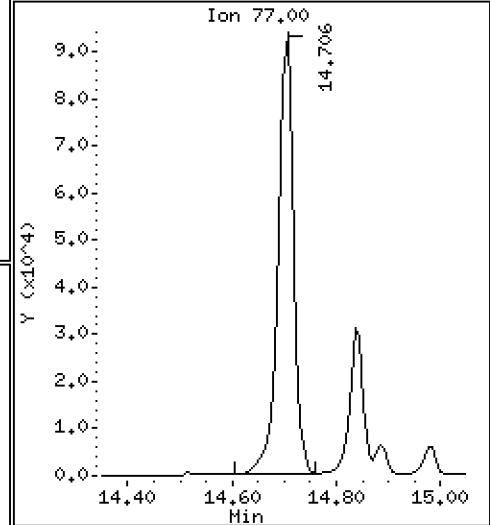
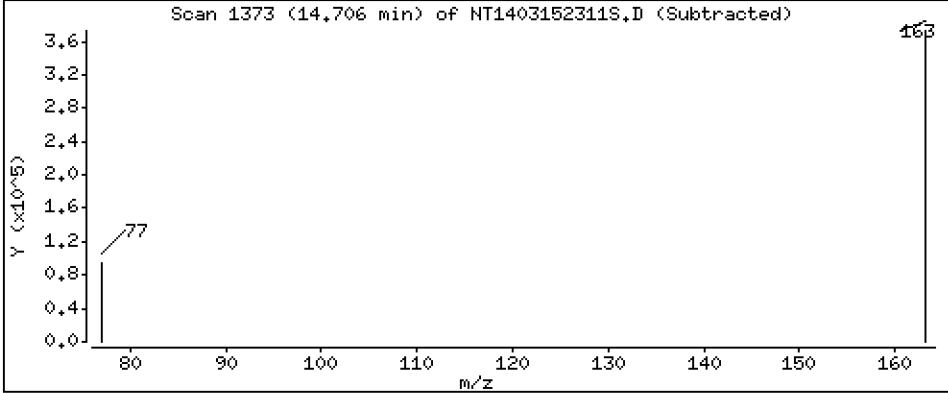
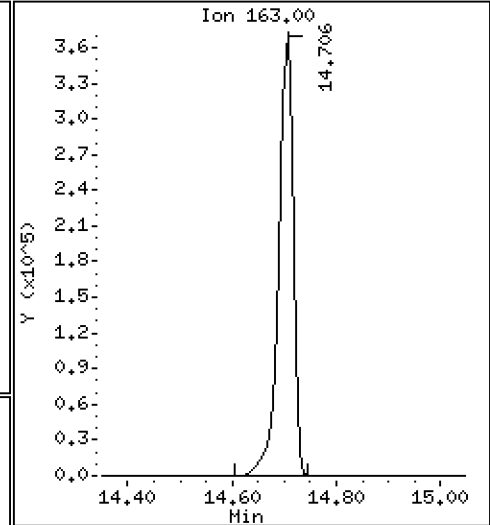
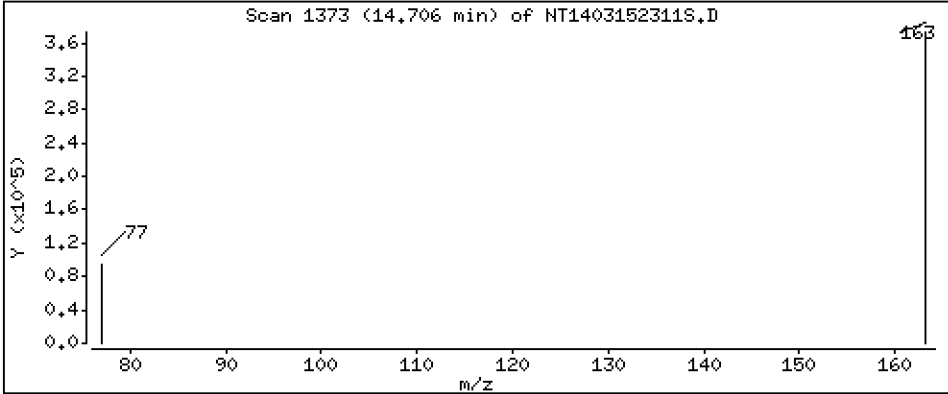
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,995 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

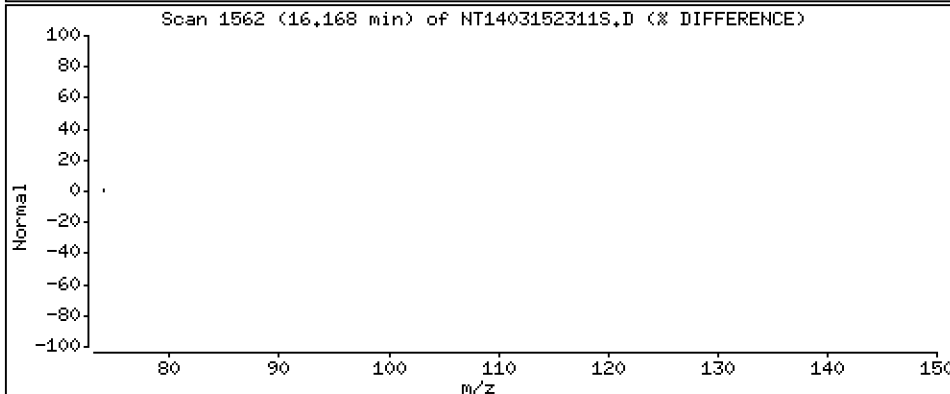
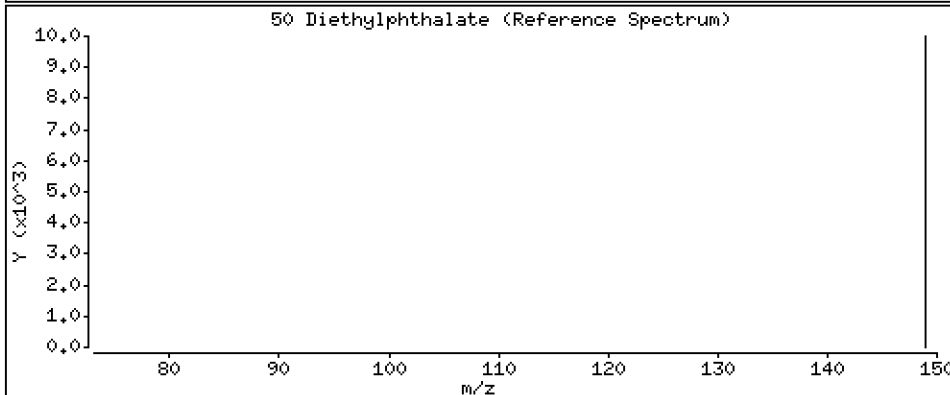
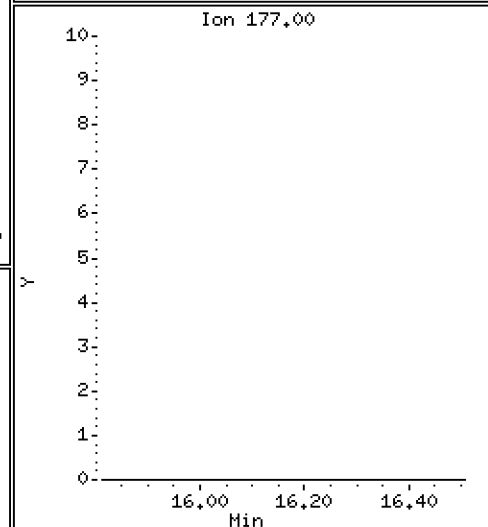
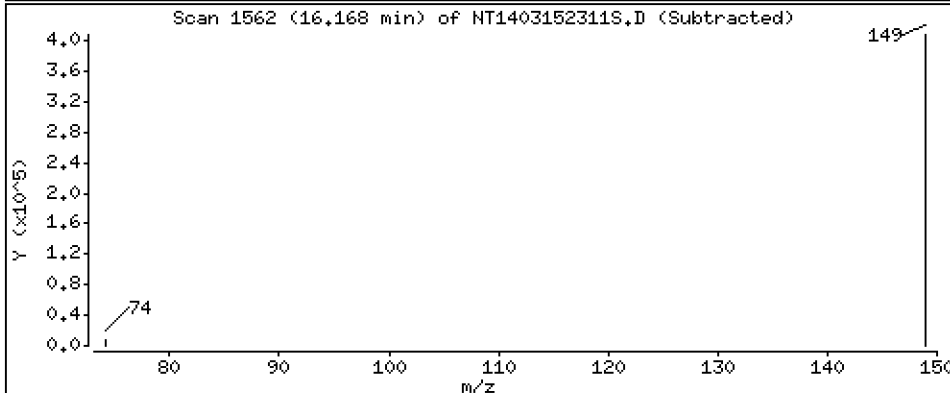
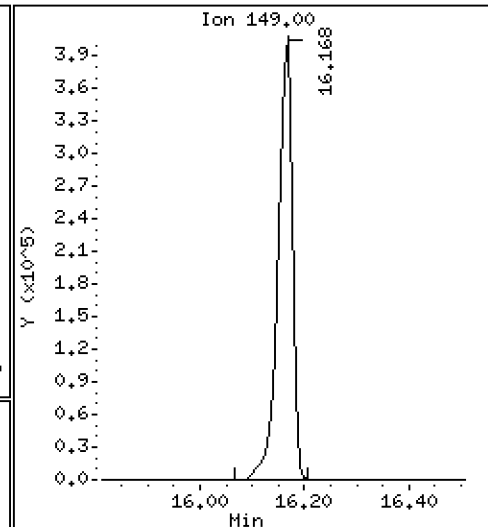
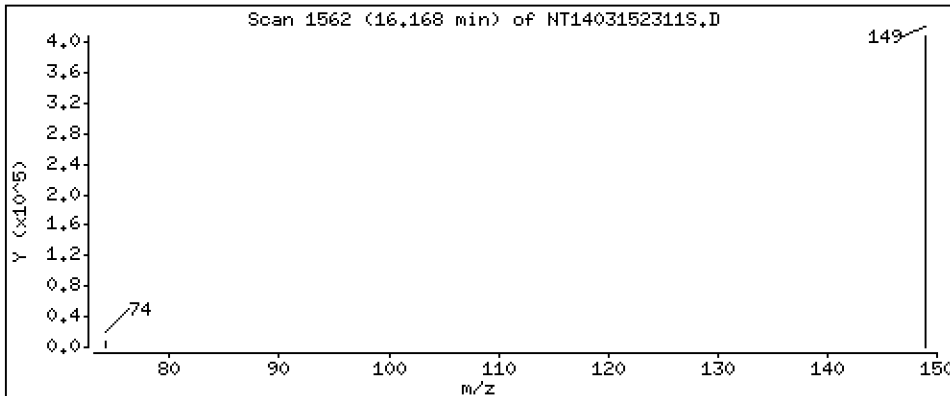
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,174 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

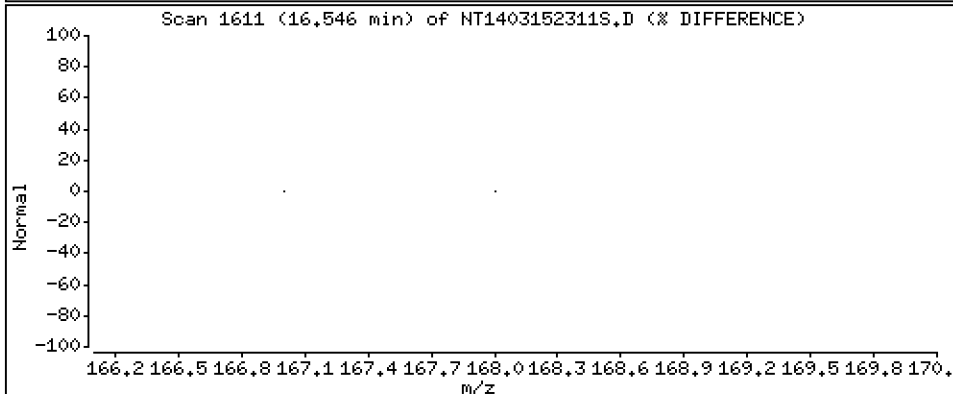
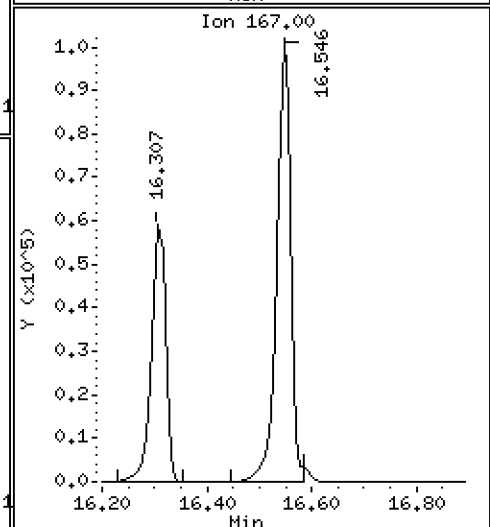
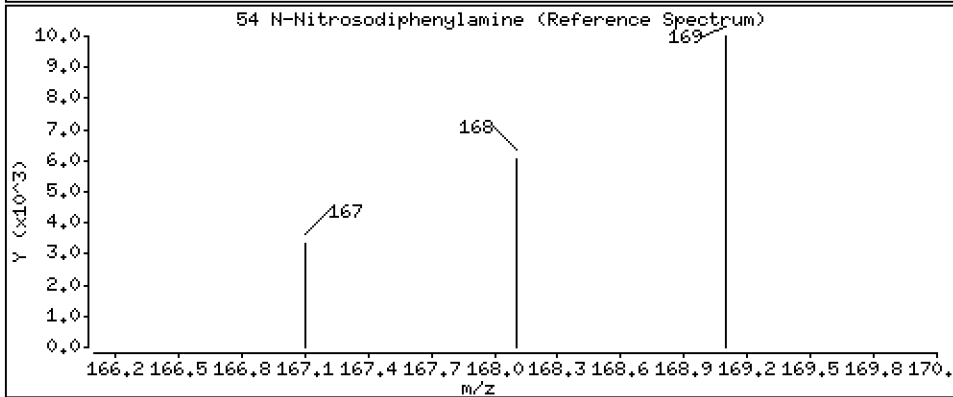
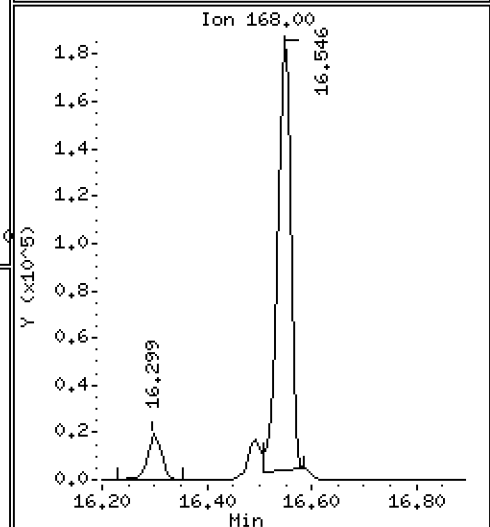
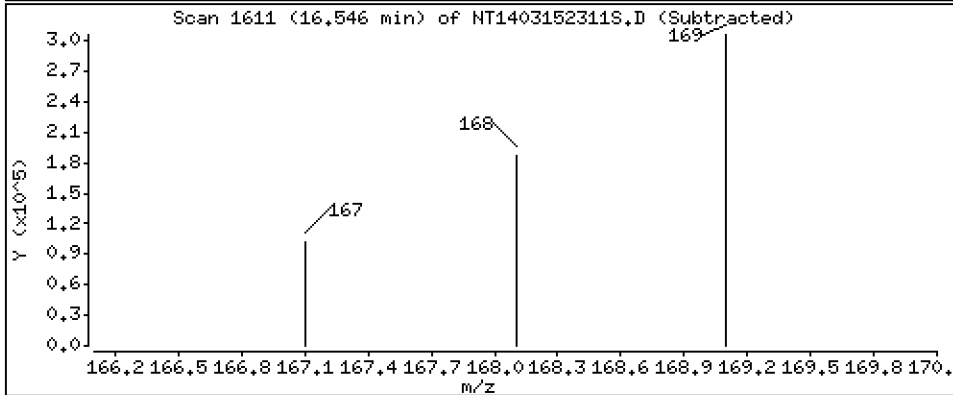
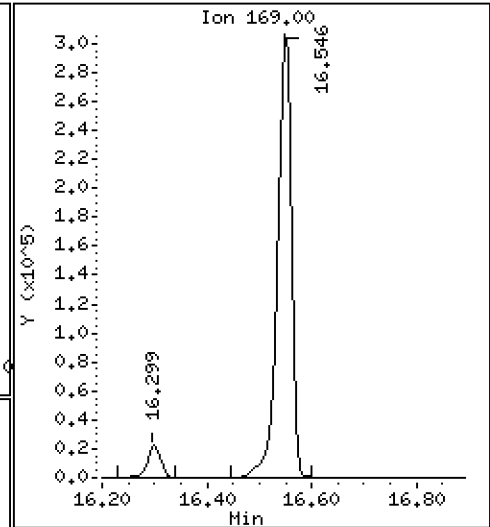
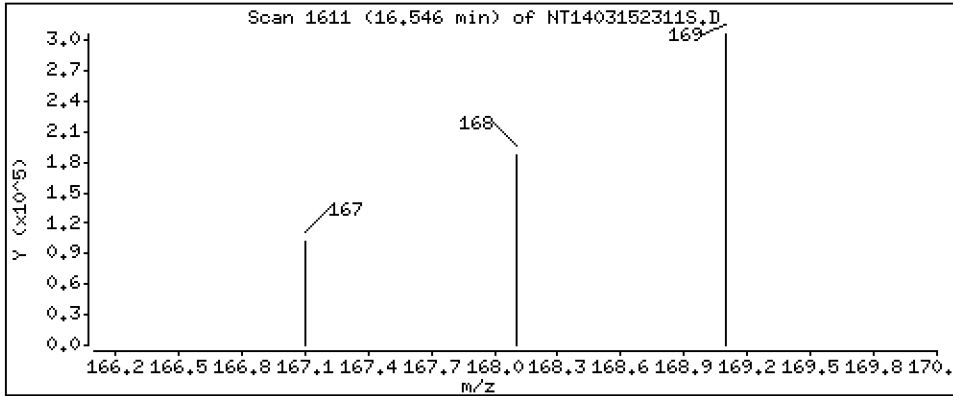
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,019 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

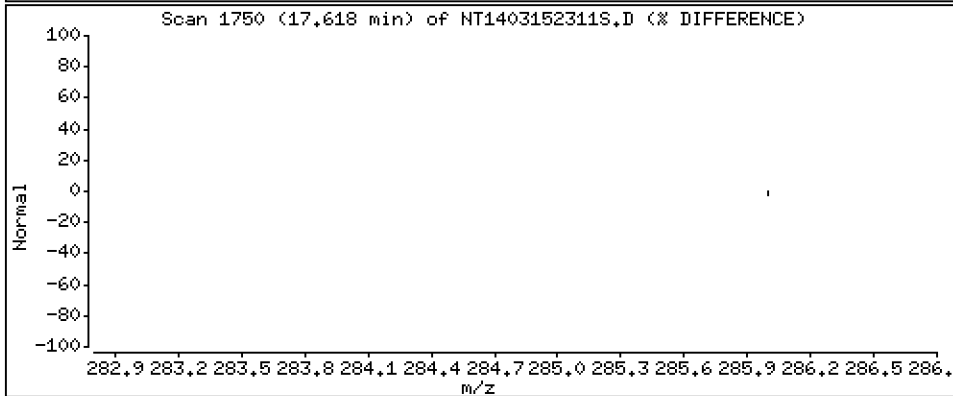
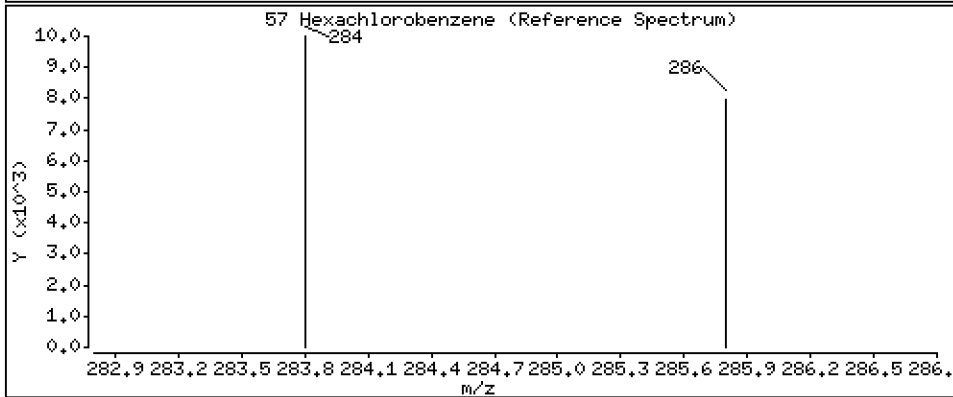
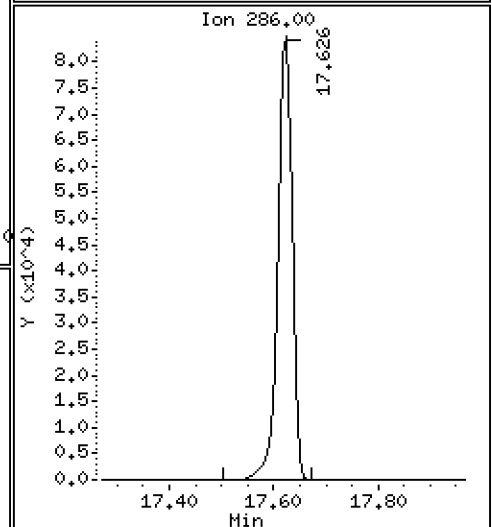
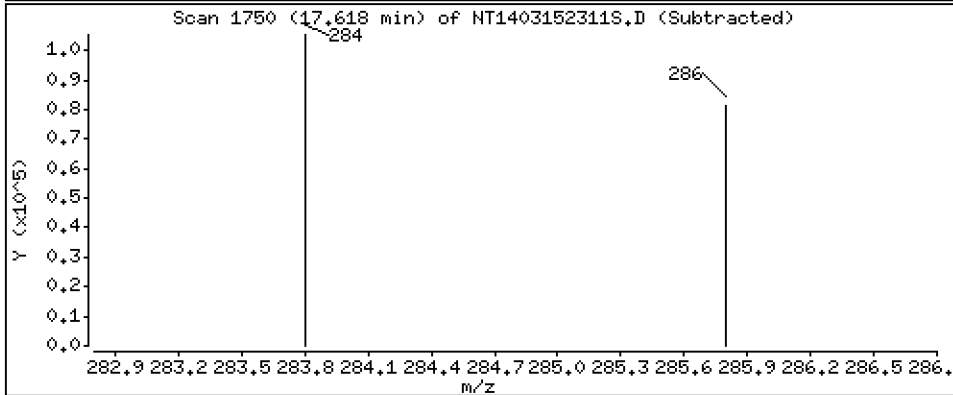
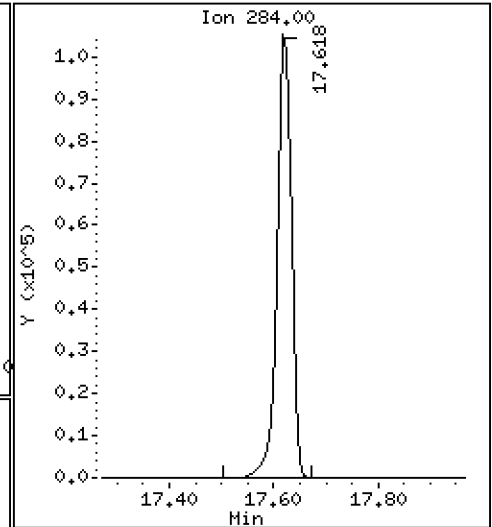
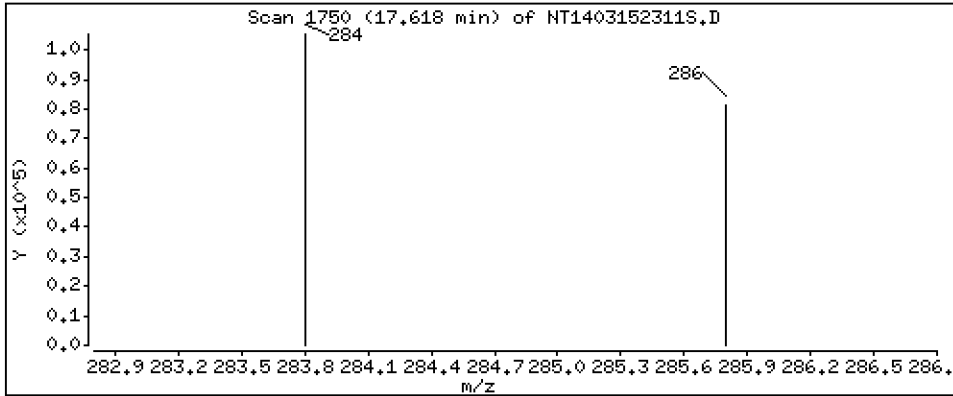
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,693 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

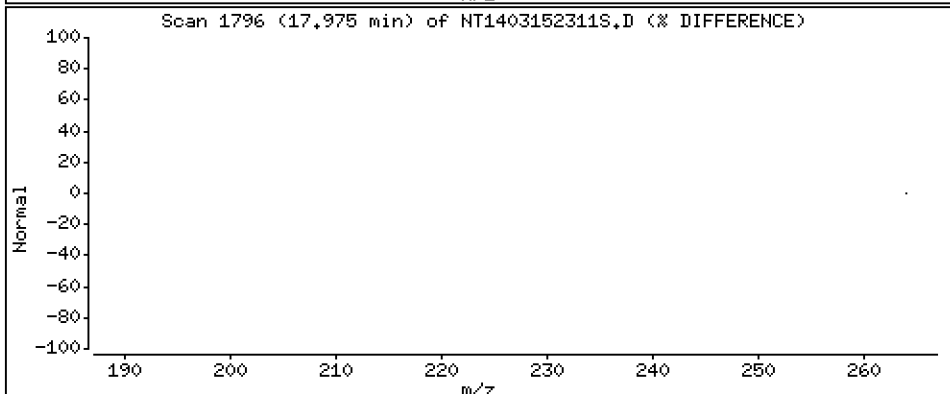
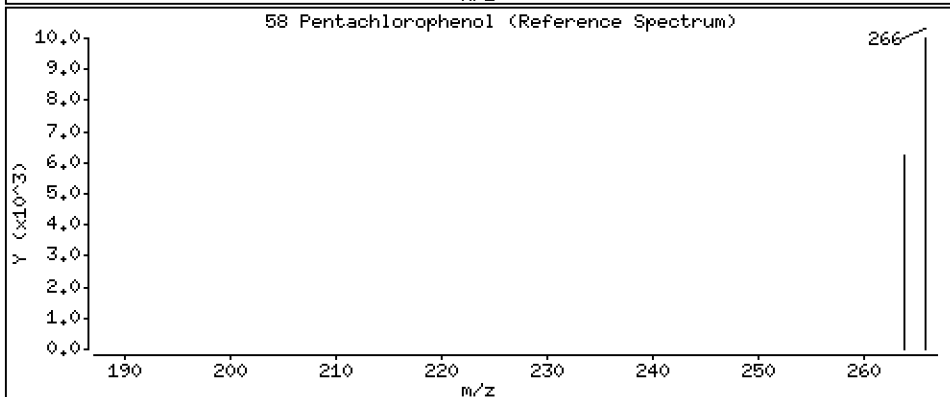
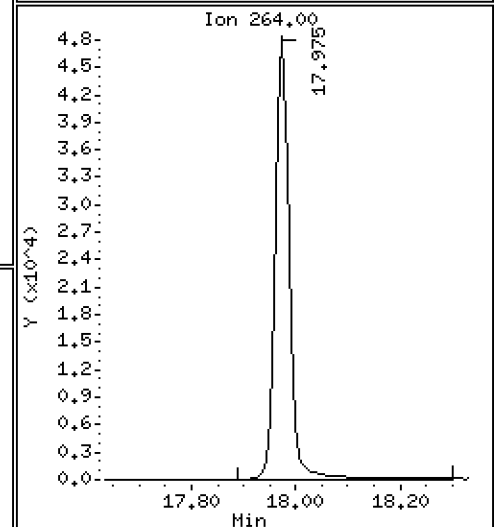
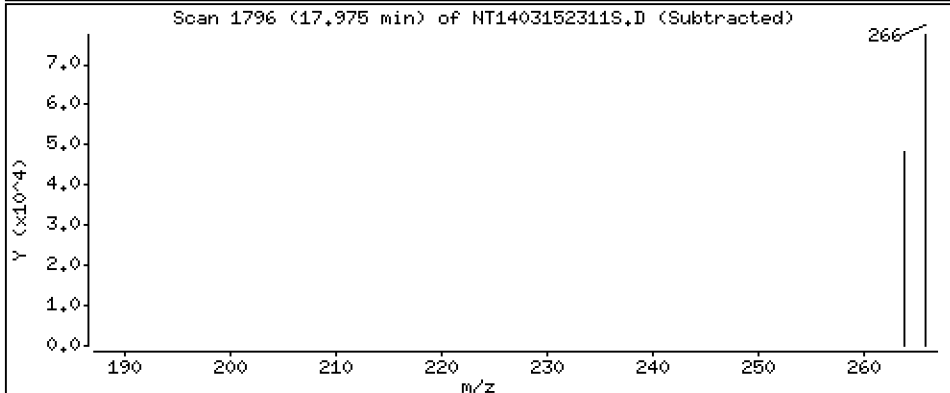
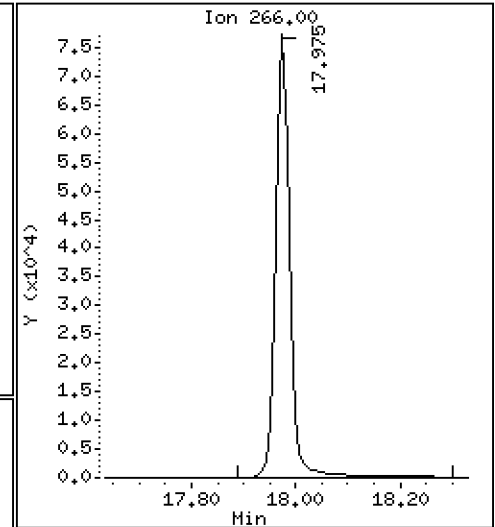
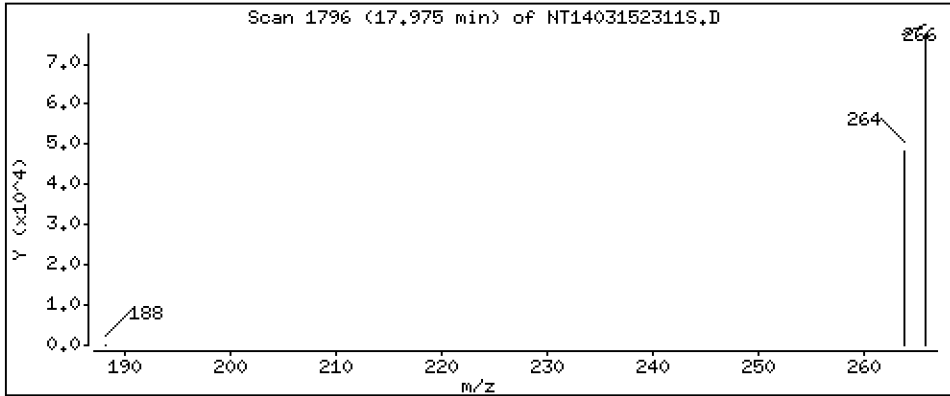
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,800 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

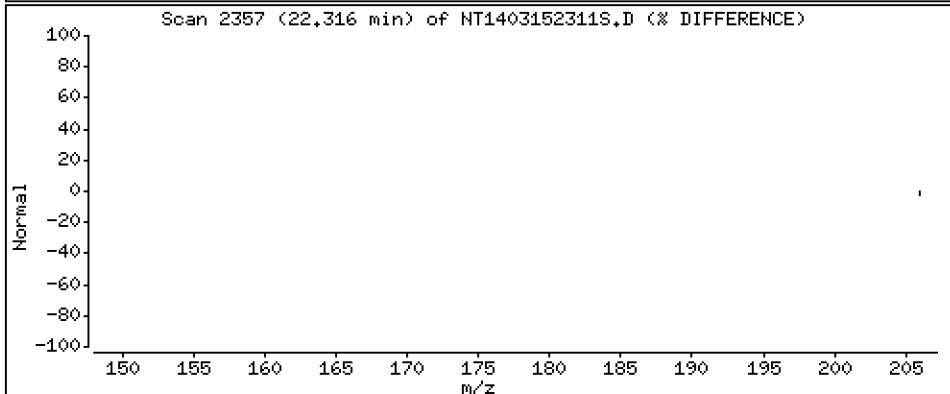
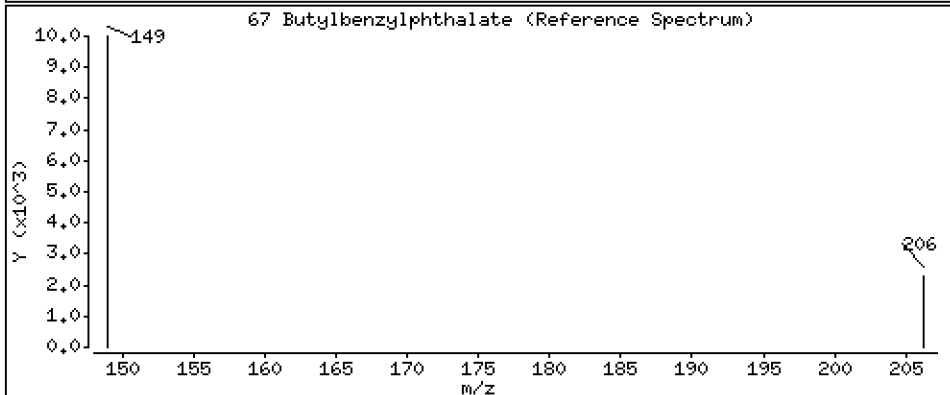
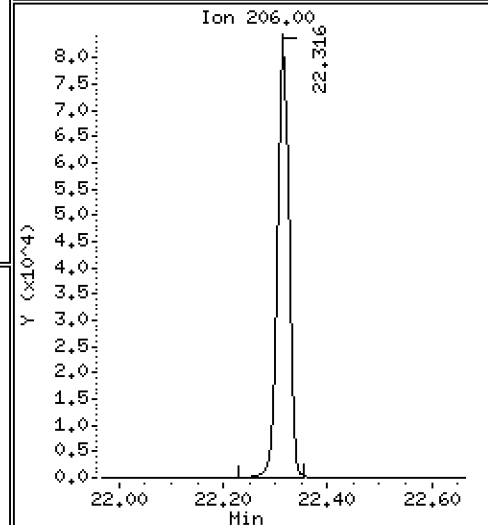
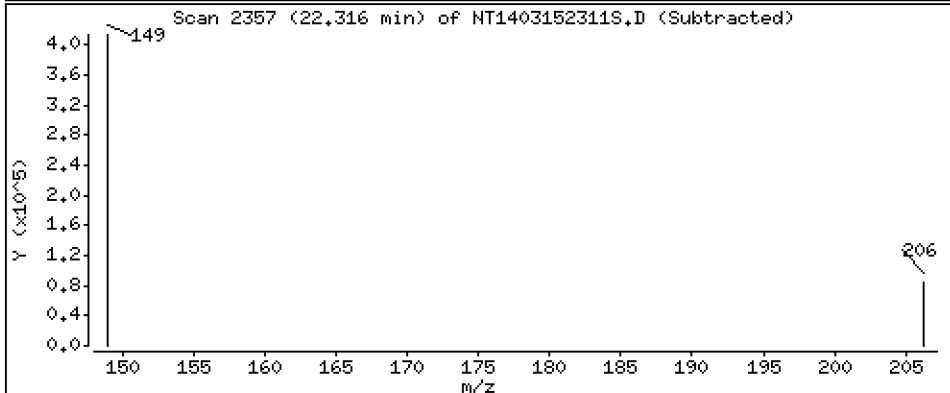
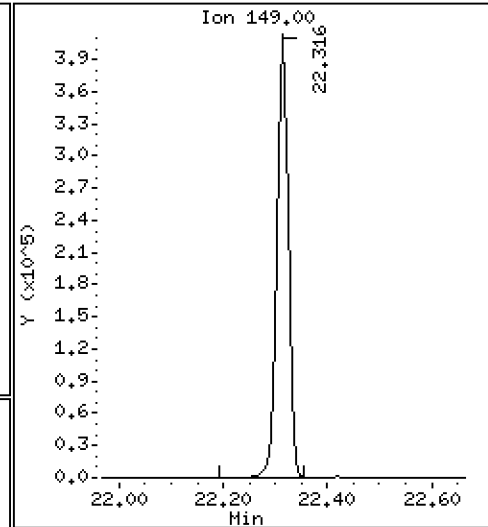
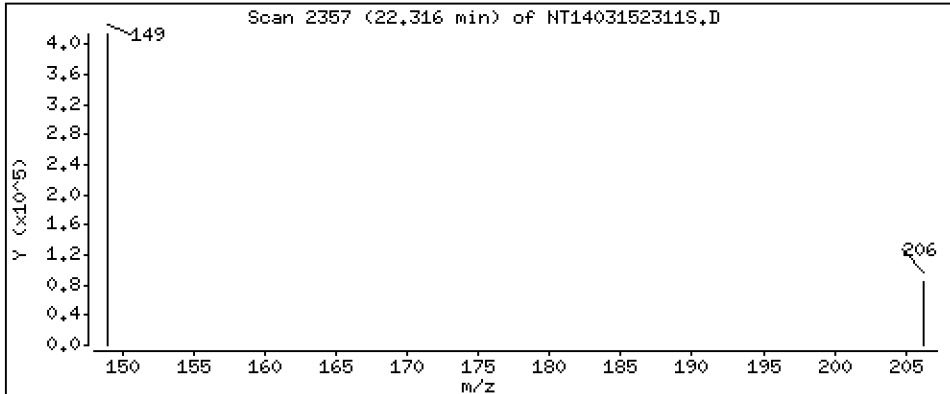
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,366 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

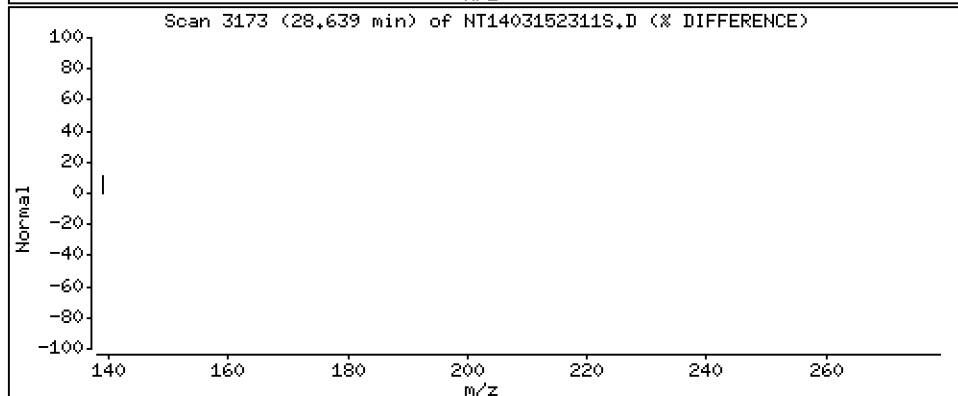
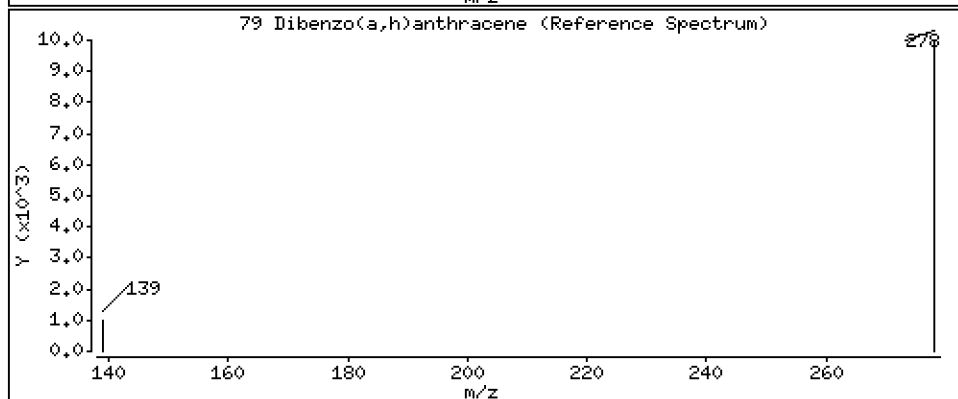
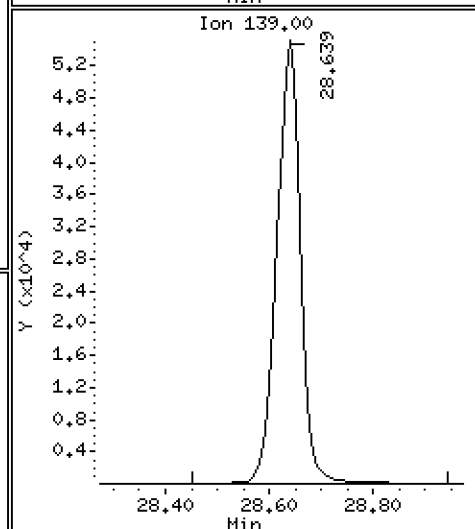
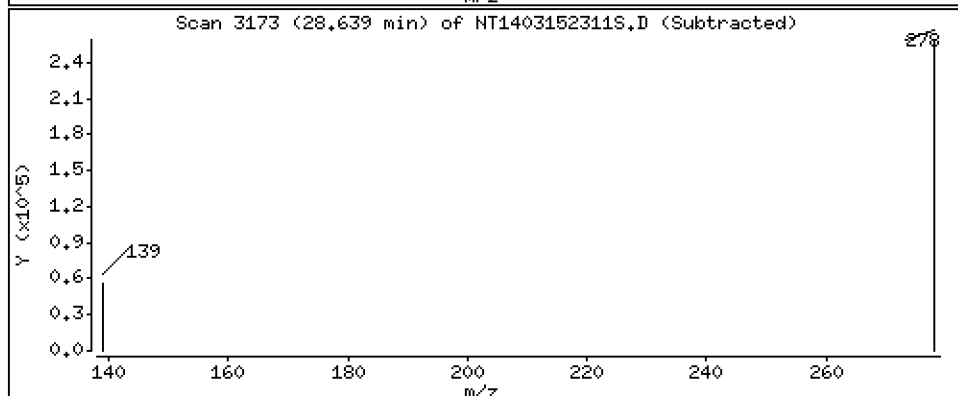
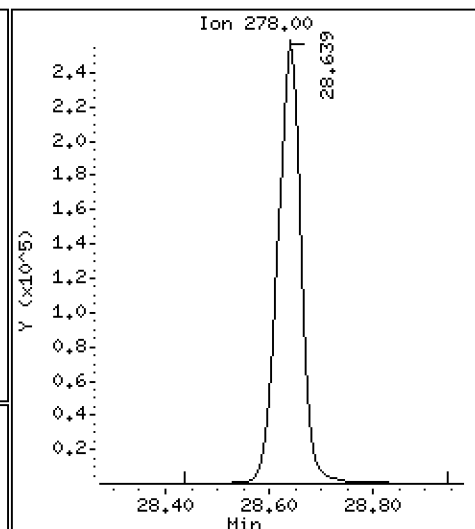
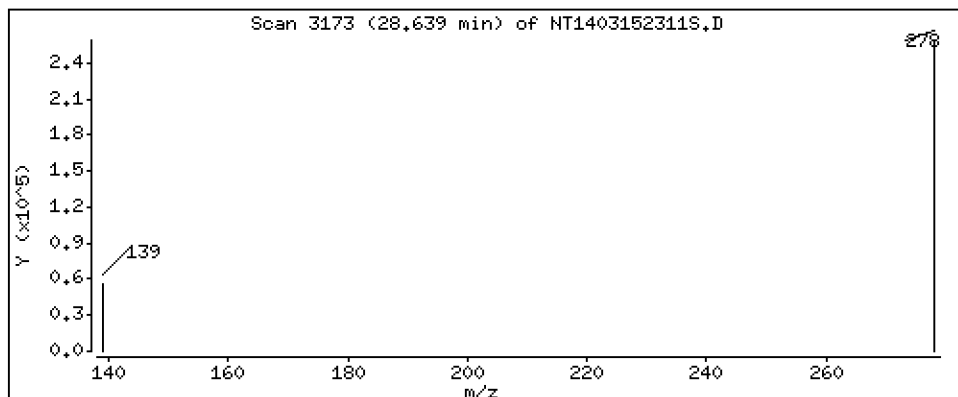
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,166 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

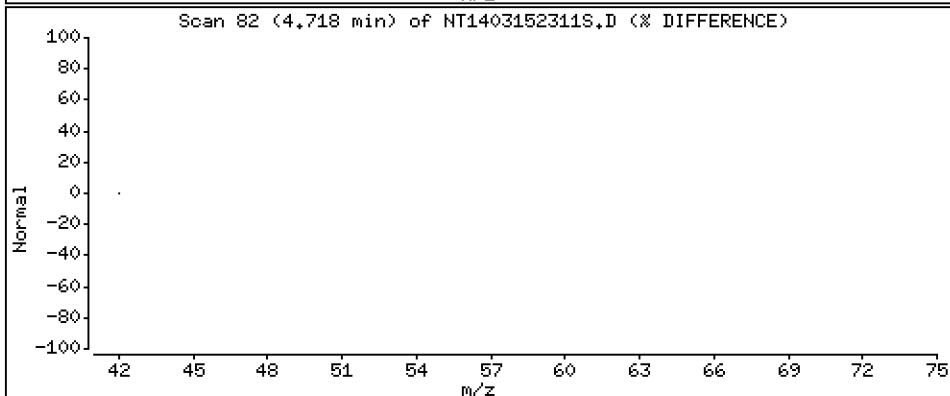
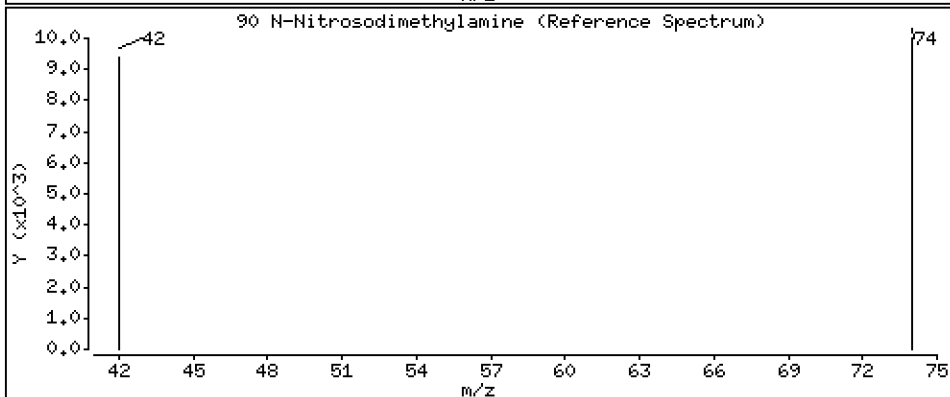
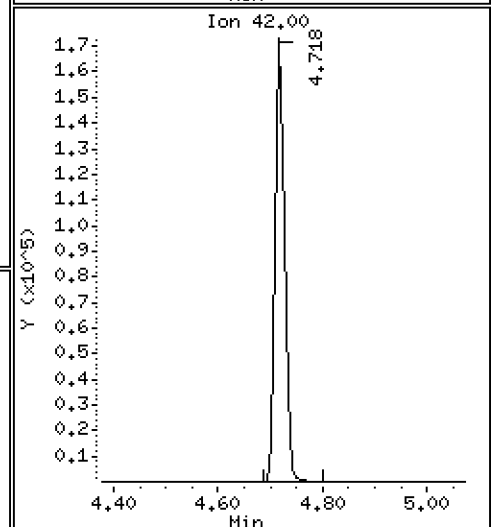
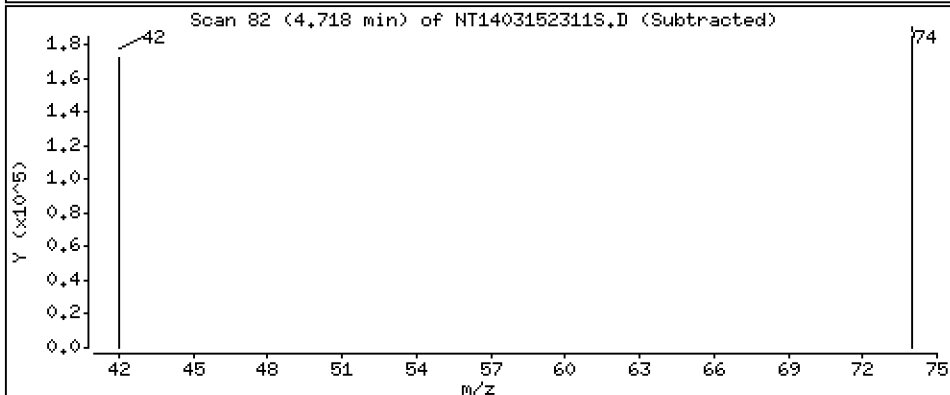
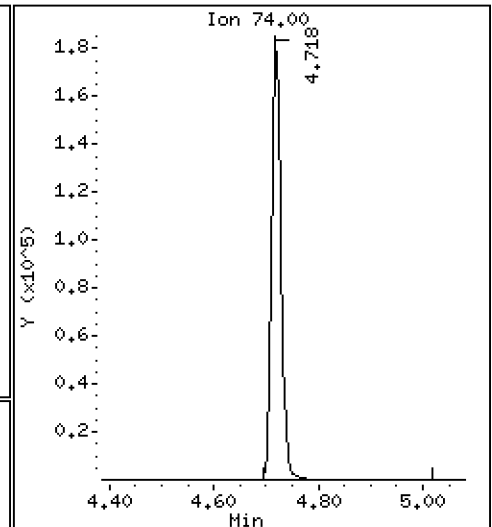
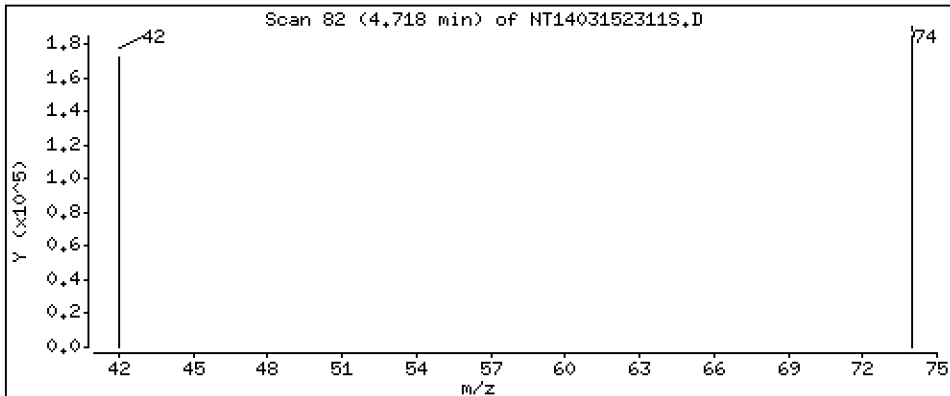
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.261 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSSDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	131	0.00180	0.001799 (R)
3 Phenol	94		8.441	8.433	(0.931)	454904	4.54237	4.542
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	414667	4.83856	4.839
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	214548	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	402045	4.84807	4.848
11 Benzyl alcohol	79		9.339	9.339	(1.030)	313629	5.34291	5.343
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	389531	4.82237	4.822
13 2-Methylphenol	108		9.564	9.556	(1.055)	296655	4.28818	4.288
15 4-Methylphenol	108		9.836	9.828	(1.085)	331703	4.53863	4.539
16 N-Nitroso-di-n-propylamine	70		9.905	9.898	(1.092)	265440	5.13699	5.137
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	272931	3.93394	3.934
24 Benzoic acid	105		11.061	10.883	(0.956)	494569	9.08128	9.081
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	311017	4.57388	4.574
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	807045	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	171122	4.97279	4.973
39 Dimethylphthalate	163		14.706	14.698	(0.967)	683967	4.99496	4.995
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	400955	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	754333	5.17432	5.174
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	544923	5.01904	5.019
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	195732	4.69277	4.693
58 Pentachlorophenol	266		17.974	17.982	(0.985)	138145	4.79996	4.800
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	801298	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	546	0.00507	0.005072 (R)
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	588546	5.36591	5.366
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	624454	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	623001	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.623	(1.104)	815876	5.16593	5.166
90 N-Nitrosodimethylamine	74		4.717	4.733	(0.520)	234083	5.26142	5.261

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	214548	-3.88
27 Naphthalene-d8	832937	416469	1665874	807045	-3.11
42 Acenaphthene-d10	403175	201588	806350	400955	-0.55
59 Phenanthrene-d10	814822	407411	1629644	801298	-1.66
69 Chrysene-d12	625755	312878	1251510	624454	-0.21
77 Perylene-d12	614085	307043	1228170	623001	1.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311S.D

Lab ID: SLC0242-SCV1

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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



SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00050

Laboratory ID: SLC0242-SCV1

Sequence: SLC0242

Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	4.8	-3.0	20.00
1,2-Dichlorobenzene	5.0000	4.8	-3.6	20.00
Benzyl Alcohol	5.0000	5.3	6.9	20.00
Benzoic acid	10.000	9.1	-9.2	20.00
2,4-Dimethylphenol	5.0000	3.9	-21.3	20.00
1,2,4-Trichlorobenzene	5.0000	4.6	-8.5	20.00
N-Nitrosodiphenylamine	5.0000	5.0	0.4	20.00
Pentachlorophenol	5.0000	4.8	-4.0	20.00
2-Fluorophenol	7.5000	0.00180	-100	
p-Terphenyl-d14	5.0000	0.00507	-99.9	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523115.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0242-SCV1

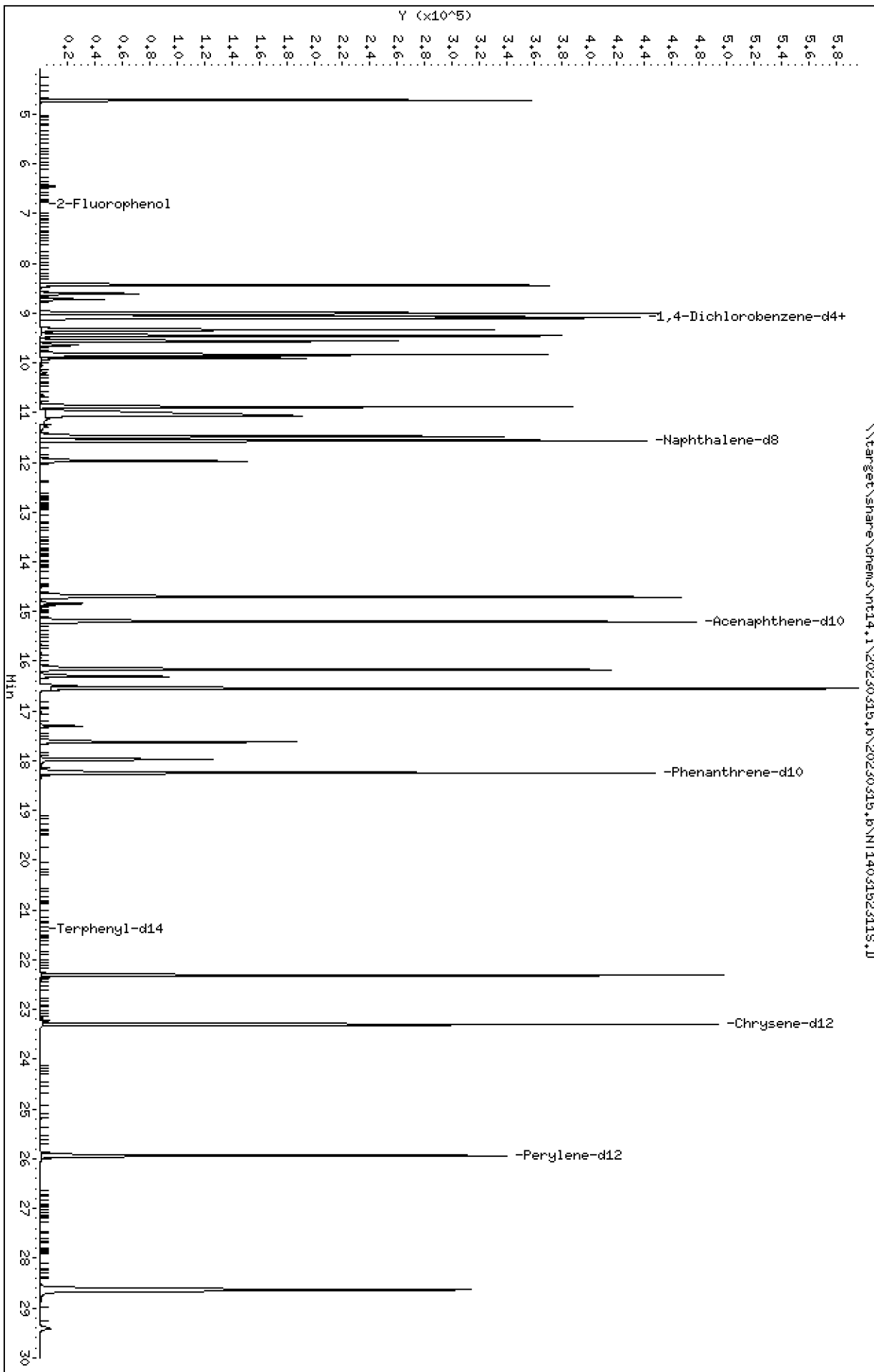
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523115.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

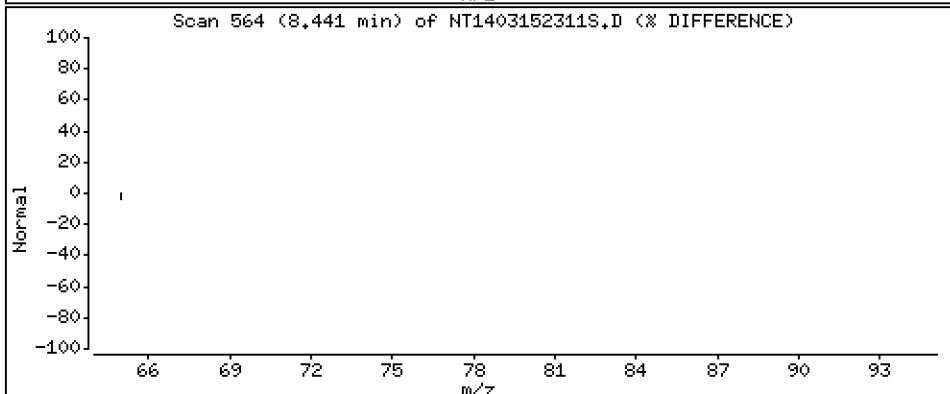
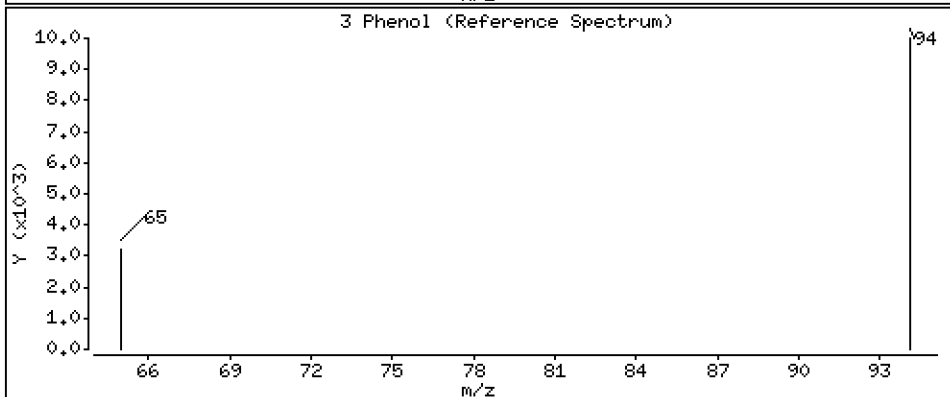
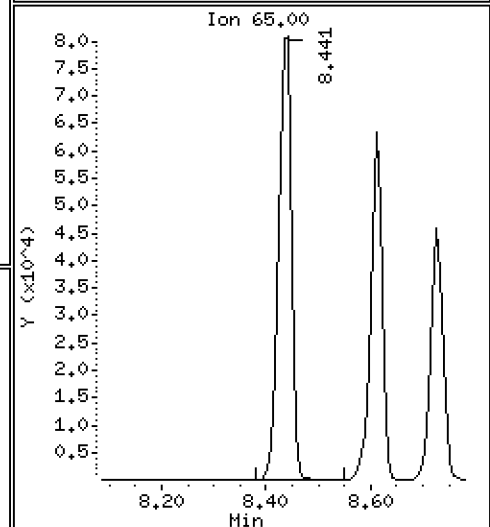
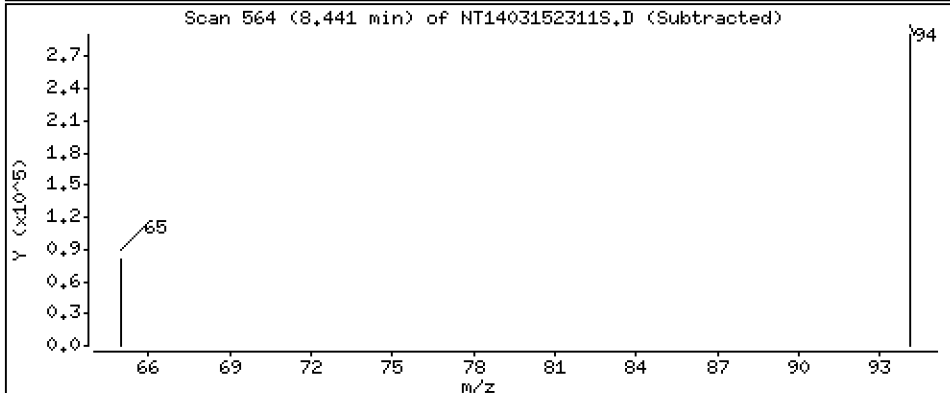
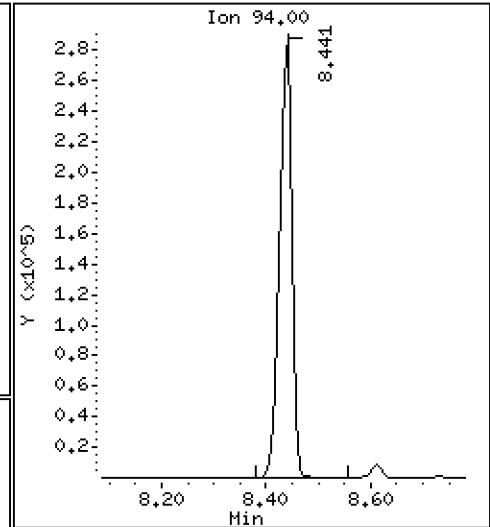
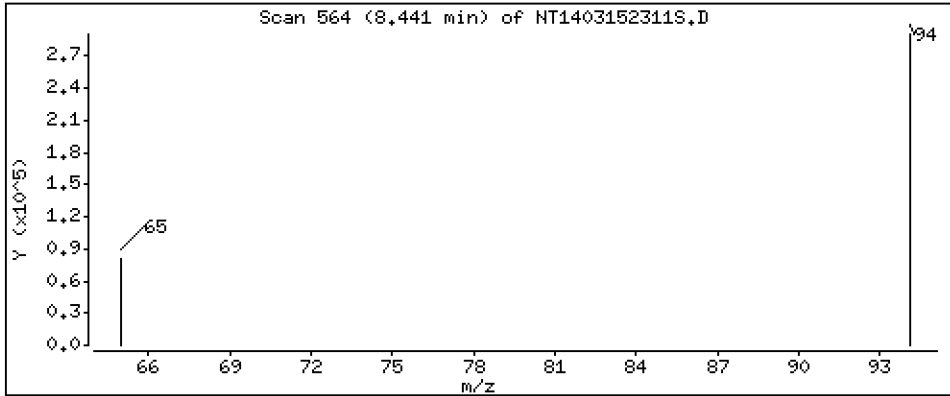
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,542 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

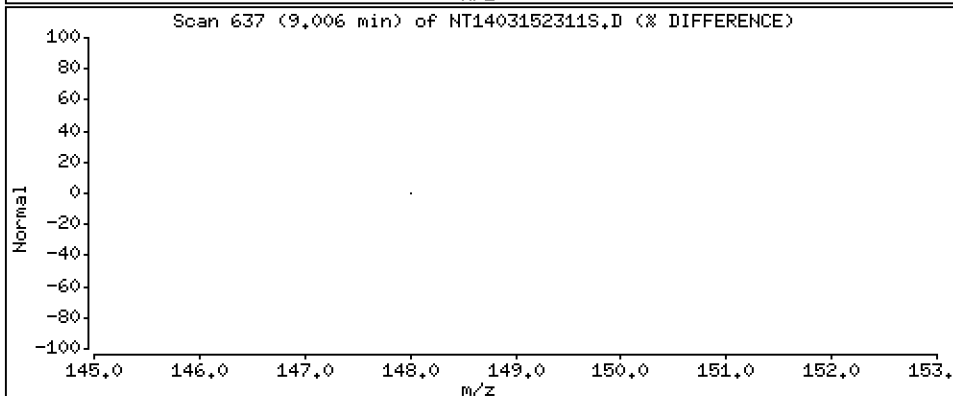
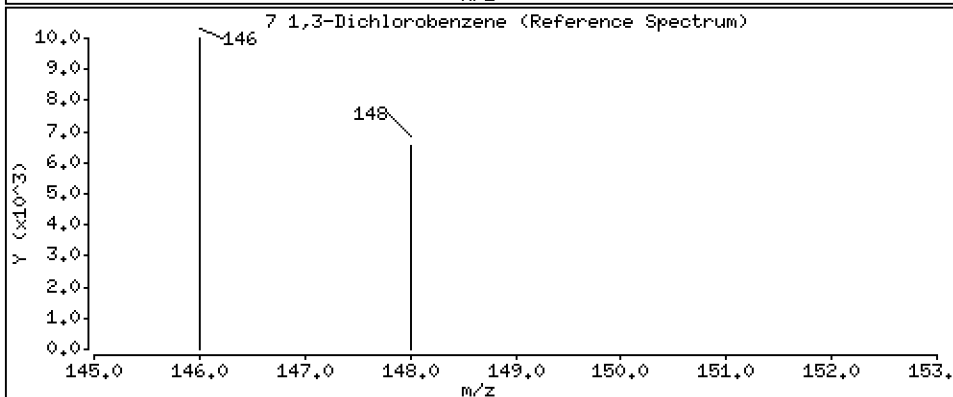
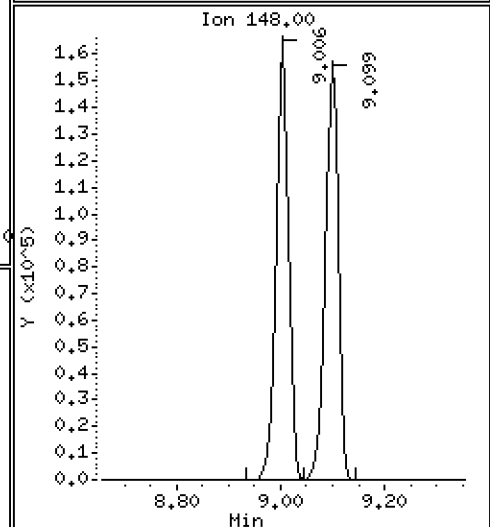
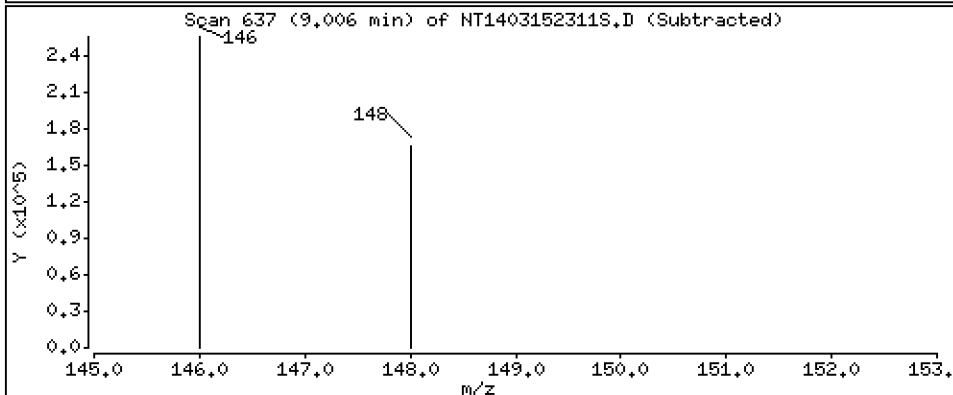
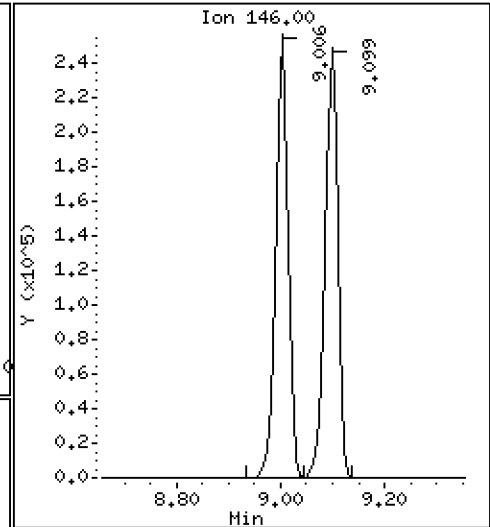
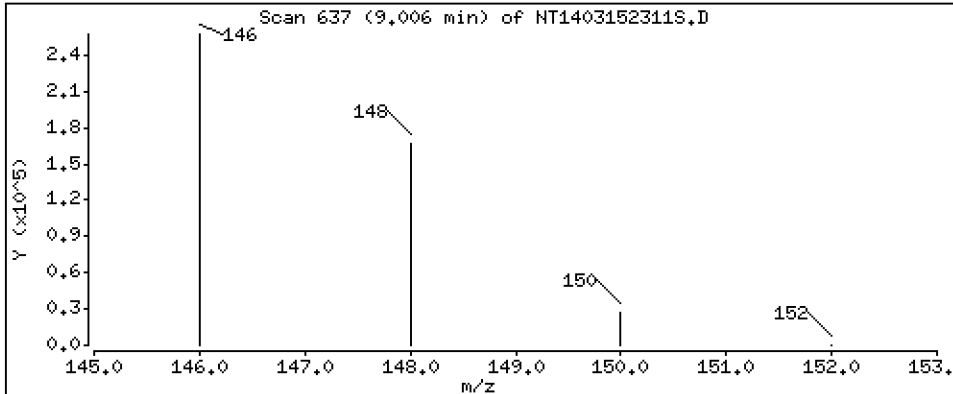
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,839 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

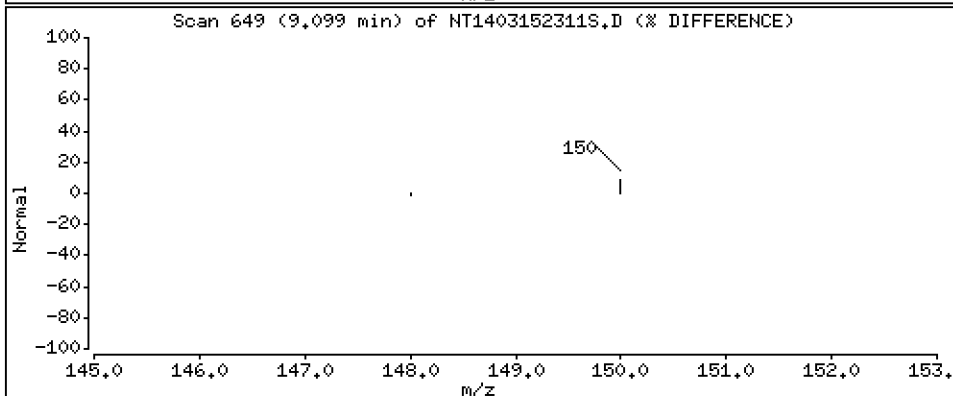
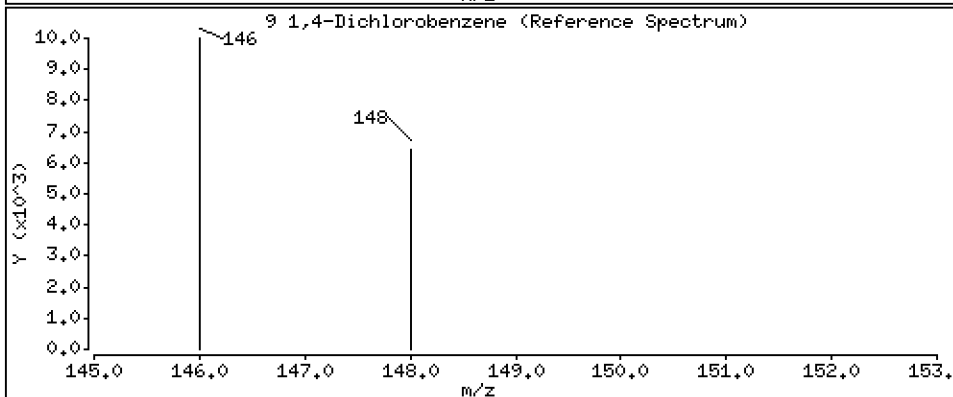
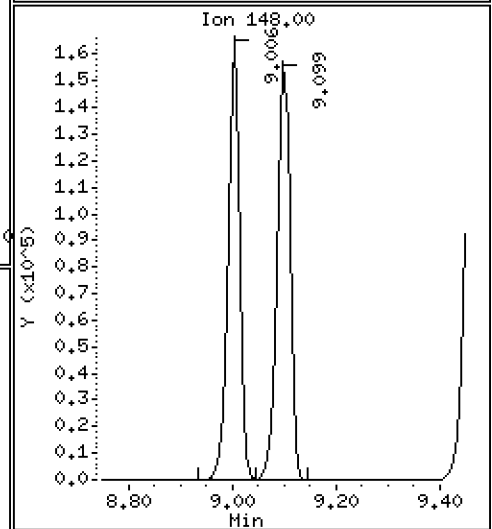
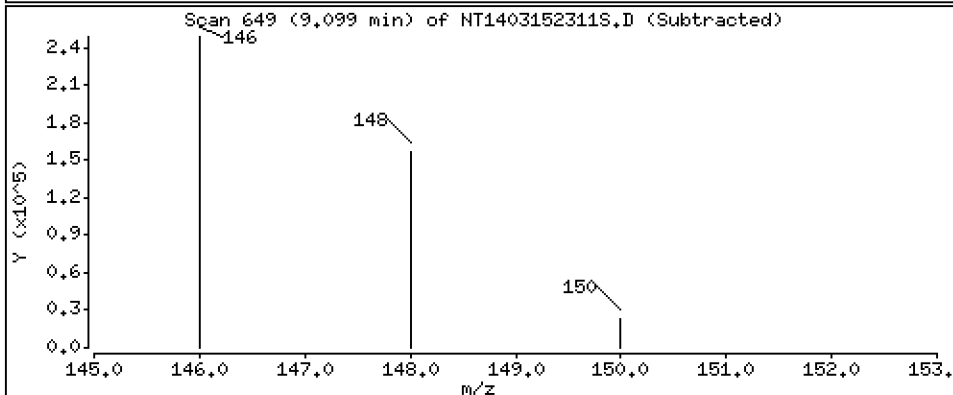
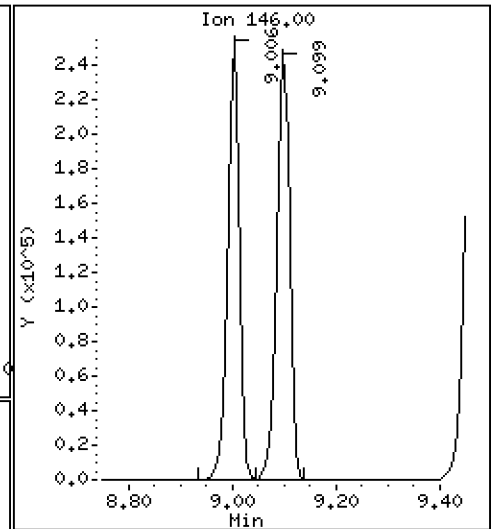
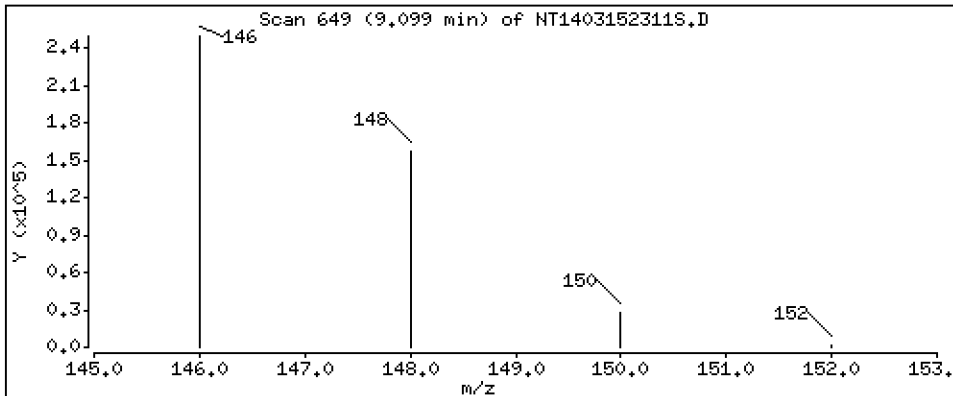
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.848 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

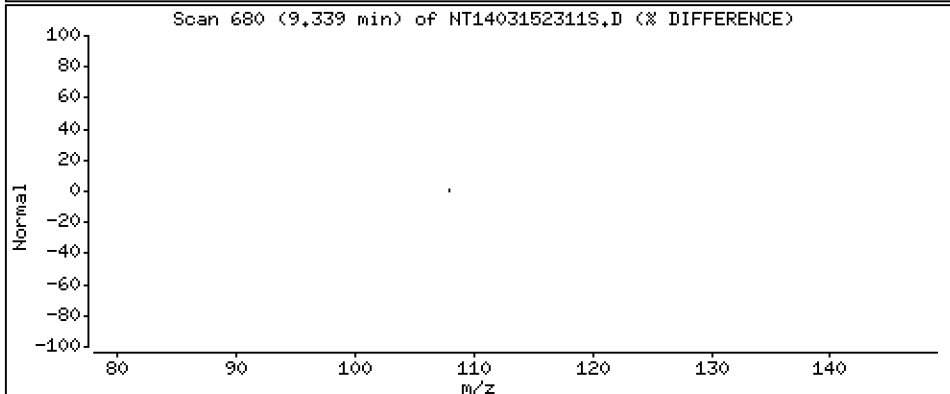
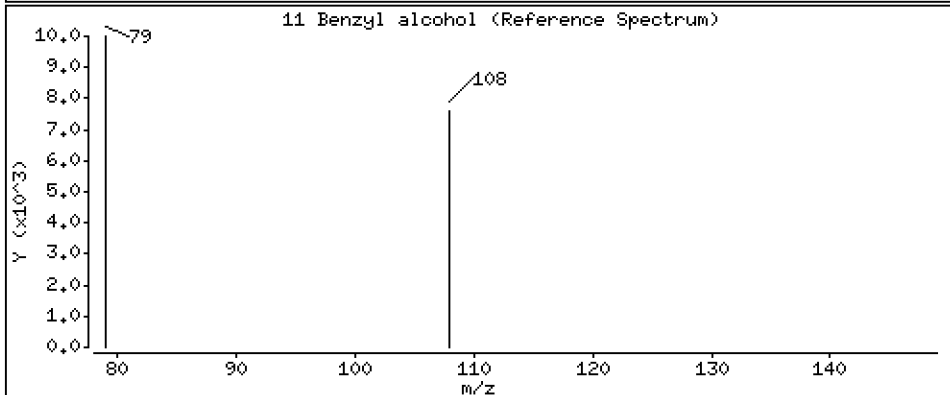
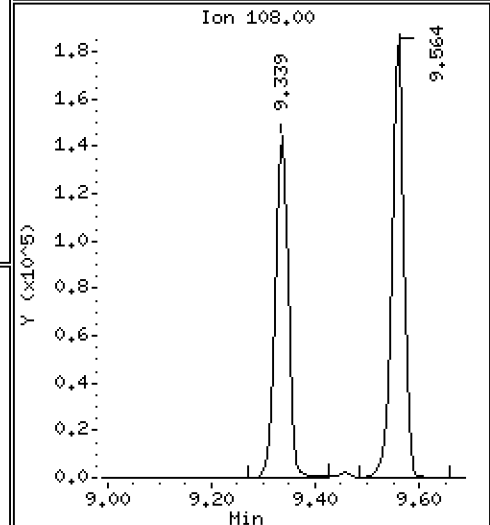
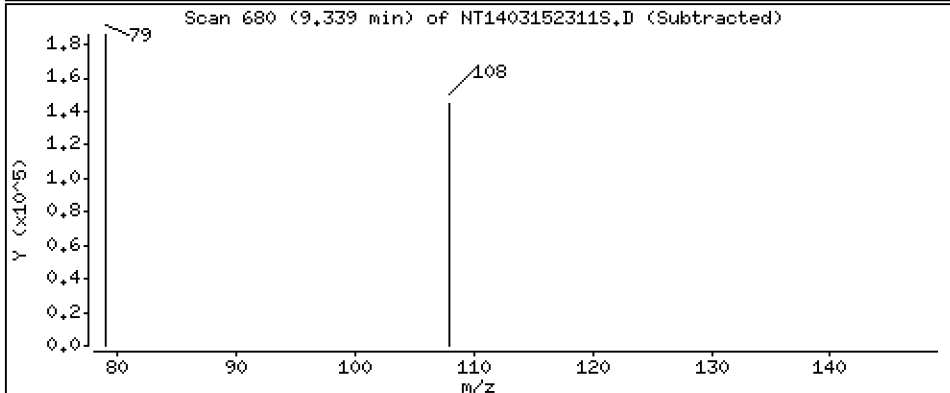
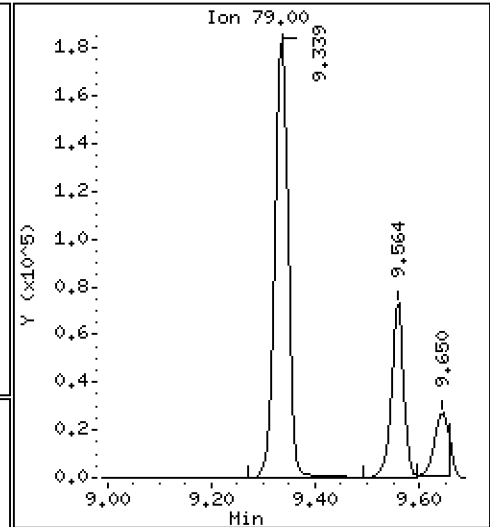
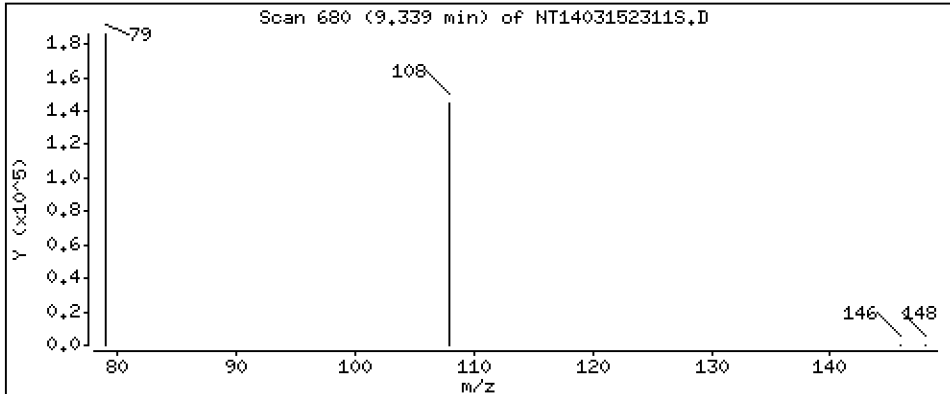
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 5,343 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

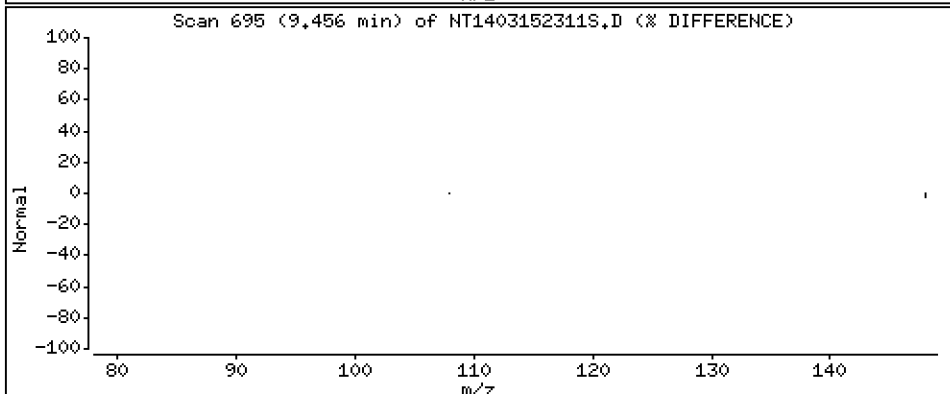
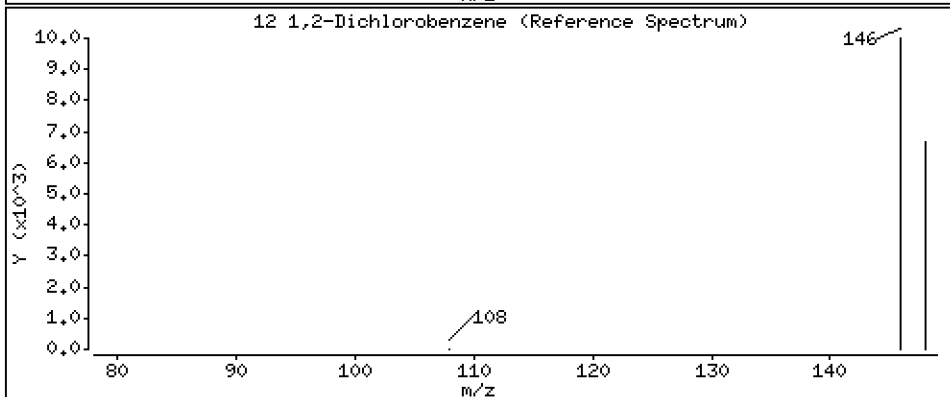
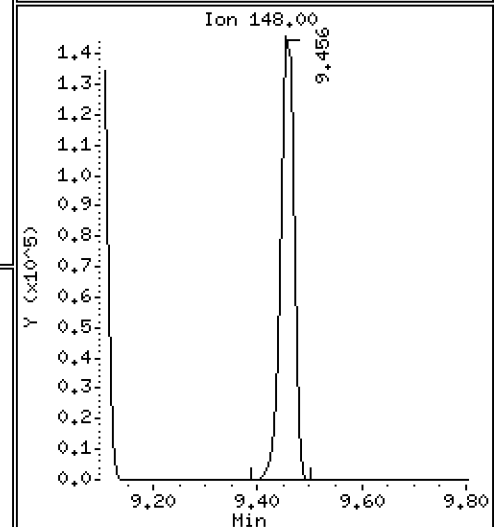
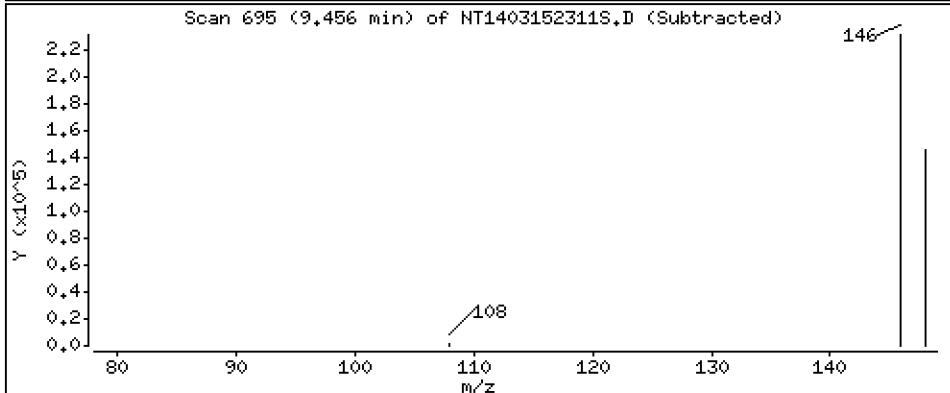
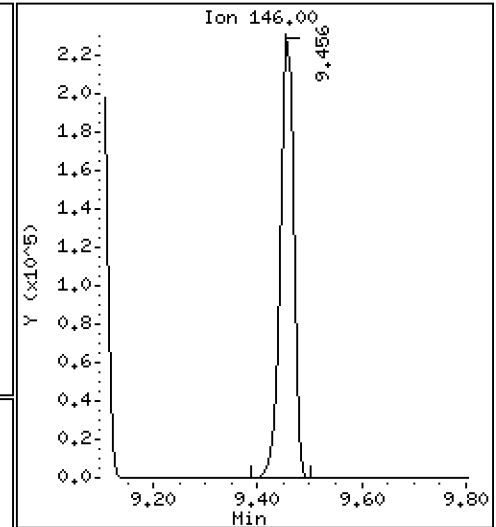
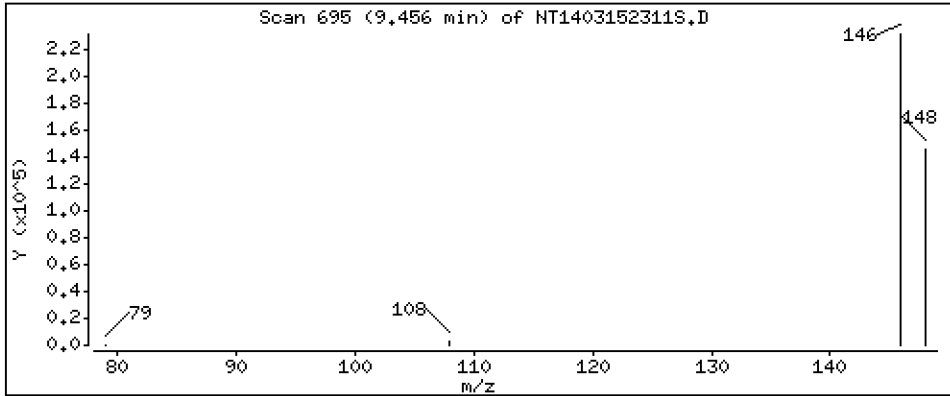
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4.822 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

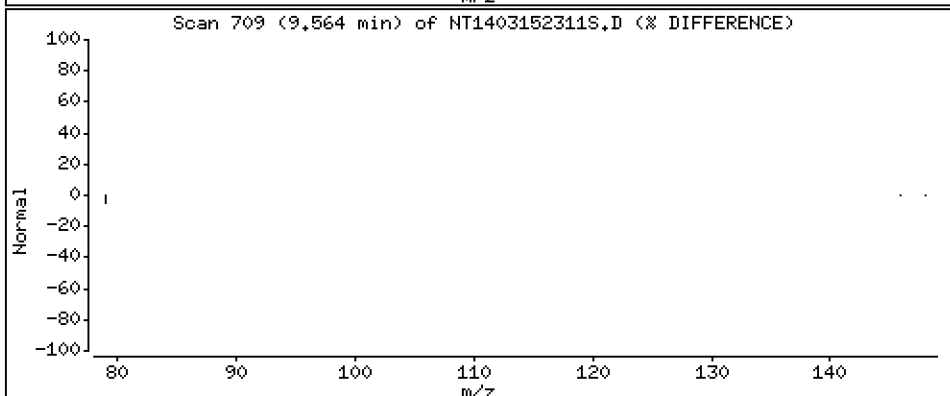
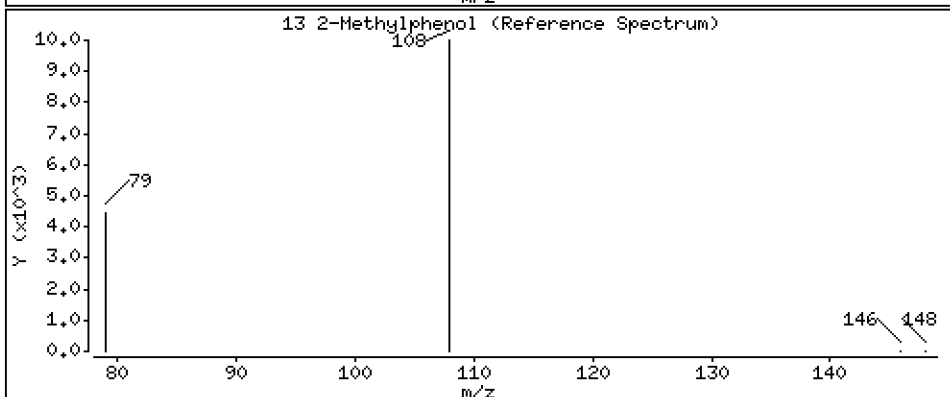
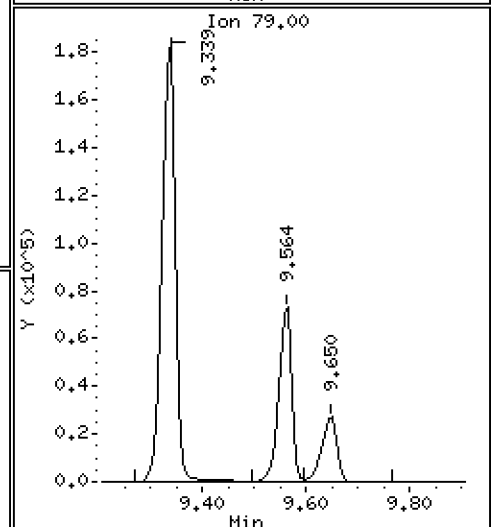
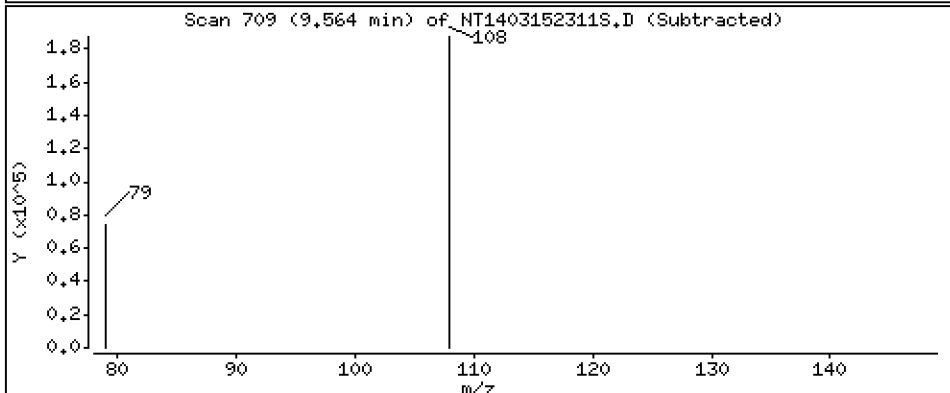
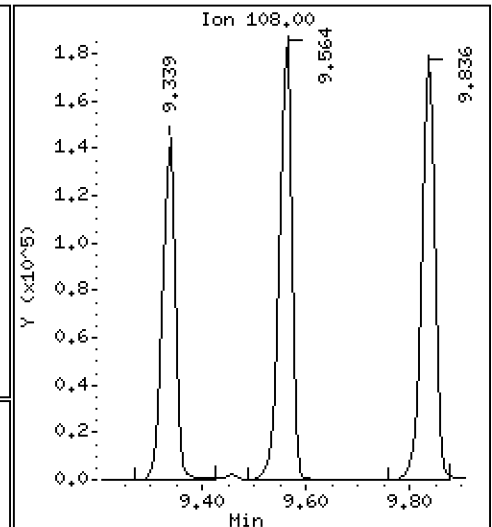
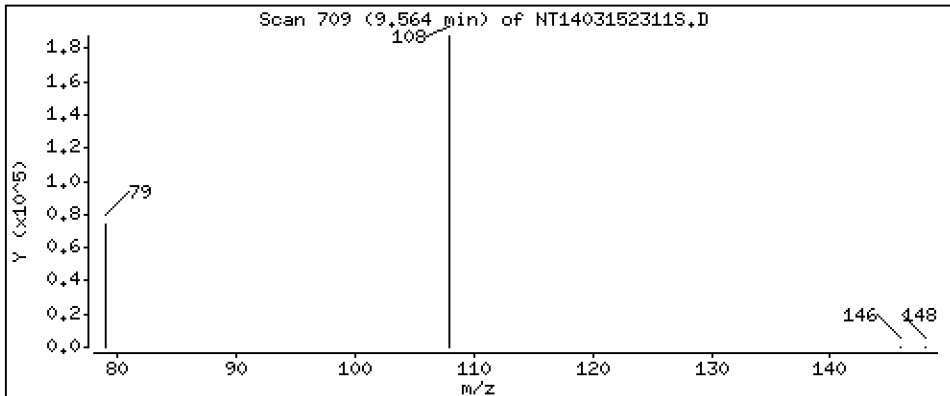
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.288 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

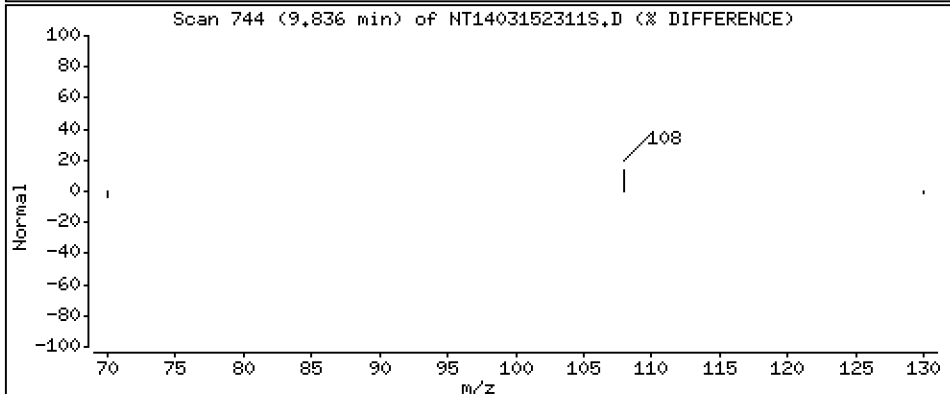
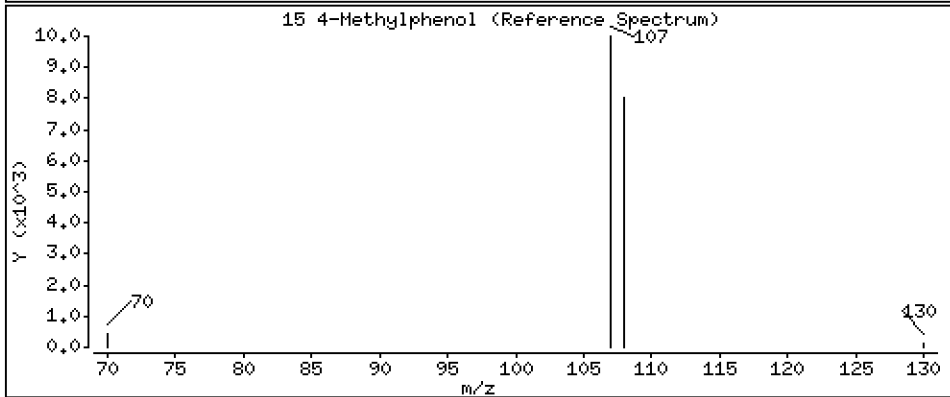
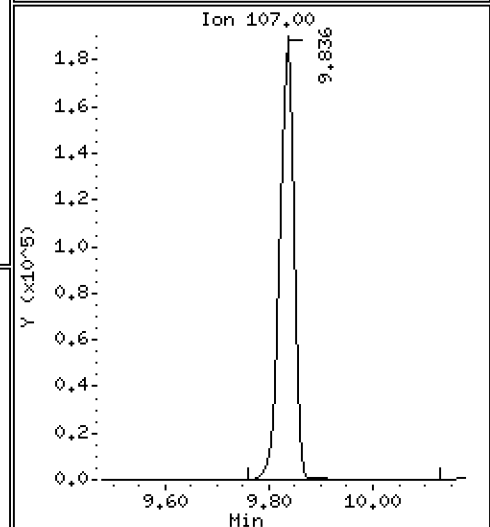
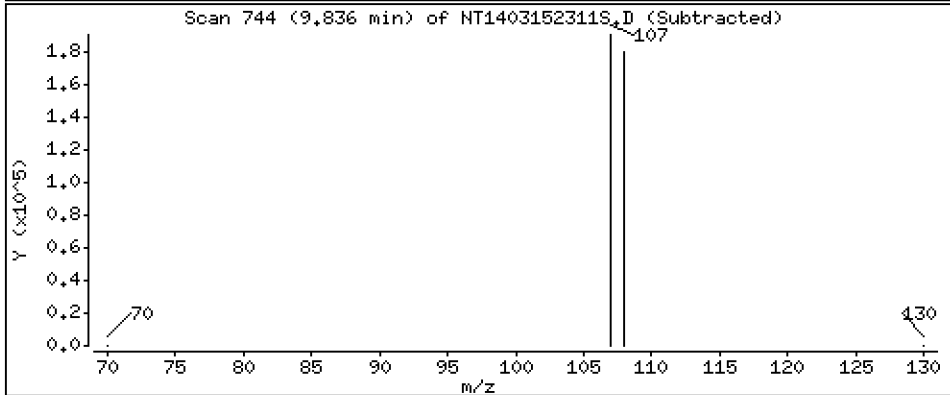
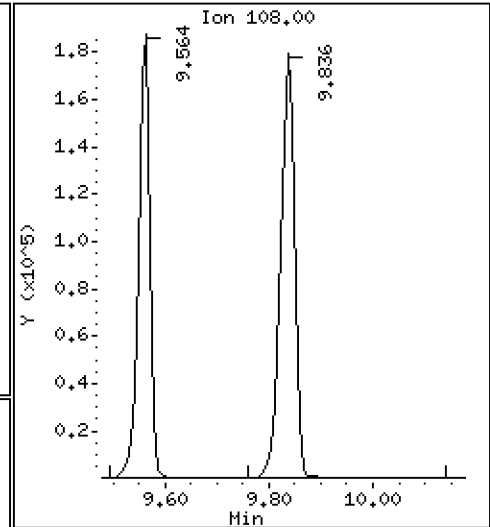
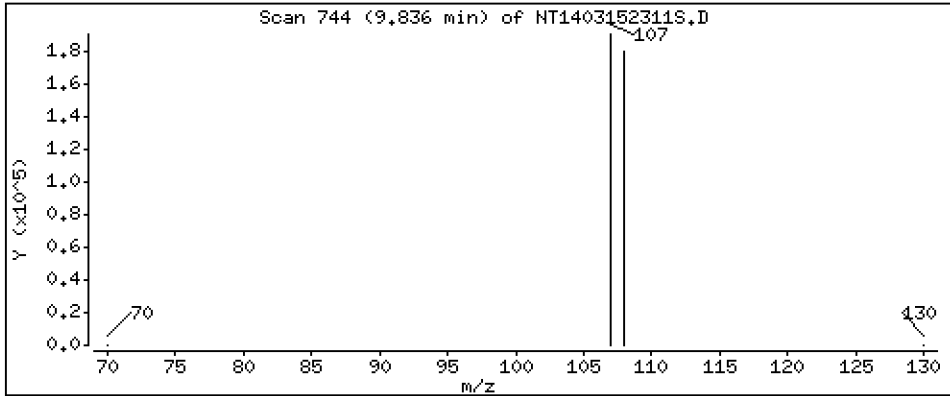
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,539 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

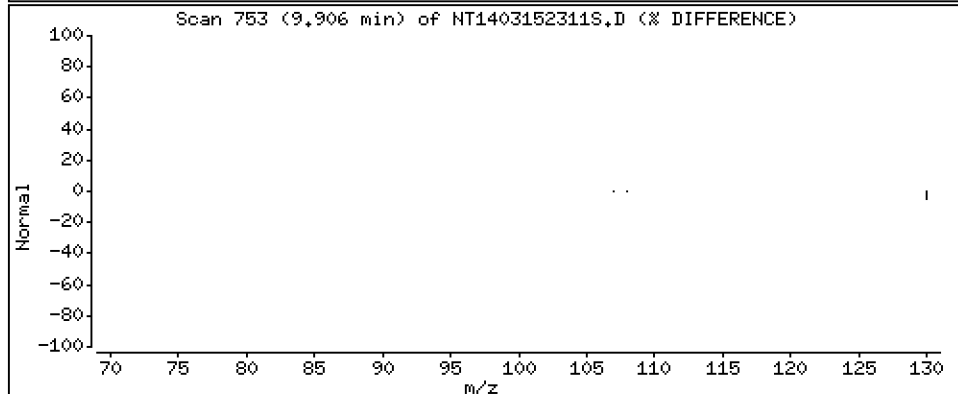
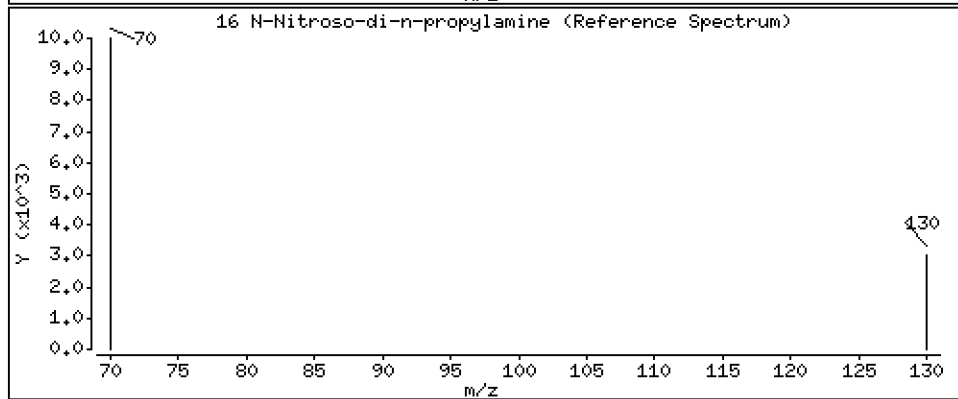
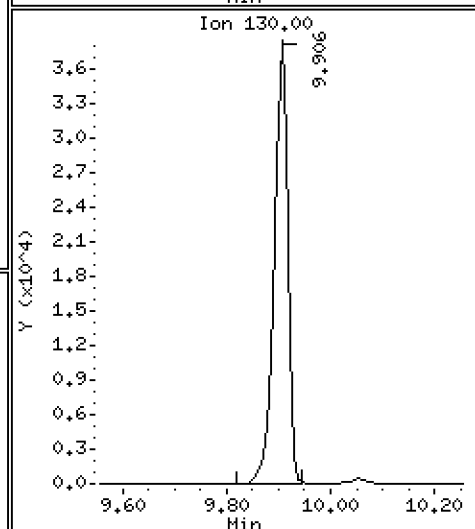
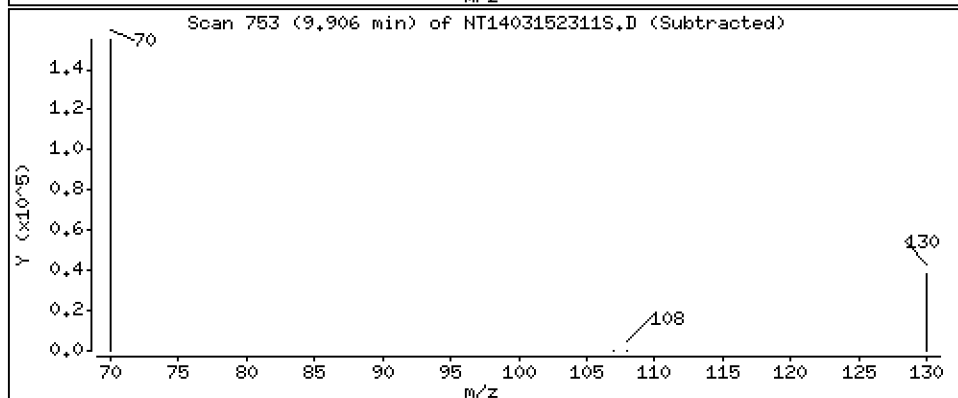
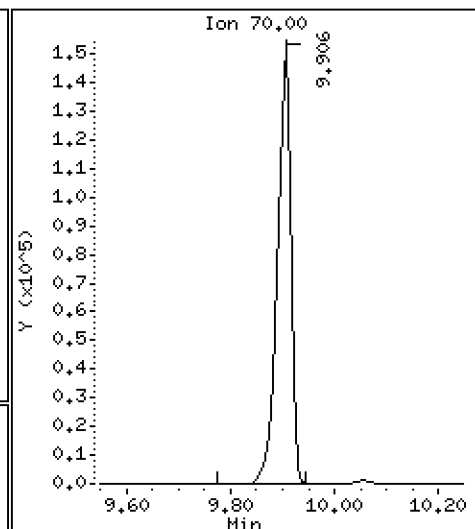
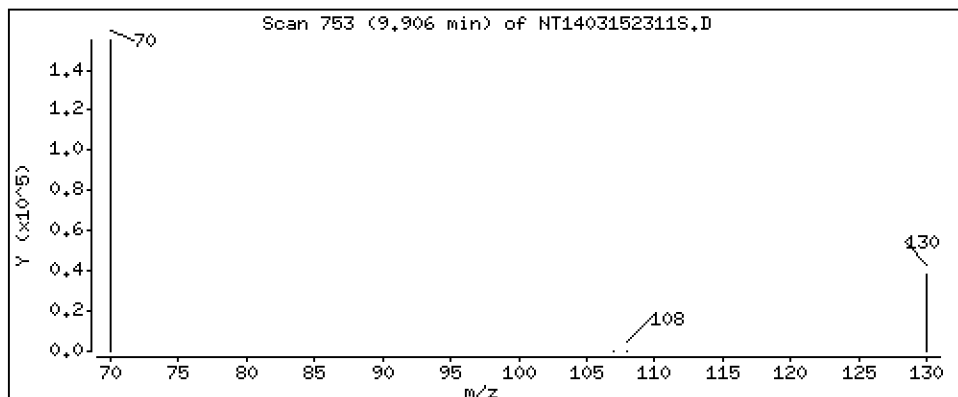
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,137 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

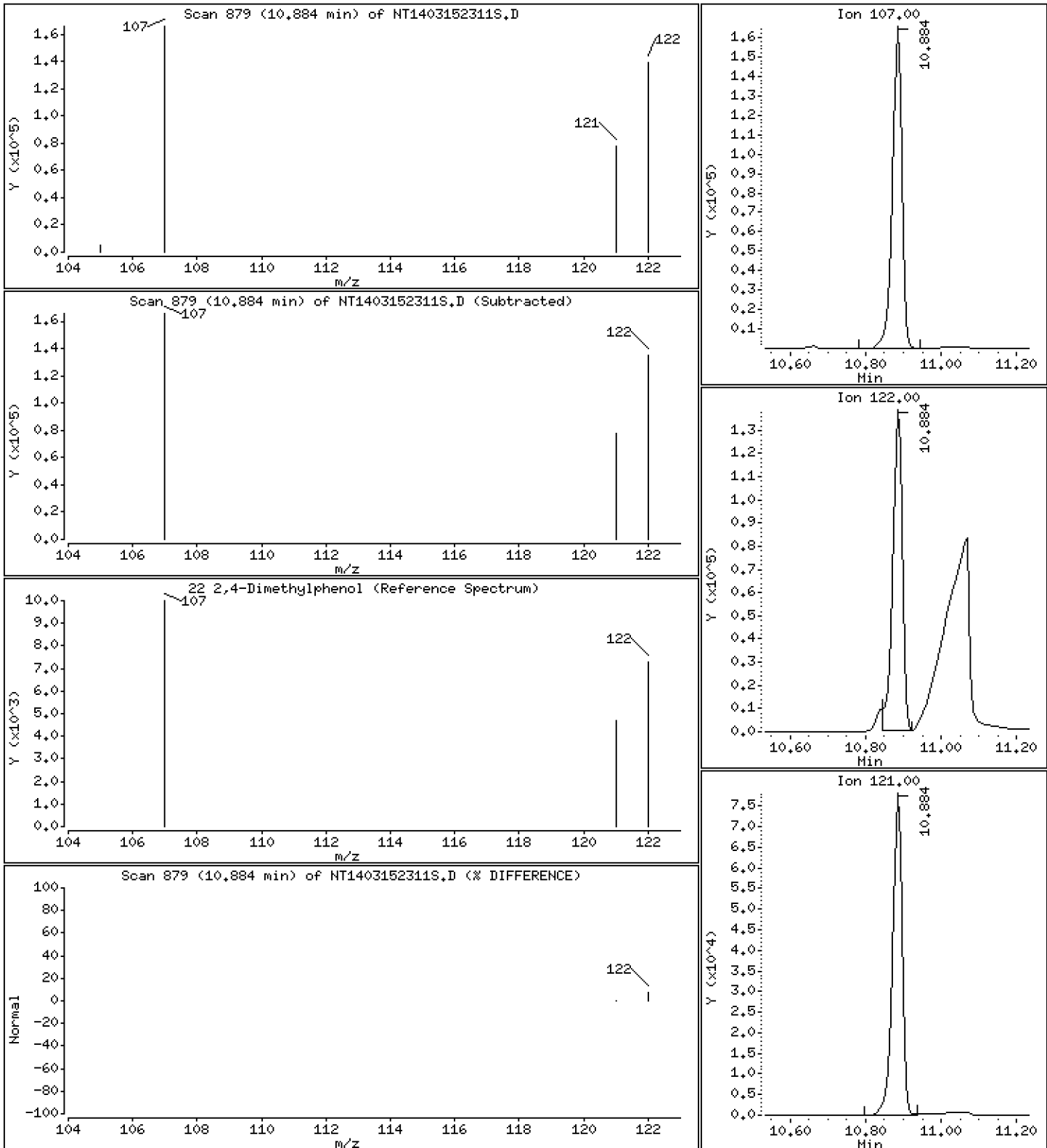
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,934 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

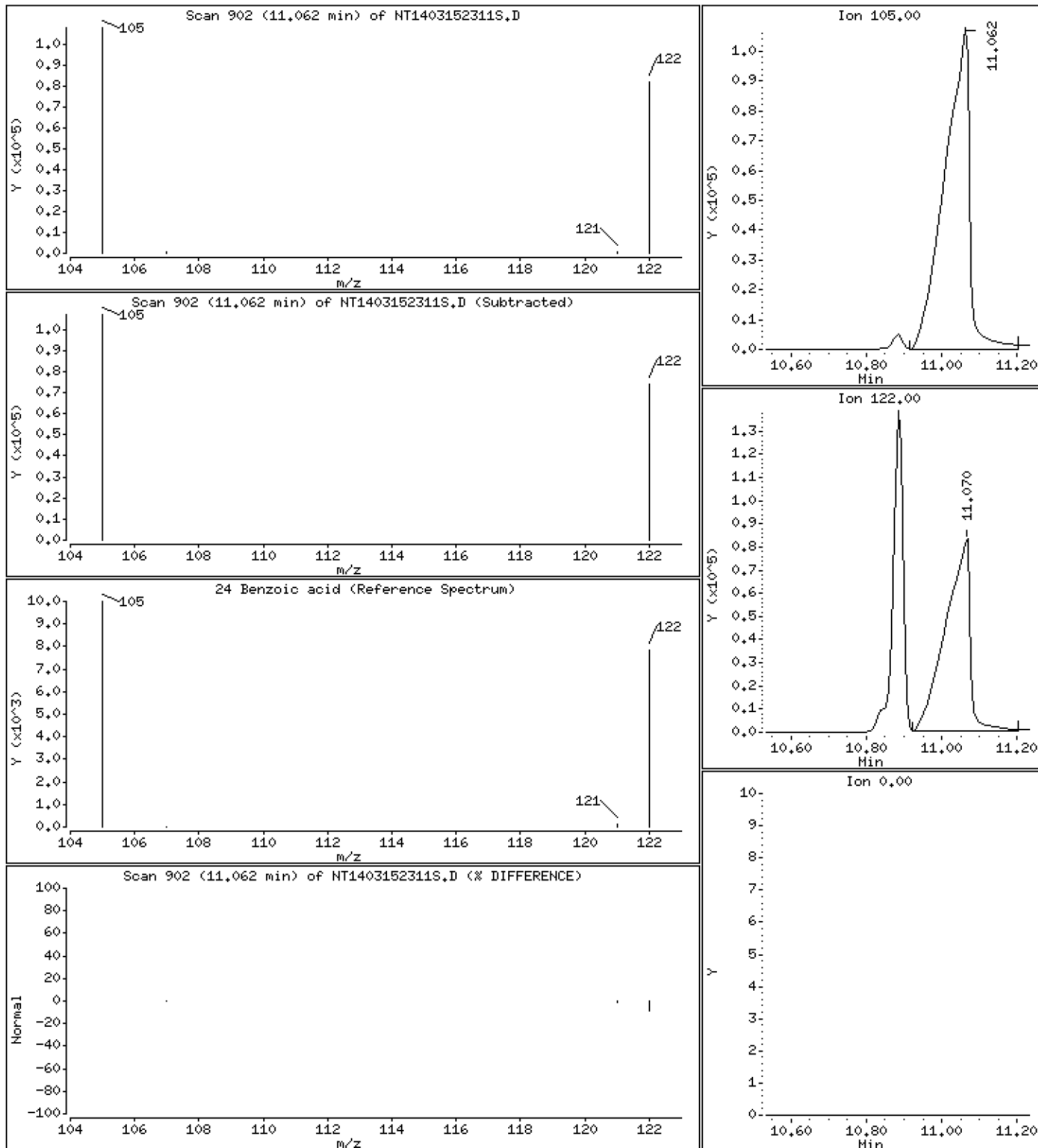
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 9.081 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

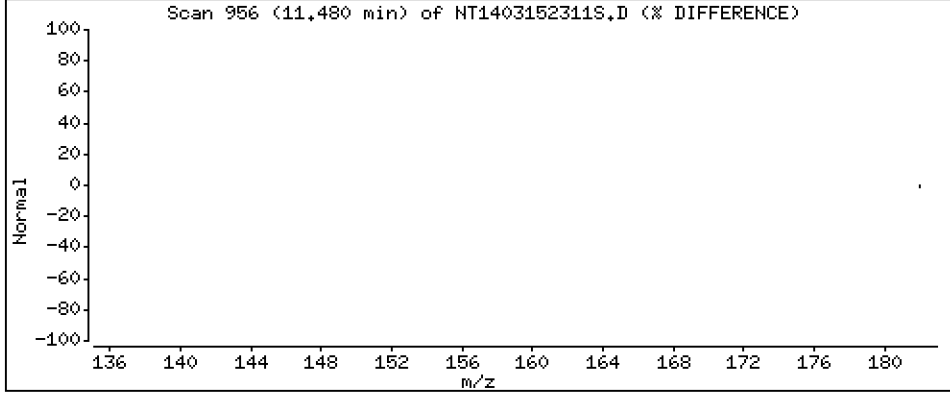
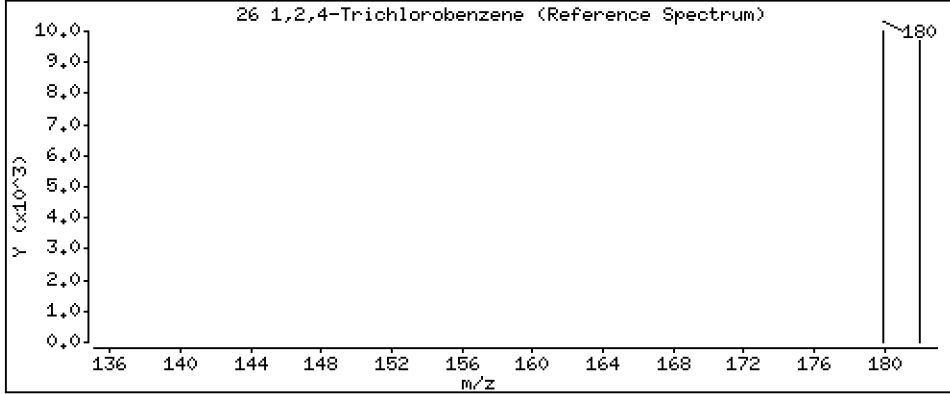
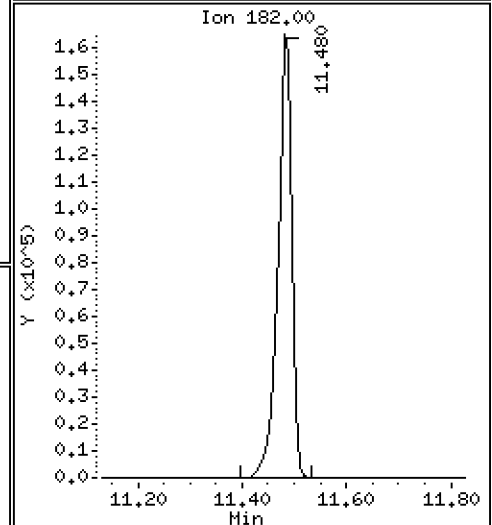
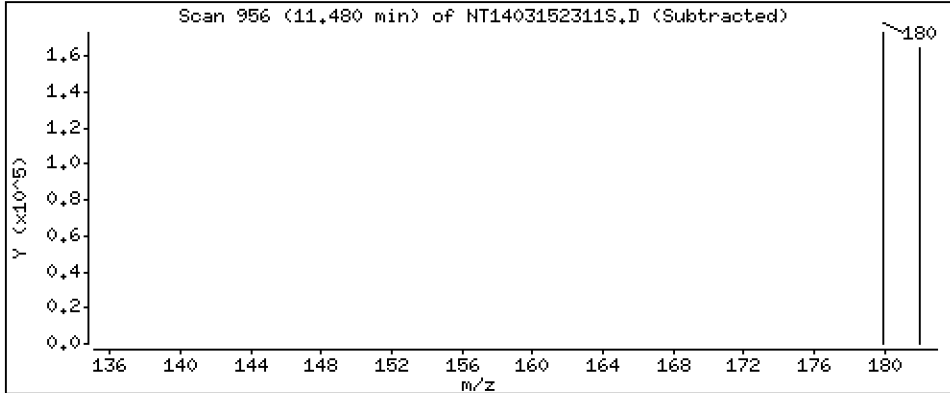
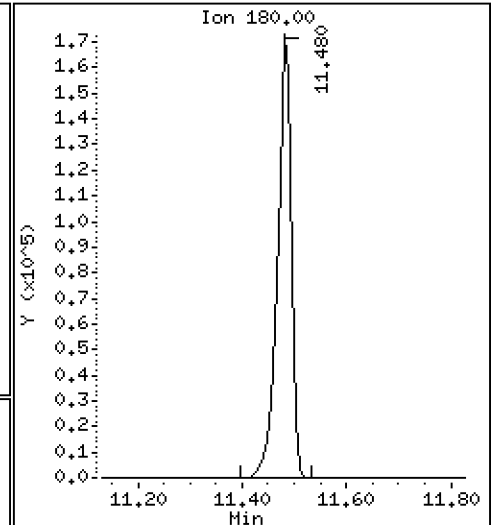
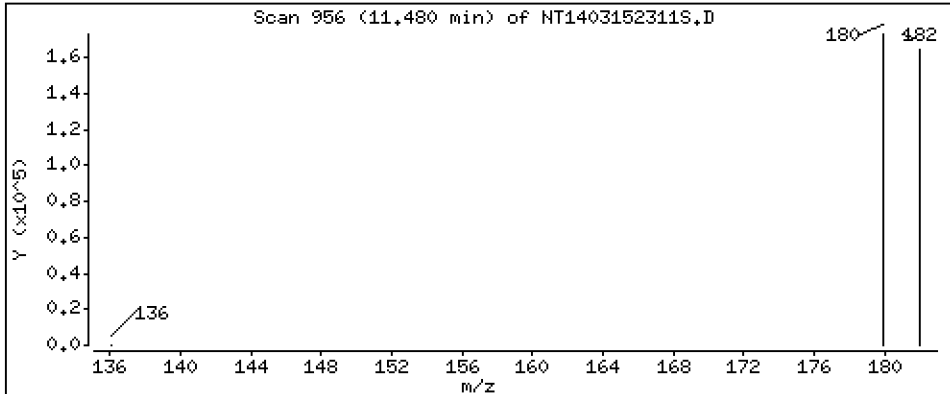
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,574 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

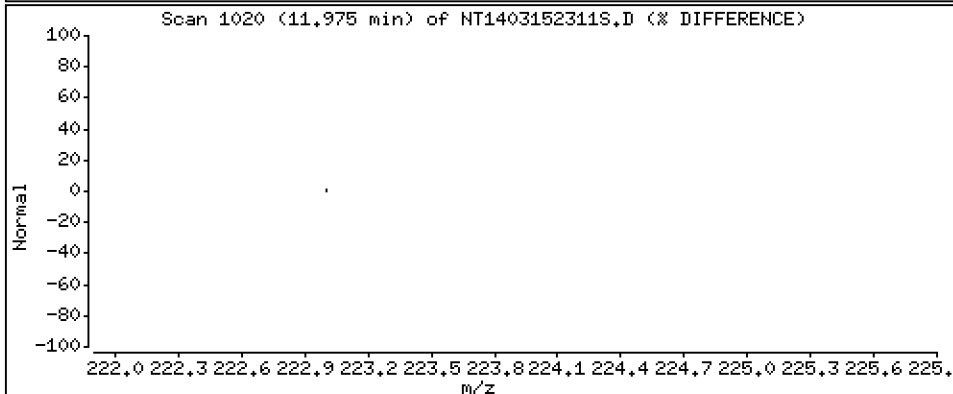
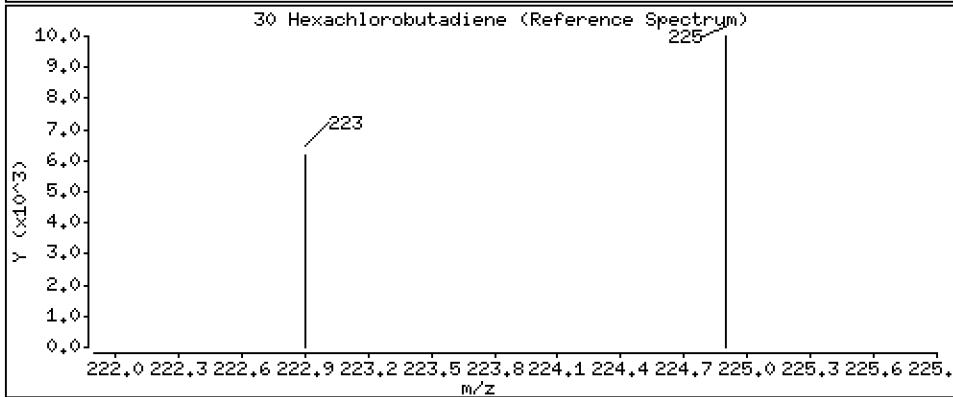
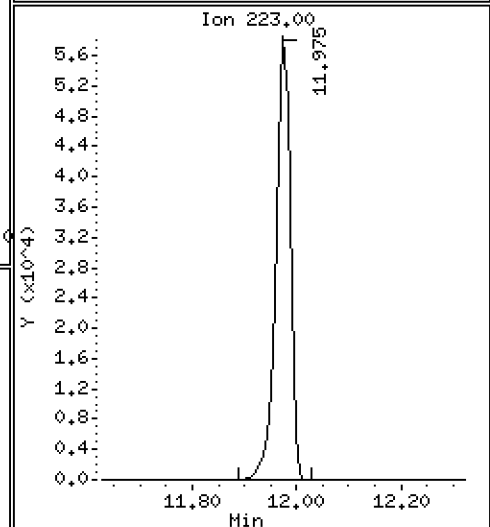
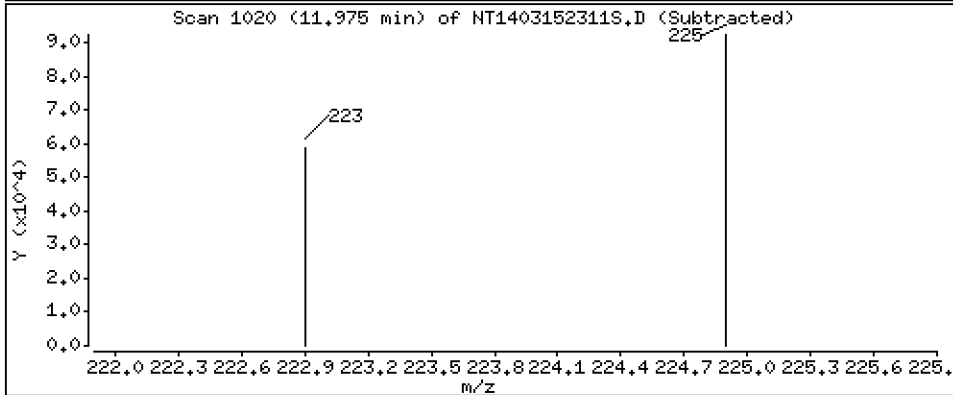
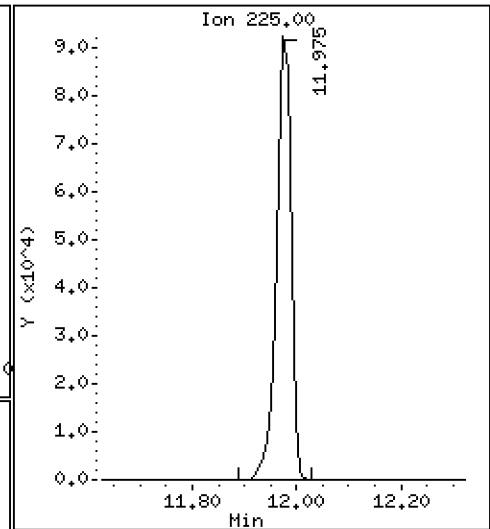
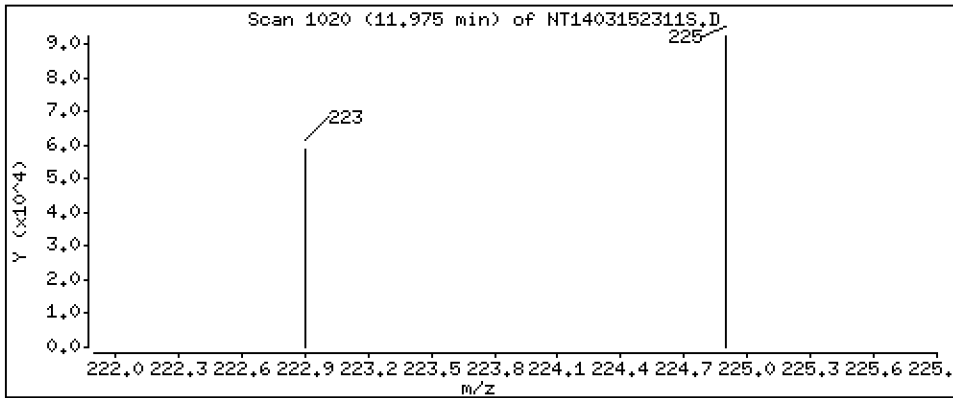
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,973 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

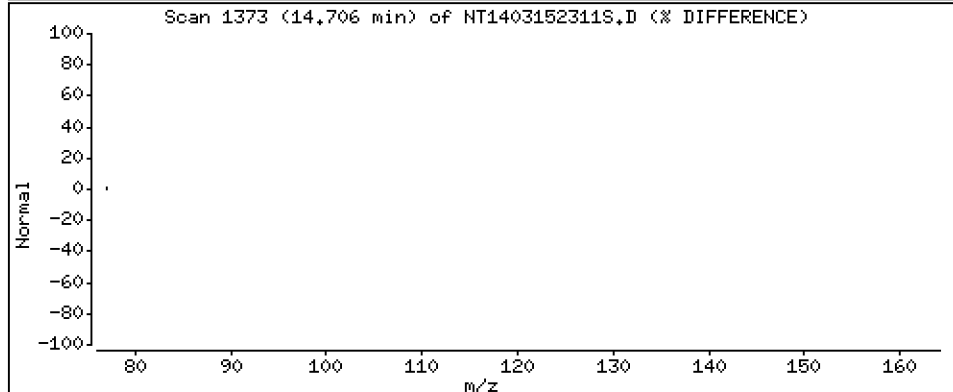
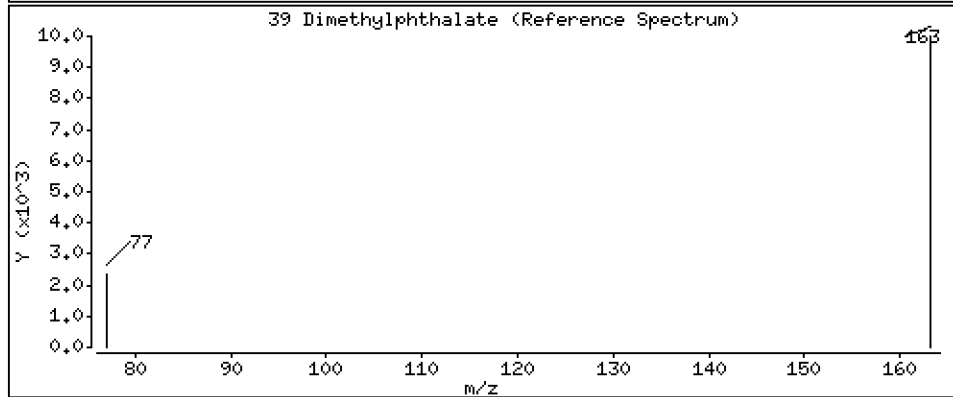
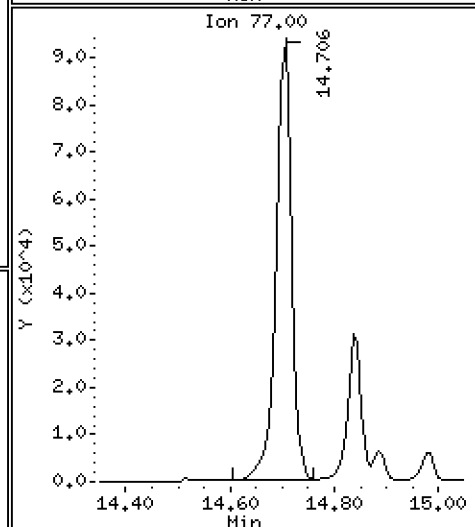
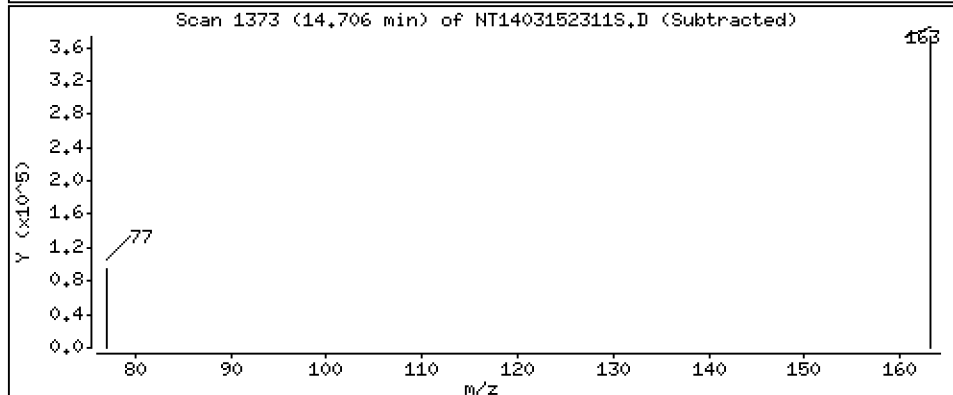
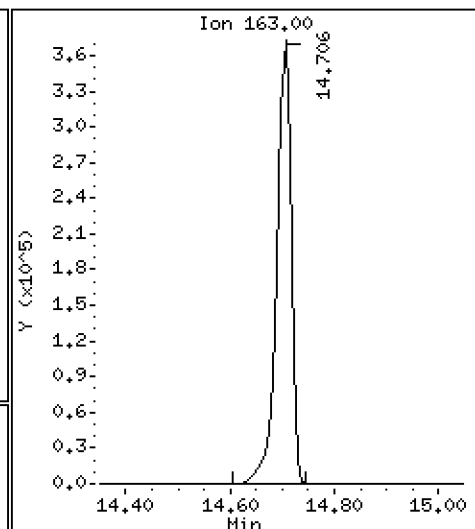
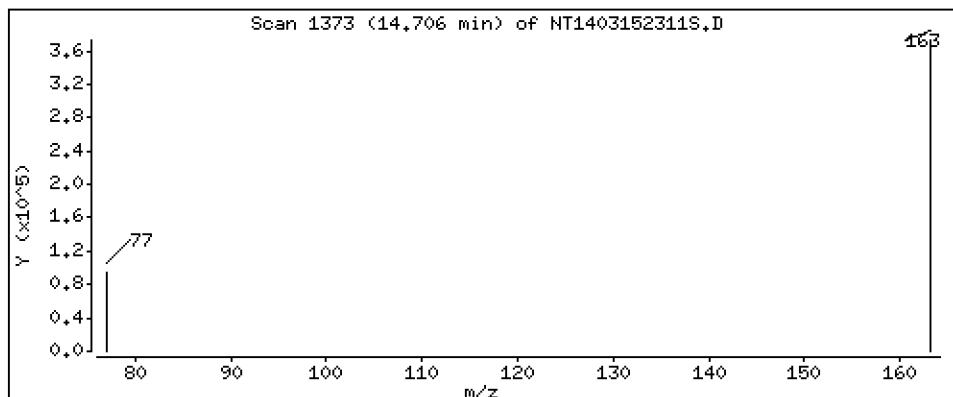
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,995 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

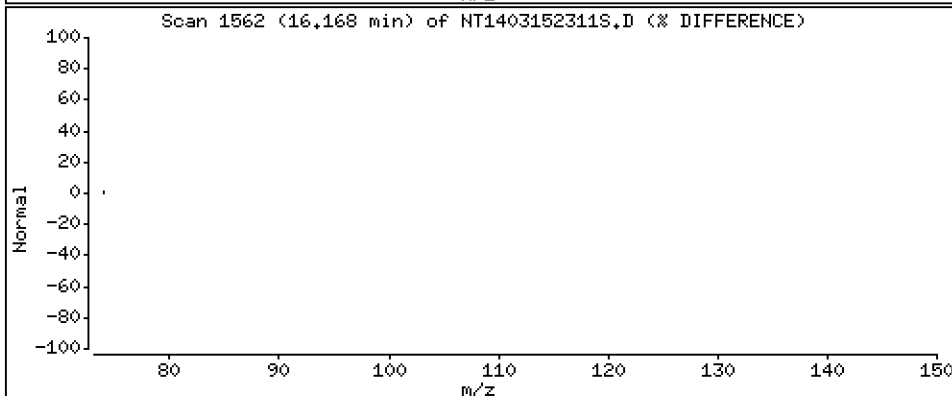
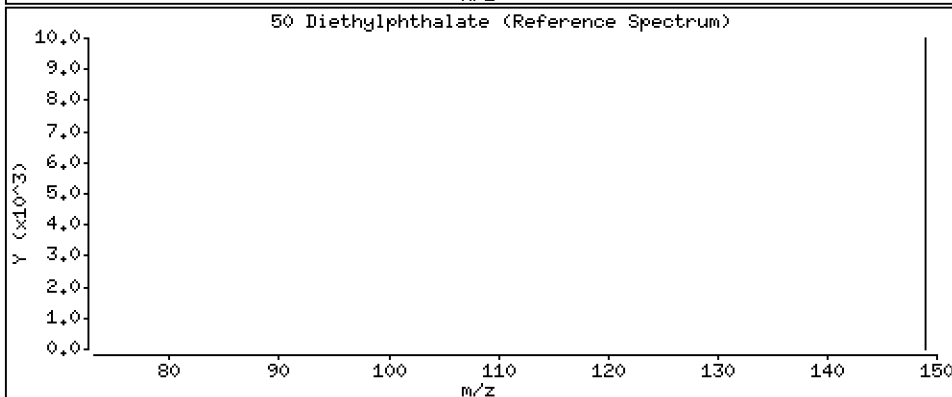
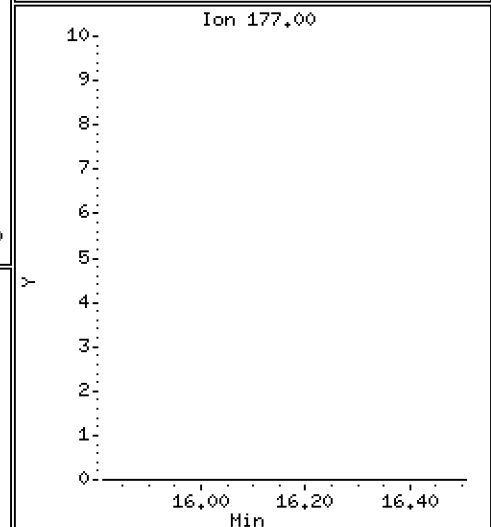
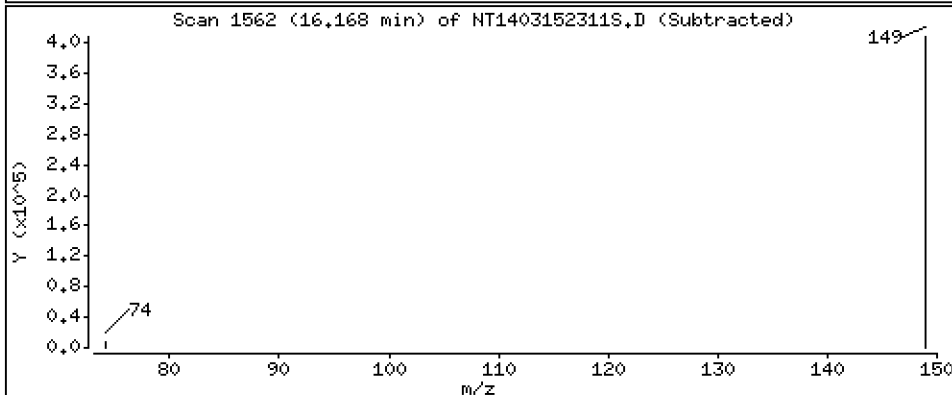
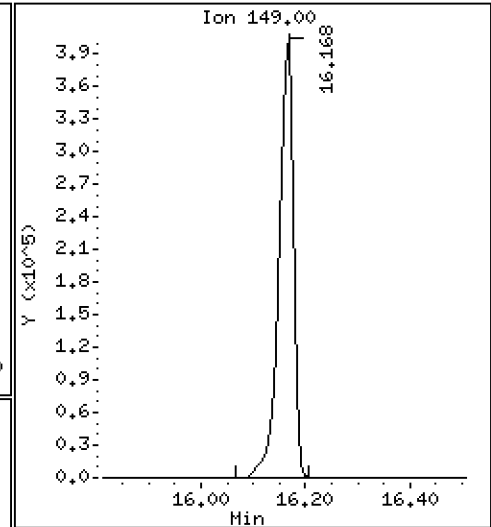
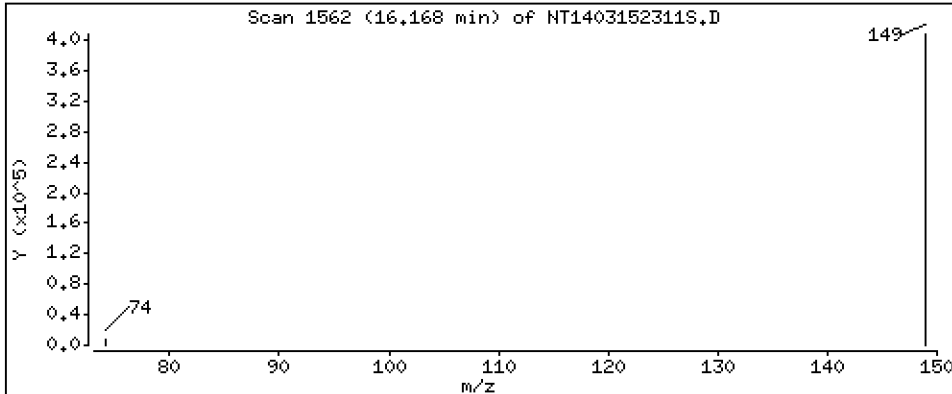
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,174 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

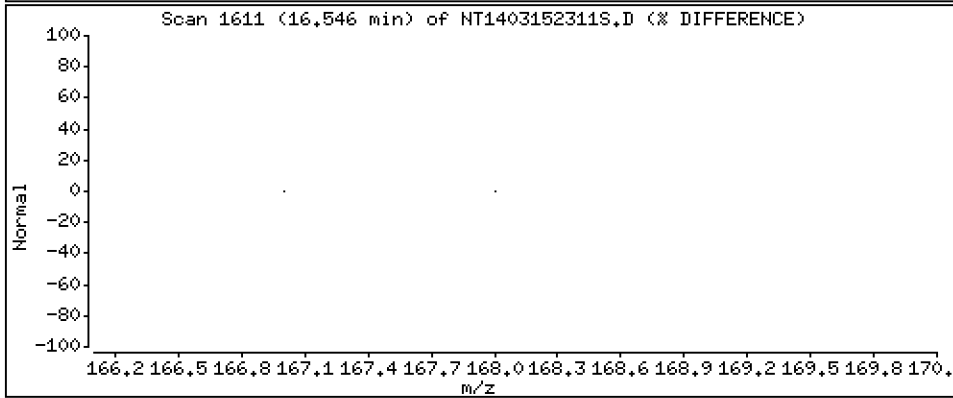
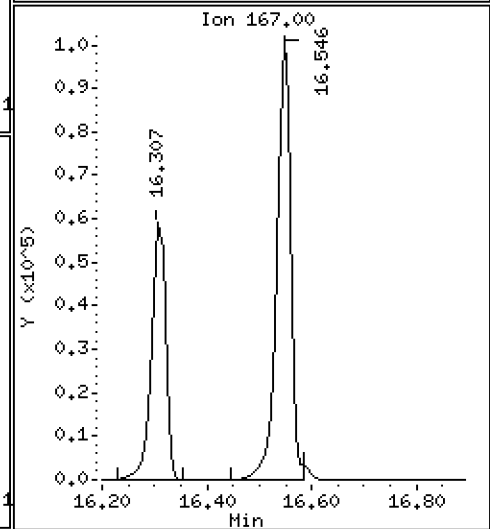
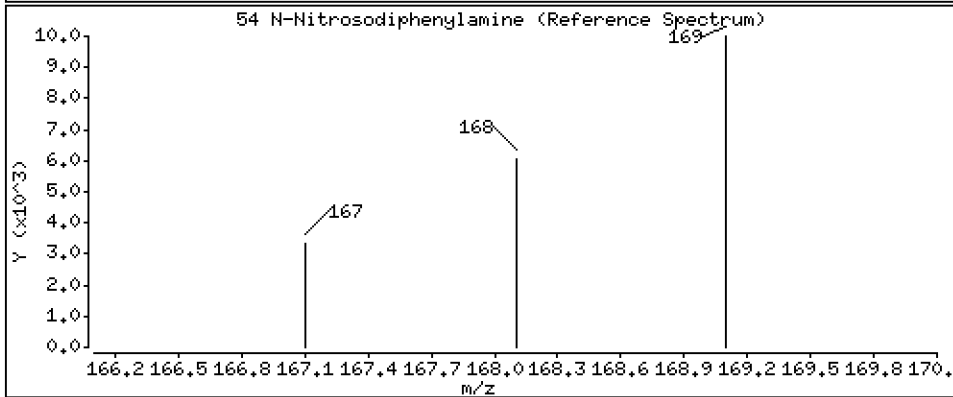
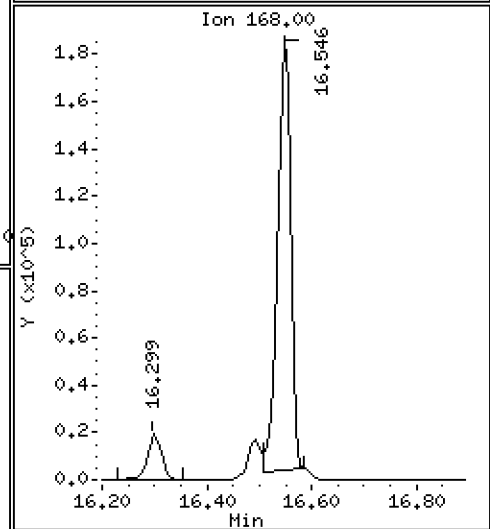
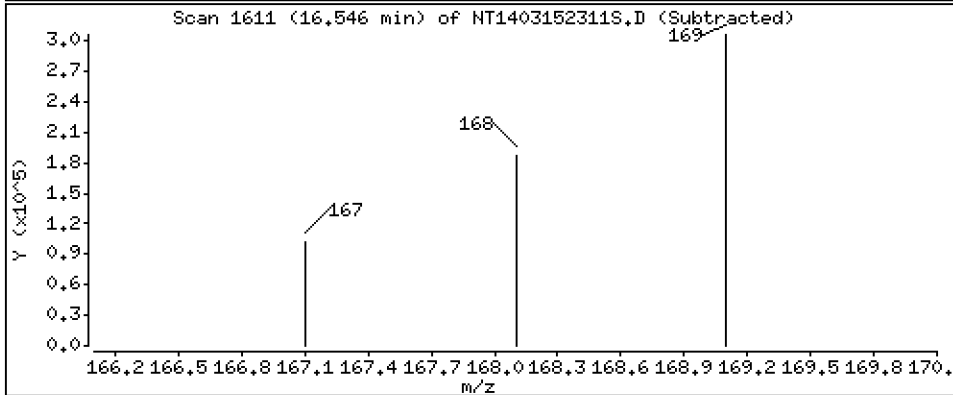
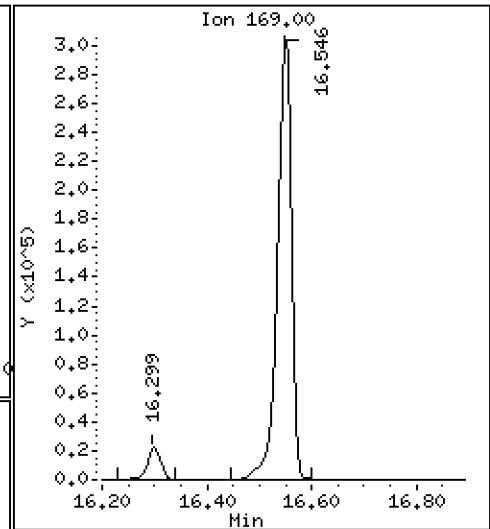
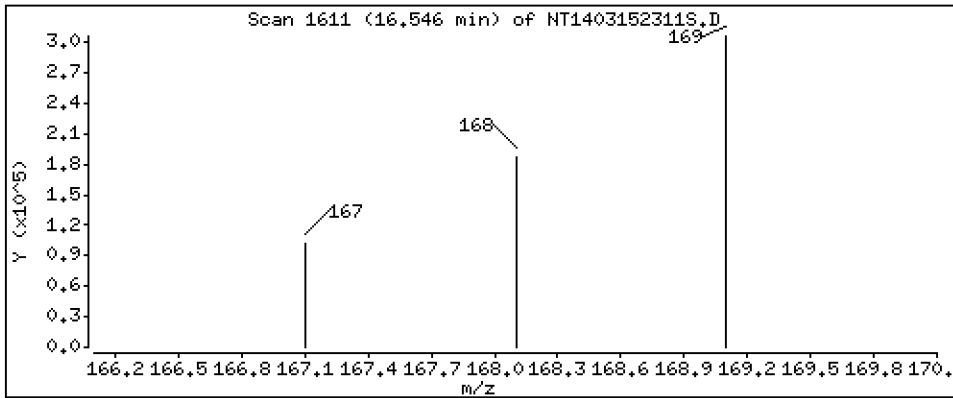
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,019 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

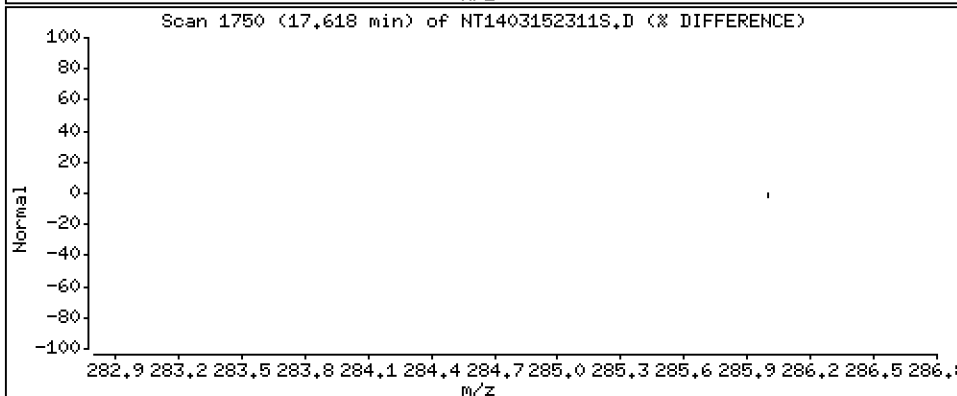
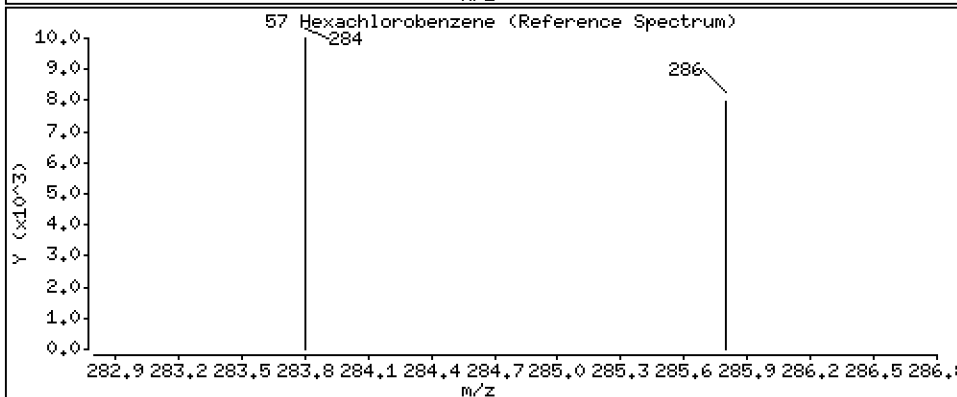
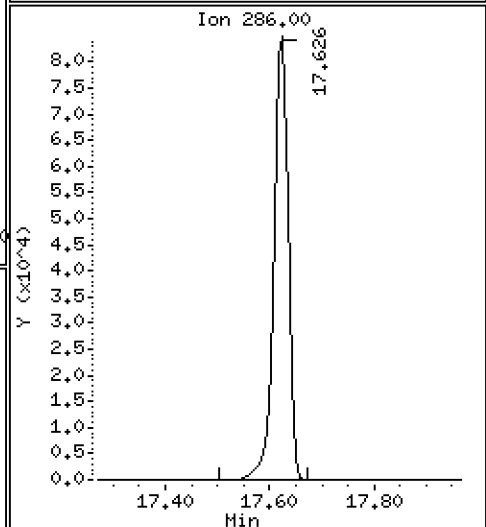
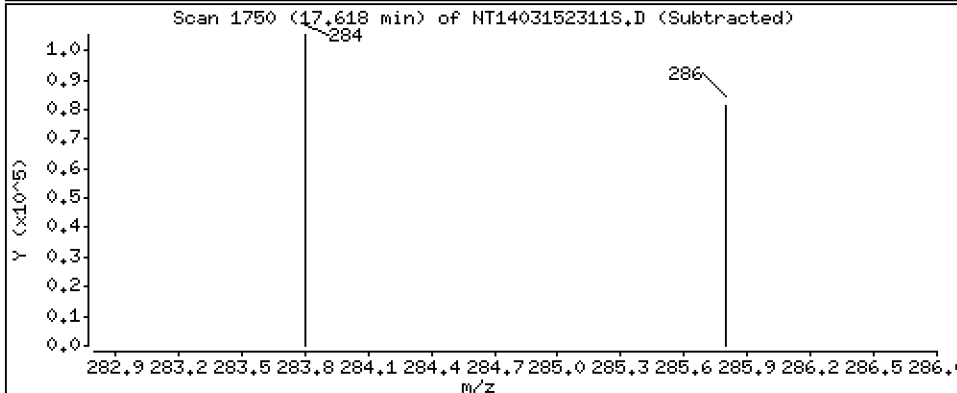
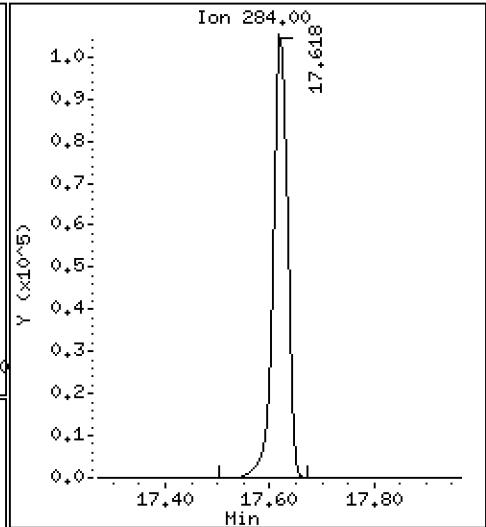
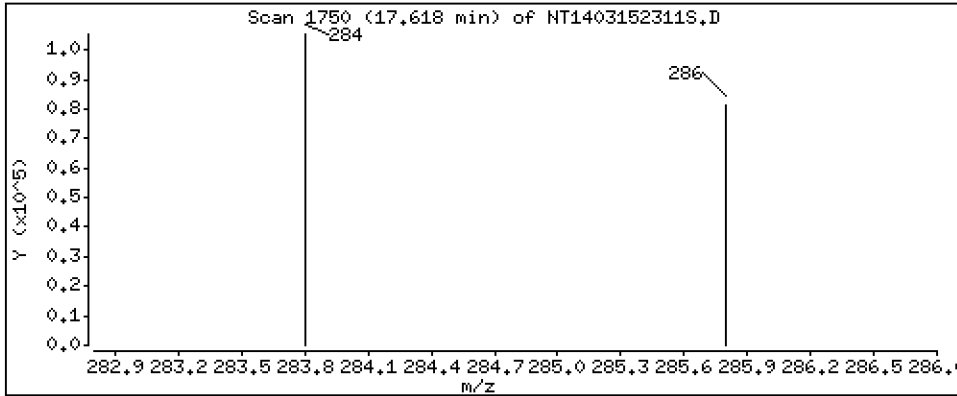
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,693 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

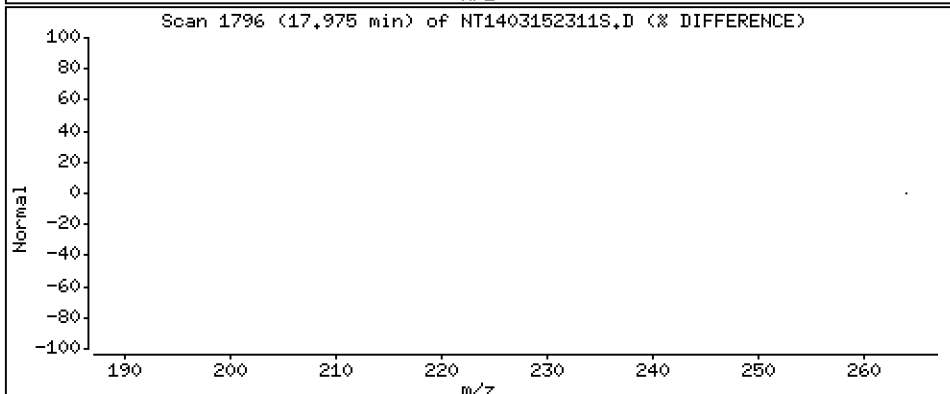
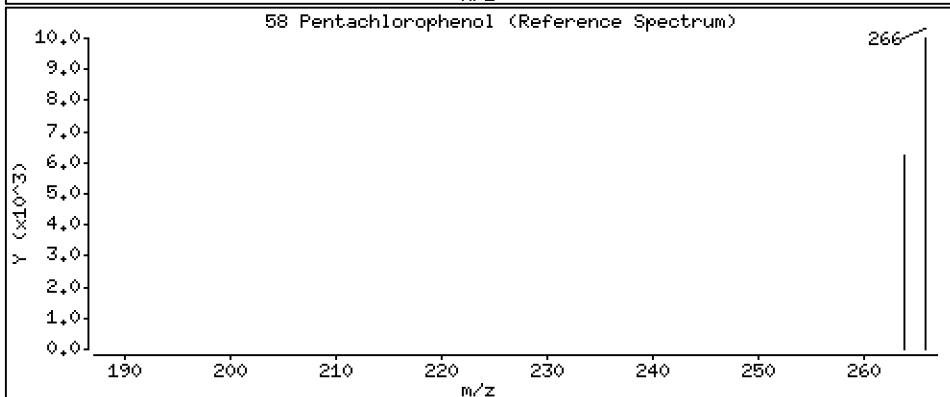
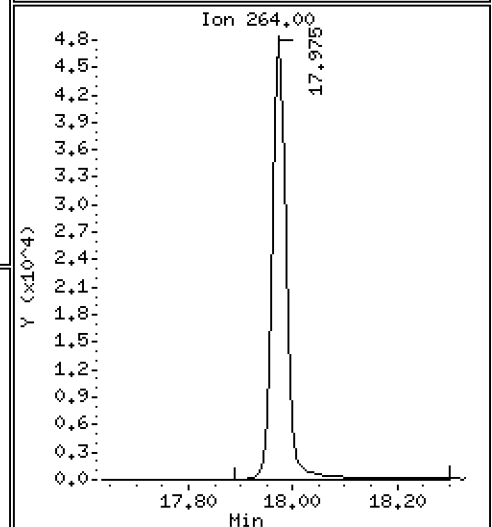
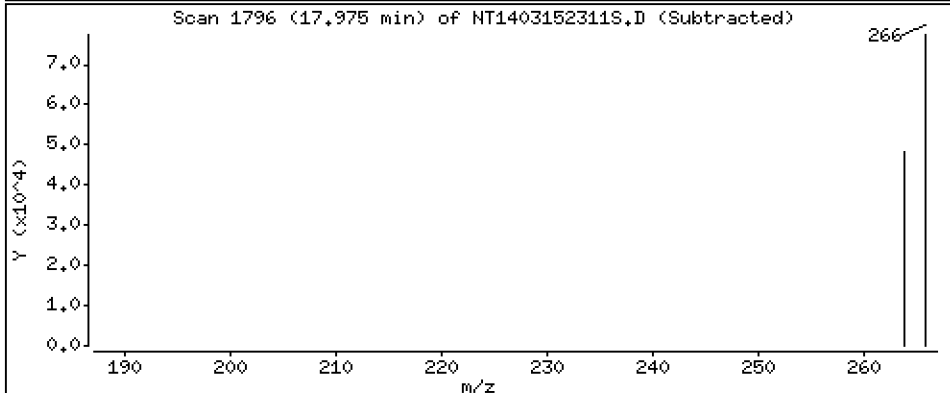
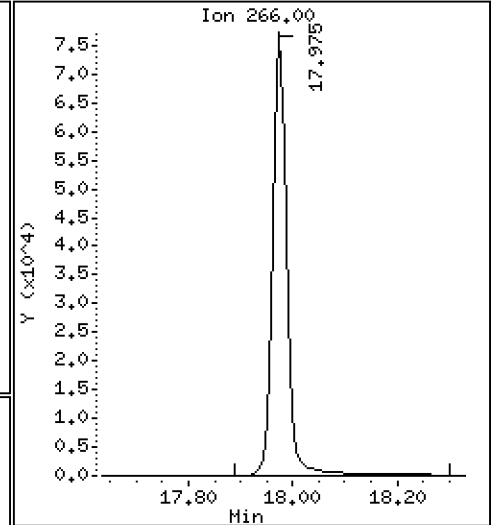
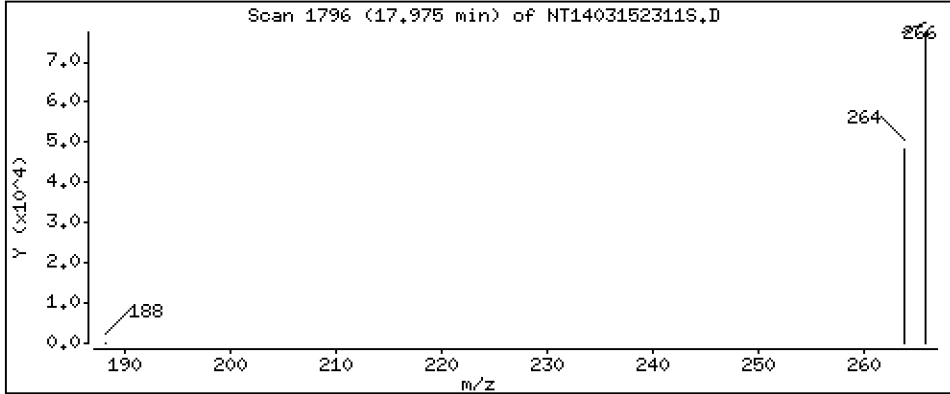
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,800 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

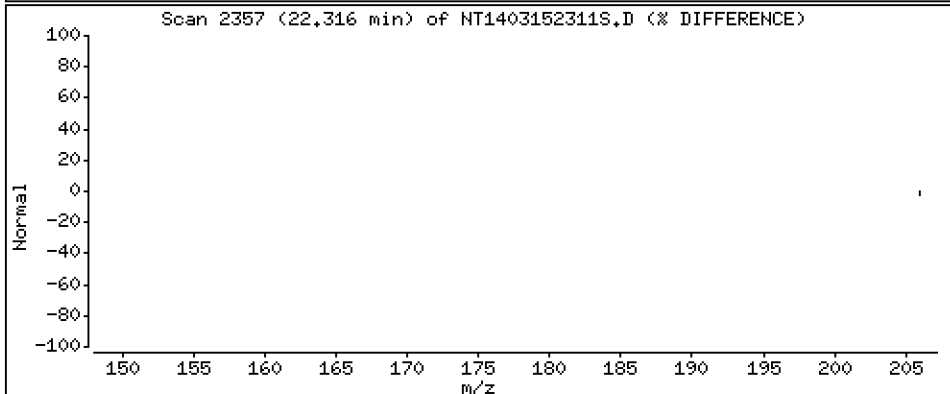
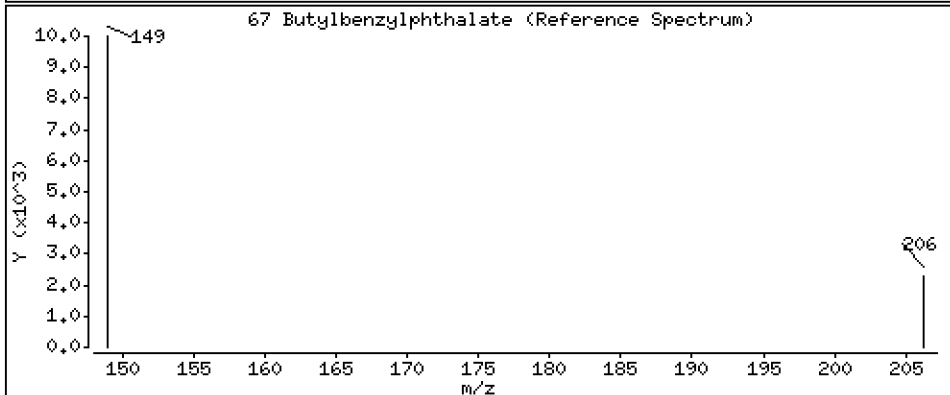
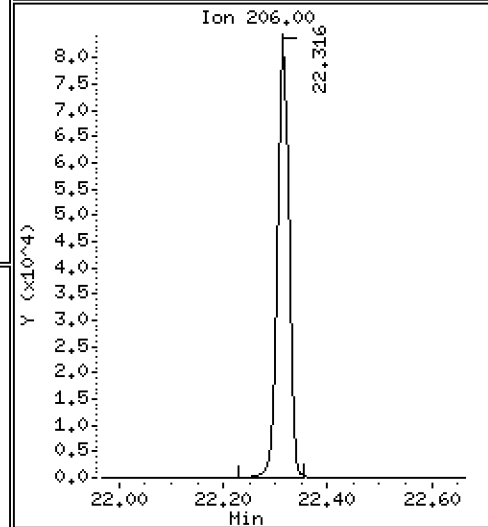
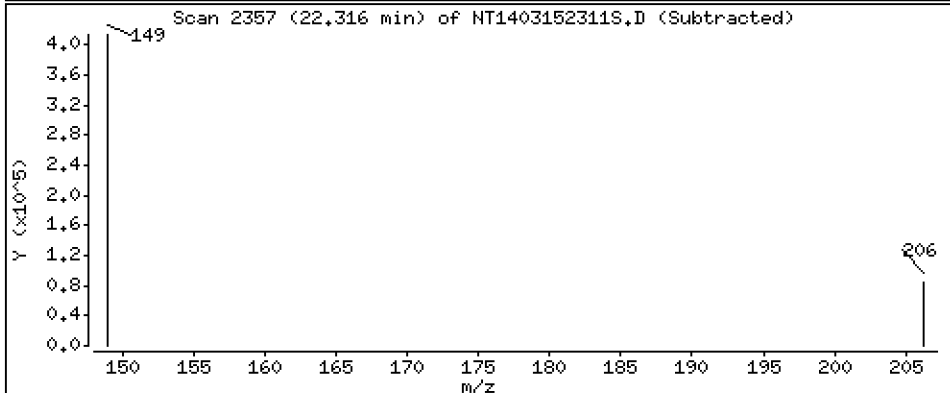
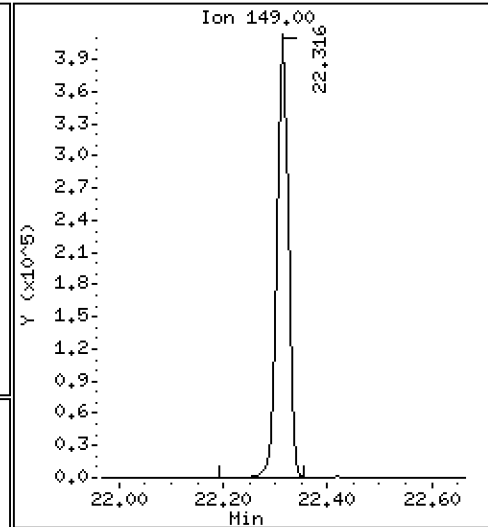
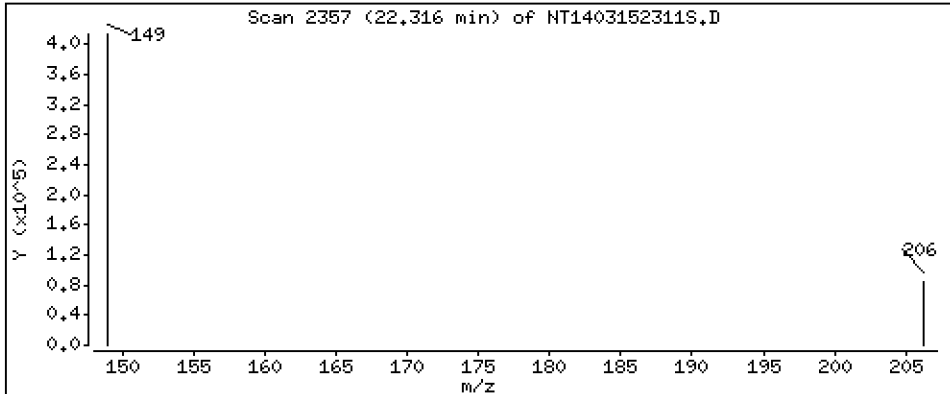
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,366 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

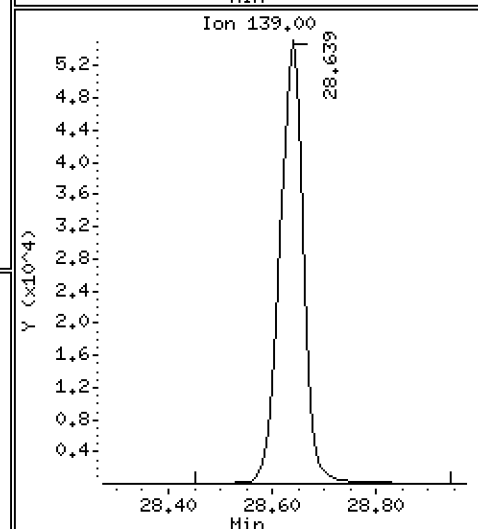
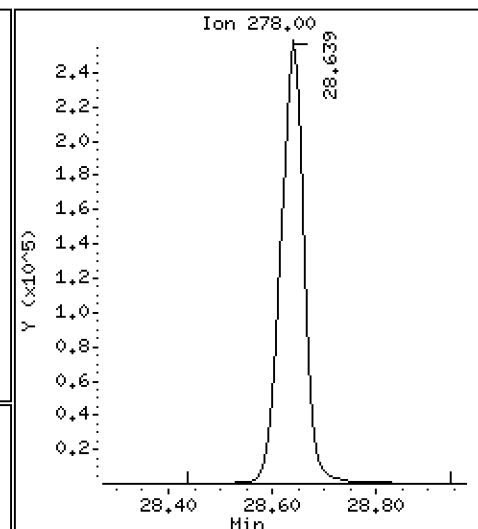
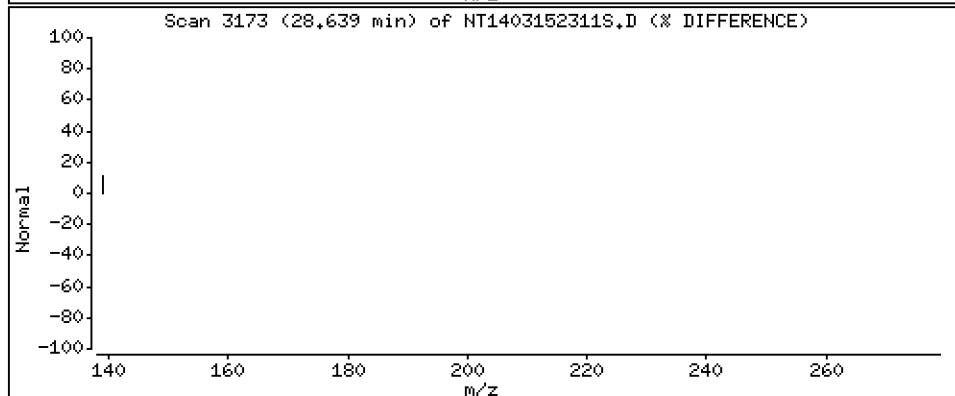
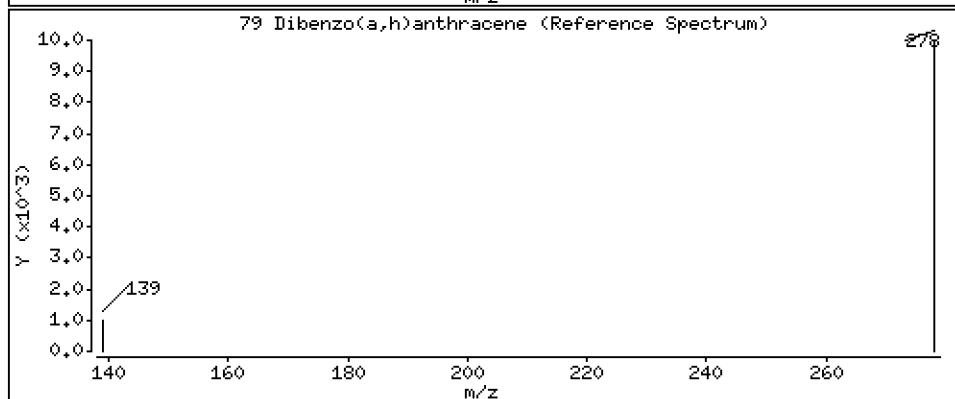
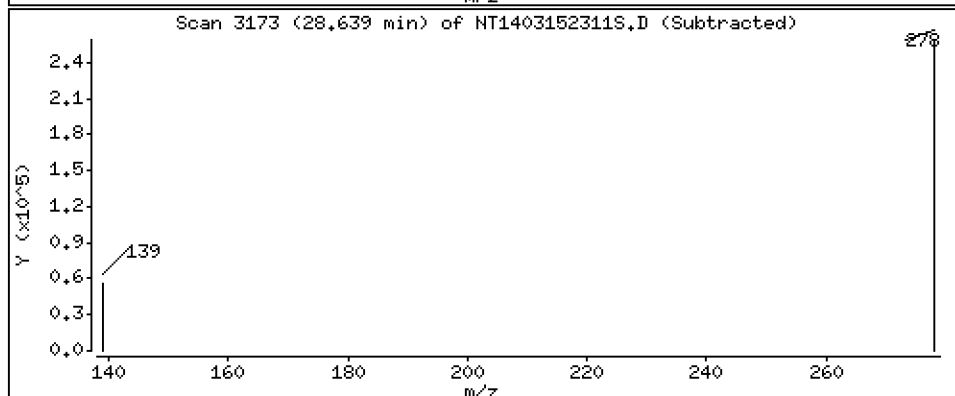
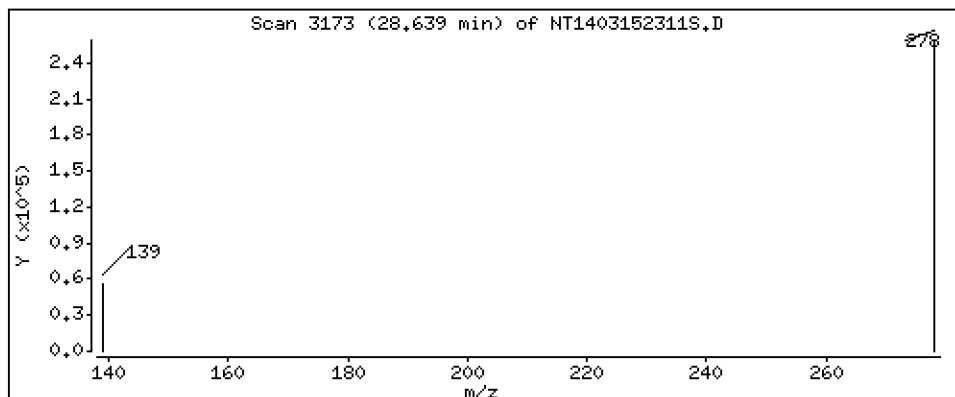
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,166 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

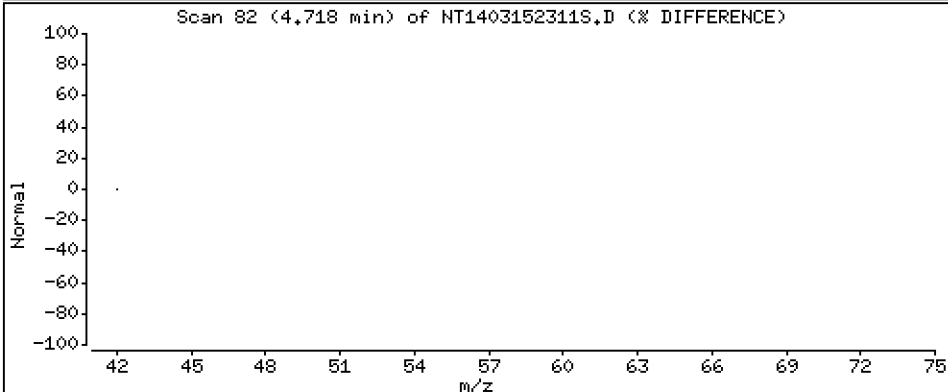
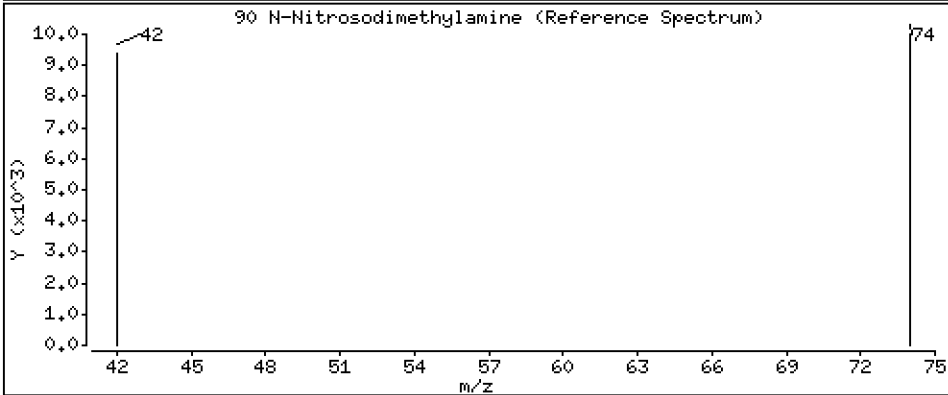
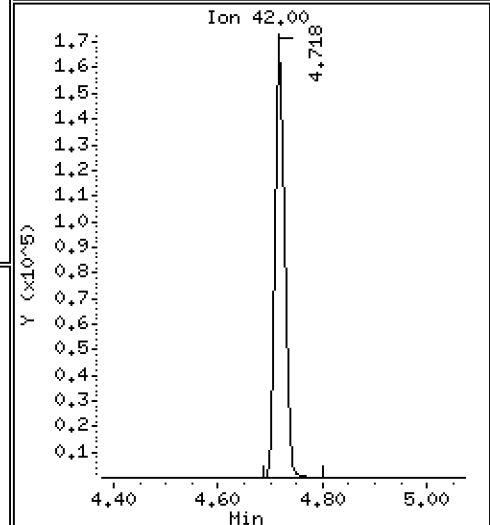
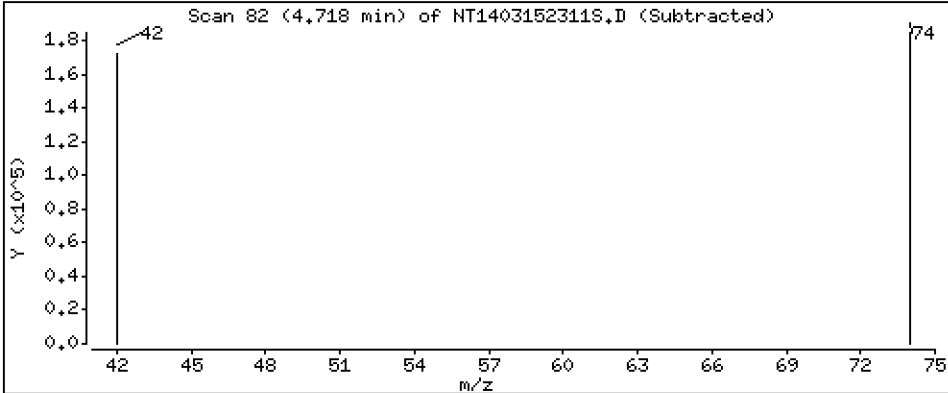
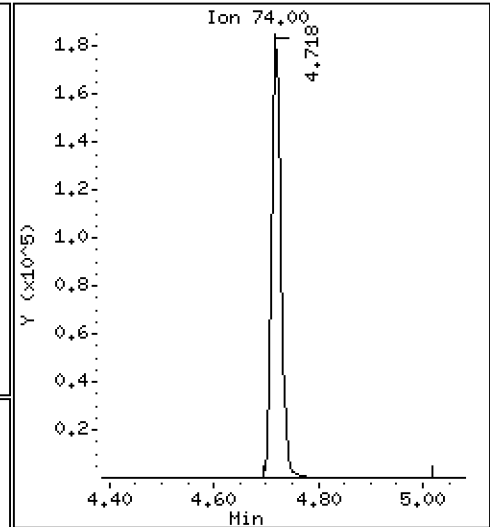
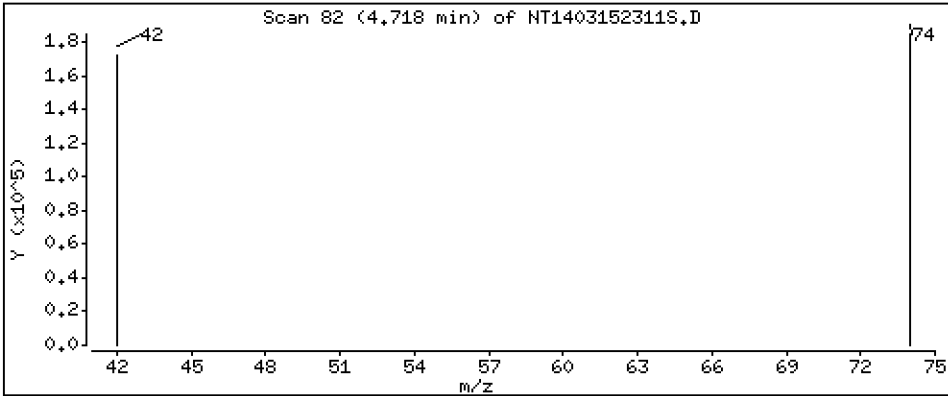
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.261 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	131	0.00180	0.001799 (R)
3 Phenol	94		8.441	8.433	(0.931)	454904	4.54237	4.542
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	414667	4.83856	4.839
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	214548	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	402045	4.84807	4.848
11 Benzyl alcohol	79		9.339	9.339	(1.030)	313629	5.34291	5.343
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	389531	4.82237	4.822
13 2-Methylphenol	108		9.564	9.556	(1.055)	296655	4.28818	4.288
15 4-Methylphenol	108		9.836	9.828	(1.085)	331703	4.53863	4.539
16 N-Nitroso-di-n-propylamine	70		9.905	9.898	(1.092)	265440	5.13699	5.137
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	272931	3.93394	3.934
24 Benzoic acid	105		11.061	10.883	(0.956)	494569	9.08128	9.081
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	311017	4.57388	4.574
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	807045	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	171122	4.97279	4.973
39 Dimethylphthalate	163		14.706	14.698	(0.967)	683967	4.99496	4.995
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	400955	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	754333	5.17432	5.174
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	544923	5.01904	5.019
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	195732	4.69277	4.693
58 Pentachlorophenol	266		17.974	17.982	(0.985)	138145	4.79996	4.800
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	801298	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	546	0.00507	0.005072 (R)
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	588546	5.36591	5.366
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	624454	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	623001	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.623	(1.104)	815876	5.16593	5.166
90 N-Nitrosodimethylamine	74		4.717	4.733	(0.520)	234083	5.26142	5.261

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	214548	-3.88
27 Naphthalene-d8	832937	416469	1665874	807045	-3.11
42 Acenaphthene-d10	403175	201588	806350	400955	-0.55
59 Phenanthrene-d10	814822	407411	1629644	801298	-1.66
69 Chrysene-d12	625755	312878	1251510	624454	-0.21
77 Perylene-d12	614085	307043	1228170	623001	1.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311S.D

Lab ID: SLC0242-SCV1

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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



INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00050

Lab File ID: NT1403172303S.D

Calibration Date: 03/15/2023

Sequence: SLC0376

Injection Date: 03/17/23

Lab Sample ID: SLC0376-ICV1

Injection Time: 15:39

Sequence Name: Initial Cal Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.5461150	1.5354220		-0.7	+/-20
1,2-Dichlorobenzene	A	1.0000	1.0	1.5059720	1.5060330		0.0	+/-20
Benzyl Alcohol	A	1.0000	0.9	1.0943940	1.0193020		-6.9	+/-20
Benzoic acid	A	4.0000	2.3	0.1762504	0.1506837		-42.6	+/-20 *
2,4-Dimethylphenol	A	2.0000	2.1	0.3438645	0.3527495		2.6	+/-20
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3370247	0.3402352		1.0	+/-20
N-Nitrosodiphenylamine	A	1.0000	1.0	0.5419762	0.5569556		2.8	+/-20
Pentachlorophenol	A	2.0000	1.4	0.1113753	0.1003637		-29.0	+/-20 *
2-Fluorophenol	A	1.5000	1.42	1.3577520	1.2839290		-5.5	+/-20
p-Terphenyl-d14	A	1.0000	1.23	0.6895811	0.8473240		22.9	+/-20 *
1,4-Dichlorobenzene-d4	A	4.0000	4.0	55463.9700	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	207494.5000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	99689.0600	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	200034.6000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	154742.9000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	150902.2000	1.0000		0.0	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723035.D

Date: 17-MAR-2023 15:39

Client ID:

Sample Info: SLC0376-ICV1

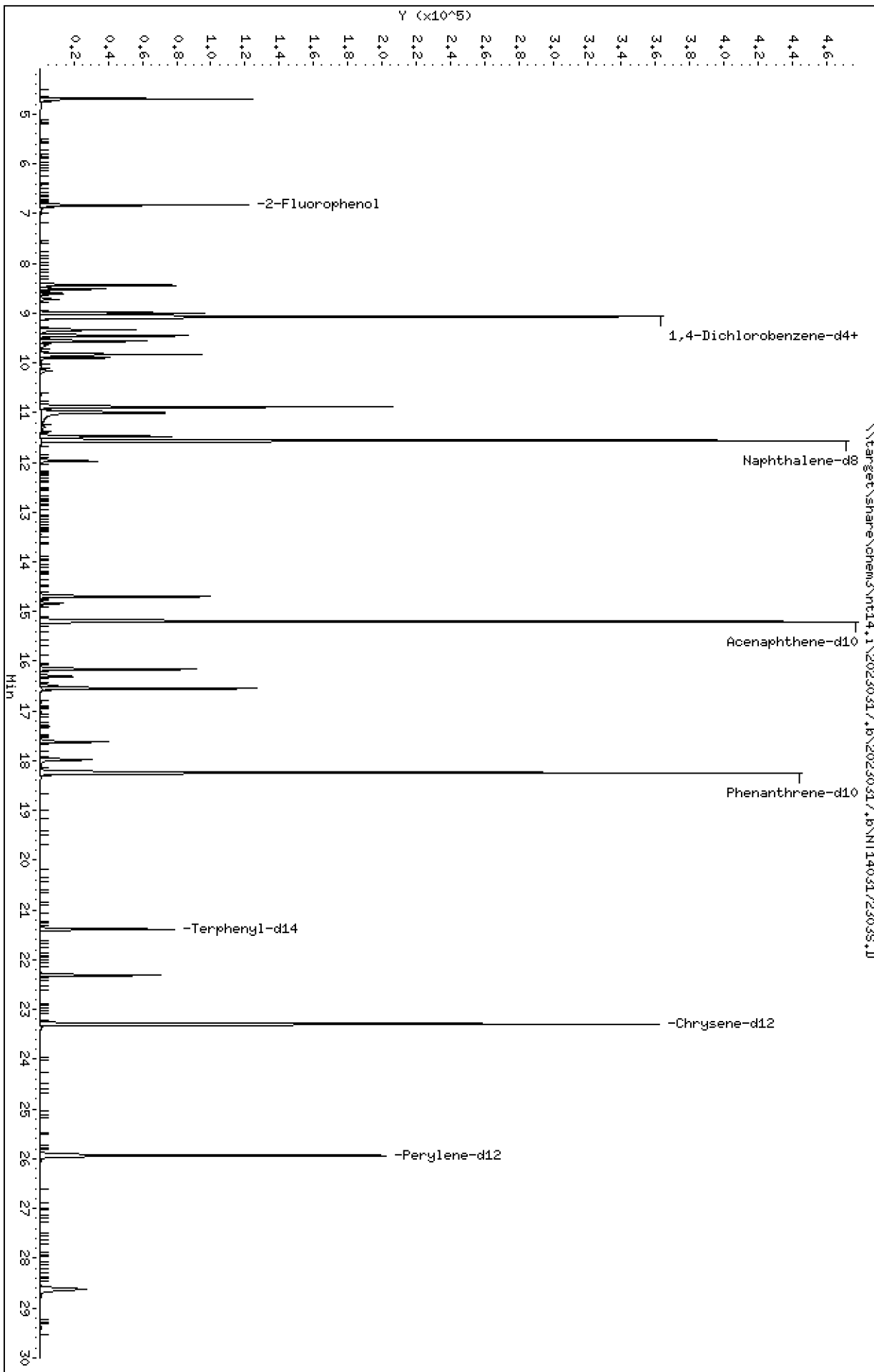
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723035.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172303S.D
 Lab Smp Id: SLC0376-ICV1
 Inj Date : 17-MAR-2023 15:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-ICV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	108060	1.50000	1.418
3 Phenol	94		8.440	8.440	(0.931)	98880	1.00000	0.9438
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	89204	1.00000	0.9950
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	224436	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	86151	1.00000	0.9931
11 Benzyl alcohol	79		9.338	9.338	(1.030)	57192	1.00000	0.9314
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	84502	1.00000	1.000
13 2-Methylphenol	108		9.563	9.563	(1.055)	72439	1.00000	1.001
15 4-Methylphenol	108		9.827	9.827	(1.084)	75926	1.00000	0.9931
16 N-Nitroso-di-n-propylamine	70		9.897	9.897	(1.092)	53222	1.00000	0.9846
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	145618	2.00000	2.052
24 Benzoic acid	105		10.999	10.999	(0.951)	124407	4.00000	2.297
26 1,2,4-Trichlorobenzene	180		11.479	11.479	(0.993)	70226	1.00000	1.010
* 27 Naphthalene-d8	136		11.564	11.564	(1.000)	825617	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	37029	1.00000	1.052
39 Dimethylphthalate	163		14.698	14.698	(0.967)	134715	1.00000	1.004
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	392947	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	146320	1.00000	1.024
54 N-Nitrosodiphenylamine	169		16.545	16.545	(0.907)	109983	1.00000	1.028
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	41009	1.00000	0.9974
58 Pentachlorophenol	266		17.982	17.982	(0.986)	39638	2.00000	1.420
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	789887	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	104646	1.00000	1.229
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	90488	1.00000	1.047
* 69 Chrysene-d12	240		23.298	23.298	(1.000)	494007	4.00000	
* 77 Perylene-d12	264		25.938	25.938	(1.000)	375441	4.00000	
79 Dibenzo(a,h)anthracene	278		28.623	28.623	(1.103)	84334	1.00000	0.8861
90 N-Nitrosodimethylamine	74		4.694	4.694	(0.518)	82758	2.00000	1.778

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172303S.D
 Lab Smp Id: SLC0376-ICV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	224436	-0.35
27 Naphthalene-d8	830434	415217	1660868	825617	-0.58
42 Acenaphthene-d10	389907	194954	779814	392947	0.78
59 Phenanthrene-d10	763679	381840	1527358	789887	3.43
69 Chrysene-d12	415791	207896	831582	494007	18.81
77 Perylene-d12	274872	137436	549744	375441	36.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.56	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
77 Perylene-d12	25.93	25.43	26.43	25.94	0.03

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

REVIEW SUMMARY FOR FILE - NT1403172303S.D

Lab ID: SLC0376-ICV1

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 15:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b\20230317.b

Instrument: nt14.i Date: 17-MAR-2023 Method: 20230317.b\SIMABN2.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1403172303S.D 17-MAR-2023 15:39

Compound	%D

Benzoic acid	-42.6
Pentachlorophenol	-29.0
Terphenyl-d14	22.9



INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT14

Calibration: GC00050

Lab File ID: NT1403172317S.D

Calibration Date: 03/15/2023

Sequence: SLC0376

Injection Date: 03/18/23

Lab Sample ID: SLC0376-ICV2

Injection Time: 00:07

Sequence Name: ABN 1

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.5461150	1.5365		-0.6	+/-20
1,2-Dichlorobenzene	A	1.0000	1.0	1.5059720	1.5117240		0.4	+/-20
Benzyl Alcohol	A	1.0000	0.9	1.0943940	0.9947918		-9.1	+/-20
Benzoic acid	A	4.0000	2.0	0.1762504	0.1303475		-50.3	+/-20 *
2,4-Dimethylphenol	A	2.0000	2.1	0.3438645	0.3532538		2.8	+/-20
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3370247	0.3429580		1.8	+/-20
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5419762	0.5709048		5.3	+/-20
Pentachlorophenol	A	2.0000	1.2	0.1113753	0.0862142		-39.0	+/-20 *
2-Fluorophenol	A	1.5000	1.40	1.3577520	1.2636830		-6.9	+/-20
p-Terphenyl-d14	A	1.0000	1.34	0.6895811	0.9244164		34.1	+/-20 *
1,4-Dichlorobenzene-d4	A	4.0000	4.0	55463.9700	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	207494.5000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	99689.0600	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	200034.6000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	154742.9000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	150902.2000	1.0000		0.0	*

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT1403172317S.D

Date: 18-MAR-2023 00:07

Client ID:

Sample Info: SLC0376-ICW2

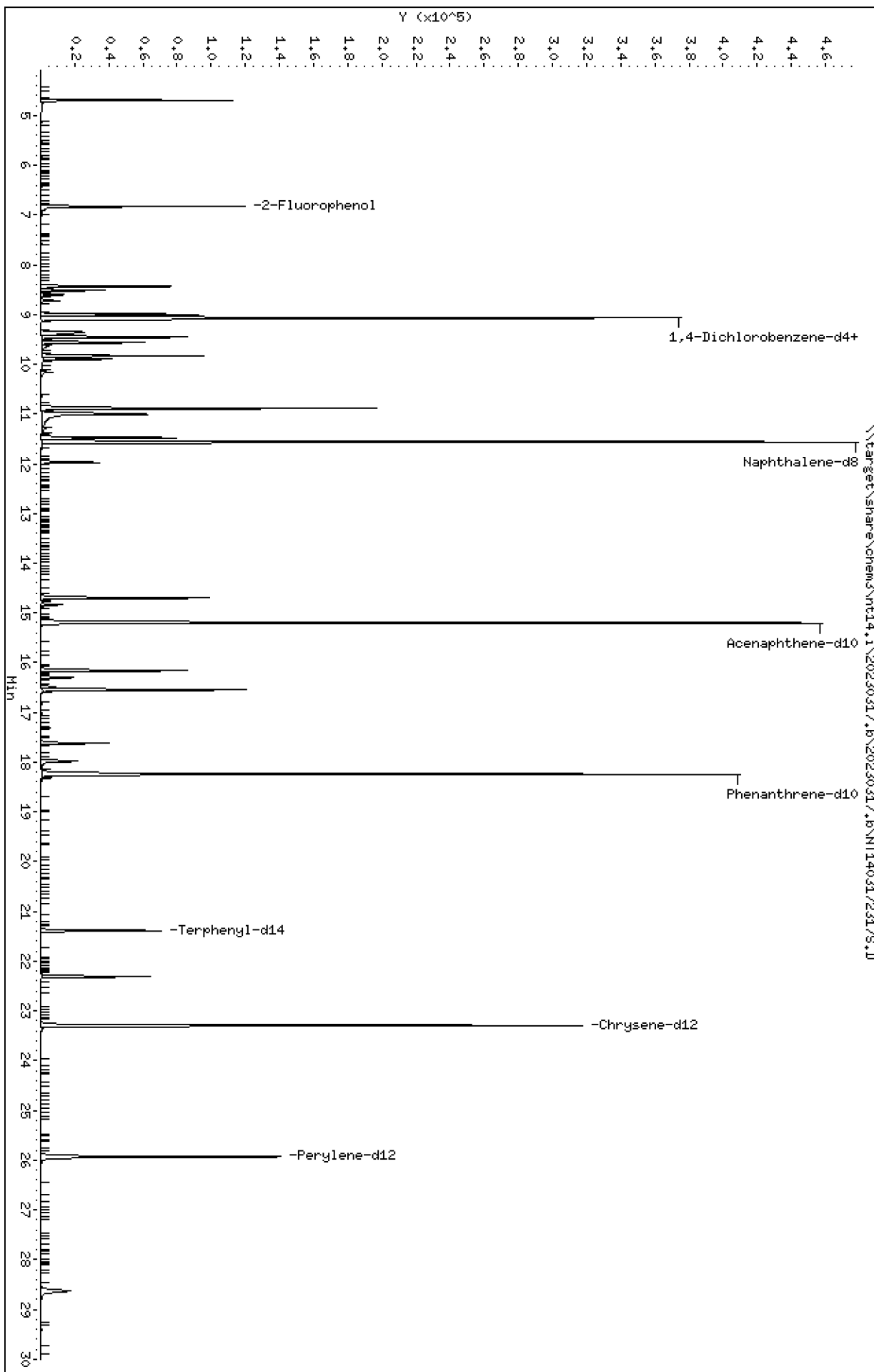
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-Smsi

\\target\share\chem3\nt14.1\20230317.1\20230317.1\NT1403172317S.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172317S.D
 Lab Smp Id: SLC0376-ICV2
 Inj Date : 18-MAR-2023 00:07 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-ICV2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	106728	1.50000	1.396
3 Phenol	94		8.441	8.441	(0.931)	98291	1.00000	0.9350
7 1,3-Dichlorobenzene	146		8.997	8.997	(0.992)	90207	1.00000	1.003
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	225221	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	86513	1.00000	0.9938
11 Benzyl alcohol	79		9.354	9.354	(1.032)	56012	1.00000	0.9090
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	85118	1.00000	1.004
13 2-Methylphenol	108		9.564	9.564	(1.055)	74154	1.00000	1.021
15 4-Methylphenol	108		9.828	9.828	(1.084)	76567	1.00000	0.9980
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	54058	1.00000	0.9966
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	146677	2.00000	2.055
24 Benzoic acid	105		10.999	10.999	(0.951)	108245	4.00000	1.989
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	71201	1.00000	1.018
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	830434	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	37211	1.00000	1.051
39 Dimethylphthalate	163		14.698	14.698	(0.967)	133947	1.00000	1.006
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	389907	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	144165	1.00000	1.017
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	108997	1.00000	1.053
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	40155	1.00000	1.010
58 Pentachlorophenol	266		17.974	17.974	(0.985)	32920	2.00000	1.221
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	763679	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	96091	1.00000	1.341
67 Butylbenzylphthalate	149		22.308	22.308	(0.958)	85732	1.00000	1.179
* 69 Chrysene-d12	240		23.291	23.291	(1.000)	415791	4.00000	
* 77 Perylene-d12	264		25.931	25.931	(1.000)	274872	4.00000	
79 Dibenzo(a,h)anthracene	278		28.631	28.631	(1.104)	60128	1.00000	0.8629
90 N-Nitrosodimethylamine	74		4.694	4.694	(0.518)	81002	2.00000	1.734

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172317S.D
 Lab Smp Id: SLC0376-ICV2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	225221	0.35
27 Naphthalene-d8	825617	412809	1651234	830434	0.58
42 Acenaphthene-d10	392947	196474	785894	389907	-0.77
59 Phenanthrene-d10	789887	394944	1579774	763679	-3.32
69 Chrysene-d12	494007	247004	988014	415791	-15.83
77 Perylene-d12	375441	187721	750882	274872	-26.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.29	-0.03
77 Perylene-d12	25.94	25.44	26.44	25.93	-0.03

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

REVIEW SUMMARY FOR FILE - NT1403172317S.D

Lab ID: SLC0376-ICV2

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 00:07

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b\20230317.b

Instrument: nt14.i Date: 18-MAR-2023 Method: 20230317.b\SIMABN2.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1403172317S.D 18-MAR-2023 00:07

Compound	%D

Benzoic acid	-50.3
Pentachlorophenol	-38.9
Terphenyl-d14	34.1



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00050</u>
Lab File ID:	<u>NT1403152311S.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0242</u>	Injection Date:	<u>03/15/23</u>
Lab Sample ID:	<u>SLC0242-SCV1</u>	Injection Time:	<u>17:39</u>
Sequence Name:	<u>SCV 5.0</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	5.0000	4.8	1.5461150	1.4991330		-3.0	+/-20
1,2-Dichlorobenzene	A	5.0000	4.8	1.5059720	1.4524710		-3.6	+/-20
Benzyl Alcohol	A	5.0000	5.3	1.0943940	1.1694500		6.9	+/-20
Benzoic acid	A	10.000	9.1	0.1762504	0.2451259		-9.2	+/-20
2,4-Dimethylphenol	A	5.0000	3.9	0.3438645	0.2705485		-21.3	+/-20
1,2,4-Trichlorobenzene	A	5.0000	4.6	0.3370247	0.3083020		-8.5	+/-20
N-Nitrosodiphenylamine	A	5.0000	5.0	0.5419762	0.5440403		0.4	+/-20
Pentachlorophenol	A	5.0000	4.8	0.1113753	0.1379212		-4.0	+/-20
2-Fluorophenol	A	7.5000	0.00180	1.3577520	0.0003256		-100	
p-Terphenyl-d14	A	5.0000	0.00507	0.6895811	0.0006995		-99.9	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523115.D

Date: 15-MAR-2023 17:39

Client ID:

Sample Info: SLC0242-SCV1

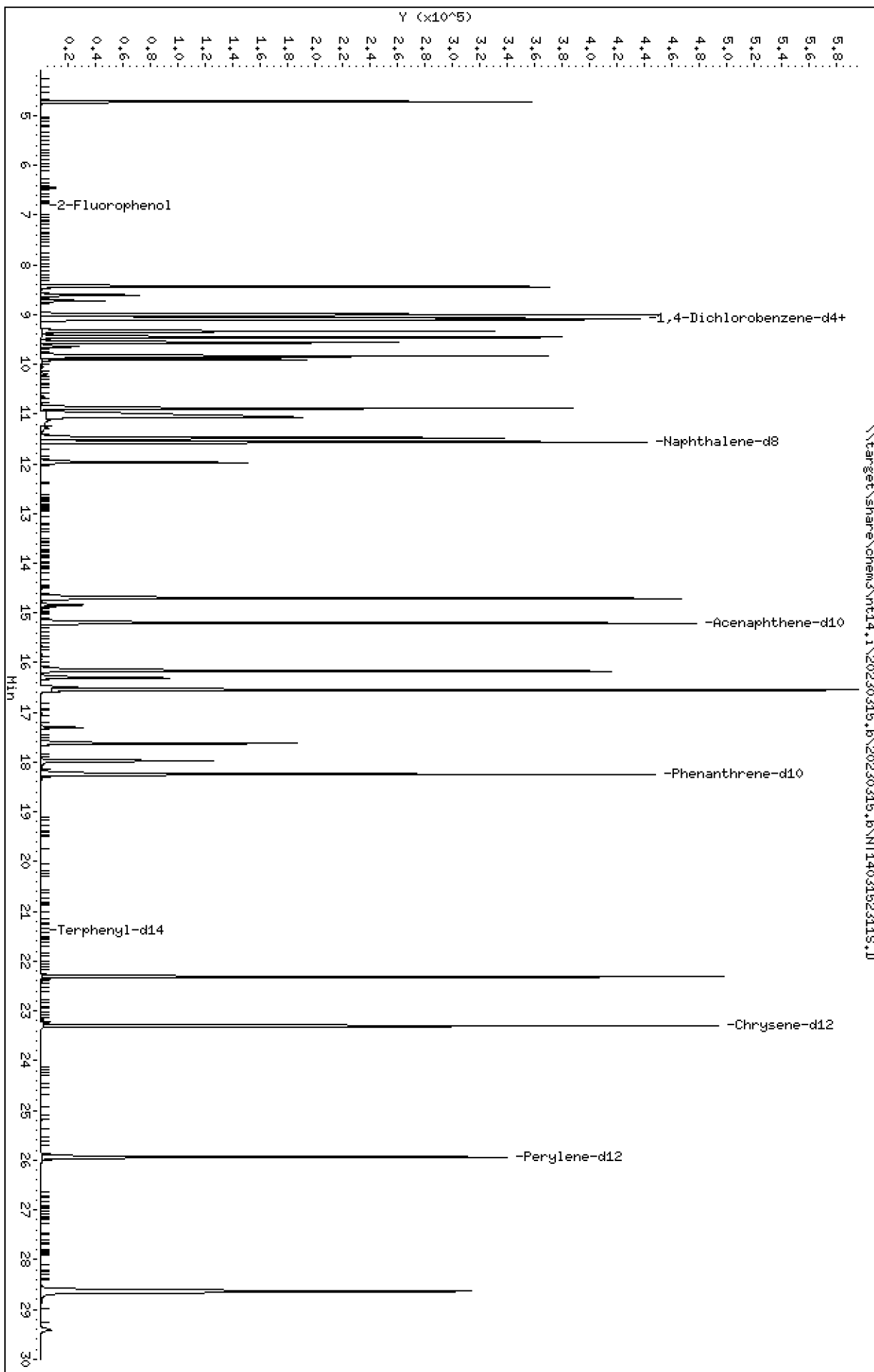
Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt14.1\20230315.1\20230315.1\NT14031523115.D



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

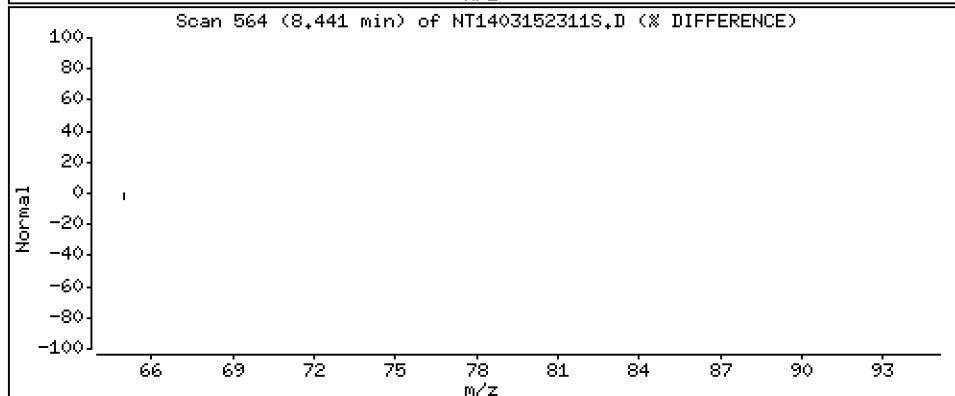
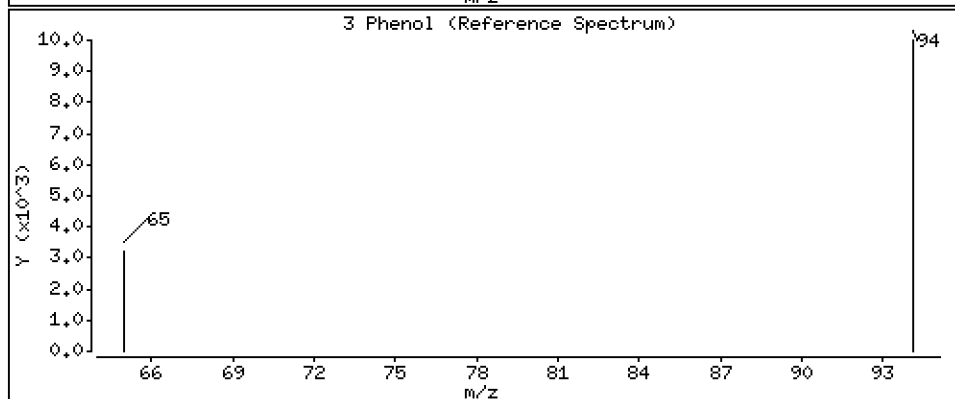
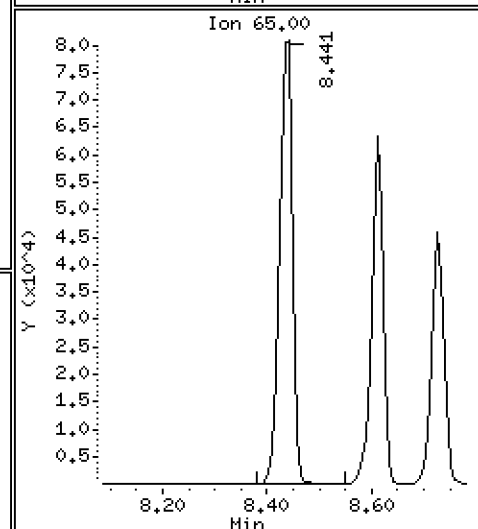
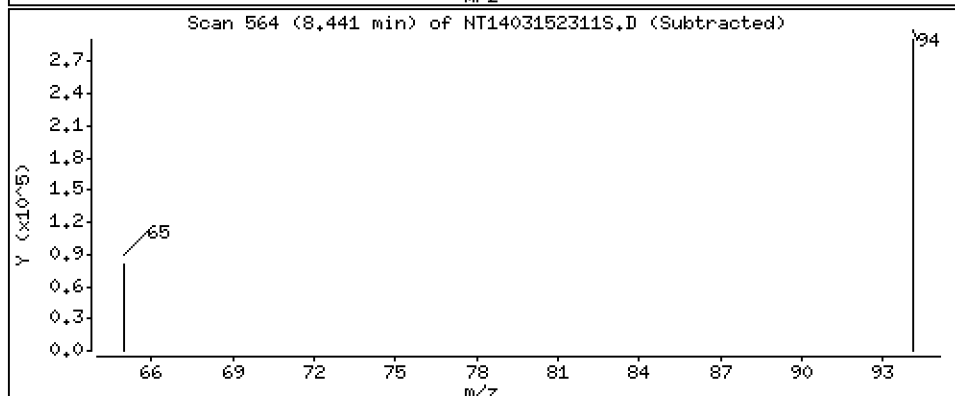
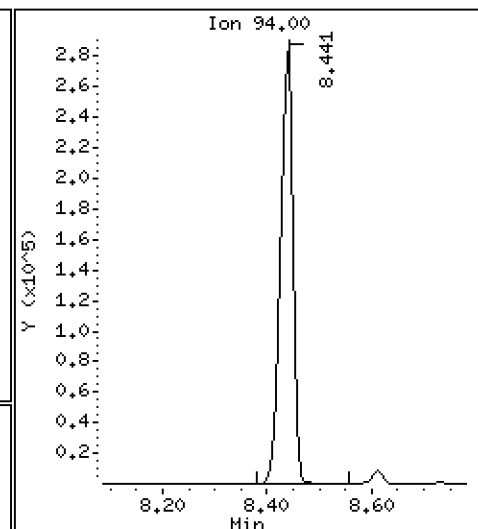
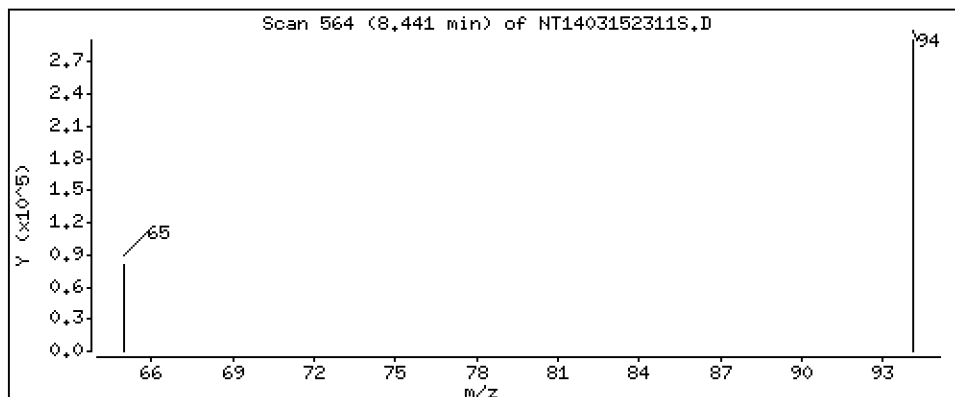
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,542 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

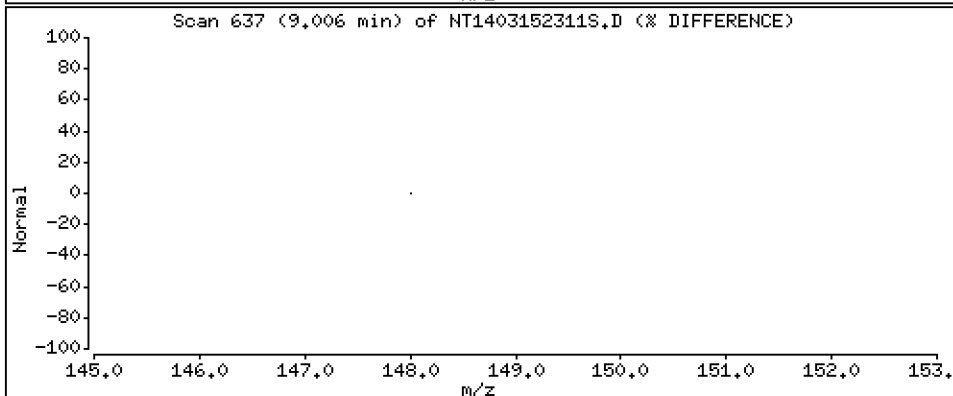
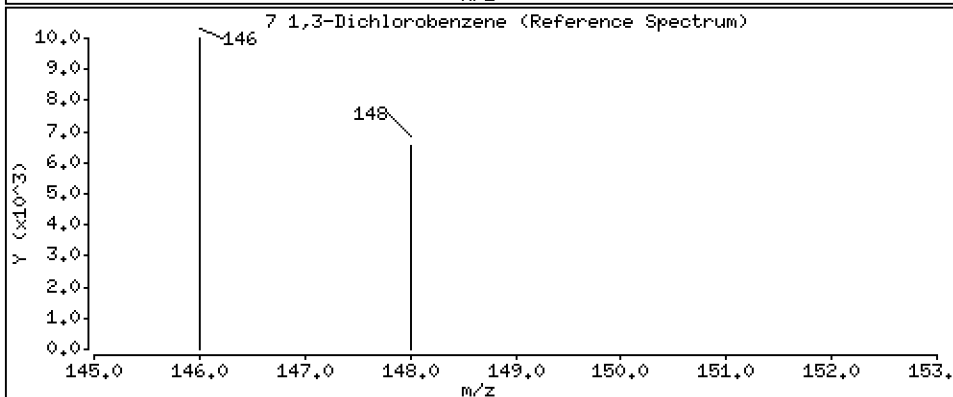
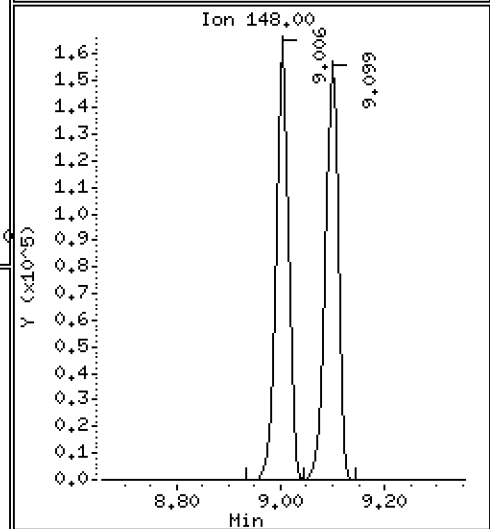
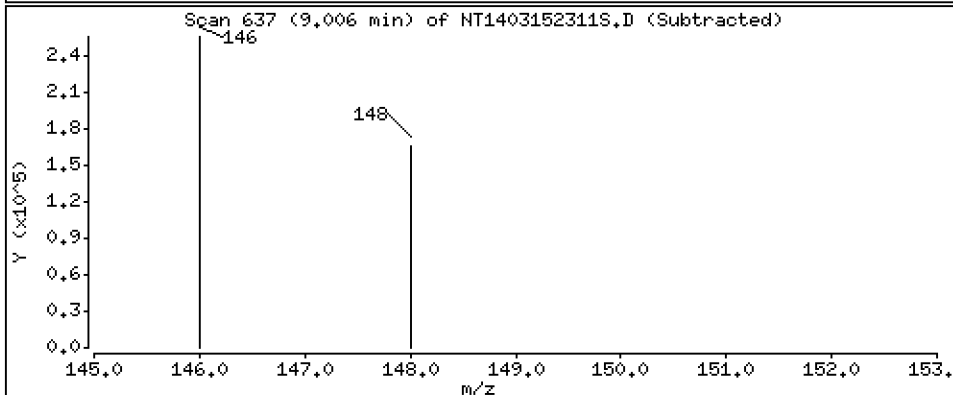
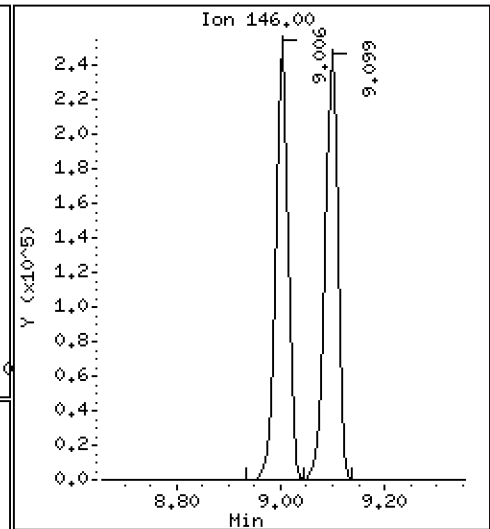
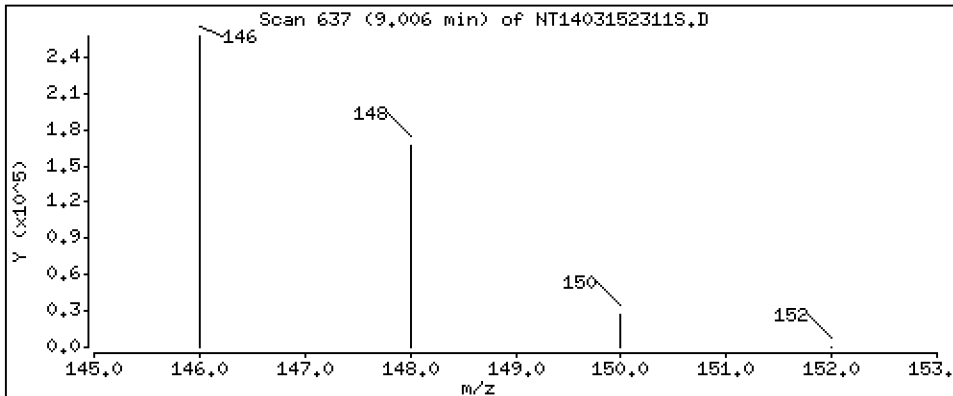
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.839 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

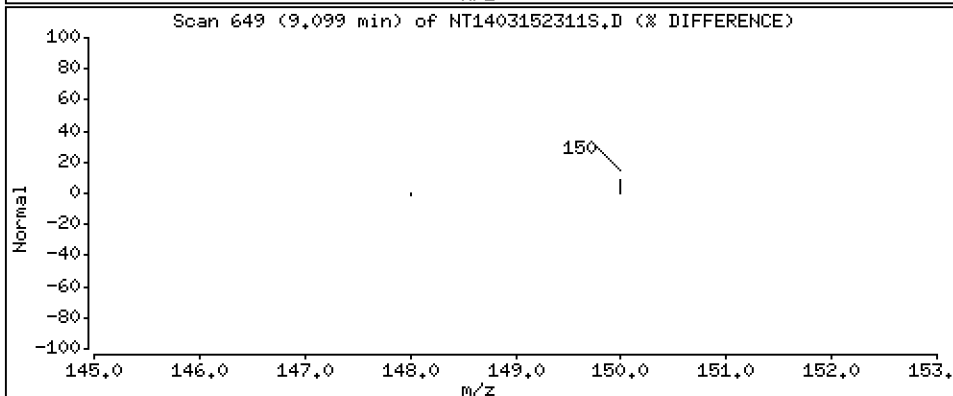
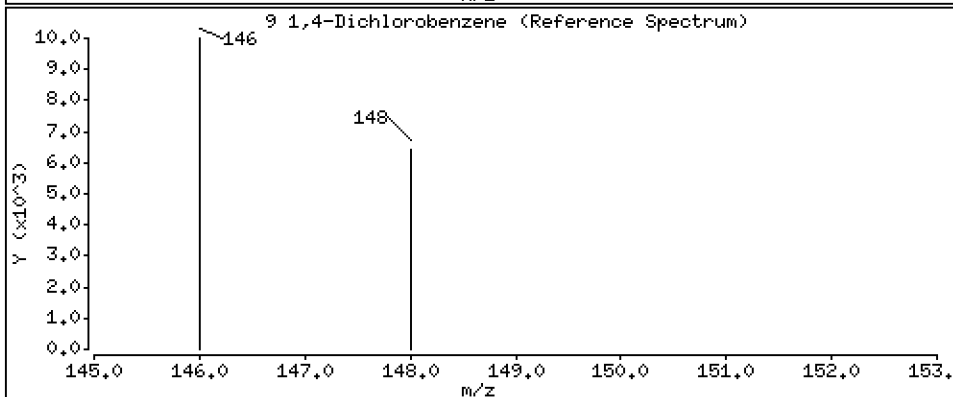
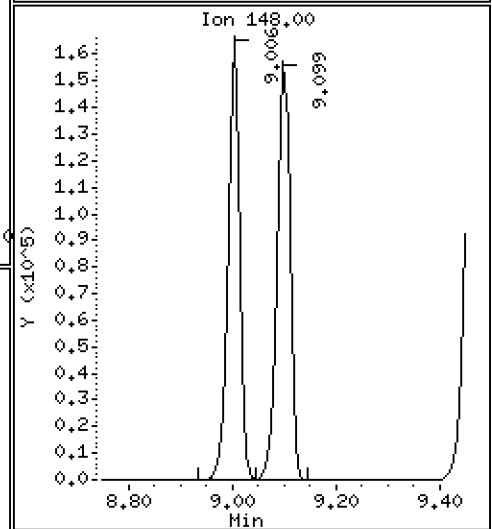
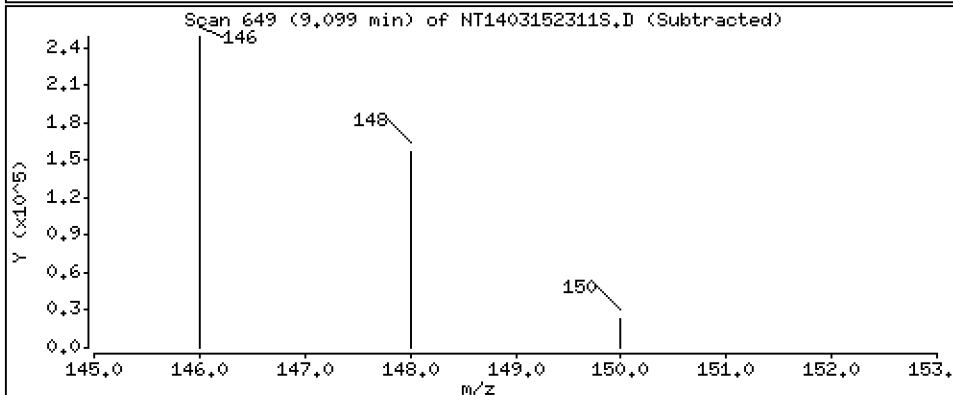
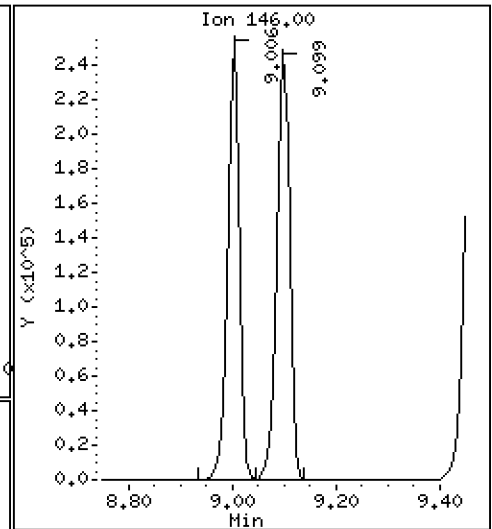
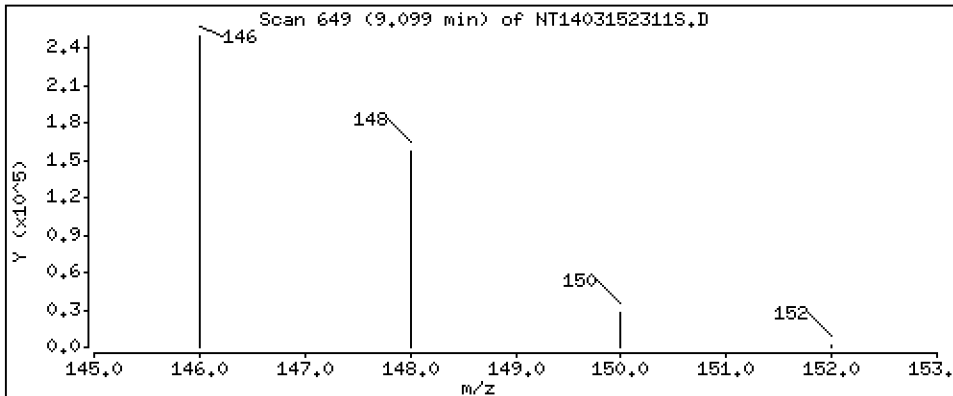
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.848 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

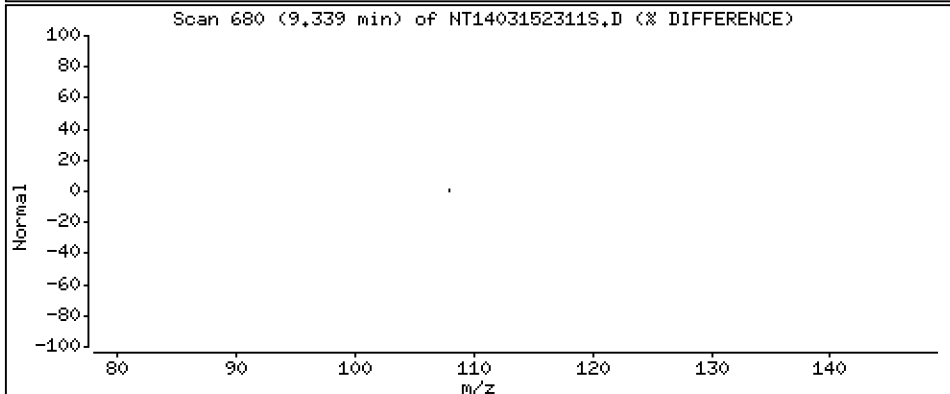
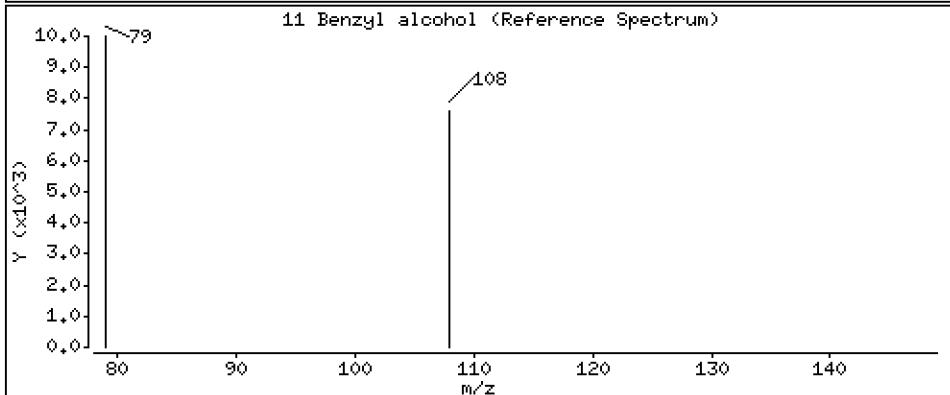
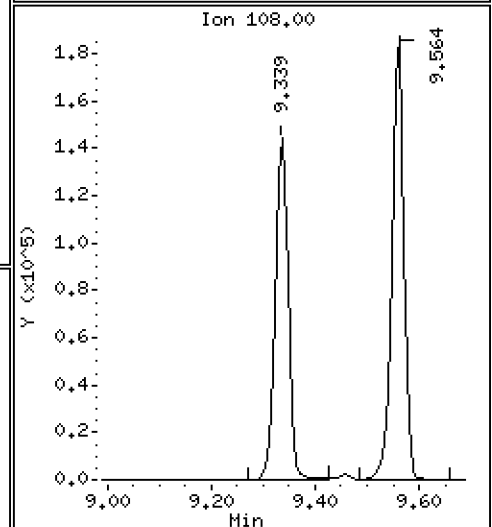
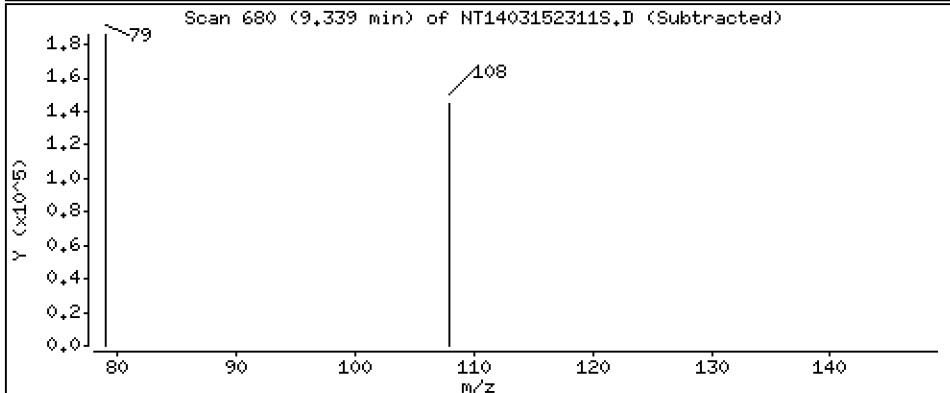
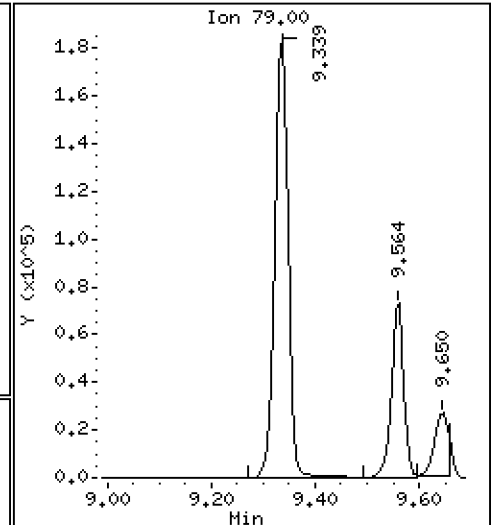
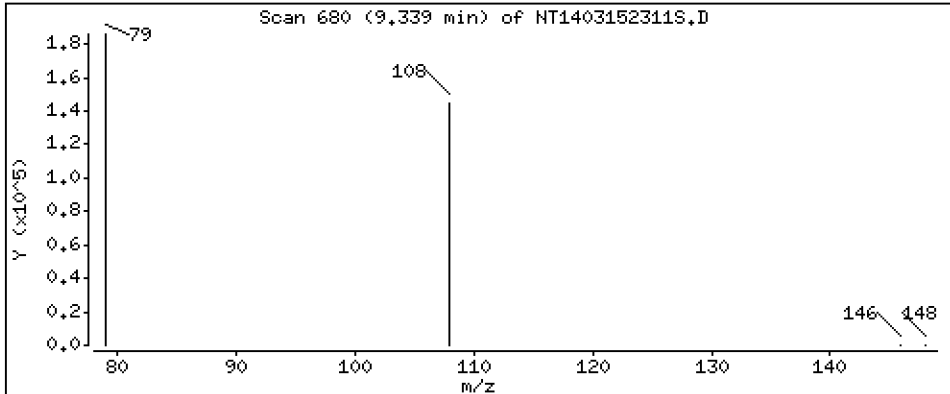
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 5,343 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

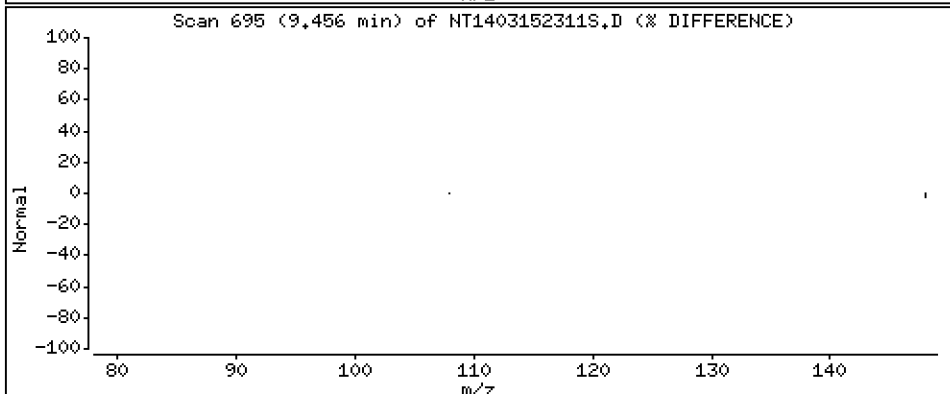
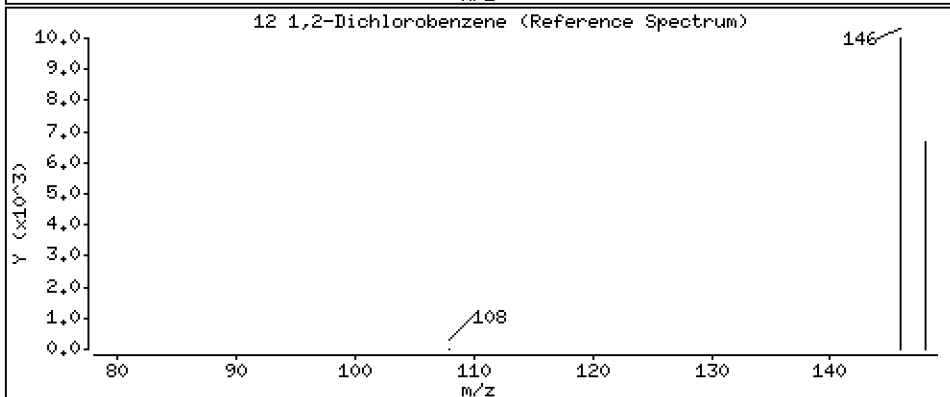
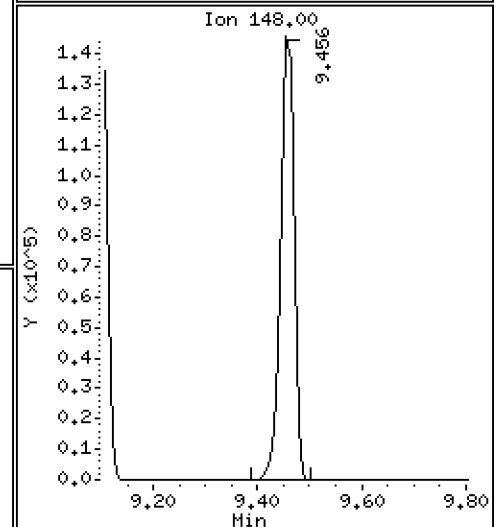
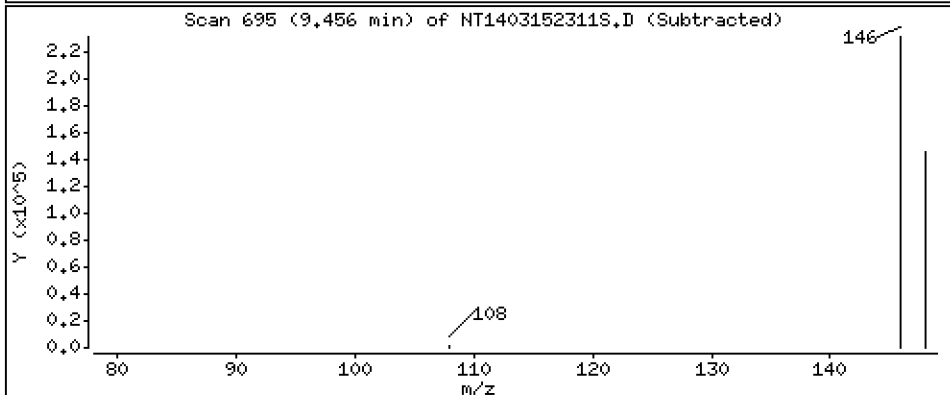
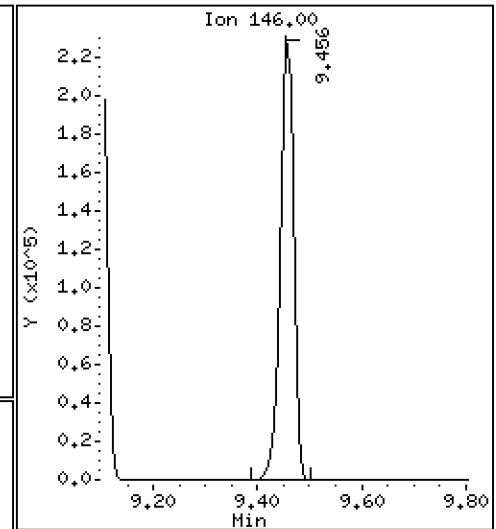
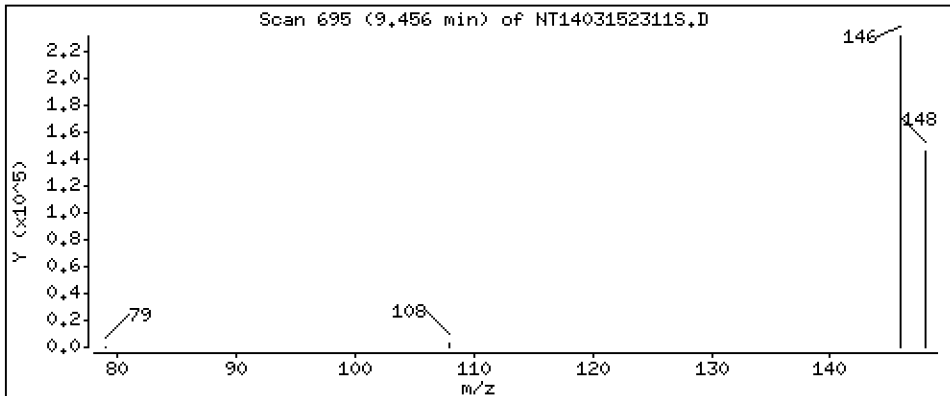
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,822 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

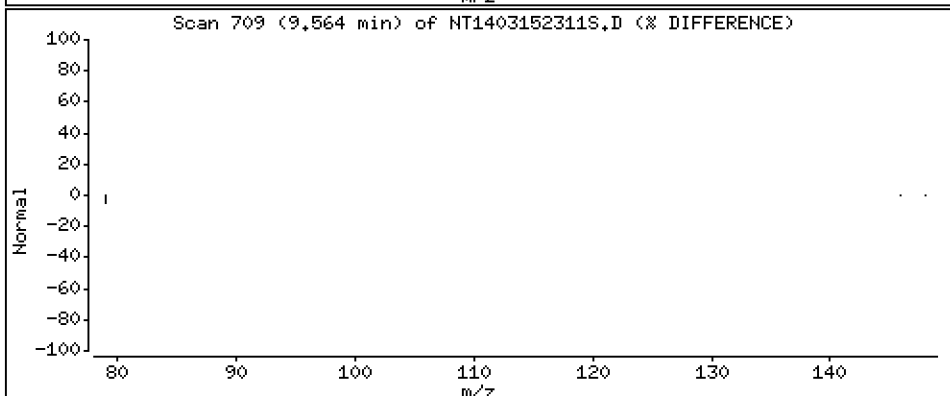
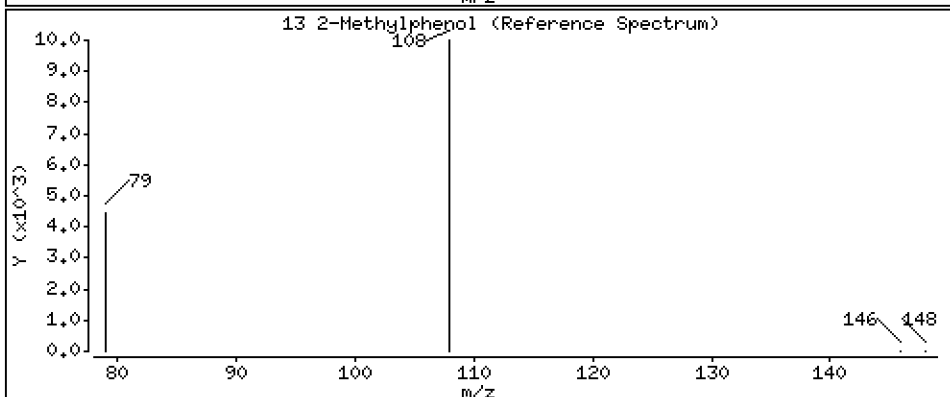
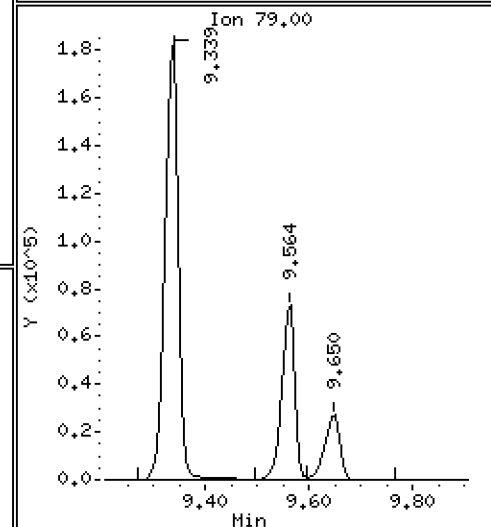
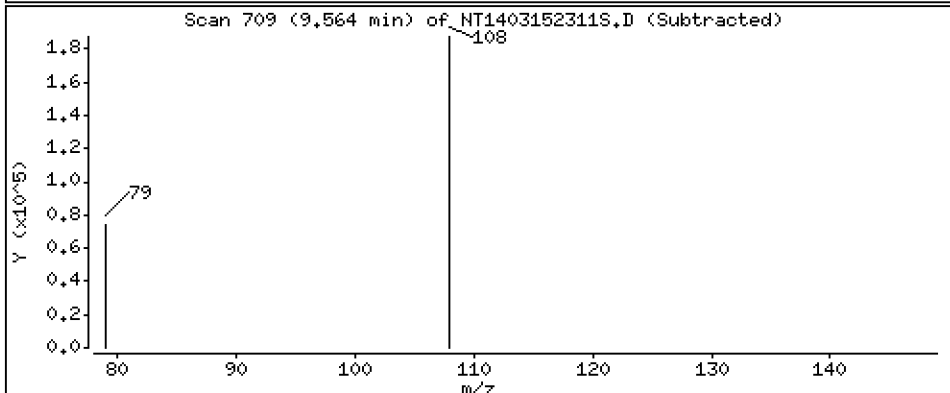
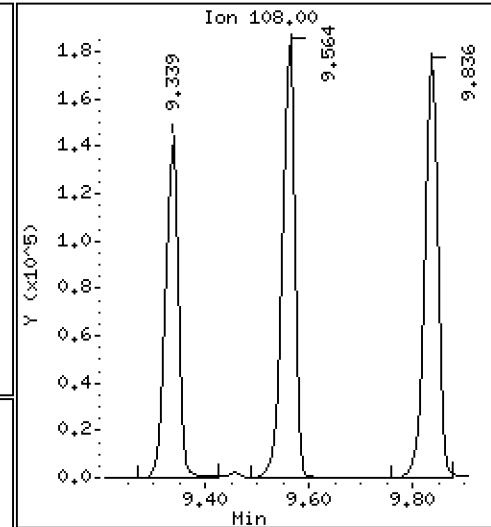
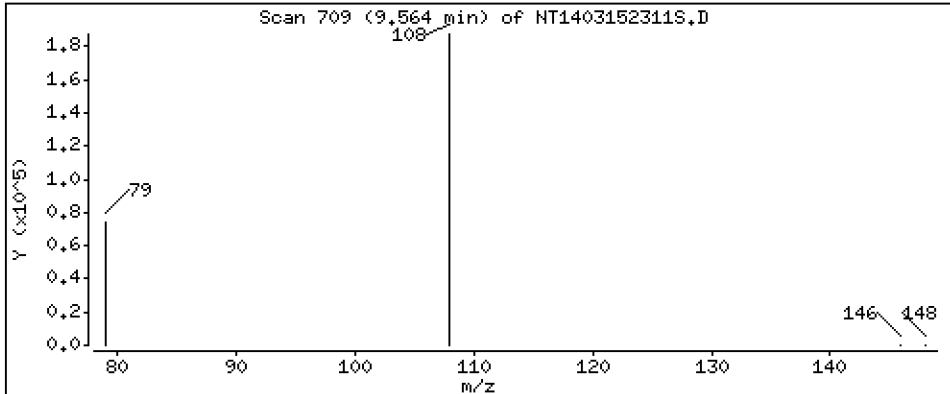
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 4,288 ug/mL

13 2-Methylphenol



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

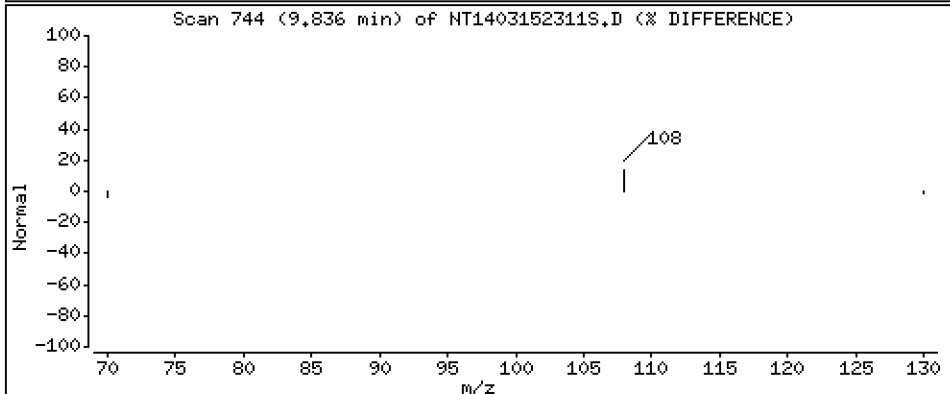
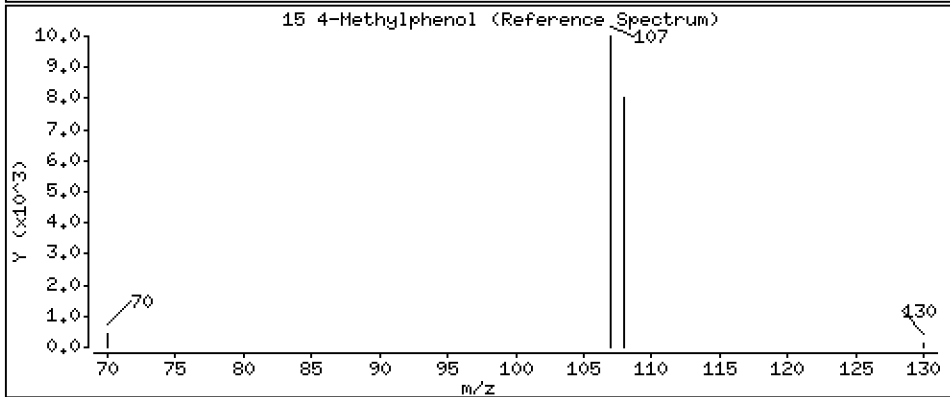
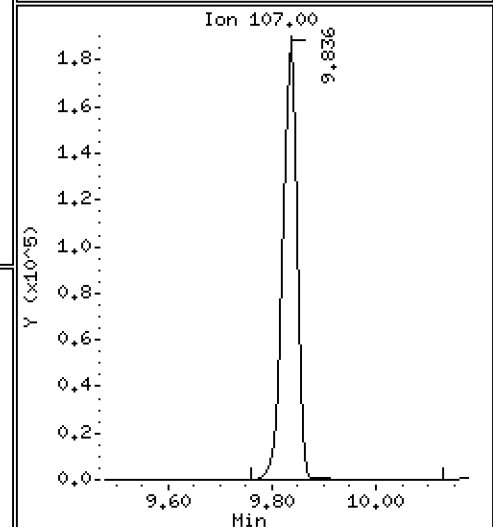
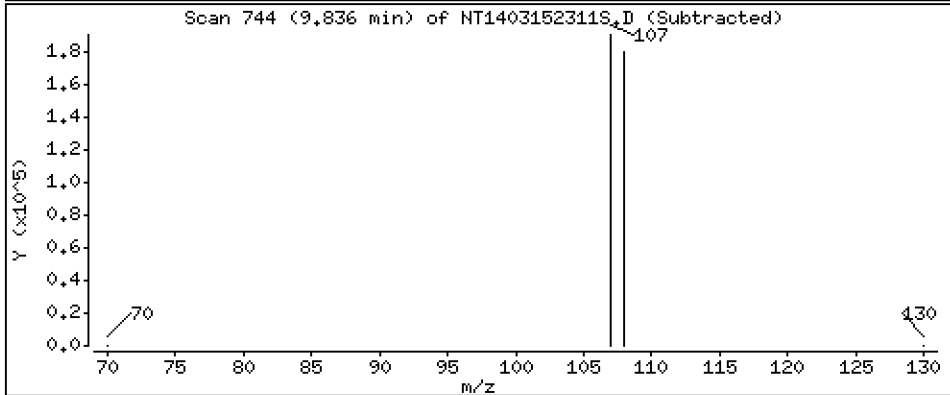
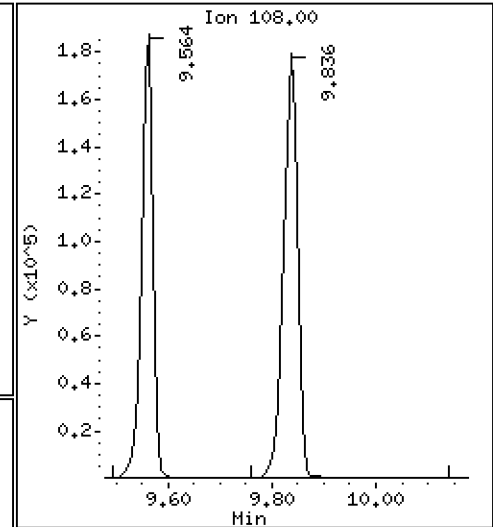
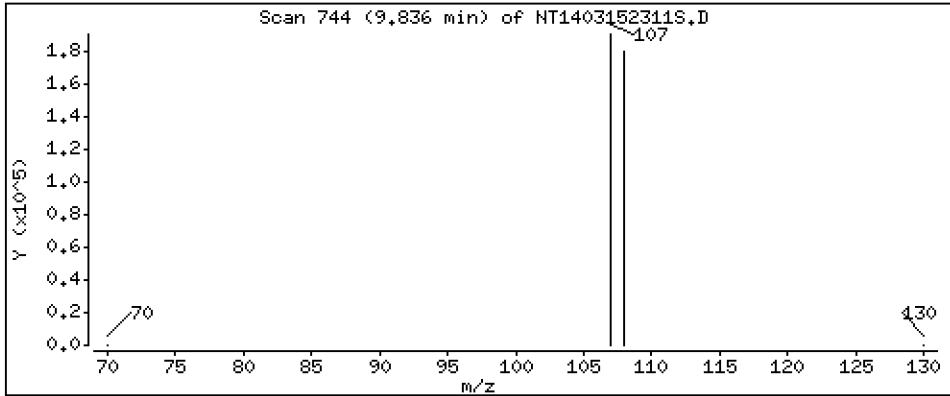
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.539 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

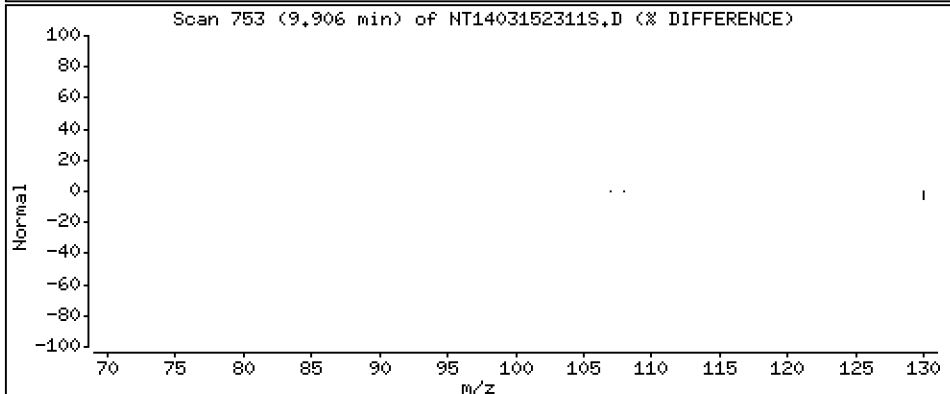
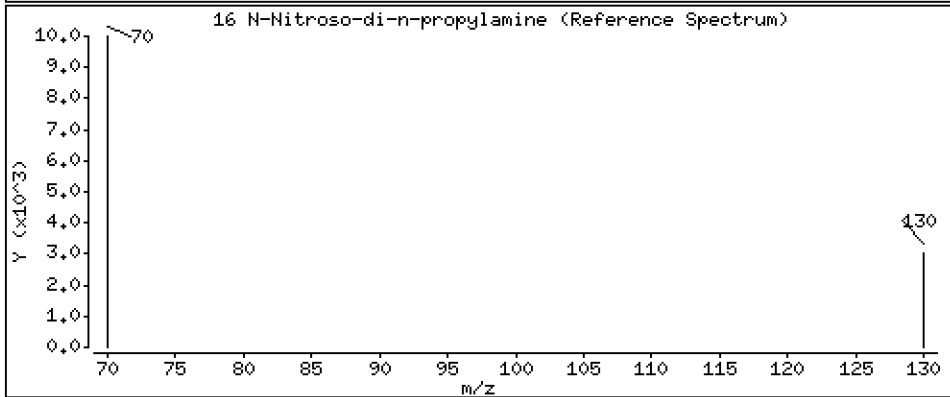
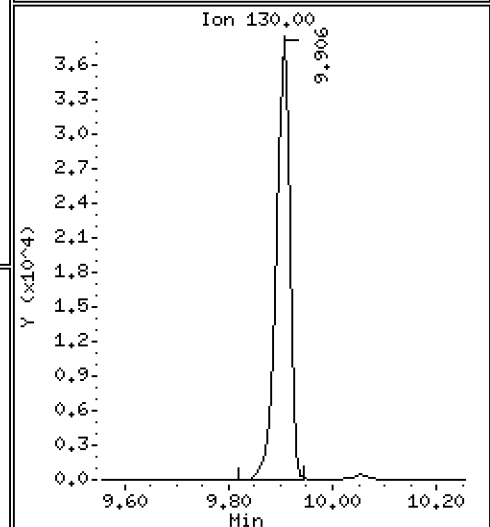
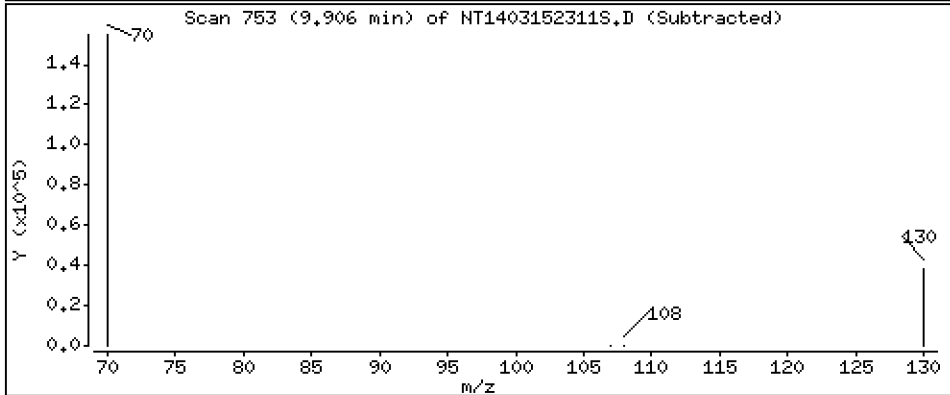
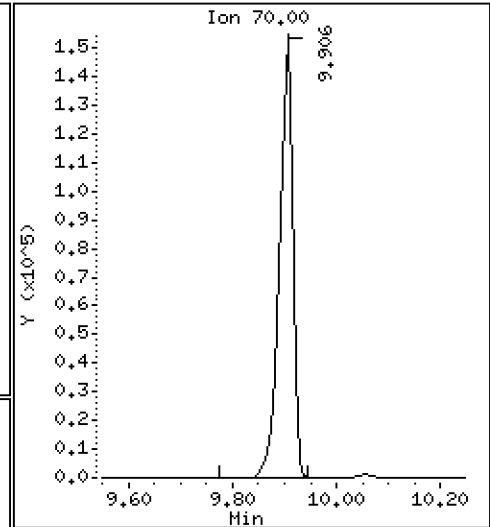
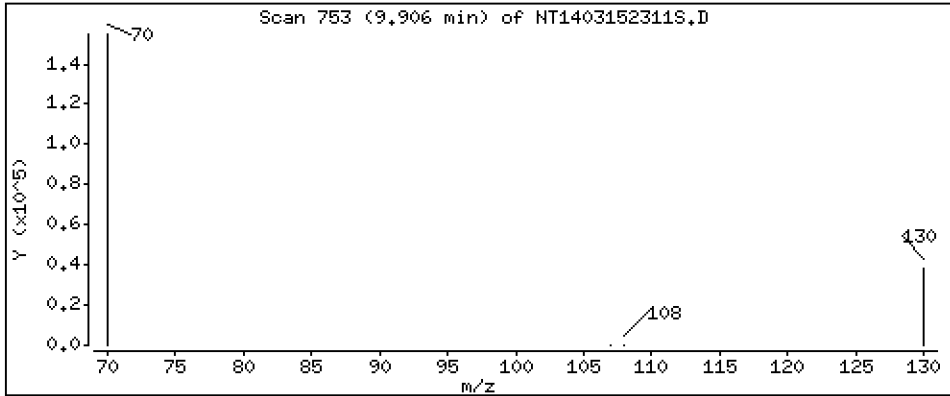
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,137 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

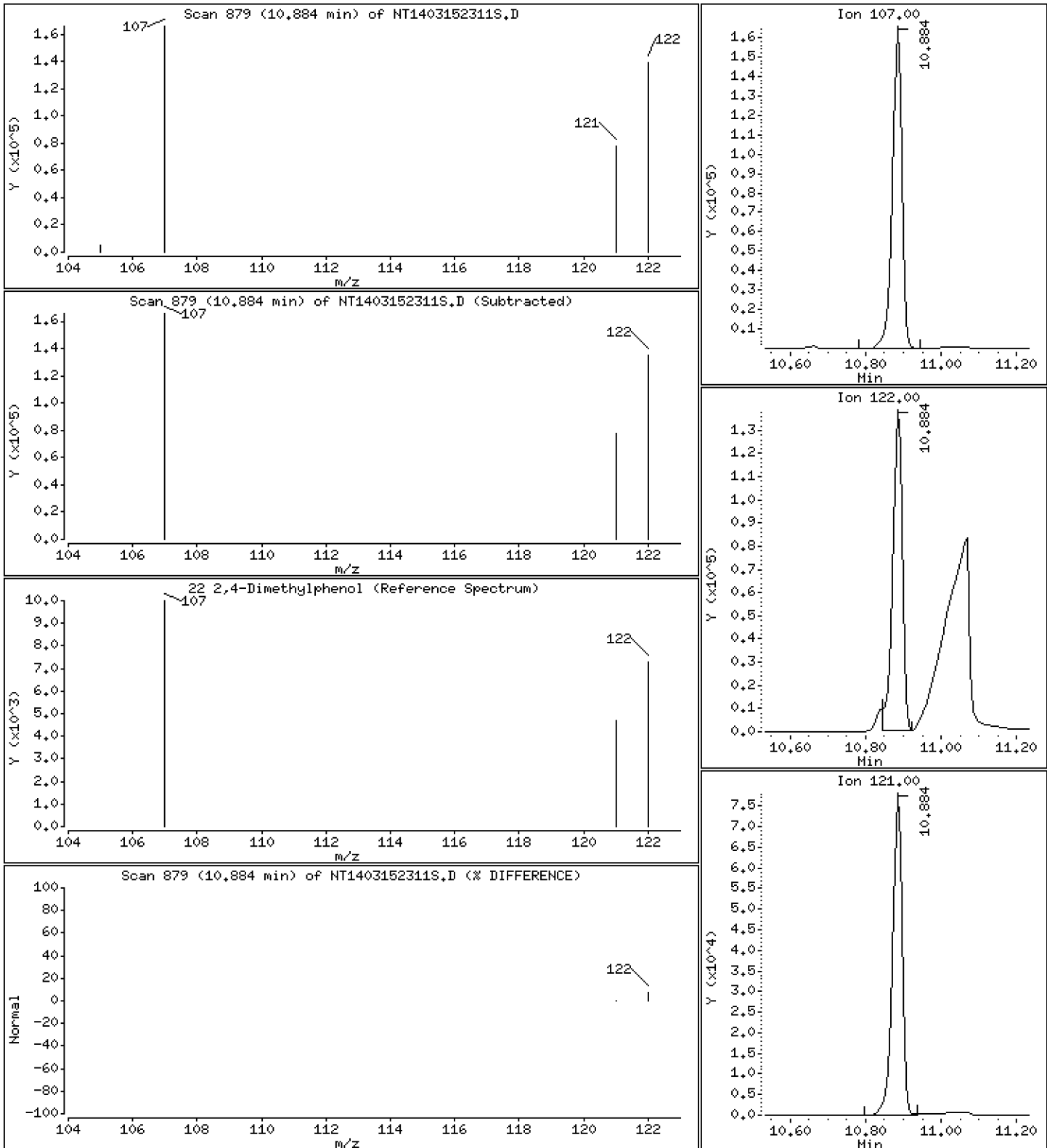
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,934 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

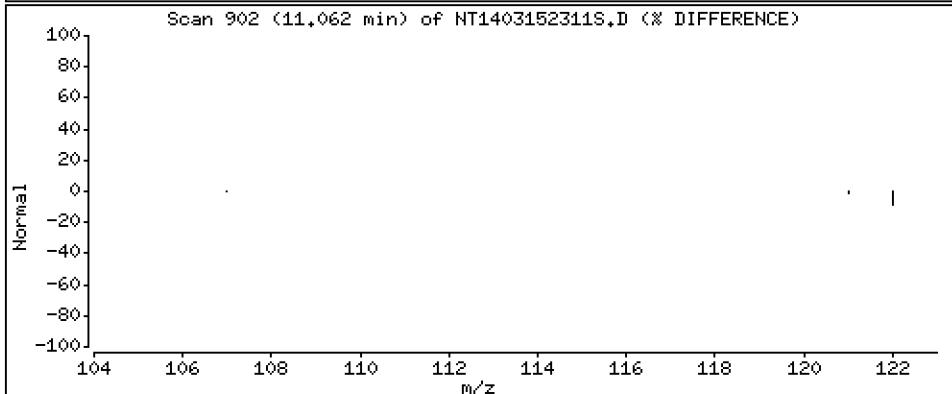
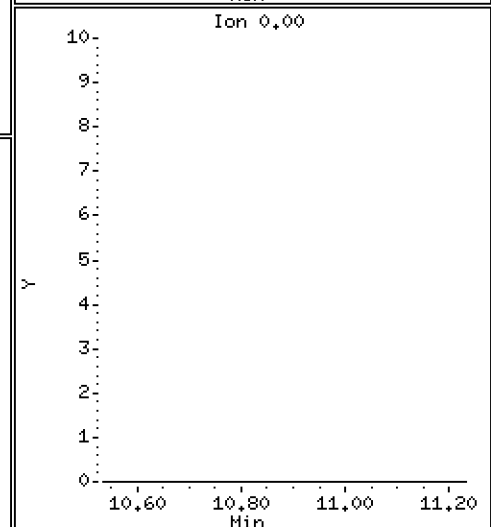
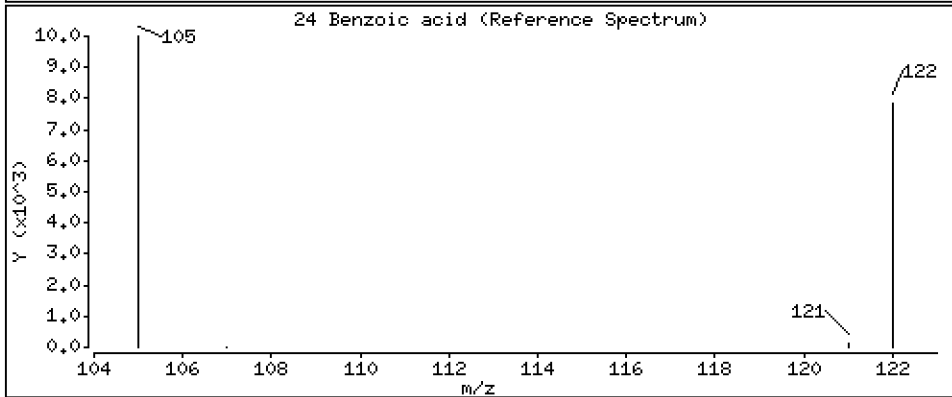
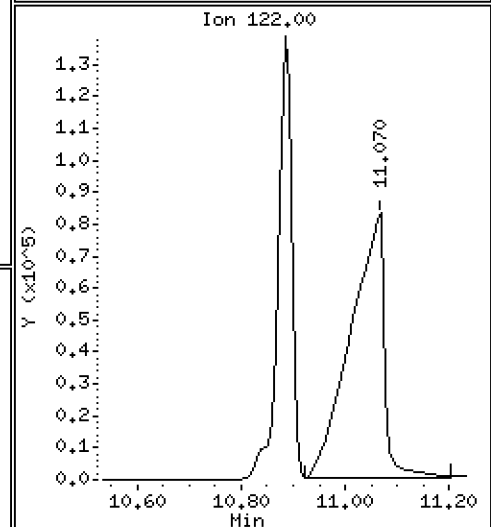
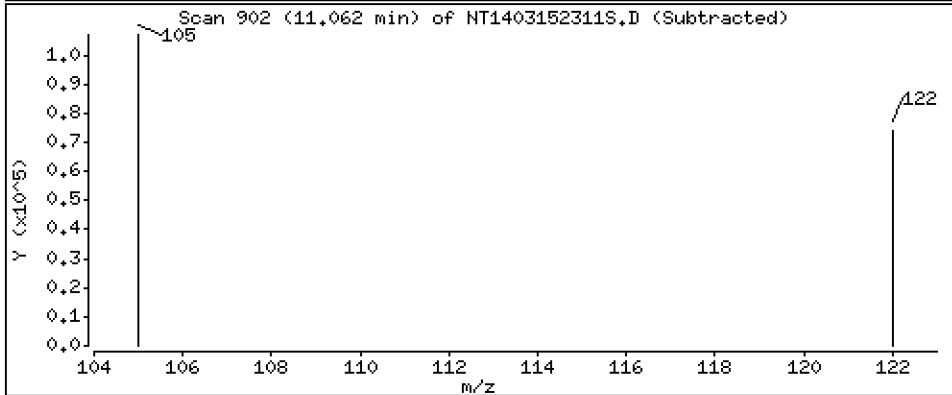
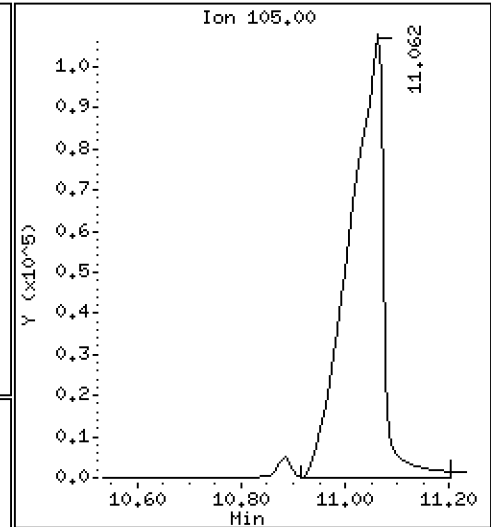
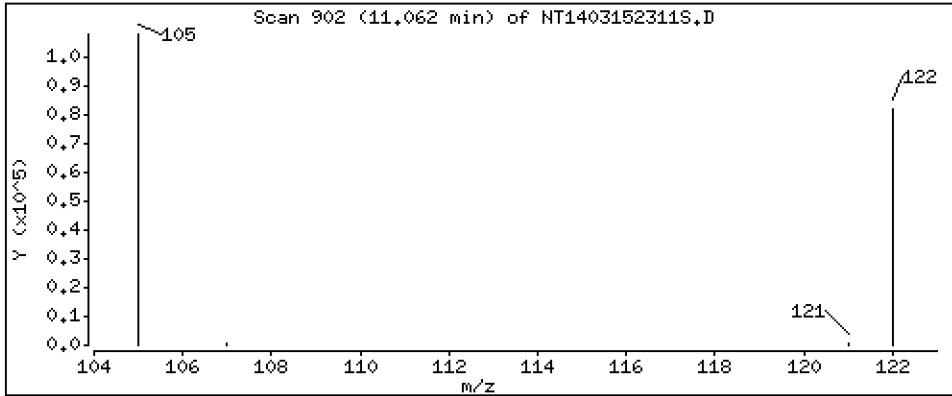
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 9.081 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

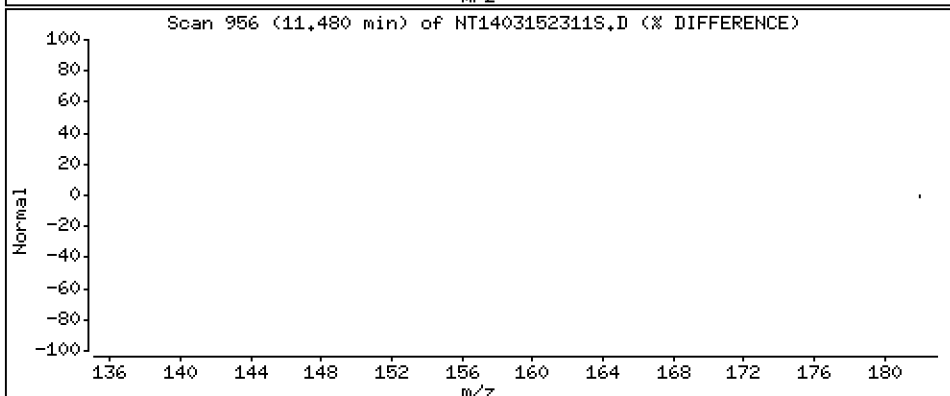
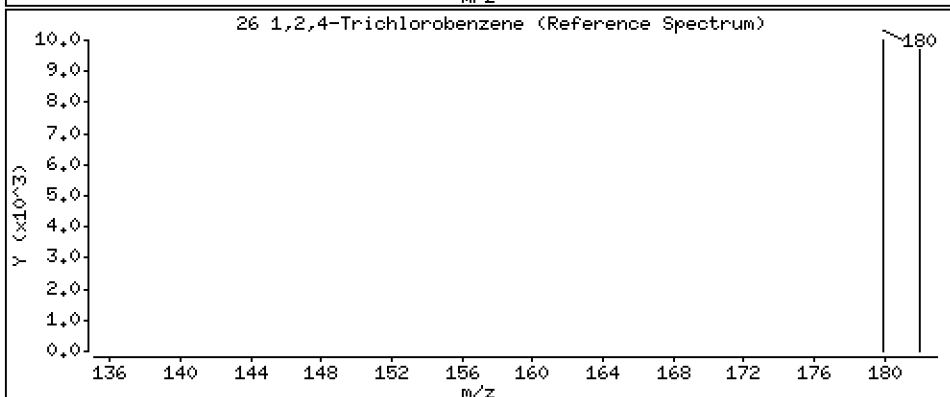
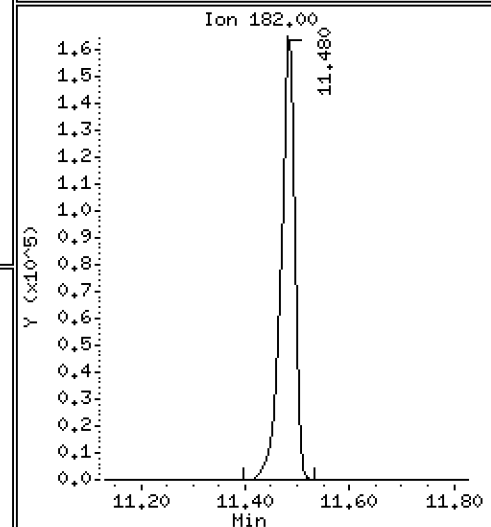
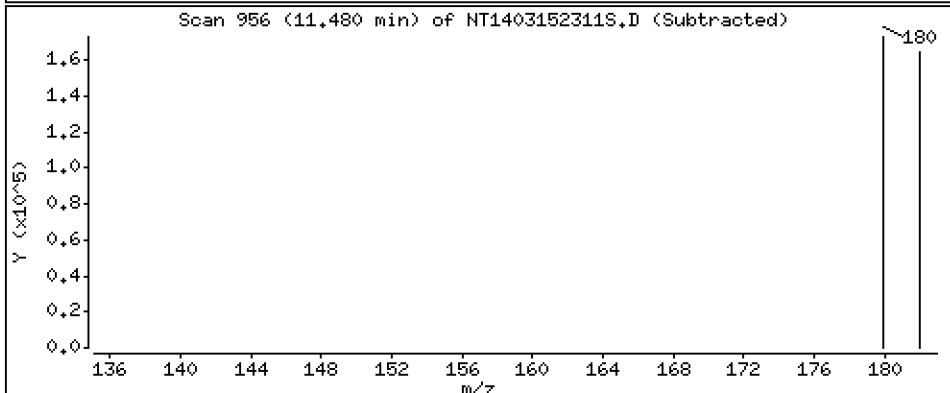
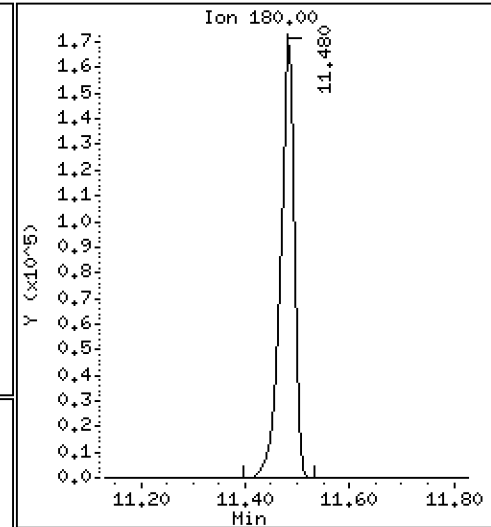
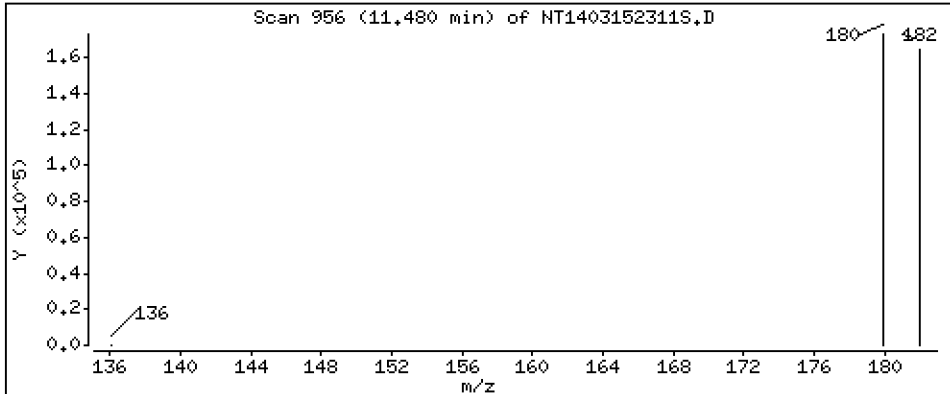
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.574 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

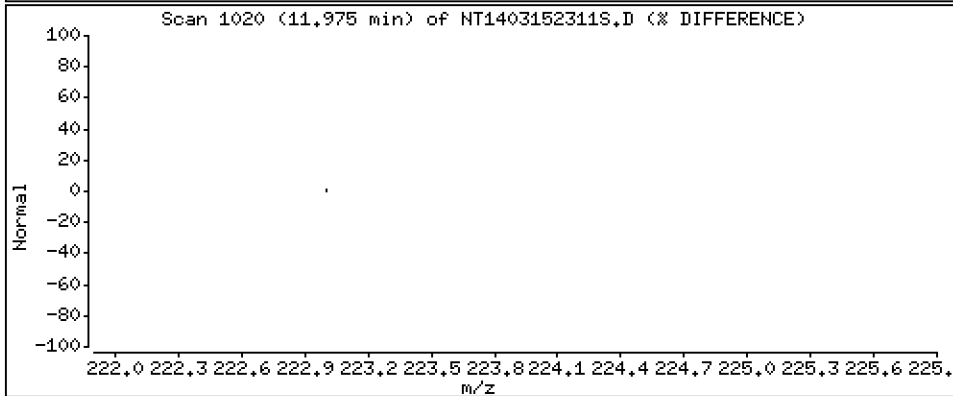
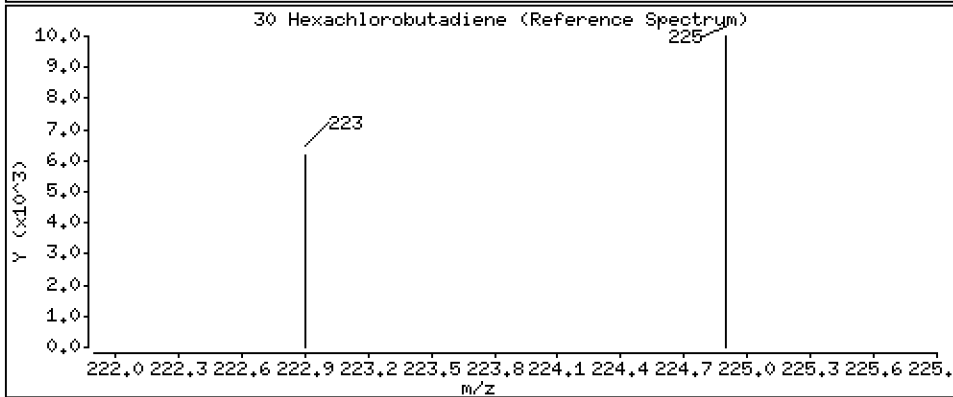
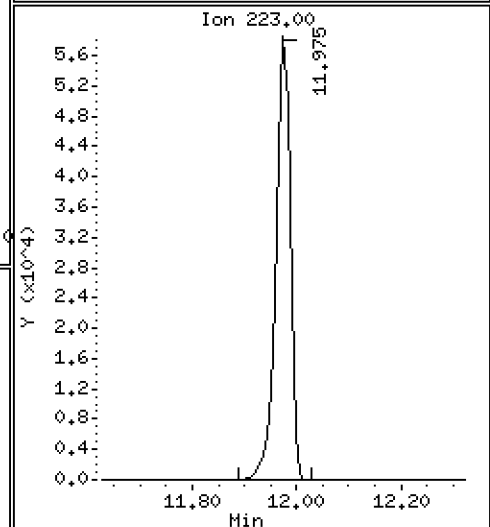
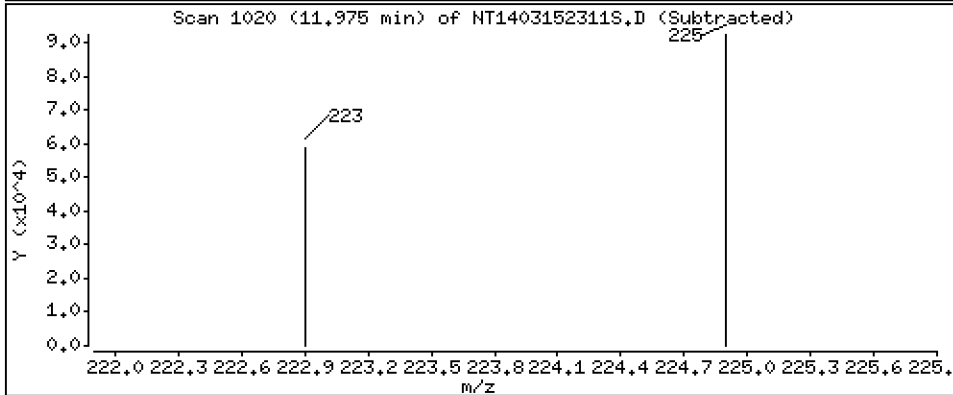
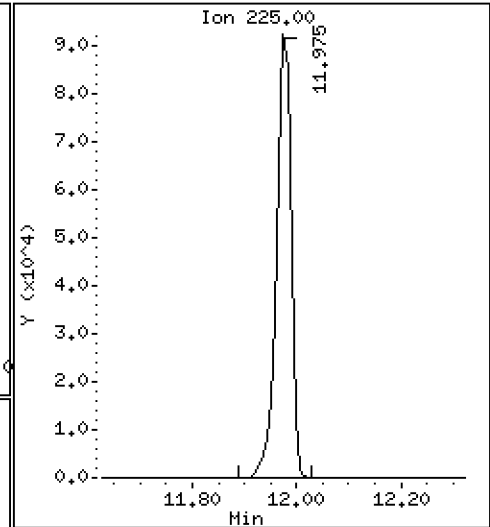
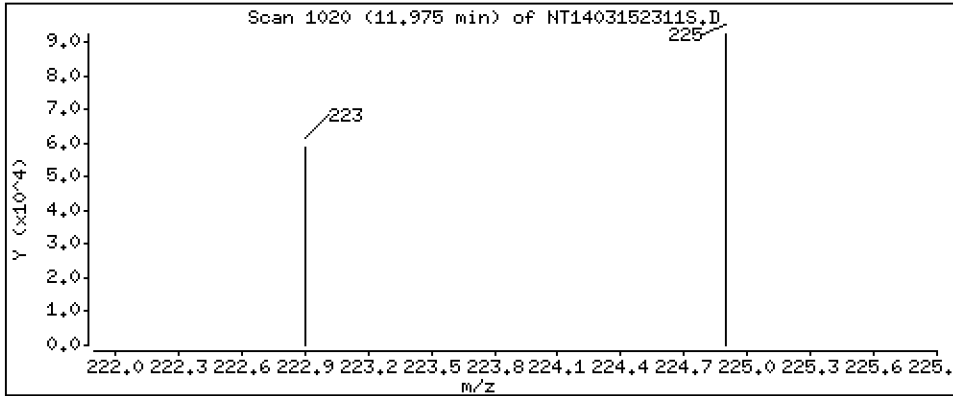
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,973 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

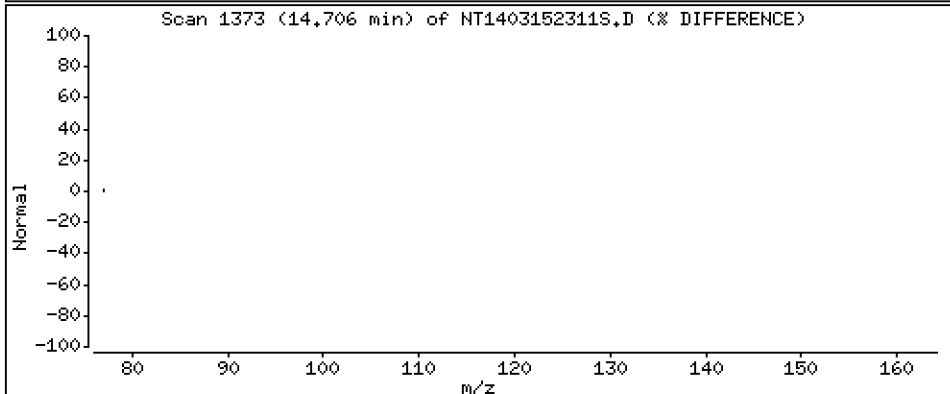
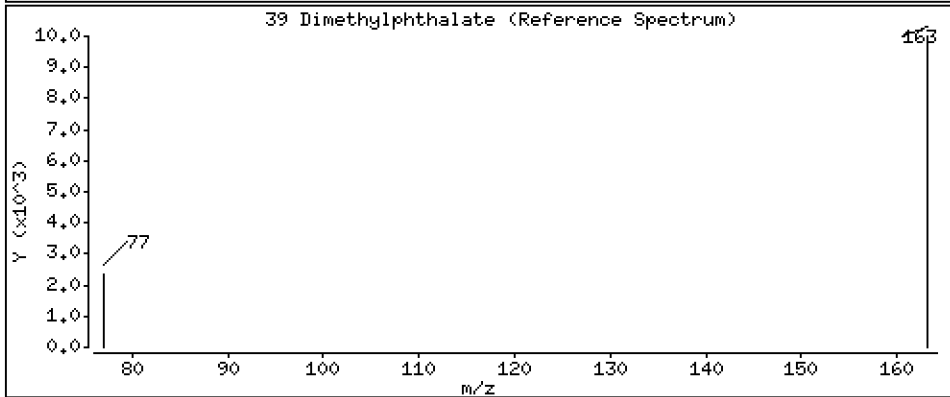
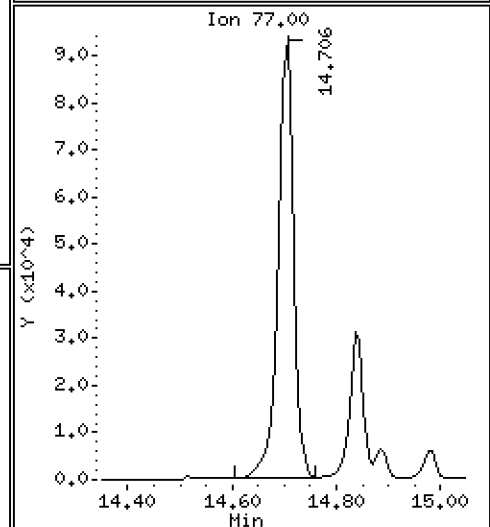
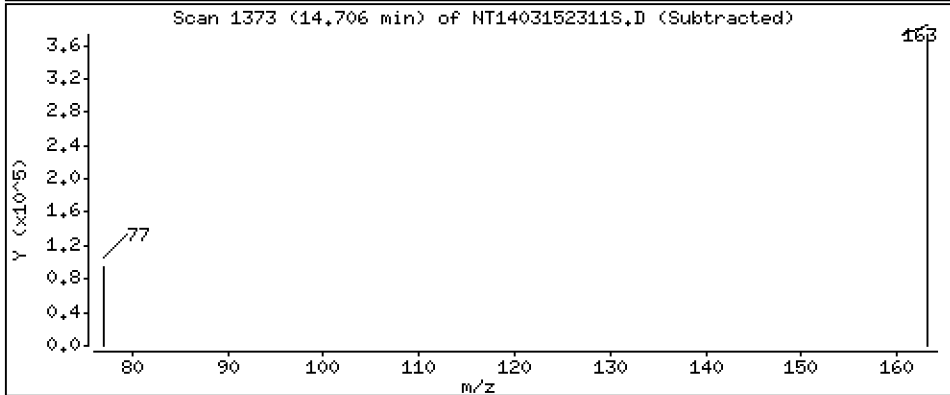
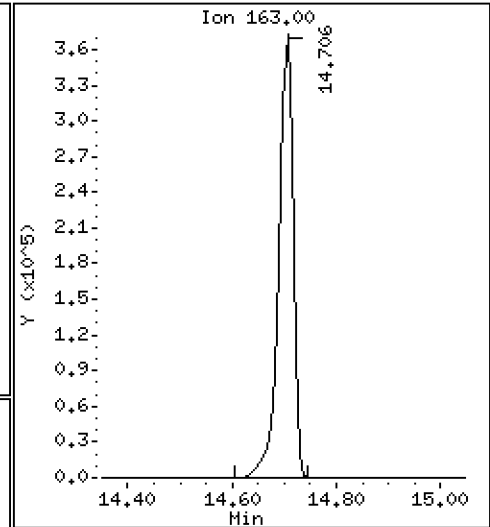
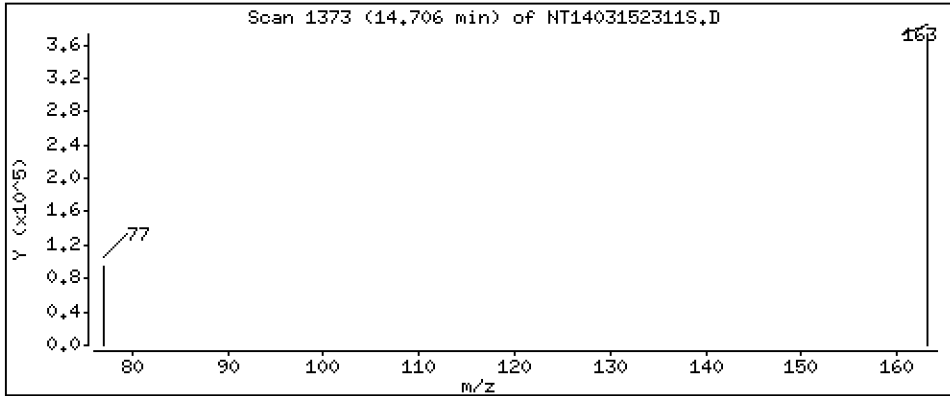
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,995 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

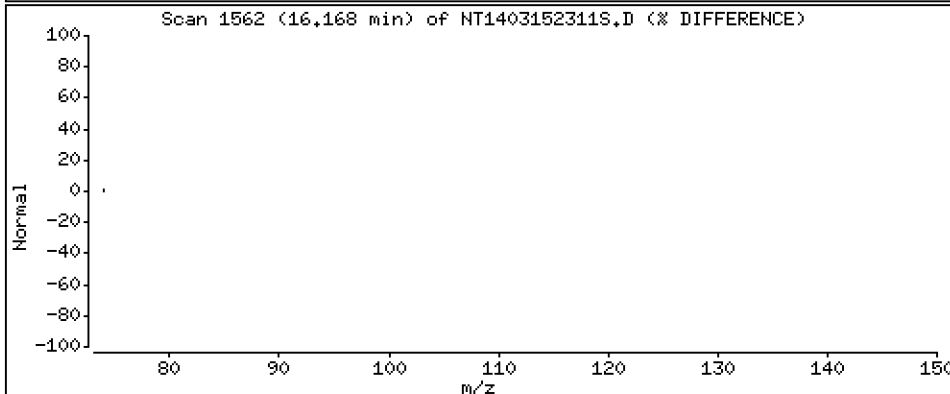
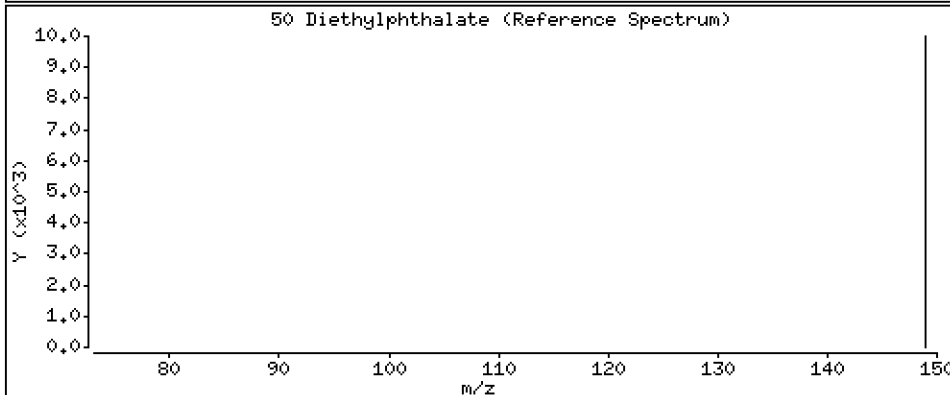
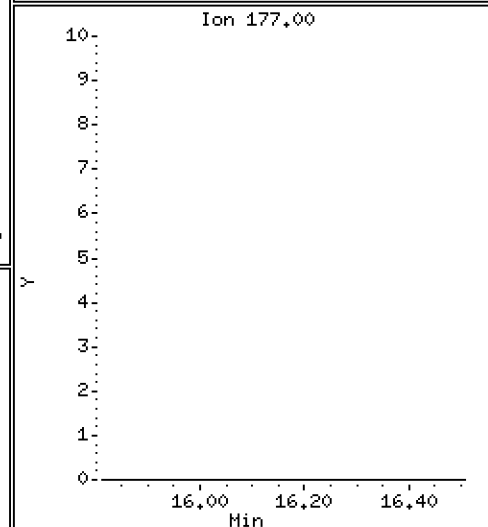
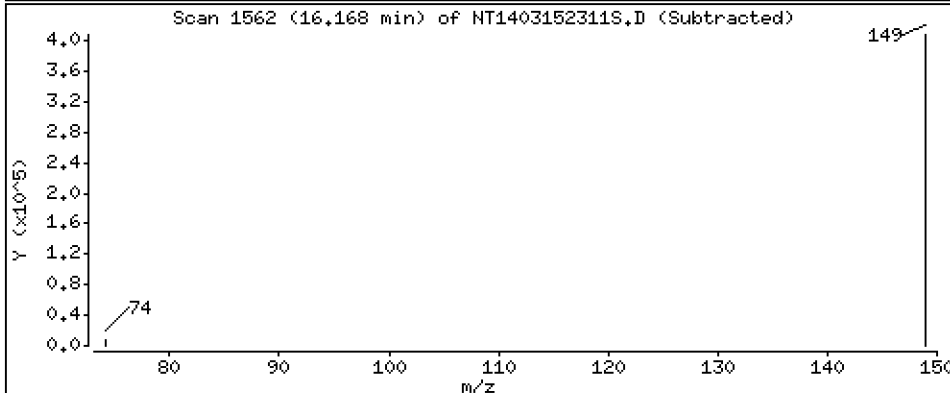
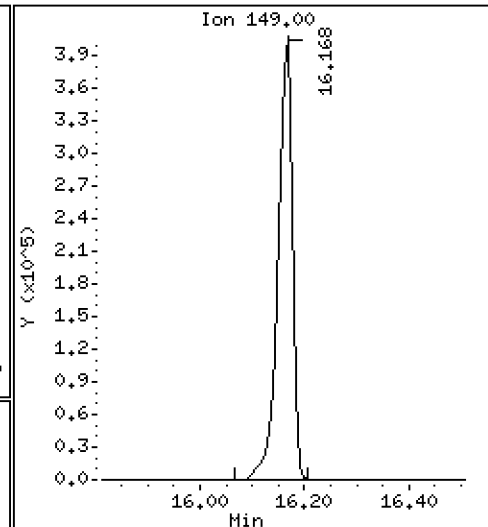
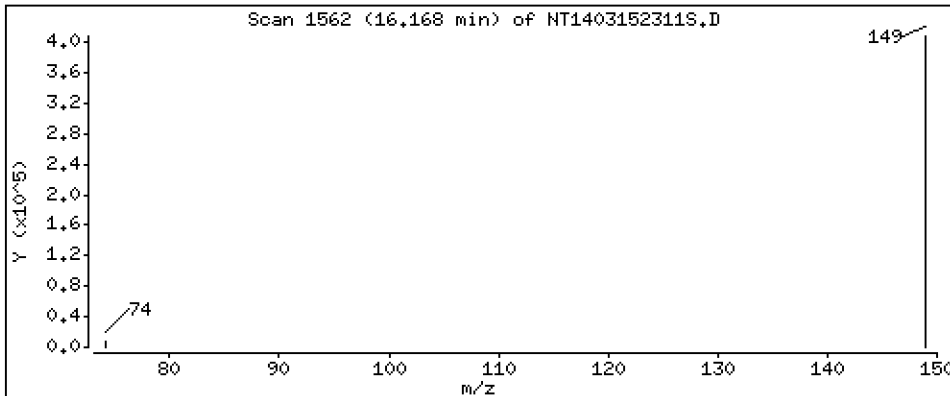
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,174 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

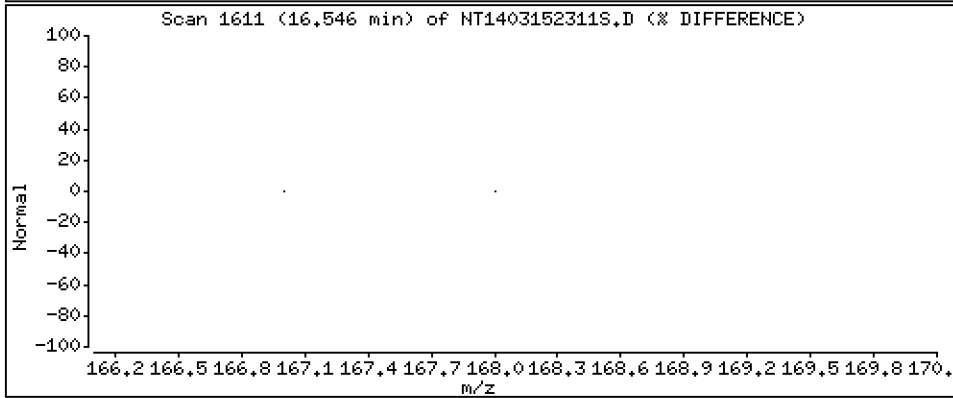
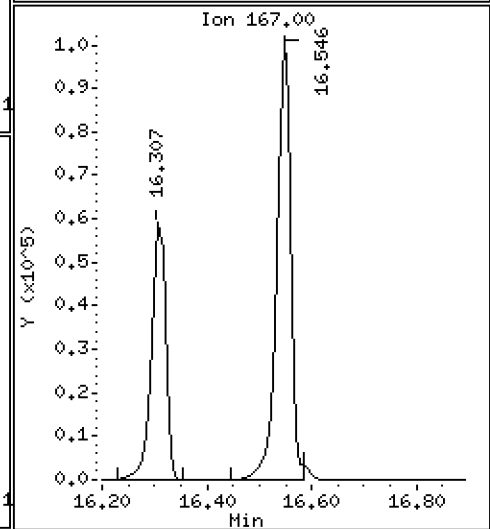
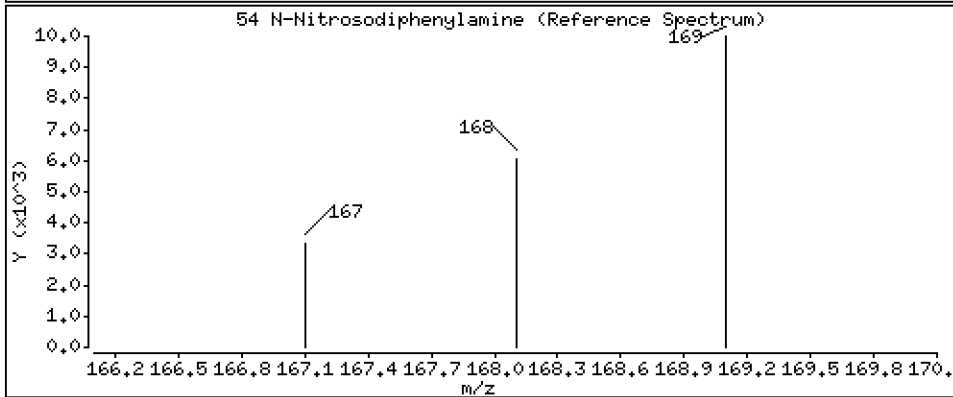
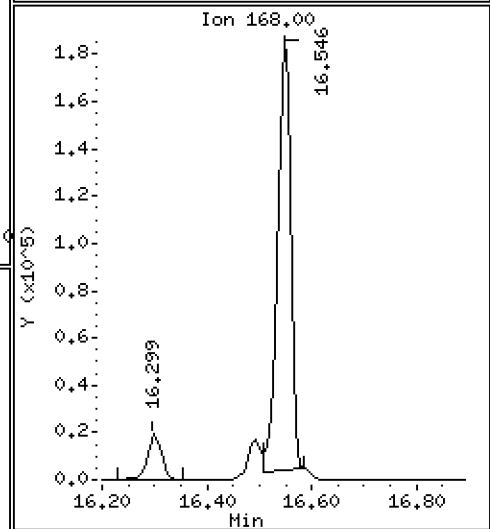
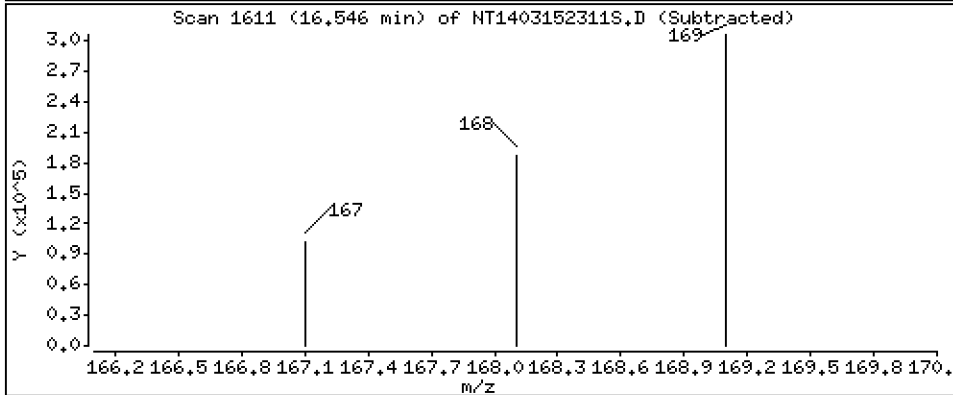
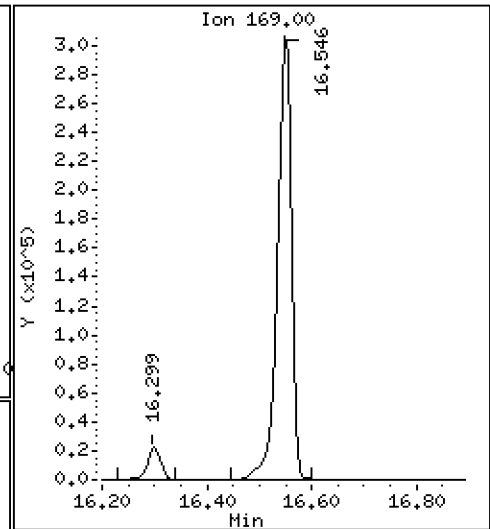
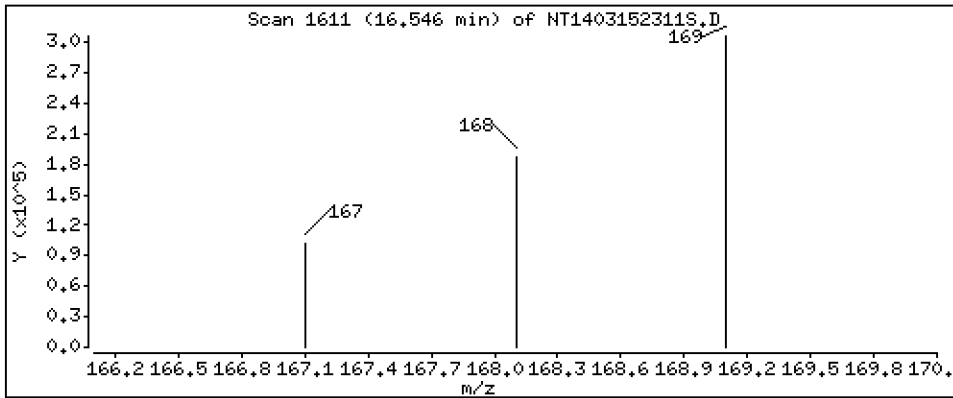
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,019 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

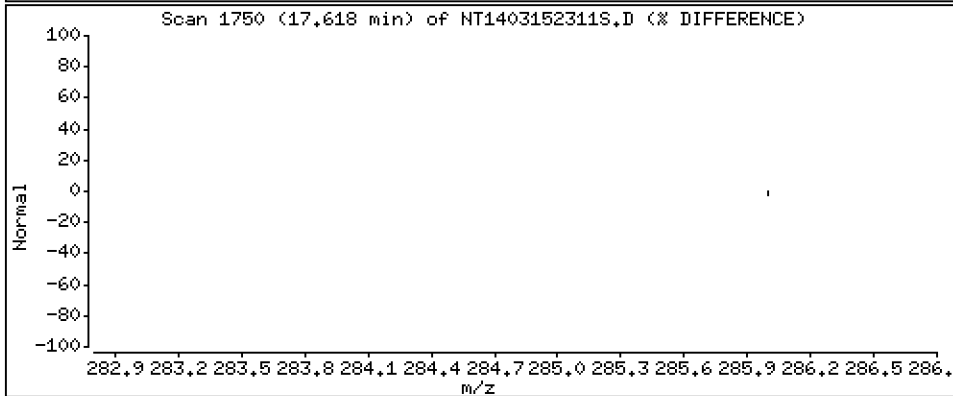
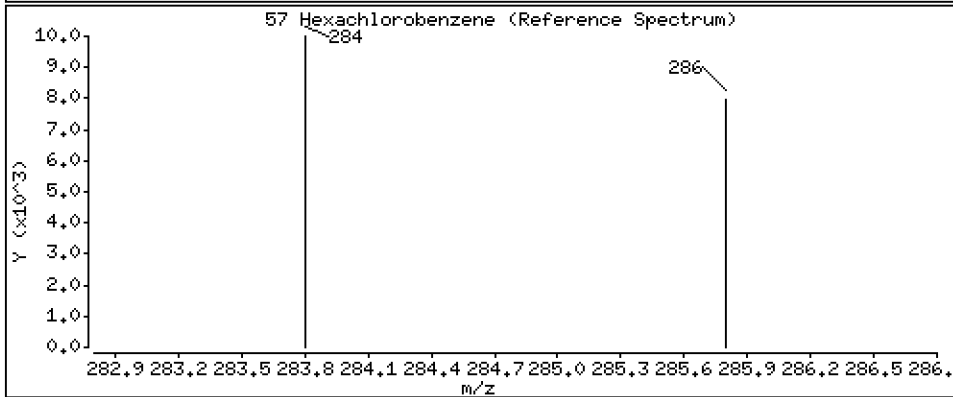
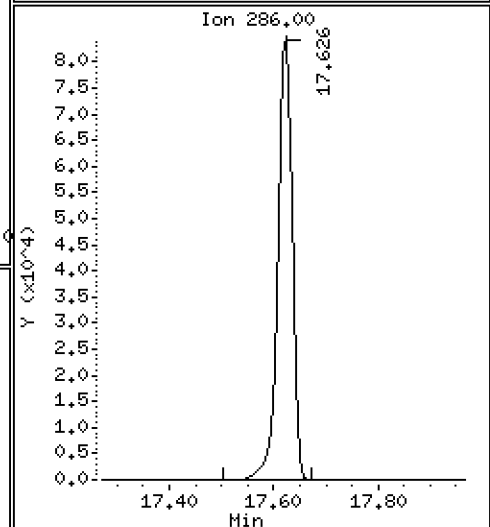
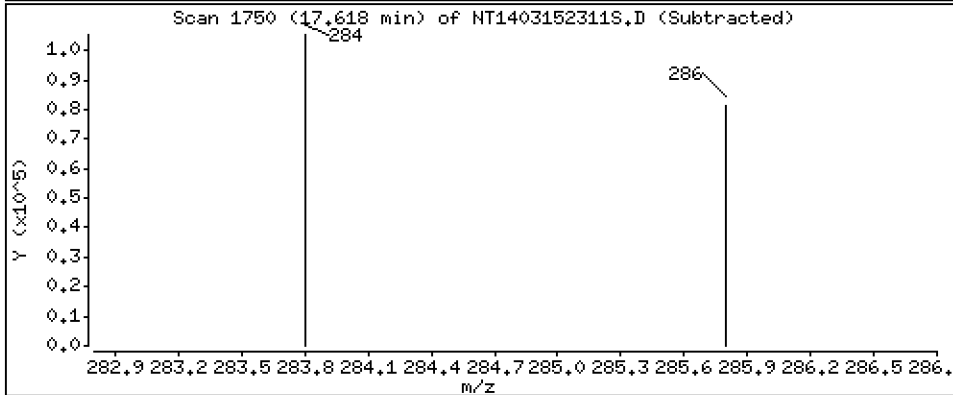
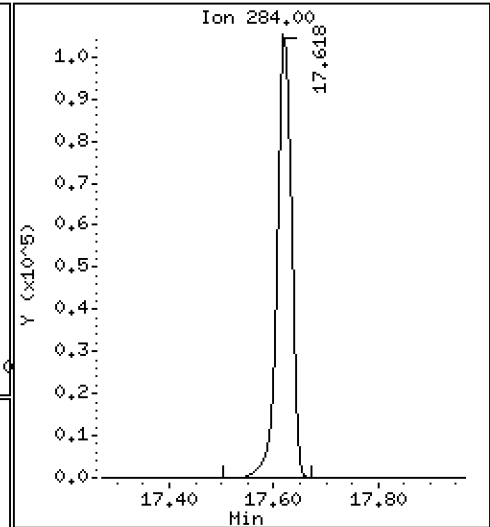
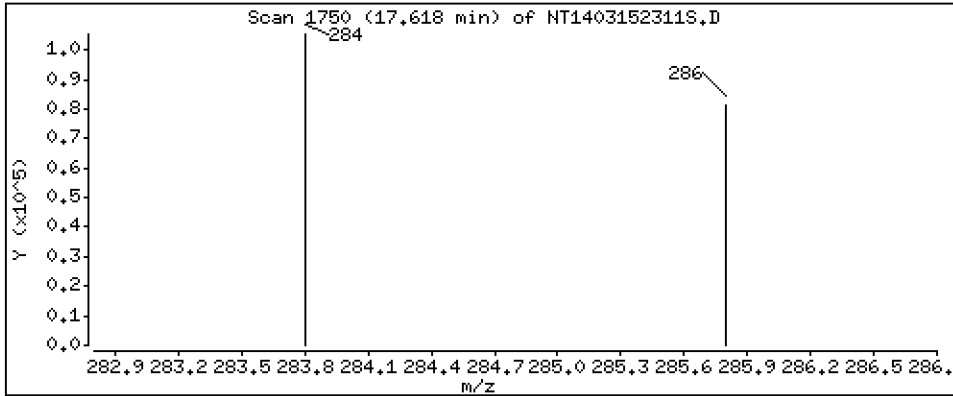
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,693 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

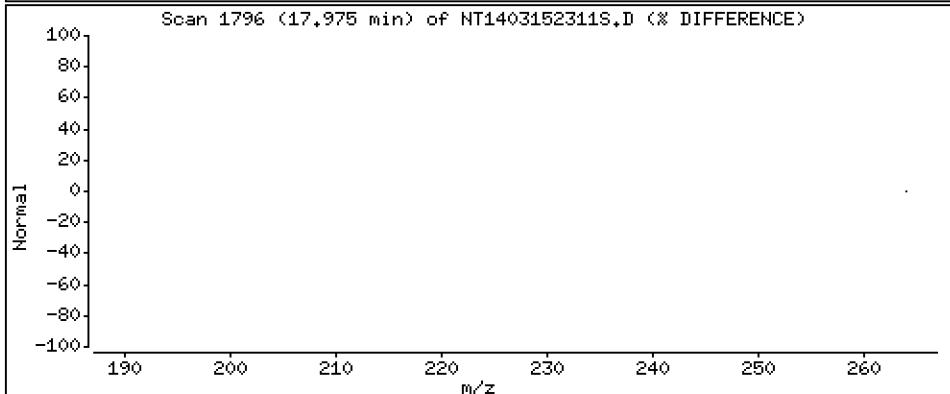
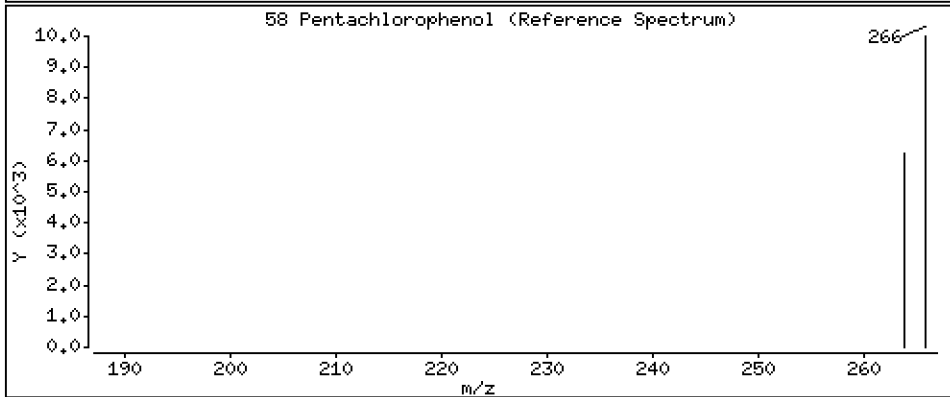
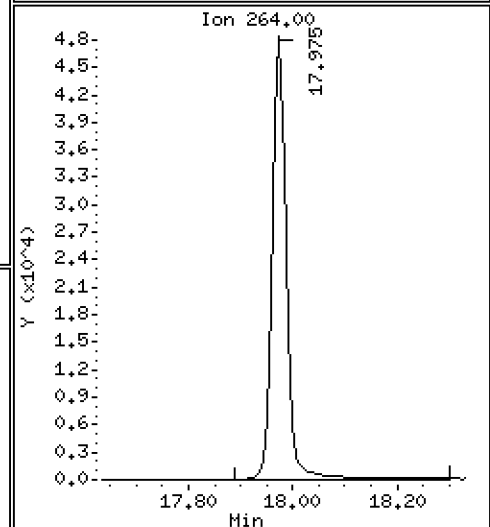
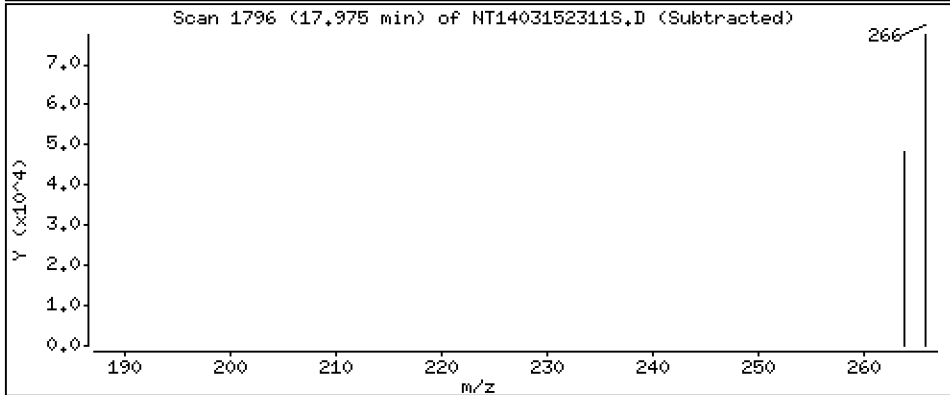
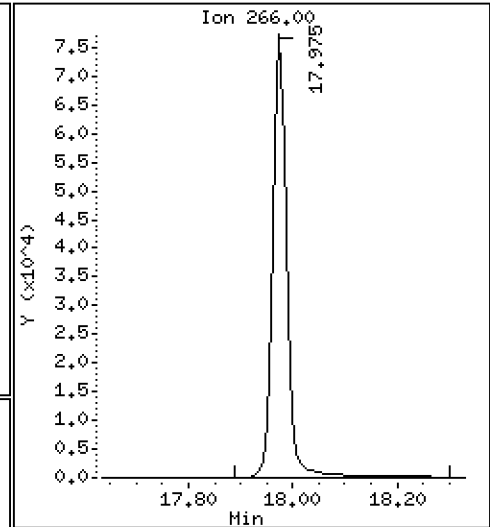
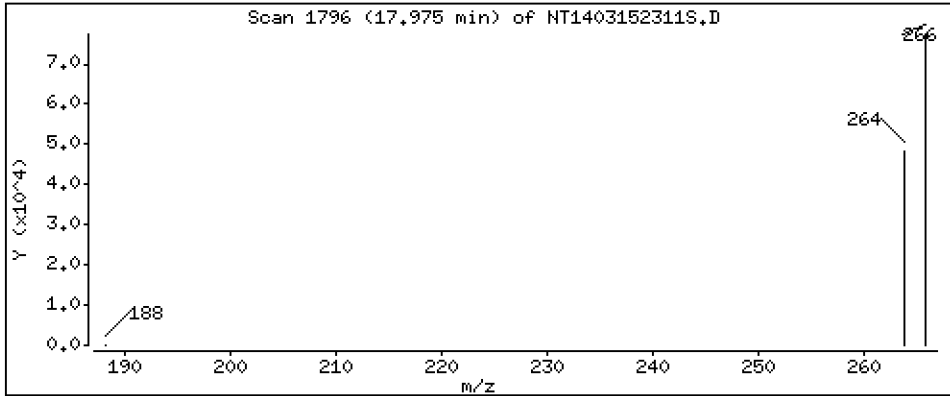
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,800 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

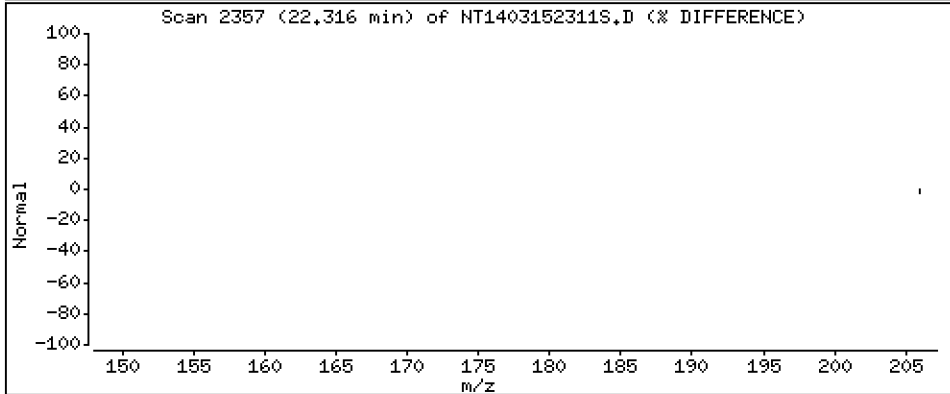
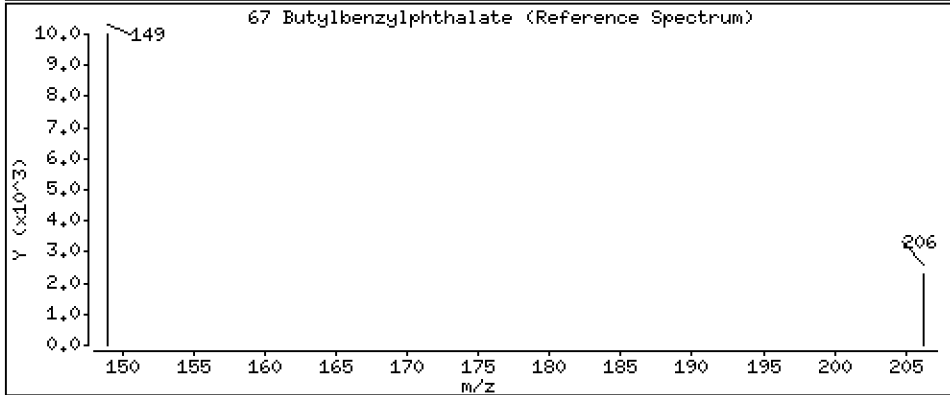
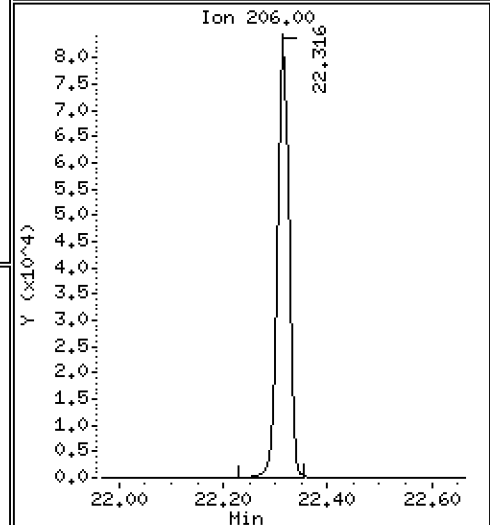
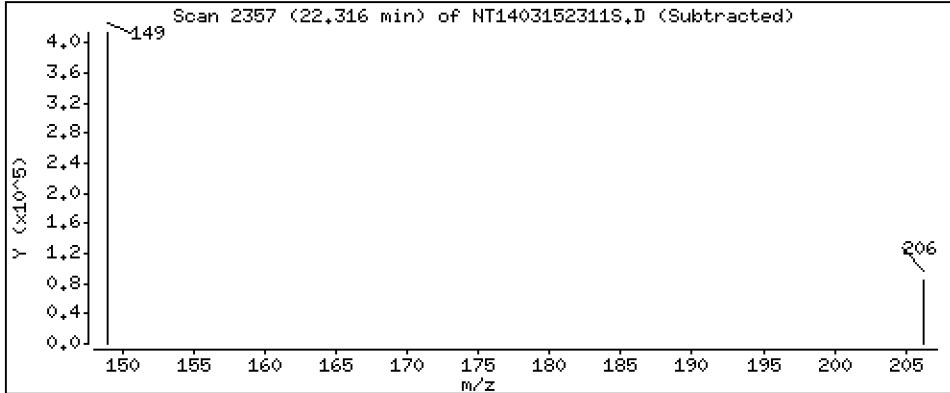
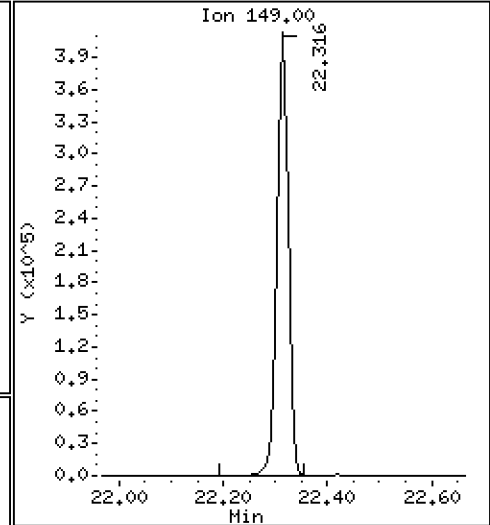
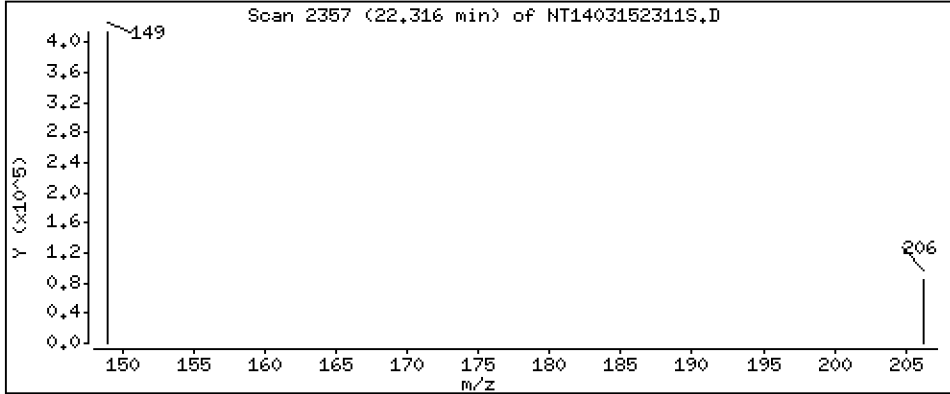
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,366 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

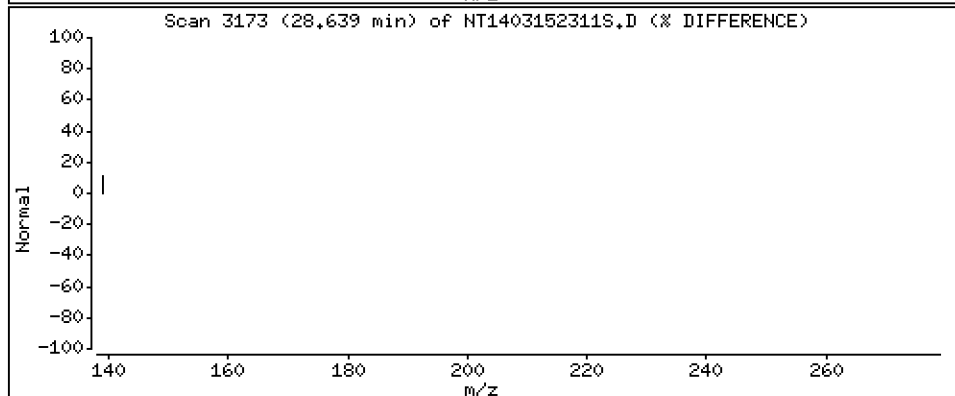
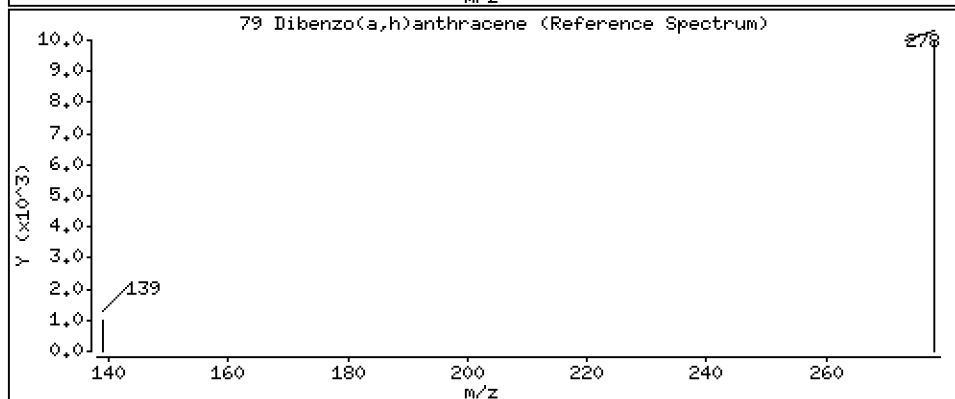
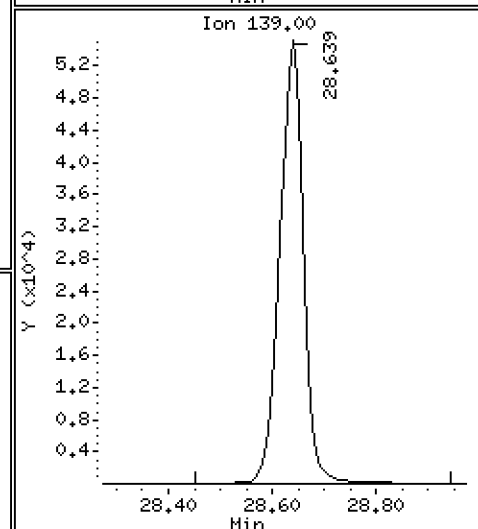
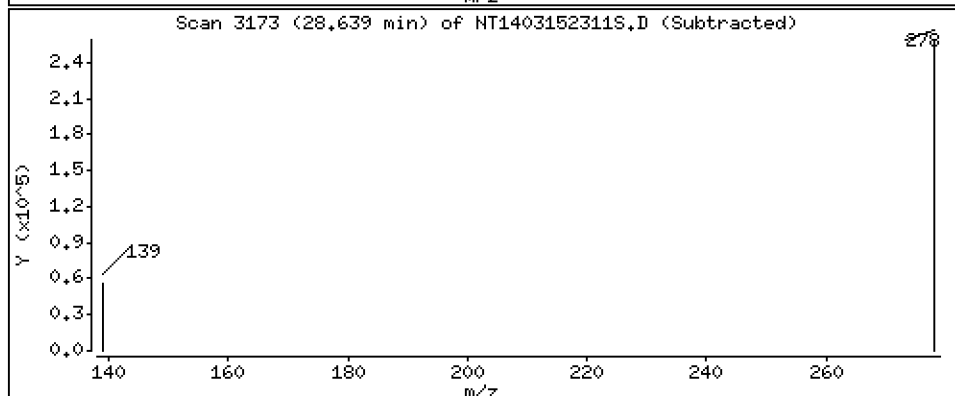
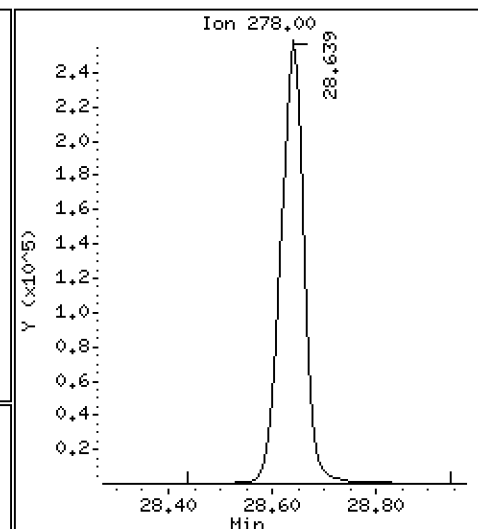
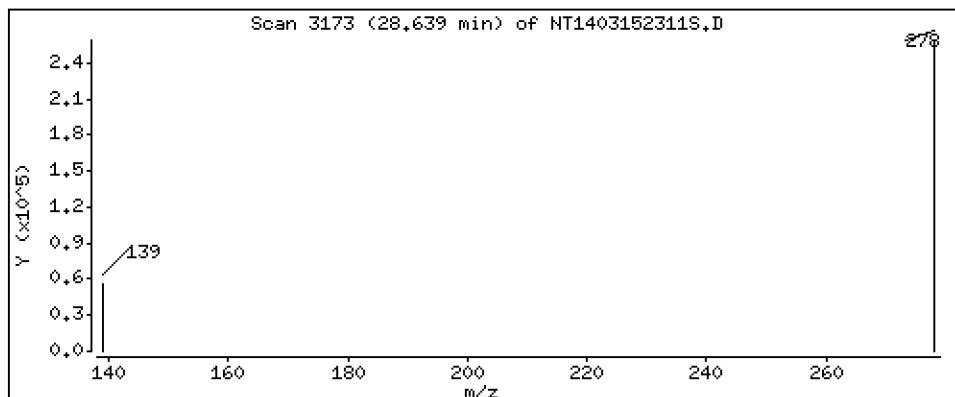
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,166 ug/mL



Date : 15-MAR-2023 17:39

Client ID:

Instrument: nt14.i

Sample Info: SLC0242-SCV1

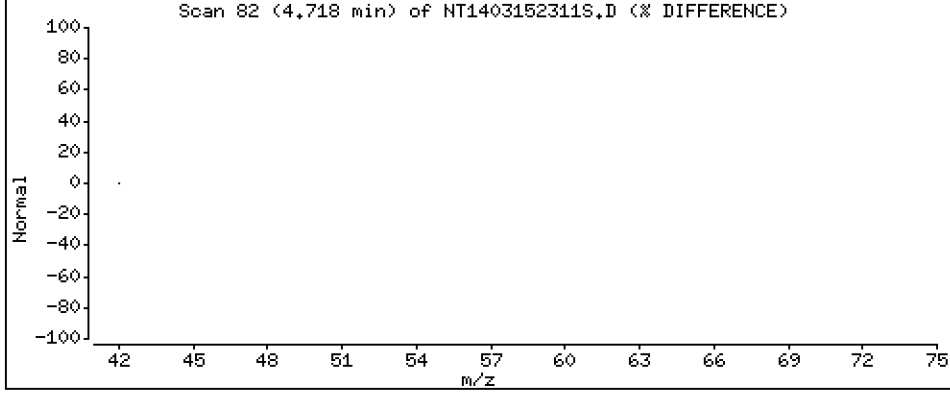
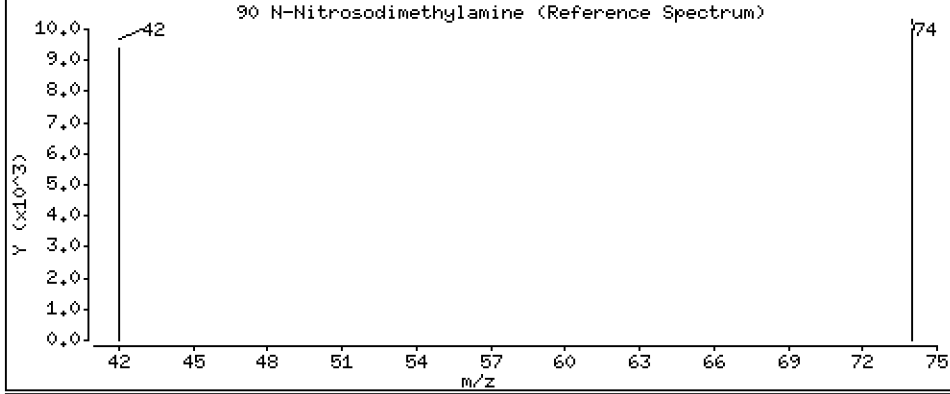
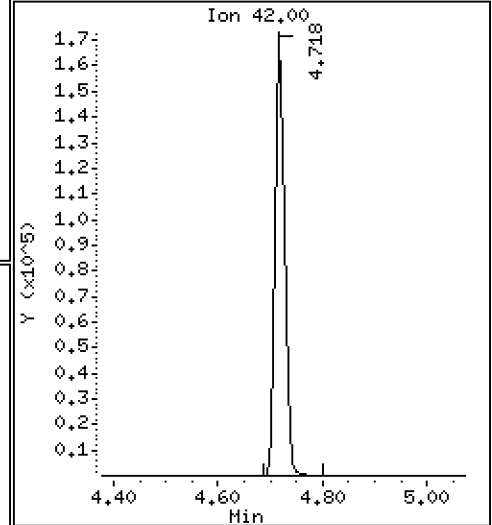
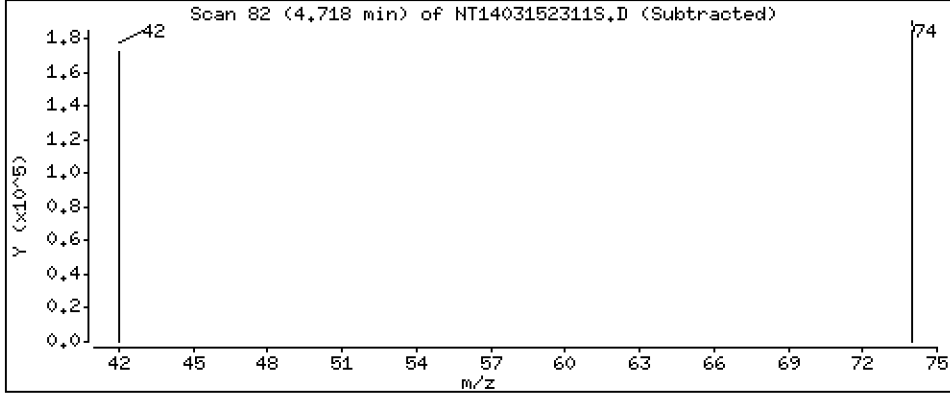
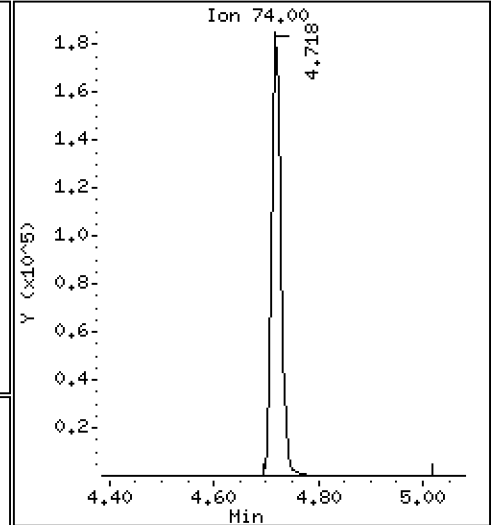
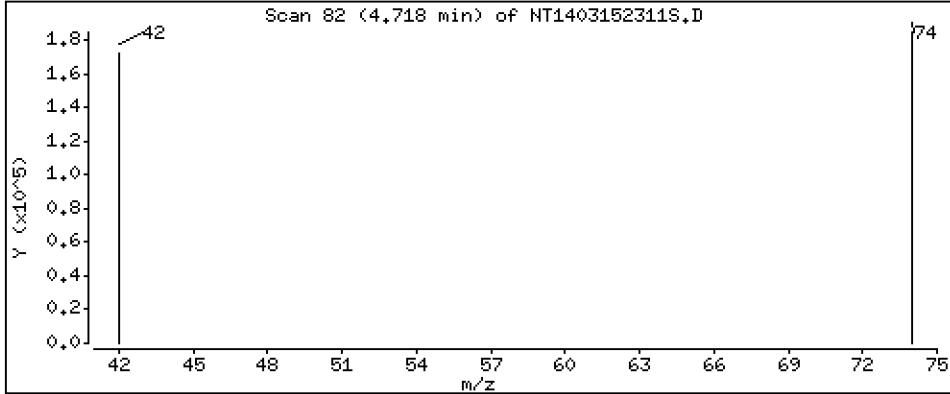
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.261 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230315.b\20230315.b\NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Inj Date : 15-MAR-2023 17:39 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0242-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Meth Date : 16-Mar-2023 15:17 deenayd Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	131	0.00180	0.001799 (R)
3 Phenol	94		8.441	8.433	(0.931)	454904	4.54237	4.542
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	414667	4.83856	4.839
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	214548	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	402045	4.84807	4.848
11 Benzyl alcohol	79		9.339	9.339	(1.030)	313629	5.34291	5.343
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	389531	4.82237	4.822
13 2-Methylphenol	108		9.564	9.556	(1.055)	296655	4.28818	4.288
15 4-Methylphenol	108		9.836	9.828	(1.085)	331703	4.53863	4.539
16 N-Nitroso-di-n-propylamine	70		9.905	9.898	(1.092)	265440	5.13699	5.137
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	272931	3.93394	3.934
24 Benzoic acid	105		11.061	10.883	(0.956)	494569	9.08128	9.081
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	311017	4.57388	4.574
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	807045	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	171122	4.97279	4.973
39 Dimethylphthalate	163		14.706	14.698	(0.967)	683967	4.99496	4.995
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	400955	4.00000	
50 Diethylphthalate	149		16.168	16.160	(1.064)	754333	5.17432	5.174
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	544923	5.01904	5.019
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	195732	4.69277	4.693
58 Pentachlorophenol	266		17.974	17.982	(0.985)	138145	4.79996	4.800
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	801298	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	546	0.00507	0.005072 (R)
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	588546	5.36591	5.366
* 69 Chrysene-d12	240		23.299	23.299	(1.000)	624454	4.00000	
* 77 Perylene-d12	264		25.939	25.939	(1.000)	623001	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.623	(1.104)	815876	5.16593	5.166
90 N-Nitrosodimethylamine	74		4.717	4.733	(0.520)	234083	5.26142	5.261

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403152311S.D
 Lab Smp Id: SLC0242-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230315.b\20230315.b\SIMABN2.m
 Misc Info:

Calibration Date: 15-MAR-2023
 Calibration Time: 14:38
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	223201	111601	446402	214548	-3.88
27 Naphthalene-d8	832937	416469	1665874	807045	-3.11
42 Acenaphthene-d10	403175	201588	806350	400955	-0.55
59 Phenanthrene-d10	814822	407411	1629644	801298	-1.66
69 Chrysene-d12	625755	312878	1251510	624454	-0.21
77 Perylene-d12	614085	307043	1228170	623001	1.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.07	-0.08
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403152311S.D

Lab ID: SLC0242-SCV1

nt14.i, 20230315.b\20230315.b\SIMABN2.m,

15-MAR-2023 17:39

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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



CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00050</u>
Lab File ID:	<u>NT1403172331S.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0376</u>	Injection Date:	<u>03/18/23</u>
Lab Sample ID:	<u>SLC0376-CCV1</u>	Injection Time:	<u>08:30</u>
Sequence Name:	<u>Calibration Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.5461150	1.5291550		-1.1	+/-50
1,2-Dichlorobenzene	A	1.0000	1.0	1.5059720	1.4953380		-0.7	+/-50
Benzyl Alcohol	A	1.0000	0.7	1.0943940	0.8082583		-26.1	+/-50
Benzoic acid	A	4.0000	2.1	0.1762504	0.1396452		-46.8	+/-50
2,4-Dimethylphenol	A	2.0000	2.0	0.3438645	0.3416153		-0.7	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3370247	0.3433713		1.9	+/-50
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5419762	0.6004019		10.8	+/-50
Pentachlorophenol	A	2.0000	1.0	0.1113753	0.0718187		-49.1	+/-50
2-Fluorophenol	A	1.5000	1.29	1.3577520	1.1657020		-14.1	+/-50
p-Terphenyl-d14	A	1.0000	1.78	0.6895811	1.2308360		78.5	+/-50 *

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723315.D

Date: 18-MAR-2023 08:30

Client ID:

Sample Info: SLC0376-CCW1

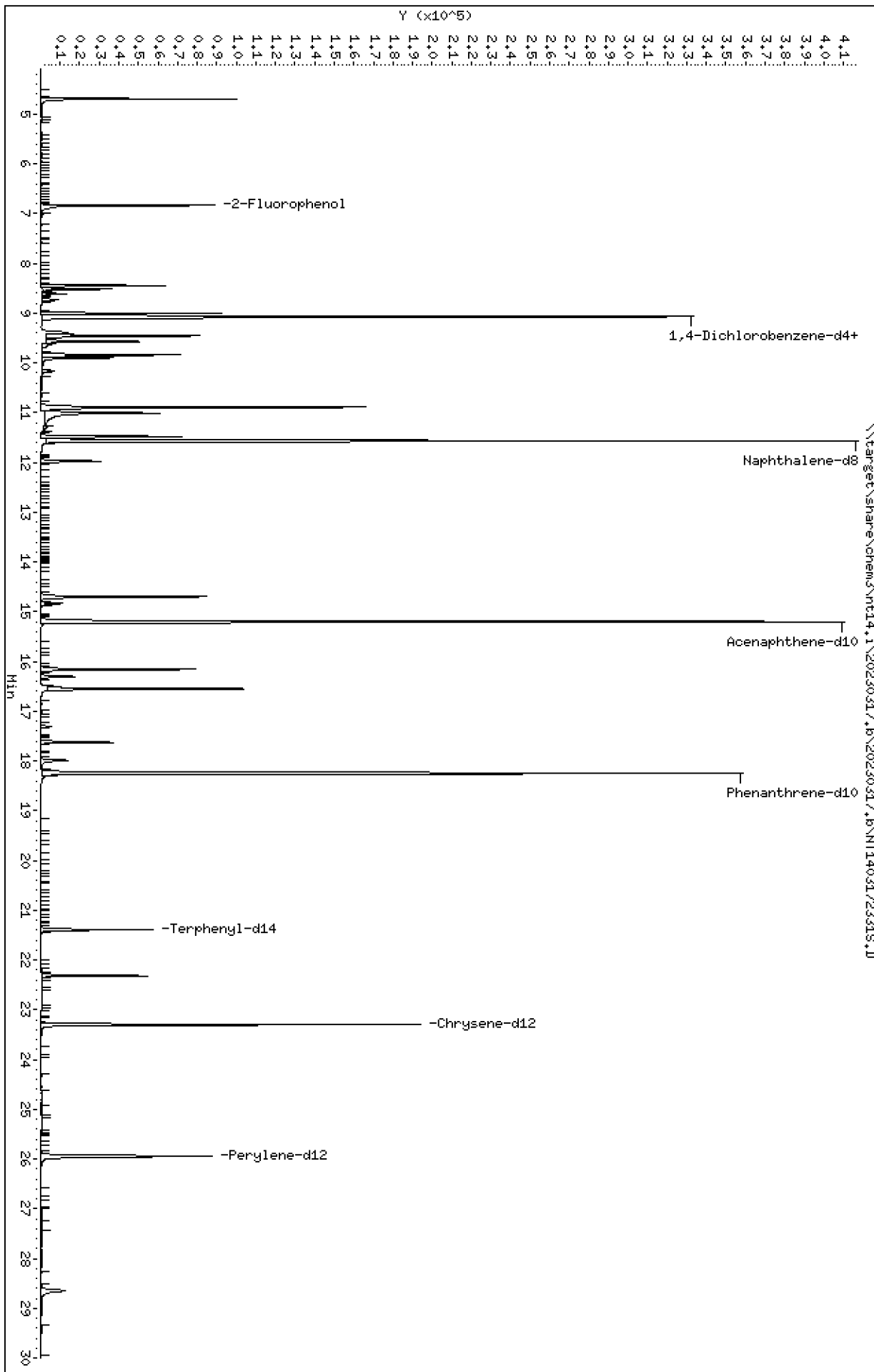
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

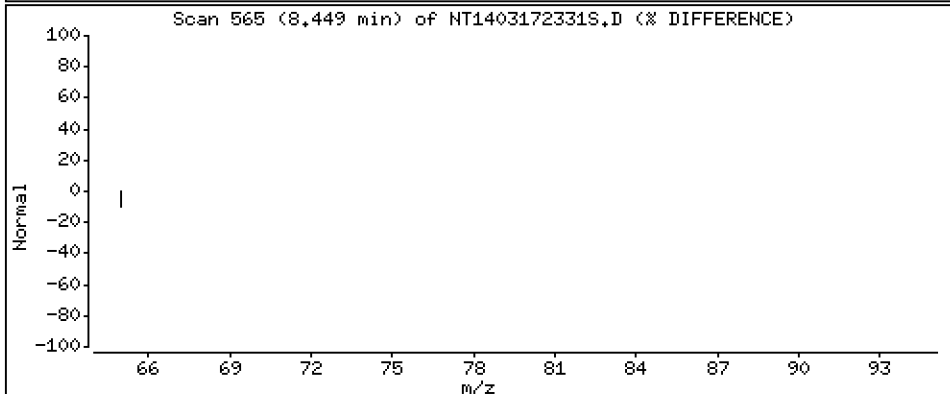
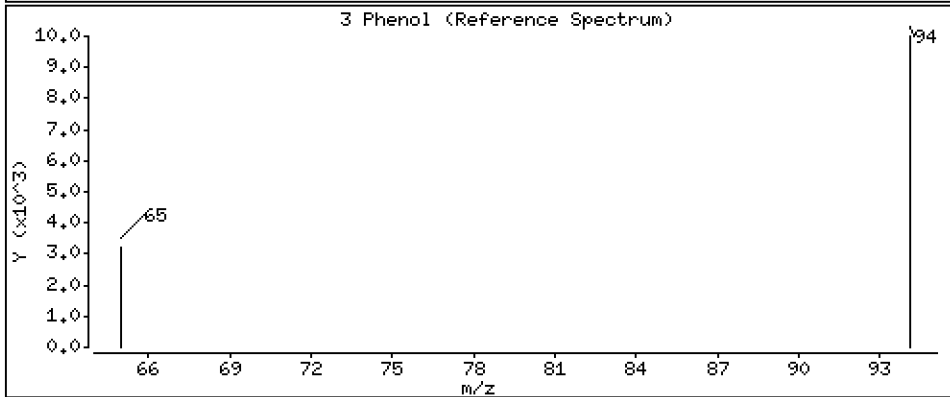
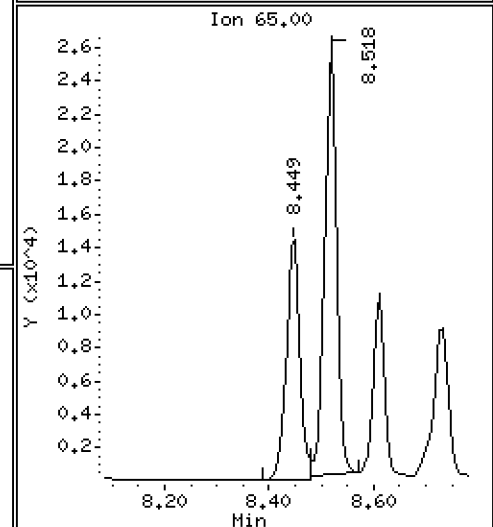
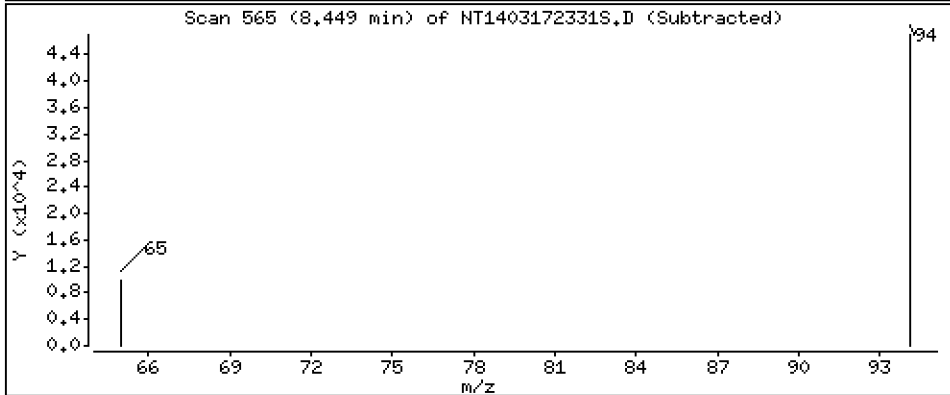
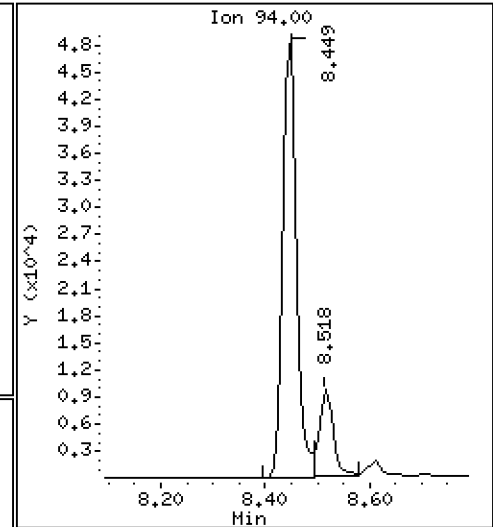
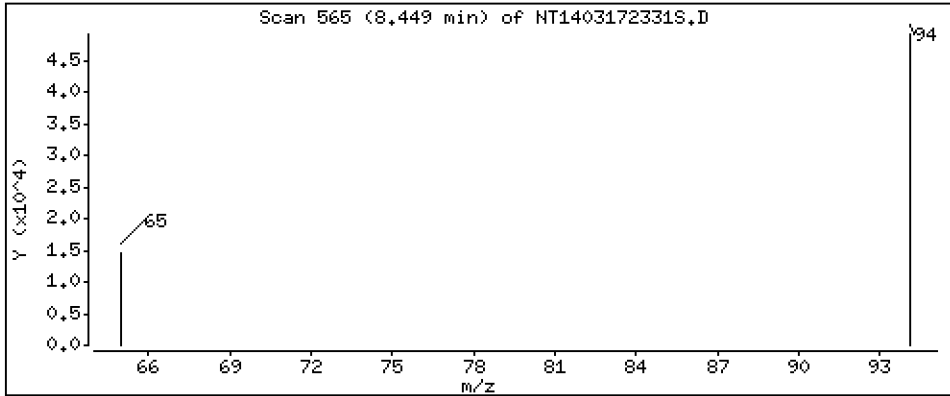
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,8649 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

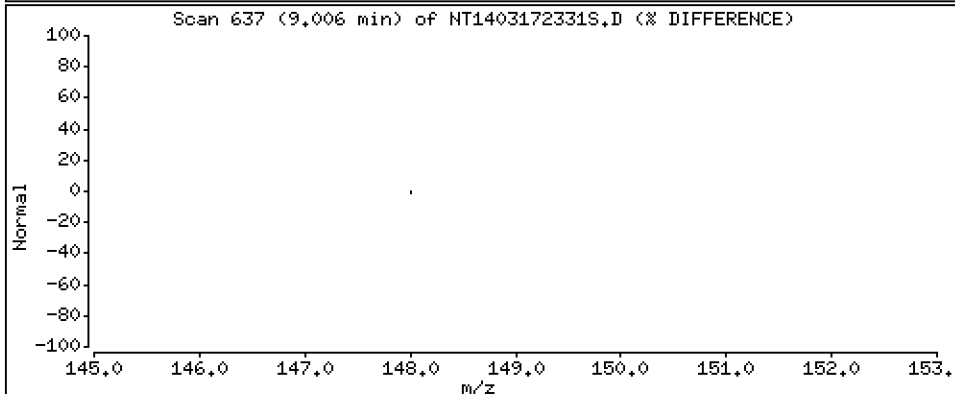
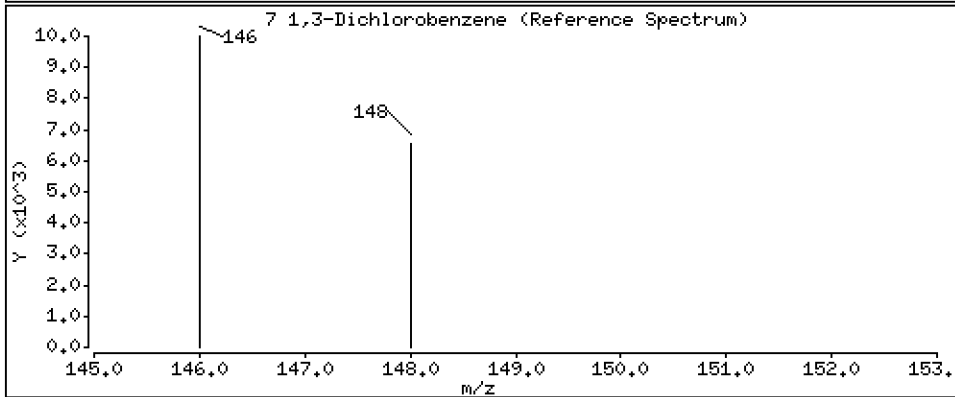
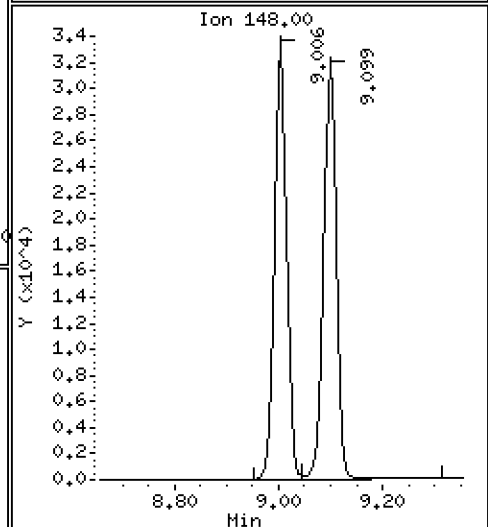
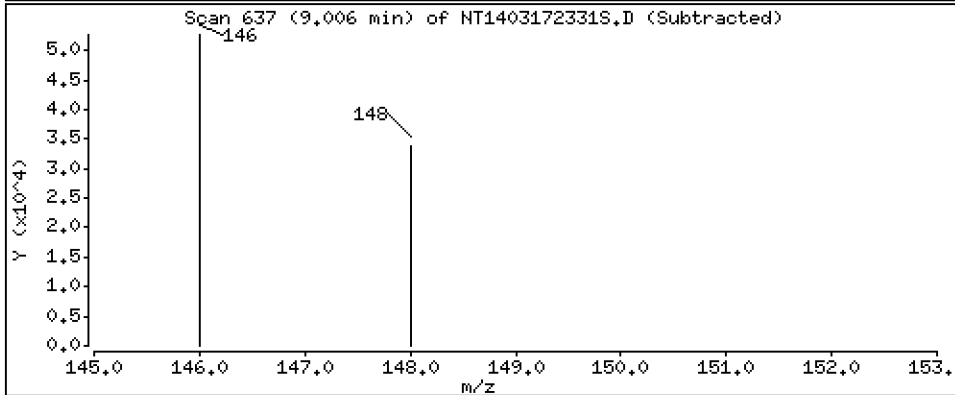
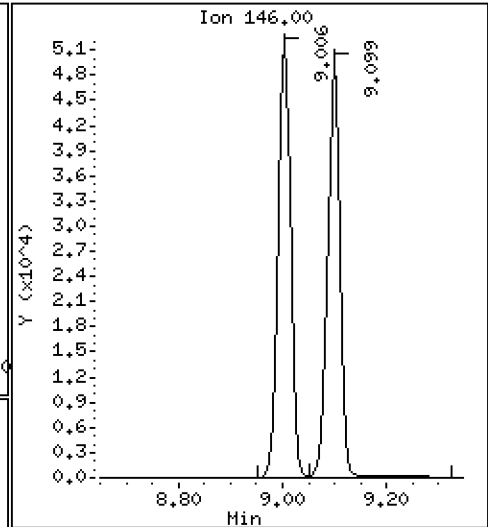
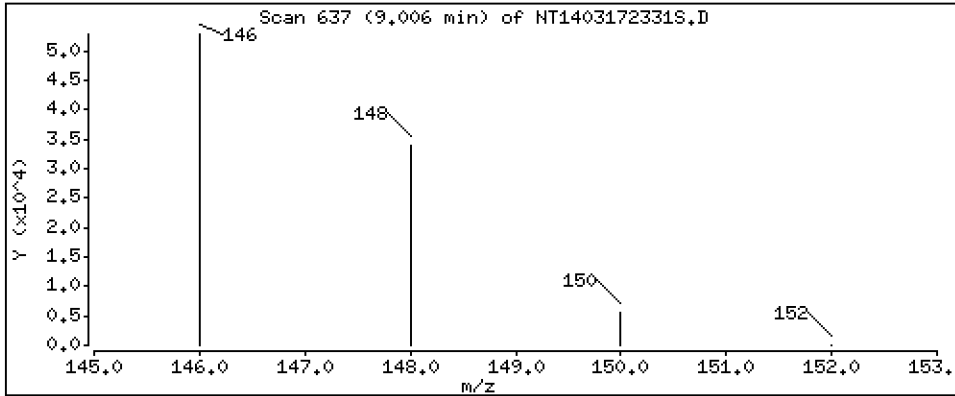
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,9875 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

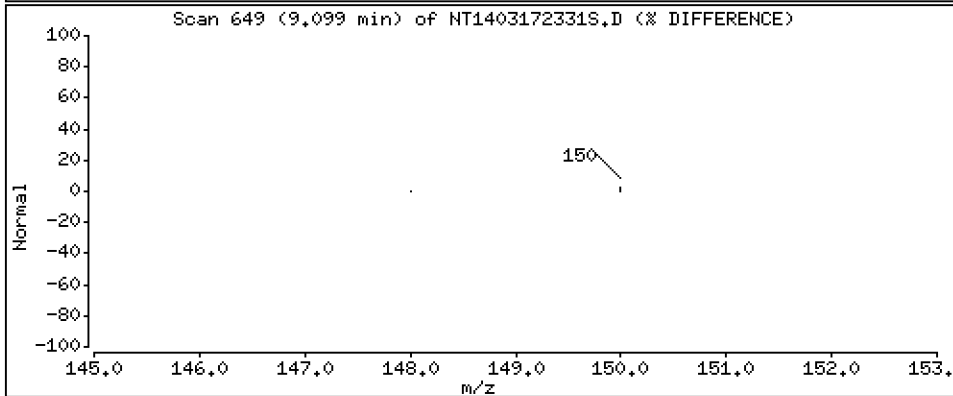
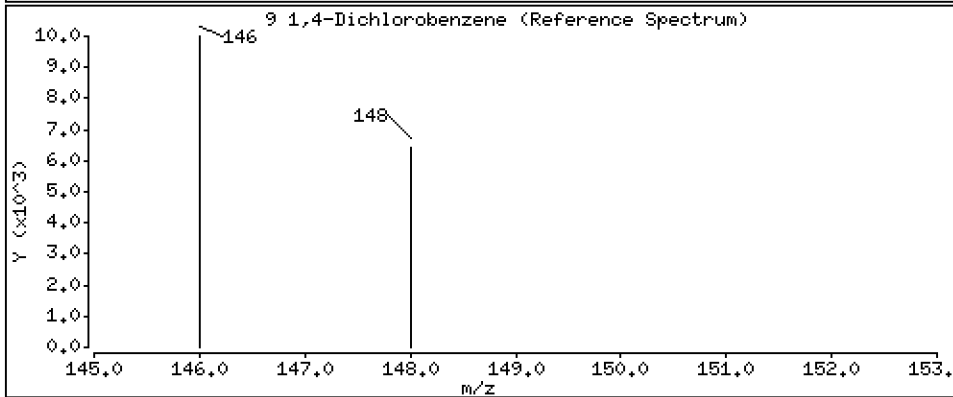
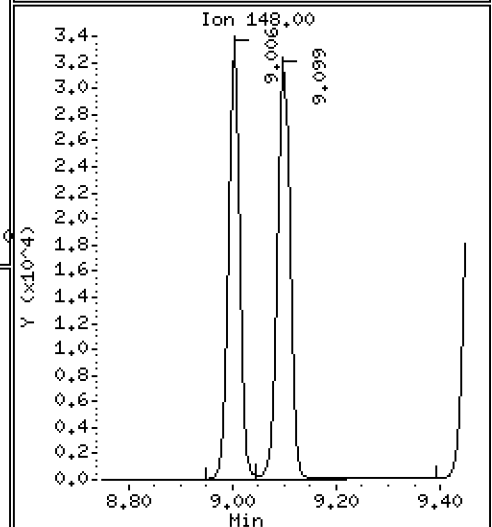
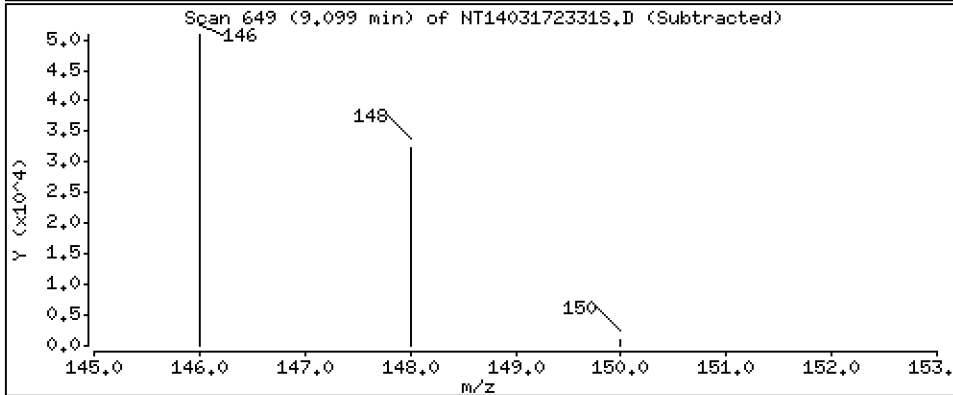
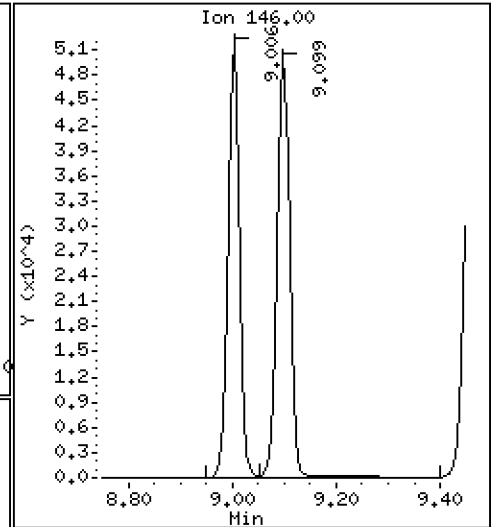
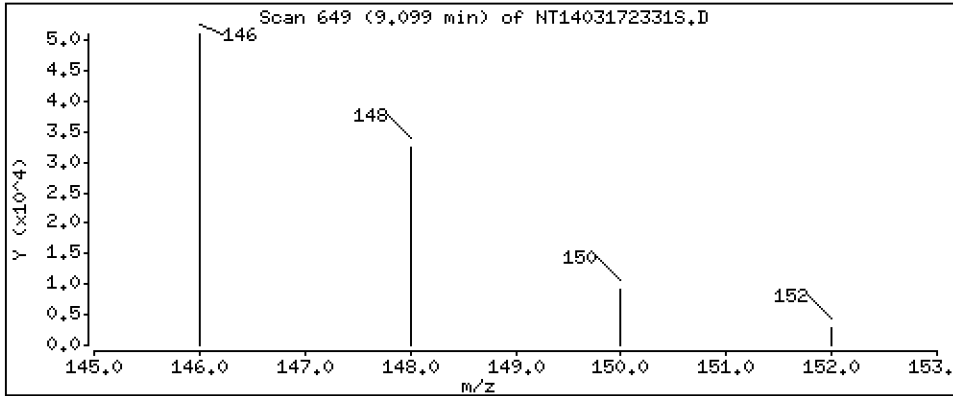
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,9890 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

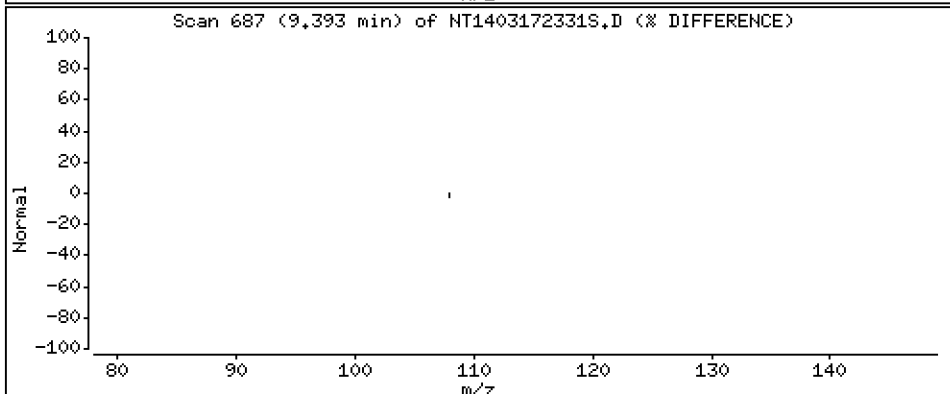
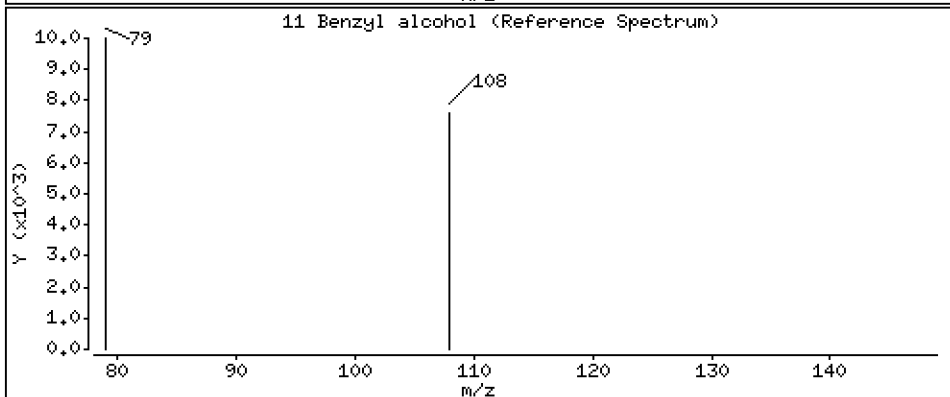
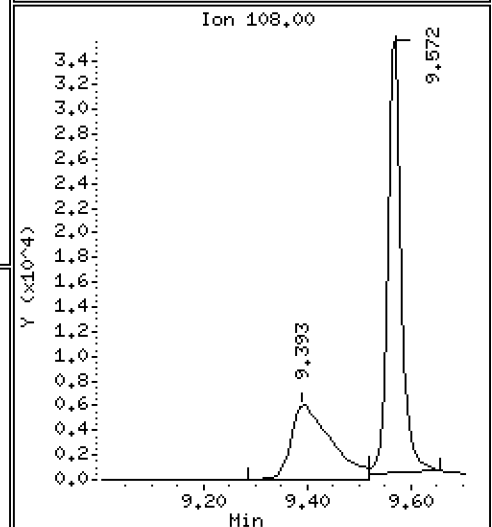
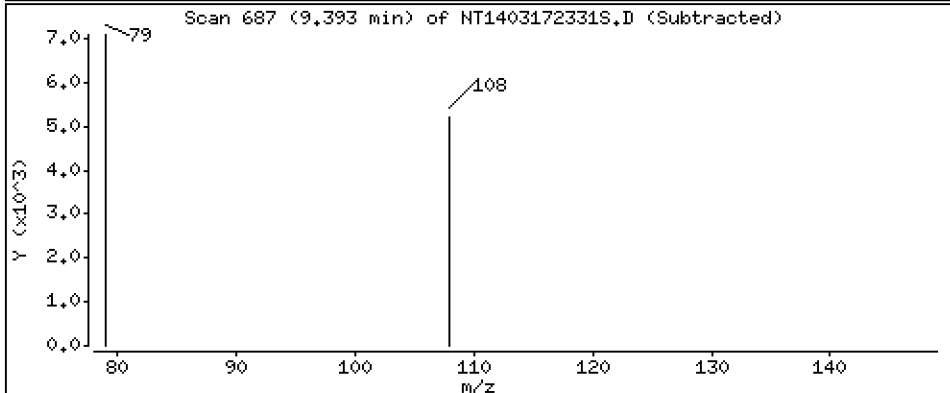
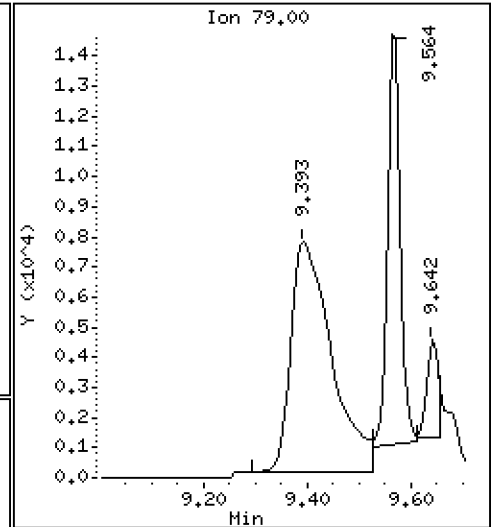
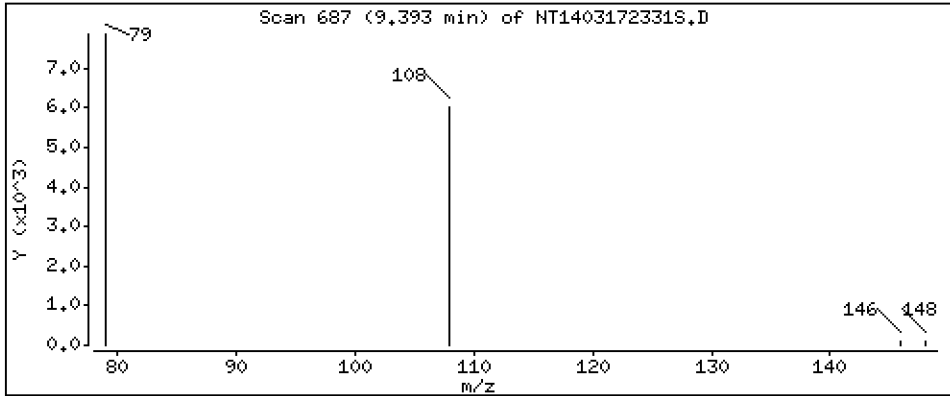
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,7385 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

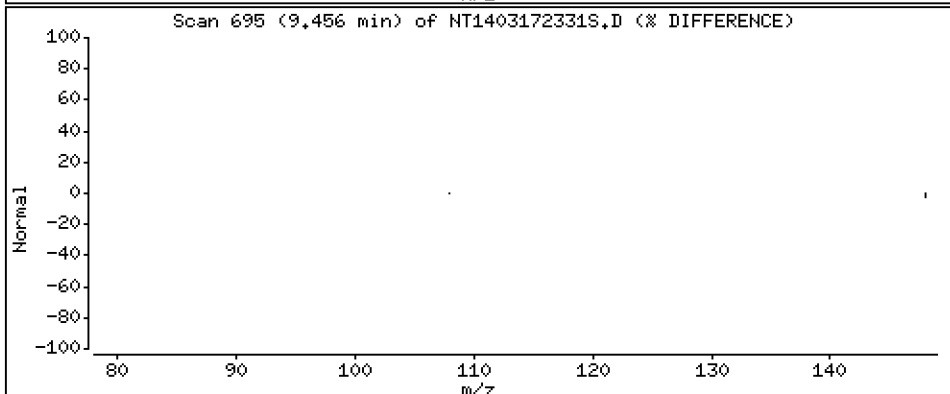
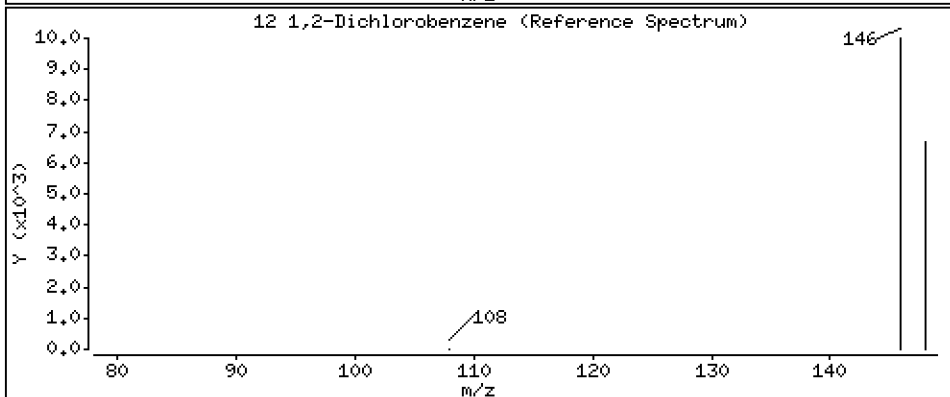
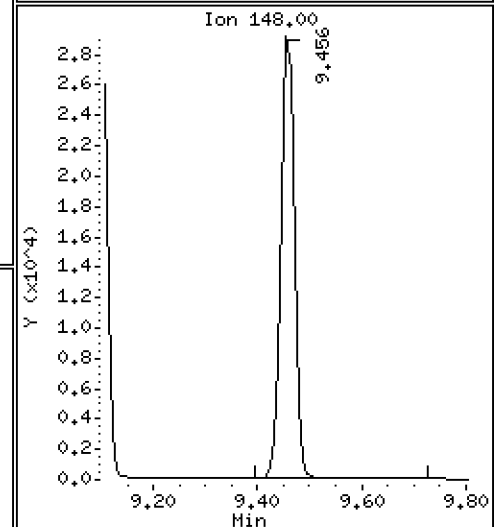
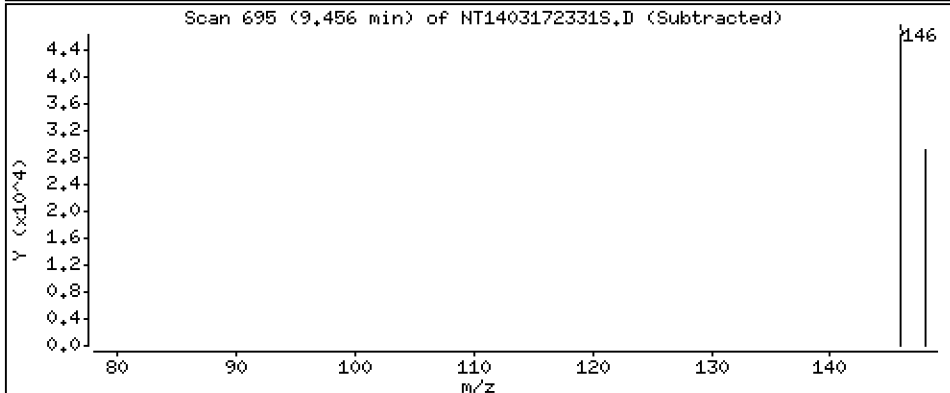
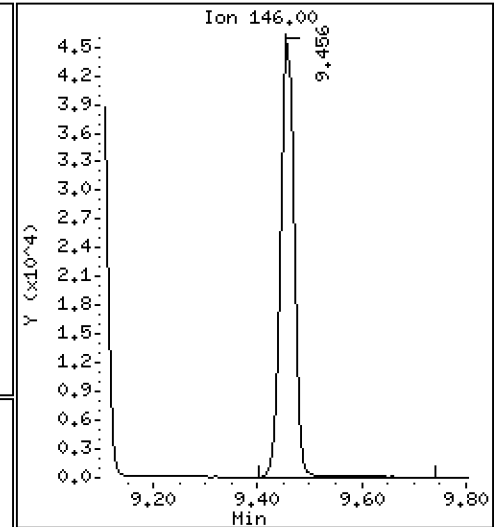
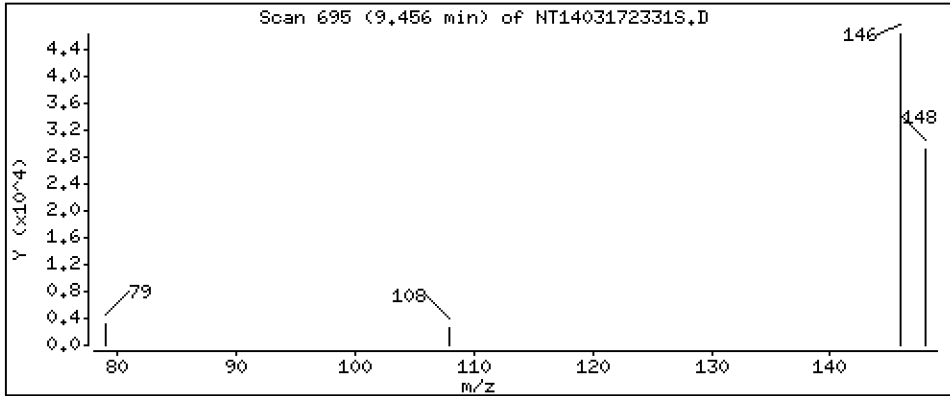
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,9929 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

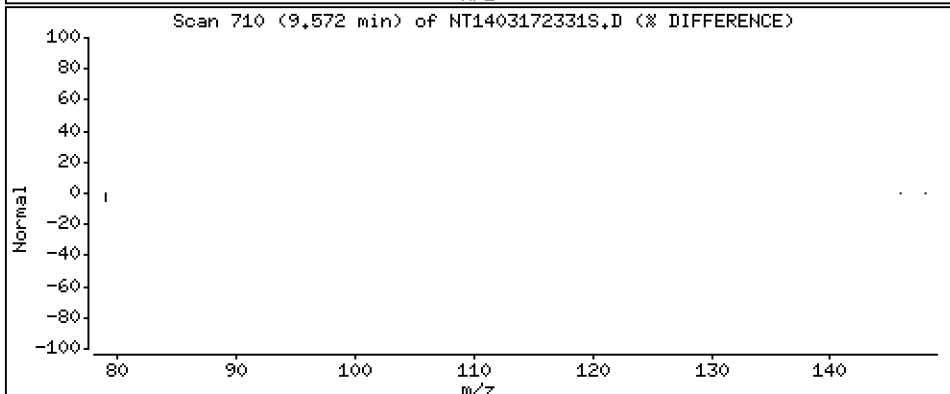
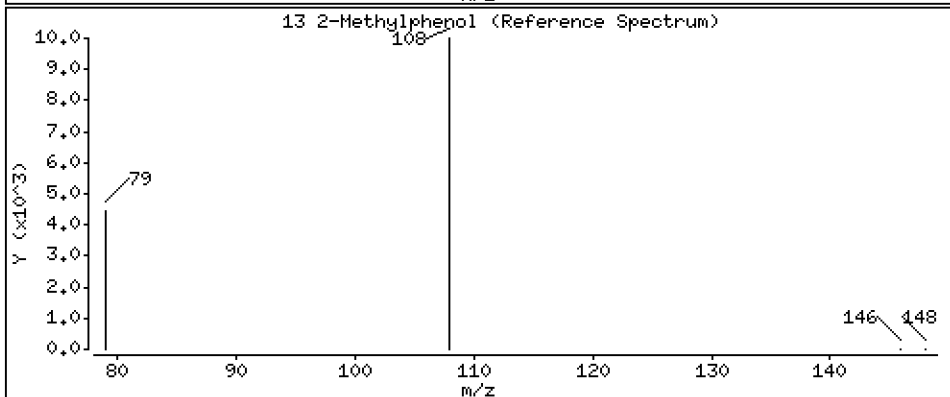
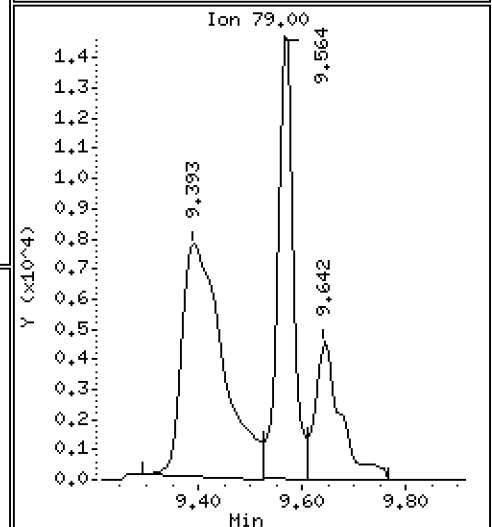
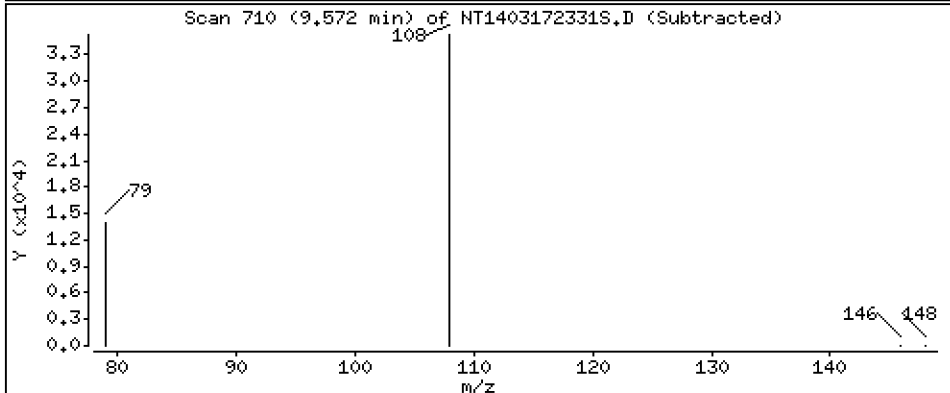
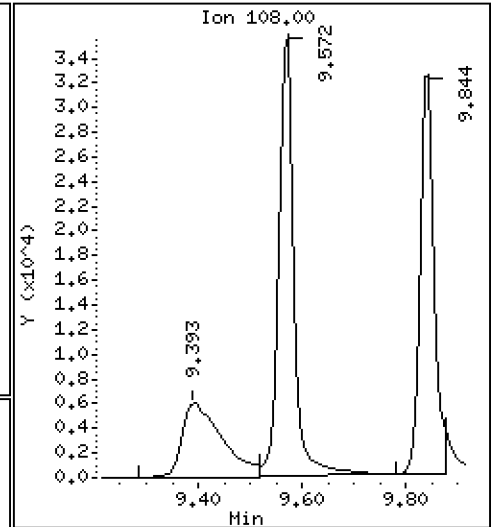
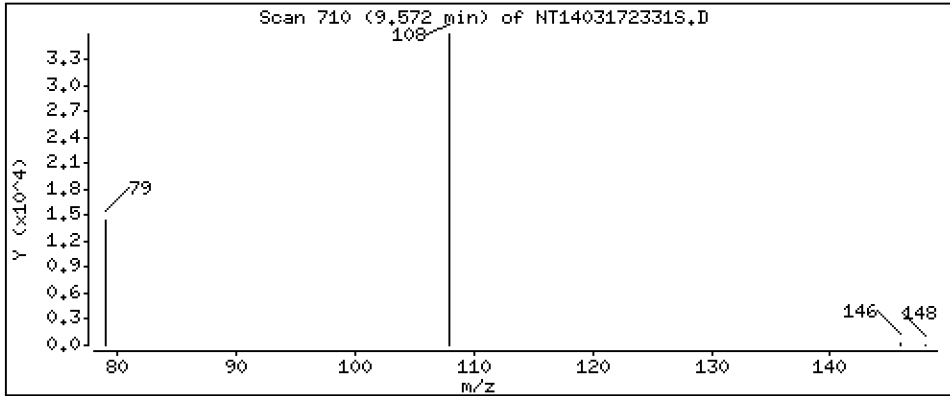
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 1.026 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

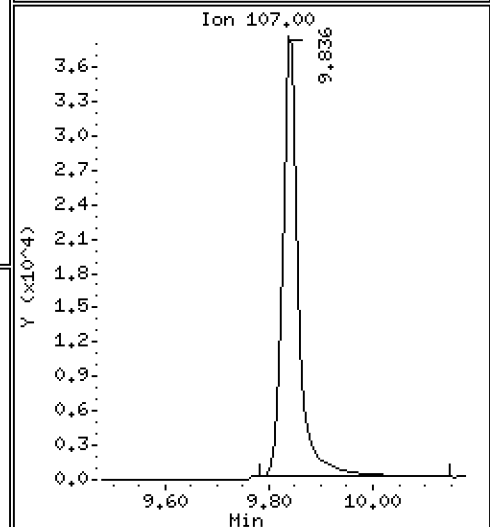
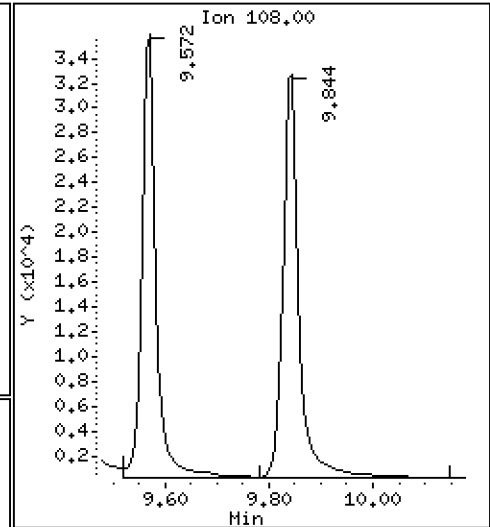
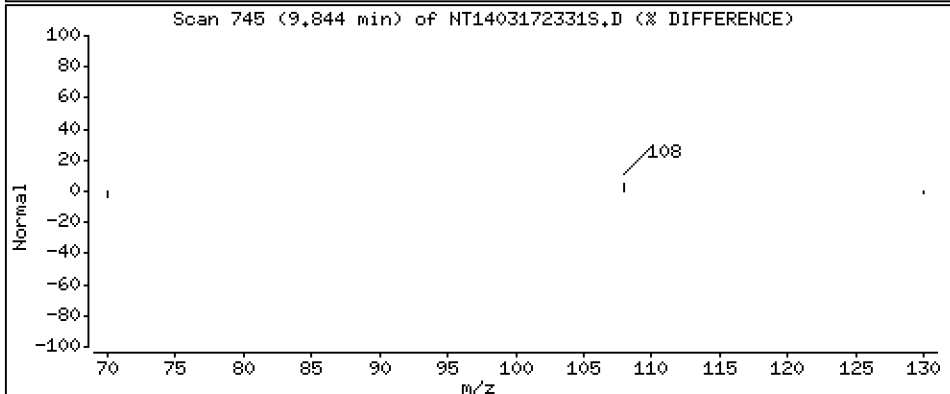
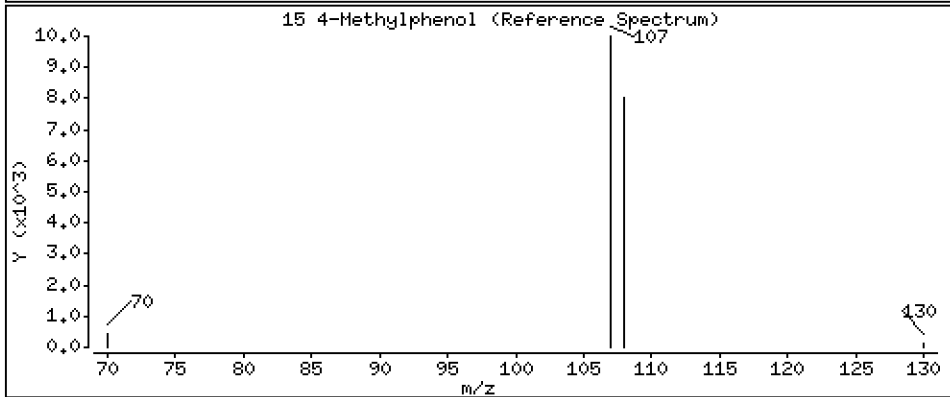
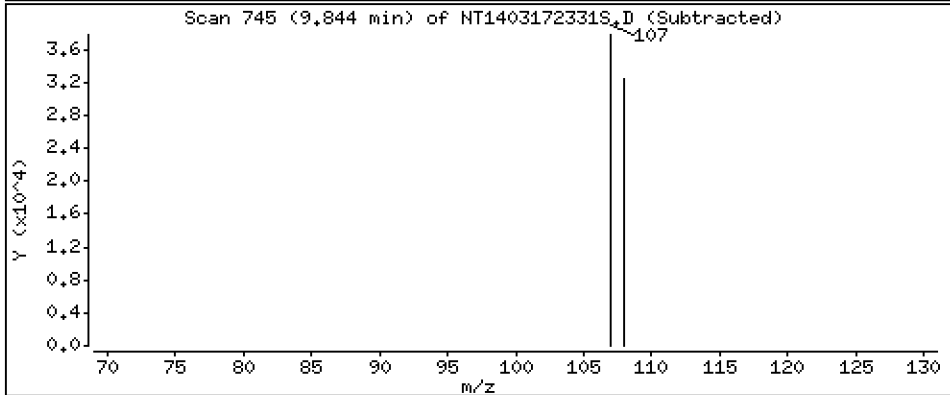
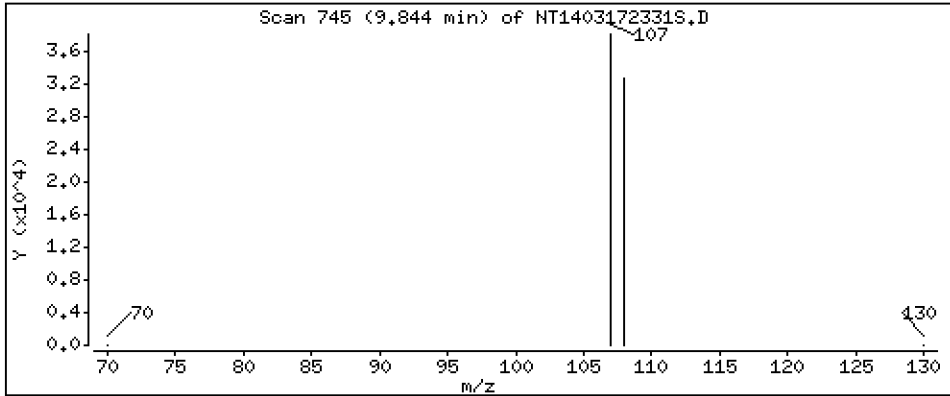
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,9752 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

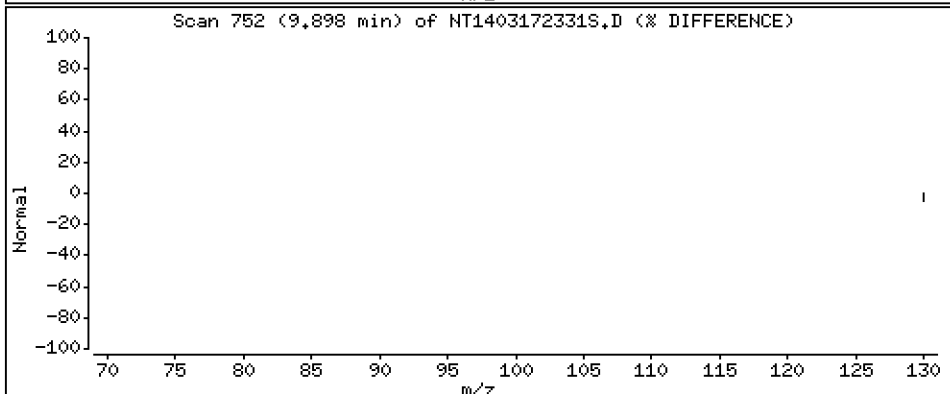
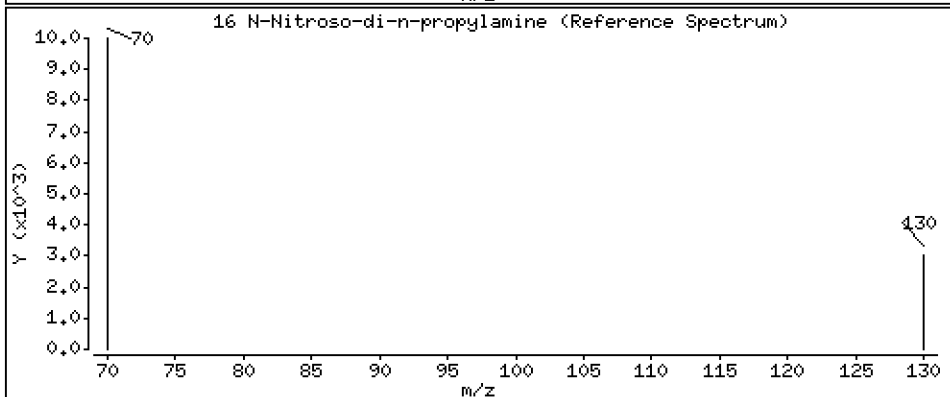
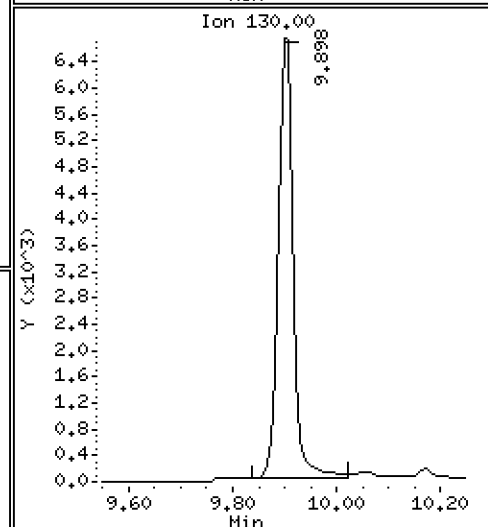
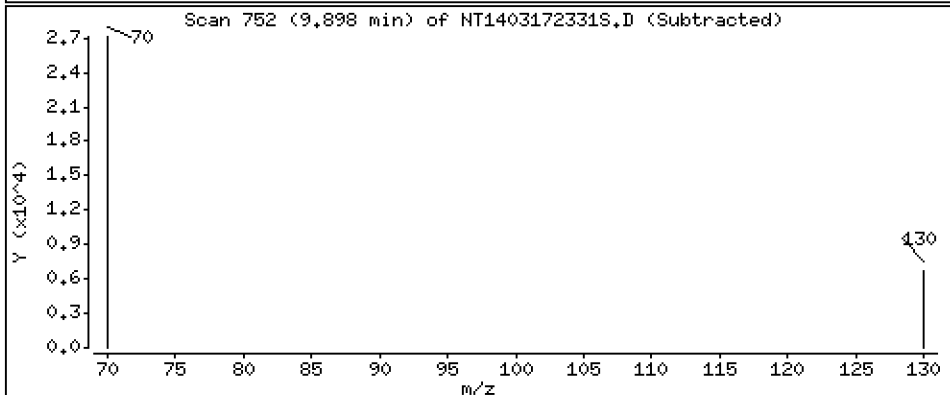
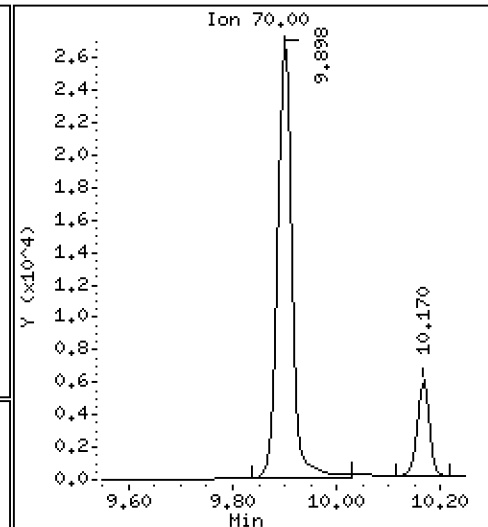
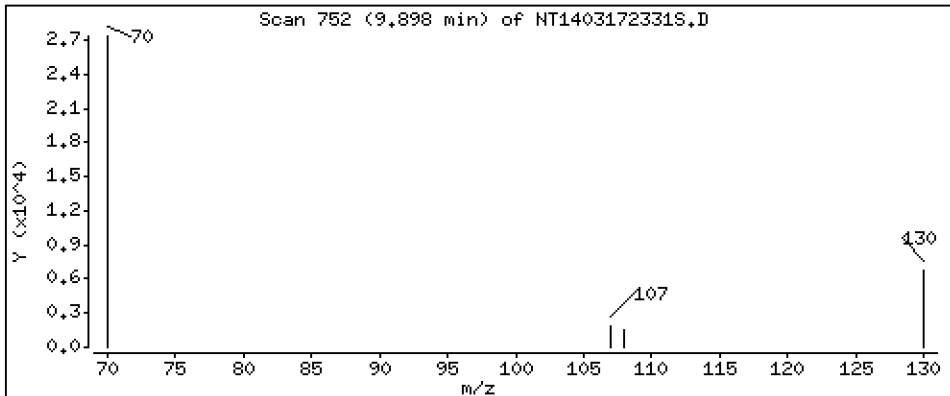
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,9895 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

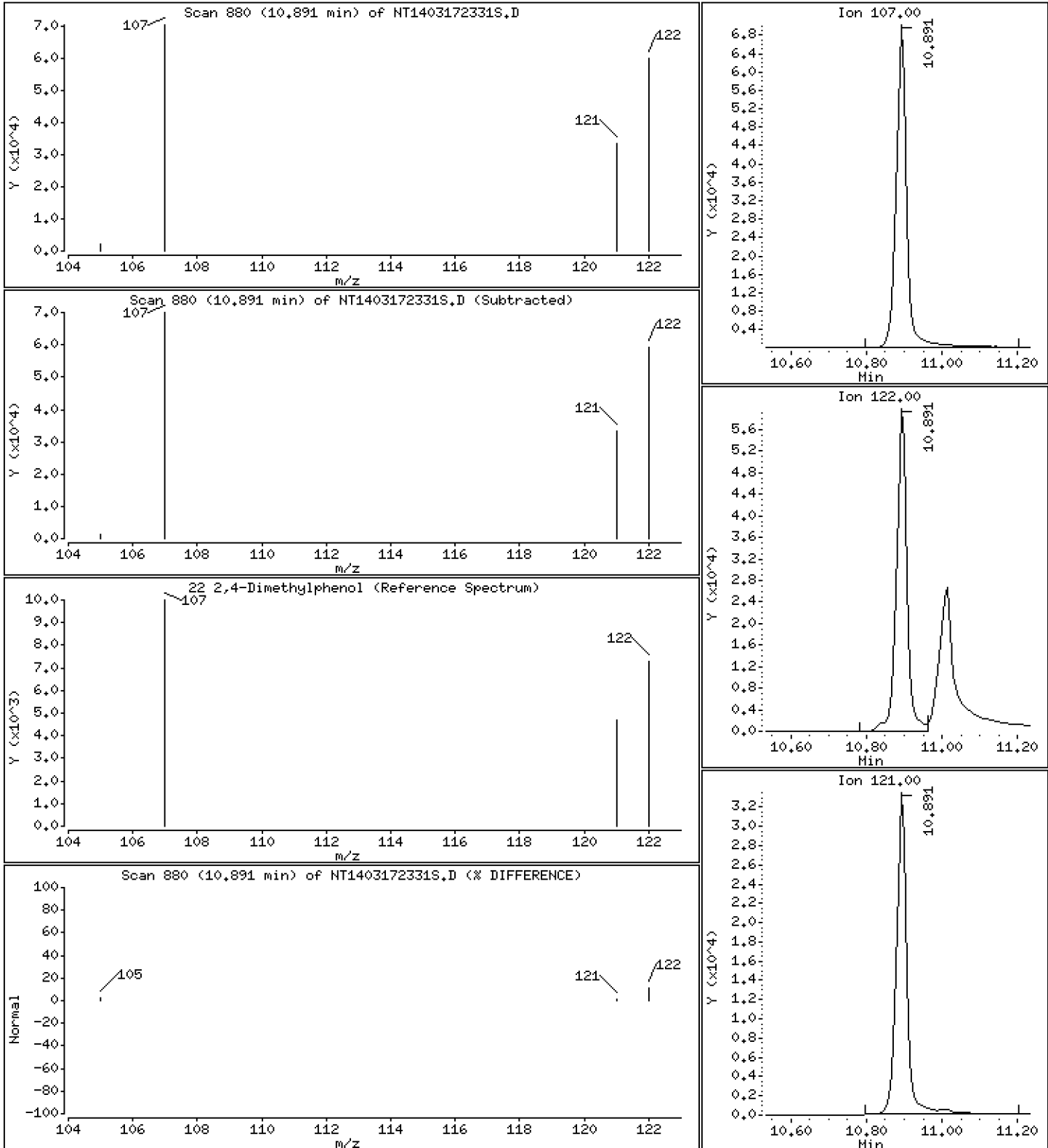
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 1.987 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

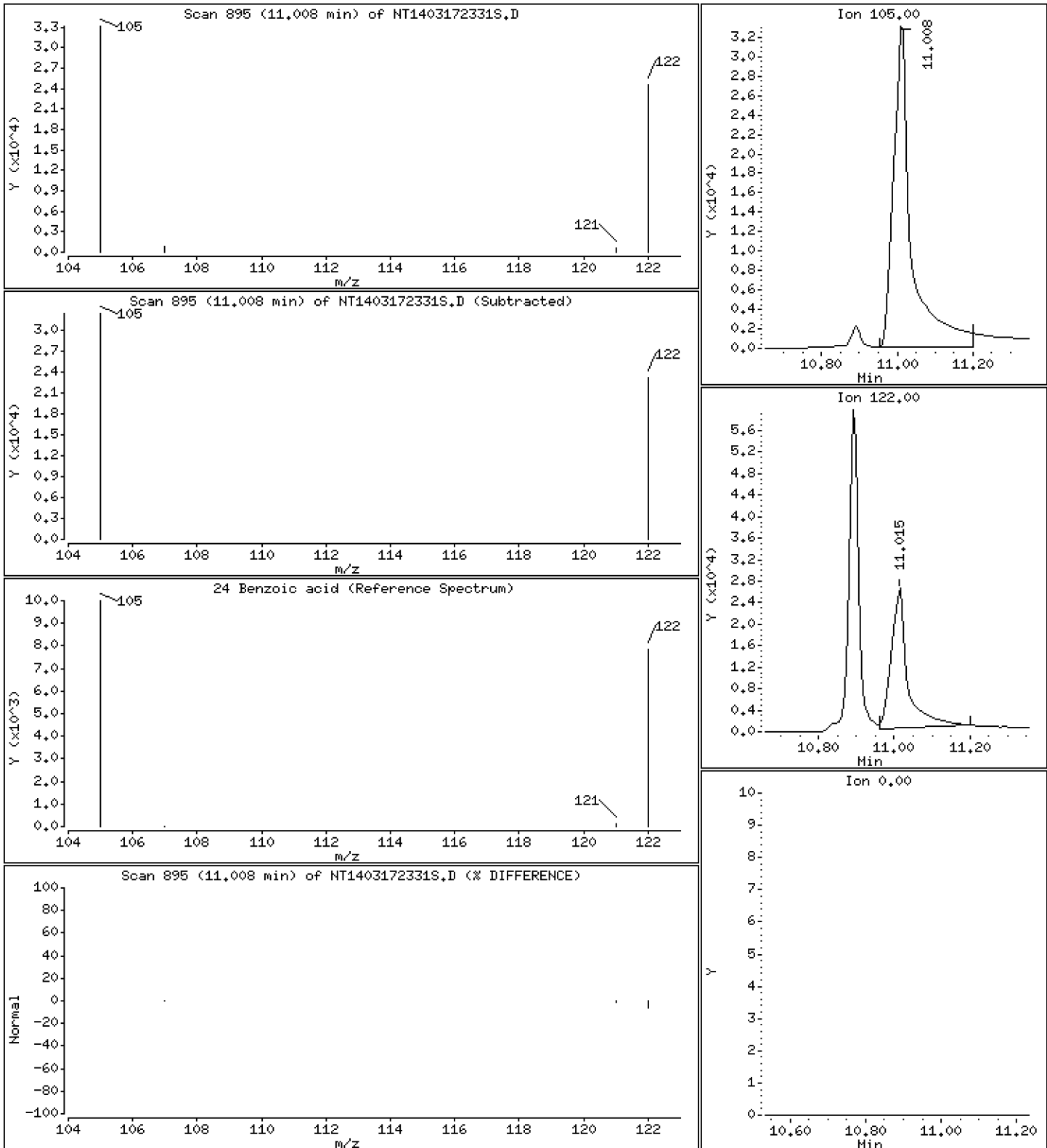
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 2,130 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

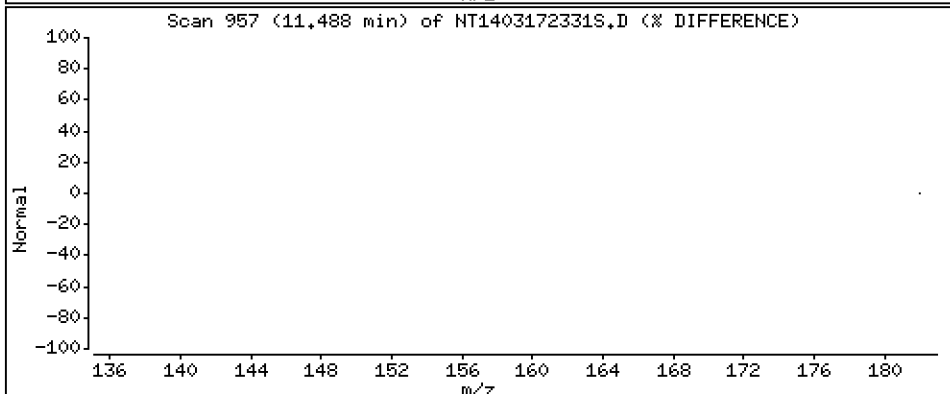
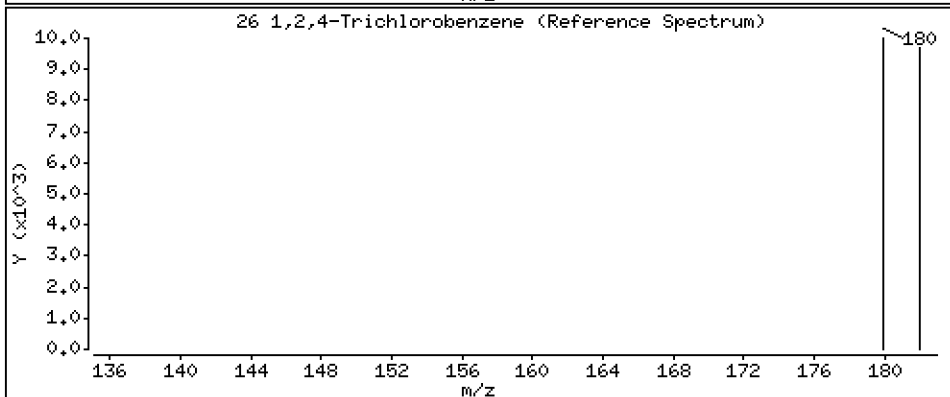
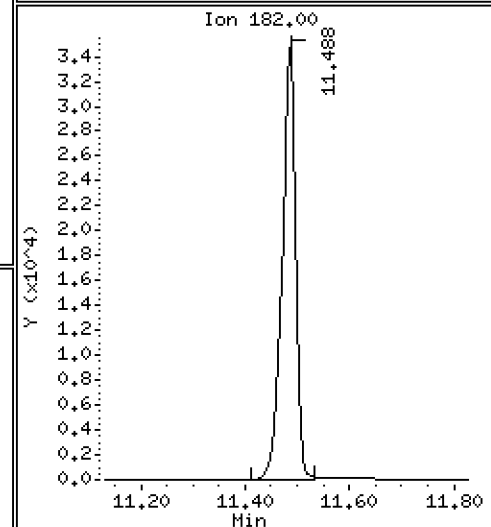
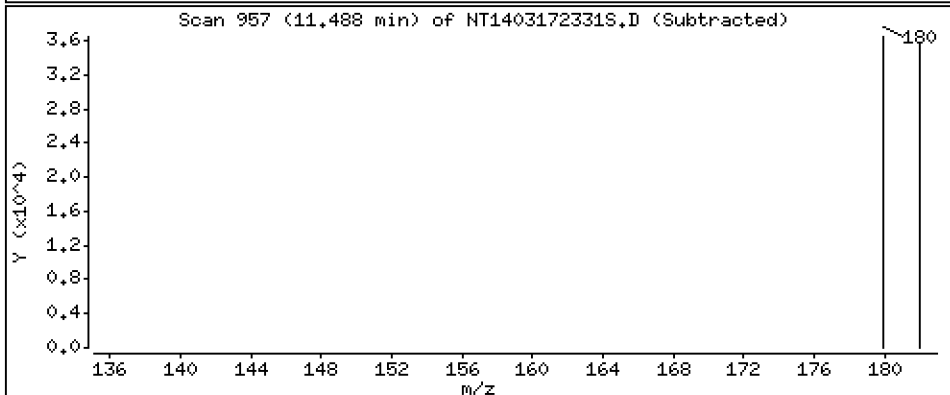
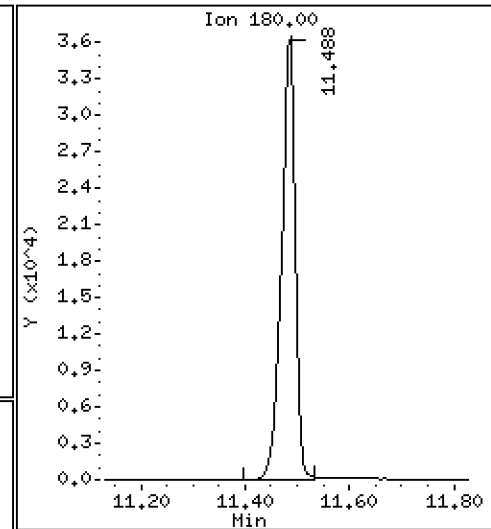
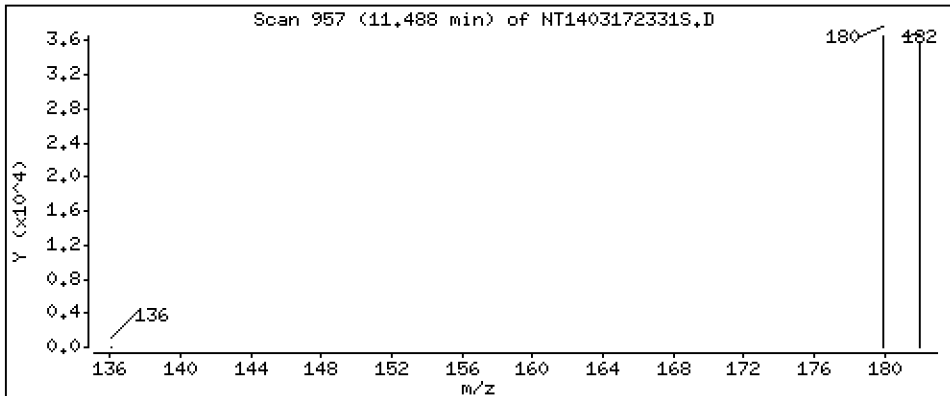
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 1,019 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

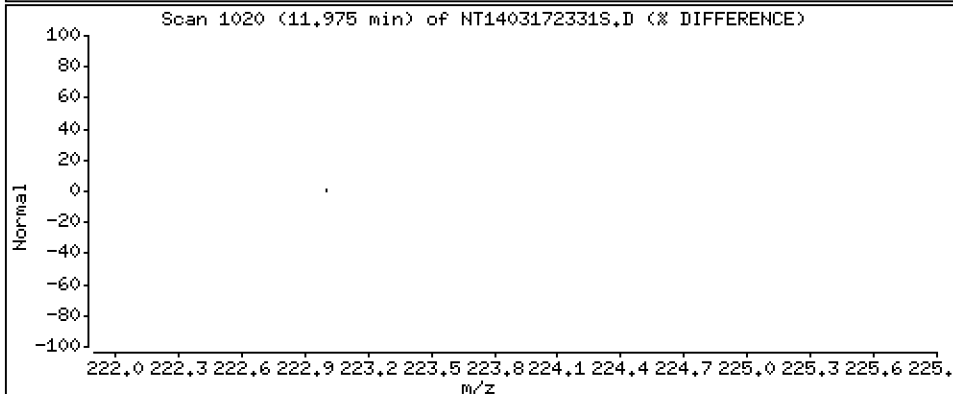
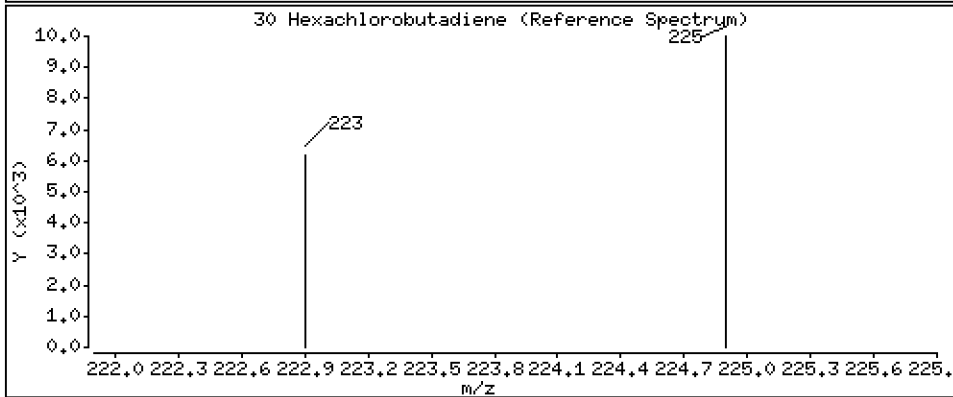
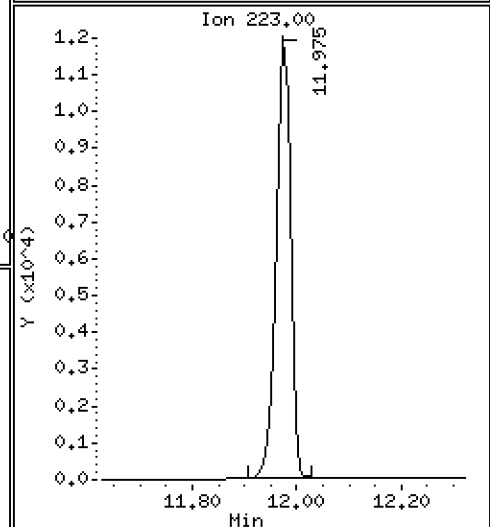
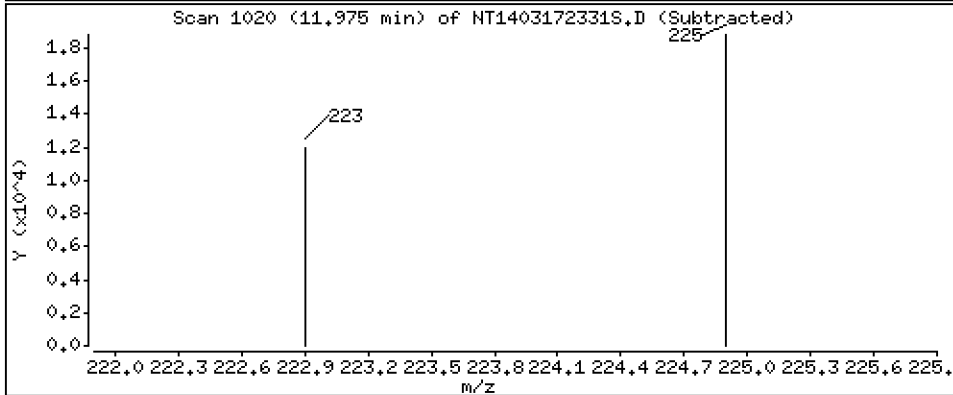
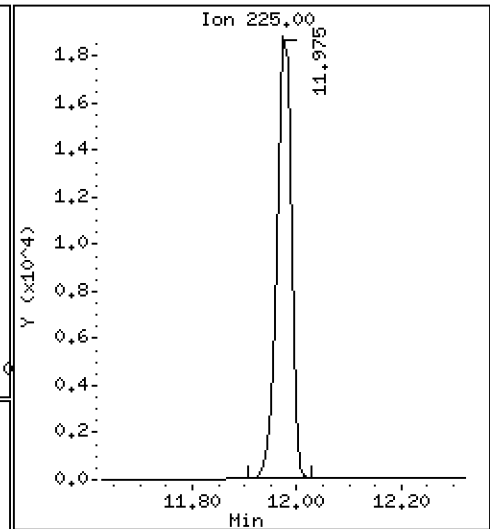
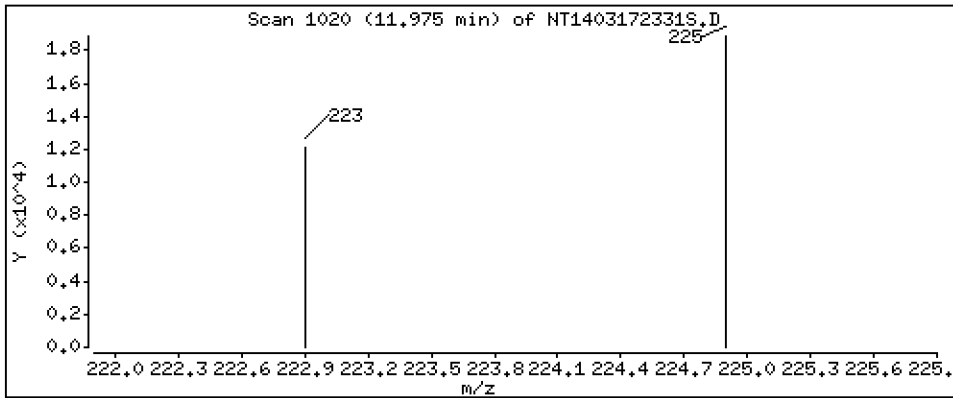
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,055 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

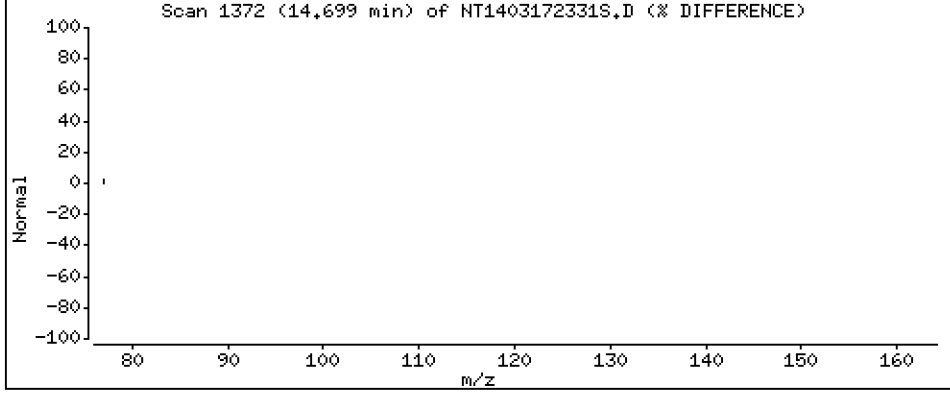
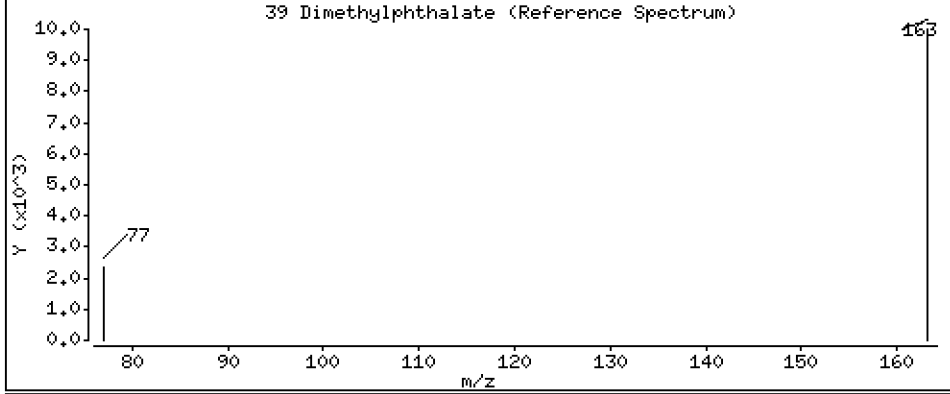
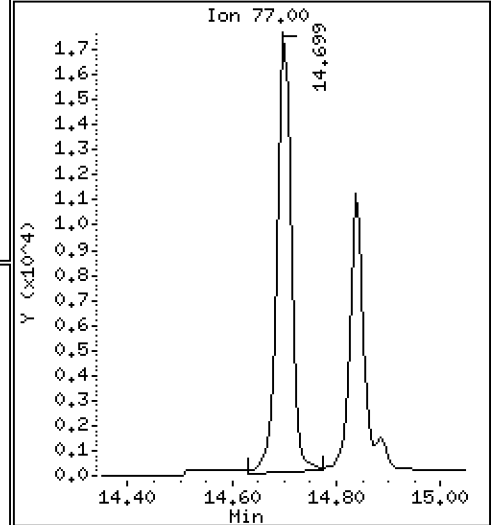
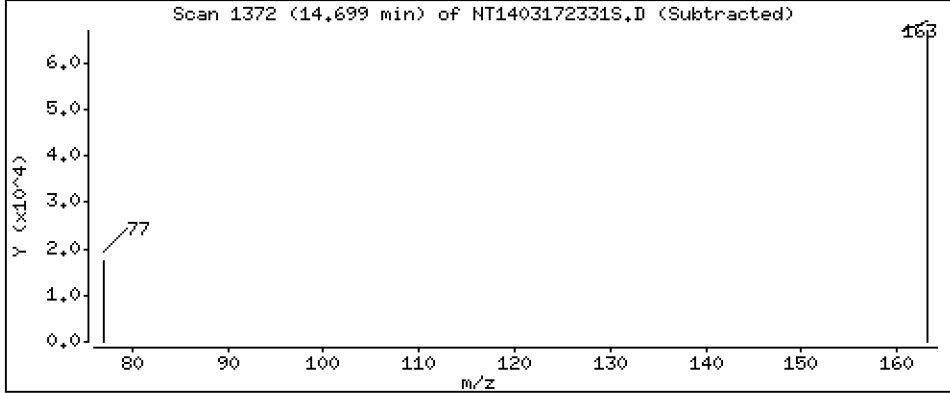
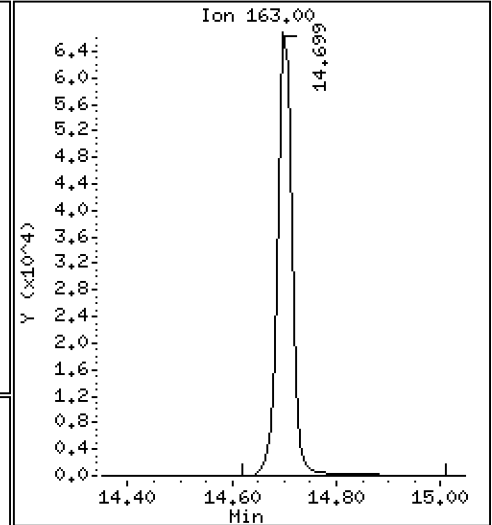
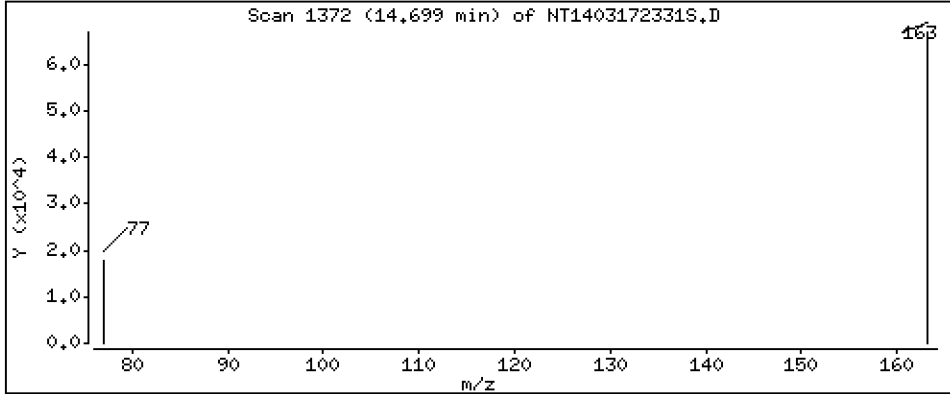
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 1,030 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

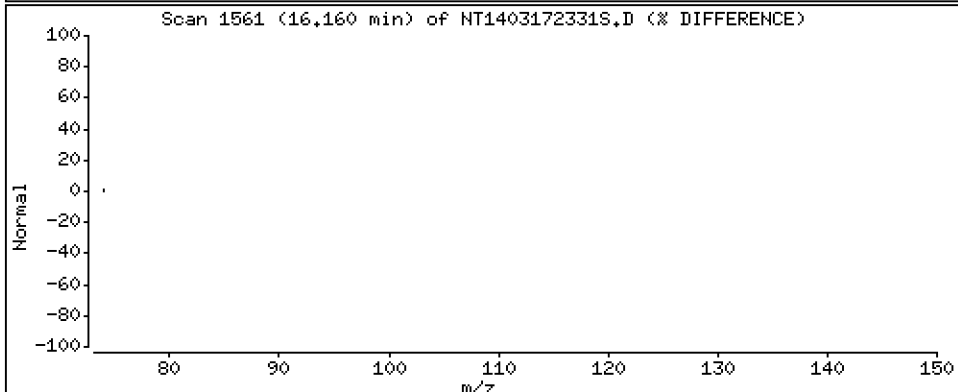
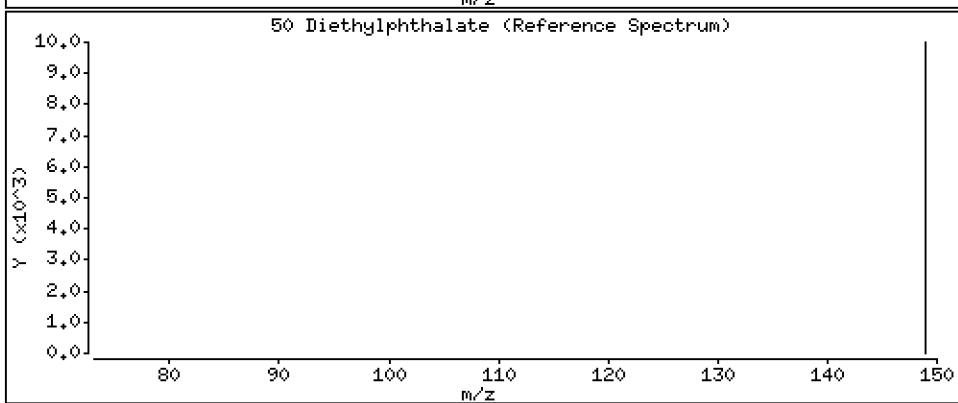
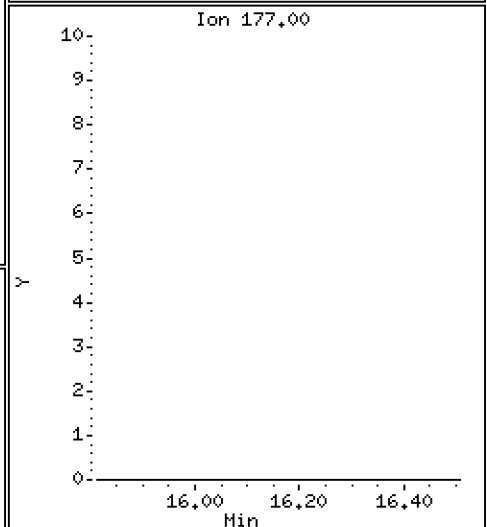
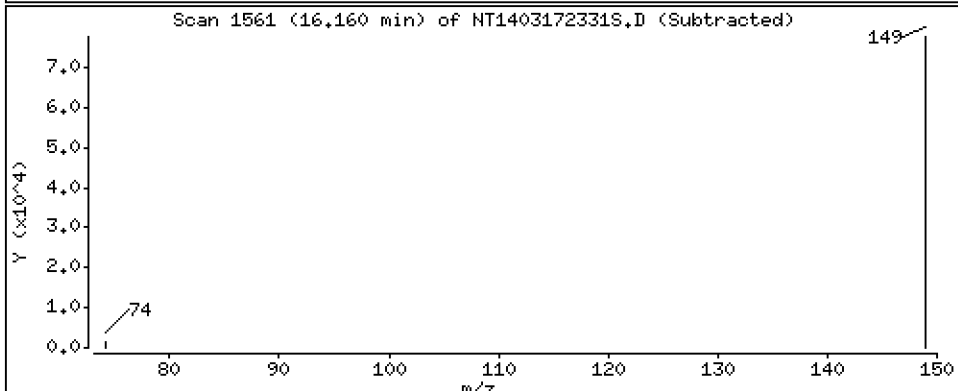
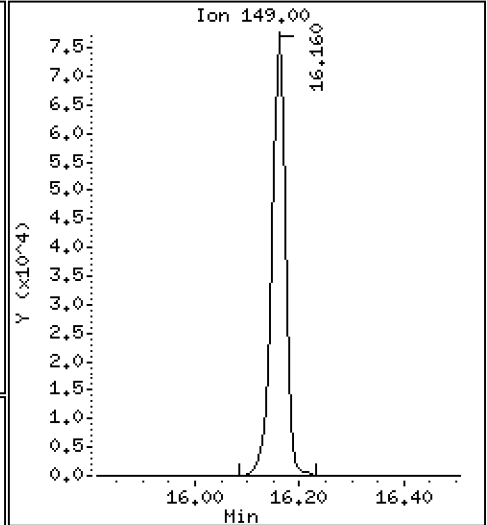
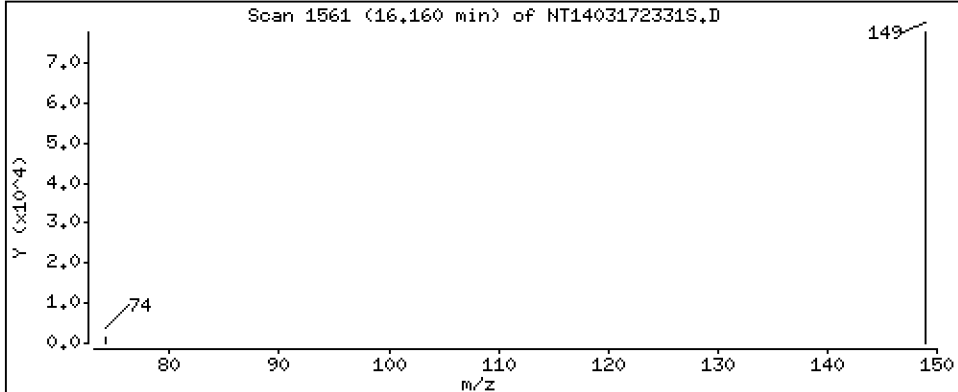
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 1,048 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

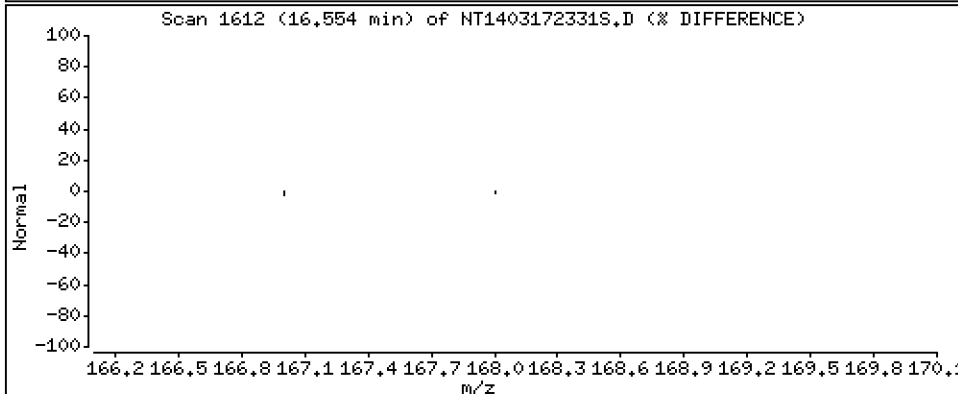
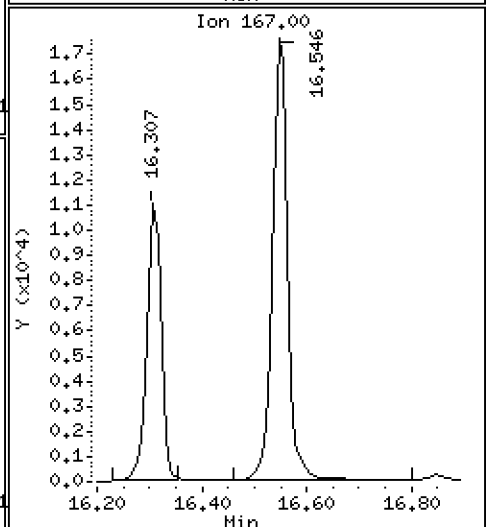
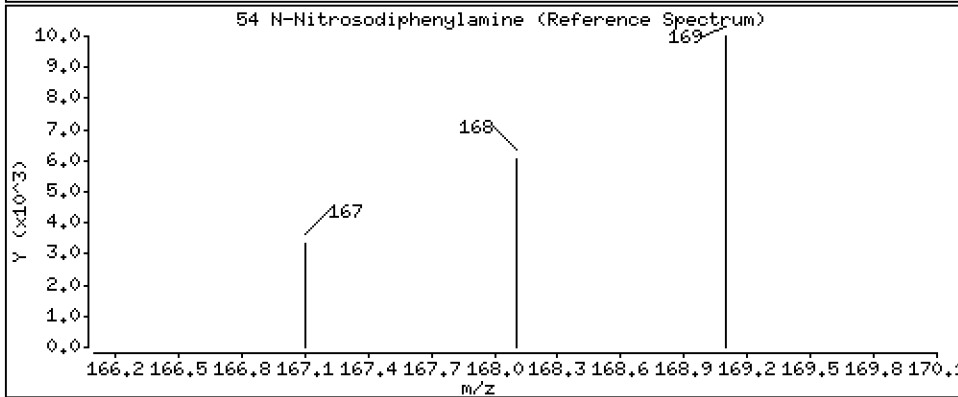
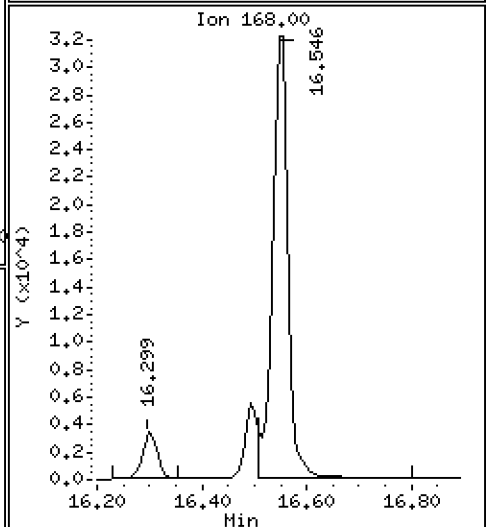
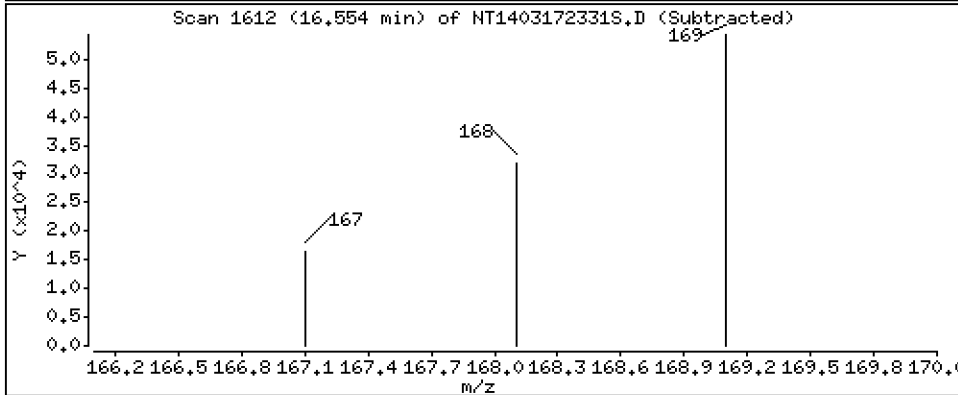
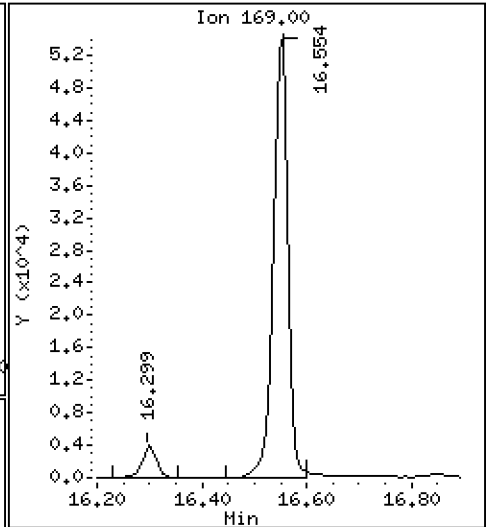
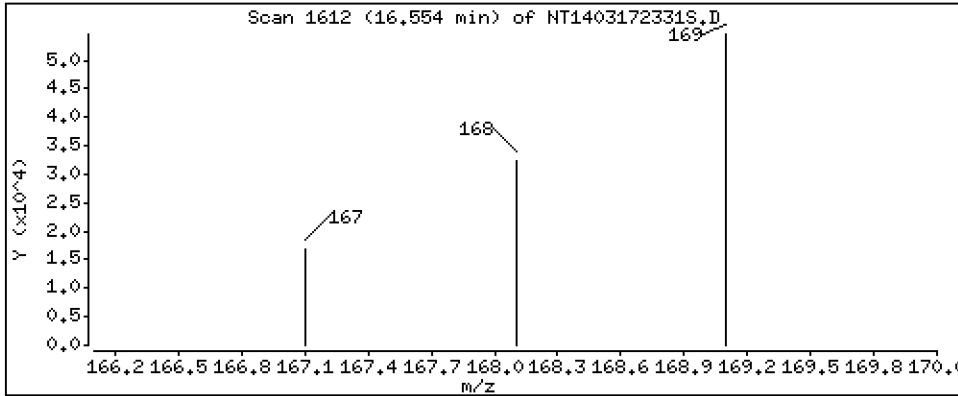
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 1,108 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

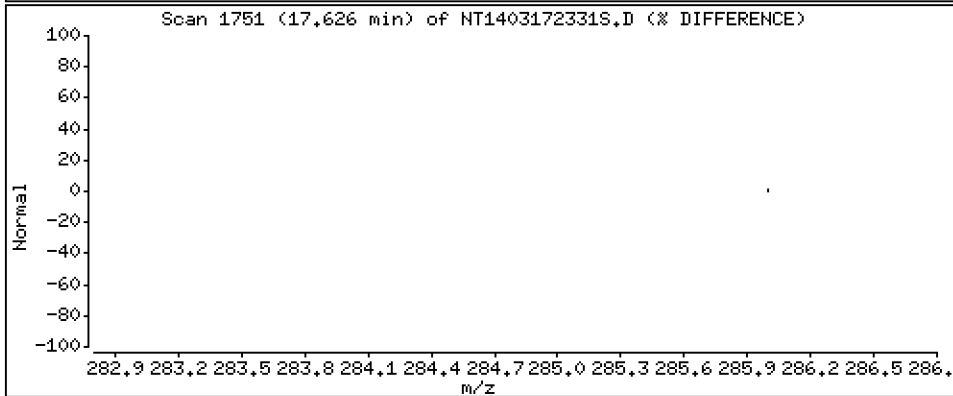
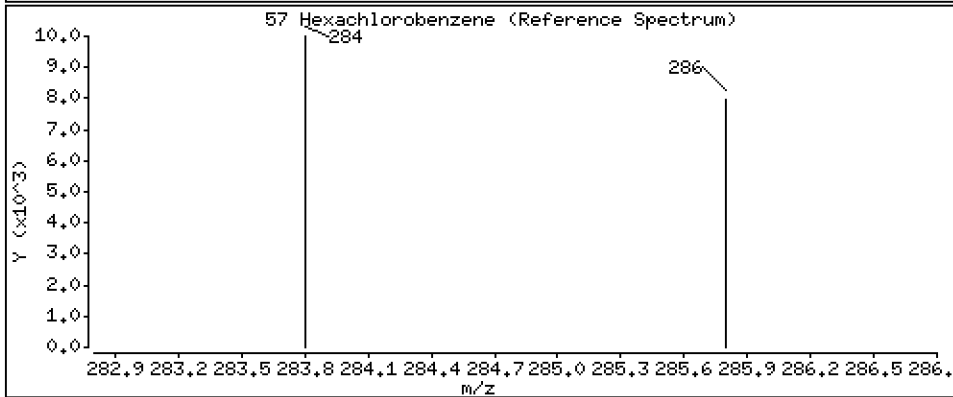
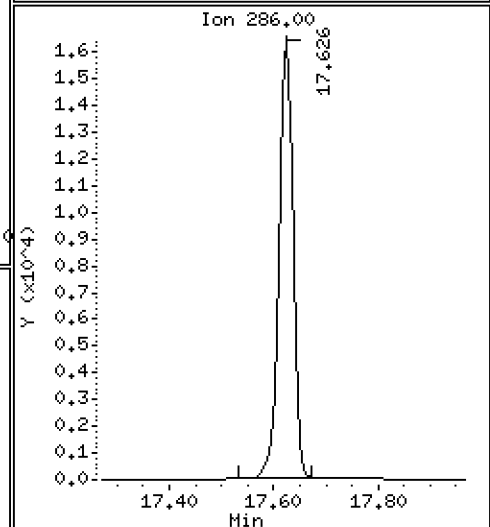
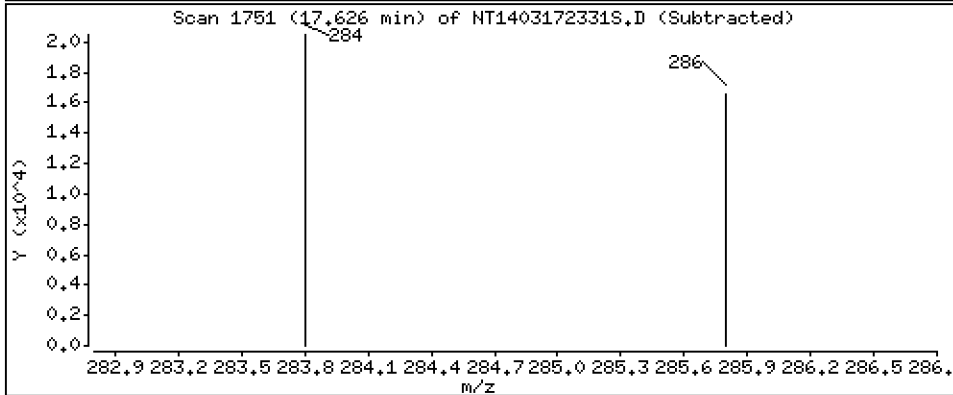
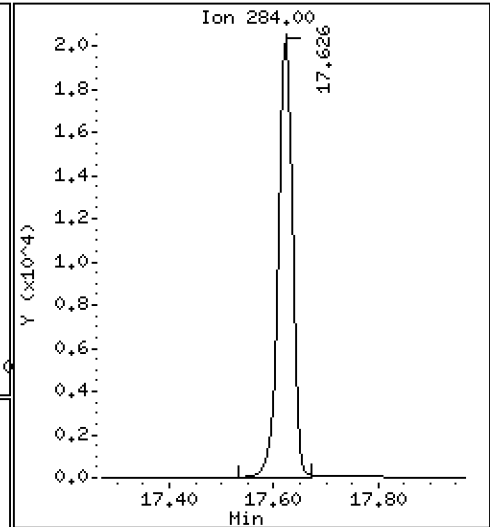
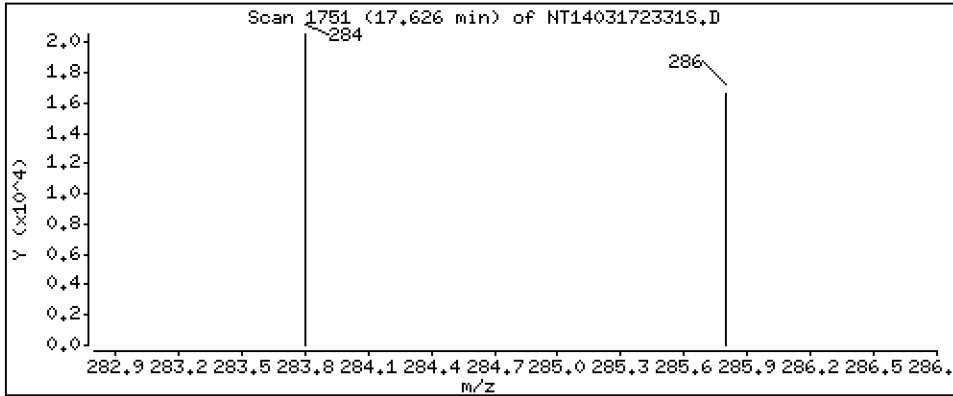
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 1,058 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

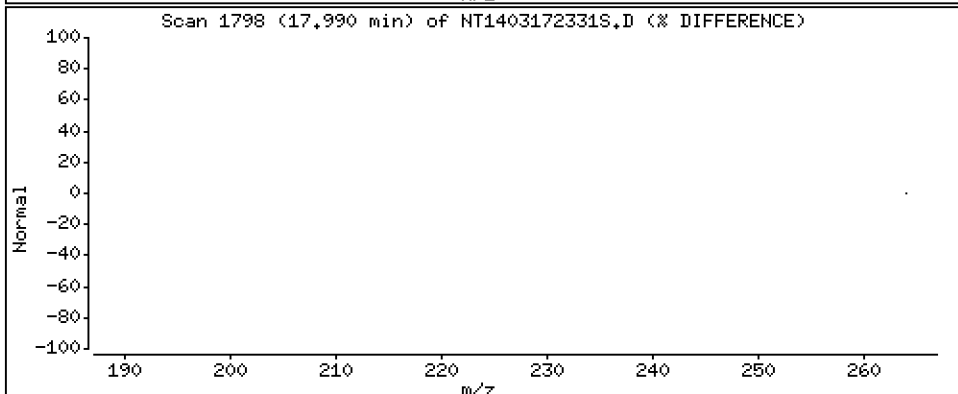
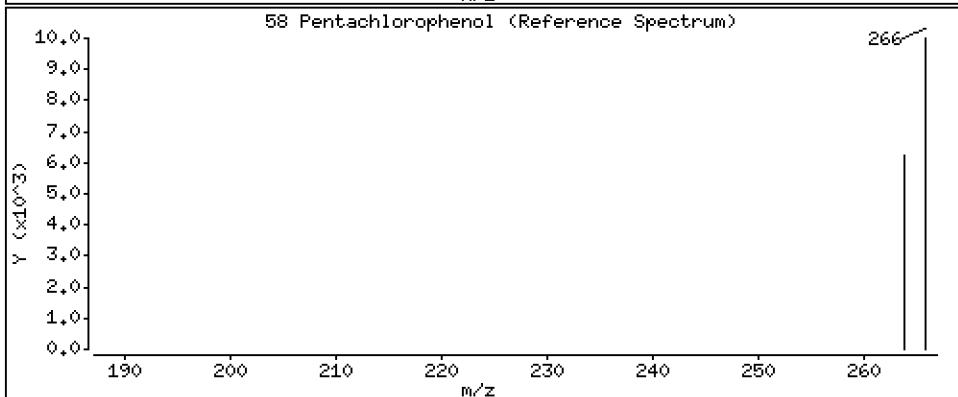
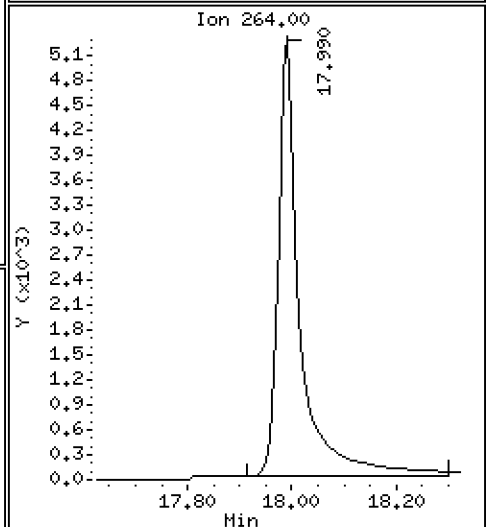
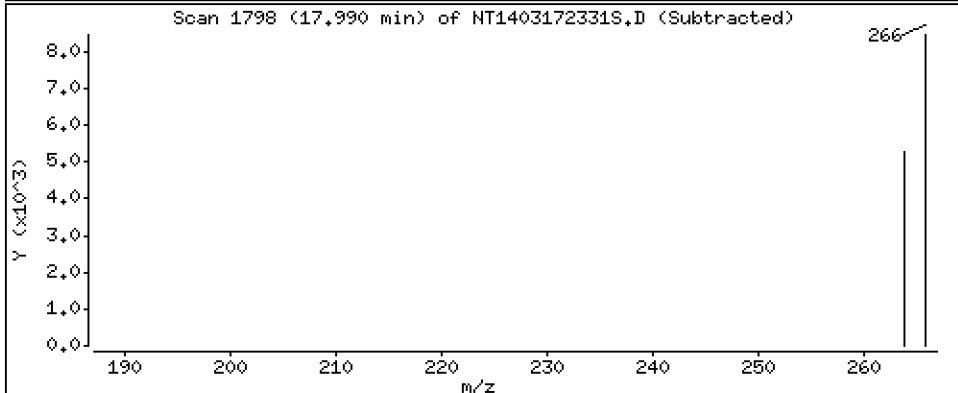
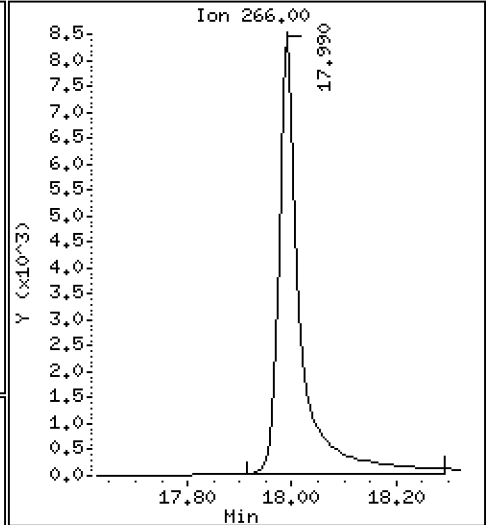
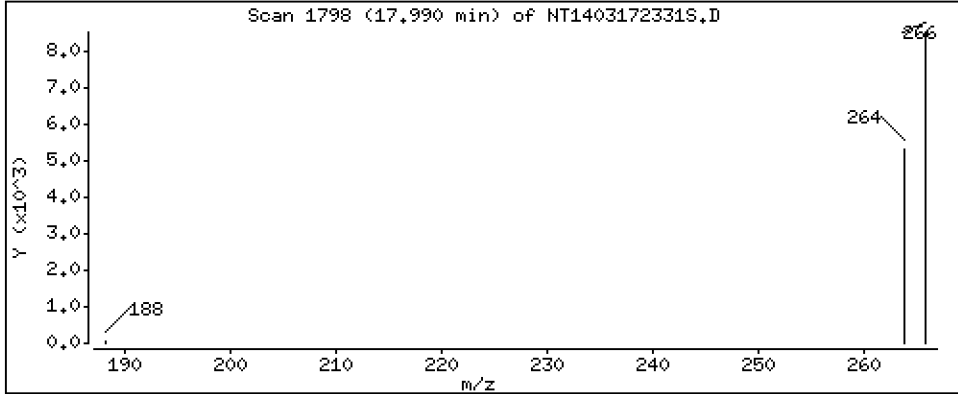
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 1,018 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

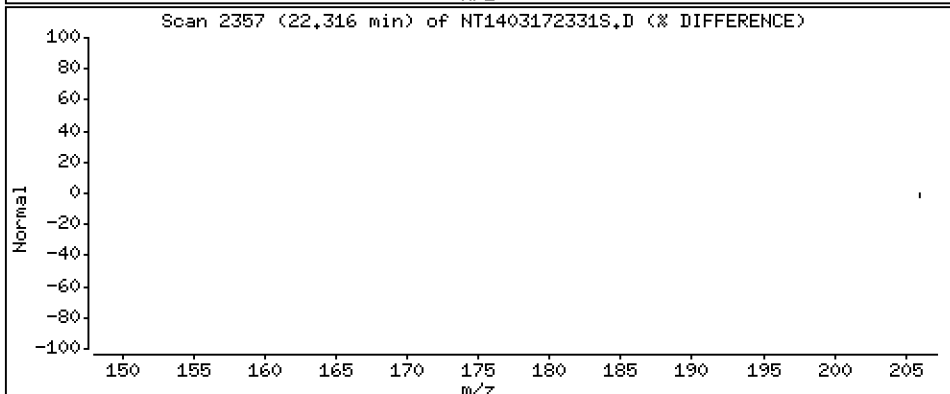
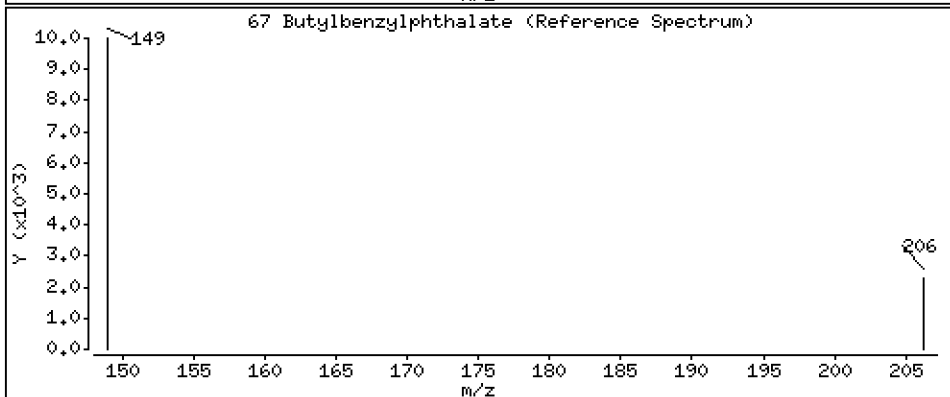
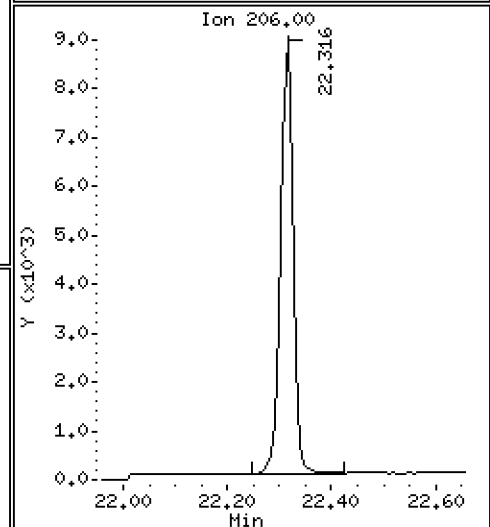
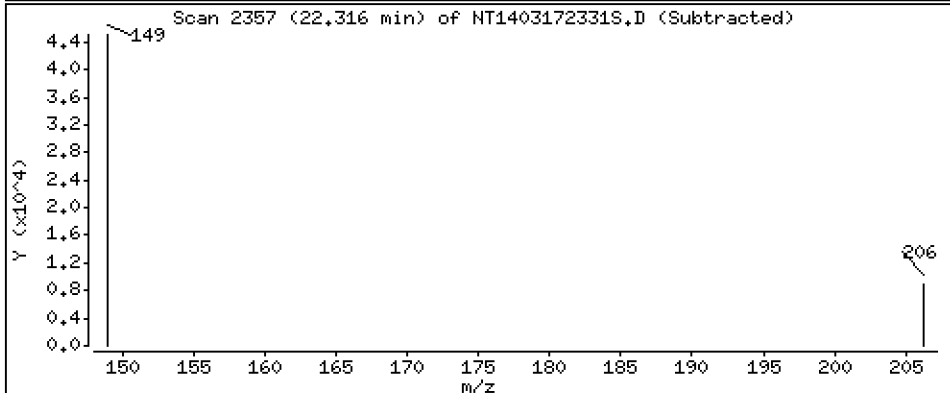
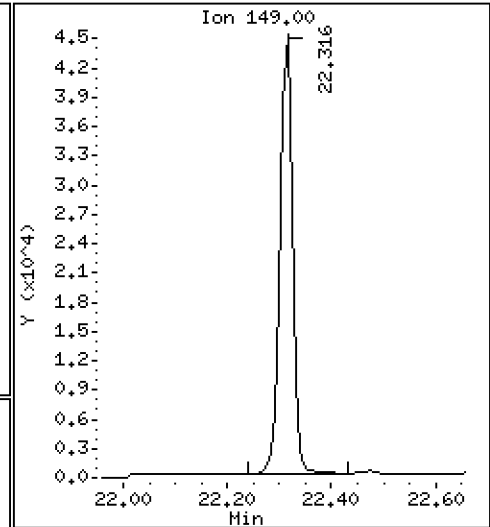
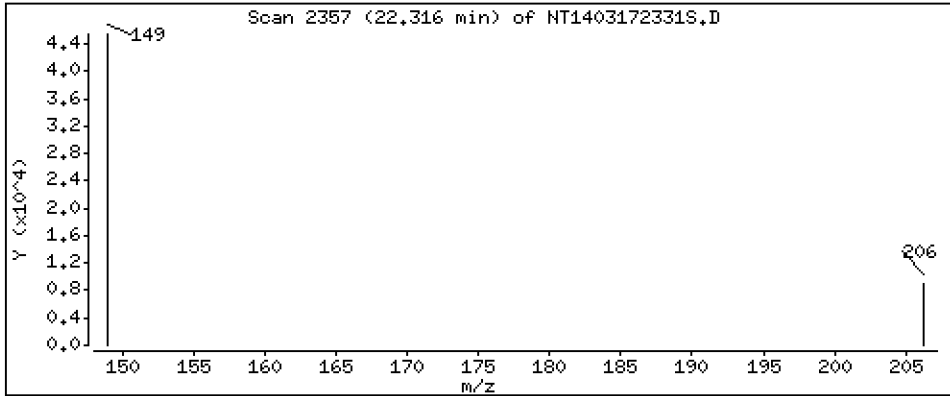
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 1,614 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

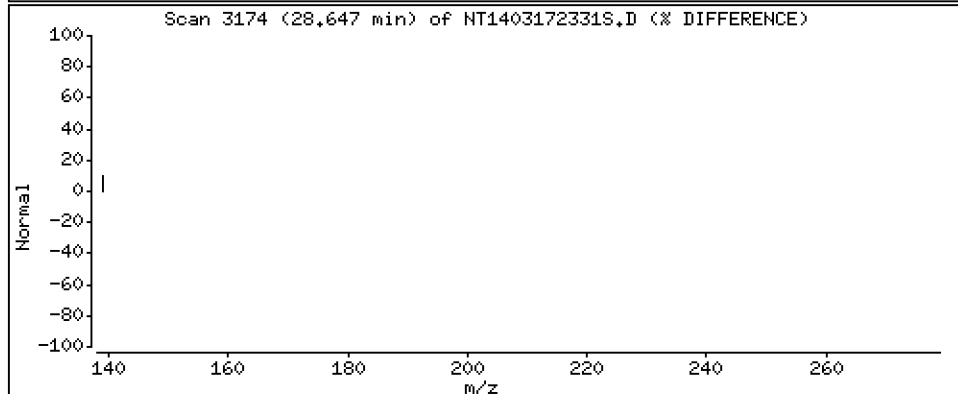
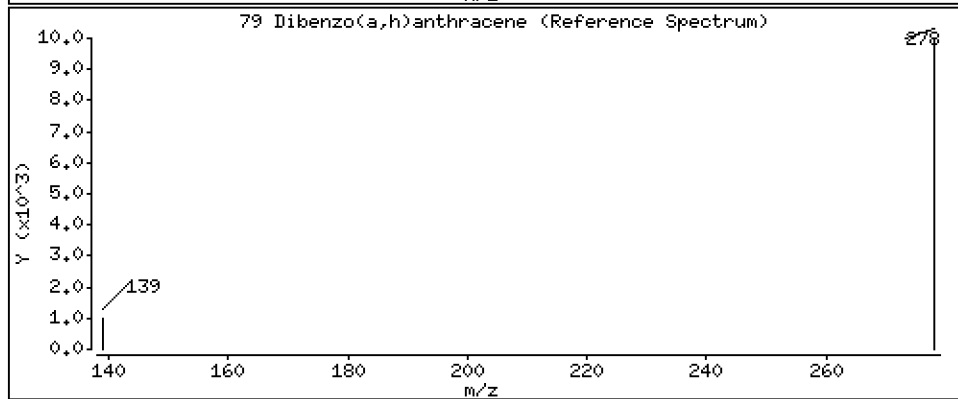
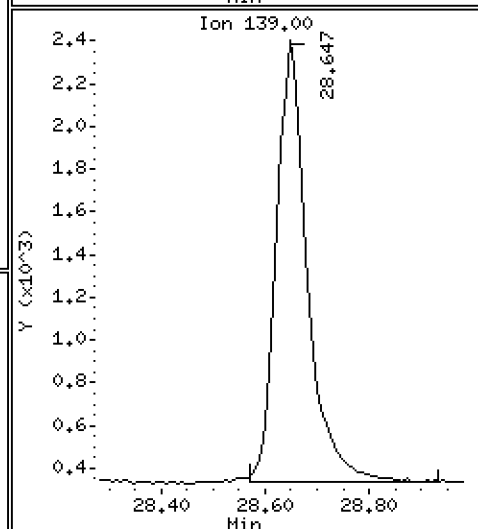
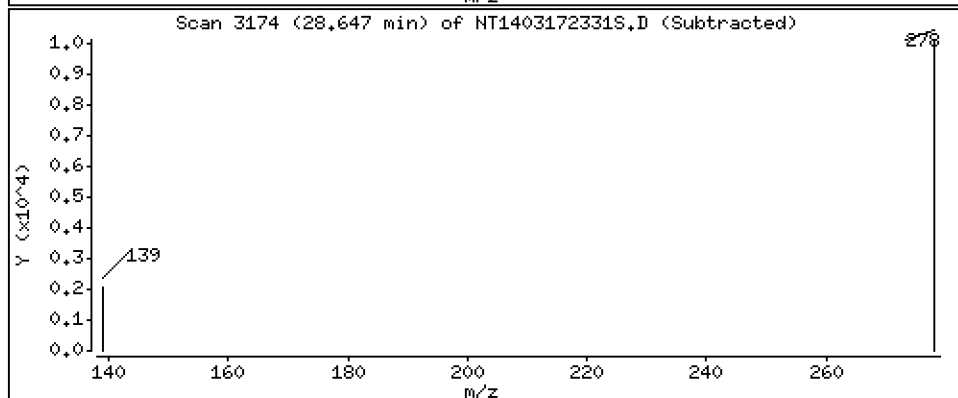
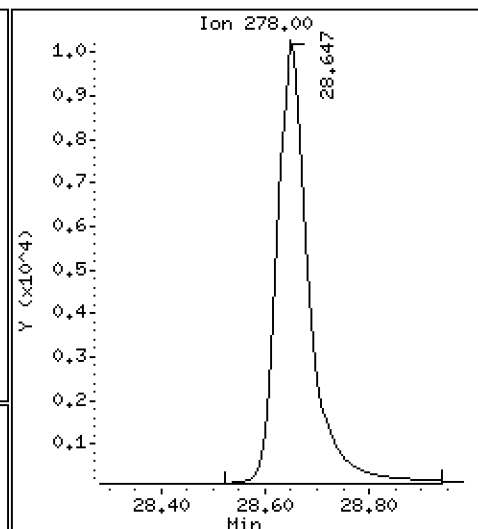
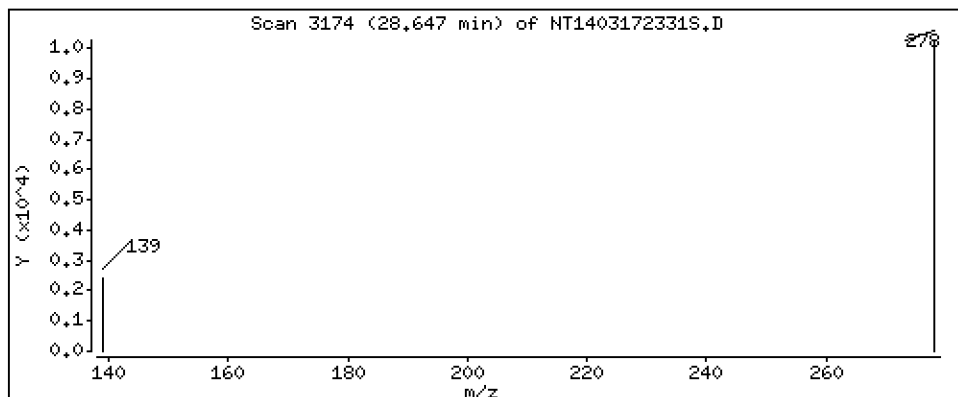
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,9286 ug/mL



Date : 18-MAR-2023 08:30

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-CCV1

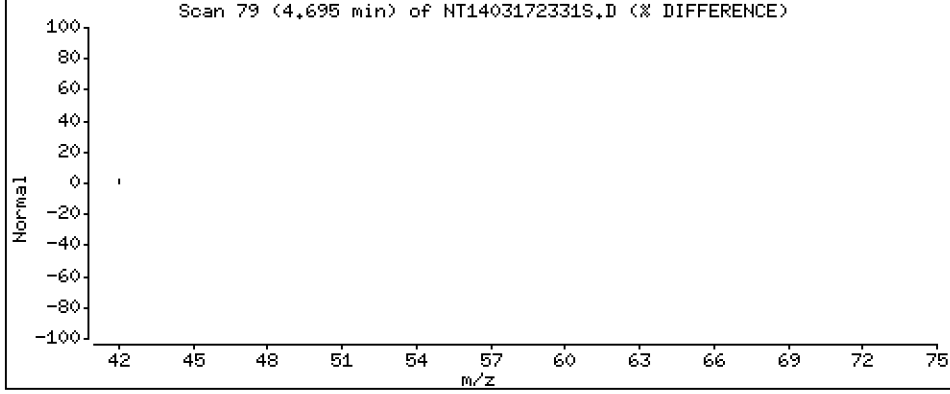
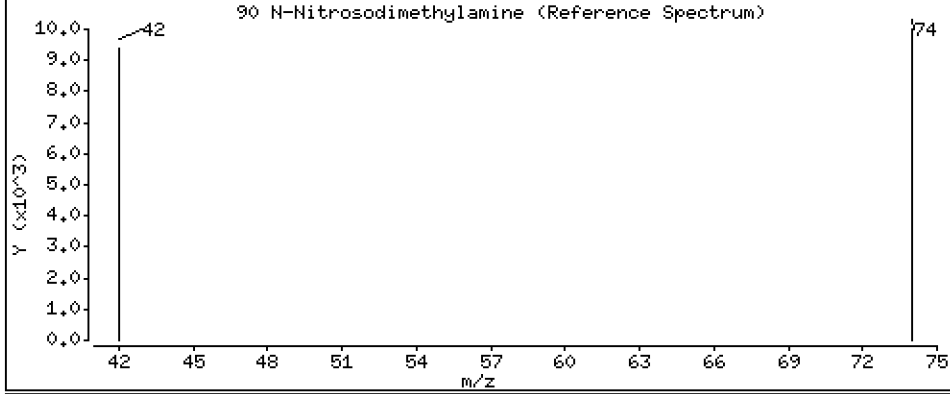
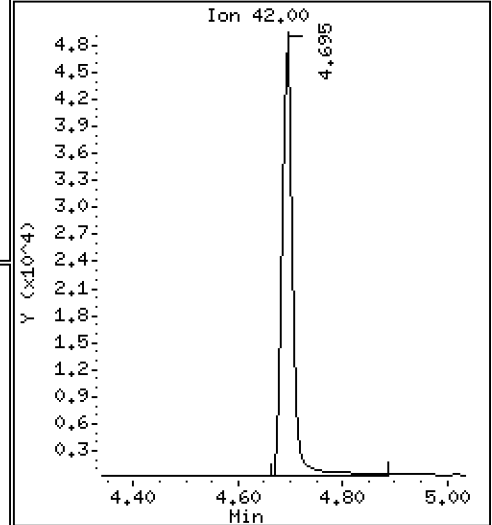
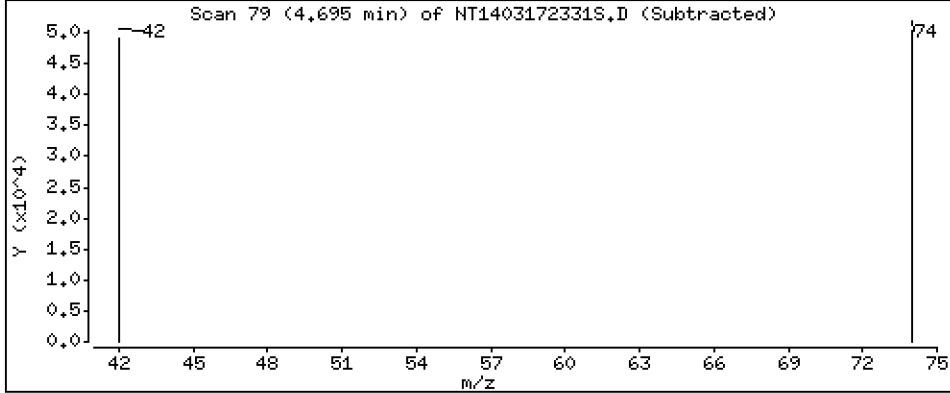
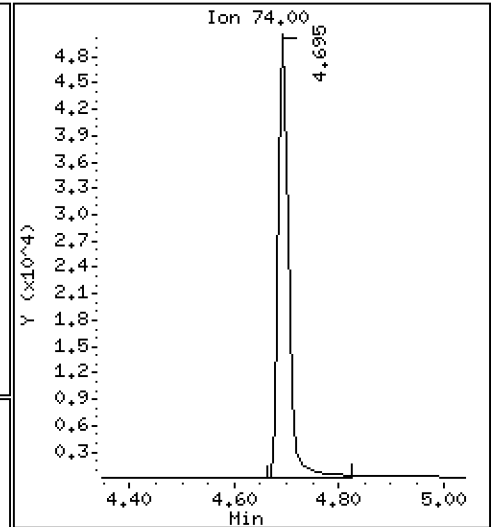
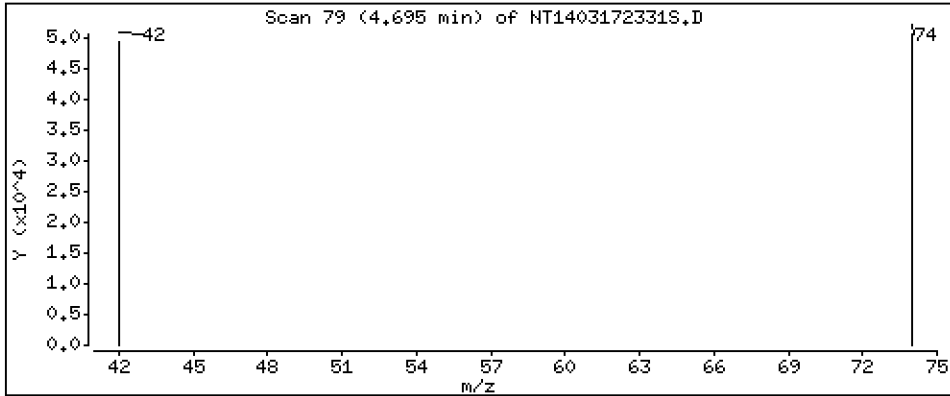
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 1,514 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172331S.D
 Lab Smp Id: SLC0376-CCV1
 Inj Date : 18-MAR-2023 08:30 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-CCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	91469	1.28783	1.288 (R)
3 Phenol	94		8.448	8.441	(0.932)	84478	0.86492	0.8649
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	82540	0.98753	0.9875
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	209245	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	79992	0.98903	0.9890
11 Benzyl alcohol	79		9.393	9.354	(1.036)	42281	0.73854	0.7385
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	78223	0.99294	0.9929
13 2-Methylphenol	108		9.572	9.564	(1.056)	69242	1.02627	1.026
15 4-Methylphenol	108		9.843	9.828	(1.086)	69508	0.97517	0.9752
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	49864	0.98946	0.9895
22 2,4-Dimethylphenol	107		10.891	10.883	(0.942)	132097	1.98692	1.987
24 Benzoic acid	105		11.007	10.999	(0.952)	107997	2.12993	2.130
26 1,2,4-Trichlorobenzene	180		11.487	11.480	(0.993)	66388	1.01883	1.019
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	773367	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	34789	1.05499	1.055
39 Dimethylphthalate	163		14.698	14.698	(0.967)	123824	1.02995	1.030
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	352031	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	134077	1.04751	1.048
54 N-Nitrosodiphenylamine	169		16.553	16.546	(0.907)	100700	1.10780	1.108
57 Hexachlorobenzene	284		17.626	17.618	(0.966)	36942	1.05788	1.058
58 Pentachlorophenol	266		17.990	17.974	(0.986)	24091	1.01820	1.018
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	670884	4.00000	
\$ 66 Terphenyl-d14	244		21.394	21.386	(0.918)	78475	1.78490	1.785 (R)
67 Butylbenzylphthalate	149		22.315	22.308	(0.958)	72013	1.61378	1.614
* 69 Chrysene-d12	240		23.299	23.291	(1.000)	255030	4.00000	
* 77 Perylene-d12	264		25.947	25.931	(1.000)	183174	4.00000	
79 Dibenzo(a,h)anthracene	278		28.647	28.631	(1.104)	43121	0.92862	0.9286
90 N-Nitrosodimethylamine	74		4.694	4.694	(0.518)	65699	1.51412	1.514

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172331S.D
 Lab Smp Id: SLC0376-CCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	209245	-7.09
27 Naphthalene-d8	830434	415217	1660868	773367	-6.87
42 Acenaphthene-d10	389907	194954	779814	352031	-9.71
59 Phenanthrene-d10	763679	381840	1527358	670884	-12.15
69 Chrysene-d12	415791	207896	831582	255030	-38.66
77 Perylene-d12	274872	137436	549744	183174	-33.36

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.30	0.03
77 Perylene-d12	25.93	25.43	26.43	25.95	0.06

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

REVIEW SUMMARY FOR FILE - NT1403172331S.D

Lab ID: SLC0376-CCV1

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 08:30

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00050</u>
Lab File ID:	<u>NT1403172304S.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0376</u>	Injection Date:	<u>03/17/23</u>
Lab Sample ID:	<u>SLC0376-LCV1</u>	Injection Time:	<u>16:16</u>
Sequence Name:	<u>ABN 0.2</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.20000	0.2	1.5461150	1.5601430		0.9	
1,2-Dichlorobenzene	A	0.20000	0.2	1.5059720	1.5333410		1.8	
Benzyl Alcohol	A	0.20000	0.1	1.0943940	0.7827201		-28.5	
Benzoic acid	A	0.80000	0.1	0.1762504	0.0315423		-87.9	
2,4-Dimethylphenol	A	0.40000	0.4	0.3438645	0.3465282		0.8	
1,2,4-Trichlorobenzene	A	0.20000	0.2	0.3370247	0.3508013		4.1	
N-Nitrosodiphenylamine	A	0.20000	0.2	0.5419762	0.5193183		-4.2	
Pentachlorophenol	A	0.40000	0.1	0.1113753	0.0490550		-65.1	
2-Fluorophenol	A	0.30000	0.253	1.3577520	1.1429820		-15.8	
p-Terphenyl-d14	A	0.20000	0.236	0.6895811	0.8146659		18.1	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723045.D

Date: 17-MAR-2023 16:16

Client ID:

Sample Info: SLC0376-LCW1

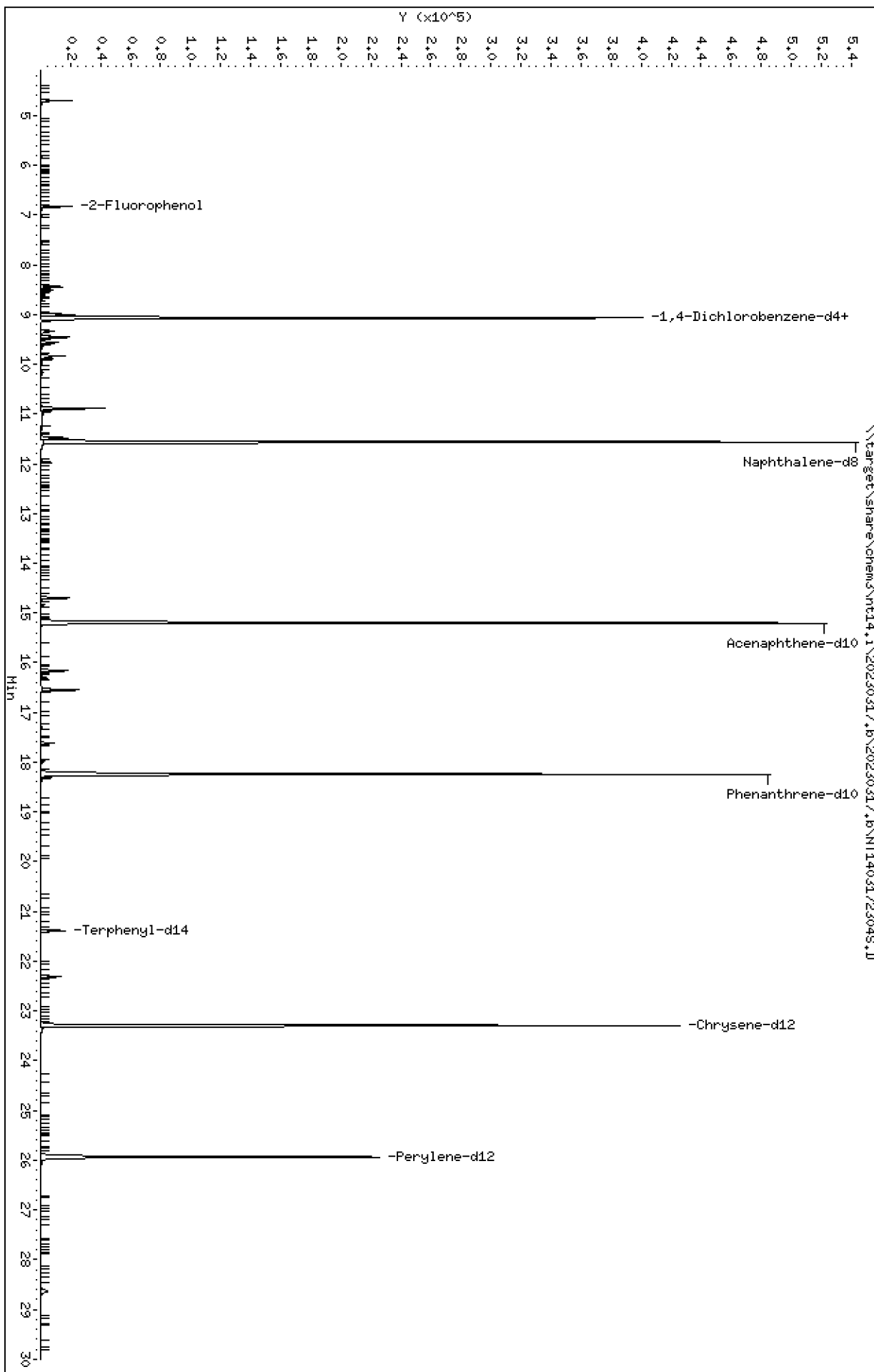
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

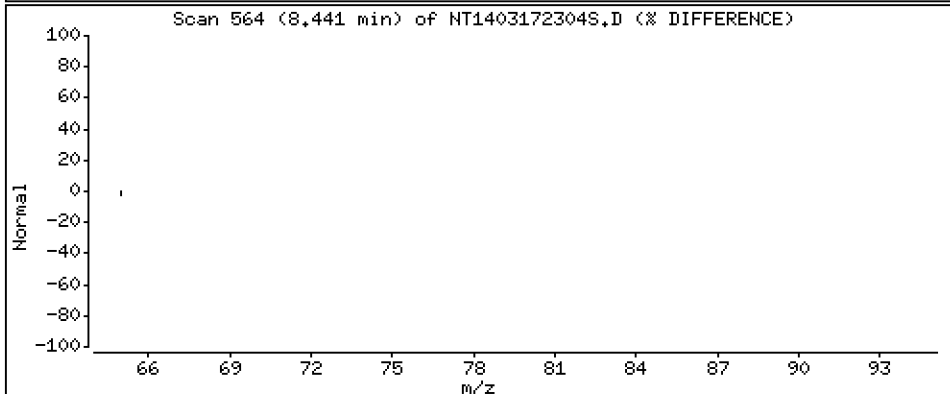
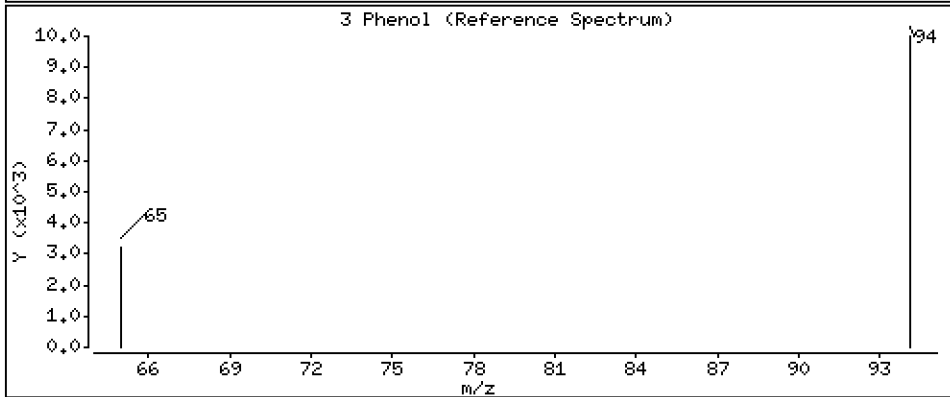
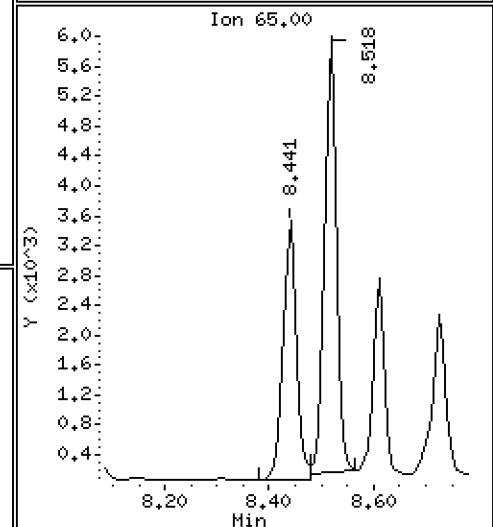
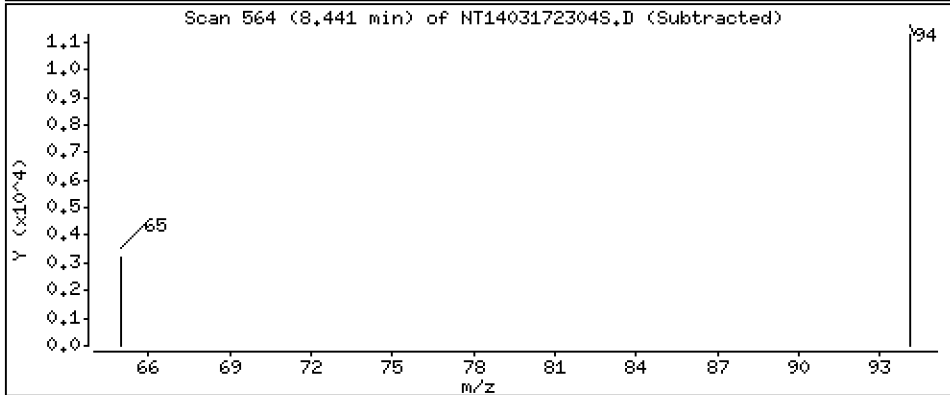
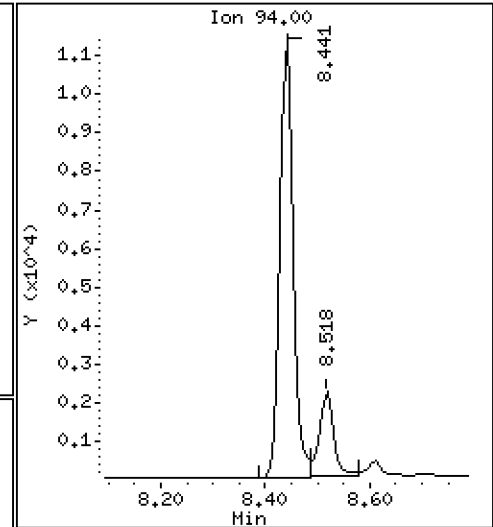
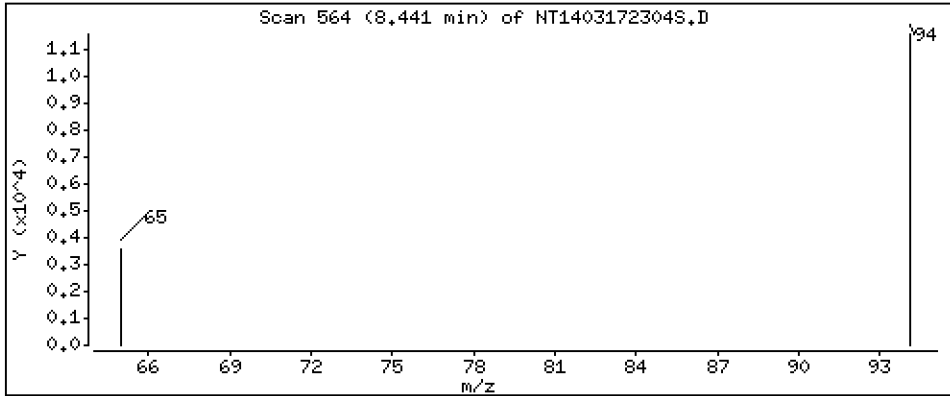
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1621 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

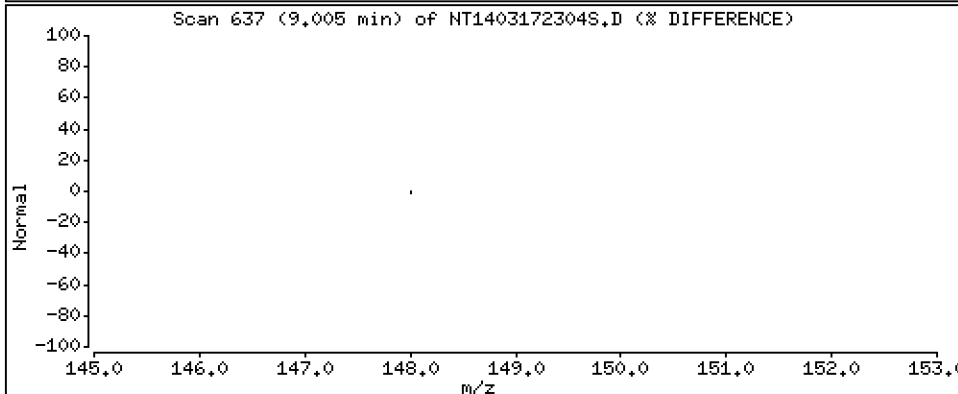
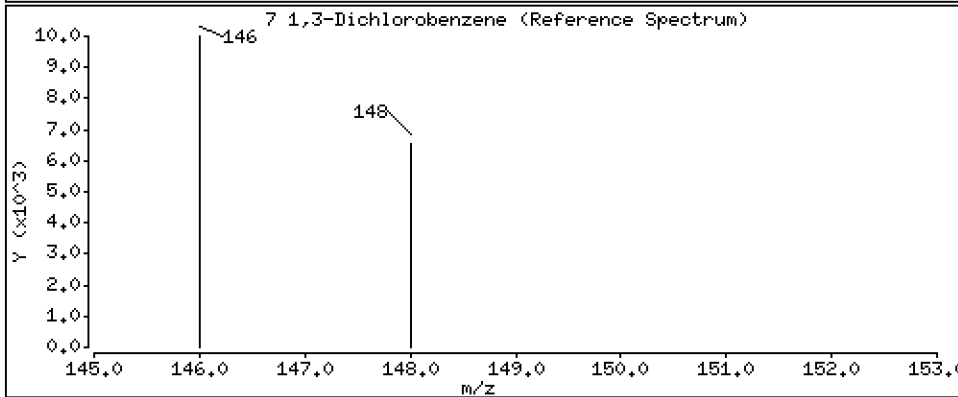
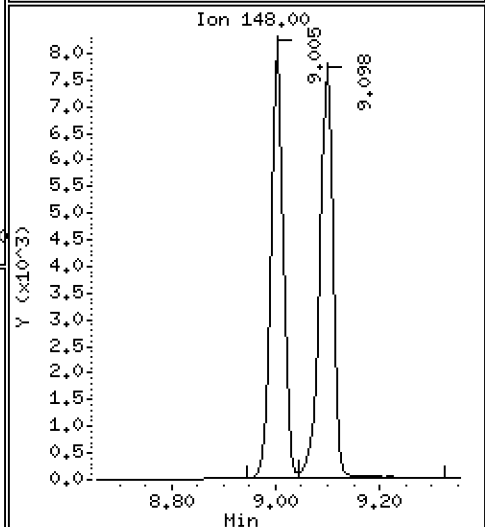
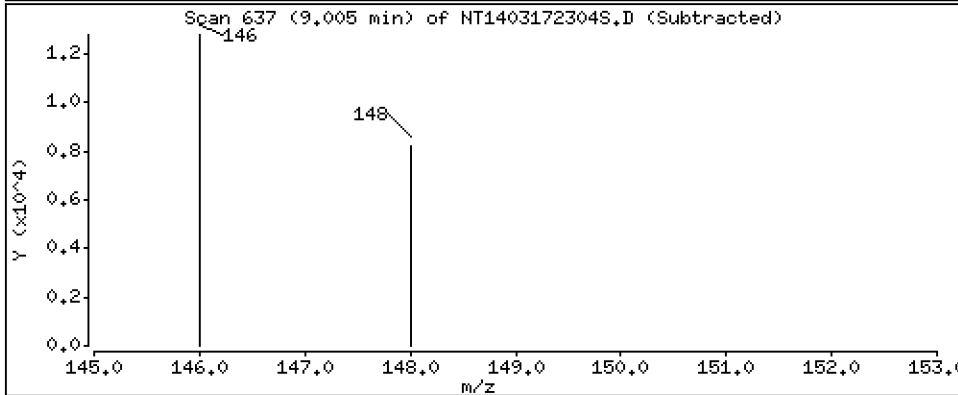
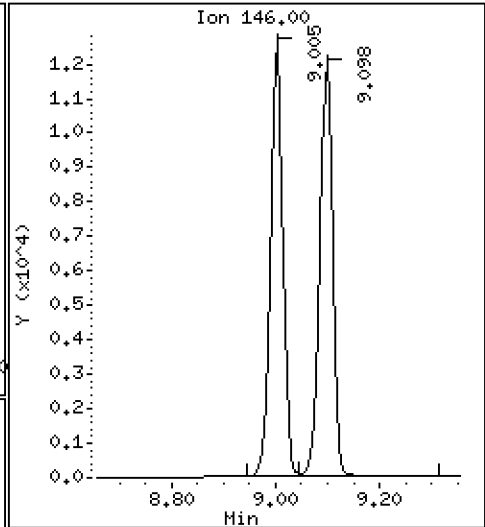
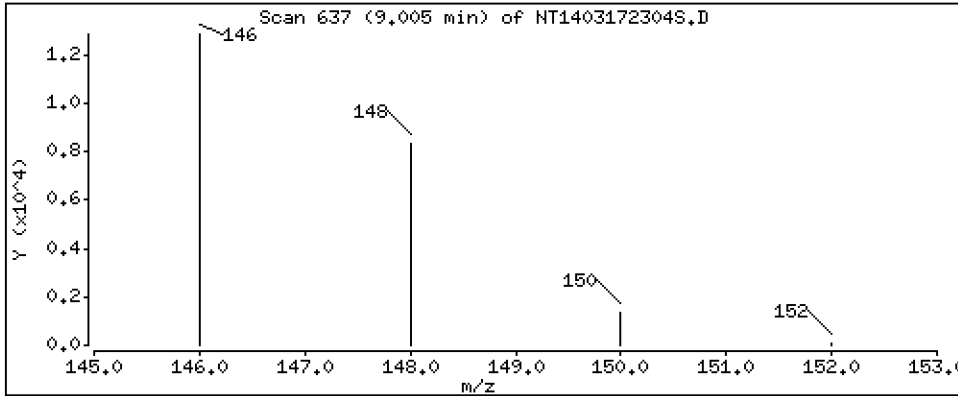
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2023 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

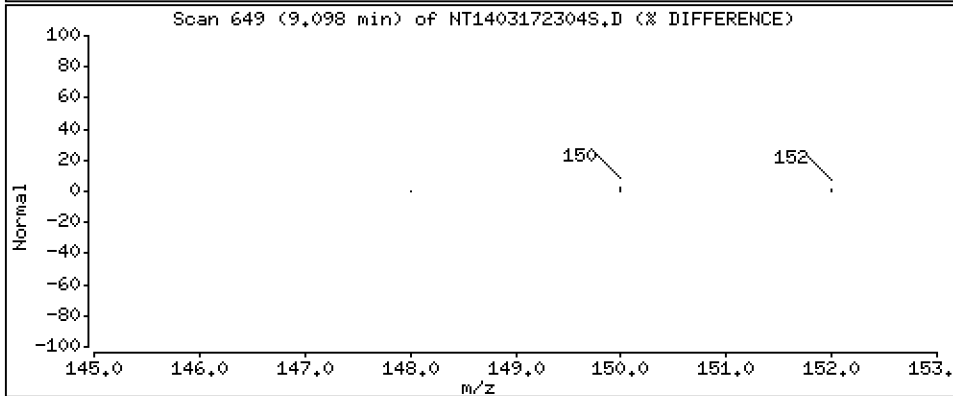
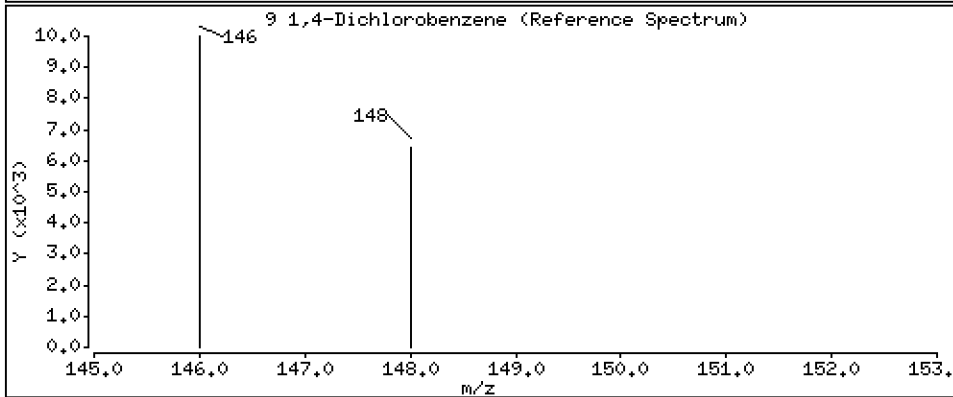
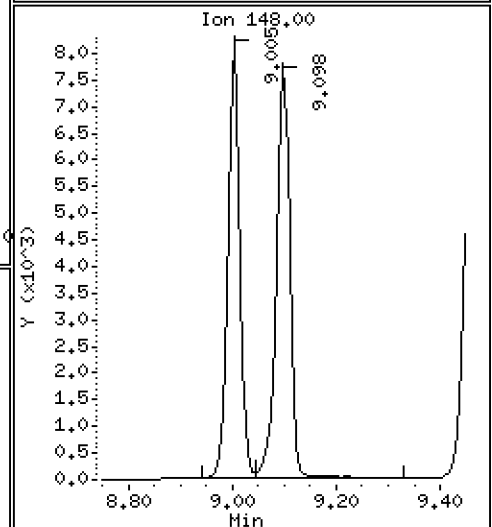
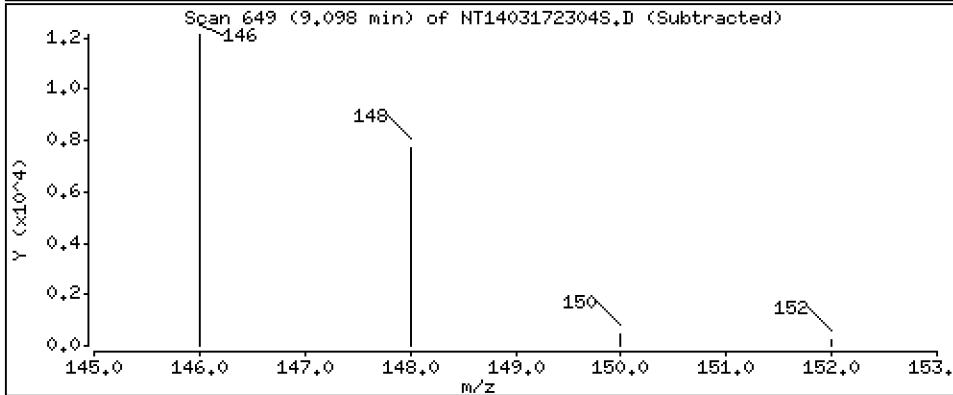
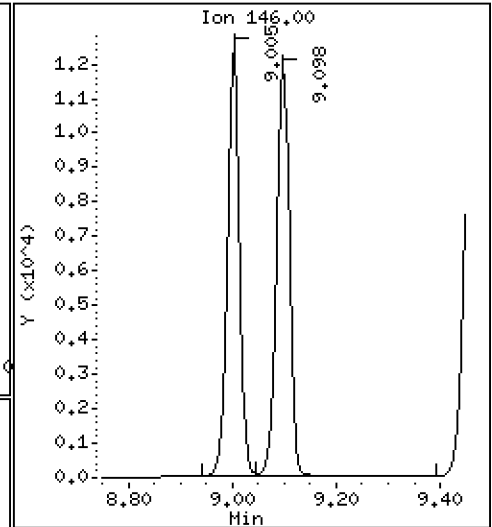
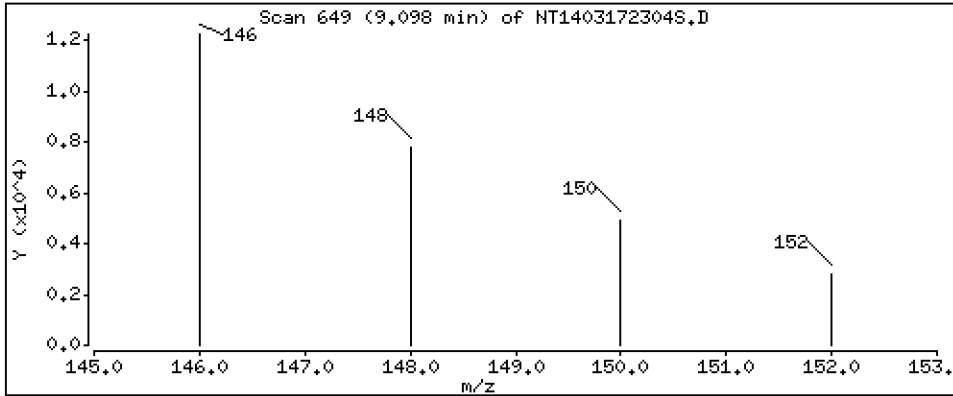
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2018 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

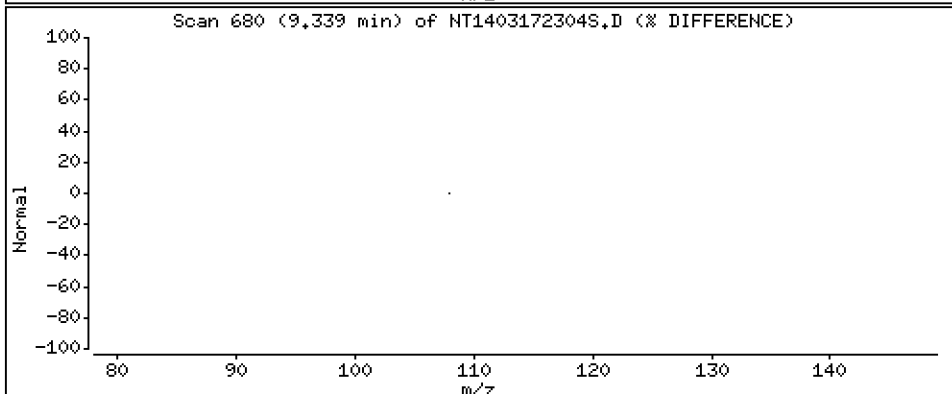
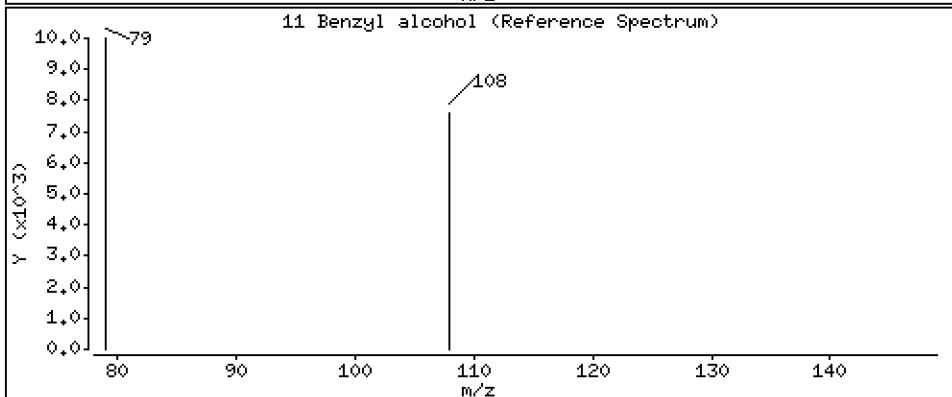
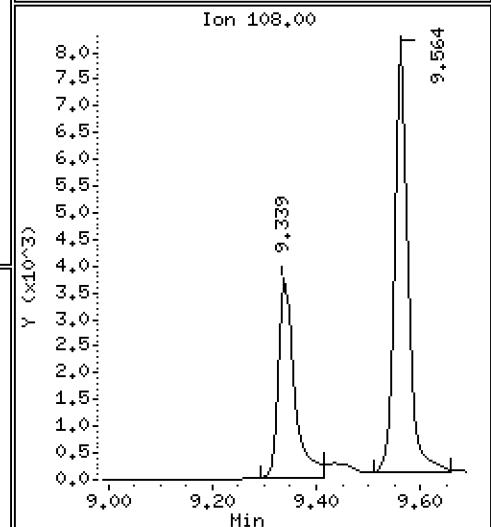
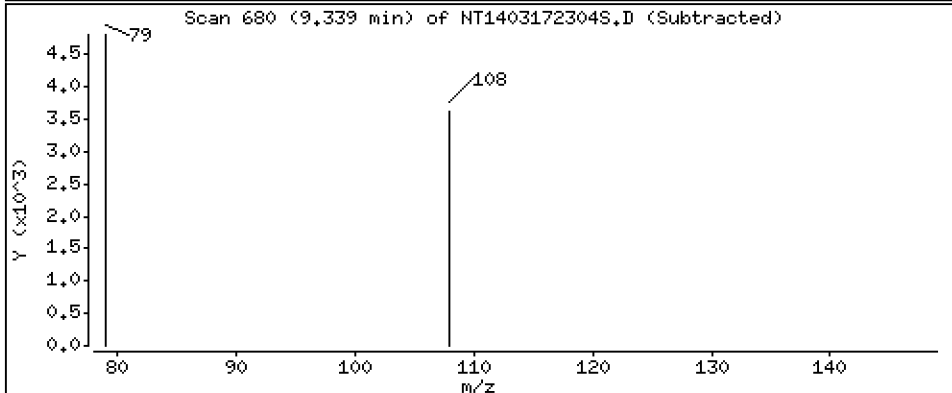
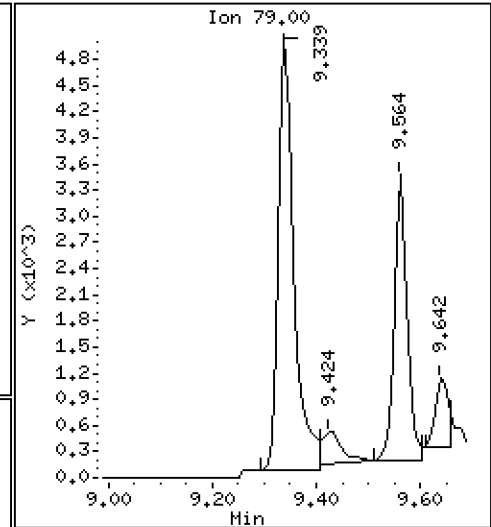
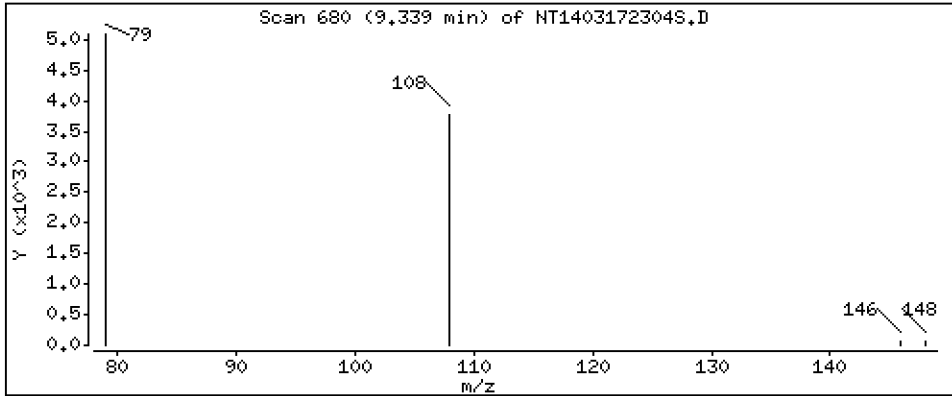
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1430 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

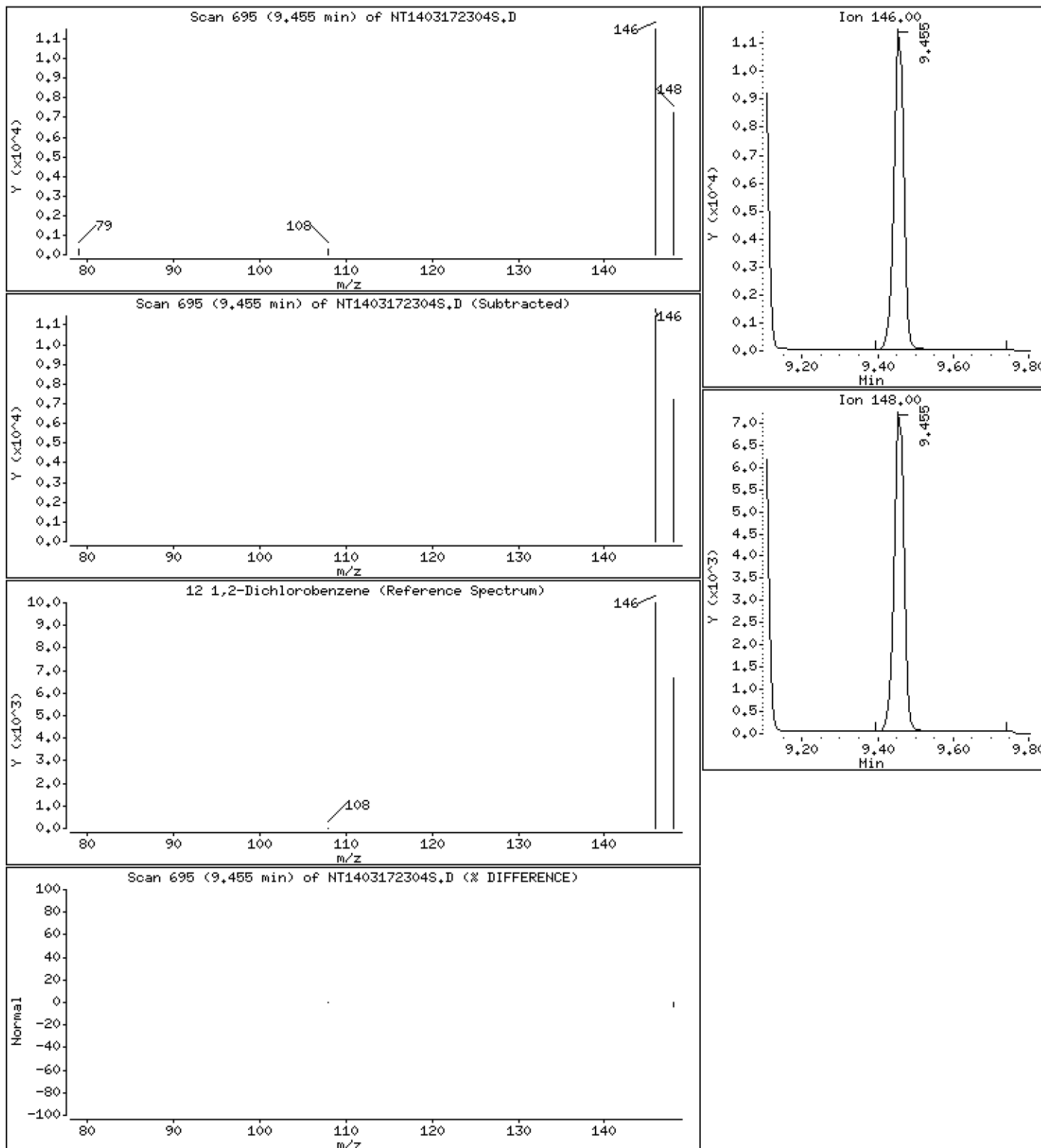
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2036 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

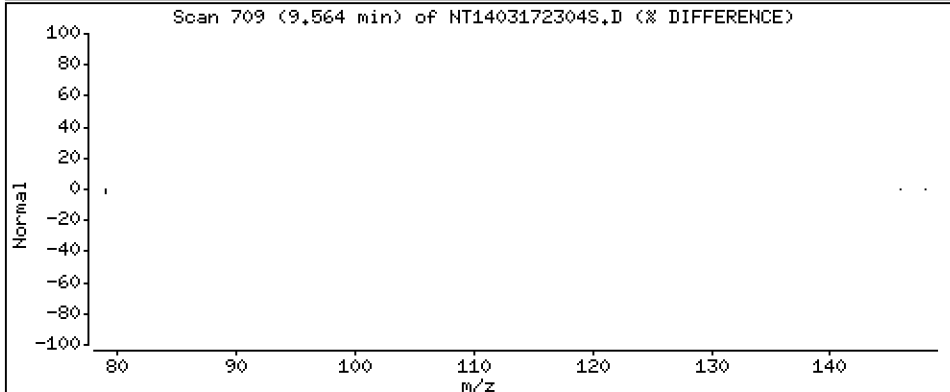
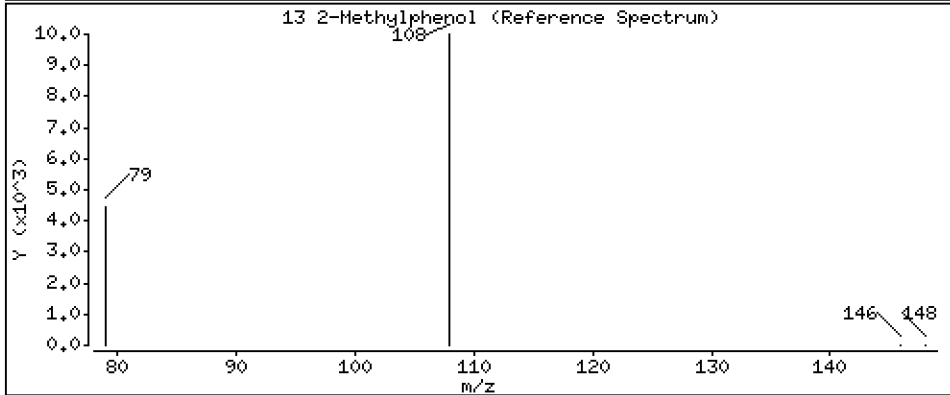
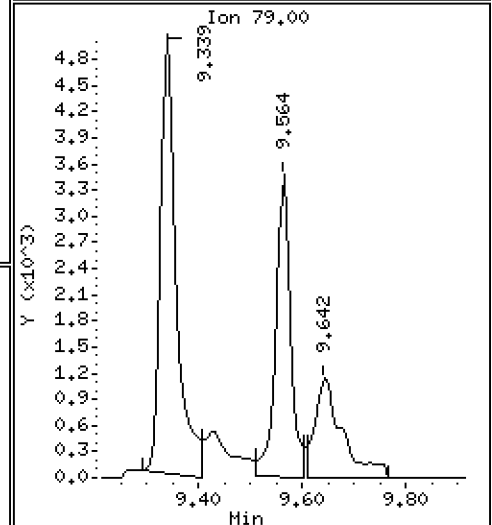
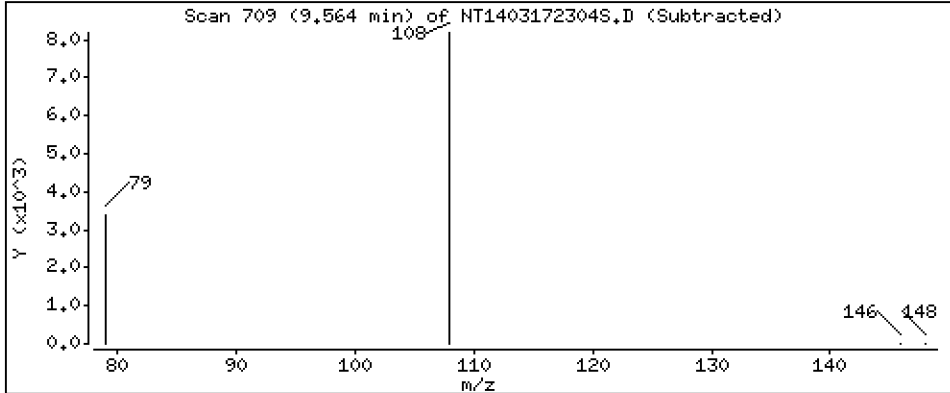
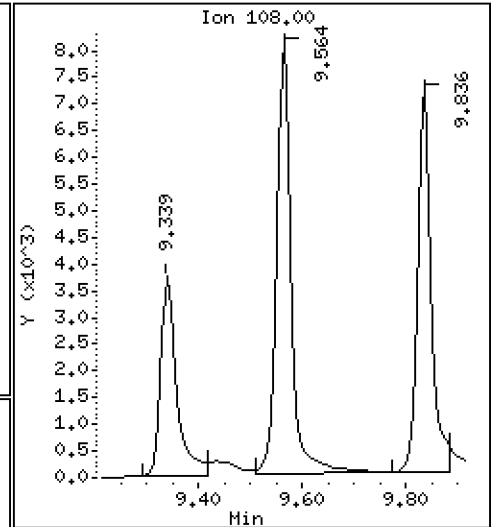
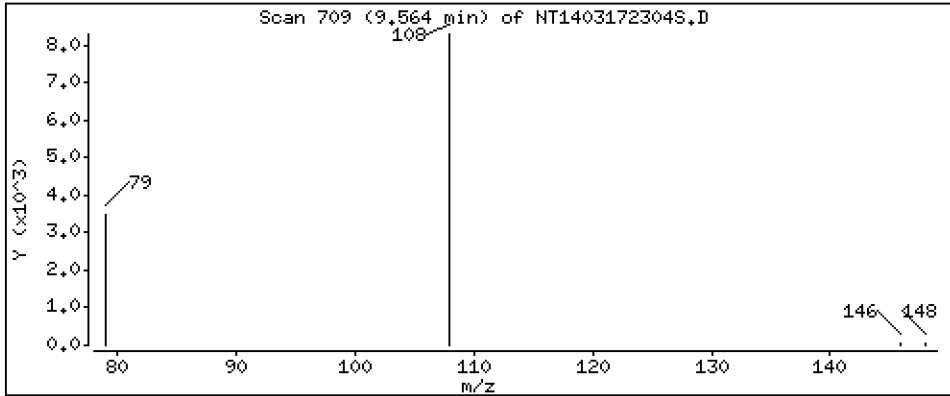
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1830 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

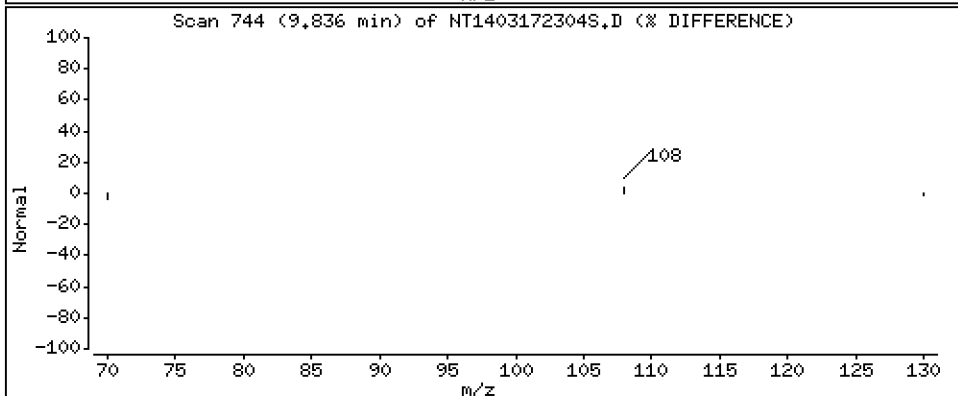
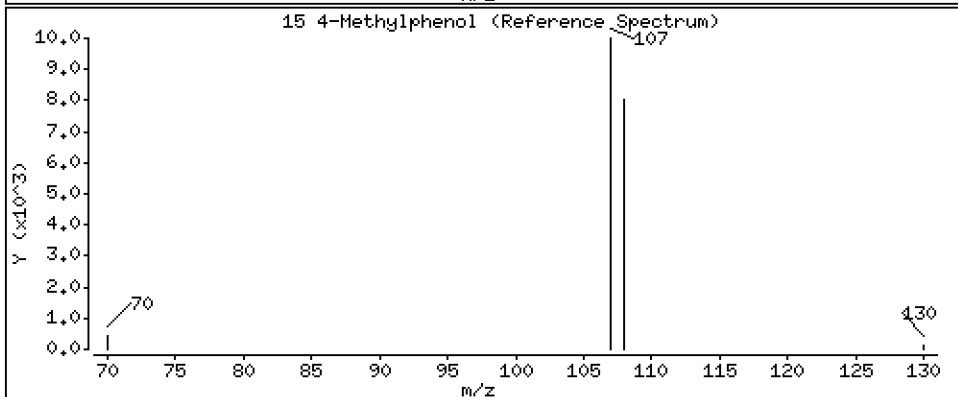
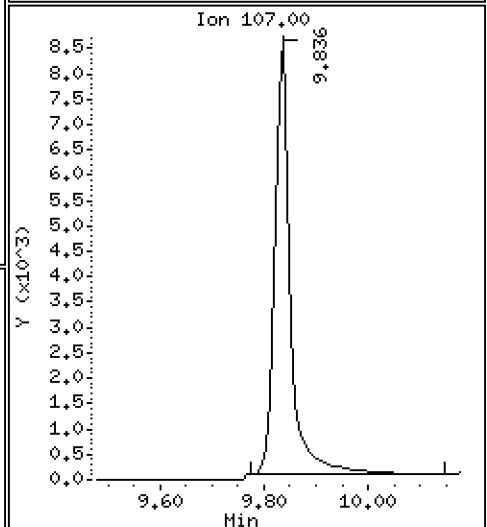
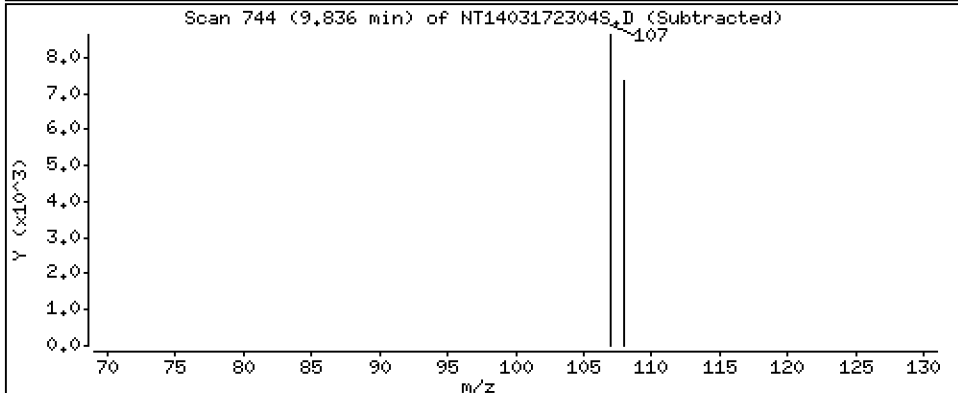
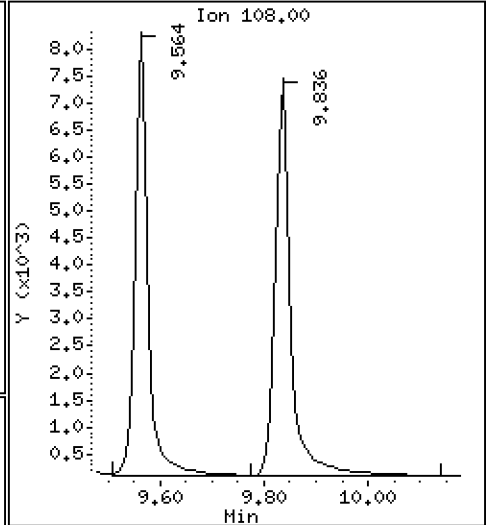
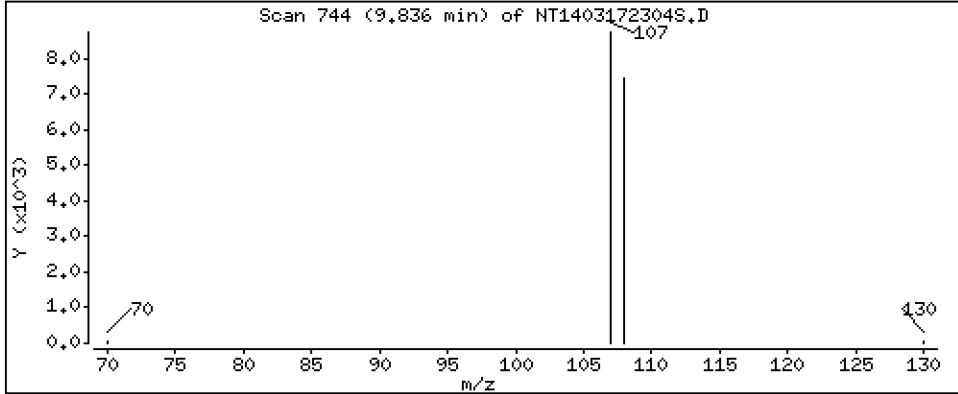
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1712 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

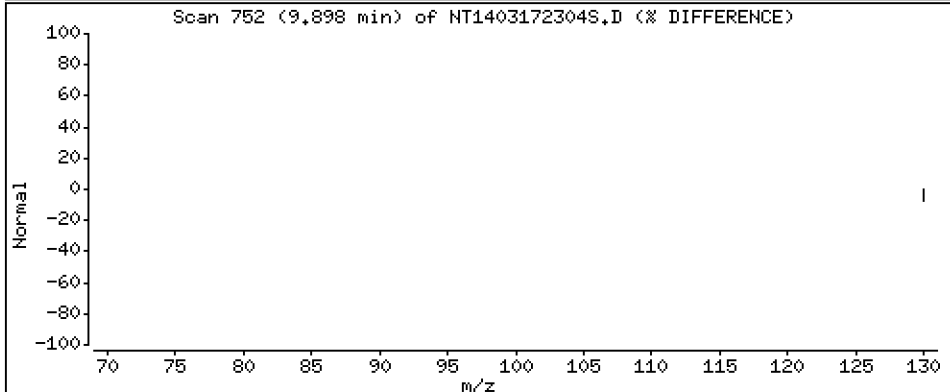
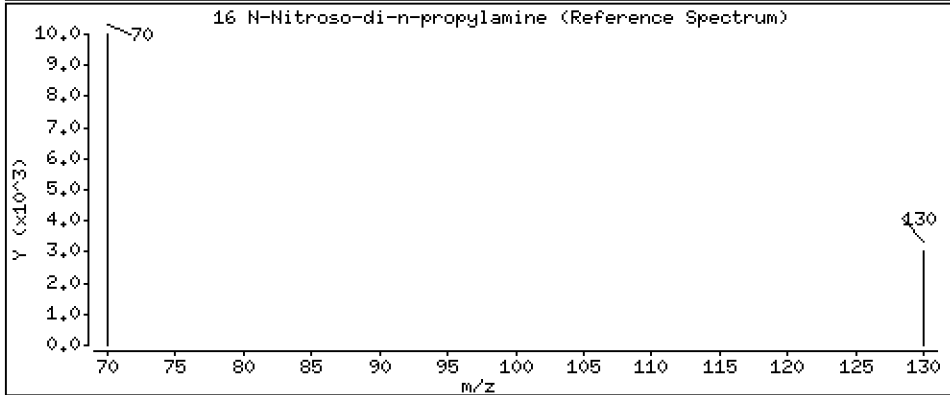
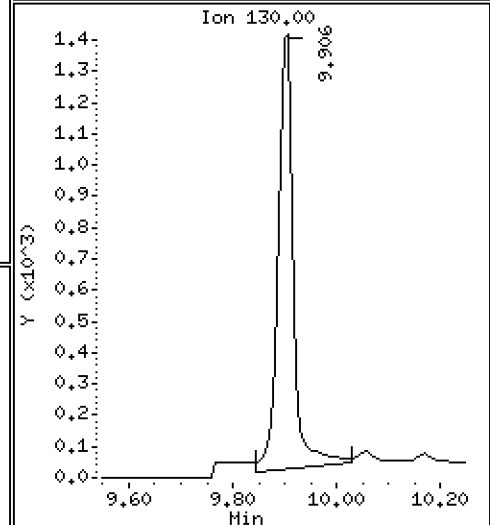
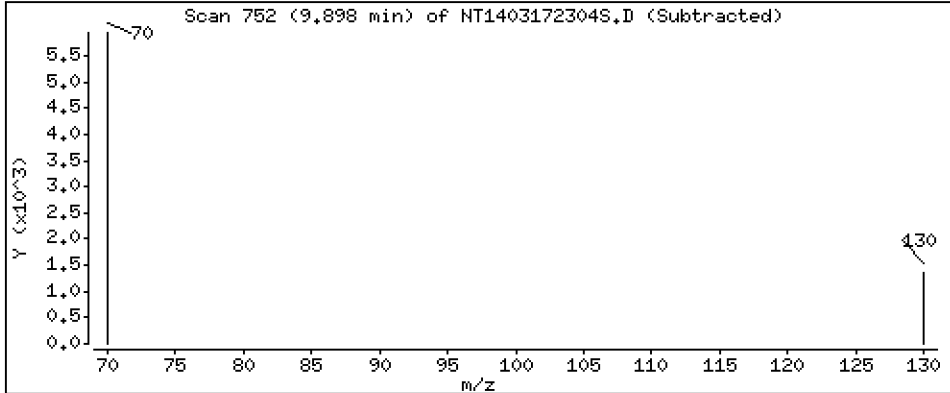
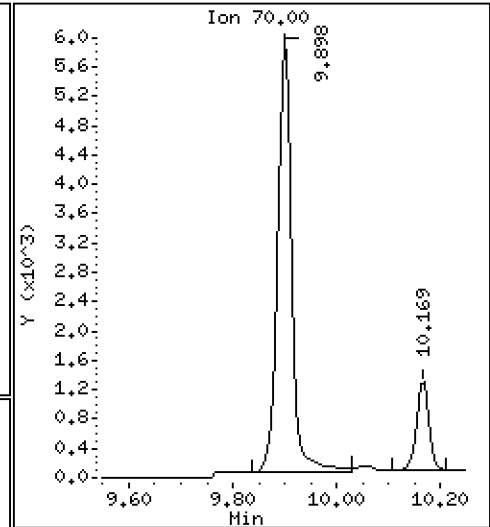
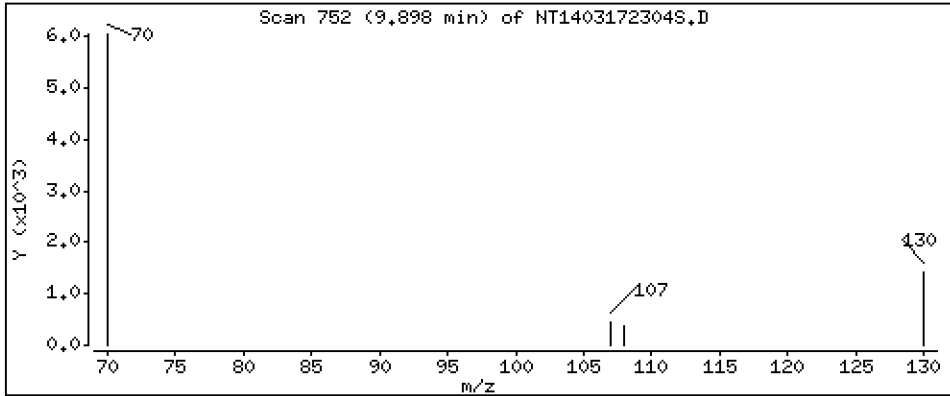
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,1753 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

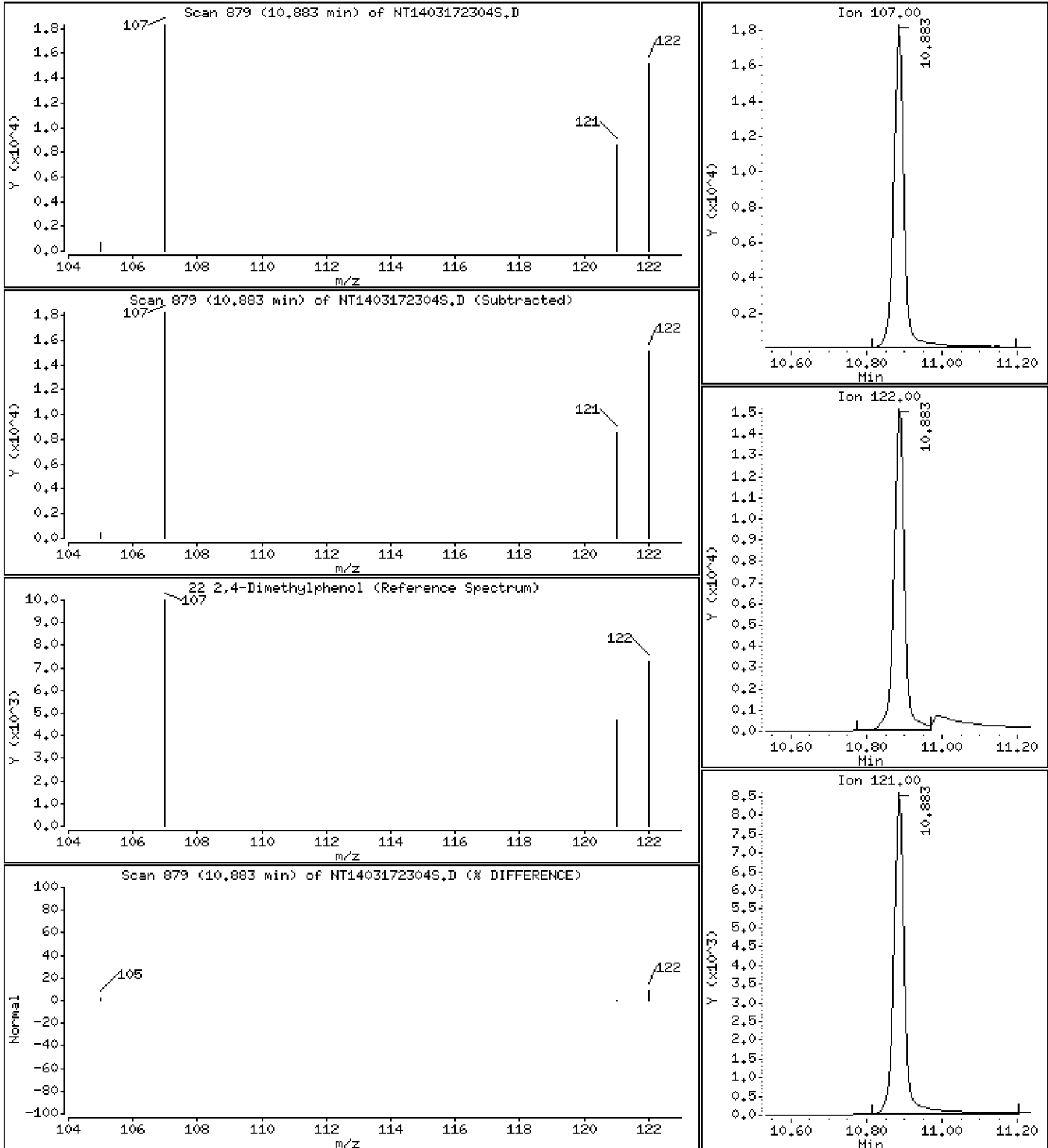
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.4031 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

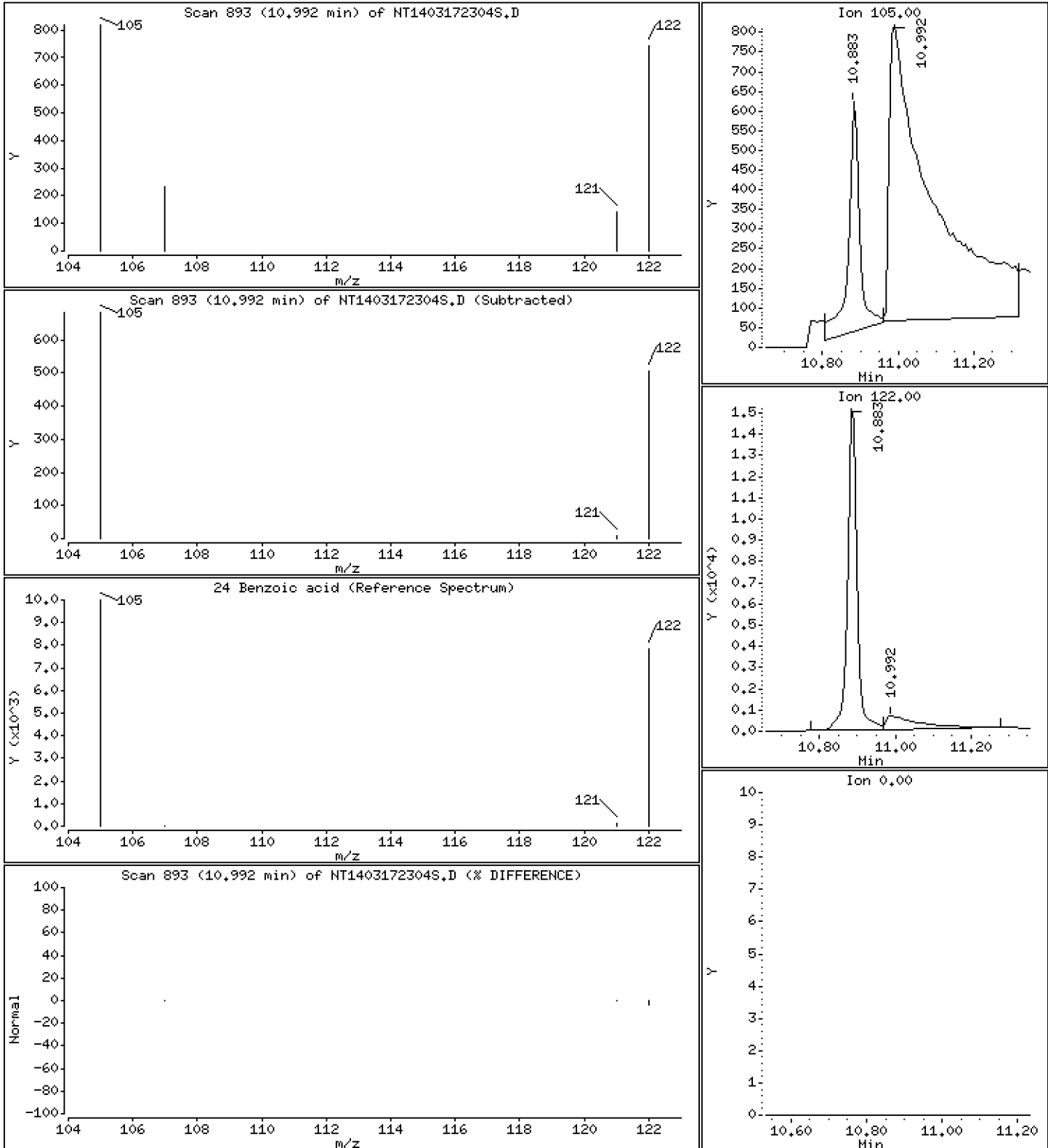
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.09699 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

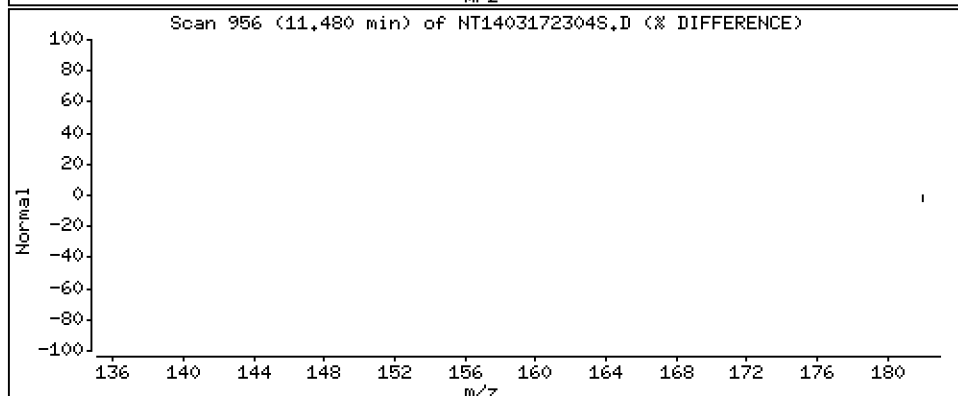
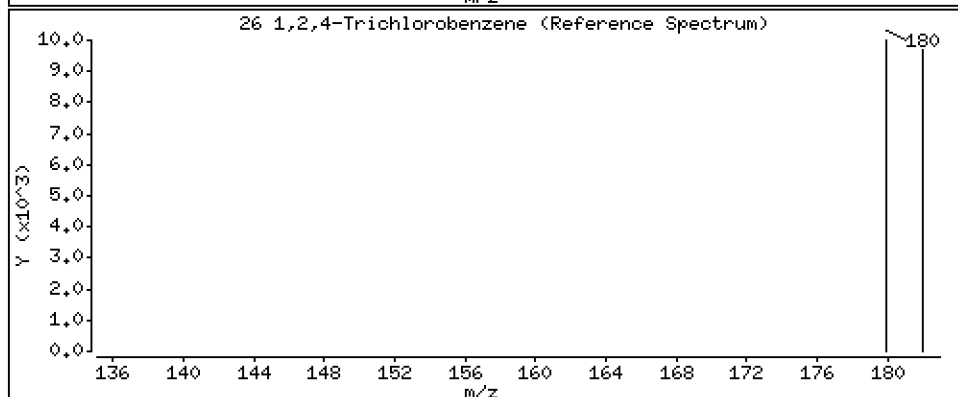
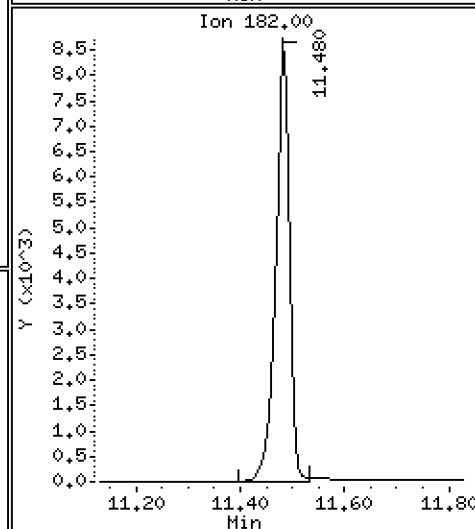
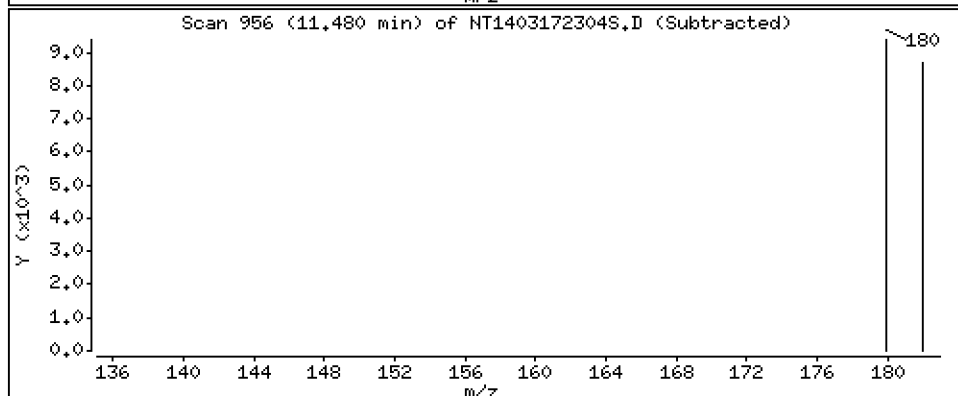
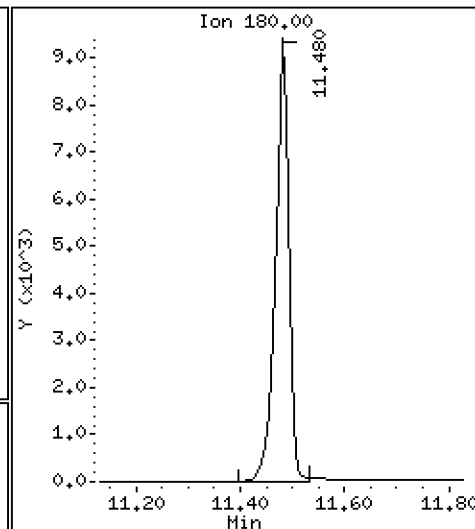
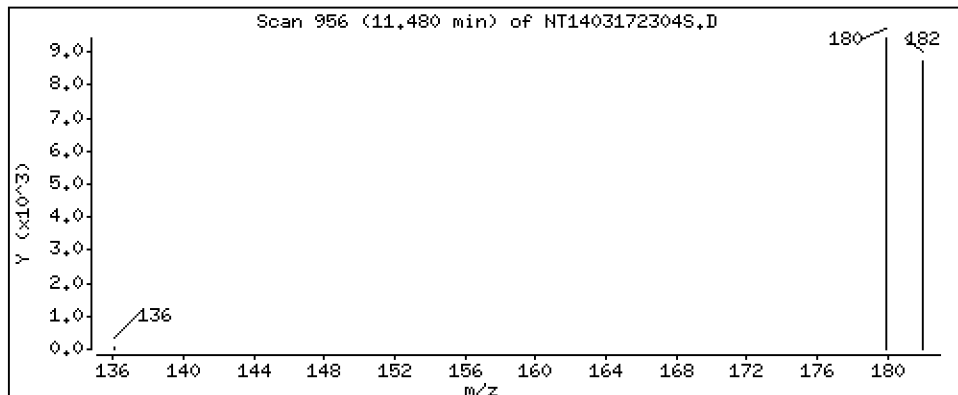
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2082 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

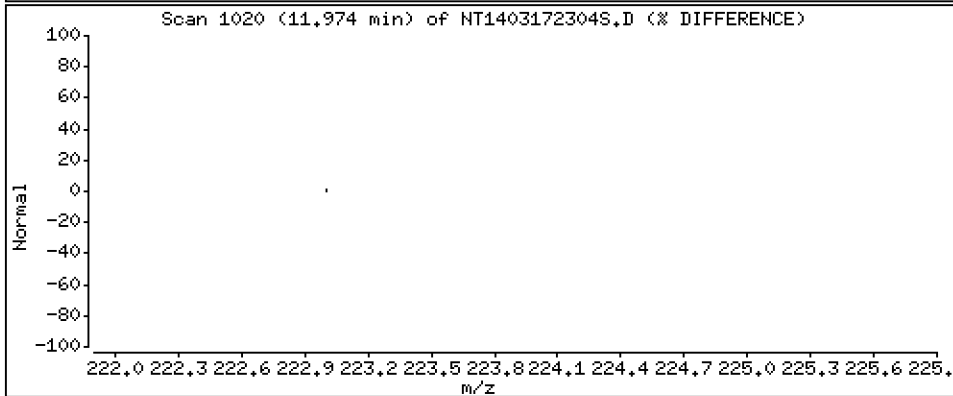
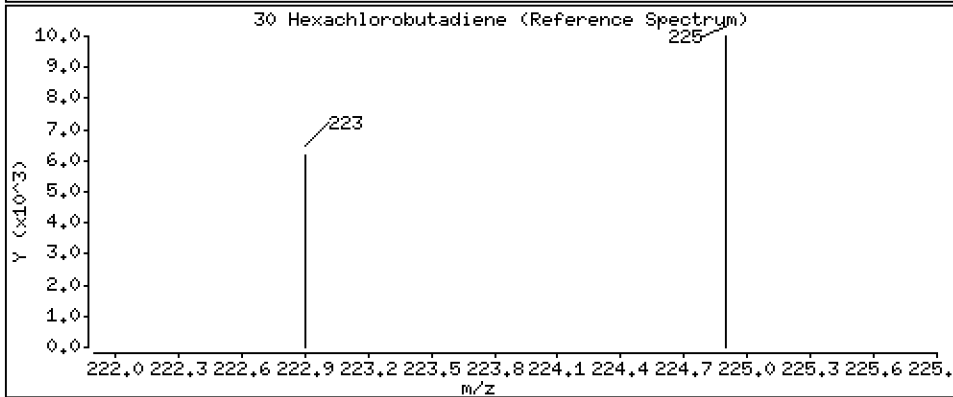
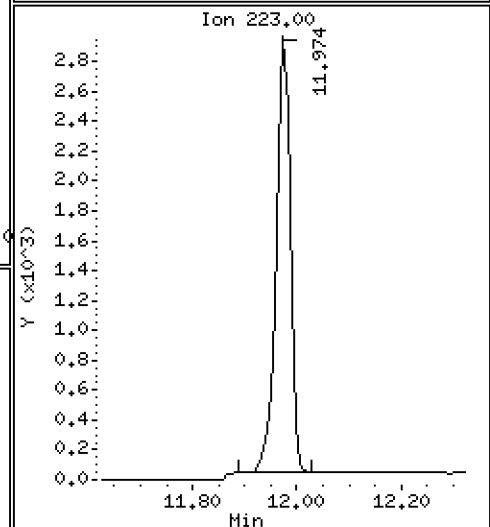
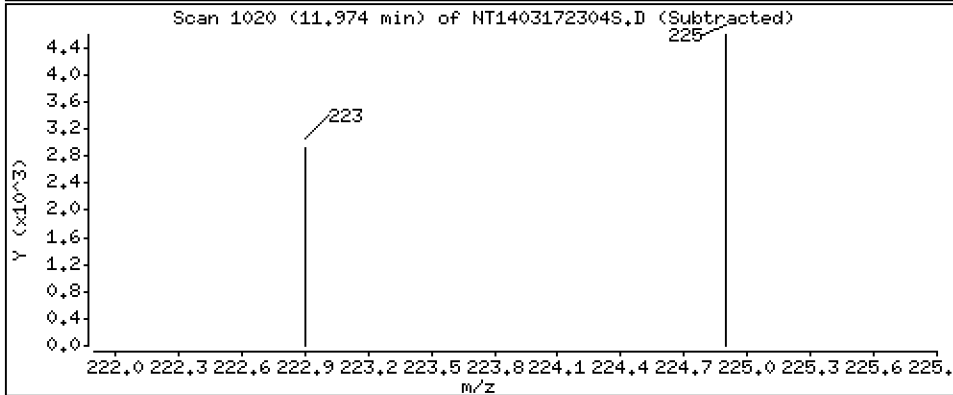
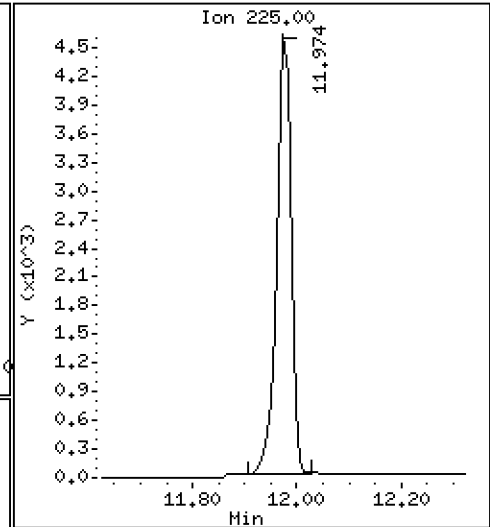
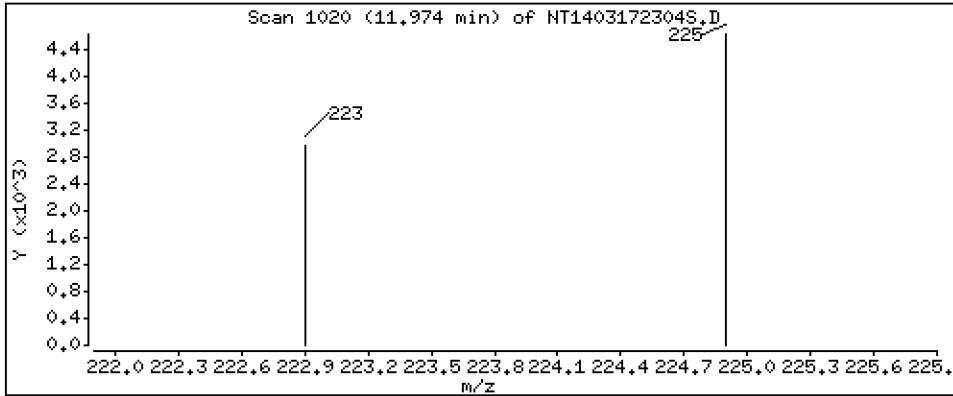
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2078 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

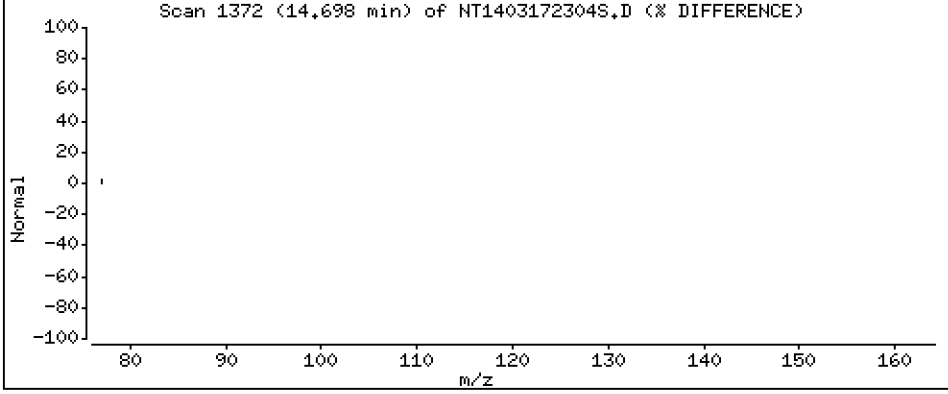
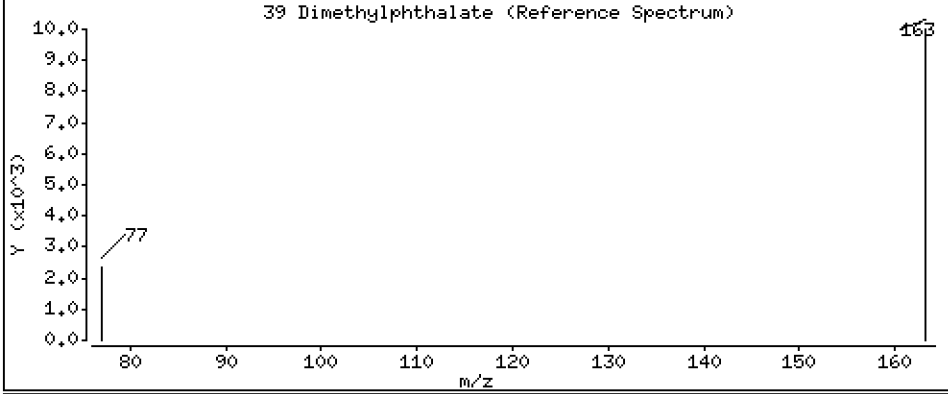
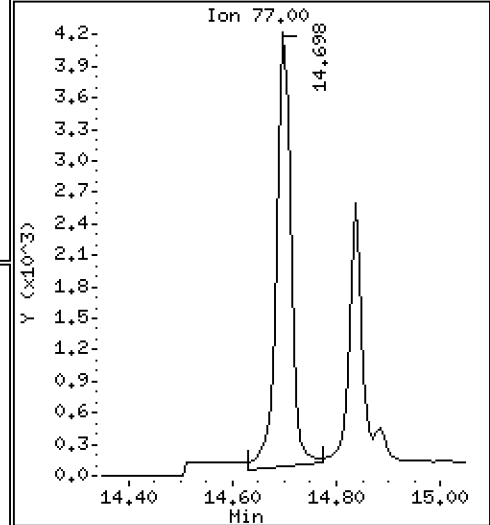
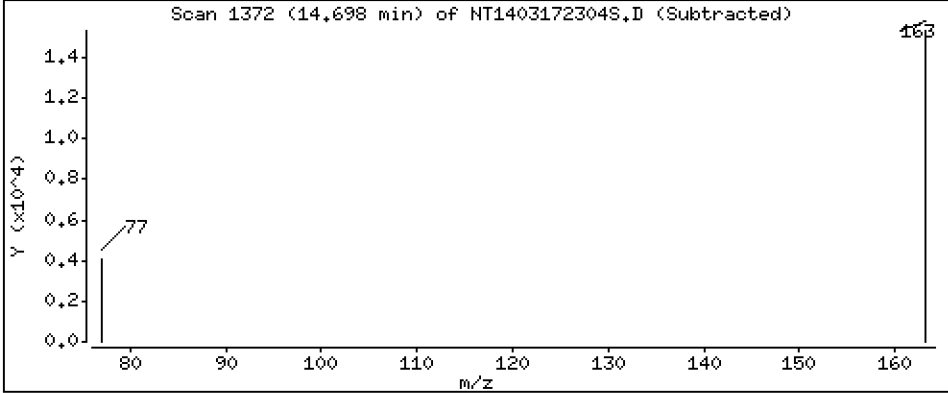
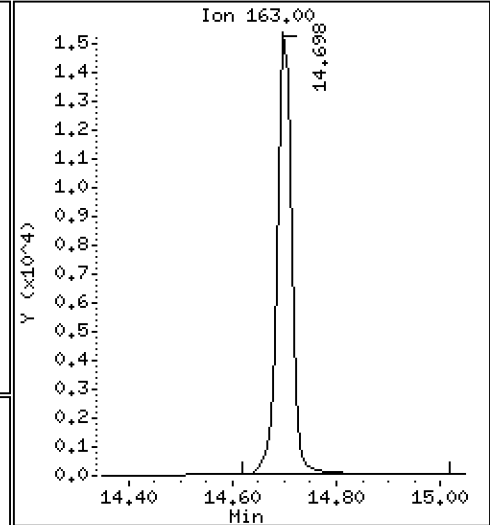
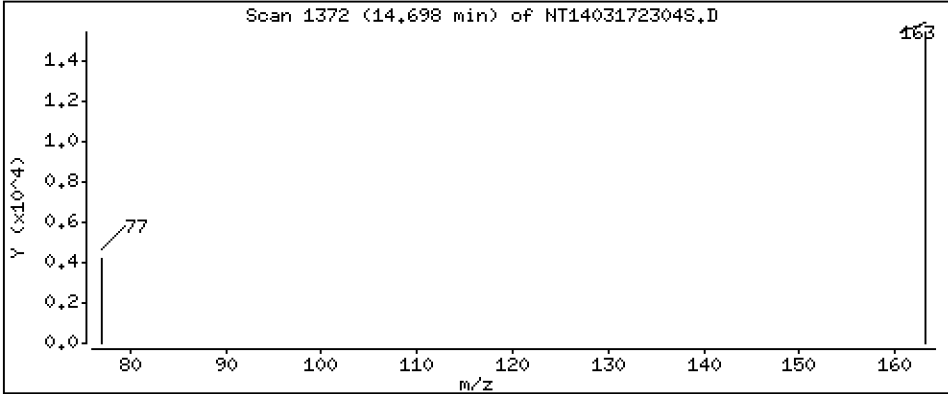
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1922 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

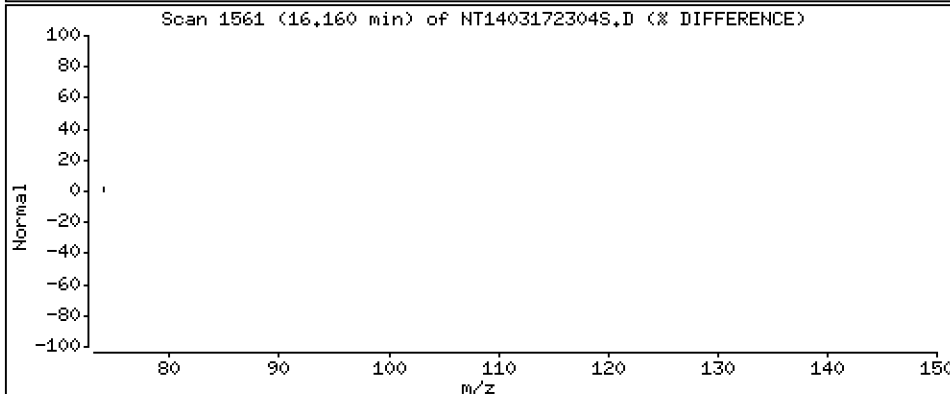
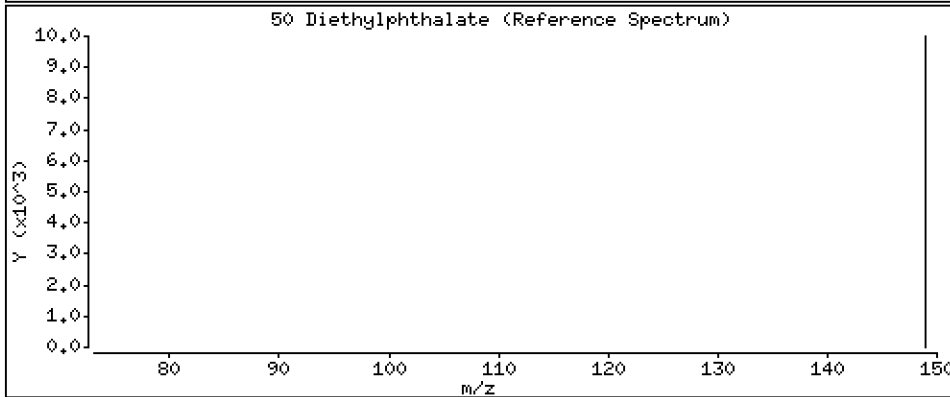
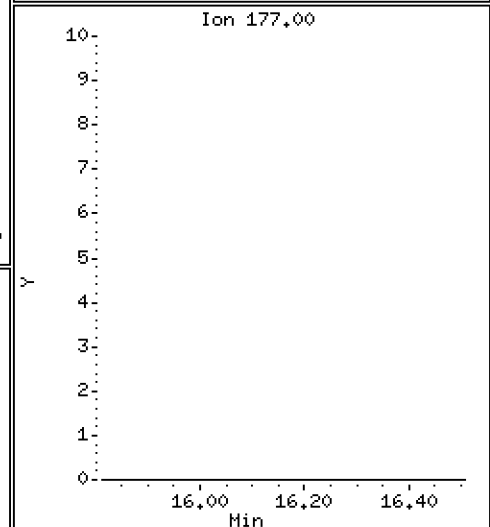
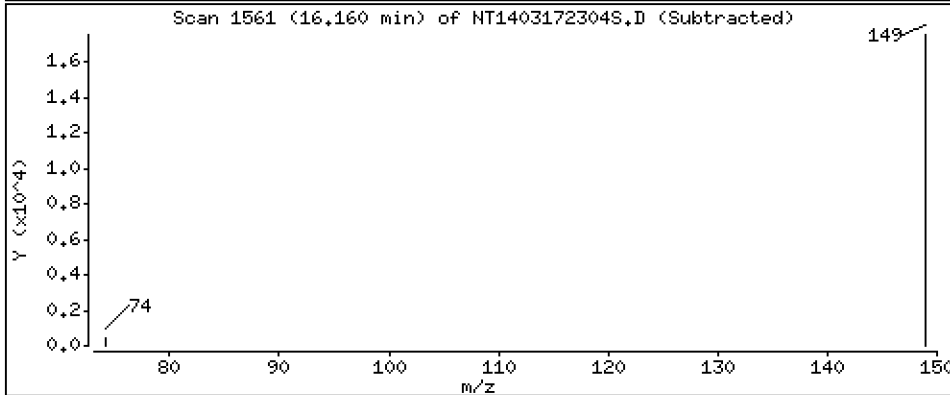
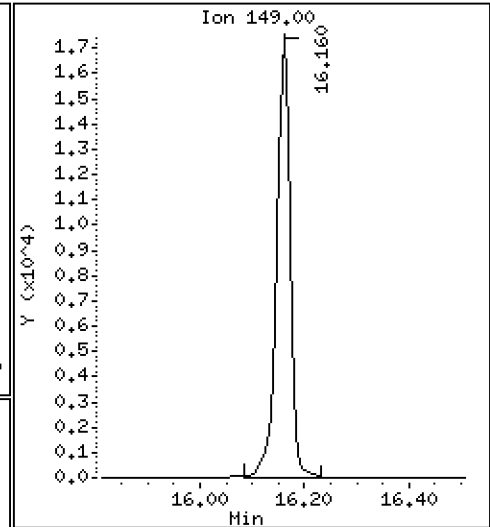
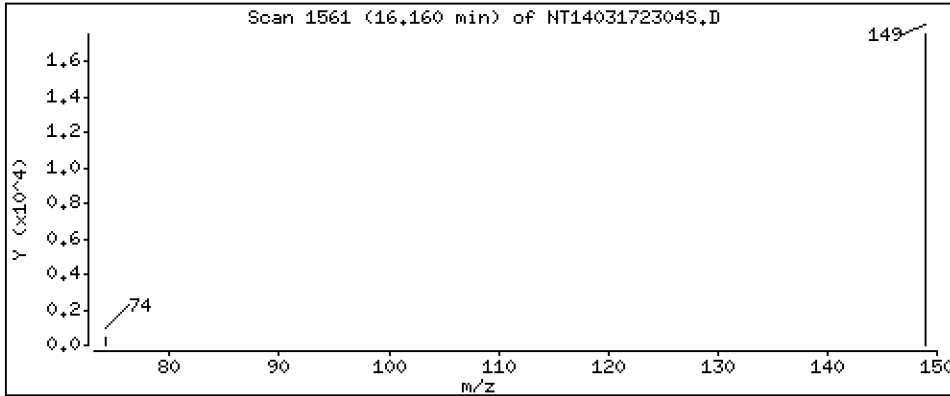
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1898 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

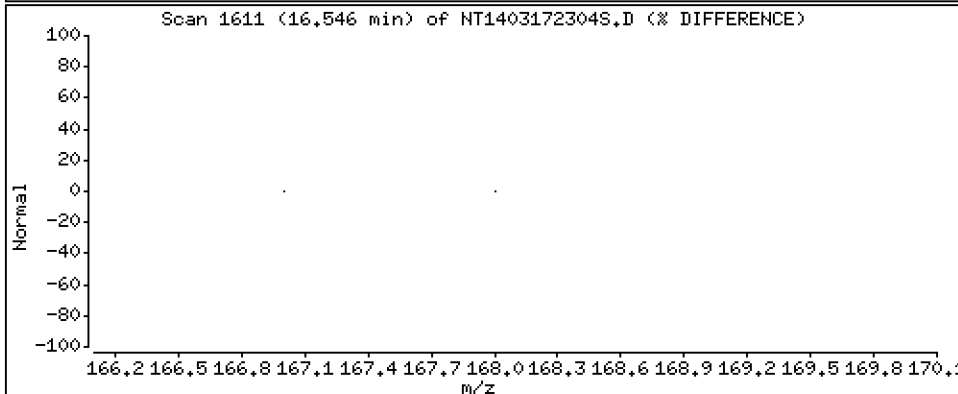
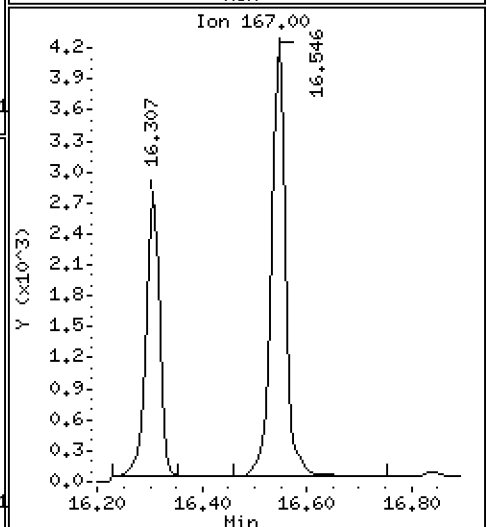
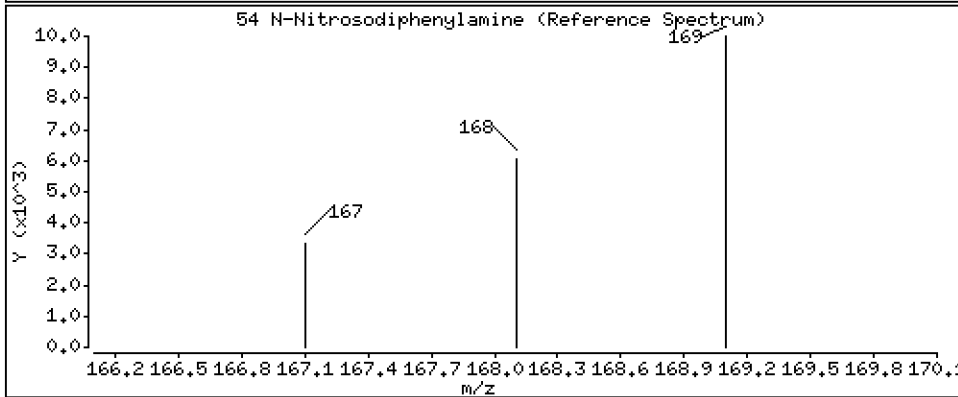
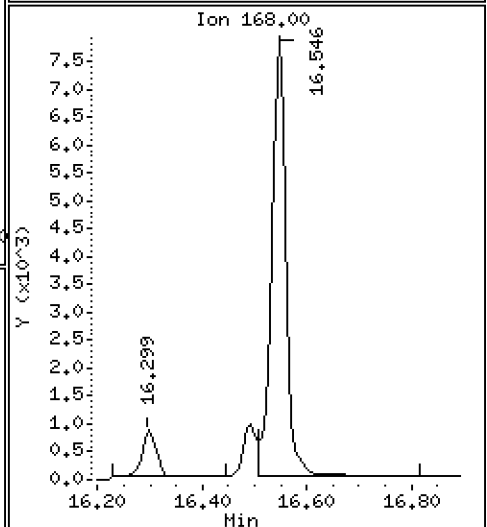
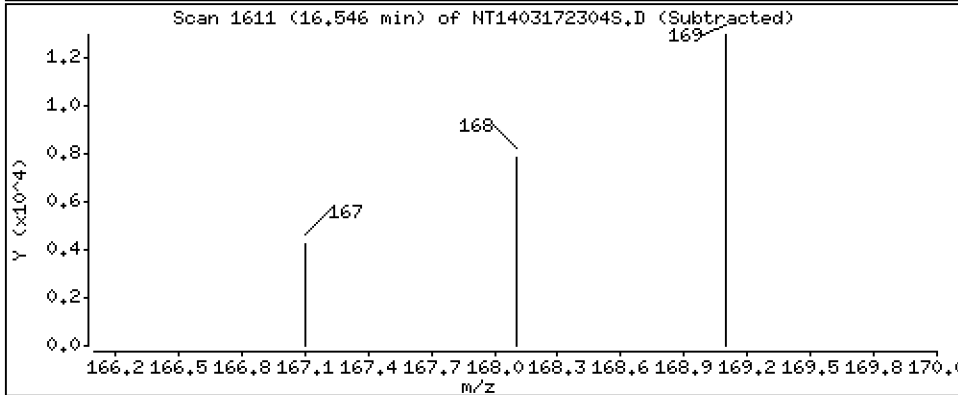
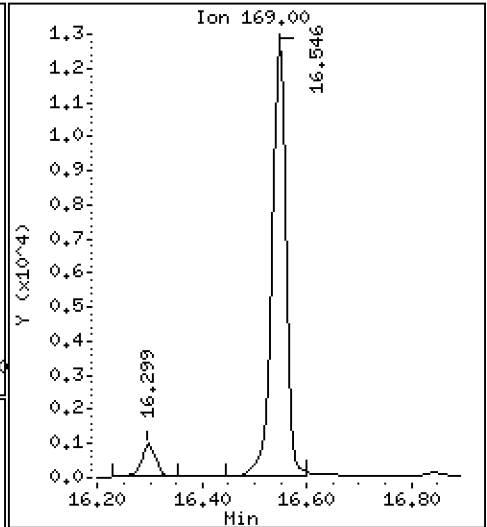
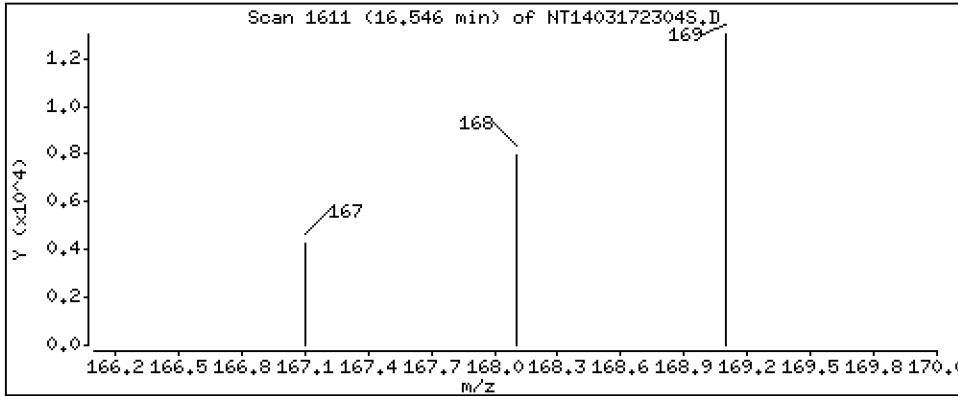
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.1916 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

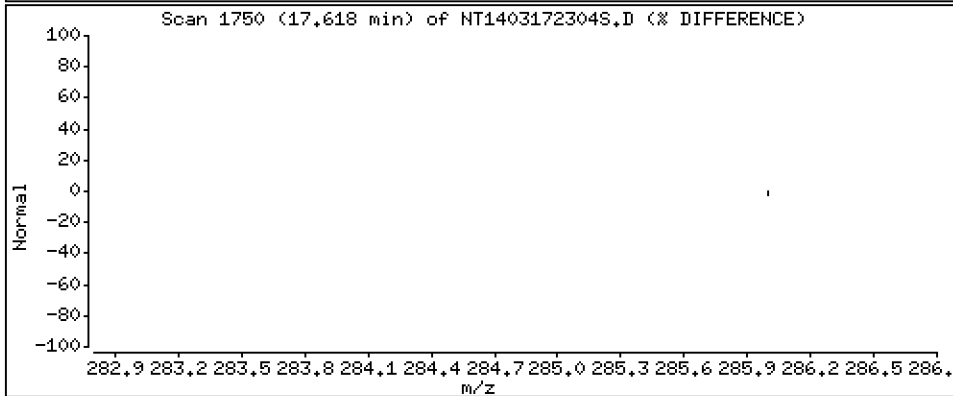
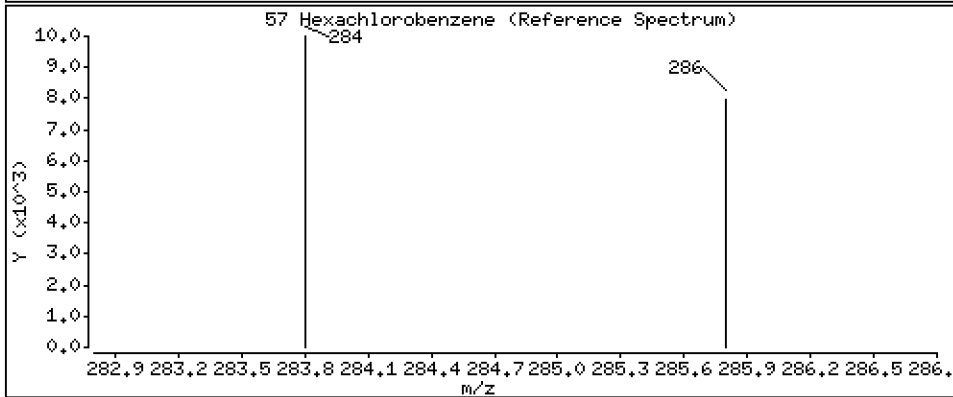
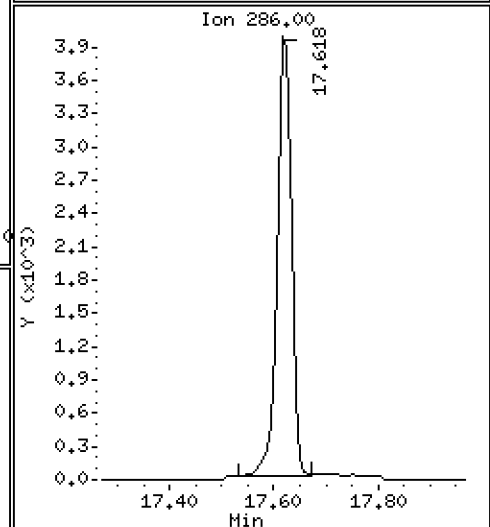
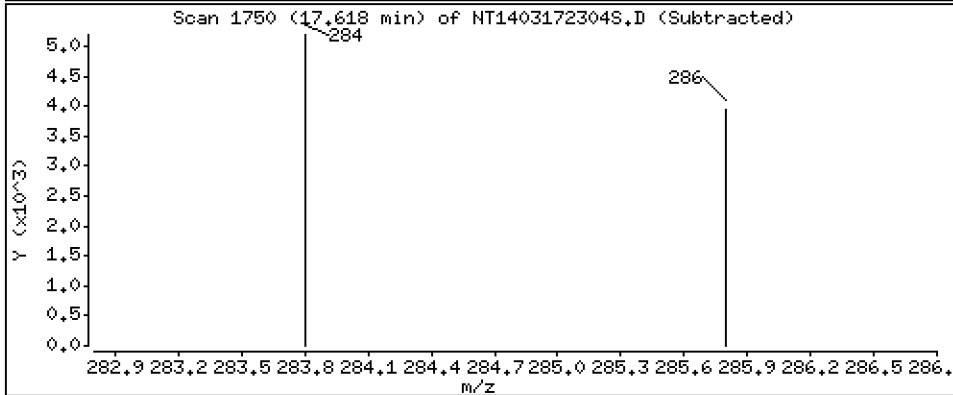
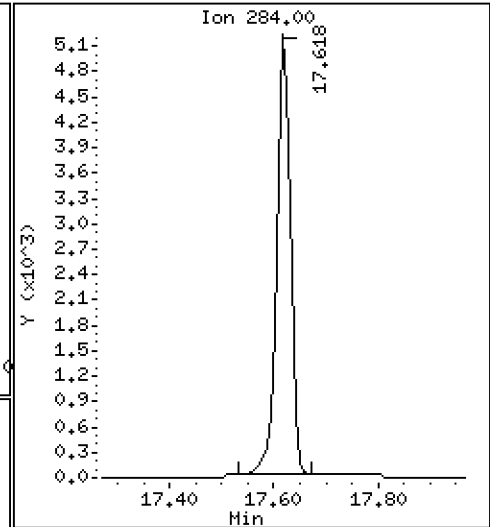
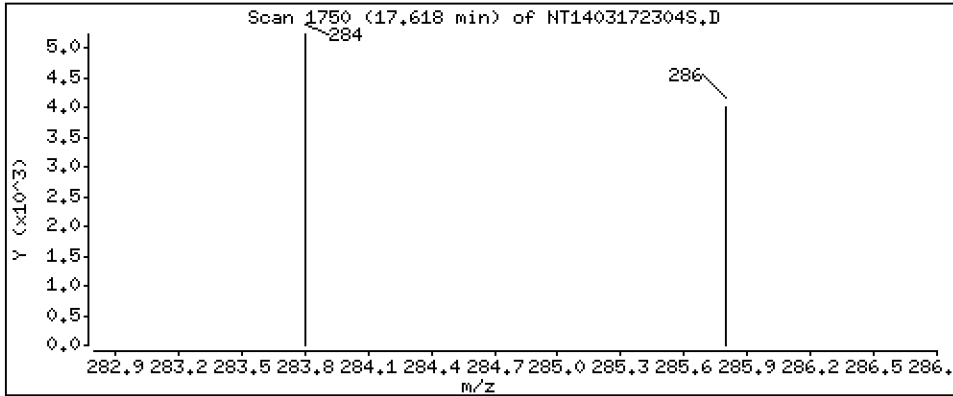
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2017 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

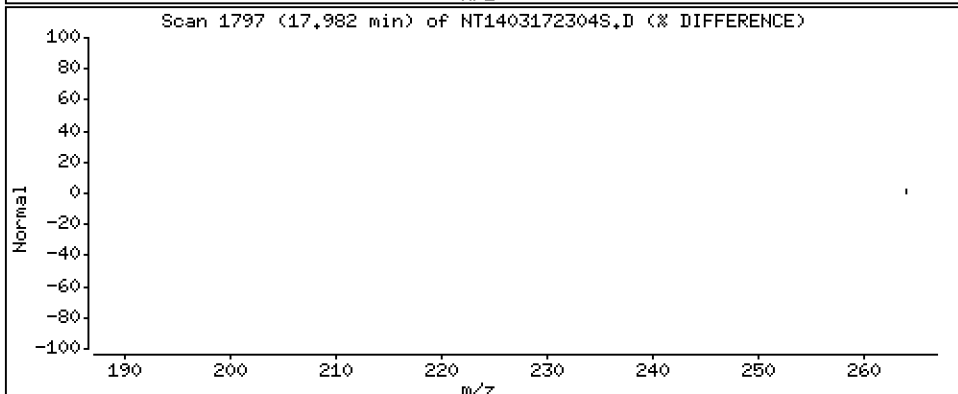
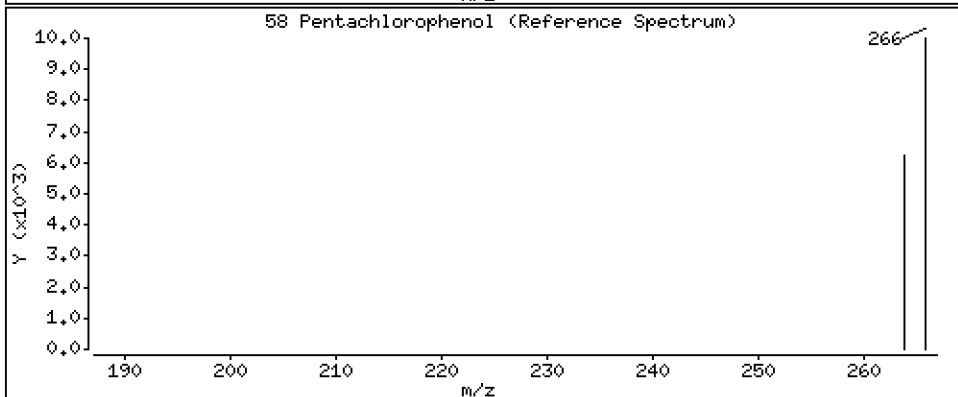
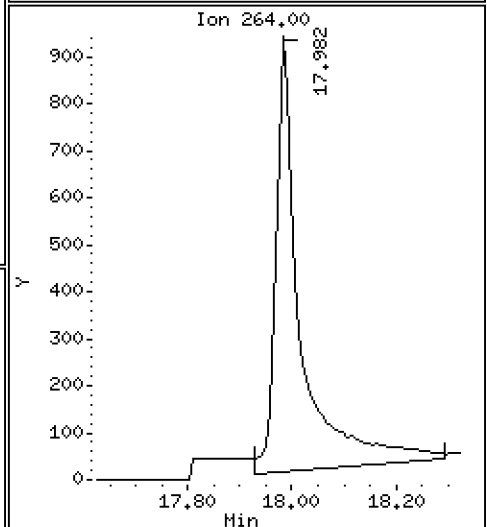
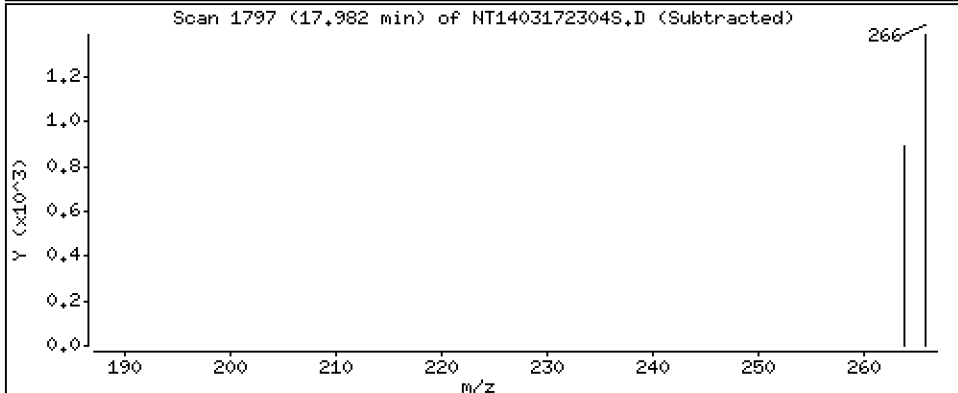
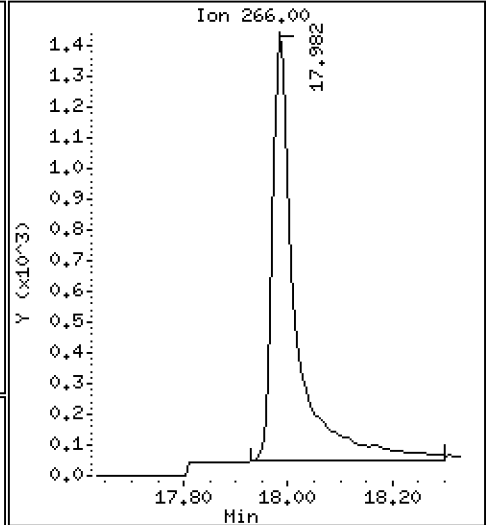
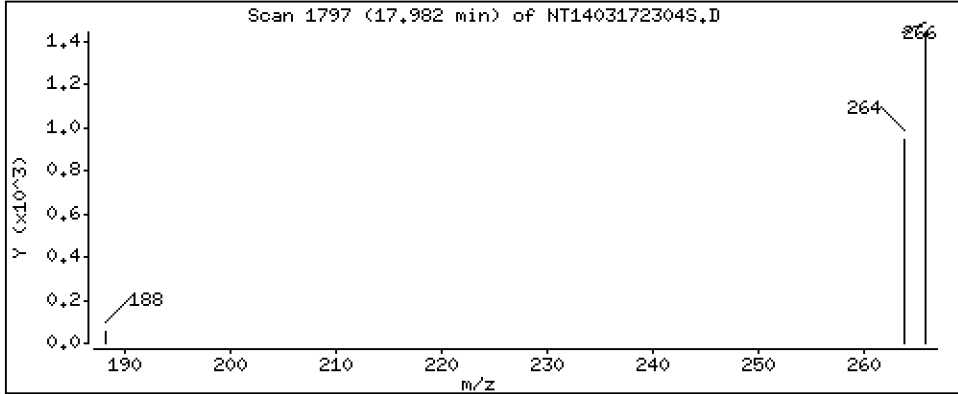
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1397 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

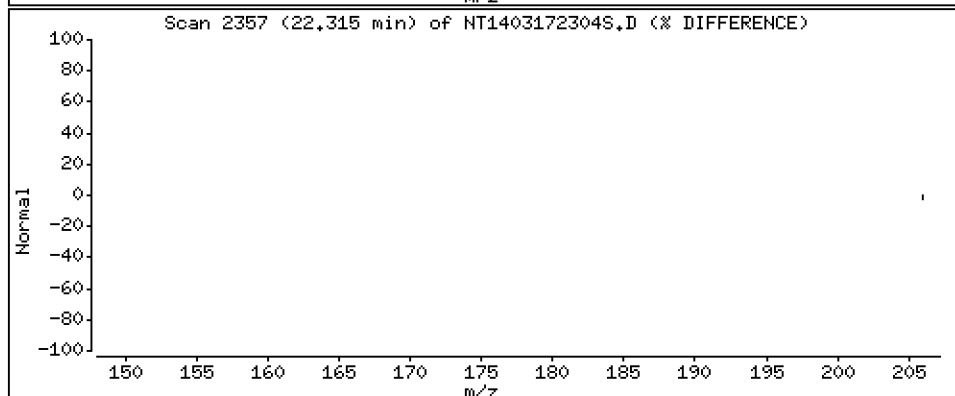
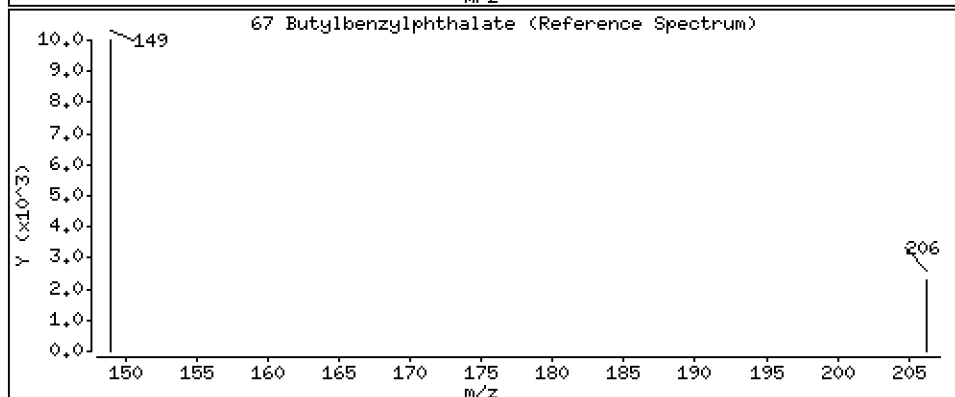
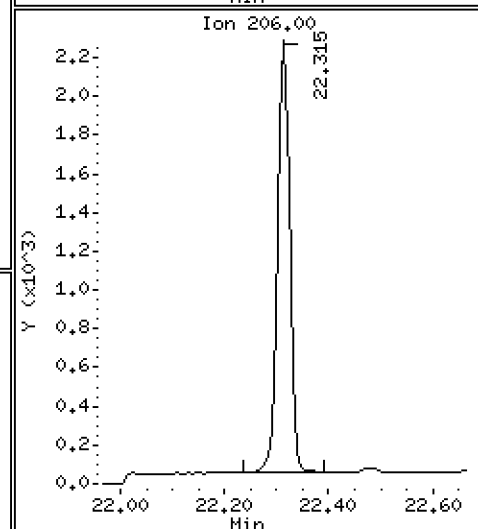
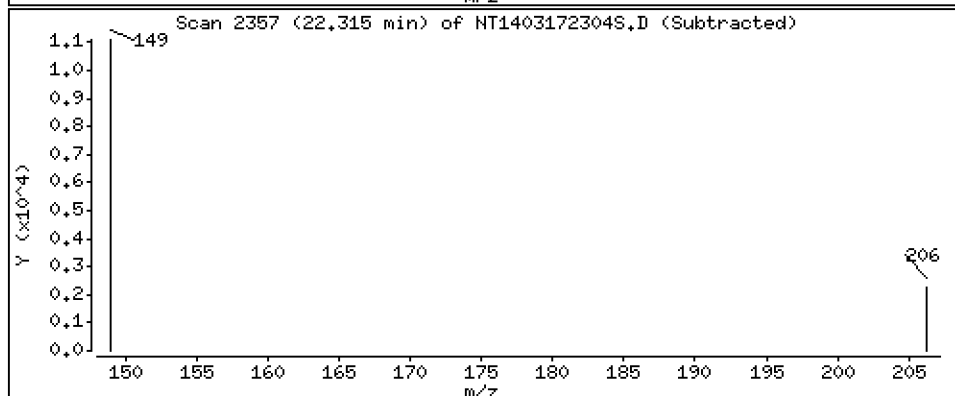
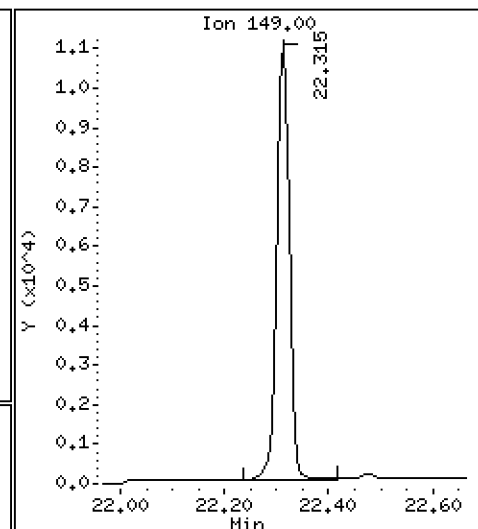
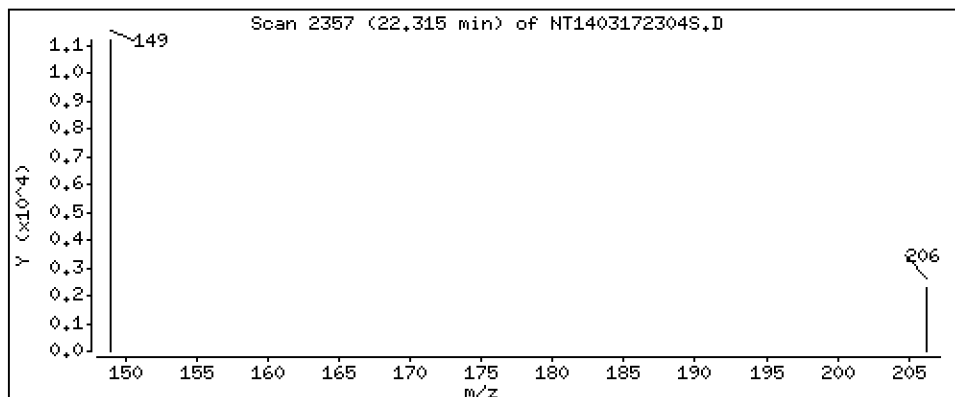
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1779 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

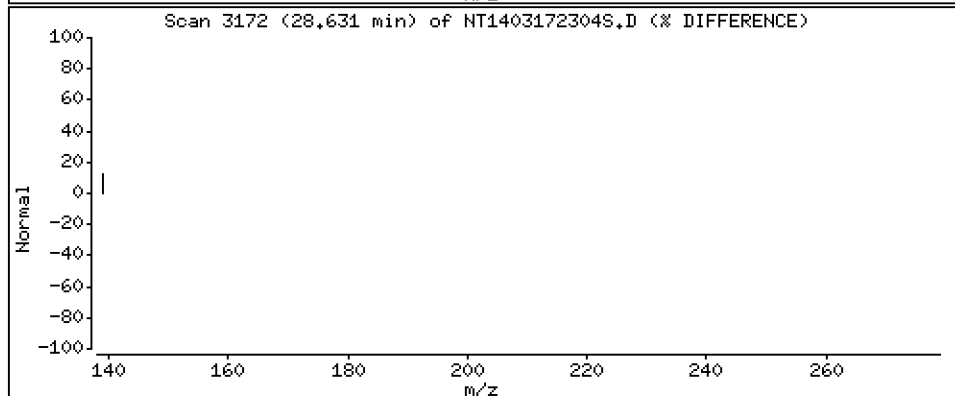
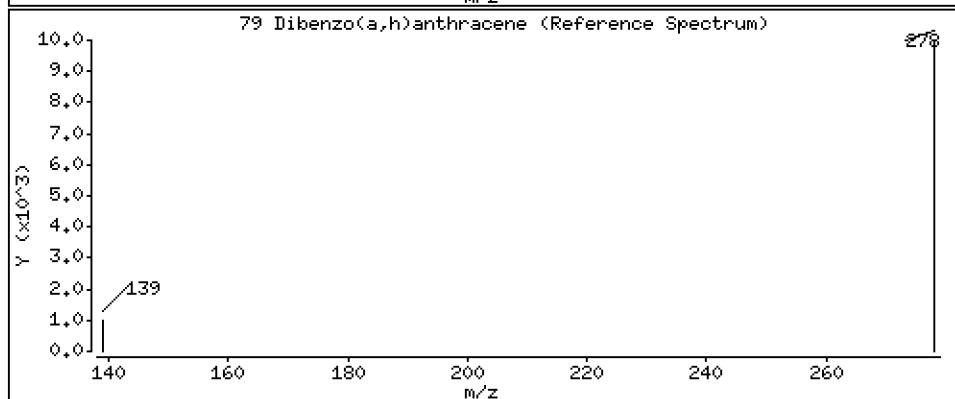
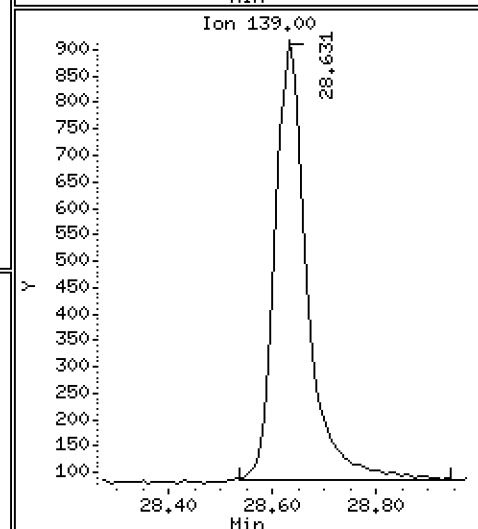
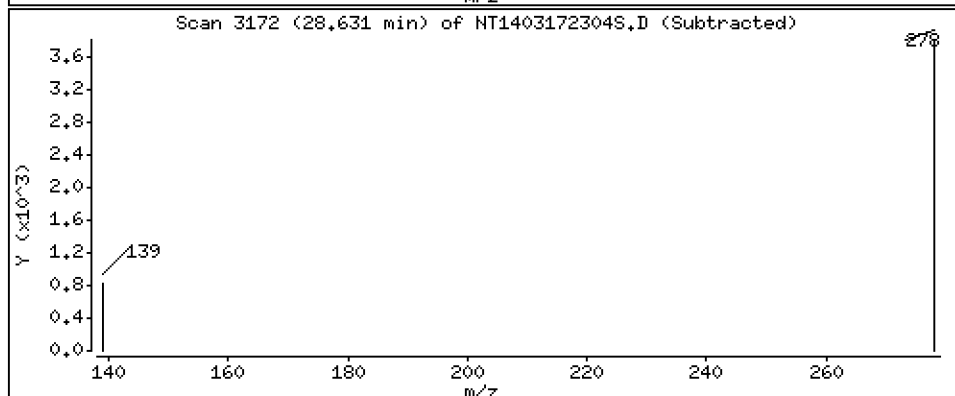
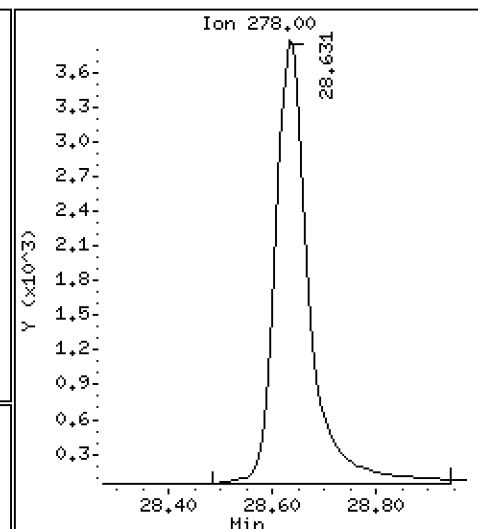
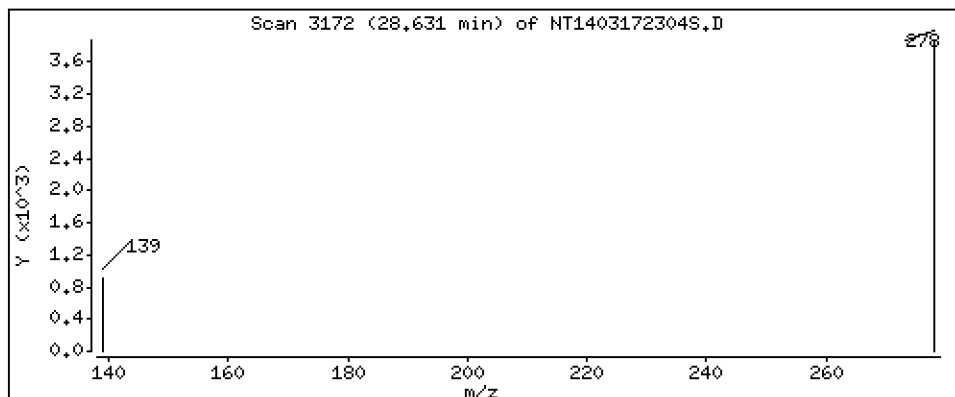
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1599 ug/mL



Date : 17-MAR-2023 16:16

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV1

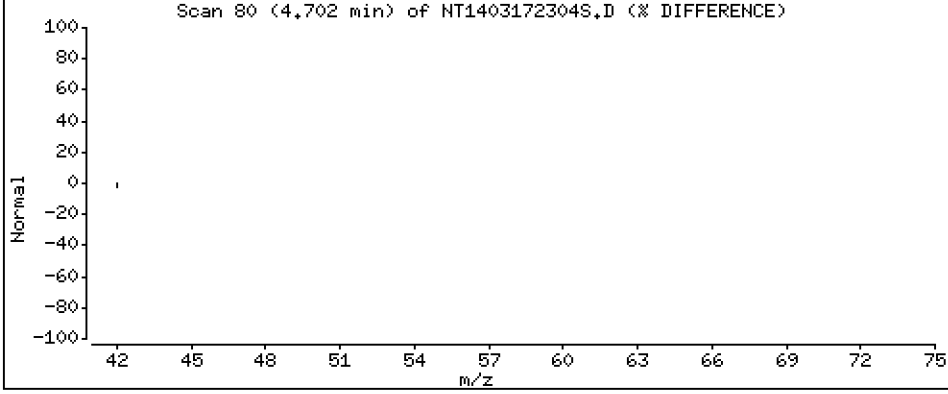
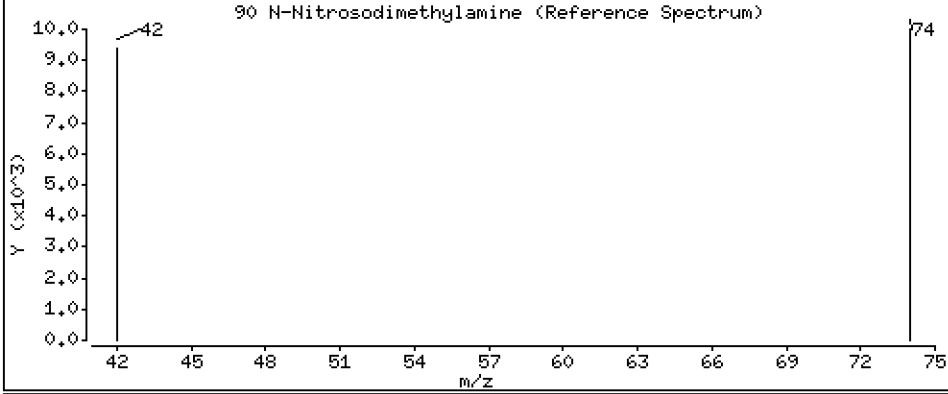
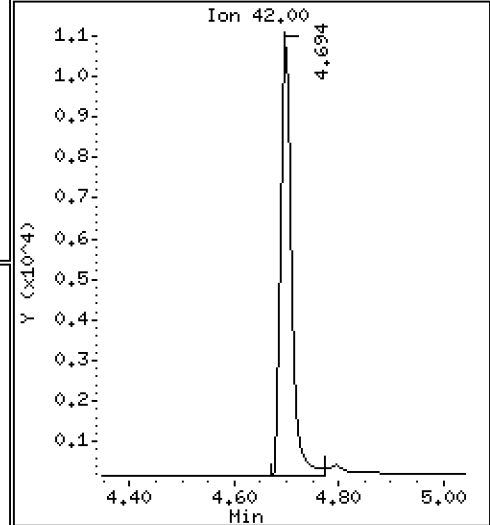
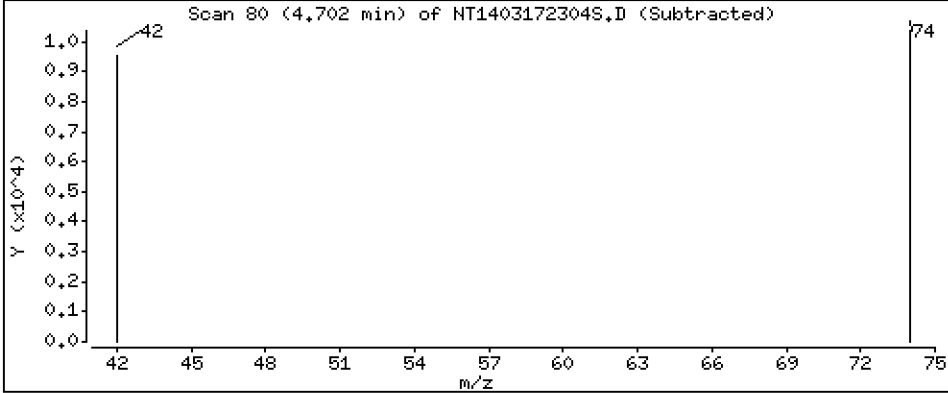
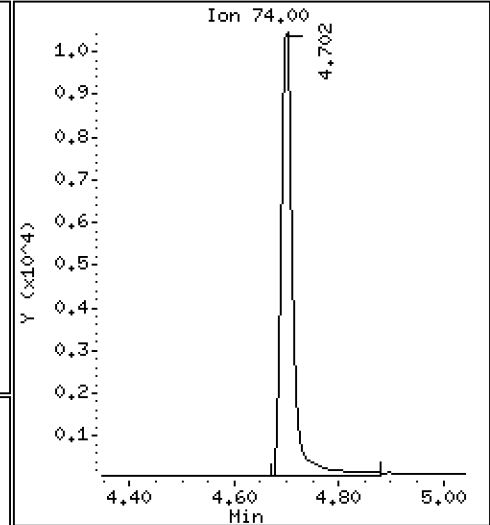
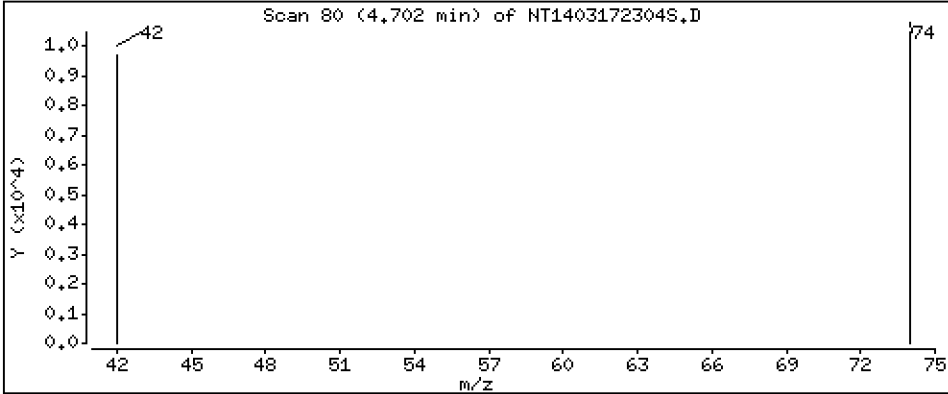
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2986 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172304S.D
 Lab Smp Id: SLC0376-LCV1
 Inj Date : 17-MAR-2023 16:16 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-LCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	21685	0.25255	0.2525 (R)
3 Phenol	94		8.440	8.440	(0.931)	19137	0.16207	0.1621
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	20438	0.20227	0.2023
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	252964	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	19733	0.20181	0.2018
11 Benzyl alcohol	79		9.338	9.338	(1.030)	9900	0.14304	0.1430
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	19394	0.20363	0.2036
13 2-Methylphenol	108		9.564	9.563	(1.055)	14928	0.18302	0.1830
15 4-Methylphenol	108		9.835	9.827	(1.085)	14749	0.17116	0.1712
16 N-Nitroso-di-n-propylamine	70		9.897	9.897	(1.092)	10682	0.17533	0.1753
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	32519	0.40310	0.4031
24 Benzoic acid	105		10.991	10.999	(0.950)	5920	0.09699	0.09699
26 1,2,4-Trichlorobenzene	180		11.479	11.479	(0.993)	16460	0.20818	0.2082
* 27 Naphthalene-d8	136		11.564	11.564	(1.000)	938423	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	8315	0.20780	0.2078
39 Dimethylphthalate	163		14.698	14.698	(0.967)	28451	0.19222	0.1922
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	433407	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	29917	0.18985	0.1898
54 N-Nitrosodiphenylamine	169		16.545	16.545	(0.907)	22655	0.19164	0.1916
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	9160	0.20170	0.2017
58 Pentachlorophenol	266		17.982	17.982	(0.986)	4280	0.13967	0.1397
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	872490	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	23037	0.23628	0.2363 (R)
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	17584	0.17795	0.1779
* 69 Chrysene-d12	240		23.298	23.298	(1.000)	565557	4.00000	
* 77 Perylene-d12	264		25.939	25.938	(1.000)	425973	4.00000	
79 Dibenzo(a,h)anthracene	278		28.631	28.623	(1.104)	17269	0.15992	0.1599
90 N-Nitrosodimethylamine	74		4.702	4.694	(0.519)	15662	0.29857	0.2986

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172304S.D
 Lab Smp Id: SLC0376-LCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	252964	12.71
27 Naphthalene-d8	825617	412809	1651234	938423	13.66
42 Acenaphthene-d10	392947	196474	785894	433407	10.30
59 Phenanthrene-d10	789887	394944	1579774	872490	10.46
69 Chrysene-d12	494007	247004	988014	565557	14.48
77 Perylene-d12	375441	187721	750882	425973	13.46

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.56	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172304S.D

Lab ID: SLC0376-LCV1

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 16:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172303S.D

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00050</u>
Lab File ID:	<u>NT1403172305S.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0376</u>	Injection Date:	<u>03/17/23</u>
Lab Sample ID:	<u>SLC0376-LCV2</u>	Injection Time:	<u>16:52</u>
Sequence Name:	<u>ABN 0.1</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.5461150	1.6186310		4.7	
1,2-Dichlorobenzene	A	0.10000	0.1	1.5059720	1.5955440		6.0	
Benzyl Alcohol	A	0.10000	0.06	1.0943940	0.7042581		-35.7	
Benzoic acid	A	0.40000	0.01	0.1762504	0.0069770		-97.3	
2,4-Dimethylphenol	A	0.20000	0.2	0.3438645	0.3299160		-4.1	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.3370247	0.3667360		8.8	
N-Nitrosodiphenylamine	A	0.10000	0.09	0.5419762	0.5049911		-6.8	
Pentachlorophenol	A	0.20000	0.04	0.1113753	0.0304867		-78.3	
2-Fluorophenol	A	0.15000	0.119	1.3577520	1.0776410		-20.6	
p-Terphenyl-d14	A	0.10000	0.119	0.6895811	0.8202201		18.9	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.1\20230317.1\NT14031723055.D

Date: 17-MAR-2023 16:52

Client ID:

Sample Info: SLC0376-LCW2

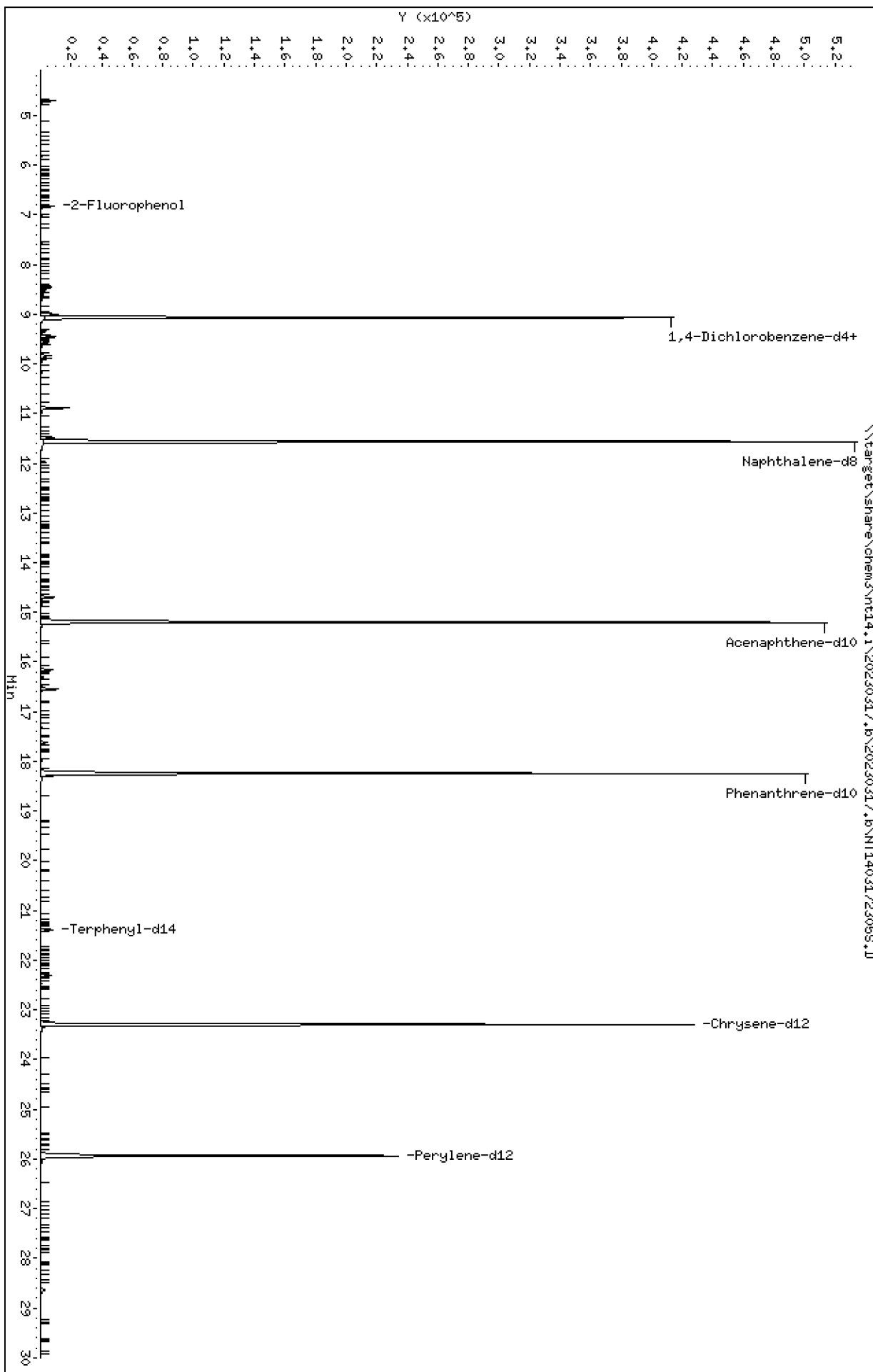
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

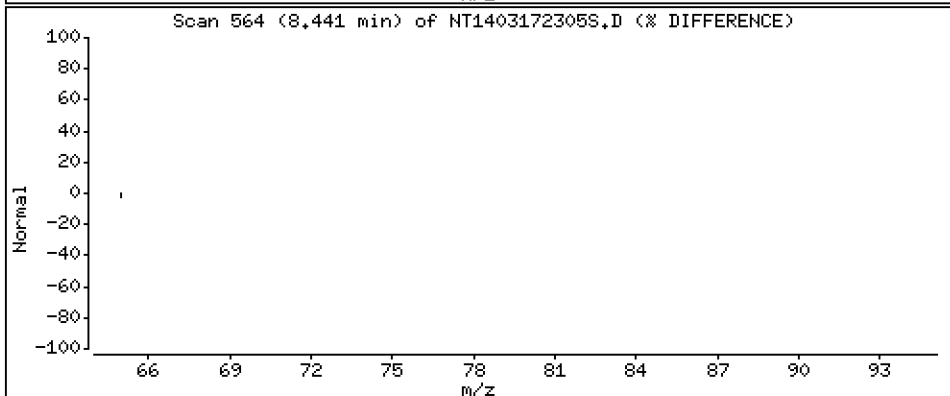
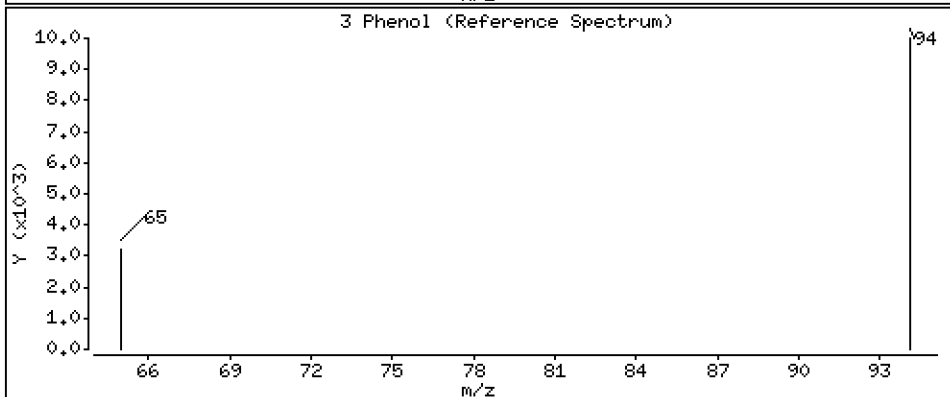
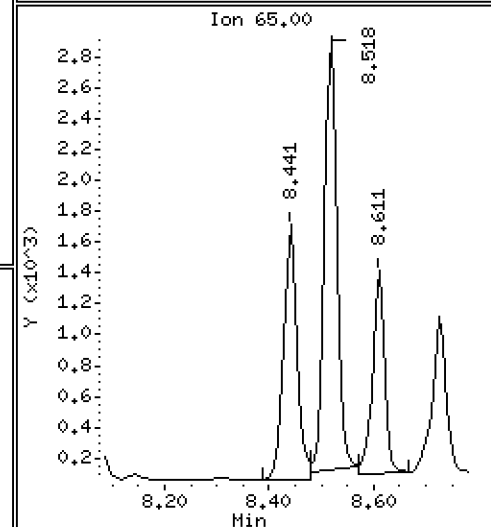
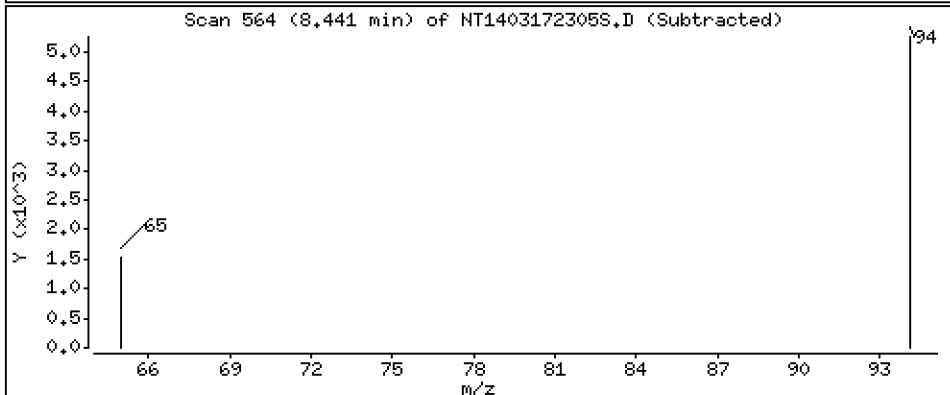
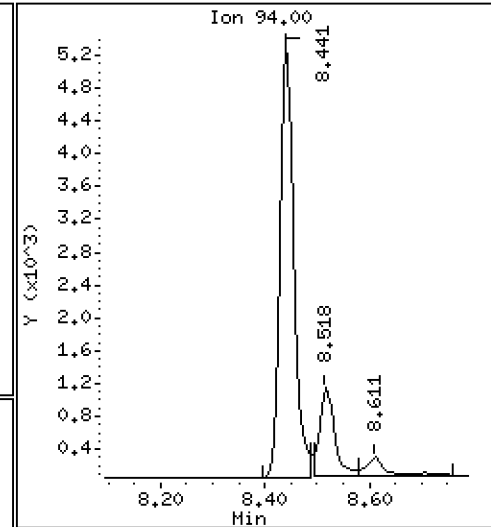
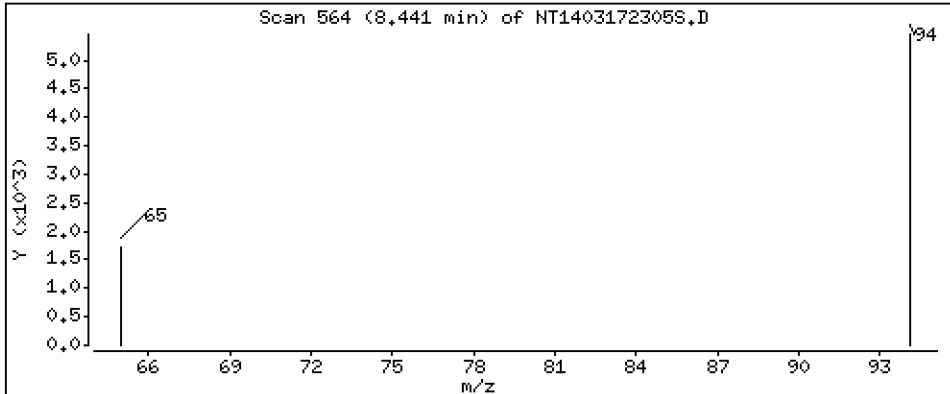
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,07614 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

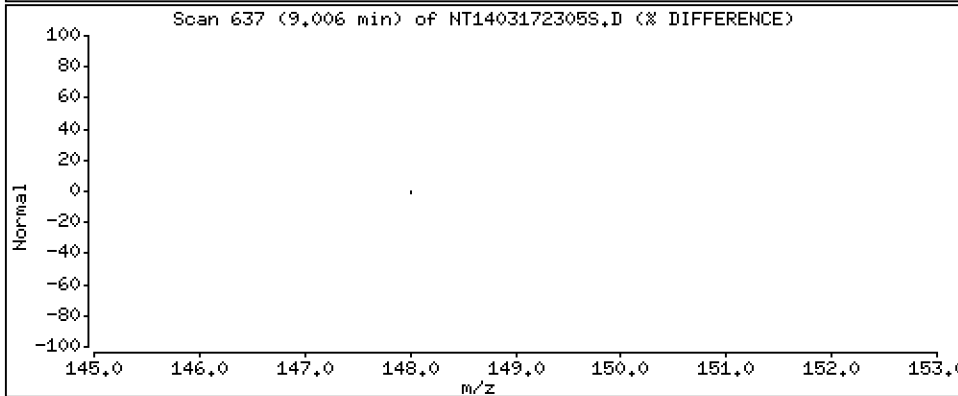
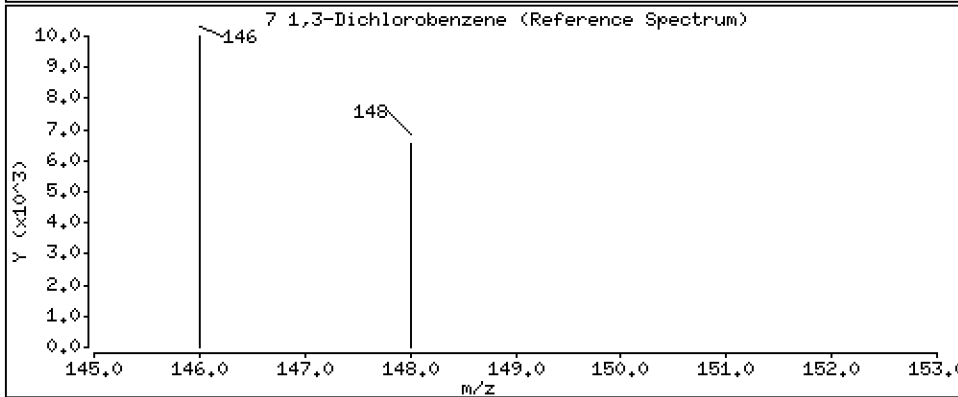
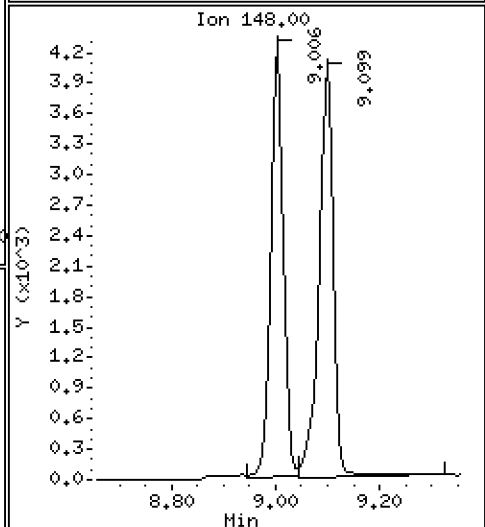
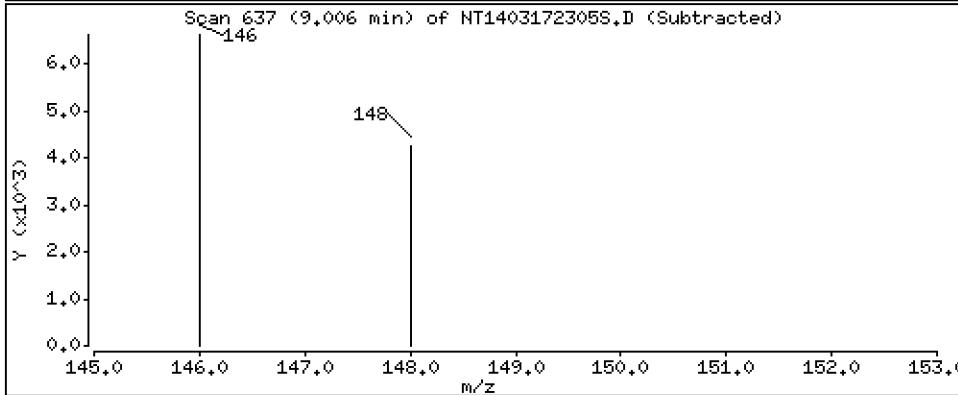
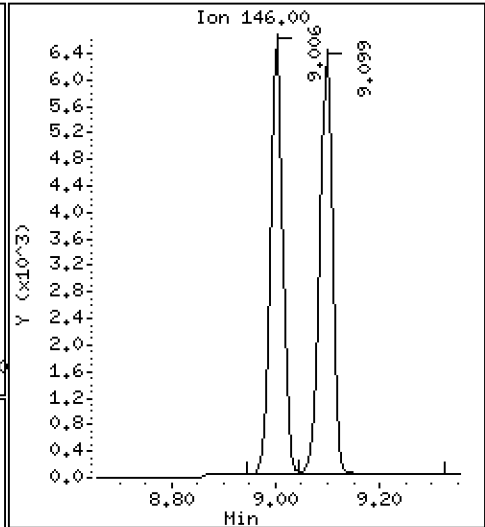
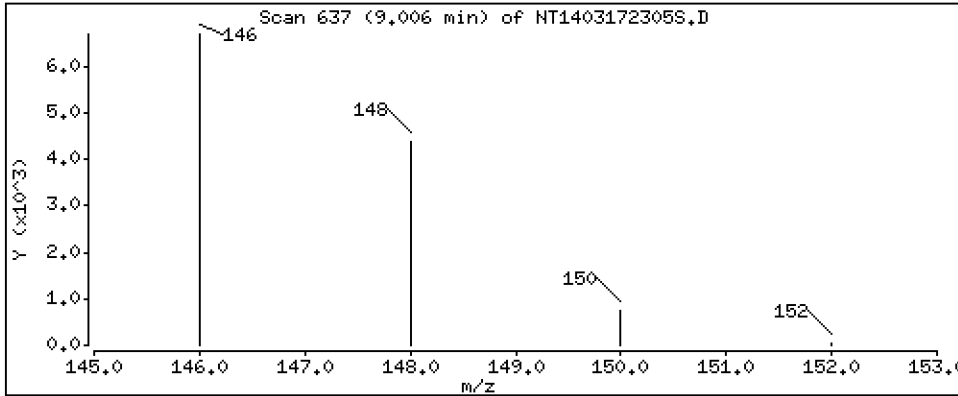
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,1046 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

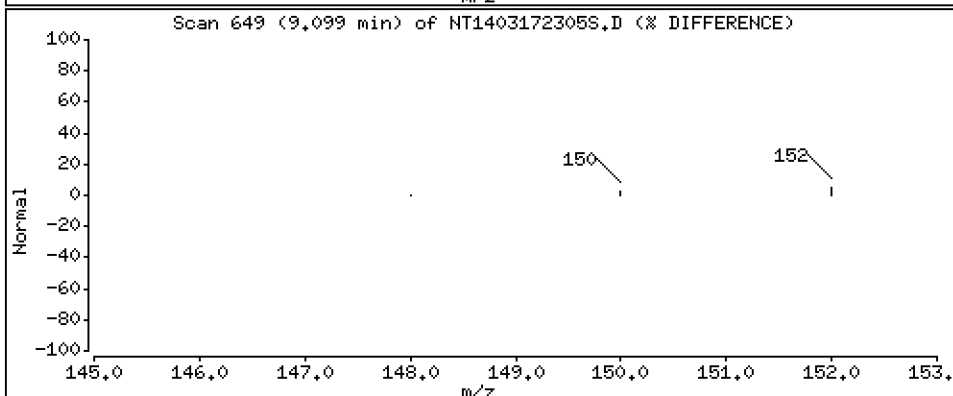
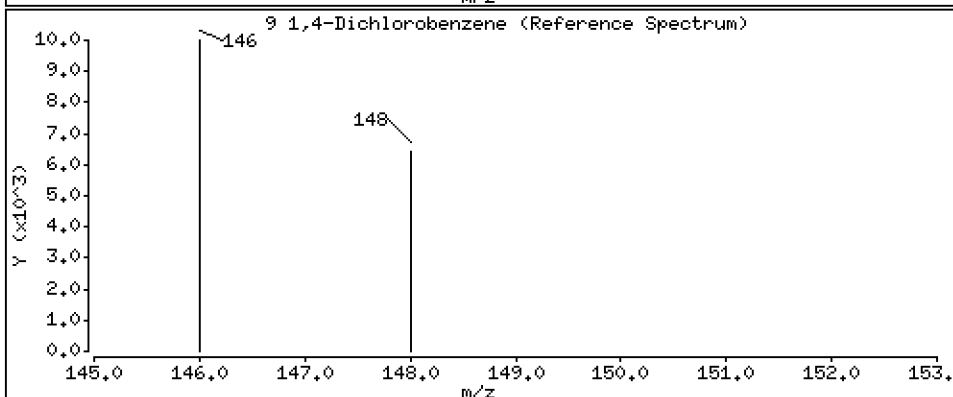
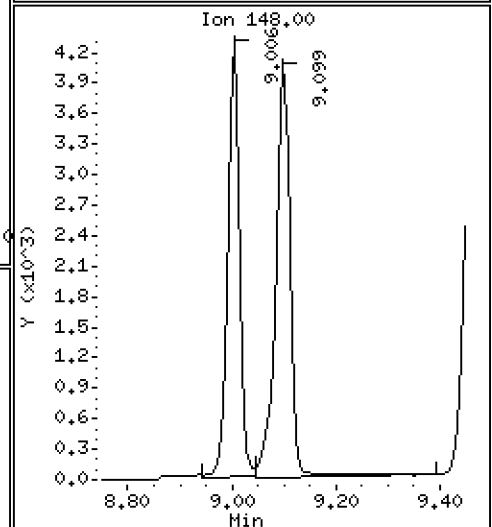
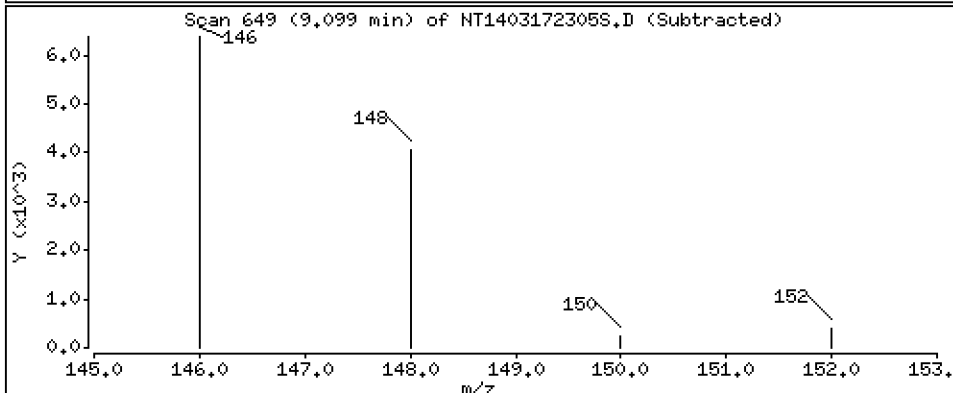
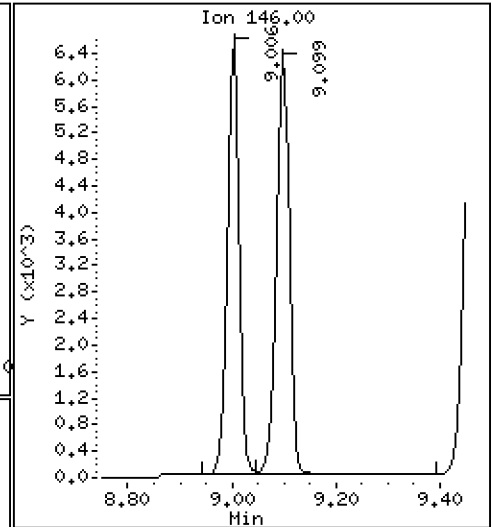
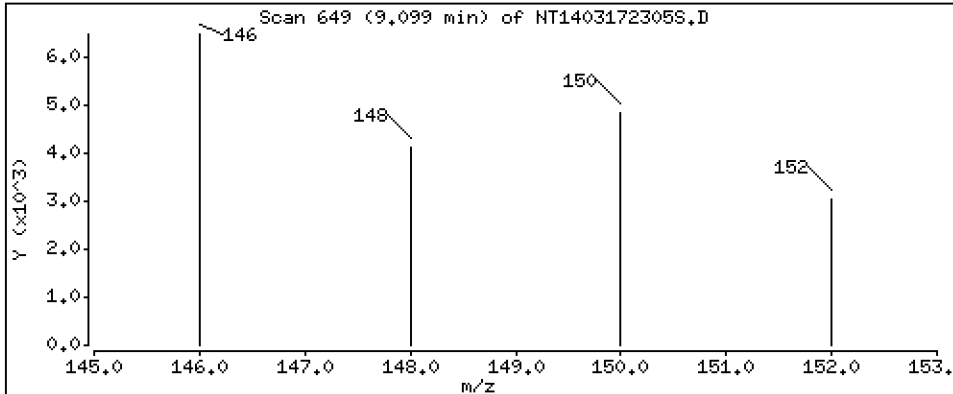
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1047 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

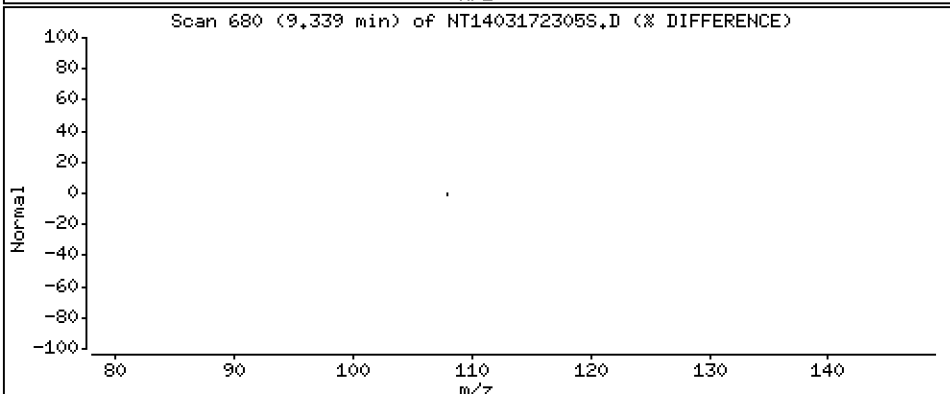
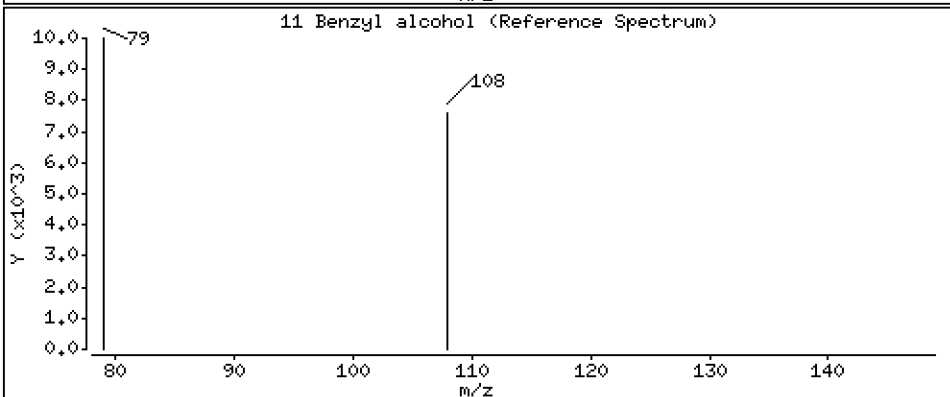
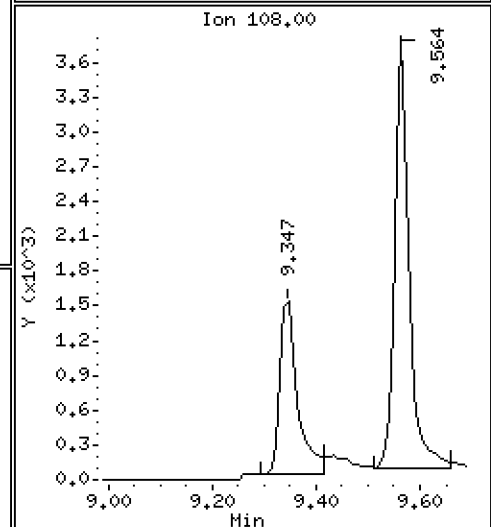
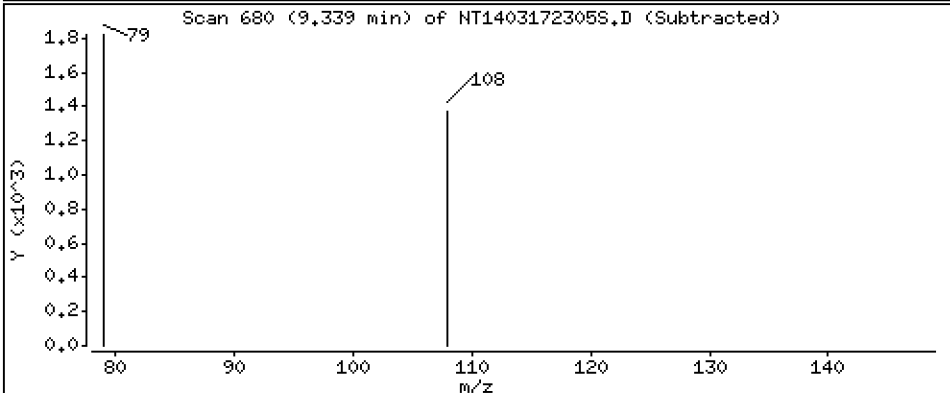
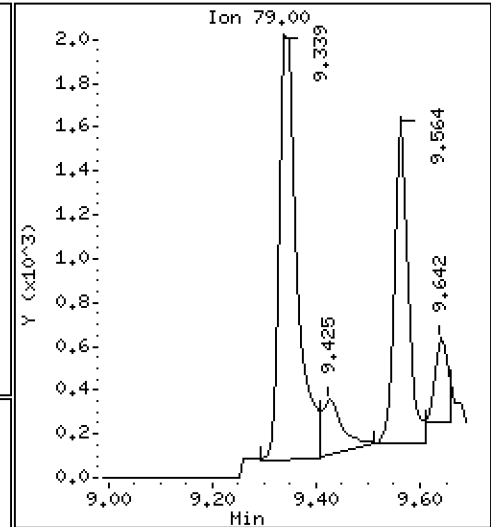
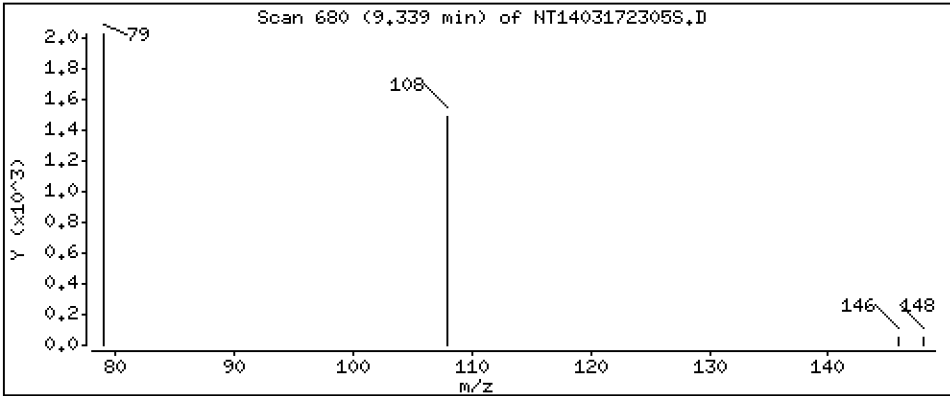
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.06435 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

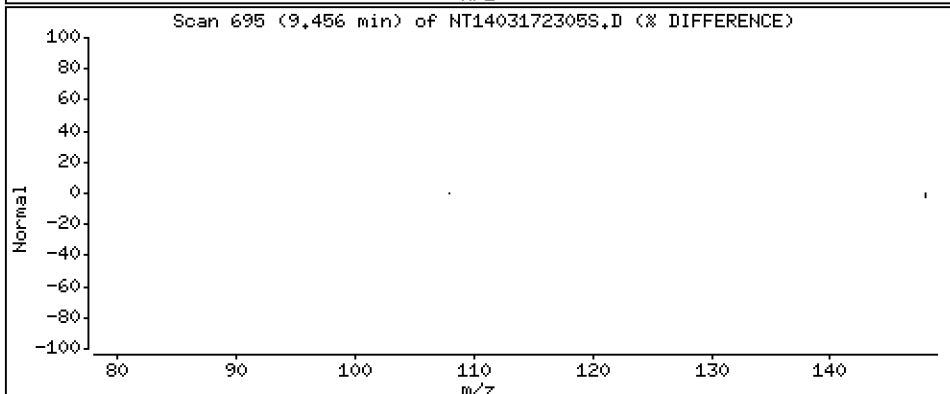
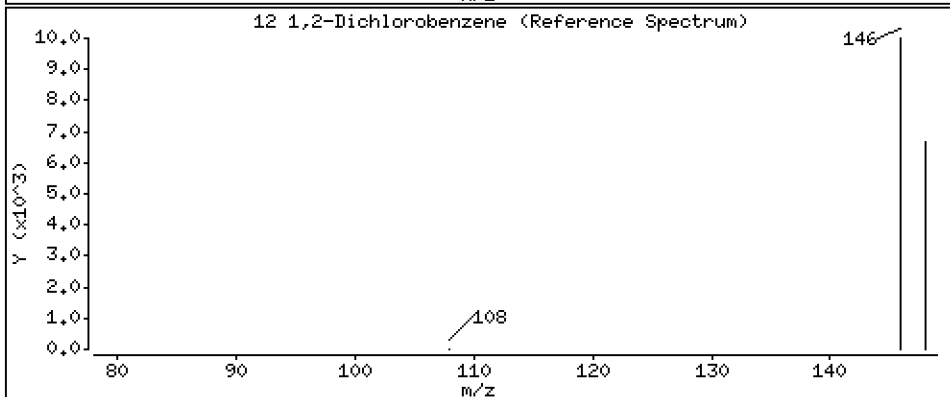
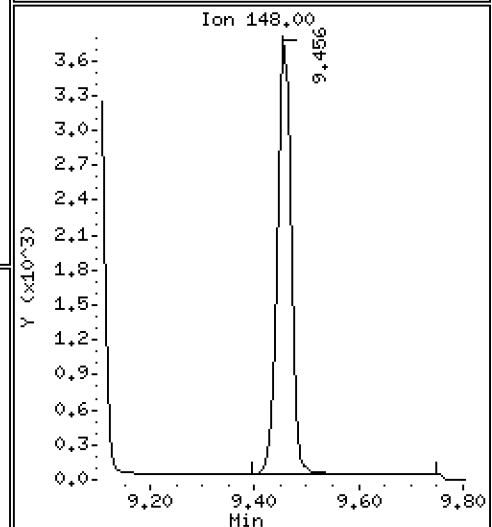
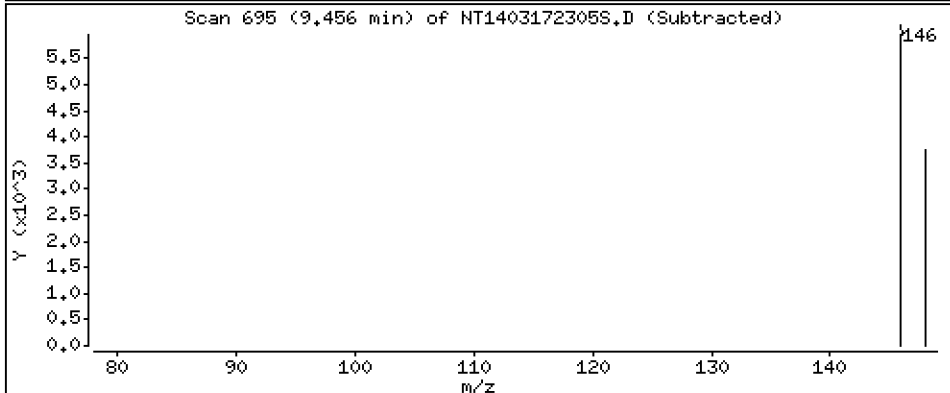
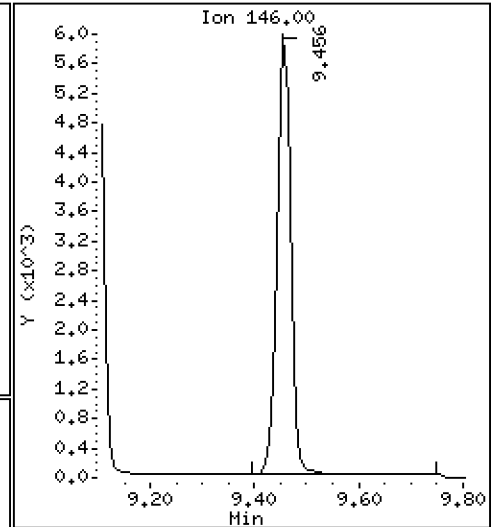
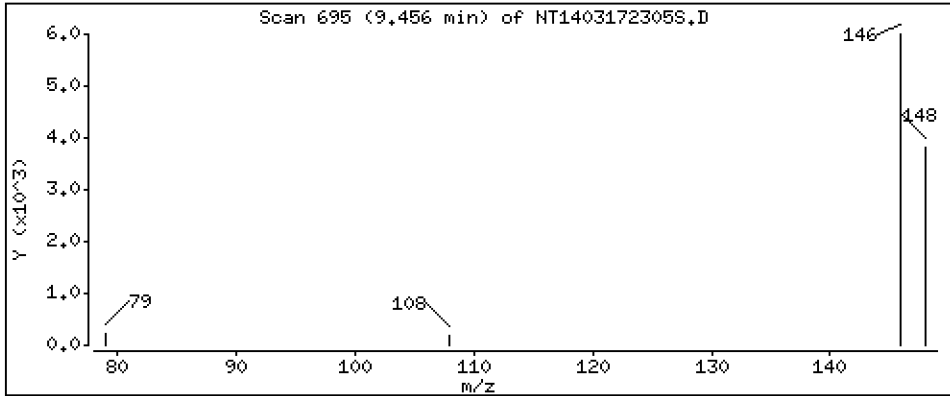
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,1059 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

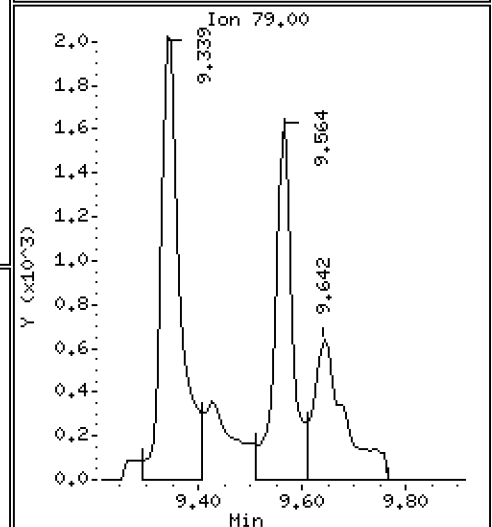
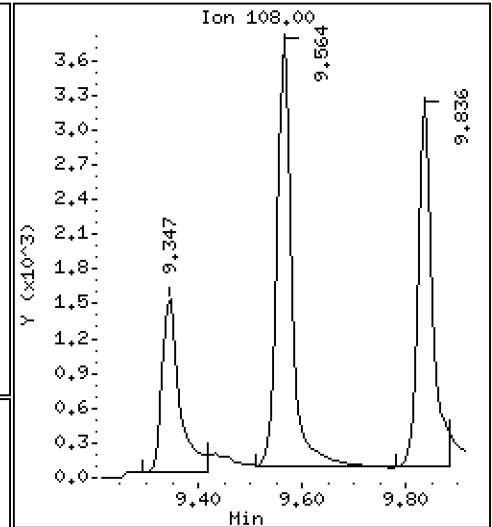
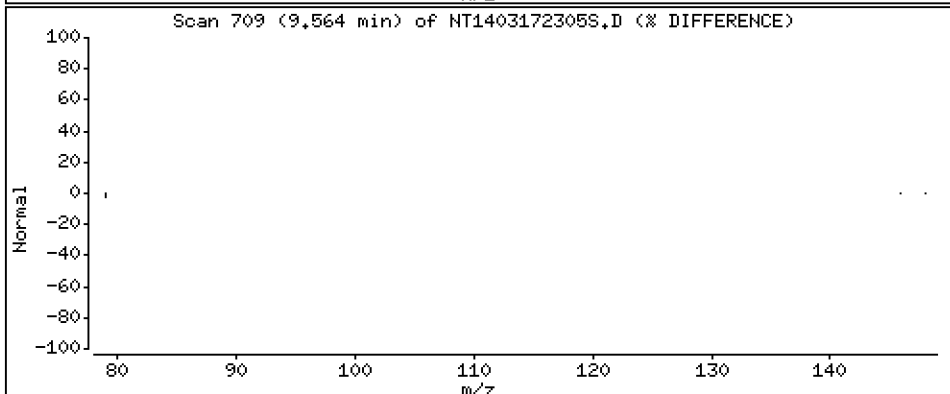
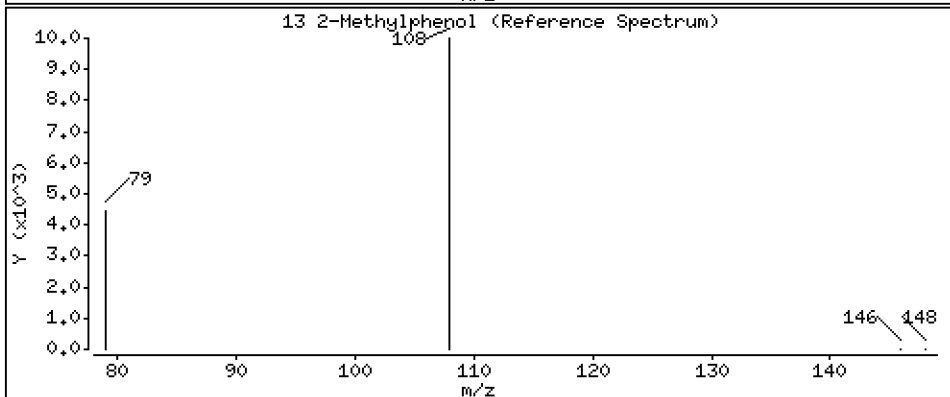
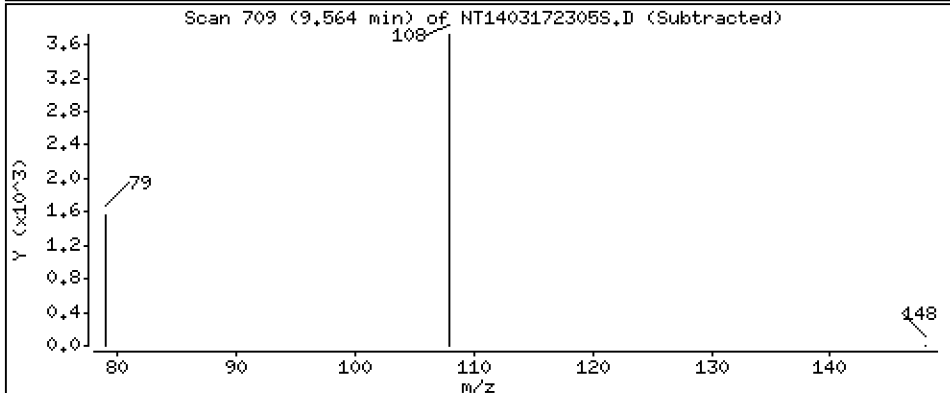
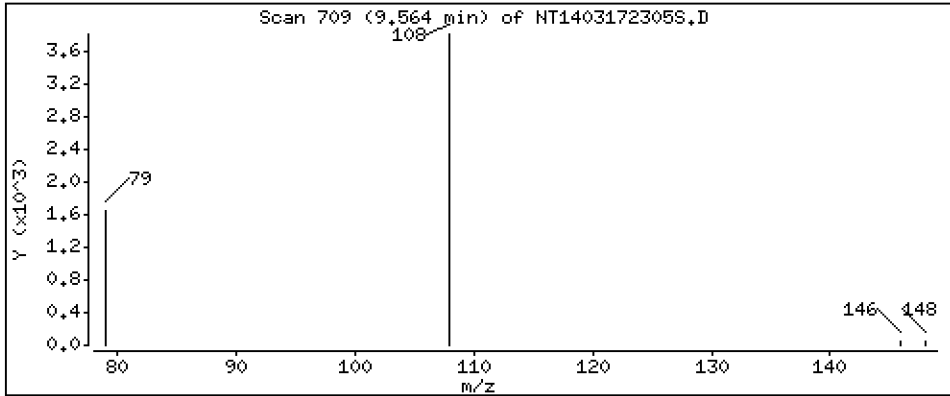
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.08466 ug/mL

13 2-Methylphenol



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

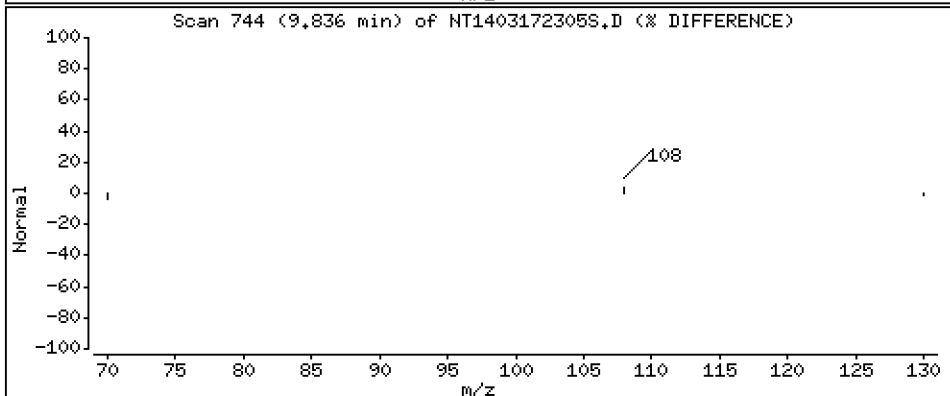
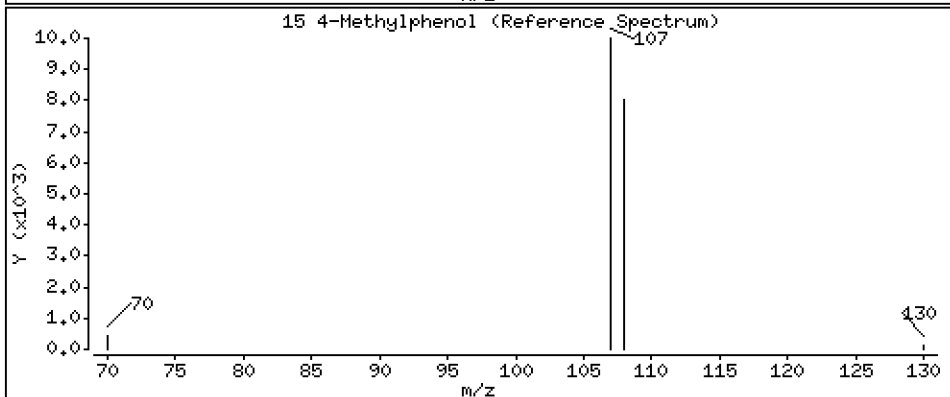
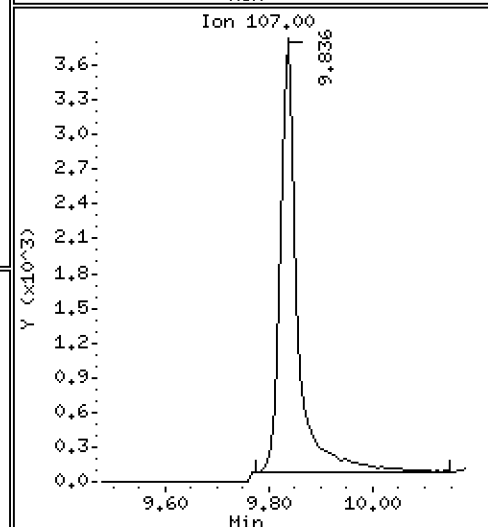
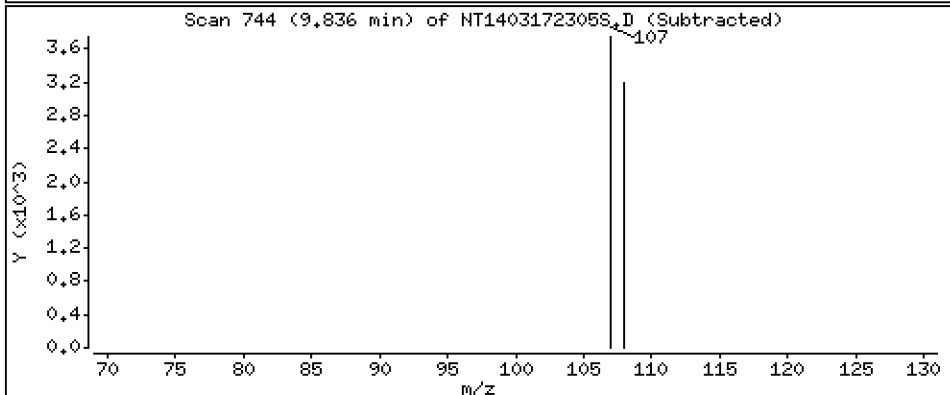
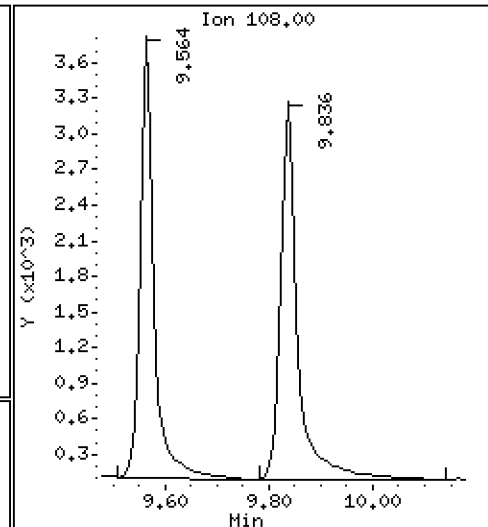
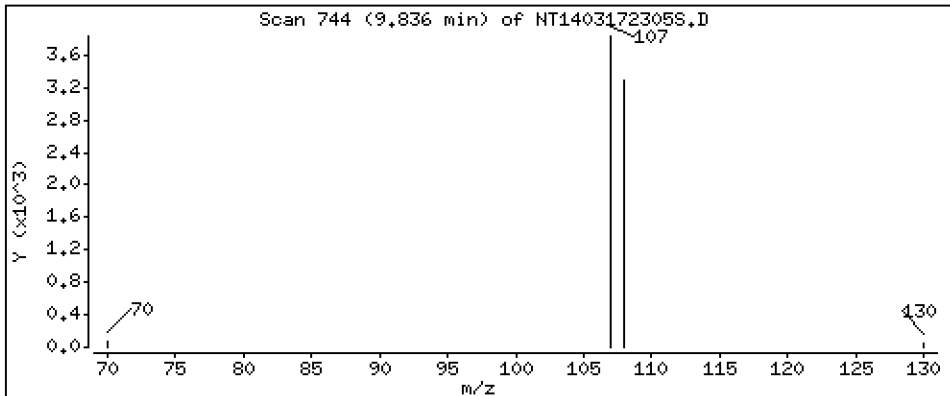
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,08043 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

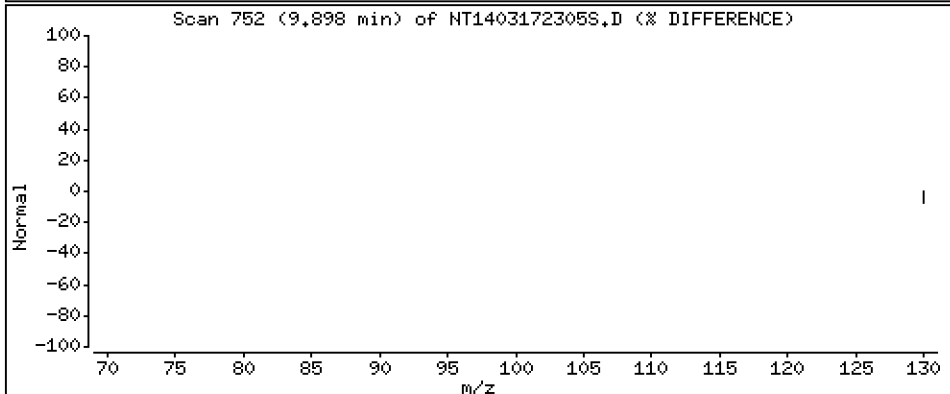
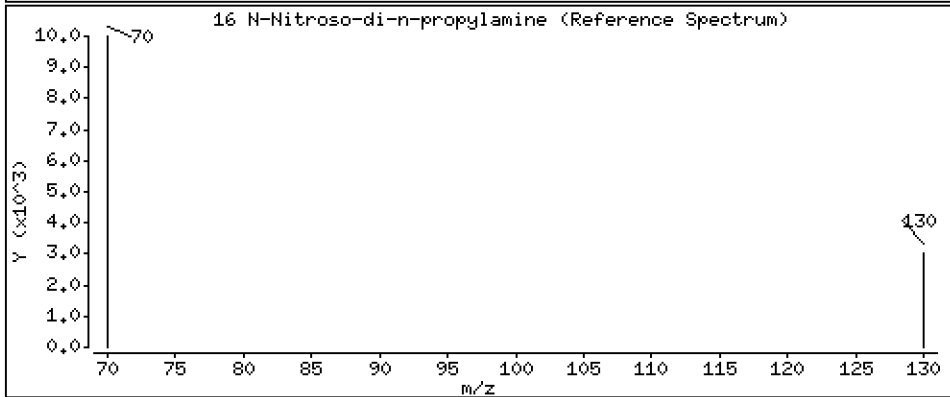
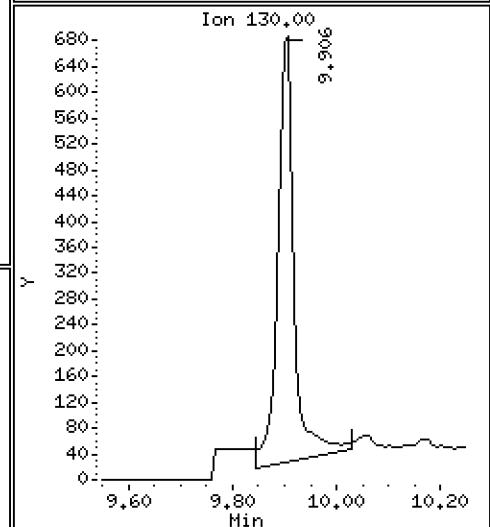
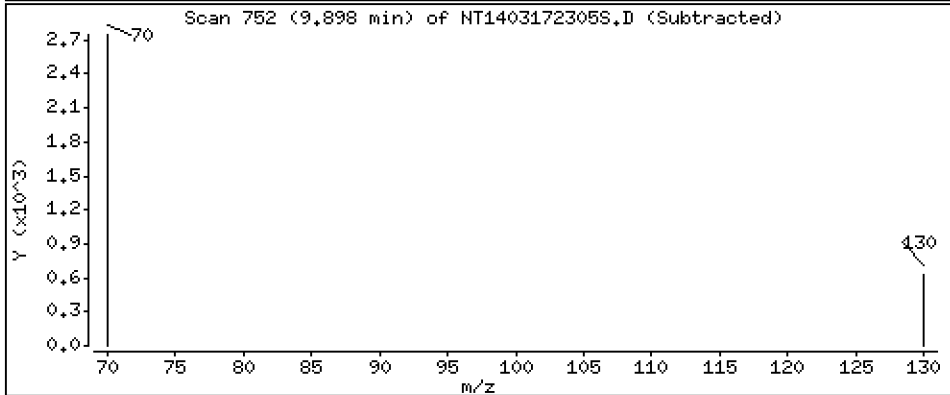
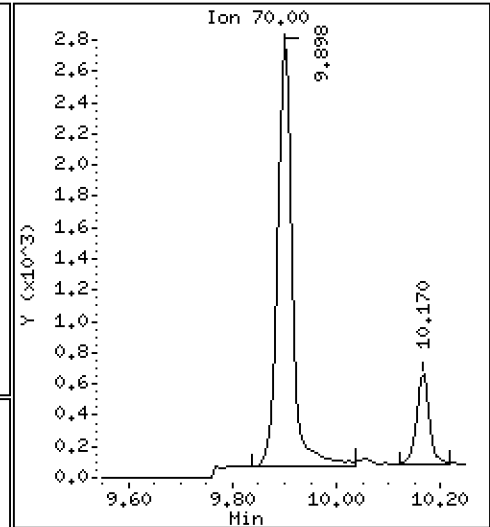
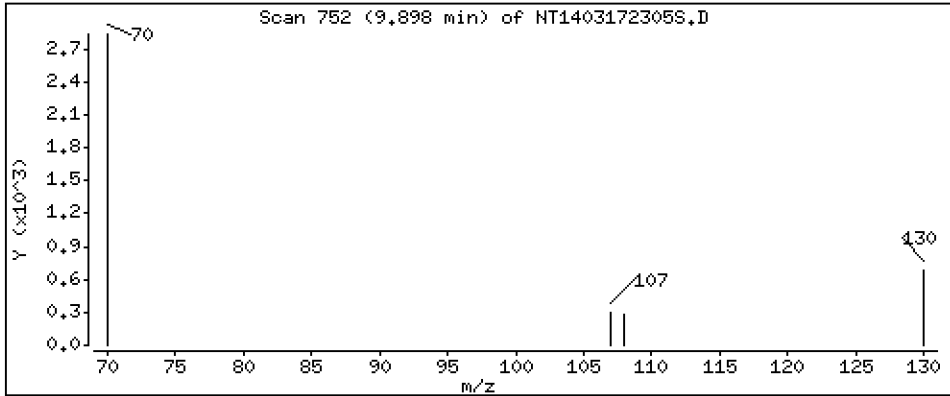
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,08357 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

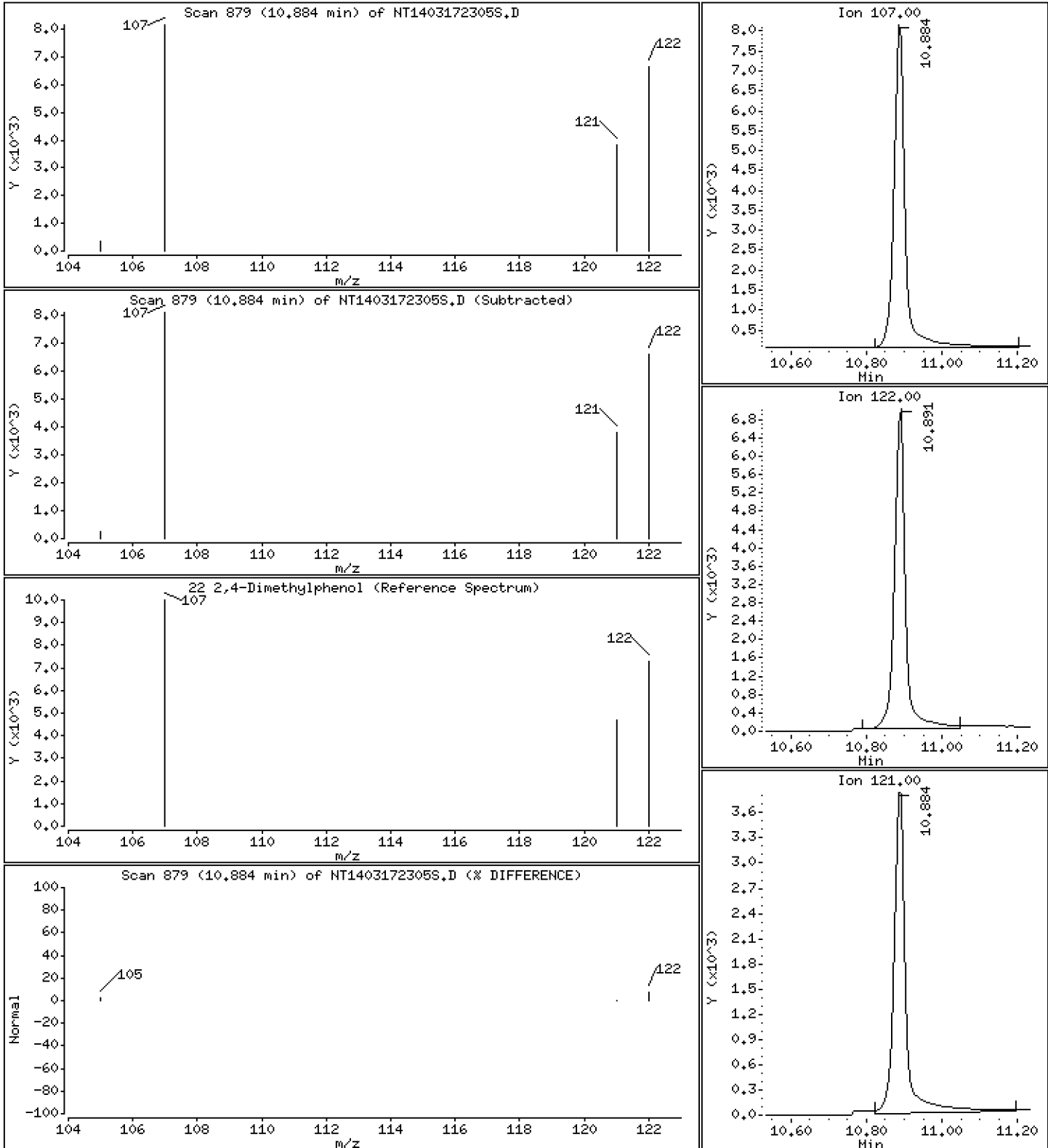
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,1919 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

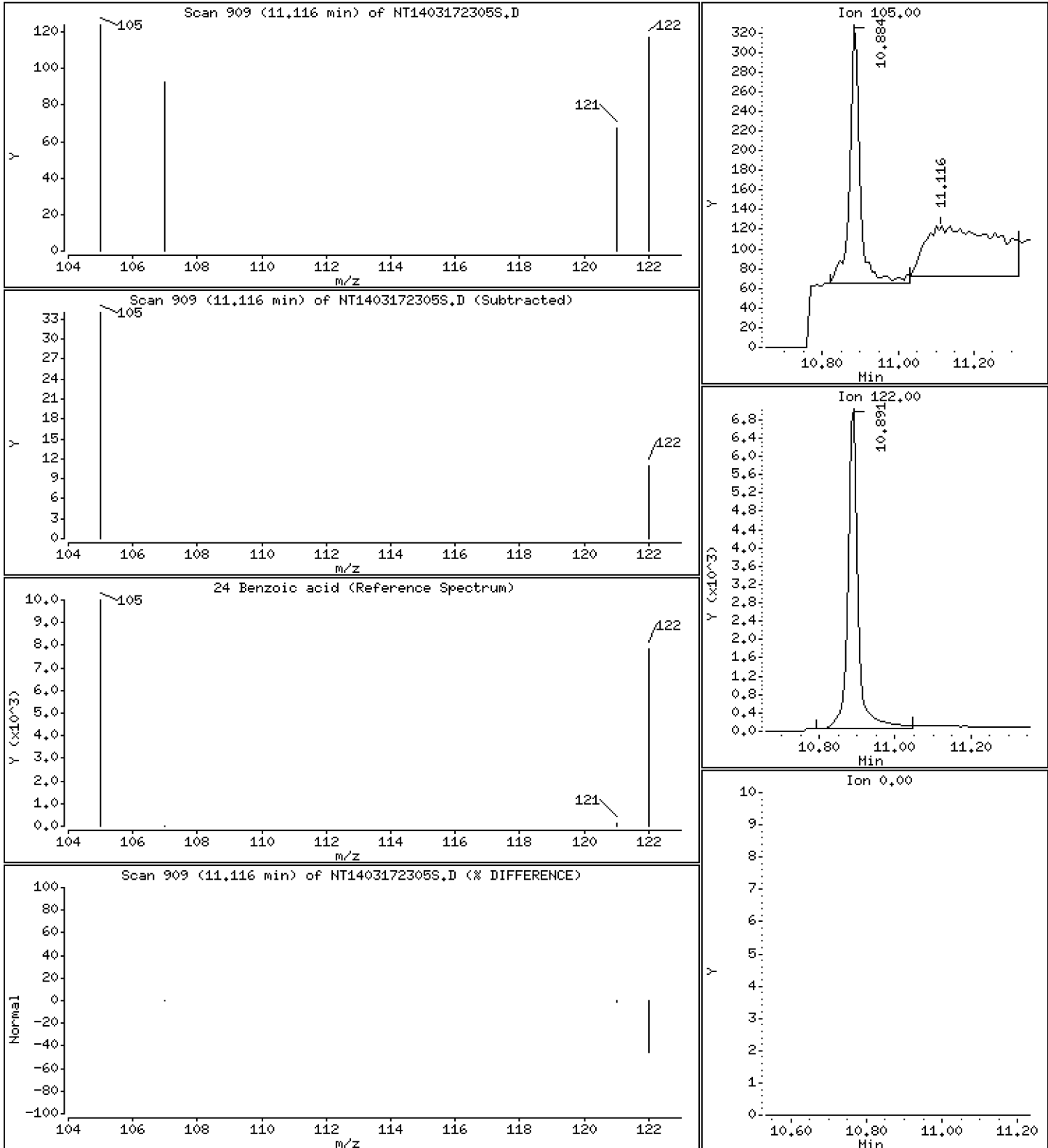
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,01073 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

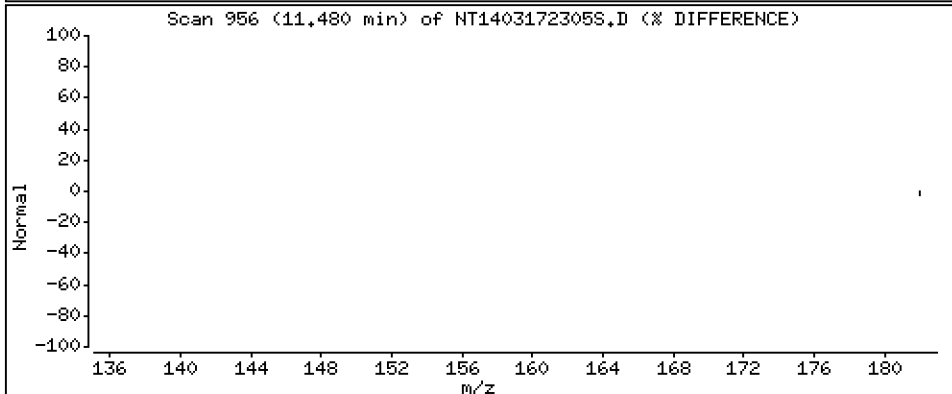
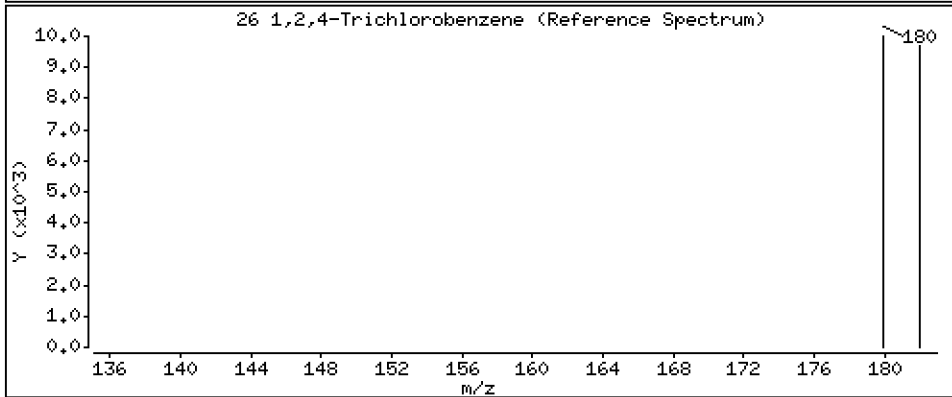
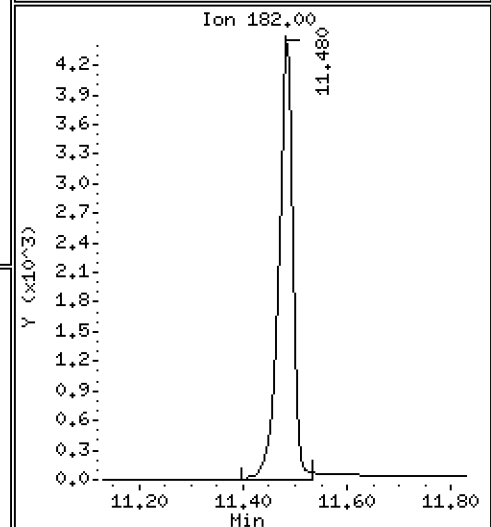
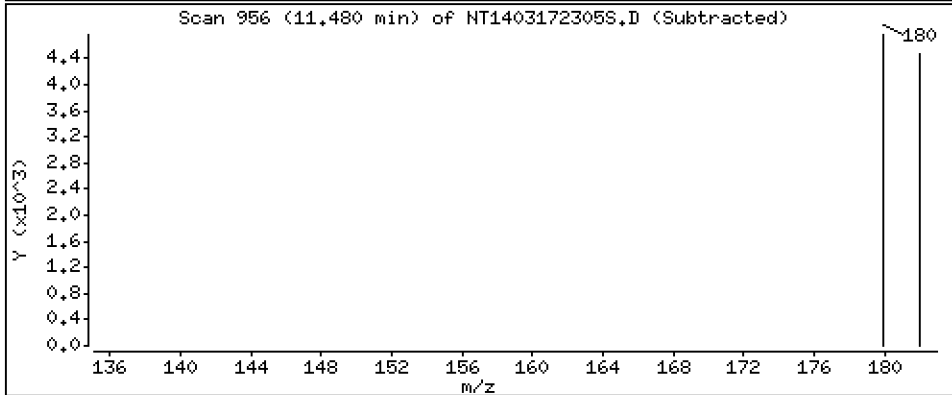
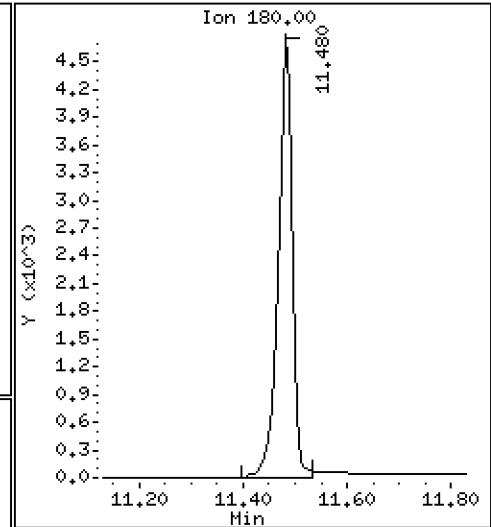
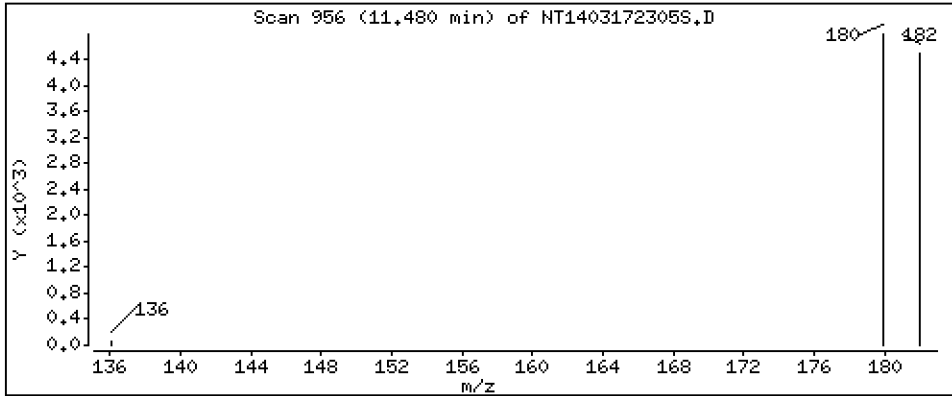
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,1088 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

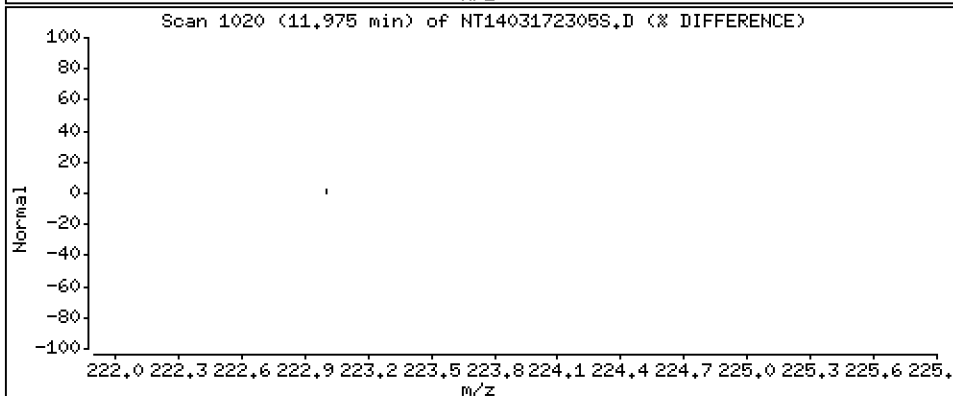
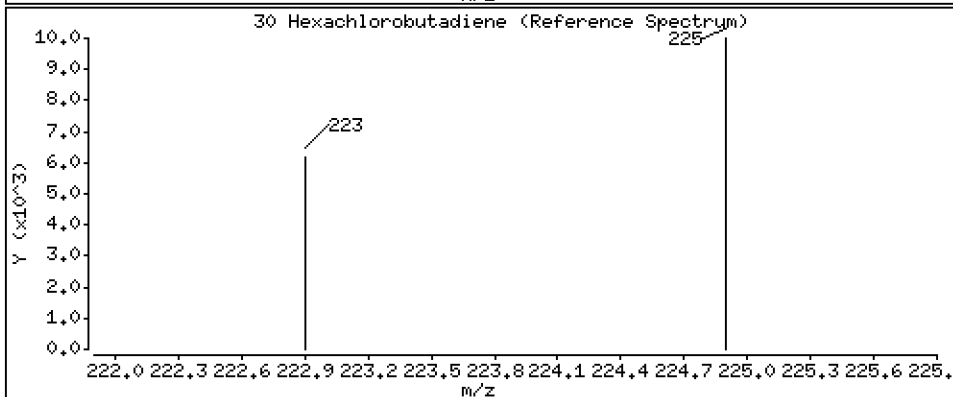
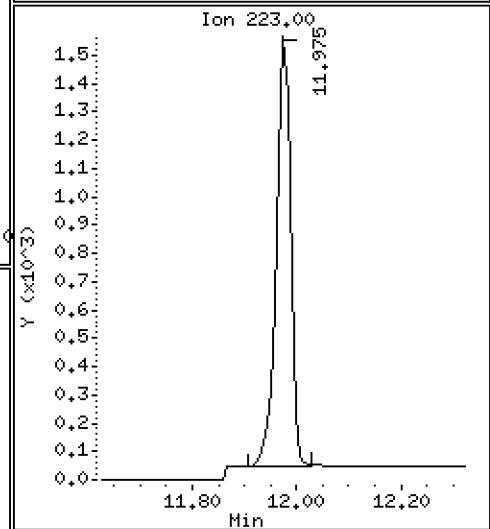
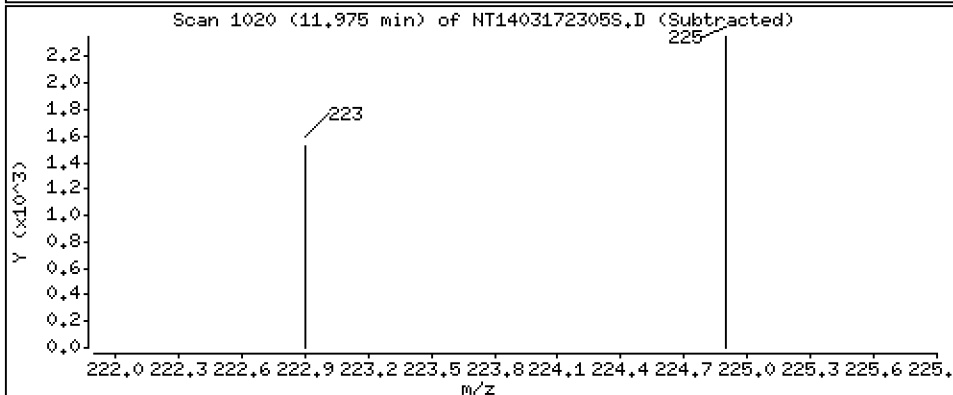
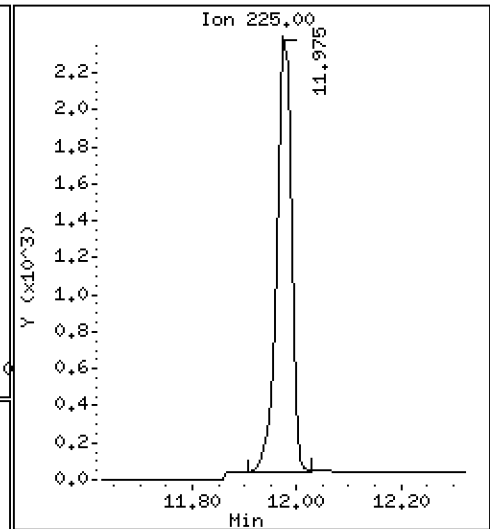
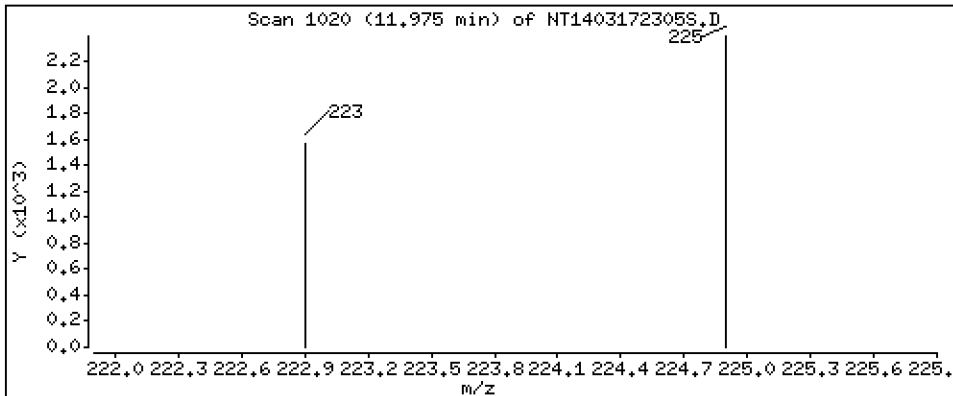
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1073 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

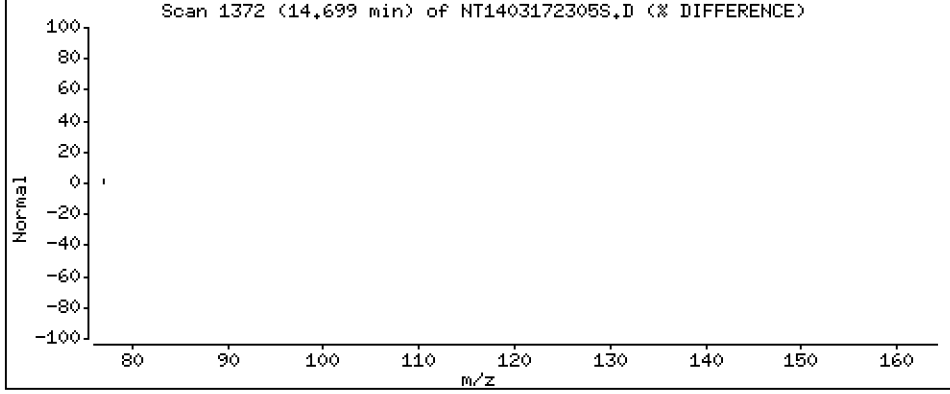
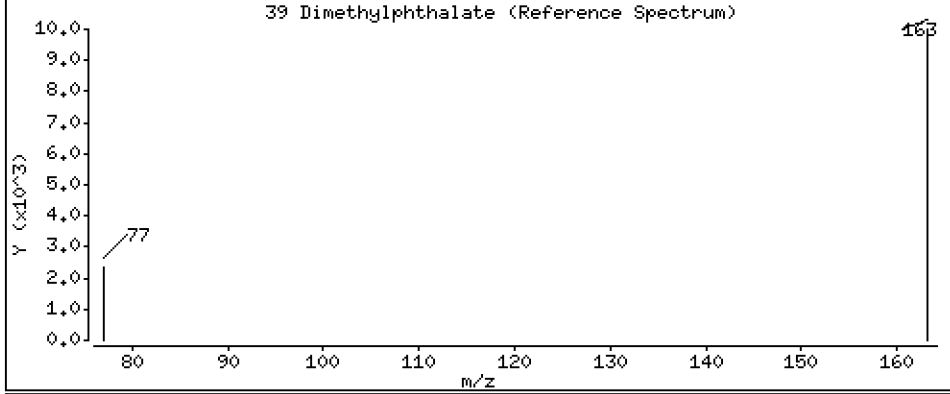
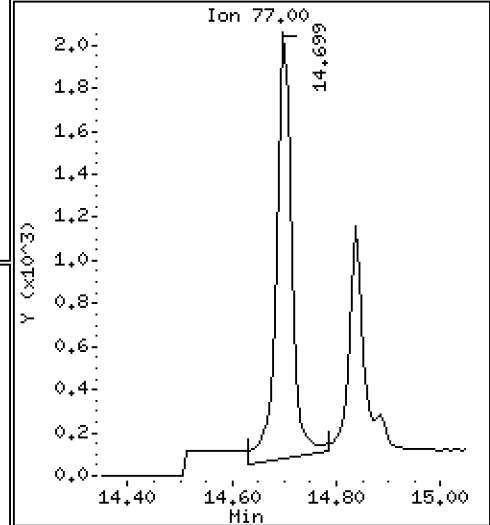
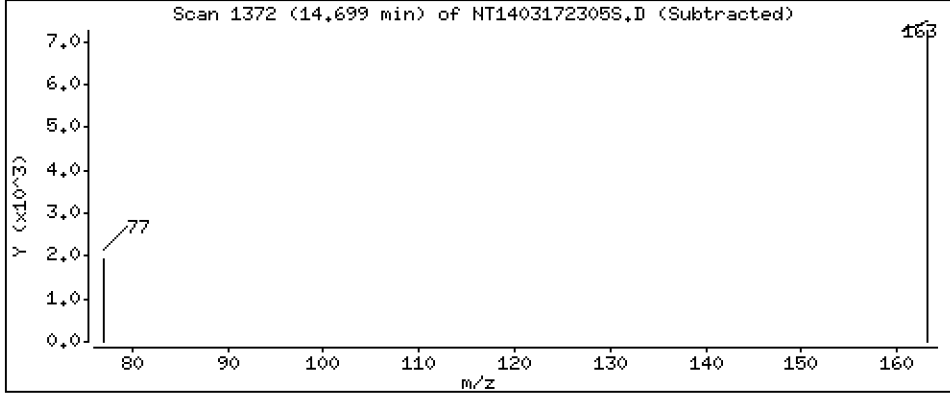
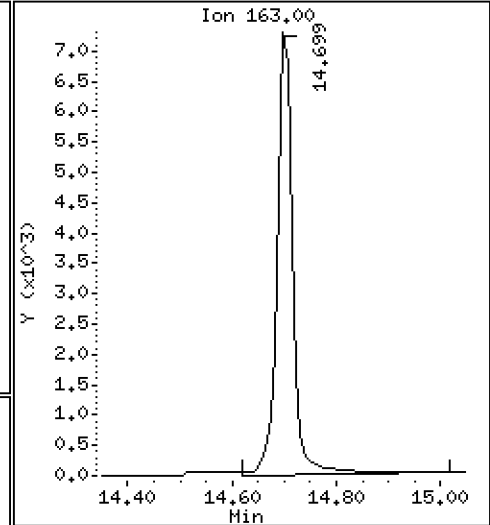
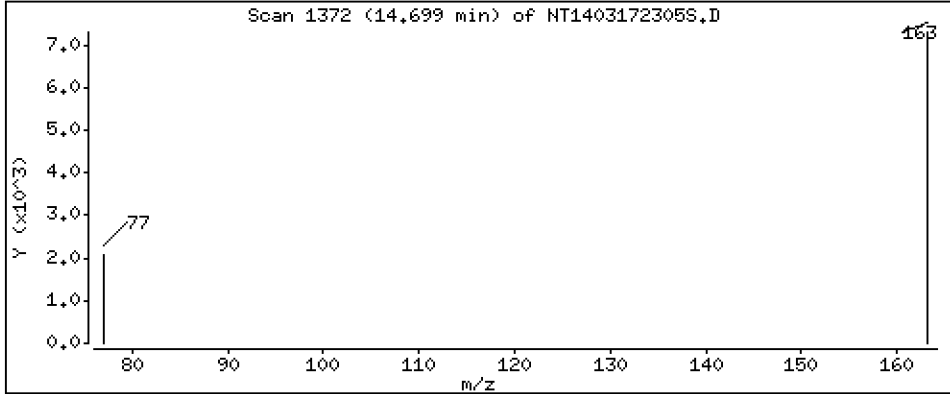
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,09719 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

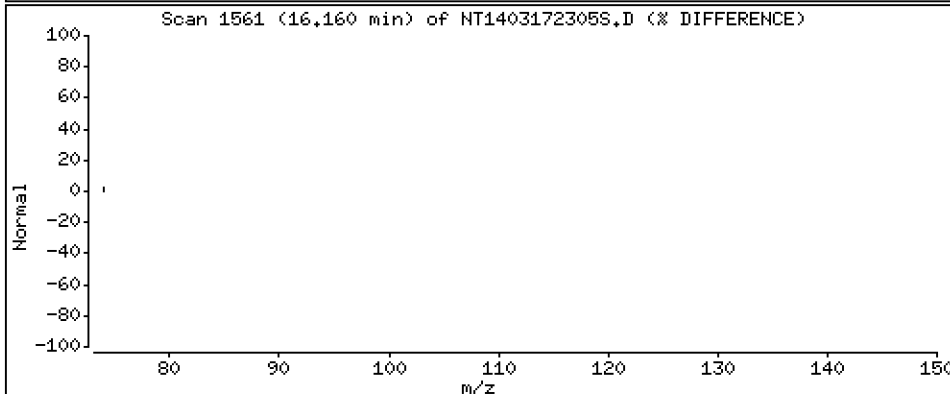
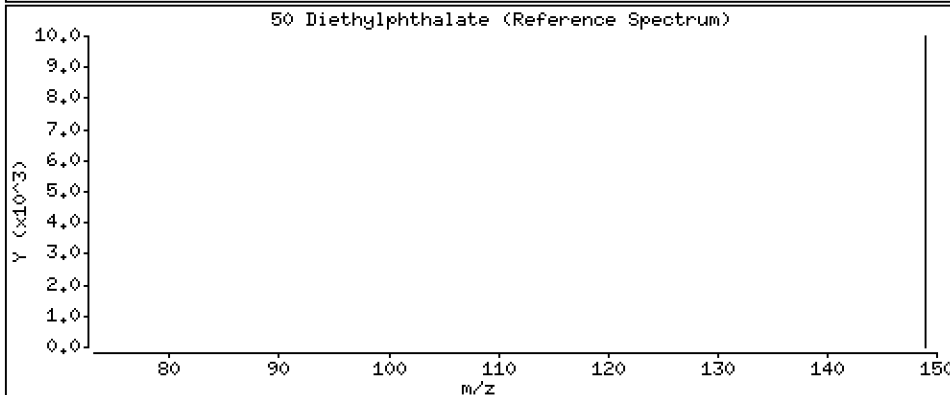
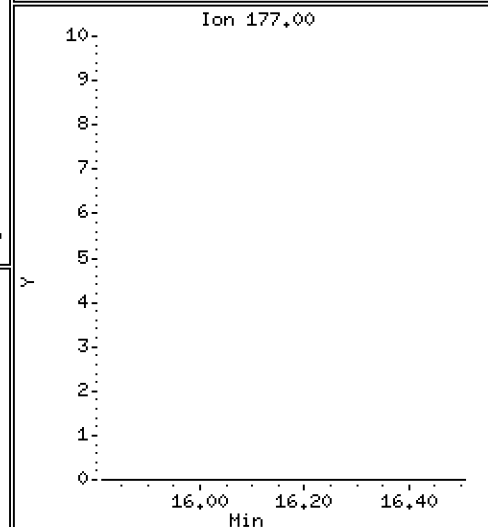
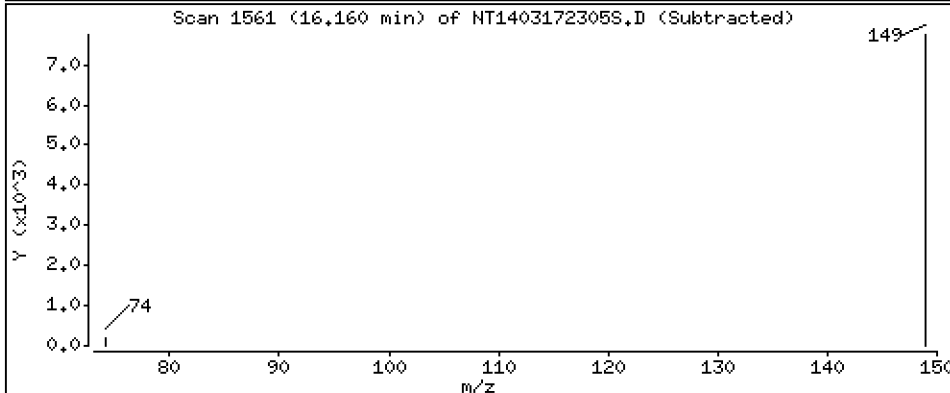
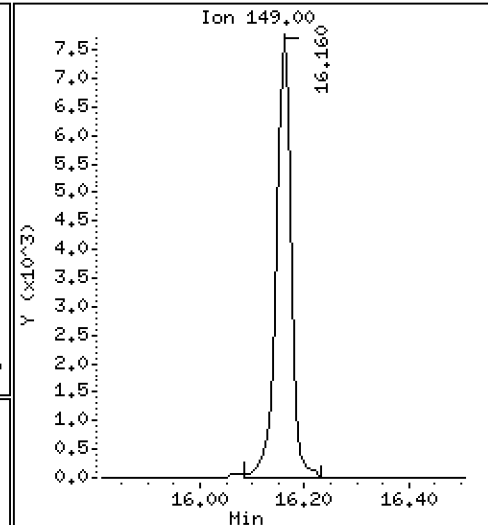
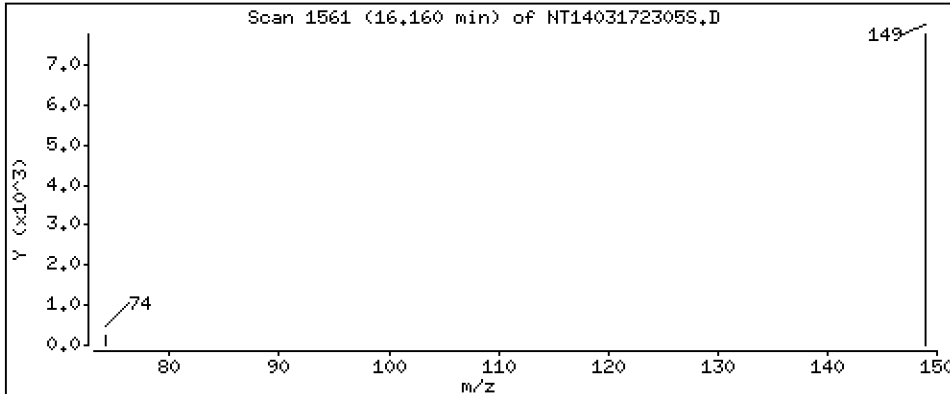
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,09213 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

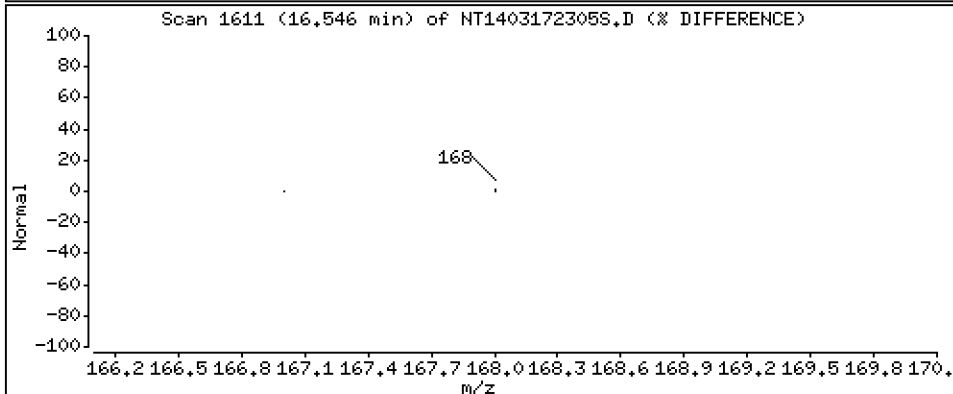
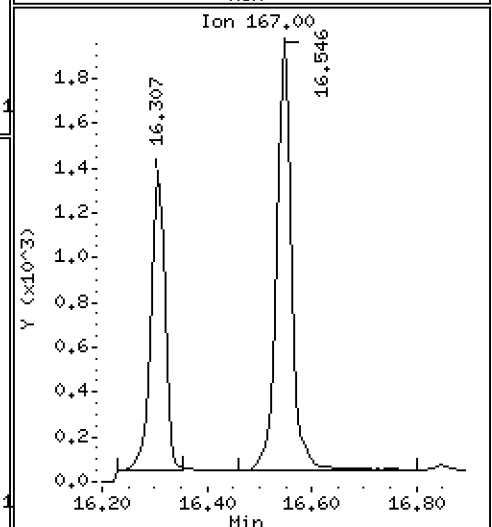
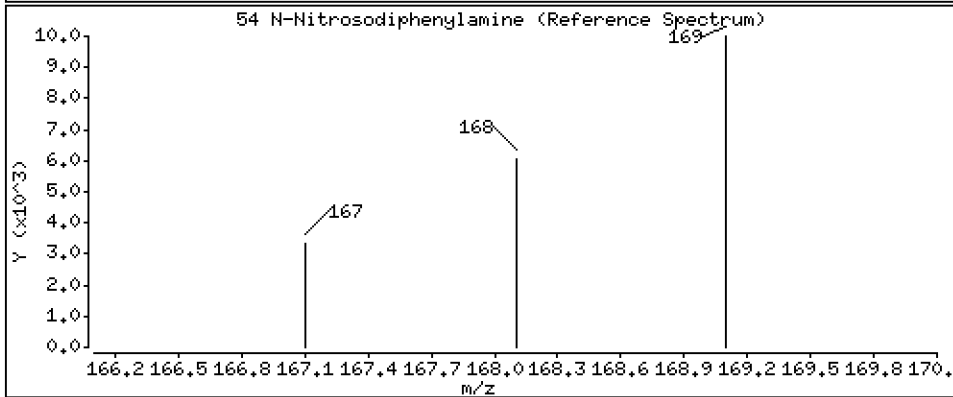
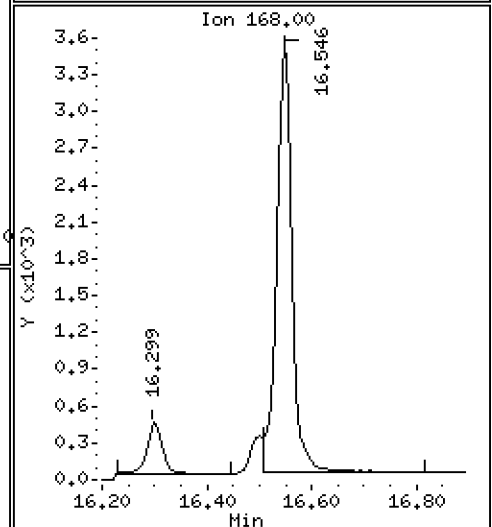
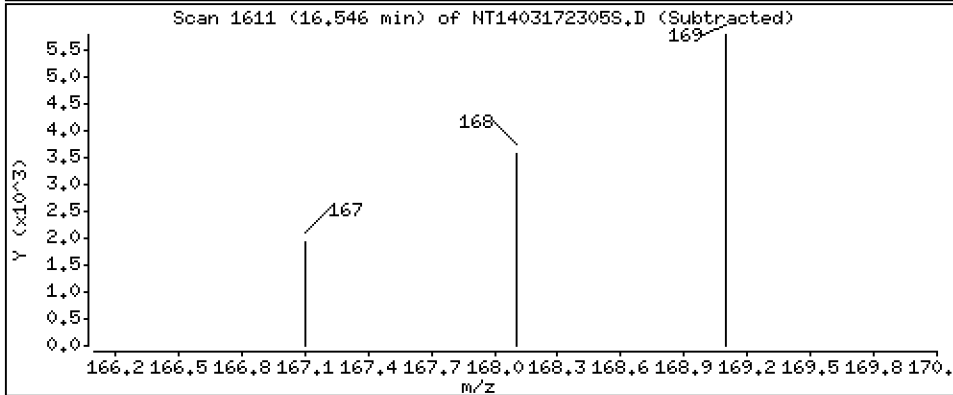
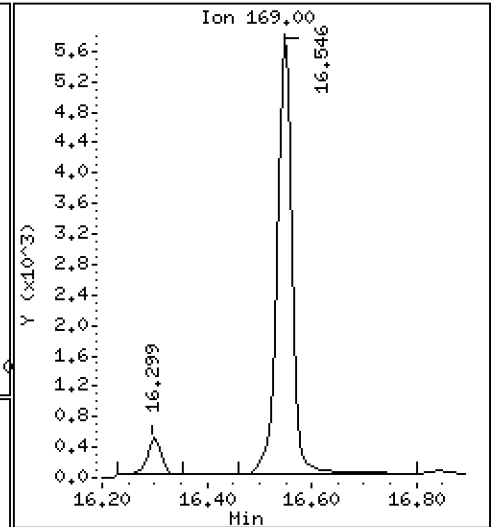
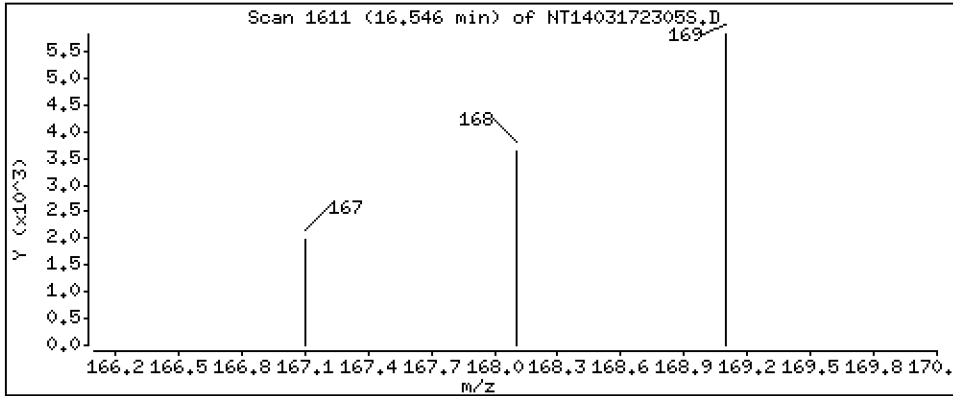
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,09318 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

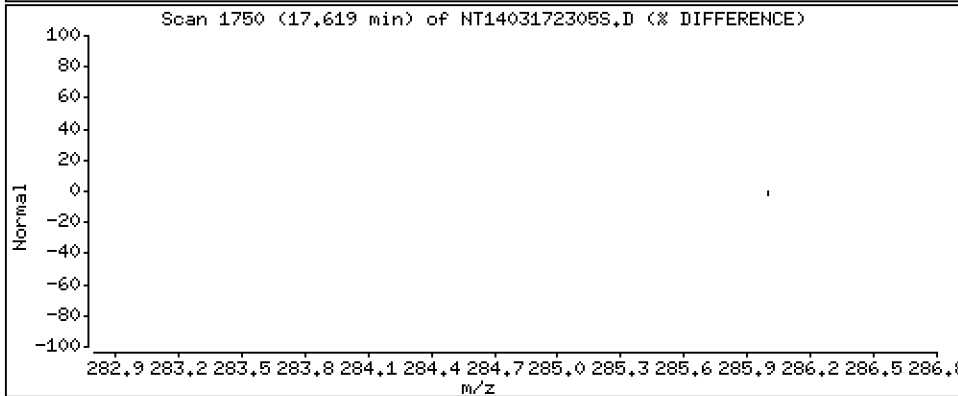
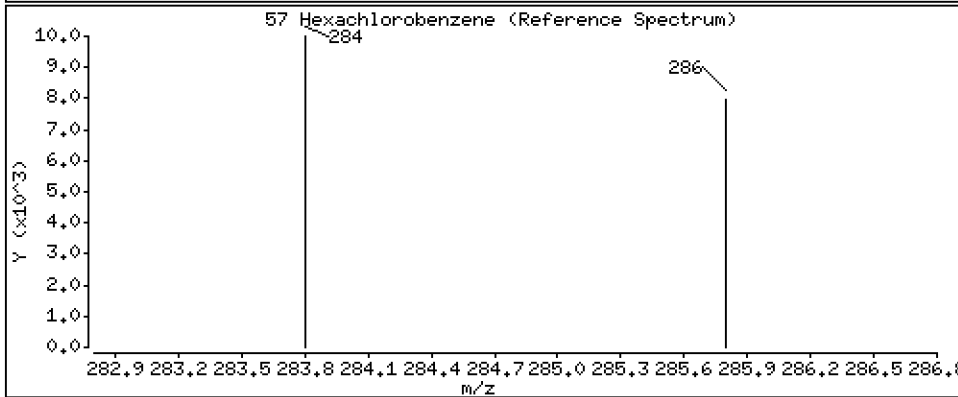
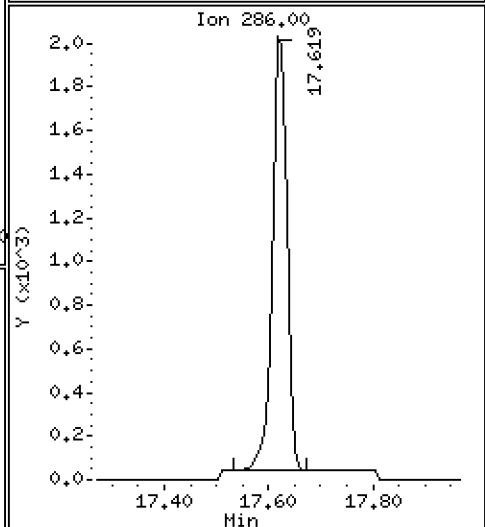
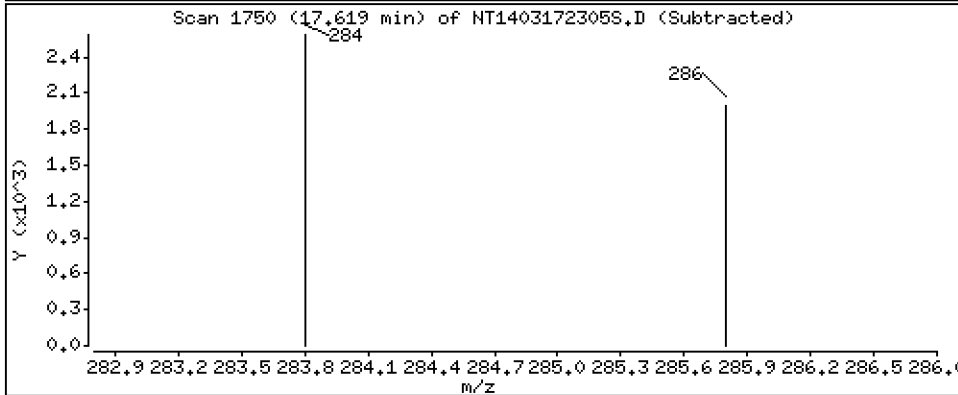
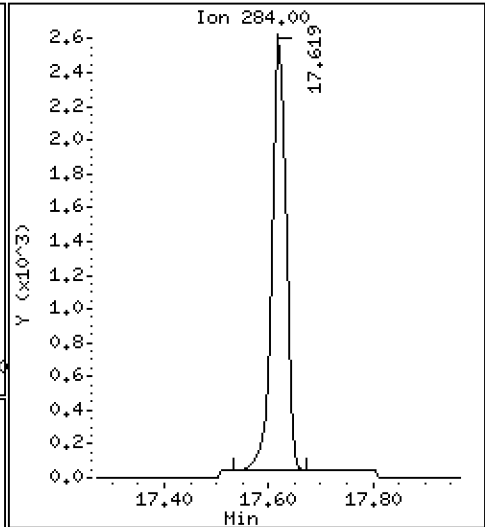
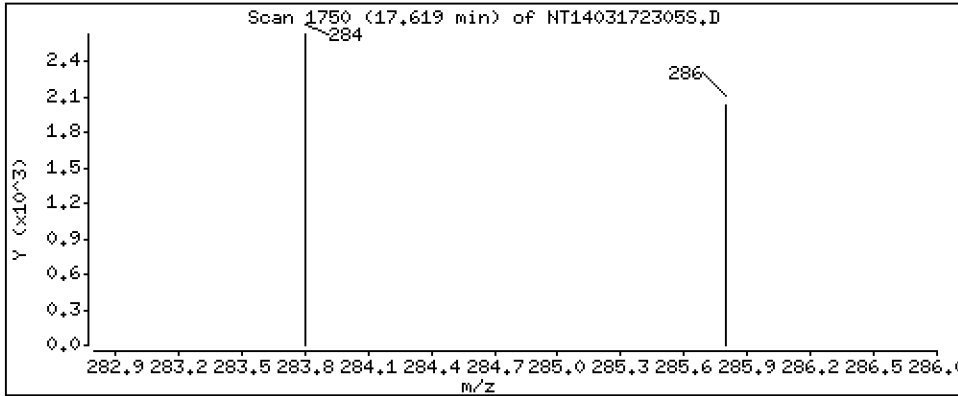
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,1032 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

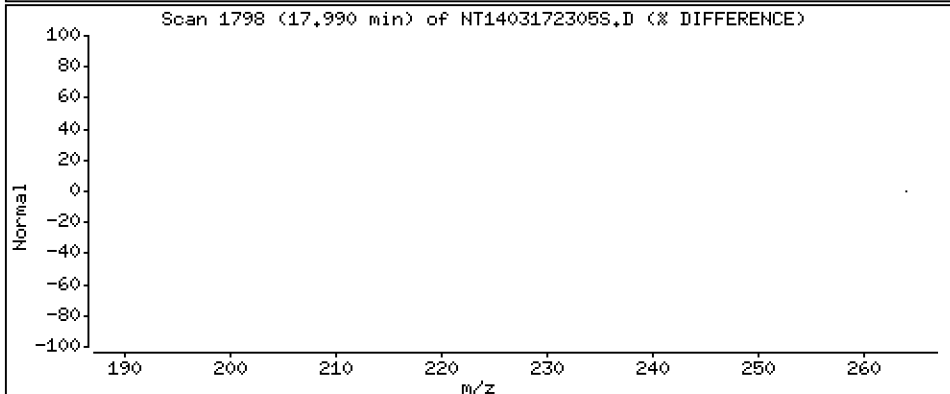
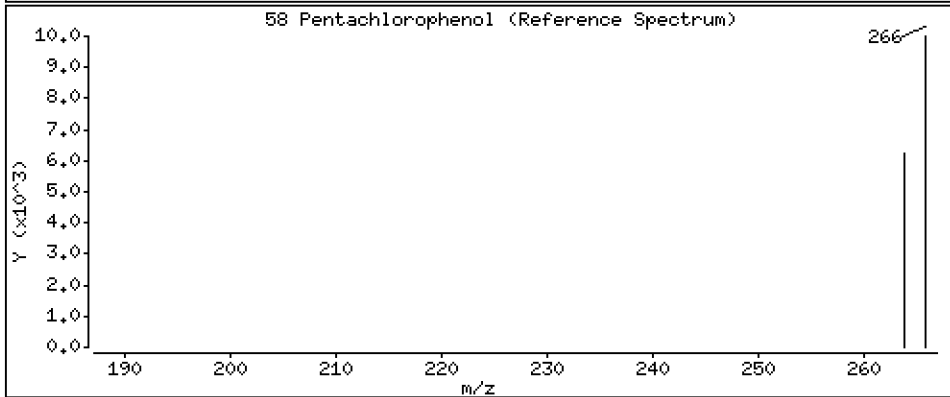
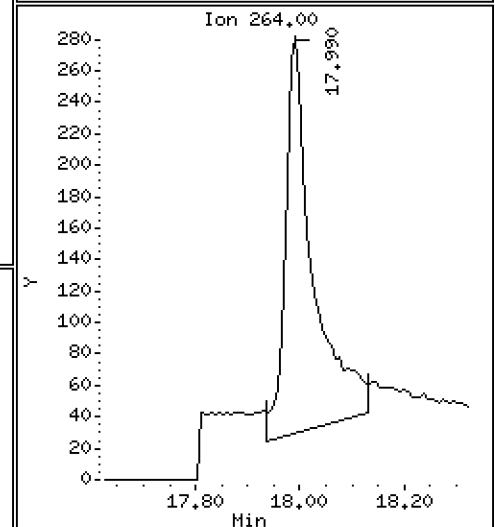
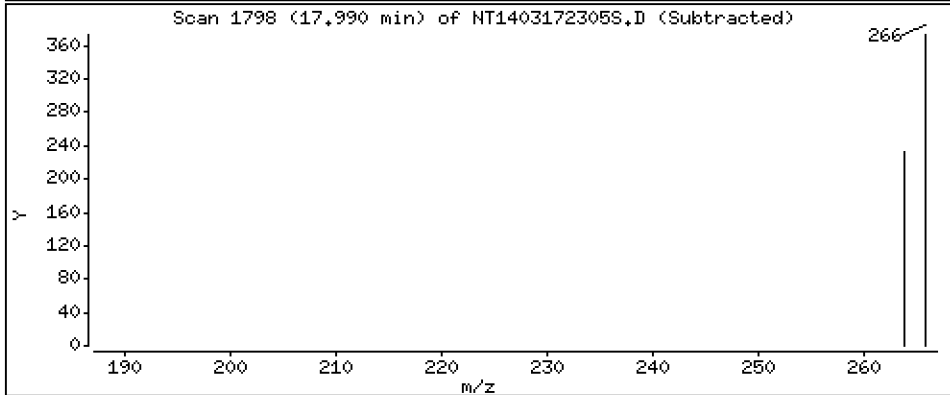
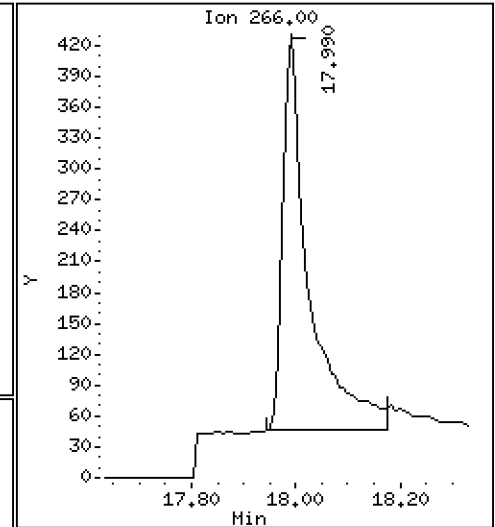
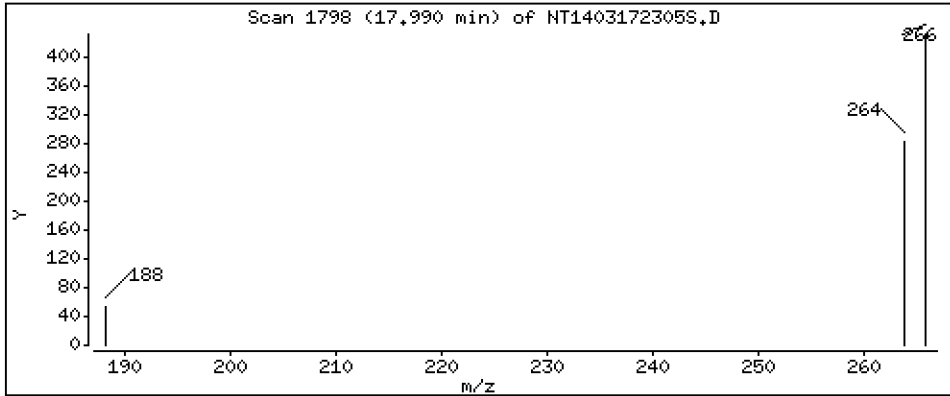
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,04342 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

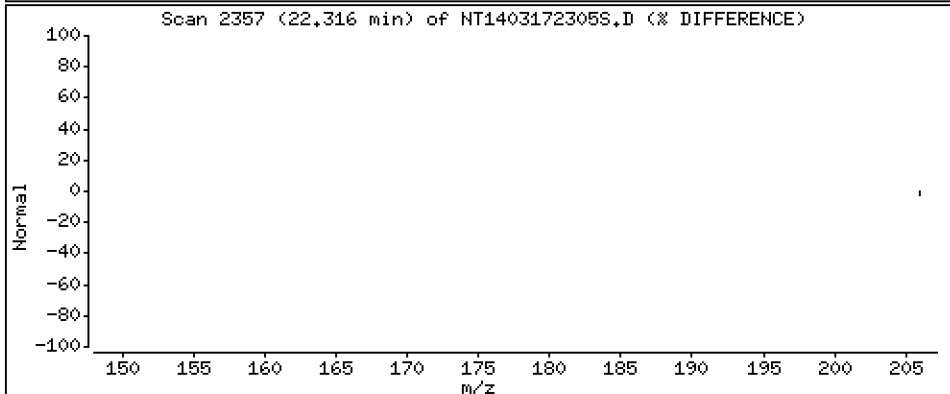
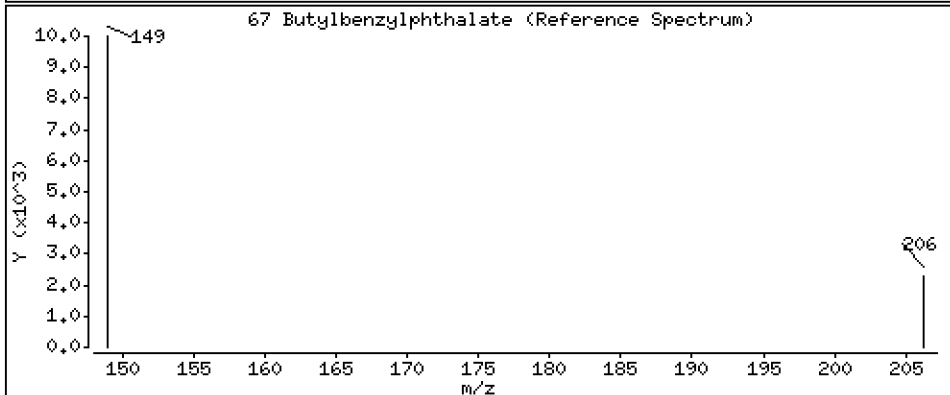
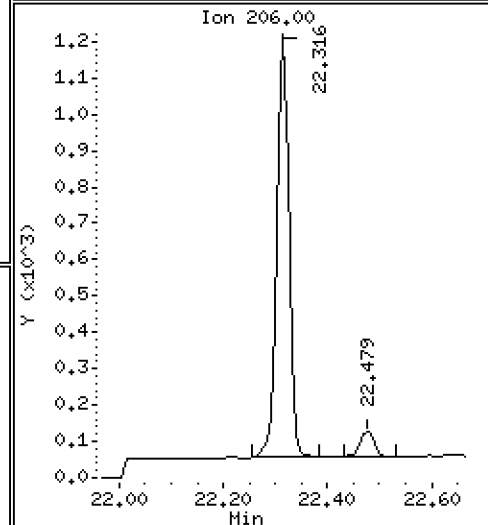
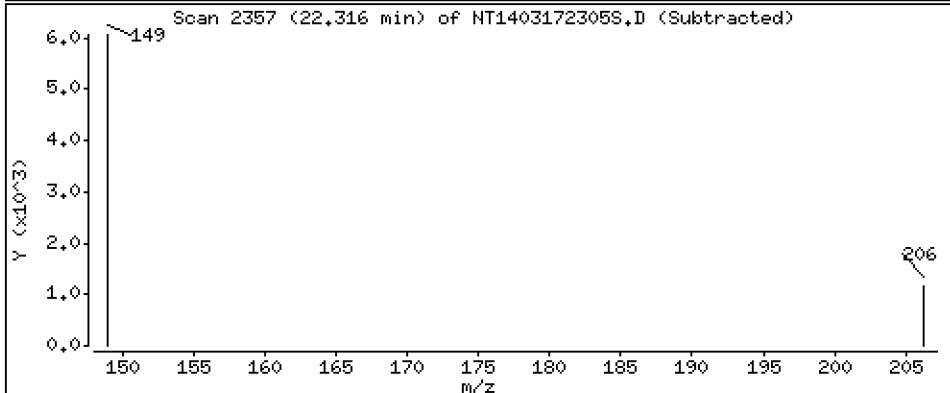
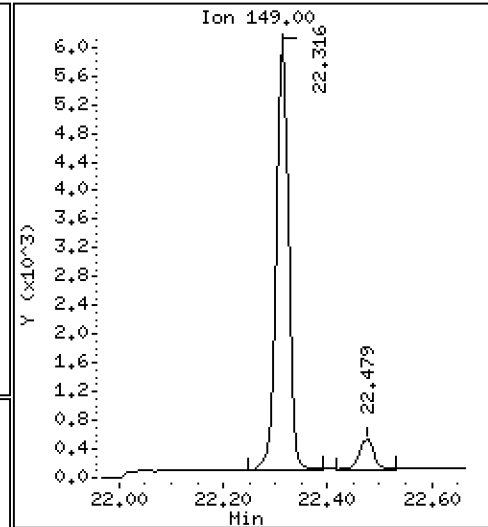
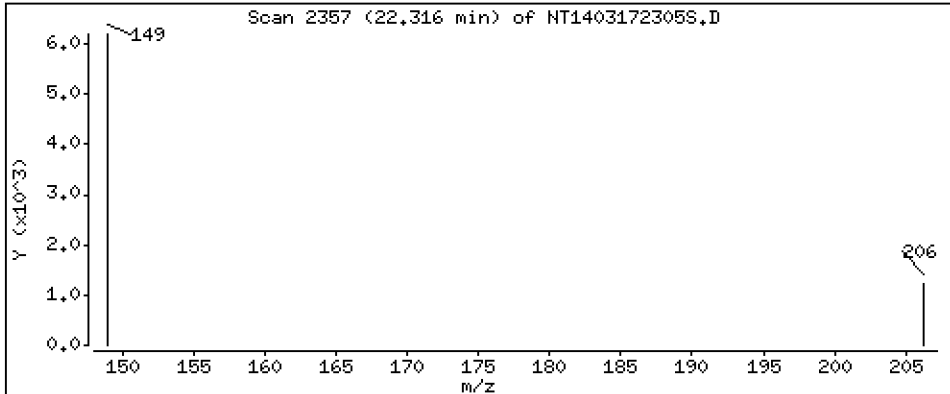
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,09436 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

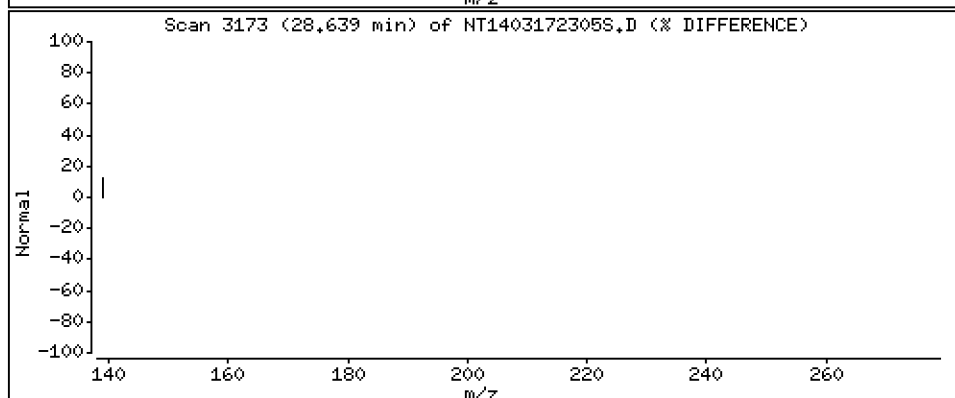
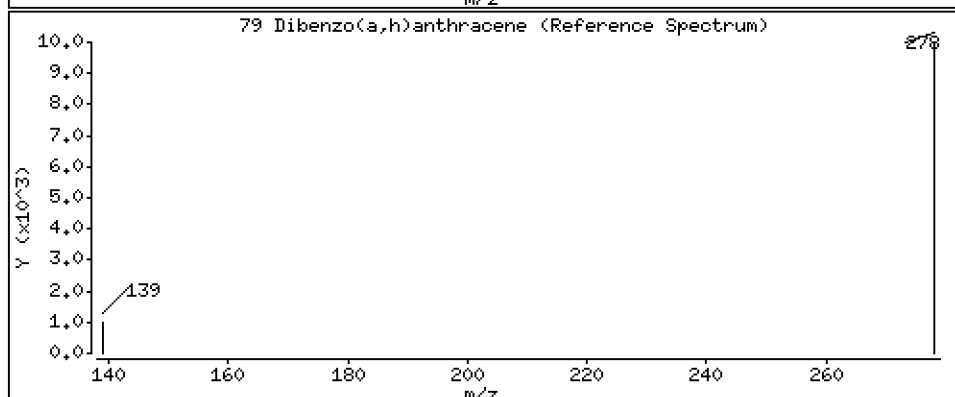
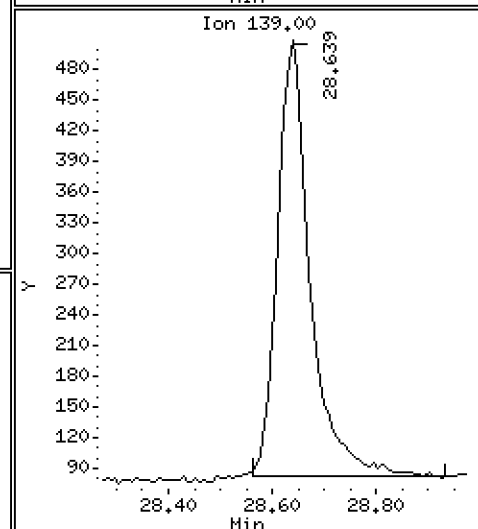
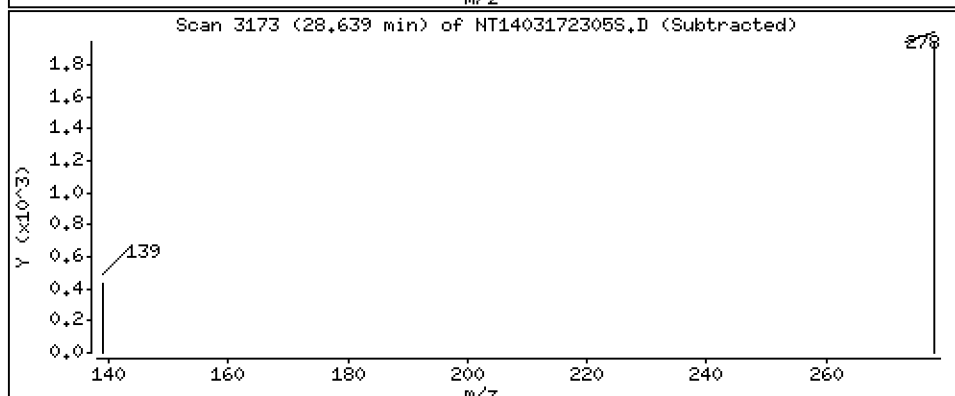
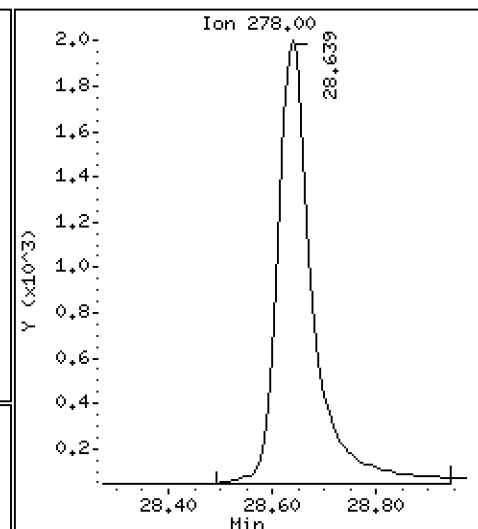
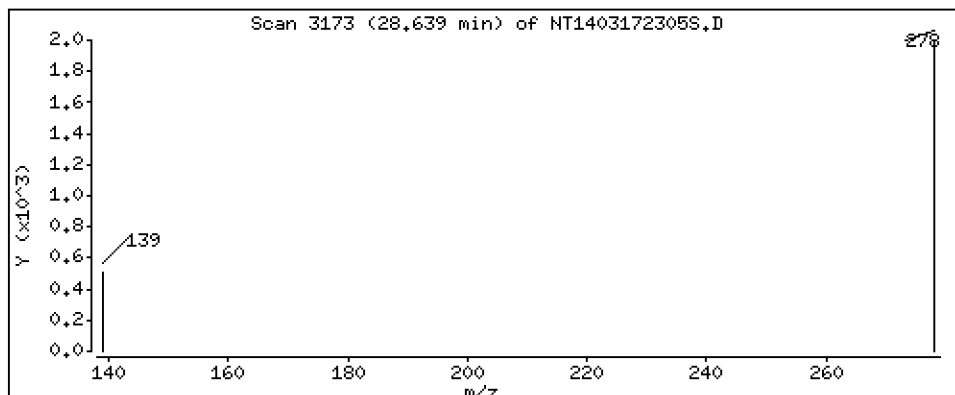
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,08170 ug/mL



Date : 17-MAR-2023 16:52

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV2

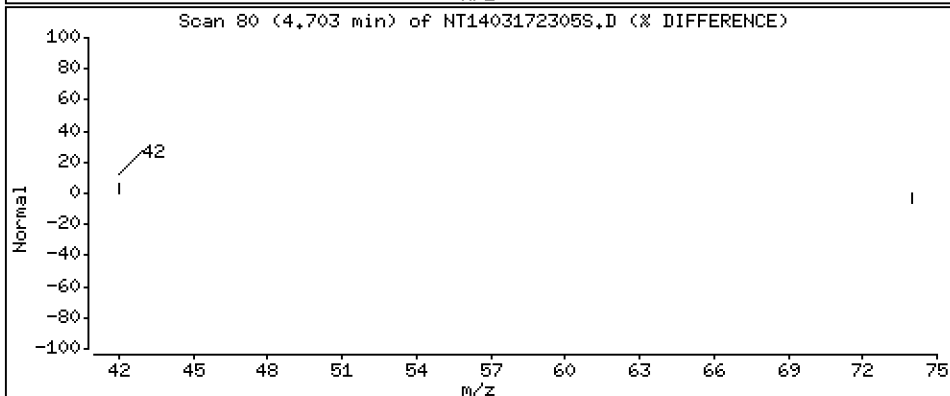
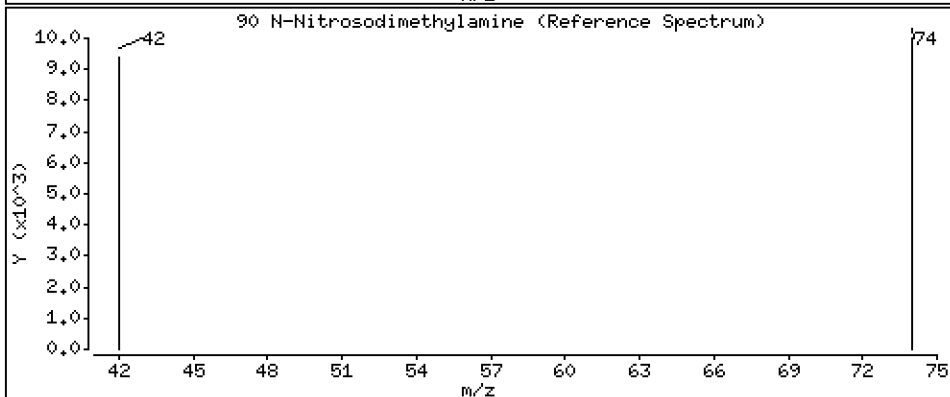
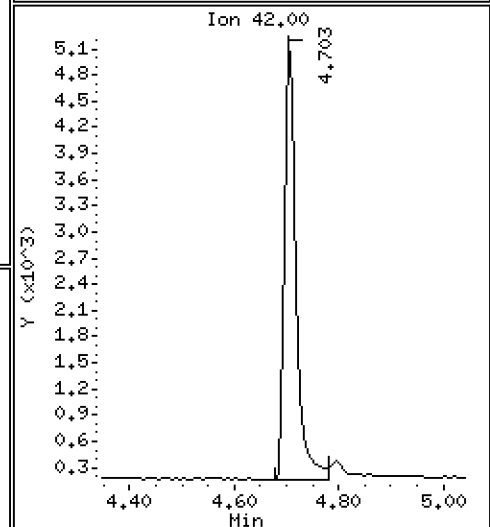
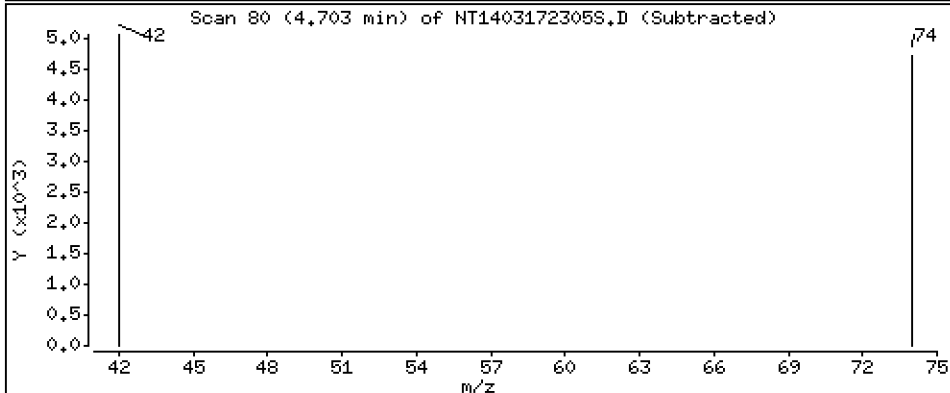
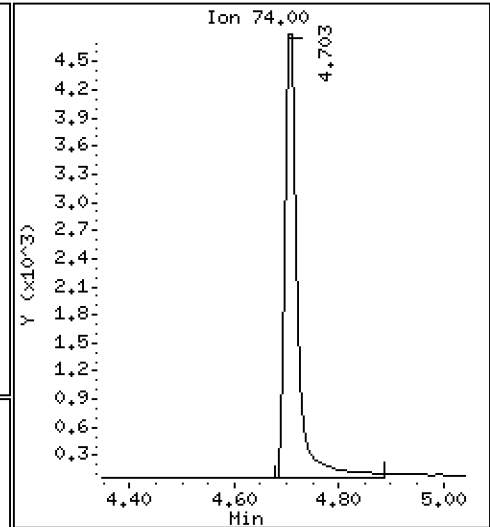
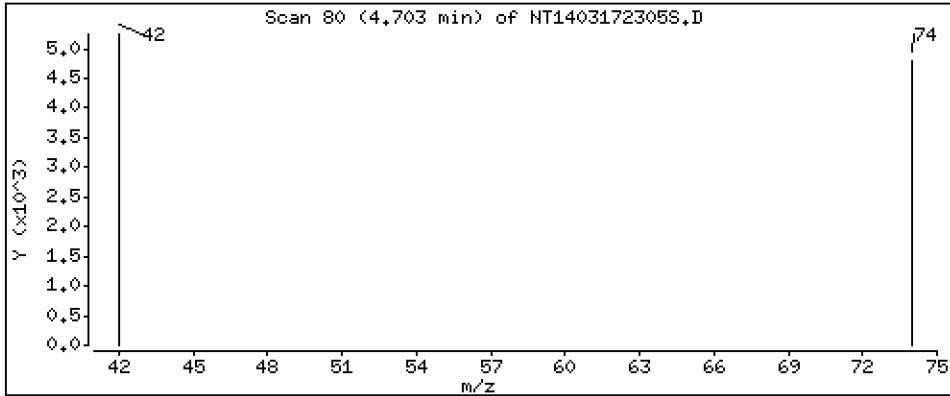
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,1443 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172305S.D
 Lab Smp Id: SLC0376-LCV2
 Inj Date : 17-MAR-2023 16:52 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-LCV2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:53 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	10432	0.11905	0.1191 (R)
3 Phenol	94		8.441	8.440	(0.931)	9175	0.07614	0.07614
7 1,3-Dichlorobenzene	146		9.005	9.005	(0.993)	10782	0.10456	0.1046
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	258144	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	10446	0.10469	0.1047
11 Benzyl alcohol	79		9.339	9.338	(1.030)	4545	0.06435	0.06435
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	10297	0.10595	0.1059
13 2-Methylphenol	108		9.564	9.563	(1.055)	7047	0.08466	0.08466
15 4-Methylphenol	108		9.836	9.827	(1.085)	7073	0.08043	0.08043
16 N-Nitroso-di-n-propylamine	70		9.898	9.897	(1.092)	5196	0.08357	0.08357
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	15770	0.19189	0.1919
24 Benzoic acid	105		11.116	10.999	(0.961)	667	0.01073	0.01073 (H)
26 1,2,4-Trichlorobenzene	180		11.480	11.479	(0.993)	8765	0.10882	0.1088
* 27 Naphthalene-d8	136		11.565	11.564	(1.000)	956001	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	4373	0.10728	0.1073
39 Dimethylphthalate	163		14.698	14.698	(0.967)	14619	0.09719	0.09719
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	440462	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	14755	0.09213	0.09213
54 N-Nitrosodiphenylamine	169		16.546	16.545	(0.907)	11007	0.09318	0.09318
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	4685	0.10323	0.1032
58 Pentachlorophenol	266		17.990	17.982	(0.986)	1329	0.04342	0.04342
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	871857	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	11595	0.11894	0.1189 (R)
67 Butylbenzylphthalate	149		22.315	22.315	(0.958)	9322	0.09436	0.09436
* 69 Chrysene-d12	240		23.299	23.298	(1.000)	565458	4.00000	
* 77 Perylene-d12	264		25.939	25.938	(1.000)	439880	4.00000	
79 Dibenzo(a,h)anthracene	278		28.639	28.623	(1.104)	9110	0.08170	0.08170
90 N-Nitrosodimethylamine	74		4.702	4.694	(0.519)	7723	0.14427	0.1443

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172305S.D
 Lab Smp Id: SLC0376-LCV2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 17-MAR-2023
 Calibration Time: 15:39
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	224436	112218	448872	258144	15.02
27 Naphthalene-d8	825617	412809	1651234	956001	15.79
42 Acenaphthene-d10	392947	196474	785894	440462	12.09
59 Phenanthrene-d10	789887	394944	1579774	871857	10.38
69 Chrysene-d12	494007	247004	988014	565458	14.46
77 Perylene-d12	375441	187721	750882	439880	17.16

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.56	11.06	12.06	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.30	22.80	23.80	23.30	0.00
77 Perylene-d12	25.94	25.44	26.44	25.94	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172305S.D

Lab ID: SLC0376-LCV2

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

17-MAR-2023 16:52

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.961	0.951	0.0100	Benzoic acid

RRT check based on Ccal File: 20230317.b/NT1403172303S.D

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00050</u>
Lab File ID:	<u>NT1403172318S.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0376</u>	Injection Date:	<u>03/18/23</u>
Lab Sample ID:	<u>SLC0376-LCV3</u>	Injection Time:	<u>00:43</u>
Sequence Name:	<u>ABN 0.2</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.20000	0.2	1.5461150	1.5667900		1.3	
1,2-Dichlorobenzene	A	0.20000	0.2	1.5059720	1.5318690		1.7	
Benzyl Alcohol	A	0.20000	0.1	1.0943940	0.7112341		-35.0	
Benzoic acid	A	0.80000	0.05	0.1762504	0.0153303		-94.1	
2,4-Dimethylphenol	A	0.40000	0.4	0.3438645	0.3421315		-0.5	
1,2,4-Trichlorobenzene	A	0.20000	0.2	0.3370247	0.3492228		3.6	
N-Nitrosodiphenylamine	A	0.20000	0.2	0.5419762	0.5350874		-1.3	
Pentachlorophenol	A	0.40000	0.1	0.1113753	0.0368606		-73.8	
2-Fluorophenol	A	0.30000	0.242	1.3577520	1.0973290		-19.2	
p-Terphenyl-d14	A	0.20000	0.246	0.6895811	0.8493763		23.2	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723189.D

Date: 18-MAR-2023 00:43

Client ID:

Sample Info: SLC0376-LCW3

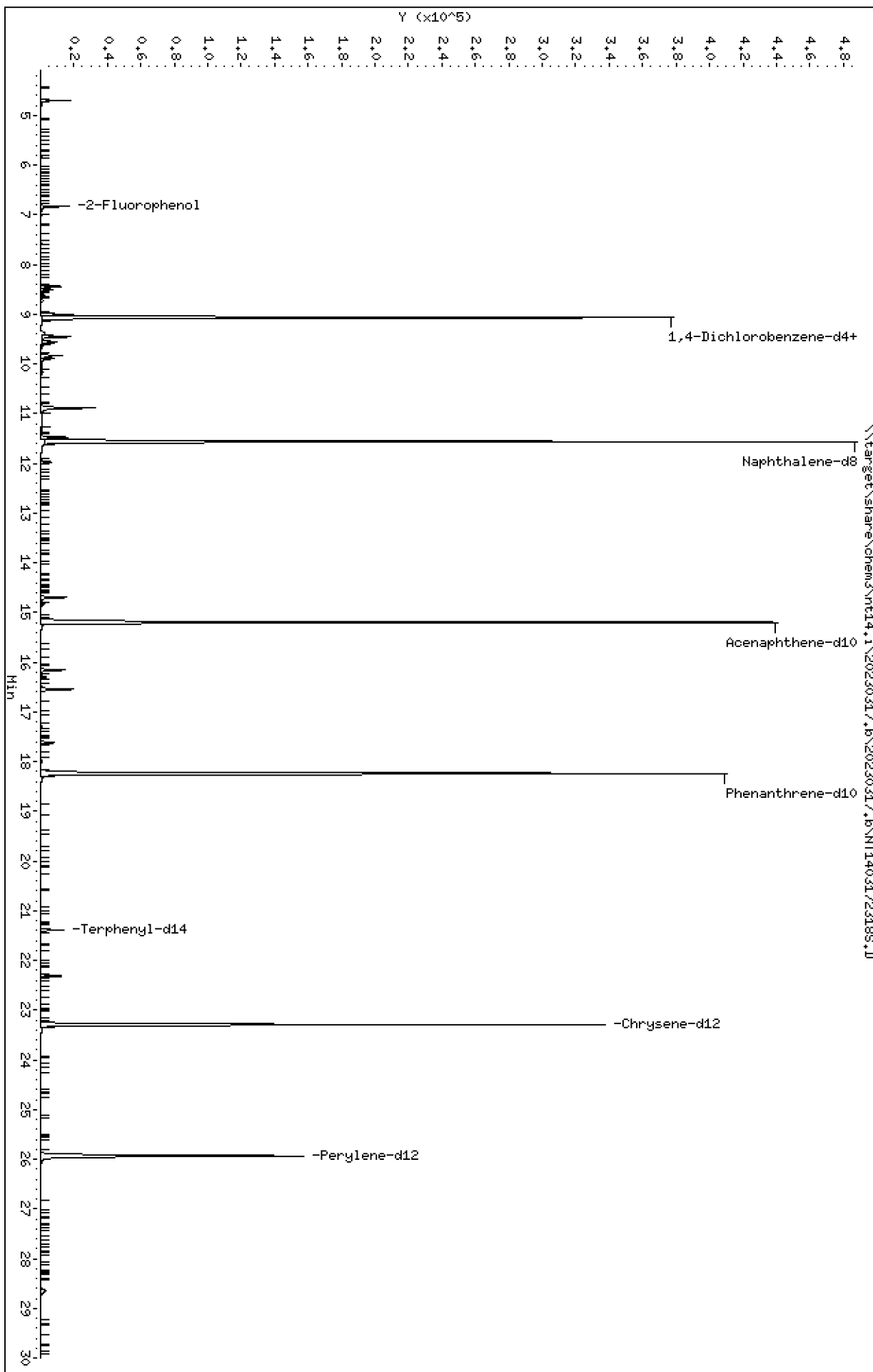
Column phase: ZB-5msi

Instrument: nt14.1

Operator: JGR

Column diameter: 0.25

Page 1



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

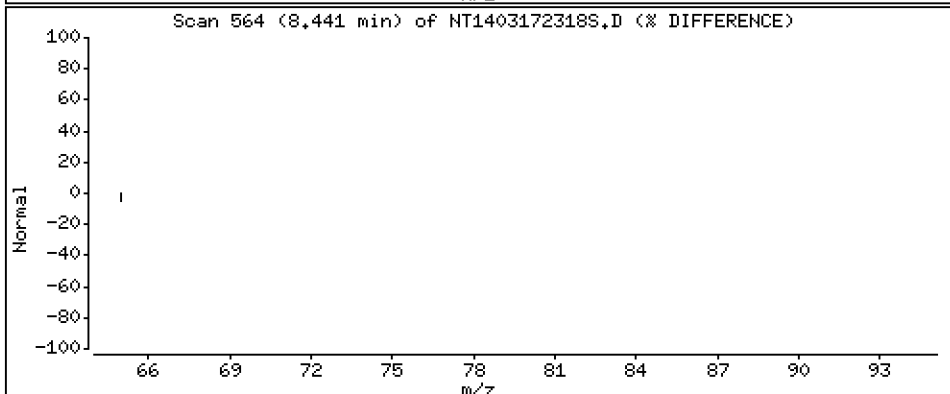
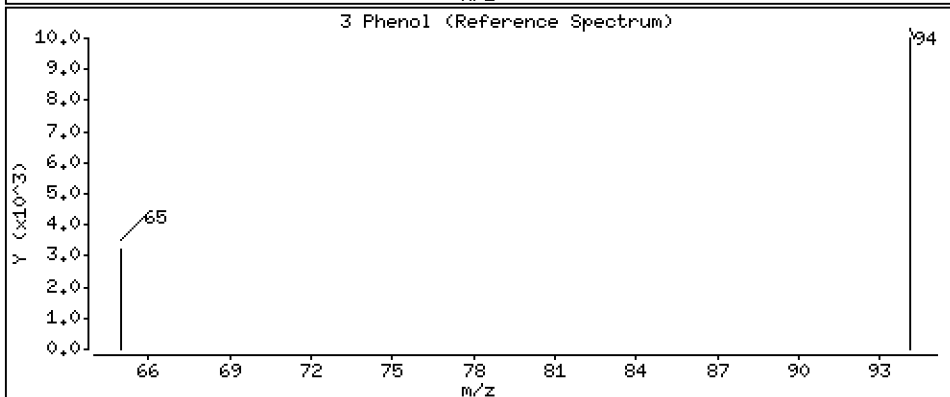
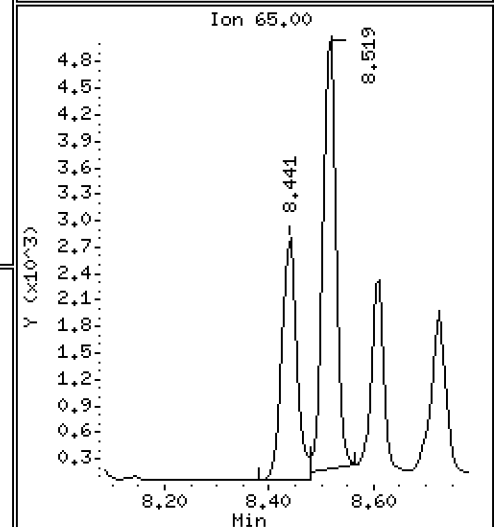
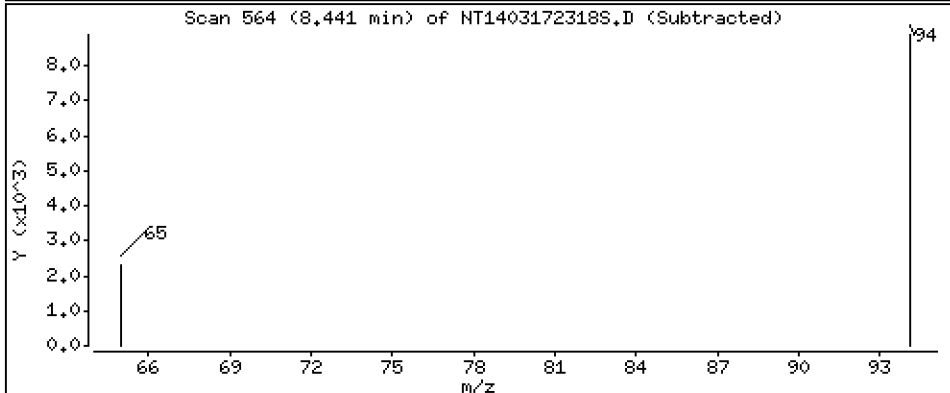
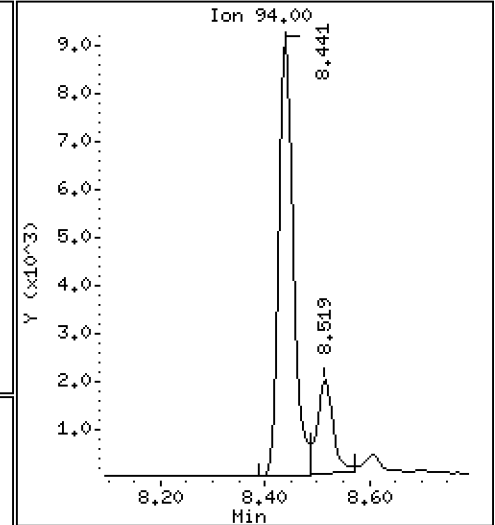
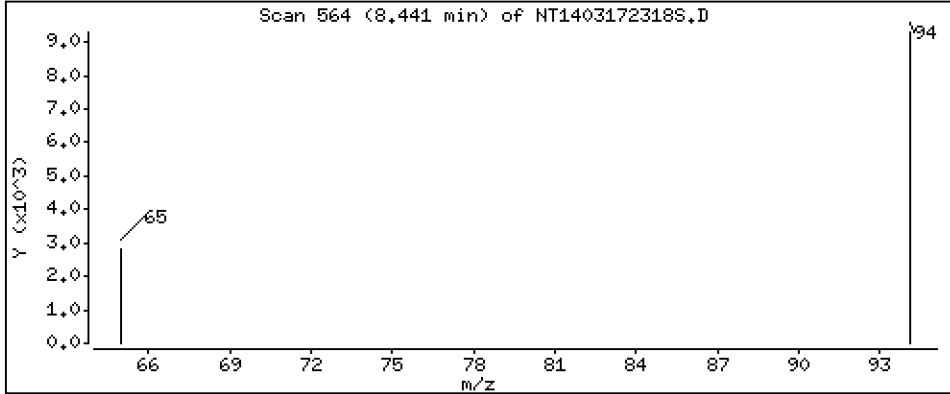
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1536 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

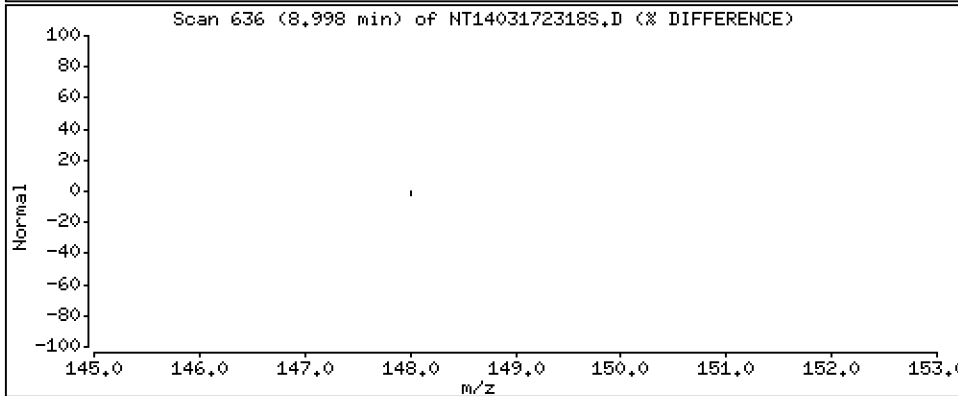
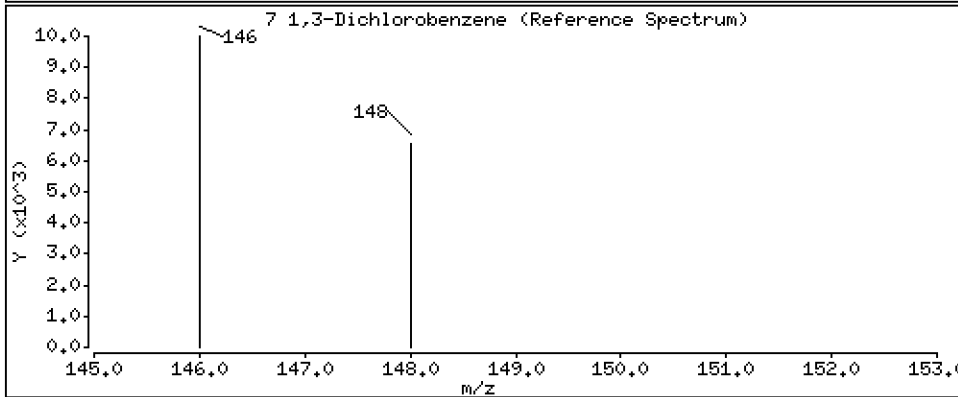
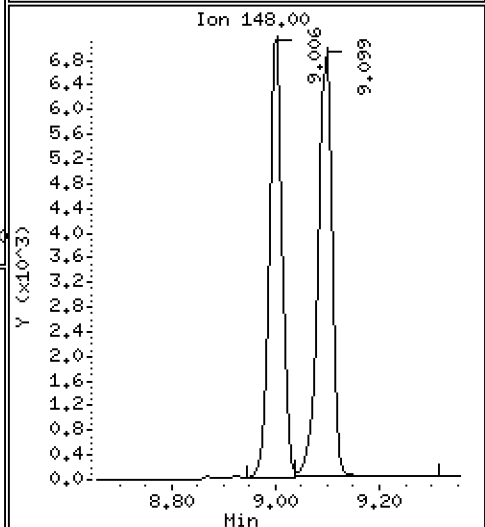
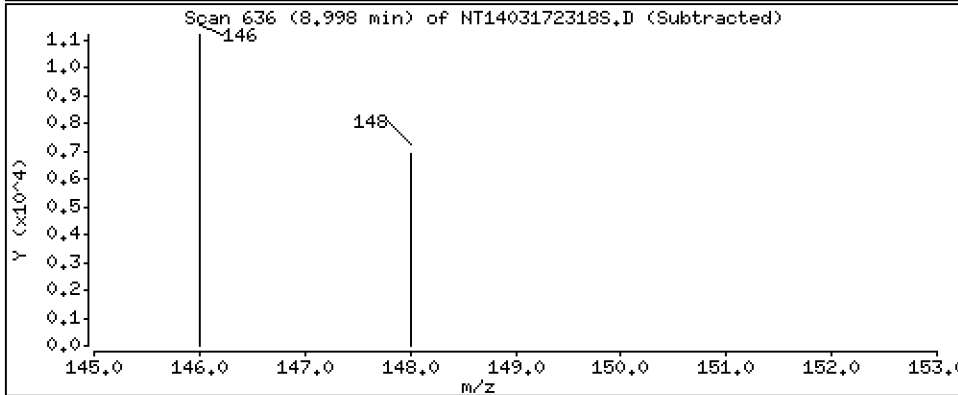
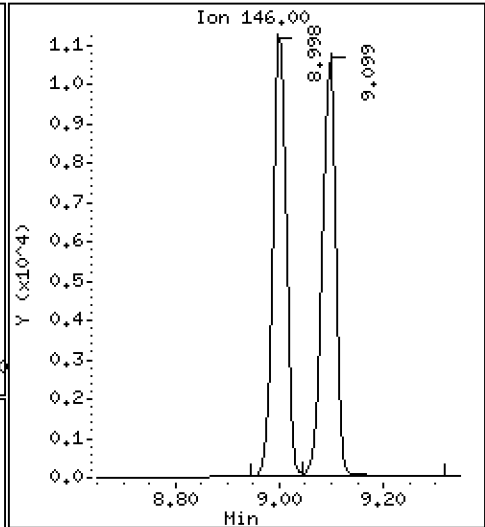
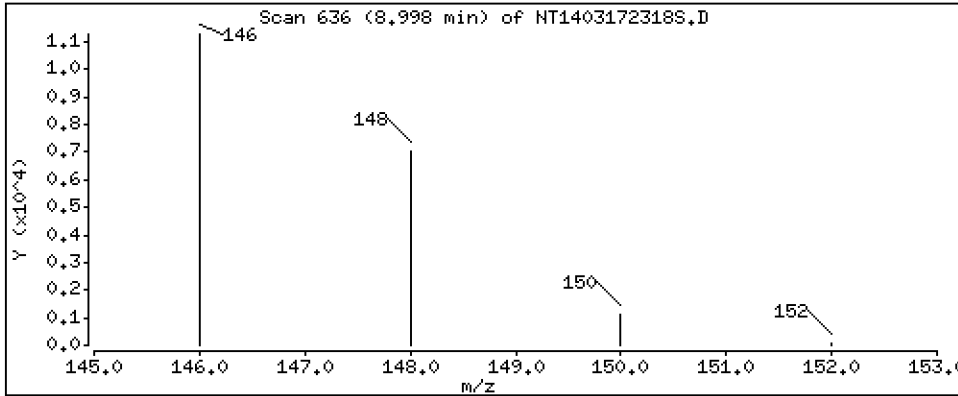
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2027 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

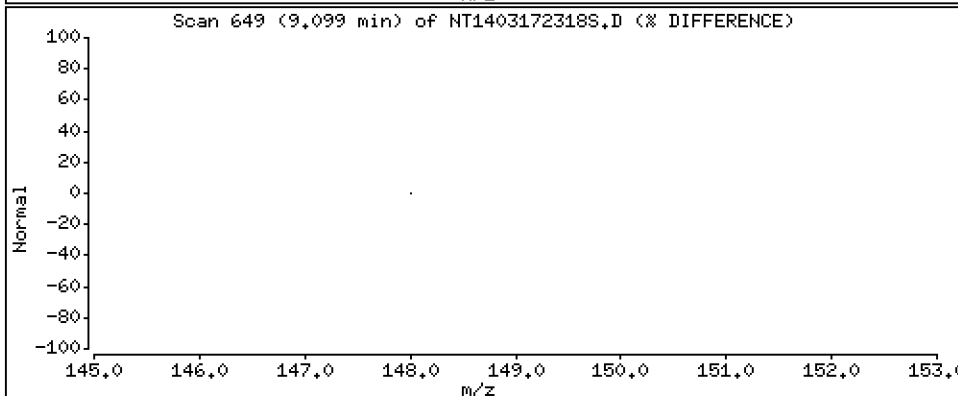
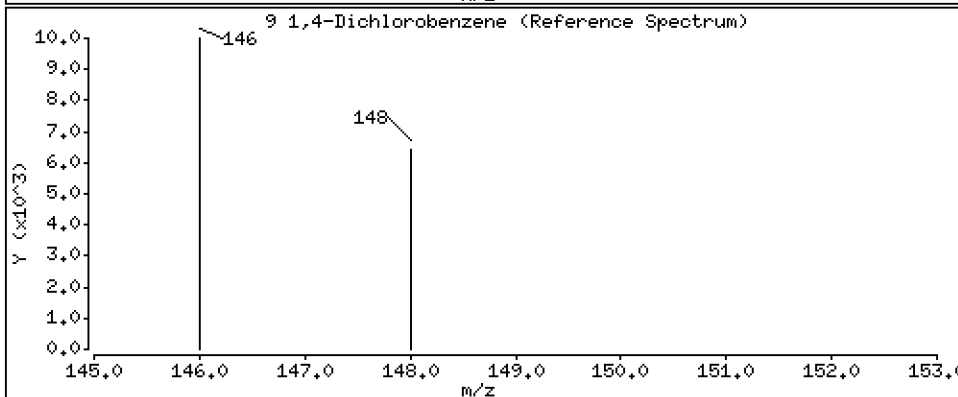
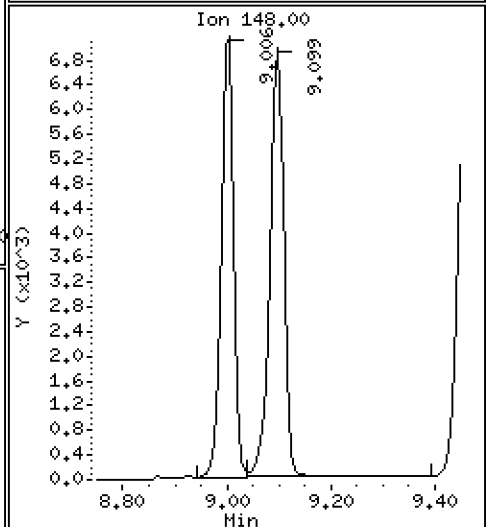
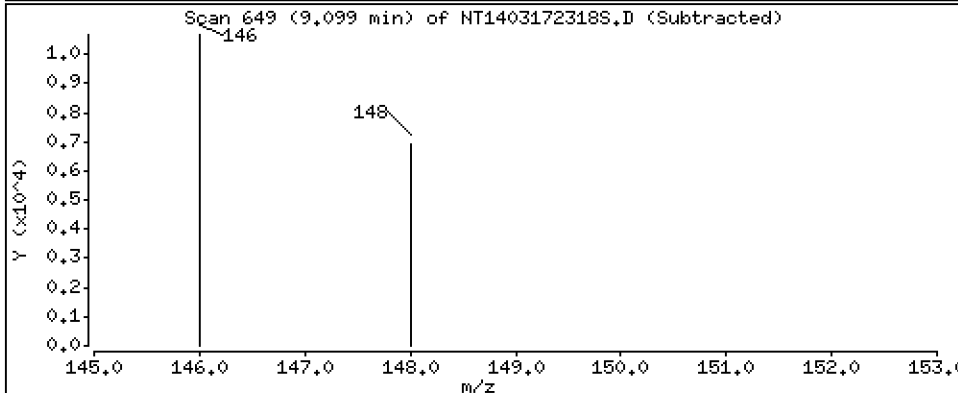
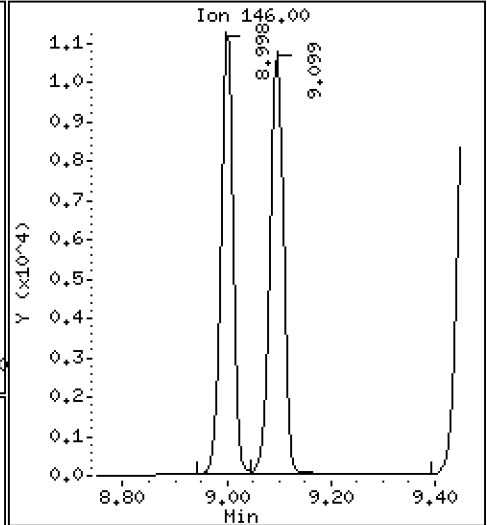
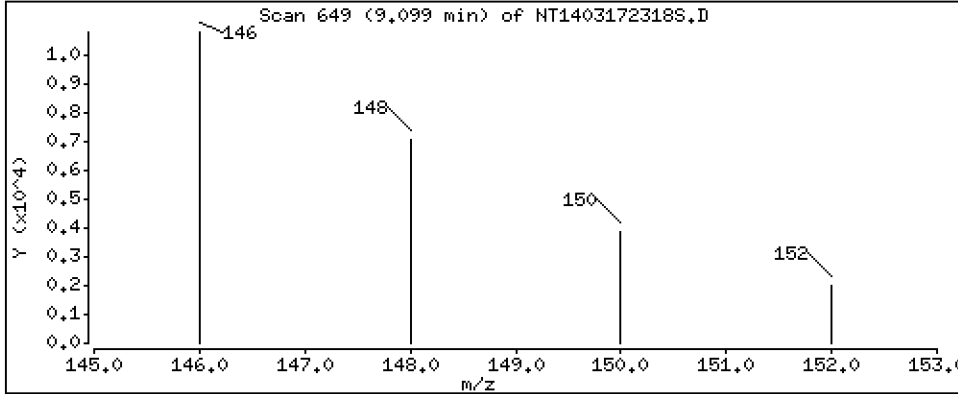
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,2027 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

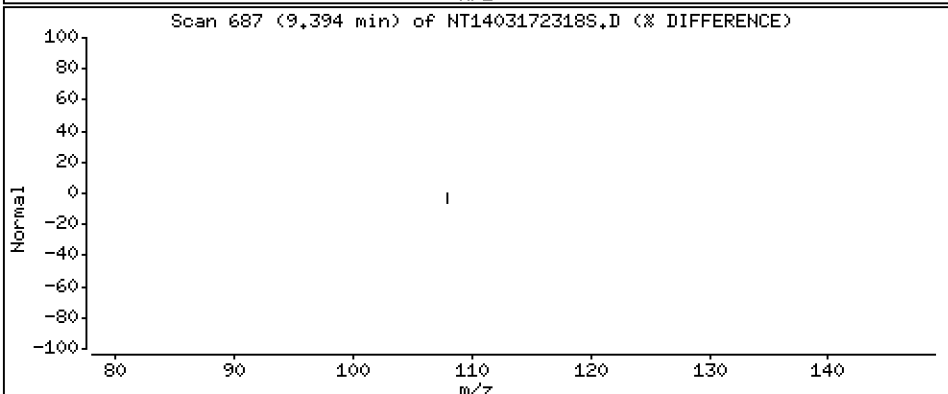
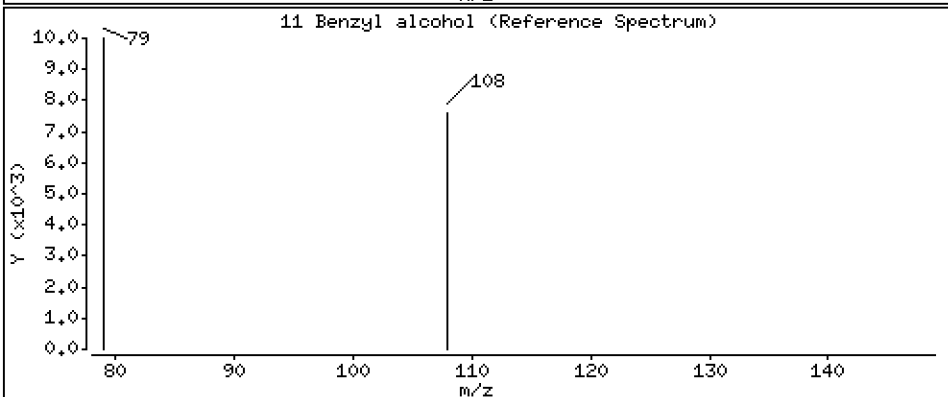
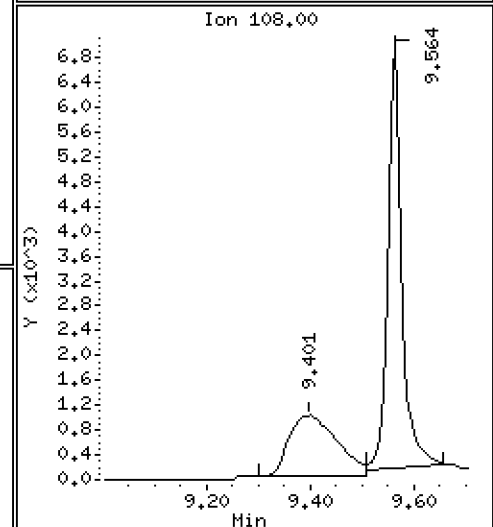
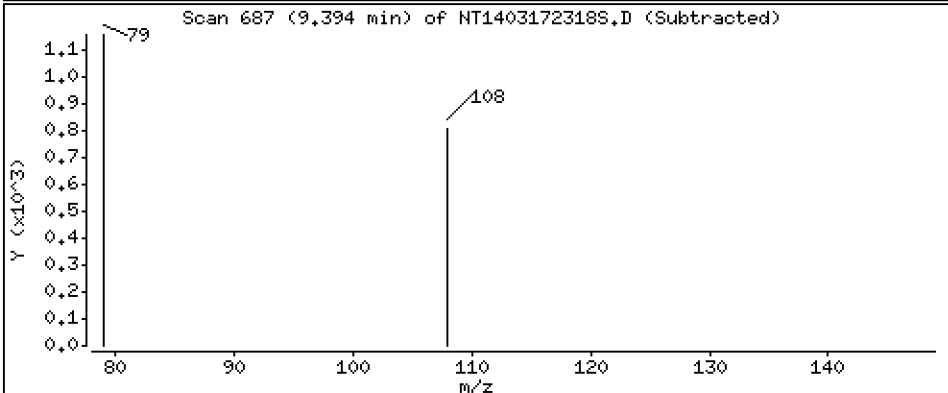
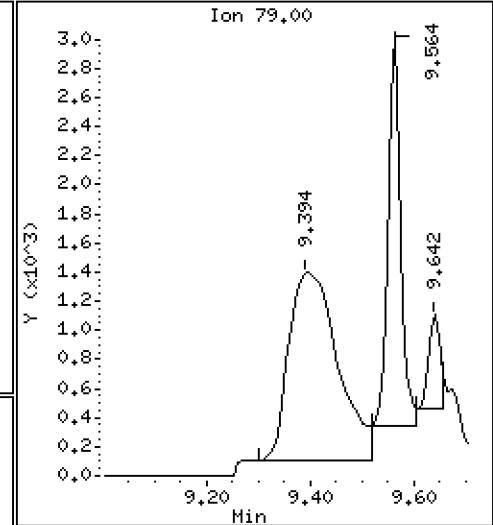
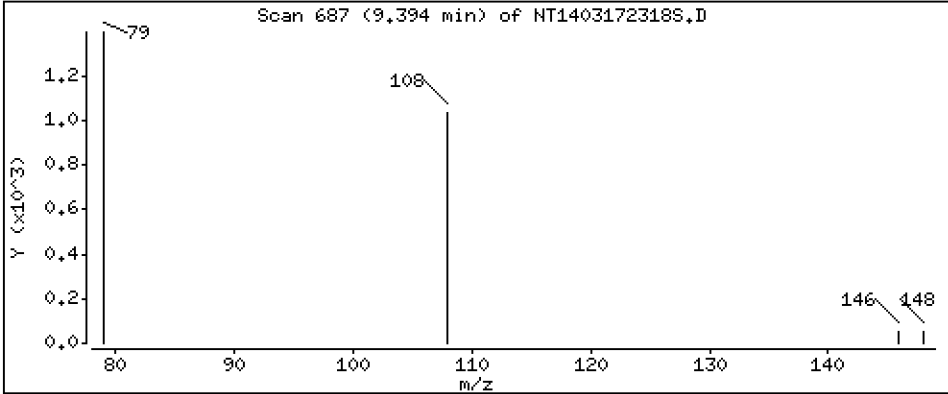
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1300 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

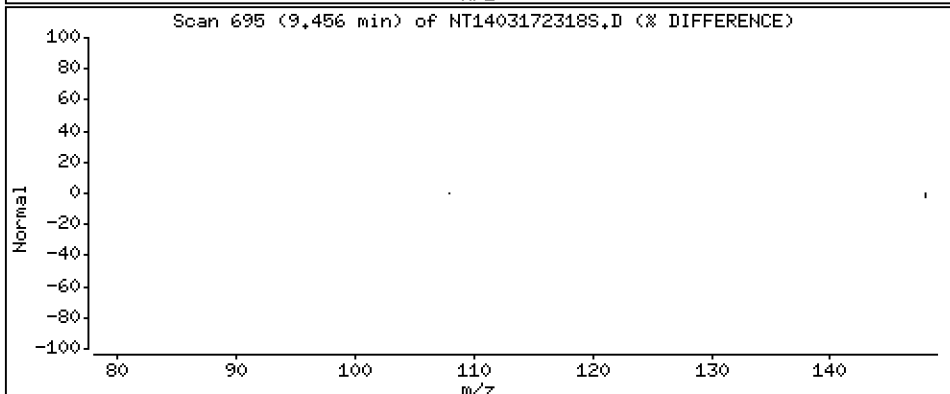
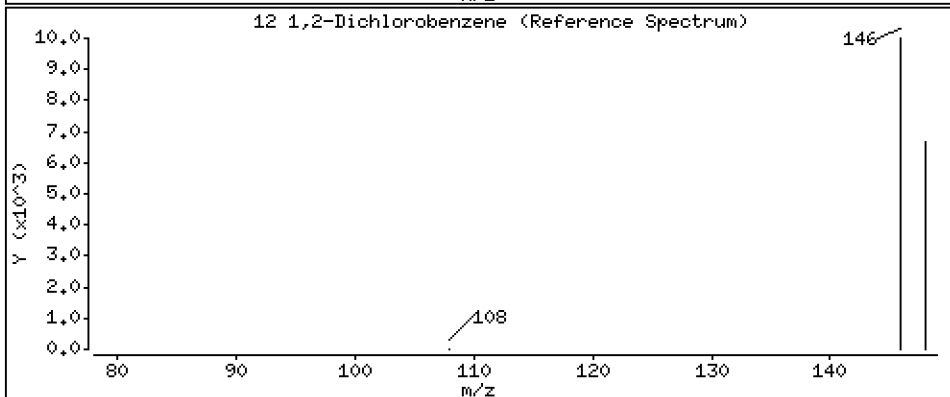
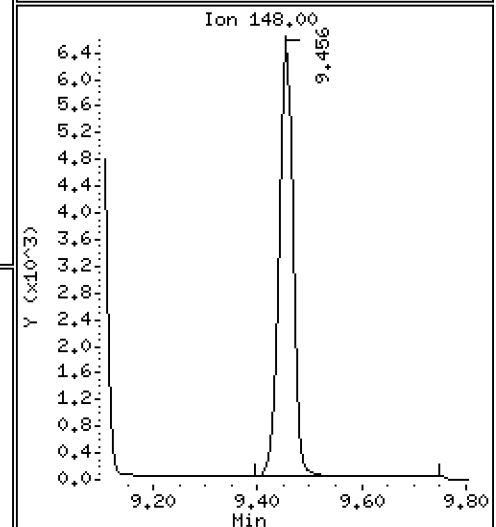
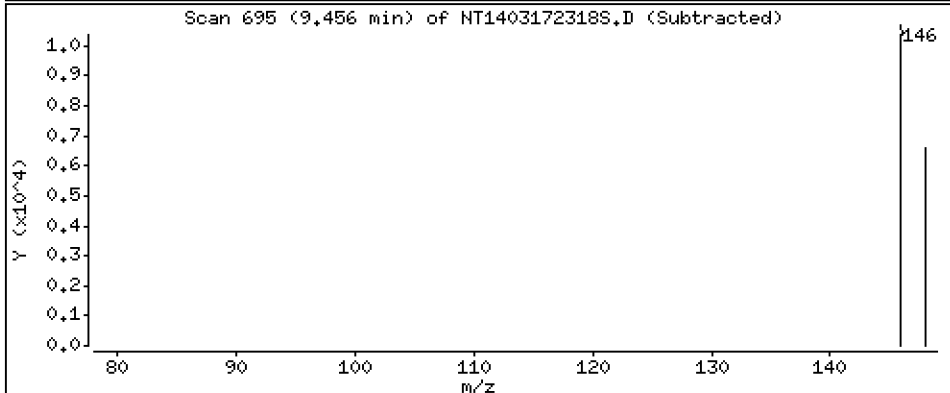
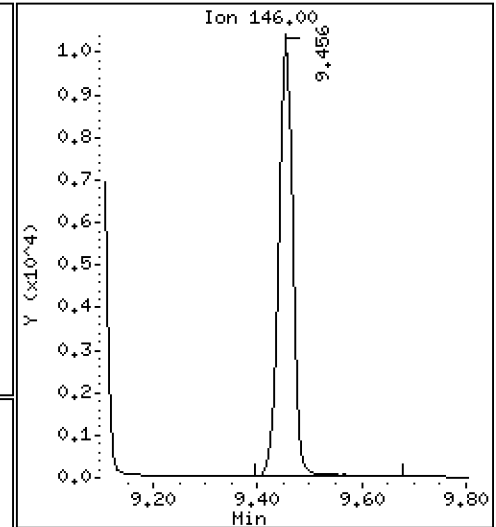
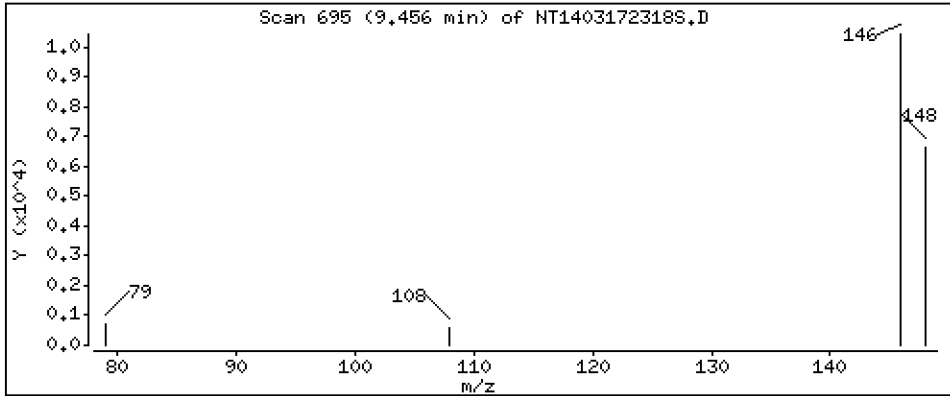
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2034 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

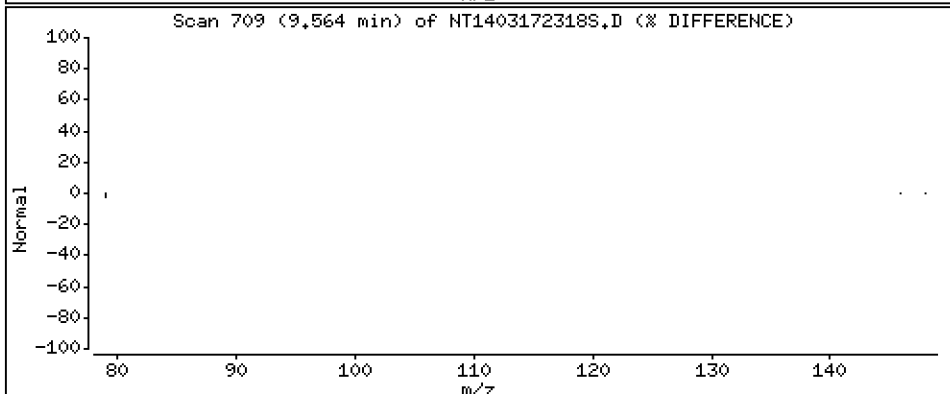
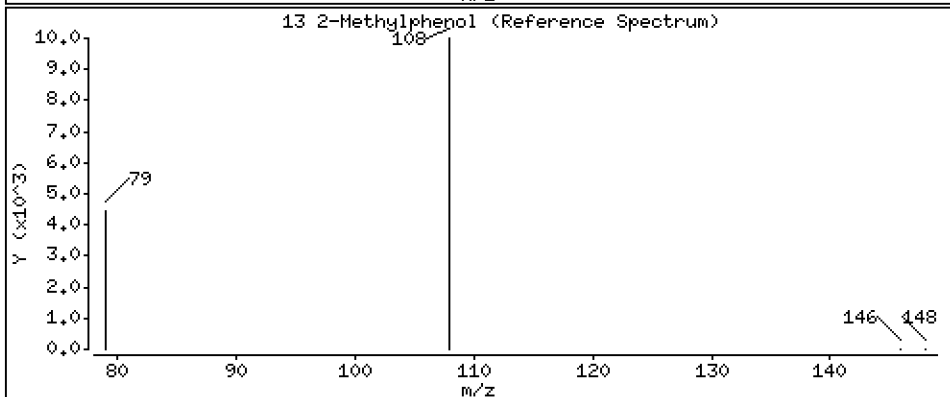
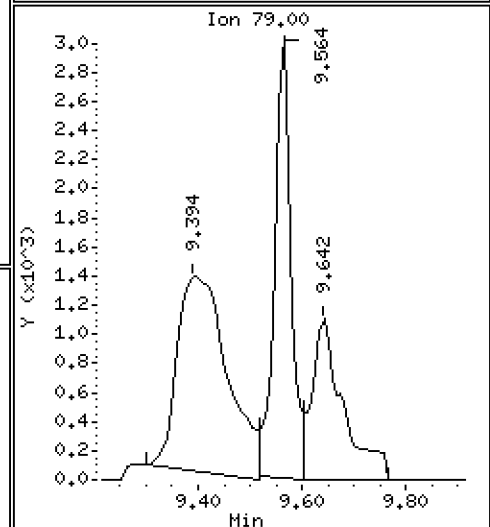
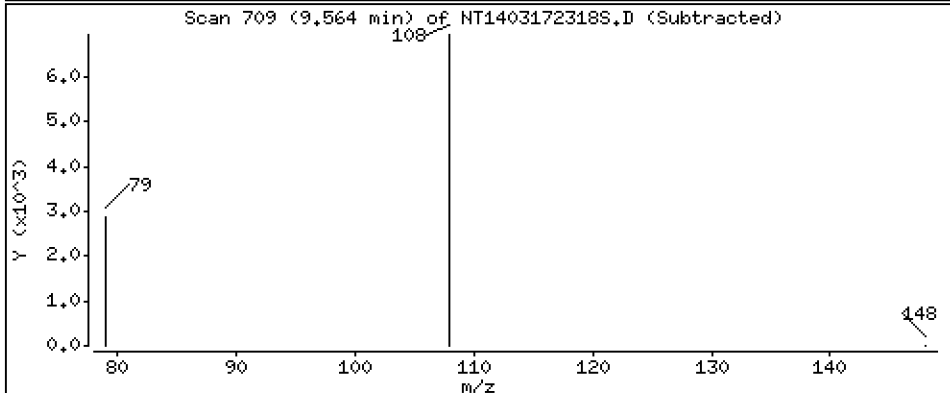
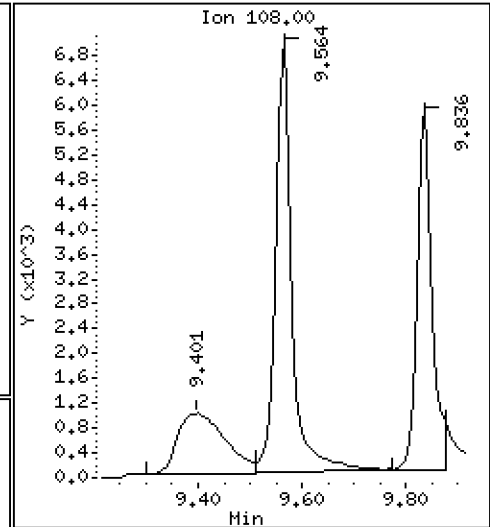
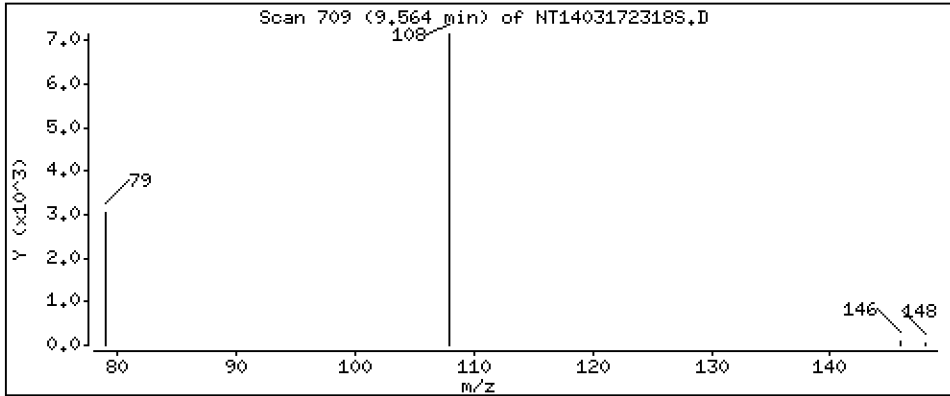
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1877 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

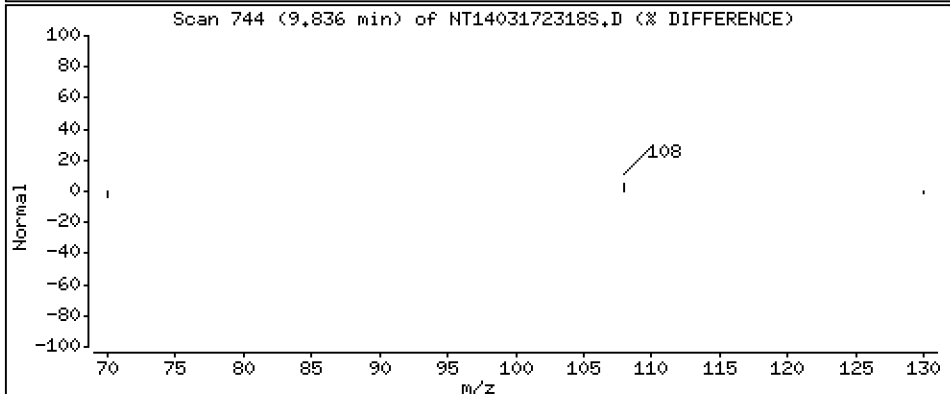
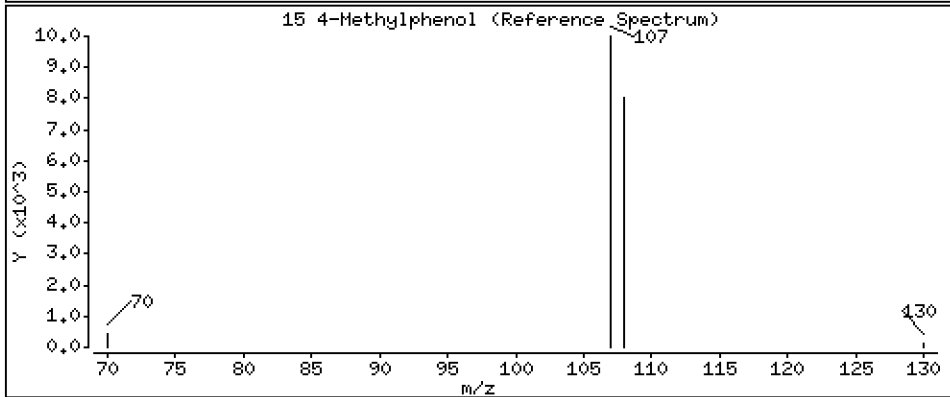
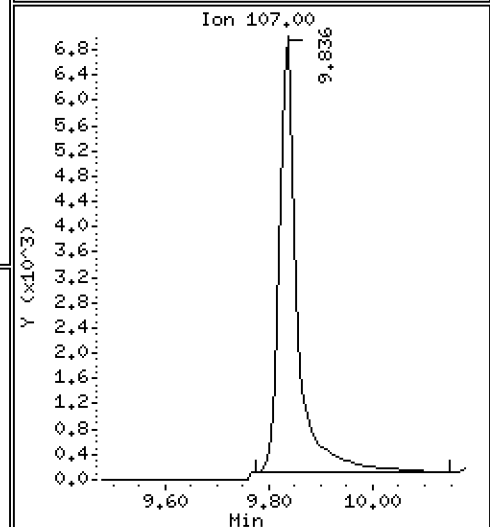
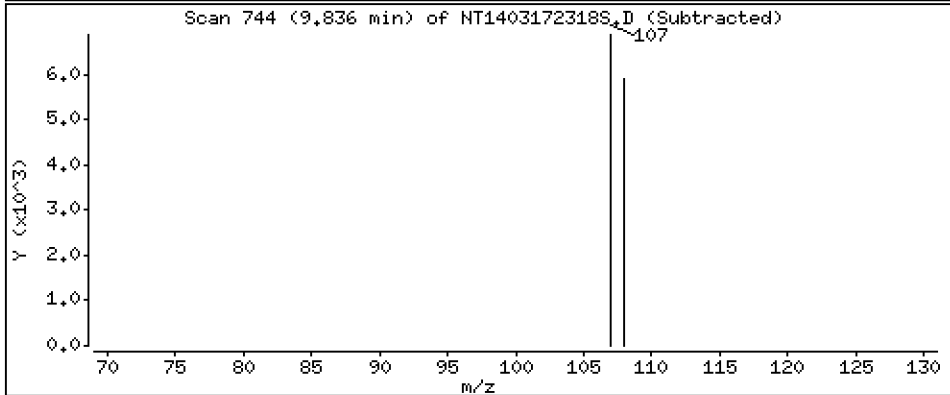
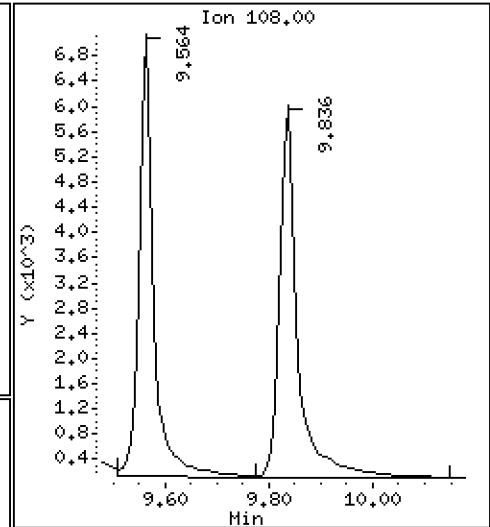
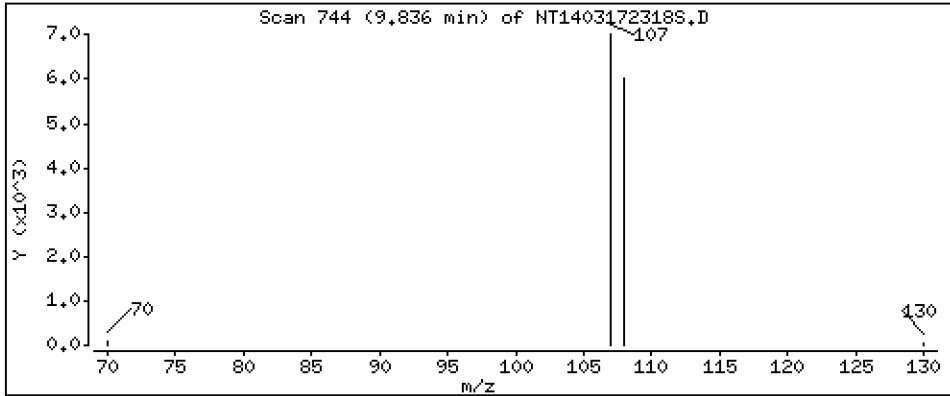
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,1738 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

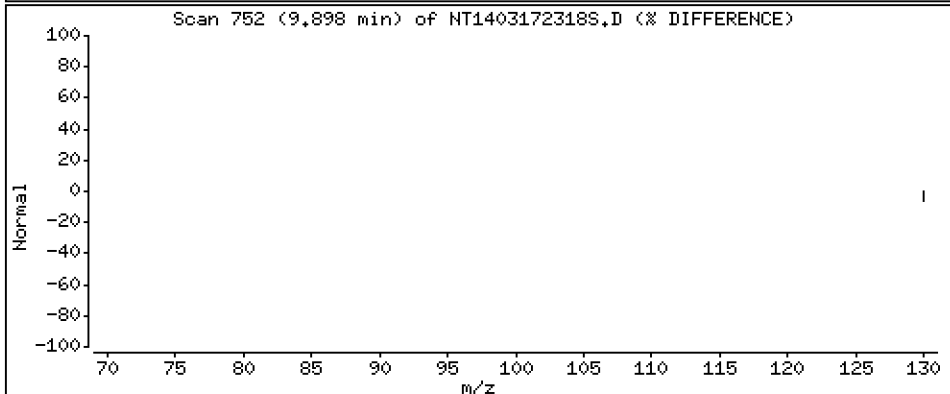
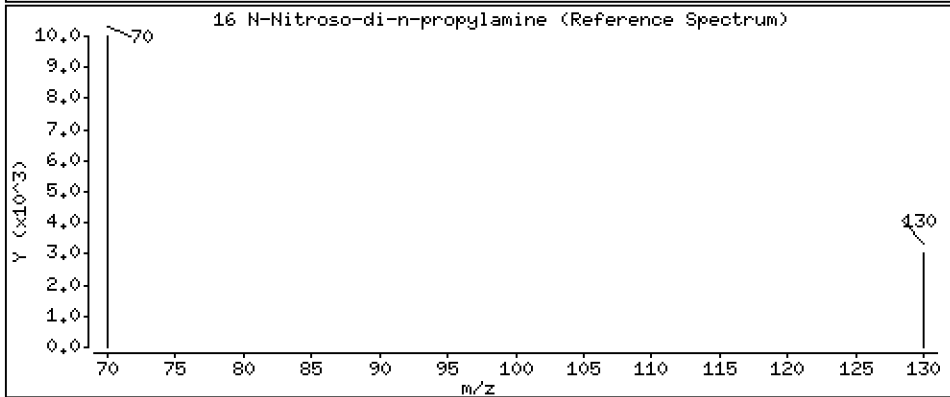
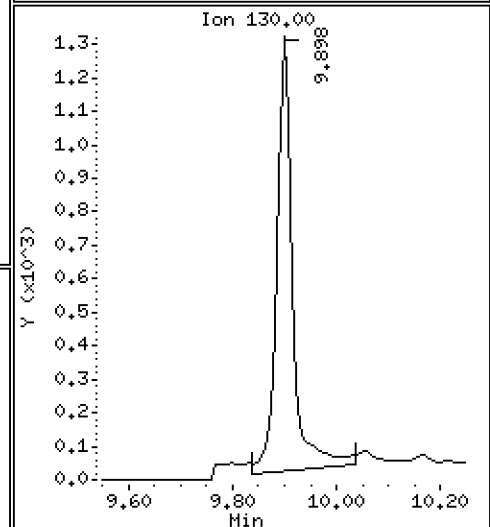
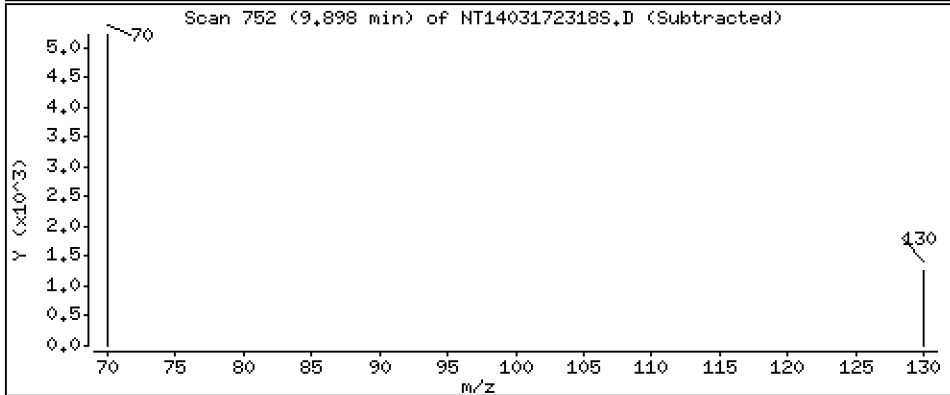
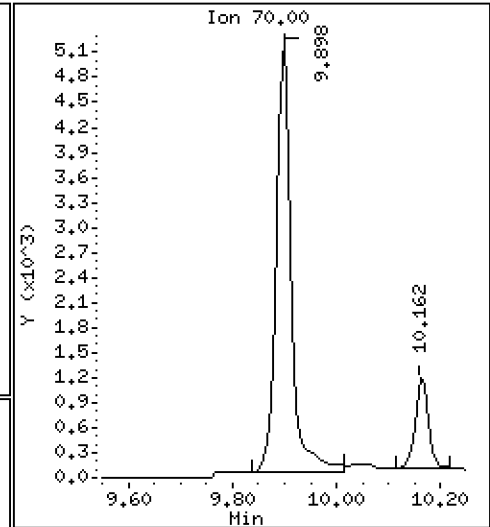
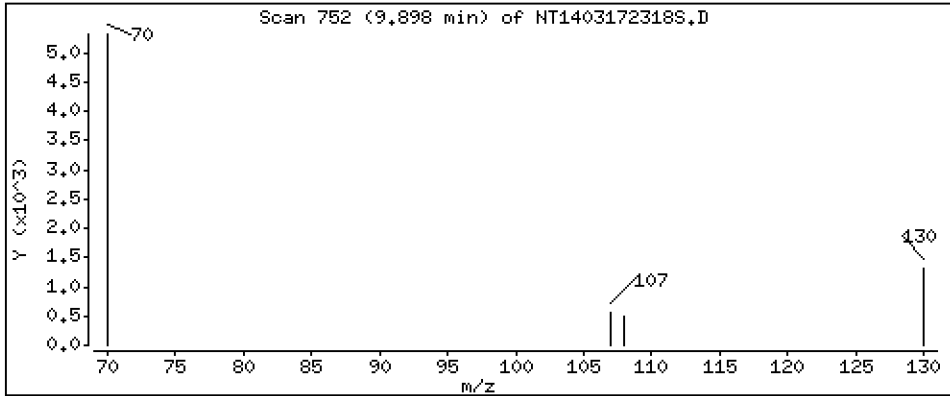
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,1717 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

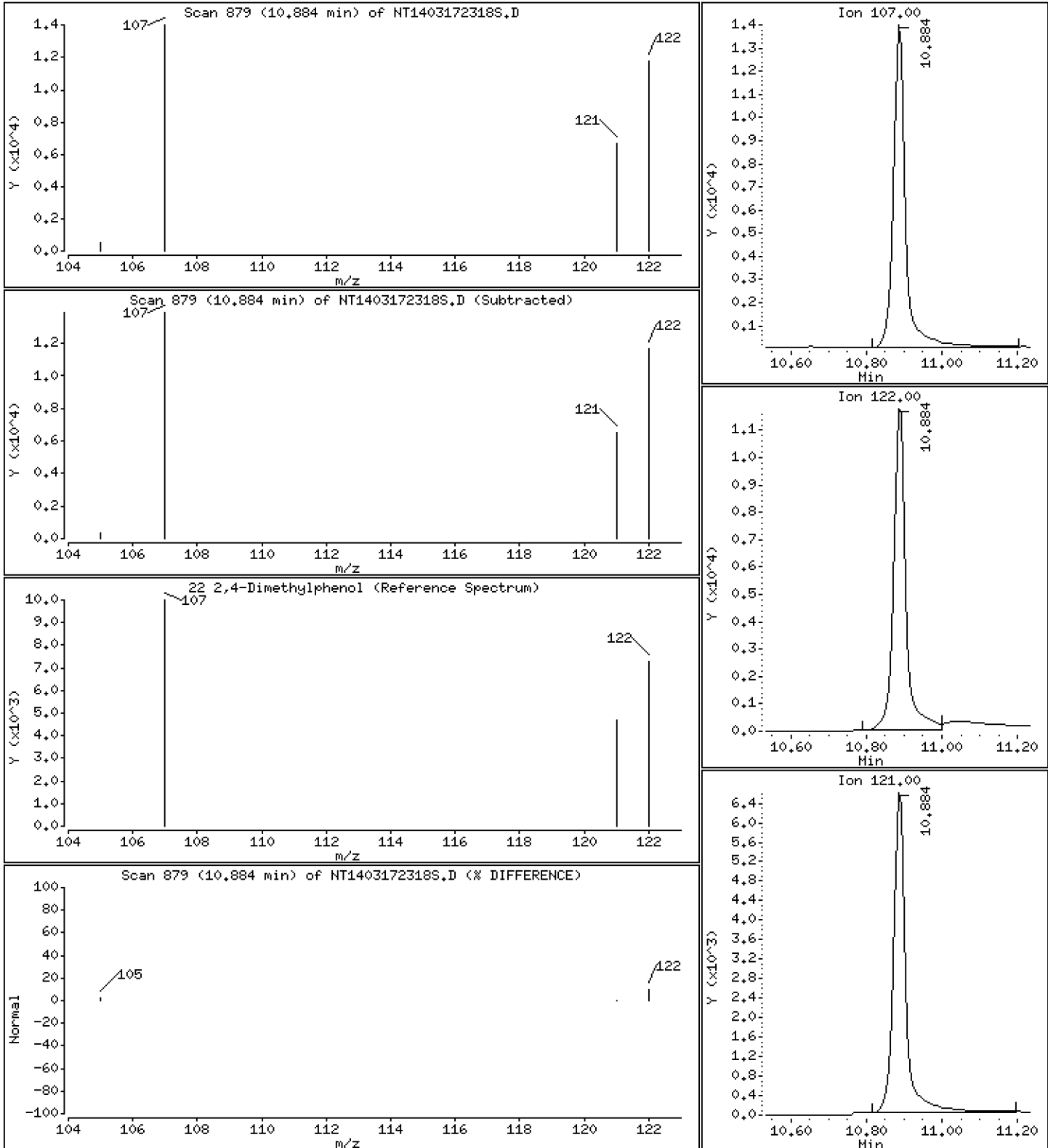
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.3980 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

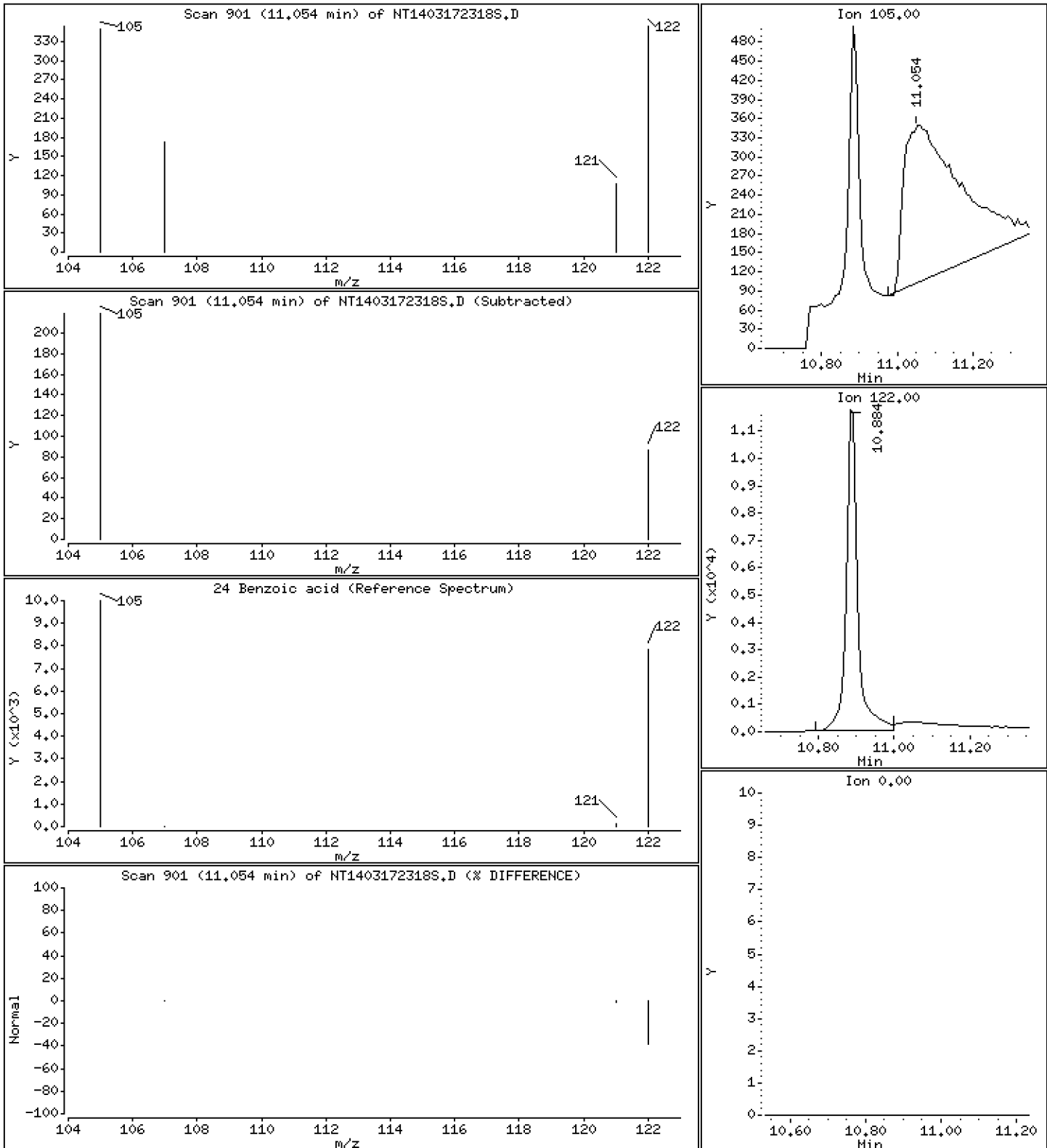
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,04715 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

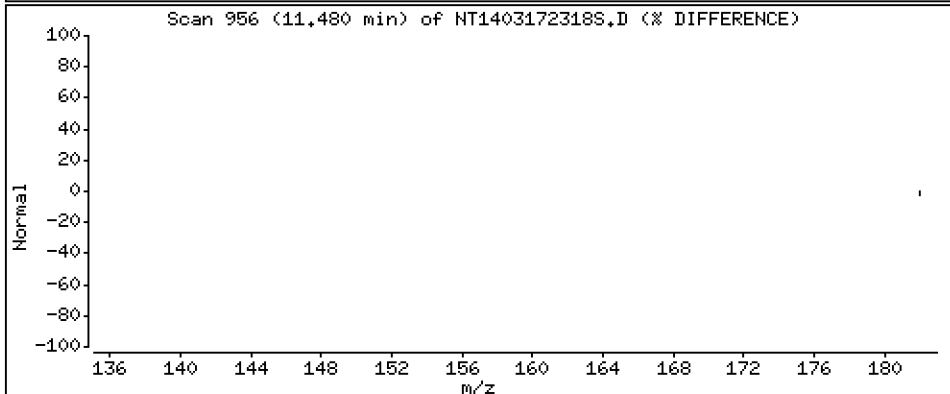
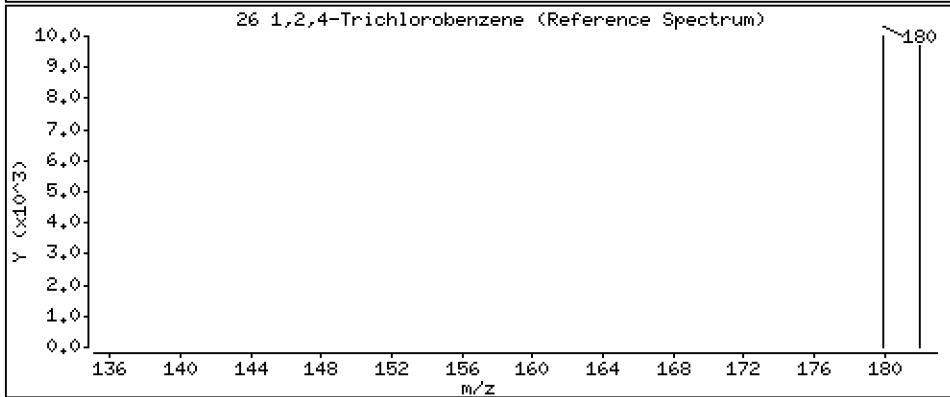
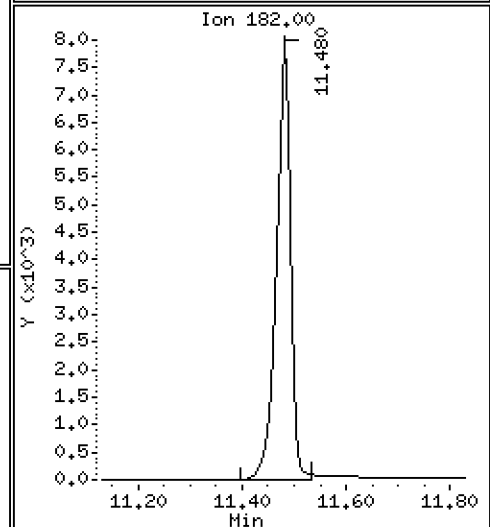
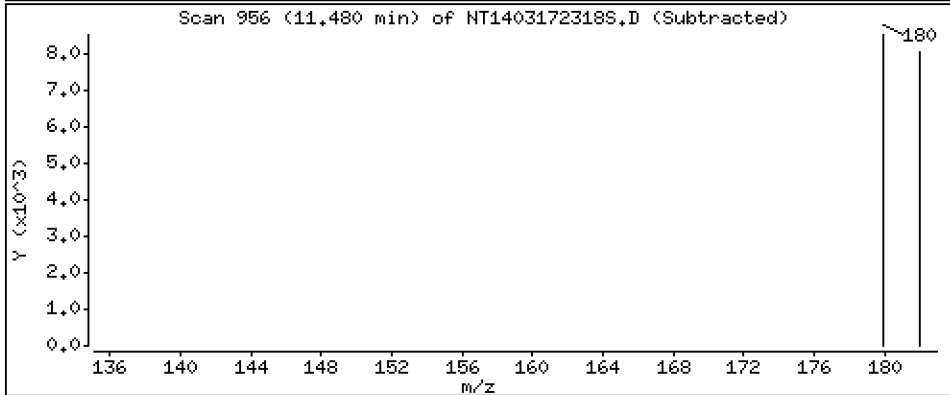
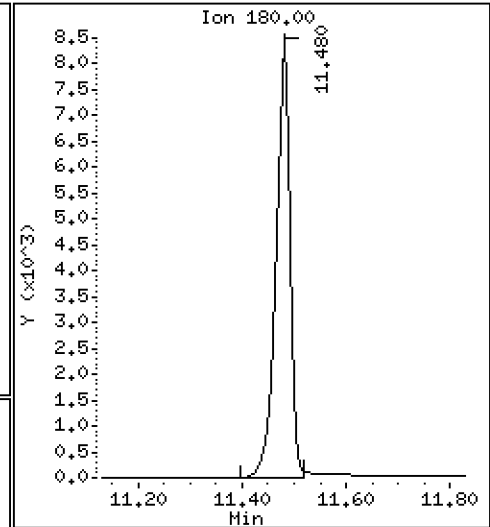
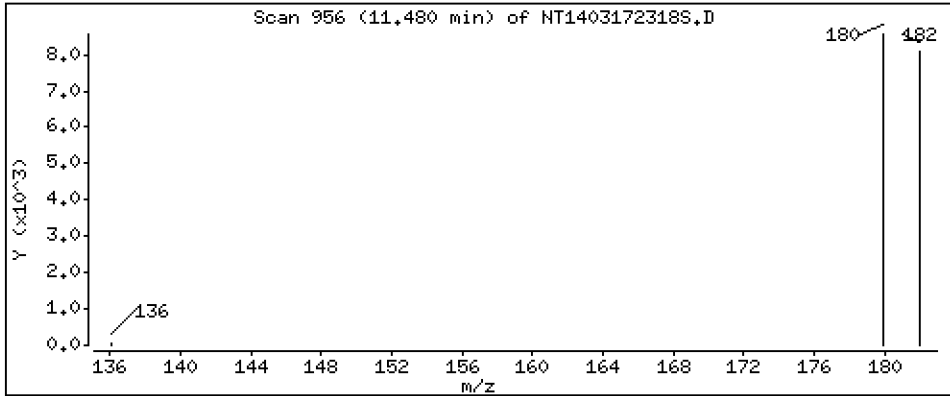
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2072 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

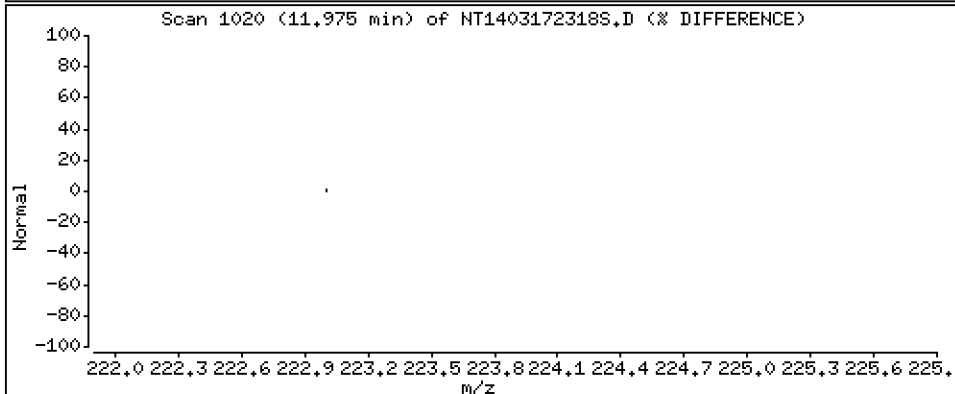
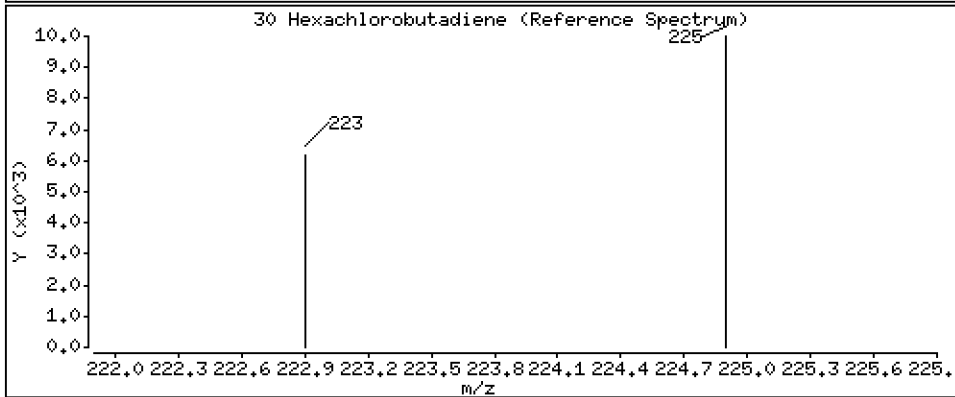
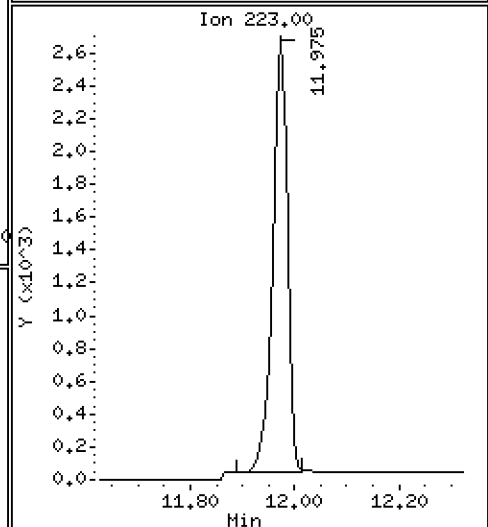
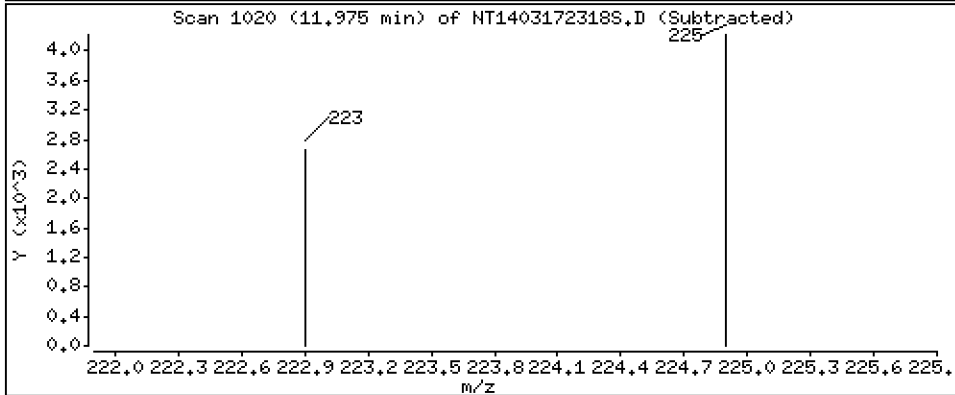
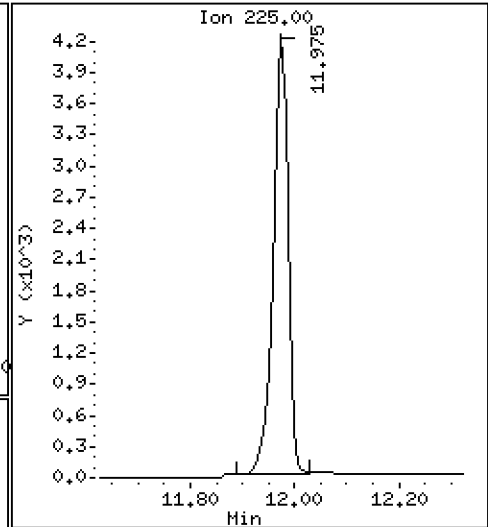
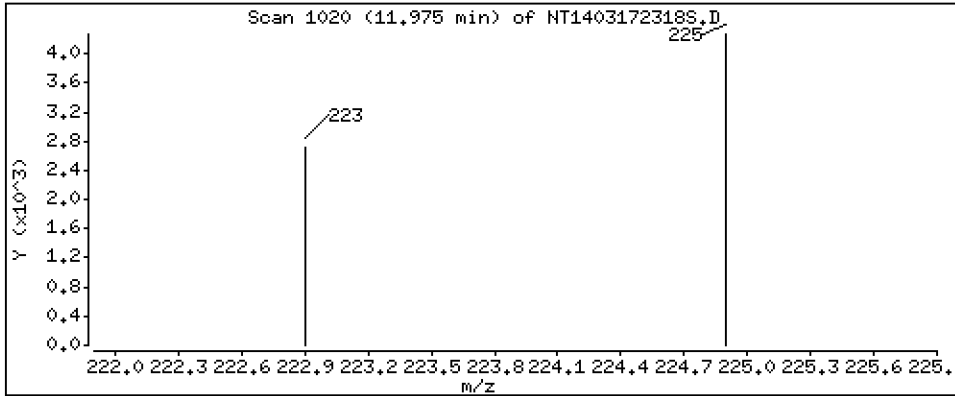
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2108 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

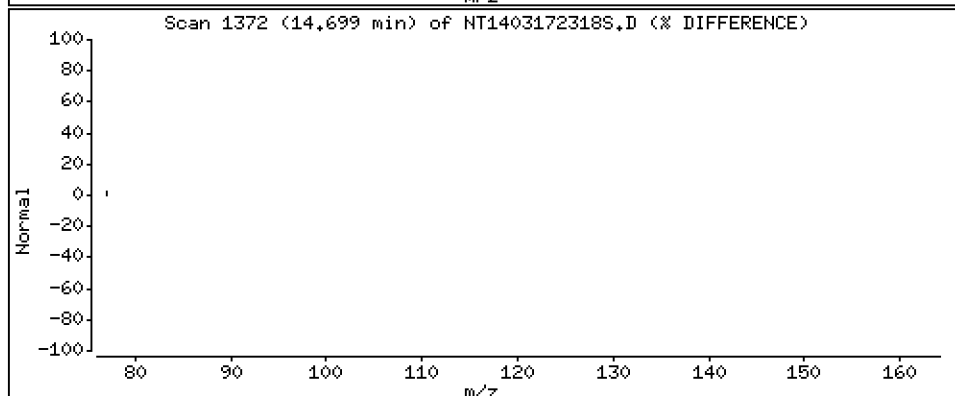
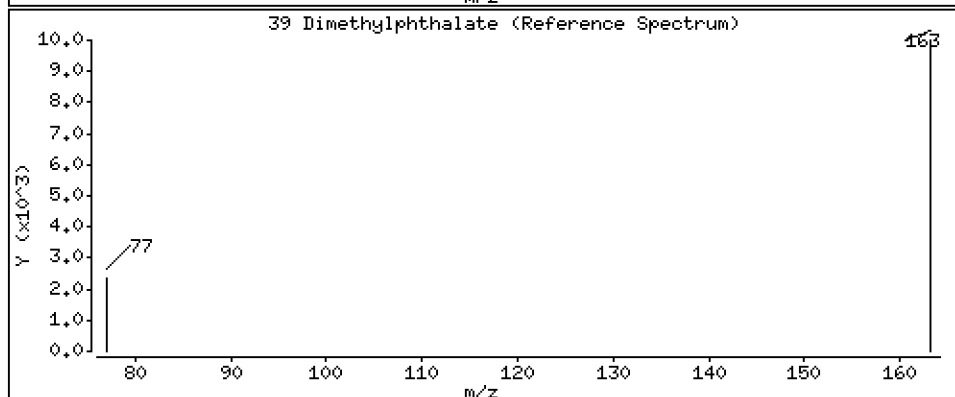
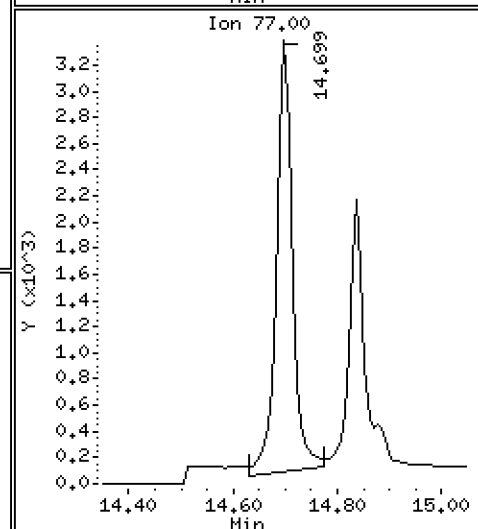
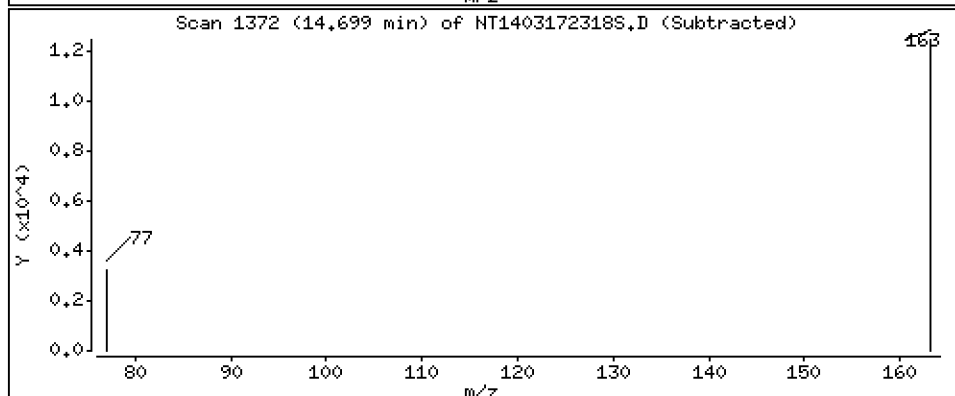
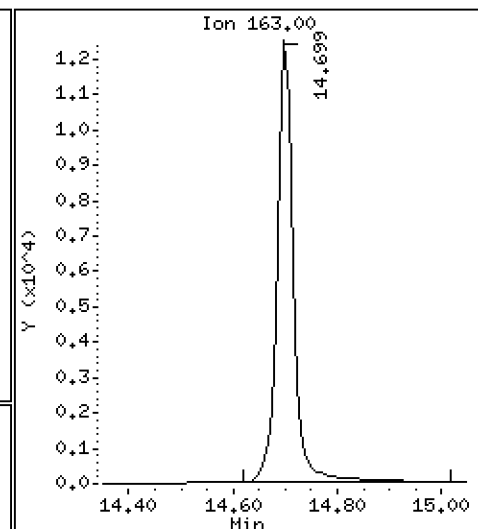
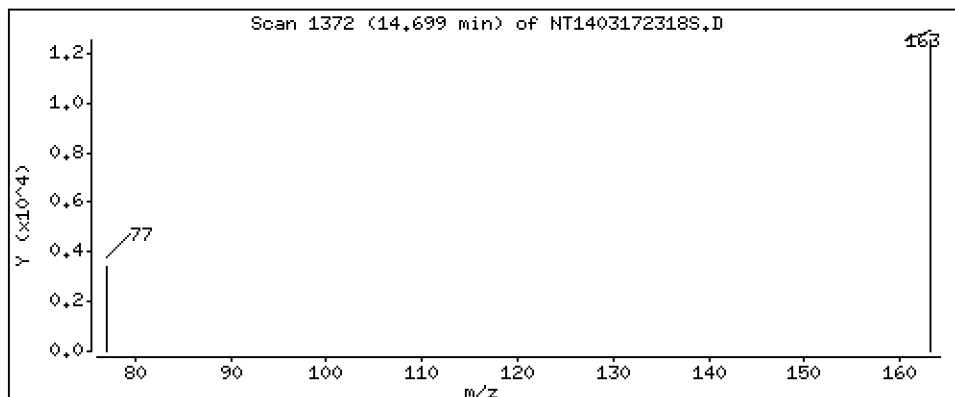
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1887 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

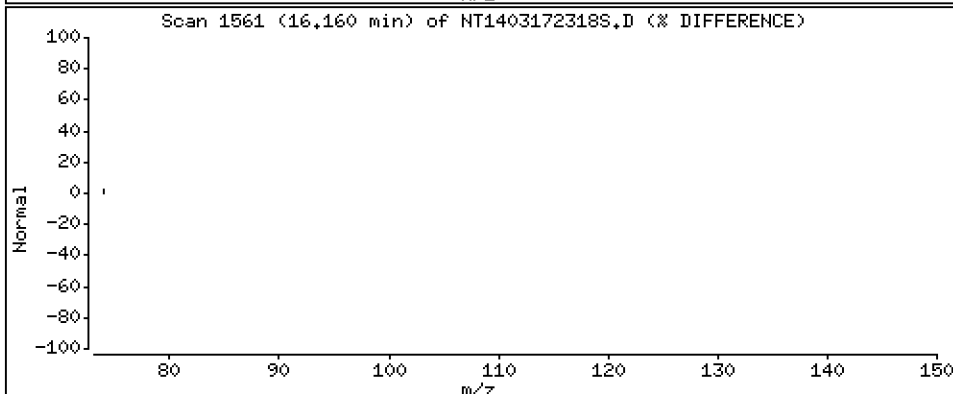
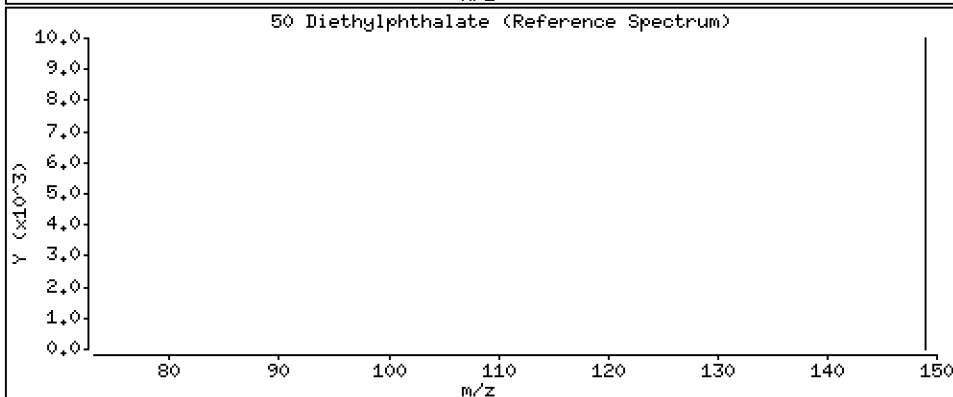
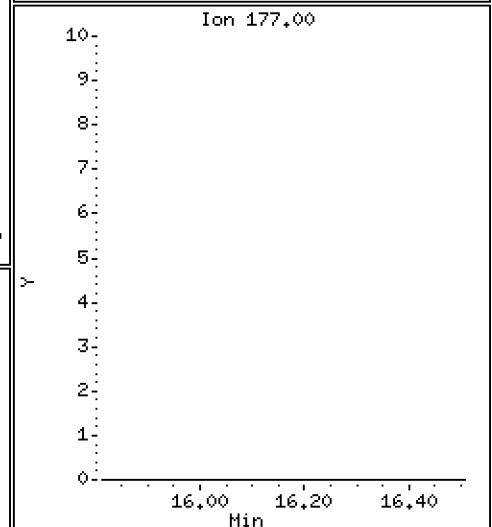
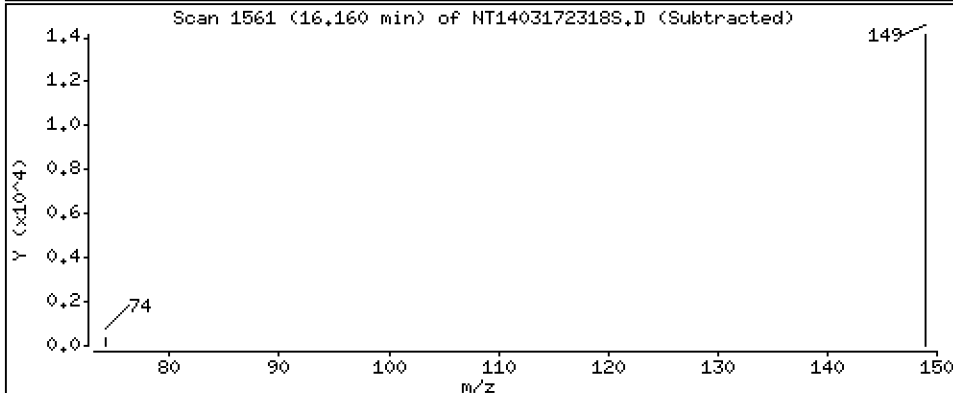
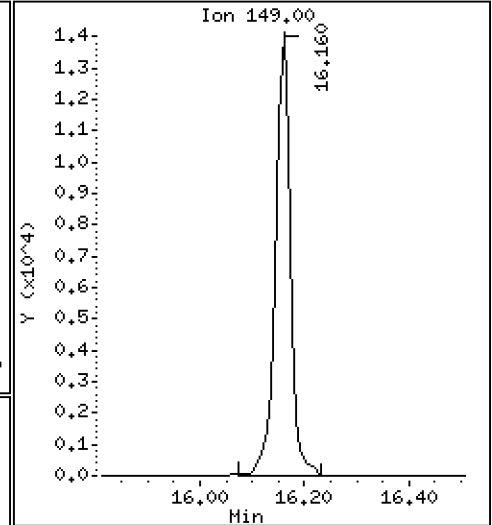
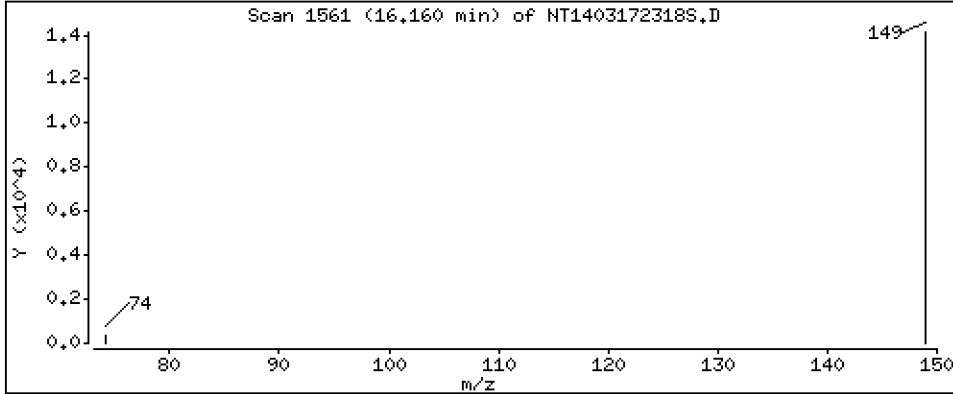
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1834 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

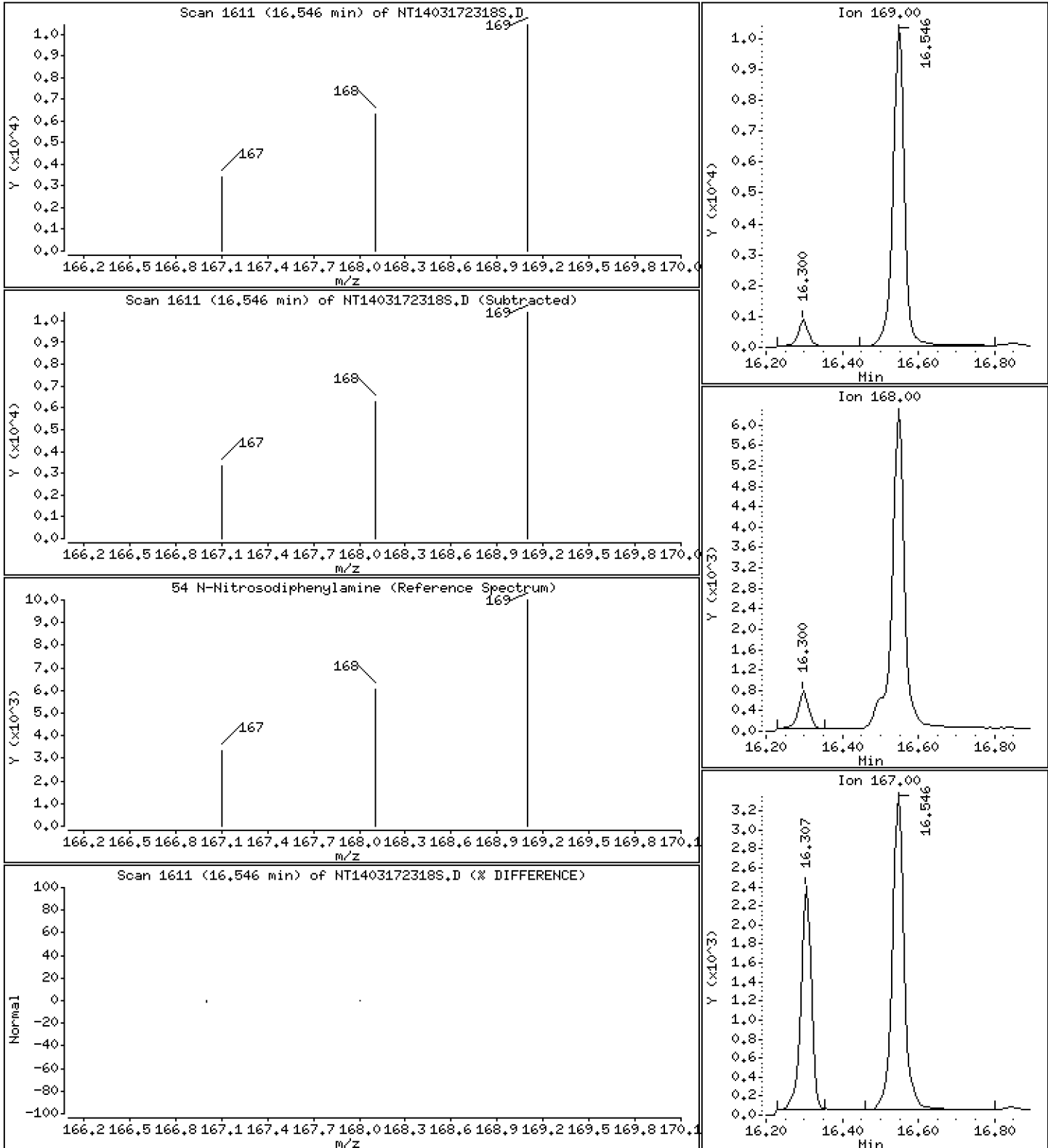
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,1975 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

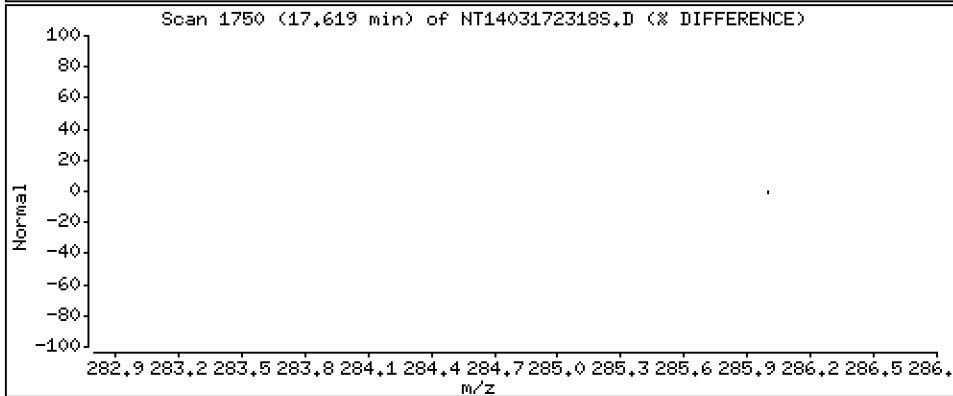
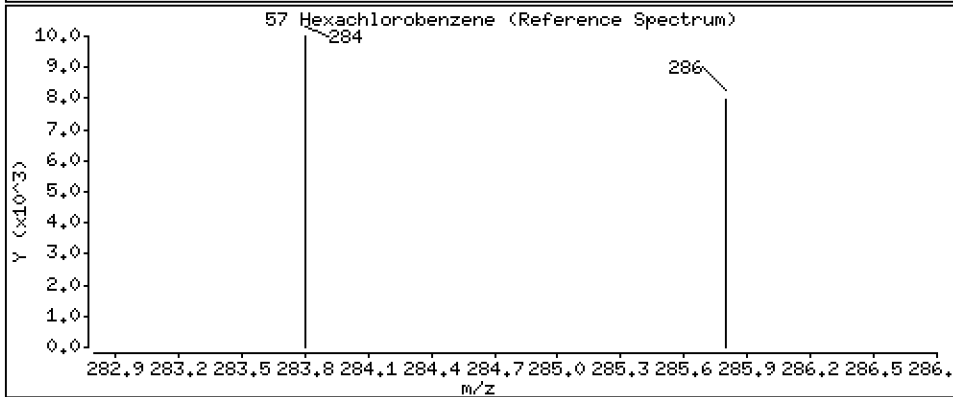
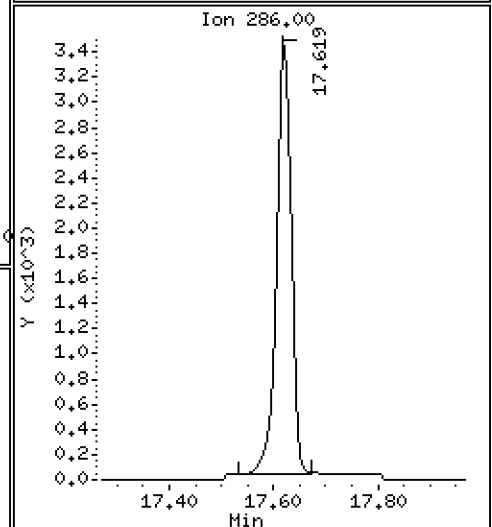
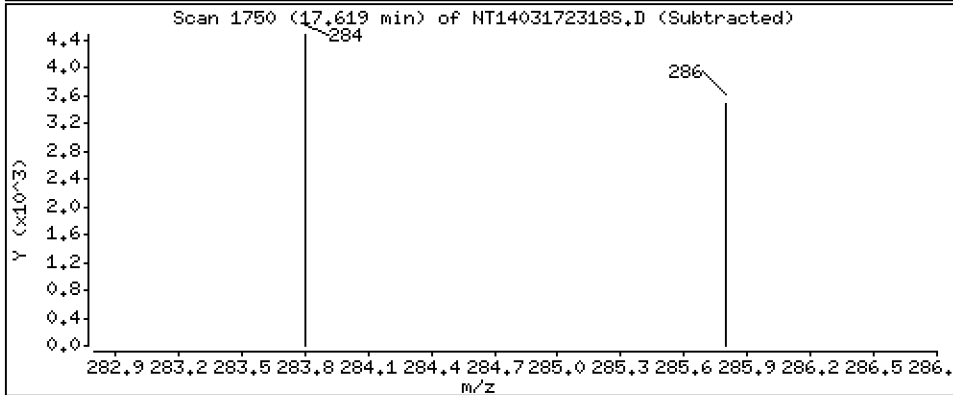
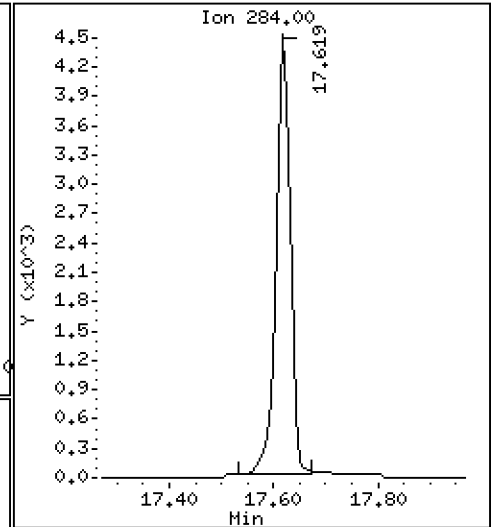
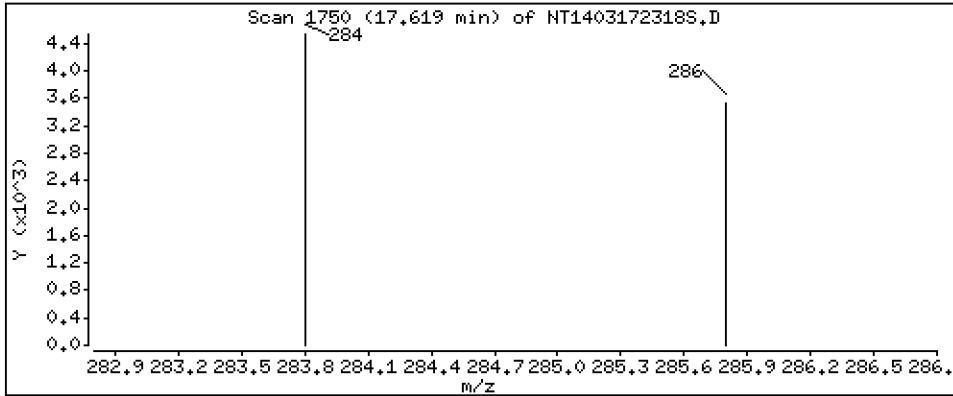
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2034 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

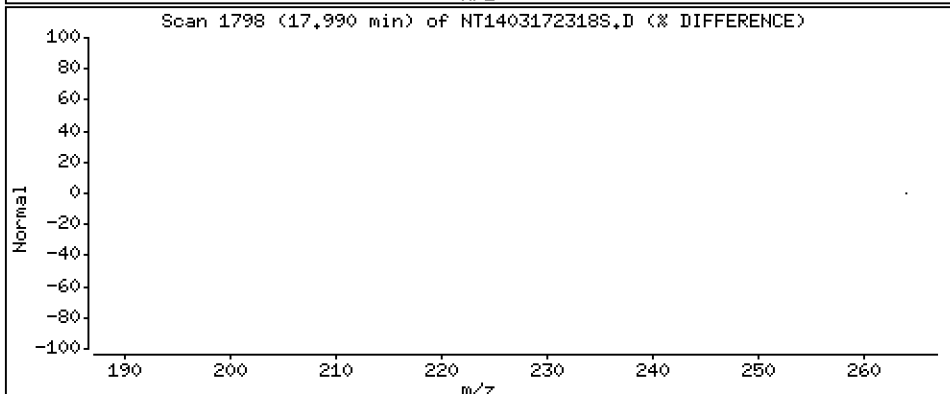
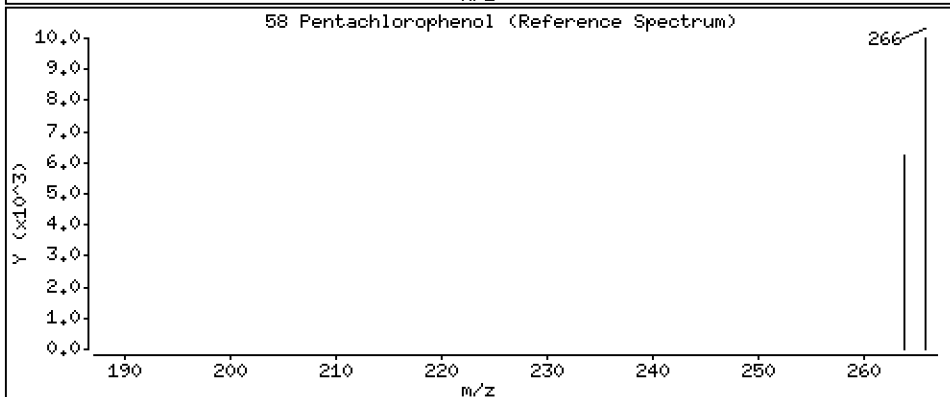
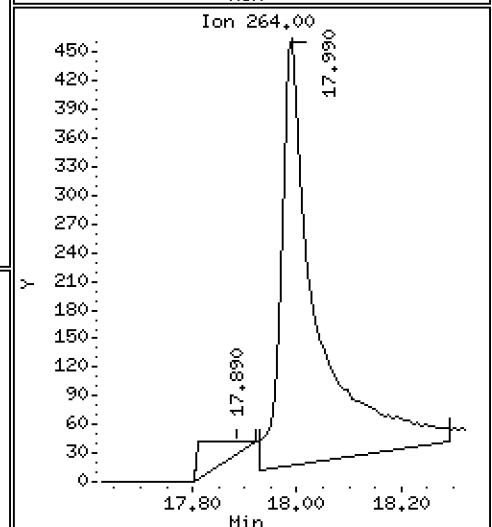
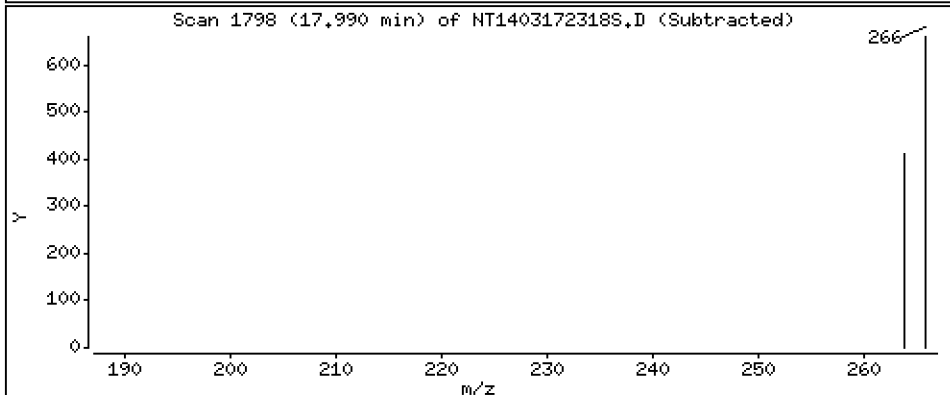
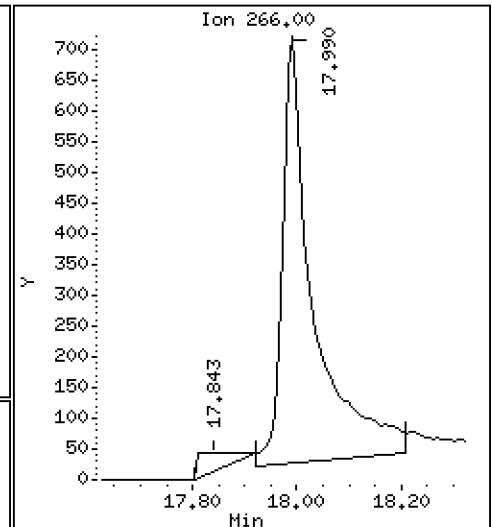
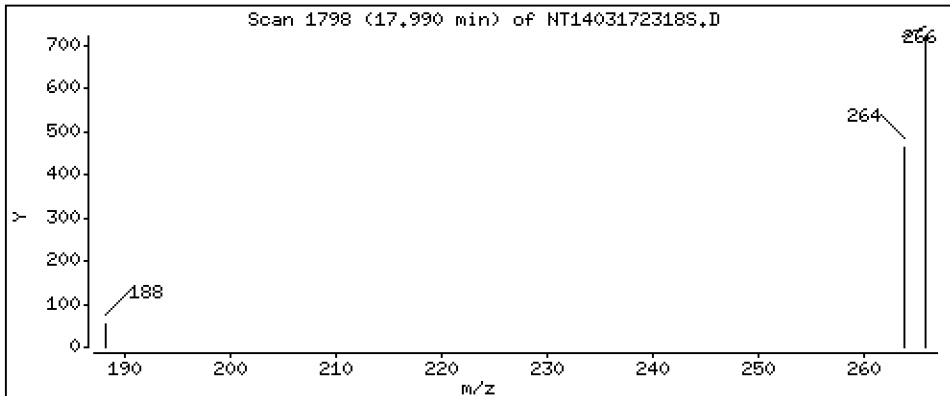
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1050 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

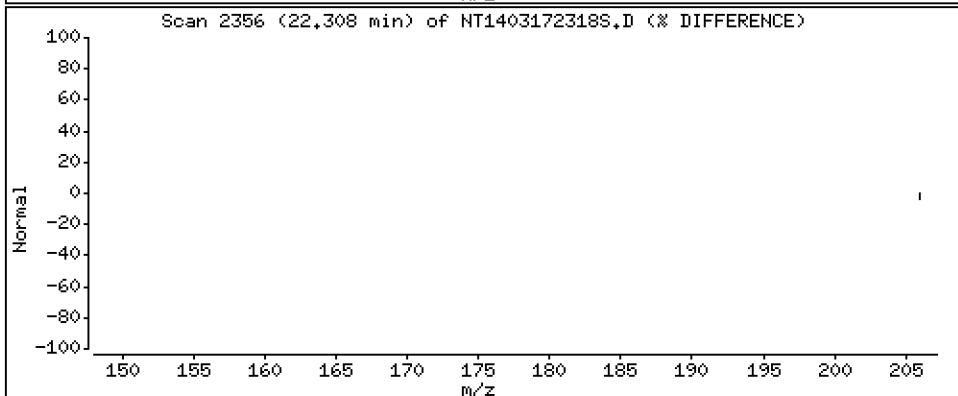
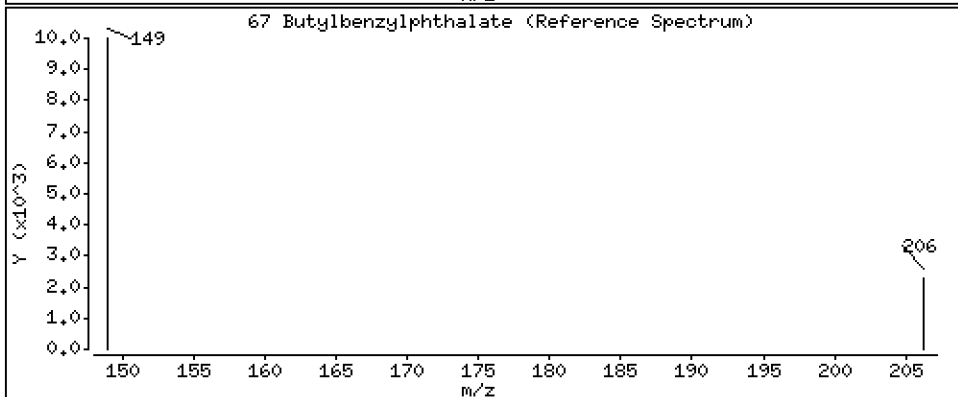
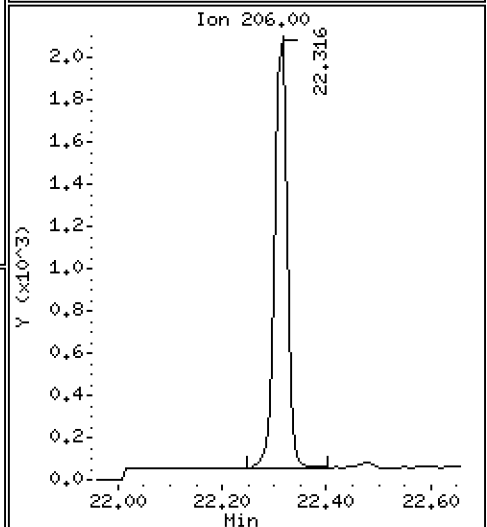
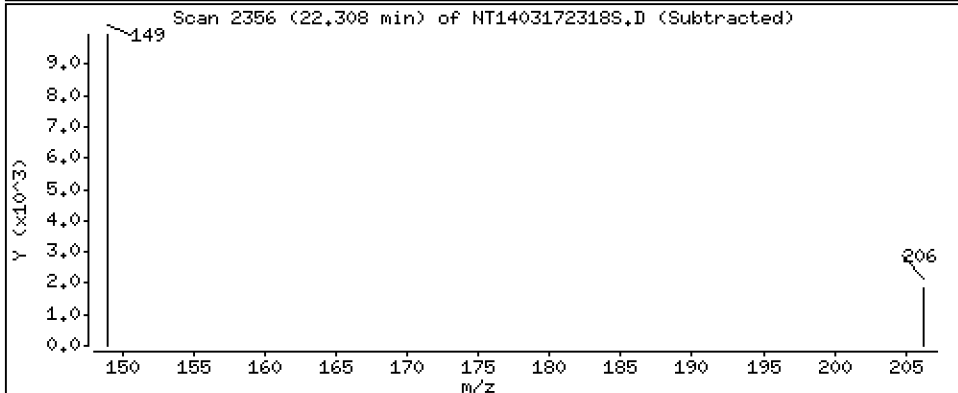
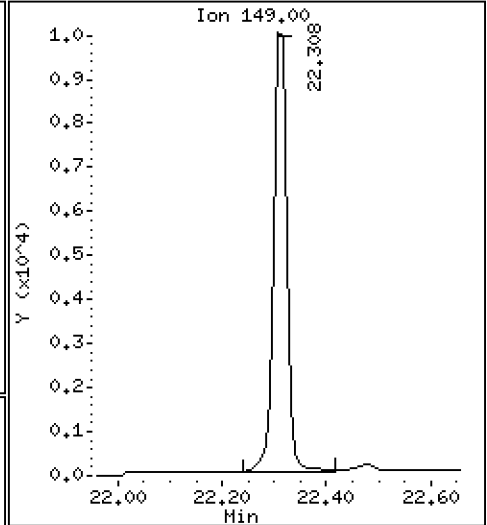
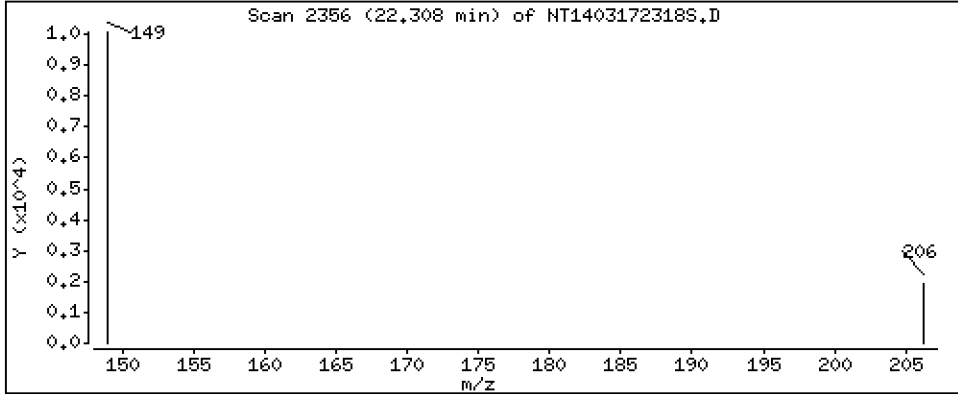
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2001 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

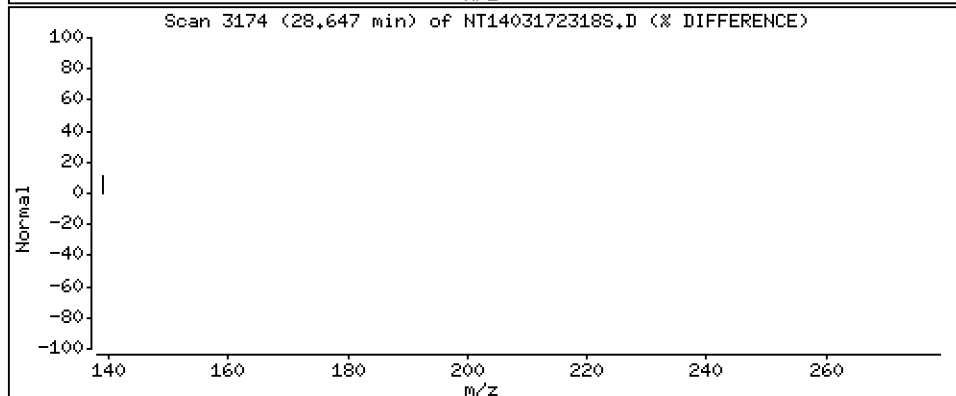
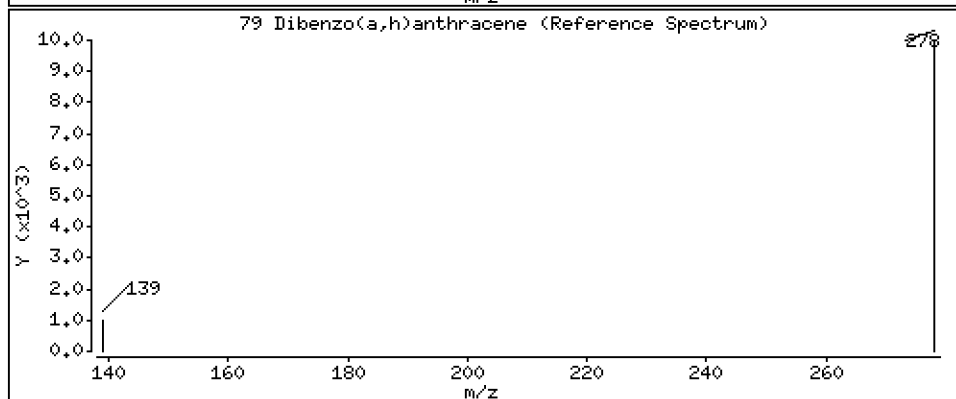
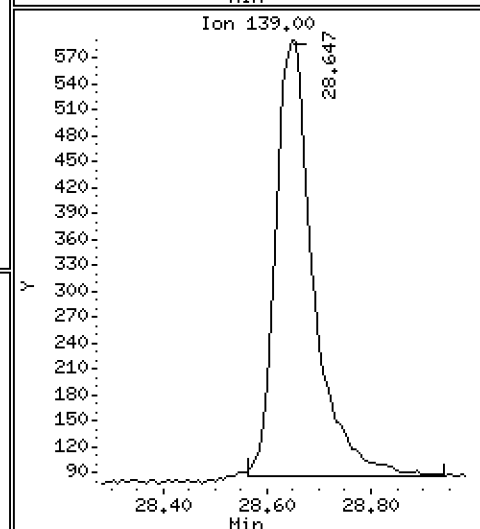
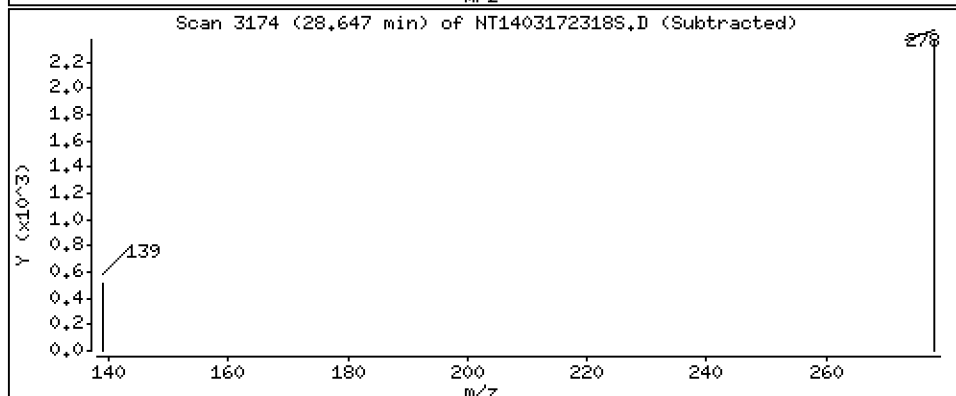
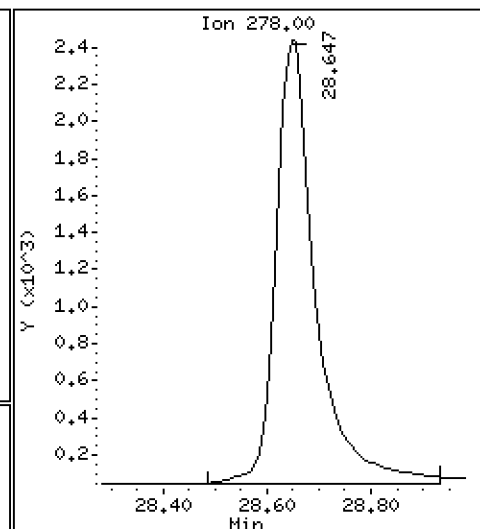
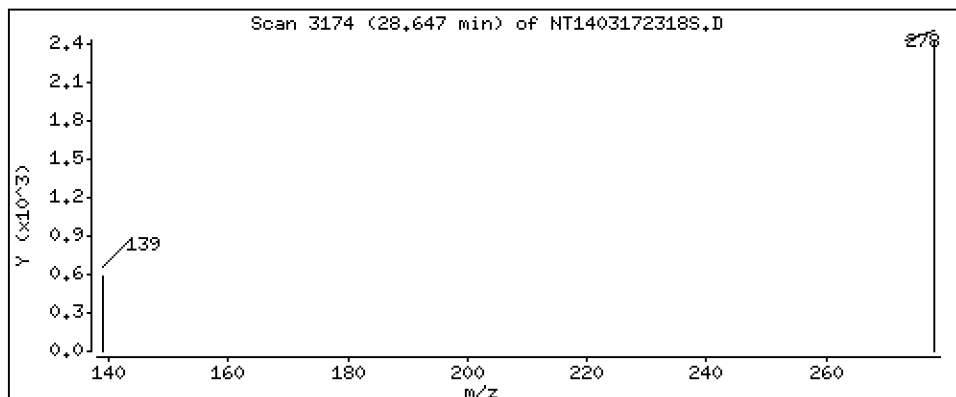
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1587 ug/mL



Date : 18-MAR-2023 00:43

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV3

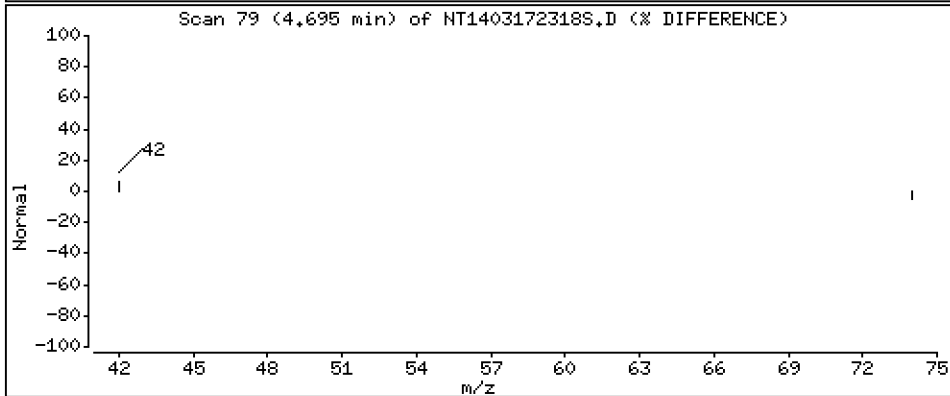
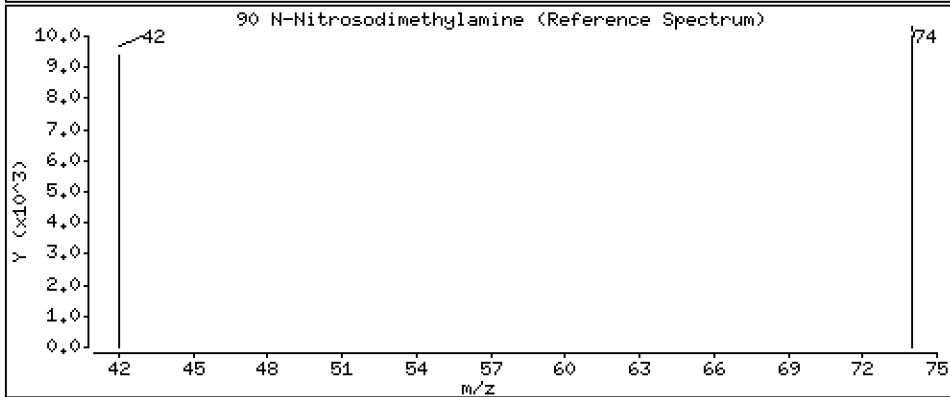
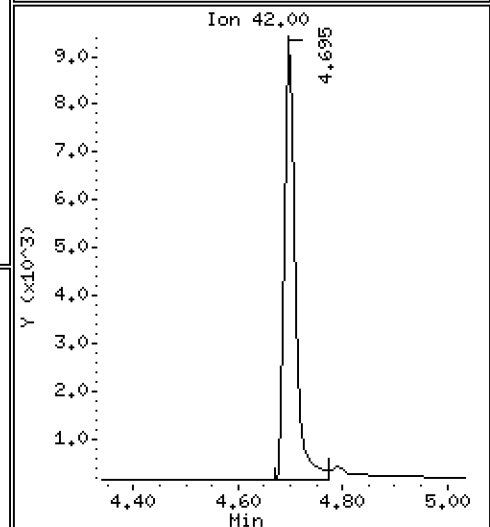
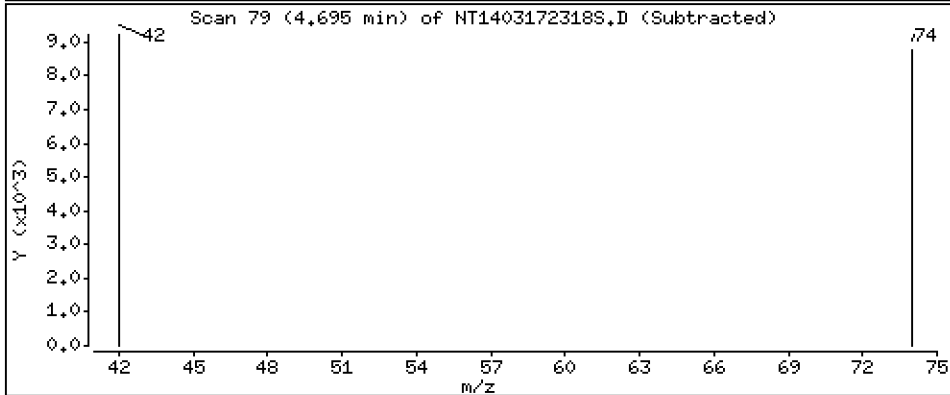
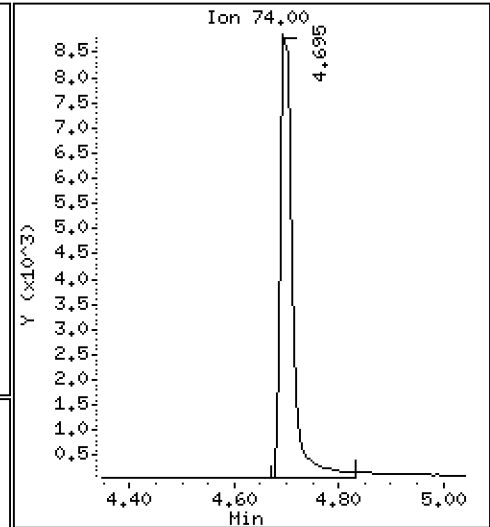
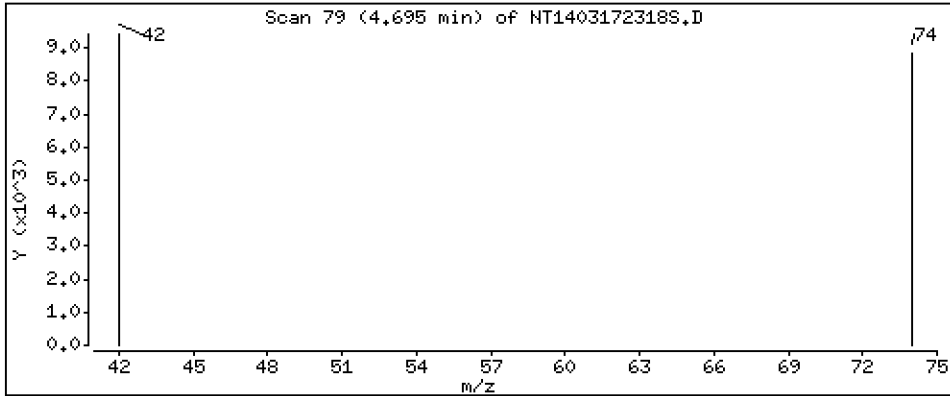
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 0.2716 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172318S.D
 Lab Smp Id: SLC0376-LCV3
 Inj Date : 18-MAR-2023 00:43 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-LCV3
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.826	6.826	(0.753)	19514	0.24246	0.2425 (R)
3 Phenol	94		8.441	8.441	(0.931)	17005	0.15364	0.1536
7 1,3-Dichlorobenzene	146		8.997	8.997	(0.992)	19198	0.20270	0.2027
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	237109	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	18575	0.20267	0.2027
11 Benzyl alcohol	79		9.393	9.354	(1.036)	8432	0.12998	0.1300
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	18161	0.20344	0.2034
13 2-Methylphenol	108		9.564	9.564	(1.055)	14348	0.18767	0.1877
15 4-Methylphenol	108		9.836	9.828	(1.085)	14038	0.17380	0.1738
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	9805	0.17170	0.1717
22 2,4-Dimethylphenol	107		10.883	10.883	(0.941)	29961	0.39798	0.3980
24 Benzoic acid	105		11.054	10.999	(0.956)	2685	0.04715	0.04715 (M)
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	15291	0.20724	0.2072
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	875716	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	7872	0.21082	0.2108
39 Dimethylphthalate	163		14.698	14.698	(0.967)	25932	0.18866	0.1887
* 42 Acenaphthene-d10	162		15.194	15.201	(1.000)	402477	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.064)	26833	0.18336	0.1834
54 N-Nitrosodiphenylamine	169		16.546	16.546	(0.907)	20853	0.19746	0.1975
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	8254	0.20345	0.2034
58 Pentachlorophenol	266		17.990	17.974	(0.986)	2873	0.10496	0.1050
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	779424	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	20015	0.24635	0.2463 (R)
67 Butylbenzylphthalate	149		22.308	22.308	(0.958)	16474	0.20006	0.2001
* 69 Chrysene-d12	240		23.291	23.291	(1.000)	471287	4.00000	
* 77 Perylene-d12	264		25.931	25.931	(1.000)	312893	4.00000	
79 Dibenzo(a,h)anthracene	278		28.647	28.631	(1.105)	12592	0.15875	0.1587
90 N-Nitrosodimethylamine	74		4.694	4.694	(0.518)	13356	0.27163	0.2716

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172318S.D
 Lab Smp Id: SLC0376-LCV3
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	237109	5.28
27 Naphthalene-d8	830434	415217	1660868	875716	5.45
42 Acenaphthene-d10	389907	194954	779814	402477	3.22
59 Phenanthrene-d10	763679	381840	1527358	779424	2.06
69 Chrysene-d12	415791	207896	831582	471287	13.35
77 Perylene-d12	274872	137436	549744	312893	13.83

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.19	-0.05
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	0.00

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

REVIEW SUMMARY FOR FILE - NT1403172318S.D

Lab ID: SLC0376-LCV3

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 00:43

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

NONE

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

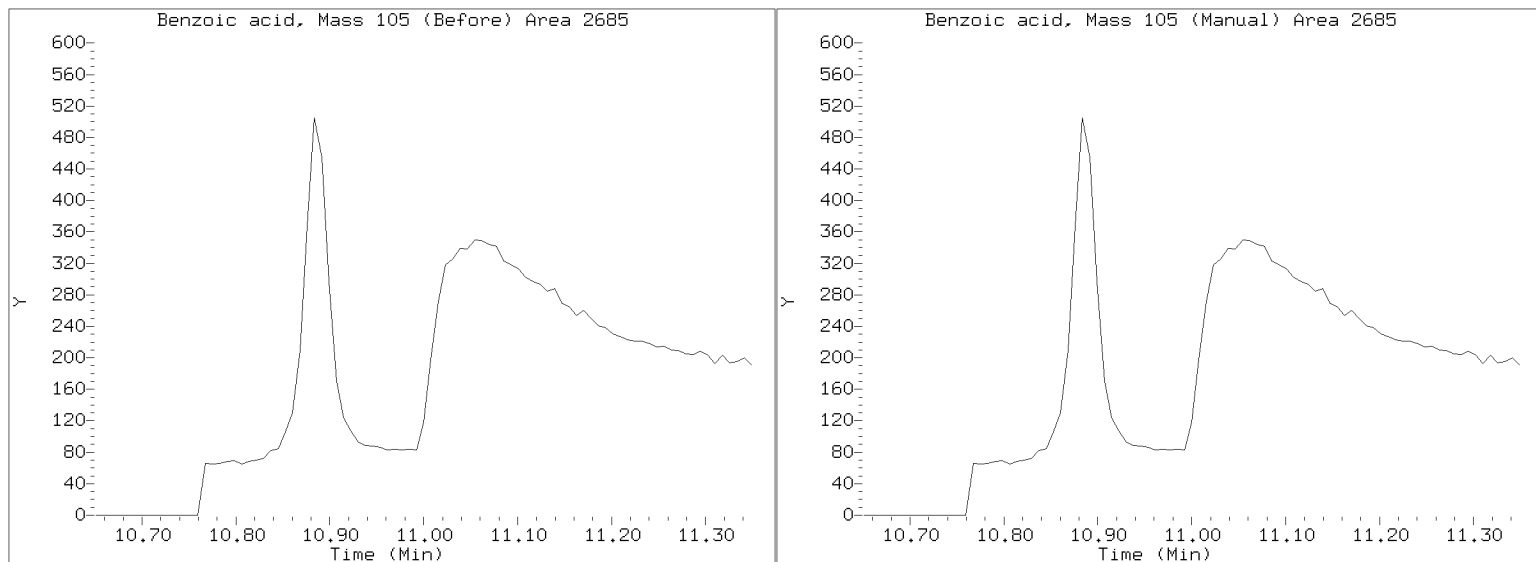
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172318S.D

Injection Date: 18-MAR-2023 00:43

Lab ID: SLC0376-LCV3 Client ID:

Report Date: 03/23/2023 16:55





**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT14</u>	Calibration:	<u>GC00050</u>
Lab File ID:	<u>NT1403172319S.D</u>	Calibration Date:	<u>03/15/2023</u>
Sequence:	<u>SLC0376</u>	Injection Date:	<u>03/18/23</u>
Lab Sample ID:	<u>SLC0376-LCV4</u>	Injection Time:	<u>01:19</u>
Sequence Name:	<u>ABN 0.1</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.5461150	1.6203860		4.8	
1,2-Dichlorobenzene	A	0.10000	0.1	1.5059720	1.5875940		5.4	
Benzyl Alcohol	A	0.10000	0.04	1.0943940	0.3863985		-64.7	
Benzoic acid	A	0.40000	0.0	0.1762504				
2,4-Dimethylphenol	A	0.20000	0.2	0.3438645	0.3240668		-5.8	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.3370247	0.3634431		7.8	
N-Nitrosodiphenylamine	A	0.10000	0.09	0.5419762	0.5115377		-5.6	
Pentachlorophenol	A	0.20000	0.03	0.1113753	0.0190260		-86.5	
2-Fluorophenol	A	0.15000	0.110	1.3577520	0.9995962		-26.4	
p-Terphenyl-d14	A	0.10000	0.129	0.6895811	0.8863625		28.5	

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.1\20230317.16\20230317.16\NT14031723195.D

Date: 18-MAR-2023 01:19

Client ID:

Sample Info: SLC0376-LCW4

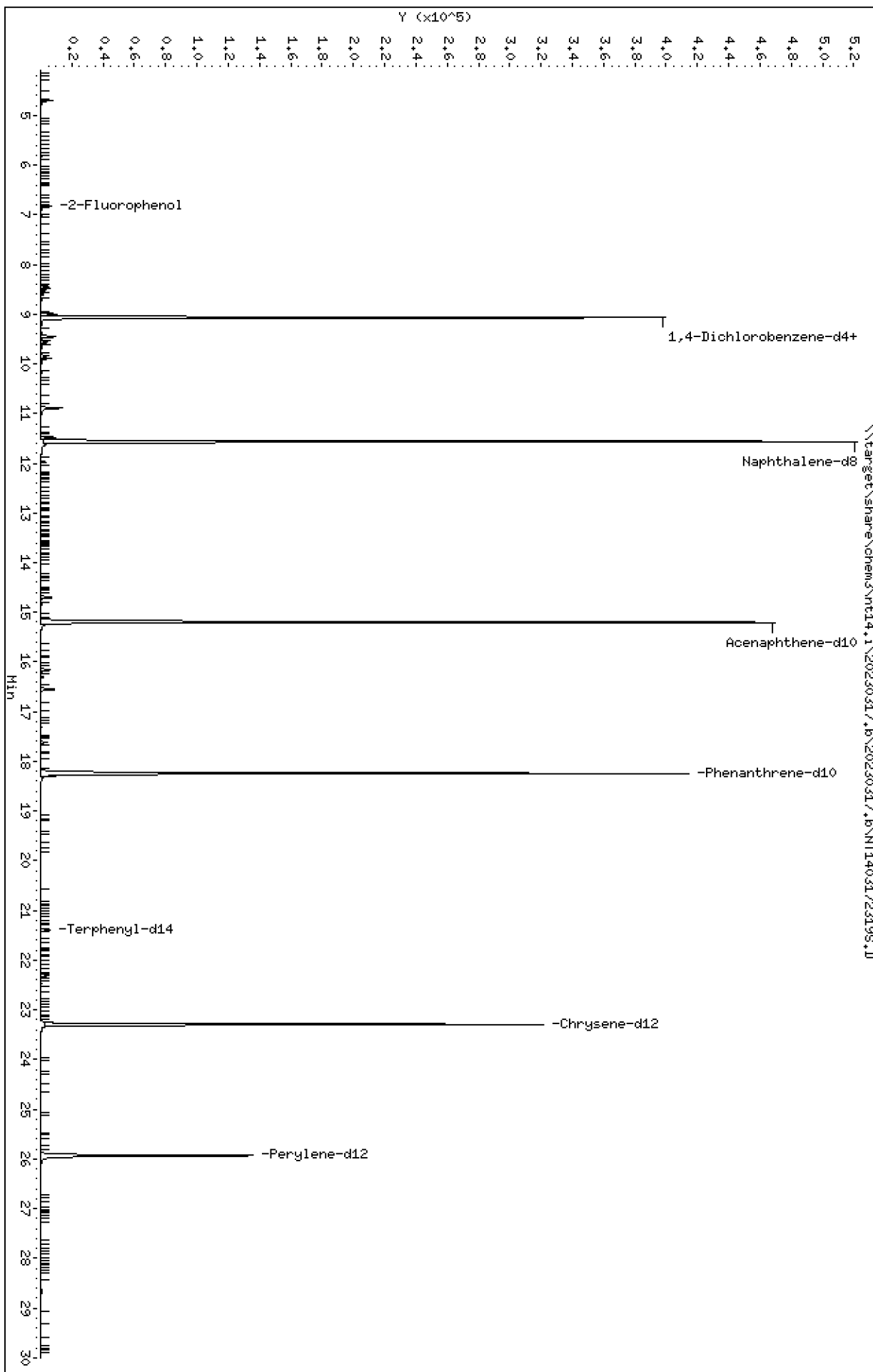
Instrument: nt14.1

Column phase: ZB-5msi

Operator: JGR

Column diameter: 0.25

Page 1



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

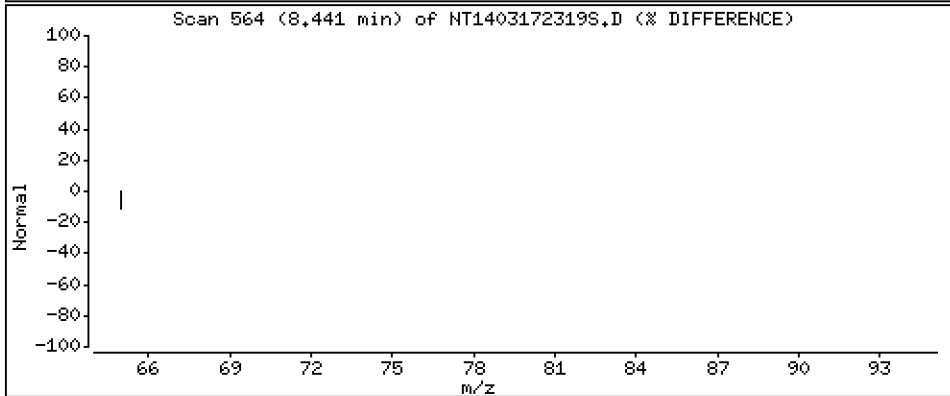
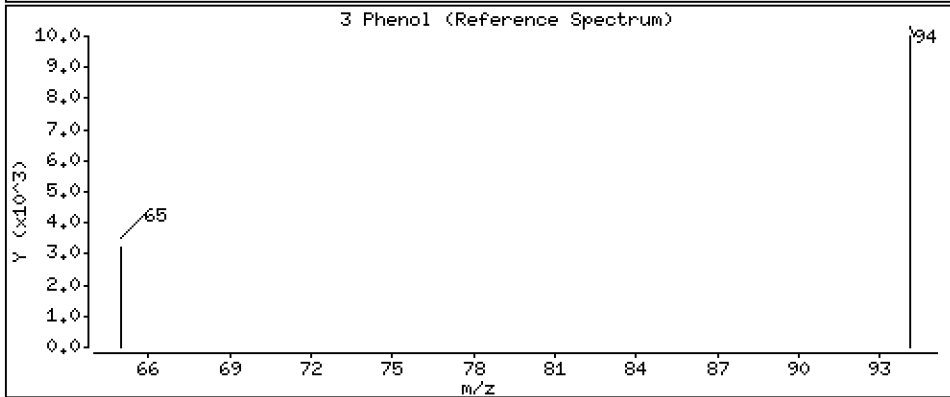
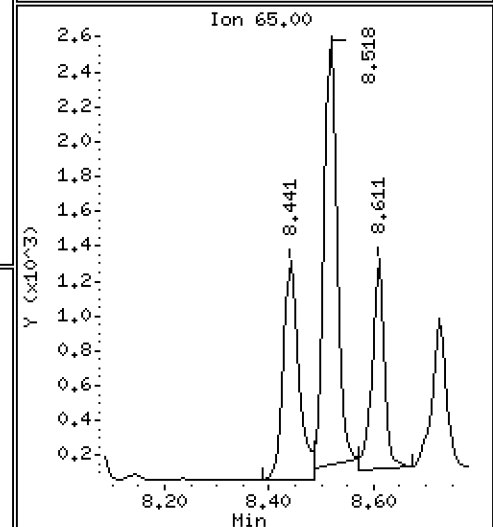
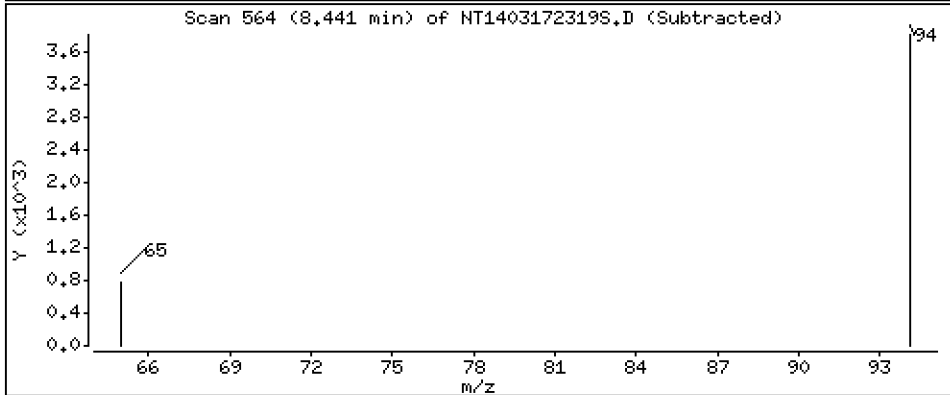
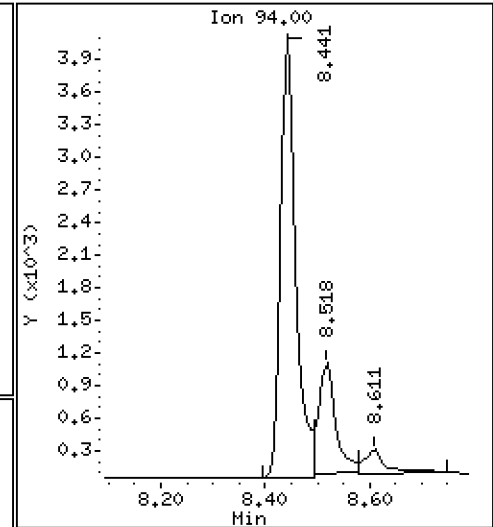
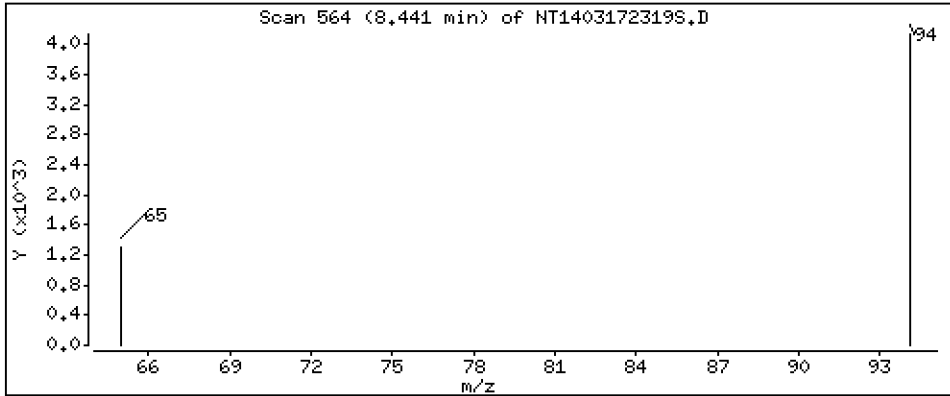
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,06874 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

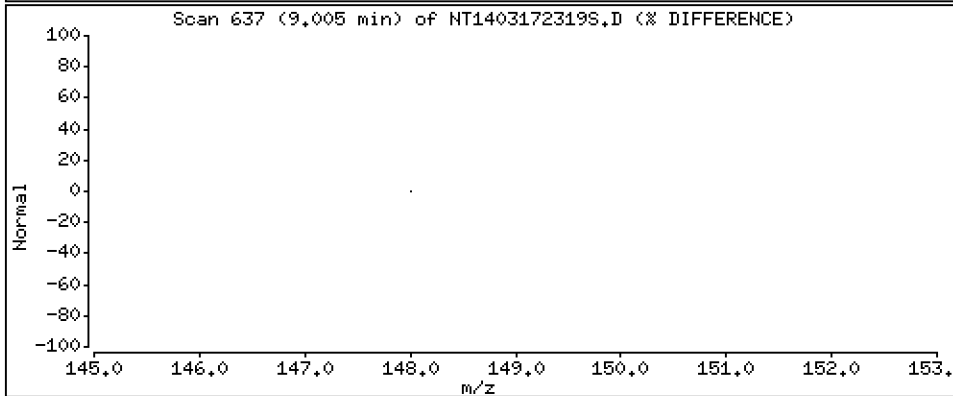
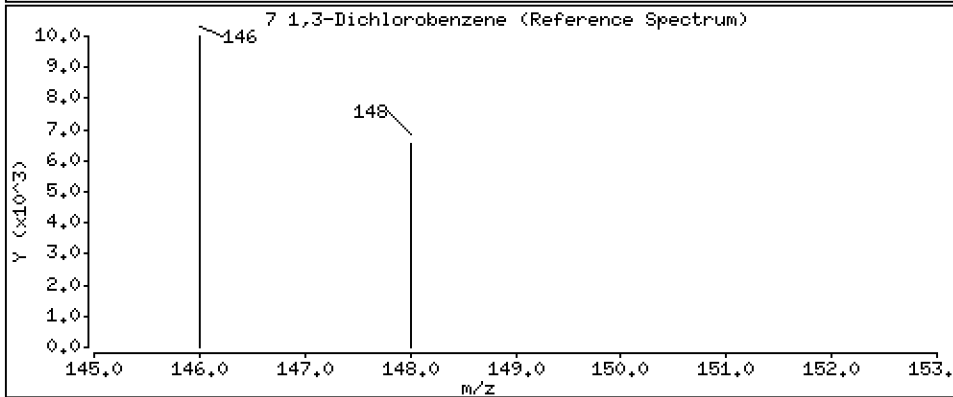
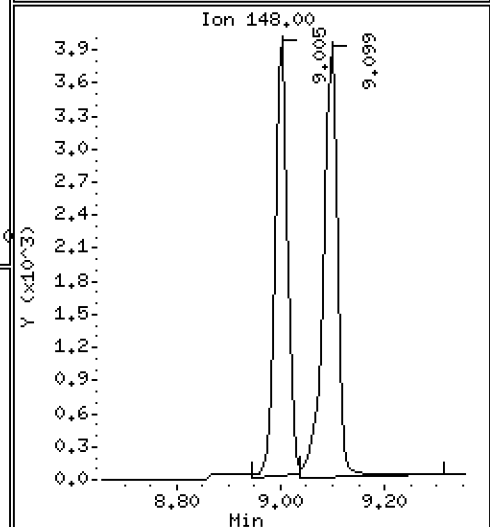
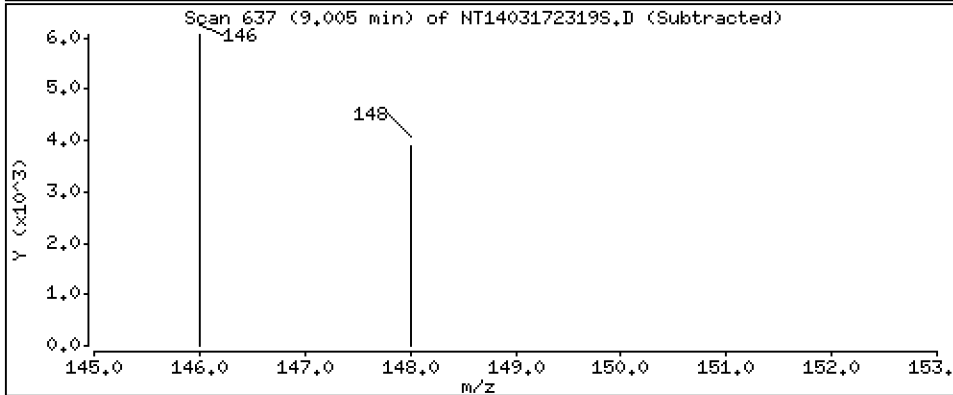
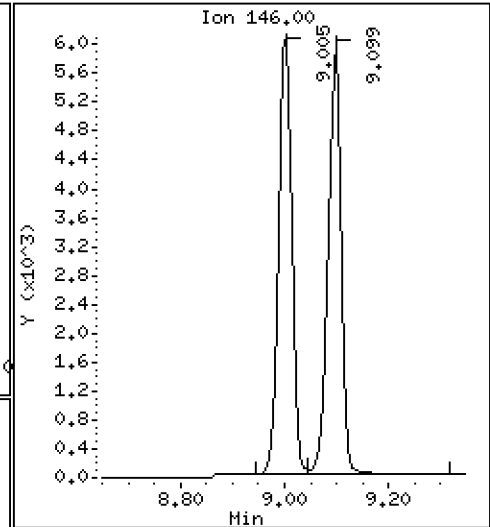
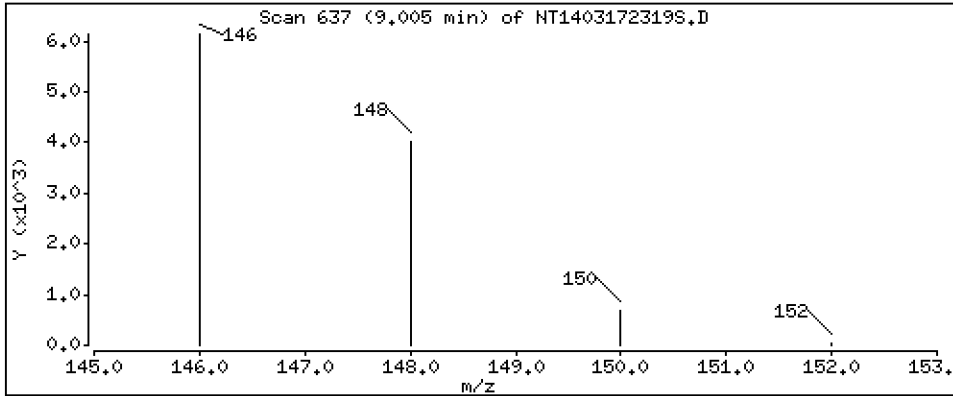
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,1039 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

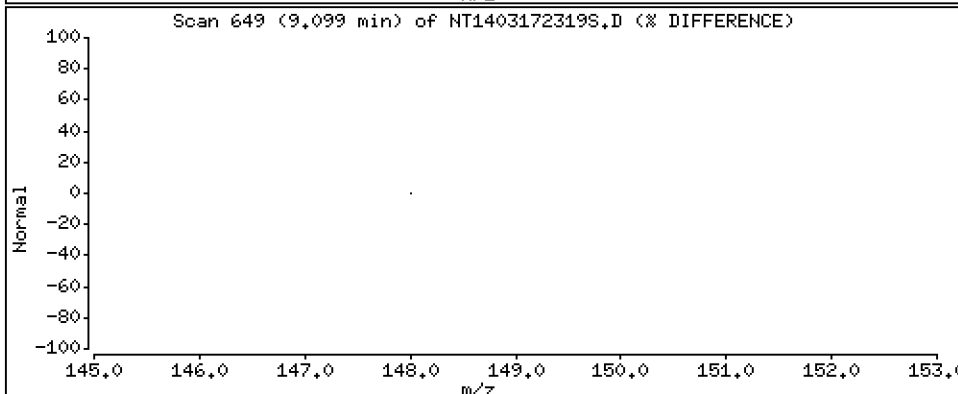
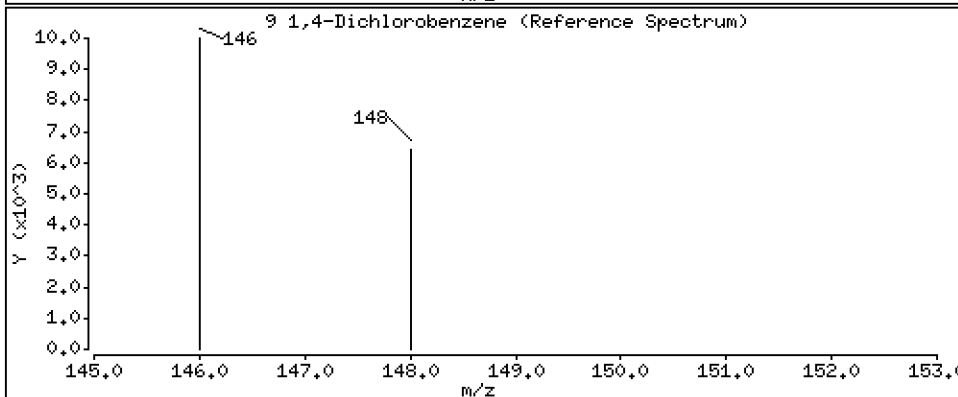
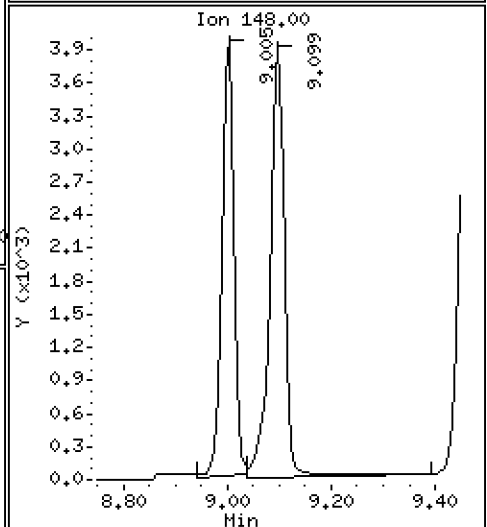
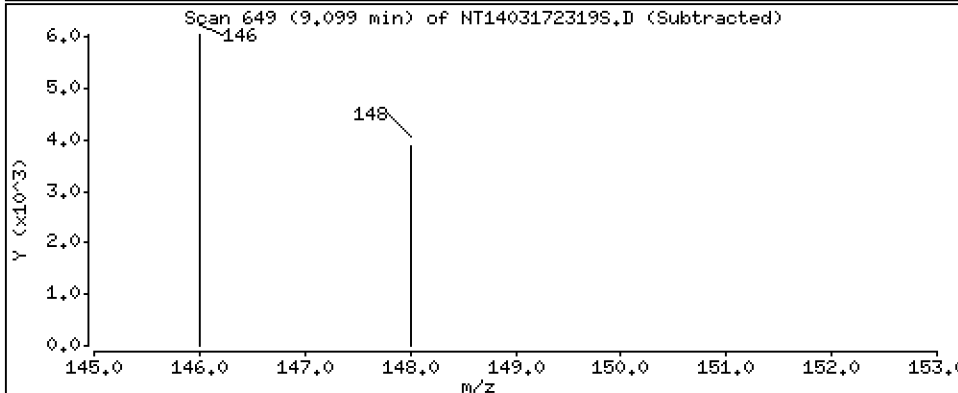
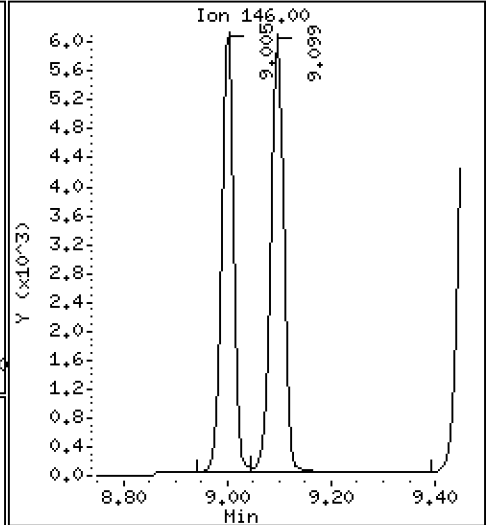
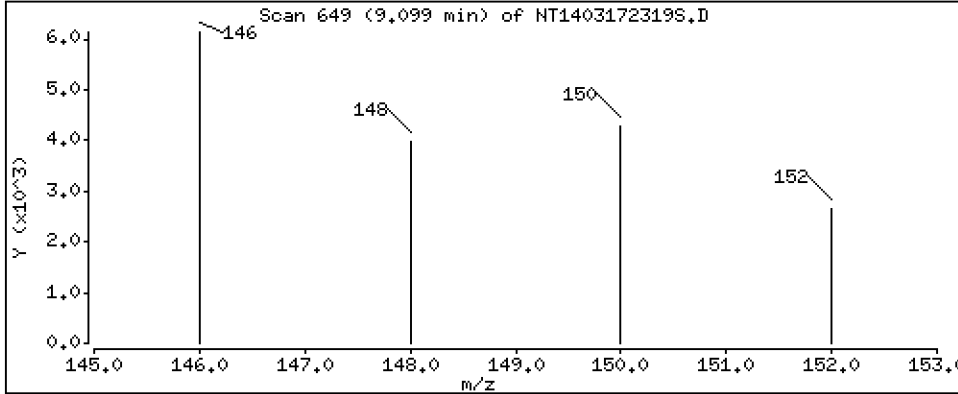
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1048 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

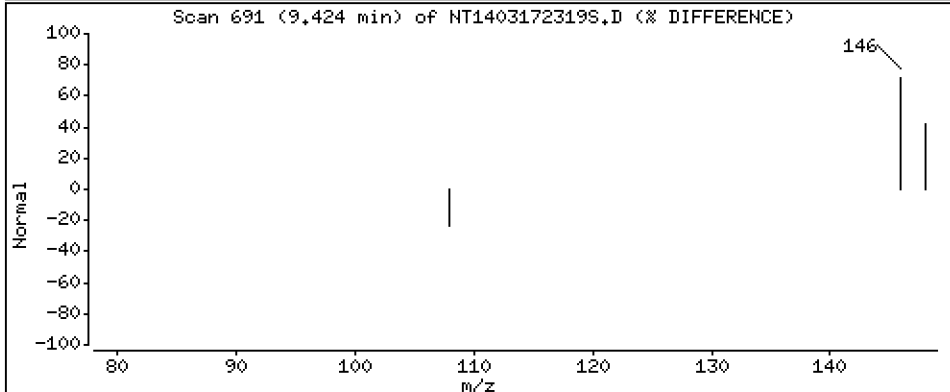
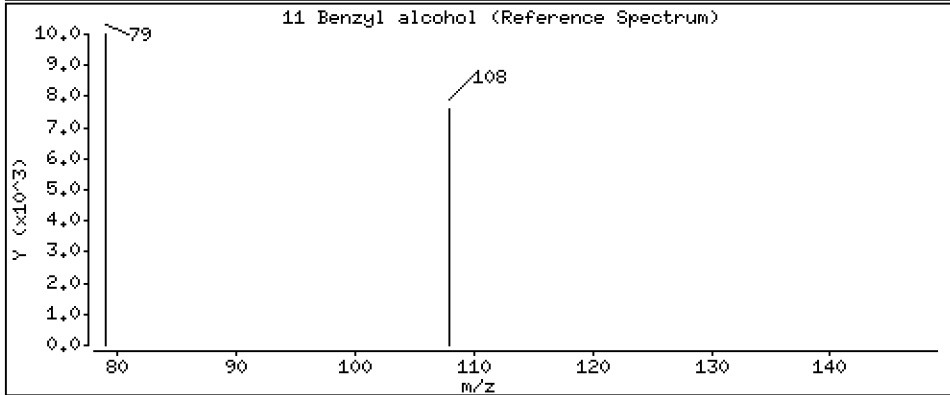
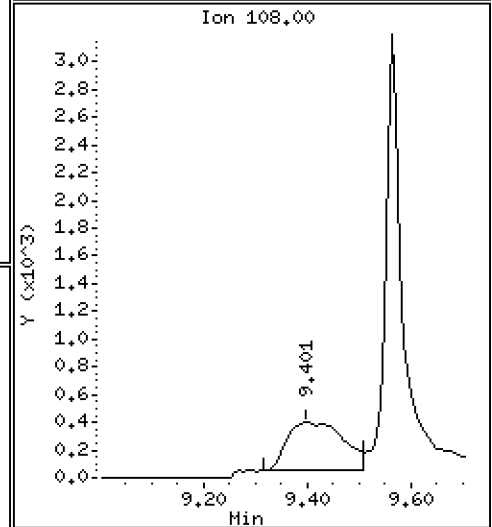
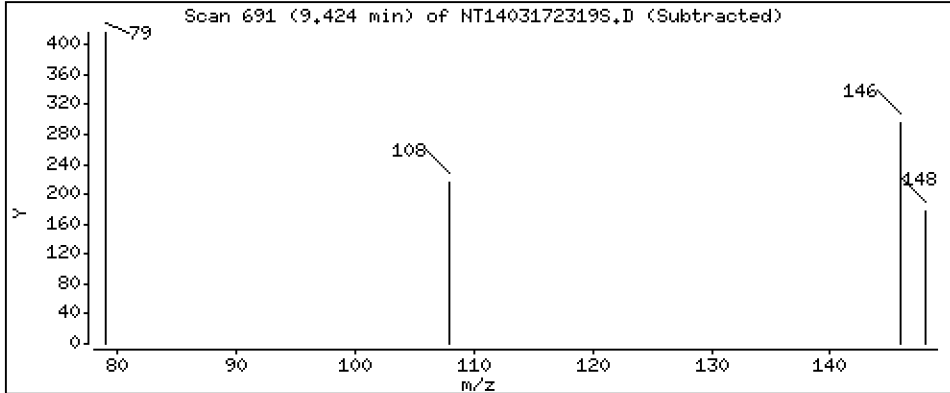
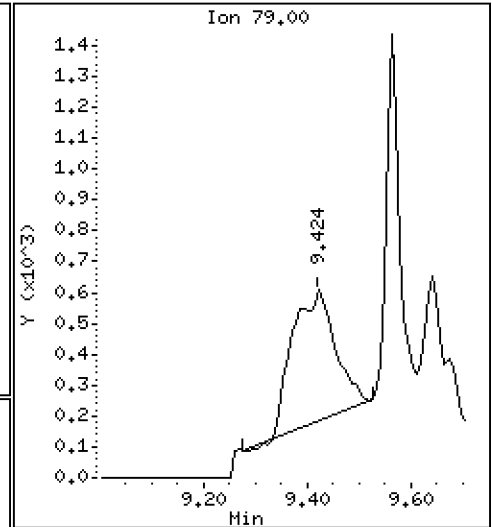
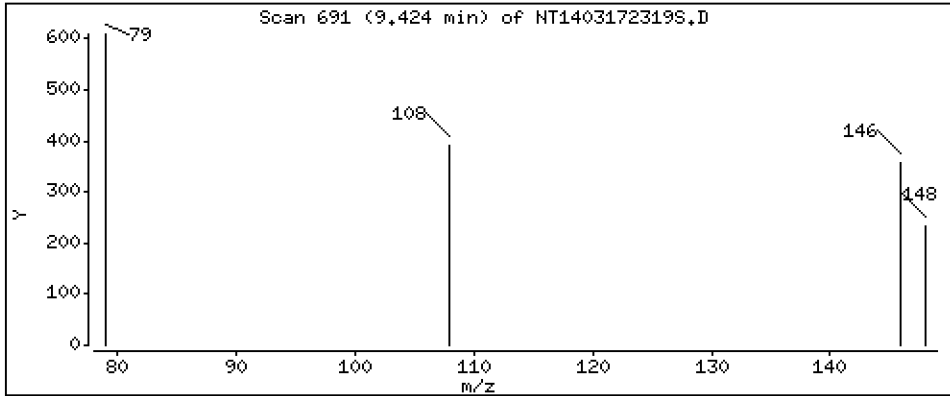
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,03531 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

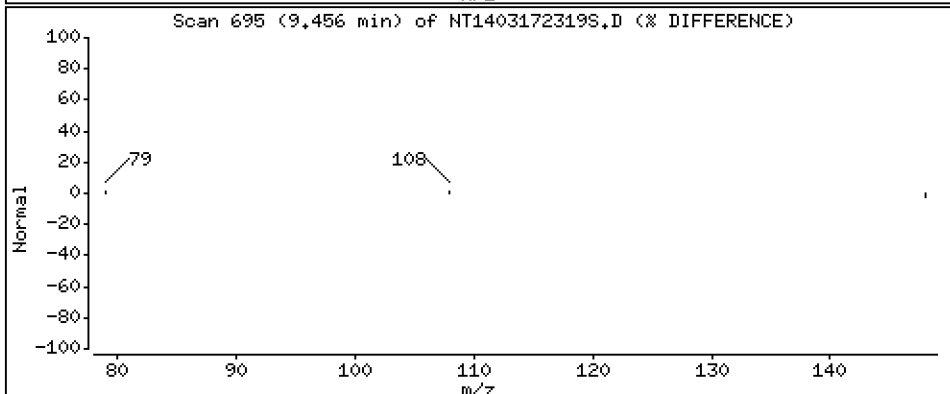
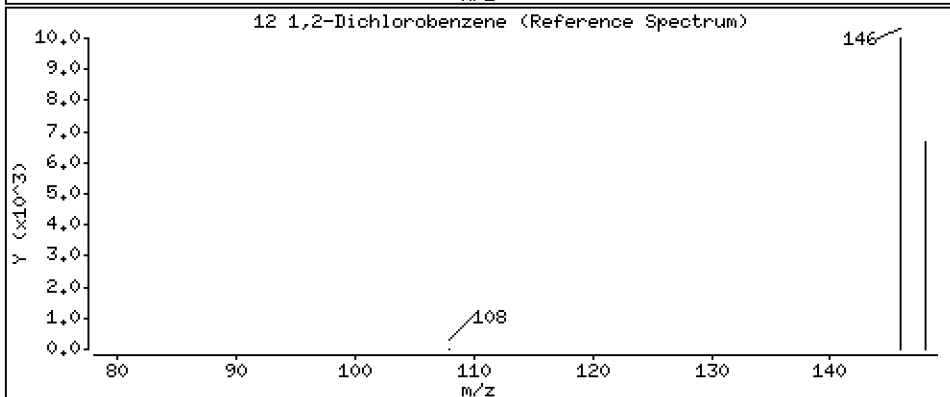
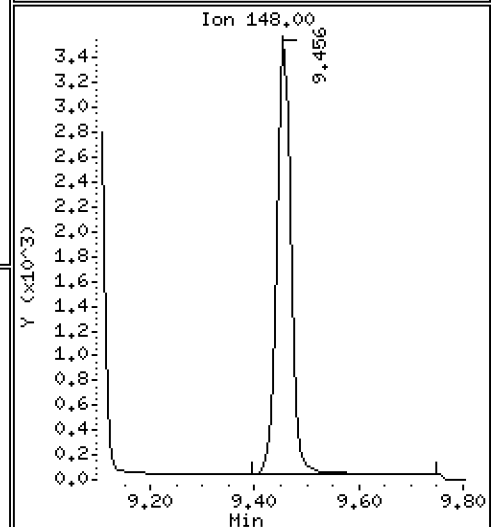
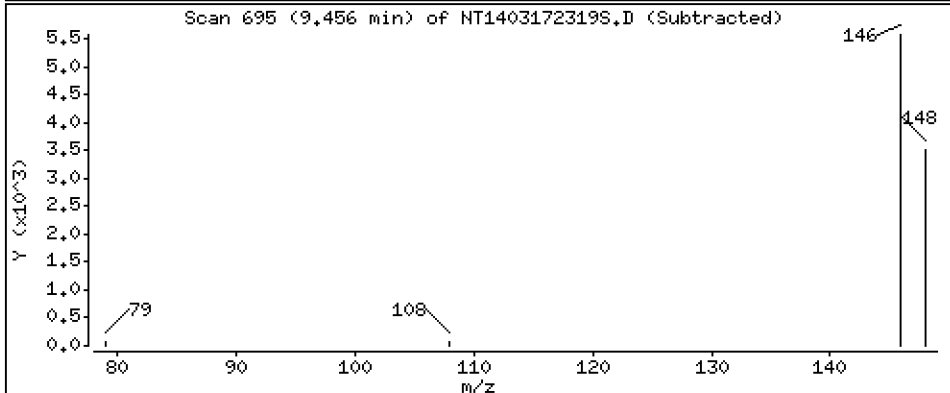
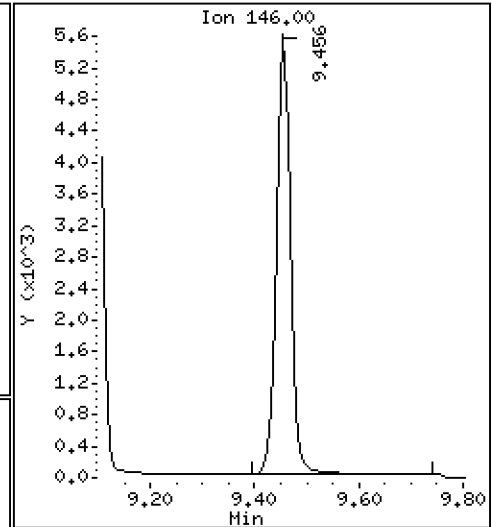
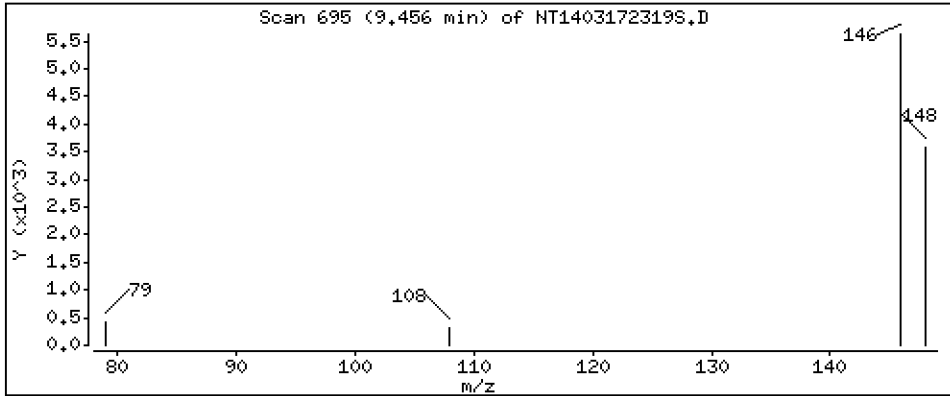
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,1054 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

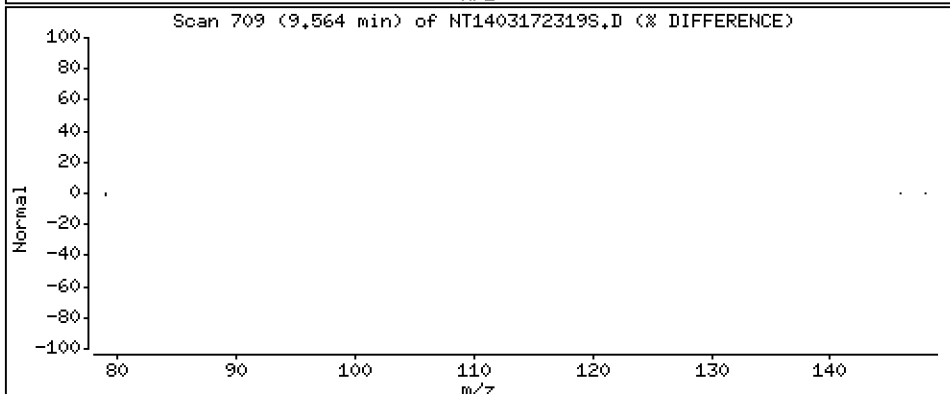
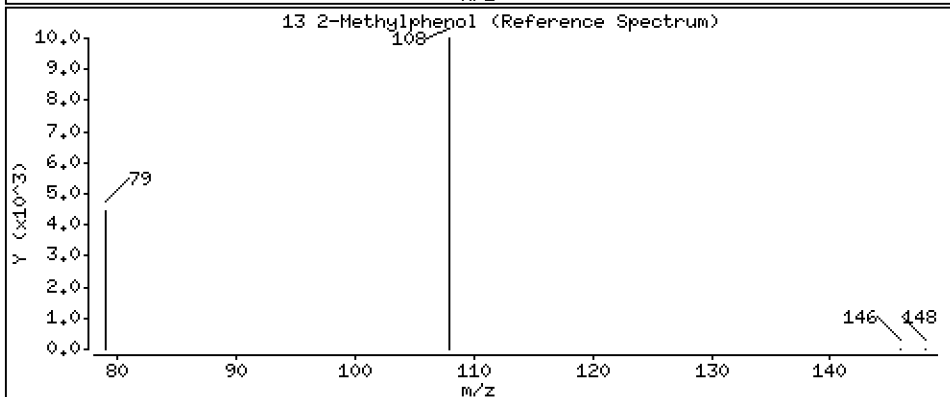
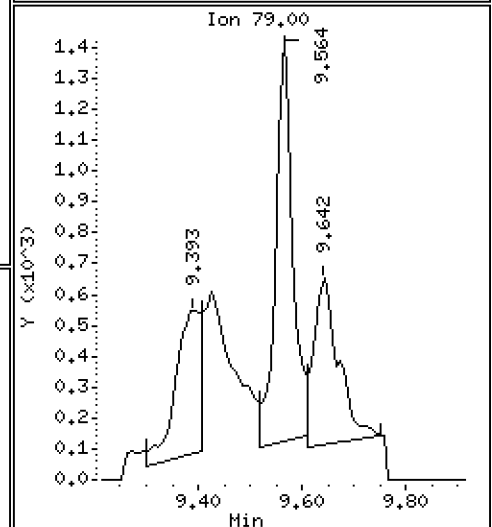
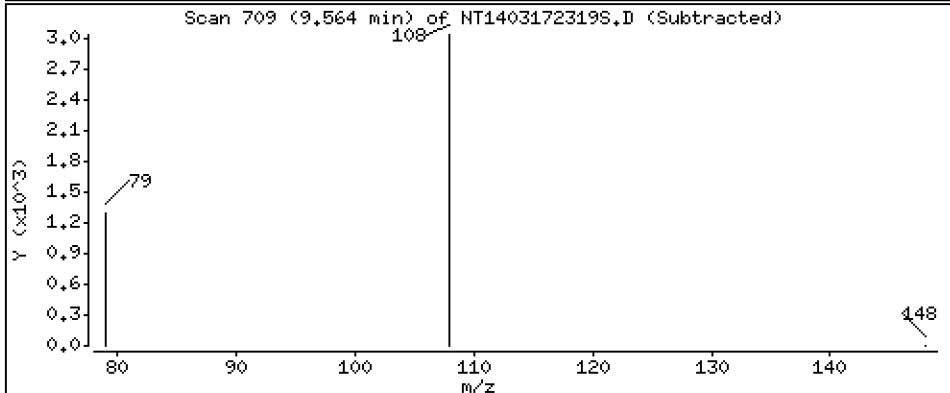
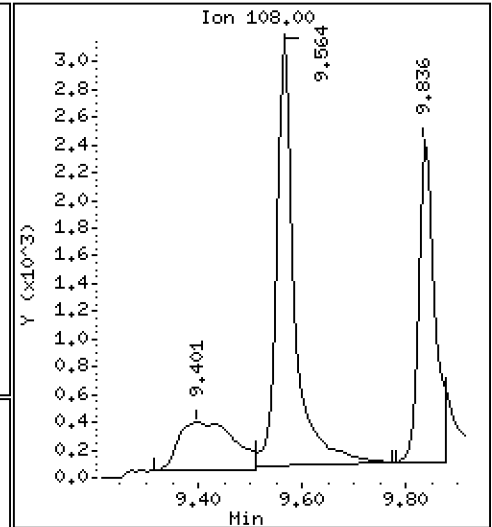
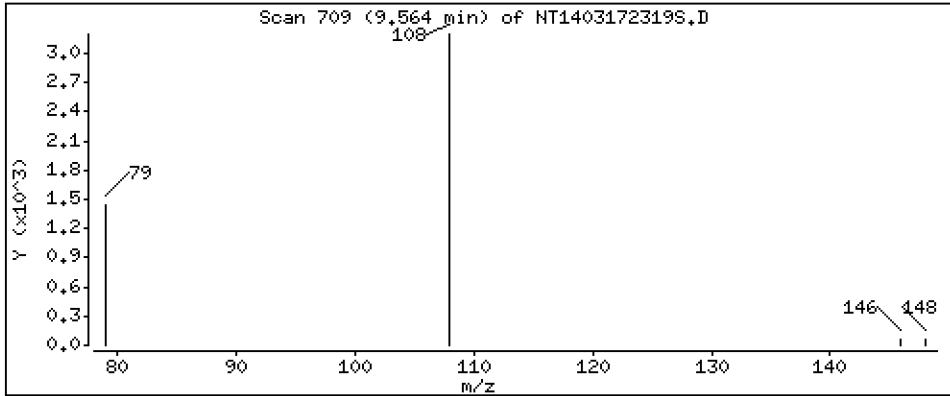
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.08993 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

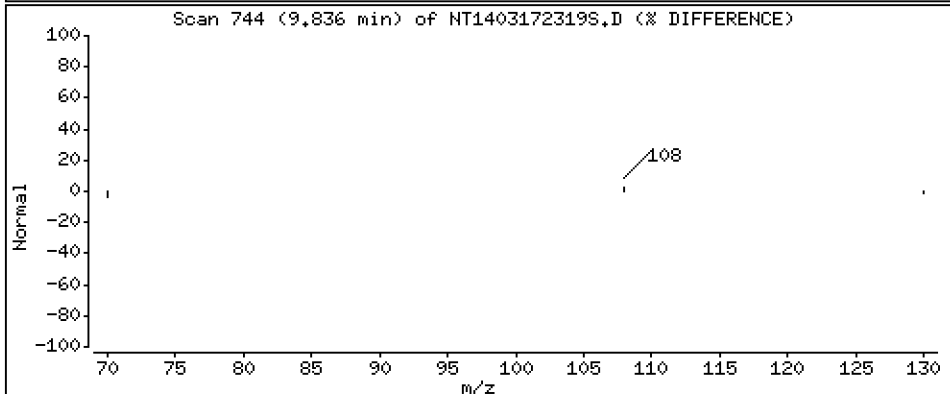
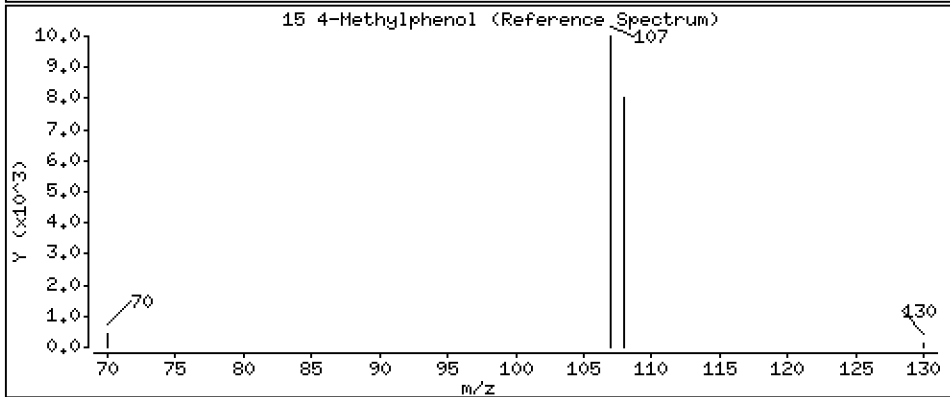
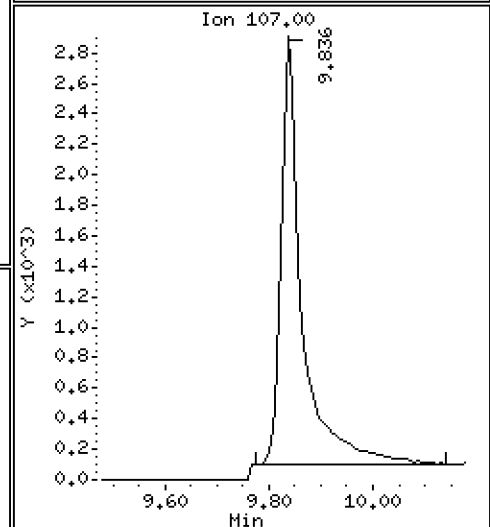
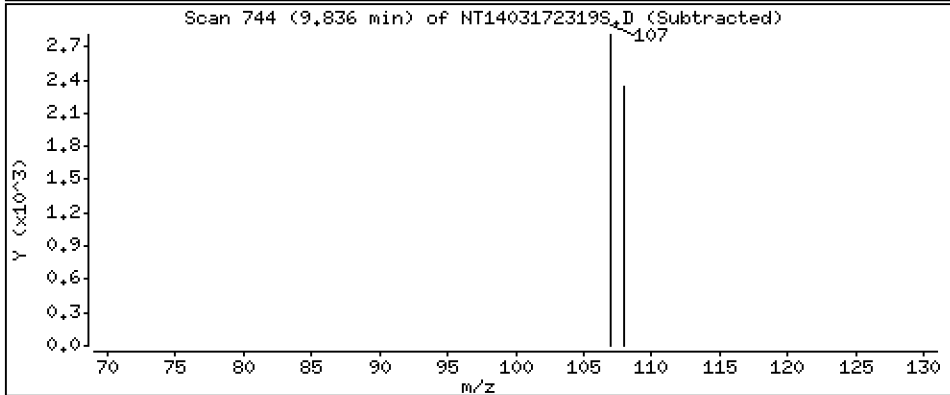
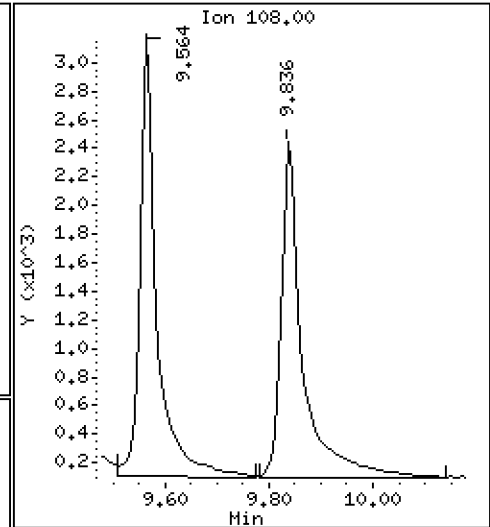
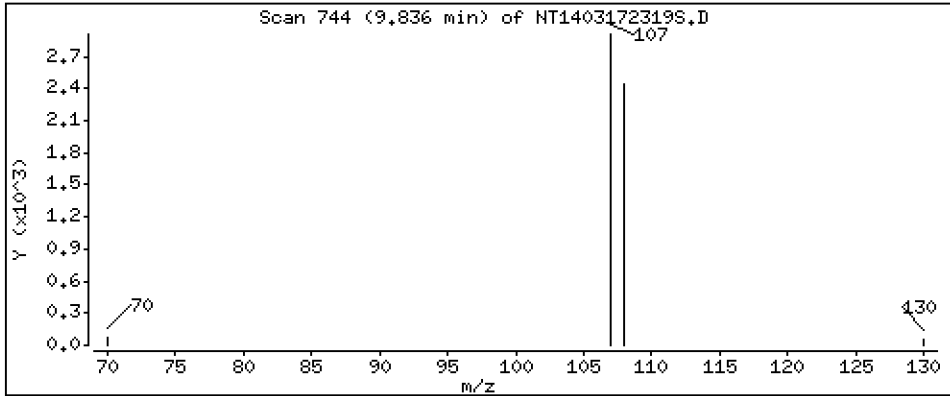
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,07821 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

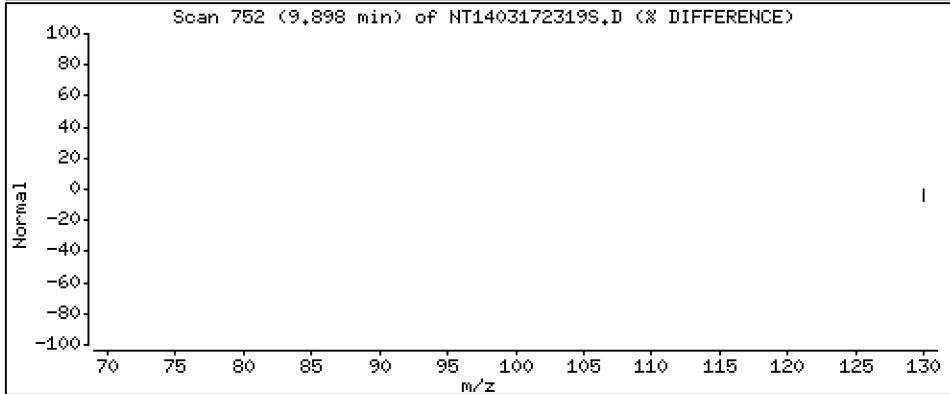
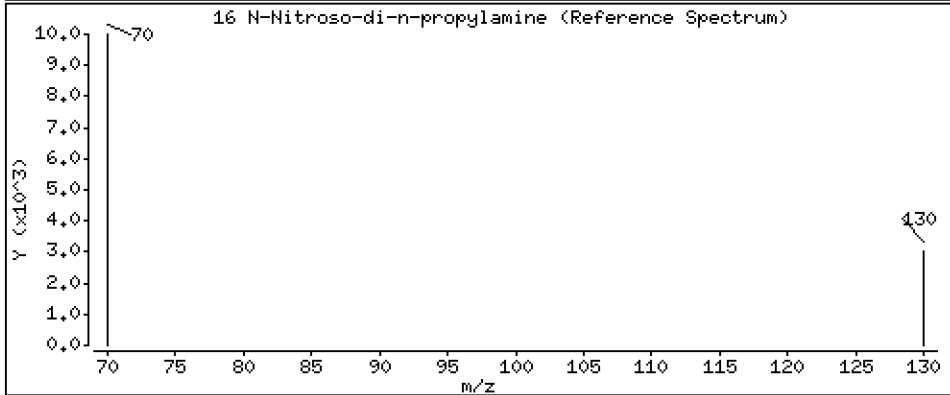
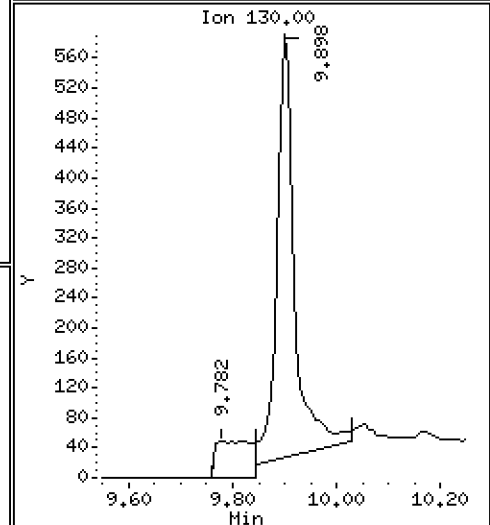
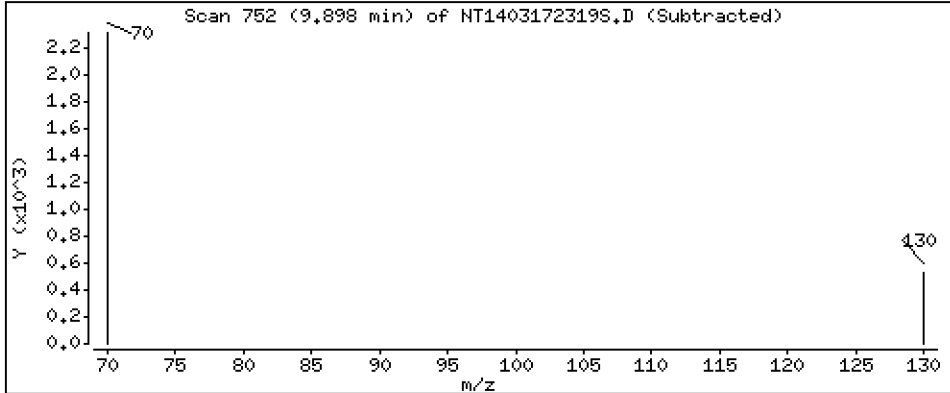
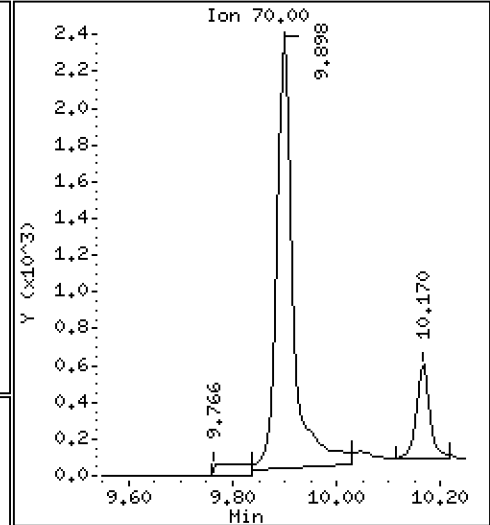
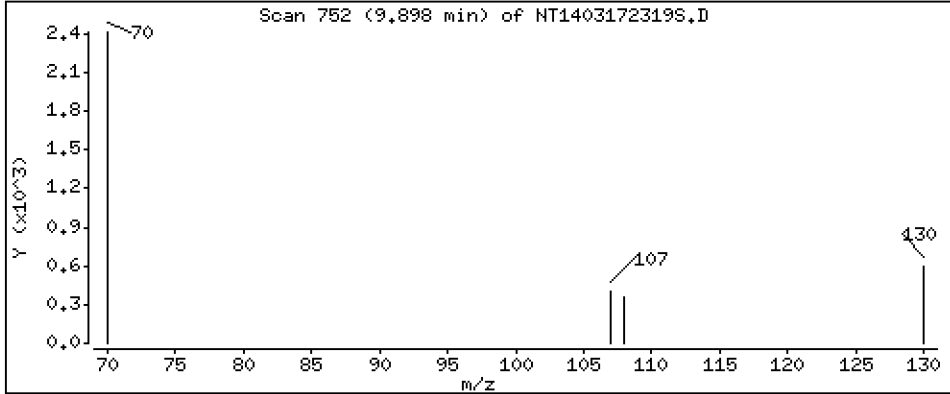
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,08396 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

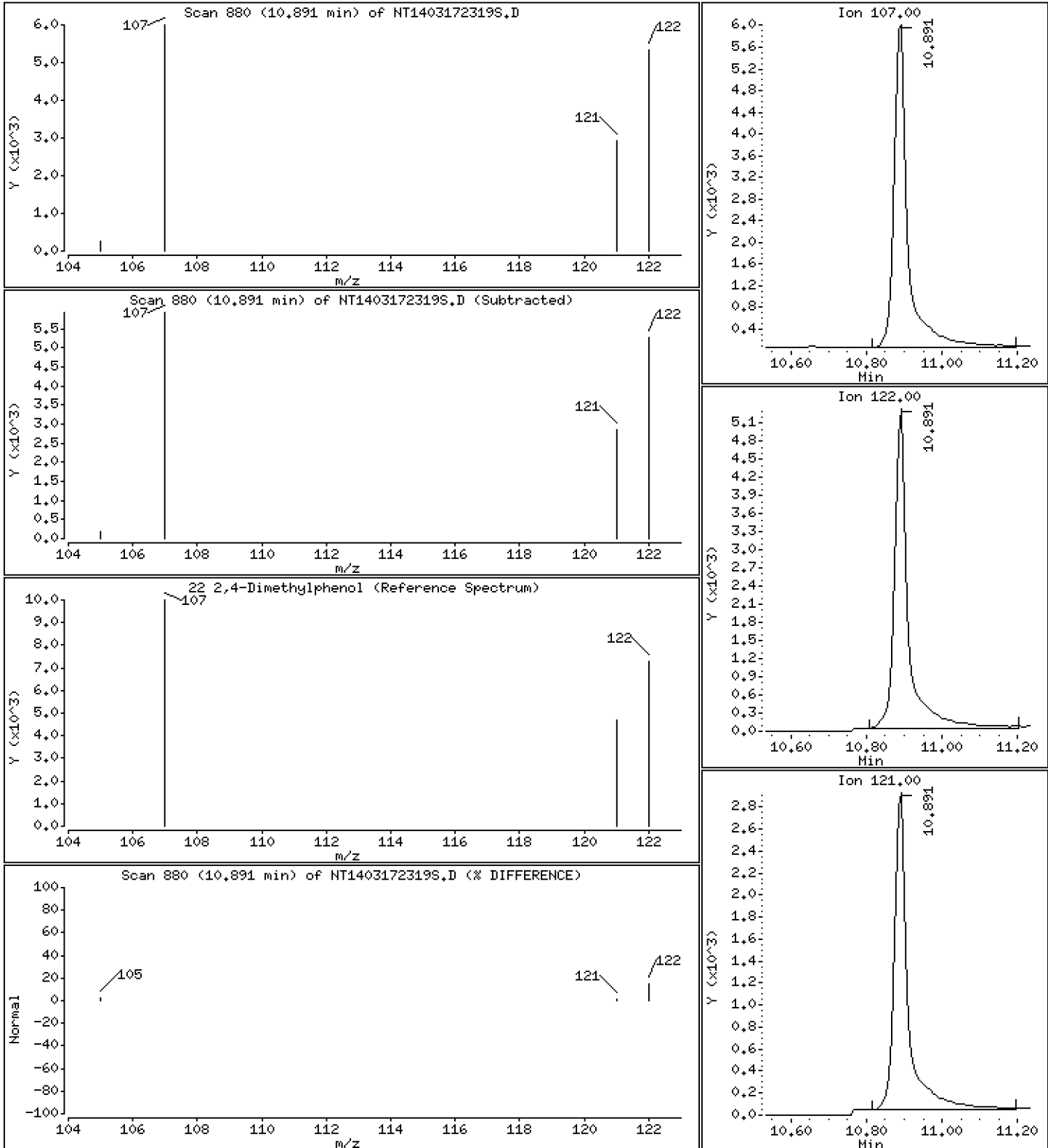
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,1885 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

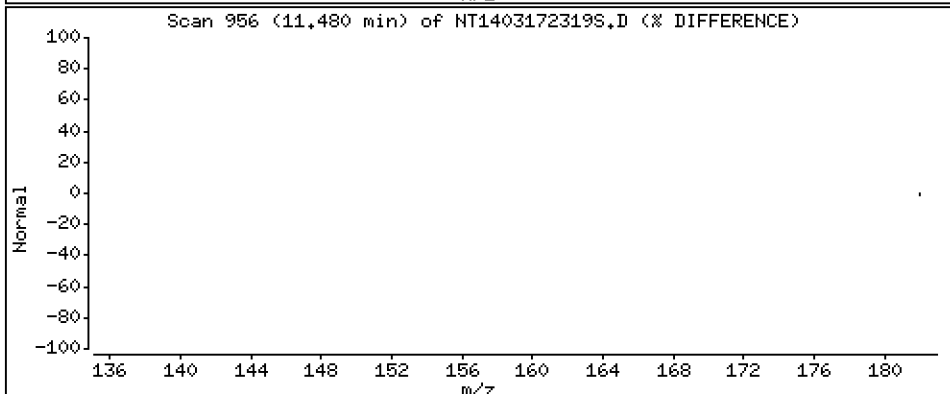
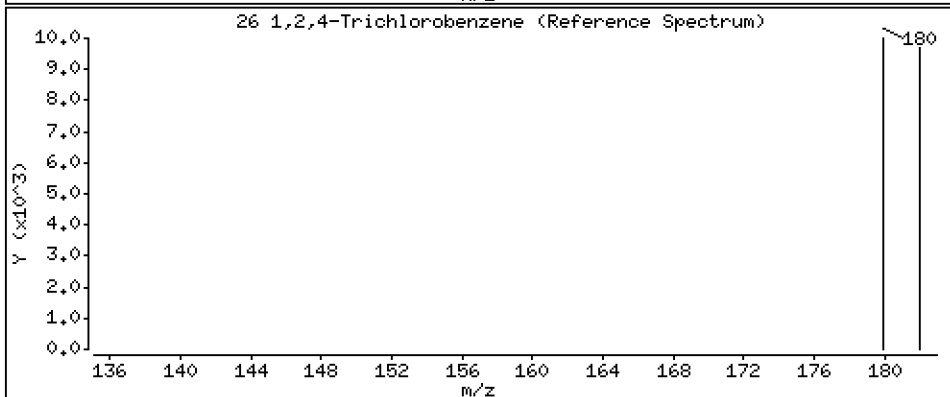
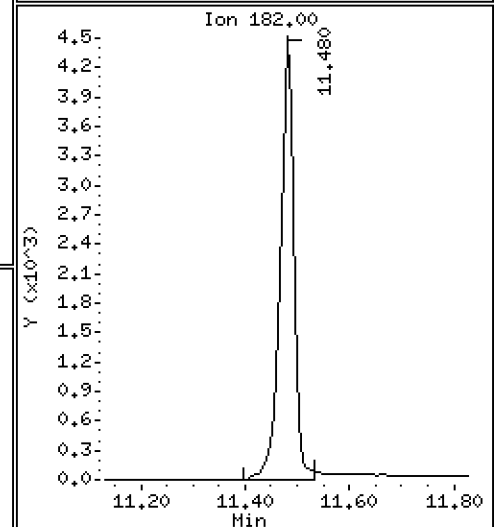
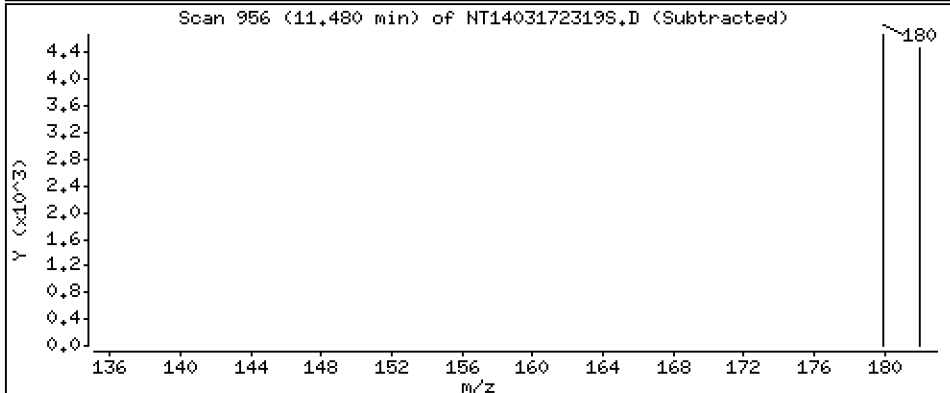
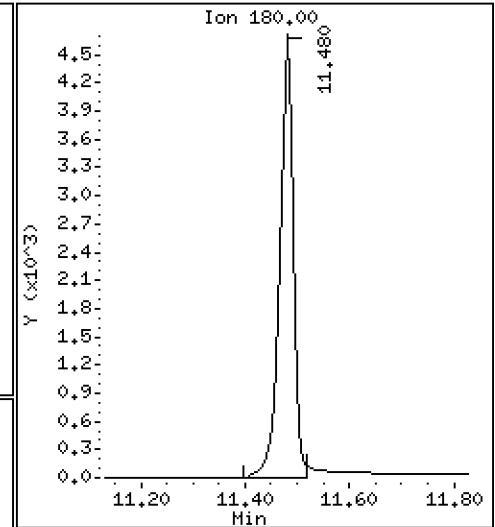
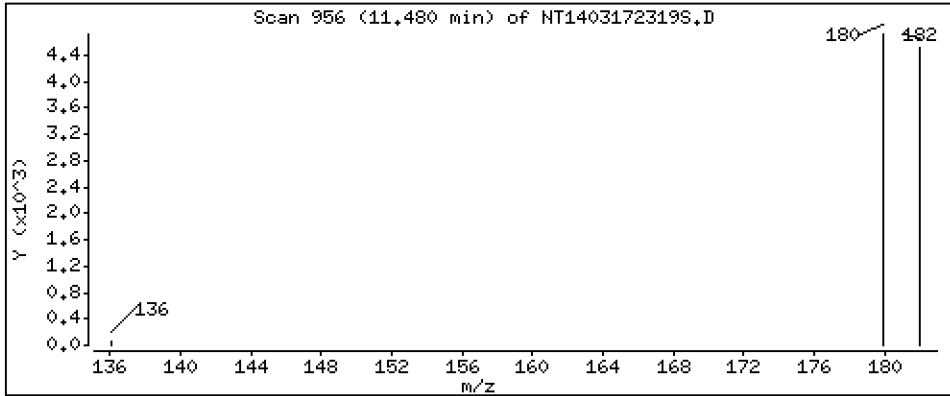
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,1078 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

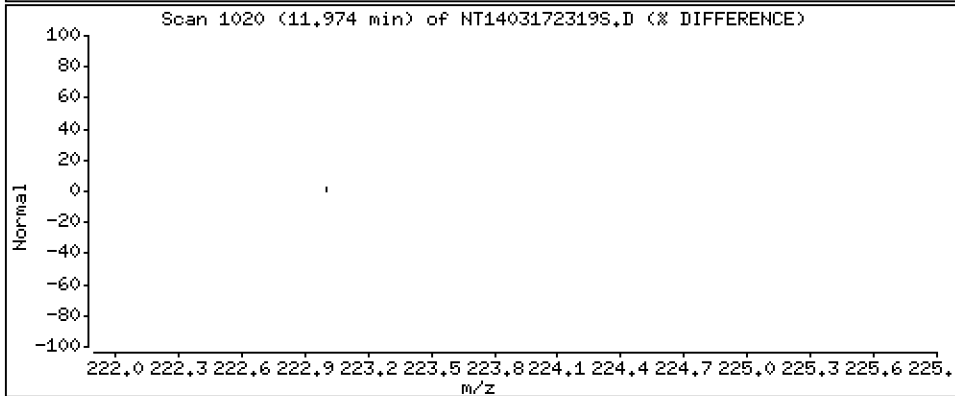
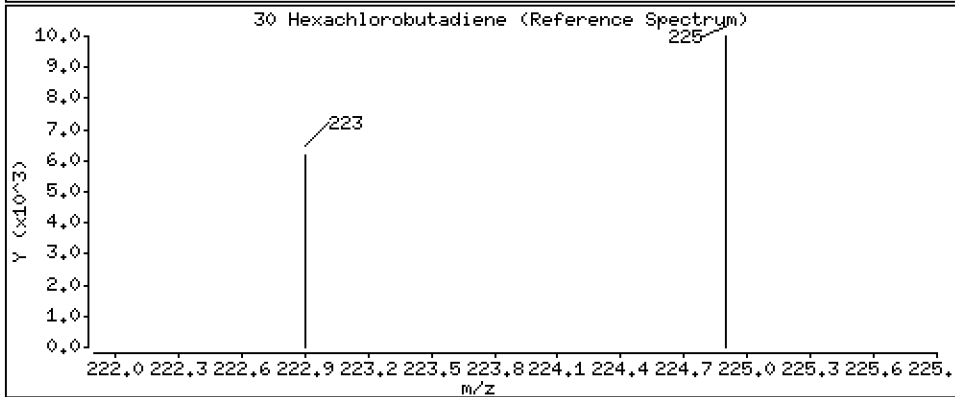
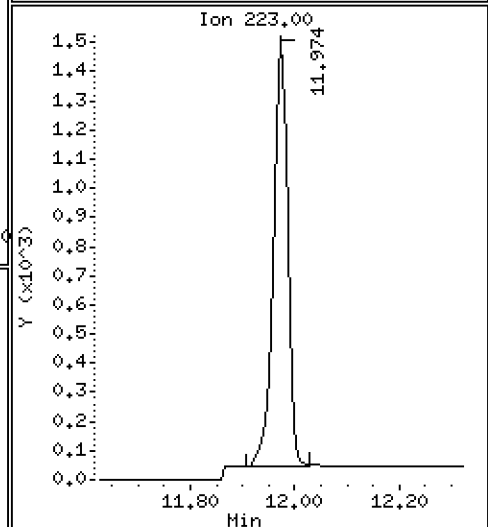
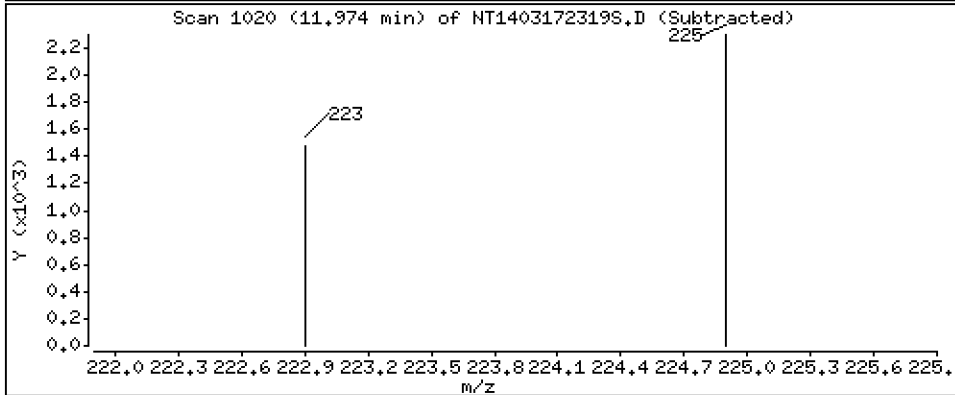
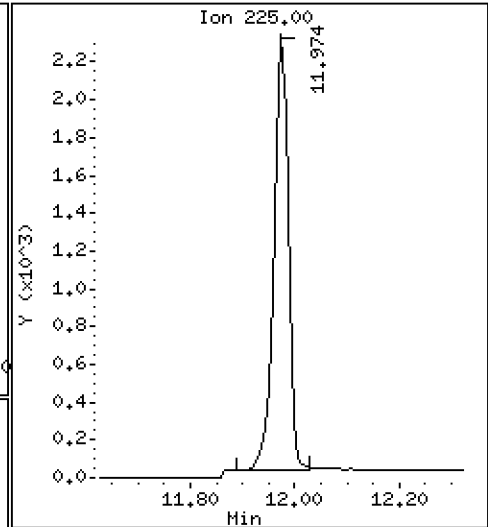
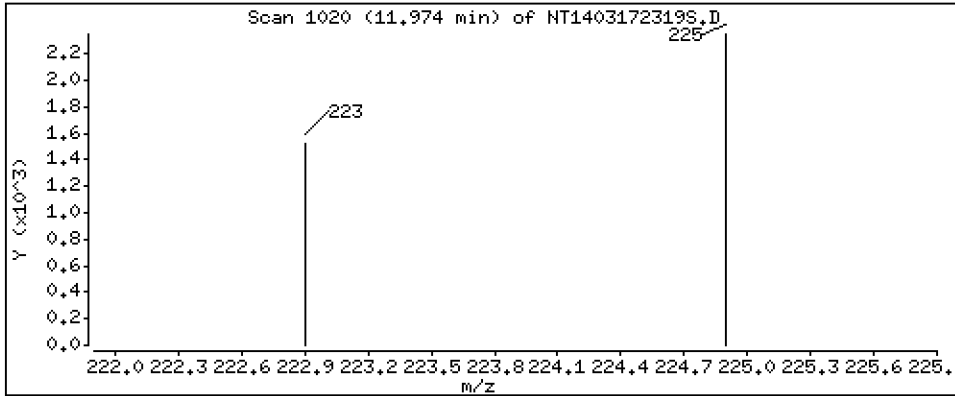
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1075 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

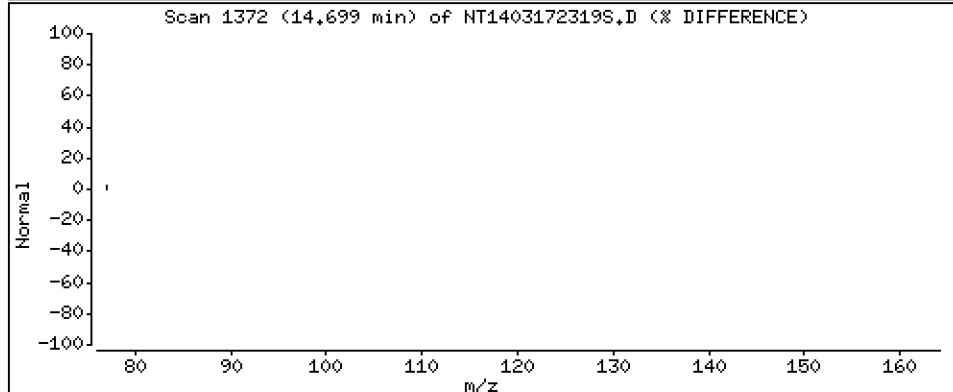
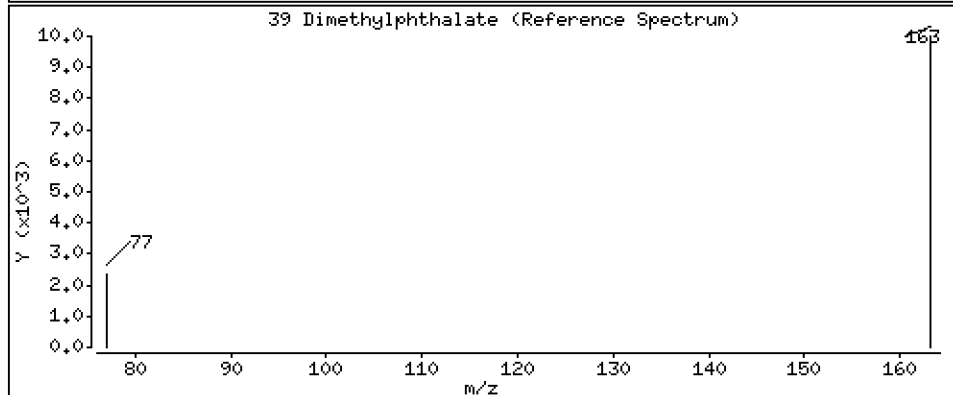
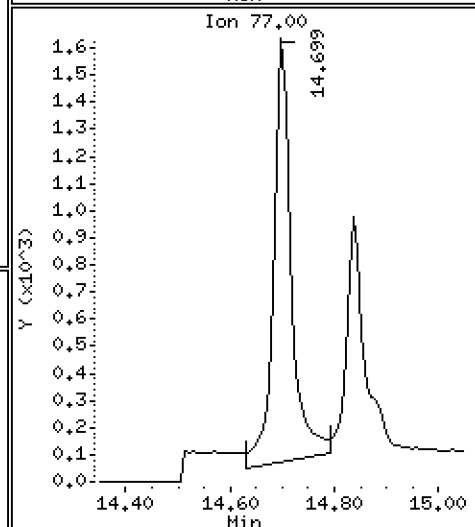
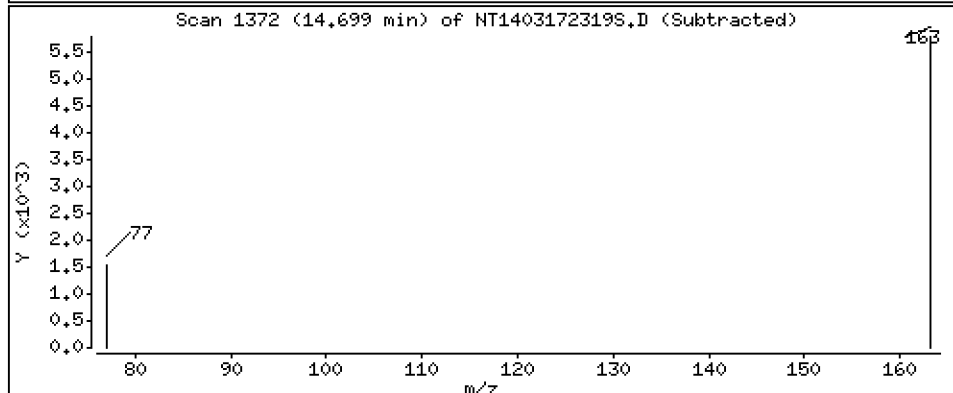
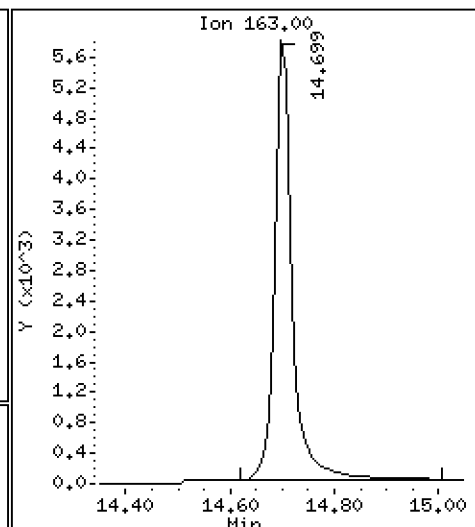
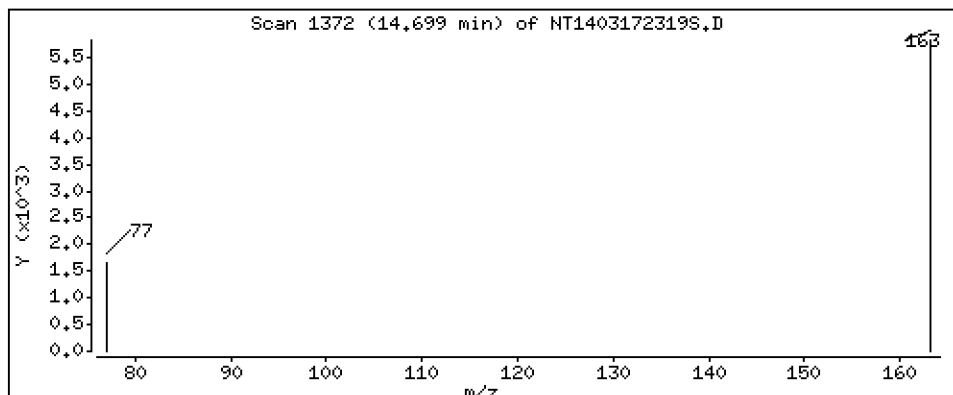
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,09264 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

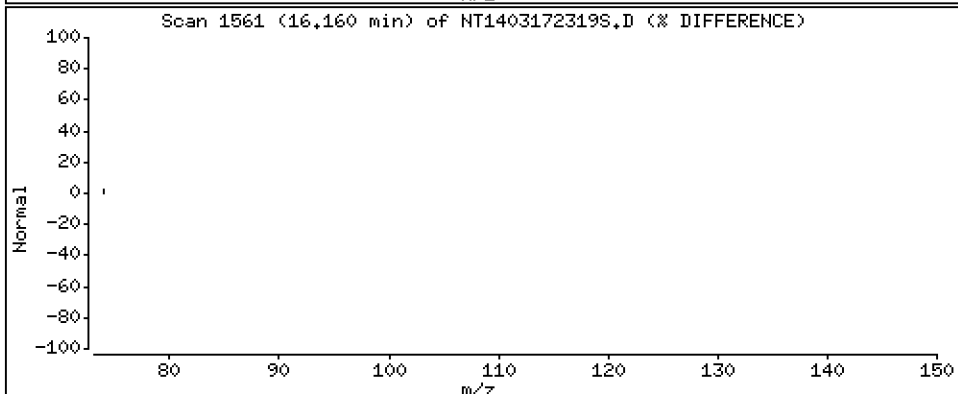
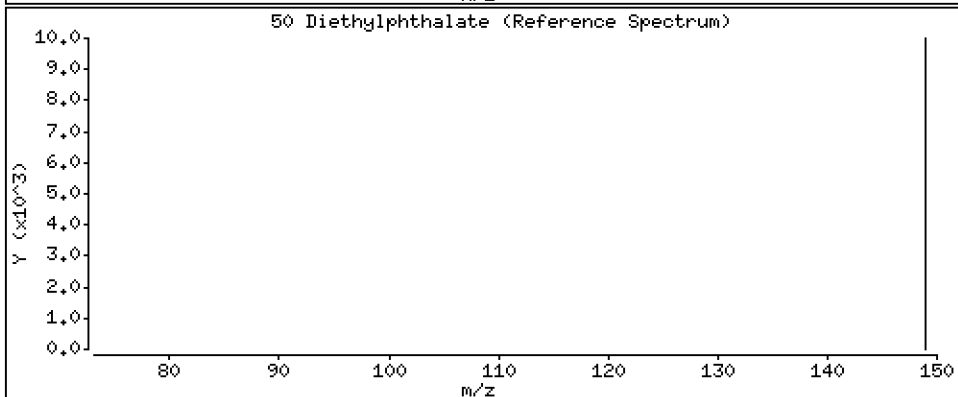
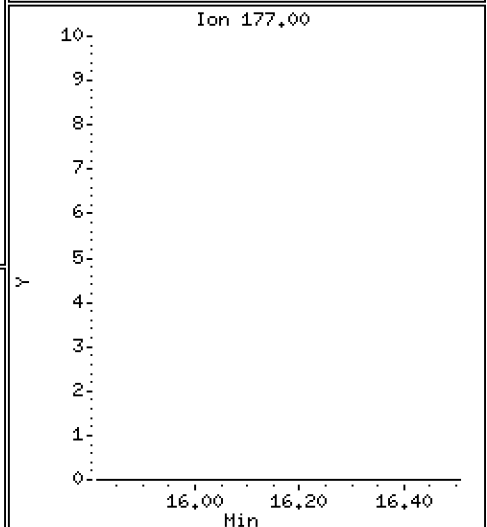
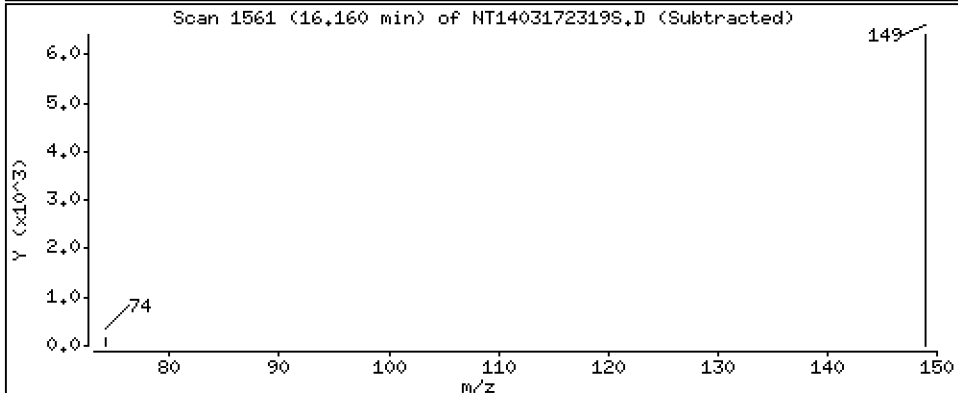
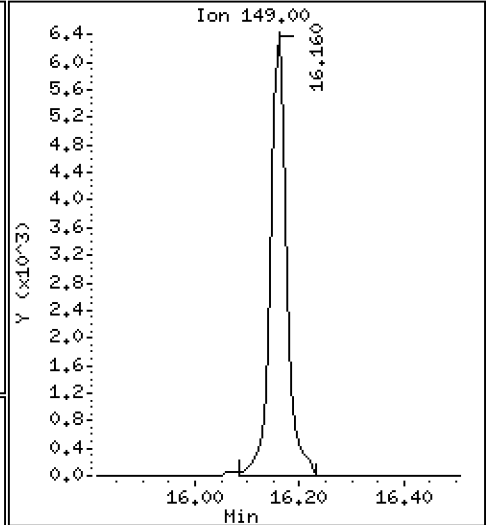
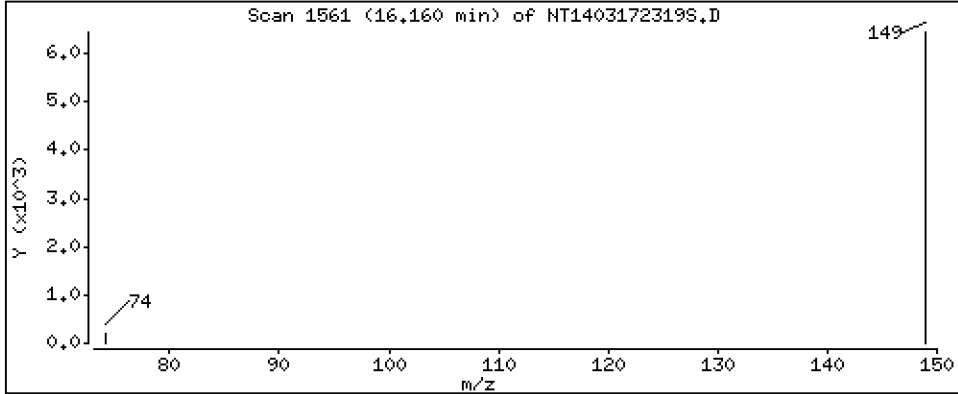
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,08870 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

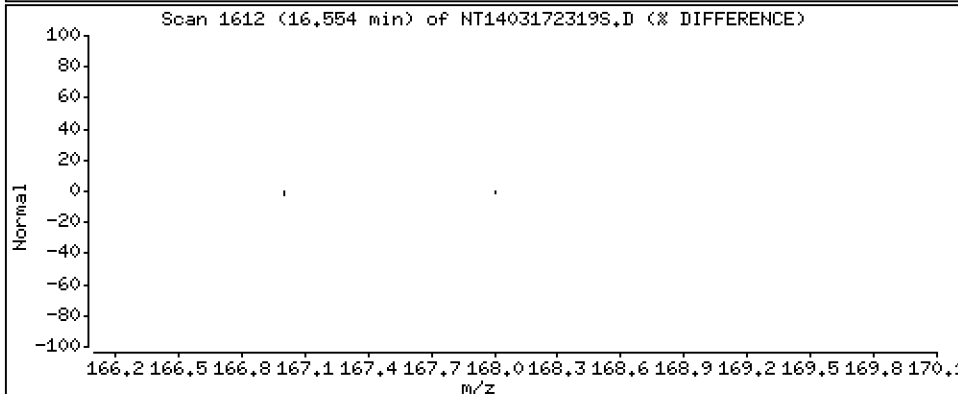
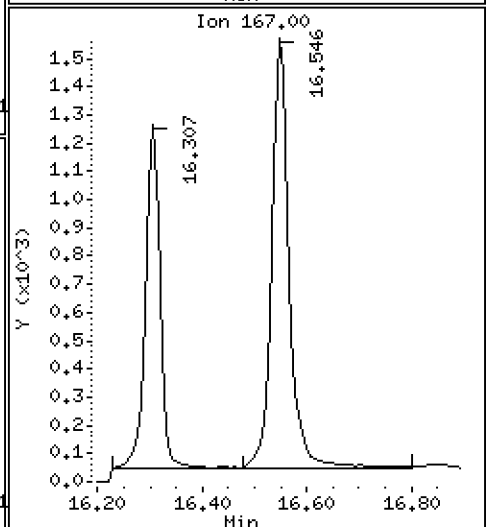
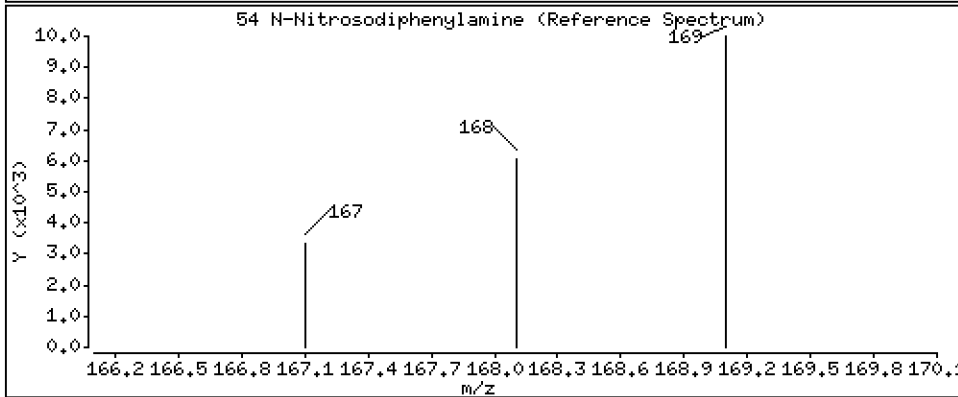
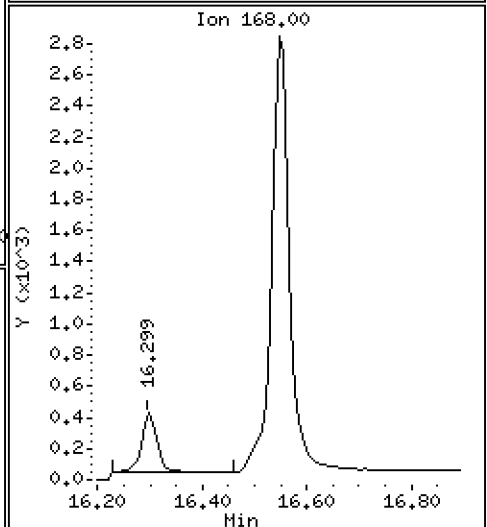
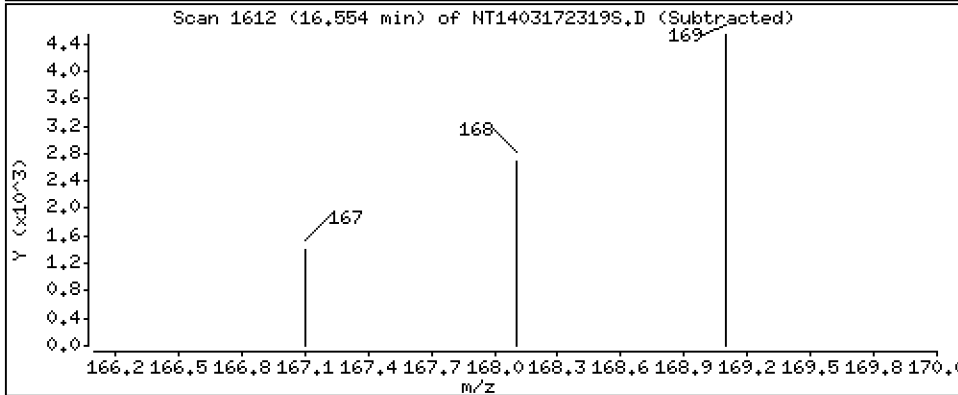
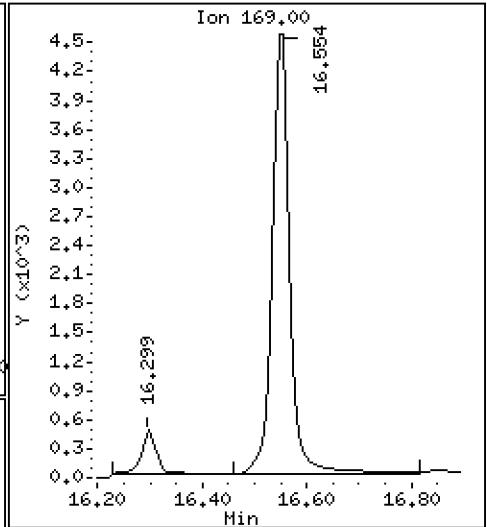
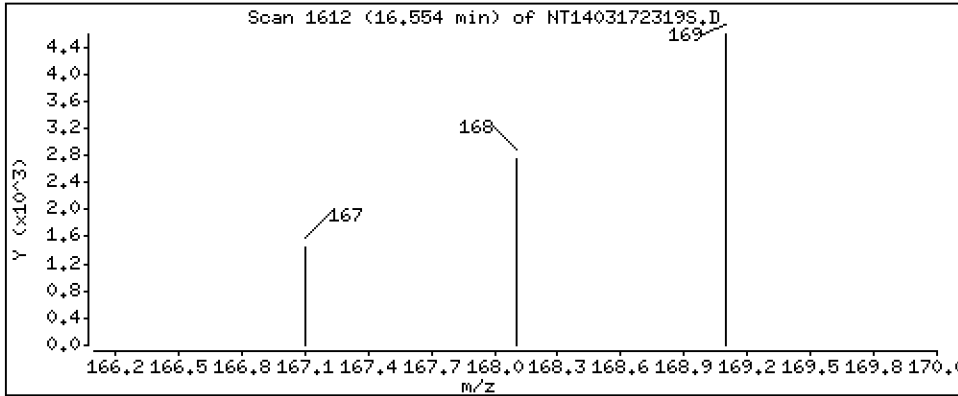
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,09438 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

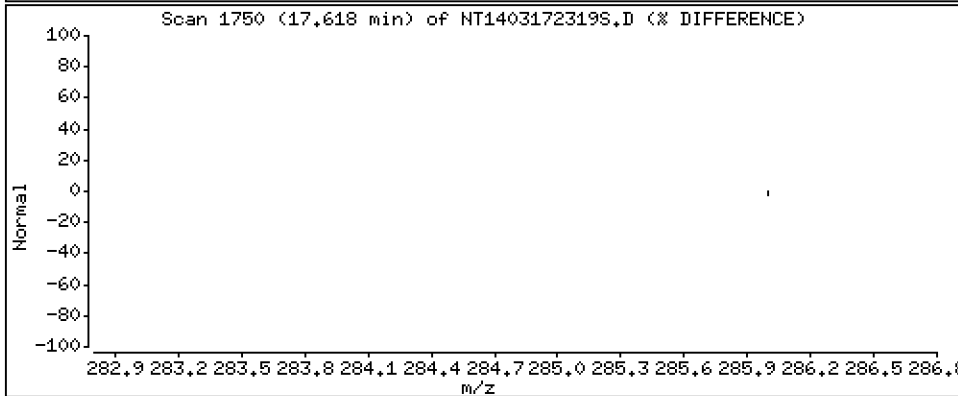
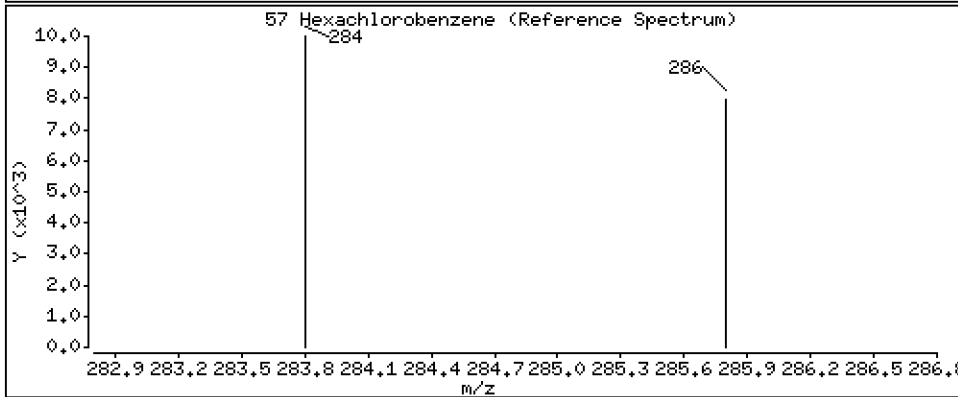
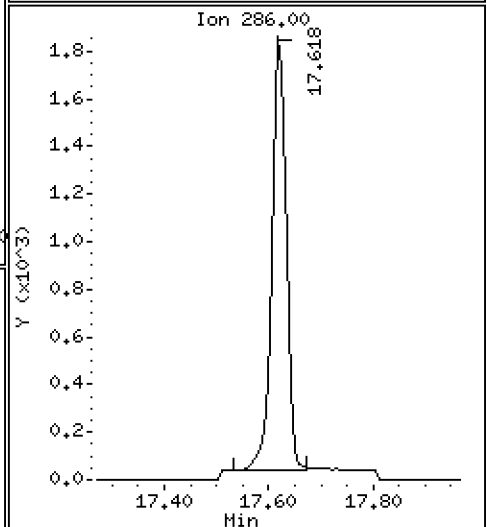
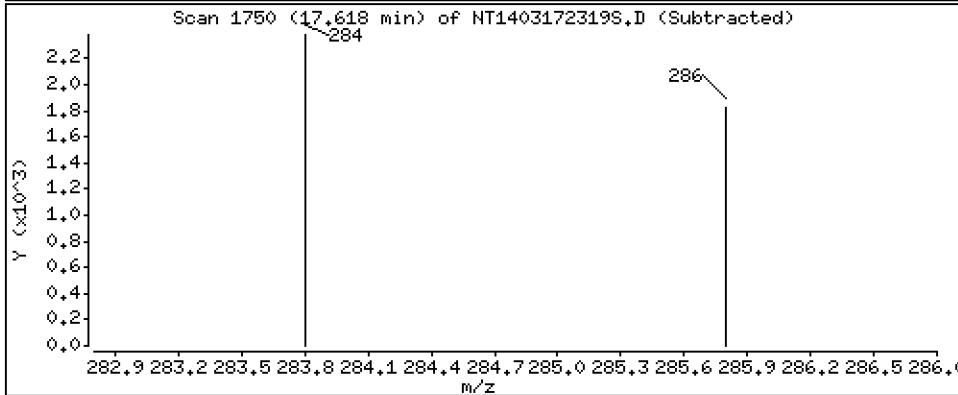
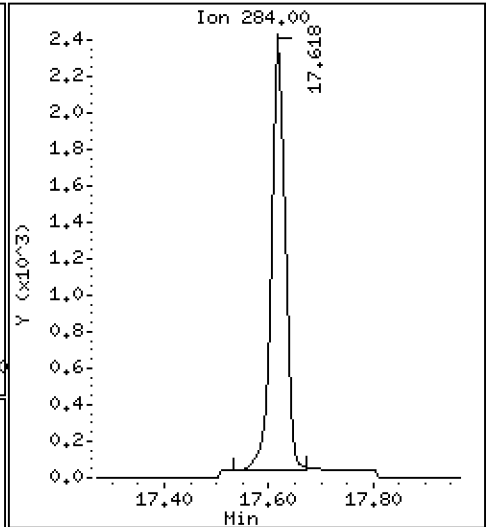
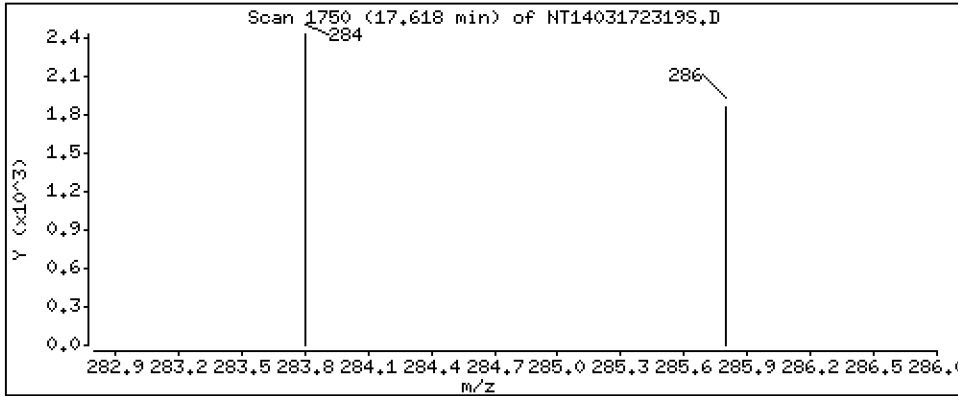
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,1030 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

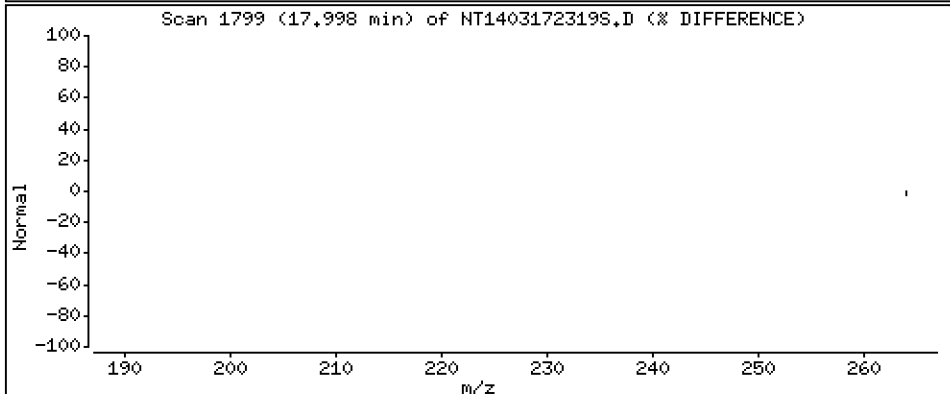
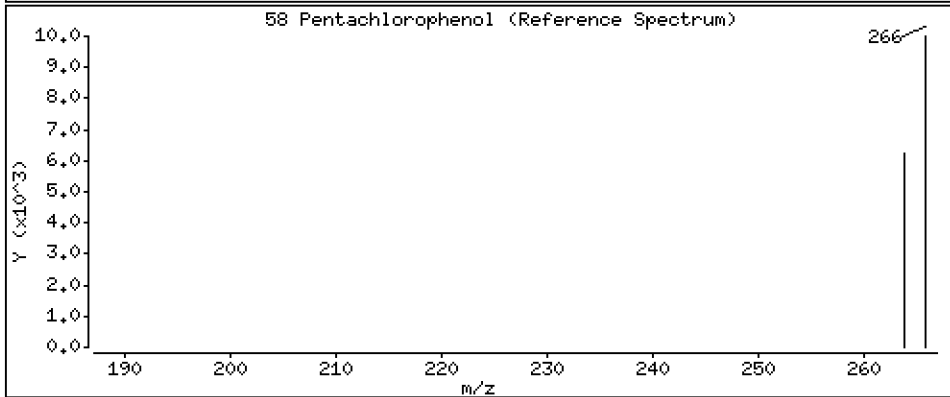
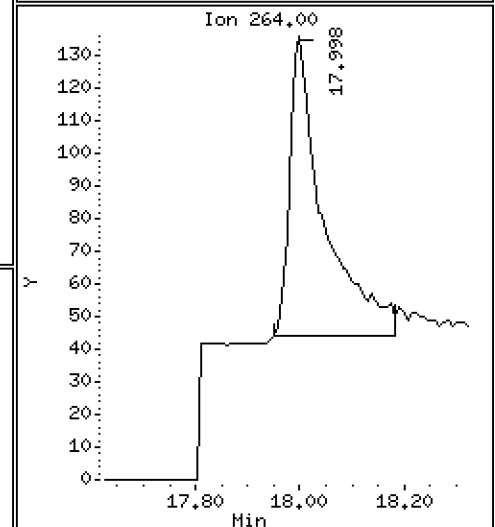
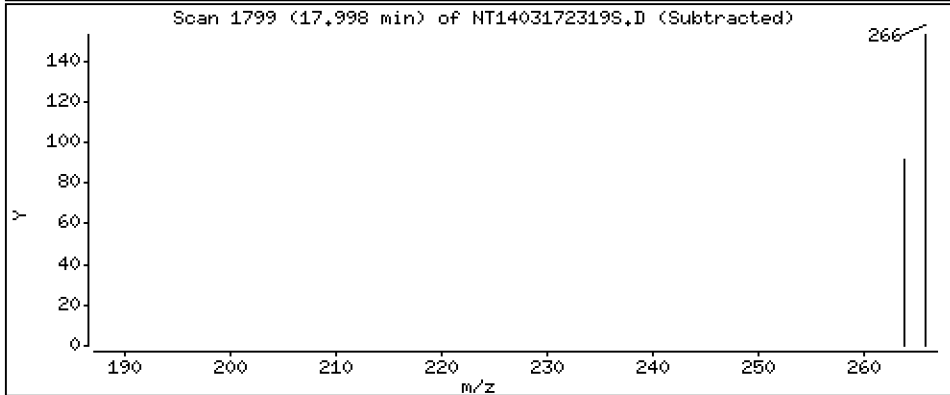
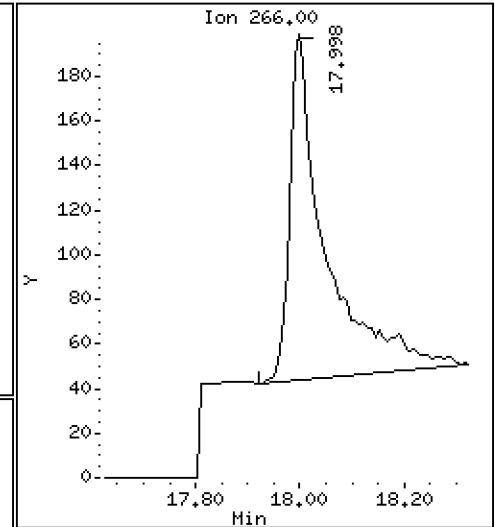
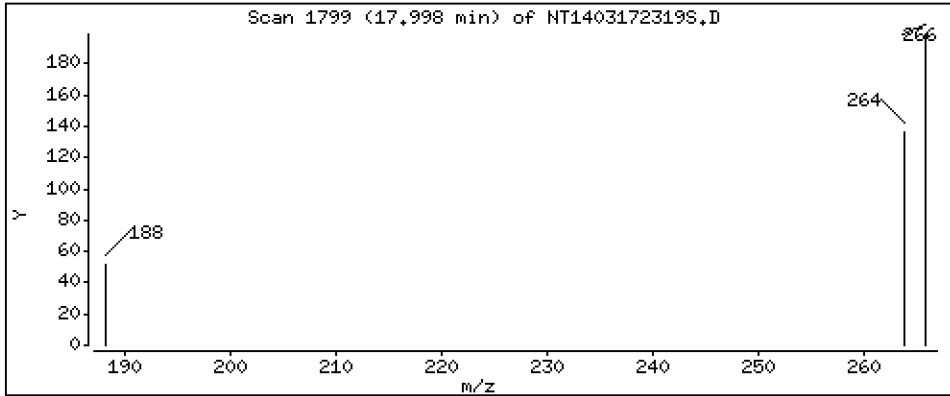
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,02710 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

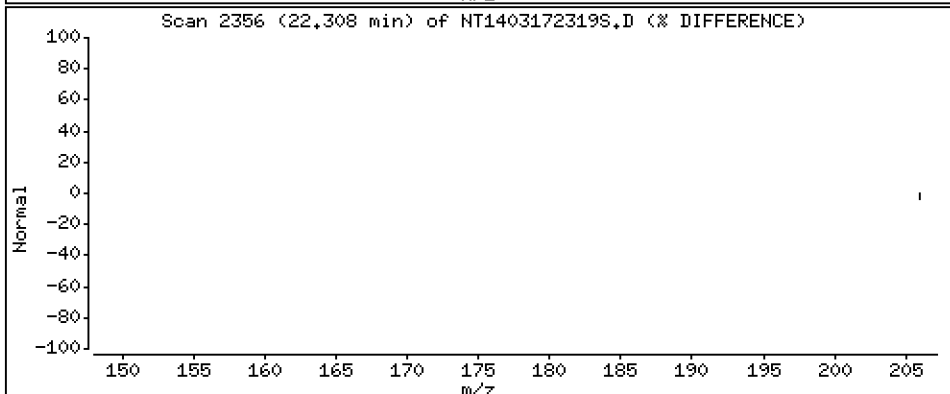
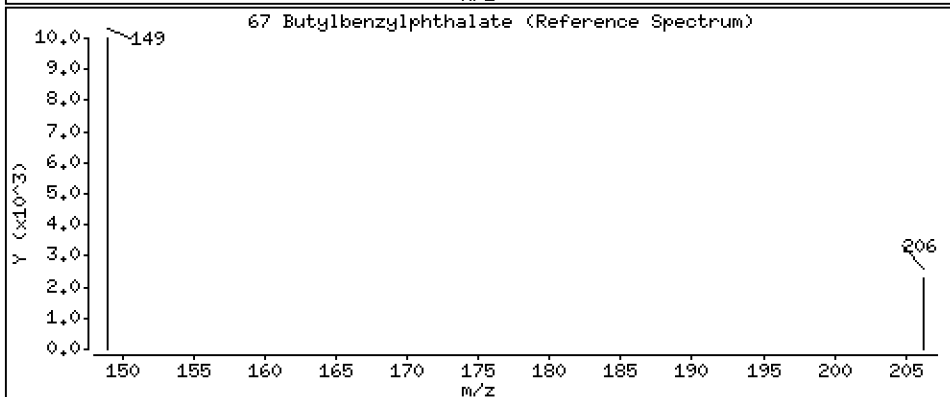
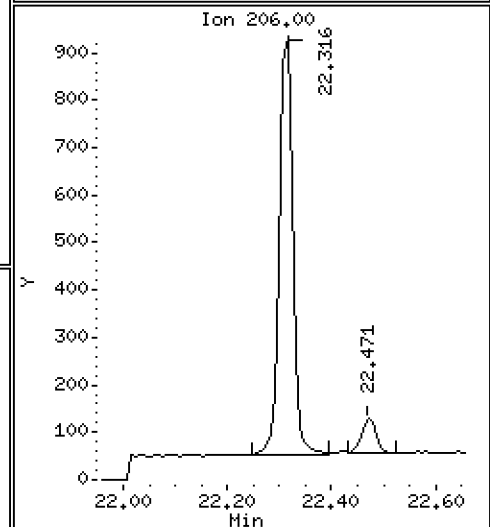
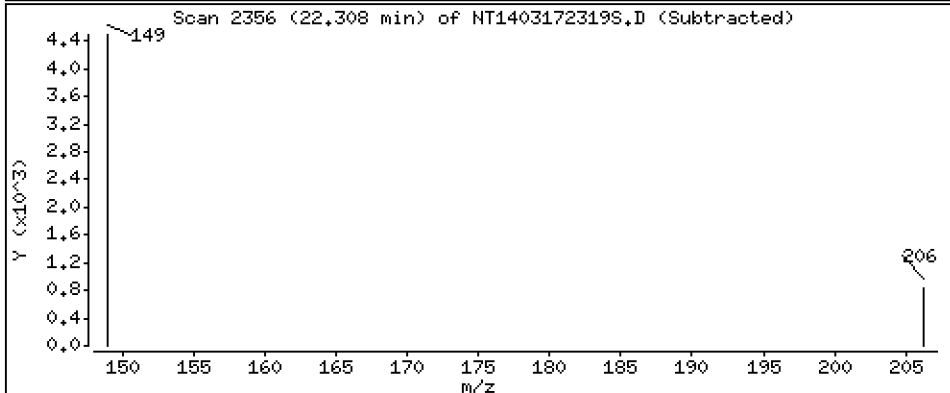
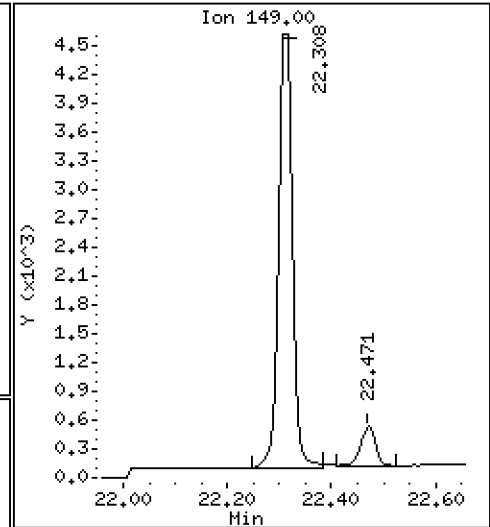
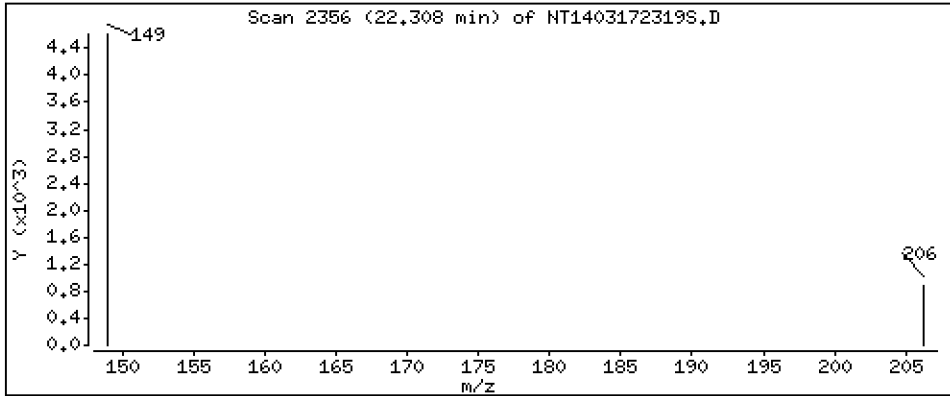
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1049 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

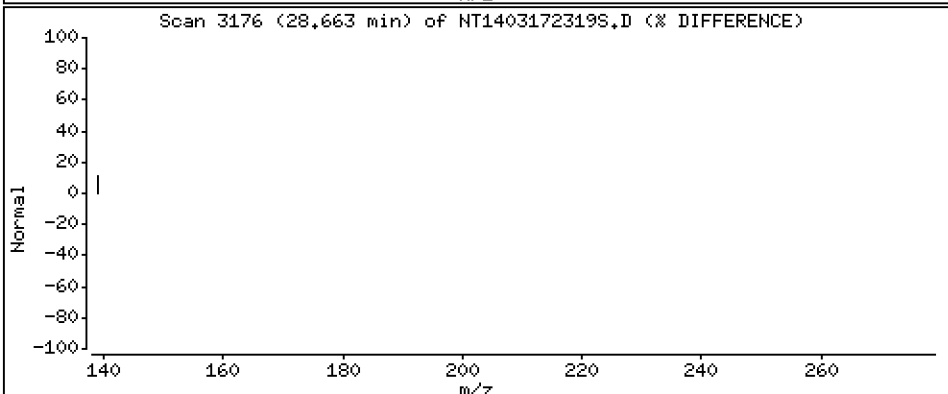
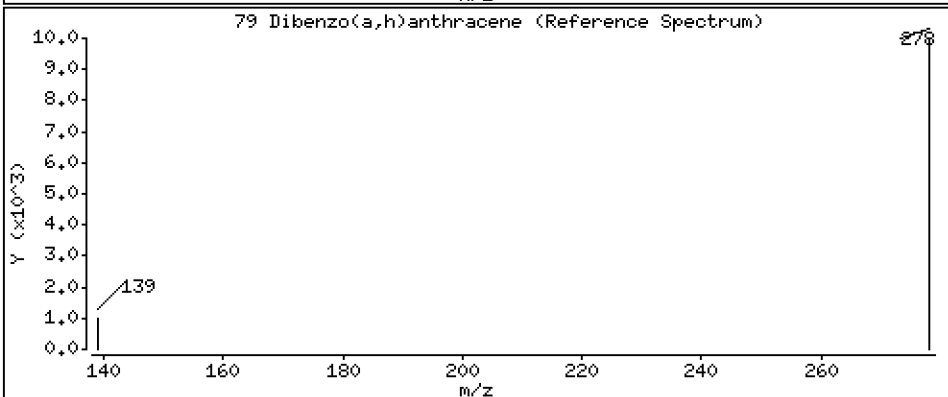
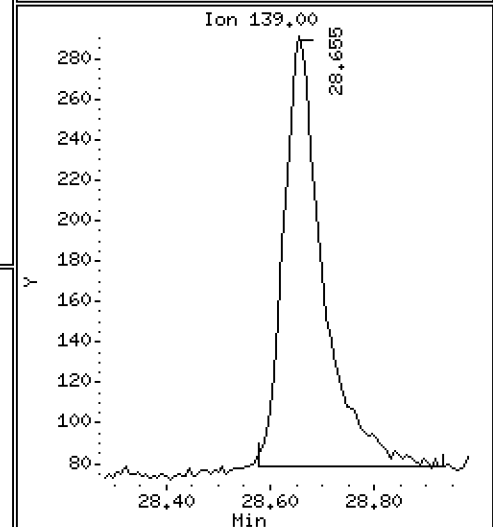
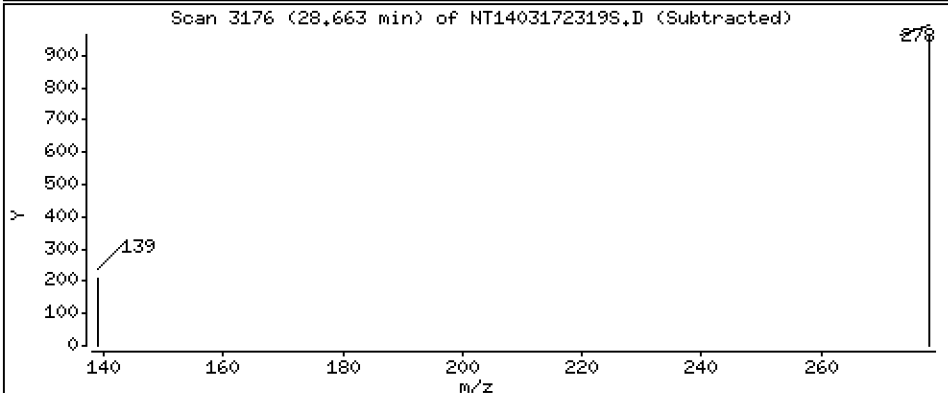
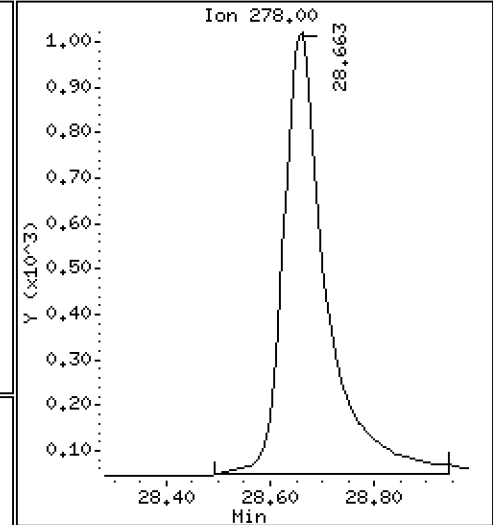
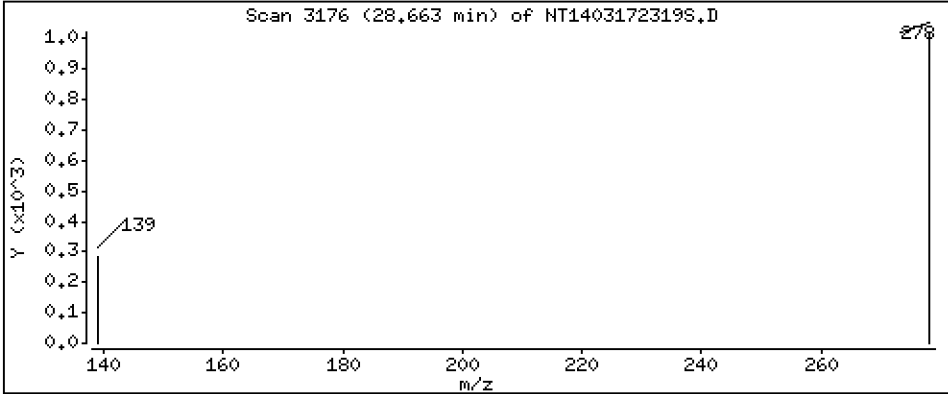
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,08011 ug/mL



Date : 18-MAR-2023 01:19

Client ID:

Instrument: nt14.i

Sample Info: SLC0376-LCV4

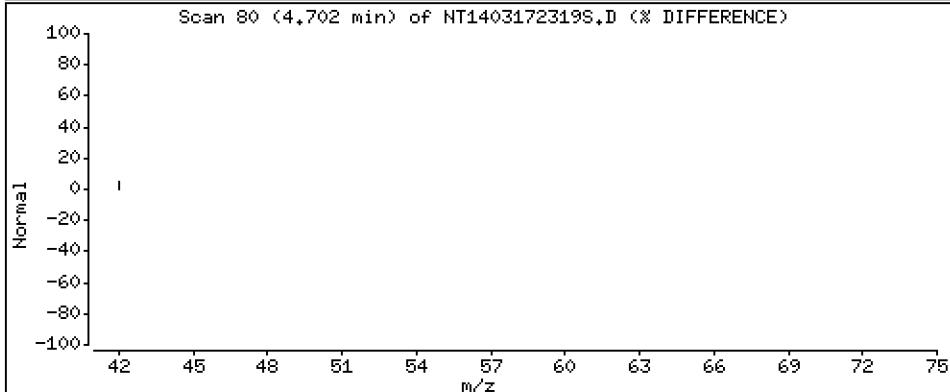
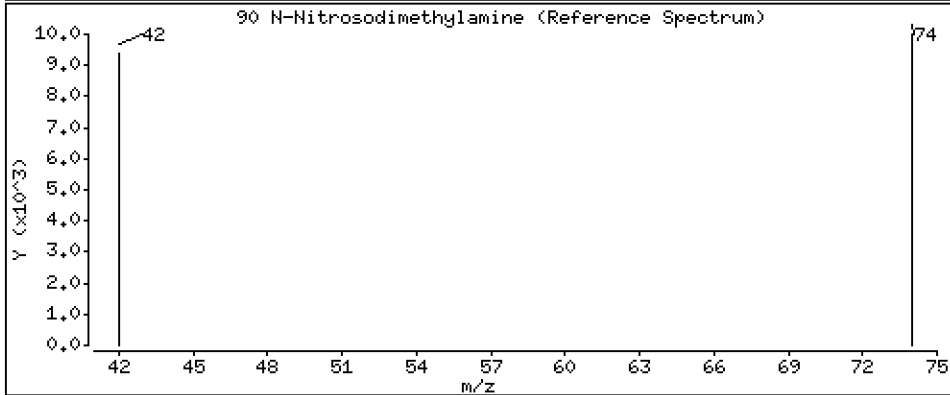
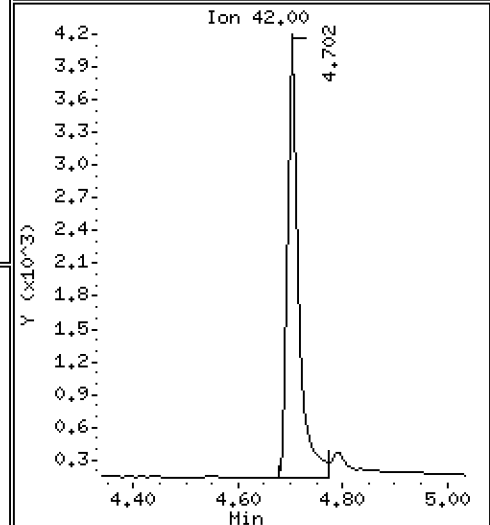
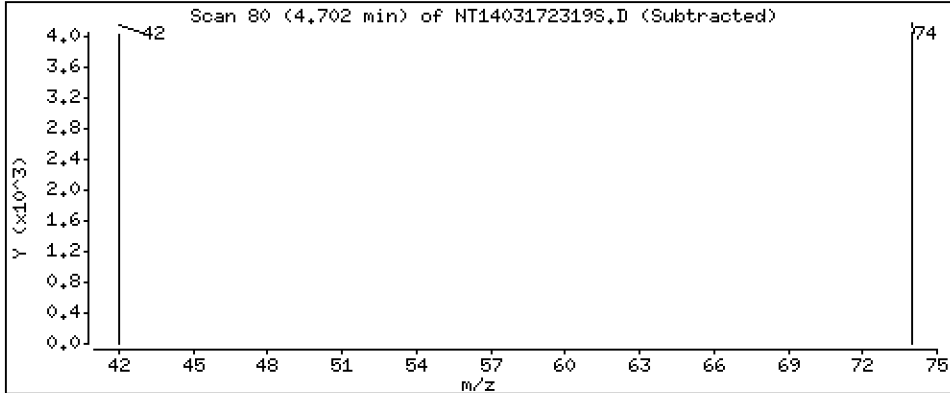
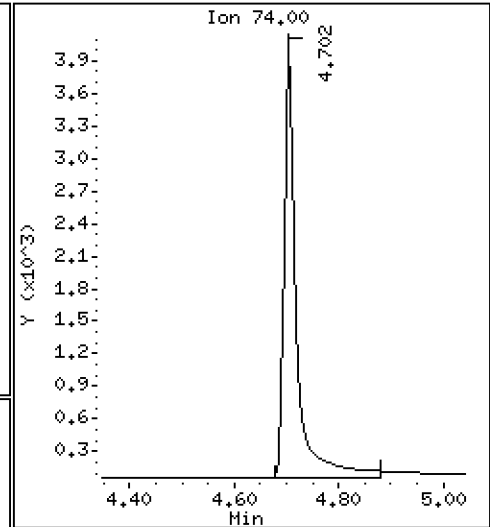
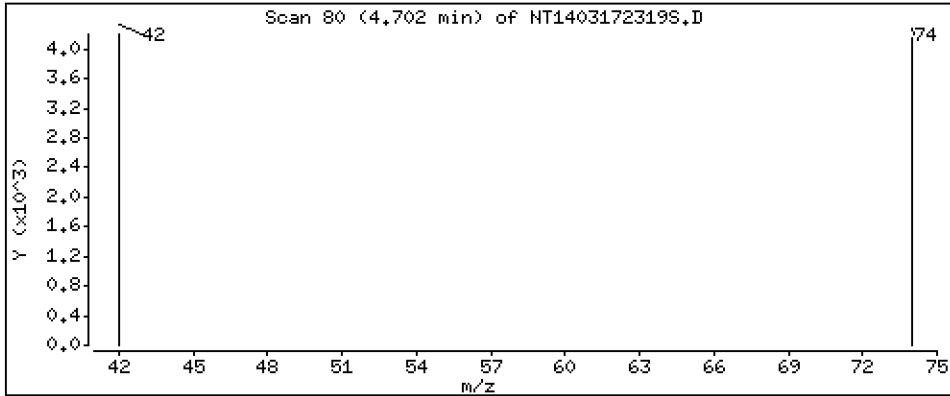
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,1264 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt14.i\20230317.b\20230317.b\NT1403172319S.D
 Lab Smp Id: SLC0376-LCV4
 Inj Date : 18-MAR-2023 01:19 MS Autotune Date: 11-MAR-2023 16:01
 Operator : JGR Inst ID: nt14.i
 Smp Info : SLC0376-LCV4
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Meth Date : 23-Mar-2023 16:55 van Quant Type: ISTD
 Cal Date : 15-MAR-2023 15:50 Cal File: NT1403152308.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: VANS-201906

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.834	6.826	(0.754)	9282	0.11043	0.1104 (R)
3 Phenol	94		8.441	8.441	(0.931)	7945	0.06874	0.06874
7 1,3-Dichlorobenzene	146		9.005	8.997	(0.993)	10278	0.10391	0.1039
* 8 1,4-Dichlorobenzene-d4	152		9.067	9.067	(1.000)	247620	4.00000	
9 1,4-Dichlorobenzene	146		9.098	9.098	(1.003)	10031	0.10480	0.1048
11 Benzyl alcohol	79		9.424	9.354	(1.039)	2392	0.03531	0.03531 (M)
12 1,2-Dichlorobenzene	146		9.455	9.455	(1.043)	9828	0.10542	0.1054
13 2-Methylphenol	108		9.564	9.564	(1.055)	7180	0.08993	0.08993
15 4-Methylphenol	108		9.835	9.828	(1.085)	6597	0.07821	0.07821
16 N-Nitroso-di-n-propylamine	70		9.898	9.898	(1.092)	5007	0.08396	0.08396
22 2,4-Dimethylphenol	107		10.891	10.883	(0.942)	14814	0.18849	0.1885
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.480	11.480	(0.993)	8307	0.10784	0.1078
* 27 Naphthalene-d8	136		11.565	11.565	(1.000)	914256	4.00000	
30 Hexachlorobutadiene	225		11.974	11.974	(1.035)	4190	0.10748	0.1075
39 Dimethylphthalate	163		14.698	14.698	(0.967)	13045	0.09264	0.09264
* 42 Acenaphthene-d10	162		15.201	15.201	(1.000)	412320	4.00000	
50 Diethylphthalate	149		16.160	16.160	(1.063)	13298	0.08870	0.08870
54 N-Nitrosodiphenylamine	169		16.553	16.546	(0.907)	10163	0.09438	0.09438
57 Hexachlorobenzene	284		17.618	17.618	(0.966)	4259	0.10296	0.1030
58 Pentachlorophenol	266		17.997	17.974	(0.986)	756	0.02710	0.02710 (M)
* 59 Phenanthrene-d10	188		18.245	18.245	(1.000)	794702	4.00000	
\$ 66 Terphenyl-d14	244		21.386	21.386	(0.918)	9496	0.12854	0.1285 (R)
67 Butylbenzylphthalate	149		22.307	22.308	(0.958)	7855	0.10492	0.1049
* 69 Chrysene-d12	240		23.291	23.291	(1.000)	428538	4.00000	
* 77 Perylene-d12	264		25.931	25.931	(1.000)	278115	4.00000	
79 Dibenzo(a,h)anthracene	278		28.662	28.631	(1.105)	5648	0.08011	0.08011
90 N-Nitrosodimethylamine	74		4.702	4.694	(0.519)	6491	0.12641	0.1264

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt14.i
 Lab File ID: NT1403172319S.D
 Lab Smp Id: SLC0376-LCV4
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt14.i\20230317.b\20230317.b\SIMABN2.m
 Misc Info:

Calibration Date: 18-MAR-2023
 Calibration Time: 00:07
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	225221	112611	450442	247620	9.95
27 Naphthalene-d8	830434	415217	1660868	914256	10.09
42 Acenaphthene-d10	389907	194954	779814	412320	5.75
59 Phenanthrene-d10	763679	381840	1527358	794702	4.06
69 Chrysene-d12	415791	207896	831582	428538	3.07
77 Perylene-d12	274872	137436	549744	278115	1.18

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.07	8.57	9.57	9.07	-0.00
27 Naphthalene-d8	11.57	11.07	12.07	11.57	-0.00
42 Acenaphthene-d10	15.20	14.70	15.70	15.20	-0.00
59 Phenanthrene-d10	18.25	17.75	18.75	18.25	-0.00
69 Chrysene-d12	23.29	22.79	23.79	23.29	-0.00
77 Perylene-d12	25.93	25.43	26.43	25.93	-0.00

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

REVIEW SUMMARY FOR FILE - NT1403172319S.D

Lab ID: SLC0376-LCV4

nt14.i, 20230317.b\20230317.b\SIMABN2.m,

18-MAR-2023 01:19

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.039	1.032	0.0077	Benzyl alcohol

RRT check based on Ccal File: 20230317.b/NT1403172317S.D

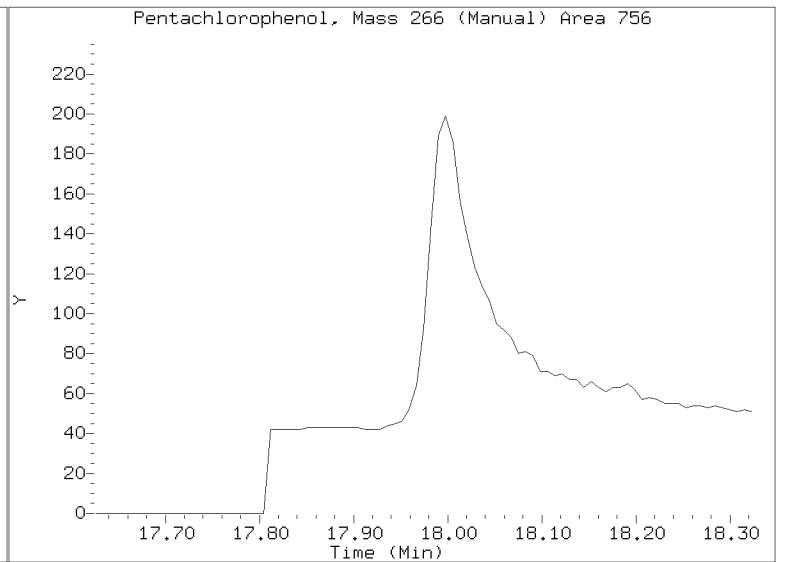
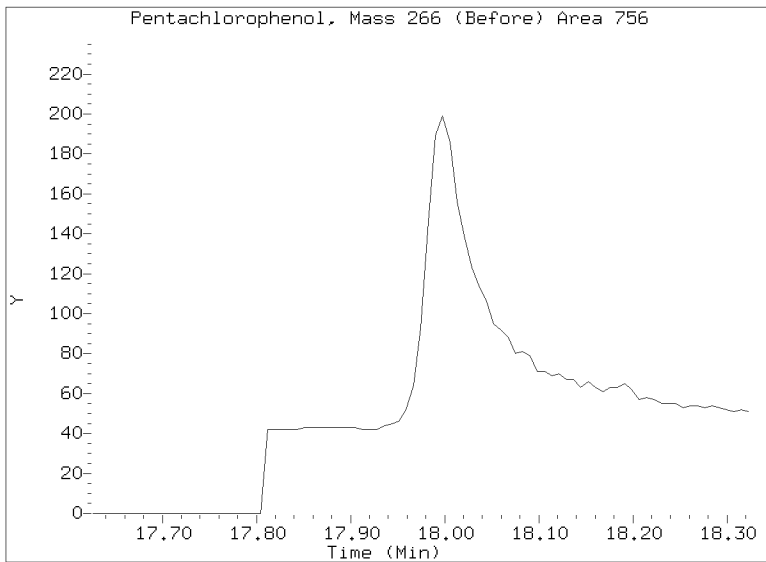
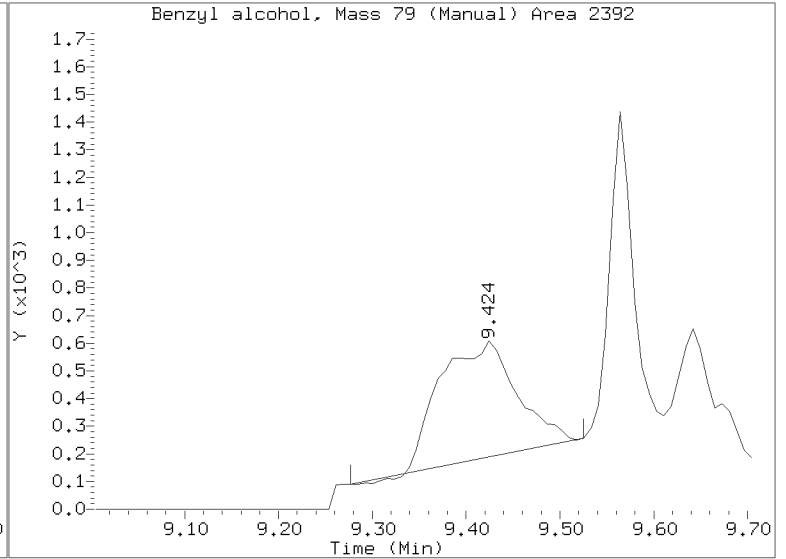
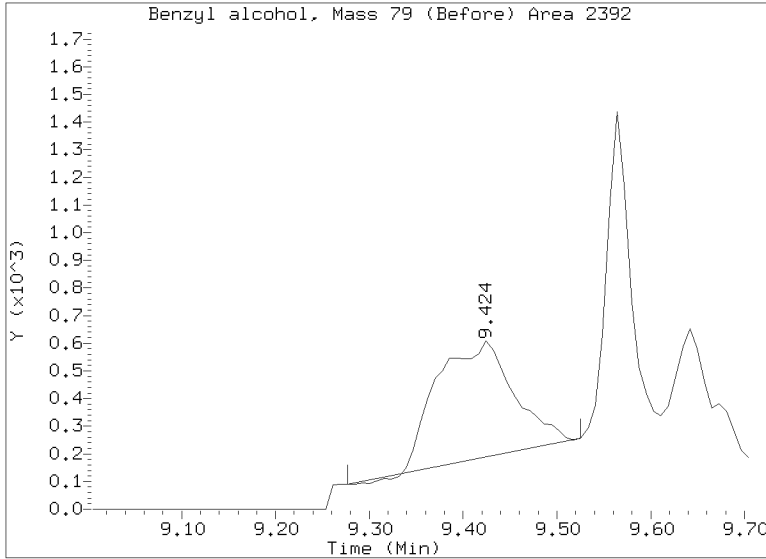
On Column LOD for nt14.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20230317.b/20230317.b/NT1403172319S.D
Injection Date: 18-MAR-2023 01:19
Lab ID:SLC0376-LCV4 Client ID:
Report Date: 03/23/2023 16:55





ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0242

Instrument: NT14

Calibration: GC00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0242-TUN1	NT1403152301S.D	NA	03/15/23 12:00
ABN 10.0	SLC0242-CAL8	NT1403152303S.D	NA	03/15/23 12:49
ABN 5.0	SLC0242-CAL7	NT1403152304S.D	NA	03/15/23 13:26
ABN 2.5	SLC0242-CAL6	NT1403152305S.D	NA	03/15/23 14:02
ABN 1.0	SLC0242-CAL5	NT1403152306S.D	NA	03/15/23 14:38
ABN 0.5	SLC0242-CAL4	NT1403152307S.D	NA	03/15/23 15:14
ABN 0.2	SLC0242-CAL3	NT1403152308S.D	NA	03/15/23 15:50
ABN 0.1	SLC0242-CAL2	NT1403152309S.D	NA	03/15/23 16:26
ABN 0.05	SLC0242-CAL1	NT1403152310S.D	NA	03/15/23 17:03
SCV 5.0	SLC0242-SCV1	NT1403152311S.D	NA	03/15/23 17:39
Initial Cal Blank	SLC0242-ICB1	NT1403152312S.D	NA	03/15/23 18:15



ANALYSIS SEQUENCE

SLC0242

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00050 GCMS Column ID: ZB-5MS
MS EM Level: EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0242-TUN1	MS Tune	QC		1	L002618		03/15/2023 12:00	NT1403152301S.D	JGR	
SLC0242-CAL1	ABN 0.05	QC		2	L002878	K010831	03/15/2023 17:03	NT1403152310S.D	JGR	
SLC0242-CAL2	ABN 0.1	QC		3	L002877	K010831	03/15/2023 16:26	NT1403152309S.D	JGR	
SLC0242-CAL3	ABN 0.2	QC		4	K011105	K010831	03/15/2023 15:50	NT1403152308S.D	JGR	
SLC0242-CAL4	ABN 0.5	QC		5	K011106	K010831	03/15/2023 15:14	NT1403152307S.D	JGR	
SLC0242-CAL5	ABN 1.0	QC		6	K011107	K010831	03/15/2023 14:38	NT1403152306S.D	JGR	
SLC0242-CAL6	ABN 2.5	QC		7	K011108	K010831	03/15/2023 14:02	NT1403152305S.D	JGR	
SLC0242-CAL7	ABN 5.0	QC		8	K011109	K010831	03/15/2023 13:26	NT1403152304S.D	JGR	
SLC0242-CAL8	ABN 10.0	QC		9	K011110	K010831	03/15/2023 12:49	NT1403152303S.D	JGR	
SLC0242-SCV1	SCV 5.0	QC		10	K010066	K010831	03/15/2023 17:39	NT1403152311S.D	JGR	
SLC0242-ICB1	Initial Cal Blank	QC		11	K005156	K010831	03/15/2023 18:15	NT1403152312S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b\20230315.b

Time	Filename	LabID	ClientId	DF																								
1	1200	NT1403152301S.D	SLC0242-TUN1	1	|	NO ISTDs FOUND	|																					
2	1213	NT1403152302S.D	SLC0242-CAL9	1	|	9.08	|	193189	|	11.58	|	746194	|	15.22	|	372879	|	18.25	|	755327	|	23.31	|	598001	|	25.95	|	566994
3	1249	NT1403152303S.D	SLC0242-CAL8	1	|	9.08	|	199100	|	11.57	|	763281	|	15.21	|	374468	|	18.25	|	756122	|	23.31	|	588196	|	25.95	|	568824
4	1326	NT1403152304S.D	SLC0242-CAL7	1	|	9.08	|	210618	|	11.57	|	802273	|	15.20	|	393217	|	18.25	|	796801	|	23.30	|	615139	|	25.94	|	604825
5	1402	NT1403152305S.D	SLC0242-CAL6	1	|	9.08	|	220094	|	11.57	|	828379	|	15.20	|	403583	|	18.25	|	810171	|	23.30	|	624805	|	25.94	|	615084
6	1438	NT1403152306S.D	SLC0242-CAL5	1	|	9.08	|	223201	|	11.56	|	832937	|	15.20	|	403175	|	18.25	|	814822	|	23.30	|	625755	|	25.94	|	614085
7	1514	NT1403152307S.D	SLC0242-CAL4	1	|	9.07	|	244579	|	11.57	|	905671	|	15.20	|	432686	|	18.25	|	872507	|	23.30	|	672118	|	25.94	|	660787
8	1550	NT1403152308S.D	SLC0242-CAL3	1	|	9.07	|	224982	|	11.57	|	833810	|	15.20	|	394134	|	18.25	|	791855	|	23.30	|	613885	|	25.94	|	596641
9	1626	NT1403152309S.D	SLC0242-CAL2	1	|	9.07	|	226822	|	11.57	|	834986	|	15.20	|	395938	|	18.25	|	787336	|	23.30	|	609729	|	25.94	|	588547
10	1703	NT1403152310S.D	SLC0242-CAL1	1	|	9.07	|	225451	|	11.56	|	838488	|	15.20	|	392849	|	18.25	|	771492	|	23.30	|	602035	|	25.94	|	580071
11	1739	NT1403152311S.D	SLC0242-SCV1	1	|	9.07	|	214548	|	11.57	|	807045	|	15.20	|	400955	|	18.25	|	801298	|	23.30	|	624454	|	25.94	|	623001
12	1815	NT1403152312S.D	SLC0242-ICB1	1	|	9.07	|	212376	|	11.56	|	811708	|	15.19	|	379238	|	18.25	|	759480	|	23.30	|	583854	|	25.94	|	563750

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230315.b\20230315.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt14.i Date: 15-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1200	NT1403152301S.D	SLC0242-TUN1		1	NO MANUAL INTEGRATION
1213	NT1403152302S.D	SLC0242-CAL9		1	NO MANUAL INTEGRATION
1249	NT1403152303S.D	SLC0242-CAL8		1	NO MANUAL INTEGRATION
1326	NT1403152304S.D	SLC0242-CAL7		1	NO MANUAL INTEGRATION
1402	NT1403152305S.D	SLC0242-CAL6		1	NO MANUAL INTEGRATION
1438	NT1403152306S.D	SLC0242-CAL5		1	NO MANUAL INTEGRATION
1514	NT1403152307S.D	SLC0242-CAL4		1	NO MANUAL INTEGRATION
1550	NT1403152308S.D	SLC0242-CAL3		1	NO MANUAL INTEGRATION
1626	NT1403152309S.D	SLC0242-CAL2		1	NO MANUAL INTEGRATION
1703	NT1403152310S.D	SLC0242-CAL1		1	NO MANUAL INTEGRATION
1739	NT1403152311S.D	SLC0242-SCV1		1	NO MANUAL INTEGRATION
1815	NT1403152312S.D	SLC0242-ICB1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 16-Mar-2023 15:20

NT1403152301S.D	Data Locked	deenayd, 16-
NT1403152302S.D	Data Locked	deenayd, 16-
NT1403152303S.D	Data Locked	deenayd, 16-
NT1403152304S.D	Data Locked	deenayd, 16-
NT1403152305S.D	Data Locked	deenayd, 16-
NT1403152306S.D	Data Locked	deenayd, 16-
NT1403152307S.D	Data Locked	deenayd, 16-
NT1403152308S.D	Data Locked	deenayd, 16-
NT1403152309S.D	Data Locked	deenayd, 16-
NT1403152310S.D	Data Locked	deenayd, 16-
NT1403152311S.D	Data Locked	deenayd, 16-
NT1403152312S.D	Data Locked	deenayd, 16-



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0376

Instrument: NT14

Calibration: GC00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0376-TUN1	NT1403172301S.D	NA	03/17/23 14:49
Initial Cal Check	SLC0376-ICV1	NT1403172303S.D	NA	03/17/23 15:39
ABN 0.2	SLC0376-LCV1	NT1403172304S.D	NA	03/17/23 16:16
ABN 0.1	SLC0376-LCV2	NT1403172305S.D	NA	03/17/23 16:52
Blank	BLB0424-BLK2	NT1403172312S.D	Solid	03/17/23 21:06
LCS	BLB0424-BS2	NT1403172313S.D	Solid	03/17/23 21:42
LCS Dup	BLB0424-BSD2	NT1403172314S.D	Solid	03/17/23 22:19
Reference	BLB0424-SRM2	NT1403172315S.D	Solid	03/17/23 22:55
ABN 1	SLC0376-ICV2	NT1403172317S.D	NA	03/18/23 00:07
ABN 0.2	SLC0376-LCV3	NT1403172318S.D	NA	03/18/23 00:43
ABN 0.1	SLC0376-LCV4	NT1403172319S.D	NA	03/18/23 01:19
<i>ZZZZZ</i>	23A0099-04	NT1403172320S.D	Solid	03/18/23 01:55
LDW23-SS1236	23B0229-02	NT1403172321S.D	Solid	03/18/23 02:31
LDW23-SS1237	23B0229-03	NT1403172322S.D	Solid	03/18/23 03:07
LDW23-SS1150	23B0229-04	NT1403172323S.D	Solid	03/18/23 03:42
LDW23-SS1008	23B0229-05	NT1403172324S.D	Solid	03/18/23 04:18
LDW23-SC1008	23B0229-06	NT1403172325S.D	Solid	03/18/23 04:54
LDW23-SC1013	23B0229-08	NT1403172326S.D	Solid	03/18/23 05:30
<i>ZZZZZ</i>	23B0276-01	NT1403172327S.D	Solid	03/18/23 06:06
Calibration Check	SLC0376-CCV1	NT1403172331S.D	NA	03/18/23 08:30



ANALYSIS SEQUENCE

SLC0376

Instrument ID: NT14 GCMS Description: Agilent 7890A/5975C XL
Calibration ID: GC00050 GCMS Column ID: L002738
MS EM Level: 1906 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0376-TUN1	MS Tune	QC		1	K004775		03/17/2023 14:49	NT1403172301S.D	JGR	
SLC0376-ICV1	Initial Cal Check	QC		2	K011107	K010831	03/17/2023 15:39	NT1403172303S.D	JGR	
SLC0376-LCV1	ABN 0.2	QC		3	K011105	K010831	03/17/2023 16:16	NT1403172304S.D	JGR	
SLC0376-LCV2	ABN 0.1	QC		4	L002877	K010831	03/17/2023 16:52	NT1403172305S.D	JGR	
BLB0424-BLK2	Blank	QC		5		K010831	03/17/2023 21:06	NT1403172312S.D	JGR	
BLB0424-BS2	LCS	QC		6		K010831	03/17/2023 21:42	NT1403172313S.D	JGR	
BLB0424-BSD2	LCS Dup	QC		7		K010831	03/17/2023 22:19	NT1403172314S.D	JGR	
BLB0424-SRM2	Reference	QC		8		K010831	03/17/2023 22:55	NT1403172315S.D	JGR	
SLC0376-ICV2	ABN 1	QC		9	K011107	K010831	03/18/2023 00:07	NT1403172317S.D	JGR	
SLC0376-LCV3	ABN 0.2	QC		10	K011105	K010831	03/18/2023 00:43	NT1403172318S.D	JGR	
SLC0376-LCV4	ABN 0.1	QC		11	L002877	K010831	03/18/2023 01:19	NT1403172319S.D	JGR	
23A0099-04	LDW23-SC1186	270E-SIM Dual Scan SVO	A 05	12		K010831	03/18/2023 01:55	NT1403172320S.D	JGR	
23B0229-02	LDW23-SS1236	270E-SIM Dual Scan SVO	A 03	13		K010831	03/18/2023 02:31	NT1403172321S.D	JGR	
23B0229-03	LDW23-SS1237	270E-SIM Dual Scan SVO	A 03	14		K010831	03/18/2023 03:07	NT1403172322S.D	JGR	
23B0229-04	LDW23-SS1150	270E-SIM Dual Scan SVO	A 03	15		K010831	03/18/2023 03:42	NT1403172323S.D	JGR	
23B0229-05	LDW23-SS1008	270E-SIM Dual Scan SVO	A 03	16		K010831	03/18/2023 04:18	NT1403172324S.D	JGR	
23B0229-06	LDW23-SC1008	270E-SIM Dual Scan SVO	A 03	17		K010831	03/18/2023 04:54	NT1403172325S.D	JGR	
23B0229-08	LDW23-SC1013	270E-SIM Dual Scan SVO	A 03	18		K010831	03/18/2023 05:30	NT1403172326S.D	JGR	
23B0276-01	LDW23-SC1150B	270E-SIM Dual Scan SVO	A 03	19		K010831	03/18/2023 06:06	NT1403172327S.D	JGR	
BLB0424-MS2	Matrix Spike	QC		20		K010831	03/18/2023 06:42	NT1403172328S.D	JGR	
BLB0424-MSD2	Matrix Spike Dup	QC		21		K010831	03/18/2023 07:18	NT1403172329S.D	JGR	
SLC0376-CCV1	Calibration Check	QC		22	K011107	K010831	03/18/2023 08:30	NT1403172331S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b\20230317.b

Time	Filename	LabID	ClientID	DF												
1	1449	NT1403172301S.D	SLC0376-TUN1		1	|	NO ISTDS FOUND|									
2	1503	NT1403172302S.D			1	|	0.00	0||	0.00	0||	0.00	0||	0.00	0||	0.00	0|
3	1539	NT1403172303S.D	SLC0376-ICV1		1	|	9.07	224436||	11.56	825617||	15.20	392947||	18.25	789887||	23.30	494007||25.94 375441|
4	1616	NT1403172304S.D	SLC0376-LCV1		1	|	9.07	252964||	11.56	938423||	15.20	433407||	18.25	872490||	23.30	565557||25.94 425973|
5	1652	NT1403172305S.D	SLC0376-LCV2		1	|	9.07	258144||	11.57	956001||	15.20	440462||	18.25	871857||	23.30	565458||25.94 439880|
6	1728	NT1403172306S.D	23A0417-14		1	|	9.07	213657||	11.57	797669||	15.20	356932||	18.25	750203||	23.30	306638||25.95 225854|
7	1805	NT1403172307S.D	23A0417-15		1	|	9.07	241262||	11.57	924018||	15.20	405633||	18.25	759057||	23.30	304470||25.95 237632|
8	1841	NT1403172308S.D	BLB0026-MS2		1	|	9.07	209536||	11.57	783115||	15.20	359263||	18.25	702671||	23.30	286699||25.94 208324|
9	1918	NT1403172309S.D	BLB0026-MSD2		1	|	9.08	216843||	11.57	821174||	15.21	383780||	18.25	794528||	23.30	377187||25.94 252820|
10	1954	NT1403172310S.D	23B0261-16RE1		20	|	9.07	265922||	11.57	1007291||	15.20	460551||	18.25	886561||	23.30	481130||25.94 352475|
11	2030	NT1403172311S.D	23B0261-28RE1		4	|	9.07	257101||	11.57	979963||	15.20	447046||	18.25	919113||	23.30	495801||25.93 348731|
12	2106	NT1403172312S.D	BLB0424-BLK2		1	|	9.07	256011||	11.56	992862||	15.20	455611||	18.25	866949||	23.30	479252||25.94 323704|
13	2142	NT1403172313S.D	BLB0424-BS2		1	|	9.07	242461||	11.57	913509||	15.20	430694||	18.25	818351||	23.30	441807||25.93 296844|
14	2219	NT1403172314S.D	BLB0424-BSD2		1	|	9.07	249790||	11.57	947229||	15.20	439174||	18.25	832353||	23.30	446664||25.94 299018|
15	2255	NT1403172315S.D	BLB0424-SRM2		1	|	9.07	267869||	11.57	995304||	15.20	457995||	18.25	866459||	23.30	456685||25.93 299254|
16	2331	NT1403172316S.D	SEQ-CCVFULL		1	|	9.07	253146||	11.57	945673||	15.20	452747||	18.25	902182||	23.30	504216||25.93 327783|
17	0007	NT1403172317S.D	SLC0376-ICV2		1	|	9.07	225221||	11.57	830434||	15.20	389907||	18.25	763679||	23.29	415791||25.93 274872|
18	0043	NT1403172318S.D	SLC0376-LCV3		1	|	9.07	237109||	11.57	875716||	15.19	402477||	18.25	779424||	23.29	471287||25.93 312893|
19	0119	NT1403172319S.D	SLC0376-LCV4		1	|	9.07	247620||	11.57	914256||	15.20	412320||	18.25	794702||	23.29	428538||25.93 278115|
20	0155	NT1403172320S.D	23A0099-04		1	|	9.07	250829||	11.57	941882||	15.20	418426||	18.25	808772||	23.30	298464||25.94 222303|

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b\20230317.b

Time	Filename	LabID	ClientId	DF									
21	0231	NT1403172321S.D	23B0229-02		1	|	9.07	245187||11.57	915475||15.20	408415||18.25	726429||23.30	258515||25.94	195534|
22	0307	NT1403172322S.D	23B0229-03		1	|	9.07	246172||11.57	940950||15.20	430030||18.25	830545||23.30	289109||25.95	198771|
23	0342	NT1403172323S.D	23B0229-04		1	|	9.07	259410||11.56	978160||15.20	431277||18.25	761577||23.30	252525||25.94	188068|
24	0418	NT1403172324S.D	23B0229-05		1	|	9.07	236781||11.56	892726||15.20	398891||18.25	730854||23.31	251679||25.95	181024|
25	0454	NT1403172325S.D	23B0229-06		1	|	9.07	235108||11.57	892040||15.20	400304||18.25	751806||23.31	255532||25.95	185509|
26	0530	NT1403172326S.D	23B0229-08		1	|	9.07	245309||11.57	937432||15.20	415064||18.25	754279||23.31	236642||25.95	176821|
27	0606	NT1403172327S.D	23B0276-01		1	|	9.07	251363||11.57	969521||15.20	434752||18.25	783103||23.31	242155||25.95	186352|
28	0642	NT1403172328S.D	BLB0424-MS2		1	|	9.07	241033||11.57	925783||15.21	432475||18.25	795089||23.31	240602||25.95	183923|
29	0718	NT1403172329S.D	BLB0424-MSD2		1	|	9.07	233702||11.57	892852||15.21	423831||18.25	849353||23.31	275198||25.95	195079|
30	0754	NT1403172330S.D	SEQ-CCVFULL		1	|	9.08	252171||11.57	950296||15.20	429535||18.25	743698||23.30	243833||25.95	183887|
31	0830	NT1403172331S.D	SLC0376-CCV1		1	|	9.07	209245||11.57	773367||15.20	352031||18.25	670884||23.30	255030||25.95	183174|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20230317.b\20230317.b

Instrument: nt14.i Date: 17-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1449	NT1403172301S.D	SLC0376-TUN1	1	NO MANUAL INTEGRATION
1503	NT1403172302S.D		1	NO MANUAL INTEGRATION
1539	NT1403172303S.D	SLC0376-ICV1	1	NO MANUAL INTEGRATION
1616	NT1403172304S.D	SLC0376-LCV1	1	NO MANUAL INTEGRATION
1652	NT1403172305S.D	SLC0376-LCV2	1	NO MANUAL INTEGRATION
1728	NT1403172306S.D	23A0417-14	1	NO MANUAL INTEGRATION
1805	NT1403172307S.D	23A0417-15	1	NO MANUAL INTEGRATION
1841	NT1403172308S.D	BLB0026-MS2	1	NO MANUAL INTEGRATION
1918	NT1403172309S.D	BLB0026-MSD2	1	NO MANUAL INTEGRATION
1954	NT1403172310S.D	23B0261-16RE1	20	NO MANUAL INTEGRATION
2030	NT1403172311S.D	23B0261-28RE1	4	NO MANUAL INTEGRATION
2106	NT1403172312S.D	BLB0424-BLK2	1	1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene,
2142	NT1403172313S.D	BLB0424-BS2	1	NO MANUAL INTEGRATION
2219	NT1403172314S.D	BLB0424-BSD2	1	NO MANUAL INTEGRATION
2255	NT1403172315S.D	BLB0424-SRM2	1	1,4-Dichlorobenzene, 1,2-Dichlorobenzene,
2331	NT1403172316S.D	SEQ-CCVFULL	1	NO MANUAL INTEGRATION
0007	NT1403172317S.D	SLC0376-ICV2	1	NO MANUAL INTEGRATION

Instrument: nt14.i Date: 18-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
0043	NT1403172318S.D	SLC0376-LCV3	1	Benzoic acid,
0119	NT1403172319S.D	SLC0376-LCV4	1	Benzyl alcohol, Pentachlorophenol,
0155	NT1403172320S.D	23A0099-04	1	Dimethylphthalate,
0231	NT1403172321S.D	23B0229-02	1	1,2-Dichlorobenzene, Dimethylphthalate,
0307	NT1403172322S.D	23B0229-03	1	Dimethylphthalate,
0342	NT1403172323S.D	23B0229-04	1	1,2-Dichlorobenzene, 2-Methylphenol, Dimethylphthalate, Pentachlorophenol,
0418	NT1403172324S.D	23B0229-05	1	2-Methylphenol, Dimethylphthalate, Pentachlorophenol,
0454	NT1403172325S.D	23B0229-06	1	2-Methylphenol, Dimethylphthalate, Pentachlorophenol,
0530	NT1403172326S.D	23B0229-08	1	2-Methylphenol, Dimethylphthalate, Pentachlorophenol,
0606	NT1403172327S.D	23B0276-01	1	Benzyl alcohol, Dimethylphthalate,
0642	NT1403172328S.D	BLB0424-MS2	1	NO MANUAL INTEGRATION
0718	NT1403172329S.D	BLB0424-MSD2	1	NO MANUAL INTEGRATION
0754	NT1403172330S.D	SEQ-CCVFULL	1	NO MANUAL INTEGRATION
0830	NT1403172331S.D	SLC0376-CCV1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 23-Mar-2023 16:51

NT1403172301S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172302S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172303S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172304S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172305S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172306S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172307S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172308S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172309S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172310S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172311S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172312S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172313S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172314S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172315S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172316S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172317S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172318S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172319S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172320S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172321S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172322S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172323S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172324S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172325S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172326S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172327S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172328S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172329S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172330S.D	Data Locked	van,	23-Mar-2023	16:51
NT1403172331S.D	Data Locked	van,	23-Mar-2023	16:51



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23B0229</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0242</u>	Instrument:	<u>NT14</u>
Calibration:	<u>GC00050</u>	Calibration Date:	<u>03/15/2023</u>

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0242-SCV1 (Solid)		Lab File ID: NT1403152311S.D			Analyzed: 03/15/23 17:39			
2-Fluorophenol	7.5000	0.0240	0 - 200	6.834	6.828	0.0060	N/A	
p-Terphenyl-d14	5.0000	0.101	0 - 200	21.386	21.388	-0.0020	N/A	
SLC0242-ICB1 (Solid)		Lab File ID: NT1403152312S.D			Analyzed: 03/15/23 18:15			
2-Fluorophenol	7.5000	95.6	27 - 120	6.826	6.828	-0.0020	N/A	
p-Terphenyl-d14	5.0000	97.2	37 - 120	21.386	21.388	-0.0020	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0376
Calibration: GC00050

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: NT14
Calibration Date: 03/15/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0376-LCV4 (Solid) Lab File ID: NT1403172319S.D Analyzed: 03/18/23 01:19								
2-Fluorophenol	0.15000	73.6	0 - 200	6.834	6.828	0.0060	N/A	
p-Terphenyl-d14	0.10000	129	0 - 200	21.386	21.388	-0.0020	N/A	
23B0229-02 (Solid) Lab File ID: NT1403172321S.D Analyzed: 03/18/23 02:31								
2-Fluorophenol	761.53	41.0	27 - 120	6.842	6.828	0.0140	N/A	
p-Terphenyl-d14	507.68	140	37 - 120	21.394	21.388	0.0060	N/A	*
23B0229-03 (Solid) Lab File ID: NT1403172322S.D Analyzed: 03/18/23 03:07								
2-Fluorophenol	741.66	51.1	27 - 120	6.842	6.828	0.0140	N/A	
p-Terphenyl-d14	494.44	156	37 - 120	21.394	21.388	0.0060	N/A	*
23B0229-04 (Solid) Lab File ID: NT1403172323S.D Analyzed: 03/18/23 03:42								
2-Fluorophenol	740.03	61.0	27 - 120	6.849	6.828	0.0210	N/A	
p-Terphenyl-d14	493.36	152	37 - 120	21.394	21.388	0.0060	N/A	*
23B0229-05 (Solid) Lab File ID: NT1403172324S.D Analyzed: 03/18/23 04:18								
2-Fluorophenol	732.45	58.7	27 - 120	6.849	6.828	0.0210	N/A	
p-Terphenyl-d14	488.30	142	37 - 120	21.394	21.388	0.0060	N/A	*
23B0229-06 (Solid) Lab File ID: NT1403172325S.D Analyzed: 03/18/23 04:54								
2-Fluorophenol	742.34	61.4	27 - 120	6.842	6.828	0.0140	N/A	
p-Terphenyl-d14	494.89	145	37 - 120	21.394	21.388	0.0060	N/A	*
23B0229-08 (Solid) Lab File ID: NT1403172326S.D Analyzed: 03/18/23 05:30								
2-Fluorophenol	726.50	70.5	27 - 120	6.849	6.828	0.0210	N/A	
p-Terphenyl-d14	484.33	168	37 - 120	21.402	21.388	0.0140	N/A	*
SLC0376-CCV1 (Solid) Lab File ID: NT1403172331S.D Analyzed: 03/18/23 08:30								
2-Fluorophenol	1.5000	85.9	50 - 150	6.834	6.828	0.0060	N/A	
p-Terphenyl-d14	1.0000	178	50 - 150	21.394	21.388	0.0060	N/A	*



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0242

Instrument: NT14

Calibration: GC00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0242-SCV1)		(Solid)	Lab File ID: NT1403152311S.D			Analyzed: 03/15/23 17:39			
1,4-Dichlorobenzene-d4	214548	9.067	223201	9.075	96	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	807045	11.565	832937	11.564	97	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	400955	15.201	403175	15.201	99	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	801298	18.245	814822	18.245	98	50 - 200	0.000	+/-0.50	
Chrysene-d12	624454	23.299	625755	23.298	100	50 - 200	0.001	+/-0.50	
Perylene-d12	623001	25.939	614085	25.939	101	50 - 200	0.000	+/-0.50	
Initial Cal Blank (SLC0242-ICB1)		(Solid)	Lab File ID: NT1403152312S.D			Analyzed: 03/15/23 18:15			
1,4-Dichlorobenzene-d4	212376	9.067	223201	9.075	95	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	811708	11.564	832937	11.564	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	379238	15.193	403175	15.201	94	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	759480	18.245	814822	18.245	93	50 - 200	0.000	+/-0.50	
Chrysene-d12	583854	23.299	625755	23.298	93	50 - 200	0.001	+/-0.50	
Perylene-d12	563750	25.939	614085	25.939	92	50 - 200	0.000	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0376

Instrument: NT14

Calibration: GC00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0376-ICV1)		(Solid)	Lab File ID: NT1403172303S.D			Analyzed: 03/17/23 15:39			
1,4-Dichlorobenzene-d4	224436	9.067	224436	9.067	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	825617	11.564	825617	11.564	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	392947	15.201	392947	15.201	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	789887	18.245	789887	18.245	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	494007	23.298	494007	23.298	100	50 - 200	0.000	+/-0.50	
Perylene-d12	375441	25.938	375441	25.938	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0376-LCV1)		(Solid)	Lab File ID: NT1403172304S.D			Analyzed: 03/17/23 16:16			
1,4-Dichlorobenzene-d4	252964	9.067	224436	9.067	113	50 - 200	0.000	+/-0.50	
Naphthalene-d8	938423	11.564	825617	11.564	114	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	433407	15.201	392947	15.201	110	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	872490	18.245	789887	18.245	110	50 - 200	0.000	+/-0.50	
Chrysene-d12	565557	23.298	494007	23.298	114	50 - 200	0.000	+/-0.50	
Perylene-d12	425973	25.939	375441	25.938	113	50 - 200	0.001	+/-0.50	
Low Cal Check (SLC0376-LCV2)		(Solid)	Lab File ID: NT1403172305S.D			Analyzed: 03/17/23 16:52			
1,4-Dichlorobenzene-d4	258144	9.067	224436	9.067	115	50 - 200	0.000	+/-0.50	
Naphthalene-d8	956001	11.565	825617	11.564	116	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	440462	15.201	392947	15.201	112	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	871857	18.245	789887	18.245	110	50 - 200	0.000	+/-0.50	
Chrysene-d12	565458	23.299	494007	23.298	114	50 - 200	0.001	+/-0.50	
Perylene-d12	439880	25.939	375441	25.938	117	50 - 200	0.001	+/-0.50	
Blank (BLB0424-BLK2)		(Solid)	Lab File ID: NT1403172312S.D			Analyzed: 03/17/23 21:06			
1,4-Dichlorobenzene-d4	256011	9.067	224436	9.067	114	50 - 200	0.000	+/-0.50	
Naphthalene-d8	992862	11.564	825617	11.564	120	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	455611	15.201	392947	15.201	116	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	866949	18.245	789887	18.245	110	50 - 200	0.000	+/-0.50	
Chrysene-d12	479252	23.299	494007	23.298	97	50 - 200	0.001	+/-0.50	
Perylene-d12	323704	25.939	375441	25.938	86	50 - 200	0.001	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0376

Instrument: NT14

Calibration: GC00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (BLB0424-BS2)		(Solid)	Lab File ID: NT1403172313S.D			Analyzed: 03/17/23 21:42			
1,4-Dichlorobenzene-d4	242461	9.067	224436	9.067	108	50 - 200	0.000	+/-0.50	
Naphthalene-d8	913509	11.565	825617	11.564	111	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	430694	15.201	392947	15.201	110	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	818351	18.245	789887	18.245	104	50 - 200	0.000	+/-0.50	
Chrysene-d12	441807	23.299	494007	23.298	89	50 - 200	0.001	+/-0.50	
Perylene-d12	296844	25.931	375441	25.938	79	50 - 200	-0.007	+/-0.50	
LCS Dup (BLB0424-BSD2)		(Solid)	Lab File ID: NT1403172314S.D			Analyzed: 03/17/23 22:19			
1,4-Dichlorobenzene-d4	249790	9.067	224436	9.067	111	50 - 200	0.000	+/-0.50	
Naphthalene-d8	947229	11.565	825617	11.564	115	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	439174	15.201	392947	15.201	112	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	832353	18.245	789887	18.245	105	50 - 200	0.000	+/-0.50	
Chrysene-d12	446664	23.299	494007	23.298	90	50 - 200	0.001	+/-0.50	
Perylene-d12	299018	25.939	375441	25.938	80	50 - 200	0.001	+/-0.50	
Reference (BLB0424-SRM2)		(Solid)	Lab File ID: NT1403172315S.D			Analyzed: 03/17/23 22:55			
1,4-Dichlorobenzene-d4	267869	9.067	224436	9.067	119	50 - 200	0.000	+/-0.50	
Naphthalene-d8	995304	11.565	825617	11.564	121	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	457995	15.201	392947	15.201	117	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	866459	18.245	789887	18.245	110	50 - 200	0.000	+/-0.50	
Chrysene-d12	456685	23.299	494007	23.298	92	50 - 200	0.001	+/-0.50	
Perylene-d12	299254	25.931	375441	25.938	80	50 - 200	-0.007	+/-0.50	
Initial Cal Check (SLC0376-ICV2)		(Solid)	Lab File ID: NT1403172317S.D			Analyzed: 03/18/23 00:07			
1,4-Dichlorobenzene-d4	225221	9.067	225221	9.067	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	830434	11.565	830434	11.565	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	389907	15.201	389907	15.201	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	763679	18.245	763679	18.245	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	415791	23.291	415791	23.291	100	50 - 200	0.000	+/-0.50	
Perylene-d12	274872	25.931	274872	25.931	100	50 - 200	0.000	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0376

Instrument: NT14

Calibration: GC00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Low Cal Check (SLC0376-LCV3)		(Solid)	Lab File ID: NT1403172318S.D			Analyzed: 03/18/23 00:43			
1,4-Dichlorobenzene-d4	237109	9.067	225221	9.067	105	50 - 200	0.000	+/-0.50	
Naphthalene-d8	875716	11.565	830434	11.565	105	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	402477	15.194	389907	15.201	103	50 - 200	-0.007	+/-0.50	
Phenanthrene-d10	779424	18.245	763679	18.245	102	50 - 200	0.000	+/-0.50	
Chrysene-d12	471287	23.291	415791	23.291	113	50 - 200	0.000	+/-0.50	
Perylene-d12	312893	25.931	274872	25.931	114	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0376-LCV4)		(Solid)	Lab File ID: NT1403172319S.D			Analyzed: 03/18/23 01:19			
1,4-Dichlorobenzene-d4	247620	9.067	225221	9.067	110	50 - 200	0.000	+/-0.50	
Naphthalene-d8	914256	11.565	830434	11.565	110	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	412320	15.201	389907	15.201	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	794702	18.245	763679	18.245	104	50 - 200	0.000	+/-0.50	
Chrysene-d12	428538	23.291	415791	23.291	103	50 - 200	0.000	+/-0.50	
Perylene-d12	278115	25.931	274872	25.931	101	50 - 200	0.000	+/-0.50	
LDW23-SS1236 (23B0229-02)		(Solid)	Lab File ID: NT1403172321S.D			Analyzed: 03/18/23 02:31			
1,4-Dichlorobenzene-d4	245187	9.067	225221	9.067	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	915475	11.565	830434	11.565	110	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	408415	15.201	389907	15.201	105	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	726429	18.245	763679	18.245	95	50 - 200	0.000	+/-0.50	
Chrysene-d12	258515	23.299	415791	23.291	62	50 - 200	0.008	+/-0.50	
Perylene-d12	195534	25.939	274872	25.931	71	50 - 200	0.008	+/-0.50	
LDW23-SS1237 (23B0229-03)		(Solid)	Lab File ID: NT1403172322S.D			Analyzed: 03/18/23 03:07			
1,4-Dichlorobenzene-d4	246172	9.067	225221	9.067	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	940950	11.565	830434	11.565	113	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	430030	15.201	389907	15.201	110	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	830545	18.245	763679	18.245	109	50 - 200	0.000	+/-0.50	
Chrysene-d12	289109	23.299	415791	23.291	70	50 - 200	0.008	+/-0.50	
Perylene-d12	198771	25.947	274872	25.931	72	50 - 200	0.016	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0376

Instrument: NT14

Calibration: GC00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1150 (23B0229-04)		(Solid)	Lab File ID: NT1403172323S.D			Analyzed: 03/18/23 03:42			
1,4-Dichlorobenzene-d4	259410	9.067	225221	9.067	115	50 - 200	0.000	+/-0.50	
Naphthalene-d8	978160	11.564	830434	11.565	118	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	431277	15.201	389907	15.201	111	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	761577	18.245	763679	18.245	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	252525	23.299	415791	23.291	61	50 - 200	0.008	+/-0.50	
Perylene-d12	188068	25.939	274872	25.931	68	50 - 200	0.008	+/-0.50	
LDW23-SS1008 (23B0229-05)		(Solid)	Lab File ID: NT1403172324S.D			Analyzed: 03/18/23 04:18			
1,4-Dichlorobenzene-d4	236781	9.067	225221	9.067	105	50 - 200	0.000	+/-0.50	
Naphthalene-d8	892726	11.564	830434	11.565	108	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	398891	15.201	389907	15.201	102	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	730854	18.245	763679	18.245	96	50 - 200	0.000	+/-0.50	
Chrysene-d12	251679	23.306	415791	23.291	61	50 - 200	0.015	+/-0.50	
Perylene-d12	181024	25.946	274872	25.931	66	50 - 200	0.015	+/-0.50	
LDW23-SC1008 (23B0229-06)		(Solid)	Lab File ID: NT1403172325S.D			Analyzed: 03/18/23 04:54			
1,4-Dichlorobenzene-d4	235108	9.067	225221	9.067	104	50 - 200	0.000	+/-0.50	
Naphthalene-d8	892040	11.565	830434	11.565	107	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	400304	15.201	389907	15.201	103	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	751806	18.253	763679	18.245	98	50 - 200	0.008	+/-0.50	
Chrysene-d12	255532	23.307	415791	23.291	61	50 - 200	0.016	+/-0.50	
Perylene-d12	185509	25.947	274872	25.931	67	50 - 200	0.016	+/-0.50	
LDW23-SC1013 (23B0229-08)		(Solid)	Lab File ID: NT1403172326S.D			Analyzed: 03/18/23 05:30			
1,4-Dichlorobenzene-d4	245309	9.067	225221	9.067	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	937432	11.565	830434	11.565	113	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	415064	15.201	389907	15.201	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	754279	18.253	763679	18.245	99	50 - 200	0.008	+/-0.50	
Chrysene-d12	236642	23.307	415791	23.291	57	50 - 200	0.016	+/-0.50	
Perylene-d12	176821	25.954	274872	25.931	64	50 - 200	0.023	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0376

Instrument: NT14

Calibration: GC00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (SLC0376-CCV1)		(Solid)	Lab File ID: NT1403172331S.D			Analyzed: 03/18/23 08:30			
1,4-Dichlorobenzene-d4	209245	9.067	225221	9.067	93	50 - 200	0.000	+/-0.50	
Naphthalene-d8	773367	11.565	830434	11.565	93	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	352031	15.201	389907	15.201	90	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	670884	18.245	763679	18.245	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	255030	23.299	415791	23.291	61	50 - 200	0.008	+/-0.50	
Perylene-d12	183174	25.947	274872	25.931	67	50 - 200	0.016	+/-0.50	



HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 02:31	28	40	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 03:07	29	40	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 03:42	29	40	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 04:18	29	40	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	02/17/23 15:00	9	14	03/18/23 04:54	29	40	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	02/17/23 15:00	8	14	03/18/23 05:30	29	40	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: NT14

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: 0-916

Lot #: 59-57A

Purity: 99%

Analyst: VFB

Element: B000954



Description: SVOC 4,4 DDT Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 23-Sep-13
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 11:46 by JZ
Vendor: Chem Service Lot #: 198-128A
Vendor Catalog #:

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AS



Description: SVOC alpha-Terpineol Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 12:13 by JZ
Vendor: ACROS Organics Lot #: AD16481201
Vendor Catalog #:

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: AD6481201

Purity: 98%

Analyst: 12



Description: SVOA Dibutyl Phenyl phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 15:45 by JZ
Vendor: Monsanto Lot #: N/A
Vendor Catalog #:

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98.9%

Analyst: AD



Description: SVOC Triphenyl Phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 15:59 by JZ
Vendor: Aldrich Lot #: 04902CM
Vendor Catalog #:

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Triphenyl phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04902CM

Purity: 99%

Analyst: [Signature]



Description: SVOC Butylated Hydroxytoluene Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 16:18 by JZ
Vendor: SIGMA Lot #: 39F-0197
Vendor Catalog #:

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Bulkyated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AB



Description: SVOC Butyl Diphenyl Phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 17:02 by JZ
Vendor: Monsanto Lot #: N/A
Vendor Catalog #:

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 99%

Analyst: [Signature]



Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941

SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: 644 5021

Purity: 90.29%

Analyst: AB



Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945

SVOC Benzoic Acid
Expires 12/31/2029

Prepared By Jianqing Zhou 12/31/2012

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0224339

Purity: 98%

Analyst: AB



Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948

SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: RB



Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL



B002054

SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 62-53

Purity: 99%

Analyst: AB



Description: SVOA Benzidine Expires: 31-Dec-29
Standard Type: Analyte Spike Prepared: 15-Oct-13
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 15-Oct-13 12:07 by JZ
Vendor: SIGMA Lot #: 18C0024
Vendor Catalog #:

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 95%

Analyst: B.

Certificate of Analysis

Product Name: 1,2,4,5-Tetrachlorobenzene
Product Description: 98%
Product Brand: Sigma-Aldrich
Product Number: 131857
Molecular Weight: 215.89
CAS Number: 95-94-3

TEST

APPEARANCE
INFRARED SPECTRUM

GAS LIQUID

QUALITY CONTROL

SPECIFICATION

WHITE POWDER, CHIPS OR CRYSTALS
CONFORMS TO STRUCTURE.

97.5% (MINIMUM)

LOT 19309JR RESULTS

WHITE CHIPS
CONFORMS TO STRUCTURE AND
STANDARD AS
ILLUSTRATED ON PAGE 1011C OF EDITION
I,
VOLUME 1 OF "THE ALDRICH LIBRARY OF
FT-IR
SPECTRA".
99.9 %
JULY 1997



Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

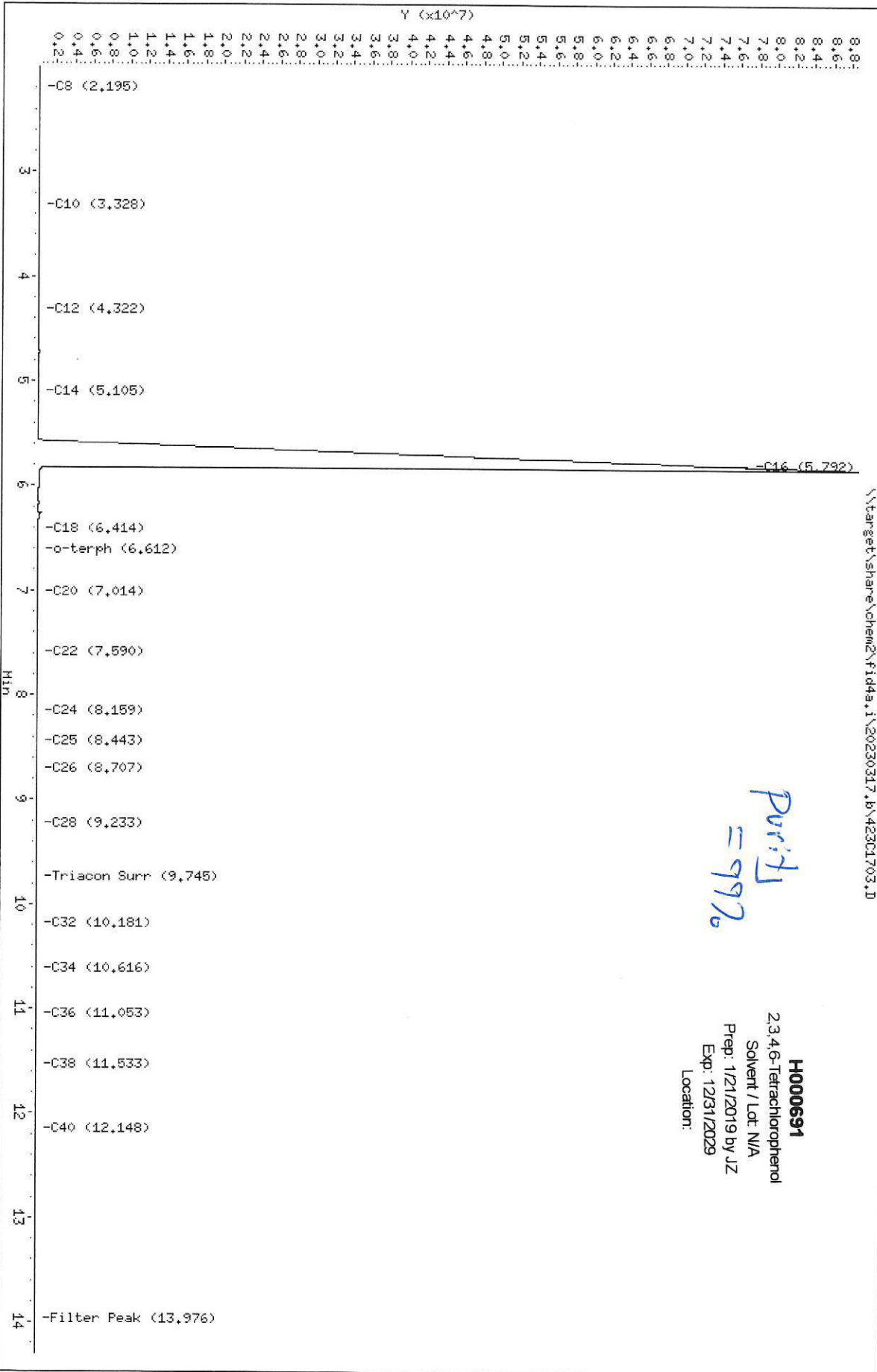
F009172

SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

Data File: \\target\share\chem2\fid4a,1\20230317,1\42301703.D
Date: 17-MAR-2023 10:46
Client ID:
Sample Info: K007226

Column phase: RTX-1

Instrument: fid4a.i
Operator: AA
Column diameter: 0.25



H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
 Lab Smp Id: K007226
 Inj Date : 17-MAR-2023 10:46
 Operator : AA Inst ID: fid4a.i
 Smp Info : K007226
 Misc Info :
 Comment :
 Method : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
 Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
 Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: Falcon+ Compound Sublist: tph.sub
 Target Version: 4.14
 Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
 Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	\$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	\$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
===== 677340272	===== 268782821	===== 100.000			

Total unknown % area = 25.478

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005199

SVOA-ABN BASE STOCK-200-800ug/ml
 Expires 5/31/2023
 Prepared By Jiangqing Zhou 5/18/2021

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

12-May-2021



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005200
 SVOA-ABN ACID STOCK-200-800ug/ml
 Solvent / Lot: DCM
 Prep: 5/18/2021 by JZ
 Exp: 5/31/2023
 Location:



Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.



Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
 Expires 6/30/2023
 Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/



ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Product Number: US-106N-1

Lot Number: 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:



Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 2 of 2

www.agilent.com/quality/



ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL16062

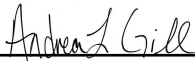
Description: Benzidines Standard

Certification Date: November 19, 2020

Storage: 4 °C

Expiration Date: November 30, 2030

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310

Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

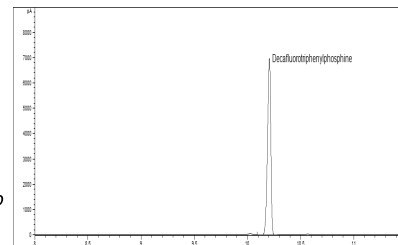


Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness

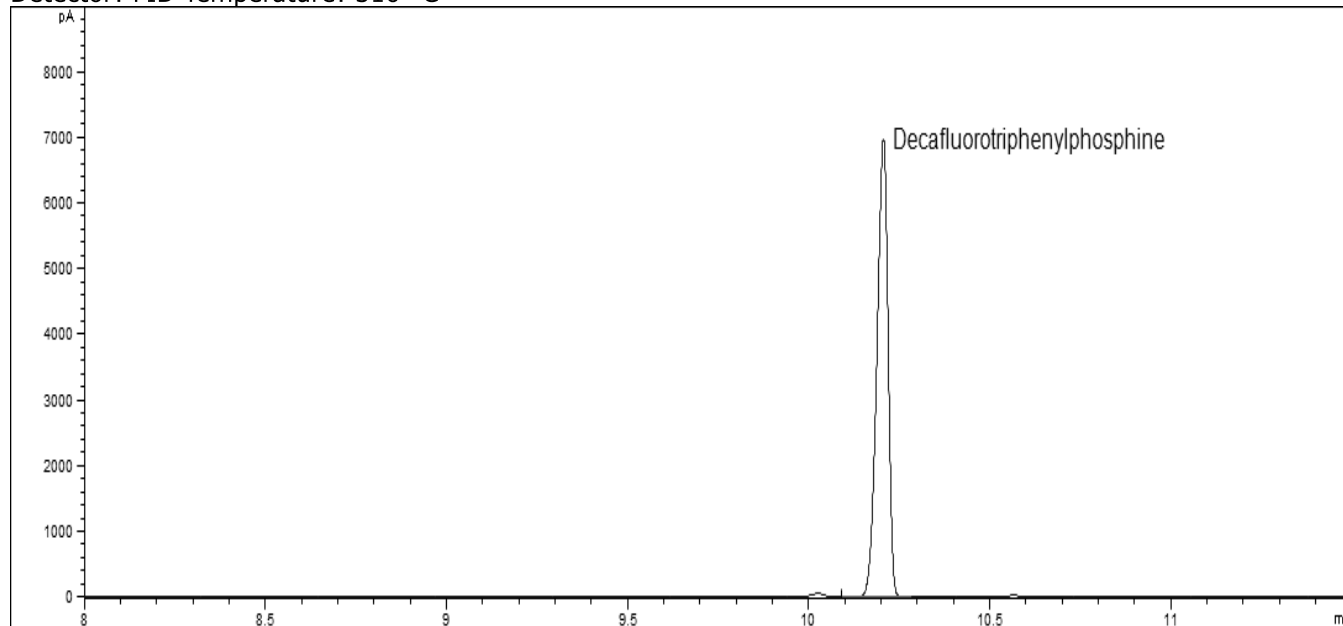
Carrier Gas: H₂ Flow Rate: 4.3 mL/min

Inlet Temperature: 250 °C Injection Volume: 1 µL

Injection Mode: 25:1

Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)

Detector: FID Temperature: 310 °C



Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL16693

Description: Benzoic Acid

Certification Date: May 6, 2021

Storage: 4 °C

Expiration Date: April 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



A Phenomenex
Company

Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenex
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443

Lot Number: CL17696

Description: Aniline

Certification Date: December 14, 2021

Storage: 4 °C

Expiration Date: December 31, 2029

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	Units	Certified ^{1,4} Value
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values



Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	Units	Suggested Acceptance Windows	Standard Deviation
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4°C.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4°C. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4°C.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.



Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

1 Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH ISO/IEC 17025:2017 (ANAB Cert AT-1467) and ISO 17034:2016 (ANAB Cert AR-1470).



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certification Date January 05, 2021
Version 0-152021



Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291

Lot Number: CL11000

Description: GC/MS Tuning Mix

Certification Date: May 9, 2014

Storage: 4 °C

Expiration Date: December 31, 2023

Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Revision Date: August 5, 2015

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891

GC/MS Tune solution-1000ug/ml

Solvent / Lot: CL11000

Prep: 4/22/2022 by VS

Exp: 12/31/2023

Location:



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL11110612_us



Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1

Lot Issue Date: 25-May-2021

Lot Number: 0006609664

Expiration Date: 30-Jun-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

[Handwritten signature]
5/11/22

K004539

toxic sub mix#1

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 6/30/2024

Location:



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Reference Material Certificate

Product Name: Phenols Standard **Lot Number:** 0006648297
Product Number: US-107N-1 **Lot Issue Date:** 17-Nov-2021
Storage Conditions: Store at Room Temperature (15° to 30°C). **Expiration Date:** 31-Dec-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
4-chloro-3-methylphenol	2006	± 10 µg/mL		000059-50-7	RM01885
2-chlorophenol	2007	± 10 µg/mL		000095-57-8	RM01871
2,4-dichlorophenol	2005	± 10 µg/mL		000120-83-2	RM13878
2,4-dimethylphenol	2006	± 10 µg/mL		000105-67-9	RM13009
2,4-dinitrophenol	2006	± 10 µg/mL		000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005	± 10 µg/mL		000534-52-1	RM02292
2-nitrophenol	2007	± 10 µg/mL		000088-75-5	RM13445
4-nitrophenol	2006	± 10 µg/mL		000100-02-7	RM03752
pentachlorophenol	2006	± 10 µg/mL		000087-86-5	RM02474
phenol	2006	± 10 µg/mL		000108-95-2	RM11471
2,4,6-trichlorophenol	2006	± 10 µg/mL		000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSS Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

JZ 5/11/22

ISO 17034



Agilent

Trusted Answers

Reference Material Certificate

Product Name: PAH Standard

Lot Number: 0006627349

Product Number: US-106N-1

Lot Issue Date: 17-Sep-2021

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
acenaphthene	2007	± 10 µg/mL		000083-32-9	RM10879
acenaphthylene	2004	± 10 µg/mL		000208-96-8	RM10891
anthracene	2006	± 10 µg/mL		000120-12-7	RM14212
benz[a]anthracene	2006	± 10 µg/mL		000056-55-3	RM16072
benzo[b]fluoranthene	2006	± 10 µg/mL		000205-99-2	RM14571
benzo[k]fluoranthene	2006	± 10 µg/mL		000207-08-9	RM18376
benzo[ghi]perylene	2006	± 10 µg/mL		000191-24-2	RM15761
benzo[a]pyrene	2006	± 10 µg/mL		000050-32-8	RM17573
chrysene	2007	± 10 µg/mL		000218-01-9	RM13771
dibenz[a,h]anthracene	2006	± 10 µg/mL		000053-70-3	RM06786
fluoranthene	2006	± 10 µg/mL		000206-44-0	RM12277
fluorene	2006	± 10 µg/mL		000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006	± 10 µg/mL		000193-39-5	RM14192
naphthalene	2007	± 10 µg/mL		000091-20-3	RM10445
phenanthrene	2005	± 10 µg/mL		000085-01-8	RM10495
pyrene	2005	± 10 µg/mL		000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541

SVOA PAH STD 2000ug/ml

Solvent / Lot: DCM/BENZENE

Prep: 5/11/2022 by JZ

Exp: 10/31/2024

Location: Fridge 19

Page: 1 of 2

CSD-QA-015.1



Reference Materials Producer
Cert #2495.01



Certificate of Analysis



Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL



Certificate of Analysis

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nove

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25 µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributed By SPEX CertiPrep

SPEX CertiPrep

Your Science is Our Passion.®

203 Norcross Ave. Metuchen NJ 08840

www.spexcrtiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647





Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1

Lot Issue Date: 19-Jul-2021

Lot Number: 0006624769

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543

1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

[Handwritten signature]
5/11/22

Sample lot approver:

[Handwritten signature]
Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1

Lot Issue Date: 02-Jul-2021

Lot Number: 0006620643

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544

toxic sub mix#2

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 7/31/2023

Location:

JZ 05/11/22



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 31493 Lot No.: A0181243
Description: CLP 04.1 BNA Surrogate Mix
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: October 31, 2025 Storage: 10°C or colder
Handling: Sonicate prior to use. Ship: Ambient

Handwritten signature and date: 05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Table with 7 columns: Elution Order, Compound, CAS #, Purity, Weight, Concentration, and Method. Contains 7 rows of data for various compounds like 2-Fluorophenol, Phenol-d6, 2-Chlorophenol-d4, 1,2-Dichlorobenzene-d4, Nitrobenzene-d5, 2-Fluorobiphenyl, and 2,4,6-Tribromophenol.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL17953

Description: Benzoic Acid

Certification Date: January 31, 2022

Storage: 4 °C

Expiration Date: January 31, 2032

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603

Benzoic Acid @2000ug/ml

Solvent / Lot: N/A

Prep: 5/13/2022 by JZ

Exp: 1/31/2032

Location: GC



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL17662

Description: Benzidines Standard

Certification Date: December 2, 2021

Storage: 4 °C

Expiration Date: November 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604

Benzidines std @2000ug/ml
Solvent / Lot: Mecl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

JZ 5/13/22



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

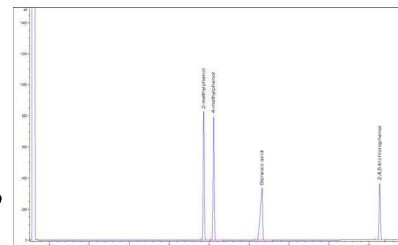


Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

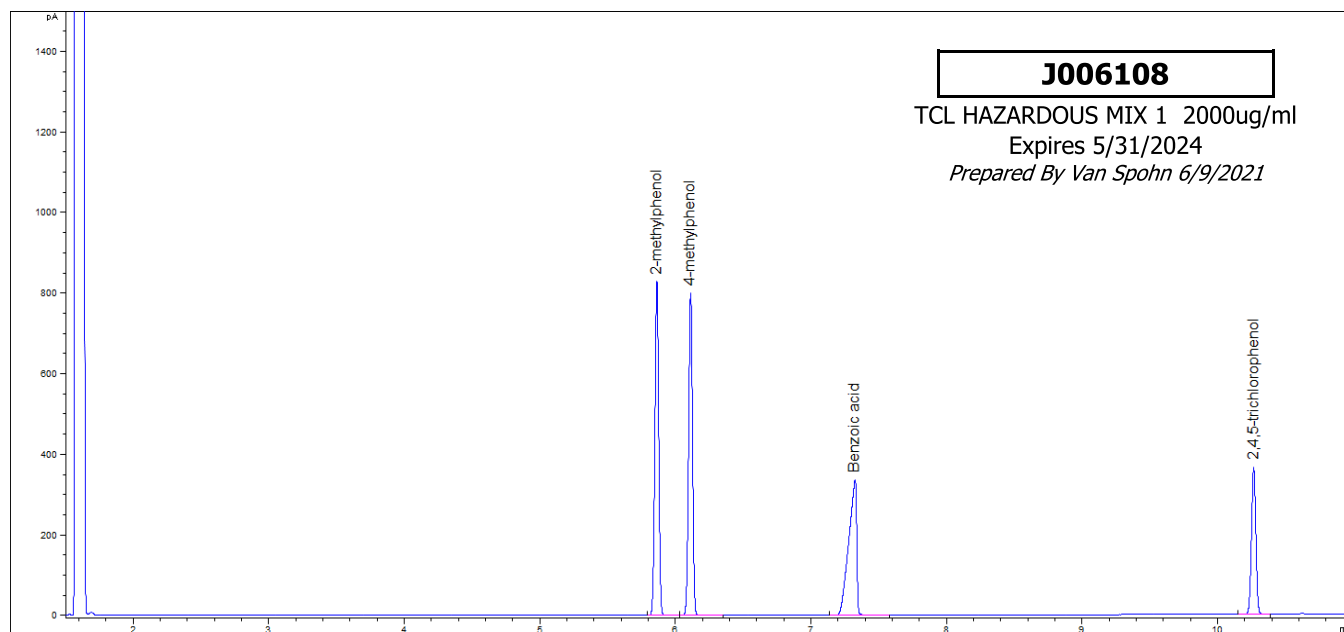
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Elution order	Raw Material Lot
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:

Analytical Method Parameters:
 Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
 Carrier Gas: H₂, Flow: 4.5 mL/min
 Inlet Temperature: 170 °C, Injection Volume: 1 µL
 Injection Mode: Split, Split Ratio: 20:1



Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021



Handwritten signature of Andy Ommen in black ink.

Andy Ommen - QC Manager

Handwritten signature of Mark Pooler in black ink.

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

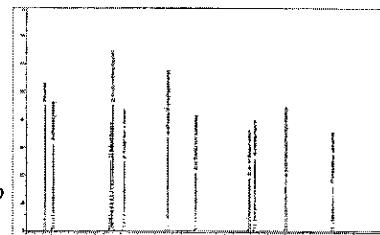
The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

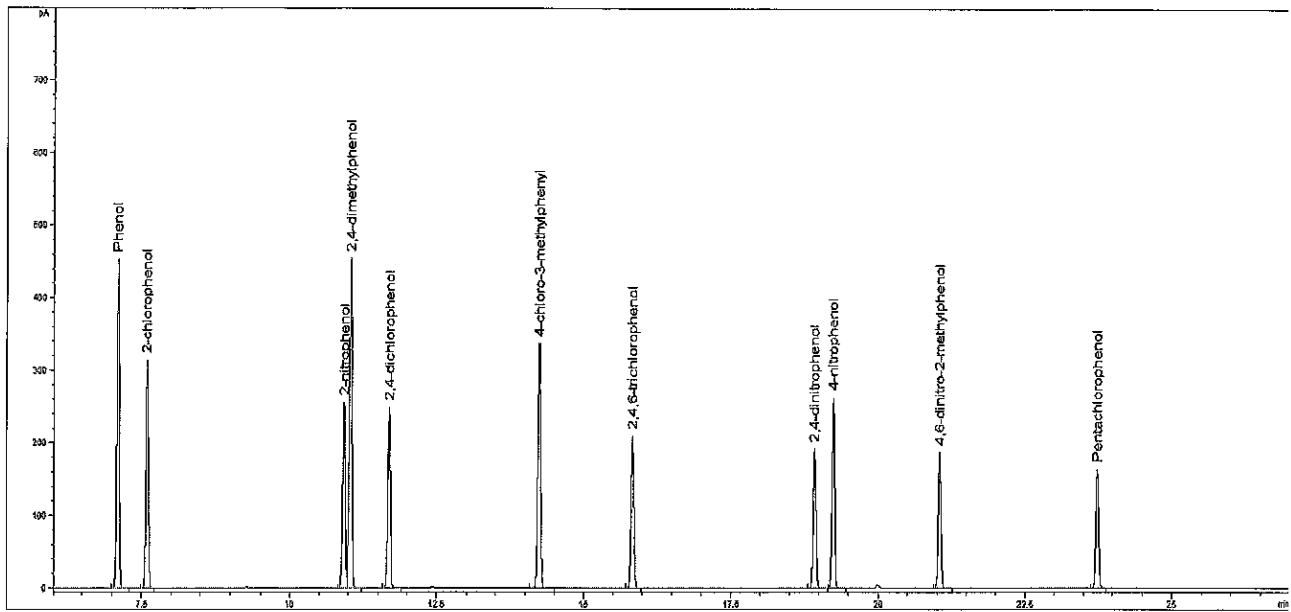
Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597

TCL Phenols Mix 2000ug/ml
 Solvent / Lot: LRAD0139
 Prep: 12/30/2021 by VS
 Exp: 7/31/2024
 Location:





METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m x 0.53 mm I.D., 1.5 µm film thickness

Carrier Gas: H₂ Flow Rate: 4.5 mL/min

Inlet Temperature: 200 °C Injection Volume: 1.0 µL

Injection Mode: 25:1

Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)

Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorophenol
6	14.242	4-chloro-3-methylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021



Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability:

This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty:

Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment:

Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.





110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

K007194
 CLP 04.1 BNA SURR MIX
 Solvent / Lot: A0187400
 Prep: 8/5/2022 by VS
 Exp: 4/30/2026
 Location:

IAL



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400
Description : CLP 04.1 BNA Surrogate Mix
CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2026 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
			µg/mL	µg/mL	Gravimetric
1	2-Fluorophenol	1,508.0 µg/mL	+/- 8.9571	µg/mL	Gravimetric
	CAS # 367-12-4 (Lot STBJ3299)		+/- 44.0466	µg/mL	Unstressed
	Purity 99%		+/- 53.4340	µg/mL	Stressed
2	Phenol-d6	1,510.0 µg/mL	+/- 8.9689	µg/mL	Gravimetric
	CAS # 13127-88-3 (Lot SL210831)		+/- 44.1050	µg/mL	Unstressed
	Purity 99%		+/- 53.5049	µg/mL	Stressed
3	2-Chlorophenol-d4	1,512.0 µg/mL	+/- 8.9808	µg/mL	Gravimetric
	CAS # 93951-73-6 (Lot PR-30568)		+/- 44.1635	µg/mL	Unstressed
	Purity 99%		+/- 53.5758	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 2199-69-1 (Lot PR-32597)		+/- 29.3255	µg/mL	Unstressed
	Purity 99%		+/- 35.5754	µg/mL	Stressed
5	Nitrobenzene-d5	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 4165-60-0 (Lot PR-29940A)		+/- 29.3255	µg/mL	Unstressed
	Purity 99%		+/- 35.5754	µg/mL	Stressed
6	2-Fluorobiphenyl	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 321-60-8 (Lot 00021384)		+/- 29.3255	µg/mL	Unstressed
	Purity 99%		+/- 35.5754	µg/mL	Stressed
7	2,4,6-Tribromophenol	1,502.0 µg/mL	+/- 8.9214	µg/mL	Gravimetric
	CAS # 118-79-6 (Lot MKCJ7664)		+/- 43.8714	µg/mL	Unstressed
	Purity 99%		+/- 53.2214	µg/mL	Stressed

8	p-Terphenyl-d14		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)		+/- 29.2671	µg/mL	Unstressed
	Purity 99%			+/- 35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

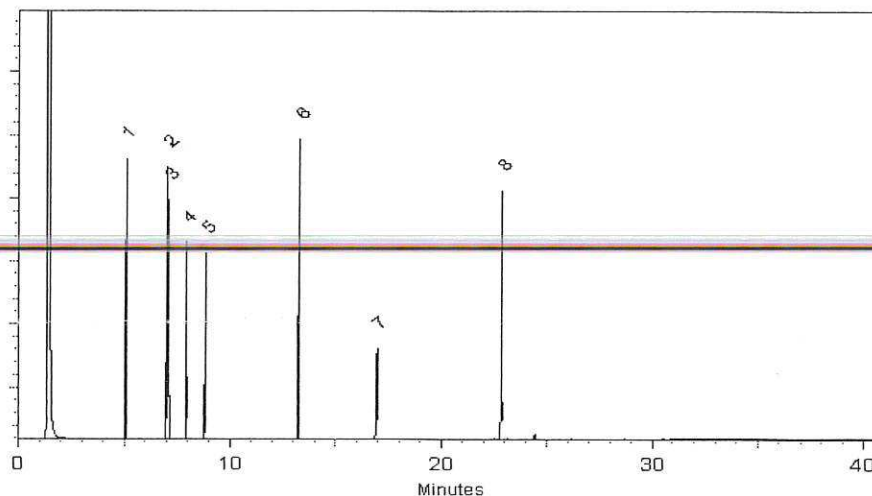
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder
Bryan Snyder - Operations Tech I

Date Mixed: 17-Jul-2022 Balance: 1128353505

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

K007995

SVOA-8270 LCS MIX 1000ug/ml

Solvent / Lot: N/A

Prep: 8/29/2022 by JZ

Exp: 8/31/2023

Location: FREEZER 44



Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444 **Lot Number:** CL18355
Description: 8270 Calibration Standard **Certification Date:** July 25, 2022
Storage: -18 °C **Expiration Date:** August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444 **Lot Number:** CL18355
Description: 8270 Calibration Standard **Certification Date:** July 25, 2022
Storage: -18 °C **Expiration Date:** August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroisopropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

03 JUN 2022



Andy Ommen - QC Manager



Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/067F7601.D
Data file 2: /20230302.b/B20230302.b/067F7601.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23B0229-02
Client ID:
Injection Date: 03-MAR-2023 22:25
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.384	-0.007	42045	4.827	-0.002	11905	1.98	0.40	132.3*	alpha-BHC MN
4.774	-0.005	6289	5.327	0.025	11454	0.77	1.02	28.2	beta-BHC MN
4.976	0.010	64340	5.646	-0.008	2701	3.70	0.11	188.4*	delta-BHC MN
4.717	0.018	72656	----	----	----	3.94	0.00	---	gamma-BHC (Lindane)
5.173	-0.019	27931	5.759	0.010	28238	1.70	1.24	31.1	Heptachlor MN
5.534	0.015	50424	----	----	----	2.74	0.00	---	Aldrin
6.182	-0.017	46995	6.783	-0.024	151700	2.95	7.07	82.4*	Heptachlor epoxide b MN
----	----	----	7.235	-0.015	12020	0.00	0.64	---	Endosulfan I
6.880	-0.021	74274	7.522	-0.022	45262	4.72	2.17	74.2*	Dieldrin MN
6.553	-0.007	96621	7.328	-0.004	55143	6.62	2.88	78.7*	4,4'-DDE MN
7.172	0.021	194986	7.892	0.026	140773	20.40	11.74	53.9*	Endrin MN
7.413	0.024	14340	8.083	0.006	75850	1.67	6.17	114.9*	Endosulfan II MN
----	----	----	7.933	-0.004	52054	0.00	4.46	---	4,4'-DDD
8.241	-0.009	6446	8.705	0.032	28674	0.79	2.66	108.4*	Endosulfan sulfate MN
----	----	----	8.259	0.005	281035	0.00	24.97	---	4,4'-DDT
8.014	0.028	24451	----	----	----	6.34	0.00	---	Methoxychlor
----	----	----	9.210	0.014	101482	0.00	8.71	---	Endrin ketone
7.838	0.023	42813	8.397	-0.011	38528	6.24	4.44	33.6	Endrin aldehyde MN
----	----	----	7.015	-0.002	9986	0.00	0.47	---	trans-Chlordane
6.503	0.017	60140	7.173	-0.004	14914	3.70	0.71	135.4*	cis-Chlordane MN
2.327	-0.019	11196	2.520	0.028	3740	0.50	0.13	116.1*	Hexachlorobutadiene M
----	----	----	----	----	----	0.00	0.00	---	Hexachlorobenzene
3.868	-0.003	303533	4.192	-0.003	474816	20.20	22.88	12.5	Tetrachloro-m-xylene MN
9.437	-0.001	214853	10.400	-0.002	271854	29.09	29.17	0.3	Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1105108	64.3
Hexabromobiphenyl	609723	728919	19.5

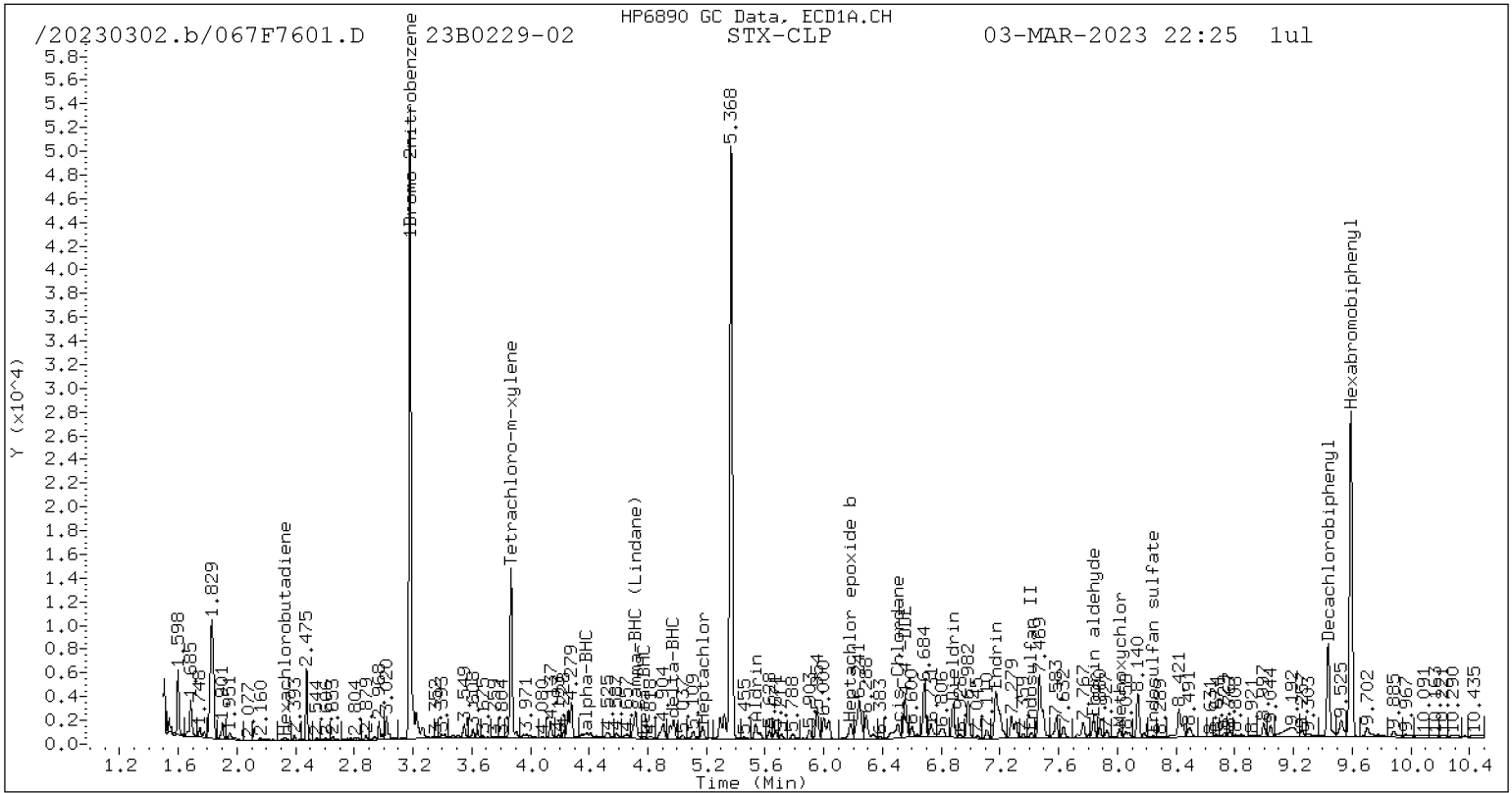
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1474206	46.5
Hexabromobiphenyl	769764	843270	9.5

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

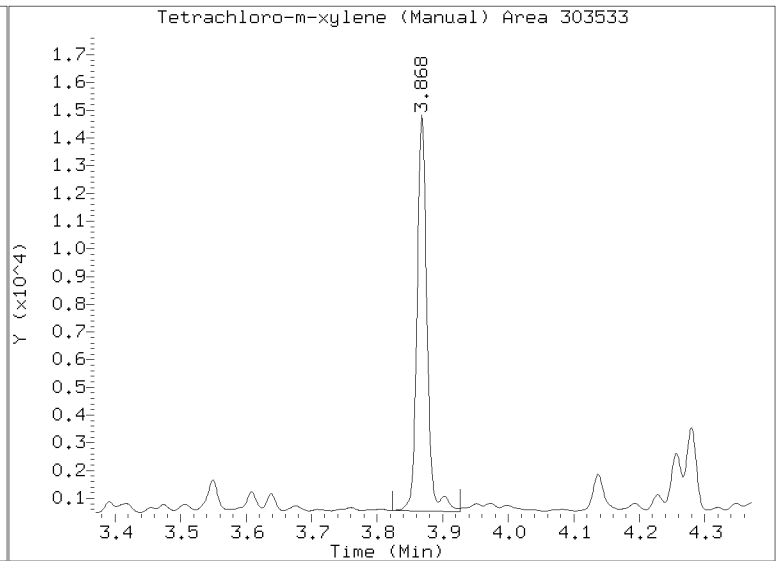
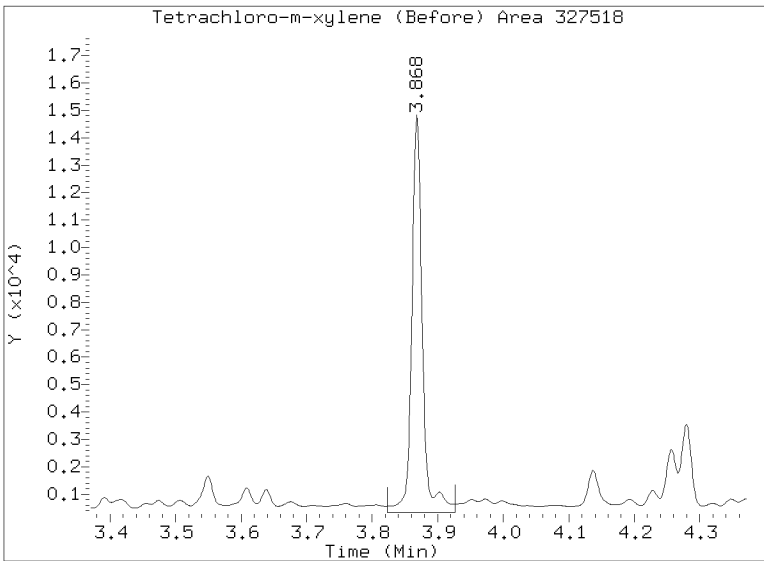
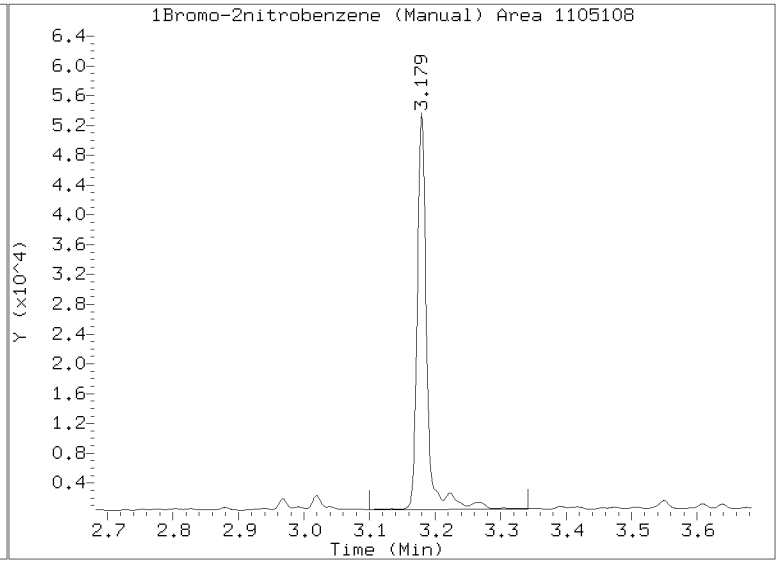
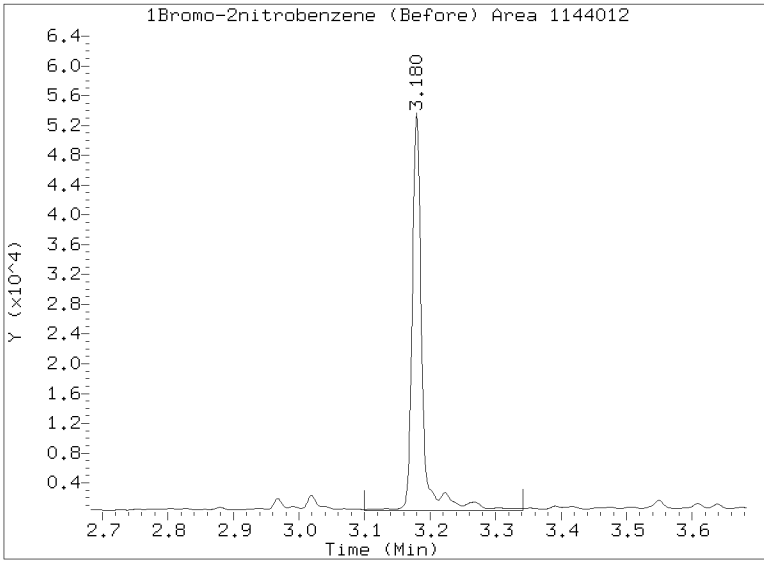
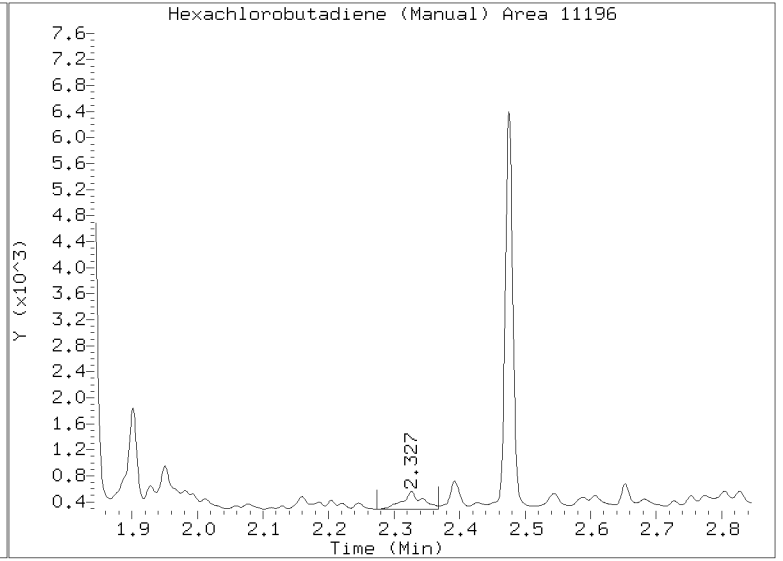
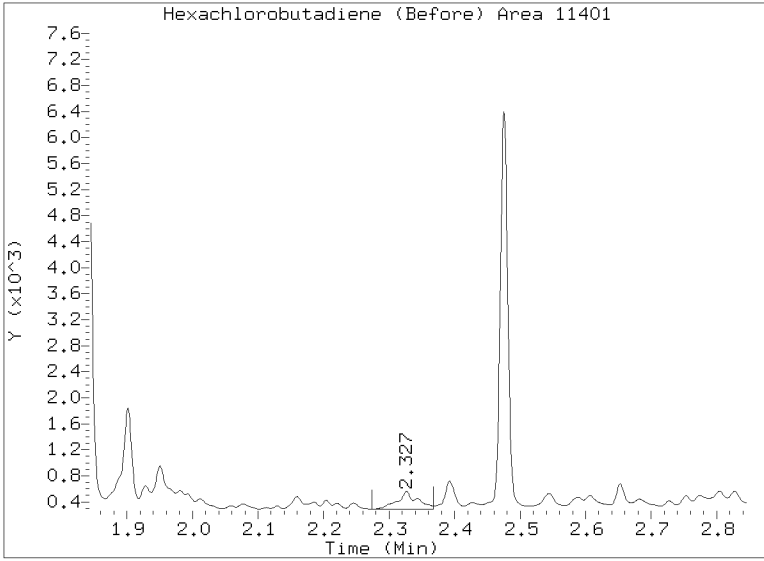
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



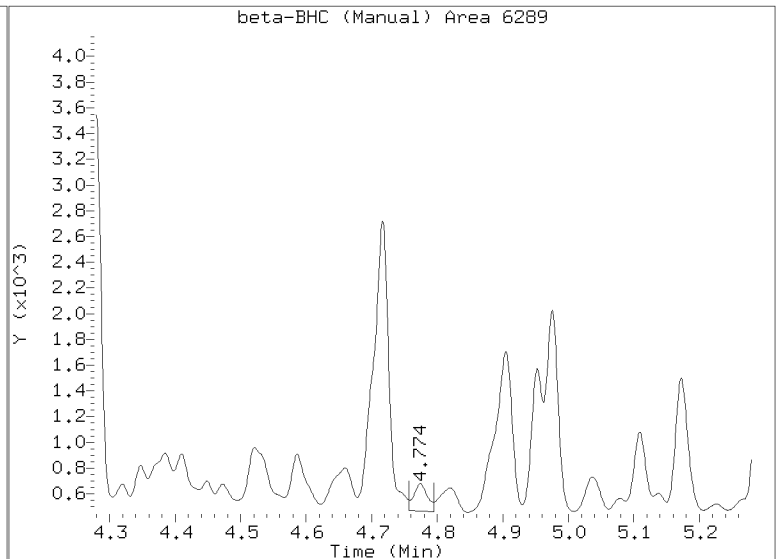
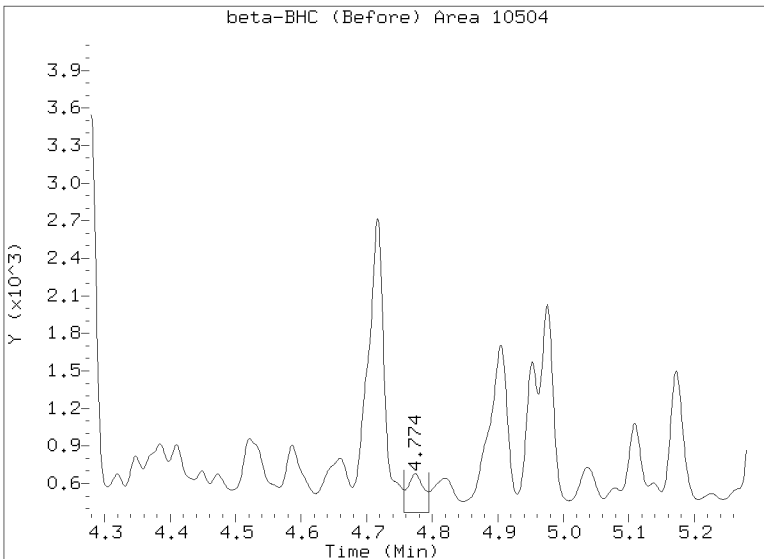
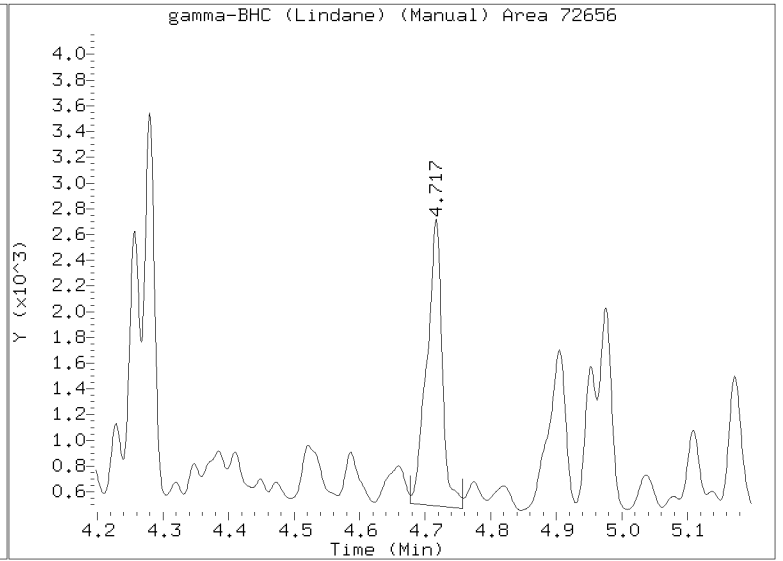
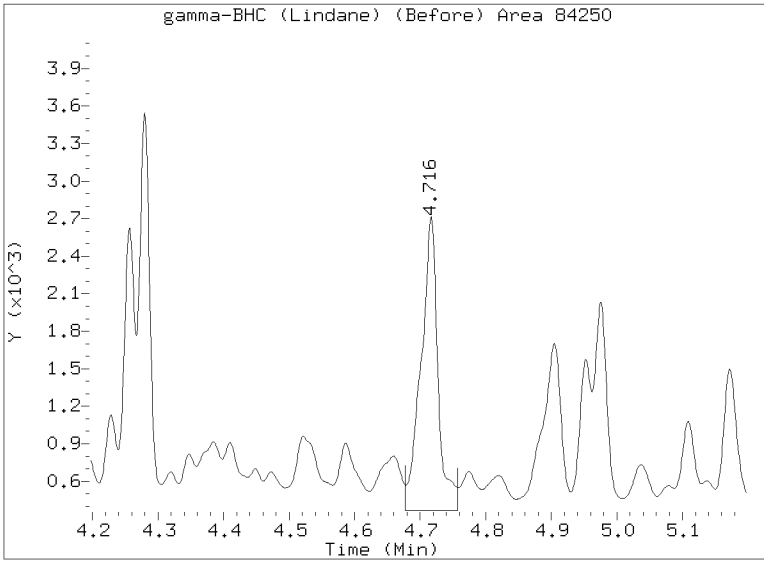
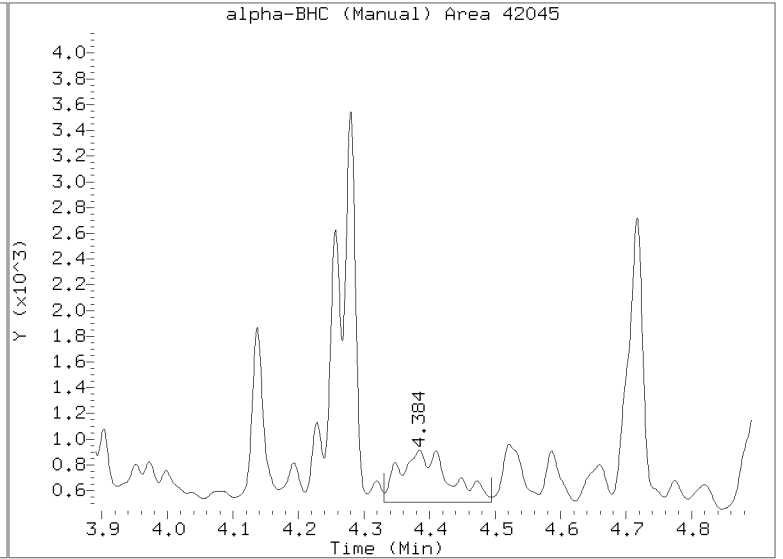
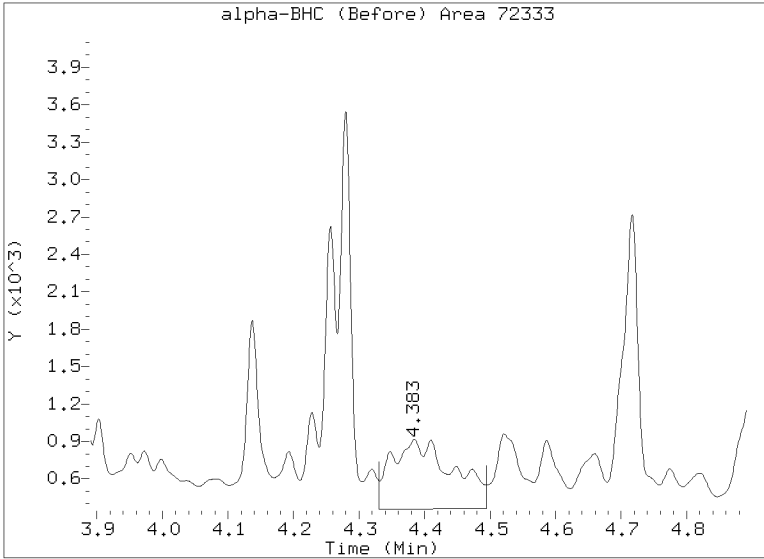
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19



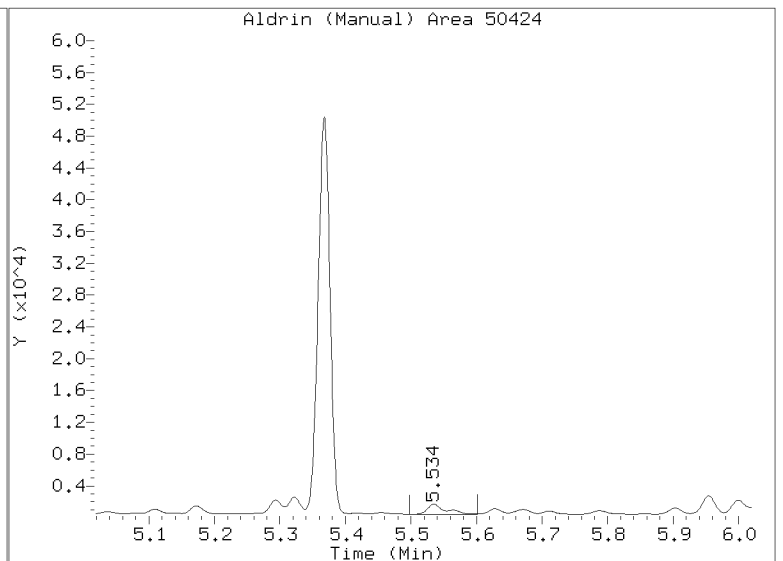
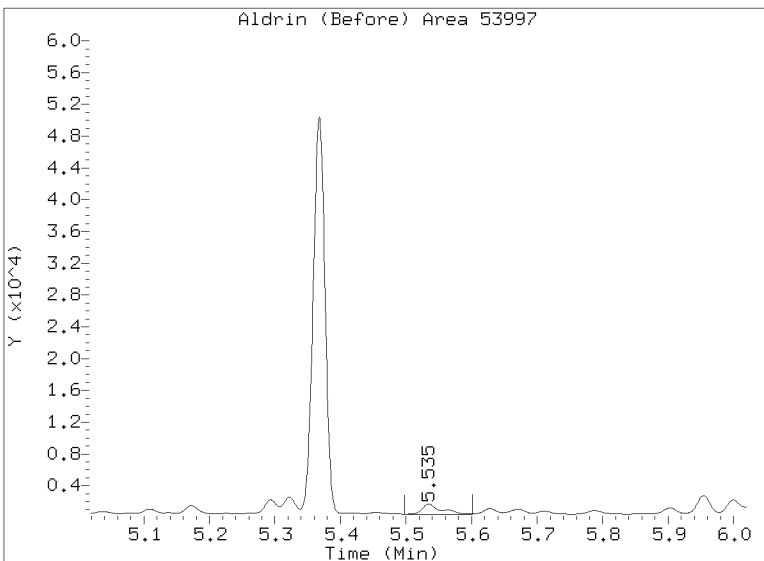
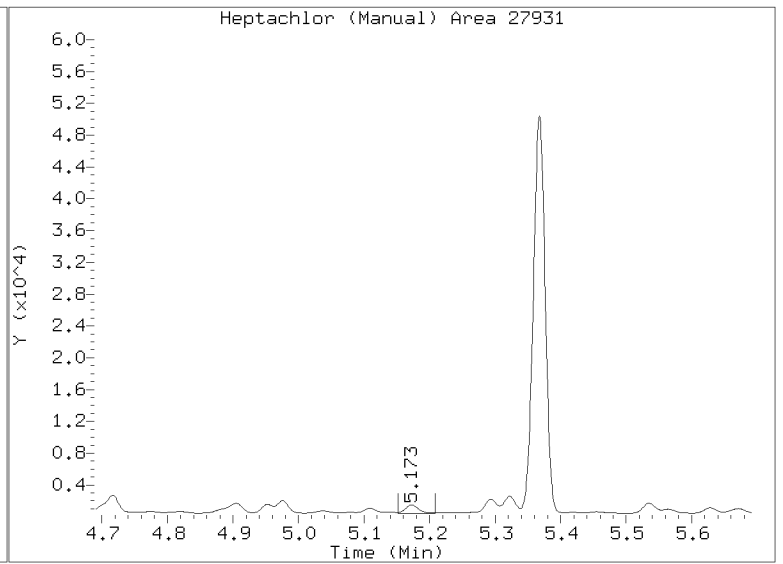
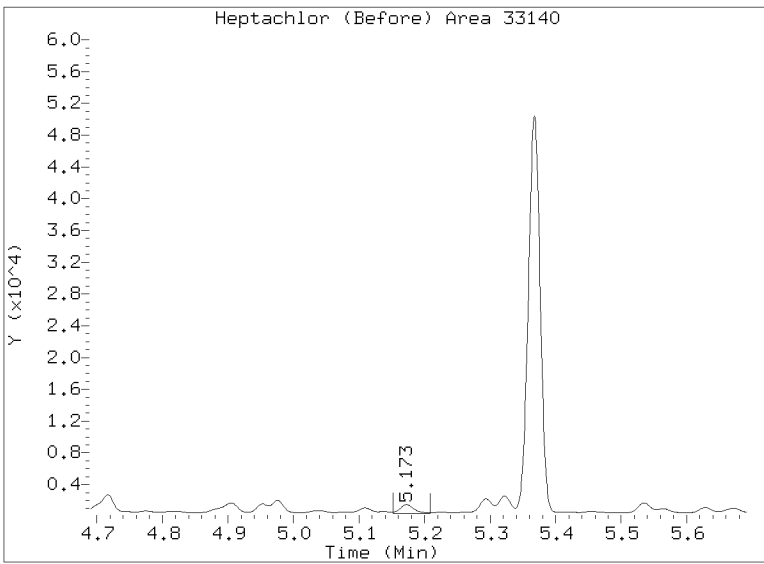
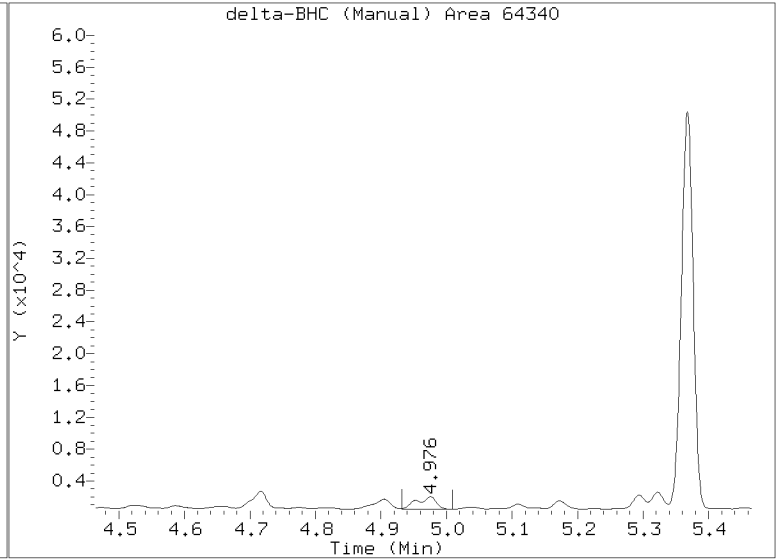
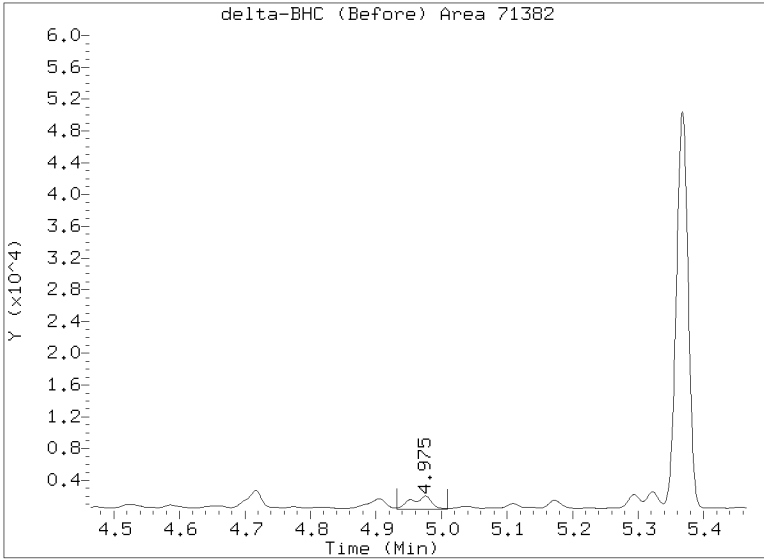
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19



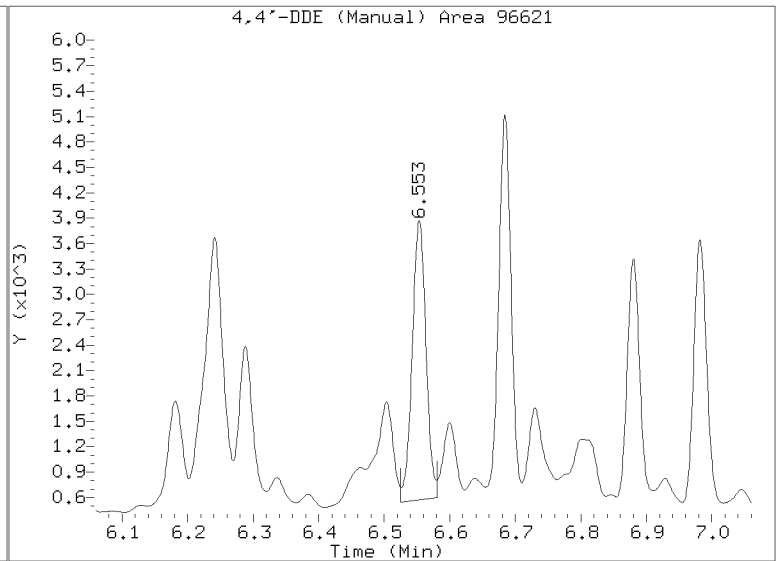
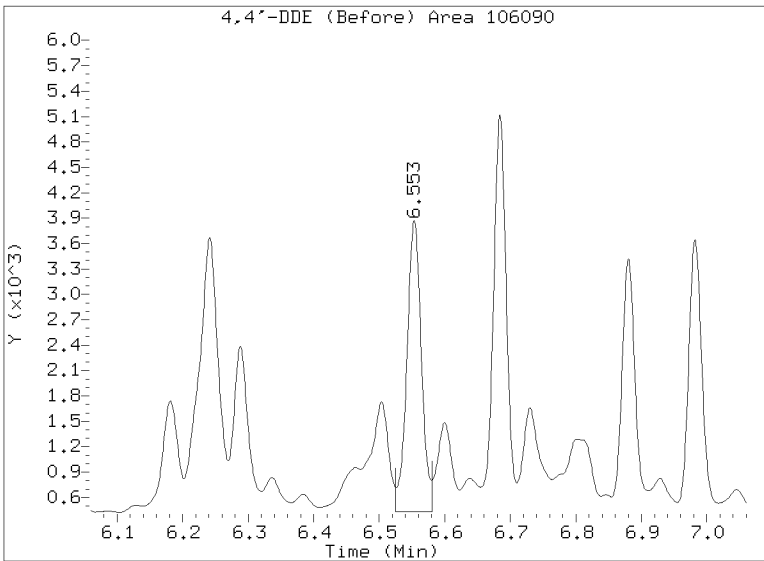
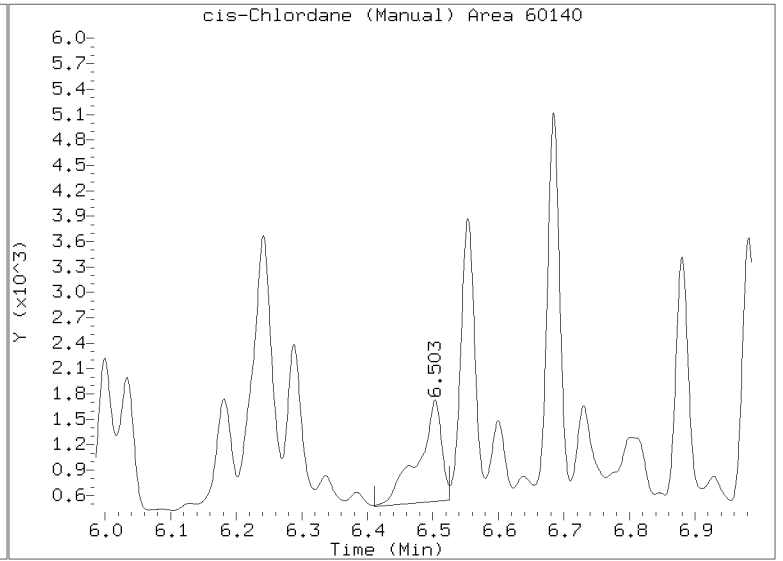
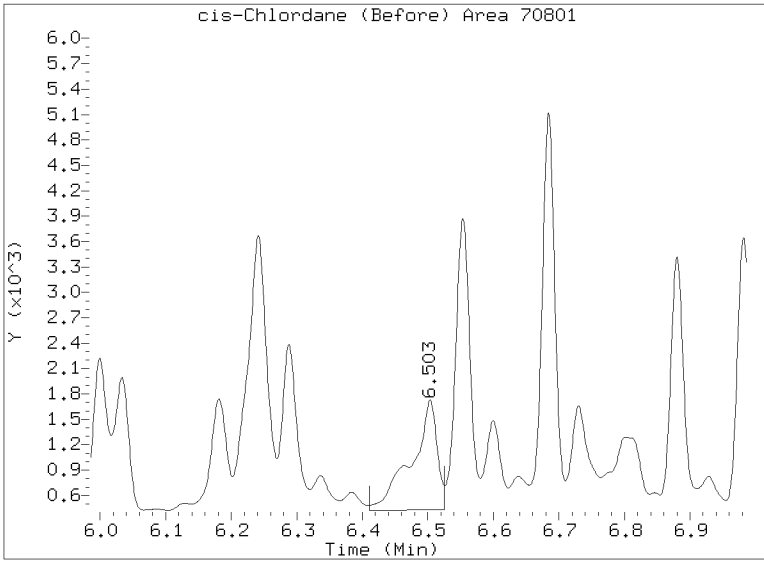
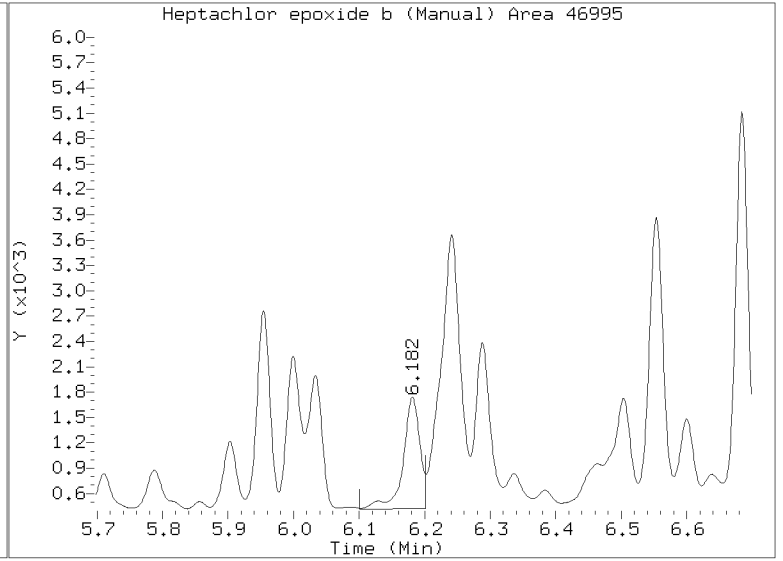
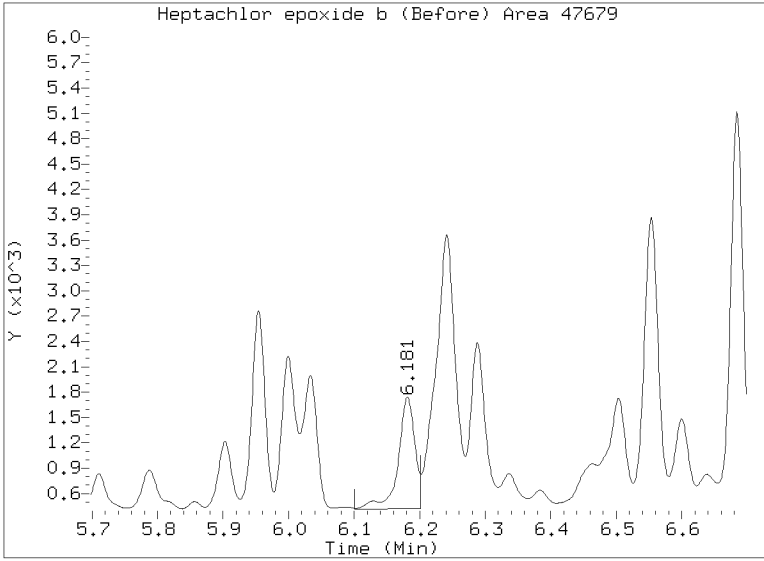
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19



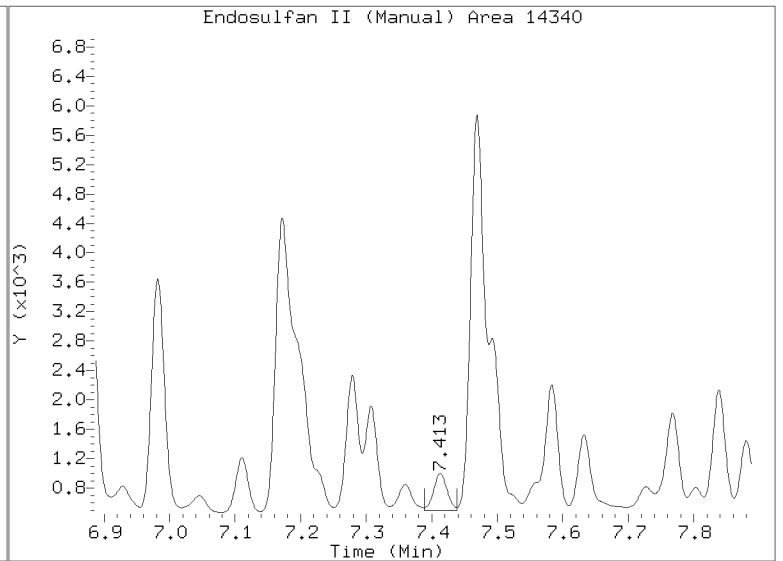
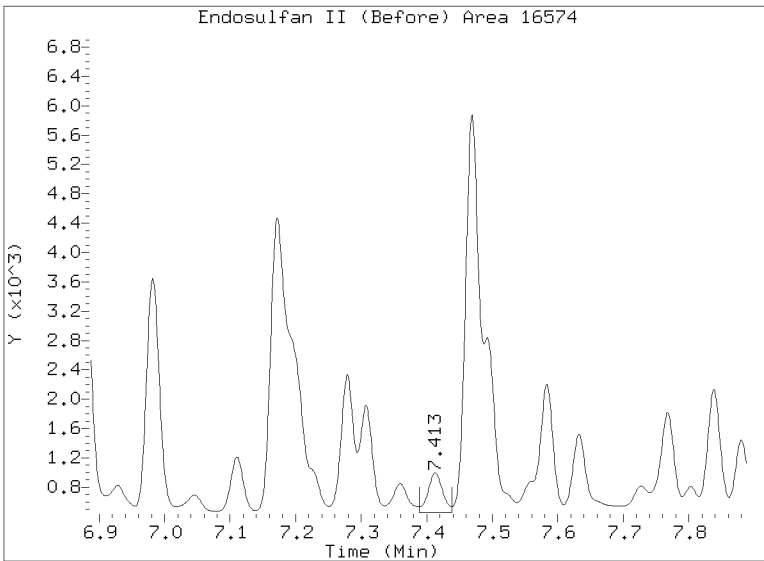
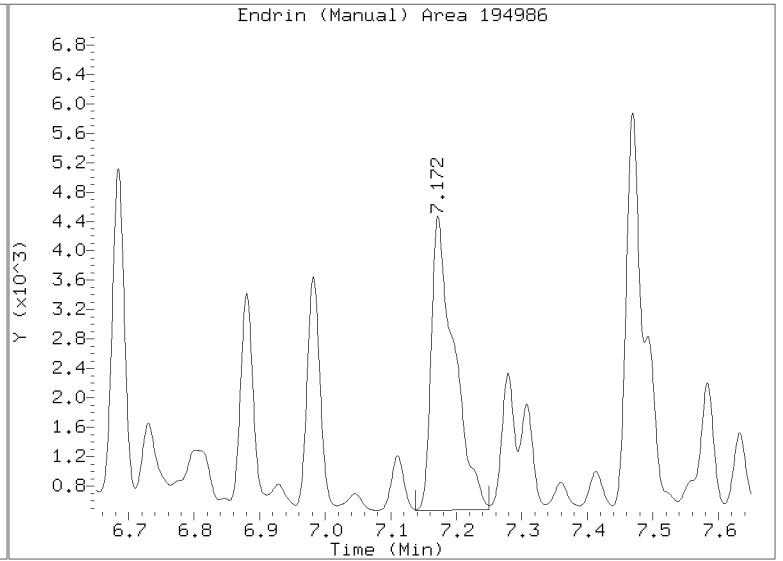
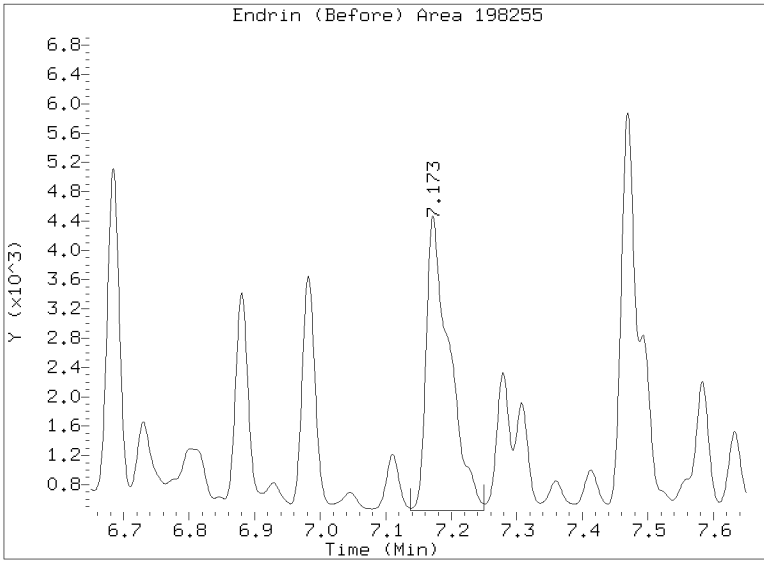
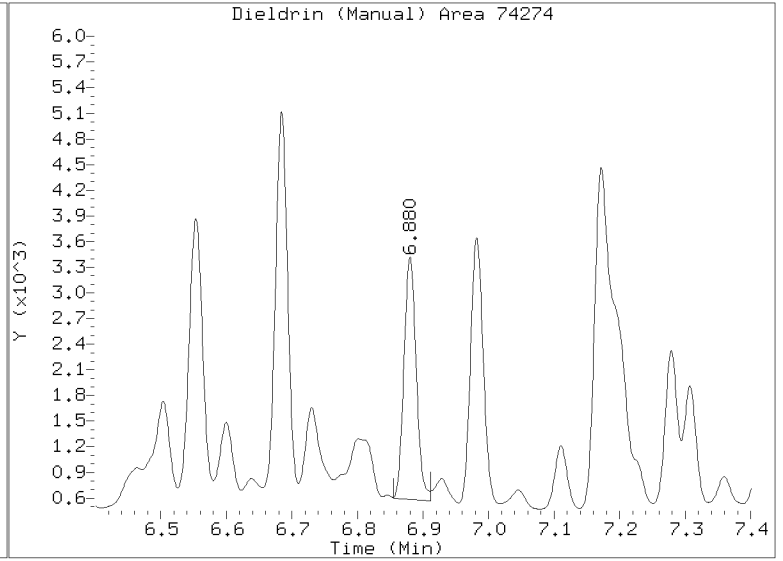
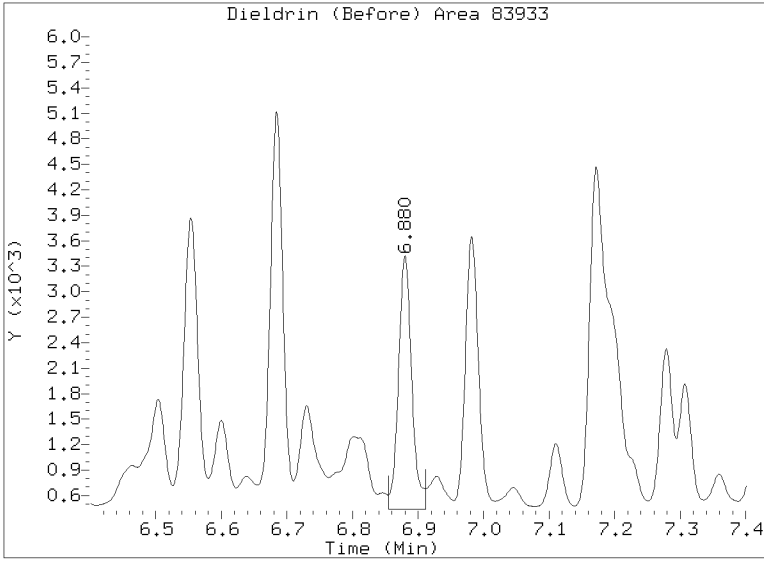
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19



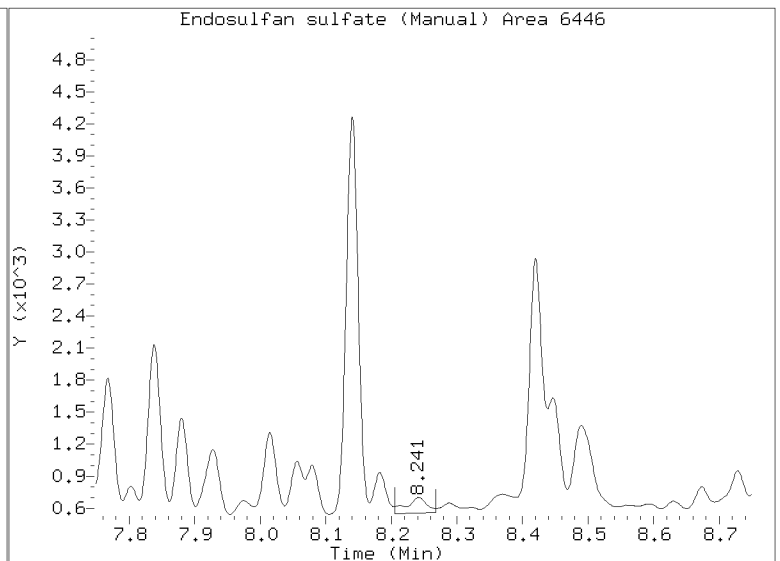
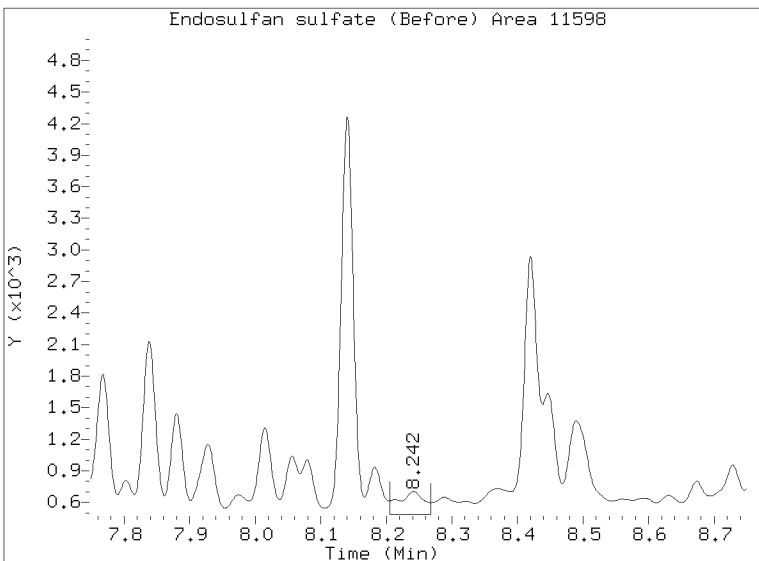
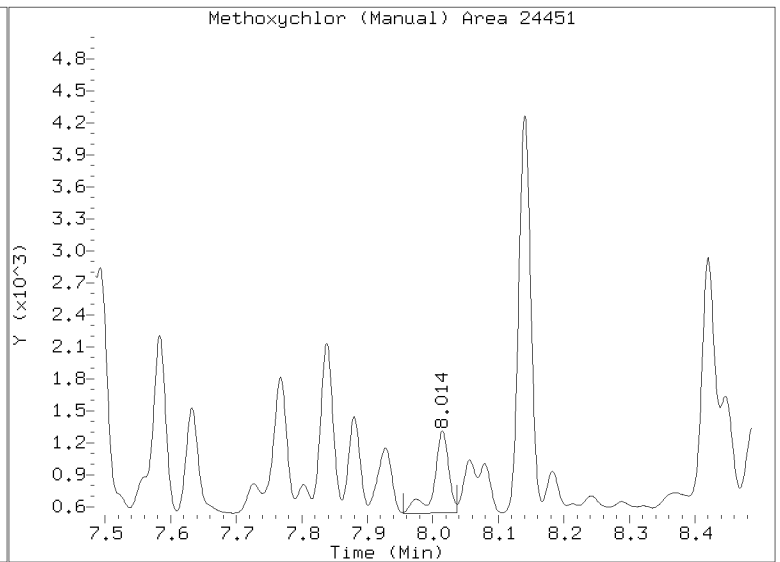
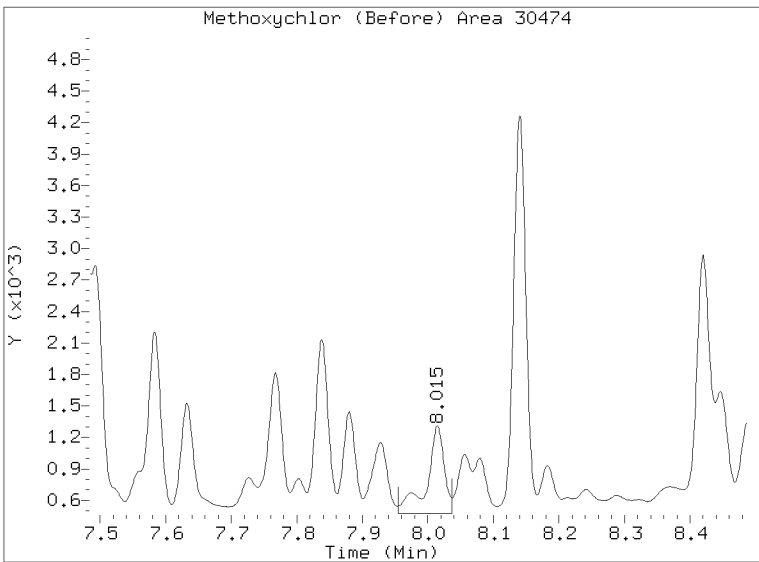
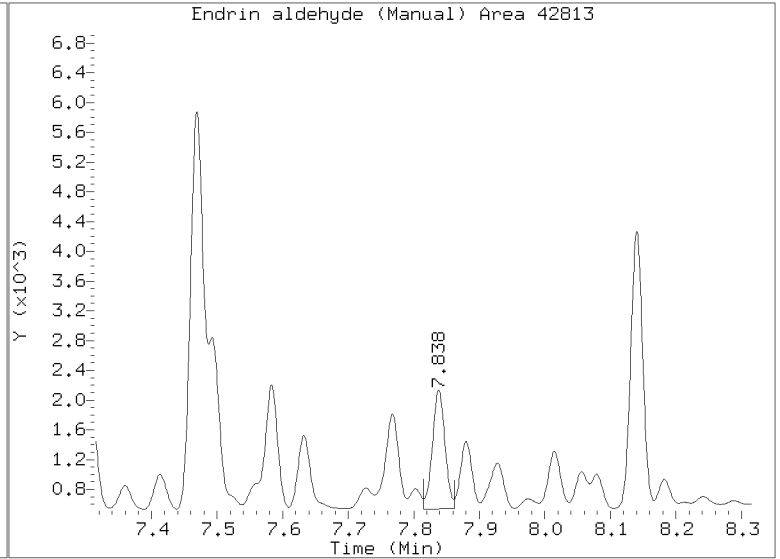
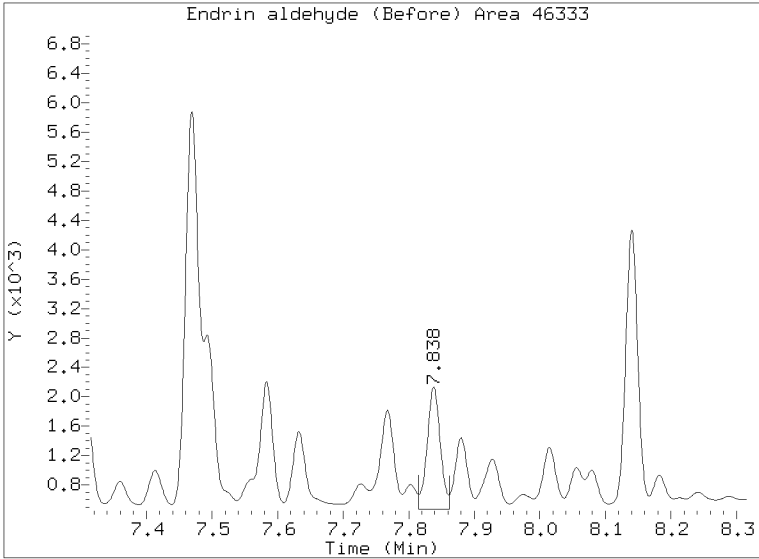
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19



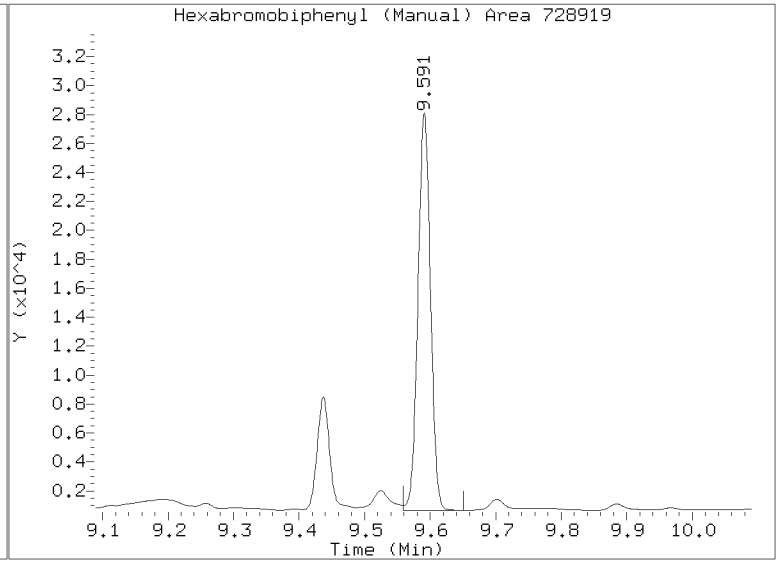
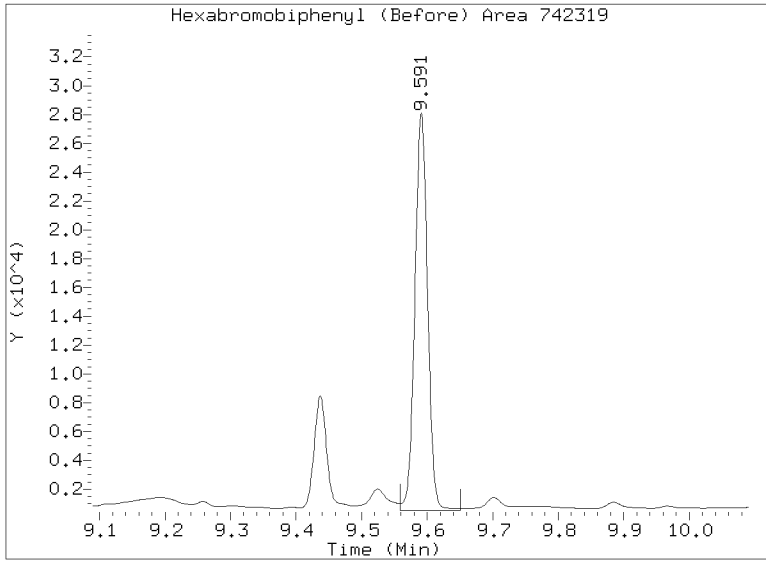
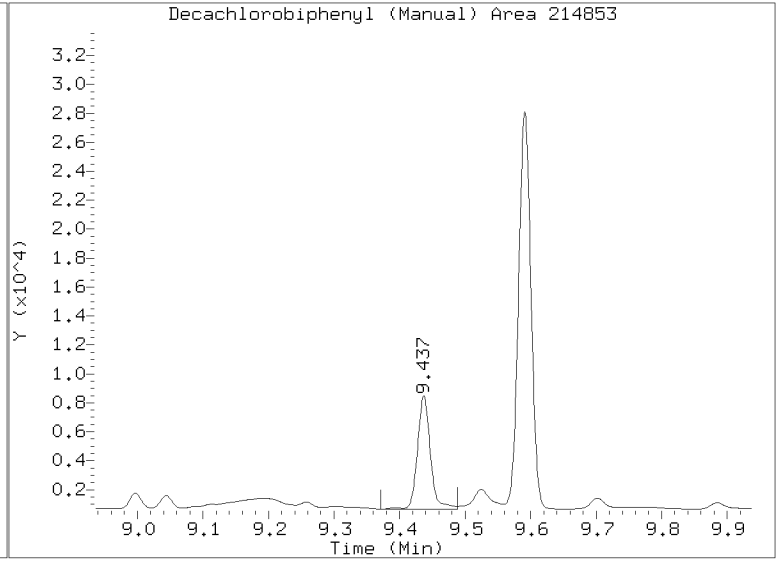
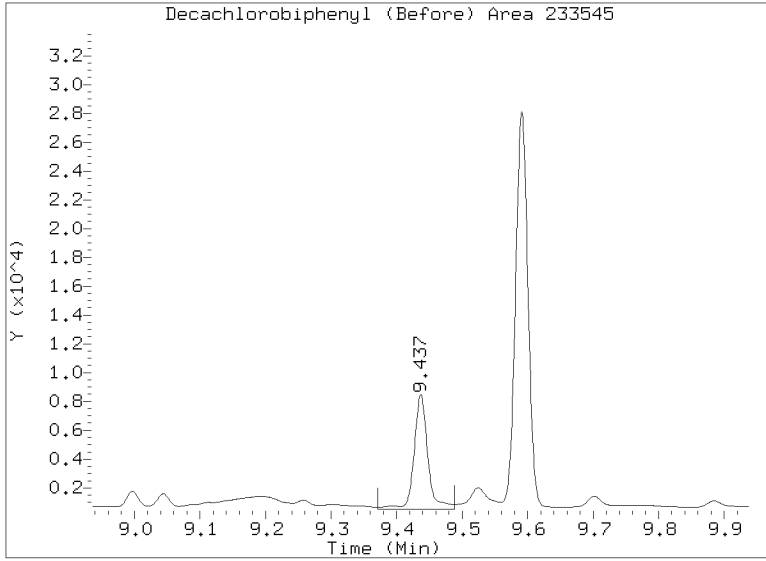
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/067F7601.D
Injection Date: 03-MAR-2023 22:25
Lab ID:23B0229-02 Client ID:
Report Date: 03/09/2023 11:19

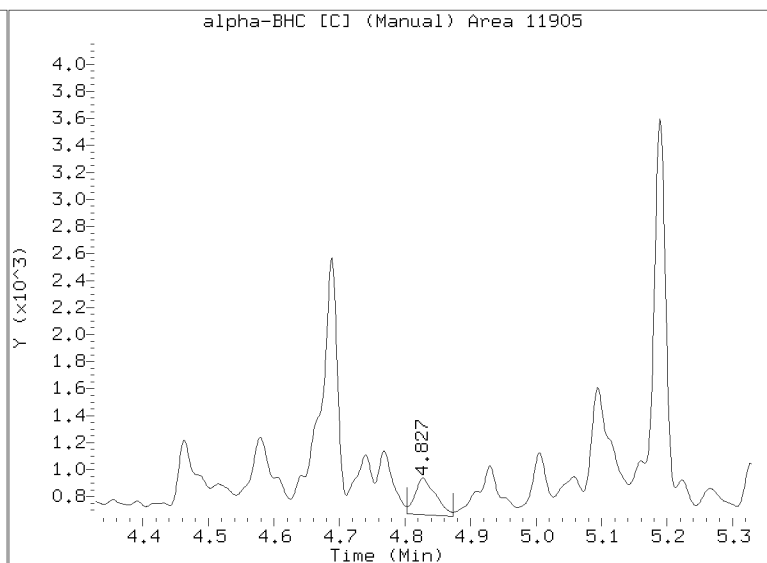
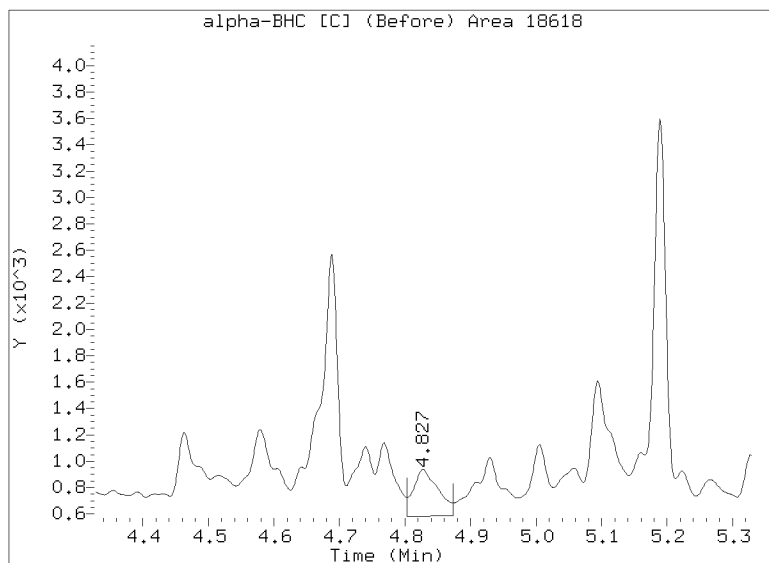
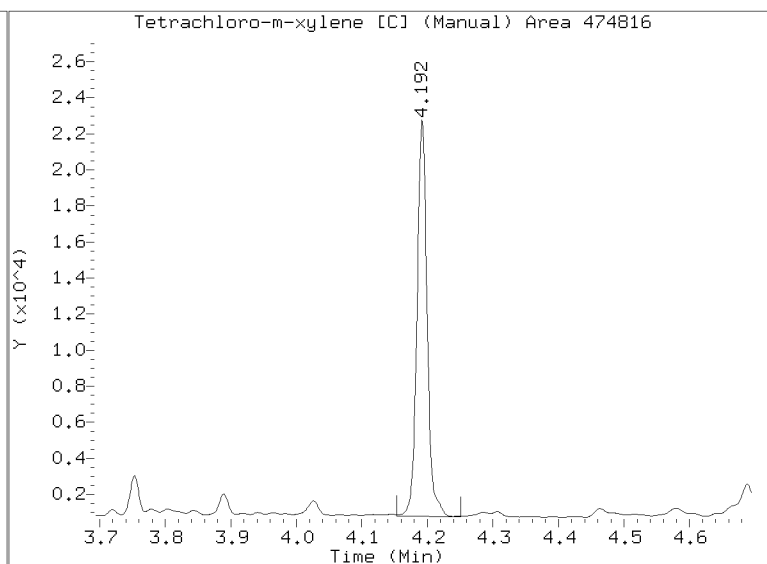
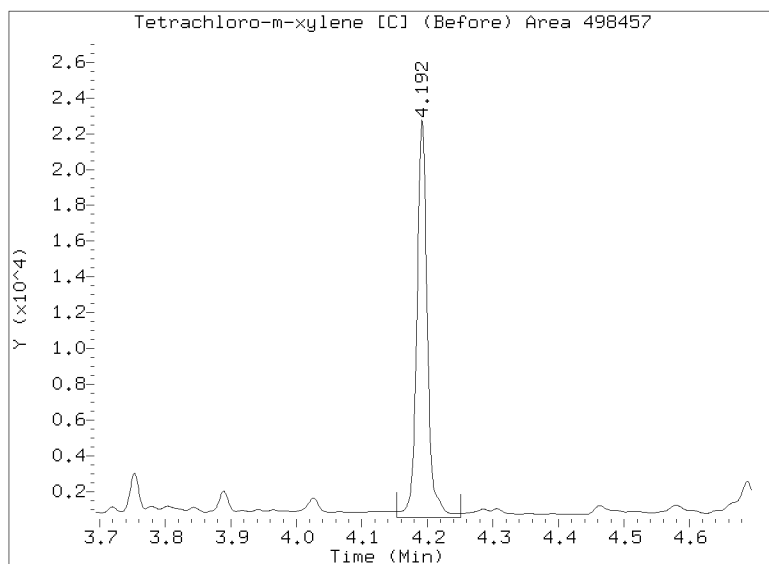
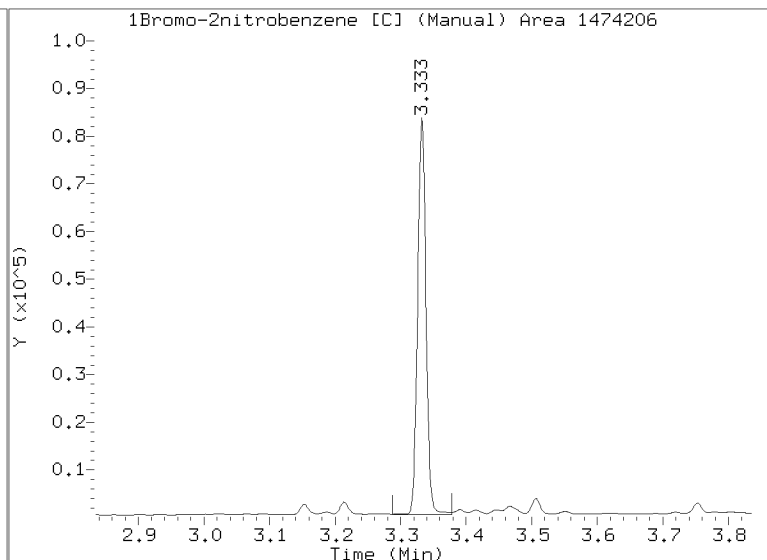
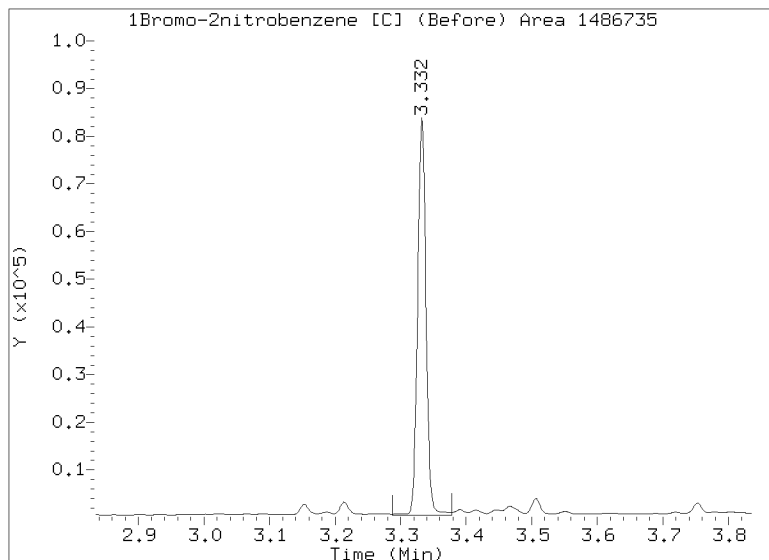


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:

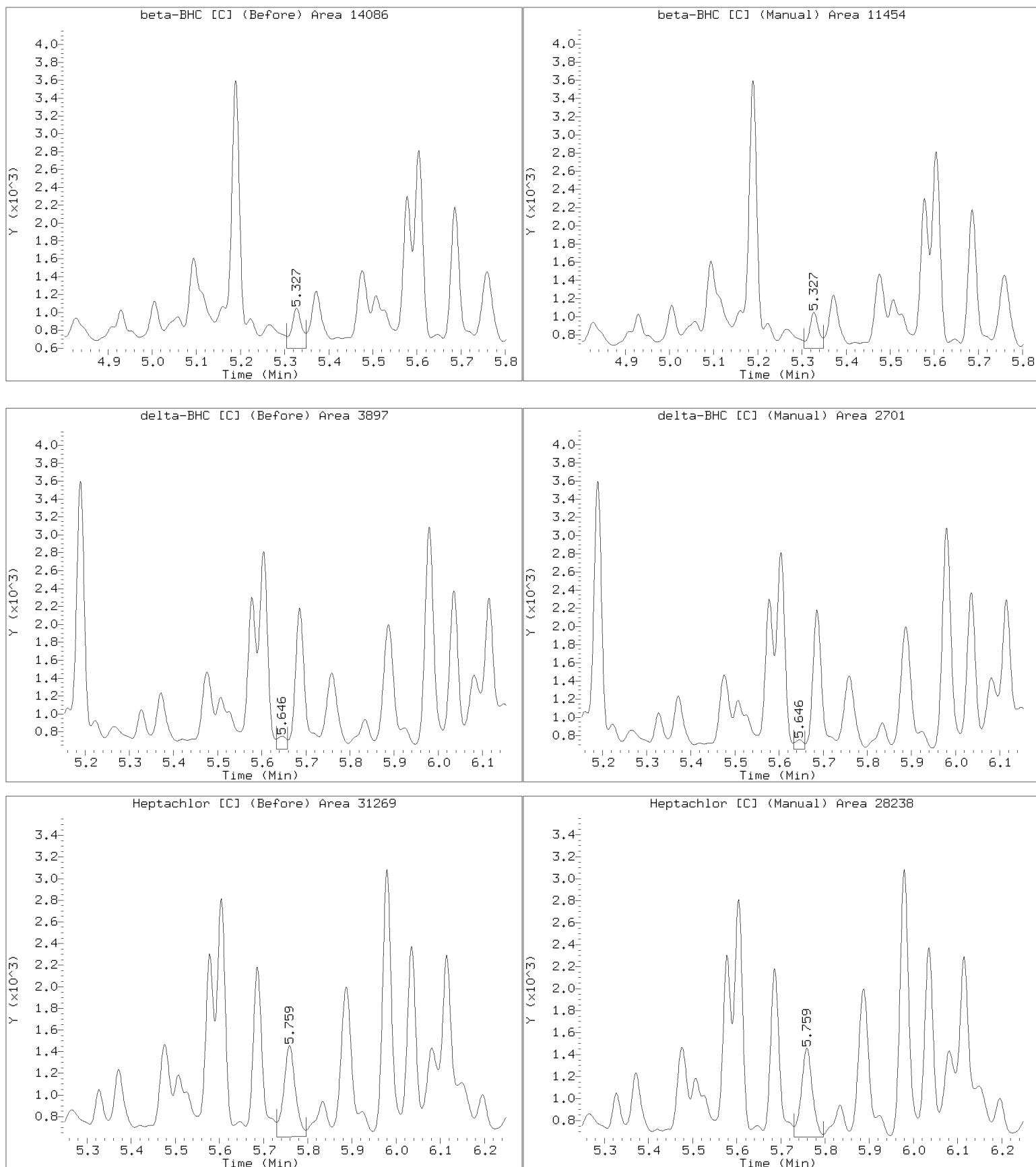


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:

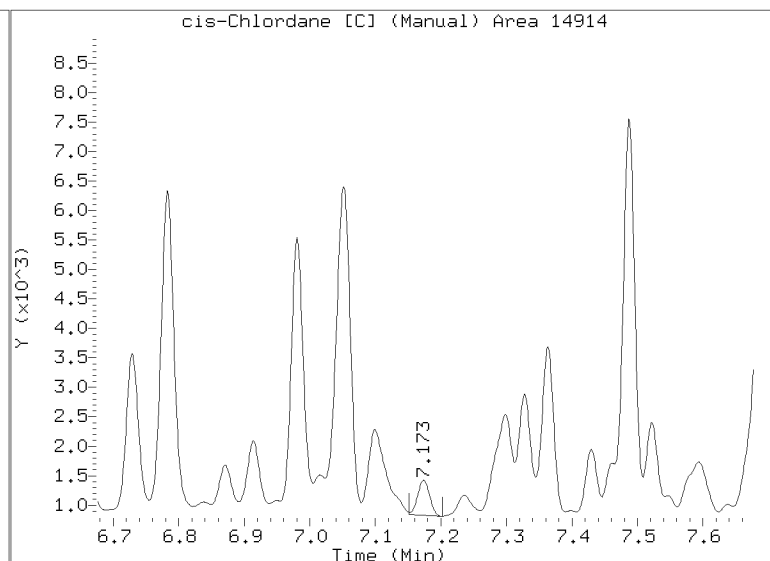
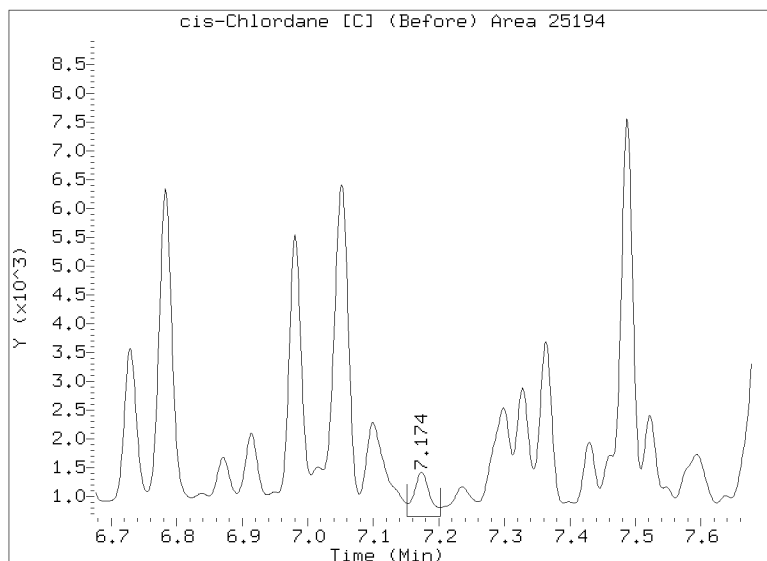
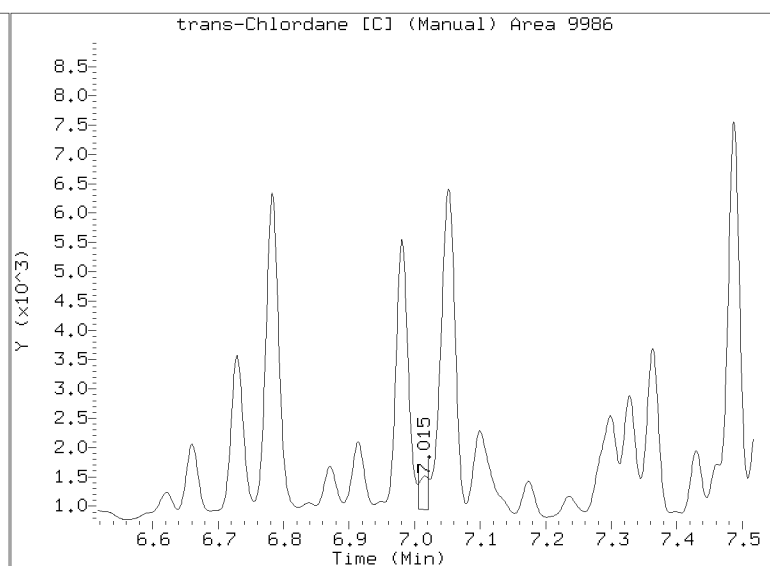
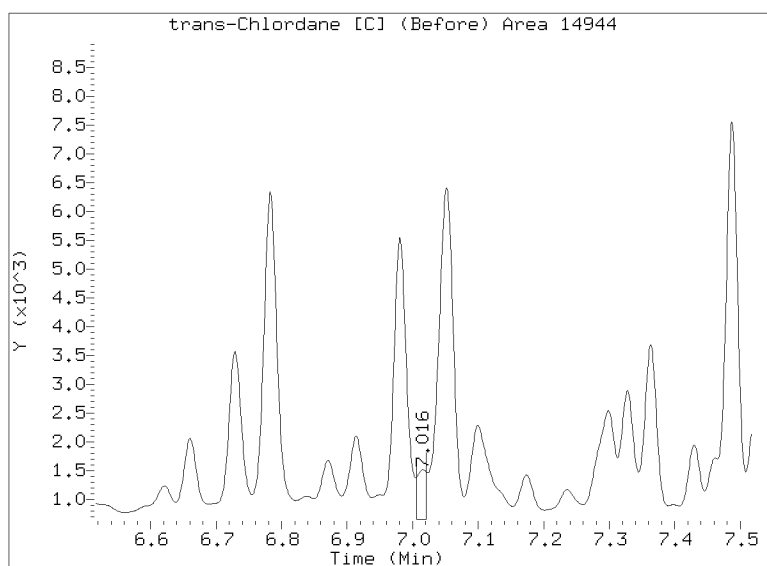
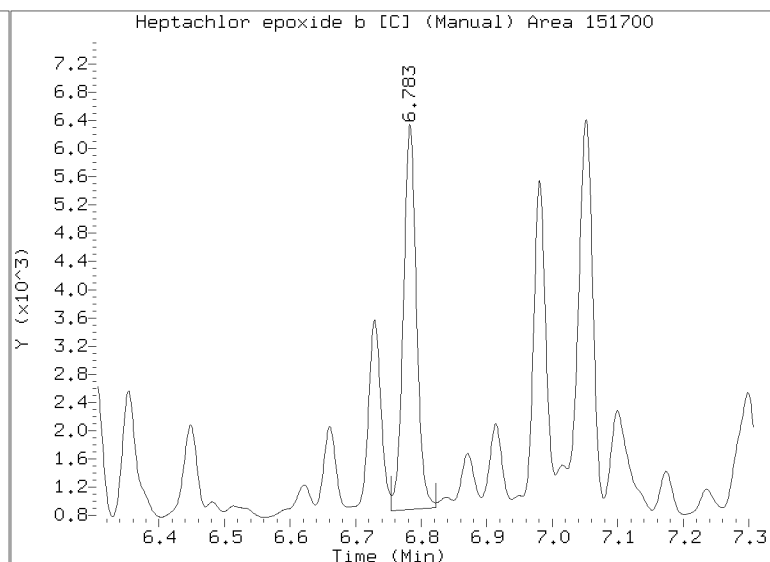
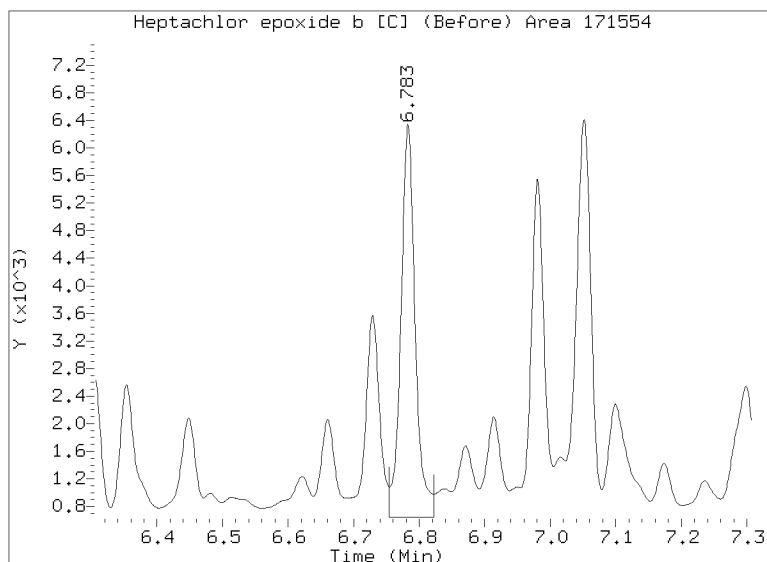


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:

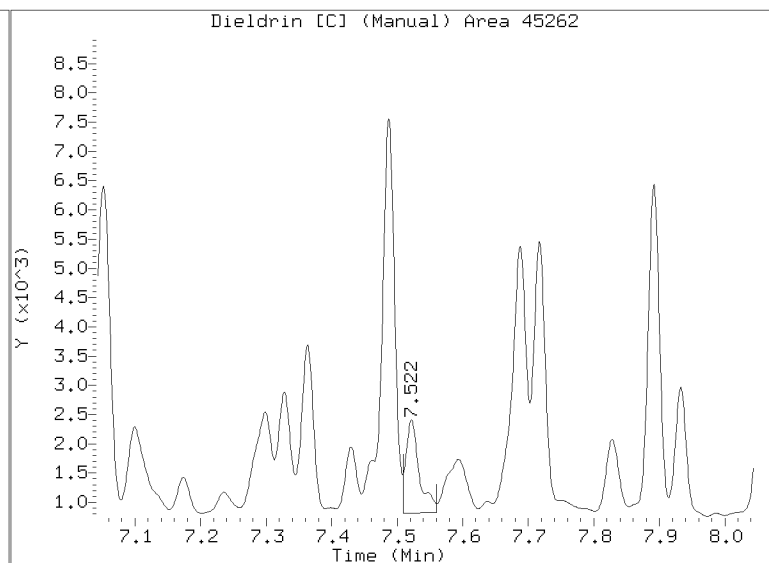
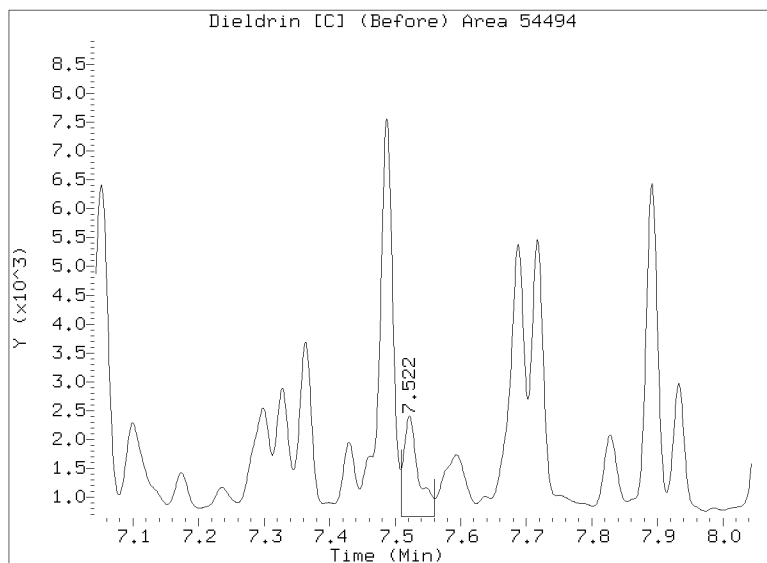
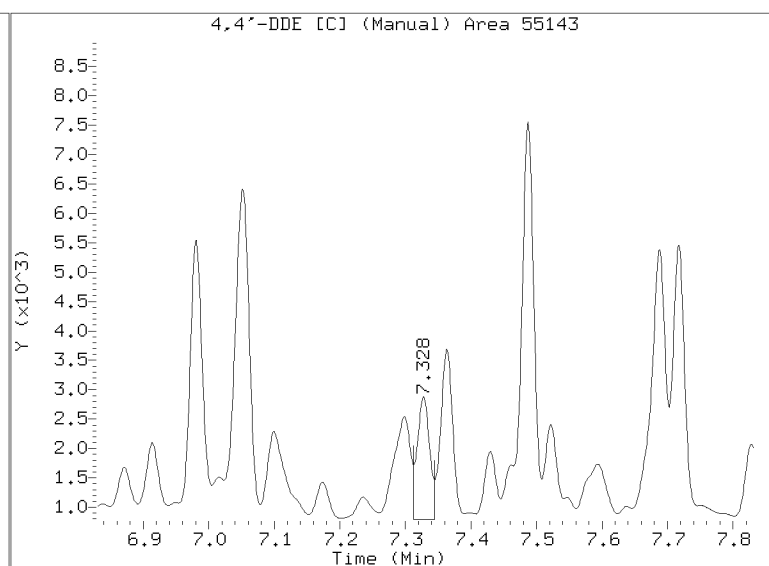
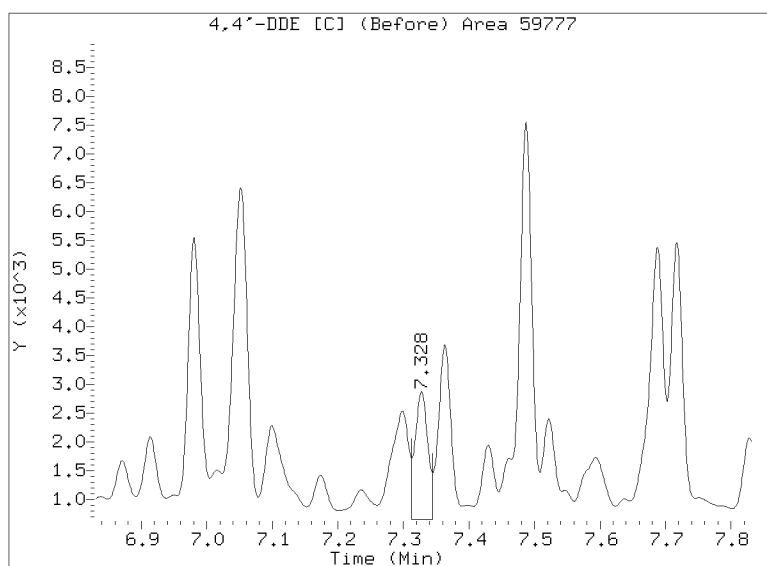
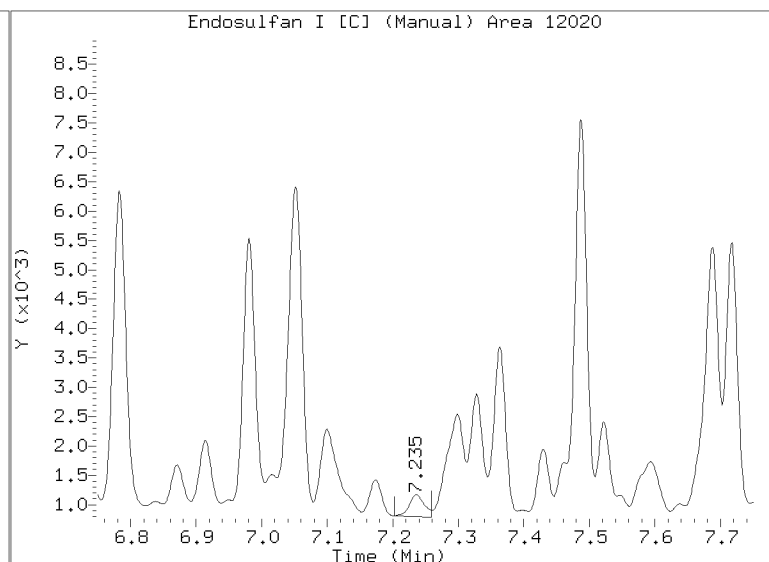
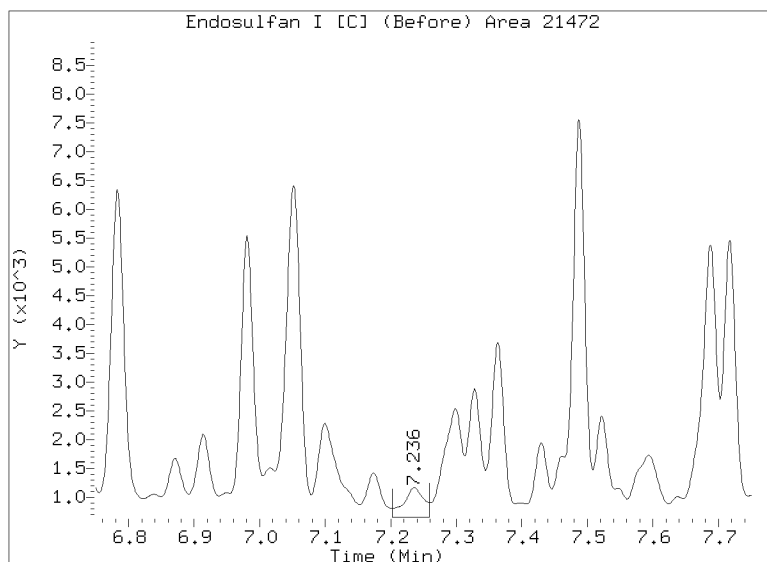


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:

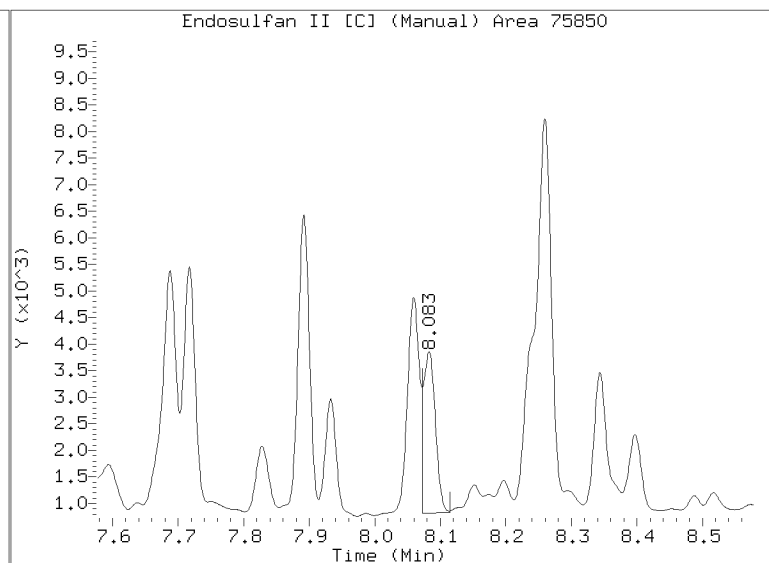
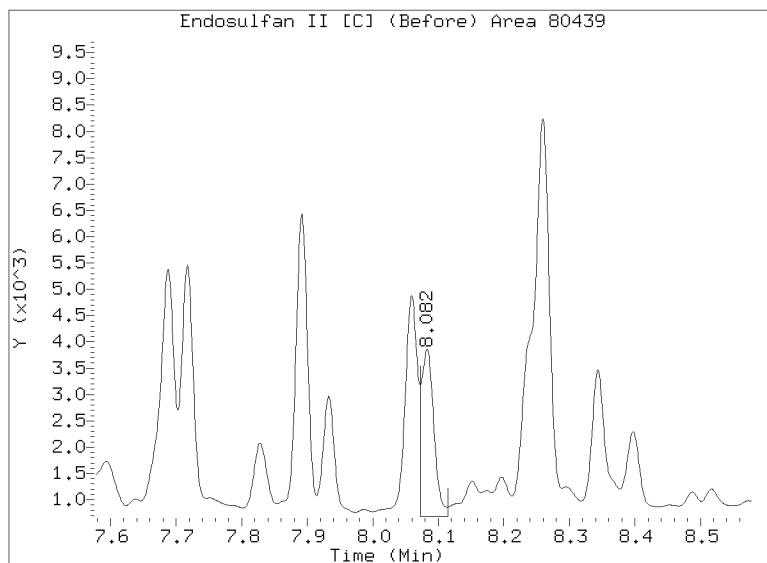
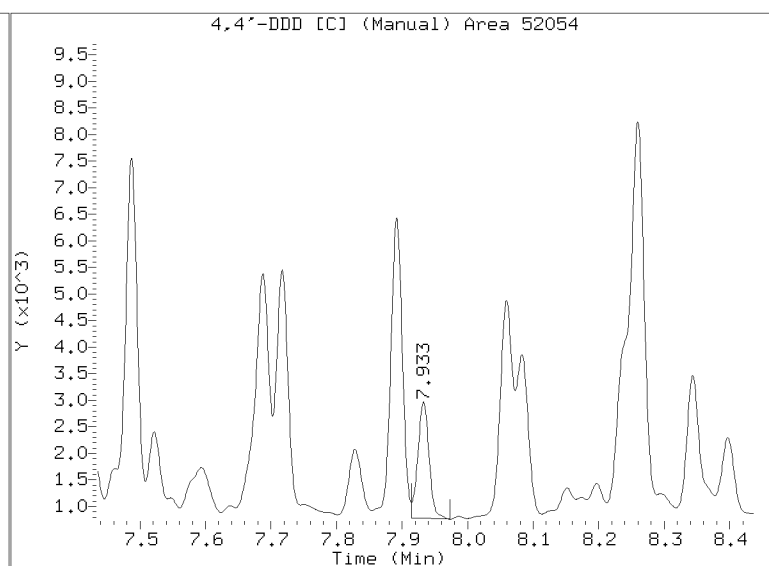
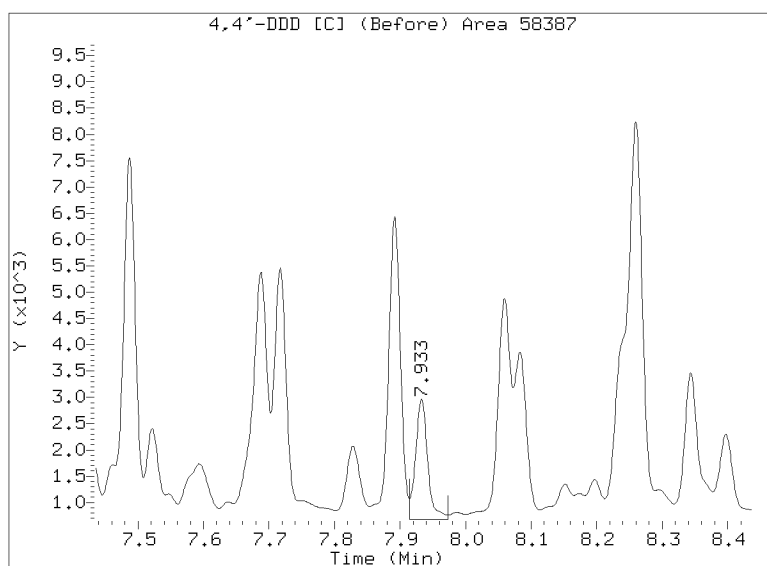
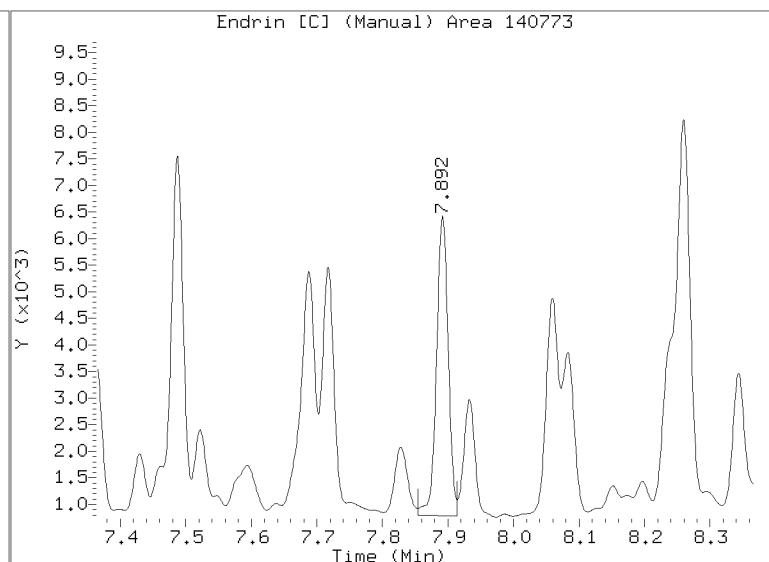
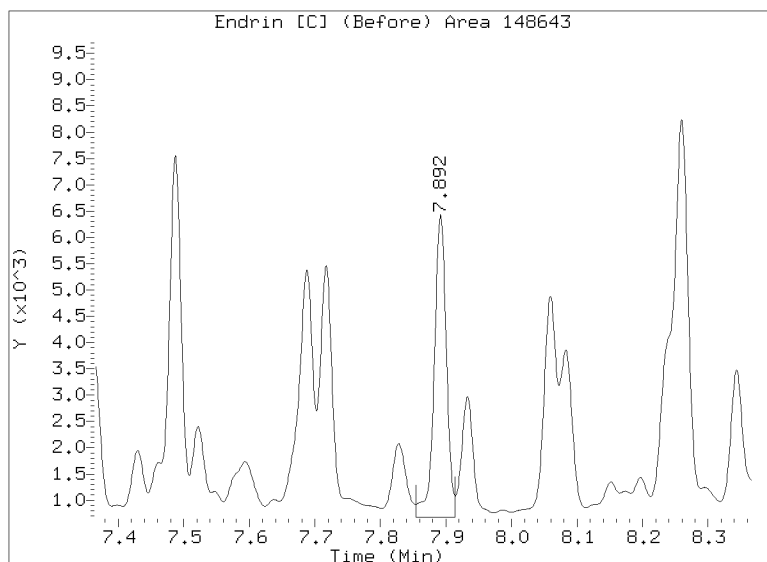


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:

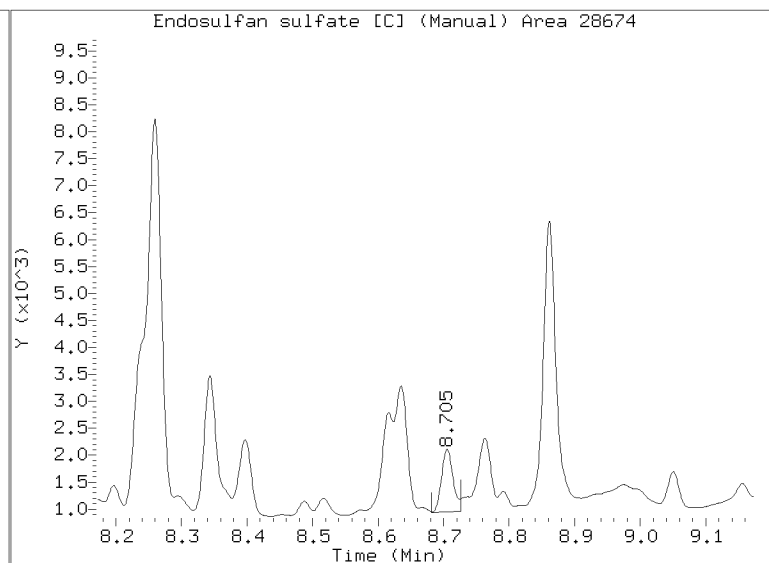
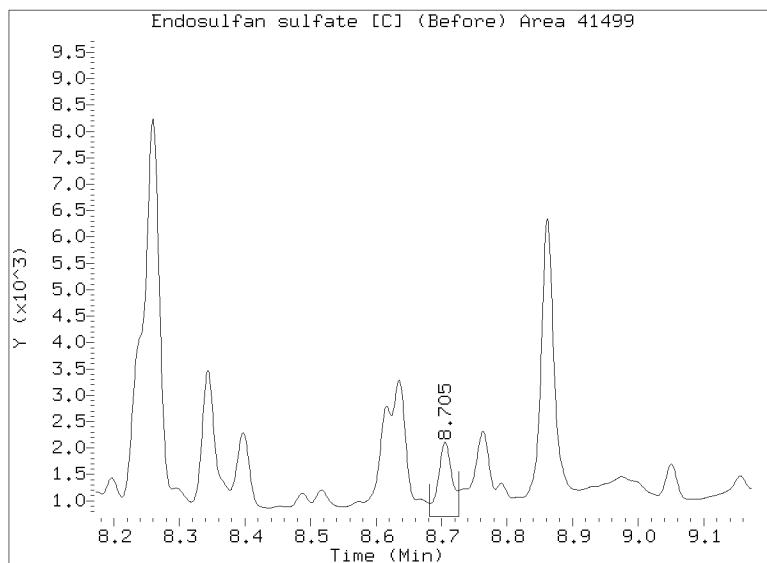
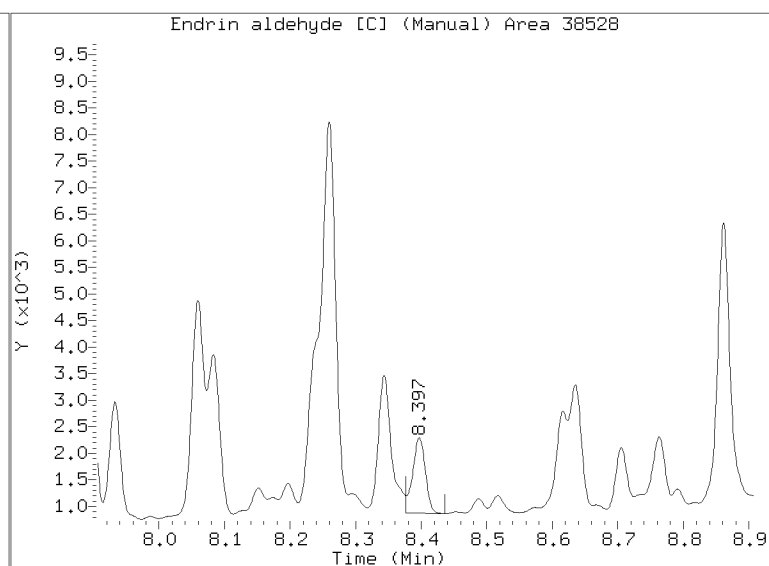
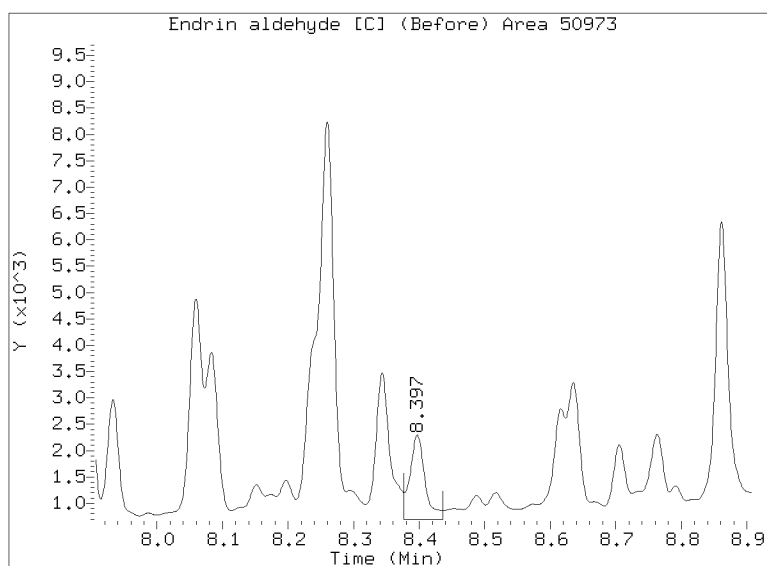
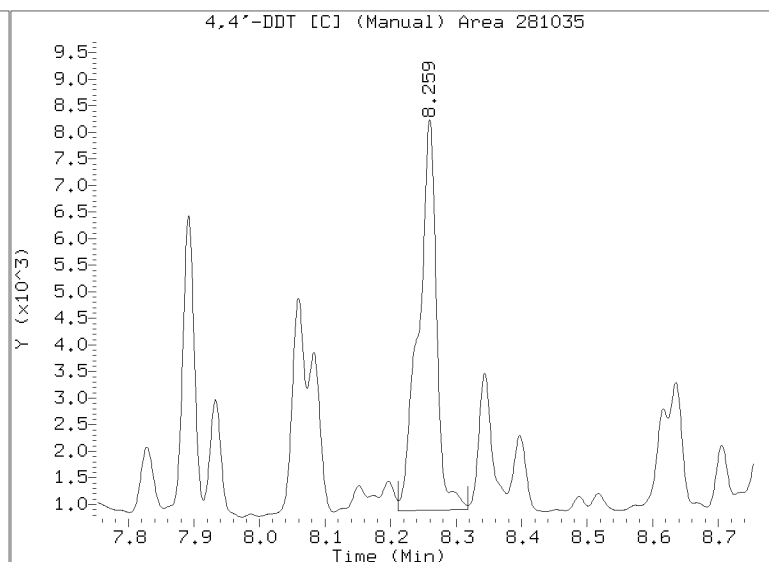
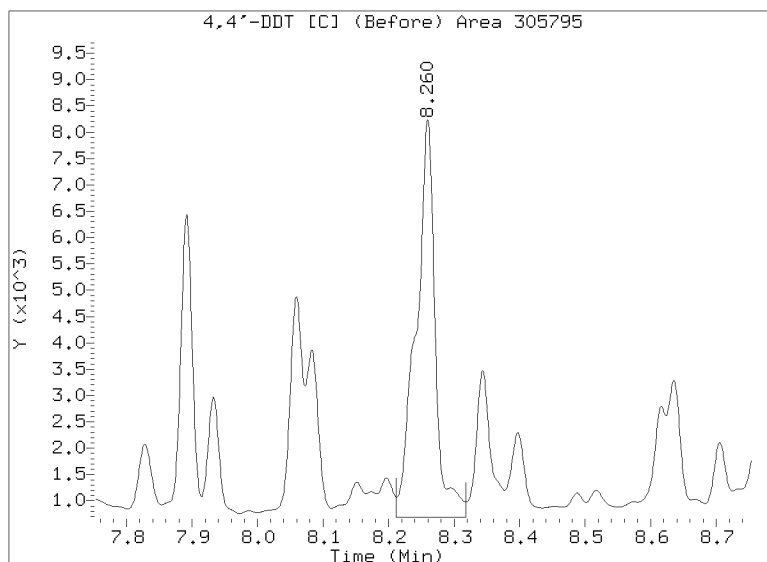


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:

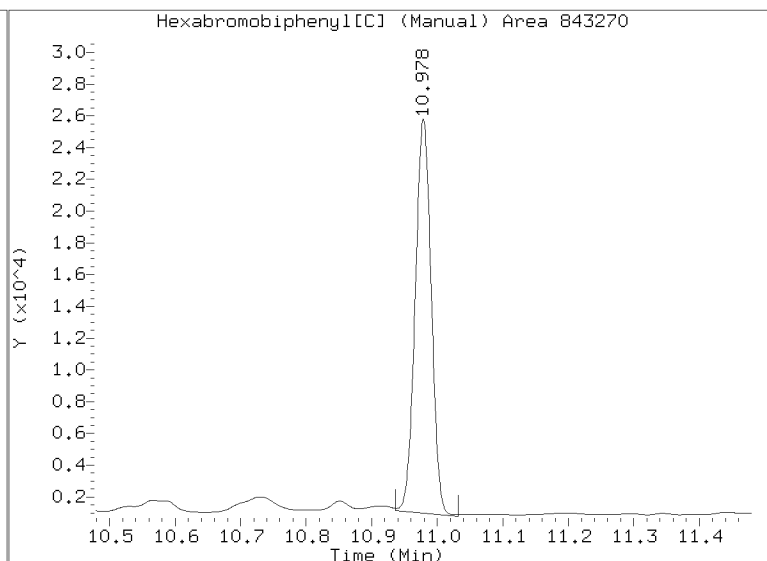
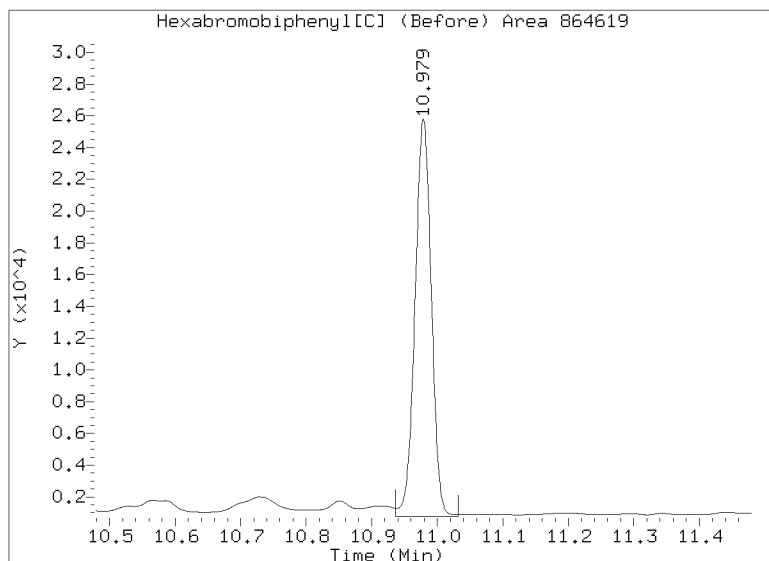
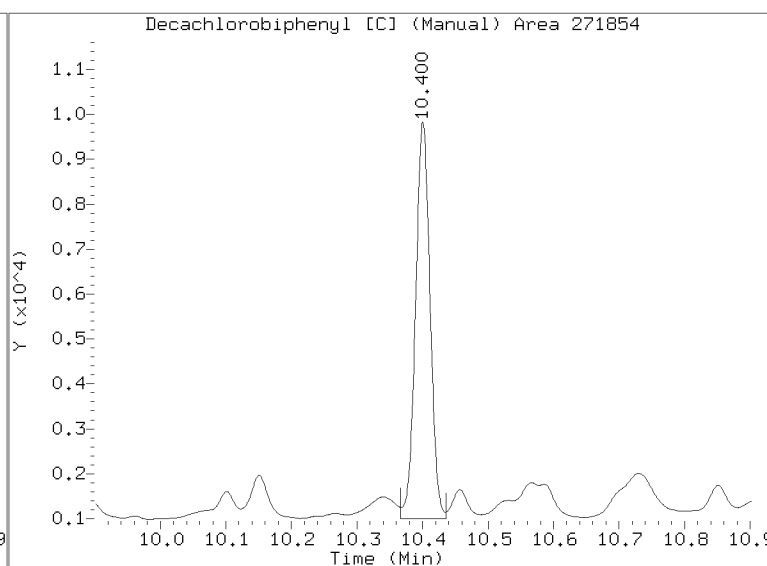
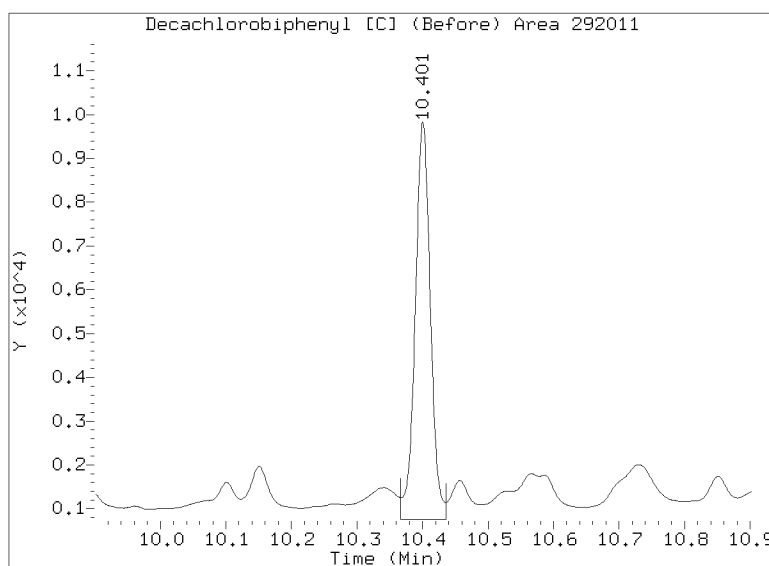
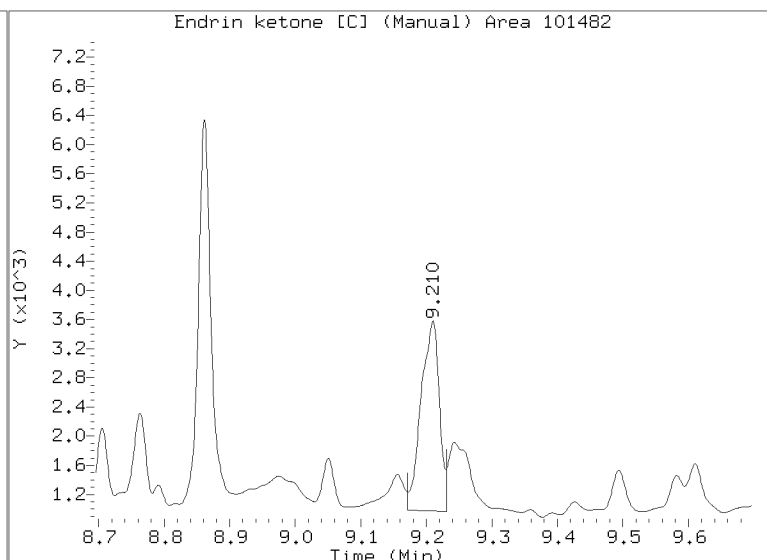
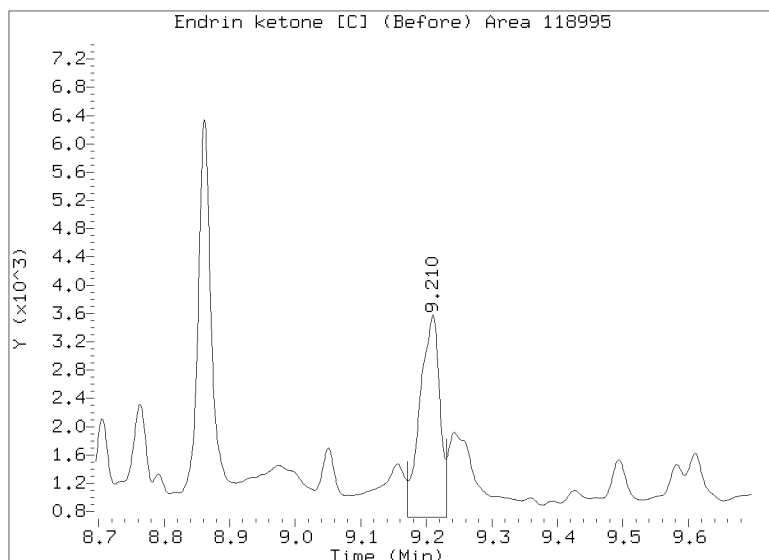


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/067F7601.D

Injection Date: 03-MAR-2023 22:25

Lab ID:23B0229-02 Client ID:





**ORGANIC ANALYSIS DATA SHEET
EPA 8081B**

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23B0229</u>	
Client: <u>Anchor QEA, LLC</u>		
Project: <u>AOC5 MR Phase 1</u>		
Matrix: <u>Solid</u>	Laboratory ID: <u>23B0229-03 A</u>	File ID: <u>025F2801.D</u>
Sampled: <u>02/08/23 11:52</u>	Prepared: <u>02/17/23 10:59</u>	Analyzed: <u>03/07/23 17:05</u>
% Solids: <u>54.81</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>22.81 g Wet / 2.5 mL</u>
Batch: <u>BLB0422</u>	Sequence: <u>SLC0106</u>	Calibration: <u>FL00041</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>	Column 2: <u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9986	5.75	71.9	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9986	5.63	70.4	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9986	4.97	62.1	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9986	4.89	61.1	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/025F2801.D
Data file 2: /20230307.b/B20230307.b/025F2801.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23B0229-03
Client ID:
Injection Date: 07-MAR-2023 17:05
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.376	-0.002	46758	4.822	0.007	17258	2.40	0.57	123.6*	alpha-BHC M
4.762	-0.004	9058	5.315	0.026	12445	1.21	1.07	11.6	beta-BHC M
4.963	0.010	68127	----			4.27	0.00	---	delta-BHC
4.686	0.002	22644	5.212	0.002	12986	1.34	0.50	90.9*	gamma-BHC (Lindane) M
5.162	-0.015	19362	5.745	0.010	38931	1.29	1.66	25.4	Heptachlor M
5.542	0.038	636649	6.156	0.019	720793	37.72	26.91	33.4	Aldrin
6.226	0.043	150751	----			10.30	0.00	---	Heptachlor epoxide b
6.670	0.045	118477	7.225	-0.011	19397	8.82	0.99	159.5*	Endosulfan I
6.914	0.029	12202	----			0.85	0.00	---	Dieldrin
6.539	-0.007	138725	----			10.36	0.00	---	4,4'-DDE
7.159	0.024	211928	7.880	0.027	156260	21.57	12.68	51.9*	Endrin
7.400	0.028	14988	8.050	-0.014	210083	1.69	16.63	163.0*	Endosulfan II
----			7.921	-0.002	70193	0.00	5.85	---	4,4'-DDD
8.234	0.001	23975	8.695	0.036	69881	2.85	6.30	75.3*	Endosulfan sulfate
----			8.248	0.007	377685	0.00	32.64	---	4,4'-DDT
8.006	0.034	69674	----			17.58	0.00	---	Methoxychlor
----			9.196	0.014	304759	0.00	25.43	---	Endrin ketone
7.824	0.024	62289	8.385	-0.009	83439	8.83	9.36	5.9	Endrin aldehyde
6.322	-0.001	40626	7.036	0.032	104809	2.73	4.75	53.8*	trans-Chlordane
6.486	0.015	85780	7.161	-0.002	41815	5.75	1.94	99.3*	cis-Chlordane
2.319	-0.017	18046	----			0.88	0.00	---	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.858	-0.002	342745	4.183	-0.001	524123	24.85	24.46	1.6	Tetrachloro-m-xylene MN
9.424	0.003	218445	10.387	0.001	269981	28.76	28.18	2.1	Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1014088	50.8
Hexabromobiphenyl	609723	749508	22.9

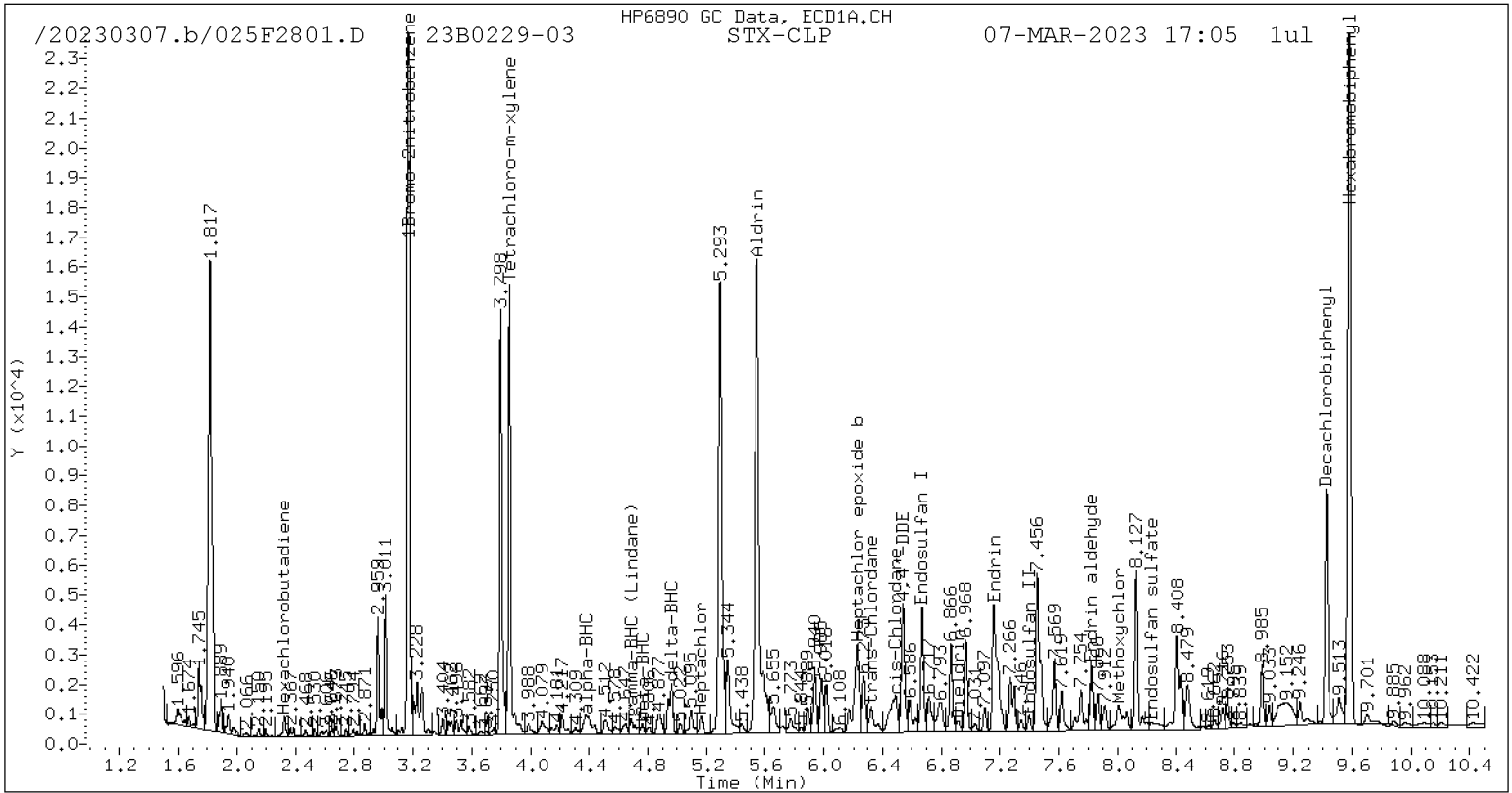
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1522541	51.3
Hexabromobiphenyl	769764	866858	12.6

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

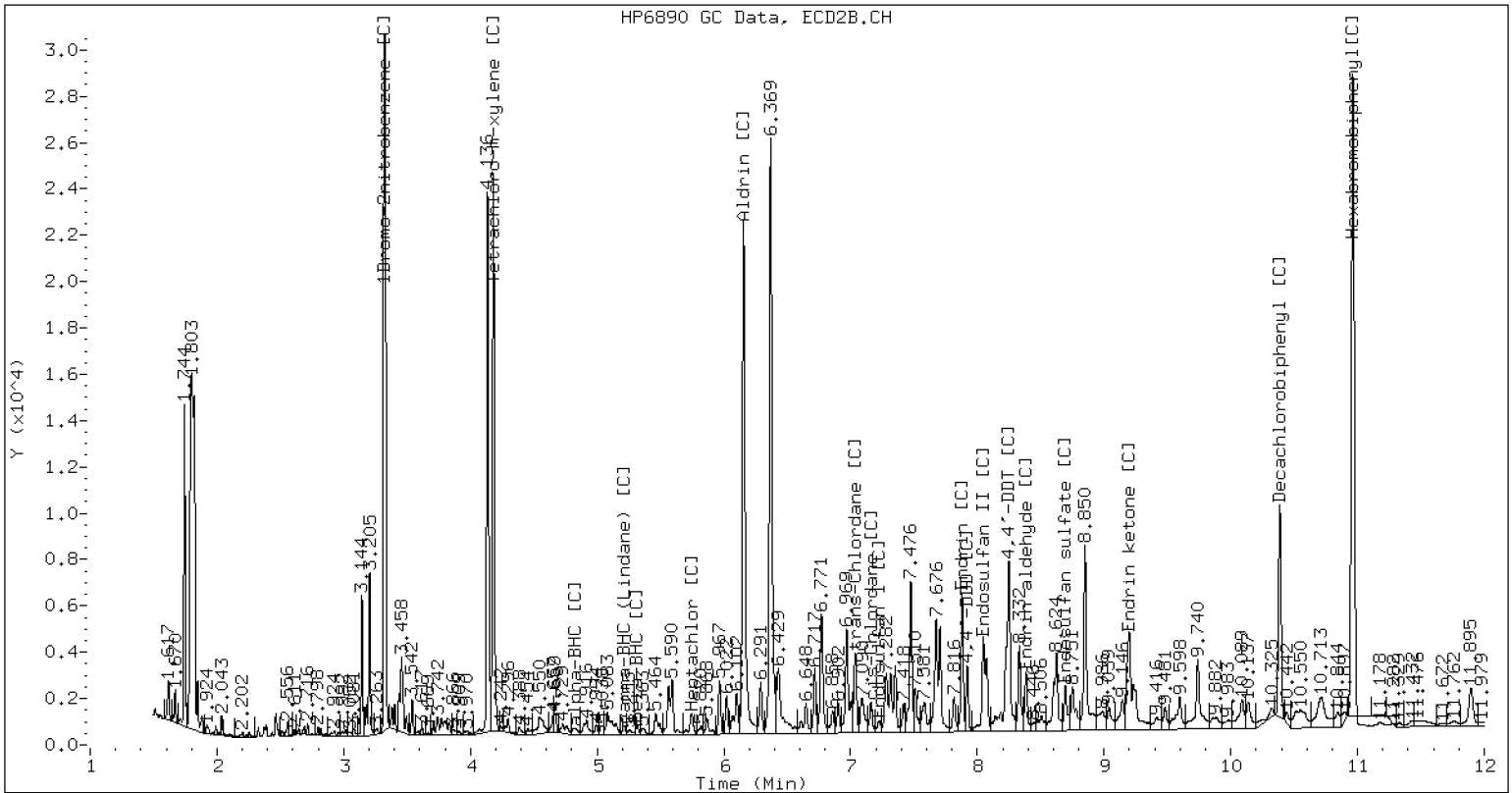
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

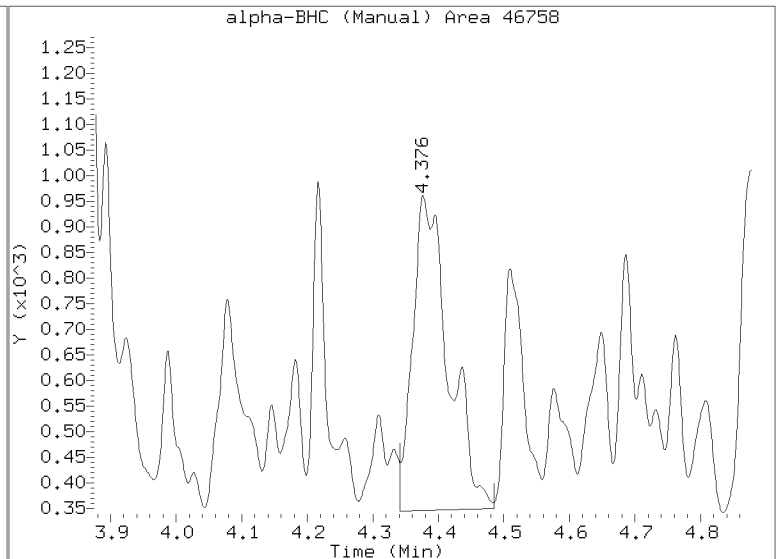
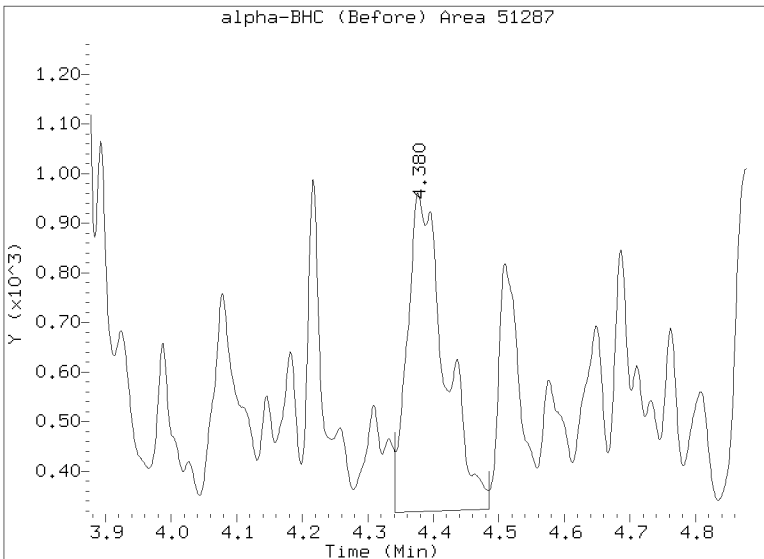
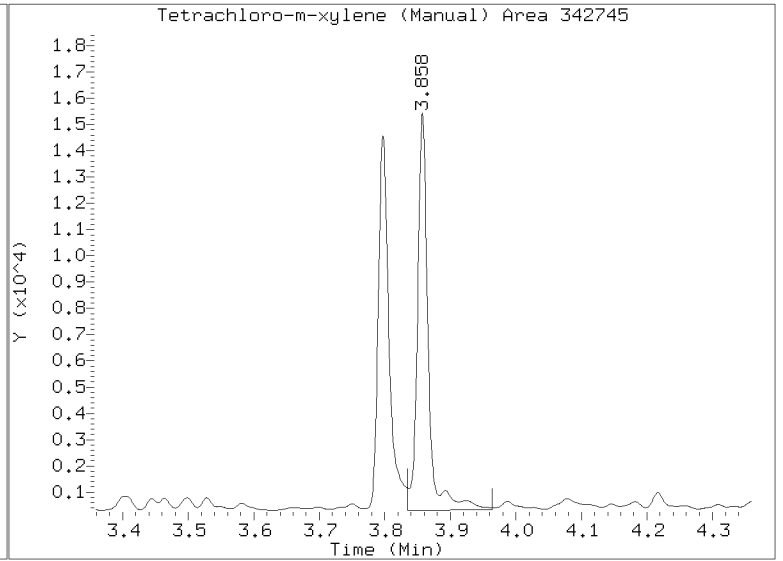
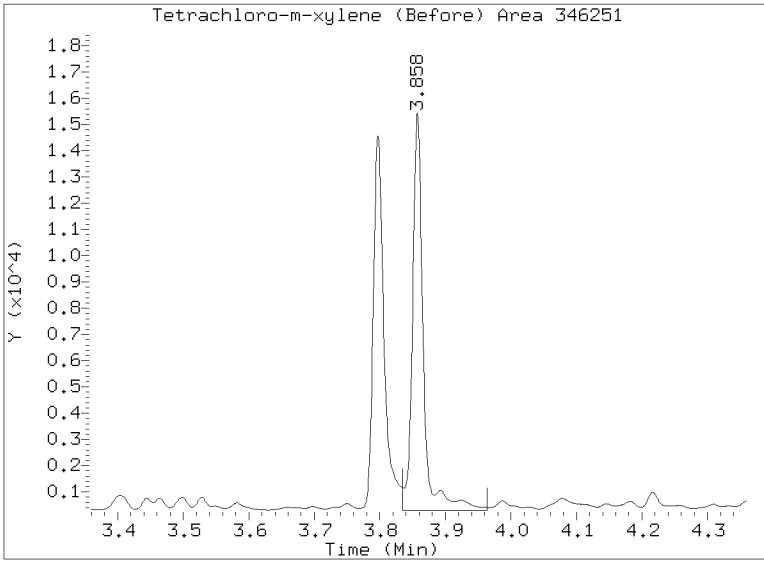
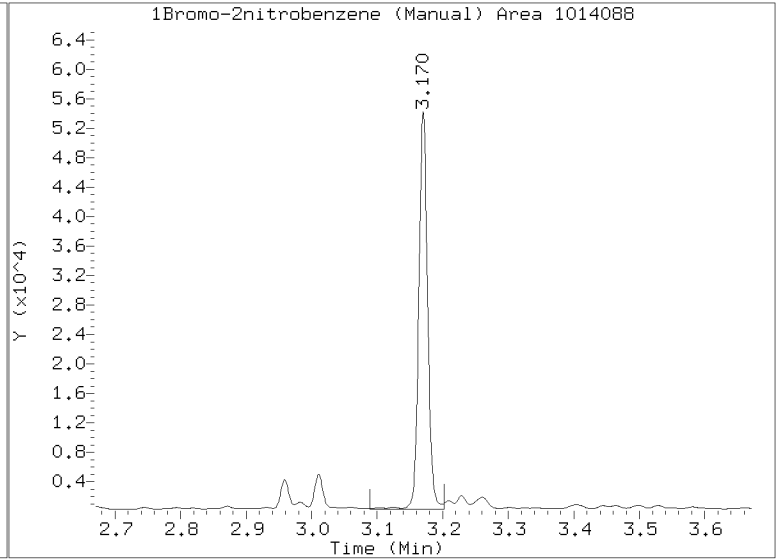
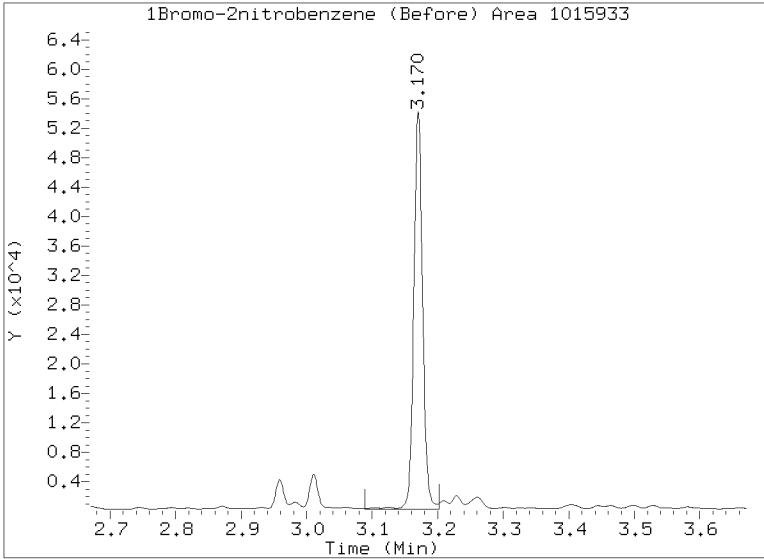
/20230307.b/B20230307.b/025F2801.D 23B0229-03 CLP2



CLP-2 Manual Integration: YES

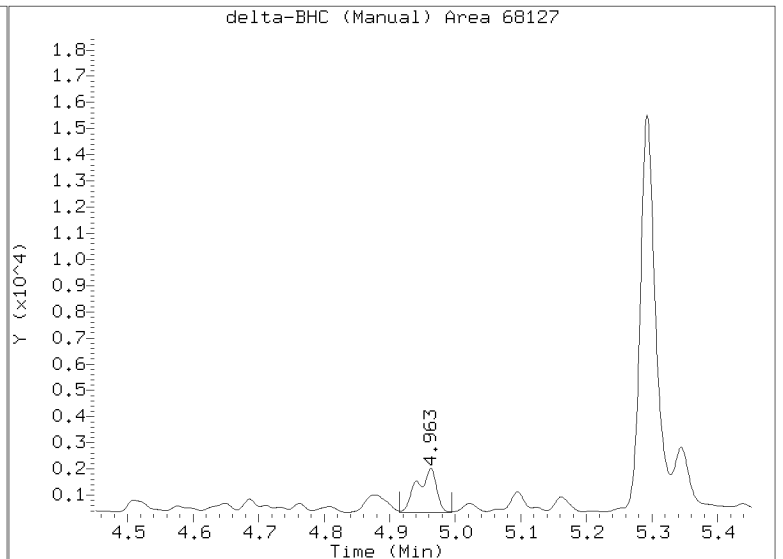
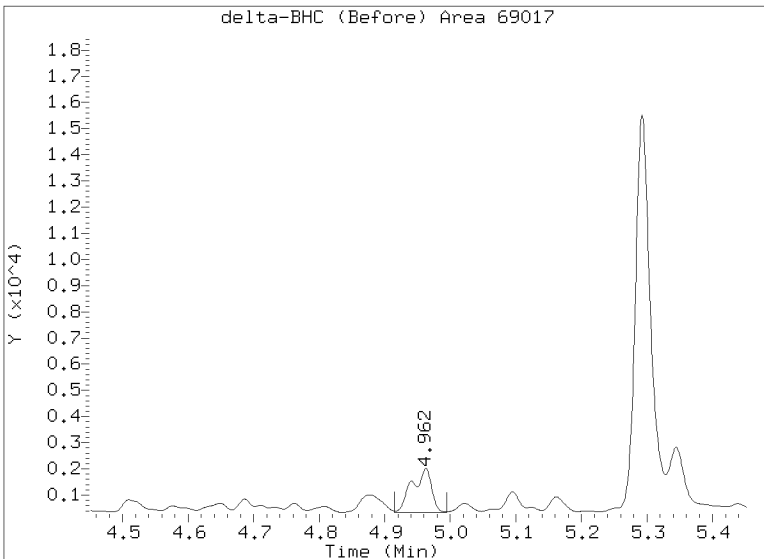
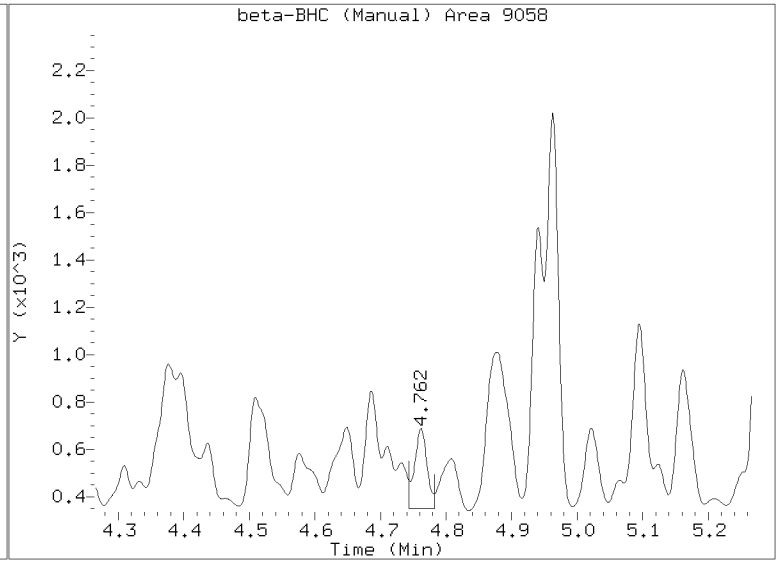
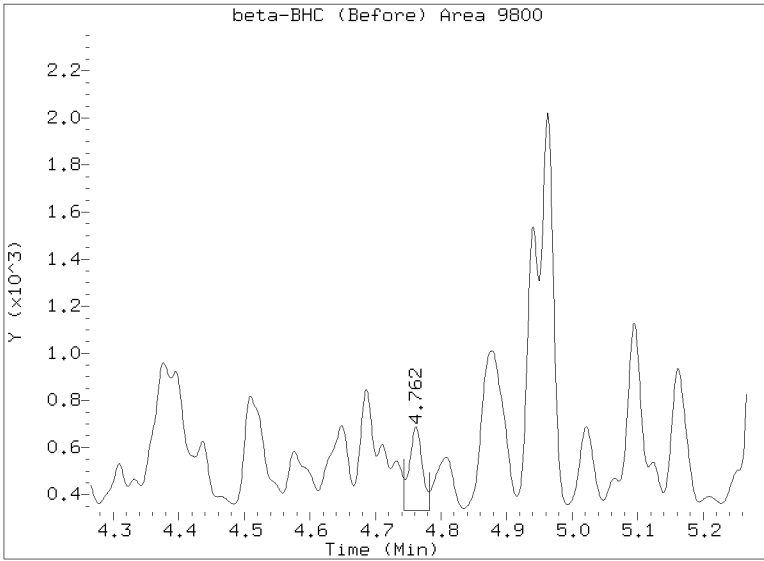
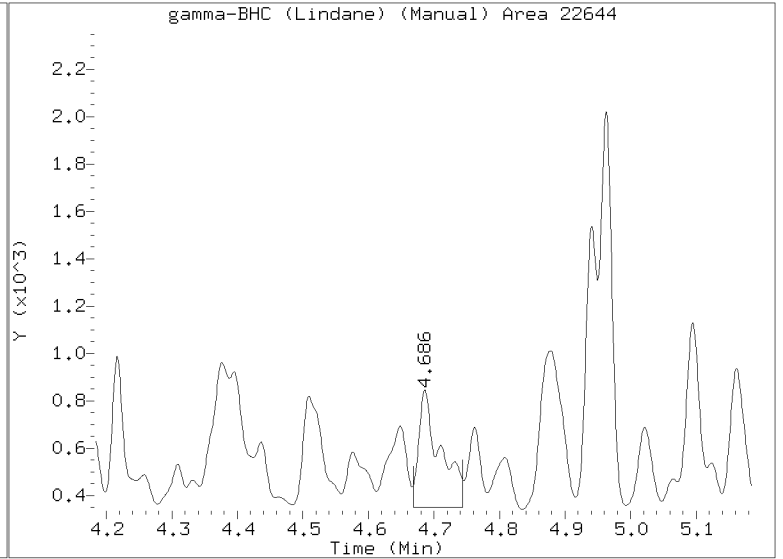
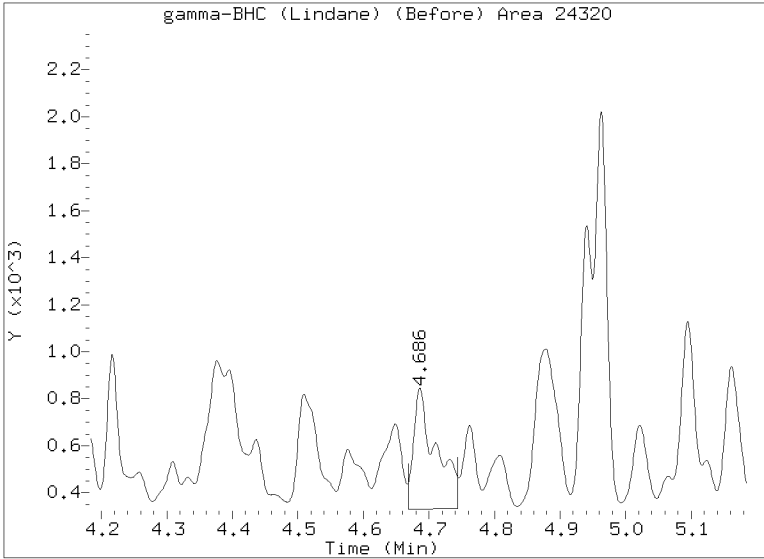
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/025F2801.D
Injection Date: 07-MAR-2023 17:05
Lab ID:23B0229-03 Client ID:
Report Date: 03/09/2023 13:37



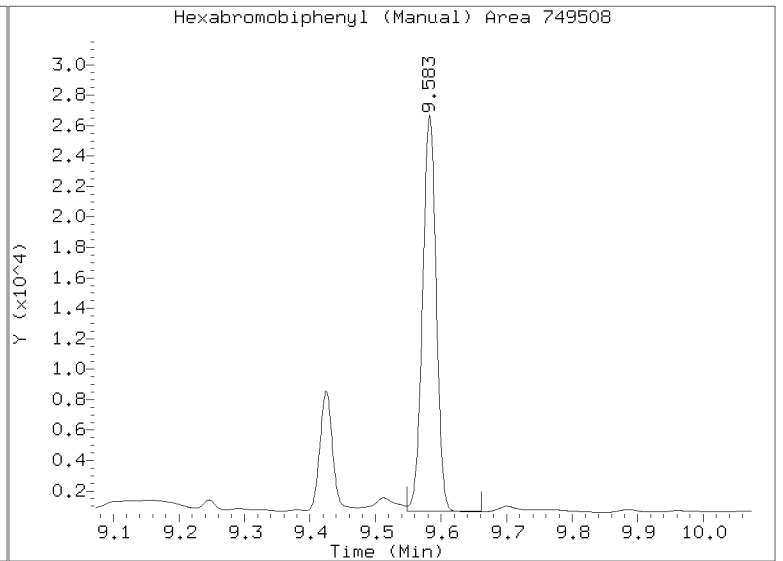
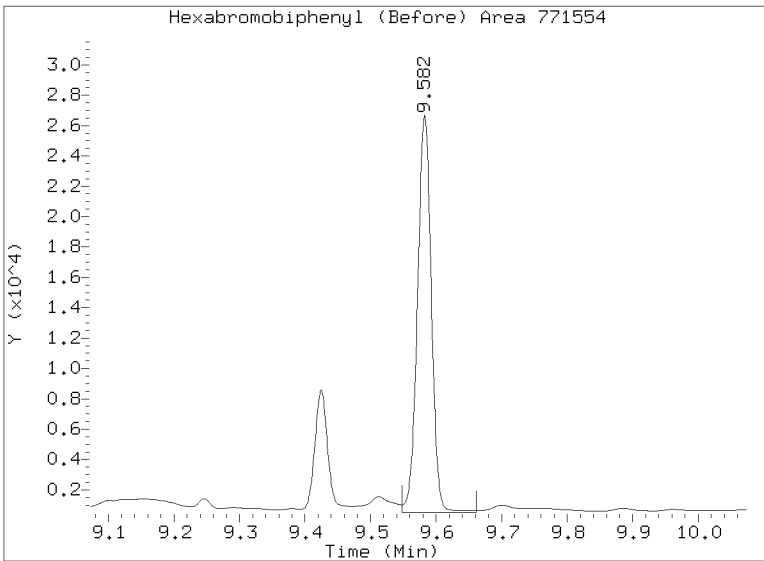
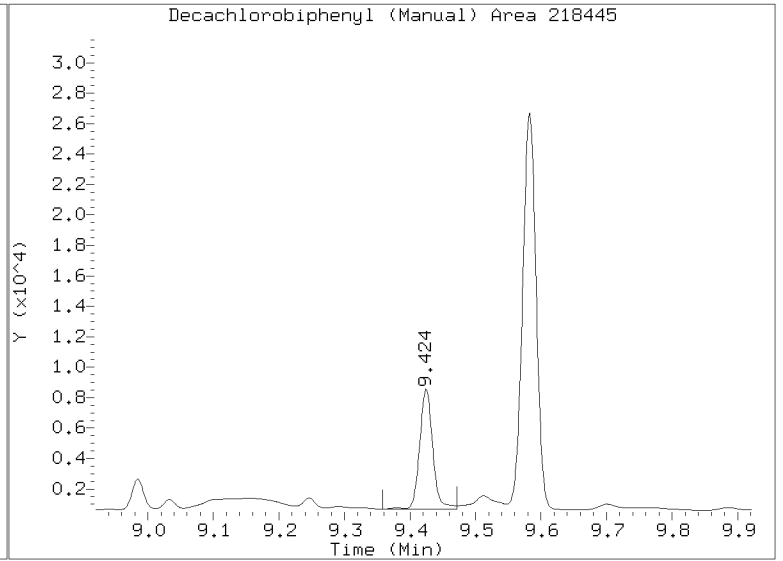
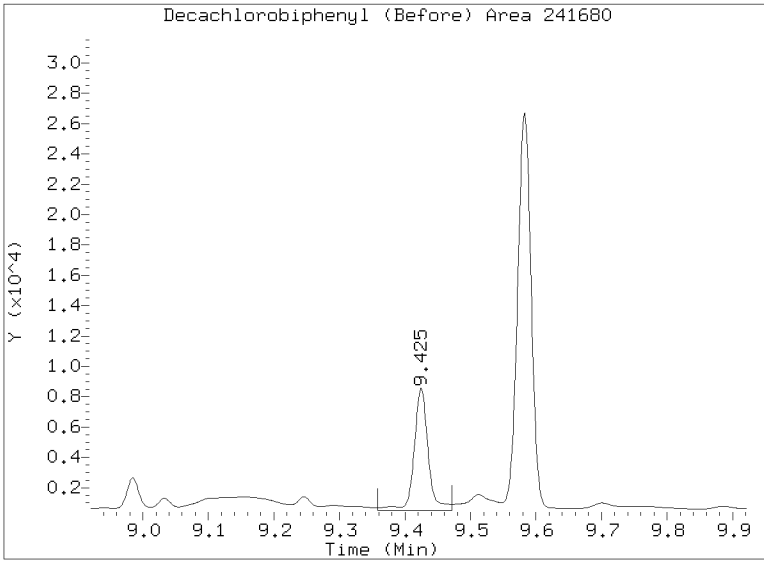
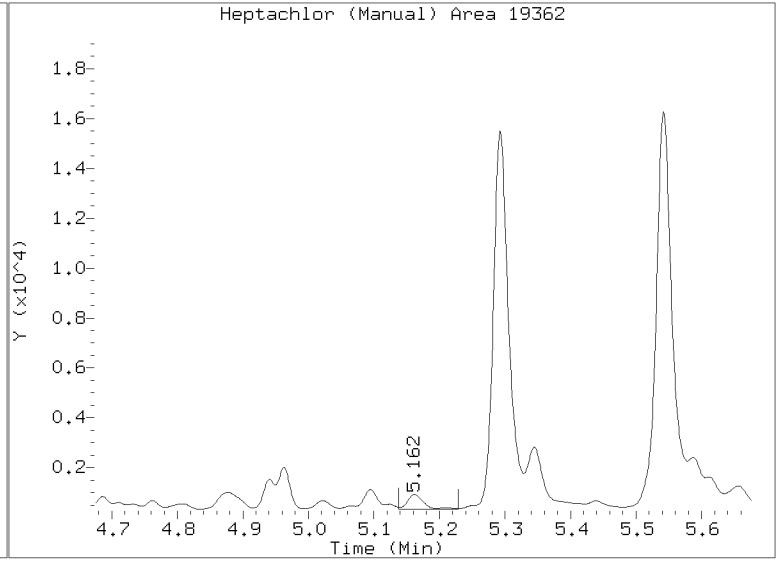
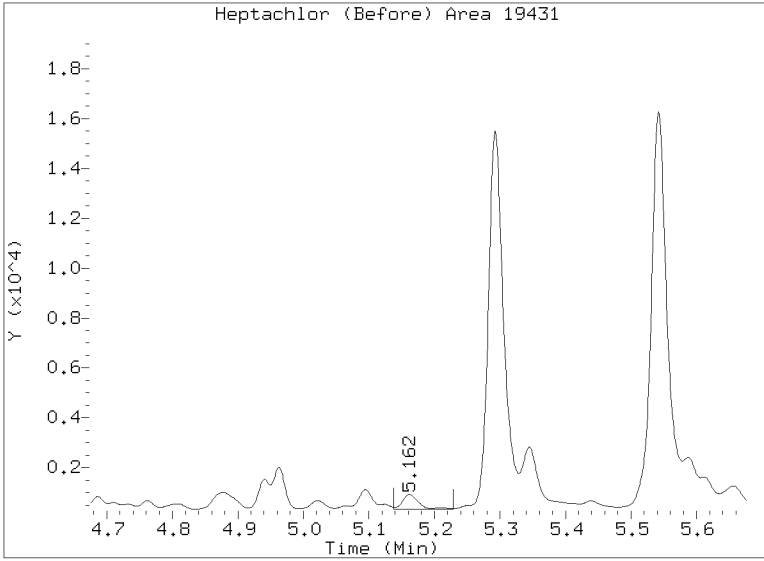
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/025F2801.D
Injection Date: 07-MAR-2023 17:05
Lab ID:23B0229-03 Client ID:
Report Date: 03/09/2023 13:37



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/025F2801.D
Injection Date: 07-MAR-2023 17:05
Lab ID:23B0229-03 Client ID:
Report Date: 03/09/2023 13:37

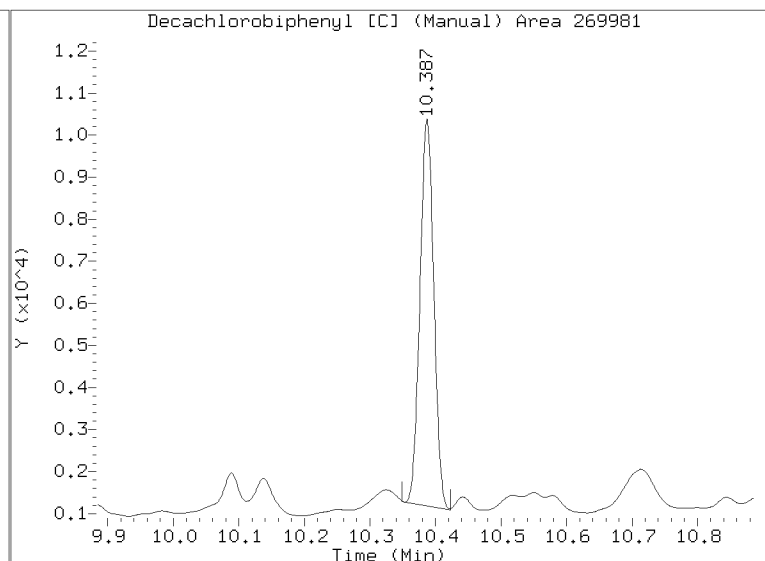
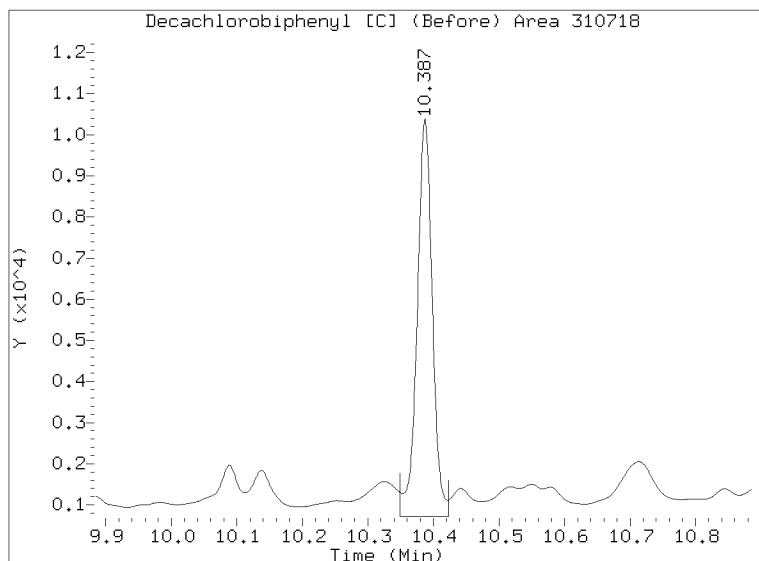
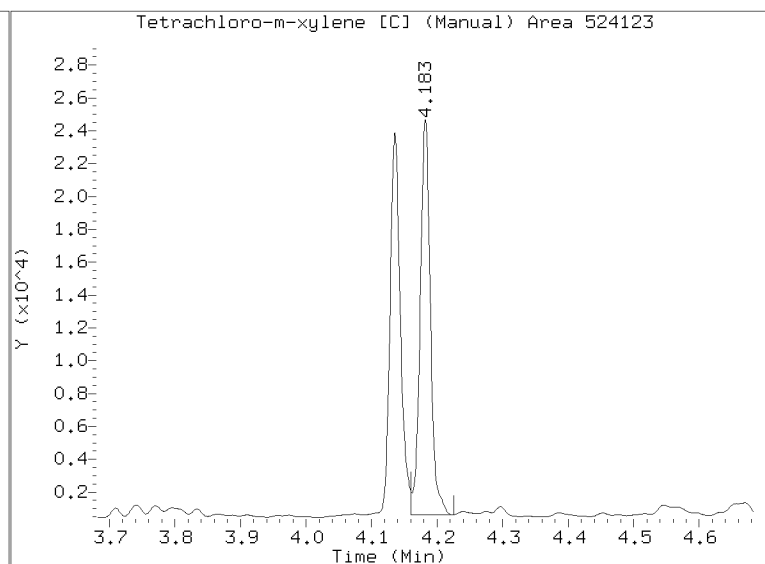
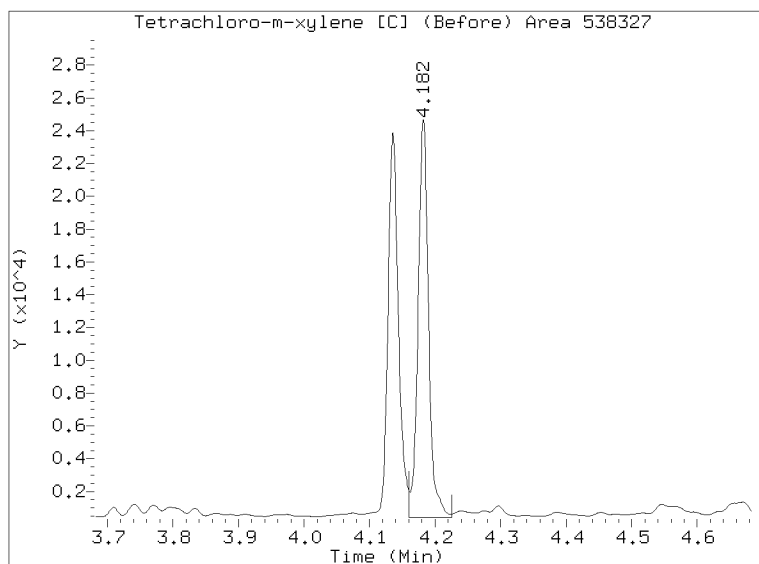
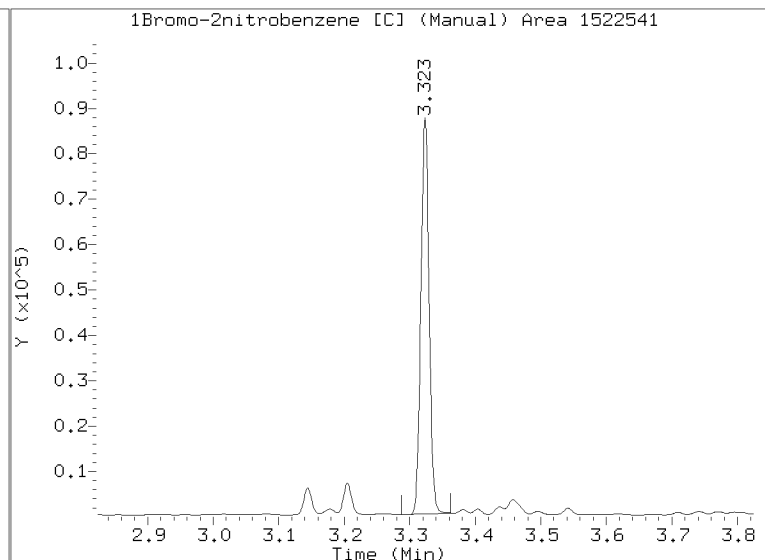
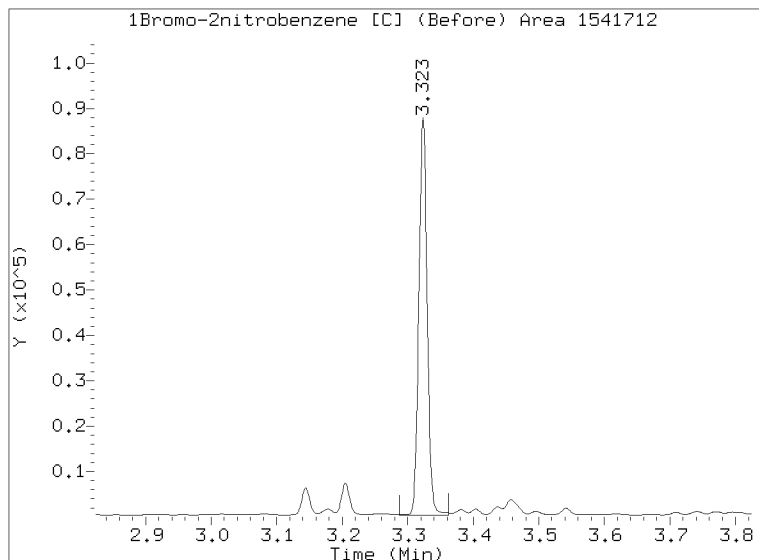


Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/025F2801.D

Injection Date: 07-MAR-2023 17:05

Lab ID:23B0229-03 Client ID:

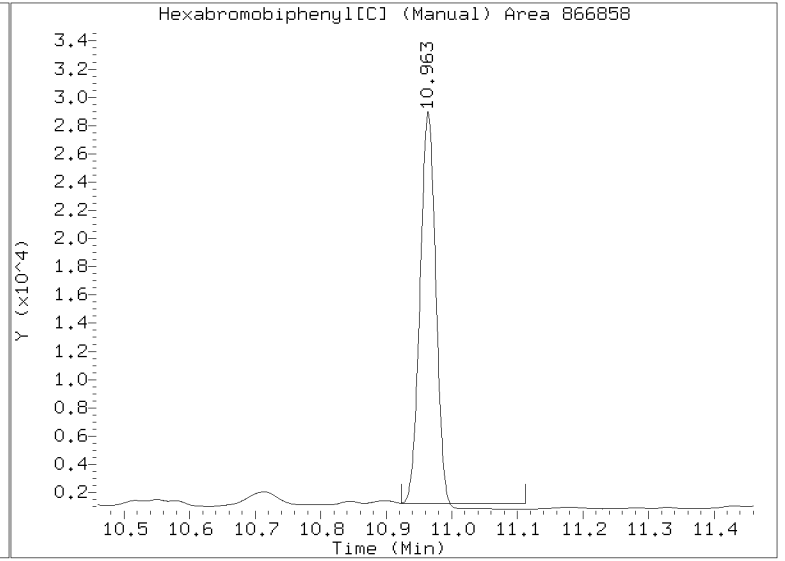
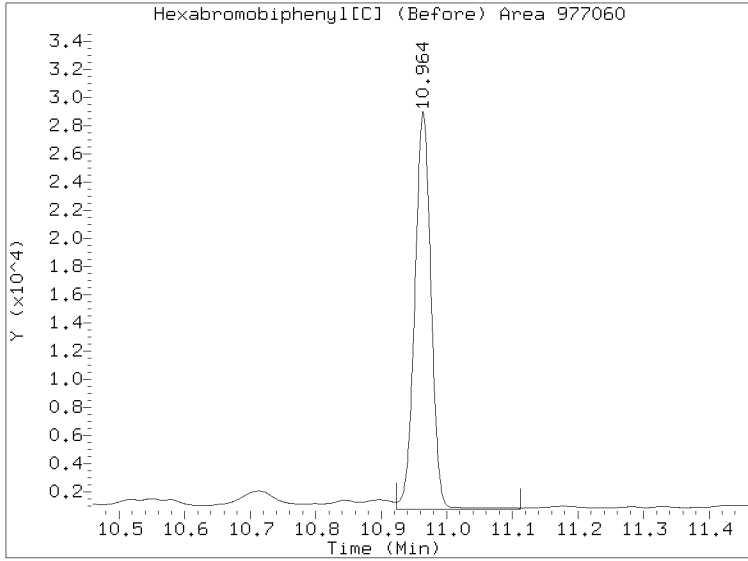


Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/025F2801.D

Injection Date: 07-MAR-2023 17:05

Lab ID:23B0229-03 Client ID:





Dual Column

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23B0229</u>
Client: <u>Anchor QEA, LLC</u>	
Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23B0229-04 A</u>
Sampled: <u>02/08/23 12:11</u>	Prepared: <u>02/17/23 10:59</u>
% Solids: <u>52.16</u>	Preparation: <u>EPA 3546 (Microwave)</u>
Batch: <u>BLB0422</u>	Sequence: <u>SLC0093</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>
	Column 2: <u>STX-CLPII</u>
	File ID: <u>069F7801.D</u>
	Analyzed: <u>03/03/23 23:01</u>
	Initial/Final: <u>23.99 g Wet / 2.5 mL</u>
	Calibration: <u>FL00041</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9916	6.12	76.6	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9916	5.99	75.0	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9916	4.39	54.9	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9916	5.00	62.5	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/069F7801.D
Data file 2: /20230302.b/B20230302.b/069F7801.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23B0229-04
Client ID:
Injection Date: 03-MAR-2023 23:01
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.384	-0.007	26995	4.828	-0.001	9118	1.26	0.30	122.8*	alpha-BHC MN
4.774	-0.005	7802	5.327	0.025	13520	0.95	1.18	21.7	beta-BHC MN
4.975	0.009	87130	5.687	0.032	46994	4.99	1.89	90.0*	delta-BHC MN
4.717	0.019	79540	5.222	-0.001	8516	4.30	0.33	171.2*	gamma-BHC (Lindane) MN
5.172	-0.019	32877	5.758	0.009	35919	2.00	1.55	25.1	Heptachlor MN
5.535	0.015	105580	6.155	0.003	23185	5.72	0.88	146.8*	Aldrin MN
6.185	-0.014	49811	6.783	-0.024	198726	3.11	9.09	98.0*	Heptachlor epoxide b MN
----			7.235	-0.016	15028	0.00	0.78	---	Endosulfan I
6.880	-0.021	94558	7.522	-0.022	49111	5.99	2.31	88.8*	Dieldrin MN
6.553	-0.007	125261	7.328	-0.003	64609	8.55	3.31	88.4*	4,4'-DDE MN
7.173	0.023	234492	7.892	0.025	173483	24.47	14.13	53.6*	Endrin N
7.412	0.024	17633	8.082	0.005	101198	2.04	8.04	118.9*	Endosulfan II MN
----			7.932	-0.004	62248	0.00	5.21	---	4,4'-DDD
8.240	-0.010	4096	8.706	0.032	33908	0.50	3.07	144.0*	Endosulfan sulfate MN
----			8.260	0.006	345359	0.00	29.97	---	4,4'-DDT
8.016	0.030	33121	----			8.57	0.00	---	Methoxychlor
----			9.211	0.015	106614	0.00	8.93	---	Endrin ketone
7.838	0.022	45372	8.398	-0.009	42643	6.59	4.80	31.4	Endrin aldehyde MN
----			7.050	0.032	185049	0.00	8.48	---	trans-Chlordane
6.504	0.018	77597	7.174	-0.003	20253	4.76	0.95	133.5*	cis-Chlordane MN
2.326	-0.020	10570	2.520	0.028	4817	0.47	0.17	94.9*	Hexachlorobutadiene M
----			4.689	0.000	48499	0.00	1.77	---	Hexachlorobenzene
3.868	-0.003	331486	4.192	-0.003	529360	21.97	25.01	12.9	Tetrachloro-m-xylene MN
9.437	-0.001	226982	10.401	-0.002	286217	30.65	29.99	2.2	Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1109293	65.0
Hexabromobiphenyl	609723	730951	19.9

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1503825	49.4
Hexabromobiphenyl	769764	863409	12.2

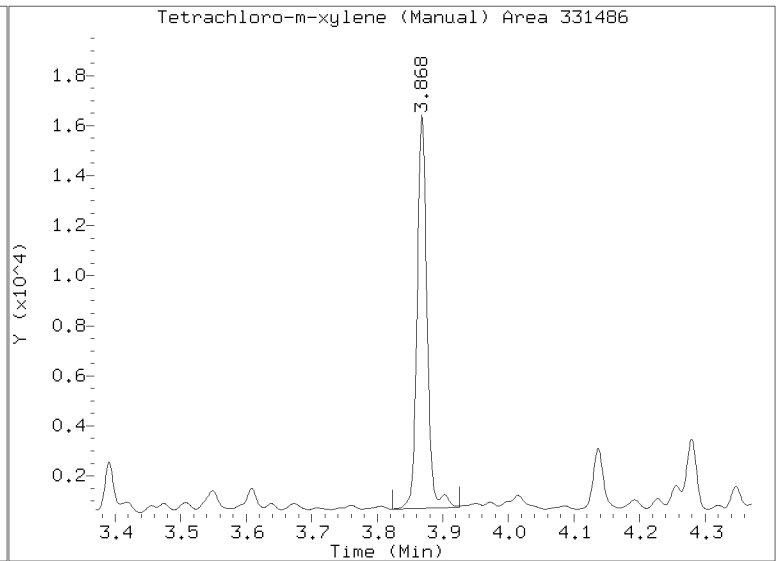
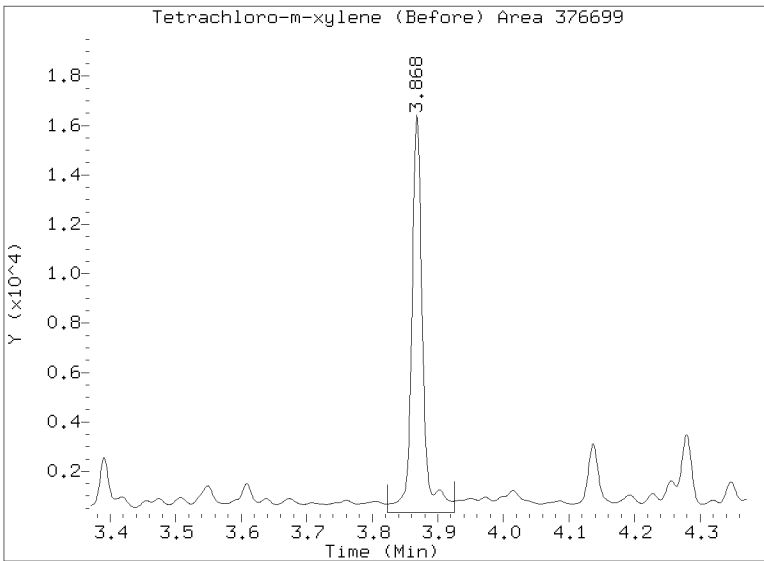
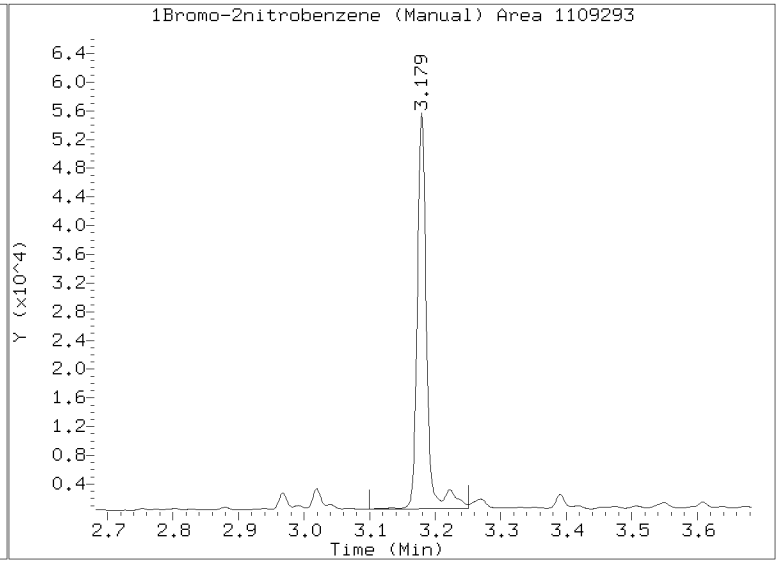
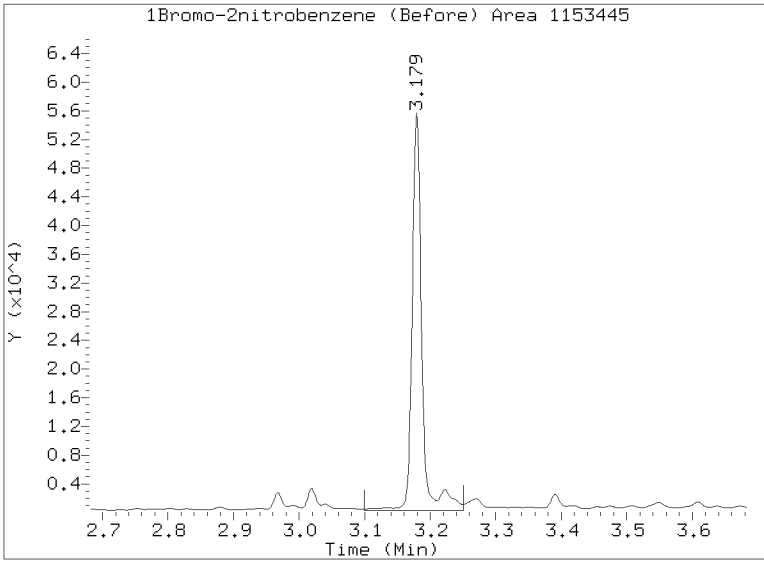
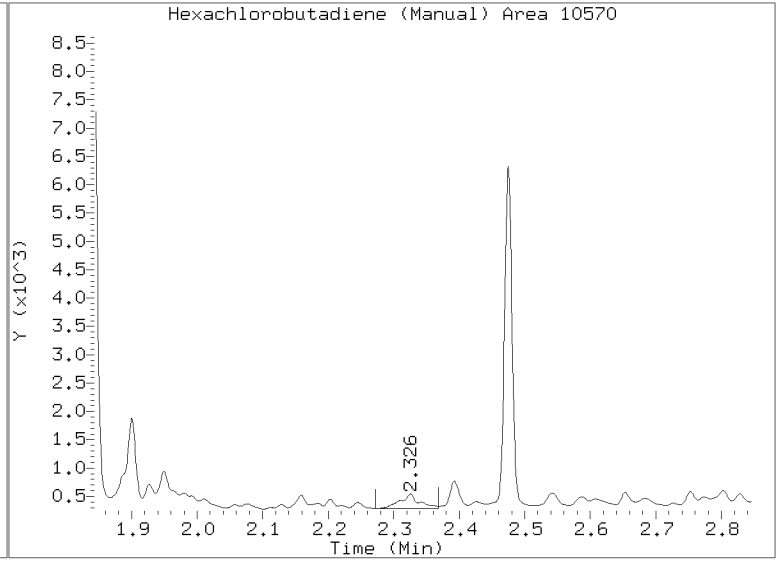
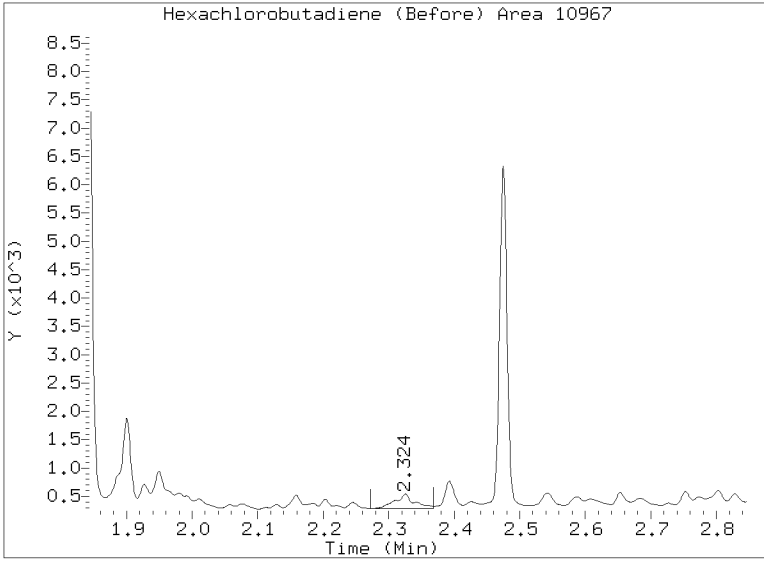
* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

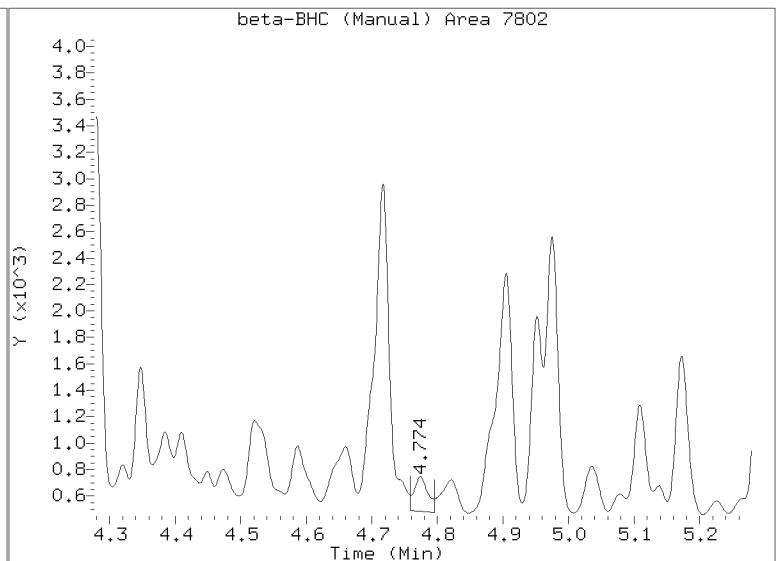
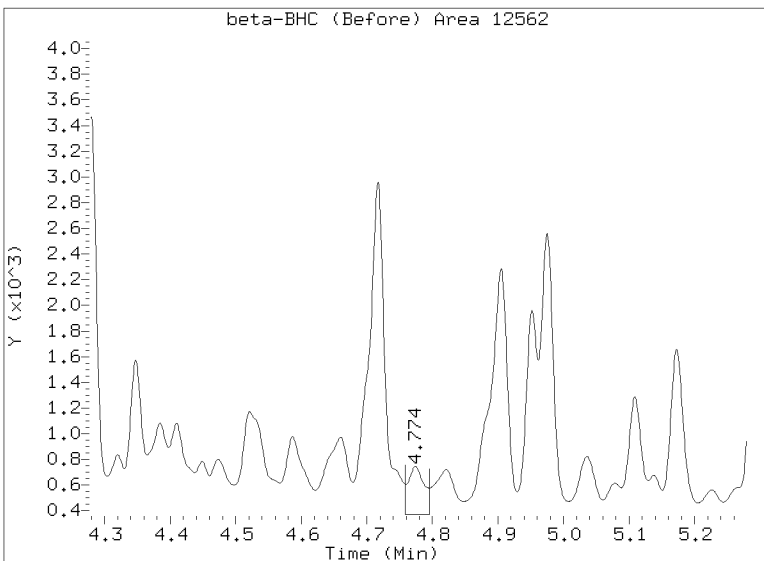
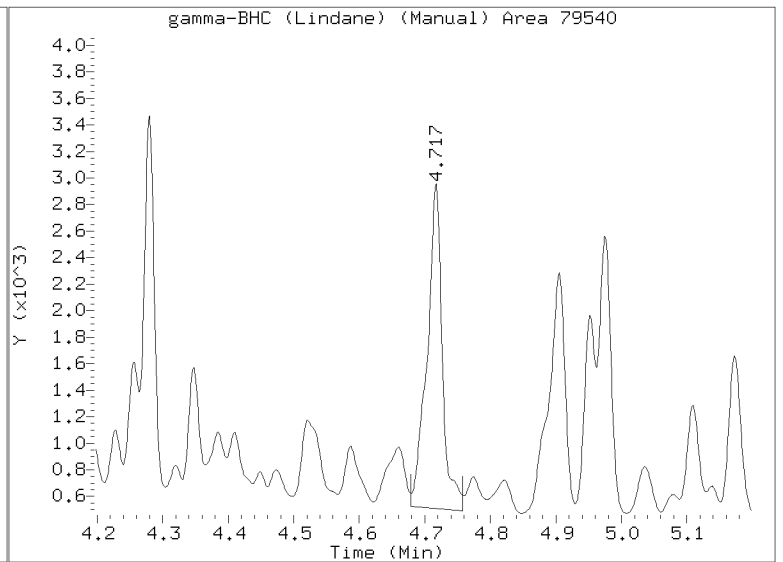
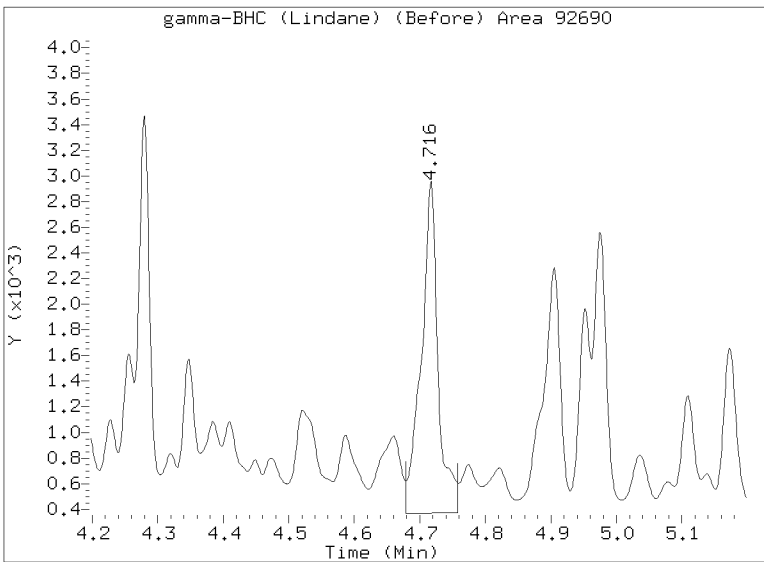
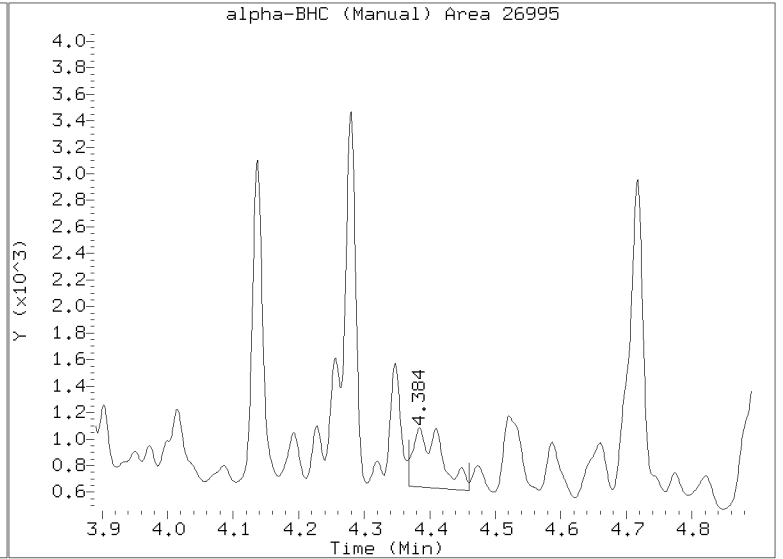
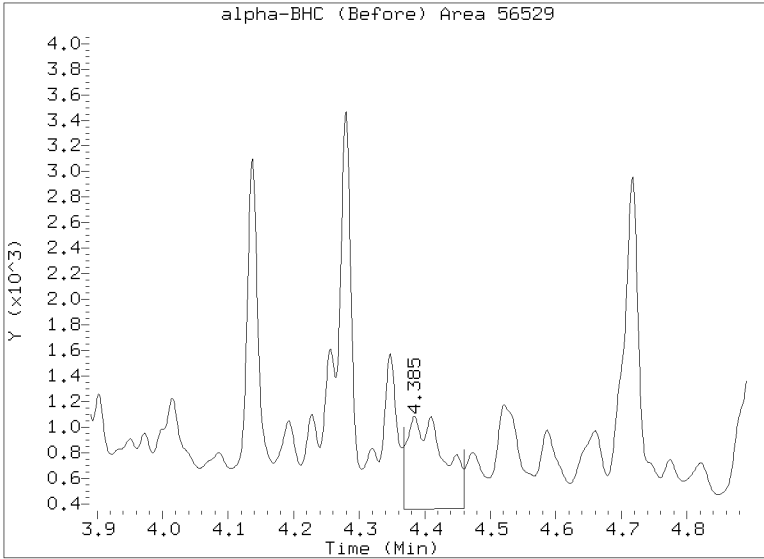
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19



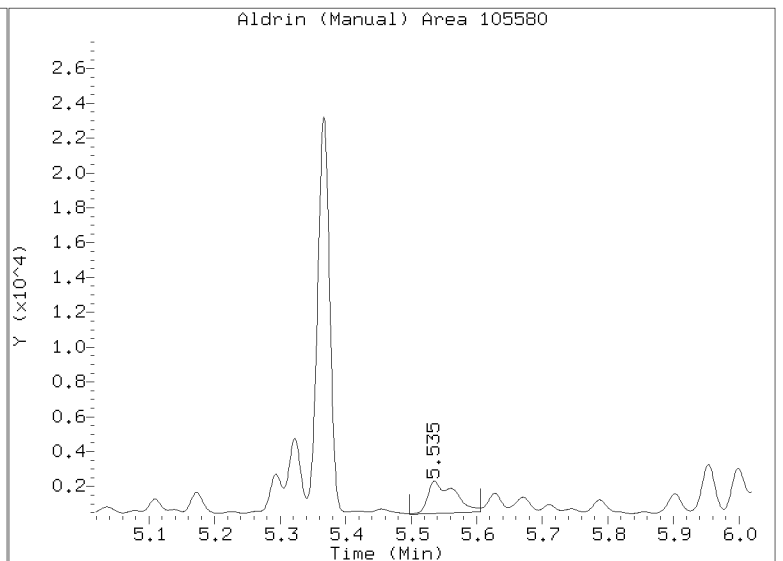
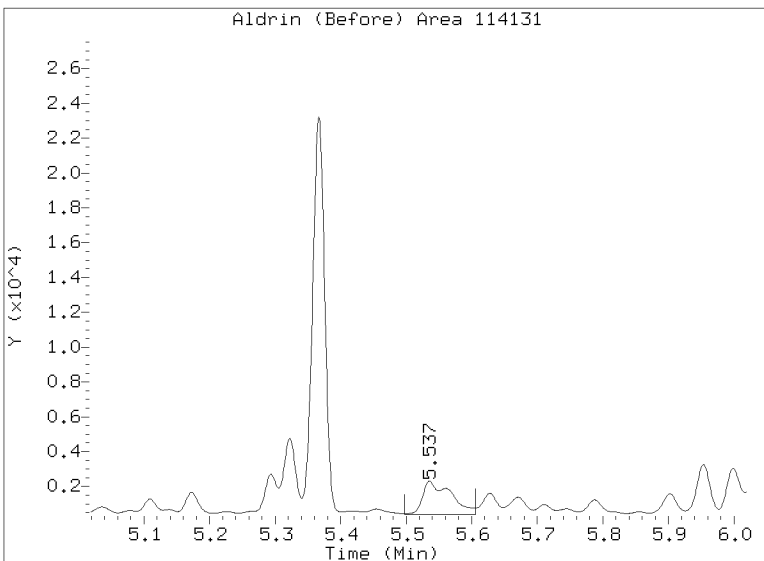
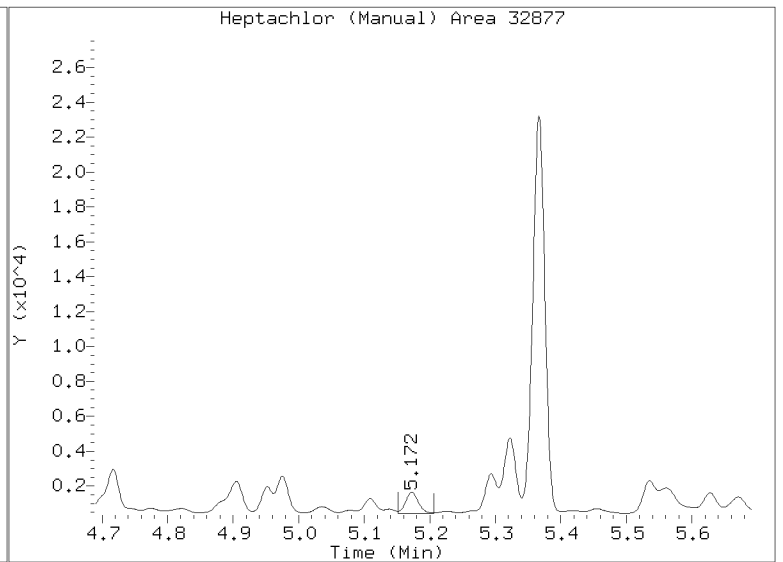
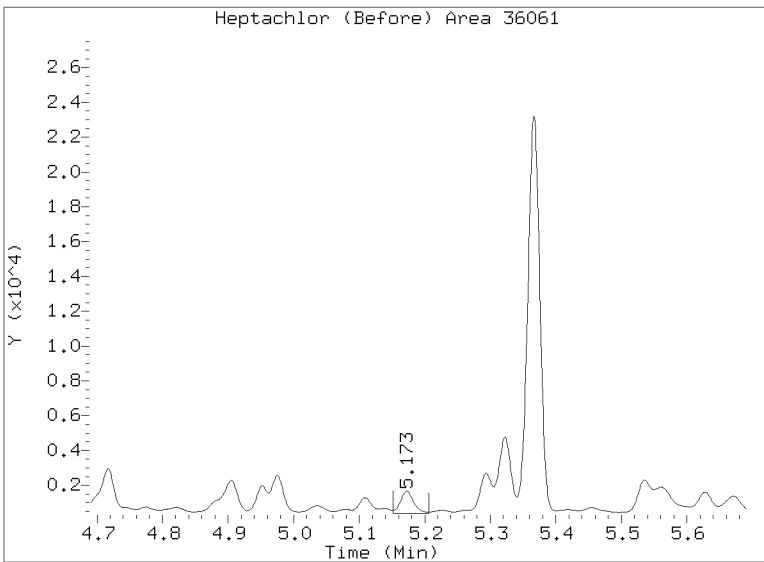
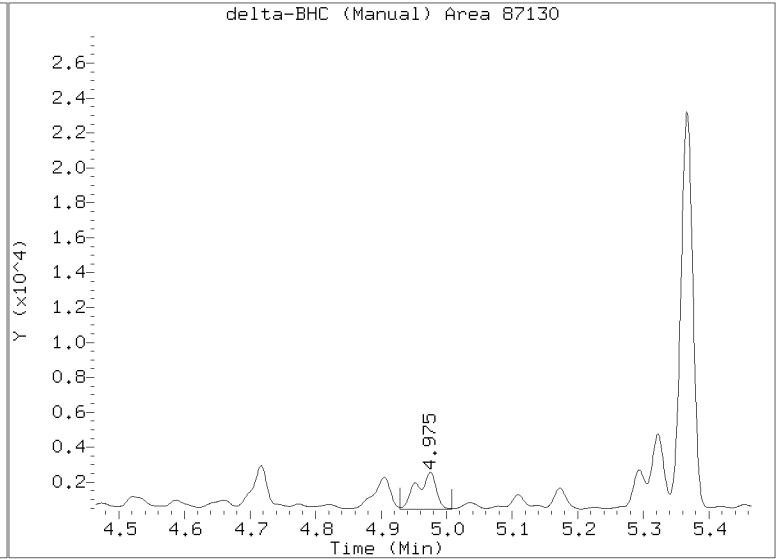
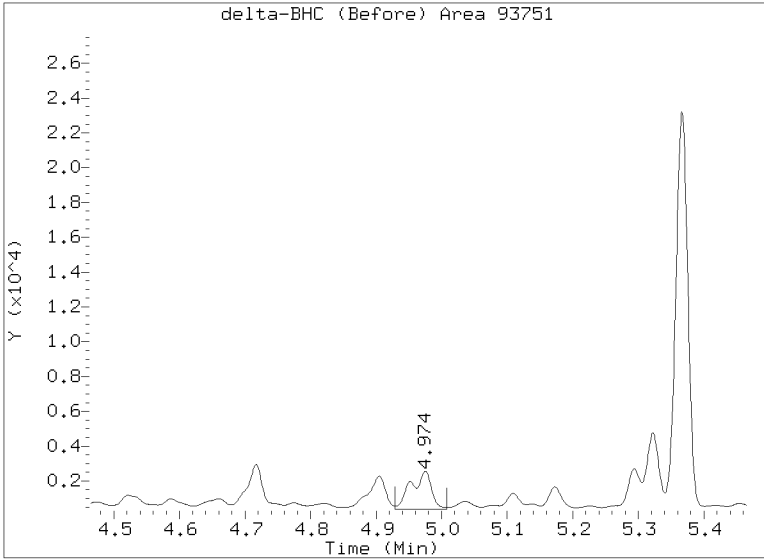
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19



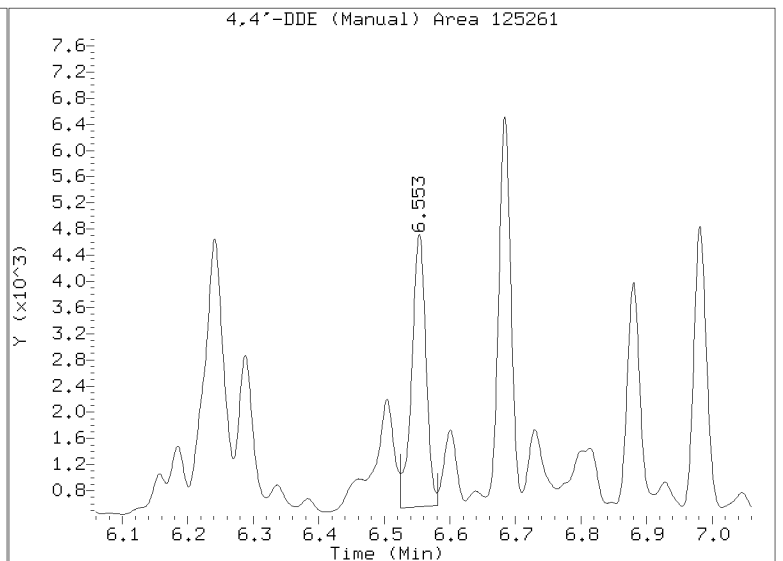
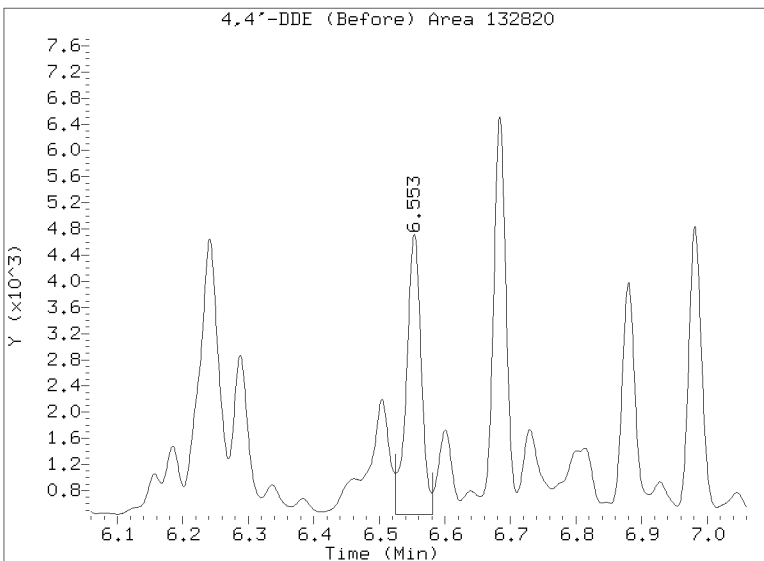
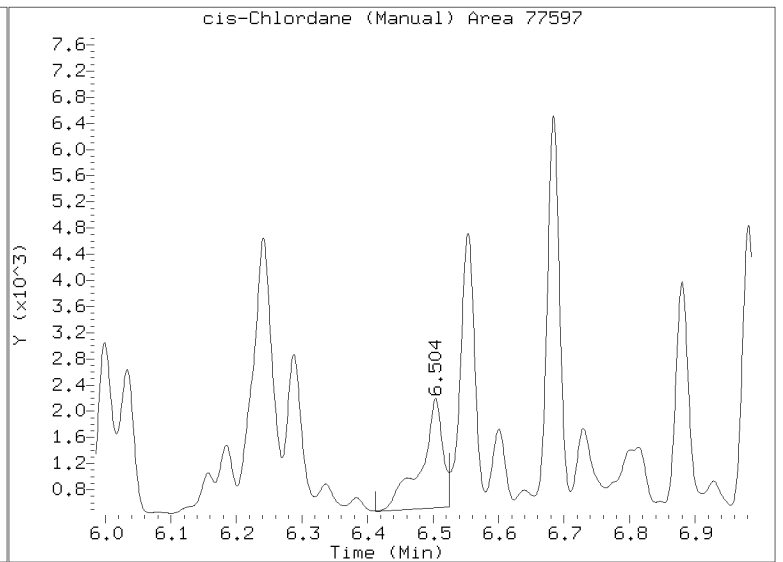
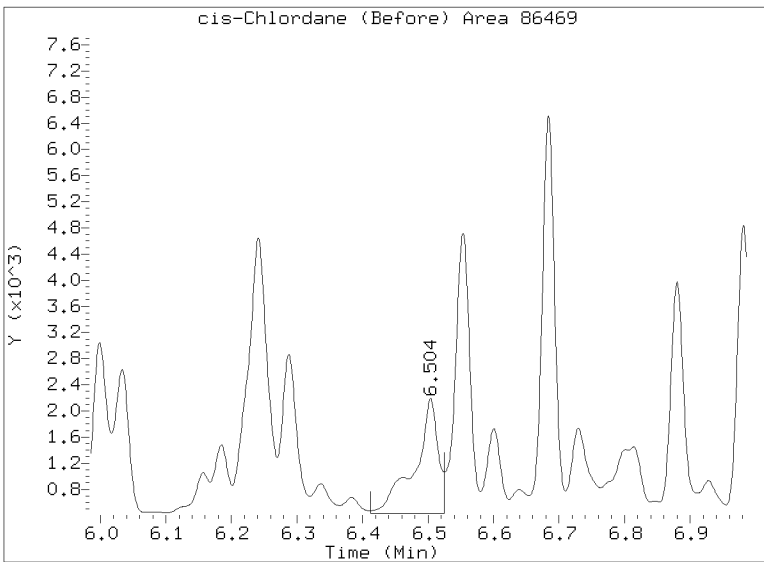
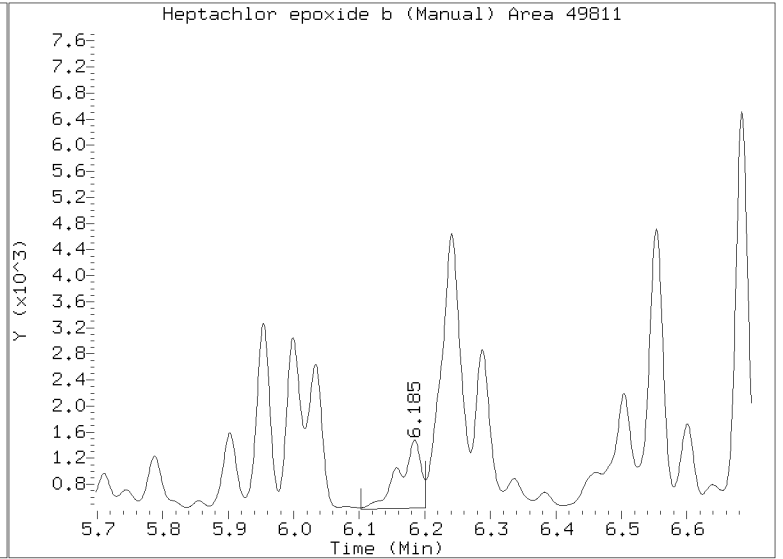
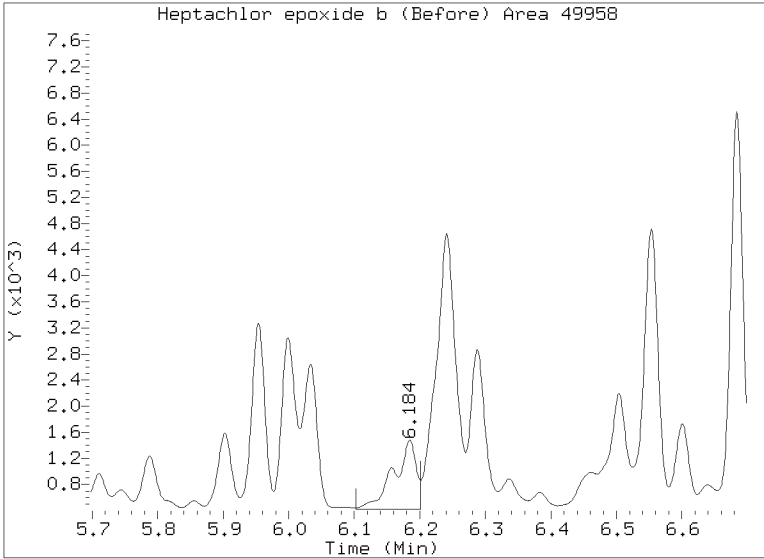
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19



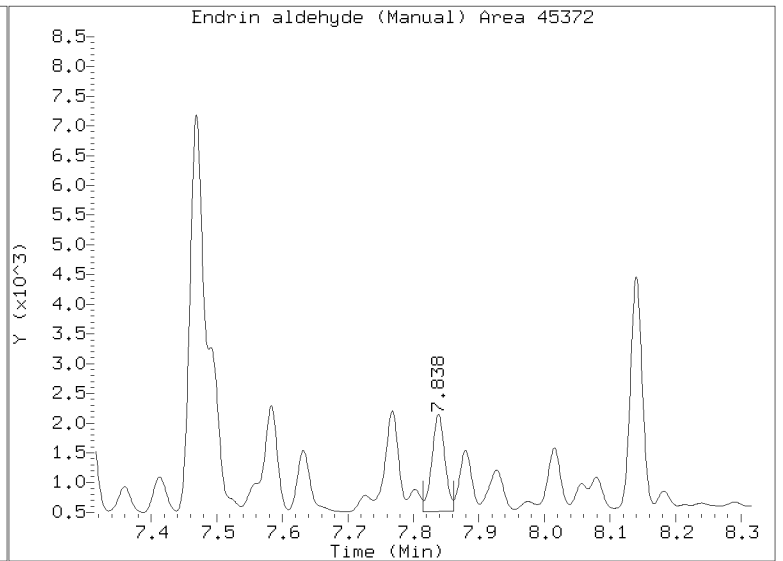
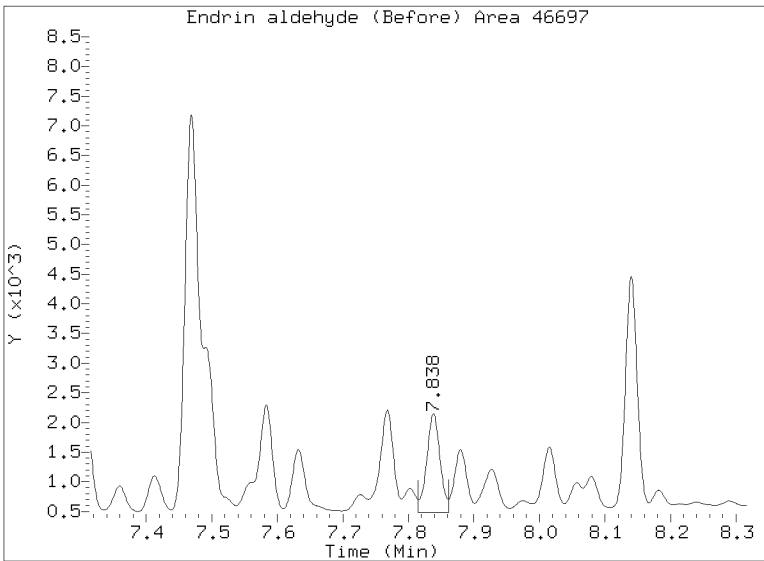
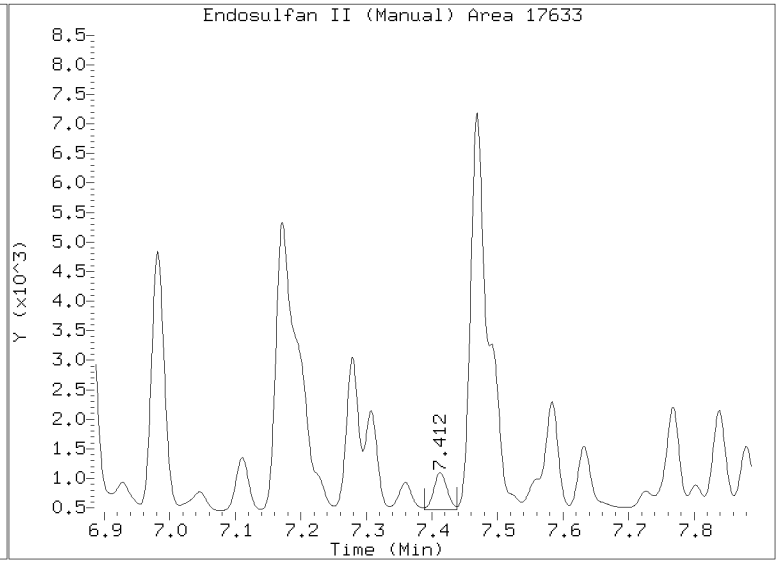
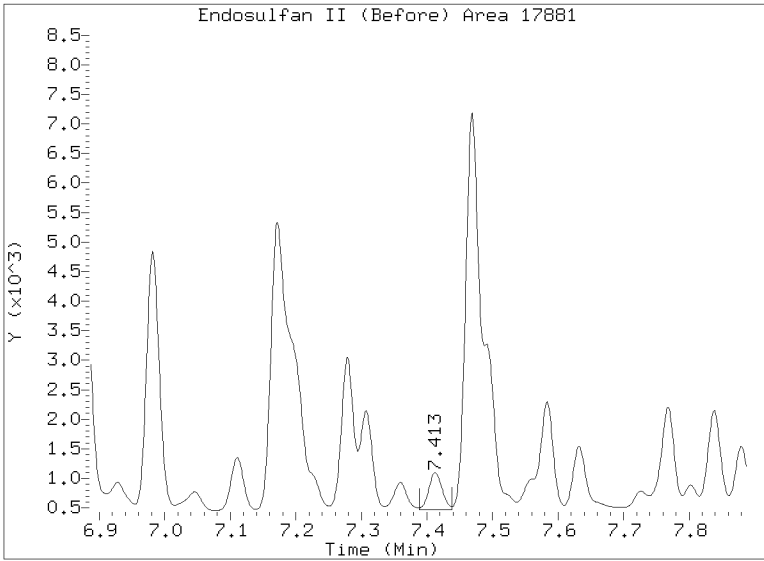
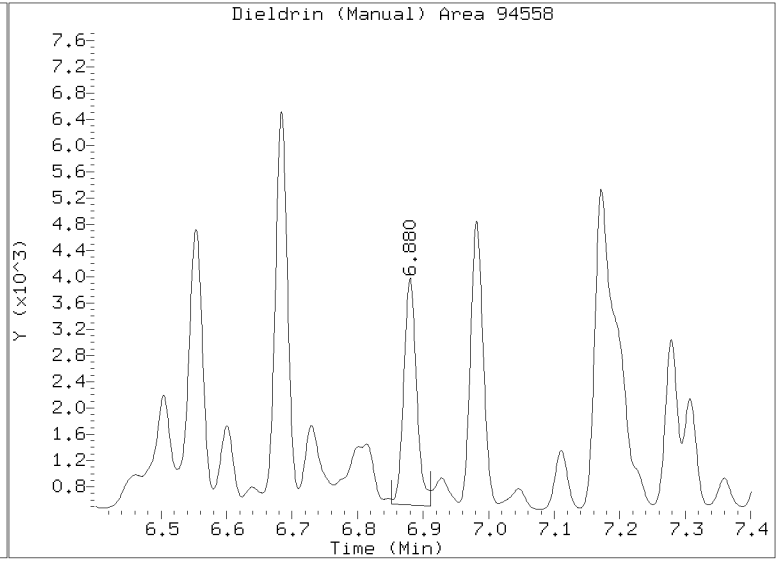
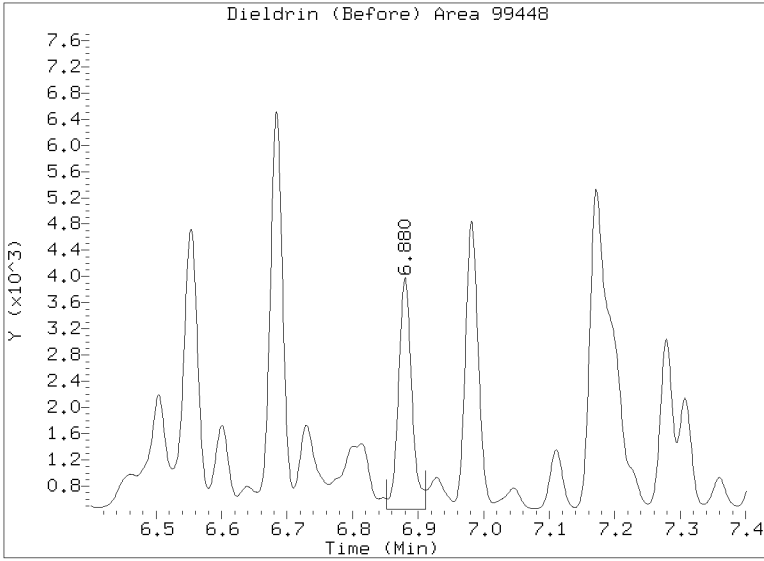
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19



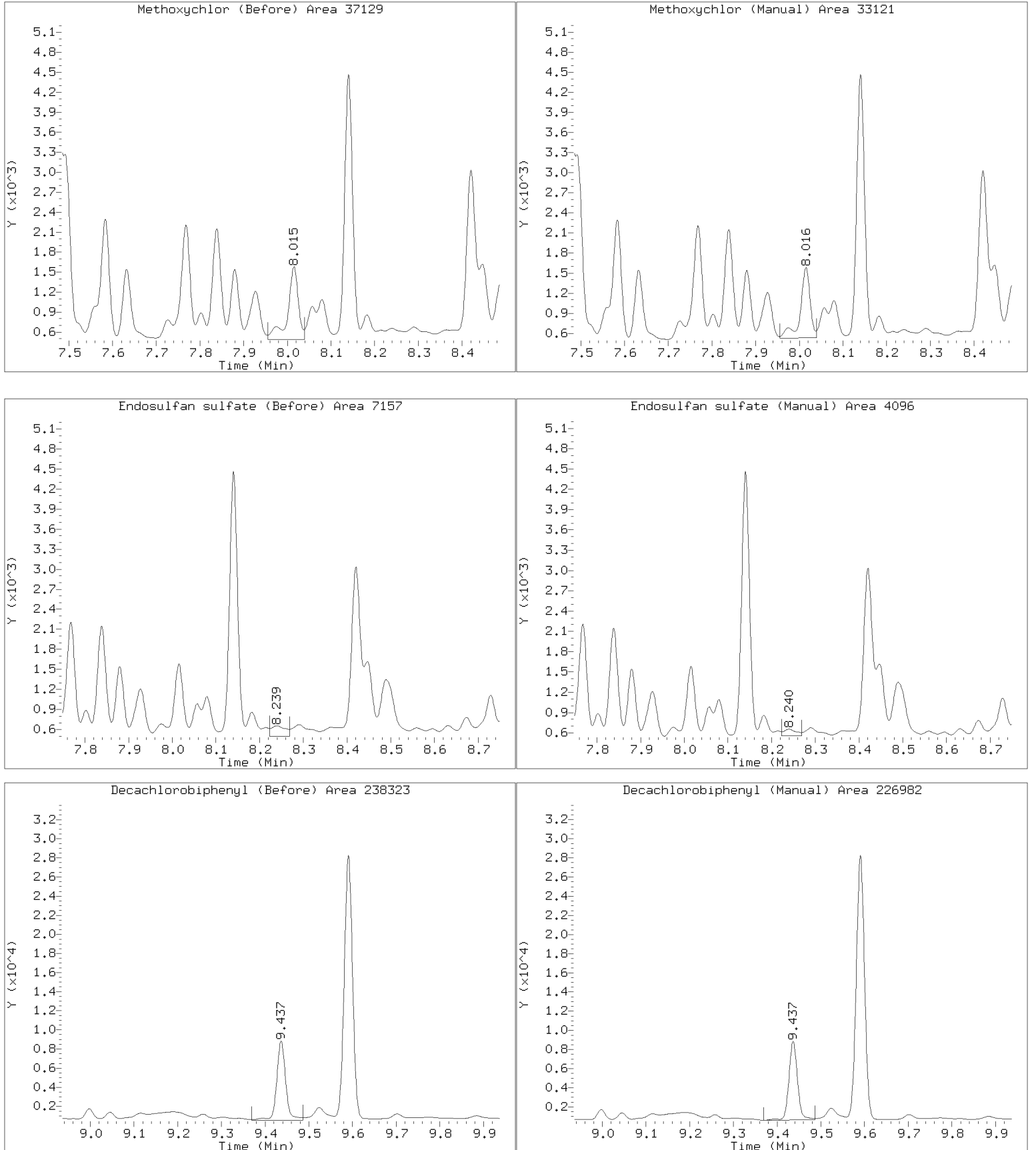
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19



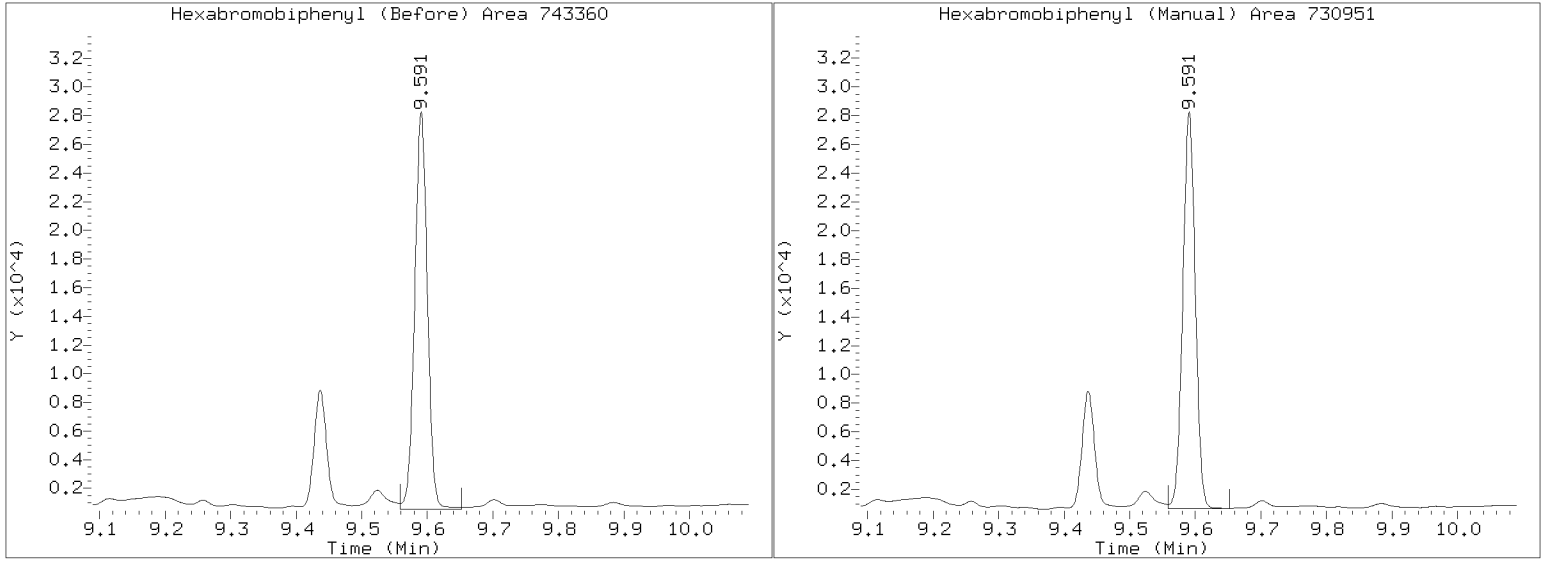
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/069F7801.D
Injection Date: 03-MAR-2023 23:01
Lab ID:23B0229-04 Client ID:
Report Date: 03/09/2023 11:19

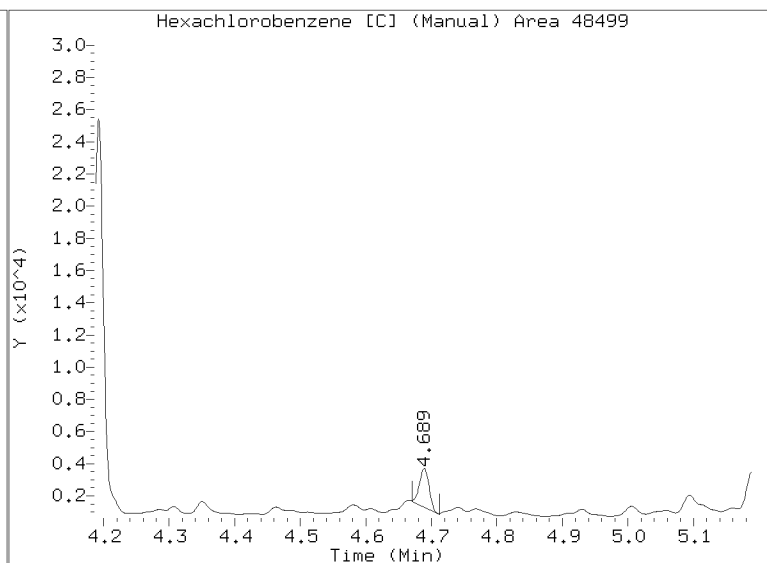
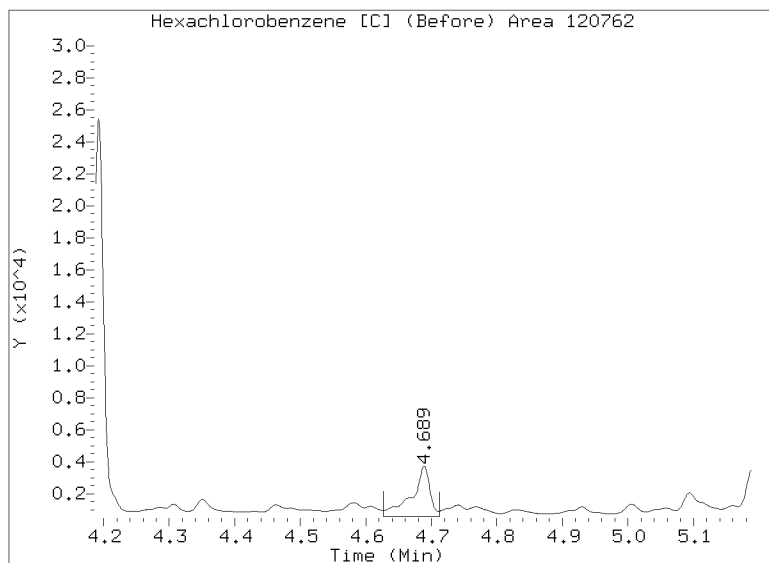
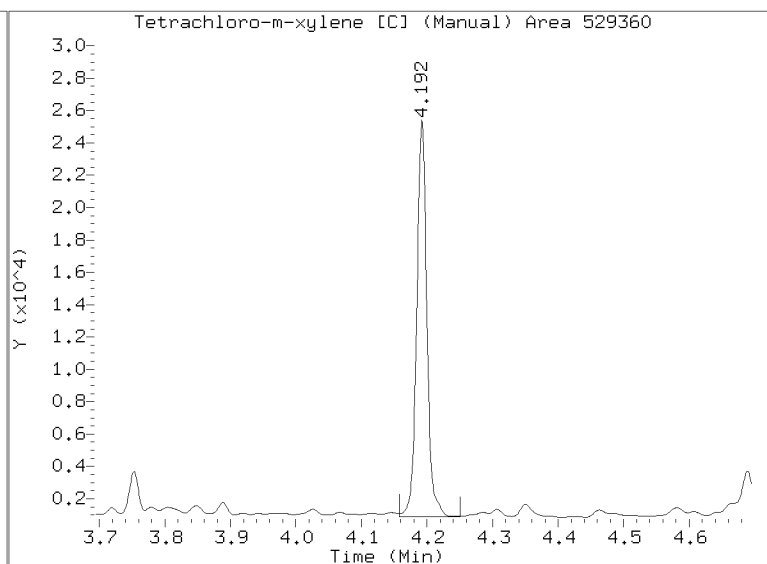
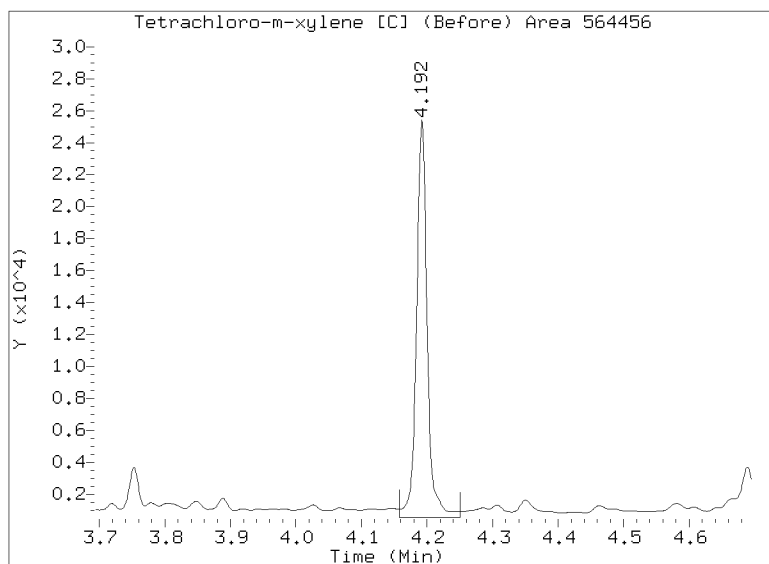
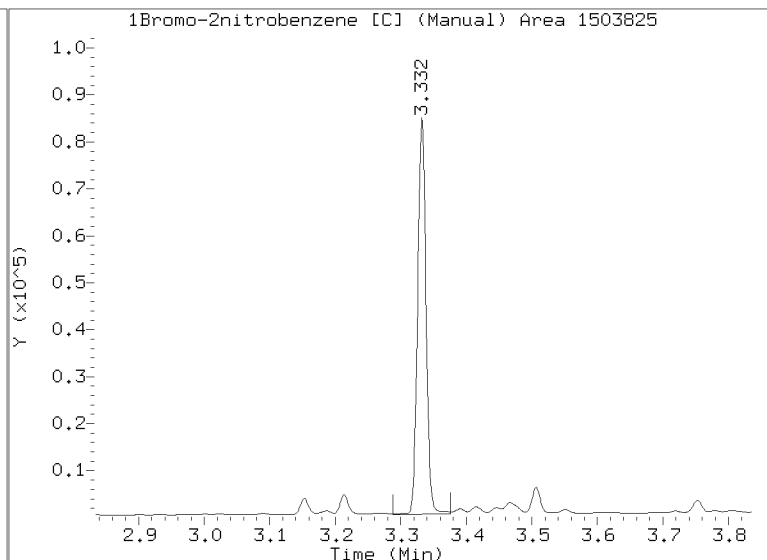
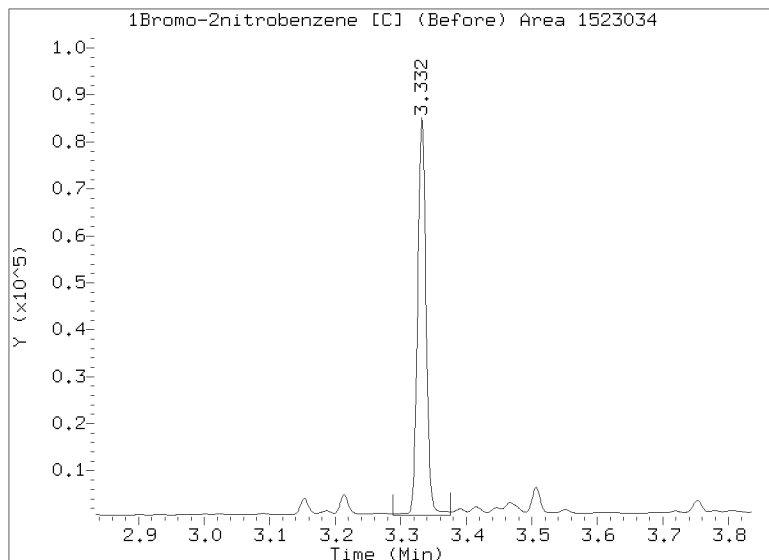


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

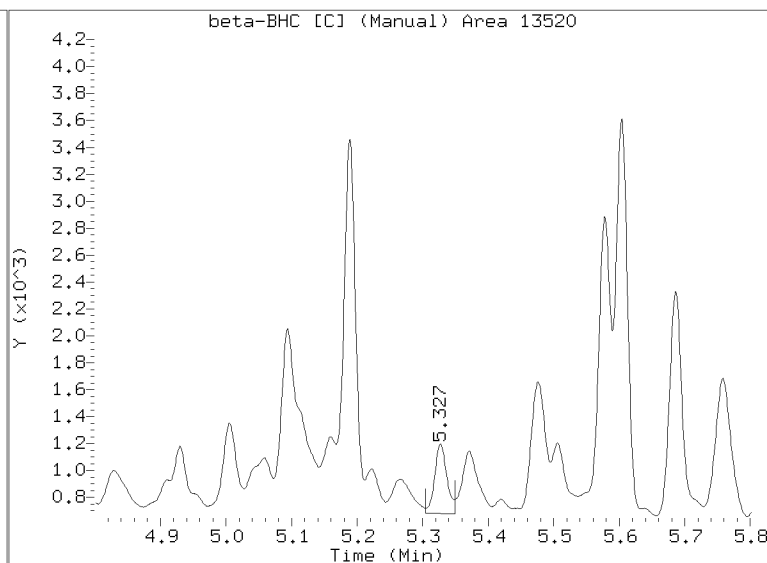
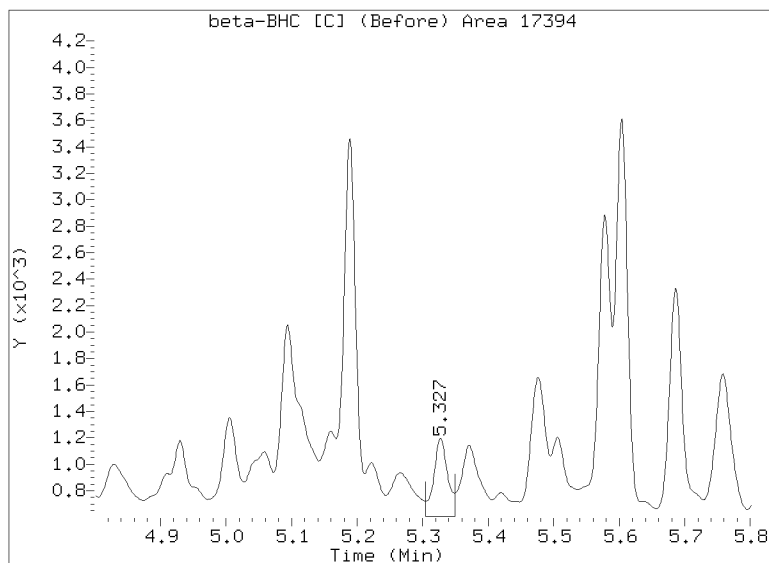
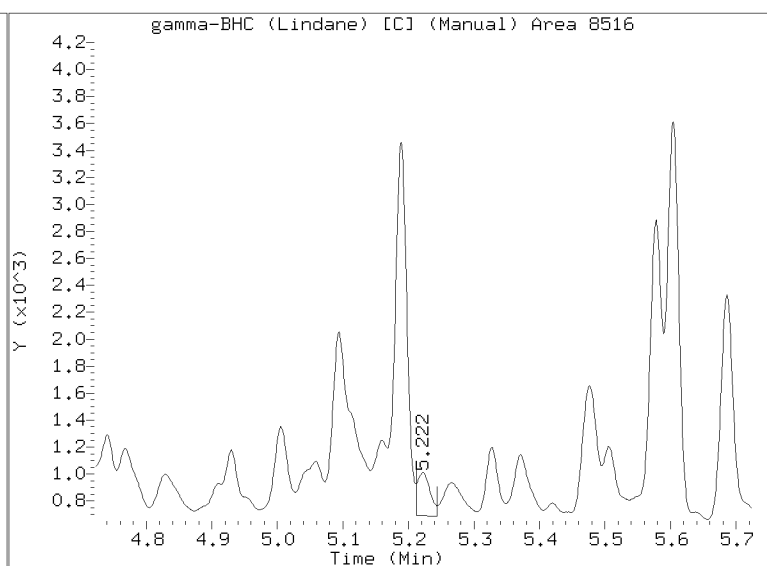
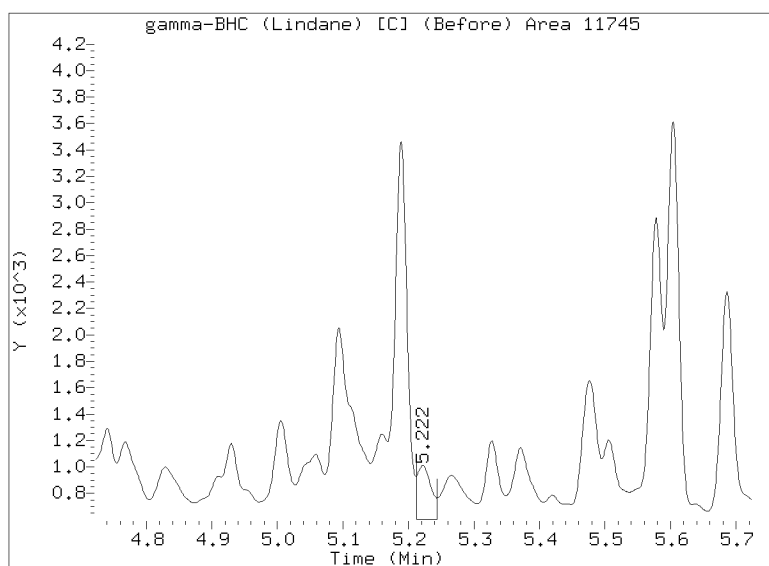
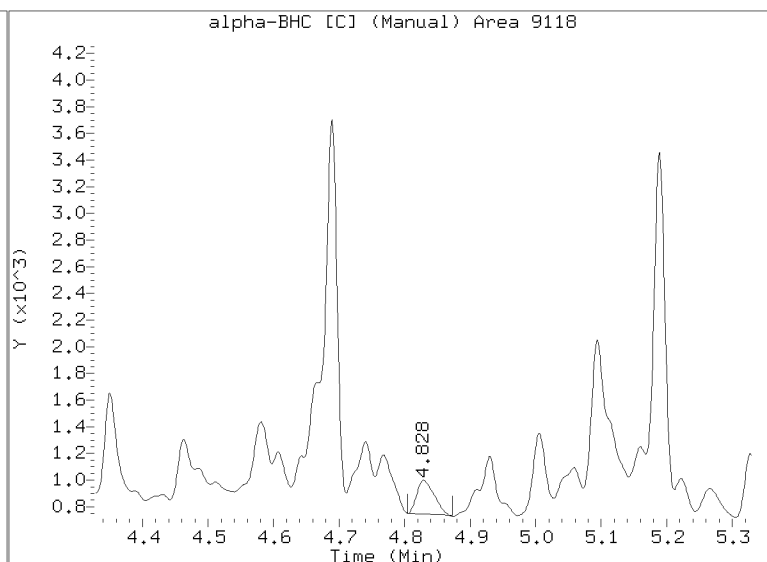
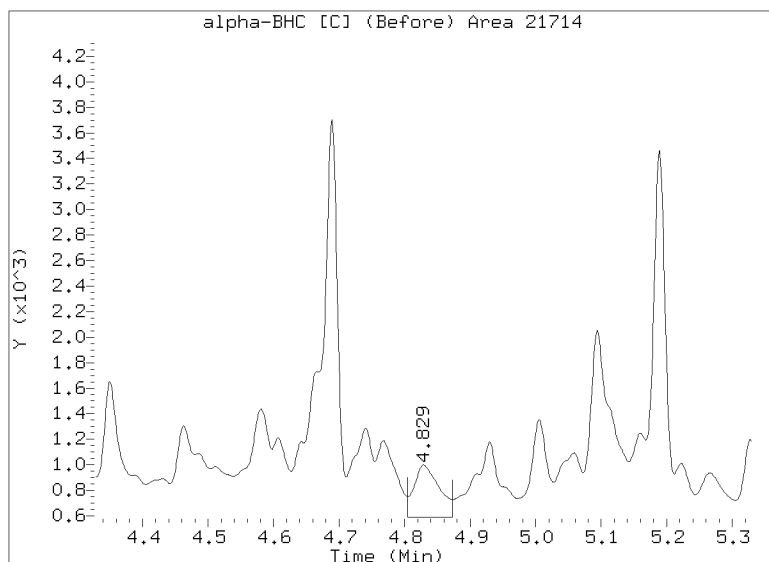


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

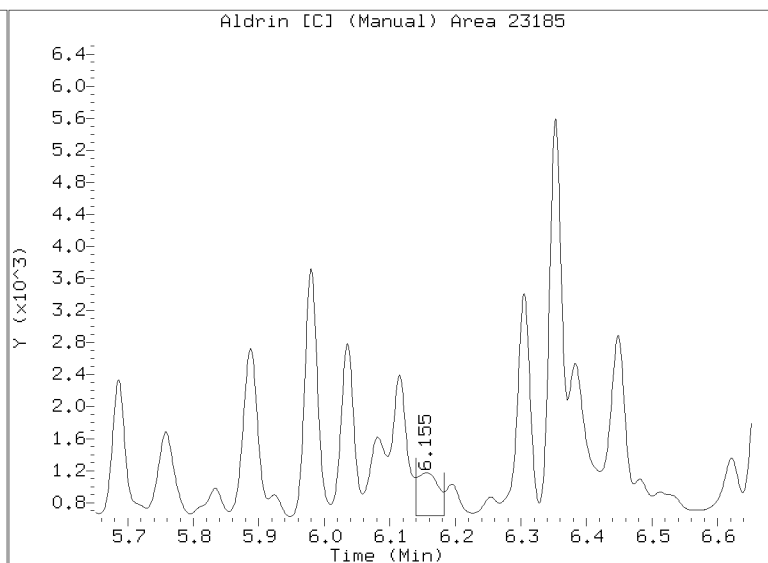
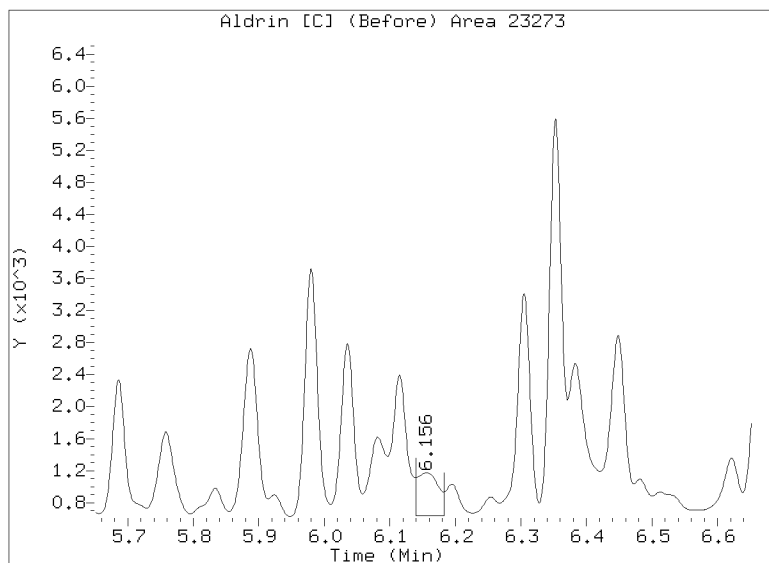
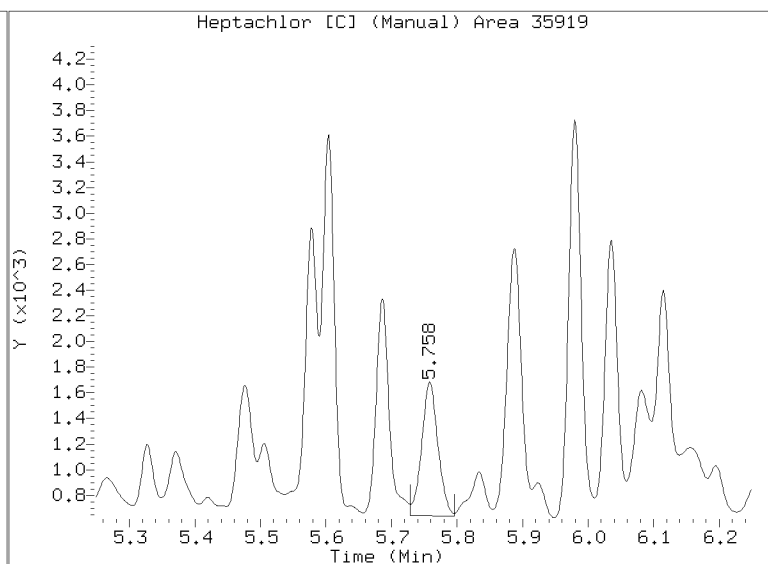
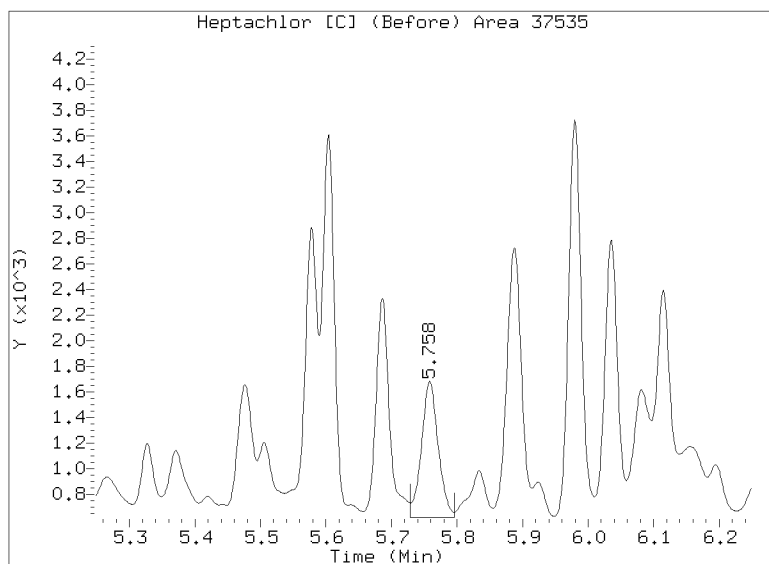
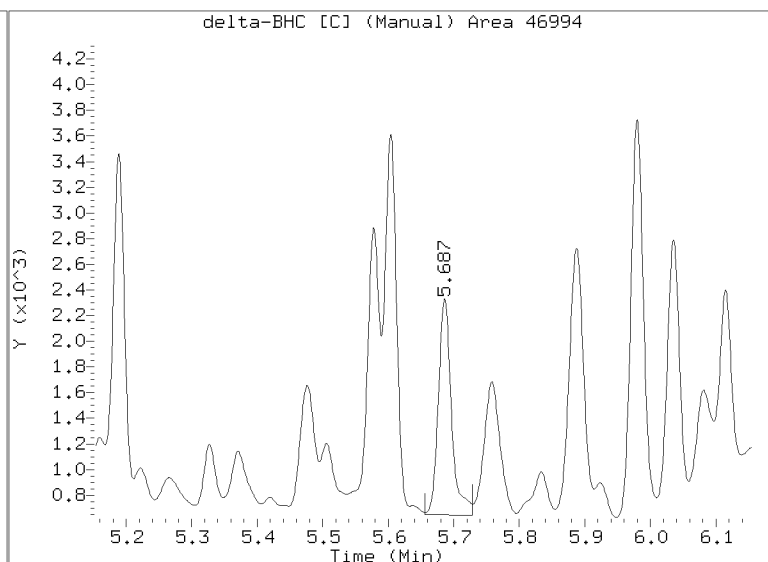
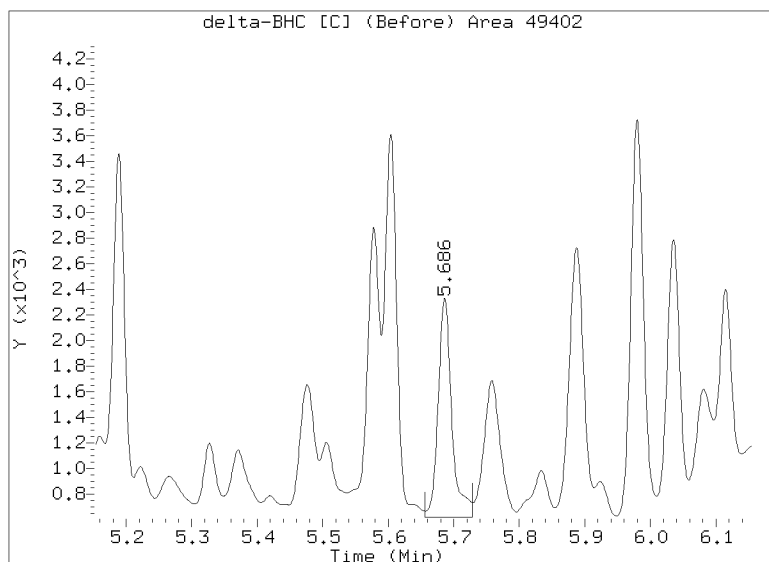


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

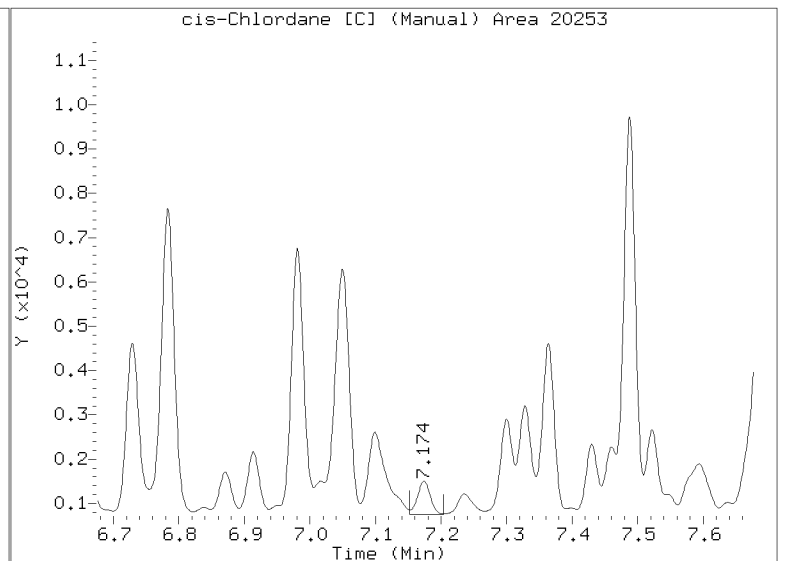
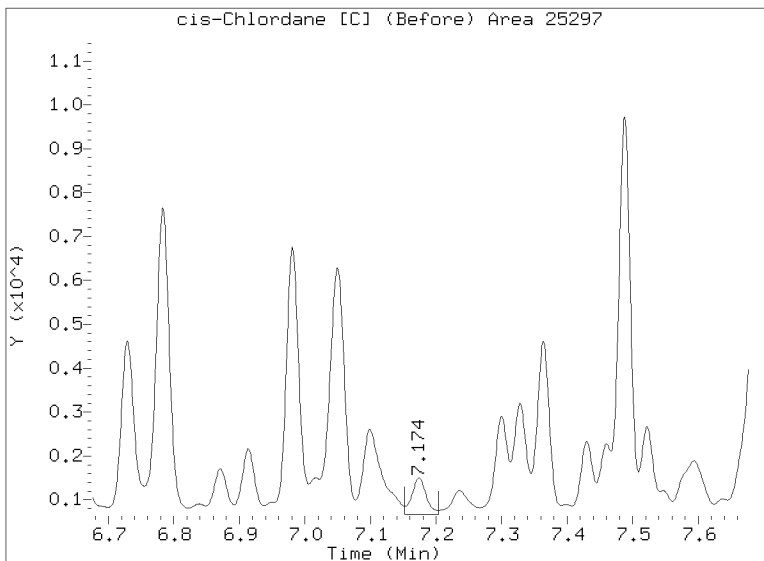
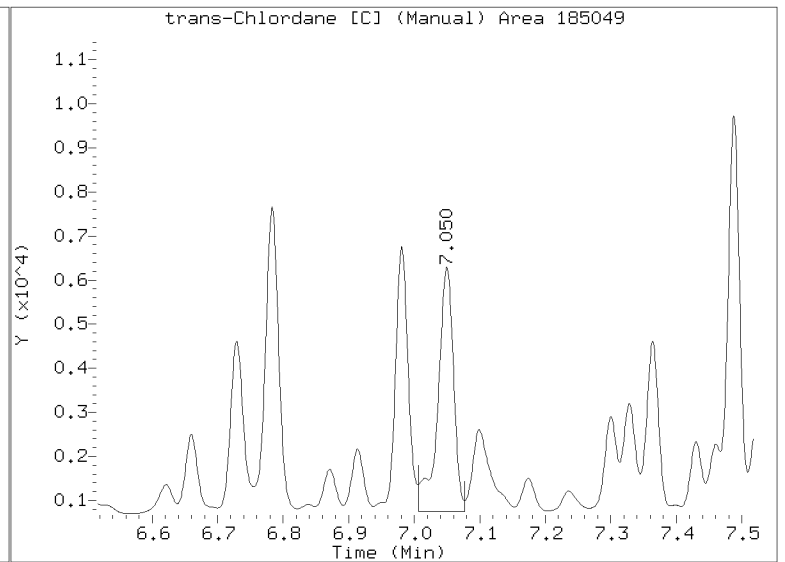
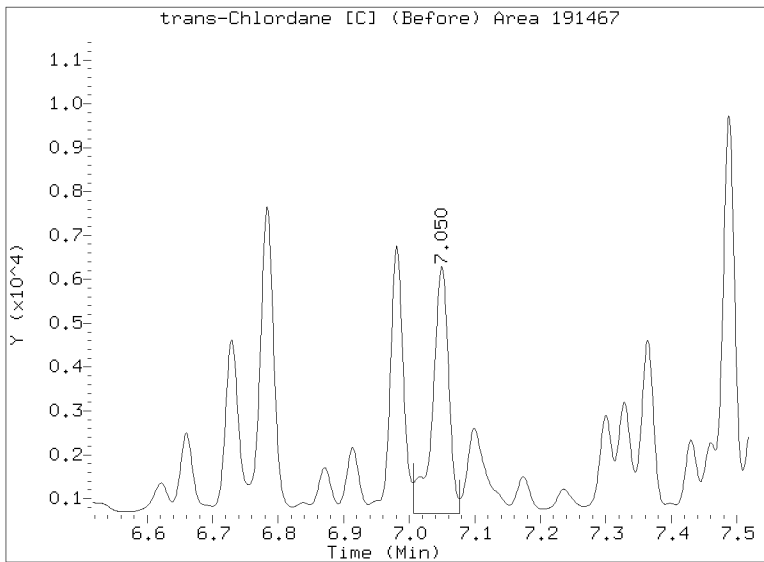
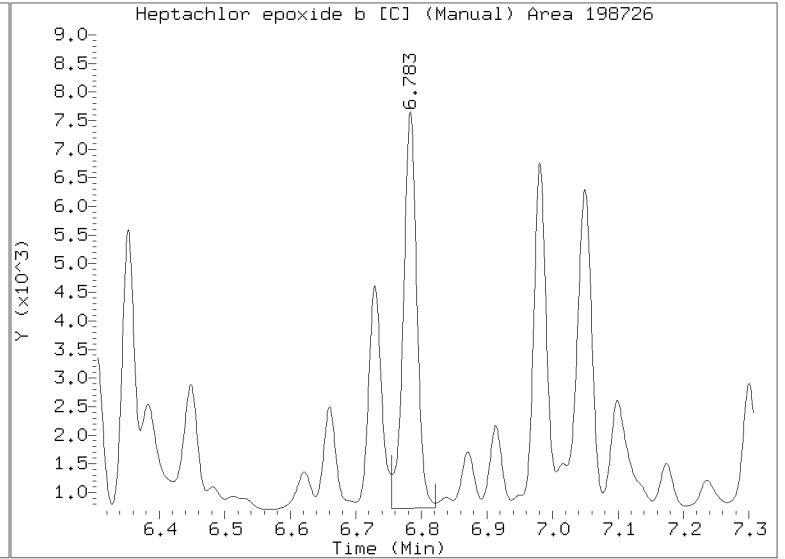
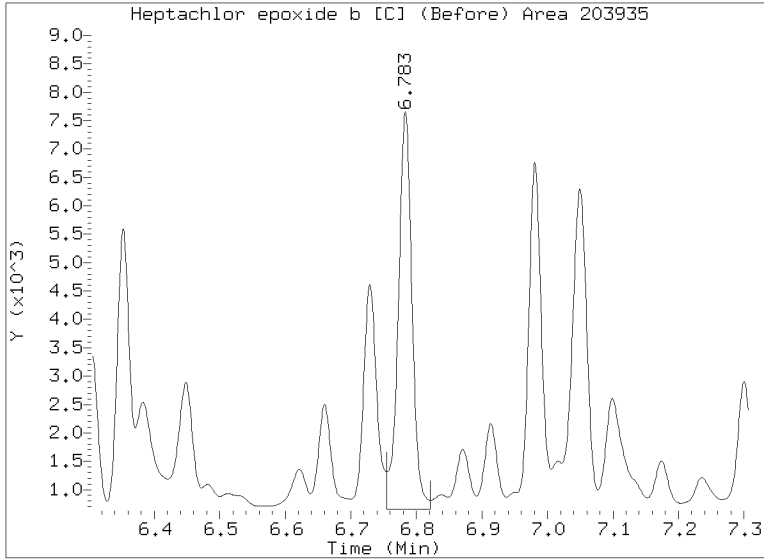


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

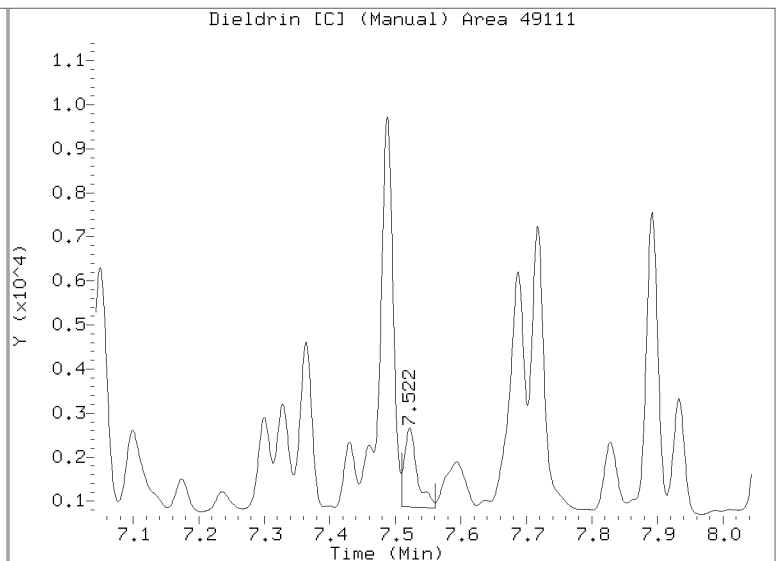
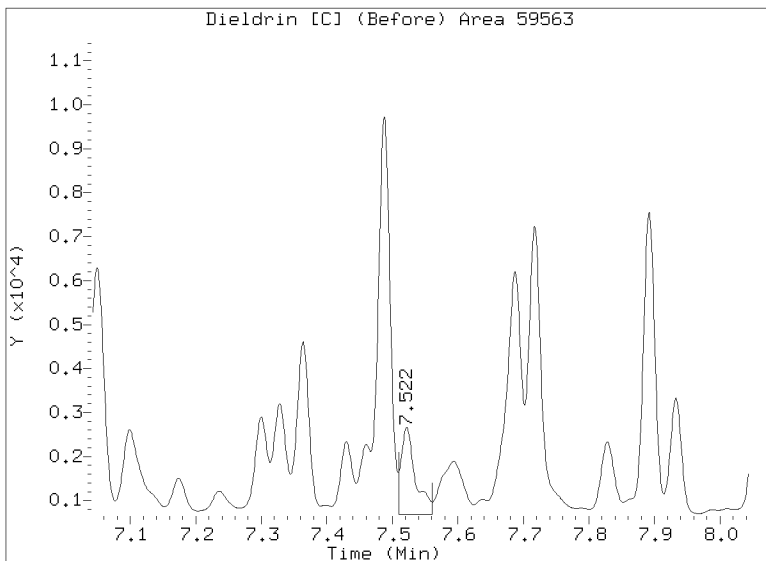
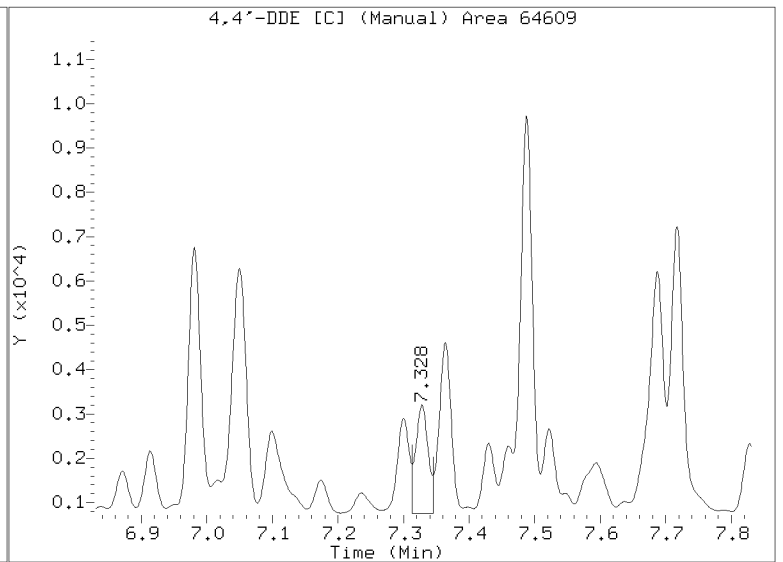
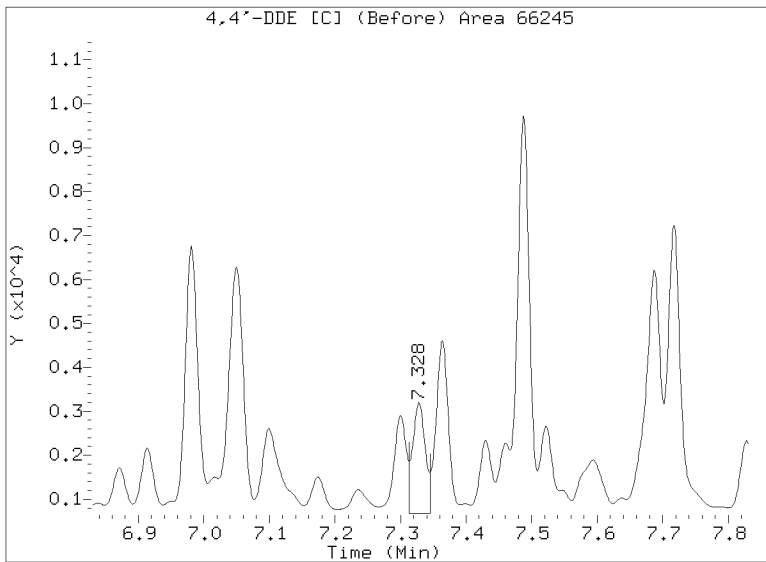
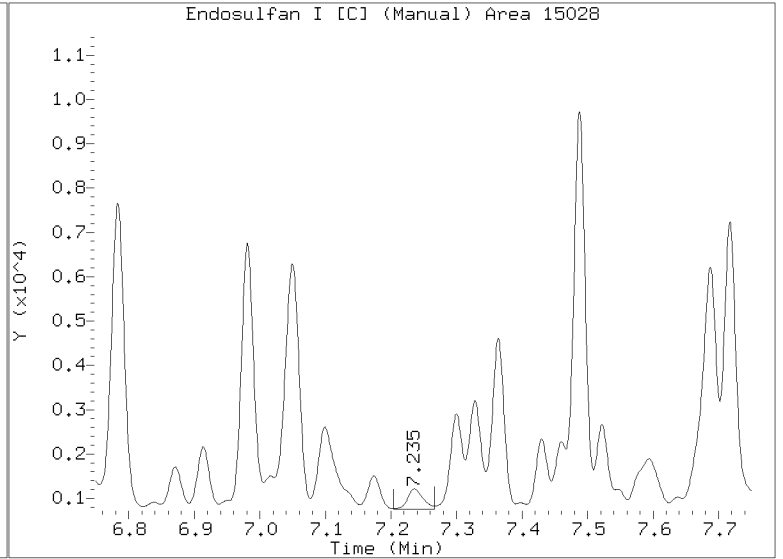
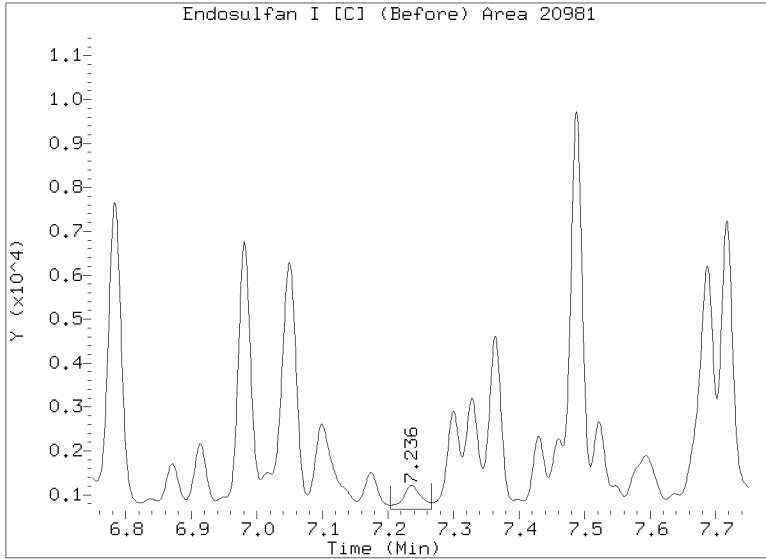


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

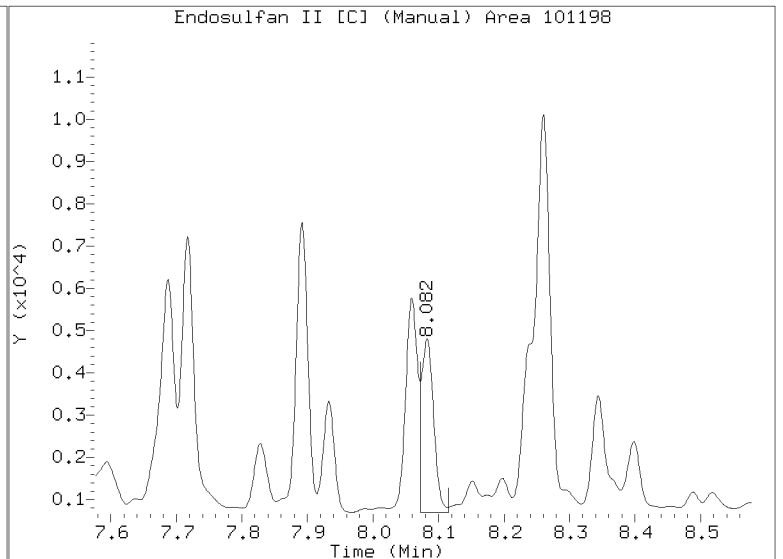
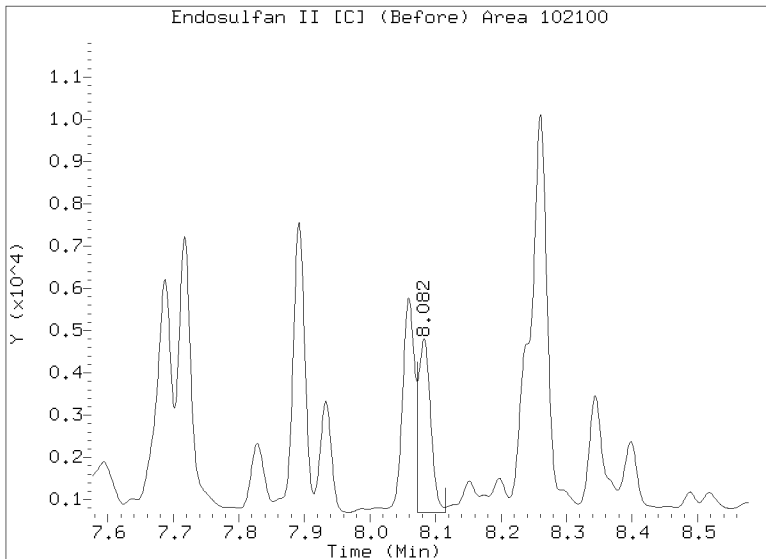
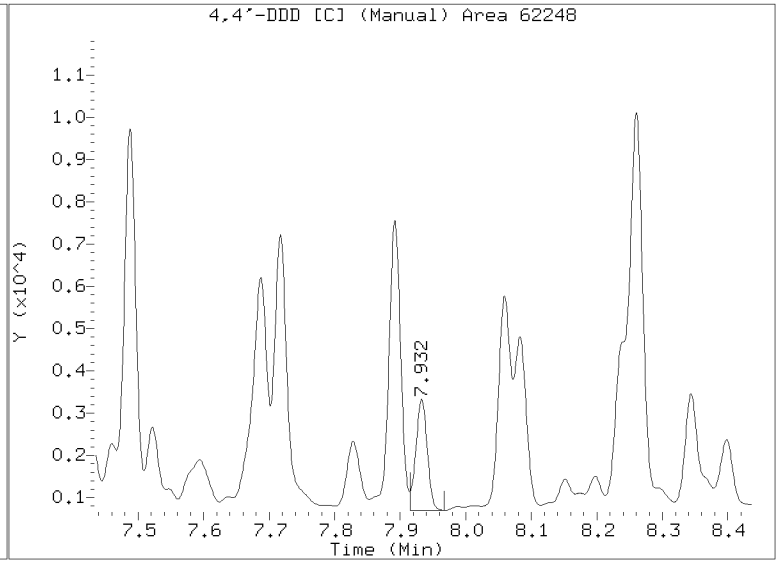
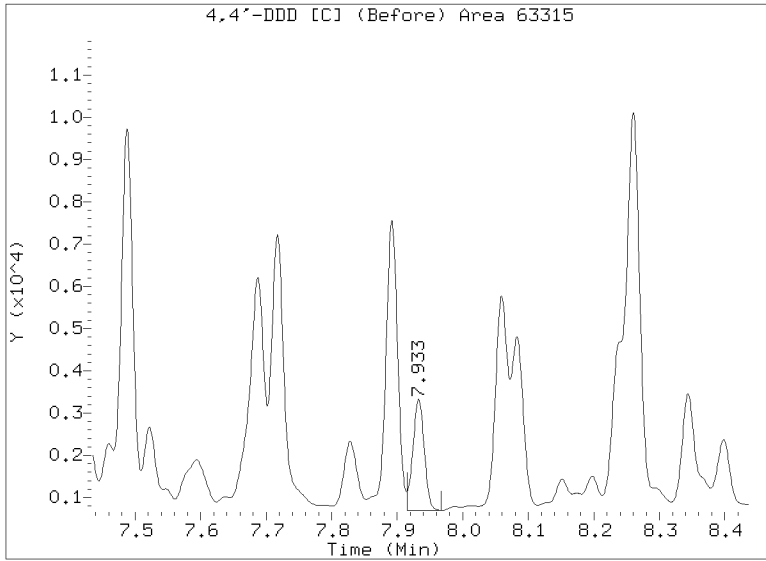
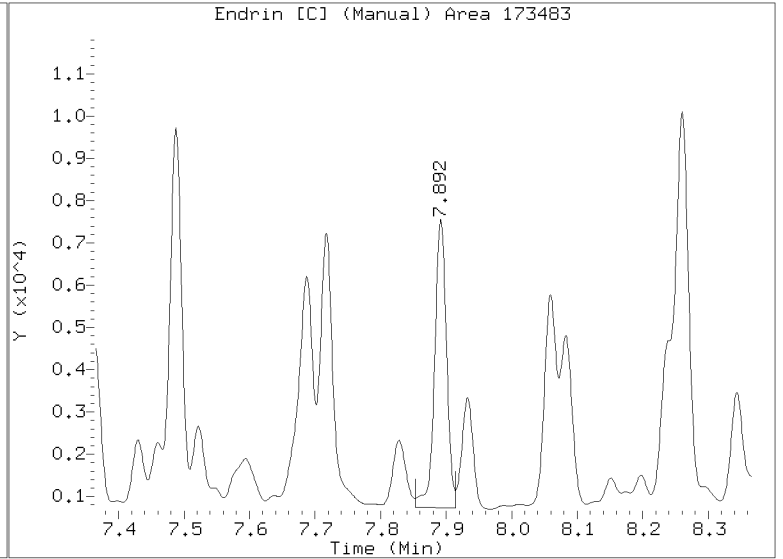
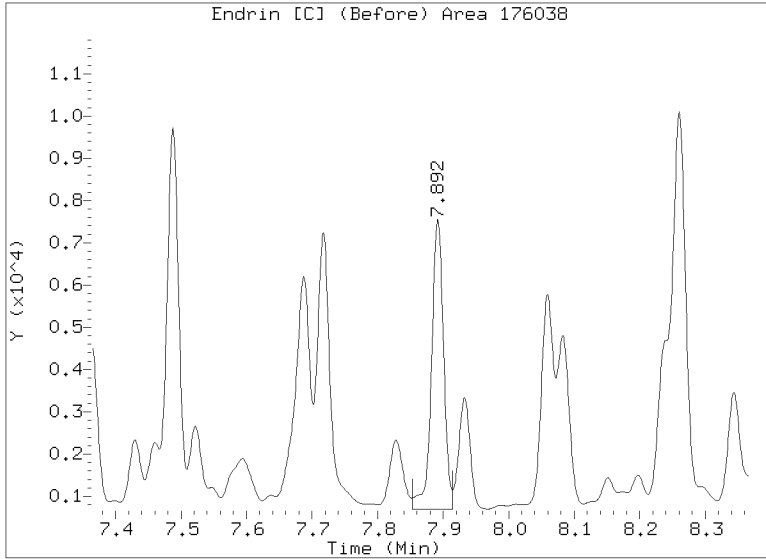


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

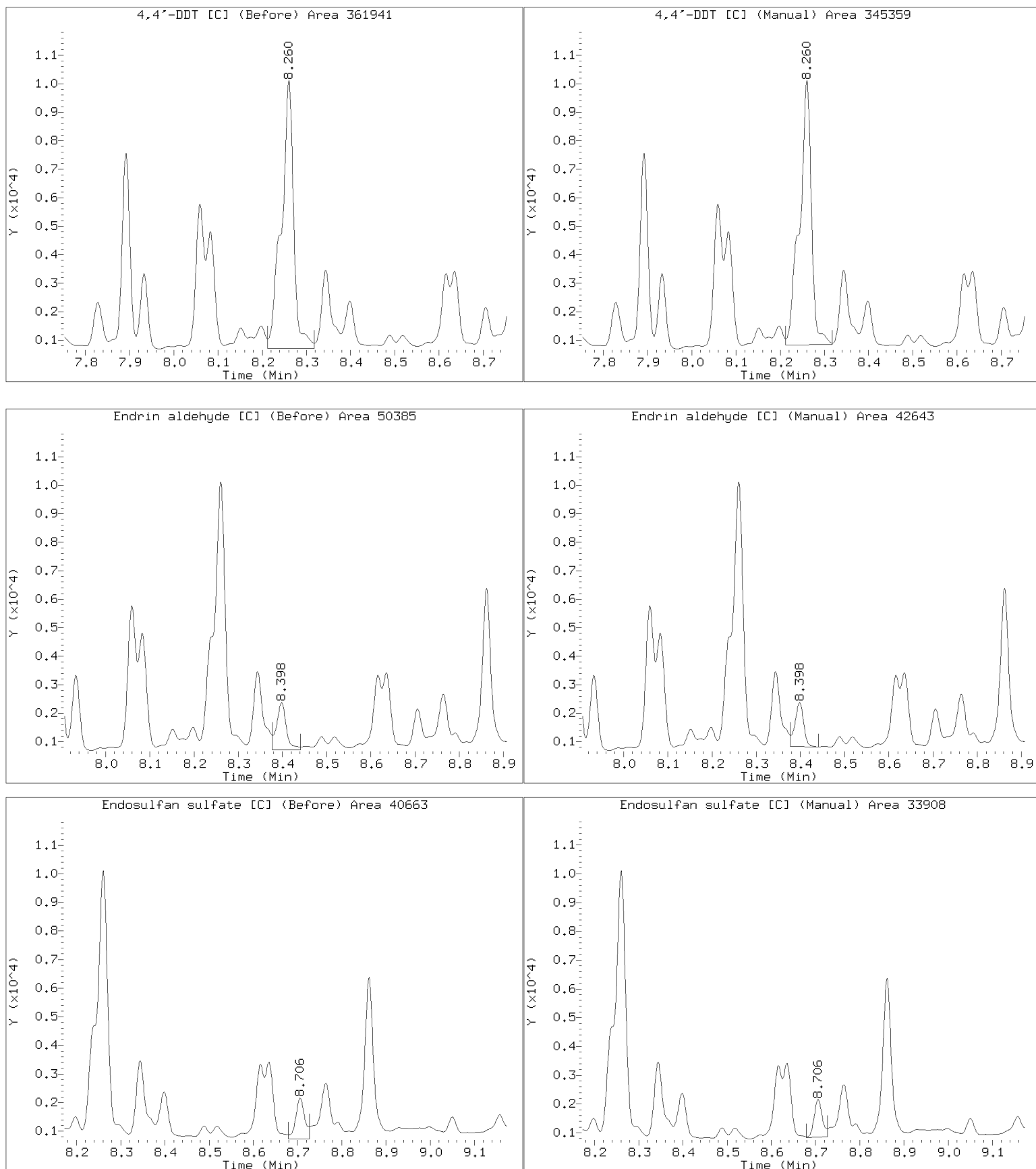


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:

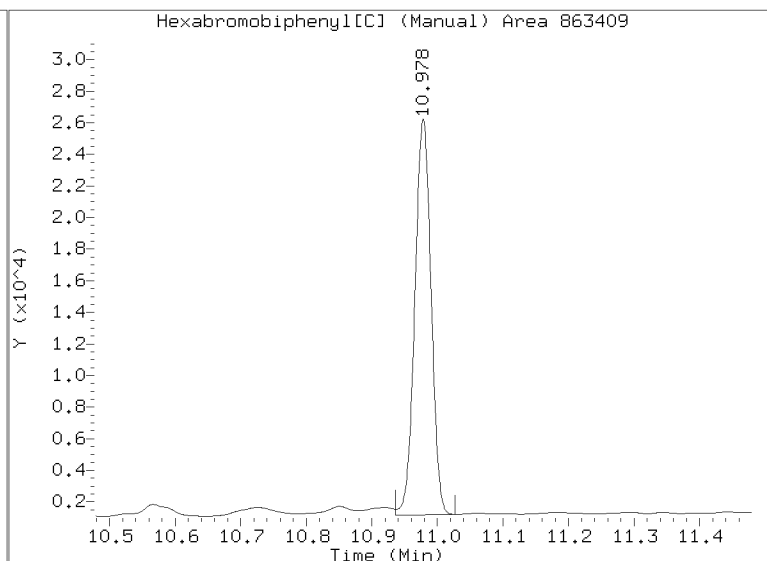
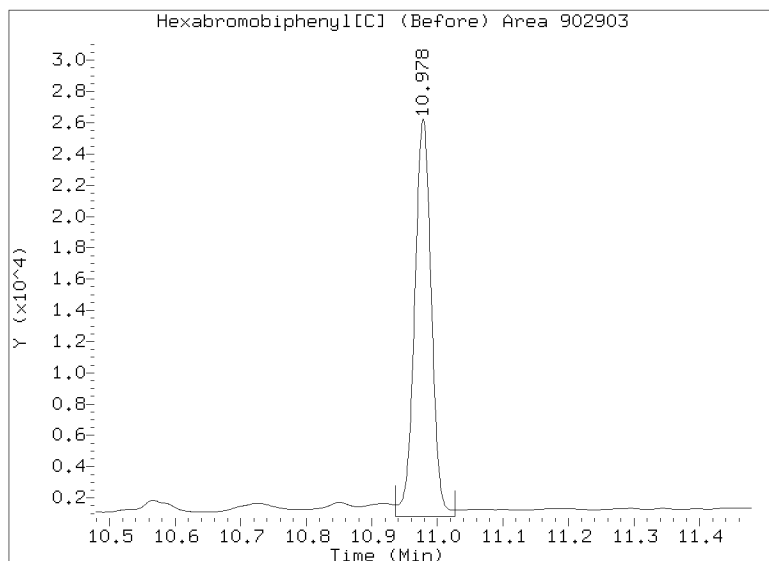
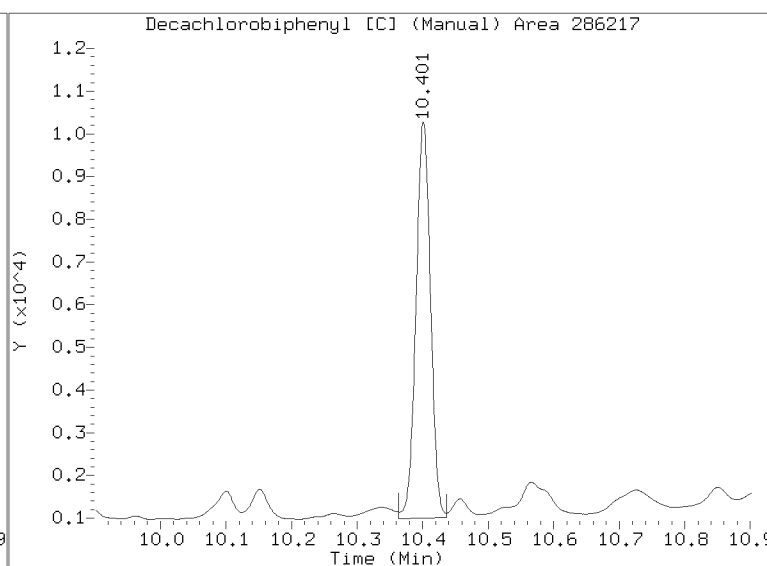
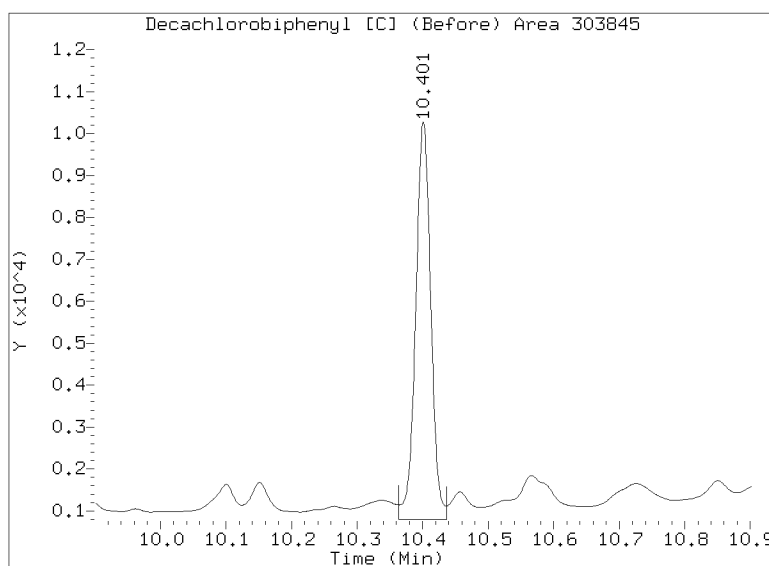
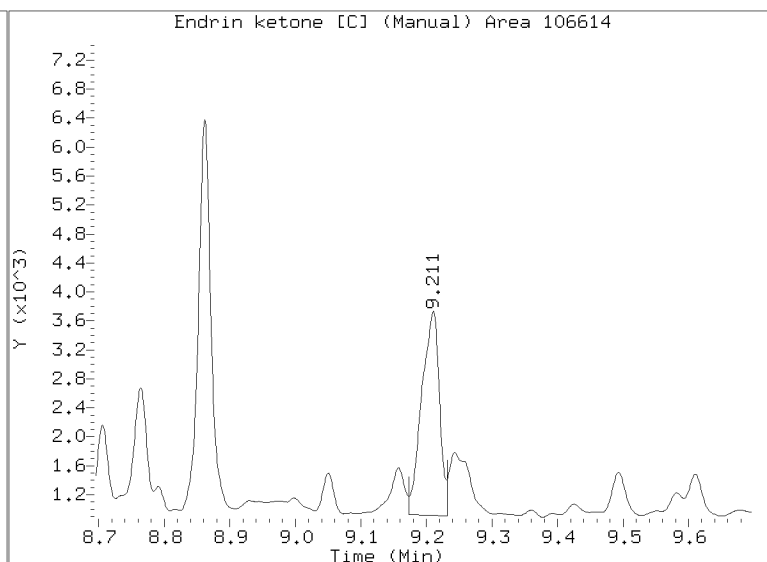
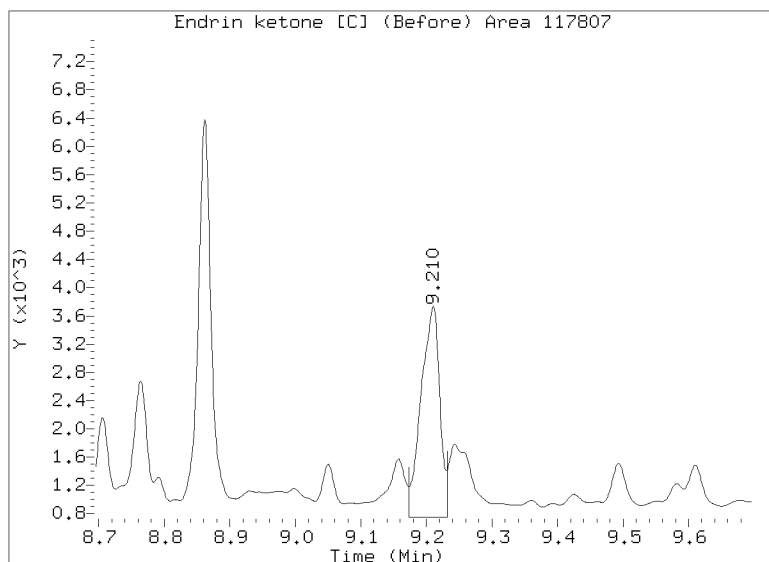


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/069F7801.D

Injection Date: 03-MAR-2023 23:01

Lab ID:23B0229-04 Client ID:



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/026F3101.D
Data file 2: /20230307.b/B20230307.b/026F3101.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23B0229-05
Client ID:
Injection Date: 07-MAR-2023 17:59
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.396	0.018	45924	4.834	0.018	18792	2.28	0.56	120.8*	alpha-BHC M
4.762	-0.004	9189	5.315	0.026	35380	1.19	2.79	80.7*	beta-BHC M
4.963	0.011	186240	5.634	-0.007	3610	11.34	0.13	195.4*	delta-BHC M
4.685	0.001	39125	5.211	0.001	17089	2.24	0.60	115.2*	gamma-BHC (Lindane) M
5.162	-0.014	46317	5.746	0.011	80869	2.99	3.16	5.5	Heptachlor
5.521	0.018	123472	6.138	0.001	24471	7.10	0.84	157.9*	Aldrin
6.228	0.045	372967	6.828	0.035	10361	24.75	0.43	193.2*	Heptachlor epoxide b
6.670	0.045	288129	7.224	-0.012	23864	20.84	1.12	179.6*	Endosulfan I M
6.915	0.031	21973	----	----	----	1.48	0.00	---	Dieldrin
6.540	-0.006	216315	7.318	-0.002	114951	15.68	5.32	98.7*	4,4'-DDE M
7.161	0.026	425975	7.881	0.028	354455	39.31	25.35	43.2*	Endrin
7.401	0.029	34262	8.072	0.008	199758	3.51	13.94	119.5*	Endosulfan II
----	----	----	7.921	-0.002	110477	0.00	8.12	---	4,4'-DDD
8.230	-0.004	17442	8.695	0.035	79454	1.88	6.31	108.1*	Endosulfan sulfate M
----	----	----	8.249	0.008	695117	0.00	52.96	---	4,4'-DDT
8.003	0.031	56407	----	----	----	12.90	0.00	---	Methoxychlor
----	----	----	9.200	0.018	255872	0.00	18.82	---	Endrin ketone
7.825	0.025	96510	8.386	-0.008	108809	12.40	10.76	14.2	Endrin aldehyde M
6.322	-0.002	31525	7.037	0.033	264424	2.06	10.96	136.7*	trans-Chlordane
6.490	0.020	136572	7.162	-0.001	34089	8.90	1.44	144.1*	cis-Chlordane M
2.318	-0.018	17912	2.466	-0.016	13331	0.85	0.42	67.5*	Hexachlorobutadiene M
----	----	----	----	----	----	0.00	0.00	---	Hexachlorobenzene
3.858	-0.001	344832	4.182	-0.001	507125	24.28	21.66	11.4	Tetrachloro-m-xylene MN
9.428	0.007	237734	10.389	0.003	296850	28.39	27.31	3.9	Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1044128	55.3
Hexabromobiphenyl	609723	826498	35.6

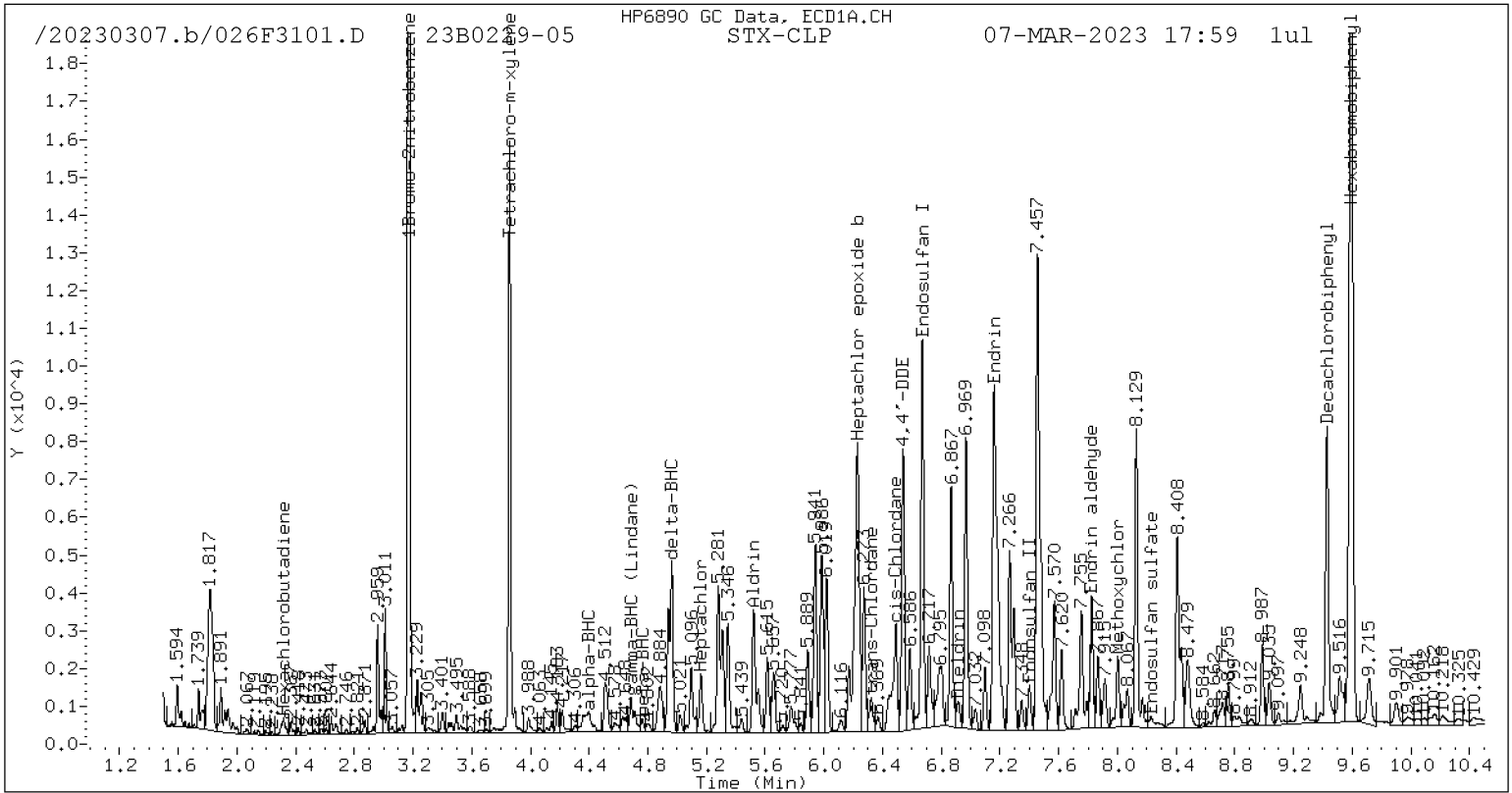
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1663023	65.2
Hexabromobiphenyl	769764	983307	27.7

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

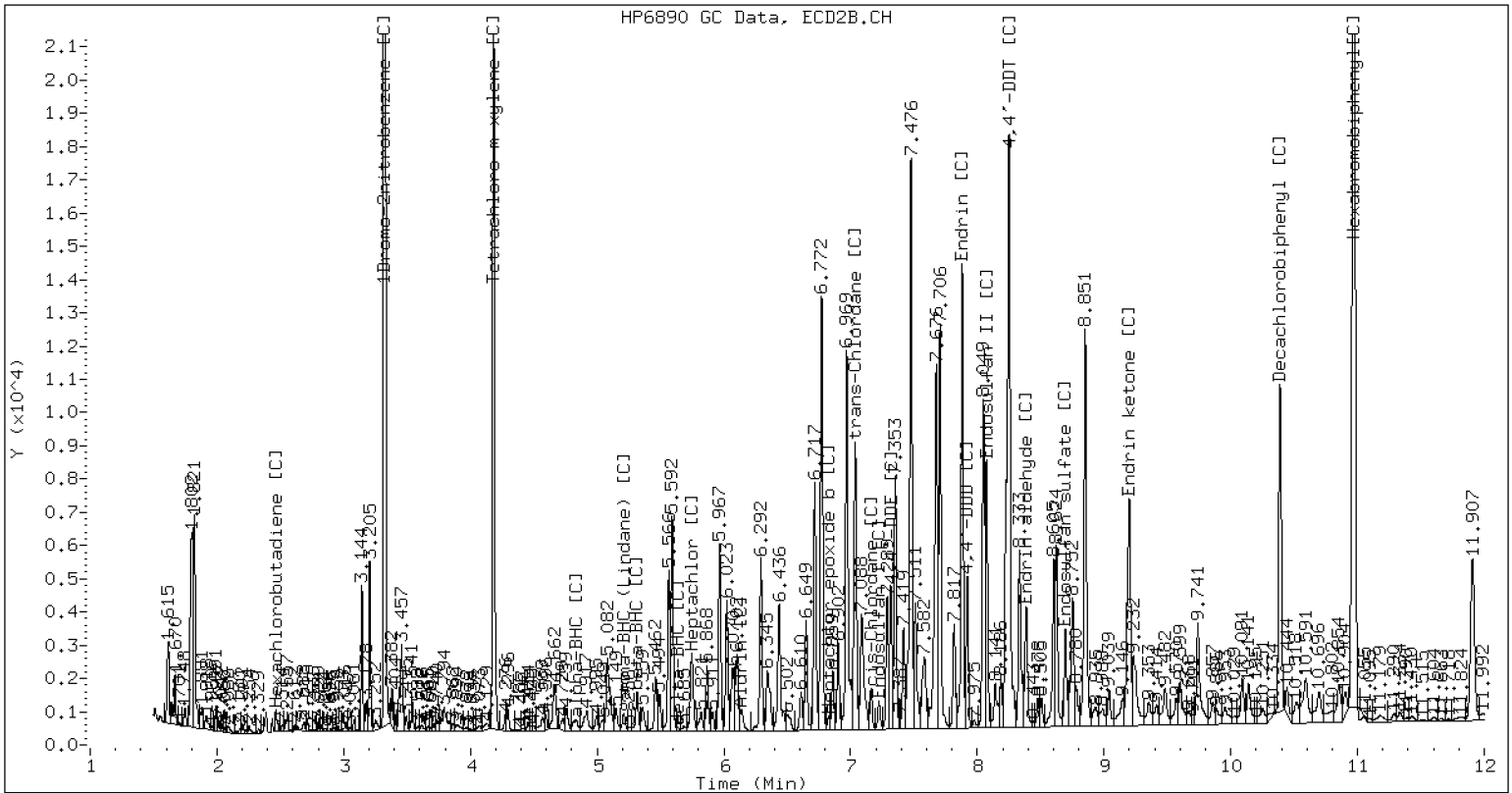
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

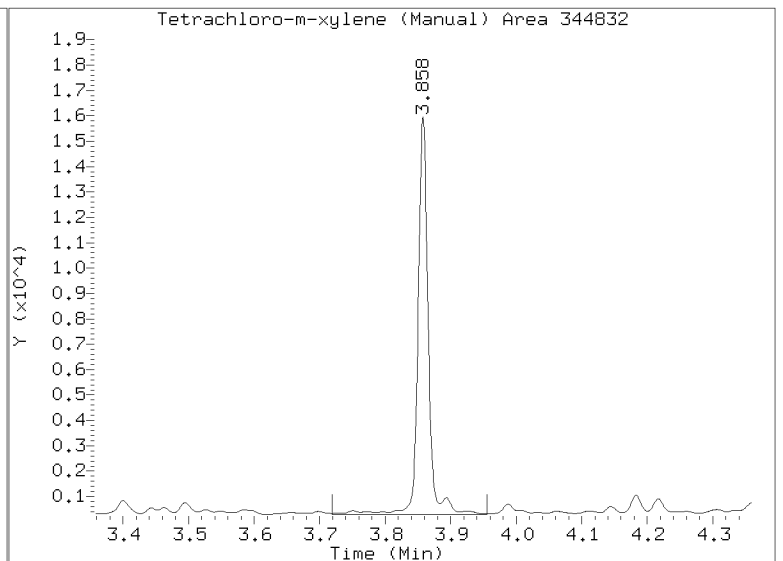
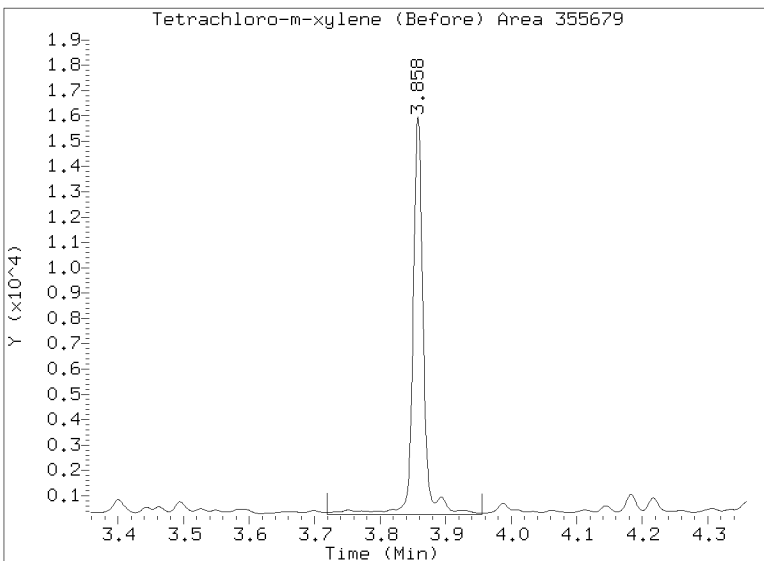
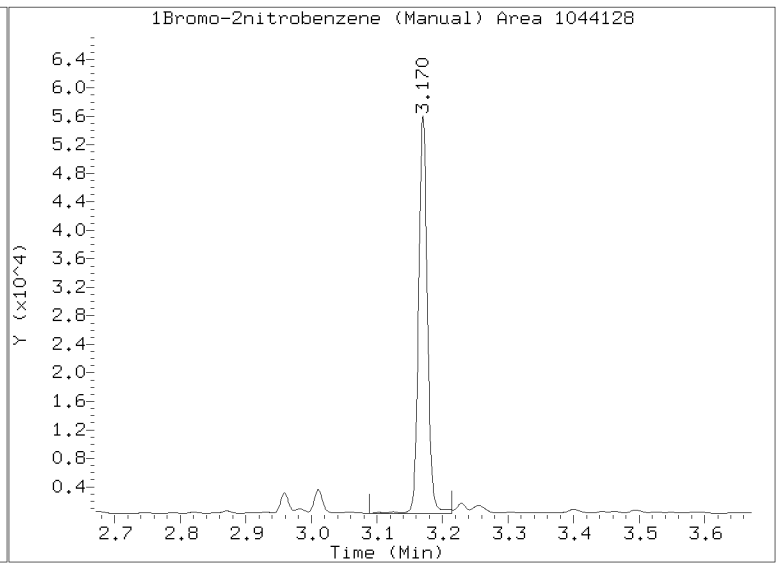
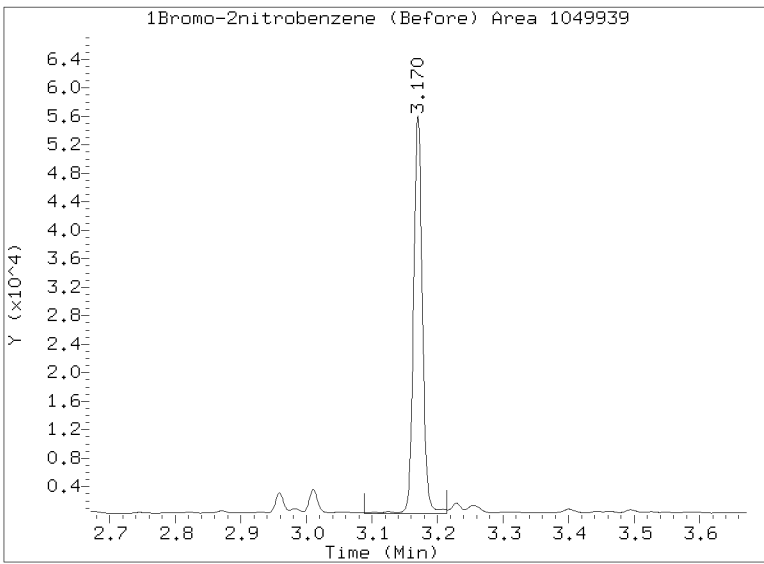
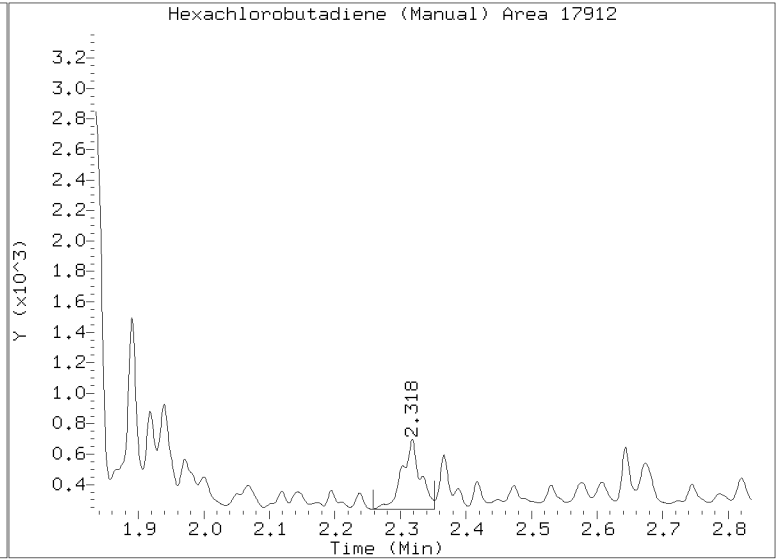
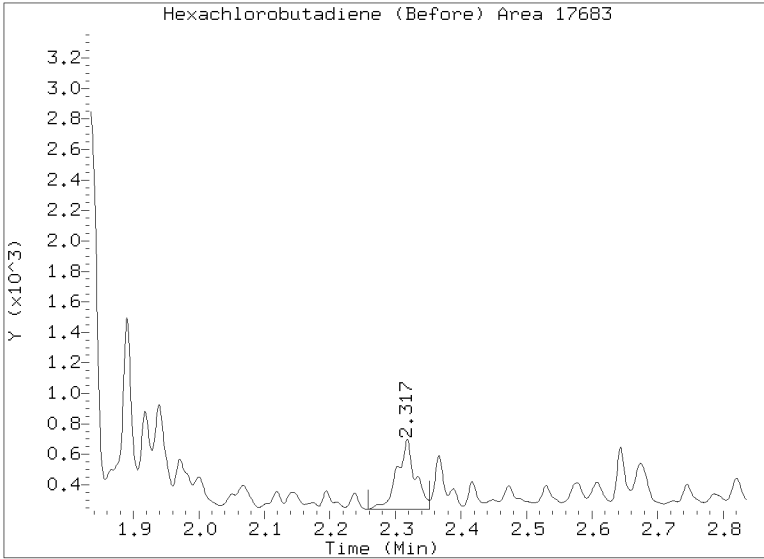
/20230307.b/B20230307.b/026F3101.D 23B0229-05 CLP2



CLP-2 Manual Integration: YES

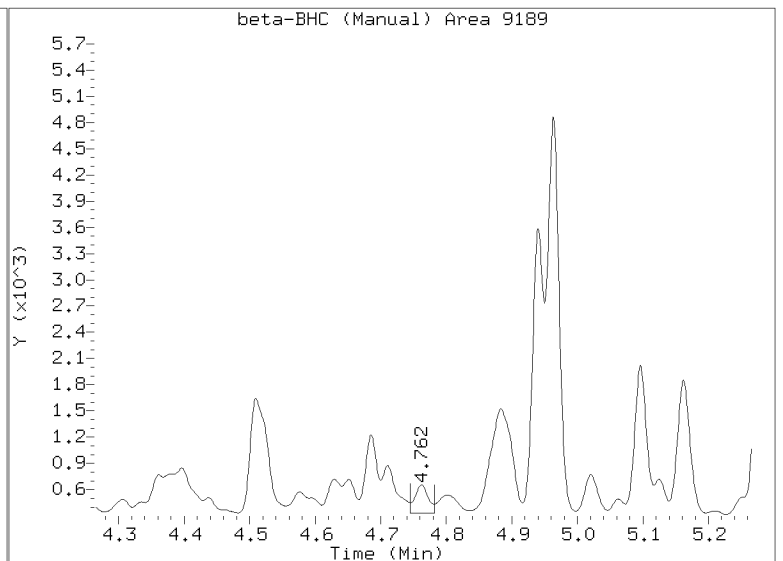
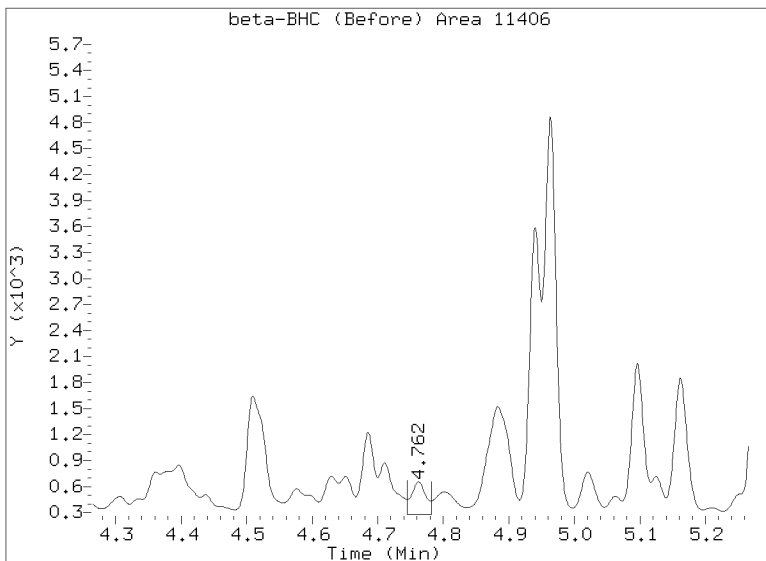
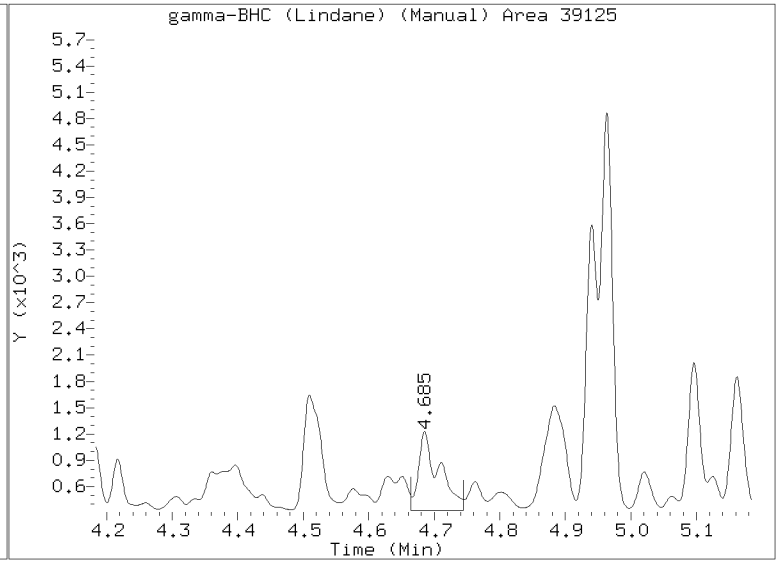
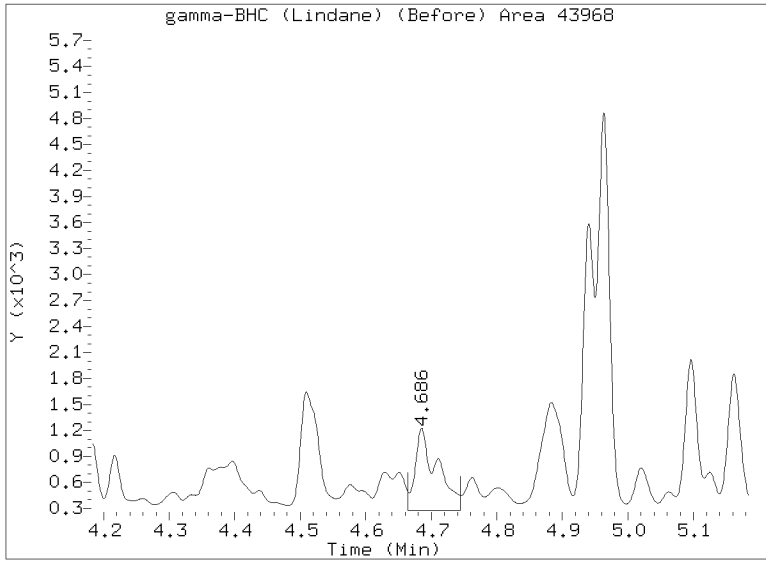
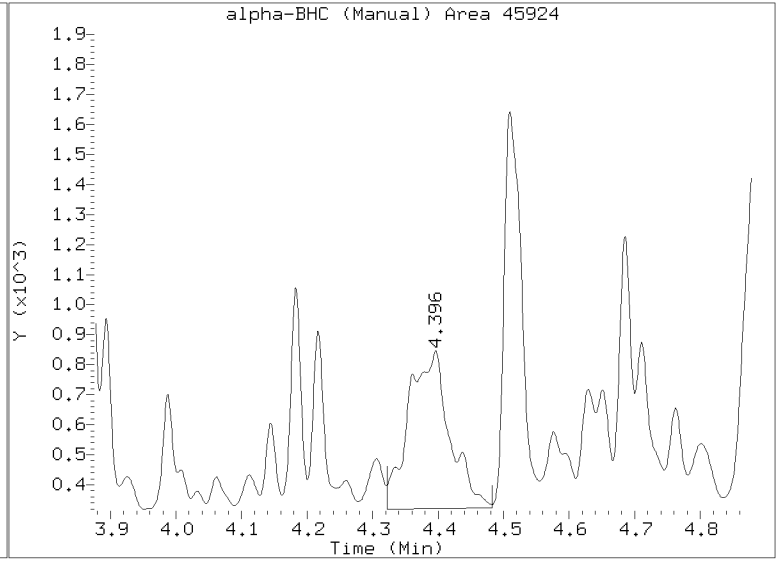
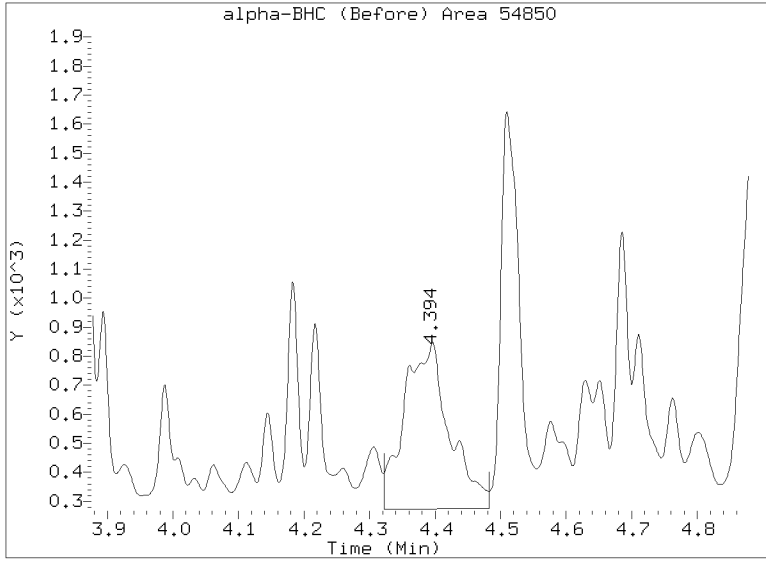
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/026F3101.D
Injection Date: 07-MAR-2023 17:59
Lab ID:23B0229-05 Client ID:
Report Date: 03/09/2023 13:37



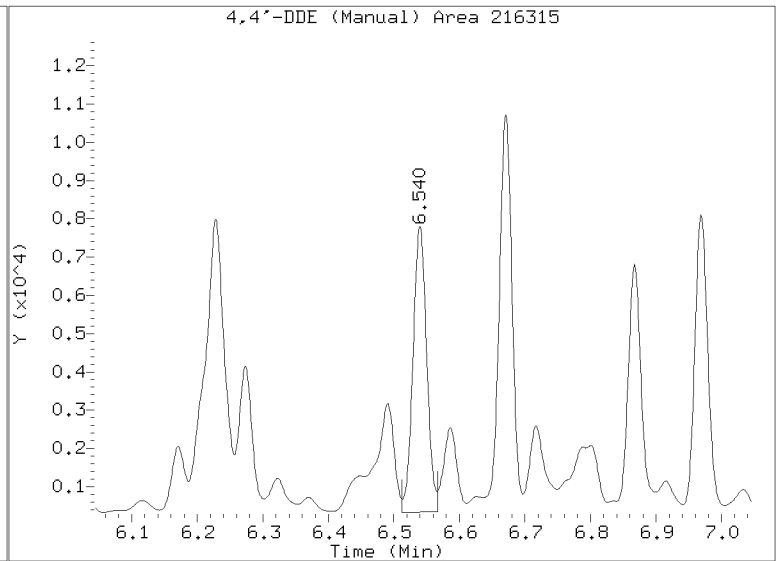
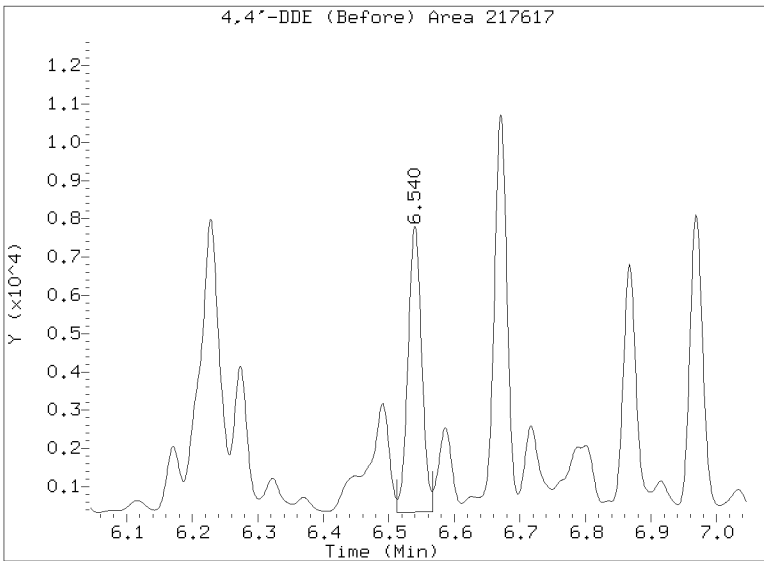
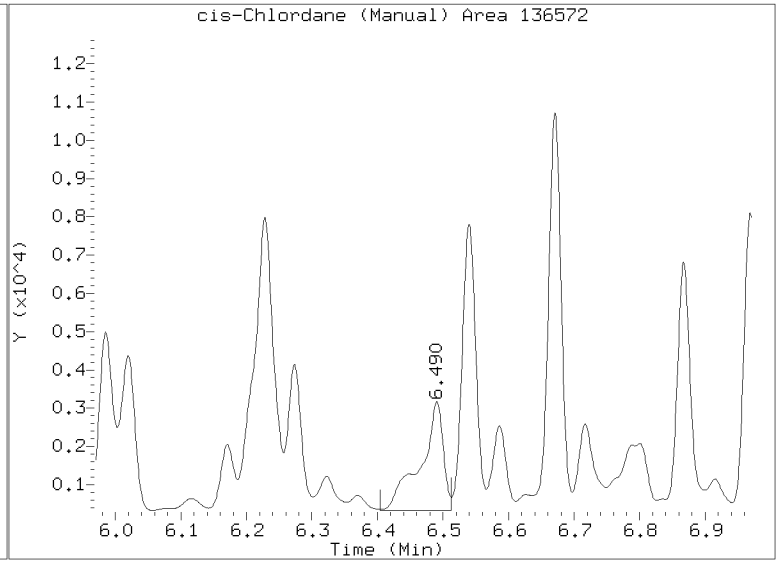
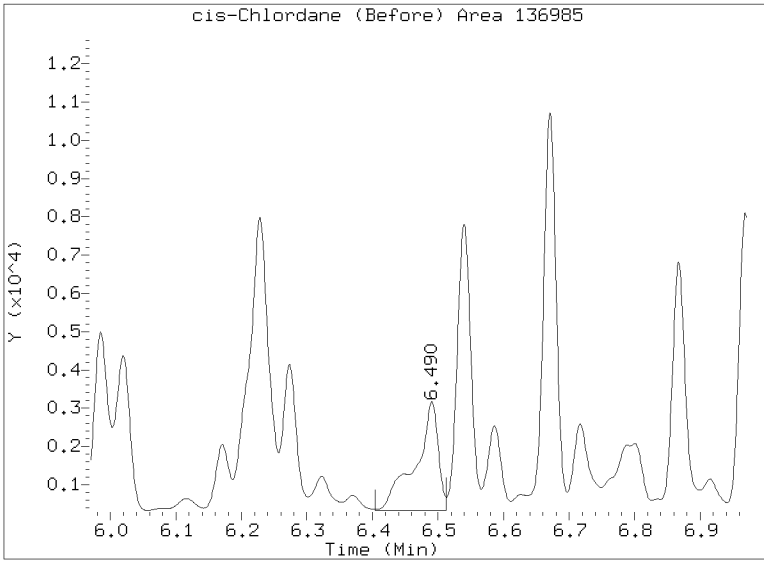
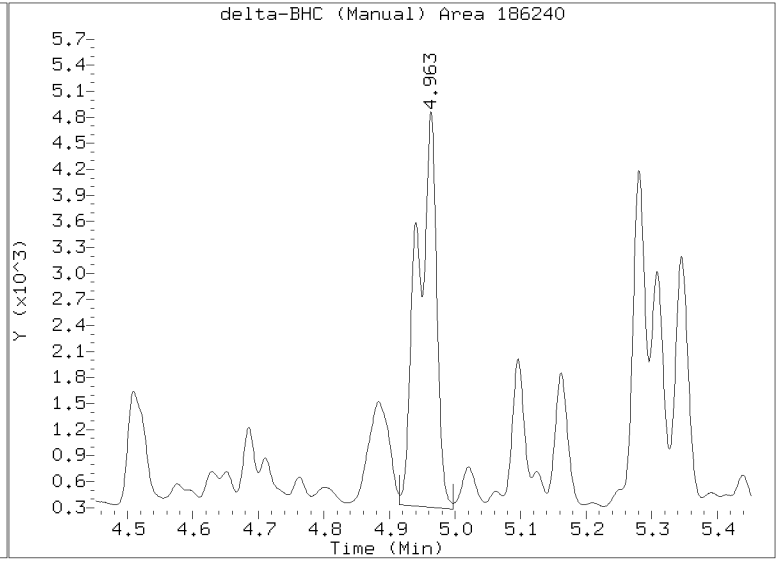
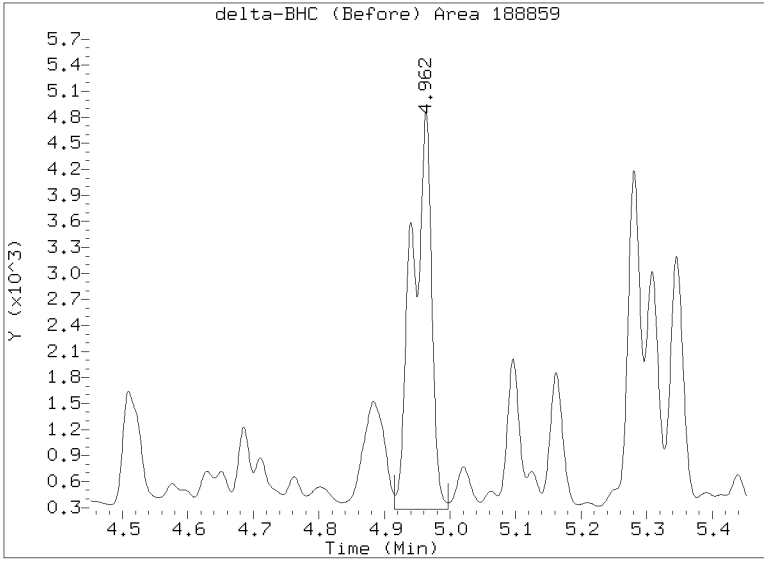
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/026F3101.D
Injection Date: 07-MAR-2023 17:59
Lab ID:23B0229-05 Client ID:
Report Date: 03/09/2023 13:37



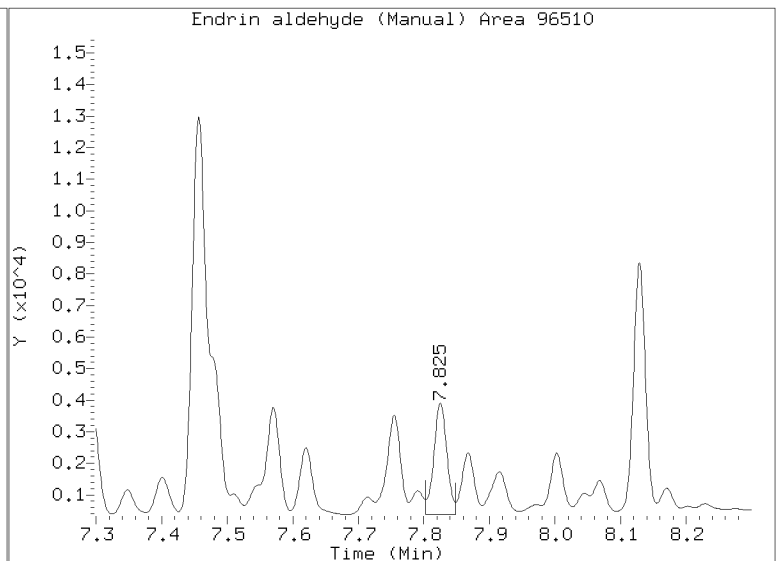
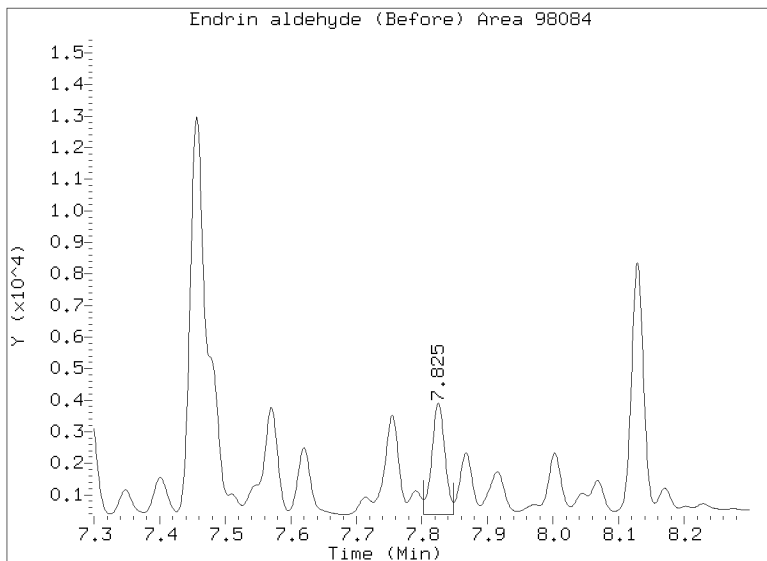
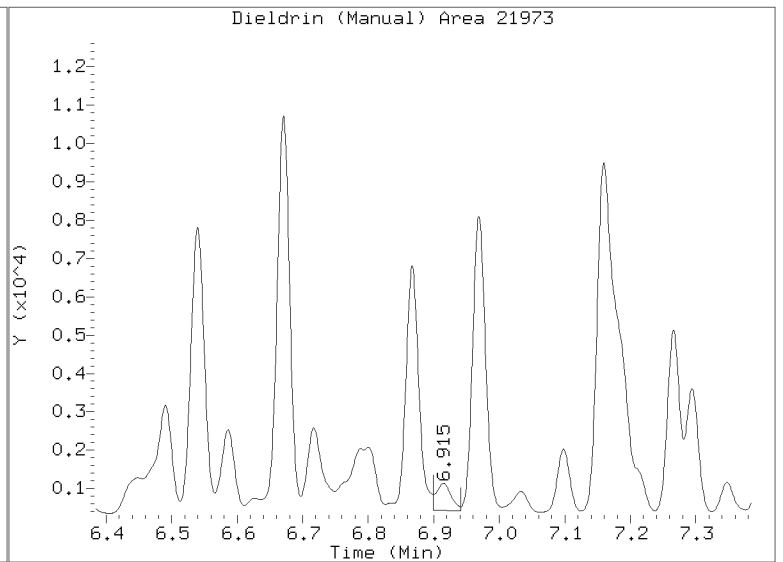
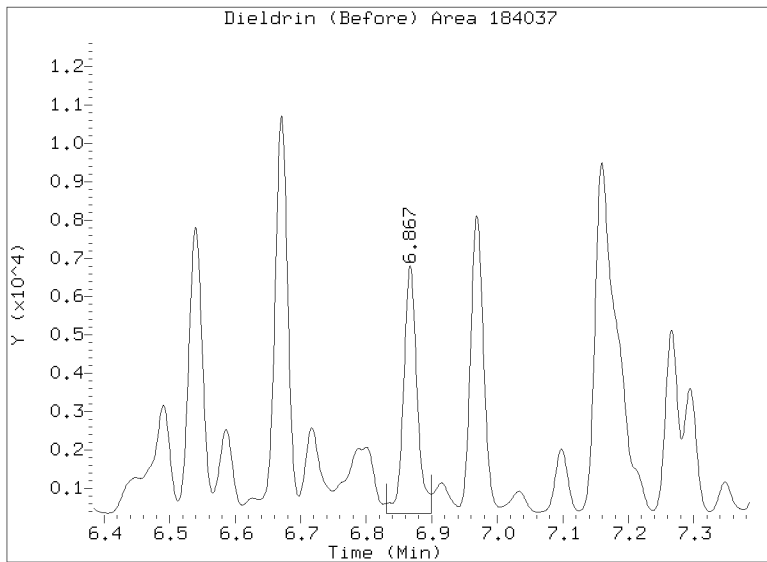
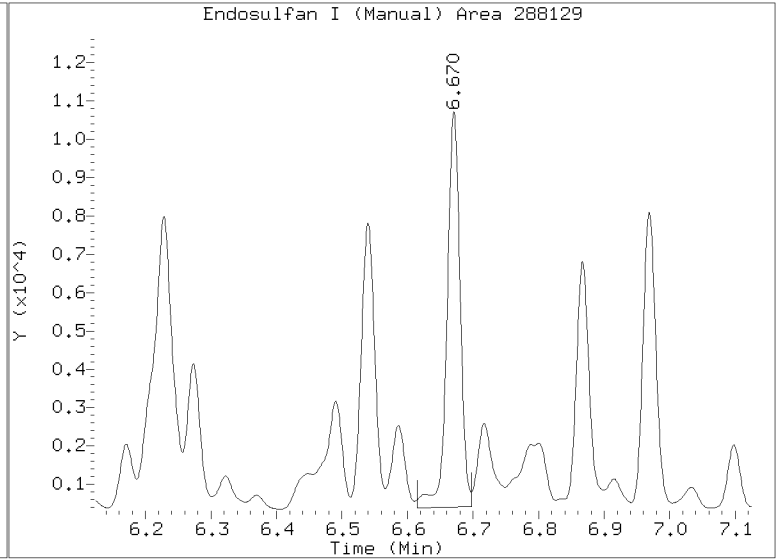
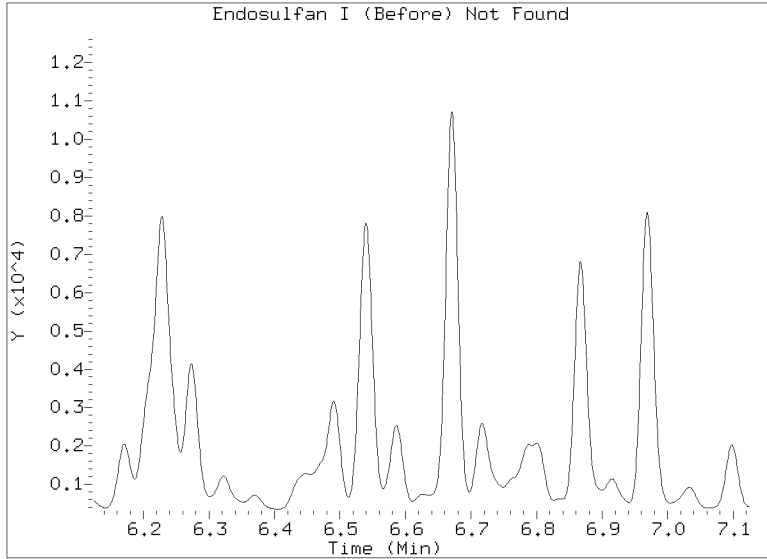
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/026F3101.D
Injection Date: 07-MAR-2023 17:59
Lab ID:23B0229-05 Client ID:
Report Date: 03/09/2023 13:37



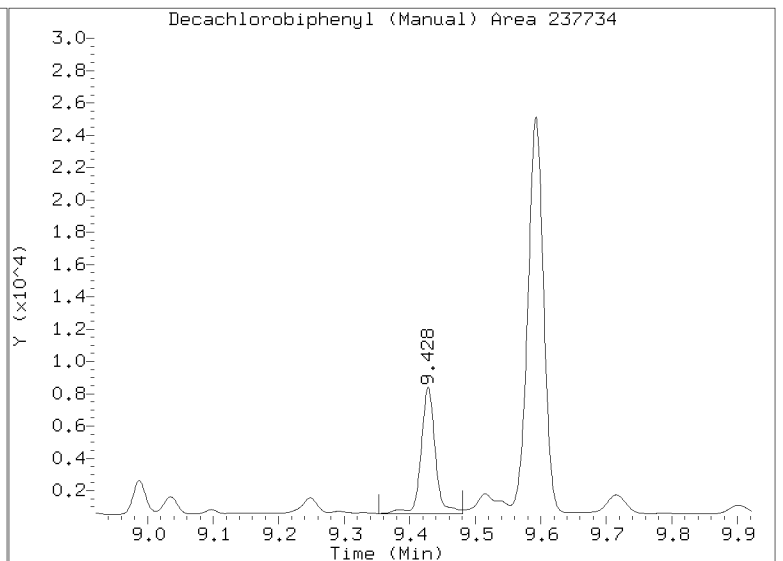
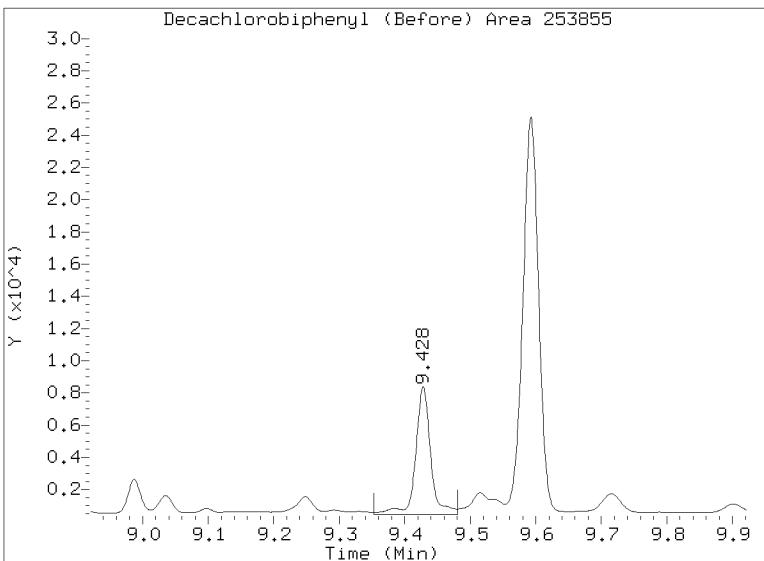
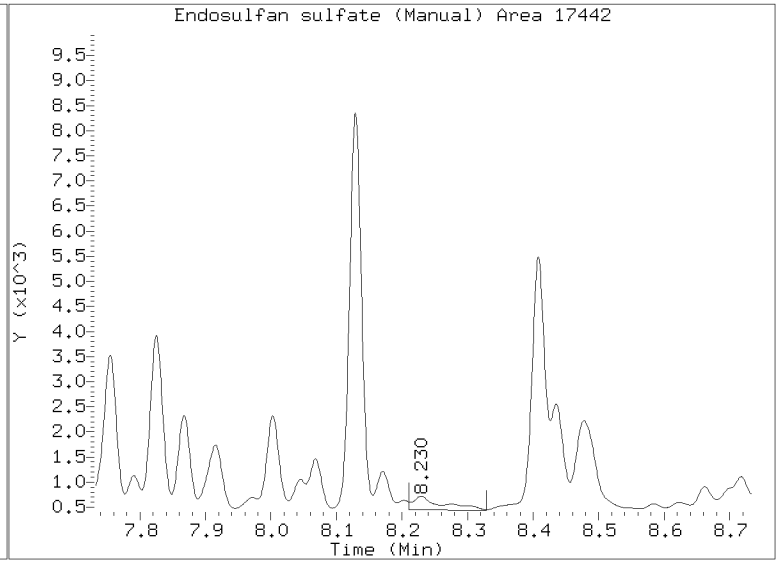
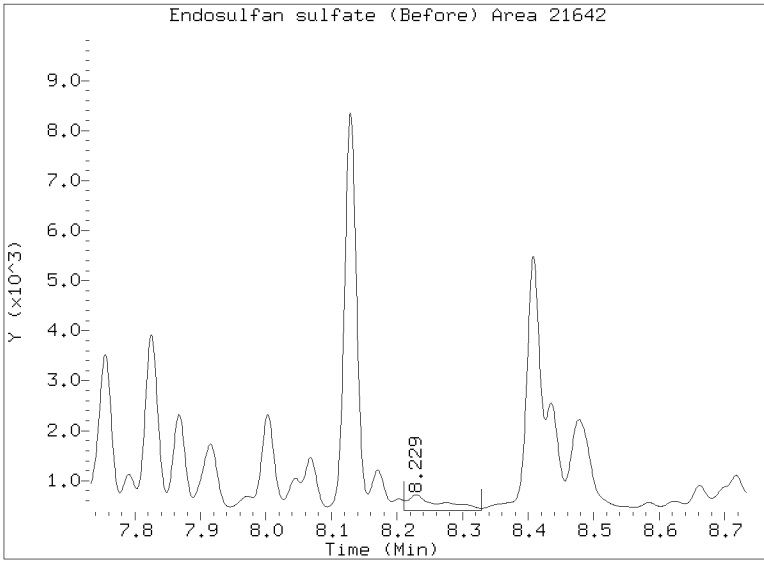
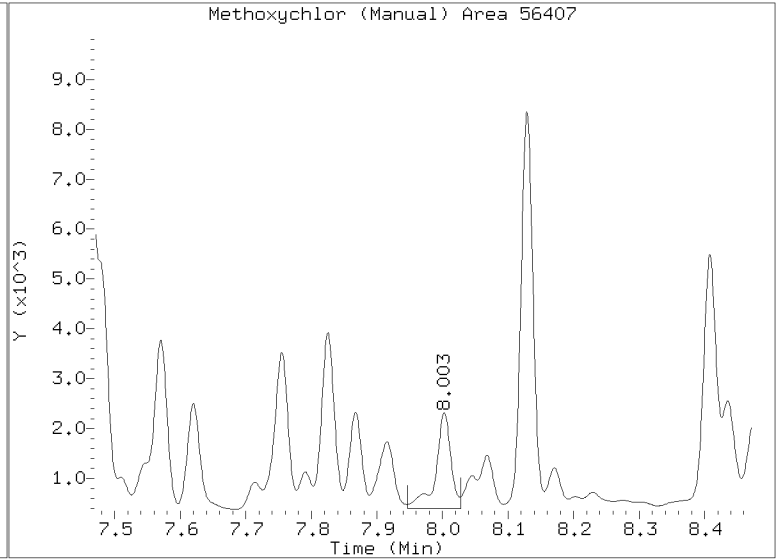
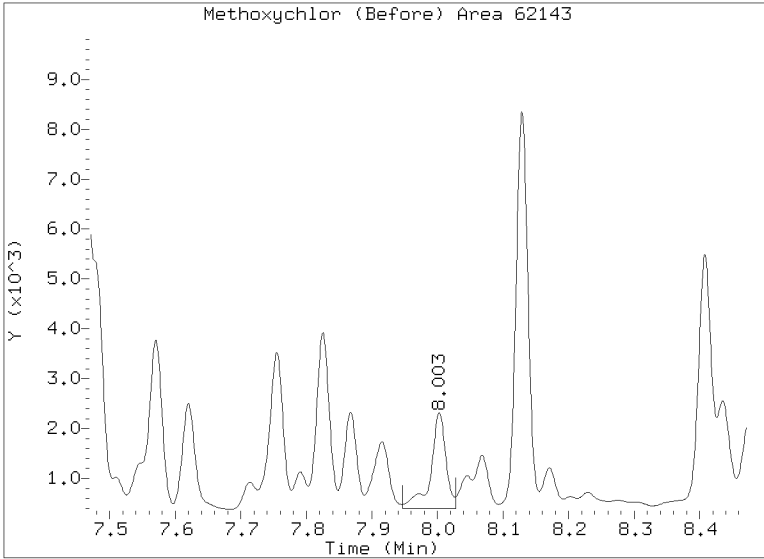
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/026F3101.D
Injection Date: 07-MAR-2023 17:59
Lab ID:23B0229-05 Client ID:
Report Date: 03/09/2023 13:37



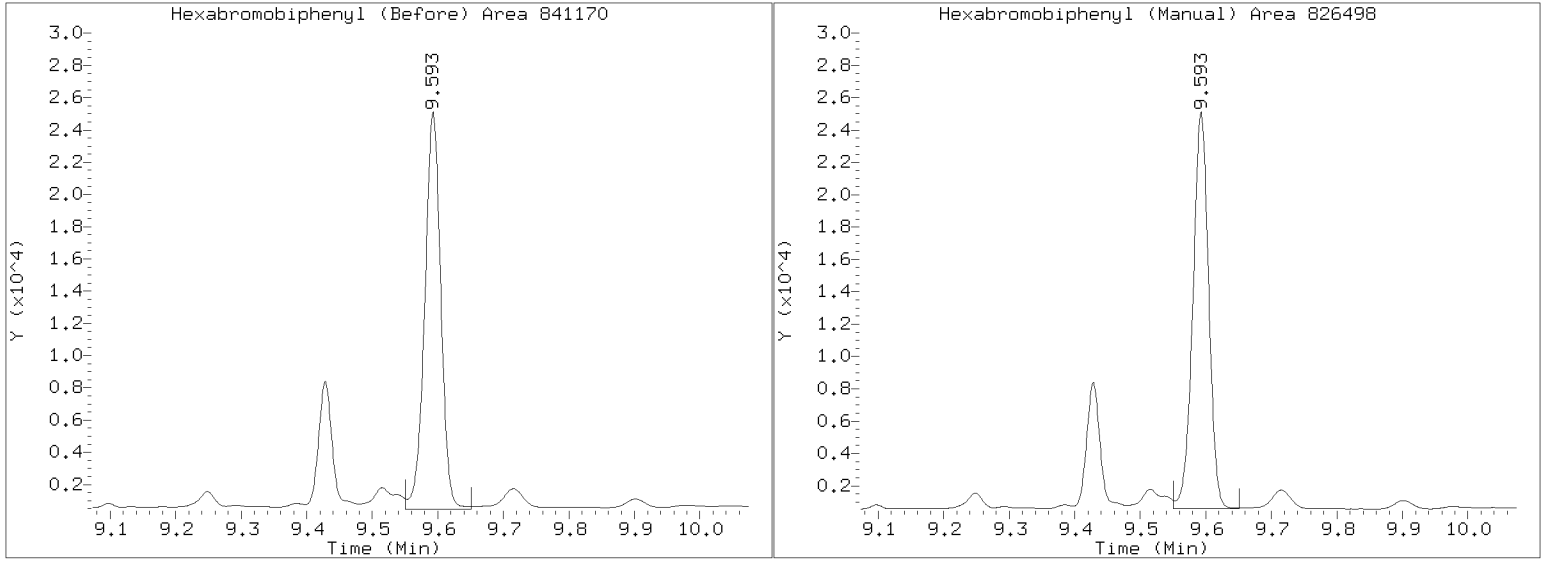
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/026F3101.D
Injection Date: 07-MAR-2023 17:59
Lab ID:23B0229-05 Client ID:
Report Date: 03/09/2023 13:37



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/026F3101.D
Injection Date: 07-MAR-2023 17:59
Lab ID:23B0229-05 Client ID:
Report Date: 03/09/2023 13:37

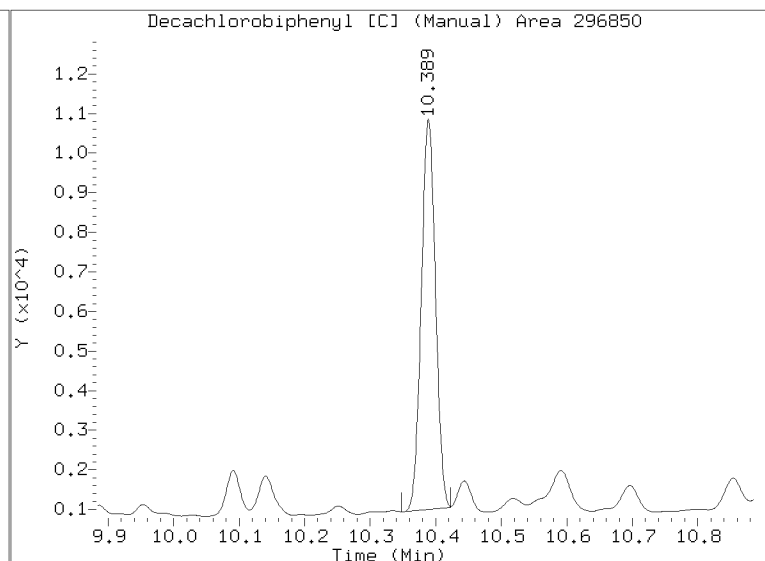
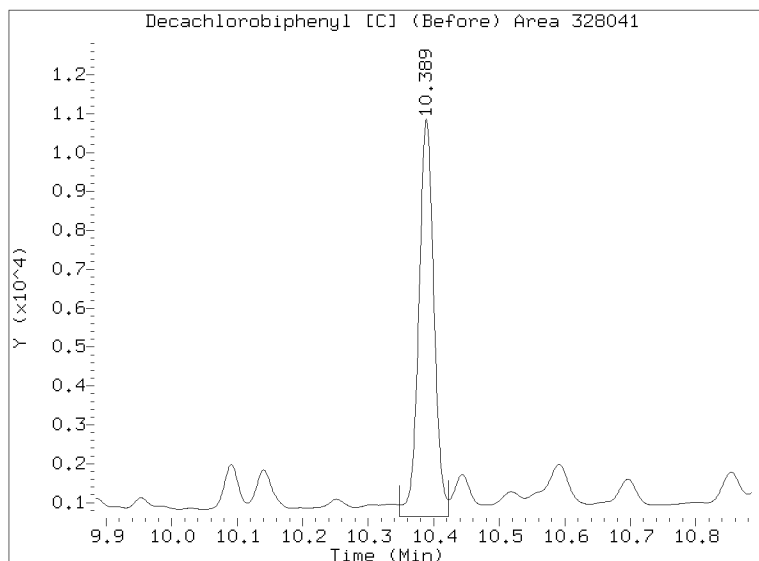
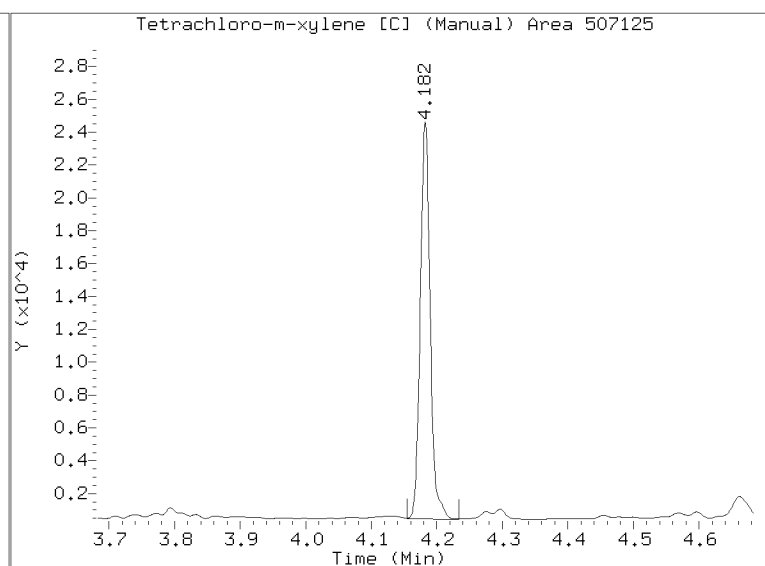
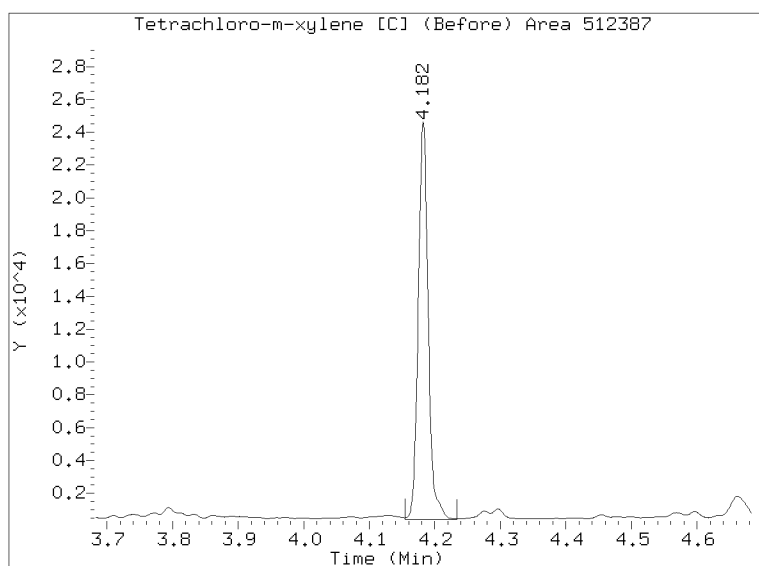
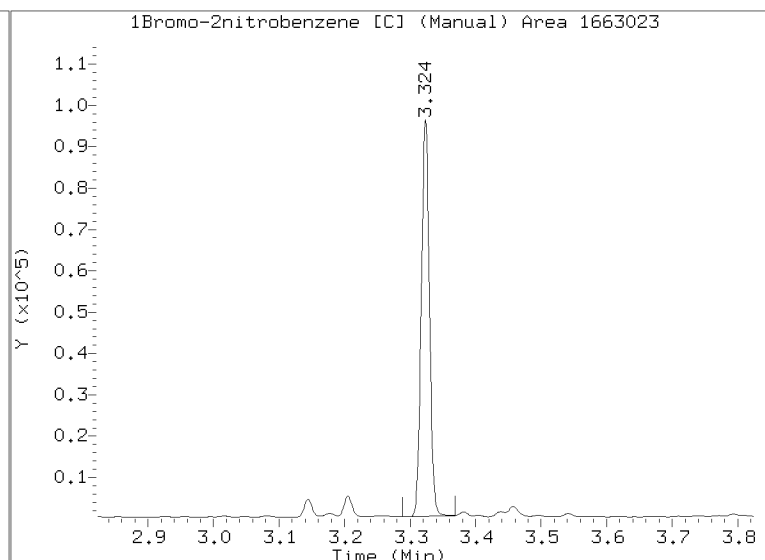
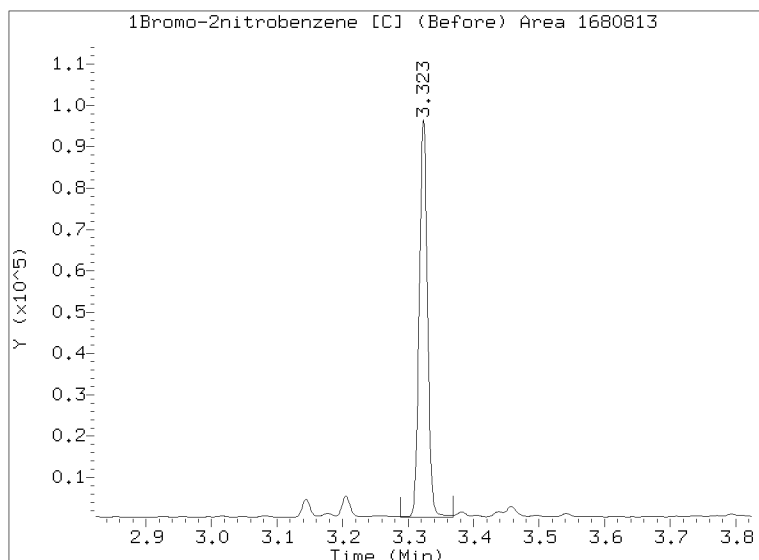


Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/026F3101.D

Injection Date: 07-MAR-2023 17:59

Lab ID:23B0229-05 Client ID:

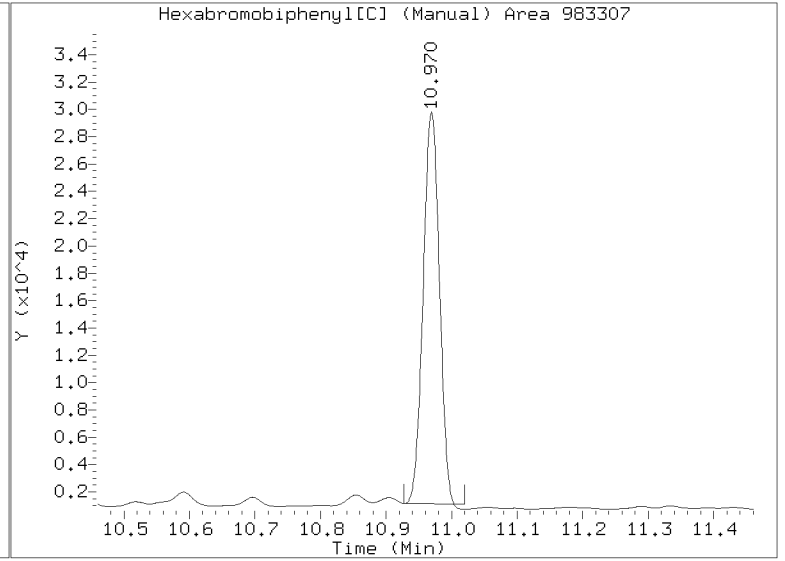
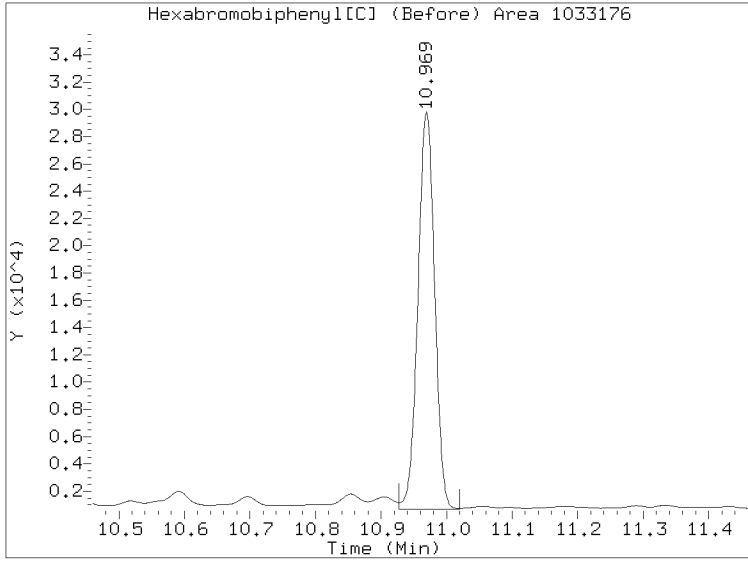


Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/026F3101.D

Injection Date: 07-MAR-2023 17:59

Lab ID:23B0229-05 Client ID:





ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23B0229</u>
Client: <u>Anchor QEA, LLC</u>	
Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23B0229-06 A</u>
Sampled: <u>02/08/23 13:30</u>	Prepared: <u>02/17/23 10:59</u>
% Solids: <u>48.62</u>	Preparation: <u>EPA 3546 (Microwave)</u>
Batch: <u>BLB0422</u>	Sequence: <u>SLC0093</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>
	File ID: <u>071F8201.D</u>
	Analyzed: <u>03/04/23 00:13</u>
	Initial/Final: <u>25.74 g Wet / 2.5 mL</u>
	Calibration: <u>FL00041</u>
	Column 2: <u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9905	5.07	63.5	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9905	5.13	64.2	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9905	3.34	41.8	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9905	3.88	48.6	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/071F8201.D
Data file 2: /20230302.b/B20230302.b/071F8201.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23B0229-06
Client ID:
Injection Date: 04-MAR-2023 00:13
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.409	0.018 54448	4.830 0.001 13145	2.27	0.42	138.0*		alpha-BHC MN
4.775	-0.005 9251	5.326 0.024 18787	1.00	1.56	43.8*		beta-BHC MN
4.976	0.010 137752	5.686 0.031 68736	7.02	2.64	90.7*		delta-BHC MN
4.717	0.019 109057	----	5.24	0.00	---		gamma-BHC (Lindane)
5.172	-0.019 51013	5.758 0.008 59139	2.76	2.43	12.4		Heptachlor MN
5.534	0.015 91485	----	4.41	0.00	---		Aldrin
6.185	-0.014 54952	6.784 -0.023 266441	3.05	11.61	116.7*		Heptachlor epoxide b MN
----	----	7.235 -0.016 17133	0.00	0.85	---		Endosulfan I
6.881	-0.020 139237	7.522 -0.021 83123	7.85	3.72	71.4*		Dieldrin MN
6.554	-0.007 168264	7.328 -0.003 88060	10.22	4.30	81.6*		4,4'-DDE MN
7.172	0.022 351133	7.892 0.026 270666	34.96	21.92	45.9*		Endrin MN
7.413	0.025 28672	8.082 0.005 152164	3.17	12.02	116.5*		Endosulfan II MN
----	----	7.933 -0.003 91074	0.00	7.58	---		4,4'-DDD
8.238	-0.011 12185	8.706 0.032 55311	1.42	4.98	111.2*		Endosulfan sulfate MN
----	----	8.261 0.007 530922	0.00	45.79	---		4,4'-DDT
8.016	0.030 51803	----	12.79	0.00	---		Methoxychlor
----	----	9.211 0.015 194305	0.00	16.18	---		Endrin ketone
7.839	0.023 80260	8.397 -0.010 81012	11.13	9.07	20.4		Endrin aldehyde MN
----	----	----	0.00	0.00	---		trans-Chlordane
6.504	0.018 95053	7.174 -0.003 24894	5.19	1.11	129.4*		cis-Chlordane MN
2.325	-0.021 14203	2.518 0.026 3792	0.56	0.13	126.9*		Hexachlorobutadiene
----	----	4.690 0.001 65284	0.00	2.27	---		Hexachlorobenzene
3.868	-0.003 283728	4.192 -0.003 431752	16.74	19.45	15.0		Tetrachloro-m-xylene MN
9.438	0.001 197080	10.402 -0.000 246548	25.39	25.68	1.1		Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1246656	85.4
Hexabromobiphenyl	609723	766029	25.6

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1577294	56.7
Hexabromobiphenyl	769764	868540	12.8

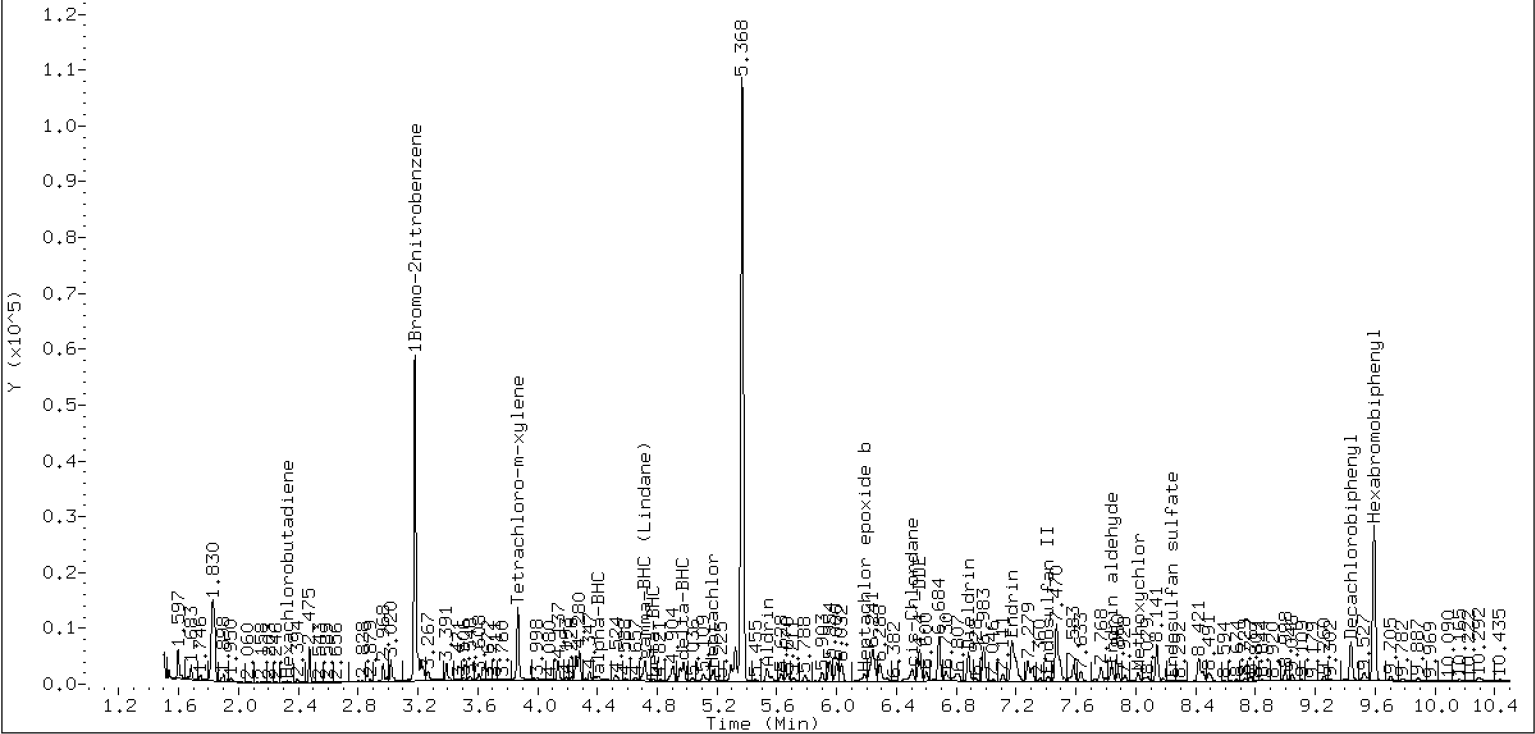
* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

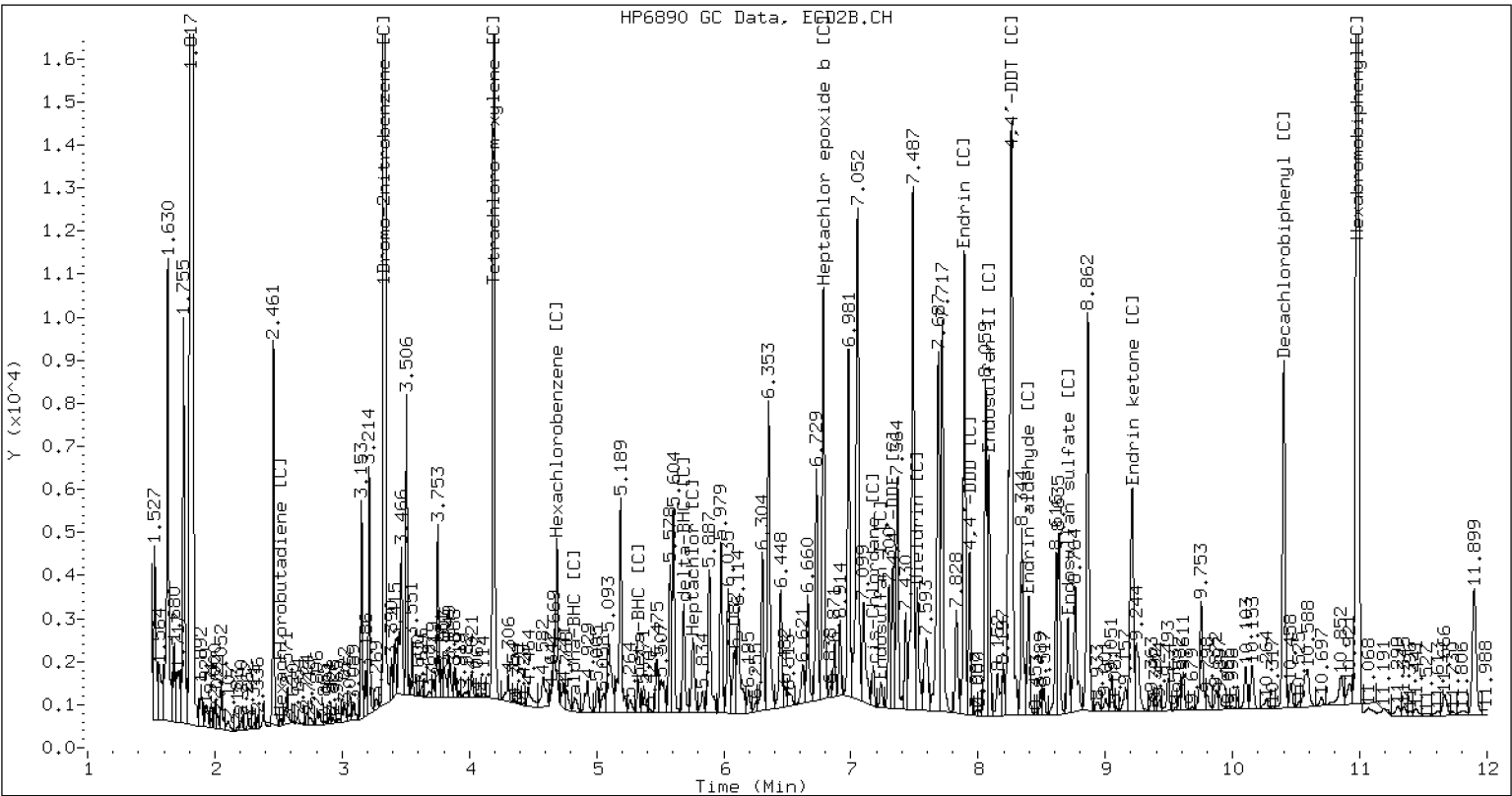
Pesticide Dual Column Chromatograms

/20230302.b/071F8201.D 23B0229-06 HP6890 GC Data, ECD1A.CH 04-MAR-2023 00:13 1u1
STX-CLP



STX-CLP Manual Integration: YES

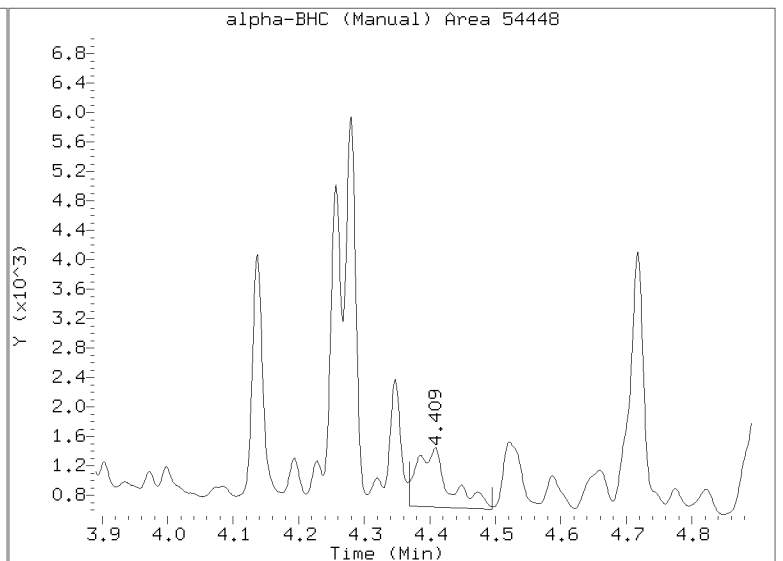
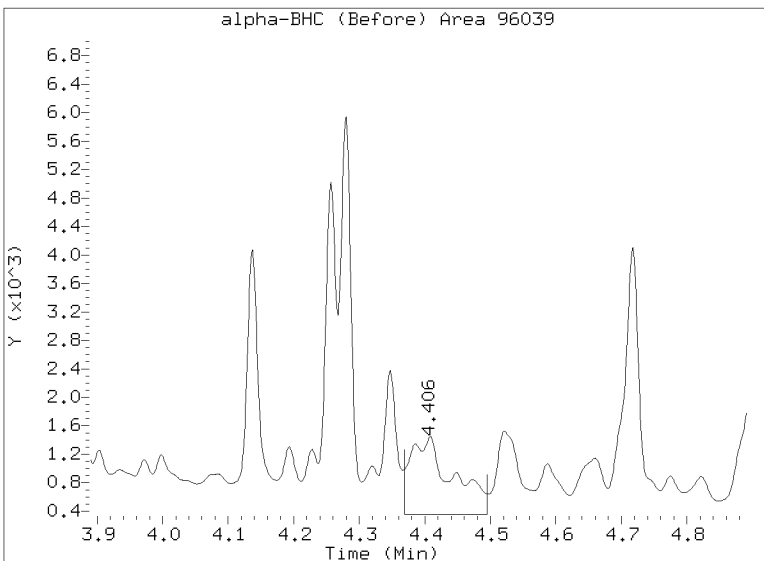
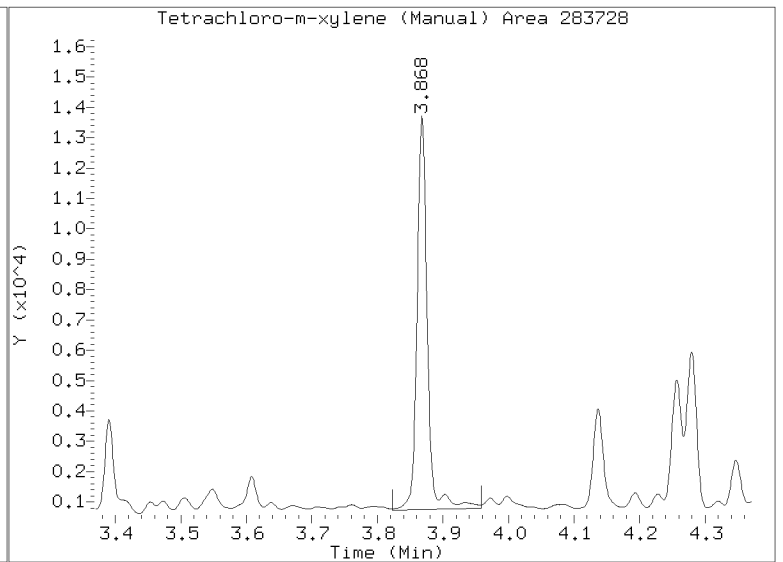
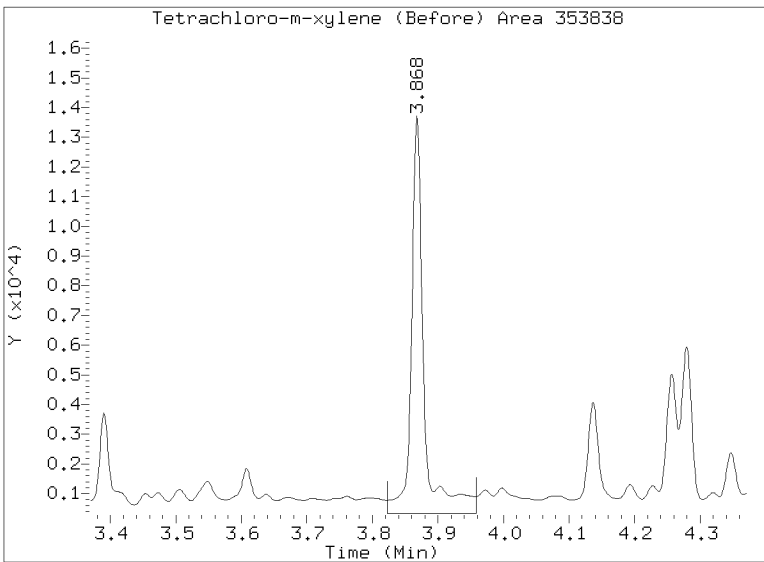
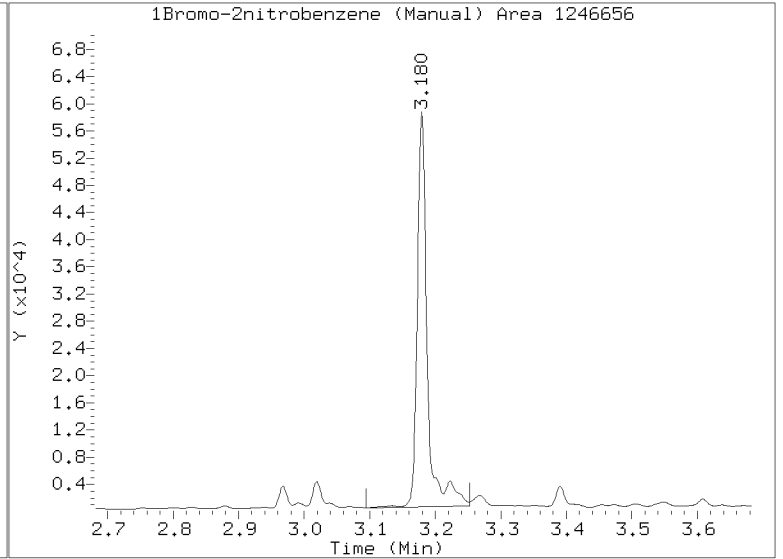
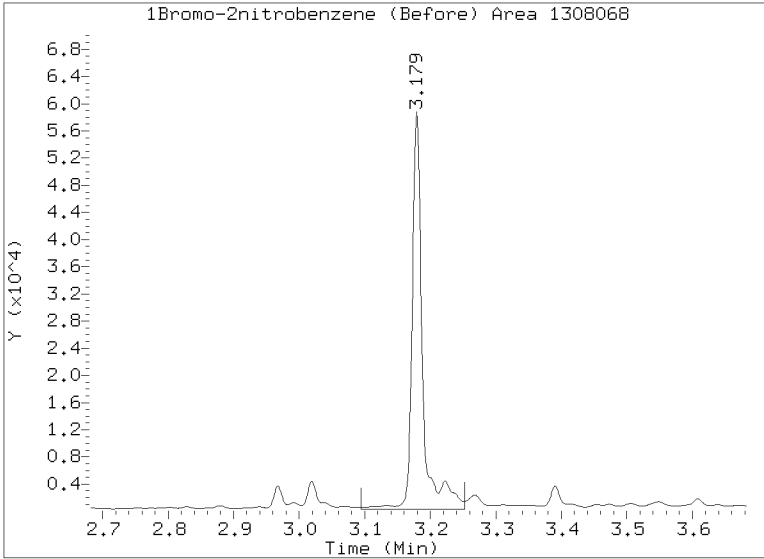
/20230302.b/B20230302.b/071F8201.D 23B0229-06 CLP2



CLP-2 Manual Integration: YES

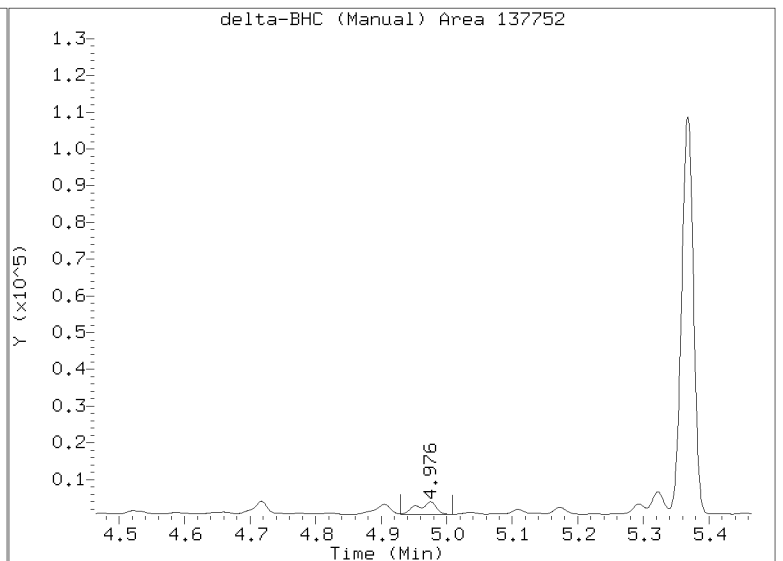
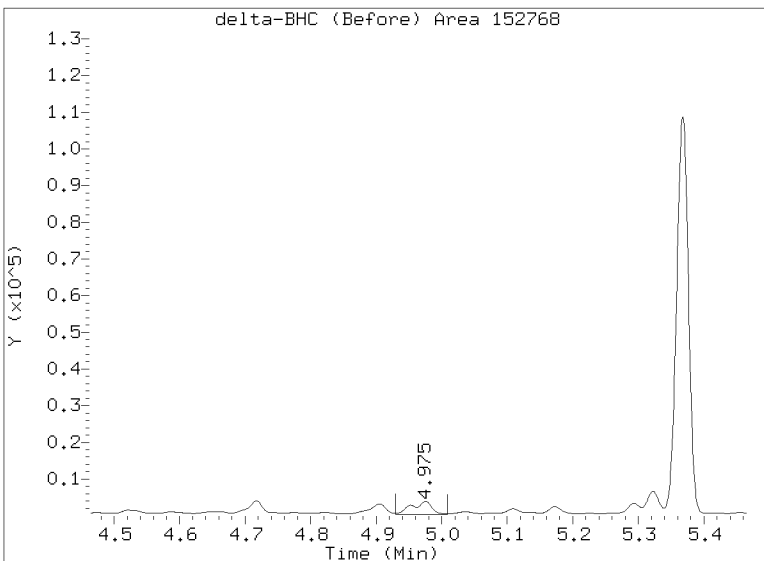
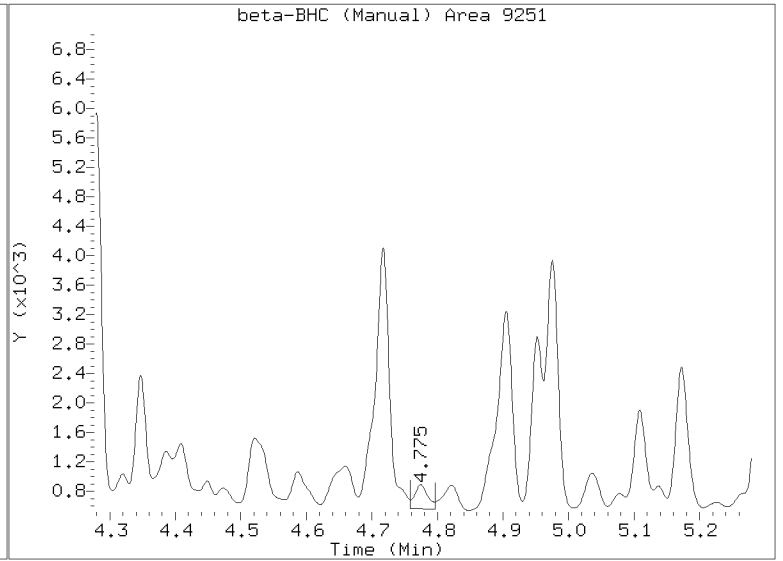
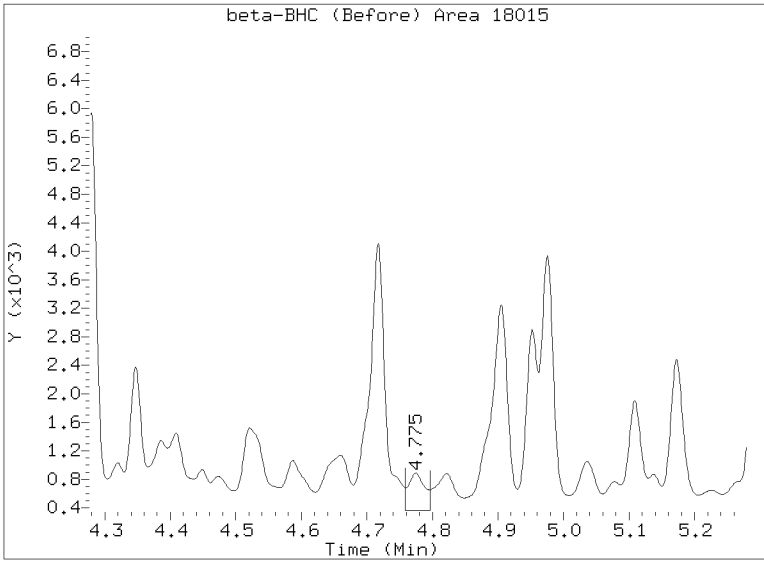
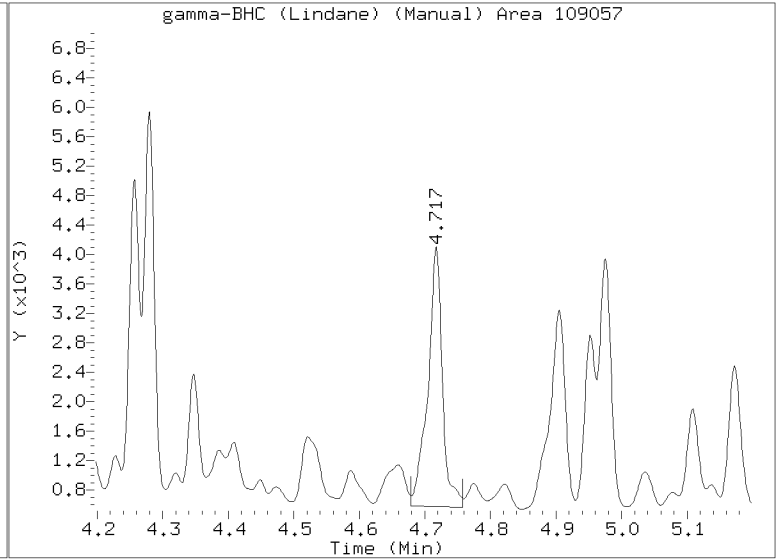
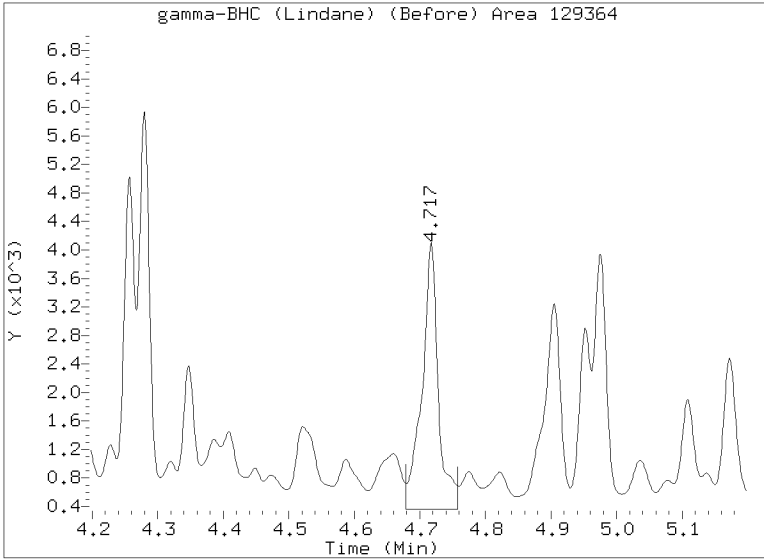
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19



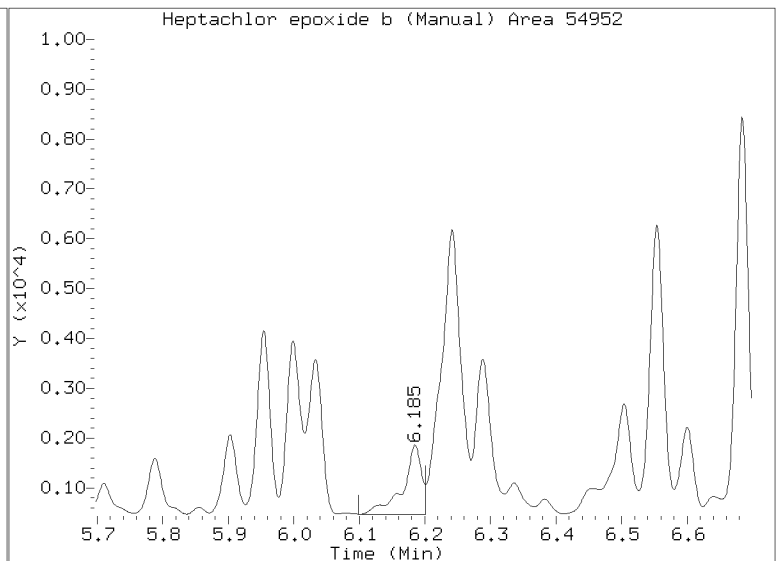
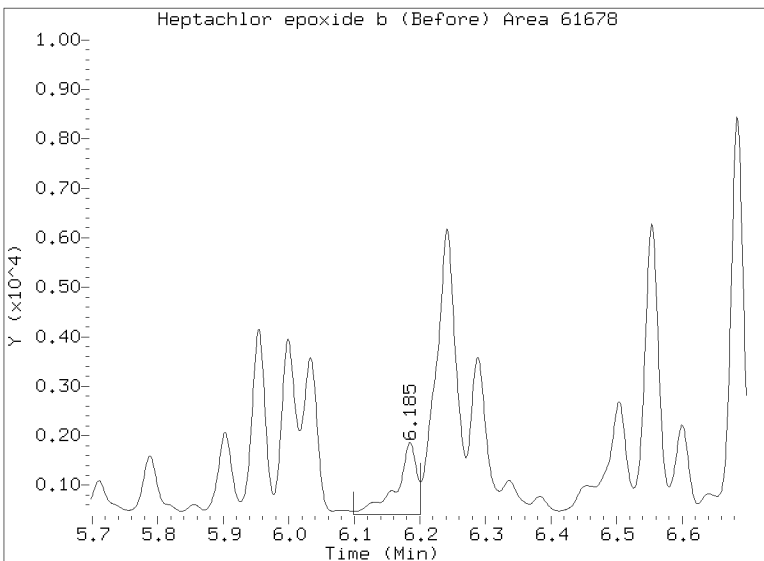
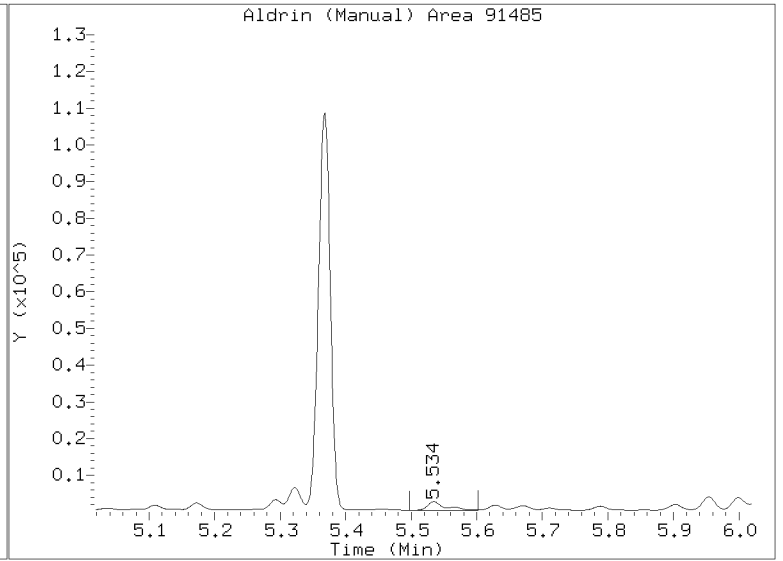
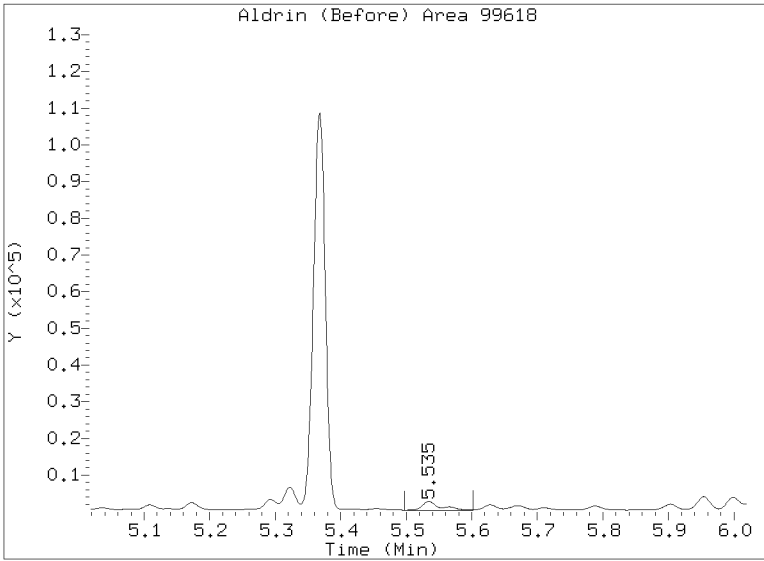
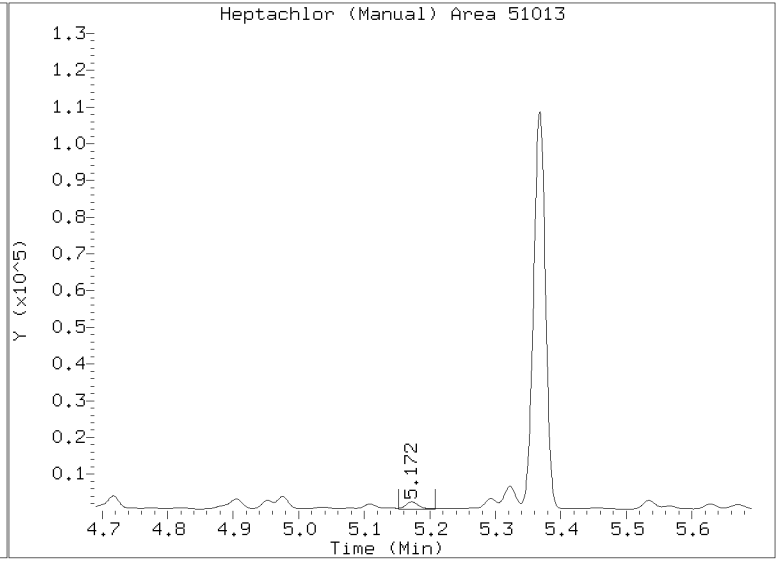
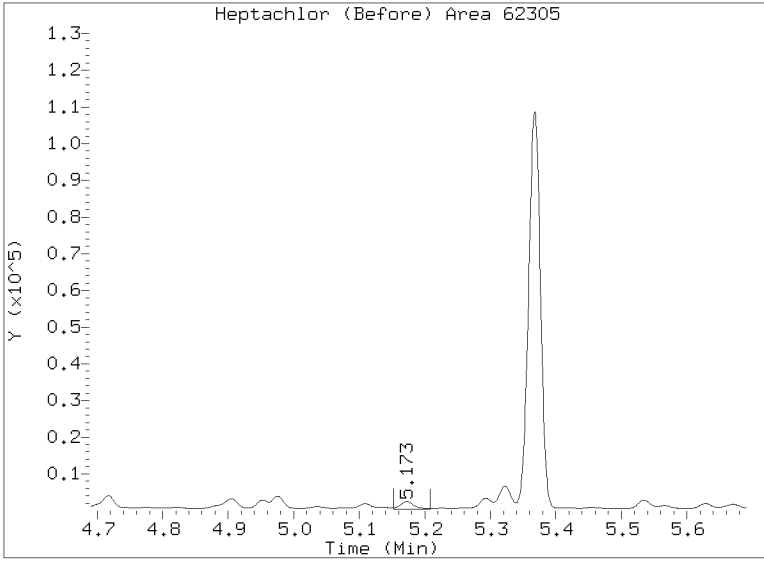
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19



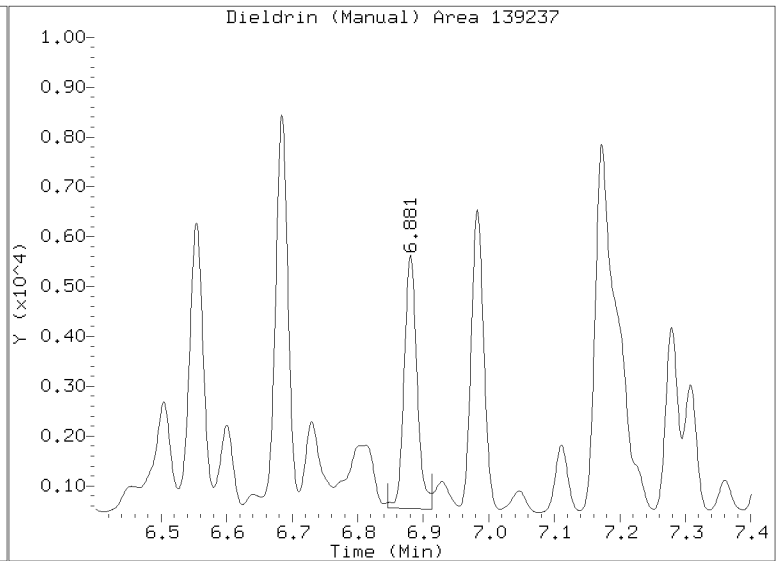
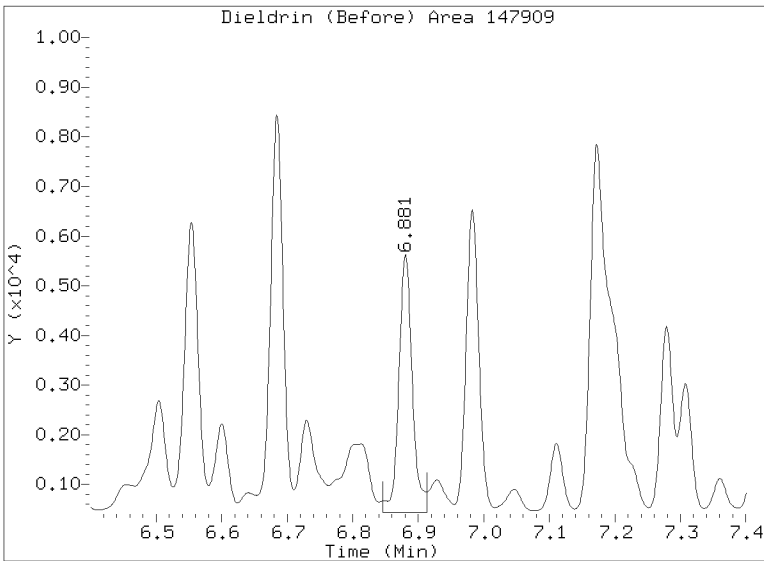
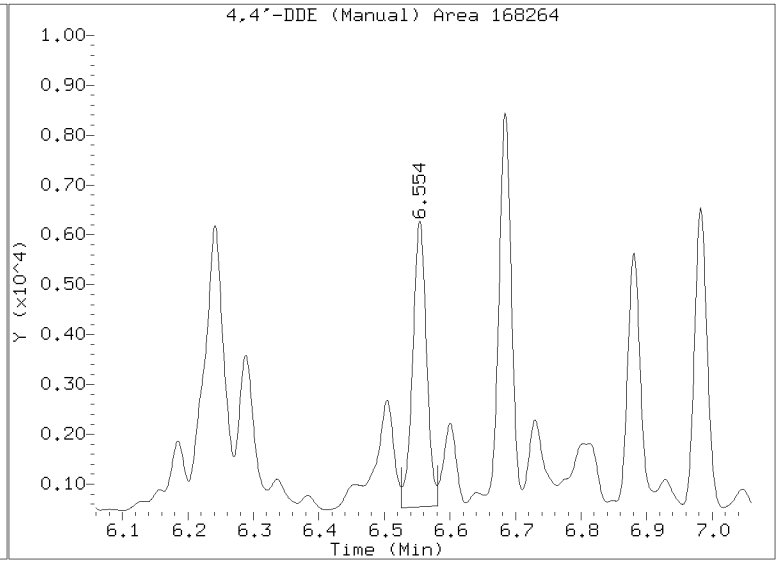
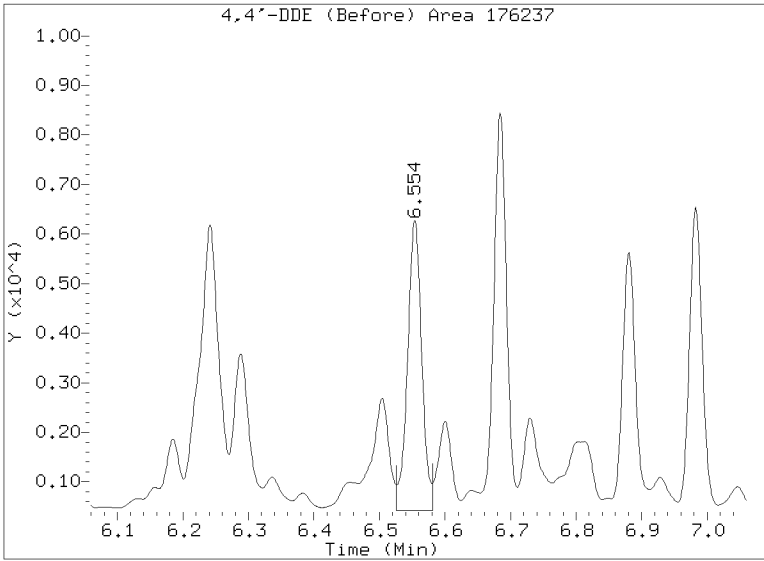
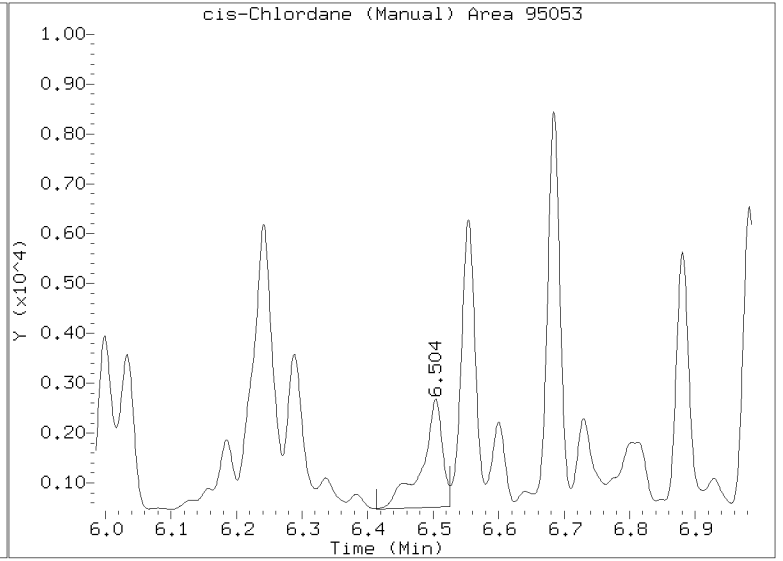
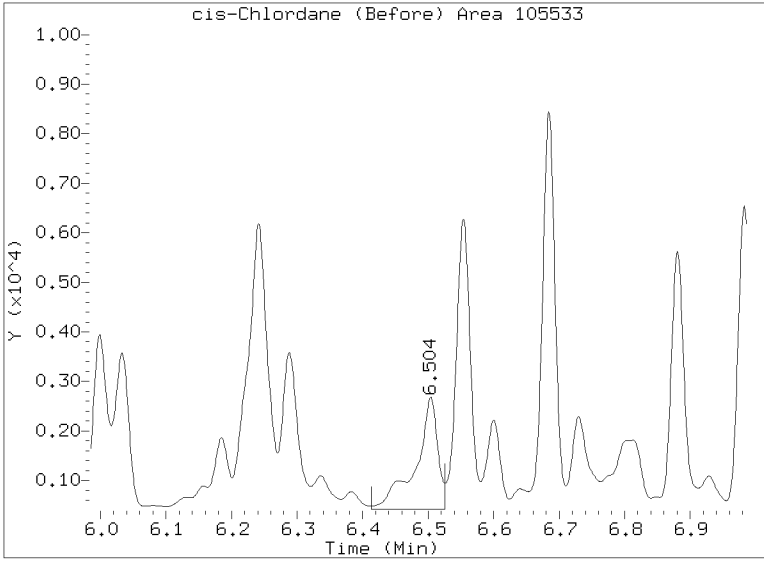
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19



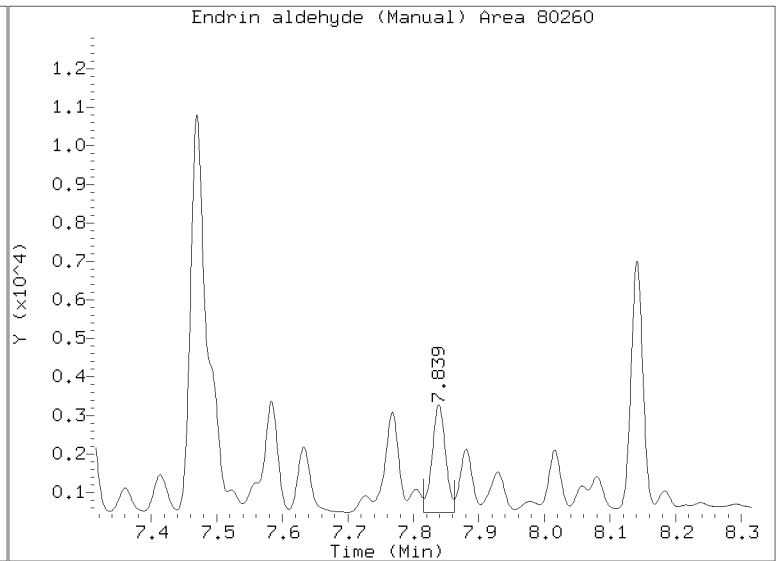
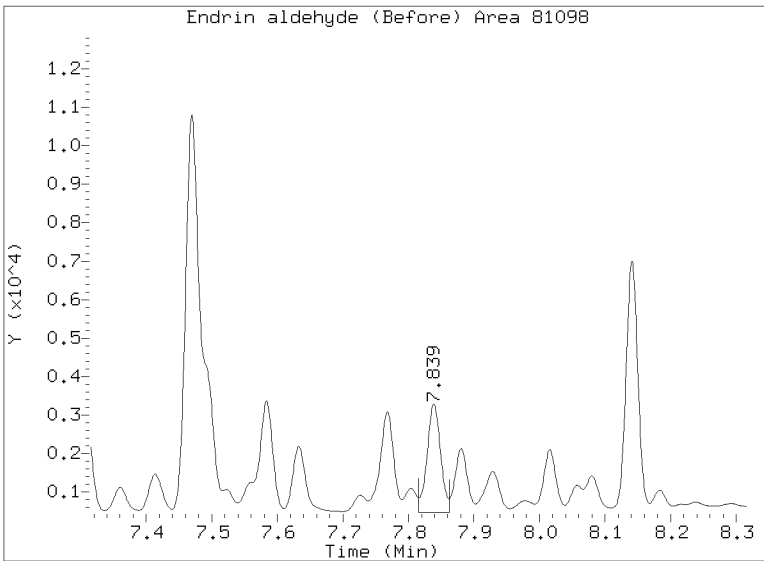
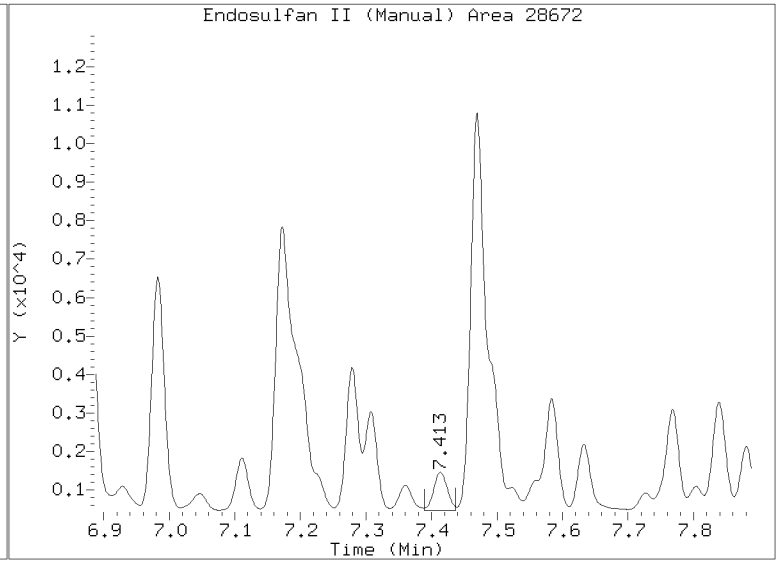
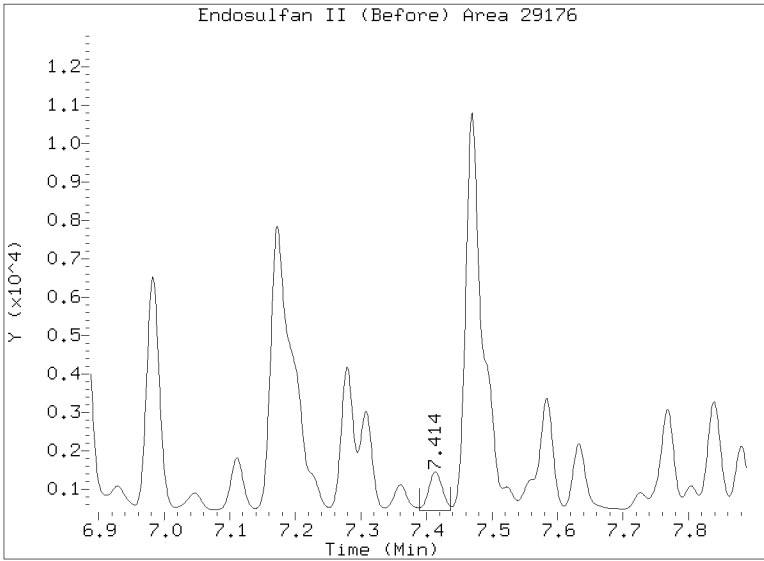
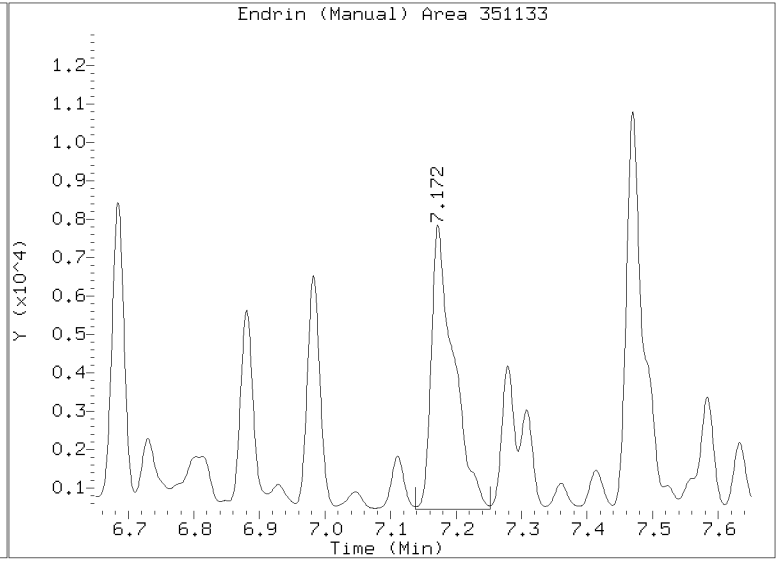
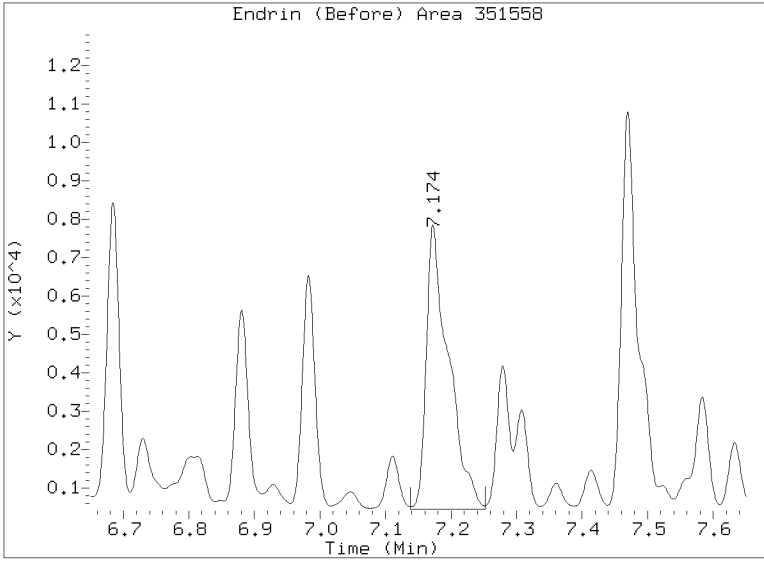
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19



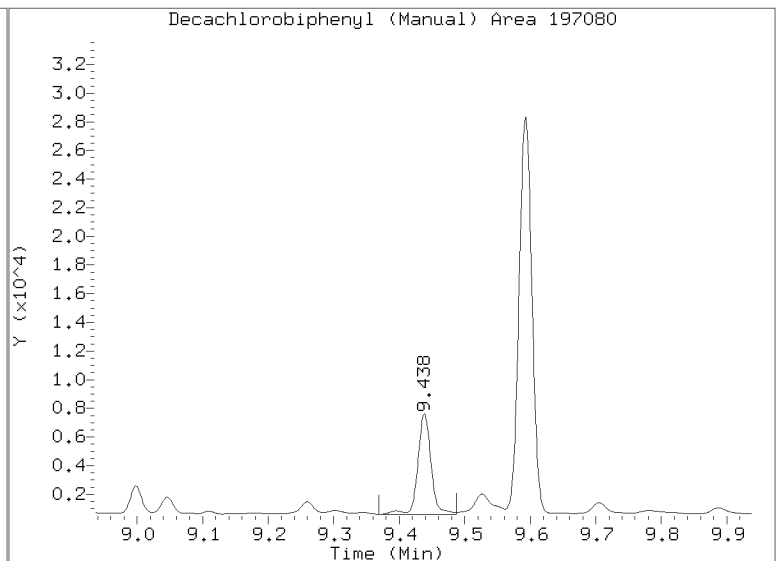
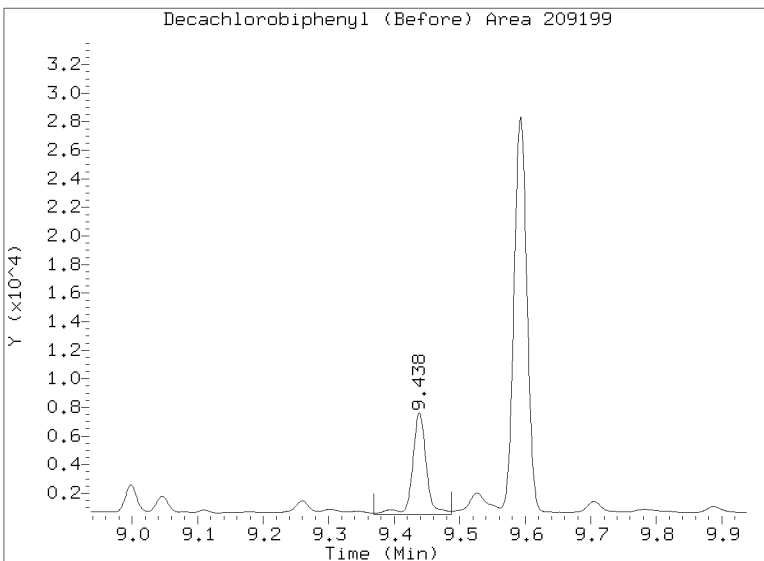
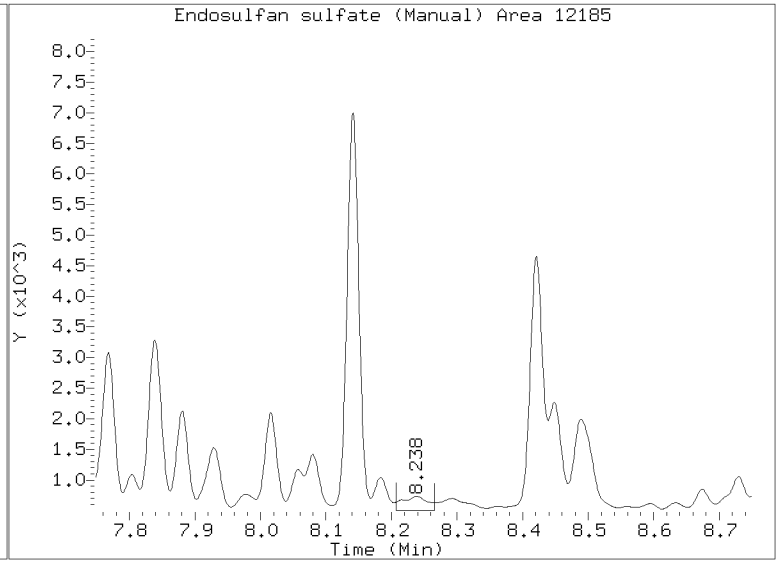
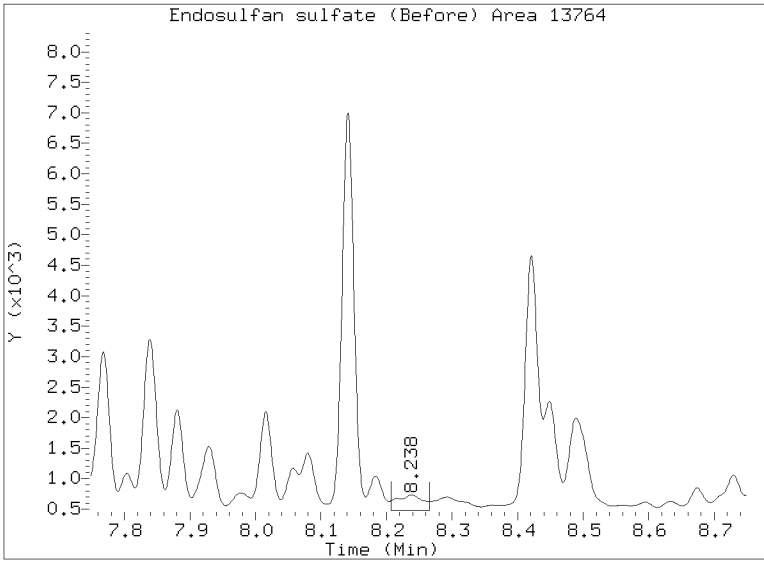
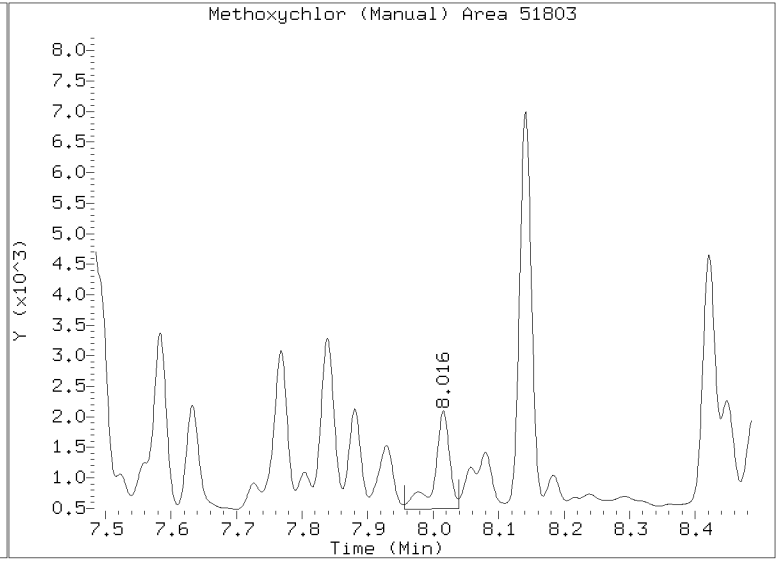
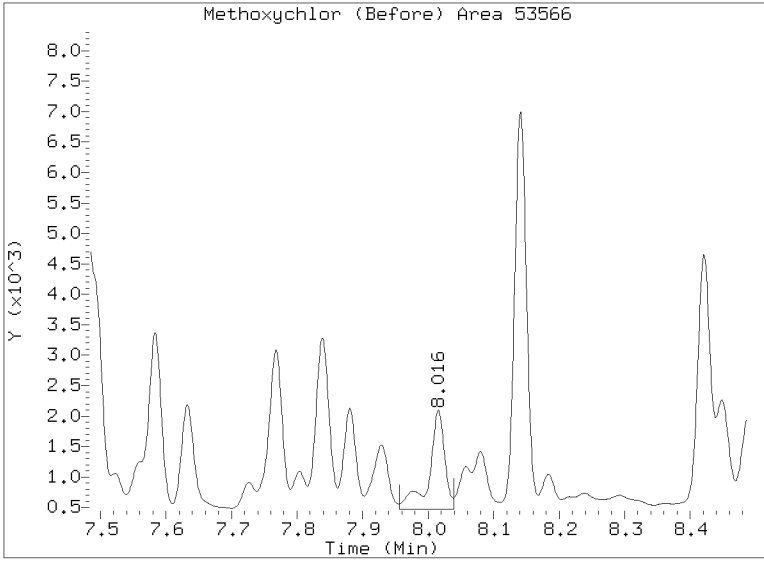
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19



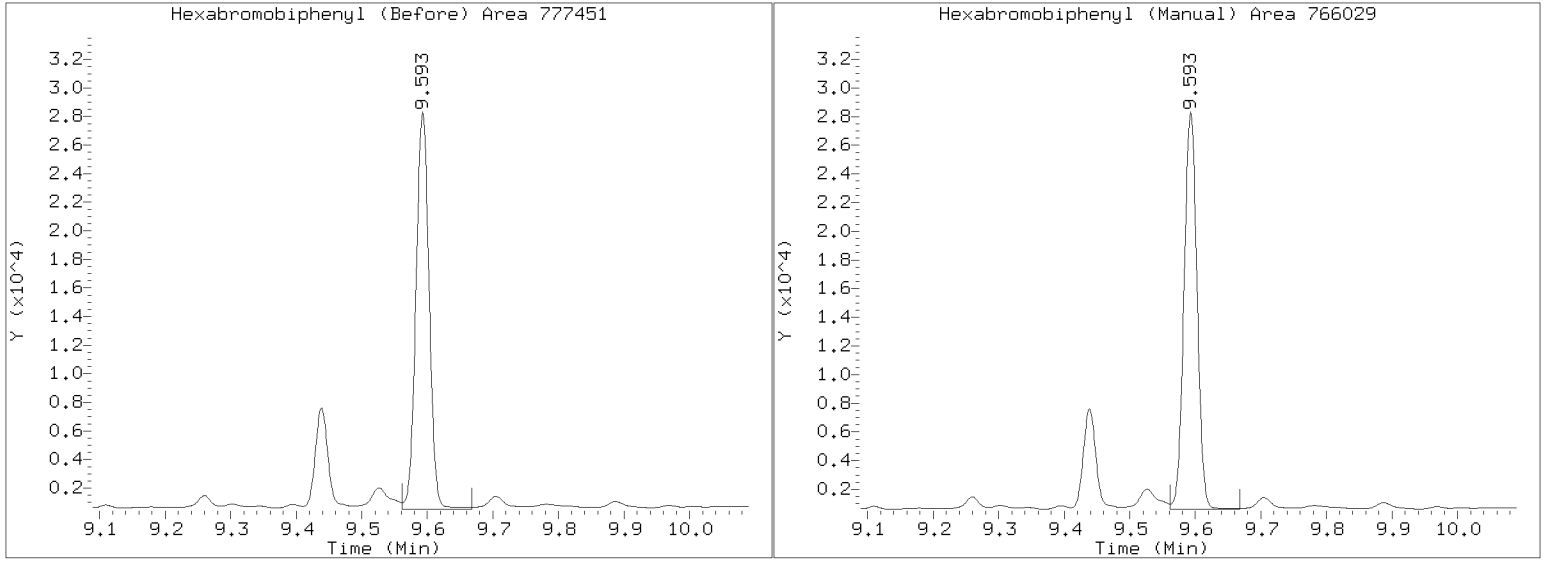
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/071F8201.D
Injection Date: 04-MAR-2023 00:13
Lab ID:23B0229-06 Client ID:
Report Date: 03/09/2023 11:19

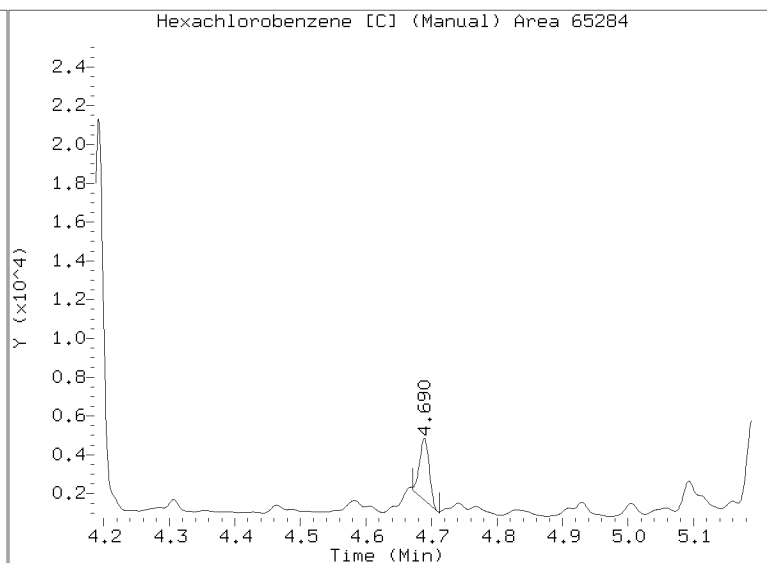
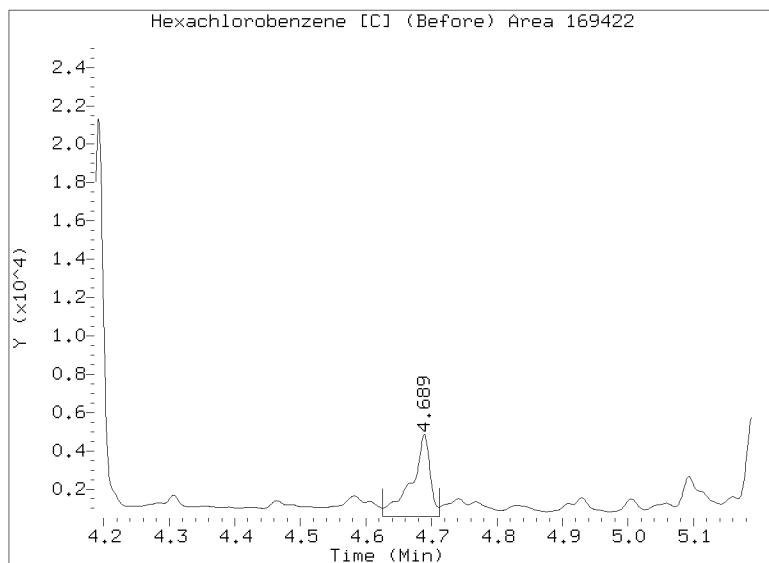
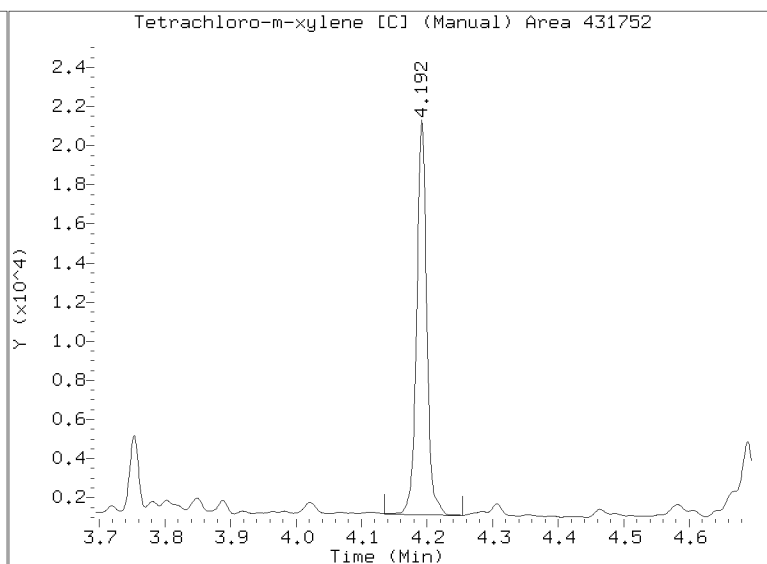
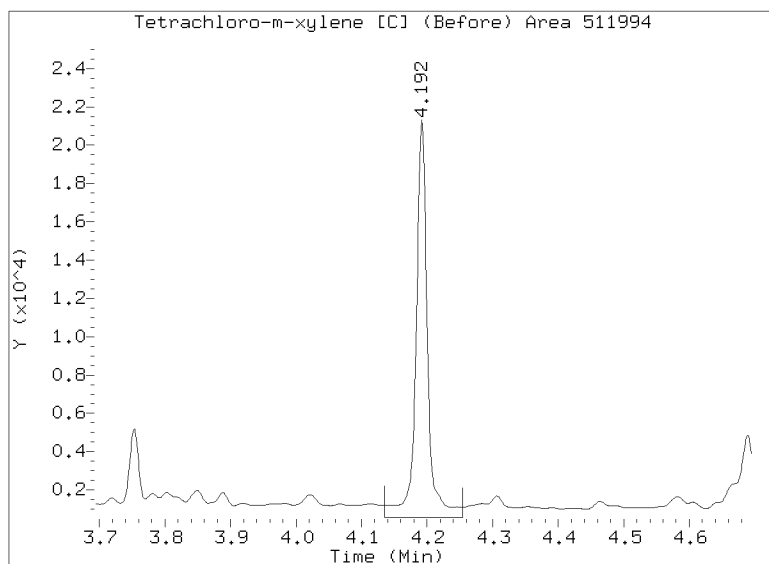
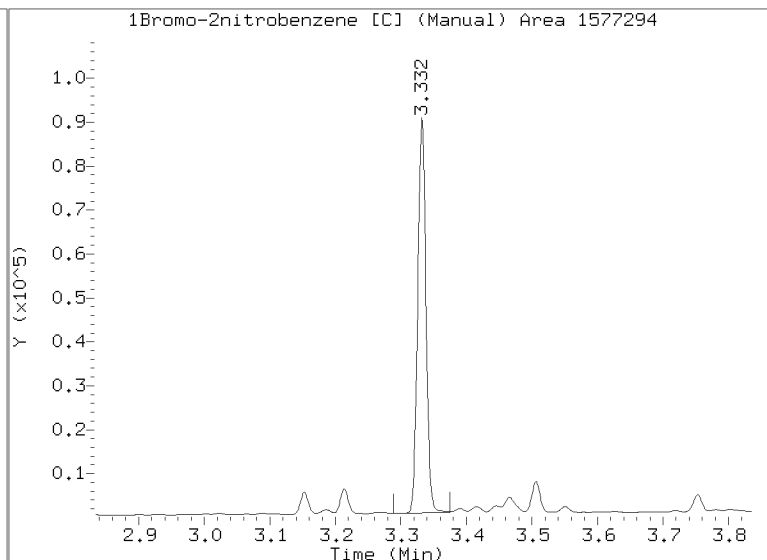
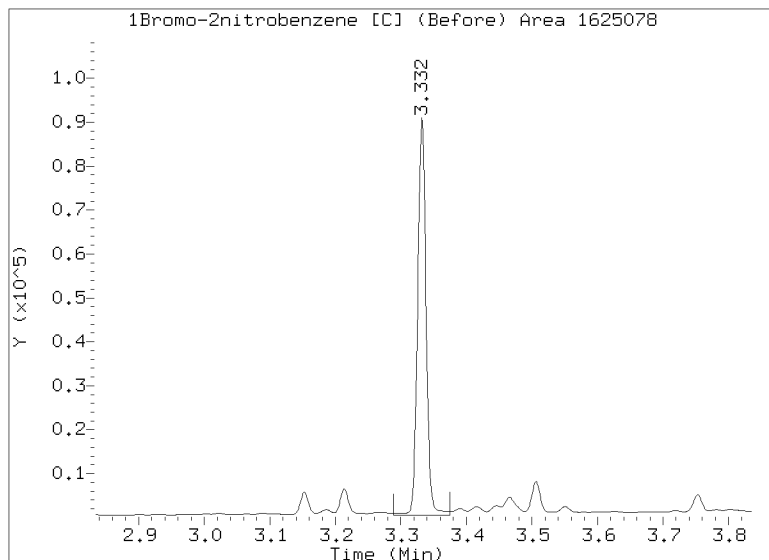


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:

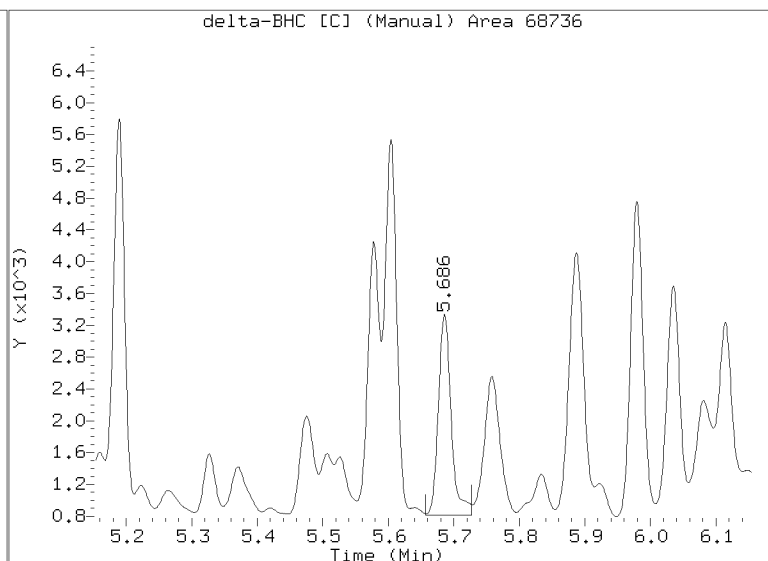
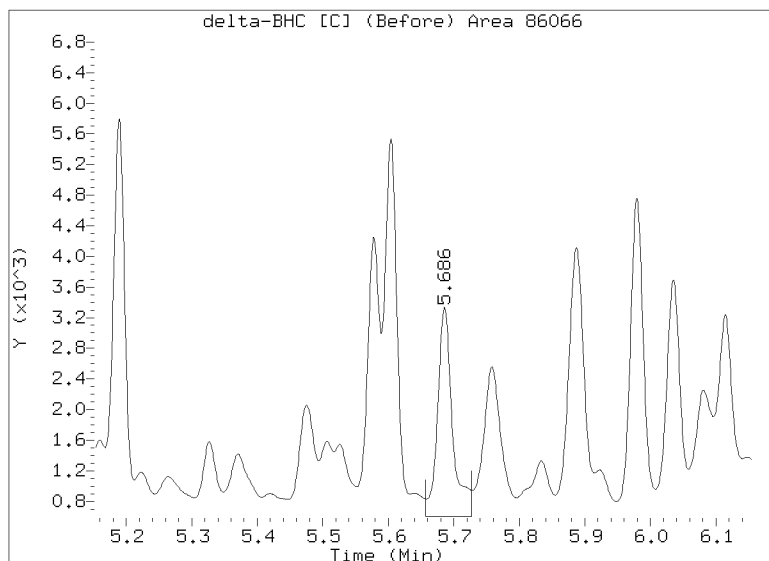
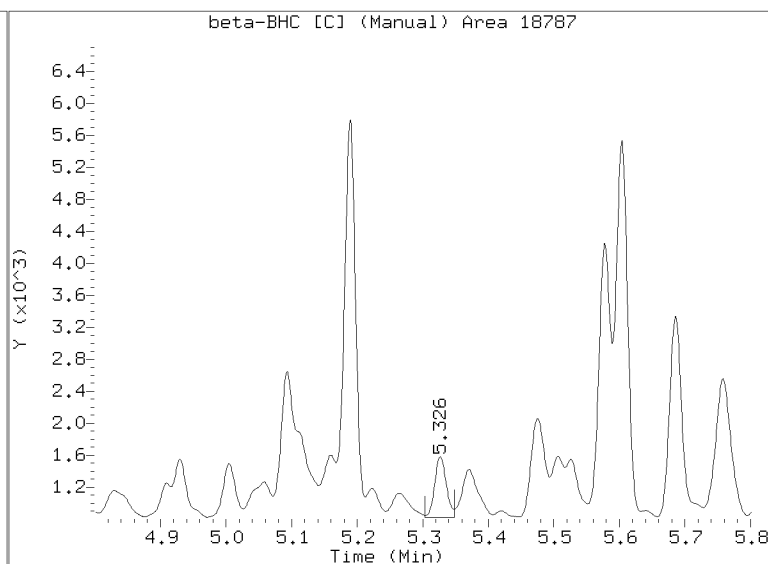
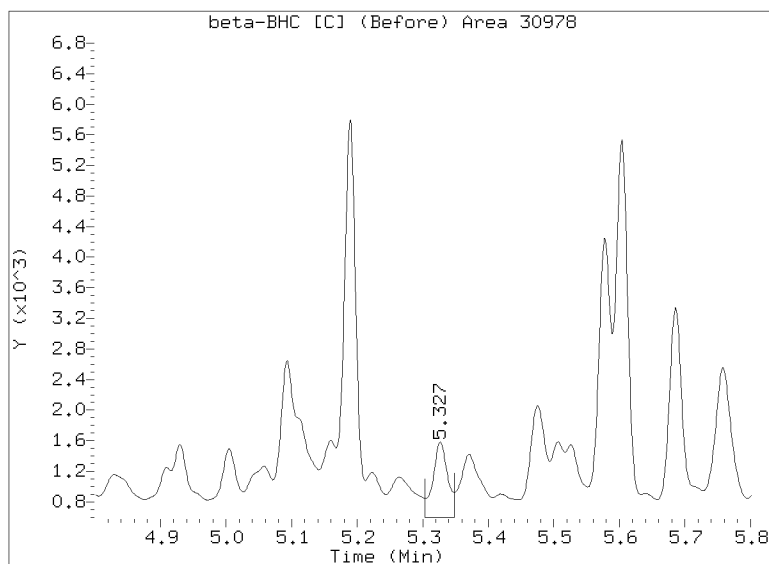
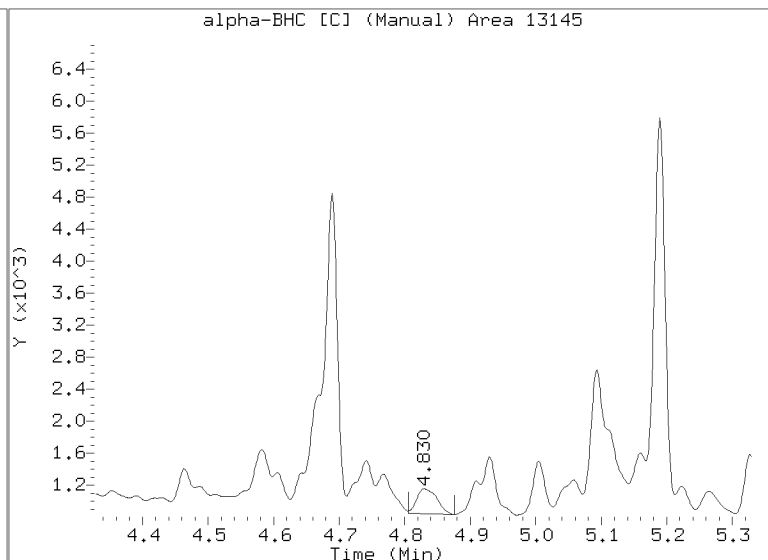
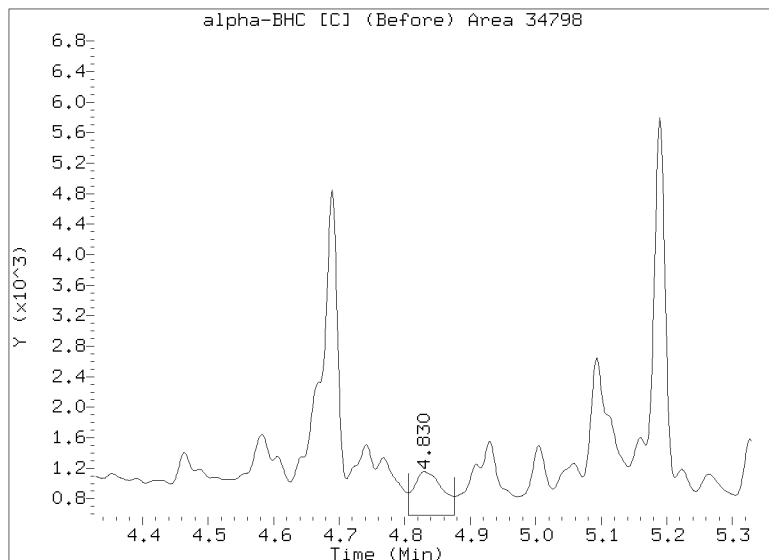


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:

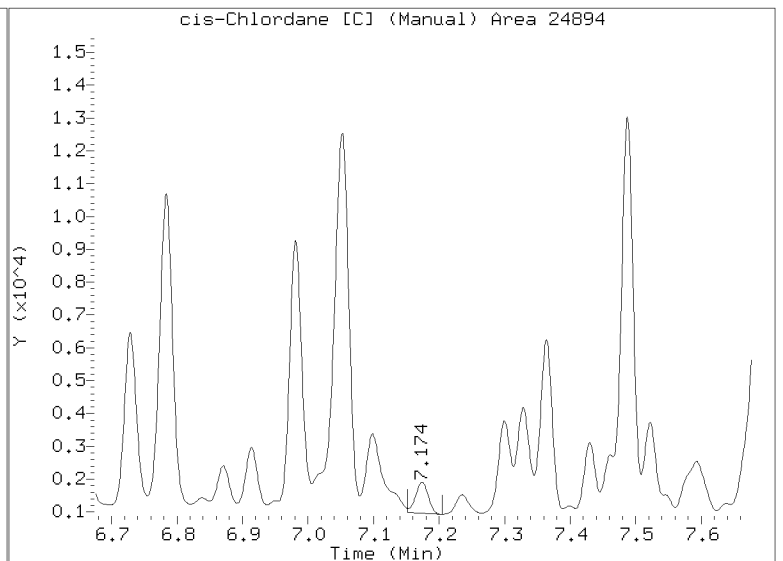
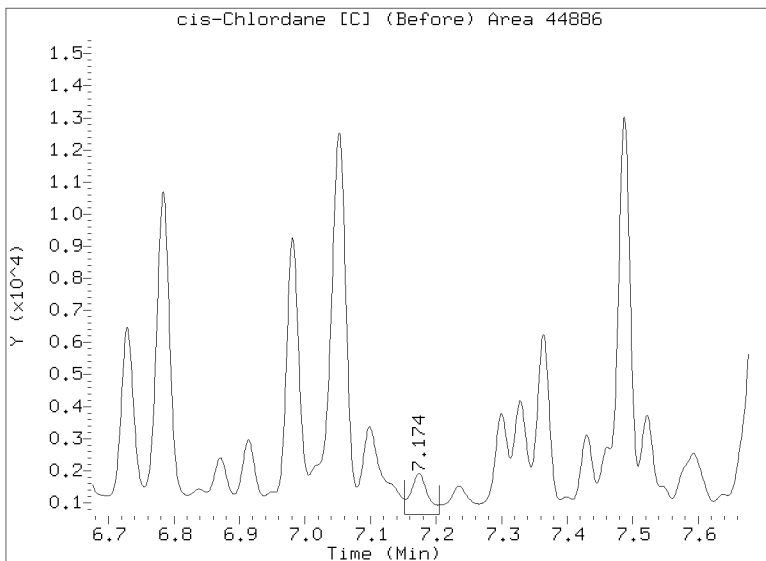
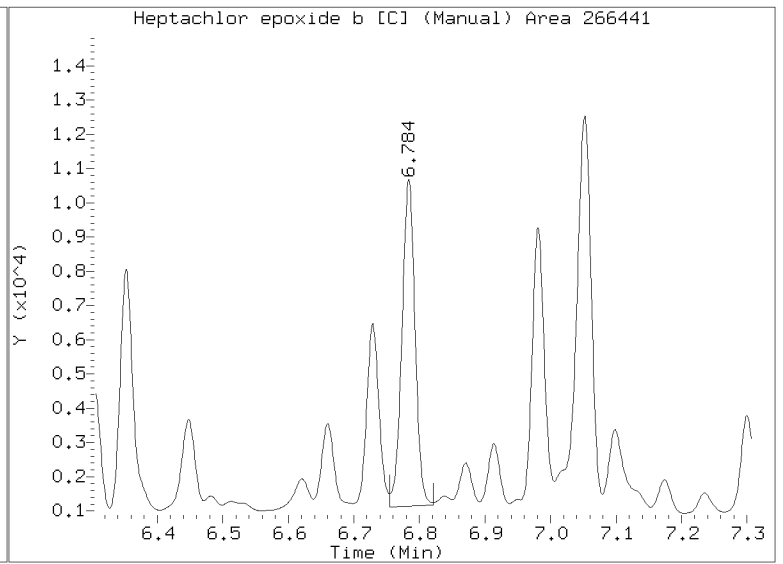
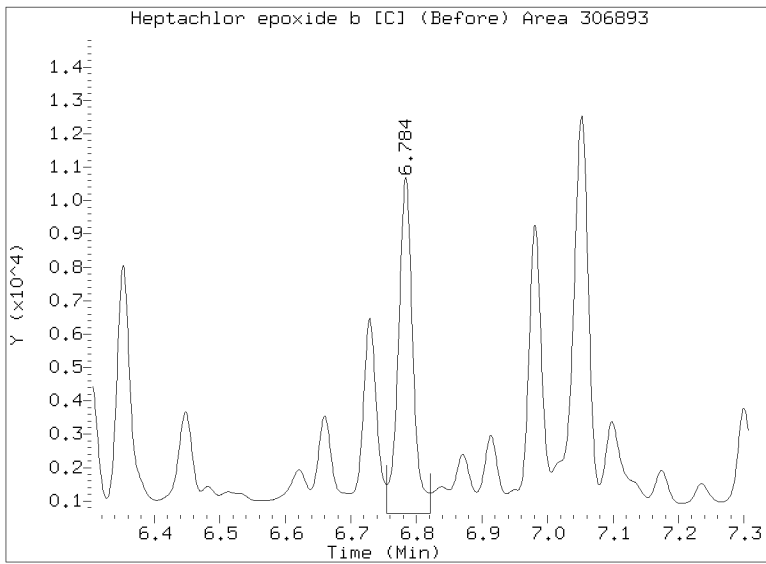
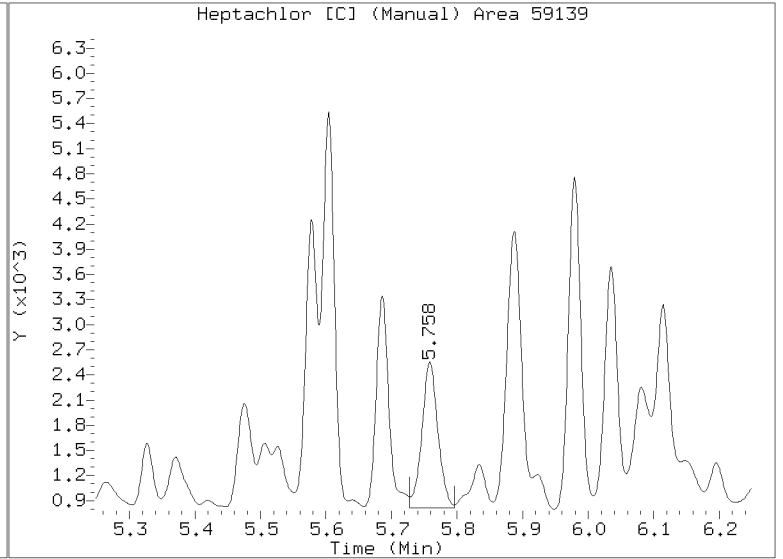
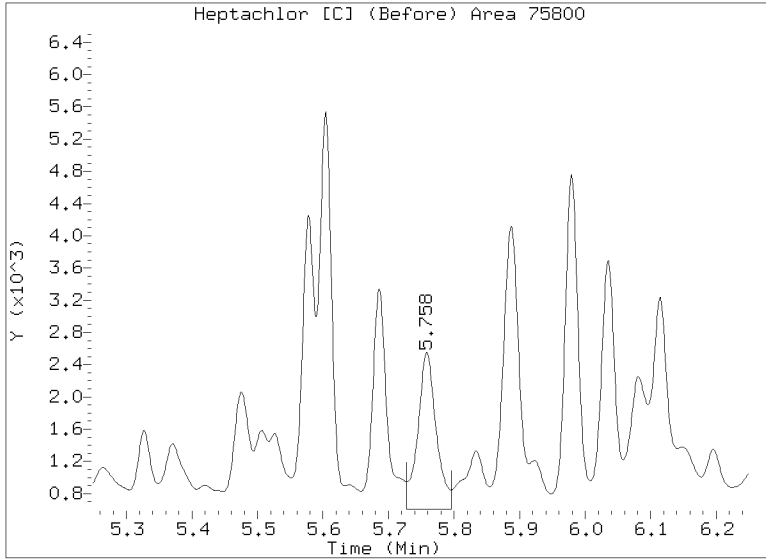


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:

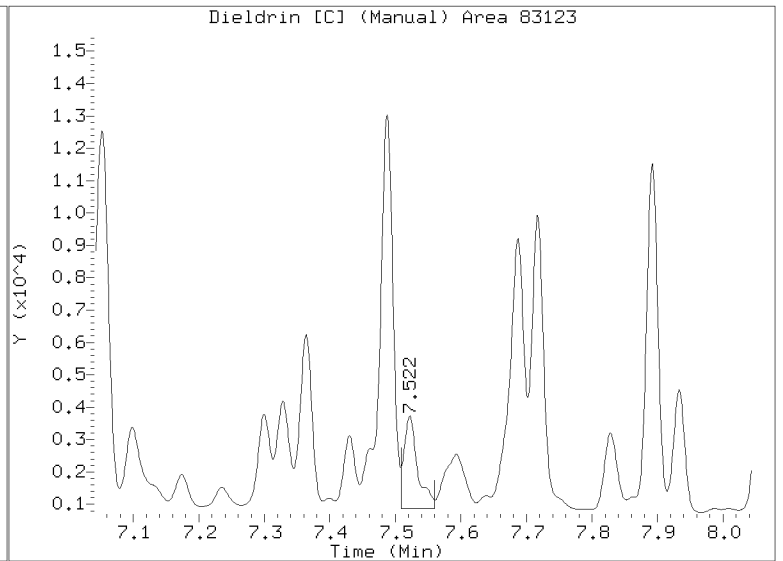
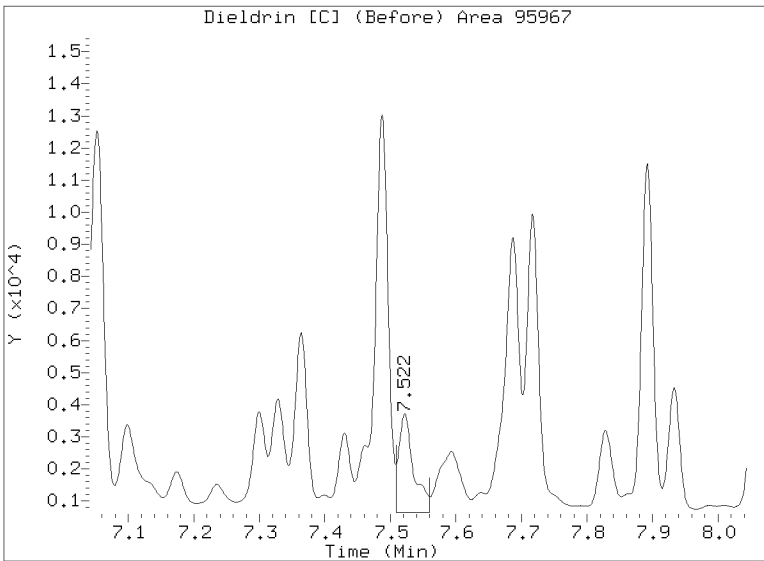
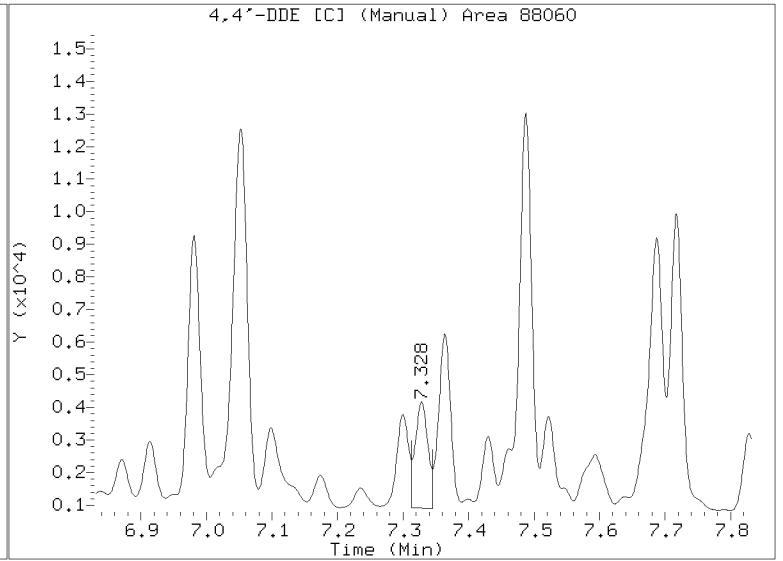
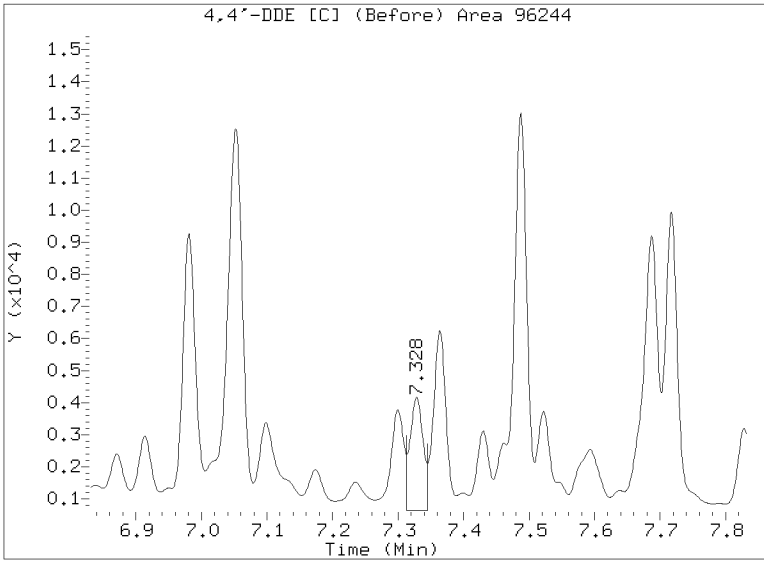
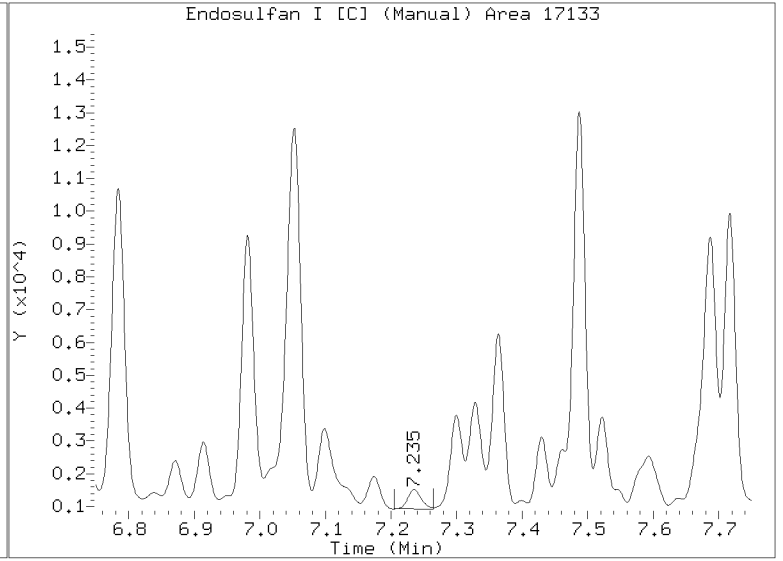
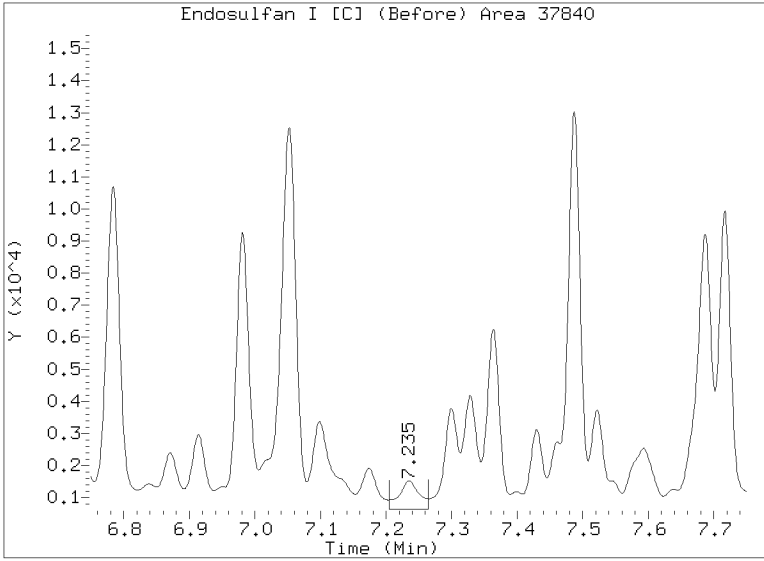


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:

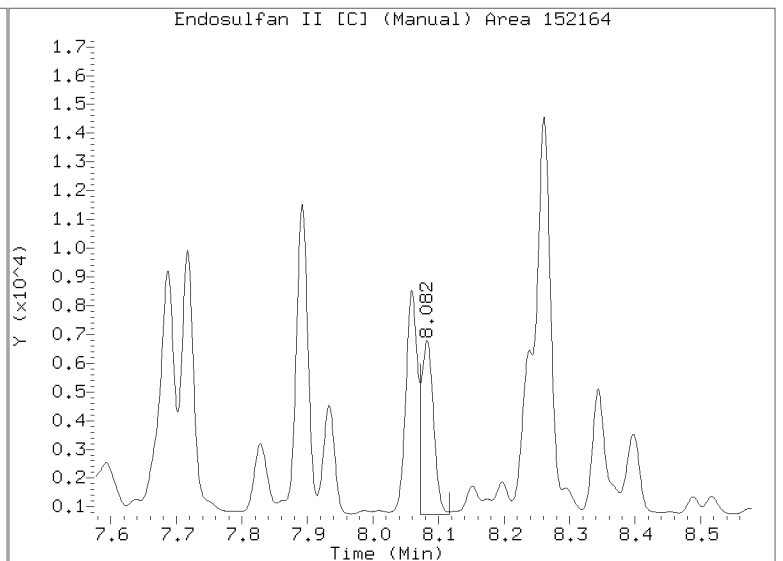
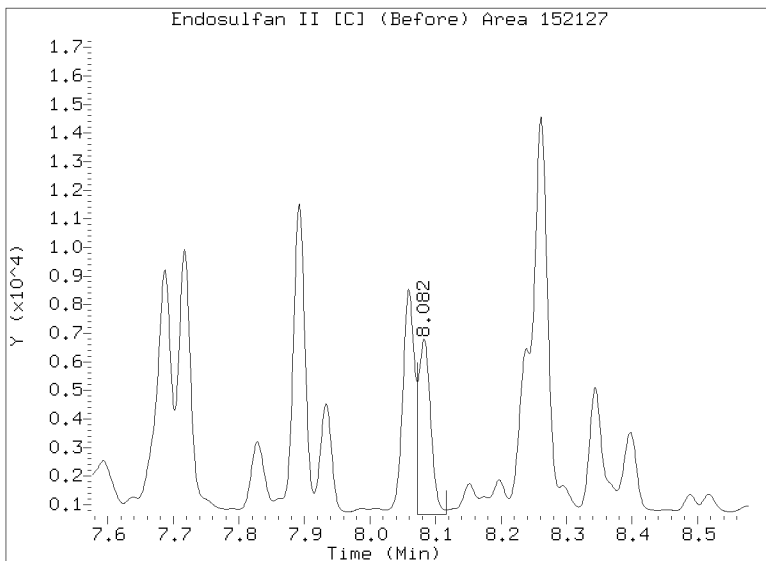
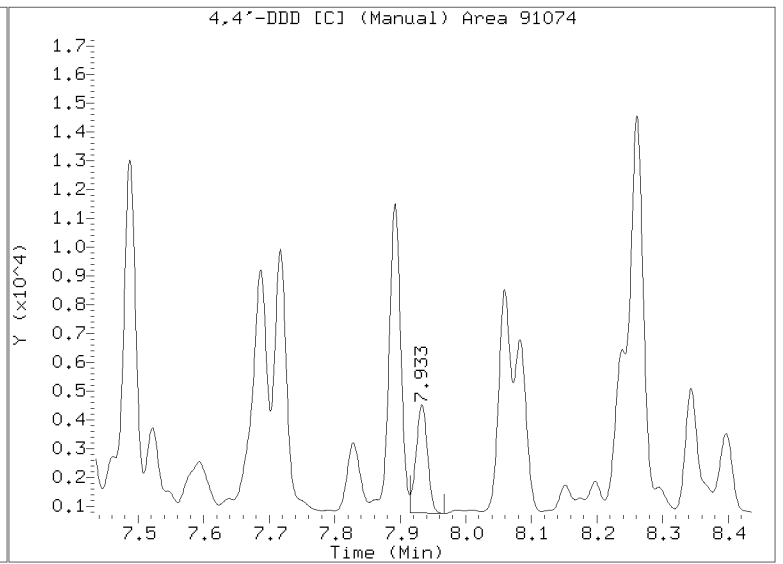
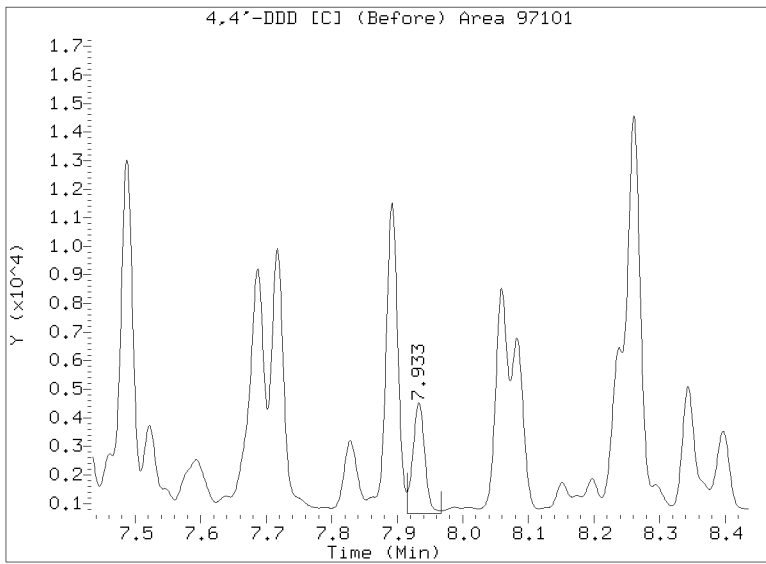
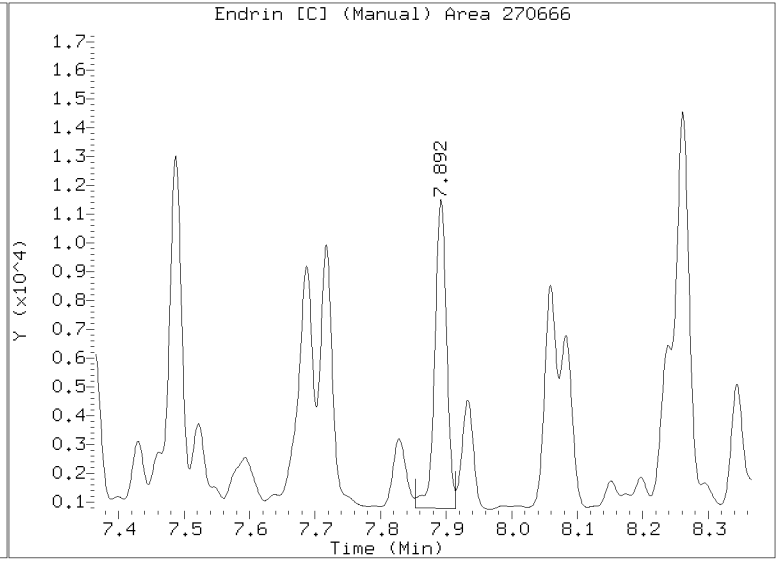
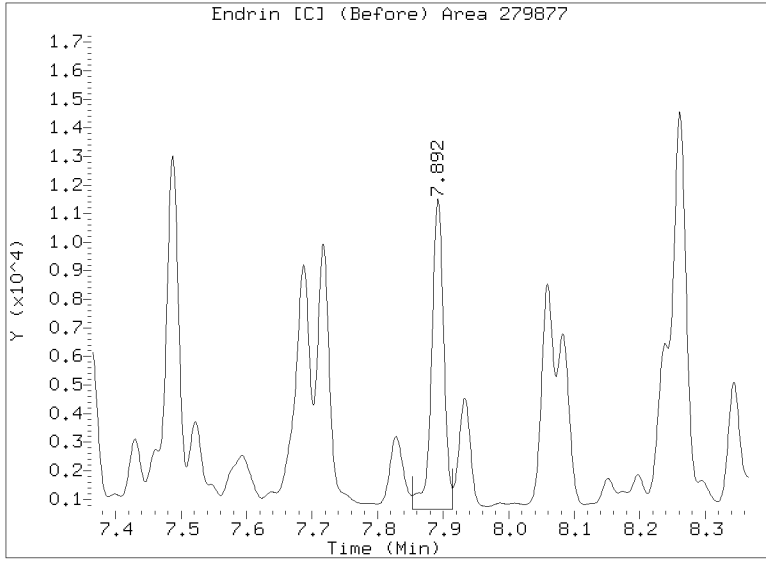


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:

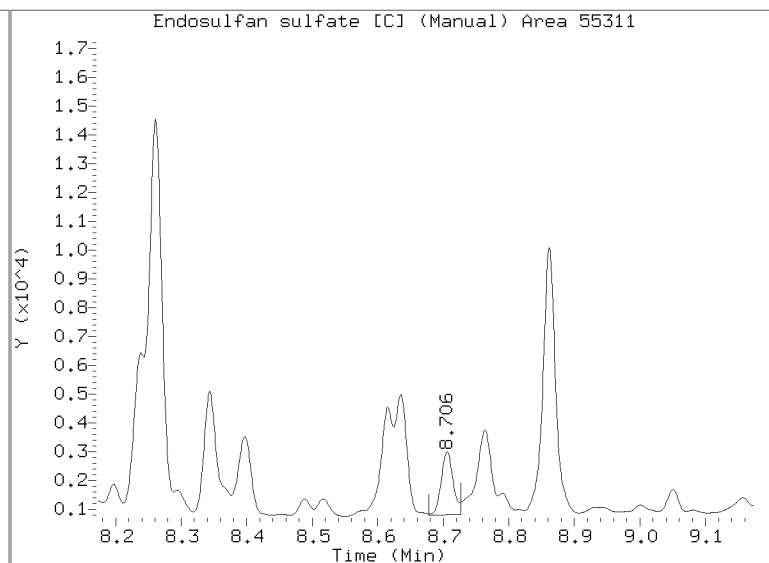
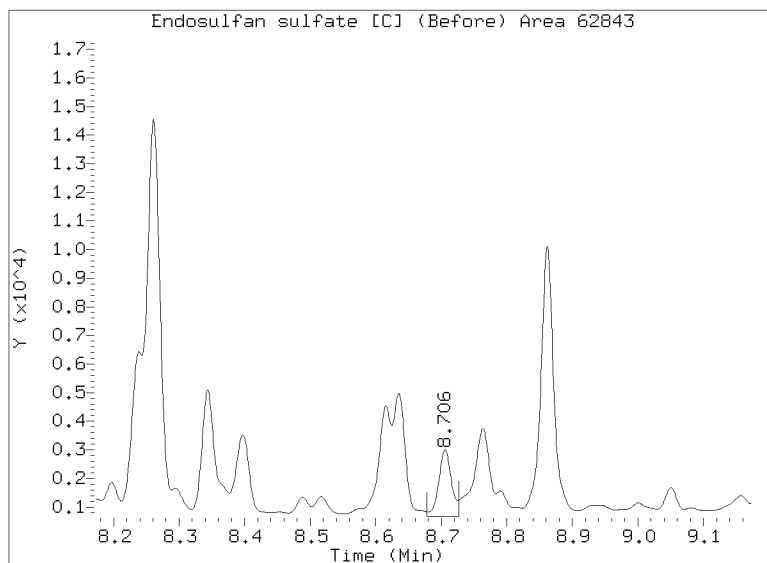
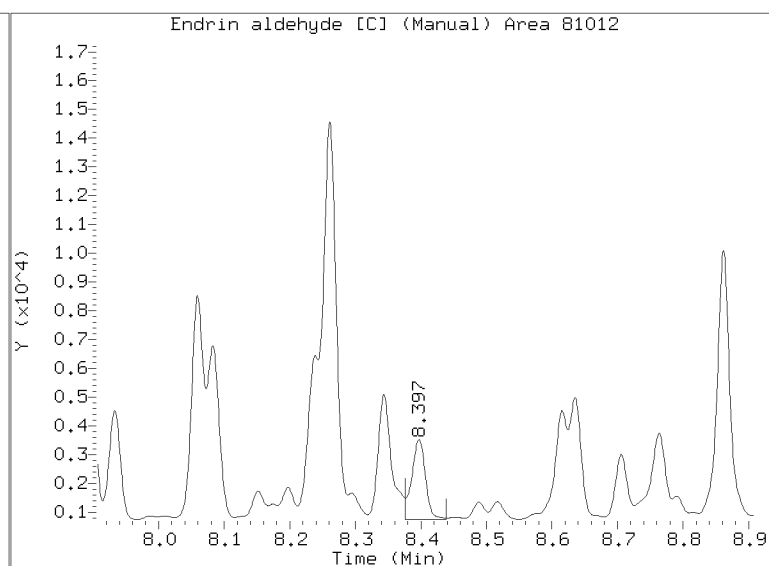
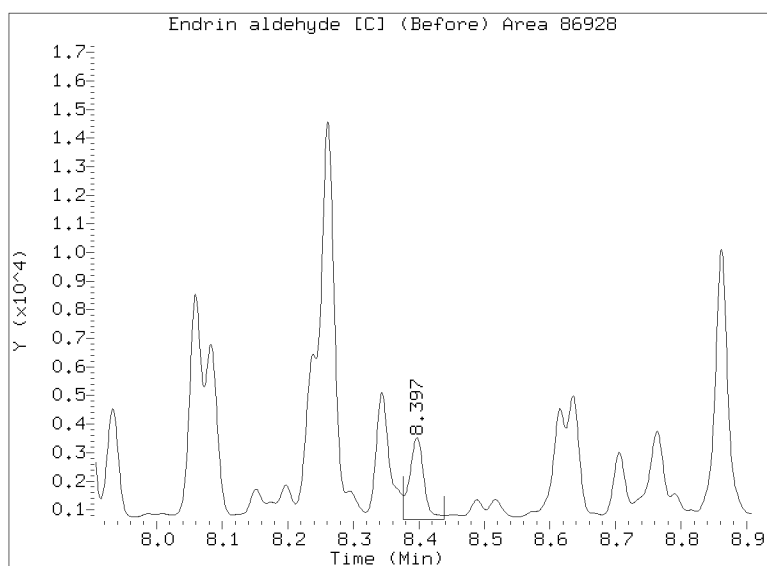
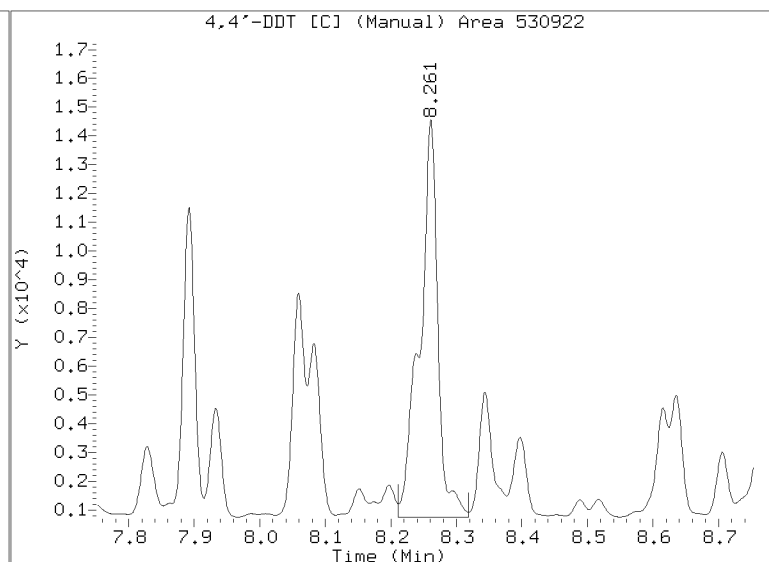
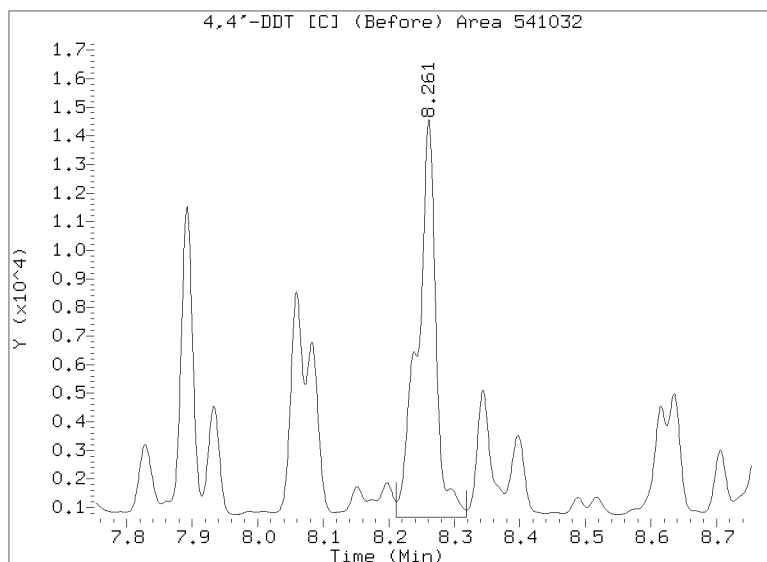


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:

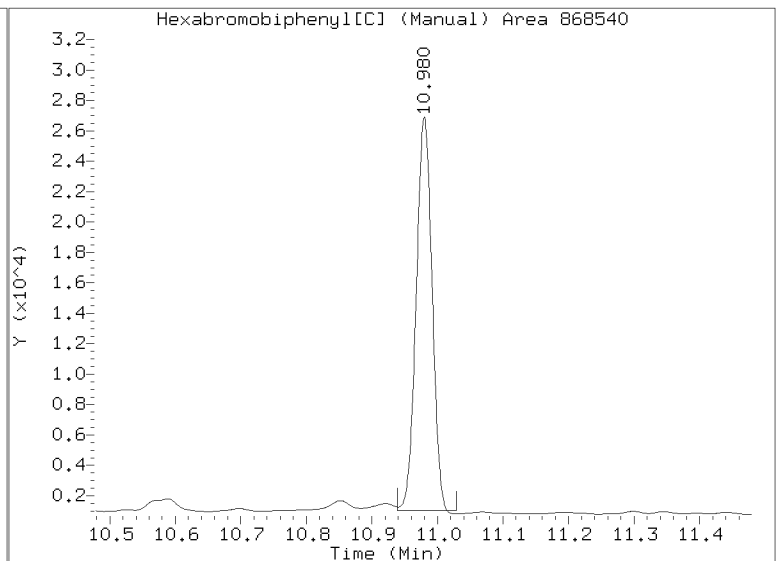
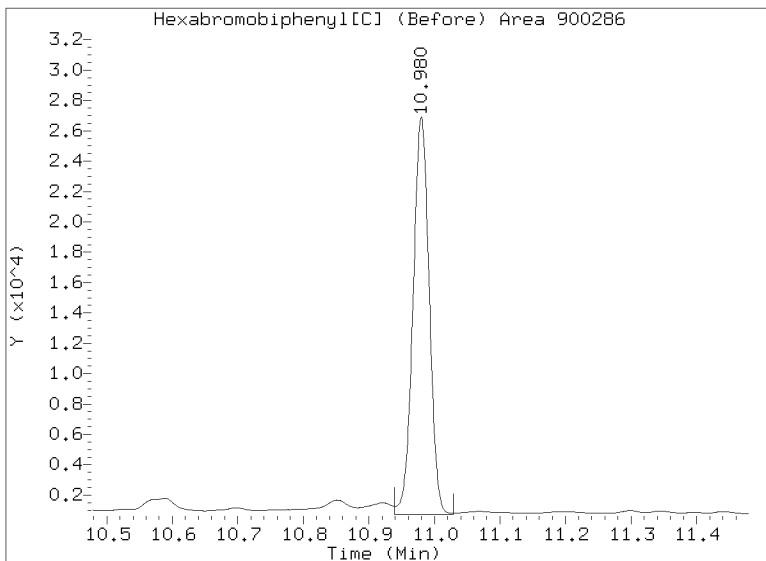
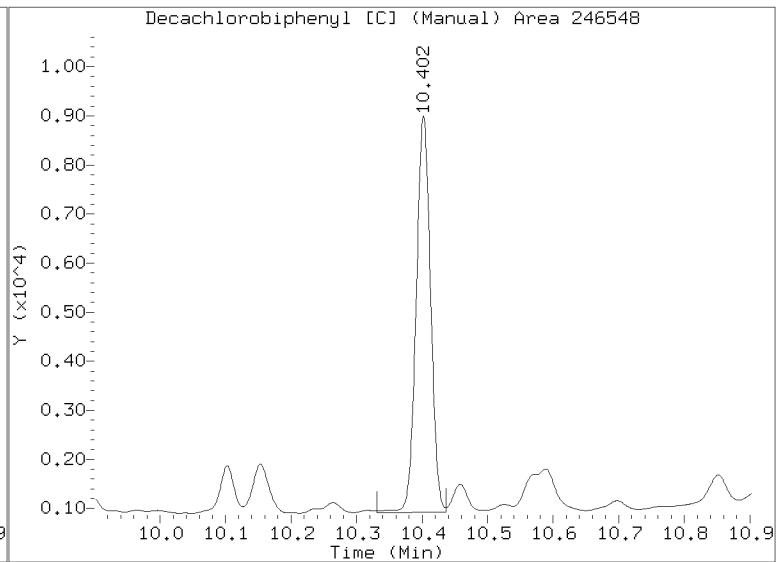
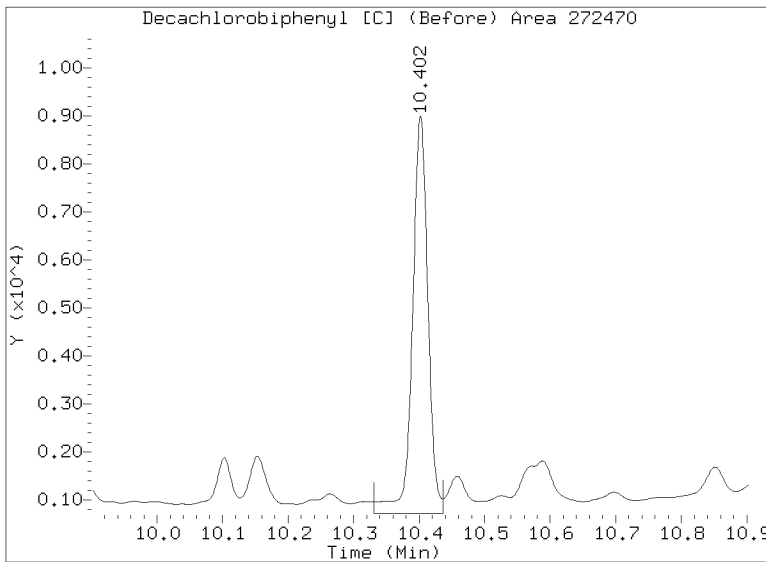
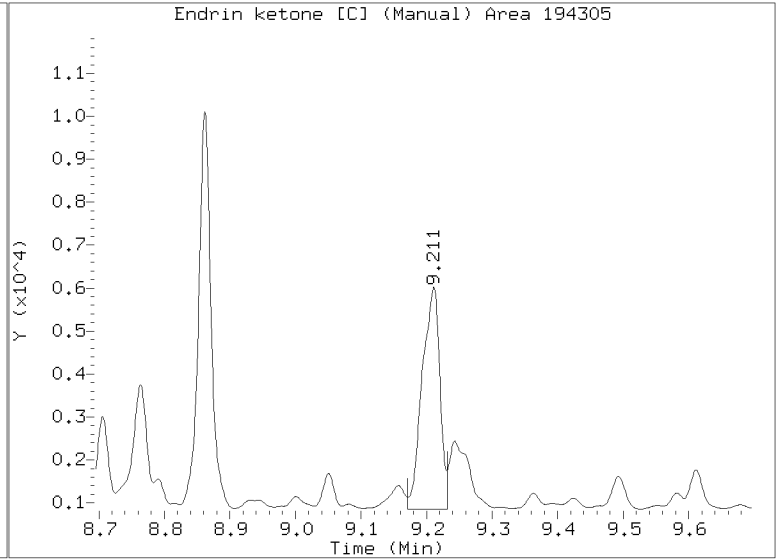
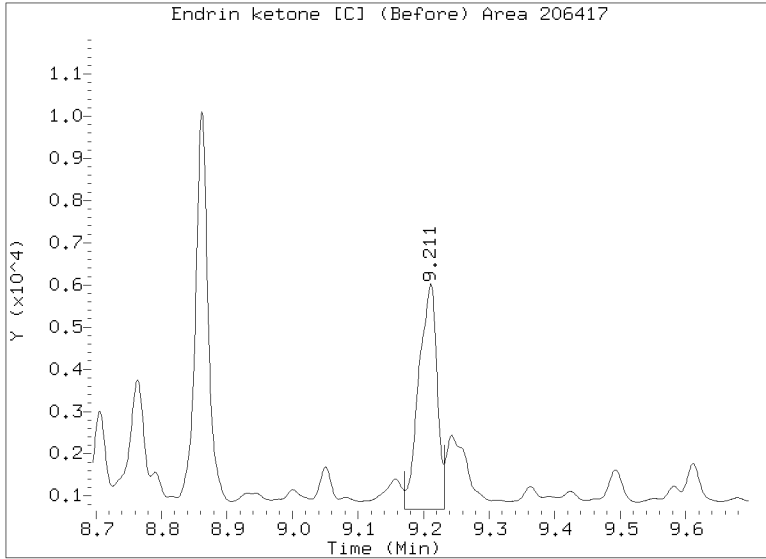


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/071F8201.D

Injection Date: 04-MAR-2023 00:13

Lab ID:23B0229-06 Client ID:





ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>		
Project:	<u>AOC5 MR Phase 1</u>		
Matrix:	<u>Solid</u>	Laboratory ID:	<u>23B0229-08 A</u>
		File ID:	<u>027F3201ECD6.D</u>
Sampled:	<u>02/08/23 15:25</u>	Prepared:	<u>02/17/23 10:59</u>
		Analyzed:	<u>03/07/23 18:17</u>
% Solids:	<u>49.68</u>	Preparation:	<u>EPA 3546 (Microwave)</u>
		Initial/Final:	<u>25.18 g Wet / 2.5 mL</u>
Batch:	<u>BLB0422</u>	Sequence:	<u>SLC0106</u>
		Calibration:	<u>FL00041</u>
Instrument:	<u>ECD6</u>	Column 1:	<u>STX-CLP</u>
		Column 2:	<u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9940	6.55	82.0	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9940	5.72	71.5	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9940	4.95	61.9	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9940	4.86	60.8	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/027F3201.D
Data file 2: /20230307.b/B20230307.b/027F3201.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23B0229-08
Client ID:
Injection Date: 07-MAR-2023 18:17
Report Date: 03/11/2023 07:25
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.397	0.019	42215	4.835	0.019	13392	3.92	0.81	131.9* alpha-BHC M
4.763	-0.003	7664	5.316	0.027	18413	1.85	2.91	44.6* beta-BHC M
4.964	0.012	100823	----	----	----	11.46	0.00	--- delta-BHC
4.687	0.003	27652	5.212	0.003	11224	2.96	0.80	115.4* gamma-BHC (Lindane) M
5.162	-0.014	26123	5.747	0.011	47054	3.15	3.68	15.6 Heptachlor
5.522	0.018	66604	----	----	----	7.16	0.00	--- Aldrin
6.227	0.044	199004	6.826	0.033	9865	24.67	0.82	187.2* Heptachlor epoxide b
6.670	0.045	154993	7.223	-0.013	20840	20.94	1.96	165.8* Endosulfan I
6.914	0.029	15685	----	----	----	1.97	0.00	--- Dieldrin
6.539	-0.007	125634	7.316	-0.003	66561	17.02	6.18	93.5* 4,4'-DDE
7.159	0.024	242179	7.880	0.027	192550	43.27	27.20	45.6* Endrin
7.399	0.028	19315	8.071	0.007	110717	3.83	15.26	119.7* Endosulfan II
----	----	----	7.921	-0.003	64923	0.00	9.43	--- 4,4'-DDD
----	----	----	8.694	0.034	56338	0.00	8.84	--- Endosulfan sulfate
----	----	----	8.249	0.008	382715	0.00	57.59	--- 4,4'-DDT
8.001	0.029	29618	8.911	0.031	42155	13.12	14.33	8.9 Methoxychlor
----	----	----	9.198	0.016	166277	0.00	24.16	--- Endrin ketone
7.824	0.024	60772	8.386	-0.009	73533	15.12	14.37	5.1 Endrin aldehyde
6.322	-0.002	14129	7.036	0.032	142847	1.72	11.87	149.3* trans-Chlordane
6.489	0.018	81660	7.161	-0.002	21682	9.94	1.84	137.5* cis-Chlordane
2.317	-0.019	9075	2.468	-0.014	7630	0.81	0.48	50.0* Hexachlorobutadiene
----	----	----	----	----	----	0.00	0.00	--- Hexachlorobenzene
3.860	0.000	188190	4.183	-0.000	283824	24.76	24.30	1.9 Tetrachloro-m-xylene MN
9.424	0.003	141821	10.386	0.001	157341	32.79	28.60	13.7 Decachlorobiphenyl N

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	558917	-16.9
Hexabromobiphenyl	609723	426896	-30.0

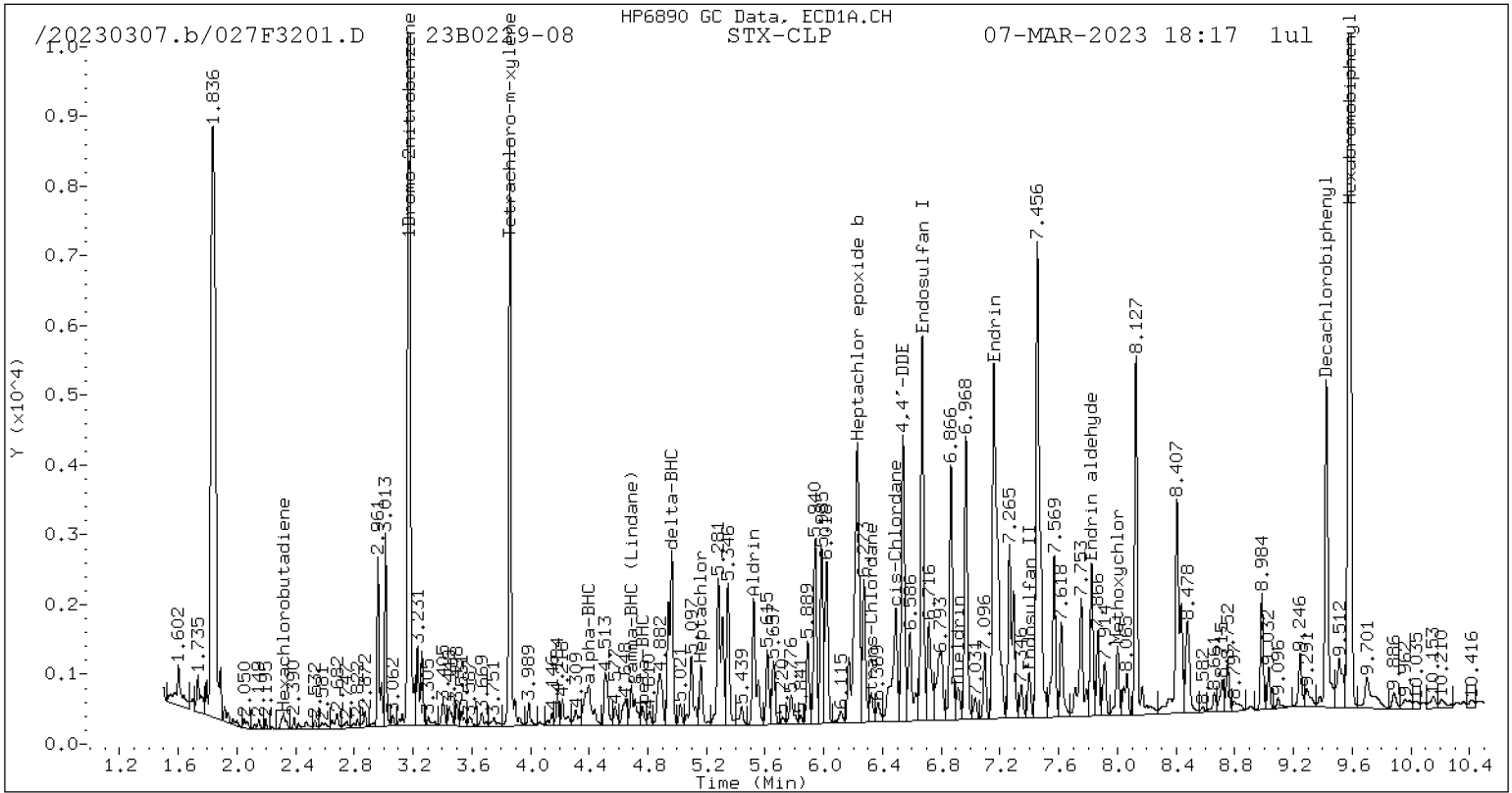
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	829688	-17.6
Hexabromobiphenyl	769764	497820	-35.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

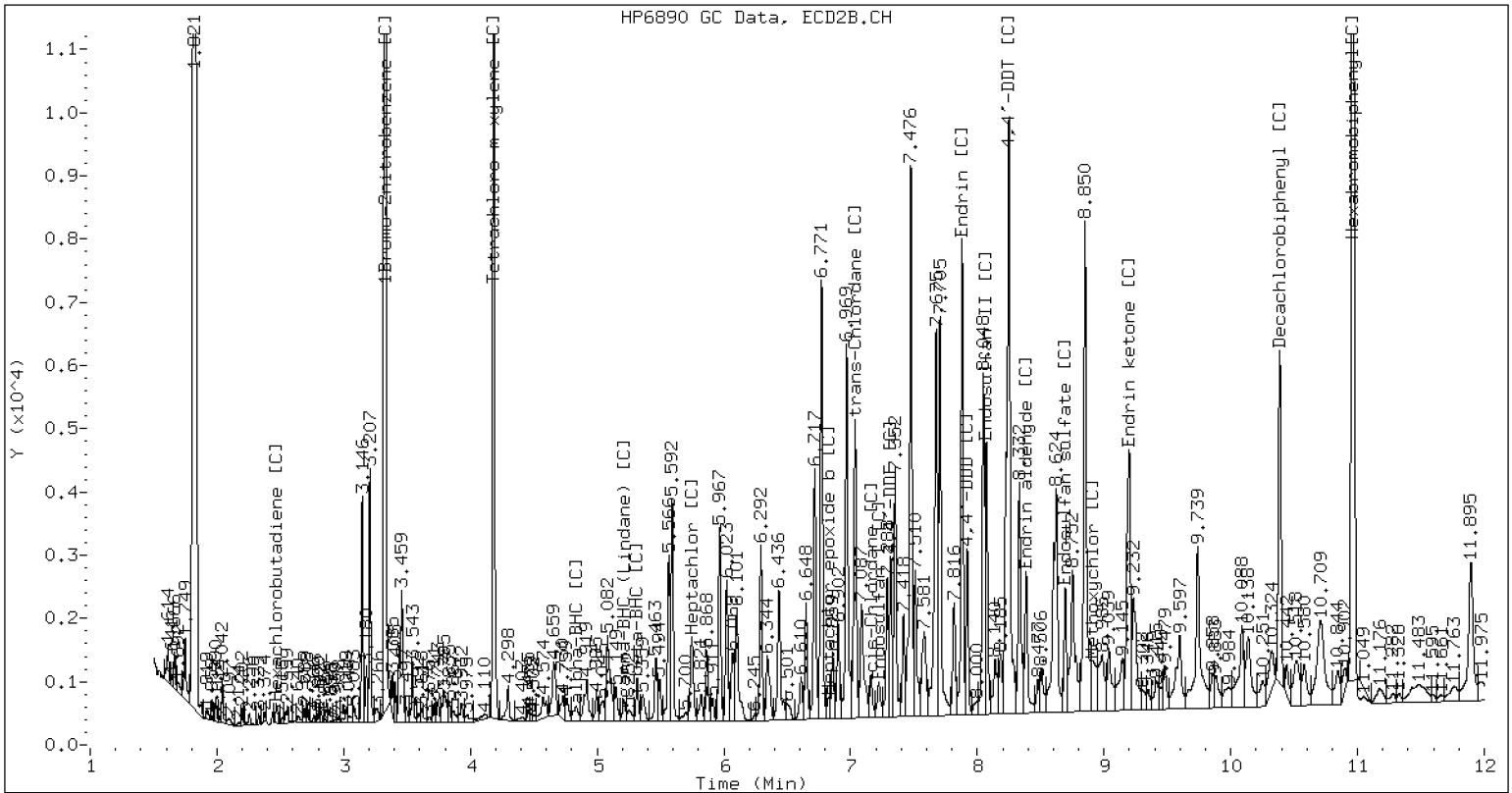
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

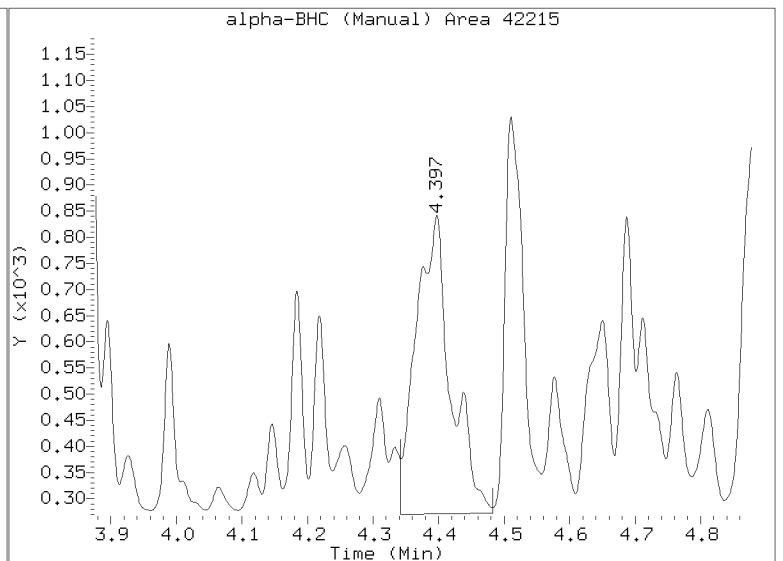
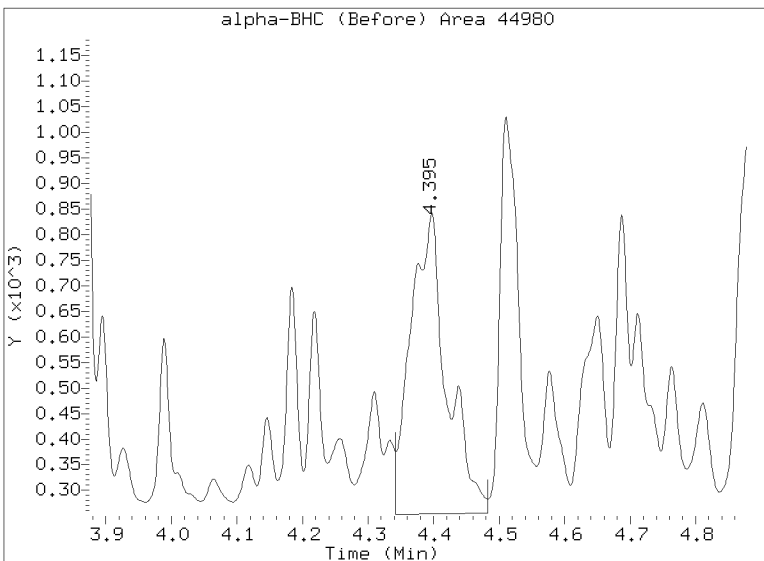
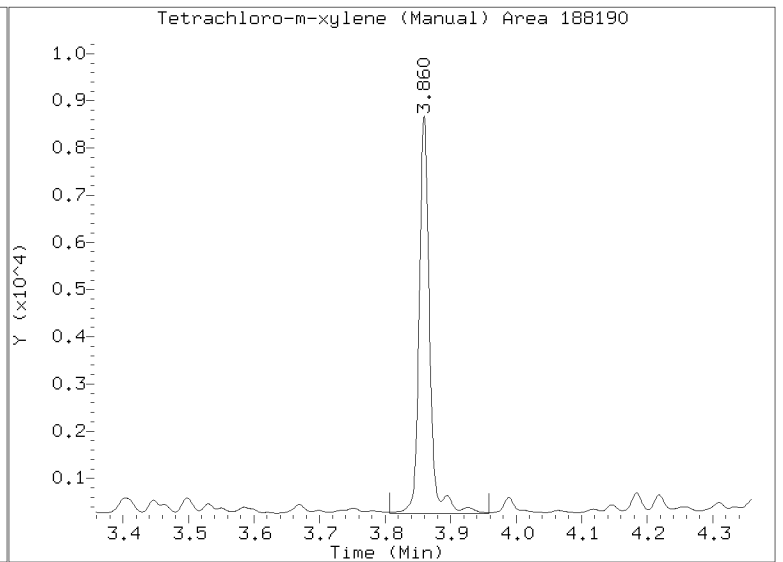
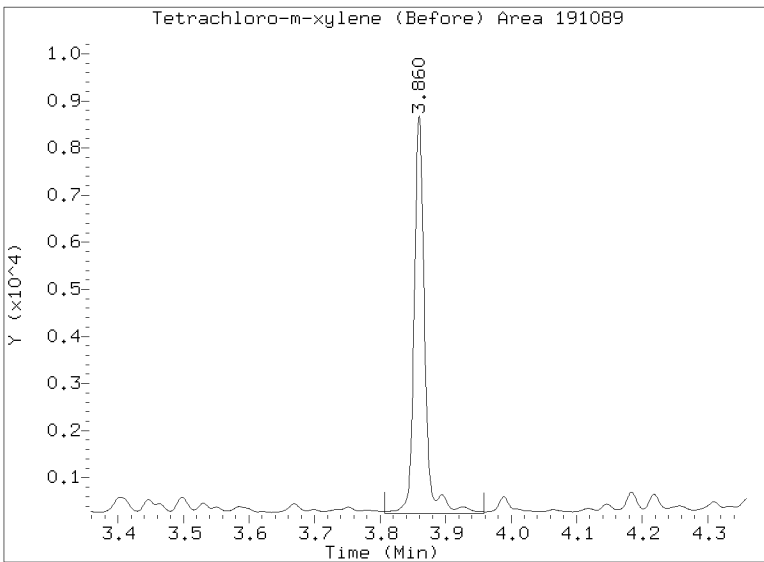
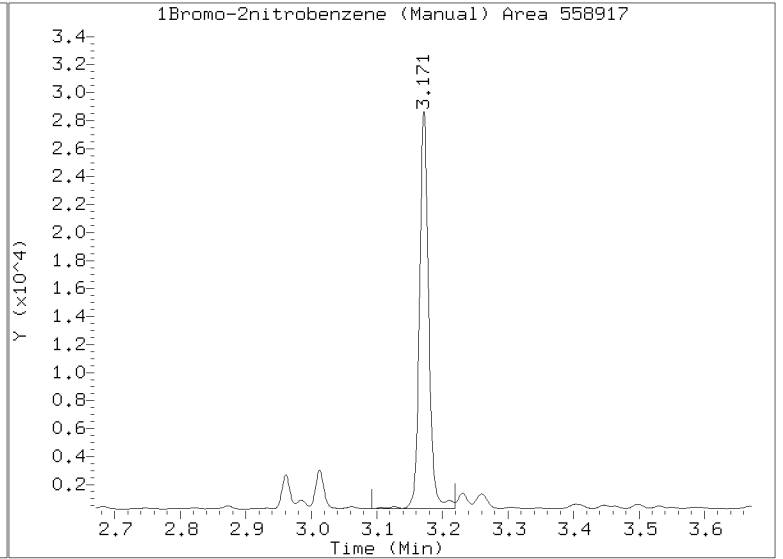
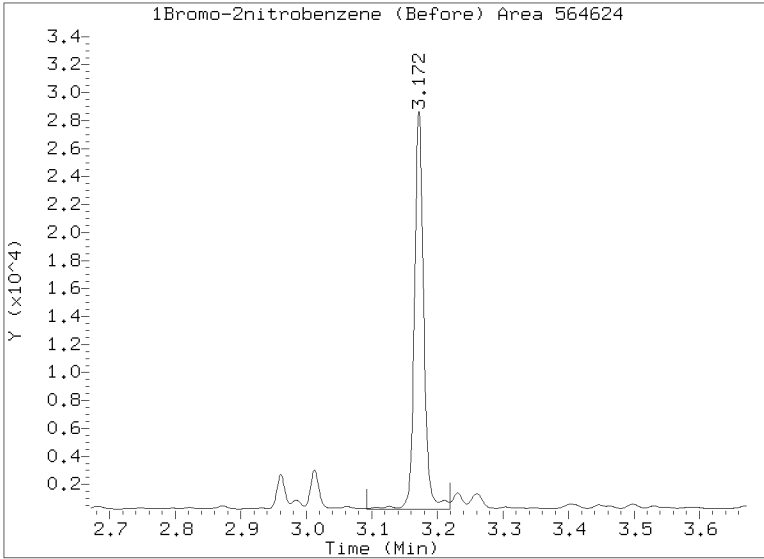
/20230307.b/B20230307.b/027F3201.D 23B0229-08 CLP2



CLP-2 Manual Integration: YES

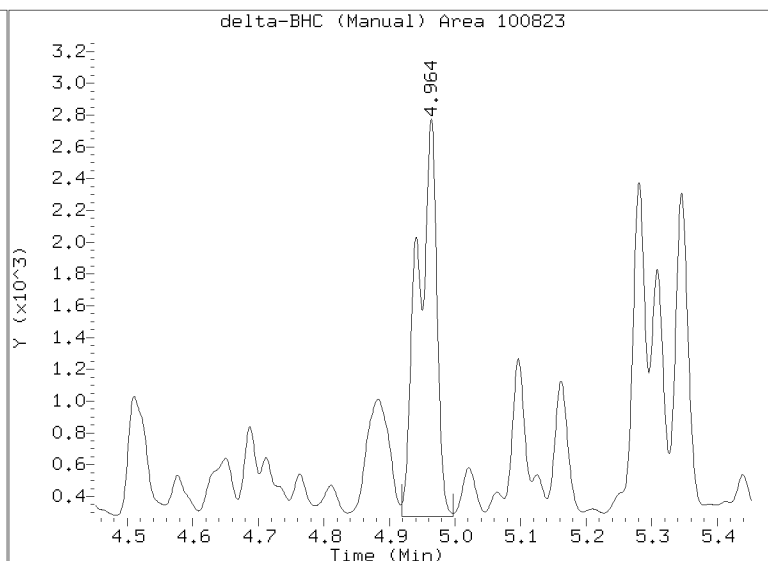
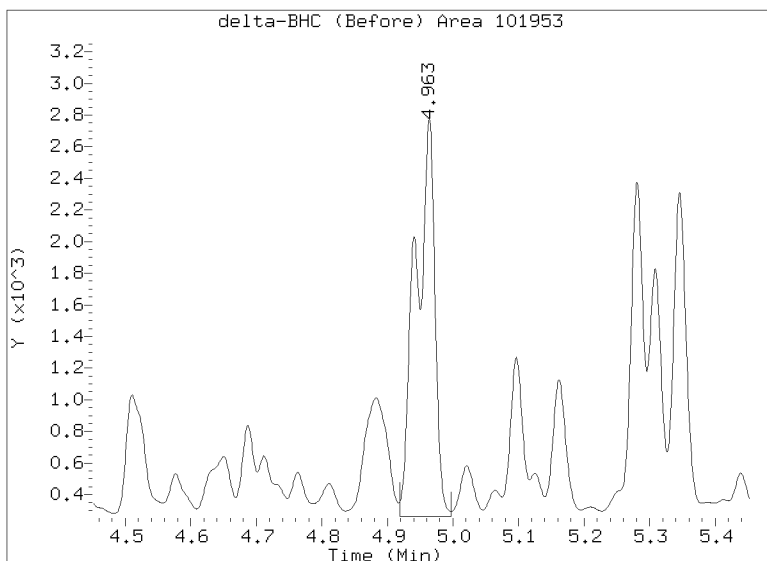
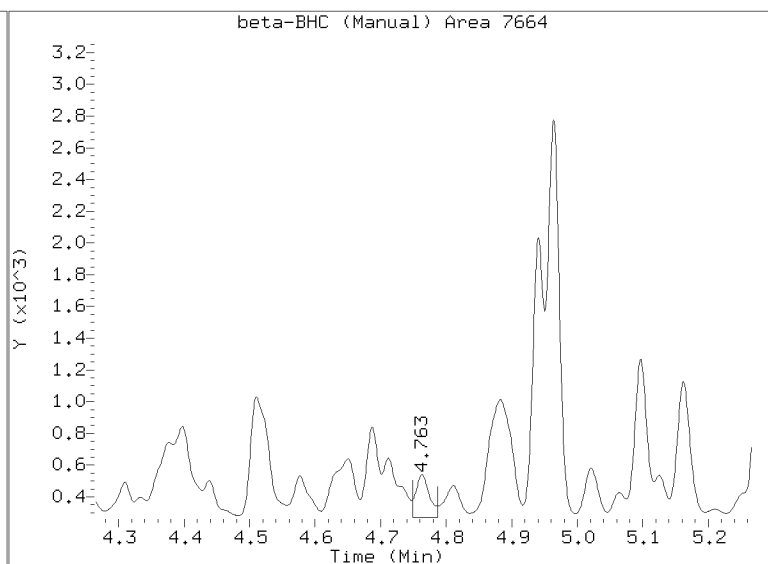
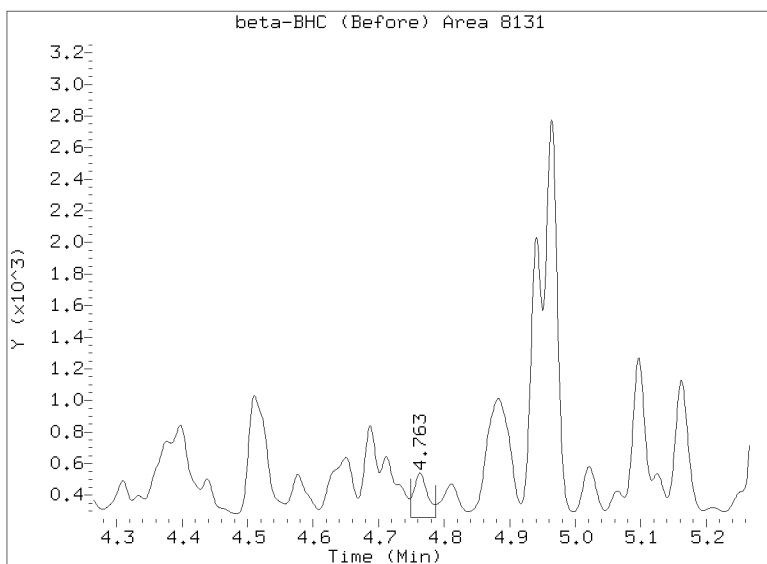
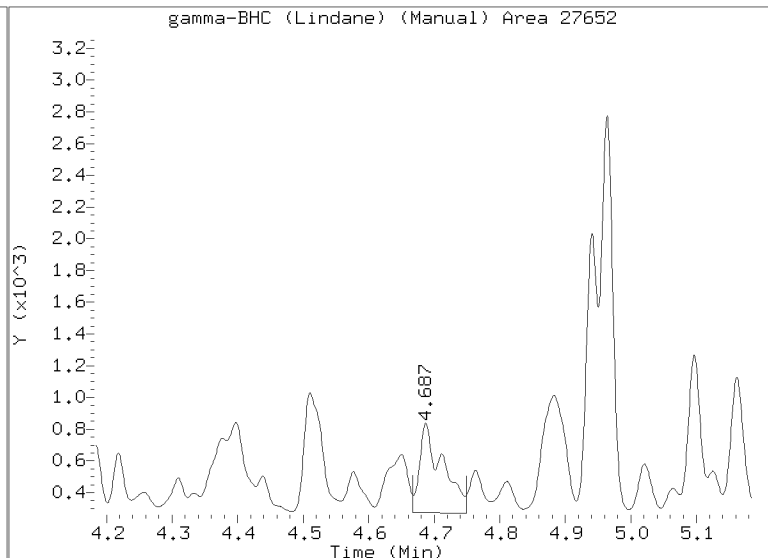
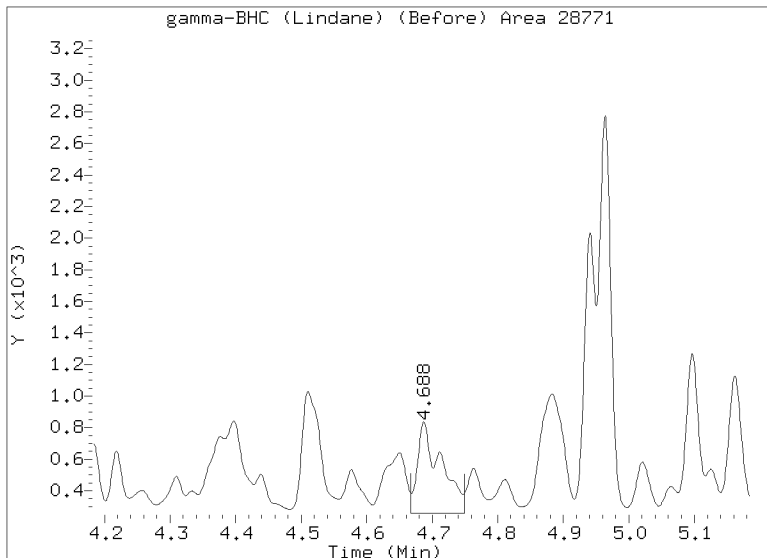
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/027F3201.D
Injection Date: 07-MAR-2023 18:17
Lab ID:23B0229-08 Client ID:
Report Date: 03/11/2023 07:25



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/027F3201.D
Injection Date: 07-MAR-2023 18:17
Lab ID:23B0229-08 Client ID:
Report Date: 03/11/2023 07:25





PREPARATION BATCH SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLB0422 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1236	23B0229-02	067F7601.D	02/17/23 10:59	
LDW23-SS1237	23B0229-03	025F2801.D	02/17/23 10:59	
LDW23-SS1150	23B0229-04	069F7801.D	02/17/23 10:59	
LDW23-SS1008	23B0229-05	026F3101.D	02/17/23 10:59	
LDW23-SC1008	23B0229-06	071F8201.D	02/17/23 10:59	
LDW23-SC1013	23B0229-08	027F3201ECD6.D	02/17/23 10:59	
Blank	BLB0422-BLK1	062F7101.D	02/17/23 10:59	
LCS	BLB0422-BS1	063F7201.D	02/17/23 10:59	
LCS Dup	BLB0422-BSD1	064F7301.D	02/17/23 10:59	
LDW23-SC1013	BLB0422-MS1	0023F2601.D	02/17/23 10:59	
LDW23-SC1013	BLB0422-MSD1	024F2701.D	02/17/23 10:59	



Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYTICAL RESOURCES, LLC

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0422

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version: HCB Only)

Matrix: Solid

Date Prepared: 02/17/23

Balance ID: B14642614

Set Up By: CTO 21602

WO Comments

23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> please push this to front of LDW line of samples

The following standards may be missing from this batch:

Designator	Description
62	Toxaphene
44	WND
QLS 10	QLS Spike

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 Actual	(REQ) GPC (1:1)	<input checked="" type="checkbox"/> Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Extract	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23B0229-02 A	56.0	22.38	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23B0229-03 A	54.8	22.81	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23B0229-04 A	52.2	23.99	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23B0229-05 A	44.9	27.87	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23B0229-06 A	48.6	25.74	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23B0229-08 A	49.7	25.18	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23B0276-01 A	63.6	19.65	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 Actual	(REQ) GPC (1:1)	<input checked="" type="checkbox"/> Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Extract	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLB0422-BLK1	100.0	12.54	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLB0422-BS1	100.0	12.64	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLB0422-BSD1	100.0	12.58	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLB0422-MS1	49.7	25.16	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23B0229-08
BLB0422-MSD1	49.7	25.16	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23B0229-08

Client ID verified By: NB02117/23

Date

Preparation Reviewed By

Date

Extraction Date and Time

LS 2/23/23

02/17/23 10:59



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0422

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDA) in Solid (Version:FCB Only)

VO Comments
23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Please push this to front of LDW line of samples

Prep Steps

Reagents Used

Microwave	Station/Reagent	Standard ID
1 2 3 LD 21/17/23 Analysr/Date	Microwave Analysr: SA14 Date: 02/17/23	Hexane L0000889
Pre GPC KD 100°C (No Exchange)	80:20 Hexane/Acetone 1:1 Hexane/Acetone Neutral Glass Wool Anhydrous Sodium Sulfate	L0001221 L0001224 L0000350 L0001285
3 4 5 6 LD 2-21 Analysr/Date	Pre GPC KD Analysr: LD Date: 2-21	Hexane L000084
Turbo Vap Pre GPC	Hexane Anhydrous Sodium Sulfate Neutral Glass Wool	
1 2 3 4 5 LD 2/21/23 Analysr/Date	GPC Filter Prep Analysr: LD Date: 2/21/23	GPC Filter L0007949
Post GPC KD 80 - 85°C Hexane Exchange (2 X 20 mL) 100°C	Methylene Chloride GPC Filter	L0005941 L0007949
1 2 3 4 5 6 LD 2-23 Analysr/Date	GPC Analysr: MR15 Date: 2/21/23	Methylene Chloride L0005941
Turbo Vap Pre-Cleanups	GPC Calibration File Post GPC KD Analysr: LD Date: 2-23-23	Hexane L0000889
1 2 3 4 5 LD 2/23/23 Analysr/Date	Methylene Chloride Hexane	Methylene Chloride L0000889
Turbo Vap Post-Cleanups	Vialing Analysr: LD Date:	Hexane L0011373
1 2 3 4 5 LD 2/23/23 Analysr/Date	Sulfuric Acid Ethyl Acetate	Sulfuric Acid L0010333 Ethyl Acetate N/A
Vialing	Tetrabutylammonium hydrogensulfate (TBAS)	L001601
LD 2/21/23	Sodium Sulfite	L0010362

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analysr	Witness
Surrogate	N L000773	50µL	CF	LD
2µg/mL Spike (Freezer)	Exp Date: 7/21/23 K011471	100µL	CF	LD
0.511/5µg/mL	Exp Date: 6/10/2023		CF	LD

MANUALLY ENTER EXPIRATION DATES!

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

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



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0422

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Please push this to front of LDW line of samples

<i>LDW/12/23</i>	<i>CA01084</i>
Analyst/Date	Silica Gel (SPE) Dats



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0422

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version: HCB Only)

WO Comments

23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <N> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM 1006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <N> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM 1006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H>Please push this to front of LDW line of samples

Prep Instructions

SPECIAL INSTRUCTIONS:

1. Weigh into beakers lightly dry with Sodium Sulfate.
2. Transfer to microwave vessels.
3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization).
4. Add surr/spike.
5. Microwave on appropriate power setting determined by # of samples.
6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool.
7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool.
8. Rinse with Hexane.
9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization).
10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane.
11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE).
12. TurboVap
13. GPC
14. After GPC: KD at 80 - 85°C
15. Exchange to Hexane at 100°C 2 x 20 mL).
16. TurboVap.
17. Cleanups: If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid labile compounds are requested.
18. Vial In Hexane.

A. Need Total Solids Y N

B. Archive/Freeze Y N



Extraction Parameter: PEST Extraction Batch 5488422

Total Solids Batch: RLB0338 Work Order(s): 23B0261, 296

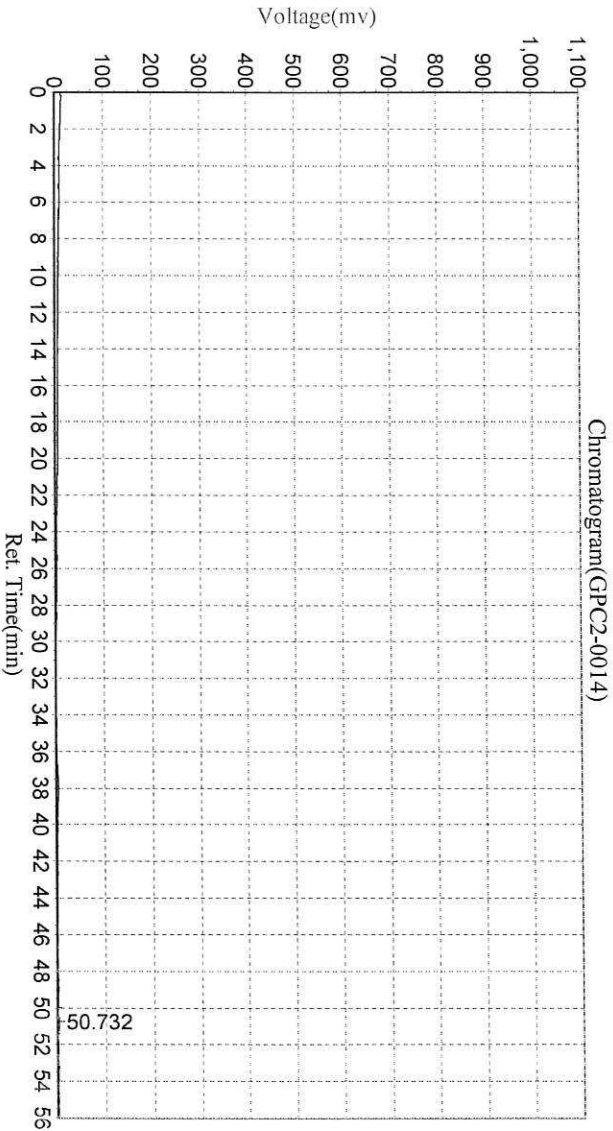
Screens:	Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)=	<u>of</u> #1, #4, #14, 13, 16, 19, 22, 27, 41	<u>MP #2/14/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not Shared)=	<u>23B0261</u> #1, #4, #7, #14, 13, 16, 19, 22, 25, 28, 30, 34	<u>MP #2/14/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=		
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=		
<input type="checkbox"/> Rocks (%+size)?		
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	<u>276</u>	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors=	<u>#1</u>	<u>MP #2/14/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=		
<input type="checkbox"/> Previously Frozen =		
<input checked="" type="checkbox"/> Other (Details)=	<u>10. #1, 2</u> <u>skull pieces = 25, 28, 31, 34,</u>	<u>MP #2/14/23</u>
Aqueous:		
<input type="checkbox"/> No Anomalies		
<input type="checkbox"/> Turbid/Color=		
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)		
<input type="checkbox"/> Emulsions (%)=		
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=		
<input type="checkbox"/> Other (Details)=		
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=		
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).		
<input type="checkbox"/> Share Samples Y/N <u>N</u>		
<input checked="" type="checkbox"/> Multiple Jars Y/N <u>N</u>		
<input type="checkbox"/> Sample Pre-Screens Indicate analyte activity=		
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=		

BLK1

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22 5:23:02 AM
Data File: c:\n2000\data\gpc2\022123\GPC2-0014
Method File: E:\GPC2_InHouse.mtd

Analysis: E%NRB
Date/Time: 2023-02-22 5:23:03 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		50.732	1771.550	115269.297	100.0000
Total			1771.550	115269.297	100.000

Ingredient Table

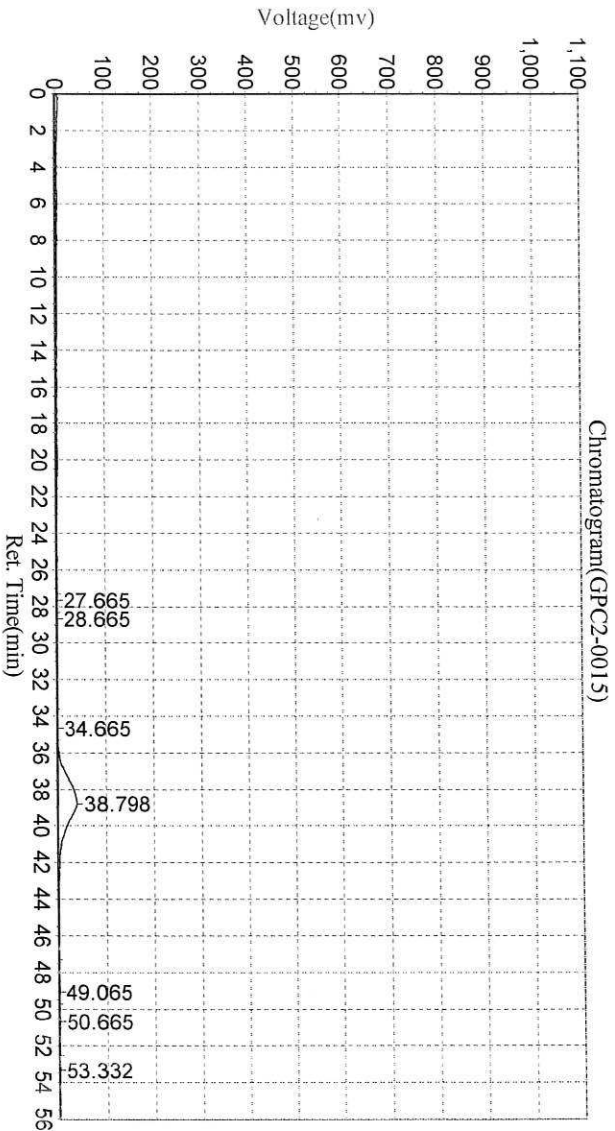
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BS1

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22, 6:20:46 AM
Data File: c:\hn2000\data\gpc2\022123\GPC2-0015
Method File: E:\GPC2_InHoud.mtd

Analysis# NRB
Date/Time: 2023-02-22, 6:20:46 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		27.665	2304.832	113156.570	1.4980
2		28.665	2584.090	142491.813	1.8863
3		34.665	1627.697	106206.992	1.4060
4		38.798	40655.273	6772375.000	89.6518
5		49.065	1670.333	162981.891	2.1575
6		50.665	1972.500	156547.031	2.0723
7		53.332	1594.111	100327.063	1.3281
Total			52408.836	7554086.359	100.000

Ingredient Table

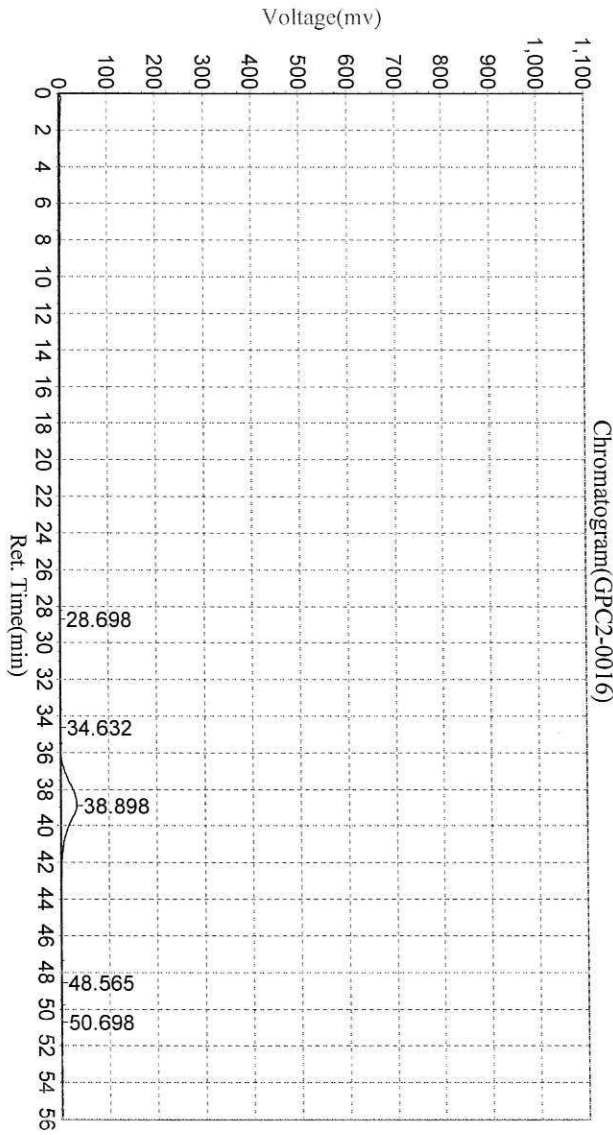
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

6801

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22 7:18:28 AM
 Data File: c:\n2000\data\gpc2\022123\GPC2-0016
 Method File: E:\GPC2_InHouse.mtd

Analysis: E°NRB
 Date/Time: 2023-02-22 7:18:29 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.698	2519.238	144903.953	2.1584
2		34.632	1616.752	113280.234	1.6874
3		38.898	35351.375	6128889.000	91.2929
4		48.565	1534.656	139620.328	2.0797
5		50.698	1933.377	186743.453	2.7816
Total			42955.398	6713436.969	100.000

Ingredient Table

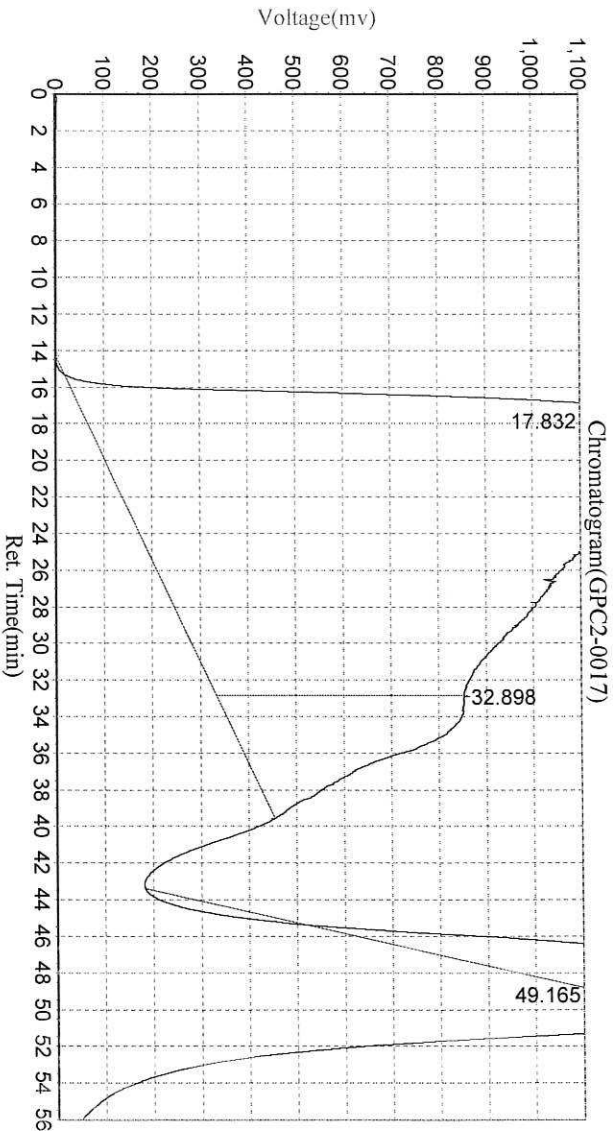
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

MSI

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22 8:16:12 AM
Data File: c:\h2000\data\gpc2\2022123\GPC2-0017
Method File: E:\GPC2_InHouse.mtd

Analyst: E°NRB
Date/Time: 2023-02-22 8:16:12 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1185793.250	896898496.000	83.5734
2		32.898	518006.531	118480576.000	11.0401
3		49.165	91419.555	57807876.000	5.3866
Total			1795219.336	1073186948.000	100.000

Ingredient Table

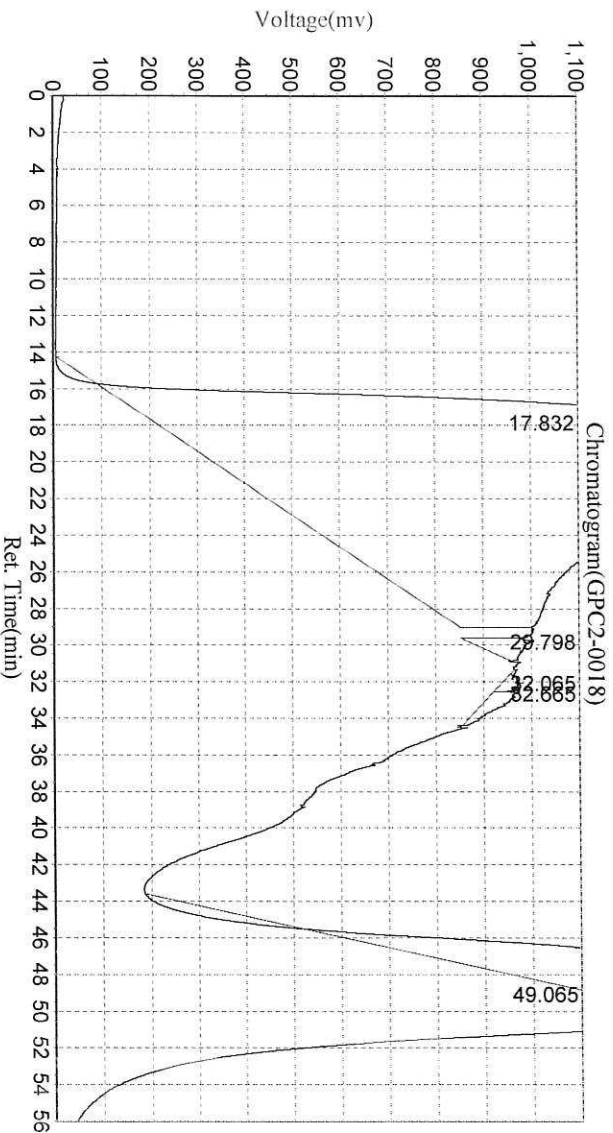
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

ms01

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22 9:13:54 AM
 Data File: c:\n2000\data\atagpc2\022123\GPC2-0018
 Method File: E:\GPC2_InHouse.mtd

Analyst: fNRB
 Date/Time: 2023-02-22 9:13:55 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1040055.938	511775776.000	88.5712
2		29.798	104011.742	4540854.000	0.7859
3		32.065	35709.828	1850083.875	0.3202
4		32.665	54083.871	4230595.500	0.7322
5		49.065	116272.156	55415280.000	9.5905
Total			1350133.535	577812589.375	100.000

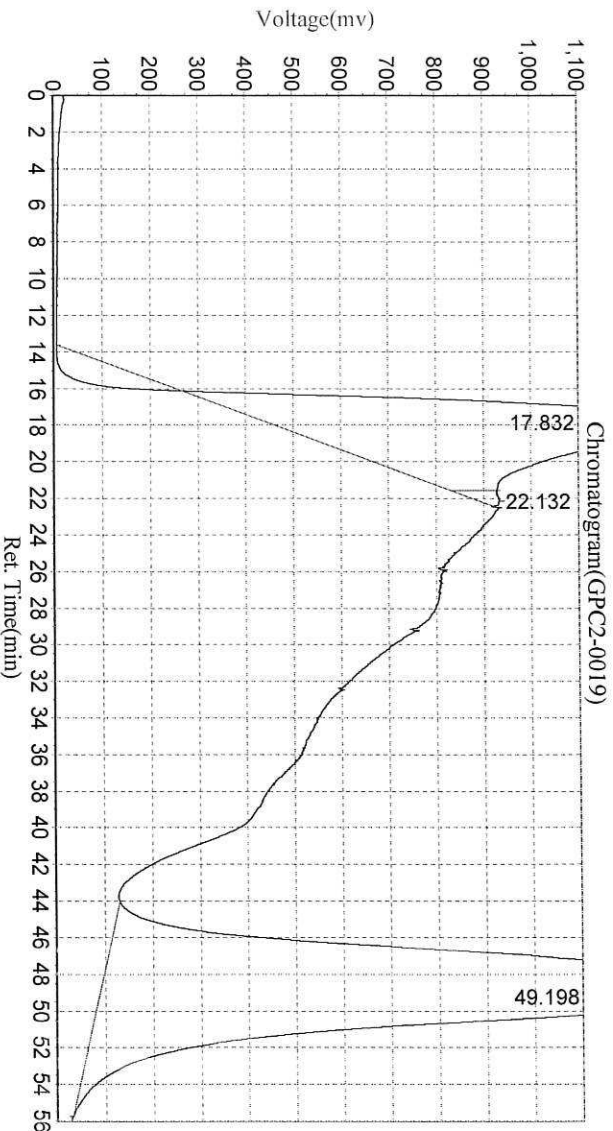
Ingredient Table

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

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22, 10:11:39 AM
Data File: c:\hn2000\data\gpc2\1022123\GPC2-0019
Method File: E:\GPC2_InHouse.mtd

Analyst: f*NRB
Date/Time: 2023-02-22, 10:11:39 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	808521.313	150548736.000	30.9425
2		22.132	45927.684	2948488.750	0.6060
3		49.198	1161927.125	333046304.000	68.4515
Total			2016376.121	486543528.750	100.000

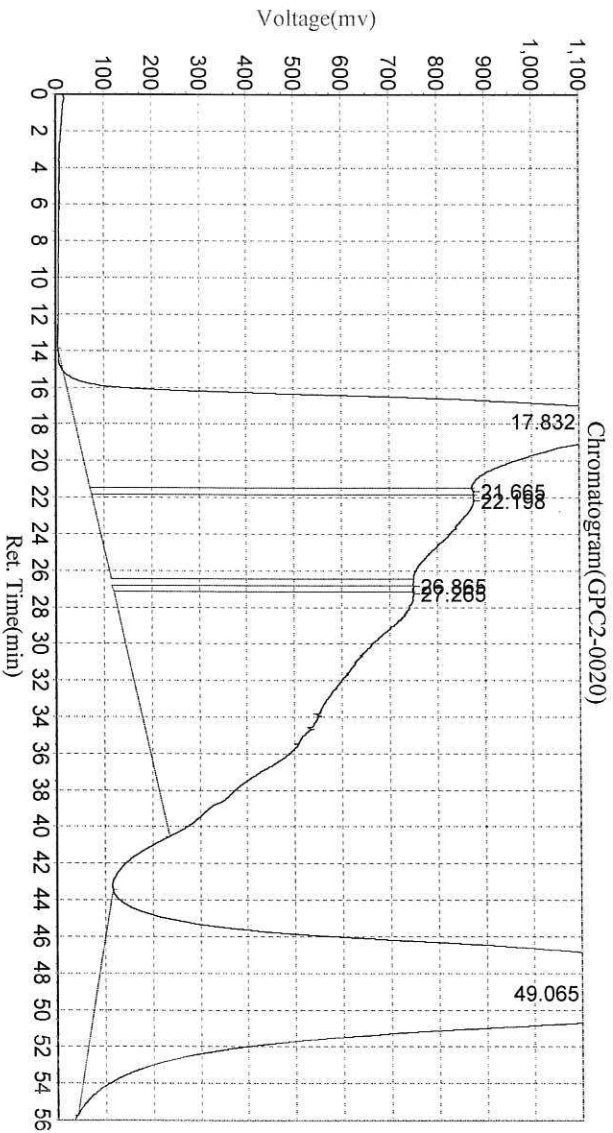
Ingredient Table

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

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22, 11:09:21 AM
 Data File: c:\n2000\data\gpc2\022123\GPC2-0020
 Method File: E:\GPC2_InHouse.mtd

Analyst: E°NRB
 Date/Time: 2023-02-22, 11:09:21 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1210169.250	314915200.000	25.7927
2		21.665	803370.313	17632914.000	1.4442
3		22.198	799064.500	199053856.000	16.3032
4		26.865	631565.875	12580913.000	1.0304
5		27.265	627073.000	283255808.000	23.1996
6		49.065	1167305.875	393510496.000	32.2299
Total			5238548.813	1220949187.000	100.000

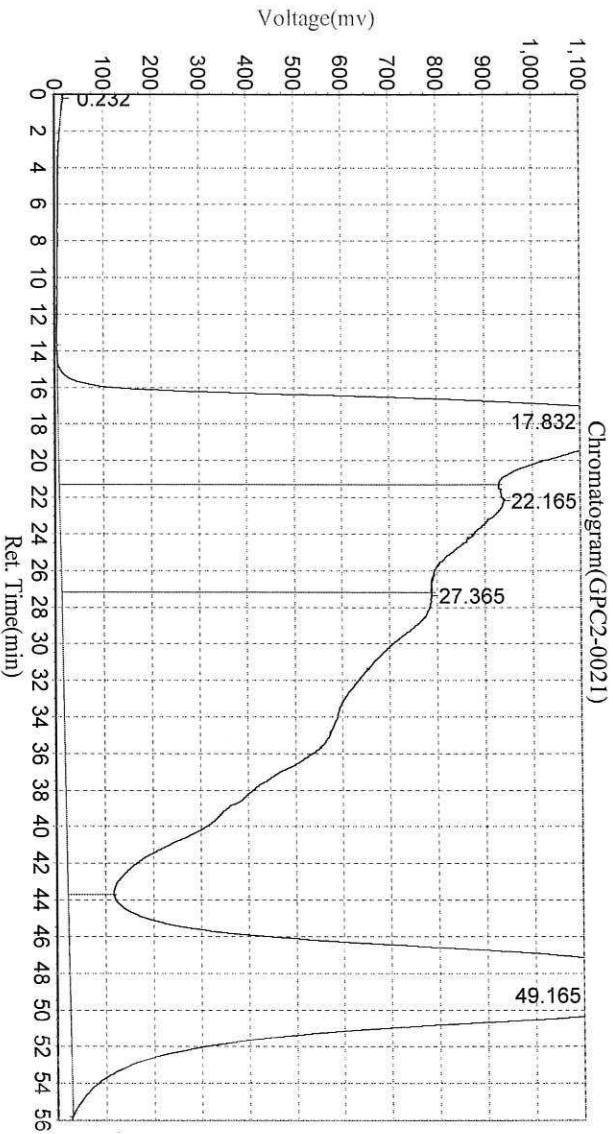
Ingredient Table

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

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22, 12:07:03 PM
 Data File: c:\n2000\data\gpc2\022123\GPC2-0021
 Method File: E:\GPC2_InHouse.mtd

Analyst: eNRB
 Date/Time: 2023-02-22, 12:07:04 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc	
1		0.232	3435.048	105194.797	0.0071	
2		17.832	1243251.625	326842816.000	21.9565	
3		22.165	931778.188	300460064.000	20.1842	
4		27.365	775772.188	475030112.000	31.9114	
5		49.165	1222569.750	386153312.000	25.9409	
Total				4176806.798	1488591498.797	100.000

Ingredient Table

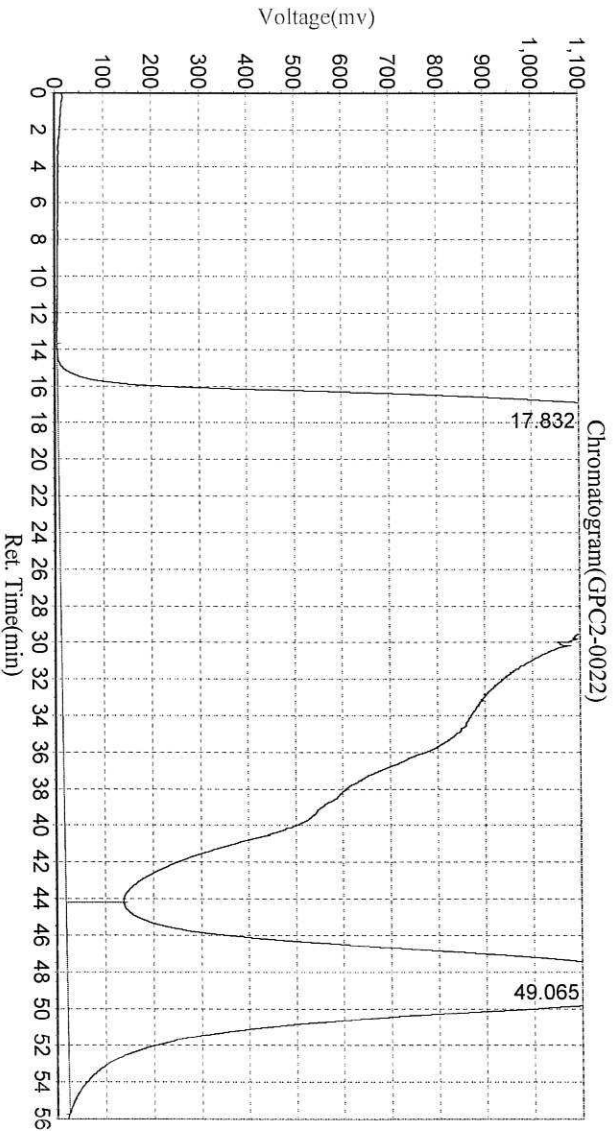
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

229-05

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22 1:04:45 PM
Data File: c:\n2000\data\gpc2\022123\GPC2-0022
Method File: E:\GPC2_InHouse.mtd

Analysis: E°NRB
Date/Time: 2023-02-22 1:04:46 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1243936.500	1516613248.000	82.1257
2		49.065	1226150.500	330083904.000	17.8743
Total			2470087.000	1846697152.000	100.000

Ingredient Table

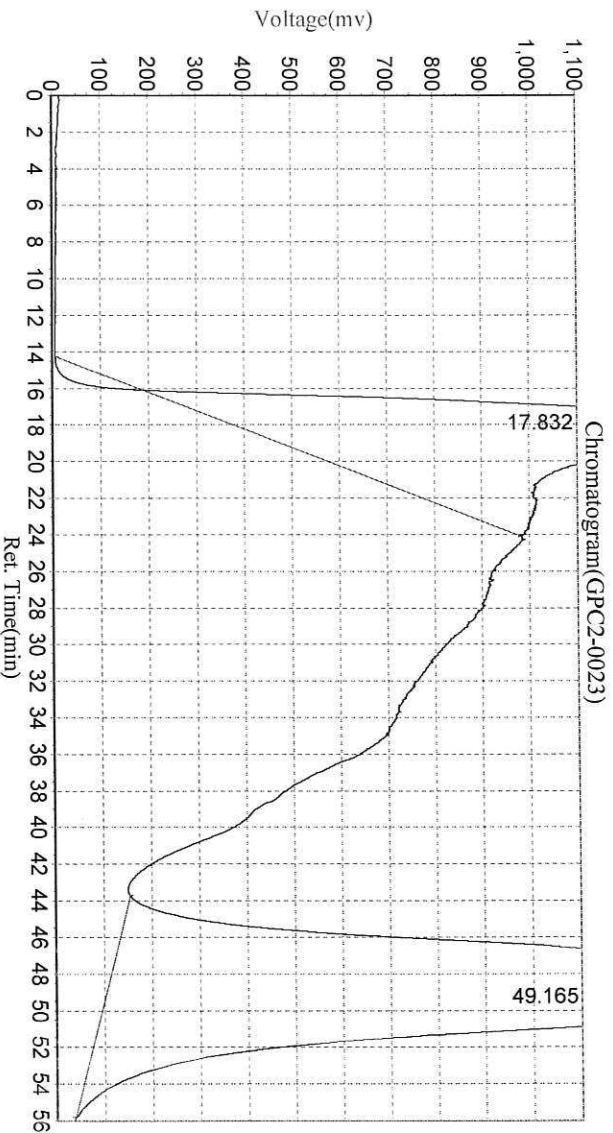
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

229-06

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22 2:02:29 PM
 Data File: c:\n2000\data\gpc2\022123\GPC2-0023
 Method File: E:\GPC2_InHouse.mtd

Analyte: %NRB
 Date/Time: 2023-02-22 2:02:30 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	891302.125	222068176.000	35.1180
2		49.165	1147313.875	410280384.000	64.8820
Total			2038616.000	632348560.000	100.000

Ingredient Table

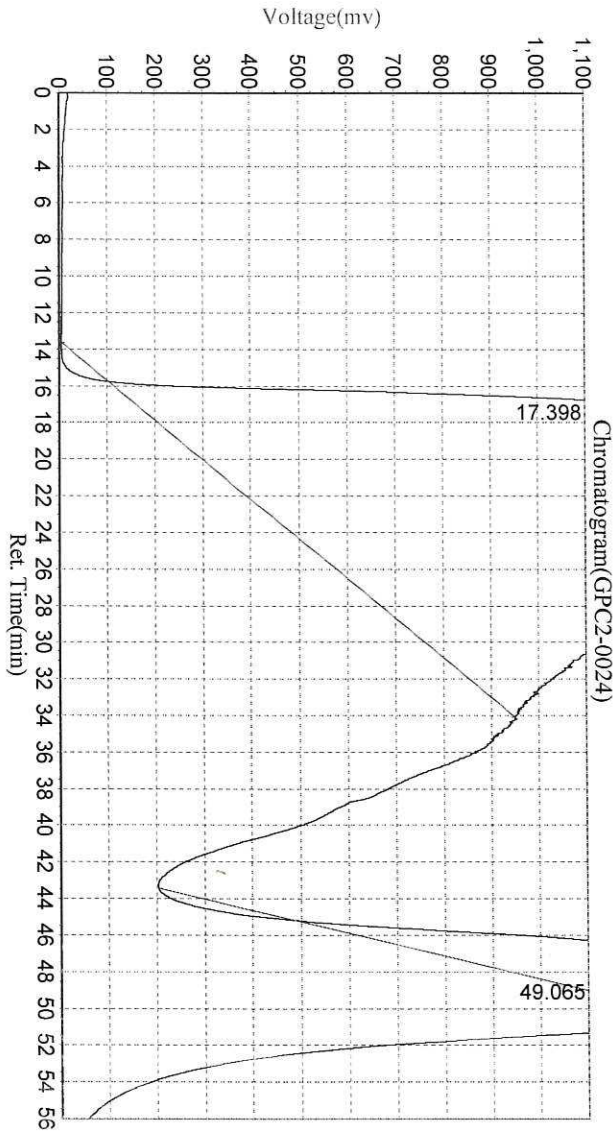
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

22A-08

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22, 3:00:11 PM
 Data File: c:\n2000\data\gpc2\022123\GPC2-0024
 Method File: E:\GPC2_InHouse.mtd

Analysis: %NRB
 Date/Time: 2023-02-22, 3:00:11 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	1072313.750	687413184.000	90.4647
2		49.065	150184.703	72456208.000	9.5354
Total			1222498.453	759869392.000	100.000

Ingredient Table

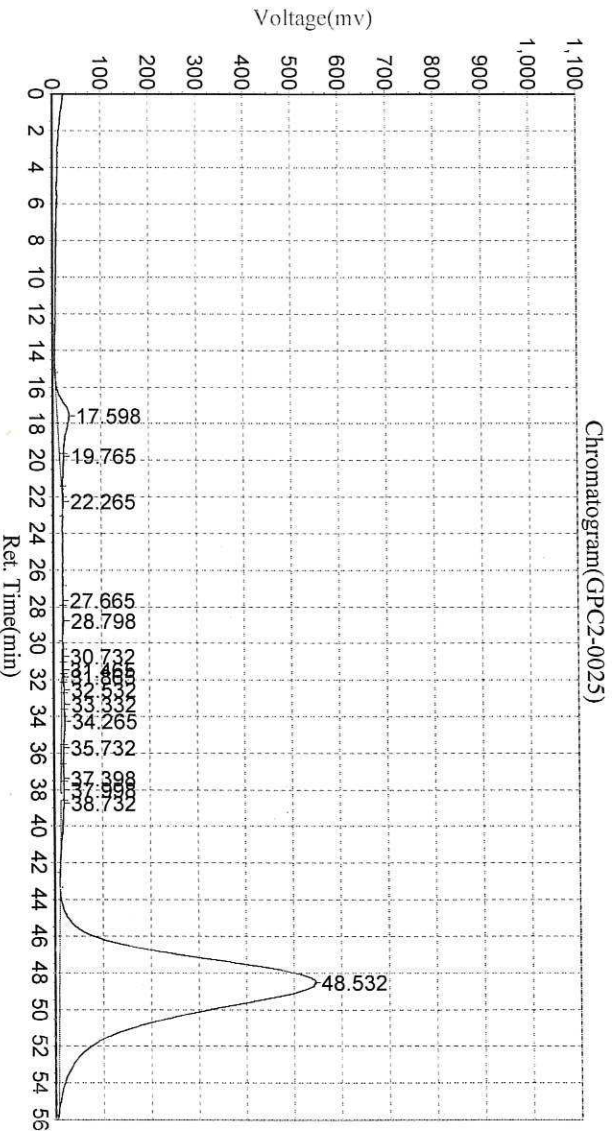
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

276-01

BLA0735/BLB0422 23A0385/523/554/563/23B0229/276 PCB/PEST

Date: 2023-02-22, 3:57:54 PM
 Data File: c:\n2000\data\gpc2\022123\GPC2-0025
 Method File: E:\GPC2_InHouse.mtd

Analyst: E°NRB
 Date/Time: 2023-02-22, 3:57:55 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.598	24120.254	3202491.250	2.5918
2		19.765	9331.525	684899.063	0.5543
3		22.265	2847.915	228725.516	0.1851
4		27.665	2647.421	137865.078	0.1116
5		28.798	3967.986	359087.219	0.2906
6		30.732	3921.007	147309.828	0.1192
7		31.465	4752.843	173323.000	0.1403
8		31.865	4980.571	135632.094	0.1098
9		32.532	6137.786	204946.625	0.1659
10		33.332	6986.243	342642.563	0.2773
11		34.265	8468.942	881712.938	0.7136
12		35.732	6641.614	392998.156	0.3181
13		37.398	6790.150	354979.281	0.2873
14		37.998	7029.743	274038.000	0.2218
15		38.732	7259.579	875811.250	0.7088
16		48.532	536644.063	115168168.000	93.2048
Total			642527.641	123564629.859	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0211

Cleanup Type: Silica Gel

Cleanup Method: EPA 3630C Silica Gel Cleanup - uL

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1008	23B0229-05	026F3101.D	02/23/2023	
Blank	BLB0422-BLK1	062F7101.D	02/23/2023	
LDW23-SS1237	23B0229-03	025F2801.D	02/23/2023	
LDW23-SS1150	23B0229-04	069F7801.D	02/23/2023	
LDW23-SC1013	23B0229-08	027F3201ECD6.D	02/23/2023	
LDW23-SC1008	23B0229-06	071F8201.D	02/23/2023	
Matrix Spike Dup	BLB0422-MSD1	024F2701.D	02/23/2023	
Matrix Spike	BLB0422-MS1	0023F2601.D	02/23/2023	
LCS Dup	BLB0422-BSD1	064F7301.D	02/23/2023	
LCS	BLB0422-BS1	063F7201.D	02/23/2023	
LDW23-SS1236	23B0229-02	067F7601.D	02/23/2023	



CLEANUP BENCH SHEET

CLB0211

Matrix: Solid

Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/23/2023 2:52:53PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0229-02	A	LDW23-SS1236	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-03	A	LDW23-SS1237	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-04	A	LDW23-SS1150	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-05	A	LDW23-SS1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-06	A	LDW23-SC1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-08	A	LDW23-SC1013	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0276-01	A	LDW23-SC1150B	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLB0422-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0212

Cleanup Type: GPC

Cleanup Method: EPA 3640A GPC Cleanup 1:1

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Matrix Spike Dup	BLB0422-MSD1	024F2701.D	02/23/2023	
Matrix Spike	BLB0422-MS1	0023F2601.D	02/23/2023	
LDW23-SS1236	23B0229-02	067F7601.D	02/23/2023	
Blank	BLB0422-BLK1	062F7101.D	02/23/2023	
LCS	BLB0422-BS1	063F7201.D	02/23/2023	
LCS Dup	BLB0422-BSD1	064F7301.D	02/23/2023	
LDW23-SS1150	23B0229-04	069F7801.D	02/23/2023	
LDW23-SS1008	23B0229-05	026F3101.D	02/23/2023	
LDW23-SS1237	23B0229-03	025F2801.D	02/23/2023	
LDW23-SC1013	23B0229-08	027F3201ECD6.D	02/23/2023	
LDW23-SC1008	23B0229-06	071F8201.D	02/23/2023	



CLEANUP BENCH SHEET

CLB0212

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLB0132-GPC2 Printed: 2/23/2023 3:00:29PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0229-02	A	LDW23-SS1236	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-03	A	LDW23-SS1237	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-04	A	LDW23-SS1150	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-05	A	LDW23-SS1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-06	A	LDW23-SC1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-08	A	LDW23-SC1013	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0276-01	A	LDW23-SC1150B	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLB0422-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0213

Cleanup Type: Sulfur

Cleanup Method: EPA 3660B Sulfur Cleanup - uL

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLB0422-BSD1	064F7301.D	02/23/2023	
LCS	BLB0422-BS1	063F7201.D	02/23/2023	
Matrix Spike	BLB0422-MS1	0023F2601.D	02/23/2023	
Matrix Spike Dup	BLB0422-MSD1	024F2701.D	02/23/2023	
LDW23-SC1008	23B0229-06	071F8201.D	02/23/2023	
LDW23-SS1236	23B0229-02	067F7601.D	02/23/2023	
LDW23-SS1150	23B0229-04	069F7801.D	02/23/2023	
LDW23-SS1008	23B0229-05	026F3101.D	02/23/2023	
LDW23-SC1013	23B0229-08	027F3201ECD6.D	02/23/2023	
Blank	BLB0422-BLK1	062F7101.D	02/23/2023	
LDW23-SS1237	23B0229-03	025F2801.D	02/23/2023	



CLEANUP BENCH SHEET

CLB0213

Matrix: Solid

Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL

Printed: 2/23/2023 3:01:01PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0229-02	A	LDW23-SS1236	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-03	A	LDW23-SS1237	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-04	A	LDW23-SS1150	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-05	A	LDW23-SS1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-06	A	LDW23-SC1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-08	A	LDW23-SC1013	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0276-01	A	LDW23-SC1150B	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLB0422-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0214

Cleanup Type: Sulfuric Acid

Cleanup Method: EPA 3665 Sulfuric Acid Cleanup - uL

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1237	23B0229-03	025F2801.D	02/23/2023	
Matrix Spike Dup	BLB0422-MSD1	024F2701.D	02/23/2023	
LDW23-SC1013	23B0229-08	027F3201ECD6.D	02/23/2023	
LDW23-SS1008	23B0229-05	026F3101.D	02/23/2023	
LDW23-SS1150	23B0229-04	069F7801.D	02/23/2023	
LDW23-SS1236	23B0229-02	067F7601.D	02/23/2023	
LDW23-SC1008	23B0229-06	071F8201.D	02/23/2023	
Blank	BLB0422-BLK1	062F7101.D	02/23/2023	
LCS	BLB0422-BS1	063F7201.D	02/23/2023	
LCS Dup	BLB0422-BSD1	064F7301.D	02/23/2023	
Matrix Spike	BLB0422-MS1	0023F2601.D	02/23/2023	



CLEANUP BENCH SHEET

CLB0214

Matrix: Solid

Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL

Printed: 2/23/2023 3:01:40PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0229-02	A	LDW23-SS1236	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-03	A	LDW23-SS1237	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-04	A	LDW23-SS1150	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-05	A	LDW23-SS1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-06	A	LDW23-SC1008	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0229-08	A	LDW23-SC1013	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23B0276-01	A	LDW23-SC1150B	A 02	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLB0422-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLB0422-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	



Form I
METHOD BLANK DATA SHEET
EPA 8081B

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLB0422-BLK1</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/17/23 10:59</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLB0422</u>	Sequence:	<u>SLC0093</u>
Instrument:	<u>ECD6</u>	Column:	<u>STX-CLP</u>
		File ID:	<u>062F7101.D</u>
		Analyzed:	<u>03/03/23 20:55</u>
		Initial/Final:	<u>12.5 g / 2.5 mL</u>
		Calibration:	<u>FL00041</u>
		Cleanups:	<u>GPC, Silica Gel, Sulfur, Sulfuric Acid</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.50	U	0.15	0.50
SURROGATES		ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl		8.0000	5.25	65.6	30 - 160	
Decachlorobiphenyl [2C]		8.0000	5.34	66.7	30 - 160	
Tetrachlorometaxylene		8.0000	4.73	59.1	30 - 160	
Tetrachlorometaxylene [2C]		8.0000	4.66	58.2	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/062F7101.D
Data file 2: /20230302.b/B20230302.b/062F7101.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0422-BLK1
Client ID:
Injection Date: 03-MAR-2023 20:55
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
----			4.833	0.004	5009	0.00	0.17	---	alpha-BHC
4.810	0.031	3089	5.282	-0.020	2521	0.45	0.23	63.4*	beta-BHC
----			5.650	-0.004	781	0.00	0.03	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			6.153	0.002	8454	0.00	0.34	---	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
6.879	-0.022	2697	7.524	-0.019	2608	0.20	0.13	44.8*	Dieldrin
6.552	-0.008	2613	7.326	-0.005	13829	0.21	0.75	111.4*	4,4'-DDE
7.172	0.021	4680	7.890	0.024	2258	0.49	0.19	86.9*	Endrin N
----			8.058	-0.020	14471	0.00	1.21	---	Endosulfan II
----			7.929	-0.008	2973	0.00	0.26	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
----			8.255	0.001	11483	0.00	1.05	---	4,4'-DDT
7.973	-0.013	7117	8.903	0.010	14452	1.85	2.99	46.8*	Methoxychlor N
8.517	-0.007	4771	9.179	-0.017	17048	0.51	1.51	98.5*	Endrin ketone N
----			8.393	-0.015	8843	0.00	1.05	---	Endrin aldehyde
6.353	0.014	7114	----			0.52	0.00	---	trans-Chlordane
6.498	0.011	3649	----			0.27	0.00	---	cis-Chlordane
2.347	0.001	7714	----			0.41	0.00	---	Hexachlorobutadiene
4.229	-0.002	8503	4.683	-0.005	3857	0.51	0.15	110.0*	Hexachlorobenzene
3.869	-0.003	300129	4.192	-0.003	468400	23.65	23.29	1.6	Tetrachloro-m-xylene
9.435	-0.003	192948	10.400	-0.002	241623	26.24	26.69	1.7	Decachlorobiphenyl N

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	933051	38.8
Hexabromobiphenyl	609723	725730	19.0

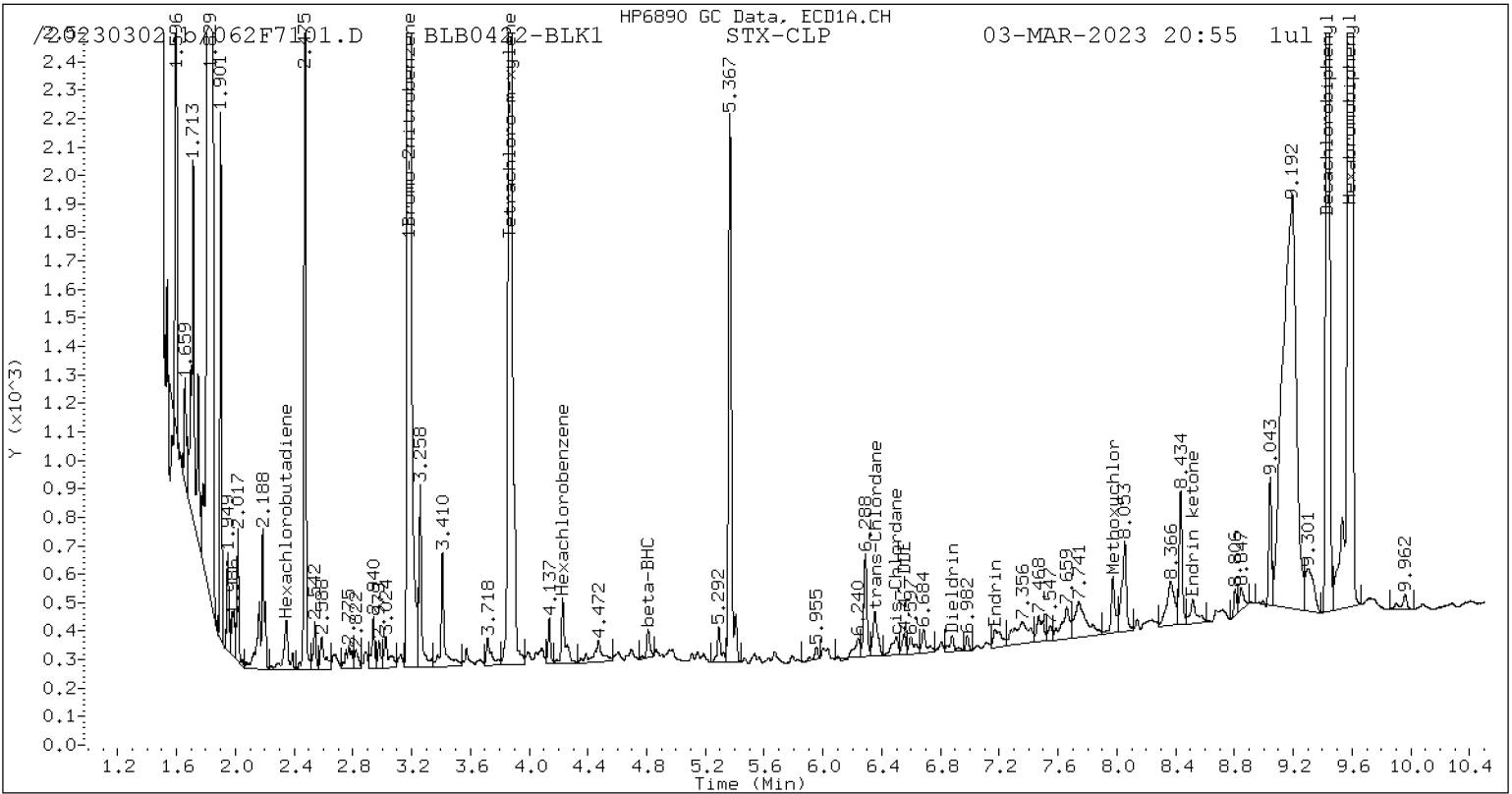
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1429005	42.0
Hexabromobiphenyl	769764	818965	6.4

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

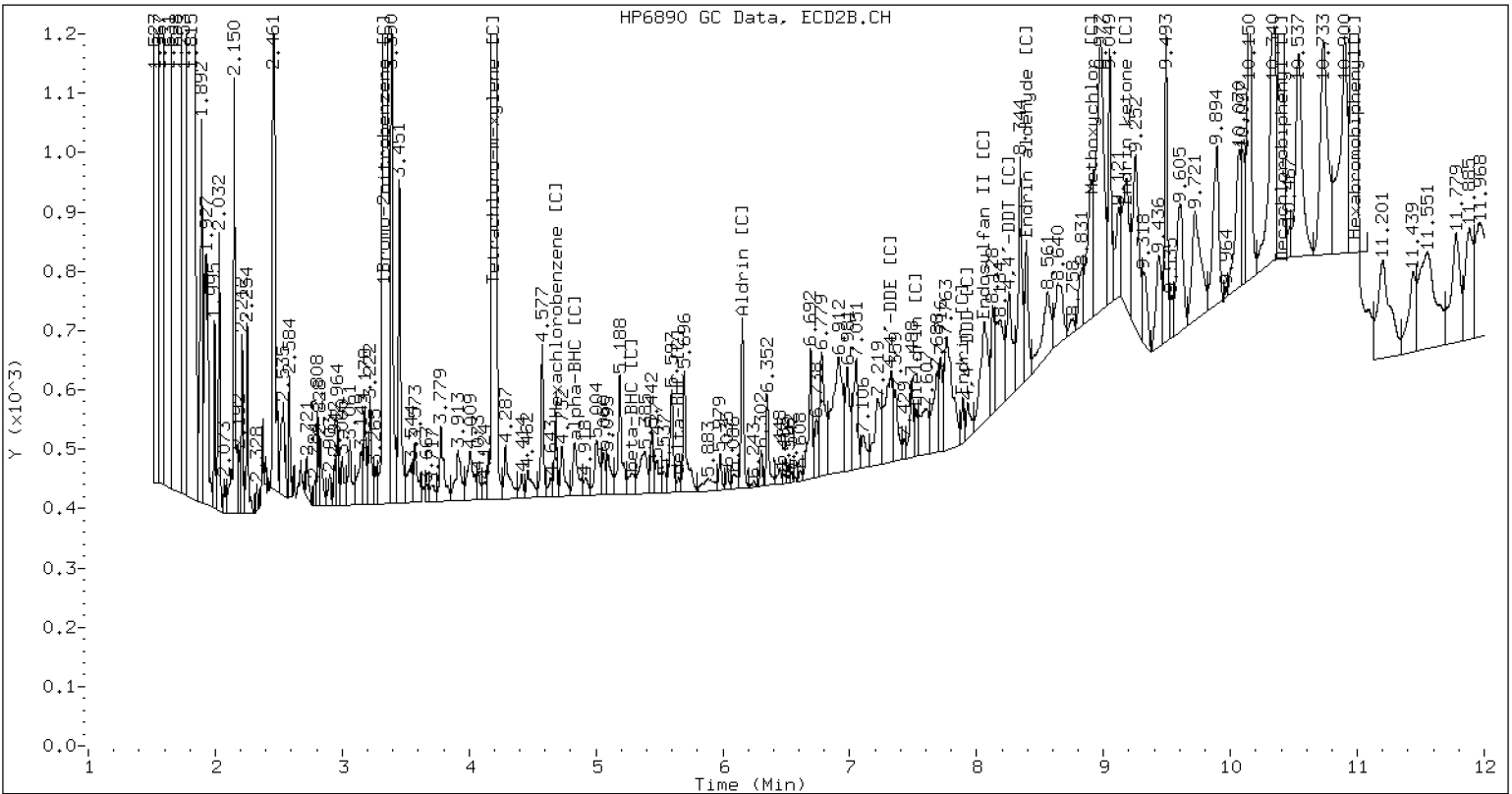
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/062F7101.D BLB0422-BLK1 CLP2



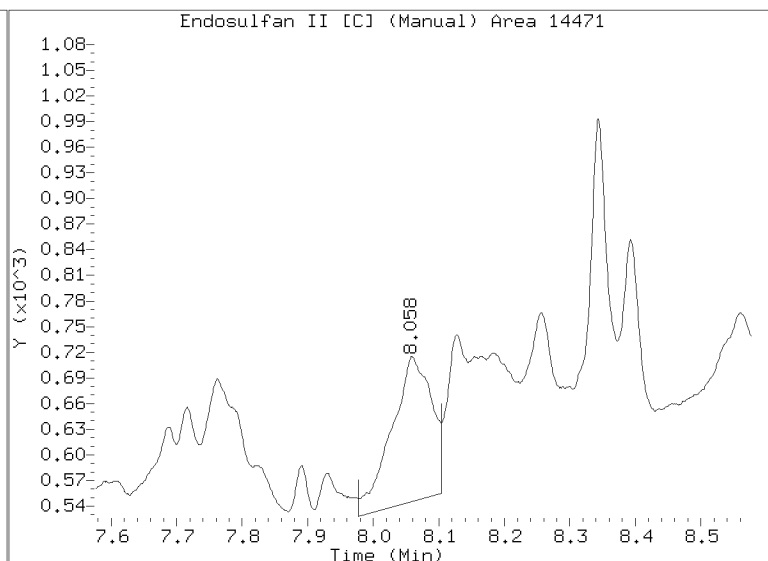
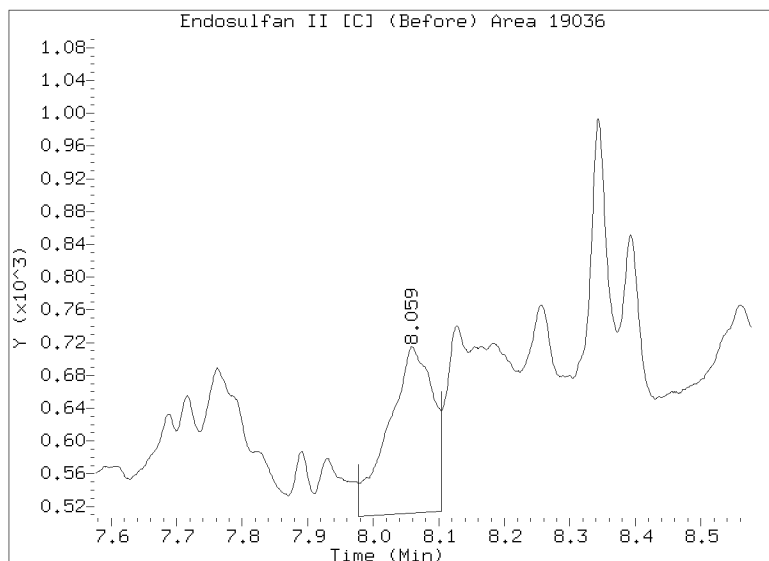
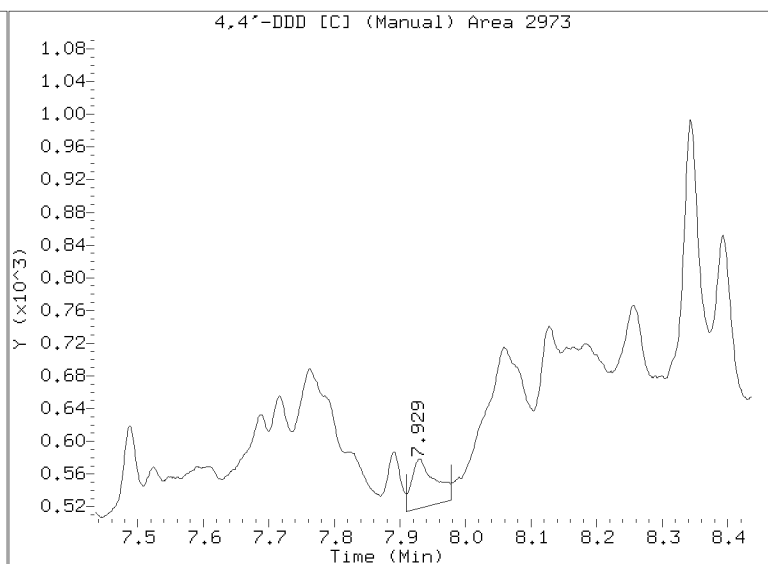
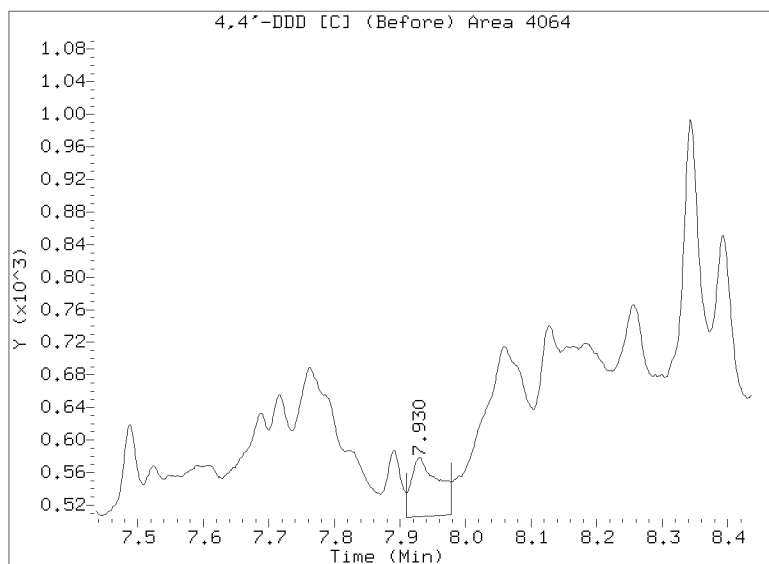
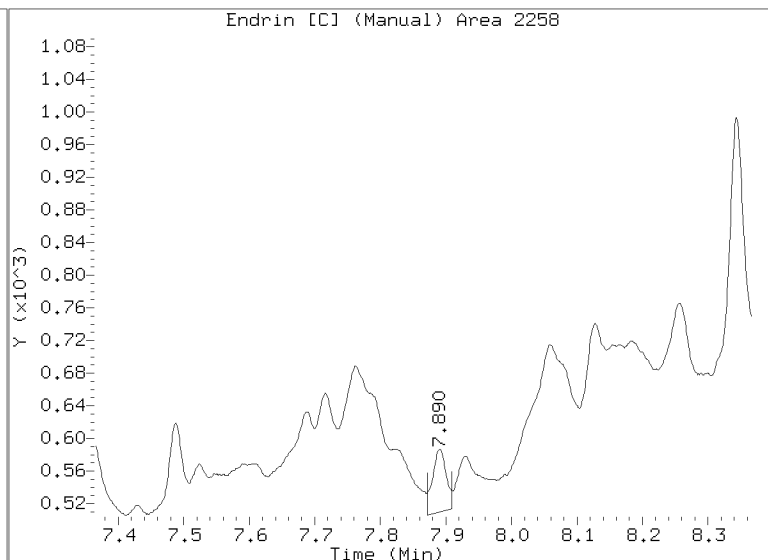
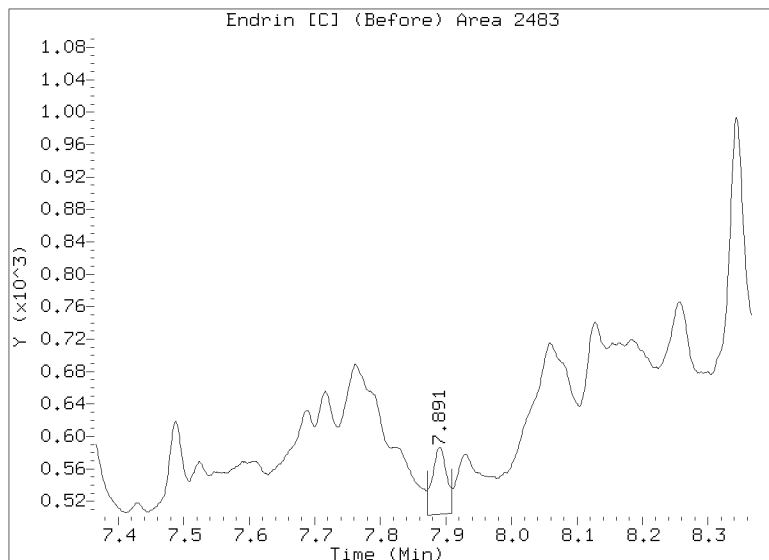
CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/062F7101.D

Injection Date: 03-MAR-2023 20:55

Lab ID:BLB0422-BLK1 Client ID:

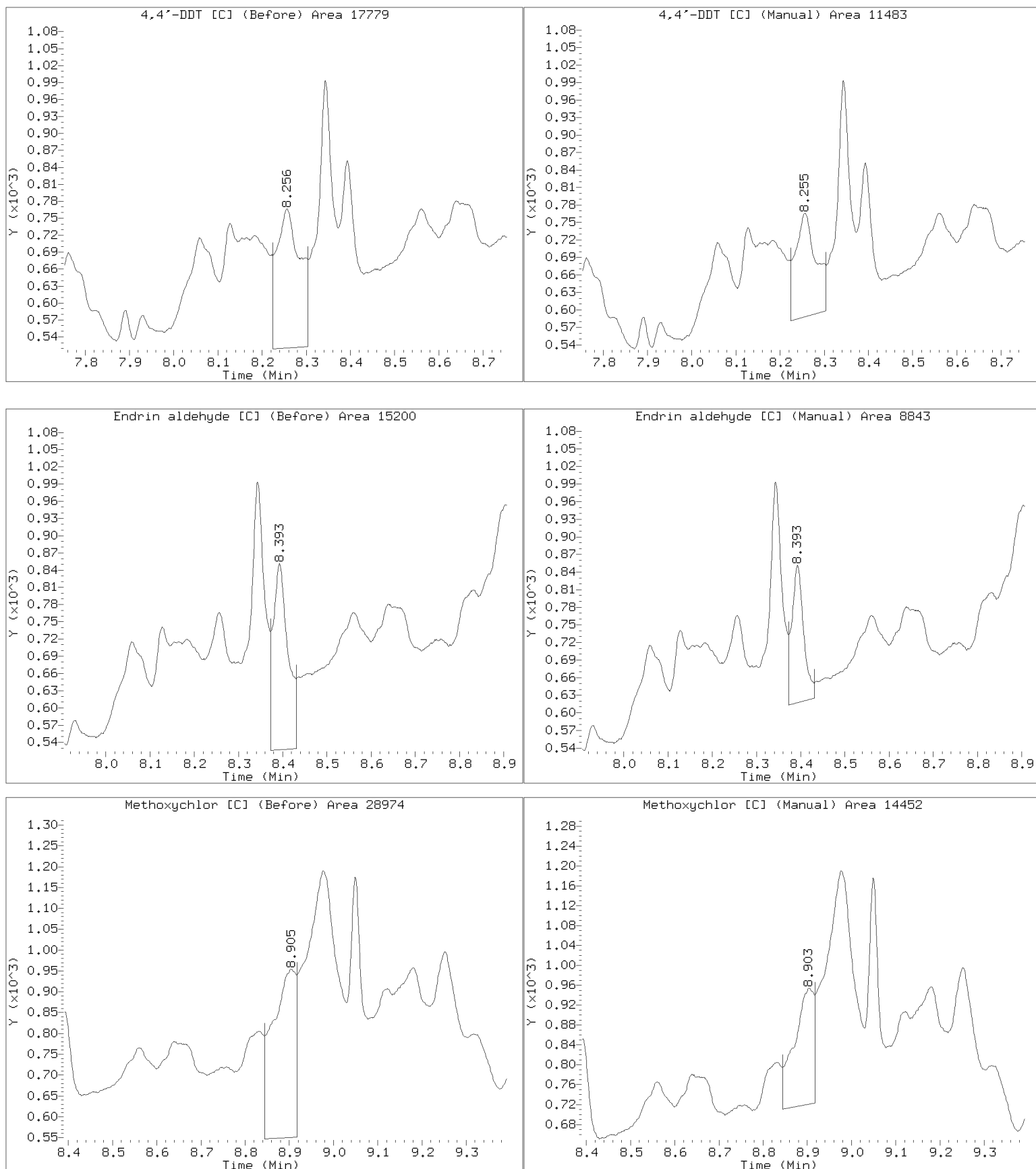


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/062F7101.D

Injection Date: 03-MAR-2023 20:55

Lab ID:BLB0422-BLK1 Client ID:

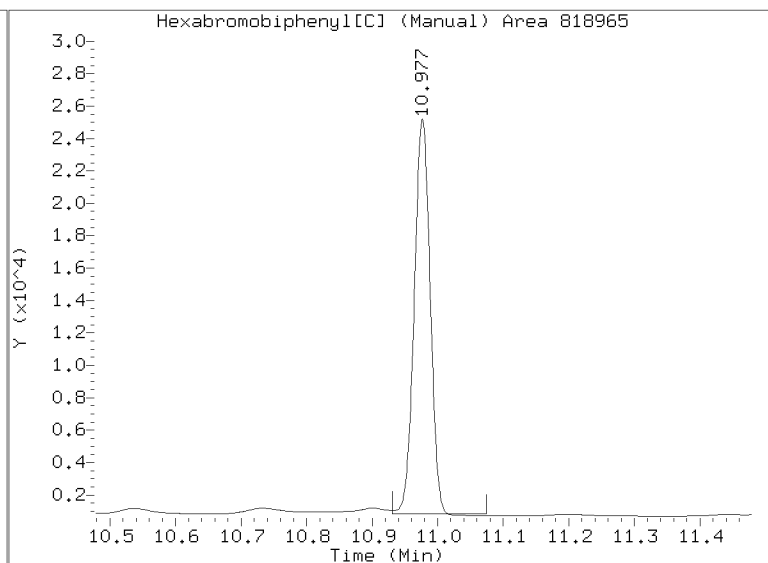
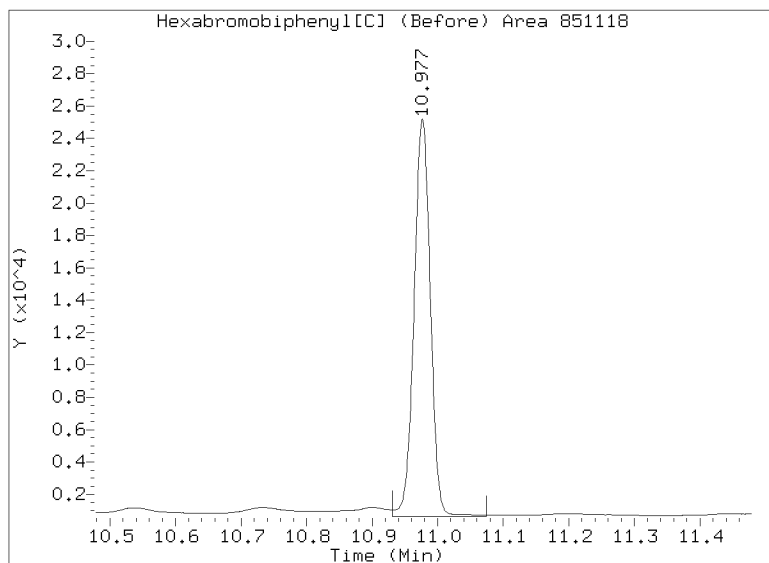
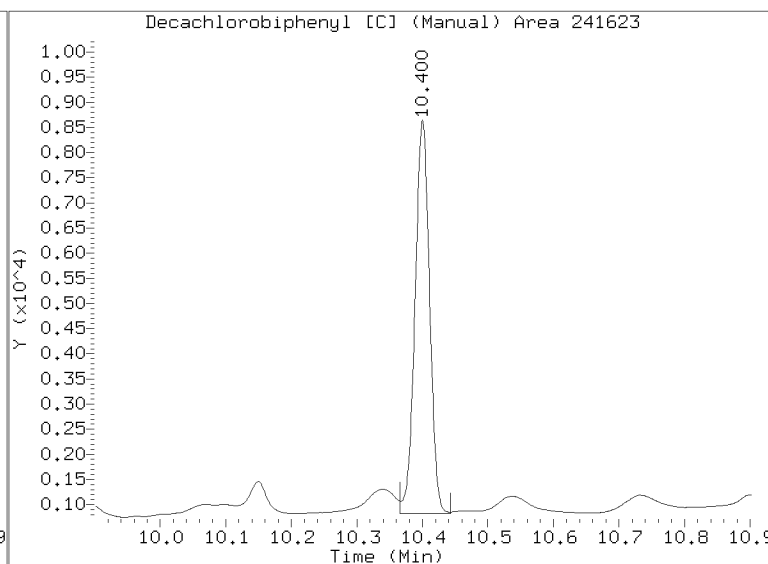
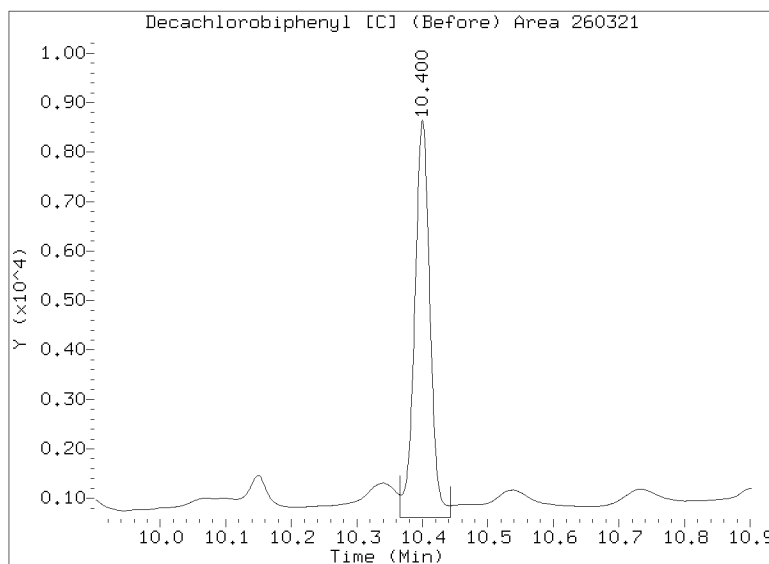
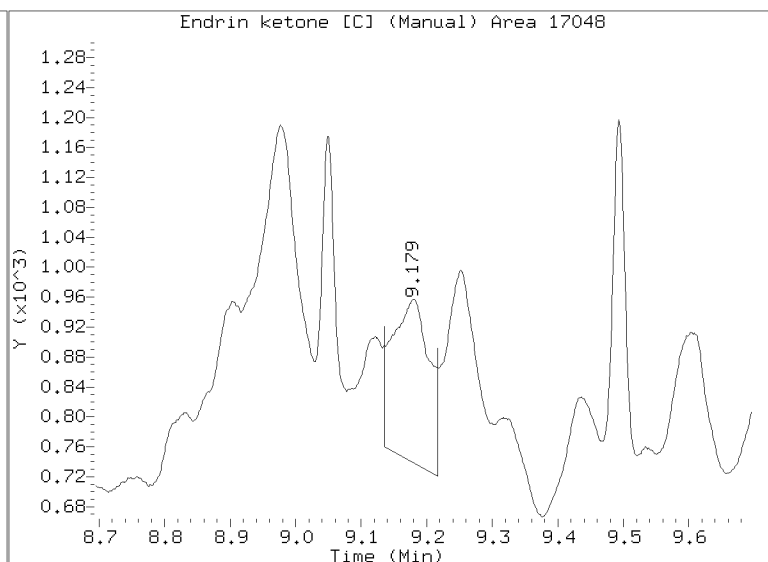
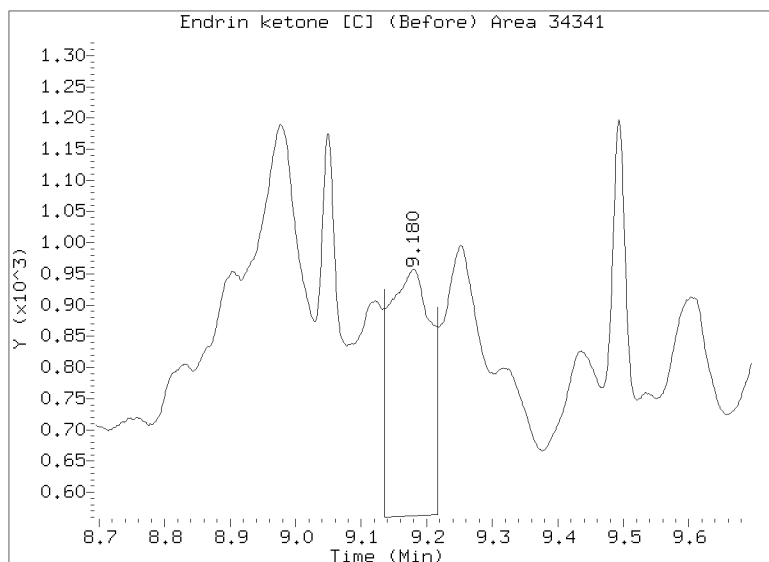


Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/062F7101.D

Injection Date: 03-MAR-2023 20:55

Lab ID:BLB0422-BLK1 Client ID:





LCS / LCS DUPLICATE RECOVERY
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/03/23 21:13</u>
Batch:	<u>BLB0422</u>	Laboratory ID:	<u>BLB0422-BS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>12.5 g / 2.5 mL</u>		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	2.09		52.3	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Hexachlorobenzene	4.00	2.33		58.1	10.6	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/063F7201.D
Data file 2: /20230302.b/B20230302.b/063F7201.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0422-BS1
Client ID:
Injection Date: 03-MAR-2023 21:13
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.388	-0.003	212709	4.826	-0.003	319253	11.09	10.19	8.4	alpha-BHC
4.776	-0.003	88684	5.299	-0.003	129982	12.01	10.92	9.5	beta-BHC
4.963	-0.003	208345	5.650	-0.004	306410	13.29	11.88	11.2	delta-BHC
4.695	-0.003	198826	5.220	-0.003	306966	11.95	11.55	3.4	gamma-BHC (Lindane)
5.189	-0.003	172014	5.746	-0.004	248943	11.62	10.34	11.7	Heptachlor
5.516	-0.003	178933	6.148	-0.003	237524	10.79	8.64	22.1	Aldrin
6.196	-0.003	165792	6.804	-0.003	220136	11.53	9.68	17.4	Heptachlor epoxide b
6.638	-0.003	239775	7.247	-0.004	299323	18.17	14.94	19.5	Endosulfan I
----			7.547	0.004	360	0.00	0.02	---	Dieldrin
6.557	-0.004	312233	7.328	-0.003	383883	23.72	18.91	22.6	4,4'-DDE
----			7.869	0.003	2528	0.00	0.20	---	Endrin
7.383	-0.005	87267	8.073	-0.005	106630	9.49	8.33	13.0	Endosulfan II
7.203	-0.004	257064	7.932	-0.004	311398	27.93	25.64	8.6	4,4'-DDD
8.246	-0.004	184889	8.670	-0.003	235140	21.17	20.92	1.2	Endosulfan sulfate
7.497	-0.004	252564	8.251	-0.003	314093	27.16	26.79	1.3	4,4'-DDT
7.982	-0.004	30102	8.890	-0.003	35174	7.30	6.78	7.4	Methoxychlor
8.521	-0.003	192281	9.193	-0.003	233212	19.22	19.21	0.0	Endrin ketone
7.811	-0.005	18060	8.403	-0.004	22897	2.46	2.54	3.0	Endrin aldehyde
6.336	-0.003	167395	7.014	-0.004	218662	11.46	9.65	17.2	trans-Chlordane
6.483	-0.003	167038	7.174	-0.003	205089	11.40	9.25	20.9	cis-Chlordane
2.343	-0.003	198096	2.489	-0.003	270614	9.86	9.10	8.0	Hexachlorobutadiene
4.228	-0.002	186306	4.686	-0.003	274809	10.46	9.64	8.1	Hexachlorobenzene
3.869	-0.002	287921	4.192	-0.003	453264	21.24	20.60	3.1	Tetrachloro-m-xylene
9.435	-0.003	180030	10.400	-0.002	229669	22.80	23.66	3.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	996589	48.2
Hexabromobiphenyl	609723	779254	27.8

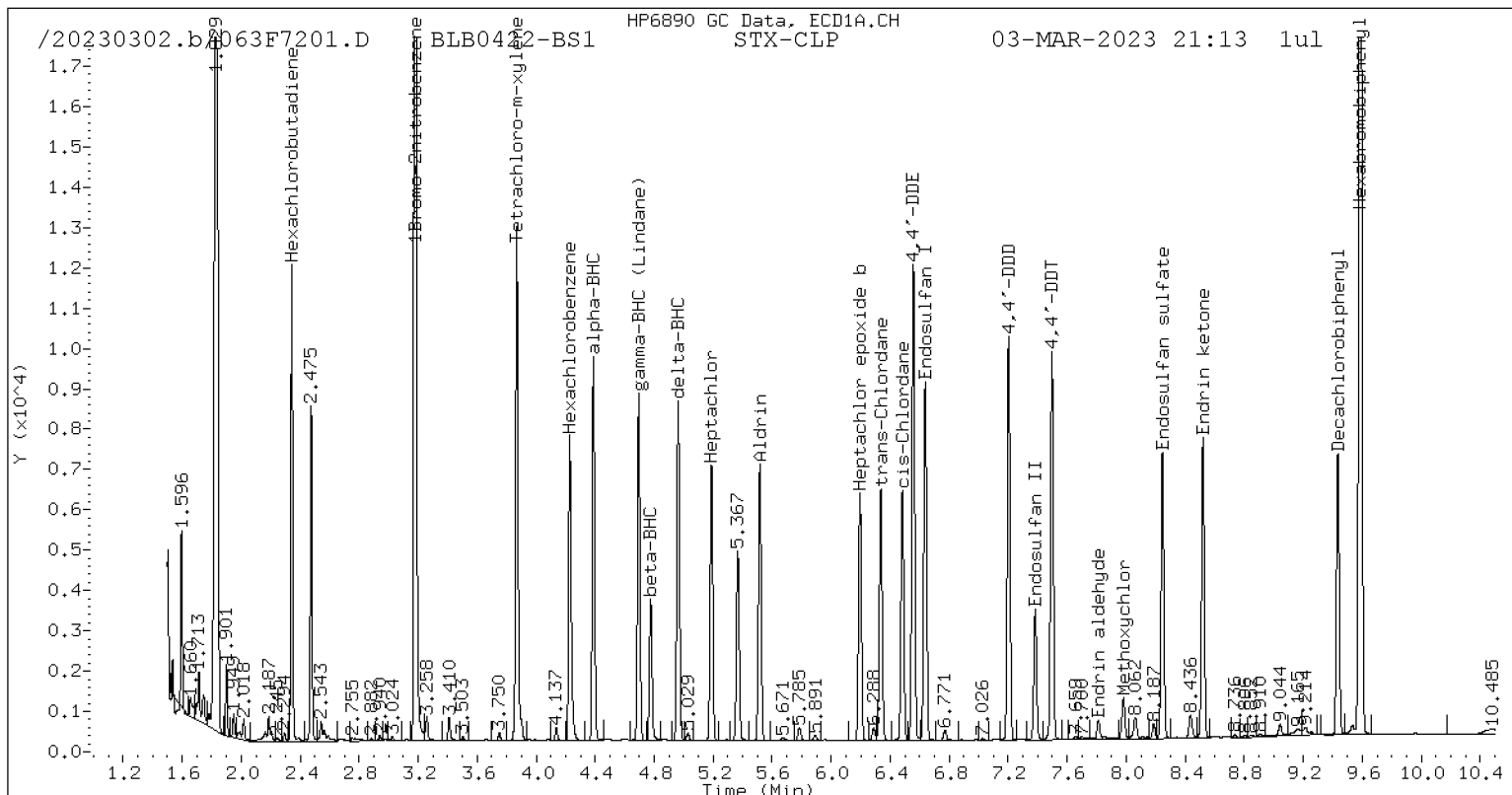
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1562925	55.3
Hexabromobiphenyl	769764	878175	14.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

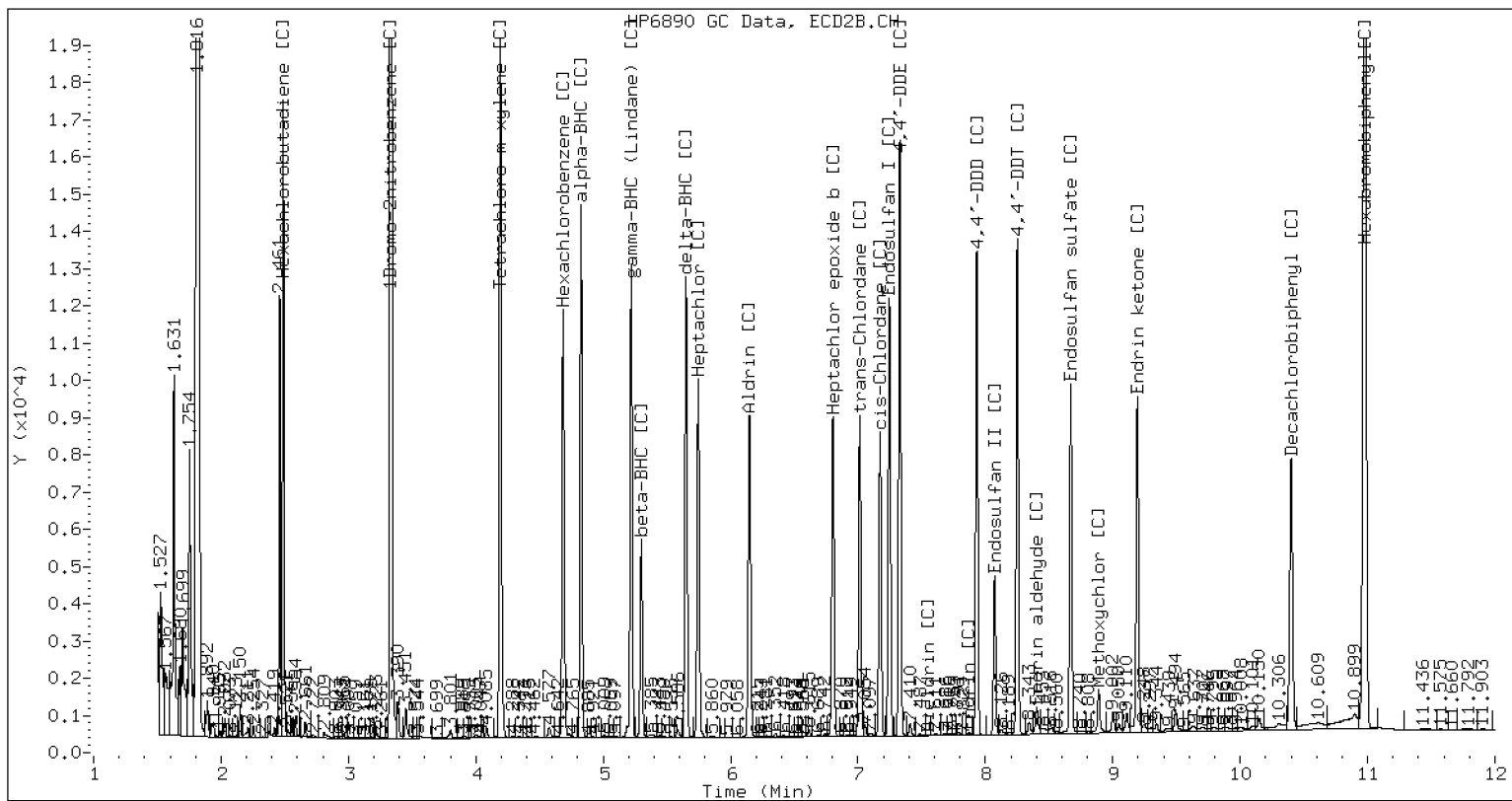
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/063F7201.D BLB0422-BS1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/064F7301.D
Data file 2: /20230302.b/B20230302.b/064F7301.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0422-BSD1
Client ID:
Injection Date: 03-MAR-2023 21:31
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.388	-0.003	258486	4.826	-0.003	393331	13.49	12.53	7.4	alpha-BHC
4.776	-0.003	109323	5.299	-0.003	163669	14.82	13.71	7.8	beta-BHC
4.963	-0.003	255026	5.650	-0.004	371374	16.29	14.36	12.6	delta-BHC
4.696	-0.003	241717	5.221	-0.003	368448	14.55	13.83	5.1	gamma-BHC (Lindane)
5.188	-0.003	208386	5.747	-0.003	311190	14.10	12.89	8.9	Heptachlor
5.516	-0.003	221060	6.148	-0.003	292928	13.35	10.63	22.7	Aldrin
6.196	-0.003	208821	6.803	-0.003	281439	14.54	12.35	16.3	Heptachlor epoxide b
6.637	-0.003	308300	7.247	-0.003	397135	23.39	19.77	16.8	Endosulfan I
----			7.547	0.004	546	0.00	0.02	---	Dieldrin
6.557	-0.004	394426	7.328	-0.003	506283	30.00	24.88	18.7	4,4'-DDE
----			7.869	0.003	2435	0.00	0.19	---	Endrin
7.384	-0.005	111086	8.073	-0.005	129867	11.81	9.84	18.2	Endosulfan II
7.203	-0.004	329025	7.932	-0.004	411123	34.97	32.84	6.3	4,4'-DDD
8.246	-0.004	244034	8.670	-0.003	308420	27.33	26.62	2.6	Endosulfan sulfate
7.497	-0.003	328280	8.251	-0.003	409060	34.52	33.86	2.0	4,4'-DDT
7.982	-0.004	30777	8.889	-0.003	41076	7.30	7.68	5.0	Methoxychlor
8.520	-0.004	251221	9.193	-0.003	295484	24.56	23.62	3.9	Endrin ketone
7.812	-0.004	21913	8.403	-0.004	31527	2.92	3.39	14.8	Endrin aldehyde
6.337	-0.003	212696	7.014	-0.003	281645	14.58	12.39	16.2	trans-Chlordane
6.483	-0.003	212462	7.174	-0.003	269255	14.52	12.11	18.1	cis-Chlordane
2.344	-0.002	190931	2.489	-0.003	250759	9.51	8.41	12.3	Hexachlorobutadiene
4.229	-0.002	206811	4.686	-0.003	313095	11.63	10.96	5.9	Hexachlorobenzene
3.869	-0.003	306084	4.193	-0.002	493911	22.62	22.39	1.0	Tetrachloro-m-xylene
9.435	-0.003	231313	10.399	-0.003	302355	28.66	30.22	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	995171	48.0
Hexabromobiphenyl	609723	796684	30.7

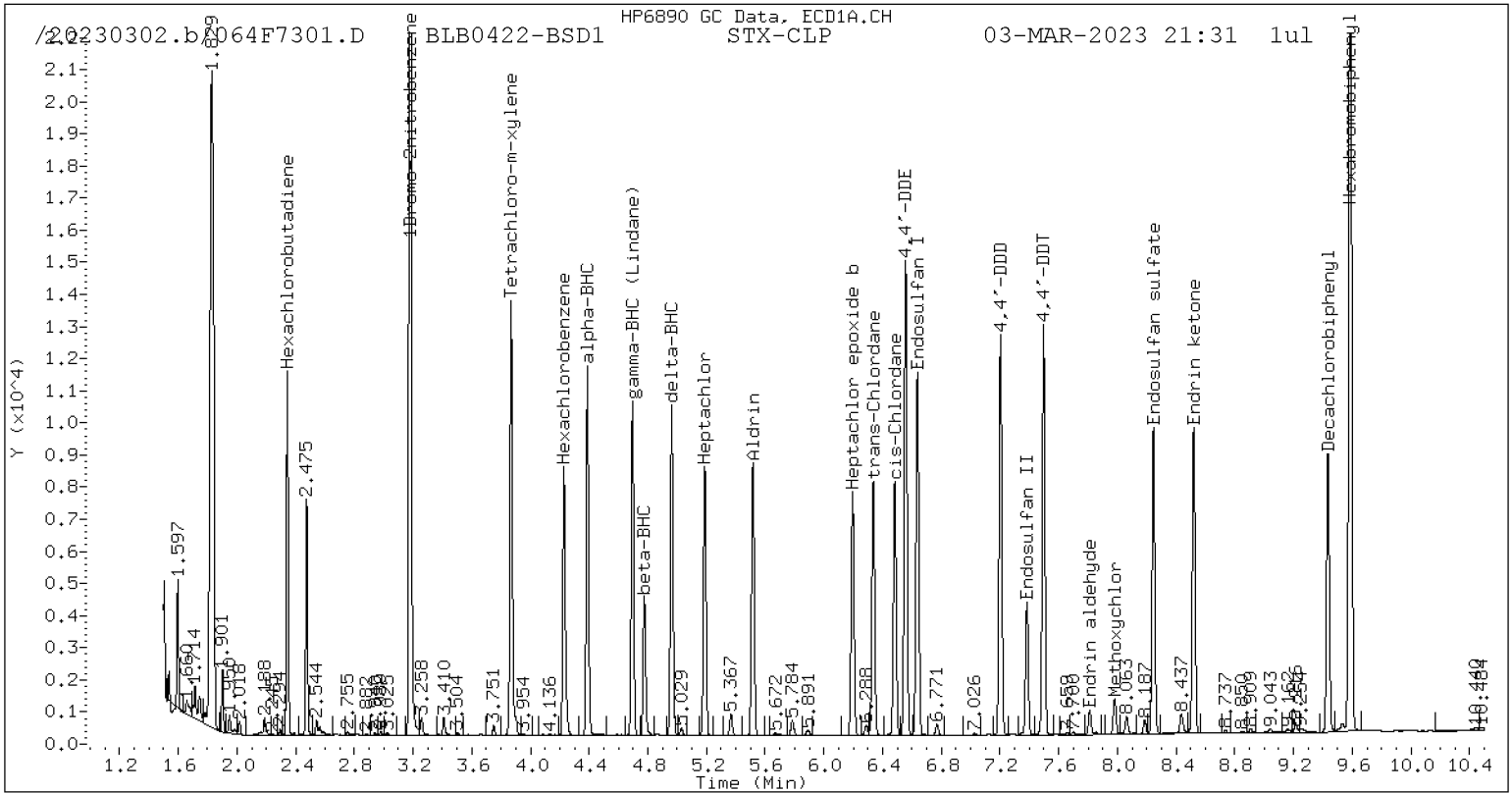
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1566782	55.7
Hexabromobiphenyl	769764	905131	17.6

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

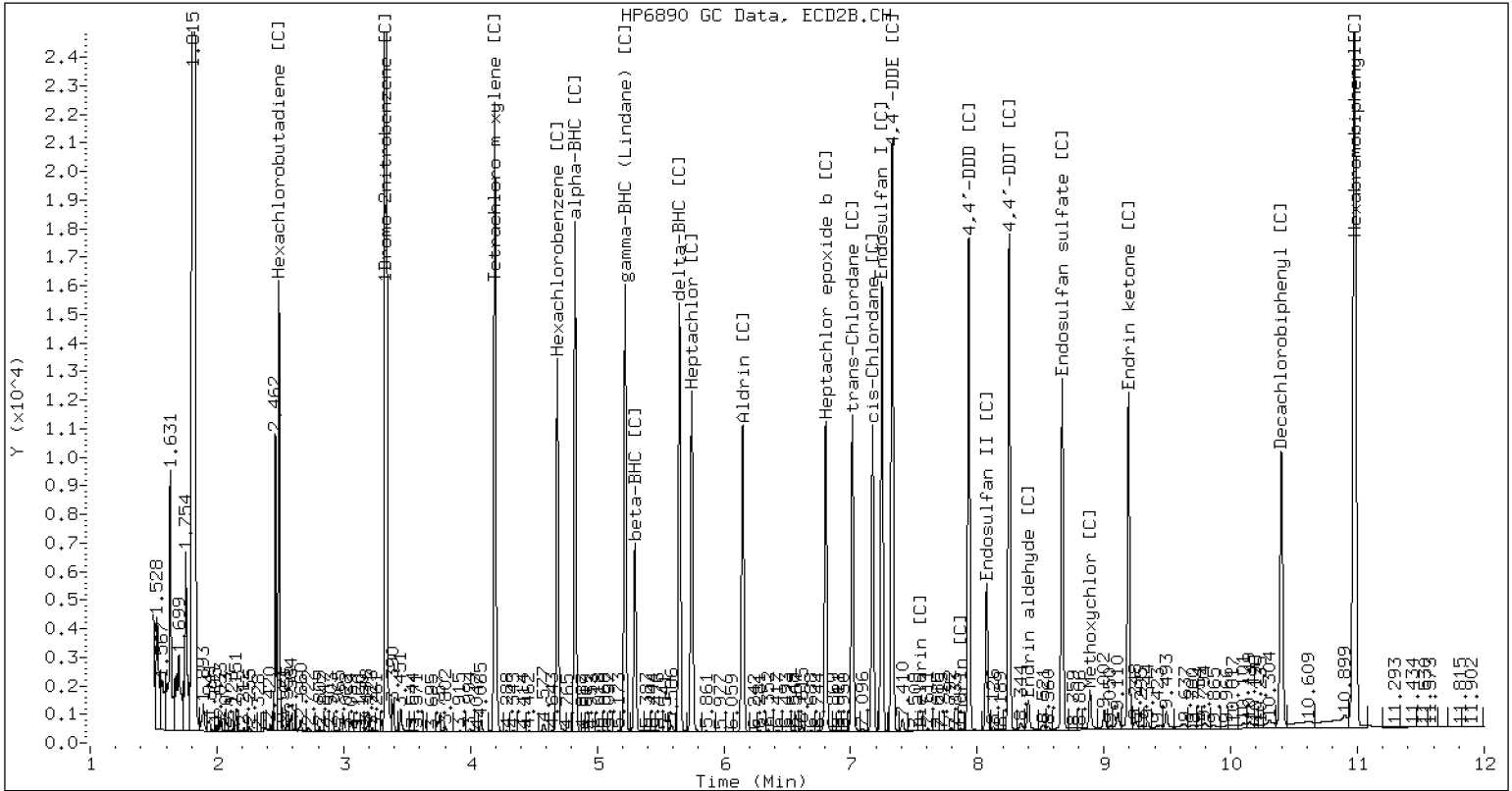
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/064F7301.D BLB0422-BSD1 CLP2



CLP-2 Manual Integration: NO



MS / MS DUPLICATE RECOVERY
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/07/23 16:29</u>
Batch:	<u>BLB0422</u>	Laboratory ID:	<u>BLB0422-MS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>25.16 g / 2.5 mL</u>	Source Sample:	<u>LDW23-SC1013</u>

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	ND	U	2.51		62.8	26 - 128

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.



MS / MS DUPLICATE RECOVERY
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/07/23 16:47</u>
Batch:	<u>BLB0422</u>	Laboratory ID:	<u>BLB0422-MSD1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>25.16 g / 2.5 mL</u>	Source Sample:	<u>LDW23-SC1013</u>

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Hexachlorobenzene	4.00	2.55		63.7	1.40	30	26 - 128

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/023F2601.D
Data file 2: /20230307.b/B20230307.b/023F2601.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0422-MS1
Client ID:
Injection Date: 07-MAR-2023 16:29
Report Date: 03/14/2023 07:03
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.376	-0.002	237025	4.814	-0.001	314164	12.86	14.40	11.2	alpha-BHC M
4.764	-0.002	89550	5.287	-0.002	165492	12.62	19.95	45.0*	beta-BHC
4.950	-0.003	292109	5.638	-0.003	194627	19.40	10.83	56.7*	delta-BHC
4.684	-0.001	255650	5.208	-0.001	246266	16.00	13.30	18.5	gamma-BHC (Lindane)
5.175	-0.002	178327	5.735	-0.001	299578	12.55	17.86	34.9	Heptachlor
5.505	0.001	217227	6.137	-0.000	234220	13.64	12.23	10.9	Aldrin
6.181	-0.002	166511	----	----	----	12.06	0.00	---	Heptachlor epoxide b
6.625	-0.001	213544	7.236	-0.001	346938	16.85	24.85	38.4	Endosulfan I
----	----	----	----	----	----	0.00	0.00	---	Dieldrin
6.544	-0.002	442580	7.318	-0.001	589658	35.01	41.69	17.4	4,4'-DDE
----	----	----	7.881	0.028	259668	0.00	22.76	---	Endrin
7.369	-0.003	102167	8.052	-0.012	478784	12.66	40.95	105.6*	Endosulfan II M
7.190	-0.002	562213	7.922	-0.002	453825	69.60	40.90	51.9*	4,4'-DDD M
8.233	-0.001	174175	8.659	-0.001	253106	22.73	24.65	8.1	Endosulfan sulfate M
7.484	-0.001	555159	8.244	0.003	885049	68.01	82.64	19.4	4,4'-DDT M
8.003	0.031	59117	8.918	0.038	122454	16.34	25.84	45.0*	Methoxychlor M
8.508	0.000	208518	9.183	0.001	455473	23.75	41.07	53.4*	Endrin ketone M
7.826	0.026	69359	8.388	-0.006	113139	10.77	13.72	24.0	Endrin aldehyde M
6.323	-0.001	168458	7.003	-0.001	249532	12.01	15.80	27.3	trans-Chlordane
6.471	0.000	227749	7.163	-0.001	238770	16.19	15.45	4.6	cis-Chlordane
2.335	-0.001	152997	2.481	-0.001	142170	7.93	6.86	14.4	Hexachlorobutadiene
4.217	-0.002	214943	4.674	-0.002	313781	12.57	15.80	22.8	Hexachlorobenzene MN
3.857	-0.002	237641	4.182	-0.001	416896	18.26	27.20	39.3	Tetrachloro-m-xylene MN
9.429	0.007	201241	10.390	0.005	252286	29.04	28.45	2.0	Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	957015	42.3
Hexabromobiphenyl	609723	683912	12.2

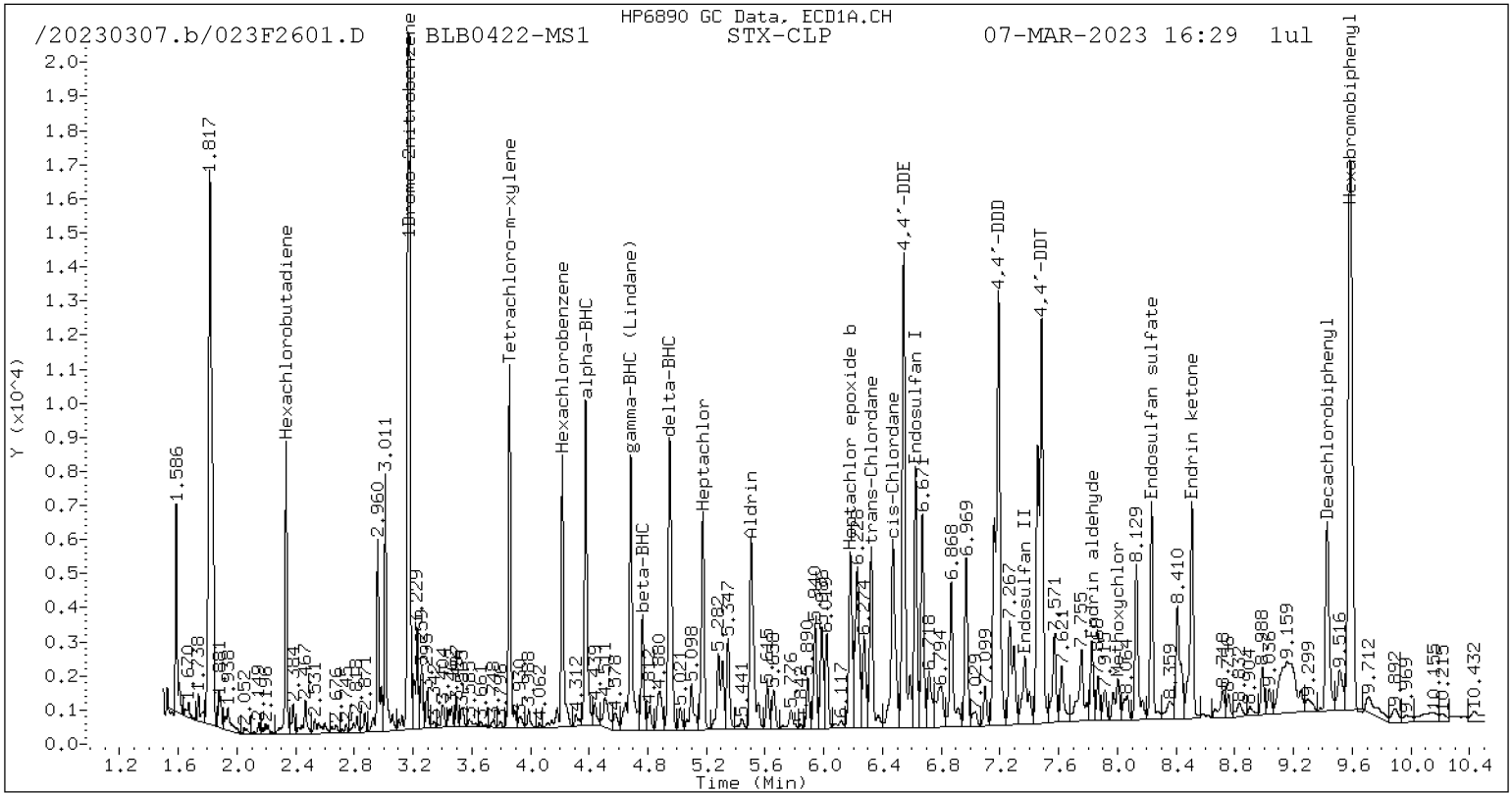
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1088854	8.2
Hexabromobiphenyl	769764	802256	4.2

* Standard Areas taken from Initial Cal Level 5

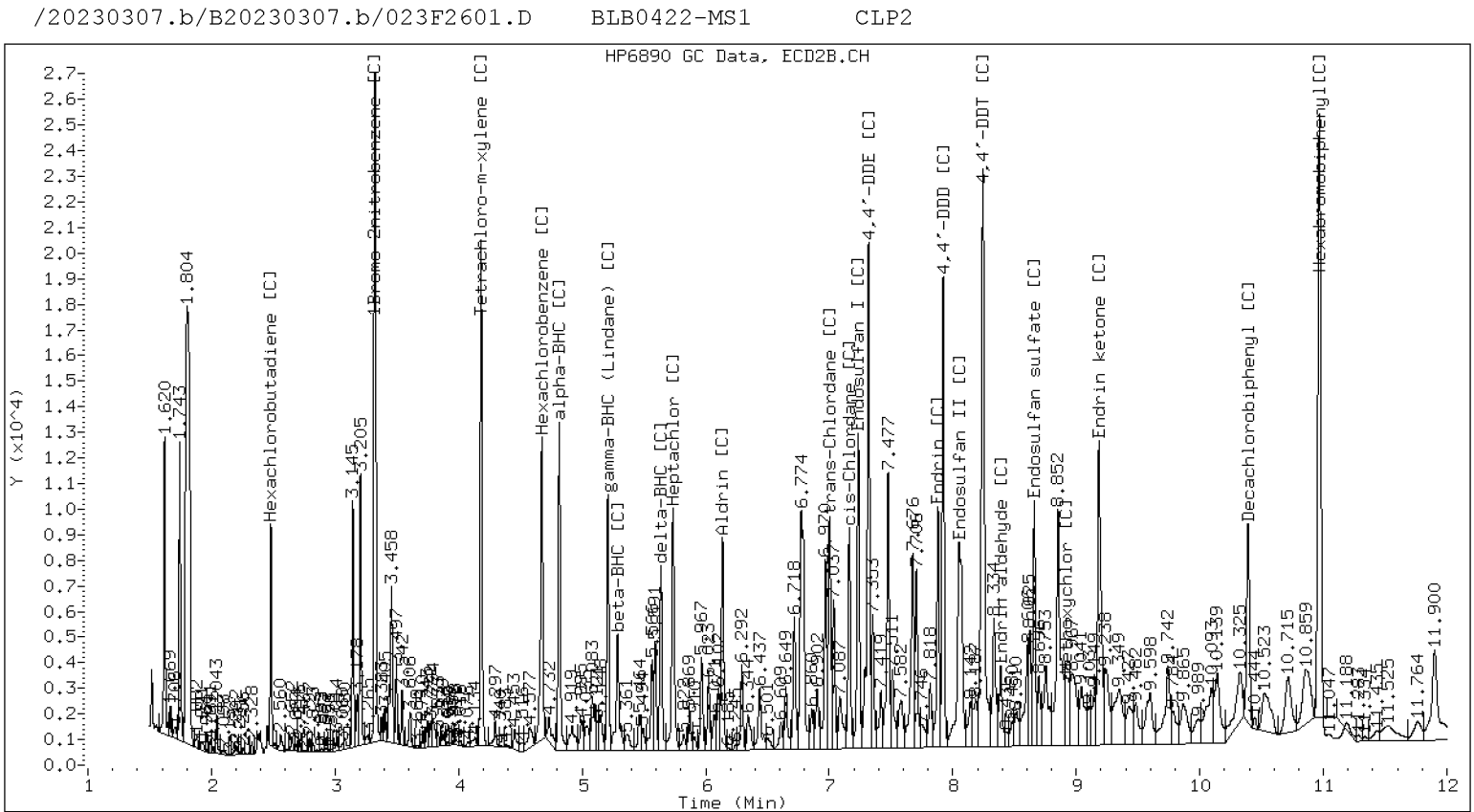
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



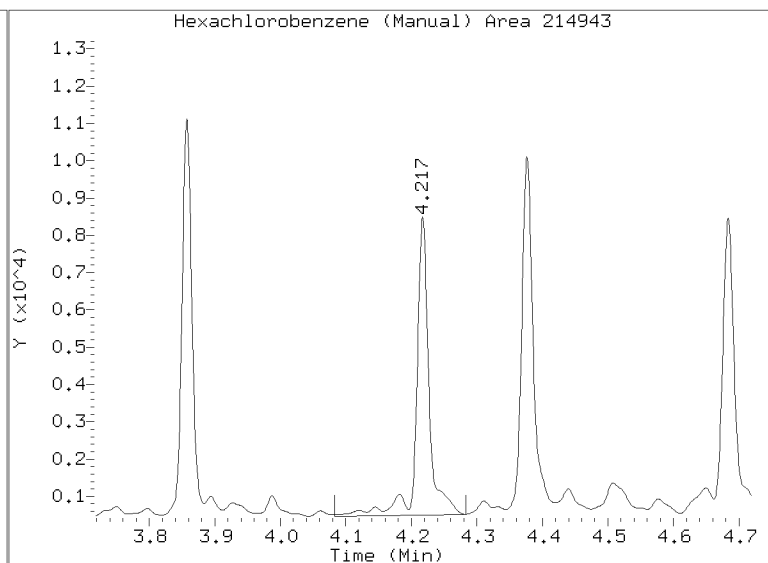
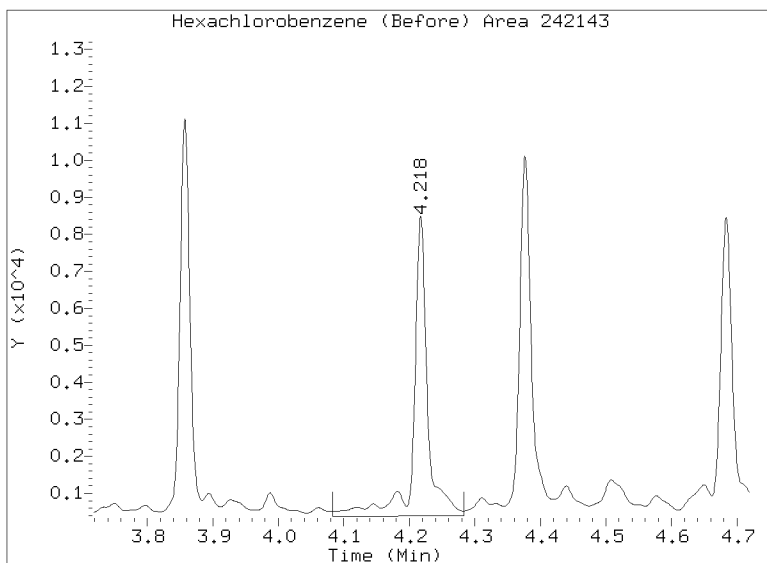
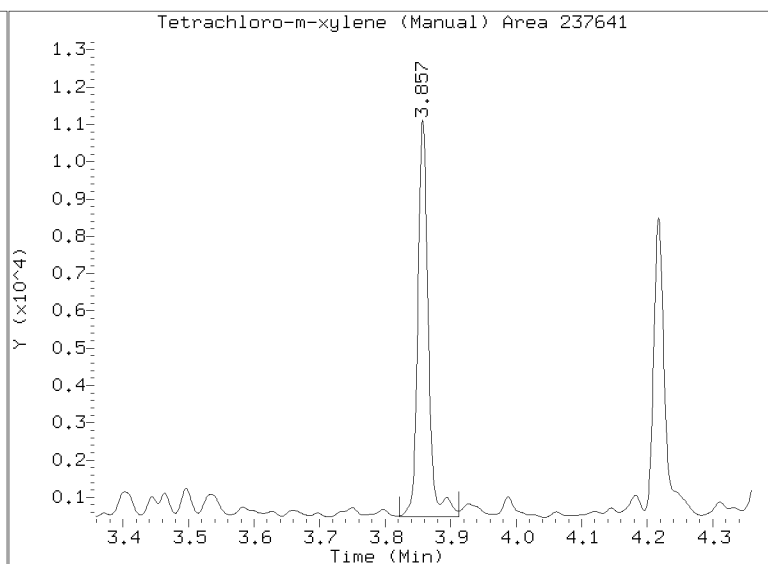
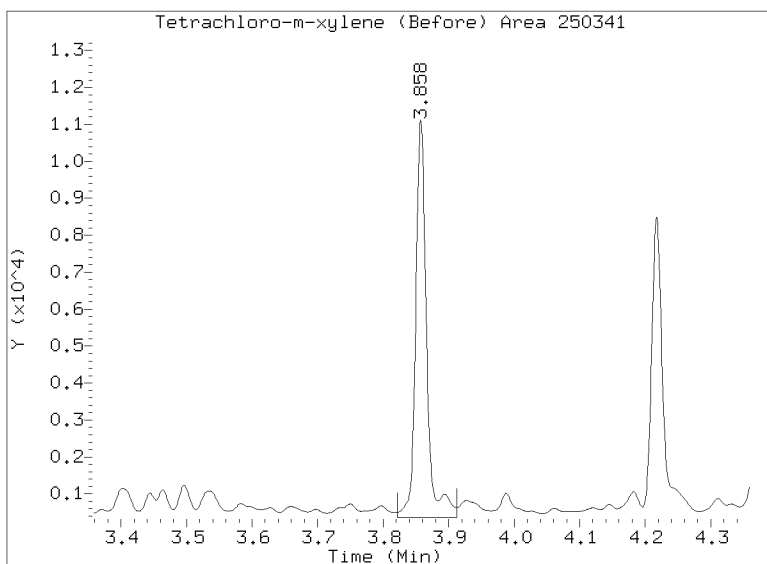
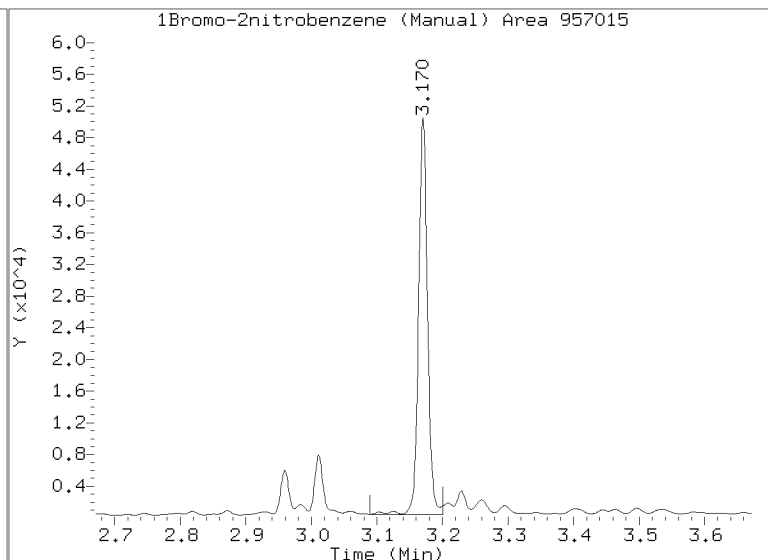
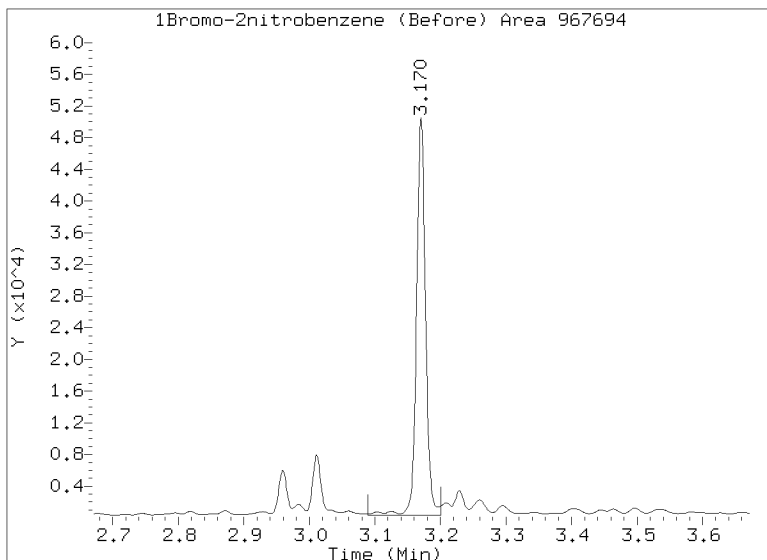
STX-CLP Manual Integration: YES



CLP-2 Manual Integration: YES

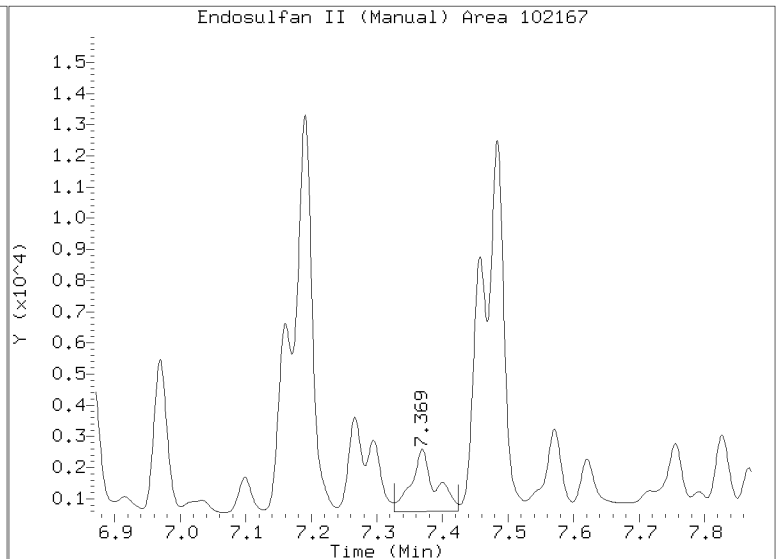
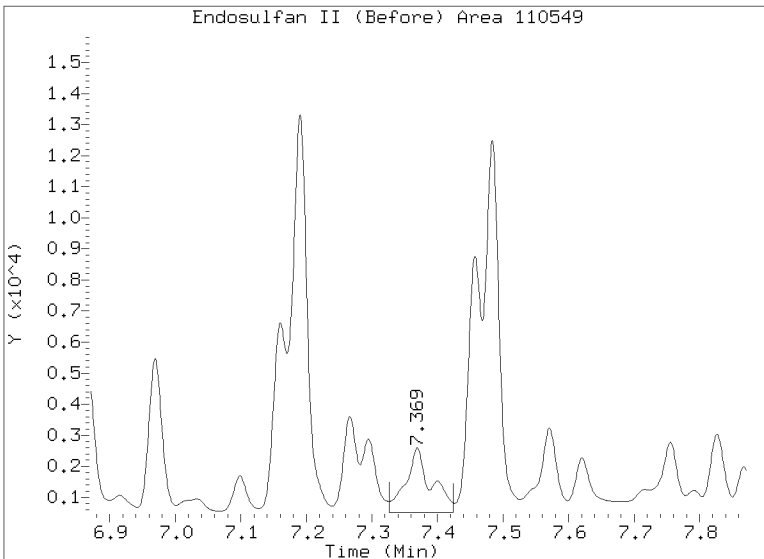
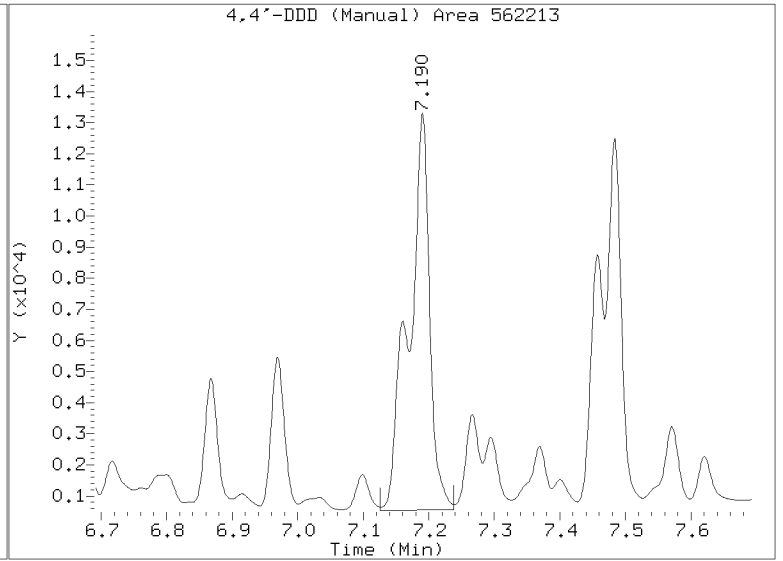
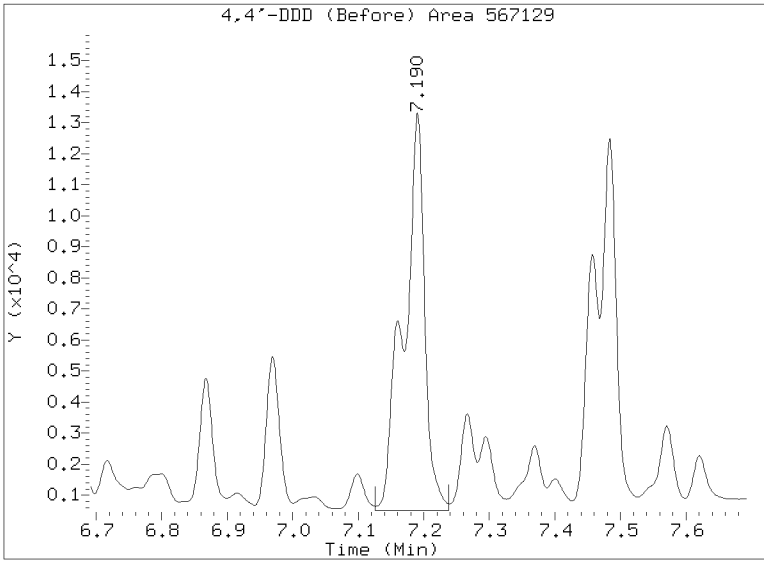
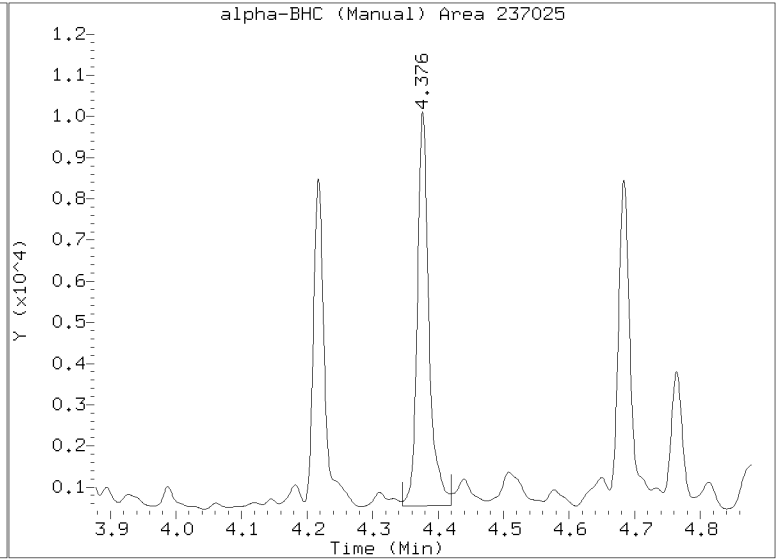
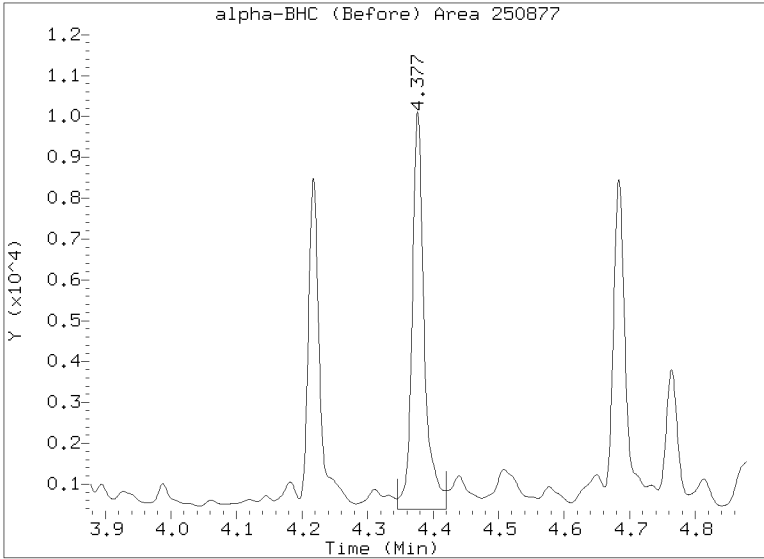
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/023F2601.D
Injection Date: 07-MAR-2023 16:29
Lab ID:BLB0422-MS1 Client ID:
Report Date: 03/14/2023 07:03



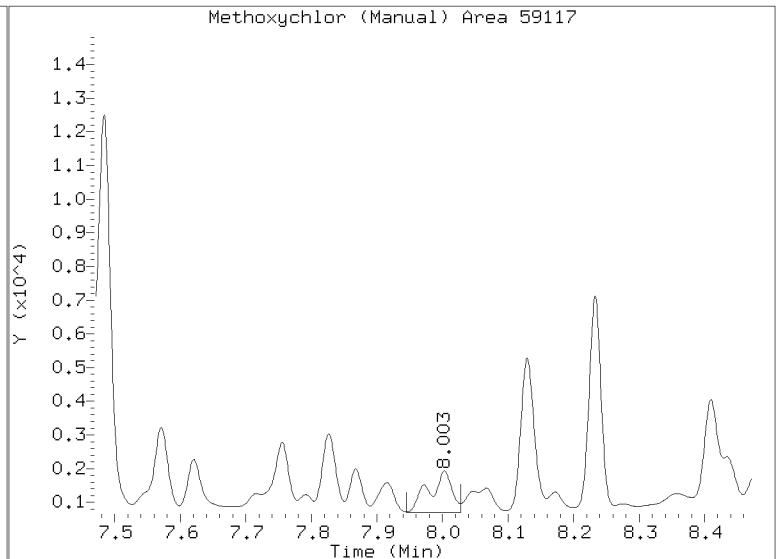
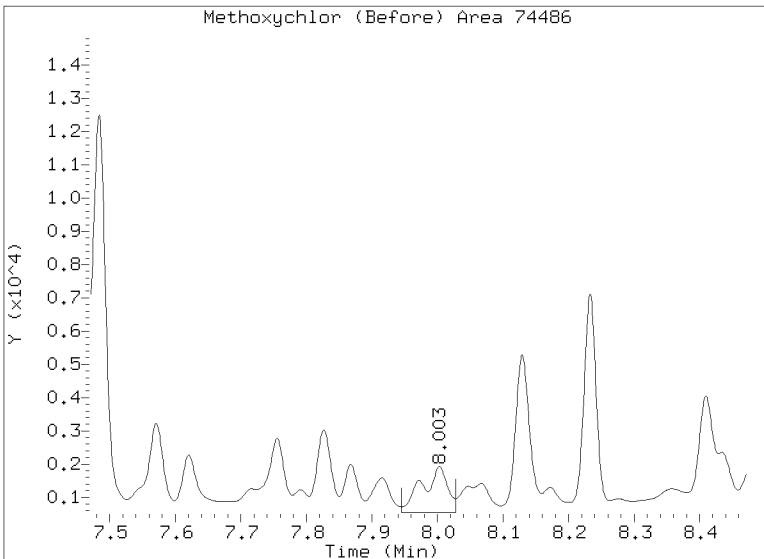
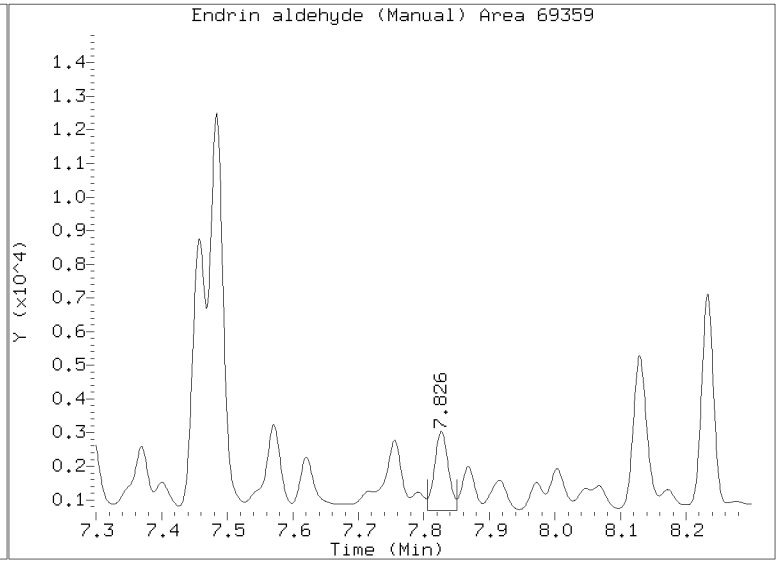
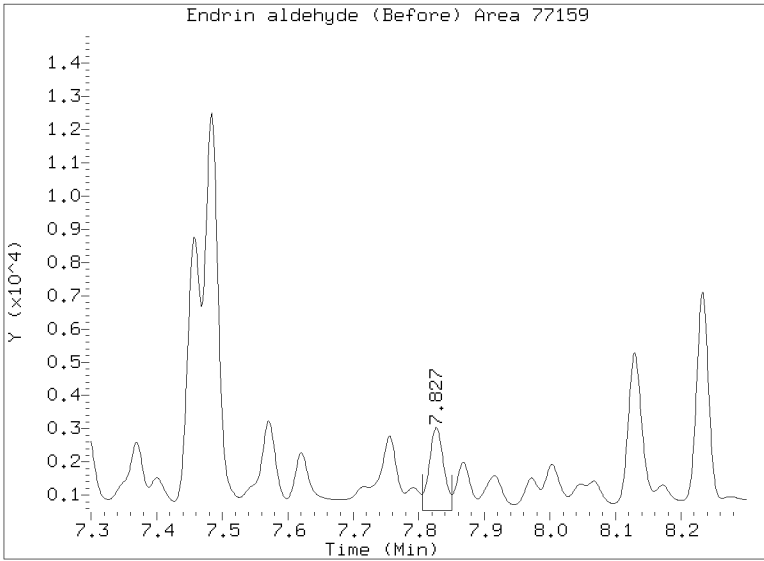
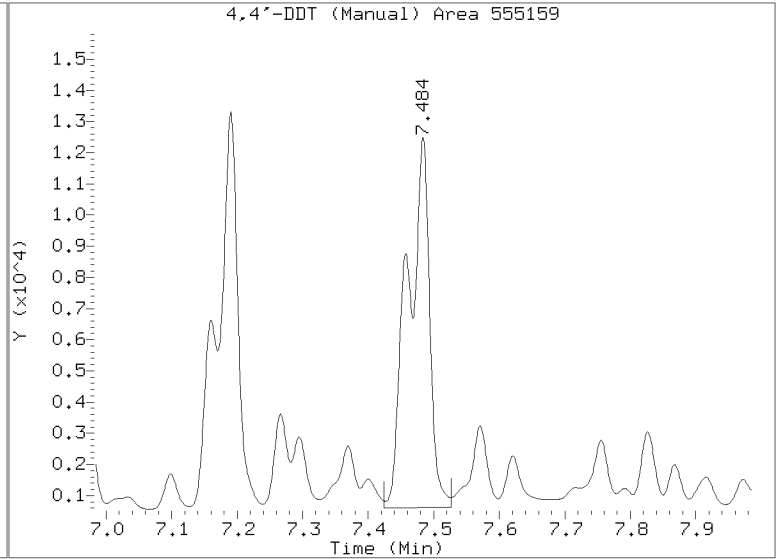
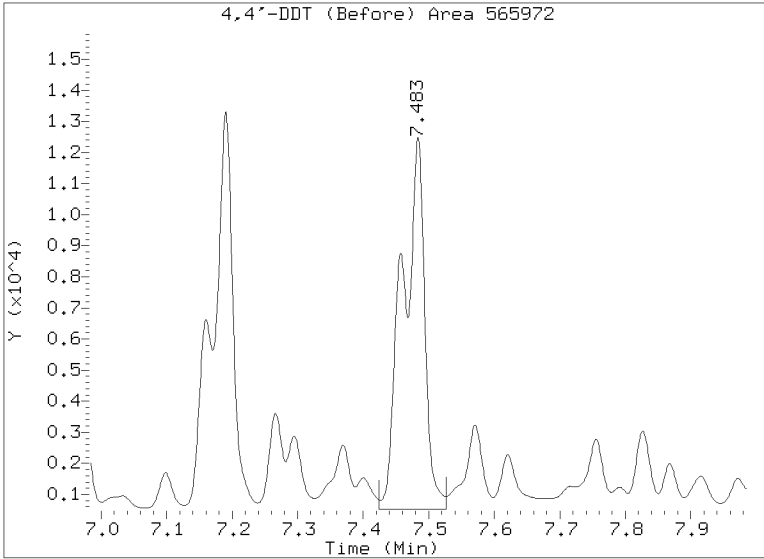
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/023F2601.D
Injection Date: 07-MAR-2023 16:29
Lab ID:BLB0422-MS1 Client ID:
Report Date: 03/14/2023 07:03



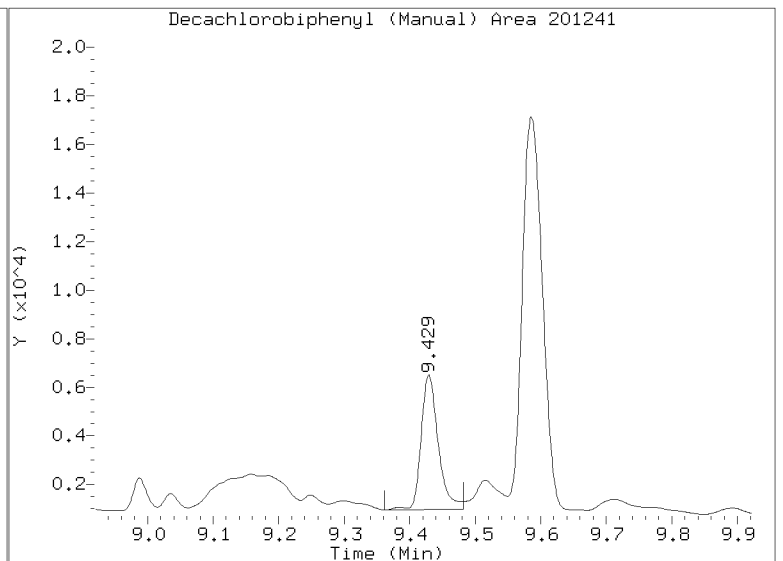
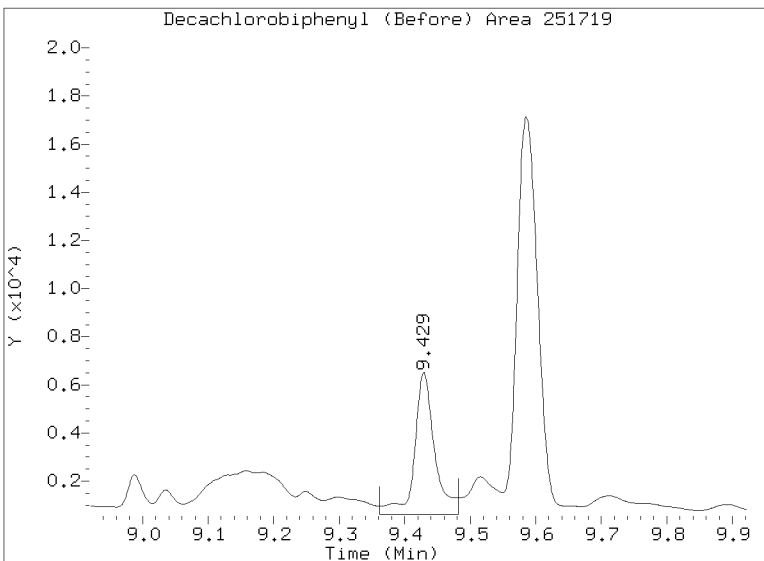
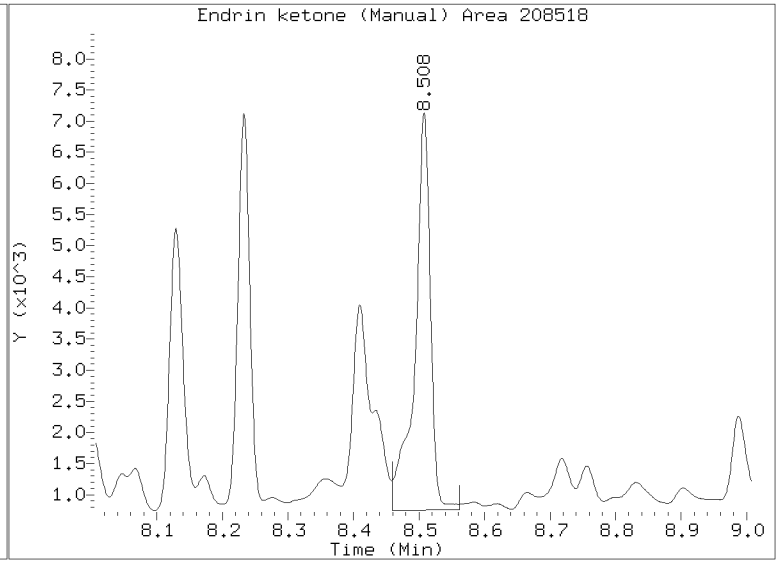
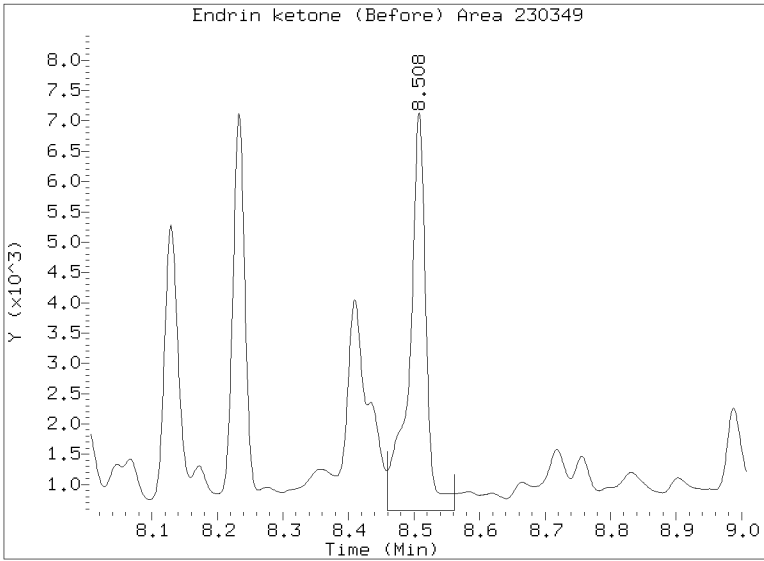
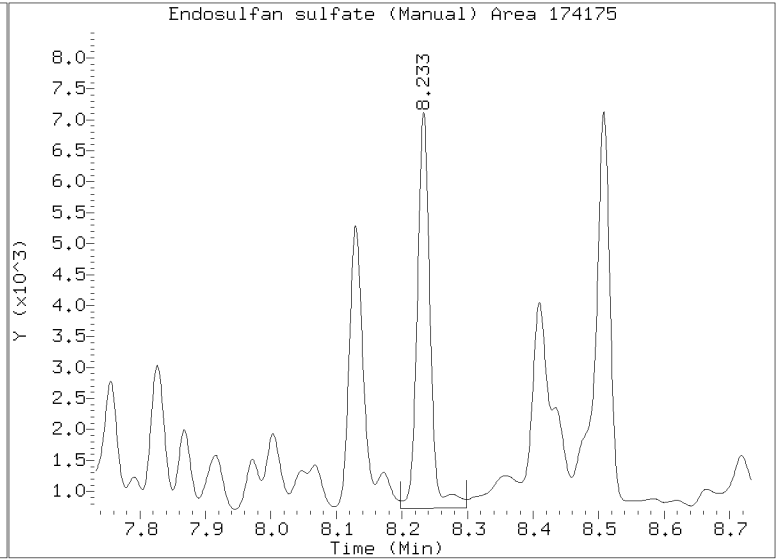
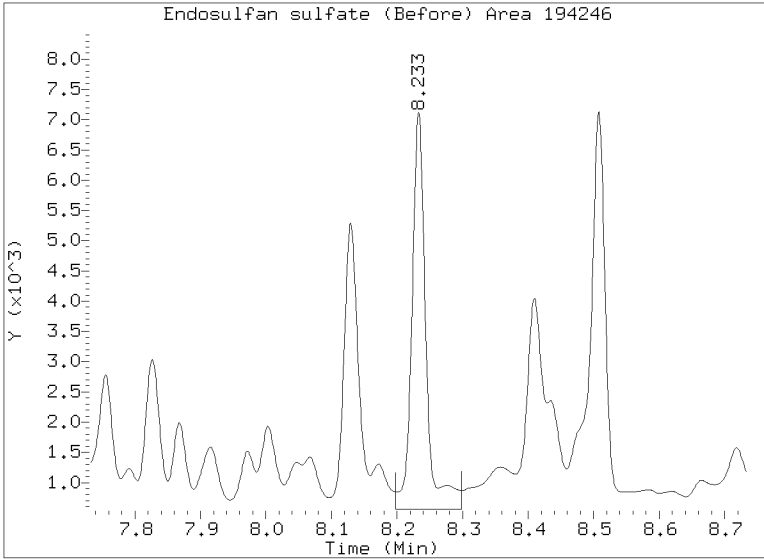
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/023F2601.D
Injection Date: 07-MAR-2023 16:29
Lab ID:BLB0422-MS1 Client ID:
Report Date: 03/14/2023 07:03



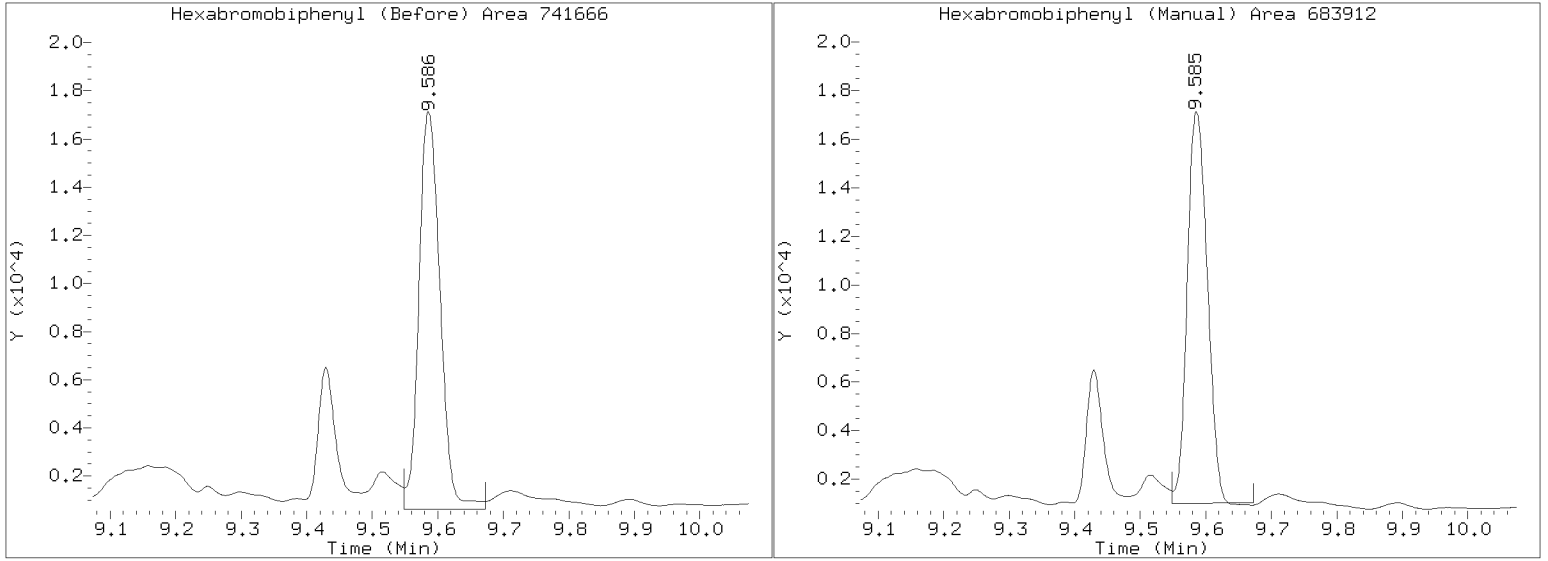
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/023F2601.D
Injection Date: 07-MAR-2023 16:29
Lab ID:BLB0422-MS1 Client ID:
Report Date: 03/14/2023 07:03



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/023F2601.D
Injection Date: 07-MAR-2023 16:29
Lab ID:BLB0422-MS1 Client ID:
Report Date: 03/14/2023 07:03



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/024F2701.D
Data file 2: /20230307.b/B20230307.b/024F2701.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0422-MSD1
Client ID:
Injection Date: 07-MAR-2023 16:47
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.376	-0.002 281631	4.814 -0.001 341708	14.63	11.90	20.6	alpha-BHC M
4.764	-0.002 96247	5.286 -0.003 156424	12.99	14.32	9.8	beta-BHC M
4.949	-0.004 322424	5.637 -0.003 225745	20.49	9.54	72.9*	delta-BHC M
4.683	-0.001 246900	5.209 -0.001 293745	14.79	12.05	20.4	gamma-BHC (Lindane) M
5.175	-0.002 187494	5.734 -0.001 299231	12.62	13.55	7.1	Heptachlor M
5.505	0.001 241388	6.136 -0.001 252792	14.50	10.03	36.5	Aldrin
6.181	-0.002 193233	----	13.39	0.00	---	Heptachlor epoxide b
6.625	-0.001 249287	7.235 -0.001 345758	18.82	18.82	0.0	Endosulfan I M
6.916	0.031 13702	----	0.96	0.00	---	Dieldrin
6.543	-0.003 428275	7.318 -0.002 614614	32.42	33.01	1.8	4,4'-DDE M
----	----	7.881 0.028 266033	0.00	20.42	---	Endrin
7.370	-0.002 88982	8.053 -0.011 428100	9.92	32.06	105.5*	Endosulfan II M
7.190	-0.002 616979	7.922 -0.001 495808	68.71	39.12	54.9*	4,4'-DDD
8.233	-0.001 187044	8.659 -0.001 250072	21.96	21.32	2.9	Endosulfan sulfate M
7.484	-0.001 556487	8.244 0.003 811369	61.33	66.33	7.8	4,4'-DDT M
8.003	0.031 60665	8.920 0.039 47039	15.09	8.69	53.8*	Methoxychlor M
8.507	-0.001 238685	9.184 0.002 451545	24.46	35.65	37.2	Endrin ketone M
7.826	0.026 83058	8.387 -0.007 104718	11.61	11.12	4.3	Endrin aldehyde M
6.323	-0.001 177747	7.003 -0.001 245069	12.13	11.79	2.8	trans-Chlordane M
6.470	-0.000 231073	7.162 -0.001 243686	15.72	11.98	27.0	cis-Chlordane M
2.335	-0.000 209762	2.482 -0.000 213198	10.40	7.82	28.4	Hexachlorobutadiene M
4.217	-0.002 227779	4.675 -0.002 334924	12.74	12.81	0.5	Hexachlorobenzene MN
3.857	-0.002 281315	4.182 -0.001 456840	20.69	22.64	9.0	Tetrachloro-m-xylene MN
9.427	0.006 221905	10.389 0.003 261748	28.81	25.84	10.8	Decachlorobiphenyl MN

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1000033	48.7
Hexabromobiphenyl	609723	760192	24.7

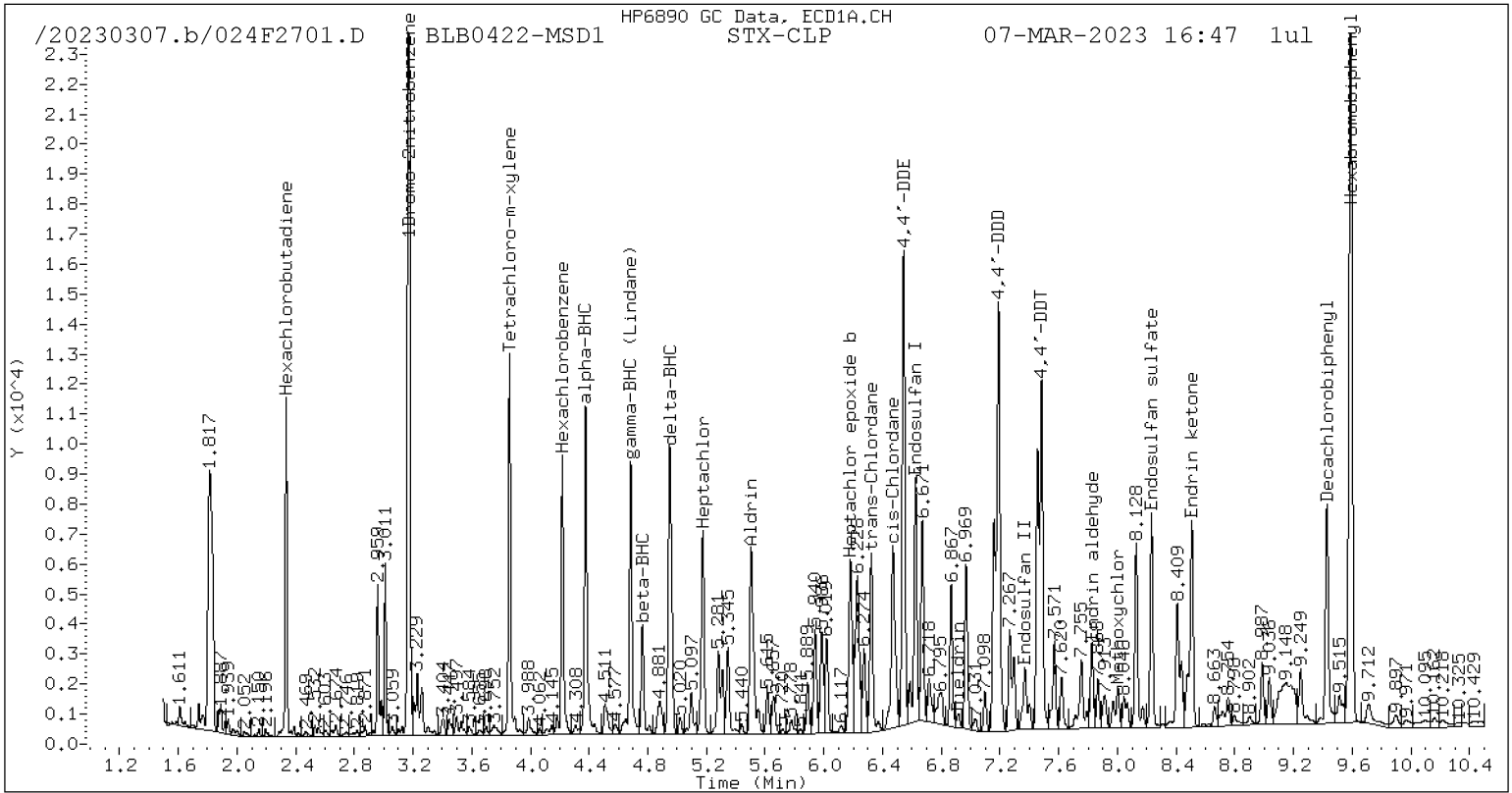
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1433353	42.4
Hexabromobiphenyl	769764	916346	19.0

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

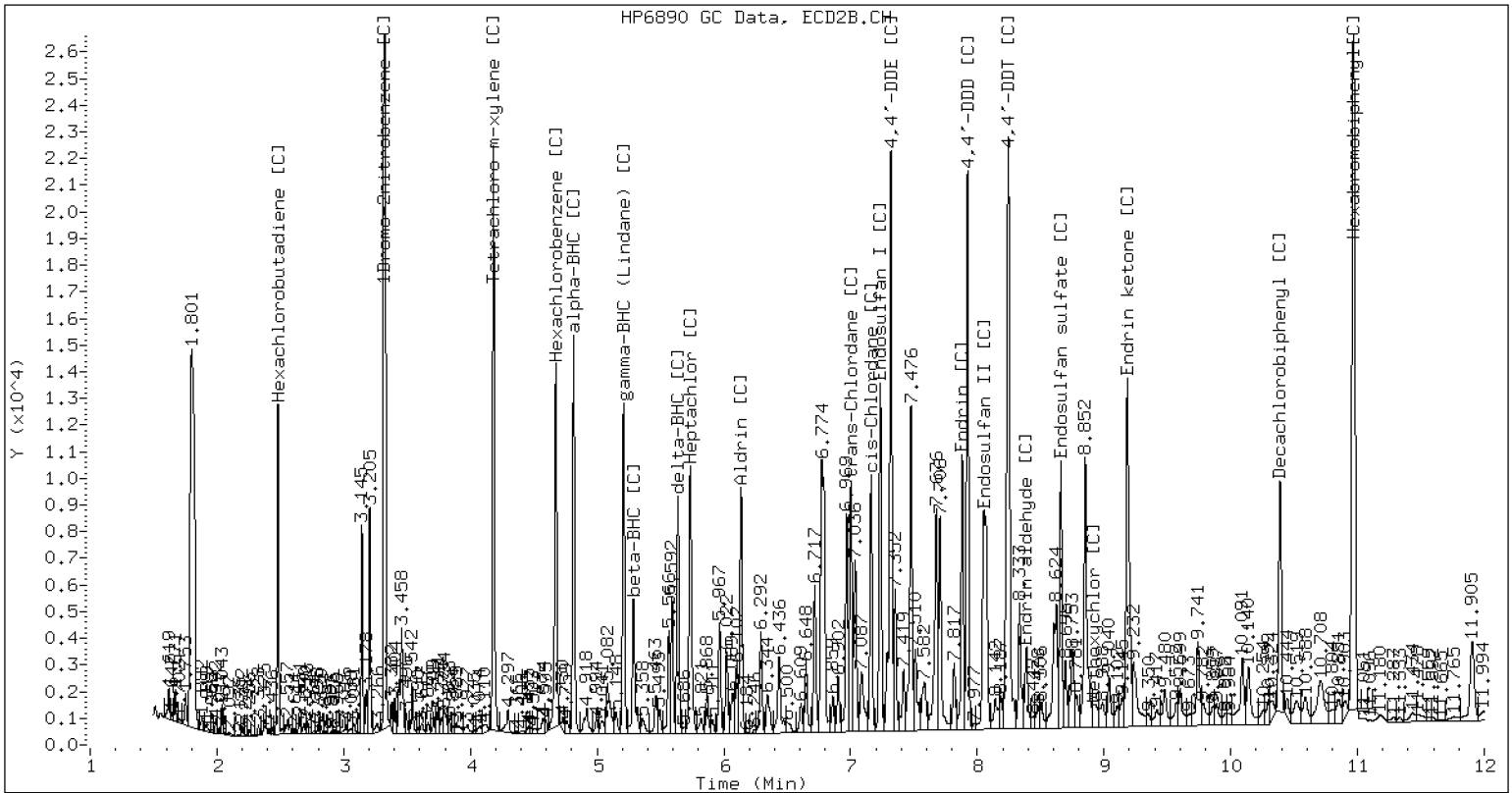
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

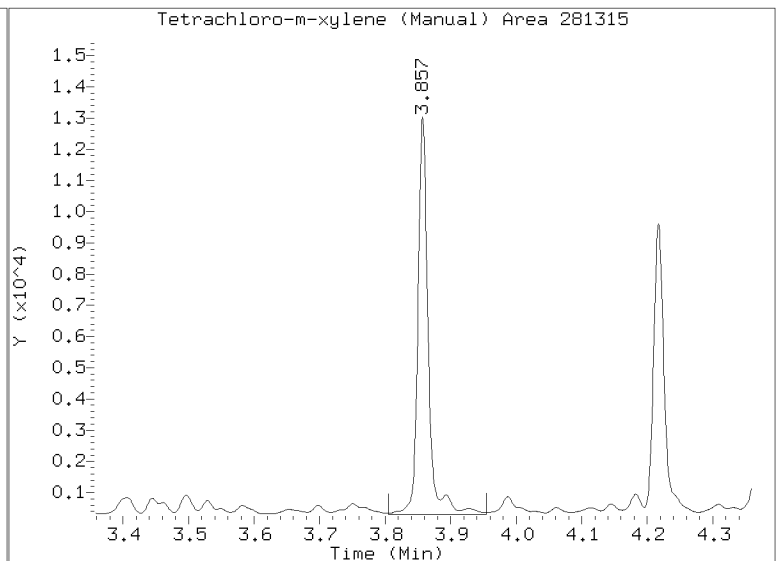
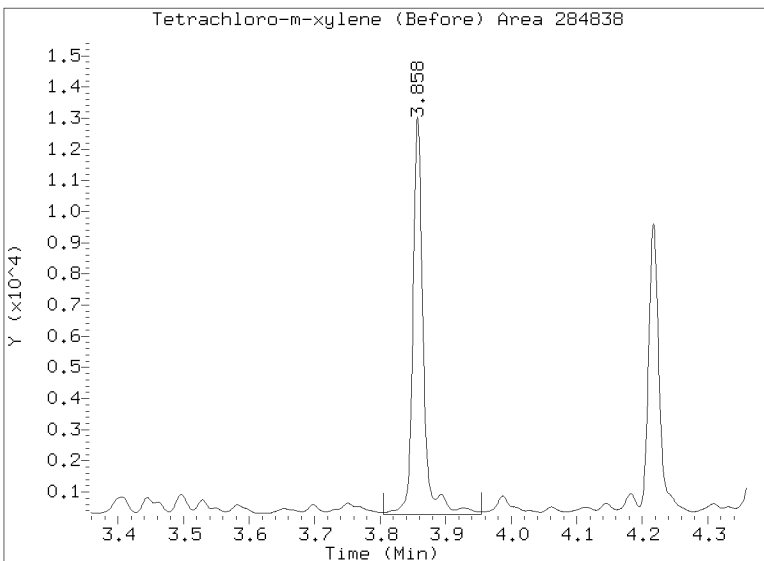
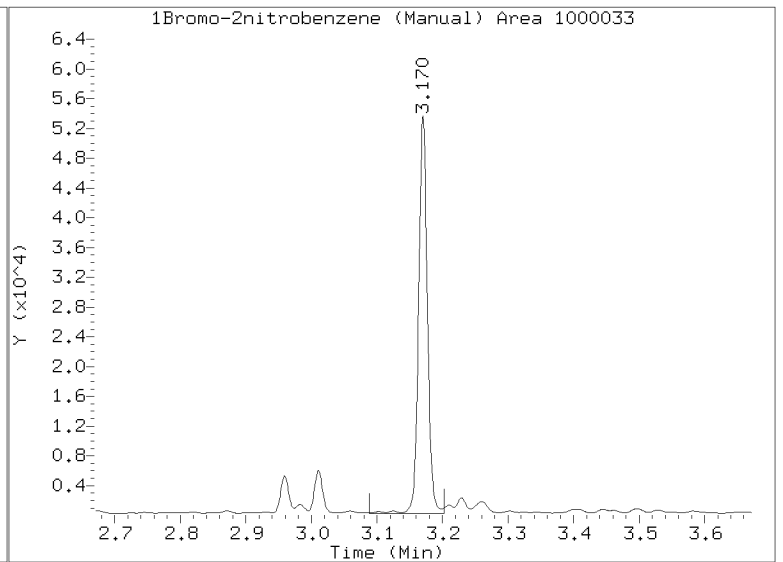
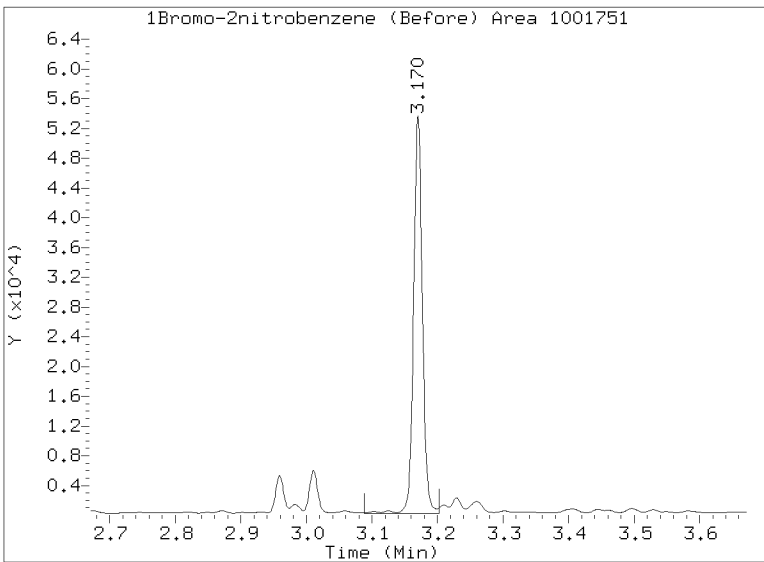
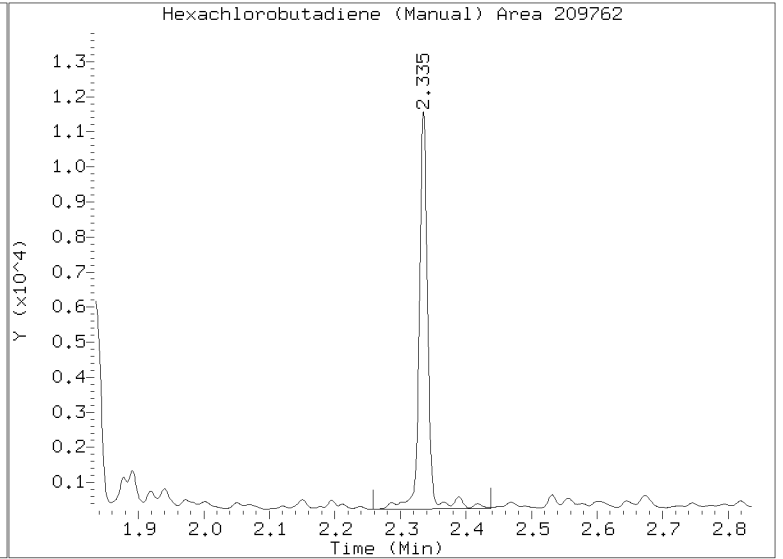
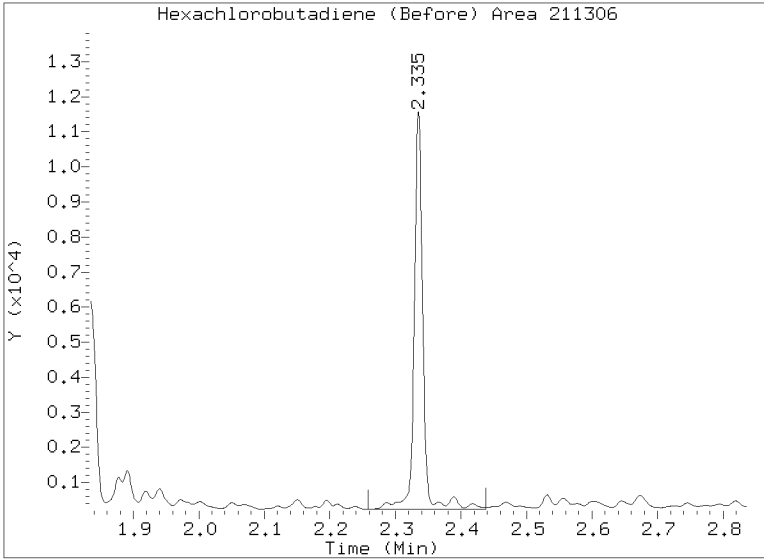
/20230307.b/B20230307.b/024F2701.D BLB0422-MSD1 CLP2



CLP-2 Manual Integration: YES

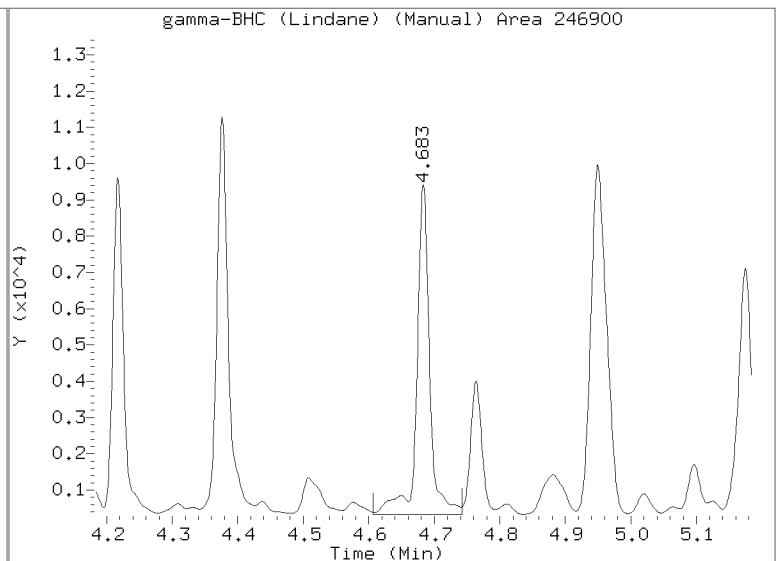
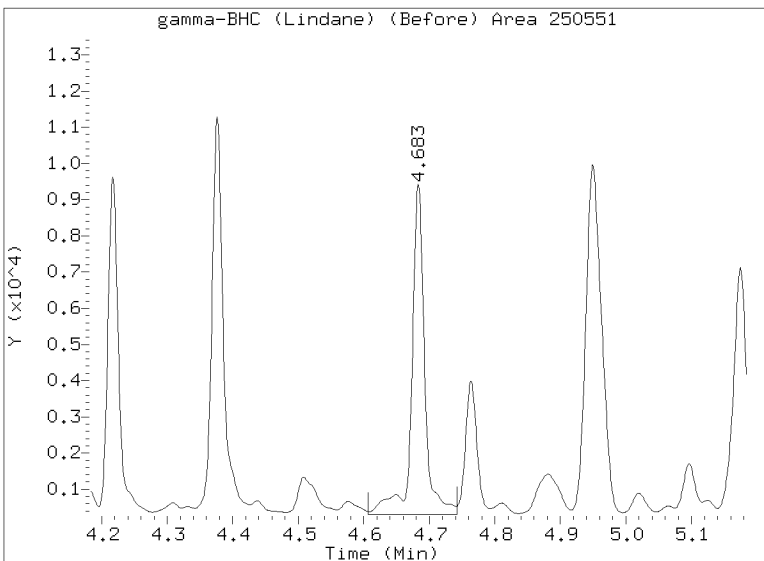
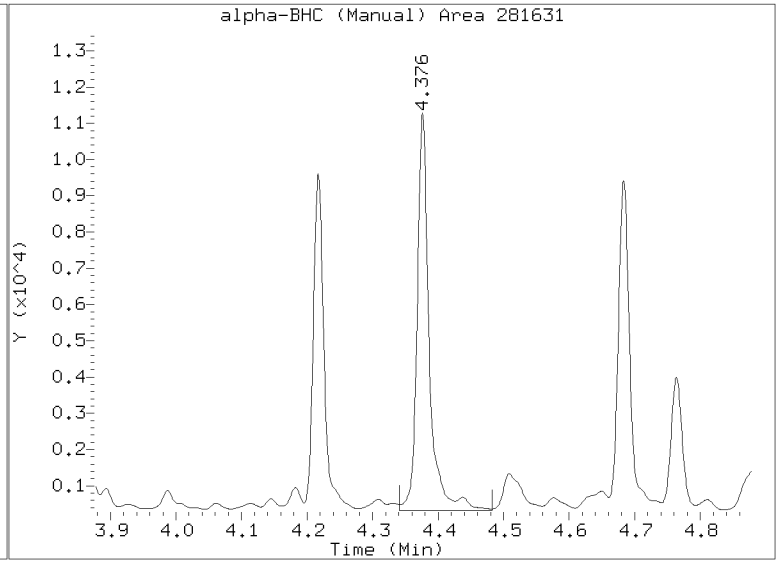
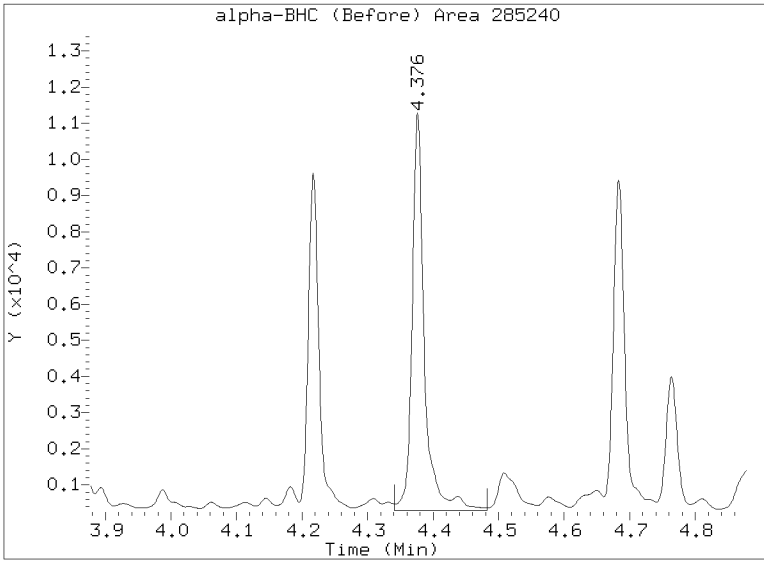
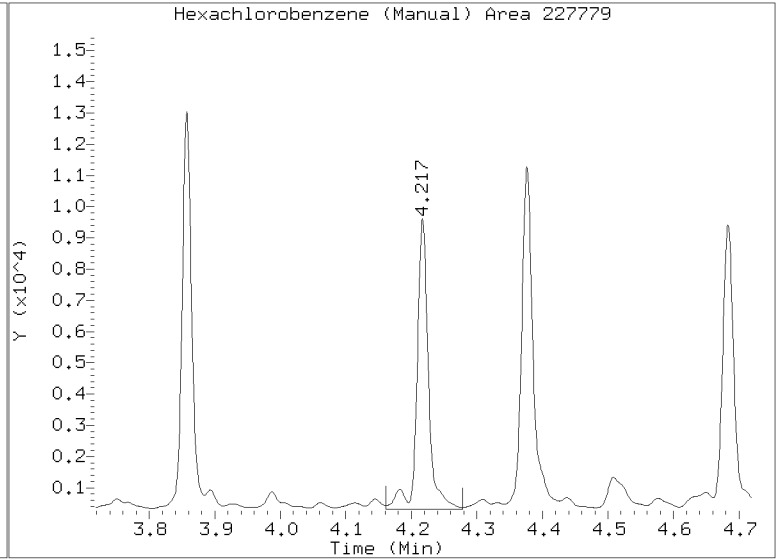
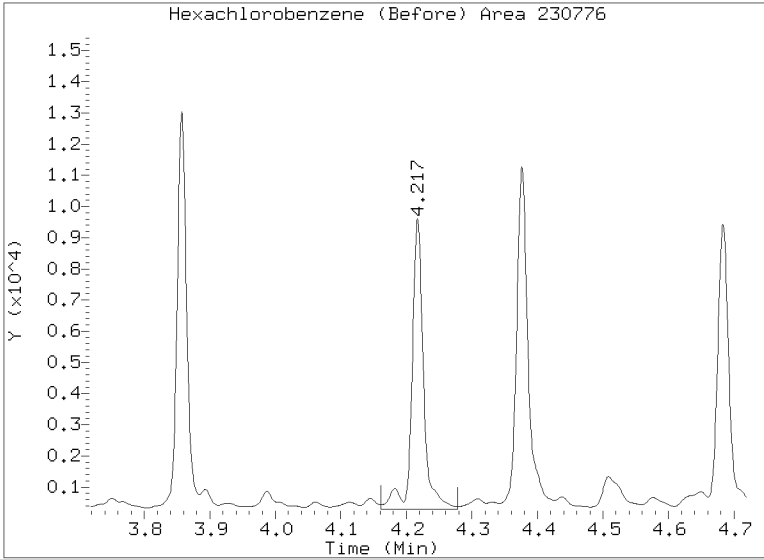
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



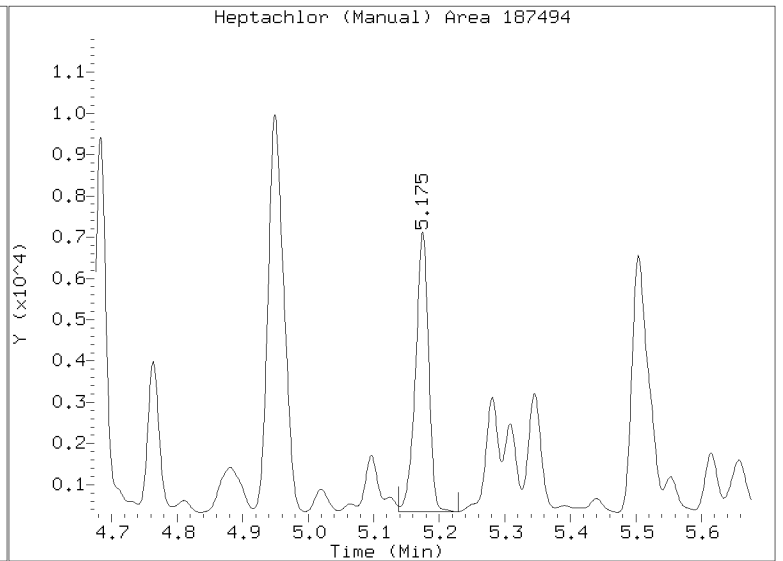
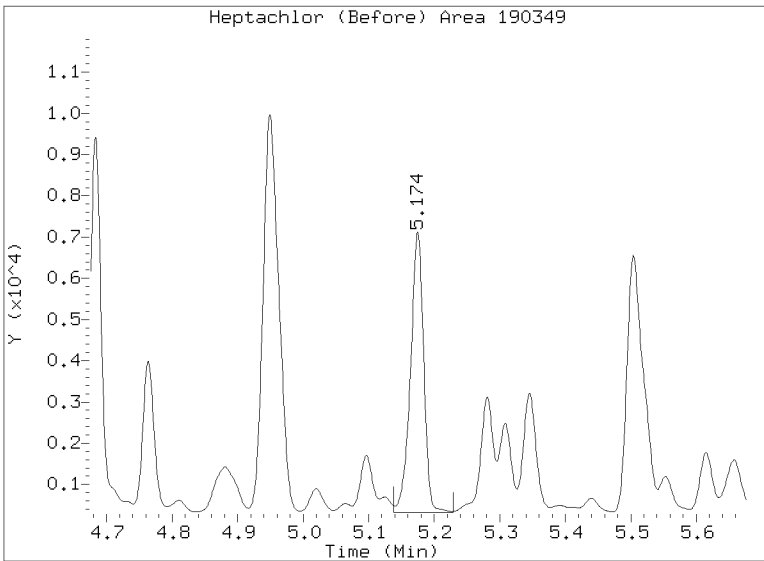
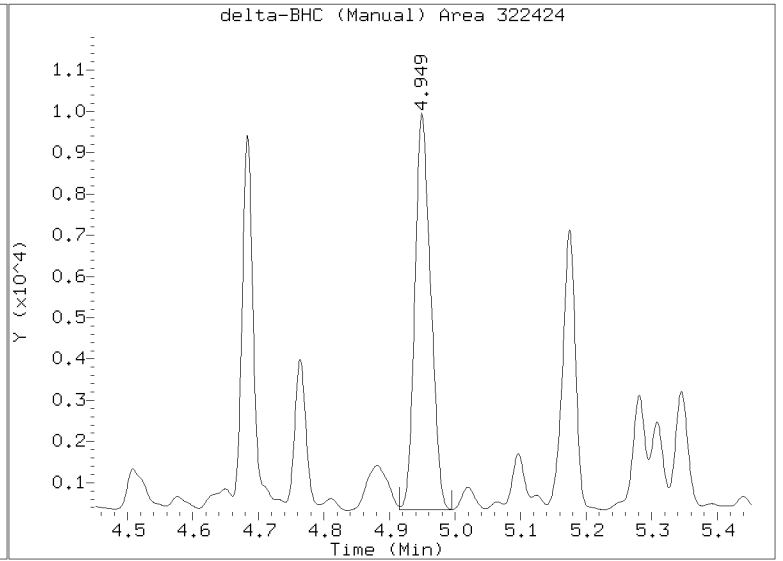
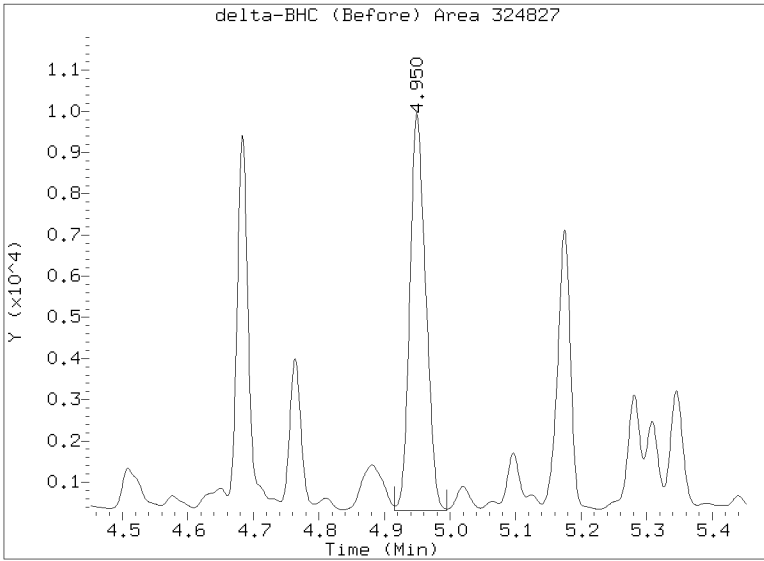
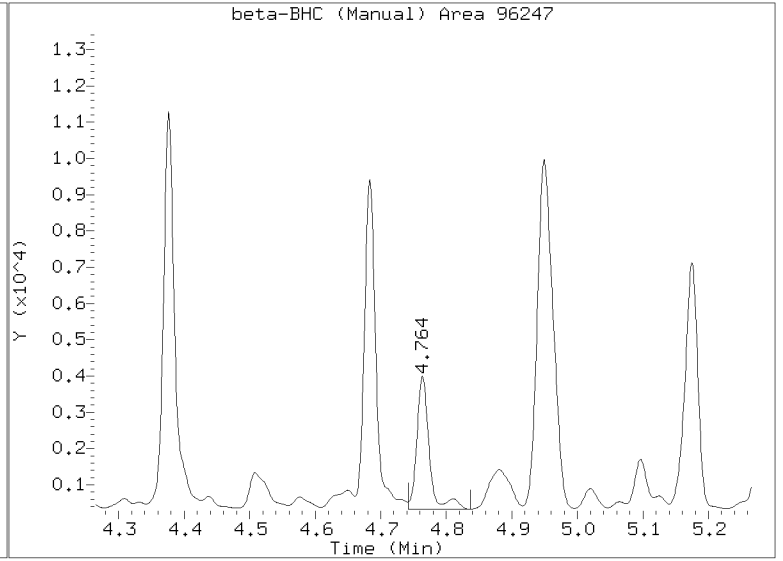
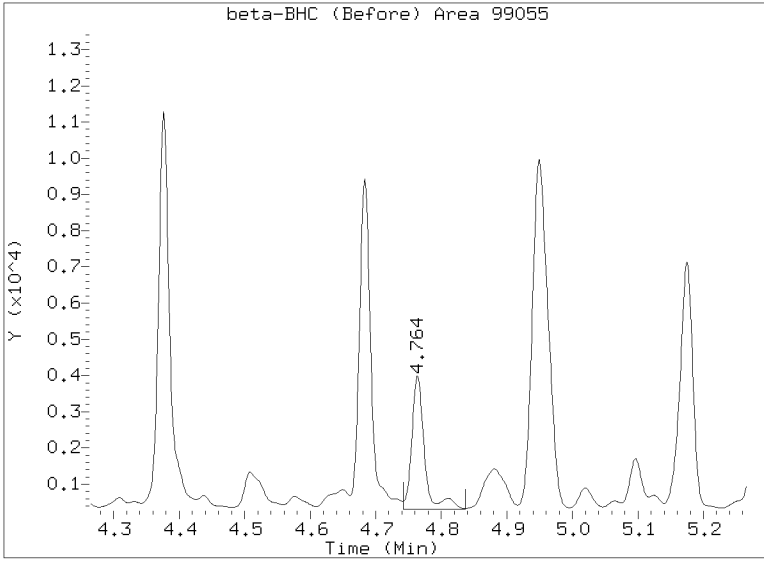
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



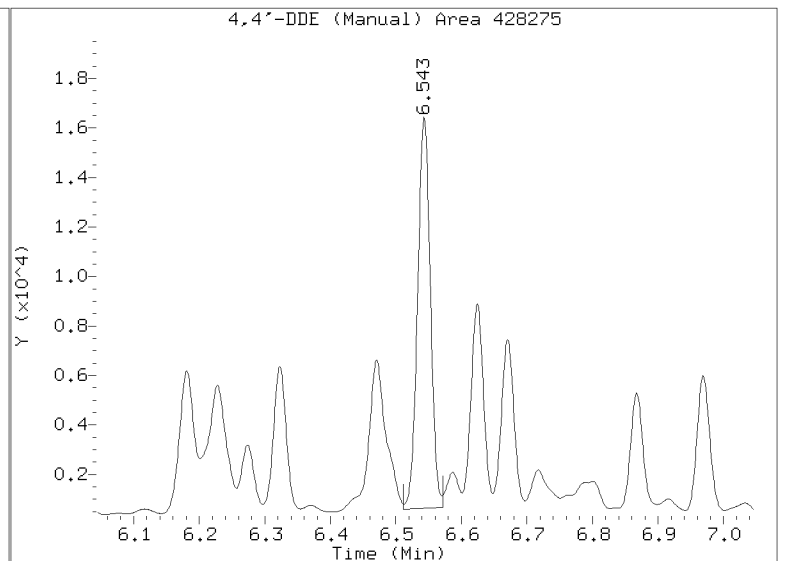
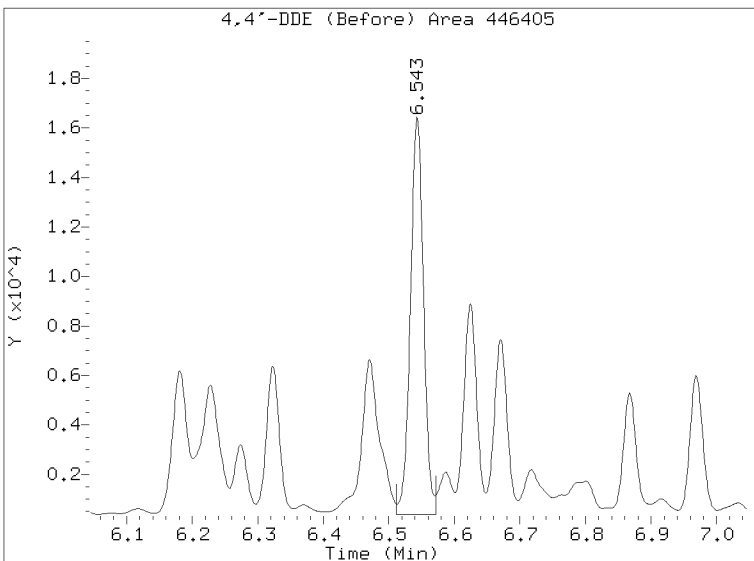
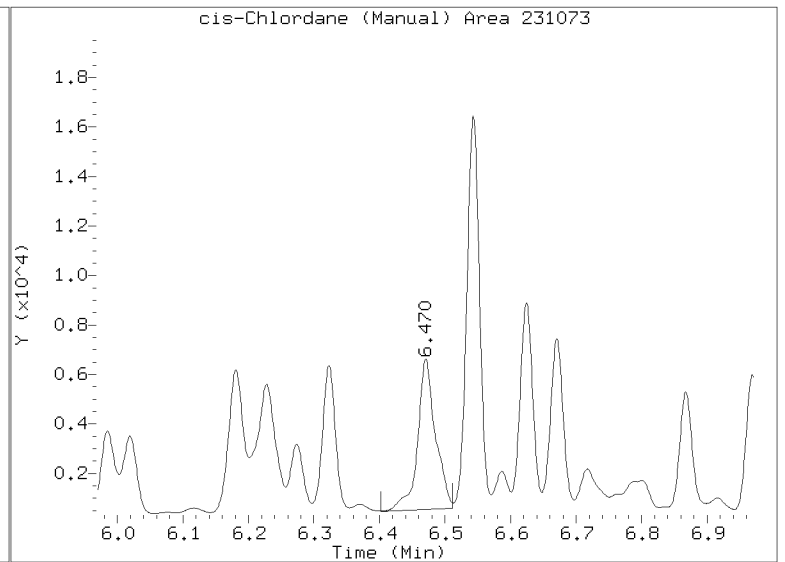
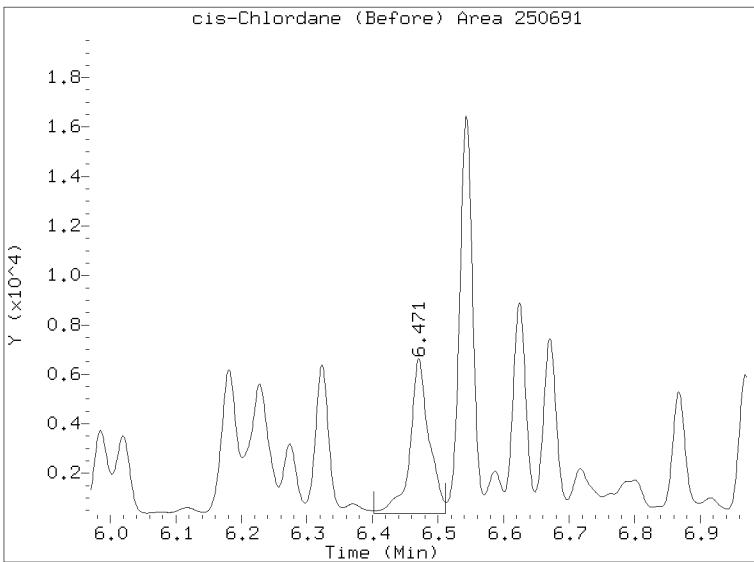
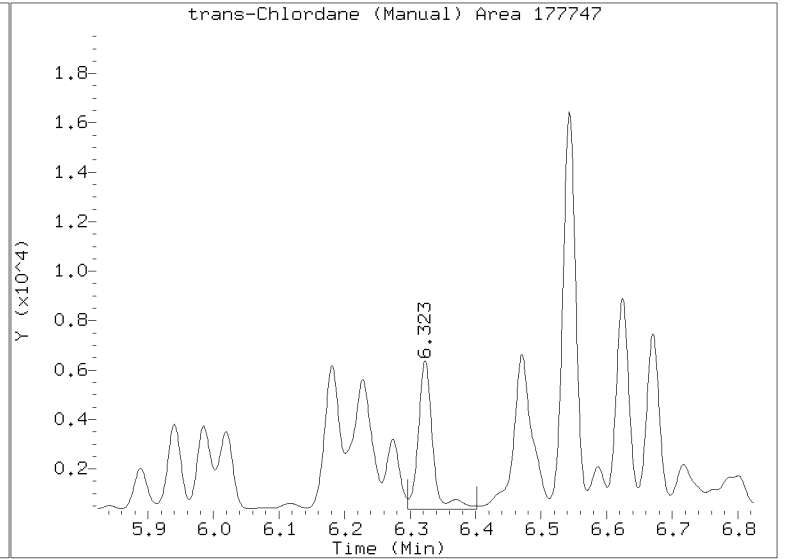
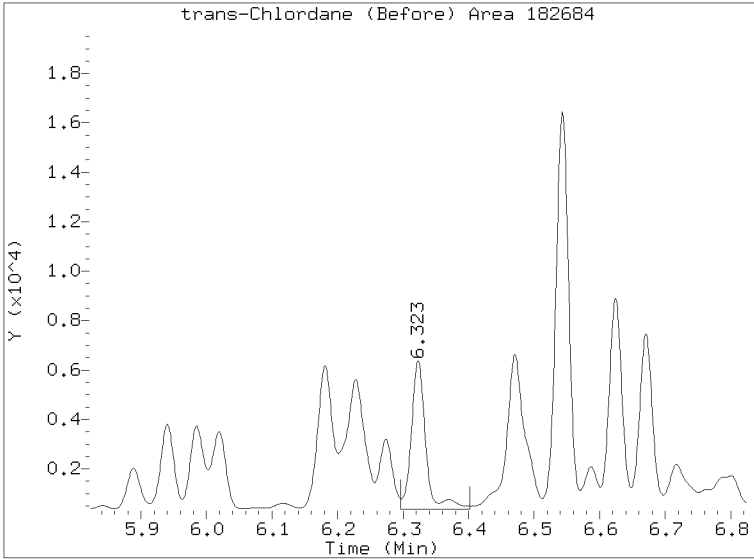
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



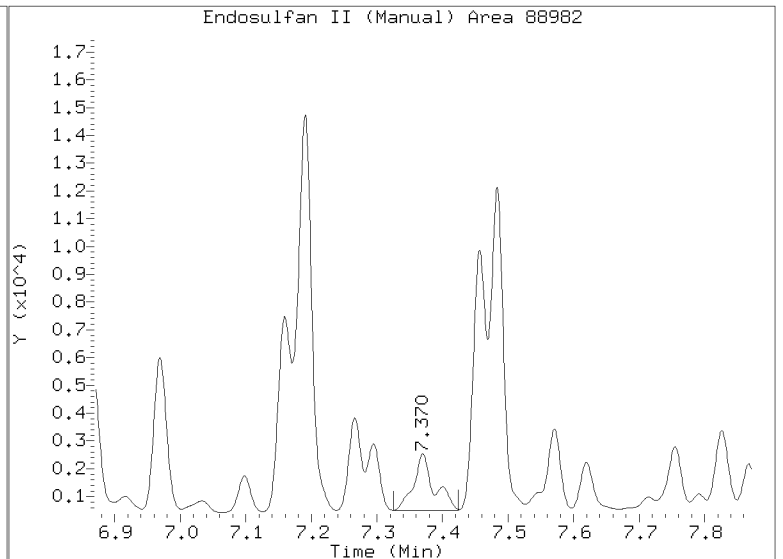
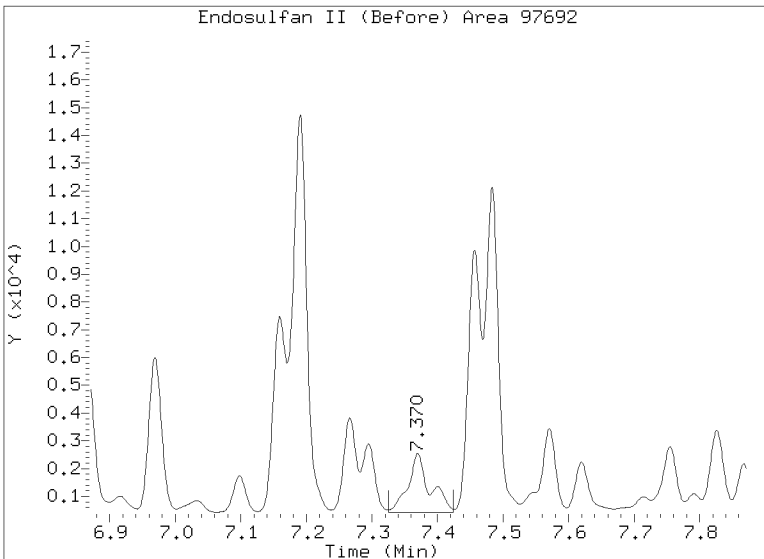
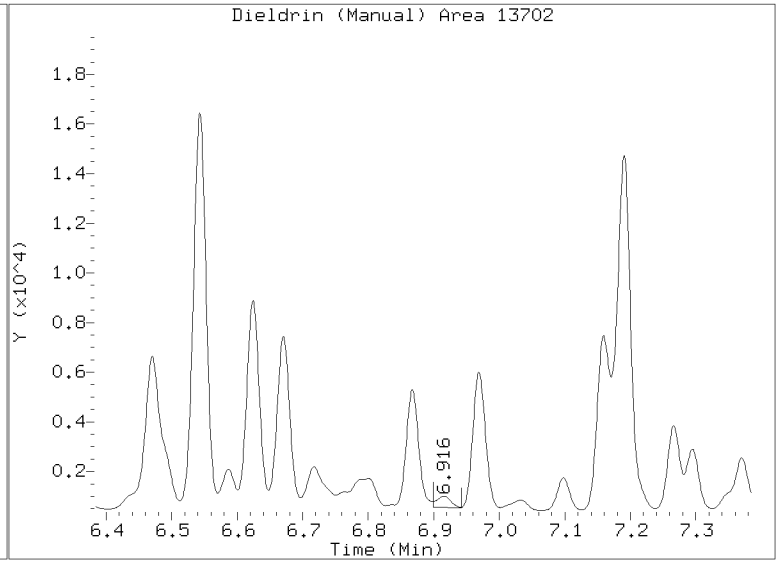
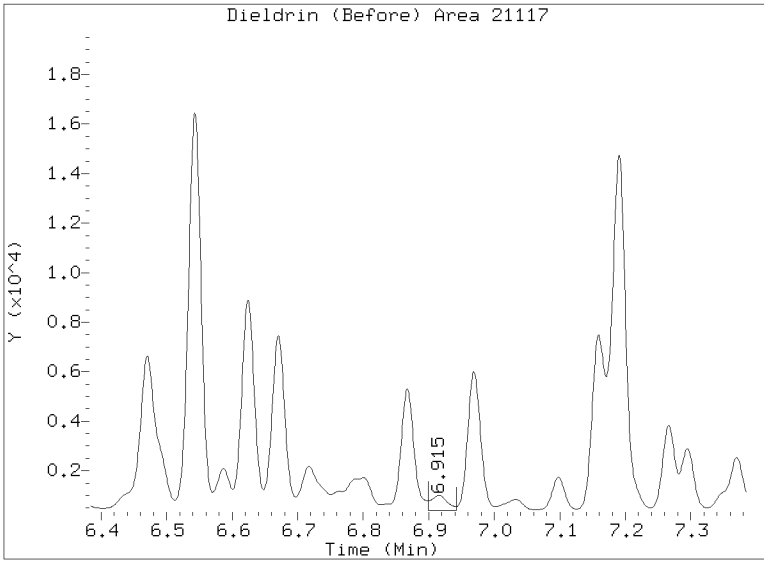
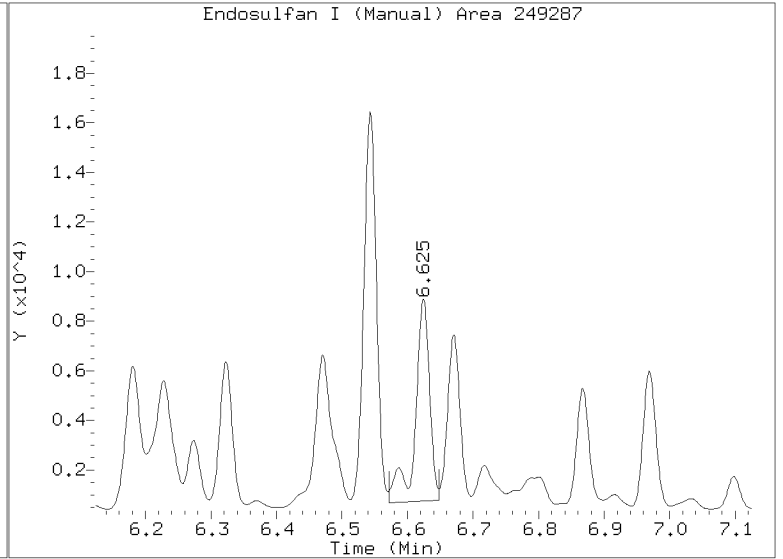
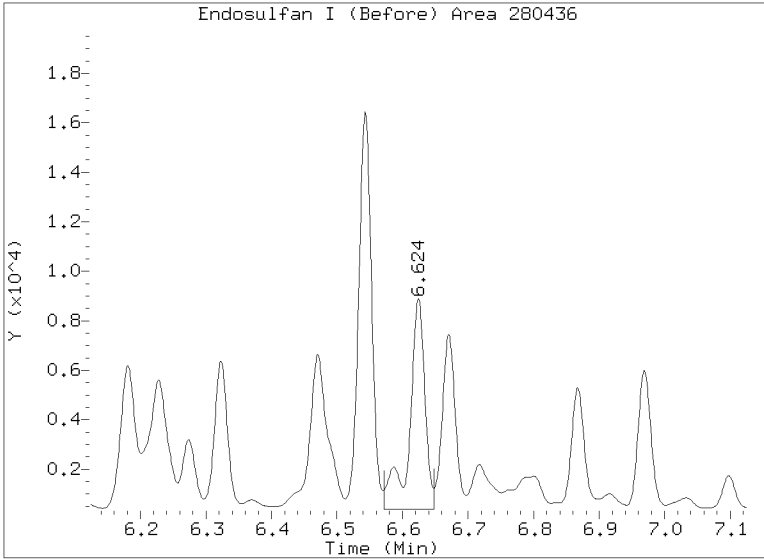
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



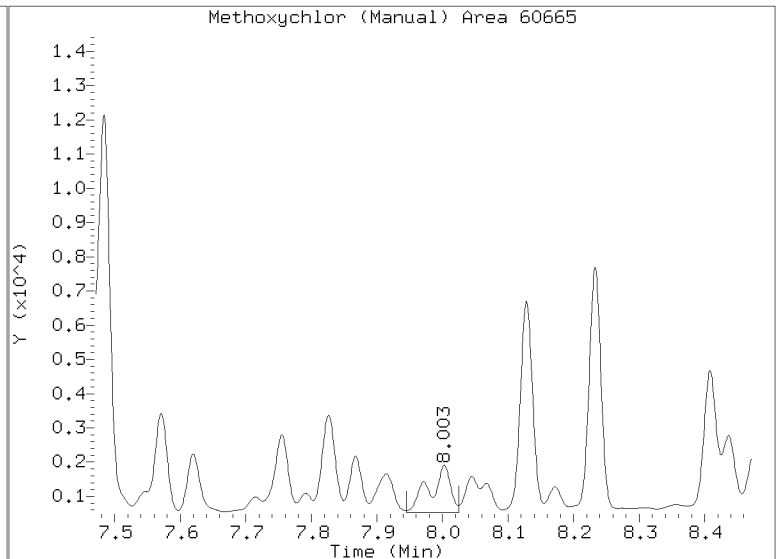
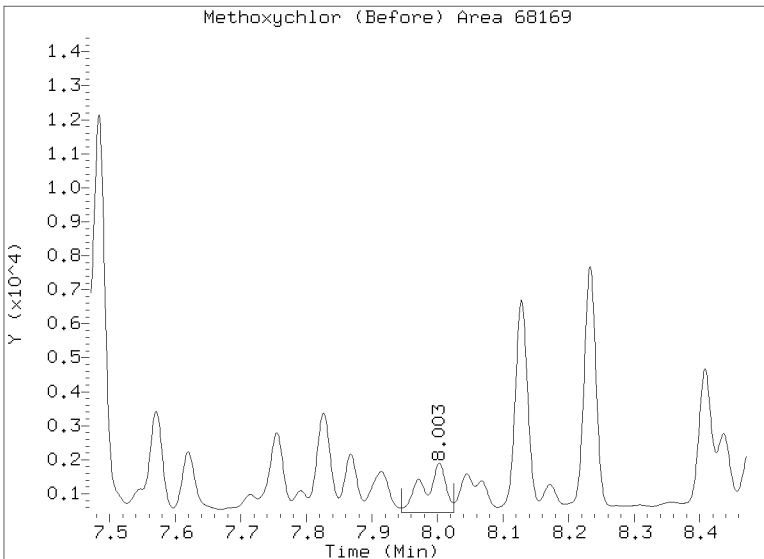
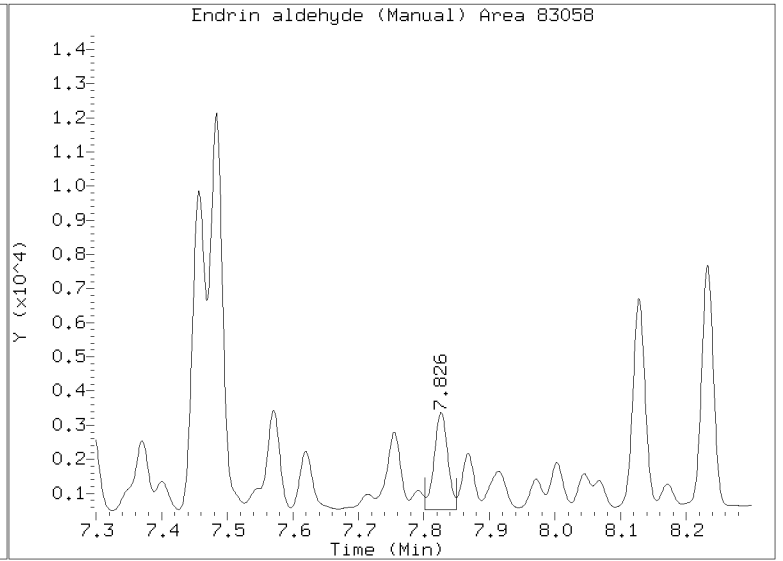
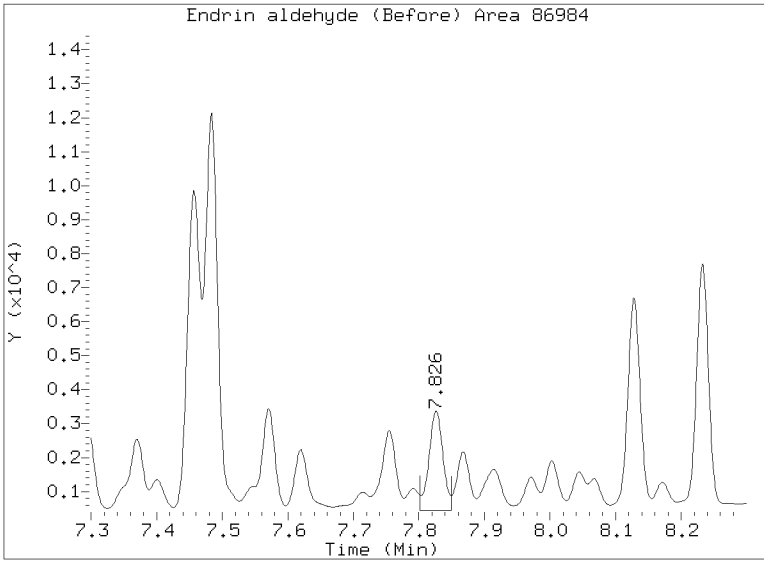
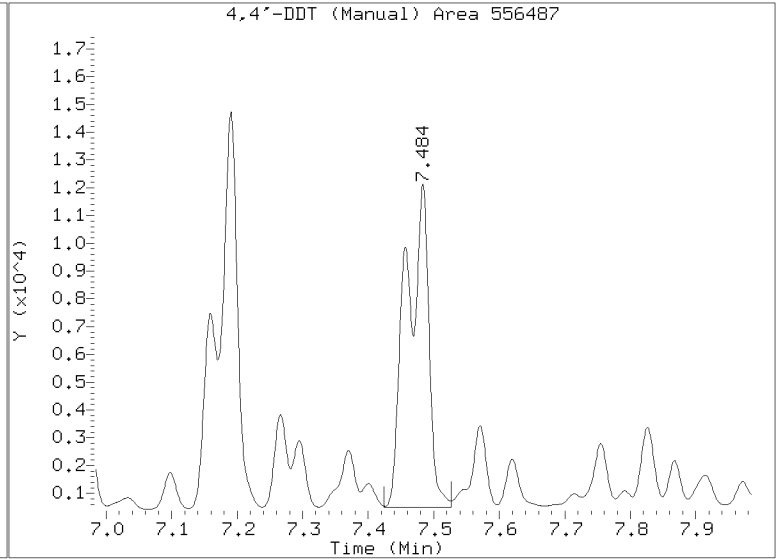
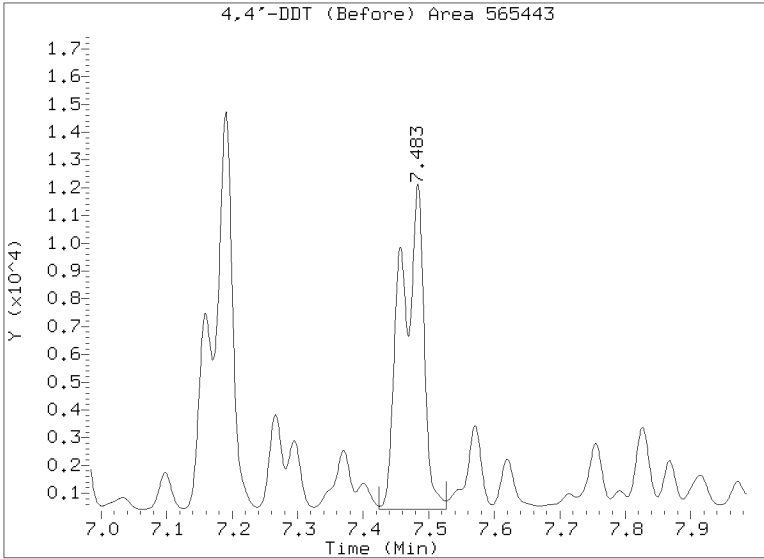
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



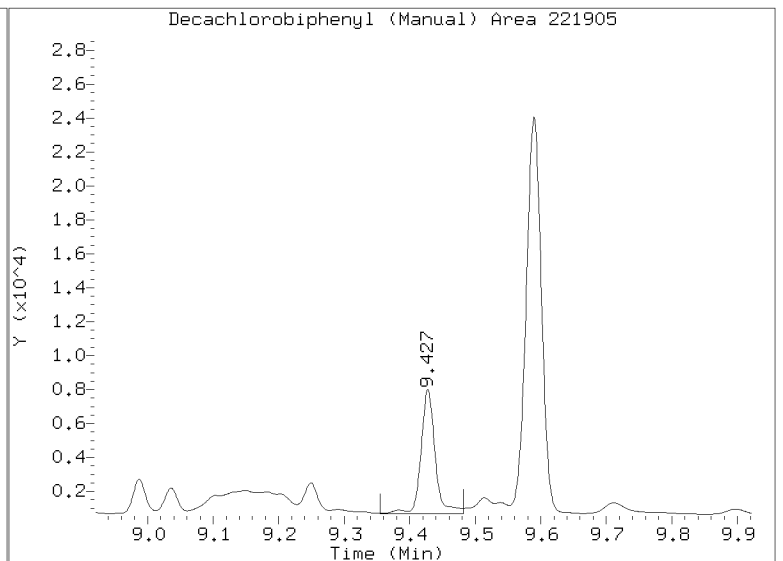
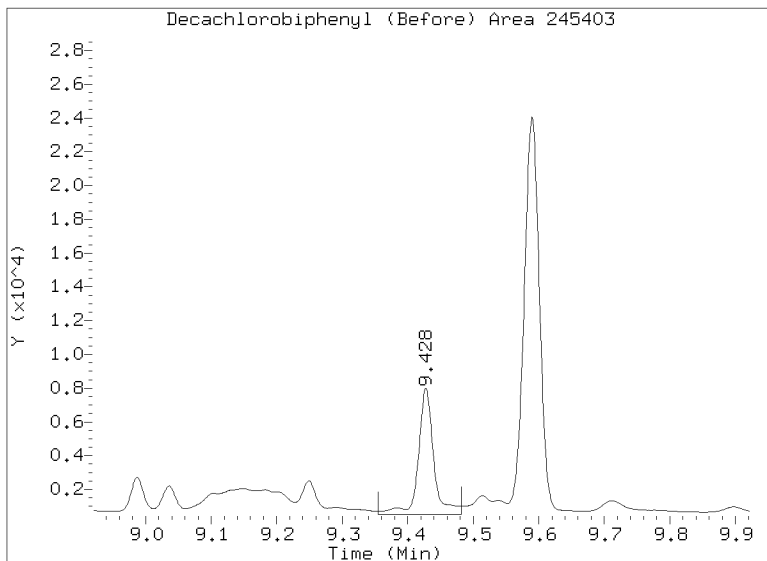
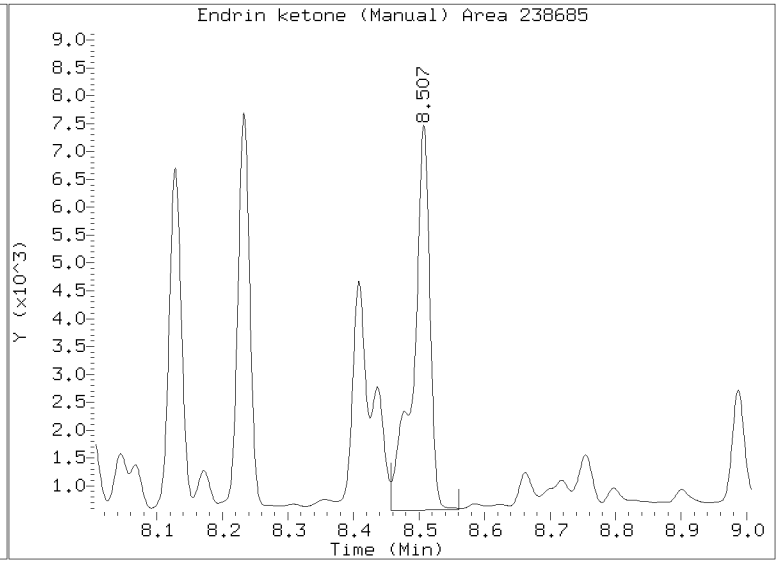
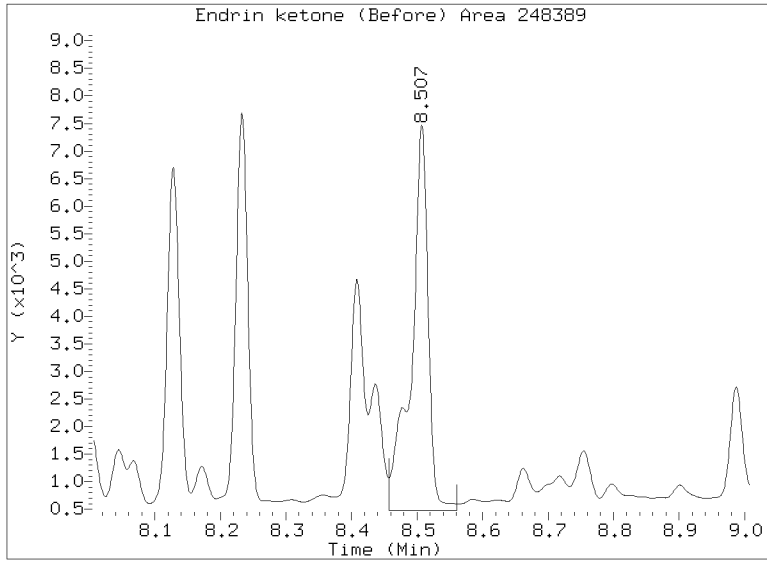
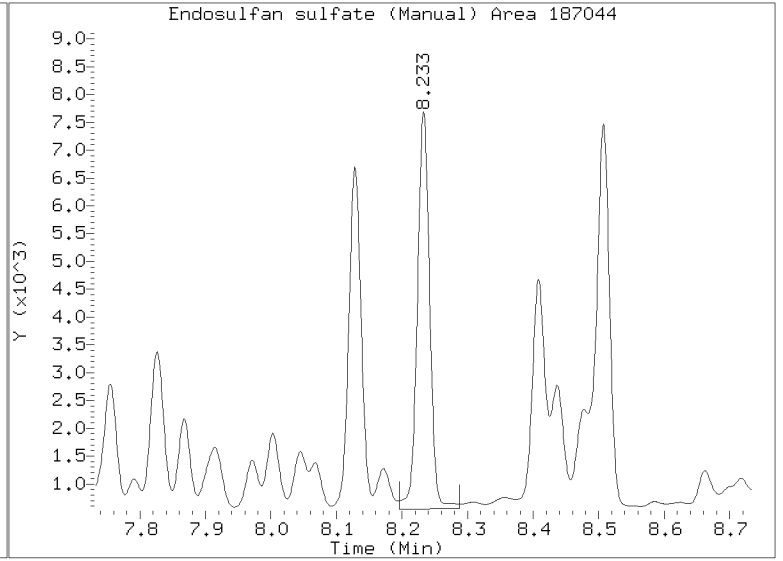
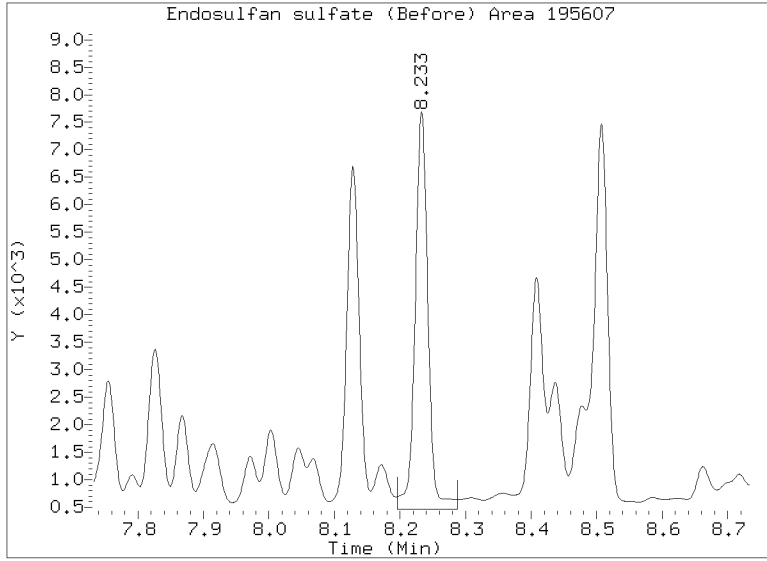
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



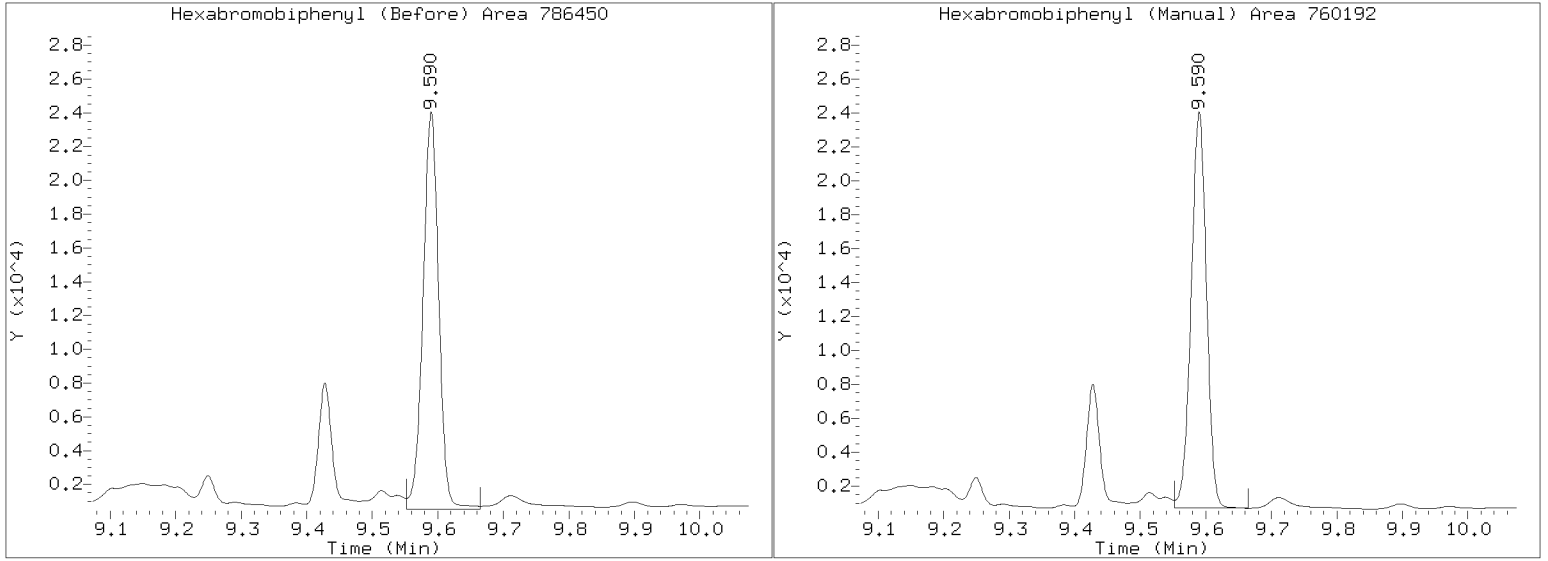
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37



Manual Peak Adjustment Report, STX-CLP

Datafile: /20230307.b/024F2701.D
Injection Date: 07-MAR-2023 16:47
Lab ID:BLB0422-MSD1 Client ID:
Report Date: 03/09/2023 13:37

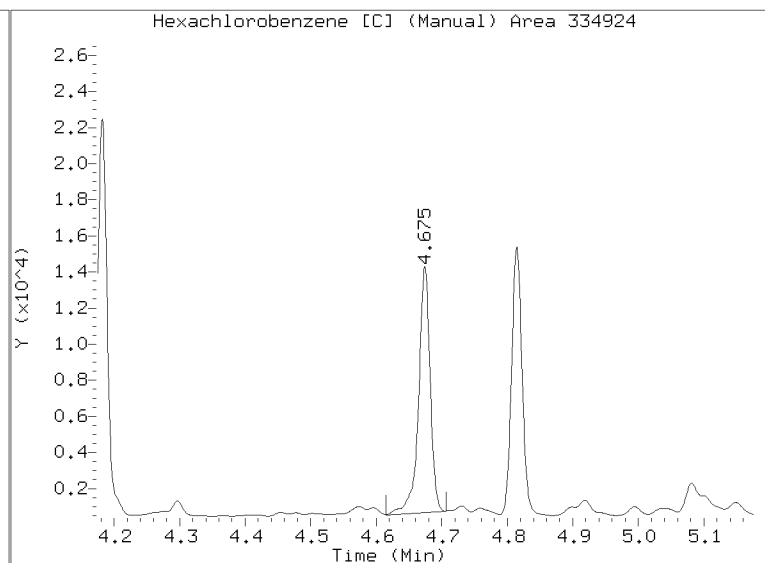
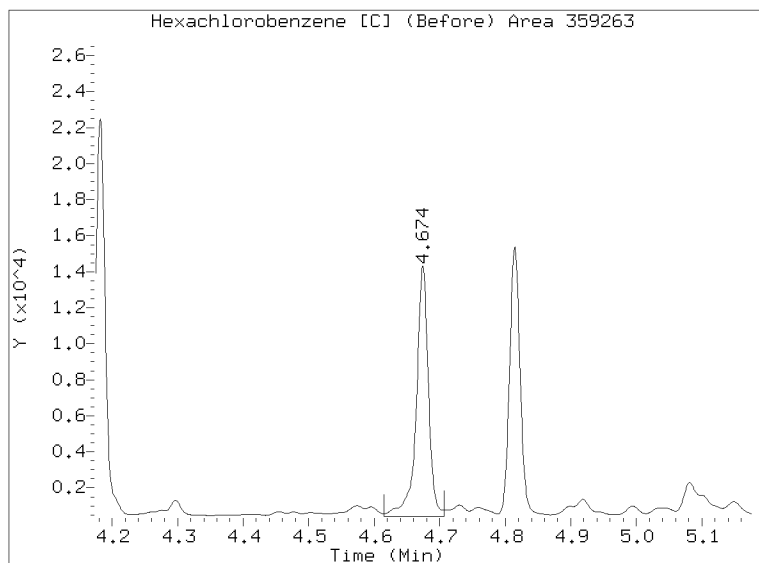
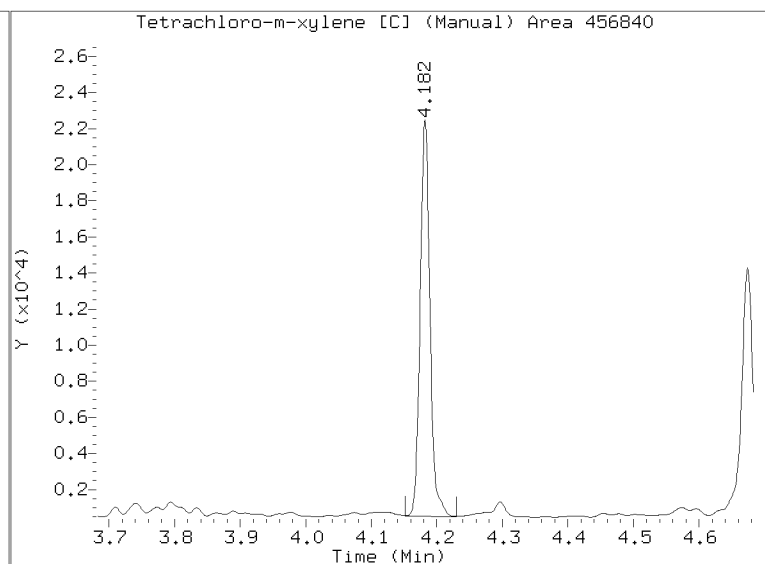
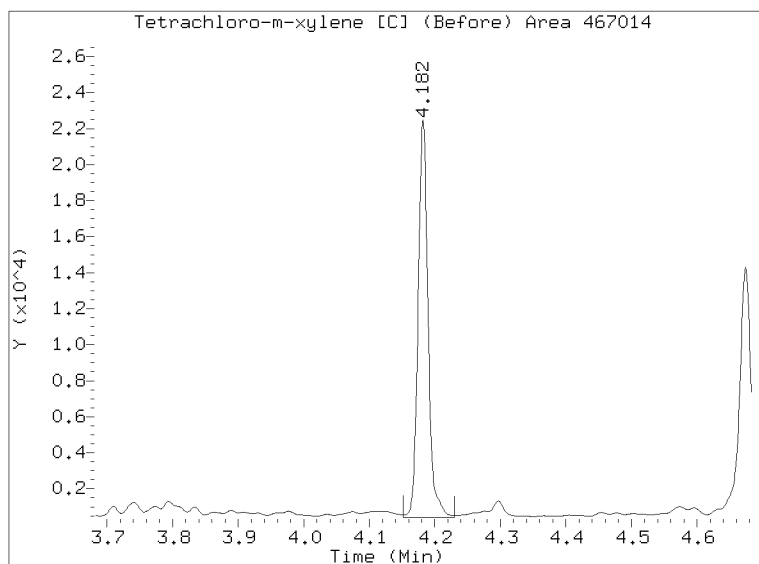
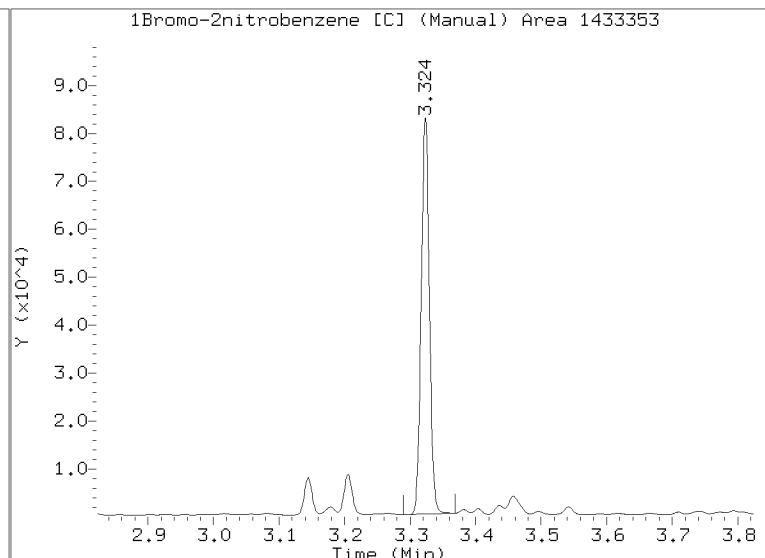
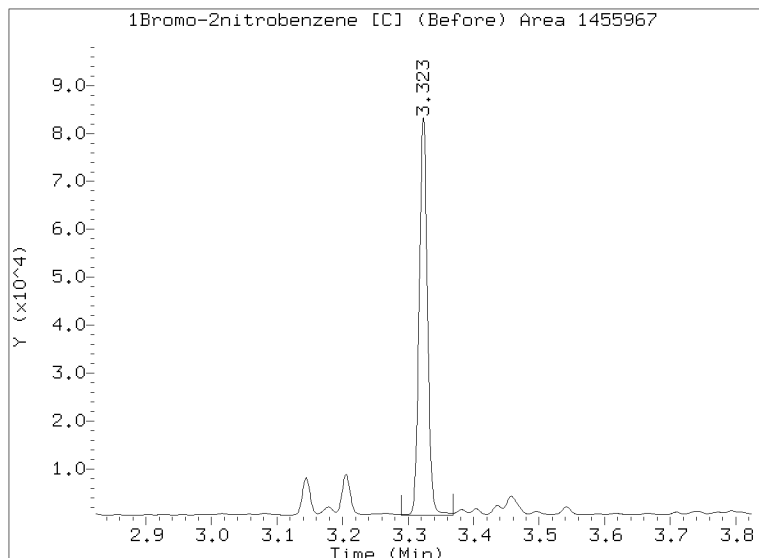


Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/024F2701.D

Injection Date: 07-MAR-2023 16:47

Lab ID:BLB0422-MSD1 Client ID:

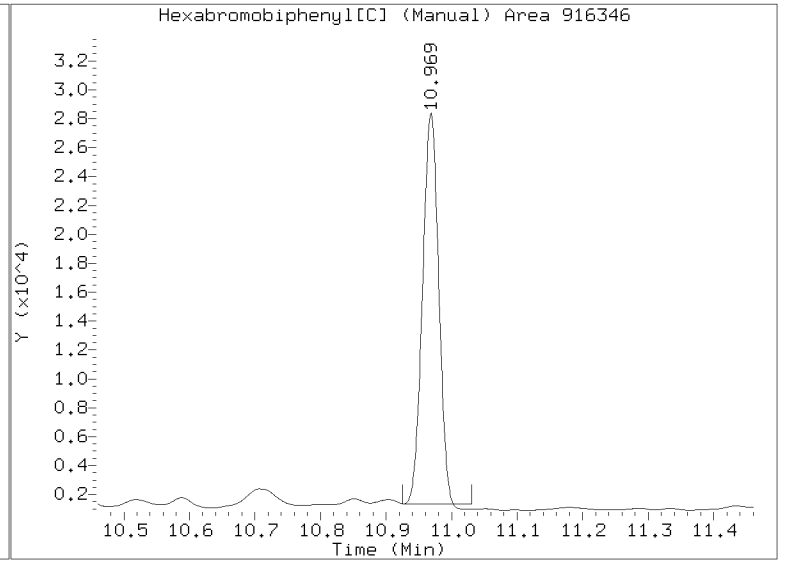
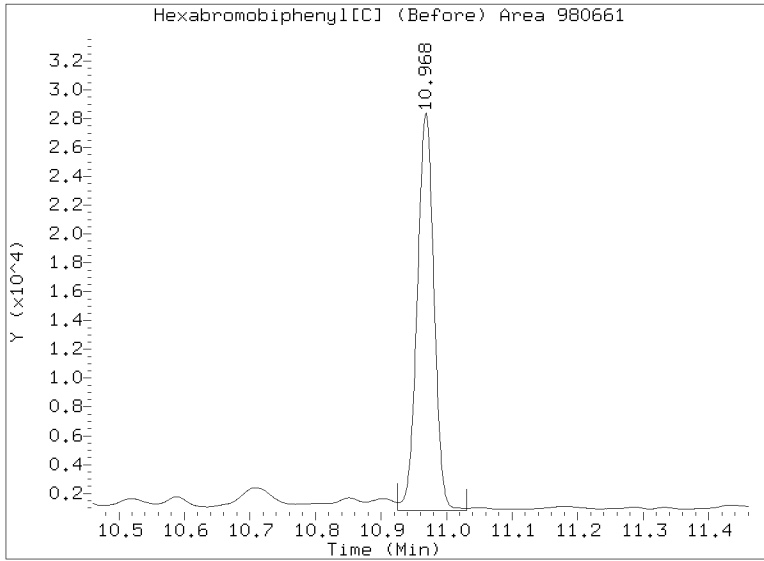
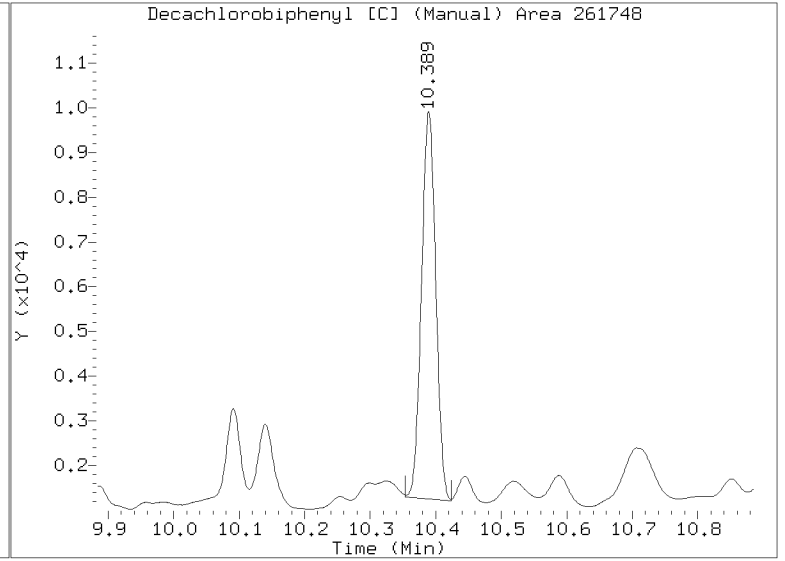
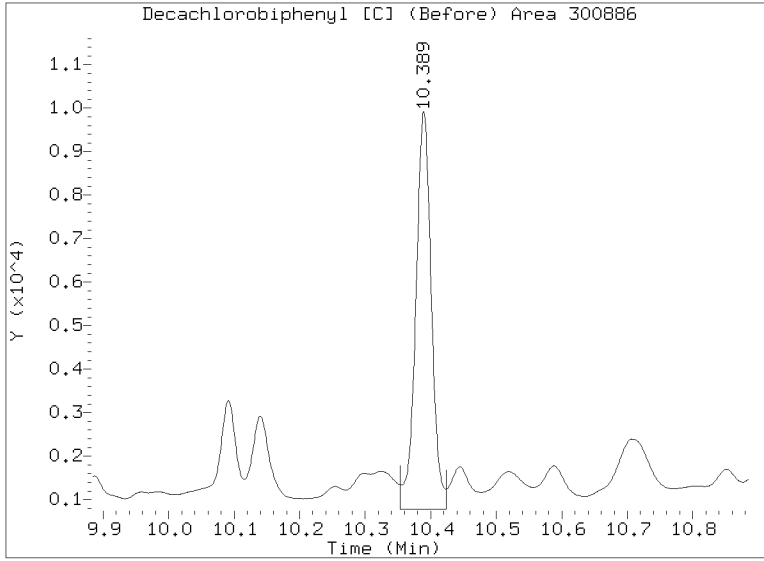


Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/024F2701.D

Injection Date: 07-MAR-2023 16:47

Lab ID:BLB0422-MSD1 Client ID:





INITIAL CALIBRATION DATA
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FL00041

Instrument: ECD6

Calibration Date: 12/14/2022

Column (1): STX-CLP

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC			2.5	1.564682	5	1.558115	10	1.57359	20	1.566596	40	1.528219
beta-BHC			2.5	0.6501672	5	0.6116678	10	0.6049898	20	0.5910241	40	0.567415
gamma-BHC (Lindane)			2.5	1.364013	5	1.359107	10	1.367627	20	1.357913	40	1.317203
delta-BHC			2.5	1.267737	5	1.264366	10	1.278672	20	1.286232	40	1.255792
Heptachlor			2.5	1.26903	5	1.222902	10	1.218715	20	1.207966	40	1.145438
Aldrin			2.5	1.349967	5	1.349283	10	1.40535	20	1.372547	40	1.307197
Heptachlor Epoxide			2.5	1.231126	5	1.189593	10	1.20792	20	1.178021	40	1.104377
trans-Chlordane (beta-Chlordane)			2.5	1.262297	5	1.202181	10	1.202336	20	1.19062	40	1.128117
cis-Chlordane (alpha-chlordane)			2.5	1.308183	5	1.222582	10	1.200602	20	1.177182	40	1.111332
Endosulfan I			2.5	1.143813	5	1.097776	10	1.093658	20	1.076133	40	1.011287
4,4'-DDE			5	1.141182	10	1.108491	20	1.098369	40	1.077225	80	0.9961189
Dieldrin			5	1.225418	10	1.190449	20	1.185191	40	1.155764	80	1.077517
Endrin			5	1.158191	10	1.117563	20	1.079508	40	1.061387	80	0.9725989
Endosulfan II			5	0.9400399	10	0.9913797	20	1.005265	40	0.925043	80	0.9337917
4,4'-DDD			5	1.004568	10	0.9927897	20	0.9803235	40	0.9586353	80	0.8937077
Endrin Aldehyde			5	0.8167784	10	0.7834798	20	0.7706241	40	0.7573308	80	0.7147756
4,4'-DDT			5	1.007054	10	0.9936998	20	0.9768522	40	0.9722874	80	0.9123228
Endosulfan Sulfate			5	0.9534179	10	0.9413755	20	0.9158457	40	0.9056998	80	0.8542021
Endrin Ketone			5	1.134866	10	1.083274	20	1.043162	40	1.021136	80	0.9645492
Methoxychlor			25	0.4887243	50	0.4567517	100	0.4291758	200	0.4123964	400	0.380531
Hexachlorobutadiene			2.5	1.967135	5	1.727858	10	1.608612	20	1.550898	40	1.457962
Hexachlorobenzene			2.5	1.583946	5	1.509865	10	1.463674	20	1.414258	40	1.348389
Decachlorobiphenyl			5	0.9567749	10	0.8690419	20	0.8114883	40	0.7853665	80	0.7399881
Tetrachlorometaxylene			5	1.223478	10	1.154628	20	1.122612	40	1.064313	80	1.018952



INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC	80	1.449687										
beta-BHC	80	0.5324503										
gamma-BHC (Lindane)	80	1.246178										
delta-BHC	80	1.199667										
Heptachlor	80	1.064858										
Aldrin	80	1.204866										
Heptachlor Epoxide	80	1.016142										
trans-Chlordane (beta-Chlordane)	80	1.050129										
cis-Chlordane (alpha-chlordane)	80	1.036345										
Endosulfan I	80	0.9344351										
4,4'-DDE	160	0.9196699										
Dieldrin	160	0.9953457										
Endrin	160	0.903669										
Endosulfan II	160	0.8694106										
4,4'-DDD	160	0.8394108										
Endrin Aldehyde	160	0.6754471										
4,4'-DDT	160	0.8666848										
Endosulfan Sulfate	160	0.808554										
Endrin Ketone	160	0.9150773										
Methoxychlor	800	0.3710888										
Hexachlorobutadiene	80	1.368623										
Hexachlorobenzene	80	1.259233										
2,4'-DDE					5	0.8703192	10	0.8471901	20	0.8231684	40	0.7887622
2,4'-DDD					5	0.761682	10	0.7418629	20	0.7301989	40	0.7053717
2,4'-DDT					5	0.8194572	10	0.8004965	20	0.7842725	40	0.7616258
Oxychlordane					5	1.016746	10	1.011016	20	0.9890796	40	0.9530961
cis-Nonachlor					5	1.323191	10	1.277938	20	1.243982	40	1.217703



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FL00041

Instrument: ECD6

Calibration Date: 12/14/2022

Column (2): STX-CLPII

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]			2.5	1.582358	5	1.586238	10	1.633164	20	1.640486	40	1.615441
beta-BHC [2C]			2.5	0.652782	5	0.6172948	10	0.6184608	20	0.6125812	40	0.5918008
gamma-BHC (Lindane) [2C]			2.5	1.355071	5	1.348783	10	1.381456	20	1.392772	40	1.366606
delta-BHC [2C]			2.5	1.323764	5	1.307234	10	1.339425	20	1.328433	40	1.331977
Heptachlor [2C]			2.5	1.270249	5	1.234236	10	1.258409	20	1.272245	40	1.215755
Aldrin [2C]			2.5	1.511397	5	1.416724	10	1.432636	20	1.430376	40	1.370917
Heptachlor Epoxide [2C]			2.5	1.2977	5	1.174596	10	1.174288	20	1.174706	40	1.114434
trans-Chlordane (beta-Chlordane) [2C]			2.5	1.25449	5	1.176102	10	1.164843	20	1.168848	40	1.125534
cis-Chlordane (alpha-chlordane) [2C]			2.5	1.258498	5	1.153199	10	1.135052	20	1.136251	40	1.089792
Endosulfan I [2C]			2.5	1.118263	5	1.044155	10	1.035412	20	1.034697	40	0.9885012
4,4'-DDE [2C]			5	1.120237	10	1.069625	20	1.064387	40	1.055415	80	0.9897135
Dieldrin [2C]			5	1.270008	10	1.162844	20	1.139359	40	1.136098	80	1.071389
Endrin [2C]			5	1.256912	10	1.17909	20	1.159477	40	1.149599	80	1.066056
Endosulfan II [2C]			5	1.296819	10	1.202961	20	1.188491	40	1.160501	80	1.099056
4,4'-DDD [2C]			5	1.234482	10	1.121556	20	1.117792	40	1.112003	80	1.04628
Endrin Aldehyde [2C]			5	0.9430111	10	0.8430348	20	0.8249196	40	0.8129946	80	0.7727701
4,4'-DDT [2C]			5	1.175911	10	1.077825	20	1.067612	40	1.073272	80	1.019364
Endosulfan Sulfate [2C]			5	1.137768	10	1.042553	20	1.030373	40	1.023023	80	0.9721732
Endrin Ketone [2C]			5	1.235631	10	1.119988	20	1.114405	40	1.100852	80	1.047659
Methoxychlor [2C]			25	0.5184064	50	0.4866753	100	0.4751666	200	0.4681736	400	0.4433957
Hexachlorobutadiene [2C]			2.5	1.975612	5	1.648845	10	1.492482	20	1.376096	40	1.341211
Hexachlorobenzene [2C]			2.5	1.602215	5	1.520618	10	1.491402	20	1.450251	40	1.385947
Decachlorobiphenyl [2C]			5	1.087142	10	0.9391597	20	0.8562421	40	0.8499592	80	0.8013928
Tetrachlorometaxylene [2C]			5	1.220863	10	1.179368	20	1.164832	40	1.127982	80	1.06878



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]	80	1.561903										
beta-BHC [2C]	80	0.5642956										
gamma-BHC (Lindane) [2C]	80	1.31891										
delta-BHC [2C]	80	1.29291										
Heptachlor [2C]	80	1.144118										
Aldrin [2C]	80	1.281263										
Heptachlor Epoxide [2C]	80	1.046144										
trans-Chlordane (beta-Chlordane) [2C]	80	1.072685										
cis-Chlordane (alpha-chlordane) [2C]	80	1.03859										
Endosulfan I [2C]	80	0.9325836										
4,4'-DDE [2C]	160	0.9356313										
Dieldrin [2C]	160	1.019365										
Endrin [2C]	160	1.013782										
Endosulfan II [2C]	160	1.047801										
4,4'-DDD [2C]	160	1.006382										
Endrin Aldehyde [2C]	160	0.7380269										
4,4'-DDT [2C]	160	0.9933936										
Endosulfan Sulfate [2C]	160	0.9372514										
Endrin Ketone [2C]	160	1.016567										
Methoxychlor [2C]	800	0.4436418										
Hexachlorobutadiene [2C]	80	1.300813										
Hexachlorobenzene [2C]	80	1.304223										
2,4'-DDE [2C]					5	0.8343307	10	0.8052418	20	0.7431295	40	0.7258871
2,4'-DDD [2C]					5	0.9097548	10	0.8797099	20	0.8273813	40	0.8164191
2,4'-DDT [2C]					5	0.9400077	10	0.8804604	20	0.8502582	40	0.8485216
Oxychlorane [2C]					5	0.9644685	10	0.9467754	20	0.9033255	40	0.8966281
cis-Nonachlor [2C]					5	1.449238	10	1.407074	20	1.376474	40	1.372123



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor [2C]					5	1.488853	10	1.51762	20	1.451789	40	1.447663
Mirex [2C]					5	0.9331395	10	0.8115521	20	0.7946205	40	0.762682
Decachlorobiphenyl [2C]	160	0.7711875										
Tetrachlorometaxylene [2C]	160	0.9948184										



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC [2C]	1.603265	1.9			RSD (20)	
beta-BHC [2C]	0.6095359	4.9			RSD (20)	
gamma-BHC (Lindane) [2C]	1.3606	1.9			RSD (20)	
delta-BHC [2C]	1.320624	1.3			RSD (20)	
Heptachlor [2C]	1.232502	3.9			RSD (20)	
Aldrin [2C]	1.407219	5.4			RSD (20)	
Heptachlor Epoxide [2C]	1.163645	7.1			RSD (20)	
trans-Chlordane (beta-Chlordane) [2C]	1.160417	5.2			RSD (20)	
cis-Chlordane (alpha-chlordane) [2C]	1.13523	6.5			RSD (20)	
Endosulfan I [2C]	1.025602	6.0			RSD (20)	
4,4'-DDE [2C]	1.039168	6.3			RSD (20)	
Dieldrin [2C]	1.133177	7.5			RSD (20)	
Endrin [2C]	1.137486	7.6			RSD (20)	
Endosulfan II [2C]	1.165938	7.4			RSD (20)	
4,4'-DDD [2C]	1.106416	7.0			RSD (20)	
Endrin Aldehyde [2C]	0.8224595	8.5			RSD (20)	
4,4'-DDT [2C]	1.067896	5.9			RSD (20)	
Endosulfan Sulfate [2C]	1.023857	6.7			RSD (20)	
Endrin Ketone [2C]	1.10585	6.8			RSD (20)	
Methoxychlor [2C]	0.4725766	6.0			RSD (20)	
Hexachlorobutadiene [2C]	1.52251	16.8			RSD (20)	
Hexachlorobenzene [2C]	1.459109	7.2			RSD (20)	
2,4'-DDE [2C]	0.7295523	11.8			RSD (20)	
2,4'-DDD [2C]	0.8188656	8.8			RSD (20)	
2,4'-DDT [2C]	0.8432439	8.1			RSD (20)	
Oxychlordane [2C]	0.8909094	7.3			RSD (20)	
cis-Nonachlor [2C]	1.361061	5.2			RSD (20)	
trans-Nonachlor [2C]	1.43157	5.4			RSD (20)	
Mirex [2C]	0.7915793	9.9			RSD (20)	
Decachlorobiphenyl [2C]	0.8841805	13.0			RSD (20)	
Tetrachlorometaxylene [2C]	1.126107	7.3			RSD (20)	



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WPDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022	19:27	22121401.D	1	RINSE	
2	14-DEC-2022	19:44	22121402.D	1	RINSE	
3	14-DEC-2022	20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022	20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022	20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022	20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022	21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022	21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022	21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022	22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022	22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022	22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022	23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022	23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022	23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022	23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022	00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022	00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022	00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022	01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022	01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022	01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022	01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022	02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022	02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022	02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022	03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022	03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022	03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022	04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022	04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022	04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022	04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022	05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022	05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022	05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022	06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022	06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022	06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022	07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022	07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022	07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022	07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022	08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022	08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022	08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022	09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022	09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022	09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022	10:02	22121450.D	1	BKK0142-MSD1	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01	1		Heptachlor epoxide b,
1131	22121455.D	22K0429-02	1		Heptachlor epoxide b,
1149	22121456.D	22K0429-03	1		Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3	1		NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1	1		NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2	1		NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3	1		NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4	1		NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1	1		NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1	1		NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1	1		NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01	1		NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01	1		NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01	1		NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1	1		NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1	1		NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2	1		NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1	1		NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1	1		NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1	1		NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2	1		NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3	1		NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4	1		NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5	1		NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6	1		NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7	1		NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8	1		NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9	1		NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA	1		NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB	1		NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC	1		NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD	1		NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane [C],
1113	22121454.D	22K0429-01	1		NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02	1		Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03	1		Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D SEQ-PEM3		1		NO MANUAL INTEGRATION
1225	22121458.D SEQ-CCV1		1		NO MANUAL INTEGRATION
1243	22121459.D SEQ-CCV2		1		NO MANUAL INTEGRATION
1301	22121460.D SEQ-CCV3		1		NO MANUAL INTEGRATION
1319	22121461.D SEQ-CCV4		1		NO MANUAL INTEGRATION
1336	22121462.D BKK0380-BLK1		1		NO MANUAL INTEGRATION
1354	22121463.D BKK0380-BS1		1		NO MANUAL INTEGRATION
1412	22121464.D BKK0380-BSD1		1		NO MANUAL INTEGRATION
1430	22121465.D 22K0157-01		1		NO MANUAL INTEGRATION
1448	22121466.D 22K0230-01		1		NO MANUAL INTEGRATION
1506	22121467.D 22K0231-01		1		NO MANUAL INTEGRATION
1524	22121468.D BKK0382-BLK1		1		NO MANUAL INTEGRATION
1542	22121469.D BKK0382-BS1		1		NO MANUAL INTEGRATION
1600	22121470.D BKK0382-BS2		1		NO MANUAL INTEGRATION
1618	22121471.D BKK0382-BSD1		1		NO MANUAL INTEGRATION
1635	22121472.D 22K0075-01		1		NO MANUAL INTEGRATION
1653	22121473.D SEQ-PEM4		1		NO MANUAL INTEGRATION
1711	22121474.D SEQ-CCV5		1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	j rains, 17-Dec-2022 10:57
22121402.D	Data Locked	j rains, 17-Dec-2022 10:57
22121403.D	Data Locked	j rains, 17-Dec-2022 10:57
22121404.D	Data Locked	j rains, 17-Dec-2022 10:57
22121405.D	Data Locked	j rains, 17-Dec-2022 10:57
22121406.D	Data Locked	j rains, 17-Dec-2022 10:57
22121407.D	Data Locked	j rains, 17-Dec-2022 10:57
22121408.D	Data Locked	j rains, 17-Dec-2022 10:57
22121409.D	Data Locked	j rains, 17-Dec-2022 10:57
22121410.D	Data Locked	j rains, 17-Dec-2022 10:57
22121411.D	Data Locked	j rains, 17-Dec-2022 10:57
22121412.D	Data Locked	j rains, 17-Dec-2022 10:57
22121413.D	Data Locked	j rains, 17-Dec-2022 10:57
22121414.D	Data Locked	j rains, 17-Dec-2022 10:57
22121415.D	Data Locked	j rains, 17-Dec-2022 10:57
22121416.D	Data Locked	j rains, 17-Dec-2022 10:57
22121417.D	Data Locked	j rains, 17-Dec-2022 10:57
22121418.D	Data Locked	j rains, 17-Dec-2022 10:57
22121419.D	Data Locked	j rains, 17-Dec-2022 10:57
22121420.D	Data Locked	j rains, 17-Dec-2022 10:57
22121421.D	Data Locked	j rains, 17-Dec-2022 10:57
22121422.D	Data Locked	j rains, 17-Dec-2022 10:57
22121423.D	Data Locked	j rains, 17-Dec-2022 10:57
22121424.D	Data Locked	j rains, 17-Dec-2022 10:57
22121425.D	Data Locked	j rains, 17-Dec-2022 10:57
22121426.D	Data Locked	j rains, 17-Dec-2022 10:57
22121427.D	Data Locked	j rains, 17-Dec-2022 10:57
22121428.D	Data Locked	j rains, 17-Dec-2022 10:57
22121429.D	Data Locked	j rains, 17-Dec-2022 10:57
22121430.D	Data Locked	j rains, 17-Dec-2022 10:57
22121431.D	Data Locked	j rains, 17-Dec-2022 10:57
22121432.D	Data Locked	j rains, 17-Dec-2022 10:57
22121433.D	Data Locked	j rains, 17-Dec-2022 10:57
22121434.D	Data Locked	j rains, 17-Dec-2022 10:57

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121428.D
 Level 2: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121429.D
 Level 3: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121430.D
 Level 4: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121431.D
 Level 5: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121432.D
 Level 6: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121433.D
 Level 7: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121434.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
1 Hexachlorobutadiene [C]	++++ 1.30081	1.97561	1.64885	1.49248	1.37610	1.34121	1.52251	16.761
5 Hexachlorobenzene [C]	++++ 1.30422	1.60221	1.52062	1.49140	1.45025	1.38595	1.45911	7.170
6 alpha-BHC [C]	++++ 1.56190	1.58236	1.58624	1.63316	1.64049	1.61544	1.60327	1.946
7 gamma-BHC (Lindane) [C]	++++ 1.31891	1.35507	1.34878	1.38146	1.39277	1.36661	1.36060	1.921
8 beta-BHC [C]	++++ 0.56430	0.65278	0.61729	0.61846	0.61258	0.59180	0.60954	4.856
9 delta-BHC [C]	++++ 1.29291	1.32376	1.30723	1.33943	1.32843	1.33198	1.32062	1.312
10 Heptachlor [C]	++++ 1.14412	1.27025	1.23424	1.25841	1.27225	1.21576	1.23250	3.937
11 Chlorthalonil	++++ ++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 j rains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
12 Aldrin [C]	++++ 1.28126	1.51140	1.41672	1.43264	1.43038	1.37092	1.40722	5.441
13 Heptachlor Epoxide a	++++ ++++	++++	++++	++++	++++	++++	++++	++++
14 Heptachlor epoxide b [C]	++++ 1.04614	1.29770	1.17460	1.17429	1.17471	1.11443	1.16364	7.144
15 cis-Chlordane [C]	++++ 1.03859	1.25850	1.15320	1.13505	1.13625	1.08979	1.13523	6.464
16 trans-Chlordane [C]	++++ 1.07269	1.25449	1.17610	1.16484	1.16885	1.12553	1.16042	5.185
17 Endosulfan I [C]	++++ 0.93258	1.11826	1.04415	1.03541	1.03470	0.98850	1.02560	6.032
18 4,4'-DDE [C]	++++ 0.93563	1.12024	1.06963	1.06439	1.05541	0.98971	1.03917	6.320
19 Dieldrin [C]	++++ 1.01937	1.27001	1.16284	1.13936	1.13610	1.07139	1.13318	7.532
20 Endrin [C]	++++ 1.01378	1.25691	1.17909	1.15948	1.14960	1.06606	1.13749	7.566
21 4,4'-DDD [C]	++++ 1.00638	1.23448	1.12156	1.11779	1.11200	1.04628	1.10642	7.049
22 Endosulfan II [C]	++++ 1.04780	1.29682	1.20296	1.18849	1.16050	1.09906	1.16594	7.425

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
23 4,4'-DDT [C]	++++ 0.99339	1.17591	1.07782	1.06761	1.07327	1.01936	1.06790	5.878
24 Endrin aldehyde [C]	++++ 0.73803	0.94301	0.84303	0.82492	0.81299	0.77277	0.82246	8.537
25 Endosulfan sulfate [C]	++++ 0.93725	1.13777	1.04255	1.03037	1.02302	0.97217	1.02386	6.702
26 Methoxychlor [C]	++++ 0.44364	0.51841	0.48668	0.47517	0.46817	0.44340	0.47258	5.996
27 Endrin ketone [C]	++++ 1.01657	1.23563	1.11999	1.11440	1.10085	1.04766	1.10585	6.827
29 Aroclor-1016(1)	++++	++++	++++	++++	++++	++++	++++	++++
(2)	++++	++++	++++	++++	++++	++++	++++	++++
(3)	++++	++++	++++	++++	++++	++++	++++	++++
(4)	++++	++++	++++	++++	++++	++++	++++	++++
(5)	++++	++++	++++	++++	++++	++++	++++	++++
30 Aroclor-1221(1)	++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 j rains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
31 Aroclor-1232 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
32 Aroclor-1242 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 j rains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
33 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
34 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
35 Aroclor-1260(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
36 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
37 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Toxaphene [C] (1)	0.01492 0.01387	0.01529	0.01573	0.01558	0.01527	0.01455	0.01503	4.285
(2)	0.03524 0.03010	0.03538	0.03581	0.03480	0.03351	0.03170	0.03379	6.368
(3)	0.02615 0.02387	0.02659	0.02671	0.02640	0.02571	0.02464	0.02572	4.197
(4)	0.08868 0.07782	0.08690	0.08740	0.08502	0.08225	0.07926	0.08390	5.022
(5)	0.04138 0.04062	0.04124	0.04193	0.04145	0.04102	0.04046	0.04116	1.227
39 2,4-DDE [C]	+++++ 0.60202	0.83433	0.80524	0.74313	0.72589	0.66671	0.72955	11.810

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
40 2,4-DDD [C]	++++ 0.71370	0.90975	0.87971	0.82738	0.81642	0.76623	0.81887	8.785
41 2,4-DDT [C]	++++ 0.74249	0.94001	0.88046	0.85026	0.84852	0.79773	0.84324	8.052
42 Hexachloroethane [C]	++++ ++++	++++	++++	++++	++++	++++	++++	++++
43 Oxychlordan [C]	++++ 0.79092	0.96447	0.94678	0.90333	0.89663	0.84333	0.89091	7.271
44 trans-Nonachlor [C]	++++ 1.30668	1.48885	1.51762	1.45179	1.44766	1.37681	1.43157	5.406
45 cis-Nonachlor [C]	++++ 1.24817	1.44924	1.40707	1.37647	1.37212	1.31329	1.36106	5.224
46 Mirex [C]	++++ 0.70751	0.93314	0.81155	0.79462	0.76268	0.73998	0.79158	9.949
47 bis-(2-ethylhexyl) Phthalate	++++ ++++	++++	++++	++++	++++	++++	++++	++++
48 Chlordane (NOS) [C] (1)	0.03877 0.03764	0.03690	0.03764	0.03840	0.03761	0.03805	0.03786	1.615
(2)	0.04647 0.03825	0.04439	0.04416	0.04357	0.04103	0.03978	0.04252	6.844
(3)	0.14135 0.13812	0.14252	0.14927	0.15059	0.14418	0.14081	0.14383	3.173

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 j rains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 4 Tetrachloro-m-xylene [C]	+++++	1.22086	1.17937	1.16483	1.12798	1.06878	1.12611	7.306
\$ 28 Decachlorobiphenyl [C]	+++++	1.08714	0.93916	0.85624	0.84996	0.80139	0.88418	12.973

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd6.i\20220809.b\22080909.D
 Level 2: \\target\share\chem4\ecd6.i\20220809.b\22080910.D
 Level 3: \\target\share\chem4\ecd6.i\20220809.b\22080911.D
 Level 4: \\target\share\chem4\ecd6.i\20220809.b\22080912.D
 Level 5: \\target\share\chem4\ecd6.i\20220809.b\22080913.D
 Level 6: \\target\share\chem4\ecd6.i\20220809.b\22080914.D
 Level 7: \\target\share\chem4\ecd6.i\20220809.b\22080915.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
1 Hexachlorobutadiene	+++++ 1.30292	1.64215	1.55667	1.51049	1.47308	1.40536	1.48178	7.988
5 Hexachlorobenzene	+++++ 1.15582	1.48647	1.40778	1.36481	1.31957	1.25458	1.33150	8.750
6 alpha-BHC	+++++ 1.29587	1.41183	1.40802	1.42270	1.42790	1.37811	1.39074	3.567
7 gamma-BHC (Lindane)	+++++ 1.11861	1.20108	1.18733	1.20704	1.21598	1.18532	1.18589	2.948
8 beta-BHC	+++++ 0.50588	0.65244	0.60612	0.58927	0.57533	0.54649	0.57925	8.684
9 delta-BHC	+++++ 1.16159	1.15252	1.13315	1.18185	1.21952	1.21492	1.17726	2.950
10 Heptachlor	+++++ 0.94214	1.18674	1.12881	1.11527	1.09009	1.03076	1.08230	7.897
11 Aldrin	+++++ 0.96536	1.14505	1.10493	1.10576	1.09698	1.04621	1.07738	5.877

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
12 Chlorthalonil	++++	++++	++++	++++	++++	++++	++++	++++
13 Heptachlor Epoxide a	++++	++++	++++	++++	++++	++++	++++	++++
14 Heptachlor epoxide b	++++	1.05278	0.99602	0.98316	0.95413	0.89408	0.94959	8.751
15 cis-Chlordane	++++	1.00217	0.95563	0.94931	0.93343	0.89233	0.92705	6.424
16 trans-Chlordane	++++	1.02223	0.96054	0.95840	0.94631	0.90606	0.93937	6.420
17 Endosulfan I	++++	1.10444	1.01004	0.97510	0.92642	0.86761	0.94287	12.207
18 4,4'-DDE	++++	0.85783	0.84618	0.86175	0.85068	0.80349	0.82557	6.027
19 Dieldrin	++++	1.02112	0.97469	0.96064	0.93395	0.87876	0.92773	8.553
20 Endrin	++++	1.03359	0.99258	1.01493	1.03951	0.95184	0.99228	4.755
21 4,4'-DDD	++++	1.26749	1.21690	1.21140	1.19455	1.09258	1.16763	7.815
22 Endosulfan II	++++	1.32213	1.30831	1.28817	1.25191	1.14300	1.22841	8.614

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
23 4,4'-DDT	++++ 1.06544	1.20278	1.19912	1.21231	1.21971	1.13284	1.17203	5.186
24 Endrin aldehyde	++++ 0.84575	1.05042	1.01673	1.00197	0.99460	0.91340	0.97048	7.836
25 Methoxychlor	++++ 0.43428	0.56408	0.54010	0.51985	0.50693	0.45626	0.50358	9.854
26 Endosulfan sulfate	++++ 0.94888	1.14290	1.11216	1.09802	1.09968	1.00734	1.06816	6.922
27 Endrin ketone	++++ 1.12695	1.47959	1.40243	1.34455	1.31335	1.19489	1.31029	9.966
29 Aroclor-1016(1)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(2)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(3)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(4)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(5)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
30 Aroclor-1221(1)	++++ ++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
31 Aroclor-1232 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
32 Aroclor-1242 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(6)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
33 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
34 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
35 Aroclor-1260(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
36 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
37 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
38 Toxaphene(1)	0.02824| 0.02792|	0.03896|	0.03693|	0.03480|	0.03418|	0.02891|		0.03285|	13.645|
(2)	0.08343| 0.08263|	0.10636|	0.10204|	0.09499|	0.09608|	0.08394|		0.09278|	10.362|
(3)	0.04776| 0.05119|	0.06283|	0.06069|	0.06020|	0.06090|	0.05141|		0.05643|	10.755|
(4)	0.05098| 0.06388|	0.07225|	0.07089|	0.06844|	0.06847|	0.06296|		0.06541|	11.021|
(5)	0.04955| 0.05934|	0.06896|	0.06748|	0.06372|	0.06603|	0.05846|		0.06194|	10.880|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
39 2,4-DDE	0.89319	1.14103	1.08072	1.09005	1.06169	0.88466	1.02522	10.614
40 2,4-DDD	0.85318	1.08881	1.01841	0.99599	0.98400	0.85150	0.96531	9.816
41 2,4-DDT	0.88215	0.97799	0.97179	0.97332	0.98841	0.88743	0.94685	5.117
42 Hexachloroethane	++++	++++	++++	++++	++++	++++	++++	++++
43 Oxychlordane	1.05015	1.32927	1.24890	1.22496	1.20236	1.04785	1.18392	9.540
44 trans-Nonachlor	1.36253	1.68629	1.57989	1.58456	1.55669	1.34437	1.51906	8.949
45 cis-Nonachlor	1.35527	1.62941	1.55213	1.53413	1.52347	1.34758	1.49033	7.639
46 Mirex	0.85786	1.20478	1.11168	1.05006	1.00932	0.85381	1.01459	13.749
47 bis-(2-ethylhexyl) Phthalate	++++	++++	++++	++++	++++	++++	++++	++++
48 Chlordane (NOS) (1)	0.04531	0.06029	0.05735	0.05369	0.05005	0.04581	0.04808	11.230
(2)	0.12030	0.15038	0.14213	0.13501	0.13074	0.12020	0.12674	8.482

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
(3)	0.17221	0.15459	0.13623	0.13893	0.12753	0.13518	0.14232	11.024
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Tetrachloro-m-xylene	0.85040	1.10401	1.05839	1.02629	0.99588	0.93352	0.99475	9.166

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
\$ 28 Decachlorobiphenyl	+++++	0.99444	0.96249	0.90111	0.87014	0.79161	0.87939	10.607
	0.75653							

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Table with 7 columns: ID, RT01, RT02, RT03, RT04, RT05, RT06, RT07. Rows include FILENAME, INJ. DATE, and INJ. TIME for each RT column.

Main data table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Lists 17 compounds with their respective retention times and standard deviations.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	6.489	6.489	6.490	6.490	6.489	6.489	6.490	6.489	6.459-6.519	6.489	0.000
19 Dieldrin	6.831	6.832	6.832	6.832	6.831	6.832	6.832	6.831	6.801-6.861	6.832	0.000
20 Endrin	7.081	7.081	7.082	7.082	7.081	7.082	7.082	7.081	7.051-7.111	7.082	0.000
21 4,4'-DDD	7.135	7.136	7.136	7.136	7.135	7.136	7.135	7.135	7.105-7.165	7.136	0.000
22 Endosulfan II	7.318	7.317	7.318	7.318	7.317	7.317	7.317	7.317	7.287-7.347	7.317	0.000
23 4,4'-DDT	7.427	7.427	7.428	7.428	7.427	7.427	7.428	7.427	7.397-7.457	7.428	0.000
24 Endrin aldehyde	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.716-7.776	7.746	0.000
25 Methoxychlor	7.912	7.912	7.913	7.912	7.912	7.912	7.912	7.912	7.882-7.942	7.912	0.000
26 Endosulfan sulfate	8.180	8.179	8.180	8.180	8.180	8.179	8.180	8.180	8.150-8.210	8.180	0.000
27 Endrin ketone	8.453	8.452	8.454	8.453	8.453	8.453	8.454	8.453	8.423-8.483	8.453	0.001
28 Decachlorobiphenyl	9.355	9.354	9.355	9.355	9.355	9.355	9.356	9.355	9.325-9.385	9.355	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121405 22121406 22121407 22121408 22121409 22121410 22121411
INJ. DATE: 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022
INJ. TIME: 20:38 20:56 21:14 21:31 21:49 22:07 22:25

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, 1Bromo-2nitrobenzene, Hexabromobiphenyl, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	7.370	7.370	7.371	7.371	7.370	7.371	7.371	7.371	7.341-7.401	7.371	0.000
19 Dieldrin [C]	7.582	7.582	7.583	7.583	7.582	7.582	7.583	7.583	7.553-7.613	7.582	0.000
20 Endrin [C]	7.906	7.906	7.906	7.907	7.907	7.907	7.907	7.907	7.877-7.937	7.907	0.000
21 4,4'-DDD [C]	7.976	7.976	7.976	7.977	7.976	7.976	7.976	7.976	7.946-8.006	7.976	0.000
22 Endosulfan II [C]	8.117	8.116	8.117	8.117	8.117	8.117	8.117	8.117	8.087-8.147	8.117	0.000
23 4,4'-DDT [C]	8.294	8.294	8.294	8.295	8.295	8.295	8.295	8.295	8.265-8.325	8.295	0.000
24 Endrin aldehyde [C]	8.448	8.447	8.448	8.448	8.448	8.448	8.448	8.448	8.418-8.478	8.448	0.000
25 Endosulfan sulfate [C]	8.715	8.714	8.715	8.715	8.715	8.715	8.715	8.715	8.685-8.745	8.715	0.000
26 Methoxychlor [C]	8.935	8.934	8.935	8.936	8.935	8.935	8.936	8.936	8.906-8.966	8.935	0.001
27 Endrin ketone [C]	9.239	9.239	9.239	9.240	9.239	9.239	9.240	9.240	9.210-9.270	9.239	0.000
28 Decachlorobiphenyl [C]	10.466	10.465	10.466	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.001
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121412 22121413 22121414 22121415 22121416 22121417 22121418
INJ. DATE: 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 22:43 23:01 23:19 23:36 23:54 00:12 00:30

Table with 12 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Hexachlorobenzene, alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Aldrin, Chlorthalonil, Heptachlor Epoxide a, Heptachlor epoxide b, cis-Chlordane, trans-Chlordane, and Endosulfan I.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.355	9.325-9.385	+++++	+++++
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
39 2,4-DDE	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.076-6.136	6.106	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.681	6.681	6.681	6.681	6.681	6.681	6.680	6.681	6.651-6.711	6.681	0.000
41 2,4-DDT	6.956	6.957	6.956	6.956	6.957	6.956	6.956	6.957	6.927-6.987	6.956	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	6.014	6.015	6.014	6.015	6.014	6.014	6.014	6.014	5.984-6.044	6.015	0.000
44 trans-Nonachlor	6.397	6.398	6.398	6.398	6.397	6.397	6.397	6.397	6.367-6.427	6.398	0.000
45 cis-Nonachlor	7.112	7.112	7.111	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.052-8.112	8.082	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121412 22121413 22121414 22121415 22121416 22121417 22121418
INJ. DATE: 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 22:43 23:01 23:19 23:36 23:54 00:12 00:30

Table with 12 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows list various compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, etc., with their respective retention times and quality indicators.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	10.471	10.467	10.437-10.497	10.471	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	7.036	7.036	7.035	7.036	7.036	7.036	7.036	7.036	7.006-7.066	7.036	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.591	7.590	7.590	7.591	7.590	7.591	7.591	7.591	7.561-7.621	7.591	0.000
41 2,4-DDT [C]	7.913	7.914	7.913	7.913	7.913	7.914	7.913	7.913	7.883-7.943	7.913	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.711-6.771	6.741	0.000
44 trans-Nonachlor [C]	7.154	7.154	7.154	7.155	7.154	7.155	7.155	7.155	7.125-7.185	7.154	0.000
45 cis-Nonachlor [C]	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.945-8.005	7.975	0.000
46 Mirex [C]	9.223	9.223	9.222	9.223	9.222	9.223	9.223	9.223	9.193-9.253	9.223	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ. DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ. TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
* 2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
* 3 Hexabromobiphenyl	9.504	9.504	9.505	9.504	9.504	9.504	9.505	9.505	9.475-9.535	9.504	0.000
\$ 4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.828	3.798-3.858	+++++	+++++
5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	9.380	9.355	9.325-9.385	9.380	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	5.593	5.593	5.593	5.593	5.593	5.592	5.593	5.593	5.563-5.623	5.593	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121421 22121422 22121423 22121424 22121425 22121426 22121427
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 01:24 01:42 01:59 02:17 02:35 02:53 03:11

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Hexachlorobenzene, alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Chlorthalonil, Aldrin, Heptachlor Epoxide a, Heptachlor epoxide b, cis-Chlordane, trans-Chlordane, and Endosulfan I.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.467	10.437-10.497	+++++	+++++
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	5.612	5.612	5.612	5.611	5.612	5.612	5.612	5.612	5.582-5.642	5.612	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121428 22121429 22121430 22121431 22121432 22121433 22121434
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 03:29 03:46 04:04 04:22 04:40 04:58 05:16

Table with 12 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows list various compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, etc., with their respective retention times and standard deviations.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
28 Decachlorobiphenyl	9.355	9.355	9.355	9.355	9.356	9.356	9.355	9.355	9.325-9.385	9.356	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.901-6.961	6.931	0.000
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121428 22121429 22121430 22121431 22121432 22121433 22121434
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 03:29 03:46 04:04 04:22 04:40 04:58 05:16

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Hexachlorobenzene, alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Chlorthalonil, Aldrin, Heptachlor Epoxide a, Heptachlor epoxide b, cis-Chlordane, trans-Chlordane, and Endosulfan I.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
\$ 28 Decachlorobiphenyl [C]	10.467	10.467	10.467	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	7.125	7.125	7.125	7.125	7.126	7.126	7.126	7.126	7.096-7.156	7.125	0.000
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			6.824	-0.021	2291	0.00	0.14	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.597	0.015	1696	0.00	0.11	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.135	0.018	285	0.00	0.02	---	Endosulfan II
----			7.975	-0.002	1369	0.00	0.12	---	4,4'-DDD
----			8.720	0.005	243	0.00	0.02	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			8.924	-0.013	546	0.00	0.11	---	Methoxychlor
8.444	-0.009	1962	9.226	-0.013	2888	0.23	0.25	10.1	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			7.070	0.014	4708	0.00	0.30	---	trans-Chlordane
----			7.219	0.003	810	0.00	0.05	---	cis-Chlordane
2.351	0.028	6378	2.512	0.012	33421	0.42	1.60	116.6*	Hexachlorobutadiene
4.183	0.001	4869	4.721	0.003	421	0.36	0.02	178.1*	Hexachlorobenzene
3.828	0.000	375293	4.220	-0.000	579767	36.70	37.46	2.1	Tetrachloro-m-xylene
9.356	0.001	243291	10.467	0.000	323668	35.86	35.40	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	751998	5.8
Hexabromobiphenyl	641833	669495	4.3

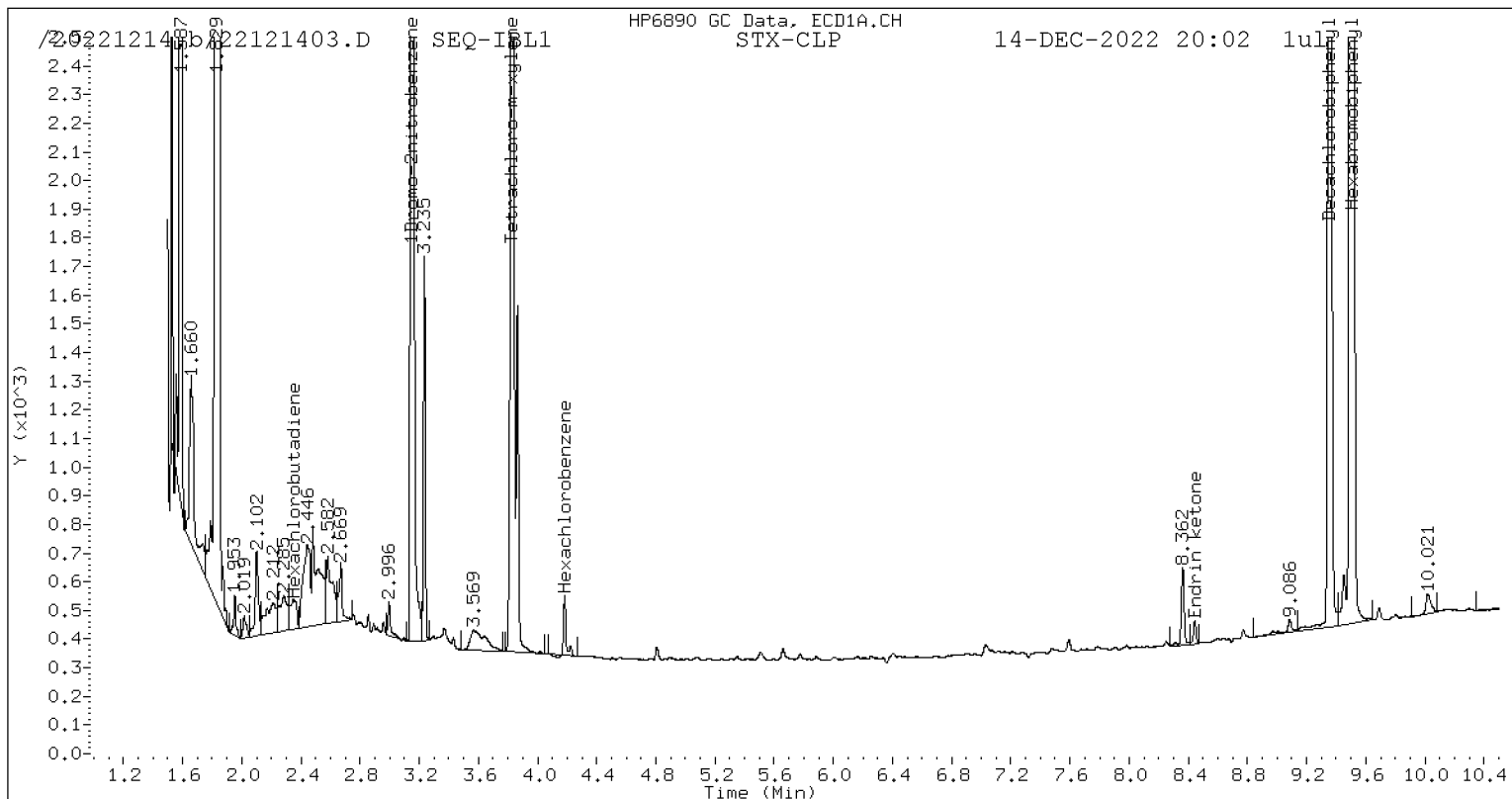
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1099555	3.8
Hexabromobiphenyl	797125	827325	3.8

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

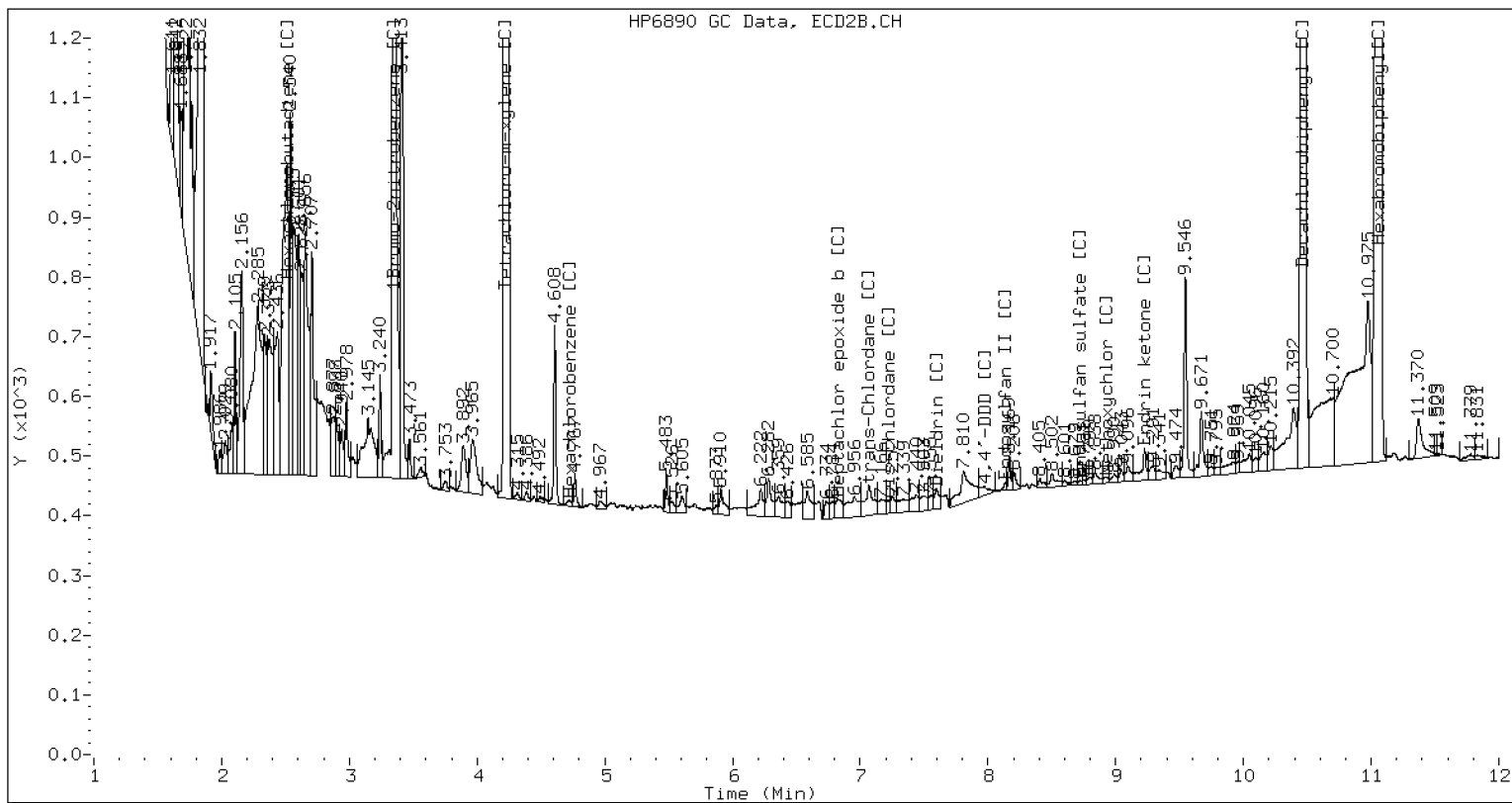
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121403.D SEQ-IBL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

7E
8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1

InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20

Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

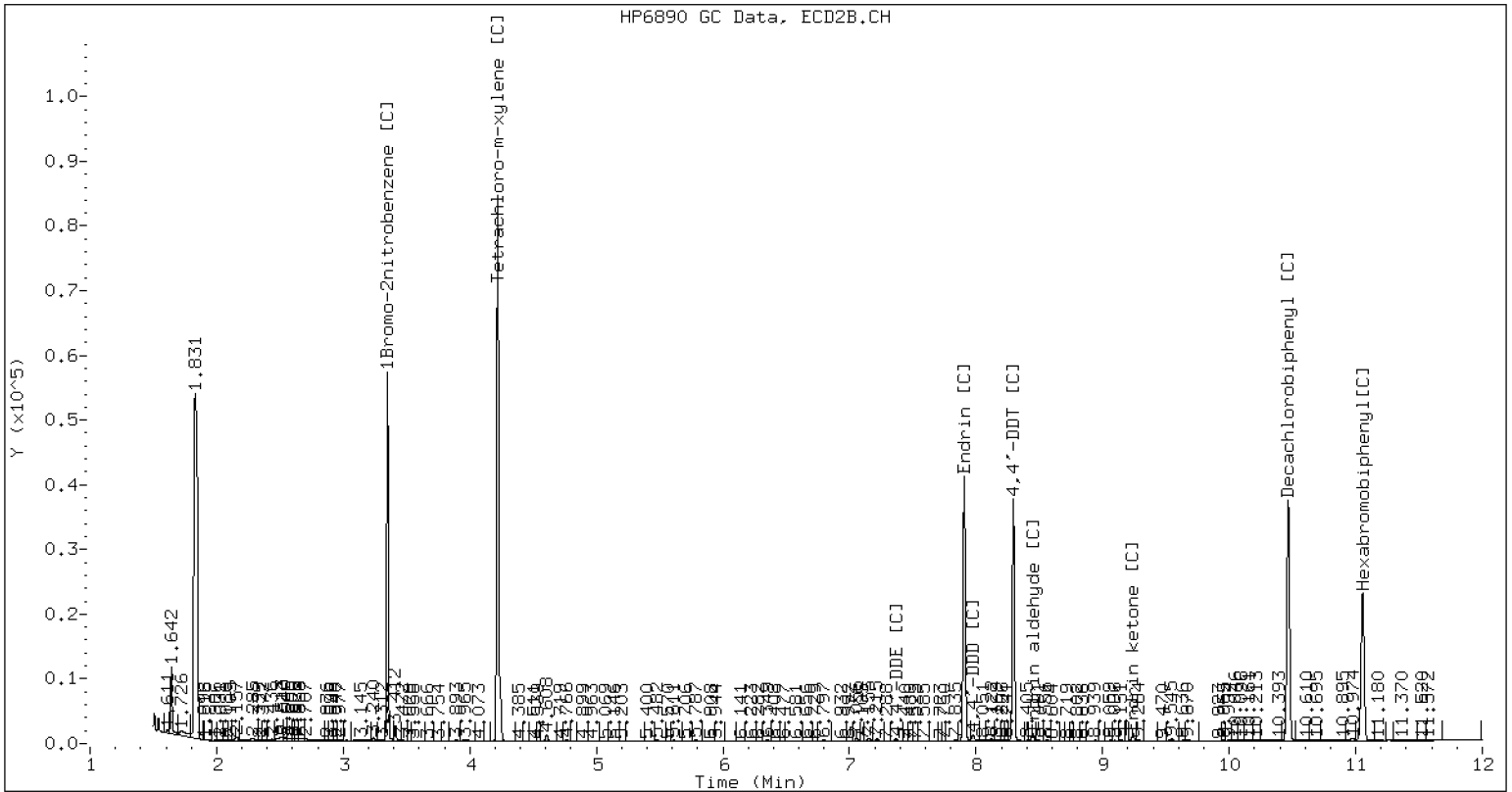
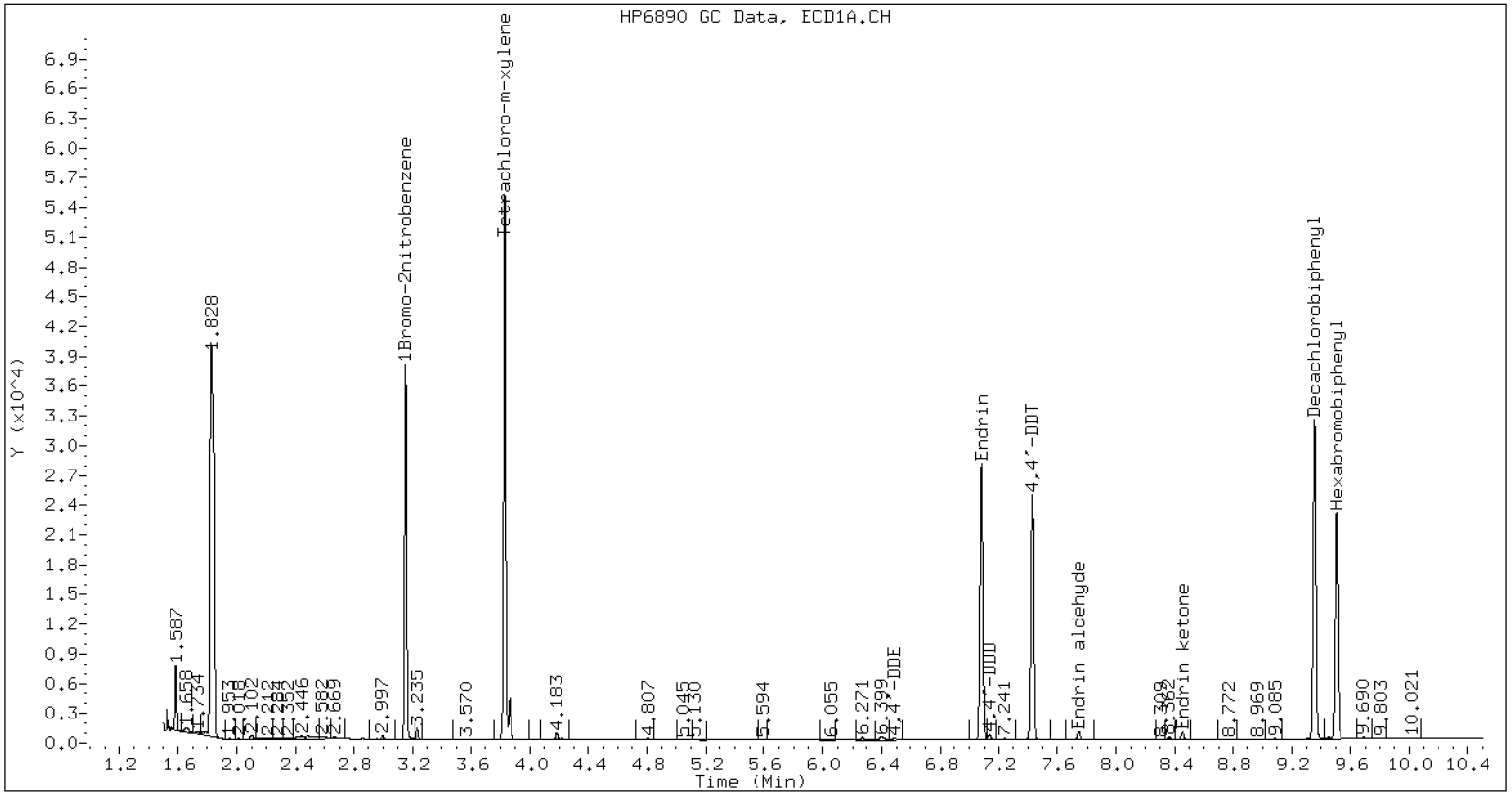
Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl [C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)



7E
8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D
 Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
 $((6258+15566) * 100)/(6258+15566+629664)$

Endrin Percent Breakdown = 5.2 %
 $((21328+19276) * 100)/(21328+19276+745471)$

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	-0.000	17720	4.860	-0.001	25579	1.30	1.22	6.4	alpha-BHC
4.726	-0.000	7513	5.337	-0.000	10927	1.43	1.37	4.4	beta-BHC
4.909	-0.000	14050	5.690	-0.000	21188	1.26	1.23	2.8	delta-BHC
4.645	-0.000	15329	5.257	-0.001	21981	1.30	1.24	4.9	gamma-BHC (Lindane)
5.130	-0.000	14540	5.786	-0.000	20395	1.38	1.27	8.9	Heptachlor
5.453	-0.001	15026	6.190	-0.001	24413	1.28	1.33	3.9	Aldrin
6.130	0.000	13937	6.845	-0.000	21959	1.37	1.44	5.6	Heptachlor epoxide b
6.572	-0.000	13220	7.288	-0.000	19257	1.41	1.44	1.8	Endosulfan I
6.831	0.000	27285	7.582	-0.001	43580	2.71	2.94	8.2	Dieldrin
6.489	0.000	25951	7.370	-0.001	37722	2.78	2.78	0.0	4,4'-DDE
7.081	0.000	24429	7.906	-0.001	31381	2.94	2.78	5.3	Endrin
7.318	0.001	19827	8.117	-0.000	30675	2.65	2.66	0.3	Endosulfan II
7.135	0.000	20434	7.976	-0.000	28995	2.73	2.65	3.0	4,4'-DDD
8.180	-0.000	19661	8.715	-0.000	26689	2.76	2.63	4.9	Endosulfan sulfate
7.427	0.000	20071	8.294	-0.001	26950	2.65	2.55	3.9	4,4'-DDT
7.912	-0.000	52385	8.935	-0.001	65896	15.60	14.07	10.3	Methoxychlor
8.453	-0.001	24276	9.239	-0.000	30129	2.98	2.75	8.0	Endrin ketone
7.746	-0.000	17209	8.448	-0.000	21218	2.88	2.60	10.1	Endrin aldehyde
6.270	-0.001	14829	7.056	-0.000	22517	1.43	1.48	3.7	trans-Chlordane
6.417	0.000	15767	7.215	-0.000	22150	1.52	1.49	1.6	cis-Chlordane
2.323	-0.001	27320	2.500	-0.001	42655	1.92	2.14	11.3	Hexachlorobutadiene
4.182	0.000	18555	4.718	-0.000	27377	1.47	1.44	2.2	Hexachlorobenzene
3.828	-0.000	28792	4.220	-0.001	41270	2.99	2.80	6.5	Tetrachloro-m-xylene
9.355	-0.000	21954	10.466	-0.000	30646	3.41	3.50	2.5	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	707324	-0.5
Hexabromobiphenyl	641833	634819	-1.1

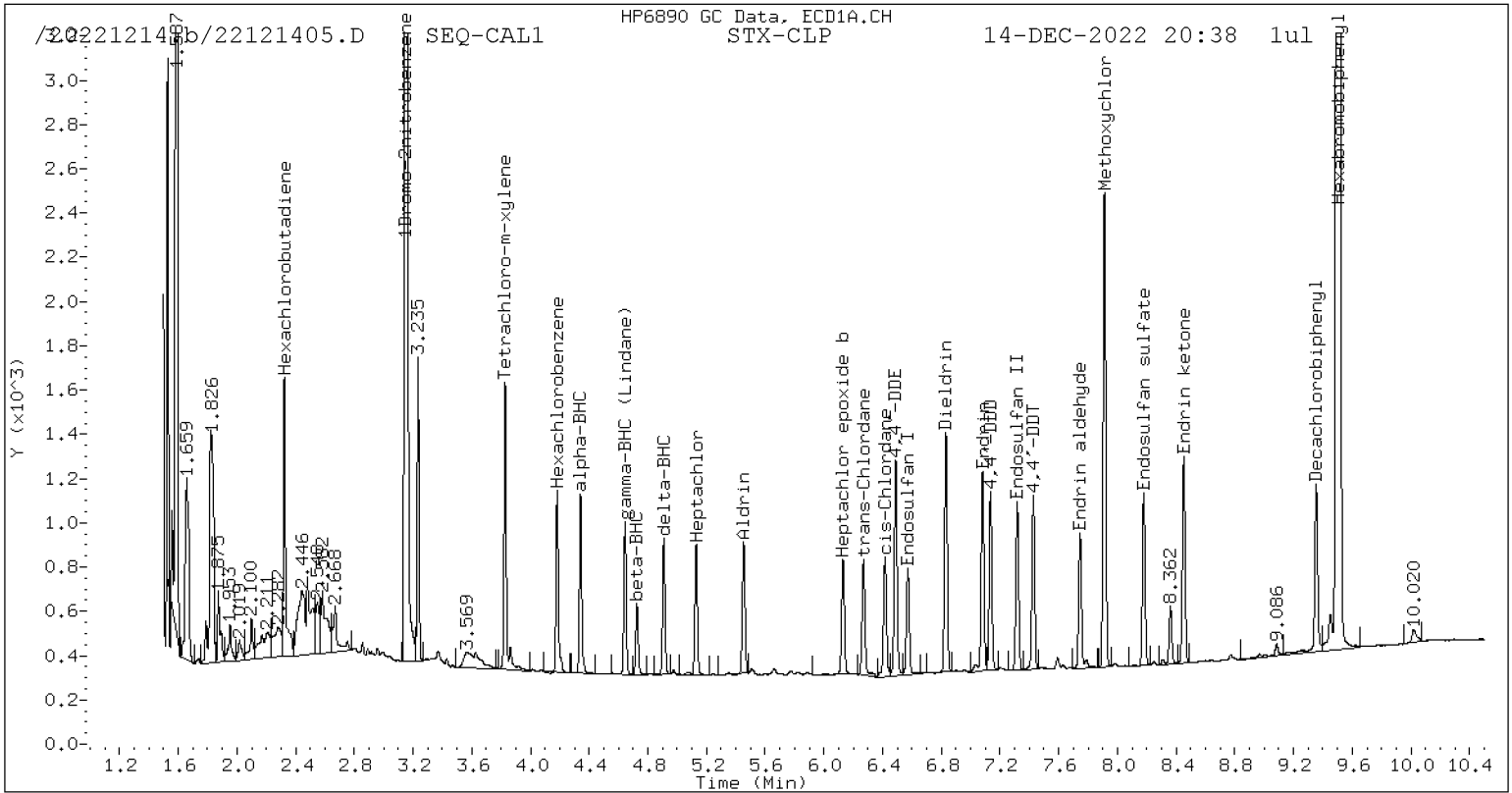
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1045524	-1.3
Hexabromobiphenyl	797125	792558	-0.6

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

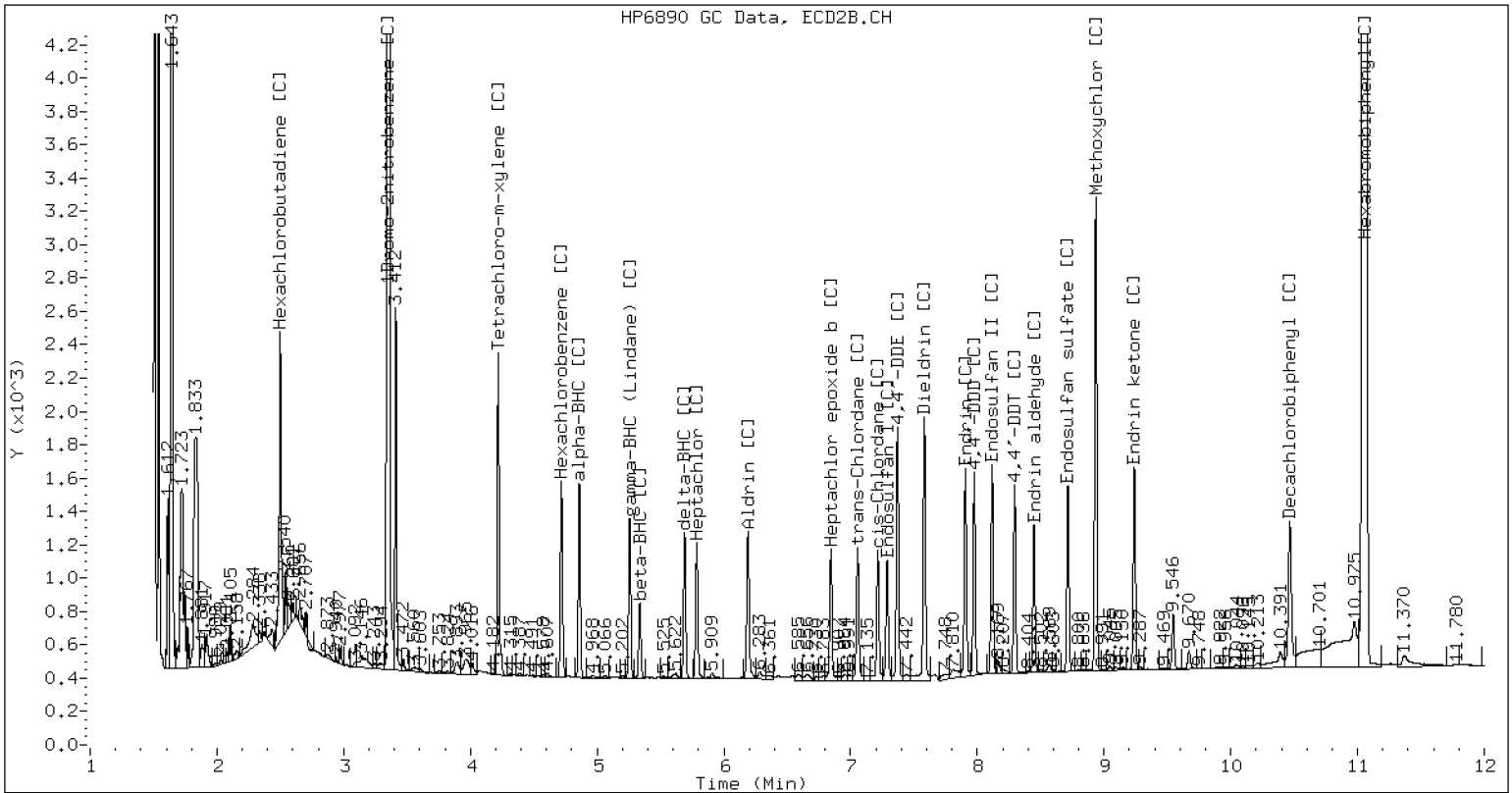
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121405.D SEQ-CAL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	-0.000	35088	4.859	-0.001	52514	2.54	2.47	2.9	alpha-BHC
4.726	-0.000	14580	5.337	-0.000	21664	2.74	2.68	2.4	beta-BHC
4.909	-0.000	28429	5.691	-0.000	43932	2.52	2.51	0.5	delta-BHC
4.645	0.000	30588	5.257	-0.001	44971	2.55	2.49	2.5	gamma-BHC (Lindane)
5.129	-0.001	28458	5.787	-0.000	42156	2.67	2.58	3.6	Heptachlor
5.453	-0.001	30273	6.190	-0.001	50159	2.53	2.69	5.8	Aldrin
6.130	-0.001	27608	6.845	-0.001	43067	2.67	2.79	4.5	Heptachlor epoxide b
6.572	-0.000	25650	7.288	-0.001	37112	2.70	2.73	1.0	Endosulfan I
6.832	0.000	54960	7.582	-0.001	84296	5.38	5.60	4.0	Dieldrin
6.489	-0.000	51182	7.370	-0.001	74355	5.40	5.39	0.2	4,4'-DDE
7.081	0.000	46577	7.906	-0.001	63434	5.52	5.52	0.1	Endrin
7.317	0.001	37804	8.116	-0.001	65448	4.98	5.56	11.1	Endosulfan II
7.136	0.001	40399	7.976	-0.001	62302	5.32	5.58	4.8	4,4'-DDD
8.179	-0.001	38342	8.714	-0.001	57421	5.32	5.56	4.4	Endosulfan sulfate
7.427	-0.000	40499	8.294	-0.001	59346	5.27	5.51	4.3	4,4'-DDT
7.912	-0.000	98271	8.934	-0.002	130815	28.88	27.42	5.2	Methoxychlor
8.452	-0.001	45639	9.239	-0.001	62360	5.53	5.59	1.1	Endrin ketone
7.746	0.000	32847	8.447	-0.001	47592	5.42	5.73	5.6	Endrin aldehyde
6.271	0.000	28307	7.055	-0.001	41633	2.69	2.70	0.4	trans-Chlordane
6.417	0.000	29336	7.215	-0.000	41766	2.78	2.77	0.3	cis-Chlordane
2.323	-0.001	44113	2.500	-0.001	65565	3.05	3.24	6.2	Hexachlorobutadiene
4.182	-0.000	35520	4.718	-0.000	53173	2.77	2.75	0.9	Hexachlorobenzene
3.828	-0.000	54873	4.220	-0.001	81034	5.62	5.42	3.7	Tetrachloro-m-xylene
9.354	-0.001	38477	10.465	-0.001	54866	5.90	6.15	4.1	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	717600	1.0
Hexabromobiphenyl	641833	643445	0.3

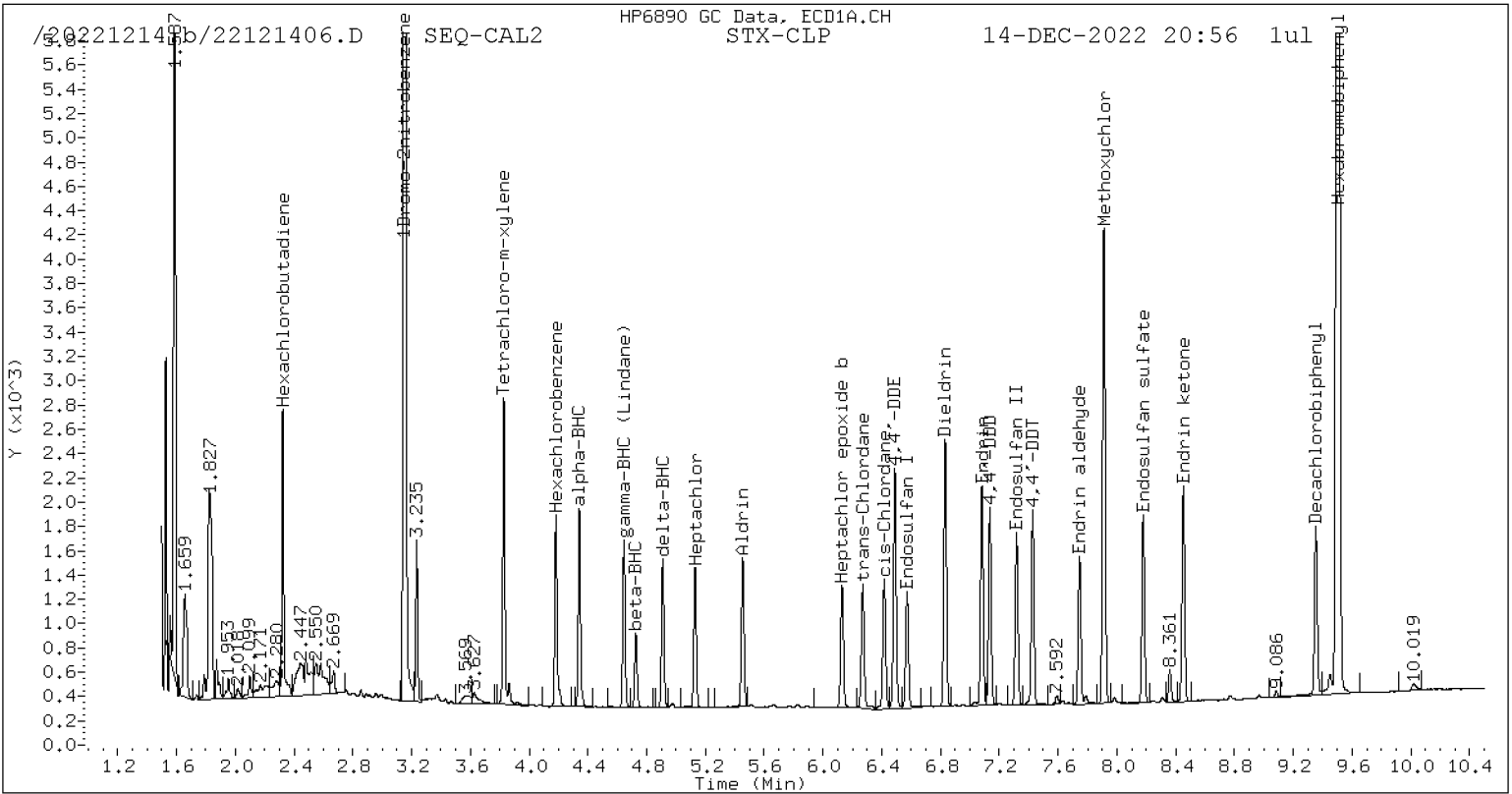
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1061990	0.3
Hexabromobiphenyl	797125	807490	1.3

* Standard Areas taken from Initial Cal Level 5

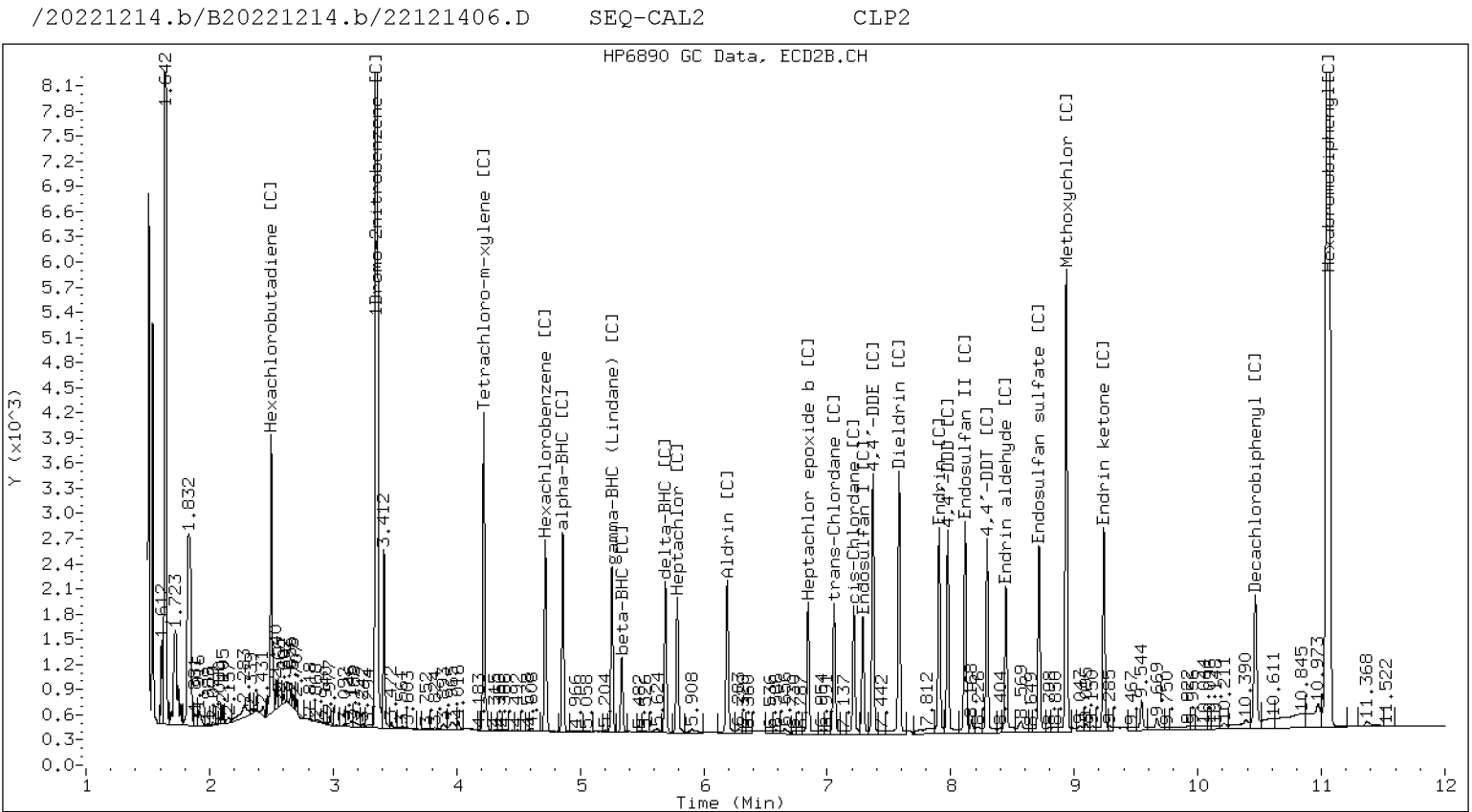
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
4.343	0.001	68202	4.860	-0.000	103195	5.06	4.95	2.2	alpha-BHC
4.727	0.000	26774	5.338	0.000	40159	5.16	5.06	1.8	beta-BHC
4.910	0.001	55344	5.691	0.000	85044	5.02	4.95	1.5	delta-BHC
4.646	0.001	59491	5.258	0.000	87747	5.09	4.96	2.6	gamma-BHC (Lindane)
5.130	0.000	53529	5.787	0.000	80295	5.15	5.01	2.7	Heptachlor
5.455	0.001	59061	6.191	0.000	92167	5.07	5.03	0.7	Aldrin
6.132	0.001	52071	6.845	-0.000	76415	5.15	5.05	2.1	Heptachlor epoxide b
6.573	0.001	48052	7.289	-0.000	67929	5.18	5.09	1.8	Endosulfan I
6.832	0.001	104217	7.583	-0.000	151301	10.46	10.26	1.9	Dieldrin
6.490	0.001	97042	7.371	0.000	139172	10.49	10.29	1.9	4,4'-DDE
7.082	0.001	87185	7.906	-0.001	115830	10.66	10.37	2.8	Endrin
7.318	0.001	77341	8.117	0.000	118175	10.50	10.32	1.8	Endosulfan II
7.136	0.001	77451	7.976	0.000	110178	10.51	10.14	3.6	4,4'-DDD
8.180	0.001	73440	8.715	0.000	102417	10.50	10.18	3.1	Endosulfan sulfate
7.428	0.001	77522	8.294	-0.001	105882	10.41	10.09	3.1	4,4'-DDT
7.913	0.001	178164	8.935	-0.001	239047	53.98	51.49	4.7	Methoxychlor
8.454	0.000	84510	9.239	-0.000	110024	10.55	10.13	4.1	Endrin ketone
7.746	0.001	61122	8.448	-0.000	82817	10.40	10.25	1.5	Endrin aldehyde
6.271	0.001	52622	7.056	-0.000	76513	5.13	5.07	1.1	trans-Chlordane
6.417	0.001	53515	7.216	0.000	75023	5.20	5.08	2.3	cis-Chlordane
2.324	-0.000	75632	2.500	-0.000	107268	5.35	5.41	1.1	Hexachlorobutadiene
4.183	0.001	66090	4.718	-0.000	98926	5.28	5.21	1.3	Hexachlorobenzene
3.828	0.000	101081	4.220	-0.000	153451	10.61	10.47	1.3	Tetrachloro-m-xylene
9.355	-0.000	67797	10.466	-0.000	92260	10.72	10.62	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	700354	-1.4
Hexabromobiphenyl	641833	624108	-2.8

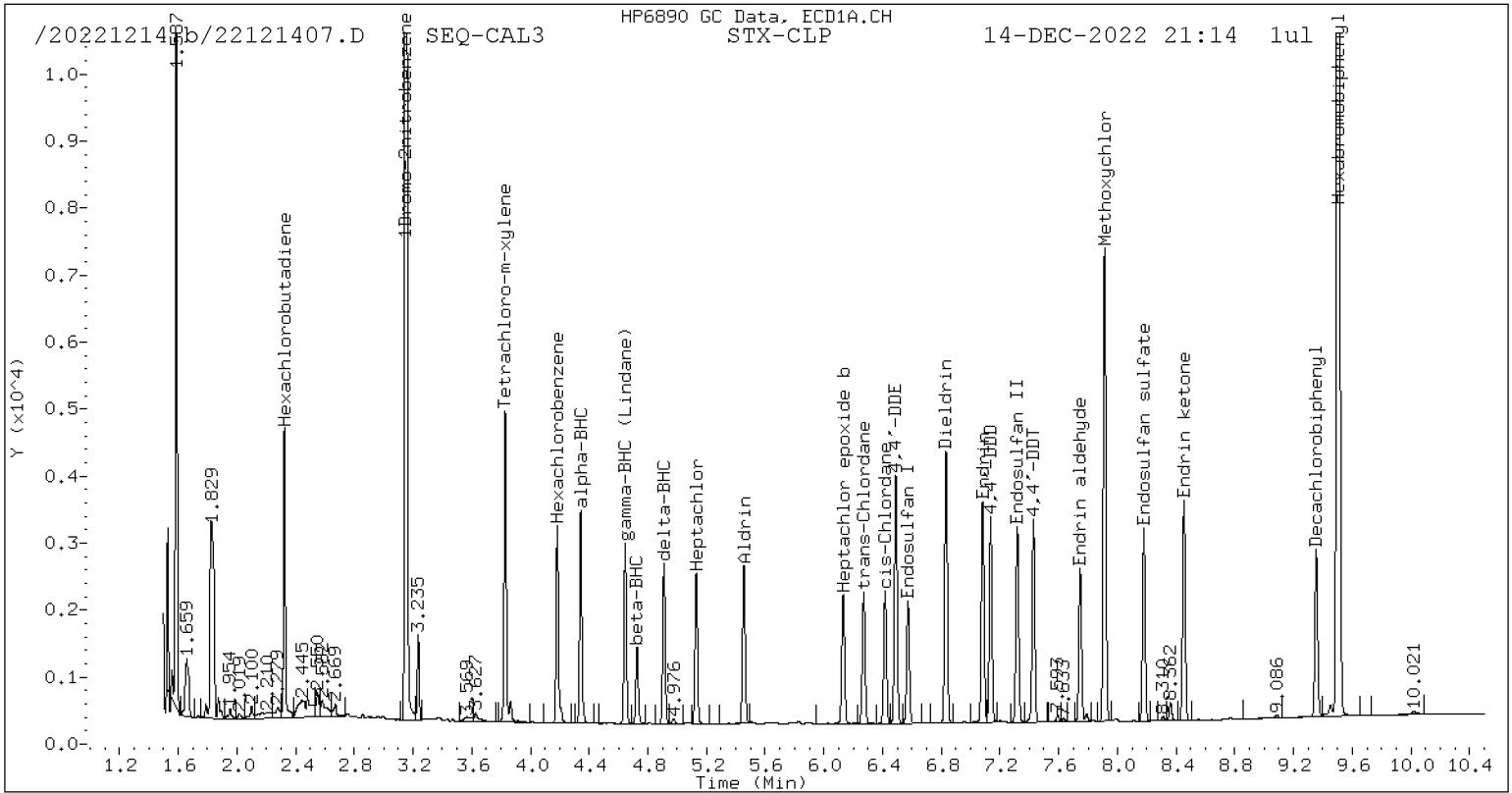
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1040903	-1.7
Hexabromobiphenyl	797125	785894	-1.4

* Standard Areas taken from Initial Cal Level 5

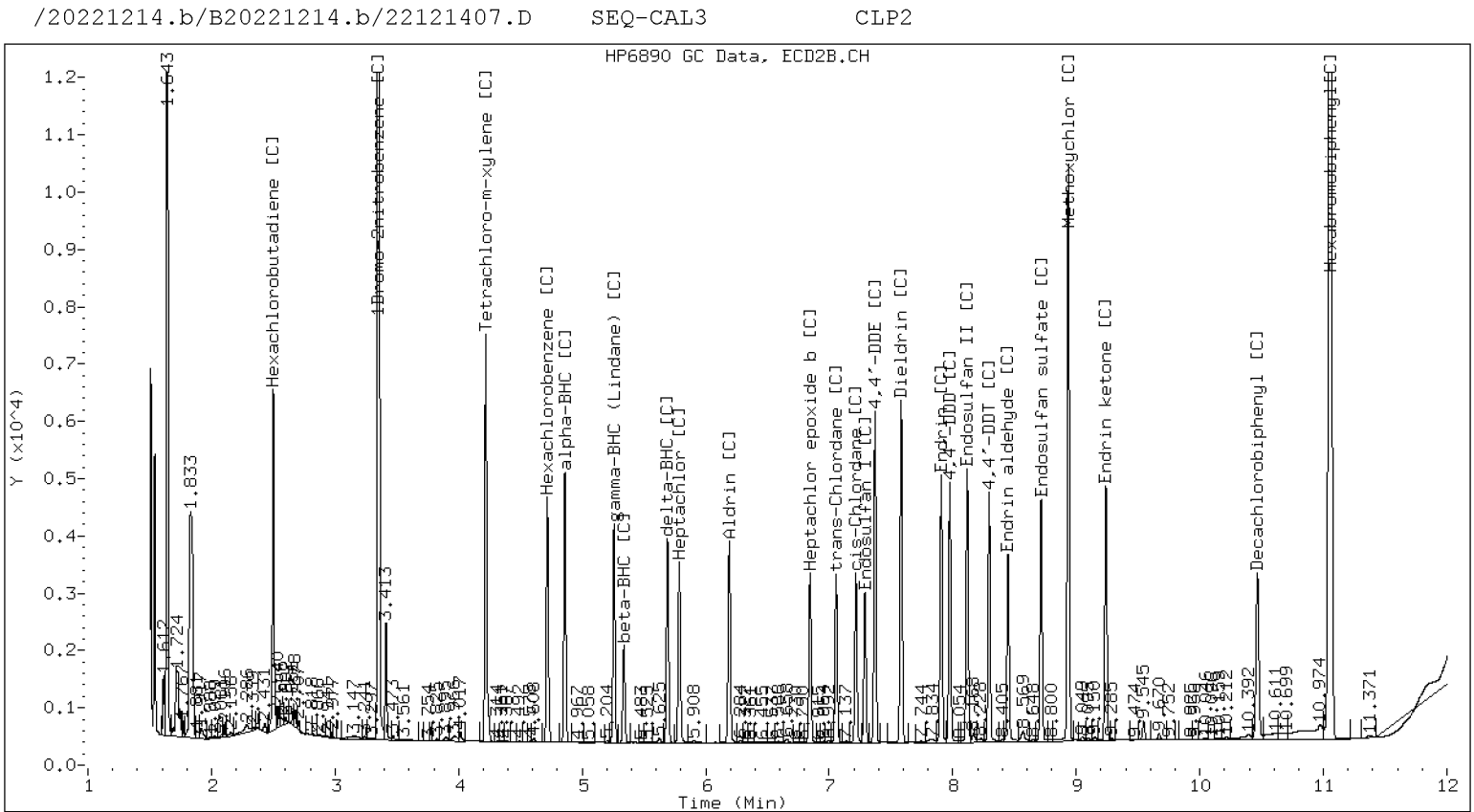
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
4.343	0.000	139784	4.860	-0.000	216159	10.22	10.19	0.3	alpha-BHC
4.726	0.000	53742	5.337	0.000	81857	10.20	10.15	0.6	beta-BHC
4.910	0.001	113586	5.691	0.000	177281	10.16	10.14	0.2	delta-BHC
4.646	0.000	121488	5.258	0.000	182844	10.24	10.15	0.9	gamma-BHC (Lindane)
5.130	0.000	108260	5.787	-0.000	166558	10.26	10.21	0.5	Heptachlor
5.454	0.000	124839	6.191	0.000	189618	10.55	10.18	3.6	Aldrin
6.131	0.001	107301	6.846	0.001	155424	10.46	10.09	3.6	Heptachlor epoxide b
6.573	0.000	97151	7.289	0.000	137043	10.32	10.10	2.2	Endosulfan I
6.832	0.001	210564	7.583	0.000	301602	20.82	20.11	3.5	Dieldrin
6.490	0.001	195139	7.371	0.000	281756	20.79	20.49	1.5	4,4'-DDE
7.082	0.001	173216	7.907	-0.000	231062	20.59	20.39	1.0	Endrin
7.318	0.001	161303	8.117	0.001	236844	21.29	20.39	4.4	Endosulfan II
7.136	0.001	157301	7.977	0.001	222755	20.75	20.21	2.7	4,4'-DDD
8.180	0.000	146955	8.715	0.000	205334	20.43	20.13	1.5	Endosulfan sulfate
7.428	0.001	156744	8.295	-0.000	212755	20.46	19.99	2.3	4,4'-DDT
7.912	0.001	344324	8.936	-0.001	473459	101.43	100.55	0.9	Methoxychlor
8.453	-0.000	167384	9.240	0.000	222080	20.31	20.15	0.8	Endrin ketone
7.746	0.000	123653	8.448	0.000	164391	20.47	20.06	2.0	Endrin aldehyde
6.271	0.001	106805	7.056	0.000	154174	10.25	10.04	2.1	trans-Chlordane
6.418	0.001	106651	7.216	0.001	150231	10.21	10.00	2.1	cis-Chlordane
2.323	-0.000	142895	2.500	-0.001	197539	9.97	9.80	1.7	Hexachlorobutadiene
4.183	0.000	130020	4.718	0.000	197396	10.24	10.22	0.1	Hexachlorobenzene
3.828	0.000	199446	4.220	-0.000	308345	20.64	20.69	0.2	Tetrachloro-m-xylene
9.355	0.000	130210	10.466	-0.000	170633	20.02	19.37	3.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	710650	0.0
Hexabromobiphenyl	641833	641833	0.0

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1058848	0.0
Hexabromobiphenyl	797125	797125	0.0

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/16/2022 15:30
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	0.000	263355	4.860	-0.001	412780	20.34	20.46	0.6	alpha-BHC
4.726	0.000	99355	5.337	-0.000	154138	19.93	20.10	0.8	beta-BHC
4.909	0.000	216224	5.690	-0.000	334261	20.44	20.12	1.6	delta-BHC
4.645	0.000	228274	5.258	-0.000	350450	20.34	20.47	0.7	gamma-BHC (Lindane)
5.130	0.000	203067	5.787	-0.000	320123	20.33	20.64	1.5	Heptachlor
5.454	0.000	230734	6.191	-0.000	359912	20.62	20.33	1.4	Aldrin
6.130	0.000	198033	6.845	-0.000	295580	20.41	20.19	1.1	Heptachlor epoxide b
6.572	0.000	180905	7.289	-0.000	260351	20.31	20.18	0.7	Endosulfan I
6.831	0.000	388583	7.582	-0.000	571731	40.61	40.10	1.3	Dieldrin
6.489	0.000	362177	7.370	-0.000	531128	40.77	40.63	0.4	4,4'-DDE
7.081	0.000	323576	7.907	-0.000	442460	40.48	40.43	0.1	Endrin
7.317	0.000	282010	8.117	-0.000	446656	39.19	39.81	1.6	Endosulfan II
7.135	0.000	292251	7.976	-0.000	427990	40.58	40.20	0.9	4,4'-DDD
8.180	0.000	276113	8.715	0.000	393743	40.41	39.97	1.1	Endosulfan sulfate
7.427	0.000	296413	8.295	-0.000	413083	40.73	40.20	1.3	4,4'-DDT
7.912	0.000	628619	8.935	-0.001	900958	194.94	198.14	1.6	Methoxychlor
8.453	0.000	311305	9.239	-0.000	423698	39.77	39.82	0.1	Endrin ketone
7.746	0.000	230881	8.448	0.000	312907	40.23	39.54	1.7	Endrin aldehyde
6.271	0.000	200151	7.056	-0.000	294106	20.31	20.15	0.8	trans-Chlordane
6.417	0.000	197892	7.216	-0.000	285904	20.02	20.02	0.0	cis-Chlordane
2.324	0.000	260716	2.500	-0.000	346254	19.22	18.08	6.2	Hexachlorobutadiene
4.182	0.000	237746	4.718	-0.000	364913	19.78	19.88	0.5	Hexachlorobenzene
3.828	0.000	357836	4.220	-0.000	567647	39.13	40.07	2.4	Tetrachloro-m-xylene
9.355	0.000	239428	10.466	-0.001	327134	38.76	38.45	0.8	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	672426	0.0
Hexabromobiphenyl	609723	609723	0.0

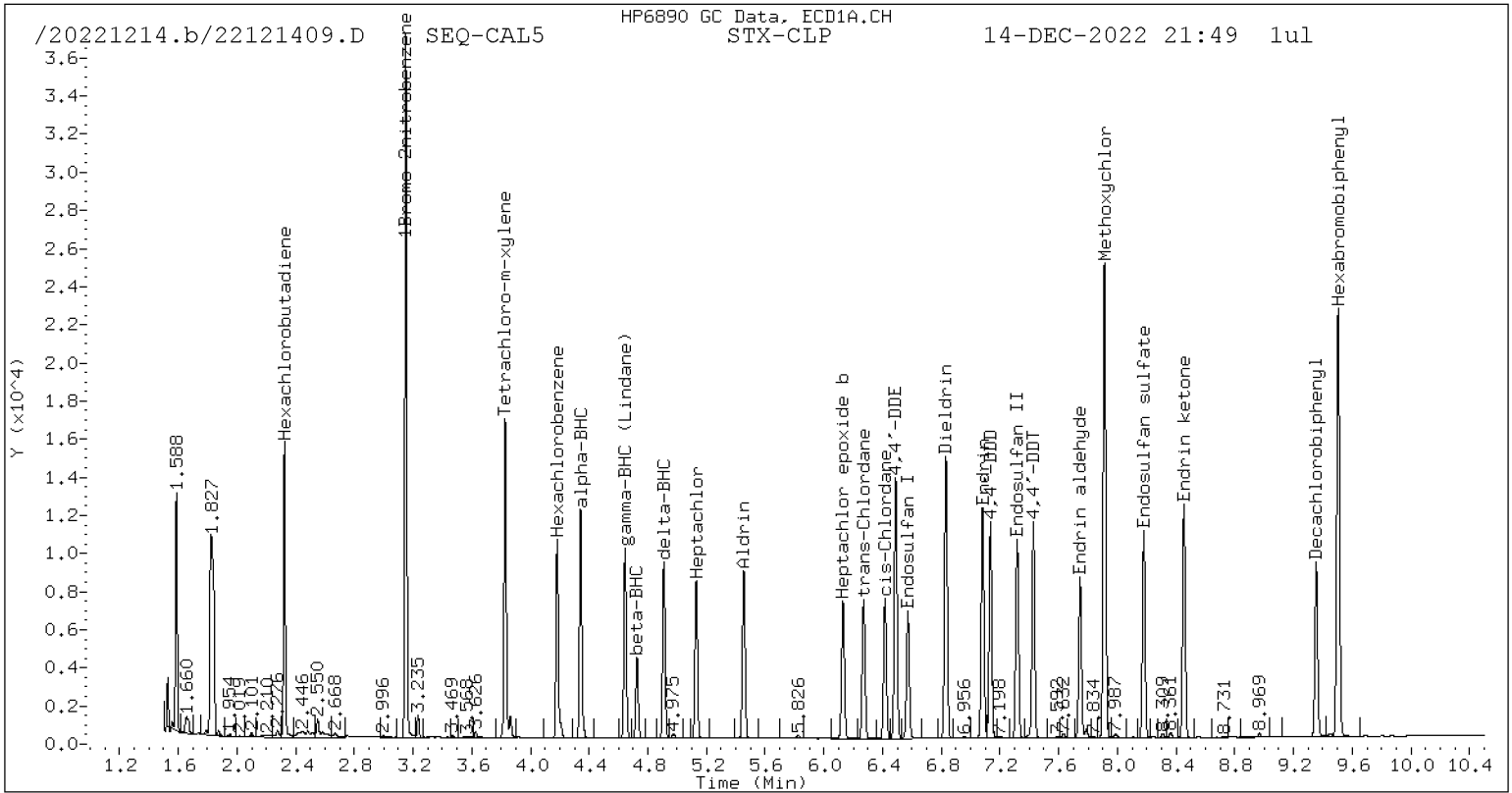
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1006482	0.0
Hexabromobiphenyl	769764	769764	0.0

* Standard Areas taken from Initial Cal Level 5

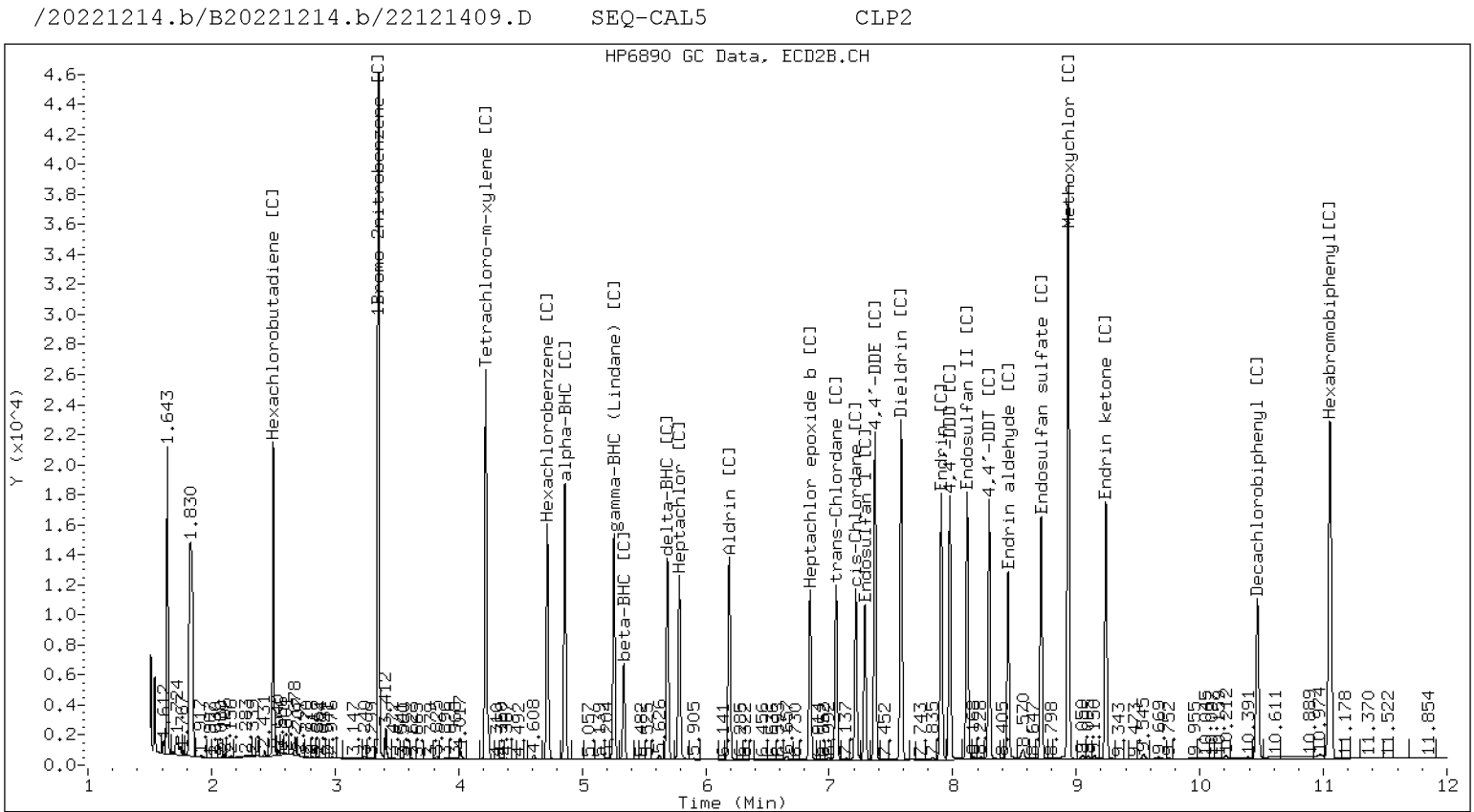
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	0.000	535902	4.860	-0.000	849533	39.69	40.30	1.5	alpha-BHC
4.726	0.000	198976	5.337	-0.000	311218	38.28	38.84	1.4	beta-BHC
4.910	0.000	440370	5.691	0.000	700464	39.91	40.34	1.1	delta-BHC
4.646	0.000	461905	5.258	0.000	718675	39.46	40.18	1.8	gamma-BHC (Lindane)
5.130	0.000	401672	5.787	0.000	639345	38.56	39.46	2.3	Heptachlor
5.454	0.000	458396	6.190	-0.000	720942	39.27	38.97	0.8	Aldrin
6.130	0.000	387273	6.846	0.000	586062	38.26	38.31	0.1	Heptachlor epoxide b
6.572	-0.000	354629	7.288	-0.001	519836	38.18	38.55	1.0	Endosulfan I
6.832	0.000	755708	7.582	-0.000	1126850	75.73	75.64	0.1	Dieldrin
6.489	0.000	698620	7.371	-0.000	1040947	75.40	76.19	1.0	4,4'-DDE
7.082	0.000	615481	7.907	-0.000	858461	74.19	74.98	1.1	Endrin
7.317	0.000	590923	8.117	-0.000	885035	79.12	75.41	4.8	Endosulfan II
7.136	0.000	565557	7.976	-0.000	842536	75.67	75.65	0.0	4,4'-DDD
8.179	-0.001	540557	8.715	0.000	782860	76.22	75.96	0.3	Endosulfan sulfate
7.427	0.000	577337	8.295	-0.000	820861	76.44	76.36	0.1	4,4'-DDT
7.912	-0.000	1204040	8.935	-0.001	1785262	359.75	375.30	4.2	Methoxychlor
8.453	-0.001	610387	9.239	-0.000	843646	75.13	75.79	0.9	Endrin ketone
7.746	-0.000	452325	8.448	0.000	622287	75.93	75.17	1.0	Endrin aldehyde
6.271	0.000	395598	7.056	-0.000	591899	38.48	38.80	0.8	trans-Chlordane
6.417	0.001	389712	7.215	-0.000	573103	37.80	38.40	1.6	cis-Chlordane
2.324	0.000	511265	2.500	-0.000	705320	36.14	35.24	2.5	Hexachlorobutadiene
4.183	0.001	472841	4.718	0.000	728846	37.72	37.99	0.7	Hexachlorobenzene
3.828	-0.000	714634	4.221	0.000	1124106	74.93	75.93	1.3	Tetrachloro-m-xylene
9.355	-0.000	468280	10.466	-0.001	645336	73.03	72.51	0.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	701342	-1.3
Hexabromobiphenyl	641833	632821	-1.4

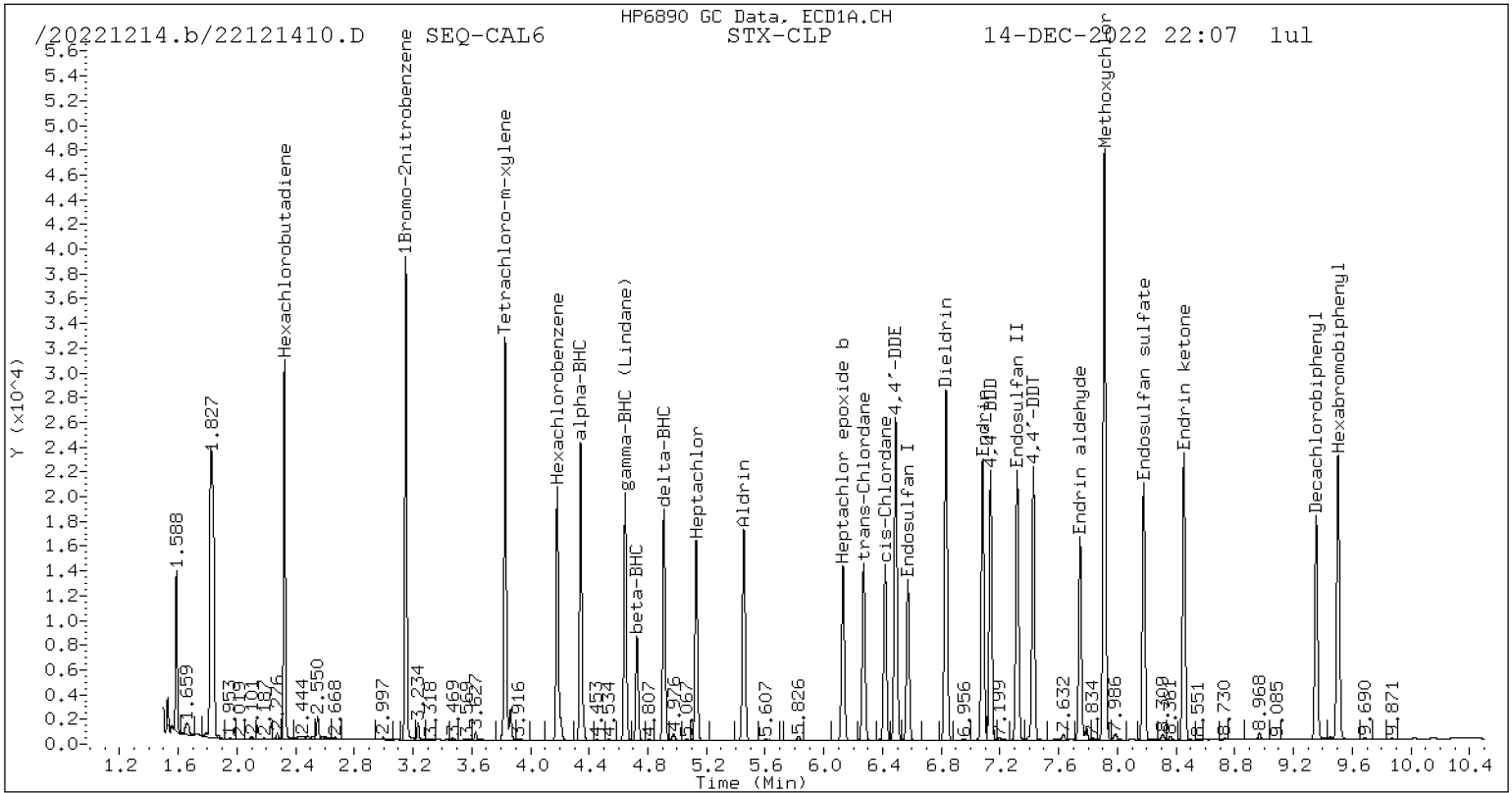
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1051766	-0.7
Hexabromobiphenyl	797125	805268	1.0

* Standard Areas taken from Initial Cal Level 5

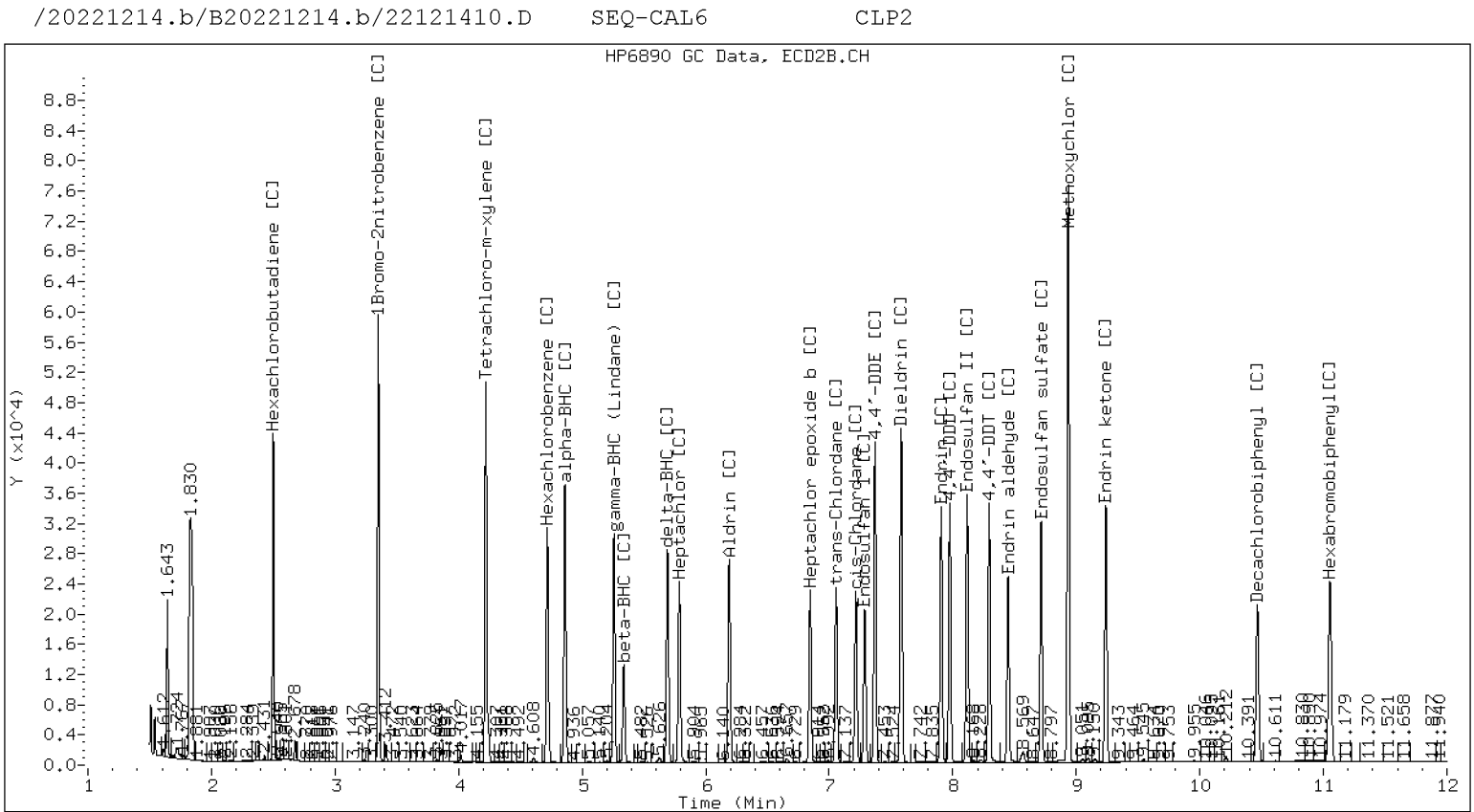
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift	Response	RT	CLP2 Col Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.342	0.000	1012605	4.861	0.000	1623058	75.30	77.94	3.4	alpha-BHC
4.726	0.000	371916	5.337	0.000	586390	71.84	74.06	3.1	beta-BHC
4.910	0.000	837966	5.691	0.000	1343533	76.25	78.32	2.7	delta-BHC
4.645	-0.000	870454	5.258	0.000	1370551	74.66	77.55	3.8	gamma-BHC (Lindane)
5.130	0.000	743802	5.787	0.000	1188915	71.70	74.26	3.5	Heptachlor
5.454	0.000	841598	6.191	0.000	1331430	72.39	72.84	0.6	Aldrin
6.130	-0.000	709774	6.845	0.000	1087105	70.41	71.92	2.1	Heptachlor epoxide b
6.573	0.000	652702	7.289	0.000	969098	70.56	72.74	3.1	Endosulfan I
6.832	0.000	1390496	7.583	0.000	2118555	139.91	143.93	2.8	Dieldrin
6.490	0.001	1284777	7.371	0.000	1944530	139.23	144.06	3.4	4,4'-DDE
7.082	0.001	1132487	7.907	0.000	1618631	137.86	142.60	3.4	Endrin
7.317	0.000	1089554	8.117	0.000	1672946	147.33	143.79	2.4	Endosulfan II
7.135	0.000	1051958	7.976	0.000	1606815	142.14	145.53	2.4	4,4'-DDD
8.180	0.000	1013288	8.715	0.000	1496440	144.30	146.47	1.5	Endosulfan sulfate
7.428	0.001	1086138	8.295	0.000	1586078	145.23	148.84	2.5	4,4'-DDT
7.912	0.001	2325261	8.936	0.000	3541650	701.64	751.02	6.8	Methoxychlor
8.454	0.000	1146784	9.240	0.000	1623077	142.56	147.08	3.1	Endrin ketone
7.746	-0.000	846477	8.448	0.000	1178353	143.51	143.57	0.0	Endrin aldehyde
6.271	0.000	733514	7.056	0.000	1114685	71.64	73.95	3.2	trans-Chlordane
6.417	0.001	723886	7.216	0.000	1079255	70.50	73.19	3.7	cis-Chlordane
2.324	0.000	955982	2.501	0.000	1351745	67.86	68.35	0.7	Hexachlorobutadiene
4.182	0.000	879573	4.718	0.000	1355289	70.45	71.51	1.5	Hexachlorobenzene
3.828	0.000	1318381	4.220	0.000	2067539	138.79	141.35	1.8	Tetrachloro-m-xylene
9.356	0.000	878340	10.467	0.000	1231298	138.34	139.55	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	698499	-1.7
Hexabromobiphenyl	641833	626605	-2.4

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1039154	-1.9
Hexabromobiphenyl	797125	798313	0.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
6.014	-0.000	22184	6.741	-0.000	34211	2.89	2.85	1.2	Oxychlorane
6.106	-0.000	18661	7.036	-0.000	30817	2.94	3.14	6.5	2,4-DDE
6.397	-0.000	30616	7.154	-0.001	41466	3.05	2.82	7.5	trans-Nonachlor
6.681	0.000	16263	7.591	0.000	26177	2.88	3.12	7.9	2,4-DDD
6.956	-0.001	17569	7.913	-0.000	24398	2.88	2.82	2.1	2,4-DDT
7.112	-0.000	29417	7.975	-0.000	37972	3.01	2.72	9.9	cis-Nonachlor
8.082	-0.000	18819	9.223	-0.000	24312	3.09	3.00	3.1	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	713898	0.5
Hexabromobiphenyl	641833	646441	0.7

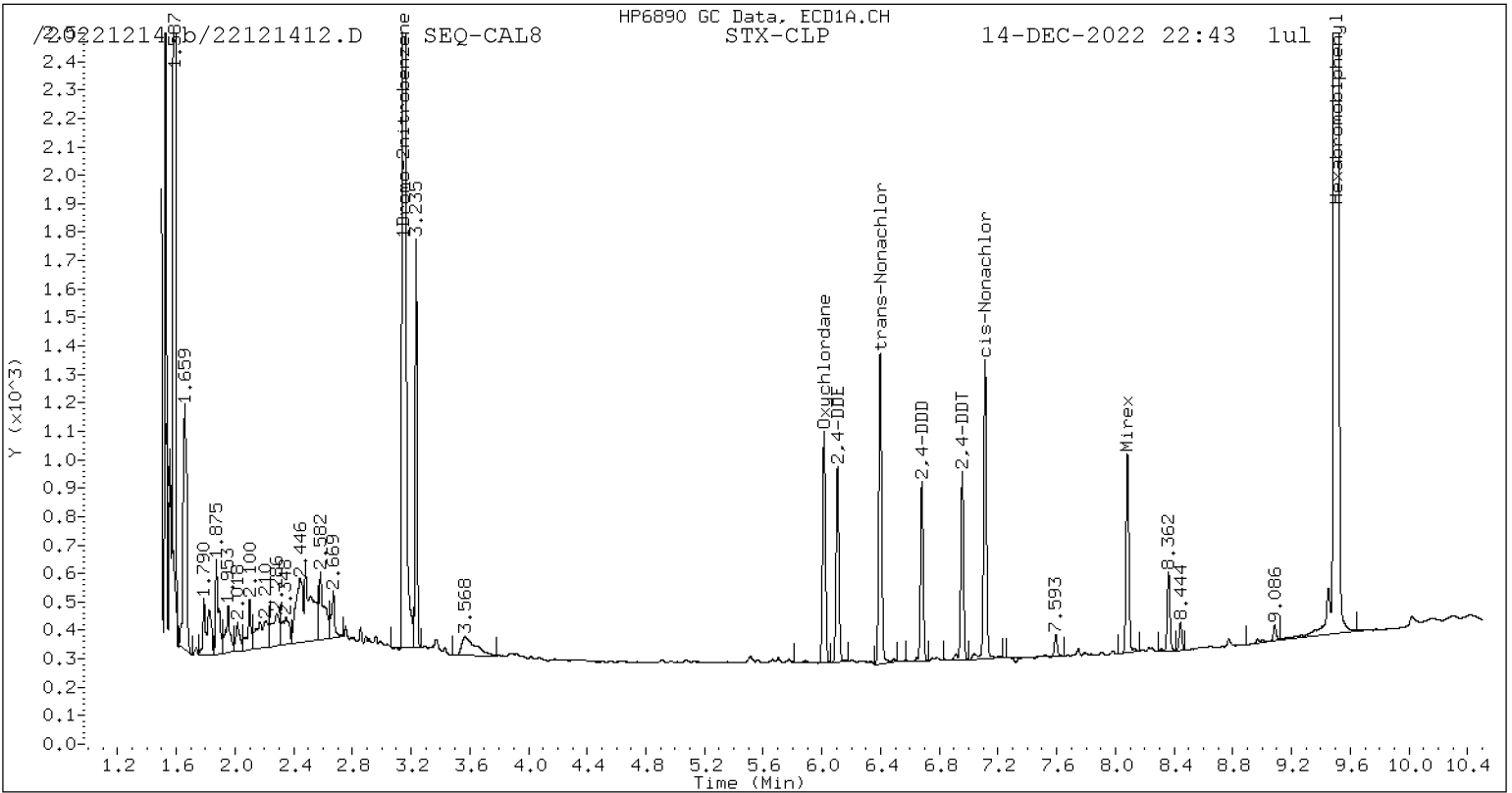
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1076864	1.7
Hexabromobiphenyl	797125	820275	2.9

* Standard Areas taken from Initial Cal Level 5

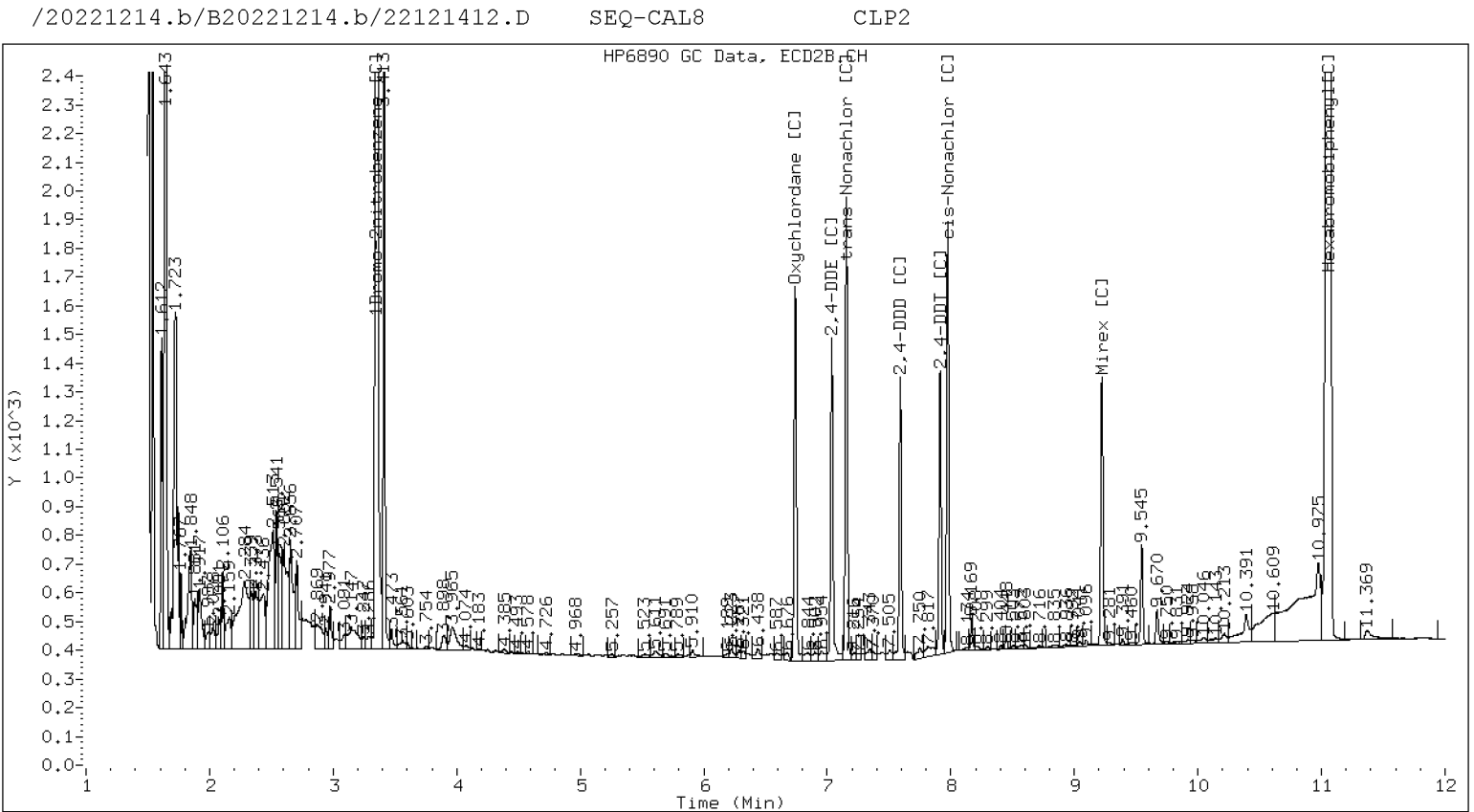
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
6.015	0.000	39121	6.741	5.34	5.41	1.3	Oxychlorane
6.106	0.000	33487	7.036	5.54	5.72	3.1	2,4-DDE
6.398	0.000	51858	7.154	5.42	5.20	4.1	trans-Nonachlor
6.681	0.000	29307	7.590	5.45	5.55	1.9	2,4-DDD
6.957	-0.000	31530	7.914	5.43	5.57	2.6	2,4-DDT
7.112	-0.000	50912	7.975	5.46	5.32	2.6	cis-Nonachlor
8.082	-0.000	32004	9.223	5.52	5.89	6.6	Mirex
----			----	0.00	0.00	---	Tetrachloro-m-xylene
----			----	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	672507	-5.4
Hexabromobiphenyl	641833	615627	-4.1

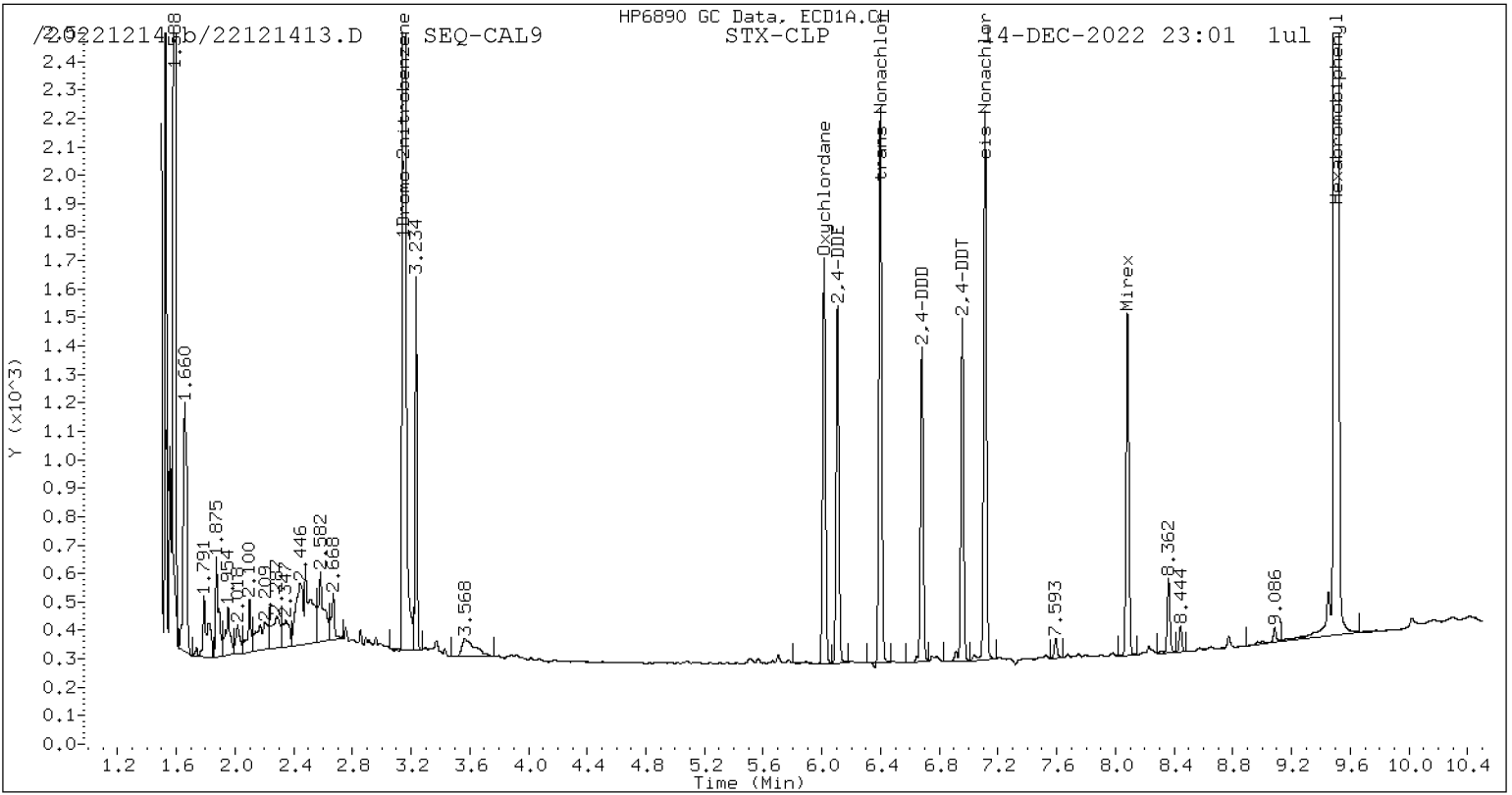
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1020334	-3.6
Hexabromobiphenyl	797125	782734	-1.8

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

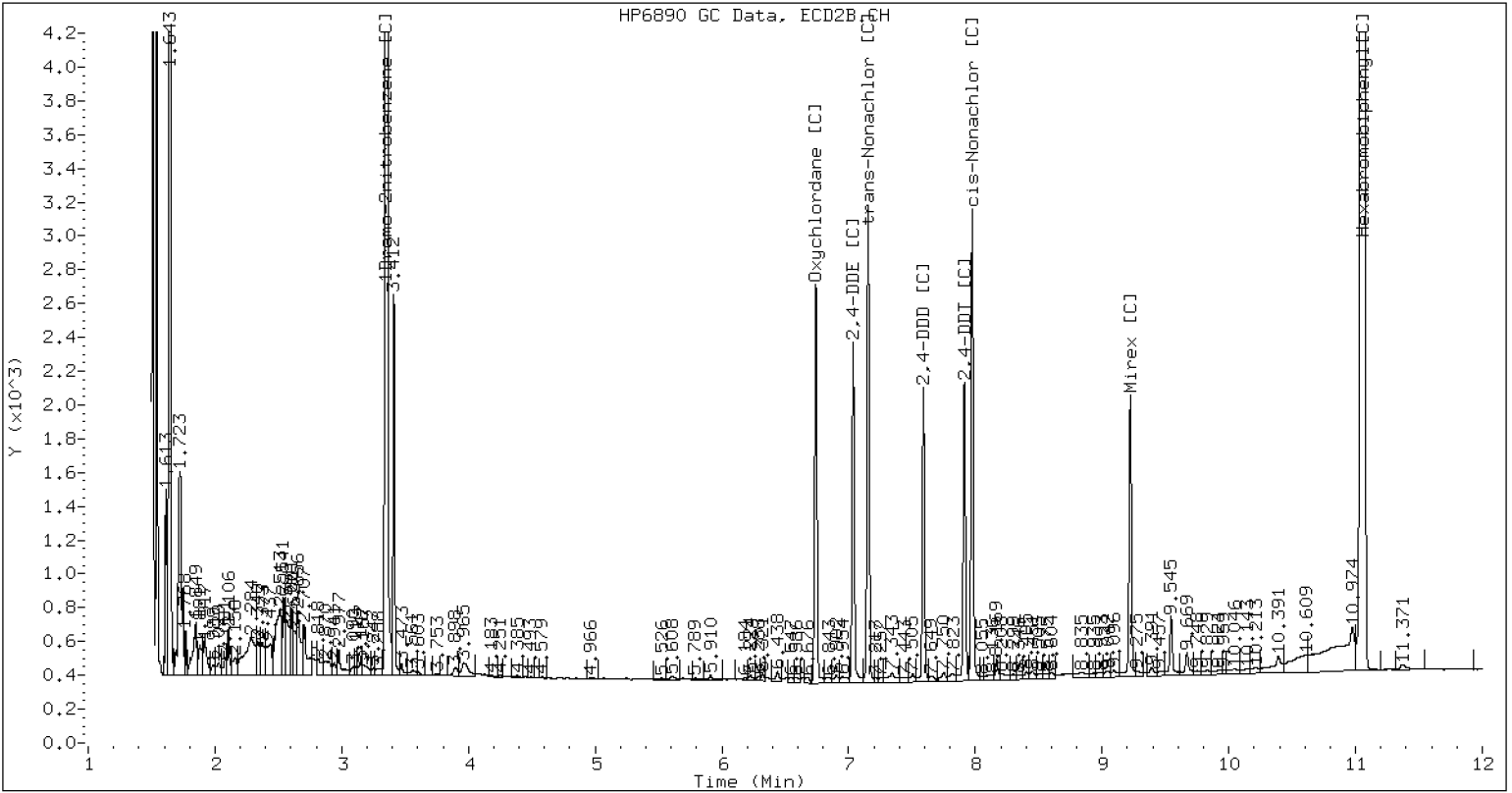
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121413.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
 Data file 2: /20221214.b/B20221214.b/22121414.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALA
 Client ID:
 Injection Date: 14-DEC-2022 23:19
 Report Date: 12/16/2022 15:19
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
6.014	-0.000	82473	6.741	-0.001	127500	10.63	10.63	0.0	Oxychlorthane
6.106	-0.000	69109	7.035	-0.001	108440	10.79	11.04	2.3	2,4-DDE
6.398	0.000	108386	7.154	-0.001	157712	10.68	10.60	0.7	trans-Nonachlor
6.681	0.000	60517	7.590	-0.000	91420	10.62	10.74	1.2	2,4-DDD
6.956	-0.001	65300	7.913	0.000	91498	10.61	10.44	1.6	2,4-DDT
7.111	-0.001	104247	7.975	-0.000	146224	10.55	10.34	2.0	cis-Nonachlor
8.082	-0.000	65614	9.222	-0.000	84337	10.67	10.25	4.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	712122	0.2
Hexabromobiphenyl	641833	652595	1.7

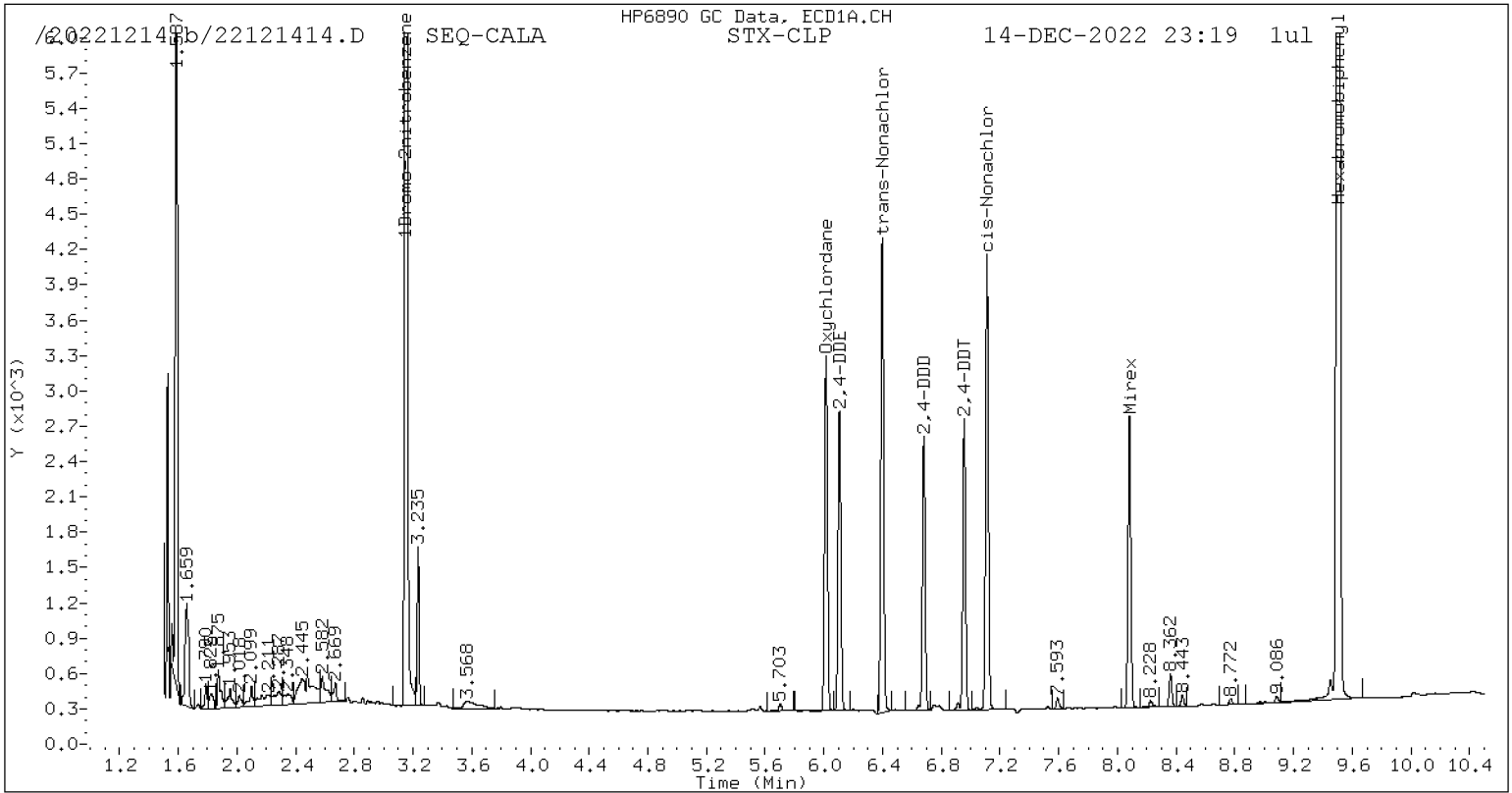
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1077341	1.7
Hexabromobiphenyl	797125	831365	4.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

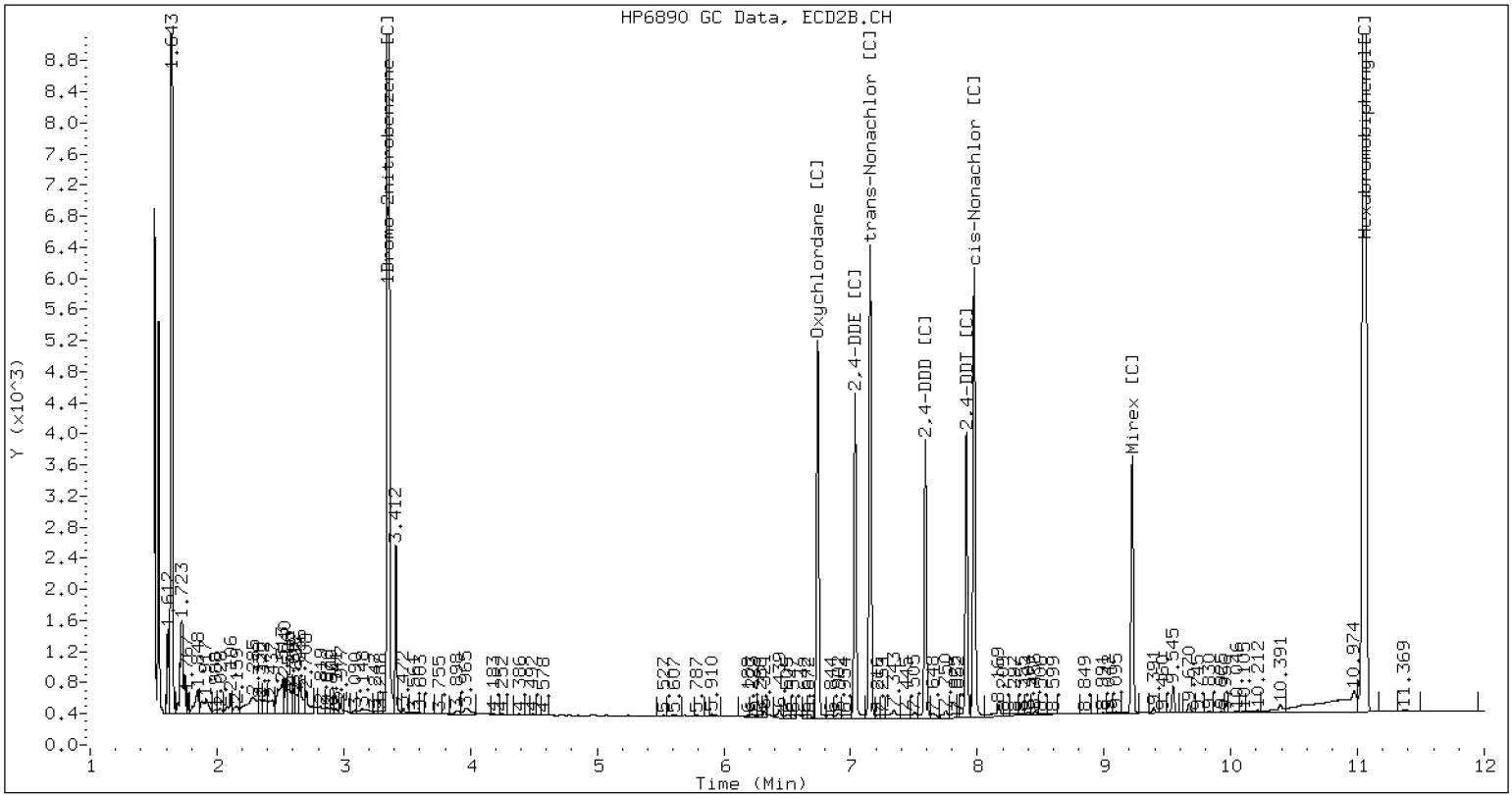
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121414.D SEQ-CALA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
6.015	0.001	154379	6.741	-0.000	238017	20.80	20.28	2.5	Oxychlorthane
6.106	-0.000	128483	7.036	-0.000	195807	20.97	20.37	2.9	2,4-DDE
6.398	0.000	200622	7.155	-0.000	289952	20.66	20.28	1.9	trans-Nonachlor
6.681	0.000	113972	7.591	0.000	165245	20.90	20.21	3.4	2,4-DDD
6.956	-0.001	122412	7.913	0.000	169814	20.78	20.17	3.0	2,4-DDT
7.112	-0.000	194165	7.975	-0.000	274910	20.54	20.23	1.5	cis-Nonachlor
8.082	-0.000	119271	9.223	0.000	158702	20.28	20.08	1.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	693450	-2.4
Hexabromobiphenyl	641833	624334	-2.7

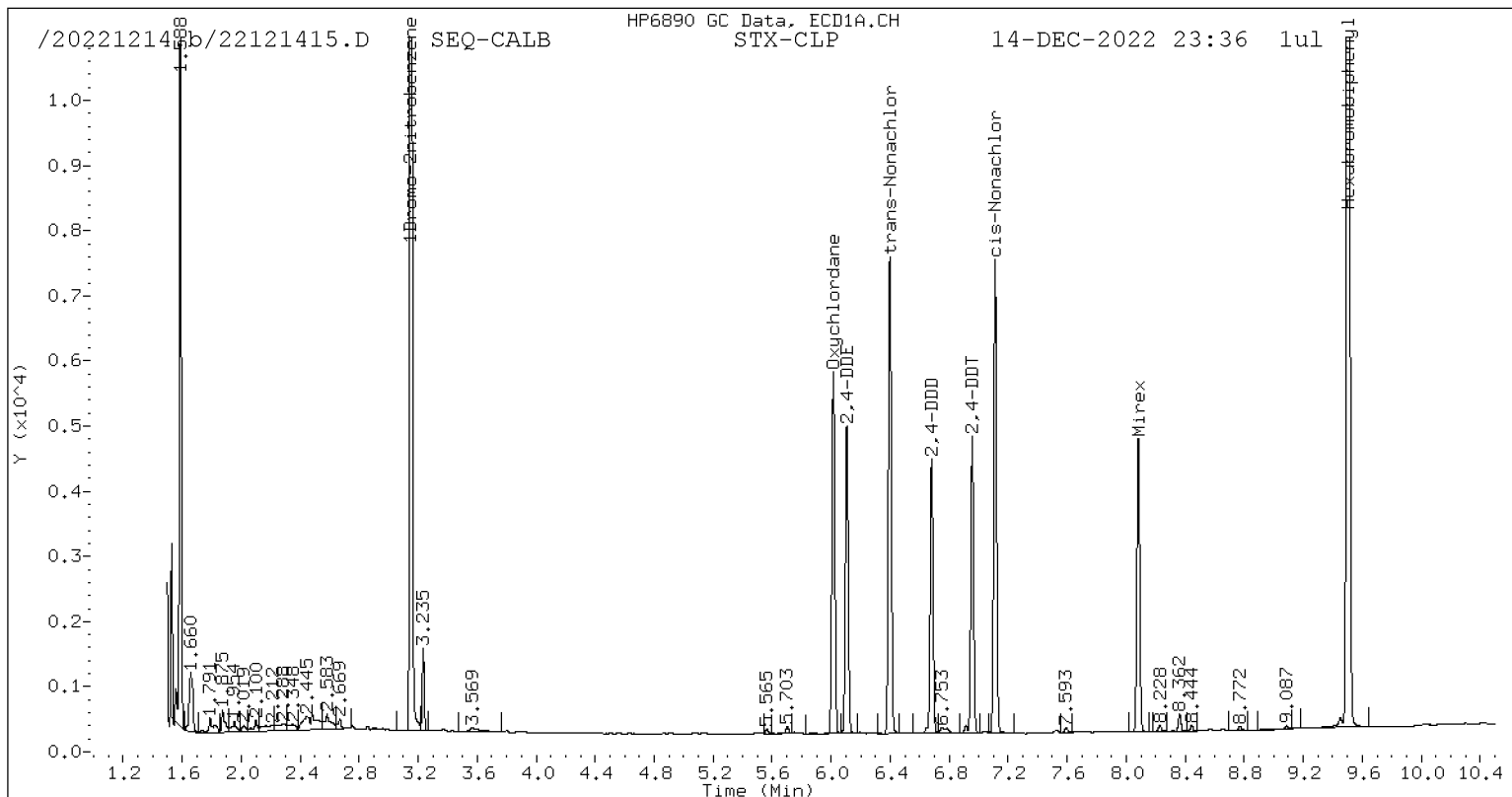
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1053959	-0.5
Hexabromobiphenyl	797125	798882	0.2

* Standard Areas taken from Initial Cal Level 5

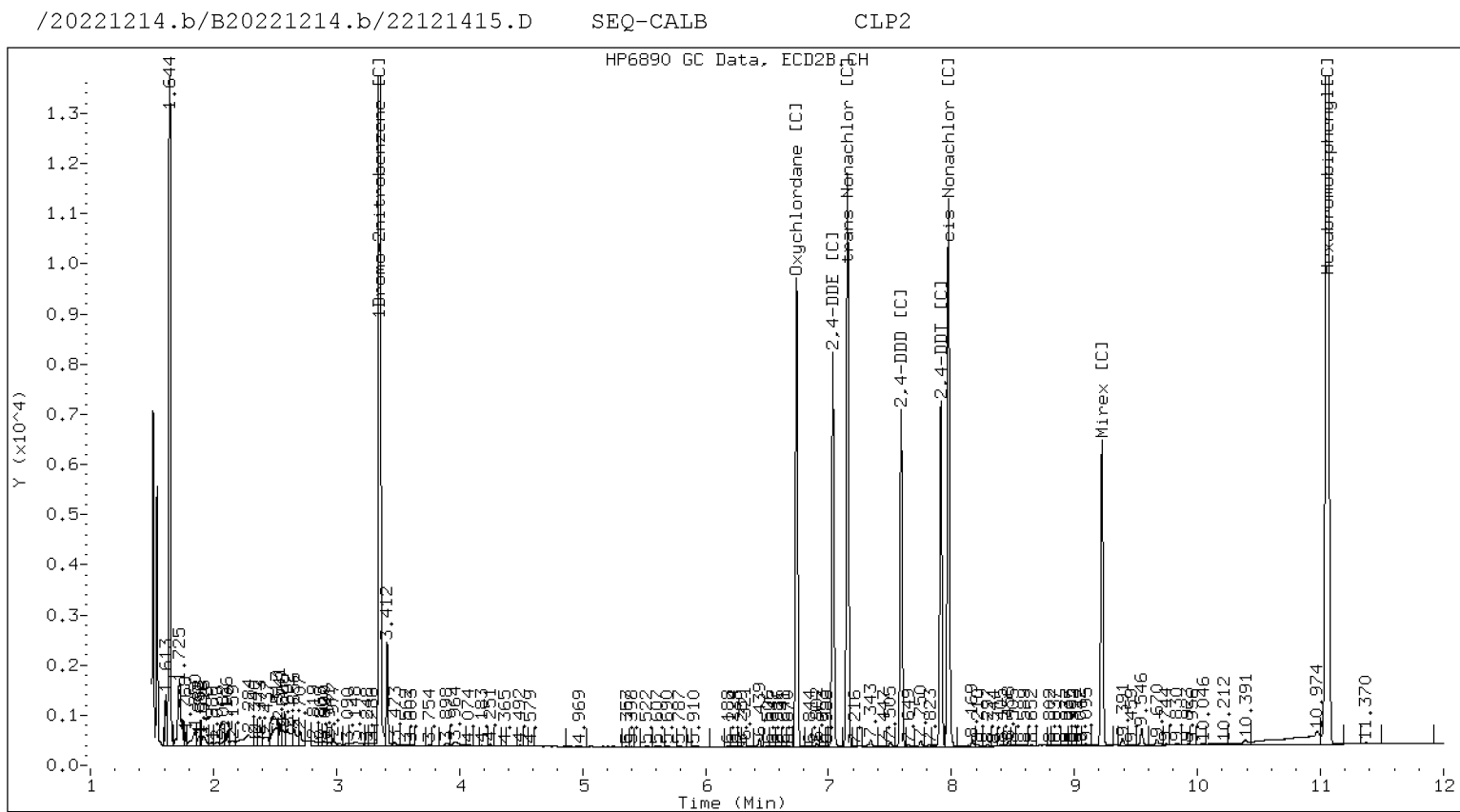
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
6.014	0.000	292499	6.741	-0.000	460731	40.08	40.26	0.4	Oxychlorthane
6.106	0.000	242066	7.036	-0.000	372996	40.18	39.80	0.9	2,4-DDE
6.397	0.000	383329	7.154	-0.001	567971	40.16	40.45	0.7	trans-Nonachlor
6.681	0.000	216474	7.590	-0.000	320311	40.39	39.88	1.3	2,4-DDD
6.957	0.000	233738	7.913	-0.000	332906	40.36	40.25	0.3	2,4-DDT
7.112	0.000	373705	7.975	-0.000	538334	40.21	40.33	0.3	cis-Nonachlor
8.082	0.000	229604	9.222	-0.000	299228	39.71	38.54	3.0	Mirex
3.800	-0.028	1151	----			0.13	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	674573	-5.1
Hexabromobiphenyl	641833	613787	-4.4

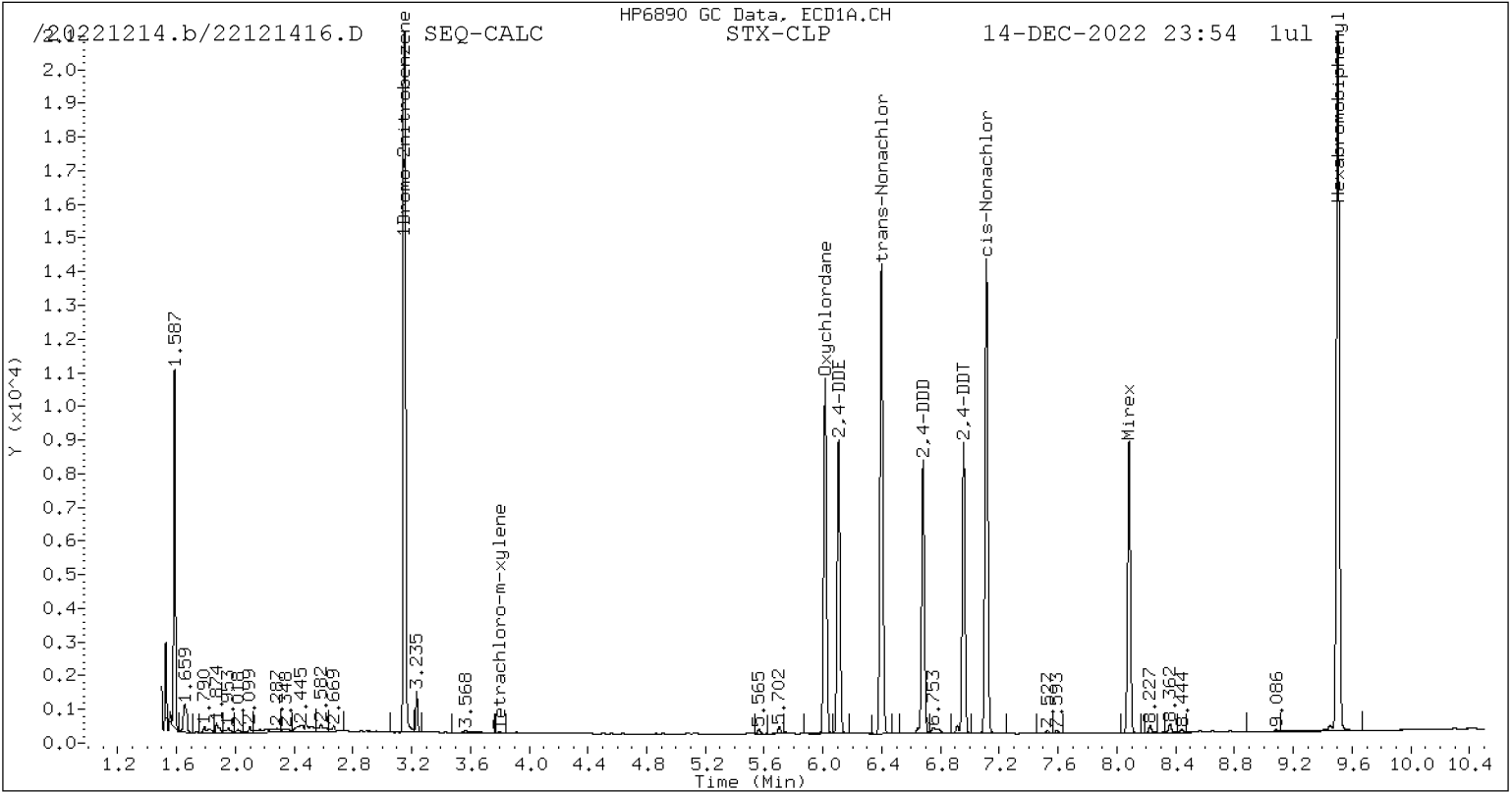
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1027697	-2.9
Hexabromobiphenyl	797125	784673	-1.6

* Standard Areas taken from Initial Cal Level 5

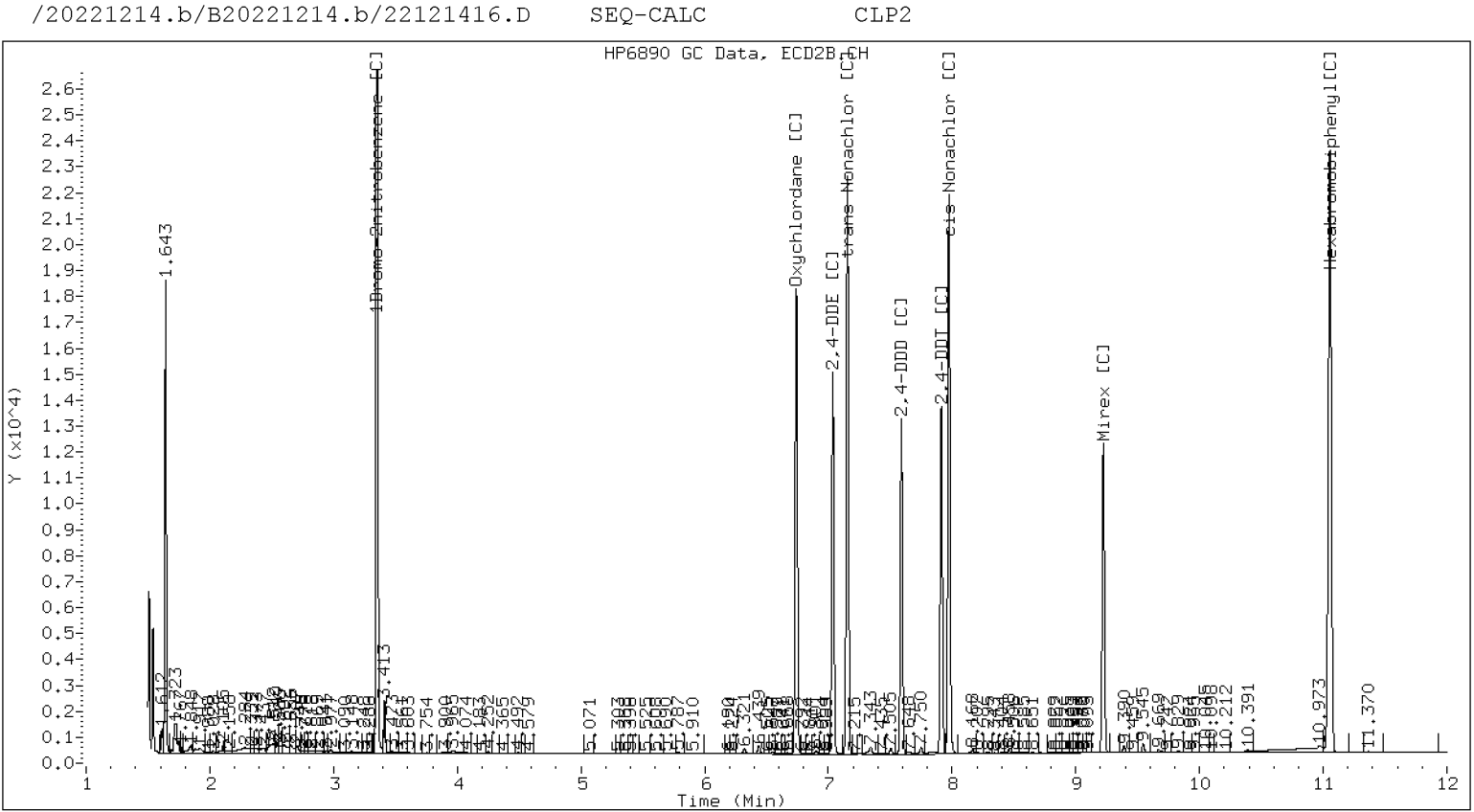
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
6.014	-0.000 544254	6.741 -0.000 856443	75.85	75.73	0.2	Oxychlorthane	
6.106	-0.000 438313	7.036 -0.000 677072	73.99	73.11	1.2	2,4-DDE	
6.397	-0.000 704675	7.155 0.000 1067899	75.09	76.94	2.4	trans-Nonachlor	
6.681	0.000 393654	7.591 0.000 594311	74.70	74.86	0.2	2,4-DDD	
6.956	-0.001 430636	7.914 0.000 618740	75.63	75.68	0.1	2,4-DDT	
7.112	-0.000 688257	7.975 0.000 1018624	75.31	77.19	2.5	cis-Nonachlor	
8.082	-0.001 426177	9.223 0.000 573947	74.97	74.78	0.2	Mirex	
3.800	-0.028 2109	----	0.23	0.00	---	Tetrachloro-m-xylene	
----		----	0.00	0.00	---	Decachlorobiphenyl	

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	664375	-6.5
Hexabromobiphenyl	641833	603504	-6.0

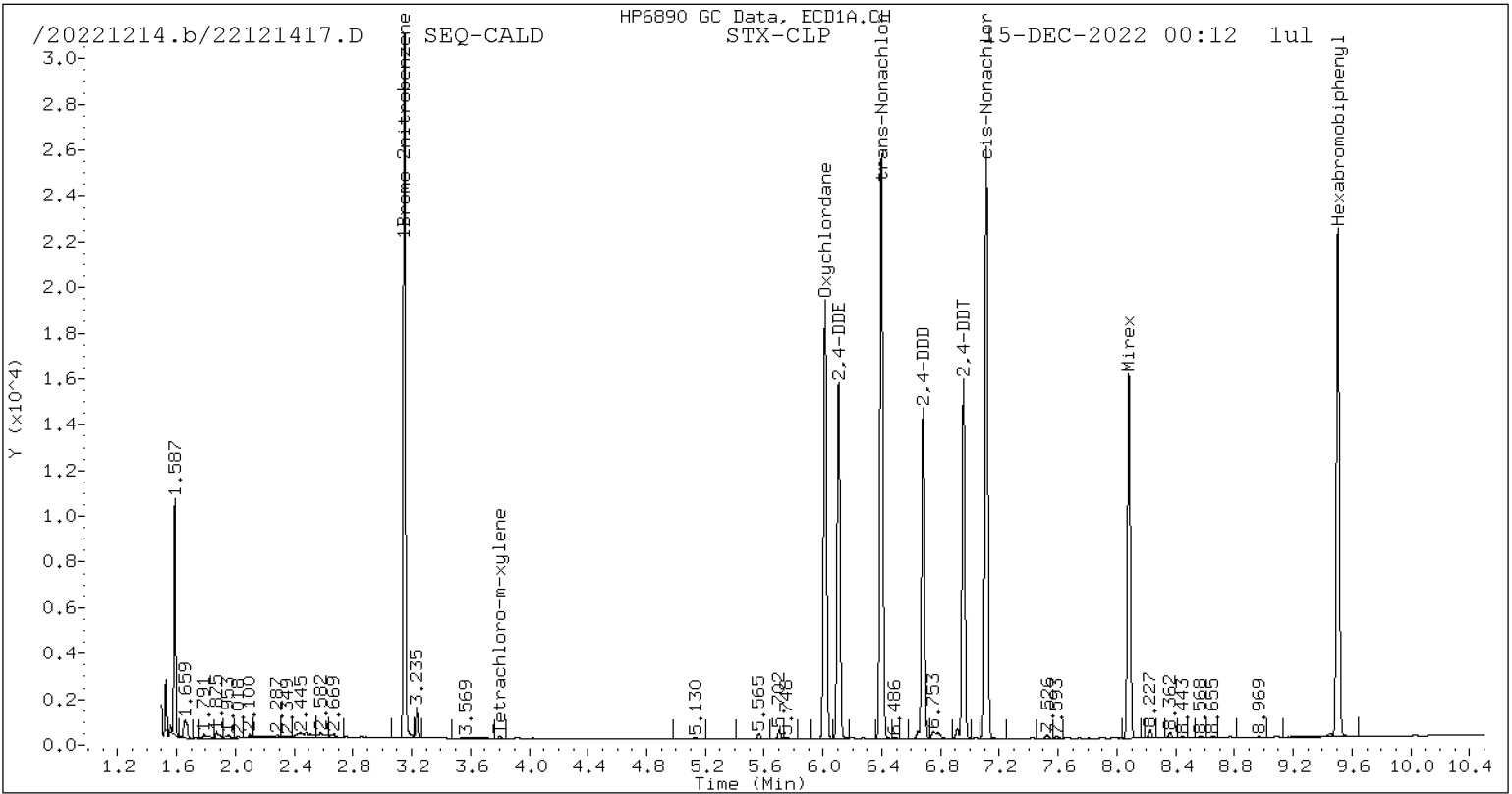
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1015544	-4.1
Hexabromobiphenyl	797125	775630	-2.7

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

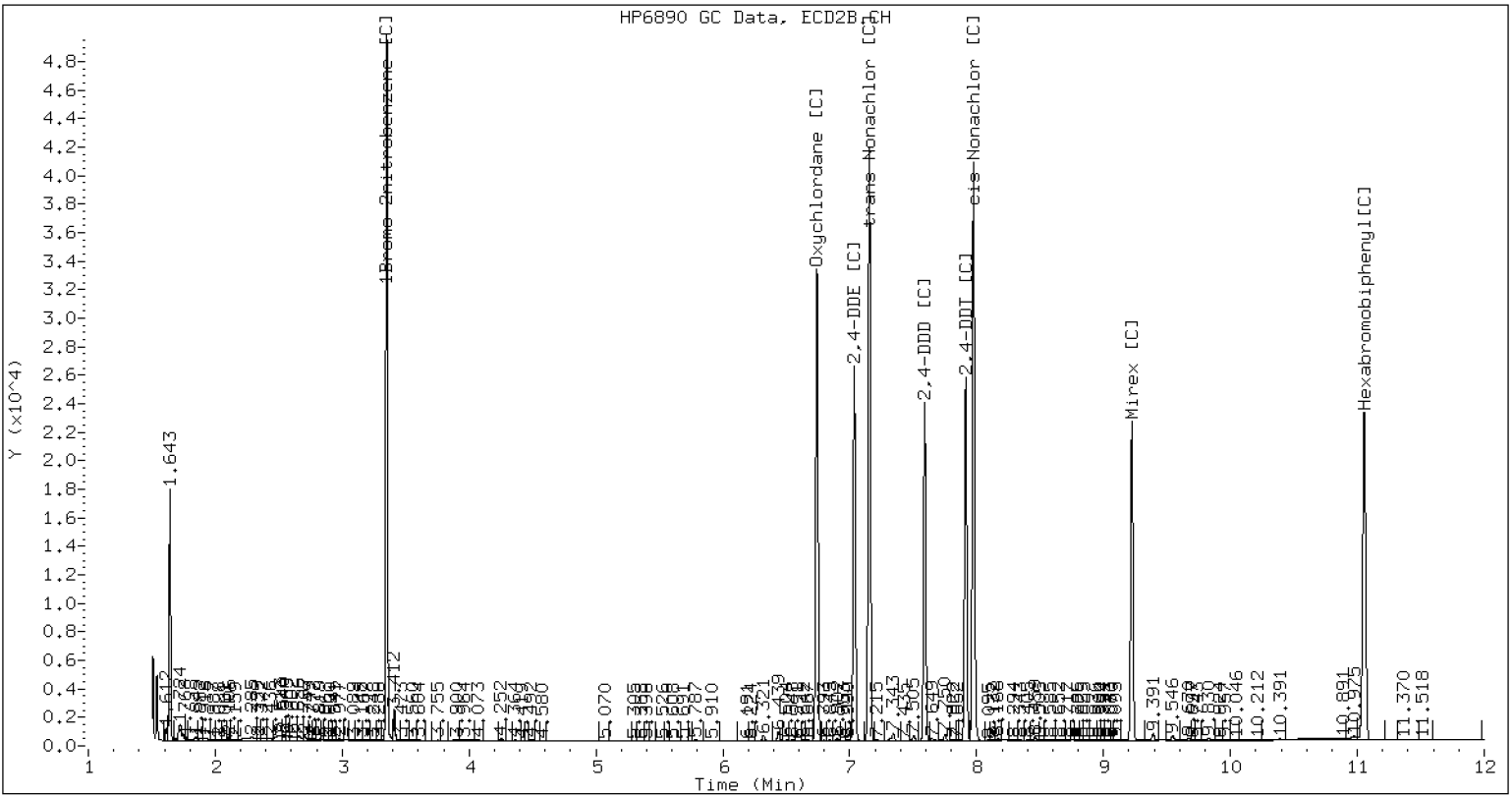
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121417.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift Response	RT	Shift Response	on col on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
 Data file 2: /20221214.b/B20221214.b/22121418.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALE
 Client ID:
 Injection Date: 15-DEC-2022 00:30
 Report Date: 12/16/2022 15:19
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
6.014	0.000	1020828	6.741	0.000	1630330	140.48	142.04	1.1	Oxychlorane
6.106	-0.000	801828	7.036	0.000	1240933	133.65	132.03	1.2	2,4-DDE
6.397	0.000	1327091	7.155	0.000	2047915	139.63	146.04	4.5	trans-Nonachlor
6.680	-0.000	733651	7.591	0.000	1118552	137.46	139.45	1.4	2,4-DDD
6.956	-0.001	794021	7.913	0.000	1163676	137.69	140.88	2.3	2,4-DDT
7.112	-0.000	1301975	7.975	0.000	1956215	140.68	146.73	4.2	cis-Nonachlor
8.082	-0.001	815059	9.223	0.000	1108848	141.57	143.01	1.0	Mirex
3.800	-0.028	3997	----	----	----	0.43	0.00	---	Tetrachloro-m-xylene
----	----	----	10.471	0.004	3393	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	675789	-4.9
Hexabromobiphenyl	641833	611199	-4.8

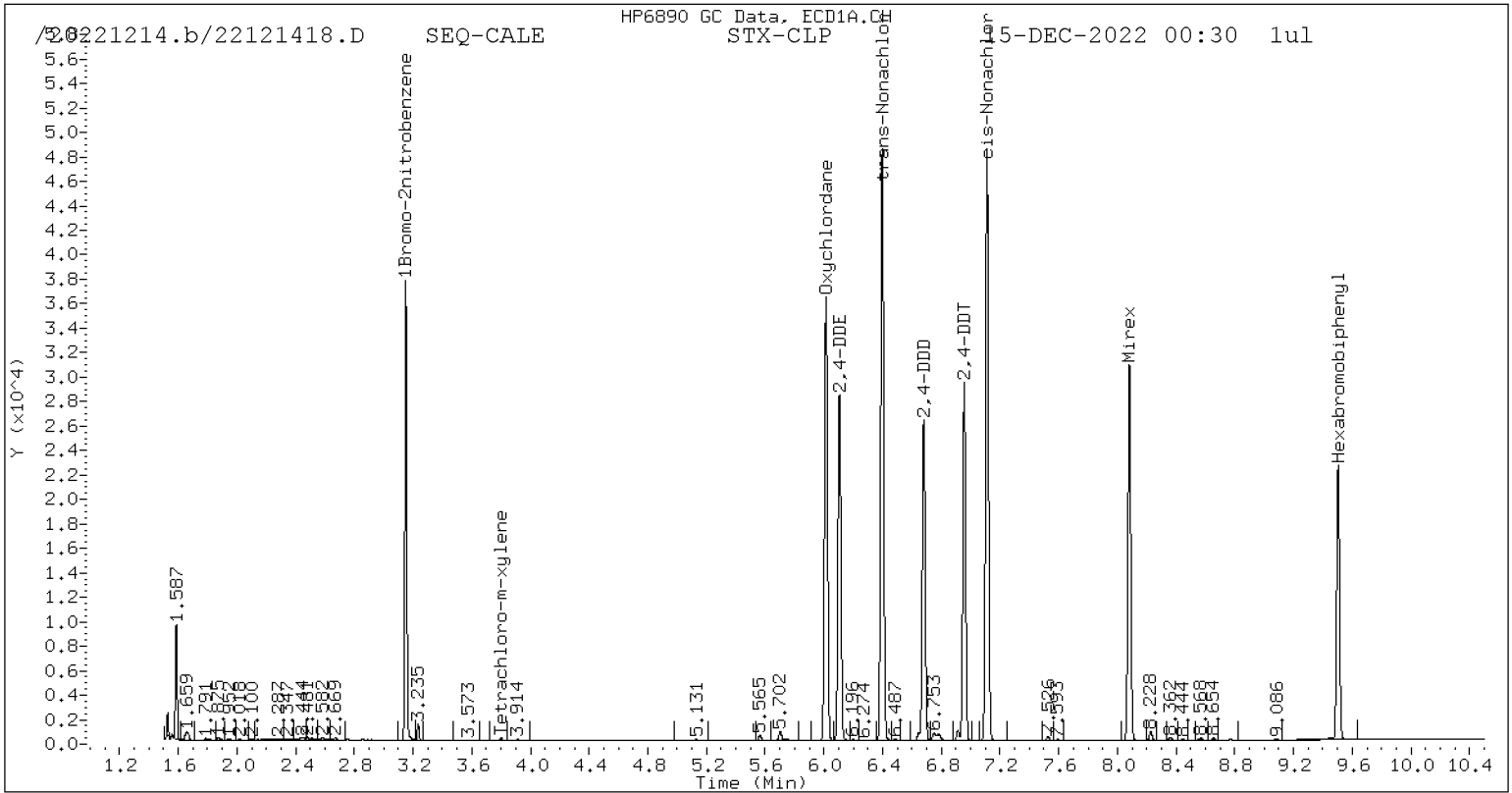
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1030648	-2.7
Hexabromobiphenyl	797125	783631	-1.7

* Standard Areas taken from Initial Cal Level 5

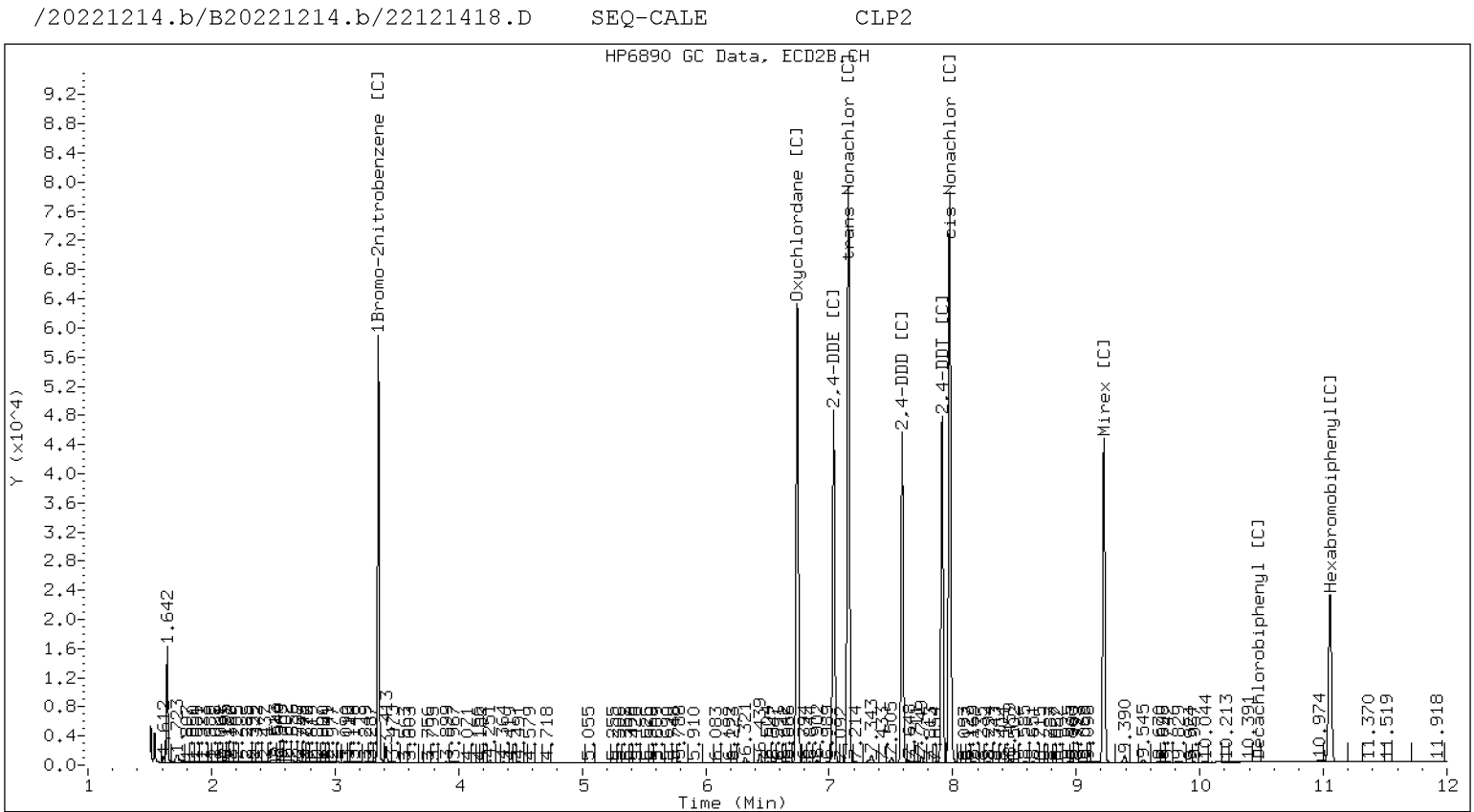
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
4.342	0.000	643235	4.860	-0.000	1047709	49.66	51.22	3.1	alpha-BHC
4.726	-0.000	242617	5.337	0.000	386388	48.66	49.69	2.1	beta-BHC
4.909	0.000	554797	5.692	0.001	897343	52.41	53.26	1.6	delta-BHC
4.646	0.001	573983	5.258	0.000	915596	51.11	52.75	3.1	gamma-BHC (Lindane)
5.130	0.000	495138	5.788	0.001	804002	49.55	51.13	3.1	Heptachlor
5.454	0.000	526615	6.191	0.000	842909	47.03	46.95	0.2	Aldrin
6.130	0.000	469481	6.846	0.000	724932	48.36	48.83	1.0	Heptachlor epoxide b
6.573	0.000	423102	7.289	-0.000	632890	47.49	48.37	1.8	Endosulfan I
6.832	0.000	478299	7.583	0.000	724854	49.97	50.14	0.3	Dieldrin
6.489	0.000	448741	7.371	0.000	670346	50.49	50.56	0.1	4,4'-DDE
7.082	0.001	396143	7.907	0.000	551004	50.36	50.73	0.7	Endrin
7.318	0.001	350431	8.118	0.001	537104	49.49	48.24	2.6	Endosulfan II
7.136	0.001	355688	7.977	0.001	525927	50.19	49.78	0.8	4,4'-DDD
8.180	0.000	347949	8.716	0.001	502438	51.75	51.39	0.7	Endosulfan sulfate
7.428	0.001	368644	8.295	-0.000	524685	51.48	51.45	0.1	4,4'-DDT
7.913	0.001	174306	8.935	-0.001	238791	54.93	52.91	3.7	Methoxychlor
8.454	0.000	394474	9.240	-0.000	540431	51.21	51.18	0.1	Endrin ketone
7.746	0.001	316262	8.448	0.000	449269	56.00	57.20	2.1	Endrin aldehyde
6.271	0.000	490842	7.056	0.000	748350	49.78	50.55	1.5	trans-Chlordane
6.417	0.001	469513	7.216	0.000	700871	47.47	48.39	1.9	cis-Chlordane
----			2.512	0.011	11364	0.00	0.59	---	Hexachlorobutadiene
----			4.719	0.001	634	0.00	0.03	---	Hexachlorobenzene
----			4.220	-0.000	1724	0.00	0.12	---	Tetrachloro-m-xylene
----			10.468	0.001	643	0.00	0.08	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	672755	-5.3
Hexabromobiphenyl	641833	599983	-6.5

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1020655	-3.6
Hexabromobiphenyl	797125	763949	-4.2

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
 Data file 2: /20221214.b/B20221214.b/22121420.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-SCV2
 Client ID:
 Injection Date: 15-DEC-2022 01:06
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
6.014	-0.000	374516	6.741	0.000	591348	51.08	50.07	2.0	Oxychlorthane
6.106	-0.000	261097	7.036	-0.000	403824	43.13	41.76	3.2	2,4-DDE
6.397	-0.000	444133	7.155	-0.000	657777	46.31	45.91	0.9	trans-Nonachlor
6.681	0.000	222534	7.591	0.000	334706	41.32	40.84	1.2	2,4-DDD
6.956	-0.001	262722	7.914	0.000	382016	45.15	45.26	0.2	2,4-DDT
7.111	-0.001	455894	7.975	0.000	655718	48.82	48.13	1.4	cis-Nonachlor
8.081	-0.001	256593	9.223	0.000	343173	44.17	43.31	2.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	687052	-3.3
Hexabromobiphenyl	641833	616730	-3.9

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1060438	0.2
Hexabromobiphenyl	797125	800740	0.5

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	361	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
----	|	4.215 -0.006	361	|	0.00 0.02	---	Tetrachloro-m-xylene
----	|	----		|	0.00 0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

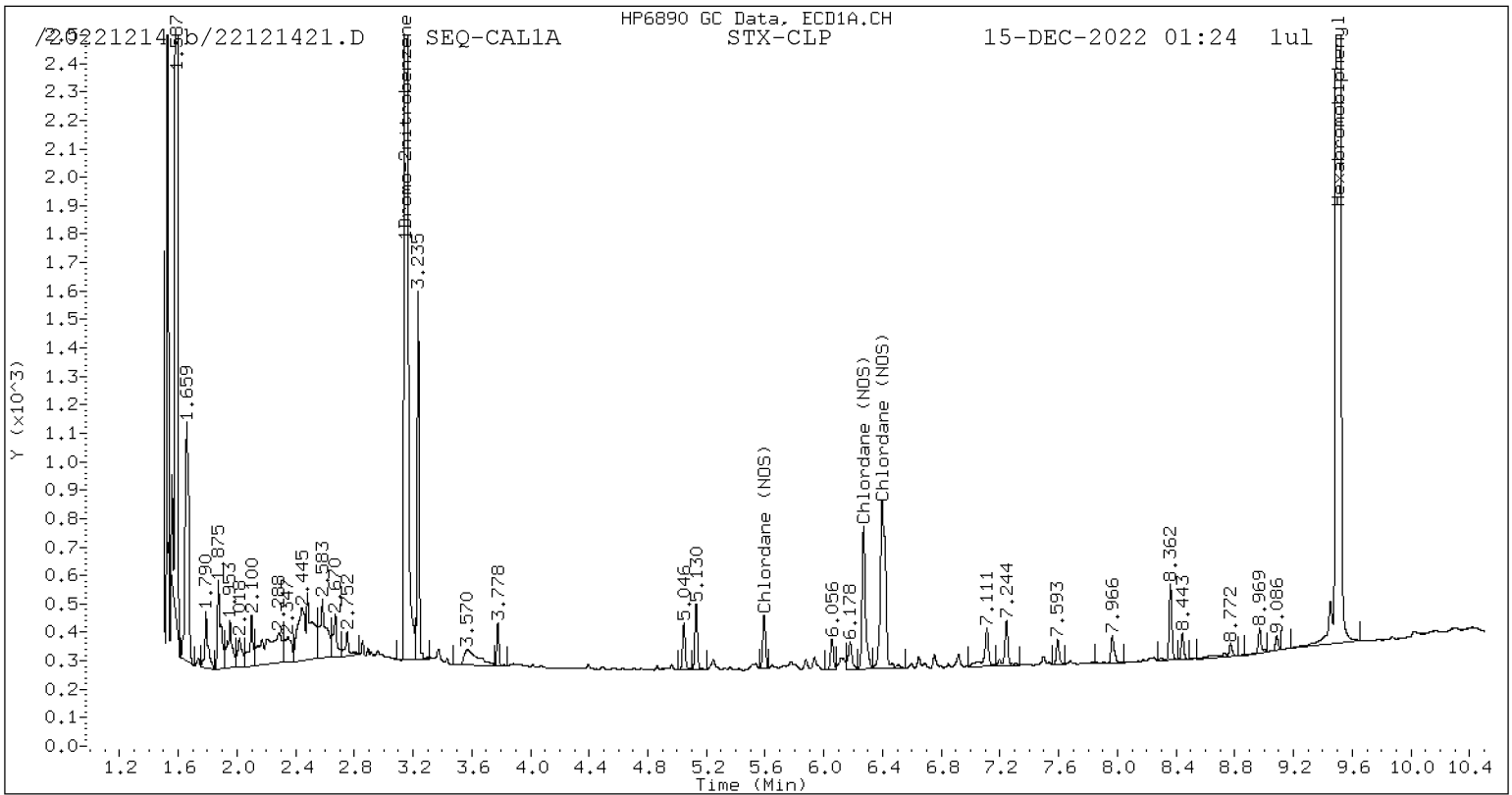
Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	601512	-15.4
Hexabromobiphenyl	641833	690103	7.5

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	776759	-26.6
Hexabromobiphenyl	797125	1058847	32.8

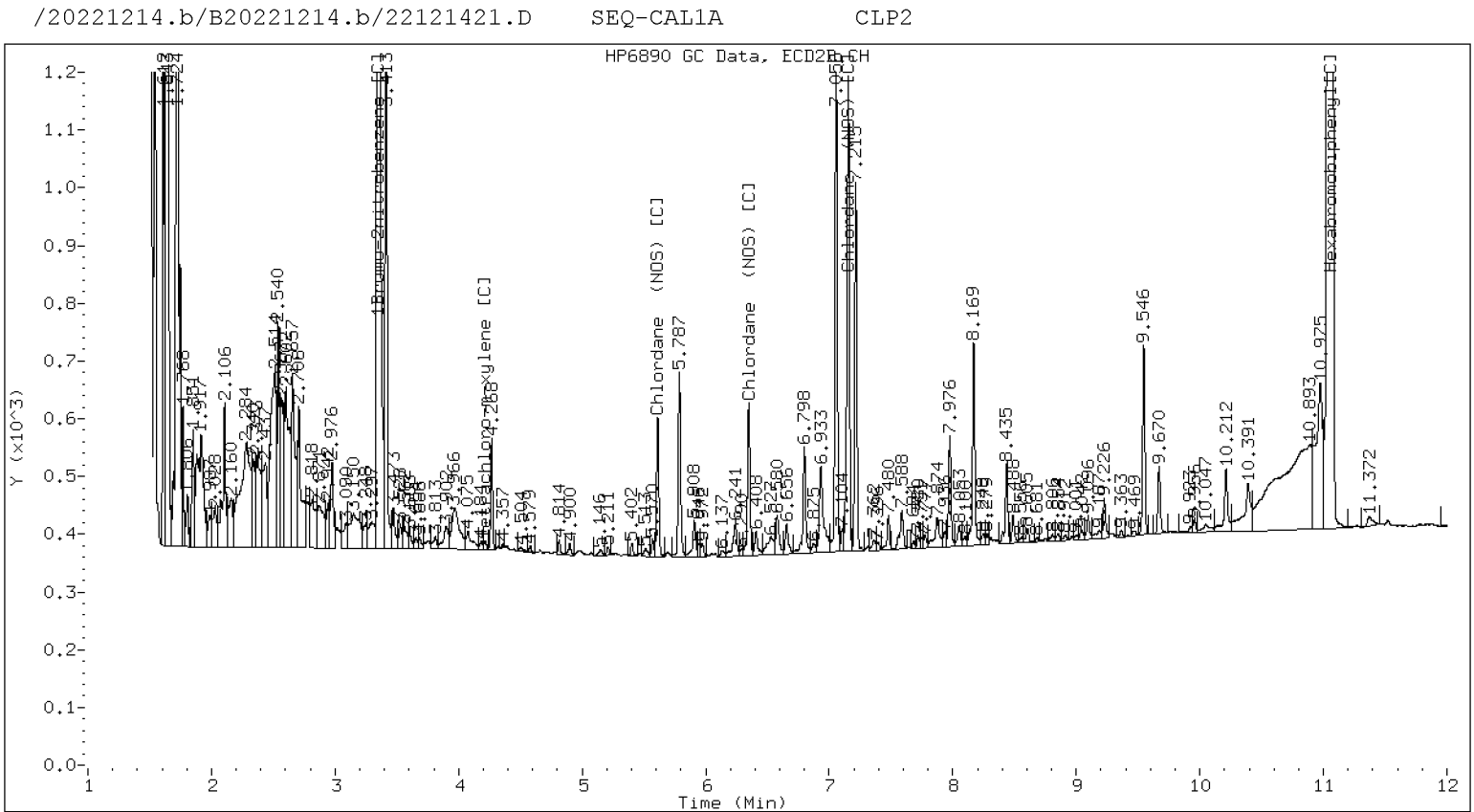
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	5054	13.1	1	5.612	-0.000	6415	12.8
Chlordane (NOS)	2	6.271	-0.000	15913	12.4	2	6.349	-0.000	7689	13.7
Chlordane (NOS)	3	6.399	0.000	29332	13.1	3	7.155	-0.001	23386	12.3
Total STX-CLPAve (3 peaks): 12.882					Total CLP2Ave (3 peaks): 12.916					RPD = 0
Corrected Ave (3 peaks): 12.882					Corrected Ave (3 peaks): 12.916					RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

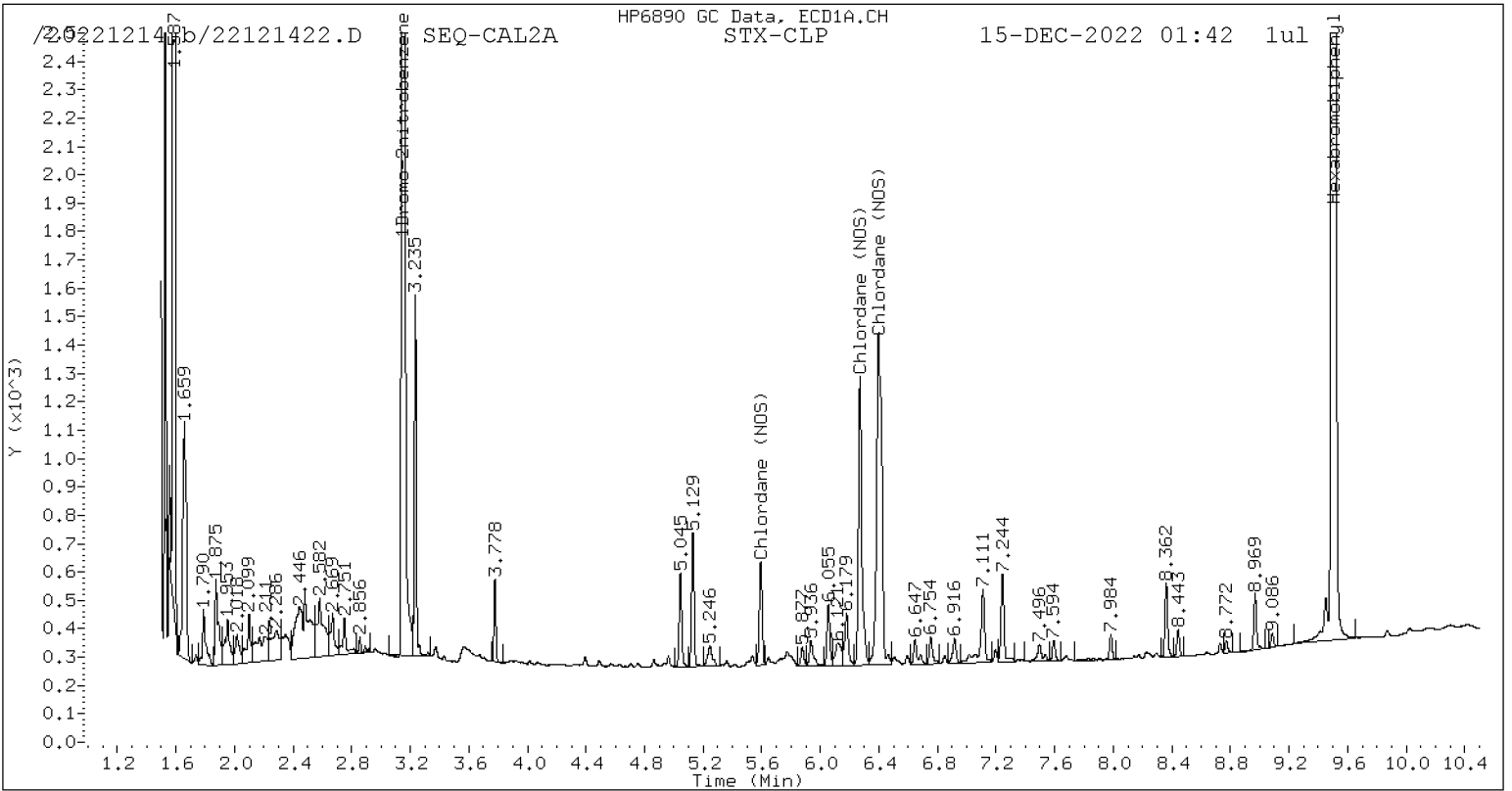
Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	611280	-14.0
Hexabromobiphenyl	641833	704720	9.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	793365	-25.1
Hexabromobiphenyl	797125	1083049	35.9

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

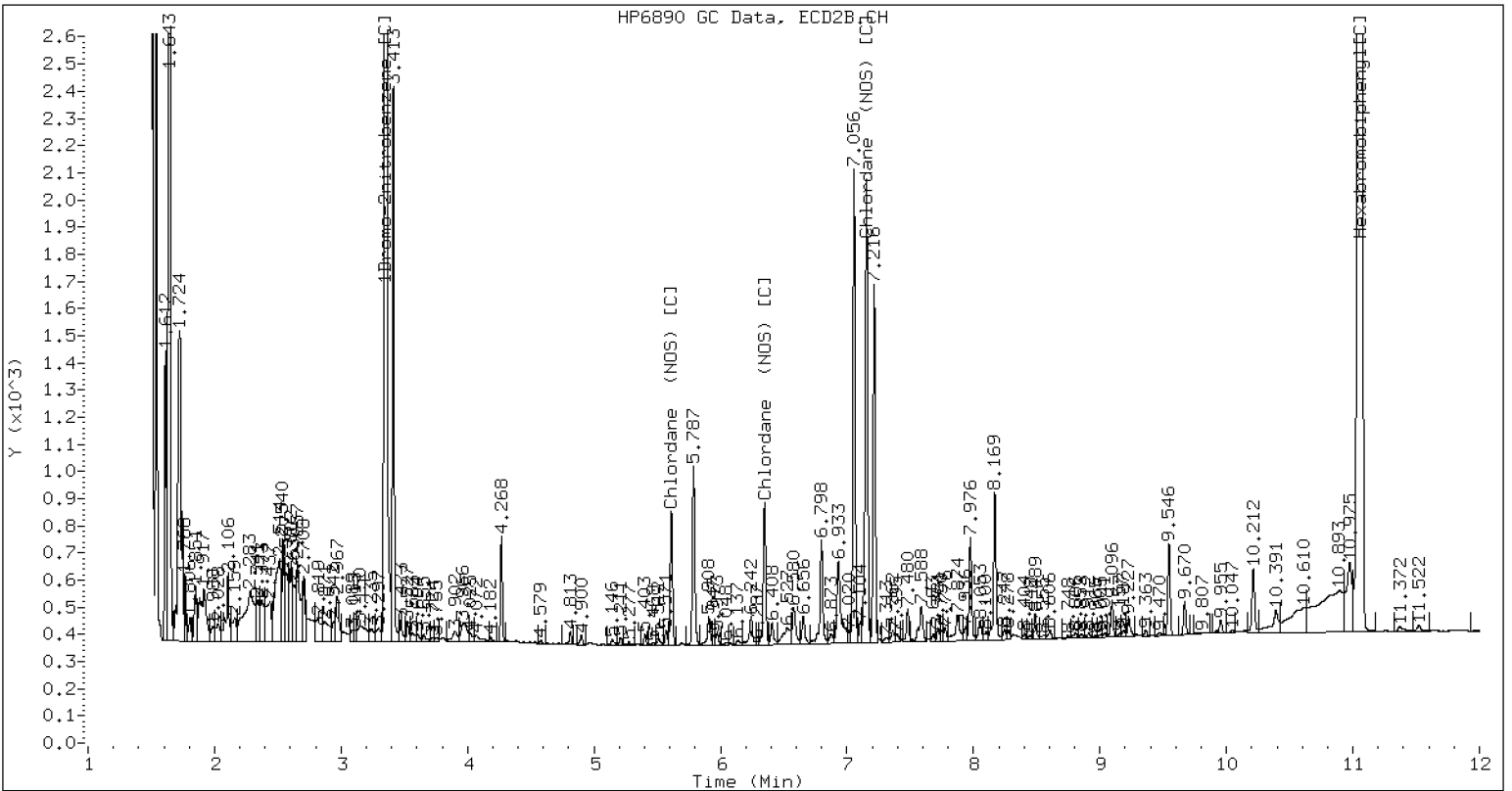
Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	10046	25.5	1	5.612	-0.000	12488	24.4
Chlordane (NOS)	2	6.271	-0.000	32715	25.0	2	6.348	-0.001	15023	26.1
Chlordane (NOS)	3	6.399	0.000	58016	25.4	3	7.155	-0.000	48236	24.8
Total STX-CLPAve (3 peaks): 25.309					Total CLP2Ave (3 peaks): 25.077					RPD = 1
Corrected Ave (3 peaks): 25.309					Corrected Ave (3 peaks): 25.077					RPD = 1

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121422.D SEQ-CAL2A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

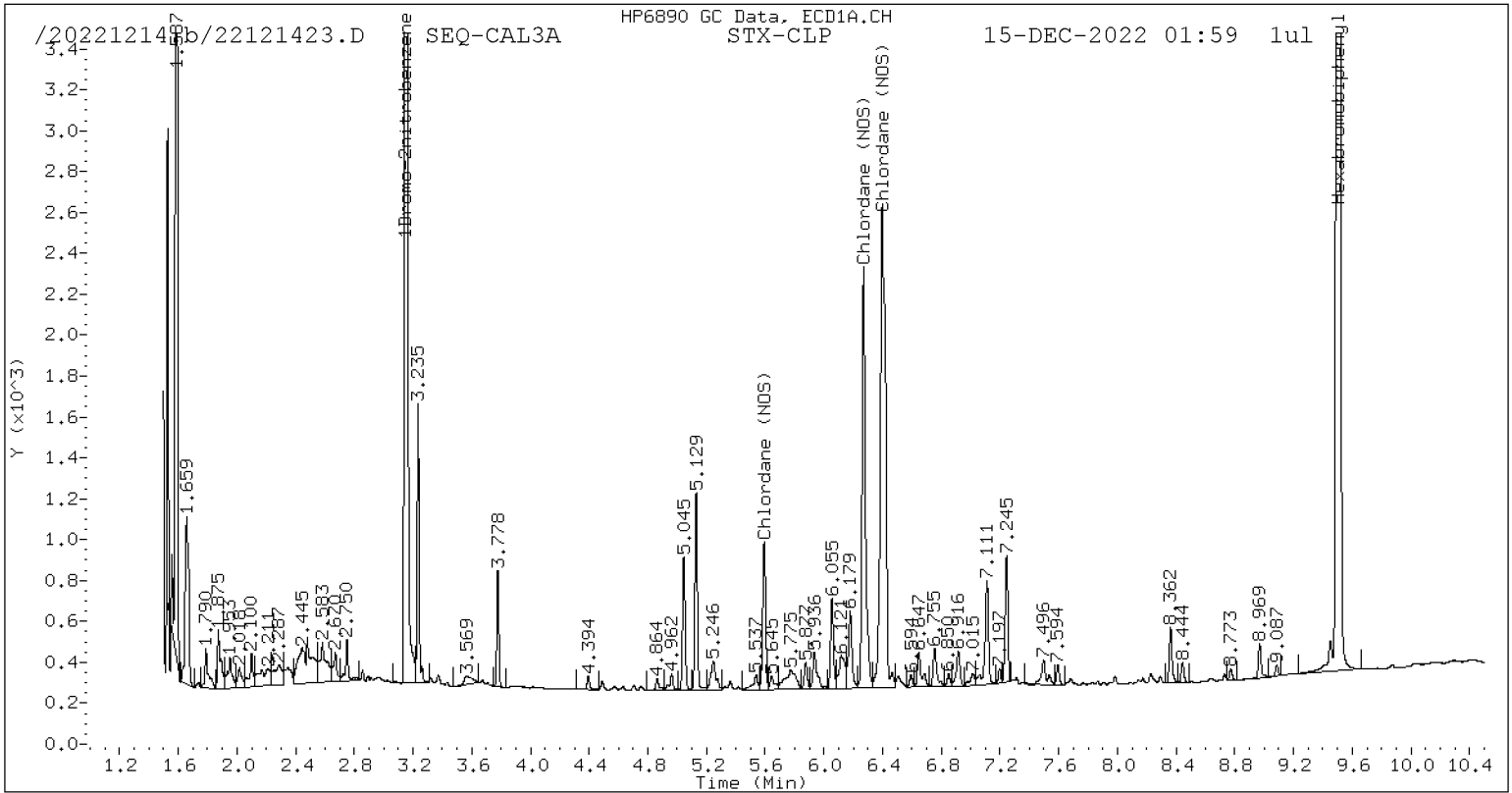
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	592438	-16.6
Hexabromobiphenyl	641833	685225	6.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	769029	-27.4
Hexabromobiphenyl	797125	1054742	32.3

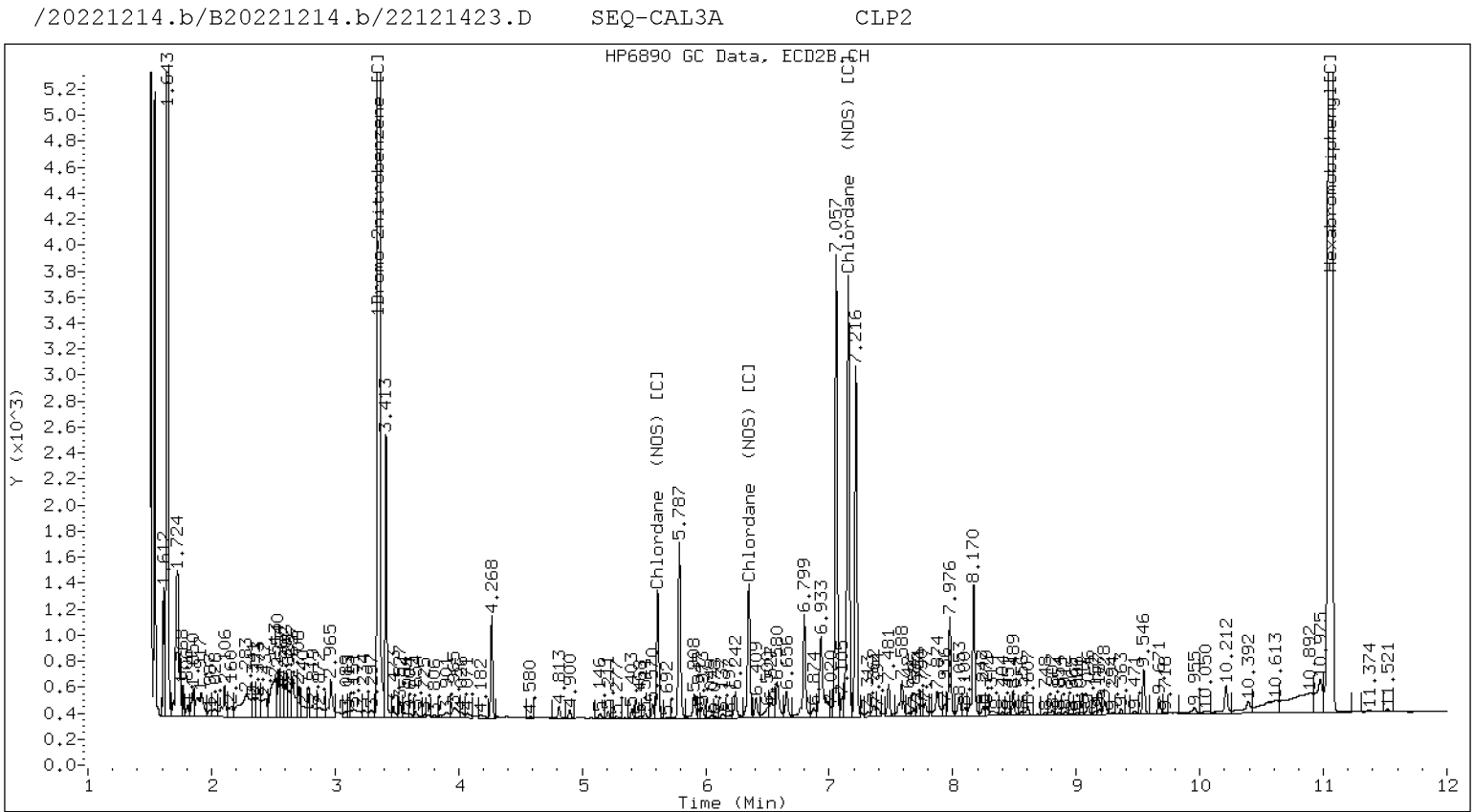
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.001	20502	53.5	1	5.612	-0.000	24816	49.7
Chlordane (NOS)	2	6.271	-0.000	66320	52.2	2	6.349	0.000	29114	51.9
Chlordane (NOS)	3	6.399	0.000	116820	52.6	3	7.155	-0.000	98401	51.9
Total STX-CLPAve (3 peaks): 52.767					Total CLP2Ave (3 peaks): 51.179					RPD = 3
Corrected Ave (3 peaks): 52.767					Corrected Ave (3 peaks): 51.179					RPD = 3

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

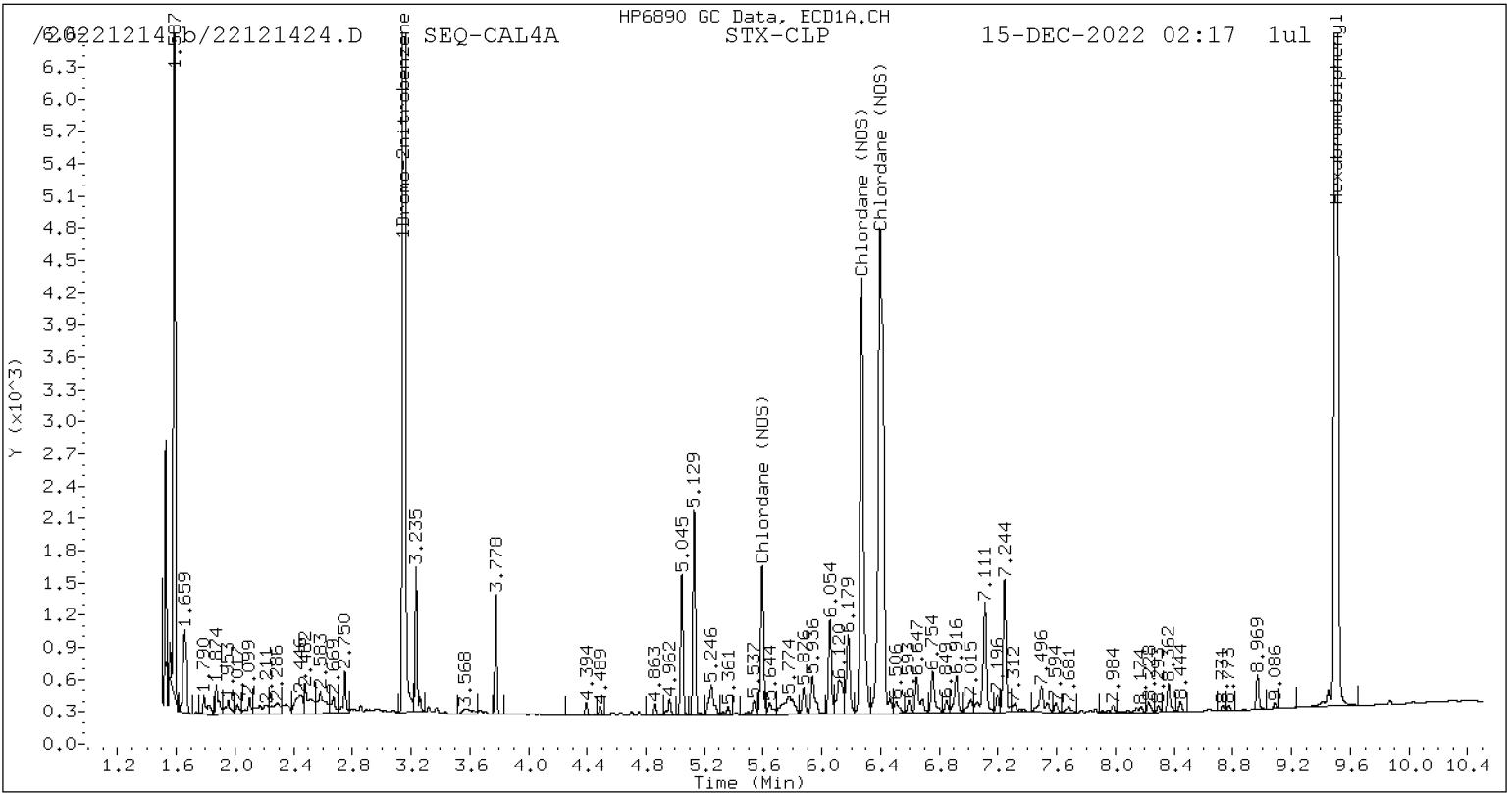
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	584808	-17.7
Hexabromobiphenyl	641833	675665	5.3

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	758204	-28.4
Hexabromobiphenyl	797125	1039488	30.4

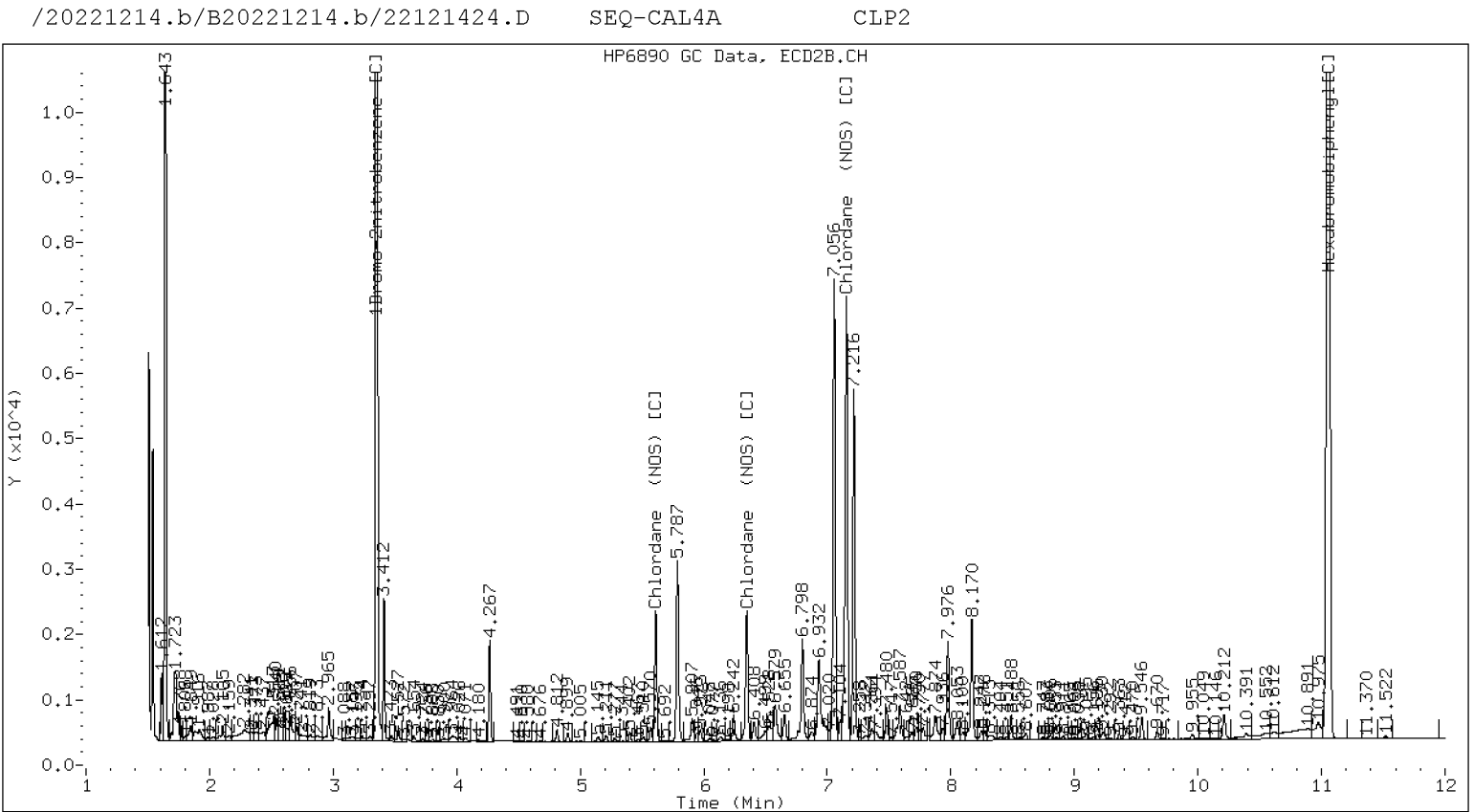
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	-0.000	39696	105.0	1	5.611	-0.001	49889	101.4
Chlordane (NOS)	2	6.271	-0.000	131726	105.2	2	6.348	-0.001	56608	102.5
Chlordane (NOS)	3	6.398	-0.001	229050	104.6	3	7.155	-0.000	195665	104.7
Total STX-CLPAve (3 peaks): 104.931					Total CLP2Ave (3 peaks): 102.854					RPD = 2
Corrected Ave (3 peaks): 104.931					Corrected Ave (3 peaks): 102.854					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	|	CLP2 Col Shift Response	|	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
----	-------------------------------	--	----------------------------	--	-------------------	----------------	-----	---------------

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

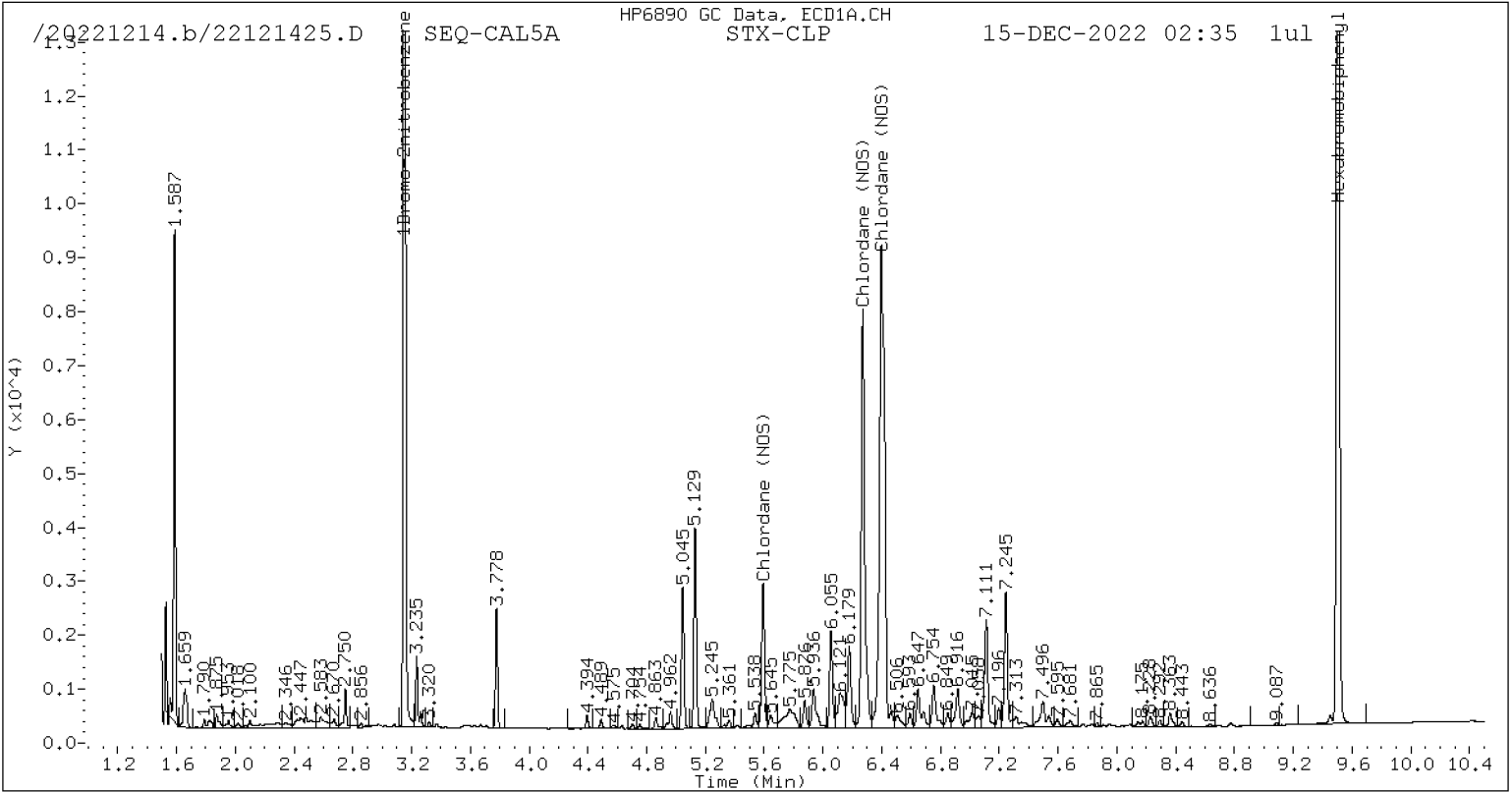
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	612592	-13.8
Hexabromobiphenyl	641833	705251	9.9

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	792856	-25.1
Hexabromobiphenyl	797125	1079718	35.5

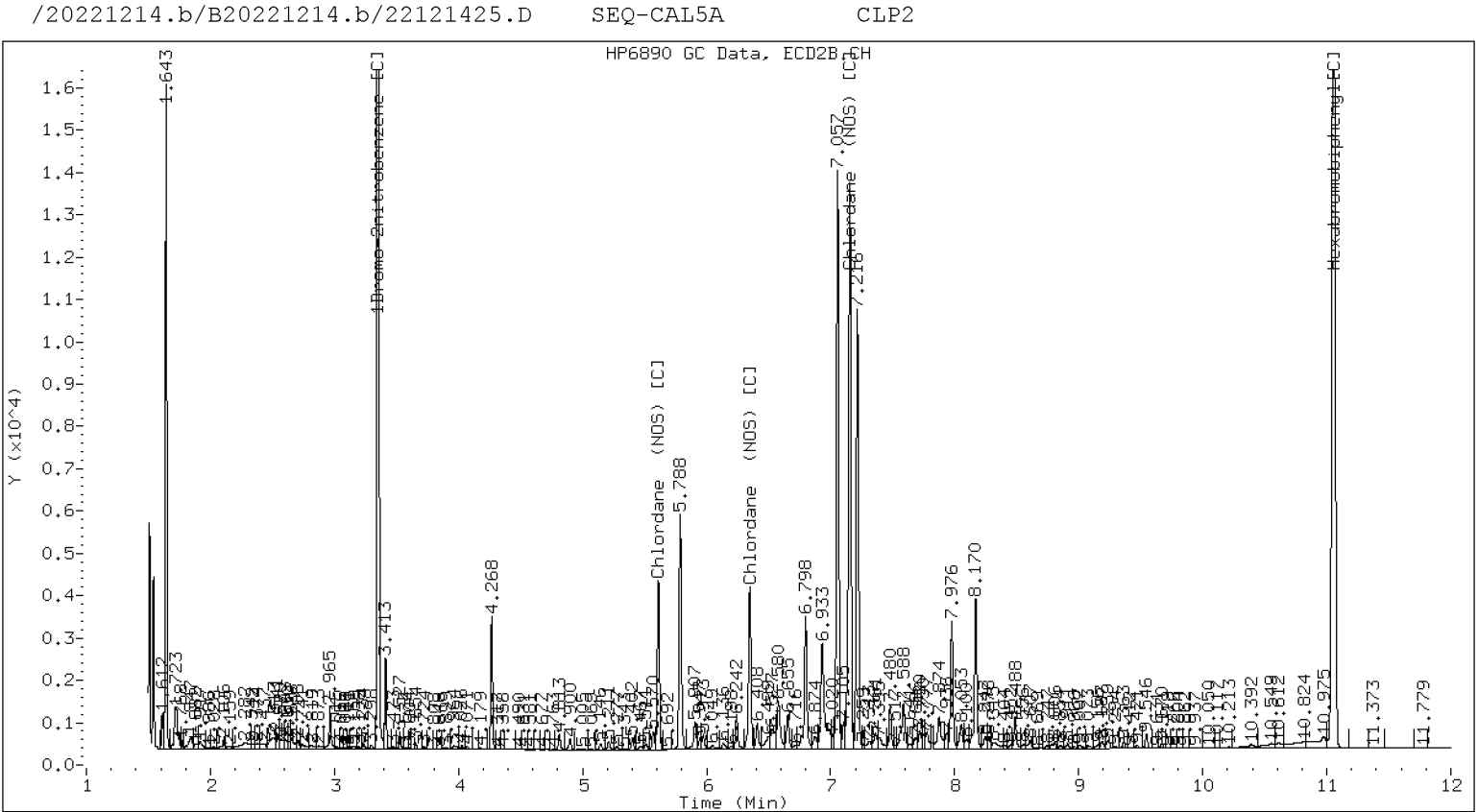
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	77307	196.0	1	5.612	-0.000	101527	198.7
Chlordane (NOS)	2	6.271	0.000	261078	199.7	2	6.349	-0.001	110757	193.0
Chlordane (NOS)	3	6.399	0.000	449301	196.5	3	7.155	-0.000	389197	200.5
Total STX-CLPAve (3 peaks): 197.408					Total CLP2Ave (3 peaks): 197.390					RPD = 0
Corrected Ave (3 peaks): 197.408					Corrected Ave (3 peaks): 197.390					RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

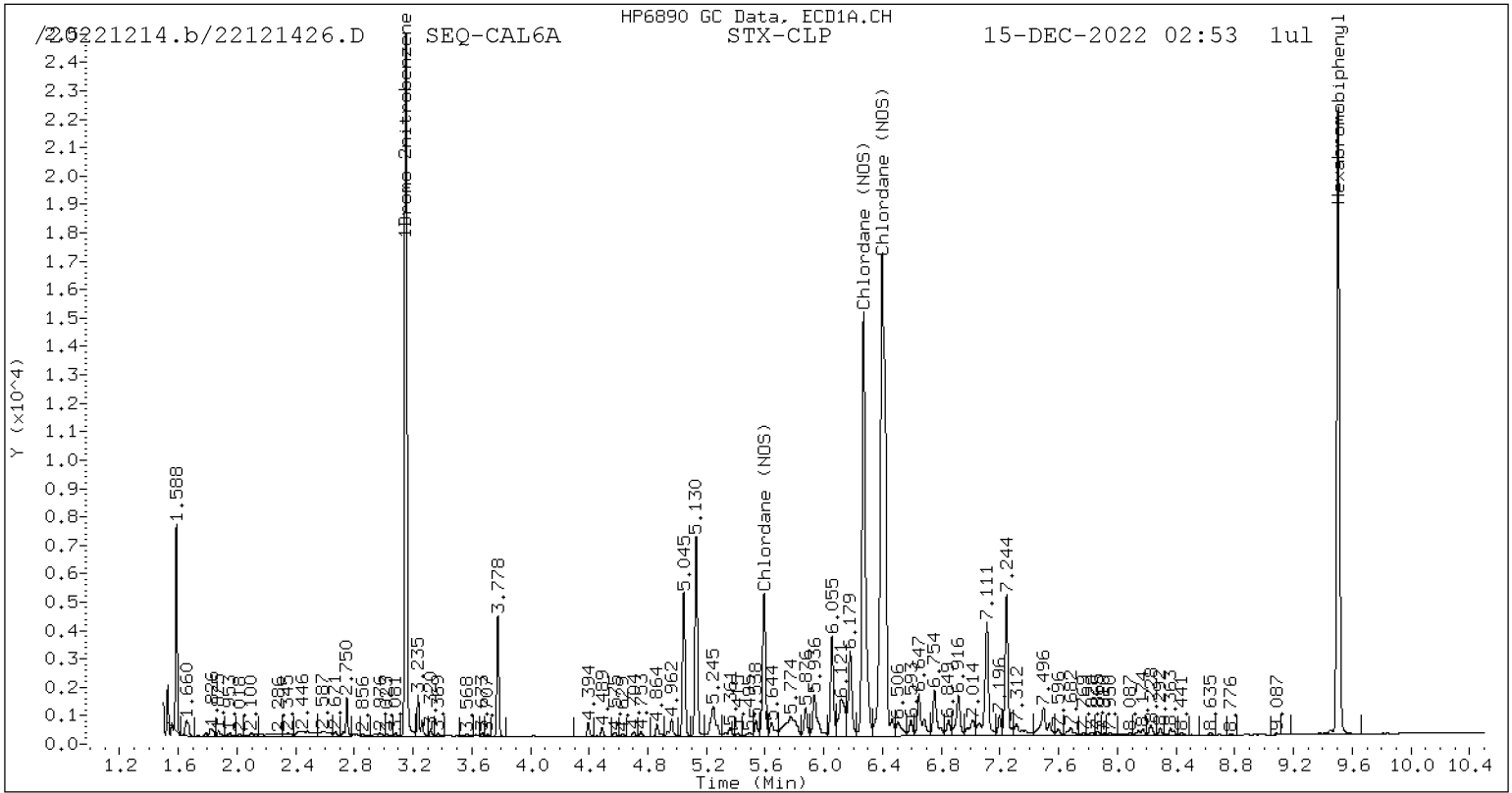
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	603526	-15.1
Hexabromobiphenyl	641833	699031	8.9

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	779405	-26.4
Hexabromobiphenyl	797125	1068976	34.1

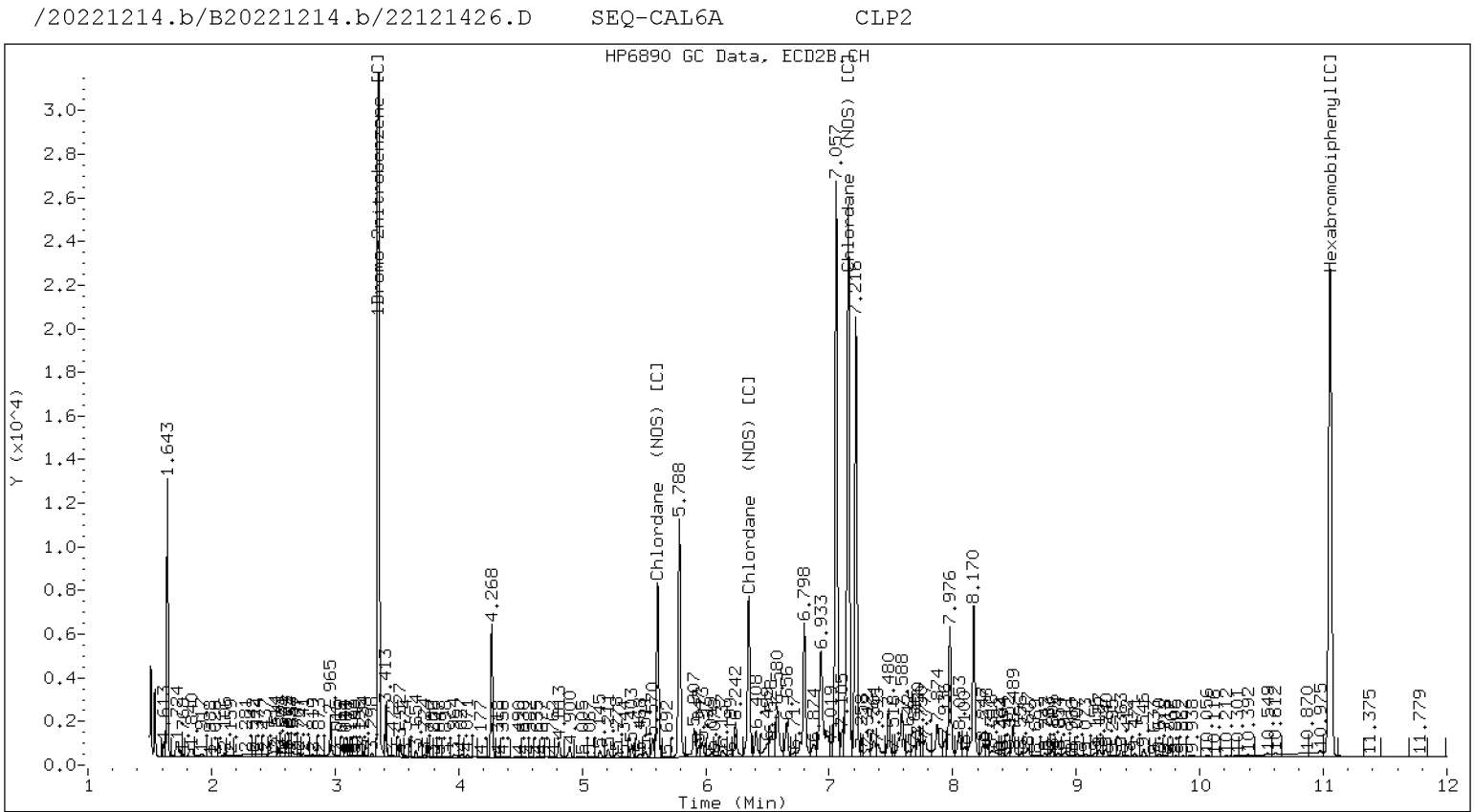
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.592	-0.000	146950	375.8	1	5.612	-0.000	203386	402.0
Chlordane (NOS)	2	6.271	-0.000	503310	388.5	2	6.349	-0.000	212637	374.2
Chlordane (NOS)	3	6.399	0.000	857451	378.4	3	7.155	-0.000	752631	391.6
Total STX-CLPAve (3 peaks): 380.894					Total CLP2Ave (3 peaks): 389.290					RPD = 2
Corrected Ave (3 peaks): 380.894					Corrected Ave (3 peaks): 389.290					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
----			----			0.00	0.00	---	Tetrachloro-m-xylene
9.380	0.025	1930	----			0.31	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

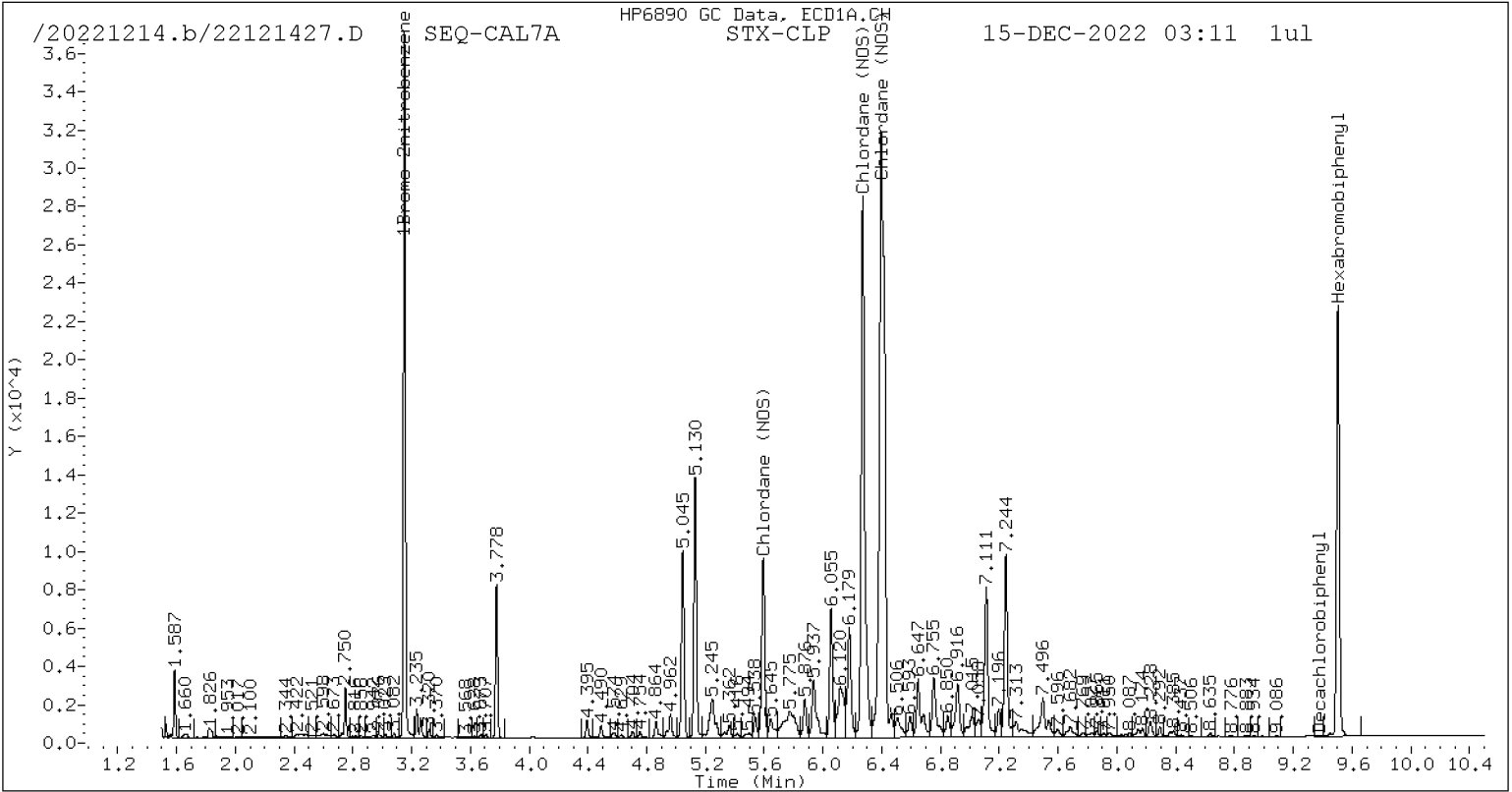
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	610159	-14.1
Hexabromobiphenyl	641833	692215	7.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	790388	-25.4
Hexabromobiphenyl	797125	1059143	32.9

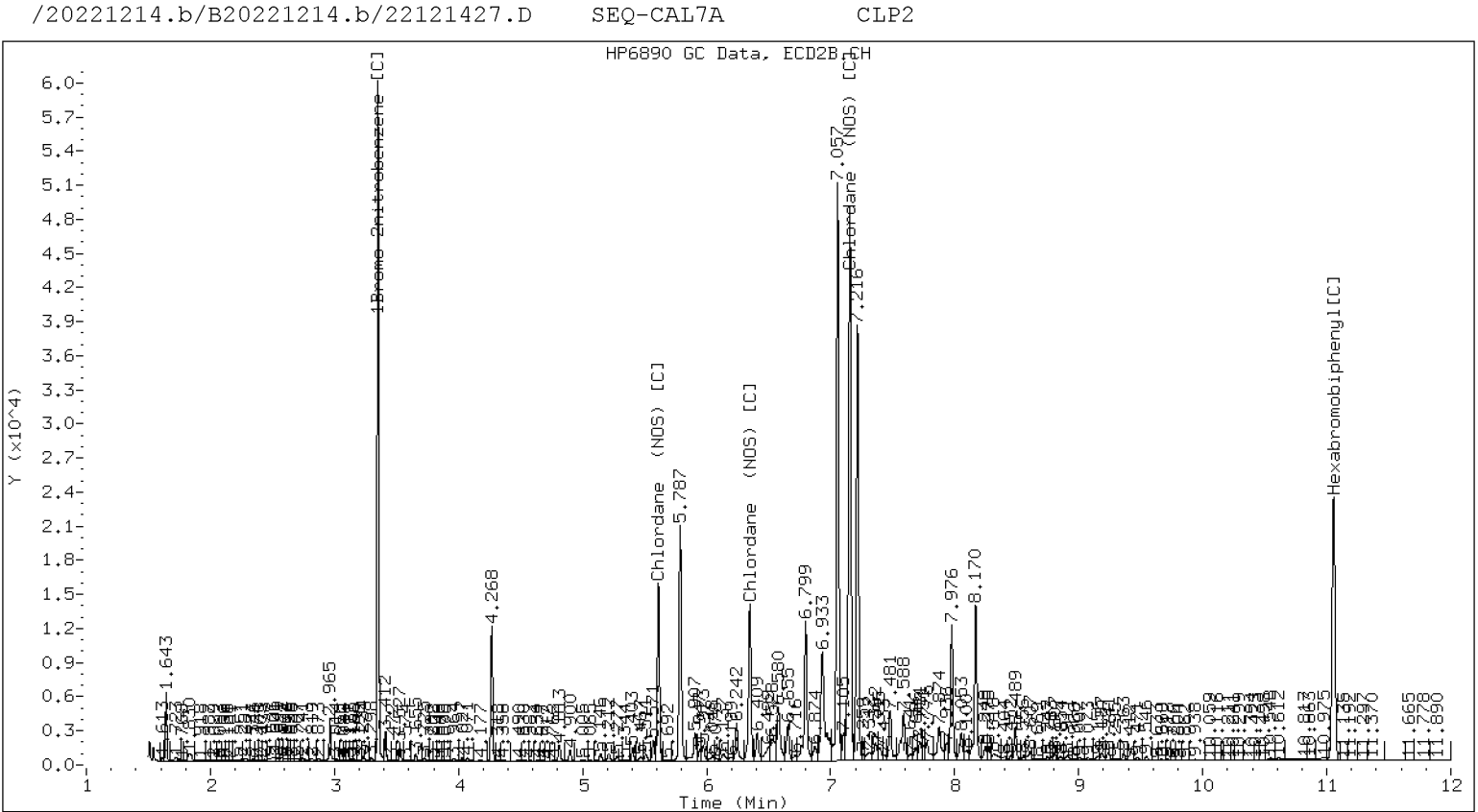
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.001	276980	715.3	1	5.612	0.000	398620	795.3
Chlordane (NOS)	2	6.271	-0.000	961368	749.3	2	6.349	0.000	405170	719.7
Chlordane (NOS)	3	6.399	-0.000	1631241	727.0	3	7.155	0.000	1462876	768.2
Total STX-CLPAve (3 peaks): 730.539					Total CLP2Ave (3 peaks): 761.064					RPD = 4
Corrected Ave (3 peaks): 730.539					Corrected Ave (3 peaks): 761.064					RPD = 4

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	0.000	8893	4.221	0.000	14795	0.95	0.98	4.0	Tetrachloro-m-xylene
9.355	0.000	15511	10.467	0.000	24896	2.54	2.86	11.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

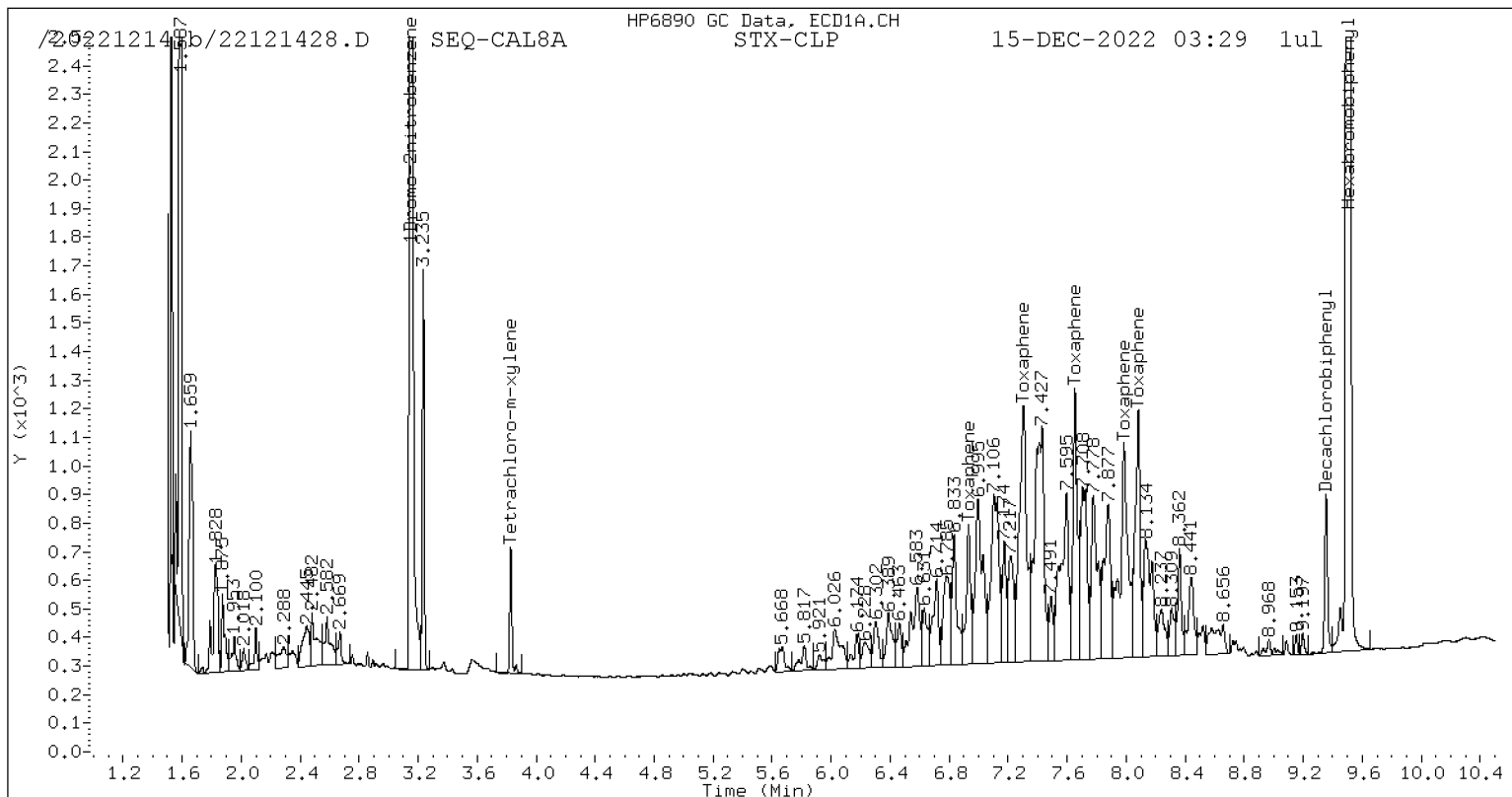
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	691781	-2.7
Hexabromobiphenyl	641833	602865	-6.1

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1068328	0.9
Hexabromobiphenyl	797125	788806	-1.0

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

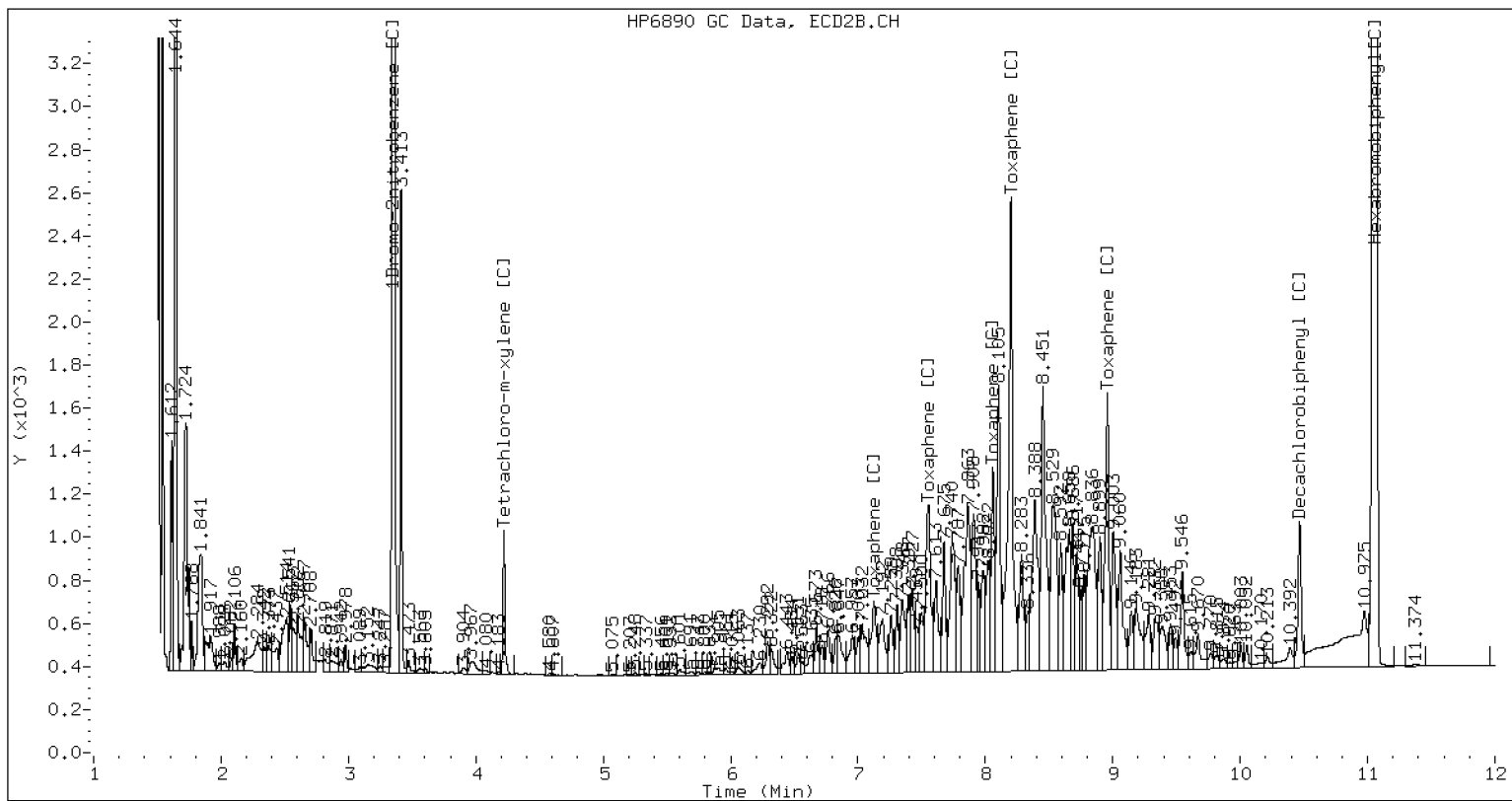
Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	20939	118.9	1	7.125	-0.000	18390	124.1		
Toxaphene	2	7.304	0.000	62921	127.5	2	7.553	-0.000	43437	130.4		
Toxaphene	3	7.653	-0.000	40147	126.2	3	8.059	-0.001	32235	127.1		
Toxaphene	4	7.985	-0.001	56816	133.6	4	8.201	-0.001	109296	132.1		
Toxaphene	5	8.082	-0.000	39643	123.4	5	8.958	-0.001	50997	125.7		
Total STX-CLPAve (5 peaks):					125.907	Total CLP2Ave (5 peaks):					127.865	RPD = 2
Corrected Ave (5 peaks):					125.907	Corrected Ave (5 peaks):					127.865	RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121428.D SEQ-CAL8A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
3.828	-0.000	18632	4.220	-0.000	29829	1.92	1.92	0.1	Tetrachloro-m-xylene
9.355	0.000	29179	10.467	0.000	44716	4.64	4.98	7.1	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	713620	0.4
Hexabromobiphenyl	641833	620026	-3.4

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1104488	4.3
Hexabromobiphenyl	797125	811719	1.8

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col			Amount
			Shift	Height	Amount			Shift	Height	Amount	
Toxaphene	1	6.931	0.000	47415	261.8	1	7.125	-0.001	38790	254.4	
Toxaphene	2	7.302	-0.001	134642	265.2	2	7.552	-0.001	89754	261.8	
Toxaphene	3	7.652	-0.001	86679	264.9	3	8.059	-0.001	67442	258.4	
Toxaphene	4	7.985	-0.001	125891	287.7	4	8.200	-0.001	220426	258.9	
Toxaphene	5	8.081	-0.000	85903	260.0	5	8.958	-0.001	104601	250.5	
Total STX-CLPAve (5 peaks): 267.939					Total CLP2Ave (5 peaks): 256.784					RPD = 4	
Corrected Ave (5 peaks): 267.939					Corrected Ave (5 peaks): 256.784					RPD = 4	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
 Data file 2: /20221214.b/B20221214.b/22121430.D
 Method: \20221214.b\PEST.m
 Compound Sublist: TOXAPH.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALAA
 Client ID:
 Injection Date: 15-DEC-2022 04:04
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	-0.000	37717	4.220	0.000	60469	3.98	3.98	0.0	Tetrachloro-m-xylene
9.355	0.000	57106	10.467	0.000	82418	9.20	9.32	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

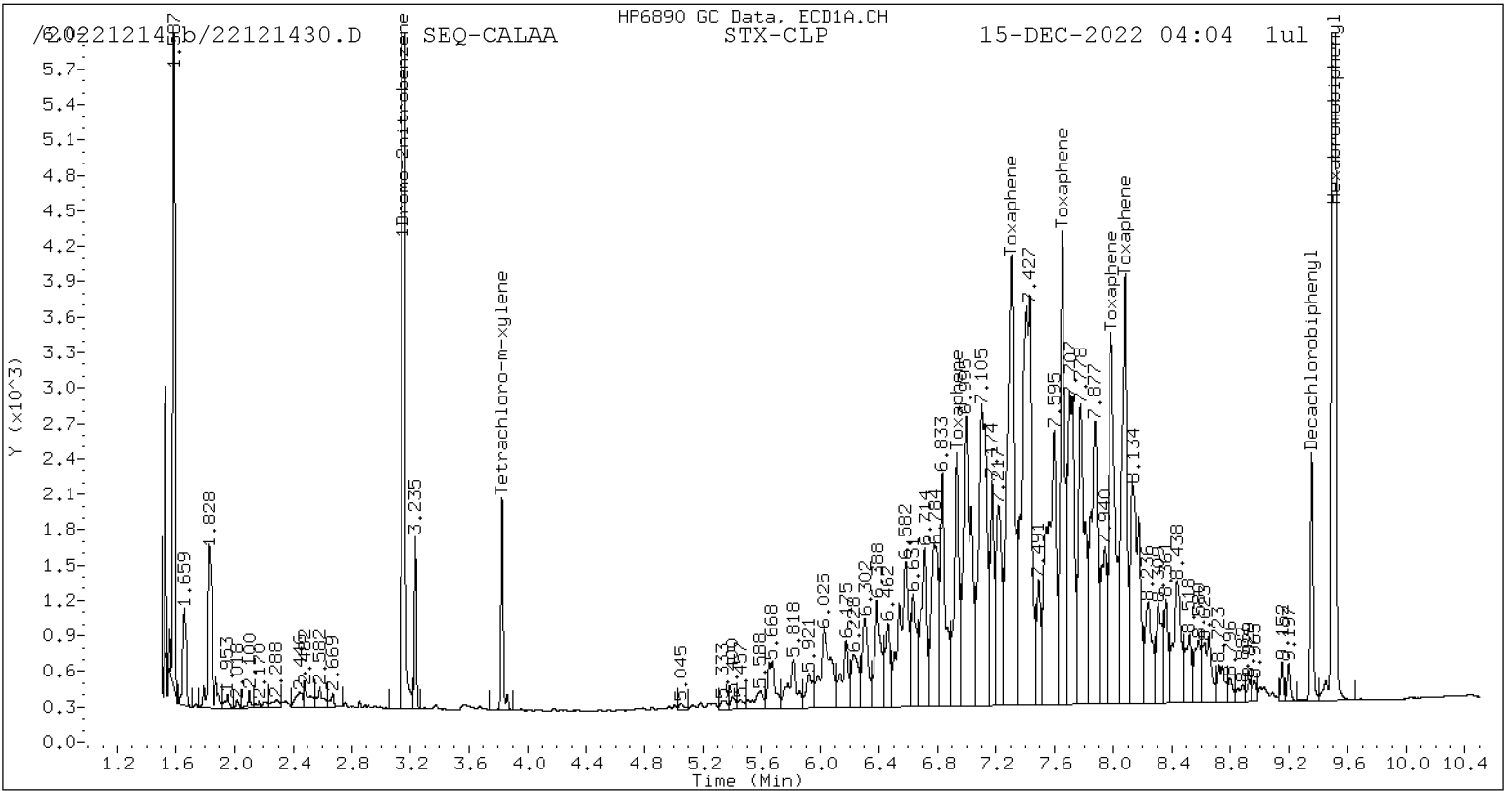
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	696179	-2.0
Hexabromobiphenyl	641833	612804	-4.5

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1078803	1.9
Hexabromobiphenyl	797125	800071	0.4

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

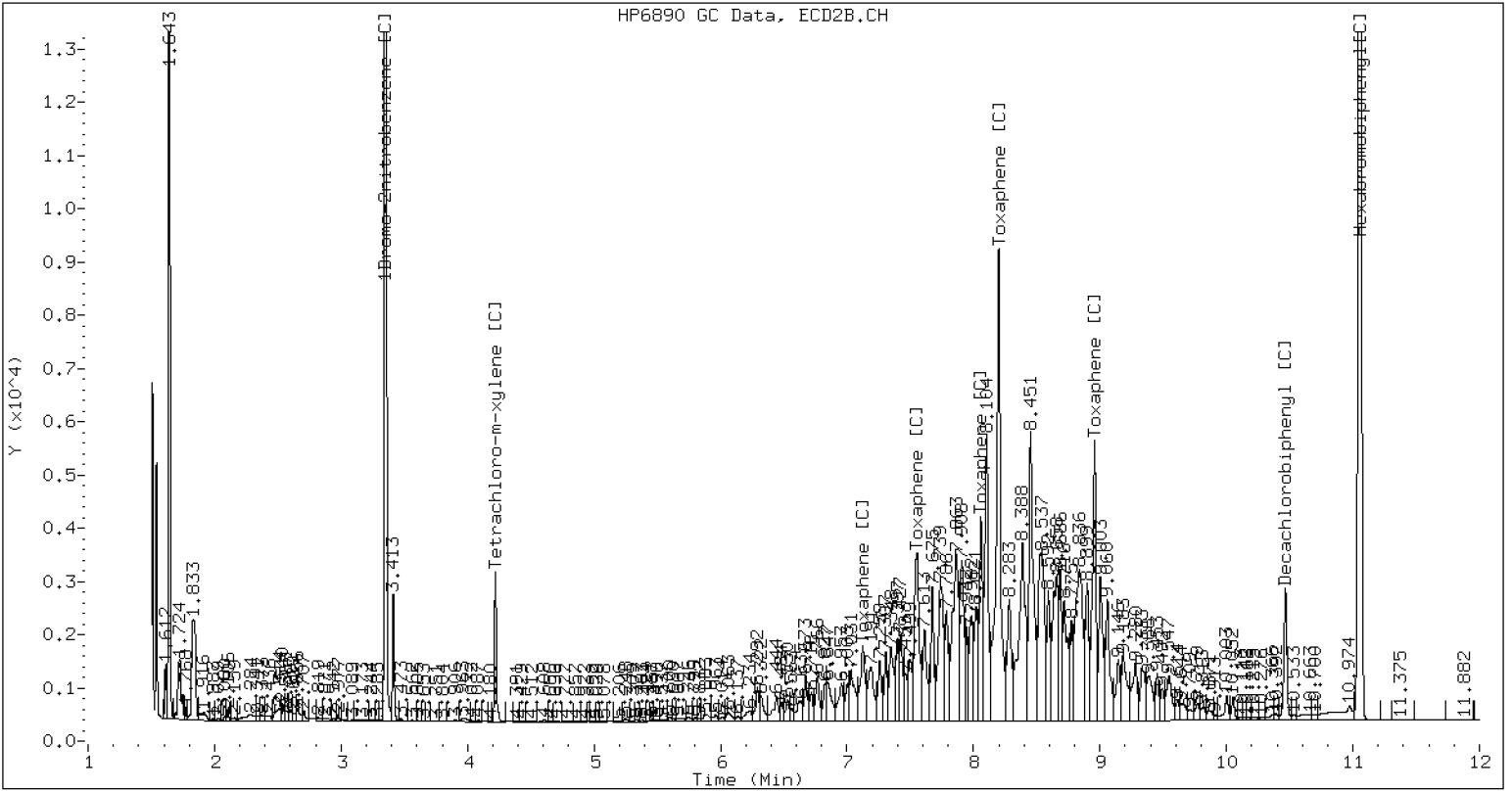
Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	-0.000	96535	539.4	1	7.125	-0.001	78635	523.1		
Toxaphene	2	7.304	0.000	273576	545.2	2	7.553	-0.001	179081	529.9		
Toxaphene	3	7.652	-0.001	177095	547.7	3	8.059	-0.001	133547	519.1		
Toxaphene	4	7.985	-0.001	190443	440.4	4	8.200	-0.001	437035	520.8		
Toxaphene	5	8.082	-0.000	175009	535.8	5	8.958	-0.001	209659	509.4		
Total STX-CLPAve (5 peaks):					521.711	Total CLP2Ave (5 peaks):					520.468	RPD = 0
Corrected Ave (5 peaks):					521.711	Corrected Ave (5 peaks):					520.468	RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121430.D SEQ-CALAA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.828	0.000 74347	4.221 0.000 119694	7.73	7.77	0.5	Tetrachloro-m-xylene
9.355	-0.000 107024	10.466 -0.000 151970	17.00	17.11	0.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

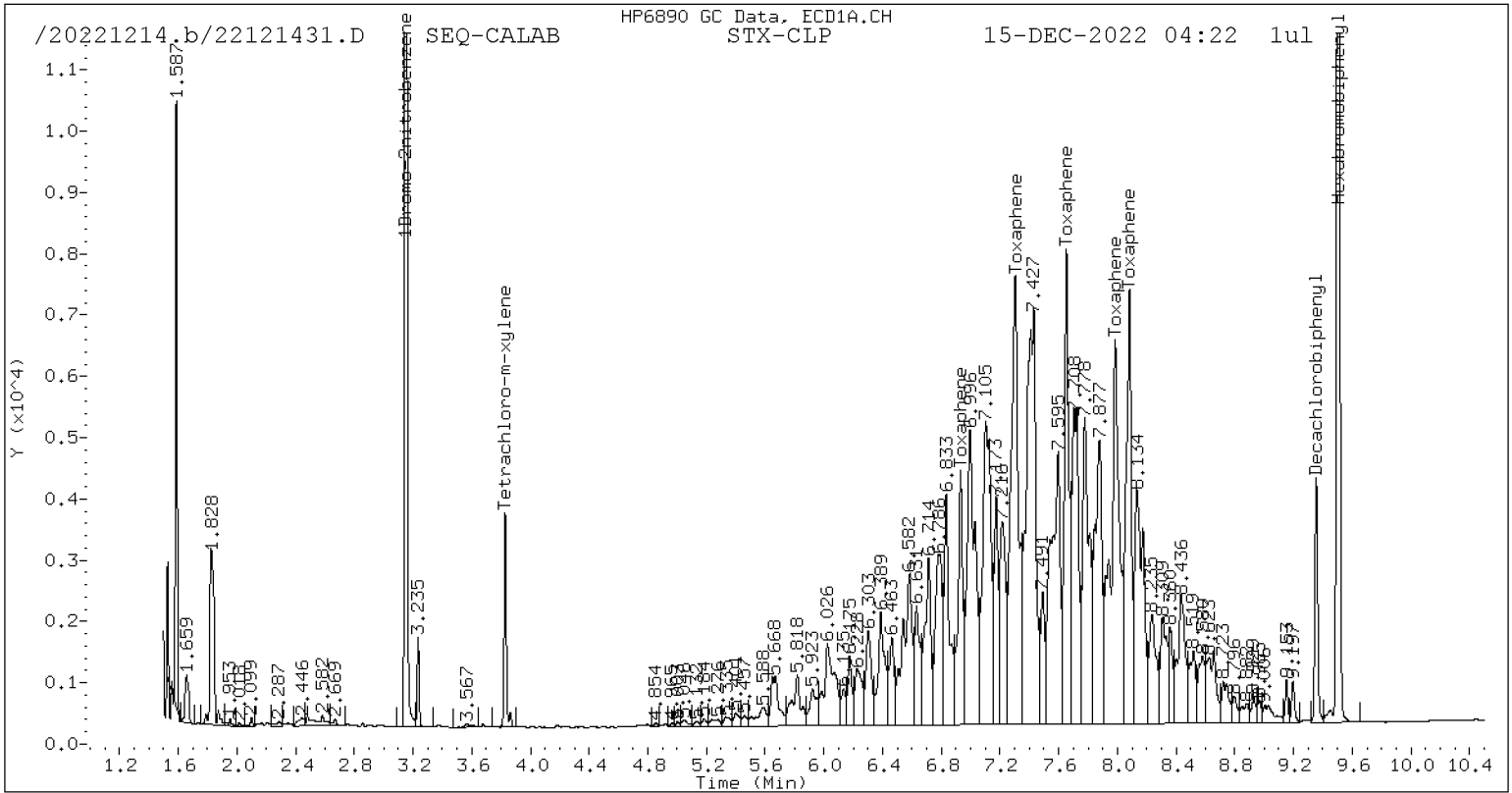
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	706924	-0.5
Hexabromobiphenyl	641833	621486	-3.2

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1093936	3.3
Hexabromobiphenyl	797125	803782	0.8

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

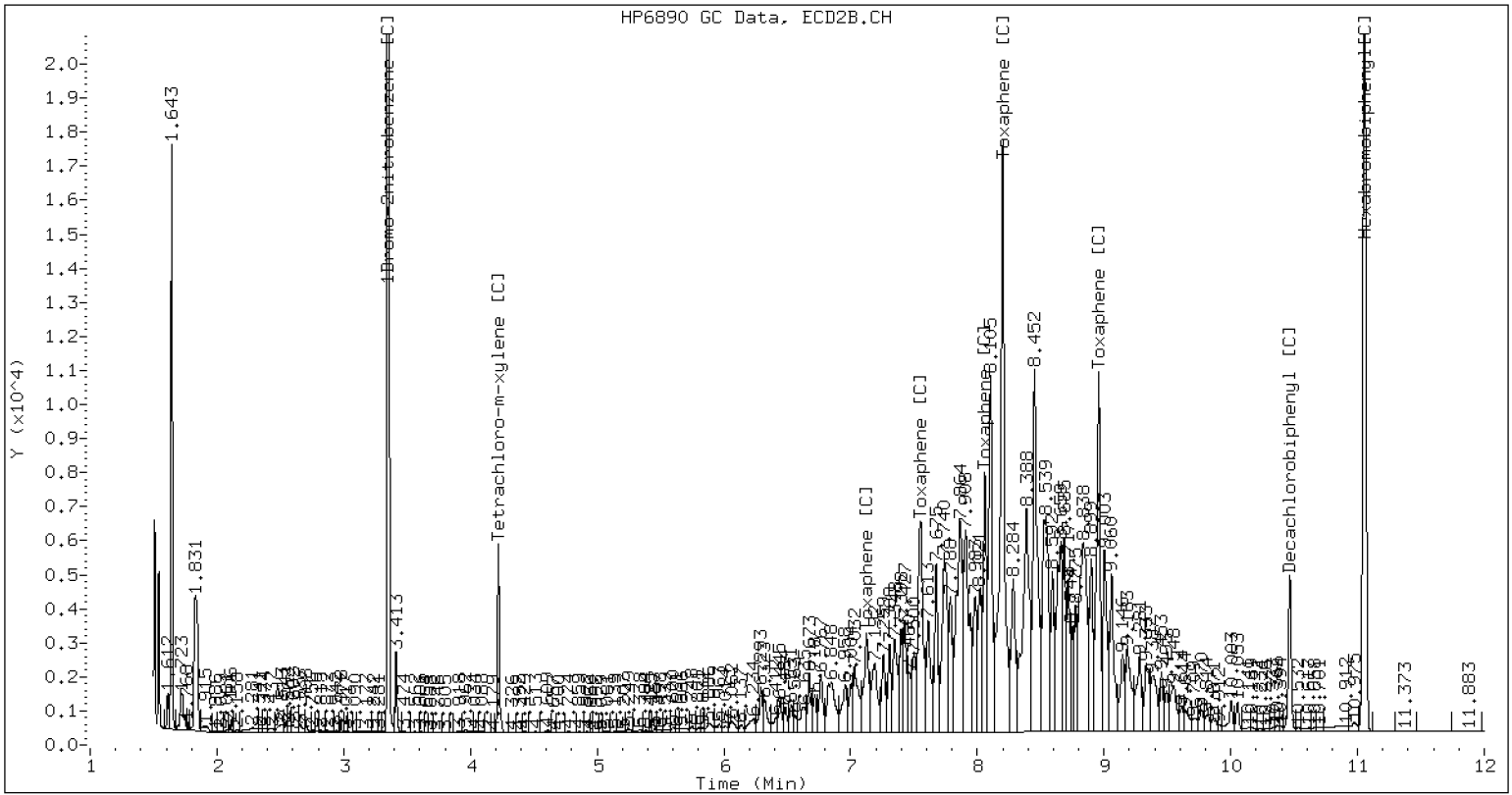
Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	192757	1062.0	1	7.125	-0.000	156515	1036.5		
Toxaphene	2	7.303	-0.000	530863	1043.2	2	7.553	-0.001	349637	1029.8		
Toxaphene	3	7.653	-0.000	344194	1049.6	3	8.059	-0.000	265296	1026.5		
Toxaphene	4	7.986	-0.000	522105	1190.6	4	8.201	-0.001	854255	1013.3		
Toxaphene	5	8.082	-0.000	345477	1043.0	5	8.958	-0.001	416452	1007.1		
Total STX-CLPAve (5 peaks):					1077.665	Total CLP2Ave (5 peaks):					1022.630	RPD = 5
Corrected Ave (5 peaks):					1077.665	Corrected Ave (5 peaks):					1022.630	RPD = 5

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121431.D SEQ-CALAB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	0.000	169388	4.221	0.000	273030	18.51	18.69	1.0	Tetrachloro-m-xylene
9.356	0.001	234532	10.466	-0.000	332716	40.53	40.11	1.0	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672958	-5.3
Hexabromobiphenyl	641833	571112	-11.0

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1037593	-2.0
Hexabromobiphenyl	797125	750492	-5.9

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	432250	2591.5	1	7.126	-0.000	358061	2539.5		
Toxaphene	2	7.303	0.000	1180375	2524.1	2	7.553	0.000	785942	2479.1		
Toxaphene	3	7.653	0.000	762221	2529.4	3	8.059	-0.000	602985	2498.7		
Toxaphene	4	7.986	0.000	863552	2142.9	4	8.201	-0.001	1929083	2450.8		
Toxaphene	5	8.082	0.000	777497	2554.3	5	8.958	-0.001	962132	2492.0		
Total STX-CLPAve (5 peaks):					2468.427	Total CLP2Ave (5 peaks):					2492.024	RPD = 1
Corrected Ave (5 peaks):					2468.427	Corrected Ave (5 peaks):					2492.024	RPD = 1

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	-0.000	329284	4.221	0.000	536251	34.78	35.63	2.4	Tetrachloro-m-xylene
9.356	0.000	464116	10.466	-0.000	660536	76.95	77.19	0.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

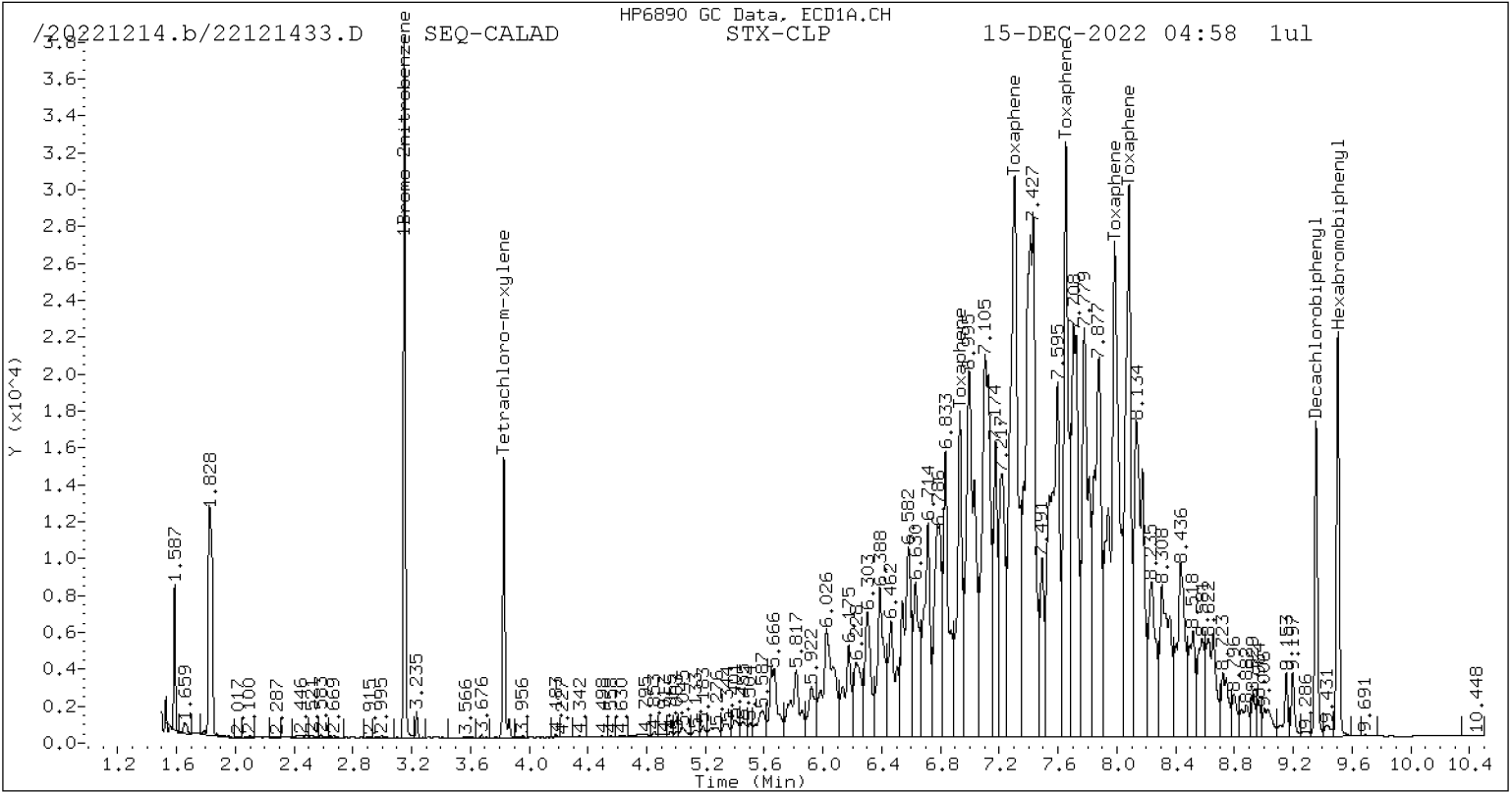
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	696178	-2.0
Hexabromobiphenyl	641833	595287	-7.3

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1069205	1.0
Hexabromobiphenyl	797125	774218	-2.9

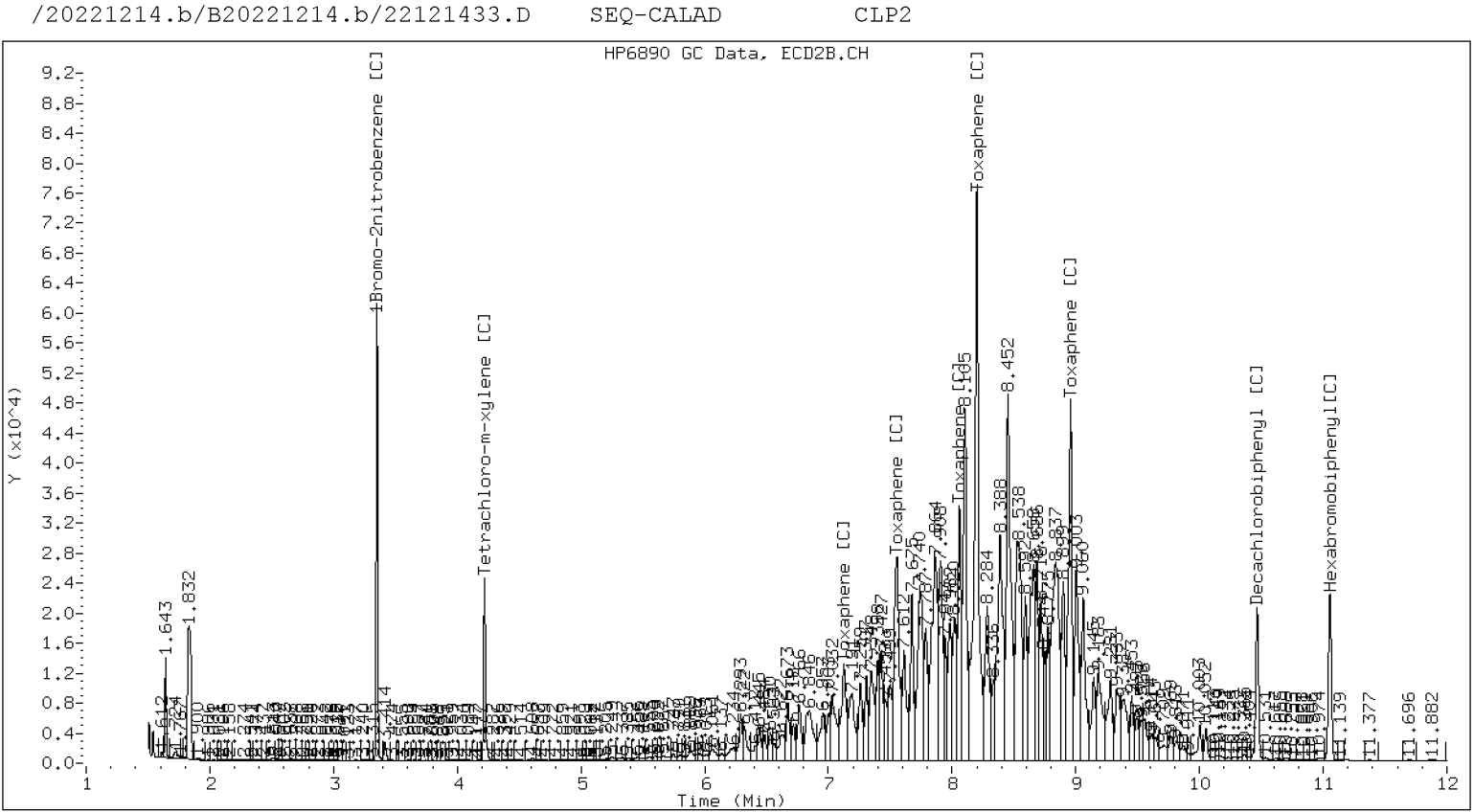
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	828531	4765.6	1	7.126	-0.000	704213	4841.5		
Toxaphene	2	7.303	-0.000	2275106	4667.4	2	7.554	0.000	1533921	4690.3		
Toxaphene	3	7.653	-0.000	1493693	4755.4	3	8.059	-0.001	1192086	4788.5		
Toxaphene	4	7.986	0.000	2318449	5519.5	4	8.201	-0.001	3835448	4723.4		
Toxaphene	5	8.081	-0.000	1509568	4758.0	5	8.958	-0.000	1957568	4914.8		
Total STX-CLPAve (5 peaks):					4893.192	Total CLP2Ave (5 peaks):					4791.694	RPD = 2
Corrected Ave (5 peaks):					4893.192	Corrected Ave (5 peaks):					4791.694	RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.828	-0.000 626937	4.221 0.000 1016753	65.66	67.54	2.8			Tetrachloro-m-xylene
9.355	0.000 899917	10.467 0.000 1293767	145.37	151.89	4.4			Decachlorobiphenyl

- * Indicates RPD > 40%
- A Indicates Peak Height was used for Column 1 quantitation instead of Area
- B Indicates Peak Height was used for Column 2 quantitation instead of Area
- M Indicates Column 1 peak was manually integrated
- N Indicates Column 2 peak was manually integrated
- ~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

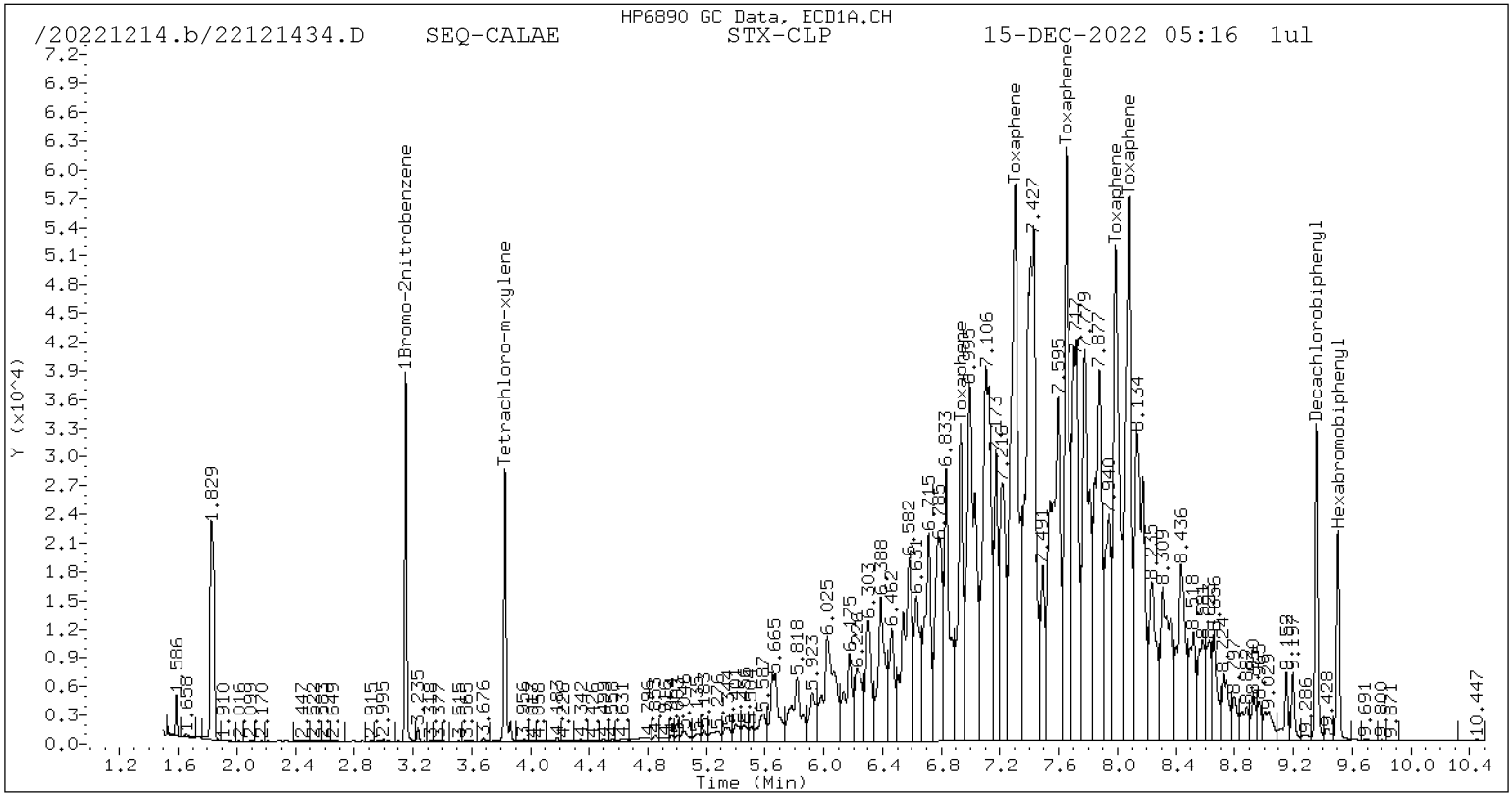
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	702143	-1.2
Hexabromobiphenyl	641833	610983	-4.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1069521	1.0
Hexabromobiphenyl	797125	770702	-3.3

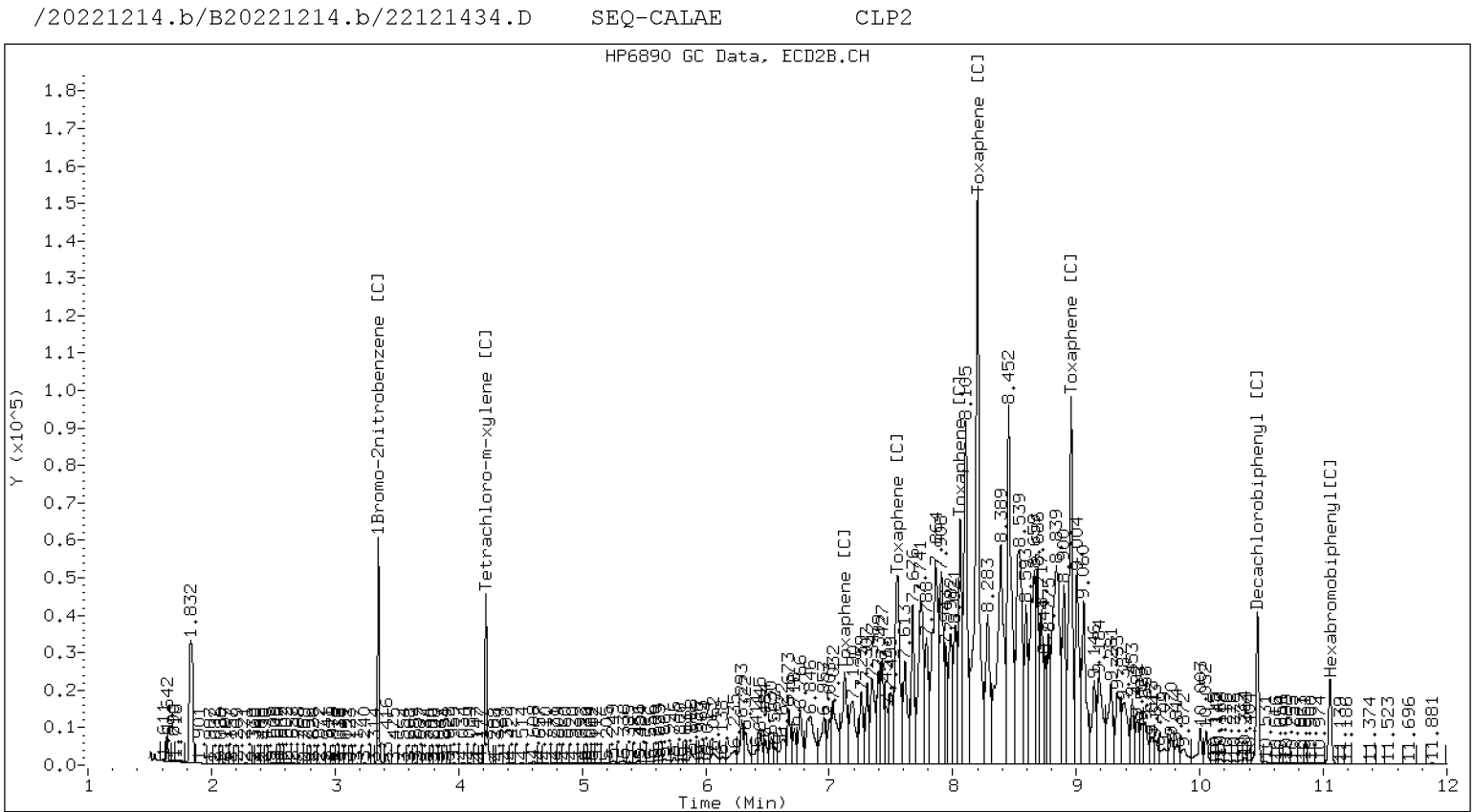
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	1553785	8707.6	1	7.126	0.000	1336419	9229.8		
Toxaphene	2	7.303	-0.000	4216546	8428.1	2	7.553	0.000	2900195	8908.4		
Toxaphene	3	7.653	-0.000	2652265	8227.0	3	8.060	0.000	2299294	9278.2		
Toxaphene	4	7.987	0.001	3225164	7480.8	4	8.201	0.000	7496819	9274.6		
Toxaphene	5	8.082	-0.000	2882252	8851.2	5	8.959	0.000	3913616	9870.7		
Total STX-CLPAve (5 peaks):					8338.950	Total CLP2Ave (5 peaks):					9312.318	RPD = 11
Corrected Ave (5 peaks):					8338.950	Corrected Ave (5 peaks):					9312.318	RPD = 11

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====



INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>23C03023.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0093-ICV1</u>	Injection Time:	<u>00:34</u>
Sequence Name:	<u>INDAE1</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	19.2	1.4298940	1.3740710		-4.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3403750		-8.0	+/-20
Decachlorobiphenyl	A	40.000	37.9	0.8105886	0.7680604		-5.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.0	0.8841805	0.8392586		-5.0	+/-20
Tetrachlorometaxylene	A	40.000	37.0	1.0879510	1.0054160		-7.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.7	1.1261070	1.0323690		-8.3	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/23C03023.D
Data file 2: /20230302.b/B20230302.b/23C03023.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA1
Client ID:
Injection Date: 03-MAR-2023 00:34
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.391	0.000	183062	4.829	0.000	264706	20.14	19.12	5.2	alpha-BHC
4.779	0.000	70663	5.302	0.000	100950	20.19	19.18	5.2	beta-BHC
4.965	0.000	157975	5.654	0.000	222619	21.27	19.52	8.6	delta-BHC
4.698	0.000	159687	5.223	0.000	229812	20.26	19.56	3.5	gamma-BHC (Lindane)
5.191	0.000	147595	5.750	0.000	200100	21.05	18.80	11.3	Heptachlor
5.519	0.000	156781	6.152	0.000	217550	19.95	17.90	10.8	Aldrin
6.199	0.000	138028	6.807	0.000	175914	20.26	17.51	14.6	Heptachlor epoxide b
6.641	0.000	123673	7.250	0.000	149530	19.78	16.89	15.8	Endosulfan I
6.901	0.000	260632	7.543	0.000	321444	38.80	32.85	16.6	Dieldrin
6.561	0.000	249441	7.331	0.000	307144	40.00	34.23	15.5	4,4'-DDE
7.151	0.000	171344	7.866	0.000	191394	34.62	33.20	4.2	Endrin
7.388	0.000	215006	8.078	0.000	259590	48.26	43.93	9.4	Endosulfan II
7.207	0.000	202817	7.936	0.000	249024	45.48	44.41	2.4	4,4'-DDD
8.249	0.000	186171	8.673	0.000	234465	44.00	45.18	2.6	Endosulfan sulfate
7.500	0.000	205859	8.254	0.000	234837	45.69	43.39	5.2	4,4'-DDT
7.986	0.000	443110	8.892	0.000	524337	221.92	218.91	1.4	Methoxychlor
8.524	0.000	231289	9.196	0.000	270054	47.72	48.18	1.0	Endrin ketone
7.816	0.000	171425	8.408	0.000	202528	48.24	48.59	0.7	Endrin aldehyde
6.339	0.000	136541	7.017	0.000	166872	19.73	16.65	16.9	trans-Chlordane
6.486	0.000	135083	7.177	0.000	164901	19.46	16.82	14.6	cis-Chlordane
2.346	0.000	176391	2.492	0.000	228593	18.53	17.39	6.3	Hexachlorobutadiene
4.231	0.000	162171	4.689	0.000	231474	19.22	18.37	4.5	Hexachlorobenzene
3.871	0.000	237323	4.195	0.000	356567	36.97	36.67	0.8	Tetrachloro-m-xylene
9.437	0.000	144981	10.402	0.000	170145	37.90	37.97	0.2	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	472089	-29.8
Hexabromobiphenyl	609723	377525	-38.1

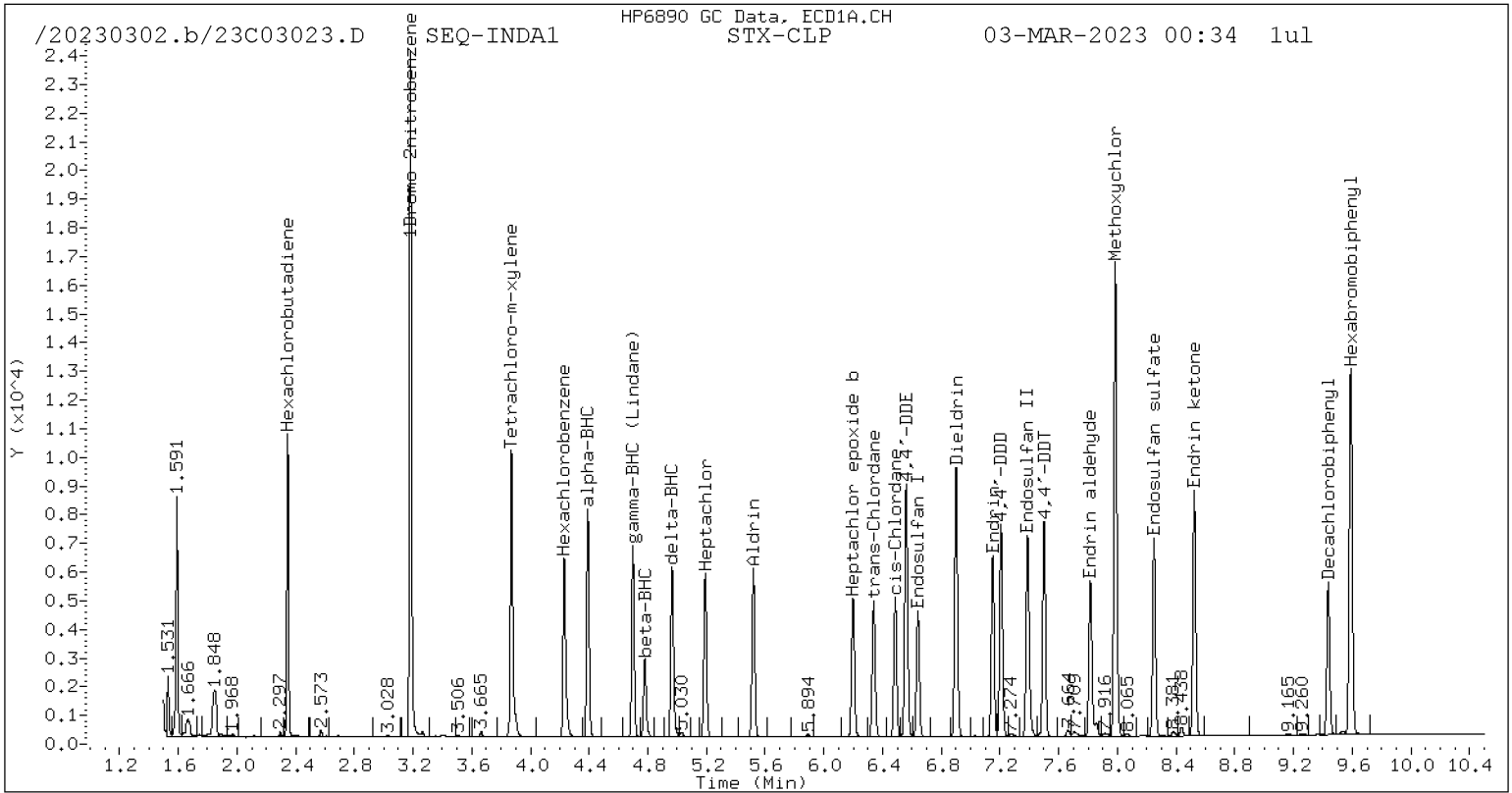
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	690774	-31.4
Hexabromobiphenyl	769764	405465	-47.3

* Standard Areas taken from Initial Cal Level 5

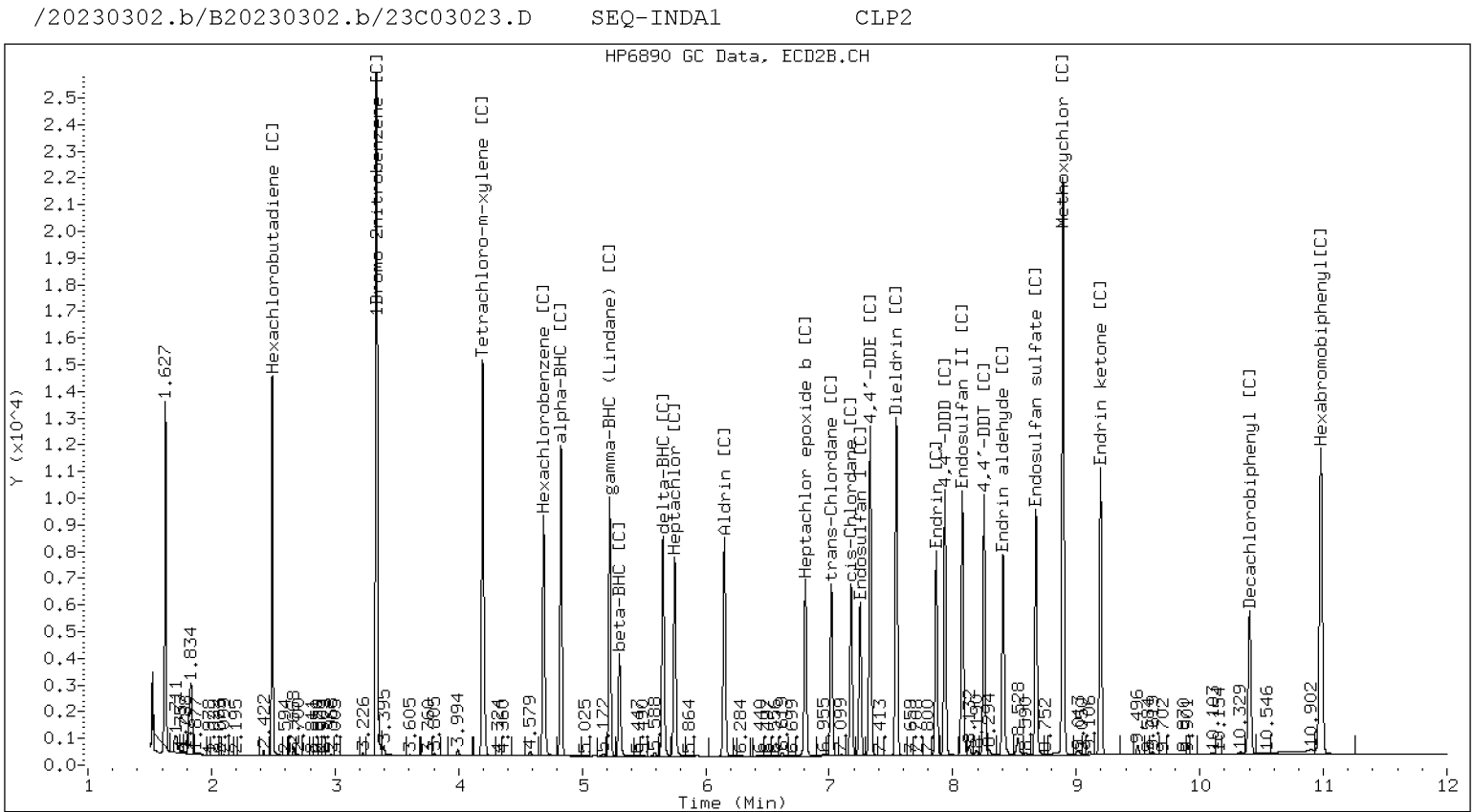
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/23C03073.D
Data file 2: /20230307.b/B20230307.b/23C03073.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA1
Client ID:
Injection Date: 07-MAR-2023 09:35
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.378	0.000	325929	4.816	0.000	494898	21.10	20.60	2.4	alpha-BHC
4.766	0.000	126955	5.289	0.000	184681	21.35	20.22	5.4	beta-BHC
4.952	0.000	277905	5.641	0.000	371523	22.01	18.77	15.9	delta-BHC
4.684	0.000	282813	5.210	0.000	428139	21.12	21.00	0.6	gamma-BHC (Lindane)
5.176	0.000	258082	5.735	0.000	383099	21.66	20.74	4.3	Heptachlor
5.504	0.000	272577	6.137	0.000	402592	20.41	19.09	6.7	Aldrin
6.183	0.000	231421	6.793	0.000	324748	19.99	18.62	7.1	Heptachlor epoxide b
6.625	0.000	215572	7.236	0.000	282875	20.29	18.40	9.7	Endosulfan I
6.885	0.000	460870	7.530	0.000	611544	40.37	36.01	11.4	Dieldrin
6.546	0.000	428294	7.319	0.000	575872	40.41	36.98	8.9	4,4'-DDE
7.135	0.000	320148	7.853	0.000	408164	38.69	39.71	2.6	Endrin
7.372	0.000	372458	8.064	0.000	485545	50.00	46.09	8.1	Endosulfan II
7.192	0.000	341363	7.924	0.000	489488	45.79	48.96	6.7	4,4'-DDD
8.234	0.000	327223	8.660	0.000	435275	46.26	47.05	1.7	Endosulfan sulfate
7.485	0.000	368275	8.241	0.000	461337	48.88	47.81	2.2	4,4'-DDT
7.972	0.000	755666	8.880	0.000	990921	226.35	232.07	2.5	Methoxychlor
8.508	0.000	401738	9.182	0.000	485441	49.58	48.58	2.0	Endrin ketone
7.800	0.000	287029	8.394	0.000	358159	48.31	48.20	0.2	Endrin aldehyde
6.324	0.000	235537	7.004	0.000	319249	20.03	18.36	8.7	trans-Chlordane
6.471	0.000	231718	7.163	0.000	310912	19.64	18.28	7.2	cis-Chlordane
2.336	0.000	293527	2.482	0.000	326794	18.14	14.32	23.5	Hexachlorobutadiene
4.219	0.000	282589	4.676	0.000	419048	19.70	19.16	2.8	Hexachlorobenzene
3.859	0.000	389244	4.183	0.000	638465	35.67	37.83	5.9	Tetrachloro-m-xylene
9.421	0.000	239846	10.385	0.000	293780	37.50	36.77	2.0	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	802383	19.3
Hexabromobiphenyl	609723	631224	3.5

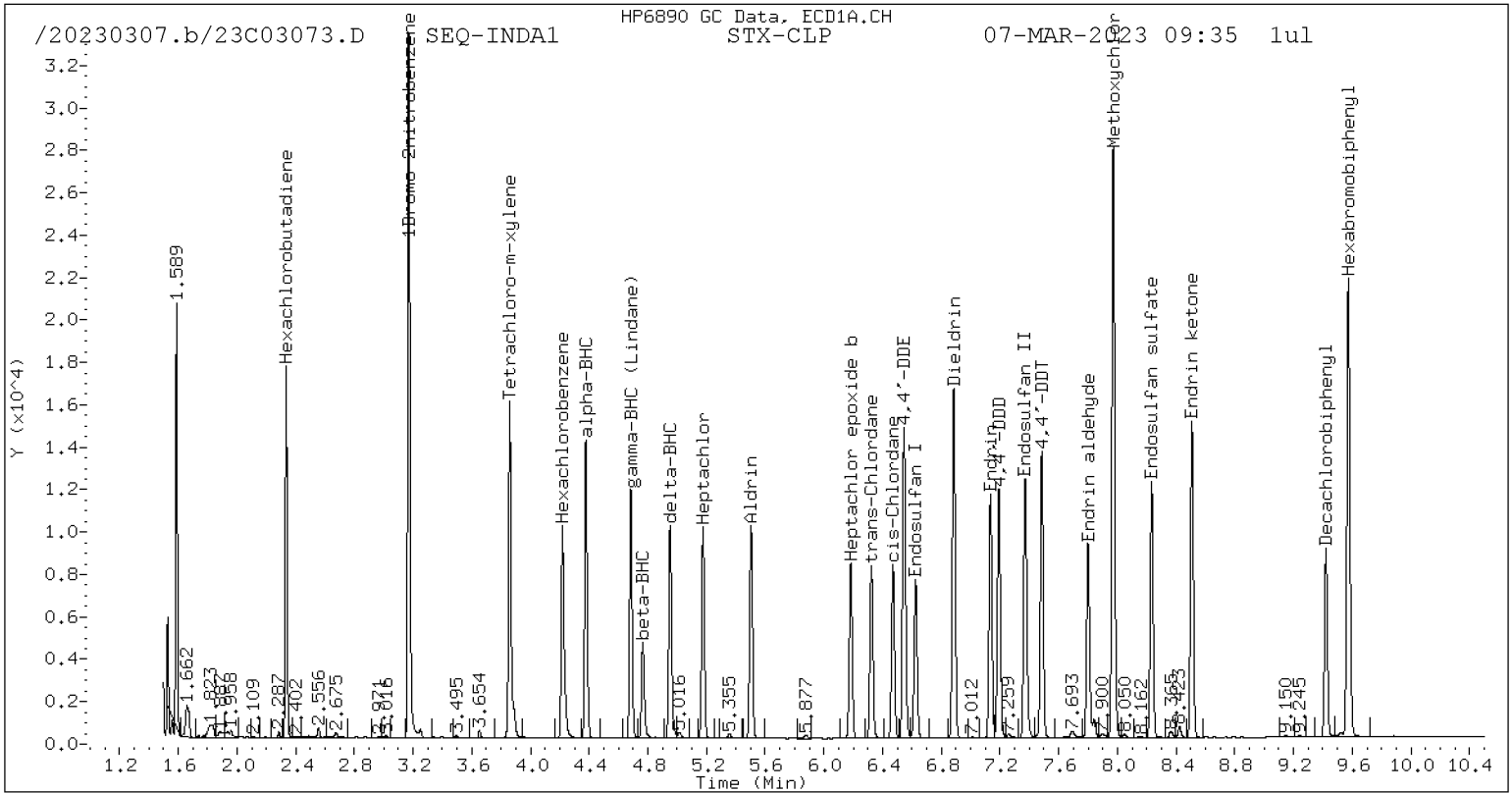
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1198897	19.1
Hexabromobiphenyl	769764	722844	-6.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

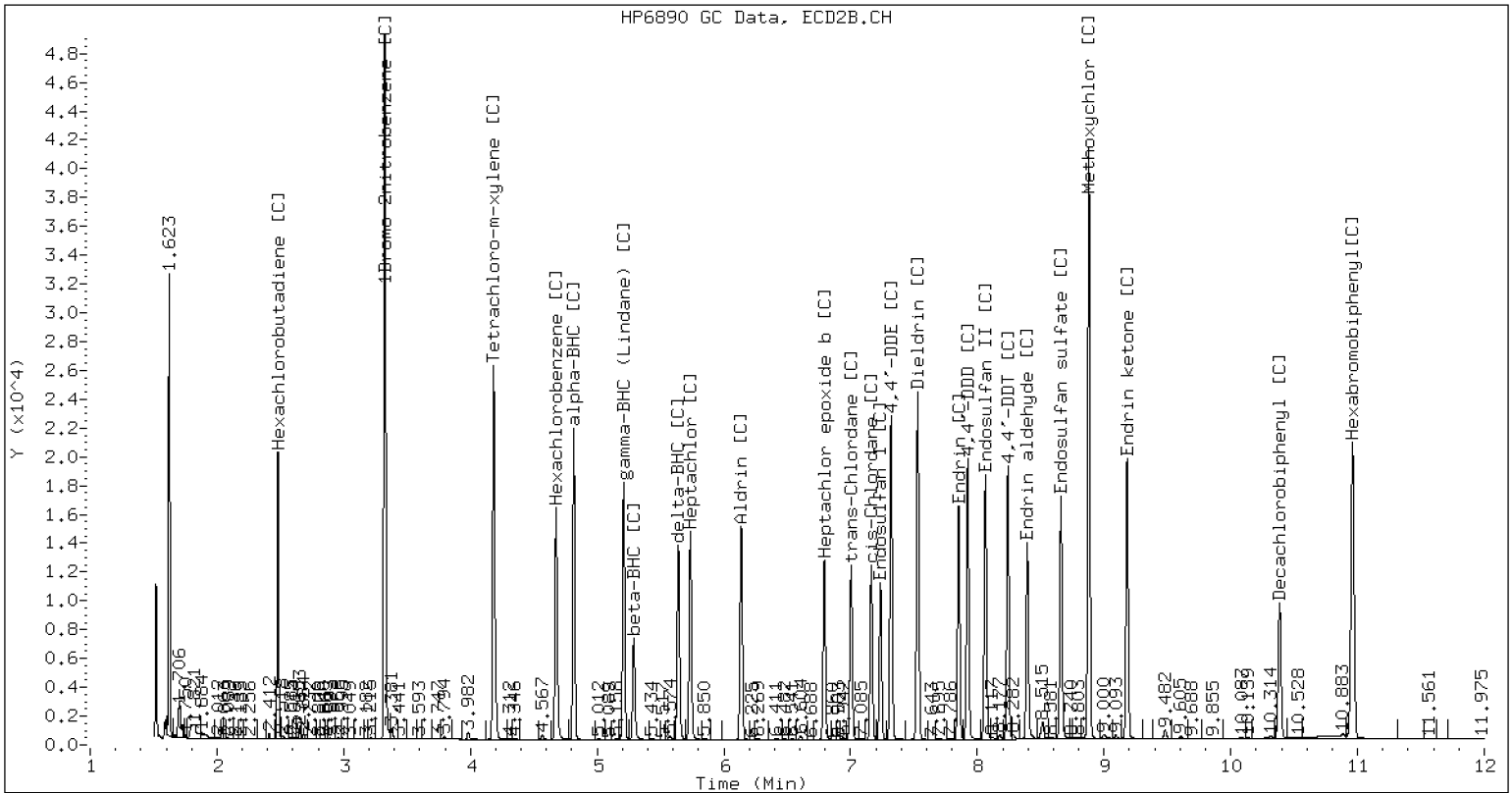
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230307.b/B20230307.b/23C03073.D SEQ-INDA1 CLP2



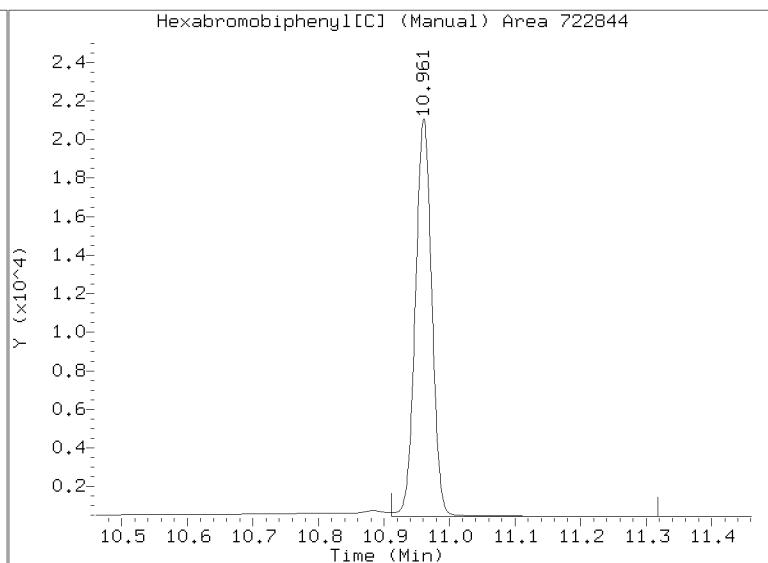
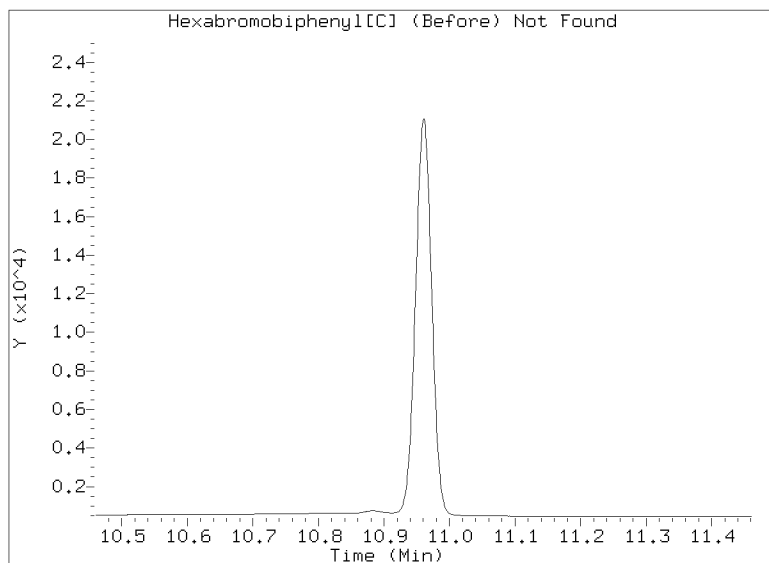
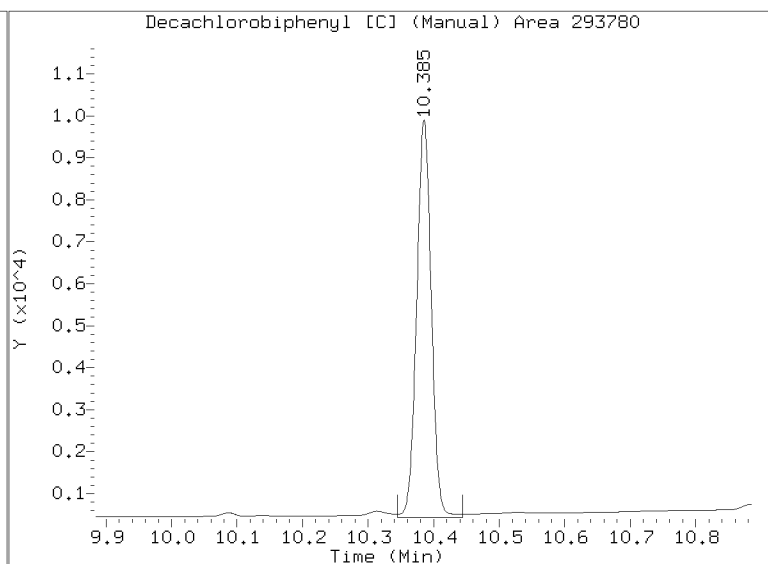
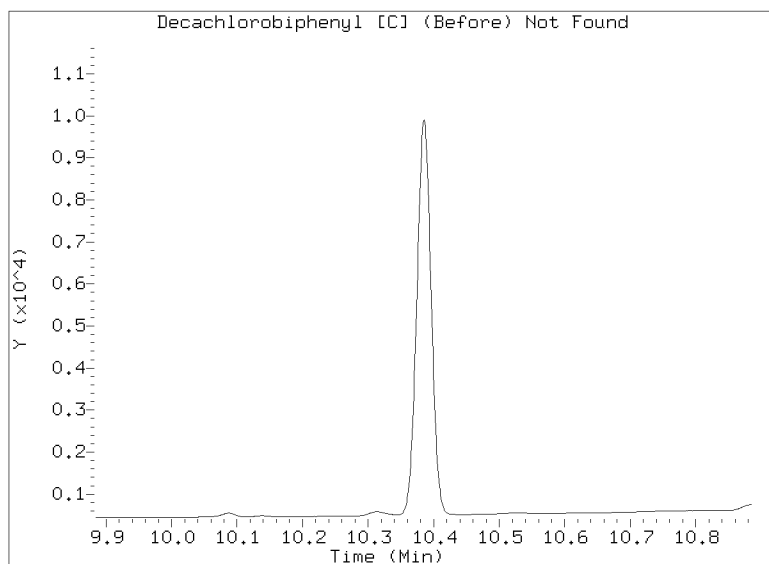
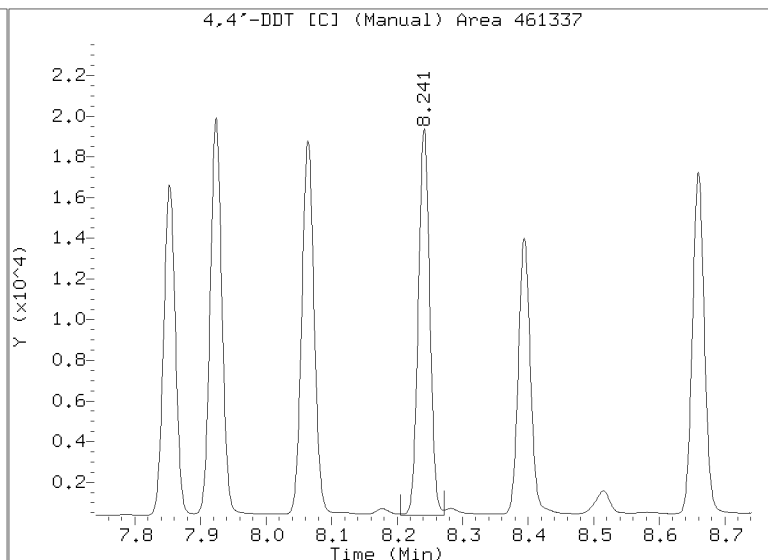
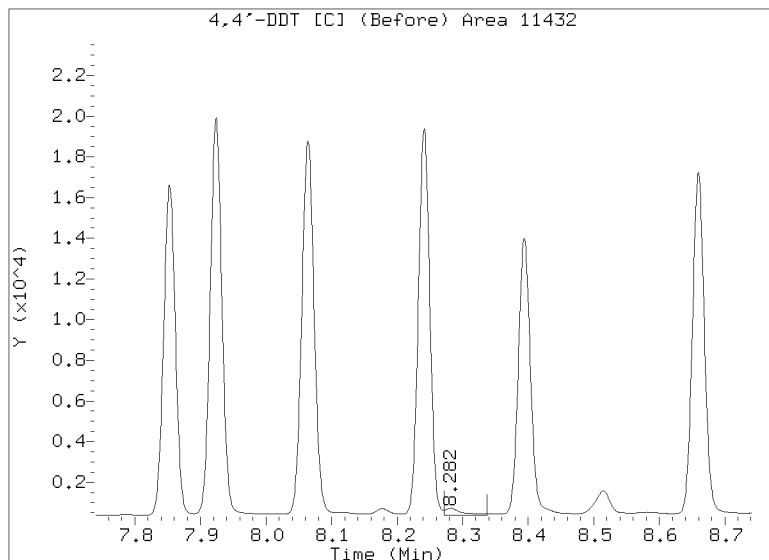
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230307.b/B20230307.b/23C03073.D

Injection Date: 07-MAR-2023 09:35

Lab ID:SEQ-INDA1 Client ID:





CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F1801.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0093-CCV1</u>	Injection Time:	<u>05:03</u>
Sequence Name:	<u>INDAE2</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4075310		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3462030		-8.0	+/-20
Decachlorobiphenyl	A	40.000	36.3	0.8105886	0.7358649		-9.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.1	0.8841805	0.7989683		-9.8	+/-20
Tetrachlorometaxylene	A	40.000	37.6	1.0879510	1.0232470		-6.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.1261070	1.0306140		-8.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F1801.D
Data file 2: /20230302.b/B20230302.b/002F1801.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA2
Client ID:
Injection Date: 03-MAR-2023 05:03
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.389	-0.002	343168	4.827	-0.002	523633	21.36	19.90	7.1	alpha-BHC
4.777	-0.002	130399	5.301	-0.001	195475	21.08	19.54	7.6	beta-BHC
4.964	-0.002	301259	5.652	-0.002	447075	22.94	20.63	10.6	delta-BHC
4.696	-0.002	298011	5.222	-0.001	455223	21.39	20.38	4.8	gamma-BHC (Lindane)
5.190	-0.002	271697	5.748	-0.001	401965	21.92	19.87	9.8	Heptachlor
5.517	-0.002	286941	6.150	-0.001	422330	20.65	18.29	12.2	Aldrin
6.196	-0.002	241170	6.805	-0.002	328965	20.02	17.22	15.0	Heptachlor epoxide b
6.639	-0.002	222373	7.248	-0.002	282710	20.12	16.79	18.0	Endosulfan I
6.899	-0.002	459350	7.542	-0.002	598481	38.68	32.18	18.3	Dieldrin
6.558	-0.002	445996	7.330	-0.002	573822	40.45	33.64	18.4	4,4'-DDE
7.149	-0.002	289978	7.864	-0.002	349879	33.34	32.02	4.0	Endrin
7.385	-0.003	380821	8.075	-0.002	482441	48.64	43.08	12.1	Endosulfan II
7.204	-0.003	359106	7.934	-0.002	461474	45.83	43.42	5.4	4,4'-DDD
8.247	-0.003	327788	8.671	-0.002	438173	44.10	44.56	1.0	Endosulfan sulfate
7.498	-0.002	362592	8.252	-0.002	460505	45.80	44.90	2.0	4,4'-DDT
7.984	-0.002	782122	8.891	-0.002	1021448	222.94	225.03	0.9	Methoxychlor
8.522	-0.002	401746	9.194	-0.002	525667	47.18	49.49	4.8	Endrin ketone
7.813	-0.003	298557	8.405	-0.002	379452	47.81	48.03	0.5	Endrin aldehyde
6.338	-0.002	246874	7.016	-0.002	321581	20.18	16.88	17.8	trans-Chlordane
6.484	-0.002	243082	7.176	-0.002	310953	19.81	16.69	17.1	cis-Chlordane
2.344	-0.002	318266	2.490	-0.002	433551	18.90	17.35	8.6	Hexachlorobutadiene
4.229	-0.002	293718	4.687	-0.002	441908	19.69	18.45	6.5	Hexachlorobenzene
3.869	-0.002	427054	4.193	-0.002	676624	37.62	36.61	2.7	Tetrachloro-m-xylene
9.435	-0.002	244061	10.400	-0.002	306966	36.31	36.15	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	834704	24.1
Hexabromobiphenyl	609723	663331	8.8

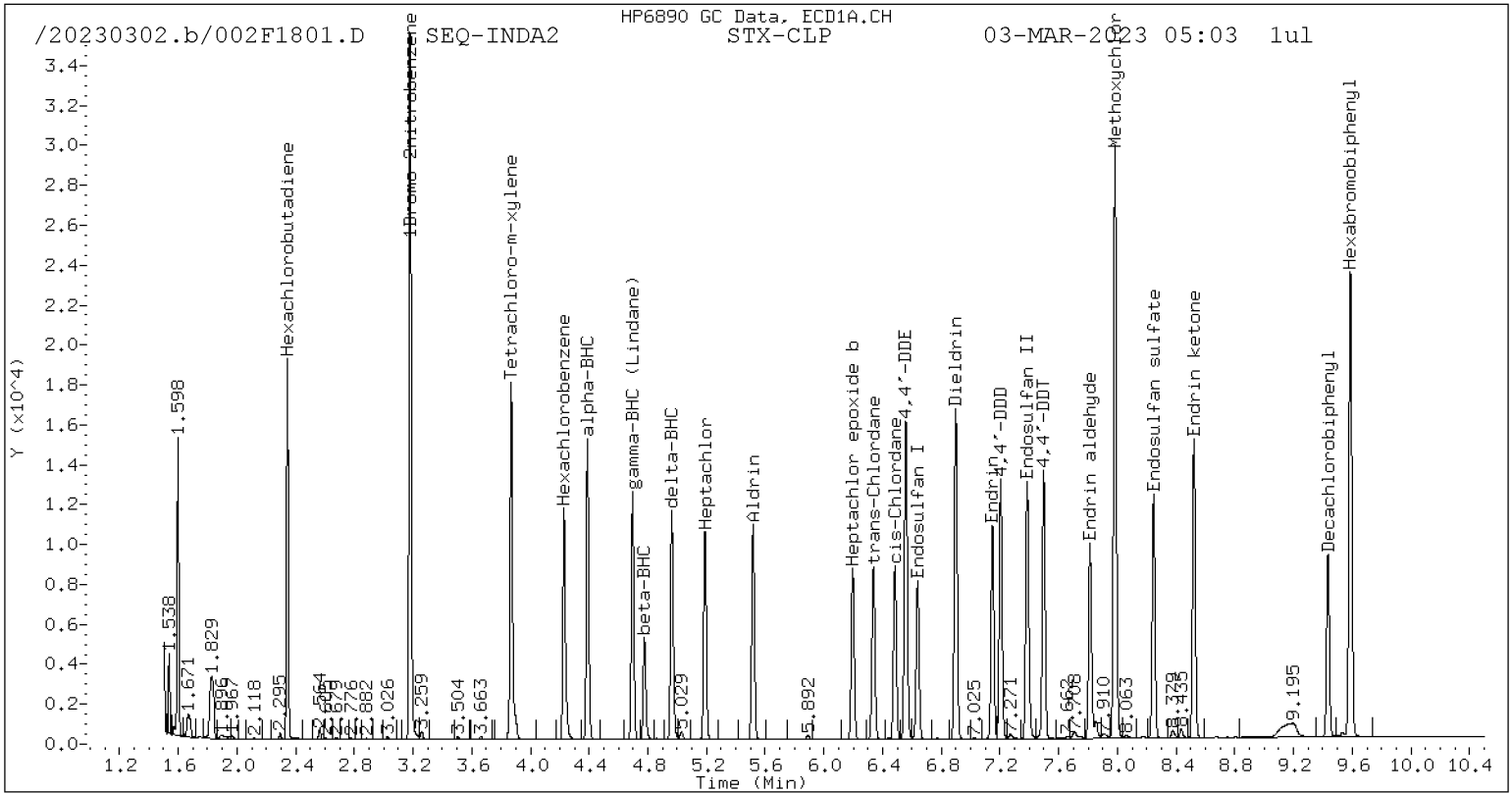
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1313050	30.5
Hexabromobiphenyl	769764	768406	-0.2

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

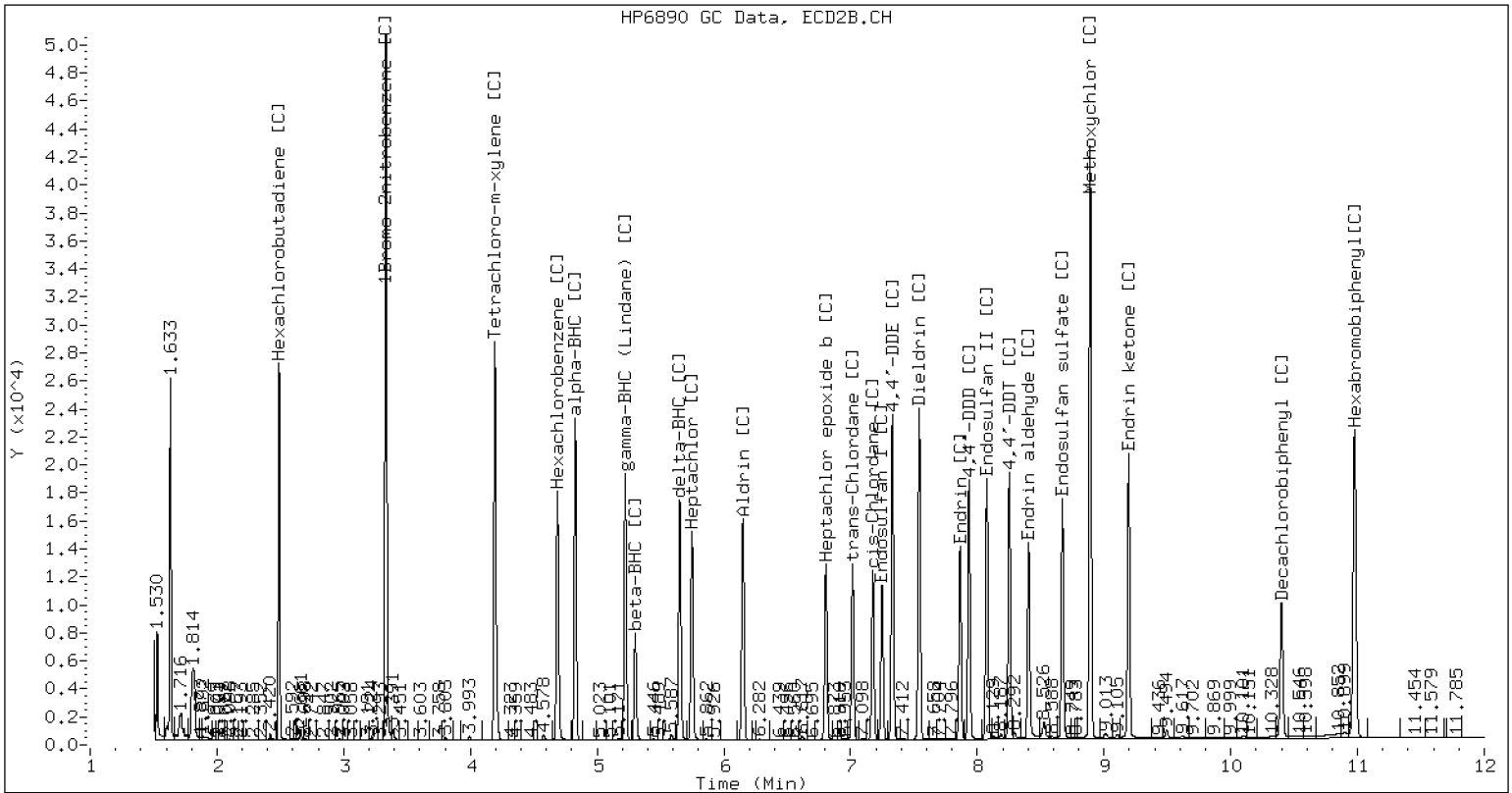
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F1801.D SEQ-INDA2 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F3501.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0093-CCV2</u>	Injection Time:	<u>10:08</u>
Sequence Name:	<u>INDAE3</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.1	1.4298940	1.3662080		-4.5	+/-20
Hexachlorobenzene [2C]	A	20.000	17.8	1.4591090	1.2955280		-11.0	+/-20
Decachlorobiphenyl	A	40.000	37.2	0.8105886	0.7548490		-7.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.1	0.8841805	0.8653759		-2.3	+/-20
Tetrachlorometaxylene	A	40.000	36.7	1.0879510	0.9994100		-8.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.6	1.1261070	1.0022730		-11.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F3501.D
Data file 2: /20230302.b/B20230302.b/002F3501.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA3
Client ID:
Injection Date: 03-MAR-2023 10:08
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.390	-0.001	188143	4.828	-0.002	275046	20.16	18.61 8.0 alpha-BHC
4.778	-0.001	72578	5.301	-0.001	105366	20.20	18.75 7.4 beta-BHC
4.964	-0.001	164939	5.653	-0.001	233517	21.63	19.18 12.0 delta-BHC
4.697	-0.002	164164	5.223	-0.001	240371	20.29	19.16 5.7 gamma-BHC (Lindane)
5.190	-0.002	149850	5.748	-0.001	211270	20.81	18.60 11.3 Heptachlor
5.518	-0.002	158122	6.150	-0.002	220726	19.60	17.02 14.1 Aldrin
6.197	-0.002	135037	6.805	-0.002	172673	19.30	16.10 18.1 Heptachlor epoxide b
6.638	-0.002	121689	7.249	-0.002	144082	18.95	15.24 21.7 Endosulfan I
6.899	-0.002	254846	7.542	-0.002	310486	36.95	29.72 21.7 Dieldrin
6.558	-0.002	246764	7.330	-0.001	293802	38.53	30.67 22.7 4,4'-DDE
7.149	-0.002	137316	7.865	-0.001	154172	28.85	26.63 8.0 Endrin
7.386	-0.002	206483	8.076	-0.001	253584	48.20	42.72 12.0 Endosulfan II
7.205	-0.002	195256	7.935	-0.002	237045	45.54	42.09 7.9 4,4'-DDD
8.247	-0.003	178093	8.672	-0.002	229175	43.78	43.97 0.4 Endosulfan sulfate
7.498	-0.002	194392	8.252	-0.002	241758	44.87	44.47 0.9 4,4'-DDT
7.984	-0.002	427965	8.891	-0.001	525596	222.91	218.48 2.0 Methoxychlor
8.522	-0.002	221528	9.195	-0.001	282492	47.54	50.18 5.4 Endrin ketone
7.814	-0.002	167495	8.406	-0.002	201428	49.02	48.11 1.9 Endrin aldehyde
6.338	-0.002	134516	7.016	-0.002	164467	18.93	15.37 20.7 trans-Chlordane
6.484	-0.002	132633	7.175	-0.002	158664	18.61	15.16 20.4 cis-Chlordane
2.345	-0.000	180359	2.492	-0.000	243057	18.45	17.32 6.3 Hexachlorobutadiene
4.230	-0.001	165566	4.688	-0.001	238852	19.11	17.76 7.3 Hexachlorobenzene
3.870	-0.001	242230	4.194	-0.001	369571	36.74	35.60 3.2 Tetrachloro-m-xylene
9.435	-0.002	137010	10.401	-0.001	176210	37.25	39.15 5.0 Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	484746	-27.9
Hexabromobiphenyl	609723	363013	-40.5

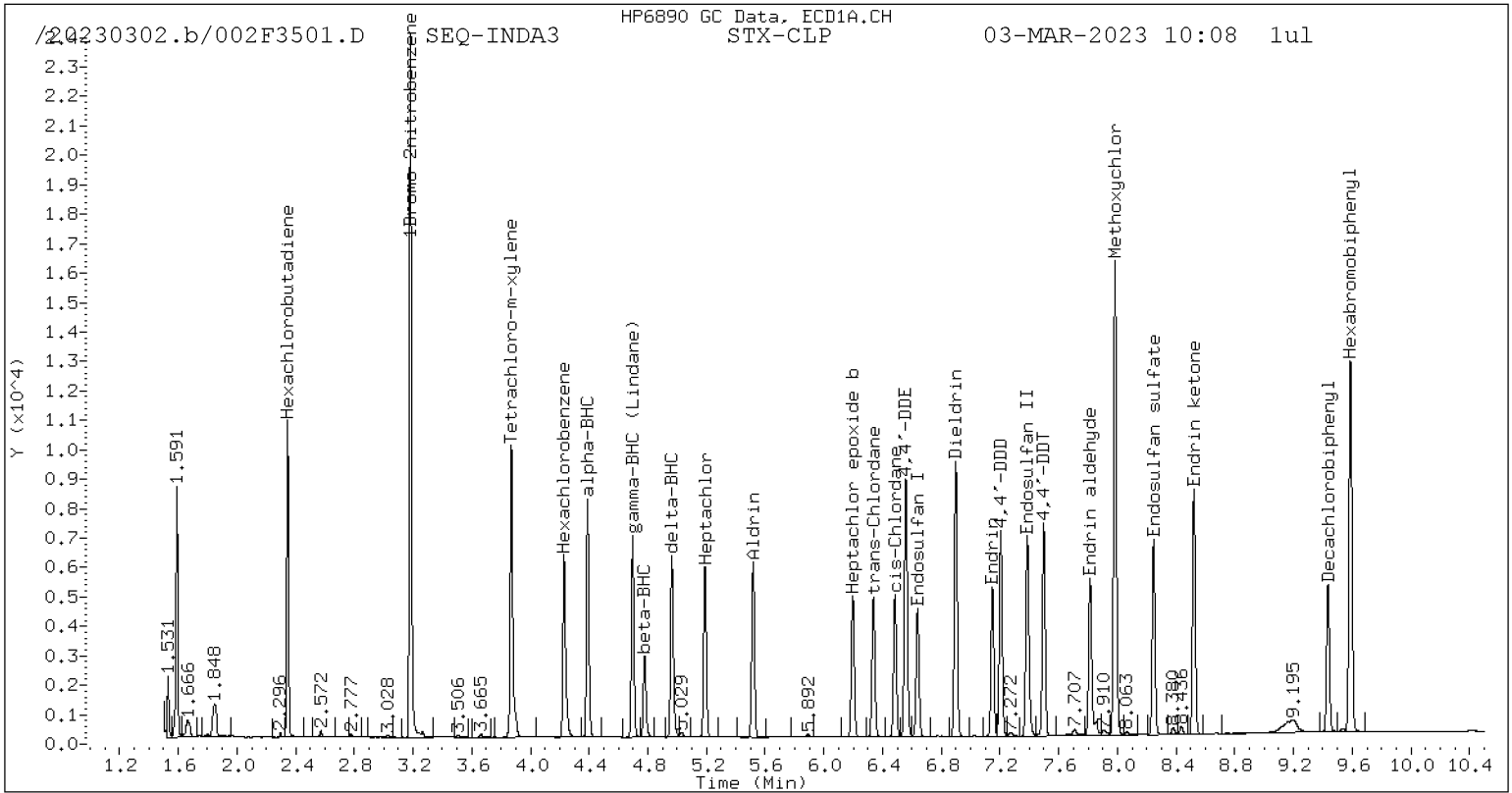
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	737466	-26.7
Hexabromobiphenyl	769764	407245	-47.1

* Standard Areas taken from Initial Cal Level 5

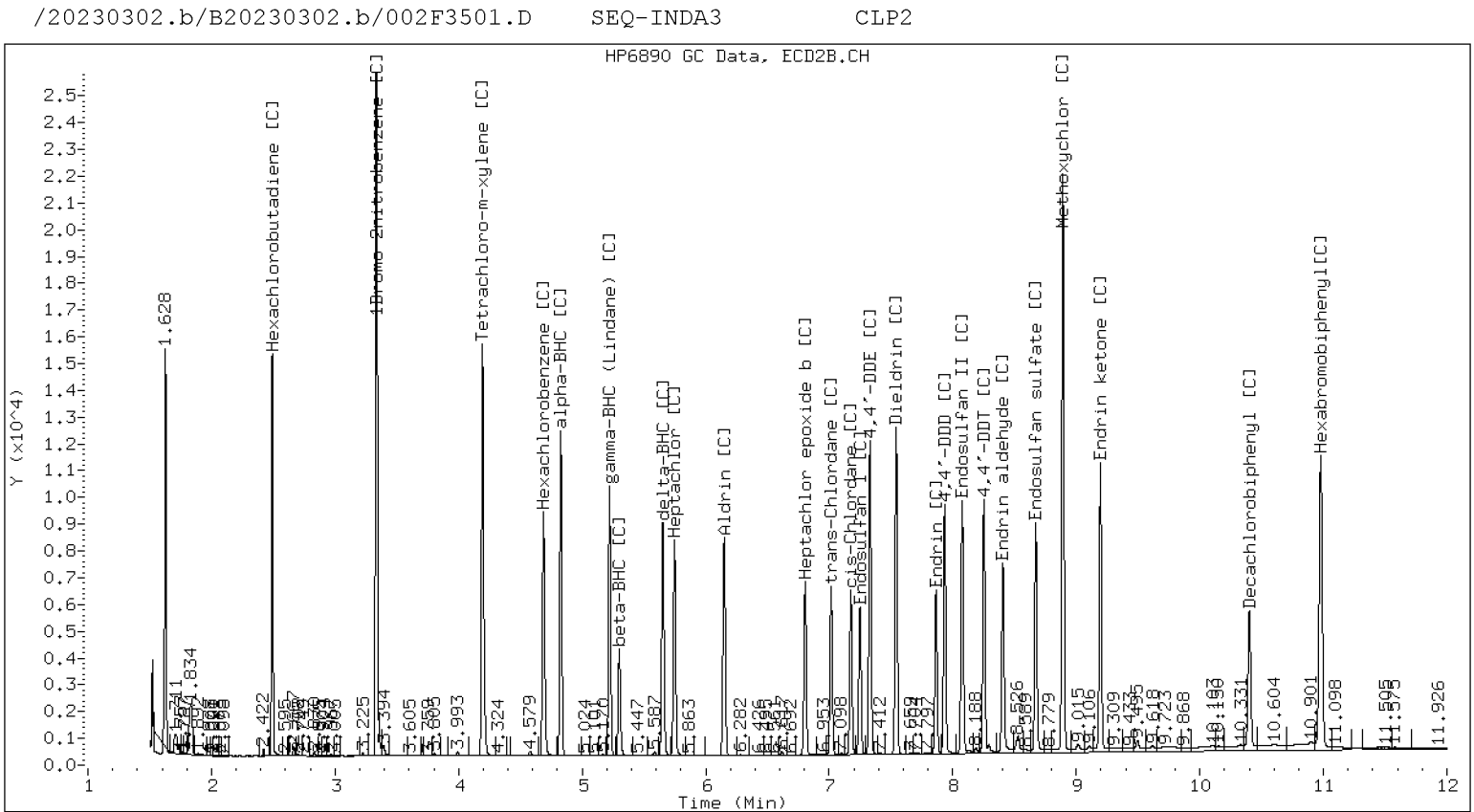
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F4701.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0093-CCV3</u>	Injection Time:	<u>13:44</u>
Sequence Name:	<u>INDAE4</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4099430		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.3	1.4591090	1.3359870		-8.5	+/-20
Decachlorobiphenyl	A	40.000	36.6	0.8105886	0.7427974		-8.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.1	0.8841805	0.8195756		-7.3	+/-20
Tetrachlorometaxylene	A	40.000	37.6	1.0879510	1.0221840		-6.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.4	1.1261070	1.0237650		-9.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F4701.D
Data file 2: /20230302.b/B20230302.b/002F4701.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA4
Client ID:
Injection Date: 03-MAR-2023 13:44
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.388	-0.003	379468	4.827	-0.003	577232	21.57	19.98	7.7	alpha-BHC
4.777	-0.003	144483	5.300	-0.002	213799	21.33	19.47	9.2	beta-BHC
4.963	-0.002	333612	5.651	-0.003	492614	23.21	20.70	11.4	delta-BHC
4.696	-0.003	329374	5.221	-0.002	500419	21.60	20.41	5.6	gamma-BHC (Lindane)
5.189	-0.003	299929	5.747	-0.002	443759	22.10	19.98	10.1	Heptachlor
5.517	-0.003	316209	6.149	-0.003	460479	20.79	18.16	13.5	Aldrin
6.195	-0.003	267512	6.804	-0.002	361113	20.29	17.22	16.3	Heptachlor epoxide b
6.638	-0.003	246695	7.247	-0.003	310176	20.39	16.79	19.4	Endosulfan I
6.898	-0.003	509698	7.541	-0.002	657623	39.21	32.21	19.6	Dieldrin
6.558	-0.003	493672	7.330	-0.002	629206	40.90	33.61	19.6	4,4'-DDE
7.148	-0.003	300689	7.864	-0.002	353106	31.04	30.07	3.2	Endrin
7.385	-0.004	423983	8.074	-0.003	526901	48.62	43.77	10.5	Endosulfan II
7.204	-0.003	399949	7.933	-0.003	507547	45.83	44.43	3.1	4,4'-DDD
8.246	-0.003	367025	8.671	-0.002	479504	44.32	45.36	2.3	Endosulfan sulfate
7.497	-0.003	408068	8.252	-0.002	507007	46.27	45.98	0.6	4,4'-DDT
7.983	-0.003	860998	8.890	-0.002	1119933	220.32	229.53	4.1	Methoxychlor
8.521	-0.003	456538	9.193	-0.003	564083	48.13	49.41	2.6	Endrin ketone
7.813	-0.003	332618	8.405	-0.002	405394	47.82	47.74	0.2	Endrin aldehyde
6.337	-0.003	273685	7.015	-0.003	351857	20.44	16.83	19.4	trans-Chlordane
6.483	-0.003	269319	7.174	-0.003	340839	20.05	16.66	18.5	cis-Chlordane
2.344	-0.002	344557	2.489	-0.002	468591	18.70	17.08	9.0	Hexachlorobutadiene
4.229	-0.002	322063	4.686	-0.003	481416	19.72	18.31	7.4	Hexachlorobenzene
3.868	-0.003	466980	4.193	-0.002	737817	37.58	36.36	3.3	Tetrachloro-m-xylene
9.434	-0.003	274425	10.399	-0.003	338472	36.65	37.08	1.1	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	913691	35.9
Hexabromobiphenyl	609723	738896	21.2

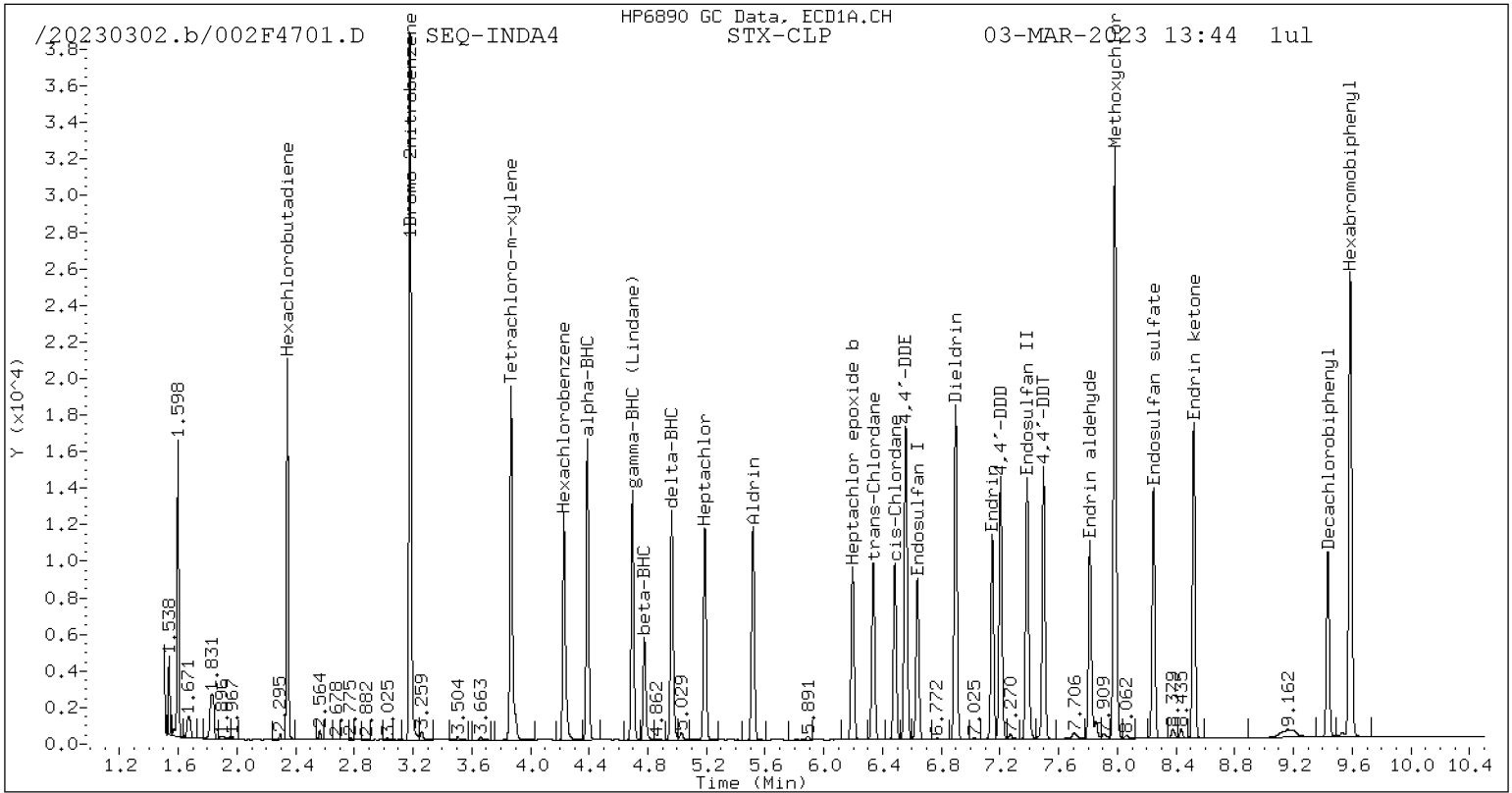
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1441379	43.2
Hexabromobiphenyl	769764	825969	7.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

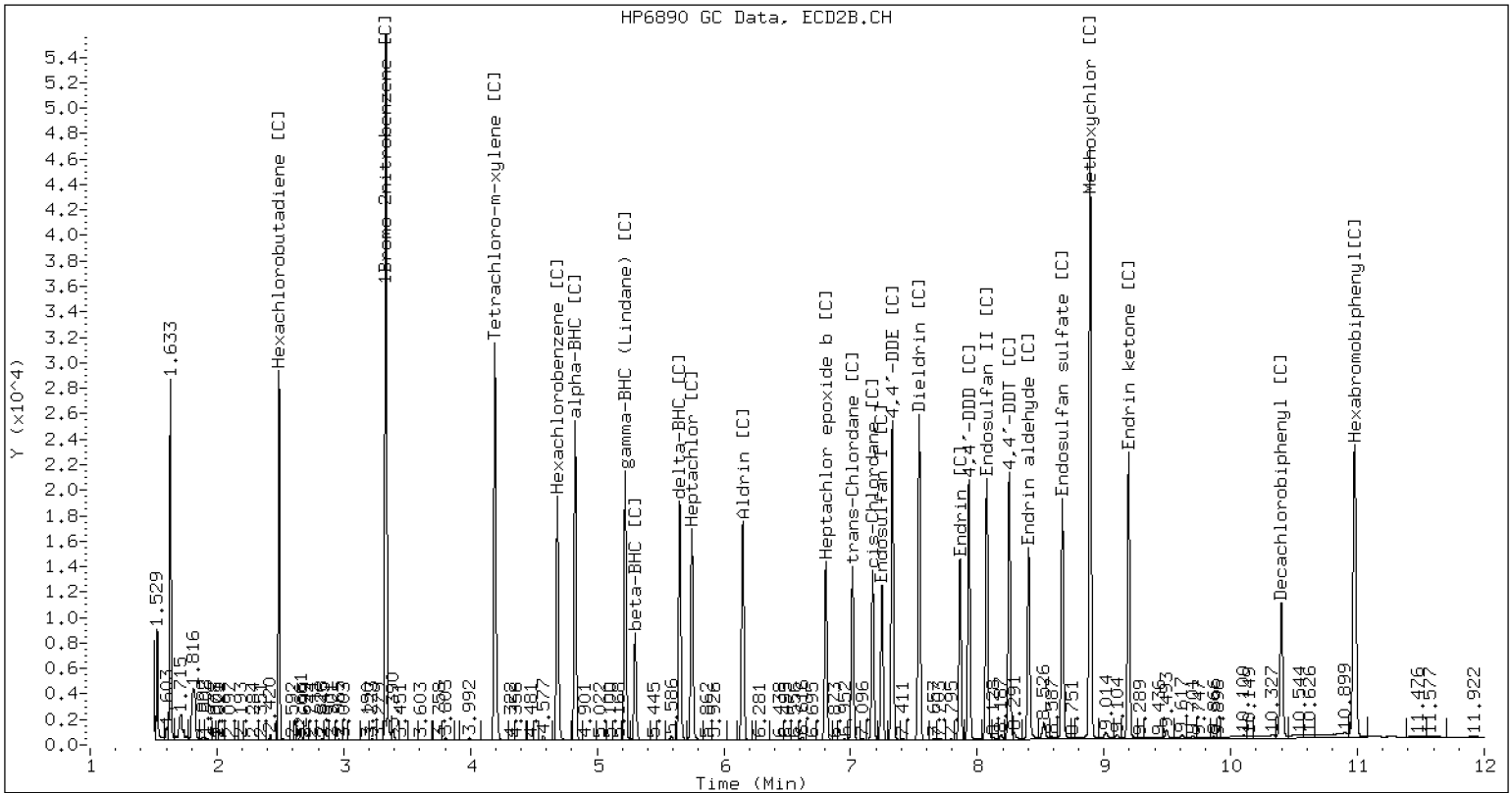
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F4701.D SEQ-INDA4 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F6401.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0093-CCV4</u>	Injection Time:	<u>18:49</u>
Sequence Name:	<u>INDAE5</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4095660		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.3	1.4591090	1.3381500		-8.5	+/-20
Decachlorobiphenyl	A	40.000	36.6	0.8105886	0.7418655		-8.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.4	0.8841805	0.8049382		-9.0	+/-20
Tetrachlorometaxylene	A	40.000	37.4	1.0879510	1.0168510		-6.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.2	1.1261070	1.0206150		-9.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F6401.D
Data file 2: /20230302.b/B20230302.b/002F6401.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA5
Client ID:
Injection Date: 03-MAR-2023 18:49
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.389	-0.002	403802	4.827	-0.003	612327	21.63	20.13	7.2	alpha-BHC
4.777	-0.002	153697	5.300	-0.002	225088	21.38	19.46	9.4	beta-BHC
4.963	-0.002	355860	5.652	-0.002	519240	23.32	20.72	11.8	delta-BHC
4.696	-0.002	350121	5.221	-0.002	528176	21.63	20.46	5.6	gamma-BHC (Lindane)
5.189	-0.002	318388	5.748	-0.002	467209	22.11	19.98	10.1	Heptachlor
5.517	-0.002	334458	6.149	-0.003	483720	20.72	18.11	13.4	Aldrin
6.196	-0.002	280279	6.805	-0.002	376773	20.03	17.06	16.0	Heptachlor epoxide b
6.638	-0.002	259074	7.248	-0.003	321896	20.17	16.54	19.8	Endosulfan I
6.898	-0.002	535604	7.541	-0.002	690086	38.82	32.09	19.0	Dieldrin
6.558	-0.003	518999	7.330	-0.002	653975	40.51	33.16	20.0	4,4'-DDE
7.148	-0.002	287586	7.864	-0.002	373877	27.72	29.68	6.9	Endrin
7.385	-0.003	444918	8.075	-0.003	547436	47.63	42.40	11.6	Endosulfan II
7.204	-0.003	421292	7.934	-0.002	528703	45.07	43.16	4.3	4,4'-DDD
8.246	-0.003	387652	8.671	-0.002	507917	43.71	44.80	2.5	Endosulfan sulfate
7.498	-0.003	428334	8.252	-0.002	560840	45.35	47.43	4.5	4,4'-DDT
7.983	-0.002	910628	8.891	-0.002	1193144	217.56	228.01	4.7	Methoxychlor
8.521	-0.003	486178	9.194	-0.002	599065	47.85	48.92	2.2	Endrin ketone
7.813	-0.003	364729	8.405	-0.003	427903	48.96	46.99	4.1	Endrin aldehyde
6.337	-0.002	287083	7.015	-0.002	367731	20.20	16.70	19.0	trans-Chlordane
6.484	-0.002	282842	7.174	-0.003	354428	19.84	16.45	18.7	cis-Chlordane
2.344	-0.001	369947	2.490	-0.002	492751	18.92	17.06	10.3	Hexachlorobutadiene
4.229	-0.002	341714	4.686	-0.002	507857	19.72	18.34	7.2	Hexachlorobenzene
3.869	-0.002	493020	4.193	-0.002	774691	37.39	36.25	3.1	Tetrachloro-m-xylene
9.435	-0.003	293561	10.400	-0.002	356518	36.61	36.42	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	969700	44.2
Hexabromobiphenyl	609723	791413	29.8

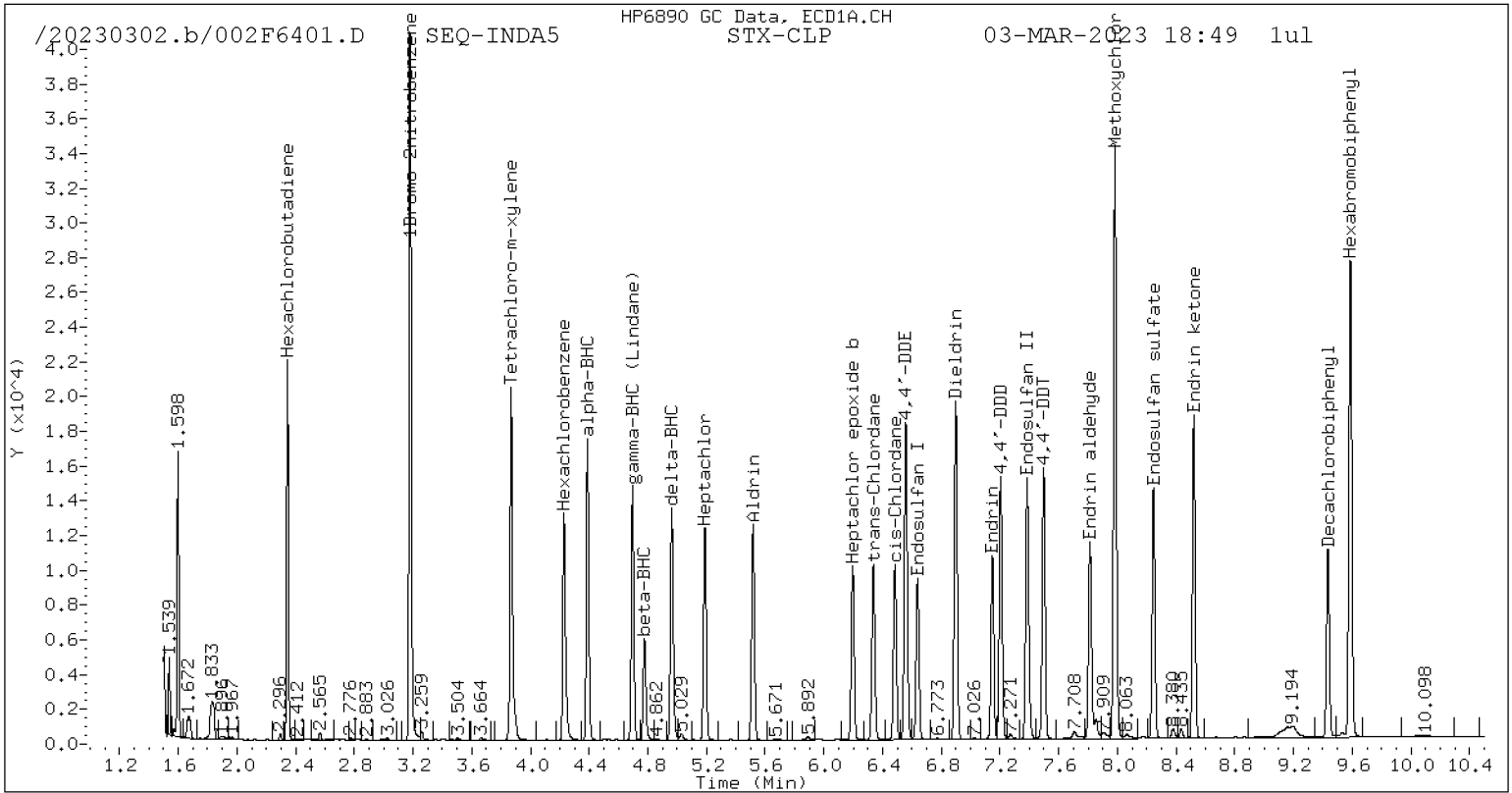
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1518087	50.8
Hexabromobiphenyl	769764	885827	15.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

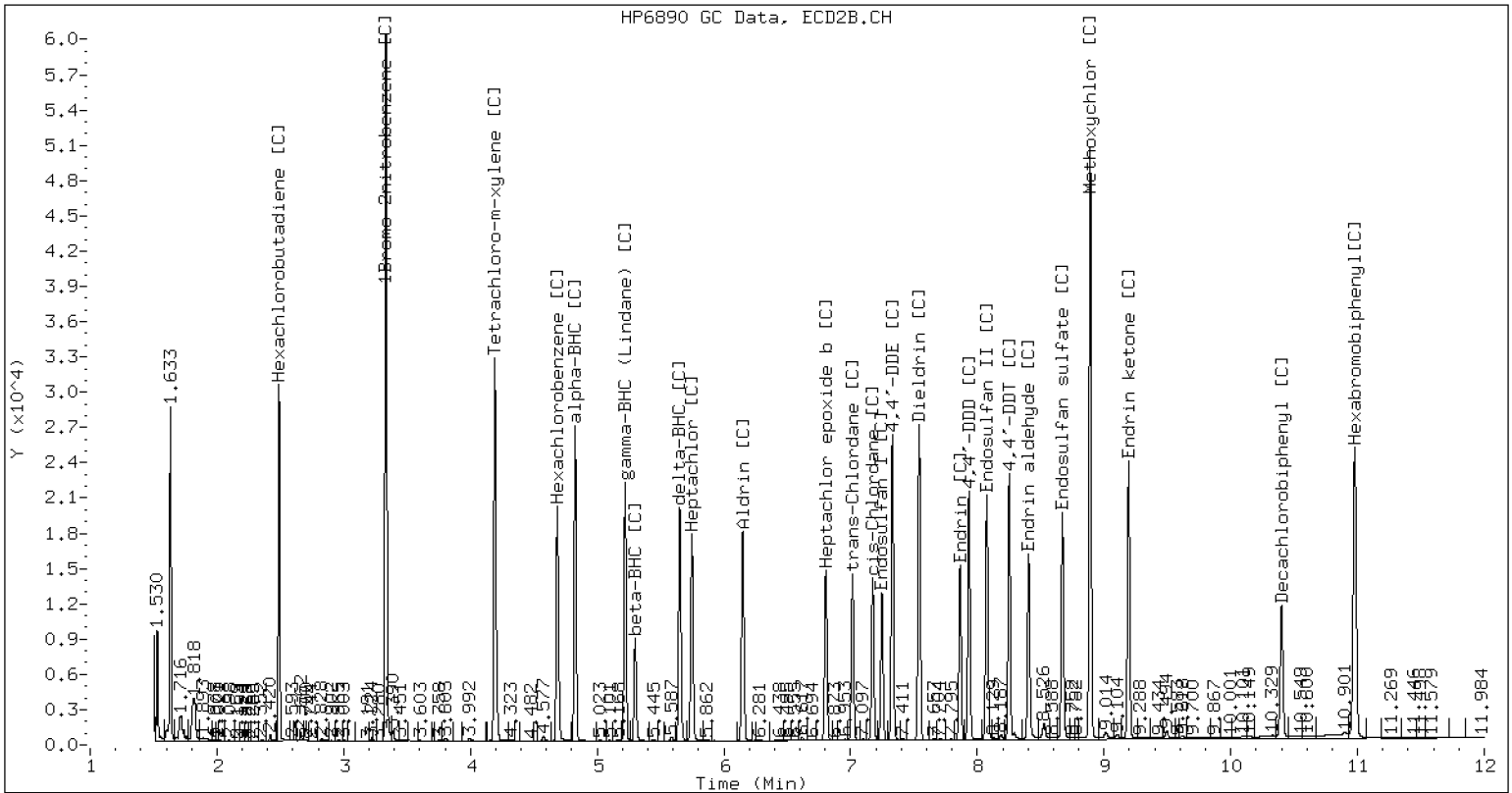
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F6401.D SEQ-INDA5 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F8101.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0093-CCV5</u>	Injection Time:	<u>23:55</u>
Sequence Name:	<u>INDAE6</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.4	1.4298940	1.3896490		-3.0	+/-20
Hexachlorobenzene [2C]	A	20.000	17.9	1.4591090	1.3063800		-10.5	+/-20
Decachlorobiphenyl	A	40.000	36.3	0.8105886	0.7362187		-9.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.1	0.8841805	0.7988071		-9.8	+/-20
Tetrachlorometaxylene	A	40.000	37.1	1.0879510	1.0095270		-7.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.4	1.1261070	0.9979182		-11.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F8101.D
Data file 2: /20230302.b/B20230302.b/002F8101.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA6
Client ID:
Injection Date: 03-MAR-2023 23:55
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.389	-0.002	423670	4.826	-0.003	632459	21.39	19.66	8.4	alpha-BHC
4.777	-0.002	161663	5.299	-0.003	237106	21.20	19.39	8.9	beta-BHC
4.963	-0.002	374799	5.651	-0.003	545788	23.15	20.60	11.7	delta-BHC
4.696	-0.002	369134	5.221	-0.002	554303	21.49	20.30	5.7	gamma-BHC (Lindane)
5.189	-0.002	330103	5.747	-0.003	487989	21.60	19.73	9.0	Heptachlor
5.516	-0.003	347634	6.149	-0.003	500567	20.30	17.73	13.5	Aldrin
6.196	-0.003	293193	6.804	-0.003	391207	19.74	16.75	16.4	Heptachlor epoxide b
6.638	-0.002	267449	7.247	-0.003	329740	19.62	16.02	20.2	Endosulfan I
6.898	-0.003	555584	7.541	-0.003	709727	37.95	31.21	19.5	Dieldrin
6.558	-0.002	537176	7.329	-0.002	668290	39.52	32.05	20.9	4,4'-DDE
7.148	-0.003	326649	7.863	-0.003	392822	30.86	30.09	2.5	Endrin
7.385	-0.003	450235	8.075	-0.003	571156	47.25	42.69	10.1	Endosulfan II
7.204	-0.003	431860	7.933	-0.003	549109	45.28	43.25	4.6	4,4'-DDD
8.246	-0.003	393731	8.670	-0.003	522785	43.51	44.49	2.2	Endosulfan sulfate
7.498	-0.003	436042	8.251	-0.002	557519	45.25	45.49	0.5	4,4'-DDT
7.984	-0.002	952291	8.890	-0.002	1225977	223.00	226.06	1.4	Methoxychlor
8.521	-0.003	486130	9.193	-0.003	613799	46.90	48.37	3.1	Endrin ketone
7.813	-0.003	353104	8.404	-0.003	440487	46.46	46.67	0.5	Endrin aldehyde
6.337	-0.002	297118	7.014	-0.003	380777	19.70	16.35	18.6	trans-Chlordane
6.484	-0.003	291264	7.174	-0.003	363732	19.25	15.97	18.7	cis-Chlordane
2.344	-0.001	390461	2.490	-0.002	519362	18.81	17.00	10.1	Hexachlorobutadiene
4.229	-0.002	357497	4.686	-0.002	524287	19.44	17.91	8.2	Hexachlorobenzene
3.869	-0.002	519416	4.193	-0.002	800985	37.12	35.45	4.6	Tetrachloro-m-xylene
9.435	-0.003	297224	10.400	-0.003	366678	36.33	36.14	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	1029028	53.0
Hexabromobiphenyl	609723	807434	32.4

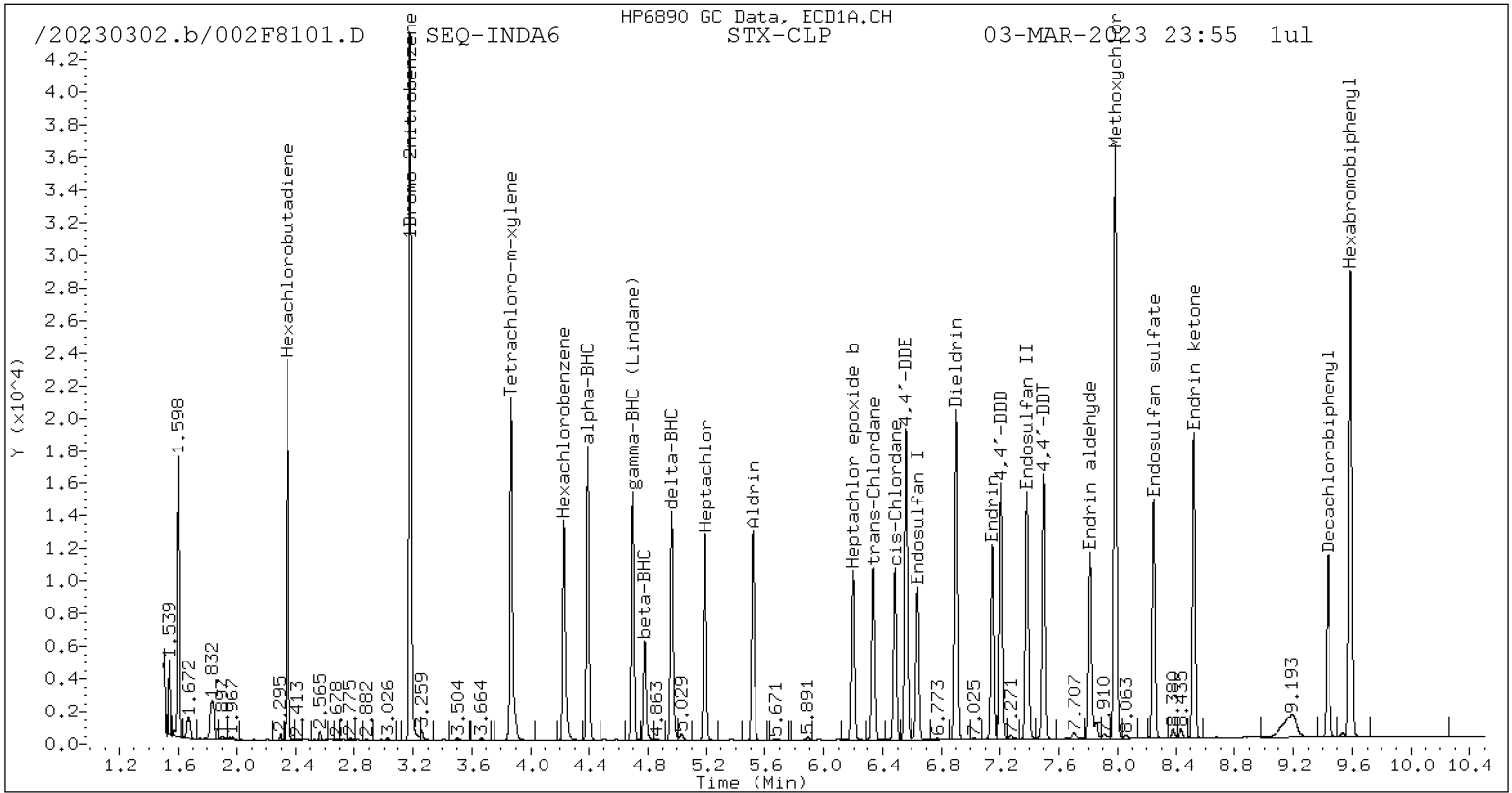
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1605312	59.5
Hexabromobiphenyl	769764	918064	19.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

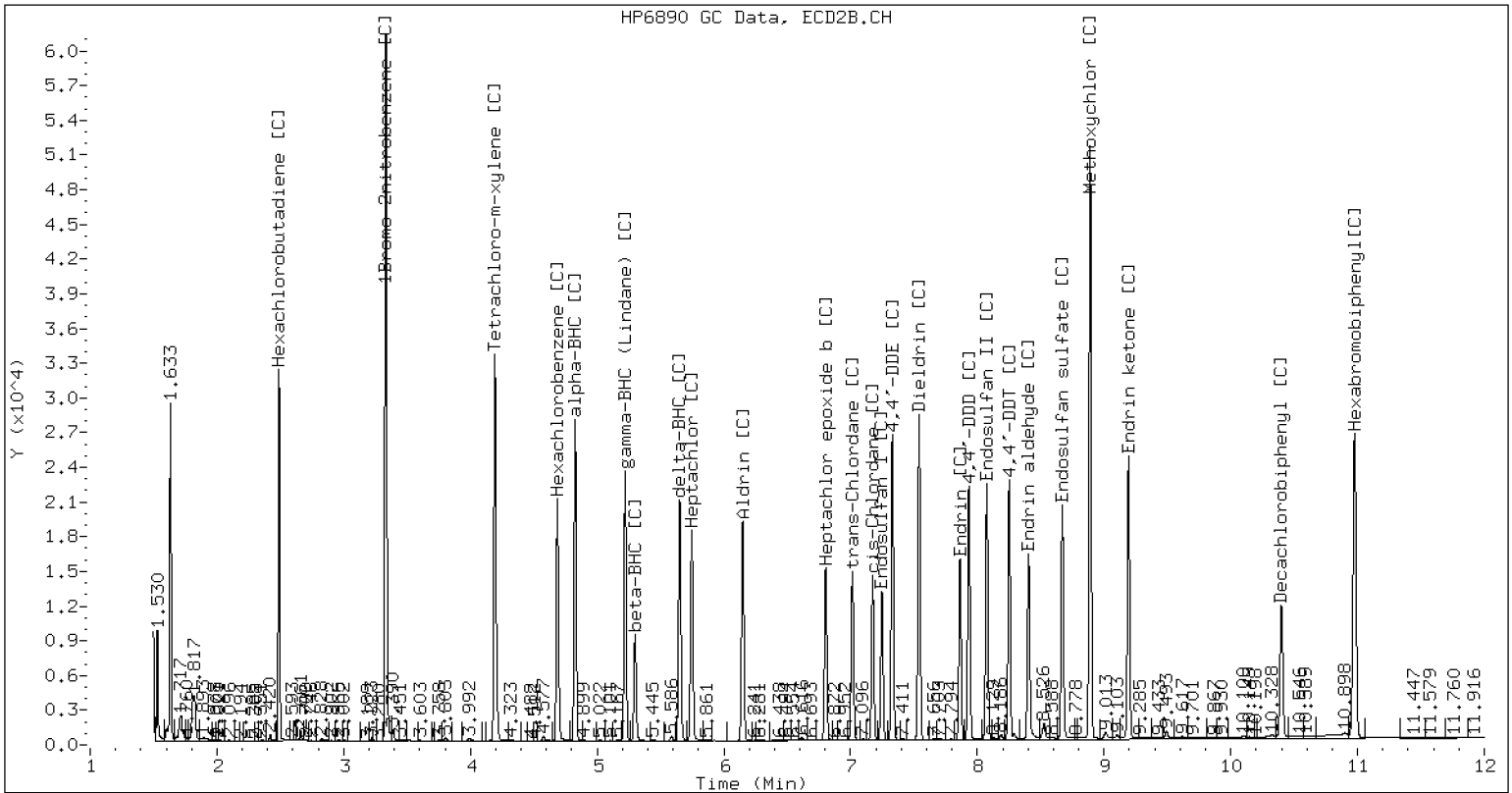
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F8101.D SEQ-INDA6 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F8601.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0093</u>	Injection Date:	<u>03/04/23</u>
Lab Sample ID:	<u>SLC0093-CCV6</u>	Injection Time:	<u>01:24</u>
Sequence Name:	<u>INDAE7</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.6	1.4298940	1.4046940		-2.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3433990		-8.0	+/-20
Decachlorobiphenyl	A	40.000	36.8	0.8105886	0.7463003		-8.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.3	0.8841805	0.8471666		-4.3	+/-20
Tetrachlorometaxylene	A	40.000	37.4	1.0879510	1.0181890		-6.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.9	1.1261070	1.0399830		-7.8	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F8601.D
Data file 2: /20230302.b/B20230302.b/002F8601.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA7
Client ID:
Injection Date: 04-MAR-2023 01:24
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.390	-0.002	232463	4.827	-0.003	348200	20.93	19.69	6.1	alpha-BHC
4.778	-0.001	88525	5.300	-0.002	130148	20.70	19.36	6.7	beta-BHC
4.965	-0.001	203026	5.652	-0.002	293836	22.37	20.17	10.3	delta-BHC
4.697	-0.002	201127	5.221	-0.002	300315	20.89	20.01	4.3	gamma-BHC (Lindane)
5.189	-0.002	183971	5.747	-0.003	263668	21.47	19.40	10.2	Heptachlor
5.517	-0.002	195945	6.149	-0.003	278631	20.41	17.95	12.8	Aldrin
6.196	-0.003	166908	6.803	-0.003	220132	20.05	17.15	15.6	Heptachlor epoxide b
6.638	-0.002	153603	7.247	-0.003	184462	20.10	16.31	20.9	Endosulfan I
6.898	-0.003	319494	7.540	-0.003	395976	38.92	31.68	20.5	Dieldrin
6.558	-0.002	308565	7.329	-0.003	375932	40.49	32.80	21.0	4,4'-DDE
7.148	-0.003	163573	7.863	-0.003	180559	27.02	25.12	7.3	Endrin
7.386	-0.002	264500	8.075	-0.003	318841	48.53	43.27	11.5	Endosulfan II
7.205	-0.002	250266	7.933	-0.003	301992	45.88	43.19	6.0	4,4'-DDD
8.246	-0.003	229289	8.671	-0.003	305427	44.31	47.21	6.3	Endosulfan sulfate
7.498	-0.003	251470	8.251	-0.002	311428	45.63	46.15	1.1	4,4'-DDT
7.984	-0.002	527622	8.890	-0.002	661873	216.03	221.63	2.6	Methoxychlor
8.522	-0.002	288922	9.193	-0.003	351587	48.74	50.31	3.2	Endrin ketone
7.813	-0.003	214471	8.405	-0.002	248838	49.34	47.88	3.0	Endrin aldehyde
6.337	-0.002	168370	7.014	-0.003	211553	19.91	16.53	18.6	trans-Chlordane
6.484	-0.003	166433	7.174	-0.003	203902	19.63	16.29	18.6	cis-Chlordane
2.345	-0.000	216480	2.491	-0.000	290101	18.61	17.28	7.4	Hexachlorobutadiene
4.230	-0.001	202586	4.687	-0.001	296322	19.65	18.41	6.5	Hexachlorobenzene
3.870	-0.001	293688	4.194	-0.001	458791	37.44	36.94	1.3	Tetrachloro-m-xylene
9.435	-0.002	172317	10.399	-0.003	214140	36.83	38.33	4.0	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	576883	-14.2
Hexabromobiphenyl	609723	461790	-24.3

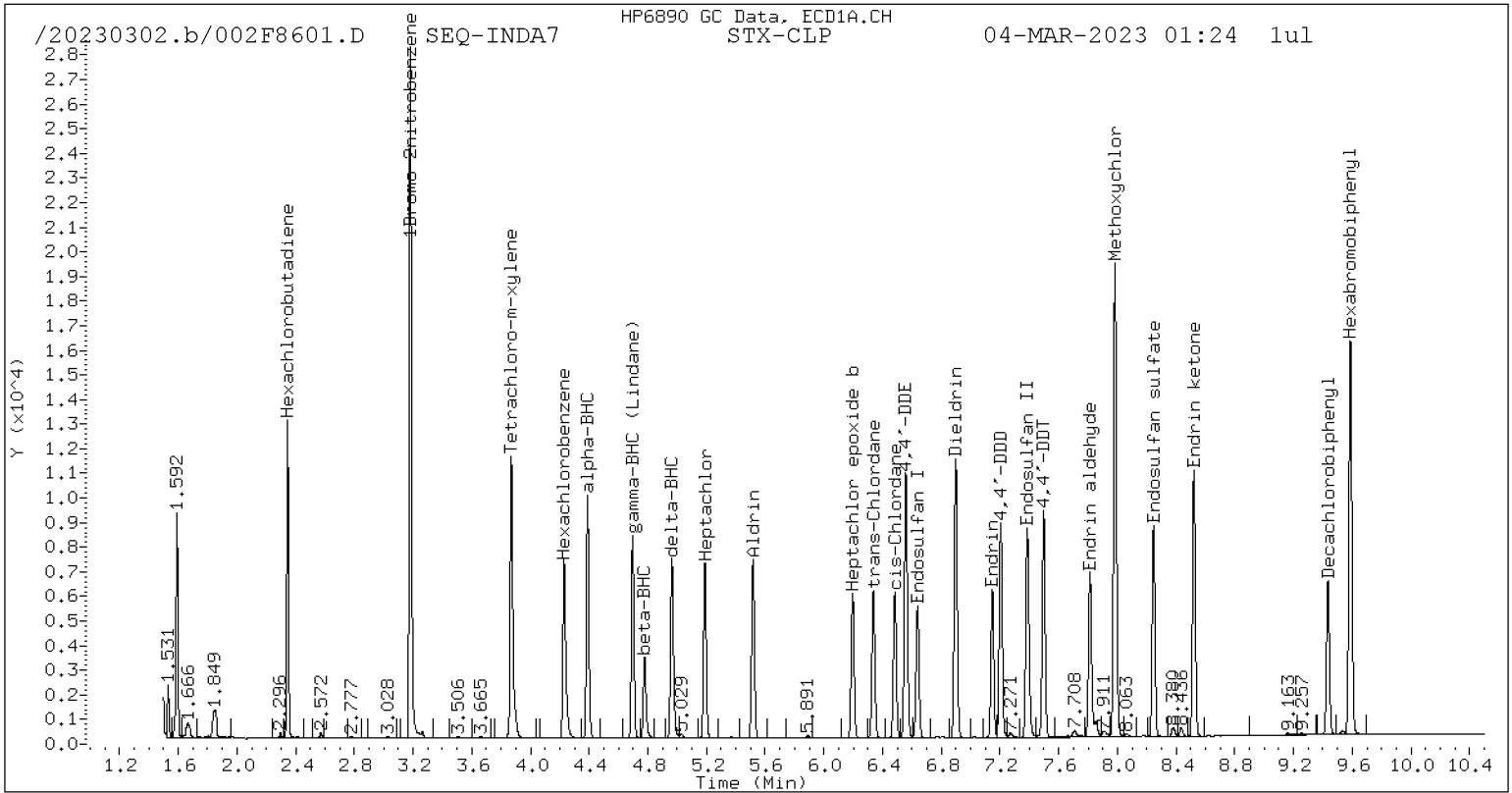
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	882305	-12.3
Hexabromobiphenyl	769764	505544	-34.3

* Standard Areas taken from Initial Cal Level 5

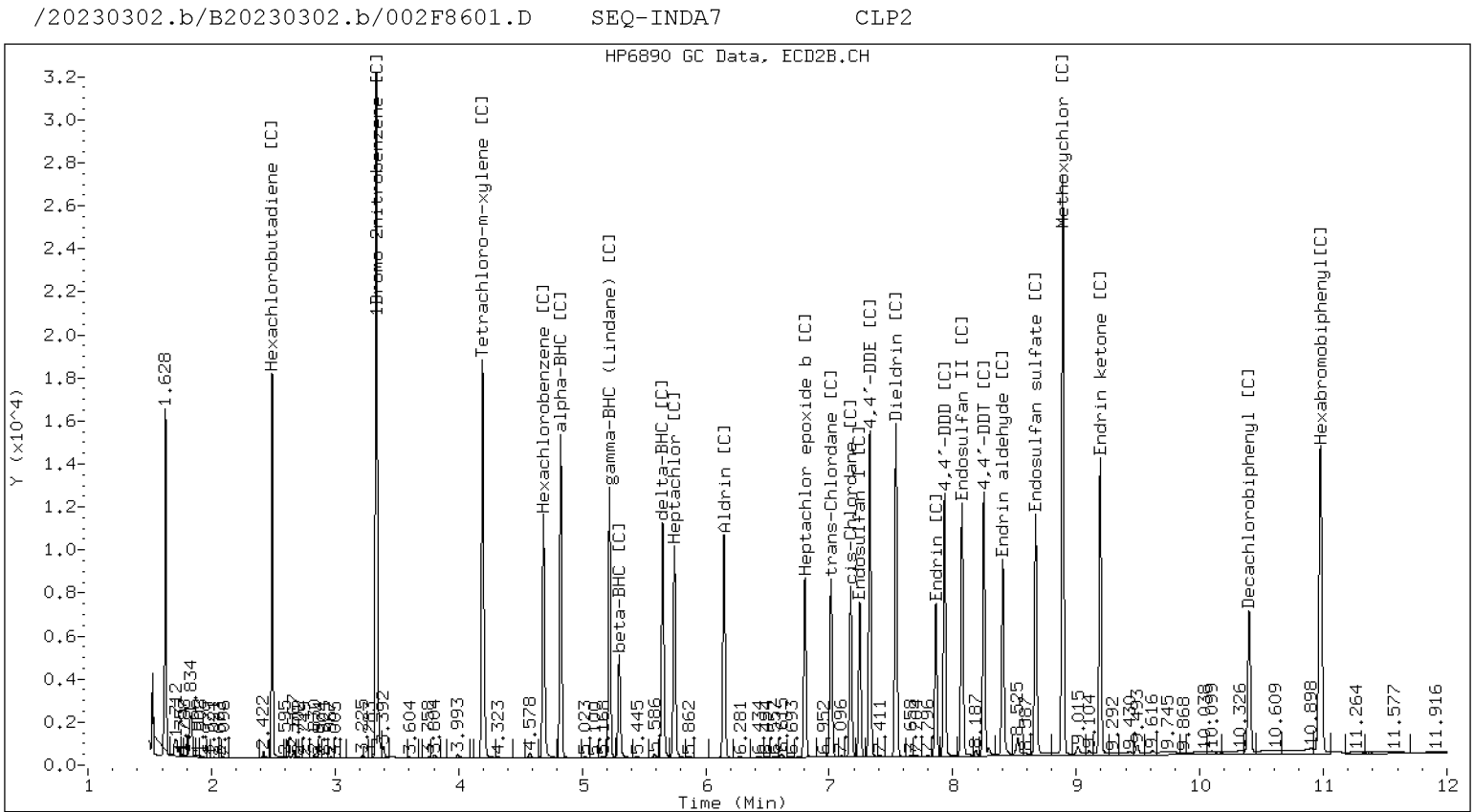
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F1601.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0106</u>	Injection Date:	<u>03/07/23</u>
Lab Sample ID:	<u>SLC0106-CCV1</u>	Injection Time:	<u>13:29</u>
Sequence Name:	<u>INDAE2</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4092350		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.3	1.4591090	1.3381770		-8.5	+/-20
Decachlorobiphenyl	A	40.000	36.5	0.8105886	0.7388784		-8.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.7	0.8841805	0.8333868		-5.8	+/-20
Tetrachlorometaxylene	A	40.000	35.9	1.0879510	0.9766068		-10.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.7	1.1261070	1.0342220		-8.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/002F1601.D
Data file 2: /20230307.b/B20230307.b/002F1601.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA2
Client ID:
Injection Date: 07-MAR-2023 13:29
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.378	-0.000	320553	4.816	-0.000	482298	21.19	19.70	7.3	alpha-BHC
4.766	0.000	121405	5.289	-0.000	181344	20.84	19.48	6.8	beta-BHC
4.952	-0.000	277506	5.640	-0.000	367860	22.44	18.24	20.7	delta-BHC
4.685	0.000	278205	5.210	0.000	420392	21.21	20.23	4.7	gamma-BHC (Lindane)
5.177	0.000	252486	5.735	-0.001	368629	21.63	19.58	10.0	Heptachlor
5.504	-0.000	262997	6.137	-0.000	379463	20.11	17.65	13.0	Aldrin
6.182	-0.001	223548	6.792	-0.001	304634	19.71	17.14	14.0	Heptachlor epoxide b
6.625	-0.000	204089	7.236	-0.000	254368	19.61	16.24	18.8	Endosulfan I
6.884	-0.001	433328	7.529	-0.001	559090	38.76	32.30	18.2	Dieldrin
6.545	-0.001	408330	7.318	-0.001	517727	39.33	32.62	18.7	4,4'-DDE
7.135	-0.001	282335	7.852	-0.001	340641	36.39	34.64	4.9	Endrin
7.371	-0.001	340308	8.062	-0.002	444173	48.72	44.06	10.0	Endosulfan II
7.192	-0.000	319954	7.923	-0.001	432495	45.77	45.21	1.2	4,4'-DDD
8.232	-0.001	299066	8.659	-0.001	395437	45.09	44.67	0.9	Endosulfan sulfate
7.484	-0.001	328944	8.240	-0.001	410518	46.57	44.46	4.6	4,4'-DDT
7.971	-0.001	702494	8.880	-0.001	915670	224.44	224.11	0.1	Methoxychlor
8.507	-0.001	361468	9.182	0.000	458683	47.58	47.98	0.8	Endrin ketone
7.799	-0.001	263235	8.393	-0.001	329555	47.25	46.35	1.9	Endrin aldehyde
6.323	-0.000	223432	7.003	-0.001	296469	19.40	16.73	14.8	trans-Chlordane
6.470	-0.001	218904	7.163	-0.000	281087	18.95	16.21	15.6	cis-Chlordane
2.336	0.000	291636	2.482	-0.000	337517	18.40	14.51	23.6	Hexachlorobutadiene
4.219	0.000	276853	4.676	0.000	408776	19.71	18.34	7.2	Hexachlorobenzene
3.859	0.000	383721	4.183	0.000	631852	35.91	36.74	2.3	Tetrachloro-m-xylene
9.421	-0.000	218633	10.384	-0.001	288206	36.46	37.70	3.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	785825	16.9
Hexabromobiphenyl	609723	591797	-2.9

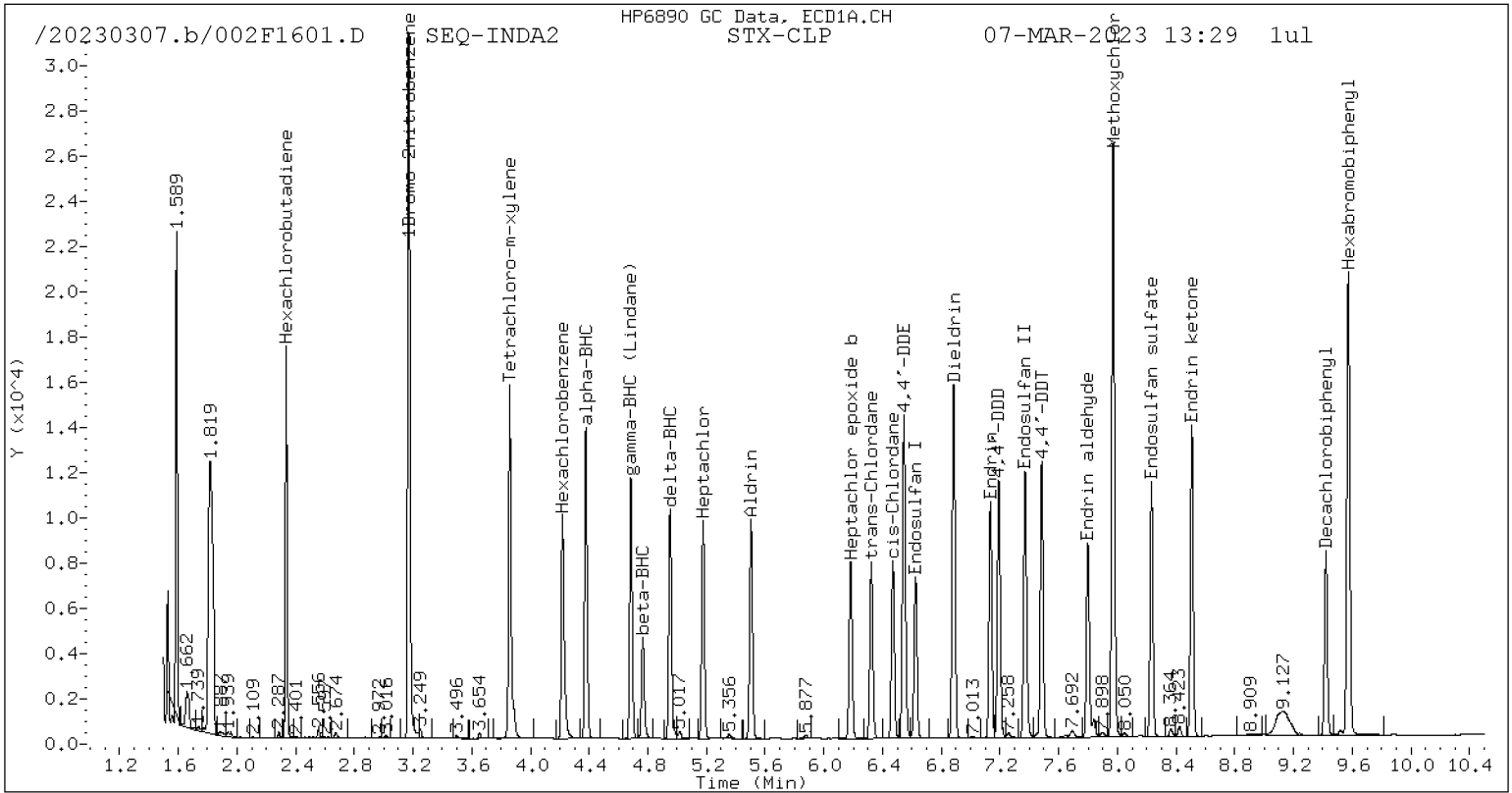
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1221889	21.4
Hexabromobiphenyl	769764	691650	-10.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

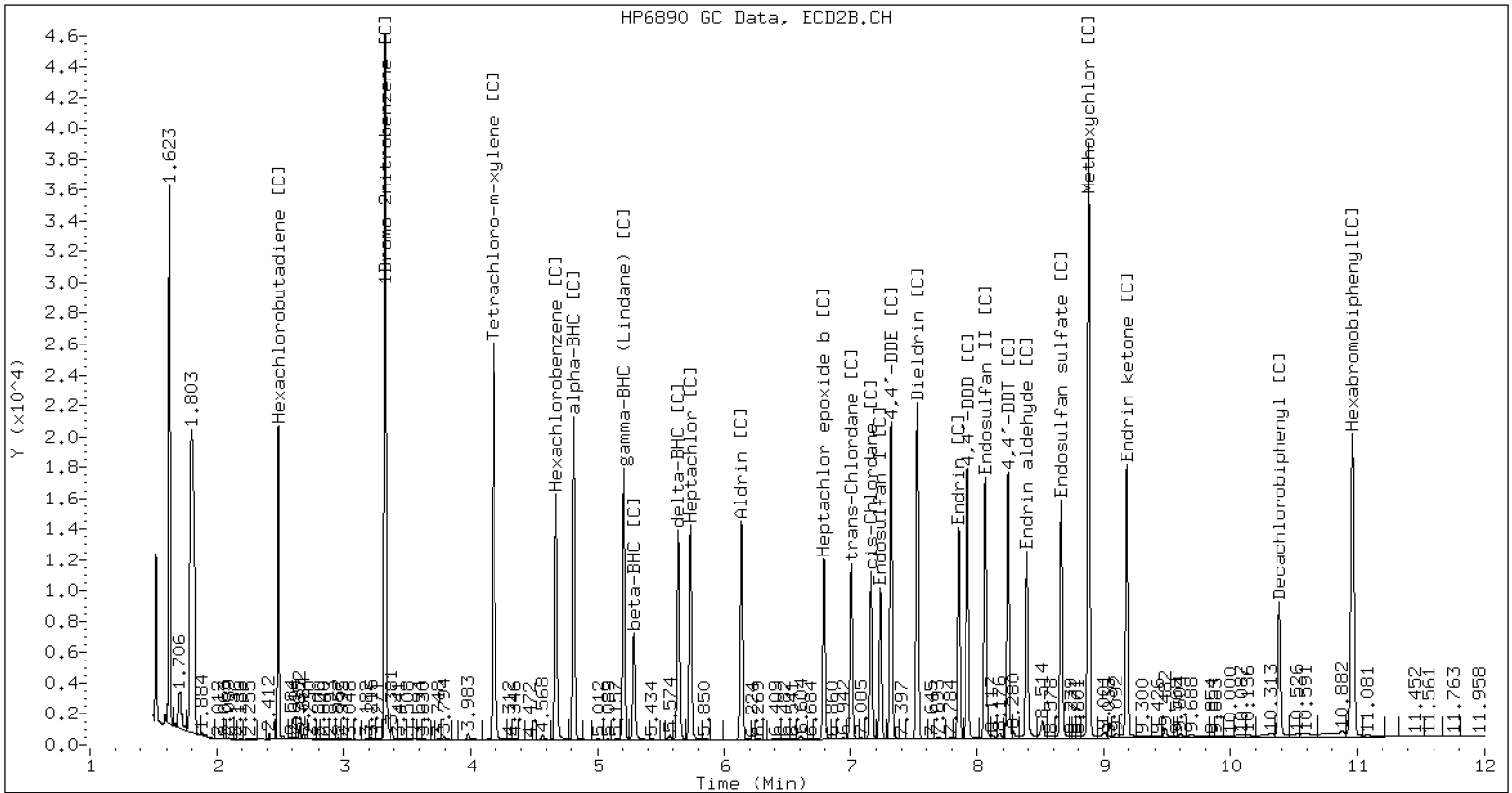
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230307.b/B20230307.b/002F1601.D SEQ-INDA2 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F3001.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0106</u>	Injection Date:	<u>03/07/23</u>
Lab Sample ID:	<u>SLC0106-CCV2</u>	Injection Time:	<u>17:41</u>
Sequence Name:	<u>INDAE3</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.8	1.4298940	1.4178620		-1.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.5	1.4591090	1.3468270		-7.5	+/-20
Decachlorobiphenyl	A	40.000	36.1	0.8105886	0.7310366		-9.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.7	0.8841805	0.8122374		-8.3	+/-20
Tetrachlorometaxylene	A	40.000	36.1	1.0879510	0.9822595		-9.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.8	1.1261070	1.0371160		-8.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/002F3001.D
Data file 2: /20230307.b/B20230307.b/002F3001.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA3
Client ID:
Injection Date: 07-MAR-2023 17:41
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.378	-0.000	331795	4.815	-0.001	506296	21.31	19.87	7.0	alpha-BHC
4.766	-0.000	127380	5.288	-0.001	190406	21.25	19.66	7.8	beta-BHC
4.951	-0.001	287040	5.639	-0.001	385433	22.56	18.37	20.5	delta-BHC
4.684	-0.000	288824	5.209	-0.000	440439	21.40	20.37	4.9	gamma-BHC (Lindane)
5.176	0.000	258476	5.734	-0.001	387759	21.52	19.80	8.3	Heptachlor
5.504	-0.000	272236	6.136	-0.001	402747	20.23	18.01	11.6	Aldrin
6.182	-0.001	230076	6.792	-0.001	317341	19.71	17.16	13.8	Heptachlor epoxide b
6.624	-0.001	208981	7.235	-0.001	267500	19.51	16.41	17.3	Endosulfan I
6.884	-0.001	441962	7.528	-0.002	584066	38.41	32.43	16.9	Dieldrin
6.545	-0.001	418514	7.318	-0.002	540799	39.18	32.75	17.9	4,4'-DDE
7.134	-0.001	268949	7.852	-0.001	328926	32.73	30.91	5.7	Endrin
7.371	-0.001	352294	8.063	-0.001	466834	47.63	42.80	10.7	Endosulfan II
7.191	-0.001	338673	7.922	-0.001	442618	45.75	42.76	6.8	4,4'-DDD
8.232	-0.002	315241	8.659	-0.001	414944	44.88	43.32	3.5	Endosulfan sulfate
7.484	-0.001	335219	8.239	-0.002	429256	44.81	42.97	4.2	4,4'-DDT
7.970	-0.002	714703	8.879	-0.001	937242	215.62	212.00	1.7	Methoxychlor
8.507	-0.001	385573	9.181	-0.001	486022	47.92	46.98	2.0	Endrin ketone
7.799	-0.001	279874	8.392	-0.002	345706	47.44	44.93	5.4	Endrin aldehyde
6.323	-0.001	230017	7.003	-0.001	309648	19.41	16.79	14.4	trans-Chlordane
6.470	-0.001	225040	7.162	-0.001	294815	18.93	16.34	14.7	cis-Chlordane
2.335	-0.000	300435	2.482	-0.000	349318	18.42	14.44	24.2	Hexachlorobutadiene
4.219	-0.000	286642	4.676	-0.000	428056	19.83	18.46	7.2	Hexachlorobenzene
3.859	0.000	397157	4.183	0.000	659244	36.11	36.84	2.0	Tetrachloro-m-xylene
9.420	-0.001	229082	10.384	-0.001	303936	36.07	36.75	1.8	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	808660	20.3
Hexabromobiphenyl	609723	626732	2.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1271302	26.3
Hexabromobiphenyl	769764	748392	-2.8

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>002F3401.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLC0106</u>	Injection Date:	<u>03/07/23</u>
Lab Sample ID:	<u>SLC0106-CCV3</u>	Injection Time:	<u>18:53</u>
Sequence Name:	<u>INDAE4</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.6	1.4298940	1.4043550		-2.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.2	1.4591090	1.3292630		-9.0	+/-20
Decachlorobiphenyl	A	40.000	37.4	0.8105886	0.7583349		-6.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.4	0.8841805	0.8498141		-4.0	+/-20
Tetrachlorometaxylene	A	40.000	36.2	1.0879510	0.9840989		-9.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.8	1.1261070	1.0366350		-8.0	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/002F3401.D
Data file 2: /20230307.b/B20230307.b/002F3401.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA4
Client ID:
Injection Date: 07-MAR-2023 18:53
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.379	0.001	175125	4.816	0.000	261369	20.32	18.96	6.9	alpha-BHC
4.767	0.001	69842	5.289	-0.000	100875	21.05	19.25	9.0	beta-BHC
4.952	0.000	154645	5.640	-0.000	207029	21.96	18.23	18.6	delta-BHC
4.685	0.001	152912	5.210	0.001	229369	20.47	19.61	4.3	gamma-BHC (Lindane)
5.177	0.000	137979	5.735	-0.001	203047	20.76	19.16	8.0	Heptachlor
5.504	-0.000	146086	6.136	-0.001	215282	19.61	17.79	9.7	Aldrin
6.182	-0.001	125399	6.791	-0.002	170913	19.41	17.08	12.8	Heptachlor epoxide b
6.624	-0.001	115352	7.235	-0.001	143253	19.46	16.24	18.0	Endosulfan I
6.884	-0.000	247910	7.528	-0.002	313099	38.93	32.13	19.1	Dieldrin
6.545	-0.001	228676	7.318	-0.002	288440	38.68	32.28	18.0	4,4'-DDE
7.134	-0.001	134725	7.851	-0.002	160123	29.88	27.41	8.6	Endrin
7.372	-0.000	195347	8.063	-0.001	257965	48.13	43.08	11.1	Endosulfan II
7.192	-0.001	187650	7.922	-0.001	236067	46.20	41.54	10.6	4,4'-DDD
8.232	-0.001	173365	8.658	-0.002	232997	44.98	44.31	1.5	Endosulfan sulfate
7.484	-0.001	185008	8.240	-0.002	228490	45.07	41.66	7.9	4,4'-DDT
7.971	-0.001	392930	8.878	-0.002	508835	216.02	209.63	3.0	Methoxychlor
8.507	-0.001	212630	9.181	-0.001	282662	48.16	49.76	3.3	Endrin ketone
7.799	-0.001	164247	8.393	-0.001	201150	50.73	47.62	6.3	Endrin aldehyde
6.323	-0.000	124493	7.002	-0.001	165751	18.98	16.61	13.3	trans-Chlordane
6.470	-0.001	123136	7.162	-0.001	158806	18.71	16.27	14.0	cis-Chlordane
2.337	0.001	164716	2.483	0.002	200236	18.25	15.29	17.6	Hexachlorobutadiene
4.220	0.001	157140	4.677	0.001	228601	19.64	18.22	7.5	Hexachlorobenzene
3.861	0.002	220231	4.184	0.001	356552	36.18	36.82	1.8	Tetrachloro-m-xylene
9.421	-0.001	130401	10.385	-0.000	174596	37.42	38.45	2.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	447579	-33.4
Hexabromobiphenyl	609723	343914	-43.6

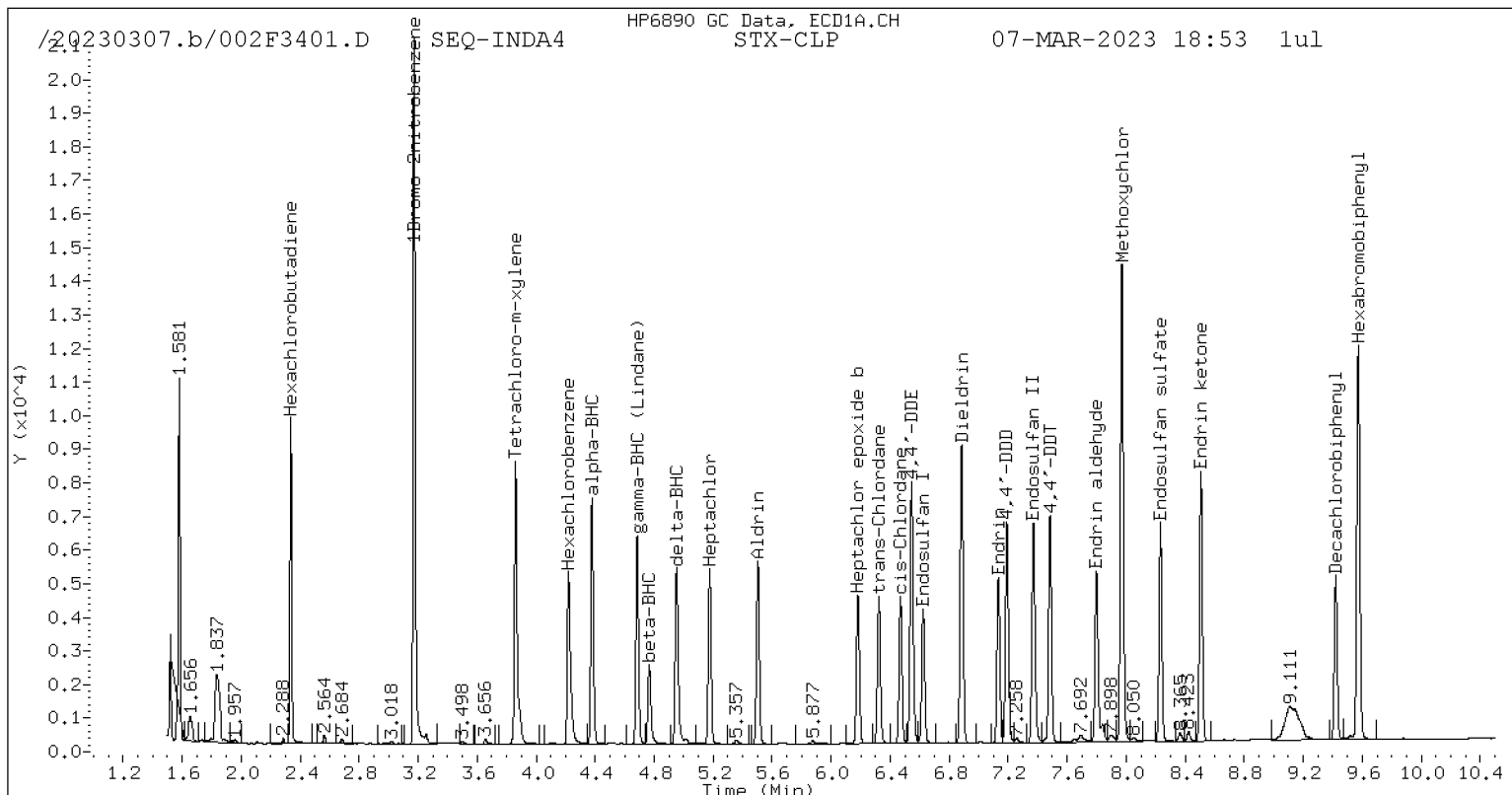
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	687903	-31.7
Hexabromobiphenyl	769764	410904	-46.6

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

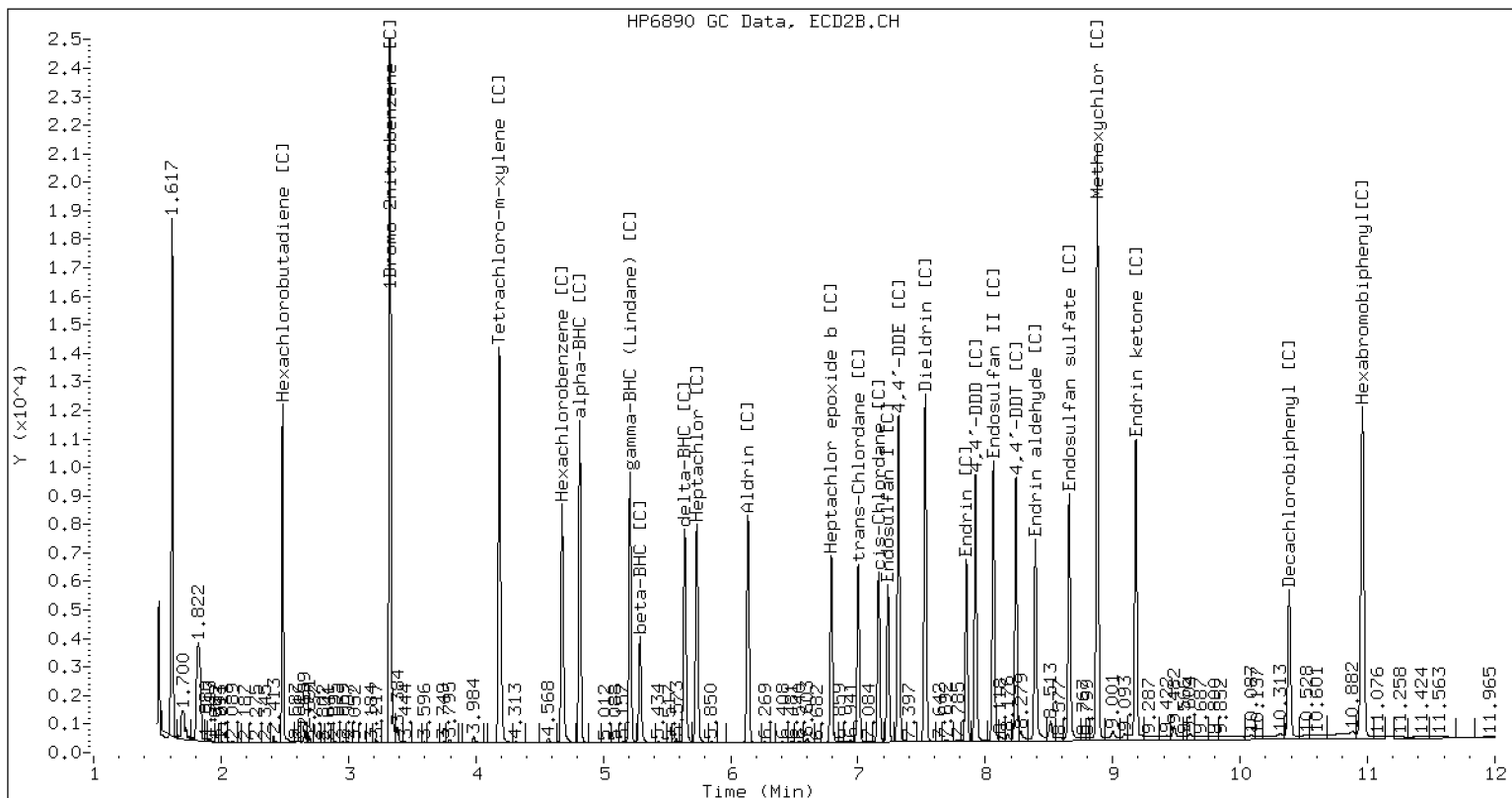
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230307.b/B20230307.b/002F3401.D SEQ-INDA4 CLP2



CLP-2 Manual Integration: NO



PERFORMANCE EVALUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC

Laboratory ID: SKL0233-PEM1

File ID: 22121404.D

Client: Anchor QEA, LLC

Matrix: Water

Instrument: ECD6

Project: AOC5 MR Phase 1

Analyzed: 12/14/2022

Sequence: SKL0233

SDG: 23B0229

Calibration: FL00041

Column: 1

PEM COMPOUND	RT	Response
4,4'-DDE	6.49	6258
Endrin	7.08	745471
4,4'-DDD	7.14	15566
Endrin Aldehyde	7.75	21328
4,4'-DDT	7.43	629664
Endrin Ketone	8.45	19276

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 5.2



PERFORMANCE EVALUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC

Laboratory ID: SKL0233-PEM1

File ID: 22121404.D

Client: Anchor QEA, LLC

Matrix: Water

Instrument: ECD6

Project: AOC5 MR Phase 1

Analyzed: 12/14/2022

Sequence: SKL0233

SDG: 23B0229

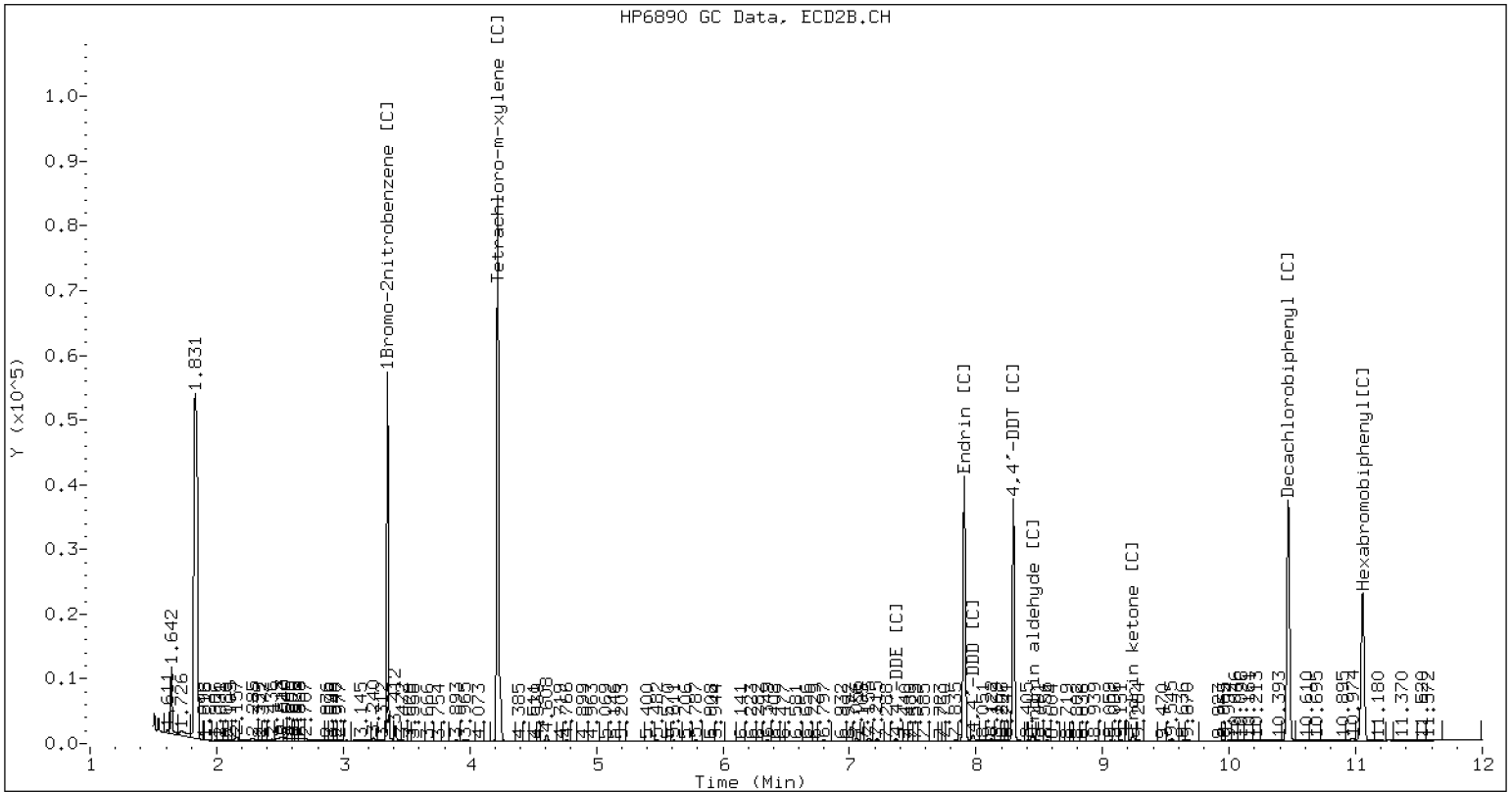
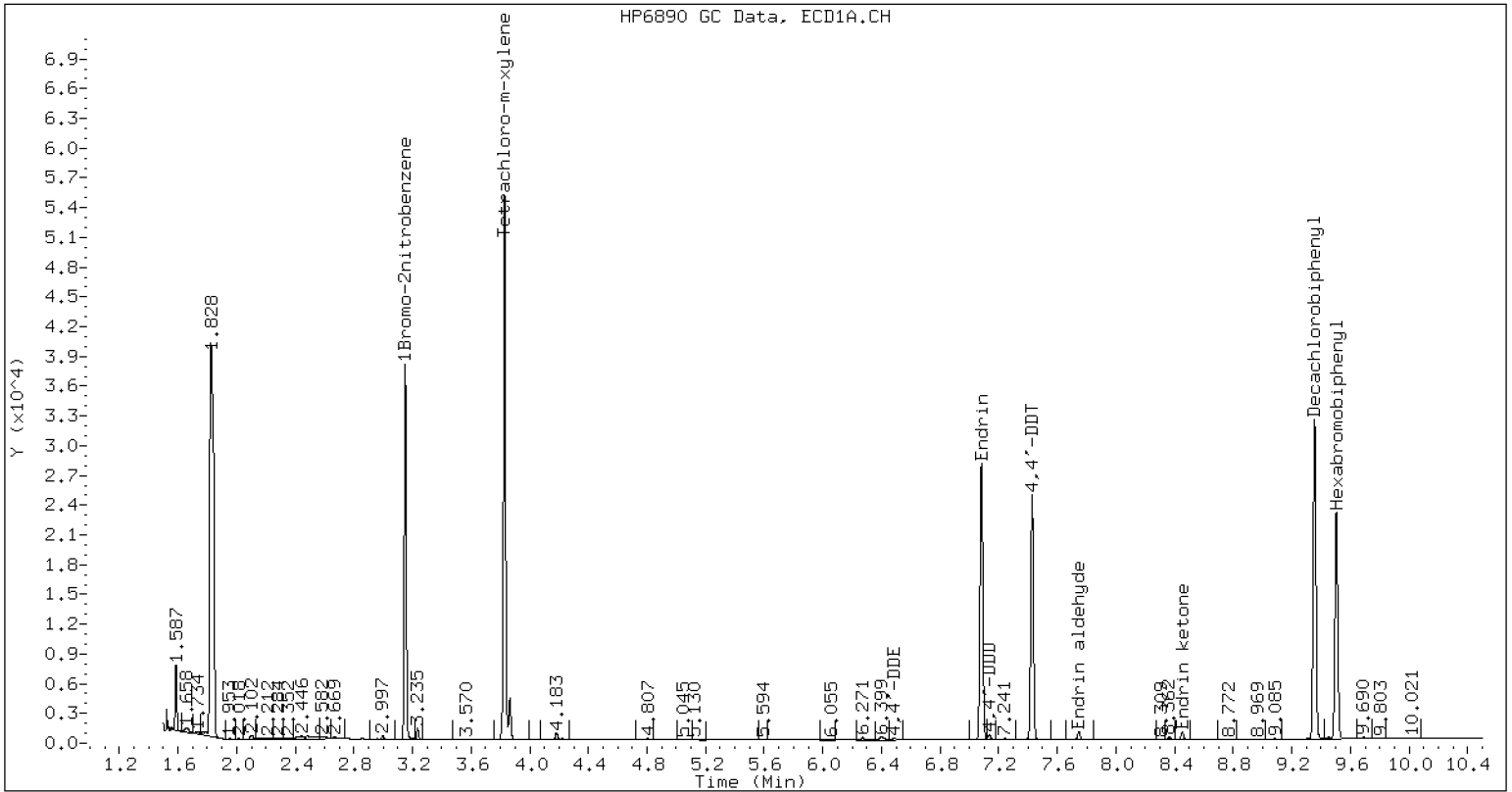
Calibration: FL00041

Column: 2

PEM COMPOUND	RT	Response
4,4'-DDE	7.37	11906
Endrin	7.91	1029194
4,4'-DDD	7.98	32697
Endrin Aldehyde	8.45	31426
4,4'-DDT	8.30	890195
Endrin Ketone	9.24	28268

4,4'-DDT %Breakdown (1): 4.8

Endrin %Breakdown (1): 5.5



7E
8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D
Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
 $((6258+15566) * 100)/(6258+15566+629664)$

Endrin Percent Breakdown = 5.2 %
 $((21328+19276) * 100)/(21328+19276+745471)$

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312



Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SKL0233

Instrument: ECD6

Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SKL0233-PEM1	22121404.D	22121404.D	NA	12/14/22 20:20
Cal Standard	SKL0233-CAL1	22121405.D	22121405.D	NA	12/14/22 20:38
Cal Standard	SKL0233-CAL2	22121406.D	22121406.D	NA	12/14/22 20:56
Cal Standard	SKL0233-CAL3	22121407.D	22121407.D	NA	12/14/22 21:14
Cal Standard	SKL0233-CAL4	22121408.D	22121408.D	NA	12/14/22 21:31
Cal Standard	SKL0233-CAL5	22121409.D	22121409.D	NA	12/14/22 21:49
Cal Standard	SKL0233-CAL6	22121410.D	22121410.D	NA	12/14/22 22:07
Cal Standard	SKL0233-CAL7	22121411.D	22121411.D	NA	12/14/22 22:25
Cal Standard	SKL0233-CAL8	22121412.D	22121412.D	NA	12/14/22 22:43
Cal Standard	SKL0233-CAL9	22121413.D	22121413.D	NA	12/14/22 23:01
Cal Standard	SKL0233-CALA	22121414.D	22121414.D	NA	12/14/22 23:19
Cal Standard	SKL0233-CALB	22121415.D	22121415.D	NA	12/14/22 23:36
Cal Standard	SKL0233-CALC	22121416.D	22121416.D	NA	12/14/22 23:54
Cal Standard	SKL0233-CALD	22121417.D	22121417.D	NA	12/15/22 00:12
Cal Standard	SKL0233-CALE	22121418.D	22121418.D	NA	12/15/22 00:30



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WPDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022	19:27	22121401.D	1	RINSE	
2	14-DEC-2022	19:44	22121402.D	1	RINSE	
3	14-DEC-2022	20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022	20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022	20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022	20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022	21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022	21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022	21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022	22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022	22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022	22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022	23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022	23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022	23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022	23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022	00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022	00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022	00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022	01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022	01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022	01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022	01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022	02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022	02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022	02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022	03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022	03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022	03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022	04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022	04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022	04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022	04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022	05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022	05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022	05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022	06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022	06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022	06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022	07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022	07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022	07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022	07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022	08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022	08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022	08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022	09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022	09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022	09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022	10:02	22121450.D	1	BKK0142-MSD1	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01	1		Heptachlor epoxide b,
1131	22121455.D	22K0429-02	1		Heptachlor epoxide b,
1149	22121456.D	22K0429-03	1		Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3	1		NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1	1		NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2	1		NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3	1		NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4	1		NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1	1		NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1	1		NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1	1		NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01	1		NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01	1		NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01	1		NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1	1		NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1	1		NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2	1		NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1	1		NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1	1		NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1	1		NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2	1		NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3	1		NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4	1		NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5	1		NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6	1		NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7	1		NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8	1		NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9	1		NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA	1		NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB	1		NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC	1		NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD	1		NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane [C],
1113	22121454.D	22K0429-01	1		NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02	1		Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03	1		Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D SEQ-PEM3		1		NO MANUAL INTEGRATION
1225	22121458.D SEQ-CCV1		1		NO MANUAL INTEGRATION
1243	22121459.D SEQ-CCV2		1		NO MANUAL INTEGRATION
1301	22121460.D SEQ-CCV3		1		NO MANUAL INTEGRATION
1319	22121461.D SEQ-CCV4		1		NO MANUAL INTEGRATION
1336	22121462.D BKK0380-BLK1		1		NO MANUAL INTEGRATION
1354	22121463.D BKK0380-BS1		1		NO MANUAL INTEGRATION
1412	22121464.D BKK0380-BSD1		1		NO MANUAL INTEGRATION
1430	22121465.D 22K0157-01		1		NO MANUAL INTEGRATION
1448	22121466.D 22K0230-01		1		NO MANUAL INTEGRATION
1506	22121467.D 22K0231-01		1		NO MANUAL INTEGRATION
1524	22121468.D BKK0382-BLK1		1		NO MANUAL INTEGRATION
1542	22121469.D BKK0382-BS1		1		NO MANUAL INTEGRATION
1600	22121470.D BKK0382-BS2		1		NO MANUAL INTEGRATION
1618	22121471.D BKK0382-BSD1		1		NO MANUAL INTEGRATION
1635	22121472.D 22K0075-01		1		NO MANUAL INTEGRATION
1653	22121473.D SEQ-PEM4		1		NO MANUAL INTEGRATION
1711	22121474.D SEQ-CCV5		1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains,	17-Dec-2022	10:57
22121402.D	Data Locked	jrains,	17-Dec-2022	10:57
22121403.D	Data Locked	jrains,	17-Dec-2022	10:57
22121404.D	Data Locked	jrains,	17-Dec-2022	10:57
22121405.D	Data Locked	jrains,	17-Dec-2022	10:57
22121406.D	Data Locked	jrains,	17-Dec-2022	10:57
22121407.D	Data Locked	jrains,	17-Dec-2022	10:57
22121408.D	Data Locked	jrains,	17-Dec-2022	10:57
22121409.D	Data Locked	jrains,	17-Dec-2022	10:57
22121410.D	Data Locked	jrains,	17-Dec-2022	10:57
22121411.D	Data Locked	jrains,	17-Dec-2022	10:57
22121412.D	Data Locked	jrains,	17-Dec-2022	10:57
22121413.D	Data Locked	jrains,	17-Dec-2022	10:57
22121414.D	Data Locked	jrains,	17-Dec-2022	10:57
22121415.D	Data Locked	jrains,	17-Dec-2022	10:57
22121416.D	Data Locked	jrains,	17-Dec-2022	10:57
22121417.D	Data Locked	jrains,	17-Dec-2022	10:57
22121418.D	Data Locked	jrains,	17-Dec-2022	10:57
22121419.D	Data Locked	jrains,	17-Dec-2022	10:57
22121420.D	Data Locked	jrains,	17-Dec-2022	10:57
22121421.D	Data Locked	jrains,	17-Dec-2022	10:57
22121422.D	Data Locked	jrains,	17-Dec-2022	10:57
22121423.D	Data Locked	jrains,	17-Dec-2022	10:57
22121424.D	Data Locked	jrains,	17-Dec-2022	10:57
22121425.D	Data Locked	jrains,	17-Dec-2022	10:57
22121426.D	Data Locked	jrains,	17-Dec-2022	10:57
22121427.D	Data Locked	jrains,	17-Dec-2022	10:57
22121428.D	Data Locked	jrains,	17-Dec-2022	10:57
22121429.D	Data Locked	jrains,	17-Dec-2022	10:57
22121430.D	Data Locked	jrains,	17-Dec-2022	10:57
22121431.D	Data Locked	jrains,	17-Dec-2022	10:57
22121432.D	Data Locked	jrains,	17-Dec-2022	10:57
22121433.D	Data Locked	jrains,	17-Dec-2022	10:57
22121434.D	Data Locked	jrains,	17-Dec-2022	10:57



Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0093

Instrument: ECD6

Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0093-ICV1	23C03023.D	23C03023.D	NA	03/03/23 00:34
Calibration Check	SLC0093-CCV1	002F1801.D	002F1801.D	NA	03/03/23 05:03
Calibration Check	SLC0093-CCV2	002F3501.D	002F3501.D	NA	03/03/23 10:08
Calibration Check	SLC0093-CCV3	002F4701.D	002F4701.D	NA	03/03/23 13:44
Calibration Check	SLC0093-CCV4	002F6401.D	002F6401.D	NA	03/03/23 18:49
Blank	BLB0422-BLK1	062F7101.D	062F7101.D	Solid	03/03/23 20:55
LCS	BLB0422-BS1	063F7201.D	063F7201.D	Solid	03/03/23 21:13
LCS Dup	BLB0422-BSD1	064F7301.D	064F7301.D	Solid	03/03/23 21:31
LDW23-SS1236	23B0229-02	067F7601.D	067F7601.D	Solid	03/03/23 22:25
LDW23-SS1150	23B0229-04	069F7801.D	069F7801.D	Solid	03/03/23 23:01
Calibration Check	SLC0093-CCV5	002F8101.D	002F8101.D	NA	03/03/23 23:55
LDW23-SC1008	23B0229-06	071F8201.D	071F8201.D	Solid	03/04/23 00:13
Calibration Check	SLC0093-CCV6	002F8601.D	002F8601.D	NA	03/04/23 01:24



ANALYSIS SEQUENCE

SLC0093

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 11:10:02AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0093-PEM2	QC		1		L002116	L000844		
SLC0093-PEM3	QC		2		L002116	L000844		
SLC0093-PEM4	QC		3		L002116	L000844		
SLC0093-PEM5	QC		4		L002116	L000844		
SLC0093-PEM6	QC		5		L002116	L000844		
SLC0093-PEM7	QC		6		L002116	L000844		
SLC0093-CCV1	QC		7		L000845	L000844		
SLC0093-CCV2	QC		8		L000845	L000844		
SLC0093-CCV3	QC		9		L000845	L000844		
SLC0093-CCV4	QC		10		L000845	L000844		
SLC0093-CCV5	QC		11		L000845	L000844		
SLC0093-CCV6	QC		12		L000845	L000844		
23A0328-03	8081B Pest (PSDDA)	A 04	13			L000844	Anchor QEA, LLC	
23A0328-04	8081B Pest (PSDDA)	A 04	14			L000844	Anchor QEA, LLC	
23A0328-05	8081B Pest (PSDDA)	A 04	15			L000844	Anchor QEA, LLC	
23A0328-06	8081B Pest (PSDDA)	A 04	16			L000844	Anchor QEA, LLC	
23A0328-07	8081B Pest (PSDDA)	A 04	17			L000844	Anchor QEA, LLC	
BLB0018-MS1	QC		18			L000844		
BLB0018-MSD1	QC		19			L000844		
23A0328-08	8081B Pest (PSDDA)	A 04	20			L000844	Anchor QEA, LLC	
23A0328-09	8081B Pest (PSDDA)	A 04	21			L000844	Anchor QEA, LLC	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230302.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	03-MAR-2023	04:45	001F1701.D	1	SEQ-PEM2	
2	03-MAR-2023	09:50	001F3401.D	1	SEQ-PEM3	
3	03-MAR-2023	13:26	001F4601.D	1	SEQ-PEM4	
4	03-MAR-2023	18:31	001F6301.D	1	SEQ-PEM5	
5	03-MAR-2023	23:37	001F8001.D	1	SEQ-PEM6	
6	04-MAR-2023	01:06	001F8501.D	1	SEQ-PEM7	
7	03-MAR-2023	05:03	002F1801.D	1	SEQ-INDA2	
8	03-MAR-2023	10:08	002F3501.D	1	SEQ-INDA3	
9	03-MAR-2023	13:44	002F4701.D	1	SEQ-INDA4	
10	03-MAR-2023	18:49	002F6401.D	1	SEQ-INDA5	
11	03-MAR-2023	23:55	002F8101.D	1	SEQ-INDA6	
12	04-MAR-2023	01:24	002F8601.D	1	SEQ-INDA7	
13	03-MAR-2023	02:40	009F1001.D	1	23A0328-03	
14	03-MAR-2023	02:58	010F1101.D	1	23A0328-04	
15	03-MAR-2023	03:15	011F1201.D	1	23A0328-05	
16	03-MAR-2023	03:33	012F1301.D	1	23A0328-06	
17	03-MAR-2023	03:51	013F1401.D	1	23A0328-07	
18	03-MAR-2023	04:09	014F1501.D	1	BLB0018-MS1	
19	03-MAR-2023	04:27	015F1601.D	1	BLB0018-MSD1	
20	03-MAR-2023	05:21	016F1901.D	1	23A0328-08	
21	03-MAR-2023	05:39	017F2001.D	1	23A0328-09	
22	03-MAR-2023	05:57	018F2101.D	1	23A0328-10	
23	03-MAR-2023	06:15	019F2201.D	1	23A0328-11	
24	03-MAR-2023	06:33	020F2301.D	1	23A0328-12	
25	03-MAR-2023	06:51	021F2401.D	1	BLB0023-BLK1	
26	03-MAR-2023	07:09	022F2501.D	1	BLB0023-BS1	
27	03-MAR-2023	07:27	023F2601.D	1	BLB0023-BSD1	
28	03-MAR-2023	07:45	024F2701.D	1	BLB0023-MS1	
29	03-MAR-2023	08:03	025F2801.D	1	BLB0023-MSD1	
30	03-MAR-2023	08:21	026F2901.D	1	23A0417-01	
31	03-MAR-2023	08:39	027F3001.D	1	23A0417-02	
32	03-MAR-2023	08:57	028F3101.D	1	23A0417-03	
33	03-MAR-2023	09:15	029F3201.D	1	23A0417-04	
34	03-MAR-2023	09:32	030F3301.D	1	23A0417-05	
35	03-MAR-2023	10:26	031F3601.D	1	23A0417-06	
36	03-MAR-2023	10:44	032F3701.D	1	23A0417-07	
37	03-MAR-2023	11:02	033F3801.D	1	23A0417-08	
38	03-MAR-2023	11:20	034F3901.D	1	23A0417-09	
39	03-MAR-2023	11:38	035F4001.D	1	23A0417-10	
40	03-MAR-2023	11:56	036F4101.D	1	23A0417-11	
41	03-MAR-2023	12:14	037F4201.D	1	23A0417-12	
42	03-MAR-2023	12:32	038F4301.D	1	23A0417-13	
43	03-MAR-2023	12:50	039F4401.D	1	23A0417-14	
44	03-MAR-2023	13:08	040F4501.D	1	23A0417-15	
45	03-MAR-2023	14:02	041F4801.D	1	BLB0382-BLK1	
46	03-MAR-2023	14:20	042F4901.D	1	BLB0382-BS1	
47	03-MAR-2023	14:38	043F5001.D	1	BLB0382-BSD1	
48	03-MAR-2023	14:56	044F5101.D	1	23A0419-01	
49	03-MAR-2023	15:14	045F5201.D	1	23A0419-02	
50	03-MAR-2023	15:32	046F5301.D	1	23A0419-03	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	03-MAR-2023 15:50	047F5401.D	1	23A0419-04	
52	03-MAR-2023 16:08	048F5501.D	1	23A0419-05	
53	03-MAR-2023 16:25	049F5601.D	1	23A0419-06	
54	03-MAR-2023 16:43	050F5701.D	1	23A0419-07	
55	03-MAR-2023 17:01	051F5801.D	1	BLB0382-MS1	
56	03-MAR-2023 17:19	052F5901.D	1	BLB0382-MSD1	
57	03-MAR-2023 17:37	053F6001.D	1	23A0419-08	
58	03-MAR-2023 17:55	054F6101.D	1	23A0419-09	
59	03-MAR-2023 18:13	055F6201.D	1	23A0419-10	
60	03-MAR-2023 19:07	056F6501.D	1	23A0419-11	
61	03-MAR-2023 19:25	057F6601.D	1	23A0419-12	
62	03-MAR-2023 19:43	058F6701.D	1	23A0420-01	
63	03-MAR-2023 20:01	059F6801.D	1	23A0420-07	
64	03-MAR-2023 20:19	060F6901.D	1	23A0420-08	
65	03-MAR-2023 20:37	061F7001.D	1	23A0420-09	
66	03-MAR-2023 20:55	062F7101.D	1	BLB0422-BLK1	
67	03-MAR-2023 21:13	063F7201.D	1	BLB0422-BS1	
68	03-MAR-2023 21:31	064F7301.D	1	BLB0422-BSD1	
69	03-MAR-2023 21:49	065F7401.D	1	BLB0422-MS1	
70	03-MAR-2023 22:07	066F7501.D	1	BLB0422-MSD1	
71	03-MAR-2023 22:25	067F7601.D	1	23B0229-02	
72	03-MAR-2023 22:43	068F7701.D	1	23B0229-03	
73	03-MAR-2023 23:01	069F7801.D	1	23B0229-04	
74	03-MAR-2023 23:19	070F7901.D	1	23B0229-05	
75	04-MAR-2023 00:13	071F8201.D	1	23B0229-06	
76	04-MAR-2023 00:30	072F8301.D	1	23B0229-08	
77	04-MAR-2023 00:48	073F8401.D	1	23B0276-01	
78	02-MAR-2023 23:58	23C03021.D	1	RINSE	
79	03-MAR-2023 00:16	23C03022.D	1	SEQ-PEM1	
80	03-MAR-2023 00:34	23C03023.D	1	SEQ-INDA1	
81	03-MAR-2023 00:52	23C03024.D	1	23A0295-04	
82	03-MAR-2023 01:10	23C03025.D	1	23A0249-05	
83	03-MAR-2023 01:28	23C03026.D	1	BLB0018-BLK1	
84	03-MAR-2023 01:46	23C03027.D	1	BLB0018-BS1	
85	03-MAR-2023 02:04	23C03028.D	1	BLB0018-BSD1	
86	03-MAR-2023 02:22	23C03029.D	1	23A0328-02	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 03-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0445	001F1701.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0950	001F3401.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1326	001F4601.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1831	001F6301.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2337	001F8001.D	SEQ-PEM6		1	NO MANUAL INTEGRATION
0106	001F8501.D	SEQ-PEM7		1	NO MANUAL INTEGRATION
0503	002F1801.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1008	002F3501.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1344	002F4701.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1849	002F6401.D	SEQ-INDA5		1	NO MANUAL INTEGRATION
2355	002F8101.D	SEQ-INDA6		1	NO MANUAL INTEGRATION
0124	002F8601.D	SEQ-INDA7		1	NO MANUAL INTEGRATION
0240	009F1001.D	23A0328-03		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0258	010F1101.D	23A0328-04		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0315	011F1201.D	23A0328-05		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0333	012F1301.D	23A0328-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0351	013F1401.D	23A0328-07		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin,

Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde,
trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0409	014F1501.D	BLB0018-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, H
0427	015F1601.D	BLB0018-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, H
0521	016F1901.D	23A0328-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0539	017F2001.D	23A0328-09		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0557	018F2101.D	23A0328-10		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0615	019F2201.D	23A0328-11		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0633	020F2301.D	23A0328-12		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0651	021F2401.D	BLB0023-BLK1		1	NO MANUAL INTEGRATION
0709	022F2501.D	BLB0023-BS1		1	NO MANUAL INTEGRATION
0727	023F2601.D	BLB0023-BSD1		1	NO MANUAL INTEGRATION
0745	024F2701.D	BLB0023-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexachlorobenzene, Tetrachloro-m-xylene,
0803	025F2801.D	BLB0023-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-
0821	026F2901.D	23A0417-01		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,

0839	027F3001.D	23A0417-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0857	028F3101.D	23A0417-03	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
0915	029F3201.D	23A0417-04	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
0932	030F3301.D	23A0417-05	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
1026	031F3601.D	23A0417-06	1	1Bromo-2nitrobenzene, alpha-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1044	032F3701.D	23A0417-07		1	alpha-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1102	033F3801.D	23A0417-08		1	alpha-BHC, beta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1120	034F3901.D	23A0417-09		1	alpha-BHC, beta-BHC, gamma-BHC (Lindane), Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1138	035F4001.D	23A0417-10		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1156	036F4101.D	23A0417-11		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
1214	037F4201.D	23A0417-12		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1232	038F4301.D	23A0417-13		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene, Decachlorobiphenyl,
1250	039F4401.D	23A0417-14		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1308	040F4501.D	23A0417-15		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,
1402	041F4801.D	BLB0382-BLK1		1	NO MANUAL INTEGRATION
1420	042F4901.D	BLB0382-BS1		1	NO MANUAL INTEGRATION
1438	043F5001.D	BLB0382-BS1		1	NO MANUAL INTEGRATION
1456	044F5101.D	23A0419-01		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

1514	045F5201.D	23A0419-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1532	046F5301.D	23A0419-03	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1550	047F5401.D	23A0419-04	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1608	048F5501.D	23A0419-05	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1625	049F5601.D	23A0419-06	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1643	050F5701.D	23A0419-07		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Endosulfan sulfate, Methoxychlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1701	051F5801.D	BLB0382-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobe
1719	052F5901.D	BLB0382-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobe
1737	053F6001.D	23A0419-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1755	054F6101.D	23A0419-09		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
1813	055F6201.D	23A0419-10		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDT, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1907	056F6501.D	23A0419-11		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Tetrachloro-m-xylene,
1925	057F6601.D	23A0419-12		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1943	058F6701.D	23A0420-01		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobip
2001	059F6801.D	23A0420-07		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2019	060F6901.D	23A0420-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

2037	061F7001.D	23A0420-09	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2055	062F7101.D	BLB0422-BLK1	1	NO MANUAL INTEGRATION
2113	063F7201.D	BLB0422-BS1	1	NO MANUAL INTEGRATION
2131	064F7301.D	BLB0422-BSD1	1	NO MANUAL INTEGRATION
2149	065F7401.D	BLB0422-MS1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Endosulfan I, Dieldrin, 4,4'-DDE, cis-Chlordane, Hexachlorobenzene, Tetrachloro-m-xylene,
2207	066F7501.D	BLB0422-MSD1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, 4,4'-DDT, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachlo
2225	067F7601.D	23B0229-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, De

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2243	068F7701.D	23B0229-03	1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,
2301	069F7801.D	23B0229-04	1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2319	070F7901.D	23B0229-05	1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0013	071F8201.D	23B0229-06	1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0030	072F8301.D	23B0229-08	1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
0048	073F8401.D	23B0276-01	1	1	Endosulfan I, Dieldrin, 4,4'-DDE, Endrin ketone, Hexabromobiphenyl,
2358	23C03021.D	RINSE	1	1	NO MANUAL INTEGRATION
0016	23C03022.D	SEQ-PEM1	1	1	NO MANUAL INTEGRATION
0034	23C03023.D	SEQ-INDA1	1	1	NO MANUAL INTEGRATION
0052	23C03024.D	23A0295-04	1	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0110	23C03025.D	23A0249-05	1	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0128	23C03026.D	BLB0018-BLK1	1	1	NO MANUAL INTEGRATION
0146	23C03027.D	BLB0018-BS1	1	1	NO MANUAL INTEGRATION
0204	23C03028.D	BLB0018-BSD1	1	1	NO MANUAL INTEGRATION
0222	23C03029.D	23A0328-02	1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone,

Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

0445 001F1701.D SEQ-PEM2

1 4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C],
Hexabromobiphenyl[C], Decachlorobiphenyl [C],

0950 001F3401.D SEQ-PEM3

1 Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C],
Decachlorobiphenyl [C],

1326 001F4601.D SEQ-PEM4

1 Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C],
Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b\B20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1831	001F6301.D	SEQ-PEM5	1		4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
2337	001F8001.D	SEQ-PEM6	1		Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0106	001F8501.D	SEQ-PEM7	1		Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0503	002F1801.D	SEQ-INDA2	1		NO MANUAL INTEGRATION
1008	002F3501.D	SEQ-INDA3	1		NO MANUAL INTEGRATION
1344	002F4701.D	SEQ-INDA4	1		NO MANUAL INTEGRATION
1849	002F6401.D	SEQ-INDA5	1		NO MANUAL INTEGRATION
2355	002F8101.D	SEQ-INDA6	1		NO MANUAL INTEGRATION
0124	002F8601.D	SEQ-INDA7	1		NO MANUAL INTEGRATION
0240	009F1001.D	23A0328-03	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0258	010F1101.D	23A0328-04	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C]
0315	011F1201.D	23A0328-05	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Tetrachloro-
0333	012F1301.D	23A0328-06	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0351	013F1401.D	23A0328-07	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0409	014F1501.D	BLB0018-MS1	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C],

Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobe

0427 015F1601.D BLB0018-MSD1 1 1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C],
4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C],
Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetra

0521 016F1901.D 23A0328-08 1 1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C],
Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C],
4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-

0539 017F2001.D 23A0328-09 1 1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C],
Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C],
4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiph

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b\B20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0557	018F2101.D	23A0328-10		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[
0615	019F2201.D	23A0328-11		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0633	020F2301.D	23A0328-12		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], De
0651	021F2401.D	BLB0023-BLK1		1	Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0709	022F2501.D	BLB0023-BS1		1	NO MANUAL INTEGRATION
0727	023F2601.D	BLB0023-BSD1		1	NO MANUAL INTEGRATION
0745	024F2701.D	BLB0023-MS1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
0803	025F2801.D	BLB0023-MSD1		1	1Bromo-2nitrobenzene [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl
0821	026F2901.D	23A0417-01		1	NO MANUAL INTEGRATION
0839	027F3001.D	23A0417-02		1	NO MANUAL INTEGRATION
0857	028F3101.D	23A0417-03		1	NO MANUAL INTEGRATION
0915	029F3201.D	23A0417-04		1	NO MANUAL INTEGRATION
0932	030F3301.D	23A0417-05		1	NO MANUAL INTEGRATION
1026	031F3601.D	23A0417-06		1	NO MANUAL INTEGRATION
1044	032F3701.D	23A0417-07		1	NO MANUAL INTEGRATION
1102	033F3801.D	23A0417-08		1	NO MANUAL INTEGRATION

1120 034F3901.D 23A0417-09 1 NO MANUAL INTEGRATION

1138 035F4001.D 23A0417-10 1 NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b\B20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1156	036F4101.D	23A0417-11		1	NO MANUAL INTEGRATION
1214	037F4201.D	23A0417-12		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C]
1232	038F4301.D	23A0417-13		1	NO MANUAL INTEGRATION
1250	039F4401.D	23A0417-14		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene
1308	040F4501.D	23A0417-15		1	NO MANUAL INTEGRATION
1402	041F4801.D	BLB0382-BLK1		1	NO MANUAL INTEGRATION
1420	042F4901.D	BLB0382-BS1		1	NO MANUAL INTEGRATION
1438	043F5001.D	BLB0382-BSD1		1	NO MANUAL INTEGRATION
1456	044F5101.D	23A0419-01		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan II [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Tetrachloro-m-xylene [C],
1514	045F5201.D	23A0419-02		1	NO MANUAL INTEGRATION
1532	046F5301.D	23A0419-03		1	alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C]
1550	047F5401.D	23A0419-04		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
1608	048F5501.D	23A0419-05		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], De
1625	049F5601.D	23A0419-06		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], Heptachlor [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1643	050F5701.D	23A0419-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],

Decachlorobiphenyl [C],

1701	051F5801.D	BLB0382-MS1	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfar sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C]
1719	052F5901.D	BLB0382-MSD1	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfar sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C]
1737	053F6001.D	23A0419-08	1	Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b\B20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1755	054F6101.D	23A0419-09	1		alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1813	055F6201.D	23A0419-10	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip
1907	056F6501.D	23A0419-11	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1925	057F6601.D	23A0419-12	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C],
1943	058F6701.D	23A0420-01	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
2001	059F6801.D	23A0420-07	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlor
2019	060F6901.D	23A0420-08	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip
2037	061F7001.D	23A0420-09	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hex
2055	062F7101.D	BLB0422-BLK1	1		Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
2113	063F7201.D	BLB0422-BS1	1		NO MANUAL INTEGRATION
2131	064F7301.D	BLB0422-BSD1	1		NO MANUAL INTEGRATION
2149	065F7401.D	BLB0422-MS1	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
2207	066F7501.D	BLB0422-MSD1	1		NO MANUAL INTEGRATION

2225	067F7601.D	23B0229-02	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip

2243	068F7701.D	23B0229-03	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]

2301	069F7801.D	23B0229-04	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]

2319	070F7901.D	23B0229-05	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl [C], Tetrachloro-m-xylene [C], Decachlorobiphenyl

0013	071F8201.D	23B0229-06	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromob

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b\B20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0031	072F8301.D	23B0229-08	1		NO MANUAL INTEGRATION
0048	073F8401.D	23B0276-01	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], Dieldrin [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
2358	23C03021.D	RINSE	1		NO MANUAL INTEGRATION
0016	23C03022.D	SEQ-PEM1	1		NO MANUAL INTEGRATION
0034	23C03023.D	SEQ-INDA1	1		NO MANUAL INTEGRATION
0052	23C03024.D	23A0295-04	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Tetrachloro-m-xylene
0110	23C03025.D	23A0249-05	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene
0128	23C03026.D	BLB0018-BLK1	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
0146	23C03027.D	BLB0018-BS1	1		Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0204	23C03028.D	BLB0018-BS1	1		NO MANUAL INTEGRATION
0222	23C03029.D	23A0328-02	1		1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Te

Security Status Report

Date: 09-Mar-2023 11:14

001F1701.D	Data Locked	alfonso,	09-Mar-2023	11:14
001F3401.D	Data Locked	alfonso,	09-Mar-2023	11:14
001F4601.D	Data Locked	alfonso,	09-Mar-2023	11:14
001F6301.D	Data Locked	alfonso,	09-Mar-2023	11:14
001F8001.D	Data Locked	alfonso,	09-Mar-2023	11:14
001F8501.D	Data Locked	alfonso,	09-Mar-2023	11:14
002F1801.D	Data Locked	alfonso,	09-Mar-2023	11:14
002F3501.D	Data Locked	alfonso,	09-Mar-2023	11:14
002F4701.D	Data Locked	alfonso,	09-Mar-2023	11:14
002F6401.D	Data Locked	alfonso,	09-Mar-2023	11:14
002F8101.D	Data Locked	alfonso,	09-Mar-2023	11:14
002F8601.D	Data Locked	alfonso,	09-Mar-2023	11:14
009F1001.D	Data Locked	alfonso,	09-Mar-2023	11:14
010F1101.D	Data Locked	alfonso,	09-Mar-2023	11:14
011F1201.D	Data Locked	alfonso,	09-Mar-2023	11:14
012F1301.D	Data Locked	alfonso,	09-Mar-2023	11:14
013F1401.D	Data Locked	alfonso,	09-Mar-2023	11:14
014F1501.D	Data Locked	alfonso,	09-Mar-2023	11:14
015F1601.D	Data Locked	alfonso,	09-Mar-2023	11:14
016F1901.D	Data Locked	alfonso,	09-Mar-2023	11:14
017F2001.D	Data Locked	alfonso,	09-Mar-2023	11:14
018F2101.D	Data Locked	alfonso,	09-Mar-2023	11:14
019F2201.D	Data Locked	alfonso,	09-Mar-2023	11:14
020F2301.D	Data Locked	alfonso,	09-Mar-2023	11:14
021F2401.D	Data Locked	alfonso,	09-Mar-2023	11:14
022F2501.D	Data Locked	alfonso,	09-Mar-2023	11:14
023F2601.D	Data Locked	alfonso,	09-Mar-2023	11:14
024F2701.D	Data Locked	alfonso,	09-Mar-2023	11:14
025F2801.D	Data Locked	alfonso,	09-Mar-2023	11:14
026F2901.D	Data Locked	alfonso,	09-Mar-2023	11:14
027F3001.D	Data Locked	alfonso,	09-Mar-2023	11:14
028F3101.D	Data Locked	alfonso,	09-Mar-2023	11:14
029F3201.D	Data Locked	alfonso,	09-Mar-2023	11:14
030F3301.D	Data Locked	alfonso,	09-Mar-2023	11:14
031F3601.D	Data Locked	alfonso,	09-Mar-2023	11:14
032F3701.D	Data Locked	alfonso,	09-Mar-2023	11:14
033F3801.D	Data Locked	alfonso,	09-Mar-2023	11:14
034F3901.D	Data Locked	alfonso,	09-Mar-2023	11:14
035F4001.D	Data Locked	alfonso,	09-Mar-2023	11:14
036F4101.D	Data Locked	alfonso,	09-Mar-2023	11:14
037F4201.D	Data Locked	alfonso,	09-Mar-2023	11:14
038F4301.D	Data Locked	alfonso,	09-Mar-2023	11:14
039F4401.D	Data Locked	alfonso,	09-Mar-2023	11:14
040F4501.D	Data Locked	alfonso,	09-Mar-2023	11:14

041F4801.D	Data Locked	alfonso,	09-Mar-2023	11:14
042F4901.D	Data Locked	alfonso,	09-Mar-2023	11:14
043F5001.D	Data Locked	alfonso,	09-Mar-2023	11:14
044F5101.D	Data Locked	alfonso,	09-Mar-2023	11:14
045F5201.D	Data Locked	alfonso,	09-Mar-2023	11:14
046F5301.D	Data Locked	alfonso,	09-Mar-2023	11:14
047F5401.D	Data Locked	alfonso,	09-Mar-2023	11:14
048F5501.D	Data Locked	alfonso,	09-Mar-2023	11:14
049F5601.D	Data Locked	alfonso,	09-Mar-2023	11:14
050F5701.D	Data Locked	alfonso,	09-Mar-2023	11:14
051F5801.D	Data Locked	alfonso,	09-Mar-2023	11:14
052F5901.D	Data Locked	alfonso,	09-Mar-2023	11:14
053F6001.D	Data Locked	alfonso,	09-Mar-2023	11:14
054F6101.D	Data Locked	alfonso,	09-Mar-2023	11:14
055F6201.D	Data Locked	alfonso,	09-Mar-2023	11:14
056F6501.D	Data Locked	alfonso,	09-Mar-2023	11:14
057F6601.D	Data Locked	alfonso,	09-Mar-2023	11:14
058F6701.D	Data Locked	alfonso,	09-Mar-2023	11:14
059F6801.D	Data Locked	alfonso,	09-Mar-2023	11:14
060F6901.D	Data Locked	alfonso,	09-Mar-2023	11:14
061F7001.D	Data Locked	alfonso,	09-Mar-2023	11:14
062F7101.D	Data Locked	alfonso,	09-Mar-2023	11:14
063F7201.D	Data Locked	alfonso,	09-Mar-2023	11:14
064F7301.D	Data Locked	alfonso,	09-Mar-2023	11:14
065F7401.D	Data Locked	alfonso,	09-Mar-2023	11:14
066F7501.D	Data Locked	alfonso,	09-Mar-2023	11:14
067F7601.D	Data Locked	alfonso,	09-Mar-2023	11:14
068F7701.D	Data Locked	alfonso,	09-Mar-2023	11:14
069F7801.D	Data Locked	alfonso,	09-Mar-2023	11:14
070F7901.D	Data Locked	alfonso,	09-Mar-2023	11:14
071F8201.D	Data Locked	alfonso,	09-Mar-2023	11:14
072F8301.D	Data Locked	alfonso,	09-Mar-2023	11:14
073F8401.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03021.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03022.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03023.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03024.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03025.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03026.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03027.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03028.D	Data Locked	alfonso,	09-Mar-2023	11:14
23C03029.D	Data Locked	alfonso,	09-Mar-2023	11:14



ANALYSIS SEQUENCE

SLC0106

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 1:32:25PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0106-PEM2	QC		1		L002116	L000844		
SLC0106-PEM3	QC		2		L002116	L000844		
SLC0106-PEM4	QC		3		L002116	L000844		
SLC0106-CCV1	QC		4		L000845	L000844		
SLC0106-CCV2	QC		5		L000845	L000844		
SLC0106-CCV3	QC		6		L000845	L000844		
23A0417-04	8081B Pest (PSDDA)	A 04	7			L000844	Anchor QEA, LLC	
23A0417-05	8081B Pest (PSDDA)	A 04	8			L000844	Anchor QEA, LLC	
23A0417-06	8081B Pest (PSDDA)	A 04	9			L000844	Anchor QEA, LLC	
23A0417-07	8081B Pest (PSDDA)	A 04	10			L000844	Anchor QEA, LLC	
23A0417-08	8081B Pest (PSDDA)	A 04	11			L000844	Anchor QEA, LLC	
23A0417-09	8081B Pest (PSDDA)	A 04	12			L000844	Anchor QEA, LLC	
23A0417-10	8081B Pest (PSDDA)	A 04	13			L000844	Anchor QEA, LLC	
23A0417-11	8081B Pest (PSDDA)	A 04	14			L000844	Anchor QEA, LLC	
23A0417-13	8081B Pest (PSDDA)	A 04	15			L000844	Anchor QEA, LLC	
23A0417-15	8081B Pest (PSDDA)	A 04	16			L000844	Anchor QEA, LLC	
23A0419-02	8081B Pest (PSDDA)	A 04	17			L000844	Anchor QEA, LLC	
23A0419-08	8081B Pest (PSDDA)	A 04	18			L000844	Anchor QEA, LLC	
23A0419-09	8081B Pest (PSDDA)	A 04	19			L000844	Anchor QEA, LLC	
23A0419-12	8081B Pest (PSDDA)	A 04	20			L000844	Anchor QEA, LLC	
BLB0422-MS1	QC		21			L000844		

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230307.b\B20230307.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	07-MAR-2023	13:11	001F1501.D	1	SEQ-PEM2	
2	07-MAR-2023	17:23	001F2901.D	1	SEQ-PEM3	
3	07-MAR-2023	18:35	001F3301.D	1	SEQ-PEM4	
4	07-MAR-2023	13:29	002F1601.D	1	SEQ-INDA2	
5	07-MAR-2023	17:41	002F3001.D	1	SEQ-INDA3	
6	07-MAR-2023	18:53	002F3401.D	1	SEQ-INDA4	
7	07-MAR-2023	11:41	009F1001.D	1	23A0417-04	
8	07-MAR-2023	11:59	010F1101.D	1	23A0417-05	
9	07-MAR-2023	12:17	011F1201.D	1	23A0417-06	
10	07-MAR-2023	12:35	012F1301.D	1	23A0417-07	
11	07-MAR-2023	12:53	013F1401.D	1	23A0417-08	
12	07-MAR-2023	13:47	014F1701.D	1	23A0417-09	
13	07-MAR-2023	14:05	015F1801.D	1	23A0417-10	
14	07-MAR-2023	14:23	016F1901.D	1	23A0417-11	
15	07-MAR-2023	14:41	017F2001.D	1	23A0417-13	
16	07-MAR-2023	14:59	018F2101.D	1	23A0417-15	
17	07-MAR-2023	15:17	019F2201.D	1	23A0419-02	
18	07-MAR-2023	15:35	020F2301.D	1	23A0419-08	
19	07-MAR-2023	15:53	021F2401.D	1	23A0419-09	
20	07-MAR-2023	16:11	022F2501.D	1	23A0419-12	
21	07-MAR-2023	16:29	023F2601.D	1	BLB0422-MS1	
22	07-MAR-2023	16:47	024F2701.D	1	BLB0422-MSD1	
23	07-MAR-2023	17:05	025F2801.D	1	23B0229-03	
24	07-MAR-2023	17:59	026F3101.D	1	23B0229-05	
25	07-MAR-2023	18:17	027F3201.D	1	23B0229-08	
26	07-MAR-2023	08:59	23C03071.D	1	RINSE	
27	07-MAR-2023	09:17	23C03072.D	1	SEQ-PEM1	
28	07-MAR-2023	09:35	23C03073.D	1	SEQ-INDA1	
29	07-MAR-2023	09:53	23C03074.D	1	23A0249-05	
30	07-MAR-2023	10:11	23C03075.D	1	23A0295-04	
31	07-MAR-2023	10:29	23C03076.D	1	BLB0023-MS1	
32	07-MAR-2023	10:47	23C03077.D	1	23A0417-01	
33	07-MAR-2023	11:05	23C03078.D	1	23A0417-02	
34	07-MAR-2023	11:23	23C03079.D	1	23A0417-03	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 07-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1311	001F1501.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
1723	001F2901.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1835	001F3301.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1329	002F1601.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1741	002F3001.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1853	002F3401.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1141	009F1001.D	23A0417-04		1	1Bromo-2nitrobenzene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1159	010F1101.D	23A0417-05		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1217	011F1201.D	23A0417-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, 4,4'-DDE, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1235	012F1301.D	23A0417-07		1	1Bromo-2nitrobenzene, alpha-BHC, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1253	013F1401.D	23A0417-08		1	1Bromo-2nitrobenzene, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1347	014F1701.D	23A0417-09		1	1Bromo-2nitrobenzene, Methoxychlor, Endrin aldehyde, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1405	015F1801.D	23A0417-10		1	1Bromo-2nitrobenzene, Tetrachloro-m-xylene,
1423	016F1901.D	23A0417-11		1	1Bromo-2nitrobenzene, Tetrachloro-m-xylene,
1441	017F2001.D	23A0417-13		1	NO MANUAL INTEGRATION

1459 018F2101.D 23A0417-15

1 1Bromo-2nitrobenzene,

1517 019F2201.D 23A0419-02

1 1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor,
Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1535	020F2301.D	23A0419-08		1	delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Decachlorobiphenyl,
1553	021F2401.D	23A0419-09		1	1Bromo-2nitrobenzene, alpha-BHC, gamma-BHC (Lindane), Tetrachloro-m-xylene,
1611	022F2501.D	23A0419-12		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1629	023F2601.D	BLB0422-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1647	024F2701.D	BLB0422-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobiphenyl, Decachlorobiphenyl,
1705	025F2801.D	23B0229-03		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1759	026F3101.D	23B0229-05		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1817	027F3201.D	23B0229-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Tetrachloro-m-xylene,
0859	23C03071.D	RINSE		1	NO MANUAL INTEGRATION
0917	23C03072.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
0935	23C03073.D	SEQ-INDA1		1	NO MANUAL INTEGRATION
0953	23C03074.D	23A0249-05		1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1011	23C03075.D	23A0295-04		1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1029	23C03076.D	BLB0023-MS1		1	Hexabromobiphenyl, Decachlorobiphenyl,
1047	23C03077.D	23A0417-01		1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

1105 23C03078.D 23A0417-02 1 1Bromo-2nitrobenzene, alpha-BHC, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

1123 23C03079.D 23A0417-03 1 1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

1311 001F1501.D SEQ-PEM2 1 4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C],
Hexabromobiphenyl[C], Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b\B20230307.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1723	001F2901.D	SEQ-PEM3		1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1835	001F3301.D	SEQ-PEM4		1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1329	002F1601.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1741	002F3001.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1853	002F3401.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1141	009F1001.D	23A0417-04		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetra
1159	010F1101.D	23A0417-05		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], De
1217	011F1201.D	23A0417-06		1	Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1235	012F1301.D	23A0417-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1253	013F1401.D	23A0417-08		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachlor
1347	014F1701.D	23A0417-09		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan sulfate [C], Methoxychlor [C], Endrin ketone [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1405	015F1801.D	23A0417-10		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C]
1423	016F1901.D	23A0417-11		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C],

4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C],
Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachlor

1441 017F2001.D 23A0417-13 1 1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C],
Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C],
4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[

1459 018F2101.D 23A0417-15 1 1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C],
Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C],
4,4'-DDD [C], Endosulfar sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C],

1517 019F2201.D 23A0419-02 1 1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan II [C], Endosulfan sulfate [C],
4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],
Decachlorobiphenyl [C],

1535 020F2301.D 23A0419-08 1 Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C],
4,4'-DDD [C], Endosulfar sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C],
trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],

1553 021F2401.D 23A0419-09 1 1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b\B20230307.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1611	022F2501.D	23A0419-12	1	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1629	023F2601.D	BLB0422-MS1	1	1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1647	024F2701.D	BLB0422-MSD1	1	1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1705	025F2801.D	23B0229-03	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1759	026F3101.D	23B0229-05	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1817	027F3201.D	23B0229-08	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
0859	23C03071.D	RINSE	1		NO MANUAL INTEGRATION
0917	23C03072.D	SEQ-PEM1	1		NO MANUAL INTEGRATION
0935	23C03073.D	SEQ-INDA1	1		NO MANUAL INTEGRATION
0953	23C03074.D	23A0249-05	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1011	23C03075.D	23A0295-04	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1029	23C03076.D	BLB0023-MS1	1	1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1047	23C03077.D	23A0417-01	1	1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1105	23C03078.D	23A0417-02	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1123	23C03079.D	23A0417-03	1	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],

Security Status Report

Date: 09-Mar-2023 13:33

001F1501.D	Data Locked	alfonso,	09-Mar-2023	13:33
001F2901.D	Data Locked	alfonso,	09-Mar-2023	13:33
001F3301.D	Data Locked	alfonso,	09-Mar-2023	13:33
002F1601.D	Data Locked	alfonso,	09-Mar-2023	13:33
002F3001.D	Data Locked	alfonso,	09-Mar-2023	13:33
002F3401.D	Data Locked	alfonso,	09-Mar-2023	13:33
009F1001.D	Data Locked	alfonso,	09-Mar-2023	13:33
010F1101.D	Data Locked	alfonso,	09-Mar-2023	13:33
011F1201.D	Data Locked	alfonso,	09-Mar-2023	13:33
012F1301.D	Data Locked	alfonso,	09-Mar-2023	13:33
013F1401.D	Data Locked	alfonso,	09-Mar-2023	13:33
014F1701.D	Data Locked	alfonso,	09-Mar-2023	13:33
015F1801.D	Data Locked	alfonso,	09-Mar-2023	13:33
016F1901.D	Data Locked	alfonso,	09-Mar-2023	13:33
017F2001.D	Data Locked	alfonso,	09-Mar-2023	13:33
018F2101.D	Data Locked	alfonso,	09-Mar-2023	13:33
019F2201.D	Data Locked	alfonso,	09-Mar-2023	13:33
020F2301.D	Data Locked	alfonso,	09-Mar-2023	13:33
021F2401.D	Data Locked	alfonso,	09-Mar-2023	13:33
022F2501.D	Data Locked	alfonso,	09-Mar-2023	13:33
023F2601.D	Data Locked	alfonso,	09-Mar-2023	13:33
024F2701.D	Data Locked	alfonso,	09-Mar-2023	13:33
025F2801.D	Data Locked	alfonso,	09-Mar-2023	13:33
026F3101.D	Data Locked	alfonso,	09-Mar-2023	13:33
027F3201.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03071.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03072.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03073.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03074.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03075.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03076.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03077.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03078.D	Data Locked	alfonso,	09-Mar-2023	13:33
23C03079.D	Data Locked	alfonso,	09-Mar-2023	13:33



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SKL0233</u>	Instrument:	<u>ECD6</u>
Calibration:	<u>FL00041</u>	Calibration Date:	<u>12/15/2022</u>

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SKL0233-PEM1 (Water)		Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20			
Decachlorobiphenyl	160.00	83.0	0 - 200	9.355	9.354666	0.0003	+/-0.1	
Decachlorobiphenyl [2C]	160.00	83.5	0 - 200	10.466	10.4655	0.0005	+/-0.1	
Tetrachlorometaxylene	160.00	78.1	0 - 200	3.828	3.827833	0.0002	+/-0.1	
Tetrachlorometaxylene [2C]	160.00	83.5	0 - 200	4.22	4.219666	0.0003	+/-0.1	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor OEA, LLC
Sequence: SLC0093
Calibration: FL00041

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0093-ICV1 (Solid) Lab File ID: 23C03023.D Analyzed: 03/03/23 00:34								
Decachlorobiphenyl	40.000	94.8	80 - 120	9.437	9.354666	0.0823	+/-0.1	
Decachlorobiphenyl [2C]	40.000	95.0	80 - 120	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylene	40.000	92.5	80 - 120	3.871	3.827833	0.0432	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.8	80 - 120	4.195	4.219666	-0.0247	+/-0.1	
SLC0093-CCV1 (Solid) Lab File ID: 002F1801.D Analyzed: 03/03/23 05:03								
Decachlorobiphenyl	40.000	90.8	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	90.3	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	94.0	80 - 120	3.869	3.827833	0.0412	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.5	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
SLC0093-CCV2 (Solid) Lab File ID: 002F3501.D Analyzed: 03/03/23 10:08								
Decachlorobiphenyl	40.000	93.0	80 - 120	9.435	9.354666	0.0803	+/-0.1	
Decachlorobiphenyl [2C]	40.000	97.8	80 - 120	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	40.000	91.8	80 - 120	3.87	3.827833	0.0422	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	89.0	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
SLC0093-CCV3 (Solid) Lab File ID: 002F4701.D Analyzed: 03/03/23 13:44								
Decachlorobiphenyl	40.000	91.5	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	92.8	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	94.0	80 - 120	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.0	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
SLC0093-CCV4 (Solid) Lab File ID: 002F6401.D Analyzed: 03/03/23 18:49								
Decachlorobiphenyl	40.000	91.5	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.0	80 - 120	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	40.000	93.5	80 - 120	3.869	3.827833	0.0412	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	90.5	80 - 120	4.192	4.219666	-0.0277	+/-0.1	
BLB0422-BLK1 (Solid) Lab File ID: 062F7101.D Analyzed: 03/03/23 20:55								
Decachlorobiphenyl	8.0000	65.6	30 - 160	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	66.7	30 - 160	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	8.0000	59.1	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	58.2	30 - 160	4.192	4.219666	-0.0277	+/-0.1	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0093
Calibration: FL00041

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0422-BS1 (Solid)			Lab File ID: 063F7201.D		Analyzed: 03/03/23 21:13			
Decachlorobiphenyl	8.0000	57.0	30 - 160	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	59.2	30 - 160	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	8.0000	53.1	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	51.5	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
BLB0422-BSD1 (Solid)			Lab File ID: 064F7301.D		Analyzed: 03/03/23 21:31			
Decachlorobiphenyl	8.0000	71.6	30 - 160	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	75.6	30 - 160	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	8.0000	56.5	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	56.0	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
23B0229-02 (Solid)			Lab File ID: 067F7601.D		Analyzed: 03/03/23 22:25			
Decachlorobiphenyl	7.9805	72.7	30 - 160	9.436	9.354666	0.0813	+/-0.1	
Decachlorobiphenyl [2C]	7.9805	72.9	30 - 160	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	7.9805	50.5	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	7.9805	57.2	30 - 160	4.191	4.219666	-0.0287	+/-0.1	
23B0229-04 (Solid)			Lab File ID: 069F7801.D		Analyzed: 03/03/23 23:01			
Decachlorobiphenyl	7.9916	76.6	30 - 160	9.436	9.354666	0.0813	+/-0.1	
Decachlorobiphenyl [2C]	7.9916	75.0	30 - 160	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	7.9916	54.9	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	7.9916	62.5	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
SLC0093-CCV5 (Solid)			Lab File ID: 002F8101.D		Analyzed: 03/03/23 23:55			
Decachlorobiphenyl	40.000	90.8	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	90.3	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	92.8	80 - 120	3.869	3.827833	0.0412	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	88.5	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
23B0229-06 (Solid)			Lab File ID: 071F8201.D		Analyzed: 03/04/23 00:13			
Decachlorobiphenyl	7.9905	63.5	30 - 160	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	7.9905	64.2	30 - 160	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylene	7.9905	41.8	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	7.9905	48.6	30 - 160	4.192	4.219666	-0.0277	+/-0.1	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0106
Calibration: FL00041

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0106-ICV1 (Solid) Lab File ID: 23C03073.D Analyzed: 03/07/23 09:35								
Decachlorobiphenyl	40.000	93.8	80 - 120	9.421	9.354666	0.0663	+/-0.1	
Decachlorobiphenyl [2C]	40.000	92.0	80 - 120	10.385	10.4655	-0.0805	+/-0.1	
Tetrachlorometaxylene	40.000	89.3	80 - 120	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	94.5	80 - 120	4.183	4.219666	-0.0367	+/-0.1	
SLC0106-CCV1 (Solid) Lab File ID: 002F1601.D Analyzed: 03/07/23 13:29								
Decachlorobiphenyl	40.000	91.3	80 - 120	9.421	9.354666	0.0663	+/-0.1	
Decachlorobiphenyl [2C]	40.000	94.3	80 - 120	10.384	10.4655	-0.0815	+/-0.1	
Tetrachlorometaxylene	40.000	89.8	80 - 120	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.8	80 - 120	4.183	4.219666	-0.0367	+/-0.1	
BLB0422-MS1 (Solid) Lab File ID: 0023F2601.D Analyzed: 03/07/23 16:29								
Decachlorobiphenyl	8.0003	72.6	30 - 160	9.428	9.354666	0.0733	+/-0.1	
Decachlorobiphenyl [2C]	8.0003	71.1	30 - 160	10.39	10.4655	-0.0755	+/-0.1	
Tetrachlorometaxylene	8.0003	45.6	30 - 160	3.857	3.827833	0.0292	+/-0.1	
Tetrachlorometaxylene [2C]	8.0003	68.0	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
BLB0422-MSD1 (Solid) Lab File ID: 024F2701.D Analyzed: 03/07/23 16:47								
Decachlorobiphenyl	8.0003	72.0	30 - 160	9.427	9.354666	0.0723	+/-0.1	
Decachlorobiphenyl [2C]	8.0003	64.6	30 - 160	10.388	10.4655	-0.0775	+/-0.1	
Tetrachlorometaxylene	8.0003	51.7	30 - 160	3.857	3.827833	0.0292	+/-0.1	
Tetrachlorometaxylene [2C]	8.0003	56.6	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
23B0229-03 (Solid) Lab File ID: 025F2801.D Analyzed: 03/07/23 17:05								
Decachlorobiphenyl	7.9986	71.9	30 - 160	9.424	9.354666	0.0693	+/-0.1	
Decachlorobiphenyl [2C]	7.9986	70.4	30 - 160	10.386	10.4655	-0.0795	+/-0.1	
Tetrachlorometaxylene	7.9986	62.1	30 - 160	3.857	3.827833	0.0292	+/-0.1	
Tetrachlorometaxylene [2C]	7.9986	61.1	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
SLC0106-CCV2 (Solid) Lab File ID: 002F3001.D Analyzed: 03/07/23 17:41								
Decachlorobiphenyl	40.000	90.3	80 - 120	9.42	9.354666	0.0653	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.8	80 - 120	10.383	10.4655	-0.0825	+/-0.1	
Tetrachlorometaxylene	40.000	90.3	80 - 120	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	92.0	80 - 120	4.183	4.219666	-0.0367	+/-0.1	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0106

Instrument: ECD6

Calibration: FL00041

Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23B0229-05 (Solid)		Lab File ID: 026F3101.D			Analyzed: 03/07/23 17:59			
Decachlorobiphenyl	7.9860	71.0	30 - 160	9.427	9.354666	0.0723	+/-0.1	
Decachlorobiphenyl [2C]	7.9860	68.3	30 - 160	10.388	10.4655	-0.0775	+/-0.1	
Tetrachlorometaxylene	7.9860	60.7	30 - 160	3.857	3.827833	0.0292	+/-0.1	
Tetrachlorometaxylene [2C]	7.9860	54.2	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
23B0229-08 (Solid)		Lab File ID: 027F3201ECD6.D			Analyzed: 03/07/23 18:17			
Decachlorobiphenyl	7.9940	82.0	30 - 160	9.424	9.354666	0.0693	+/-0.1	
Decachlorobiphenyl [2C]	7.9940	71.5	30 - 160	10.386	10.4655	-0.0795	+/-0.1	
Tetrachlorometaxylene	7.9940	61.9	30 - 160	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	7.9940	60.8	30 - 160	4.183	4.219666	-0.0367	+/-0.1	
SLC0106-CCV3 (Solid)		Lab File ID: 002F3401.D			Analyzed: 03/07/23 18:53			
Decachlorobiphenyl	40.000	93.5	80 - 120	9.42	9.354666	0.0653	+/-0.1	
Decachlorobiphenyl [2C]	40.000	96.0	80 - 120	10.384	10.4655	-0.0815	+/-0.1	
Tetrachlorometaxylene	40.000	90.5	80 - 120	3.861	3.827833	0.0332	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	92.0	80 - 120	4.184	4.219666	-0.0357	+/-0.1	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SKL0233

Instrument: ECD6

Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SKL0233-PEM1)		(Water)	Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20			
1-Bromo-2-Nitrobenzene	683485	3.15	672426	3.15	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	619012	9.503	609723	9.504	102	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1005375	3.35	1006482	3.35	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	772586	11.054	769764	11.053	100	50 - 200	0.001	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0093

Instrument: ECD6

Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0093-ICV1)		(Solid)	Lab File ID: 23C03023.D			Analyzed: 03/03/23 00:34			
1-Bromo-2-Nitrobenzene	472089	3.182	472089	3.182	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	377525	9.59	377525	9.59	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	690774	3.335	690774	3.335	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	405465	10.979	405465	10.979	100	50 - 200	0.000	+/-0.50	
Blank (BLB0422-BLK1)		(Solid)	Lab File ID: 062F7101.D			Analyzed: 03/03/23 20:55			
1-Bromo-2-Nitrobenzene	933051	3.179	472089	3.182	198	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl	725730	9.587	377525	9.59	192	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1429005	3.332	690774	3.335	207	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	818965	10.976	405465	10.979	202	50 - 200	-0.003	+/-0.50	*
LCS (BLB0422-BS1)		(Solid)	Lab File ID: 063F7201.D			Analyzed: 03/03/23 21:13			
1-Bromo-2-Nitrobenzene	996589	3.179	472089	3.182	211	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	779254	9.587	377525	9.59	206	50 - 200	-0.003	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1562925	3.332	690774	3.335	226	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	878175	10.976	405465	10.979	217	50 - 200	-0.003	+/-0.50	*
LCS Dup (BLB0422-BSD1)		(Solid)	Lab File ID: 064F7301.D			Analyzed: 03/03/23 21:31			
1-Bromo-2-Nitrobenzene	995171	3.179	472089	3.182	211	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	796684	9.586	377525	9.59	211	50 - 200	-0.004	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1566782	3.332	690774	3.335	227	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	905131	10.976	405465	10.979	223	50 - 200	-0.003	+/-0.50	*
LDW23-SS1236 (23B0229-02)		(Solid)	Lab File ID: 067F7601.D			Analyzed: 03/03/23 22:25			
1-Bromo-2-Nitrobenzene	1105108	3.179	472089	3.182	234	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	728919	9.59	377525	9.59	193	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1474206	3.332	690774	3.335	213	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	843270	10.978	405465	10.979	208	50 - 200	-0.001	+/-0.50	*
LDW23-SS1150 (23B0229-04)		(Solid)	Lab File ID: 069F7801.D			Analyzed: 03/03/23 23:01			
1-Bromo-2-Nitrobenzene	1109293	3.179	472089	3.182	235	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	730951	9.59	377525	9.59	194	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1503825	3.332	690774	3.335	218	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	863409	10.978	405465	10.979	213	50 - 200	-0.001	+/-0.50	*



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0093

Instrument: ECD6

Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1008 (23B0229-06)		(Solid)	Lab File ID: 071F8201.D		Analyzed: 03/04/23 00:13				
1-Bromo-2-Nitrobenzene	1246656	3.179	472089	3.182	264	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	766029	9.593	377525	9.59	203	50 - 200	0.003	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1577294	3.332	690774	3.335	228	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	868540	10.979	405465	10.979	214	50 - 200	0.000	+/-0.50	*



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0106

Instrument: ECD6

Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0106-ICV1)		(Solid)	Lab File ID: 23C03073.D			Analyzed: 03/07/23 09:35			
1-Bromo-2-Nitrobenzene	802383	3.171	802383	3.171	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	631224	9.574	631224	9.574	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1198897	3.324	1198897	3.324	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	722844	10.96	722844	10.96	100	50 - 200	0.000	+/-0.50	
Matrix Spike (BLB0422-MS1)		(Solid)	Lab File ID: 0023F2601.D			Analyzed: 03/07/23 16:29			
1-Bromo-2-Nitrobenzene	957015	3.17	802383	3.171	119	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	683912	9.584	631224	9.574	108	50 - 200	0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1088854	3.323	1198897	3.324	91	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	802256	10.967	722844	10.96	111	50 - 200	0.007	+/-0.50	
Matrix Spike Dup (BLB0422-MSD1)		(Solid)	Lab File ID: 024F2701.D			Analyzed: 03/07/23 16:47			
1-Bromo-2-Nitrobenzene	1000033	3.17	802383	3.171	125	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	760192	9.589	631224	9.574	120	50 - 200	0.015	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1433353	3.323	1198897	3.324	120	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	916346	10.968	722844	10.96	127	50 - 200	0.008	+/-0.50	
LDW23-SS1237 (23B0229-03)		(Solid)	Lab File ID: 025F2801.D			Analyzed: 03/07/23 17:05			
1-Bromo-2-Nitrobenzene	1014088	3.17	802383	3.171	126	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	749508	9.582	631224	9.574	119	50 - 200	0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1522541	3.323	1198897	3.324	127	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	866858	10.963	722844	10.96	120	50 - 200	0.003	+/-0.50	
LDW23-SS1008 (23B0229-05)		(Solid)	Lab File ID: 026F3101.D			Analyzed: 03/07/23 17:59			
1-Bromo-2-Nitrobenzene	1044128	3.17	802383	3.171	130	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	826498	9.592	631224	9.574	131	50 - 200	0.018	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1663023	3.323	1198897	3.324	139	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	983307	10.969	722844	10.96	136	50 - 200	0.009	+/-0.50	
LDW23-SC1013 (23B0229-08)		(Solid)	Lab File ID: 027F3201ECD6.D			Analyzed: 03/07/23 18:17			
1-Bromo-2-Nitrobenzene	558917	3.171	802383	3.171	70	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	426896	9.582	631224	9.574	68	50 - 200	0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	829688	3.324	1198897	3.324	69	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	497820	10.963	722844	10.96	69	50 - 200	0.003	+/-0.50	



HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	02/17/23 10:59	8	14	03/03/23 22:25	14	40	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	02/17/23 10:59	8	14	03/07/23 17:05	18	40	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	02/17/23 10:59	8	14	03/03/23 23:01	15	40	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	02/17/23 10:59	8	14	03/07/23 17:59	18	40	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	02/17/23 10:59	8	14	03/04/23 00:13	15	40	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	02/17/23 10:59	8	14	03/07/23 18:17	18	40	
Matrix Spike BLB0422-MS1	02/08/23 15:25	02/08/23 16:47	02/17/23 10:59	8	14	03/07/23 16:29	18	40	
Matrix Spike Dup BLB0422-MSD1	02/08/23 15:25	02/08/23 16:47	02/17/23 10:59	8	14	03/07/23 16:47	18	40	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**

EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Warning

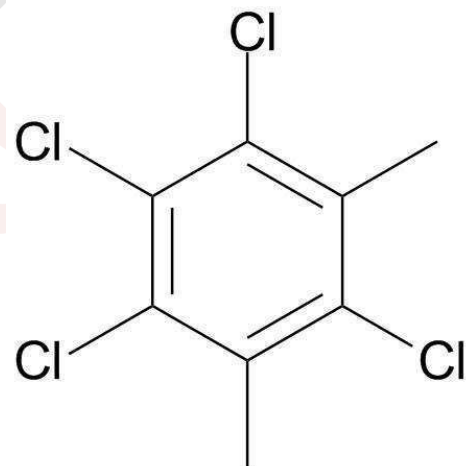
Certified Reference Material



Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration ¹
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C₈H₆Cl₄
Molecular weight: 243.94



C000147

tetrachlorometaxylene

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ The Uncertainty calculated for this product is $\pm 2.4\%$. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



AccuStandard

125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N

EXPIRATION: Jul 28, 2015

DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

LOT #: 990521LB-AC

SOLVENT: N/A

This product is guaranteed accurate to $\pm 0.5\%$ of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹	Certified Analyte Concentration ²
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2;

C000148

decachlorobiphenyl

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

** I 1768 A*

Certified by:

R. Cooper

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
 2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is $\pm 0.5\%$ which is the Combined Uncertainty $U_c(y)$. It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is $U_c(y) * K$ where K is the coverage factor at the 95% confidence level ($K=2$).
 3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

** Recertified ~ 4-6-09 (S)*



Analytical Standard Record
Standard ID: C000148

Printed: 4/23/2015 11:54:44AM

Description:	decachlorobiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	9905211b-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By

Date

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4



1007970

Mirex 2d source
Solvent / Lot: MeOH
Prep: 9/7/2020 by JR
Exp: 6/5/2024
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-026S

Description: o,p'-DDE

Lot: 218021093-01

Solvent: Methanol

Hazards: Refer to SDS for complete safety information

Date Certified: Feb 10, 2020

Expiration: Feb 10, 2023

Sample Size: 1 mL

Components: 1

Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity %	Prepared	Certified Analyte
		(GC/MS)	Concentration ² (µg/mL)	Concentration ¹ (µg/mL)
o,p'-DDE	3424-82-6	99.9	100.4	100.3

I7971

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 218011470
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jan 30, 2018
Expiration: Jan 30, 2028
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

I 7974

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: May 27, 2020
Expiration: Jun 27, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2



I010773

o,p-DDD
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations Certificate Number 3774

2 Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this

4 Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 218101131
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Oct 8, 2018
Expiration: Nov 8, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	97.7	102.4*	100.0



I010795

Oxychlordane isomer
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/20/2022
Location:

* Weight compensated to 100% purity.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4 Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 217121240
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Dec 13, 2017
Expiration: Dec 13, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹ (µg/mL)	Certified Analyte Concentration ² (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.4	99.0

I010796

cis-Nonochlor-Accustd-100ug/ml

Solvent / Lot: methanol

Prep: 11/20/2020 by VS

Exp: 11/27/2022

Location:



A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ All weights are traceable through NIST, Test No. 822-275872-11

² Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By:

Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

- 2. Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11.
- 3. Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.
- 4. Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
- 5. Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
- 6. Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.
- 7. Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: Refer to SDS for complete safety information

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982



J006504

Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this

4 Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 21, 2021
Expiration: Aug 21, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations

2. Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level.

7. Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 6, 2021
Expiration: Aug 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

K 0448

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: May 28, 2021
Expiration: Jun 28, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



AR-1463

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

K000449

Oxychlordane isomer
Solvent / Lot: methanol
Prep: 1/13/2022 by YZ
Exp: 6/28/2023
Location:

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations

- 2. Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.
- 3. Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.
- 4. Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
- 5. Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
- 6. Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level.
- 7. Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 221041461
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Apr 22, 2021
Expiration: Apr 22, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
cis-Nonachlor	5103-73-1	98.6	101.1	99.7

K 000450

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:



Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 220091107
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Sep 11, 2020
Expiration: Sep 11, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

K-00451

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:



Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

K 000952

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

K 000 452

CERTIFICATE OF ANALYSIS

Catalog No: P-066S

Description: Mirex

Lot: 221121451

Solvent: Methanol

Hazards: Refer to SDS for complete safety information

Date Certified: Dec 27, 2021

Expiration: Dec 27, 2025

Sample Size: 1 mL

Components: 1

Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 221031488-04
Solvent: Hexane
Hazards: Refer to SDS for complete safety information

Date Certified: Apr 8, 2022
Expiration: May 8, 2023
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
4,4'-DDT	50-29-3	100.0	200.9	200.9
Endrin	72-20-8	99.8	200.0	199.6

K7002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:



Larry Decker, Organic QC Manager



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2
Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	alpha-BHC	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/-	0.3672	µg/mL	Unstressed
	Purity 99%		+/-	0.5281	µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/-	0.3672	µg/mL	Unstressed
	Purity 99%		+/-	0.5281	µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/-	0.3702	µg/mL	Unstressed
	Purity 96%		+/-	0.5323	µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed

8	trans-Chlordane CAS # 5103-74-2 Purity 98%	(Lot 32943)	8.0 µg/mL	+/- 0.0657 +/- 0.3689 +/- 0.5305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	cis-Chlordane CAS # 5103-71-9 Purity 98%	(Lot 31766)	8.0 µg/mL	+/- 0.0657 +/- 0.3689 +/- 0.5305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Endosulfan I CAS # 959-98-8 Purity 99%	(Lot BCCF4060)	8.0 µg/mL	+/- 0.0654 +/- 0.3672 +/- 0.5281	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	4,4'-DDE CAS # 72-55-9 Purity 99%	(Lot GHYQG)	16.1 µg/mL	+/- 0.1314 +/- 0.7375 +/- 1.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Dieldrin CAS # 60-57-1 Purity 98%	(Lot 11129900)	16.1 µg/mL	+/- 0.1320 +/- 0.7408 +/- 1.0653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Endrin CAS # 72-20-8 Purity 99%	(Lot 13157400)	16.1 µg/mL	+/- 0.1320 +/- 0.7406 +/- 1.0650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	4,4'-DDD CAS # 72-54-8 Purity 99%	(Lot HAN02)	16.1 µg/mL	+/- 0.1320 +/- 0.7406 +/- 1.0650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Endosulfan II CAS # 33213-65-9 Purity 99%	(Lot 12448900)	16.0 µg/mL	+/- 0.1309 +/- 0.7345 +/- 1.0562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	4,4'-DDT CAS # 50-29-3 Purity 98%	(Lot 220428JLM)	16.1 µg/mL	+/- 0.1315 +/- 0.7378 +/- 1.0610	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Endrin aldehyde CAS # 7421-93-4 Purity 99%	(Lot 30720)	16.1 µg/mL	+/- 0.1314 +/- 0.7375 +/- 1.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Endosulfan sulfate CAS # 1031-07-8 Purity 99%	(Lot BCCB0424)	16.1 µg/mL	+/- 0.1320 +/- 0.7406 +/- 1.0650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Methoxychlor CAS # 72-43-5 Purity 98%	(Lot 13027000)	80.2 µg/mL	+/- 0.5781 +/- 3.6697 +/- 5.2871	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Endrin ketone CAS # 53494-70-5 Purity 99%	(Lot 13026800)	16.1 µg/mL	+/- 0.1314 +/- 0.7375 +/- 1.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

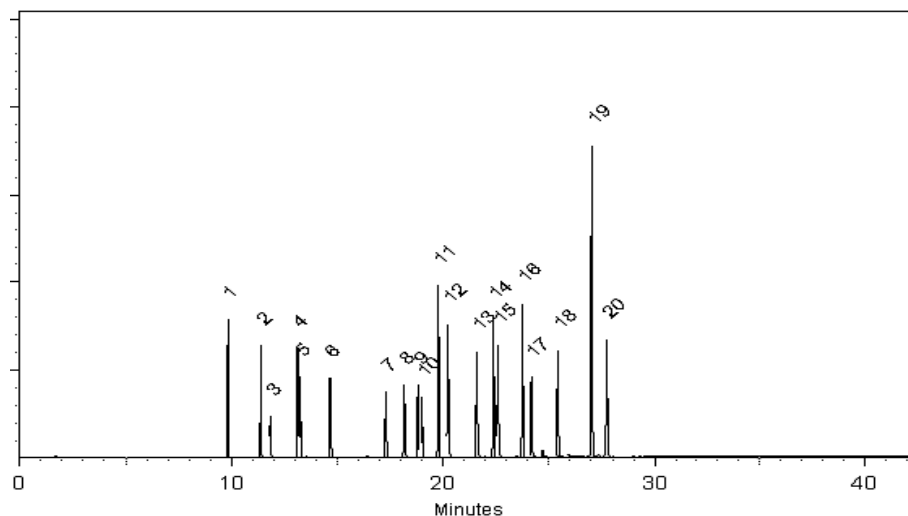
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311


Fang-Yun Lo - GC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations

2. Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level.

7. Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X

Description: Hexachlorobutadiene

Lot: 222031188

Solvent: Methanol

Hazards: Refer to SDS for complete safety information

Date Certified: Mar 11, 2022

Expiration: Apr 11, 2024

Sample Size: 1 mL

Components: 1

Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282338ECD7.D
Data file 2: /230228.b/230228.b/02282338ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-01
Client ID:
Injection Date: 01-MAR-2023 04:53
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.003	312815	5.682	-0.005	146665	26.2	31.4	18.0	Tetrachloro-m-xylene
13.886	-0.007	254798	14.113	-0.007	179294	34.3	33.2	3.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	800058	18.7
Hexabromobiphenyl	1429847	754196	-47.3

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	318689	1.1
Hexabromobiphenyl	513946	354662	-31.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.395	-0.011	45905	117.6	1	8.298	-0.009	25923	170.4
Aroclor-1248	2	8.564	-0.017	39438	79.5	2	8.704	-0.011	20387	129.6
Aroclor-1248	3	8.983	-0.014	116414	124.4	3	9.138	-0.030	30519	168.6
Aroclor-1248	4	9.285	-0.010	131490	275.9	4	9.532	-0.062	32122	147.8
Total CollAve (4 peaks):				149.3	Total Col2Ave (4 peaks):				154.1	RPD = 3
Corrected Ave (3 peaks):				107.1	Corrected Ave (3 peaks):				148.6	RPD = 32
156.2										
Aroclor-1254	1	9.285	-0.014	131490	163.7	1	9.436	-0.015	55568	229.4
Aroclor-1254	2	9.360	-0.018	54221	150.1	2	9.954	-0.017	29601	151.9
Aroclor-1254	3	9.658	-0.011	111862	216.6	3	10.103	-0.022	96094	227.9
Aroclor-1254	4	9.786	-0.022	188878	188.1	4	10.351	-0.023	131995	321.1
Aroclor-1254	5	10.118	-0.060	122160	194.1	5	10.553	-0.017	86849	347.1
Total CollAve (5 peaks):				182.5	Total Col2Ave (5 peaks):				255.5	RPD = 33
Corrected Ave (4 peaks):				174.0	Corrected Ave (4 peaks):				232.6	RPD = 29
179.625										
Aroclor-1260	1	11.032	-0.012	77564	285.9	1	11.642	-0.011	49221	236.0
Aroclor-1260	2	11.345	-0.016	56856	200.6	2	11.903	-0.014	99421	186.8
Aroclor-1260	3	11.718	-0.018	175492	233.4	3	12.421	-0.014	36743	260.1
Aroclor-1260	4	12.120	-0.020	91829	242.5	4	12.486	-0.016	68516	191.0
Aroclor-1260	5	12.234	-0.009	42732	262.2	NS	---			----
Total CollAve (5 peaks):				244.9	Total Col2Ave (4 peaks):				218.5	RPD = 11
Corrected Ave (4 peaks):				234.7	Corrected Ave (3 peaks):				204.6	RPD = 14
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.907 - 13.793) = 3675831 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1841441 Col2 Total PCB = 0.5 ppm*

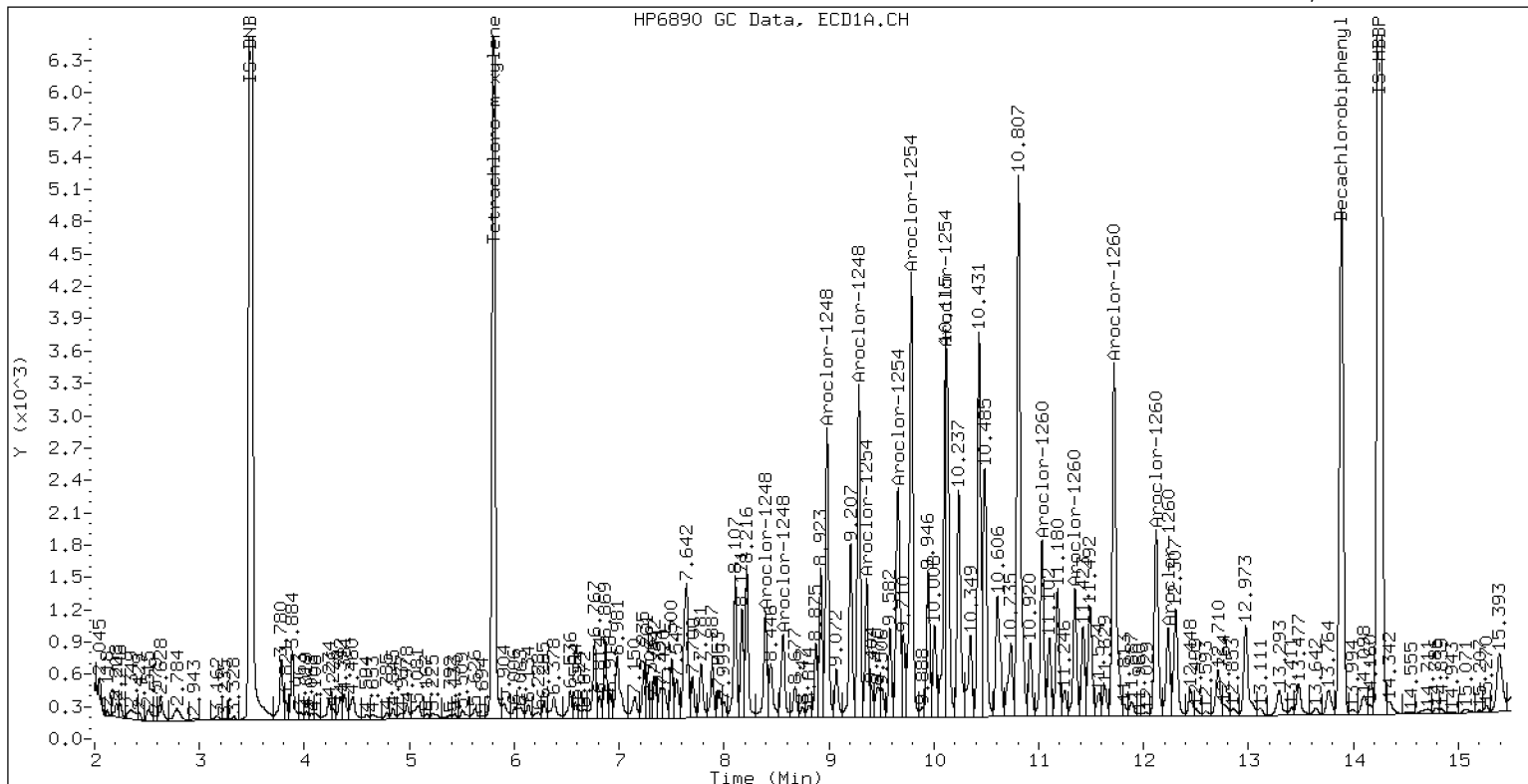
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-01

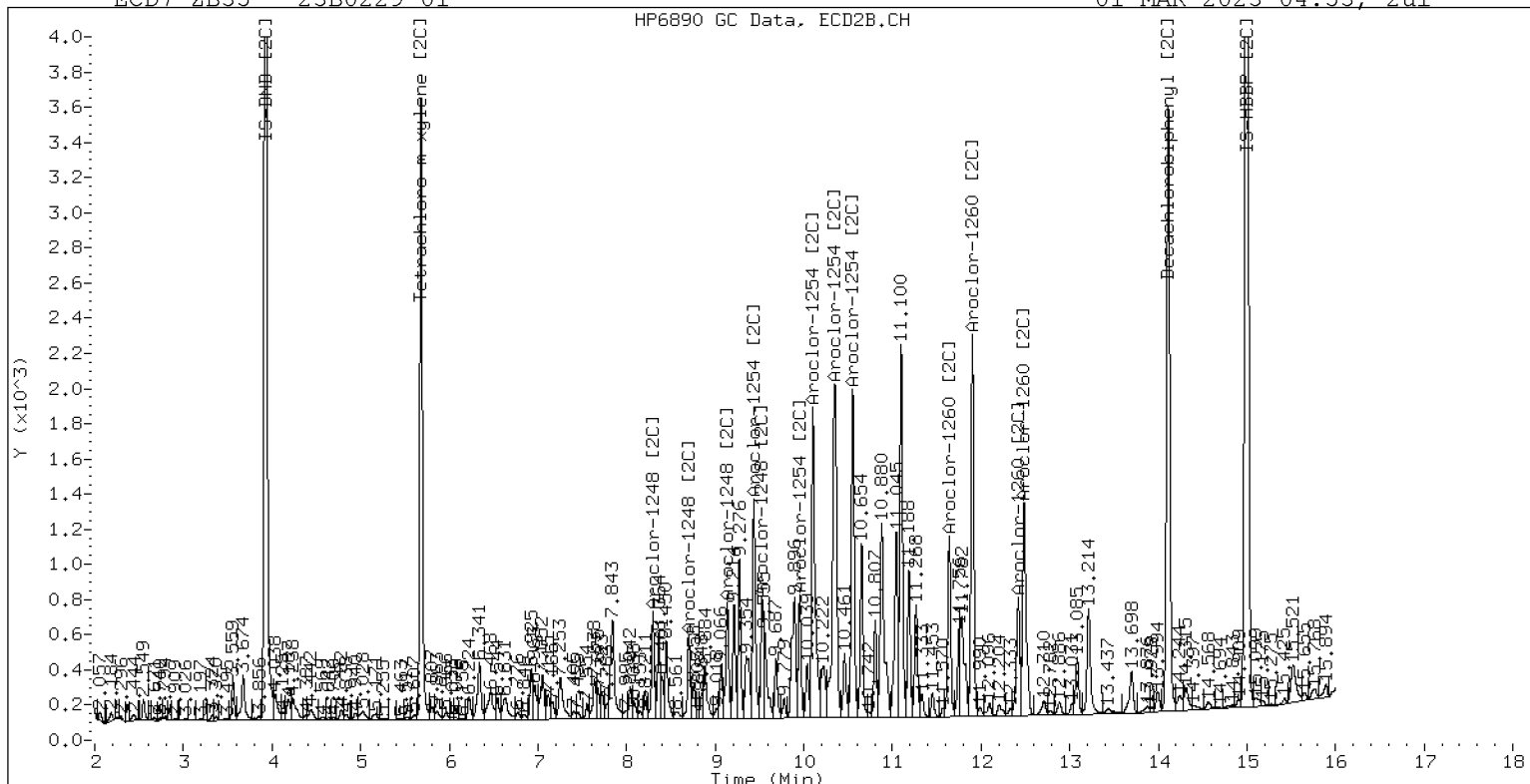
01-MAR-2023 04:53, 2u1



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-01

01-MAR-2023 04:53, 2u1



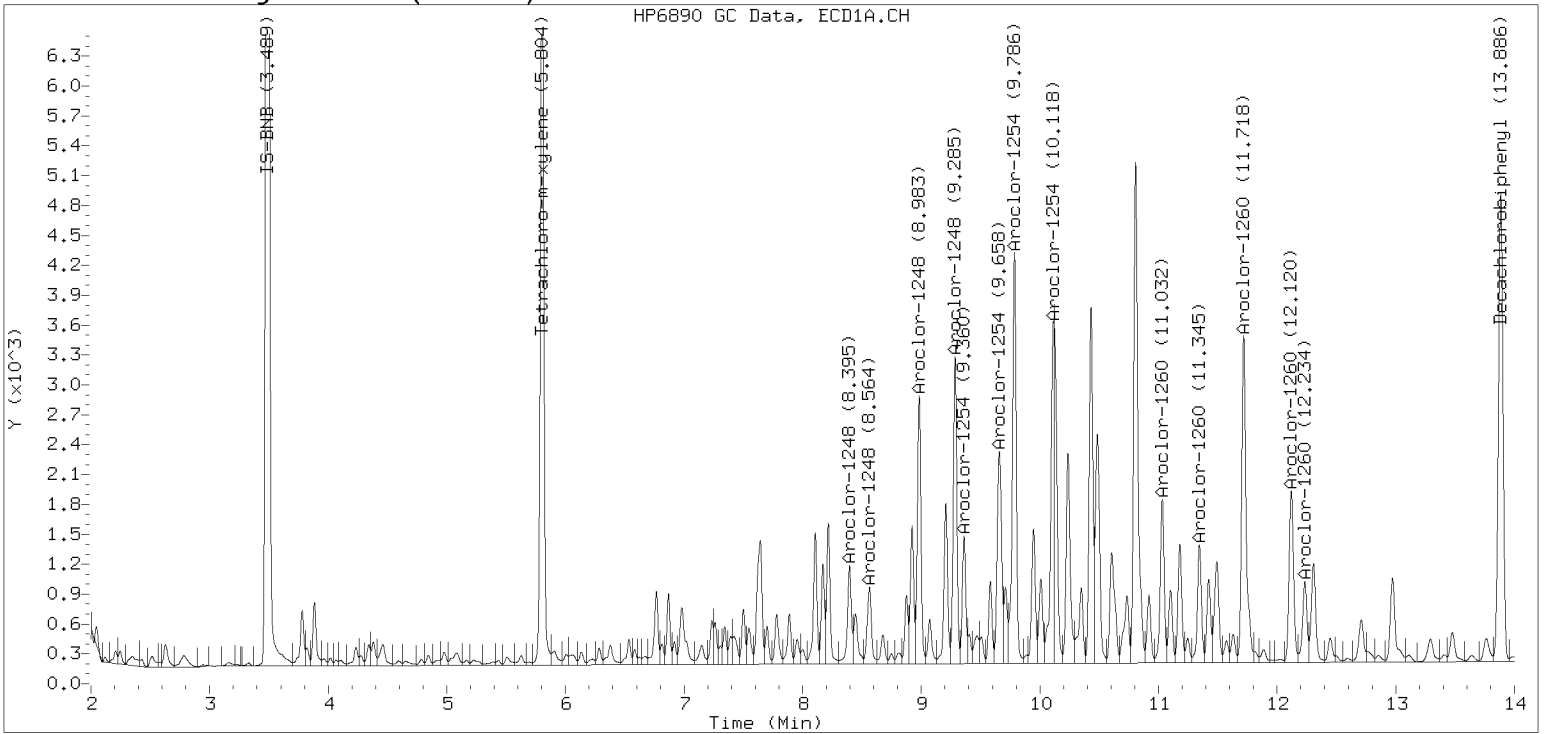
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

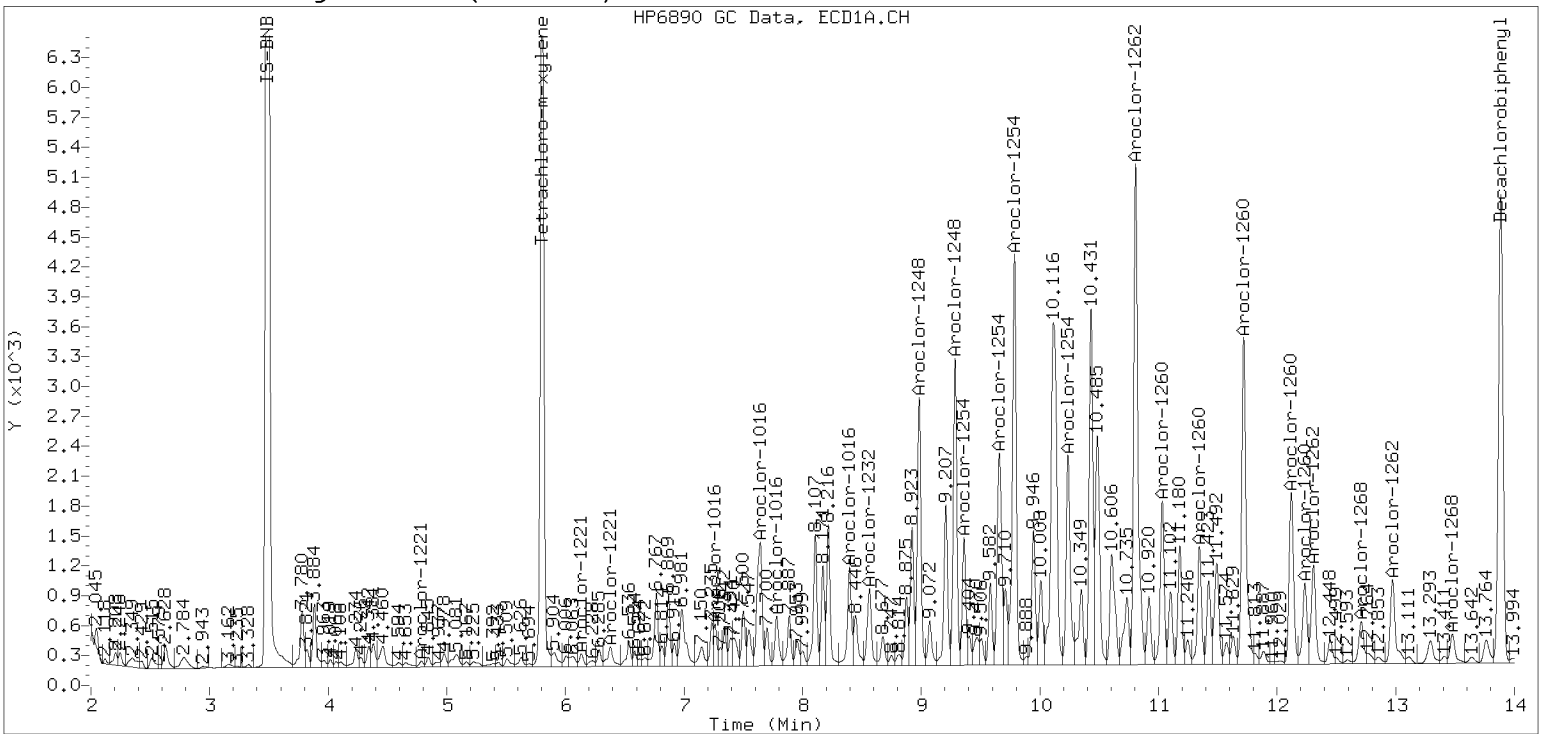
Datafile: ecd7.i/230228.b/02282338ECD7.D

Injection Date: 01-MAR-2023 04:53

Manual Integration (After)



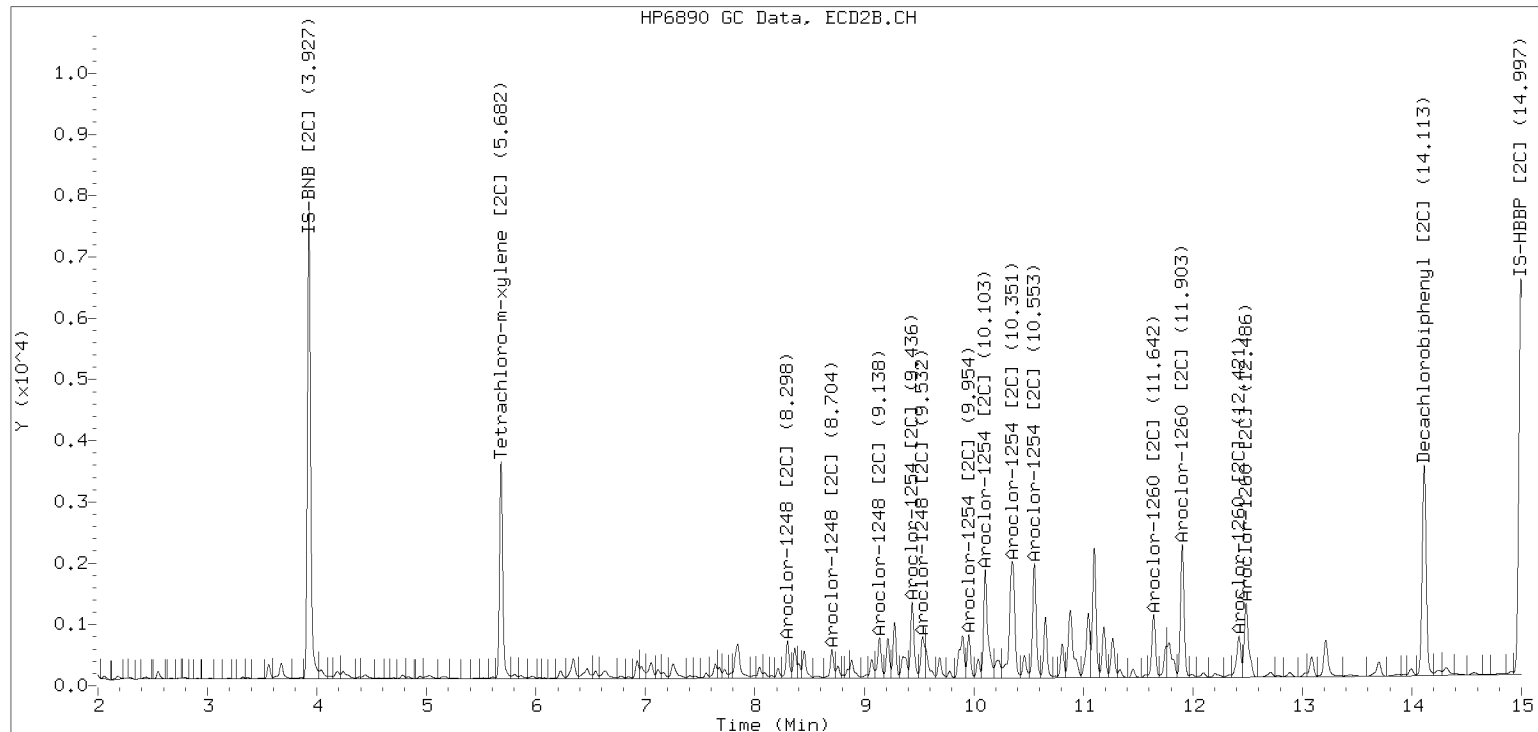
Processed Integration (Before)



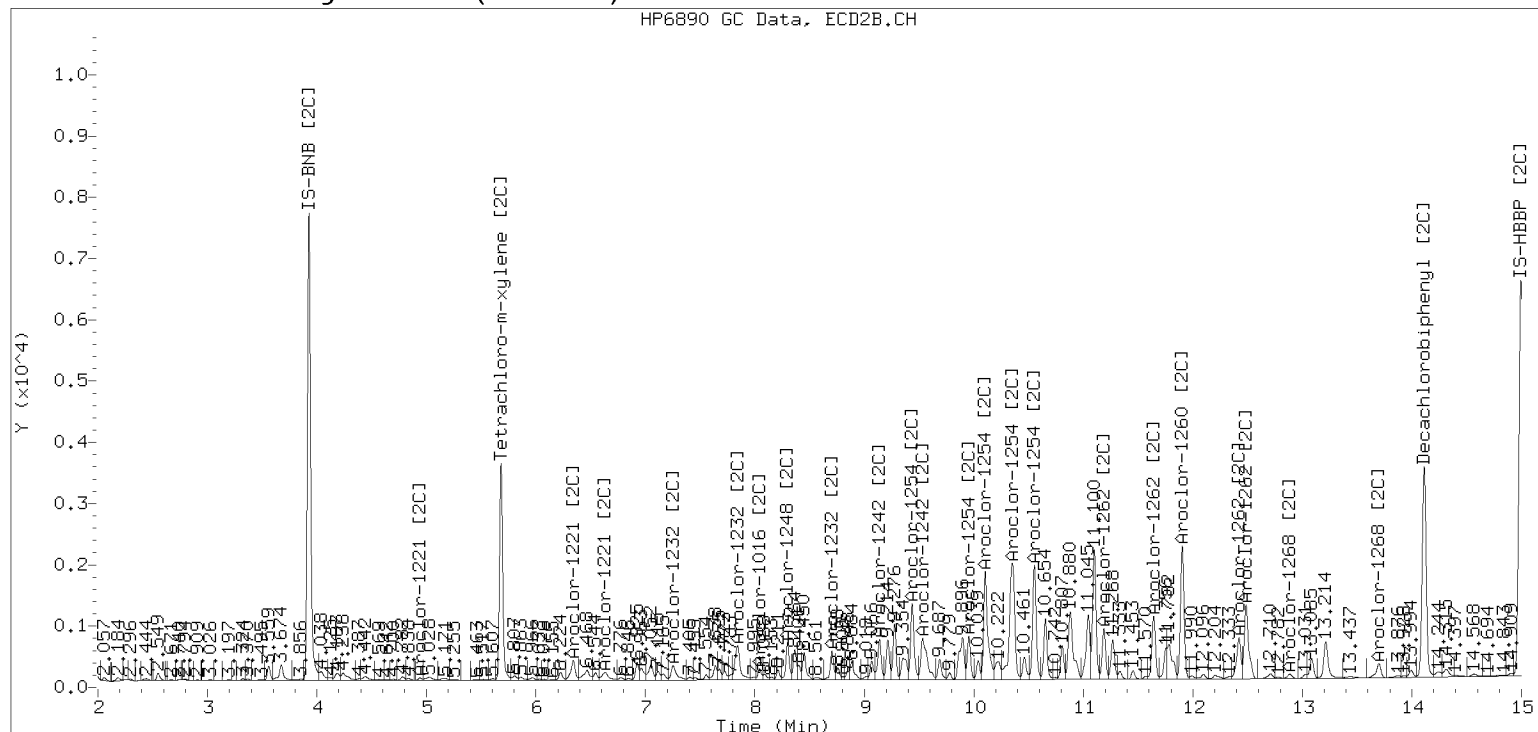
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282338ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





Dual Column

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23B0229</u>	
Client: <u>Anchor QEA, LLC</u>		
Project: <u>AOC5 MR Phase 1</u>		
Matrix: <u>Solid</u>	Laboratory ID: <u>23B0229-02 A</u>	File ID: <u>02282339ECD7.D</u>
Sampled: <u>02/08/23 11:28</u>	Prepared: <u>02/17/23 13:53</u>	Analyzed: <u>03/01/23 05:14</u>
% Solids: <u>55.99</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>22.38 g Wet / 2.5 mL</u>
Batch: <u>BLB0427</u>	Sequence: <u>SLC0014</u>	Calibration: <u>GB00069</u>
Instrument: <u>ECD7</u>	Column 1: <u>ZB5</u>	Column 2: <u>ZB35</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	31.0	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	52.5	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	36.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9805	7.00	87.8	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9805	5.30	66.4	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9805	6.83	85.5	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9805	6.28	78.7	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282339ECD7.D
Data file 2: /230228.b/230228.b/02282339ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-02
Client ID:
Injection Date: 01-MAR-2023 05:14
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.805	-0.003	331748	5.683	-0.005	156367	26.6	31.5	17.0	Tetrachloro-m-xylene
13.886	-0.007	274202	14.112	-0.008	192356	35.1	34.2	2.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	836335	24.1
Hexabromobiphenyl	1429847	793114	-44.5

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	338347	7.3
Hexabromobiphenyl	513946	369130	-28.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.395	-0.010	48660	119.2	1	8.298	-0.009	27144	168.0	
Aroclor-1248	2	8.563	-0.017	36910	71.2	2	8.705	-0.010	21846	130.8	
Aroclor-1248	3	8.983	-0.013	123788	126.5	3	9.138	-0.030	32116	167.1	
Aroclor-1248	4	9.286	-0.009	151188	303.5	4	9.531	-0.063	33026	149.1	
Total CollAve (4 peaks):				155.1	Total Col2Ave (4 peaks):				152.2	RPD = 2	
Corrected Ave (3 peaks):				105.6	Corrected Ave (3 peaks):				147.0	RPD = 33	
155.3											
Aroclor-1254	1	9.286	-0.013	151188	180.0	1	9.437	-0.014	63247	245.9	
Aroclor-1254	2	9.360	-0.018	57246	151.6	2	9.955	-0.016	38415	185.7	
Aroclor-1254	3	9.656	-0.013	120533	223.2	3	10.105	-0.020	110548	247.0	
Aroclor-1254	4	9.785	-0.023	207693	197.8	4	10.347	-0.027	140721	322.5	
Aroclor-1254	5	10.124	-0.054	248306	377.4	5	10.554	-0.016	83318	313.6	
Total CollAve (5 peaks):				226.0	Total Col2Ave (5 peaks):				262.9	RPD = 15	
Corrected Ave (4 peaks):				188.2	Corrected Ave (4 peaks):				248.0	RPD = 27	
Aroclor-1260	1	11.031	-0.013	56553	198.2	1	11.642	-0.011	52599	242.3	
Aroclor-1260	2	11.347	-0.014	51000	171.1	2	11.903	-0.015	76756	138.6	
Aroclor-1260	3	11.717	-0.019	146433	185.2	3	12.421	-0.014	31285	212.8	
Aroclor-1260	4	12.119	-0.021	75432	189.5	4	12.487	-0.015	53698	143.8	
Aroclor-1260	5	12.233	-0.010	31571	184.2	NS	---			----	
Total CollAve (5 peaks):				185.6	Total Col2Ave (4 peaks):				184.4	RPD = 1	
Corrected Ave (4 peaks):				182.5	Corrected Ave (3 peaks):				165.1	RPD = 10	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.907 - 13.793) = 3492589 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1768203 Col2 Total PCB = 0.4 ppm*

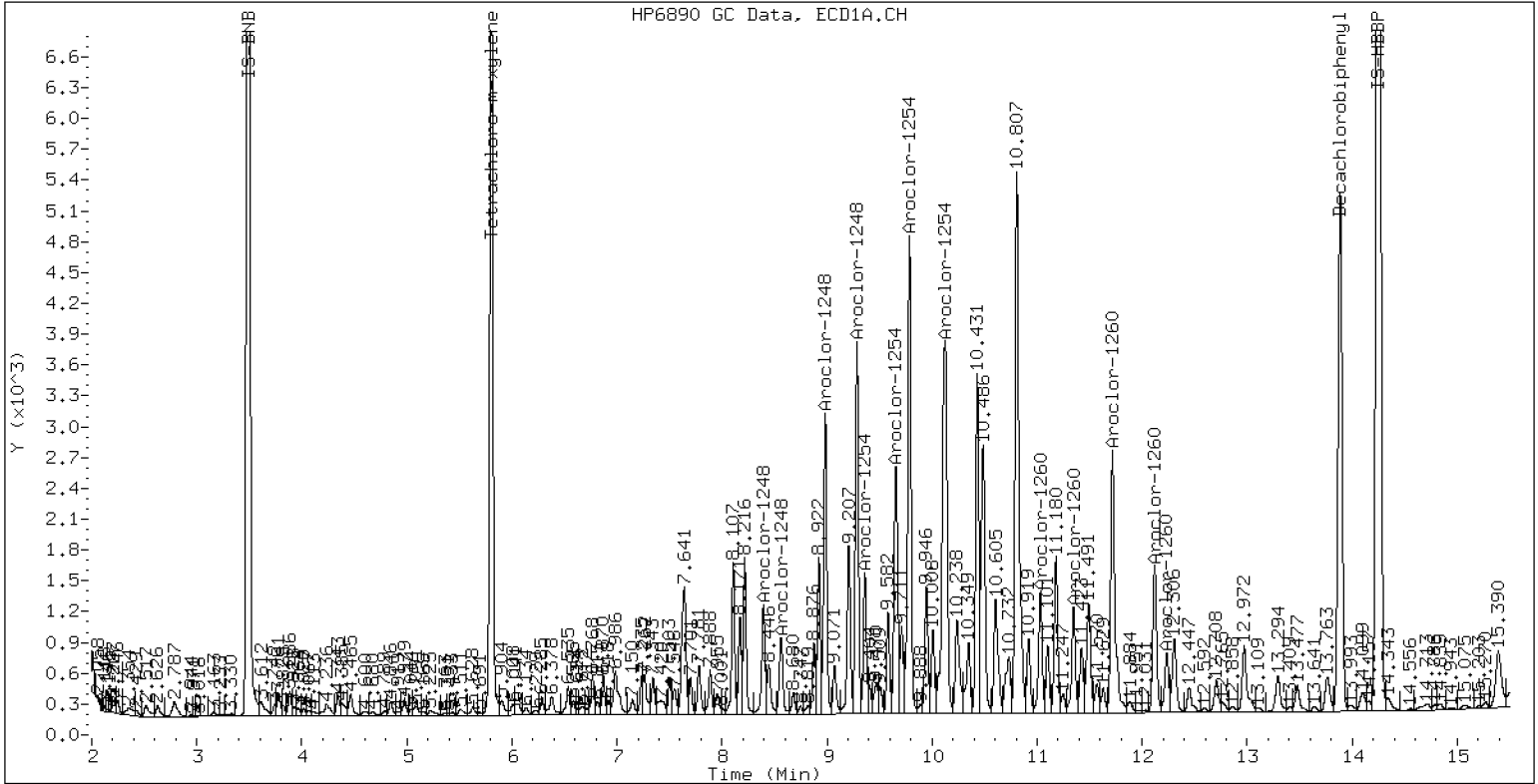
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-02

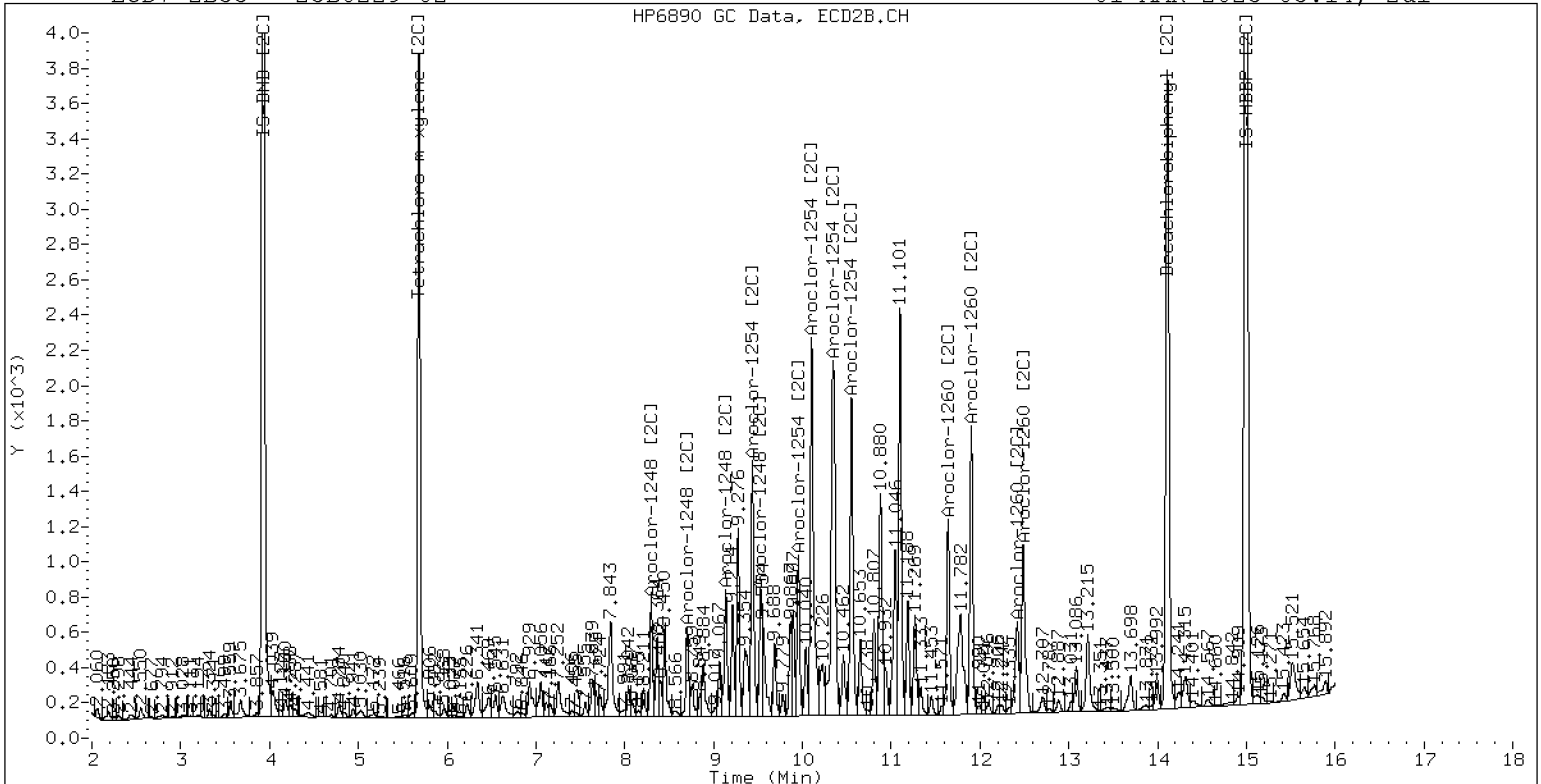
01-MAR-2023 05:14, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 23B0229-02

01-MAR-2023 05:14, 2u1

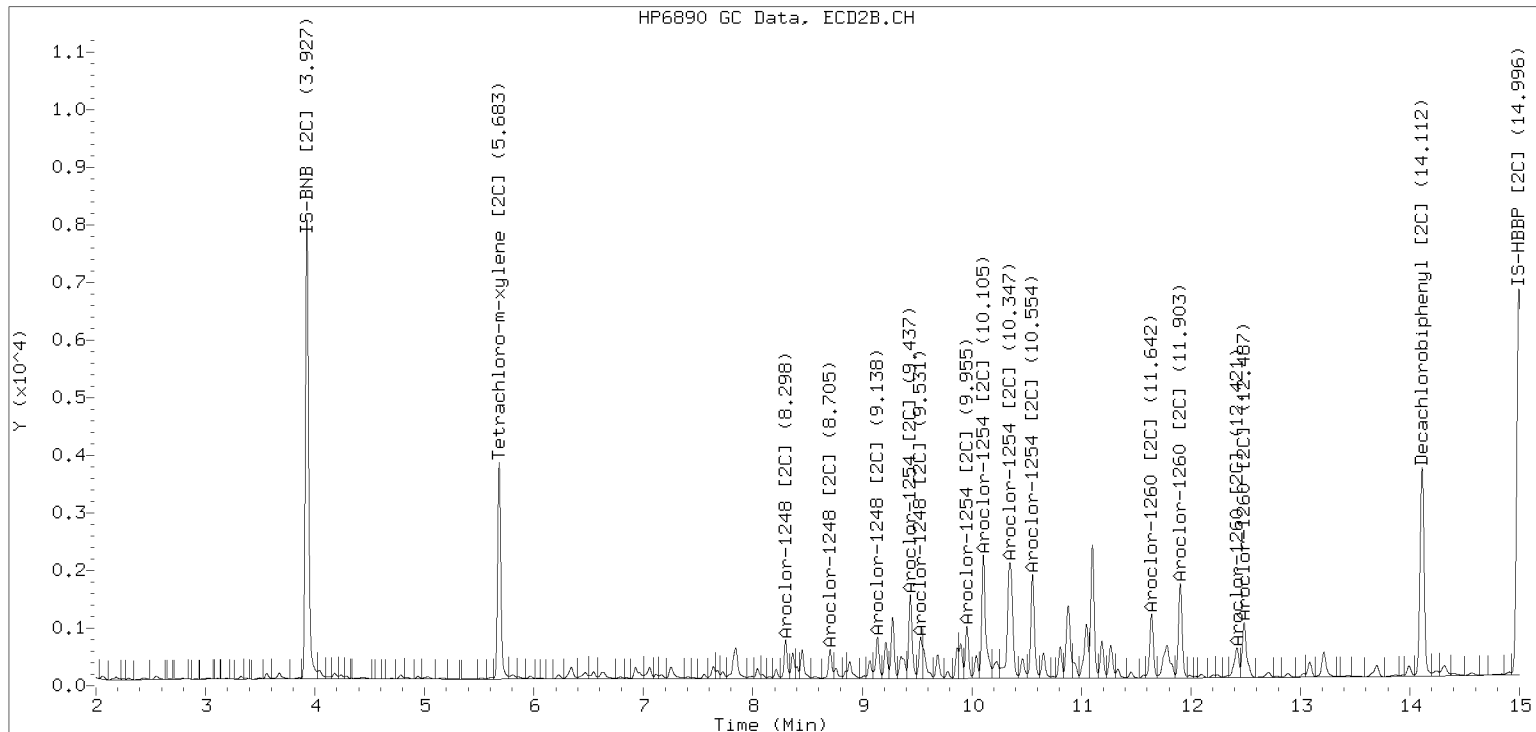


ZB-35 Manual Integration: YES

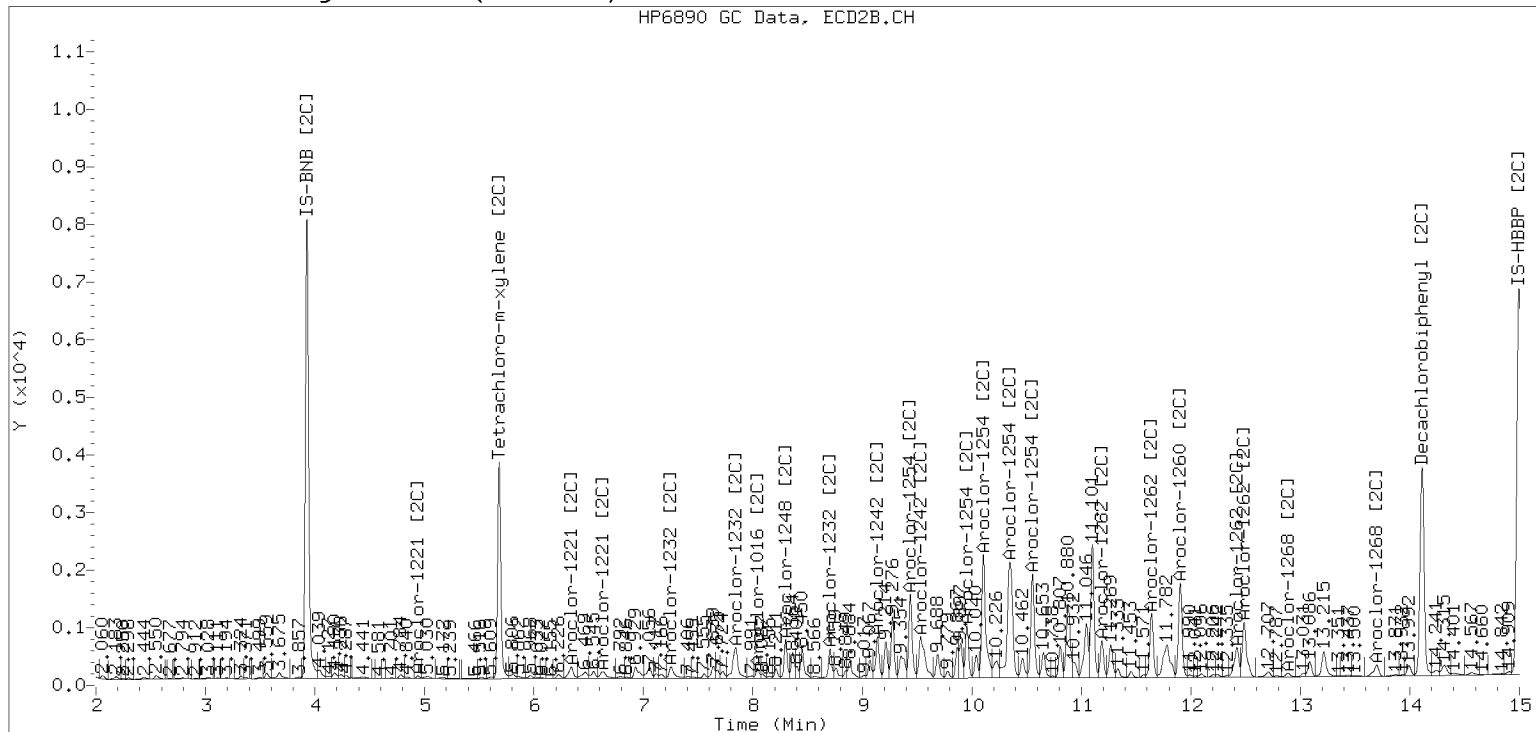
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282339ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282340ECD7.D
Data file 2: /230228.b/230228.b/02282340ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-03
Client ID:
Injection Date: 01-MAR-2023 05:35
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.004	308691	5.681	-0.006	146863	25.4	30.0	16.4	Tetrachloro-m-xylene
13.886	-0.008	266249	14.112	-0.008	186099	35.4	34.2	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	813220	20.7
Hexabromobiphenyl	1429847	763077	-46.6

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	334198	6.0
Hexabromobiphenyl	513946	356862	-30.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.395	-0.011	38573	97.2	1	8.298	-0.009	22086	138.4
Aroclor-1248	2	8.563	-0.017	31880	63.2	2	8.704	-0.011	19435	117.8
Aroclor-1248	3	8.983	-0.014	99209	104.3	3	9.138	-0.031	27734	146.1
Aroclor-1248	4	9.285	-0.010	112185	231.6	4	9.533	-0.061	25041	109.9
Total CollAve (4 peaks):				124.1	Total Col2Ave (4 peaks):				128.0	RPD = 3
Corrected Ave (3 peaks):				88.2	Corrected Ave (3 peaks):				122.0	RPD = 32
134.1										
Aroclor-1254	1	9.285	-0.014	112185	137.4	1	9.437	-0.014	48550	191.1
Aroclor-1254	2	9.361	-0.017	42856	116.7	2	9.956	-0.016	27565	134.9
Aroclor-1254	3	9.659	-0.010	102775	195.8	3	10.105	-0.021	82687	187.0
Aroclor-1254	4	9.787	-0.021	159120	155.9	4	10.349	-0.025	111034	257.6
Aroclor-1254	5	10.122	-0.056	94312	147.4	5	10.553	-0.017	69301	264.1
Total CollAve (5 peaks):				150.6	Total Col2Ave (5 peaks):				206.9	RPD = 32
Corrected Ave (4 peaks):				139.3	Corrected Ave (4 peaks):				192.7	RPD = 32
151.45										
Aroclor-1260	1	11.032	-0.012	52821	192.4	1	11.642	-0.011	45493	216.8
Aroclor-1260	2	11.347	-0.013	44015	153.5	2	11.904	-0.014	70153	131.0
Aroclor-1260	3	11.717	-0.018	134770	177.2	3	12.421	-0.014	30506	214.7
Aroclor-1260	4	12.118	-0.022	64089	167.3	4	12.486	-0.016	49151	136.2
Aroclor-1260	5	12.234	-0.009	29546	179.2	NS	---			----
Total CollAve (5 peaks):				173.9	Total Col2Ave (4 peaks):				174.7	RPD = 0
Corrected Ave (4 peaks):				169.3	Corrected Ave (3 peaks):				160.6	RPD = 5
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.907 - 13.793) = 2830934 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1494448 Col2 Total PCB = 0.4 ppm*

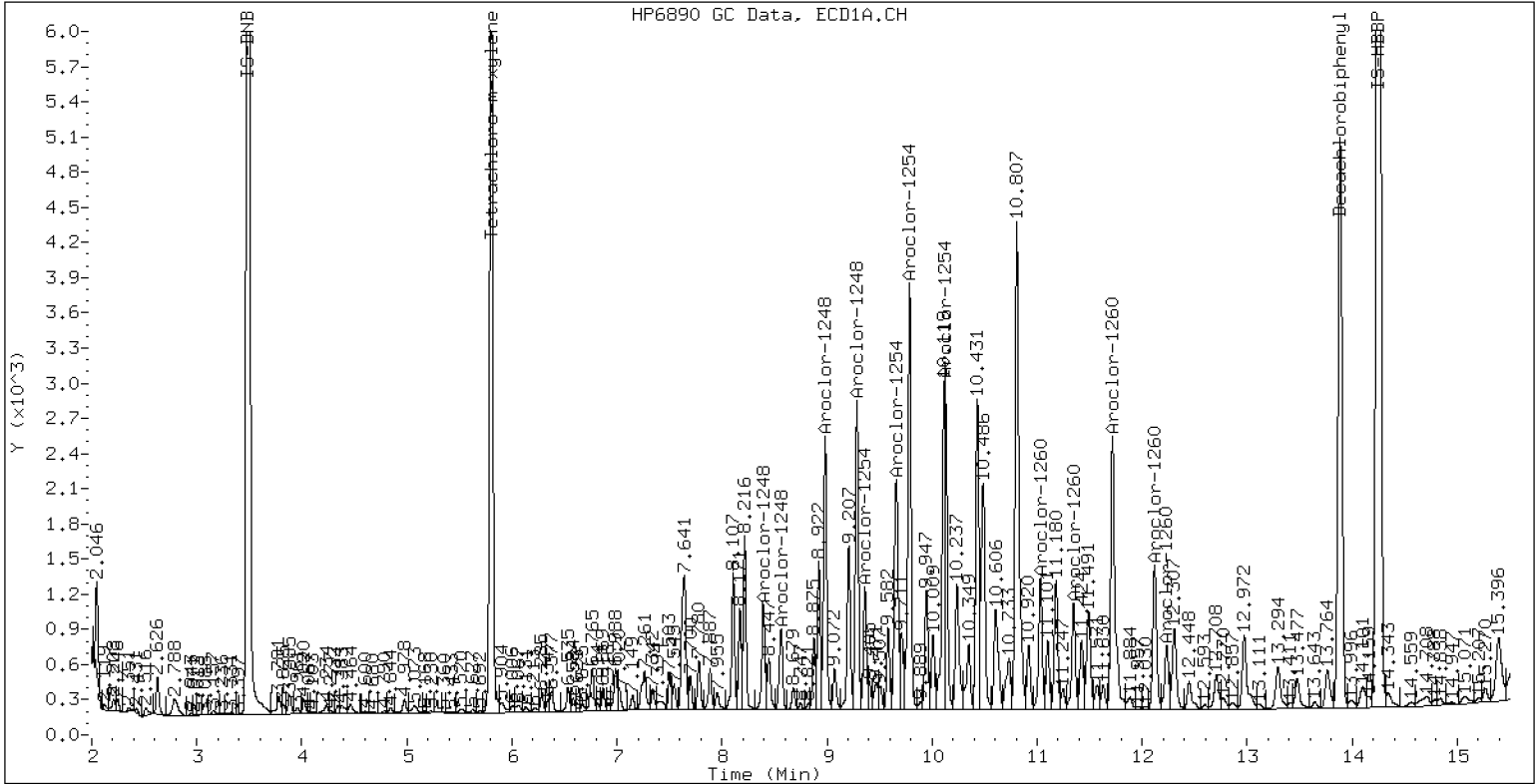
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-03

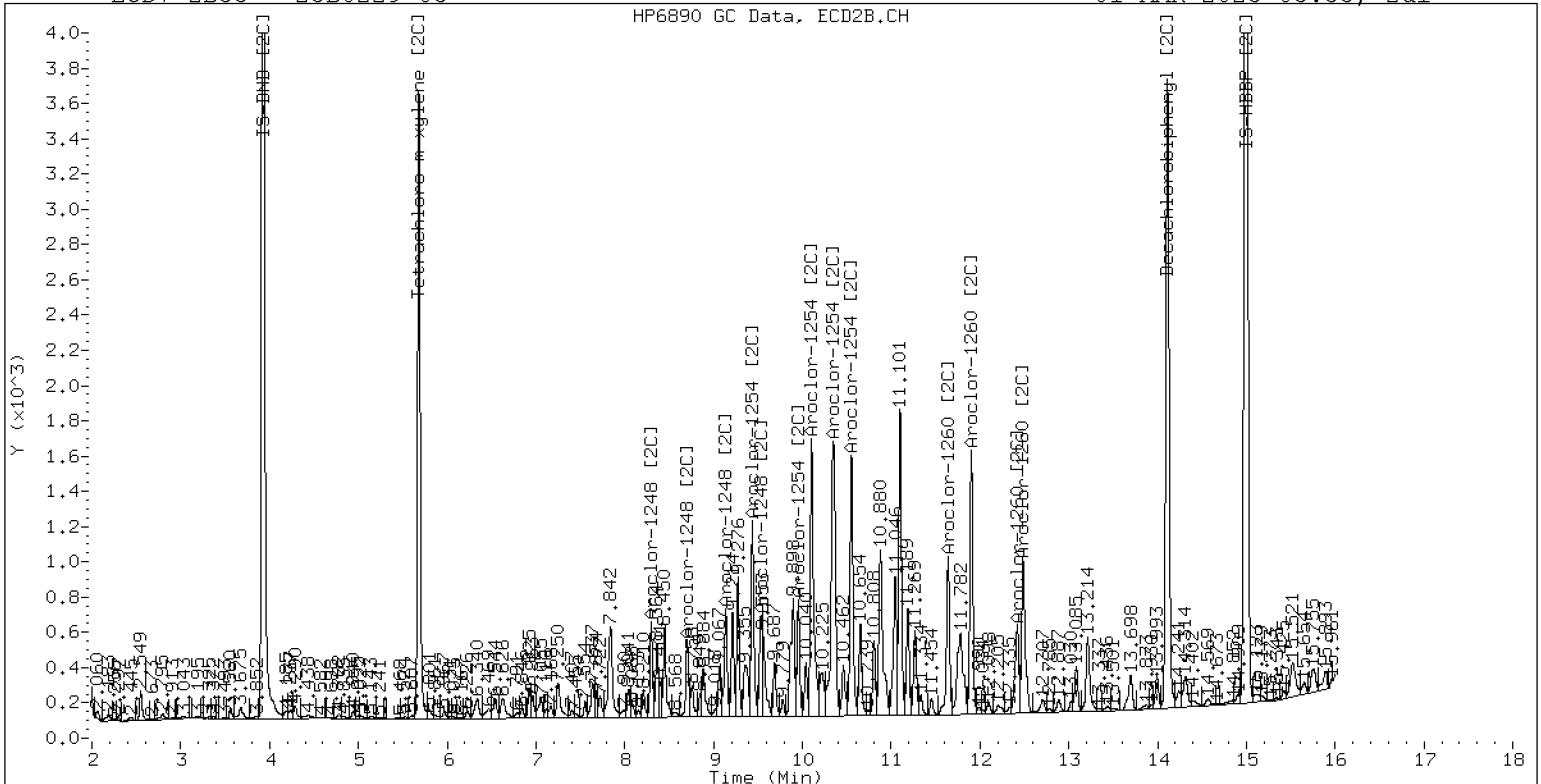
01-MAR-2023 05:35, 2u1



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-03

01-MAR-2023 05:35, 2u1



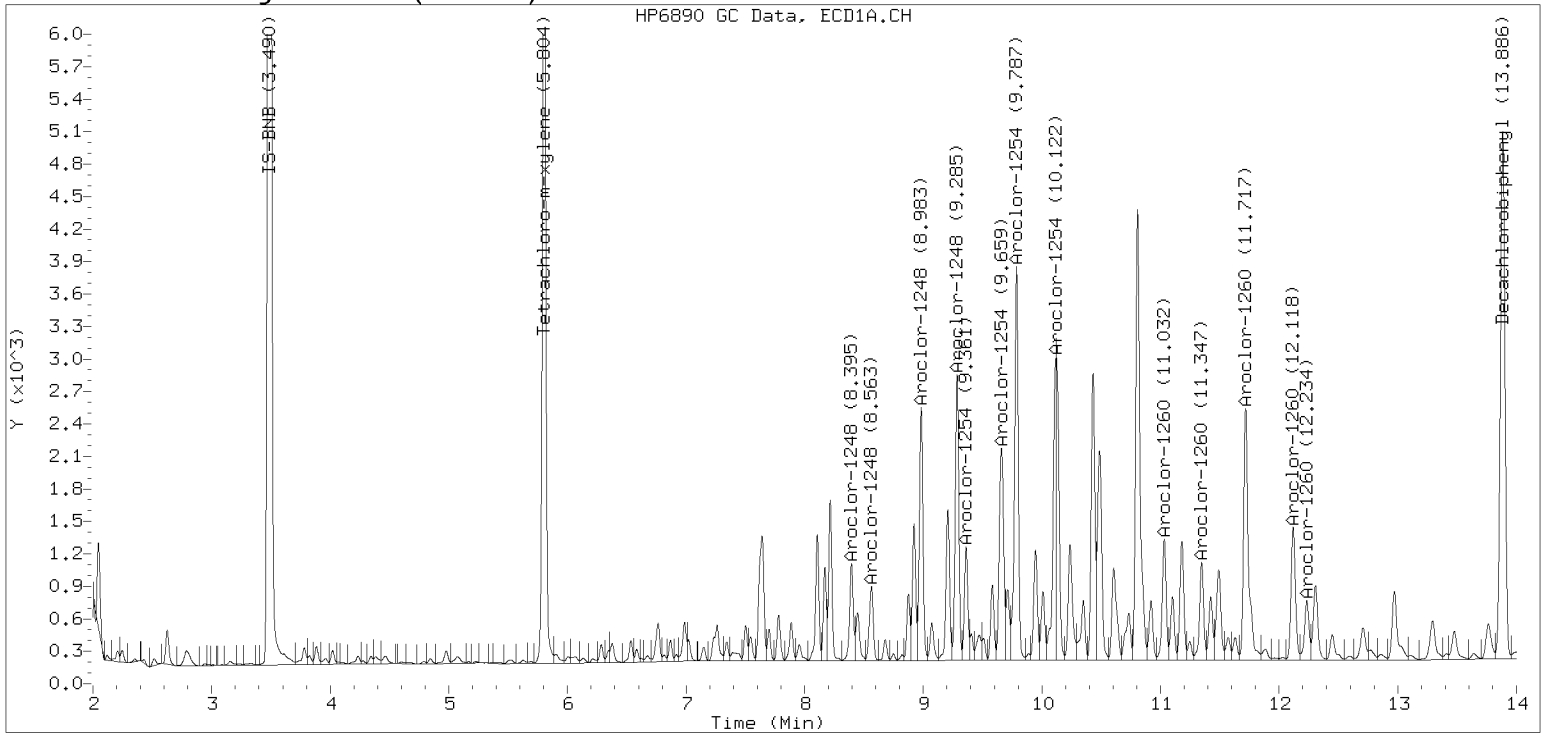
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

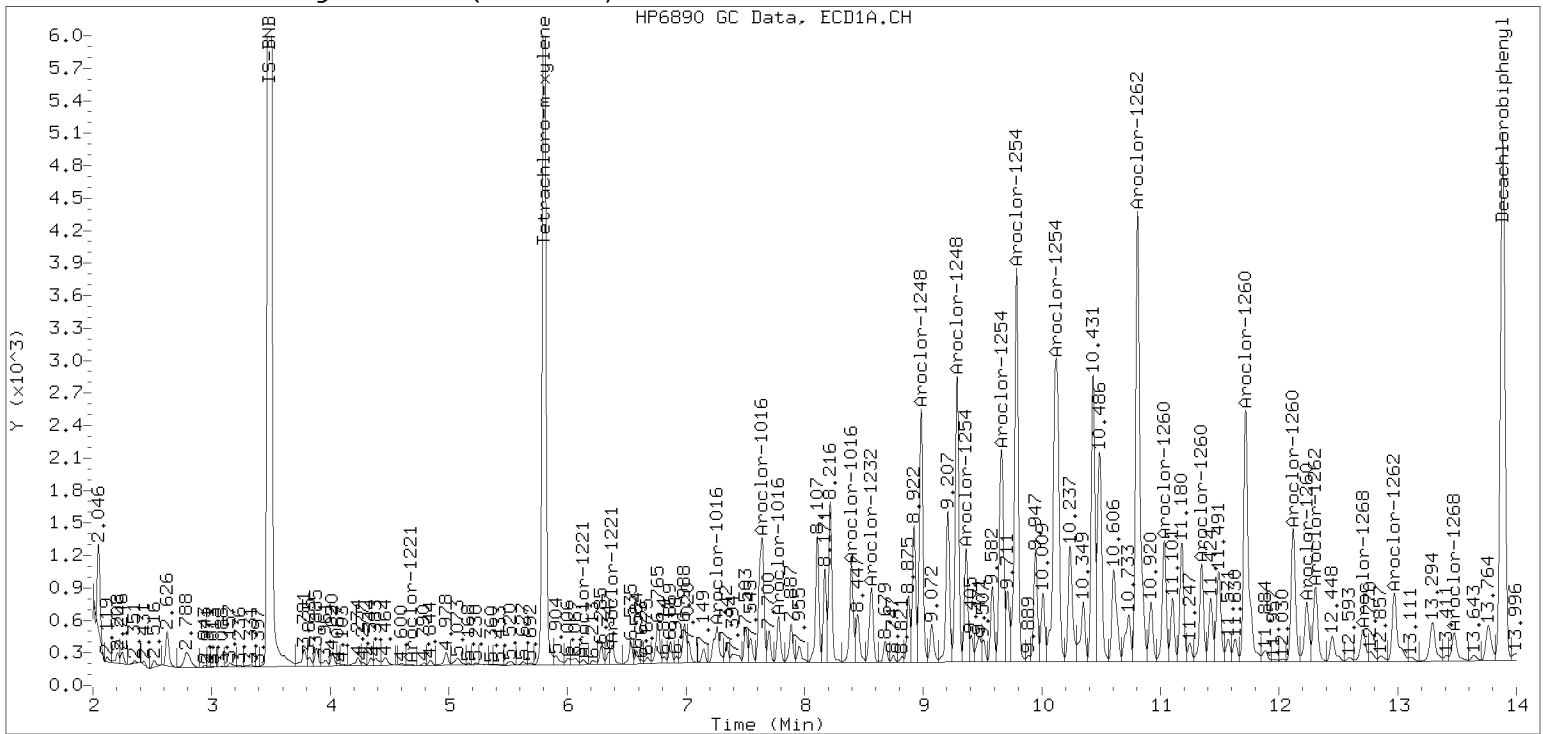
Datafile: ecd7.i/230228.b/02282340ECD7.D

Injection Date: 01-MAR-2023 05:35

Manual Integration (After)



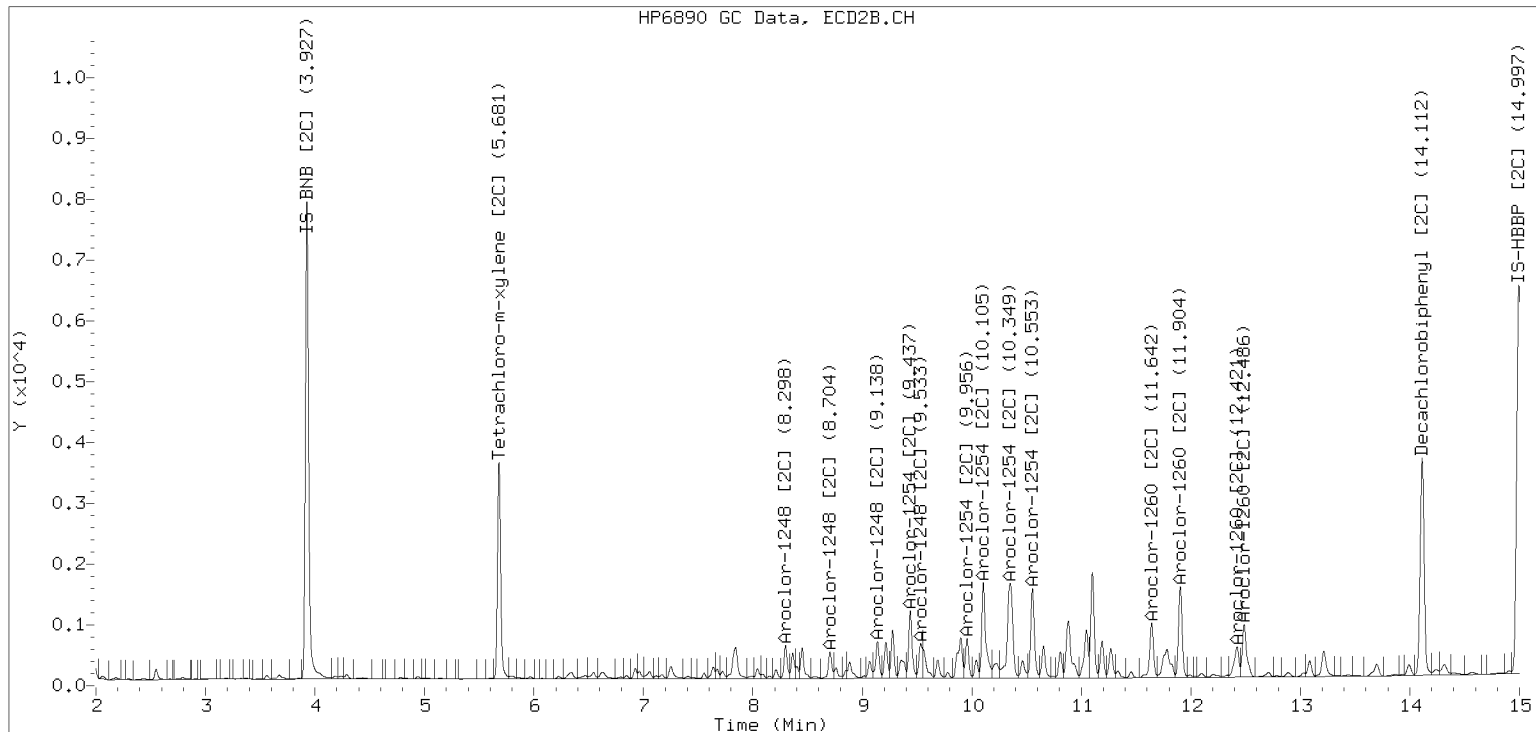
Processed Integration (Before)



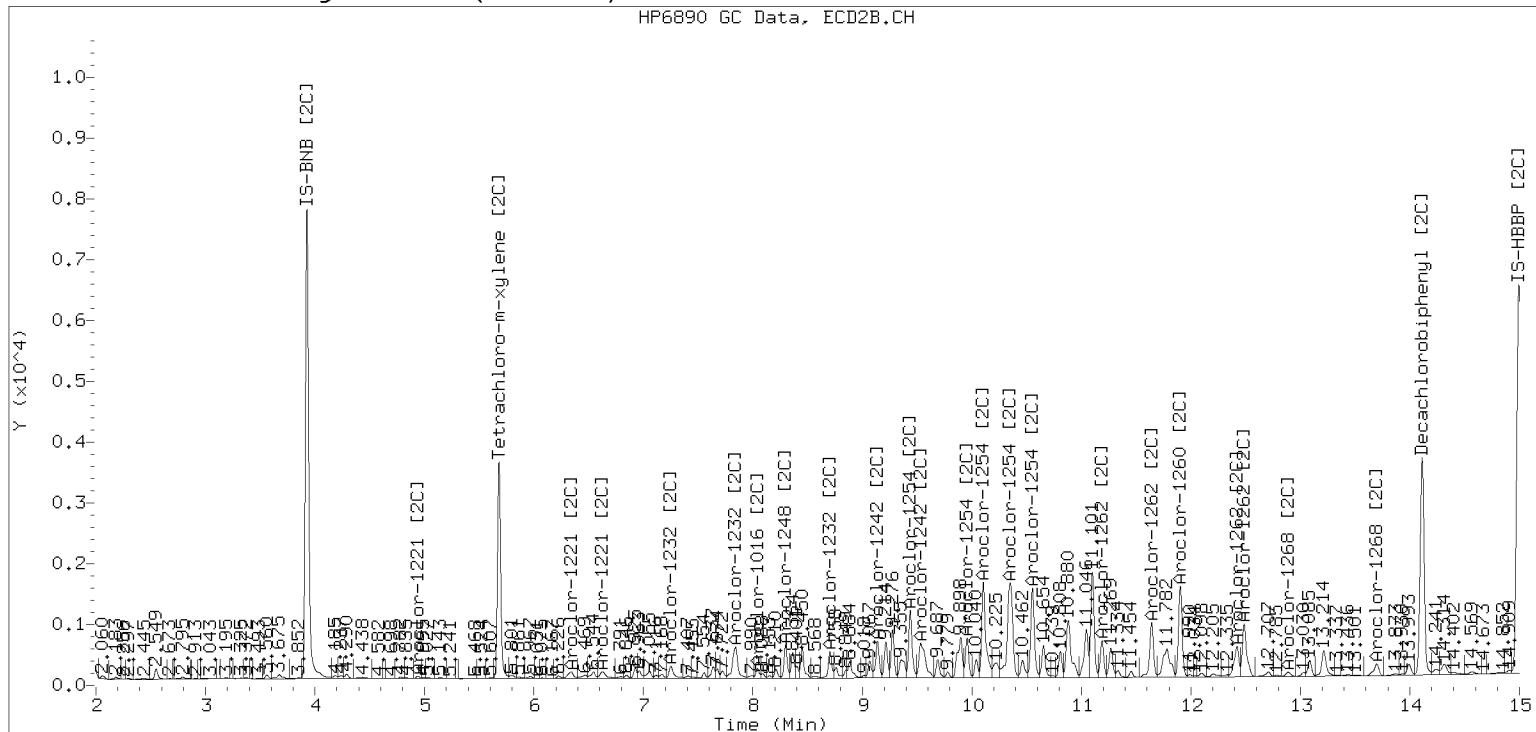
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282340ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282341ECD7.D
Data file 2: /230228.b/230228.b/02282341ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-04
Client ID:
Injection Date: 01-MAR-2023 05:56
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.805	-0.003	320977	5.682	-0.005	151627	26.9	31.2	14.7	Tetrachloro-m-xylene
13.886	-0.007	268354	14.113	-0.007	189321	35.5	35.0	1.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	798552	18.5
Hexabromobiphenyl	1429847	768353	-46.3

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	331462	5.1
Hexabromobiphenyl	513946	355613	-30.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.395	-0.011	46868	120.3	1	8.298	-0.009	24900	157.3	
Aroclor-1248	2	8.564	-0.017	40606	82.0	2	8.704	-0.011	21762	133.0	
Aroclor-1248	3	8.983	-0.014	114787	122.9	3	9.138	-0.030	32998	175.2	
Aroclor-1248	4	9.285	-0.010	128382	269.9	4	9.532	-0.062	28093	174.3	
Total CollAve (4 peaks):				148.8	Total Col2Ave (4 peaks):				147.5	RPD = 1	
Corrected Ave (3 peaks):				108.4	Corrected Ave (3 peaks):				138.2	RPD = 24	
155.17											
Aroclor-1254	1	9.285	-0.014	128382	160.1	1	9.437	-0.014	55482	220.2	
Aroclor-1254	2	9.360	-0.018	49765	138.0	2	9.955	-0.016	32272	159.2	
Aroclor-1254	3	9.659	-0.010	120566	233.9	3	10.104	-0.022	94154	214.7	
Aroclor-1254	4	9.786	-0.022	178625	178.2	4	10.349	-0.026	126638	296.2	
Aroclor-1254	5	10.127	-0.051	98169	156.3	5	10.553	-0.017	76262	293.0	
Total CollAve (5 peaks):				173.3	Total Col2Ave (5 peaks):				236.7	RPD = 31	
Corrected Ave (4 peaks):				158.1	Corrected Ave (4 peaks):				221.8	RPD = 34	
177.55											
Aroclor-1260	1	11.032	-0.012	58735	212.5	1	11.643	-0.010	46870	224.1	
Aroclor-1260	2	11.346	-0.014	47903	165.9	2	11.904	-0.014	77956	146.1	
Aroclor-1260	3	11.718	-0.018	149643	195.4	3	12.421	-0.014	33541	236.8	
Aroclor-1260	4	12.119	-0.021	75108	194.7	4	12.487	-0.015	55165	153.4	
Aroclor-1260	5	12.234	-0.009	33123	199.5	NS	---			----	
Total CollAve (5 peaks):				193.6	Total Col2Ave (4 peaks):				190.1	RPD = 2	
Corrected Ave (4 peaks):				188.9	Corrected Ave (3 peaks):				174.5	RPD = 8	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.907 - 13.793) = 3247768 Col1 Total PCB = 0.3 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 1671784 Col2 Total PCB = 0.4 ppm*

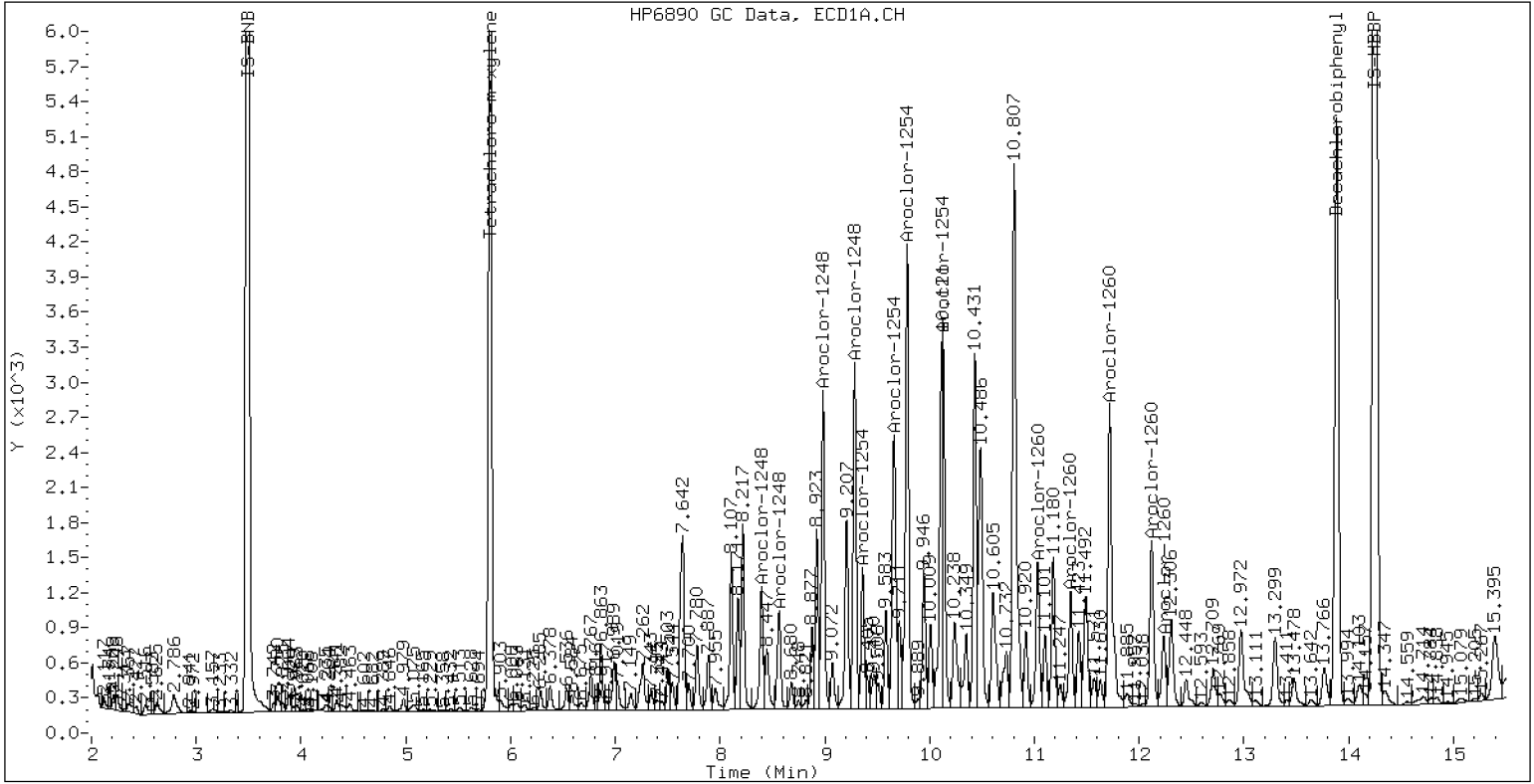
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-04

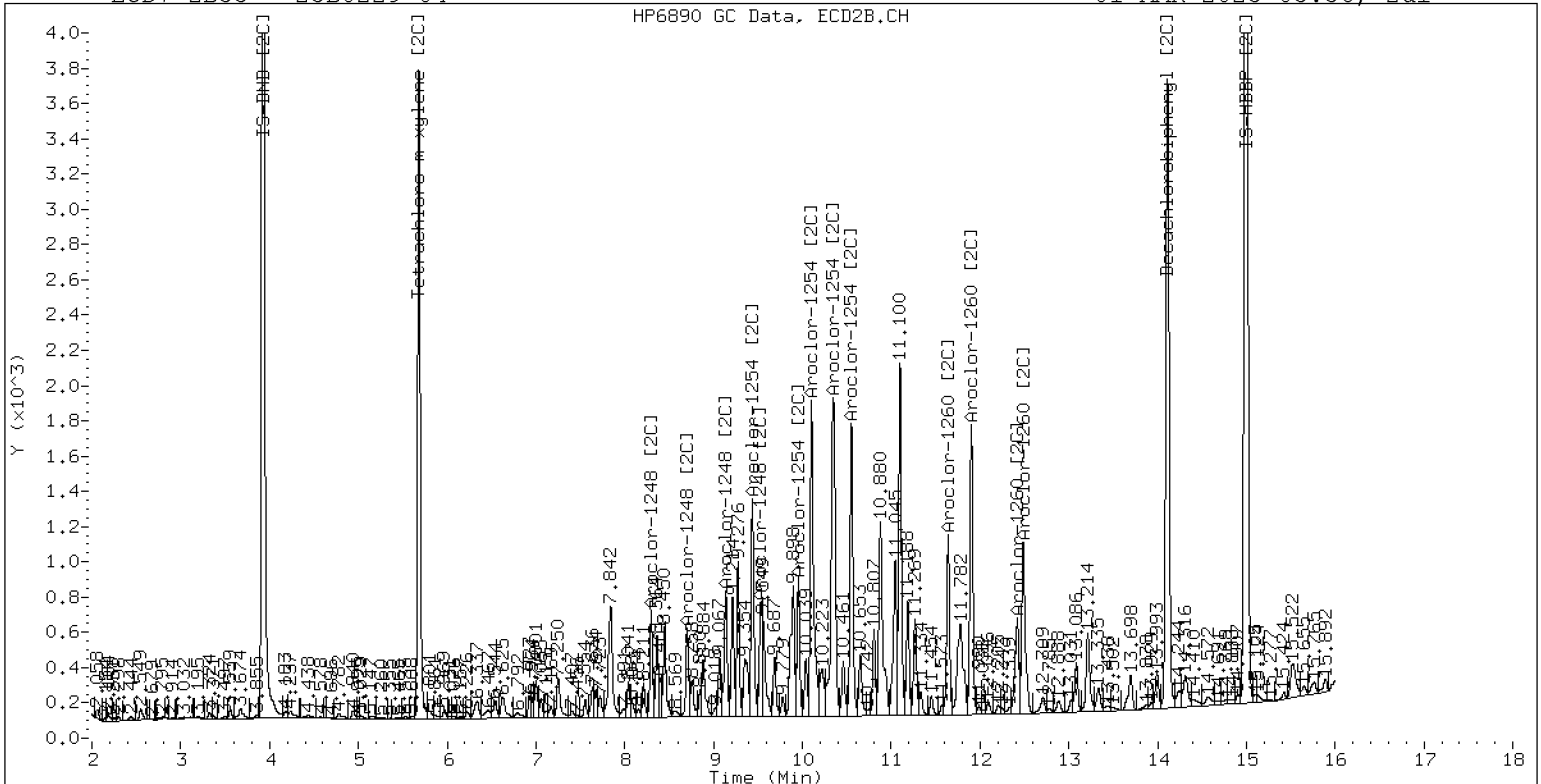
01-MAR-2023 05:56, 2u1



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-04

01-MAR-2023 05:56, 2u1

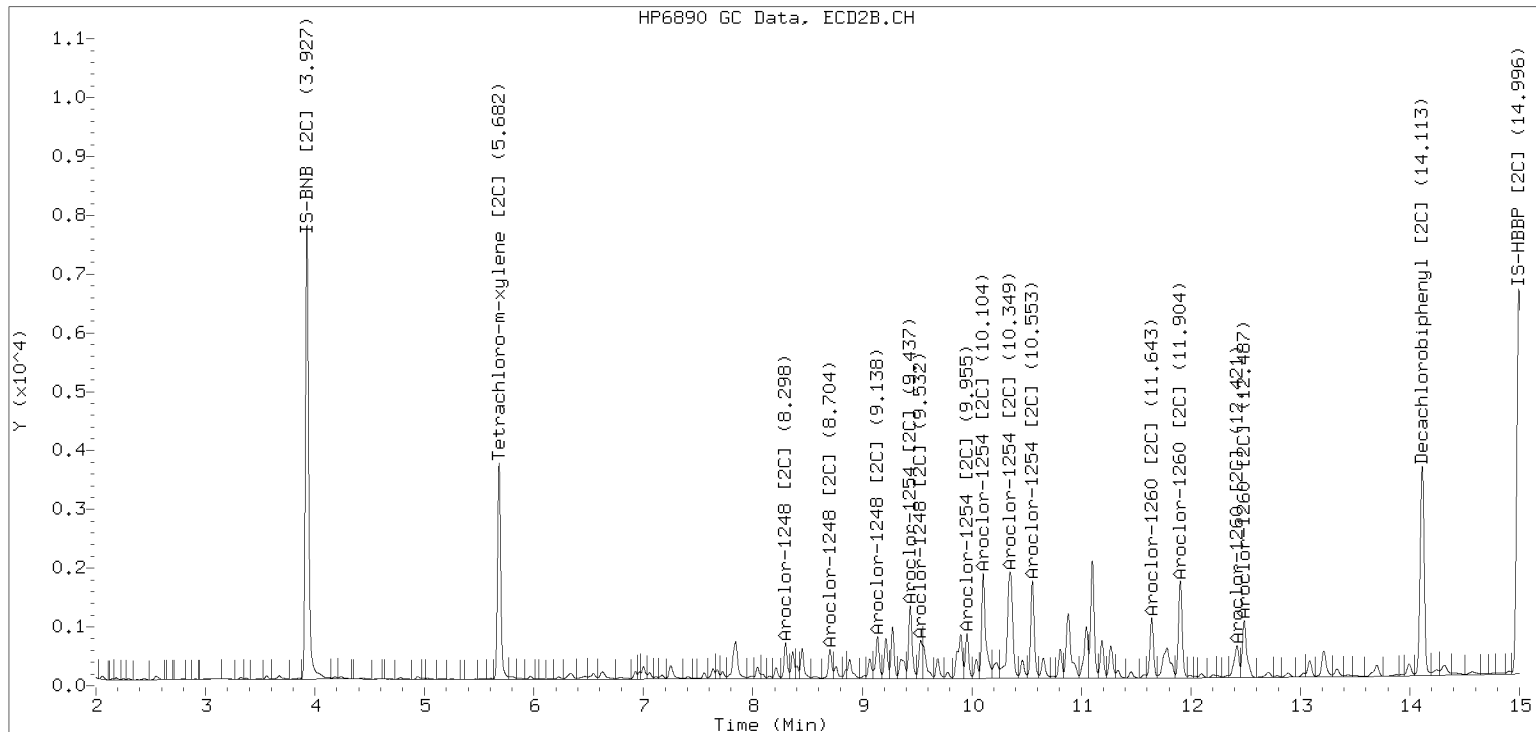


ZB-35 Manual Integration: YES

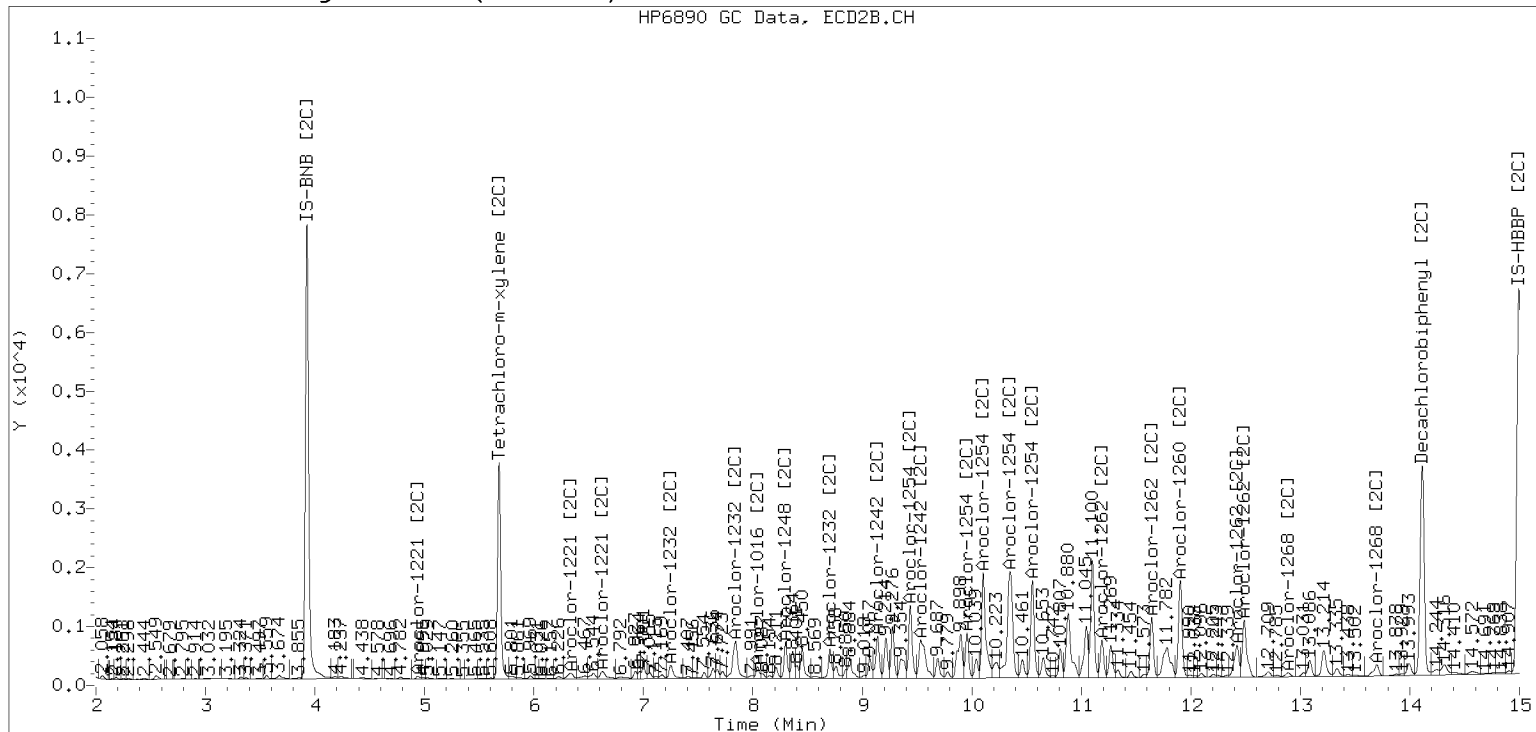
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282341ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23B0229-05 A

File ID: 02282342ECD7.D

Sampled: 02/08/23 12:45

Prepared: 02/17/23 13:53

Analyzed: 03/01/23 06:17

% Solids: 44.93

Preparation: EPA 3546 (Microwave)

Initial/Final: 27.84 g Wet / 2.5 mL

Batch: BLB0427

Sequence: SLC0014

Calibration: GB00069

Instrument: ECD7

Column 1: ZB5

Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	4	16.0	6.2	16.0	U
11104-28-2	Aroclor 1221	1	4	16.0	6.2	16.0	U
11141-16-5	Aroclor 1232	1	4	16.0	6.2	16.0	U
53469-21-9	Aroclor 1242	1	4	16.0	6.2	16.0	U
12672-29-6	Aroclor 1248	2	4	71.2	6.2	16.0	D
11097-69-1	Aroclor 1254	2	4	108	6.2	16.0	D
11096-82-5	Aroclor 1260	2	4	95.2	2.4	16.0	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9946	8.25	103	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9946	6.20	77.6	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9946	7.63	95.4	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9946	7.00	87.6	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282342ECD7.D
Data file 2: /230228.b/230228.b/02282342ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-05RE1
Client ID:
Injection Date: 01-MAR-2023 06:17
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 4.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col			
5.805	-0.003	98341	5.684 -0.004	44336	7.8	8.8	12.1	Tetrachloro-m-xylene
13.886	-0.007	89186	14.113 -0.007	55834	10.3	9.5	7.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	849273	26.0
Hexabromobiphenyl	1429847	877895	-38.6

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	345130	9.5
Hexabromobiphenyl	513946	384123	-25.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.397	-0.008	28576	69.0	1	8.300	-0.007	14417	87.5	
Aroclor-1248	2	8.567	-0.013	27447	52.1	2	8.707	-0.008	12724	74.7	
Aroclor-1248	3	8.985	-0.011	70951	71.4	3	9.143	-0.026	20573	104.9	
Aroclor-1248	4	9.287	-0.008	80339	158.8	4	9.536	-0.058	14537	61.8	
Total CollAve (4 peaks):				87.8	Total Col2Ave (4 peaks):				82.2	RPD = 7	
Corrected Ave (3 peaks):				64.2	Corrected Ave (3 peaks):				74.6	RPD = 15	
89.03											
Aroclor-1254	1	9.287	-0.012	80339	94.2	1	9.440	-0.012	32641	124.4	
Aroclor-1254	2	9.363	-0.016	36806	96.0	2	9.958	-0.013	20099	95.2	
Aroclor-1254	3	9.659	-0.010	64559	117.7	3	10.107	-0.018	57695	126.4	
Aroclor-1254	4	9.789	-0.019	108096	101.4	4	10.354	-0.021	70617	158.7	
Aroclor-1254	5	10.127	-0.051	75520	113.0	5	10.556	-0.014	47064	173.7	
Total CollAve (5 peaks):				104.5	Total Col2Ave (5 peaks):				135.7	RPD = 26	
Corrected Ave (4 peaks):				101.1	Corrected Ave (4 peaks):				126.2	RPD = 22	
Aroclor-1260	1	11.035	-0.010	41119	130.2	1	11.644	-0.009	30638	135.6	
Aroclor-1260	2	11.349	-0.011	35532	107.7	2	11.906	-0.012	51631	89.6	
Aroclor-1260	3	11.720	-0.016	100911	115.3	3	12.423	-0.012	23076	150.9	
Aroclor-1260	4	12.120	-0.019	49251	111.8	4	12.489	-0.013	38925	100.2	
Aroclor-1260	5	12.235	-0.008	26353	138.9	NS	---			----	
Total CollAve (5 peaks):				120.8	Total Col2Ave (4 peaks):				119.1	RPD = 1	
Corrected Ave (4 peaks):				116.2	Corrected Ave (3 peaks):				108.5	RPD = 7	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.907 - 13.793) = 2032052 Col1 Total PCB = 0.2 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 1012433 Col2 Total PCB = 0.2 ppm*

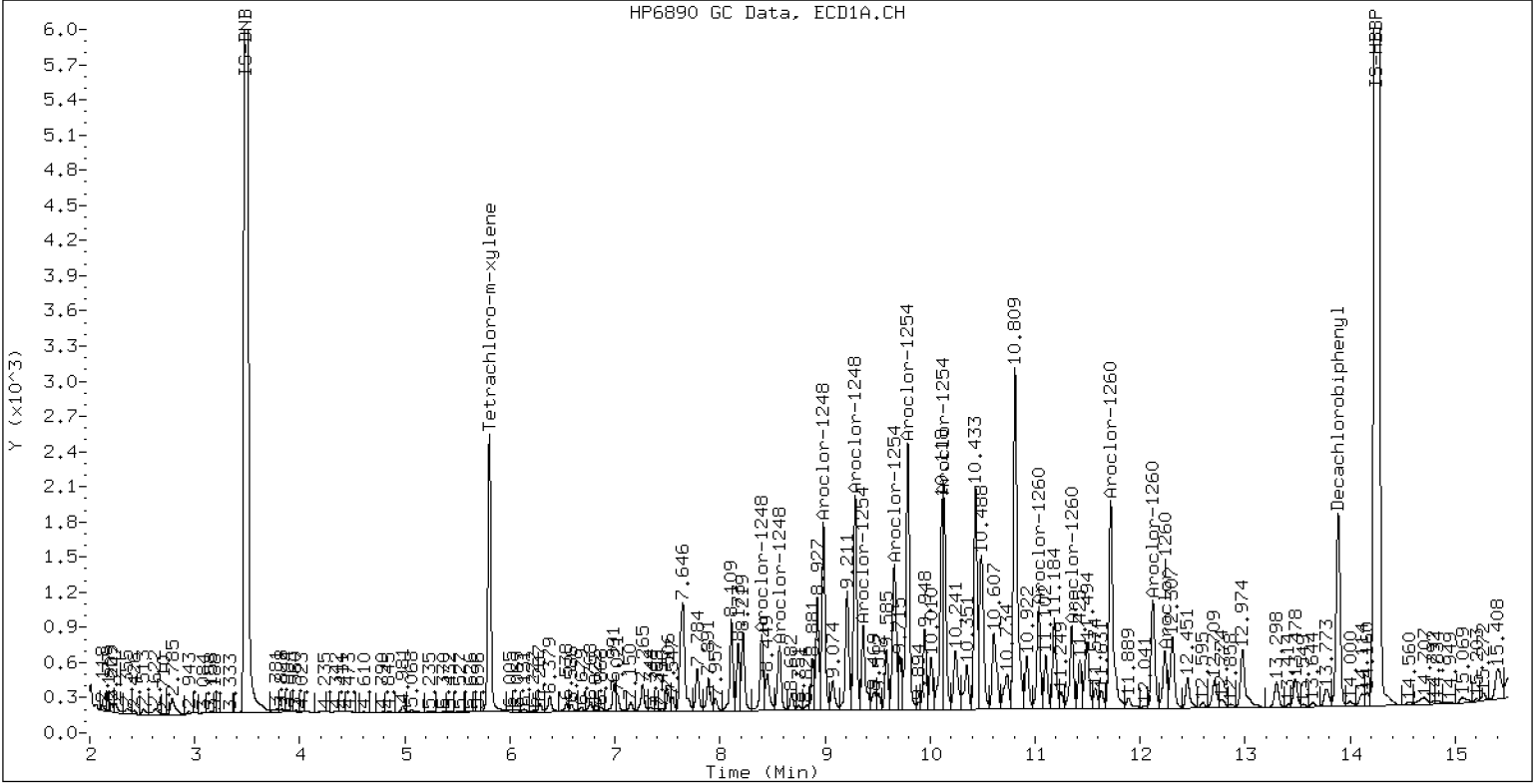
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-05RE1

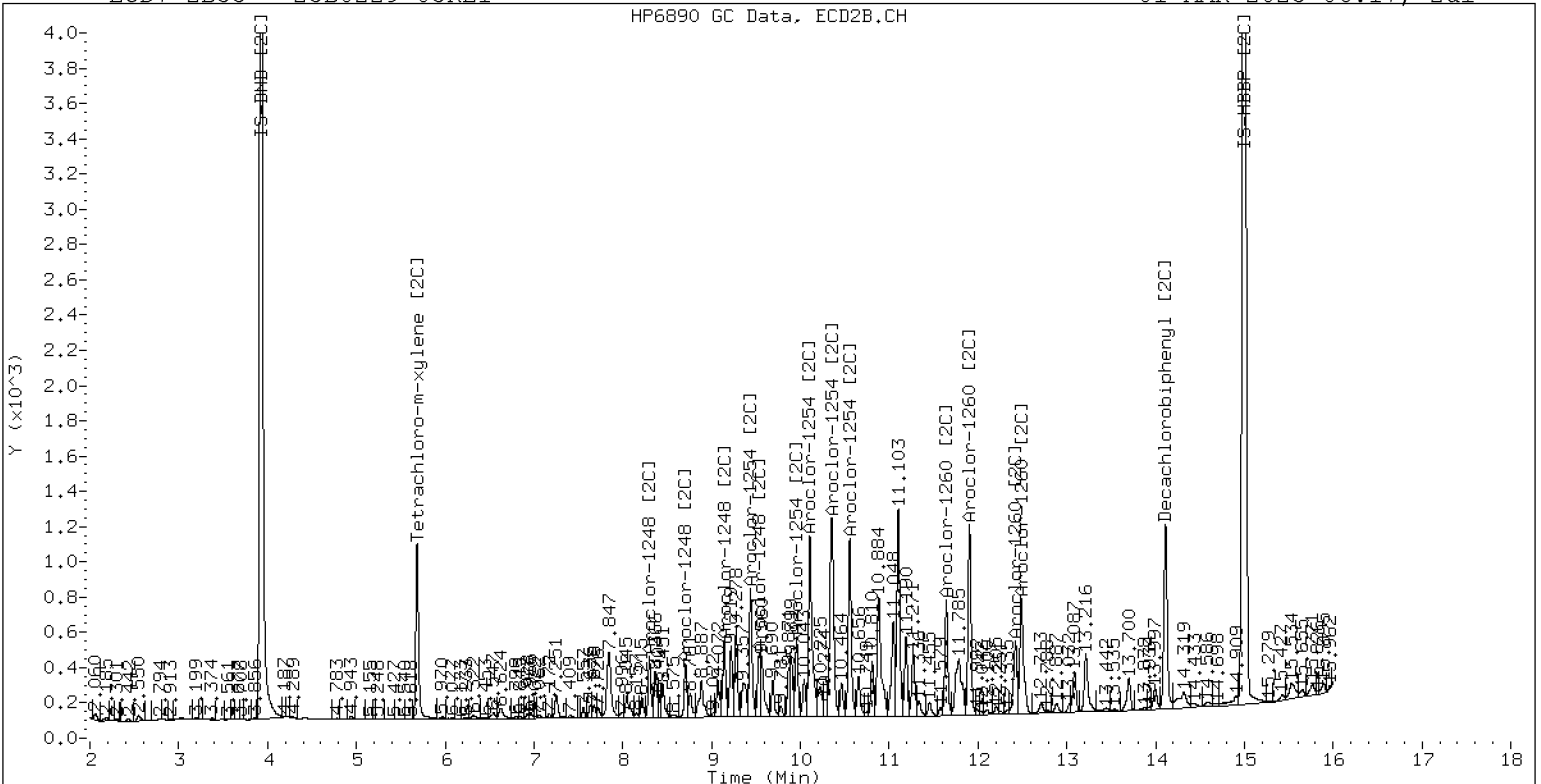
01-MAR-2023 06:17, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-05RE1

01-MAR-2023 06:17, 2ul



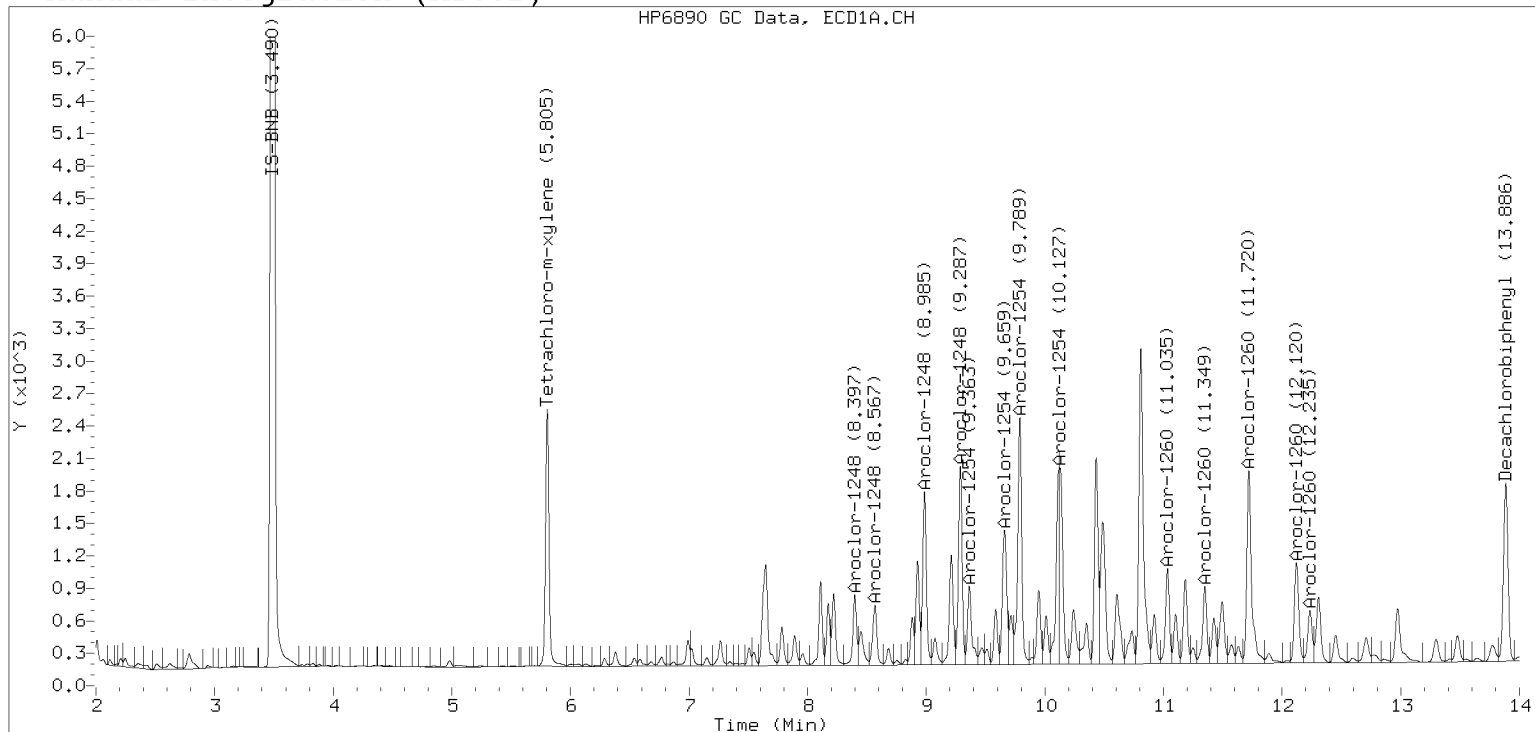
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

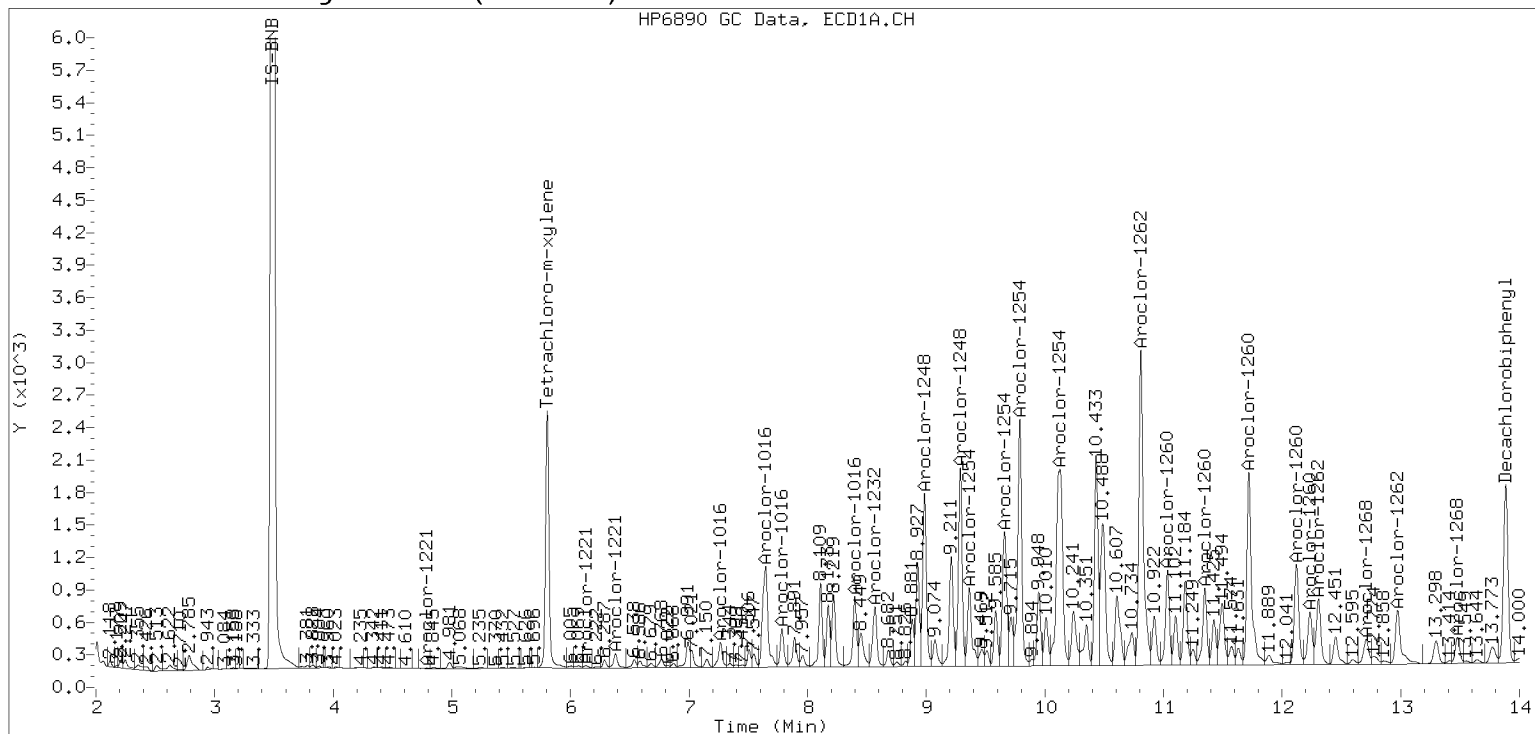
Datafile: ecd7.i/230228.b/02282342ECD7.D

Injection Date: 01-MAR-2023 06:17

Manual Integration (After)



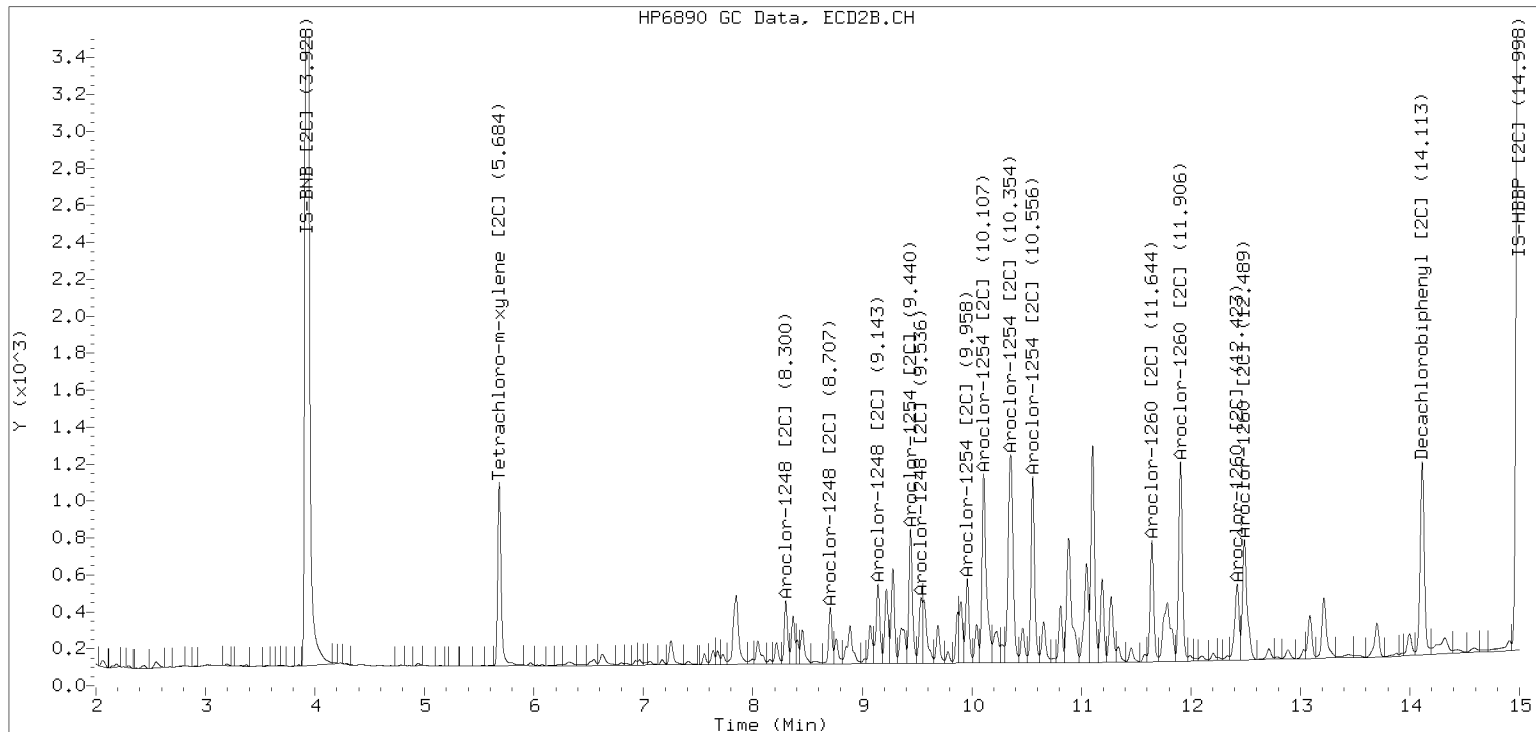
Processed Integration (Before)



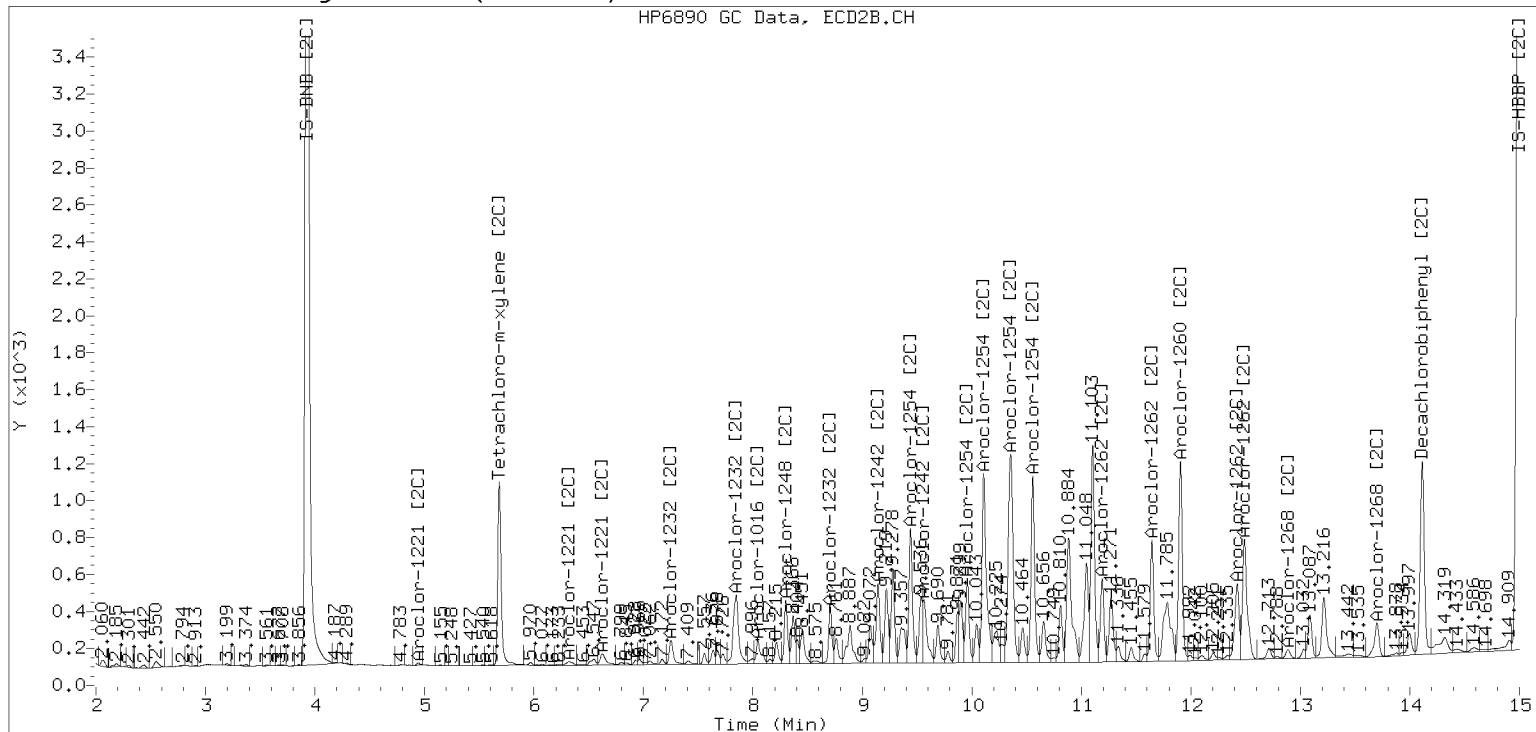
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282342ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>		
Project:	<u>AOC5 MR Phase 1</u>		
Matrix:	<u>Solid</u>	Laboratory ID:	<u>23B0229-06 A</u>
		File ID:	<u>02282343ECD7.D</u>
Sampled:	<u>02/08/23 13:30</u>	Prepared:	<u>02/17/23 13:53</u>
		Analyzed:	<u>03/01/23 06:39</u>
% Solids:	<u>48.62</u>	Preparation:	<u>EPA 3546 (Microwave)</u>
		Initial/Final:	<u>25.77 g Wet / 2.5 mL</u>
Batch:	<u>BLB0427</u>	Sequence:	<u>SLC0014</u>
		Calibration:	<u>GB00069</u>
Instrument:	<u>ECD7</u>	Column 1:	<u>ZB5</u>
		Column 2:	<u>ZB35</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	3	12.0	4.7	12.0	U
11104-28-2	Aroclor 1221	1	3	12.0	4.7	12.0	U
11141-16-5	Aroclor 1232	1	3	12.0	4.7	12.0	U
53469-21-9	Aroclor 1242	1	3	12.0	4.7	12.0	U
12672-29-6	Aroclor 1248	2	3	59.1	4.7	12.0	D
11097-69-1	Aroclor 1254	2	3	89.4	4.7	12.0	D
11096-82-5	Aroclor 1260	2	3	73.1	1.8	12.0	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9812	7.13	89.3	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9812	5.45	68.2	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9812	6.71	84.1	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9812	6.12	76.7	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282343ECD7.D
Data file 2: /230228.b/230228.b/02282343ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-06RE1
Client ID:
Injection Date: 01-MAR-2023 06:39
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 3.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.805	-0.002	110451	5.684	-0.003	49630	9.1	10.2	11.6	Tetrachloro-m-xylene
13.885	-0.008	99330	14.112	-0.008	63317	11.9	11.2	6.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	813187	20.7
Hexabromobiphenyl	1429847	847148	-40.8
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	330982	5.0
Hexabromobiphenyl	513946	370704	-27.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.397	-0.009	30216	76.2	1	8.300	-0.007	15611	98.8
Aroclor-1248	2	8.567	-0.013	28547	56.6	2	8.707	-0.008	13793	84.4
Aroclor-1248	3	8.985	-0.012	74617	78.4	3	9.142	-0.026	21286	113.2
Aroclor-1248	4	9.287	-0.008	85265	176.0	4	9.535	-0.059	15727	69.7
Total CollAve (4 peaks):				96.8	Total Col2Ave (4 peaks):				91.5	RPD = 6
Corrected Ave (3 peaks):				70.4	Corrected Ave (3 peaks):				84.3	RPD = 18
98.8										
Aroclor-1254	1	9.287	-0.012	85265	104.4	1	9.439	-0.012	34109	135.6
Aroclor-1254	2	9.363	-0.015	39338	107.1	2	9.958	-0.014	21412	105.8
Aroclor-1254	3	9.659	-0.010	69222	131.9	3	10.107	-0.018	60681	138.6
Aroclor-1254	4	9.788	-0.020	115538	113.2	4	10.352	-0.022	74532	174.6
Aroclor-1254	5	10.129	-0.049	61783	96.6	5	10.555	-0.015	49893	192.0
Total CollAve (5 peaks):				110.6	Total Col2Ave (5 peaks):				149.3	RPD = 30
Corrected Ave (4 peaks):				105.3	Corrected Ave (4 peaks):				138.6	RPD = 27
Aroclor-1260	1	11.034	-0.011	40874	134.1	1	11.644	-0.009	30666	140.7
Aroclor-1260	2	11.348	-0.012	34835	109.4	2	11.906	-0.012	53586	96.3
Aroclor-1260	3	11.720	-0.016	104265	123.5	3	12.423	-0.012	21557	146.0
Aroclor-1260	4	12.120	-0.020	54000	127.0	4	12.489	-0.013	39594	105.6
Aroclor-1260	5	12.235	-0.008	24705	135.0	NS	---			----
Total CollAve (5 peaks):				125.8	Total Col2Ave (4 peaks):				122.2	RPD = 3
Corrected Ave (4 peaks):				123.5	Corrected Ave (3 peaks):				114.2	RPD = 8
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.907 - 13.793) = 2176554 Col1 Total PCB = 0.2 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 1084806 Col2 Total PCB = 0.3 ppm*

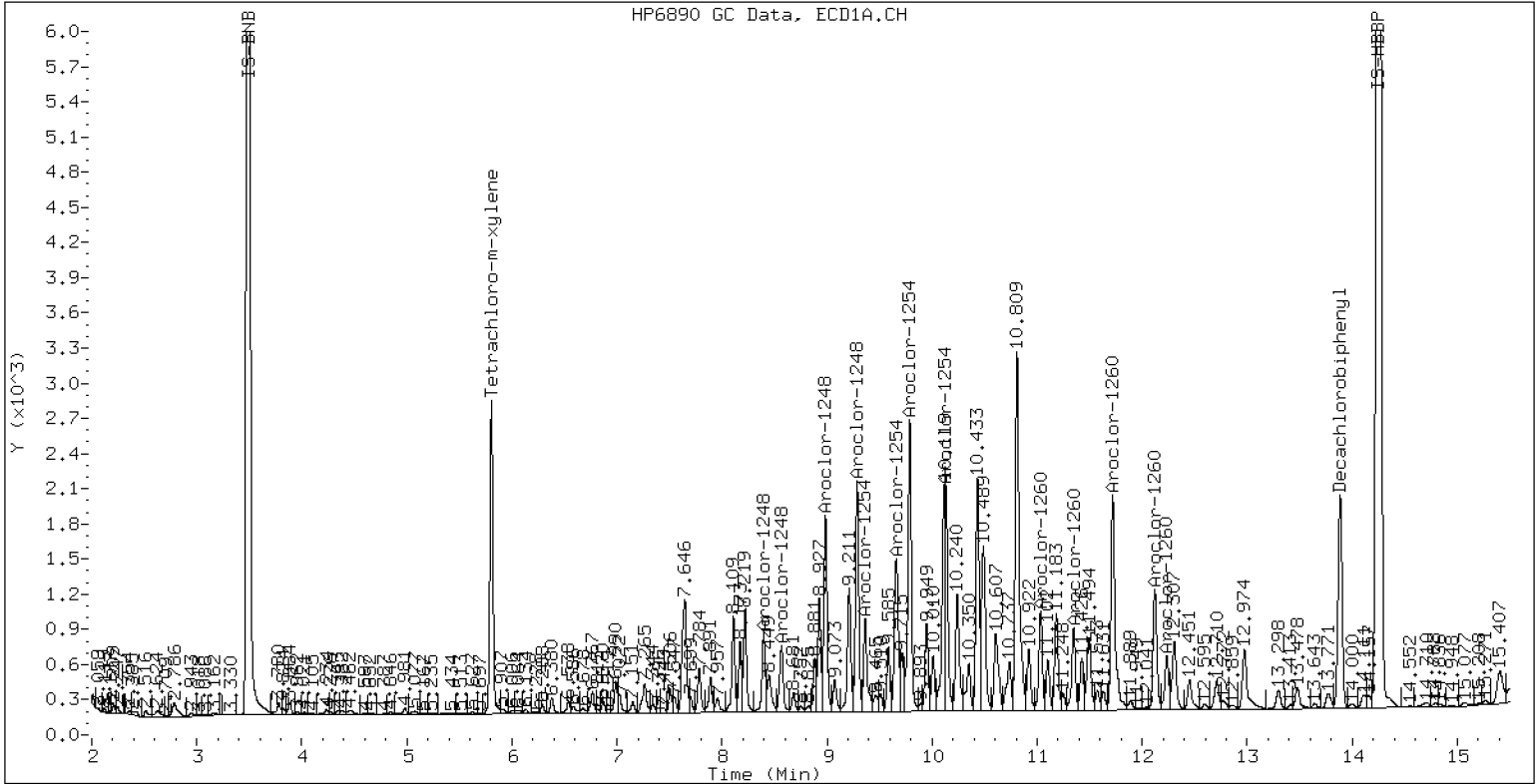
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-06RE1

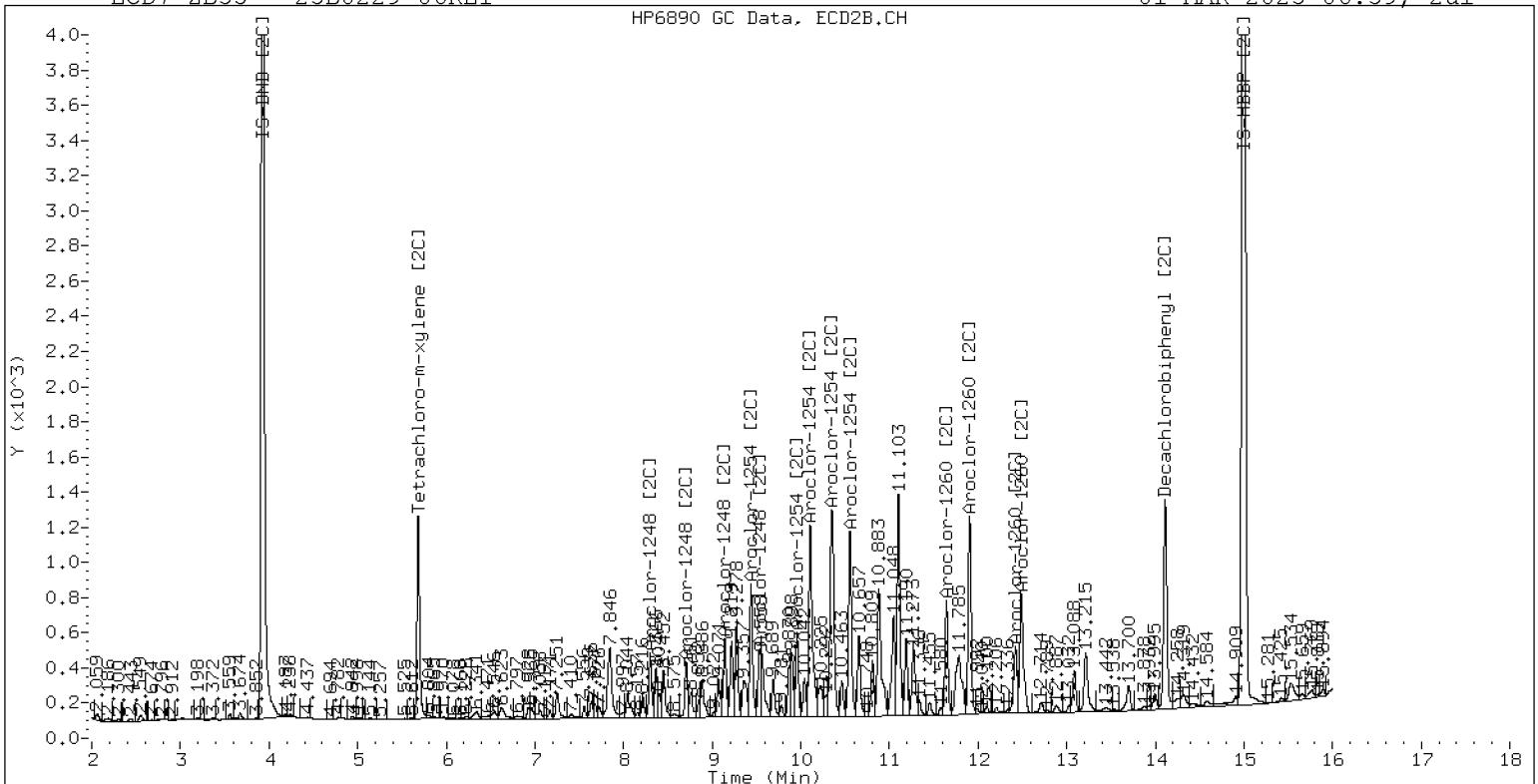
01-MAR-2023 06:39, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-06RE1

01-MAR-2023 06:39, 2ul



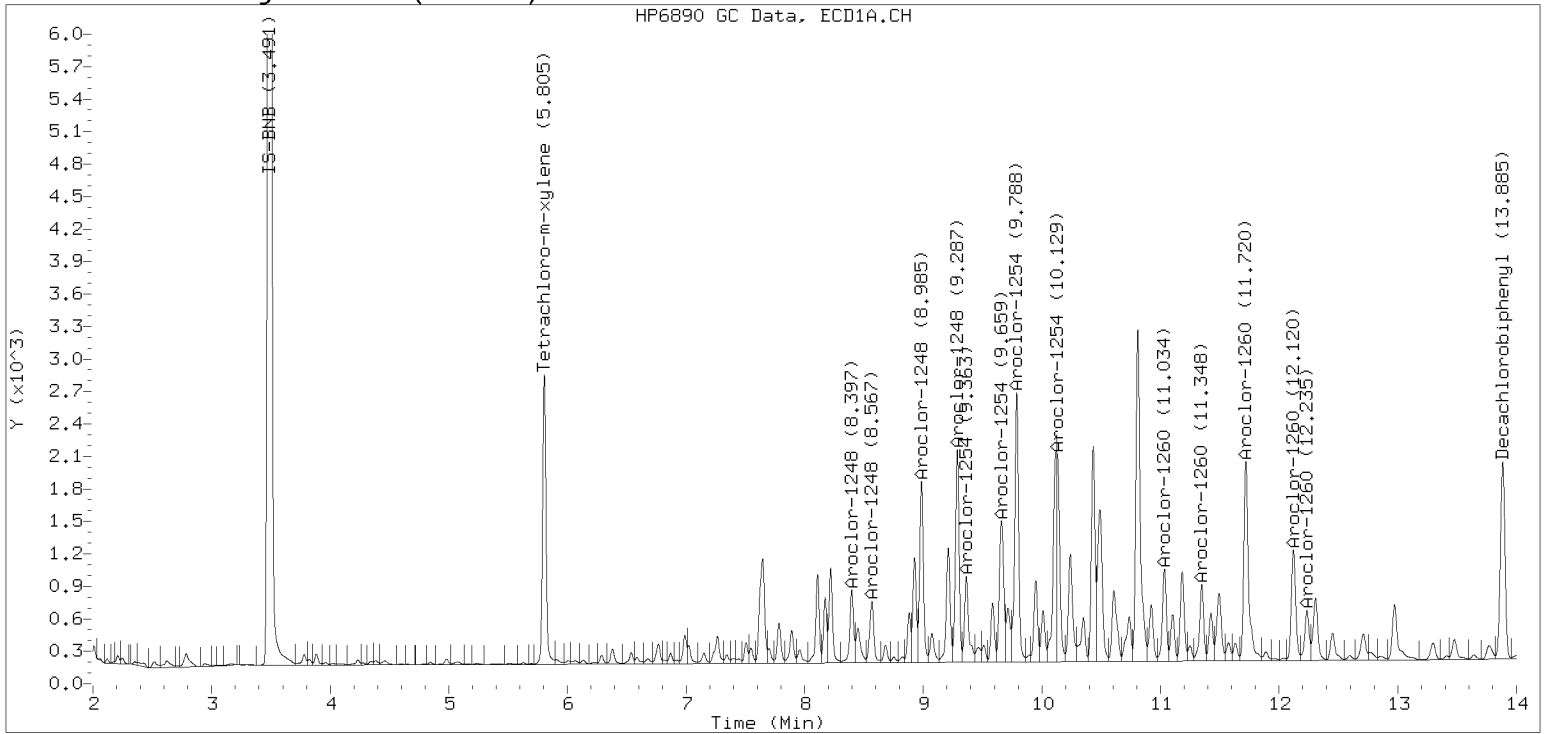
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

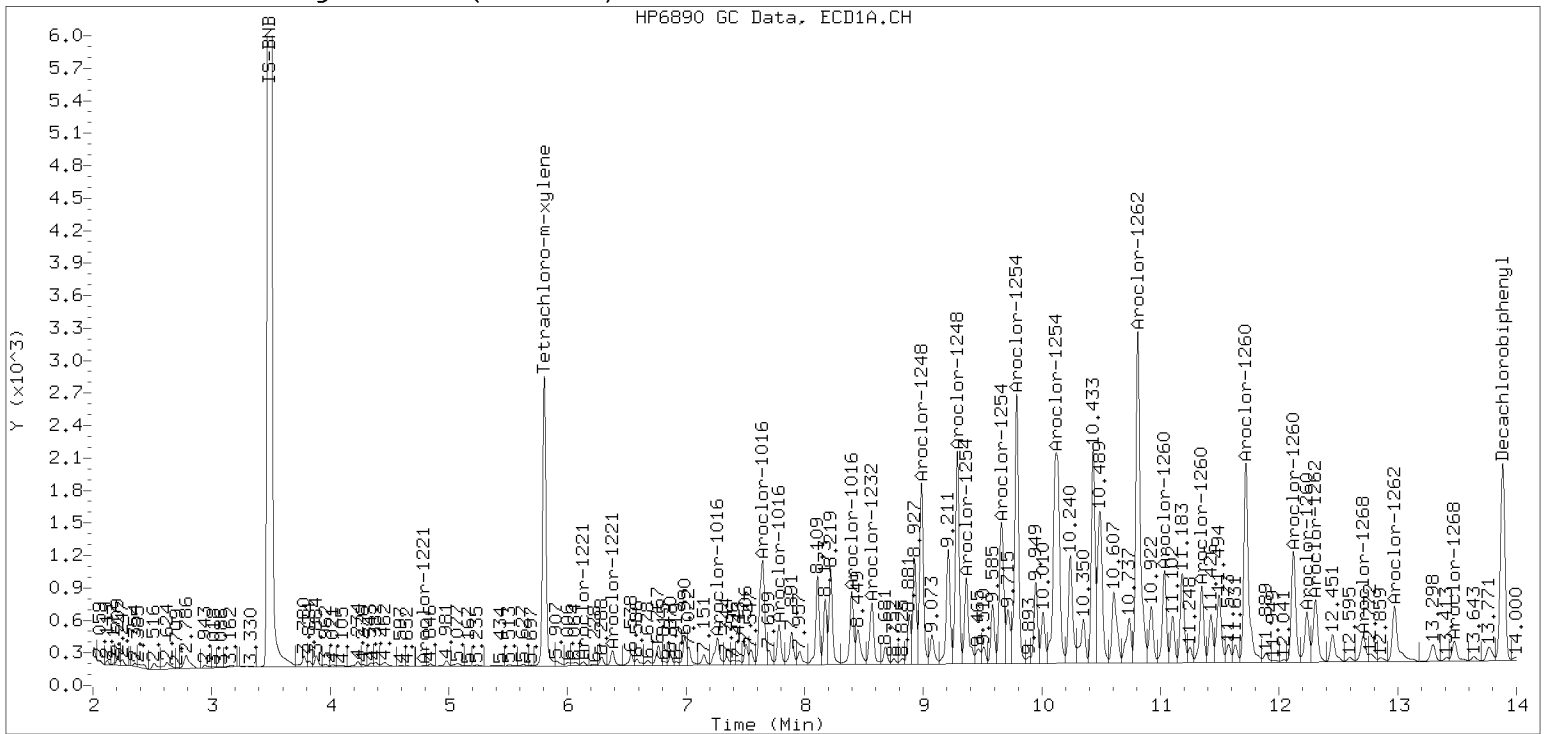
Datafile: ecd7.i/230228.b/02282343ECD7.D

Injection Date: 01-MAR-2023 06:39

Manual Integration (After)



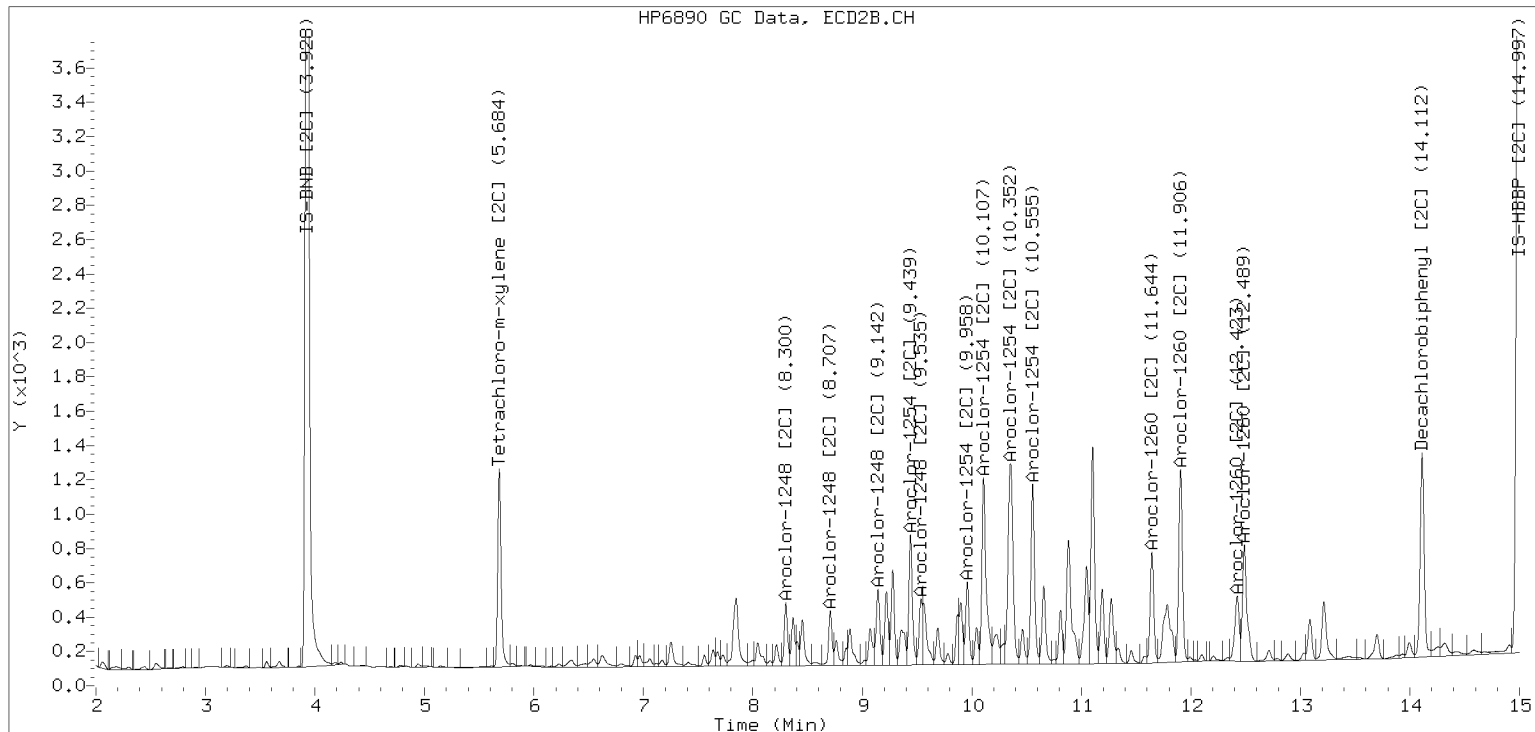
Processed Integration (Before)



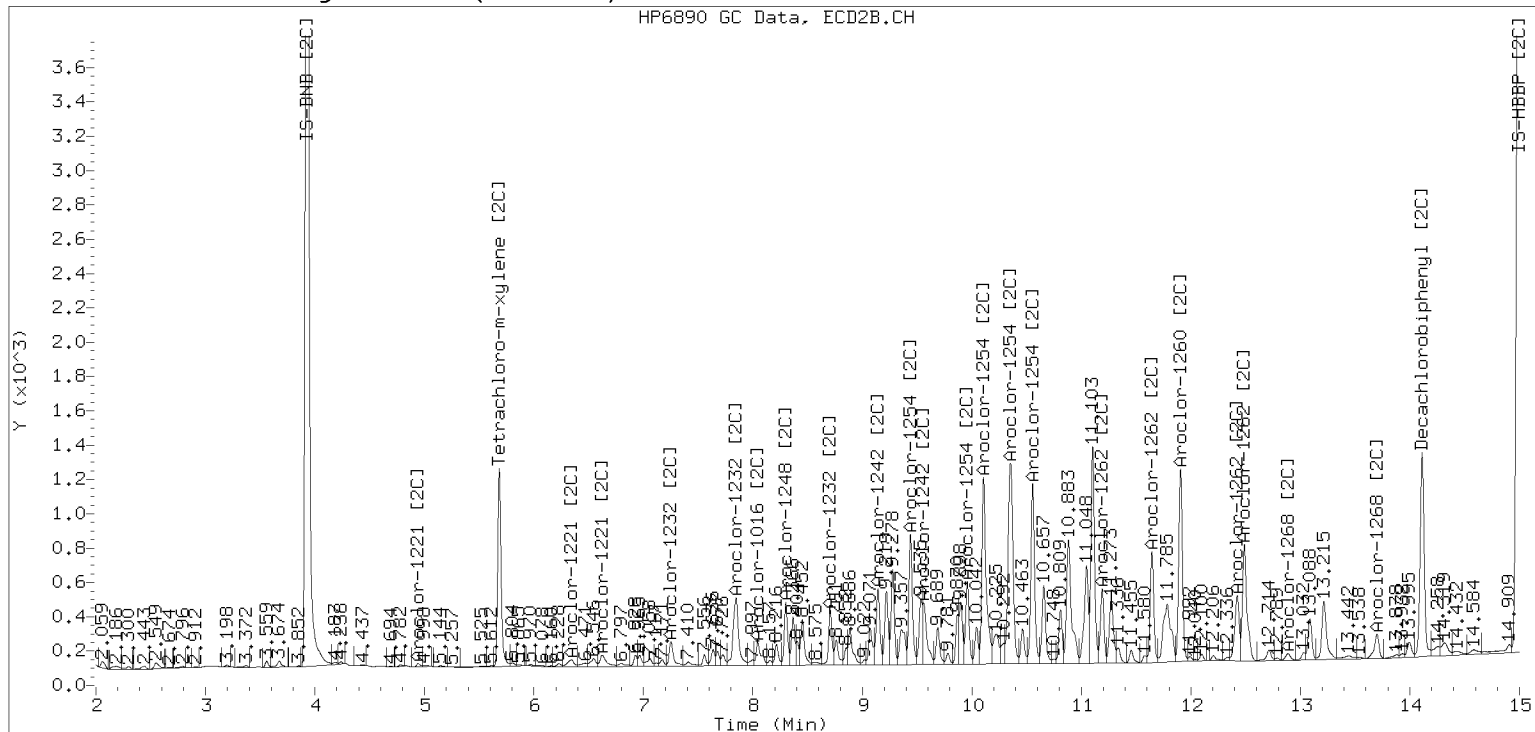
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282343ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23B0229
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-07A File ID: 02282344ECD7.D
 Sampled: 02/08/23 14:24 Prepared: 02/17/23 13:53 Analyzed: 03/01/23 07:00
 % Solids: 68.66 Preparation: EPA 3546 (Microwave) Initial/Final: 18.23 g Wet / 2.5 mL
 Batch: BLB0427 Sequence: SLC0014 Calibration: GB00069
 Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	29.8	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	42.7	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	39.0	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9893	7.19	90.0	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9893	5.51	69.0	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9893	7.22	90.4	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9893	6.41	80.3	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282344ECD7.D
Data file 2: /230228.b/230228.b/02282344ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-07
Client ID:
Injection Date: 01-MAR-2023 07:00
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.805	-0.002	339199	5.683	-0.004	156587	27.6	32.1	15.1	Tetrachloro-m-xylene
13.886	-0.007	270632	14.113	-0.007	191753	36.0	36.2	0.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	823012	22.1
Hexabromobiphenyl	1429847	763097	-46.6

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	332336	5.4
Hexabromobiphenyl	513946	348143	-32.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.396	-0.010	46584	116.0	1	8.299	-0.008	22435	141.4
Aroclor-1248	2	8.565	-0.016	44006	86.2	2	8.705	-0.010	22236	135.5
Aroclor-1248	3	8.983	-0.013	119685	124.3	3	9.139	-0.029	32118	170.1
Aroclor-1248	4	9.286	-0.009	120635	246.1	4	9.534	-0.060	28794	127.0
Total CollAve (4 peaks):				143.1	Total Col2Ave (4 peaks):				143.5	RPD = 0
Corrected Ave (3 peaks):				108.8	Corrected Ave (3 peaks):				134.6	RPD = 21
149										
Aroclor-1254	1	9.286	-0.013	120635	146.0	1	9.437	-0.014	49074	194.3
Aroclor-1254	2	9.361	-0.017	55913	150.4	2	9.956	-0.016	28356	139.5
Aroclor-1254	3	9.656	-0.013	88269	166.1	3	10.105	-0.021	89604	203.8
Aroclor-1254	4	9.787	-0.022	161807	156.6	4	10.350	-0.025	106721	249.0
Aroclor-1254	5	10.121	-0.058	126685	195.6	5	10.553	-0.016	73446	281.4
Total CollAve (5 peaks):				657.0	Total Col2Ave (5 peaks):				213.6	RPD = 27
Corrected Ave (4 peaks):				154.8	Corrected Ave (4 peaks):				196.7	RPD = 24
Aroclor-1260	1	11.032	-0.012	59127	215.4	1	11.643	-0.010	46518	227.2
Aroclor-1260	2	11.349	-0.012	51707	180.3	2	11.904	-0.013	75684	144.9
Aroclor-1260	3	11.719	-0.017	151199	198.8	3	12.422	-0.013	35322	254.8
Aroclor-1260	4	12.120	-0.020	73766	192.6	4	12.488	-0.014	53949	153.2
Aroclor-1260	5	12.234	-0.009	34003	206.2	NS	---			----
Total CollAve (5 peaks):				198.6	Total Col2Ave (4 peaks):				195.0	RPD = 2
Corrected Ave (4 peaks):				194.5	Corrected Ave (3 peaks):				175.1	RPD = 10
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.907 - 13.793) = 3214171 Col1 Total PCB = 0.3 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 1600552 Col2 Total PCB = 0.4 ppm*

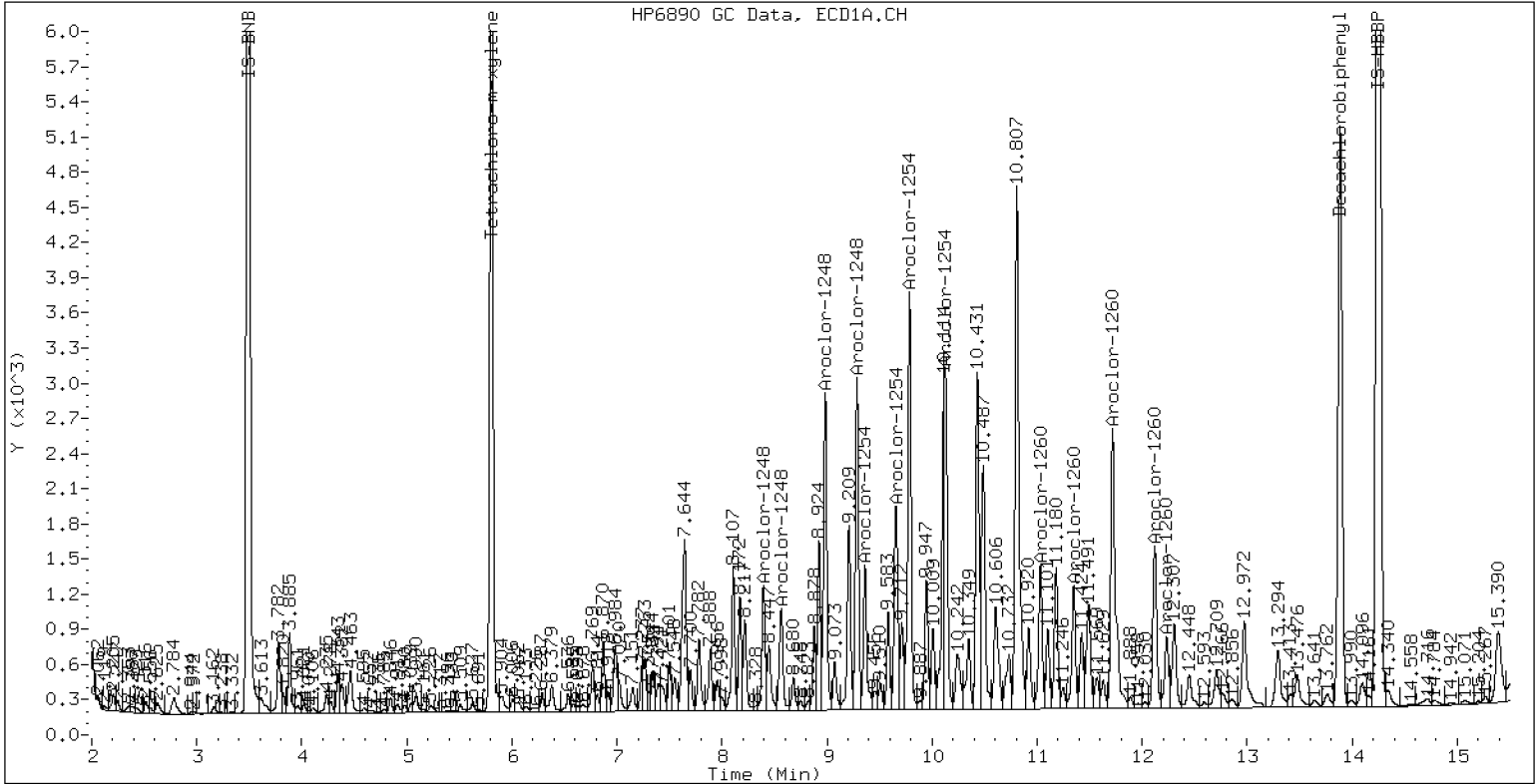
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-07

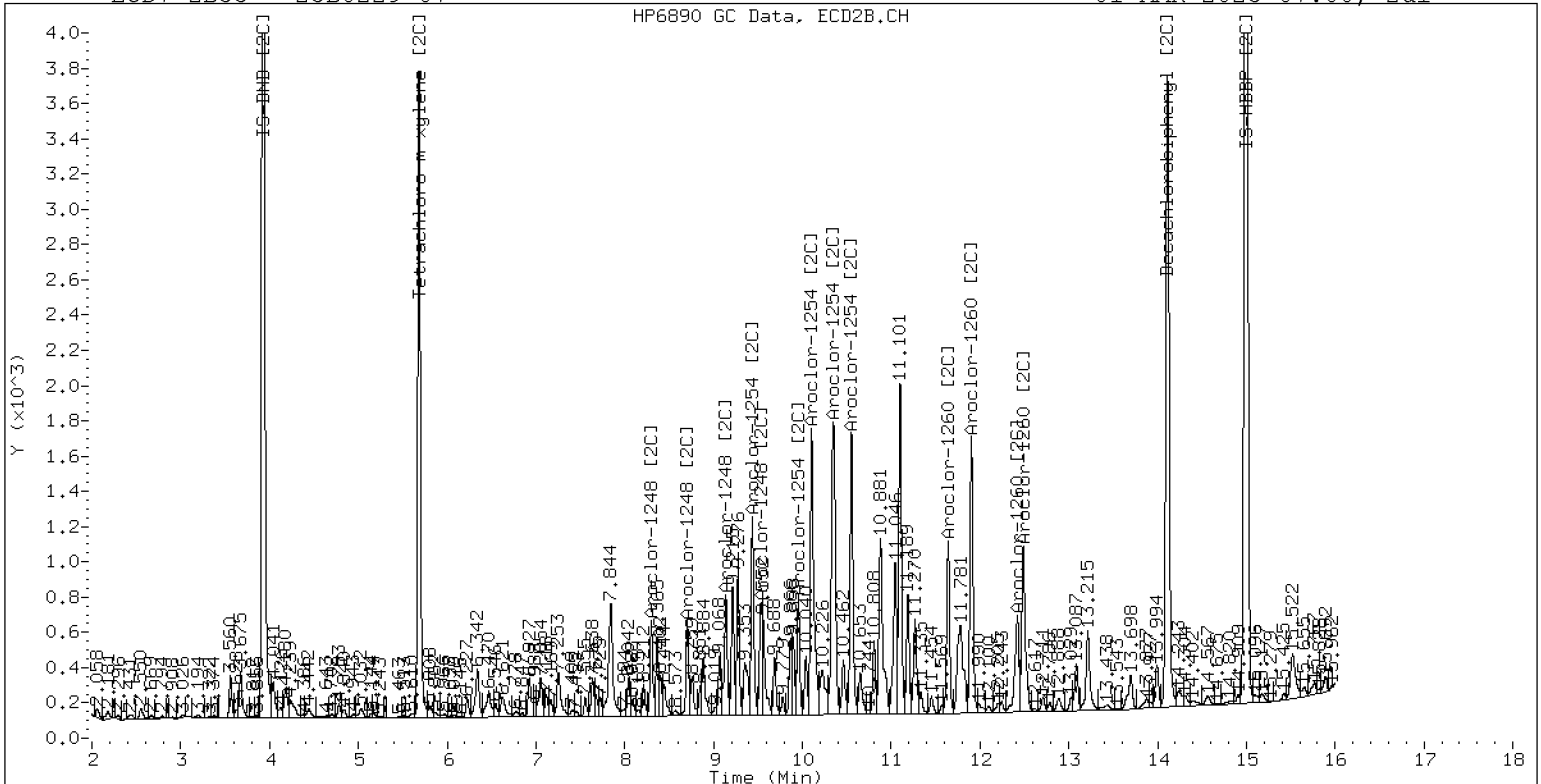
01-MAR-2023 07:00, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-07

01-MAR-2023 07:00, 2ul



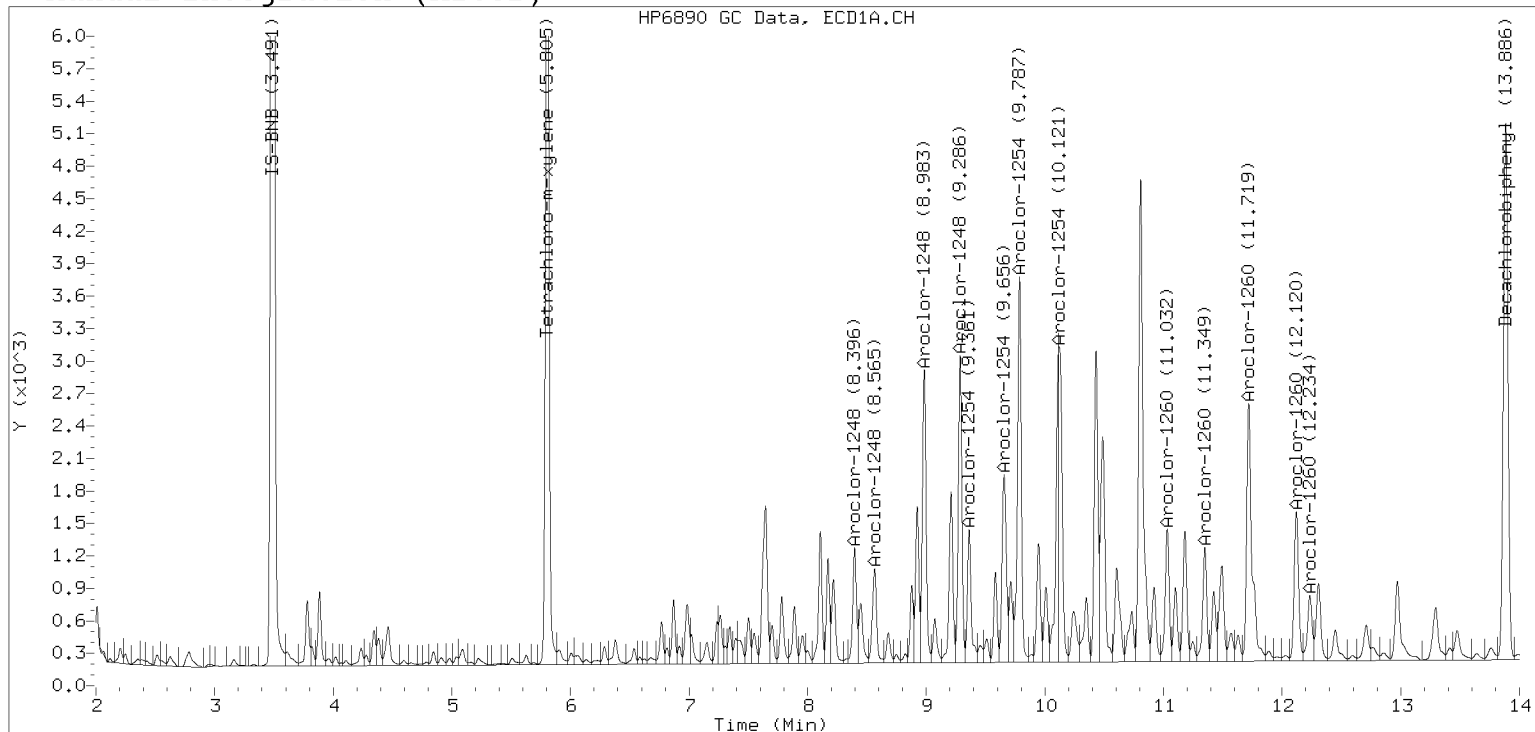
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

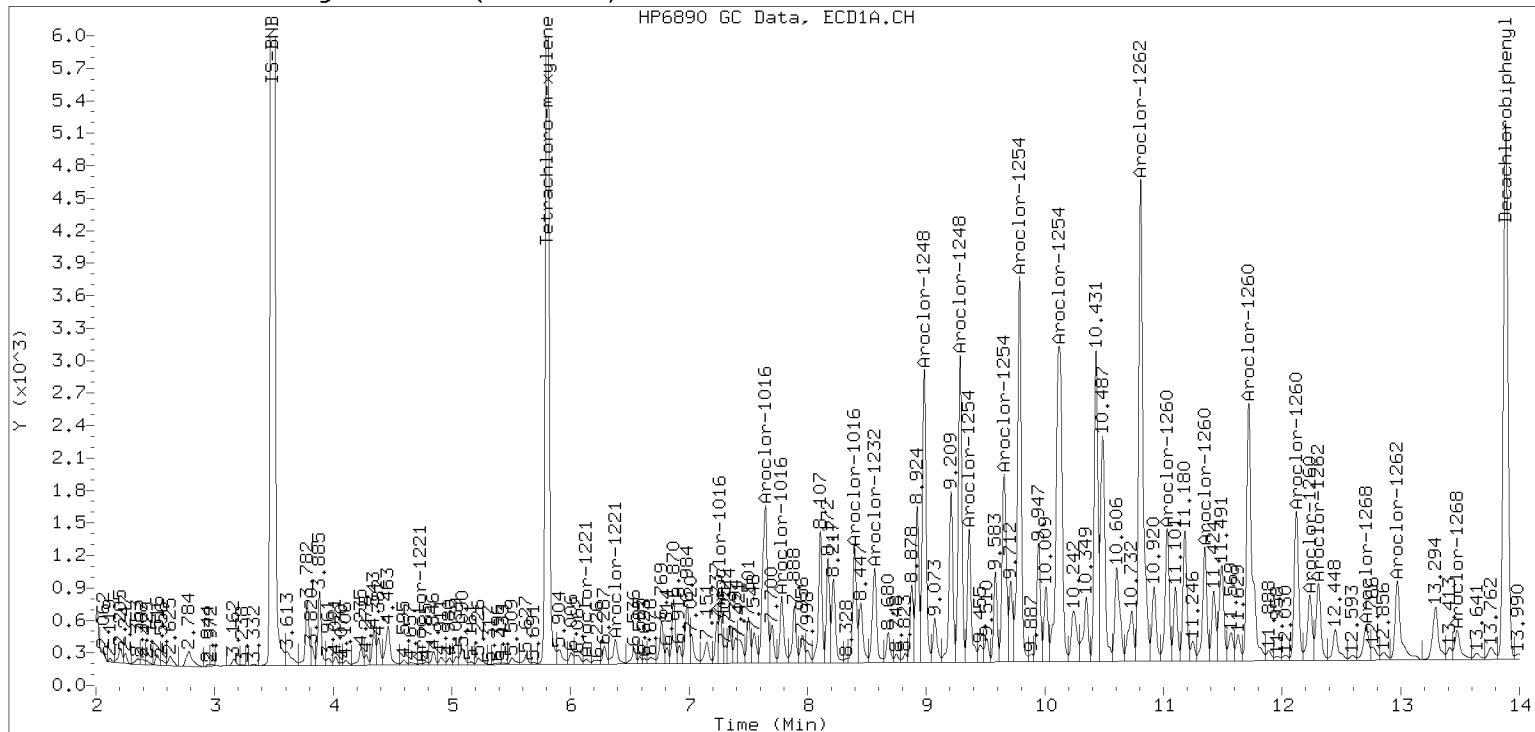
Datafile: ecd7.i/230228.b/02282344ECD7.D

Injection Date: 01-MAR-2023 07:00

Manual Integration (After)



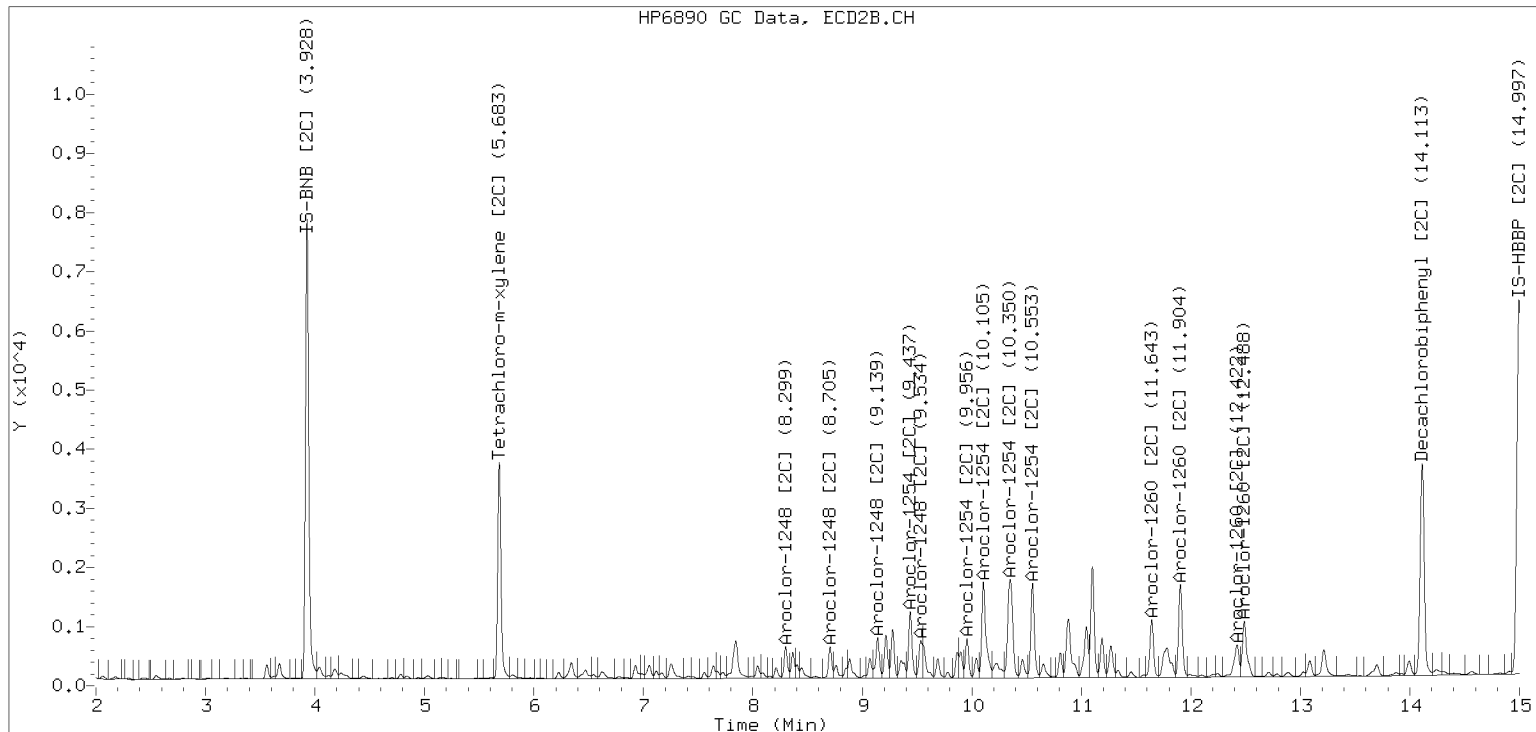
Processed Integration (Before)



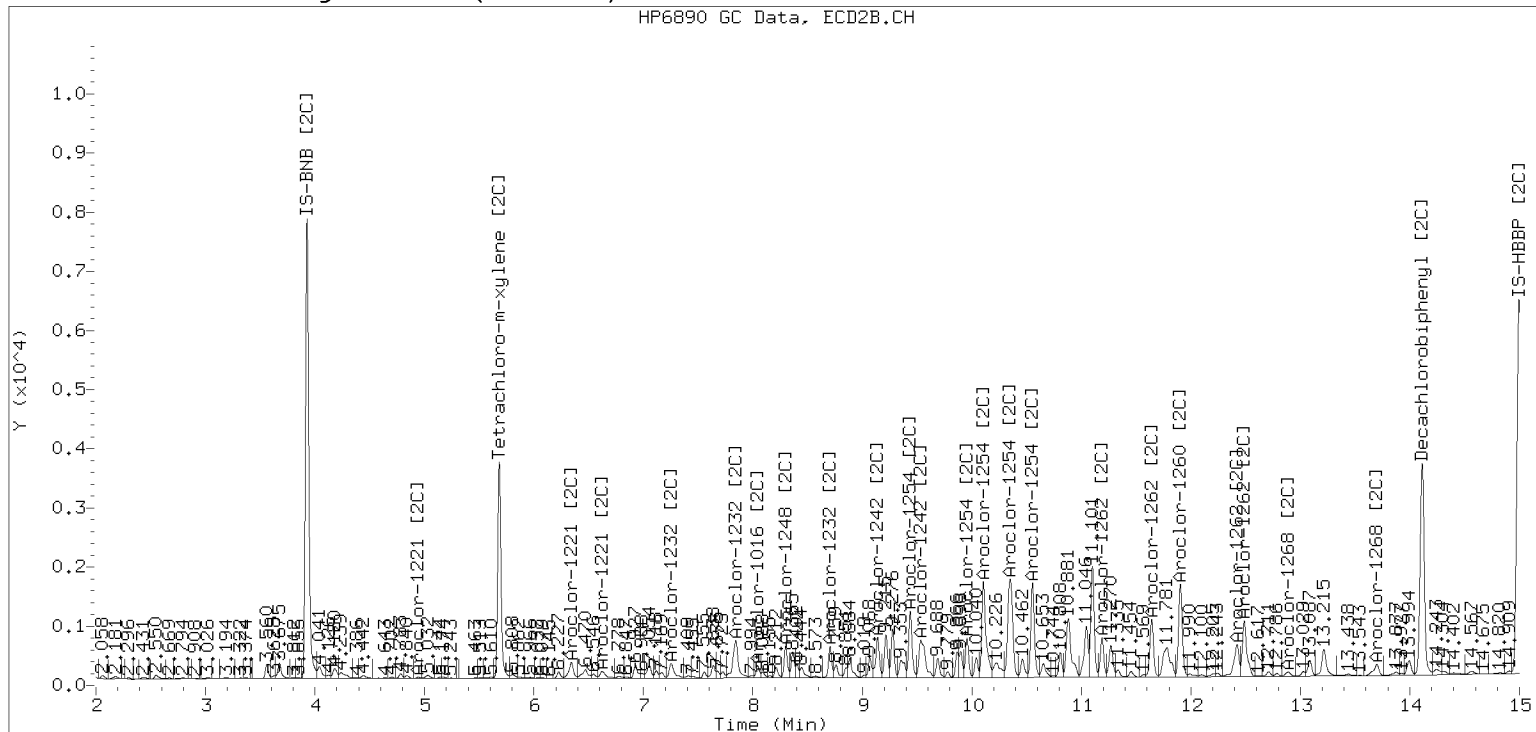
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282344ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282347ECD7.D
Data file 2: /230228.b/230228.b/02282347ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23B0229-08RE1
Client ID:
Injection Date: 01-MAR-2023 08:03
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 3.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col			
5.804	-0.003	111339	5.683 -0.004	50299	9.4	10.6	11.6	Tetrachloro-m-xylene
13.885	-0.008	98035	14.113 -0.007	63452	12.0	11.4	5.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	791682	17.5
Hexabromobiphenyl	1429847	826309	-42.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	324012	2.8
Hexabromobiphenyl	513946	365386	-28.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.397	-0.009	27835	72.1	1	8.300	-0.008	13870	89.7	
Aroclor-1248	2	8.567	-0.014	26348	53.7	2	8.706	-0.009	12093	75.6	
Aroclor-1248	3	8.985	-0.012	67084	72.4	3	9.142	-0.026	18821	102.2	
Aroclor-1248	4	9.287	-0.008	75267	159.6	4	9.536	-0.058	14320	64.8	
Total CollAve (4 peaks):				89.4	Total Col2Ave (4 peaks):				83.1	RPD = 7	
Corrected Ave (3 peaks):				66.0	Corrected Ave (3 peaks):				76.7	RPD = 15	
89.17											
Aroclor-1254	1	9.287	-0.012	75267	94.7	1	9.439	-0.012	30179	122.5	
Aroclor-1254	2	9.362	-0.016	34980	97.8	2	9.958	-0.014	18333	92.5	
Aroclor-1254	3	9.660	-0.009	61751	120.8	3	10.107	-0.018	53610	125.1	
Aroclor-1254	4	9.788	-0.020	102800	103.4	4	10.353	-0.021	65903	157.7	
Aroclor-1254	5	10.129	-0.049	58658	94.2	5	10.555	-0.015	44730	175.8	
Total CollAve (5 peaks):				102.2	Total Col2Ave (5 peaks):				134.7	RPD = 27	
Corrected Ave (4 peaks):				97.5	Corrected Ave (4 peaks):				124.5	RPD = 24	
Aroclor-1260	1	11.034	-0.010	36402	122.5	1	11.644	-0.009	27398	127.5	
Aroclor-1260	2	11.348	-0.013	30574	98.4	2	11.905	-0.012	46932	85.6	
Aroclor-1260	3	11.720	-0.016	93460	113.5	3	12.423	-0.013	20587	141.5	
Aroclor-1260	4	12.121	-0.019	47521	114.6	4	12.488	-0.014	33976	91.9	
Aroclor-1260	5	12.236	-0.008	21501	120.4	NS	---			----	
Total CollAve (5 peaks):				113.9	Total Col2Ave (4 peaks):				111.6	RPD = 2	
Corrected Ave (4 peaks):				111.7	Corrected Ave (3 peaks):				101.7	RPD = 9	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.907 - 13.793) = 1947196 Col1 Total PCB = 0.2 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 956474 Col2 Total PCB = 0.2 ppm*

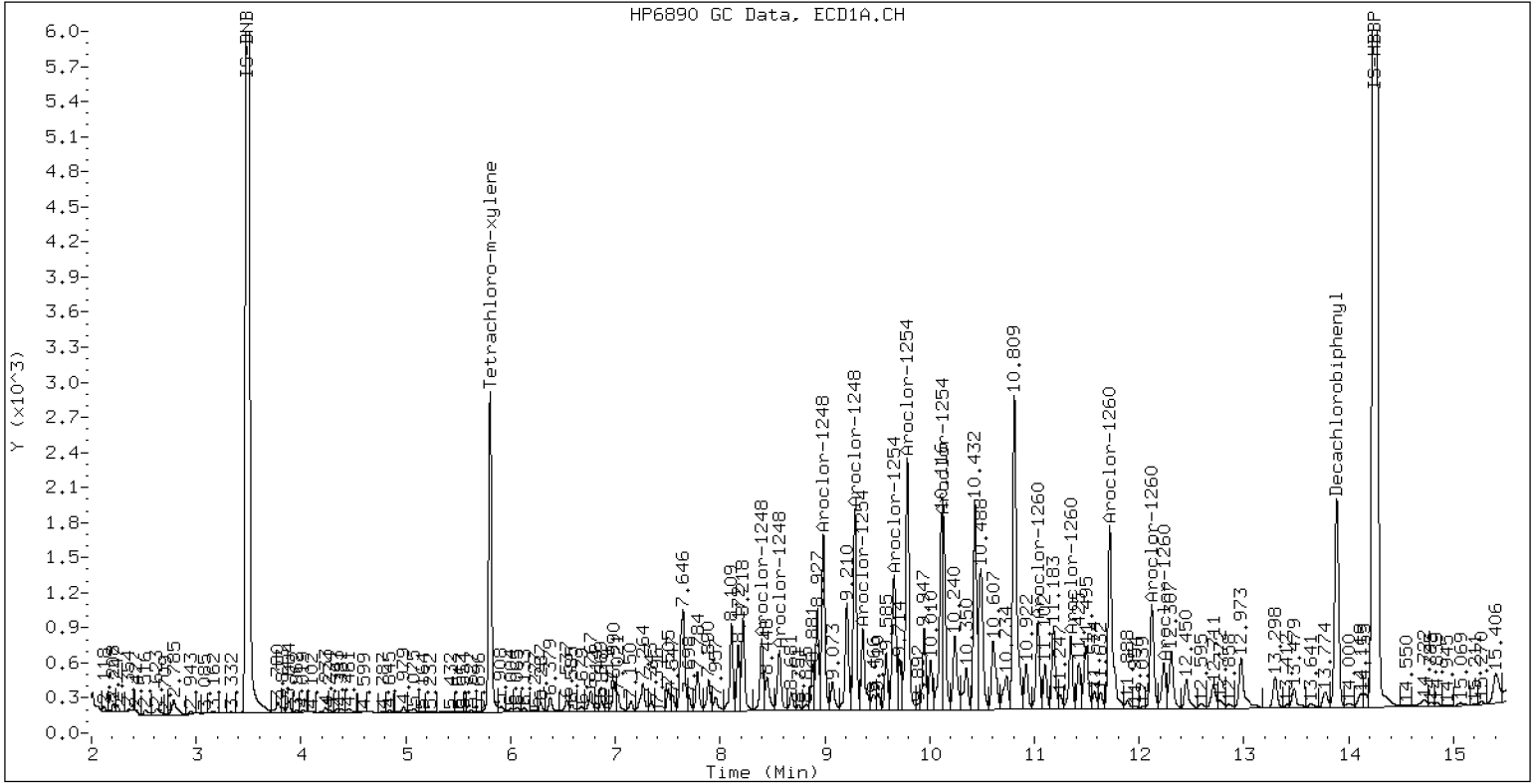
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23B0229-08RE1

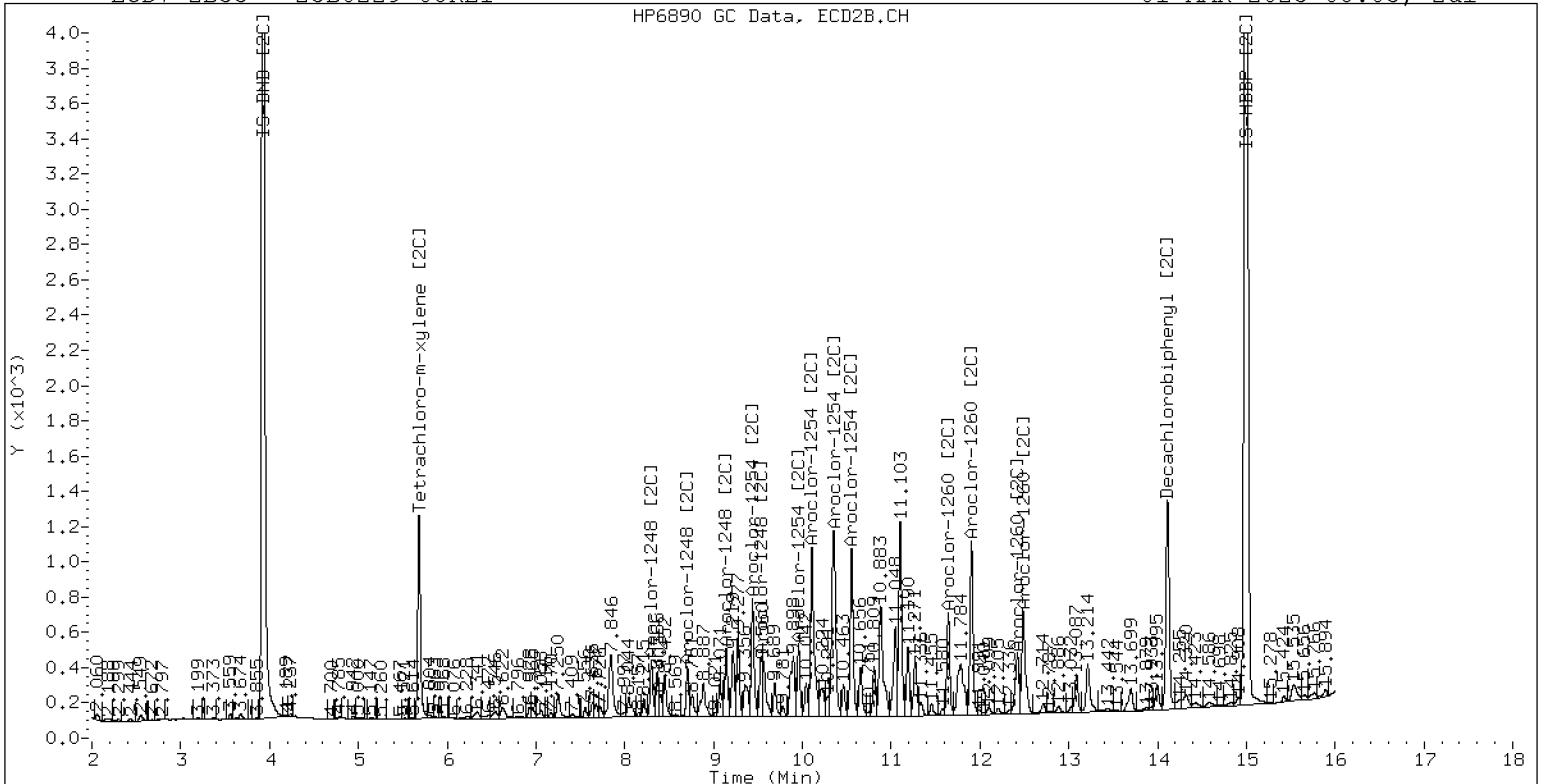
01-MAR-2023 08:03, 2u1



ZB-5 Manual Integration: YES

ECD7-ZB35 23B0229-08RE1

01-MAR-2023 08:03, 2u1

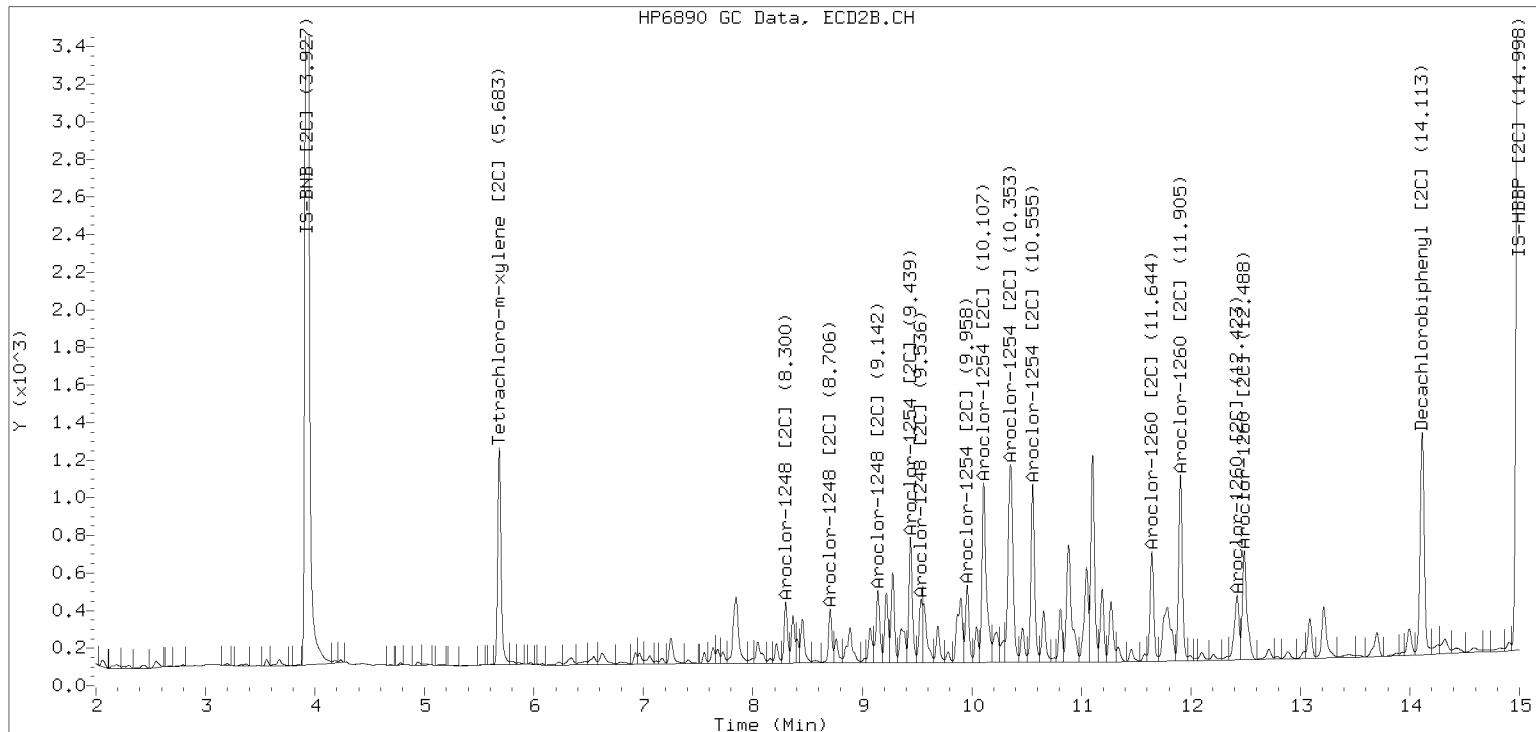


ZB-35 Manual Integration: YES

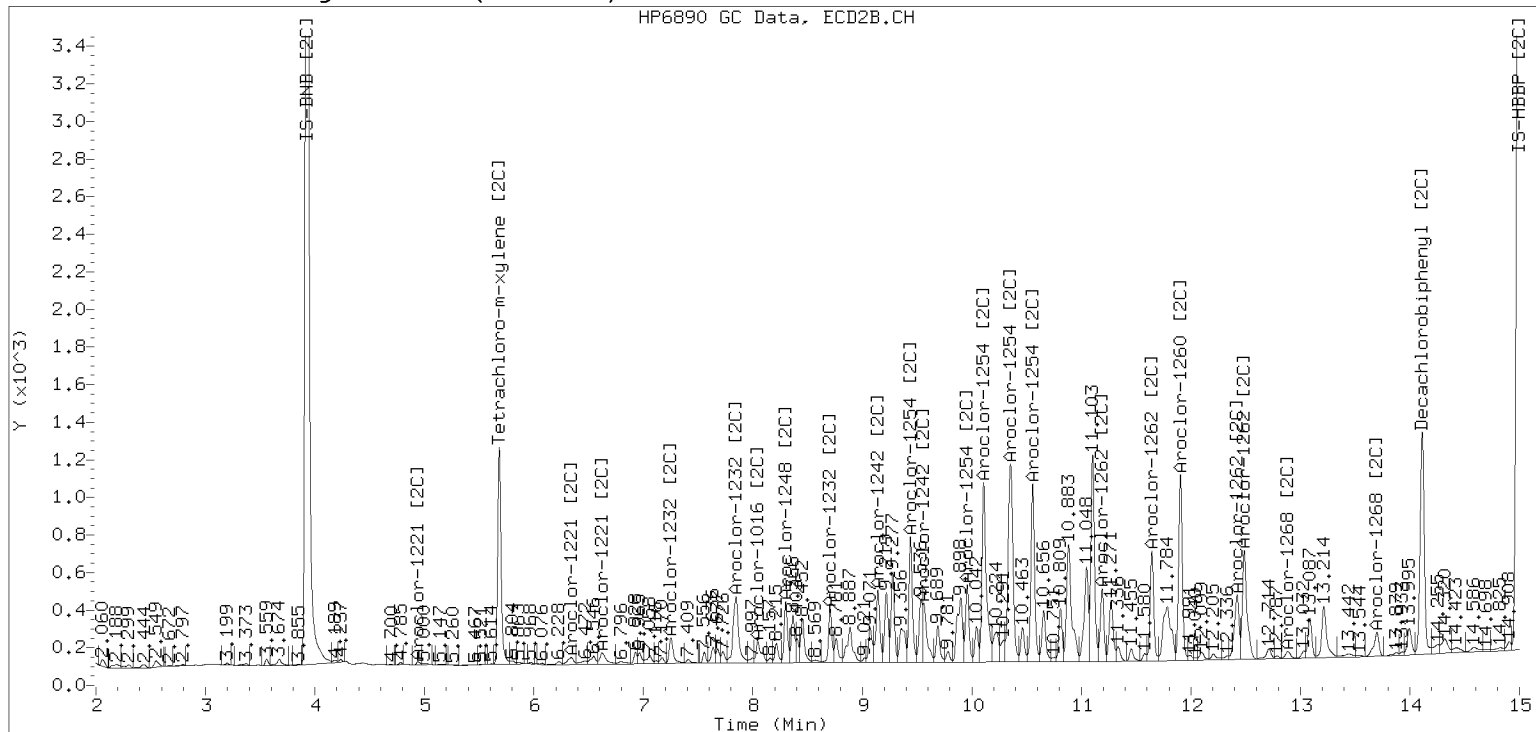
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282347ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





PREPARATION BATCH SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLB0427 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1236	23B0229-01	02282338ECD7.D	02/17/23 13:53	
LDW23-SS1236	23B0229-02	02282339ECD7.D	02/17/23 13:53	
LDW23-SS1237	23B0229-03	02282340ECD7.D	02/17/23 13:53	
LDW23-SS1150	23B0229-04	02282341ECD7.D	02/17/23 13:53	
LDW23-SS1008	23B0229-05	02282342ECD7.D	02/17/23 13:53	
LDW23-SC1008	23B0229-06	02282343ECD7.D	02/17/23 13:53	
LDW23-SC1014	23B0229-07	02282344ECD7.D	02/17/23 13:53	
LDW23-SC1013	23B0229-08	02282347ECD7.D	02/17/23 13:53	
Blank	BLB0427-BLK1	02282333ECD7.D	02/17/23 13:53	
LCS	BLB0427-BS1	02282334ECD7.D	02/17/23 13:53	
LCS Dup	BLB0427-BSD1	02282335ECD7.D	02/17/23 13:53	
LDW23-SC1014	BLB0427-MS1	02282345ECD7.D	02/17/23 13:53	
LDW23-SC1014	BLB0427-MSD1	02282346ECD7.D	02/17/23 13:53	
Reference	BLB0427-SRM1	02282336ECD7.D	02/17/23 13:53	



Batch: BLB0427

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

Matrix: Solid

Date Prepared: 02/17/23

Balance ID: B146462114

Set Up By: CR 2/16/23

WO Comments

23B0228: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 5	QLS Spike

Analysis: 8082A PCB Solid 4

Lab Number & Container	% Solids	Initial (g)		(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL)	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 12.5 (Wet)	Actual						
23B0228-01 A	62.0	(20.16)	20.19	5mL	5mL	2mL	2.5	1.0	
23B0229-01 A	51.9	(24.09)	24.09	5mL	5mL	2mL	2.5	1.0	
23B0229-02 A	56.0	(22.33)	22.32	5mL	5mL	2mL	2.5	1.0	
23B0229-03 A	54.8	(22.81)	22.85	5mL	5mL	2mL	2.5	1.0	
23B0229-04 A	52.2	(23.97)	23.98	5mL	5mL	2mL	2.5	1.0	
23B0229-05 A	44.9	(27.82)	27.84	5mL	5mL	2mL	2.5	1.0	
23B0229-06 A	48.6	(25.71)	25.77	5mL	5mL	2mL	2.5	1.0	
23B0229-07 A	68.7	(18.21)	18.23	5mL	5mL	2mL	2.5	1.0	
23B0229-08 A	49.7	(25.16)	25.21	5mL	5mL	2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g)		(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL)	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 12.5 (Wet)	Actual						
BLB0427-BLK1	100.0	(12.50)	12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLB0427-BS1	100.0	(12.50)	12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLB0427-BSD1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLB0427-MS1	68.7	(18.21)	18.23	5mL	5mL	2mL	2.5	1.0	Use 23B0229-07
BLB0427-MSD1	68.7	(18.21)	18.23	5mL	5mL	2mL	2.5	1.0	Use 23B0229-07
BLB0427-SRM1	100.0	(12.50) ^(2.50)	25.0	5mL	5mL	2mL	2.5	1.0	Use K011478

+1g DI WATER

Client ID/Verified By: [Signature] Date: 02/17/23

Preparation Reviewed By: NRC's Date: 2/21/23

Extraction Date and Time: 02/17/23 13:53



Batch: BLB0427

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments
 23B0228: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Reagents Used

Surrogates & Spike Standards Used

Station/Reagent	Standard ID
Microwave	
Analyst: <i>CT/JS</i> Date: <i>2/17/23</i>	
Neutral Glass Wool	<i>L000350</i>
1:1 Hexane/Acetone	<i>L001220</i>
Hexane	<i>L000889</i>
Anhydrous Sodium Sulfate	<i>L001285</i>
KD	
Analyst: <i>LO</i> Date: <i>2-20-23</i>	
Anhydrous Sodium Sulfate	
Hexane	<i>L000889</i>
Vialing	
Analyst: <i>MRS</i> Date: <i>2/20/23</i>	
Hexane	<i>L000889</i>
Concentrated Sulfuric Acid	<i>L001033</i>
Silica Gel (SPE) Darts	<i>L001054</i>
Sodium Sulfite	<i>K010363</i>
Tetrabutylammonium hydrogensulfate (TBAS)	<i>L001601</i>

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	N <i>L000773</i>	50µL	<i>CT</i>	<i>JS</i>
2µg/mL	Exp Date: <i>7/21/2023</i>			
Spike	1 <i>L001587</i>	63µL	<i>CT</i>	<i>JS</i>
20µg/mL	Exp Date: <i>8/13/2023</i>			

MANUALLY ENTER EXPIRATION DATES!

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

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



Batch: BLB0427

Prepared using: EPA 3546 (Microwave)
8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments
23B0228: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23B0229: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

Prep Instructions	
<p>SPECIAL INSTRUCTIONS:</p> <ol style="list-style-type: none"> 1. Weigh soil/sed into beakers-lightly dry with sodium sulfate. 2. Transfer to microwave vessel(s). Note: (do not fill vessels more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hexane/Acetone until the solvent layer is 3 inches above the soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then cool vessels in R-05 15 minutes. Re-homogenize while cool. 7. Decant 1:1 Hex/Ace into Erlenmeyer flask with sodium sulfate in bottom and funnel with neutral glasswool plug. 8. Re-homogenize and rinse with 1:1 Hexane/Acetone. 9. Let cool and decant solvent then empty the soil into the funnel and rinse with Hexane. 10. KD on 100° bath. 11. Exchange (2 X with 20mL) Hexane. 12. TurboVap. 13. Clean-ups. 14. TurboVap. 15. Vial with Hexane. <p>A. Need Total Solids Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p> <p>B. Archive/Freeze <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/></p>	

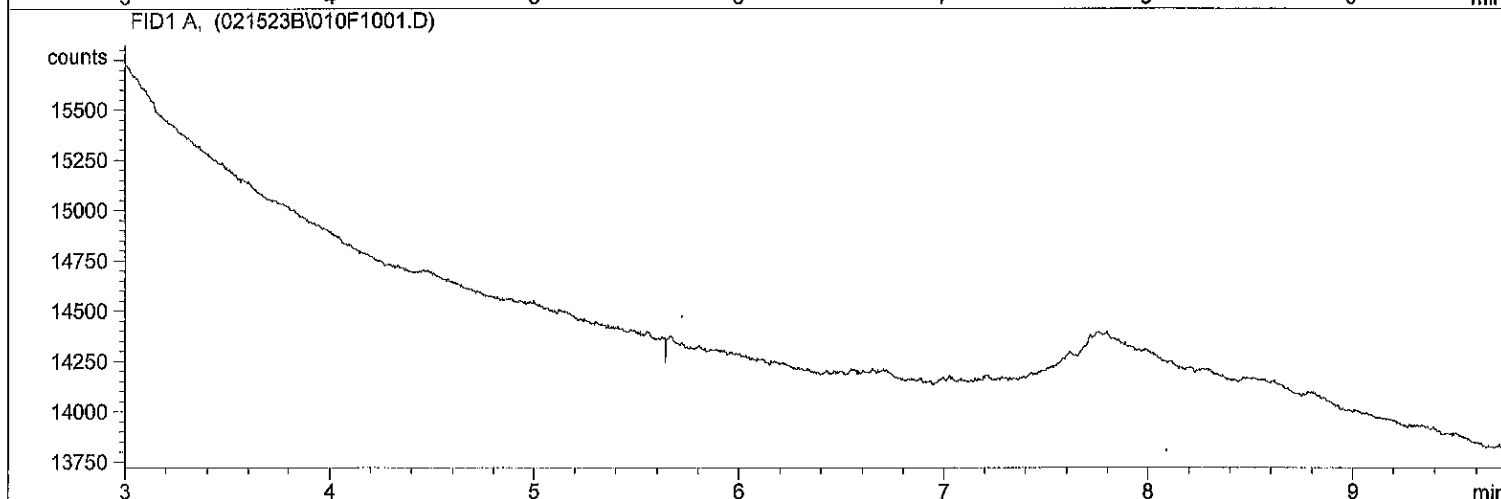
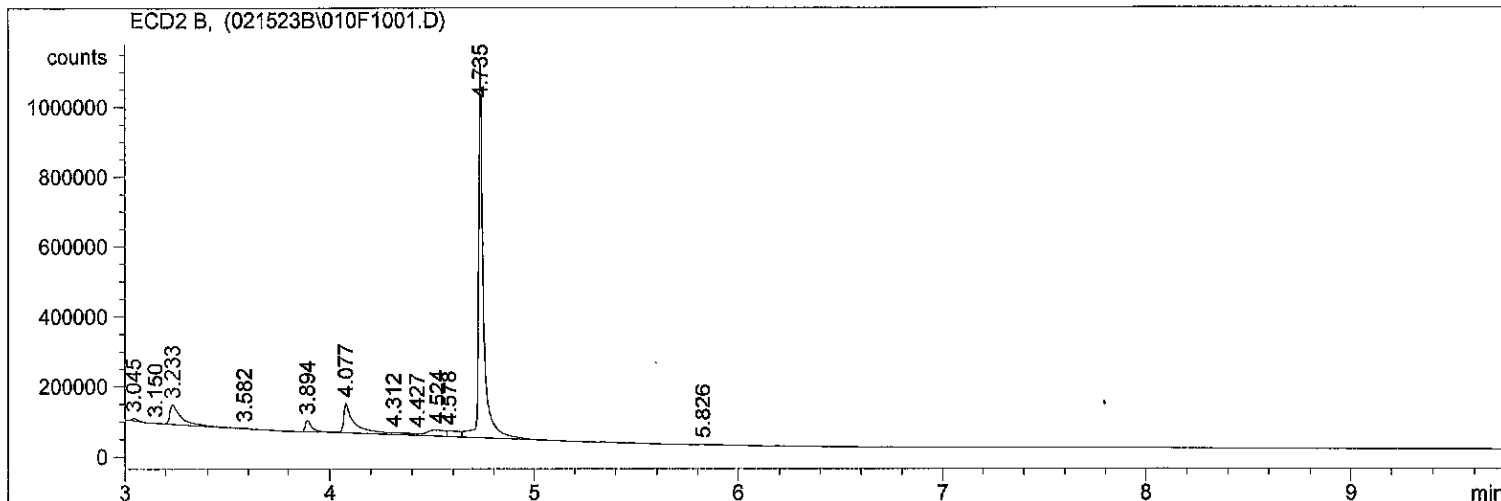


Extraction Parameter: PCB Extraction Batch BLB0427

Total Solids Batch: BLB0340 Work Order(s): 23B0228 01

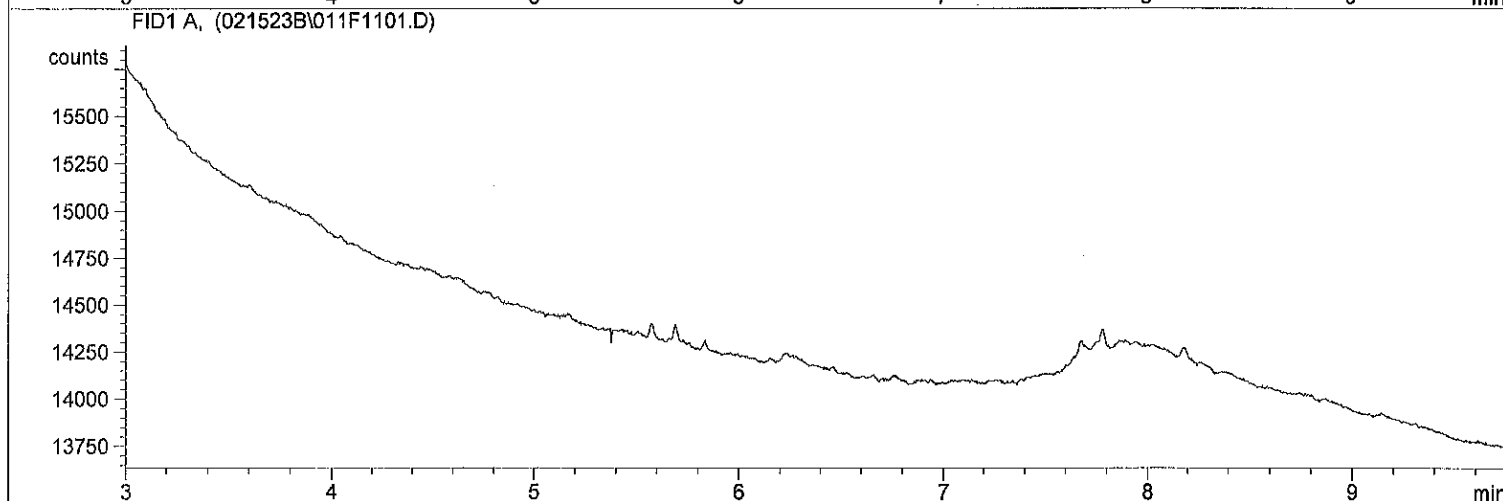
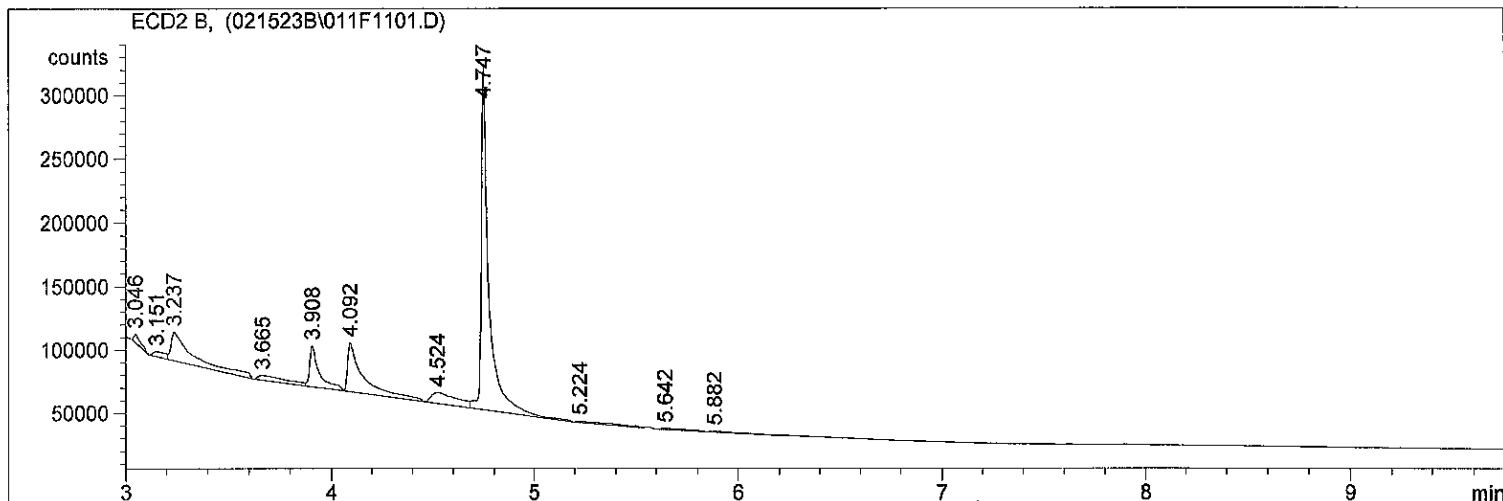
Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= 01	UR 2/15/23
<input type="checkbox"/> Standing Water Decanted (Not shared)=	
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input checked="" type="checkbox"/> Previously Frozen = 01	UR 2/15/23
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input checked="" type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
-lost some of BSP1 and maybe BSI during sulfur chr, the stickers got stuck on the vial	NRB 2/20/23
<input checked="" type="checkbox"/> Share Samples Y/N <u>(N)</u>	UR 2/15/23
<input checked="" type="checkbox"/> Multiple Jars Y/N <u>(N)</u>	UR 2/15/23
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	

=====
Injection Date : 2/15/2023 5:38:15 PM Seq. Line : 10
Sample Name : 23B0228 01 Location : Vial 10
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



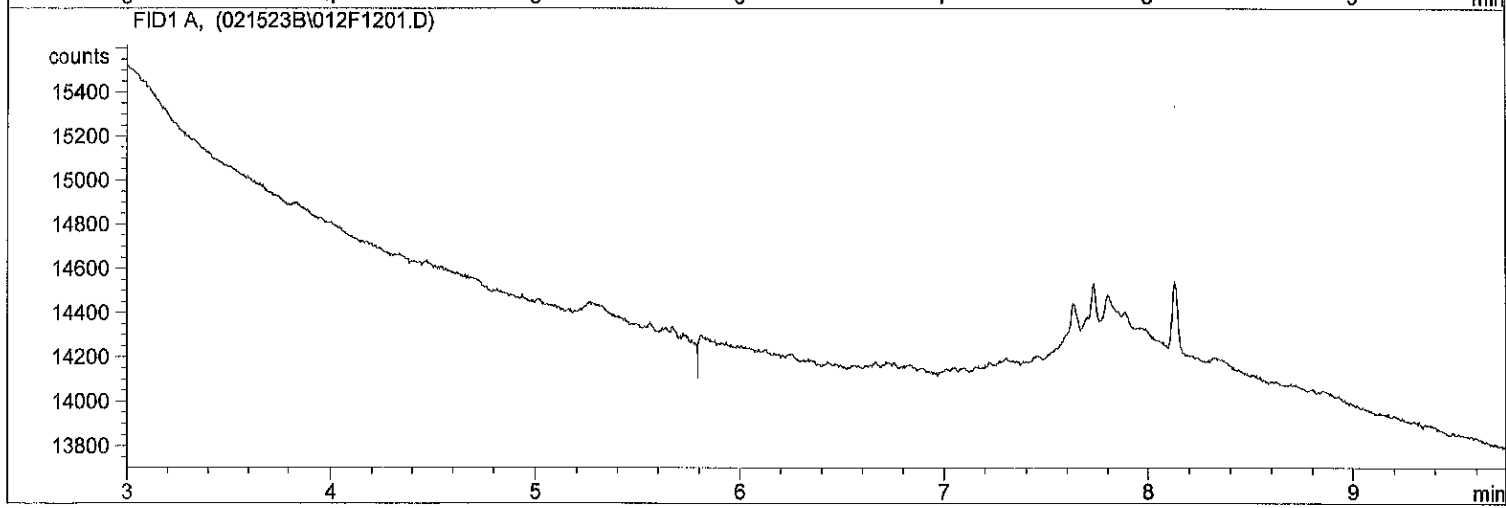
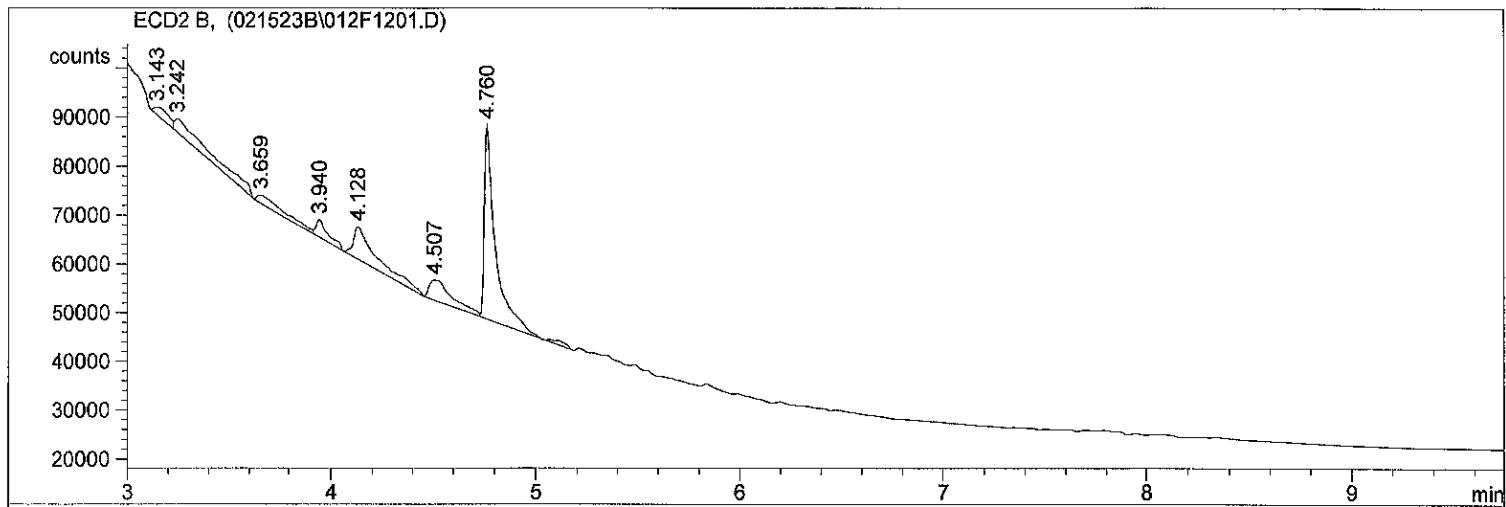
*** End of Report ***

=====
Injection Date : 2/15/2023 5:52:48 PM Seq. Line : 11
Sample Name : 23B0229 01 Location : Vial 11
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



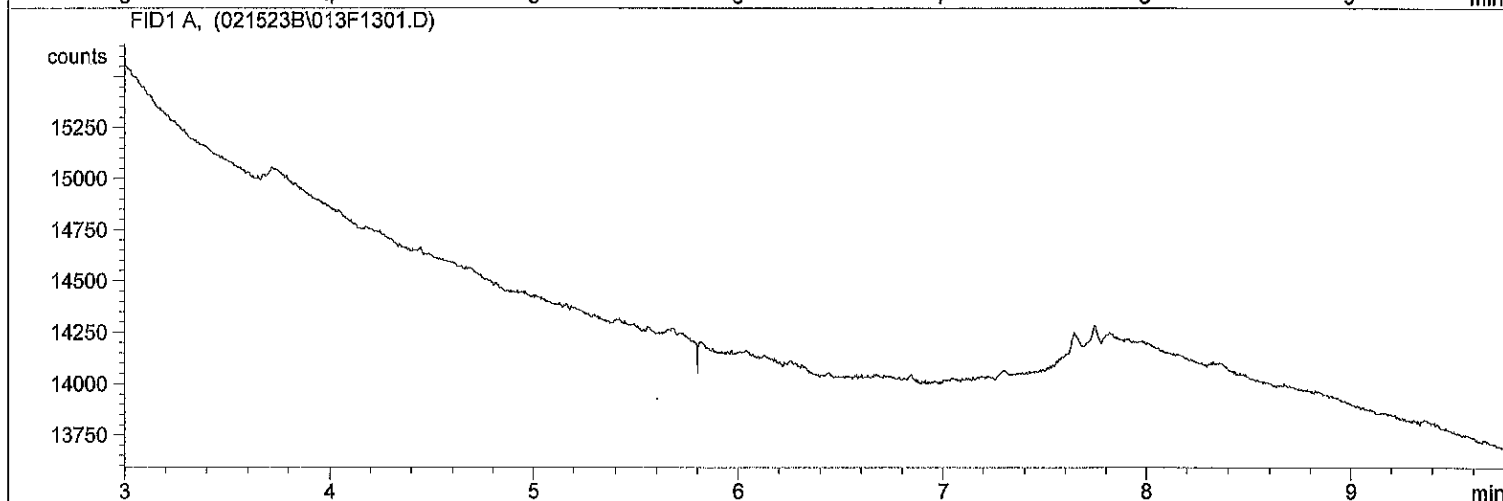
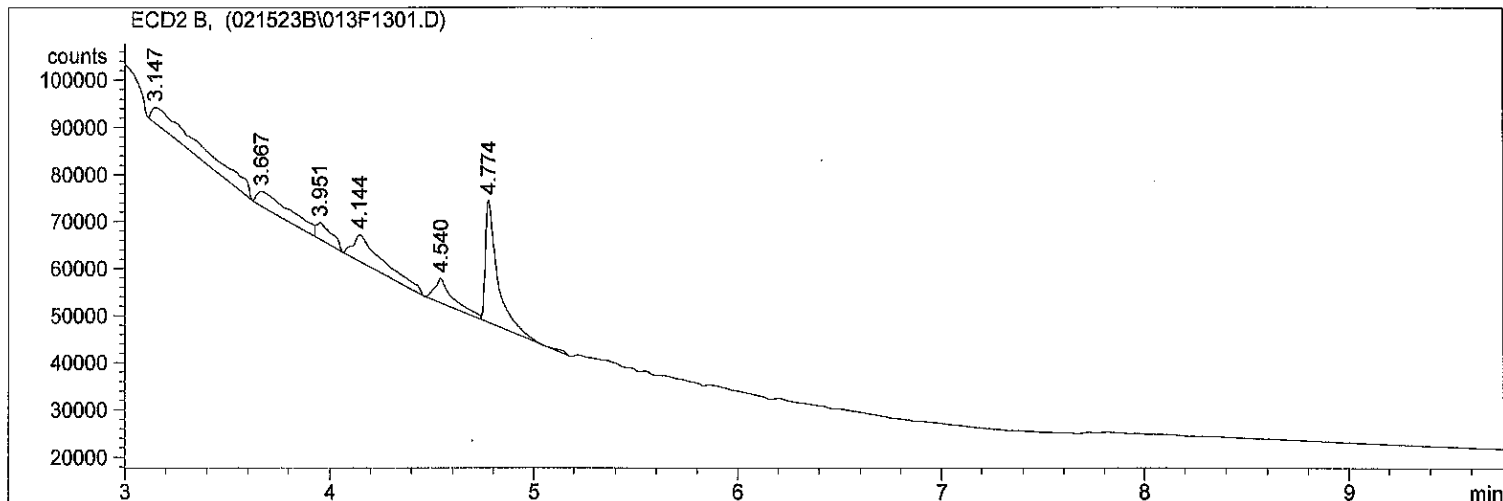
*** End of Report ***

=====
Injection Date : 2/15/2023 6:06:45 PM Seq. Line : 12
Sample Name : 23B0229 02 Location : Vial 12
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



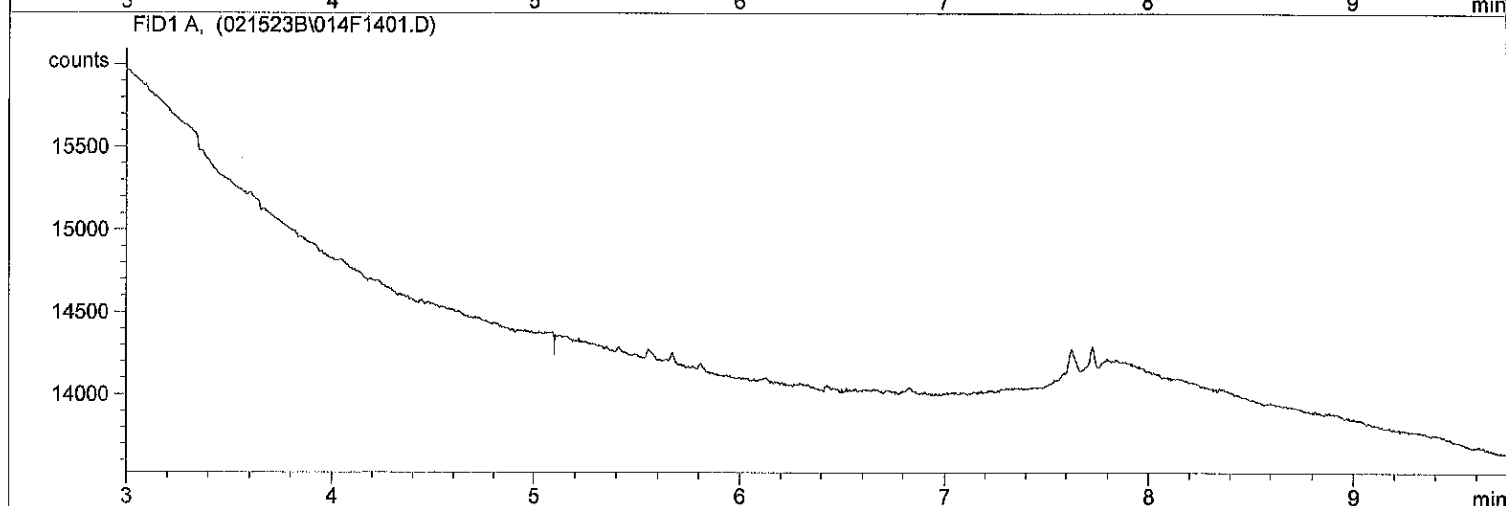
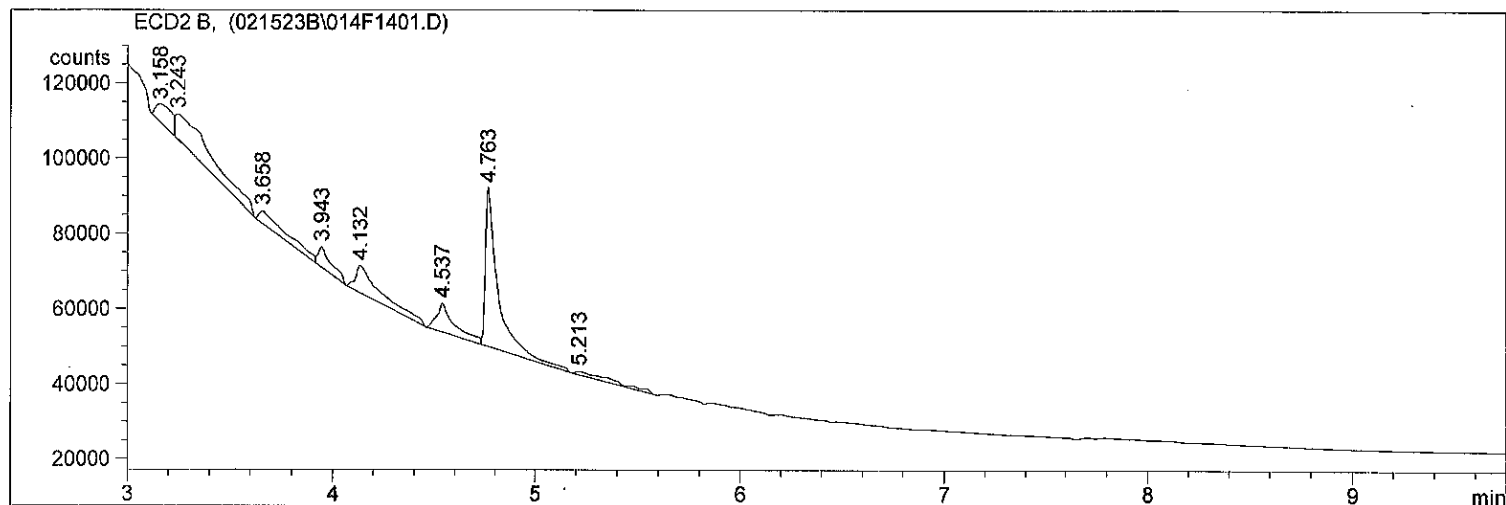
*** End of Report ***

=====
Injection Date : 2/15/2023 6:21:23 PM Seq. Line : 13
Sample Name : 23B0229 03 Location : Vial 13
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

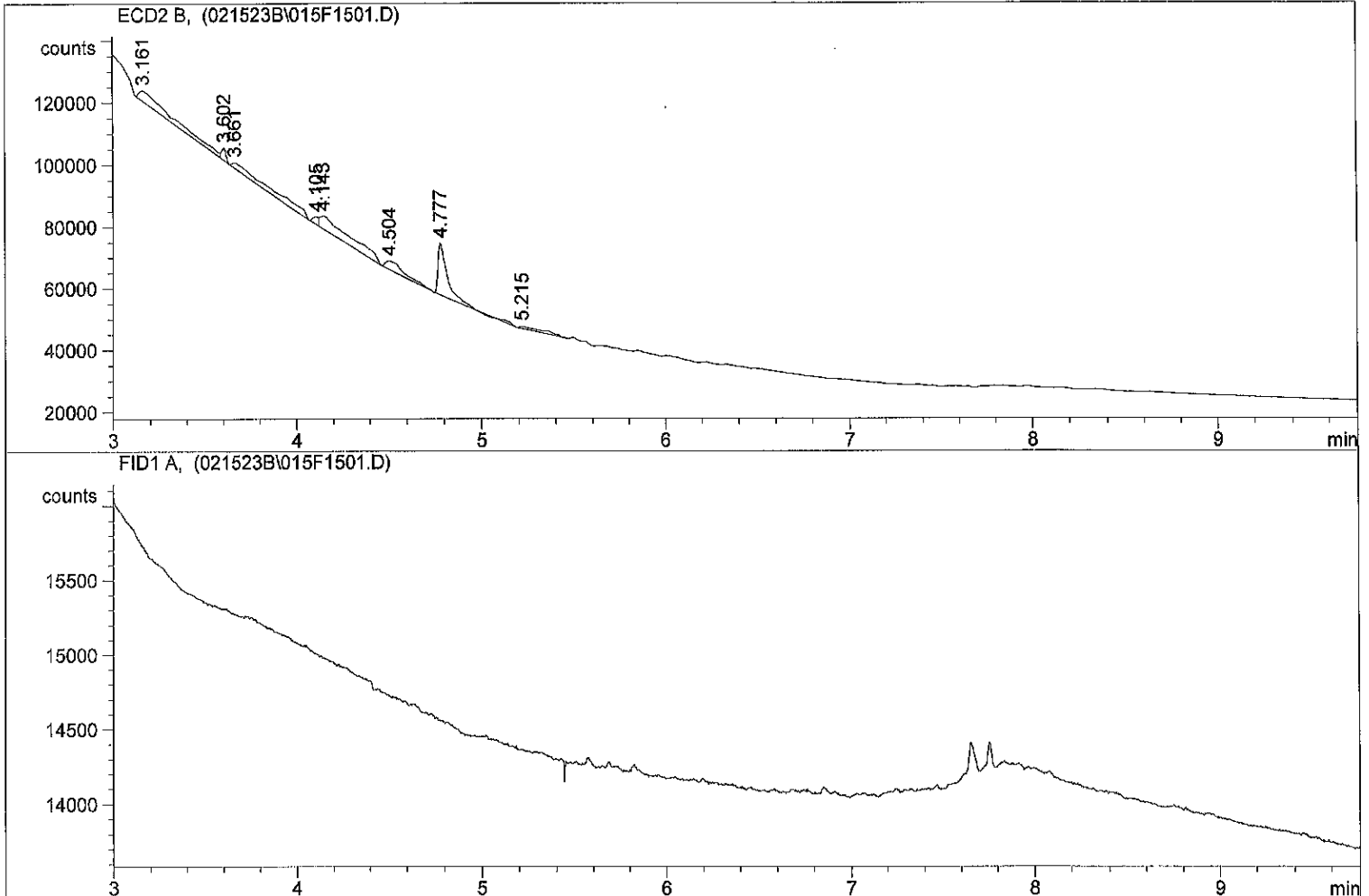
=====
Injection Date : 2/15/2023 6:35:23 PM Seq. Line : 14
Sample Name : 23B0229 04 Location : Vial 14
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

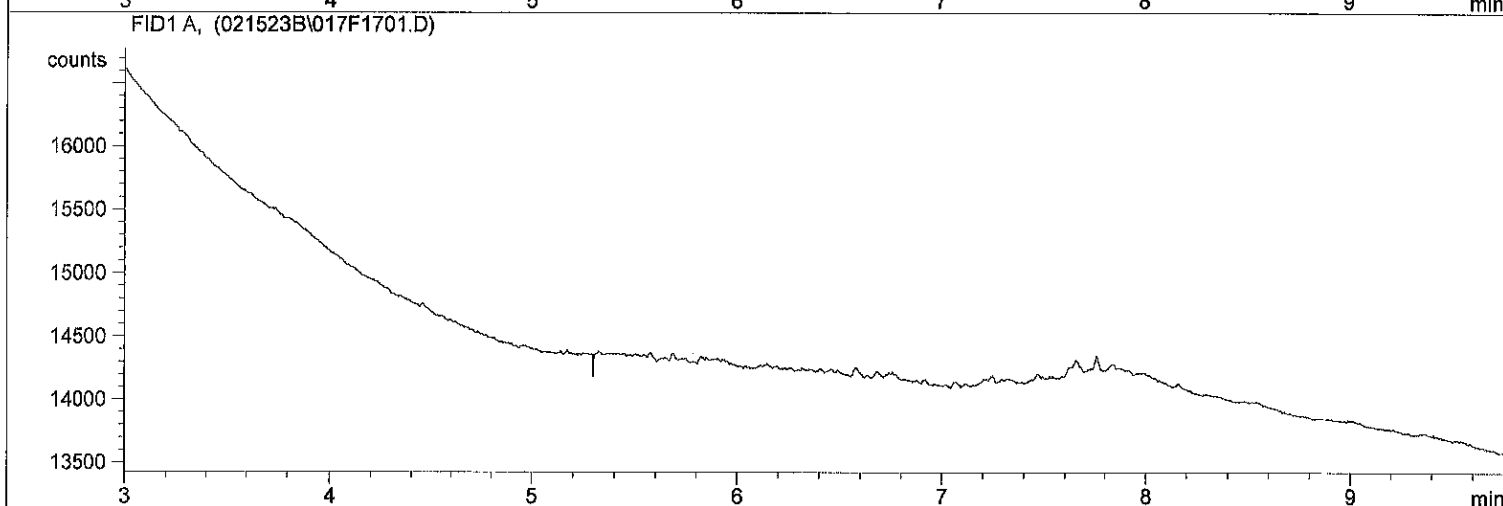
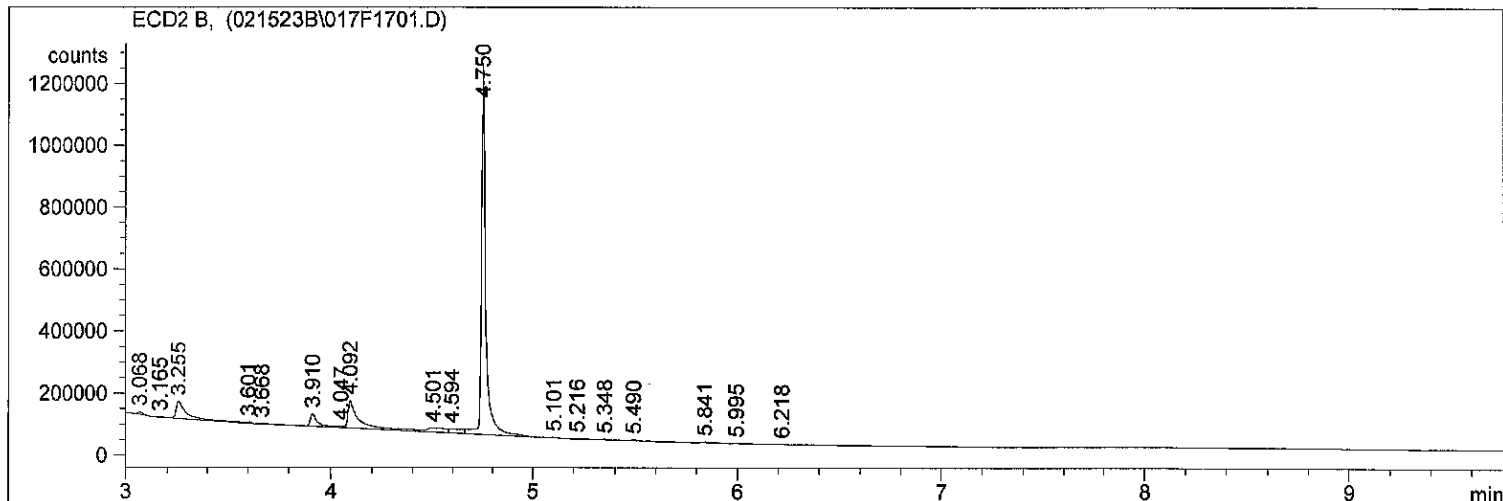
=====
Injection Date : 2/15/2023 6:49:53 PM Seq. Line : 15
Sample Name : 23B0229 05 Location : Vial 15
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



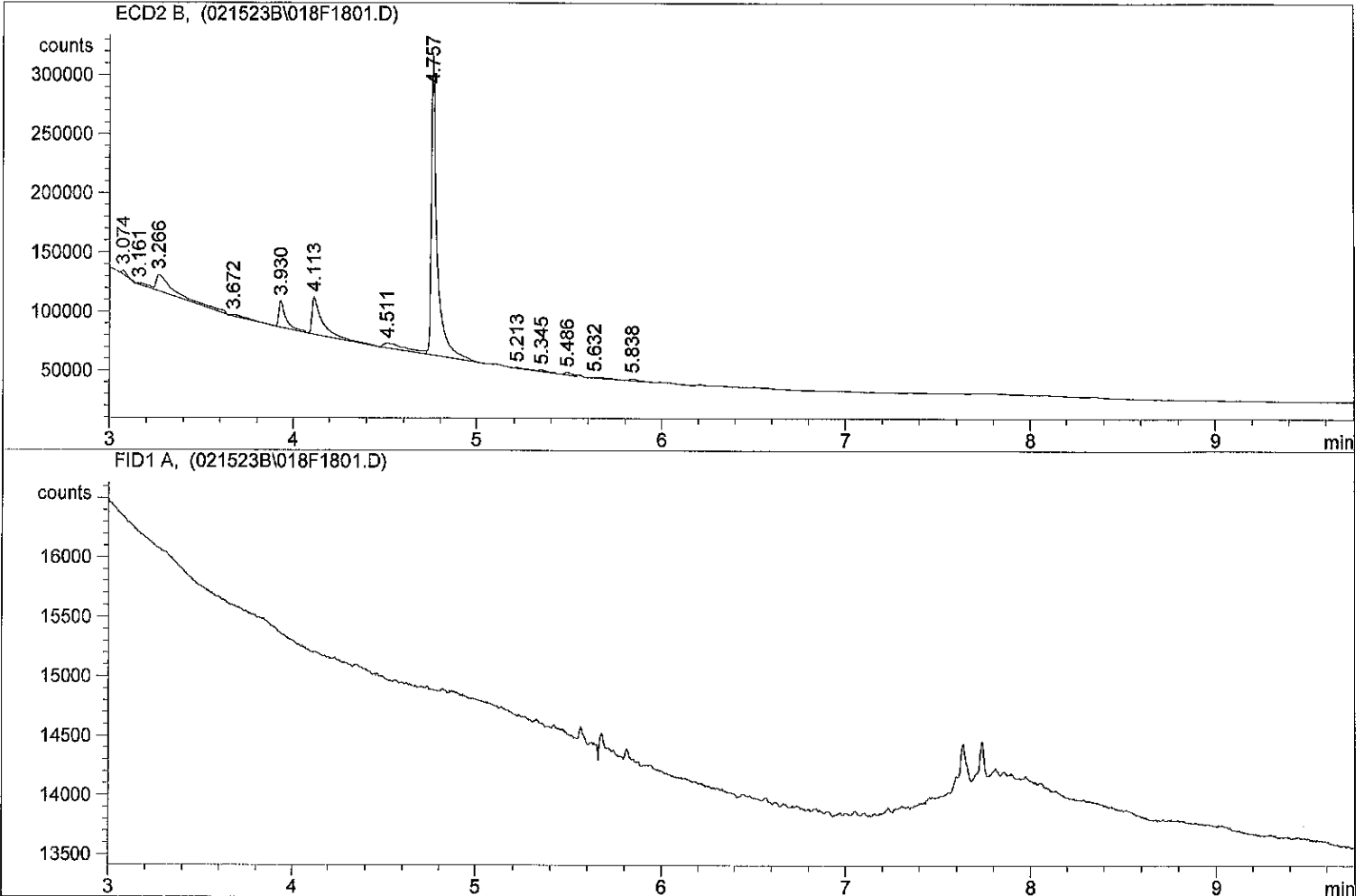
*** End of Report ***

=====
Injection Date : 2/15/2023 7:18:26 PM Seq. Line : 17
Sample Name : 23B0229 07 Location : Vial 17
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

=====
Injection Date : 2/15/2023 7:32:27 PM Seq. Line : 18
Sample Name : 23B0229 08 Location : Vial 18
Acq. Operator : CR Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\021523B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0181

Cleanup Type: Sulfuric Acid

Cleanup Method: EPA 3665 Sulfuric Acid Cleanup - uL

Analysis: EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1236	23B0229-01	02282338ECD7.D	02/21/2023	
LDW23-SC1014	23B0229-07	02282344ECD7.D	02/21/2023	
LDW23-SC1013	23B0229-08	02282347ECD7.D	02/21/2023	
Blank	BLB0427-BLK1	02282333ECD7.D	02/21/2023	
LDW23-SC1008	23B0229-06	02282343ECD7.D	02/21/2023	
LDW23-SS1008	23B0229-05	02282342ECD7.D	02/21/2023	
LDW23-SS1237	23B0229-03	02282340ECD7.D	02/21/2023	
LDW23-SS1150	23B0229-04	02282341ECD7.D	02/21/2023	
Reference	BLB0427-SRM1	02282336ECD7.D	02/21/2023	
LCS	BLB0427-BS1	02282334ECD7.D	02/21/2023	
LCS Dup	BLB0427-BSD1	02282335ECD7.D	02/21/2023	
Matrix Spike	BLB0427-MS1	02282345ECD7.D	02/21/2023	
Matrix Spike Dup	BLB0427-MSD1	02282346ECD7.D	02/21/2023	
LDW23-SS1236	23B0229-02	02282339ECD7.D	02/21/2023	



CLEANUP BENCH SHEET

CLB0181

Matrix: Solid

Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL

Printed: 2/21/2023 11:13:29AM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0228-01	A	LDW23-SC1009	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-01	A	LDW23-SC1236	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-02	A	LDW23-SS1236	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-03	A	LDW23-SS1237	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-04	A	LDW23-SS1150	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-05	A	LDW23-SS1008	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-06	A	LDW23-SC1008	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-07	A	LDW23-SC1014	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-08	A	LDW23-SC1013	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
BLB0427-BLK1	-	Blank	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-BS1	-	LCS	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-BSD1	-	LCS Dup	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-MS1	-	Matrix Spike	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-SRM1	-	Reference	-	2.5	2.5	-	2/21/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0182

Cleanup Type: Sulfur

Cleanup Method: EPA 3660B Sulfur Cleanup - uL

Analysis: EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	BLB0427-BS1	02282334ECD7.D	02/21/2023	
LCS Dup	BLB0427-BSD1	02282335ECD7.D	02/21/2023	
Matrix Spike	BLB0427-MS1	02282345ECD7.D	02/21/2023	
Matrix Spike Dup	BLB0427-MSD1	02282346ECD7.D	02/21/2023	
Blank	BLB0427-BLK1	02282333ECD7.D	02/21/2023	
Reference	BLB0427-SRM1	02282336ECD7.D	02/21/2023	
LDW23-SC1014	23B0229-07	02282344ECD7.D	02/21/2023	
LDW23-SS1237	23B0229-03	02282340ECD7.D	02/21/2023	
LDW23-SC1013	23B0229-08	02282347ECD7.D	02/21/2023	
LDW23-SC1236	23B0229-01	02282338ECD7.D	02/21/2023	
LDW23-SS1008	23B0229-05	02282342ECD7.D	02/21/2023	
LDW23-SS1150	23B0229-04	02282341ECD7.D	02/21/2023	
LDW23-SS1236	23B0229-02	02282339ECD7.D	02/21/2023	
LDW23-SC1008	23B0229-06	02282343ECD7.D	02/21/2023	



CLEANUP BENCH SHEET

CLB0182

Matrix: Solid

Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL

Printed: 2/21/2023 11:14:01AM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0228-01	A	LDW23-SC1009	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-01	A	LDW23-SC1236	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-02	A	LDW23-SS1236	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-03	A	LDW23-SS1237	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-04	A	LDW23-SS1150	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-05	A	LDW23-SS1008	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-06	A	LDW23-SC1008	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-07	A	LDW23-SC1014	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-08	A	LDW23-SC1013	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
BLB0427-BLK1	-	Blank	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-BS1	-	LCS	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-BSD1	-	LCS Dup	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-MS1	-	Matrix Spike	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-SRM1	-	Reference	-	2.5	2.5	-	2/21/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0183

Cleanup Type: Silica Gel

Cleanup Method: EPA 3630C Silica Gel Cleanup - uL

Analysis: EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	BLB0427-BS1	02282334ECD7.D	02/21/2023	
Blank	BLB0427-BLK1	02282333ECD7.D	02/21/2023	
LDW23-SS1237	23B0229-03	02282340ECD7.D	02/21/2023	
LDW23-SC1008	23B0229-06	02282343ECD7.D	02/21/2023	
LDW23-SC1013	23B0229-08	02282347ECD7.D	02/21/2023	
LDW23-SC1014	23B0229-07	02282344ECD7.D	02/21/2023	
LDW23-SC1236	23B0229-01	02282338ECD7.D	02/21/2023	
LDW23-SS1008	23B0229-05	02282342ECD7.D	02/21/2023	
LDW23-SS1150	23B0229-04	02282341ECD7.D	02/21/2023	
Matrix Spike Dup	BLB0427-MSD1	02282346ECD7.D	02/21/2023	
LDW23-SS1236	23B0229-02	02282339ECD7.D	02/21/2023	
LCS Dup	BLB0427-BSD1	02282335ECD7.D	02/21/2023	
Reference	BLB0427-SRM1	02282336ECD7.D	02/21/2023	
Matrix Spike	BLB0427-MS1	02282345ECD7.D	02/21/2023	



CLEANUP BENCH SHEET

CLB0183

Matrix: Solid

Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/21/2023 11:14:33AM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23B0228-01	A	LDW23-SC1009	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-01	A	LDW23-SC1236	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-02	A	LDW23-SS1236	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-03	A	LDW23-SS1237	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-04	A	LDW23-SS1150	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-05	A	LDW23-SS1008	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-06	A	LDW23-SC1008	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-07	A	LDW23-SC1014	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
23B0229-08	A	LDW23-SC1013	A 01	2.5	2.5	8082A PCB Solid 4	2/21/2023	NRB	
BLB0427-BLK1	-	Blank	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-BS1	-	LCS	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-BSD1	-	LCS Dup	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-MS1	-	Matrix Spike	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/21/2023	NRB	
BLB0427-SRM1	-	Reference	-	2.5	2.5	-	2/21/2023	NRB	



Form I
METHOD BLANK DATA SHEET
EPA 8082A

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLB0427-BLK1</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/17/23 13:53</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLB0427</u>	Sequence:	<u>SLC0014</u>
Instrument:	<u>ECD7</u>	Column:	<u>ZB5</u>
		File ID:	<u>02282333ECD7.D</u>
		Analyzed:	<u>03/01/23 03:08</u>
		Initial/Final:	<u>12.5 g / 2.5 mL</u>
		Calibration:	<u>GB00069</u>
		Cleanups:	<u>Silica Gel, Sulfur, Sulfuric Acid</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
12674-11-2	Aroclor 1016	1	4.0	U	1.6	4.0
11104-28-2	Aroclor 1221	1	4.0	U	1.6	4.0
11141-16-5	Aroclor 1232	1	4.0	U	1.6	4.0
53469-21-9	Aroclor 1242	1	4.0	U	1.6	4.0
12672-29-6	Aroclor 1248	1	4.0	U	1.6	4.0
11097-69-1	Aroclor 1254	1	4.0	U	1.6	4.0
11096-82-5	Aroclor 1260	1	4.0	U	0.6	4.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	7.47	93.4	40 - 126	
Tetrachlorometaxylene	8.0000	5.94	74.2	44 - 120	
Decachlorobiphenyl [2C]	8.0000	7.00	87.5	40 - 126	
Tetrachlorometaxylene [2C]	8.0000	6.43	80.3	44 - 120	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282333ECD7.D
Data file 2: /230228.b/230228.b/02282333ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0427-BLK1
Client ID:
Injection Date: 01-MAR-2023 03:08
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.807	-0.000	348911	5.686	-0.001	146228	29.7	32.1	7.9	Tetrachloro-m-xylene
13.892	-0.001	436465	14.118	-0.002	211607	37.4	35.0	6.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	787062	16.8
Hexabromobiphenyl	1429847	1186214	-17.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	310177	-1.6
Hexabromobiphenyl	513946	397133	-22.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				

Total PCB Area Coll (5.907 - 13.793) = 469796

Coll Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 15554 Col2 Total PCB = 0.0 ppm*

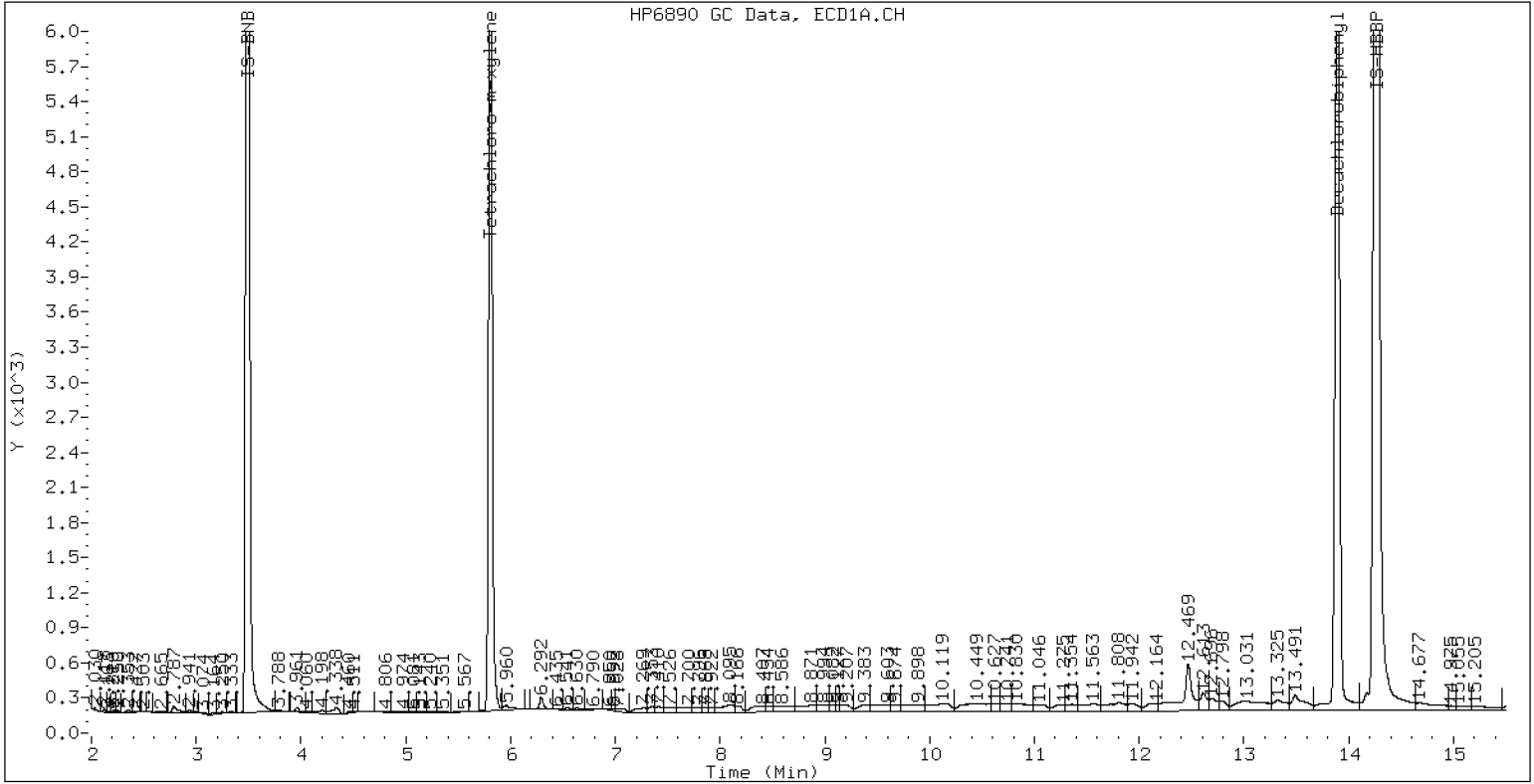
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLB0427-BLK1

01-MAR-2023 03:08, 2u1





LCS / LCS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/01/23 03:29</u>
Batch:	<u>BLB0427</u>	Laboratory ID:	<u>BLB0427-BS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>12.5 g / 2.5 mL</u>		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Aroclor 1016	101	75.7		75.1	56 - 120
Aroclor 1260	101	107		106	58 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016	101	81.1		80.4	6.87	30	56 - 120
Aroclor 1260	101	111		110	3.89	30	58 - 120

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282334ECD7.D
Data file 2: /230228.b/230228.b/02282334ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0427-BS1
Client ID:
Injection Date: 01-MAR-2023 03:29
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.001	404782	5.687	0.000	160749	32.3	32.0	1.0	Tetrachloro-m-xylene
13.893	-0.000	477901	14.119	-0.001	245652	38.9	38.0	2.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	839905	24.7
Hexabromobiphenyl	1429847	1248668	-12.7

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	342893	8.8
Hexabromobiphenyl	513946	424424	-17.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.001	117834	369.4	1	7.254	-0.001	69682	347.1
Aroclor-1016	2	7.652	-0.003	385165	396.1	2	7.852	-0.008	158651	389.8
Aroclor-1016	3	7.788	-0.004	166450	350.6	3	8.052	-0.006	65280	355.1
Aroclor-1016	4	8.402	-0.004	122029	397.6	4	8.304	-0.003	50842	352.5
Total CollAve (4 peaks):				378.4	Total Col2Ave (4 peaks):				361.1	RPD = 5
Corrected Ave (3 peaks):				372.0	Corrected Ave (3 peaks):				351.6	RPD = 6
Aroclor-1221	1	4.732	0.001	529	7.0	1	4.958	0.002	244	7.5
Aroclor-1221	2	6.130	-0.002	15172	112.8	2	6.299	0.002	7015	114.2
Aroclor-1221	3	6.382	-0.000	74309	237.9	3	6.622	0.000	31997	319.9
Total CollAve (3 peaks):				119.2	Total Col2Ave (3 peaks):				147.2	RPD = 21
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks					
Aroclor-1232	1	4.732	0.002	529	11.8	1	4.958	0.002	244	13.9
Aroclor-1232	2	6.130	-0.001	15172	170.0	2	7.254	0.000	69682	799.3
Aroclor-1232	3	7.652	-0.004	385165	953.5	3	7.852	-0.009	158651	910.1
Aroclor-1232	4	8.575	-0.006	156341	910.6	4	8.711	-0.004	50097	998.6
Total CollAve (4 peaks):				511.5	Total Col2Ave (4 peaks):				680.5	RPD = 28
Corrected Ave (3 peaks):				364.1	Corrected Ave (3 peaks):				574.4	RPD = 45*
Aroclor-1242	1	7.268	-0.000	117834	452.7	1	7.254	0.001	69682	437.4
Aroclor-1242	2	7.652	-0.004	385165	487.3	2	7.852	-0.008	158651	473.7
Aroclor-1242	3	8.402	-0.003	122029	496.2	3	9.156	-0.012	8789	84.3
Aroclor-1242	4	8.575	-0.005	156341	430.0	4	9.581	-0.017	3378	26.6
Total CollAve (4 peaks):				466.5	Total Col2Ave (4 peaks):				255.5	RPD = 58*
Corrected Ave (3 peaks):				456.7	Corrected Ave (3 peaks):				182.8	RPD = 86*
Aroclor-1248	1	8.402	-0.004	122029	297.8	1	8.304	-0.003	50842	310.5
Aroclor-1248	2	8.575	-0.005	156341	300.1	2	8.711	-0.004	50097	295.9
Aroclor-1248	3	8.991	-0.006	161664	164.5	3	9.156	-0.013	8789	45.1
Aroclor-1248	4	9.297	0.002	136914	273.7	4	9.581	-0.014	3378	14.4
Total CollAve (4 peaks):				259.0	Total Col2Ave (4 peaks):				166.5	RPD = 43*
Corrected Ave (3 peaks):				245.3	Corrected Ave (3 peaks):				118.5	RPD = 70*
Aroclor-1254	1	9.297	-0.002	136914	162.3	1	9.447	-0.004	44947	172.5
Aroclor-1254	2	---			0.0	2	9.968	-0.004	9788	46.7
Aroclor-1254	3	9.662	-0.007	22976	42.4	3	10.143	0.018	96970	213.8
Aroclor-1254	4	9.802	-0.006	76361	72.4	4	10.368	-0.006	120137	271.7
Aroclor-1254	5	10.117	-0.061	346429	524.2	5	10.564	-0.006	169976	631.3
Total CollAve (4 peaks):				200.3	Total Col2Ave (5 peaks):				267.2	RPD = 29
Corrected Ave (3 peaks):				92.4	Corrected Ave (4 peaks):				176.1	RPD = 62*
Aroclor-1260	1	11.043	-0.001	244288	543.8	1	11.651	-0.002	118072	473.1
Aroclor-1260	2	11.359	-0.002	257717	549.1	2	11.915	-0.003	308961	485.1
Aroclor-1260	3	11.733	-0.003	636560	511.4	3	12.434	-0.002	80187	474.4
Aroclor-1260	4	12.136	-0.003	335678	535.5	4	12.500	-0.002	202823	472.4
Aroclor-1260	5	12.242	-0.001	141048	522.8	NS	---			----
Total CollAve (5 peaks):				532.5	Total Col2Ave (4 peaks):				476.3	RPD = 11
Corrected Ave (4 peaks):				528.4	Corrected Ave (3 peaks):				473.3	RPD = 11
Aroclor-1262	1	10.823	-0.006	521402	1361.2	1	11.197	-0.003	115715	319.3
Aroclor-1262	2	12.242	-0.002	141048	226.3	2	11.651	-0.001	118072	382.5
Aroclor-1262	3	12.317	-0.001	173260	258.6	3	12.434	-0.000	80187	229.0
Aroclor-1262	4	12.986	-0.001	171201	279.6	4	12.500	-0.002	202823	369.7
Total CollAve (4 peaks):				531.4	Total Col2Ave (4 peaks):				325.1	RPD = 48*
Corrected Ave (3 peaks):				254.8	Corrected Ave (3 peaks):				306.0	RPD = 18
Aroclor-1268	1	12.242	-0.004	141048	88.2	1	12.434	0.002	80187	93.8
Aroclor-1268	2	12.317	0.000	173260	109.4	2	12.500	-0.000	202823	220.8
Aroclor-1268	3	12.723	0.023	86503	63.8	3	12.891	-0.001	6252	8.0
Aroclor-1268	4	13.488	-0.002	57960	13.0	4	13.708	-0.001	21822	8.7
Total CollAve (4 peaks):				68.6	Total Col2Ave (4 peaks):				82.8	RPD = 19

Corrected Ave (3 peaks): 55.0 Corrected Ave (3 peaks): 36.8 RPD = 40

Total PCB Area Col1 (5.907 - 13.793) = 7400705 Col1 Total PCB = 0.7 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2935143 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282335ECD7.D
Data file 2: /230228.b/230228.b/02282335ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0427-BSD1
Client ID:
Injection Date: 01-MAR-2023 03:50
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	ZB5 Col Response	RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.000	437425	5.686	-0.001	170014	32.2	31.2	3.0	Tetrachloro-m-xylene
13.892	-0.001	513138	14.118	-0.002	264364	36.8	36.2	1.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	910442	35.1
Hexabromobiphenyl	1429847	1416430	-0.9

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	371249	17.8
Hexabromobiphenyl	513946	479766	-6.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	138934	401.8	1	7.254	-0.001	82187	378.2
Aroclor-1016	2	7.651	-0.004	445586	422.7	2	7.853	-0.007	185014	419.8
Aroclor-1016	3	7.788	-0.003	191856	372.8	3	8.052	-0.007	75979	381.7
Aroclor-1016	4	8.403	-0.003	141085	424.1	4	8.305	-0.002	58633	375.5
Total CollAve (4 peaks):				405.3		Total Col2Ave (4 peaks):				388.8 RPD = 4
Corrected Ave (3 peaks):				399.1		Corrected Ave (3 peaks):				378.4 RPD = 5
Aroclor-1221	1	4.731	0.001	754	9.2	1	---			0.0
Aroclor-1221	2	6.130	-0.002	17380	119.2	2	6.298	0.001	8161	122.7
Aroclor-1221	3	6.382	-0.001	85973	253.9	3	6.621	-0.000	35919	331.7
Total CollAve (3 peaks):				127.5		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.731	0.001	754	15.5	1	---			0.0
Aroclor-1232	2	6.130	-0.001	17380	179.7	2	7.254	-0.000	82187	870.7
Aroclor-1232	3	7.651	-0.005	445586	1017.6	3	7.853	-0.008	185014	980.3
Aroclor-1232	4	8.575	-0.005	179920	966.7	4	8.712	-0.003	56683	1043.5
Total CollAve (4 peaks):				544.9		Total Col2Ave (3 peaks):				964.8 RPD = 56*
Corrected Ave (3 peaks):				387.3		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.269	0.000	138934	492.4	1	7.254	0.001	82187	476.5
Aroclor-1242	2	7.651	-0.004	445586	520.0	2	7.853	-0.007	185014	510.3
Aroclor-1242	3	8.403	-0.002	141085	529.2	3	9.158	-0.009	9013	79.9
Aroclor-1242	4	8.575	-0.005	179920	456.5	4	9.582	-0.016	3817	27.8
Total CollAve (4 peaks):				499.6		Total Col2Ave (4 peaks):				273.6 RPD = 58*
Corrected Ave (3 peaks):				489.7		Corrected Ave (3 peaks):				194.7 RPD = 86*
Aroclor-1248	1	8.403	-0.003	141085	317.6	1	8.305	-0.002	58633	330.8
Aroclor-1248	2	8.575	-0.005	179920	318.6	2	8.712	-0.003	56683	309.3
Aroclor-1248	3	8.992	-0.005	185680	174.3	3	9.158	-0.010	9013	42.7
Aroclor-1248	4	9.297	0.002	160144	295.3	4	9.582	-0.012	3817	15.1
Total CollAve (4 peaks):				276.5		Total Col2Ave (4 peaks):				174.5 RPD = 45*
Corrected Ave (3 peaks):				262.4		Corrected Ave (3 peaks):				122.4 RPD = 73*
Aroclor-1254	1	9.297	-0.002	160144	175.2	1	9.447	-0.004	51612	182.9
Aroclor-1254	2	---			0.0	2	9.967	-0.004	11332	49.9
Aroclor-1254	3	9.662	-0.007	24190	41.2	3	10.143	0.017	113266	230.6
Aroclor-1254	4	9.801	-0.007	87207	76.3	4	10.368	-0.006	139864	292.1
Aroclor-1254	5	10.117	-0.061	402080	561.3	5	10.564	-0.005	196760	674.9
Total CollAve (4 peaks):				213.5		Total Col2Ave (5 peaks):				286.1 RPD = 29
Corrected Ave (3 peaks):				97.5		Corrected Ave (4 peaks):				188.9 RPD = 64*
Aroclor-1260	1	11.042	-0.002	289833	568.8	1	11.650	-0.003	140639	498.5
Aroclor-1260	2	11.359	-0.002	309392	581.1	2	11.916	-0.002	346725	481.6
Aroclor-1260	3	11.734	-0.002	766204	542.6	3	12.434	-0.001	96676	506.0
Aroclor-1260	4	12.136	-0.004	389548	547.9	4	12.500	-0.002	240427	495.4
Aroclor-1260	5	12.242	-0.001	161521	527.7	NS	---			----
Total CollAve (5 peaks):				553.6		Total Col2Ave (4 peaks):				495.4 RPD = 11
Corrected Ave (4 peaks):				546.8		Corrected Ave (3 peaks):				491.8 RPD = 11
Aroclor-1262	1	10.823	-0.006	622450	1432.5	1	11.197	-0.003	136288	332.7
Aroclor-1262	2	12.242	-0.002	161521	228.4	2	11.650	-0.001	140639	403.1
Aroclor-1262	3	12.318	-0.001	197825	260.3	3	12.434	0.000	96676	244.2
Aroclor-1262	4	12.986	-0.001	204047	293.7	4	12.500	-0.002	240427	387.7
Total CollAve (4 peaks):				553.7		Total Col2Ave (4 peaks):				341.9 RPD = 47*
Corrected Ave (3 peaks):				260.8		Corrected Ave (3 peaks):				321.5 RPD = 21
Aroclor-1268	1	12.242	-0.005	161521	89.0	1	12.434	0.002	96676	100.1
Aroclor-1268	2	12.318	0.001	197825	110.1	2	12.500	-0.000	240427	231.5
Aroclor-1268	3	12.721	0.021	99538	64.7	3	12.890	-0.002	7925	8.9
Aroclor-1268	4	13.486	-0.004	70605	13.9	4	13.707	-0.002	26402	9.3
Total CollAve (4 peaks):				69.4		Total Col2Ave (4 peaks):				87.5 RPD = 23
Corrected Ave (3 peaks):				55.9		Corrected Ave (3 peaks):				39.4 RPD = 35

Total PCB Area Col1 (5.907 - 13.793) = 8641117 Col1 Total PCB = 0.8 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 3435750 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.



MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/01/23 07:21</u>
Batch:	<u>BLB0427</u>	Laboratory ID:	<u>BLB0427-MS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>18.23 g / 2.5 mL</u>	Source Sample:	<u>LDW23-SC1014</u>

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Aroclor 1016	101	ND	U	73.1		72.6	56 - 120
Aroclor 1260 [2C]	101	39.0		113		73.2	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.



MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/01/23 07:42</u>
Batch:	<u>BLB0427</u>	Laboratory ID:	<u>BLB0427-MSD1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>18.23 g / 2.5 mL</u>	Source Sample:	<u>LDW23-SC1014</u>

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016	101	76.2		75.7	4.18	30	56 - 120
Aroclor 1260 [2C]	101	119		79.1	5.14	30	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282345ECD7.D
Data file 2: /230228.b/230228.b/02282345ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0427-MS1
Client ID:
Injection Date: 01-MAR-2023 07:21
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	ZB5 Col Response	RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.805	-0.002	363125	5.683	-0.004	165307	27.6	31.8	14.1	Tetrachloro-m-xylene
13.886	-0.007	276022	14.112	-0.008	200801	35.1	35.8	2.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	880974	30.8
Hexabromobiphenyl	1429847	798460	-44.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	354459	12.4
Hexabromobiphenyl	513946	367932	-28.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.265	-0.005	125659	375.5	1	7.249	-0.006	81511	392.8
Aroclor-1016	2	7.643	-0.012	390365	382.7	2	7.843	-0.017	185604	441.1
Aroclor-1016	3	7.781	-0.011	143727	288.6	3	8.042	-0.017	70035	368.5
Aroclor-1016	4	8.396	-0.010	133966	416.2	4	8.299	-0.009	61222	410.6
Total CollAve (4 peaks):				365.8		Total Col2Ave (4 peaks):				403.3 RPD = 10
Corrected Ave (3 peaks):				349.0		Corrected Ave (3 peaks):				390.7 RPD = 11
Aroclor-1221	1	4.732	0.002	1096	13.9	1	4.946	-0.010	1311	39.1
Aroclor-1221	2	6.127	-0.005	14211	100.7	2	6.295	-0.001	7013	110.4
Aroclor-1221	3	6.378	-0.004	77187	235.6	3	6.617	-0.005	37942	367.0
Total CollAve (3 peaks):				116.7		Total Col2Ave (3 peaks):				172.2 RPD = 38
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	0.002	1096	23.2	1	4.946	-0.010	1311	72.3
Aroclor-1232	2	6.127	-0.004	14211	151.8	2	7.249	-0.005	81511	904.4
Aroclor-1232	3	7.643	-0.013	390365	921.3	3	7.843	-0.018	185604	1030.0
Aroclor-1232	4	8.566	-0.015	139225	773.1	4	8.705	-0.010	64907	1251.5
Total CollAve (4 peaks):				467.4		Total Col2Ave (4 peaks):				814.6 RPD = 54*
Corrected Ave (3 peaks):				316.1		Corrected Ave (3 peaks):				668.9 RPD = 72*
Aroclor-1242	1	7.265	-0.004	125659	460.3	1	7.249	-0.004	81511	494.9
Aroclor-1242	2	7.643	-0.012	390365	470.8	2	7.843	-0.017	185604	536.1
Aroclor-1242	3	8.396	-0.009	133966	519.3	3	9.138	-0.029	48401	449.3
Aroclor-1242	4	8.566	-0.015	139225	365.1	4	9.533	-0.065	56996	434.2
Total CollAve (4 peaks):				453.9		Total Col2Ave (4 peaks):				478.7 RPD = 5
Corrected Ave (3 peaks):				432.1		Corrected Ave (3 peaks):				459.5 RPD = 6
Aroclor-1248	1	8.396	-0.010	133966	311.7	1	8.299	-0.009	61222	361.7
Aroclor-1248	2	8.566	-0.015	139225	254.8	2	8.705	-0.010	64907	370.9
Aroclor-1248	3	8.984	-0.012	189587	183.9	3	9.138	-0.030	48401	240.4
Aroclor-1248	4	9.286	-0.009	192572	367.0	4	9.533	-0.061	56996	235.7
Total CollAve (4 peaks):				279.3		Total Col2Ave (4 peaks):				302.2 RPD = 8
Corrected Ave (3 peaks):				250.1		Corrected Ave (3 peaks):				279.3 RPD = 11
Aroclor-1254	1	9.286	-0.013	192572	217.7	1	9.437	-0.014	82198	305.1
Aroclor-1254	2	9.361	-0.018	60357	151.7	2	9.955	-0.017	36186	167.0
Aroclor-1254	3	9.655	-0.014	107094	188.3	3	10.105	-0.020	163991	349.7
Aroclor-1254	4	9.786	-0.022	237526	214.8	4	10.357	-0.017	202657	443.3
Aroclor-1254	5	10.111	-0.067	398940	575.6	5	10.553	-0.017	190406	684.1
Total CollAve (5 peaks):				269.6		Total Col2Ave (5 peaks):				389.8 RPD = 36
Corrected Ave (4 peaks):				193.1		Corrected Ave (4 peaks):				316.3 RPD = 48*
Aroclor-1260	1	11.033	-0.011	194922	678.6	1	11.642	-0.011	128480	593.9
Aroclor-1260	2	11.350	-0.011	191450	637.9	2	11.904	-0.014	291808	528.5
Aroclor-1260	3	11.719	-0.017	490666	616.4	3	12.424	-0.011	89435	610.4
Aroclor-1260	4	12.120	-0.020	262938	656.0	4	12.487	-0.015	194726	523.2
Aroclor-1260	5	12.233	-0.010	101939	590.8	NS	---			----
Total CollAve (5 peaks):				636.0		Total Col2Ave (4 peaks):				564.0 RPD = 12
Corrected Ave (4 peaks):				625.3		Corrected Ave (3 peaks):				548.5 RPD = 13
Aroclor-1262	1	10.808	-0.021	530752	2166.9	1	11.189	-0.011	106394	338.7
Aroclor-1262	2	12.233	-0.011	101939	255.8	2	11.642	-0.010	128480	480.2
Aroclor-1262	3	12.306	-0.012	122445	285.8	3	12.424	-0.010	89435	294.6
Aroclor-1262	4	12.972	-0.015	131663	336.2	4	12.487	-0.015	194726	409.4
Total CollAve (4 peaks):				761.2		Total Col2Ave (4 peaks):				380.7 RPD = 67*
Corrected Ave (3 peaks):				292.6		Corrected Ave (3 peaks):				347.6 RPD = 17
Aroclor-1268	1	12.233	-0.014	101939	99.6	1	12.424	-0.008	89435	120.7
Aroclor-1268	2	12.306	-0.010	122445	120.9	2	12.487	-0.013	194726	244.5
Aroclor-1268	3	12.709	0.010	61307	70.7	3	12.885	-0.006	8325	12.2
Aroclor-1268	4	13.477	-0.013	42834	15.0	4	13.699	-0.010	28020	12.9
Total CollAve (4 peaks):				76.6		Total Col2Ave (4 peaks):				97.6 RPD = 24

Corrected Ave (3 peaks): 61.8 Corrected Ave (3 peaks): 48.6 RPD = 24

Total PCB Area Col1 (5.907 - 13.793) = 7393569 Col1 Total PCB = 0.7 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 3767929 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282346ECD7.D
Data file 2: /230228.b/230228.b/02282346ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0427-MSD1
Client ID:
Injection Date: 01-MAR-2023 07:42
Report Date: 03/01/2023 12:21
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	ZB5 Col Response	RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.805	-0.003	354893	5.683	-0.004	160350	27.9	31.9	13.2	Tetrachloro-m-xylene
13.885	-0.008	273069	14.113	-0.007	197312	36.0	36.3	1.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	851306	26.3
Hexabromobiphenyl	1429847	771200	-46.1

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	343108	8.8
Hexabromobiphenyl	513946	356646	-30.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.265	-0.005	125504	388.2	1	7.250	-0.005	81886	407.7
Aroclor-1016	2	7.643	-0.013	405244	411.1	2	7.843	-0.017	184581	453.2
Aroclor-1016	3	7.781	-0.011	143448	298.1	3	8.042	-0.017	68387	371.8
Aroclor-1016	4	8.396	-0.010	133149	428.1	4	8.299	-0.009	60864	421.7
Total CollAve (4 peaks):				381.4		Total Col2Ave (4 peaks):				413.6 RPD = 8
Corrected Ave (3 peaks):				365.8		Corrected Ave (3 peaks):				400.4 RPD = 9
Aroclor-1221	1	4.731	0.000	514	6.7	1	4.942	-0.014	2923	90.0
Aroclor-1221	2	6.127	-0.005	13721	100.6	2	6.295	-0.001	6848	111.4
Aroclor-1221	3	6.378	-0.004	76501	241.7	3	6.617	-0.005	37900	378.7
Total CollAve (3 peaks):				116.3		Total Col2Ave (3 peaks):				193.4 RPD = 50*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.731	0.001	514	11.3	1	4.942	-0.014	2923	166.5
Aroclor-1232	2	6.127	-0.004	13721	151.7	2	7.250	-0.004	81886	938.6
Aroclor-1232	3	7.643	-0.013	405244	989.7	3	7.843	-0.018	184581	1058.2
Aroclor-1232	4	8.565	-0.015	138250	794.4	4	8.704	-0.010	64417	1283.2
Total CollAve (4 peaks):				486.8		Total Col2Ave (4 peaks):				861.6 RPD = 56*
Corrected Ave (3 peaks):				319.1		Corrected Ave (3 peaks):				721.1 RPD = 77*
Aroclor-1242	1	7.265	-0.004	125504	475.7	1	7.250	-0.003	81886	513.7
Aroclor-1242	2	7.643	-0.013	405244	505.8	2	7.843	-0.017	184581	550.8
Aroclor-1242	3	8.396	-0.009	133149	534.1	3	9.138	-0.029	48398	464.2
Aroclor-1242	4	8.565	-0.015	138250	375.2	4	9.533	-0.064	56949	448.2
Total CollAve (4 peaks):				472.7		Total Col2Ave (4 peaks):				494.2 RPD = 4
Corrected Ave (3 peaks):				452.2		Corrected Ave (3 peaks):				475.4 RPD = 5
Aroclor-1248	1	8.396	-0.010	133149	320.6	1	8.299	-0.008	60864	371.5
Aroclor-1248	2	8.565	-0.015	138250	261.9	2	8.704	-0.010	64417	380.3
Aroclor-1248	3	8.983	-0.013	190105	190.9	3	9.138	-0.030	48398	248.3
Aroclor-1248	4	9.286	-0.009	192441	379.5	4	9.533	-0.061	56949	243.3
Total CollAve (4 peaks):				288.2		Total Col2Ave (4 peaks):				310.9 RPD = 8
Corrected Ave (3 peaks):				257.8		Corrected Ave (3 peaks):				287.7 RPD = 11
Aroclor-1254	1	9.286	-0.013	192441	225.1	1	9.437	-0.014	82016	314.5
Aroclor-1254	2	9.361	-0.017	60096	156.3	2	9.955	-0.016	36345	173.2
Aroclor-1254	3	9.656	-0.013	114007	207.4	3	10.106	-0.020	162661	358.3
Aroclor-1254	4	9.786	-0.022	239889	224.5	4	10.357	-0.017	202539	457.7
Aroclor-1254	5	10.111	-0.067	399289	596.1	5	10.553	-0.017	190844	708.3
Total CollAve (5 peaks):				281.9		Total Col2Ave (5 peaks):				402.4 RPD = 35
Corrected Ave (4 peaks):				203.3		Corrected Ave (4 peaks):				325.9 RPD = 46*
Aroclor-1260	1	11.032	-0.012	194571	701.3	1	11.642	-0.010	128290	611.7
Aroclor-1260	2	11.348	-0.012	190535	657.3	2	11.904	-0.013	293751	548.9
Aroclor-1260	3	11.719	-0.017	501910	652.8	3	12.424	-0.012	95357	671.4
Aroclor-1260	4	12.120	-0.020	264252	682.6	4	12.488	-0.014	195842	542.9
Aroclor-1260	5	12.234	-0.010	103328	620.1	NS	---			----
Total CollAve (5 peaks):				662.8		Total Col2Ave (4 peaks):				593.7 RPD = 11
Corrected Ave (4 peaks):				653.2		Corrected Ave (3 peaks):				567.8 RPD = 14
Aroclor-1262	1	10.807	-0.022	527913	2231.5	1	11.189	-0.011	106788	350.7
Aroclor-1262	2	12.234	-0.010	103328	268.4	2	11.642	-0.009	128290	494.6
Aroclor-1262	3	12.308	-0.011	123460	298.3	3	12.424	-0.010	95357	324.0
Aroclor-1262	4	12.973	-0.014	123688	327.0	4	12.488	-0.014	195842	424.8
Total CollAve (4 peaks):				781.3		Total Col2Ave (4 peaks):				398.5 RPD = 65*
Corrected Ave (3 peaks):				297.9		Corrected Ave (3 peaks):				366.5 RPD = 21
Aroclor-1268	1	12.234	-0.013	103328	104.6	1	12.424	-0.008	95357	132.8
Aroclor-1268	2	12.308	-0.009	123460	126.2	2	12.488	-0.012	195842	253.7
Aroclor-1268	3	12.709	0.010	62616	74.8	3	12.885	-0.007	8343	12.7
Aroclor-1268	4	13.478	-0.012	43373	15.7	4	13.699	-0.010	30634	14.5
Total CollAve (4 peaks):				80.3		Total Col2Ave (4 peaks):				103.4 RPD = 25

Corrected Ave (3 peaks): 65.0 Corrected Ave (3 peaks): 53.3 RPD = 20

Total PCB Area Col1 (5.907 - 13.793) = 7422247 Col1 Total PCB = 0.7 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 3784097 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.



STANDARD REFERENCE MATERIAL RECOVERY

EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLB0427-SRM1

Batch: BLB0427

Initial/Final: 2.5 g / 2.5 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 03/01/2023 4:11

Standard ID: K011478

Expires: 06/11/2023

Standard Lot#: PSRM0169

Description: Puget Sound reference-SRM

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Aroclor 1260	108.00	133	2.9	20.0		123	38 - 167
Aroclor 1260 [2C]	108.00	131	2.9	20.0		122	38 - 167

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282336ECD7.D
Data file 2: /230228.b/230228.b/02282336ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0427-SRM1
Client ID:
Injection Date: 01-MAR-2023 04:11
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.806	-0.001	353977	5.685	-0.003	151921	28.0	30.3	7.9	Tetrachloro-m-xylene
13.887	-0.006	375307	14.115	-0.005	212554	33.5	32.8	1.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	845866	25.5
Hexabromobiphenyl	1429847	1138921	-20.3
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	341218	8.2
Hexabromobiphenyl	513946	424905	-17.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.237	-0.032	25337	78.9	1	7.263	0.008	8514	42.6	
Aroclor-1016	2	7.649	-0.007	14426	14.7	2	7.849	-0.010	6346	15.7	
Aroclor-1016	3	7.797	0.005	10049	21.0	3	8.048	-0.010	2618	14.3	
Aroclor-1016	4	8.400	-0.005	13034	42.2	4	8.302	-0.006	7249	50.5	
Total CollAve (4 peaks):				39.2	Total Col2Ave (4 peaks):				30.8	RPD = 24	
Corrected Ave (3 peaks):				26.0	Corrected Ave (3 peaks):				24.2	RPD = 7	
Aroclor-1221	1	4.781	0.051	1950	25.7	1	4.940	-0.016	603	18.7	
Aroclor-1221	2	6.157	0.025	1720	12.7	2	6.346	0.049	13920	227.7	
Aroclor-1221	3	6.391	0.009	4014	12.8	3	6.638	0.016	5361	53.9	
Total CollAve (3 peaks):				17.1	Total Col2Ave (3 peaks):				100.1	RPD = 142*	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.781	0.051	1950	43.0	1	4.940	-0.016	603	34.5	
Aroclor-1232	2	6.157	0.026	1720	19.1	2	7.263	0.009	8514	98.1	
Aroclor-1232	3	7.649	-0.007	14426	35.5	3	7.849	-0.011	6346	36.6	
Aroclor-1232	4	8.570	-0.010	11647	67.4	4	8.709	-0.006	5502	110.2	
Total CollAve (4 peaks):				41.2	Total Col2Ave (4 peaks):				69.9	RPD = 52*	
Corrected Ave (3 peaks):				32.5	Corrected Ave (3 peaks):				56.4	RPD = 54*	
Aroclor-1242	1	7.237	-0.031	25337	96.7	1	7.263	0.009	8514	53.7	
Aroclor-1242	2	7.649	-0.007	14426	18.1	2	7.849	-0.010	6346	19.0	
Aroclor-1242	3	8.400	-0.005	13034	52.6	3	9.149	-0.019	7148	68.9	
Aroclor-1242	4	8.570	-0.010	11647	31.8	4	9.537	-0.061	12325	97.5	
Total CollAve (4 peaks):				49.8	Total Col2Ave (4 peaks):				59.8	RPD = 18	
Corrected Ave (3 peaks):				34.2	Corrected Ave (3 peaks):				47.2	RPD = 32	
Aroclor-1248	1	8.400	-0.006	13034	31.6	1	8.302	-0.005	7249	44.5	
Aroclor-1248	2	8.570	-0.010	11647	22.2	2	8.709	-0.006	5502	32.7	
Aroclor-1248	3	8.989	-0.007	35763	36.1	3	9.149	-0.020	7148	36.9	
Aroclor-1248	4	9.291	-0.004	47809	94.9	4	9.537	-0.057	12325	53.0	
Total CollAve (4 peaks):				46.2	Total Col2Ave (4 peaks):				41.7	RPD = 10	
Corrected Ave (3 peaks):				30.0	Corrected Ave (3 peaks):				38.0	RPD = 24	
Aroclor-1254	1	9.291	-0.008	47809	56.3	1	9.442	-0.009	19190	74.0	
Aroclor-1254	2	9.366	-0.012	18377	48.1	2	9.961	-0.011	9483	45.5	
Aroclor-1254	3	9.663	-0.006	23658	43.3	3	10.114	-0.011	37173	82.3	
Aroclor-1254	4	9.793	-0.015	65690	61.9	4	10.362	-0.013	47579	108.1	
Aroclor-1254	5	10.113	-0.065	107857	162.1	5	10.558	-0.012	48551	181.2	
Total CollAve (5 peaks):				74.3	Total Col2Ave (5 peaks):				98.2	RPD = 28	
Corrected Ave (4 peaks):				52.4	Corrected Ave (4 peaks):				77.5	RPD = 39	
Aroclor-1260	1	11.036	-0.008	61703	150.6	1	11.646	-0.007	34888	139.6	
Aroclor-1260	2	11.350	-0.011	51150	119.5	2	11.908	-0.010	76125	119.4	
Aroclor-1260	3	11.723	-0.013	158186	139.3	3	12.426	-0.009	25334	149.7	
Aroclor-1260	4	12.124	-0.015	77396	135.4	4	12.492	-0.010	50204	116.8	
Aroclor-1260	5	12.236	-0.007	29601	120.3	NS	---			----	
Total CollAve (5 peaks):				133.0	Total Col2Ave (4 peaks):				131.4	RPD = 1	
Corrected Ave (4 peaks):				128.6	Corrected Ave (3 peaks):				125.3	RPD = 3	
Aroclor-1262	1	10.813	-0.016	141926	406.2	1	11.192	-0.008	30384	83.7	
Aroclor-1262	2	12.236	-0.008	29601	52.1	2	11.646	-0.006	34888	112.9	
Aroclor-1262	3	12.311	-0.008	36981	60.5	3	12.426	-0.008	25334	72.3	
Aroclor-1262	4	12.978	-0.009	37424	67.0	4	12.492	-0.010	50204	91.4	
Total CollAve (4 peaks):				146.4	Total Col2Ave (4 peaks):				90.1	RPD = 48*	
Corrected Ave (3 peaks):				59.9	Corrected Ave (3 peaks):				82.5	RPD = 32	
Aroclor-1268	1	12.236	-0.011	29601	20.3	1	12.426	-0.006	25334	29.6	
Aroclor-1268	2	12.311	-0.006	36981	25.6	2	12.492	-0.008	50204	54.6	
Aroclor-1268	3	12.714	0.015	17661	14.3	3	12.889	-0.003	1845	2.3	
Aroclor-1268	4	13.481	-0.009	10629	2.6	4	13.701	-0.007	7710	3.1	
Total CollAve (4 peaks):				15.7	Total Col2Ave (4 peaks):				22.4	RPD = 35	

Corrected Ave (3 peaks): 12.4 Corrected Ave (3 peaks): 11.7 RPD = 6

Total PCB Area Col1 (5.907 - 13.793) = 1886614 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 898081 Col2 Total PCB = 0.2 ppm*

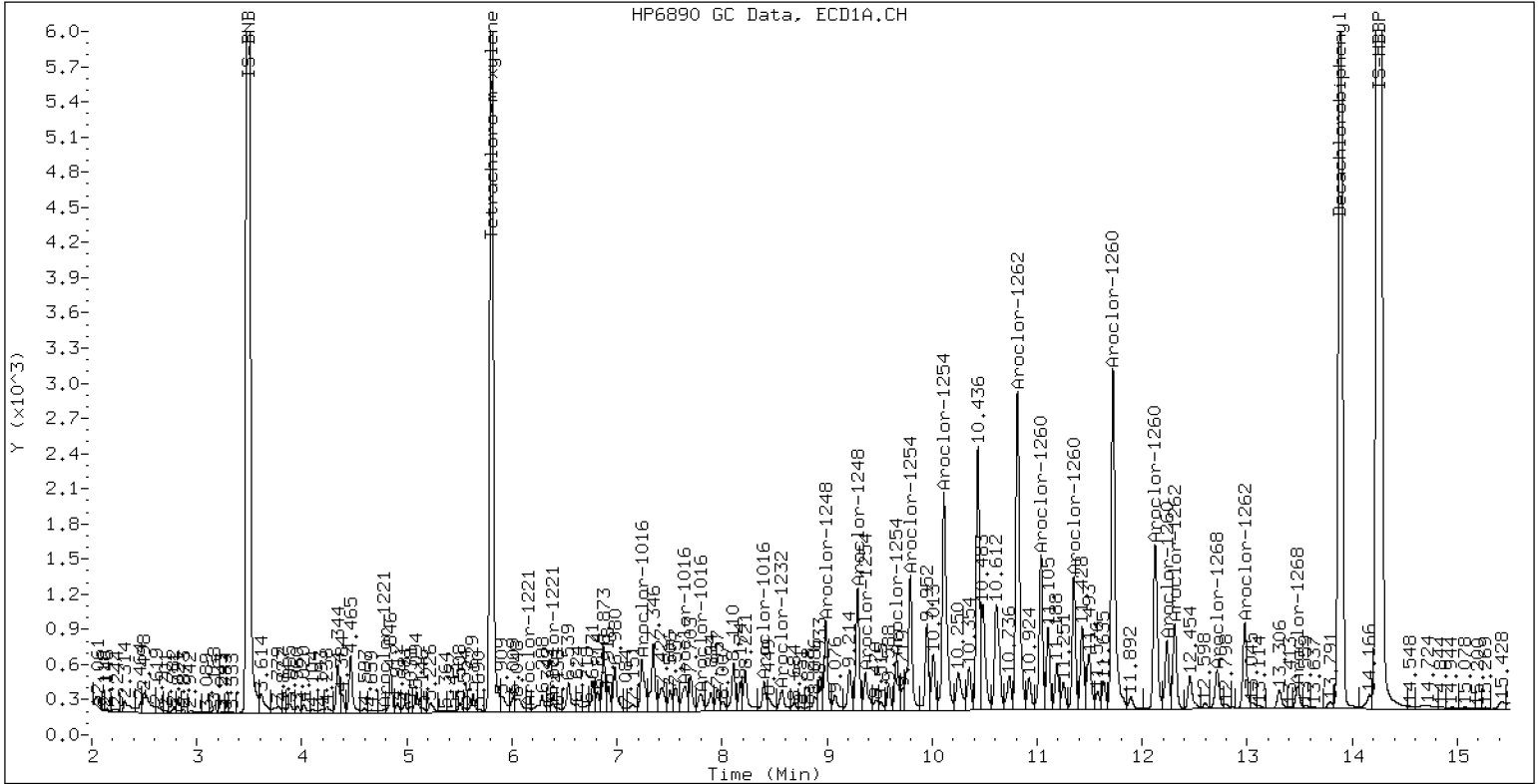
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLB0427-SRM1

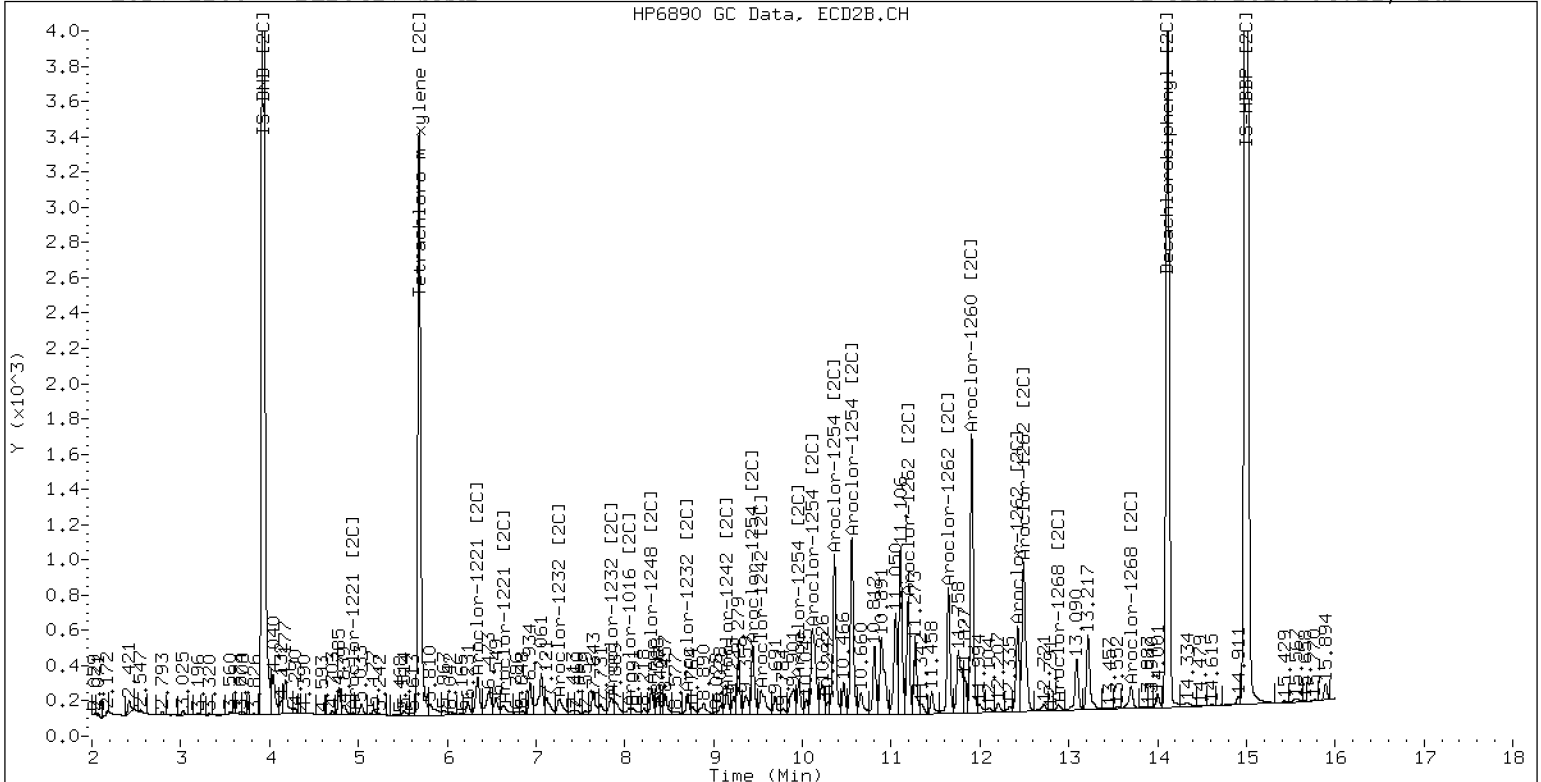
01-MAR-2023 04:11, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0427-SRM1

01-MAR-2023 04:11, 2u1



ZB-35 Manual Integration: NO



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016	4.936617E-02	5.3			RSD (20)	
Aroclor-1016 (1)	3.038517E-02	7.4			RSD (20)	
Aroclor-1016 (2)	9.263078E-02	3.5			RSD (20)	
Aroclor-1016 (3)	0.045218	12.9			RSD (20)	
Aroclor-1016 (4)	2.923074E-02	3.5			RSD (20)	
Aroclor 1221		0.0			RSD (20)	
Aroclor-1221 (1)		0.0			RSD (20)	
Aroclor-1221 (2)		0.0			RSD (20)	
Aroclor-1221 (3)		0.0			RSD (20)	
Aroclor 1232		0.0			RSD (20)	
Aroclor-1232 (1)		0.0			RSD (20)	
Aroclor-1232 (2)		0.0			RSD (20)	
Aroclor-1232 (3)		0.0			RSD (20)	
Aroclor-1232 (4)		0.0			RSD (20)	
Aroclor 1242		0.0			RSD (20)	
Aroclor-1242 (1)		0.0			RSD (20)	
Aroclor-1242 (2)		0.0			RSD (20)	
Aroclor-1242 (3)		0.0			RSD (20)	
Aroclor-1242 (4)		0.0			RSD (20)	
Aroclor 1248		0.0			RSD (20)	
Aroclor-1248 (1)		0.0			RSD (20)	
Aroclor-1248 (2)		0.0			RSD (20)	
Aroclor-1248 (3)		0.0			RSD (20)	
Aroclor-1248 (4)		0.0			RSD (20)	
Aroclor 1254		0.0			RSD (20)	
Aroclor-1254 (1)		0.0			RSD (20)	
Aroclor-1254 (2)		0.0			RSD (20)	
Aroclor-1254 (3)		0.0			RSD (20)	
Aroclor-1254 (4)		0.0			RSD (20)	
Aroclor-1254 (5)		0.0			RSD (20)	
Aroclor 1260	3.920913E-02	4.7			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1)	2.877854E-02	4.7			RSD (20)	
Aroclor-1260 (2)	3.006895E-02	5.0			RSD (20)	
Aroclor-1260 (3)	7.975167E-02	4.6			RSD (20)	
Aroclor-1260 (4)	4.015993E-02	5.8			RSD (20)	
Aroclor-1260 (5)	1.728656E-02	5.0			RSD (20)	
Aroclor 1262		0.0			RSD (20)	
Aroclor-1262 (1)		0.0			RSD (20)	
Aroclor-1262 (2)		0.0			RSD (20)	
Aroclor-1262 (3)		0.0			RSD (20)	
Aroclor-1262 (4)		0.0			RSD (20)	
Aroclor 1268		0.0			RSD (20)	
Aroclor-1268 (1)		0.0			RSD (20)	
Aroclor-1268 (2)		0.0			RSD (20)	
Aroclor-1268 (3)		0.0			RSD (20)	
Aroclor-1268 (4)		0.0			RSD (20)	
Decachlorobiphenyl	0.7878687	4.2			RSD (20)	
Tetrachlorometaxylene	1.194488	3.9			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016 [2C]	5.458565E-02	6.3			RSD (20)	
Aroclor-1016 (1) [2C]	4.683127E-02	8.5			RSD (20)	
Aroclor-1016 (2) [2C]	9.496755E-02	8.0			RSD (20)	
Aroclor-1016 (3) [2C]	4.289222E-02	7.9			RSD (20)	
Aroclor-1016 (4) [2C]	3.365154E-02	10.3			RSD (20)	
Aroclor 1221 [2C]		0.0			RSD (20)	
Aroclor-1221 (1) [2C]		0.0			RSD (20)	
Aroclor-1221 (2) [2C]		0.0			RSD (20)	
Aroclor-1221 (3) [2C]		0.0			RSD (20)	
Aroclor 1232 [2C]		0.0			RSD (20)	
Aroclor-1232 (1) [2C]		0.0			RSD (20)	
Aroclor-1232 (2) [2C]		0.0			RSD (20)	
Aroclor-1232 (3) [2C]		0.0			RSD (20)	
Aroclor-1232 (4) [2C]		0.0			RSD (20)	
Aroclor 1242 [2C]		0.0			RSD (20)	
Aroclor-1242 (1) [2C]		0.0			RSD (20)	
Aroclor-1242 (2) [2C]		0.0			RSD (20)	
Aroclor-1242 (3) [2C]		0.0			RSD (20)	
Aroclor-1242 (4) [2C]		0.0			RSD (20)	
Aroclor 1248 [2C]		0.0			RSD (20)	
Aroclor-1248 (1) [2C]		0.0			RSD (20)	
Aroclor-1248 (2) [2C]		0.0			RSD (20)	
Aroclor-1248 (3) [2C]		0.0			RSD (20)	
Aroclor-1248 (4) [2C]		0.0			RSD (20)	
Aroclor 1254 [2C]		0.0			RSD (20)	
Aroclor-1254 (1) [2C]		0.0			RSD (20)	
Aroclor-1254 (2) [2C]		0.0			RSD (20)	
Aroclor-1254 (3) [2C]		0.0			RSD (20)	
Aroclor-1254 (4) [2C]		0.0			RSD (20)	
Aroclor-1254 (5) [2C]		0.0			RSD (20)	
Aroclor 1260 [2C]	6.996878E-02	6.4			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23B0229
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1) [2C]	4.704064E-02	8.4			RSD (20)	
Aroclor-1260 (2) [2C]	0.1200523	7.6			RSD (20)	
Aroclor-1260 (3) [2C]	3.185902E-02	6.0			RSD (20)	
Aroclor-1260 (4) [2C]	8.092314E-02	5.1			RSD (20)	
Aroclor 1262 [2C]		0.0			RSD (20)	
Aroclor-1262 (1) [2C]		0.0			RSD (20)	
Aroclor-1262 (2) [2C]		0.0			RSD (20)	
Aroclor-1262 (3) [2C]		0.0			RSD (20)	
Aroclor-1262 (4) [2C]		0.0			RSD (20)	
Aroclor 1268 [2C]		0.0			RSD (20)	
Aroclor-1268 (1) [2C]		0.0			RSD (20)	
Aroclor-1268 (2) [2C]		0.0			RSD (20)	
Aroclor-1268 (3) [2C]		0.0			RSD (20)	
Aroclor-1268 (4) [2C]		0.0			RSD (20)	
Decachlorobiphenyl [2C]	1.218271	3.9			RSD (20)	
Tetrachlorometaxylene [2C]	1.173721	3.9			RSD (20)	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	24-FEB-2023	10:51	02242301ECD7.D	1	IB	
2	24-FEB-2023	11:12	02242302ECD7.D	1	0.25PPMAR1660	
3	24-FEB-2023	11:33	02242303ECD7.D	1	0.02PPMAR1660	
4	24-FEB-2023	11:54	02242304ECD7.D	1	0.05PPMAR1660	
5	24-FEB-2023	12:15	02242305ECD7.D	1	1.0PPMAR1660	
6	24-FEB-2023	12:36	02242306ECD7.D	1	0.1PPMAR1660	
7	24-FEB-2023	12:57	02242307ECD7.D	1	0.5PPMAR1660	
8	24-FEB-2023	13:18	02242308ECD7.D	1	0.25PPMAR1242	
9	24-FEB-2023	13:39	02242309ECD7.D	1	0.25PPMAR1248	
10	24-FEB-2023	14:00	02242310ECD7.D	1	0.25PPMAR1254	
11	24-FEB-2023	14:21	02242311ECD7.D	1	0.25PPMAR2162	
12	24-FEB-2023	14:42	02242312ECD7.D	1	0.25PPMAR3268	
13	24-FEB-2023	15:03	02242313ECD7.D	1	AR1660SCV	
14	24-FEB-2023	15:24	02242314ECD7.D	1	AR1242SCV	
15	24-FEB-2023	15:45	02242315ECD7.D	1	AR1248SCV	
16	24-FEB-2023	16:06	02242316ECD7.D	1	AR1254SCV	
17	24-FEB-2023	16:27	02242317ECD7.D	1	AR2162SCV	
18	24-FEB-2023	16:48	02242318ECD7.D	1	AR3268SCV	
19	24-FEB-2023	17:09	02242319ECD7.D	1	DDTS	
20	24-FEB-2023	17:30	02242320ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1051	02242301ECD7.D	IB		1	NO MANUAL INTEGRATION
1112	02242302ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1133	02242303ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
1154	02242304ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
1215	02242305ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2039	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION
1051	02242301ECD7.D IB			1	NO MANUAL INTEGRATION
1112	02242302ECD7.D 0.25PPMAR1660			1	NO MANUAL INTEGRATION
1133	02242303ECD7.D 0.02PPMAR1660			1	Aroclor-1016 [2C],
1154	02242304ECD7.D 0.05PPMAR1660			1	NO MANUAL INTEGRATION
1215	02242305ECD7.D 1.0PPMAR1660			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2038	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION

Security Status Report

Date: 28-Feb-2023 09:27

02242301ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242302ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242303ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242304ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242305ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242306ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242307ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242308ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242309ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242310ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242311ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242312ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242313ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242314ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242315ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242316ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242317ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242318ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242319ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242320ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd7.i\230224.b\02242303ECD7.D
 Level 2: \\target\share\chem4\ecd7.i\230224.b\02242304ECD7.D
 Level 3: \\target\share\chem4\ecd7.i\230224.b\02242306ECD7.D
 Level 4: \\target\share\chem4\ecd7.i\230224.b\02242302ECD7.D
 Level 5: \\target\share\chem4\ecd7.i\230224.b\02242307ECD7.D
 Level 6: \\target\share\chem4\ecd7.i\230224.b\02242305ECD7.D
 Level 7: \\target\share\chem4\ecd7.i\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
2 Aroclor-1221 (1)	+++++ 0.00716	+++++	+++++	+++++	+++++	+++++	0.00716	0.000
(2)	+++++ 0.01281	+++++	+++++	+++++	+++++	+++++	0.01281	0.000
(3)	+++++ 0.02975	+++++	+++++	+++++	+++++	+++++	0.02975	0.000
3 Aroclor-1242 (1)	+++++ 0.02479	+++++	+++++	+++++	+++++	+++++	0.02479	0.000
(2)	+++++ 0.07529	+++++	+++++	+++++	+++++	+++++	0.07529	0.000
(3)	+++++ 0.02343	+++++	+++++	+++++	+++++	+++++	0.02343	0.000
(4)	+++++ 0.03463	+++++	+++++	+++++	+++++	+++++	0.03463	0.000
4 Aroclor-1232 (1)	+++++ 0.00429	+++++	+++++	+++++	+++++	+++++	0.00429	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	++++ 0.00850	++++	++++	++++	++++	++++	0.00850	0.000
(3)	++++ 0.03848	++++	++++	++++	++++	++++	0.03848	0.000
(4)	++++ 0.01635	++++	++++	++++	++++	++++	0.01635	0.000
7 Aroclor-1016(1)	0.03172 ++++	0.03253	0.03142	0.03141	0.02856	0.02667	0.03039	7.449
(2)	0.09239 ++++	0.09246	0.09222	0.09849	0.09174	0.08849	0.09263	3.499
(3)	0.05165 ++++	0.05037	0.04823	0.04393	0.03991	0.03721	0.04522	12.936
(4)	0.03002 ++++	0.02894	0.02959	0.03058	0.02852	0.02774	0.02923	3.542
6 Aroclor-1248(1)	++++ 0.03903	++++	++++	++++	++++	++++	0.03903	0.000
(2)	++++ 0.04961	++++	++++	++++	++++	++++	0.04961	0.000
(3)	++++ 0.09360	++++	++++	++++	++++	++++	0.09360	0.000
(4)	++++ 0.04765	++++	++++	++++	++++	++++	0.04765	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
8 Aroclor-1254 (1)	++++ 0.08033	++++	++++	++++	++++	++++	0.08033	0.000
(2)	++++ 0.03613	++++	++++	++++	++++	++++	0.03613	0.000
(3)	++++ 0.05165	++++	++++	++++	++++	++++	0.05165	0.000
(4)	++++ 0.10042	++++	++++	++++	++++	++++	0.10042	0.000
(5)	++++ 0.06294	++++	++++	++++	++++	++++	0.06294	0.000
9 Aroclor-1260 (1)	0.02926 ++++	0.02920	0.02841	0.03096	0.02737	0.02746	0.02878	4.677
(2)	0.02967 ++++	0.03006	0.03011	0.03291	0.02910	0.02857	0.03007	5.029
(3)	0.08088 ++++	0.08045	0.07954	0.08575	0.07515	0.07674	0.07975	4.627
(4)	0.03905 ++++	0.03887	0.03955	0.04485	0.03942	0.03922	0.04016	5.753
(5)	0.01783 ++++	0.01715	0.01679	0.01875	0.01664	0.01655	0.01729	4.953
10 Aroclor-1262 (1)	++++ 0.02454	++++	++++	++++	++++	++++	0.02454	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	++++ 0.03993	++++	++++	++++	++++	++++	0.03993	0.000
(3)	++++ 0.04293	++++	++++	++++	++++	++++	0.04293	0.000
(4)	++++ 0.03923	++++	++++	++++	++++	++++	0.03923	0.000
11 Aroclor-1268(1)	++++ 0.10250	++++	++++	++++	++++	++++	0.10250	0.000
(2)	++++ 0.10151	++++	++++	++++	++++	++++	0.10151	0.000
(3)	++++ 0.08686	++++	++++	++++	++++	++++	0.08686	0.000
(4)	++++ 0.28598	++++	++++	++++	++++	++++	0.28598	0.000
42 2,4-DDE	++++ ++++	++++	++++	++++	++++	++++	++++	++++
43 2,4-DDD	++++ ++++	++++	++++	++++	++++	++++	++++	++++
44 2,4-DDT	++++ ++++	++++	++++	++++	++++	++++	++++	++++
46 4,4-DDE	++++ ++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
1 Tetrachloro-m-xylene	1.16827	1.24402	1.18546	1.20509	1.12295	1.24114	1.19449	3.860
13 Decachlorobiphenyl	0.82901	0.80558	0.77587	0.78808	0.73125	0.79742	0.78787	4.189

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242303ECD7.D
 Level 2: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242304ECD7.D
 Level 3: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242306ECD7.D
 Level 4: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242302ECD7.D
 Level 5: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242307ECD7.D
 Level 6: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242305ECD7.D
 Level 7: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
1 Aroclor-1221 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00757	0.000
(2)	0.00757						0.00757	0.000
(3)	0.01433						0.01433	0.000
4 Aroclor-1232 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00409	0.000
(2)	0.00409						0.00409	0.000
(3)	0.02034						0.02034	0.000
(4)	0.04067						0.04067	0.000
(4)	0.01170						0.01170	0.000
3 Aroclor-1242 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03717	0.000
	0.03717						0.03717	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07813	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02431	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.02962	0.000
6 Aroclor-1248 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03820	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.03949	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04545	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.05457	0.000
7 Aroclor-1016 [2C] (1)	0.05071	0.05022	0.04868	0.04733	0.04326	0.04080	0.04683	8.503
(2)	0.08143	0.09407	0.10159	0.10259	0.09651	0.09362	0.09497	8.025
(3)	0.04006	0.04718	0.04613	0.04410	0.04062	0.03926	0.04289	7.857
(4)	0.03181	0.03802	0.03707	0.03450	0.03115	0.02936	0.03365	10.251

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
8 Aroclor-1254 [2C] (1)	+++++ 0.06081	+++++	+++++	+++++	+++++	+++++	0.06081	0.000
(2)	+++++ 0.04892	+++++	+++++	+++++	+++++	+++++	0.04892	0.000
(3)	+++++ 0.10584	+++++	+++++	+++++	+++++	+++++	0.10584	0.000
(4)	+++++ 0.10317	+++++	+++++	+++++	+++++	+++++	0.10317	0.000
(5)	+++++ 0.06282	+++++	+++++	+++++	+++++	+++++	0.06282	0.000
10 Aroclor-1262 [2C] (1)	+++++ 0.06831	+++++	+++++	+++++	+++++	+++++	0.06831	0.000
(2)	+++++ 0.05818	+++++	+++++	+++++	+++++	+++++	0.05818	0.000
(3)	+++++ 0.06601	+++++	+++++	+++++	+++++	+++++	0.06601	0.000
(4)	+++++ 0.10341	+++++	+++++	+++++	+++++	+++++	0.10341	0.000
9 Aroclor-1260 [2C] (1)	0.05286 +++++	0.04911	0.04696	0.04801	0.04329	0.04201	0.04704	8.422
(2)	0.12976 +++++	0.12431	0.12095	0.12664	0.11320	0.10545	0.12005	7.605

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(3)	0.03524 +++++	0.03147	0.02937	0.03208	0.03102	0.03198	0.03186	6.045
(4)	0.08632 +++++	0.08237	0.08044	0.08393	0.07718	0.07531	0.08092	5.126
11 Aroclor-1268 [2C] (1)	+++++ 0.16109	+++++	+++++	+++++	+++++	+++++	0.16109	0.000
(2)	+++++ 0.17318	+++++	+++++	+++++	+++++	+++++	0.17318	0.000
(3)	+++++ 0.14787	+++++	+++++	+++++	+++++	+++++	0.14787	0.000
(4)	+++++ 0.47260	+++++	+++++	+++++	+++++	+++++	0.47260	0.000
41 2,4-DDE [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 2,4-DDD [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 4,4-DDE [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 4,4-DDT [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 2 Tetrachloro-m-xylene [2C]	1.21526|	1.19545|	1.17555|	1.21907|	1.12560|	1.11139|	1.17372|	3.897|
\$ 13 Decachlorobiphenyl [2C]	1.17066|	1.20406|	1.20549|	1.31040|	1.21104|	1.20797|	1.21827|	3.898|

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230224.b
Inst ID: ecd7.i

ID: RT01 RT02 RT03 RT04 RT05 RT06
FILENAME: 02242302ECD7 02242303ECD7 02242304ECD7 02242305ECD7 02242306ECD7 02242307ECD7
INJ. DATE: 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023
INJ. TIME: 11:12 11:33 11:54 12:15 12:36 12:57

Table with 11 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like IS-BNB, Tetrachloro-m-xylene, Aroclor-1221, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Batch File: \\target\share\chem4\ecd7.i\230224.b
 Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.254	10.154-10.354	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.754	10.654-10.854	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
Inst ID: ecd7.i

ID: RT01 RT02 RT03 RT04 RT05 RT06
FILENAME: 02242302ECD7 02242303ECD7 02242304ECD7 02242305ECD7 02242306ECD7 02242307ECD7
INJ. DATE: 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023
INJ. TIME: 11:12 11:33 11:54 12:15 12:36 12:57

Table with 11 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like Aroclor-1221, Aroclor-1232, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
 Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.092	10.992-11.192	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242301ECD7.D
Data file 2: /230224.b/230224.b/02242301ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-FEB-2023 10:51
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.826	0.019	382217	5.683	-0.002	180378	33.8	36.5	7.7	Tetrachloro-m-xylene
13.904	0.011	534110	14.120	0.001	295605	35.3	37.2	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	756896	12.3
Hexabromobiphenyl	1429847	1534275	7.3

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	336543	6.8
Hexabromobiphenyl	513946	521508	1.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.321	0.025	1873	31.1
Aroclor-1221	3	---			0.0	3	6.633	0.012	314	3.2
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	7.698	0.043	2193	6.0	3	---			0.0
Aroclor-1232	4	8.505	-0.076	11525	74.5	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	7.698	0.042	2193	3.1	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	8.505	-0.074	11525	35.2	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.596	-0.072	31424	64.3	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	10.167	-0.010	18361	30.8	5	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.098	0.054	6994	12.7	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	11.706	-0.027	7806	5.1	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.824	-0.005	16873	35.8	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	13.040	0.053	14031	18.6	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.709	0.009	6037	3.6	3	12.891	-0.001	659	0.7
Aroclor-1268	4	13.499	0.010	12396	2.3	4	13.710	0.001	1848	0.6
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				

Total PCB Area Coll (5.906 - 13.793) = 260205

Coll Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 18252 Col2 Total PCB = 0.0 ppm*

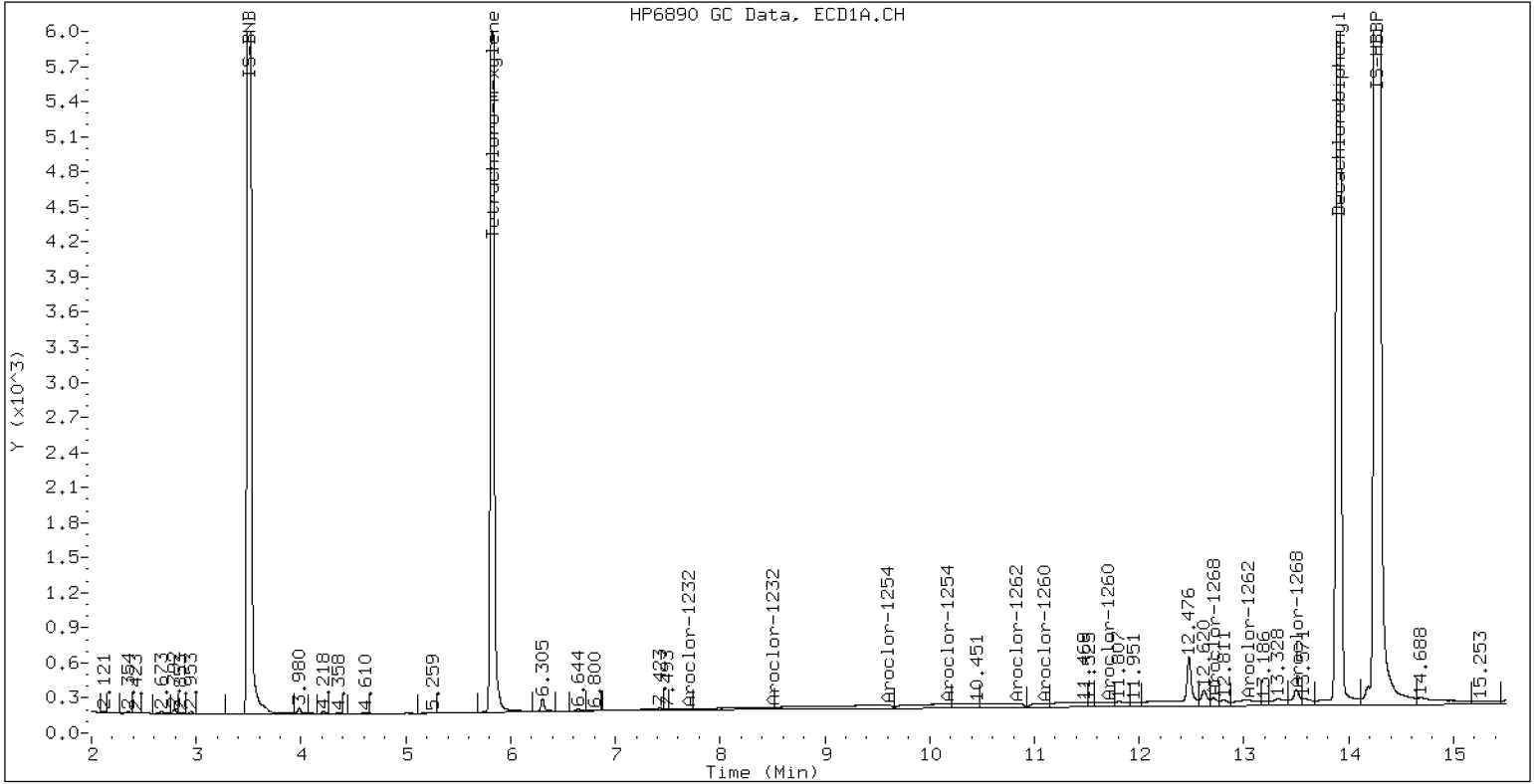
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 IB

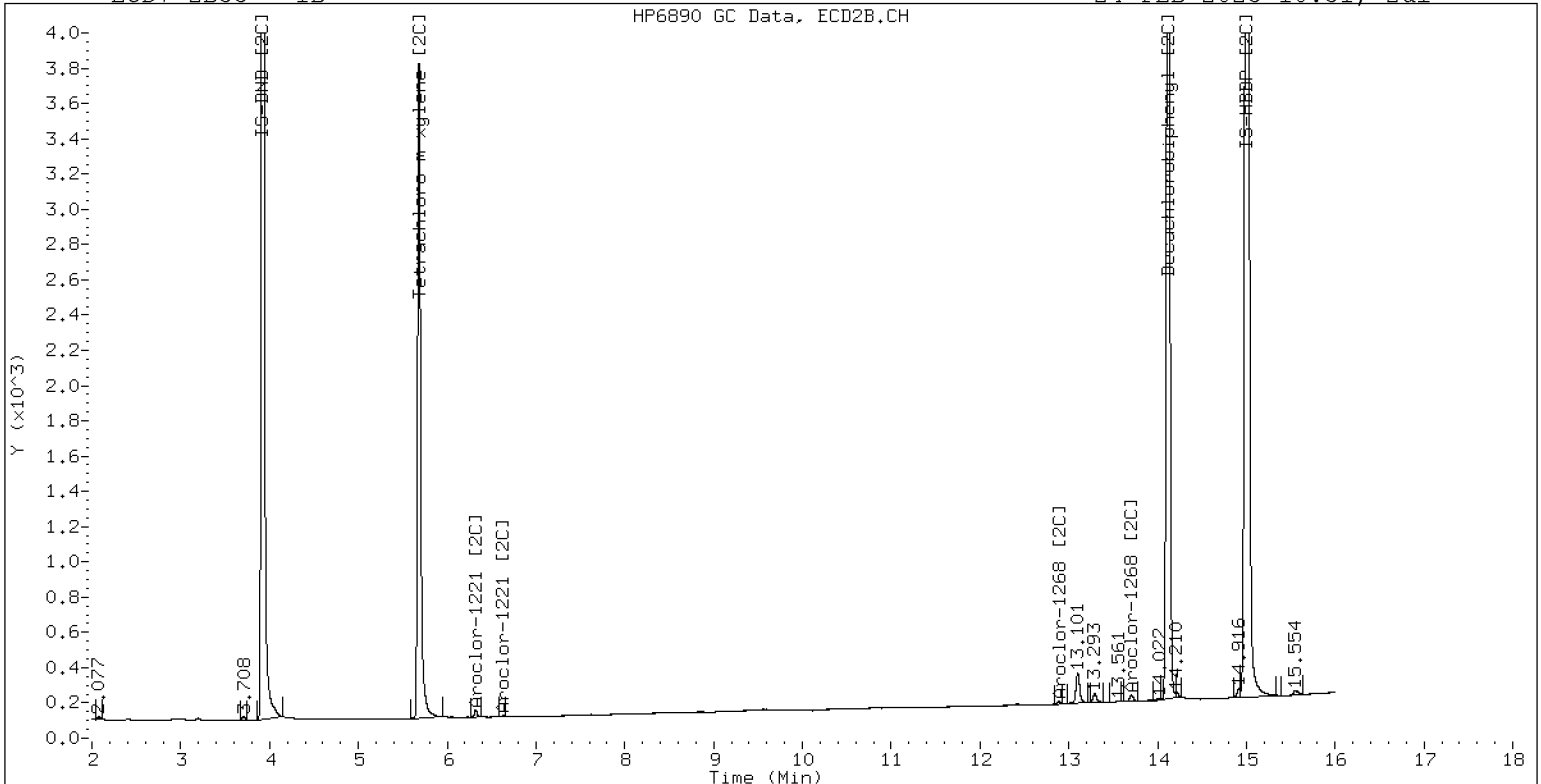
24-FEB-2023 10:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB

24-FEB-2023 10:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242302ECD7.D
 Data file 2: /230224.b/230224.b/02242302ECD7.D
 Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Compound Sublist: AR1660.sub
 Instrument, Inj. Vol.: ecd7.i, 2ul
 Quant Method: Internal Std

ARI ID: 0.25PPMAR1660
 Client ID:
 Injection Date: 24-FEB-2023 11:12
 Report Date: 02/28/2023 09:50
 Matrix: NONE
 Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.811	0.005	405980	5.687	0.002	192160	40.4	41.5	2.9	Tetrachloro-m-xylene
13.897	0.004	563414	14.120	0.001	336737	40.0	43.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	673778	0.0
Hexabromobiphenyl	1429847	1429847	0.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	315256	0.0
Hexabromobiphenyl	513946	513946	0.0

* Standard Areas taken from Initial Cal Level 3
 Initial Calibration Date: 24-FEB-2023
 <- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.001	66125	258.4	1	7.255	-0.001	46626	252.6	
Aroclor-1016	2	7.654	-0.000	207370	265.8	2	7.855	-0.001	101071	270.1	
Aroclor-1016	3	7.792	0.002	92507	242.9	3	8.055	0.001	43448	257.1	
Aroclor-1016	4	8.406	0.001	64388	261.5	4	8.306	-0.000	33986	256.3	
Total CollAve (4 peaks):				257.2	Total Col2Ave (4 peaks):				259.0	RPD = 1	
Corrected Ave (3 peaks):				254.3	Corrected Ave (3 peaks):				255.3	RPD = 0	

CalAmt %D: 2.9

CalAmt %D: 3.6

Aroclor-1260	1	11.046	0.001	138355	269.0	1	11.653	0.001	77114	255.2	
Aroclor-1260	2	11.363	0.002	147051	273.6	2	11.918	0.001	203401	263.7	
Aroclor-1260	3	11.736	0.003	383171	268.8	3	12.435	-0.000	51517	251.7	
Aroclor-1260	4	12.141	0.002	200399	279.2	4	12.502	0.001	134797	259.3	
Aroclor-1260	5	12.247	0.003	83796	271.2	NS	---			----	
Total CollAve (5 peaks):				272.4	Total Col2Ave (4 peaks):				257.5	RPD = 6	
Corrected Ave (4 peaks):				270.7	Corrected Ave (3 peaks):				255.4	RPD = 6	

CalAmt %D: 8.9

CalAmt %D: 3.0

Total PCB Area Coll (5.906 - 13.793) = 4024419 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1889311 Col2 Total PCB = 0.5 ppm*

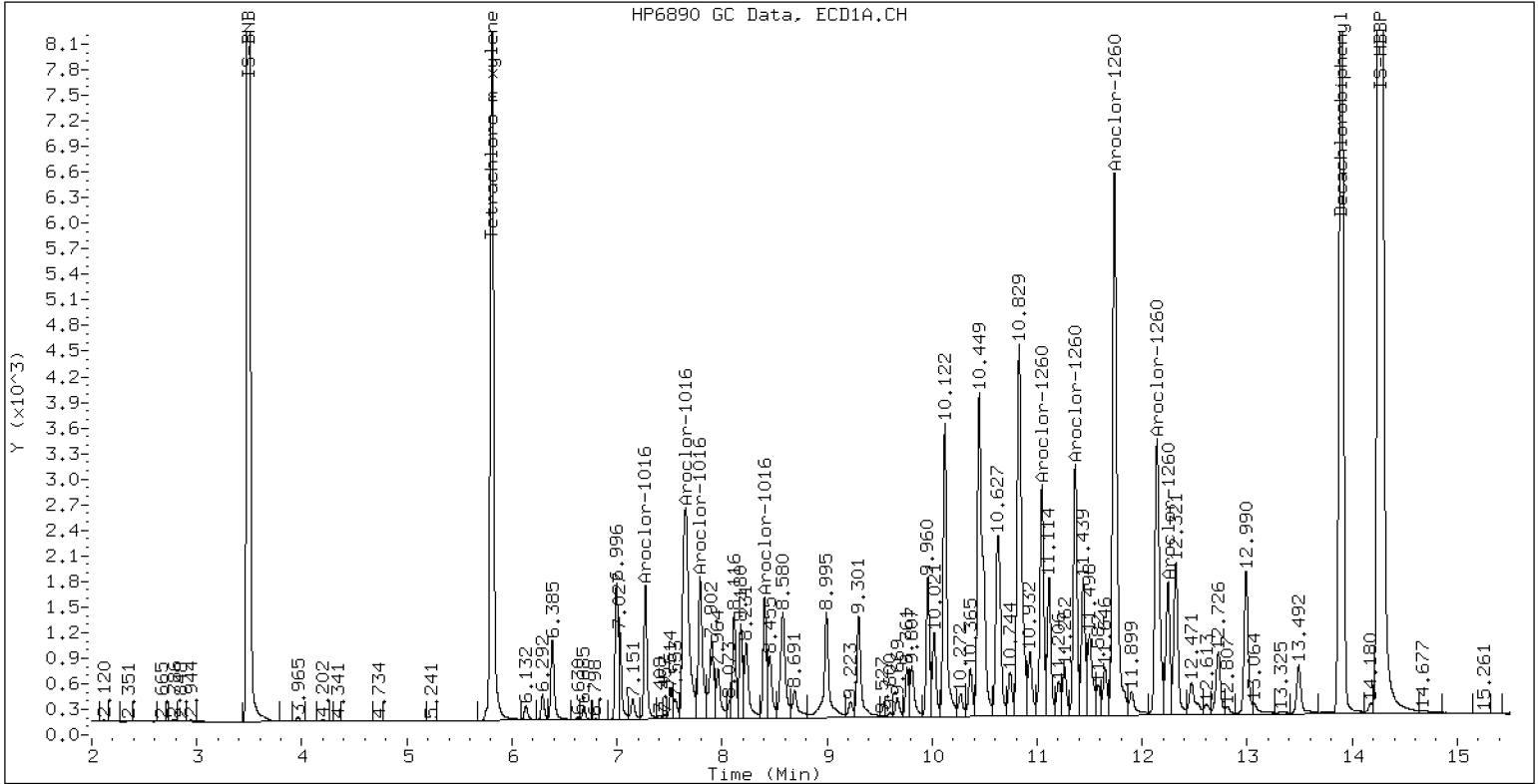
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1660

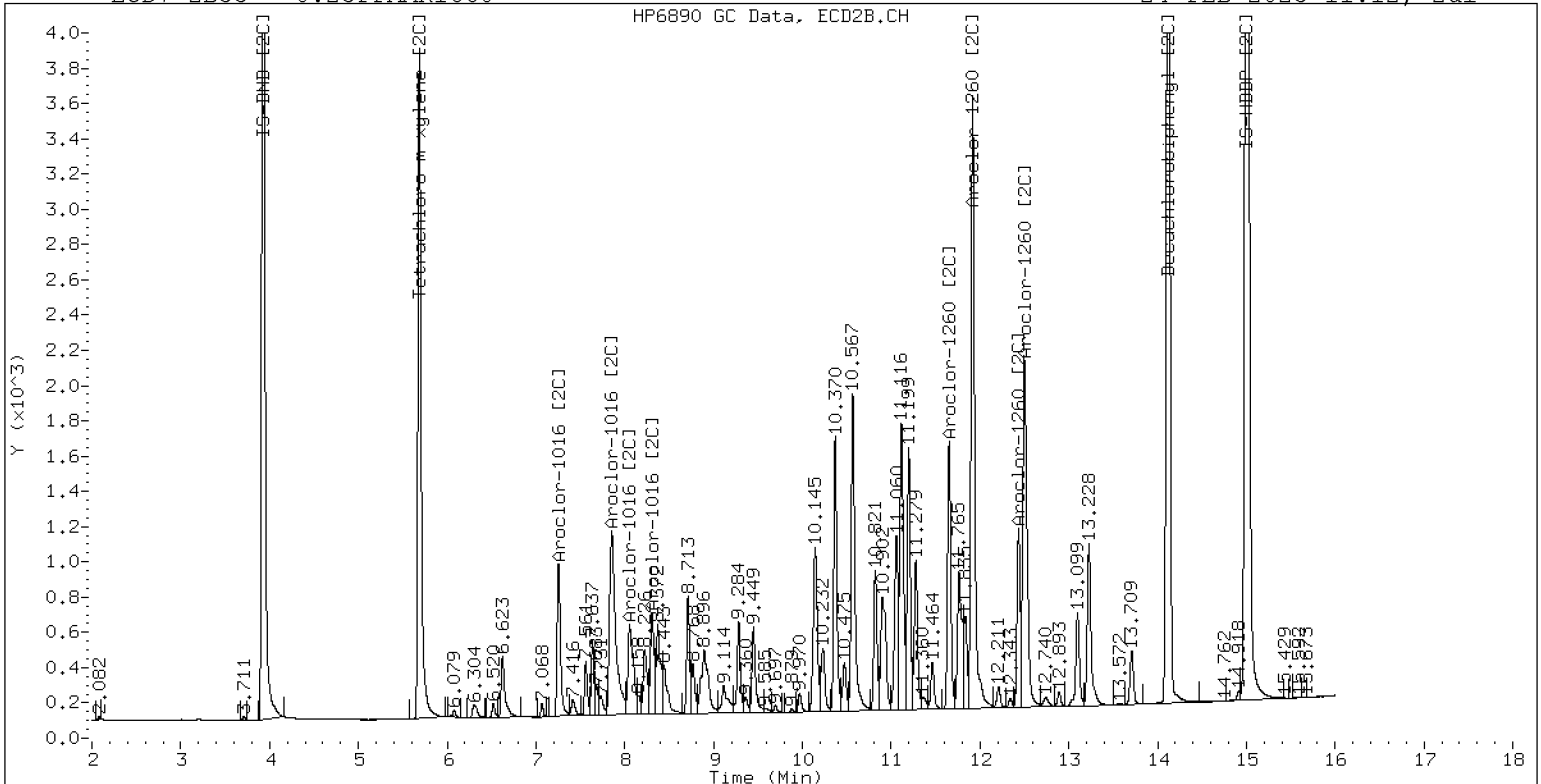
24-FEB-2023 11:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1660

24-FEB-2023 11:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242303ECD7.D
Data file 2: /230224.b/230224.b/02242303ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:33
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.002	29768	5.688	0.003	14932	3.1	3.3	5.7	Tetrachloro-m-xylene
13.893	0.000	45992	14.120	0.000	23950	3.4	3.1	9.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	637010	-5.5
Hexabromobiphenyl	1429847	1386953	-3.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307177	-2.6
Hexabromobiphenyl	513946	511463	-0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.001	5052	20.9	1	7.256	0.000	3894	21.7	
Aroclor-1016	2	7.659	0.005	14714	19.9	2	7.864	0.008	6253	17.1	
Aroclor-1016	3	7.795	0.005	8226	22.8	3	8.060	0.006	3076	18.7	
Aroclor-1016	4	8.407	0.002	4780	20.5	4	8.309	0.002	2443	18.9	
Total CollAve (4 peaks):				21.1	Total Col2Ave (4 peaks):				19.1	RPD = 10	
Corrected Ave (3 peaks):				20.5	Corrected Ave (3 peaks):				18.2	RPD = 11	
CalAmt %D:				5.3	CalAmt %D:				-4.5		
Aroclor-1260	1	11.047	0.003	10147	20.3	1	11.656	0.003	6759	22.5	
Aroclor-1260	2	11.364	0.003	10287	19.7	2	11.922	0.005	16592	21.6	
Aroclor-1260	3	11.740	0.006	28043	20.3	3	12.438	0.002	4506	22.1	
Aroclor-1260	4	12.145	0.006	13540	19.4	4	12.505	0.004	11037	21.3	
Aroclor-1260	5	12.246	0.002	6182	20.6	NS	---			----	
Total CollAve (5 peaks):				20.1	Total Col2Ave (4 peaks):				21.9	RPD = 9	
Corrected Ave (4 peaks):				19.9	Corrected Ave (3 peaks):				21.7	RPD = 8	
CalAmt %D:				0.4	CalAmt %D:				9.4		

Total PCB Area Col1 (5.906 - 13.793) = 324832 Col1 Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 157149 Col2 Total PCB = 0.0 ppm*

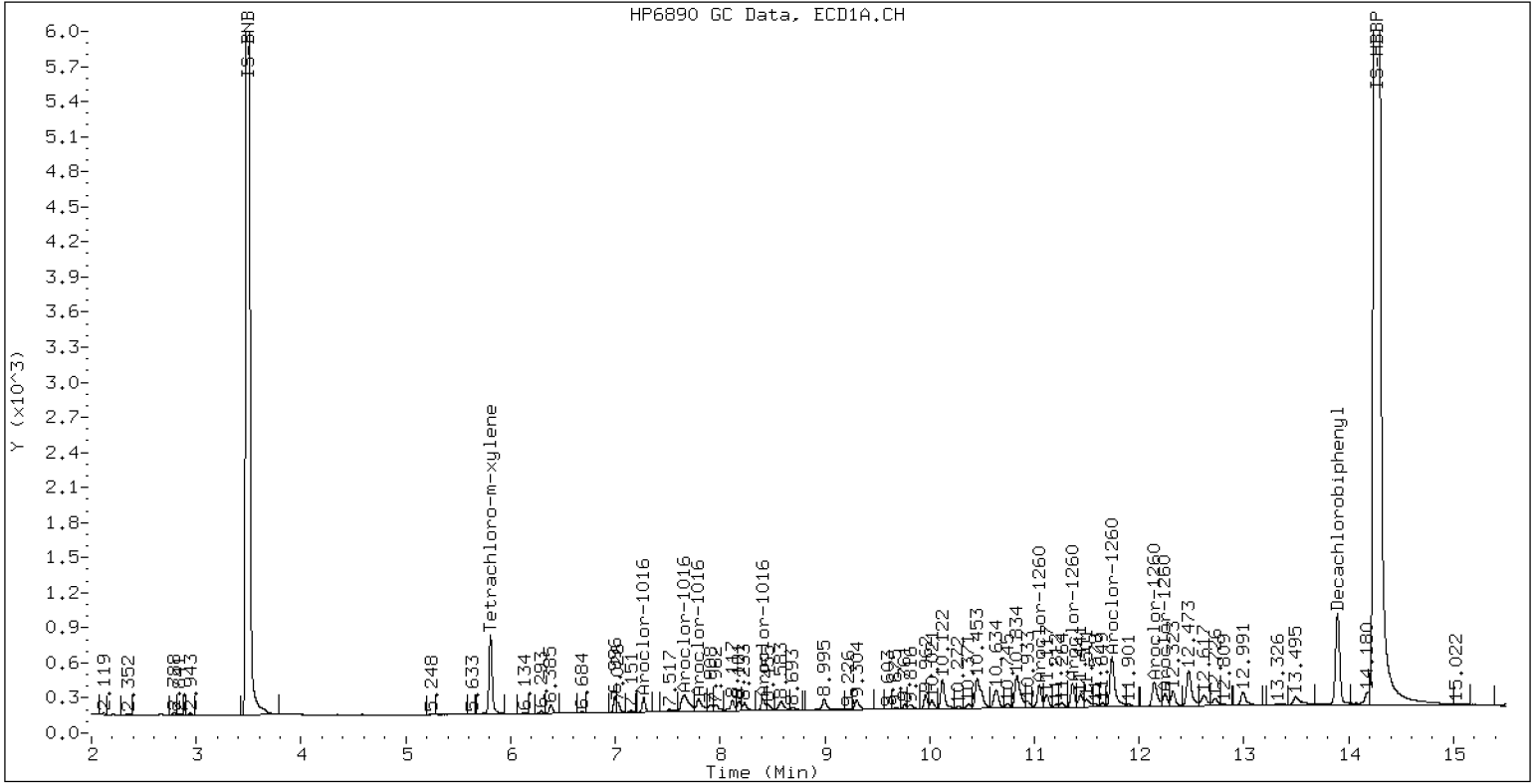
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPMAR1660

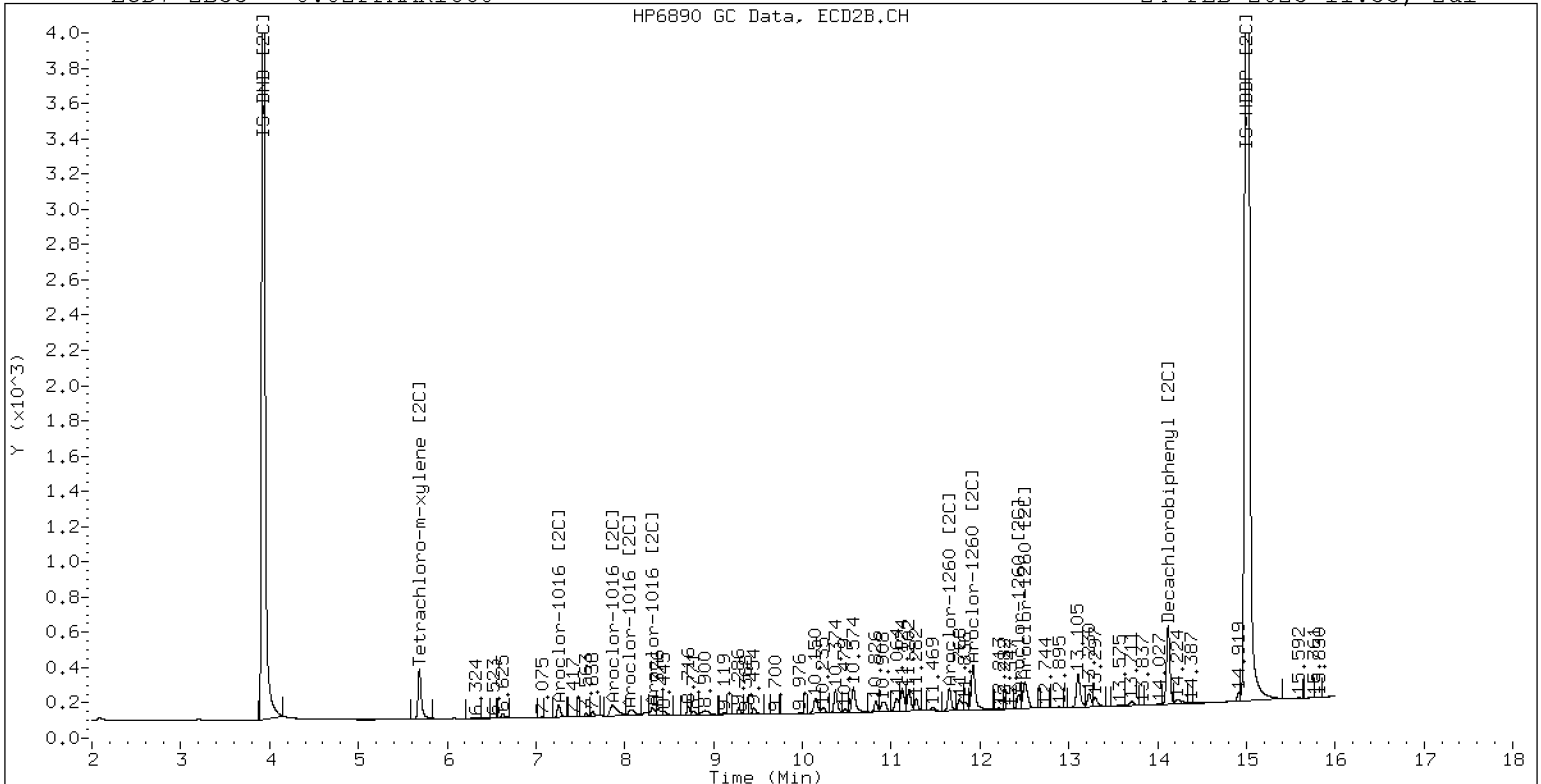
24-FEB-2023 11:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPMAR1660

24-FEB-2023 11:33, 2ul

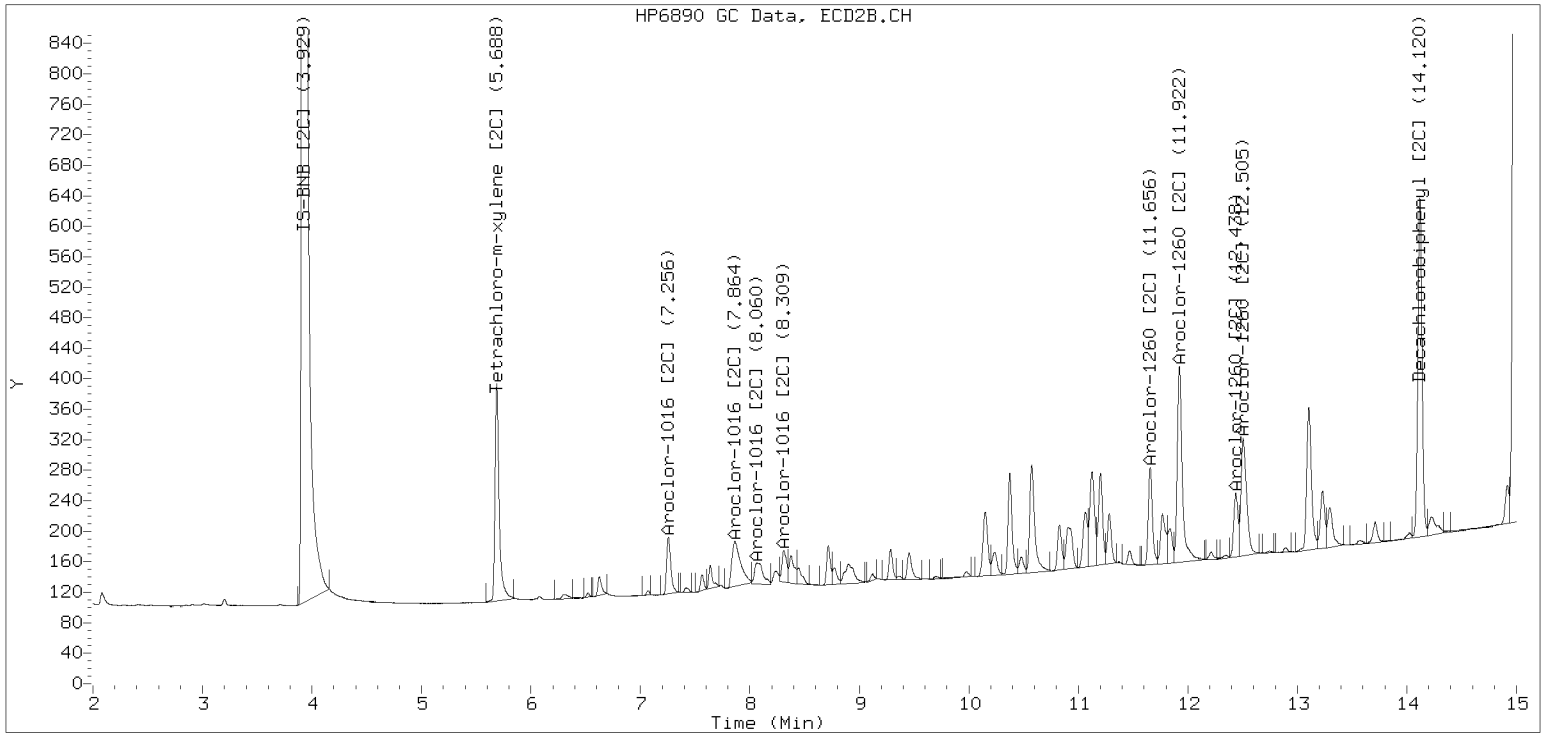


ZB-35 Manual Integration: YES

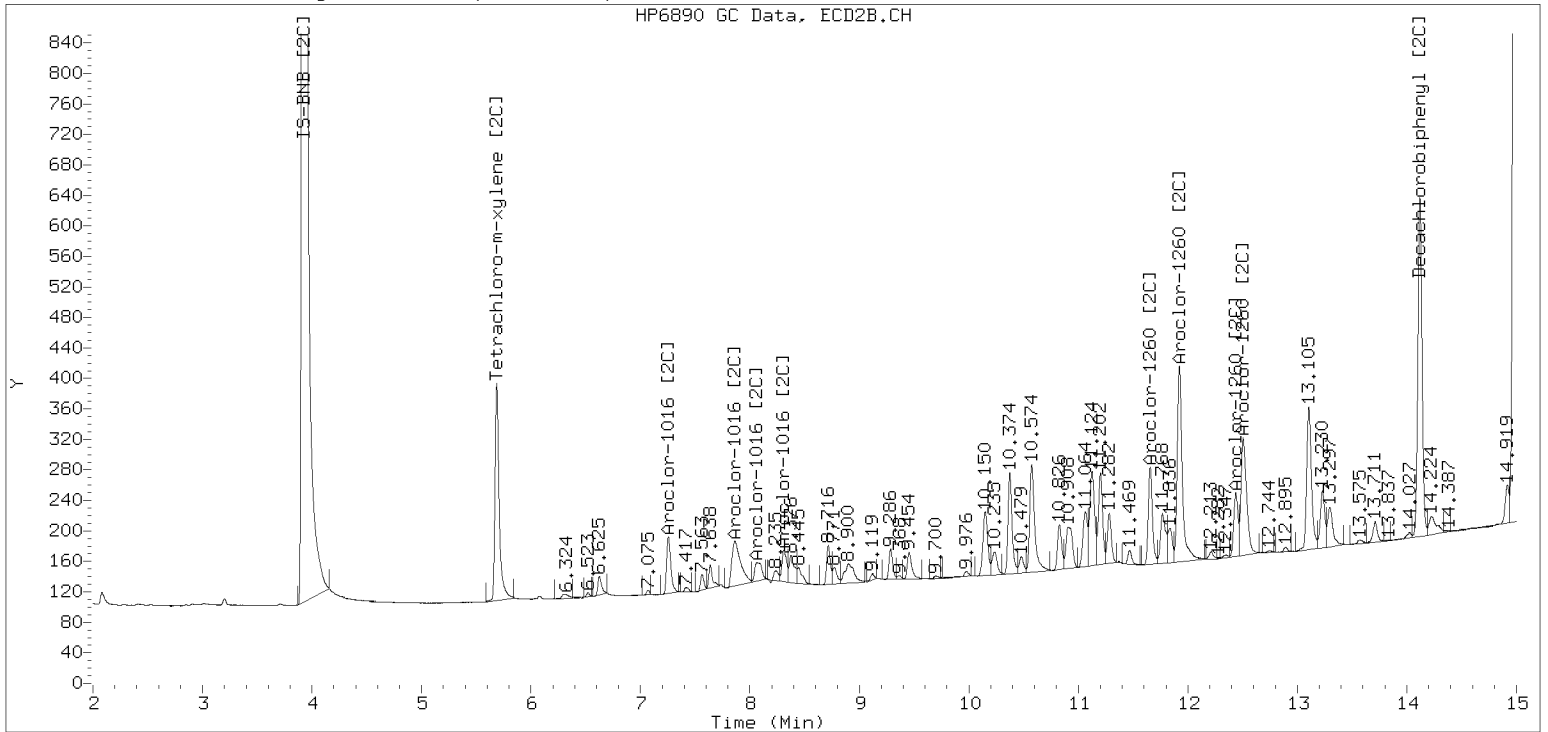
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230224.b/230224.b/02242303ECD7.D Injection Date: 24-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242304ECD7.D
Data file 2: /230224.b/230224.b/02242304ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:54
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col				
5.809	0.003	78493	5.688	0.003	36772	8.3	8.1	2.2	Tetrachloro-m-xylene
13.893	-0.000	113544	14.119	-0.000	62745	8.2	7.9	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	630965	-6.4
Hexabromobiphenyl	1429847	1409464	-1.4

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307599	-2.4
Hexabromobiphenyl	513946	521112	1.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.002	12829	53.5	1	7.256	0.000	9654	53.6	
Aroclor-1016	2	7.660	0.006	36461	49.9	2	7.864	0.008	18085	49.5	
Aroclor-1016	3	7.795	0.005	19865	55.7	3	8.063	0.008	9071	55.0	
Aroclor-1016	4	8.408	0.003	11411	49.5	4	8.310	0.003	7309	56.5	
Total CollAve (4 peaks):				52.2	Total Col2Ave (4 peaks):				53.7	RPD = 3	
Corrected Ave (3 peaks):				51.0	Corrected Ave (3 peaks):				52.7	RPD = 3	
CalAmt %D:				4.3	CalAmt %D:				7.3		
Aroclor-1260	1	11.046	0.002	25727	50.7	1	11.655	0.002	15996	52.2	
Aroclor-1260	2	11.363	0.002	26482	50.0	2	11.922	0.004	40487	51.8	
Aroclor-1260	3	11.739	0.005	70871	50.4	3	12.437	0.002	10248	49.4	
Aroclor-1260	4	12.143	0.004	34239	48.4	4	12.506	0.004	26828	50.9	
Aroclor-1260	5	12.246	0.002	15109	49.6	NS	---			----	
Total CollAve (5 peaks):				49.8	Total Col2Ave (4 peaks):				51.1	RPD = 2	
Corrected Ave (4 peaks):				49.6	Corrected Ave (3 peaks):				50.7	RPD = 2	
CalAmt %D:				-0.3	CalAmt %D:				2.1		

Total PCB Area Coll (5.906 - 13.793) = 758292 Coll Total PCB = 0.1 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 386383 Col2 Total PCB = 0.1 ppm*

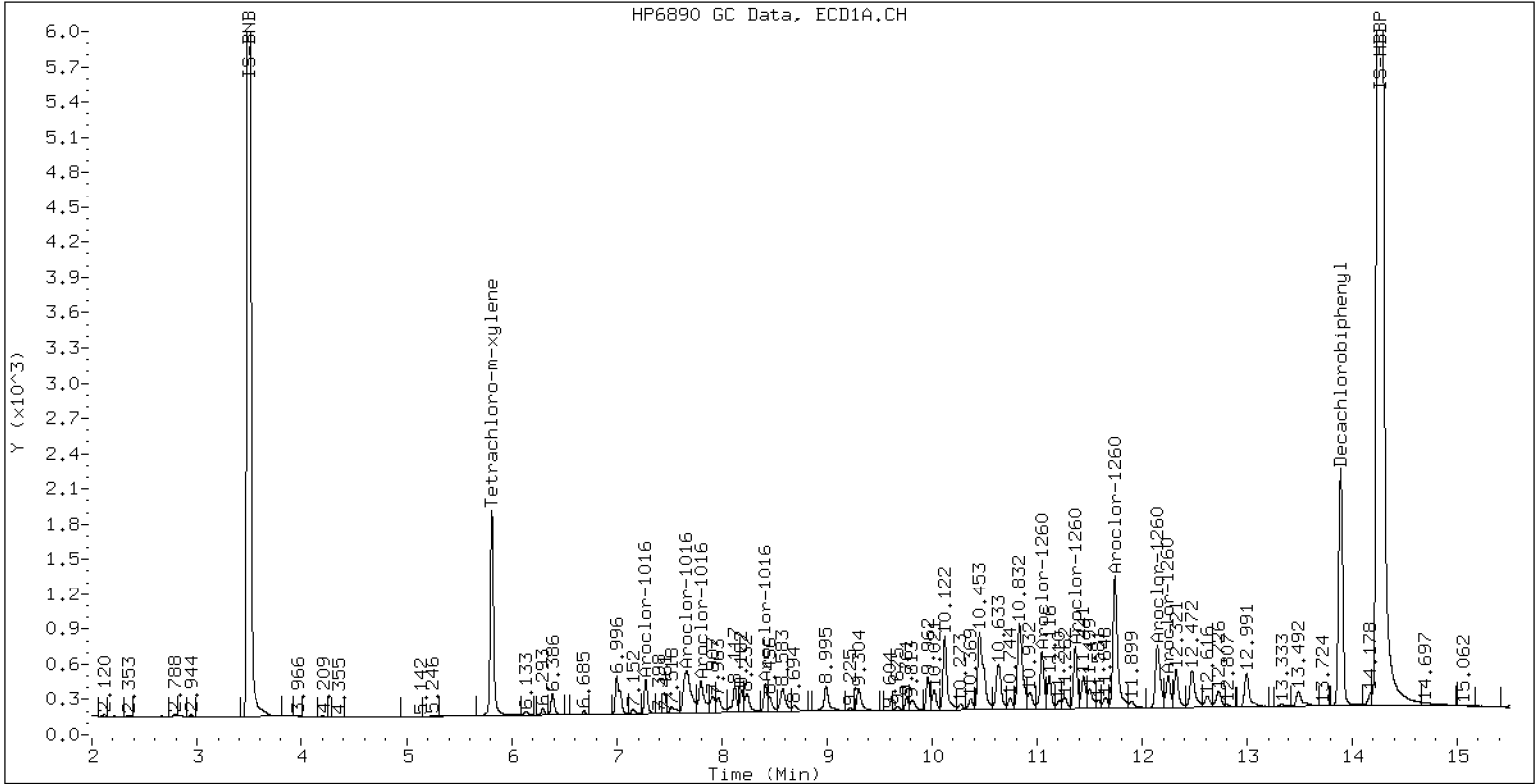
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPMAR1660

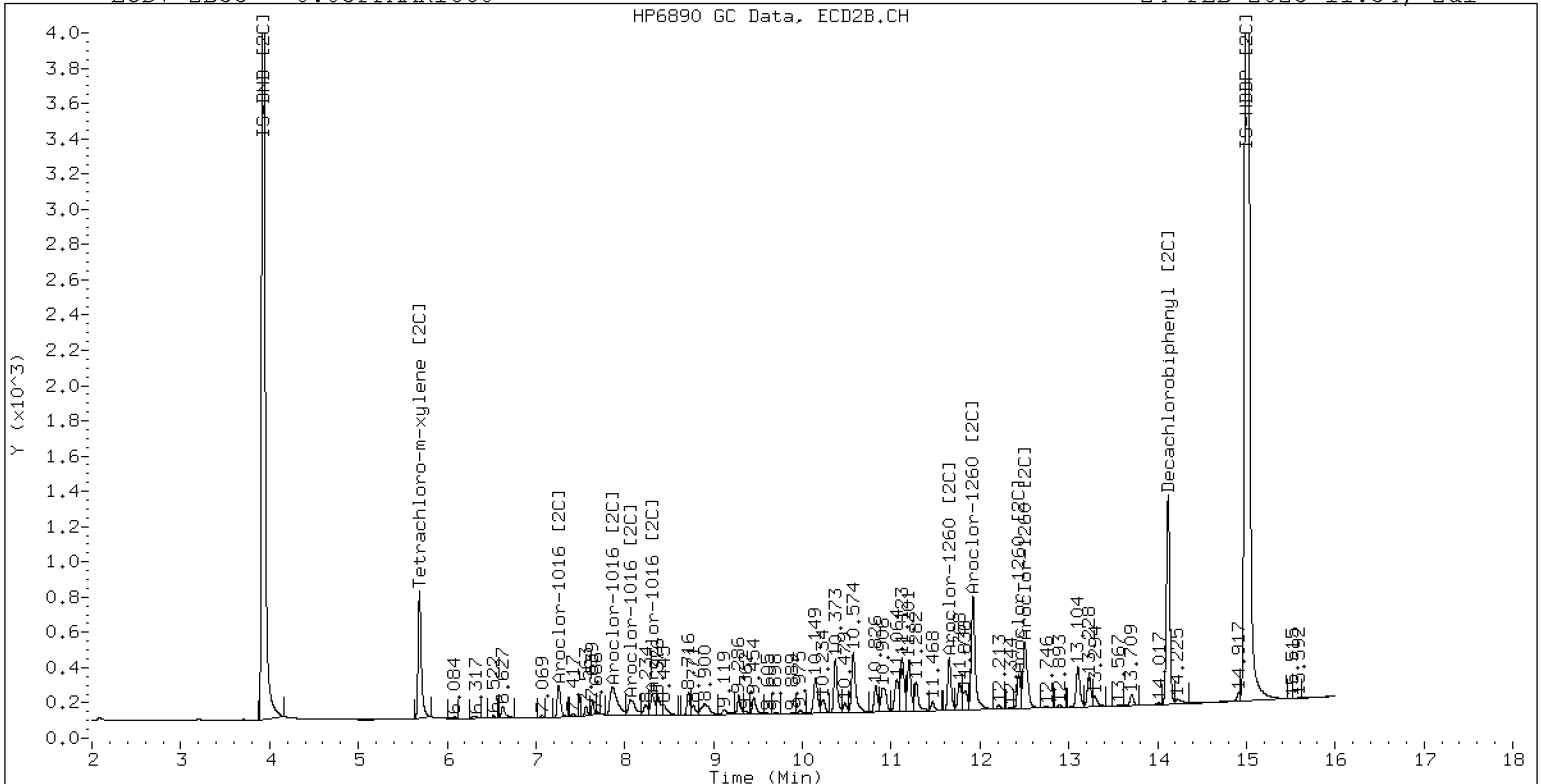
24-FEB-2023 11:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPMAR1660

24-FEB-2023 11:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242305ECD7.D
Data file 2: /230224.b/230224.b/02242305ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:15
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.813	0.006	1641874	5.688	0.003	709674	166.2	151.5	9.3	Tetrachloro-m-xylene
13.899	0.006	2344583	14.122	0.002	1300114	161.9	158.6	2.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661440	-1.8
Hexabromobiphenyl	1429847	1470100	2.8
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319272	1.3
Hexabromobiphenyl	513946	538138	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	220519	877.8	1	7.254	-0.001	162833	871.2
Aroclor-1016	2	7.652	-0.002	731607	955.3	2	7.852	-0.004	373610	985.8
Aroclor-1016	3	7.789	-0.001	307629	822.8	3	8.051	-0.003	156666	915.2
Aroclor-1016	4	8.404	-0.001	229387	949.1	4	8.305	-0.002	117186	872.6
Total CollAve (4 peaks):				901.3		Total Col2Ave (4 peaks):				911.2 RPD = 1
Corrected Ave (3 peaks):				883.3		Corrected Ave (3 peaks):				886.3 RPD = 0

CalAmt %D: -9.9

CalAmt %D: -8.9

Aroclor-1260	1	11.044	-0.000	504641	954.2	1	11.652	-0.000	282606	893.1
Aroclor-1260	2	11.360	-0.001	524931	950.0	2	11.917	-0.000	709329	878.4
Aroclor-1260	3	11.734	-0.000	1410270	962.3	3	12.434	-0.001	215124	1003.8
Aroclor-1260	4	12.137	-0.002	720770	976.7	4	12.501	-0.001	506566	930.6
Aroclor-1260	5	12.243	-0.001	304211	957.7	NS	---			----
Total CollAve (5 peaks):				960.2		Total Col2Ave (4 peaks):				926.5 RPD = 4
Corrected Ave (4 peaks):				956.0		Corrected Ave (3 peaks):				900.7 RPD = 6

CalAmt %D: -4.0

CalAmt %D: -7.4

Total PCB Area Coll (5.906 - 13.793) = 14454279 Coll Total PCB = 1.8 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 7029563 Col2 Total PCB = 1.8 ppm*

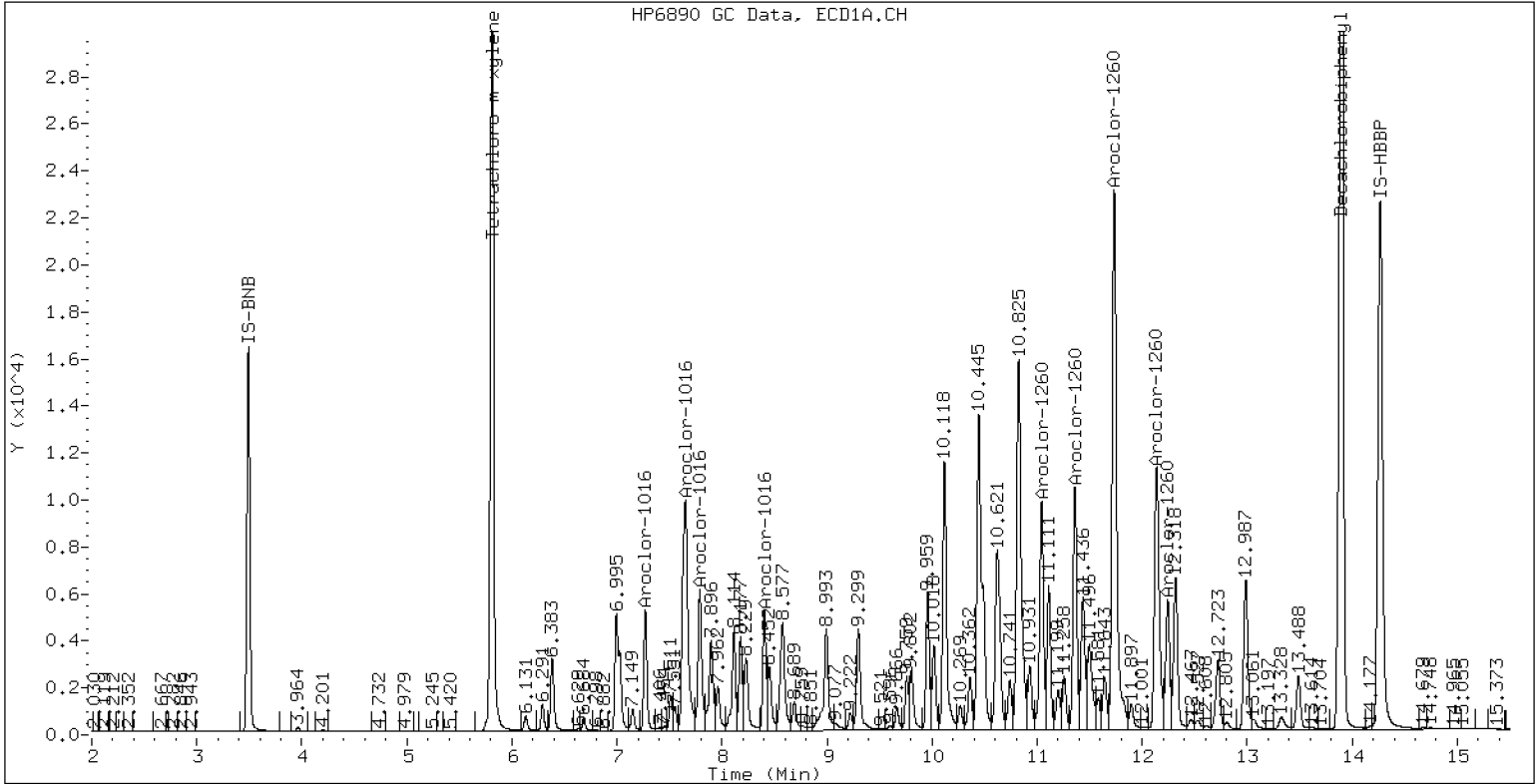
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPMAR1660

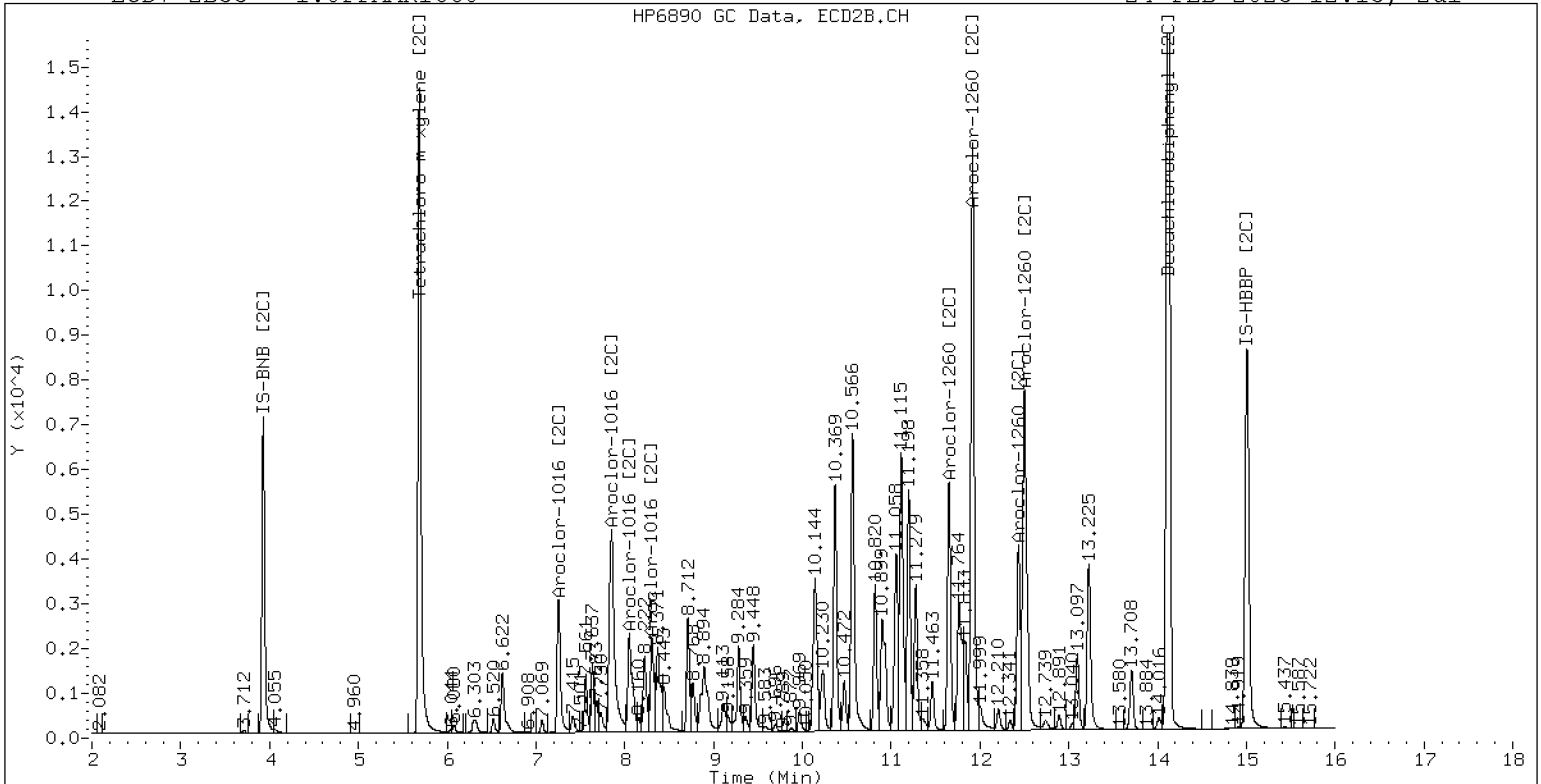
24-FEB-2023 12:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPMAR1660

24-FEB-2023 12:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242306ECD7.D
Data file 2: /230224.b/230224.b/02242306ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:36
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift	Response	RT	Shift	Response				
5.809	0.002	155528	5.688	0.003	74628	15.9	16.0	0.9	Tetrachloro-m-xylene
13.892	-0.001	227253	14.119	-0.000	128496	15.8	15.8	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	655979	-2.6
Hexabromobiphenyl	1429847	1464509	2.4
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317418	0.7
Hexabromobiphenyl	513946	532962	3.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.271	0.000	25761	103.4	1	7.255	-0.000	19315	103.9	
Aroclor-1016	2	7.657	0.003	75616	99.6	2	7.863	0.007	40308	107.0	
Aroclor-1016	3	7.794	0.004	39547	106.7	3	8.059	0.005	18304	107.6	
Aroclor-1016	4	8.406	0.001	24260	101.2	4	8.309	0.002	14708	110.2	
Total CollAve (4 peaks):				102.7		Total Col2Ave (4 peaks):				107.2	RPD = 4
Corrected Ave (3 peaks):				101.4		Corrected Ave (3 peaks):				106.2	RPD = 5
CalAmt %D:				2.7		CalAmt %D:				7.2	
Aroclor-1260	1	11.045	0.000	52009	98.7	1	11.655	0.002	31282	99.8	
Aroclor-1260	2	11.362	0.001	55116	100.1	2	11.920	0.003	80574	100.7	
Aroclor-1260	3	11.738	0.004	145604	99.7	3	12.437	0.002	19566	92.2	
Aroclor-1260	4	12.141	0.002	72408	98.5	4	12.503	0.001	53588	99.4	
Aroclor-1260	5	12.245	0.001	30745	97.2	NS	---			----	
Total CollAve (5 peaks):				98.8		Total Col2Ave (4 peaks):				98.0	RPD = 1
Corrected Ave (4 peaks):				98.5		Corrected Ave (3 peaks):				97.1	RPD = 1
CalAmt %D:				-1.2		CalAmt %D:				-2.0	

Total PCB Area Coll (5.906 - 13.793) = 1555762 Coll Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 764924 Col2 Total PCB = 0.2 ppm*

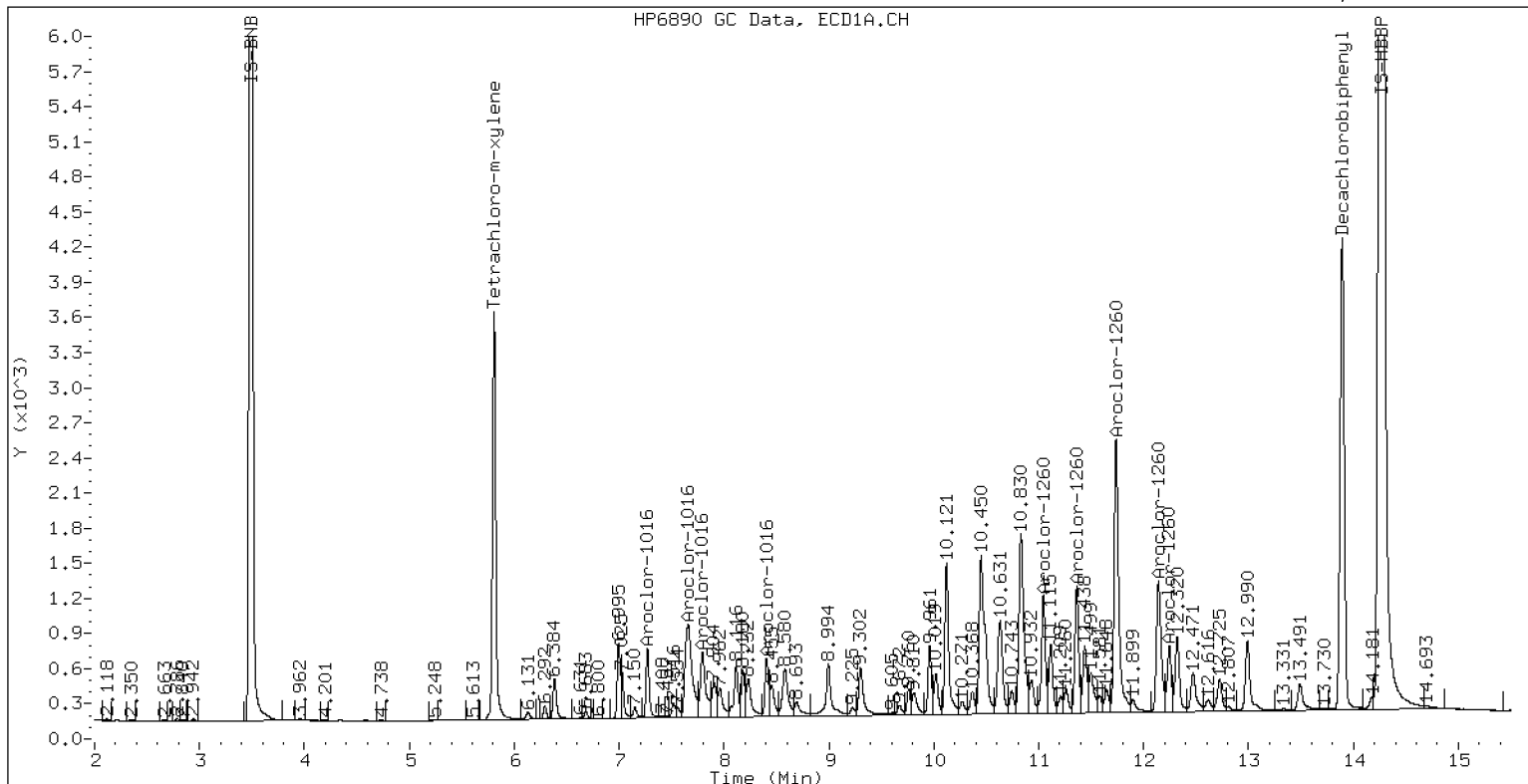
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPMAR1660

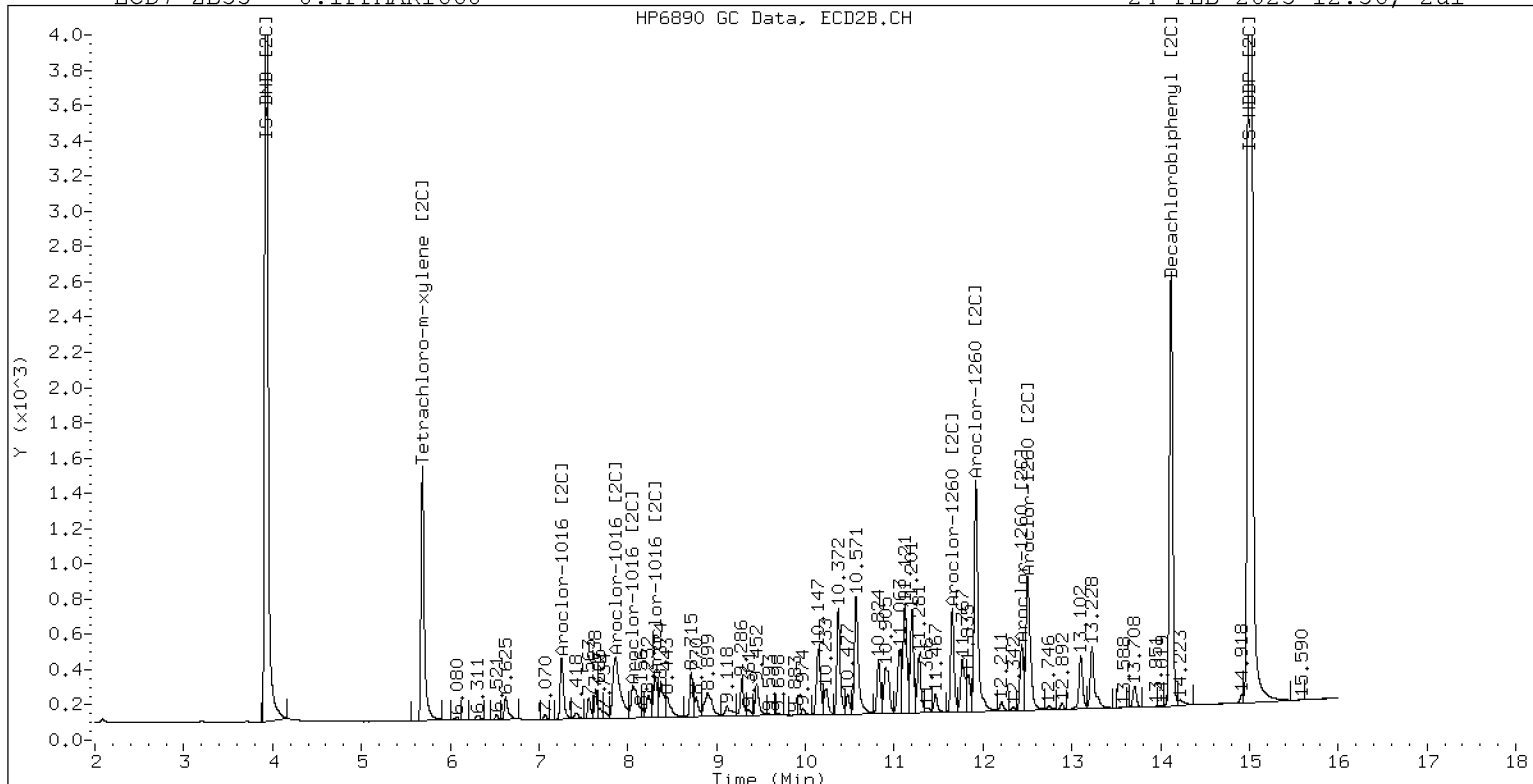
24-FEB-2023 12:36, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPMAR1660

24-FEB-2023 12:36, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242307ECD7.D
Data file 2: /230224.b/230224.b/02242307ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:57
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.810	0.004	724614	5.688	0.003	359257	75.2	76.7	2.0	Tetrachloro-m-xylene
13.898	0.005	1056911	14.120	0.000	650153	74.3	79.5	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645275	-4.2
Hexabromobiphenyl	1429847	1445345	1.1

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319170	1.2
Hexabromobiphenyl	513946	536853	4.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.270	0.000	115193	470.0	1	7.256	0.000	86287	461.8	
Aroclor-1016	2	7.654	0.000	369991	495.2	2	7.856	0.000	192524	508.1	
Aroclor-1016	3	7.790	0.000	160952	441.3	3	8.055	0.000	81039	473.6	
Aroclor-1016	4	8.405	0.000	115032	487.9	4	8.307	0.000	62136	462.8	
Total CollAve (4 peaks):				473.6		Total Col2Ave (4 peaks):				476.6	RPD = 1
Corrected Ave (3 peaks):				466.4		Corrected Ave (3 peaks):				466.1	RPD = 0

CalAmt %D: -5.3

CalAmt %D: -4.7

Aroclor-1260	1	11.044	0.000	247212	475.5	1	11.653	0.000	145247	460.1	
Aroclor-1260	2	11.361	0.000	262877	483.9	2	11.918	0.000	379838	471.5	
Aroclor-1260	3	11.734	0.000	678830	471.1	3	12.436	0.000	104092	486.9	
Aroclor-1260	4	12.139	0.000	356067	490.7	4	12.502	0.000	258953	476.9	
Aroclor-1260	5	12.244	0.000	150280	481.2	NS	---			----	
Total CollAve (5 peaks):				480.5		Total Col2Ave (4 peaks):				473.8	RPD = 1
Corrected Ave (4 peaks):				477.9		Corrected Ave (3 peaks):				469.5	RPD = 2

CalAmt %D: -3.9

CalAmt %D: -5.2

Total PCB Area Coll (5.906 - 13.793) = 7134169 Coll Total PCB = 0.9 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 3589735 Col2 Total PCB = 0.9 ppm*

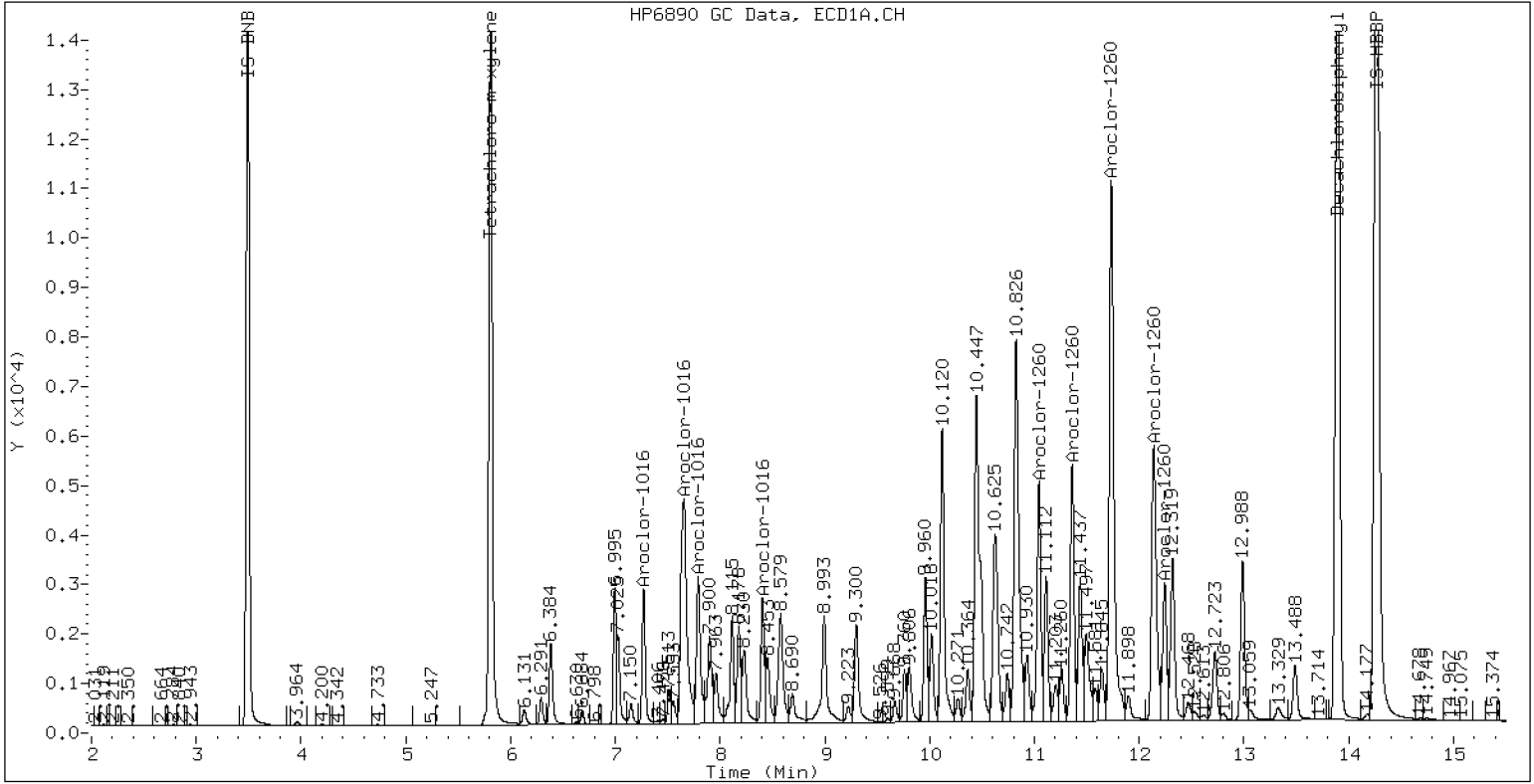
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPMAR1660

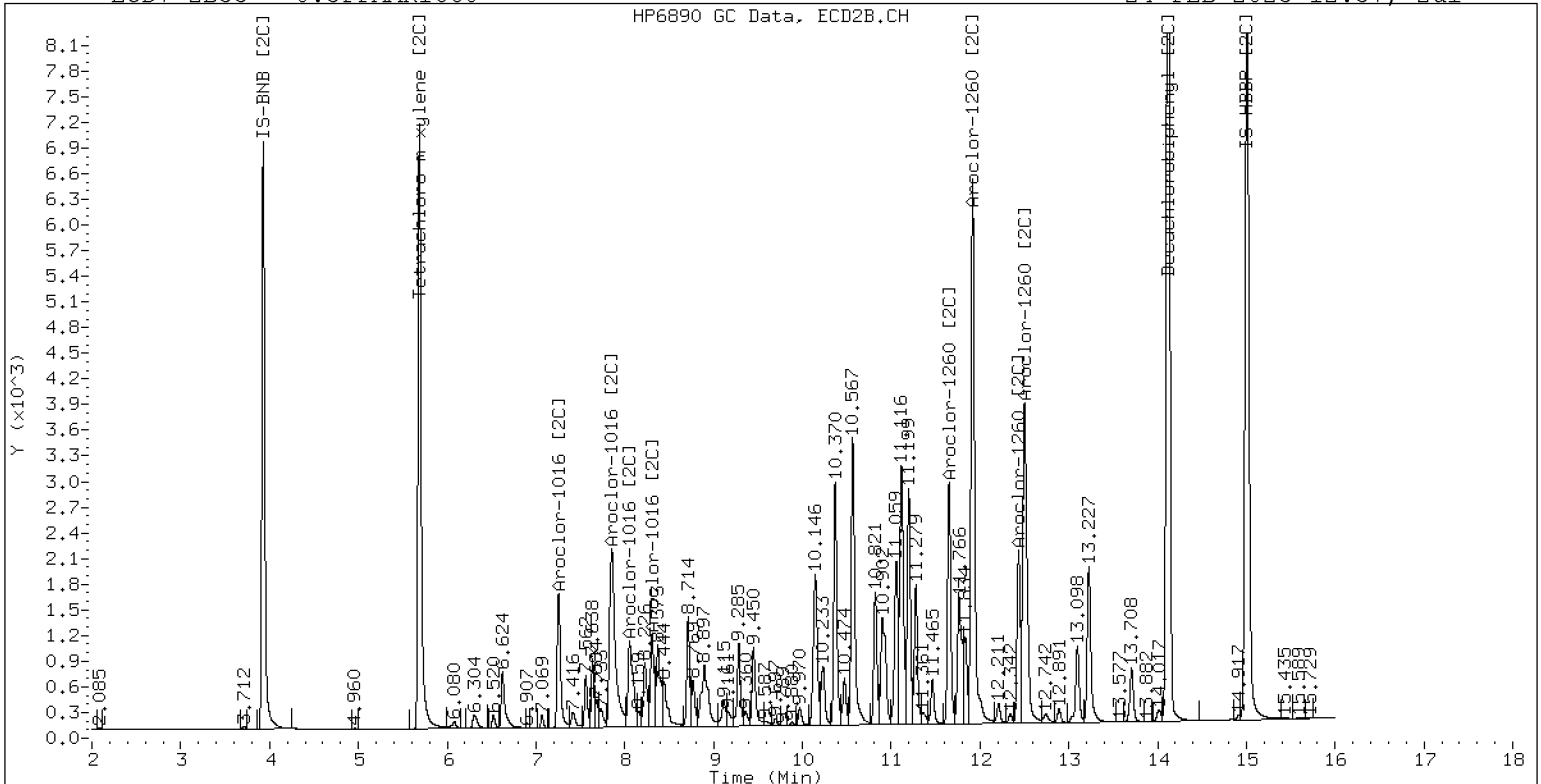
24-FEB-2023 12:57, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPMAR1660

24-FEB-2023 12:57, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242308ECD7.D
Data file 2: /230224.b/230224.b/02242308ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1242
Client ID:
Injection Date: 24-FEB-2023 13:18
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.003	434187	5.688	0.003	214306	46.0	46.5	1.1	Tetrachloro-m-xylene
13.894	0.000	515867	14.119	-0.001	312943	35.6	38.5	7.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632576	-6.1
Hexabromobiphenyl	1429847	1469715	2.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314129	-0.4
Hexabromobiphenyl	513946	534294	4.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1242	1	7.271	0.000	49009	250.0	1	7.255	0.000	36487	250.0	
Aroclor-1242	2	7.656	0.000	148833	250.0	2	7.858	0.000	76699	250.0	
Aroclor-1242	3	8.405	0.000	46308	250.0	3	9.167	0.000	23866	250.0	
Aroclor-1242	4	8.579	0.000	68453	250.0	4	9.597	0.000	29080	250.0	
Total Col1Ave (4 peaks):				250.0	Total Col2Ave (4 peaks):				250.0	RPD = 0	
Corrected Ave (3 peaks):				250.0	Corrected Ave (3 peaks):				250.0	RPD = 0	

Total PCB Area Col1 (5.906 - 13.793) = 1221467 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 572067 Col2 Total PCB = 0.2 ppm*

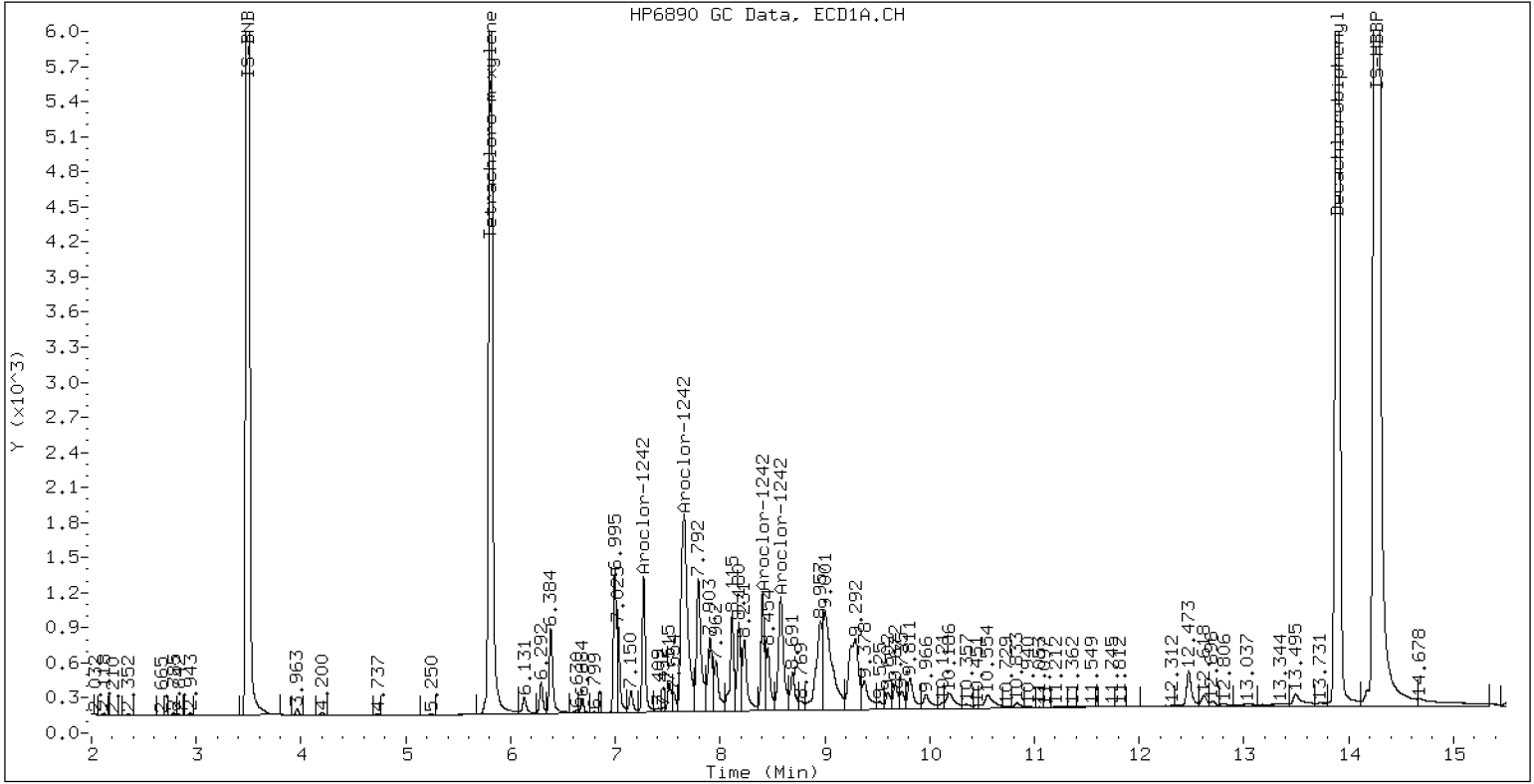
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1242

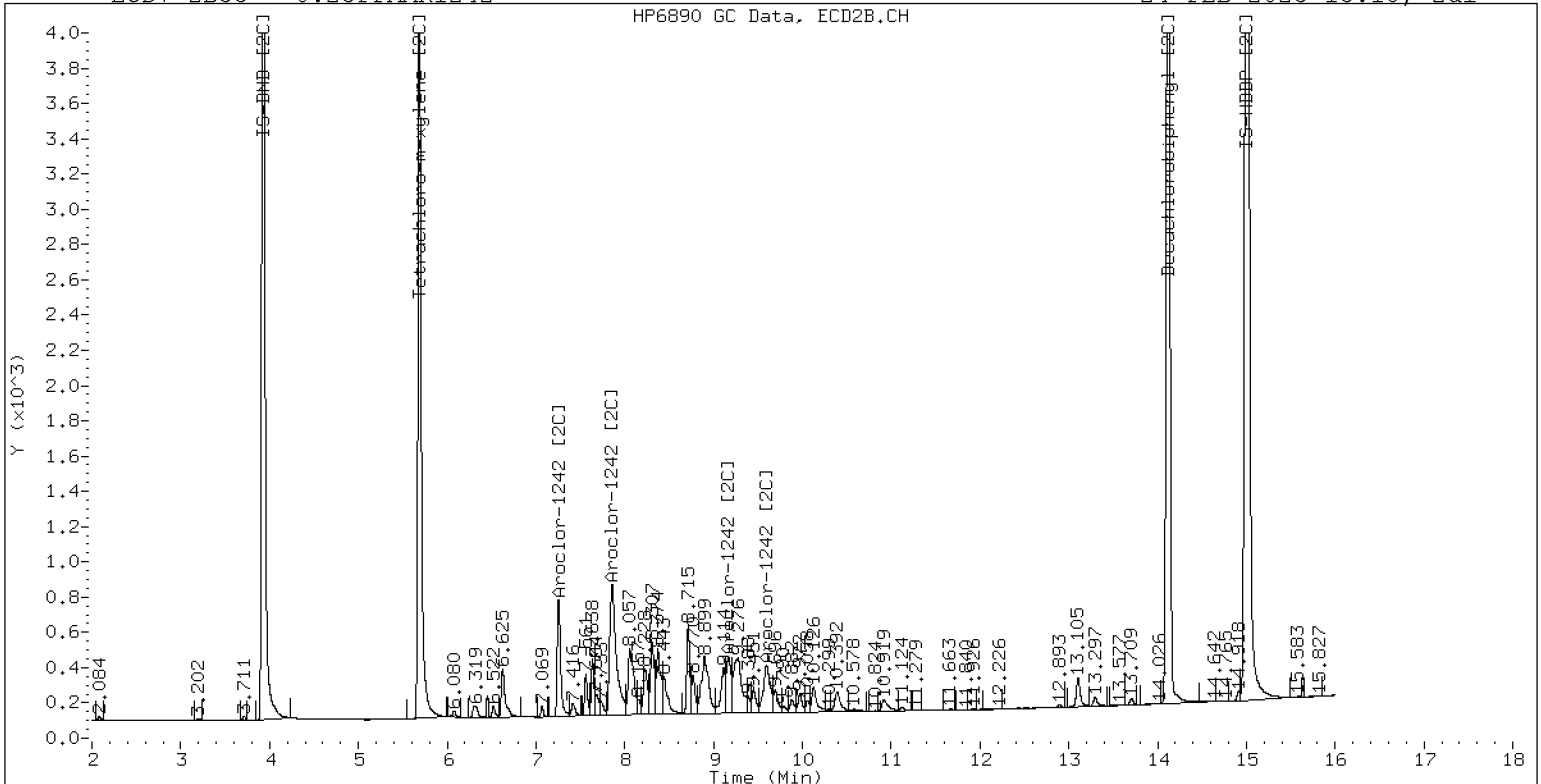
24-FEB-2023 13:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1242

24-FEB-2023 13:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242309ECD7.D
Data file 2: /230224.b/230224.b/02242309ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1248
Client ID:
Injection Date: 24-FEB-2023 13:39
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.003	349513	5.688	0.003	176615	36.6	37.9	3.4	Tetrachloro-m-xylene
13.894	0.001	523008	14.121	0.001	322054	36.4	39.3	7.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	639911	-5.0
Hexabromobiphenyl	1429847	1458696	2.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317938	0.9
Hexabromobiphenyl	513946	538760	4.8

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.405	0.000	78055	250.0	1	8.308	0.000	37951	250.0
Aroclor-1248	2	8.580	0.000	99216	250.0	2	8.714	0.000	39239	250.0
Aroclor-1248	3	8.999	0.000	187178	250.0	3	9.166	0.000	45157	250.0
Aroclor-1248	4	9.295	0.000	95291	250.0	4	9.590	0.000	54216	250.0
Total Col1Ave (4 peaks):				250.0	Total Col2Ave (4 peaks):				250.0	RPD = 0
Corrected Ave (3 peaks):				250.0	Corrected Ave (3 peaks):				250.0	RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 1565180 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 754991 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242310ECD7.D
 Data file 2: /230224.b/230224.b/02242310ECD7.D
 Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Compound Sublist: AR1254.sub
 Instrument, Inj. Vol.: ecd7.i, 2ul
 Quant Method: Internal Std

ARI ID: 0.25PPMAR1254
 Client ID:
 Injection Date: 24-FEB-2023 14:00
 Report Date: 02/28/2023 09:51
 Matrix: NONE
 Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.002	352587	5.687	0.002	177502	37.3	38.6	3.4	Tetrachloro-m-xylene
13.895	0.002	532500	14.119	0.000	325903	37.0	40.2	8.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	633407	-6.0
Hexabromobiphenyl	1429847	1460265	2.1

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	313673	-0.5
Hexabromobiphenyl	513946	532442	3.6

* Standard Areas taken from Initial Cal Level 3
 Initial Calibration Date: 24-FEB-2023
 <- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.299	0.000	159011	250.0	1	9.449	0.000	59603	250.0
Aroclor-1254	2	9.377	0.000	71516	250.0	2	9.970	0.000	47949	250.0
Aroclor-1254	3	9.668	0.000	102230	250.0	3	10.124	0.000	103745	250.0
Aroclor-1254	4	9.807	0.000	198777	250.0	4	10.373	0.000	101135	250.0
Aroclor-1254	5	10.176	0.000	124586	250.0	5	10.569	0.000	61577	250.0
Total CollAve (5 peaks):				250.0		Total Col2Ave (5 peaks):				250.0 RPD = 0
Corrected Ave (4 peaks):				250.0		Corrected Ave (4 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 2179224 Coll Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1022156 Col2 Total PCB = 0.3 ppm*

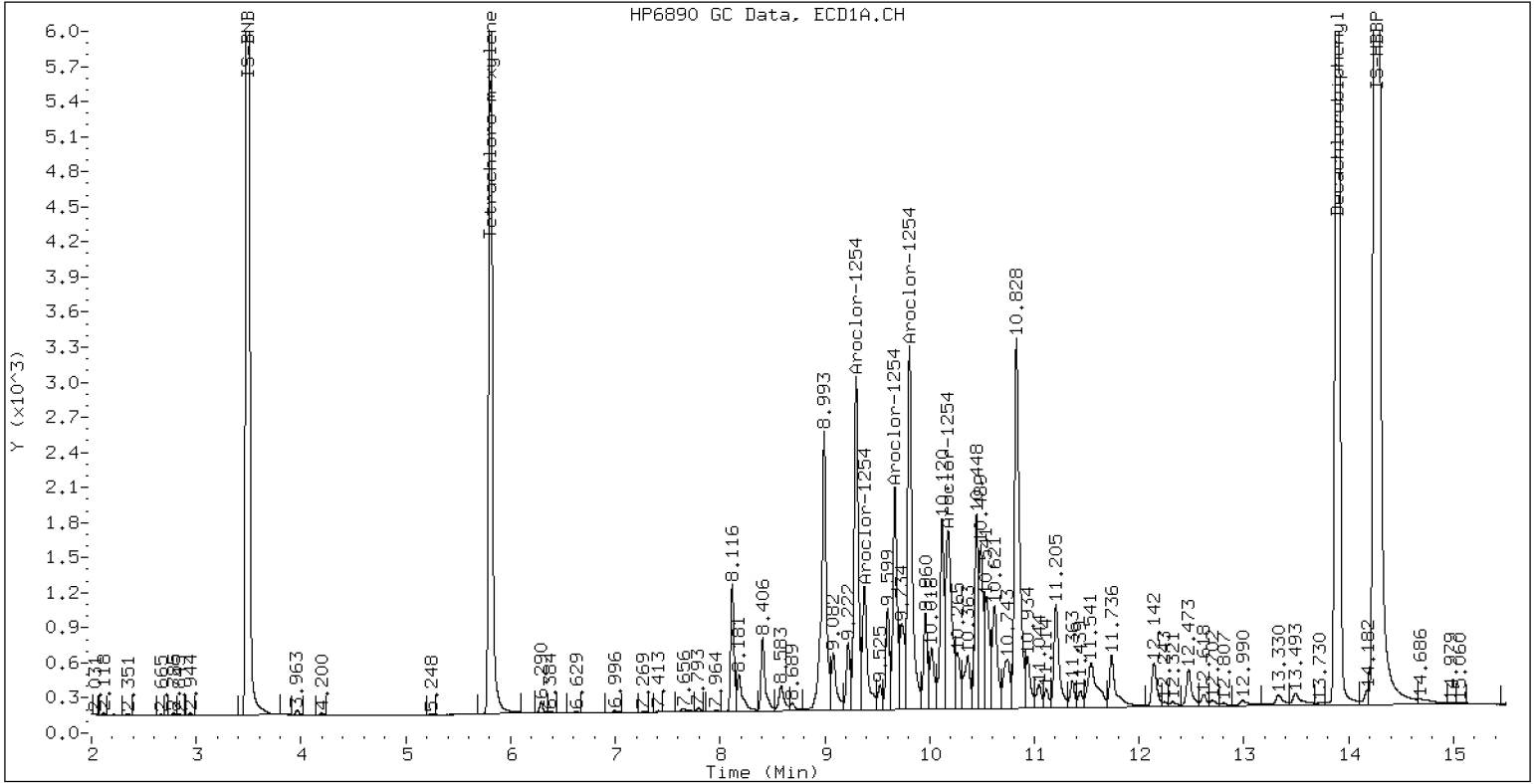
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1254

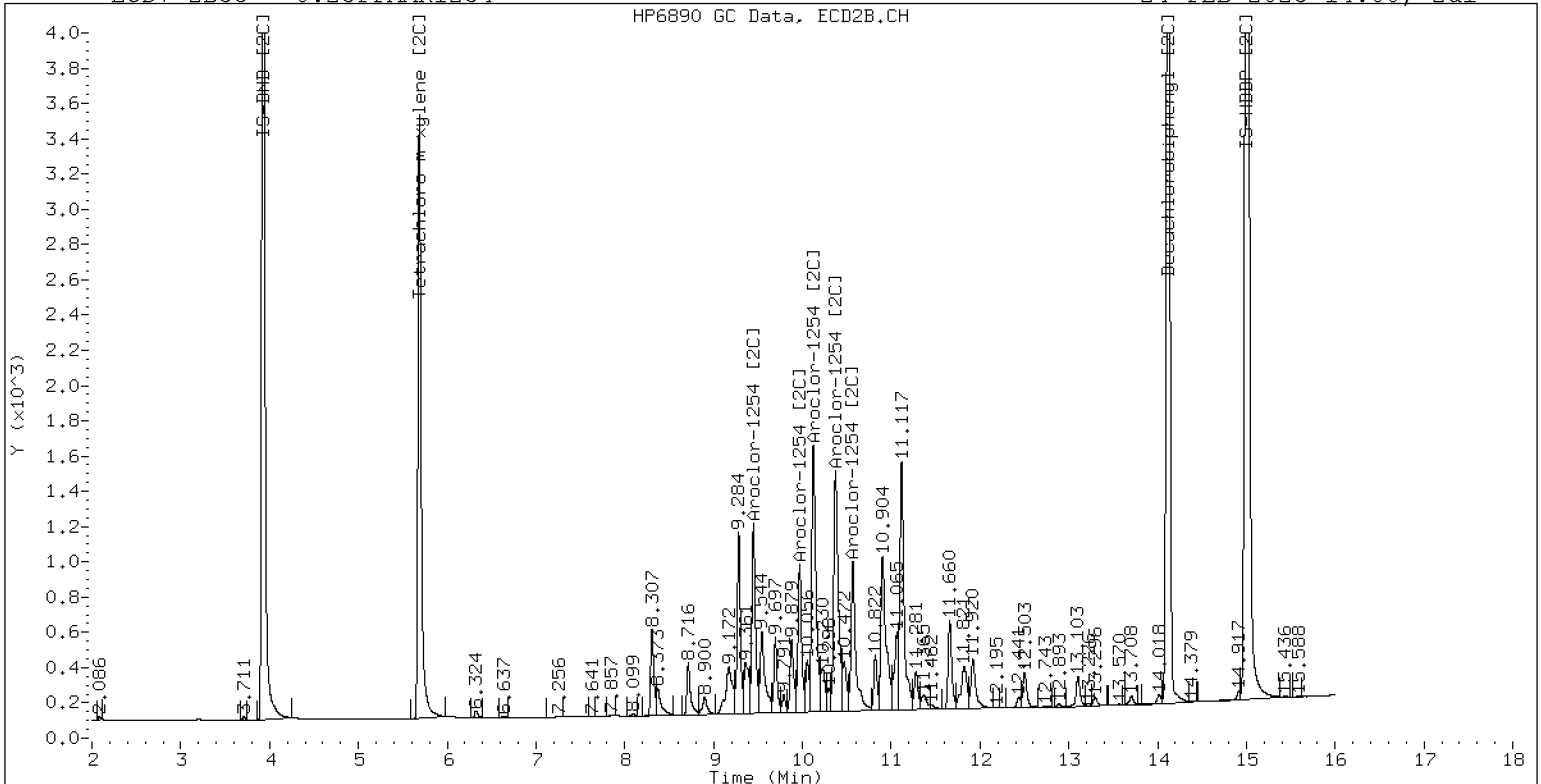
24-FEB-2023 14:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1254

24-FEB-2023 14:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242311ECD7.D
Data file 2: /230224.b/230224.b/02242311ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR2162
Client ID:
Injection Date: 24-FEB-2023 14:21
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.001	362236	5.686	0.000	177349	38.4	39.2	2.1	Tetrachloro-m-xylene
13.894	0.001	523254	14.119	-0.000	321034	36.0	39.2	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632433	-6.1
Hexabromobiphenyl	1429847	1474039	3.1

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	308453	-2.2
Hexabromobiphenyl	513946	538177	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	4.731	0.000	14160	250.0	1	4.956	0.000	7300	250.0
Aroclor-1221	2	6.132	0.000	25324	250.0	2	6.296	0.000	13816	250.0
Aroclor-1221	3	6.382	0.000	58795	250.0	3	6.622	0.000	22491	250.0
Total CollAve (3 peaks):				250.0		Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Aroclor-1262	1	10.829	0.000	113046	250.0	1	11.200	0.000	114880	250.0
Aroclor-1262	2	12.244	0.000	183948	250.0	2	11.652	0.000	97844	250.0
Aroclor-1262	3	12.319	0.000	197749	250.0	3	12.434	0.000	111015	250.0
Aroclor-1262	4	12.987	0.000	180727	250.0	4	12.502	0.000	173913	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 3105316 Coll Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1573107 Col2 Total PCB = 0.4 ppm*

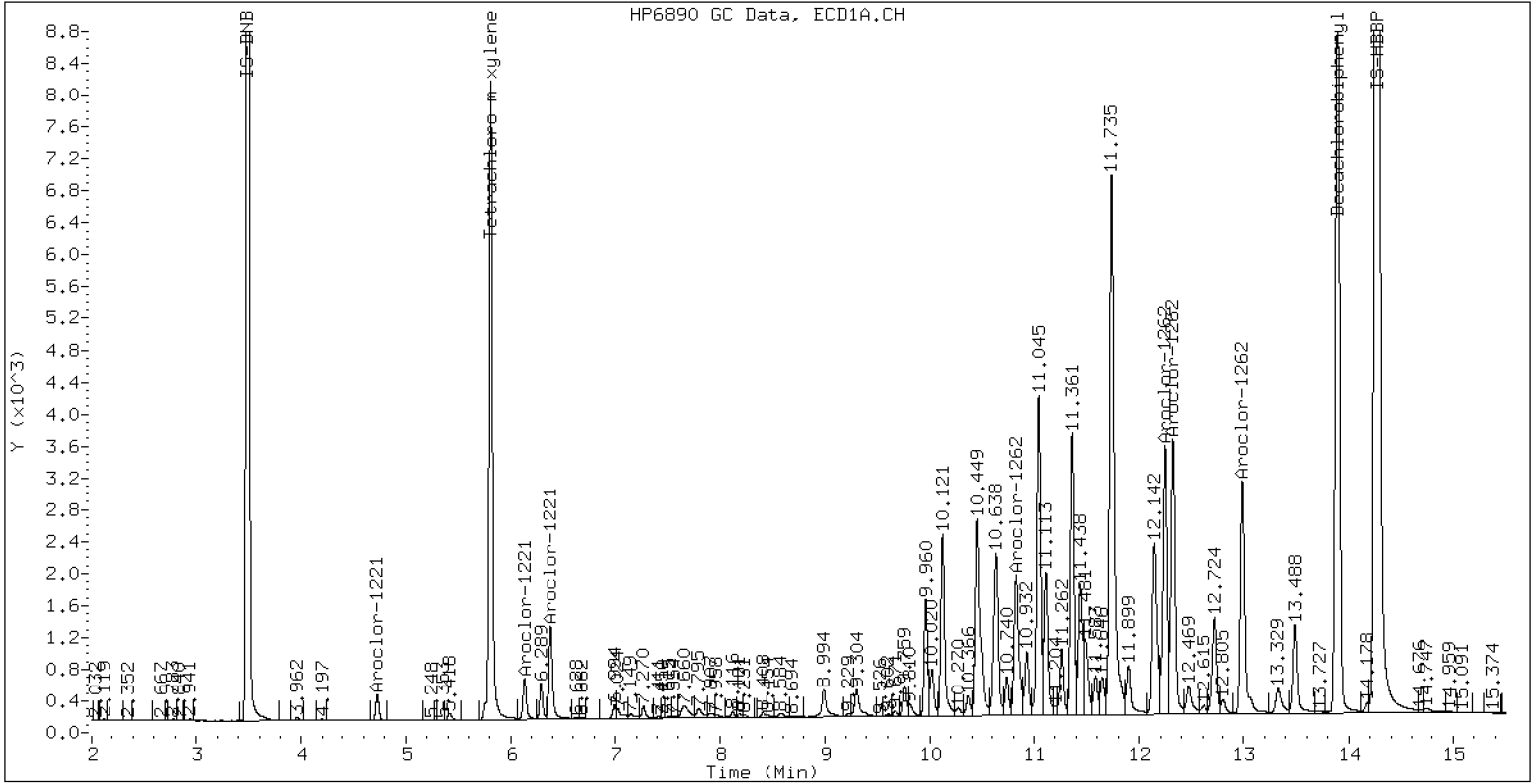
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR2162

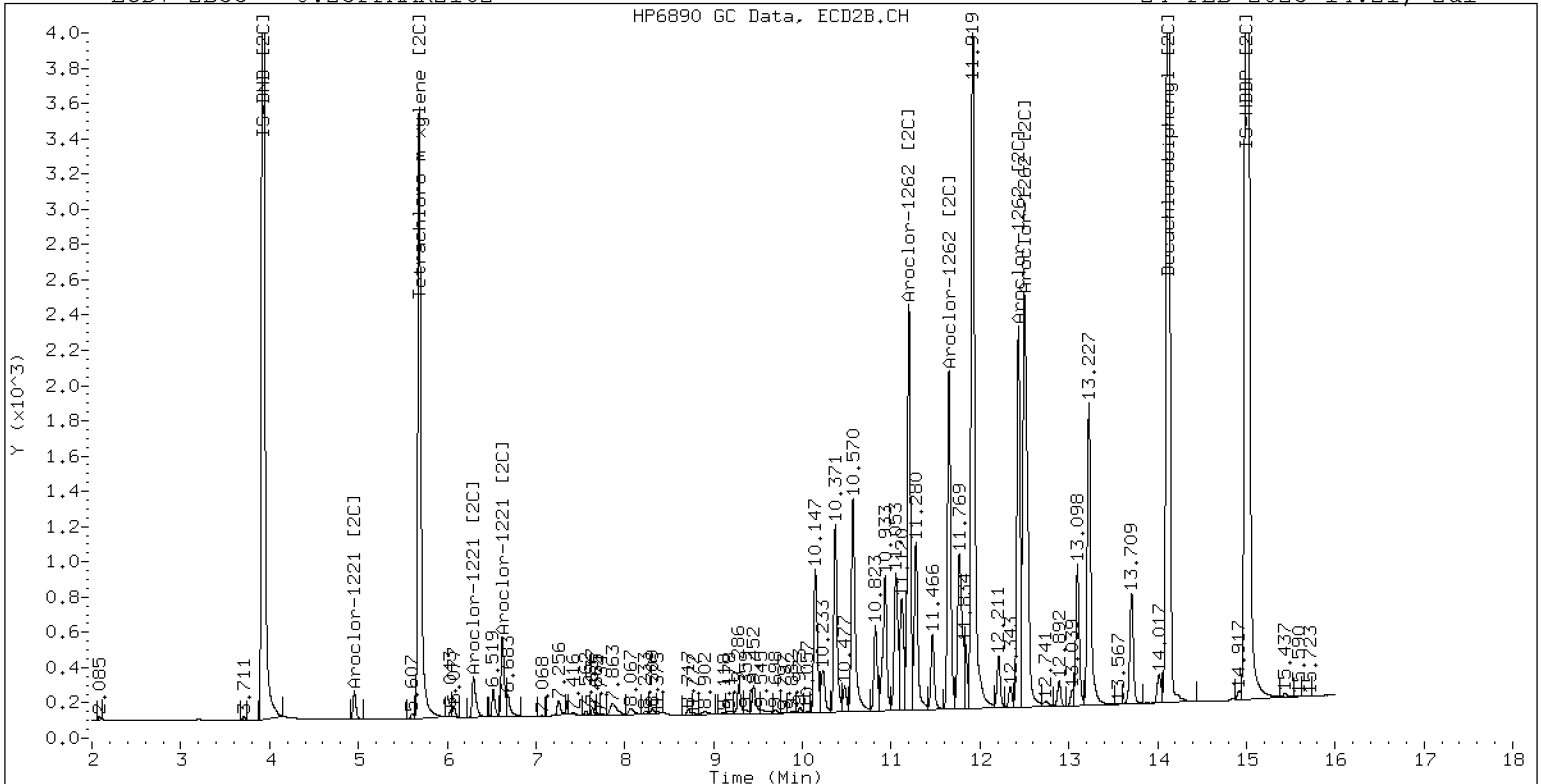
24-FEB-2023 14:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR2162

24-FEB-2023 14:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242312ECD7.D
Data file 2: /230224.b/230224.b/02242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR3268
Client ID:
Injection Date: 24-FEB-2023 14:42
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.806	0.000	366416	5.685	0.000	179450	38.0	38.9	2.4	Tetrachloro-m-xylene
13.893	0.000	778191	14.119	0.000	477889	53.0	57.5	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645602	-4.2
Hexabromobiphenyl	1429847	1492154	4.4

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314042	-0.4
Hexabromobiphenyl	513946	545458	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.730	0.000	8647	250.0	1	4.956	0.000	4017	250.0
Aroclor-1232	2	6.131	0.000	17148	250.0	2	7.254	0.000	19962	250.0
Aroclor-1232	3	7.656	0.000	77627	250.0	3	7.861	0.000	39913	250.0
Aroclor-1232	4	8.581	0.000	32993	250.0	4	8.715	0.000	11487	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.247	0.000	477974	250.0	1	12.432	0.000	274595	250.0
Aroclor-1268	2	12.317	0.000	473326	250.0	2	12.500	0.000	295194	250.0
Aroclor-1268	3	12.699	0.000	405011	250.0	3	12.892	0.000	252048	250.0
Aroclor-1268	4	13.490	0.000	1333528	250.0	4	13.709	0.000	805579	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 3998414 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 2300029 Col2 Total PCB = 0.6 ppm*

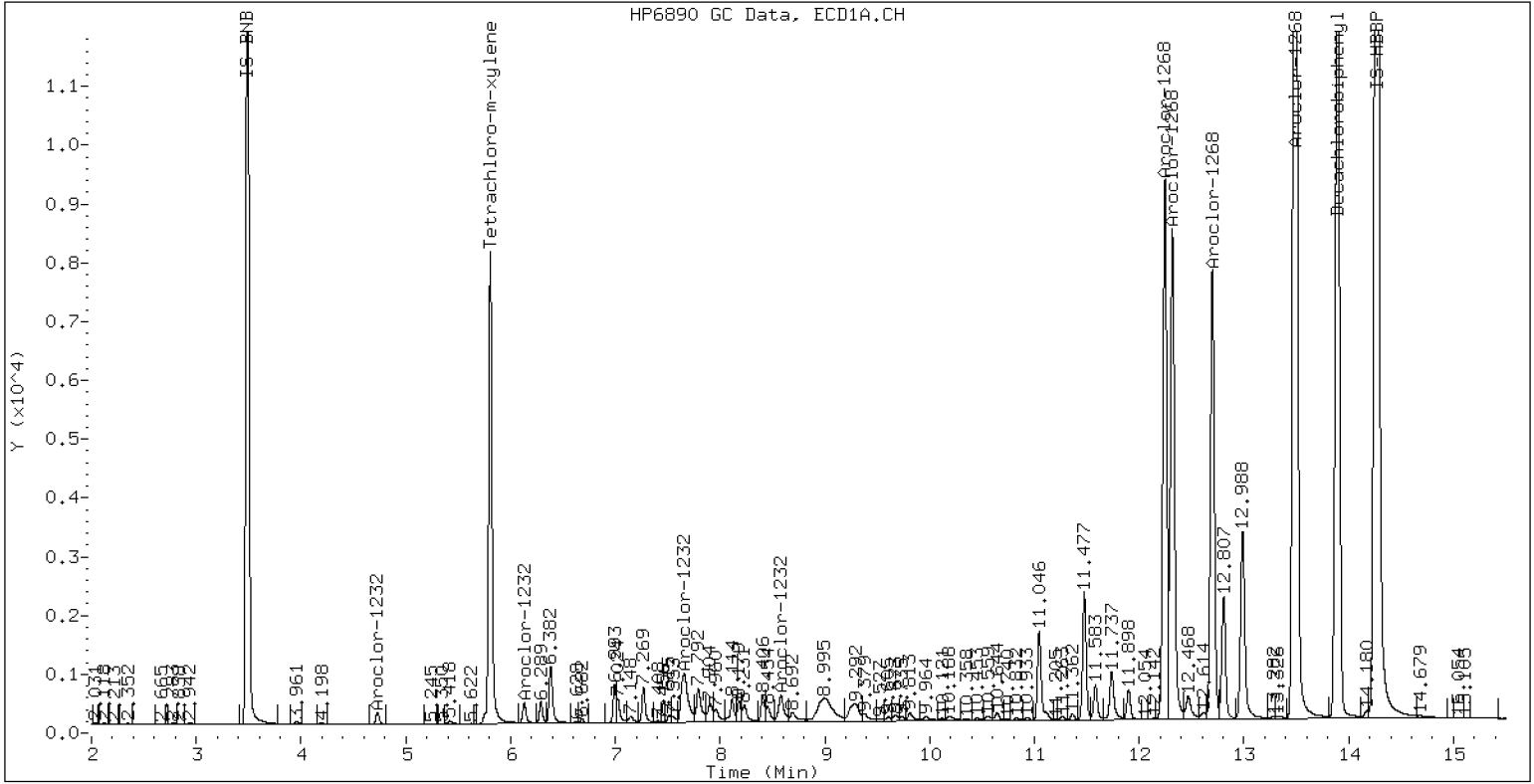
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR3268

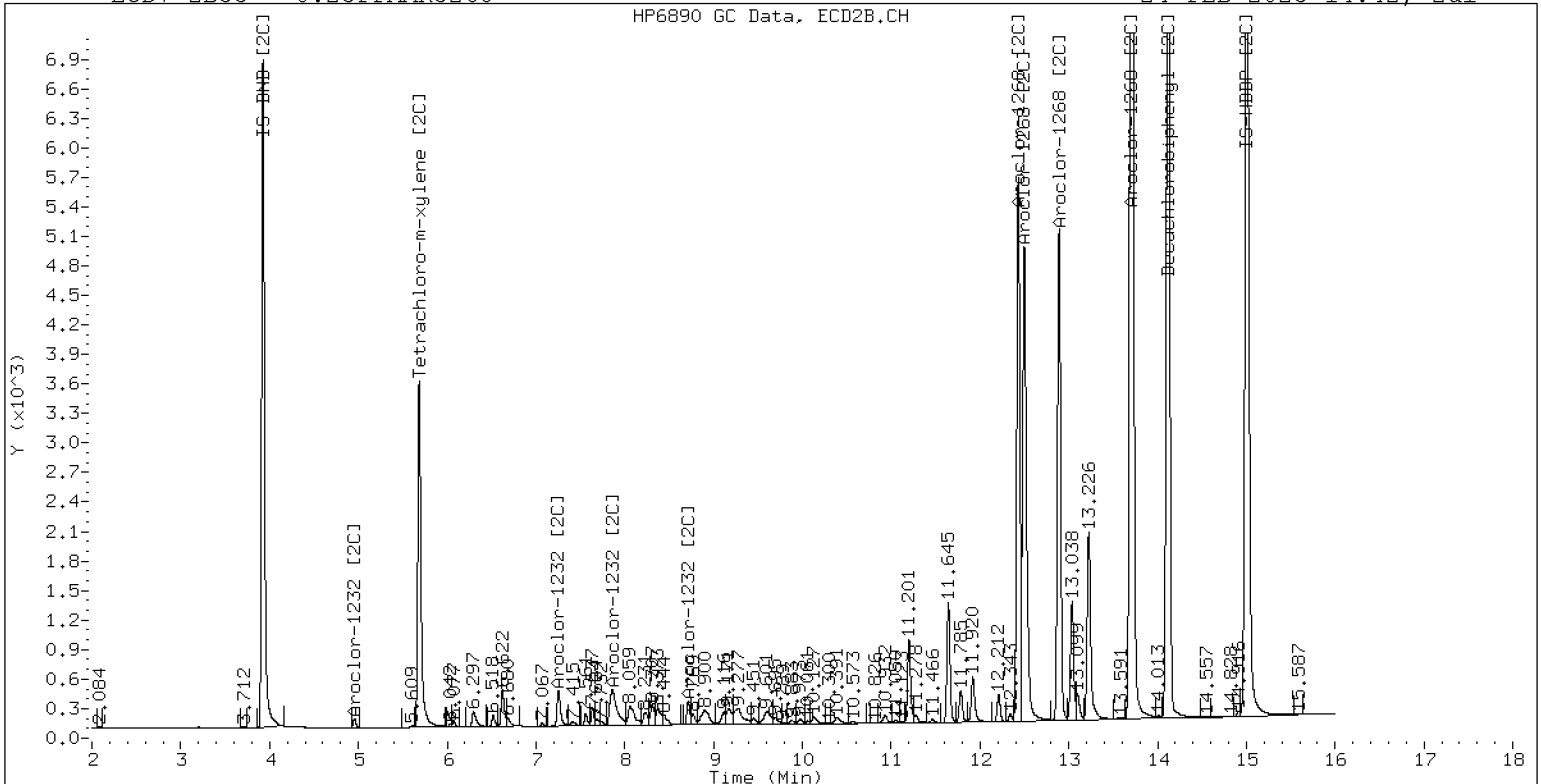
24-FEB-2023 14:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR3268

24-FEB-2023 14:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242313ECD7.D
Data file 2: /230224.b/230224.b/02242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 24-FEB-2023 15:03
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.001	337070	5.686	0.001	165848	34.9	35.8	2.3	Tetrachloro-m-xylene
13.895	0.002	515407	14.119	-0.000	316730	34.3	37.3	8.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645975	-4.1
Hexabromobiphenyl	1429847	1524245	6.6

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316115	0.3
Hexabromobiphenyl	513946	556950	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.002	59491	242.5	1	7.254	-0.002	44576	240.9
Aroclor-1016	2	7.655	0.001	181090	242.1	2	7.857	0.002	95386	254.2
Aroclor-1016	3	7.790	0.000	88470	242.3	3	8.056	0.002	42160	248.8
Aroclor-1016	4	8.404	-0.001	57980	245.6	4	8.307	0.000	32197	242.1
Total CollAve (4 peaks):				243.1		Total Col2Ave (4 peaks):				246.5 RPD = 1
Corrected Ave (3 peaks):				242.3		Corrected Ave (3 peaks):				243.9 RPD = 1
Aroclor-1221	1	4.731	0.000	464	8.0	1	---			0.0
Aroclor-1221	2	6.130	-0.002	9233	89.2	2	6.300	0.004	5379	95.0
Aroclor-1221	3	6.382	-0.001	42570	177.2	3	6.623	0.001	20952	227.2
Total CollAve (3 peaks):				91.5		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.731	0.001	464	13.4	1	---			0.0
Aroclor-1232	2	6.130	-0.001	9233	134.5	2	7.254	-0.000	44576	554.6
Aroclor-1232	3	7.655	-0.001	181090	582.9	3	7.857	-0.003	95386	593.5
Aroclor-1232	4	8.580	-0.001	79916	605.2	4	8.713	-0.002	29795	644.2
Total CollAve (4 peaks):				334.0		Total Col2Ave (3 peaks):				597.4 RPD = 57*
Corrected Ave (3 peaks):				243.6		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.269	-0.002	59491	297.2	1	7.254	-0.002	44576	303.5
Aroclor-1242	2	7.655	-0.001	181090	297.9	2	7.857	-0.000	95386	309.0
Aroclor-1242	3	8.404	-0.001	57980	306.5	3	9.115	-0.052	18754	195.2
Aroclor-1242	4	8.580	0.000	79916	285.8	4	9.697	0.100	1355	11.6
Total CollAve (4 peaks):				296.8		Total Col2Ave (4 peaks):				204.8 RPD = 37
Corrected Ave (3 peaks):				293.6		Corrected Ave (3 peaks):				170.1 RPD = 53*
Aroclor-1248	1	8.404	-0.001	57980	184.0	1	8.307	-0.001	32197	213.3
Aroclor-1248	2	8.580	-0.001	79916	199.5	2	8.713	-0.001	29795	190.9
Aroclor-1248	3	8.993	-0.006	71805	95.0	3	9.115	-0.050	18754	104.4
Aroclor-1248	4	9.300	0.006	47348	123.1	4	---			0.0
Total CollAve (4 peaks):				150.4		Total Col2Ave (3 peaks):				169.6 RPD = 12
Corrected Ave (3 peaks):				134.0		Corrected Ave: < 3 Peaks				
Aroclor-1254	1	9.300	0.002	47348	73.0	1	9.451	0.001	22438	93.4
Aroclor-1254	2	---			0.0	2	9.972	0.001	2694	13.9
Aroclor-1254	3	9.670	0.002	5461	13.1	3	10.147	0.024	52914	126.5
Aroclor-1254	4	9.807	-0.000	18944	23.4	4	10.370	-0.003	70430	172.8
Aroclor-1254	5	10.121	-0.056	154170	303.3	5	10.568	-0.000	98525	396.9
Total CollAve (4 peaks):				103.2		Total Col2Ave (5 peaks):				160.7 RPD = 44*
Corrected Ave (3 peaks):				36.5		Corrected Ave (4 peaks):				101.7 RPD = 94*
Aroclor-1260	1	11.044	0.000	149195	272.1	1	11.653	0.000	82210	251.0
Aroclor-1260	2	11.361	-0.000	153832	268.5	2	11.919	0.001	222226	265.9
Aroclor-1260	3	11.736	0.002	396660	261.0	3	12.435	-0.000	59148	266.7
Aroclor-1260	4	12.140	0.001	190448	248.9	4	12.504	0.002	147180	261.2
Aroclor-1260	5	12.244	-0.000	91385	277.5	NS	---			----
Total CollAve (5 peaks):				265.6		Total Col2Ave (4 peaks):				261.2 RPD = 2
Corrected Ave (4 peaks):				262.6		Corrected Ave (3 peaks):				259.4 RPD = 1
Aroclor-1262	1	10.827	-0.002	220238	471.0	1	11.199	-0.001	84479	177.6
Aroclor-1262	2	12.244	0.000	91385	120.1	2	11.653	0.002	82210	203.0
Aroclor-1262	3	12.320	0.001	113066	138.2	3	12.435	0.002	59148	128.7
Aroclor-1262	4	12.988	0.001	102156	136.7	4	12.504	0.002	147180	204.4
Total CollAve (4 peaks):				216.5		Total Col2Ave (4 peaks):				178.4 RPD = 19
Corrected Ave (3 peaks):				131.7		Corrected Ave (3 peaks):				169.8 RPD = 25
Aroclor-1268	1	12.244	-0.003	91385	46.8	1	12.435	0.003	59148	52.7
Aroclor-1268	2	12.320	0.003	113066	58.5	2	12.504	0.004	147180	122.1
Aroclor-1268	3	12.726	0.027	46633	28.2	3	12.893	0.001	2874	2.8
Aroclor-1268	4	13.489	-0.000	25567	4.7	4	13.709	-0.000	13041	4.0
Total CollAve (4 peaks):				34.5		Total Col2Ave (4 peaks):				45.4 RPD = 27
Corrected Ave (3 peaks):				26.6		Corrected Ave (3 peaks):				19.8 RPD = 29

Total PCB Area Col1 (5.906 - 13.793) = 3743076 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1897008 Col2 Total PCB = 0.5 ppm*

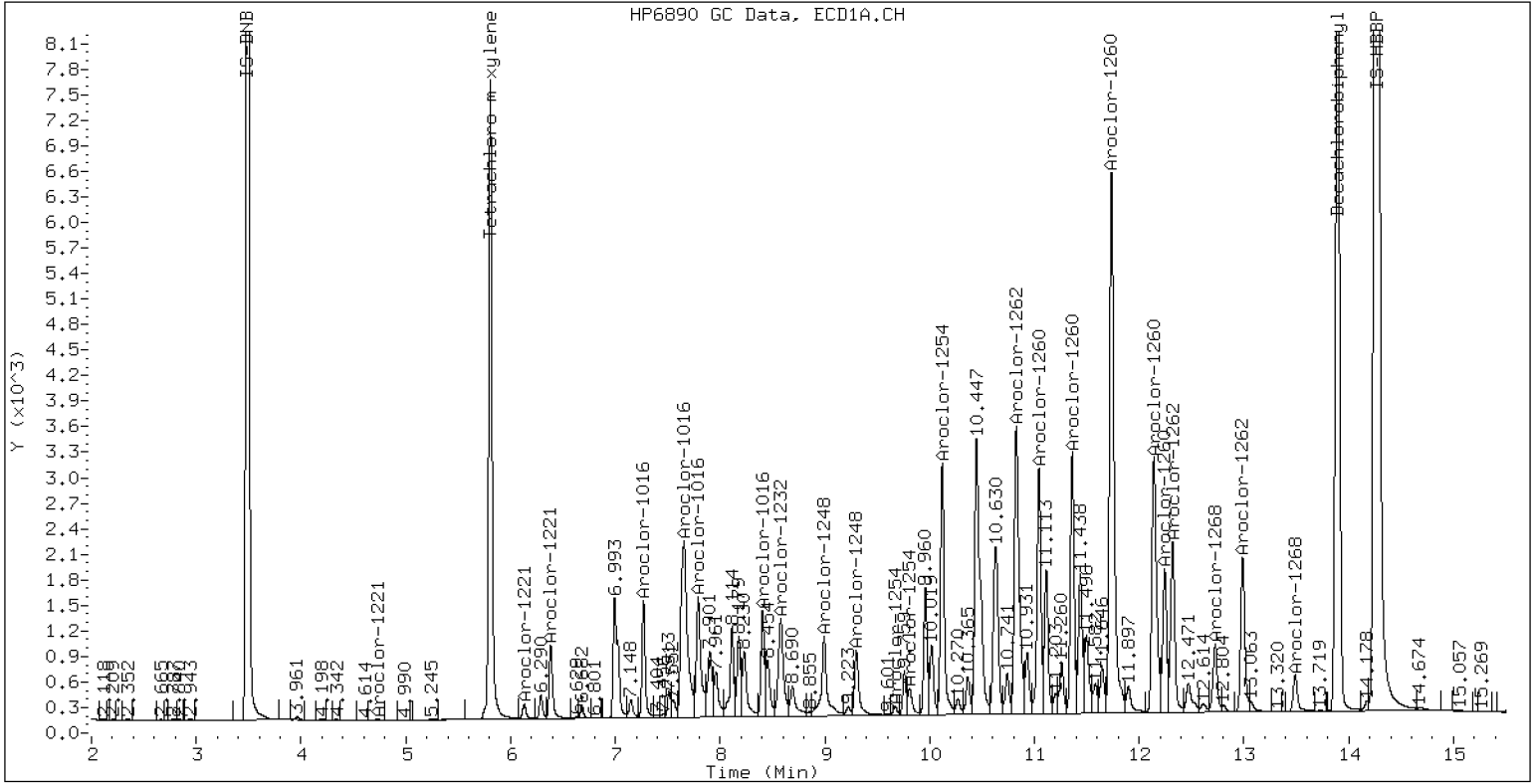
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV

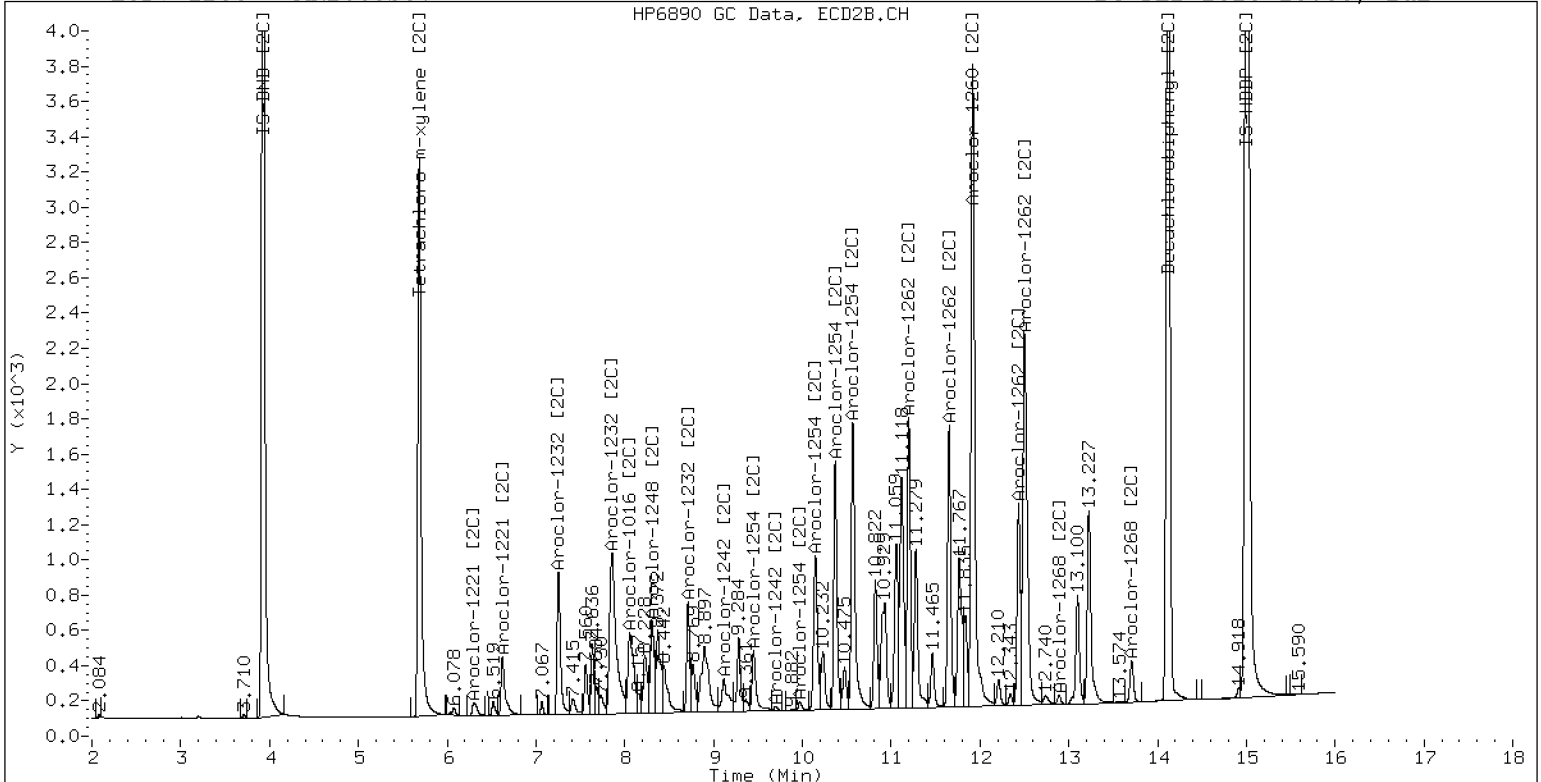
24-FEB-2023 15:03, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV

24-FEB-2023 15:03, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242314ECD7.D
Data file 2: /230224.b/230224.b/02242314ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 24-FEB-2023 15:24
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.002	354283	5.686	0.001	172455	33.6	34.5	2.6	Tetrachloro-m-xylene
13.895	0.002	567088	14.120	0.001	347430	37.0	40.3	8.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	705650	4.7
Hexabromobiphenyl	1429847	1555683	8.8
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	340433	8.0
Hexabromobiphenyl	513946	565609	10.1

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	39927	149.0	1	7.256	0.000	32417	162.7
Aroclor-1016	2	7.653	-0.001	132339	162.0	2	7.856	0.001	69235	171.3
Aroclor-1016	3	7.791	0.001	59310	148.7	3	8.055	0.000	29473	161.5
Aroclor-1016	4	8.405	0.000	42537	165.0	4	8.307	-0.000	22792	159.2
Total CollAve (4 peaks):				156.2		Total Col2Ave (4 peaks):				163.7 RPD = 5
Corrected Ave (3 peaks):				153.2		Corrected Ave (3 peaks):				161.1 RPD = 5
Aroclor-1221	1	4.733	0.002	319	5.0	1	---			0.0
Aroclor-1221	2	6.131	-0.001	6534	57.8	2	6.319	0.022	4365	71.6
Aroclor-1221	3	6.384	0.001	29664	113.0	3	6.624	0.002	14916	150.2
Total CollAve (3 peaks):				58.6		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.733	0.003	319	8.4	1	---			0.0
Aroclor-1232	2	6.131	0.000	6534	87.2	2	7.256	0.002	32417	374.5
Aroclor-1232	3	7.653	-0.003	132339	389.9	3	7.856	-0.004	69235	400.0
Aroclor-1232	4	8.579	-0.002	69445	481.4	4	8.714	-0.001	22167	445.0
Total CollAve (4 peaks):				241.7		Total Col2Ave (3 peaks):				406.5 RPD = 51*
Corrected Ave (3 peaks):				161.8		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.270	-0.001	39927	182.6	1	7.256	0.000	32417	205.0
Aroclor-1242	2	7.653	-0.003	132339	199.3	2	7.856	-0.002	69235	208.2
Aroclor-1242	3	8.405	-0.000	42537	205.9	3	9.164	-0.004	23068	223.0
Aroclor-1242	4	8.579	-0.000	69445	227.4	4	9.587	-0.010	31021	246.1
Total CollAve (4 peaks):				203.8		Total Col2Ave (4 peaks):				220.6 RPD = 8
Corrected Ave (3 peaks):				195.9		Corrected Ave (3 peaks):				212.1 RPD = 8
Aroclor-1248	1	8.405	0.000	42537	123.5	1	8.307	-0.001	22792	140.2
Aroclor-1248	2	8.579	-0.001	69445	158.7	2	8.714	-0.000	22167	131.9
Aroclor-1248	3	9.001	0.003	91942	111.4	3	9.164	-0.002	23068	119.3
Aroclor-1248	4	9.294	-0.000	38711	92.1	4	9.587	-0.003	31021	133.6
Total CollAve (4 peaks):				121.4		Total Col2Ave (4 peaks):				131.2 RPD = 8
Corrected Ave (3 peaks):				109.0		Corrected Ave (3 peaks):				128.3 RPD = 16
Aroclor-1254	1	9.294	-0.005	38711	54.6	1	9.450	0.001	13131	50.7
Aroclor-1254	2	9.377	-0.000	17371	54.5	2	9.970	0.000	8340	40.1
Aroclor-1254	3	9.668	-0.000	16373	35.9	3	10.123	-0.000	16364	36.3
Aroclor-1254	4	9.807	-0.001	27490	31.0	4	10.382	0.009	16062	36.6
Aroclor-1254	5	10.175	-0.001	20494	36.9	5	10.572	0.004	4818	18.0
Total CollAve (5 peaks):				42.6		Total Col2Ave (5 peaks):				36.4 RPD = 16
Corrected Ave (4 peaks):				39.6		Corrected Ave (4 peaks):				32.8 RPD = 19
Aroclor-1260	1	11.048	0.003	794	1.4	1	11.665	0.012	1652	5.0
Aroclor-1260	2	11.366	0.005	814	1.4	2	11.926	0.008	842	1.0
Aroclor-1260	3	11.739	0.006	1848	1.2	3	12.438	0.002	483	2.1
Aroclor-1260	4	12.145	0.006	1372	1.8	4	12.506	0.004	790	1.4
Aroclor-1260	5	---			0.0	NS	---			---
Total CollAve (4 peaks):				1.4		Total Col2Ave (4 peaks):				2.4 RPD = 49*
Corrected Ave (3 peaks):				1.3		Corrected Ave (3 peaks):				1.5 RPD = 12
Aroclor-1262	1	10.832	0.003	13157	27.6	1	11.121	-0.079	6113	12.7
Aroclor-1262	2	12.145	-0.098	1372	1.8	2	11.665	0.013	1652	4.0
Aroclor-1262	3	---			0.0	3	12.438	0.004	483	1.0
Aroclor-1262	4	13.038	0.051	842	1.1	4	12.506	0.004	790	1.1
Total CollAve (3 peaks):				10.1		Total Col2Ave (4 peaks):				4.7 RPD = 73*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):				2.0
Aroclor-1268	1	---			0.0	1	12.438	0.006	483	0.4
Aroclor-1268	2	---			0.0	2	12.506	0.006	790	0.6
Aroclor-1268	3	12.617	-0.082	5851	3.5	3	12.899	0.007	491	0.5
Aroclor-1268	4	13.500	0.010	1745	0.3	4	13.714	0.005	379	0.1
CollAve: <3 Quant Peaks						Col2Ave:				0.4

Total PCB Area Col1 (5.906 - 13.793) = 1149784 Col1 Total PCB = 0.1 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 572210 Col2 Total PCB = 0.1 ppm*

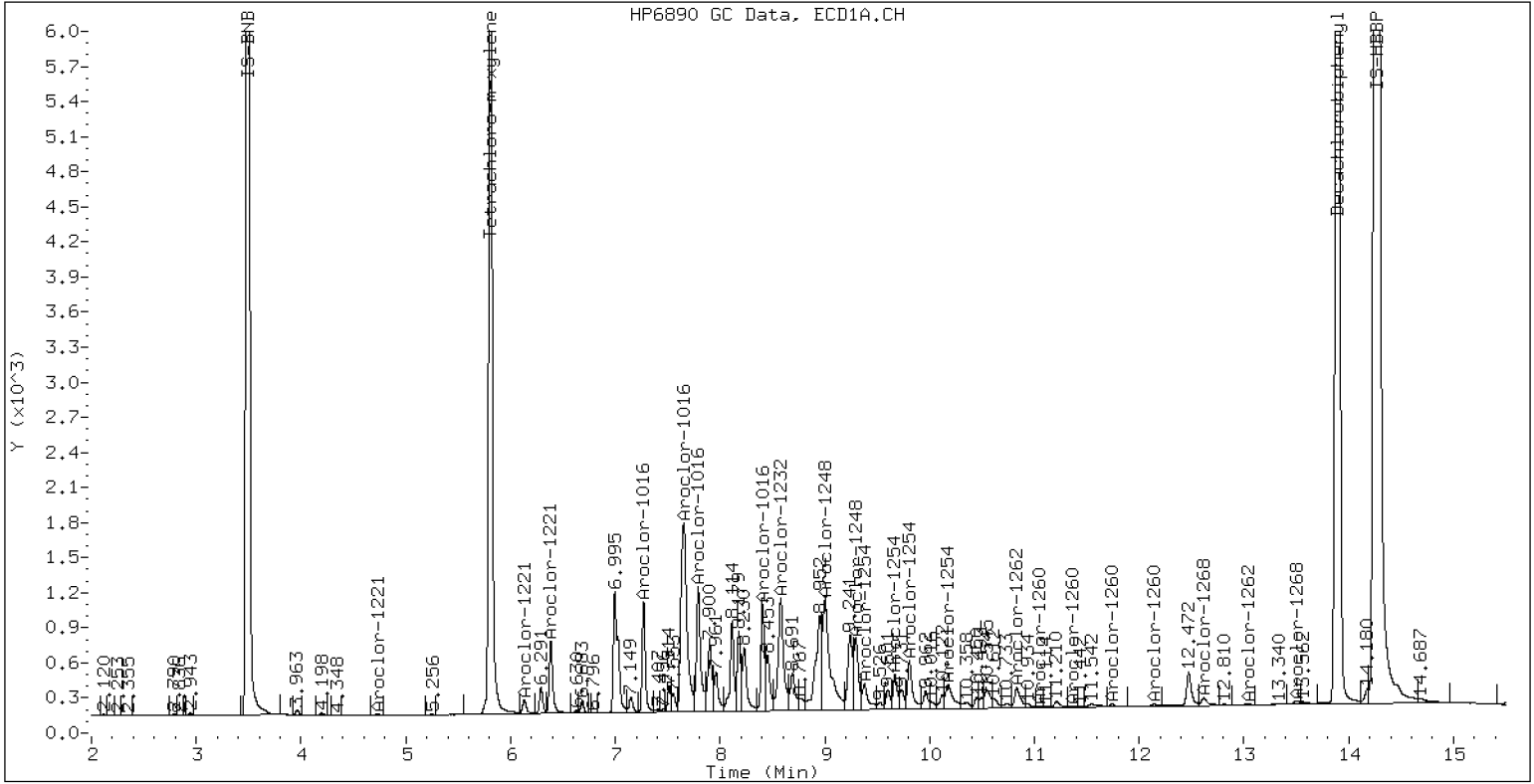
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV

24-FEB-2023 15:24, 2ul



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242315ECD7.D
Data file 2: /230224.b/230224.b/02242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 24-FEB-2023 15:45
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col				
5.809	0.002	336655	5.687	0.002	168719	34.9	36.4	4.2	Tetrachloro-m-xylene
13.894	0.001	499162	14.118	-0.001	308317	33.1	36.3	9.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	646554	-4.0
Hexabromobiphenyl	1429847	1529451	7.0

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316066	0.3
Hexabromobiphenyl	513946	557213	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	19773	80.5	1	7.254	-0.002	16926	91.5
Aroclor-1016	2	7.653	-0.001	88099	117.7	2	7.857	0.001	45733	121.9
Aroclor-1016	3	7.794	0.003	35915	98.3	3	8.060	0.005	8078	47.7
Aroclor-1016	4	8.406	0.001	77842	329.5	4	8.307	0.000	37348	280.9
Total CollAve (4 peaks):				156.5		Total Col2Ave (4 peaks):				135.5 RPD = 14
Corrected Ave (3 peaks):				98.8		Corrected Ave (3 peaks):				87.0 RPD = 13
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	0.001	680	6.6	2	6.326	0.030	1966	34.7
Aroclor-1221	3	6.384	0.002	3390	14.1	3	6.631	0.009	1571	17.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	0.002	680	9.9	2	7.254	-0.000	16926	210.6
Aroclor-1232	3	7.653	-0.002	88099	283.3	3	7.857	-0.004	45733	284.6
Aroclor-1232	4	8.581	-0.000	99572	753.4	4	8.714	-0.001	38224	826.6
Total CollAve (3 peaks):				348.9		Total Col2Ave (3 peaks):				440.6 RPD = 23
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	19773	98.7	1	7.254	-0.002	16926	115.3
Aroclor-1242	2	7.653	-0.003	88099	144.8	2	7.857	-0.001	45733	148.2
Aroclor-1242	3	8.406	0.000	77842	411.2	3	9.165	-0.002	45021	468.7
Aroclor-1242	4	8.581	0.001	99572	355.8	4	9.590	-0.008	53613	458.1
Total CollAve (4 peaks):				252.6		Total Col2Ave (4 peaks):				297.6 RPD = 16
Corrected Ave (3 peaks):				199.8		Corrected Ave (3 peaks):				240.5 RPD = 19
Aroclor-1248	1	8.406	0.000	77842	246.8	1	8.307	-0.001	37348	247.5
Aroclor-1248	2	8.581	0.000	99572	248.3	2	8.714	-0.000	38224	245.0
Aroclor-1248	3	8.998	-0.000	186857	247.0	3	9.165	-0.000	45021	250.7
Aroclor-1248	4	9.294	-0.000	98398	255.5	4	9.590	-0.001	53613	248.7
Total CollAve (4 peaks):				249.4		Total Col2Ave (4 peaks):				248.0 RPD = 1
Corrected Ave (3 peaks):				247.4		Corrected Ave (3 peaks):				247.0 RPD = 0
Aroclor-1254	1	9.294	-0.004	98398	151.6	1	9.450	0.001	21823	90.8
Aroclor-1254	2	9.377	-0.001	49616	169.9	2	9.971	0.001	19450	100.6
Aroclor-1254	3	9.669	0.001	40230	96.4	3	10.124	0.000	36574	87.5
Aroclor-1254	4	9.808	0.001	68500	84.4	4	10.389	0.016	35100	86.1
Aroclor-1254	5	10.183	0.007	47365	93.1	5	10.573	0.004	5676	22.9
Total CollAve (5 peaks):				119.1		Total Col2Ave (5 peaks):				77.6 RPD = 42*
Corrected Ave (4 peaks):				106.4		Corrected Ave (4 peaks):				71.8 RPD = 39
Aroclor-1260	1	11.047	0.003	1670	3.0	1	11.662	0.009	2055	6.3
Aroclor-1260	2	11.362	0.001	1111	1.9	2	11.924	0.007	1466	1.8
Aroclor-1260	3	11.739	0.005	2107	1.4	3	12.434	-0.002	573	2.6
Aroclor-1260	4	12.144	0.005	1379	1.8	4	12.505	0.003	1003	1.8
Aroclor-1260	5	12.251	0.006	698	2.1	NS	---			----
Total CollAve (5 peaks):				2.1		Total Col2Ave (4 peaks):				3.1 RPD = 41*
Corrected Ave (4 peaks):				1.8		Corrected Ave (3 peaks):				2.0 RPD = 12
Aroclor-1262	1	10.833	0.005	15355	32.7	1	11.122	-0.079	7225	15.2
Aroclor-1262	2	12.251	0.007	698	0.9	2	11.662	0.011	2055	5.1
Aroclor-1262	3	12.321	0.002	836	1.0	3	12.434	0.000	573	1.2
Aroclor-1262	4	12.991	0.004	1043	1.4	4	12.505	0.003	1003	1.4
Total CollAve (4 peaks):				9.0		Total Col2Ave (4 peaks):				5.7 RPD = 45*
Corrected Ave (3 peaks):				1.1		Corrected Ave (3 peaks):				2.6 RPD = 80*
Aroclor-1268	1	12.251	0.004	698	0.4	1	12.434	0.002	573	0.5
Aroclor-1268	2	12.321	0.004	836	0.4	2	12.505	0.005	1003	0.8
Aroclor-1268	3	12.700	0.001	2449	1.5	3	12.892	0.001	721	0.7
Aroclor-1268	4	13.493	0.003	7547	1.4	4	13.708	-0.001	2265	0.7
Total CollAve (4 peaks):				0.9		Total Col2Ave (4 peaks):				0.7 RPD = 29
Corrected Ave (3 peaks):				0.7		Corrected Ave (3 peaks):				0.6 RPD = 13

Total PCB Area Col1 (5.906 - 13.793) = 1574335 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 746330 Col2 Total PCB = 0.2 ppm*

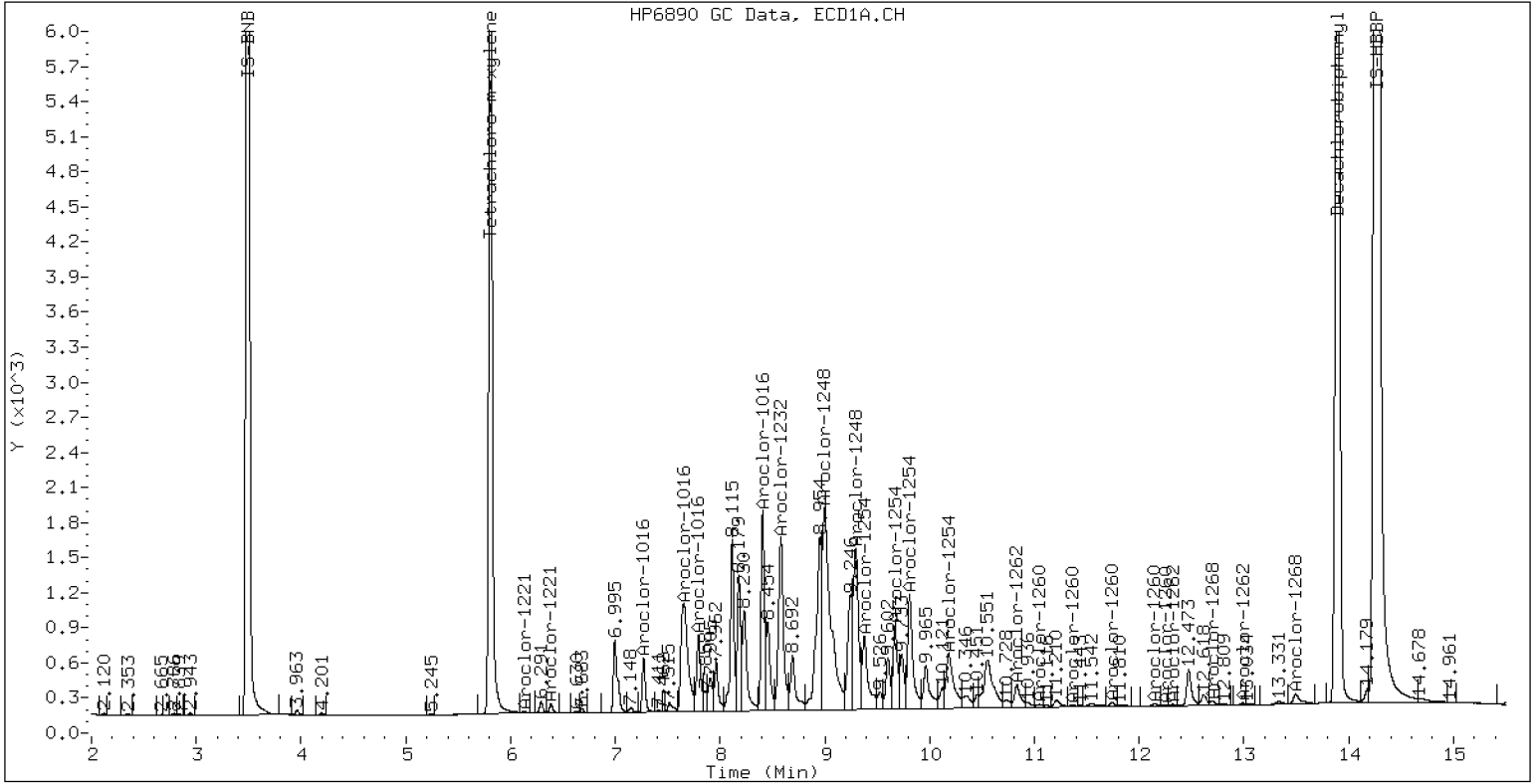
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV

24-FEB-2023 15:45, 2ul



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242316ECD7.D
Data file 2: /230224.b/230224.b/02242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 24-FEB-2023 16:06
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.806	-0.000	354312	5.686	0.001	174604	36.1	37.1	2.6	Tetrachloro-m-xylene
13.895	0.002	540961	14.119	-0.000	329134	34.6	37.9	9.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656887	-2.5
Hexabromobiphenyl	1429847	1585505	10.9

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	320936	1.8
Hexabromobiphenyl	513946	570006	10.9

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.270	0.000	565	2.3	1	7.255	-0.001	387	2.1	
Aroclor-1016	2	7.656	0.002	1875	2.5	2	7.854	-0.002	860	2.3	
Aroclor-1016	3	7.792	0.002	1106	3.0	3	8.098	0.043	578	3.4	
Aroclor-1016	4	8.405	0.000	29924	124.7	4	8.307	0.000	21985	162.9	
Total CollAve (4 peaks):				33.1	Total Col2Ave (4 peaks):				42.6	RPD = 25	
Corrected Ave (3 peaks):				2.6	Corrected Ave (3 peaks):				2.6	RPD = 0	
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	6.325	0.028	1947	33.9	
Aroclor-1221	3	---			0.0	3	6.637	0.015	368	3.9	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	7.255	0.001	387	4.7	
Aroclor-1232	3	7.656	0.000	1875	5.9	3	7.854	-0.007	860	5.3	
Aroclor-1232	4	8.583	0.002	12327	91.8	4	8.715	0.000	15013	319.7	
CollAve: <3 Quant Peaks					Col2Ave: 109.9						
Aroclor-1242	1	7.270	-0.000	565	2.8	1	7.255	-0.001	387	2.6	
Aroclor-1242	2	7.656	0.000	1875	3.0	2	7.854	-0.004	860	2.7	
Aroclor-1242	3	8.405	-0.000	29924	155.6	3	9.169	0.002	21933	224.9	
Aroclor-1242	4	8.583	0.003	12327	43.4	4	9.545	-0.053	34065	286.6	
Total CollAve (4 peaks):				51.2	Total Col2Ave (4 peaks):				129.2	RPD = 87*	
Corrected Ave (3 peaks):				16.4	Corrected Ave (3 peaks):				76.7	RPD = 130*	
Aroclor-1248	1	8.405	0.000	29924	93.4	1	8.307	-0.001	21985	143.5	
Aroclor-1248	2	8.583	0.002	12327	30.3	2	8.715	0.001	15013	94.8	
Aroclor-1248	3	8.992	-0.007	145580	189.4	3	9.169	0.004	21933	120.3	
Aroclor-1248	4	9.298	0.003	155450	397.3	4	9.545	-0.046	34065	155.6	
Total CollAve (4 peaks):				177.6	Total Col2Ave (4 peaks):				128.5	RPD = 32	
Corrected Ave (3 peaks):				104.3	Corrected Ave (3 peaks):				119.5	RPD = 14	
Aroclor-1254	1	9.298	-0.001	155450	235.7	1	9.450	0.001	58639	240.4	
Aroclor-1254	2	9.377	-0.001	69801	235.3	2	9.971	0.000	47008	239.5	
Aroclor-1254	3	9.668	-0.000	100839	237.8	3	10.124	0.000	100062	235.7	
Aroclor-1254	4	9.807	0.000	190544	231.1	4	10.373	0.000	99535	240.5	
Aroclor-1254	5	10.176	-0.000	122321	236.7	5	10.570	0.001	61549	244.2	
Total CollAve (5 peaks):				235.3	Total Col2Ave (5 peaks):				240.1	RPD = 2	
Corrected Ave (4 peaks):				234.7	Corrected Ave (4 peaks):				239.0	RPD = 2	
Aroclor-1260	1	11.043	-0.002	12288	21.5	1	11.661	0.008	29062	86.7	
Aroclor-1260	2	11.361	-0.001	13660	22.9	2	11.921	0.003	22238	26.0	
Aroclor-1260	3	11.736	0.002	37632	23.8	3	12.441	0.005	3555	15.7	
Aroclor-1260	4	12.141	0.002	27105	34.1	4	12.503	0.001	13126	22.8	
Aroclor-1260	5	12.320	0.076	2381	6.9	NS	---			---	
Total CollAve (5 peaks):				21.9	Total Col2Ave (4 peaks):				37.8	RPD = 53*	
Corrected Ave (4 peaks):				18.8	Corrected Ave (3 peaks):				21.5	RPD = 13	
Aroclor-1262	1	10.827	-0.002	220626	453.6	1	11.281	0.081	13562	27.9	
Aroclor-1262	2	12.320	0.076	2381	3.0	2	11.661	0.009	29062	70.1	
Aroclor-1262	3	---			0.0	3	12.441	0.007	3555	7.6	
Aroclor-1262	4	12.989	0.002	3225	4.1	4	12.503	0.001	13126	17.8	
Total CollAve (3 peaks):				153.6	Total Col2Ave (4 peaks):				30.8	RPD = 133*	
Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				17.7		
Aroclor-1268	1	12.320	0.074	2381	1.2	1	12.441	0.009	3555	3.1	
Aroclor-1268	2	---			0.0	2	12.503	0.003	13126	10.6	
Aroclor-1268	3	12.701	0.002	2939	1.7	3	12.892	0.000	772	0.7	
Aroclor-1268	4	13.493	0.003	9164	1.6	4	13.707	-0.002	2801	0.8	
Total CollAve (3 peaks):				1.5	Total Col2Ave (4 peaks):				3.8	RPD = 87*	
Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				1.6		

Total PCB Area Col1 (5.906 - 13.793) = 2118645 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1007601 Col2 Total PCB = 0.3 ppm*

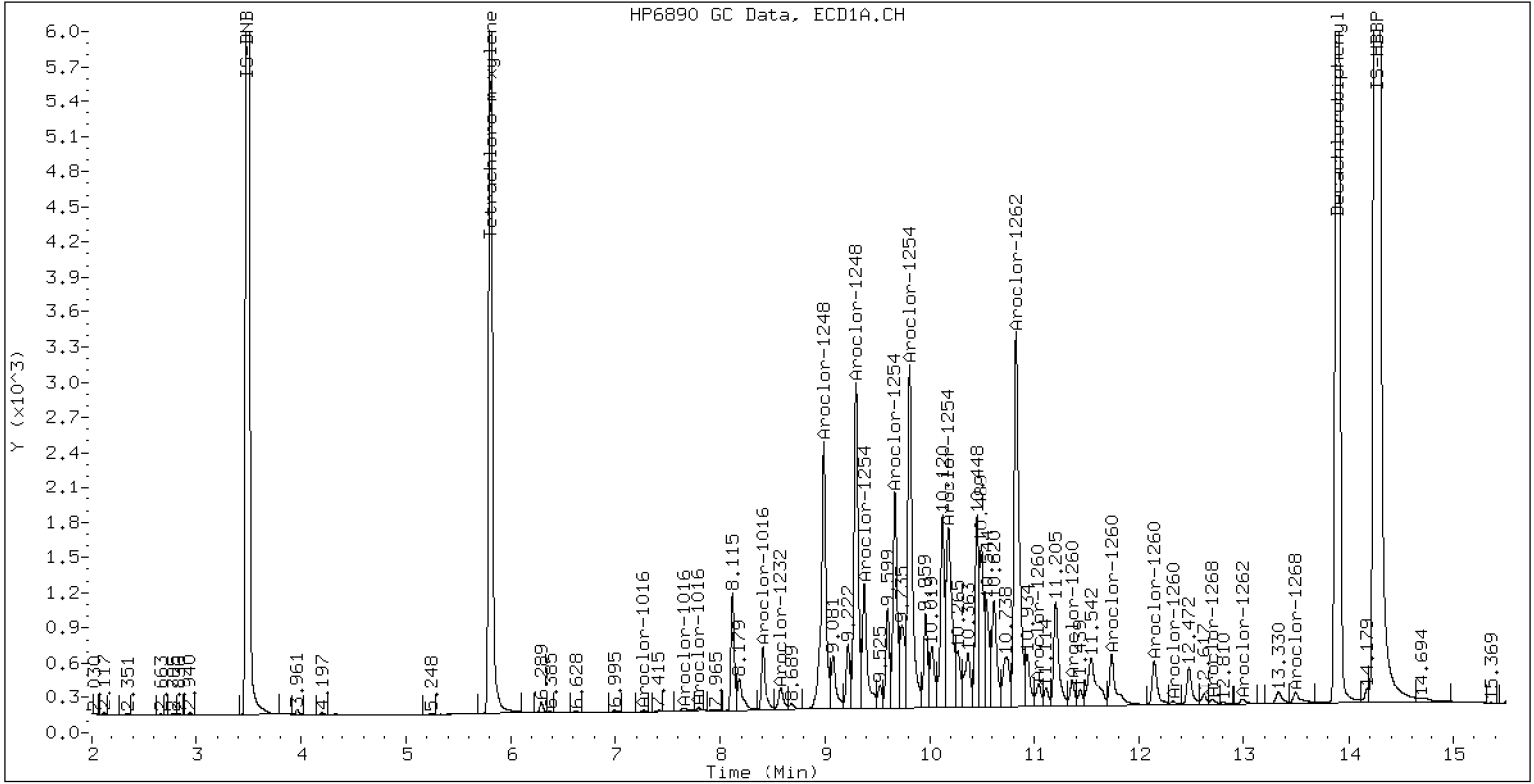
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV

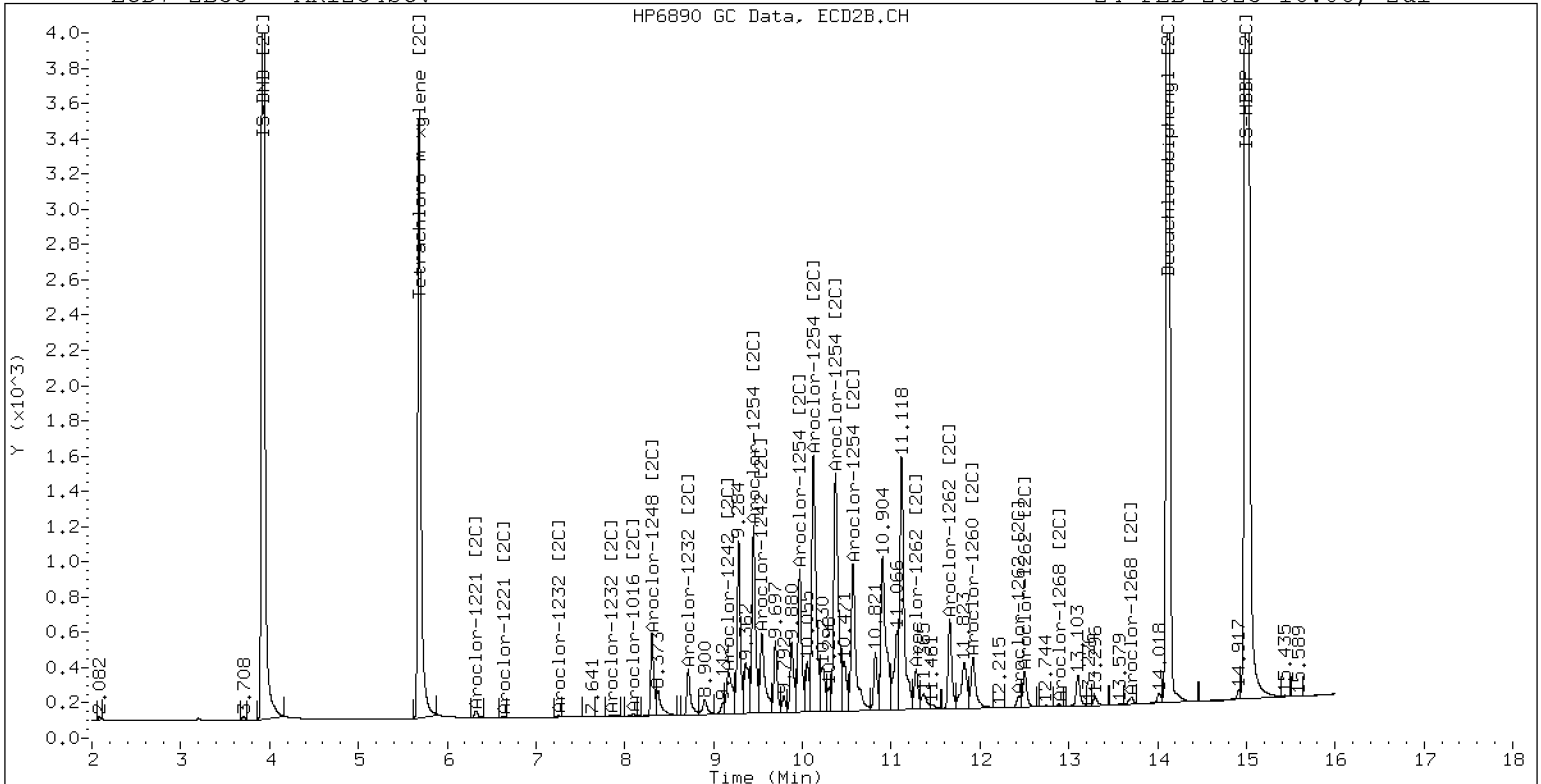
24-FEB-2023 16:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV

24-FEB-2023 16:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242317ECD7.D
Data file 2: /230224.b/230224.b/02242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 24-FEB-2023 16:27
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.000	356001	5.685	0.000	170882	36.0	36.6	1.7	Tetrachloro-m-xylene
13.895	0.002	533971	14.119	0.000	326235	34.4	37.9	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661953	-1.8
Hexabromobiphenyl	1429847	1574993	10.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317807	0.8
Hexabromobiphenyl	513946	565951	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.269	-0.001	7175	28.5	1	7.256	0.000	3727	20.0	
Aroclor-1016	2	7.659	0.005	12893	16.8	2	7.863	0.007	5834	15.5	
Aroclor-1016	3	7.794	0.004	6936	18.5	3	8.063	0.009	2963	17.4	
Aroclor-1016	4	8.408	0.003	3610	14.9	4	8.308	0.002	2045	15.3	
Total CollAve (4 peaks):				19.7	Total Col2Ave (4 peaks):				17.0	RPD = 14	
Corrected Ave (3 peaks):				16.8	Corrected Ave (3 peaks):				16.1	RPD = 4	
Aroclor-1221	1	4.730	-0.000	15803	266.6	1	4.955	-0.001	7909	262.9	
Aroclor-1221	2	6.131	-0.001	26946	254.1	2	6.296	-0.000	14303	251.2	
Aroclor-1221	3	6.382	-0.000	62477	253.8	3	6.622	0.000	23612	254.7	
Total CollAve (3 peaks):				258.2	Total Col2Ave (3 peaks):				256.3	RPD = 1	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.730	0.000	15803	445.6	1	4.955	-0.001	7909	486.4	
Aroclor-1232	2	6.131	0.000	26946	383.1	2	7.256	0.002	3727	46.1	
Aroclor-1232	3	7.659	0.003	12893	40.5	3	7.863	0.002	5834	36.1	
Aroclor-1232	4	8.583	0.003	2684	19.8	4	8.716	0.002	1189	25.6	
Total CollAve (4 peaks):				222.3	Total Col2Ave (4 peaks):				148.5	RPD = 40	
Corrected Ave (3 peaks):				147.8	Corrected Ave (3 peaks):				35.9	RPD = 122*	
Aroclor-1242	1	7.269	-0.001	7175	35.0	1	7.256	0.000	3727	25.2	
Aroclor-1242	2	7.659	0.003	12893	20.7	2	7.863	0.005	5834	18.8	
Aroclor-1242	3	8.408	0.002	3610	18.6	3	9.175	0.008	1082	11.2	
Aroclor-1242	4	8.583	0.004	2684	9.4	4	9.543	-0.054	1390	11.8	
Total CollAve (4 peaks):				20.9	Total Col2Ave (4 peaks):				16.8	RPD = 22	
Corrected Ave (3 peaks):				16.2	Corrected Ave (3 peaks):				13.9	RPD = 15	
Aroclor-1248	1	8.408	0.002	3610	11.2	1	8.308	0.001	2045	13.5	
Aroclor-1248	2	8.583	0.003	2684	6.5	2	8.716	0.002	1189	7.6	
Aroclor-1248	3	8.994	-0.005	24440	31.6	3	9.175	0.009	1082	6.0	
Aroclor-1248	4	9.302	0.008	26328	66.8	4	9.543	-0.048	1390	6.4	
Total CollAve (4 peaks):				29.0	Total Col2Ave (4 peaks):				8.4	RPD = 110*	
Corrected Ave (3 peaks):				16.4	Corrected Ave (3 peaks):				6.7	RPD = 85*	
Aroclor-1254	1	9.302	0.004	26328	39.6	1	9.452	0.003	9571	39.6	
Aroclor-1254	2	---			0.0	2	9.972	0.002	1733	8.9	
Aroclor-1254	3	9.670	0.002	3721	8.7	3	10.147	0.023	49218	117.1	
Aroclor-1254	4	9.808	0.000	9653	11.6	4	10.370	-0.002	59603	145.4	
Aroclor-1254	5	10.120	-0.056	131179	251.9	5	10.569	0.001	79533	318.7	
Total CollAve (4 peaks):				78.0	Total Col2Ave (5 peaks):				125.9	RPD = 47*	
Corrected Ave (3 peaks):				20.0	Corrected Ave (4 peaks):				77.8	RPD = 118*	
Aroclor-1260	1	11.044	-0.000	223208	394.0	1	11.652	-0.001	104071	312.7	
Aroclor-1260	2	11.361	-0.001	190166	321.2	2	11.919	0.002	251579	296.2	
Aroclor-1260	3	11.737	0.003	458281	291.9	3	12.435	-0.001	113645	504.2	
Aroclor-1260	4	12.141	0.002	149720	189.4	4	12.501	-0.001	182951	319.6	
Aroclor-1260	5	12.244	0.000	196033	576.0	NS	---			----	
Total CollAve (5 peaks):				354.5	Total Col2Ave (4 peaks):				358.2	RPD = 1	
Corrected Ave (4 peaks):				299.1	Corrected Ave (3 peaks):				309.5	RPD = 3	
Aroclor-1262	1	10.828	-0.001	121431	251.3	1	11.201	0.000	121335	251.1	
Aroclor-1262	2	12.244	0.000	196033	249.3	2	11.652	0.000	104071	252.9	
Aroclor-1262	3	12.319	0.001	211092	249.8	3	12.435	0.001	113645	243.4	
Aroclor-1262	4	12.988	0.001	183455	237.5	4	12.501	-0.001	182951	250.1	
Total CollAve (4 peaks):				247.0	Total Col2Ave (4 peaks):				249.3	RPD = 1	
Corrected Ave (3 peaks):				245.5	Corrected Ave (3 peaks):				248.2	RPD = 1	
Aroclor-1268	1	12.244	-0.002	196033	97.1	1	12.435	0.003	113645	99.7	
Aroclor-1268	2	12.319	0.002	211092	105.6	2	12.501	0.001	182951	149.3	
Aroclor-1268	3	12.723	0.024	77240	45.2	3	12.891	-0.000	7755	7.4	
Aroclor-1268	4	13.488	-0.002	65479	11.6	4	13.709	0.000	35146	10.5	
Total CollAve (4 peaks):				64.9	Total Col2Ave (4 peaks):				66.7	RPD = 3	

Corrected Ave (3 peaks): 51.3 Corrected Ave (3 peaks): 39.2 RPD = 27

Total PCB Area Col1 (5.906 - 13.793) = 3239932 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1655522 Col2 Total PCB = 0.4 ppm*

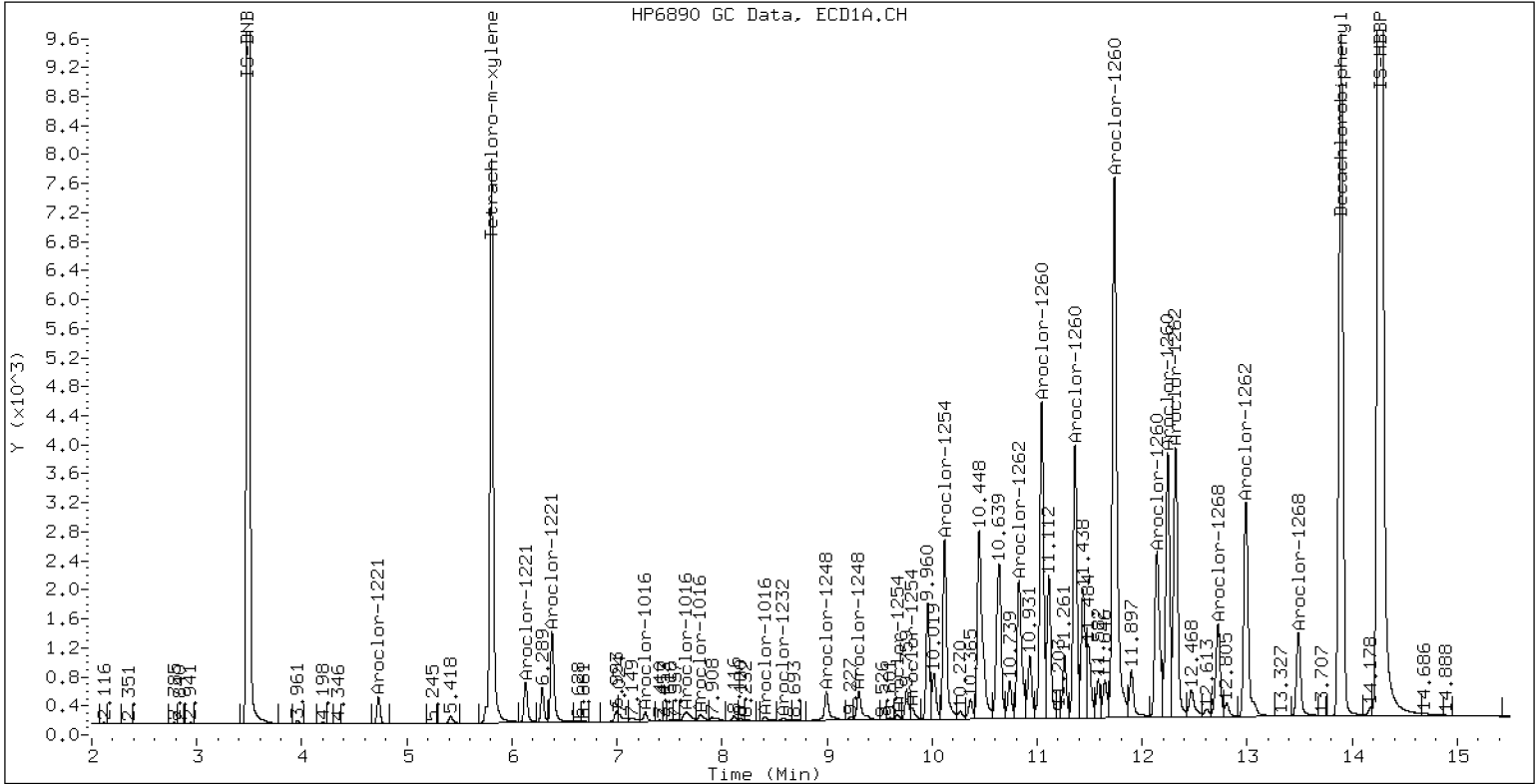
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV

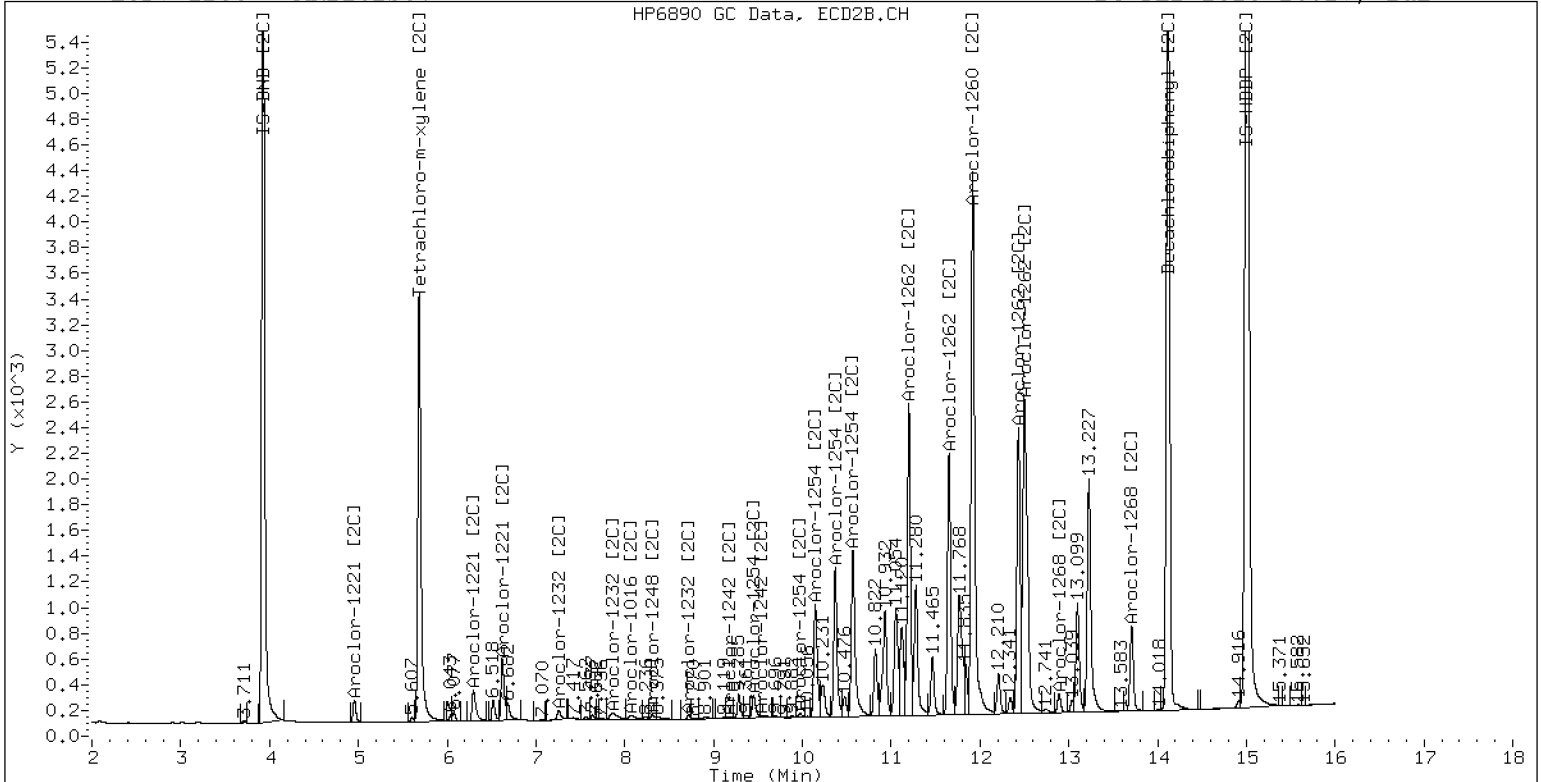
24-FEB-2023 16:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV

24-FEB-2023 16:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242318ECD7.D
Data file 2: /230224.b/230224.b/02242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 24-FEB-2023 16:48
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.806	0.000	363331	5.685	0.000	176204	37.1	38.2	2.9	Tetrachloro-m-xylene
13.894	0.001	800845	14.118	-0.001	488290	51.3	56.4	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656592	-2.6
Hexabromobiphenyl	1429847	1584453	10.8
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314741	-0.2
Hexabromobiphenyl	513946	568346	10.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.001	28327	113.6	1	7.254	-0.001	20651	112.1
Aroclor-1016	2	7.657	0.003	80668	106.1	2	7.861	0.005	41326	110.6
Aroclor-1016	3	7.793	0.003	40661	109.6	3	8.060	0.005	20446	121.2
Aroclor-1016	4	8.407	0.002	24680	102.9	4	8.308	0.001	13576	102.5
Total CollAve (4 peaks):				108.0		Total Col2Ave (4 peaks):				111.6 RPD = 3
Corrected Ave (3 peaks):				106.2		Corrected Ave (3 peaks):				108.4 RPD = 2
Aroclor-1221	1	4.729	-0.001	8535	145.1	1	4.956	-0.000	3965	133.1
Aroclor-1221	2	6.132	-0.000	15523	147.6	2	6.297	0.001	8689	154.1
Aroclor-1221	3	6.382	-0.000	45872	187.9	3	6.622	0.001	22272	242.6
Total CollAve (3 peaks):				160.2		Total Col2Ave (3 peaks):				176.6 RPD = 10
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.729	-0.001	8535	242.6	1	4.956	0.000	3965	246.2
Aroclor-1232	2	6.132	0.001	15523	222.5	2	7.254	0.000	20651	258.1
Aroclor-1232	3	7.657	0.001	80668	255.4	3	7.861	0.001	41326	258.3
Aroclor-1232	4	8.582	0.001	34784	259.2	4	8.714	-0.001	12504	271.5
Total CollAve (4 peaks):				244.9		Total Col2Ave (4 peaks):				258.5 RPD = 5
Corrected Ave (3 peaks):				240.2		Corrected Ave (3 peaks):				254.2 RPD = 6
Aroclor-1242	1	7.270	-0.001	28327	139.2	1	7.254	-0.001	20651	141.2
Aroclor-1242	2	7.657	0.001	80668	130.5	2	7.861	0.003	41326	134.4
Aroclor-1242	3	8.407	0.001	24680	128.4	3	9.170	0.003	12830	134.1
Aroclor-1242	4	8.582	0.003	34784	122.4	4	9.600	0.003	14836	127.3
Total CollAve (4 peaks):				130.1		Total Col2Ave (4 peaks):				134.3 RPD = 3
Corrected Ave (3 peaks):				127.1		Corrected Ave (3 peaks):				132.0 RPD = 4
Aroclor-1248	1	8.407	0.001	24680	77.0	1	8.308	0.000	13576	90.3
Aroclor-1248	2	8.582	0.001	34784	85.4	2	8.714	-0.000	12504	80.5
Aroclor-1248	3	8.996	-0.003	83592	108.8	3	9.170	0.004	12830	71.8
Aroclor-1248	4	9.292	-0.003	39603	101.3	4	9.600	0.010	14836	69.1
Total CollAve (4 peaks):				93.1		Total Col2Ave (4 peaks):				77.9 RPD = 18
Corrected Ave (3 peaks):				87.9		Corrected Ave (3 peaks):				73.8 RPD = 17
Aroclor-1254	1	9.292	-0.007	39603	60.1	1	9.452	0.003	4590	19.2
Aroclor-1254	2	9.377	-0.000	11450	38.6	2	9.973	0.003	2892	15.0
Aroclor-1254	3	9.674	0.005	6387	15.1	3	10.131	0.007	6052	14.5
Aroclor-1254	4	9.813	0.006	10162	12.3	4	10.390	0.017	5324	13.1
Aroclor-1254	5	10.189	0.012	6862	13.3	5	10.572	0.004	1891	7.7
Total CollAve (5 peaks):				27.9		Total Col2Ave (5 peaks):				13.9 RPD = 67*
Corrected Ave (4 peaks):				19.8		Corrected Ave (4 peaks):				12.6 RPD = 45*
Aroclor-1260	1	11.046	0.002	87033	152.7	1	11.645	-0.008	62543	187.1
Aroclor-1260	2	11.362	0.001	6300	10.6	2	11.920	0.003	28552	33.5
Aroclor-1260	3	11.738	0.004	54524	34.5	3	12.432	-0.004	285450	1261.2
Aroclor-1260	4	12.144	0.005	1727	2.2	4	12.499	-0.002	306992	534.0
Aroclor-1260	5	12.246	0.002	502931	1469.0	NS	---			----
Total CollAve (5 peaks):				333.8		Total Col2Ave (4 peaks):				503.9 RPD = 41*
Corrected Ave (4 peaks):				50.0		Corrected Ave (3 peaks):				251.5 RPD = 134*
Aroclor-1262	1	10.832	0.004	3395	7.0	1	11.201	0.001	44255	91.2
Aroclor-1262	2	12.246	0.002	502931	635.9	2	11.645	-0.007	62543	151.3
Aroclor-1262	3	12.318	-0.000	497006	584.5	3	12.432	-0.002	285450	608.7
Aroclor-1262	4	12.987	-0.000	202197	260.2	4	12.499	-0.003	306992	417.9
Total CollAve (4 peaks):				371.9		Total Col2Ave (4 peaks):				317.3 RPD = 16
Corrected Ave (3 peaks):				283.9		Corrected Ave (3 peaks):				220.1 RPD = 25
Aroclor-1268	1	12.246	-0.001	502931	247.7	1	12.432	-0.000	285450	249.4
Aroclor-1268	2	12.318	0.002	497006	247.2	2	12.499	-0.001	306992	249.5
Aroclor-1268	3	12.699	-0.000	422793	245.8	3	12.892	0.000	260893	248.4
Aroclor-1268	4	13.490	0.000	1386953	244.9	4	13.709	-0.000	829733	247.1
Total CollAve (4 peaks):				246.4		Total Col2Ave (4 peaks):				248.6 RPD = 1

Corrected Ave (3 peaks): 246.0 Corrected Ave (3 peaks): 248.3 RPD = 1

Total PCB Area Col1 (5.906 - 13.793) = 4180607 Col1 Total PCB = 0.5 ppm*
Total PCB Area Col2 (5.785 - 14.019) = 2376912 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242319ECD7.D

ARI ID: DDTS

RT	ZB5 Col Shift Response	ZB35 Col Shift Response	RT	ZB5 on col	ZB35 on col	RPD	Compound/Flag
9.261	0.000 694353|	9.912 0.000 580269|	0.100	0.100	0.0	2,4-DDE	
0.000	-10.293 0|	10.672 0.000 673479|	0.000	0.200#	----	2,4-DDT	
9.686	0.000 1191406|	10.212 0.000 433373|	0.100	0.100	0.0	4,4-DDE	
10.259	0.000 1721760|	10.672 0.000 673479|	0.100	0.200#	66.7*	4,4-DDD	

Indicates value is from co-eluting peaks

* Indicates RPD > 40%

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242320ECD7.D

ARI ID: DDT BD

RT	ZB5 Col Shift Response		RT	ZB35 Col Shift Response		ZB5 on col	ZB35 on col	RPD	Compound/Flag
9.285	0.023	4923|	9.921	0.009	9972|	0.001	0.002	84.3*	2,4-DDE
0.000	-10.293	0|	10.677	0.004	249094|	0.000	0.074#	----	2,4-DDT
9.692	0.006	12128|	10.221	0.009	528|	0.001	0.000	156.7*	4,4-DDE
10.265	0.006	410017|	10.677	0.004	249094|	0.023	0.074#	103.6*	4,4-DDD

Indicates value is from co-eluting peaks

* Indicates RPD > 40%

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	24-FEB-2023	10:51	02242301ECD7.D	1	IB	
2	24-FEB-2023	11:12	02242302ECD7.D	1	0.25PPMAR1660	
3	24-FEB-2023	11:33	02242303ECD7.D	1	0.02PPMAR1660	
4	24-FEB-2023	11:54	02242304ECD7.D	1	0.05PPMAR1660	
5	24-FEB-2023	12:15	02242305ECD7.D	1	1.0PPMAR1660	
6	24-FEB-2023	12:36	02242306ECD7.D	1	0.1PPMAR1660	
7	24-FEB-2023	12:57	02242307ECD7.D	1	0.5PPMAR1660	
8	24-FEB-2023	13:18	02242308ECD7.D	1	0.25PPMAR1242	
9	24-FEB-2023	13:39	02242309ECD7.D	1	0.25PPMAR1248	
10	24-FEB-2023	14:00	02242310ECD7.D	1	0.25PPMAR1254	
11	24-FEB-2023	14:21	02242311ECD7.D	1	0.25PPMAR2162	
12	24-FEB-2023	14:42	02242312ECD7.D	1	0.25PPMAR3268	
13	24-FEB-2023	15:03	02242313ECD7.D	1	AR1660SCV	
14	24-FEB-2023	15:24	02242314ECD7.D	1	AR1242SCV	
15	24-FEB-2023	15:45	02242315ECD7.D	1	AR1248SCV	
16	24-FEB-2023	16:06	02242316ECD7.D	1	AR1254SCV	
17	24-FEB-2023	16:27	02242317ECD7.D	1	AR2162SCV	
18	24-FEB-2023	16:48	02242318ECD7.D	1	AR3268SCV	
19	24-FEB-2023	17:09	02242319ECD7.D	1	DDTS	
20	24-FEB-2023	17:30	02242320ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1051	02242301ECD7.D	IB		1	NO MANUAL INTEGRATION
1112	02242302ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1133	02242303ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
1154	02242304ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
1215	02242305ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2039	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION
1051	02242301ECD7.D IB			1	NO MANUAL INTEGRATION
1112	02242302ECD7.D 0.25PPMAR1660			1	NO MANUAL INTEGRATION
1133	02242303ECD7.D 0.02PPMAR1660			1	Aroclor-1016 [2C],
1154	02242304ECD7.D 0.05PPMAR1660			1	NO MANUAL INTEGRATION
1215	02242305ECD7.D 1.0PPMAR1660			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2038	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION

Security Status Report

Date: 28-Feb-2023 10:53

02242301ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242302ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242303ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242304ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242305ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242306ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242307ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242308ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242309ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242310ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242311ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242312ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242313ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242314ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242315ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242316ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242317ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242318ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242319ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242320ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd7.i\230224.b\02242303ECD7.D
 Level 2: \\target\share\chem4\ecd7.i\230224.b\02242304ECD7.D
 Level 3: \\target\share\chem4\ecd7.i\230224.b\02242306ECD7.D
 Level 4: \\target\share\chem4\ecd7.i\230224.b\02242302ECD7.D
 Level 5: \\target\share\chem4\ecd7.i\230224.b\02242307ECD7.D
 Level 6: \\target\share\chem4\ecd7.i\230224.b\02242305ECD7.D
 Level 7: \\target\share\chem4\ecd7.i\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
2 Aroclor-1221 (1)	+++++ 0.00716	+++++	+++++	+++++	+++++	+++++	0.00716	0.000
(2)	+++++ 0.01281	+++++	+++++	+++++	+++++	+++++	0.01281	0.000
(3)	+++++ 0.02975	+++++	+++++	+++++	+++++	+++++	0.02975	0.000
3 Aroclor-1242 (1)	+++++ 0.02479	+++++	+++++	+++++	+++++	+++++	0.02479	0.000
(2)	+++++ 0.07529	+++++	+++++	+++++	+++++	+++++	0.07529	0.000
(3)	+++++ 0.02343	+++++	+++++	+++++	+++++	+++++	0.02343	0.000
(4)	+++++ 0.03463	+++++	+++++	+++++	+++++	+++++	0.03463	0.000
4 Aroclor-1232 (1)	+++++ 0.00429	+++++	+++++	+++++	+++++	+++++	0.00429	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	++++ 0.00850	++++	++++	++++	++++	++++	0.00850	0.000
(3)	++++ 0.03848	++++	++++	++++	++++	++++	0.03848	0.000
(4)	++++ 0.01635	++++	++++	++++	++++	++++	0.01635	0.000
7 Aroclor-1016(1)	0.03172 ++++	0.03253	0.03142	0.03141	0.02856	0.02667	0.03039	7.449
(2)	0.09239 ++++	0.09246	0.09222	0.09849	0.09174	0.08849	0.09263	3.499
(3)	0.05165 ++++	0.05037	0.04823	0.04393	0.03991	0.03721	0.04522	12.936
(4)	0.03002 ++++	0.02894	0.02959	0.03058	0.02852	0.02774	0.02923	3.542
6 Aroclor-1248(1)	++++ 0.03903	++++	++++	++++	++++	++++	0.03903	0.000
(2)	++++ 0.04961	++++	++++	++++	++++	++++	0.04961	0.000
(3)	++++ 0.09360	++++	++++	++++	++++	++++	0.09360	0.000
(4)	++++ 0.04765	++++	++++	++++	++++	++++	0.04765	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
8 Aroclor-1254 (1)	++++ 0.08033	++++	++++	++++	++++	++++	0.08033	0.000
(2)	++++ 0.03613	++++	++++	++++	++++	++++	0.03613	0.000
(3)	++++ 0.05165	++++	++++	++++	++++	++++	0.05165	0.000
(4)	++++ 0.10042	++++	++++	++++	++++	++++	0.10042	0.000
(5)	++++ 0.06294	++++	++++	++++	++++	++++	0.06294	0.000
9 Aroclor-1260 (1)	0.02926 ++++	0.02920	0.02841	0.03096	0.02737	0.02746	0.02878	4.677
(2)	0.02967 ++++	0.03006	0.03011	0.03291	0.02910	0.02857	0.03007	5.029
(3)	0.08088 ++++	0.08045	0.07954	0.08575	0.07515	0.07674	0.07975	4.627
(4)	0.03905 ++++	0.03887	0.03955	0.04485	0.03942	0.03922	0.04016	5.753
(5)	0.01783 ++++	0.01715	0.01679	0.01875	0.01664	0.01655	0.01729	4.953
10 Aroclor-1262 (1)	++++ 0.02454	++++	++++	++++	++++	++++	0.02454	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	++++ 0.03993	++++	++++	++++	++++	++++	0.03993	0.000
(3)	++++ 0.04293	++++	++++	++++	++++	++++	0.04293	0.000
(4)	++++ 0.03923	++++	++++	++++	++++	++++	0.03923	0.000
11 Aroclor-1268(1)	++++ 0.10250	++++	++++	++++	++++	++++	0.10250	0.000
(2)	++++ 0.10151	++++	++++	++++	++++	++++	0.10151	0.000
(3)	++++ 0.08686	++++	++++	++++	++++	++++	0.08686	0.000
(4)	++++ 0.28598	++++	++++	++++	++++	++++	0.28598	0.000
42 2,4-DDE	++++ ++++	++++	++++	++++	++++	++++	++++	++++
43 2,4-DDD	++++ ++++	++++	++++	++++	++++	++++	++++	++++
44 2,4-DDT	++++ ++++	++++	++++	++++	++++	++++	++++	++++
46 4,4-DDE	++++ ++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Last Edit : 24-Feb-2023 15:31 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
47 4,4-DDD	++++	++++	++++	++++	++++	++++	++++	++++
48 4,4-DDT	++++	++++	++++	++++	++++	++++	++++	++++
49 Hexachlorobutadiene	++++	++++	++++	++++	++++	++++	++++	++++
50 Hexachlorobenzene	++++	++++	++++	++++	++++	++++	++++	++++
1 Tetrachloro-m-xylene	1.16827	1.24402	1.18546	1.20509	1.12295	1.24114	1.19449	3.860
13 Decachlorobiphenyl	0.82901	0.80558	0.77587	0.78808	0.73125	0.79742	0.78787	4.189

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242303ECD7.D
 Level 2: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242304ECD7.D
 Level 3: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242306ECD7.D
 Level 4: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242302ECD7.D
 Level 5: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242307ECD7.D
 Level 6: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242305ECD7.D
 Level 7: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
1 Aroclor-1221 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00757	0.000
(2)	0.00757						0.00757	0.000
(3)	0.01433						0.01433	0.000
4 Aroclor-1232 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00409	0.000
(2)	0.00409						0.00409	0.000
(3)	0.02034						0.02034	0.000
(4)	0.04067						0.04067	0.000
3 Aroclor-1242 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03717	0.000
(2)	0.03717						0.03717	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07813	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02431	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.02962	0.000
6 Aroclor-1248 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03820	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.03949	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04545	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.05457	0.000
7 Aroclor-1016 [2C] (1)	0.05071	0.05022	0.04868	0.04733	0.04326	0.04080	0.04683	8.503
(2)	0.08143	0.09407	0.10159	0.10259	0.09651	0.09362	0.09497	8.025
(3)	0.04006	0.04718	0.04613	0.04410	0.04062	0.03926	0.04289	7.857
(4)	0.03181	0.03802	0.03707	0.03450	0.03115	0.02936	0.03365	10.251

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
8 Aroclor-1254 [2C] (1)	++++ 0.06081	++++	++++	++++	++++	++++	0.06081	0.000
(2)	++++ 0.04892	++++	++++	++++	++++	++++	0.04892	0.000
(3)	++++ 0.10584	++++	++++	++++	++++	++++	0.10584	0.000
(4)	++++ 0.10317	++++	++++	++++	++++	++++	0.10317	0.000
(5)	++++ 0.06282	++++	++++	++++	++++	++++	0.06282	0.000
10 Aroclor-1262 [2C] (1)	++++ 0.06831	++++	++++	++++	++++	++++	0.06831	0.000
(2)	++++ 0.05818	++++	++++	++++	++++	++++	0.05818	0.000
(3)	++++ 0.06601	++++	++++	++++	++++	++++	0.06601	0.000
(4)	++++ 0.10341	++++	++++	++++	++++	++++	0.10341	0.000
9 Aroclor-1260 [2C] (1)	0.05286 ++++	0.04911	0.04696	0.04801	0.04329	0.04201	0.04704	8.422
(2)	0.12976 ++++	0.12431	0.12095	0.12664	0.11320	0.10545	0.12005	7.605

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(3)	0.03524 +++++	0.03147	0.02937	0.03208	0.03102	0.03198	0.03186	6.045
(4)	0.08632 +++++	0.08237	0.08044	0.08393	0.07718	0.07531	0.08092	5.126
11 Aroclor-1268 [2C] (1)	+++++ 0.16109	+++++	+++++	+++++	+++++	+++++	0.16109	0.000
(2)	+++++ 0.17318	+++++	+++++	+++++	+++++	+++++	0.17318	0.000
(3)	+++++ 0.14787	+++++	+++++	+++++	+++++	+++++	0.14787	0.000
(4)	+++++ 0.47260	+++++	+++++	+++++	+++++	+++++	0.47260	0.000
41 2,4-DDE [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 2,4-DDD [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 4,4-DDE [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 4,4-DDT [2C]	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
 End Cal Date : 24-FEB-2023 14:42
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Last Edit : 24-Feb-2023 15:29 richardl
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 2 Tetrachloro-m-xylene [2C]	1.21526 +++++	1.19545	1.17555	1.21907	1.12560	1.11139	1.17372	3.897
\$ 13 Decachlorobiphenyl [2C]	1.17066 +++++	1.20406	1.20549	1.31040	1.21104	1.20797	1.21827	3.898

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230224.b
Inst ID: ecd7.i

ID: RT01 RT02 RT03 RT04 RT05 RT06
FILENAME: 02242302ECD7 02242303ECD7 02242304ECD7 02242305ECD7 02242306ECD7 02242307ECD7
INJ. DATE: 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023
INJ. TIME: 11:12 11:33 11:54 12:15 12:36 12:57

Table with 11 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like IS-BNB, Tetrachloro-m-xylene, Aroclor-1221, Aroclor-1242, Aroclor-1232, Aroclor-1016, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268, Decachlorobiphenyl, IS-HBBP, 2,4-DDE, 2,4-DDD, 2,4-DDT, 4,4-DDE.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
 Batch File: \\target\share\chem4\ecd7.i\230224.b
 Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.254	10.154-10.354	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.754	10.654-10.854	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
Inst ID: ecd7.i

ID: RT01 RT02 RT03 RT04 RT05 RT06
FILENAME: 02242302ECD7 02242303ECD7 02242304ECD7 02242305ECD7 02242306ECD7 02242307ECD7
INJ. DATE: 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023 24-FEB-2023
INJ. TIME: 11:12 11:33 11:54 12:15 12:36 12:57

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like 40 IS-BNB, 2 Tetrachloro-m-xylene, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
 Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
 Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.092	10.992-11.192	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242301ECD7.D
Data file 2: /230224.b/230224.b/02242301ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-FEB-2023 10:51
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.826	0.019	382217	5.683	-0.002	180378	33.8	36.5	7.7	Tetrachloro-m-xylene
13.904	0.011	534110	14.120	0.001	295605	35.3	37.2	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	756896	12.3
Hexabromobiphenyl	1429847	1534275	7.3
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	336543	6.8
Hexabromobiphenyl	513946	521508	1.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.321	0.025	1873	31.1
Aroclor-1221	3	---			0.0	3	6.633	0.012	314	3.2
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	7.698	0.043	2193	6.0	3	---			0.0
Aroclor-1232	4	8.505	-0.076	11525	74.5	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	7.698	0.042	2193	3.1	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	8.505	-0.074	11525	35.2	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.596	-0.072	31424	64.3	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	10.167	-0.010	18361	30.8	5	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.098	0.054	6994	12.7	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	11.706	-0.027	7806	5.1	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.824	-0.005	16873	35.8	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	13.040	0.053	14031	18.6	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.709	0.009	6037	3.6	3	12.891	-0.001	659	0.7
Aroclor-1268	4	13.499	0.010	12396	2.3	4	13.710	0.001	1848	0.6
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				

Total PCB Area Coll (5.906 - 13.793) = 260205

Coll Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 18252 Col2 Total PCB = 0.0 ppm*

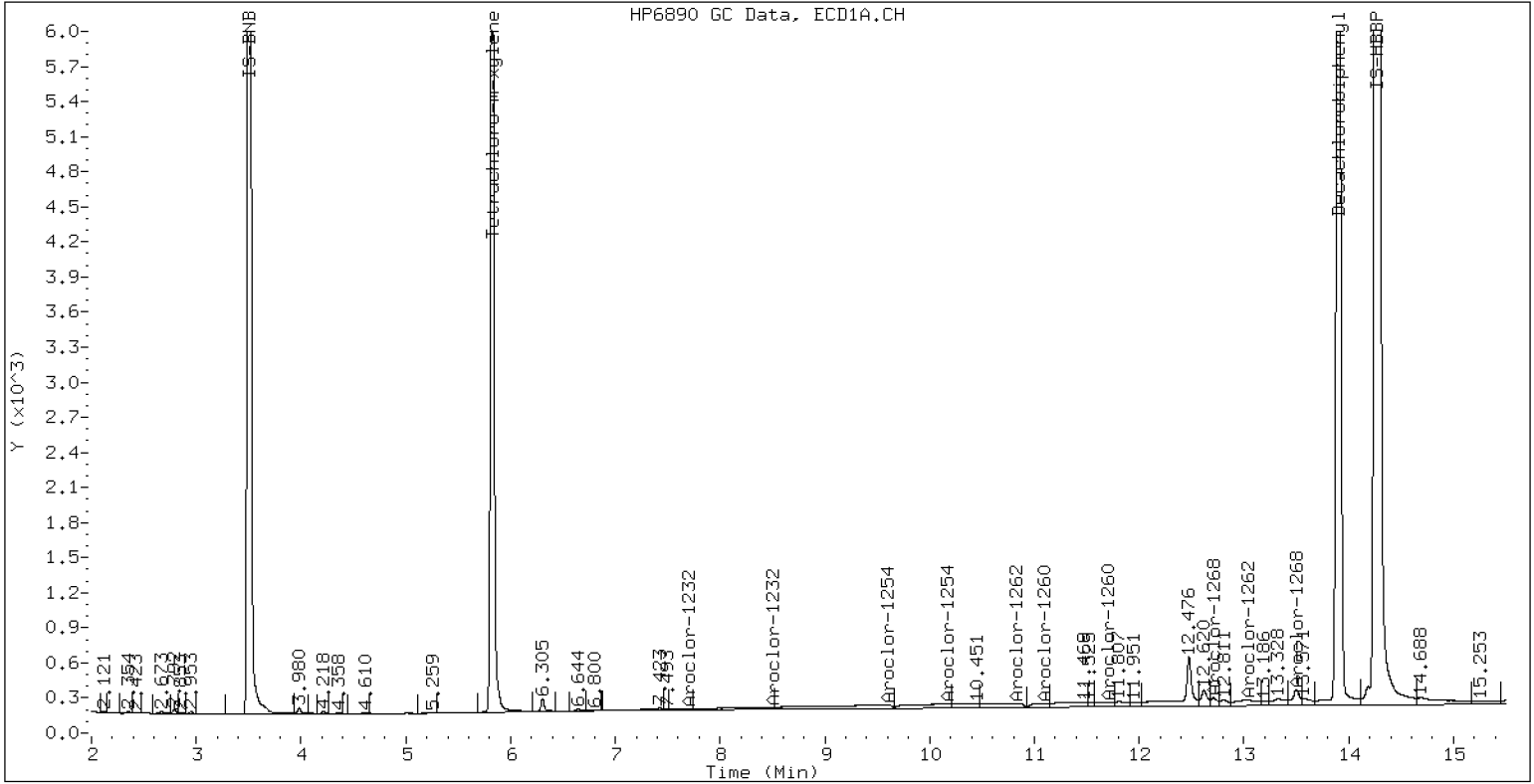
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 IB

24-FEB-2023 10:51, 2ul



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242302ECD7.D
Data file 2: /230224.b/230224.b/02242302ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:12
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.811	0.005	405980	5.687	0.002	192160	40.4	41.5	2.9	Tetrachloro-m-xylene
13.897	0.004	563414	14.120	0.001	336737	40.0	43.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	673778	0.0
Hexabromobiphenyl	1429847	1429847	0.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	315256	0.0
Hexabromobiphenyl	513946	513946	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.001	66125	258.4	1	7.255	-0.001	46626	252.6	
Aroclor-1016	2	7.654	-0.000	207370	265.8	2	7.855	-0.001	101071	270.1	
Aroclor-1016	3	7.792	0.002	92507	242.9	3	8.055	0.001	43448	257.1	
Aroclor-1016	4	8.406	0.001	64388	261.5	4	8.306	-0.000	33986	256.3	
Total CollAve (4 peaks):				257.2		Total Col2Ave (4 peaks):				259.0	RPD = 1
Corrected Ave (3 peaks):				254.3		Corrected Ave (3 peaks):				255.3	RPD = 0

CalAmt %D: 2.9

CalAmt %D: 3.6

Aroclor-1260	1	11.046	0.001	138355	269.0	1	11.653	0.001	77114	255.2	
Aroclor-1260	2	11.363	0.002	147051	273.6	2	11.918	0.001	203401	263.7	
Aroclor-1260	3	11.736	0.003	383171	268.8	3	12.435	-0.000	51517	251.7	
Aroclor-1260	4	12.141	0.002	200399	279.2	4	12.502	0.001	134797	259.3	
Aroclor-1260	5	12.247	0.003	83796	271.2	NS	---			----	
Total CollAve (5 peaks):				272.4		Total Col2Ave (4 peaks):				257.5	RPD = 6
Corrected Ave (4 peaks):				270.7		Corrected Ave (3 peaks):				255.4	RPD = 6

CalAmt %D: 8.9

CalAmt %D: 3.0

Total PCB Area Coll (5.906 - 13.793) = 4024419 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1889311 Col2 Total PCB = 0.5 ppm*

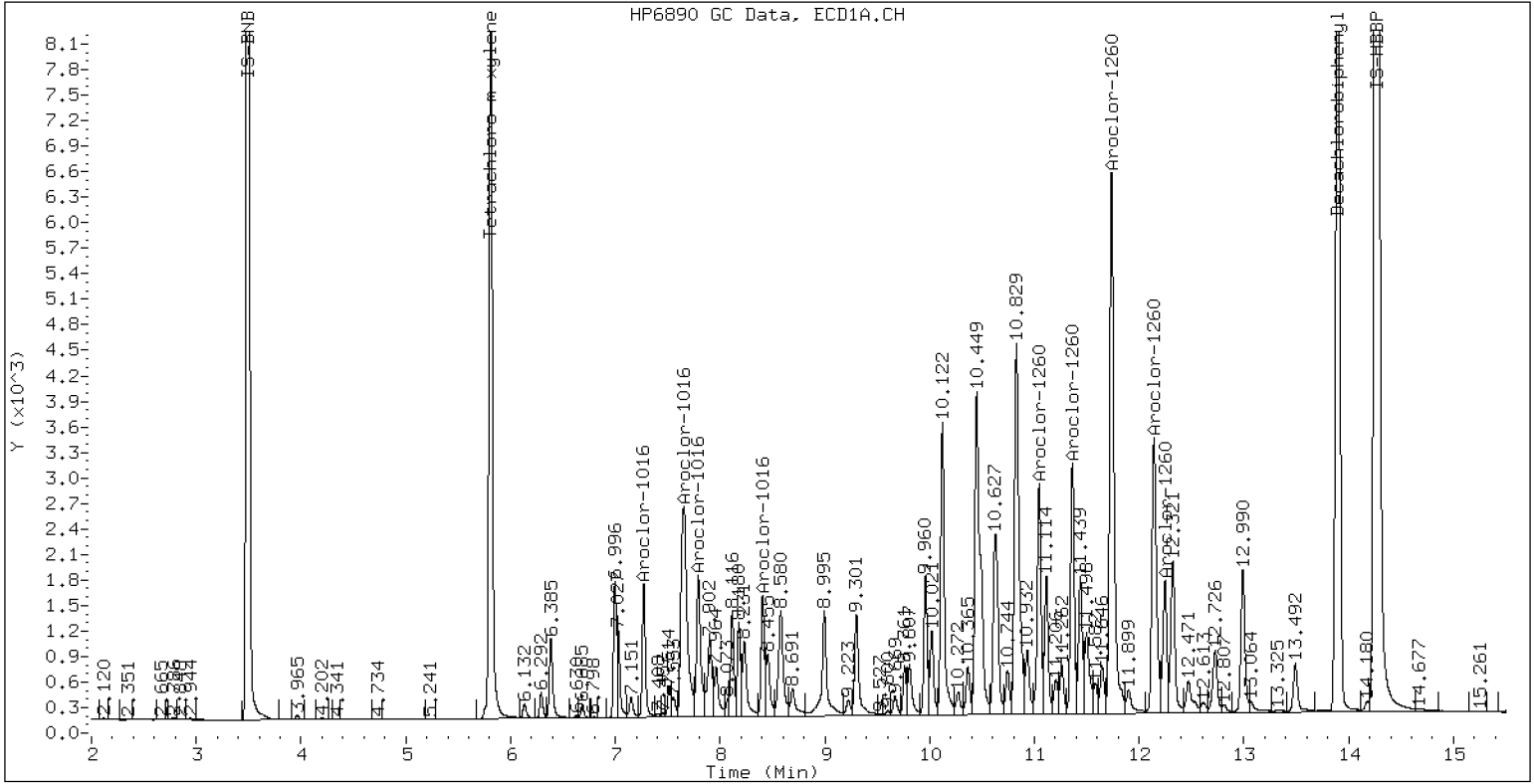
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1660

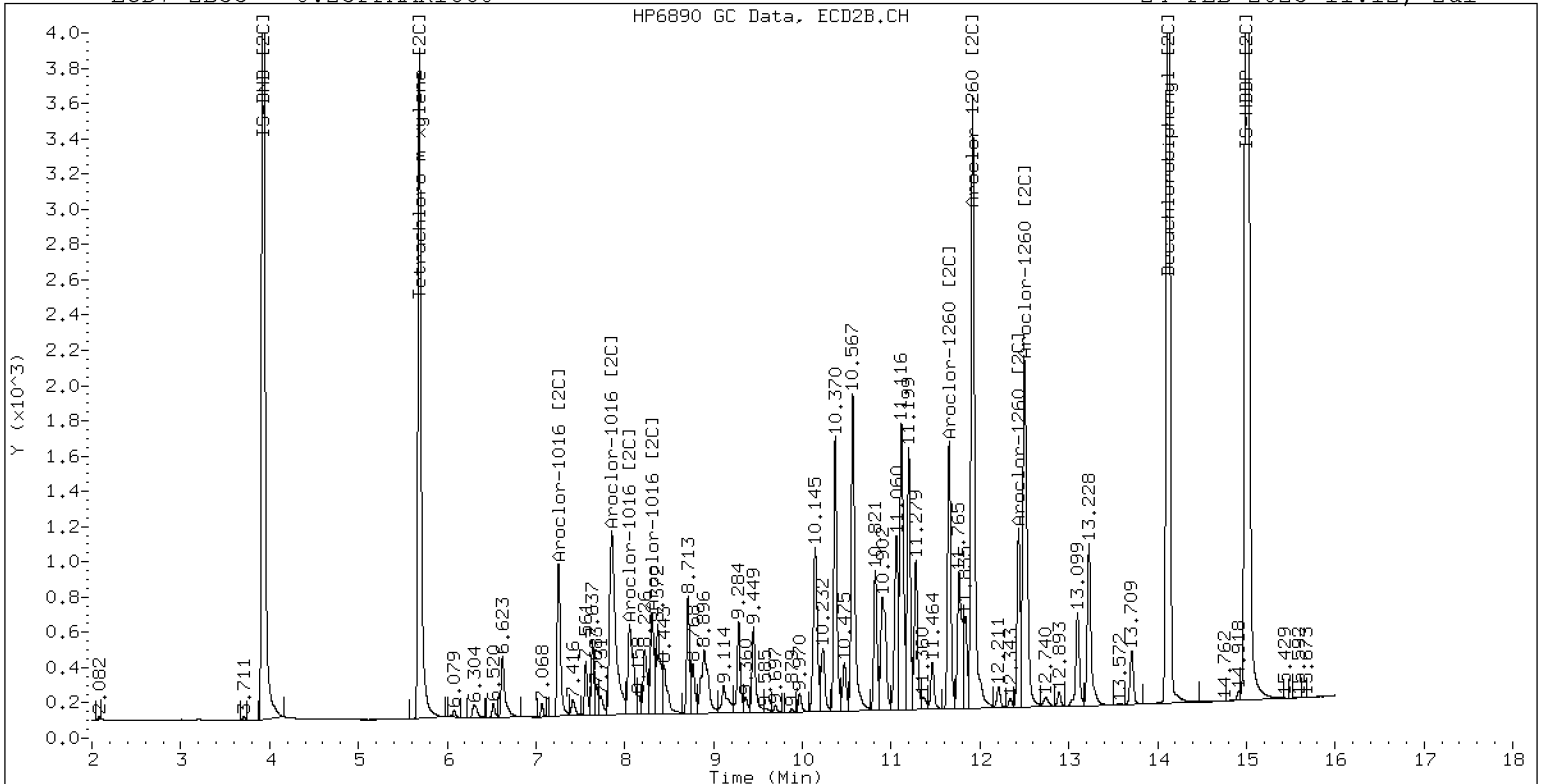
24-FEB-2023 11:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1660

24-FEB-2023 11:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242303ECD7.D
Data file 2: /230224.b/230224.b/02242303ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:33
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.002	29768	5.688	0.003	14932	3.1	3.3	5.7	Tetrachloro-m-xylene
13.893	0.000	45992	14.120	0.000	23950	3.4	3.1	9.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	637010	-5.5
Hexabromobiphenyl	1429847	1386953	-3.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307177	-2.6
Hexabromobiphenyl	513946	511463	-0.5

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.001	5052	20.9	1	7.256	0.000	3894	21.7	
Aroclor-1016	2	7.659	0.005	14714	19.9	2	7.864	0.008	6253	17.1	
Aroclor-1016	3	7.795	0.005	8226	22.8	3	8.060	0.006	3076	18.7	
Aroclor-1016	4	8.407	0.002	4780	20.5	4	8.309	0.002	2443	18.9	
Total CollAve (4 peaks):				21.1	Total Col2Ave (4 peaks):				19.1	RPD = 10	
Corrected Ave (3 peaks):				20.5	Corrected Ave (3 peaks):				18.2	RPD = 11	
CalAmt %D:				5.3	CalAmt %D:				-4.5		
Aroclor-1260	1	11.047	0.003	10147	20.3	1	11.656	0.003	6759	22.5	
Aroclor-1260	2	11.364	0.003	10287	19.7	2	11.922	0.005	16592	21.6	
Aroclor-1260	3	11.740	0.006	28043	20.3	3	12.438	0.002	4506	22.1	
Aroclor-1260	4	12.145	0.006	13540	19.4	4	12.505	0.004	11037	21.3	
Aroclor-1260	5	12.246	0.002	6182	20.6	NS	---			----	
Total CollAve (5 peaks):				20.1	Total Col2Ave (4 peaks):				21.9	RPD = 9	
Corrected Ave (4 peaks):				19.9	Corrected Ave (3 peaks):				21.7	RPD = 8	
CalAmt %D:				0.4	CalAmt %D:				9.4		

Total PCB Area Coll (5.906 - 13.793) = 324832 Coll Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 157149 Col2 Total PCB = 0.0 ppm*

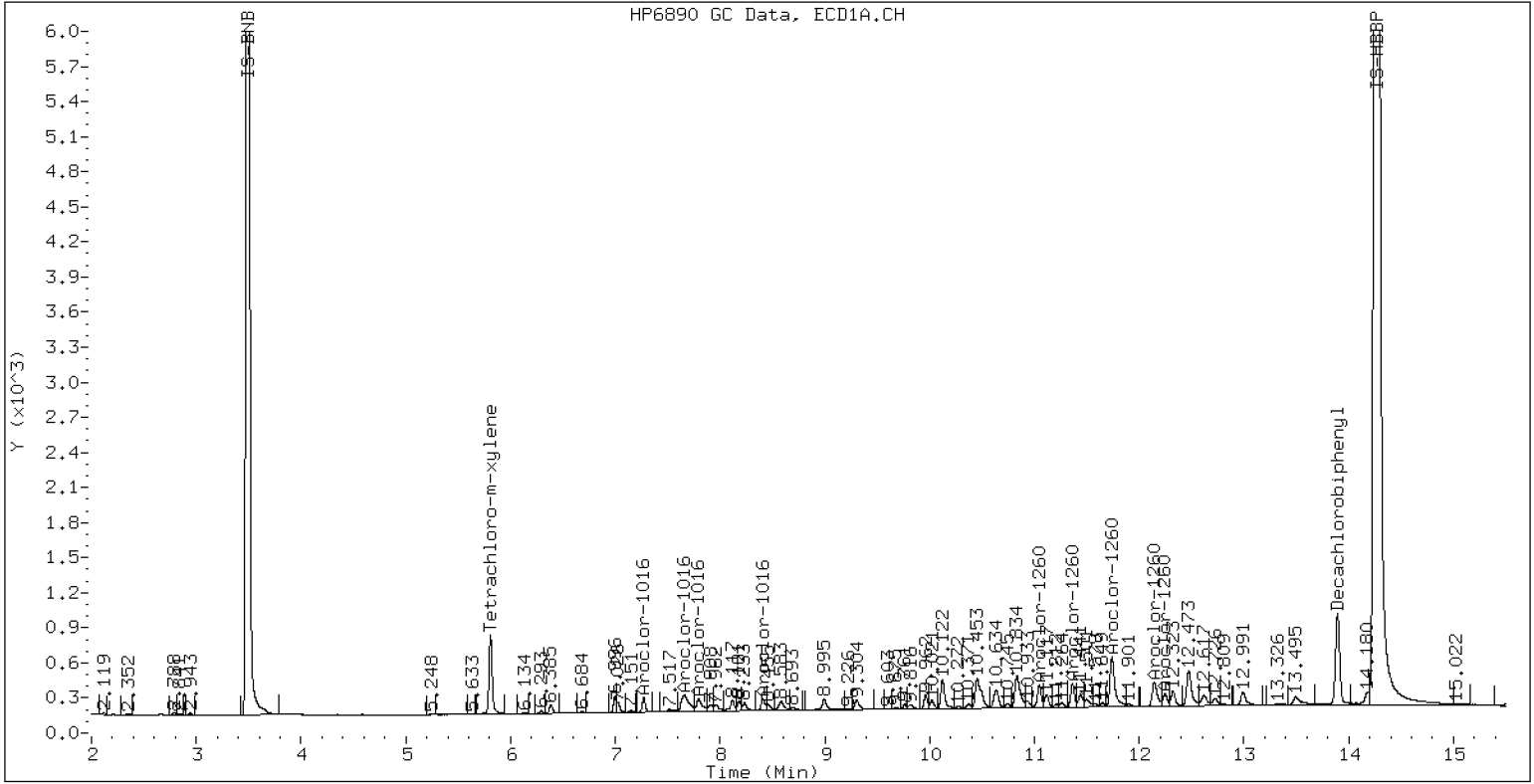
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPMAR1660

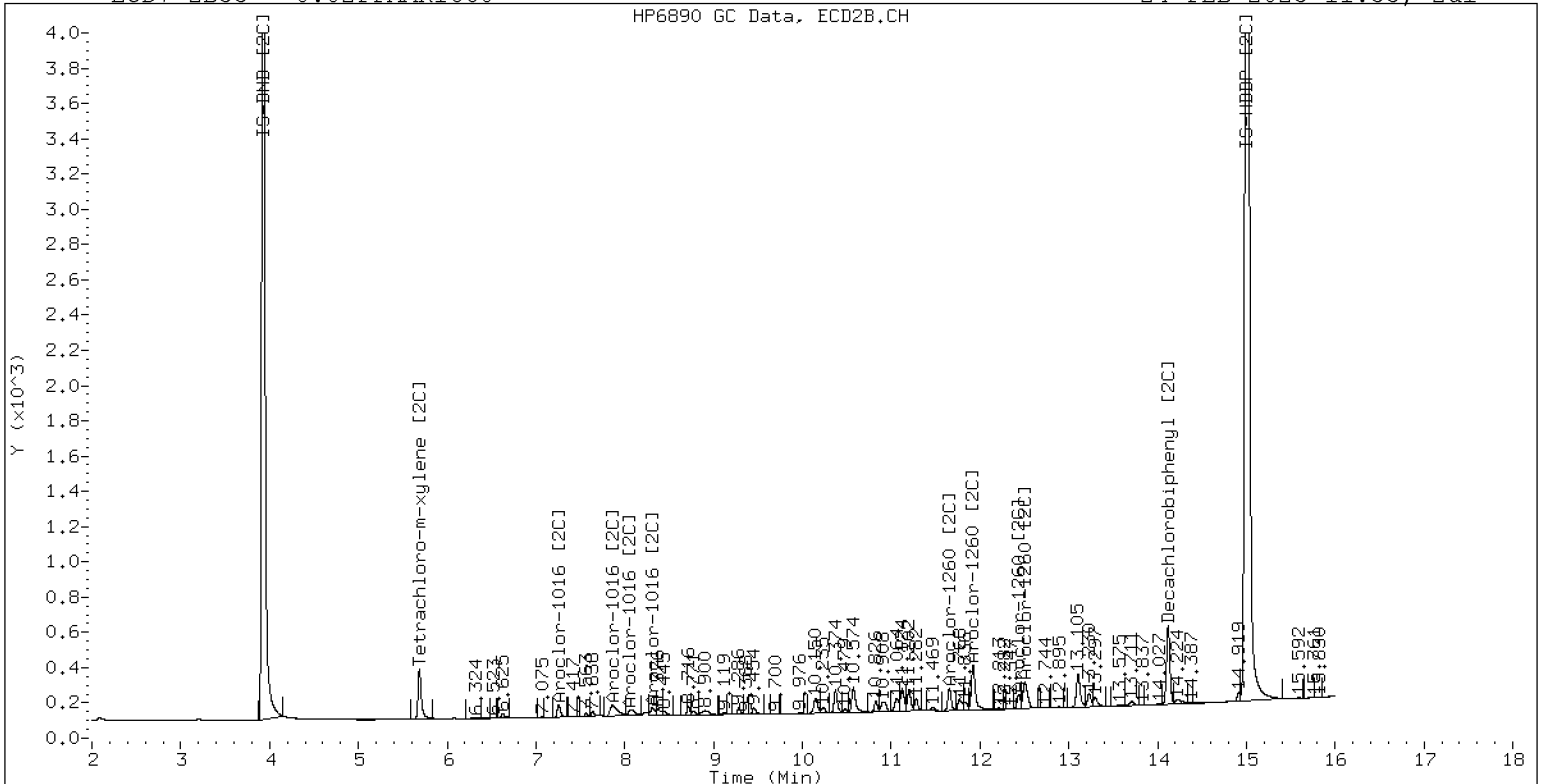
24-FEB-2023 11:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPMAR1660

24-FEB-2023 11:33, 2ul

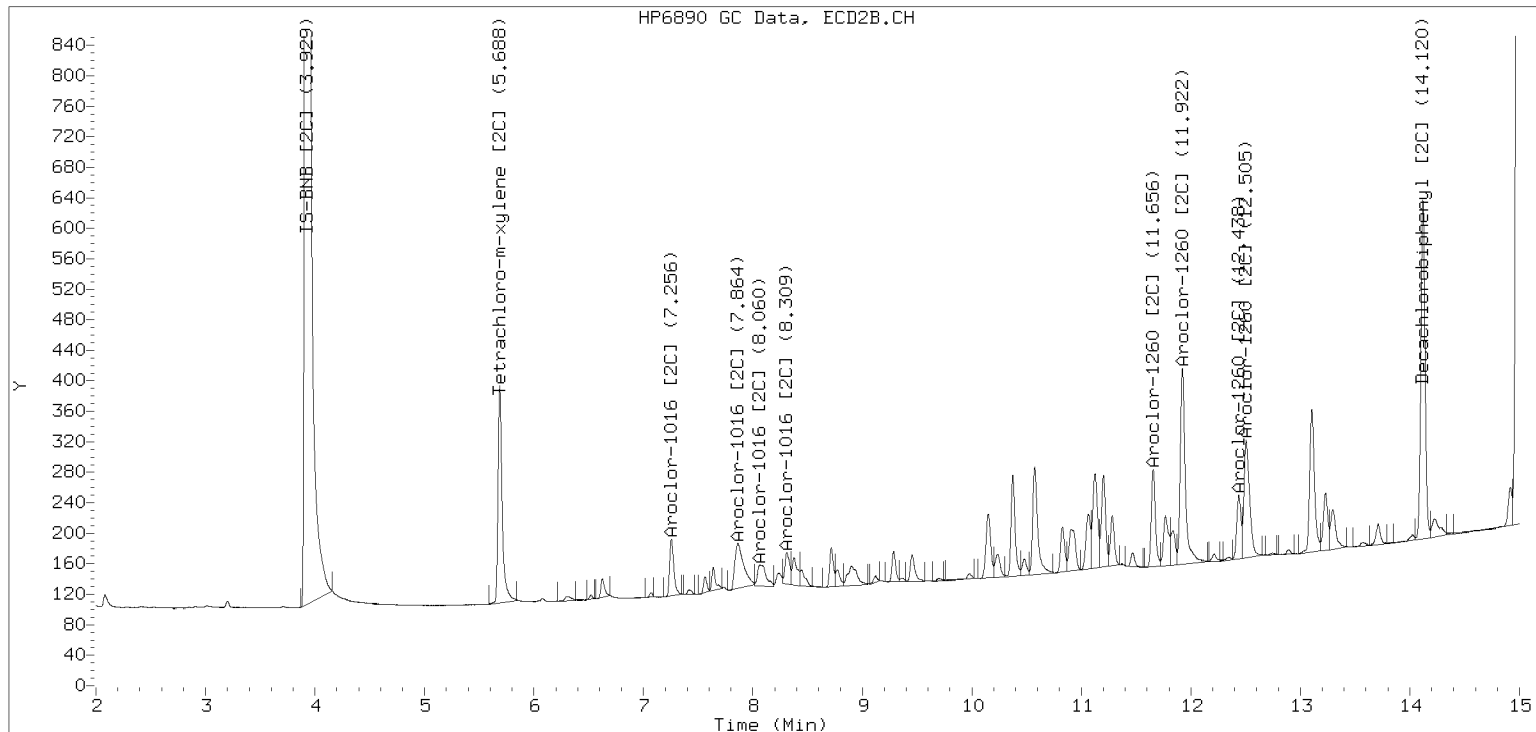


ZB-35 Manual Integration: YES

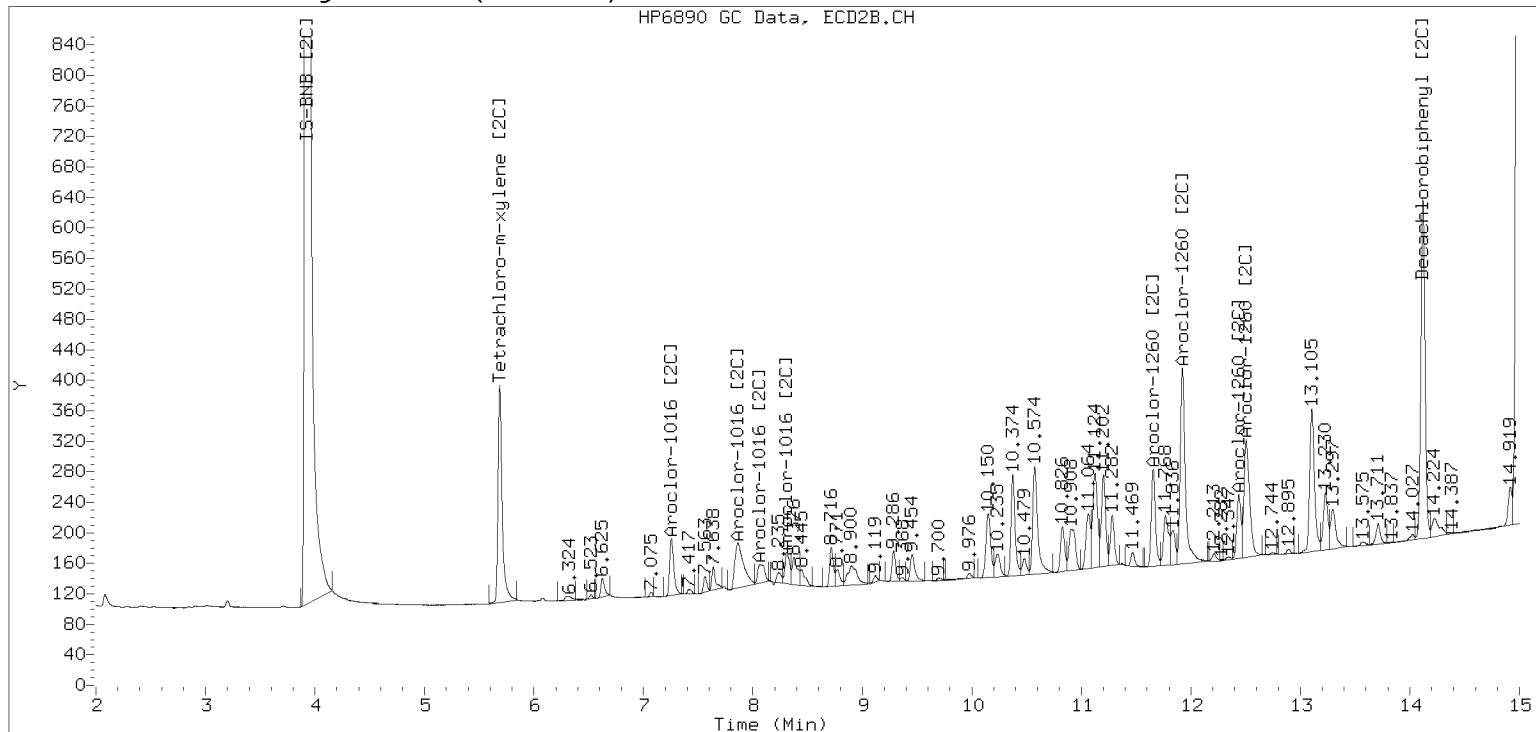
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230224.b/230224.b/02242303ECD7.D Injection Date: 24-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242304ECD7.D
Data file 2: /230224.b/230224.b/02242304ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:54
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col				
5.809	0.003	78493	5.688	0.003	36772	8.3	8.1	2.2	Tetrachloro-m-xylene
13.893	-0.000	113544	14.119	-0.000	62745	8.2	7.9	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	630965	-6.4
Hexabromobiphenyl	1429847	1409464	-1.4

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307599	-2.4
Hexabromobiphenyl	513946	521112	1.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	12829	53.5	1	7.256	0.000	9654	53.6
Aroclor-1016	2	7.660	0.006	36461	49.9	2	7.864	0.008	18085	49.5
Aroclor-1016	3	7.795	0.005	19865	55.7	3	8.063	0.008	9071	55.0
Aroclor-1016	4	8.408	0.003	11411	49.5	4	8.310	0.003	7309	56.5
Total CollAve (4 peaks):				52.2		Total Col2Ave (4 peaks):				53.7 RPD = 3
Corrected Ave (3 peaks):				51.0		Corrected Ave (3 peaks):				52.7 RPD = 3
CalAmt %D:				4.3		CalAmt %D:				7.3
Aroclor-1260	1	11.046	0.002	25727	50.7	1	11.655	0.002	15996	52.2
Aroclor-1260	2	11.363	0.002	26482	50.0	2	11.922	0.004	40487	51.8
Aroclor-1260	3	11.739	0.005	70871	50.4	3	12.437	0.002	10248	49.4
Aroclor-1260	4	12.143	0.004	34239	48.4	4	12.506	0.004	26828	50.9
Aroclor-1260	5	12.246	0.002	15109	49.6	NS	---			----
Total CollAve (5 peaks):				49.8		Total Col2Ave (4 peaks):				51.1 RPD = 2
Corrected Ave (4 peaks):				49.6		Corrected Ave (3 peaks):				50.7 RPD = 2
CalAmt %D:				-0.3		CalAmt %D:				2.1

Total PCB Area Coll (5.906 - 13.793) = 758292 Coll Total PCB = 0.1 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 386383 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242305ECD7.D
Data file 2: /230224.b/230224.b/02242305ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:15
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.813	0.006	1641874	5.688	0.003	709674	166.2	151.5	9.3	Tetrachloro-m-xylene
13.899	0.006	2344583	14.122	0.002	1300114	161.9	158.6	2.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661440	-1.8
Hexabromobiphenyl	1429847	1470100	2.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319272	1.3
Hexabromobiphenyl	513946	538138	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	220519	877.8	1	7.254	-0.001	162833	871.2
Aroclor-1016	2	7.652	-0.002	731607	955.3	2	7.852	-0.004	373610	985.8
Aroclor-1016	3	7.789	-0.001	307629	822.8	3	8.051	-0.003	156666	915.2
Aroclor-1016	4	8.404	-0.001	229387	949.1	4	8.305	-0.002	117186	872.6
Total CollAve (4 peaks):				901.3		Total Col2Ave (4 peaks):				911.2 RPD = 1
Corrected Ave (3 peaks):				883.3		Corrected Ave (3 peaks):				886.3 RPD = 0

CalAmt %D: -9.9

CalAmt %D: -8.9

Aroclor-1260	1	11.044	-0.000	504641	954.2	1	11.652	-0.000	282606	893.1
Aroclor-1260	2	11.360	-0.001	524931	950.0	2	11.917	-0.000	709329	878.4
Aroclor-1260	3	11.734	-0.000	1410270	962.3	3	12.434	-0.001	215124	1003.8
Aroclor-1260	4	12.137	-0.002	720770	976.7	4	12.501	-0.001	506566	930.6
Aroclor-1260	5	12.243	-0.001	304211	957.7	NS	---			----
Total CollAve (5 peaks):				960.2		Total Col2Ave (4 peaks):				926.5 RPD = 4
Corrected Ave (4 peaks):				956.0		Corrected Ave (3 peaks):				900.7 RPD = 6

CalAmt %D: -4.0

CalAmt %D: -7.4

Total PCB Area Coll (5.906 - 13.793) = 14454279 Coll Total PCB = 1.8 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 7029563 Col2 Total PCB = 1.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242306ECD7.D
Data file 2: /230224.b/230224.b/02242306ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:36
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col				
5.809	0.002	155528	5.688	0.003	74628	15.9	16.0	0.9	Tetrachloro-m-xylene
13.892	-0.001	227253	14.119	-0.000	128496	15.8	15.8	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	655979	-2.6
Hexabromobiphenyl	1429847	1464509	2.4
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317418	0.7
Hexabromobiphenyl	513946	532962	3.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	25761	103.4	1	7.255	-0.000	19315	103.9
Aroclor-1016	2	7.657	0.003	75616	99.6	2	7.863	0.007	40308	107.0
Aroclor-1016	3	7.794	0.004	39547	106.7	3	8.059	0.005	18304	107.6
Aroclor-1016	4	8.406	0.001	24260	101.2	4	8.309	0.002	14708	110.2
Total CollAve (4 peaks):				102.7		Total Col2Ave (4 peaks):				107.2 RPD = 4
Corrected Ave (3 peaks):				101.4		Corrected Ave (3 peaks):				106.2 RPD = 5
CalAmt %D:				2.7		CalAmt %D:				7.2
Aroclor-1260	1	11.045	0.000	52009	98.7	1	11.655	0.002	31282	99.8
Aroclor-1260	2	11.362	0.001	55116	100.1	2	11.920	0.003	80574	100.7
Aroclor-1260	3	11.738	0.004	145604	99.7	3	12.437	0.002	19566	92.2
Aroclor-1260	4	12.141	0.002	72408	98.5	4	12.503	0.001	53588	99.4
Aroclor-1260	5	12.245	0.001	30745	97.2	NS	---			----
Total CollAve (5 peaks):				98.8		Total Col2Ave (4 peaks):				98.0 RPD = 1
Corrected Ave (4 peaks):				98.5		Corrected Ave (3 peaks):				97.1 RPD = 1
CalAmt %D:				-1.2		CalAmt %D:				-2.0

Total PCB Area Coll (5.906 - 13.793) = 1555762 Coll Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 764924 Col2 Total PCB = 0.2 ppm*

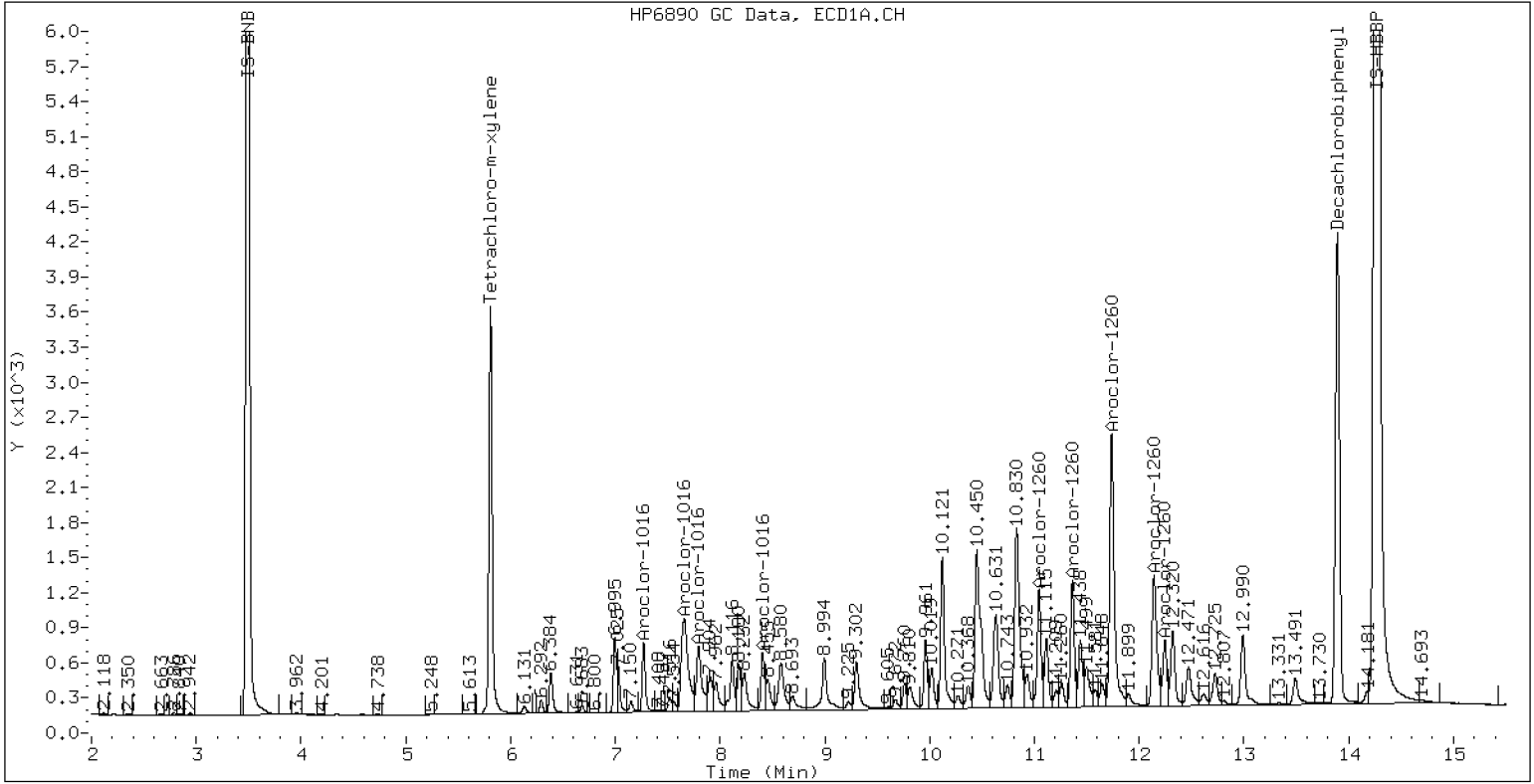
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPMAR1660

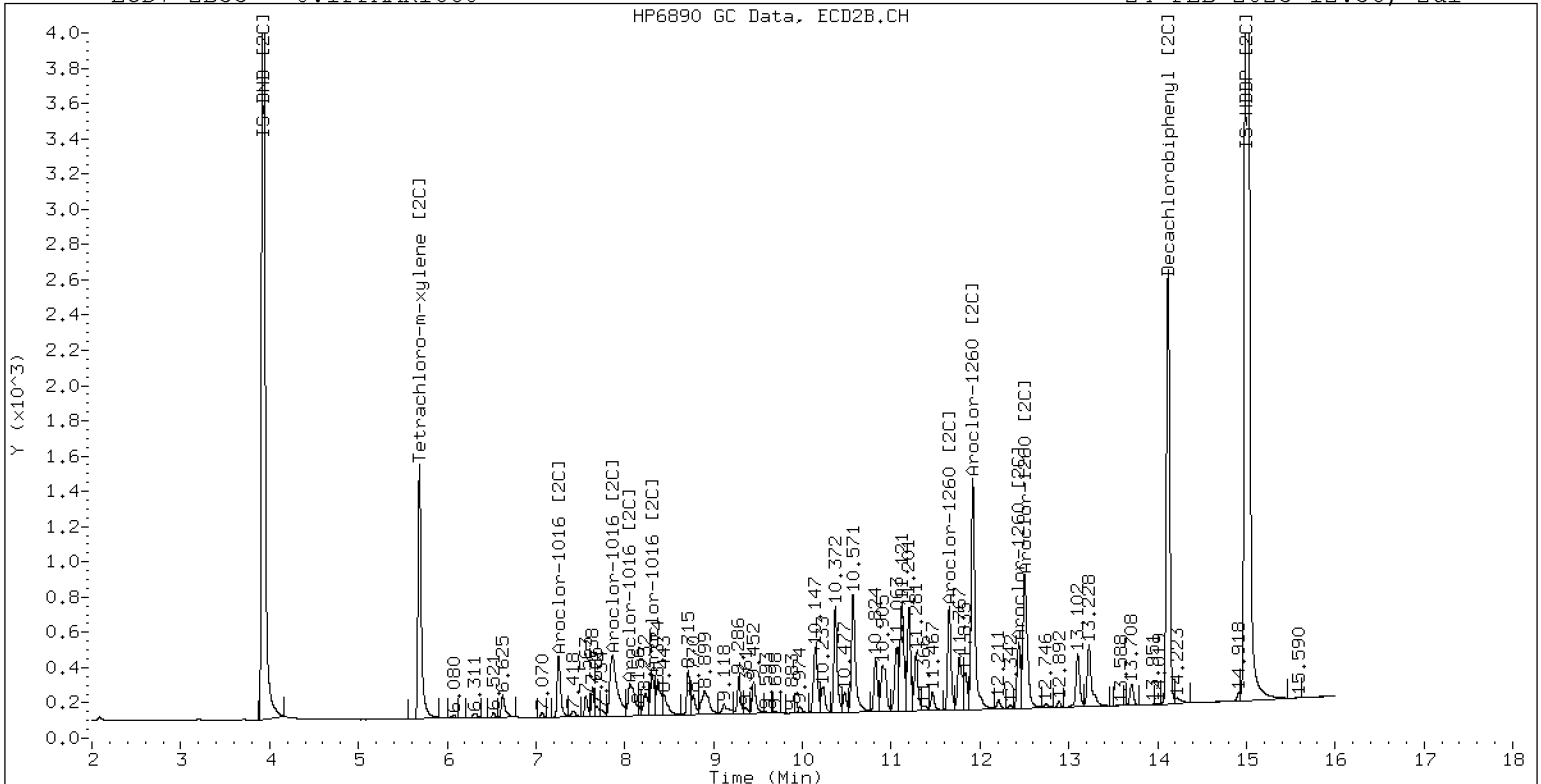
24-FEB-2023 12:36, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPMAR1660

24-FEB-2023 12:36, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242307ECD7.D
Data file 2: /230224.b/230224.b/02242307ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:57
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.810	0.004	724614	5.688	0.003	359257	75.2	76.7	2.0	Tetrachloro-m-xylene
13.898	0.005	1056911	14.120	0.000	650153	74.3	79.5	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645275	-4.2
Hexabromobiphenyl	1429847	1445345	1.1
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319170	1.2
Hexabromobiphenyl	513946	536853	4.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.270	0.000	115193	470.0	1	7.256	0.000	86287	461.8	
Aroclor-1016	2	7.654	0.000	369991	495.2	2	7.856	0.000	192524	508.1	
Aroclor-1016	3	7.790	0.000	160952	441.3	3	8.055	0.000	81039	473.6	
Aroclor-1016	4	8.405	0.000	115032	487.9	4	8.307	0.000	62136	462.8	
Total CollAve (4 peaks):				473.6		Total Col2Ave (4 peaks):				476.6	RPD = 1
Corrected Ave (3 peaks):				466.4		Corrected Ave (3 peaks):				466.1	RPD = 0

CalAmt %D: -5.3

CalAmt %D: -4.7

Aroclor-1260	1	11.044	0.000	247212	475.5	1	11.653	0.000	145247	460.1	
Aroclor-1260	2	11.361	0.000	262877	483.9	2	11.918	0.000	379838	471.5	
Aroclor-1260	3	11.734	0.000	678830	471.1	3	12.436	0.000	104092	486.9	
Aroclor-1260	4	12.139	0.000	356067	490.7	4	12.502	0.000	258953	476.9	
Aroclor-1260	5	12.244	0.000	150280	481.2	NS	---			----	
Total CollAve (5 peaks):				480.5		Total Col2Ave (4 peaks):				473.8	RPD = 1
Corrected Ave (4 peaks):				477.9		Corrected Ave (3 peaks):				469.5	RPD = 2

CalAmt %D: -3.9

CalAmt %D: -5.2

Total PCB Area Coll (5.906 - 13.793) = 7134169 Coll Total PCB = 0.9 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 3589735 Col2 Total PCB = 0.9 ppm*

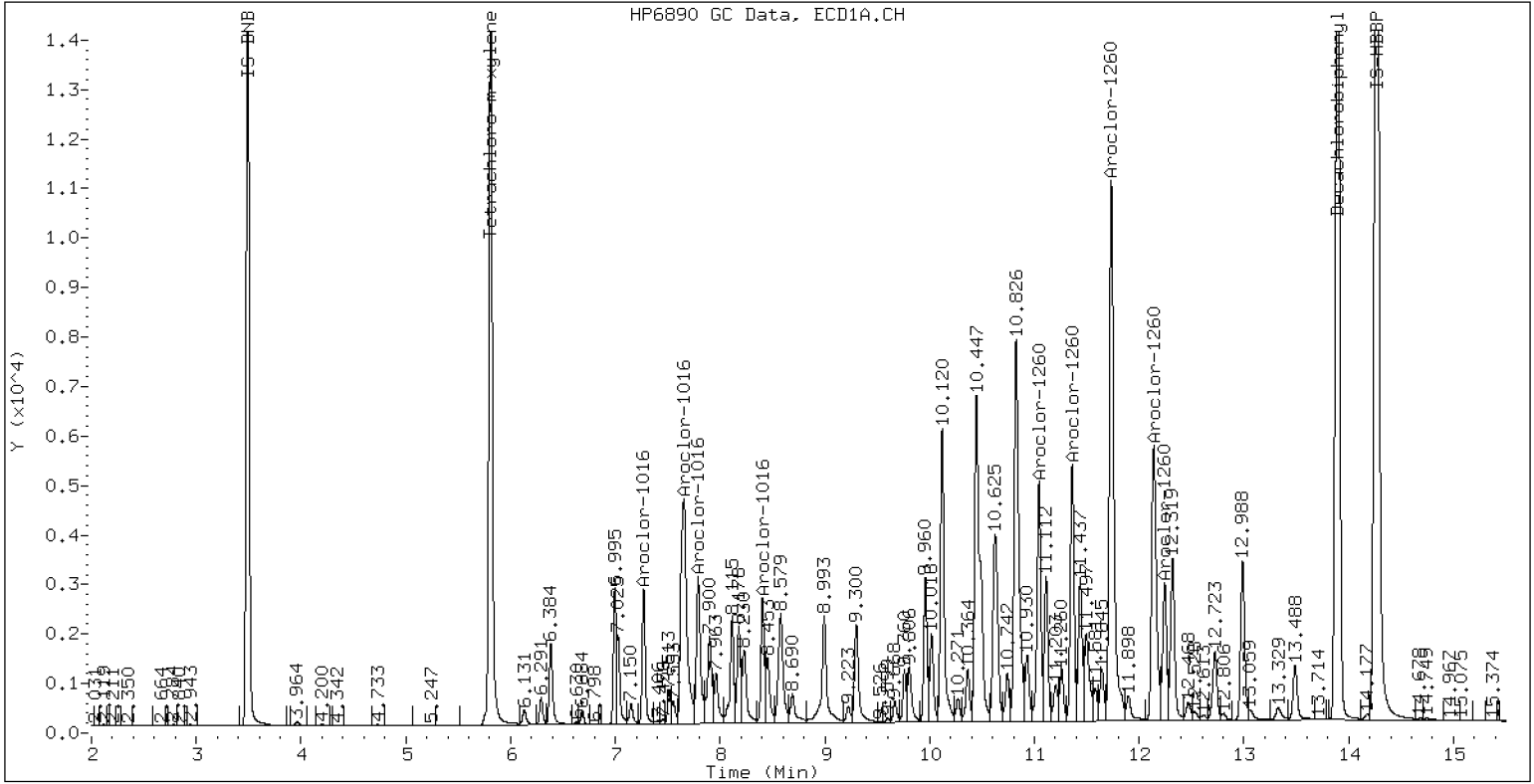
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPMAR1660

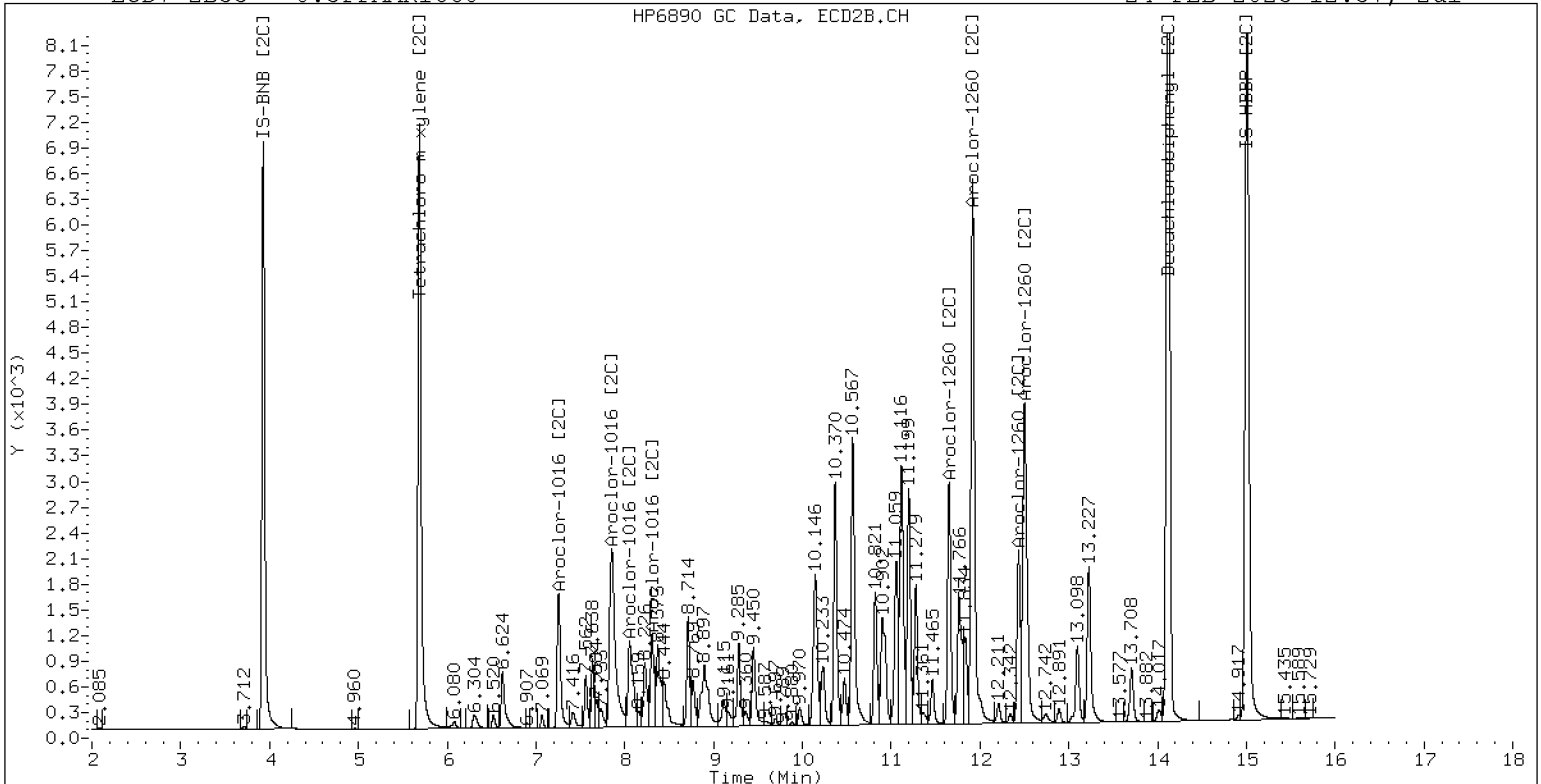
24-FEB-2023 12:57, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPMAR1660

24-FEB-2023 12:57, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242308ECD7.D
Data file 2: /230224.b/230224.b/02242308ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1242
Client ID:
Injection Date: 24-FEB-2023 13:18
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.003	434187	5.688	0.003	214306	46.0	46.5	1.1	Tetrachloro-m-xylene
13.894	0.000	515867	14.119	-0.001	312943	35.6	38.5	7.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632576	-6.1
Hexabromobiphenyl	1429847	1469715	2.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314129	-0.4
Hexabromobiphenyl	513946	534294	4.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.271	0.000	49009	250.0	1	7.255	0.000	36487	250.0
Aroclor-1242	2	7.656	0.000	148833	250.0	2	7.858	0.000	76699	250.0
Aroclor-1242	3	8.405	0.000	46308	250.0	3	9.167	0.000	23866	250.0
Aroclor-1242	4	8.579	0.000	68453	250.0	4	9.597	0.000	29080	250.0
Total Col1Ave (4 peaks):				250.0	Total Col2Ave (4 peaks):				250.0	RPD = 0
Corrected Ave (3 peaks):				250.0	Corrected Ave (3 peaks):				250.0	RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 1221467 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 572067 Col2 Total PCB = 0.2 ppm*

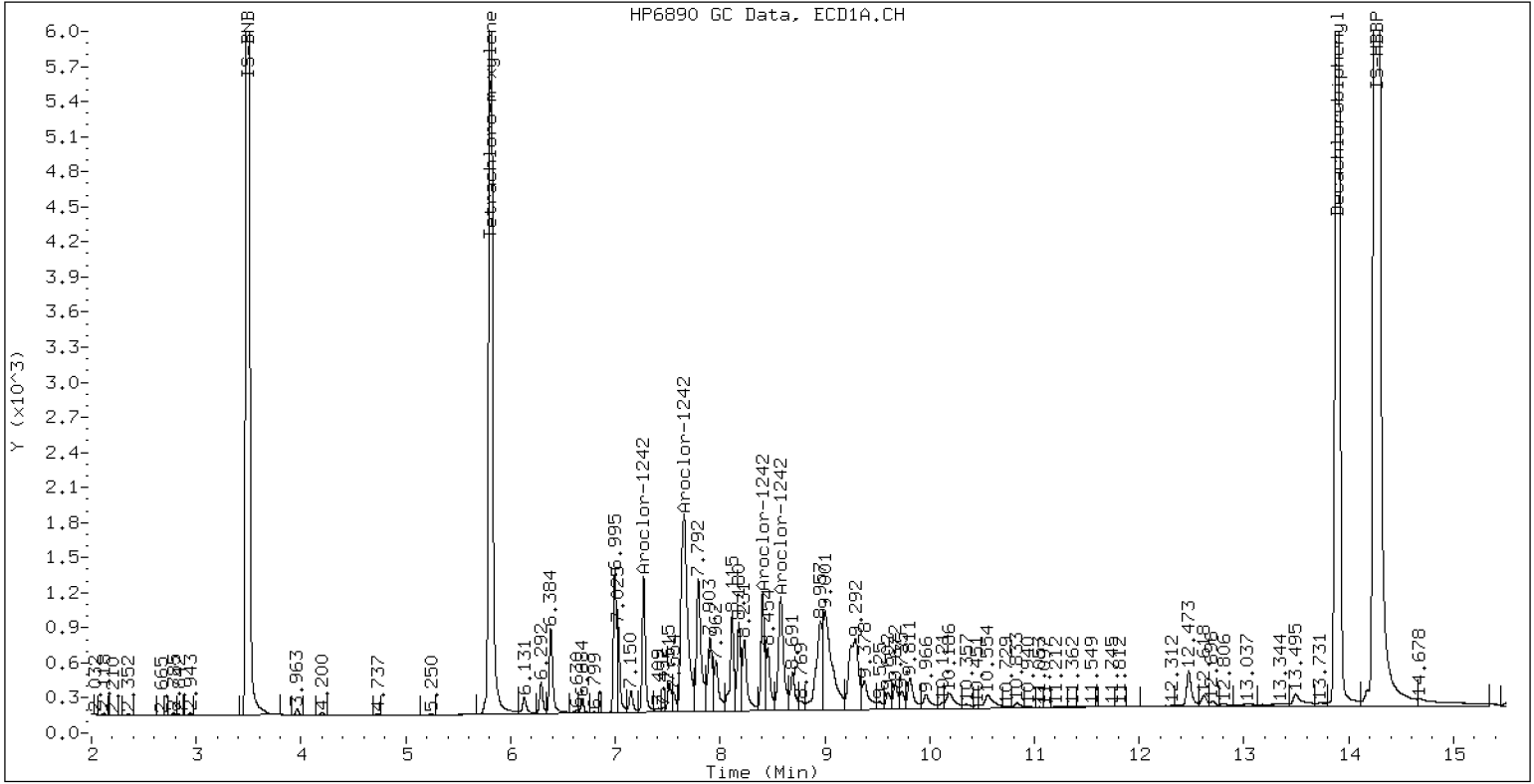
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1242

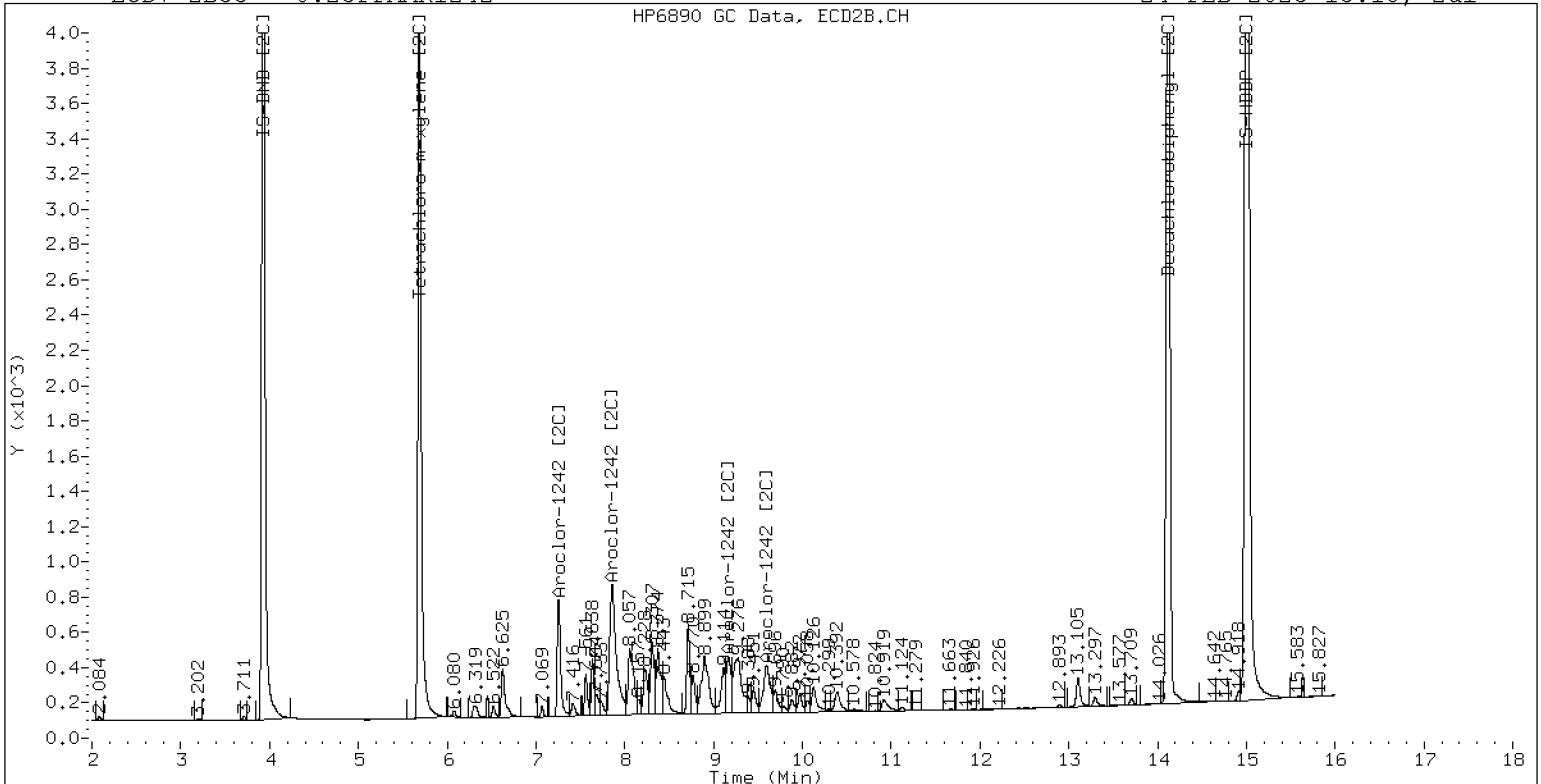
24-FEB-2023 13:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1242

24-FEB-2023 13:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242309ECD7.D
Data file 2: /230224.b/230224.b/02242309ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1248
Client ID:
Injection Date: 24-FEB-2023 13:39
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.003	349513	5.688	0.003	176615	36.6	37.9	3.4	Tetrachloro-m-xylene
13.894	0.001	523008	14.121	0.001	322054	36.4	39.3	7.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	639911	-5.0
Hexabromobiphenyl	1429847	1458696	2.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317938	0.9
Hexabromobiphenyl	513946	538760	4.8

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.405	0.000	78055	250.0	1	8.308	0.000	37951	250.0
Aroclor-1248	2	8.580	0.000	99216	250.0	2	8.714	0.000	39239	250.0
Aroclor-1248	3	8.999	0.000	187178	250.0	3	9.166	0.000	45157	250.0
Aroclor-1248	4	9.295	0.000	95291	250.0	4	9.590	0.000	54216	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 1565180 Coll Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 754991 Col2 Total PCB = 0.2 ppm*

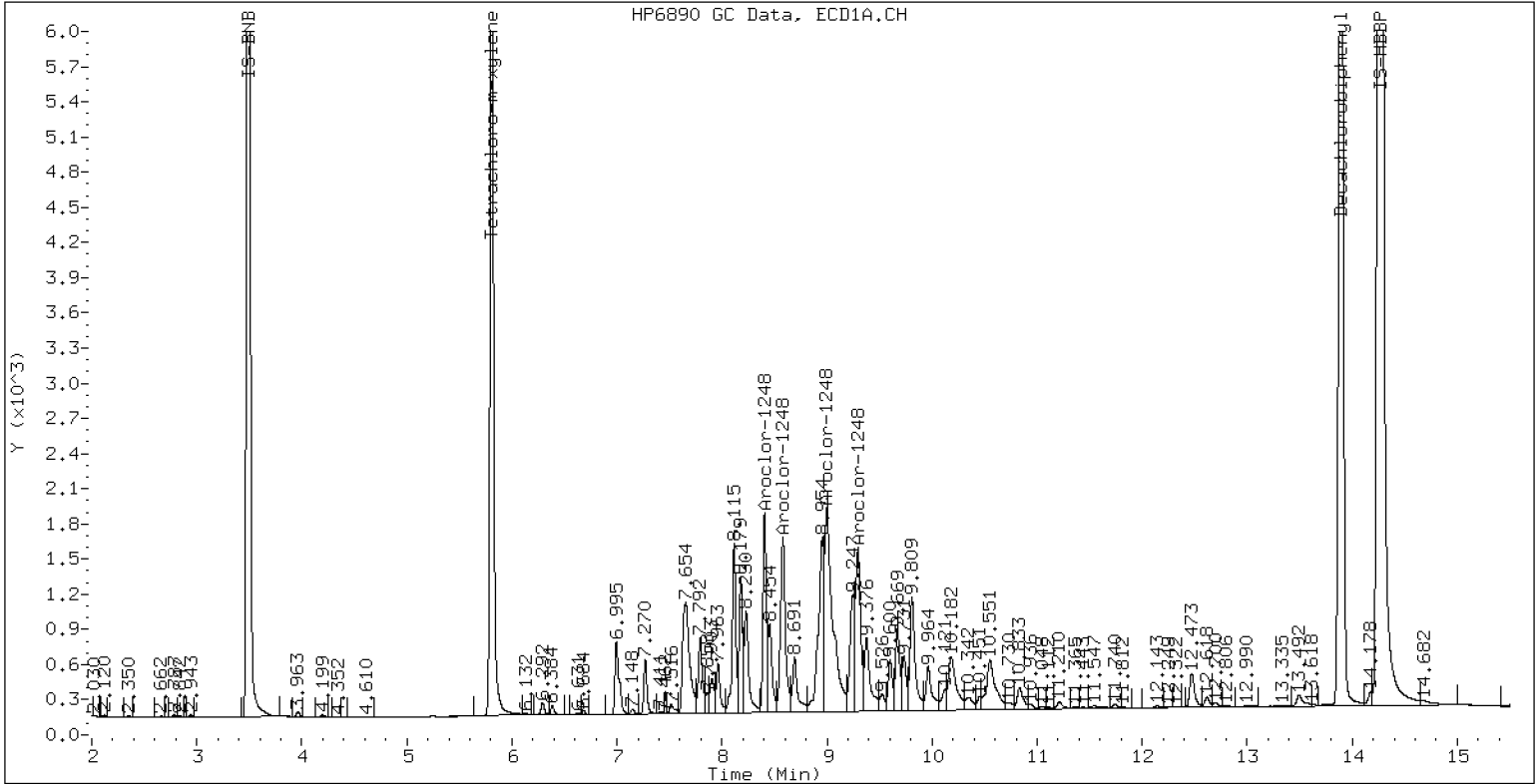
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1248

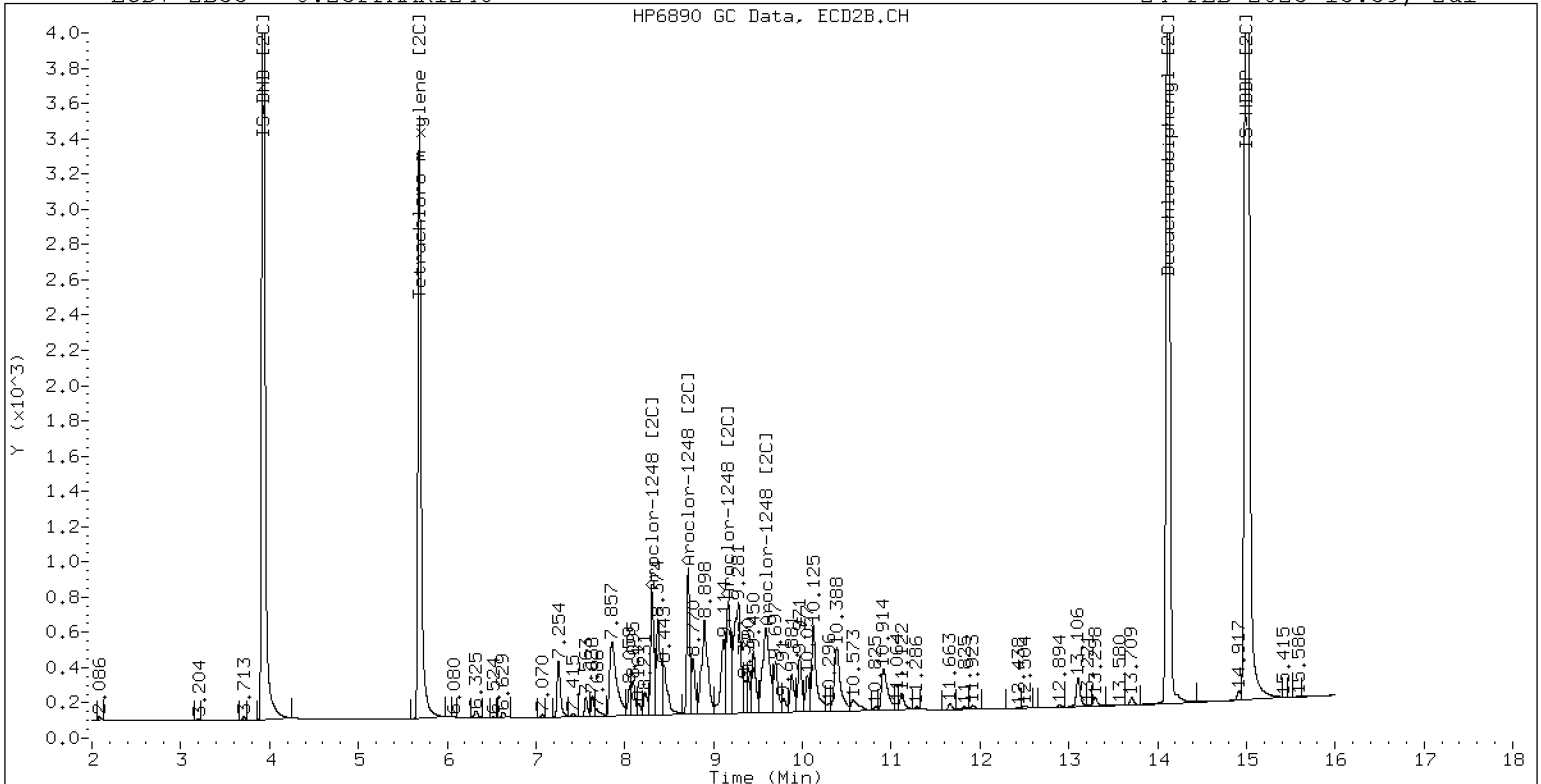
24-FEB-2023 13:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1248

24-FEB-2023 13:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242310ECD7.D
Data file 2: /230224.b/230224.b/02242310ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1254
Client ID:
Injection Date: 24-FEB-2023 14:00
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.002	352587	5.687	0.002	177502	37.3	38.6	3.4	Tetrachloro-m-xylene
13.895	0.002	532500	14.119	0.000	325903	37.0	40.2	8.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	633407	-6.0
Hexabromobiphenyl	1429847	1460265	2.1
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	313673	-0.5
Hexabromobiphenyl	513946	532442	3.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1254	1	9.299	0.000	159011	250.0	1	9.449	0.000	59603	250.0	
Aroclor-1254	2	9.377	0.000	71516	250.0	2	9.970	0.000	47949	250.0	
Aroclor-1254	3	9.668	0.000	102230	250.0	3	10.124	0.000	103745	250.0	
Aroclor-1254	4	9.807	0.000	198777	250.0	4	10.373	0.000	101135	250.0	
Aroclor-1254	5	10.176	0.000	124586	250.0	5	10.569	0.000	61577	250.0	
Total CollAve (5 peaks):				250.0		Total Col2Ave (5 peaks):				250.0	RPD = 0
Corrected Ave (4 peaks):				250.0		Corrected Ave (4 peaks):				250.0	RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 2179224 Coll Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1022156 Col2 Total PCB = 0.3 ppm*

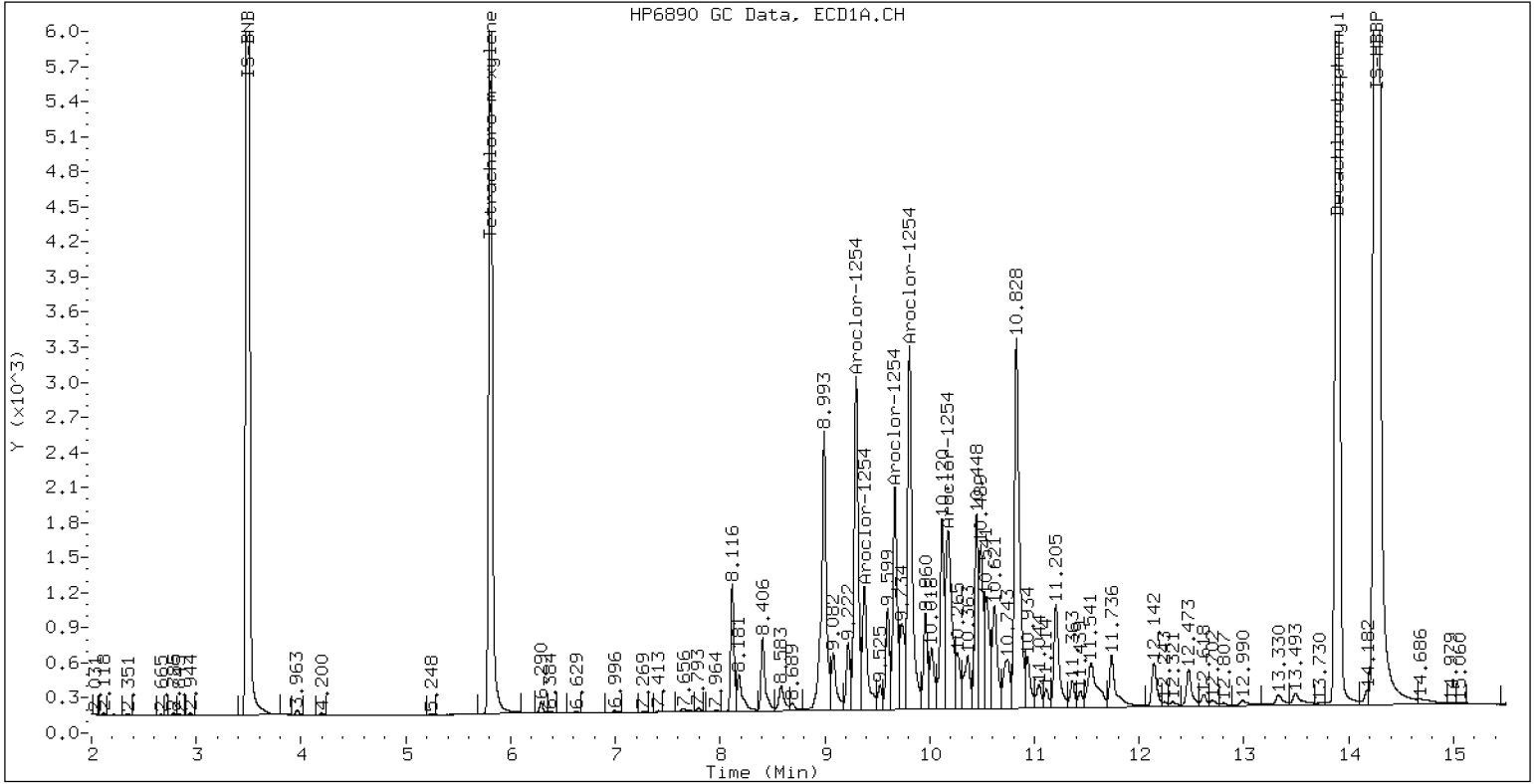
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1254

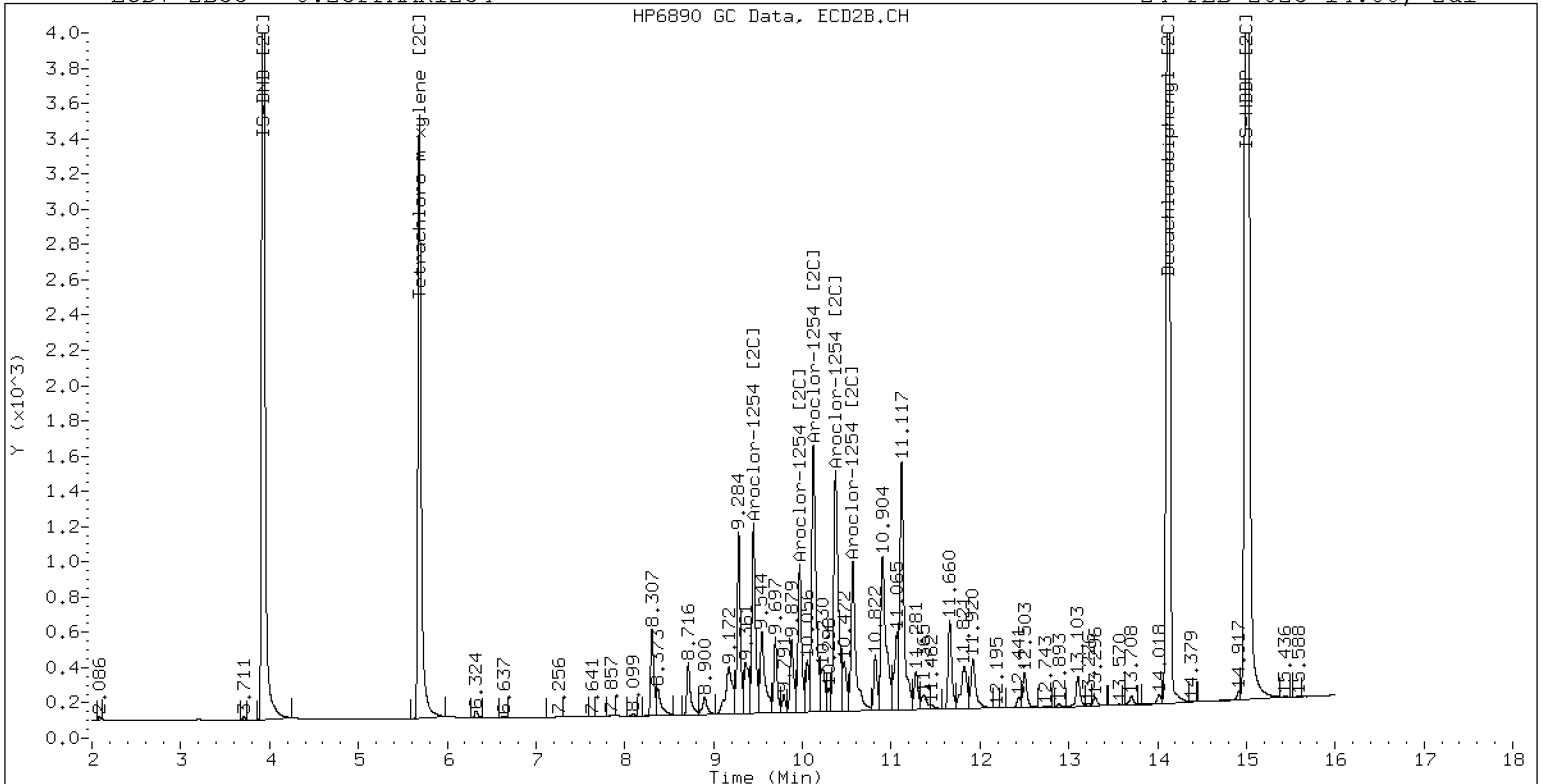
24-FEB-2023 14:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1254

24-FEB-2023 14:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242311ECD7.D
Data file 2: /230224.b/230224.b/02242311ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR2162
Client ID:
Injection Date: 24-FEB-2023 14:21
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.001	362236	5.686	0.000	177349	38.4	39.2	2.1	Tetrachloro-m-xylene
13.894	0.001	523254	14.119	-0.000	321034	36.0	39.2	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632433	-6.1
Hexabromobiphenyl	1429847	1474039	3.1

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	308453	-2.2
Hexabromobiphenyl	513946	538177	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	4.731	0.000	14160	250.0	1	4.956	0.000	7300	250.0
Aroclor-1221	2	6.132	0.000	25324	250.0	2	6.296	0.000	13816	250.0
Aroclor-1221	3	6.382	0.000	58795	250.0	3	6.622	0.000	22491	250.0
Total CollAve (3 peaks):				250.0		Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Aroclor-1262	1	10.829	0.000	113046	250.0	1	11.200	0.000	114880	250.0
Aroclor-1262	2	12.244	0.000	183948	250.0	2	11.652	0.000	97844	250.0
Aroclor-1262	3	12.319	0.000	197749	250.0	3	12.434	0.000	111015	250.0
Aroclor-1262	4	12.987	0.000	180727	250.0	4	12.502	0.000	173913	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 3105316 Coll Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1573107 Col2 Total PCB = 0.4 ppm*

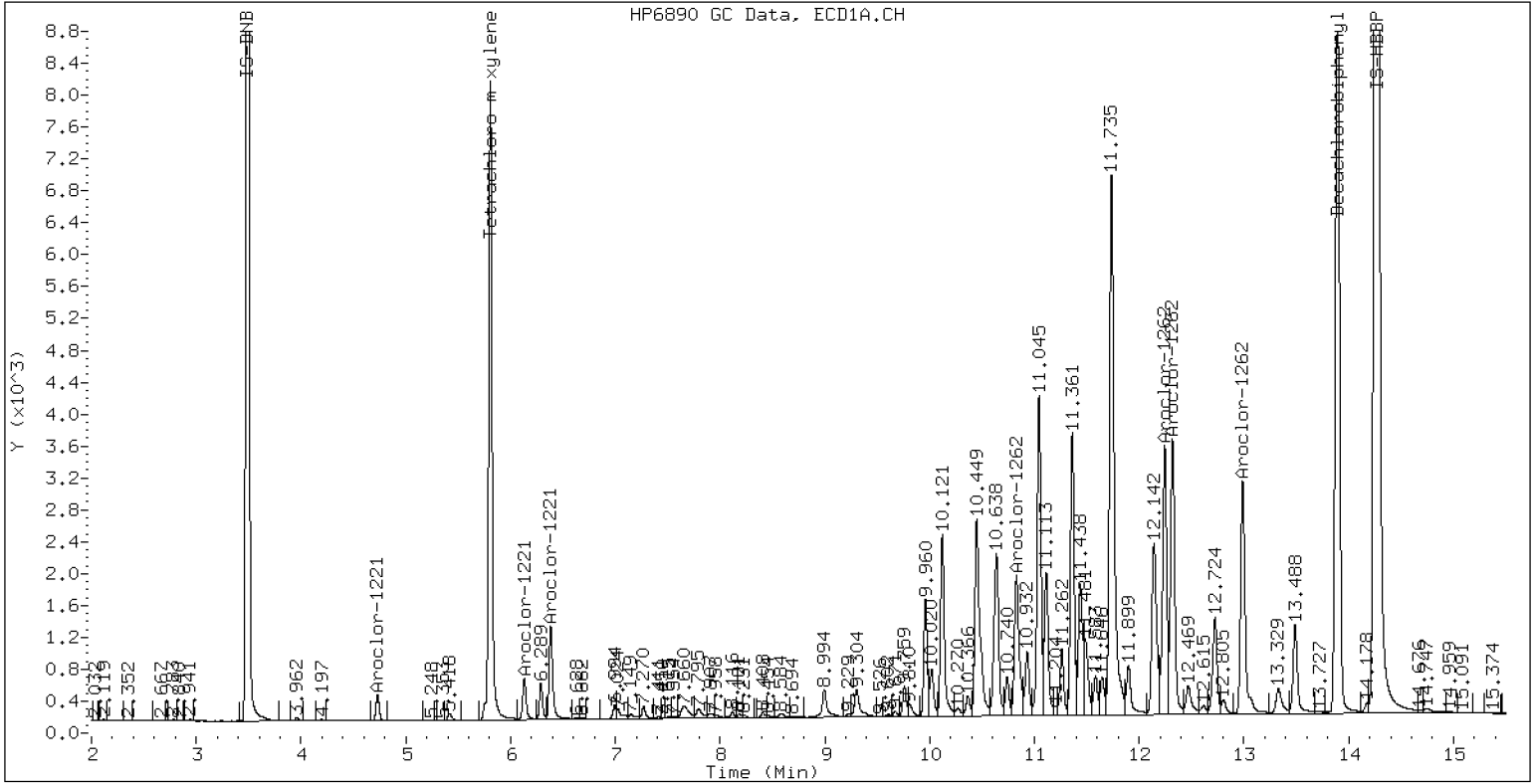
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR2162

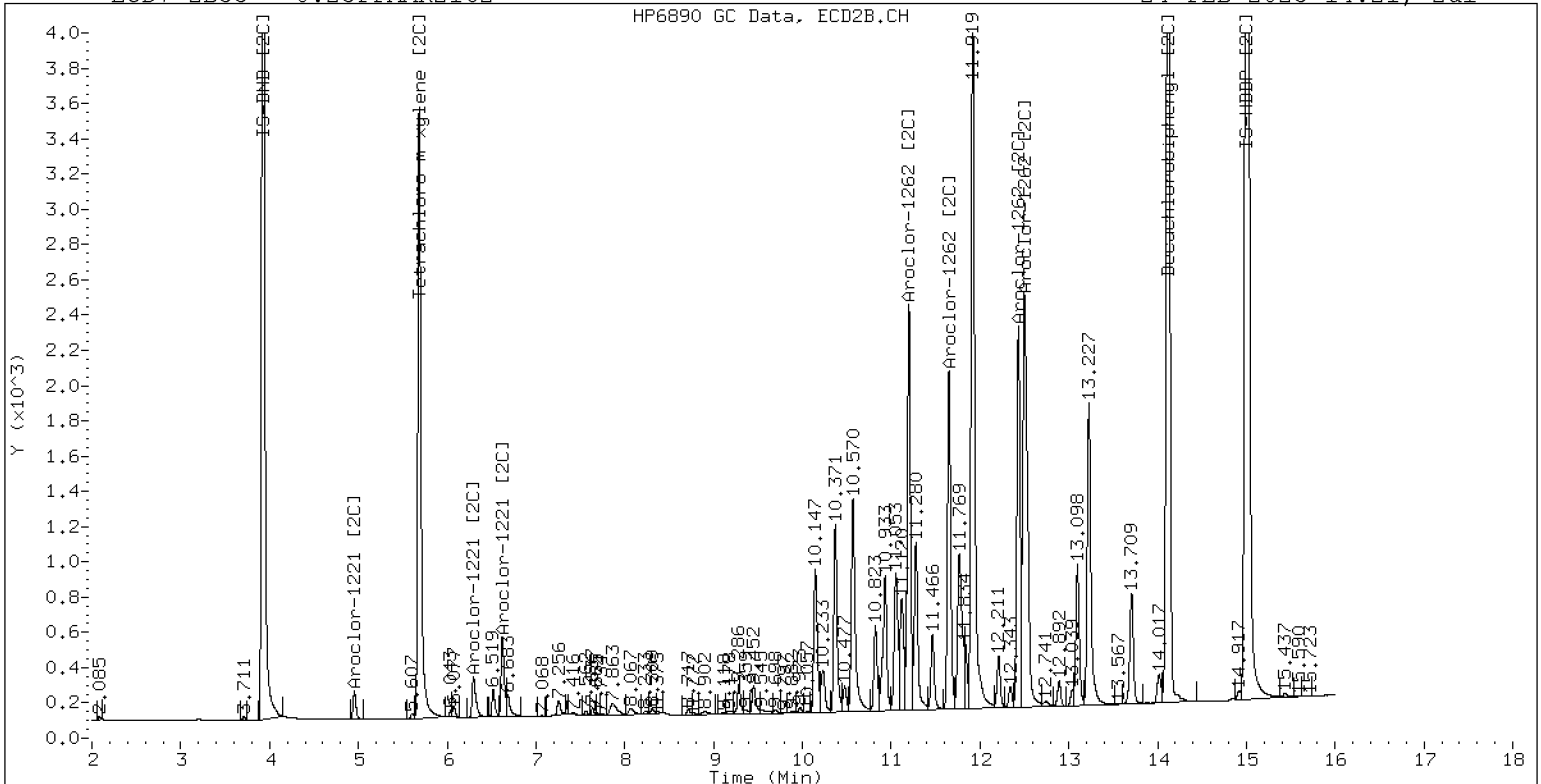
24-FEB-2023 14:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR2162

24-FEB-2023 14:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242312ECD7.D
Data file 2: /230224.b/230224.b/02242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR3268
Client ID:
Injection Date: 24-FEB-2023 14:42
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.806	0.000	366416	5.685	0.000	179450	38.0	38.9	2.4	Tetrachloro-m-xylene
13.893	0.000	778191	14.119	0.000	477889	53.0	57.5	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645602	-4.2
Hexabromobiphenyl	1429847	1492154	4.4

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314042	-0.4
Hexabromobiphenyl	513946	545458	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.730	0.000	8647	250.0	1	4.956	0.000	4017	250.0
Aroclor-1232	2	6.131	0.000	17148	250.0	2	7.254	0.000	19962	250.0
Aroclor-1232	3	7.656	0.000	77627	250.0	3	7.861	0.000	39913	250.0
Aroclor-1232	4	8.581	0.000	32993	250.0	4	8.715	0.000	11487	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.247	0.000	477974	250.0	1	12.432	0.000	274595	250.0
Aroclor-1268	2	12.317	0.000	473326	250.0	2	12.500	0.000	295194	250.0
Aroclor-1268	3	12.699	0.000	405011	250.0	3	12.892	0.000	252048	250.0
Aroclor-1268	4	13.490	0.000	1333528	250.0	4	13.709	0.000	805579	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.906 - 13.793) = 3998414 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 2300029 Col2 Total PCB = 0.6 ppm*

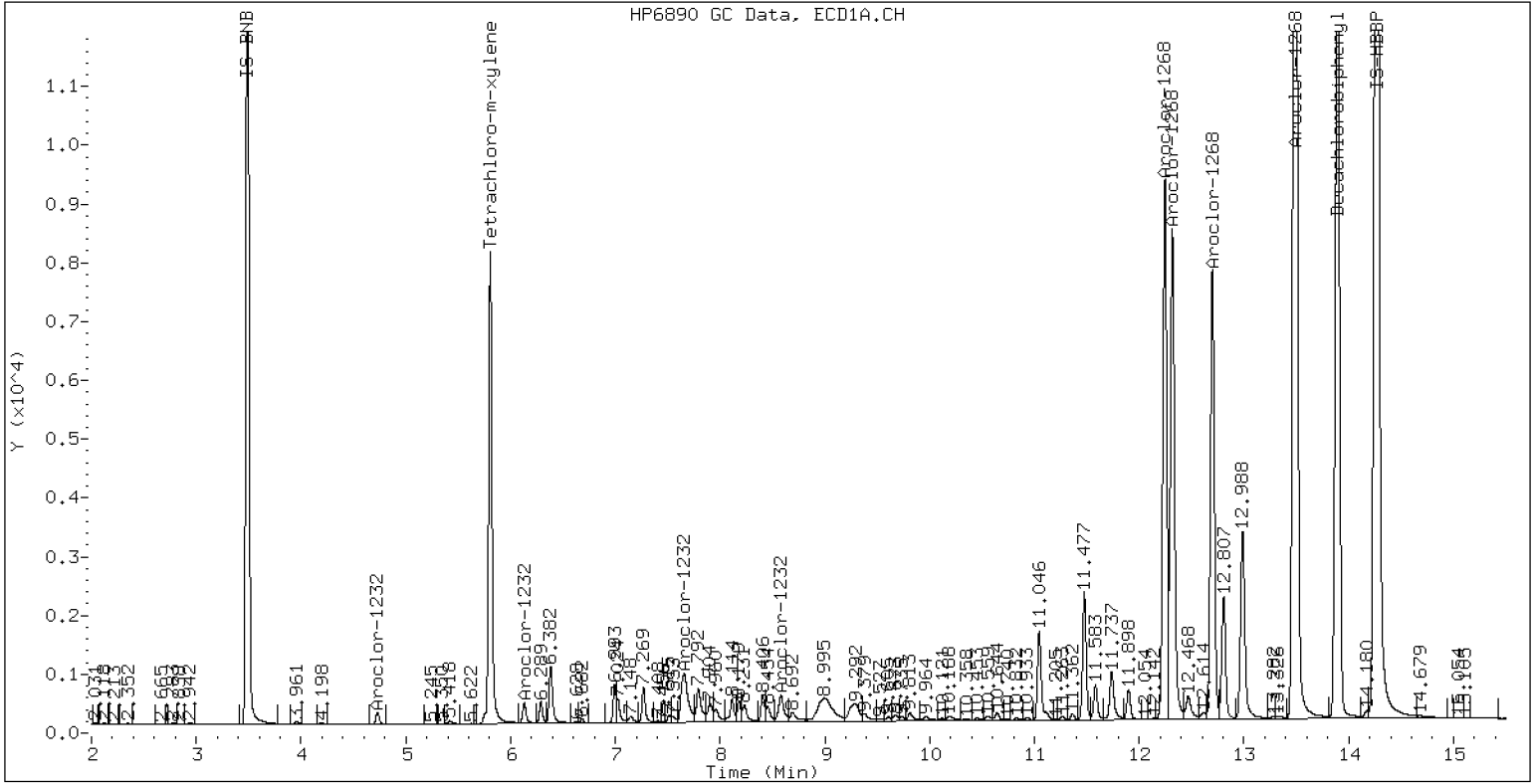
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR3268

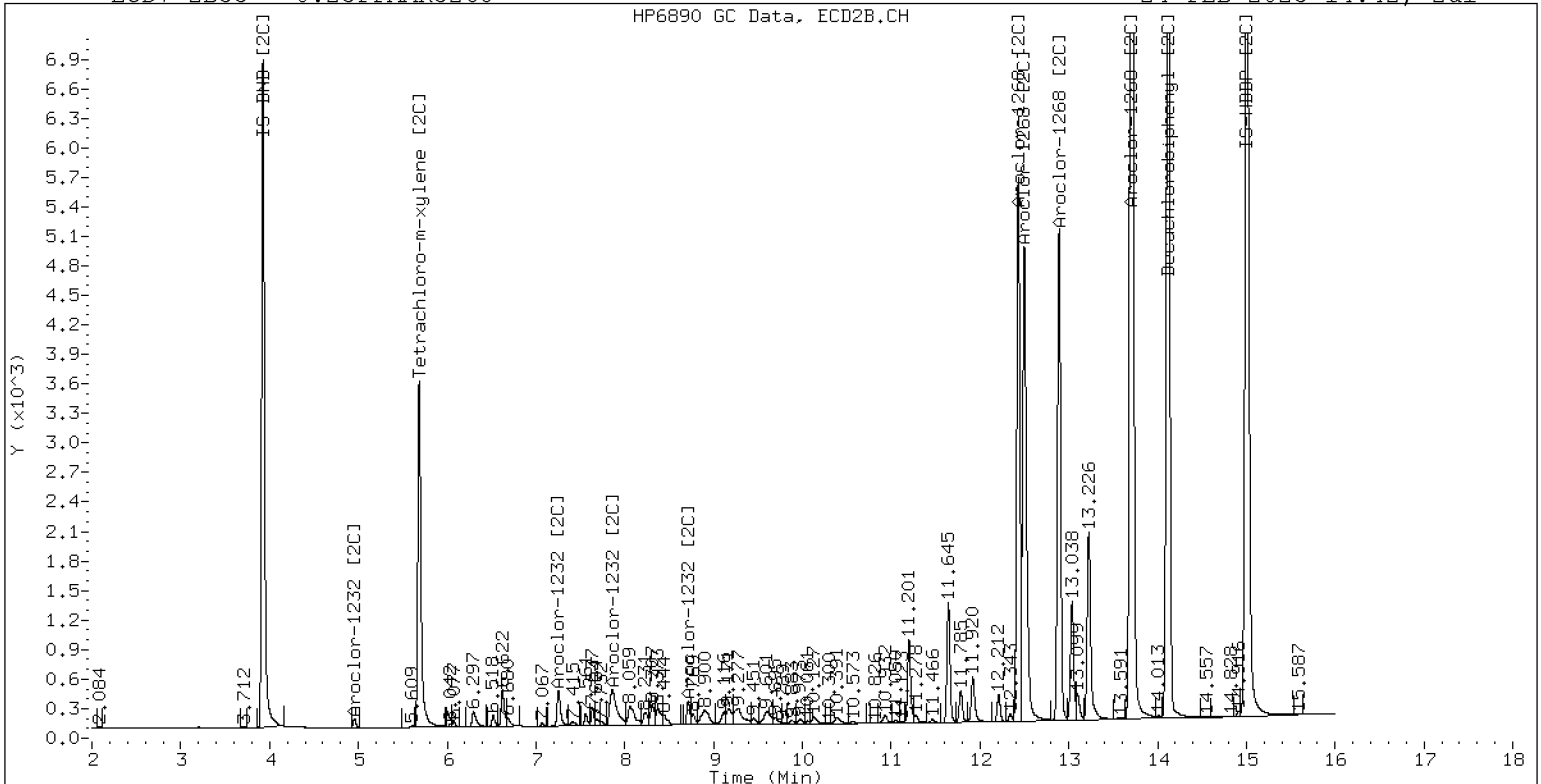
24-FEB-2023 14:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR3268

24-FEB-2023 14:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242313ECD7.D
Data file 2: /230224.b/230224.b/02242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 24-FEB-2023 15:03
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.001	337070	5.686	0.001	165848	34.9	35.8	2.3	Tetrachloro-m-xylene
13.895	0.002	515407	14.119	-0.000	316730	34.3	37.3	8.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645975	-4.1
Hexabromobiphenyl	1429847	1524245	6.6

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316115	0.3
Hexabromobiphenyl	513946	556950	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.269	-0.002	59491	242.5	1	7.254	-0.002	44576	240.9	
Aroclor-1016	2	7.655	0.001	181090	242.1	2	7.857	0.002	95386	254.2	
Aroclor-1016	3	7.790	0.000	88470	242.3	3	8.056	0.002	42160	248.8	
Aroclor-1016	4	8.404	-0.001	57980	245.6	4	8.307	0.000	32197	242.1	
Total CollAve (4 peaks):				243.1	Total Col2Ave (4 peaks):				246.5	RPD = 1	
Corrected Ave (3 peaks):				242.3	Corrected Ave (3 peaks):				243.9	RPD = 1	
Aroclor-1221	1	4.731	0.000	464	8.0	1	---			0.0	
Aroclor-1221	2	6.130	-0.002	9233	89.2	2	6.300	0.004	5379	95.0	
Aroclor-1221	3	6.382	-0.001	42570	177.2	3	6.623	0.001	20952	227.2	
Total CollAve (3 peaks):				91.5	Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	4.731	0.001	464	13.4	1	---			0.0	
Aroclor-1232	2	6.130	-0.001	9233	134.5	2	7.254	-0.000	44576	554.6	
Aroclor-1232	3	7.655	-0.001	181090	582.9	3	7.857	-0.003	95386	593.5	
Aroclor-1232	4	8.580	-0.001	79916	605.2	4	8.713	-0.002	29795	644.2	
Total CollAve (4 peaks):				334.0	Total Col2Ave (3 peaks):				597.4	RPD = 57*	
Corrected Ave (3 peaks):				243.6	Corrected Ave: < 3 Peaks						
Aroclor-1242	1	7.269	-0.002	59491	297.2	1	7.254	-0.002	44576	303.5	
Aroclor-1242	2	7.655	-0.001	181090	297.9	2	7.857	-0.000	95386	309.0	
Aroclor-1242	3	8.404	-0.001	57980	306.5	3	9.115	-0.052	18754	195.2	
Aroclor-1242	4	8.580	0.000	79916	285.8	4	9.697	0.100	1355	11.6	
Total CollAve (4 peaks):				296.8	Total Col2Ave (4 peaks):				204.8	RPD = 37	
Corrected Ave (3 peaks):				293.6	Corrected Ave (3 peaks):				170.1	RPD = 53*	
Aroclor-1248	1	8.404	-0.001	57980	184.0	1	8.307	-0.001	32197	213.3	
Aroclor-1248	2	8.580	-0.001	79916	199.5	2	8.713	-0.001	29795	190.9	
Aroclor-1248	3	8.993	-0.006	71805	95.0	3	9.115	-0.050	18754	104.4	
Aroclor-1248	4	9.300	0.006	47348	123.1	4	---			0.0	
Total CollAve (4 peaks):				150.4	Total Col2Ave (3 peaks):				169.6	RPD = 12	
Corrected Ave (3 peaks):				134.0	Corrected Ave: < 3 Peaks						
Aroclor-1254	1	9.300	0.002	47348	73.0	1	9.451	0.001	22438	93.4	
Aroclor-1254	2	---			0.0	2	9.972	0.001	2694	13.9	
Aroclor-1254	3	9.670	0.002	5461	13.1	3	10.147	0.024	52914	126.5	
Aroclor-1254	4	9.807	-0.000	18944	23.4	4	10.370	-0.003	70430	172.8	
Aroclor-1254	5	10.121	-0.056	154170	303.3	5	10.568	-0.000	98525	396.9	
Total CollAve (4 peaks):				103.2	Total Col2Ave (5 peaks):				160.7	RPD = 44*	
Corrected Ave (3 peaks):				36.5	Corrected Ave (4 peaks):				101.7	RPD = 94*	
Aroclor-1260	1	11.044	0.000	149195	272.1	1	11.653	0.000	82210	251.0	
Aroclor-1260	2	11.361	-0.000	153832	268.5	2	11.919	0.001	222226	265.9	
Aroclor-1260	3	11.736	0.002	396660	261.0	3	12.435	-0.000	59148	266.7	
Aroclor-1260	4	12.140	0.001	190448	248.9	4	12.504	0.002	147180	261.2	
Aroclor-1260	5	12.244	-0.000	91385	277.5	NS	---			----	
Total CollAve (5 peaks):				265.6	Total Col2Ave (4 peaks):				261.2	RPD = 2	
Corrected Ave (4 peaks):				262.6	Corrected Ave (3 peaks):				259.4	RPD = 1	
Aroclor-1262	1	10.827	-0.002	220238	471.0	1	11.199	-0.001	84479	177.6	
Aroclor-1262	2	12.244	0.000	91385	120.1	2	11.653	0.002	82210	203.0	
Aroclor-1262	3	12.320	0.001	113066	138.2	3	12.435	0.002	59148	128.7	
Aroclor-1262	4	12.988	0.001	102156	136.7	4	12.504	0.002	147180	204.4	
Total CollAve (4 peaks):				216.5	Total Col2Ave (4 peaks):				178.4	RPD = 19	
Corrected Ave (3 peaks):				131.7	Corrected Ave (3 peaks):				169.8	RPD = 25	
Aroclor-1268	1	12.244	-0.003	91385	46.8	1	12.435	0.003	59148	52.7	
Aroclor-1268	2	12.320	0.003	113066	58.5	2	12.504	0.004	147180	122.1	
Aroclor-1268	3	12.726	0.027	46633	28.2	3	12.893	0.001	2874	2.8	
Aroclor-1268	4	13.489	-0.000	25567	4.7	4	13.709	-0.000	13041	4.0	
Total CollAve (4 peaks):				34.5	Total Col2Ave (4 peaks):				45.4	RPD = 27	
Corrected Ave (3 peaks):				26.6	Corrected Ave (3 peaks):				19.8	RPD = 29	

Total PCB Area Col1 (5.906 - 13.793) = 3743076 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1897008 Col2 Total PCB = 0.5 ppm*

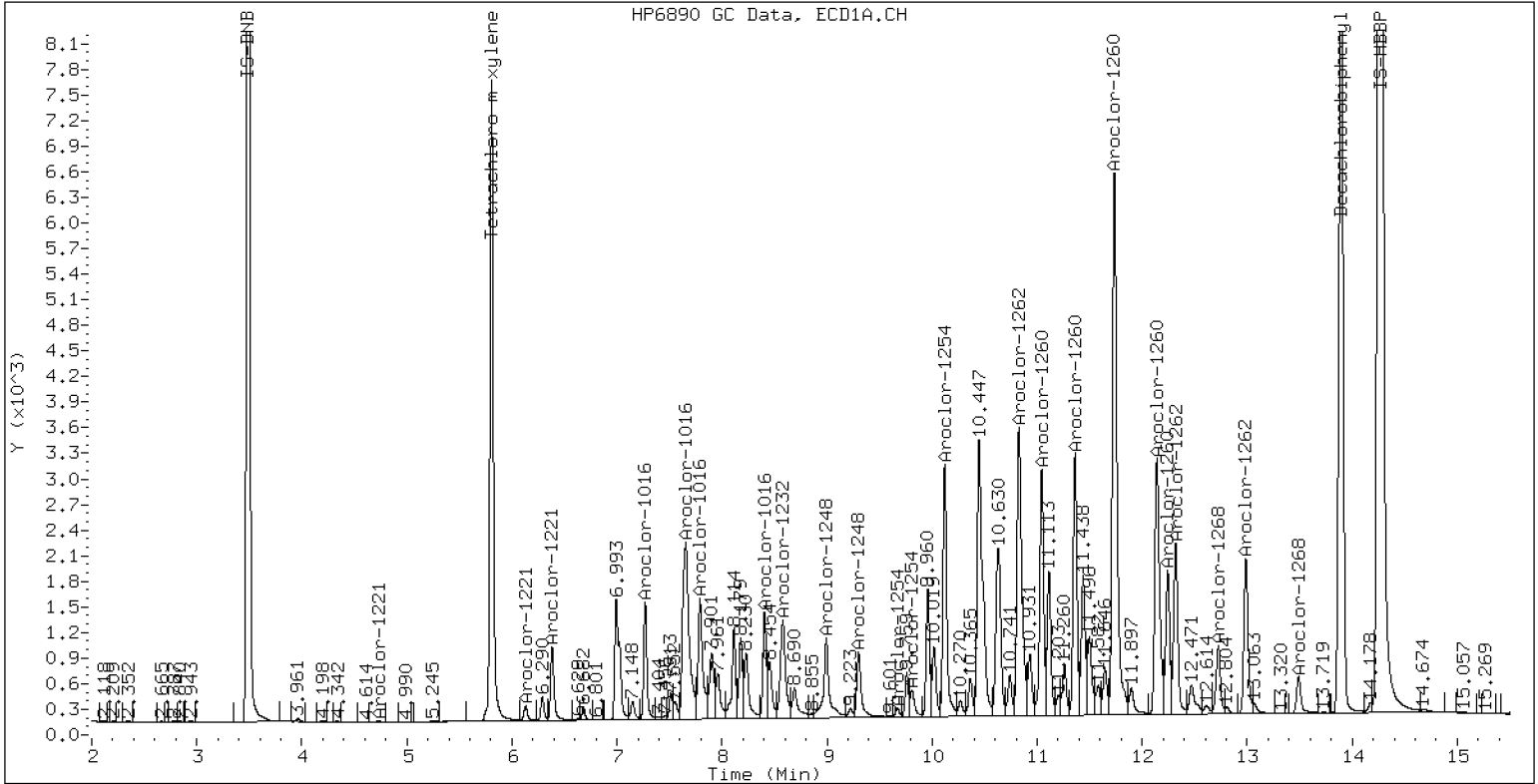
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV

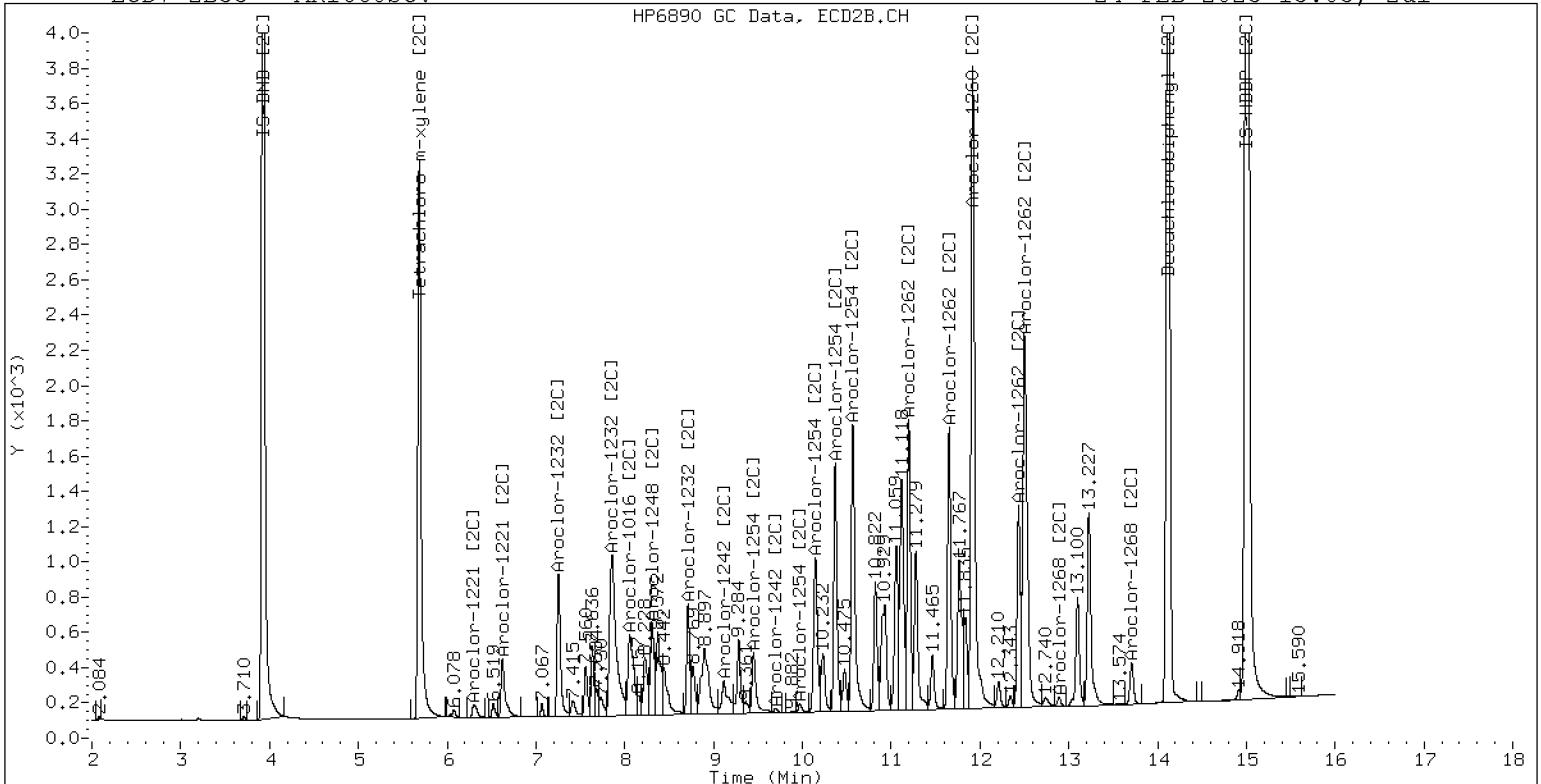
24-FEB-2023 15:03, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV

24-FEB-2023 15:03, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242314ECD7.D
Data file 2: /230224.b/230224.b/02242314ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 24-FEB-2023 15:24
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.002	354283	5.686	0.001	172455	33.6	34.5	2.6	Tetrachloro-m-xylene
13.895	0.002	567088	14.120	0.001	347430	37.0	40.3	8.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	705650	4.7
Hexabromobiphenyl	1429847	1555683	8.8
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	340433	8.0
Hexabromobiphenyl	513946	565609	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	39927	149.0	1	7.256	0.000	32417	162.7
Aroclor-1016	2	7.653	-0.001	132339	162.0	2	7.856	0.001	69235	171.3
Aroclor-1016	3	7.791	0.001	59310	148.7	3	8.055	0.000	29473	161.5
Aroclor-1016	4	8.405	0.000	42537	165.0	4	8.307	-0.000	22792	159.2
Total CollAve (4 peaks):				156.2		Total Col2Ave (4 peaks):				163.7 RPD = 5
Corrected Ave (3 peaks):				153.2		Corrected Ave (3 peaks):				161.1 RPD = 5
Aroclor-1221	1	4.733	0.002	319	5.0	1	---			0.0
Aroclor-1221	2	6.131	-0.001	6534	57.8	2	6.319	0.022	4365	71.6
Aroclor-1221	3	6.384	0.001	29664	113.0	3	6.624	0.002	14916	150.2
Total CollAve (3 peaks):				58.6		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.733	0.003	319	8.4	1	---			0.0
Aroclor-1232	2	6.131	0.000	6534	87.2	2	7.256	0.002	32417	374.5
Aroclor-1232	3	7.653	-0.003	132339	389.9	3	7.856	-0.004	69235	400.0
Aroclor-1232	4	8.579	-0.002	69445	481.4	4	8.714	-0.001	22167	445.0
Total CollAve (4 peaks):				241.7		Total Col2Ave (3 peaks):				406.5 RPD = 51*
Corrected Ave (3 peaks):				161.8		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.270	-0.001	39927	182.6	1	7.256	0.000	32417	205.0
Aroclor-1242	2	7.653	-0.003	132339	199.3	2	7.856	-0.002	69235	208.2
Aroclor-1242	3	8.405	-0.000	42537	205.9	3	9.164	-0.004	23068	223.0
Aroclor-1242	4	8.579	-0.000	69445	227.4	4	9.587	-0.010	31021	246.1
Total CollAve (4 peaks):				203.8		Total Col2Ave (4 peaks):				220.6 RPD = 8
Corrected Ave (3 peaks):				195.9		Corrected Ave (3 peaks):				212.1 RPD = 8
Aroclor-1248	1	8.405	0.000	42537	123.5	1	8.307	-0.001	22792	140.2
Aroclor-1248	2	8.579	-0.001	69445	158.7	2	8.714	-0.000	22167	131.9
Aroclor-1248	3	9.001	0.003	91942	111.4	3	9.164	-0.002	23068	119.3
Aroclor-1248	4	9.294	-0.000	38711	92.1	4	9.587	-0.003	31021	133.6
Total CollAve (4 peaks):				121.4		Total Col2Ave (4 peaks):				131.2 RPD = 8
Corrected Ave (3 peaks):				109.0		Corrected Ave (3 peaks):				128.3 RPD = 16
Aroclor-1254	1	9.294	-0.005	38711	54.6	1	9.450	0.001	13131	50.7
Aroclor-1254	2	9.377	-0.000	17371	54.5	2	9.970	0.000	8340	40.1
Aroclor-1254	3	9.668	-0.000	16373	35.9	3	10.123	-0.000	16364	36.3
Aroclor-1254	4	9.807	-0.001	27490	31.0	4	10.382	0.009	16062	36.6
Aroclor-1254	5	10.175	-0.001	20494	36.9	5	10.572	0.004	4818	18.0
Total CollAve (5 peaks):				42.6		Total Col2Ave (5 peaks):				36.4 RPD = 16
Corrected Ave (4 peaks):				39.6		Corrected Ave (4 peaks):				32.8 RPD = 19
Aroclor-1260	1	11.048	0.003	794	1.4	1	11.665	0.012	1652	5.0
Aroclor-1260	2	11.366	0.005	814	1.4	2	11.926	0.008	842	1.0
Aroclor-1260	3	11.739	0.006	1848	1.2	3	12.438	0.002	483	2.1
Aroclor-1260	4	12.145	0.006	1372	1.8	4	12.506	0.004	790	1.4
Aroclor-1260	5	---			0.0	NS	---			---
Total CollAve (4 peaks):				1.4		Total Col2Ave (4 peaks):				2.4 RPD = 49*
Corrected Ave (3 peaks):				1.3		Corrected Ave (3 peaks):				1.5 RPD = 12
Aroclor-1262	1	10.832	0.003	13157	27.6	1	11.121	-0.079	6113	12.7
Aroclor-1262	2	12.145	-0.098	1372	1.8	2	11.665	0.013	1652	4.0
Aroclor-1262	3	---			0.0	3	12.438	0.004	483	1.0
Aroclor-1262	4	13.038	0.051	842	1.1	4	12.506	0.004	790	1.1
Total CollAve (3 peaks):				10.1		Total Col2Ave (4 peaks):				4.7 RPD = 73*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):				2.0
Aroclor-1268	1	---			0.0	1	12.438	0.006	483	0.4
Aroclor-1268	2	---			0.0	2	12.506	0.006	790	0.6
Aroclor-1268	3	12.617	-0.082	5851	3.5	3	12.899	0.007	491	0.5
Aroclor-1268	4	13.500	0.010	1745	0.3	4	13.714	0.005	379	0.1
CollAve: <3 Quant Peaks						Col2Ave:				0.4

Total PCB Area Col1 (5.906 - 13.793) = 1149784 Col1 Total PCB = 0.1 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 572210 Col2 Total PCB = 0.1 ppm*

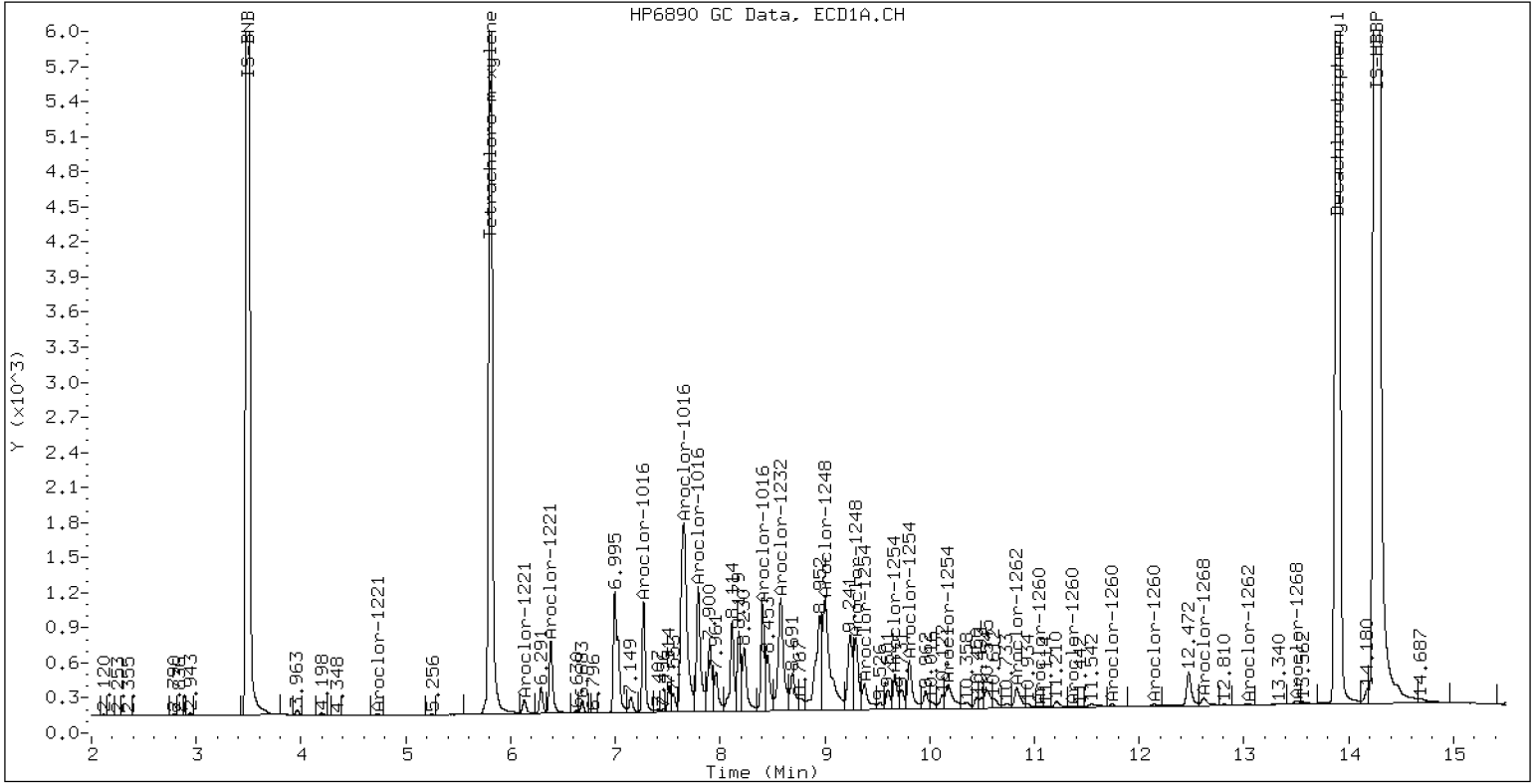
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV

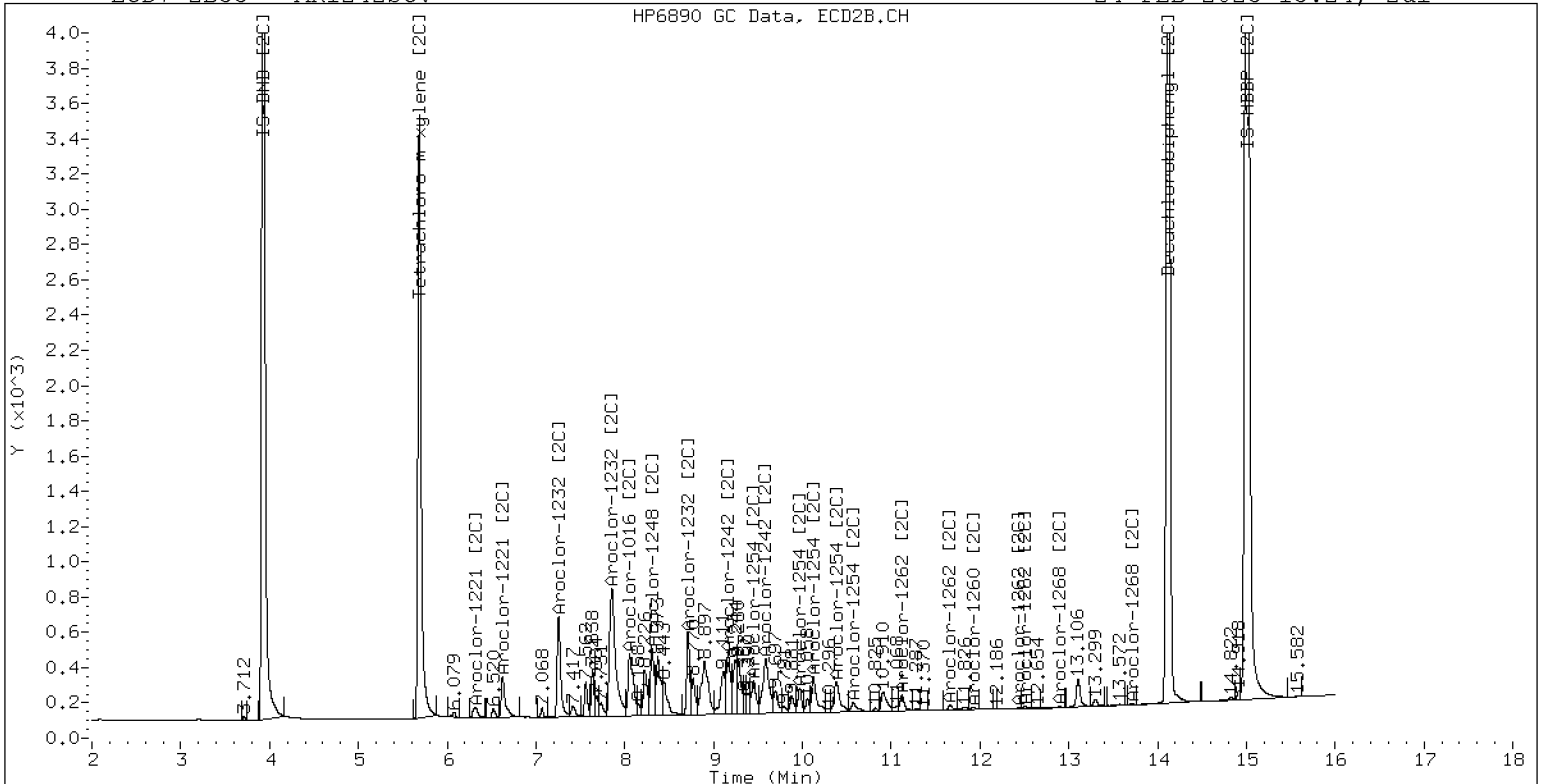
24-FEB-2023 15:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV

24-FEB-2023 15:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242315ECD7.D
Data file 2: /230224.b/230224.b/02242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 24-FEB-2023 15:45
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.002	336655	5.687	0.002	168719	34.9	36.4	4.2	Tetrachloro-m-xylene
13.894	0.001	499162	14.118	-0.001	308317	33.1	36.3	9.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	646554	-4.0
Hexabromobiphenyl	1429847	1529451	7.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316066	0.3
Hexabromobiphenyl	513946	557213	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	19773	80.5	1	7.254	-0.002	16926	91.5
Aroclor-1016	2	7.653	-0.001	88099	117.7	2	7.857	0.001	45733	121.9
Aroclor-1016	3	7.794	0.003	35915	98.3	3	8.060	0.005	8078	47.7
Aroclor-1016	4	8.406	0.001	77842	329.5	4	8.307	0.000	37348	280.9
Total CollAve (4 peaks):				156.5		Total Col2Ave (4 peaks):				135.5 RPD = 14
Corrected Ave (3 peaks):				98.8		Corrected Ave (3 peaks):				87.0 RPD = 13
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	0.001	680	6.6	2	6.326	0.030	1966	34.7
Aroclor-1221	3	6.384	0.002	3390	14.1	3	6.631	0.009	1571	17.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	0.002	680	9.9	2	7.254	-0.000	16926	210.6
Aroclor-1232	3	7.653	-0.002	88099	283.3	3	7.857	-0.004	45733	284.6
Aroclor-1232	4	8.581	-0.000	99572	753.4	4	8.714	-0.001	38224	826.6
Total CollAve (3 peaks):				348.9		Total Col2Ave (3 peaks):				440.6 RPD = 23
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	19773	98.7	1	7.254	-0.002	16926	115.3
Aroclor-1242	2	7.653	-0.003	88099	144.8	2	7.857	-0.001	45733	148.2
Aroclor-1242	3	8.406	0.000	77842	411.2	3	9.165	-0.002	45021	468.7
Aroclor-1242	4	8.581	0.001	99572	355.8	4	9.590	-0.008	53613	458.1
Total CollAve (4 peaks):				252.6		Total Col2Ave (4 peaks):				297.6 RPD = 16
Corrected Ave (3 peaks):				199.8		Corrected Ave (3 peaks):				240.5 RPD = 19
Aroclor-1248	1	8.406	0.000	77842	246.8	1	8.307	-0.001	37348	247.5
Aroclor-1248	2	8.581	0.000	99572	248.3	2	8.714	-0.000	38224	245.0
Aroclor-1248	3	8.998	-0.000	186857	247.0	3	9.165	-0.000	45021	250.7
Aroclor-1248	4	9.294	-0.000	98398	255.5	4	9.590	-0.001	53613	248.7
Total CollAve (4 peaks):				249.4		Total Col2Ave (4 peaks):				248.0 RPD = 1
Corrected Ave (3 peaks):				247.4		Corrected Ave (3 peaks):				247.0 RPD = 0
Aroclor-1254	1	9.294	-0.004	98398	151.6	1	9.450	0.001	21823	90.8
Aroclor-1254	2	9.377	-0.001	49616	169.9	2	9.971	0.001	19450	100.6
Aroclor-1254	3	9.669	0.001	40230	96.4	3	10.124	0.000	36574	87.5
Aroclor-1254	4	9.808	0.001	68500	84.4	4	10.389	0.016	35100	86.1
Aroclor-1254	5	10.183	0.007	47365	93.1	5	10.573	0.004	5676	22.9
Total CollAve (5 peaks):				119.1		Total Col2Ave (5 peaks):				77.6 RPD = 42*
Corrected Ave (4 peaks):				106.4		Corrected Ave (4 peaks):				71.8 RPD = 39
Aroclor-1260	1	11.047	0.003	1670	3.0	1	11.662	0.009	2055	6.3
Aroclor-1260	2	11.362	0.001	1111	1.9	2	11.924	0.007	1466	1.8
Aroclor-1260	3	11.739	0.005	2107	1.4	3	12.434	-0.002	573	2.6
Aroclor-1260	4	12.144	0.005	1379	1.8	4	12.505	0.003	1003	1.8
Aroclor-1260	5	12.251	0.006	698	2.1	NS	---			----
Total CollAve (5 peaks):				2.1		Total Col2Ave (4 peaks):				3.1 RPD = 41*
Corrected Ave (4 peaks):				1.8		Corrected Ave (3 peaks):				2.0 RPD = 12
Aroclor-1262	1	10.833	0.005	15355	32.7	1	11.122	-0.079	7225	15.2
Aroclor-1262	2	12.251	0.007	698	0.9	2	11.662	0.011	2055	5.1
Aroclor-1262	3	12.321	0.002	836	1.0	3	12.434	0.000	573	1.2
Aroclor-1262	4	12.991	0.004	1043	1.4	4	12.505	0.003	1003	1.4
Total CollAve (4 peaks):				9.0		Total Col2Ave (4 peaks):				5.7 RPD = 45*
Corrected Ave (3 peaks):				1.1		Corrected Ave (3 peaks):				2.6 RPD = 80*
Aroclor-1268	1	12.251	0.004	698	0.4	1	12.434	0.002	573	0.5
Aroclor-1268	2	12.321	0.004	836	0.4	2	12.505	0.005	1003	0.8
Aroclor-1268	3	12.700	0.001	2449	1.5	3	12.892	0.001	721	0.7
Aroclor-1268	4	13.493	0.003	7547	1.4	4	13.708	-0.001	2265	0.7
Total CollAve (4 peaks):				0.9		Total Col2Ave (4 peaks):				0.7 RPD = 29
Corrected Ave (3 peaks):				0.7		Corrected Ave (3 peaks):				0.6 RPD = 13

Total PCB Area Col1 (5.906 - 13.793) = 1574335 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 746330 Col2 Total PCB = 0.2 ppm*

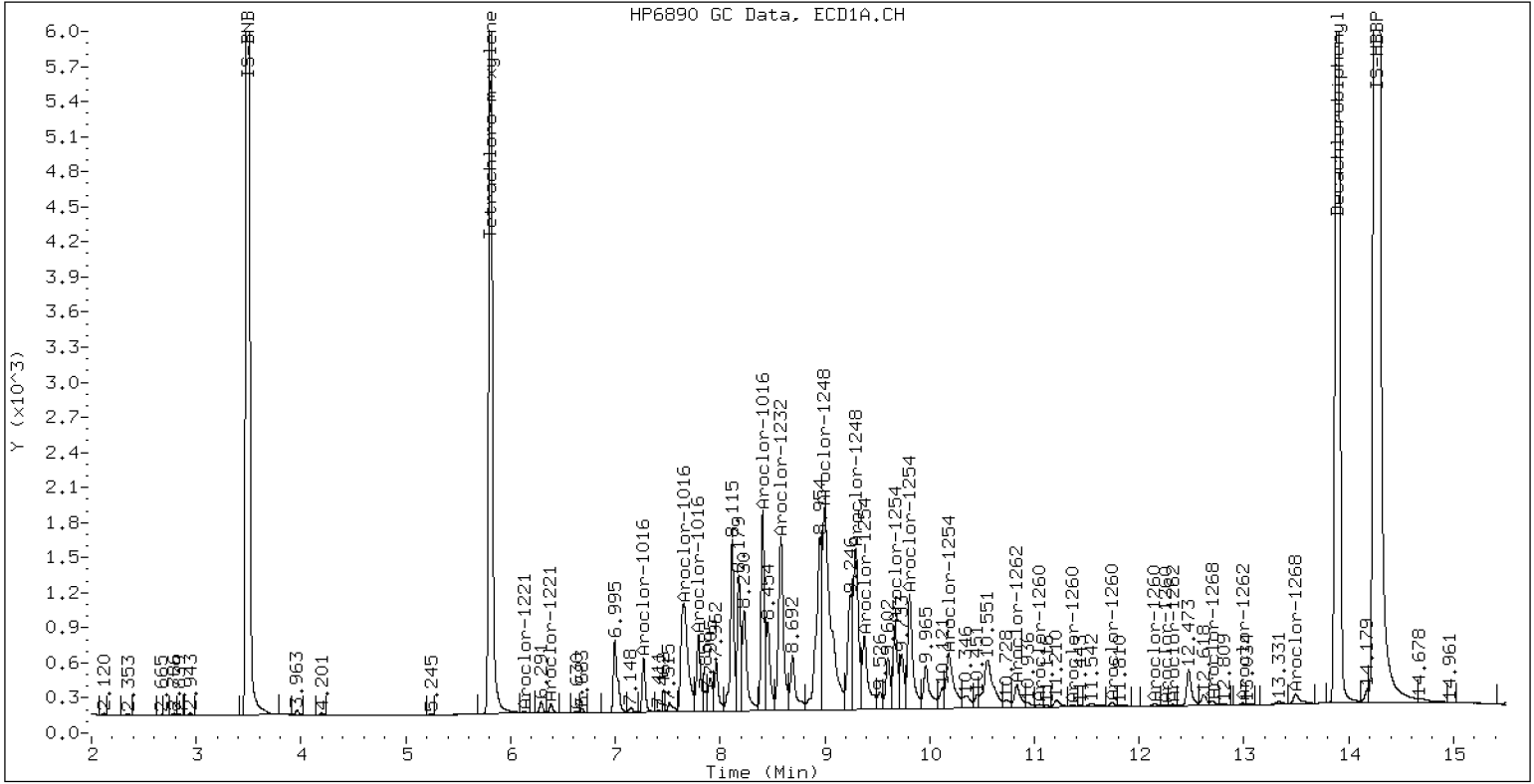
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV

24-FEB-2023 15:45, 2ul



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242316ECD7.D
Data file 2: /230224.b/230224.b/02242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 24-FEB-2023 16:06
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.806	-0.000	354312	5.686	0.001	174604	36.1	37.1	2.6	Tetrachloro-m-xylene
13.895	0.002	540961	14.119	-0.000	329134	34.6	37.9	9.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656887	-2.5
Hexabromobiphenyl	1429847	1585505	10.9

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	320936	1.8
Hexabromobiphenyl	513946	570006	10.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.270	0.000	565	2.3	1	7.255	-0.001	387	2.1	
Aroclor-1016	2	7.656	0.002	1875	2.5	2	7.854	-0.002	860	2.3	
Aroclor-1016	3	7.792	0.002	1106	3.0	3	8.098	0.043	578	3.4	
Aroclor-1016	4	8.405	0.000	29924	124.7	4	8.307	0.000	21985	162.9	
Total CollAve (4 peaks):				33.1	Total Col2Ave (4 peaks):				42.6	RPD = 25	
Corrected Ave (3 peaks):				2.6	Corrected Ave (3 peaks):				2.6	RPD = 0	
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	6.325	0.028	1947	33.9	
Aroclor-1221	3	---			0.0	3	6.637	0.015	368	3.9	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	7.255	0.001	387	4.7	
Aroclor-1232	3	7.656	0.000	1875	5.9	3	7.854	-0.007	860	5.3	
Aroclor-1232	4	8.583	0.002	12327	91.8	4	8.715	0.000	15013	319.7	
CollAve: <3 Quant Peaks					Col2Ave: 109.9						
Aroclor-1242	1	7.270	-0.000	565	2.8	1	7.255	-0.001	387	2.6	
Aroclor-1242	2	7.656	0.000	1875	3.0	2	7.854	-0.004	860	2.7	
Aroclor-1242	3	8.405	-0.000	29924	155.6	3	9.169	0.002	21933	224.9	
Aroclor-1242	4	8.583	0.003	12327	43.4	4	9.545	-0.053	34065	286.6	
Total CollAve (4 peaks):				51.2	Total Col2Ave (4 peaks):				129.2	RPD = 87*	
Corrected Ave (3 peaks):				16.4	Corrected Ave (3 peaks):				76.7	RPD = 130*	
Aroclor-1248	1	8.405	0.000	29924	93.4	1	8.307	-0.001	21985	143.5	
Aroclor-1248	2	8.583	0.002	12327	30.3	2	8.715	0.001	15013	94.8	
Aroclor-1248	3	8.992	-0.007	145580	189.4	3	9.169	0.004	21933	120.3	
Aroclor-1248	4	9.298	0.003	155450	397.3	4	9.545	-0.046	34065	155.6	
Total CollAve (4 peaks):				177.6	Total Col2Ave (4 peaks):				128.5	RPD = 32	
Corrected Ave (3 peaks):				104.3	Corrected Ave (3 peaks):				119.5	RPD = 14	
Aroclor-1254	1	9.298	-0.001	155450	235.7	1	9.450	0.001	58639	240.4	
Aroclor-1254	2	9.377	-0.001	69801	235.3	2	9.971	0.000	47008	239.5	
Aroclor-1254	3	9.668	-0.000	100839	237.8	3	10.124	0.000	100062	235.7	
Aroclor-1254	4	9.807	0.000	190544	231.1	4	10.373	0.000	99535	240.5	
Aroclor-1254	5	10.176	-0.000	122321	236.7	5	10.570	0.001	61549	244.2	
Total CollAve (5 peaks):				235.3	Total Col2Ave (5 peaks):				240.1	RPD = 2	
Corrected Ave (4 peaks):				234.7	Corrected Ave (4 peaks):				239.0	RPD = 2	
Aroclor-1260	1	11.043	-0.002	12288	21.5	1	11.661	0.008	29062	86.7	
Aroclor-1260	2	11.361	-0.001	13660	22.9	2	11.921	0.003	22238	26.0	
Aroclor-1260	3	11.736	0.002	37632	23.8	3	12.441	0.005	3555	15.7	
Aroclor-1260	4	12.141	0.002	27105	34.1	4	12.503	0.001	13126	22.8	
Aroclor-1260	5	12.320	0.076	2381	6.9	NS	---			---	
Total CollAve (5 peaks):				21.9	Total Col2Ave (4 peaks):				37.8	RPD = 53*	
Corrected Ave (4 peaks):				18.8	Corrected Ave (3 peaks):				21.5	RPD = 13	
Aroclor-1262	1	10.827	-0.002	220626	453.6	1	11.281	0.081	13562	27.9	
Aroclor-1262	2	12.320	0.076	2381	3.0	2	11.661	0.009	29062	70.1	
Aroclor-1262	3	---			0.0	3	12.441	0.007	3555	7.6	
Aroclor-1262	4	12.989	0.002	3225	4.1	4	12.503	0.001	13126	17.8	
Total CollAve (3 peaks):				153.6	Total Col2Ave (4 peaks):				30.8	RPD = 133*	
Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				17.7		
Aroclor-1268	1	12.320	0.074	2381	1.2	1	12.441	0.009	3555	3.1	
Aroclor-1268	2	---			0.0	2	12.503	0.003	13126	10.6	
Aroclor-1268	3	12.701	0.002	2939	1.7	3	12.892	0.000	772	0.7	
Aroclor-1268	4	13.493	0.003	9164	1.6	4	13.707	-0.002	2801	0.8	
Total CollAve (3 peaks):				1.5	Total Col2Ave (4 peaks):				3.8	RPD = 87*	
Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				1.6		

Total PCB Area Col1 (5.906 - 13.793) = 2118645 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1007601 Col2 Total PCB = 0.3 ppm*

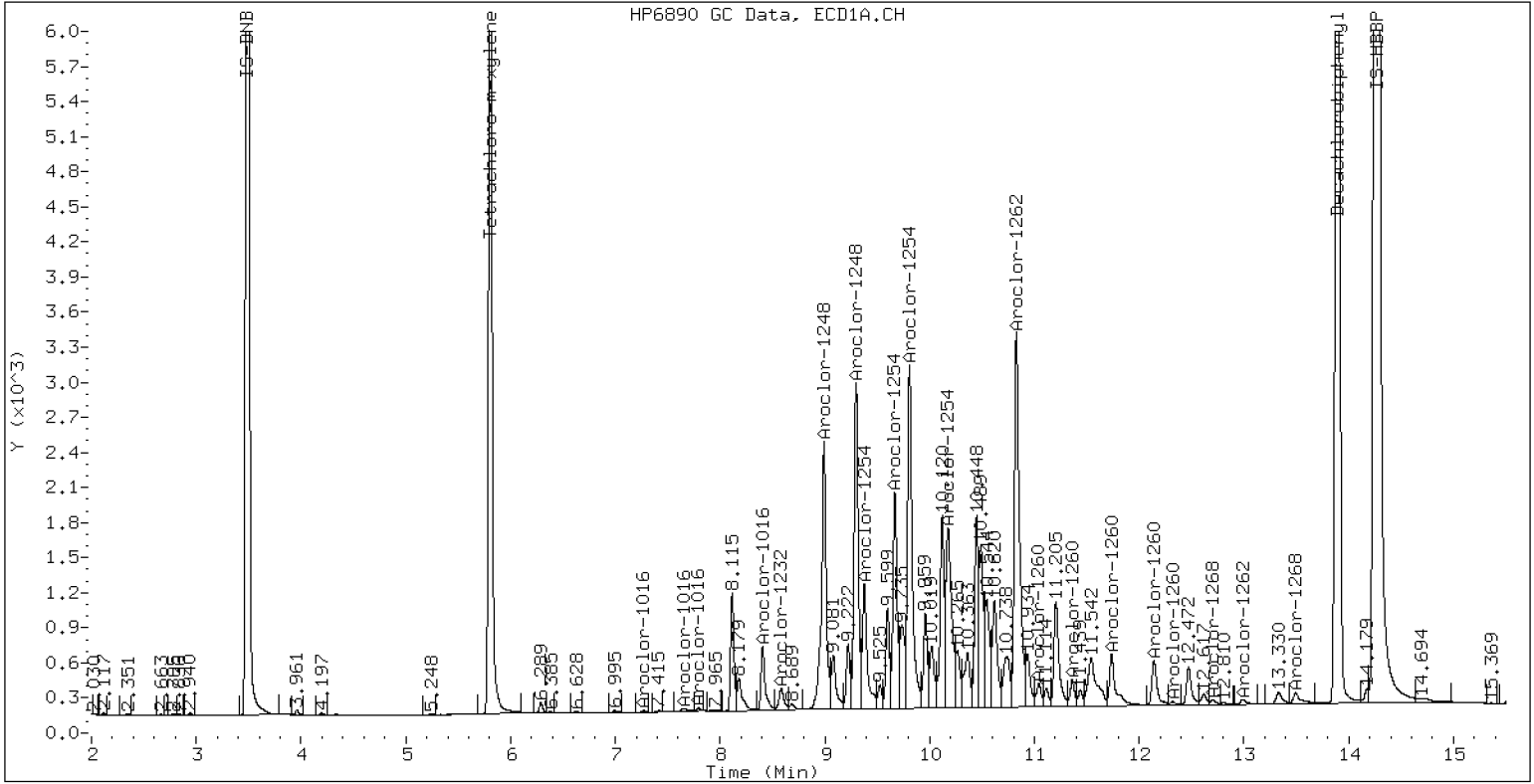
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV

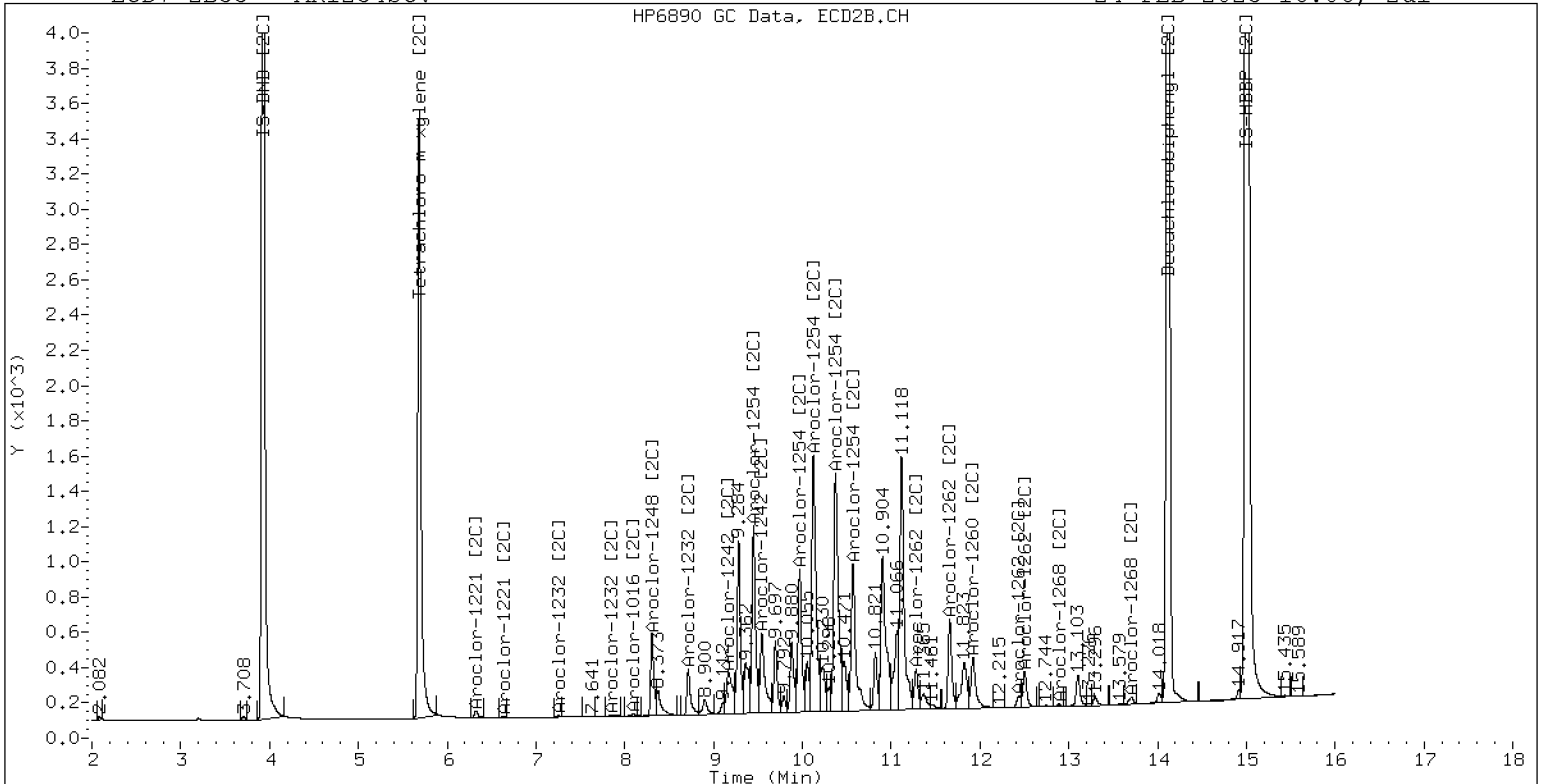
24-FEB-2023 16:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV

24-FEB-2023 16:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242317ECD7.D
Data file 2: /230224.b/230224.b/02242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 24-FEB-2023 16:27
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.000	356001	5.685	0.000	170882	36.0	36.6	1.7	Tetrachloro-m-xylene
13.895	0.002	533971	14.119	0.000	326235	34.4	37.9	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661953	-1.8
Hexabromobiphenyl	1429847	1574993	10.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317807	0.8
Hexabromobiphenyl	513946	565951	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.269	-0.001	7175	28.5	1	7.256	0.000	3727	20.0	
Aroclor-1016	2	7.659	0.005	12893	16.8	2	7.863	0.007	5834	15.5	
Aroclor-1016	3	7.794	0.004	6936	18.5	3	8.063	0.009	2963	17.4	
Aroclor-1016	4	8.408	0.003	3610	14.9	4	8.308	0.002	2045	15.3	
Total CollAve (4 peaks):				19.7	Total Col2Ave (4 peaks):				17.0	RPD = 14	
Corrected Ave (3 peaks):				16.8	Corrected Ave (3 peaks):				16.1	RPD = 4	
Aroclor-1221	1	4.730	-0.000	15803	266.6	1	4.955	-0.001	7909	262.9	
Aroclor-1221	2	6.131	-0.001	26946	254.1	2	6.296	-0.000	14303	251.2	
Aroclor-1221	3	6.382	-0.000	62477	253.8	3	6.622	0.000	23612	254.7	
Total CollAve (3 peaks):				258.2	Total Col2Ave (3 peaks):				256.3	RPD = 1	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.730	0.000	15803	445.6	1	4.955	-0.001	7909	486.4	
Aroclor-1232	2	6.131	0.000	26946	383.1	2	7.256	0.002	3727	46.1	
Aroclor-1232	3	7.659	0.003	12893	40.5	3	7.863	0.002	5834	36.1	
Aroclor-1232	4	8.583	0.003	2684	19.8	4	8.716	0.002	1189	25.6	
Total CollAve (4 peaks):				222.3	Total Col2Ave (4 peaks):				148.5	RPD = 40	
Corrected Ave (3 peaks):				147.8	Corrected Ave (3 peaks):				35.9	RPD = 122*	
Aroclor-1242	1	7.269	-0.001	7175	35.0	1	7.256	0.000	3727	25.2	
Aroclor-1242	2	7.659	0.003	12893	20.7	2	7.863	0.005	5834	18.8	
Aroclor-1242	3	8.408	0.002	3610	18.6	3	9.175	0.008	1082	11.2	
Aroclor-1242	4	8.583	0.004	2684	9.4	4	9.543	-0.054	1390	11.8	
Total CollAve (4 peaks):				20.9	Total Col2Ave (4 peaks):				16.8	RPD = 22	
Corrected Ave (3 peaks):				16.2	Corrected Ave (3 peaks):				13.9	RPD = 15	
Aroclor-1248	1	8.408	0.002	3610	11.2	1	8.308	0.001	2045	13.5	
Aroclor-1248	2	8.583	0.003	2684	6.5	2	8.716	0.002	1189	7.6	
Aroclor-1248	3	8.994	-0.005	24440	31.6	3	9.175	0.009	1082	6.0	
Aroclor-1248	4	9.302	0.008	26328	66.8	4	9.543	-0.048	1390	6.4	
Total CollAve (4 peaks):				29.0	Total Col2Ave (4 peaks):				8.4	RPD = 110*	
Corrected Ave (3 peaks):				16.4	Corrected Ave (3 peaks):				6.7	RPD = 85*	
Aroclor-1254	1	9.302	0.004	26328	39.6	1	9.452	0.003	9571	39.6	
Aroclor-1254	2	---			0.0	2	9.972	0.002	1733	8.9	
Aroclor-1254	3	9.670	0.002	3721	8.7	3	10.147	0.023	49218	117.1	
Aroclor-1254	4	9.808	0.000	9653	11.6	4	10.370	-0.002	59603	145.4	
Aroclor-1254	5	10.120	-0.056	131179	251.9	5	10.569	0.001	79533	318.7	
Total CollAve (4 peaks):				78.0	Total Col2Ave (5 peaks):				125.9	RPD = 47*	
Corrected Ave (3 peaks):				20.0	Corrected Ave (4 peaks):				77.8	RPD = 118*	
Aroclor-1260	1	11.044	-0.000	223208	394.0	1	11.652	-0.001	104071	312.7	
Aroclor-1260	2	11.361	-0.001	190166	321.2	2	11.919	0.002	251579	296.2	
Aroclor-1260	3	11.737	0.003	458281	291.9	3	12.435	-0.001	113645	504.2	
Aroclor-1260	4	12.141	0.002	149720	189.4	4	12.501	-0.001	182951	319.6	
Aroclor-1260	5	12.244	0.000	196033	576.0	NS	---			----	
Total CollAve (5 peaks):				354.5	Total Col2Ave (4 peaks):				358.2	RPD = 1	
Corrected Ave (4 peaks):				299.1	Corrected Ave (3 peaks):				309.5	RPD = 3	
Aroclor-1262	1	10.828	-0.001	121431	251.3	1	11.201	0.000	121335	251.1	
Aroclor-1262	2	12.244	0.000	196033	249.3	2	11.652	0.000	104071	252.9	
Aroclor-1262	3	12.319	0.001	211092	249.8	3	12.435	0.001	113645	243.4	
Aroclor-1262	4	12.988	0.001	183455	237.5	4	12.501	-0.001	182951	250.1	
Total CollAve (4 peaks):				247.0	Total Col2Ave (4 peaks):				249.3	RPD = 1	
Corrected Ave (3 peaks):				245.5	Corrected Ave (3 peaks):				248.2	RPD = 1	
Aroclor-1268	1	12.244	-0.002	196033	97.1	1	12.435	0.003	113645	99.7	
Aroclor-1268	2	12.319	0.002	211092	105.6	2	12.501	0.001	182951	149.3	
Aroclor-1268	3	12.723	0.024	77240	45.2	3	12.891	-0.000	7755	7.4	
Aroclor-1268	4	13.488	-0.002	65479	11.6	4	13.709	0.000	35146	10.5	
Total CollAve (4 peaks):				64.9	Total Col2Ave (4 peaks):				66.7	RPD = 3	

Corrected Ave (3 peaks): 51.3 Corrected Ave (3 peaks): 39.2 RPD = 27

Total PCB Area Col1 (5.906 - 13.793) = 3239932 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 1655522 Col2 Total PCB = 0.4 ppm*

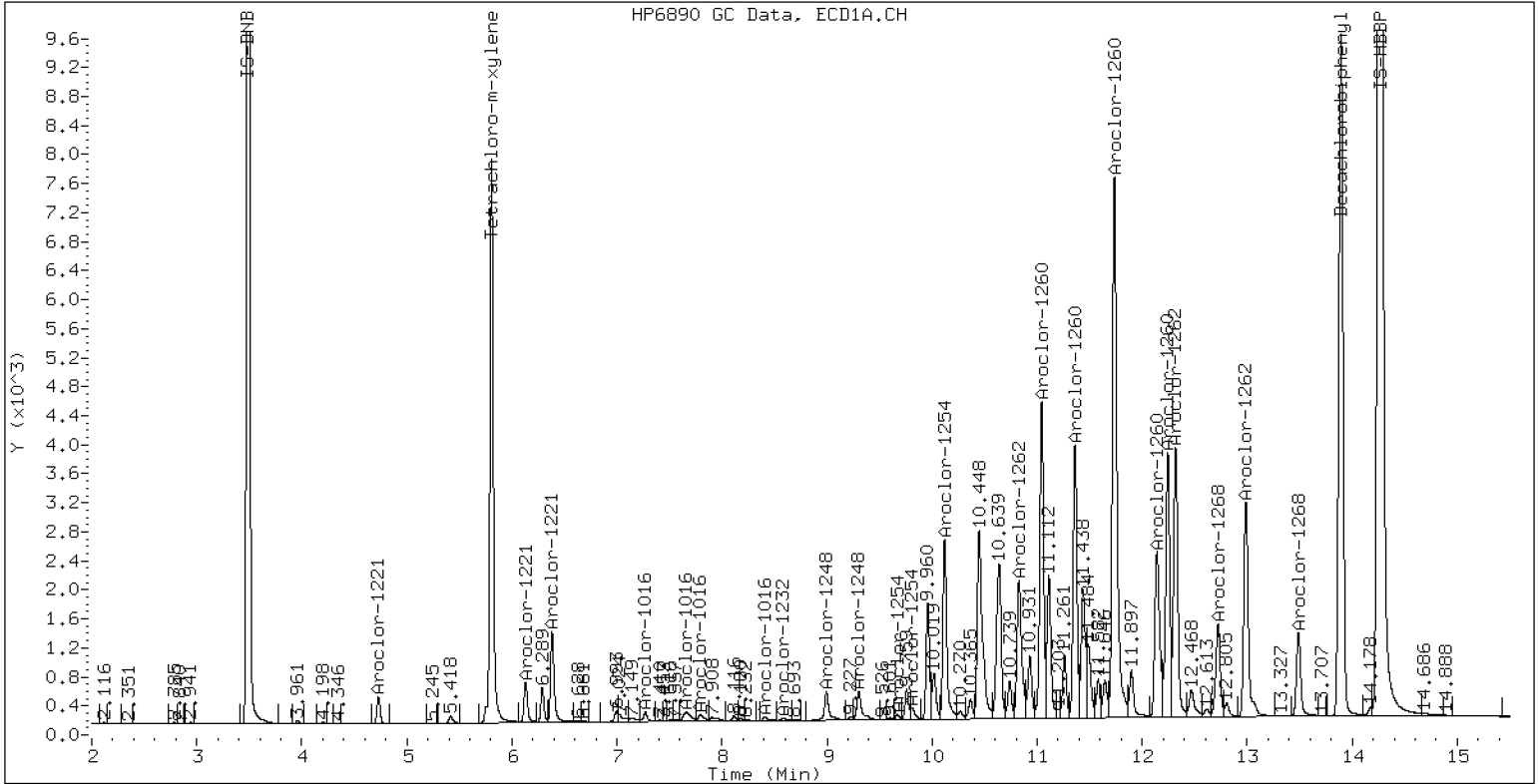
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV

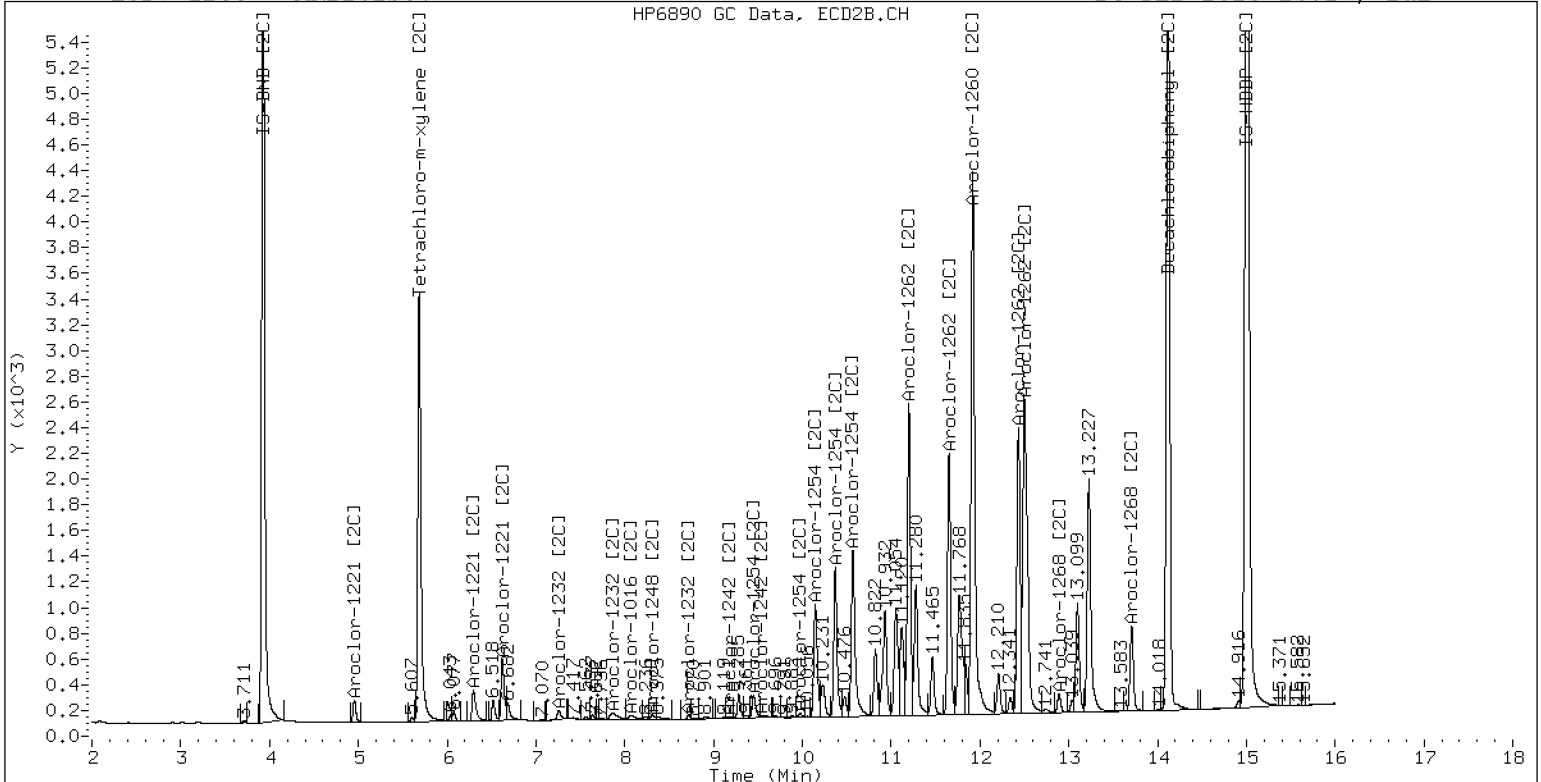
24-FEB-2023 16:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV

24-FEB-2023 16:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242318ECD7.D
Data file 2: /230224.b/230224.b/02242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 24-FEB-2023 16:48
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.806	0.000	363331	5.685	0.000	176204	37.1	38.2	2.9	Tetrachloro-m-xylene
13.894	0.001	800845	14.118	-0.001	488290	51.3	56.4	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656592	-2.6
Hexabromobiphenyl	1429847	1584453	10.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314741	-0.2
Hexabromobiphenyl	513946	568346	10.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.001	28327	113.6	1	7.254	-0.001	20651	112.1
Aroclor-1016	2	7.657	0.003	80668	106.1	2	7.861	0.005	41326	110.6
Aroclor-1016	3	7.793	0.003	40661	109.6	3	8.060	0.005	20446	121.2
Aroclor-1016	4	8.407	0.002	24680	102.9	4	8.308	0.001	13576	102.5
Total CollAve (4 peaks):				108.0		Total Col2Ave (4 peaks):				111.6 RPD = 3
Corrected Ave (3 peaks):				106.2		Corrected Ave (3 peaks):				108.4 RPD = 2
Aroclor-1221	1	4.729	-0.001	8535	145.1	1	4.956	-0.000	3965	133.1
Aroclor-1221	2	6.132	-0.000	15523	147.6	2	6.297	0.001	8689	154.1
Aroclor-1221	3	6.382	-0.000	45872	187.9	3	6.622	0.001	22272	242.6
Total CollAve (3 peaks):				160.2		Total Col2Ave (3 peaks):				176.6 RPD = 10
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.729	-0.001	8535	242.6	1	4.956	0.000	3965	246.2
Aroclor-1232	2	6.132	0.001	15523	222.5	2	7.254	0.000	20651	258.1
Aroclor-1232	3	7.657	0.001	80668	255.4	3	7.861	0.001	41326	258.3
Aroclor-1232	4	8.582	0.001	34784	259.2	4	8.714	-0.001	12504	271.5
Total CollAve (4 peaks):				244.9		Total Col2Ave (4 peaks):				258.5 RPD = 5
Corrected Ave (3 peaks):				240.2		Corrected Ave (3 peaks):				254.2 RPD = 6
Aroclor-1242	1	7.270	-0.001	28327	139.2	1	7.254	-0.001	20651	141.2
Aroclor-1242	2	7.657	0.001	80668	130.5	2	7.861	0.003	41326	134.4
Aroclor-1242	3	8.407	0.001	24680	128.4	3	9.170	0.003	12830	134.1
Aroclor-1242	4	8.582	0.003	34784	122.4	4	9.600	0.003	14836	127.3
Total CollAve (4 peaks):				130.1		Total Col2Ave (4 peaks):				134.3 RPD = 3
Corrected Ave (3 peaks):				127.1		Corrected Ave (3 peaks):				132.0 RPD = 4
Aroclor-1248	1	8.407	0.001	24680	77.0	1	8.308	0.000	13576	90.3
Aroclor-1248	2	8.582	0.001	34784	85.4	2	8.714	-0.000	12504	80.5
Aroclor-1248	3	8.996	-0.003	83592	108.8	3	9.170	0.004	12830	71.8
Aroclor-1248	4	9.292	-0.003	39603	101.3	4	9.600	0.010	14836	69.1
Total CollAve (4 peaks):				93.1		Total Col2Ave (4 peaks):				77.9 RPD = 18
Corrected Ave (3 peaks):				87.9		Corrected Ave (3 peaks):				73.8 RPD = 17
Aroclor-1254	1	9.292	-0.007	39603	60.1	1	9.452	0.003	4590	19.2
Aroclor-1254	2	9.377	-0.000	11450	38.6	2	9.973	0.003	2892	15.0
Aroclor-1254	3	9.674	0.005	6387	15.1	3	10.131	0.007	6052	14.5
Aroclor-1254	4	9.813	0.006	10162	12.3	4	10.390	0.017	5324	13.1
Aroclor-1254	5	10.189	0.012	6862	13.3	5	10.572	0.004	1891	7.7
Total CollAve (5 peaks):				27.9		Total Col2Ave (5 peaks):				13.9 RPD = 67*
Corrected Ave (4 peaks):				19.8		Corrected Ave (4 peaks):				12.6 RPD = 45*
Aroclor-1260	1	11.046	0.002	87033	152.7	1	11.645	-0.008	62543	187.1
Aroclor-1260	2	11.362	0.001	6300	10.6	2	11.920	0.003	28552	33.5
Aroclor-1260	3	11.738	0.004	54524	34.5	3	12.432	-0.004	285450	1261.2
Aroclor-1260	4	12.144	0.005	1727	2.2	4	12.499	-0.002	306992	534.0
Aroclor-1260	5	12.246	0.002	502931	1469.0	NS	---			----
Total CollAve (5 peaks):				333.8		Total Col2Ave (4 peaks):				503.9 RPD = 41*
Corrected Ave (4 peaks):				50.0		Corrected Ave (3 peaks):				251.5 RPD = 134*
Aroclor-1262	1	10.832	0.004	3395	7.0	1	11.201	0.001	44255	91.2
Aroclor-1262	2	12.246	0.002	502931	635.9	2	11.645	-0.007	62543	151.3
Aroclor-1262	3	12.318	-0.000	497006	584.5	3	12.432	-0.002	285450	608.7
Aroclor-1262	4	12.987	-0.000	202197	260.2	4	12.499	-0.003	306992	417.9
Total CollAve (4 peaks):				371.9		Total Col2Ave (4 peaks):				317.3 RPD = 16
Corrected Ave (3 peaks):				283.9		Corrected Ave (3 peaks):				220.1 RPD = 25
Aroclor-1268	1	12.246	-0.001	502931	247.7	1	12.432	-0.000	285450	249.4
Aroclor-1268	2	12.318	0.002	497006	247.2	2	12.499	-0.001	306992	249.5
Aroclor-1268	3	12.699	-0.000	422793	245.8	3	12.892	0.000	260893	248.4
Aroclor-1268	4	13.490	0.000	1386953	244.9	4	13.709	-0.000	829733	247.1
Total CollAve (4 peaks):				246.4		Total Col2Ave (4 peaks):				248.6 RPD = 1

Corrected Ave (3 peaks): 246.0 Corrected Ave (3 peaks): 248.3 RPD = 1

Total PCB Area Col1 (5.906 - 13.793) = 4180607 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.019) = 2376912 Col2 Total PCB = 0.6 ppm*

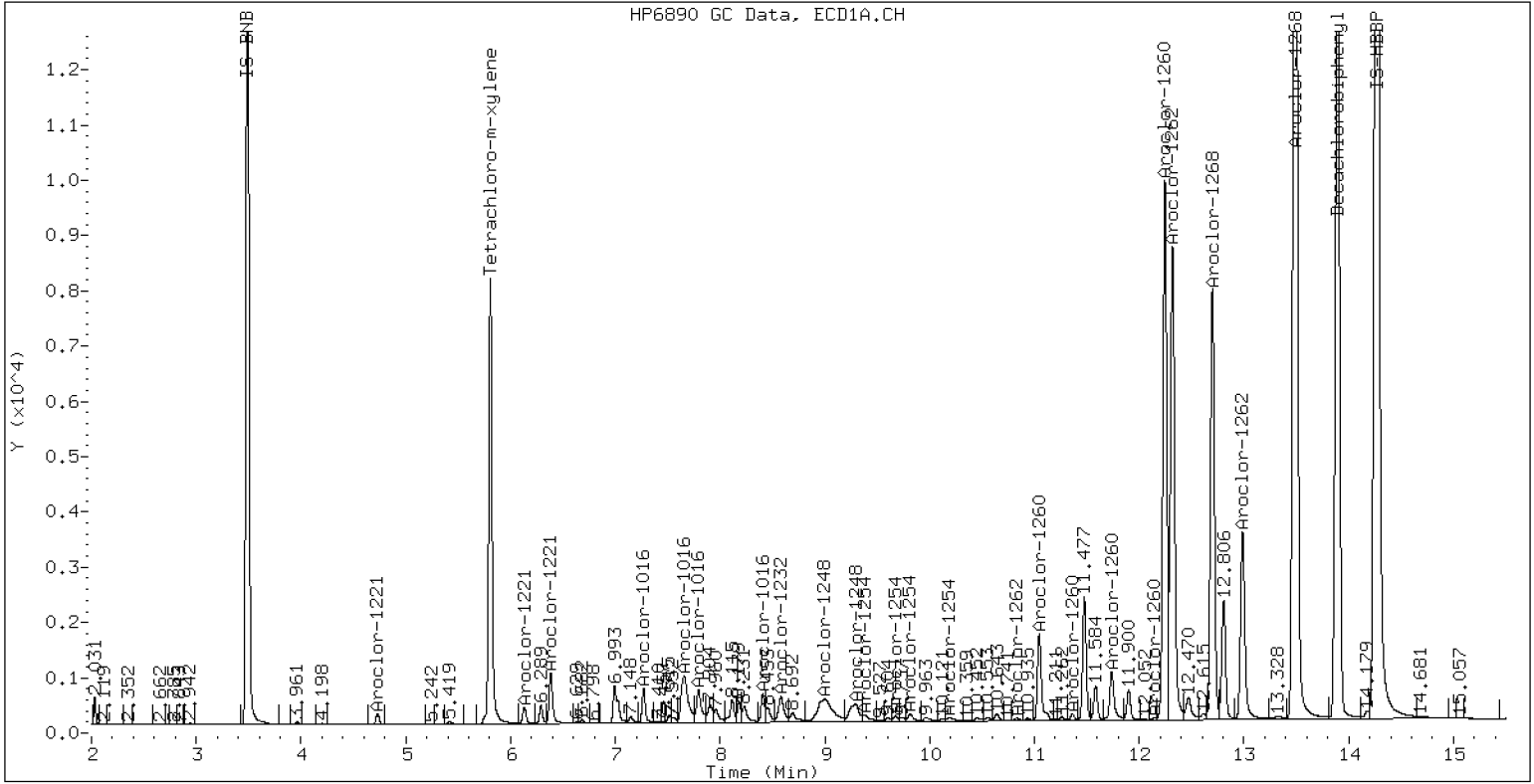
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV

24-FEB-2023 16:48, 2ul



Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242319ECD7.D

ARI ID: DDTS

RT	ZB5 Col Shift Response	ZB35 Col Shift Response	RT	ZB5 on col	ZB35 on col	RPD	Compound/Flag
9.261	0.000 694353|	9.912 0.000 580269|	0.100	0.100	0.0	2,4-DDE	
0.000	-10.293 0|	10.672 0.000 673479|	0.000	0.200#	----	2,4-DDT	
9.686	0.000 1191406|	10.212 0.000 433373|	0.100	0.100	0.0	4,4-DDE	
10.259	0.000 1721760|	10.672 0.000 673479|	0.100	0.200#	66.7*	4,4-DDD	

Indicates value is from co-eluting peaks

* Indicates RPD > 40%

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242320ECD7.D

ARI ID: DDT BD

RT	ZB5 Col Shift Response	ZB35 Col Shift Response	RT	ZB5 on col	ZB35 on col	RPD	Compound/Flag		
9.285	0.023	4923	9.921	0.009	9972	0.001	0.002	84.3*	2,4-DDE
0.000	-10.293	0	10.677	0.004	249094	0.000	0.074#	----	2,4-DDT
9.692	0.006	12128	10.221	0.009	528	0.001	0.000	156.7*	4,4-DDE
10.265	0.006	410017	10.677	0.004	249094	0.023	0.074#	103.6*	4,4-DDD

Indicates value is from co-eluting peaks

* Indicates RPD > 40%



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GB00069

Laboratory ID: SLB0342-SCV1

Sequence: SLB0342

Sequence Name: AR1660SCV1

Standard ID: L002065

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1016	250.00	243	-2.7	20.00
Aroclor 1016 [2C]	250.00	246	-1.4	20.00
Aroclor 1260	250.00	266	6.2	20.00
Aroclor 1260 [2C]	250.00	261	4.5	20.00
Decachlorobiphenyl	40.000	34.3	-14.2	20.00
Tetrachlorometaxylene	40.000	34.9	-12.6	20.00
Decachlorobiphenyl [2C]	40.000	37.3	-6.6	20.00
Tetrachlorometaxylene [2C]	40.000	35.8	-10.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GB00069

Laboratory ID: SLB0342-SCV2

Sequence: SLB0342

Sequence Name: AR1242SCV2

Standard ID: K007656

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1242	250.00	204	-18.5	20.00
Aroclor 1242 [2C]	250.00	221	-11.8	20.00
Decachlorobiphenyl	40.000	37.0	-7.5	20.00
Tetrachlorometaxylene	40.000	33.6	-15.9	20.00
Decachlorobiphenyl [2C]	40.000	40.3	0.8	20.00
Tetrachlorometaxylene [2C]	40.000	34.5	-13.7	20.00

* Indicates values outside of QC limits

[2C] indicates second-column analyte.



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GB00069

Laboratory ID: SLB0342-SCV3

Sequence: SLB0342

Sequence Name: AR1248SCV3

Standard ID: L002066

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1248	250.00	249	-0.2	20.00
Aroclor 1248 [2C]	250.00	248	-0.8	20.00
Decachlorobiphenyl	40.000	33.1	-17.2	20.00
Tetrachlorometaxylene	40.000	34.9	-12.8	20.00
Decachlorobiphenyl [2C]	40.000	36.3	-9.2	20.00
Tetrachlorometaxylene [2C]	40.000	36.4	-9.0	20.00

* Indicates values outside of QC limits

[2C] indicates second-column analyte.



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GB00069

Laboratory ID: SLB0342-SCV4

Sequence: SLB0342

Sequence Name: AR1254SCV4

Standard ID: L002067

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1254	250.00	235	-5.9	20.00
Aroclor 1254 [2C]	250.00	240	-4.0	20.00
Decachlorobiphenyl	40.000	34.6	-13.4	20.00
Tetrachlorometaxylene	40.000	36.1	-9.7	20.00
Decachlorobiphenyl [2C]	40.000	37.9	-5.2	20.00
Tetrachlorometaxylene [2C]	40.000	37.1	-7.3	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GB00069

Laboratory ID: SLB0342-SCV5

Sequence: SLB0342

Sequence Name: AR2162SCV5

Standard ID: L002068

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1221	250.00	258	3.3	20.00
Aroclor 1221 [2C]	250.00	256	2.5	20.00
Aroclor 1262	250.00	247	-1.2	20.00
Aroclor 1262 [2C]	250.00	249	-0.3	20.00
Decachlorobiphenyl	40.000	34.4	-13.9	20.00
Tetrachlorometaxylene	40.000	36.0	-10.0	20.00
Decachlorobiphenyl [2C]	40.000	37.9	-5.4	20.00
Tetrachlorometaxylene [2C]	40.000	36.6	-8.4	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GB00069

Laboratory ID: SLB0342-SCV6

Sequence: SLB0342

Sequence Name: AR3268SCV6

Standard ID: L002069

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1232	250.00	245	-2.0	20.00
Aroclor 1232 [2C]	250.00	259	3.4	20.00
Aroclor 1268	250.00	246	-1.4	20.00
Aroclor 1268 [2C]	250.00	249	-0.6	20.00
Decachlorobiphenyl	40.000	51.3	28.3	20.00
Tetrachlorometaxylene	40.000	37.1	-7.3	20.00
Decachlorobiphenyl [2C]	40.000	56.4	41.0	20.00
Tetrachlorometaxylene [2C]	40.000	38.2	-4.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.



INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ECD7

Calibration: GB00069

Lab File ID: 02282310ECD7.D

Calibration Date: 02/24/2023

Sequence: SLC0014

Injection Date: 02/28/23

Lab Sample ID: SLC0014-ICV1

Injection Time: 19:04

Sequence Name: AR1254ICV1

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1254	A	250.00	284	0.0662949	0.0748899		13.7	+/-20
Aroclor-1254 (1)	A	250.00	282	0.0803331	0.0904834			
Aroclor-1254 (2)	A	250.00	292	0.0361302	0.0421510			
Aroclor-1254 (3)	A	250.00	291	0.0516471	0.0600635			
Aroclor-1254 (4)	A	250.00	278	0.1004230	0.1118357			
Aroclor-1254 (5)	A	250.00	278	0.0629414	0.0699159			
Aroclor 1254 [2C]	A	250.00	263	0.0763106	0.0803775		5.4	+/-20
Aroclor-1254 (1) [2C]	A	250.00	264	0.0608052	0.0641940			
Aroclor-1254 (2) [2C]	A	250.00	266	0.0489162	0.0521536			
Aroclor-1254 (3) [2C]	A	250.00	266	0.1058376	0.1127019			
Aroclor-1254 (4) [2C]	A	250.00	258	0.1031750	0.1067184			
Aroclor-1254 (5) [2C]	A	250.00	263	0.0628191	0.0661198			
Decachlorobiphenyl	A	40.000	37.4	0.7878687	0.7377254		-6.5	+/-20
Tetrachlorometaxylene	A	40.000	40.1	1.1944880	1.1986300		0.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	41.4	1.2182710	1.2609770		3.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.4	1.1737210	1.1848750		1.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282310ECD7.D
Data file 2: /230228.b/230228.b/02282310ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254ICV1
Client ID:
Injection Date: 28-FEB-2023 19:04
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.002	447919	5.688	0.001	178473	40.1	40.4	0.6	Tetrachloro-m-xylene
13.894	0.001	610235	14.119	-0.001	294184	37.5	41.4	10.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	747385	10.9
Hexabromobiphenyl	1429847	1654369	15.7

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	301252	-4.4
Hexabromobiphenyl	513946	466597	-9.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.300	0.001	211331	281.6	1	9.451	0.000	60433	263.9
Aroclor-1254	2	9.378	-0.000	98447	291.7	2	9.971	-0.001	49098	266.5
Aroclor-1254	3	9.670	0.001	140283	290.7	3	10.125	-0.000	106099	266.2
Aroclor-1254	4	9.809	0.001	261201	278.4	4	10.375	0.001	100466	258.6
Aroclor-1254	5	10.179	0.001	163294	277.7	5	10.570	0.000	62246	263.1
Total CollAve (5 peaks):				284.0		Total Col2Ave (5 peaks):				263.7 RPD = 7
Corrected Ave (4 peaks):				282.1		Corrected Ave (4 peaks):				263.0 RPD = 7
CalAmt %D:				13.6		CalAmt %D:				5.5

Total PCB Area Col1 (5.907 - 13.793) = 3085449 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1027352 Col2 Total PCB = 0.3 ppm*

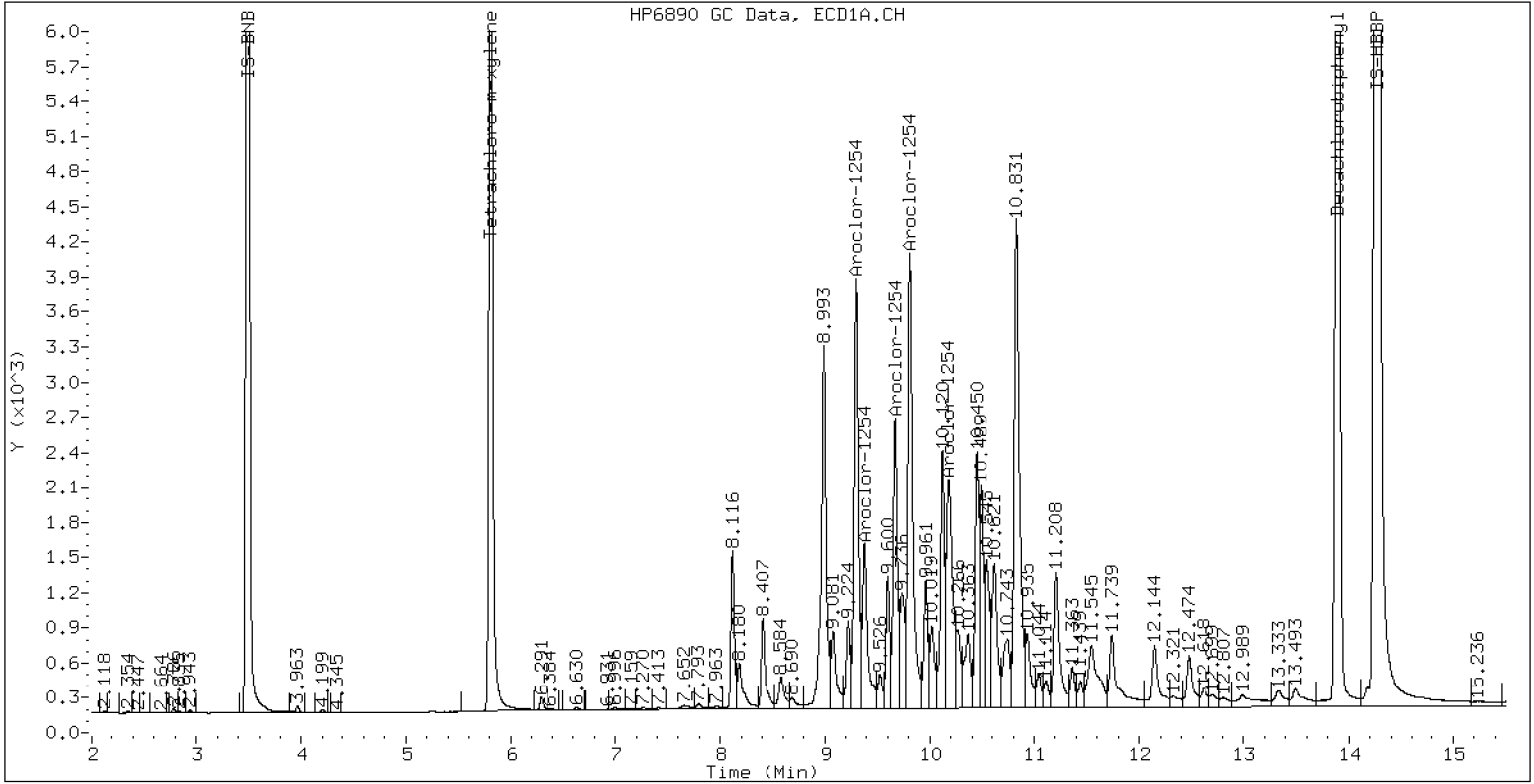
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254ICV1

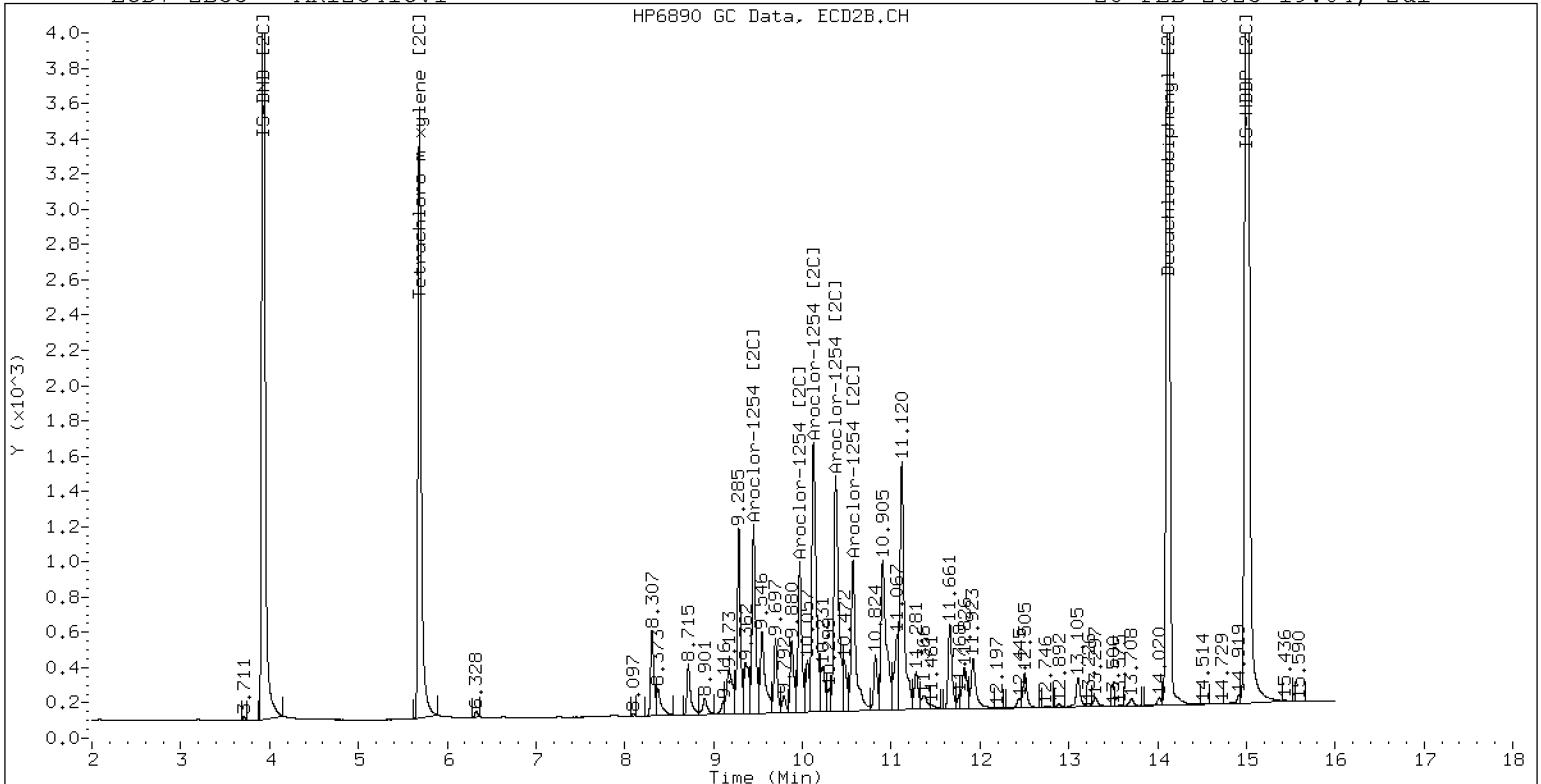
28-FEB-2023 19:04, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 AR1254ICV1

28-FEB-2023 19:04, 2ul

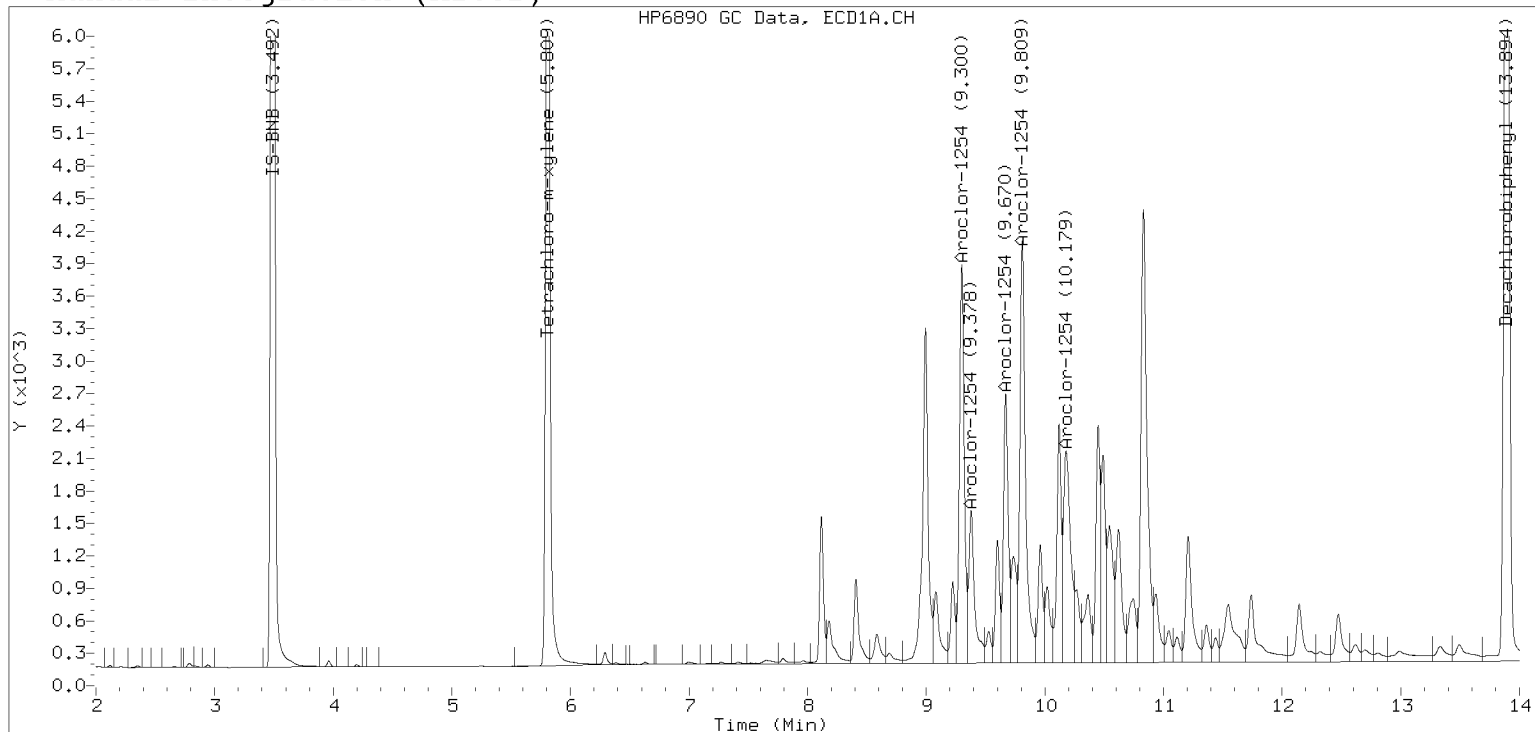


ZB-35 Manual Integration: NO

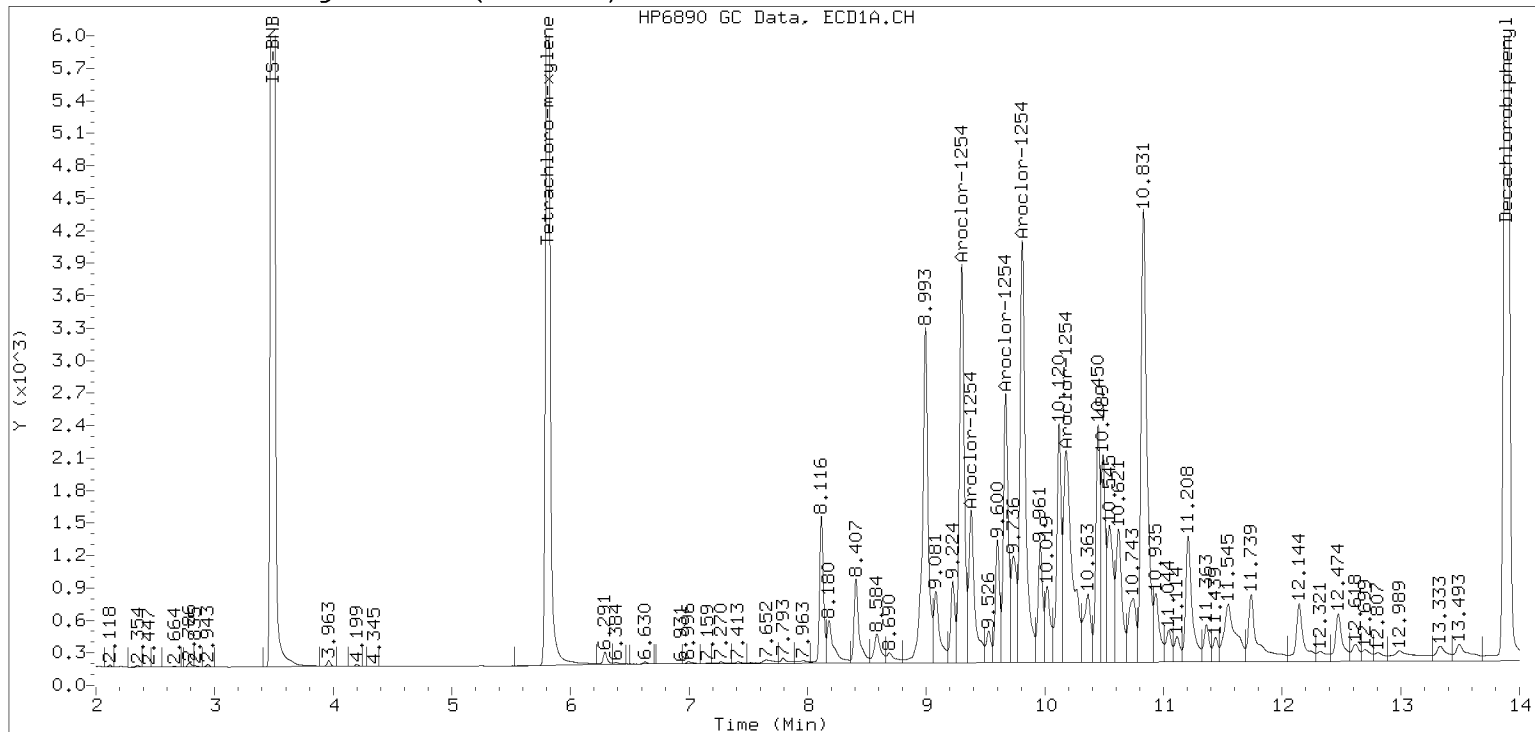
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282310ECD7.D Injection Date: 28-FEB-2023 19:04

Manual Integration (After)



Processed Integration (Before)





INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ECD7

Calibration: GB00069

Lab File ID: 02282311ECD7.D

Calibration Date: 02/24/2023

Sequence: SLC0014

Injection Date: 02/28/23

Lab Sample ID: SLC0014-ICV2

Injection Time: 19:25

Sequence Name: AR1660ICV2

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1016	A	250.00	280	0.0493662	0.0552775		12.0	+/-20
Aroclor-1016 (1)	A	250.00	277	0.0303852	0.0337077		10.8	
Aroclor-1016 (2)	A	250.00	278	0.0926308	0.1031854		11.2	
Aroclor-1016 (3)	A	250.00	284	0.0452180	0.0513640		13.6	
Aroclor-1016 (4)	A	250.00	281	0.0292307	0.0328528		12.4	
Aroclor 1016 [2C]	A	250.00	267	0.0545857	0.0586892		6.6	+/-20
Aroclor-1016 (1) [2C]	A	250.00	258	0.0468313	0.0483572		3.2	
Aroclor-1016 (2) [2C]	A	250.00	278	0.0949676	0.1054261		11.2	
Aroclor-1016 (3) [2C]	A	250.00	260	0.0428922	0.0445645		4.0	
Aroclor-1016 (4) [2C]	A	250.00	270	0.0336515	0.0364091		8.0	
Aroclor 1260	A	250.00	308	0.0392091	0.0484773		23.3	+/-20 *
Aroclor-1260 (1)	A	250.00	282	0.0287785	0.0324665		12.8	
Aroclor-1260 (2)	A	250.00	318	0.0300690	0.0382204		27.2	
Aroclor-1260 (3)	A	250.00	310	0.0797517	0.0989819		24.0	
Aroclor-1260 (4)	A	250.00	318	0.0401599	0.0510785		27.2	
Aroclor-1260 (5)	A	250.00	313	0.0172866	0.0216391		25.2	
Aroclor 1260 [2C]	A	250.00	252	0.0699688	0.0716171		0.7	+/-20
Aroclor-1260 (1) [2C]	A	250.00	237	0.0470406	0.0445304		-5.2	
Aroclor-1260 (2) [2C]	A	250.00	260	0.1200523	0.1249385		4.0	
Aroclor-1260 (3) [2C]	A	250.00	246	0.0318590	0.0313749		-1.6	
Aroclor-1260 (4) [2C]	A	250.00	264	0.0809231	0.0856245		5.6	
Decachlorobiphenyl	A	40.000	40.5	0.7878687	0.7977915		1.3	+/-20
Tetrachlorometaxylene	A	40.000	41.8	1.1944880	1.2496600		4.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.4	1.2182710	1.2317770		1.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	42.2	1.1737210	1.2392490		5.5	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282311ECD7.D
Data file 2: /230228.b/230228.b/02282311ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660ICV2
Client ID:
Injection Date: 28-FEB-2023 19:25
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.000	469361	5.687	-0.000	189615	41.8	42.2	0.9	Tetrachloro-m-xylene
13.893	-0.001	628838	14.118	-0.002	286648	40.5	40.4	0.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	751182	11.5
Hexabromobiphenyl	1429847	1576447	10.3
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	306016	-2.9
Hexabromobiphenyl	513946	465422	-9.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	0.000	79127	277.3	1	7.254	-0.001	46244	258.1
Aroclor-1016	2	7.655	-0.000	242222	278.5	2	7.858	-0.001	100819	277.5
Aroclor-1016	3	7.792	0.000	120574	284.0	3	8.057	-0.002	42617	259.7
Aroclor-1016	4	8.405	-0.001	77120	281.0	4	8.308	-0.000	34818	270.5
Total CollAve (4 peaks):				280.2		Total Col2Ave (4 peaks):				266.5 RPD = 5
Corrected Ave (3 peaks):				278.9		Corrected Ave (3 peaks):				262.8 RPD = 6

CalAmt %D: 12.1

CalAmt %D: 6.6

Aroclor-1260	1	11.045	0.001	159943	282.0	1	11.653	-0.000	64767	236.7
Aroclor-1260	2	11.362	0.001	188289	317.8	2	11.919	0.001	181716	260.2
Aroclor-1260	3	11.736	0.001	487624	310.3	3	12.436	0.001	45633	246.2
Aroclor-1260	4	12.140	0.000	251633	318.0	4	12.502	0.000	124536	264.5
Aroclor-1260	5	12.244	0.001	106603	312.9	NS	---			----
Total CollAve (5 peaks):				308.2		Total Col2Ave (4 peaks):				251.9 RPD = 20
Corrected Ave (4 peaks):				305.8		Corrected Ave (3 peaks):				247.7 RPD = 21

CalAmt %D: 23.3

CalAmt %D: 0.8

Total PCB Area Coll (5.907 - 13.793) = 5090549 Coll Total PCB = 0.6 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1776656 Col2 Total PCB = 0.5 ppm*

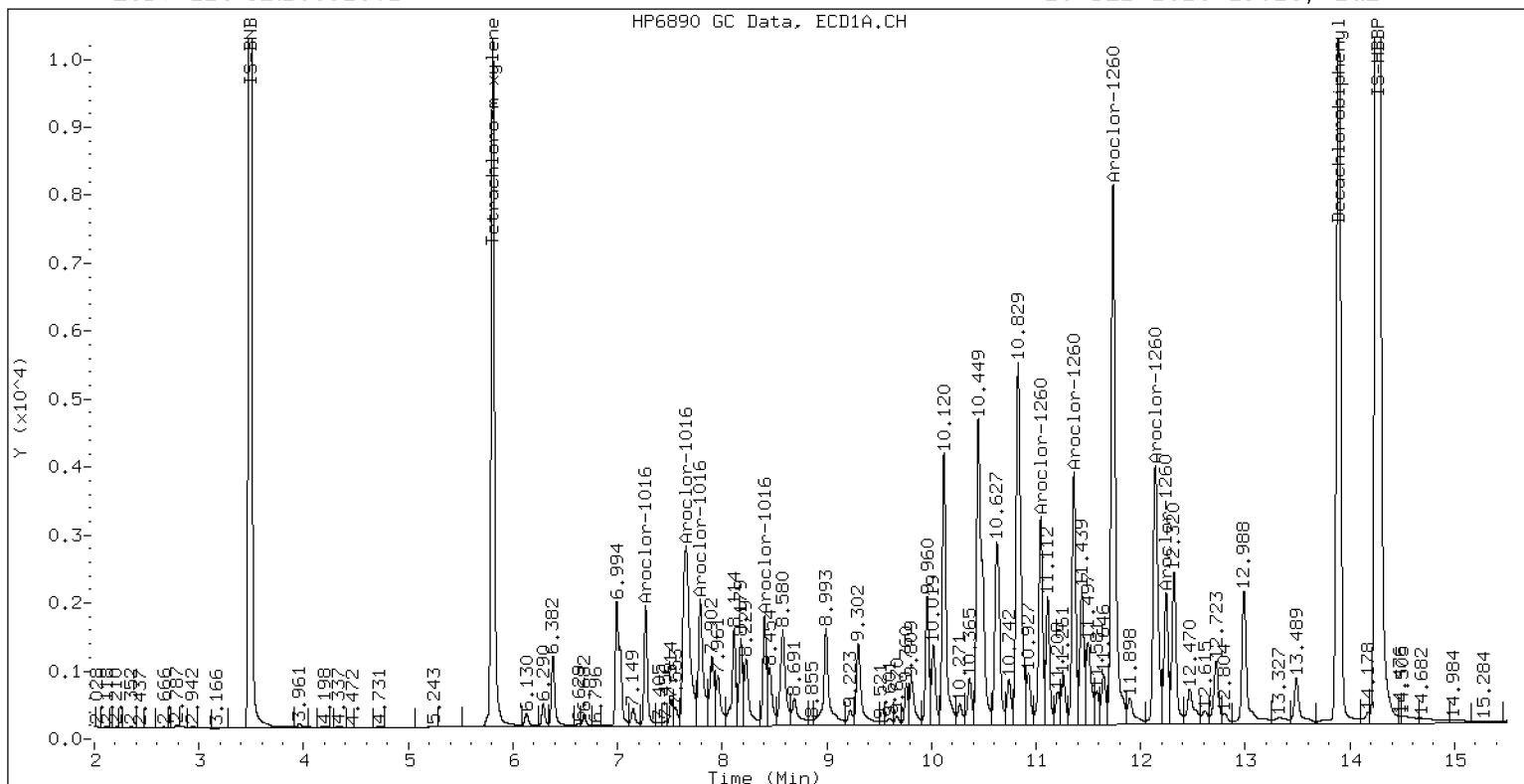
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660ICV2

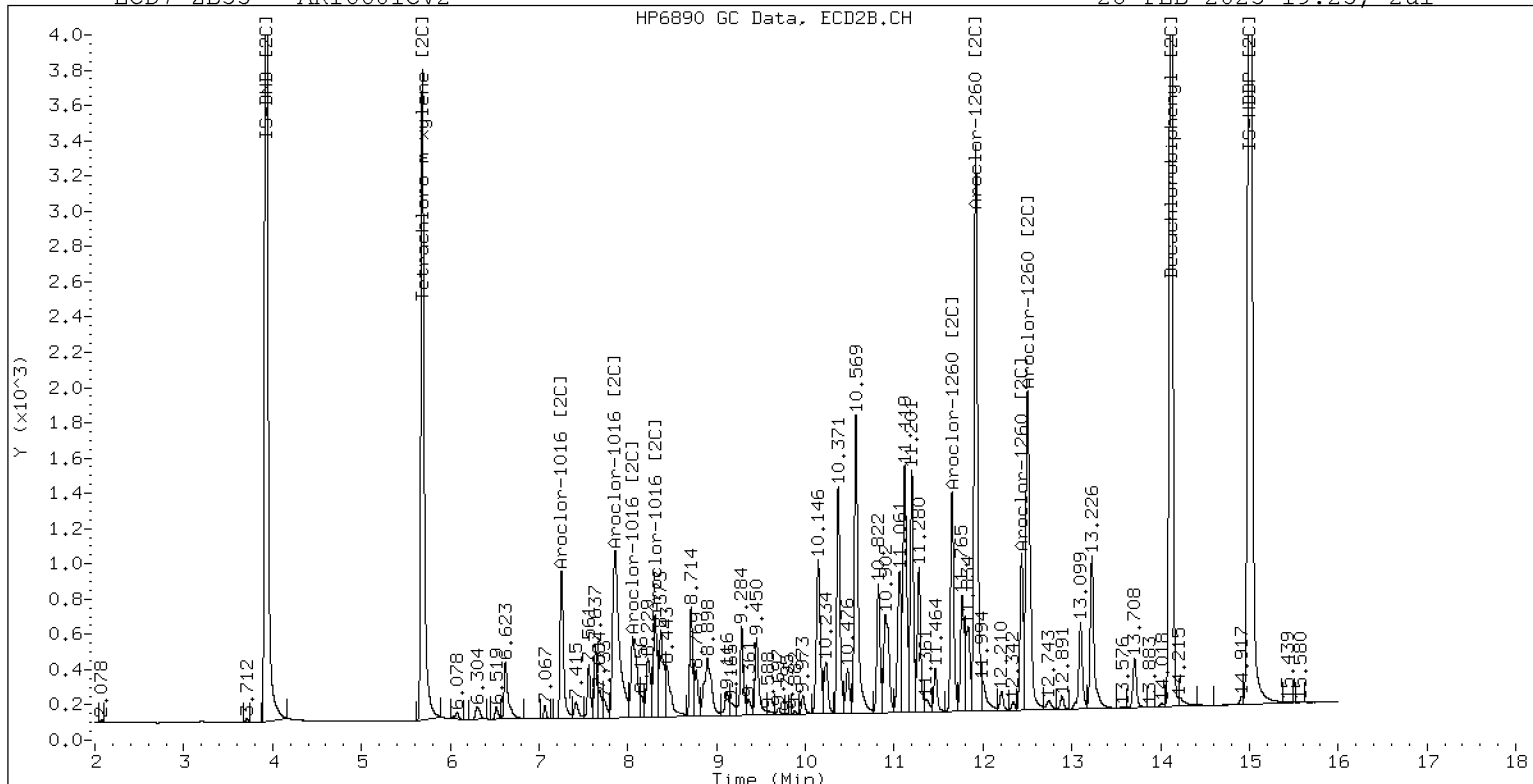
28-FEB-2023 19:25, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660ICV2

28-FEB-2023 19:25, 2ul

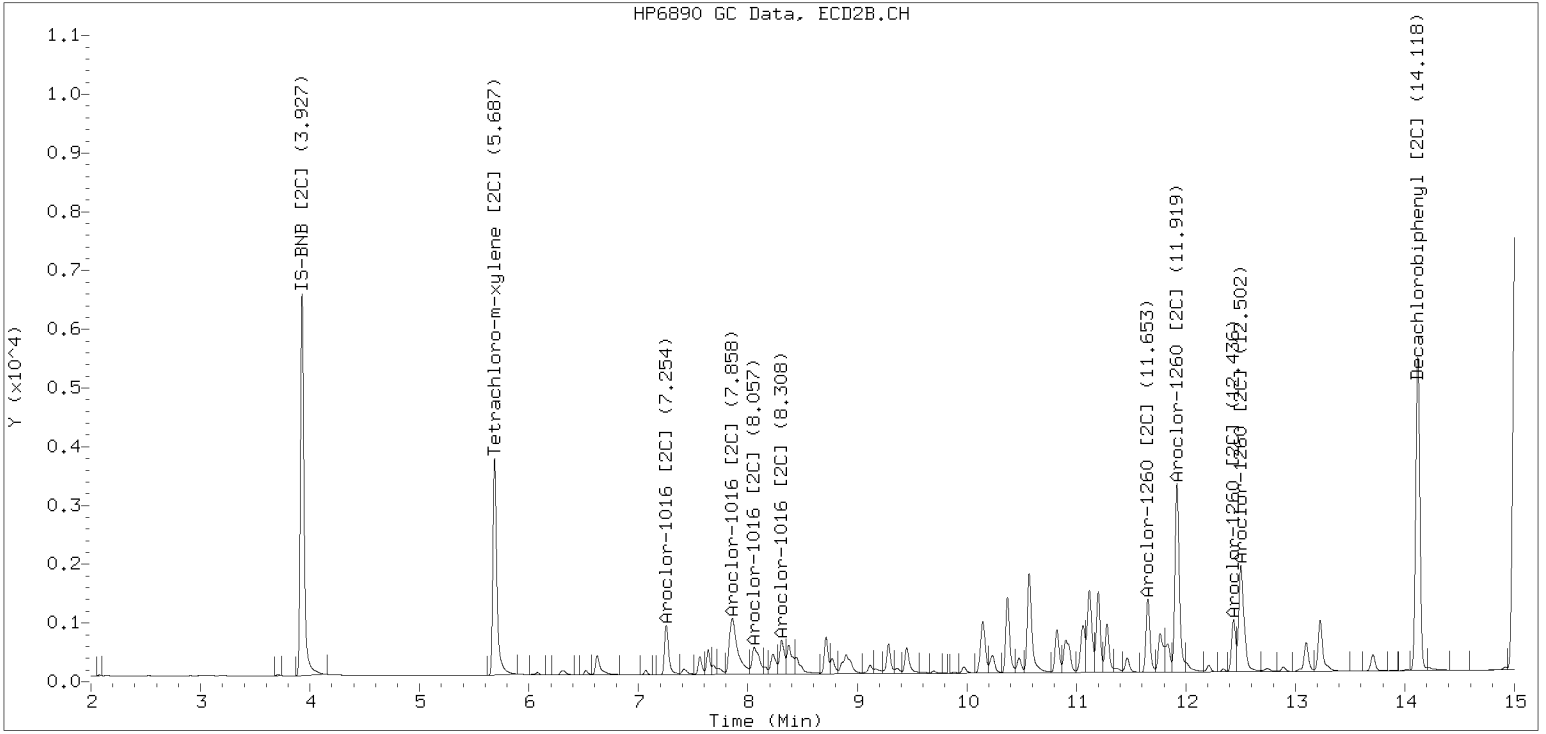


ZB-35 Manual Integration: YES

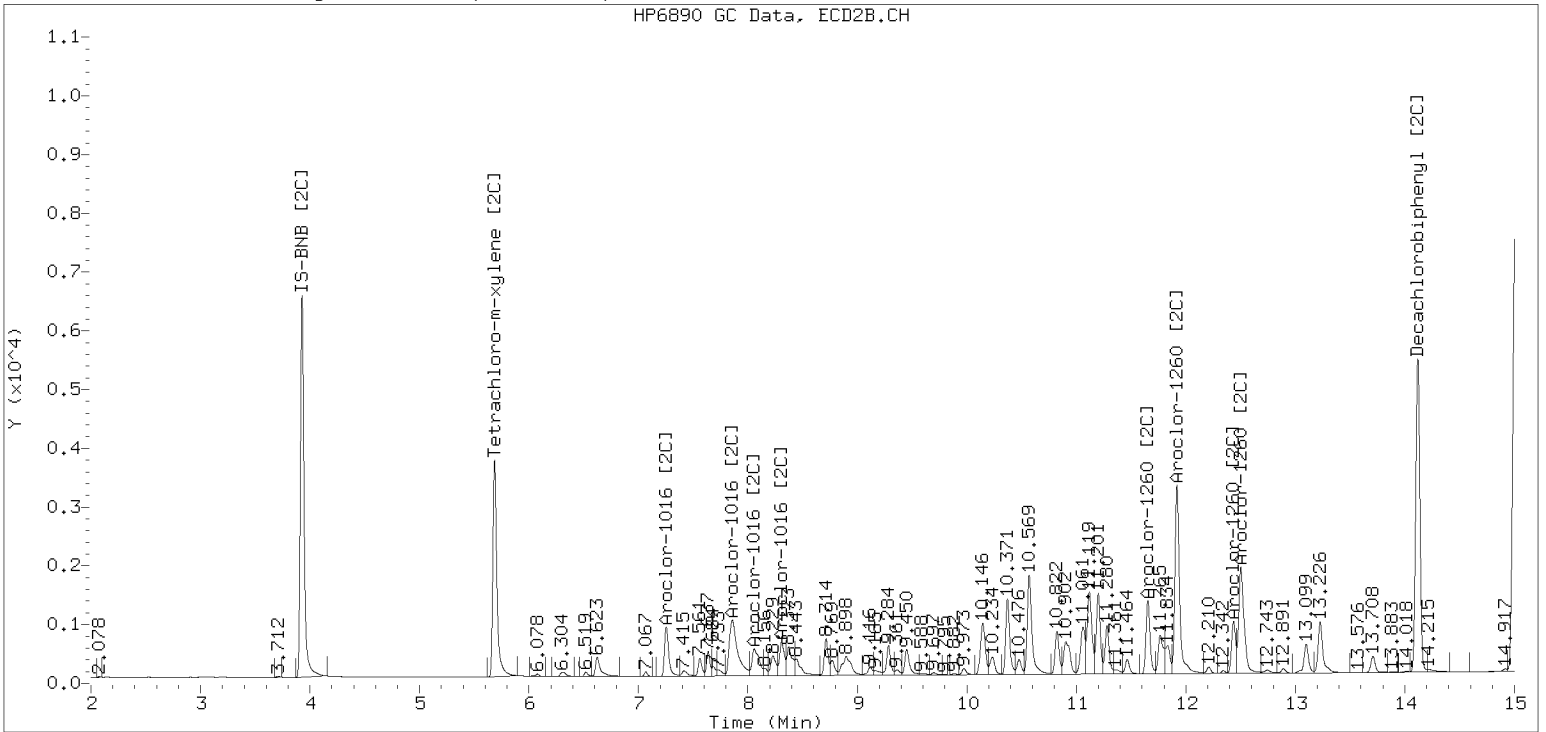
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282311ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)





**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02242313ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLB0342</u>	Injection Date:	<u>02/24/23</u>
Lab Sample ID:	<u>SLB0342-SCV1</u>	Injection Time:	<u>15:03</u>
Sequence Name:	<u>AR1660SCV1</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	243	0.0493662	0.0479314		-2.7	+/-20
Aroclor 1016 [2C]	A	250.00	246	0.0545857	0.0542382		-1.4	+/-20
Aroclor 1260	A	250.00	266	0.0392091	0.0412121		6.2	+/-20
Aroclor 1260 [2C]	A	250.00	261	0.0699688	0.0733659		4.5	+/-20
Decachlorobiphenyl	A	40.000	34.3	0.7878687	0.6762784		-14.2	+/-20
Tetrachlorometaxylene	A	40.000	34.9	1.1944880	1.0436010		-12.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.3	1.2182710	1.1373730		-6.6	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.8	1.1737210	1.0492890		-10.6	+/-20

* Values outside of QC limits

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02242314ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLB0342</u>	Injection Date:	<u>02/24/23</u>
Lab Sample ID:	<u>SLB0342-SCV2</u>	Injection Time:	<u>15:24</u>
Sequence Name:	<u>AR1242SCV2</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	204	0.0395340	0.0322254		-18.5	+/-20
Aroclor 1242 [2C]	A	250.00	221	0.0423092	0.0365983		-11.8	+/-20
Decachlorobiphenyl	A	40.000	37.0	0.7878687	0.7290534		-7.5	+/-20
Tetrachlorometaxylene	A	40.000	33.6	1.1944880	1.0041320		-15.9	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.3	1.2182710	1.2285170		0.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	34.5	1.1737210	1.0131510		-13.7	+/-20

* Values outside of QC limits

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02242315ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLB0342</u>	Injection Date:	<u>02/24/23</u>
Lab Sample ID:	<u>SLB0342-SCV3</u>	Injection Time:	<u>15:45</u>
Sequence Name:	<u>AR1248SCV3</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	249	0.0574755	0.0572474		-0.2	+/-20
Aroclor 1248 [2C]	A	250.00	248	0.0444270	0.0440936		-0.8	+/-20
Decachlorobiphenyl	A	40.000	33.1	0.7878687	0.6527336		-17.2	+/-20
Tetrachlorometaxylene	A	40.000	34.9	1.1944880	1.0413820		-12.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.3	1.2182710	1.1066400		-9.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.4	1.1737210	1.0676190		-9.0	+/-20

* Values outside of QC limits

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02242316ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLB0342</u>	Injection Date:	<u>02/24/23</u>
Lab Sample ID:	<u>SLB0342-SCV4</u>	Injection Time:	<u>16:06</u>
Sequence Name:	<u>AR1254SCV4</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	235	0.0662949	0.0622529		-5.9	+/-20
Aroclor 1254 [2C]	A	250.00	240	0.0763106	0.0731447		-4.0	+/-20
Decachlorobiphenyl	A	40.000	34.6	0.7878687	0.6823832		-13.4	+/-20
Tetrachlorometaxylene	A	40.000	36.1	1.1944880	1.0787610		-9.7	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.9	1.2182710	1.1548440		-5.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.1	1.1737210	1.0880920		-7.3	+/-20

* Values outside of QC limits

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02242317ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLB0342</u>	Injection Date:	<u>02/24/23</u>
Lab Sample ID:	<u>SLB0342-SCV5</u>	Injection Time:	<u>16:27</u>
Sequence Name:	<u>AR2162SCV5</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1221	A	250.00	258	0.0165758	0.0169561		3.3	+/-20
Aroclor 1221 [2C]	A	250.00	256	0.0150798	0.0153801		2.5	+/-20
Aroclor 1262	A	250.00	247	0.0366596	0.0361658		-1.2	+/-20
Aroclor 1262 [2C]	A	250.00	249	0.0739760	0.0737876		-0.3	+/-20
Decachlorobiphenyl	A	40.000	34.4	0.7878687	0.6780614		-13.9	+/-20
Tetrachlorometaxylene	A	40.000	36.0	1.1944880	1.0756080		-10.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.9	1.2182710	1.1528740		-5.4	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.1737210	1.0753820		-8.4	+/-20

* Values outside of QC limits

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02242318ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLB0342</u>	Injection Date:	<u>02/24/23</u>
Lab Sample ID:	<u>SLB0342-SCV6</u>	Injection Time:	<u>16:48</u>
Sequence Name:	<u>AR3268SCV6</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1232	A	250.00	245	0.0169039	0.0169981		-2.0	+/-20
Aroclor 1232 [2C]	A	250.00	259	0.0192023	0.0199392		3.4	+/-20
Aroclor 1268	A	250.00	246	0.1442124	0.1418626		-1.4	+/-20
Aroclor 1268 [2C]	A	250.00	249	0.2386862	0.2369075		-0.6	+/-20
Decachlorobiphenyl	A	40.000	51.3	0.7878687	1.0108790		28.3	+/-20
Tetrachlorometaxylene	A	40.000	37.1	1.1944880	1.1067180		-7.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	56.4	1.2182710	1.7182840		41.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.2	1.1737210	1.1196760		-4.6	+/-20

* Values outside of QC limits



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02282313ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLC0014</u>	Injection Date:	<u>02/28/23</u>
Lab Sample ID:	<u>SLC0014-CCV1</u>	Injection Time:	<u>20:07</u>
Sequence Name:	<u>AR1248CCV1</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	269	0.0574755	0.0623062		7.6	+/-20
Aroclor-1248 (1)	A	250.00	262		0.0409869			
Aroclor-1248 (2)	A	250.00	263		0.0521196			
Aroclor-1248 (3)	A	250.00	278		0.1040716			
Aroclor-1248 (4)	A	250.00	273		0.0520464			
Aroclor 1248 [2C]	A	250.00	251	0.0444270	0.0445547		0.5	+/-20
Aroclor-1248 (1) [2C]	A	250.00	256		0.0391330			
Aroclor-1248 (2) [2C]	A	250.00	254		0.0400822			
Aroclor-1248 (3) [2C]	A	250.00	248		0.0450484			
Aroclor-1248 (4) [2C]	A	250.00	247		0.0539552			
Decachlorobiphenyl	A	40.000	36.6	0.7878687	0.7215080		-8.5	+/-20
Tetrachlorometaxylene	A	40.000	37.8	1.1944880	1.1297030		-5.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.0	1.2182710	1.2199110		0.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.5	1.1737210	1.1298520		-3.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282313ECD7.D
Data file 2: /230228.b/230228.b/02282313ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV1
Client ID:
Injection Date: 28-FEB-2023 20:07
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.001	442341	5.687	-0.000	182079	37.8	38.5	1.8	Tetrachloro-m-xylene
13.894	0.001	593120	14.118	-0.001	303850	36.6	40.1	8.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	783110	16.2
Hexabromobiphenyl	1429847	1644112	15.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	322306	2.2
Hexabromobiphenyl	513946	498151	-3.1

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1248	1	8.406	0.000	100304	262.5	1	8.307	0.000	39415	256.1	
Aroclor-1248	2	8.581	0.000	127548	262.6	2	8.715	0.000	40371	253.7	
Aroclor-1248	3	8.997	0.000	254686	278.0	3	9.169	0.000	45373	247.8	
Aroclor-1248	4	9.295	0.000	127369	273.1	4	9.594	0.000	54344	247.2	
Total CollAve (4 peaks):				269.0		Total Col2Ave (4 peaks):				251.2	RPD = 7
Corrected Ave (3 peaks):				266.1		Corrected Ave (3 peaks):				249.6	RPD = 6
CalAmt %D:				7.6		CalAmt %D:				0.5	

Total PCB Area Col1 (5.907 - 13.793) = 1982415 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 774039 Col2 Total PCB = 0.2 ppm*

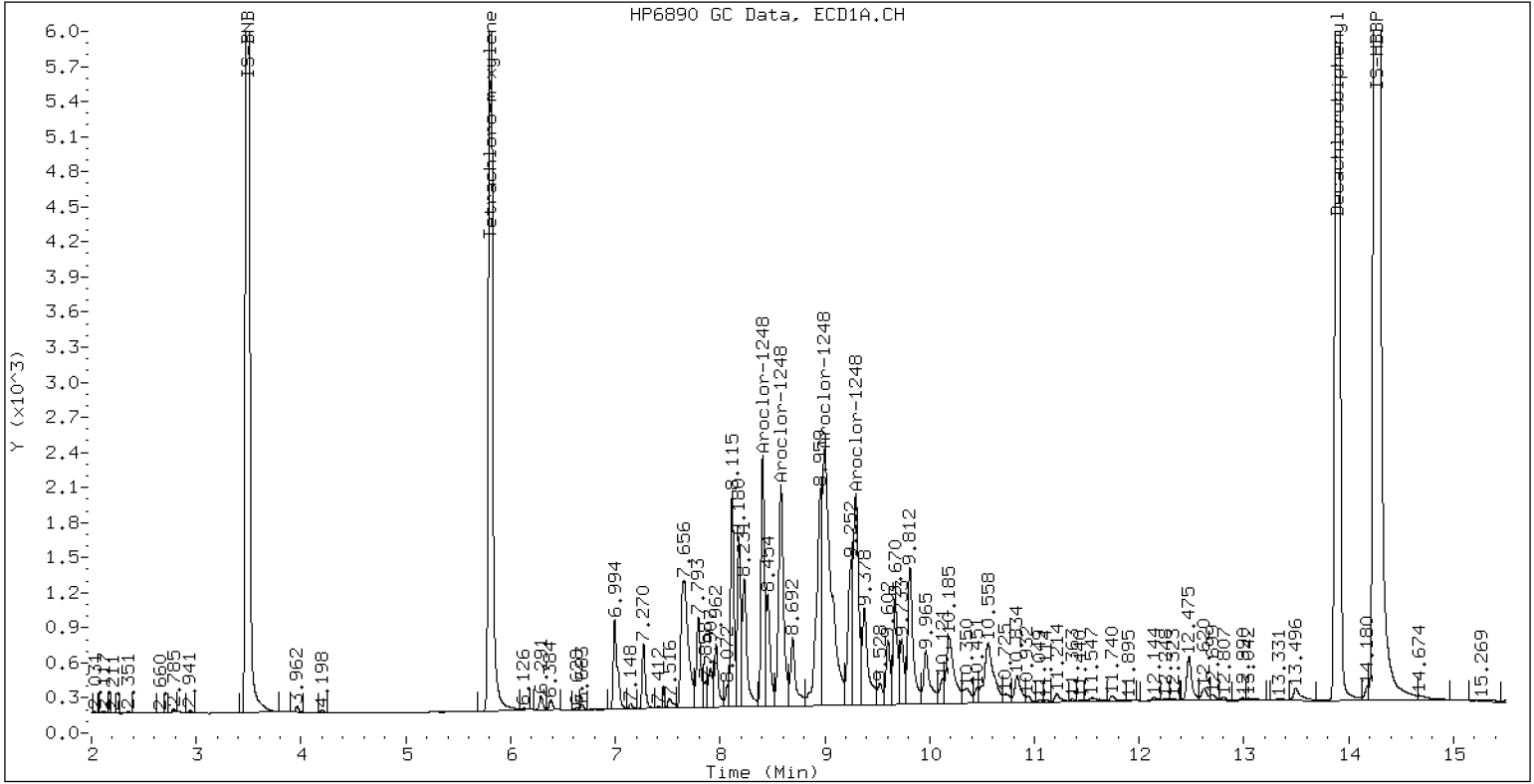
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV1

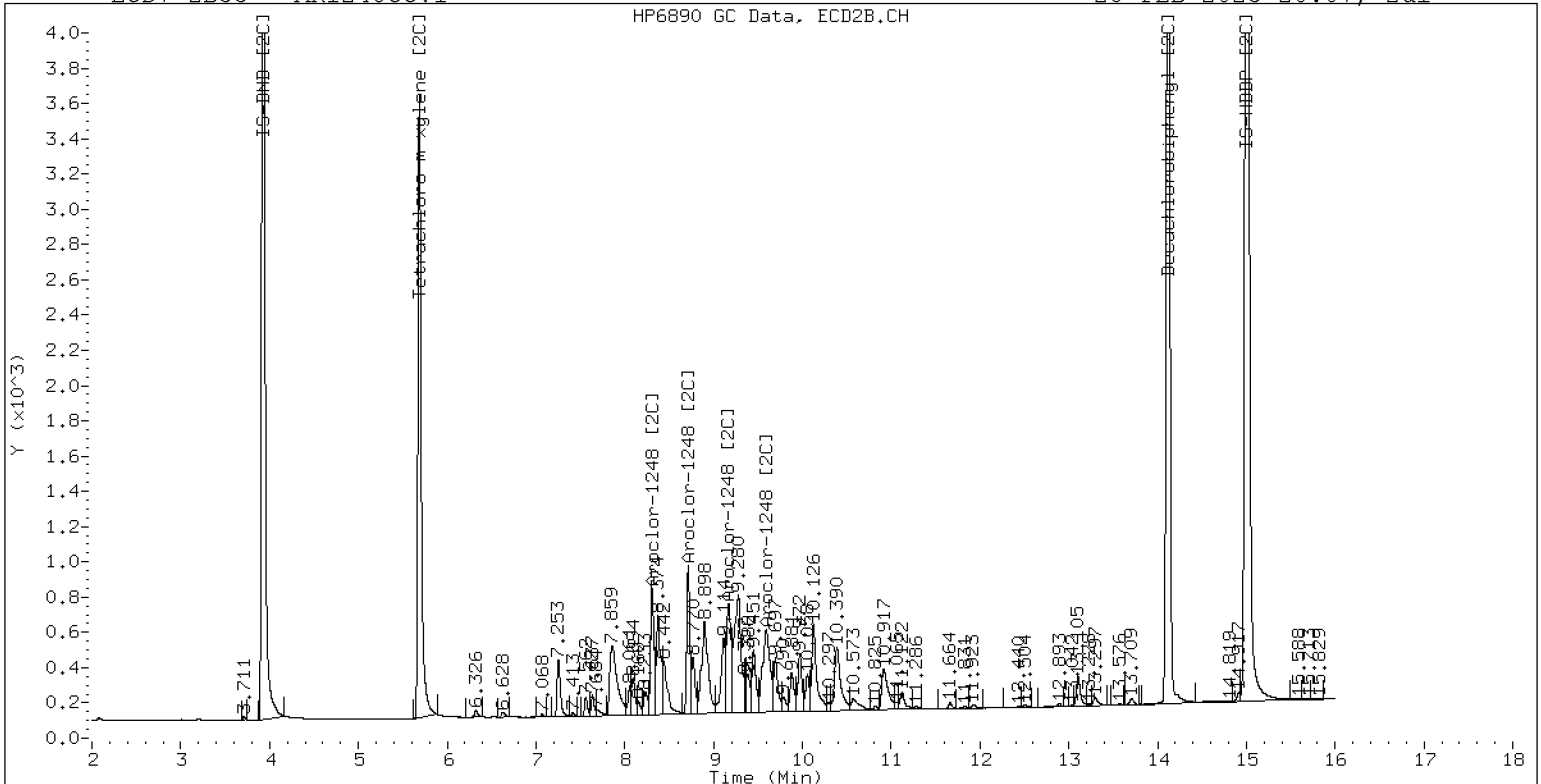
28-FEB-2023 20:07, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 AR1248CCV1

28-FEB-2023 20:07, 2ul



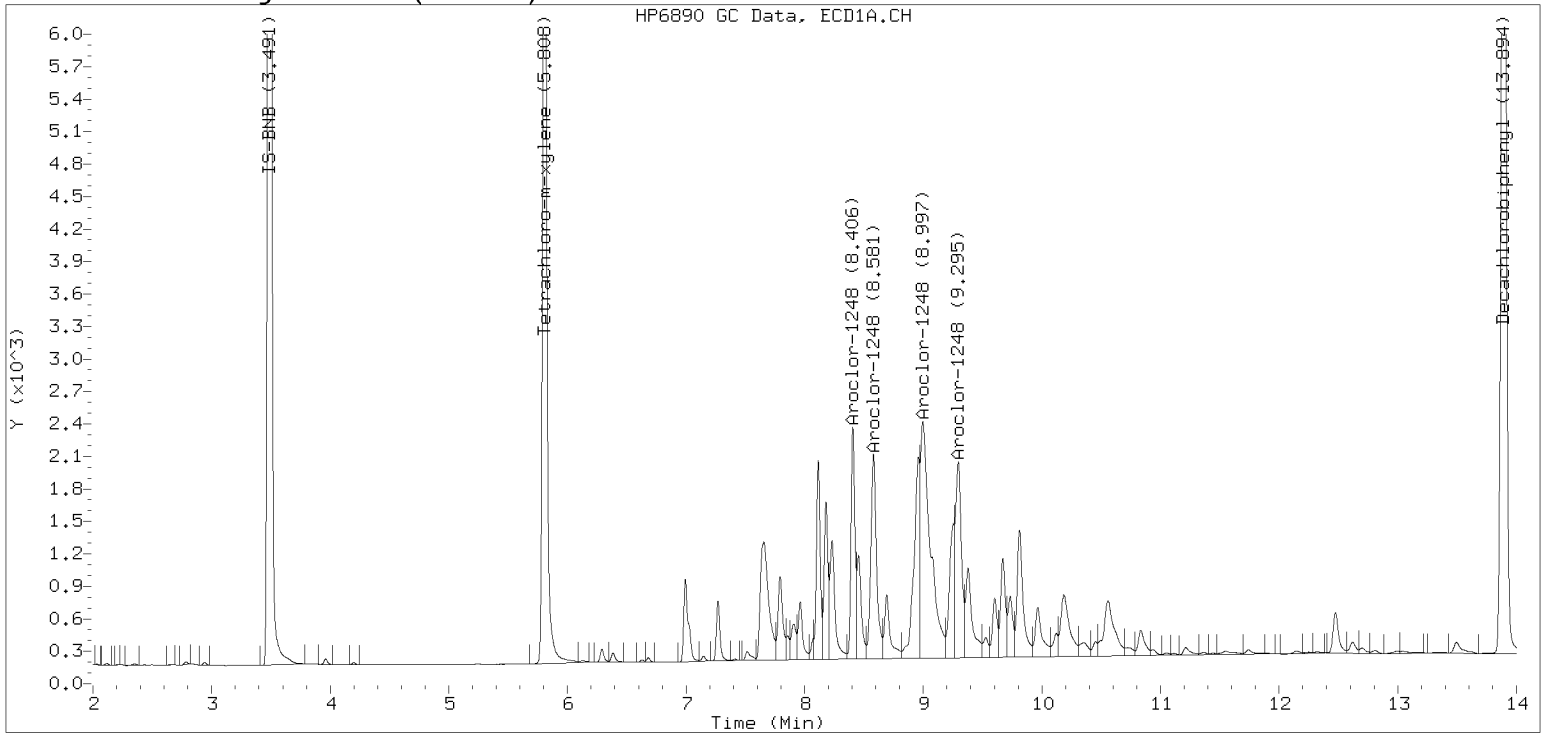
ZB-35 Manual Integration: NO

Manual Peak Adjustment, ZB-5

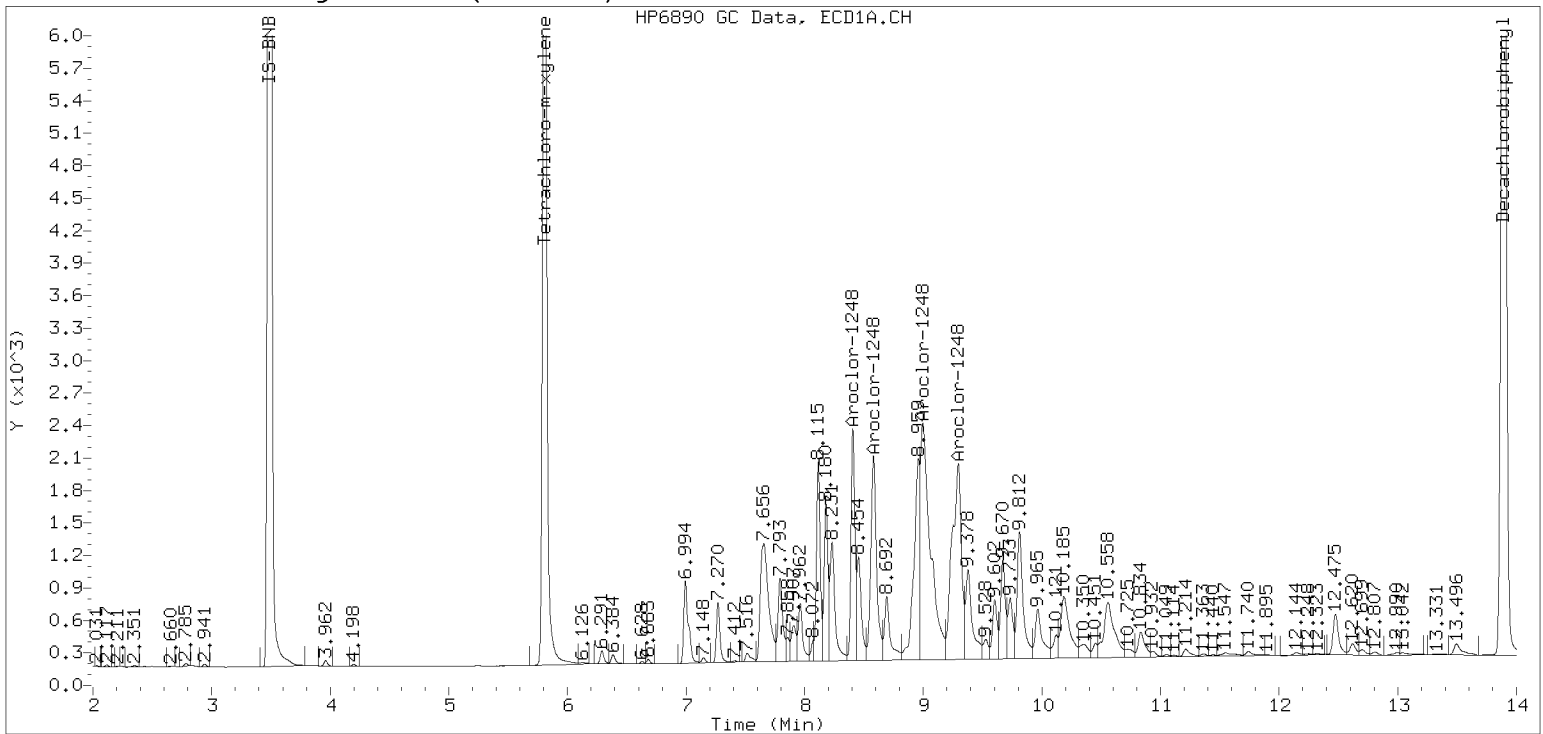
Datafile: ecd7.i/230228.b/02282313ECD7.D

Injection Date: 28-FEB-2023 20:07

Manual Integration (After)



Processed Integration (Before)





CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ECD7

Calibration: GB00069

Lab File ID: 02282314ECD7.D

Calibration Date: 02/24/2023

Sequence: SLC0014

Injection Date: 02/28/23

Lab Sample ID: SLC0014-CCV2

Injection Time: 20:28

Sequence Name: AR1660CCV2

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	269	0.0493662	0.0531918		7.6	+/-20
Aroclor-1016 (1)	A	250.00	264	0.0303852	0.0320347		5.6	
Aroclor-1016 (2)	A	250.00	270	0.0926308	0.0998609		8.0	
Aroclor-1016 (3)	A	250.00	274	0.0452180	0.0495154		9.6	
Aroclor-1016 (4)	A	250.00	268	0.0292307	0.0313563		7.2	
Aroclor 1016 [2C]	A	250.00	261	0.0545857	0.0576031		4.5	+/-20
Aroclor-1016 (1) [2C]	A	250.00	252	0.0468313	0.0472870		0.8	
Aroclor-1016 (2) [2C]	A	250.00	272	0.0949676	0.1035346		8.8	
Aroclor-1016 (3) [2C]	A	250.00	254	0.0428922	0.0436436		1.6	
Aroclor-1016 (4) [2C]	A	250.00	267	0.0336515	0.0359471		6.8	
Aroclor 1260	A	250.00	302	0.0392091	0.0475954		20.8	+/-20 *
Aroclor-1260 (1)	A	250.00	277	0.0287785	0.0319038		10.8	
Aroclor-1260 (2)	A	250.00	310	0.0300690	0.0373331		24.0	
Aroclor-1260 (3)	A	250.00	306	0.0797517	0.0976402		22.4	
Aroclor-1260 (4)	A	250.00	310	0.0401599	0.0498416		24.0	
Aroclor-1260 (5)	A	250.00	307	0.0172866	0.0212581		22.8	
Aroclor 1260 [2C]	A	250.00	245	0.0699688	0.0695777		-2.2	+/-20
Aroclor-1260 (1) [2C]	A	250.00	230	0.0470406	0.0433241		-8.0	
Aroclor-1260 (2) [2C]	A	250.00	252	0.1200523	0.1210413		0.8	
Aroclor-1260 (3) [2C]	A	250.00	238	0.0318590	0.0303454		-4.8	
Aroclor-1260 (4) [2C]	A	250.00	258	0.0809231	0.0835999		3.2	
Decachlorobiphenyl	A	40.000	40.1	0.7878687	0.7892449		0.3	+/-20
Tetrachlorometaxylene	A	40.000	40.8	1.1944880	1.2188610		2.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.6	1.2182710	1.2361950		1.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.3	1.1737210	1.2124060		3.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282314ECD7.D
Data file 2: /230228.b/230228.b/02282314ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV2
Client ID:
Injection Date: 28-FEB-2023 20:28
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.001	465648	5.688	0.000	189813	40.8	41.3	1.2	Tetrachloro-m-xylene
13.893	-0.000	625756	14.119	-0.001	297494	40.1	40.6	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	764071	13.4
Hexabromobiphenyl	1429847	1585708	10.9

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	313118	-0.7
Hexabromobiphenyl	513946	481306	-6.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.270	0.001	76490	263.6	1	7.255	-0.000	46270	252.4	
Aroclor-1016	2	7.657	0.002	238440	269.5	2	7.860	0.000	101308	272.6	
Aroclor-1016	3	7.792	0.001	118229	273.8	3	8.059	0.000	42705	254.4	
Aroclor-1016	4	8.406	-0.000	74870	268.2	4	8.307	-0.001	35174	267.1	
Total CollAve (4 peaks):				268.8	Total Col2Ave (4 peaks):				261.6	RPD = 3	
Corrected Ave (3 peaks):				267.1	Corrected Ave (3 peaks):				258.0	RPD = 3	
CalAmt %D:				7.5	CalAmt %D:				4.6		
Aroclor-1260	1	11.045	0.000	158094	277.1	1	11.654	0.001	65163	230.2	
Aroclor-1260	2	11.362	0.001	184998	310.4	2	11.918	0.001	182056	252.1	
Aroclor-1260	3	11.737	0.001	483840	306.1	3	12.436	0.001	45642	238.1	
Aroclor-1260	4	12.141	0.001	246982	310.3	4	12.503	0.001	125741	258.3	
Aroclor-1260	5	12.245	0.002	105341	307.4	NS	---			----	
Total CollAve (5 peaks):				302.3	Total Col2Ave (4 peaks):				244.7	RPD = 21	
Corrected Ave (4 peaks):				300.2	Corrected Ave (3 peaks):				240.1	RPD = 22	
CalAmt %D:				20.9	CalAmt %D:				-2.1		

Total PCB Area Col1 (5.907 - 13.793) = 4921192 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1783996 Col2 Total PCB = 0.5 ppm*

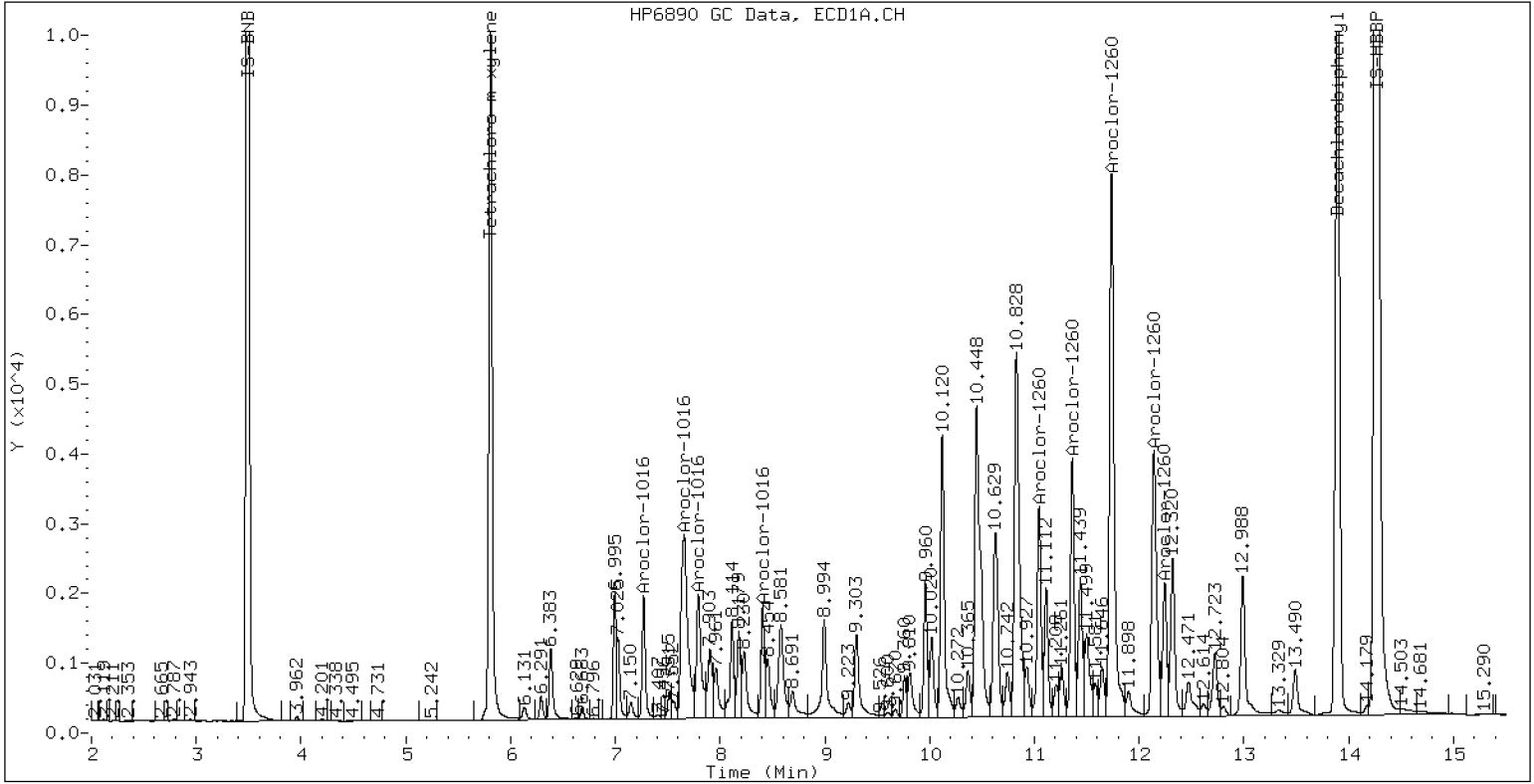
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV2

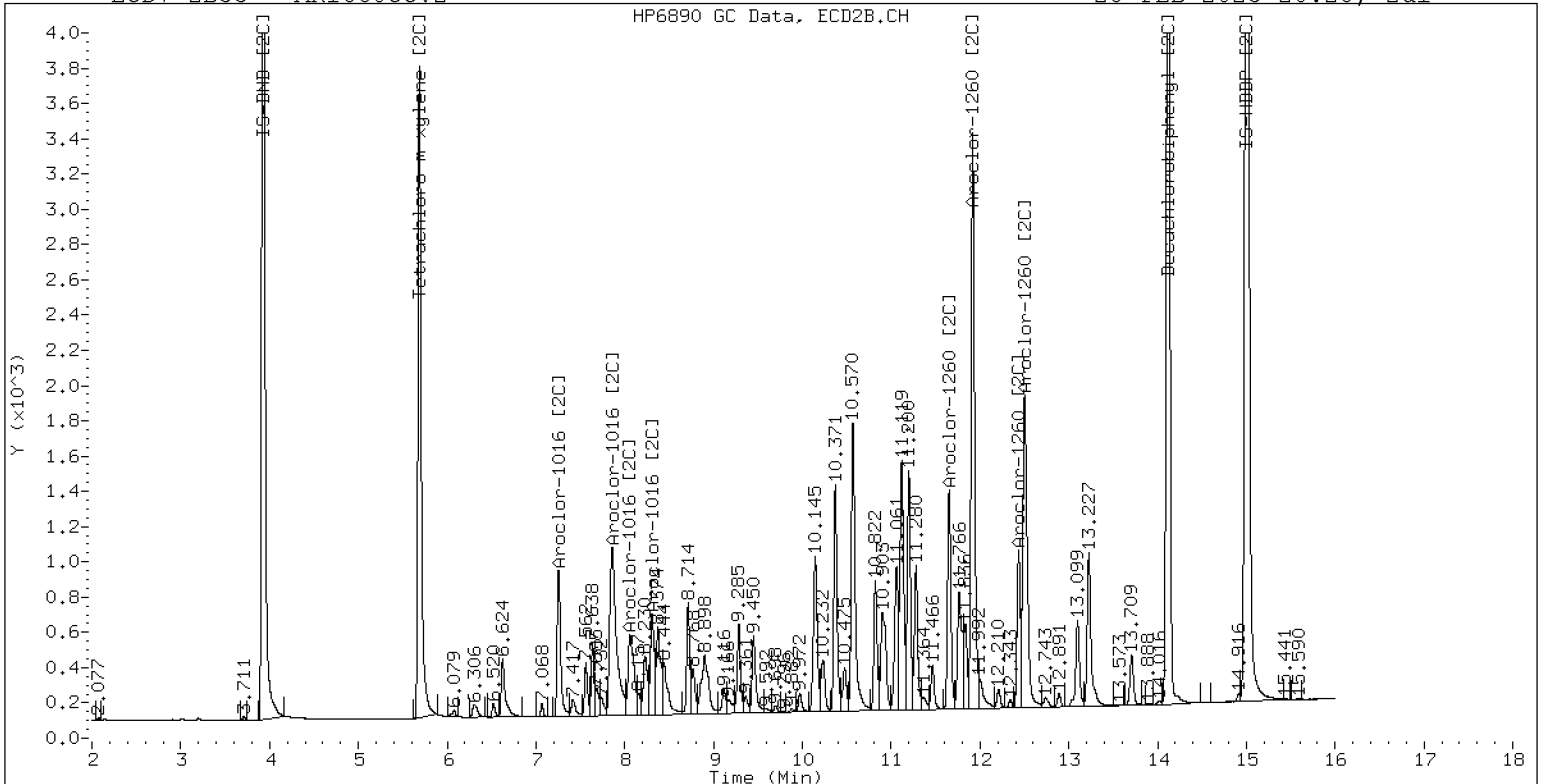
28-FEB-2023 20:28, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV2

28-FEB-2023 20:28, 2u1

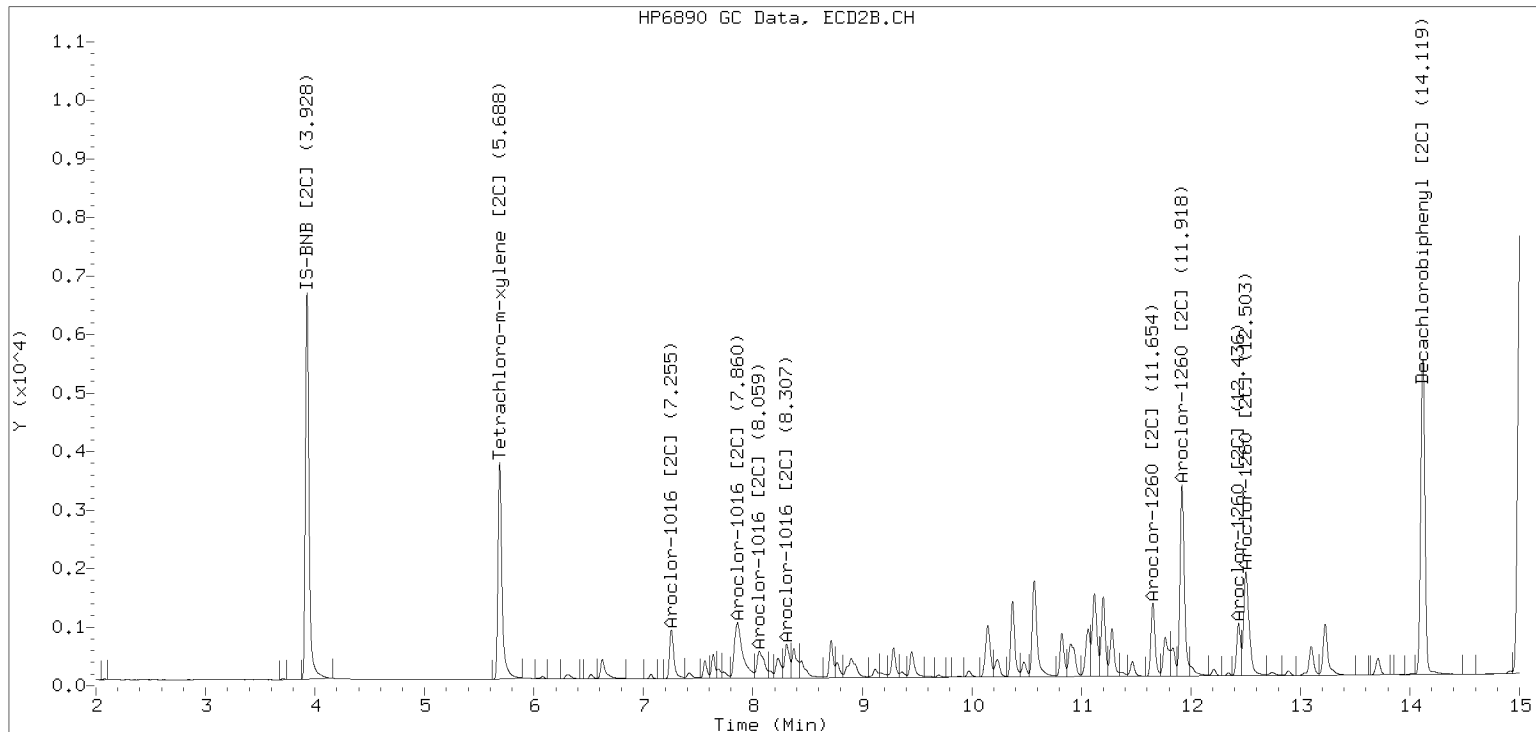


ZB-35 Manual Integration: YES

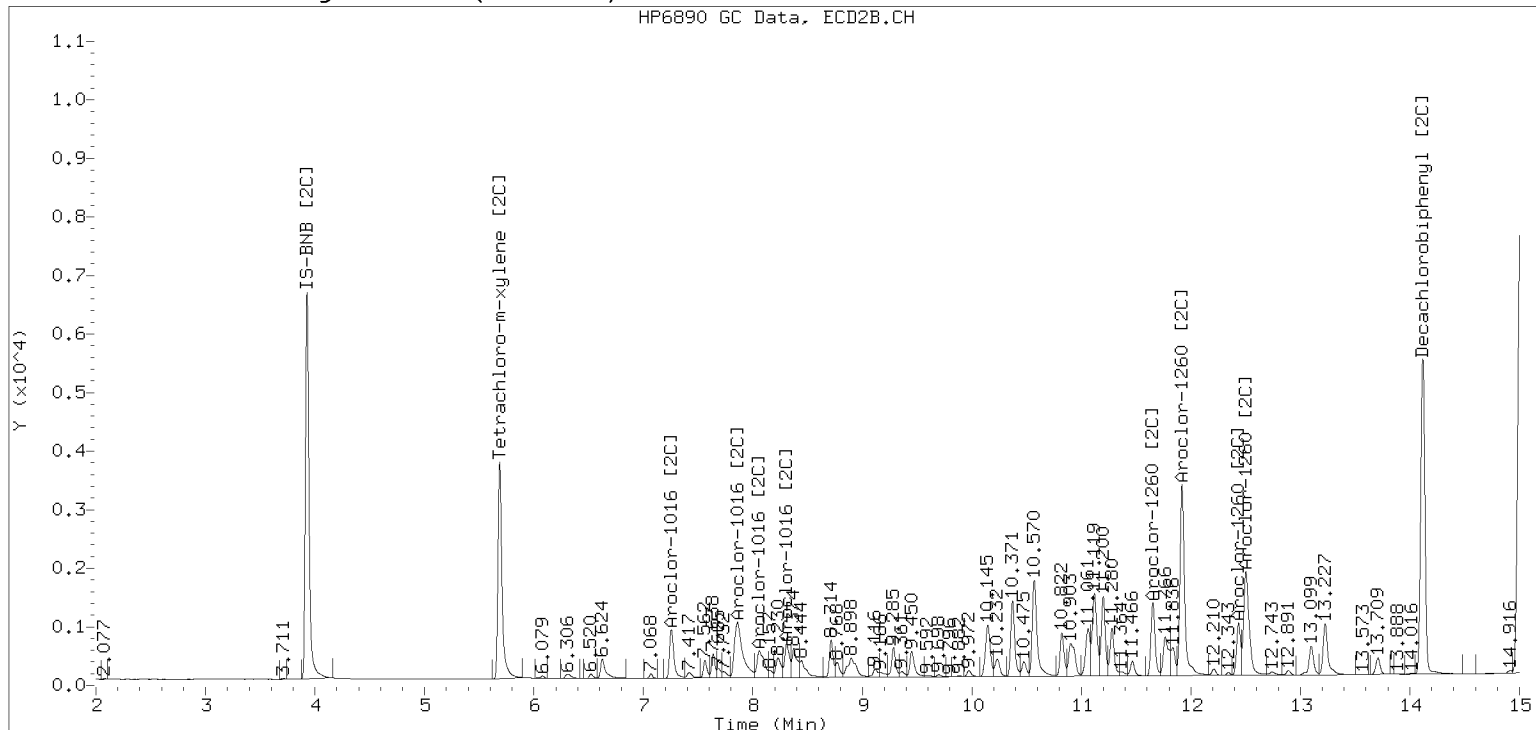
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282314ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)





CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02282331ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLC0014</u>	Injection Date:	<u>03/01/23</u>
Lab Sample ID:	<u>SLC0014-CCV3</u>	Injection Time:	<u>02:26</u>
Sequence Name:	<u>AR1242CCV3</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	250	0.0395340	0.0396605		0.1	+/-20
Aroclor-1242 (1)	A	250.00	249		0.0246910			
Aroclor-1242 (2)	A	250.00	251		0.0757041			
Aroclor-1242 (3)	A	250.00	250		0.0234345			
Aroclor-1242 (4)	A	250.00	251		0.0348122			
Aroclor 1242 [2C]	A	250.00	248	0.0423092	0.0421656		-0.8	+/-20
Aroclor-1242 (1) [2C]	A	250.00	251		0.0372722			
Aroclor-1242 (2) [2C]	A	250.00	251		0.0785934			
Aroclor-1242 (3) [2C]	A	250.00	246		0.0239032			
Aroclor-1242 (4) [2C]	A	250.00	244		0.0288938			
Decachlorobiphenyl	A	40.000	39.8	0.7878687	0.7842420		-0.5	+/-20
Tetrachlorometaxylene	A	40.000	44.9	1.1944880	1.3409470		12.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.1	1.2182710	1.2828530		5.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	46.8	1.1737210	1.3739480		17.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282331ECD7.D
 Data file 2: /230228.b/230228.b/02282331ECD7.D
 Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
 Compound Sublist: AR1242.sub
 Instrument, Inj. Vol.: ecd7.i, 2ul
 Quant Method: Internal Std

ARI ID: AR1242CCV3
 Client ID:
 Injection Date: 01-MAR-2023 02:26
 Report Date: 03/01/2023 12:20
 Matrix: NONE
 Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	-0.000	520986	5.687	-0.000	217825	44.9	46.8	4.2	Tetrachloro-m-xylene
13.892	-0.001	352496	14.118	-0.001	222500	39.8	42.1	5.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	777042	15.3
Hexabromobiphenyl	1429847	898947	-37.1

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317079	0.6
Hexabromobiphenyl	513946	346883	-32.5

* Standard Areas taken from Initial Cal Level 3
 Initial Calibration Date: 24-FEB-2023
 <- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1242	1	7.269	0.000	59956	249.0	1	7.253	0.000	36932	250.7	
Aroclor-1242	2	7.656	0.000	183829	251.4	2	7.859	0.000	77876	251.5	
Aroclor-1242	3	8.405	0.000	56905	250.1	3	9.167	0.000	23685	245.8	
Aroclor-1242	4	8.580	0.000	84533	251.3	4	9.598	0.000	28630	243.8	
Total CollAve (4 peaks):				250.4	Total Col2Ave (4 peaks):				248.0	RPD = 1	
Corrected Ave (3 peaks):				250.1	Corrected Ave (3 peaks):				246.8	RPD = 1	
CalAmt %D:				0.2	CalAmt %D:				-0.8		

Total PCB Area Col1 (5.907 - 13.793) = 1461012 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 562198 Col2 Total PCB = 0.1 ppm*

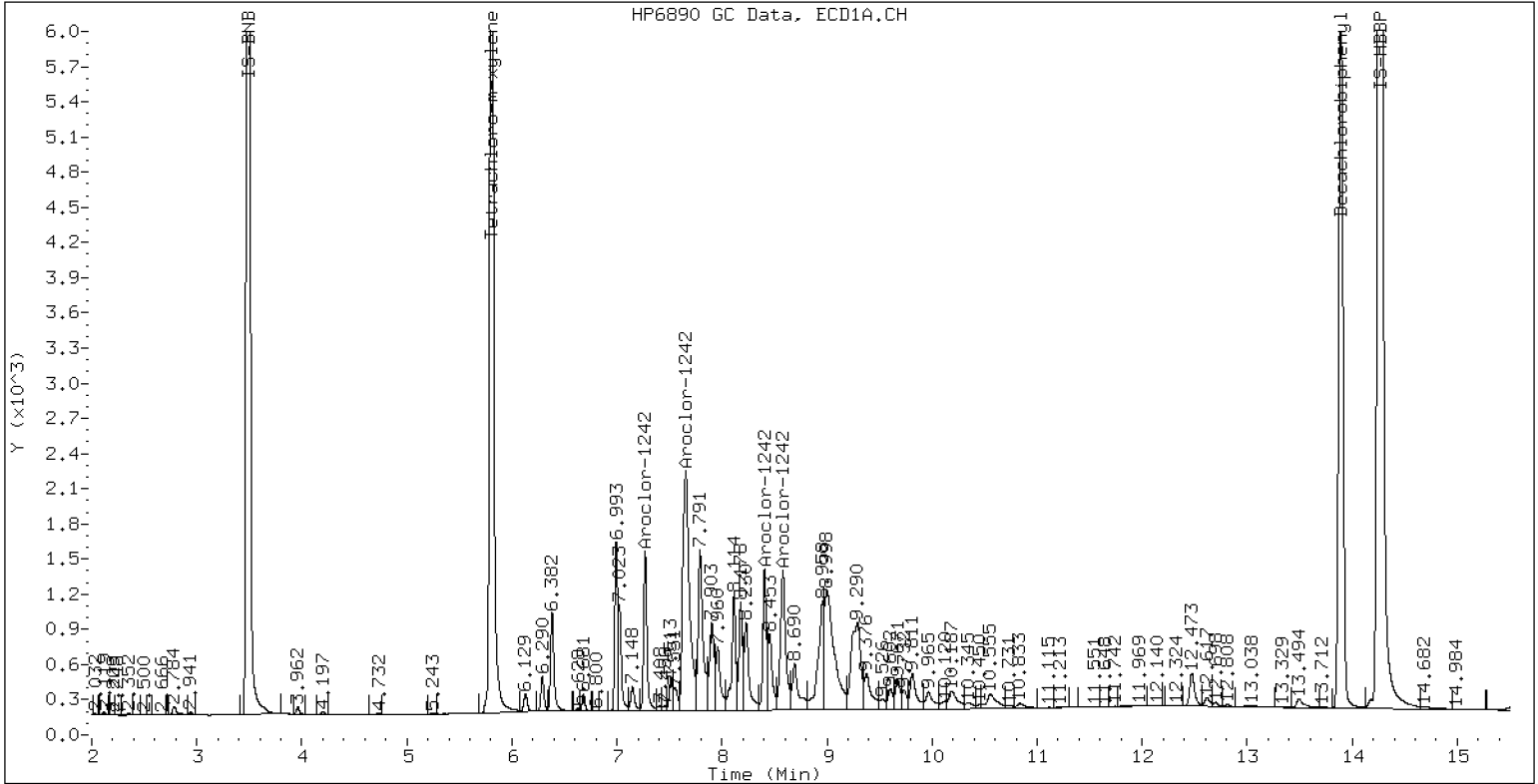
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3

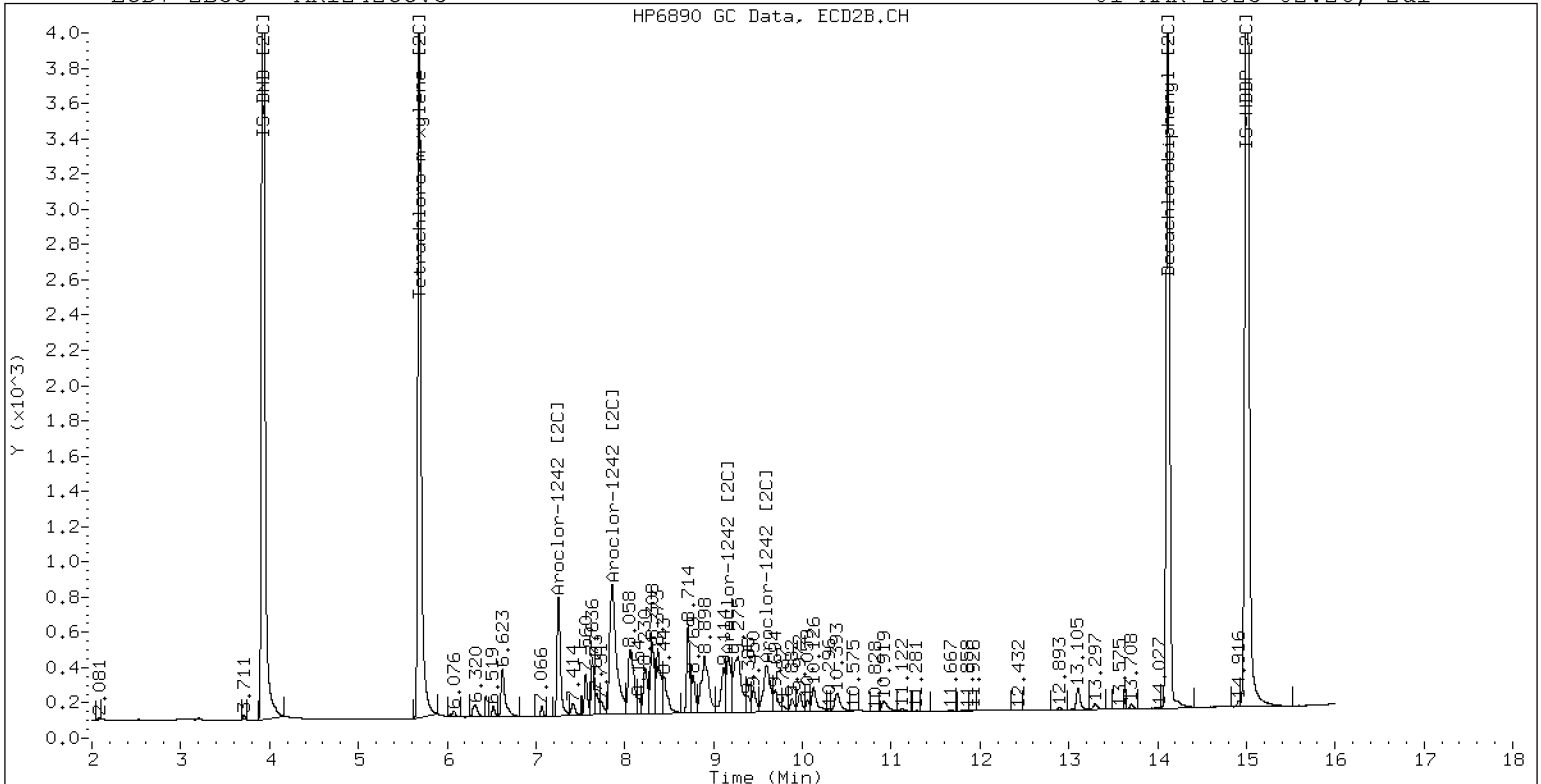
01-MAR-2023 02:26, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3

01-MAR-2023 02:26, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ECD7

Calibration: GB00069

Lab File ID: 02282332ECD7.D

Calibration Date: 02/24/2023

Sequence: SLC0014

Injection Date: 03/01/23

Lab Sample ID: SLC0014-CCV4

Injection Time: 02:47

Sequence Name: AR1660CCV4

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	265	0.0493662	0.0524970		5.9	+/-20
Aroclor-1016 (1)	A	250.00	258	0.0303852	0.0314097		3.2	
Aroclor-1016 (2)	A	250.00	267	0.0926308	0.0990067		6.8	
Aroclor-1016 (3)	A	250.00	266	0.0452180	0.0482150		6.4	
Aroclor-1016 (4)	A	250.00	268	0.0292307	0.0313565		7.2	
Aroclor 1016 [2C]	A	250.00	254	0.0545857	0.0560912		1.5	+/-20
Aroclor-1016 (1) [2C]	A	250.00	247	0.0468313	0.0462735		-1.2	
Aroclor-1016 (2) [2C]	A	250.00	267	0.0949676	0.1015811		6.8	
Aroclor-1016 (3) [2C]	A	250.00	245	0.0428922	0.0420645		-2.0	
Aroclor-1016 (4) [2C]	A	250.00	256	0.0336515	0.0344458		2.4	
Aroclor 1260	A	250.00	383	0.0392091	0.0596066		53.2	+/-20 *
Aroclor-1260 (1)	A	250.00	366	0.0287785	0.0421980		46.4	
Aroclor-1260 (2)	A	250.00	379	0.0300690	0.0455431		51.6	
Aroclor-1260 (3)	A	250.00	369	0.0797517	0.1177419		47.6	
Aroclor-1260 (4)	A	250.00	406	0.0401599	0.0652154		62.4	
Aroclor-1260 (5)	A	250.00	395	0.0172866	0.0273346		58.0	
Aroclor 1260 [2C]	A	250.00	297	0.0699688	0.0837623		18.6	+/-20
Aroclor-1260 (1) [2C]	A	250.00	288	0.0470406	0.0541160		15.2	
Aroclor-1260 (2) [2C]	A	250.00	303	0.1200523	0.1454699		21.2	
Aroclor-1260 (3) [2C]	A	250.00	291	0.0318590	0.0371272		16.4	
Aroclor-1260 (4) [2C]	A	250.00	304	0.0809231	0.0983362		21.6	
Decachlorobiphenyl	A	40.000	45.3	0.7878687	0.8917978		13.3	+/-20
Tetrachlorometaxylene	A	40.000	39.7	1.1944880	1.1844690		-0.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	44.0	1.2182710	1.3404950		10.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	41.8	1.1737210	1.2272110		4.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282332ECD7.D
Data file 2: /230228.b/230228.b/02282332ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 01-MAR-2023 02:47
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	-0.001	466455	5.686	-0.001	195329	39.7	41.8	5.3	Tetrachloro-m-xylene
13.892	-0.001	461529	14.118	-0.002	245956	45.3	44.0	2.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	787619	16.9
Hexabromobiphenyl	1429847	1035053	-27.6

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	318330	1.0
Hexabromobiphenyl	513946	366963	-28.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	77309	258.4	1	7.253	-0.002	46032	247.0
Aroclor-1016	2	7.654	-0.001	243686	267.2	2	7.857	-0.003	101051	267.4
Aroclor-1016	3	7.791	-0.001	118672	266.6	3	8.056	-0.002	41845	245.2
Aroclor-1016	4	8.405	-0.001	77178	268.2	4	8.306	-0.002	34266	255.9
Total CollAve (4 peaks):				265.1		Total Col2Ave (4 peaks):				253.9 RPD = 4
Corrected Ave (3 peaks):				264.1		Corrected Ave (3 peaks):				249.4 RPD = 6

CalAmt %D: 6.0

CalAmt %D: 1.6

Aroclor-1260	1	11.044	-0.000	136491	366.6	1	11.653	-0.000	62058	287.6
Aroclor-1260	2	11.361	0.000	147311	378.7	2	11.917	-0.001	166819	302.9
Aroclor-1260	3	11.735	-0.000	380841	369.1	3	12.435	0.000	42576	291.3
Aroclor-1260	4	12.139	-0.001	210942	406.0	4	12.501	-0.001	112768	303.8
Aroclor-1260	5	12.244	0.001	88415	395.3	NS	---			----
Total CollAve (5 peaks):				383.1		Total Col2Ave (4 peaks):				296.4 RPD = 26
Corrected Ave (4 peaks):				377.4		Corrected Ave (3 peaks):				294.0 RPD = 25

CalAmt %D: 53.2

CalAmt %D: 18.6

Total PCB Area Coll (5.907 - 13.793) = 4504656 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1698889 Col2 Total PCB = 0.4 ppm*

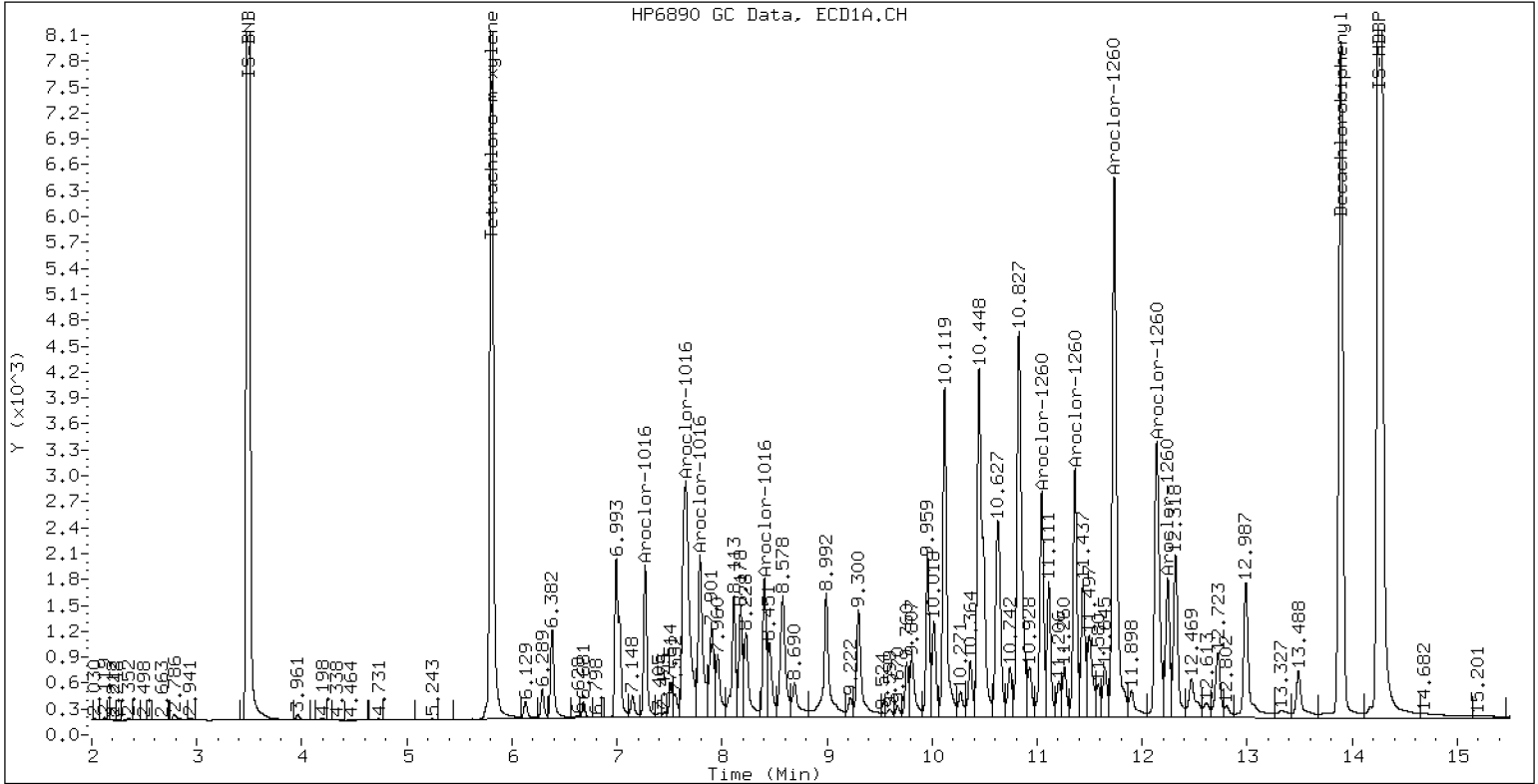
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4

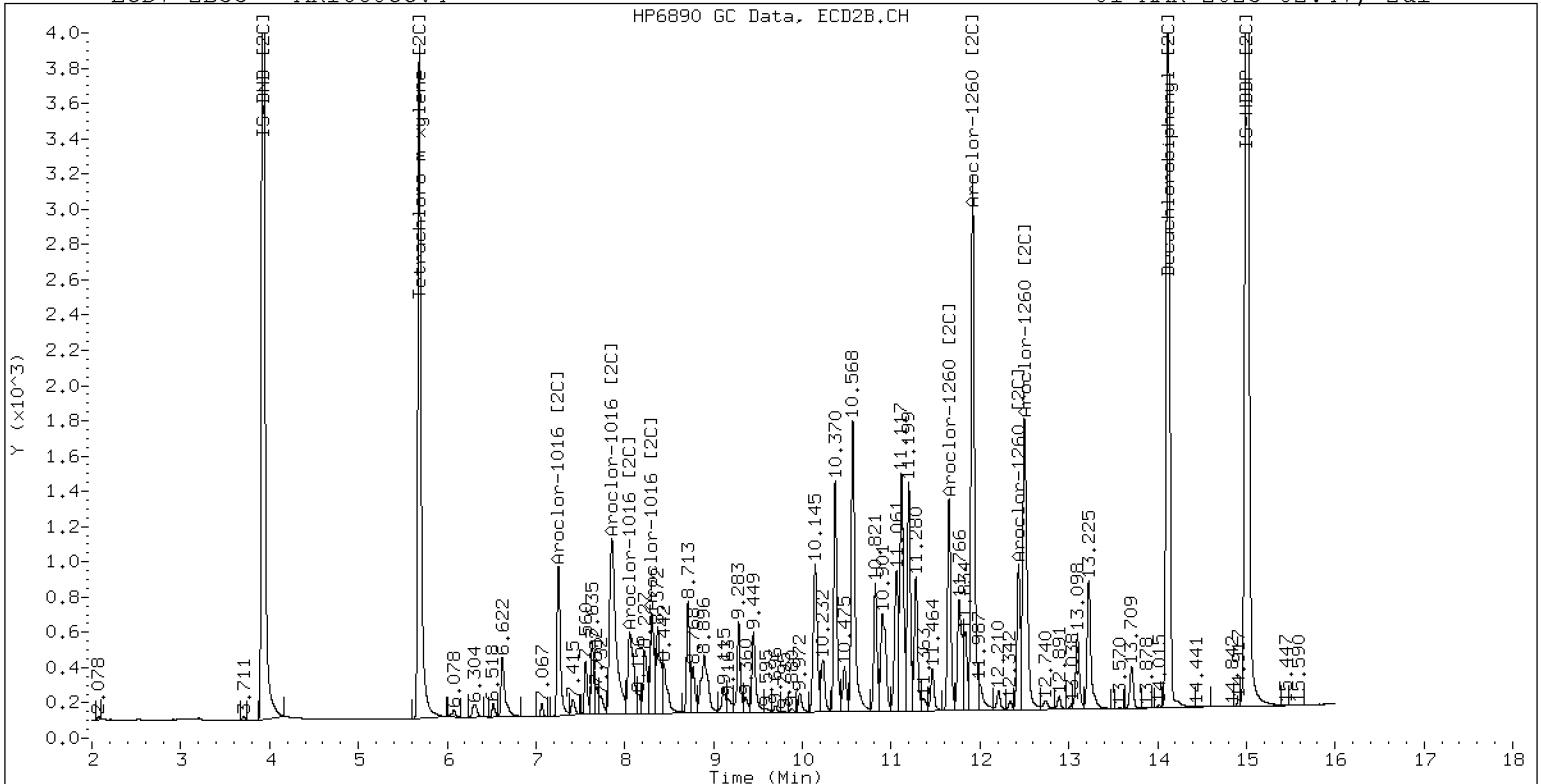
01-MAR-2023 02:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4

01-MAR-2023 02:47, 2ul

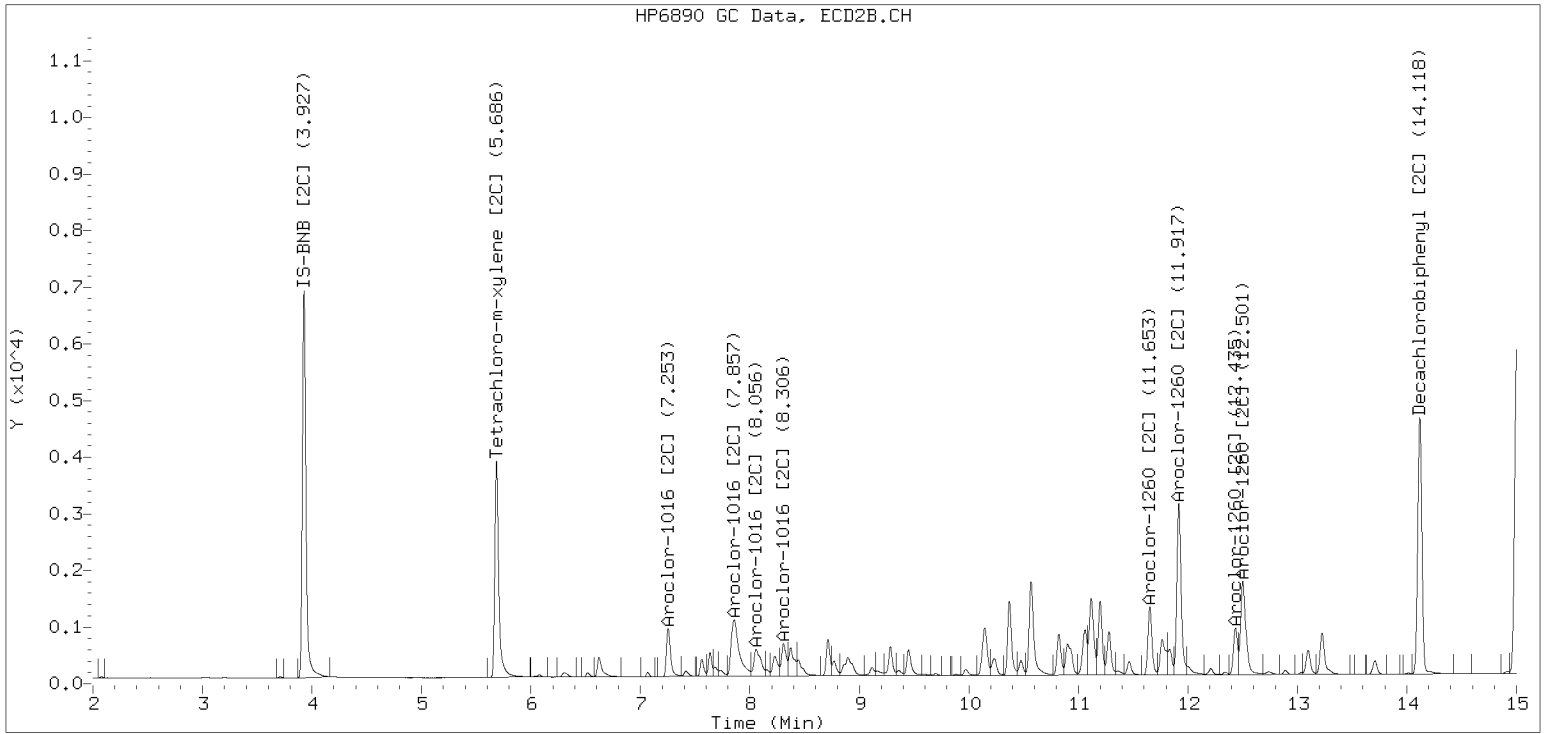


ZB-35 Manual Integration: YES

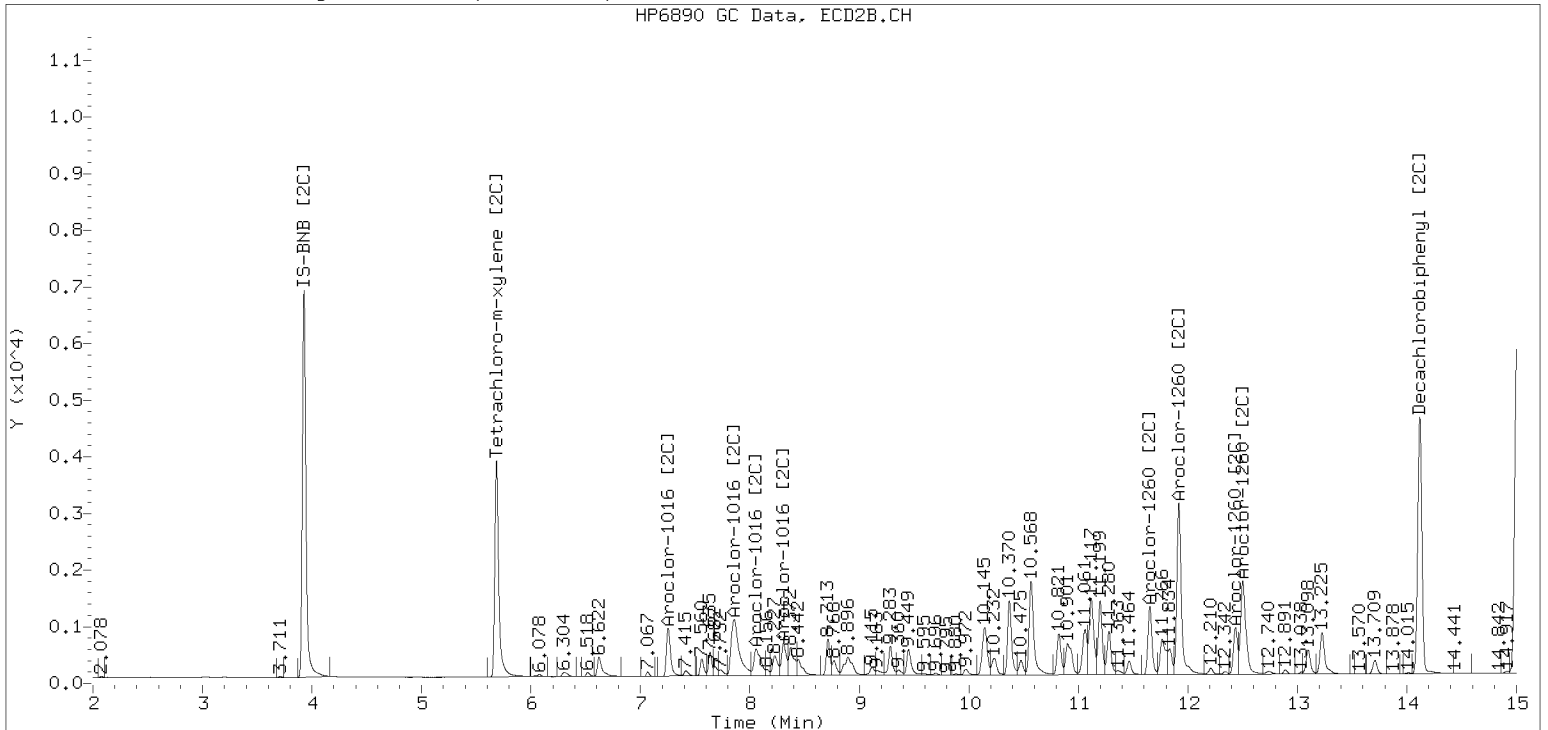
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282332ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02282348ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLC0014</u>	Injection Date:	<u>03/01/23</u>
Lab Sample ID:	<u>SLC0014-CCV5</u>	Injection Time:	<u>08:24</u>
Sequence Name:	<u>AR1254CCV5</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	245	0.0662949	0.0646060		-2.2	+/-20
Aroclor-1254 (1)	A	250.00	247		0.0793086			
Aroclor-1254 (2)	A	250.00	250		0.0361281			
Aroclor-1254 (3)	A	250.00	245		0.0506642			
Aroclor-1254 (4)	A	250.00	238		0.0956681			
Aroclor-1254 (5)	A	250.00	243		0.0612610			
Aroclor 1254 [2C]	A	250.00	243	0.0763106	0.0741904		-2.8	+/-20
Aroclor-1254 (1) [2C]	A	250.00	248		0.0603001			
Aroclor-1254 (2) [2C]	A	250.00	246		0.0482340			
Aroclor-1254 (3) [2C]	A	250.00	245		0.1038543			
Aroclor-1254 (4) [2C]	A	250.00	240		0.0991212			
Aroclor-1254 (5) [2C]	A	250.00	236		0.0594422			
Decachlorobiphenyl	A	40.000	38.4	0.7878687	0.7555757		-4.0	+/-20
Tetrachlorometaxylene	A	40.000	37.5	1.1944880	1.1209210		-6.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.7	1.2182710	1.3011340		6.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.5	1.1737210	1.1593320		-1.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282348ECD7.D
Data file 2: /230228.b/230228.b/02282348ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCV5
Client ID:
Injection Date: 01-MAR-2023 08:24
Report Date: 03/01/2023 09:00
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	-0.000	436115	5.687	0.000	183801	37.5	39.5	5.1	Tetrachloro-m-xylene
13.893	-0.001	396137	14.119	0.000	249929	38.4	42.7	10.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	778137	15.5
Hexabromobiphenyl	1429847	1048570	-26.7

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317081	0.6
Hexabromobiphenyl	513946	384171	-25.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1254	1	9.299	-0.001	192853	246.8	1	9.451	0.000	59750	247.9	
Aroclor-1254	2	9.378	0.000	87852	250.0	2	9.972	0.000	47794	246.5	
Aroclor-1254	3	9.669	-0.001	123199	245.2	3	10.125	0.000	102907	245.3	
Aroclor-1254	4	9.808	-0.001	232634	238.2	4	10.374	0.000	98217	240.2	
Aroclor-1254	5	10.178	-0.001	148967	243.3	5	10.570	0.000	58900	236.6	
Total CollAve (5 peaks):				244.7		Total Col2Ave (5 peaks):				243.3	RPD = 1
Corrected Ave (4 peaks):				243.4		Corrected Ave (4 peaks):				242.1	RPD = 1
CalAmt %D:				-2.1		CalAmt %D:				-2.7	

Total PCB Area Col1 (5.908 - 13.794) = 2555616 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.019) = 986433 Col2 Total PCB = 0.3 ppm*

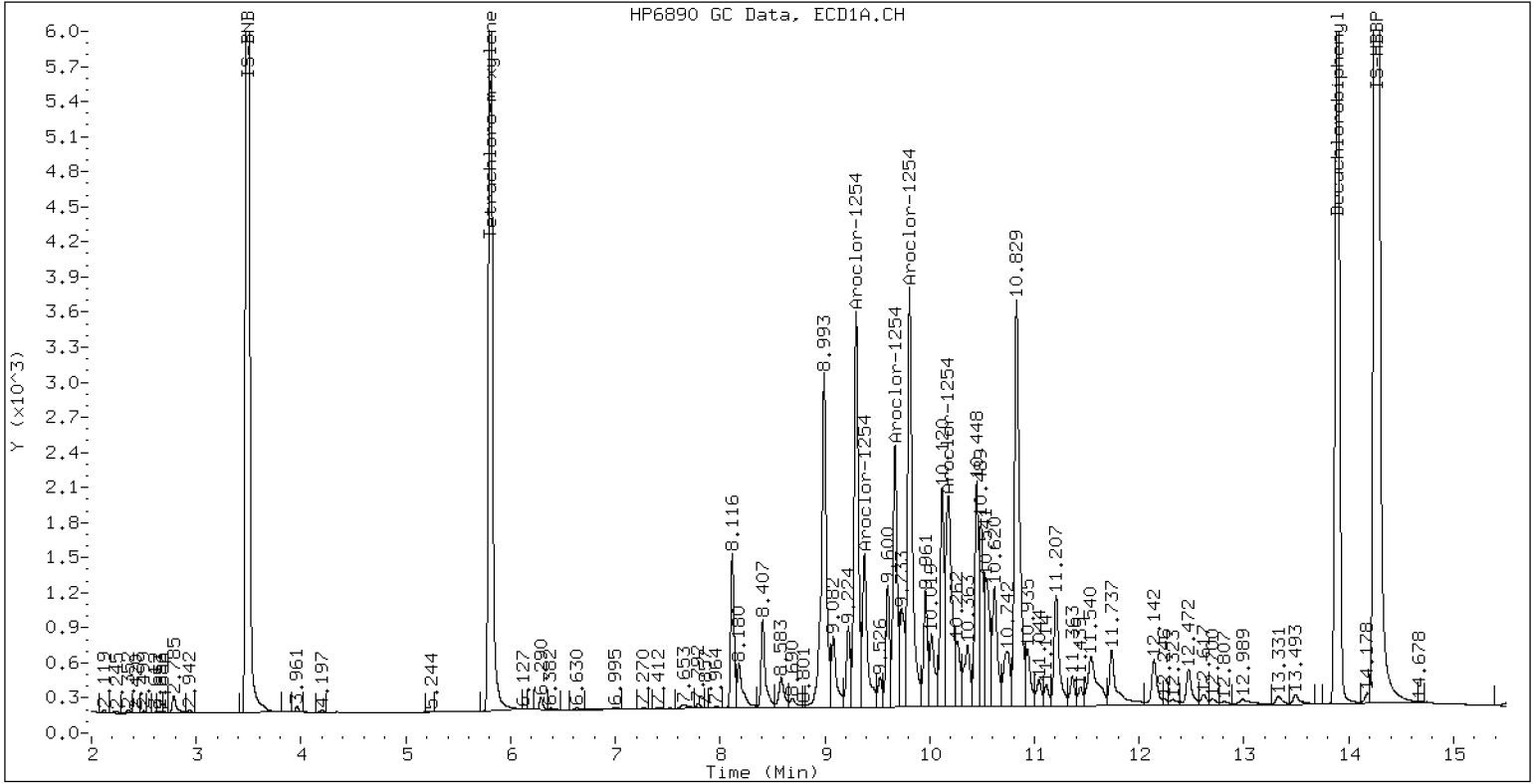
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCV5

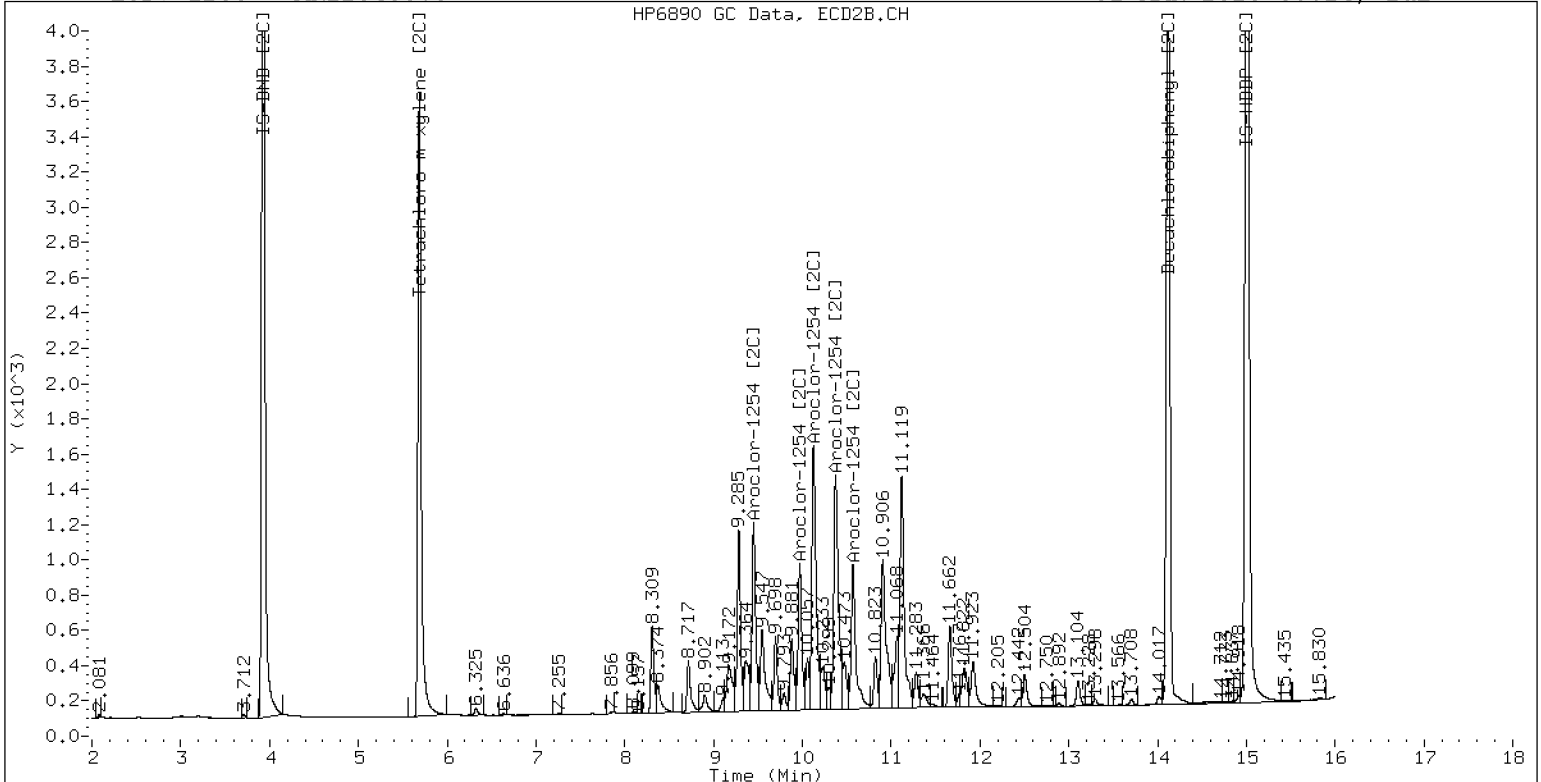
01-MAR-2023 08:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCV5

01-MAR-2023 08:24, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GB00069</u>
Lab File ID:	<u>02282349ECD7.D</u>	Calibration Date:	<u>02/24/2023</u>
Sequence:	<u>SLC0014</u>	Injection Date:	<u>03/01/23</u>
Lab Sample ID:	<u>SLC0014-CCV6</u>	Injection Time:	<u>08:45</u>
Sequence Name:	<u>AR1660CCV6</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	267	0.0493662	0.0529550		6.6	+/-20
Aroclor-1016 (1)	A	250.00	260	0.0303852	0.0316067		4.0	
Aroclor-1016 (2)	A	250.00	270	0.0926308	0.1001731		8.0	
Aroclor-1016 (3)	A	250.00	270	0.0452180	0.0488706		8.0	
Aroclor-1016 (4)	A	250.00	266	0.0292307	0.0311698		6.4	
Aroclor 1016 [2C]	A	250.00	256	0.0545857	0.0566479		2.4	+/-20
Aroclor-1016 (1) [2C]	A	250.00	249	0.0468313	0.0466155		-0.4	
Aroclor-1016 (2) [2C]	A	250.00	272	0.0949676	0.1032238		8.8	
Aroclor-1016 (3) [2C]	A	250.00	244	0.0428922	0.0419403		-2.4	
Aroclor-1016 (4) [2C]	A	250.00	259	0.0336515	0.0348121		3.6	
Aroclor 1260	A	250.00	335	0.0392091	0.0526811		34.1	+/-20 *
Aroclor-1260 (1)	A	250.00	330	0.0287785	0.0379438		32.0	
Aroclor-1260 (2)	A	250.00	352	0.0300690	0.0422977		40.8	
Aroclor-1260 (3)	A	250.00	336	0.0797517	0.1070851		34.4	
Aroclor-1260 (4)	A	250.00	335	0.0401599	0.0537628		34.0	
Aroclor-1260 (5)	A	250.00	323	0.0172866	0.0223159		29.2	
Aroclor 1260 [2C]	A	250.00	272	0.0699688	0.0769061		8.6	+/-20
Aroclor-1260 (1) [2C]	A	250.00	263	0.0470406	0.0494367		5.2	
Aroclor-1260 (2) [2C]	A	250.00	278	0.1200523	0.1337765		11.2	
Aroclor-1260 (3) [2C]	A	250.00	266	0.0318590	0.0339438		6.4	
Aroclor-1260 (4) [2C]	A	250.00	279	0.0809231	0.0904670		11.6	
Decachlorobiphenyl	A	40.000	38.7	0.7878687	0.7622857		-3.3	+/-20
Tetrachlorometaxylene	A	40.000	40.1	1.1944880	1.1963830		0.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.8	1.2182710	1.3020620		7.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	42.1	1.1737210	1.2367140		5.3	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282349ECD7.D
Data file 2: /230228.b/230228.b/02282349ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV6
Client ID:
Injection Date: 01-MAR-2023 08:45
Report Date: 03/01/2023 12:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	0.000	481038	5.687	0.000	200869	40.1	42.1	5.1	Tetrachloro-m-xylene
13.893	0.000	498212	14.120	0.000	275782	38.7	42.8	9.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	804154	19.3
Hexabromobiphenyl	1429847	1307153	-8.6
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	324843	3.0
Hexabromobiphenyl	513946	423608	-17.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	0.000	79427	260.1	1	7.255	0.000	47321	248.8
Aroclor-1016	2	7.655	0.000	251733	270.4	2	7.859	0.000	104786	271.7
Aroclor-1016	3	7.792	0.000	122811	270.2	3	8.059	0.000	42575	244.5
Aroclor-1016	4	8.406	0.000	78329	266.6	4	8.308	0.000	35339	258.6
Total CollAve (4 peaks):				266.8		Total Col2Ave (4 peaks):				255.9 RPD = 4
Corrected Ave (3 peaks):				265.6		Corrected Ave (3 peaks):				250.6 RPD = 6

CalAmt %D: 6.7

CalAmt %D: 2.4

Aroclor-1260	1	11.044	0.000	154995	329.6	1	11.653	0.000	65443	262.7
Aroclor-1260	2	11.360	0.000	172780	351.7	2	11.918	0.000	177090	278.6
Aroclor-1260	3	11.736	0.000	437427	335.7	3	12.435	0.000	44934	266.4
Aroclor-1260	4	12.140	0.000	219613	334.7	4	12.502	0.000	119758	279.5
Aroclor-1260	5	12.243	0.000	91157	322.7	NS	---			----
Total CollAve (5 peaks):				334.9		Total Col2Ave (4 peaks):				271.8 RPD = 21
Corrected Ave (4 peaks):				330.7		Corrected Ave (3 peaks):				269.2 RPD = 20

CalAmt %D: 34.0

CalAmt %D: 8.7

Total PCB Area Col1 (5.907 - 13.793) = 4749889 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1777486 Col2 Total PCB = 0.5 ppm*

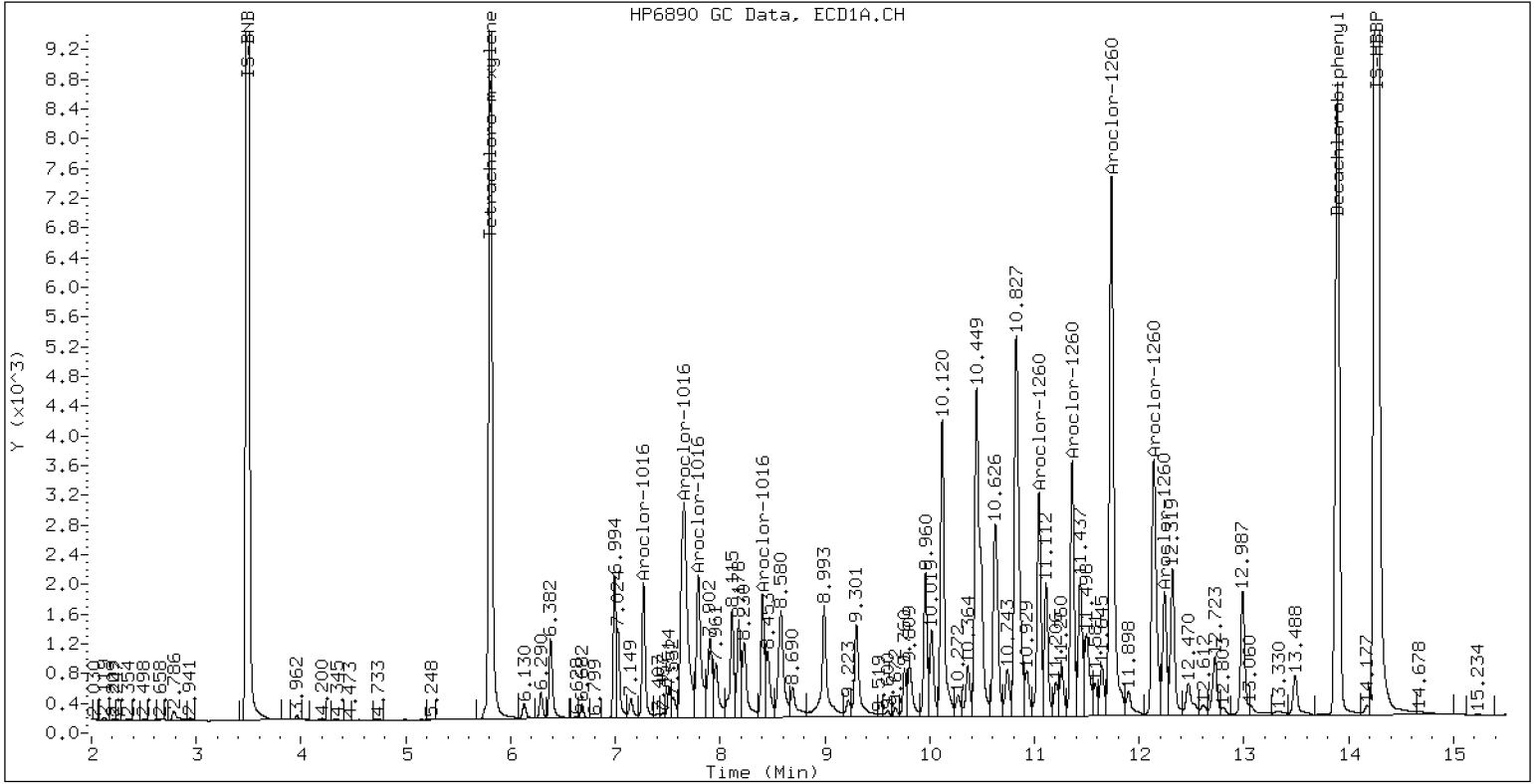
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV6

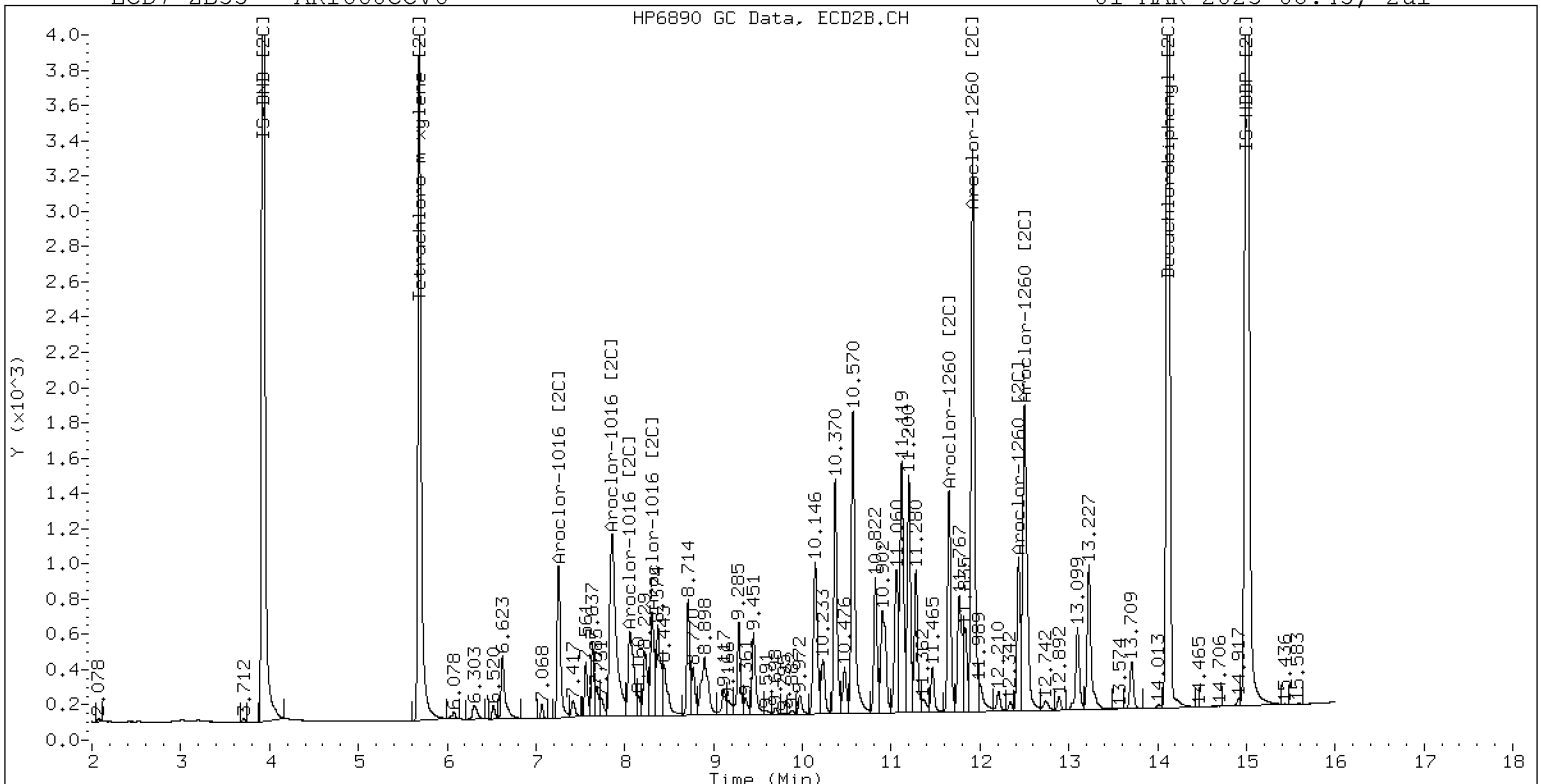
01-MAR-2023 08:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV6

01-MAR-2023 08:45, 2ul

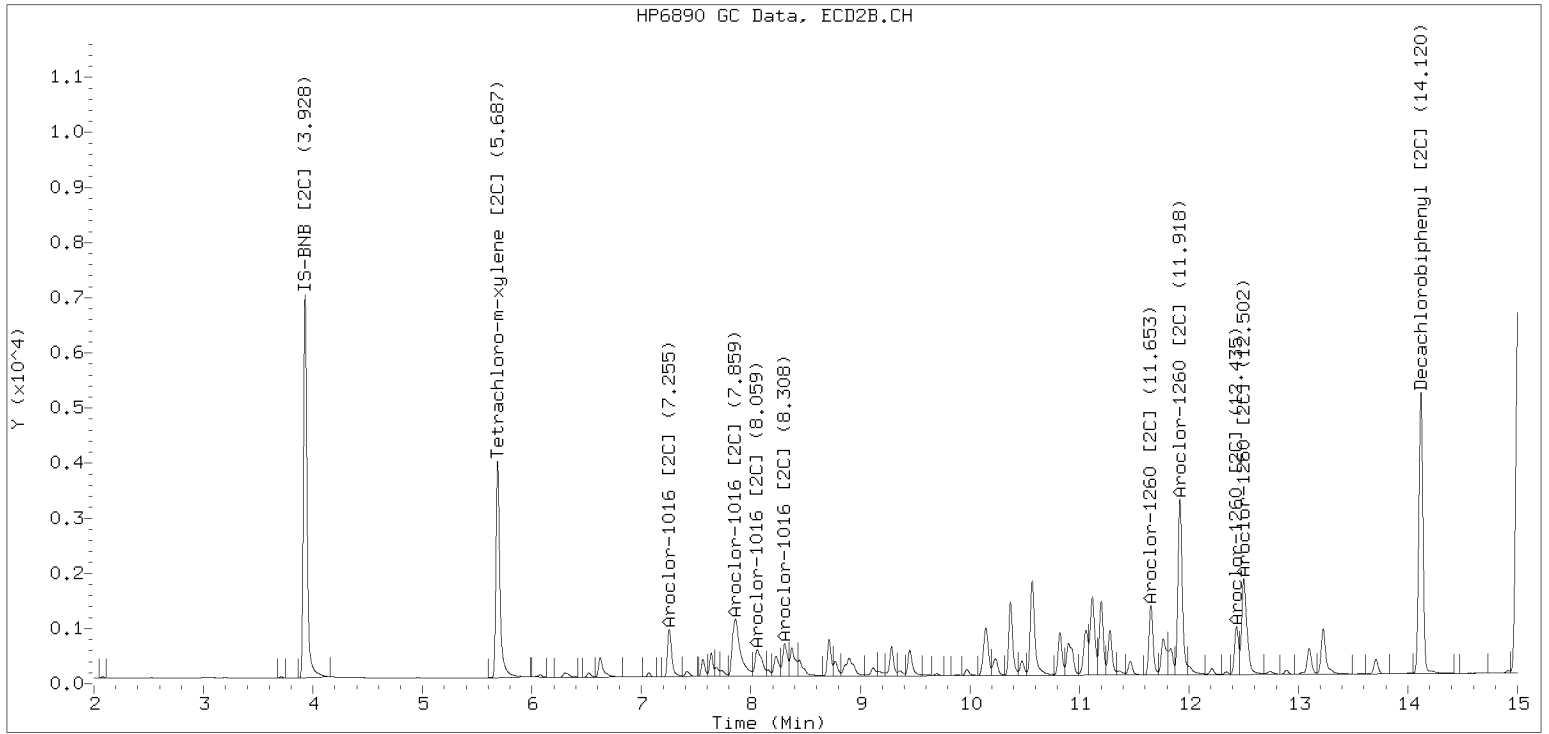


ZB-35 Manual Integration: YES

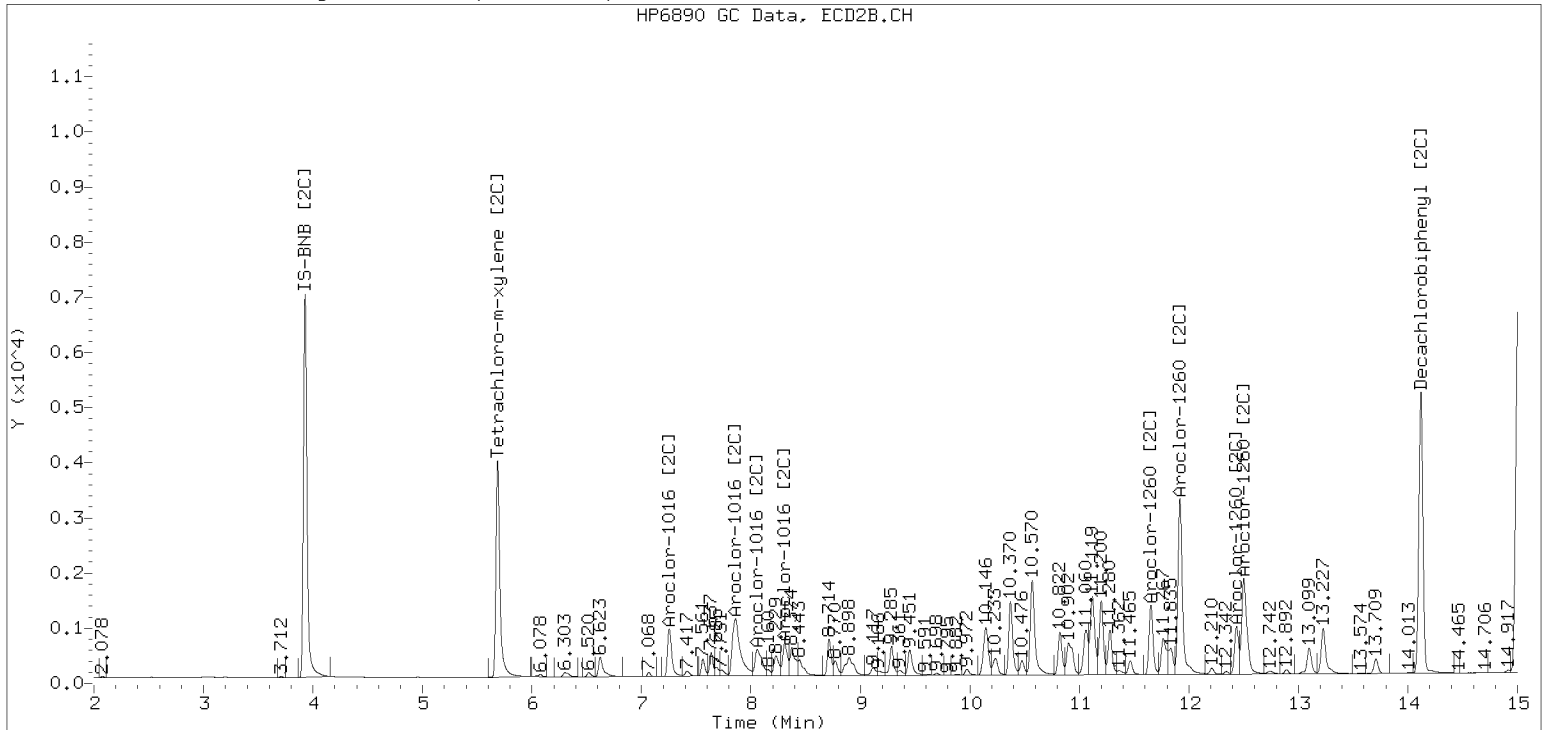
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282349ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)





Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0342

Instrument: ECD7

Calibration: GB00069

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLB0342-CAL1	02242302ECD7.D	02242302ECD7.D	NA	02/24/23 11:12
Cal Standard	SLB0342-CAL2	02242303ECD7.D	02242303ECD7.D	NA	02/24/23 11:33
Cal Standard	SLB0342-CAL3	02242304ECD7.D	02242304ECD7.D	NA	02/24/23 11:54
Cal Standard	SLB0342-CAL4	02242305ECD7.D	02242305ECD7.D	NA	02/24/23 12:15
Cal Standard	SLB0342-CAL5	02242306ECD7.D	02242306ECD7.D	NA	02/24/23 12:36
Cal Standard	SLB0342-CAL6	02242307ECD7.D	02242307ECD7.D	NA	02/24/23 12:57
Cal Standard	SLB0342-CAL7	02242308ECD7.D	02242308ECD7.D	NA	02/24/23 13:18
Cal Standard	SLB0342-CAL8	02242309ECD7.D	02242309ECD7.D	NA	02/24/23 13:39
Cal Standard	SLB0342-CAL9	02242310ECD7.D	02242310ECD7.D	NA	02/24/23 14:00
Cal Standard	SLB0342-CALA	02242311ECD7.D	02242311ECD7.D	NA	02/24/23 14:21
Cal Standard	SLB0342-CALB	02242312ECD7.D	02242312ECD7.D	NA	02/24/23 14:42
Secondary Cal Check	SLB0342-SCV1	02242313ECD7.D	02242313ECD7.D	NA	02/24/23 15:03
Secondary Cal Check	SLB0342-SCV2	02242314ECD7.D	02242314ECD7.D	NA	02/24/23 15:24
Secondary Cal Check	SLB0342-SCV3	02242315ECD7.D	02242315ECD7.D	NA	02/24/23 15:45
Secondary Cal Check	SLB0342-SCV4	02242316ECD7.D	02242316ECD7.D	NA	02/24/23 16:06
Secondary Cal Check	SLB0342-SCV5	02242317ECD7.D	02242317ECD7.D	NA	02/24/23 16:27
Secondary Cal Check	SLB0342-SCV6	02242318ECD7.D	02242318ECD7.D	NA	02/24/23 16:48



Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0014

Instrument: ECD7

Calibration: GB00069

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0014-ICV1	02282310ECD7.D	02282310ECD7.D	NA	02/28/23 19:04
Initial Cal Check	SLC0014-ICV2	02282311ECD7.D	02282311ECD7.D	NA	02/28/23 19:25
Calibration Check	SLC0014-CCV1	02282313ECD7.D	02282313ECD7.D	NA	02/28/23 20:07
Calibration Check	SLC0014-CCV2	02282314ECD7.D	02282314ECD7.D	NA	02/28/23 20:28
Calibration Check	SLC0014-CCV3	02282331ECD7.D	02282331ECD7.D	NA	03/01/23 02:26
Calibration Check	SLC0014-CCV4	02282332ECD7.D	02282332ECD7.D	NA	03/01/23 02:47
Blank	BLB0427-BLK1	02282333ECD7.D	02282333ECD7.D	Solid	03/01/23 03:08
LCS	BLB0427-BS1	02282334ECD7.D	02282334ECD7.D	Solid	03/01/23 03:29
LCS Dup	BLB0427-BSD1	02282335ECD7.D	02282335ECD7.D	Solid	03/01/23 03:50
Reference	BLB0427-SRM1	02282336ECD7.D	02282336ECD7.D	Solid	03/01/23 04:11
LDW23-SC1236	23B0229-01	02282338ECD7.D	02282338ECD7.D	Solid	03/01/23 04:53
LDW23-SS1236	23B0229-02	02282339ECD7.D	02282339ECD7.D	Solid	03/01/23 05:14
LDW23-SS1237	23B0229-03	02282340ECD7.D	02282340ECD7.D	Solid	03/01/23 05:35
LDW23-SS1150	23B0229-04	02282341ECD7.D	02282341ECD7.D	Solid	03/01/23 05:56
LDW23-SS1008	23B0229-05	02282342ECD7.D	02282342ECD7.D	Solid	03/01/23 06:17
LDW23-SC1008	23B0229-06	02282343ECD7.D	02282343ECD7.D	Solid	03/01/23 06:39
LDW23-SC1014	23B0229-07	02282344ECD7.D	02282344ECD7.D	Solid	03/01/23 07:00
LDW23-SC1014	BLB0427-MS1	02282345ECD7.D	02282345ECD7.D	Solid	03/01/23 07:21
LDW23-SC1014	BLB0427-MSD1	02282346ECD7.D	02282346ECD7.D	Solid	03/01/23 07:42
LDW23-SC1013	23B0229-08	02282347ECD7.D	02282347ECD7.D	Solid	03/01/23 08:03
Calibration Check	SLC0014-CCV5	02282348ECD7.D	02282348ECD7.D	NA	03/01/23 08:24
Calibration Check	SLC0014-CCV6	02282349ECD7.D	02282349ECD7.D	NA	03/01/23 08:45



ANALYSIS SEQUENCE

SLC0014

Instrument: ECD7
Calibration ID: GB00069

Printed: 3/1/2023 2:29:55PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0014-ICV1	QC		1		L000862	L000844		
SLC0014-ICV2	QC		2		L000856	L000844		
23A0556-01	PCB (20 ug/kg) or (MTCA 0.	A 02	3			L000844	Integral Consulting, Inc.	Use this one
SLC0014-CCV1	QC		4		L000861	L000844		
SLC0014-CCV2	QC		5		L000856	L000844		
BLB0391-BLK1	QC		6			L000844		
BLB0391-BS1	QC		7			L000844		
BLB0391-BSD1	QC		8			L000844		
BLB0391-SRM1	QC		9			L000844		
23A0420-01	8082A PCB Solid 4	A 02	10			L000844	Anchor QEA, LLC	
23A0420-02	8082A PCB Solid 4	A 02	11			L000844	Anchor QEA, LLC	
23A0420-03	8082A PCB Solid 4	A 02	12			L000844	Anchor QEA, LLC	
23A0420-04	8082A PCB Solid 4	A 02	13			L000844	Anchor QEA, LLC	
BLB0391-MS1	QC		14			L000844		
BLB0391-MSD1	QC		15			L000844		
23A0420-05	8082A PCB Solid 4	A 02	16			L000844	Anchor QEA, LLC	
23A0420-06	8082A PCB Solid 4	A 02	17			L000844	Anchor QEA, LLC	
23A0420-07	8082A PCB Solid 4	A 02	18			L000844	Anchor QEA, LLC	
23A0420-08	8082A PCB Solid 4	A 02	19			L000844	Anchor QEA, LLC	
23A0420-09	8082A PCB Solid 4	A 02	20			L000844	Anchor QEA, LLC	
23B0276-01	8082A PCB Solid 4	A 01	21			L000844	Anchor QEA, LLC	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____



ANALYSIS SEQUENCE

SLC0014

Instrument: ECD7
Calibration ID: GB00069

Printed: 3/1/2023 2:29:55PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0014-CCV3	QC		22		L000860	L000844		
SLC0014-CCV4	QC		23		L000856	L000844		
BLB0427-BLK1	QC		24			L000844		
BLB0427-BS1	QC		25			L000844		
BLB0427-BSD1	QC		26			L000844		
BLB0427-SRM1	QC		27			L000844		
23B0228-01	8082A PCB Solid 4	A 01	28			L000844	Anchor QEA, LLC	
23B0229-01	8082A PCB Solid 4	A 01	29			L000844	Anchor QEA, LLC	
23B0229-02	8082A PCB Solid 4	A 01	30			L000844	Anchor QEA, LLC	
23B0229-03	8082A PCB Solid 4	A 01	31			L000844	Anchor QEA, LLC	
23B0229-04	8082A PCB Solid 4	A 01	32			L000844	Anchor QEA, LLC	
23B0229-05	8082A PCB Solid 4	A 01	33			L000844	Anchor QEA, LLC	
23B0229-06	8082A PCB Solid 4	A 01	34			L000844	Anchor QEA, LLC	
23B0229-07	8082A PCB Solid 4	A 01	35			L000844	Anchor QEA, LLC	
BLB0427-MS1	QC		36			L000844		
BLB0427-MSD1	QC		37			L000844		
23B0229-08	8082A PCB Solid 4	A 01	38			L000844	Anchor QEA, LLC	
SLC0014-CCV5	QC		39		L000862	L000844		
SLC0014-CCV6	QC		40		L000856	L000844		

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	28-FEB-2023	19:04	02282310ECD7.D	1	AR1254ICV1	
2	28-FEB-2023	19:25	02282311ECD7.D	1	AR1660ICV2	
3	28-FEB-2023	19:46	02282312ECD7.D	10	23A0556-01RE1	
4	28-FEB-2023	20:07	02282313ECD7.D	1	AR1248CCV1	
5	28-FEB-2023	20:28	02282314ECD7.D	1	AR1660CCV2	
6	28-FEB-2023	20:49	02282315ECD7.D	1	BLB0391-BLK1	
7	28-FEB-2023	21:10	02282316ECD7.D	1	BLB0391-BS1	
8	28-FEB-2023	21:31	02282317ECD7.D	1	BLB0391-BSD1	
9	28-FEB-2023	21:53	02282318ECD7.D	1	BLB0391-SRM1	
10	28-FEB-2023	22:14	02282319ECD7.D	1	23A0420-01	
11	28-FEB-2023	22:35	02282320ECD7.D	3	23A0420-02RE1	
12	28-FEB-2023	22:56	02282321ECD7.D	3	23A0420-03RE1	
13	28-FEB-2023	23:17	02282322ECD7.D	1	23A0420-04	
14	28-FEB-2023	23:38	02282323ECD7.D	1	BLB0391-MS1	
15	28-FEB-2023	23:59	02282324ECD7.D	1	BLB0391-MSD1	
16	01-MAR-2023	00:20	02282325ECD7.D	15	23A0420-05RE2	
17	01-MAR-2023	00:41	02282326ECD7.D	25	23A0420-06RE2	
18	01-MAR-2023	01:02	02282327ECD7.D	3	23A0420-07RE1	
19	01-MAR-2023	01:23	02282328ECD7.D	1	23A0420-08	
20	01-MAR-2023	01:44	02282329ECD7.D	5	23A0420-09RE1	
21	01-MAR-2023	02:05	02282330ECD7.D	3	23A0276-01RE1	
22	01-MAR-2023	02:26	02282331ECD7.D	1	AR1242CCV3	
23	01-MAR-2023	02:47	02282332ECD7.D	1	AR1660CCV4	
24	01-MAR-2023	03:08	02282333ECD7.D	1	BLB0427-BLK1	
25	01-MAR-2023	03:29	02282334ECD7.D	1	BLB0427-BS1	
26	01-MAR-2023	03:50	02282335ECD7.D	1	BLB0427-BSD1	
27	01-MAR-2023	04:11	02282336ECD7.D	1	BLB0427-SRM1	
28	01-MAR-2023	04:32	02282337ECD7.D	3	23B0228-01RE1	
29	01-MAR-2023	04:53	02282338ECD7.D	1	23B0229-01	
30	01-MAR-2023	05:14	02282339ECD7.D	1	23B0229-02	
31	01-MAR-2023	05:35	02282340ECD7.D	1	23B0229-03	
32	01-MAR-2023	05:56	02282341ECD7.D	1	23B0229-04	
33	01-MAR-2023	06:17	02282342ECD7.D	4	23B0229-05RE1	
34	01-MAR-2023	06:39	02282343ECD7.D	3	23B0229-06RE1	
35	01-MAR-2023	07:00	02282344ECD7.D	1	23B0229-07	
36	01-MAR-2023	07:21	02282345ECD7.D	1	BLB0427-MS1	
37	01-MAR-2023	07:42	02282346ECD7.D	1	BLB0427-MSD1	
38	01-MAR-2023	08:03	02282347ECD7.D	3	23B0229-08RE1	
39	01-MAR-2023	08:24	02282348ECD7.D	1	AR1254CCV5	
40	01-MAR-2023	08:45	02282349ECD7.D	1	AR1660CCV6	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

ARI Job No.: AR12 Method: PCB.m Instrument: ecd7.i Date: 28-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1904	02282310ECD7.D	AR1254ICV1		1	Aroclor-1254,
1925	02282311ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1946	02282312ECD7.D	23A0556-01RE1		10	Aroclor-1262,
2007	02282313ECD7.D	AR1248CCV1		1	Aroclor-1248,
2028	02282314ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
2049	02282315ECD7.D	BLB0391-BLK1		1	NO MANUAL INTEGRATION
2110	02282316ECD7.D	BLB0391-BS1		1	NO MANUAL INTEGRATION
2131	02282317ECD7.D	BLB0391-BSD1		1	NO MANUAL INTEGRATION
2153	02282318ECD7.D	BLB0391-SRM1		1	NO MANUAL INTEGRATION
2214	02282319ECD7.D	23A0420-01		1	Aroclor-1254,
2235	02282320ECD7.D	23A0420-02RE1		3	NO MANUAL INTEGRATION
2256	02282321ECD7.D	23A0420-03RE1		3	NO MANUAL INTEGRATION
2317	02282322ECD7.D	23A0420-04		1	Aroclor-1254,
2338	02282323ECD7.D	BLB0391-MS1		1	NO MANUAL INTEGRATION
2359	02282324ECD7.D	BLB0391-MSD1		1	NO MANUAL INTEGRATION
0020	02282325ECD7.D	23A0420-05RE2		15	Aroclor-1254,
0041	02282326ECD7.D	23A0420-06RE2		25	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0102	02282327ECD7.D	23A0420-07RE1		3	Aroclor-1254,
0123	02282328ECD7.D	23A0420-08		1	NO MANUAL INTEGRATION
0144	02282329ECD7.D	23A0420-09RE1		5	Aroclor-1254,
0205	02282330ECD7.D	23A0276-01RE1		3	Aroclor-1254,
0226	02282331ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
0247	02282332ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
0308	02282333ECD7.D	BLB0427-BLK1		1	NO MANUAL INTEGRATION
0329	02282334ECD7.D	BLB0427-BS1		1	NO MANUAL INTEGRATION
0350	02282335ECD7.D	BLB0427-BSD1		1	NO MANUAL INTEGRATION
0411	02282336ECD7.D	BLB0427-SRML		1	NO MANUAL INTEGRATION
0432	02282337ECD7.D	23B0228-01RE1		3	NO MANUAL INTEGRATION
0453	02282338ECD7.D	23B0229-01		1	Aroclor-1254,
0514	02282339ECD7.D	23B0229-02		1	NO MANUAL INTEGRATION
0535	02282340ECD7.D	23B0229-03		1	Aroclor-1254,
0556	02282341ECD7.D	23B0229-04		1	Aroclor-1254,
0617	02282342ECD7.D	23B0229-05RE1		4	Aroclor-1254,
0639	02282343ECD7.D	23B0229-06RE1		3	Aroclor-1254,
0700	02282344ECD7.D	23B0229-07		1	Aroclor-1254,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0721	02282345ECD7.D	BLB0427-MS1		1	NO MANUAL INTEGRATION
0742	02282346ECD7.D	BLB0427-MSD1		1	NO MANUAL INTEGRATION
0803	02282347ECD7.D	23B0229-08RE1		3	Aroclor-1254,
0824	02282348ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0845	02282349ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
1216	02282302ECD7.D	AR2162SCVICAL		1	NO MANUAL INTEGRATION
1319	02282303ECD7.D	AR1660		1	NO MANUAL INTEGRATION
1412	02282304ECD7.D	AR1660		1	NO MANUAL INTEGRATION
1719	02282305ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1740	02282306ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1801	02282307ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1822	02282308ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1843	02282309ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1904	02282310ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1925	02282311ECD7.D	AR1660ICV2		1	Aroclor-1260 [2C],
1946	02282312ECD7.D	23A0556-01RE1		10	NO MANUAL INTEGRATION
2007	02282313ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
2028	02282314ECD7.D	AR1660CCV2		1	Aroclor-1260 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2049	02282315ECD7.D	BLB0391-BLK1		1	NO MANUAL INTEGRATION
2110	02282316ECD7.D	BLB0391-BS1		1	NO MANUAL INTEGRATION
2131	02282317ECD7.D	BLB0391-BSD1		1	NO MANUAL INTEGRATION
2153	02282318ECD7.D	BLB0391-SRM1		1	NO MANUAL INTEGRATION
2214	02282319ECD7.D	23A0420-01		1	Aroclor-1248 [2C],
2235	02282320ECD7.D	23A0420-02RE1		3	Aroclor-1248 [2C],
2256	02282321ECD7.D	23A0420-03RE1		3	Aroclor-1248 [2C],
2317	02282322ECD7.D	23A0420-04		1	Aroclor-1248 [2C],
2338	02282323ECD7.D	BLB0391-MS1		1	NO MANUAL INTEGRATION
2359	02282324ECD7.D	BLB0391-MSD1		1	NO MANUAL INTEGRATION
0020	02282325ECD7.D	23A0420-05RE2		15	Aroclor-1248 [2C],
0041	02282326ECD7.D	23A0420-06RE2		25	Aroclor-1248 [2C],
0102	02282327ECD7.D	23A0420-07RE1		3	Aroclor-1248 [2C],
0123	02282328ECD7.D	23A0420-08		1	Aroclor-1248 [2C],
0144	02282329ECD7.D	23A0420-09RE1		5	Aroclor-1248 [2C],
0205	02282330ECD7.D	23A0276-01RE1		3	Aroclor-1248 [2C],
0226	02282331ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
0247	02282332ECD7.D	AR1660CCV4		1	Aroclor-1260 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0308	02282333ECD7.D	BLB0427-BLK1		1	NO MANUAL INTEGRATION
0329	02282334ECD7.D	BLB0427-BS1		1	NO MANUAL INTEGRATION
0350	02282335ECD7.D	BLB0427-BSD1		1	NO MANUAL INTEGRATION
0411	02282336ECD7.D	BLB0427-SRM1		1	NO MANUAL INTEGRATION
0432	02282337ECD7.D	23B0228-01RE1		3	Aroclor-1248 [2C],
0453	02282338ECD7.D	23B0229-01		1	Aroclor-1248 [2C],
0514	02282339ECD7.D	23B0229-02		1	Aroclor-1248 [2C],
0535	02282340ECD7.D	23B0229-03		1	Aroclor-1248 [2C],
0556	02282341ECD7.D	23B0229-04		1	Aroclor-1248 [2C],
0617	02282342ECD7.D	23B0229-05RE1		4	Aroclor-1248 [2C],
0639	02282343ECD7.D	23B0229-06RE1		3	Aroclor-1248 [2C],
0700	02282344ECD7.D	23B0229-07		1	Aroclor-1248 [2C],
0721	02282345ECD7.D	BLB0427-MS1		1	NO MANUAL INTEGRATION
0742	02282346ECD7.D	BLB0427-MSD1		1	NO MANUAL INTEGRATION
0803	02282347ECD7.D	23B0229-08RE1		3	Aroclor-1248 [2C],
0824	02282348ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0845	02282349ECD7.D	AR1660CCV6		1	Aroclor-1260 [2C],

Security Status Report

Date: 01-Mar-2023 12:52

02282302ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282303ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282304ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282305ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282306ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282307ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282308ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282309ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282310ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282311ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282312ECD7.D	Data Locked	richardl,	01-Mar-2023	12:52
02282313ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282314ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282315ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282316ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282317ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282318ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282319ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282320ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282321ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282322ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282323ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282324ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282325ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282326ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282327ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282328ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282329ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282330ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282331ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282332ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282333ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282334ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282335ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282336ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282337ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282338ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282339ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282340ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282341ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282342ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282343ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282344ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23
02282345ECD7.D	Data Locked	richardl,	01-Mar-2023	12:23

02282346ECD7.D
02282347ECD7.D
02282348ECD7.D
02282349ECD7.D

Data Locked
Data Locked
Data Locked
Data Locked

richardl, 01-Mar-2023 12:23
richardl, 01-Mar-2023 12:23
richardl, 01-Mar-2023 12:23
richardl, 01-Mar-2023 12:23



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0342

Instrument: ECD7

Calibration: GB00069

Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0342-SCV1 (Water)			Lab File ID: 02242313ECD7.D			Analyzed: 02/24/23 15:03		
Decachlorobiphenyl	40.000	85.8	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	87.4	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	93.4	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	89.4	80 - 120	5.685	5.687167	-0.0022	N/A	
SLB0342-SCV2 (Water)			Lab File ID: 02242314ECD7.D			Analyzed: 02/24/23 15:24		
Decachlorobiphenyl	40.000	92.5	80 - 120	13.895	13.89483	0.0002	N/A	
Tetrachlorometaxylene	40.000	84.1	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.12	14.11917	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	86.3	80 - 120	5.686	5.687167	-0.0012	N/A	
SLB0342-SCV3 (Water)			Lab File ID: 02242315ECD7.D			Analyzed: 02/24/23 15:45		
Decachlorobiphenyl	40.000	82.8	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	87.2	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	90.8	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	91.0	80 - 120	5.687	5.687167	-0.0002	N/A	
SLB0342-SCV4 (Water)			Lab File ID: 02242316ECD7.D			Analyzed: 02/24/23 16:06		
Decachlorobiphenyl	40.000	86.6	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	90.3	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	94.8	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	92.7	80 - 120	5.685	5.687167	-0.0022	N/A	
SLB0342-SCV5 (Water)			Lab File ID: 02242317ECD7.D			Analyzed: 02/24/23 16:27		
Decachlorobiphenyl	40.000	86.1	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	90.0	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	94.6	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	91.6	80 - 120	5.685	5.687167	-0.0022	N/A	
SLB0342-SCV6 (Water)			Lab File ID: 02242318ECD7.D			Analyzed: 02/24/23 16:48		
Decachlorobiphenyl	40.000	128	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	92.7	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	141	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	95.4	80 - 120	5.685	5.687167	-0.0022	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0014</u>	Instrument:	<u>ECD7</u>
Calibration:	<u>GB00069</u>	Calibration Date:	<u>02/24/2023</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0014-ICV1 (Solid) Lab File ID: 02282310ECD7.D Analyzed: 02/28/23 19:04								
Decachlorobiphenyl	40.000	93.5	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	100	80 - 120	5.809	5.8095	-0.0005	N/A	
Decachlorobiphenyl [2C]	40.000	104	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	101	80 - 120	5.688	5.687167	0.0008	N/A	
SLC0014-ICV2 (Solid) Lab File ID: 02282311ECD7.D Analyzed: 02/28/23 19:25								
Decachlorobiphenyl	40.000	101	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	105	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	106	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV1 (Solid) Lab File ID: 02282313ECD7.D Analyzed: 02/28/23 20:07								
Decachlorobiphenyl	40.000	91.5	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	94.5	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	100	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	96.3	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV2 (Solid) Lab File ID: 02282314ECD7.D Analyzed: 02/28/23 20:28								
Decachlorobiphenyl	40.000	100	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	102	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	102	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	103	80 - 120	5.687	5.687167	-0.0002	N/A	
SLC0014-CCV3 (Solid) Lab File ID: 02282331ECD7.D Analyzed: 03/01/23 02:26								
Decachlorobiphenyl	40.000	99.5	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	112	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	105	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	117	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV4 (Solid) Lab File ID: 02282332ECD7.D Analyzed: 03/01/23 02:47								
Decachlorobiphenyl	40.000	113	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	99.3	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	110	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	5.686	5.687167	-0.0012	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0014
Calibration: GB00069

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0427-BLK1 (Solid) Lab File ID: 02282333ECD7.D Analyzed: 03/01/23 03:08								
Decachlorobiphenyl	8.0000	93.4	40 - 126	13.891	13.89483	-0.0038	N/A	
Tetrachlorometaxylene	8.0000	74.2	44 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	8.0000	87.5	40 - 126	14.117	14.11917	-0.0022	N/A	
Tetrachlorometaxylene [2C]	8.0000	80.3	44 - 120	5.686	5.687167	-0.0012	N/A	
BLB0427-BS1 (Solid) Lab File ID: 02282334ECD7.D Analyzed: 03/01/23 03:29								
Decachlorobiphenyl	8.0000	97.2	40 - 126	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	8.0000	80.7	44 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	8.0000	95.0	40 - 126	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	8.0000	79.9	44 - 120	5.687	5.687167	-0.0002	N/A	
BLB0427-BSD1 (Solid) Lab File ID: 02282335ECD7.D Analyzed: 03/01/23 03:50								
Decachlorobiphenyl	8.0000	92.0	40 - 126	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	8.0000	80.4	44 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	8.0000	90.5	40 - 126	14.117	14.11917	-0.0022	N/A	
Tetrachlorometaxylene [2C]	8.0000	78.0	44 - 120	5.686	5.687167	-0.0012	N/A	
BLB0427-SRM1 (Solid) Lab File ID: 02282336ECD7.D Analyzed: 03/01/23 04:11								
Decachlorobiphenyl	40.000	83.7	40 - 126	13.887	13.89483	-0.0078	N/A	
Tetrachlorometaxylene	40.000	70.1	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	40.000	82.1	40 - 126	14.114	14.11917	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	75.9	44 - 120	5.684	5.687167	-0.0032	N/A	
23B0229-01 (Solid) Lab File ID: 02282338ECD7.D Analyzed: 03/01/23 04:53								
Decachlorobiphenyl	8.0013	85.8	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	8.0013	65.5	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	8.0013	83.0	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	8.0013	78.4	44 - 120	5.681	5.687167	-0.0062	N/A	
23B0229-02 (Solid) Lab File ID: 02282339ECD7.D Analyzed: 03/01/23 05:14								
Decachlorobiphenyl	7.9805	87.8	40 - 126	13.886	13.89483	-0.0088	N/A	
Tetrachlorometaxylene	7.9805	66.4	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9805	85.5	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9805	78.7	44 - 120	5.682	5.687167	-0.0052	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG/WO: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0014

Instrument: ECD7

Calibration: GB00069

Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23B0229-03 (Solid) Lab File ID: 02282340ECD7.D Analyzed: 03/01/23 05:35								
Decachlorobiphenyl	7.9846	88.6	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9846	63.6	44 - 120	5.803	5.8095	-0.0065	N/A	
Decachlorobiphenyl [2C]	7.9846	85.6	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9846	74.9	44 - 120	5.681	5.687167	-0.0062	N/A	
23B0229-04 (Solid) Lab File ID: 02282341ECD7.D Analyzed: 03/01/23 05:56								
Decachlorobiphenyl	7.9949	88.7	40 - 126	13.886	13.89483	-0.0088	N/A	
Tetrachlorometaxylene	7.9949	67.3	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9949	87.4	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9949	77.9	44 - 120	5.682	5.687167	-0.0052	N/A	
23B0229-05 (Solid) Lab File ID: 02282342ECD7.D Analyzed: 03/01/23 06:17								
Decachlorobiphenyl	7.9946	103	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9946	77.6	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9946	95.4	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9946	87.6	44 - 120	5.683	5.687167	-0.0042	N/A	
23B0229-06 (Solid) Lab File ID: 02282343ECD7.D Analyzed: 03/01/23 06:39								
Decachlorobiphenyl	7.9812	89.3	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9812	68.2	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	7.9812	84.1	40 - 126	14.111	14.11917	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9812	76.7	44 - 120	5.683	5.687167	-0.0042	N/A	
23B0229-07 (Solid) Lab File ID: 02282344ECD7.D Analyzed: 03/01/23 07:00								
Decachlorobiphenyl	7.9893	90.0	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9893	69.0	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	7.9893	90.4	40 - 126	14.113	14.11917	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.9893	80.3	44 - 120	5.683	5.687167	-0.0042	N/A	
BLB0427-MS1 (Solid) Lab File ID: 02282345ECD7.D Analyzed: 03/01/23 07:21								
Decachlorobiphenyl	7.9893	87.8	40 - 126	13.886	13.89483	-0.0088	N/A	
Tetrachlorometaxylene	7.9893	69.0	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	7.9893	89.6	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9893	79.5	44 - 120	5.683	5.687167	-0.0042	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0014
Calibration: GB00069

SDG/WO: 23B0229
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0427-MSD1 (Solid)		Lab File ID: 02282346ECD7.D			Analyzed: 03/01/23 07:42			
Decachlorobiphenyl	7.9893	89.9	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9893	69.8	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9893	90.8	40 - 126	14.113	14.11917	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.9893	79.6	44 - 120	5.683	5.687167	-0.0042	N/A	
23B0229-08 (Solid)		Lab File ID: 02282347ECD7.D			Analyzed: 03/01/23 08:03			
Decachlorobiphenyl	7.9845	90.4	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9845	70.6	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9845	85.5	40 - 126	14.113	14.11917	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.9845	79.4	44 - 120	5.683	5.687167	-0.0042	N/A	
SLC0014-CCV5 (Solid)		Lab File ID: 02282348ECD7.D			Analyzed: 03/01/23 08:24			
Decachlorobiphenyl	40.000	96.0	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	93.8	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	107	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	98.8	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV6 (Solid)		Lab File ID: 02282349ECD7.D			Analyzed: 03/01/23 08:45			
Decachlorobiphenyl	40.000	96.8	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	100	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	107	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	5.687	5.687167	-0.0002	N/A	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0342

Instrument: ECD7

Calibration: GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLB0342-SCV1)		(Water)	Lab File ID: 02242313ECD7.D			Analyzed: 02/24/23 15:03			
1-Bromo-2-Nitrobenzene	645975	3.489	673778	3.493	96	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl	1524245	14.268	1429847	14.268	107	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	316115	3.927	315256	3.928	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	556950	15.007	513946	15.008	108	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLB0342-SCV2)		(Water)	Lab File ID: 02242314ECD7.D			Analyzed: 02/24/23 15:24			
1-Bromo-2-Nitrobenzene	705650	3.493	673778	3.493	105	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1555683	14.267	1429847	14.268	109	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	340433	3.929	315256	3.928	108	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	565609	15.008	513946	15.008	110	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLB0342-SCV3)		(Water)	Lab File ID: 02242315ECD7.D			Analyzed: 02/24/23 15:45			
1-Bromo-2-Nitrobenzene	646554	3.49	673778	3.493	96	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl	1529451	14.268	1429847	14.268	107	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	316066	3.928	315256	3.928	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	557213	15.008	513946	15.008	108	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLB0342-SCV4)		(Water)	Lab File ID: 02242316ECD7.D			Analyzed: 02/24/23 16:06			
1-Bromo-2-Nitrobenzene	656887	3.488	673778	3.493	97	50 - 200	-0.005	+/-0.50	
Hexabromobiphenyl	1585505	14.267	1429847	14.268	111	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	320936	3.925	315256	3.928	102	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	570006	15.007	513946	15.008	111	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLB0342-SCV5)		(Water)	Lab File ID: 02242317ECD7.D			Analyzed: 02/24/23 16:27			
1-Bromo-2-Nitrobenzene	661953	3.489	673778	3.493	98	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl	1574993	14.268	1429847	14.268	110	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	317807	3.926	315256	3.928	101	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	565951	15.007	513946	15.008	110	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLB0342-SCV6)		(Water)	Lab File ID: 02242318ECD7.D			Analyzed: 02/24/23 16:48			
1-Bromo-2-Nitrobenzene	656592	3.489	673778	3.493	97	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl	1584453	14.268	1429847	14.268	111	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	314741	3.926	315256	3.928	100	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	568346	15.007	513946	15.008	111	50 - 200	-0.001	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0014

SDG: 23B0229
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration: GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0014-ICV1)		(Solid)	Lab File ID: 02282310ECD7.D			Analyzed: 02/28/23 19:04			
1-Bromo-2-Nitrobenzene	747385	3.492	747385	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1654369	14.268	1654369	14.268	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	301252	3.928	301252	3.928	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	466597	15.008	466597	15.008	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLC0014-ICV2)		(Solid)	Lab File ID: 02282311ECD7.D			Analyzed: 02/28/23 19:25			
1-Bromo-2-Nitrobenzene	751182	3.491	751182	3.491	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1576447	14.266	1576447	14.266	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	306016	3.927	306016	3.927	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	465422	15.006	465422	15.006	100	50 - 200	0.000	+/-0.50	
Blank (BLB0427-BLK1)		(Solid)	Lab File ID: 02282333ECD7.D			Analyzed: 03/01/23 03:08			
1-Bromo-2-Nitrobenzene	787062	3.491	751182	3.491	105	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1186214	14.265	1576447	14.266	75	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	310177	3.927	306016	3.927	101	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	397133	15.005	465422	15.006	85	50 - 200	-0.001	+/-0.50	
LCS (BLB0427-BS1)		(Solid)	Lab File ID: 02282334ECD7.D			Analyzed: 03/01/23 03:29			
1-Bromo-2-Nitrobenzene	839905	3.491	751182	3.491	112	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1248668	14.265	1576447	14.266	79	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	342893	3.929	306016	3.927	112	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	424424	15.007	465422	15.006	91	50 - 200	0.001	+/-0.50	
LCS Dup (BLB0427-BSD1)		(Solid)	Lab File ID: 02282335ECD7.D			Analyzed: 03/01/23 03:50			
1-Bromo-2-Nitrobenzene	910442	3.49	751182	3.491	121	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	1416430	14.264	1576447	14.266	90	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	371249	3.927	306016	3.927	121	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	479766	15.005	465422	15.006	103	50 - 200	-0.001	+/-0.50	
Reference (BLB0427-SRM1)		(Solid)	Lab File ID: 02282336ECD7.D			Analyzed: 03/01/23 04:11			
1-Bromo-2-Nitrobenzene	845866	3.49	751182	3.491	113	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	1138921	14.256	1576447	14.266	72	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341218	3.927	306016	3.927	112	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	424905	15	465422	15.006	91	50 - 200	-0.006	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0014

Instrument: ECD7

Calibration: GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1236 (23B0229-01)		(Solid)	Lab File ID: 02282338ECD7.D			Analyzed: 03/01/23 04:53			
1-Bromo-2-Nitrobenzene	800058	3.489	751182	3.491	107	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	754196	14.251	1576447	14.266	48	50 - 200	-0.015	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	318689	3.926	306016	3.927	104	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	354662	14.996	465422	15.006	76	50 - 200	-0.010	+/-0.50	
LDW23-SS1236 (23B0229-02)		(Solid)	Lab File ID: 02282339ECD7.D			Analyzed: 03/01/23 05:14			
1-Bromo-2-Nitrobenzene	836335	3.49	751182	3.491	111	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	793114	14.251	1576447	14.266	50	50 - 200	-0.015	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	338347	3.926	306016	3.927	111	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	369130	14.996	465422	15.006	79	50 - 200	-0.010	+/-0.50	
LDW23-SS1237 (23B0229-03)		(Solid)	Lab File ID: 02282340ECD7.D			Analyzed: 03/01/23 05:35			
1-Bromo-2-Nitrobenzene	813220	3.489	751182	3.491	108	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	763077	14.251	1576447	14.266	48	50 - 200	-0.015	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	334198	3.926	306016	3.927	109	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	356862	14.996	465422	15.006	77	50 - 200	-0.010	+/-0.50	
LDW23-SS1150 (23B0229-04)		(Solid)	Lab File ID: 02282341ECD7.D			Analyzed: 03/01/23 05:56			
1-Bromo-2-Nitrobenzene	798552	3.489	751182	3.491	106	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	768353	14.251	1576447	14.266	49	50 - 200	-0.015	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	331462	3.926	306016	3.927	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	355613	14.996	465422	15.006	76	50 - 200	-0.010	+/-0.50	
LDW23-SS1008 (23B0229-05)		(Solid)	Lab File ID: 02282342ECD7.D			Analyzed: 03/01/23 06:17			
1-Bromo-2-Nitrobenzene	849273	3.489	751182	3.491	113	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	877895	14.252	1576447	14.266	56	50 - 200	-0.014	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	345130	3.927	306016	3.927	113	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	384123	14.998	465422	15.006	83	50 - 200	-0.008	+/-0.50	
LDW23-SC1008 (23B0229-06)		(Solid)	Lab File ID: 02282343ECD7.D			Analyzed: 03/01/23 06:39			
1-Bromo-2-Nitrobenzene	813187	3.49	751182	3.491	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	847148	14.252	1576447	14.266	54	50 - 200	-0.014	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	330982	3.927	306016	3.927	108	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	370704	14.997	465422	15.006	80	50 - 200	-0.009	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0014

Instrument: ECD7

Calibration: GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1014 (23B0229-07)		(Solid)	Lab File ID: 02282344ECD7.D			Analyzed: 03/01/23 07:00			
1-Bromo-2-Nitrobenzene	823012	3.49	751182	3.491	110	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	763097	14.25	1576447	14.266	48	50 - 200	-0.016	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	332336	3.927	306016	3.927	109	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	348143	14.997	465422	15.006	75	50 - 200	-0.009	+/-0.50	
Matrix Spike (BLB0427-MS1)		(Solid)	Lab File ID: 02282345ECD7.D			Analyzed: 03/01/23 07:21			
1-Bromo-2-Nitrobenzene	880974	3.49	751182	3.491	117	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	798460	14.25	1576447	14.266	51	50 - 200	-0.016	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	354459	3.927	306016	3.927	116	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	367932	14.996	465422	15.006	79	50 - 200	-0.010	+/-0.50	
Matrix Spike Dup (BLB0427-MSD1)		(Solid)	Lab File ID: 02282346ECD7.D			Analyzed: 03/01/23 07:42			
1-Bromo-2-Nitrobenzene	851306	3.49	751182	3.491	113	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	771200	14.25	1576447	14.266	49	50 - 200	-0.016	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	343108	3.927	306016	3.927	112	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	356646	14.998	465422	15.006	77	50 - 200	-0.008	+/-0.50	
LDW23-SC1013 (23B0229-08)		(Solid)	Lab File ID: 02282347ECD7.D			Analyzed: 03/01/23 08:03			
1-Bromo-2-Nitrobenzene	791682	3.49	751182	3.491	105	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	826309	14.252	1576447	14.266	52	50 - 200	-0.014	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	324012	3.927	306016	3.927	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	365386	14.998	465422	15.006	79	50 - 200	-0.008	+/-0.50	



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: Analytical Resources, LLC SDG: 23B0229
 Client: Anchor OEA, LLC Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-01 File ID: 02282338ECD7.D
 Sampled: 02/08/23 10:04 Prepared: 02/17/23 13:53 Analyzed: 03/01/23 04:53
 Solids: 51.88 Preparation: EPA 3546 (Microwave) Instrument: ECD7
 Batch: BLB0427 Sequence: SLC0014
 GC Column(1): ZB5 GC Column(2): ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	83311.75	29.9	4.3
	* 2	8.298	8.307	0.009	27237.75	31.2	
Aroclor 1254	1	9.285	9.298	0.013	121722.2	35.9	34.9
	* 2	9.436	9.449	0.013	80021.4	51.1	
Aroclor 1260	1	11.032	11.04467	0.0127	88894.6	49.0	11.4
	* 2	11.641	11.6535	0.0125	63475.25	43.7	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>		
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>		
Matrix:	<u>Solid</u>	Laboratory ID:	<u>23B0229-03</u>	File ID:	<u>02282340ECD7.D</u>
Sampled:	<u>02/08/23 11:52</u>	Prepared:	<u>02/17/23 13:53</u>	Analyzed:	<u>03/01/23 05:35</u>
Solids:	<u>54.81</u>	Preparation:	<u>EPA 3546 (Microwave)</u>	Instrument:	<u>ECD7</u>
Batch:	<u>BLB0427</u>	Sequence:	<u>SLC0014</u>		
GC Column(1):	<u>ZB5</u>	GC Column(2):	<u>ZB35</u>		

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	70461.75	24.8	7.8
	* 2	8.298	8.307	0.009	23574	26.8	
Aroclor 1254	1	9.285	9.298	0.013	102249.6	30.2	31.
	* 2	9.437	9.449	0.012	67827.4	41.3	
Aroclor 1260	1	11.032	11.04467	0.0127	65048.2	34.7	.6
	* 2	11.642	11.6535	0.0115	48825.75	34.9	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: Analytical Resources, LLC SDG: 23B0229
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-04 File ID: 02282341ECD7.D
 Sampled: 02/08/23 12:11 Prepared: 02/17/23 13:53 Analyzed: 03/01/23 05:56
 Solids: 52.16 Preparation: EPA 3546 (Microwave) Instrument: ECD7
 Batch: BLB0427 Sequence: SLC0014
 GC Column(1): ZB5 GC Column(2): ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	82660.75	29.7	4.3
	* 2	8.298	8.307	0.009	26938.25	31.0	
Aroclor 1254	1	9.284	9.298	0.014	115101.4	35.5	28.5
	* 2	9.437	9.449	0.012	76961.6	47.3	
Aroclor 1260	1	11.031	11.04467	0.0137	72902.4	38.7	1.8
	* 2	11.642	11.6535	0.0115	53383	38.0	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Matrix: Solid Laboratory ID: 23B0229-06 File ID: 02282343ECD7.D
Sampled: 02/08/23 13:30 Prepared: 02/17/23 13:53 Analyzed: 03/01/23 06:39
Solids: 48.62 Preparation: EPA 3546 (Microwave) Instrument: ECD7
Batch: BLB0427 Sequence: SLC0014
GC Column(1): ZB5 GC Column(2): ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.397	8.405	0.008	54661.25	57.9	2.1
	* 2	8.3	8.307	0.007	16604.25	59.1	
Aroclor 1254	1	9.287	9.298	0.011	74229.2	66.2	29.8
	* 2	9.439	9.449	0.01	48125.4	89.4	
Aroclor 1260	1	11.033	11.04467	0.0117	51735.8	75.3	3.
	* 2	11.643	11.6535	0.0105	36350.75	73.1	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23B0229</u>	
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23B0229-08</u>	File ID: <u>02282347ECD7.D</u>
Sampled: <u>02/08/23 15:25</u>	Prepared: <u>02/17/23 13:53</u>	Analyzed: <u>03/01/23 08:03</u>
Solids: <u>49.68</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Instrument: <u>ECD7</u>
Batch: <u>BLB0427</u>	Sequence: <u>SLC0014</u>	
GC Column(1): <u>ZB5</u>	GC Column(2): <u>ZB35</u>	

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.396	8.405	0.009	49133.5	53.6	.4
	2	8.299	8.307	0.008	14776	53.4	
Aroclor 1254	1	9.286	9.298	0.012	66691.2	61.2	27.5
	* 2	9.439	9.449	0.01	42551	80.7	
Aroclor 1260	1	11.033	11.04467	0.0117	45891.6	68.2	2.1
	* 2	11.643	11.6535	0.0105	32223.25	66.8	

* Column used for quantitation



HOLDING TIME SUMMARY

Analysis: EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1236 23B0229-01	02/08/23 10:04	02/08/23 16:47	02/17/23 13:53	9	14	03/01/23 04:53	12	40	
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	02/17/23 13:53	9	14	03/01/23 05:14	12	40	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	02/17/23 13:53	9	14	03/01/23 05:35	12	40	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	02/17/23 13:53	9	14	03/01/23 05:56	12	40	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	02/17/23 13:53	9	14	03/01/23 06:17	12	40	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	02/17/23 13:53	9	14	03/01/23 06:39	12	40	
LDW23-SC1014 23B0229-07	02/08/23 14:24	02/08/23 16:47	02/17/23 13:53	8	14	03/01/23 07:00	12	40	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	02/17/23 13:53	8	14	03/01/23 08:03	12	40	
Matrix Spike BLB0427-MS1	02/08/23 14:24	02/08/23 16:47	02/17/23 13:53	8	14	03/01/23 07:21	12	40	
Matrix Spike Dup BLB0427-MSD1	02/08/23 14:24	02/08/23 16:47	02/17/23 13:53	8	14	03/01/23 07:42	12	40	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ECD7

Analyte	MDL	RL	Units
Aroclor 1016	1.6	4.0	ug/kg
Aroclor 1016 [2C]	1.6	4.0	ug/kg
Aroclor 1221	1.6	4.0	ug/kg
Aroclor 1221 [2C]	1.6	4.0	ug/kg
Aroclor 1232	1.6	4.0	ug/kg
Aroclor 1232 [2C]	1.6	4.0	ug/kg
Aroclor 1242	1.6	4.0	ug/kg
Aroclor 1242 [2C]	1.6	4.0	ug/kg
Aroclor 1248	1.6	4.0	ug/kg
Aroclor 1248 [2C]	1.6	4.0	ug/kg
Aroclor 1254	1.6	4.0	ug/kg
Aroclor 1254 [2C]	1.6	4.0	ug/kg
Aroclor 1260	0.6	4.0	ug/kg
Aroclor 1260 [2C]	0.6	4.0	ug/kg

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Warning

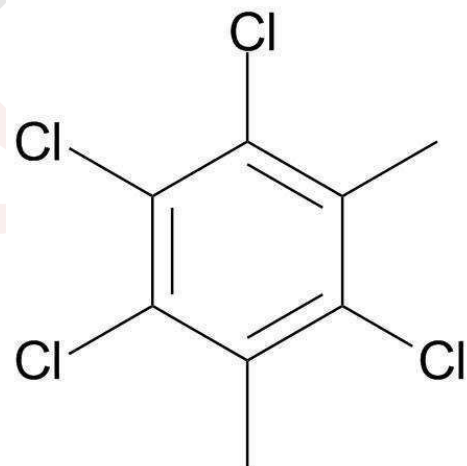
Certified Reference Material



Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration ¹
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C₈H₆Cl₄
Molecular weight: 243.94



C000147

tetrachlorometaxylene

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ The Uncertainty calculated for this product is $\pm 2.4\%$. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



AccuStandard

125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N

EXPIRATION: Jul 28, 2015

DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

LOT #: 990521LB-AC

SOLVENT: N/A

This product is guaranteed accurate to $\pm 0.5\%$ of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹	Certified Analyte Concentration ²
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2;

C000148

decachlorobiphenyl

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

** I 1768 A*

Certified by:

R. Cooper

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
 2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is $\pm 0.5\%$ which is the Combined Uncertainty $u_c(y)$. It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is $U_c(y) * K$ where K is the coverage factor at the 95% confidence level ($K=2$).
 3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

** Recertified ~ 4-6-09 (S)*



Analytical Standard Record
Standard ID: C000148

Printed: 4/23/2015 11:54:44AM

Description:	decachlorobiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	9905211b-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By

Date

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101461

Lot Number: CL13053

Description: Aroclor 1254

Certification Date: November 29, 2018

Storage: 4 °C

Expiration Date: November 30, 2026

Provided As: 1 mL in 2 mL Ampoule in Hexane

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1254	11097-69-1	1000	± 0.246%

I 09808
Recd.
02/24/20



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_US

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101468

Lot Number: CL14017

Description: Aroclor 1221

Certification Date: August 20, 2019

Storage: 4 °C

Expiration Date: August 31, 2027

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1221	11104-28-2	1000	± 0.553%

J006466
Recd of
06/18/21



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA * Tel: 303-940-0033 * Fax: 303-940-0043 * info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

A Phenomenex
Company



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101469

Lot Number: CL14914

Description: Aroclor 1232

Certification Date: January 31, 2020

Storage: 4 °C

Expiration Date: January 31, 2028

Provided As: 1 mL in 2 mL Ampoule in Isooctane



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1232	11141-16-5	1000	± 0.738%

J 006467
reed
06/18/21



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



A Phenomenix
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101470

Lot Number: CL14018

Description: Aroclor 1242

Certification Date: August 20, 2019

Storage: 4 °C

Expiration Date: August 31, 2027

Provided As: 1 mL in 2 mL Ampoule in Isooctane



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1242	53469-21-9	1000	± 0.553%

J006468
feed JR
06/18/21



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA * Tel: 303-940-0033 * Fax: 303-940-0043 * info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k\sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenex
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101471

Lot Number: CL15384

Description: Aroclor 1248

Certification Date: June 19, 2020

Storage: 4 °C

Expiration Date: June 30, 2028

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1248	12672-29-6	1000	± 0.520%

*# J006469
Reed, JR
06/18/21*



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

- 1. Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
- 2. Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
- 3. Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
- 4. Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
- 5. Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
- 6. Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
- 7. Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
- 8. Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
- 9. Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
- 10. Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
- 11. Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
- 12. Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomena
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101474

Lot Number: CL11330

Description: Aroclor 1262

Certification Date: May 15, 2015

Storage: 4 °C

Expiration Date: April 30, 2023

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Revision Date: April 2, 2018

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1262	37324-23-5	1000	± 0.516%

J 00647H
Reed JK
06/18/21



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
 2. **Quality Standards:** Phenova is accredited by A2LA to ISO Guide 34³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
 3. **Intended Use:** The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.
 4. **Instruction:** Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.
 5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.
 6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
 7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
 8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
 9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$
- Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
 11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.
 12. **Period of Validity:** The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
- ³ ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101475

Lot Number: CL11331

Description: Aroclor 1268

Certification Date: May 15, 2015

Storage: 4 °C

Expiration Date: April 30, 2023

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Revision Date: April 2, 2018

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1268	11100-14-4	1000	± 0.516%

J006472
Rec'd. JK
06/18/21



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL1110613_US

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO Guide 34³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.
4. **Instruction:** Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k \cdot \sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.
12. **Period of Validity:** The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
- ³ ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03



Certificate of Analysis

Aroclor 1016 Solution

Product Number: PP-282

Page: 1 of 1

Lot Number: CR-0761

Lot Issue Date: 28-Feb-2017

Expiration Date: 31-Mar-2025

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

*K1254
Recd JP
02/05/17*

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.

John Russo
President

Monica Bourgeois
Director of QA/RA



Certificate of Analysis

Product Name: Aroclor 1260 Standard

Product Number: PP-362-1

Lot Issue Date: 20-Jan-2021

Lot Number: 0006582048

Expiration Date: 28-Feb-2025

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1260	011096-82-5	NT01023	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

K 1255

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois

QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis ISO Guide 34

Aroclor 1242 Solution

Product Number: PP-312

Page: 1 of 1

Lot Number: CS-6293

Lot Issue Date: 04-Jan-2019

Expiration Date: 31-Jan-2023

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1242	053469-21-9	NT01020	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1256

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative



ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO17025 Cert No.
AT-1937

ISO 17034



Agilent

Trusted Answers

Reference Material Certificate

Product Name: Aroclor 1248 Standard **Lot Number:** 0006626997
Product Number: PP-342-1 **Lot Issue Date:** 17-Aug-2021
Storage Conditions: Store at Room Temperature (15° to 30°C). **Expiration Date:** 30-Sep-2025

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
Aroclor 1248	100.3	± 0.5 µg/mL		012672-29-6	NT01582

Matrix: isooctane (2,2,4-trimethylpentane)

K1257

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.



Certificate of Analysis

Aroclor 1254 Solution

Product Number: PP-352

Page: 1 of 1

Lot Number: CS-2321

Lot Issue Date: 04-May-2018

Expiration Date: 31-May-2026

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

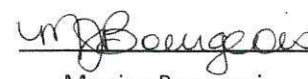
K-1250

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA



Certificate of Analysis

Product Name: Aroclor 1221 Standard

Product Number: PP-292-1

Lot Issue Date: 28-Apr-2020

Lot Number: 0006535333

Expiration Date: 31-May-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1221	011104-28-2	RM04278	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1259

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis ISO 17034

Aroclor 1262 Standard

Product Number: PP-372-1

Page: 1 of 1

Lot Number: 0006499800

Lot Issue Date: 04-Nov-2019

Expiration Date: 30-Nov-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1262	037324-23-5	RM14263	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1260

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO 17025 Cert No.
AT-1937



Certificate of Analysis ISO 17034

Aroclor 1232 Standard

Product Number: PP-302-1

Page: 1 of 1

Lot Number: CF-2197A

Lot Issue Date: 05-Jul-2016

Expiration Date: 31-Aug-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01717	100.4 ± 0.5 µg/mL

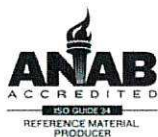
Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1261

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.


Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO17025 Cert No.
AT-1937



Certificate of Analysis

Product Name: Aroclor 1268 Standard

Product Number: PP-382-1

Lot Issue Date: 09-Feb-2021

Lot Number: 0006587800

Expiration Date: 31-Mar-2029

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration \pm Uncertainty
Aroclor 1268	011100-14-4	RM00937	100.0 \pm 0.5 μ g/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1262

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101467

Lot Number: CL12975

Description: Aroclor 1016

Certification Date: November 19, 2018

Storage: 4 °C

Expiration Date: October 31, 2026

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.553%

12975



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO Guide 34³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.
4. **Instruction:** Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$u_{CRM} = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.
12. **Period of Validity:** The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.

³ ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL111063_US

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462

Lot Number: CL18021

Description: Aroclor 1260

Certification Date: February 14, 2022

Storage: 4 °C

Expiration Date: February 28, 2030

Provided As: 1 mL in 2 mL Ampoule in Hexane

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

K005830



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15570

Order Number: CB014985

Date Shipped: 12/12/2022

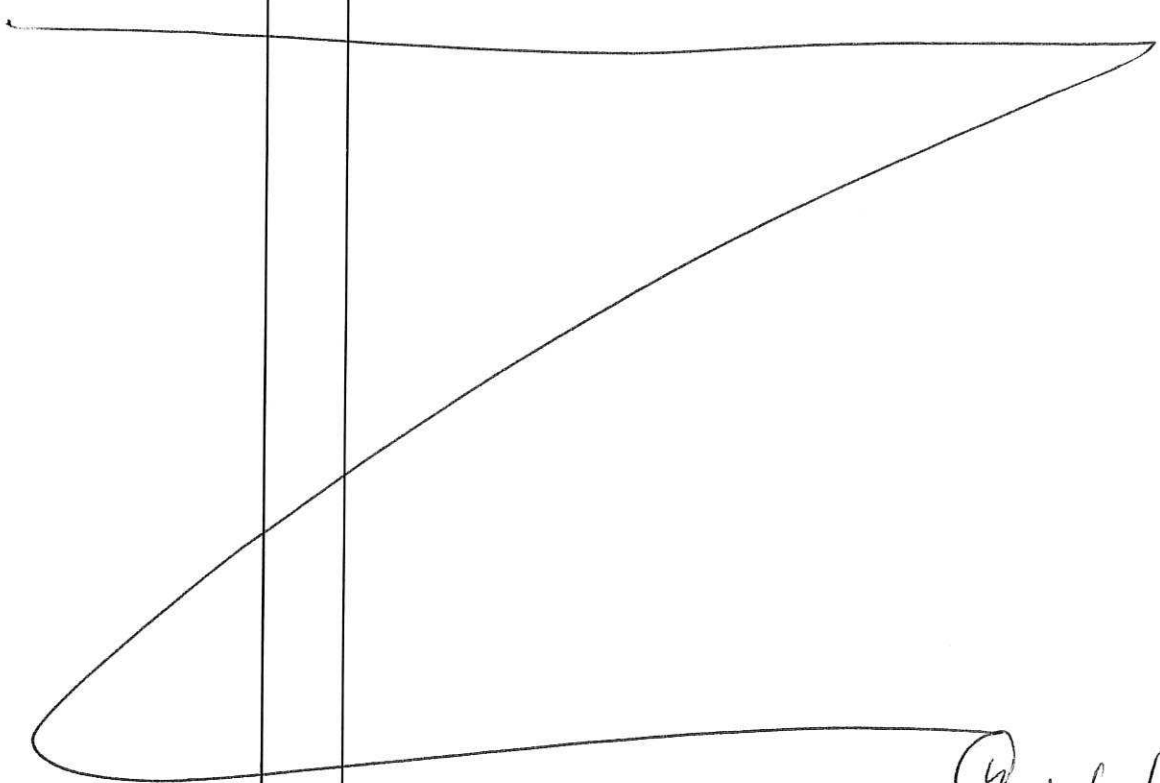
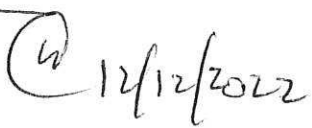
AirBill No(s):

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

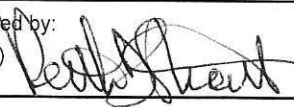

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

519204142631

K011177
K011178
K011179

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0168	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0169	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0171	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
				
				
PUGET SOUND SRM FOR DUWAMISH AOC4 PROJECT.				

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature) 	Date/Time (1400) 12/12/2022	Received by: (Signature) 	Date/Time 12/12/22 11:15
Custody Seal(s): <u>Present</u> /Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SS1236

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-02 A SDG: 23B0229
 Sampled: 02/08/23 11:28 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-123
 % Solids: 55.01 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:45
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.023 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	12.8	20	0.07	0.36	
7440-43-9	Cadmium	0.26	20	0.05	0.18	
7440-50-8	Copper	40.8	20	0.31	0.89	
7440-66-6	Zinc	82.9	20	5.2	10.7	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SS1237

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-03 A SDG: 23B0229
 Sampled: 02/08/23 11:52 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-124
 % Solids: 53.14 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:50
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.047 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	8.63	20	0.07	0.36	
7440-43-9	Cadmium	0.28	20	0.05	0.18	
7440-50-8	Copper	49.7	20	0.31	0.90	
7440-66-6	Zinc	97.3	20	5.2	10.8	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SS1150

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-04 A SDG: 23B0229
 Sampled: 02/08/23 12:11 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-125
 % Solids: 51.84 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:54
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.043 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.6	20	0.07	0.37	
7440-43-9	Cadmium	0.30	20	0.06	0.18	
7440-50-8	Copper	52.3	20	0.65	0.92	
7440-66-6	Zinc	101	20	5.4	11.1	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SS1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-05 D SDG: 23B0229
 Sampled: 02/08/23 12:45 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-126
 % Solids: 46.84 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:59
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.046 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	15.6	20	0.08	0.41	
7440-43-9	Cadmium	0.54	20	0.06	0.20	
7440-50-8	Copper	70.2	20	0.36	1.02	
7440-66-6	Zinc	123	20	6.0	12.2	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-06 A SDG: 23B0229
 Sampled: 02/08/23 13:30 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-127
 % Solids: 49.29 Preparation: SWN EPA 3050B Analyzed: 03/17/23 03:04
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.044 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	14.4	20	0.07	0.39	
7440-43-9	Cadmium	0.43	20	0.06	0.19	
7440-50-8	Copper	68.2	20	0.34	0.97	
7440-66-6	Zinc	123	20	5.7	11.7	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1013

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-08 A SDG: 23B0229

Sampled: 02/08/23 15:25 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-128

% Solids: 51.39 Preparation: SWN EPA 3050B Analyzed: 03/17/23 03:08

Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.035 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	14.0	20	0.07	0.38	
7440-43-9	Cadmium	0.37	20	0.06	0.19	
7440-50-8	Copper	71.6	20	0.66	0.94	
7440-66-6	Zinc	145	20	5.5	11.3	



PREPARATION BATCH SUMMARY
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLC0079 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1236	23B0229-02	XDT_m2230316-123	03/14/23 17:30	
LDW23-SS1237	23B0229-03	XDT_m2230316-124	03/14/23 17:30	
LDW23-SS1150	23B0229-04	XDT_m2230316-125	03/14/23 17:30	
LDW23-SS1008	23B0229-05	XDT_m2230316-126	03/14/23 17:30	
LDW23-SC1008	23B0229-06	XDT_m2230316-127	03/14/23 17:30	
LDW23-SC1013	23B0229-08	XDT_m2230316-128	03/14/23 17:30	
Blank	BLC0079-BLK1	XDT_m2230316-098	03/14/23 17:30	
LCS	BLC0079-BS1	XDT_m2230316-099	03/14/23 17:30	



Digestion Log

Analyst: AP Date: 3/14/23 Time: 1240-1730 Balance ID: BAL10
 Matrix: soil Block ID: 3 Block Temp: 92°C Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: <u>SUN</u>		Prep Code:		Comments
			Initial Wt (g) Vol (mL)	Final Vol (mL)	Initial Wt (g) Vol (mL)	Final Vol (mL)	
23A88-01	D		1.036	50			
02			1.055				
-05			1.012				
-06			1.020				
-07			1.022				
-08			1.018				
-09			1.041				
-10			1.015				
-11			1.028				
-12			1.015				
-13			1.005				
-14			1.056				
✓ -15	↓		1.012				
23B229-02	A		1.023				
03	↓		1.047				
-04	↓		1.043				
-05	D		1.046				
-06	A		1.044				
✓ -08	↓		1.035				
BLC79-blk	—		—				23A88-01
-105	—		—				↓
-dup	—		1.036				
-MS	—		1.035				
-MSD	—		1.035				
↓ -SPM	—		1.001				↓

Chemical/Reagent ID:

HNO₃: 492 1:1 HNO₃: L2316 HCl: — H₂O₂: K11056
 Tube Lot#: 2708005 Boiling Chip Lot#: — (DoD Only)



Form I
METHOD BLANK DATA SHEET
EPA 6020B UCT-KED
Total Metals

Blank

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLC0079

Laboratory ID: BLC0079-BLK1

Prepared: 03/14/23 17:30

Matrix: Solid

Preparation: SWN EPA 3050B

Analyzed: 03/17/23 00:43

Sequence: SLC0248

Calibration: GC00054

Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	0.05	20	0.04	0.20	J
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	ND	20	0.17	0.50	U
7440-50-8	Copper-65	ND	20	0.35	0.50	U
7440-66-6	Zinc-66	ND	20	2.9	6.0	U



LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/17/23 00:48

Batch: BLC0079

Laboratory ID: BLC0079-BS1

Preparation: SWN EPA 3050B

Sequence Name: LCS

Initial/Final: 1 g / 50 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	25.5		102	80 - 120
Cadmium-111	25.0	25.5		102	80 - 120
Copper-63	25.0	26.5		106	80 - 120
Copper-65	25.0	26.2		105	80 - 120
Zinc-66	80.0	78.9		98.6	80 - 120

* Indicates values outside of QC limits



INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00054

Instrument: ICPMS2

Calibration Date: 03/16/2023 16:35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	21300	10	21368.7	20	21099.9	50	20726.16	100	19898.12
Chromium-52	0	0	0.5	66846	10	25317	20	23776.5	50	22883.26	100	22586.28
Chromium-53	0	0	0.5	3074	10	2721.5	20	2713.1	50	2601.78	100	2589.78
Lead-208	0	0	0.1	58120	10	56601.8	20	55900.6	50	54592	100	53627.74



INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC

Instrument: ICPMS2

Calibration: GC00054

Calibration Date: 3/16/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	17398.81	49.1	0.9995		0.998	
Chromium-52	26901.51	80.9	1.0000		0.998	
Chromium-53	2283.36	49.6	0.9999		0.998	
Lead-208	46473.69	49.1	0.9999		0.998	



INITIAL CALIBRATION DATA
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00054

Instrument: ICPMS2

Calibration Date: 03/16/2023 16:35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	215	10	201.2	20	199.5	50	194.5	100	192.4
Cadmium-111	0	0	0.1	270	10	257.3	20	258.4	50	249.22	100	248.49
Cadmium-114	0	0	0.1	560	10	634.5	20	628	50	618.06	100	609.12
Copper-63	0	0	0.5	3444	10	3249.4	20	3156.05	50	3075	100	2964.22
Copper-65	0	0	0.5	1616	10	1612.3	20	1589.6	50	1534.46	100	1492.07
Zinc-66	0	0	6	429.8333	10	432.5	20	415.25	50	405.38	100	392.78
Zinc-67	0	0	6	64.16666	10	70.5	20	69.25	50	66.18	100	65.39



INITIAL CALIBRATION DATA
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Calibration: GC00054

Instrument: ICPMS2
Calibration Date: 3/16/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	167.1	49.2	0.9999		0.998	
Cadmium-111	213.9017	49.1	0.9999		0.998	
Cadmium-114	508.28	49.3	0.9999		0.998	
Copper-63	2648.112	49.4	0.9996		0.998	
Copper-65	1307.405	49.1	0.9997		0.998	
Zinc-66	345.9572	49.2	0.9998		0.998	
Zinc-67	55.91444	49.2	0.9998		0.998	



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/13 Analyst: MB Sequence: SLC0248 Cal: GC00054

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	SEQ-CAL1	I		
	↓	-CAL2	I		Ge st noisy
	↓	-CAL3	I		In ⁻¹ noisy/ Cd st-noisy
	↓	-CAL4	I		
		SEQ-CAL1	L2708		
		-CAL2	L2709		
		-CAL3	L2710		In ⁻¹ , Cd ¹¹⁴ , Se st. noisy - %R, Mt R-Volves + GC OK
		-CAL4	L2711		
		-CAL5	L2712		
		-CAL6	L2713		
		-IBL1	—		
		-ICV1	L0243		
		-ICB1	L2708		
		-CCV1	L2712		
		-CCB1	L2708		
	✓	-CRL1	—		Se ↑
		-CRL1	L2709		
		-IFA1	L2581		C ⁻⁵³ ↑
		-IFB1	L2744		↓
		-HCV1	L2745		
		-HCV2	L2746		
		-IBL2	—		
		-CCV2			
		-CCB2			



ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. MB 3/16/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ441-BLK1	REN		
		↓ -BS1	↓		
		BLCΦ393-BLK2			Pb only
		↓ -BS2			↓
354-7 334		23CΦ334-Φ1		10	
		23CΦ3Φ8-Φ1		2	
		23CΦ338-Φ1		↓	
		↓ -Φ2			
		↓ -Φ3	↓	↓	
		SEQ-IBL3			
		↓ -CCV3			
		↓ -CCB3			
	✓	23CΦ363-Φ1	REN	2	Zn↑
		SEQ-IBL4			
		23CΦ363-Φ1	REN	20	
		23CΦ375-Φ1		2	Cd ^{III} noisy
		↓ -Φ1RE1		10	Cd only
NO REI		23CΦΦ25-Φ1 RE1 ^{NO}			Tl NR/Mn only
		BLCΦ339-DUP2			
		↓ -MS2		↓	Mn STL
	✓	23CΦΦ35-Φ1	↓	2	Re-run @ 1x
		SEQ-IBL5			
	✓	↓ -CCV4			Ge + group noisy
		↓ -CCB4CCV4			In ⁻¹ noisy - 2x +Analytes OK



Analysis Date: 3/16/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBY			
B-C		23CΦΦ35-Φ1	REN		
		23CΦΦ34-Φ1			
		BLCΦ393-DUP1			
		↓ -MS1			
		23CΦ283-Φ1			
		↓ -Φ2			
		23CΦ285-Φ2			Pb only
		BLCΦ39Φ-DUP2			
		↓ -MS2			
		SEQ-IBLG			
		↓ -CCV5			
		-CCB5			
	✓	-CAL1			B ₂ , Mn Removed
		-CCV6			
		↓ -CCB6			
		BLCΦ394-BLK2	REN		Tl only
		↓ -BS2			
		23CΦ283-Φ3		2	
		23CΦΦ73-Φ1			Zn↑ No Zn
		BLCΦ441-DUP1			
		↓ -MS1			SC noisy / Zn, Tl best X noisy - % Rst Analytes OK
REI		23CΦΦ25-Φ1REI			Tl only
		BLCΦ339-DUP3			



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ339-MS3	REN		Tl only
		SEQ-IBL7			
		↓ -CCV7			
		↓ -CCB7			
		BLCΦ339-BLK2	REN		Tl only
		↓ -BS2			↓
		23CΦΦ22-Φ4			
		↓ -Φ6			
		↓ -Φ8			
		↓ -Φ1			Se noisy No Se
		↓ -Φ3			
		↓ -Φ5			
		↓ -Φ7			
		SEQ-IBL8			
		↓ -CCV8			
		↓ -CCB8			Se sl. noisy %R & Analytes OK
		BLCΦ39Φ-BLK2	REN		Pb only
		↓ -BS2			↓
		BLCΦΦ79-BLK1	SWN	20	
		↓ -BS1			
		23AΦΦ88-Φ1			Ge sl. noisy %R & Analytes OK/Match Dup No Cr
		BLCΦΦ79-DUP1			
		↓ -MS1			Ag %RL
		↓ -MS01			Se ↑ ↓ Pb %RL



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. MB 3/16/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦΦ79-PS1	SWN	20	60 ul K7409 No Cr
		SEQ-IBL9			
		↓ -CCV9			
		↓ -CCB9			
		23AΦΦ88-Φ2	SWN	20	Sc sl. noisy → R Not + Analytes OK Needed As only
		↓ -Φ5	↓	↓	↓
		↓ -Φ6	↓	↓	Sc ↑ No Cr
		↓ -Φ7	↓	↓	↓
		↓ -Φ8	↓	↓	↓
		↓ -Φ9	↓	↓	↓
		↓ -1Φ	↓	↓	↓
		↓ -11	↓	↓	↓
	✓	↓ -12	↓	↓	No Sample?
		SEQ-IBLA			
		↓ -CCVA			
		↓ -CCBA			
		23AΦΦ88-13	SWN	20	Sc ↑ No Cr
		↓ -14	↓	↓	↓
		↓ -15	↓	↓	↓
		23BΦ229-Φ2			
		↓ -Φ3	↓	↓	↓
		↓ -Φ4	↓	↓	Sc ↑ No Cr
		↓ -Φ5	↓	↓	↓
		↓ -Φ6	↓	↓	↓



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23B0229-08	SWN	20	Sci No Cr
		SEQ-IBLB			
		↑ -CCVB			
		↓ -CCBB			
✓		↓ -CALI			
		↓ -CCVC			TI sl. noisy - Value OK
		↓ -CCBC			
		BLC0388-BLK2	REN		Cd, Pb only
		↓ -BSZ			↓
		23C0034-04			
		↓ -06			
		↓ -08			
		↓ -10			
		↓ -02			
		BLC0388-DUPI			
		↓ -MSI			
		SEQ-IBLC			
		↓ -CCVD			
		↓ -CCBD			
		23C0034-12	REN		
		↓ -14			
		↓ -16			
		↓ -03			
		↓ -05			



ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦΦ34-Φ7	REN		
		↓ -Φ9	↓		
		↓ -11			
		↓ -13	↓		
		SEQ-IBLD			
		↓ -CCVE			
		↓ -CCBE			
		23CΦΦ34-15	REN		
		23CΦΦ57-Φ1	↓		
		23CΦΦ6Φ-Φ1	↓		
		23CΦΦ97-Φ1	↓	10	
		23CΦΦ74-Φ1	↓		
		SEQ-IBLE			
		23CΦΦ22-Φ2	REN		
		BLCΦ394-DUPI	↓		
		↓ -MSI	↓		
		SEQ-IBLF			
		↓ -CCVF			Crst. noisy-Values OK
		↓ -CCBF			
	✓	↓ -CALI			
		↓ -CCVG			
		↓ -CCBG			
		23CΦΦ46-Φ1	REN	5	
		23CΦΦ41-Φ1	↓		



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/16/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. MB 3/16/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦΦ41-Φ2	REN		
		↓ -Φ3	↓		
		↓ -Φ4	↓		
		↓ -Φ5	↓		
		23CΦΦ93-Φ1		2	
		↓ -Φ2	↓		
		23CΦΦ88-Φ1	↓		
		SEQ-IBLH			
		↓ -CCVH			
		↓ -CCBH			
		23CΦ2Φ3-Φ2	REN		
		↓ -Φ4	↓		
		↓ -Φ6	↓		
		↓ -Φ8	↓		
		↓ -1Φ	↓		
		↓ -12	↓		
		↓ -14	↓		
		↓ -16	↓		
		↓ -18	↓		
		SEQ-IBLXI			
		↓ -CCVI			
		↓ -CCBI			
		23CΦ2Φ3-2Φ	REN		Int noisy - %R & Analytes OK
		↓ -22	↓		

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, March 16, 2023 14:31:11

Sample Description:

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth

Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5448

MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		3054.4		3054.393		103.955		3.4	Standard	
In	114.9		53335.2		53335.247		347.396		0.7	Standard	
U	238.1		46128.2		46128.224		375.700		0.8	Standard	
[	CeO	155.9		661.8		0.013		0.000		3.6	Standard
|>	Ce	139.9		51762.5		51762.479		420.839		0.8	Standard
[	Ce++	70.0		991.8		0.019		0.001		3.4	Standard
	Bkgd	220.0		0.2		0.200		0.274		136.9	Standard

Current Conditions File Data

Current Value	Description
1.03	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, March 16, 2023 14:33:15

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/16/2023 2:31:02 PM

End Time: 3/16/2023 2:35:12 PM

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 3054.39

Obtained Intensity (In 115): 53335.25

Obtained Intensity (U 238): 46128.22

Obtained Intensity (Bkgd 220): 0.20

Obtained Formula (Ce++ 70 / Ce 140): 0.019 (=991.77 / 51762.48)

Obtained Formula (CeO 156 / Ce 140): 0.013 (=661.82 / 51762.48)

Obtained RSD (Be 9): 0.0340

Obtained RSD (In 115): 0.0065

Obtained RSD (U 238): 0.0081

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.57 mm	0.02 mm	44355.75

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/16/2023 2:31:02 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 3054.39
Obtained Intensity (In 115): 53335.25
Obtained Intensity (U 238): 46128.22
Obtained Intensity (Bkgd 220): 0.20
Obtained Formula (Ce++ 70 / Ce 140): 0.019 (=991.77 / 51762.48)
Obtained Formula (CeO 156 / Ce 140): 0.013 (=661.82 / 51762.48)
Obtained RSD (Be 9): 0.0340
Obtained RSD (In 115): 0.0065
Obtained RSD (U 238): 0.0081

[Passed] Optimum value(s): N/A

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.
Intensity Criterion: In 115 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	0.57 mm	0.02 mm	44355.75

End Time: 3/16/2023 2:35:12 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/16/2023 2:36:55 PM

End Time: 3/16/2023 2:44:20 PM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.67 mm	0.02 mm	44842.27

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.05

Obtained Intensity (In 115): 57639.04

Obtained Formula (CeO 156 / Ce 140): 0.0187 (=1038.04 / 55421.30)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.689)

Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.691)

Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.699)

Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.696)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.52

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.989; Intercept = -12.32

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/16/2023 2:36:55 PM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 115 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	0.67 mm	0.02 mm	44842.27

Nebulizer Gas Flow STD/KED [NEB]

Optimization Settings:

Method: Optimize.mth.

Initial Try - Start/End/Step: 1/1.1/0.01.

Intensity Criterion: In 115 Maximum

Formula Criterion: CeO 156 / Ce 140 <= 0.025

Optimization Results:

Initial Try

Obtained Intensity (In 115): 57639.04

Obtained Formula (CeO 156 / Ce 140): 0.0187 (=1038.04 / 55421.30)

[Passed] optimum value(s): 1.05

Mass Calibration and Resolution

Optimization Settings:

Method: Tuning.mth.

MassCal File: Default.tun

Iterations: 6

Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution

Peak height (%) for Res. Opt.: 10

Optimization Results:

Initial Try

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.688)

Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.647) - <Target not achieved>

Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.700)

Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.687)

[Failed]

Retry 1

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.689)

Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.691)

Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.699)

Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.696)

[Passed] optimum value(s): N/A

QID STD/DRC

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.52

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	17610.8
Mg	24	41	-13.5	33214.6
In	115	41	-9	68950
Ce	140	41	-8	61399.7
Pb	208	41	-7.5	32068
U	238	41	-7.5	54527.9

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.989; Intercept = -12.32

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	12857.8
Mg	24	41	-13.5	19901.9
In	115	41	-11	42980.6
Ce	140	41	-8.5	49256.8
Pb	208	41	-6.5	27314.1
U	238	41	-6	43702.7

End Time: 3/16/2023 2:44:20 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/16/2023 2:44:23 PM

End Time: 3/16/2023 2:45:39 PM

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.999; Intercept = -13.33

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/16/2023 2:44:23 PM

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.999; Intercept = -13.33

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13.5	13430.3
Mg	24	41	-13.5	21932.8
In	115	41	-10	44693.8
Ce	140	41	-8.5	49606
Pb	208	41	-6.5	27462.4
U	238	41	-6.5	46078.2

End Time: 3/16/2023 2:45:39 PM

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, March 16, 2023 14:45:47

Sample Description:

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth

Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5458

MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		4945.9		4945.856		89.990		1.8	Standard	
In	114.9		69307.5		69307.451		178.212		0.3	Standard	
U	238.1		57843.7		57843.742		440.042		0.8	Standard	
[	CeO	155.9		1277.9		0.020		0.001		6.8	Standard
|>	Ce	139.9		63239.7		63239.736		392.043		0.6	Standard
[	Ce++	70.0		1835.5		0.029		0.000		1.6	Standard
	Bkgd	220.0		0.1		0.067		0.091		136.9	Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1500.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, March 16, 2023 14:47:51

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/16/2023 2:45:46 PM

End Time: 3/16/2023 2:47:52 PM

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 4945.86

Obtained Intensity (In 115): 69307.45

Obtained Intensity (U 238): 57843.74

Obtained Intensity (Bkgd 220): 0.07

Obtained Formula (Ce++ 70 / Ce 140): 0.029 (=1835.45 / 63239.74)

Obtained Formula (CeO 156 / Ce 140): 0.020 (=1277.92 / 63239.74)

Obtained RSD (Be 9): 0.0182

Obtained RSD (In 115): 0.0026

Obtained RSD (U 238): 0.0076

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/16/2023 2:45:46 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 4945.86
Obtained Intensity (In 115): 69307.45
Obtained Intensity (U 238): 57843.74
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (Ce++ 70 / Ce 140): 0.029 (=1835.45 / 63239.74)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=1277.92 / 63239.74)
Obtained RSD (Be 9): 0.0182
Obtained RSD (In 115): 0.0026
Obtained RSD (U 238): 0.0076

[Passed] Optimum value(s): N/A

End Time: 3/16/2023 2:47:52 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 3/16/2023 2:53:39 PM

End Time: 3/16/2023 2:59:40 PM

Detector Voltages - [Passed]

Pulse Stage Voltage - [Passed] Optimum value(s): 1600

Analog Stage Voltage - [Passed] Optimum value(s): -1712

Pulse Stage Voltage (Fine-tune) - [Passed] Optimum value(s): 1600

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 3/16/2023 2:53:39 PM

Detector Voltages

Pulse Stage Voltage Optimization Settings:

Method: Pulse Stage Optimization.mth.

Initial Try - Start/End/Step: 600/1300/50.

Retry 1 - Start/End/Step: 600/1800/50.

Optimization Criterion (Pulse 76): 0.1

Analog Stage Voltage Optimization Settings:

Method: Analog Stage Optimization.mth.

Initial Try - Start/End: -1300/-1900.

Retry 1 - Start/End: -1600/-2400.

Optimization Criterion (Analog 80): Target Gain 10000

Pulse Stage Voltage Results:

Initial Try

[Failed]

Retry 1

Intensity Obtained For Criterion (Pulse 76): 84669.17

[Passed] Optimum value(s): 1600

Analog Stage Voltage Results:

Initial Try

Interim Gain Values: 6397.69 (-1600V), 11769.8 (-1750V), 8714.55 (-1675V), 10194 (-1712.5V)

Analyte: Analog 80

ACEM(volts): -1712

Achieved Gain: 10194

Achieved NMax: 1.22813e+009

Conversion Factor: 0.104223

Passes: 4

Points Collected: 31

Points Used: 4

Coefficient: 0.999999

[Passed] Optimum value(s): -1712

Pulse Stage voltage (Fine-tune) Results:

Initial Try

[Failed]

Retry 1

Intensity Obtained For Criterion (Pulse 76): 86530.27

[Passed] Optimum value(s): 1600

End Time: 3/16/2023 2:59:40 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 3/16/2023 3:04:06 PM

End Time: 3/16/2023 3:11:36 PM

Dual Detector Calibration

Points Collected: 401

Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 3/16/2023 3:04:06 PM

Dual Detector Calibration

Optimization Settings:

Method: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\DualDetectorNew.mth.

Initial Try - Start/End/Step: -20/0/0.05.

Optimization Results:

Initial Try

Points Collected: 401

Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

End Time: 3/16/2023 3:11:36 PM

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, March 16, 2023 15:20:39

Sample Description:

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth

Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5469

MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		5268.0		5267.973		285.312		5.4	Standard	
In	114.9		79130.6		79130.592		2496.688		3.2	Standard	
U	238.1		66200.3		66200.335		1924.262		2.9	Standard	
[	CeO	155.9		1425.7		0.020		0.001		6.4	Standard
|>	Ce	139.9		71403.5		71403.518		2045.821		2.9	Standard
[	Ce++	70.0		2115.4		0.030		0.001		3.5	Standard
	Bkgd	220.0		0.2		0.200		0.139		69.7	Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, March 16, 2023 15:22:43

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 3/16/2023 3:20:38 PM

End Time: 3/16/2023 3:22:44 PM

STD Performance Check - [Failed]

Obtained Intensity (Be 9): 5267.97

Obtained Intensity (In 115): 79130.59

Obtained Intensity (U 238): 66200.34

Obtained Intensity (Bkgd 220): 0.20

Obtained Formula (Ce++ 70 / Ce 140): 0.030 (=2115.42 / 71403.52)

Obtained Formula (CeO 156 / Ce 140): 0.020 (=1425.67 / 71403.52)

Obtained RSD (Be 9): 0.0542 - <Target not achieved>

Obtained RSD (In 115): 0.0316

Obtained RSD (U 238): 0.0291

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 3/16/2023 3:20:38 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 10
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 5267.97
Obtained Intensity (In 115): 79130.59
Obtained Intensity (U 238): 66200.34
Obtained Intensity (Bkgd 220): 0.20
Obtained Formula (Ce++ 70 / Ce 140): 0.030 (=2115.42 / 71403.52)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=1425.67 / 71403.52)
Obtained RSD (Be 9): 0.0542 - <Target not achieved>
Obtained RSD (In 115): 0.0316
Obtained RSD (U 238): 0.0291

[Failed]

[Failed]

End Time: 3/16/2023 3:22:44 PM

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, March 16, 2023 15:25:29

Sample Description:

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth

Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5471

MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		4881.8		4881.768		85.896		1.8	Standard	
In	114.9		76165.8		76165.797		995.825		1.3	Standard	
U	238.1		64256.8		64256.812		926.814		1.4	Standard	
[	CeO	155.9		1261.7		0.018		0.001		3.1	Standard
|>	Ce	139.9		69881.9		69881.916		643.580		0.9	Standard
[	Ce++	70.0		1908.5		0.027		0.001		2.4	Standard
	Bkgd	220.0		0.3		0.267		0.346		129.6	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, March 16, 2023 15:27:33

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 3/16/2023 3:25:28 PM

End Time: 3/16/2023 3:27:34 PM

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 4881.77

Obtained Intensity (In 115): 76165.80

Obtained Intensity (U 238): 64256.81

Obtained Intensity (Bkgd 220): 0.27

Obtained Formula (Ce++ 70 / Ce 140): 0.027 (=1908.53 / 69881.92)

Obtained Formula (CeO 156 / Ce 140): 0.018 (=1261.66 / 69881.92)

Obtained RSD (Be 9): 0.0176

Obtained RSD (In 115): 0.0131

Obtained RSD (U 238): 0.0144

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 3/16/2023 3:25:28 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 10
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 4881.77
Obtained Intensity (In 115): 76165.80
Obtained Intensity (U 238): 64256.81
Obtained Intensity (Bkgd 220): 0.27
Obtained Formula (Ce++ 70 / Ce 140): 0.027 (=1908.53 / 69881.92)
Obtained Formula (CeO 156 / Ce 140): 0.018 (=1261.66 / 69881.92)
Obtained RSD (Be 9): 0.0176
Obtained RSD (In 115): 0.0131
Obtained RSD (U 238): 0.0144

[Passed] Optimum value(s): N/A

End Time: 3/16/2023 3:27:34 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:03:50

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L				20948	3	Standard
Cl	37		ug/L				3545429	1	Standard
[> Sc	45		ug/L				528973	1	Standard
| Cr	52		ug/L				21865	3	Standard
| Cr	53		ug/L				183	6	Standard
| Mn	55		ug/L				724	3	Standard
[> Ge	72		ug/L				26281	3	KED
| Ni	60		ug/L				5	57	KED
| Ni	62		ug/L				0	173	KED
| Cu	63		ug/L				69	13	KED
| Cu	65		ug/L				34	29	KED
| Zn	66		ug/L				26	15	KED
| Zn	67		ug/L				3	86	KED
| As	75		ug/L				5	14	KED
| Se	78		ug/L				14	12	KED
Y	89		ug/L				365491	0	Standard
Kr	83		ug/L				70	22	Standard
[> In-1	115		ug/L				7887	2	KED
| Cd	111		ug/L				1	114	KED
| Cd	114		ug/L				2	88	KED
[> In	115		ug/L				498434	2	Standard
| Ag	107		ug/L				60	3	Standard
| Ba	135		ug/L				28	6	Standard
| Ba	137		ug/L				41	22	Standard
[> Tb	159		ug/L				694270	2	Standard
| Tl	205		ug/L				31	23	Standard
| Pb	208		ug/L				204	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:08:36

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			20948	23964	4	Standard
Cl	37		ug/L			3545429	3636387	1	Standard
[> Sc	45		ug/L			528973	549512	2	Standard
| Cr	52	0.500	ug/L	0.011	2	21865	32837	2	Standard
| Cr	53	0.500	ug/L	0.021	4	183	1485	3	Standard
| Mn	55	0.500	ug/L	0.010	1	724	17136	1	Standard
[> Ge	72		ug/L			26281	24235	7	KED
| Ni	60	0.500	ug/L	0.013	2	5	493	8	KED
| Ni	62	0.500	ug/L	0.050	9	0	78	12	KED
| Cu	63	0.500	ug/L	0.025	4	69	1478	5	KED
| Cu	65	0.500	ug/L	0.030	5	34	677	4	KED
| Zn	66	6.000	ug/L	0.158	2	26	2197	9	KED
| Zn	67	6.000	ug/L	0.484	8	3	358	12	KED
| As	75	0.200	ug/L	0.060	30	5	41	17	KED
| Se	78	0.500	ug/L	0.098	19	14	25	11	KED
Y	89		ug/L			365491	377824	2	Standard
Kr	83		ug/L			70	79	8	Standard
[> In-1	115		ug/L			7887	8082	3	KED
| Cd	111	0.100	ug/L	0.019	18	1	23	19	KED
| Cd	114	0.100	ug/L	0.023	22	2	69	23	KED
[> In	115		ug/L			498434	523270	0	Standard
| Ag	107	0.200	ug/L	0.008	3	60	4328	3	Standard
| Ba	135	0.500	ug/L	0.022	4	28	2063	3	Standard
| Ba	137	0.500	ug/L	0.006	1	41	3682	1	Standard
[> Tb	159		ug/L			694270	708088	1	Standard
| Tl	205	0.200	ug/L	0.005	2	31	8497	2	Standard
| Pb	208	0.100	ug/L	0.002	1	204	5982	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:13:22

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			20948	24794	3	Standard
Cl	37		ug/L			3545429	3598984	2	Standard
[> Sc	45		ug/L			528973	556518	1	Standard
| Cr	52	10.002	ug/L	0.146	1	21865	244029	0	Standard
| Cr	53	10.000	ug/L	0.193	1	183	26739	1	Standard
| Mn	55	10.000	ug/L	0.316	3	724	332147	1	Standard
[> Ge	72		ug/L			26281	26931	1	KED
| Ni	60	9.999	ug/L	0.503	5	5	10364	4	KED
| Ni	62	10.000	ug/L	0.295	2	0	1739	4	KED
| Cu	63	10.000	ug/L	0.189	1	69	31654	1	KED
| Cu	65	10.003	ug/L	0.379	3	34	16351	3	KED
| Zn	66	10.140	ug/L	0.258	2	26	4270	3	KED
| Zn	67	10.168	ug/L	0.882	8	3	703	8	KED
| As	75	10.000	ug/L	0.439	4	5	1976	3	KED
| Se	78	9.991	ug/L	0.177	1	14	224	1	KED
Y	89		ug/L			365491	391684	2	Standard
Kr	83		ug/L			70	66	9	Standard
[> In-1	115		ug/L			7887	7719	15	KED
| Cd	111	10.000	ug/L	0.811	8	1	2515	7	KED
| Cd	114	10.000	ug/L	0.981	9	2	6189	6	KED
[> In	115		ug/L			498434	524030	1	Standard
| Ag	107	10.000	ug/L	0.172	1	60	206959	0	Standard
| Ba	135	10.001	ug/L	0.255	2	28	42307	1	Standard
| Ba	137	10.001	ug/L	0.125	1	41	74510	1	Standard
[> Tb	159		ug/L			694270	727262	2	Standard
| Tl	205	10.000	ug/L	0.097	0	31	431651	1	Standard
| Pb	208	10.000	ug/L	0.241	2	204	563429	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:18:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			20948	24447	3	Standard
Cl	37		ug/L			3545429	3559661	0	Standard
> Sc	45		ug/L			528973	555611	2	Standard
| Cr	52	20.117	ug/L	0.586	2	21865	477237	0	Standard
| Cr	53	20.046	ug/L	0.185	0	183	53806	1	Standard
| Mn	55	20.008	ug/L	0.356	1	724	663760	0	Standard
> Ge	72		ug/L			26281	27569	2	KED
| Ni	60	19.879	ug/L	0.199	0	5	20593	1	KED
| Ni	62	19.843	ug/L	0.411	2	0	3424	2	KED
| Cu	63	19.881	ug/L	0.334	1	69	62858	2	KED
| Cu	65	19.830	ug/L	0.793	3	34	32052	2	KED
| Zn	66	20.019	ug/L	0.166	0	26	8626	1	KED
| Zn	67	19.943	ug/L	0.724	3	3	1396	2	KED
| As	75	19.902	ug/L	0.200	1	5	3944	1	KED
| Se	78	20.104	ug/L	1.295	6	14	457	4	KED
Y	89		ug/L			365491	389428	2	Standard
Kr	83		ug/L			70	60	16	Standard
> In-1	115		ug/L			7887	8047	3	KED
| Cd	111	19.742	ug/L	0.506	2	1	4960	1	KED
| Cd	114	19.720	ug/L	0.333	1	2	12160	1	KED
> In	115		ug/L			498434	530679	1	Standard
| Ag	107	19.940	ug/L	0.314	1	60	412929	0	Standard
| Ba	135	19.973	ug/L	0.334	1	28	85070	0	Standard
| Ba	137	19.969	ug/L	0.113	0	41	149704	1	Standard
> Tb	159		ug/L			694270	739201	1	Standard
| Tl	205	19.985	ug/L	0.227	1	31	874080	0	Standard
| Pb	208	19.881	ug/L	0.344	1	204	1111975	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:35:01

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L				21673	2	Standard
Cl	37	ug/L				3592149	1	Standard
[> Sc	45	ug/L				551279	4	Standard
| Cr	52	ug/L				21929	1	Standard
| Cr	53	ug/L				168	7	Standard
| Mn	55	ug/L				725	9	Standard
[> Ge	72	ug/L				26465	1	KED
| Ni	60	ug/L				40	132	KED
| Ni	62	ug/L				6	128	KED
| Cu	63	ug/L				175	97	KED
| Cu	65	ug/L				91	85	KED
| Zn	66	ug/L				71	32	KED
| Zn	67	ug/L				10	20	KED
| As	75	ug/L				12	104	KED
| Se	78	ug/L				10	17	KED
Y	89	ug/L				376878	2	Standard
Kr	83	ug/L				56	22	Standard
[> In-1	115	ug/L				7985	2	KED
| Cd	111	ug/L				0	100	KED
| Cd	114	ug/L				1	109	KED
[> In	115	ug/L				514682	1	Standard
| Ag	107	ug/L				116	13	Standard
| Ba	135	ug/L				102	10	Standard
| Ba	137	ug/L				172	2	Standard
[> Tb	159	ug/L				707850	1	Standard
| Tl	205	ug/L				57	16	Standard
| Pb	208	ug/L				326	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:39:46

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			21673	21652	2	Standard
Cl	37	ug/L			3592149	3558994	1	Standard
[> Sc	45	ug/L			551279	544610	1	Standard
| Cr	52	0.500	0.030	6	21929	33423	0	Standard
| Cr	53	0.500	0.012	2	168	1537	1	Standard
| Mn	55	0.500	0.010	1	725	16888	0	Standard
[> Ge	72	ug/L			26465	27425	0	KED
| Ni	60	0.500	0.033	6	40	543	5	KED
| Ni	62	0.500	0.023	4	6	83	3	KED
| Cu	63	0.500	0.015	2	175	1722	3	KED
| Cu	65	0.500	0.028	5	91	808	4	KED
| Zn	66	6.000	0.180	2	71	2579	2	KED
| Zn	67	6.000	0.416	6	10	385	7	KED
| As	75	0.200	0.011	5	12	43	4	KED
| Se	78	0.500	0.048	9	10	25	4	KED
Y	89	ug/L			376878	375444	1	Standard
Kr	83	ug/L			56	66	14	Standard
[> In-1	115	ug/L			7985	8638	2	KED
| Cd	111	0.100	0.019	18	0	27	19	KED
| Cd	114	0.100	0.025	25	1	56	22	KED
[> In	115	ug/L			514682	524777	1	Standard
| Ag	107	0.200	0.008	4	116	4260	3	Standard
| Ba	135	0.500	0.014	2	102	2235	3	Standard
| Ba	137	0.500	0.007	1	172	3891	1	Standard
[> Tb	159	ug/L			707850	726088	0	Standard
| Tl	205	0.200	0.005	2	57	8418	1	Standard
| Pb	208	0.100	0.002	1	326	5812	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:44:32

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			21673	26513	2	Standard
Cl	37	ug/L			3592149	3581708	2	Standard
> Sc	45	ug/L			551279	568246	0	Standard
| Cr	52	9.998	0.174	1	21929	253170	1	Standard
| Cr	53	9.999	0.299	2	168	27215	3	Standard
| Mn	55	10.000	0.101	1	725	335146	0	Standard
> Ge	72	ug/L			26465	27774	1	KED
| Ni	60	10.000	0.131	1	40	10373	1	KED
| Ni	62	10.003	0.220	2	6	1757	3	KED
| Cu	63	10.001	0.297	2	175	32494	1	KED
| Cu	65	10.002	0.173	1	91	16123	1	KED
| Zn	66	10.013	0.194	1	71	4325	0	KED
| Zn	67	10.246	0.592	5	10	705	3	KED
| As	75	10.001	0.048	0	12	2012	1	KED
| Se	78	9.994	0.820	8	10	244	6	KED
Y	89	ug/L			376878	398567	1	Standard
Kr	83	ug/L			56	55	12	Standard
> In-1	115	ug/L			7985	7999	6	KED
| Cd	111	10.000	0.191	1	0	2573	4	KED
| Cd	114	10.000	0.317	3	1	6345	6	KED
> In	115	ug/L			514682	540448	1	Standard
| Ag	107	10.000	0.189	1	116	213687	0	Standard
| Ba	135	10.000	0.074	0	102	43645	2	Standard
| Ba	137	9.999	0.121	1	172	74692	2	Standard
> Tb	159	ug/L			707850	747160	1	Standard
| Tl	205	10.000	0.050	0	57	434110	1	Standard
| Pb	208	10.000	0.102	1	326	566018	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:49:31

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			21673	26155	3	Standard
Cl	37	ug/L			3592149	3629852	2	Standard
[> Sc	45	ug/L			551279	568538	3	Standard
| Cr	52	19.925	0.140	0	21929	475530	3	Standard
| Cr	53	19.998	0.088	0	168	54262	2	Standard
| Mn	55	19.925	0.518	2	725	657237	0	Standard
[> Ge	72	ug/L			26465	27499	0	KED
| Ni	60	20.119	0.888	4	40	21116	3	KED
| Ni	62	19.936	0.999	5	6	3415	4	KED
| Cu	63	19.933	0.049	0	175	63121	0	KED
| Cu	65	19.996	0.481	2	91	31792	1	KED
| Zn	66	19.892	0.540	2	71	8305	2	KED
| Zn	67	20.119	0.188	0	10	1385	1	KED
| As	75	20.018	0.154	0	12	3990	0	KED
[Se	78	19.895	0.028	0	10	460	0	KED
Y	89	ug/L			376878	396147	2	Standard
Kr	83	ug/L			56	73	12	Standard
[> In-1	115	ug/L			7985	8400	1	KED
| Cd	111	19.816	0.165	0	0	5168	1	KED
| Cd	114	19.759	0.354	1	1	12560	3	KED
[> In	115	ug/L			514682	537148	1	Standard
| Ag	107	19.974	0.321	1	116	421998	2	Standard
| Ba	135	19.912	0.425	2	102	84778	2	Standard
[Ba	137	19.979	0.440	2	172	147490	1	Standard
[> Tb	159	ug/L			707850	748018	2	Standard
| Tl	205	19.897	0.504	2	57	846871	0	Standard
[Pb	208	19.947	0.344	1	326	1118012	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 16:54:40

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			21673	23956	0	Standard
Cl	37	ug/L			3592149	3595848	1	Standard
[> Sc	45	ug/L			551279	568405	0	Standard
| Cr	52	49.891	0.702	1	21929	1144163	1	Standard
| Cr	53	49.663	0.212	0	168	130089	0	Standard
| Mn	55	49.877	0.548	1	725	1624569	1	Standard
[> Ge	72	ug/L			26465	27890	0	KED
| Ni	60	49.778	0.467	0	40	51788	1	KED
| Ni	62	49.696	0.675	1	6	8373	2	KED
| Cu	63	49.647	1.061	2	175	153750	1	KED
| Cu	65	49.594	1.259	2	91	76723	2	KED
| Zn	66	49.658	0.813	1	71	20269	0	KED
| Zn	67	49.561	0.639	1	10	3309	0	KED
| As	75	49.690	0.310	0	12	9725	1	KED
| Se	78	49.478	0.784	1	10	1088	2	KED
Y	89	ug/L			376878	395475	1	Standard
Kr	83	ug/L			56	60	12	Standard
[> In-1	115	ug/L			7985	8455	3	KED
| Cd	111	49.565	1.477	2	0	12461	1	KED
| Cd	114	49.721	2.781	5	1	30903	2	KED
[> In	115	ug/L			514682	535692	0	Standard
| Ag	107	49.864	0.827	1	116	1036308	1	Standard
| Ba	135	49.982	0.109	0	102	211680	0	Standard
| Ba	137	50.081	0.254	0	172	371536	0	Standard
[> Tb	159	ug/L			707850	741877	0	Standard
| Tl	205	50.163	0.166	0	57	2153420	0	Standard
| Pb	208	49.848	0.275	0	326	2729600	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:01:30

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	24486	2	Standard
Cl	37		ug/L			3592149	3581054	2	Standard
> Sc	45		ug/L			551279	550635	1	Standard
| Cr	52	100.609	ug/L	1.269	1	21929	2258628	2	Standard
| Cr	53	100.483	ug/L	1.799	1	168	258978	2	Standard
| Mn	55	100.225	ug/L	0.958	0	725	3185420	1	Standard
> Ge	72		ug/L			26465	27179	2	KED
| Ni	60	99.779	ug/L	0.082	0	40	100383	2	KED
| Ni	62	100.676	ug/L	3.261	3	6	16894	1	KED
| Cu	63	99.602	ug/L	2.216	2	175	296422	1	KED
| Cu	65	99.779	ug/L	1.422	1	91	149207	1	KED
| Zn	66	99.747	ug/L	1.566	1	71	39278	2	KED
| Zn	67	100.148	ug/L	1.184	1	10	6539	3	KED
| As	75	100.221	ug/L	1.173	1	12	19240	1	KED
| Se	78	100.168	ug/L	0.185	0	10	2148	2	KED
Y	89		ug/L			376878	386396	3	Standard
Kr	83		ug/L			56	75	12	Standard
> In-1	115		ug/L			7985	8205	1	KED
| Cd	111	100.409	ug/L	0.890	0	0	24849	0	KED
| Cd	114	100.204	ug/L	2.160	2	1	60912	0	KED
> In	115		ug/L			514682	520874	2	Standard
| Ag	107	99.633	ug/L	2.467	2	116	1989812	4	Standard
| Ba	135	99.981	ug/L	2.538	2	102	411272	2	Standard
| Ba	137	99.768	ug/L	1.568	1	172	714157	4	Standard
> Tb	159		ug/L			707850	735123	1	Standard
| Tl	205	99.266	ug/L	1.300	1	57	4122358	3	Standard
| Pb	208	99.731	ug/L	0.256	0	326	5362774	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:09:00

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			21673	21761	3	Standard
Cl	37	ug/L			3592149	3586647	1	Standard
> Sc	45	ug/L			551279	548312	2	Standard
| Cr	52	0.007	0.010	141	21929	21978	3	Standard
| Cr	53	0.003	0.005	195	168	174	6	Standard
| Mn	55	0.003	0.001	53	725	804	3	Standard
> Ge	72	ug/L			26465	27505	1	KED
| Ni	60	-0.027	0.005	19	40	14	37	KED
| Ni	62	-0.020	0.011	54	6	3	50	KED
| Cu	63	-0.022	0.005	22	175	114	13	KED
| Cu	65	-0.029	0.004	15	91	50	14	KED
| Zn	66	-0.013	0.029	219	71	68	17	KED
| Zn	67	0.032	0.048	150	10	13	24	KED
| As	75	-0.025	0.003	10	12	8	5	KED
| Se	78	0.130	0.283	217	10	14	41	KED
Y	89	ug/L			376878	372174	2	Standard
Kr	83	ug/L			56	57	20	Standard
> In-1	115	ug/L			7985	8386	3	KED
| Cd	111	0.002	0.010	502	0	1	173	KED
| Cd	114	0.002	0.006	366	1	3	134	KED
> In	115	ug/L			514682	518933	0	Standard
| Ag	107	0.020	0.002	8	116	519	7	Standard
| Ba	135	-0.001	0.004	253	102	97	14	Standard
| Ba	137	0.001	0.003	234	172	184	12	Standard
> Tb	159	ug/L			707850	715994	1	Standard
| Tl	205	0.004	0.001	17	57	236	11	Standard
| Pb	208	0.004	0.000	9	326	537	1	Standard

Sample Information

Sample Date/Time: Thursday, March 16, 2023 17:01:30

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED

Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCa\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	0.9999	0.040	0.50	10	20	50	100
Cr	53	0.9999	0.005	0.50	10	20	50	100
Mn	55	1.0000	0.058	0.50	10	20	50	100
Ge	72							
Ni	60	1.0000	0.037	0.50	10	20	50	100
Ni	62	0.9999	0.006	0.50	10	20	50	100
Cu	63	0.9999	0.109	0.50	10	20	50	100
Cu	65	1.0000	0.055	0.50	10	20	50	100
Zn	66	1.0000	0.014	6.00	10	20	50	100
Zn	67	0.9999	0.002	6.00	10	20	50	100
As	75	1.0000	0.007	0.20	10	20	50	100
Se	78	0.9999	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	0.9999	0.030	0.10	10	20	50	100
Cd	114	1.0000	0.074	0.10	10	20	50	100
In	115							
Ag	107	1.0000	0.038	0.20	10	20	50	100
Ba	135	1.0000	0.008	0.50	10	20	50	100
Ba	137	1.0000	0.014	0.50	10	20	50	100
Tb	159							
Tl	205	0.9999	0.056	0.20	10	20	50	100
Pb	208	1.0000	0.073	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:16:29

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	24548	5	Standard
Cl	37		ug/L			3592149	3544266	0	Standard
[> Sc	45		ug/L			551279	582328	1	Standard
| Cr	52	49.226	ug/L	0.542	1	21929	1180317	0	Standard
| Cr	53	48.912	ug/L	1.391	2	168	133388	2	Standard
| Mn	55	50.032	ug/L	0.644	1	725	1682229	2	Standard
[> Ge	72		ug/L			26465	27285	2	KED
| Ni	60	51.864	ug/L	1.790	3	40	52381	2	KED
| Ni	62	51.929	ug/L	2.669	5	6	8749	3	KED
| Cu	63	52.605	ug/L	0.859	1	175	157257	1	KED
| Cu	65	52.444	ug/L	1.552	2	91	78754	1	KED
| Zn	66	50.964	ug/L	1.014	1	71	20179	2	KED
| Zn	67	50.204	ug/L	1.601	3	10	3294	1	KED
| As	75	48.554	ug/L	1.125	2	12	9362	1	KED
[Se	78	77.168	ug/L	0.837	1	10	1663	1	KED
Y	89		ug/L			376878	400311	1	Standard
Kr	83		ug/L			56	55	7	Standard
[> In-1	115		ug/L			7985	8669	0	KED
| Cd	111	48.909	ug/L	0.615	1	0	12790	0	KED
[Cd	114	48.879	ug/L	0.948	1	1	31400	1	KED
[> In	115		ug/L			514682	536913	1	Standard
| Ag	107	51.057	ug/L	0.172	0	116	1050710	1	Standard
| Ba	135	50.691	ug/L	0.166	0	102	215043	2	Standard
[Ba	137	50.626	ug/L	1.163	2	172	373439	0	Standard
[> Tb	159		ug/L			707850	743216	0	Standard
| Tl	205	52.243	ug/L	1.309	2	57	2193050	2	Standard
[Pb	208	50.835	ug/L	0.583	1	326	2763715	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:23:59

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	20441	2	Standard
Cl	37		ug/L			3592149	3427511	1	Standard
[> Sc	45		ug/L			551279	540643	1	Standard
| Cr	52	0.019	ug/L	0.028	150	21929	21907	1	Standard
| Cr	53	0.009	ug/L	0.006	65	168	187	6	Standard
| Mn	55	0.006	ug/L	0.004	70	725	892	13	Standard
[> Ge	72		ug/L			26465	27174	0	KED
| Ni	60	-0.031	ug/L	0.001	3	40	10	10	KED
| Ni	62	-0.020	ug/L	0.011	57	6	3	50	KED
| Cu	63	-0.037	ug/L	0.004	11	175	69	18	KED
| Cu	65	-0.032	ug/L	0.007	20	91	46	21	KED
| Zn	66	-0.068	ug/L	0.021	30	71	46	17	KED
| Zn	67	-0.112	ug/L	0.050	45	10	3	86	KED
| As	75	-0.036	ug/L	0.001	3	12	5	4	KED
| Se	78	0.202	ug/L	0.190	94	10	15	26	KED
Y	89		ug/L			376878	379269	1	Standard
Kr	83		ug/L			56	66	21	Standard
[> In-1	115		ug/L			7985	8295	2	KED
| Cd	111	-0.001	ug/L	0.002	156	0	0	86	KED
| Cd	114	0.006	ug/L	0.000	3	1	5	0	KED
[> In	115		ug/L			514682	529093	1	Standard
| Ag	107	0.014	ug/L	0.004	25	116	412	19	Standard
| Ba	135	0.036	ug/L	0.001	3	102	255	2	Standard
| Ba	137	0.042	ug/L	0.003	7	172	483	6	Standard
[> Tb	159		ug/L			707850	702578	3	Standard
| Tl	205	0.006	ug/L	0.002	43	57	281	32	Standard
| Pb	208	0.004	ug/L	0.003	74	326	520	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:29:05

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	23322	3	Standard
Cl	37		ug/L			3592149	3645691	0	Standard
[> Sc	45		ug/L			551279	565542	1	Standard
| Cr	52	49.274	ug/L	0.146	0	21929	1147499	2	Standard
| Cr	53	50.080	ug/L	0.631	1	168	132636	0	Standard
| Mn	55	49.849	ug/L	0.552	1	725	1627559	1	Standard
[> Ge	72		ug/L			26465	27816	0	KED
| Ni	60	49.097	ug/L	0.564	1	40	50571	0	KED
| Ni	62	49.346	ug/L	1.270	2	6	8483	2	KED
| Cu	63	51.142	ug/L	0.729	1	175	155902	1	KED
| Cu	65	50.542	ug/L	0.743	1	91	77416	1	KED
| Zn	66	50.739	ug/L	0.991	1	71	20485	1	KED
| Zn	67	50.134	ug/L	0.318	0	10	3355	0	KED
| As	75	49.827	ug/L	0.682	1	12	9798	1	KED
[Se	78	50.573	ug/L	1.343	2	10	1115	3	KED
Y	89		ug/L			376878	384567	0	Standard
Kr	83		ug/L			56	67	33	Standard
[> In-1	115		ug/L			7985	8426	3	KED
| Cd	111	48.896	ug/L	0.196	0	0	12427	3	KED
| Cd	114	49.318	ug/L	0.899	1	1	30787	3	KED
[> In	115		ug/L			514682	529523	1	Standard
| Ag	107	50.622	ug/L	1.230	2	116	1027281	1	Standard
| Ba	135	50.021	ug/L	0.862	1	102	209251	0	Standard
[Ba	137	50.749	ug/L	0.470	0	172	369289	1	Standard
[> Tb	159		ug/L			707850	751961	0	Standard
| Tl	205	50.407	ug/L	0.405	0	57	2140873	0	Standard
[Pb	208	49.021	ug/L	0.775	1	326	2696478	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:36:14

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21929	2	Standard
Cl	37		ug/L			3592149	3564718	1	Standard
[> Sc	45		ug/L			551279	537024	2	Standard
| Cr	52	0.031	ug/L	0.019	59	21929	22047	4	Standard
| Cr	53	-0.004	ug/L	0.002	50	168	155	0	Standard
| Mn	55	0.004	ug/L	0.000	11	725	830	2	Standard
[> Ge	72		ug/L			26465	27057	1	KED
| Ni	60	-0.026	ug/L	0.018	68	40	15	119	KED
| Ni	62	-0.020	ug/L	0.023	114	6	3	100	KED
| Cu	63	-0.027	ug/L	0.018	66	175	98	54	KED
| Cu	65	-0.026	ug/L	0.027	103	91	54	73	KED
| Zn	66	-0.043	ug/L	0.026	59	71	55	17	KED
| Zn	67	-0.013	ug/L	0.036	270	10	10	21	KED
| As	75	-0.022	ug/L	0.020	90	12	8	46	KED
| Se	78	0.113	ug/L	0.195	172	10	13	31	KED
Y	89		ug/L			376878	376441	2	Standard
Kr	83		ug/L			56	57	18	Standard
[> In-1	115		ug/L			7985	8294	1	KED
| Cd	111	0.002	ug/L	0.002	94	0	1	34	KED
| Cd	114	0.004	ug/L	0.005	114	1	4	66	KED
[> In	115		ug/L			514682	519503	3	Standard
| Ag	107	0.011	ug/L	0.002	14	116	333	6	Standard
| Ba	135	0.048	ug/L	0.006	13	102	298	10	Standard
| Ba	137	0.046	ug/L	0.007	14	172	504	6	Standard
[> Tb	159		ug/L			707850	710931	2	Standard
| Tl	205	0.003	ug/L	0.001	20	57	173	11	Standard
| Pb	208	0.001	ug/L	0.000	32	326	403	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:41:24

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21684	1	Standard
Cl	37		ug/L			3592149	3591483	2	Standard
> Sc	45		ug/L			551279	548303	1	Standard
| Cr	52	0.518	ug/L	0.024	4	21929	33262	0	Standard
| Cr	53	0.499	ug/L	0.009	1	168	1447	1	Standard
| Mn	55	0.504	ug/L	0.012	2	725	16656	3	Standard
> Ge	72		ug/L			26465	27583	2	KED
| Ni	60	0.495	ug/L	0.016	3	40	547	3	KED
| Ni	62	0.472	ug/L	0.151	31	6	87	28	KED
| Cu	63	0.480	ug/L	0.015	3	175	1630	3	KED
| Cu	65	0.479	ug/L	0.006	1	91	822	3	KED
| Zn	66	6.107	ug/L	0.470	7	71	2508	6	KED
| Zn	67	5.409	ug/L	0.293	5	10	368	5	KED
| As	75	0.187	ug/L	0.008	4	12	49	0	KED
| Se	78	0.773	ug/L	0.161	20	10	28	9	KED
Y	89		ug/L			376878	380072	0	Standard
Kr	83		ug/L			56	63	11	Standard
> In-1	115		ug/L			7985	8168	2	KED
| Cd	111	0.137	ug/L	0.029	21	0	34	19	KED
| Cd	114	0.082	ug/L	0.019	22	1	51	24	KED
> In	115		ug/L			514682	529256	3	Standard
| Ag	107	0.208	ug/L	0.009	4	116	4327	2	Standard
| Ba	135	0.505	ug/L	0.010	1	102	2216	4	Standard
| Ba	137	0.522	ug/L	0.021	4	172	3970	1	Standard
> Tb	159		ug/L			707850	720470	0	Standard
| Tl	205	0.199	ug/L	0.006	3	57	8159	3	Standard
| Pb	208	0.101	ug/L	0.003	2	326	5670	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:47:22

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	20244	1	Standard
Cl	37		ug/L			3592149	3481053	0	Standard
[> Sc	45		ug/L			551279	528989	3	Standard
| Cr	52	0.545	ug/L	0.038	6	21929	32670	0	Standard
| Cr	53	0.510	ug/L	0.022	4	168	1423	6	Standard
| Mn	55	0.509	ug/L	0.008	1	725	16234	1	Standard
[> Ge	72		ug/L			26465	26642	0	KED
| Ni	60	0.475	ug/L	0.033	7	40	509	6	KED
| Ni	62	0.425	ug/L	0.095	22	6	76	19	KED
| Cu	63	0.494	ug/L	0.032	6	175	1615	5	KED
| Cu	65	0.478	ug/L	0.016	3	91	792	3	KED
| Zn	66	6.555	ug/L	0.367	5	71	2597	5	KED
| Zn	67	5.484	ug/L	0.271	4	10	361	5	KED
| As	75	0.143	ug/L	0.019	13	12	39	9	KED
| Se	78	0.551	ug/L	0.190	34	10	22	17	KED
Y	89		ug/L			376878	376307	2	Standard
Kr	83		ug/L			56	60	9	Standard
[> In-1	115		ug/L			7985	8593	2	KED
| Cd	111	0.087	ug/L	0.025	29	0	23	26	KED
| Cd	114	0.083	ug/L	0.027	32	1	54	29	KED
[> In	115		ug/L			514682	518047	1	Standard
| Ag	107	0.209	ug/L	0.003	1	116	4267	2	Standard
| Ba	135	0.521	ug/L	0.013	2	102	2236	3	Standard
| Ba	137	0.546	ug/L	0.014	2	172	4062	3	Standard
[> Tb	159		ug/L			707850	710242	2	Standard
| Tl	205	0.198	ug/L	0.003	1	57	7989	1	Standard
| Pb	208	0.101	ug/L	0.002	1	326	5565	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:52:35

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	91835	0	Standard
Cl	37		ug/L			3592149	9421550	2	Standard
[> Sc	45		ug/L			551279	588752	3	Standard
| Cr	52	0.837	ug/L	0.053	6	21929	43306	2	Standard
| Cr	53	4.913	ug/L	0.073	1	168	13707	2	Standard
| Mn	55	0.080	ug/L	0.004	5	725	3498	3	Standard
[> Ge	72		ug/L			26465	27402	0	KED
| Ni	60	0.059	ug/L	0.008	13	40	101	7	KED
| Ni	62	0.137	ug/L	0.045	32	6	30	25	KED
| Cu	63	0.103	ug/L	0.010	9	175	490	5	KED
| Cu	65	0.108	ug/L	0.009	8	91	257	5	KED
| Zn	66	0.175	ug/L	0.036	20	71	142	10	KED
| Zn	67	0.139	ug/L	0.088	63	10	20	28	KED
| As	75	0.005	ug/L	0.004	84	12	13	5	KED
| Se	78	0.204	ug/L	0.075	36	10	15	10	KED
Y	89		ug/L			376878	397739	3	Standard
Kr	83		ug/L			56	70	23	Standard
[> In-1	115		ug/L			7985	8216	2	KED
| Cd	111	0.074	ug/L	0.044	59	0	19	56	KED
| Cd	114	0.051	ug/L	0.006	12	1	32	14	KED
[> In	115		ug/L			514682	494199	4	Standard
| Ag	107	0.008	ug/L	0.001	10	116	266	7	Standard
| Ba	135	0.098	ug/L	0.013	13	102	479	6	Standard
| Ba	137	0.097	ug/L	0.002	2	172	826	4	Standard
[> Tb	159		ug/L			707850	715573	1	Standard
| Tl	205	0.022	ug/L	0.001	3	57	967	4	Standard
| Pb	208	0.037	ug/L	0.003	7	326	2259	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 17:57:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	91054	1	Standard
Cl	37		ug/L			3592149	9889484	1	Standard
[> Sc	45		ug/L			551279	581745	4	Standard
| Cr	52	20.429	ug/L	0.824	4	21929	502320	0	Standard
| Cr	53	24.598	ug/L	0.747	3	168	67053	1	Standard
| Mn	55	19.733	ug/L	0.514	2	725	662704	1	Standard
[> Ge	72		ug/L			26465	27397	2	KED
| Ni	60	20.659	ug/L	0.725	3	40	20972	1	KED
| Ni	62	20.513	ug/L	1.145	5	6	3474	3	KED
| Cu	63	20.414	ug/L	0.377	1	175	61383	1	KED
| Cu	65	20.177	ug/L	0.548	2	91	30483	1	KED
| Zn	66	18.523	ug/L	0.273	1	71	7412	2	KED
| Zn	67	17.281	ug/L	0.808	4	10	1145	1	KED
| As	75	19.036	ug/L	0.323	1	12	3693	1	KED
[Se	78	0.045	ug/L	0.111	247	10	12	16	KED
| Y	89		ug/L			376878	391539	3	Standard
| Kr	83		ug/L			56	85	8	Standard
[> In-1	115		ug/L			7985	8303	2	KED
| Cd	111	18.810	ug/L	0.114	0	0	4711	1	KED
| Cd	114	18.766	ug/L	0.145	0	1	11548	2	KED
[> In	115		ug/L			514682	480464	5	Standard
| Ag	107	20.223	ug/L	1.059	5	116	371767	0	Standard
| Ba	135	0.111	ug/L	0.007	5	102	514	0	Standard
[Ba	137	0.103	ug/L	0.006	5	172	841	1	Standard
[> Tb	159		ug/L			707850	694068	4	Standard
| Tl	205	0.020	ug/L	0.002	11	57	819	6	Standard
[Pb	208	0.039	ug/L	0.003	6	326	2299	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 18:02:05

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22929	1	Standard
Cl	37		ug/L			3592149	3762355	2	Standard
[> Sc	45		ug/L			551279	574110	0	Standard
| Cr	52	192.870	ug/L	2.331	1	21929	4492953	1	Standard
| Cr	53	192.723	ug/L	1.371	0	168	517727	0	Standard
| Mn	55	192.885	ug/L	3.335	1	725	6391368	1	Standard
[> Ge	72		ug/L			26465	26379	1	KED
| Ni	60	197.492	ug/L	1.063	0	40	192806	1	KED
| Ni	62	202.753	ug/L	5.556	2	6	33022	1	KED
| Cu	63	200.372	ug/L	3.540	1	175	578861	3	KED
| Cu	65	198.398	ug/L	3.119	1	91	287881	0	KED
| Zn	66	198.065	ug/L	5.130	2	71	75614	0	KED
| Zn	67	190.992	ug/L	6.057	3	10	12088	1	KED
| As	75	197.252	ug/L	1.317	0	12	36746	0	KED
[Se	78	191.872	ug/L	0.934	0	10	3983	1	KED
Y	89		ug/L			376878	388981	1	Standard
Kr	83		ug/L			56	78	11	Standard
[> In-1	115		ug/L			7985	8057	2	KED
| Cd	111	194.587	ug/L	2.346	1	0	47288	2	KED
| Cd	114	193.355	ug/L	2.836	1	1	115440	2	KED
[> In	115		ug/L			514682	493527	1	Standard
| Ag	107	198.093	ug/L	4.520	2	116	3746090	0	Standard
| Ba	135	197.013	ug/L	2.065	1	102	767901	1	Standard
[Ba	137	197.614	ug/L	1.144	0	172	1339704	1	Standard
[> Tb	159		ug/L			707850	719517	0	Standard
| Tl	205	202.483	ug/L	2.259	1	57	8229083	1	Standard
[Pb	208	203.939	ug/L	2.113	1	326	10733504	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 18:06:51

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	24034	6	Standard
Cl	37		ug/L			3592149	3613373	1	Standard
[> Sc	45		ug/L			551279	546167	0	Standard
| Cr	52	292.084	ug/L	5.357	1	21929	6461812	1	Standard
| Cr	53	296.201	ug/L	7.185	2	168	756948	2	Standard
| Mn	55	294.281	ug/L	4.216	1	725	9276218	1	Standard
[> Ge	72		ug/L			26465	25337	1	KED
| Ni	60	298.581	ug/L	16.565	5	40	279748	3	KED
| Ni	62	298.782	ug/L	12.499	4	6	46726	2	KED
| Cu	63	303.075	ug/L	5.437	1	175	840539	0	KED
| Cu	65	294.078	ug/L	5.596	1	91	409783	0	KED
| Zn	66	285.864	ug/L	12.945	4	71	104759	2	KED
| Zn	67	284.841	ug/L	15.049	5	10	17304	3	KED
| As	75	300.352	ug/L	10.372	3	12	53716	1	KED
[Se	78	290.630	ug/L	12.345	4	10	5786	2	KED
Y	89		ug/L			376878	378552	1	Standard
Kr	83		ug/L			56	102	7	Standard
[> In-1	115		ug/L			7985	8085	3	KED
| Cd	111	280.305	ug/L	7.937	2	0	68312	0	KED
[Cd	114	281.298	ug/L	7.417	2	1	168454	2	KED
[> In	115		ug/L			514682	475078	1	Standard
| Ag	107	297.525	ug/L	2.574	0	116	5417003	0	Standard
| Ba	135	299.117	ug/L	5.656	1	102	1122233	1	Standard
[Ba	137	301.730	ug/L	5.943	1	172	1968866	1	Standard
[> Tb	159		ug/L			707850	706792	0	Standard
| Tl	205	297.448	ug/L	8.013	2	57	11872808	1	Standard
[Pb	208	296.455	ug/L	3.141	1	326	15325810	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 18:14:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22624	1	Standard
Cl	37		ug/L			3592149	3761649	1	Standard
[> Sc	45		ug/L			551279	551700	0	Standard
| Cr	52	0.020	ug/L	0.016	80	21929	22381	1	Standard
| Cr	53	0.046	ug/L	0.009	19	168	286	8	Standard
| Mn	55	0.017	ug/L	0.000	2	725	1260	1	Standard
[> Ge	72		ug/L			26465	27864	1	KED
| Ni	60	-0.031	ug/L	0.006	20	40	10	61	KED
| Ni	62	-0.024	ug/L	0.006	25	6	3	34	KED
| Cu	63	-0.036	ug/L	0.002	5	175	74	7	KED
| Cu	65	-0.035	ug/L	0.004	11	91	41	13	KED
| Zn	66	-0.035	ug/L	0.007	21	71	60	5	KED
| Zn	67	-0.047	ug/L	0.042	88	10	8	35	KED
| As	75	-0.024	ug/L	0.006	23	12	8	14	KED
| Se	78	0.083	ug/L	0.061	73	10	13	8	KED
Y	89		ug/L			376878	390774	0	Standard
Kr	83		ug/L			56	69	13	Standard
[> In-1	115		ug/L			7985	8431	2	KED
| Cd	111	0.004	ug/L	0.008	208	0	1	100	KED
| Cd	114	0.007	ug/L	0.004	52	1	6	35	KED
[> In	115		ug/L			514682	515644	1	Standard
| Ag	107	0.042	ug/L	0.002	4	116	946	5	Standard
| Ba	135	-0.016	ug/L	0.002	15	102	38	27	Standard
| Ba	137	-0.014	ug/L	0.001	5	172	71	9	Standard
[> Tb	159		ug/L			707850	709242	2	Standard
| Tl	205	0.043	ug/L	0.002	5	57	1796	2	Standard
| Pb	208	0.003	ug/L	0.000	14	326	473	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 18:21:00

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	23635	1	Standard
Cl	37		ug/L			3592149	3854423	0	Standard
[> Sc	45		ug/L			551279	575872	1	Standard
| Cr	52	48.465	ug/L	1.155	2	21929	1149475	1	Standard
| Cr	53	49.190	ug/L	1.727	3	168	132645	2	Standard
| Mn	55	49.477	ug/L	1.297	2	725	1644801	2	Standard
[> Ge	72		ug/L			26465	27541	2	KED
| Ni	60	49.480	ug/L	0.545	1	40	50456	1	KED
| Ni	62	51.020	ug/L	2.050	4	6	8678	1	KED
| Cu	63	51.633	ug/L	1.372	2	175	155792	1	KED
| Cu	65	50.282	ug/L	1.785	3	91	76225	2	KED
| Zn	66	51.850	ug/L	1.234	2	71	20719	0	KED
| Zn	67	51.406	ug/L	1.446	2	10	3407	4	KED
| As	75	50.121	ug/L	0.797	1	12	9757	1	KED
[Se	78	51.345	ug/L	0.523	1	10	1121	1	KED
Y	89		ug/L			376878	403340	2	Standard
Kr	83		ug/L			56	67	22	Standard
[> In-1	115		ug/L			7985	8588	1	KED
| Cd	111	50.194	ug/L	1.798	3	0	12999	2	KED
[Cd	114	50.355	ug/L	2.046	4	1	32035	2	KED
[> In	115		ug/L			514682	538129	1	Standard
| Ag	107	49.149	ug/L	1.035	2	116	1013584	0	Standard
| Ba	135	49.154	ug/L	1.151	2	102	208972	2	Standard
[Ba	137	49.190	ug/L	0.218	0	172	363758	0	Standard
[> Tb	159		ug/L			707850	745907	1	Standard
| Tl	205	52.064	ug/L	0.605	1	57	2193373	0	Standard
[Pb	208	51.096	ug/L	0.079	0	326	2788126	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 18:28:30

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22055	3	Standard
Cl	37		ug/L			3592149	3695953	2	Standard
[> Sc	45		ug/L			551279	562979	1	Standard
| Cr	52	0.006	ug/L	0.011	191	21929	22528	0	Standard
| Cr	53	0.021	ug/L	0.003	14	168	227	2	Standard
| Mn	55	0.013	ug/L	0.001	7	725	1173	2	Standard
[> Ge	72		ug/L			26465	27040	1	KED
| Ni	60	-0.029	ug/L	0.004	13	40	12	32	KED
| Ni	62	-0.028	ug/L	0.006	23	6	2	43	KED
| Cu	63	-0.031	ug/L	0.005	15	175	86	15	KED
| Cu	65	-0.038	ug/L	0.003	7	91	36	10	KED
| Zn	66	-0.012	ug/L	0.040	339	71	67	22	KED
| Zn	67	-0.033	ug/L	0.018	55	10	8	12	KED
| As	75	-0.042	ug/L	0.003	6	12	4	11	KED
| Se	78	0.122	ug/L	0.091	74	10	13	14	KED
Y	89		ug/L			376878	387288	1	Standard
Kr	83		ug/L			56	59	9	Standard
[> In-1	115		ug/L			7985	8399	4	KED
| Cd	111	0.002	ug/L	0.007	356	0	1	124	KED
| Cd	114	-0.000	ug/L	0.005	7195	1	1	180	KED
[> In	115		ug/L			514682	522602	0	Standard
| Ag	107	0.021	ug/L	0.002	8	116	532	6	Standard
| Ba	135	0.077	ug/L	0.005	6	102	420	4	Standard
| Ba	137	0.075	ug/L	0.004	5	172	713	4	Standard
[> Tb	159		ug/L			707850	719880	2	Standard
| Tl	205	0.011	ug/L	0.001	10	57	505	7	Standard
| Pb	208	0.003	ug/L	0.001	25	326	484	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0441-BLK1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 18:34:14**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	27717	1	Standard
Cl	37		ug/L			3592149	3574742	0	Standard
> Sc	45		ug/L			551279	569804	0	Standard
| Cr	52	0.062	ug/L	0.038	62	21929	24079	3	Standard
| Cr	53	0.046	ug/L	0.004	9	168	297	3	Standard
| Mn	55	0.022	ug/L	0.001	2	725	1477	1	Standard
> Ge	72		ug/L			26465	27615	3	KED
| Ni	60	-0.031	ug/L	0.001	3	40	10	10	KED
| Ni	62	-0.024	ug/L	0.017	72	6	3	91	KED
| Cu	63	-0.034	ug/L	0.001	3	175	79	1	KED
| Cu	65	-0.038	ug/L	0.009	24	91	38	32	KED
| Zn	66	-0.017	ug/L	0.015	89	71	67	9	KED
| Zn	67	-0.007	ug/L	0.034	486	10	10	20	KED
| As	75	-0.039	ug/L	0.011	27	12	5	40	KED
| Se	78	0.045	ug/L	0.024	53	10	12	2	KED
Y	89		ug/L			376878	391083	1	Standard
Kr	83		ug/L			56	57	21	Standard
> In-1	115		ug/L			7985	8537	1	KED
| Cd	111	0.003	ug/L	0.006	186	0	1	86	KED
| Cd	114	0.001	ug/L	0.002	213	1	2	45	KED
> In	115		ug/L			514682	533217	1	Standard
| Ag	107	0.009	ug/L	0.001	8	116	310	3	Standard
| Ba	135	0.012	ug/L	0.006	50	102	158	17	Standard
| Ba	137	0.012	ug/L	0.001	10	172	267	4	Standard
> Tb	159		ug/L			707850	724957	0	Standard
| Tl	205	0.041	ug/L	0.001	2	57	1750	1	Standard
| Pb	208	-0.002	ug/L	0.000	8	326	236	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0441-BS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 18:39:00**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	29255	1	Standard
Cl	37		ug/L			3592149	3629578	0	Standard
> Sc	45		ug/L			551279	549290	0	Standard
| Cr	52	25.553	ug/L	0.542	2	21929	588475	1	Standard
| Cr	53	25.775	ug/L	0.729	2	168	66394	3	Standard
| Mn	55	25.560	ug/L	0.697	2	725	810919	2	Standard
> Ge	72		ug/L			26465	27194	2	KED
| Ni	60	25.672	ug/L	0.277	1	40	25872	3	KED
| Ni	62	24.602	ug/L	0.676	2	6	4140	5	KED
| Cu	63	25.722	ug/L	0.362	1	175	76747	3	KED
| Cu	65	25.602	ug/L	0.461	1	91	38397	4	KED
| Zn	66	83.277	ug/L	1.135	1	71	32820	2	KED
| Zn	67	78.389	ug/L	2.027	2	10	5122	3	KED
| As	75	24.520	ug/L	0.198	0	12	4719	2	KED
| Se	78	81.243	ug/L	2.590	3	10	1746	6	KED
Y	89		ug/L			376878	385450	1	Standard
Kr	83		ug/L			56	63	4	Standard
> In-1	115		ug/L			7985	8819	1	KED
| Cd	111	25.093	ug/L	0.371	1	0	6675	0	KED
| Cd	114	25.312	ug/L	0.646	2	1	16540	1	KED
> In	115		ug/L			514682	526176	1	Standard
| Ag	107	26.457	ug/L	0.405	1	116	533640	1	Standard
| Ba	135	24.975	ug/L	0.354	1	102	103876	1	Standard
| Ba	137	24.820	ug/L	0.434	1	172	179536	0	Standard
> Tb	159		ug/L			707850	719483	0	Standard
| Tl	205	25.994	ug/L	0.412	1	57	1056378	1	Standard
| Pb	208	26.225	ug/L	0.140	0	326	1380444	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0393-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 18:43:45**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	31922	1	Standard
Cl	37		ug/L			3592149	3583942	1	Standard
> Sc	45		ug/L			551279	535912	0	Standard
| Cr	52	0.089	ug/L	0.027	30	21929	23244	2	Standard
| Cr	53	0.041	ug/L	0.009	21	168	265	7	Standard
| Mn	55	0.335	ug/L	0.012	3	725	11075	3	Standard
> Ge	72		ug/L			26465	26673	0	KED
| Ni	60	-0.013	ug/L	0.008	62	40	27	28	KED
| Ni	62	-0.008	ug/L	0.012	144	6	5	33	KED
| Cu	63	-0.000	ug/L	0.004	7097	175	176	6	KED
| Cu	65	-0.001	ug/L	0.014	2741	91	91	22	KED
| Zn	66	0.550	ug/L	0.081	14	71	283	10	KED
| Zn	67	0.635	ug/L	0.199	31	10	51	24	KED
| As	75	-0.028	ug/L	0.011	39	12	7	30	KED
| Se	78	0.055	ug/L	0.167	305	10	12	29	KED
Y	89		ug/L			376878	370160	1	Standard
Kr	83		ug/L			56	46	10	Standard
> In-1	115		ug/L			7985	8169	0	KED
| Cd	111	0.008	ug/L	0.008	101	0	2	66	KED
| Cd	114	0.005	ug/L	0.005	102	1	4	61	KED
> In	115		ug/L			514682	516073	0	Standard
| Ag	107	0.016	ug/L	0.001	5	116	437	4	Standard
| Ba	135	0.005	ug/L	0.005	98	102	124	16	Standard
| Ba	137	0.007	ug/L	0.004	56	172	220	12	Standard
> Tb	159		ug/L			707850	710439	1	Standard
| Tl	205	0.012	ug/L	0.000	2	57	531	1	Standard
| Pb	208	0.030	ug/L	0.001	2	326	1866	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0393-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 18:48:30**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	32102	1	Standard
Cl	37		ug/L			3592149	3499284	1	Standard
> Sc	45		ug/L			551279	532710	1	Standard
| Cr	52	23.851	ug/L	0.656	2	21929	533931	0	Standard
| Cr	53	24.332	ug/L	0.322	1	168	60784	0	Standard
| Mn	55	24.589	ug/L	0.739	3	725	756322	1	Standard
> Ge	72		ug/L			26465	27479	2	KED
| Ni	60	24.353	ug/L	0.354	1	40	24799	1	KED
| Ni	62	24.029	ug/L	0.692	2	6	4084	3	KED
| Cu	63	24.573	ug/L	0.066	0	175	74090	2	KED
| Cu	65	25.249	ug/L	1.017	4	91	38233	2	KED
| Zn	66	81.910	ug/L	2.360	2	71	32618	2	KED
| Zn	67	77.529	ug/L	2.605	3	10	5122	5	KED
| As	75	24.408	ug/L	0.751	3	12	4746	1	KED
| Se	78	79.613	ug/L	1.586	1	10	1728	2	KED
Y	89		ug/L			376878	369509	1	Standard
Kr	83		ug/L			56	68	26	Standard
> In-1	115		ug/L			7985	7746	2	KED
| Cd	111	25.598	ug/L	0.476	1	0	5980	1	KED
| Cd	114	25.408	ug/L	0.137	0	1	14586	2	KED
> In	115		ug/L			514682	514274	2	Standard
| Ag	107	25.077	ug/L	0.819	3	116	494115	1	Standard
| Ba	135	24.080	ug/L	0.305	1	102	97872	1	Standard
| Ba	137	23.823	ug/L	0.409	1	172	168404	1	Standard
> Tb	159		ug/L			707850	704724	1	Standard
| Tl	205	24.878	ug/L	0.796	3	57	990273	3	Standard
| Pb	208	25.117	ug/L	0.721	2	326	1294809	2	Standard

ICP-MS Quantitative Analysis - Summary Report

23C0334

Sample ID: **23C0354-01**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 18:53:26**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	89005	3	Standard
Cl	37		ug/L			3592149	3678167	1	Standard
> Sc	45		ug/L			551279	584152	1	Standard
| Cr	52	65.316	ug/L	1.619	2	21929	1563779	3	Standard
| Cr	53	65.796	ug/L	0.498	0	168	179966	1	Standard
| Mn	55	24.034	ug/L	0.128	0	725	810993	1	Standard
> Ge	72		ug/L			26465	27785	0	KED
| Ni	60	2.480	ug/L	0.126	5	40	2591	4	KED
| Ni	62	2.655	ug/L	0.161	6	6	462	6	KED
| Cu	63	1.763	ug/L	0.049	2	175	5545	2	KED
| Cu	65	1.774	ug/L	0.025	1	91	2806	0	KED
| Zn	66	117.181	ug/L	2.675	2	71	47166	2	KED
| Zn	67	105.883	ug/L	2.191	2	10	7065	1	KED
| As	75	0.070	ug/L	0.014	20	12	26	10	KED
| Se	78	0.186	ug/L	0.135	72	10	15	18	KED
Y	89		ug/L			376878	405381	1	Standard
Kr	83		ug/L			56	74	7	Standard
> In-1	115		ug/L			7985	8302	4	KED
| Cd	111	0.858	ug/L	0.060	6	0	215	5	KED
| Cd	114	0.861	ug/L	0.098	11	1	530	10	KED
> In	115		ug/L			514682	519186	1	Standard
| Ag	107	0.060	ug/L	0.011	17	116	1308	15	Standard
| Ba	135	4.541	ug/L	0.168	3	102	18720	3	Standard
| Ba	137	4.469	ug/L	0.031	0	172	32039	1	Standard
> Tb	159		ug/L			707850	730654	1	Standard
| Tl	205	0.013	ug/L	0.008	63	57	602	56	Standard
| Pb	208	0.294	ug/L	0.012	3	326	16072	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0308-01**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 18:59:42**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	30558	2	Standard
Cl	37		ug/L			3592149	3607466	2	Standard
[> Sc	45		ug/L			551279	562213	2	Standard
| Cr	52	0.249	ug/L	0.025	9	21929	28018	1	Standard
| Cr	53	0.275	ug/L	0.011	4	168	895	1	Standard
| Mn	55	2.288	ug/L	0.015	0	725	74965	2	Standard
[> Ge	72		ug/L			26465	27935	2	KED
| Ni	60	0.359	ug/L	0.049	13	40	412	9	KED
| Ni	62	0.407	ug/L	0.086	21	6	77	18	KED
| Cu	63	1.893	ug/L	0.024	1	175	5973	2	KED
| Cu	65	1.914	ug/L	0.013	0	91	3037	2	KED
| Zn	66	272.703	ug/L	10.445	3	71	110175	1	KED
| Zn	67	250.055	ug/L	3.483	1	10	16757	1	KED
| As	75	0.209	ug/L	0.027	12	12	54	12	KED
[Se	78	0.131	ug/L	0.145	110	10	14	23	KED
Y	89		ug/L			376878	391839	1	Standard
Kr	83		ug/L			56	59	9	Standard
[> In-1	115		ug/L			7985	8523	2	KED
| Cd	111	0.570	ug/L	0.078	13	0	147	12	KED
| Cd	114	0.518	ug/L	0.013	2	1	329	2	KED
[> In	115		ug/L			514682	516176	1	Standard
| Ag	107	0.008	ug/L	0.000	1	116	266	0	Standard
| Ba	135	6.470	ug/L	0.177	2	102	26470	1	Standard
[Ba	137	6.504	ug/L	0.124	1	172	46278	0	Standard
[> Tb	159		ug/L			707850	731300	1	Standard
| Tl	205	0.005	ug/L	0.000	4	57	246	5	Standard
[Pb	208	0.256	ug/L	0.001	0	326	14046	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0338-01**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 19:05:05**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	28254	2	Standard
Cl	37		ug/L			3592149	3619162	2	Standard
[> Sc	45		ug/L			551279	609748	1	Standard
| Cr	52	0.131	ug/L	0.016	12	21929	27477	0	Standard
| Cr	53	0.263	ug/L	0.002	0	168	937	1	Standard
| Mn	55	261.374	ug/L	3.376	1	725	9196953	0	Standard
[> Ge	72		ug/L			26465	26858	0	KED
| Ni	60	0.166	ug/L	0.038	22	40	206	17	KED
| Ni	62	0.263	ug/L	0.072	27	6	50	23	KED
| Cu	63	3.988	ug/L	0.125	3	175	11900	2	KED
| Cu	65	3.892	ug/L	0.134	3	91	5841	3	KED
| Zn	66	8.836	ug/L	0.433	4	71	3503	4	KED
| Zn	67	27.715	ug/L	2.242	8	10	1796	8	KED
| As	75	16.979	ug/L	0.375	2	12	3232	2	KED
| Se	78	0.104	ug/L	0.211	202	10	13	33	KED
| Y	89		ug/L			376878	392742	1	Standard
| Kr	83		ug/L			56	67	21	Standard
[> In-1	115		ug/L			7985	8453	1	KED
| Cd	111	0.012	ug/L	0.004	35	0	4	26	KED
| Cd	114	0.004	ug/L	0.005	108	1	4	64	KED
[> In	115		ug/L			514682	520153	0	Standard
| Ag	107	0.003	ug/L	0.000	10	116	182	3	Standard
| Ba	135	191.875	ug/L	1.263	0	102	788232	0	Standard
| Ba	137	195.720	ug/L	1.078	0	172	1398581	1	Standard
[> Tb	159		ug/L			707850	730904	1	Standard
| Tl	205	0.003	ug/L	0.000	16	57	163	12	Standard
| Pb	208	0.394	ug/L	0.004	0	326	21375	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0338-02**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 19:13:29**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	26441	2	Standard
Cl	37		ug/L			3592149	3651912	1	Standard
> Sc	45		ug/L			551279	585907	0	Standard
| Cr	52	0.136	ug/L	0.019	14	21929	26516	1	Standard
| Cr	53	0.287	ug/L	0.006	2	168	964	1	Standard
| Mn	55	253.239	ug/L	2.853	1	725	8563579	1	Standard
> Ge	72		ug/L			26465	27120	0	KED
| Ni	60	5.276	ug/L	0.141	2	40	5334	1	KED
| Ni	62	5.598	ug/L	0.215	3	6	944	4	KED
| Cu	63	89.170	ug/L	1.253	1	175	264876	0	KED
| Cu	65	86.442	ug/L	1.833	2	91	129016	1	KED
| Zn	66	274.627	ug/L	7.008	2	71	107777	1	KED
| Zn	67	260.714	ug/L	4.251	1	10	16967	2	KED
| As	75	3.170	ug/L	0.020	0	12	619	0	KED
| Se	78	0.248	ug/L	0.111	44	10	16	15	KED
| Y	89		ug/L			376878	398747	1	Standard
| Kr	83		ug/L			56	71	16	Standard
> In-1	115		ug/L			7985	8255	1	KED
| Cd	111	0.358	ug/L	0.028	7	0	90	6	KED
| Cd	114	0.321	ug/L	0.085	26	1	197	24	KED
> In	115		ug/L			514682	513004	0	Standard
| Ag	107	0.019	ug/L	0.001	5	116	481	4	Standard
| Ba	135	112.548	ug/L	0.185	0	102	456051	0	Standard
| Ba	137	113.230	ug/L	2.596	2	172	798037	2	Standard
> Tb	159		ug/L			707850	727591	1	Standard
| Tl	205	0.011	ug/L	0.001	6	57	520	4	Standard
| Pb	208	10.419	ug/L	0.114	1	326	554779	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0338-03**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 19:18:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	26289	0	Standard
Cl	37		ug/L			3592149	3506681	1	Standard
[> Sc	45		ug/L			551279	570546	2	Standard
| Cr	52	0.198	ug/L	0.017	8	21929	27259	2	Standard
| Cr	53	0.318	ug/L	0.021	6	168	1023	4	Standard
| Mn	55	60.900	ug/L	0.578	0	725	2005563	1	Standard
[> Ge	72		ug/L			26465	26421	1	KED
| Ni	60	1.054	ug/L	0.058	5	40	1071	5	KED
| Ni	62	1.184	ug/L	0.108	9	6	200	7	KED
| Cu	63	22.476	ug/L	0.582	2	175	65168	2	KED
| Cu	65	22.723	ug/L	0.137	0	91	33110	1	KED
| Zn	66	22.405	ug/L	0.187	0	71	8631	1	KED
| Zn	67	19.909	ug/L	0.738	3	10	1271	3	KED
| As	75	4.637	ug/L	0.085	1	12	877	3	KED
| Se	78	0.162	ug/L	0.136	83	10	14	18	KED
| Y	89		ug/L			376878	376172	2	Standard
| Kr	83		ug/L			56	66	32	Standard
[> In-1	115		ug/L			7985	8097	2	KED
| Cd	111	0.025	ug/L	0.002	6	0	6	7	KED
| Cd	114	0.018	ug/L	0.014	76	1	12	65	KED
[> In	115		ug/L			514682	487598	2	Standard
| Ag	107	0.005	ug/L	0.001	19	116	198	7	Standard
| Ba	135	2.375	ug/L	0.096	4	102	9241	3	Standard
| Ba	137	2.393	ug/L	0.058	2	172	16188	1	Standard
[> Tb	159		ug/L			707850	697842	2	Standard
| Tl	205	0.003	ug/L	0.000	12	57	160	6	Standard
| Pb	208	2.629	ug/L	0.042	1	326	134474	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 19:23:01

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	20835	2	Standard
Cl	37		ug/L			3592149	3559386	1	Standard
> Sc	45		ug/L			551279	526969	2	Standard
| Cr	52	-0.002	ug/L	0.006	325	21929	20920	2	Standard
| Cr	53	0.006	ug/L	0.002	26	168	177	2	Standard
| Mn	55	0.002	ug/L	0.001	39	725	757	1	Standard
> Ge	72		ug/L			26465	26112	1	KED
| Ni	60	-0.033	ug/L	0.006	18	40	8	70	KED
| Ni	62	-0.023	ug/L	0.018	79	6	3	91	KED
| Cu	63	-0.025	ug/L	0.005	18	175	101	12	KED
| Cu	65	-0.038	ug/L	0.008	21	91	34	31	KED
| Zn	66	-0.043	ug/L	0.014	31	71	53	8	KED
| Zn	67	-0.109	ug/L	0.031	28	10	3	50	KED
| As	75	-0.035	ug/L	0.001	1	12	5	0	KED
| Se	78	0.115	ug/L	0.133	115	10	13	21	KED
Y	89		ug/L			376878	364379	4	Standard
Kr	83		ug/L			56	60	19	Standard
> In-1	115		ug/L			7985	8309	3	KED
| Cd	111	0.004	ug/L	0.000	7	0	1		KED
| Cd	114	-0.000	ug/L	0.003	2805	1	1	107	KED
> In	115		ug/L			514682	503609	2	Standard
| Ag	107	-0.001	ug/L	0.000	18	116	100	4	Standard
| Ba	135	-0.012	ug/L	0.003	22	102	52	22	Standard
| Ba	137	-0.009	ug/L	0.003	33	172	108	21	Standard
> Tb	159		ug/L			707850	680721	3	Standard
| Tl	205	-0.001	ug/L	0.000	47	57	35	29	Standard
| Pb	208	-0.000	ug/L	0.000	325	326	307	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 19:27:47

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22842	1	Standard
Cl	37		ug/L			3592149	3606211	2	Standard
[> Sc	45		ug/L			551279	542579	4	Standard
| Cr	52	49.083	ug/L	1.150	2	21929	1095879	2	Standard
| Cr	53	49.582	ug/L	1.280	2	168	125901	2	Standard
| Mn	55	50.425	ug/L	0.795	1	725	1578814	3	Standard
[> Ge	72		ug/L			26465	27404	2	KED
| Ni	60	48.462	ug/L	0.529	1	40	49172	1	KED
| Ni	62	48.882	ug/L	1.096	2	6	8279	3	KED
| Cu	63	50.052	ug/L	1.024	2	175	150302	2	KED
| Cu	65	50.253	ug/L	0.599	1	91	75847	3	KED
| Zn	66	50.341	ug/L	1.642	3	71	20015	0	KED
| Zn	67	50.805	ug/L	1.372	2	10	3348	0	KED
| As	75	49.942	ug/L	0.217	0	12	9675	2	KED
[Se	78	50.025	ug/L	1.262	2	10	1087	4	KED
Y	89		ug/L			376878	385869	2	Standard
Kr	83		ug/L			56	70	9	Standard
[> In-1	115		ug/L			7985	8627	1	KED
| Cd	111	49.014	ug/L	0.383	0	0	12754	0	KED
[Cd	114	49.790	ug/L	1.299	2	1	31826	1	KED
[> In	115		ug/L			514682	517123	2	Standard
| Ag	107	49.527	ug/L	0.715	1	116	981669	3	Standard
| Ba	135	49.586	ug/L	0.894	1	102	202541	1	Standard
[Ba	137	49.729	ug/L	0.406	0	172	353365	2	Standard
[> Tb	159		ug/L			707850	715394	3	Standard
| Tl	205	52.149	ug/L	1.294	2	57	2108160	5	Standard
[Pb	208	51.006	ug/L	0.867	1	326	2668304	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 19:35:17

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21203	1	Standard
Cl	37		ug/L			3592149	3568312	1	Standard
[> Sc	45		ug/L			551279	522068	1	Standard
| Cr	52	0.019	ug/L	0.026	132	21929	21180	3	Standard
| Cr	53	0.004	ug/L	0.002	58	168	169	4	Standard
| Mn	55	0.003	ug/L	0.000	11	725	781	2	Standard
[> Ge	72		ug/L			26465	26974	0	KED
| Ni	60	-0.031	ug/L	0.001	3	40	10	10	KED
| Ni	62	-0.024	ug/L	0.024	101	6	3	124	KED
| Cu	63	-0.032	ug/L	0.002	5	175	83	6	KED
| Cu	65	-0.039	ug/L	0.005	13	91	34	22	KED
| Zn	66	-0.036	ug/L	0.014	37	71	58	8	KED
| Zn	67	-0.053	ug/L	0.050	94	10	7	43	KED
| As	75	-0.042	ug/L	0.005	12	12	4	21	KED
| Se	78	-0.039	ug/L	0.027	68	10	10	4	KED
Y	89		ug/L			376878	361140	2	Standard
Kr	83		ug/L			56	62	6	Standard
[> In-1	115		ug/L			7985	8526	2	KED
| Cd	111	-0.002	ug/L	0.004	267	0	0	173	KED
| Cd	114	-0.001	ug/L	0.004	306	1	1	201	KED
[> In	115		ug/L			514682	500466	1	Standard
| Ag	107	0.009	ug/L	0.001	7	116	278	6	Standard
| Ba	135	0.084	ug/L	0.005	5	102	433	5	Standard
| Ba	137	0.083	ug/L	0.009	11	172	735	6	Standard
[> Tb	159		ug/L			707850	684101	1	Standard
| Tl	205	0.001	ug/L	0.000	10	57	111	4	Standard
| Pb	208	0.002	ug/L	0.000	15	326	429	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0363-01

Sample Dil Factor: 2

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 19:40:41

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	27946	3	Standard
Cl	37		ug/L			3592149	5742821	2	Standard
[> Sc	45		ug/L			551279	534758	1	Standard
| Cr	52	0.179	ug/L	0.015	8	21929	25137	2	Standard
| Cr	53	3.159	ug/L	0.097	3	168	8064	2	Standard
| Mn	55	124.928	ug/L	1.305	1	725	3855737	0	Standard
[> Ge	72		ug/L			26465	25644	2	KED
| Ni	60	3.886	ug/L	0.217	5	40	3724	4	KED
| Ni	62	4.331	ug/L	0.309	7	6	693	9	KED
| Cu	63	91.760	ug/L	2.963	3	175	257593	1	KED
| Cu	65	92.224	ug/L	0.365	0	91	130147	2	KED
| Zn	66	547.833	ug/L	7.814	1	71	203191	1	KED
| Zn	67	501.233	ug/L	15.773	3	10	30830	4	KED
| As	75	0.104	ug/L	0.006	5	12	30	6	KED
[Se	78	0.315	ug/L	0.150	47	10	17	19	KED
| Y	89		ug/L			376878	370077	0	Standard
| Kr	83		ug/L			56	73	17	Standard
[> In-1	115		ug/L			7985	7885	2	KED
| Cd	111	0.060	ug/L	0.018	30	0	15	27	KED
| Cd	114	0.046	ug/L	0.016	35	1	28	31	KED
[> In	115		ug/L			514682	472593	0	Standard
| Ag	107	0.046	ug/L	0.004	8	116	942	7	Standard
| Ba	135	2.582	ug/L	0.051	1	102	9727	1	Standard
[Ba	137	2.551	ug/L	0.042	1	172	16719	2	Standard
[> Tb	159		ug/L			707850	684416	0	Standard
| Tl	205	0.041	ug/L	0.002	4	57	1655	4	Standard
[Pb	208	8.418	ug/L	0.080	0	326	421698	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 19:47:35

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	20643	3	Standard
Cl	37		ug/L			3592149	3407229	1	Standard
> Sc	45		ug/L			551279	523767	1	Standard
| Cr	52	0.003	ug/L	0.027	942	21929	20892	1	Standard
| Cr	53	0.115	ug/L	0.008	7	168	440	3	Standard
| Mn	55	0.016	ug/L	0.004	24	725	1176	10	Standard
> Ge	72		ug/L			26465	26440	1	KED
| Ni	60	-0.025	ug/L	0.005	18	40	16	29	KED
| Ni	62	-0.027	ug/L	0.007	26	6	2	43	KED
| Cu	63	-0.033	ug/L	0.007	22	175	80	24	KED
| Cu	65	-0.030	ug/L	0.002	5	91	47	6	KED
| Zn	66	-0.026	ug/L	0.025	95	71	60	14	KED
| Zn	67	0.050	ug/L	0.037	72	10	13	15	KED
| As	75	-0.043	ug/L	0.005	12	12	4	22	KED
| Se	78	0.121	ug/L	0.083	68	10	13	14	KED
Y	89		ug/L			376878	367885	0	Standard
Kr	83		ug/L			56	66	18	Standard
> In-1	115		ug/L			7985	8340	3	KED
| Cd	111	-0.000	ug/L	0.000	77	0	0		KED
| Cd	114	0.002	ug/L	0.002	99	1	3	39	KED
> In	115		ug/L			514682	495586	0	Standard
| Ag	107	-0.001	ug/L	0.001	78	116	97	11	Standard
| Ba	135	-0.009	ug/L	0.001	8	102	62	5	Standard
| Ba	137	-0.011	ug/L	0.001	7	172	91	6	Standard
> Tb	159		ug/L			707850	683643	1	Standard
| Tl	205	0.000	ug/L	0.000	134	57	65	21	Standard
| Pb	208	-0.000	ug/L	0.001	289	326	300	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0363-01**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 20:00:30**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21883	3	Standard
Cl	37		ug/L			3592149	3677082	3	Standard
[> Sc	45		ug/L			551279	551097	1	Standard
| Cr	52	0.061	ug/L	0.004	5	21929	23288	1	Standard
| Cr	53	0.562	ug/L	0.018	3	168	1617	4	Standard
| Mn	55	13.307	ug/L	0.275	2	725	423881	1	Standard
[> Ge	72		ug/L			26465	27326	1	KED
| Ni	60	0.547	ug/L	0.015	2	40	594	1	KED
| Ni	62	0.584	ug/L	0.201	34	6	106	33	KED
| Cu	63	9.787	ug/L	0.122	1	175	29457	2	KED
| Cu	65	9.596	ug/L	0.226	2	91	14515	2	KED
| Zn	66	61.843	ug/L	1.795	2	71	24509	2	KED
| Zn	67	57.233	ug/L	1.755	3	10	3760	1	KED
| As	75	-0.013	ug/L	0.013	104	12	10	25	KED
| Se	78	0.160	ug/L	0.192	119	10	14	28	KED
| Y	89		ug/L			376878	392366	2	Standard
| Kr	83		ug/L			56	62	21	Standard
[> In-1	115		ug/L			7985	8539	2	KED
| Cd	111	0.008	ug/L	0.006	71	0	3	45	KED
| Cd	114	0.008	ug/L	0.002	26	1	6	16	KED
[> In	115		ug/L			514682	513249	2	Standard
| Ag	107	0.004	ug/L	0.001	17	116	202	9	Standard
| Ba	135	0.280	ug/L	0.010	3	102	1236	3	Standard
| Ba	137	0.273	ug/L	0.001	0	172	2099	2	Standard
[> Tb	159		ug/L			707850	716705	0	Standard
| Tl	205	0.009	ug/L	0.000	5	57	419	5	Standard
| Pb	208	0.984	ug/L	0.010	0	326	51892	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0375-01**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 20:05:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	28049	3	Standard
Cl	37		ug/L			3592149	6386802	1	Standard
> Sc	45		ug/L			551279	562143	1	Standard
| Cr	52	25.838	ug/L	0.915	3	21929	608820	4	Standard
| Cr	53	29.411	ug/L	0.367	1	168	77516	2	Standard
| Mn	55	2.400	ug/L	0.017	0	725	78589	1	Standard
> Ge	72		ug/L			26465	26841	0	KED
| Ni	60	3.000	ug/L	0.090	2	40	3020	3	KED
| Ni	62	3.130	ug/L	0.090	2	6	525	2	KED
| Cu	63	14.191	ug/L	0.220	1	175	41868	0	KED
| Cu	65	13.769	ug/L	0.249	1	91	20418	1	KED
| Zn	66	32.005	ug/L	0.143	0	71	12496	0	KED
| Zn	67	29.882	ug/L	0.856	2	10	1934	2	KED
| As	75	0.108	ug/L	0.006	5	12	33	4	KED
| Se	78	0.114	ug/L	0.059	52	10	13	8	KED
Y	89		ug/L			376878	393765	1	Standard
Kr	83		ug/L			56	62	9	Standard
> In-1	115		ug/L			7985	8316	2	KED
| Cd	111	0.868	ug/L	0.108	12	0	218	10	KED
| Cd	114	0.853	ug/L	0.034	4	1	527	5	KED
> In	115		ug/L			514682	496999	2	Standard
| Ag	107	0.012	ug/L	0.000	0	116	335	3	Standard
| Ba	135	1.832	ug/L	0.046	2	102	7285	0	Standard
| Ba	137	1.821	ug/L	0.033	1	172	12596	1	Standard
> Tb	159		ug/L			707850	719677	1	Standard
| Tl	205	0.003	ug/L	0.000	4	57	162	1	Standard
| Pb	208	0.256	ug/L	0.004	1	326	13796	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0375-01RE1**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 20:13:53**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22875	4	Standard
Cl	37		ug/L			3592149	3931933	2	Standard
[> Sc	45		ug/L			551279	542630	2	Standard
| Cr	52	5.296	ug/L	0.055	1	21929	137593	2	Standard
| Cr	53	6.544	ug/L	0.111	1	168	16772	1	Standard
| Mn	55	0.517	ug/L	0.014	2	725	16887	1	Standard
[> Ge	72		ug/L			26465	27447	4	KED
| Ni	60	0.699	ug/L	0.070	10	40	749	4	KED
| Ni	62	0.741	ug/L	0.038	5	6	132	1	KED
| Cu	63	2.949	ug/L	0.042	1	175	9046	5	KED
| Cu	65	2.813	ug/L	0.090	3	91	4340	5	KED
| Zn	66	7.967	ug/L	0.415	5	71	3231	0	KED
| Zn	67	7.094	ug/L	0.657	9	10	479	13	KED
| As	75	-0.024	ug/L	0.009	35	12	8	17	KED
| Se	78	0.087	ug/L	0.093	107	10	13	12	KED
Y	89		ug/L			376878	376379	0	Standard
Kr	83		ug/L			56	59	18	Standard
[> In-1	115		ug/L			7985	8606	2	KED
| Cd	111	0.199	ug/L	0.016	8	0	52	9	KED
| Cd	114	0.190	ug/L	0.025	13	1	123	14	KED
[> In	115		ug/L			514682	500200	0	Standard
| Ag	107	0.000	ug/L	0.001	11388	116	113	15	Standard
| Ba	135	0.374	ug/L	0.022	5	102	1574	5	Standard
| Ba	137	0.376	ug/L	0.011	2	172	2752	3	Standard
[> Tb	159		ug/L			707850	710316	1	Standard
| Tl	205	0.002	ug/L	0.000	5	57	132	1	Standard
| Pb	208	0.121	ug/L	0.002	1	326	6601	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0025-01RE1**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 20:18:39**

MB 3/16/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	28773	1	Standard
Cl	37		ug/L			3592149	4009874	1	Standard
> Sc	45		ug/L			551279	544658	1	Standard
| Cr	52	0.139	ug/L	0.008	5	21929	24717	1	Standard
| Cr	53	1.006	ug/L	0.027	2	168	2728	2	Standard
| Mn	55	66.580	ug/L	0.390	0	725	2093371	0	Standard
> Ge	72		ug/L			26465	26446	3	KED
| Ni	60	0.853	ug/L	0.039	4	40	874	3	KED
| Ni	62	0.983	ug/L	0.141	14	6	167	14	KED
| Cu	63	0.112	ug/L	0.015	12	175	499	9	KED
| Cu	65	0.144	ug/L	0.084	58	91	298	37	KED
| Zn	66	3.789	ug/L	0.273	7	71	1518	5	KED
| Zn	67	4.996	ug/L	2.451	49	10	324	44	KED
| As	75	0.432	ug/L	0.630	145	12	90	124	KED
| Se	78	3.332	ug/L	5.702	171	10	77	146	KED
| Y	89		ug/L			376878	378619	1	Standard
| Kr	83		ug/L			56	60	31	Standard
> In-1	115		ug/L			7985	7944	1	KED
| Cd	111	0.004	ug/L	0.008	196	0	1	100	KED
| Cd	114	0.007	ug/L	0.005	67	1	6	49	KED
> In	115		ug/L			514682	503304	1	Standard
| Ag	107	-0.003	ug/L	0.000	15	116	53	14	Standard
| Ba	135	7.477	ug/L	0.207	2	102	29808	1	Standard
| Ba	137	7.525	ug/L	0.174	2	172	52180	1	Standard
> Tb	159		ug/L			707850	709273	2	Standard
| Tl	205	0.001	ug/L	0.000	22	57	100	11	Standard
| Pb	208	0.195	ug/L	0.004	2	326	10431	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0339-DUP2**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 20:23:24**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	26451	2	Standard
Cl	37		ug/L			3592149	3899248	4	Standard
Sc	45		ug/L			551279	536349	3	Standard
Cr	52	0.153	ug/L	0.016	10	21929	24654	4	Standard
Cr	53	1.020	ug/L	0.011	1	168	2723	3	Standard
Mn	55	63.669	ug/L	0.226	0	725	1971493	3	Standard
Ge	72		ug/L			26465	26531	1	KED
Ni	60	0.903	ug/L	0.042	4	40	926	3	KED
Ni	62	0.896	ug/L	0.094	10	6	153	8	KED
Cu	63	0.116	ug/L	0.002	1	175	513	0	KED
Cu	65	0.119	ug/L	0.012	10	91	265	5	KED
Zn	66	3.568	ug/L	0.172	4	71	1440	3	KED
Zn	67	3.942	ug/L	0.113	2	10	261	2	KED
As	75	0.047	ug/L	0.013	28	12	21	10	KED
Se	78	0.023	ug/L	0.040	173	10	11	6	KED
Y	89		ug/L			376878	371071	2	Standard
Kr	83		ug/L			56	57	21	Standard
In-1	115		ug/L			7985	8338	0	KED
Cd	111	0.004	ug/L	0.004	105	0	1	50	KED
Cd	114	0.008	ug/L	0.012	153	1	6	110	KED
In	115		ug/L			514682	494435	2	Standard
Ag	107	-0.003	ug/L	0.001	22	116	50	24	Standard
Ba	135	7.332	ug/L	0.097	1	102	28732	3	Standard
Ba	137	7.310	ug/L	0.079	1	172	49820	3	Standard
Tb	159		ug/L			707850	696396	0	Standard
Tl	205	0.001	ug/L	0.000	26	57	102	12	Standard
Pb	208	0.191	ug/L	0.005	2	326	10042	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0339-MS2**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 20:28:09**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	27652	2	Standard
Cl	37		ug/L			3592149	3930299	2	Standard
[> Sc	45		ug/L			551279	539960	0	Standard
| Cr	52	2.679	ug/L	0.040	1	21929	79872	0	Standard
| Cr	53	3.531	ug/L	0.072	2	168	9082	1	Standard
| Mn STL	55	67.847	ug/L	0.884	1	725	2114967	1	Standard
[> Ge	72		ug/L			26465	26510	3	KED
| Ni	60	3.425	ug/L	0.130	3	40	3397	0	KED
| Ni	62	3.368	ug/L	0.063	1	6	558	2	KED
| Cu	63	2.754	ug/L	0.100	3	175	8165	3	KED
| Cu	65	2.758	ug/L	0.082	2	91	4112	5	KED
| Zn	66	12.288	ug/L	0.018	0	71	4782	3	KED
| Zn	67	12.232	ug/L	0.645	5	10	788	6	KED
| As	75	2.645	ug/L	0.187	7	12	506	5	KED
| Se	78	8.542	ug/L	0.099	1	10	188	2	KED
| Y	89		ug/L			376878	382292	0	Standard
| Kr	83		ug/L			56	68	20	Standard
[> In-1	115		ug/L			7985	8189	2	KED
| Cd	111	2.720	ug/L	0.157	5	0	672	3	KED
| Cd	114	2.663	ug/L	0.148	5	1	1616	2	KED
[> In	115		ug/L			514682	497897	1	Standard
| Ag	107	2.551	ug/L	0.003	0	116	48791	1	Standard
| Ba	135	9.864	ug/L	0.202	2	102	38879	1	Standard
| Ba	137	10.016	ug/L	0.151	1	172	68658	0	Standard
[> Tb	159		ug/L			707850	710045	0	Standard
| Tl	205	2.630	ug/L	0.050	1	57	105531	2	Standard
| Pb	208	2.837	ug/L	0.034	1	326	147671	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0035-01

Sample Dil Factor: 2

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 20:32:49

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	28184	3	Standard
Cl	37		ug/L			3592149	3451061	3	Standard
[> Sc	45		ug/L			551279	563124	2	Standard
| Cr	52	0.165	ug/L	0.013	7	21929	26149	3	Standard
| Cr	53	0.332	ug/L	0.006	1	168	1045	2	Standard
| Mn	55	1.007	ug/L	0.014	1	725	33474	3	Standard
[> Ge	72		ug/L			26465	25939	4	KED
| Ni	60	0.172	ug/L	0.012	6	40	205	7	KED
| Ni	62	0.255	ug/L	0.021	8	6	47	6	KED
| Cu	63	1.652	ug/L	0.074	4	175	4855	1	KED
| Cu	65	1.595	ug/L	0.175	10	91	2364	11	KED
| Zn	66	9.398	ug/L	0.266	2	71	3594	4	KED
| Zn	67	7.958	ug/L	0.600	7	10	504	5	KED
| As	75	0.639	ug/L	0.043	6	12	128	1	KED
| Se	78	0.213	ug/L	0.028	13	10	15	8	KED
Y	89		ug/L			376878	394144	1	Standard
Kr	83		ug/L			56	55	17	Standard
[> In-1	115		ug/L			7985	8620	3	KED
| Cd	111	0.006	ug/L	0.011	190	0	2	114	KED
| Cd	114	0.001	ug/L	0.006	581	1	2	153	KED
[> In	115		ug/L			514682	507183	1	Standard
| Ag	107	-0.001	ug/L	0.000	29	116	103	2	Standard
| Ba	135	0.677	ug/L	0.017	2	102	2811	4	Standard
| Ba	137	0.702	ug/L	0.028	4	172	5056	2	Standard
[> Tb	159		ug/L			707850	713151	3	Standard
| Tl	205	0.001	ug/L	0.001	171	57	87	58	Standard
| Pb	208	0.161	ug/L	0.005	3	326	8744	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 20:37:35

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21233	5	Standard
Cl	37		ug/L			3592149	3469200	2	Standard
[> Sc	45		ug/L			551279	526739	2	Standard
| Cr	52	0.028	ug/L	0.051	182	21929	21536	3	Standard
| Cr	53	0.051	ug/L	0.005	9	168	286	3	Standard
| Mn	55	0.003	ug/L	0.001	25	725	789	3	Standard
[> Ge	72		ug/L			26465	26152	1	KED
| Ni	60	-0.028	ug/L	0.006	20	40	12	43	KED
| Ni	62	-0.027	ug/L	0.007	26	6	2	43	KED
| Cu	63	-0.037	ug/L	0.001	3	175	67	6	KED
| Cu	65	-0.034	ug/L	0.006	16	91	41	20	KED
| Zn	66	-0.031	ug/L	0.016	52	71	58	9	KED
| Zn	67	-0.069	ug/L	0.035	50	10	6	34	KED
| As	75	-0.039	ug/L	0.006	14	12	5	19	KED
| Se	78	0.115	ug/L	0.094	82	10	13	16	KED
Y	89		ug/L			376878	361960	1	Standard
Kr	83		ug/L			56	70	21	Standard
[> In-1	115		ug/L			7985	7865	2	KED
| Cd	111	0.003	ug/L	0.006	220	0	1	91	KED
| Cd	114	0.002	ug/L	0.007	304	1	3	129	KED
[> In	115		ug/L			514682	491682	3	Standard
| Ag	107	-0.003	ug/L	0.000	13	116	52	14	Standard
| Ba	135	-0.010	ug/L	0.002	23	102	57	18	Standard
| Ba	137	-0.010	ug/L	0.001	10	172	100	9	Standard
[> Tb	159		ug/L			707850	687455	1	Standard
| Tl	205	-0.001	ug/L	0.000	11	57	22	17	Standard
| Pb	208	-0.001	ug/L	0.000	18	326	275	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, March 16, 2023 20:42:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22341	3	Standard
Cl	37		ug/L			3592149	3623684	2	Standard
[> Sc	45		ug/L			551279	548510	2	Standard
| Cr	52	48.255	ug/L	1.362	2	21929	1089947	0	Standard
| Cr	53	48.742	ug/L	0.967	1	168	125193	0	Standard
| Mn	55	49.954	ug/L	1.947	3	725	1581365	2	Standard
[> Ge	72		ug/L			26465	24383	9	KED
| Ni	60	48.681	ug/L	1.228	2	40	43986	10	KED
| Ni	62	49.600	ug/L	2.067	4	6	7474	10	KED
| Cu	63	50.148	ug/L	0.531	1	175	133969	8	KED
| Cu	65	49.496	ug/L	0.186	0	91	66449	9	KED
| Zn	66	51.285	ug/L	0.242	0	71	18155	9	KED
| Zn	67	51.482	ug/L	0.760	1	10	3019	9	KED
| As	75	50.447	ug/L	0.435	0	12	8693	8	KED
[Se	78	49.946	ug/L	1.409	2	10	964	7	KED
Y	89		ug/L			376878	392304	2	Standard
Kr	83		ug/L			56	64	17	Standard
[> In-1	115		ug/L			7985	8414	2	KED
| Cd	111	49.241	ug/L	0.748	1	0	12495	1	KED
| Cd	114	49.633	ug/L	1.058	2	1	30936	0	KED
[> In	115		ug/L			514682	509095	2	Standard
| Ag	107	50.765	ug/L	1.690	3	116	990086	1	Standard
| Ba	135	50.419	ug/L	2.607	5	102	202638	2	Standard
[Ba	137	50.301	ug/L	0.963	1	172	351810	0	Standard
[> Tb	159		ug/L			707850	734975	1	Standard
| Tl	205	50.517	ug/L	0.618	1	57	2096913	1	Standard
[Pb	208	50.247	ug/L	0.822	1	326	2701181	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 20:49:50

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22725	0	Standard
Cl	37		ug/L			3592149	3589980	1	Standard
> Sc	45		ug/L			551279	545179	2	Standard
| Cr	52	48.903	ug/L	0.499	1	21929	1097778	1	Standard
| Cr	53	49.104	ug/L	1.633	3	168	125316	0	Standard
| Mn	55	49.640	ug/L	1.088	2	725	1562049	2	Standard
> Ge	72		ug/L			26465	26861	0	KED
| Ni	60	50.089	ug/L	0.517	1	40	49823	1	KED
| Ni	62	47.384	ug/L	1.015	2	6	7865	1	KED
| Cu	63	50.209	ug/L	0.193	0	175	147804	0	KED
| Cu	65	49.847	ug/L	0.647	1	91	73733	1	KED
| Zn	66	50.181	ug/L	0.487	0	71	19565	0	KED
| Zn	67	50.919	ug/L	0.930	1	10	3290	1	KED
| As	75	49.687	ug/L	0.667	1	12	9435	0	KED
| Se	78	51.007	ug/L	2.037	3	10	1086	3	KED
Y	89		ug/L			376878	380388	1	Standard
Kr	83		ug/L			56	67	15	Standard
> In-1	115		ug/L			7985	7777	9	KED
| Cd	111	50.804	ug/L	3.807	7	0	11862	2	KED
| Cd	114	50.993	ug/L	3.893	7	1	29249	2	KED
> In	115		ug/L			514682	507767	1	Standard
| Ag	107	50.717	ug/L	1.404	2	116	986971	2	Standard
| Ba	135	49.617	ug/L	1.028	2	102	199026	1	Standard
| Ba	137	50.114	ug/L	0.823	1	172	349657	1	Standard
> Tb	159		ug/L			707850	732488	2	Standard
| Tl	205	50.473	ug/L	1.570	3	57	2087216	0	Standard
| Pb	208	49.554	ug/L	1.307	2	326	2654252	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 20:57:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21528	0	Standard
Cl	37		ug/L			3592149	3600317	2	Standard
[> Sc	45		ug/L			551279	517326	0	Standard
| Cr	52	0.031	ug/L	0.003	8	21929	21236	1	Standard
| Cr	53	0.014	ug/L	0.003	24	168	192	4	Standard
| Mn	55	0.009	ug/L	0.001	10	725	935	2	Standard
[> Ge	72		ug/L			26465	25837	3	KED
| Ni	60	-0.033	ug/L	0.009	28	40	8	113	KED
| Ni	62	-0.023	ug/L	0.025	109	6	3	124	KED
| Cu	63	-0.030	ug/L	0.005	15	175	85	12	KED
| Cu	65	-0.037	ug/L	0.001	3	91	36	2	KED
| Zn	66	-0.020	ug/L	0.041	203	71	61	22	KED
| Zn	67	-0.057	ug/L	0.018	31	10	6	15	KED
| As	75	-0.040	ug/L	0.002	5	12	4	10	KED
[Se	78	0.121	ug/L	0.162	134	10	13	21	KED
Y	89		ug/L			376878	368590	2	Standard
Kr	83		ug/L			56	63	19	Standard
[> In-1	115		ug/L			7985	8055	1	KED
| Cd	111	0.001	ug/L	0.006	460	0	1	114	KED
[Cd	114	0.000	ug/L	0.000	2277	1	1	1	KED
[> In	115		ug/L			514682	499491	1	Standard
| Ag	107	0.010	ug/L	0.002	18	116	313	10	Standard
| Ba	135	0.084	ug/L	0.009	11	102	428	7	Standard
[Ba	137	0.087	ug/L	0.008	9	172	765	6	Standard
[> Tb	159		ug/L			707850	697097	1	Standard
| Tl	205	0.002	ug/L	0.000	22	57	126	11	Standard
[Pb	208	0.003	ug/L	0.000	16	326	466	5	Standard

ICP-MS Quantitative Analysis - Summary Report

23C0035

Sample ID: **23B0035-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:04:03**

MB 3/16/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	29443	4	Standard
Cl	37		ug/L			3592149	3376531	2	Standard
> Sc	45		ug/L			551279	574616	3	Standard
| Cr	52	0.197	ug/L	0.029	14	21929	27416	2	Standard
| Cr	53	0.350	ug/L	0.007	2	168	1117	4	Standard
| Mn	55	1.990	ug/L	0.021	1	725	66722	3	Standard
> Ge	72		ug/L			26465	26815	1	KED
| Ni	60	0.056	ug/L	0.004	6	40	96	4	KED
| Ni	62	0.030	ug/L	0.018	60	6	12	24	KED
| Cu	63	3.210	ug/L	0.092	2	175	9599	3	KED
| Cu	65	3.096	ug/L	0.128	4	91	4659	4	KED
| Zn	66	15.283	ug/L	0.367	2	71	5998	1	KED
| Zn	67	13.979	ug/L	0.289	2	10	909	2	KED
| As	75	1.248	ug/L	0.022	1	12	248	2	KED
| Se	78	0.327	ug/L	0.153	46	10	17	17	KED
Y	89		ug/L			376878	382517	4	Standard
Kr	83		ug/L			56	54	14	Standard
> In-1	115		ug/L			7985	8027	1	KED
| Cd	111	0.012	ug/L	0.008	66	0	3	50	KED
| Cd	114	0.005	ug/L	0.004	77	1	4	47	KED
> In	115		ug/L			514682	500057	3	Standard
| Ag	107	0.003	ug/L	0.000	5	116	178	5	Standard
| Ba	135	1.383	ug/L	0.032	2	102	5559	1	Standard
| Ba	137	1.375	ug/L	0.021	1	172	9610	2	Standard
> Tb	159		ug/L			707850	709317	4	Standard
| Tl	205	0.003	ug/L	0.000	8	57	180	9	Standard
| Pb	208	0.131	ug/L	0.003	2	326	7132	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:09:10**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	34532	1	Standard
Cl	37		ug/L			3592149	3588634	0	Standard
> Sc	45		ug/L			551279	627638	3	Standard
| Cr	52	0.424	ug/L	0.023	5	21929	35711	3	Standard
| Cr	53	0.945	ug/L	0.024	2	168	2967	5	Standard
| Mn	55	30.504	ug/L	0.791	2	725	1105610	3	Standard
> Ge	72		ug/L			26465	27270	1	KED
| Ni	60	0.328	ug/L	0.040	12	40	373	11	KED
| Ni	62	0.312	ug/L	0.082	26	6	59	22	KED
| Cu	63	0.555	ug/L	0.033	6	175	1836	5	KED
| Cu	65	0.523	ug/L	0.014	2	91	878	3	KED
| Zn	66	3.281	ug/L	0.065	1	71	1367	1	KED
| Zn	67	3.861	ug/L	0.435	11	10	263	10	KED
| As	75	0.735	ug/L	0.016	2	12	154	0	KED
| Se	78	0.356	ug/L	0.098	27	10	18	10	KED
Y	89		ug/L			376878	388413	3	Standard
Kr	83		ug/L			56	74	6	Standard
> In-1	115		ug/L			7985	8309	1	KED
| Cd	111	0.005	ug/L	0.012	250	0	2	137	KED
| Cd	114	0.007	ug/L	0.005	65	1	6	46	KED
> In	115		ug/L			514682	509203	2	Standard
| Ag	107	0.003	ug/L	0.001	18	116	175	4	Standard
| Ba	135	5.654	ug/L	0.089	1	102	22842	3	Standard
| Ba	137	5.618	ug/L	0.054	0	172	39467	2	Standard
> Tb	159		ug/L			707850	720475	3	Standard
| Tl	205	0.002	ug/L	0.000	9	57	139	7	Standard
| Pb	208	0.166	ug/L	0.001	0	326	9066	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0393-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:15:01**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	35654	4	Standard
Cl	37		ug/L			3592149	3595678	1	Standard
> Sc	45		ug/L			551279	613835	3	Standard
| Cr	52	0.436	ug/L	0.014	3	21929	35230	2	Standard
| Cr	53	0.958	ug/L	0.020	2	168	2936	1	Standard
| Mn	55	31.347	ug/L	0.683	2	725	1110770	1	Standard
> Ge	72		ug/L			26465	26344	2	KED
| Ni	60	0.331	ug/L	0.011	3	40	362	0	KED
| Ni	62	0.321	ug/L	0.046	14	6	59	11	KED
| Cu	63	0.493	ug/L	0.007	1	175	1597	3	KED
| Cu	65	0.504	ug/L	0.016	3	91	820	0	KED
| Zn	66	1.021	ug/L	0.068	6	71	460	8	KED
| Zn	67	1.598	ug/L	0.339	21	10	111	19	KED
| As	75	0.845	ug/L	0.038	4	12	169	4	KED
| Se	78	0.194	ug/L	0.139	71	10	14	20	KED
Y	89		ug/L			376878	385173	3	Standard
Kr	83		ug/L			56	57	11	Standard
> In-1	115		ug/L			7985	8164	3	KED
| Cd	111	0.001	ug/L	0.004	396	0	1	86	KED
| Cd	114	0.003	ug/L	0.003	104	1	3	52	KED
> In	115		ug/L			514682	493882	2	Standard
| Ag	107	0.001	ug/L	0.001	158	116	122	14	Standard
| Ba	135	5.969	ug/L	0.195	3	102	23374	3	Standard
| Ba	137	5.892	ug/L	0.017	0	172	40137	1	Standard
> Tb	159		ug/L			707850	718984	1	Standard
| Tl	205	0.002	ug/L	0.001	33	57	129	16	Standard
| Pb	208	0.162	ug/L	0.002	1	326	8835	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0393-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:19:46**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	33187	0	Standard
Cl	37		ug/L			3592149	3647469	4	Standard
> Sc	45		ug/L			551279	621783	1	Standard
| Cr	52	21.967	ug/L	0.165	0	21929	576095	1	Standard
| Cr	53	22.886	ug/L	0.171	0	168	66758	2	Standard
| Mn	55	53.142	ug/L	0.242	0	725	1907685	1	Standard
> Ge	72		ug/L			26465	25661	2	KED
| Ni	60	24.637	ug/L	0.634	2	40	23435	4	KED
| Ni	62	25.623	ug/L	0.792	3	6	4066	3	KED
| Cu	63	26.527	ug/L	0.419	1	175	74664	1	KED
| Cu	65	25.692	ug/L	0.058	0	91	36347	2	KED
| Zn	66	79.887	ug/L	2.225	2	71	29706	2	KED
| Zn	67	76.418	ug/L	0.943	1	10	4711	1	KED
| As	75	25.618	ug/L	0.406	1	12	4652	1	KED
| Se	78	77.931	ug/L	0.890	1	10	1579	1	KED
Y	89		ug/L			376878	388204	1	Standard
Kr	83		ug/L			56	55	12	Standard
> In-1	115		ug/L			7985	7904	3	KED
| Cd	111	24.828	ug/L	0.716	2	0	5918	2	KED
| Cd	114	24.764	ug/L	0.813	3	1	14495	0	KED
> In	115		ug/L			514682	499875	1	Standard
| Ag	107	26.042	ug/L	0.032	0	116	499024	1	Standard
| Ba	135	31.747	ug/L	0.449	1	102	125429	2	Standard
| Ba	137	31.445	ug/L	0.041	0	172	216075	1	Standard
> Tb	159		ug/L			707850	712972	1	Standard
| Tl	205	25.449	ug/L	0.389	1	57	1024817	1	Standard
| Pb	208	26.435	ug/L	0.337	1	326	1378805	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0283-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:28:57**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	36177	3	Standard
Cl	37		ug/L			3592149	3384450	1	Standard
[> Sc	45		ug/L			551279	547681	0	Standard
| Cr	52	35.631	ug/L	0.600	1	21929	809608	2	Standard
| Cr	53	36.128	ug/L	1.343	3	168	92730	4	Standard
| Mn	55	28.447	ug/L	0.636	2	725	899821	2	Standard
[> Ge	72		ug/L			26465	26906	1	KED
| Ni	60	2.011	ug/L	0.067	3	40	2042	2	KED
| Ni	62	1.799	ug/L	0.101	5	6	306	6	KED
| Cu	63	17.306	ug/L	0.277	1	175	51155	2	KED
| Cu	65	17.010	ug/L	0.333	1	91	25267	3	KED
| Zn	66	81.069	ug/L	0.794	0	71	31621	2	KED
| Zn	67	75.460	ug/L	2.406	3	10	4878	2	KED
| As	75	0.695	ug/L	0.015	2	12	144	1	KED
[Se	78	0.240	ug/L	0.245	101	10	16	31	KED
| Y	89		ug/L			376878	395575	2	Standard
| Kr	83		ug/L			56	53	14	Standard
[> In-1	115		ug/L			7985	8456	1	KED
| Cd	111	0.134	ug/L	0.036	27	0	35	28	KED
| Cd	114	0.109	ug/L	0.024	21	1	70	23	KED
[> In	115		ug/L			514682	507676	2	Standard
| Ag	107	0.073	ug/L	0.002	2	116	1544	2	Standard
| Ba	135	16.269	ug/L	0.434	2	102	65300	0	Standard
[Ba	137	16.500	ug/L	0.536	3	172	115176	1	Standard
[> Tb	159		ug/L			707850	702021	0	Standard
| Tl	205	0.015	ug/L	0.000	0	57	657	1	Standard
[Pb	208	12.972	ug/L	0.090	0	326	666449	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0283-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:34:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	32821	3	Standard
Cl	37		ug/L			3592149	8419660	2	Standard
> Sc	45		ug/L			551279	537987	2	Standard
| Cr	52	0.401	ug/L	0.032	7	21929	30121	3	Standard
| Cr	53	6.157	ug/L	0.096	1	168	15656	2	Standard
| Mn	55	4.752	ug/L	0.107	2	725	148178	0	Standard
> Ge	72		ug/L			26465	25411	1	KED
| Ni	60	0.473	ug/L	0.013	2	40	483	3	KED
| Ni	62	0.382	ug/L	0.031	8	6	66	7	KED
| Cu	63	0.503	ug/L	0.020	3	175	1566	3	KED
| Cu	65	0.518	ug/L	0.020	3	91	812	4	KED
| Zn	66	0.807	ug/L	0.081	10	71	365	9	KED
| Zn	67	1.904	ug/L	0.125	6	10	126	6	KED
| As	75	1.280	ug/L	0.085	6	12	241	6	KED
| Se	78	0.341	ug/L	0.124	36	10	17	13	KED
Y	89		ug/L			376878	373731	1	Standard
Kr	83		ug/L			56	58	20	Standard
> In-1	115		ug/L			7985	7691	3	KED
| Cd	111	0.005	ug/L	0.013	237	0	2	137	KED
| Cd	114	0.002	ug/L	0.005	354	1	2	120	KED
> In	115		ug/L			514682	476608	1	Standard
| Ag	107	0.002	ug/L	0.000	13	116	153	3	Standard
| Ba	135	12.826	ug/L	0.141	1	102	48366	1	Standard
| Ba	137	12.750	ug/L	0.068	0	172	83626	0	Standard
> Tb	159		ug/L			707850	683002	1	Standard
| Tl	205	0.004	ug/L	0.000	8	57	215	5	Standard
| Pb	208	0.055	ug/L	0.002	3	326	3083	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0285-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:38:58**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	42337	4	Standard
Cl	37		ug/L			3592149	8403677	2	Standard
> Sc	45		ug/L			551279	513047	0	Standard
| Cr	52	7.925	ug/L	0.205	2	21929	184520	1	Standard
| Cr	53	14.679	ug/L	0.116	0	168	35384	0	Standard
| Mn	55	19.468	ug/L	0.361	1	725	577028	1	Standard
> Ge	72		ug/L			26465	25937	2	KED
| Ni	60	2.166	ug/L	0.011	0	40	2118	2	KED
| Ni	62	2.246	ug/L	0.127	5	6	366	3	KED
| Cu	63	12.424	ug/L	0.131	1	175	35440	1	KED
| Cu	65	12.548	ug/L	0.189	1	91	17993	3	KED
| Zn	66	35.874	ug/L	1.272	3	71	13526	4	KED
| Zn	67	35.542	ug/L	1.946	5	10	2219	4	KED
| As	75	2.044	ug/L	0.050	2	12	386	0	KED
| Se	78	0.336	ug/L	0.154	45	10	17	20	KED
Y	89		ug/L			376878	357595	1	Standard
Kr	83		ug/L			56	72	10	Standard
> In-1	115		ug/L			7985	7894	0	KED
| Cd	111	0.040	ug/L	0.033	81	0	10	74	KED
| Cd	114	0.047	ug/L	0.006	12	1	29	11	KED
> In	115		ug/L			514682	465809	0	Standard
| Ag	107	0.005	ug/L	0.001	24	116	186	10	Standard
| Ba	135	33.891	ug/L	0.302	0	102	124758	0	Standard
| Ba	137	34.131	ug/L	0.229	0	172	218528	0	Standard
> Tb	159		ug/L			707850	670262	1	Standard
| Tl	205	0.002	ug/L	0.000	15	57	133	9	Standard
| Pb	208	0.386	ug/L	0.004	1	326	19227	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0390-DUP2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:43:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	44324	4	Standard
Cl	37		ug/L			3592149	8325135	2	Standard
[> Sc	45		ug/L			551279	521645	1	Standard
| Cr	52	7.756	ug/L	0.112	1	21929	184086	1	Standard
| Cr	53	14.510	ug/L	0.297	2	168	35567	2	Standard
| Mn	55	18.960	ug/L	0.262	1	725	571471	2	Standard
[> Ge	72		ug/L			26465	24901	1	KED
| Ni	60	1.999	ug/L	0.047	2	40	1880	2	KED
| Ni	62	2.199	ug/L	0.016	0	6	344	1	KED
| Cu	63	12.422	ug/L	0.083	0	175	34025	2	KED
| Cu	65	12.149	ug/L	0.074	0	91	16724	1	KED
| Zn	66	35.532	ug/L	0.709	1	71	12862	1	KED
| Zn	67	35.460	ug/L	0.510	1	10	2127	2	KED
| As	75	2.129	ug/L	0.037	1	12	385	1	KED
| Se	78	0.285	ug/L	0.047	16	10	15	5	KED
| Y	89		ug/L			376878	350090	1	Standard
| Kr	83		ug/L			56	53	13	Standard
[> In-1	115		ug/L			7985	7568	3	KED
| Cd	111	0.040	ug/L	0.012	28	0	10	28	KED
| Cd	114	0.034	ug/L	0.006	17	1	20	14	KED
[> In	115		ug/L			514682	470213	0	Standard
| Ag	107	0.006	ug/L	0.002	40	116	210	20	Standard
| Ba	135	33.148	ug/L	0.512	1	102	123186	2	Standard
| Ba	137	33.461	ug/L	0.386	1	172	216271	1	Standard
[> Tb	159		ug/L			707850	671671	0	Standard
| Tl	205	0.003	ug/L	0.001	54	57	155	34	Standard
| Pb	208	0.384	ug/L	0.003	0	326	19180	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0390-MS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 21:48:29**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	43056	1	Standard
Cl	37		ug/L			3592149	8403729	3	Standard
> Sc	45		ug/L			551279	520528	1	Standard
| Cr	52	29.925	ug/L	0.432	1	21929	649433	0	Standard
| Cr	53	36.717	ug/L	1.017	2	168	89541	2	Standard
| Mn	55	42.125	ug/L	0.388	0	725	1266005	1	Standard
> Ge	72		ug/L			26465	24363	1	KED
| Ni	60	26.131	ug/L	0.578	2	40	23587	0	KED
| Ni	62	26.299	ug/L	0.252	0	6	3962	1	KED
| Cu	63	37.506	ug/L	1.341	3	175	100153	2	KED
| Cu	65	36.710	ug/L	1.213	3	91	49254	1	KED
| Zn	66	109.497	ug/L	2.906	2	71	38643	2	KED
| Zn	67	105.855	ug/L	1.369	1	10	6194	3	KED
| As	75	27.425	ug/L	0.225	0	12	4729	2	KED
| Se	78	76.493	ug/L	1.351	1	10	1473	3	KED
Y	89		ug/L			376878	354924	1	Standard
Kr	83		ug/L			56	75	1	Standard
> In-1	115		ug/L			7985	7488	0	KED
| Cd	111	23.253	ug/L	0.643	2	0	5252	2	KED
| Cd	114	22.765	ug/L	0.381	1	1	12632	1	KED
> In	115		ug/L			514682	468399	1	Standard
| Ag	107	23.866	ug/L	0.610	2	116	428469	1	Standard
| Ba	135	59.295	ug/L	0.587	0	102	219424	1	Standard
| Ba	137	59.614	ug/L	0.879	1	172	383665	0	Standard
> Tb	159		ug/L			707850	672254	1	Standard
| Tl	205	23.448	ug/L	0.540	2	57	890238	1	Standard
| Pb	208	23.675	ug/L	0.197	0	326	1164393	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 21:53:15

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	22104	0	Standard
Cl	37		ug/L			3592149	3508158	1	Standard
[> Sc	45		ug/L			551279	479220	1	Standard
| Cr	52	0.048	ug/L	0.027	55	21929	19990	1	Standard
| Cr	53	0.336	ug/L	0.007	2	168	900	2	Standard
| Mn	55	0.001	ug/L	0.000	13	725	668	1	Standard
[> Ge	72		ug/L			26465	25182	4	KED
| Ni	60	-0.019	ug/L	0.023	116	40	20	100	KED
| Ni	62	-0.006	ug/L	0.013	212	6	5	33	KED
| Cu	63	-0.011	ug/L	0.025	224	175	134	48	KED
| Cu	65	-0.015	ug/L	0.040	274	91	66	80	KED
| Zn	66	-0.006	ug/L	0.114	1759	71	64	61	KED
| Zn	67	-0.024	ug/L	0.071	300	10	8	49	KED
| As	75	-0.025	ug/L	0.034	134	12	7	78	KED
[Se	78	0.236	ug/L	0.057	24	10	15	6	KED
Y	89		ug/L			376878	342025	2	Standard
Kr	83		ug/L			56	59	12	Standard
[> In-1	115		ug/L			7985	7836	2	KED
| Cd	111	0.000	ug/L	0.004	7262	0	0	100	KED
| Cd	114	0.000	ug/L	0.006	4477	1	1	183	KED
[> In	115		ug/L			514682	476400	0	Standard
| Ag	107	-0.001	ug/L	0.001	62	116	83	19	Standard
| Ba	135	-0.011	ug/L	0.003	24	102	51	20	Standard
[Ba	137	-0.011	ug/L	0.002	21	172	88	16	Standard
[> Tb	159		ug/L			707850	648916	1	Standard
| Tl	205	0.002	ug/L	0.001	31	57	132	18	Standard
[Pb	208	0.002	ug/L	0.000	12	326	372	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 21:58:01

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	21327	2	Standard
Cl	37		ug/L			3592149	3493769	3	Standard
> Sc	45		ug/L			551279	508715	5	Standard
| Cr	52	48.956	ug/L	1.362	2	21929	1025177	4	Standard
| Cr	53	49.482	ug/L	0.778	1	168	117854	3	Standard
| Mn	55	49.242	ug/L	1.335	2	725	1444981	2	Standard
> Ge	72		ug/L			26465	25179	2	KED
| Ni	60	48.657	ug/L	0.556	1	40	45374	3	KED
| Ni	62	50.046	ug/L	0.430	0	6	7786	1	KED
| Cu	63	49.663	ug/L	0.301	0	175	137047	2	KED
| Cu	65	49.714	ug/L	1.341	2	91	68930	3	KED
| Zn	66	49.826	ug/L	1.648	3	71	18212	4	KED
| Zn	67	50.370	ug/L	0.789	1	10	3051	3	KED
| As	75	49.883	ug/L	0.235	0	12	8878	2	KED
| Se	78	50.987	ug/L	1.004	1	10	1018	3	KED
Y	89		ug/L			376878	357973	2	Standard
Kr	83		ug/L			56	64	9	Standard
> In-1	115		ug/L			7985	8141	2	KED
| Cd	111	48.627	ug/L	0.928	1	0	11944	3	KED
| Cd	114	48.009	ug/L	0.538	1	1	28962	2	KED
> In	115		ug/L			514682	492313	2	Standard
| Ag	107	50.540	ug/L	0.581	1	116	953489	1	Standard
| Ba	135	49.972	ug/L	1.418	2	102	194300	2	Standard
| Ba	137	50.051	ug/L	1.088	2	172	338517	1	Standard
> Tb	159		ug/L			707850	701291	2	Standard
| Tl	205	49.872	ug/L	1.779	3	57	1975358	4	Standard
| Pb	208	49.548	ug/L	0.066	0	326	2541999	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 22:05:31

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21673	20842	2	Standard
Cl	37		ug/L			3592149	3455949	1	Standard
[> Sc	45		ug/L			551279	502672	1	Standard
| Cr	52	0.022	ug/L	0.017	76	21929	20431	0	Standard
| Cr	53	0.100	ug/L	0.009	9	168	387	4	Standard
| Mn	55	0.003	ug/L	0.001	45	725	754	4	Standard
[> Ge	72		ug/L			26465	25100	0	KED
| Ni	60	-0.029	ug/L	0.004	13	40	11	33	KED
| Ni	62	-0.043	ug/L	0.000	0	6	0		KED
| Cu	63	-0.033	ug/L	0.005	14	175	74	17	KED
| Cu	65	-0.037	ug/L	0.006	16	91	36	22	KED
| Zn	66	-0.013	ug/L	0.016	123	71	62	9	KED
| Zn	67	0.051	ug/L	0.032	61	10	13	14	KED
| As	75	-0.032	ug/L	0.011	34	12	6	32	KED
[Se	78	0.224	ug/L	0.116	51	10	14	15	KED
Y	89		ug/L			376878	344733	2	Standard
Kr	83		ug/L			56	62	16	Standard
[> In-1	115		ug/L			7985	7980	2	KED
| Cd	111	0.000	ug/L	0.004	6229	0	0	100	KED
[Cd	114	0.002	ug/L	0.004	176	1	3	73	KED
[> In	115		ug/L			514682	493289	0	Standard
| Ag	107	0.008	ug/L	0.001	14	116	265	8	Standard
| Ba	135	0.088	ug/L	0.005	5	102	441	5	Standard
[Ba	137	0.088	ug/L	0.003	3	172	763	1	Standard
[> Tb	159		ug/L			707850	679402	1	Standard
| Tl	205	0.001	ug/L	0.000	38	57	93	14	Standard
[Pb	208	0.003	ug/L	0.001	30	326	466	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 22:15:52

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13	ug/L				19805	1	Standard
	Cl	37	ug/L				3322518	0	Standard
[>	Sc	45	ug/L				491766	2	Standard
|	Cr	52	ug/L				20438	2	Standard
|	Cr	53	ug/L				299	5	Standard
[>	Ge	72	ug/L				25430	2	KED
|	Ni	60	ug/L				10	57	KED
|	Ni	62	ug/L				3	124	KED
|	Cu	63	ug/L				66	15	KED
|	Cu	65	ug/L				22	43	KED
|	Zn	66	ug/L				27	17	KED
|	Zn	67	ug/L				1	86	KED
|	As	75	ug/L				4	31	KED
|	Se	78	ug/L				11	41	KED
	Y	89	ug/L				352268	2	Standard
	Kr	83	ug/L				57	13	Standard
[>	In-1	115	ug/L				8274	0	KED
|	Cd	111	ug/L				0	100	KED
|	Cd	114	ug/L				1	95	KED
[>	In	115	ug/L				483589	2	Standard
|	Ag	107	ug/L				103	15	Standard
[>	Tb	159	ug/L				666189	4	Standard
|	Tl	205	ug/L				46	20	Standard
|	Pb	208	ug/L				207	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 22:20:31

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	23028	2	Standard
Cl	37		ug/L			3322518	3473787	1	Standard
[> Sc	45		ug/L			491766	525556	1	Standard
| Cr	52	47.966	ug/L	0.920	1	20438	1039384	1	Standard
| Cr	53	48.101	ug/L	0.637	1	299	118556	0	Standard
[> Ge	72		ug/L			25430	26399	1	KED
| Ni	60	48.556	ug/L	0.931	1	10	47438	2	KED
| Ni	62	47.293	ug/L	1.462	3	3	7709	1	KED
| Cu	63	48.999	ug/L	0.239	0	66	141654	1	KED
| Cu	65	49.308	ug/L	0.673	1	22	71606	1	KED
| Zn	66	49.917	ug/L	1.110	2	27	19086	2	KED
| Zn	67	49.553	ug/L	0.886	1	1	3137	0	KED
| As	75	48.992	ug/L	0.589	1	4	9134	0	KED
| Se	78	49.580	ug/L	1.390	2	11	1039	2	KED
Y	89		ug/L			352268	369894	1	Standard
Kr	83		ug/L			57	63	9	Standard
[> In-1	115		ug/L			8274	8403	1	KED
| Cd	111	48.653	ug/L	2.156	4	0	12328	3	KED
| Cd	114	47.885	ug/L	1.172	2	1	29813	1	KED
[> In	115		ug/L			483589	508392	1	Standard
| Ag	107	49.001	ug/L	0.878	1	103	954841	2	Standard
[> Tb	159		ug/L			666189	716662	1	Standard
| Tl	205	48.914	ug/L	0.884	1	46	1979710	0	Standard
| Pb	208	48.972	ug/L	0.392	0	207	2567178	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 22:27:55

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	20300	1	Standard
Cl	37		ug/L			3322518	3379693	2	Standard
[> Sc	45		ug/L			491766	498521	0	Standard
| Cr	52	-0.018	ug/L	0.024	134	20438	20357	2	Standard
| Cr	53	-0.018	ug/L	0.004	21	299	260	2	Standard
[> Ge	72		ug/L			25430	25882	2	KED
| Ni	60	-0.005	ug/L	0.000	3	10	5	0	KED
| Ni	62	-0.012	ug/L	0.007	54	3	1	86	KED
| Cu	63	-0.009	ug/L	0.003	34	66	42	22	KED
| Cu	65	0.005	ug/L	0.008	160	22	29	35	KED
| Zn	66	0.005	ug/L	0.027	530	27	30	34	KED
| Zn	67	0.040	ug/L	0.030	73	1	3	50	KED
| As	75	-0.001	ug/L	0.009	1475	4	4	36	KED
| Se	78	0.106	ug/L	0.053	50	11	13	7	KED
Y	89		ug/L			352268	349083	2	Standard
Kr	83		ug/L			57	60	14	Standard
[> In-1	115		ug/L			8274	7895	1	KED
| Cd	111	0.003	ug/L	0.002	83	0	1	34	KED
| Cd	114	0.002	ug/L	0.005	221	1	2	121	KED
[> In	115		ug/L			483589	496141	1	Standard
| Ag	107	0.007	ug/L	0.002	24	103	241	12	Standard
[> Tb	159		ug/L			666189	667611	1	Standard
| Tl	205	0.002	ug/L	0.001	29	46	113	18	Standard
| Pb	208	0.002	ug/L	0.000	14	207	329	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0394-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 22:32:34

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	28765	3	Standard
Cl	37		ug/L			3322518	3281574	1	Standard
[> Sc	45		ug/L			491766	483716	2	Standard
| Cr	52	0.043	ug/L	0.043	98	20438	20938	3	Standard
| Cr	53	0.008	ug/L	0.012	143	299	312	6	Standard
[> Ge	72		ug/L			25430	24471	0	KED
| Ni	60	-0.002	ug/L	0.003	187	10	8	35	KED
| Ni	62	-0.016	ug/L	0.007	45	3	0	173	KED
| Cu	63	0.031	ug/L	0.008	26	66	146	15	KED
| Cu	65	0.026	ug/L	0.005	19	22	56	11	KED
| Zn	66	0.107	ug/L	0.028	26	27	64	15	KED
| Zn	67	0.120	ug/L	0.050	41	1	8	35	KED
| As	75	-0.007	ug/L	0.004	59	4	3	20	KED
| Se	78	0.057	ug/L	0.084	148	11	12	13	KED
Y	89		ug/L			352268	345253	1	Standard
Kr	83		ug/L			57	60	24	Standard
[> In-1	115		ug/L			8274	8289	1	KED
| Cd	111	0.004	ug/L	0.004	99	0	1	50	KED
| Cd	114	0.003	ug/L	0.002	57	1	3	36	KED
[> In	115		ug/L			483589	485703	2	Standard
| Ag	107	0.002	ug/L	0.000	18	103	142	4	Standard
[> Tb	159		ug/L			666189	672756	2	Standard
| Tl	205	0.001	ug/L	0.000	24	46	104	10	Standard
| Pb	208	0.007	ug/L	0.001	10	207	573	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0394-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 22:37:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	28741	2	Standard
Cl	37		ug/L			3322518	3329353	2	Standard
[> Sc	45		ug/L			491766	476958	2	Standard
| Cr	52	24.259	ug/L	0.331	1	20438	486865	2	Standard
| Cr	53	24.713	ug/L	0.521	2	299	55422	3	Standard
[> Ge	72		ug/L			25430	25874	1	KED
| Ni	60	24.200	ug/L	0.238	0	10	23176	1	KED
| Ni	62	24.290	ug/L	1.618	6	3	3881	5	KED
| Cu	63	25.551	ug/L	0.128	0	66	72432	1	KED
| Cu	65	24.871	ug/L	0.718	2	22	35424	4	KED
| Zn	66	82.425	ug/L	0.907	1	27	30868	1	KED
| Zn	67	75.806	ug/L	2.649	3	1	4702	2	KED
| As	75	24.607	ug/L	0.126	0	4	4500	2	KED
| Se	78	82.162	ug/L	1.569	1	11	1679	1	KED
Y	89		ug/L			352268	345323	0	Standard
Kr	83		ug/L			57	60	11	Standard
[> In-1	115		ug/L			8274	8220	4	KED
| Cd	111	24.784	ug/L	1.375	5	0	6138	3	KED
| Cd	114	24.573	ug/L	0.708	2	1	14962	3	KED
[> In	115		ug/L			483589	480789	0	Standard
| Ag	107	25.140	ug/L	0.672	2	103	463262	1	Standard
[> Tb	159		ug/L			666189	655884	2	Standard
| Tl	205	25.084	ug/L	0.163	0	46	929196	2	Standard
| Pb	208	25.763	ug/L	0.325	1	207	1235863	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0283-03**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 22:41:52**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	26920	0	Standard
Cl	37		ug/L			3322518	3968120	3	Standard
[> Sc	45		ug/L			491766	526136	3	Standard
| Cr	52	3.915	ug/L	0.038	0	20438	105039	3	Standard
| Cr	53	4.995	ug/L	0.098	1	299	12614	4	Standard
[> Ge	72		ug/L			25430	25219	3	KED
| Ni	60	2.854	ug/L	0.111	3	10	2674	6	KED
| Ni	62	3.020	ug/L	0.262	8	3	474	11	KED
| Cu	63	15.543	ug/L	0.450	2	66	42959	3	KED
| Cu	65	15.470	ug/L	0.213	1	22	21473	2	KED
| Zn	66	82.392	ug/L	1.463	1	27	30090	5	KED
| Zn	67	79.498	ug/L	1.363	1	1	4809	4	KED
| As	75	2.004	ug/L	0.050	2	4	361	5	KED
| Se	78	0.283	ug/L	0.140	49	11	16	17	KED
| Y	89		ug/L			352268	390916	3	Standard
| Kr	83		ug/L			57	60	20	Standard
[> In-1	115		ug/L			8274	8191	2	KED
| Cd	111	0.108	ug/L	0.010	8	0	27	10	KED
| Cd	114	0.150	ug/L	0.026	17	1	91	15	KED
[> In	115		ug/L			483589	490119	3	Standard
| Ag	107	0.072	ug/L	0.004	5	103	1450	3	Standard
[> Tb	159		ug/L			666189	689688	2	Standard
| Tl	205	0.015	ug/L	0.002	11	46	617	8	Standard
| Pb	208	14.531	ug/L	0.148	1	207	733121	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0073-01**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 22:46:31**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	26263	5	Standard
Cl	37		ug/L			3322518	3393180	2	Standard
> Sc	45		ug/L			491766	519680	5	Standard
| Cr	52	0.173	ug/L	0.027	15	20438	25207	3	Standard
| Cr	53	0.292	ug/L	0.033	11	299	1024	5	Standard
> Ge	72		ug/L			25430	26671	3	KED
| Ni	60	0.373	ug/L	0.026	6	10	379	9	KED
| Ni	62	0.335	ug/L	0.043	12	3	58	12	KED
| Cu	63	2.728	ug/L	0.019	0	66	8032	2	KED
| Cu	65	2.766	ug/L	0.058	2	22	4079	4	KED
| Zn	66	315.105	ug/L	4.210	1	27	121535	2	KED
| Zn	67	289.456	ug/L	5.183	1	1	18507	2	KED
| As	75	0.344	ug/L	0.060	17	4	70	18	KED
| Se	78	0.160	ug/L	0.183	114	11	15	23	KED
Y	89		ug/L			352268	367628	3	Standard
Kr	83		ug/L			57	55	12	Standard
> In-1	115		ug/L			8274	8274	1	KED
| Cd	111	0.696	ug/L	0.011	1	0	174	2	KED
| Cd	114	0.718	ug/L	<u>0.097</u>	13	1	441	13	KED
> In	115		ug/L			483589	501979	3	Standard
| Ag	107	0.003	ug/L	0.002	47	103	170	15	Standard
> Tb	159		ug/L			666189	690581	2	Standard
| Tl	205	0.004	ug/L	0.001	22	46	196	15	Standard
| Pb	208	0.245	ug/L	0.006	2	207	12600	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0441-DUP1**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 22:51:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	26457	1	Standard
Cl	37		ug/L			3322518	3323864	3	Standard
> Sc	45		ug/L			491766	479678	9	Standard
| Cr	52	0.258	ug/L	0.067	26	20438	24847	3	Standard
| Cr	53	0.324	ug/L	0.015	4	299	1015	5	Standard
> Ge	72		ug/L			25430	26245	0	KED
| Ni	60	0.385	ug/L	0.013	3	10	384	3	KED
| Ni	62	0.344	ug/L	0.054	15	3	59	14	KED
| Cu	63	2.747	ug/L	0.100	3	66	7960	3	KED
| Cu	65	2.759	ug/L	0.175	6	22	4005	6	KED
| Zn	66	311.615	ug/L	9.455	3	27	118306	2	KED
| Zn	67	279.584	ug/L	2.764	0	1	17596	0	KED
| As	75	0.312	ug/L	0.053	16	4	62	15	KED
| Se	78	-0.024	ug/L	0.101	421	11	11	18	KED
Y	89		ug/L			352268	339754	7	Standard
Kr	83		ug/L			57	68	7	Standard
> In-1	115		ug/L			8274	8277	1	KED
| Cd	111	0.710	ug/L	0.073	10	0	178	10	KED
| Cd	114	0.720	ug/L	0.068	9	1	442	9	KED
> In	115		ug/L			483589	472539	7	Standard
| Ag	107	0.002	ug/L	0.000	18	103	139	2	Standard
> Tb	159		ug/L			666189	658447	7	Standard
| Tl	205	0.003	ug/L	0.001	16	46	161	16	Standard
| Pb	208	0.254	ug/L	0.012	4	207	12410	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0441-MS1**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Thursday, March 16, 2023 22:56:07**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	26206	1	Standard
Cl	37		ug/L			3322518	3399466	0	Standard
> Sc	45		ug/L			491766	510266	2	Standard
| Cr	52	12.406	ug/L	0.202	1	20438	276747	2	Standard
| Cr	53	12.765	ug/L	0.138	1	299	30782	2	Standard
> Ge	72		ug/L			25430	25938	2	KED
| Ni	60	12.880	ug/L	0.381	2	10	12365	0	KED
| Ni	62	12.545	ug/L	0.326	2	3	2012	3	KED
| Cu	63	15.443	ug/L	0.107	0	66	43919	3	KED
| Cu	65	15.281	ug/L	0.134	0	22	21818	1	KED
| Zn	66	355.179	ug/L	6.368	1	27	133260	2	KED
| Zn	67	321.315	ug/L	2.265	0	1	19988	3	KED
| As	75	12.910	ug/L	0.359	2	4	2368	0	KED
| Se	78	39.420	ug/L	2.456	6	11	814	8	KED
Y	89		ug/L			352268	364657	5	Standard
Kr	83		ug/L			57	70	8	Standard
> In-1	115		ug/L			8274	8116	1	KED
| Cd	111	13.264	ug/L	0.226	1	0	3247	0	KED
| Cd	114	13.465	ug/L	0.325	2	1	8097	1	KED
> In	115		ug/L			483589	502247	4	Standard
| Ag	107	12.732	ug/L	0.352	2	103	245014	2	Standard
> Tb	159		ug/L			666189	690993	2	Standard
| Tl	205	12.807	ug/L	0.057	0	46	499901	2	Standard
| Pb	208	13.018	ug/L	0.182	1	207	658041	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0025-01** RE1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:03:30

MB 3/16/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	71577	2	Standard
Cl	37		ug/L			3322518	8098630	3	Standard
[> Sc	45		ug/L			491766	519548	1	Standard
| Cr	52	1.013	ug/L	0.029	2	20438	42853	3	Standard
| Cr	53	5.023	ug/L	0.048	0	299	12524	2	Standard
[> Ge	72		ug/L			25430	22935	1	KED
| Ni	60	7.397	ug/L	0.249	3	10	6284	2	KED
| Ni	62	7.309	ug/L	0.254	3	3	1038	4	KED
| Cu	63	0.988	ug/L	0.030	3	66	2539	1	KED
| Cu	65	1.026	ug/L	0.009	0	22	1313	1	KED
| Zn	66	19.657	ug/L	0.942	4	27	6544	4	KED
| Zn	67	23.864	ug/L	1.287	5	1	1313	4	KED
| As	75	0.920	ug/L	0.086	9	4	153	8	KED
| Se	78	0.336	ug/L	0.292	86	11	16	32	KED
Y	89		ug/L			352268	345221	2	Standard
Kr	83		ug/L			57	82	9	Standard
[> In-1	115		ug/L			8274	7228	1	KED
| Cd	111	0.027	ug/L	0.007	26	0	6	24	KED
| Cd	114	0.016	ug/L	0.007	42	1	9	37	KED
[> In	115		ug/L			483589	441408	2	Standard
| Ag	107	0.002	ug/L	0.000	21	103	127	6	Standard
[> Tb	159		ug/L			666189	635459	0	Standard
| Tl	205	0.001	ug/L	0.000	33	46	75	13	Standard
| Pb	208	1.097	ug/L	0.013	1	207	51189	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0339-DUP3**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 23:08:03**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	76028	0	Standard
Cl	37		ug/L			3322518	8270835	1	Standard
[> Sc	45		ug/L			491766	537775	1	Standard
| Cr	52	1.002	ug/L	0.045	4	20438	44089	1	Standard
| Cr	53	5.056	ug/L	0.112	2	299	13041	0	Standard
[> Ge	72		ug/L			25430	22408	3	KED
| Ni	60	7.097	ug/L	0.296	4	10	5888	1	KED
| Ni	62	7.313	ug/L	0.306	4	3	1014	2	KED
| Cu	63	1.048	ug/L	0.057	5	66	2628	5	KED
| Cu	65	1.091	ug/L	0.057	5	22	1363	5	KED
| Zn	66	19.013	ug/L	0.713	3	27	6181	0	KED
| Zn	67	22.734	ug/L	1.023	4	1	1221	2	KED
| As	75	0.876	ug/L	0.059	6	4	143	8	KED
| Se	78	0.266	ug/L	0.228	85	11	14	29	KED
Y	89		ug/L			352268	361977	1	Standard
Kr	83		ug/L			57	83	26	Standard
[> In-1	115		ug/L			8274	7088	0	KED
| Cd	111	0.027	ug/L	0.008	27	0	6	24	KED
| Cd	114	0.028	ug/L	0.003	9	1	15	8	KED
[> In	115		ug/L			483589	453979	1	Standard
| Ag	107	0.005	ug/L	0.010	197	103	187	94	Standard
[> Tb	159		ug/L			666189	669028	0	Standard
| Tl	205	0.007	ug/L	0.011	162	46	300	137	Standard
| Pb	208	1.053	ug/L	0.015	1	207	51754	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0339-MS3**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:13:06

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	74128	0	Standard
Cl	37		ug/L			3322518	7763029	2	Standard
[> Sc	45		ug/L			491766	525222	0	Standard
| Cr	52	23.467	ug/L	0.533	2	20438	519360	1	Standard
| Cr	53	27.719	ug/L	0.639	2	299	68412	1	Standard
[> Ge	72		ug/L			25430	23218	0	KED
| Ni	60	31.636	ug/L	0.837	2	10	27183	1	KED
| Ni	62	32.191	ug/L	0.344	1	3	4617	0	KED
| Cu	63	25.878	ug/L	0.078	0	66	65830	0	KED
| Cu	65	25.708	ug/L	1.520	5	22	32837	5	KED
| Zn	66	91.788	ug/L	1.269	1	27	30845	0	KED
| Zn	67	90.881	ug/L	0.780	0	1	5061	1	KED
| As	75	26.938	ug/L	0.679	2	4	4419	1	KED
| Se	78	78.427	ug/L	1.652	2	11	1439	1	KED
Y	89		ug/L			352268	344077	0	Standard
Kr	83		ug/L			57	81	11	Standard
[> In-1	115		ug/L			8274	7236	2	KED
| Cd	111	23.348	ug/L	0.736	3	0	5094	2	KED
| Cd	114	23.250	ug/L	0.401	1	1	12464	1	KED
[> In	115		ug/L			483589	434114	0	Standard
| Ag	107	22.793	ug/L	0.202	0	103	379295	0	Standard
[> Tb	159		ug/L			666189	649550	1	Standard
| Tl	205	24.372	ug/L	0.389	1	46	894139	0	Standard
| Pb	208	25.759	ug/L	0.465	1	207	1223902	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:17:39

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22204	1	Standard
Cl	37		ug/L			3322518	3622926	2	Standard
[> Sc	45		ug/L			491766	487435	0	Standard
| Cr	52	0.025	ug/L	0.016	62	20438	20746	1	Standard
| Cr	53	0.196	ug/L	0.017	8	299	743	4	Standard
[> Ge	72		ug/L			25430	25238	2	KED
| Ni	60	-0.005	ug/L	0.004	76	10	5	78	KED
| Ni	62	0.013	ug/L	0.019	152	3	5	57	KED
| Cu	63	0.001	ug/L	0.008	605	66	69	32	KED
| Cu	65	0.009	ug/L	0.008	84	22	34	28	KED
| Zn	66	0.065	ug/L	0.023	35	27	51	14	KED
| Zn	67	0.093	ug/L	0.077	82	1	6	68	KED
| As	75	0.002	ug/L	0.020	924	4	5	65	KED
| Se	78	0.104	ug/L	0.178	171	11	13	25	KED
Y	89		ug/L			352268	339811	3	Standard
Kr	83		ug/L			57	62	3	Standard
[> In-1	115		ug/L			8274	7828	2	KED
| Cd	111	0.000	ug/L	0.004	1524	0	0	100	KED
| Cd	114	0.001	ug/L	0.006	530	1	1	191	KED
[> In	115		ug/L			483589	473746	2	Standard
| Ag	107	0.004	ug/L	0.007	196	103	165	75	Standard
[> Tb	159		ug/L			666189	656573	2	Standard
| Tl	205	0.006	ug/L	0.007	127	46	250	103	Standard
| Pb	208	0.007	ug/L	0.007	96	207	546	59	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:22:19

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22487	3	Standard
Cl	37		ug/L			3322518	3395493	1	Standard
> Sc	45		ug/L			491766	510537	2	Standard
| Cr	52	47.334	ug/L	0.552	1	20438	996641	0	Standard
| Cr	53	48.065	ug/L	0.834	1	299	115103	3	Standard
> Ge	72		ug/L			25430	25432	1	KED
| Ni	60	48.965	ug/L	0.650	1	10	46088	2	KED
| Ni	62	50.353	ug/L	1.812	3	3	7912	4	KED
| Cu	63	51.047	ug/L	0.387	0	66	142183	2	KED
| Cu	65	50.133	ug/L	0.898	1	22	70141	2	KED
| Zn	66	50.461	ug/L	1.259	2	27	18586	2	KED
| Zn	67	52.786	ug/L	1.257	2	1	3220	2	KED
| As	75	49.868	ug/L	0.166	0	4	8959	1	KED
| Se	78	50.322	ug/L	1.525	3	11	1015	1	KED
Y	89		ug/L			352268	359622	0	Standard
Kr	83		ug/L			57	67	11	Standard
> In-1	115		ug/L			8274	7677	2	KED
| Cd	111	49.599	ug/L	0.984	1	0	11484	2	KED
| Cd	114	48.924	ug/L	1.507	3	1	27829	3	KED
> In	115		ug/L			483589	484165	1	Standard
| Ag	107	50.034	ug/L	0.339	0	103	928484	0	Standard
> Tb	159		ug/L			666189	695449	2	Standard
| Tl	205	49.938	ug/L	1.002	2	46	1961246	1	Standard
| Pb	208	50.018	ug/L	0.263	0	207	2544408	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:29:42

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	19971	4	Standard
Cl	37		ug/L			3322518	3445206	0	Standard
[> Sc	45		ug/L			491766	506299	0	Standard
| Cr	52	-0.045	ug/L	0.035	77	20438	20124	3	Standard
| Cr	53	0.017	ug/L	0.003	16	299	348	2	Standard
[> Ge	72		ug/L			25430	24252	3	KED
| Ni	60	0.001	ug/L	0.009	802	10	10	73	KED
| Ni	62	0.034	ug/L	0.027	78	3	8	53	KED
| Cu	63	0.000	ug/L	0.009	1819	66	65	39	KED
| Cu	65	0.006	ug/L	0.008	123	22	29	37	KED
| Zn	66	0.015	ug/L	0.020	130	27	31	18	KED
| Zn	67	0.121	ug/L	0.035	29	1	8	26	KED
| As	75	0.001	ug/L	0.010	851	4	4	36	KED
| Se	78	0.355	ug/L	0.106	29	11	17	12	KED
Y	89		ug/L			352268	360612	2	Standard
Kr	83		ug/L			57	64	1	Standard
[> In-1	115		ug/L			8274	8001	0	KED
| Cd	111	0.003	ug/L	0.005	164	0	1	69	KED
| Cd	114	0.002	ug/L	0.002	96	1	2	50	KED
[> In	115		ug/L			483589	485795	1	Standard
| Ag	107	0.008	ug/L	0.001	15	103	260	10	Standard
[> Tb	159		ug/L			666189	655223	1	Standard
| Tl	205	0.001	ug/L	0.001	39	46	99	19	Standard
| Pb	208	0.003	ug/L	0.000	6	207	351	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0339-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:34:22

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	29465	2	Standard
Cl	37		ug/L			3322518	3242421	3	Standard
[> Sc	45		ug/L			491766	478243	1	Standard
| Cr	52	0.078	ug/L	0.032	40	20438	21371	1	Standard
| Cr	53	0.055	ug/L	0.012	20	299	414	6	Standard
[> Ge	72		ug/L			25430	25204	2	KED
| Ni	60	0.003	ug/L	0.003	92	10	13	24	KED
| Ni	62	0.020	ug/L	0.030	147	3	6	75	KED
| Cu	63	0.024	ug/L	0.004	17	66	130	6	KED
| Cu	65	0.026	ug/L	0.010	36	22	58	20	KED
| Zn	66	0.187	ug/L	0.026	13	27	95	8	KED
| Zn	67	0.240	ug/L	0.145	60	1	15	56	KED
| As	75	-0.001	ug/L	0.009	1541	4	4	34	KED
| Se	78	0.222	ug/L	0.059	26	11	15	9	KED
Y	89		ug/L			352268	348234	3	Standard
Kr	83		ug/L			57	46	6	Standard
[> In-1	115		ug/L			8274	7745	1	KED
| Cd	111	0.000	ug/L	0.000	21	0	0		KED
| Cd	114	0.005	ug/L	0.002	36	1	4	26	KED
[> In	115		ug/L			483589	483557	1	Standard
| Ag	107	0.002	ug/L	0.002	112	103	132	23	Standard
[> Tb	159		ug/L			666189	659863	3	Standard
| Tl	205	0.002	ug/L	0.001	51	46	107	26	Standard
| Pb	208	0.004	ug/L	0.001	19	207	377	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0339-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, March 16, 2023 23:39:01

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	29323	0	Standard
Cl	37		ug/L			3322518	3322322	1	Standard
[> Sc	45		ug/L			491766	496773	2	Standard
| Cr	52	24.457	ug/L	0.215	0	20438	511053	2	Standard
| Cr	53	24.856	ug/L	0.482	1	299	58050	2	Standard
[> Ge	72		ug/L			25430	25225	2	KED
| Ni	60	25.444	ug/L	0.289	1	10	23753	1	KED
| Ni	62	24.923	ug/L	0.628	2	3	3883	1	KED
| Cu	63	26.374	ug/L	0.455	1	66	72888	3	KED
| Cu	65	25.983	ug/L	0.440	1	22	36058	0	KED
| Zn	66	83.362	ug/L	0.562	0	27	30436	1	KED
| Zn	67	79.920	ug/L	0.804	1	1	4835	2	KED
| As	75	25.343	ug/L	0.567	2	4	4518	3	KED
| Se	78	82.360	ug/L	2.851	3	11	1641	1	KED
Y	89		ug/L			352268	355284	3	Standard
Kr	83		ug/L			57	65	26	Standard
[> In-1	115		ug/L			8274	7785	1	KED
| Cd	111	25.426	ug/L	0.796	3	0	5970	2	KED
| Cd	114	25.190	ug/L	1.093	4	1	14529	3	KED
[> In	115		ug/L			483589	492119	2	Standard
| Ag	107	25.477	ug/L	0.826	3	103	480414	1	Standard
[> Tb	159		ug/L			666189	666790	0	Standard
| Tl	205	26.464	ug/L	0.562	2	46	996712	2	Standard
| Pb	208	26.502	ug/L	0.395	1	207	1292711	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 23:43:40**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	33095	4	Standard
Cl	37		ug/L			3322518	3277667	1	Standard
> Sc	45		ug/L			491766	564663	1	Standard
| Cr	52	4.613	ug/L	0.064	1	20438	128619	0	Standard
| Cr	53	5.065	ug/L	0.085	1	299	13719	0	Standard
> Ge	72		ug/L			25430	24563	4	KED
| Ni	60	3.736	ug/L	0.149	3	10	3402	4	KED
| Ni	62	3.694	ug/L	0.428	11	3	561	6	KED
| Cu	63	0.719	ug/L	0.054	7	66	1994	3	KED
| Cu	65	0.749	ug/L	0.023	3	22	1032	4	KED
| Zn	66	1.985	ug/L	0.163	8	27	730	3	KED
| Zn	67	2.032	ug/L	0.149	7	1	120	2	KED
| As	75	1.427	ug/L	<u>0.120</u>	8	4	251	6	KED
| Se	78	0.706	ug/L	<u>0.415</u>	58	11	24	30	KED
| Y	89		ug/L			352268	353084	1	Standard
| Kr	83		ug/L			57	63	22	Standard
> In-1	115		ug/L			8274	7684	1	KED
| Cd	111	0.010	ug/L	0.005	46	0	3	34	KED
| Cd	114	0.000	ug/L	0.002	1767	1	1	102	KED
> In	115		ug/L			483589	473088	1	Standard
| Ag	107	0.011	ug/L	0.002	15	103	306	11	Standard
> Tb	159		ug/L			666189	667385	2	Standard
| Ti	205	0.007	ug/L	0.001	14	46	294	13	Standard
| Pb	208	0.188	ug/L	0.006	2	207	9389	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-06**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 23:48:19**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	29819	2	Standard
Cl	37		ug/L			3322518	3341873	1	Standard
[> Sc	45		ug/L			491766	557278	1	Standard
| Cr	52	0.591	ug/L	0.028	4	20438	36467	2	Standard
| Cr	53	0.952	ug/L	0.024	2	299	2821	2	Standard
[> Ge	72		ug/L			25430	24420	1	KED
| Ni	60	3.132	ug/L	0.089	2	10	2839	3	KED
| Ni	62	2.924	ug/L	0.115	3	3	443	3	KED
| Cu	63	0.091	ug/L	0.013	14	66	306	10	KED
| Cu	65	0.117	ug/L	0.015	13	22	177	10	KED
| Zn	66	3.214	ug/L	0.079	2	27	1161	2	KED
| Zn	67	5.704	ug/L	0.349	6	1	335	6	KED
| As	75	0.317	ug/L	0.048	14	4	59	12	KED
| Se	78	0.134	ug/L	0.036	27	11	13	5	KED
| Y	89		ug/L			352268	350227	0	Standard
| Kr	83		ug/L			57	46	24	Standard
[> In-1	115		ug/L			8274	7542	1	KED
| Cd	111	0.005	ug/L	0.004	92	0	1	50	KED
| Cd	114	0.007	ug/L	0.005	76	1	4	59	KED
[> In	115		ug/L			483589	462913	2	Standard
| Ag	107	0.001	ug/L	0.000	31	103	116	2	Standard
[> Tb	159		ug/L			666189	669390	2	Standard
| Ti	205	0.001	ug/L	0.001	63	46	87	30	Standard
| Pb	208	0.039	ug/L	0.002	6	207	2143	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-08**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 23:52:58**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	29980	1	Standard
Cl	37		ug/L			3322518	3516169	0	Standard
> Sc	45		ug/L			491766	572444	1	Standard
| Cr	52	2.004	ug/L	0.028	1	20438	70109	0	Standard
| Cr	53	2.308	ug/L	0.030	1	299	6527	2	Standard
> Ge	72		ug/L			25430	25829	1	KED
| Ni	60	0.132	ug/L	0.018	13	10	136	12	KED
| Ni	62	0.151	ug/L	0.036	24	3	27	22	KED
| Cu	63	0.182	ug/L	0.015	8	66	581	6	KED
| Cu	65	0.192	ug/L	0.028	14	22	294	13	KED
| Zn	66	0.618	ug/L	0.055	8	27	259	7	KED
| Zn	67	1.128	ug/L	0.217	19	1	71	18	KED
| As	75	1.960	ug/L	0.067	3	4	362	2	KED
| Se	78	0.798	ug/L	0.196	24	11	27	14	KED
Y	89		ug/L			352268	375154	1	Standard
Kr	83		ug/L			57	64	26	Standard
> In-1	115		ug/L			8274	7852	1	KED
| Cd	111	0.002	ug/L	0.002	147	0	1	43	KED
| Cd	114	0.002	ug/L	0.005	231	1	2	121	KED
> In	115		ug/L			483589	484801	1	Standard
| Ag	107	-0.001	ug/L	0.000	28	103	77	10	Standard
> Tb	159		ug/L			666189	698987	1	Standard
| Ti	205	0.002	ug/L	0.000	17	46	119	8	Standard
| Pb	208	0.061	ug/L	0.003	5	207	3348	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, March 16, 2023 23:57:37**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31716	5	Standard
Cl	37		ug/L			3322518	3488346	1	Standard
[> Sc	45		ug/L			491766	595384	1	Standard
| Cr	52	1.971	ug/L	0.025	1	20438	72108	1	Standard
| Cr	53	2.443	ug/L	0.039	1	299	7166	1	Standard
[> Ge	72		ug/L			25430	25977	1	KED
| Ni	60	0.297	ug/L	0.025	8	10	295	8	KED
| Ni	62	0.304	ug/L	0.062	20	3	52	20	KED
| Cu	63	0.187	ug/L	0.013	7	66	600	6	KED
| Cu	65	0.193	ug/L	0.011	5	22	299	5	KED
| Zn	66	0.885	ug/L	0.089	10	27	361	10	KED
| Zn	67	1.476	ug/L	0.246	16	1	93	17	KED
| As	75	1.190	ug/L	0.046	3	4	223	4	KED
| Se	78	1.042	ug/L	0.515	49	11	32	30	KED
| Y	89		ug/L			352268	371810	0	Standard
| Kr	83		ug/L			57	49	13	Standard
[> In-1	115		ug/L			8274	7591	2	KED
| Cd	111	0.005	ug/L	0.004	93	0	1	50	KED
| Cd	114	0.007	ug/L	0.005	77	1	4	59	KED
[> In	115		ug/L			483589	472736	0	Standard
| Ag	107	-0.002	ug/L	0.001	36	103	69	15	Standard
[> Tb	159		ug/L			666189	680980	1	Standard
| Ti	205	0.001	ug/L	0.000	16	46	69	5	Standard
| Pb	208	0.037	ug/L	0.001	3	207	2064	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-03**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 00:02:10

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	35421	1	Standard
Cl	37		ug/L			3322518	3504459	1	Standard
> Sc	45		ug/L			491766	591849	0	Standard
| Cr	52	4.749	ug/L	0.095	2	20438	138055	0	Standard
| Cr	53	5.252	ug/L	0.049	0	299	14899	0	Standard
> Ge	72		ug/L			25430	24737	0	KED
| Ni	60	3.861	ug/L	0.034	0	10	3543	0	KED
| Ni	62	3.557	ug/L	0.302	8	3	546	9	KED
| Cu	63	0.986	ug/L	0.057	5	66	2733	5	KED
| Cu	65	1.039	ug/L	0.037	3	22	1435	3	KED
| Zn	66	1.532	ug/L	0.101	6	27	575	5	KED
| Zn	67	1.886	ug/L	0.368	19	1	113	18	KED
| As	75	1.502	ug/L	0.096	6	4	267	6	KED
| Se	78	0.754	ug/L	0.333	44	11	25	24	KED
| Y	89		ug/L			352268	369583	0	Standard
| Kr	83		ug/L			57	60	6	Standard
> In-1	115		ug/L			8274	7602	2	KED
| Cd	111	-0.001	ug/L	0.002	235	0	0	86	KED
| Cd	114	0.007	ug/L	0.005	70	1	4	55	KED
> In	115		ug/L			483589	479569	0	Standard
| Ag	107	0.001	ug/L	0.001	104	103	120	15	Standard
> Tb	159		ug/L			666189	690731	0	Standard
| Ti	205	0.000	ug/L	0.000	364	46	52	23	Standard
| Pb	208	0.159	ug/L	0.002	1	207	8271	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-05**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:07:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	32284	2	Standard
Cl	37		ug/L			3322518	3560667	0	Standard
[> Sc	45		ug/L			491766	598073	0	Standard
| Cr	52	1.210	ug/L	0.056	4	20438	54078	2	Standard
| Cr	53	1.590	ug/L	0.033	2	299	4812	2	Standard
[> Ge	72		ug/L			25430	25204	2	KED
| Ni	60	19.097	ug/L	0.212	1	10	17820	3	KED
| Ni	62	18.458	ug/L	0.727	3	3	2873	1	KED
| Cu	63	0.843	ug/L	0.018	2	66	2391	4	KED
| Cu	65	0.837	ug/L	0.021	2	22	1182	4	KED
| Zn	66	5.528	ug/L	0.128	2	27	2042	1	KED
| Zn	67	8.046	ug/L	0.548	6	1	486	4	KED
| As	75	0.352	ug/L	0.039	10	4	67	12	KED
| Se	78	0.104	ug/L	0.155	149	11	13	24	KED
| Y	89		ug/L			352268	370558	0	Standard
| Kr	83		ug/L			57	55	8	Standard
[> In-1	115		ug/L			8274	7549	1	KED
| Cd	111	0.005	ug/L	0.000	2	0	1		KED
| Cd	114	0.007	ug/L	0.004	58	1	4	46	KED
[> In	115		ug/L			483589	479910	1	Standard
| Ag	107	-0.002	ug/L	0.000	15	103	60	10	Standard
[> Tb	159		ug/L			666189	701798	1	Standard
| Ti	205	0.000	ug/L	0.000	105	46	58	14	Standard
| Pb	208	0.170	ug/L	0.003	1	207	8941	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-07**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:13:16**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	30480	3	Standard
Cl	37		ug/L			3322518	3426832	5	Standard
> Sc	45		ug/L			491766	546181	5	Standard
| Cr	52	2.177	ug/L	0.098	4	20438	70618	2	Standard
| Cr	53	2.442	ug/L	0.064	2	299	6566	3	Standard
> Ge	72		ug/L			25430	25582	1	KED
| Ni	60	0.370	ug/L	0.045	12	10	360	12	KED
| Ni	62	0.329	ug/L	0.095	28	3	55	28	KED
| Cu	63	0.252	ug/L	0.004	1	66	772	1	KED
| Cu	65	0.277	ug/L	0.016	5	22	411	5	KED
| Zn	66	0.909	ug/L	0.130	14	27	365	14	KED
| Zn	67	1.507	ug/L	0.342	22	1	93	23	KED
| As	75	1.971	ug/L	0.070	3	4	361	5	KED
| Se	78	0.866	ug/L	0.295	34	11	28	21	KED
| Y	89		ug/L			352268	365271	2	Standard
| Kr	83		ug/L			57	67	11	Standard
> In-1	115		ug/L			8274	8207	1	KED
| Cd	111	0.005	ug/L	0.010	188	0	2	107	KED
| Cd	114	0.003	ug/L	0.004	120	1	2	74	KED
> In	115		ug/L			483589	472845	2	Standard
| Ag	107	-0.002	ug/L	0.000	12	103	58	8	Standard
> Tb	159		ug/L			666189	670769	4	Standard
| Ti	205	0.001	ug/L	0.000	11	46	88	5	Standard
| Pb	208	0.080	ug/L	0.005	6	207	4113	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 00:17:49

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	21578	3	Standard
Cl	37		ug/L			3322518	3401518	2	Standard
[> Sc	45		ug/L			491766	494614	2	Standard
| Cr	52	-0.051	ug/L	0.019	37	20438	19540	2	Standard
| Cr	53	-0.038	ug/L	0.004	10	299	212	4	Standard
[> Ge	72		ug/L			25430	24220	1	KED
| Ni	60	-0.004	ug/L	0.004	85	10	5	57	KED
| Ni	62	-0.012	ug/L	0.015	126	3	1	173	KED
| Cu	63	0.001	ug/L	0.002	131	66	67	8	KED
| Cu	65	0.003	ug/L	0.004	110	22	25	17	KED
| Zn	66	0.040	ug/L	0.024	61	27	40	22	KED
| Zn	67	0.133	ug/L	0.097	72	1	8	61	KED
| As	75	-0.008	ug/L	0.010	130	4	3	51	KED
| Se	78	0.172	ug/L	0.097	56	11	14	12	KED
Y	89		ug/L			352268	343128	2	Standard
Kr	83		ug/L			57	59	13	Standard
[> In-1	115		ug/L			8274	7846	1	KED
| Cd	111	0.004	ug/L	0.004	96	0	1	50	KED
| Cd	114	0.003	ug/L	0.005	156	1	2	98	KED
[> In	115		ug/L			483589	477724	2	Standard
| Ag	107	-0.003	ug/L	0.000	5	103	45	6	Standard
[> Tb	159		ug/L			666189	651286	2	Standard
| Tl	205	-0.001	ug/L	0.000	58	46	23	53	Standard
| Pb	208	0.001	ug/L	0.000	28	207	245	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 00:22:29

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22931	1	Standard
Cl	37		ug/L			3322518	3417279	2	Standard
[> Sc	45		ug/L			491766	519641	2	Standard
| Cr	52	47.089	ug/L	0.663	1	20438	1009207	1	Standard
| Cr	53	47.635	ug/L	0.462	0	299	116100	2	Standard
[> Ge	72		ug/L			25430	25429	1	KED
| Ni	60	49.603	ug/L	0.384	0	10	46678	1	KED
| Ni	62	48.024	ug/L	1.361	2	3	7542	2	KED
| Cu	63	48.994	ug/L	0.756	1	66	136452	2	KED
| Cu	65	50.448	ug/L	1.142	2	22	70587	3	KED
| Zn	66	49.830	ug/L	0.338	0	27	18354	1	KED
| Zn	67	49.010	ug/L	3.758	7	1	2990	8	KED
| As	75	49.215	ug/L	0.487	0	4	8840	1	KED
| Se	78	49.876	ug/L	1.616	3	11	1006	1	KED
Y	89		ug/L			352268	364559	1	Standard
Kr	83		ug/L			57	59	15	Standard
[> In-1	115		ug/L			8274	7866	2	KED
| Cd	111	49.128	ug/L	0.589	1	0	11659	2	KED
| Cd	114	49.144	ug/L	0.788	1	1	28643	1	KED
[> In	115		ug/L			483589	492386	1	Standard
| Ag	107	49.004	ug/L	1.317	2	103	924580	1	Standard
[> Tb	159		ug/L			666189	692642	0	Standard
| Tl	205	49.902	ug/L	0.697	1	46	1952196	0	Standard
| Pb	208	50.426	ug/L	0.503	0	207	2554896	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 00:29:52

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	20255	3	Standard
Cl	37		ug/L			3322518	3322636	2	Standard
[> Sc	45		ug/L			491766	483545	6	Standard
| Cr	52	-0.031	ug/L	0.013	40	20438	19479	5	Standard
| Cr	53	-0.036	ug/L	0.009	25	299	213	16	Standard
[> Ge	72		ug/L			25430	25040	3	KED
| Ni	60	0.032	ug/L	0.069	214	10	38	160	KED
| Ni	62	0.055	ug/L	0.090	162	3	11	116	KED
| Cu	63	0.026	ug/L	0.055	215	66	133	109	KED
| Cu	65	0.034	ug/L	0.064	188	22	66	126	KED
| Zn	66	0.030	ug/L	0.073	240	27	38	65	KED
| Zn	67	0.099	ug/L	0.181	182	1	6	150	KED
| As	75	0.028	ug/L	0.054	192	4	9	94	KED
| Se	78	0.251	ug/L	0.262	104	11	16	28	KED
Y	89		ug/L			352268	348253	4	Standard
Kr	83		ug/L			57	56	24	Standard
[> In-1	115		ug/L			8274	8193	4	KED
| Cd	111	0.003	ug/L	0.005	175	0	1	69	KED
| Cd	114	0.001	ug/L	0.003	326	1	1	105	KED
[> In	115		ug/L			483589	479470	4	Standard
| Ag	107	0.007	ug/L	0.001	7	103	231	6	Standard
[> Tb	159		ug/L			666189	659131	4	Standard
| Tl	205	0.001	ug/L	0.000	34	46	86	12	Standard
| Pb	208	0.003	ug/L	0.000	11	207	334	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0390-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:34:32**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	28103	3	Standard
Cl	37		ug/L			3322518	3249034	2	Standard
[> Sc	45		ug/L			491766	475523	1	Standard
| Cr	52	0.119	ug/L	0.025	21	20438	22044	3	Standard
| Cr	53	0.065	ug/L	0.011	16	299	433	5	Standard
[> Ge	72		ug/L			25430	24941	2	KED
| Ni	60	0.011	ug/L	0.018	166	10	20	85	KED
| Ni	62	0.008	ug/L	0.025	304	3	4	89	KED
| Cu	63	0.064	ug/L	0.013	21	66	240	18	KED
| Cu	65	0.062	ug/L	0.019	31	22	106	27	KED
| Zn	66	0.299	ug/L	0.023	7	27	135	6	KED
| Zn	67	0.383	ug/L	0.015	3	1	24	4	KED
| As	75	0.017	ug/L	0.014	80	4	7	34	KED
| Se	78	0.227	ug/L	0.058	25	11	15	5	KED
Y	89		ug/L			352268	344870	1	Standard
Kr	83		ug/L			57	55	7	Standard
[> In-1	115		ug/L			8274	7797	1	KED
| Cd	111	0.002	ug/L	0.006	391	0	1	114	KED
| Cd	114	0.002	ug/L	0.005	235	1	2	128	KED
[> In	115		ug/L			483589	475798	3	Standard
| Ag	107	0.003	ug/L	0.001	47	103	147	14	Standard
[> Tb	159		ug/L			666189	656980	2	Standard
| Tl	205	0.002	ug/L	0.001	39	46	122	24	Standard
| Pb	208	0.012	ug/L	0.001	10	207	759	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0390-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 00:39:11

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31261	1	Standard
Cl	37		ug/L			3322518	3222596	2	Standard
[> Sc	45		ug/L			491766	486609	0	Standard
| Cr	52	24.876	ug/L	0.557	2	20438	508919	2	Standard
| Cr	53	24.685	ug/L	0.302	1	299	56486	1	Standard
[> Ge	72		ug/L			25430	25035	0	KED
| Ni	60	24.139	ug/L	0.624	2	10	22367	1	KED
| Ni	62	24.494	ug/L	0.731	2	3	3789	2	KED
| Cu	63	25.442	ug/L	0.588	2	66	69794	2	KED
| Cu	65	24.936	ug/L	0.127	0	22	34355	1	KED
| Zn	66	78.139	ug/L	2.246	2	27	28315	2	KED
| Zn	67	73.114	ug/L	4.286	5	1	4389	5	KED
| As	75	24.552	ug/L	0.336	1	4	4344	1	KED
| Se	78	75.930	ug/L	1.401	1	11	1503	1	KED
Y	89		ug/L			352268	347787	2	Standard
Kr	83		ug/L			57	58	8	Standard
[> In-1	115		ug/L			8274	7964	1	KED
| Cd	111	23.839	ug/L	0.324	1	0	5726	0	KED
| Cd	114	23.688	ug/L	0.458	1	1	13978	1	KED
[> In	115		ug/L			483589	480721	1	Standard
| Ag	107	24.997	ug/L	0.921	3	103	460606	3	Standard
[> Tb	159		ug/L			666189	662507	2	Standard
| Tl	205	26.001	ug/L	0.366	1	46	972949	2	Standard
| Pb	208	26.394	ug/L	0.383	1	207	1278937	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-BLK1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:43:50**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	26958	1	Standard
Cl	37		ug/L			3322518	3259201	1	Standard
> Sc	45		ug/L			491766	485436	0	Standard
| Cr	52	0.004	ug/L	0.015	364	20438	20259	1	Standard
| Cr	53	-0.029	ug/L	0.006	22	299	229	5	Standard
> Ge	72		ug/L			25430	24581	3	KED
| Ni	60	0.027	ug/L	0.042	156	10	33	109	KED
| Ni	62	0.018	ug/L	0.056	305	3	5	145	KED
| Cu	63	0.043	ug/L	0.044	102	66	177	62	KED
| Cu	65	0.055	ug/L	0.073	133	22	93	101	KED
| Zn	66	0.565	ug/L	0.253	44	27	226	37	KED
| Zn	67	0.782	ug/L	0.313	40	1	46	36	KED
| As	75	0.047	ug/L	0.080	169	4	12	105	KED
| Se	78	0.145	ug/L	0.058	40	11	13	11	KED
Y	89		ug/L			352268	342606	1	Standard
Kr	83		ug/L			57	61	10	Standard
> In-1	115		ug/L			8274	8102	3	KED
| Cd	111	-0.001	ug/L	0.002	190	0	0	86	KED
| Cd	114	-0.000	ug/L	0.003	1148	1	1	194	KED
> In	115		ug/L			483589	479579	0	Standard
| Ag	107	0.009	ug/L	0.001	5	103	273	3	Standard
> Tb	159		ug/L			666189	650112	1	Standard
| Tl	205	0.005	ug/L	0.001	16	46	241	12	Standard
| Pb	208	0.011	ug/L	0.001	5	207	707	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-BS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:48:29**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	27206	3	Standard
Cl	37		ug/L			3322518	3420062	1	Standard
> Sc	45		ug/L			491766	509999	1	Standard
| Cr	52	26.036	ug/L	0.752	2	20438	557148	2	Standard
| Cr	53	26.214	ug/L	0.860	3	299	62827	1	Standard
> Ge	72		ug/L			25430	25684	3	KED
| Ni	60	25.925	ug/L	1.011	3	10	24643	4	KED
| Ni	62	25.648	ug/L	0.884	3	3	4071	5	KED
| Cu	63	26.464	ug/L	0.757	2	66	74443	3	KED
| Cu	65	26.220	ug/L	1.046	3	22	37041	3	KED
| Zn	66	78.890	ug/L	1.530	1	27	29320	2	KED
| Zn	67	75.455	ug/L	2.934	3	1	4644	1	KED
| As	75	25.463	ug/L	0.504	1	4	4620	1	KED
| Se	78	78.426	ug/L	2.462	3	11	1591	1	KED
Y	89		ug/L			352268	364201	0	Standard
Kr	83		ug/L			57	59	14	Standard
> In-1	115		ug/L			8274	8151	2	KED
| Cd	111	25.481	ug/L	0.313	1	0	6265	1	KED
| Cd	114	25.330	ug/L	0.502	1	1	15296	0	KED
> In	115		ug/L			483589	502807	1	Standard
| Ag	107	25.897	ug/L	0.673	2	103	499046	1	Standard
> Tb	159		ug/L			666189	688662	1	Standard
| Tl	205	26.739	ug/L	0.401	1	46	1039960	0	Standard
| Pb	208	27.048	ug/L	0.319	1	207	1362525	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-01**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:53:08**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	30962	2	Standard
Cl	37		ug/L			3322518	3293885	2	Standard
> Sc	45		ug/L			491766	572626	0	Standard
| Cr	52	14.139	ug/L	0.233	1	20438	350620	1	Standard
| Cr	53	14.387	ug/L	0.291	2	299	38882	1	Standard
> Ge	72		ug/L			25430	25852	6	KED
| Ni	60	9.924	ug/L	0.188	1	10	9495	4	KED
| Ni	62	10.194	ug/L	0.104	1	3	1630	6	KED
| Cu	63	25.227	ug/L	0.066	0	66	71454	6	KED
| Cu	65	24.299	ug/L	0.732	3	22	34526	3	KED
| Zn	66	67.684	ug/L	1.948	2	27	25303	3	KED
| Zn	67	63.639	ug/L	1.637	2	1	3943	4	KED
| As	75	5.610	ug/L	0.078	1	4	1028	5	KED
| Se	78	1.083	ug/L	0.329	30	11	33	16	KED
Y	89		ug/L			352268	570052	2	Standard
Kr	83		ug/L			57	86	6	Standard
> In-1	115		ug/L			8274	7764	3	KED
| Cd	111	0.322	ug/L	0.069	21	0	76	20	KED
| Cd	114	0.309	ug/L	0.025	8	1	178	5	KED
> In	115		ug/L			483589	474165	1	Standard
| Ag	107	0.206	ug/L	0.007	3	103	3848	2	Standard
> Tb	159		ug/L			666189	698871	0	Standard
| Tl	205	0.071	ug/L	0.001	1	46	2847	1	Standard
| Pb	208	34.395	ug/L	0.337	0	207	1758424	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-DUP1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 00:57:47**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	34062	2	Standard
Cl	37		ug/L			3322518	3333796	1	Standard
[> Sc	45		ug/L			491766	603544	2	Standard
| Cr	52	13.892	ug/L	0.066	0	20438	363565	2	Standard
| Cr	53	14.125	ug/L	0.117	0	299	40249	2	Standard
[> Ge	72		ug/L			25430	26409	2	KED
| Ni	60	9.566	ug/L	0.218	2	10	9354	0	KED
| Ni	62	9.582	ug/L	0.292	3	3	1565	1	KED
| Cu	63	22.343	ug/L	0.613	2	66	64682	5	KED
| Cu	65	22.417	ug/L	0.535	2	22	32569	0	KED
| Zn	66	65.726	ug/L	1.960	2	27	25124	2	KED
| Zn	67	64.071	ug/L	2.592	4	1	4057	3	KED
| As	75	5.505	ug/L	0.169	3	4	1031	4	KED
| Se	78	0.828	ug/L	0.176	21	11	29	11	KED
| Y	89		ug/L			352268	600706	1	Standard
| Kr	83		ug/L			57	87	32	Standard
[> In-1	115		ug/L			8274	7932	1	KED
| Cd	111	0.391	ug/L	0.043	11	0	94	9	KED
| Cd	114	0.366	ug/L	0.010	2	1	216	1	KED
[> In	115		ug/L			483589	500259	2	Standard
| Ag	107	0.182	ug/L	0.006	3	103	3592	5	Standard
[> Tb	159		ug/L			666189	720860	2	Standard
| Tl	205	0.049	ug/L	0.005	9	46	2061	6	Standard
| Pb	208	34.950	ug/L	0.455	1	207	1842593	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-MS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:02:26**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31647	2	Standard
Cl	37		ug/L			3322518	3369408	1	Standard
Sc	45		ug/L			491766	584299	1	Standard
Cr	52	38.239	ug/L	0.400	1	20438	926167	1	Standard
Cr	53	39.151	ug/L	1.062	2	299	107342	2	Standard
Ge	72		ug/L			25430	26020	1	KED
Ni	60	34.326	ug/L	0.918	2	10	33049	1	KED
Ni	62	35.524	ug/L	1.080	3	3	5709	2	KED
Cu	63	47.646	ug/L	0.390	0	66	135783	2	KED
Cu	65	47.679	ug/L	0.603	1	22	68245	1	KED
Zn	66	141.451	ug/L	5.928	4	27	53234	2	KED
Zn	67	136.914	ug/L	4.254	3	1	8540	1	KED
As	75	28.757	ug/L	0.838	2	4	5286	1	KED
Se	78	76.835	ug/L	1.496	1	11	1580	0	KED
Y	89		ug/L			352268	584174	0	Standard
Kr	83		ug/L			57	84	12	Standard
In-1	115		ug/L			8274	8526	1	KED
Cd	111	24.726	ug/L	0.385	1	0	6359	0	KED
Cd	114	25.239	ug/L	0.322	1	1	15945	0	KED
In	115		ug/L			483589	490665	1	Standard
Ag	107	9.236	ug/L	0.077	0	103	173793	1	Standard
Tb	159		ug/L			666189	700693	1	Standard
Tl	205	25.614	ug/L	0.173	0	46	1013719	0	Standard
Pb	208	61.054	ug/L	0.086	0	207	3129402	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-MSD1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:07:05**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31259	3	Standard
Cl	37		ug/L			3322518	3461960	3	Standard
> Sc	45		ug/L			491766	616125	3	Standard
Cr	52	35.422	ug/L	0.255	0	20438	906496	3	Standard
Cr	53	36.367	ug/L	0.457	1	299	105151	2	Standard
> Ge	72		ug/L			25430	26419	1	KED
Ni	60	33.874	ug/L	1.059	3	10	33111	1	KED
Ni	62	33.763	ug/L	1.683	4	3	5508	4	KED
Cu	63	47.773	ug/L	1.063	2	66	138184	0	KED
Cu	65	47.949	ug/L	2.580	5	22	69658	4	KED
Zn	66	147.937	ug/L	4.153	2	27	56542	2	KED
Zn	67	140.122	ug/L	1.798	1	1	8877	1	KED
As	75	29.039	ug/L	0.611	2	4	5420	0	KED
Se	78	75.785	ug/L	0.935	1	11	1583	2	KED
Y	89		ug/L			352268	603647	4	Standard
Kr	83		ug/L			57	81	15	Standard
> In-1	115		ug/L			8274	8242	5	KED
Cd	111	24.878	ug/L	1.144	4	0	6175	1	KED
Cd	114	24.815	ug/L	1.516	6	1	15122	0	KED
> In	115		ug/L			483589	506538	1	Standard
Ag	107	7.933	ug/L	0.142	1	103	154116	2	Standard
> Tb	159		ug/L			666189	730555	2	Standard
Tl	205	25.239	ug/L	0.772	3	46	1041295	2	Standard
Pb	208	84.930	ug/L	1.587	1	207	4538401	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-PS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:11:38**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	32018	1	Standard
Cl	37		ug/L			3322518	3241846	3	Standard
[> Sc	45		ug/L			491766	540033	7	Standard
| Cr	52	35.487	ug/L	0.832	2	20438	795349	5	Standard
| Cr	53	36.496	ug/L	0.584	1	299	92459	6	Standard
[> Ge	72		ug/L			25430	25684	2	KED
| Ni	60	34.294	ug/L	0.509	1	10	32605	3	KED
| Ni	62	33.589	ug/L	0.608	1	3	5330	3	KED
| Cu	63	47.929	ug/L	0.899	1	66	134779	1	KED
| Cu	65	48.463	ug/L	0.933	1	22	68468	2	KED
| Zn	66	138.739	ug/L	1.884	1	27	51562	2	KED
| Zn	67	132.224	ug/L	0.314	0	1	8144	2	KED
| As	75	29.613	ug/L	0.134	0	4	5374	2	KED
| Se	78	76.868	ug/L	2.109	2	11	1561	4	KED
Y	89		ug/L			352268	546004	5	Standard
Kr	83		ug/L			57	86	7	Standard
[> In-1	115		ug/L			8274	8103	1	KED
| Cd	111	25.294	ug/L	0.775	3	0	6181	2	KED
| Cd	114	25.045	ug/L	0.502	2	1	15036	0	KED
[> In	115		ug/L			483589	458109	6	Standard
| Ag	107	26.324	ug/L	0.450	1	103	462125	5	Standard
[> Tb	159		ug/L			666189	668296	6	Standard
| Tl	205	25.631	ug/L	0.279	1	46	967122	5	Standard
| Pb	208	59.617	ug/L	1.121	1	207	2912426	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 01:16:18

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	21711	4	Standard
Cl	37		ug/L			3322518	3312495	1	Standard
[> Sc	45		ug/L			491766	486614	1	Standard
| Cr	52	-0.053	ug/L	0.012	21	20438	19181	1	Standard
| Cr	53	-0.046	ug/L	0.009	19	299	190	10	Standard
[> Ge	72		ug/L			25430	25344	0	KED
| Ni	60	-0.005	ug/L	0.002	43	10	5	33	KED
| Ni	62	-0.012	ug/L	0.014	114	3	1	173	KED
| Cu	63	-0.003	ug/L	0.001	50	66	58	6	KED
| Cu	65	0.008	ug/L	0.007	81	22	33	27	KED
| Zn	66	0.052	ug/L	0.025	47	27	46	19	KED
| Zn	67	0.094	ug/L	0.037	39	1	6	31	KED
| As	75	0.002	ug/L	0.017	940	4	5	59	KED
| Se	78	0.076	ug/L	0.095	126	11	12	14	KED
Y	89		ug/L			352268	340269	1	Standard
Kr	83		ug/L			57	52	38	Standard
[> In-1	115		ug/L			8274	7885	2	KED
| Cd	111	0.012	ug/L	0.024	199	0	3	152	KED
| Cd	114	0.013	ug/L	0.016	121	1	9	108	KED
[> In	115		ug/L			483589	484129	2	Standard
| Ag	107	0.006	ug/L	0.000	7	103	213	2	Standard
[> Tb	159		ug/L			666189	669065	2	Standard
| Tl	205	0.004	ug/L	0.000	8	46	187	3	Standard
| Pb	208	0.005	ug/L	0.001	11	207	434	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 01:20:57

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22788	2	Standard
Cl	37		ug/L			3322518	3349792	1	Standard
[> Sc	45		ug/L			491766	506511	1	Standard
| Cr	52	48.191	ug/L	0.657	1	20438	1006545	2	Standard
| Cr	53	48.198	ug/L	0.332	0	299	114497	0	Standard
[> Ge	72		ug/L			25430	26141	1	KED
| Ni	60	47.399	ug/L	1.077	2	10	45852	2	KED
| Ni	62	46.009	ug/L	0.781	1	3	7428	0	KED
| Cu	63	48.965	ug/L	0.579	1	66	140162	0	KED
| Cu	65	47.370	ug/L	0.873	1	22	68123	2	KED
| Zn	66	48.870	ug/L	1.145	2	27	18507	3	KED
| Zn	67	51.194	ug/L	1.280	2	1	3209	1	KED
| As	75	49.307	ug/L	0.148	0	4	9104	1	KED
| Se	78	49.218	ug/L	2.554	5	11	1021	4	KED
Y	89		ug/L			352268	360028	2	Standard
Kr	83		ug/L			57	56	7	Standard
[> In-1	115		ug/L			8274	7980	1	KED
| Cd	111	49.842	ug/L	0.676	1	0	11997	1	KED
| Cd	114	49.535	ug/L	1.129	2	1	29297	3	KED
[> In	115		ug/L			483589	492582	0	Standard
| Ag	107	48.939	ug/L	0.965	1	103	923974	1	Standard
[> Tb	159		ug/L			666189	695999	1	Standard
| Tl	205	49.095	ug/L	1.045	2	46	1929979	2	Standard
| Pb	208	49.088	ug/L	0.758	1	207	2498965	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 01:28:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	20409	5	Standard
Cl	37		ug/L			3322518	3309254	3	Standard
[> Sc	45		ug/L			491766	485866	1	Standard
| Cr	52	-0.025	ug/L	0.016	63	20438	19698	3	Standard
| Cr	53	-0.054	ug/L	0.003	5	299	173	3	Standard
[> Ge	72		ug/L			25430	24741	2	KED
| Ni	60	-0.002	ug/L	0.001	55	10	8	13	KED
| Ni	62	0.005	ug/L	0.001	12	3	3	0	KED
| Cu	63	-0.002	ug/L	0.005	251	66	59	21	KED
| Cu	65	0.005	ug/L	0.010	214	22	27	47	KED
| Zn	66	-0.005	ug/L	0.023	436	27	25	33	KED
| Zn	67	0.055	ug/L	0.051	92	1	4	65	KED
| As	75	-0.006	ug/L	0.003	57	4	3	12	KED
| Se	78	0.046	ug/L	0.125	272	11	11	17	KED
Y	89		ug/L			352268	341686	2	Standard
Kr	83		ug/L			57	65	6	Standard
[> In-1	115		ug/L			8274	7619	2	KED
| Cd	111	0.002	ug/L	0.006	373	0	1	114	KED
| Cd	114	-0.001	ug/L	0.002	191	1	0	209	KED
[> In	115		ug/L			483589	480642	1	Standard
| Ag	107	0.007	ug/L	0.001	17	103	238	11	Standard
[> Tb	159		ug/L			666189	662104	2	Standard
| Tl	205	0.002	ug/L	0.001	44	46	121	28	Standard
| Pb	208	0.003	ug/L	0.000	6	207	360	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-02**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:33:01**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	34368	1	Standard
Cl	37		ug/L			3322518	3305411	1	Standard
> Sc	45		ug/L			491766	562176	6	Standard
| Cr	52	12.031	ug/L	0.338	2	20438	296108	4	Standard
| Cr	53	12.184	ug/L	0.320	2	299	32361	5	Standard
> Ge	72		ug/L			25430	26433	1	KED
| Ni	60	7.398	ug/L	0.253	3	10	7243	1	KED
| Ni	62	7.573	ug/L	0.438	5	3	1238	4	KED
| Cu	63	26.712	ug/L	1.369	5	66	77329	4	KED
| Cu	65	26.706	ug/L	0.429	1	22	38852	3	KED
| Zn	66	38.918	ug/L	1.301	3	27	14902	2	KED
| Zn	67	34.774	ug/L	1.535	4	1	2204	3	KED
| As	75	3.705	ug/L	0.102	2	4	696	1	KED
| Se	78	1.004	ug/L	0.268	26	11	32	17	KED
Y	89		ug/L			352268	610272	3	Standard
Kr	83		ug/L			57	99	3	Standard
> In-1	115		ug/L			8274	8281	1	KED
| Cd	111	0.341	ug/L	0.050	14	0	86	13	KED
| Cd	114	0.292	ug/L	0.017	5	1	180	7	KED
> In	115		ug/L			483589	480976	3	Standard
| Ag	107	0.125	ug/L	0.012	9	103	2394	6	Standard
> Tb	159		ug/L			666189	688480	4	Standard
| Tl	205	0.042	ug/L	0.004	9	46	1691	8	Standard
| Pb	208	18.146	ug/L	0.449	2	207	913375	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-05**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:37:39**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31095	3	Standard
Cl	37		ug/L			3322518	3366010	0	Standard
[> Sc	45		ug/L			491766	579743	4	Standard
| Cr	52	9.937	ug/L	0.257	2	20438	256525	3	Standard
| Cr	53	10.156	ug/L	0.286	2	299	27872	2	Standard
[> Ge	72		ug/L			25430	27083	0	KED
| Ni	60	7.423	ug/L	0.039	0	10	7448	0	KED
| Ni	62	8.018	ug/L	0.283	3	3	1344	3	KED
| Cu	63	20.546	ug/L	0.221	1	66	60975	0	KED
| Cu	65	21.037	ug/L	0.334	1	22	31356	1	KED
| Zn	66	51.253	ug/L	0.745	1	27	20103	0	KED
| Zn	67	51.118	ug/L	1.865	3	1	3320	2	KED
| As	75	4.499	ug/L	0.265	5	4	865	5	KED
| Se	78	0.732	ug/L	0.129	17	11	27	9	KED
Y	89		ug/L			352268	517103	1	Standard
Kr	83		ug/L			57	78	16	Standard
[> In-1	115		ug/L			8274	8119	2	KED
| Cd	111	0.052	ug/L	0.007	13	0	13	14	KED
| Cd	114	0.061	ug/L	0.011	18	1	38	19	KED
[> In	115		ug/L			483589	495084	1	Standard
| Ag	107	0.048	ug/L	0.007	14	103	1019	12	Standard
[> Tb	159		ug/L			666189	721387	1	Standard
| Tl	205	0.032	ug/L	0.002	7	46	1337	6	Standard
| Pb	208	16.725	ug/L	0.281	1	207	882627	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-06**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:42:18**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	32110	1	Standard
Cl	37		ug/L			3322518	3375485	1	Standard
> Sc	45		ug/L			491766	629904	2	Standard
Cr	52	12.677	ug/L	0.307	2	20438	348580	3	Standard
Cr	53	13.015	ug/L	0.359	2	299	38746	5	Standard
> Ge	72		ug/L			25430	26407	2	KED
Ni	60	12.472	ug/L	0.253	2	10	12191	1	KED
Ni	62	12.692	ug/L	0.697	5	3	2071	3	KED
Cu	63	28.360	ug/L	0.051	0	66	82045	2	KED
Cu	65	27.552	ug/L	0.462	1	22	40024	1	KED
Zn	66	61.073	ug/L	0.817	1	27	23349	2	KED
Zn	67	58.233	ug/L	3.239	5	1	3685	3	KED
As	75	5.038	ug/L	0.216	4	4	943	3	KED
Se	78	1.443	ug/L	0.056	3	11	41	2	KED
Y	89		ug/L			352268	639305	4	Standard
Kr	83		ug/L			57	112	7	Standard
> In-1	115		ug/L			8274	8334	1	KED
Cd	111	0.146	ug/L	0.020	13	0	37	13	KED
Cd	114	0.190	ug/L	0.007	3	1	118	2	KED
> In	115		ug/L			483589	487482	1	Standard
Ag	107	0.109	ug/L	0.003	2	103	2143	1	Standard
> Tb	159		ug/L			666189	711707	3	Standard
Tl	205	0.060	ug/L	0.001	1	46	2480	2	Standard
Pb	208	11.416	ug/L	0.059	0	207	594442	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-07**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:46:57**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	32836	1	Standard
Cl	37		ug/L			3322518	3350250	0	Standard
> Sc	45		ug/L			491766	647663	2	Standard
Cr	52	13.878	ug/L	0.279	2	20438	389794	3	Standard
Cr	53	14.502	ug/L	0.462	3	299	44322	3	Standard
> Ge	72		ug/L			25430	27031	1	KED
Ni	60	12.242	ug/L	0.117	0	10	12255	2	KED
Ni	62	12.237	ug/L	0.180	1	3	2045	2	KED
Cu	63	28.575	ug/L	0.386	1	66	84621	2	KED
Cu	65	28.474	ug/L	0.875	3	22	42356	3	KED
Zn	66	58.763	ug/L	1.052	1	27	23004	2	KED
Zn	67	58.033	ug/L	2.149	3	1	3762	3	KED
As	75	6.024	ug/L	0.047	0	4	1154	1	KED
Se	78	0.969	ug/L	0.107	10	11	32	5	KED
Y	89		ug/L			352268	675007	4	Standard
Kr	83		ug/L			57	111	22	Standard
> In-1	115		ug/L			8274	8329	0	KED
Cd	111	0.242	ug/L	0.033	13	0	61	12	KED
Cd	114	0.219	ug/L	0.018	8	1	136	7	KED
> In	115		ug/L			483589	490909	2	Standard
Ag	107	0.180	ug/L	0.005	2	103	3496	1	Standard
> Tb	159		ug/L			666189	718805	1	Standard
Tl	205	0.063	ug/L	0.001	1	46	2621	0	Standard
Pb	208	17.609	ug/L	0.011	0	207	926038	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-08**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:51:36**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	33614	1	Standard
Cl	37		ug/L			3322518	3363893	4	Standard
Sc	45		ug/L			491766	658337	1	Standard
Cr	52	13.063	ug/L	0.210	1	20438	374512	1	Standard
Cr	53	13.341	ug/L	0.151	1	299	41479	0	Standard
Ge	72		ug/L			25430	25072	1	KED
Ni	60	12.546	ug/L	0.265	2	10	11647	1	KED
Ni	62	12.889	ug/L	0.879	6	3	1996	5	KED
Cu	63	28.735	ug/L	0.650	2	66	78907	0	KED
Cu	65	28.524	ug/L	0.639	2	22	39360	3	KED
Zn	66	58.736	ug/L	1.160	1	27	21321	0	KED
Zn	67	59.030	ug/L	1.844	3	1	3549	1	KED
As	75	5.891	ug/L	0.069	1	4	1047	1	KED
Se	78	1.122	ug/L	0.244	21	11	33	14	KED
Y	89		ug/L			352268	670862	2	Standard
Kr	83		ug/L			57	103	7	Standard
In-1	115		ug/L			8274	7846	1	KED
Cd	111	0.267	ug/L	0.034	12	0	64	14	KED
Cd	114	0.244	ug/L	0.007	2	1	142	4	KED
In	115		ug/L			483589	504100	1	Standard
Ag	107	0.168	ug/L	0.008	4	103	3351	2	Standard
Tb	159		ug/L			666189	739249	0	Standard
Tl	205	0.063	ug/L	0.003	4	46	2665	4	Standard
Pb	208	17.082	ug/L	0.389	2	207	923868	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-09**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 01:56:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	33243	2	Standard
Cl	37		ug/L			3322518	3439665	1	Standard
Sc	45		ug/L			491766	670386	1	Standard
Cr	52	13.314	ug/L	0.111	0	20438	388218	2	Standard
Cr	53	13.393	ug/L	0.139	1	299	42409	2	Standard
Ge	72		ug/L			25430	26115	0	KED
Ni	60	13.655	ug/L	0.121	0	10	13204	0	KED
Ni	62	13.404	ug/L	0.407	3	3	2164	2	KED
Cu	63	28.131	ug/L	0.981	3	66	80473	2	KED
Cu	65	28.417	ug/L	0.744	2	22	40834	2	KED
Zn	66	58.782	ug/L	0.369	0	27	22229	0	KED
Zn	67	56.205	ug/L	1.241	2	1	3521	2	KED
As	75	6.365	ug/L	0.177	2	4	1178	1	KED
Se	78	1.316	ug/L	0.204	15	11	38	9	KED
Y	89		ug/L			352268	683881	1	Standard
Kr	83		ug/L			57	99	13	Standard
In-1	115		ug/L			8274	8188	0	KED
Cd	111	0.168	ug/L	0.032	18	0	42	18	KED
Cd	114	0.153	ug/L	0.029	19	1	94	17	KED
In	115		ug/L			483589	500078	2	Standard
Ag	107	0.112	ug/L	0.007	6	103	2256	3	Standard
Tb	159		ug/L			666189	733572	1	Standard
Tl	205	0.063	ug/L	0.001	2	46	2669	3	Standard
Pb	208	11.237	ug/L	0.209	1	207	603216	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-10**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:00:54**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	32567	2	Standard
Cl	37		ug/L			3322518	3420716	2	Standard
Sc	45		ug/L			491766	658562	1	Standard
Cr	52	11.831	ug/L	0.291	2	20438	341913	2	Standard
Cr	53	11.919	ug/L	0.096	0	299	37116	1	Standard
Ge	72		ug/L			25430	26530	2	KED
Ni	60	12.162	ug/L	0.342	2	10	11944	1	KED
Ni	62	12.013	ug/L	0.190	1	3	1971	3	KED
Cu	63	24.506	ug/L	0.062	0	66	71233	2	KED
Cu	65	24.813	ug/L	0.426	1	22	36222	2	KED
Zn	66	50.406	ug/L	2.146	4	27	19361	3	KED
Zn	67	48.215	ug/L	2.207	4	1	3067	4	KED
As	75	5.235	ug/L	0.180	3	4	985	1	KED
Se	78	1.119	ug/L	0.117	10	11	35	9	KED
Y	89		ug/L			352268	644581	1	Standard
Kr	83		ug/L			57	97	15	Standard
In-1	115		ug/L			8274	8199	1	KED
Cd	111	0.139	ug/L	0.022	15	0	35	16	KED
Cd	114	0.137	ug/L	0.019	14	1	84	15	KED
In	115		ug/L			483589	496046	1	Standard
Ag	107	0.103	ug/L	0.005	4	103	2063	3	Standard
Tb	159		ug/L			666189	719839	1	Standard
Tl	205	0.056	ug/L	0.001	1	46	2347	1	Standard
Pb	208	9.972	ug/L	0.050	0	207	525290	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-11**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:05:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	33914	3	Standard
Cl	37		ug/L			3322518	3353752	1	Standard
Sc	45		ug/L			491766	643213	4	Standard
Cr	52	12.604	ug/L	0.417	3	20438	353730	1	Standard
Cr	53	12.814	ug/L	0.396	3	299	38913	2	Standard
Ge	72		ug/L			25430	25811	2	KED
Ni	60	12.277	ug/L	0.225	1	10	11735	3	KED
Ni	62	12.408	ug/L	0.379	3	3	1979	1	KED
Cu	63	27.022	ug/L	0.511	1	66	76425	3	KED
Cu	65	26.801	ug/L	0.607	2	22	38054	0	KED
Zn	66	53.651	ug/L	0.491	0	27	20055	2	KED
Zn	67	51.976	ug/L	0.684	1	1	3217	1	KED
As	75	5.744	ug/L	0.207	3	4	1051	1	KED
Se	78	1.152	ug/L	0.195	16	11	34	12	KED
Y	89		ug/L			352268	647058	0	Standard
Kr	83		ug/L			57	111	22	Standard
In-1	115		ug/L			8274	8009	1	KED
Cd	111	0.156	ug/L	0.012	7	0	38	7	KED
Cd	114	0.144	ug/L	0.017	11	1	86	10	KED
In	115		ug/L			483589	492889	1	Standard
Ag	107	0.111	ug/L	0.006	5	103	2197	6	Standard
Tb	159		ug/L			666189	719677	1	Standard
Tl	205	0.059	ug/L	0.003	5	46	2442	6	Standard
Pb	208	10.877	ug/L	0.154	1	207	572841	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0088-12

Sample Dil Factor: 20

Comments:

DEL

Sample Date/Time: Friday, March 17, 2023 02:10:12

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	24812	2	Standard
Cl	37		ug/L			3322518	3312468	3	Standard
[> Sc	45		ug/L			491766	496009	3	Standard
| Cr	52	-0.007	ug/L	0.027	370	20438	20456	0	Standard
| Cr	53	-0.053	ug/L	0.008	14	299	177	7	Standard
[> Ge	72		ug/L			25430	24380	2	KED
| Ni	60	0.001	ug/L	0.003	286	10	10	26	KED
| Ni	62	0.001	ug/L	0.014	1868	3	3	69	KED
| Cu	63	0.002	ug/L	0.000	17	66	70	2	KED
| Cu	65	0.007	ug/L	0.005	72	22	30	22	KED
| Zn	66	0.410	ug/L	0.105	25	27	170	18	KED
| Zn	67	0.512	ug/L	0.128	24	1	31	23	KED
| As	75	0.005	ug/L	0.003	70	4	5	13	KED
| Se	78	0.142	ug/L	0.046	32	11	13	9	KED
Y	89		ug/L			352268	354618	0	Standard
Kr	83		ug/L			57	50	17	Standard
[> In-1	115		ug/L			8274	7611	3	KED
| Cd	111	-0.002	ug/L	0.002	101	0	0	173	KED
| Cd	114	0.005	ug/L	0.006	129	1	3	89	KED
[> In	115		ug/L			483589	494481	1	Standard
| Ag	107	-0.003	ug/L	0.001	21	103	46	27	Standard
[> Tb	159		ug/L			666189	666156	0	Standard
| Tl	205	-0.001	ug/L	0.000	17	46	21	20	Standard
| Pb	208	0.005	ug/L	0.001	10	207	471	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 02:14:52

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22269	3	Standard
Cl	37		ug/L			3322518	3265735	1	Standard
[> Sc	45		ug/L			491766	495644	2	Standard
| Cr	52	-0.028	ug/L	0.026	90	20438	20024	0	Standard
| Cr	53	-0.058	ug/L	0.003	5	299	165	1	Standard
[> Ge	72		ug/L			25430	24803	1	KED
| Ni	60	-0.005	ug/L	0.003	58	10	5	57	KED
| Ni	62	0.009	ug/L	0.007	78	3	4	24	KED
| Cu	63	-0.001	ug/L	0.002	177	66	61	10	KED
| Cu	65	0.004	ug/L	0.009	248	22	26	46	KED
| Zn	66	0.057	ug/L	0.040	70	27	47	31	KED
| Zn	67	0.064	ug/L	0.080	125	1	5	94	KED
| As	75	-0.010	ug/L	0.004	38	4	3	24	KED
| Se	78	-0.064	ug/L	0.041	65	11	9	8	KED
Y	89		ug/L			352268	349720	4	Standard
Kr	83		ug/L			57	60	14	Standard
[> In-1	115		ug/L			8274	7735	2	KED
| Cd	111	0.002	ug/L	0.005	297	0	1	86	KED
| Cd	114	0.004	ug/L	0.007	151	1	3	107	KED
[> In	115		ug/L			483589	488311	1	Standard
| Ag	107	-0.003	ug/L	0.000	14	103	46	16	Standard
[> Tb	159		ug/L			666189	670939	3	Standard
| Tl	205	-0.001	ug/L	0.000	9	46	20	14	Standard
| Pb	208	0.002	ug/L	0.000	27	207	285	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 02:19:32

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22552	2	Standard
Cl	37		ug/L			3322518	3268584	2	Standard
[> Sc	45		ug/L			491766	499819	1	Standard
| Cr	52	47.664	ug/L	1.376	2	20438	982865	4	Standard
| Cr	53	47.714	ug/L	1.546	3	299	111904	5	Standard
[> Ge	72		ug/L			25430	25310	1	KED
| Ni	60	48.594	ug/L	1.178	2	10	45510	1	KED
| Ni	62	49.151	ug/L	1.741	3	3	7687	4	KED
| Cu	63	51.373	ug/L	0.986	1	66	142418	3	KED
| Cu	65	49.320	ug/L	0.599	1	22	68674	1	KED
| Zn	66	50.869	ug/L	2.060	4	27	18648	4	KED
| Zn	67	51.423	ug/L	2.156	4	1	3120	2	KED
| As	75	50.570	ug/L	0.761	1	4	9041	2	KED
| Se	78	50.417	ug/L	1.857	3	11	1013	4	KED
Y	89		ug/L			352268	349765	3	Standard
Kr	83		ug/L			57	58	8	Standard
[> In-1	115		ug/L			8274	8083	2	KED
| Cd	111	49.045	ug/L	0.966	1	0	11958	2	KED
| Cd	114	49.068	ug/L	0.689	1	1	29386	0	KED
[> In	115		ug/L			483589	492590	1	Standard
| Ag	107	47.965	ug/L	1.077	2	103	905724	3	Standard
[> Tb	159		ug/L			666189	686346	2	Standard
| Tl	205	48.996	ug/L	0.934	1	46	1899040	2	Standard
| Pb	208	49.105	ug/L	0.339	0	207	2465235	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 02:26:55

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	21369	2	Standard
Cl	37		ug/L			3322518	3263997	1	Standard
[> Sc	45		ug/L			491766	485391	2	Standard
| Cr	52	-0.045	ug/L	0.020	45	20438	19297	3	Standard
| Cr	53	-0.058	ug/L	0.010	16	299	164	13	Standard
[> Ge	72		ug/L			25430	23969	3	KED
| Ni	60	-0.002	ug/L	0.001	63	10	8	13	KED
| Ni	62	-0.012	ug/L	0.007	63	3	1	86	KED
| Cu	63	-0.006	ug/L	0.003	53	66	47	14	KED
| Cu	65	0.005	ug/L	0.007	126	22	27	34	KED
| Zn	66	0.003	ug/L	0.010	325	27	27	10	KED
| Zn	67	0.113	ug/L	0.060	53	1	7	43	KED
| As	75	0.004	ug/L	0.011	292	4	5	32	KED
| Se	78	<u>0.355</u>	ug/L	<u>0.209</u>	58	11	17	19	KED
Y	89		ug/L			352268	342534	1	Standard
Kr	83		ug/L			57	59	19	Standard
[> In-1	115		ug/L			8274	7629	2	KED
| Cd	111	0.003	ug/L	0.008	282	0	1	124	KED
| Cd	114	0.000	ug/L	0.004	2552	1	1	189	KED
[> In	115		ug/L			483589	480438	0	Standard
| Ag	107	0.006	ug/L	0.001	19	103	212	9	Standard
[> Tb	159		ug/L			666189	660923	2	Standard
| Tl	205	0.001	ug/L	0.001	67	46	76	23	Standard
| Pb	208	0.003	ug/L	0.001	22	207	340	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-13**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:31:35**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	33566	3	Standard
Cl	37		ug/L			3322518	3309842	0	Standard
> Sc	45		ug/L			491766	664535	3	Standard
Cr	52	12.496	ug/L	0.566	4	20438	362514	1	Standard
Cr	53	12.826	ug/L	0.568	4	299	40230	0	Standard
> Ge	72		ug/L			25430	25335	1	KED
Ni	60	13.016	ug/L	0.120	0	10	12212	2	KED
Ni	62	13.615	ug/L	0.228	1	3	2133	3	KED
Cu	63	23.603	ug/L	0.478	2	66	65514	2	KED
Cu	65	23.210	ug/L	0.584	2	22	32352	0	KED
Zn	66	50.155	ug/L	1.380	2	27	18411	4	KED
Zn	67	50.128	ug/L	1.062	2	1	3047	3	KED
As	75	5.382	ug/L	0.124	2	4	967	1	KED
Se	78	1.243	ug/L	0.115	9	11	36	4	KED
Y	89		ug/L			352268	700082	2	Standard
Kr	83		ug/L			57	106	7	Standard
> In-1	115		ug/L			8274	8026	2	KED
Cd	111	0.167	ug/L	0.029	17	0	41	15	KED
Cd	114	0.166	ug/L	0.027	15	1	99	13	KED
> In	115		ug/L			483589	498951	2	Standard
Ag	107	0.121	ug/L	0.008	6	103	2412	4	Standard
> Tb	159		ug/L			666189	729236	2	Standard
Tl	205	0.061	ug/L	0.001	1	46	2546	0	Standard
Pb	208	11.402	ug/L	0.247	2	207	608195	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-14**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:36:14**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31063	2	Standard
Cl	37		ug/L			3322518	3221733	2	Standard
Sc	45		ug/L			491766	615072	2	Standard
Cr	52	13.664	ug/L	0.227	1	20438	364762	1	Standard
Cr	53	13.879	ug/L	0.055	0	299	40307	2	Standard
Ge	72		ug/L			25430	25140	3	KED
Ni	60	14.149	ug/L	0.560	3	10	13162	2	KED
Ni	62	13.491	ug/L	0.444	3	3	2096	1	KED
Cu	63	26.632	ug/L	0.239	0	66	73338	2	KED
Cu	65	27.457	ug/L	1.160	4	22	37958	2	KED
Zn	66	58.553	ug/L	1.719	2	27	21304	0	KED
Zn	67	56.892	ug/L	1.252	2	1	3431	4	KED
As	75	5.608	ug/L	0.254	4	4	999	2	KED
Se	78	1.224	ug/L	0.192	15	11	35	12	KED
Y	89		ug/L			352268	663255	2	Standard
Kr	83		ug/L			57	87	13	Standard
In-1	115		ug/L			8274	7809	0	KED
Cd	111	0.174	ug/L	0.036	20	0	41	19	KED
Cd	114	0.198	ug/L	0.043	21	1	115	20	KED
In	115		ug/L			483589	479076	1	Standard
Ag	107	0.121	ug/L	0.008	6	103	2323	5	Standard
Tb	159		ug/L			666189	707718	2	Standard
Tl	205	0.064	ug/L	0.003	4	46	2608	5	Standard
Pb	208	12.458	ug/L	0.187	1	207	644962	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-15**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:40:53**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	30637	3	Standard
Cl	37		ug/L			3322518	3216062	1	Standard
> Sc	45		ug/L			491766	614932	1	Standard
Cr	52	12.680	ug/L	0.239	1	20438	340297	0	Standard
Cr	53	13.122	ug/L	0.070	0	299	38118	0	Standard
> Ge	72		ug/L			25430	24880	1	KED
Ni	60	12.503	ug/L	0.199	1	10	11518	1	KED
Ni	62	13.101	ug/L	0.411	3	3	2015	2	KED
Cu	63	26.655	ug/L	0.570	2	66	72643	1	KED
Cu	65	26.460	ug/L	0.356	1	22	36231	2	KED
Zn	66	56.626	ug/L	1.080	1	27	20399	1	KED
Zn	67	56.113	ug/L	0.628	1	1	3348	1	KED
As	75	5.495	ug/L	0.201	3	4	969	2	KED
Se	78	1.224	ug/L	0.189	15	11	35	8	KED
Y	89		ug/L			352268	650245	3	Standard
Kr	83		ug/L			57	106	23	Standard
> In-1	115		ug/L			8274	8051	2	KED
Cd	111	0.232	ug/L	0.038	16	0	57	13	KED
Cd	114	0.221	ug/L	0.013	5	1	133	7	KED
> In	115		ug/L			483589	482158	1	Standard
Ag	107	0.144	ug/L	0.007	4	103	2771	2	Standard
> Tb	159		ug/L			666189	699478	1	Standard
Tl	205	0.060	ug/L	0.000	0	46	2438	1	Standard
Pb	208	16.772	ug/L	0.321	1	207	858252	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-02**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:45:26**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31124	1	Standard
Cl	37		ug/L			3322518	3188252	2	Standard
> Sc	45		ug/L			491766	582354	2	Standard
| Cr	52	10.806	ug/L	0.012	0	20438	278249	2	Standard
| Cr	53	10.886	ug/L	0.223	2	299	29997	0	Standard
> Ge	72		ug/L			25430	25659	1	KED
| Ni	60	9.986	ug/L	0.147	1	10	9489	0	KED
| Ni	62	9.914	ug/L	0.116	1	3	1574	2	KED
| Cu	63	22.937	ug/L	0.547	2	66	64483	2	KED
| Cu	65	23.165	ug/L	0.398	1	22	32707	1	KED
| Zn	66	46.630	ug/L	0.707	1	27	17329	0	KED
| Zn	67	44.572	ug/L	1.716	3	1	2742	2	KED
| As	75	7.199	ug/L	0.304	4	4	1308	3	KED
| Se	78	0.867	ug/L	0.077	8	11	28	4	KED
Y	89		ug/L			352268	568698	1	Standard
Kr	83		ug/L			57	78	10	Standard
> In-1	115		ug/L			8274	8112	1	KED
| Cd	111	0.147	ug/L	0.004	3	0	36	3	KED
| Cd	114	0.141	ug/L	0.036	25	1	86	25	KED
> In	115		ug/L			483589	477803	0	Standard
| Ag	107	0.185	ug/L	0.006	3	103	3495	3	Standard
> Tb	159		ug/L			666189	702657	1	Standard
| Tl	205	0.049	ug/L	0.002	3	46	1987	2	Standard
| Pb	208	9.769	ug/L	0.076	0	207	502311	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-03**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:50:05**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	31633	1	Standard
Cl	37		ug/L			3322518	3218871	1	Standard
> Sc	45		ug/L			491766	587537	1	Standard
| Cr	52	12.256	ug/L	0.348	2	20438	315041	1	Standard
| Cr	53	12.747	ug/L	0.227	1	299	35386	1	Standard
> Ge	72		ug/L			25430	26148	3	KED
| Ni	60	12.113	ug/L	0.408	3	10	11722	1	KED
| Ni	62	12.067	ug/L	0.718	5	3	1949	4	KED
| Cu	63	27.639	ug/L	0.771	2	66	79143	2	KED
| Cu	65	27.526	ug/L	0.978	3	22	39579	1	KED
| Zn	66	54.111	ug/L	1.969	3	27	20476	1	KED
| Zn	67	52.049	ug/L	0.302	0	1	3265	3	KED
| As	75	4.802	ug/L	0.220	4	4	890	2	KED
| Se	78	1.163	ug/L	0.158	13	11	35	8	KED
Y	89		ug/L			352268	598738	1	Standard
Kr	83		ug/L			57	83	8	Standard
> In-1	115		ug/L			8274	7990	0	KED
| Cd	111	0.154	ug/L	0.045	29	0	38	28	KED
| Cd	114	0.162	ug/L	0.018	11	1	97	11	KED
> In	115		ug/L			483589	477365	1	Standard
| Ag	107	0.103	ug/L	0.004	4	103	1984	2	Standard
> Tb	159		ug/L			666189	699886	2	Standard
| Tl	205	0.057	ug/L	0.000	0	46	2291	2	Standard
| Pb	208	11.219	ug/L	0.294	2	207	574313	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-04**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:54:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	35238	2	Standard
Cl	37		ug/L			3322518	3368467	1	Standard
Sc	45		ug/L			491766	627162	1	Standard
Cr	52	12.429	ug/L	0.330	2	20438	340670	1	Standard
Cr	53	12.741	ug/L	0.360	2	299	37752	1	Standard
Ge	72		ug/L			25430	26622	0	KED
Ni	60	11.669	ug/L	0.437	3	10	11504	4	KED
Ni	62	11.632	ug/L	0.327	2	3	1915	3	KED
Cu	63	28.878	ug/L	0.104	0	66	84220	0	KED
Cu	65	28.259	ug/L	0.633	2	22	41393	1	KED
Zn	66	54.427	ug/L	1.533	2	27	20984	2	KED
Zn	67	54.461	ug/L	0.403	0	1	3477	0	KED
As	75	6.278	ug/L	0.273	4	4	1184	3	KED
Se	78	1.072	ug/L	0.084	7	11	34	4	KED
Y	89		ug/L			352268	632851	0	Standard
Kr	83		ug/L			57	85	15	Standard
In-1	115		ug/L			8274	8149	2	KED
Cd	111	0.161	ug/L	0.047	28	0	40	29	KED
Cd	114	0.176	ug/L	0.004	2	1	107	4	KED
In	115		ug/L			483589	497881	1	Standard
Ag	107	0.108	ug/L	0.004	3	103	2172	4	Standard
Tb	159		ug/L			666189	731060	1	Standard
Tl	205	0.063	ug/L	0.001	2	46	2650	1	Standard
Pb	208	10.998	ug/L	0.048	0	207	588361	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-05**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 02:59:23**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	34692	3	Standard
Cl	37		ug/L			3322518	3356601	1	Standard
Sc	45		ug/L			491766	629636	1	Standard
Cr	52	13.226	ug/L	0.198	1	20438	362335	1	Standard
Cr	53	13.463	ug/L	0.105	0	299	40033	0	Standard
Ge	72		ug/L			25430	25138	1	KED
Ni	60	11.635	ug/L	0.416	3	10	10830	3	KED
Ni	62	11.998	ug/L	0.191	1	3	1865	2	KED
Cu	63	34.377	ug/L	0.670	1	66	94656	2	KED
Cu	65	34.075	ug/L	0.056	0	22	47130	0	KED
Zn	66	60.084	ug/L	0.909	1	27	21869	0	KED
Zn	67	58.975	ug/L	0.936	1	1	3556	2	KED
As	75	7.620	ug/L	0.222	2	4	1357	3	KED
Se	78	0.999	ug/L	0.332	33	11	31	21	KED
Y	89		ug/L			352268	621773	1	Standard
Kr	83		ug/L			57	74	5	Standard
In-1	115		ug/L			8274	7866	0	KED
Cd	111	0.265	ug/L	0.014	5	0	63	5	KED
Cd	114	0.279	ug/L	0.005	1	1	163	2	KED
In	115		ug/L			483589	500492	1	Standard
Ag	107	0.175	ug/L	0.002	1	103	3462	1	Standard
Tb	159		ug/L			666189	740503	1	Standard
Tl	205	0.073	ug/L	0.002	2	46	3121	3	Standard
Pb	208	16.475	ug/L	0.086	0	207	892557	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-06**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 03:04:02**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	32549	3	Standard
Cl	37		ug/L			3322518	3321172	1	Standard
Sc	45		ug/L			491766	623474	1	Standard
Cr	52	13.884	ug/L	0.122	0	20438	375381	2	Standard
Cr	53	14.155	ug/L	0.174	1	299	41660	2	Standard
Ge	72		ug/L			25430	25900	1	KED
Ni	60	13.444	ug/L	0.476	3	10	12890	2	KED
Ni	62	13.358	ug/L	0.556	4	3	2140	5	KED
Cu	63	35.081	ug/L	0.676	1	66	99501	0	KED
Cu	65	35.202	ug/L	0.725	2	22	50155	0	KED
Zn	66	63.264	ug/L	1.156	1	27	23728	3	KED
Zn	67	60.330	ug/L	1.369	2	1	3747	0	KED
As	75	7.394	ug/L	0.077	1	4	1357	1	KED
Se	78	1.217	ug/L	0.173	14	11	36	11	KED
Y	89		ug/L			352268	655546	1	Standard
Kr	83		ug/L			57	99	6	Standard
In-1	115		ug/L			8274	7949	0	KED
Cd	111	0.220	ug/L	0.036	16	0	53	16	KED
Cd	114	0.208	ug/L	0.032	15	1	123	14	KED
In	115		ug/L			483589	484029	1	Standard
Ag	107	0.165	ug/L	0.006	3	103	3159	2	Standard
Tb	159		ug/L			666189	710622	1	Standard
Tl	205	0.075	ug/L	0.002	3	46	3040	2	Standard
Pb	208	16.784	ug/L	0.227	1	207	872467	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-08**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 03:08:41**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	37145	1	Standard
Cl	37		ug/L			3322518	3285155	1	Standard
> Sc	45		ug/L			491766	631416	1	Standard
Cr	52	15.513	ug/L	0.210	1	20438	421667	1	Standard
Cr	53	15.689	ug/L	0.223	1	299	46717	0	Standard
> Ge	72		ug/L			25430	25538	0	KED
Ni	60	14.546	ug/L	0.039	0	10	13755	0	KED
Ni	62	14.891	ug/L	0.197	1	3	2351	1	KED
Cu	63	38.905	ug/L	0.499	1	66	108819	1	KED
Cu	65	38.085	ug/L	0.795	2	22	53511	1	KED
Zn	66	76.877	ug/L	1.276	1	27	28421	1	KED
Zn	67	73.087	ug/L	0.927	1	1	4476	1	KED
As	75	7.435	ug/L	0.152	2	4	1345	1	KED
Se	78	1.409	ug/L	0.338	23	11	39	17	KED
Y	89		ug/L			352268	677008	0	Standard
Kr	83		ug/L			57	93	7	Standard
> In-1	115		ug/L			8274	7734	1	KED
Cd	111	0.199	ug/L	0.030	15	0	47	15	KED
Cd	114	0.208	ug/L	0.037	17	1	120	18	KED
> In	115		ug/L			483589	489254	0	Standard
Ag	107	0.186	ug/L	0.005	2	103	3584	1	Standard
> Tb	159		ug/L			666189	709413	2	Standard
Tl	205	0.080	ug/L	0.004	4	46	3246	2	Standard
Pb	208	17.519	ug/L	0.196	1	207	909183	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 03:13:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	21481	2	Standard
Cl	37		ug/L			3322518	3105201	2	Standard
[> Sc	45		ug/L			491766	459147	1	Standard
| Cr	52	-0.025	ug/L	0.012	46	20438	18611	0	Standard
| Cr	53	-0.061	ug/L	0.008	12	299	148	12	Standard
[> Ge	72		ug/L			25430	24376	2	KED
| Ni	60	-0.005	ug/L	0.003	49	10	5	43	KED
| Ni	62	-0.003	ug/L	0.019	604	3	2	114	KED
| Cu	63	-0.002	ug/L	0.002	136	66	59	9	KED
| Cu	65	0.005	ug/L	0.000	8	22	28	0	KED
| Zn	66	0.027	ug/L	0.047	176	27	36	45	KED
| Zn	67	0.078	ug/L	0.058	74	1	5	57	KED
| As	75	-0.002	ug/L	0.001	66	4	4	6	KED
| Se	78	0.085	ug/L	0.080	93	11	12	13	KED
Y	89		ug/L			352268	327984	2	Standard
Kr	83		ug/L			57	64	29	Standard
[> In-1	115		ug/L			8274	8030	2	KED
| Cd	111	0.007	ug/L	0.008	124	0	2	78	KED
| Cd	114	0.003	ug/L	0.007	206	1	3	132	KED
[> In	115		ug/L			483589	464571	2	Standard
| Ag	107	-0.004	ug/L	0.000	11	103	34	20	Standard
[> Tb	159		ug/L			666189	644881	1	Standard
| Tl	205	-0.001	ug/L	0.000	20	46	16	35	Standard
| Pb	208	0.002	ug/L	0.001	27	207	314	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 03:18:01

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	22946	3	Standard
Cl	37		ug/L			3322518	3265487	0	Standard
[> Sc	45		ug/L			491766	506897	1	Standard
| Cr	52	48.197	ug/L	0.572	1	20438	1007275	0	Standard
| Cr	53	48.457	ug/L	1.389	2	299	115190	2	Standard
[> Ge	72		ug/L			25430	24672	4	KED
| Ni	60	47.900	ug/L	0.421	0	10	43731	4	KED
| Ni	62	48.193	ug/L	0.499	1	3	7346	5	KED
| Cu	63	49.967	ug/L	1.053	2	66	134967	4	KED
| Cu	65	48.531	ug/L	1.317	2	22	65825	2	KED
| Zn	66	49.603	ug/L	2.103	4	27	17707	2	KED
| Zn	67	51.028	ug/L	0.342	0	1	3020	4	KED
| As	75	50.241	ug/L	0.579	1	4	8755	4	KED
| Se	78	49.151	ug/L	1.650	3	11	961	1	KED
Y	89		ug/L			352268	360700	0	Standard
Kr	83		ug/L			57	61	22	Standard
[> In-1	115		ug/L			8274	7666	5	KED
| Cd	111	48.985	ug/L	2.749	5	0	11307	0	KED
| Cd	114	50.006	ug/L	2.740	5	1	28359	1	KED
[> In	115		ug/L			483589	499117	0	Standard
| Ag	107	48.114	ug/L	0.695	1	103	920416	0	Standard
[> Tb	159		ug/L			666189	704648	1	Standard
| Tl	205	48.673	ug/L	0.767	1	46	1936895	0	Standard
| Pb	208	48.673	ug/L	0.277	0	207	2508854	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 03:25:24

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			19805	21090	4	Standard
Cl	37		ug/L			3322518	3217368	1	Standard
[> Sc	45		ug/L			491766	481509	3	Standard
| Cr	52	-0.024	ug/L	0.014	59	20438	19535	2	Standard
| Cr	53	-0.059	ug/L	0.002	3	299	158	1	Standard
[> Ge	72		ug/L			25430	24120	2	KED
| Ni	60	-0.002	ug/L	0.001	65	10	8	13	KED
| Ni	62	-0.007	ug/L	0.013	178	3	1	100	KED
| Cu	63	-0.010	ug/L	0.001	14	66	36	13	KED
| Cu	65	0.005	ug/L	0.005	93	22	27	20	KED
| Zn	66	-0.007	ug/L	0.010	145	27	24	16	KED
| Zn	67	0.110	ug/L	0.063	57	1	7	50	KED
| As	75	0.001	ug/L	0.006	961	4	4	20	KED
| Se	78	<u>0.243</u>	ug/L	0.043	17	11	15	7	KED
Y	89		ug/L			352268	340042	2	Standard
Kr	83		ug/L			57	50	26	Standard
[> In-1	115		ug/L			8274	7513	1	KED
| Cd	111	0.005	ug/L	0.004	90	0	1	50	KED
| Cd	114	0.001	ug/L	0.003	263	1	1	106	KED
[> In	115		ug/L			483589	480261	2	Standard
| Ag	107	0.007	ug/L	0.001	20	103	227	13	Standard
[> Tb	159		ug/L			666189	647034	3	Standard
| Tl	205	0.002	ug/L	0.002	97	46	107	59	Standard
| Pb	208	0.003	ug/L	0.000	12	207	351	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 03:30:03

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L				21629	2	Standard
Cl	37		ug/L				3356614	3	Standard
[> Sc	45		ug/L				484823	2	Standard
| Cr	52		ug/L				19988	2	Standard
| Cr	53		ug/L				142	9	Standard
[> Ge	72		ug/L				24480	1	KED
| Ni	60		ug/L				6	45	KED
| Ni	62		ug/L				0	173	KED
| Cu	63		ug/L				45	4	KED
| Cu	65		ug/L				28	23	KED
| Zn	66		ug/L				20	51	KED
| Zn	67		ug/L				7	66	KED
| As	75		ug/L				5	39	KED
| Se	78		ug/L				14	21	KED
Y	89		ug/L				344872	2	Standard
Kr	83		ug/L				53	18	Standard
[> In-1	115		ug/L				8000	1	KED
| Cd	111		ug/L				0	100	KED
| Cd	114		ug/L				2	44	KED
[> In	115		ug/L				485197	0	Standard
| Ag	107		ug/L				106	10	Standard
[> Tb	159		ug/L				658360	2	Standard
| Tl	205		ug/L				45	23	Standard
| Pb	208		ug/L				339	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 03:34:43

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	22390	2	Standard
Cl	37		ug/L			3356614	3345532	1	Standard
[> Sc	45		ug/L			484823	500487	1	Standard
| Cr	52	47.535	ug/L	0.165	0	19988	981037	0	Standard
| Cr	53	48.838	ug/L	0.493	1	142	114474	0	Standard
[> Ge	72		ug/L			24480	25257	2	KED
| Ni	60	46.508	ug/L	2.017	4	6	43452	3	KED
| Ni	62	47.191	ug/L	1.264	2	0	7356	1	KED
| Cu	63	47.361	ug/L	0.533	1	45	130986	3	KED
| Cu	65	47.890	ug/L	1.533	3	28	66581	5	KED
| Zn	66	48.711	ug/L	1.135	2	20	17818	4	KED
| Zn	67	48.184	ug/L	0.721	1	7	2925	1	KED
| As	75	48.720	ug/L	0.482	0	5	8691	2	KED
| Se	78	49.204	ug/L	1.744	3	14	989	1	KED
Y	89		ug/L			344872	357622	3	Standard
Kr	83		ug/L			53	62	17	Standard
[> In-1	115		ug/L			8000	7709	0	KED
| Cd	111	49.505	ug/L	0.882	1	0	11513	1	KED
| Cd	114	49.287	ug/L	0.765	1	2	28160	1	KED
[> In	115		ug/L			485197	494575	3	Standard
| Ag	107	48.978	ug/L	1.927	3	106	927717	1	Standard
[> Tb	159		ug/L			658360	701080	1	Standard
| Tl	205	49.504	ug/L	2.529	5	45	1961296	6	Standard
| Pb	208	48.620	ug/L	0.087	0	339	2493649	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 03:42:06

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	21664	4	Standard
Cl	37		ug/L			3356614	3290487	3	Standard
[> Sc	45		ug/L			484823	470179	3	Standard
| Cr	52	-0.002	ug/L	0.007	294	19988	19340	2	Standard
| Cr	53	-0.007	ug/L	0.008	105	142	121	11	Standard
[> Ge	72		ug/L			24480	25103	1	KED
| Ni	60	0.003	ug/L	0.004	125	6	9	40	KED
| Ni	62	0.016	ug/L	0.018	115	0	3	91	KED
| Cu	63	0.017	ug/L	0.005	27	45	92	15	KED
| Cu	65	0.004	ug/L	0.004	110	28	34	16	KED
| Zn	66	0.103	ug/L	0.019	18	20	58	13	KED
| Zn	67	0.060	ug/L	0.083	139	7	11	44	KED
| As	75	-0.003	ug/L	0.011	339	5	4	41	KED
| Se	78	-0.095	ug/L	0.104	108	14	12	17	KED
Y	89		ug/L			344872	334550	1	Standard
Kr	83		ug/L			53	54	11	Standard
[> In-1	115		ug/L			8000	7804	2	KED
| Cd	111	0.011	ug/L	0.002	21	0	3	15	KED
| Cd	114	0.000	ug/L	0.005	6227	2	2	126	KED
[> In	115		ug/L			485197	476150	1	Standard
| Ag	107	0.006	ug/L	0.001	8	106	215	4	Standard
[> Tb	159		ug/L			658360	648625	3	Standard
| Tl	205	0.001	ug/L	0.000	6	45	79	4	Standard
| Pb	208	-0.001	ug/L	0.000	9	339	265	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0388-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 03:46:46**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	28579	1	Standard
Cl	37		ug/L			3356614	3139140	2	Standard
[> Sc	45		ug/L			484823	467892	0	Standard
| Cr	52	0.079	ug/L	0.014	17	19988	20775	1	Standard
| Cr	53	0.077	ug/L	0.006	7	142	306	4	Standard
[> Ge	72		ug/L			24480	24346	2	KED
| Ni	60	0.009	ug/L	0.006	72	6	13	39	KED
| Ni	62	0.008	ug/L	0.022	259	0	1	173	KED
| Cu	63	0.044	ug/L	0.002	5	45	162	2	KED
| Cu	65	0.039	ug/L	0.003	8	28	80	5	KED
| Zn	66	0.224	ug/L	0.046	20	20	99	14	KED
| Zn	67	0.218	ug/L	0.022	10	7	20	5	KED
| As	75	-0.004	ug/L	0.015	347	5	4	61	KED
| Se	78	-0.247	ug/L	0.149	60	14	9	28	KED
Y	89		ug/L			344872	330246	2	Standard
Kr	83		ug/L			53	59	21	Standard
[> In-1	115		ug/L			8000	8019	1	KED
| Cd	111	0.003	ug/L	0.002	84	0	1	34	KED
| Cd	114	0.000	ug/L	0.005	2677	2	2	118	KED
[> In	115		ug/L			485197	472147	1	Standard
| Ag	107	0.000	ug/L	0.001	803	106	105	16	Standard
[> Tb	159		ug/L			658360	649067	2	Standard
| Tl	205	0.001	ug/L	0.000	27	45	83	10	Standard
| Pb	208	-0.001	ug/L	0.000	48	339	305	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0388-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 03:51:25**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	29109	2	Standard
Cl	37		ug/L			3356614	3214546	1	Standard
> Sc	45		ug/L			484823	475070	0	Standard
| Cr	52	23.261	ug/L	0.329	1	19988	465691	1	Standard
| Cr	53	23.265	ug/L	0.275	1	142	51837	0	Standard
> Ge	72		ug/L			24480	24935	2	KED
| Ni	60	23.049	ug/L	0.855	3	6	21260	2	KED
| Ni	62	23.588	ug/L	0.425	1	0	3631	2	KED
| Cu	63	23.953	ug/L	0.378	1	45	65415	2	KED
| Cu	65	23.721	ug/L	0.224	0	28	32553	1	KED
| Zn	66	73.779	ug/L	4.424	5	20	26597	3	KED
| Zn	67	70.789	ug/L	0.983	1	7	4239	1	KED
| As	75	23.269	ug/L	0.595	2	5	4099	0	KED
| Se	78	72.067	ug/L	1.383	1	14	1425	4	KED
Y	89		ug/L			344872	334922	2	Standard
Kr	83		ug/L			53	55	11	Standard
> In-1	115		ug/L			8000	7645	1	KED
| Cd	111	23.502	ug/L	0.663	2	0	5420	2	KED
| Cd	114	23.908	ug/L	0.229	0	2	13546	0	KED
> In	115		ug/L			485197	482248	2	Standard
| Ag	107	23.995	ug/L	1.272	5	106	443227	2	Standard
> Tb	159		ug/L			658360	669099	1	Standard
| Tl	205	23.519	ug/L	0.127	0	45	888825	0	Standard
| Pb	208	23.872	ug/L	0.205	0	339	1168591	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 03:56:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33004	4	Standard
Cl	37		ug/L			3356614	3325838	2	Standard
[> Sc	45		ug/L			484823	550581	1	Standard
| Cr	52	0.226	ug/L	0.026	11	19988	27726	2	Standard
| Cr	53	0.831	ug/L	0.003	0	142	2301	0	Standard
[> Ge	72		ug/L			24480	25176	2	KED
| Ni	60	0.616	ug/L	0.074	12	6	579	9	KED
| Ni	62	0.609	ug/L	0.042	6	0	95	5	KED
| Cu	63	0.687	ug/L	0.011	1	45	1938	0	KED
| Cu	65	0.654	ug/L	0.019	2	28	934	1	KED
| Zn	66	1.458	ug/L	0.063	4	20	551	4	KED
| Zn	67	2.202	ug/L	0.315	14	7	140	15	KED
| As	75	0.608	ug/L	0.043	7	5	113	8	KED
| Se	78	-0.046	ug/L	0.090	194	14	13	15	KED
| Y	89		ug/L			344872	355923	1	Standard
| Kr	83		ug/L			53	57	15	Standard
[> In-1	115		ug/L			8000	7927	2	KED
| Cd	111	0.012	ug/L	0.010	86	0	3	66	KED
| Cd	114	-0.001	ug/L	0.003	319	2	1	108	KED
[> In	115		ug/L			485197	477060	1	Standard
| Ag	107	0.011	ug/L	0.003	25	106	311	17	Standard
[> Tb	159		ug/L			658360	676057	1	Standard
| Tl	205	0.008	ug/L	0.003	38	45	343	33	Standard
| Pb	208	0.057	ug/L	0.000	0	339	3161	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-06**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:00:43**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32239	2	Standard
Cl	37		ug/L			3356614	3298341	3	Standard
[> Sc	45		ug/L			484823	539692	0	Standard
| Cr	52	0.373	ug/L	0.030	8	19988	30376	1	Standard
| Cr	53	0.855	ug/L	0.007	0	142	2316	0	Standard
[> Ge	72		ug/L			24480	24694	3	KED
| Ni	60	0.243	ug/L	0.046	18	6	228	18	KED
| Ni	62	0.262	ug/L	0.045	17	0	40	17	KED
| Cu	63	0.307	ug/L	0.019	6	45	874	4	KED
| Cu	65	0.326	ug/L	0.041	12	28	471	8	KED
| Zn	66	0.867	ug/L	0.037	4	20	330	4	KED
| Zn	67	1.248	ug/L	0.379	30	7	81	25	KED
| As	75	0.526	ug/L	0.043	8	5	96	10	KED
| Se	78	-0.089	ug/L	0.101	112	14	12	13	KED
Y	89		ug/L			344872	355479	3	Standard
Kr	83		ug/L			53	57	8	Standard
[> In-1	115		ug/L			8000	7589	2	KED
| Cd	111	0.000	ug/L	0.007	6905	0	0	173	KED
| Cd	114	0.004	ug/L	0.007	187	2	4	91	KED
[> In	115		ug/L			485197	478689	2	Standard
| Ag	107	-0.000	ug/L	0.001	579	106	102	12	Standard
[> Tb	159		ug/L			658360	682637	2	Standard
| Tl	205	0.002	ug/L	0.001	34	45	107	18	Standard
| Pb	208	0.009	ug/L	0.001	6	339	820	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-08**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:05:22**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33244	1	Standard
Cl	37		ug/L			3356614	3349322	0	Standard
[> Sc	45		ug/L			484823	562992	2	Standard
[Cr	52	0.168	ug/L	0.042	25	19988	27031	4	Standard
[Cr	53	0.692	ug/L	0.018	2	142	1986	1	Standard
[> Ge	72		ug/L			24480	25006	1	KED
[Ni	60	0.303	ug/L	0.042	13	6	287	14	KED
[Ni	62	0.358	ug/L	0.059	16	0	55	16	KED
[Cu	63	0.440	ug/L	0.027	6	45	1248	5	KED
[Cu	65	0.454	ug/L	0.024	5	28	652	3	KED
[Zn	66	1.360	ug/L	0.075	5	20	512	5	KED
[Zn	67	1.724	ug/L	0.110	6	7	111	4	KED
[As	75	0.712	ug/L	0.061	8	5	130	8	KED
[Se	78	-0.003	ug/L	0.083	2973	14	14	12	KED
[Y	89		ug/L			344872	361096	1	Standard
[Kr	83		ug/L			53	68	20	Standard
[> In-1	115		ug/L			8000	8018	2	KED
[Cd	111	0.003	ug/L	0.005	175	0	1	69	KED
[Cd	114	0.005	ug/L	0.000	4	2	5	0	KED
[> In	115		ug/L			485197	493977	0	Standard
[Ag	107	-0.001	ug/L	0.001	206	106	97	23	Standard
[> Tb	159		ug/L			658360	693602	1	Standard
[Tl	205	0.001	ug/L	0.000	25	45	104	12	Standard
[Pb	208	0.027	ug/L	0.000	0	339	1728	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-10**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:10:01**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33552	4	Standard
Cl	37		ug/L			3356614	3343350	2	Standard
[> Sc	45		ug/L			484823	551486	1	Standard
| Cr	52	0.119	ug/L	0.011	9	19988	25391	0	Standard
| Cr	53	0.693	ug/L	0.017	2	142	1949	1	Standard
[> Ge	72		ug/L			24480	24868	1	KED
| Ni	60	0.340	ug/L	0.021	6	6	319	7	KED
| Ni	62	0.358	ug/L	0.096	26	0	55	28	KED
| Cu	63	0.383	ug/L	0.005	1	45	1087	1	KED
| Cu	65	0.408	ug/L	0.056	13	28	587	12	KED
| Zn	66	1.028	ug/L	0.135	13	20	390	12	KED
| Zn	67	1.670	ug/L	0.273	16	7	107	14	KED
| As	75	0.491	ug/L	0.008	1	5	91	1	KED
| Se	78	0.010	ug/L	0.181	1887	14	14	23	KED
| Y	89		ug/L			344872	348734	1	Standard
| Kr	83		ug/L			53	59	9	Standard
[> In-1	115		ug/L			8000	7856	0	KED
| Cd	111	0.007	ug/L	0.006	89	0	2	57	KED
| Cd	114	0.002	ug/L	0.007	274	2	3	102	KED
[> In	115		ug/L			485197	480600	1	Standard
| Ag	107	-0.001	ug/L	0.001	83	106	82	21	Standard
[> Tb	159		ug/L			658360	684711	1	Standard
| Tl	205	0.001	ug/L	0.000	38	45	93	17	Standard
| Pb	208	0.038	ug/L	0.000	0	339	2271	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-02**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 04:14:34

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32879	2	Standard
Cl	37		ug/L			3356614	3262860	1	Standard
Sc	45		ug/L			484823	545530	0	Standard
Cr	52	0.218	ug/L	0.023	10	19988	27299	0	Standard
Cr	53	0.746	ug/L	0.030	4	142	2062	2	Standard
Ge	72		ug/L			24480	24942	1	KED
Ni	60	0.264	ug/L	0.025	9	6	250	10	KED
Ni	62	0.288	ug/L	0.100	34	0	45	34	KED
Cu	63	0.345	ug/L	0.007	2	45	987	3	KED
Cu	65	0.380	ug/L	0.025	6	28	550	7	KED
Zn	66	0.912	ug/L	0.058	6	20	349	6	KED
Zn	67	1.332	ug/L	0.424	31	7	87	30	KED
As	75	0.709	ug/L	0.073	10	5	130	11	KED
Se	78	-0.057	ug/L	0.171	298	14	13	25	KED
Y	89		ug/L			344872	346838	2	Standard
Kr	83		ug/L			53	62	22	Standard
In-1	115		ug/L			8000	7942	1	KED
Cd	111	0.001	ug/L	0.006	439	0	1	114	KED
Cd	114	0.006	ug/L	0.005	79	2	6	48	KED
In	115		ug/L			485197	470735	1	Standard
Ag	107	-0.002	ug/L	0.000	15	106	58	11	Standard
Tb	159		ug/L			658360	665147	0	Standard
Tl	205	0.001	ug/L	0.000	32	45	86	14	Standard
Pb	208	0.044	ug/L	0.002	3	339	2501	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0388-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:19:37**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32451	3	Standard
Cl	37		ug/L			3356614	3325890	1	Standard
Sc	45		ug/L			484823	556274	1	Standard
Cr	52	0.194	ug/L	0.031	15	19988	27289	4	Standard
Cr	53	0.738	ug/L	0.006	0	142	2083	2	Standard
Ge	72		ug/L			24480	24980	2	KED
Ni	60	0.228	ug/L	0.023	10	6	217	10	KED
Ni	62	0.224	ug/L	0.080	35	0	34	31	KED
Cu	63	0.331	ug/L	0.022	6	45	951	3	KED
Cu	65	0.317	ug/L	0.016	5	28	464	7	KED
Zn	66	1.059	ug/L	0.037	3	20	403	3	KED
Zn	67	1.205	ug/L	0.124	10	7	80	10	KED
As	75	0.581	ug/L	0.054	9	5	107	10	KED
Se	78	0.073	ug/L	0.064	87	14	15	10	KED
Y	89		ug/L			344872	361741	3	Standard
Kr	83		ug/L			53	64	12	Standard
In-1	115		ug/L			8000	7955	1	KED
Cd	111	0.000	ug/L	0.004	6450	0	0	100	KED
Cd	114	-0.002	ug/L	0.002	83	2	1	108	KED
In	115		ug/L			485197	488624	0	Standard
Ag	107	-0.002	ug/L	0.000	18	106	65	11	Standard
Tb	159		ug/L			658360	695021	0	Standard
Tl	205	0.001	ug/L	0.000	29	45	90	13	Standard
Pb	208	0.038	ug/L	0.002	5	339	2272	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0388-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:25:40**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33248	2	Standard
Cl	37		ug/L			3356614	3333156	1	Standard
[> Sc	45		ug/L			484823	545462	0	Standard
| Cr	52	21.624	ug/L	0.345	1	19988	498672	1	Standard
| Cr	53	22.496	ug/L	0.140	0	142	57561	1	Standard
[> Ge	72		ug/L			24480	24195	1	KED
| Ni	60	24.705	ug/L	0.546	2	6	22121	1	KED
| Ni	62	24.494	ug/L	0.398	1	0	3659	0	KED
| Cu	63	25.330	ug/L	0.651	2	45	67115	1	KED
| Cu	65	24.909	ug/L	0.995	3	28	33164	2	KED
| Zn	66	77.965	ug/L	0.566	0	20	27300	0	KED
| Zn	67	72.309	ug/L	2.077	2	7	4202	2	KED
| As	75	25.215	ug/L	0.529	2	5	4311	1	KED
| Se	78	77.329	ug/L	3.646	4	14	1482	3	KED
Y	89		ug/L			344872	350120	0	Standard
Kr	83		ug/L			53	52	27	Standard
[> In-1	115		ug/L			8000	7696	4	KED
| Cd	111	24.393	ug/L	1.093	4	0	5657	2	KED
| Cd	114	23.913	ug/L	0.859	3	2	13627	2	KED
[> In	115		ug/L			485197	472188	1	Standard
| Ag	107	24.455	ug/L	0.176	0	106	442647	1	Standard
[> Tb	159		ug/L			658360	678832	2	Standard
| Tl	205	24.507	ug/L	0.307	1	45	939543	1	Standard
| Pb	208	24.625	ug/L	0.339	1	339	1222768	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 04:30:14

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	22811	6	Standard
Cl	37		ug/L			3356614	3282711	1	Standard
[> Sc	45		ug/L			484823	469919	1	Standard
| Cr	52	0.034	ug/L	0.020	59	19988	20017	1	Standard
| Cr	53	0.025	ug/L	0.007	26	142	193	6	Standard
[> Ge	72		ug/L			24480	24167	0	KED
| Ni	60	0.004	ug/L	0.004	98	6	9	34	KED
| Ni	62	0.009	ug/L	0.000	1	0	1		KED
| Cu	63	0.003	ug/L	0.003	98	45	53	15	KED
| Cu	65	-0.002	ug/L	0.009	549	28	26	44	KED
| Zn	66	0.048	ug/L	0.021	44	20	36	19	KED
| Zn	67	-0.031	ug/L	0.033	105	7	5	33	KED
| As	75	-0.005	ug/L	0.004	78	5	4	17	KED
| Se	78	0.043	ug/L	0.229	535	14	14	28	KED
Y	89		ug/L			344872	346223	3	Standard
Kr	83		ug/L			53	49	32	Standard
[> In-1	115		ug/L			8000	7966	2	KED
| Cd	111	0.003	ug/L	0.002	83	0	1	34	KED
| Cd	114	0.003	ug/L	0.002	60	2	4	25	KED
[> In	115		ug/L			485197	478637	1	Standard
| Ag	107	0.008	ug/L	0.006	74	106	258	44	Standard
[> Tb	159		ug/L			658360	653192	0	Standard
| Tl	205	0.006	ug/L	0.007	113	45	261	93	Standard
| Pb	208	0.003	ug/L	0.006	184	339	500	60	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 04:34:53

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	23299	3	Standard
Cl	37		ug/L			3356614	3338658	3	Standard
[> Sc	45		ug/L			484823	513535	0	Standard
| Cr	52	47.425	ug/L	1.006	2	19988	1004290	1	Standard
| Cr	53	48.032	ug/L	0.656	1	142	115525	0	Standard
[> Ge	72		ug/L			24480	25740	3	KED
| Ni	60	47.463	ug/L	1.463	3	6	45178	1	KED
| Ni	62	48.365	ug/L	2.214	4	0	7680	2	KED
| Cu	63	49.442	ug/L	1.043	2	45	139280	1	KED
| Cu	65	49.282	ug/L	1.994	4	28	69759	3	KED
| Zn	66	49.225	ug/L	2.161	4	20	18329	2	KED
| Zn	67	49.811	ug/L	1.311	2	7	3081	3	KED
| As	75	49.108	ug/L	1.514	3	5	8923	0	KED
| Se	78	50.093	ug/L	2.600	5	14	1026	4	KED
Y	89		ug/L			344872	362341	2	Standard
Kr	83		ug/L			53	50	15	Standard
[> In-1	115		ug/L			8000	7998	1	KED
| Cd	111	48.232	ug/L	0.693	1	0	11638	2	KED
| Cd	114	48.380	ug/L	0.418	0	2	28674	1	KED
[> In	115		ug/L			485197	501949	1	Standard
| Ag	107	47.246	ug/L	1.629	3	106	908810	2	Standard
[> Tb	159		ug/L			658360	699039	2	Standard
| Tl	205	49.598	ug/L	1.400	2	45	1957319	0	Standard
| Pb	208	49.902	ug/L	1.053	2	339	2551060	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 04:42:16

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	21387	2	Standard
Cl	37		ug/L			3356614	3258835	1	Standard
[> Sc	45		ug/L			484823	471351	0	Standard
| Cr	52	0.029	ug/L	0.030	104	19988	19975	2	Standard
| Cr	53	0.007	ug/L	0.014	204	142	153	19	Standard
[> Ge	72		ug/L			24480	23824	2	KED
| Ni	60	0.007	ug/L	0.008	113	6	12	55	KED
| Ni	62	0.004	ug/L	0.007	168	0	1	86	KED
| Cu	63	0.014	ug/L	0.006	45	45	80	21	KED
| Cu	65	0.006	ug/L	0.005	71	28	36	13	KED
| Zn	66	0.108	ug/L	0.063	58	20	57	39	KED
| Zn	67	0.103	ug/L	0.030	29	7	13	14	KED
| As	75	0.004	ug/L	0.006	165	5	5	19	KED
| Se	78	-0.102	ug/L	0.108	105	14	11	19	KED
Y	89		ug/L			344872	335370	1	Standard
Kr	83		ug/L			53	52	20	Standard
[> In-1	115		ug/L			8000	8169	1	KED
| Cd	111	-0.004	ug/L	0.000	0	0	0		KED
| Cd	114	0.001	ug/L	0.004	404	2	2	74	KED
[> In	115		ug/L			485197	484232	1	Standard
| Ag	107	0.007	ug/L	0.001	7	106	238	4	Standard
[> Tb	159		ug/L			658360	659563	1	Standard
| Tl	205	0.001	ug/L	0.000	26	45	83	12	Standard
| Pb	208	-0.002	ug/L	0.001	35	339	264	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-12**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:46:56**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32568	4	Standard
Cl	37		ug/L			3356614	3256064	2	Standard
Sc	45		ug/L			484823	538774	3	Standard
Cr	52	0.127	ug/L	0.036	28	19988	24962	1	Standard
Cr	53	0.701	ug/L	0.028	4	142	1922	3	Standard
Ge	72		ug/L			24480	25581	2	KED
Ni	60	0.409	ug/L	0.013	3	6	393	2	KED
Ni	62	0.451	ug/L	0.089	19	0	71	18	KED
Cu	63	0.386	ug/L	0.018	4	45	1127	3	KED
Cu	65	0.363	ug/L	0.011	2	28	540	4	KED
Zn	66	1.086	ug/L	0.048	4	20	422	3	KED
Zn	67	1.574	ug/L	0.455	28	7	104	24	KED
As	75	0.382	ug/L	0.039	10	5	74	8	KED
Se	78	0.005	ug/L	0.130	2522	14	14	17	KED
Y	89		ug/L			344872	352743	3	Standard
Kr	83		ug/L			53	50	30	Standard
In-1	115		ug/L			8000	8211	2	KED
Cd	111	0.004	ug/L	0.007	175	0	1	86	KED
Cd	114	0.001	ug/L	0.005	668	2	2	101	KED
In	115		ug/L			485197	477273	1	Standard
Ag	107	0.003	ug/L	0.001	32	106	151	11	Standard
Tb	159		ug/L			658360	675079	0	Standard
Tl	205	0.002	ug/L	0.000	10	45	132	7	Standard
Pb	208	0.021	ug/L	0.002	7	339	1395	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-14**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:51:35**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	35283	1	Standard
Cl	37		ug/L			3356614	3472716	0	Standard
[> Sc	45		ug/L			484823	546137	1	Standard
| Cr	52	0.162	ug/L	0.004	2	19988	26078	1	Standard
| Cr	53	0.699	ug/L	0.013	1	142	1946	1	Standard
[> Ge	72		ug/L			24480	25472	1	KED
| Ni	60	0.762	ug/L	0.065	8	6	723	7	KED
| Ni	62	0.826	ug/L	0.161	19	0	130	20	KED
| Cu	63	1.376	ug/L	0.104	7	45	3879	5	KED
| Cu	65	1.399	ug/L	0.020	1	28	1989	2	KED
| Zn	66	3.663	ug/L	0.192	5	20	1370	4	KED
| Zn	67	4.192	ug/L	0.225	5	7	264	6	KED
| As	75	0.312	ug/L	0.041	13	5	61	10	KED
| Se	78	0.103	ug/L	0.165	160	14	16	20	KED
| Y	89		ug/L			344872	355364	0	Standard
| Kr	83		ug/L			53	48	17	Standard
[> In-1	115		ug/L			8000	8003	3	KED
| Cd	111	0.012	ug/L	0.007	59	0	3	43	KED
| Cd	114	0.003	ug/L	0.004	111	2	4	50	KED
[> In	115		ug/L			485197	483301	1	Standard
| Ag	107	0.001	ug/L	0.001	176	106	120	19	Standard
[> Tb	159		ug/L			658360	690177	2	Standard
| Tl	205	0.002	ug/L	0.000	0	45	136	2	Standard
| Pb	208	0.021	ug/L	0.002	8	339	1398	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-16**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 04:56:14**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32834	3	Standard
Cl	37		ug/L			3356614	3362495	1	Standard
> Sc	45		ug/L			484823	572341	0	Standard
| Cr	52	0.339	ug/L	0.022	6	19988	31426	1	Standard
| Cr	53	0.831	ug/L	0.016	1	142	2392	1	Standard
> Ge	72		ug/L			24480	25813	1	KED
| Ni	60	0.219	ug/L	0.012	5	6	215	5	KED
| Ni	62	0.227	ug/L	0.038	16	0	36	15	KED
| Cu	63	0.246	ug/L	0.011	4	45	741	3	KED
| Cu	65	0.270	ug/L	0.008	3	28	413	3	KED
| Zn	66	0.976	ug/L	0.099	10	20	386	10	KED
| Zn	67	1.161	ug/L	0.156	13	7	80	13	KED
| As	75	0.613	ug/L	0.034	5	5	116	4	KED
| Se	78	0.032	ug/L	0.282	877	14	15	36	KED
Y	89		ug/L			344872	360162	3	Standard
Kr	83		ug/L			53	65	37	Standard
> In-1	115		ug/L			8000	7733	1	KED
| Cd	111	0.007	ug/L	0.005	66	0	2	43	KED
| Cd	114	-0.000	ug/L	0.005	10868	2	2	126	KED
> In	115		ug/L			485197	492337	0	Standard
| Ag	107	-0.002	ug/L	0.000	6	106	60	5	Standard
> Tb	159		ug/L			658360	701448	1	Standard
| Tl	205	0.000	ug/L	0.000	46	45	66	11	Standard
| Pb	208	0.008	ug/L	0.000	3	339	780	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:00:53**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32879	2	Standard
Cl	37		ug/L			3356614	3388881	3	Standard
Sc	45		ug/L			484823	561097	4	Standard
Cr	52	0.656	ug/L	0.012	1	19988	37992	5	Standard
Cr	53	1.291	ug/L	0.016	1	142	3555	5	Standard
Ge	72		ug/L			24480	24899	1	KED
Ni	60	0.836	ug/L	0.046	5	6	776	4	KED
Ni	62	0.817	ug/L	0.028	3	0	126	4	KED
Cu	63	2.909	ug/L	0.066	2	45	7974	2	KED
Cu	65	2.923	ug/L	0.132	4	28	4031	5	KED
Zn	66	8.025	ug/L	0.027	0	20	2910	1	KED
Zn	67	7.860	ug/L	0.637	8	7	477	9	KED
As	75	1.109	ug/L	0.065	5	5	200	5	KED
Se	78	0.138	ug/L	0.039	28	14	17	5	KED
Y	89		ug/L			344872	370073	3	Standard
Kr	83		ug/L			53	57	10	Standard
In-1	115		ug/L			8000	7977	4	KED
Cd	111	0.032	ug/L	0.012	37	0	8	29	KED
Cd	114	0.022	ug/L	0.005	21	2	15	14	KED
In	115		ug/L			485197	478097	1	Standard
Ag	107	0.003	ug/L	0.001	39	106	159	12	Standard
Tb	159		ug/L			658360	690793	2	Standard
Tl	205	0.003	ug/L	0.000	11	45	161	10	Standard
Pb	208	0.382	ug/L	0.005	1	339	19645	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-05**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:05:32**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33327	0	Standard
Cl	37		ug/L			3356614	3270100	2	Standard
[> Sc	45		ug/L			484823	537407	1	Standard
| Cr	52	0.510	ug/L	0.034	6	19988	33217	3	Standard
| Cr	53	1.059	ug/L	0.032	3	142	2819	2	Standard
[> Ge	72		ug/L			24480	25709	0	KED
| Ni	60	0.319	ug/L	0.023	7	6	309	7	KED
| Ni	62	0.320	ug/L	0.045	14	0	51	13	KED
| Cu	63	1.611	ug/L	0.028	1	45	4581	1	KED
| Cu	65	1.567	ug/L	0.044	2	28	2245	3	KED
| Zn	66	1.083	ug/L	0.124	11	20	424	10	KED
| Zn	67	1.209	ug/L	0.076	6	7	82	5	KED
| As	75	0.630	ug/L	0.026	4	5	119	4	KED
| Se	78	0.000	ug/L	0.053	18203	14	14	6	KED
| Y	89		ug/L			344872	345044	2	Standard
| Kr	83		ug/L			53	54	8	Standard
[> In-1	115		ug/L			8000	7793	2	KED
| Cd	111	0.005	ug/L	0.005	84	0	2	49	KED
| Cd	114	0.003	ug/L	0.007	229	2	3	97	KED
[> In	115		ug/L			485197	465086	2	Standard
| Ag	107	-0.002	ug/L	0.001	41	106	71	18	Standard
[> Tb	159		ug/L			658360	665230	0	Standard
| Tl	205	0.001	ug/L	0.000	34	45	75	12	Standard
| Pb	208	0.073	ug/L	0.002	2	339	3887	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-07**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:10:11**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	34075	1	Standard
Cl	37		ug/L			3356614	3448120	4	Standard
[> Sc	45		ug/L			484823	572397	0	Standard
| Cr	52	0.781	ug/L	0.016	2	19988	41643	0	Standard
| Cr	53	1.324	ug/L	0.036	2	142	3714	3	Standard
[> Ge	72		ug/L			24480	25170	2	KED
| Ni	60	0.768	ug/L	0.009	1	6	721	1	KED
| Ni	62	0.887	ug/L	0.058	6	0	138	4	KED
| Cu	63	1.152	ug/L	0.063	5	45	3221	7	KED
| Cu	65	1.165	ug/L	0.042	3	28	1642	4	KED
| Zn	66	2.725	ug/L	0.115	4	20	1012	4	KED
| Zn	67	3.205	ug/L	0.270	8	7	201	8	KED
| As	75	1.026	ug/L	0.049	4	5	187	6	KED
| Se	78	0.193	ug/L	0.053	27	14	18	4	KED
| Y	89		ug/L			344872	372988	2	Standard
| Kr	83		ug/L			53	57	10	Standard
[> In-1	115		ug/L			8000	7859	1	KED
| Cd	111	0.024	ug/L	0.020	82	0	6	71	KED
| Cd	114	0.013	ug/L	0.004	28	2	9	20	KED
[> In	115		ug/L			485197	485377	1	Standard
| Ag	107	0.000	ug/L	0.001	274	106	111	12	Standard
[> Tb	159		ug/L			658360	696352	1	Standard
| Tl	205	0.003	ug/L	0.000	4	45	156	3	Standard
| Pb	208	0.416	ug/L	0.010	2	339	21537	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-09**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:14:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33046	5	Standard
Cl	37		ug/L			3356614	3417148	3	Standard
[> Sc	45		ug/L			484823	559409	2	Standard
| Cr	52	0.464	ug/L	0.034	7	19988	33534	3	Standard
| Cr	53	1.052	ug/L	0.019	1	142	2916	3	Standard
[> Ge	72		ug/L			24480	25839	0	KED
| Ni	60	0.502	ug/L	0.019	3	6	486	2	KED
| Ni	62	0.537	ug/L	0.047	8	0	86	8	KED
| Cu	63	0.783	ug/L	0.029	3	45	2263	4	KED
| Cu	65	0.777	ug/L	0.031	4	28	1134	3	KED
| Zn	66	2.259	ug/L	0.139	6	20	865	5	KED
| Zn	67	2.966	ug/L	0.176	5	7	191	4	KED
| As	75	0.884	ug/L	0.046	5	5	166	4	KED
| Se	78	0.075	ug/L	0.190	253	14	16	23	KED
| Y	89		ug/L			344872	364794	2	Standard
| Kr	83		ug/L			53	54	23	Standard
[> In-1	115		ug/L			8000	8010	0	KED
| Cd	111	0.010	ug/L	0.002	20	0	3	15	KED
| Cd	114	0.012	ug/L	0.008	72	2	9	52	KED
[> In	115		ug/L			485197	484467	2	Standard
| Ag	107	-0.001	ug/L	0.001	84	106	90	12	Standard
[> Tb	159		ug/L			658360	694981	2	Standard
| Tl	205	0.002	ug/L	0.000	14	45	139	7	Standard
| Pb	208	0.278	ug/L	0.004	1	339	14468	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-11**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:19:47**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32918	2	Standard
Cl	37		ug/L			3356614	3363331	2	Standard
[> Sc	45		ug/L			484823	555014	3	Standard
| Cr	52	0.740	ug/L	0.037	5	19988	39438	1	Standard
| Cr	53	1.348	ug/L	0.013	0	142	3662	2	Standard
[> Ge	72		ug/L			24480	25268	0	KED
| Ni	60	0.873	ug/L	0.026	2	6	822	3	KED
| Ni	62	0.835	ug/L	0.146	17	0	130	16	KED
| Cu	63	1.352	ug/L	0.021	1	45	3787	2	KED
| Cu	65	1.336	ug/L	0.071	5	28	1885	5	KED
| Zn	66	6.463	ug/L	0.433	6	20	2383	6	KED
| Zn	67	7.154	ug/L	0.753	10	7	441	10	KED
| As	75	1.138	ug/L	0.014	1	5	208	1	KED
| Se	78	0.005	ug/L	0.132	2436	14	14	17	KED
| Y	89		ug/L			344872	371131	3	Standard
| Kr	83		ug/L			53	62	31	Standard
[> In-1	115		ug/L			8000	7614	0	KED
| Cd	111	0.021	ug/L	0.011	53	0	5	44	KED
| Cd	114	0.016	ug/L	0.009	53	2	11	43	KED
[> In	115		ug/L			485197	480009	2	Standard
| Ag	107	0.001	ug/L	0.001	55	106	124	8	Standard
[> Tb	159		ug/L			658360	680449	1	Standard
| Tl	205	0.004	ug/L	0.001	18	45	193	15	Standard
| Pb	208	0.645	ug/L	0.008	1	339	32470	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-13**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:25:50**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	37920	1	Standard
Cl	37		ug/L			3356614	3527225	3	Standard
[> Sc	45		ug/L			484823	559202	2	Standard
[Cr	52	0.285	ug/L	0.024	8	19988	29489	2	Standard
[Cr	53	0.805	ug/L	0.012	1	142	2268	0	Standard
[> Ge	72		ug/L			24480	24778	3	KED
[Ni	60	0.850	ug/L	0.030	3	6	785	3	KED
[Ni	62	0.820	ug/L	0.161	19	0	125	17	KED
[Cu	63	1.797	ug/L	0.021	1	45	4920	3	KED
[Cu	65	1.827	ug/L	0.050	2	28	2518	4	KED
[Zn	66	5.103	ug/L	0.275	5	20	1849	6	KED
[Zn	67	5.633	ug/L	0.373	6	7	342	9	KED
[As	75	0.377	ug/L	0.024	6	5	70	4	KED
[Se	78	0.102	ug/L	0.044	42	14	16	2	KED
[Y	89		ug/L			344872	369744	2	Standard
[Kr	83		ug/L			53	54	13	Standard
[> In-1	115		ug/L			8000	8049	2	KED
[Cd	111	0.009	ug/L	0.009	101	0	3	69	KED
[Cd	114	0.005	ug/L	0.007	152	2	5	81	KED
[> In	115		ug/L			485197	482067	1	Standard
[Ag	107	-0.001	ug/L	0.000	24	106	78	8	Standard
[> Tb	159		ug/L			658360	686351	2	Standard
[Tl	205	0.003	ug/L	0.000	2	45	157	1	Standard
[Pb	208	0.125	ug/L	0.001	0	339	6606	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 05:30:24

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	23024	1	Standard
Cl	37		ug/L			3356614	3209370	1	Standard
[> Sc	45		ug/L			484823	482033	0	Standard
| Cr	52	0.020	ug/L	0.012	60	19988	20265	1	Standard
| Cr	53	0.030	ug/L	0.008	27	142	208	8	Standard
[> Ge	72		ug/L			24480	25565	0	KED
| Ni	60	-0.000	ug/L	0.004	1468	6	6	62	KED
| Ni	62	-0.000	ug/L	0.007	3389	0	0	173	KED
| Cu	63	0.003	ug/L	0.005	168	45	55	25	KED
| Cu	65	0.004	ug/L	0.006	154	28	35	25	KED
| Zn	66	0.054	ug/L	0.025	46	20	41	21	KED
| Zn	67	0.046	ug/L	0.095	204	7	10	53	KED
| As	75	-0.005	ug/L	0.006	118	5	4	22	KED
| Se	78	-0.059	ug/L	0.163	277	14	13	24	KED
Y	89		ug/L			344872	340199	3	Standard
Kr	83		ug/L			53	57	24	Standard
[> In-1	115		ug/L			8000	7861	1	KED
| Cd	111	0.001	ug/L	0.005	335	0	1	86	KED
| Cd	114	0.001	ug/L	0.002	141	2	3	34	KED
[> In	115		ug/L			485197	490833	0	Standard
| Ag	107	-0.004	ug/L	0.001	14	106	29	38	Standard
[> Tb	159		ug/L			658360	659288	2	Standard
| Tl	205	-0.001	ug/L	0.000	20	45	14	41	Standard
| Pb	208	-0.001	ug/L	0.001	37	339	273	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 05:35:03

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	22910	7	Standard
Cl	37		ug/L			3356614	3392122	3	Standard
[> Sc	45		ug/L			484823	497180	3	Standard
| Cr	52	47.234	ug/L	0.707	1	19988	968393	3	Standard
| Cr	53	48.728	ug/L	0.067	0	142	113465	3	Standard
[> Ge	72		ug/L			24480	26330	0	KED
| Ni	60	46.990	ug/L	1.485	3	6	45789	3	KED
| Ni	62	47.766	ug/L	0.716	1	0	7767	2	KED
| Cu	63	47.624	ug/L	0.996	2	45	137326	3	KED
| Cu	65	47.594	ug/L	0.606	1	28	68954	2	KED
| Zn	66	49.777	ug/L	0.468	0	20	18978	1	KED
| Zn	67	49.938	ug/L	2.134	4	7	3160	4	KED
| As	75	49.035	ug/L	0.575	1	5	9121	2	KED
| Se	78	49.577	ug/L	1.159	2	14	1039	1	KED
Y	89		ug/L			344872	353778	2	Standard
Kr	83		ug/L			53	59	19	Standard
[> In-1	115		ug/L			8000	8491	0	KED
| Cd	111	48.503	ug/L	0.154	0	0	12423	0	KED
| Cd	114	48.285	ug/L	1.223	2	2	30382	2	KED
[> In	115		ug/L			485197	488467	2	Standard
| Ag	107	48.565	ug/L	0.519	1	106	909259	2	Standard
[> Tb	159		ug/L			658360	690251	2	Standard
| Tl	205	49.252	ug/L	0.178	0	45	1920086	2	Standard
| Pb	208	49.451	ug/L	0.527	1	339	2496552	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 05:42:27

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	21877	2	Standard
Cl	37		ug/L			3356614	3255254	4	Standard
[> Sc	45		ug/L			484823	461337	1	Standard
| Cr	52	0.019	ug/L	0.026	137	19988	19375	3	Standard
| Cr	53	0.021	ug/L	0.004	18	142	181	3	Standard
[> Ge	72		ug/L			24480	25502	2	KED
| Ni	60	-0.001	ug/L	0.002	226	6	5	33	KED
| Ni	62	0.012	ug/L	0.007	59	0	2	43	KED
| Cu	63	0.012	ug/L	0.004	34	45	81	16	KED
| Cu	65	0.014	ug/L	0.007	50	28	50	21	KED
| Zn	66	0.115	ug/L	0.020	17	20	63	9	KED
| Zn	67	-0.037	ug/L	0.060	162	7	5	66	KED
| As	75	-0.008	ug/L	0.009	114	5	3	43	KED
| Se	78	-0.110	ug/L	0.172	157	14	12	26	KED
Y	89		ug/L			344872	334522	1	Standard
Kr	83		ug/L			53	54	28	Standard
[> In-1	115		ug/L			8000	7797	3	KED
| Cd	111	0.001	ug/L	0.006	438	0	1	114	KED
| Cd	114	0.000	ug/L	0.002	1357	2	2	46	KED
[> In	115		ug/L			485197	462791	0	Standard
| Ag	107	0.007	ug/L	0.003	43	106	224	23	Standard
[> Tb	159		ug/L			658360	639755	0	Standard
| Tl	205	0.002	ug/L	0.001	52	45	99	28	Standard
| Pb	208	-0.001	ug/L	0.001	99	339	285	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0034-15**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:47:06**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32404	1	Standard
Cl	37		ug/L			3356614	3282777	2	Standard
[> Sc	45		ug/L			484823	541950	3	Standard
| Cr	52	0.613	ug/L	0.060	9	19988	35730	3	Standard
| Cr	53	1.144	ug/L	0.018	1	142	3059	2	Standard
[> Ge	72		ug/L			24480	26112	1	KED
| Ni	60	0.305	ug/L	0.018	6	6	300	5	KED
| Ni	62	0.310	ug/L	0.052	16	0	50	17	KED
| Cu	63	0.384	ug/L	0.010	2	45	1146	1	KED
| Cu	65	0.376	ug/L	0.031	8	28	571	8	KED
| Zn	66	1.211	ug/L	0.068	5	20	479	6	KED
| Zn	67	1.482	ug/L	0.154	10	7	100	10	KED
| As	75	0.636	ug/L	0.024	3	5	122	3	KED
| Se	78	0.122	ug/L	0.118	96	14	17	12	KED
Y	89		ug/L			344872	358763	0	Standard
Kr	83		ug/L			53	53	14	Standard
[> In-1	115		ug/L			8000	8598	2	KED
| Cd	111	0.005	ug/L	0.008	183	0	2	98	KED
| Cd	114	0.007	ug/L	0.003	35	2	7	25	KED
[> In	115		ug/L			485197	473393	2	Standard
| Ag	107	0.002	ug/L	0.000	12	106	144	1	Standard
[> Tb	159		ug/L			658360	672199	2	Standard
| Tl	205	0.002	ug/L	0.001	44	45	123	27	Standard
| Pb	208	0.151	ug/L	0.003	1	339	7763	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0057-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:51:39**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32495	3	Standard
Cl	37		ug/L			3356614	3797156	1	Standard
> Sc	45		ug/L			484823	528099	1	Standard
| Cr	52	0.365	ug/L	0.038	10	19988	29538	1	Standard
| Cr	53	0.725	ug/L	0.008	1	142	1946	1	Standard
> Ge	72		ug/L			24480	22402	2	KED
| Ni	60	0.604	ug/L	0.054	8	6	505	6	KED
| Ni	62	0.688	ug/L	0.072	10	0	95	12	KED
| Cu	63	1.119	ug/L	0.015	1	45	2783	1	KED
| Cu	65	1.046	ug/L	0.011	1	28	1314	4	KED
| Zn	66	3.017	ug/L	0.075	2	20	995	1	KED
| Zn	67	3.019	ug/L	0.597	19	7	168	17	KED
| As	75	1.269	ug/L	0.064	5	5	205	3	KED
| Se	78	0.481	ug/L	0.013	2	14	21	3	KED
Y	89		ug/L			344872	358814	1	Standard
Kr	83		ug/L			53	69	22	Standard
> In-1	115		ug/L			8000	7227	2	KED
| Cd	111	0.028	ug/L	0.007	26	0	6	20	KED
| Cd	114	0.022	ug/L	0.013	61	2	14	53	KED
> In	115		ug/L			485197	422476	1	Standard
| Ag	107	0.003	ug/L	0.001	31	106	142	10	Standard
> Tb	159		ug/L			658360	638464	0	Standard
| Tl	205	0.039	ug/L	0.001	3	45	1463	2	Standard
| Pb	208	0.273	ug/L	0.003	1	339	13079	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0060-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 05:56:12**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32570	4	Standard
Cl	37		ug/L			3356614	3493338	2	Standard
Sc	45		ug/L			484823	493458	2	Standard
Cr	52	0.501	ug/L	0.033	6	19988	30307	1	Standard
Cr	53	0.633	ug/L	0.017	2	142	1606	1	Standard
Ge	72		ug/L			24480	25693	3	KED
Ni	60	0.608	ug/L	0.033	5	6	583	2	KED
Ni	62	0.644	ug/L	0.066	10	0	102	11	KED
Cu	63	0.534	ug/L	0.033	6	45	1545	2	KED
Cu	65	0.545	ug/L	0.028	5	28	800	7	KED
Zn	66	127.119	ug/L	3.263	2	20	47238	3	KED
Zn	67	114.710	ug/L	3.018	2	7	7071	2	KED
As	75	0.183	ug/L	0.035	18	5	38	19	KED
Se	78	0.022	ug/L	0.097	447	14	15	9	KED
Y	89		ug/L			344872	347061	0	Standard
Kr	83		ug/L			53	54	4	Standard
In-1	115		ug/L			8000	7704	4	KED
Cd	111	0.004	ug/L	0.000	8	0	1		KED
Cd	114	0.010	ug/L	0.007	71	2	7	48	KED
In	115		ug/L			485197	452424	0	Standard
Ag	107	0.000	ug/L	0.001	350	106	102	11	Standard
Tb	159		ug/L			658360	636444	1	Standard
Tl	205	0.001	ug/L	0.000	40	45	88	20	Standard
Pb	208	0.131	ug/L	0.005	3	339	6446	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0097-01**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Friday, March 17, 2023 06:00:45**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	61500	2	Standard
Cl	37		ug/L			3356614	3523722	2	Standard
> Sc	45		ug/L			484823	512097	3	Standard
| Cr	52	31.724	ug/L	0.792	2	19988	676602	1	Standard
| Cr	53	31.914	ug/L	0.400	1	142	76598	3	Standard
> Ge	72		ug/L			24480	25736	1	KED
| Ni	60	2.660	ug/L	0.069	2	6	2540	4	KED
| Ni	62	2.580	ug/L	0.143	5	0	410	6	KED
| Cu	63	0.949	ug/L	0.040	4	45	2718	2	KED
| Cu	65	0.941	ug/L	0.056	5	28	1361	4	KED
| Zn	66	58.023	ug/L	1.878	3	20	21611	2	KED
| Zn	67	52.748	ug/L	2.478	4	7	3261	3	KED
| As	75	0.056	ug/L	0.022	39	5	15	25	KED
| Se	78	-0.009	ug/L	0.101	1135	14	14	15	KED
Y	89		ug/L			344872	358724	5	Standard
Kr	83		ug/L			53	52	22	Standard
> In-1	115		ug/L			8000	8004	0	KED
| Cd	111	0.350	ug/L	0.025	7	0	85	7	KED
| Cd	114	0.391	ug/L	0.009	2	2	234	2	KED
> In	115		ug/L			485197	469339	2	Standard
| Ag	107	0.009	ug/L	0.002	25	106	272	17	Standard
> Tl	159		ug/L			658360	668984	2	Standard
| Tl	205	-0.000	ug/L	0.000	54	45	32	21	Standard
| Pb	208	0.150	ug/L	0.005	3	339	7689	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0074-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 06:05:48**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	33046	1	Standard
Cl	37		ug/L			3356614	4578945	4	Standard
> Sc	45		ug/L			484823	575321	1	Standard
| Cr	52	0.020	ug/L	0.025	125	19988	24177	1	Standard
| Cr	53	1.151	ug/L	0.013	1	142	3267	1	Standard
> Ge	72		ug/L			24480	22705	0	KED
| Ni	60	4.655	ug/L	0.134	2	6	3916	2	KED
| Ni	62	4.687	ug/L	0.434	9	0	657	9	KED
| Cu	63	0.684	ug/L	0.034	4	45	1741	4	KED
| Cu	65	0.688	ug/L	0.033	4	28	886	5	KED
| Zn	66	8.047	ug/L	0.338	4	20	2660	3	KED
| Zn	67	10.508	ug/L	0.564	5	7	579	4	KED
| As	75	0.635	ug/L	0.027	4	5	106	3	KED
| Se	78	3.626	ug/L	0.116	3	14	77	3	KED
| Y	89		ug/L			344872	344346	2	Standard
| Kr	83		ug/L			53	73	8	Standard
> In-1	115		ug/L			8000	7260	3	KED
| Cd	111	0.690	ug/L	0.034	4	0	152	7	KED
| Cd	114	0.683	ug/L	0.024	3	2	369	4	KED
> In	115		ug/L			485197	425192	1	Standard
| Ag	107	0.003	ug/L	0.001	43	106	141	15	Standard
> Tb	159		ug/L			658360	639043	1	Standard
| Tl	205	0.018	ug/L	0.001	5	45	709	6	Standard
| Pb	208	0.029	ug/L	0.000	1	339	1702	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:10:22

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	24406	1	Standard
Cl	37		ug/L			3356614	3524951	0	Standard
[> Sc	45		ug/L			484823	473951	2	Standard
| Cr	52	0.031	ug/L	0.017	54	19988	20141	4	Standard
| Cr	53	0.068	ug/L	0.007	10	142	289	5	Standard
[> Ge	72		ug/L			24480	24551	2	KED
| Ni	60	-0.001	ug/L	0.003	212	6	5	57	KED
| Ni	62	0.008	ug/L	0.012	148	0	1	100	KED
| Cu	63	0.007	ug/L	0.005	64	45	64	19	KED
| Cu	65	0.005	ug/L	0.003	67	28	35	13	KED
| Zn	66	0.062	ug/L	0.043	69	20	42	37	KED
| Zn	67	0.107	ug/L	0.076	71	7	13	34	KED
| As	75	-0.008	ug/L	0.004	49	5	3	19	KED
| Se	78	-0.092	ug/L	0.075	81	14	12	9	KED
Y	89		ug/L			344872	337113	1	Standard
Kr	83		ug/L			53	56	30	Standard
[> In-1	115		ug/L			8000	7600	0	KED
| Cd	111	0.003	ug/L	0.009	291	0	1	124	KED
| Cd	114	-0.002	ug/L	0.004	202	2	1	173	KED
[> In	115		ug/L			485197	460731	1	Standard
| Ag	107	-0.003	ug/L	0.001	16	106	43	21	Standard
[> Tb	159		ug/L			658360	644864	2	Standard
| Tl	205	-0.000	ug/L	0.000	73	45	27	49	Standard
| Pb	208	-0.002	ug/L	0.001	34	339	260	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0022-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 06:15:02**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	29067	3	Standard
Cl	37		ug/L			3356614	3372937	1	Standard
> Sc	45		ug/L			484823	573302	0	Standard
| Cr	52	1.802	ug/L	0.043	2	19988	65334	1	Standard
| Cr	53	2.327	ug/L	0.073	3	142	6409	3	Standard
> Ge	72		ug/L			24480	25257	2	KED
| Ni	60	0.796	ug/L	0.045	5	6	749	4	KED
| Ni	62	0.900	ug/L	0.170	18	0	140	18	KED
| Cu	63	0.300	ug/L	0.011	3	45	876	3	KED
| Cu	65	0.301	ug/L	0.026	8	28	446	7	KED
| Zn	66	1.753	ug/L	0.146	8	20	660	5	KED
| Zn	67	1.588	ug/L	0.089	5	7	104	7	KED
| As	75	1.050	ug/L	0.050	4	5	192	3	KED
| Se	78	0.897	ug/L	0.174	19	14	32	10	KED
Y	89		ug/L			344872	358493	1	Standard
Kr	83		ug/L			53	57	16	Standard
> In-1	115		ug/L			8000	7982	1	KED
| Cd	111	0.011	ug/L	0.008	78	0	3	56	KED
| Cd	114	0.005	ug/L	0.003	58	2	5	34	KED
> In	115		ug/L			485197	461955	0	Standard
| Ag	107	-0.004	ug/L	0.000	4	106	33	8	Standard
> Tb	159		ug/L			658360	664668	0	Standard
| Ti	205	0.001	ug/L	0.000	18	45	66	6	Standard
| Pb	208	0.065	ug/L	0.001	2	339	3490	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0394-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 06:19:41**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	29869	3	Standard
Cl	37		ug/L			3356614	3449140	3	Standard
> Sc	45		ug/L			484823	566154	7	Standard
| Cr	52	1.878	ug/L	0.123	6	19988	66144	3	Standard
| Cr	53	2.318	ug/L	0.075	3	142	6295	4	Standard
> Ge	72		ug/L			24480	24619	2	KED
| Ni	60	0.821	ug/L	0.033	4	6	754	6	KED
| Ni	62	0.795	ug/L	0.072	9	0	121	6	KED
| Cu	63	0.304	ug/L	0.012	4	45	865	6	KED
| Cu	65	0.301	ug/L	0.001	0	28	436	2	KED
| Zn	66	1.708	ug/L	0.072	4	20	628	4	KED
| Zn	67	1.578	ug/L	0.383	24	7	100	23	KED
| As	75	1.093	ug/L	0.049	4	5	194	1	KED
| Se	78	0.832	ug/L	<u>0.407</u>	48	14	30	28	KED
Y	89		ug/L			344872	348760	6	Standard
Kr	83		ug/L			53	45	14	Standard
> In-1	115		ug/L			8000	7780	4	KED
| Cd	111	0.006	ug/L	0.006	111	0	2	65	KED
| Cd	114	0.006	ug/L	0.005	97	2	5	58	KED
> In	115		ug/L			485197	459824	6	Standard
| Ag	107	-0.004	ug/L	0.000	10	106	33	24	Standard
> Tb	159		ug/L			658360	653746	5	Standard
| Ti	205	0.000	ug/L	0.000	275	45	50	29	Standard
| Pb	208	0.066	ug/L	0.004	5	339	3496	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0394-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 06:24:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	32293	4	Standard
Cl	37		ug/L			3356614	3587850	1	Standard
> Sc	45		ug/L			484823	586087	3	Standard
| Cr	52	22.654	ug/L	0.439	1	19988	559970	1	Standard
| Cr	53	23.705	ug/L	0.241	1	142	65148	1	Standard
> Ge	72		ug/L			24480	25194	1	KED
| Ni	60	24.876	ug/L	0.082	0	6	23195	1	KED
| Ni	62	25.137	ug/L	0.971	3	0	3912	5	KED
| Cu	63	25.006	ug/L	0.241	0	45	69000	0	KED
| Cu	65	24.358	ug/L	0.346	1	28	33775	0	KED
| Zn	66	75.317	ug/L	1.936	2	20	27458	1	KED
| Zn	67	74.956	ug/L	0.507	0	7	4535	1	KED
| As	75	25.363	ug/L	0.818	3	5	4515	1	KED
| Se	78	76.076	ug/L	1.608	2	14	1518	1	KED
Y	89		ug/L			344872	357456	1	Standard
Kr	83		ug/L			53	57	21	Standard
> In-1	115		ug/L			8000	7765	3	KED
| Cd	111	24.438	ug/L	0.811	3	0	5721	0	KED
| Cd	114	24.472	ug/L	0.843	3	2	14075	1	KED
> In	115		ug/L			485197	470938	2	Standard
| Ag	107	24.913	ug/L	0.322	1	106	449690	1	Standard
> Tb	159		ug/L			658360	680042	0	Standard
| Ti	205	26.019	ug/L	0.291	1	45	999502	1	Standard
| Pb	208	26.024	ug/L	0.130	0	339	1294860	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:29:17

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	23854	1	Standard
Cl	37		ug/L			3356614	3514836	3	Standard
[> Sc	45		ug/L			484823	485304	2	Standard
| Cr	52	0.027	ug/L	0.016	60	19988	20534	1	Standard
| Cr	53	0.035	ug/L	0.007	20	142	220	4	Standard
[> Ge	72		ug/L			24480	24742	1	KED
| Ni	60	0.003	ug/L	0.008	308	6	8	86	KED
| Ni	62	0.029	ug/L	0.036	123	0	5	108	KED
| Cu	63	0.003	ug/L	0.003	103	45	54	17	KED
| Cu	65	-0.000	ug/L	0.014	5148	28	28	65	KED
| Zn	66	0.024	ug/L	0.021	85	20	29	24	KED
| Zn	67	-0.044	ug/L	0.092	208	7	5	108	KED
| As	75	-0.001	ug/L	0.014	1097	5	4	49	KED
| Se	78	0.128	ug/L	0.157	122	14	16	19	KED
Y	89		ug/L			344872	348064	3	Standard
Kr	83		ug/L			53	57	3	Standard
[> In-1	115		ug/L			8000	7730	2	KED
| Cd	111	-0.003	ug/L	0.002	95	0	0	173	KED
| Cd	114	-0.002	ug/L	0.002	102	2	1	90	KED
[> In	115		ug/L			485197	468611	4	Standard
| Ag	107	0.006	ug/L	0.005	82	106	204	37	Standard
[> Tb	159		ug/L			658360	653773	4	Standard
| Tl	205	0.004	ug/L	0.004	103	45	178	73	Standard
| Pb	208	-0.000	ug/L	0.003	1190	339	318	45	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:33:57

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	22969	6	Standard
Cl	37		ug/L			3356614	3444213	3	Standard
[> Sc	45		ug/L			484823	491357	5	Standard
| Cr	52	48.861	ug/L	0.540	1	19988	989828	6	Standard
| Cr	53	49.720	ug/L	0.935	1	142	114443	6	Standard
[> Ge	72		ug/L			24480	25123	1	KED
| Ni	60	48.835	ug/L	0.333	0	6	45399	1	KED
| Ni	62	49.316	ug/L	1.743	3	0	7647	1	KED
| Cu	63	49.373	ug/L	1.853	3	45	135756	1	KED
| Cu	65	49.031	ug/L	0.398	0	28	67772	1	KED
| Zn	66	50.195	ug/L	1.068	2	20	18257	2	KED
| Zn	67	49.991	ug/L	0.885	1	7	3019	2	KED
| As	75	49.963	ug/L	0.225	0	5	8867	1	KED
| Se	78	49.653	ug/L	1.939	3	14	993	4	KED
Y	89		ug/L			344872	362824	3	Standard
Kr	83		ug/L			53	66	12	Standard
[> In-1	115		ug/L			8000	7696	1	KED
| Cd	111	48.891	ug/L	1.579	3	0	11347	1	KED
| Cd	114	48.890	ug/L	0.911	1	2	27887	2	KED
[> In	115		ug/L			485197	483240	4	Standard
| Ag	107	48.399	ug/L	0.532	1	106	896404	4	Standard
[> Tb	159		ug/L			658360	694933	3	Standard
| Tl	205	50.600	ug/L	0.880	1	45	1986995	5	Standard
| Pb	208	49.648	ug/L	0.995	2	339	2525152	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:41:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21629	22408	2	Standard
Cl	37		ug/L			3356614	3398969	3	Standard
[> Sc	45		ug/L			484823	481226	4	Standard
| Cr	52	0.004	ug/L	0.039	1009	19988	19894	1	Standard
| Cr	53	0.025	ug/L	0.008	32	142	197	6	Standard
[> Ge	72		ug/L			24480	26356	1	KED
| Ni	60	0.007	ug/L	0.009	129	6	13	62	KED
| Ni	62	0.035	ug/L	0.038	108	0	6	96	KED
| Cu	63	0.016	ug/L	0.002	13	45	93	7	KED
| Cu	65	0.009	ug/L	0.006	71	28	43	19	KED
| Zn	66	0.051	ug/L	0.036	71	20	41	34	KED
| Zn	67	-0.029	ug/L	0.071	243	7	6	69	KED
| As	75	0.002	ug/L	0.015	737	5	5	49	KED
| Se	78	-0.163	ug/L	0.218	133	14	11	38	KED
Y	89		ug/L			344872	344942	2	Standard
Kr	83		ug/L			53	59	12	Standard
[> In-1	115		ug/L			8000	8433	0	KED
| Cd	111	-0.000	ug/L	0.004	2092	0	0	100	KED
| Cd	114	-0.002	ug/L	0.004	171	2	1	188	KED
[> In	115		ug/L			485197	477762	2	Standard
| Ag	107	0.007	ug/L	0.001	8	106	238	1	Standard
[> Tb	159		ug/L			658360	663025	4	Standard
| Tl	205	0.001	ug/L	0.000	8	45	83	3	Standard
| Pb	208	-0.001	ug/L	0.001	42	339	273	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:46:00

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13	ug/L				22791	0	Standard
	Cl	37	ug/L				3389325	0	Standard
[>	Sc	45	ug/L				463781	2	Standard
|	Cr	52	ug/L				19463	4	Standard
|	Cr	53	ug/L				219	2	Standard
[>	Ge	72	ug/L				24722	2	KED
|	Ni	60	ug/L				5	88	KED
|	Ni	62	ug/L				1	100	KED
|	Cu	63	ug/L				38	26	KED
|	Cu	65	ug/L				33	32	KED
|	Zn	66	ug/L				24	31	KED
|	Zn	67	ug/L				3	91	KED
|	As	75	ug/L				3	0	KED
|	Se	78	ug/L				17	21	KED
	Y	89	ug/L				333921	2	Standard
	Kr	83	ug/L				50	15	Standard
[>	In-1	115	ug/L				8068	2	KED
|	Cd	111	ug/L				1	69	KED
|	Cd	114	ug/L				1	118	KED
[>	In	115	ug/L				466833	1	Standard
|	Ag	107	ug/L				109	5	Standard
[>	Tb	159	ug/L				642030	2	Standard
|	Tl	205	ug/L				29	9	Standard
|	Pb	208	ug/L				311	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:50:39

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22845	1	Standard
Cl	37		ug/L			3389325	3328608	2	Standard
[> Sc	45		ug/L			463781	484440	2	Standard
| Cr	52	48.247	ug/L	0.766	1	19463	963627	1	Standard
| Cr	53	48.576	ug/L	1.495	3	219	110245	0	Standard
[> Ge	72		ug/L			24722	25035	1	KED
| Ni	60	48.254	ug/L	1.624	3	5	44697	2	KED
| Ni	62	48.366	ug/L	2.236	4	1	7476	3	KED
| Cu	63	49.700	ug/L	0.578	1	38	136226	1	KED
| Cu	65	48.071	ug/L	0.751	1	33	66224	2	KED
| Zn	66	50.218	ug/L	0.736	1	24	18207	1	KED
| Zn	67	50.303	ug/L	2.280	4	3	3021	3	KED
| As	75	49.689	ug/L	0.835	1	3	8785	1	KED
| Se	78	49.615	ug/L	0.705	1	17	993	1	KED
Y	89		ug/L			333921	345416	3	Standard
Kr	83		ug/L			50	62	13	Standard
[> In-1	115		ug/L			8068	7704	1	KED
| Cd	111	48.161	ug/L	0.405	0	1	11193	1	KED
| Cd	114	47.951	ug/L	1.321	2	1	27370	1	KED
[> In	115		ug/L			466833	484224	0	Standard
| Ag	107	48.270	ug/L	0.972	2	109	895875	1	Standard
[> Tb	159		ug/L			642030	682213	1	Standard
| Tl	205	49.473	ug/L	1.021	2	29	1906106	1	Standard
| Pb	208	49.804	ug/L	0.649	1	311	2485258	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 06:58:02

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	23188	1	Standard
Cl	37		ug/L			3389325	3437313	1	Standard
[> Sc	45		ug/L			463781	483766	1	Standard
| Cr	52	-0.011	ug/L	0.007	68	19463	20091	1	Standard
| Cr	53	-0.019	ug/L	0.011	58	219	186	13	Standard
[> Ge	72		ug/L			24722	24961	1	KED
| Ni	60	0.001	ug/L	0.001	84	5	6	15	KED
| Ni	62	-0.000	ug/L	0.013	19462	1	1	100	KED
| Cu	63	0.017	ug/L	0.002	11	38	84	4	KED
| Cu	65	0.003	ug/L	0.005	152	33	38	19	KED
| Zn	66	0.073	ug/L	0.025	33	24	50	17	KED
| Zn	67	0.031	ug/L	0.065	210	3	5	78	KED
| As	75	0.013	ug/L	0.018	137	3	5	57	KED
| Se	78	-0.161	ug/L	0.097	60	17	14	12	KED
Y	89		ug/L			333921	345073	1	Standard
Kr	83		ug/L			50	64	22	Standard
[> In-1	115		ug/L			8068	7640	4	KED
| Cd	111	-0.002	ug/L	0.004	183	1	0	100	KED
| Cd	114	-0.001	ug/L	0.004	496	1	1	206	KED
[> In	115		ug/L			466833	489042	0	Standard
| Ag	107	0.015	ug/L	0.012	81	109	398	58	Standard
[> Tb	159		ug/L			642030	664966	2	Standard
| Tl	205	0.009	ug/L	0.014	149	29	379	138	Standard
| Pb	208	0.007	ug/L	0.012	183	311	659	94	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0046-01**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:02:42**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	26031	1	Standard
Cl	37		ug/L			3389325	3406236	1	Standard
Sc	45		ug/L			463781	568293	1	Standard
Cr	52	1.281	ug/L	0.057	4	19463	53234	1	Standard
Cr	53	1.434	ug/L	0.037	2	219	4078	1	Standard
Ge	72		ug/L			24722	26236	3	KED
Ni	60	2.284	ug/L	0.065	2	5	2222	2	KED
Ni	62	2.355	ug/L	0.028	1	1	383	2	KED
Cu	63	6.159	ug/L	0.266	4	38	17710	1	KED
Cu	65	6.244	ug/L	0.037	0	33	9044	3	KED
Zn	66	13.417	ug/L	0.473	3	24	5113	1	KED
Zn	67	14.074	ug/L	1.020	7	3	887	4	KED
As	75	0.245	ug/L	0.027	11	3	48	7	KED
Se	78	-0.096	ug/L	0.194	201	17	17	26	KED
Y	89		ug/L			333921	417098	3	Standard
Kr	83		ug/L			50	60	18	Standard
In-1	115		ug/L			8068	8143	2	KED
Cd	111	0.014	ug/L	0.020	139	1	5	96	KED
Cd	114	0.029	ug/L	0.008	28	1	19	25	KED
In	115		ug/L			466833	503809	0	Standard
Ag	107	0.009	ug/L	0.001	5	109	299	3	Standard
Tb	159		ug/L			642030	716660	1	Standard
Tl	205	0.008	ug/L	0.001	12	29	365	12	Standard
Pb	208	0.579	ug/L	0.015	2	311	30706	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0041-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:07:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	29428	1	Standard
Cl	37		ug/L			3389325	3476950	2	Standard
> Sc	45		ug/L			463781	535618	2	Standard
| Cr	52	0.755	ug/L	0.043	5	19463	38796	1	Standard
| Cr	53	1.100	ug/L	0.032	2	219	3008	1	Standard
> Ge	72		ug/L			24722	25393	1	KED
| Ni	60	1.491	ug/L	0.068	4	5	1406	3	KED
| Ni	62	1.392	ug/L	0.062	4	1	220	5	KED
| Cu	63	2.430	ug/L	0.098	4	38	6792	3	KED
| Cu	65	2.401	ug/L	0.054	2	33	3387	1	KED
| Zn	66	17.880	ug/L	0.169	0	24	6590	0	KED
| Zn	67	17.360	ug/L	1.173	6	3	1059	5	KED
| As	75	3.553	ug/L	0.076	2	3	640	1	KED
| Se	78	-0.158	ug/L	0.094	59	17	15	11	KED
| Y	89		ug/L			333921	359429	2	Standard
| Kr	83		ug/L			50	71	27	Standard
> In-1	115		ug/L			8068	7946	3	KED
| Cd	111	0.011	ug/L	0.009	83	1	4	53	KED
| Cd	114	0.017	ug/L	0.013	73	1	11	59	KED
> In	115		ug/L			466833	477773	2	Standard
| Ag	107	0.001	ug/L	0.001	205	109	121	15	Standard
> Tb	159		ug/L			642030	683387	1	Standard
| Tl	205	0.004	ug/L	0.001	15	29	173	12	Standard
| Pb	208	0.303	ug/L	0.002	0	311	15500	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0041-02**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 07:11:54

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	34630	3	Standard
Cl	37		ug/L			3389325	4285346	3	Standard
[> Sc	45		ug/L			463781	490425	1	Standard
| Cr	52	0.481	ug/L	0.035	7	19463	30103	1	Standard
| Cr	53	1.770	ug/L	0.086	4	219	4290	3	Standard
[> Ge	72		ug/L			24722	25784	3	KED
| Ni	60	1.214	ug/L	0.014	1	5	1163	3	KED
| Ni	62	1.168	ug/L	0.100	8	1	187	9	KED
| Cu	63	5.676	ug/L	0.111	1	38	16051	1	KED
| Cu	65	5.439	ug/L	0.068	1	33	7746	2	KED
| Zn	66	97.410	ug/L	3.084	3	24	36326	1	KED
| Zn	67	91.854	ug/L	2.841	3	3	5679	2	KED
| As	75	0.325	ug/L	0.023	6	3	62	9	KED
| Se	78	-0.137	ug/L	0.158	115	17	15	17	KED
Y	89		ug/L			333921	339443	3	Standard
Kr	83		ug/L			50	51	3	Standard
[> In-1	115		ug/L			8068	8227	2	KED
| Cd	111	0.031	ug/L	0.008	26	1	9	21	KED
| Cd	114	0.041	ug/L	0.012	30	1	26	27	KED
[> In	115		ug/L			466833	468314	0	Standard
| Ag	107	0.001	ug/L	0.001	54	109	133	9	Standard
[> Tb	159		ug/L			642030	674724	1	Standard
| Tl	205	0.003	ug/L	0.000	2	29	158	1	Standard
| Pb	208	0.298	ug/L	0.005	1	311	15042	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0041-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:16:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	35739	5	Standard
Cl	37		ug/L			3389325	5199337	3	Standard
Sc	45		ug/L			463781	491953	1	Standard
Cr	52	1.346	ug/L	0.047	3	19463	47382	2	Standard
Cr	53	3.030	ug/L	0.063	2	219	7203	1	Standard
Ge	72		ug/L			24722	24768	1	KED
Ni	60	1.227	ug/L	0.050	4	5	1130	3	KED
Ni	62	1.282	ug/L	0.084	6	1	198	8	KED
Cu	63	7.342	ug/L	0.123	1	38	19940	0	KED
Cu	65	7.235	ug/L	0.137	1	33	9889	2	KED
Zn	66	91.594	ug/L	0.992	1	24	32832	1	KED
Zn	67	84.632	ug/L	1.439	1	3	5030	3	KED
As	75	0.592	ug/L	0.073	12	3	106	12	KED
Se	78	-0.160	ug/L	0.252	157	17	14	34	KED
Y	89		ug/L			333921	351192	0	Standard
Kr	83		ug/L			50	53	6	Standard
In-1	115		ug/L			8068	7790	3	KED
Cd	111	0.079	ug/L	0.027	33	1	20	28	KED
Cd	114	0.054	ug/L	0.010	17	1	33	19	KED
In	115		ug/L			466833	476502	2	Standard
Ag	107	0.006	ug/L	0.002	23	109	229	13	Standard
Tb	159		ug/L			642030	678733	1	Standard
Tl	205	0.005	ug/L	0.000	4	29	215	3	Standard
Pb	208	1.143	ug/L	0.008	0	311	57057	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0041-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:21:12**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	34229	2	Standard
Cl	37		ug/L			3389325	5988785	2	Standard
Sc	45		ug/L			463781	500876	0	Standard
Cr	52	2.232	ug/L	0.005	0	19463	66144	0	Standard
Cr	53	4.281	ug/L	0.042	0	219	10266	0	Standard
Ge	72		ug/L			24722	24637	0	KED
Ni	60	7.757	ug/L	0.224	2	5	7076	2	KED
Ni	62	7.330	ug/L	0.496	6	1	1116	6	KED
Cu	63	12.198	ug/L	0.274	2	38	32931	2	KED
Cu	65	12.350	ug/L	0.248	2	33	16767	1	KED
Zn	66	160.872	ug/L	0.828	0	24	57345	0	KED
Zn	67	148.443	ug/L	1.357	0	3	8772	0	KED
As	75	4.747	ug/L	0.217	4	3	829	4	KED
Se	78	-0.110	ug/L	0.105	95	17	15	12	KED
Y	89		ug/L			333921	354976	1	Standard
Kr	83		ug/L			50	61	12	Standard
In-1	115		ug/L			8068	7874	2	KED
Cd	111	0.061	ug/L	0.030	48	1	16	46	KED
Cd	114	0.062	ug/L	0.009	13	1	37	15	KED
In	115		ug/L			466833	473396	0	Standard
Ag	107	0.009	ug/L	0.001	12	109	271	7	Standard
Tb	159		ug/L			642030	673980	1	Standard
Tl	205	0.005	ug/L	0.000	3	29	206	4	Standard
Pb	208	2.209	ug/L	0.035	1	311	109195	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0041-05**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:25:51**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	33895	4	Standard
Cl	37		ug/L			3389325	4725483	2	Standard
Sc	45		ug/L			463781	513744	2	Standard
Cr	52	1.094	ug/L	0.017	1	19463	44251	2	Standard
Cr	53	2.219	ug/L	0.027	1	219	5576	3	Standard
Ge	72		ug/L			24722	24787	2	KED
Ni	60	4.665	ug/L	0.192	4	5	4281	2	KED
Ni	62	4.702	ug/L	0.261	5	1	721	5	KED
Cu	63	9.854	ug/L	0.236	2	38	26770	2	KED
Cu	65	9.789	ug/L	0.401	4	33	13370	2	KED
Zn	66	211.131	ug/L	9.119	4	24	75673	2	KED
Zn	67	196.908	ug/L	9.495	4	3	11700	3	KED
As	75	0.543	ug/L	0.027	4	3	98	3	KED
Se	78	-0.066	ug/L	0.071	107	17	16	7	KED
Y	89		ug/L			333921	360709	2	Standard
Kr	83		ug/L			50	50	24	Standard
In-1	115		ug/L			8068	7715	3	KED
Cd	111	0.057	ug/L	0.017	30	1	14	24	KED
Cd	114	0.066	ug/L	0.011	16	1	39	19	KED
In	115		ug/L			466833	493883	1	Standard
Ag	107	0.003	ug/L	0.001	31	109	164	8	Standard
Tb	159		ug/L			642030	704947	2	Standard
Tl	205	0.003	ug/L	0.001	18	29	154	11	Standard
Pb	208	1.938	ug/L	0.017	0	311	100256	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0093-01**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:30:55**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	33020	2	Standard
Cl	37		ug/L			3389325	4862834	2	Standard
[> Sc	45		ug/L			463781	527033	2	Standard
| Cr	52	0.239	ug/L	0.007	2	19463	27211	2	Standard
| Cr	53	2.975	ug/L	0.081	2	219	7580	2	Standard
[> Ge	72		ug/L			24722	24439	4	KED
| Ni	60	1.029	ug/L	0.006	0	5	936	4	KED
| Ni	62	1.122	ug/L	0.131	11	1	171	13	KED
| Cu	63	6.498	ug/L	0.101	1	38	17413	3	KED
| Cu	65	6.476	ug/L	0.105	1	33	8734	2	KED
| Zn	66	37.786	ug/L	0.812	2	24	13385	6	KED
| Zn	67	35.707	ug/L	0.527	1	3	2094	2	KED
| As	75	0.663	ug/L	0.062	9	3	117	4	KED
| Se	78	-0.062	ug/L	0.168	272	17	16	19	KED
Y	89		ug/L			333921	360900	2	Standard
Kr	83		ug/L			50	63	9	Standard
[> In-1	115		ug/L			8068	7453	1	KED
| Cd	111	0.050	ug/L	0.009	17	1	12	15	KED
| Cd	114	0.065	ug/L	0.015	22	1	37	22	KED
[> In	115		ug/L			466833	483536	1	Standard
| Ag	107	-0.000	ug/L	0.001	566	109	110	11	Standard
[> Tb	159		ug/L			642030	699277	0	Standard
| Tl	205	0.003	ug/L	0.001	18	29	169	14	Standard
| Pb	208	0.443	ug/L	0.007	1	311	22985	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0093-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:35:28**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	32107	2	Standard
Cl	37		ug/L			3389325	5518237	1	Standard
[> Sc	45		ug/L			463781	537673	0	Standard
| Cr	52	0.337	ug/L	0.042	12	19463	29871	2	Standard
| Cr	53	3.714	ug/L	0.075	2	219	9595	2	Standard
[> Ge	72		ug/L			24722	25448	0	KED
| Ni	60	1.538	ug/L	0.053	3	5	1454	3	KED
| Ni	62	1.688	ug/L	0.212	12	1	267	12	KED
| Cu	63	7.103	ug/L	0.177	2	38	19827	3	KED
| Cu	65	7.270	ug/L	0.142	1	33	10209	1	KED
| Zn	66	106.266	ug/L	3.491	3	24	39134	3	KED
| Zn	67	101.046	ug/L	3.850	3	3	6170	4	KED
| As	75	2.395	ug/L	0.038	1	3	433	1	KED
| Se	78	-0.239	ug/L	0.043	18	17	13	6	KED
Y	89		ug/L			333921	364782	1	Standard
Kr	83		ug/L			50	60	11	Standard
[> In-1	115		ug/L			8068	7921	1	KED
| Cd	111	0.068	ug/L	0.017	24	1	17	22	KED
| Cd	114	0.048	ug/L	0.020	42	1	29	37	KED
[> In	115		ug/L			466833	473682	0	Standard
| Ag	107	0.002	ug/L	0.000	24	109	142	5	Standard
[> Tb	159		ug/L			642030	680614	0	Standard
| Tl	205	0.002	ug/L	0.000	10	29	123	7	Standard
| Pb	208	0.528	ug/L	0.005	0	311	26630	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0088-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 07:40:01**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	34581	2	Standard
Cl	37		ug/L			3389325	3534033	4	Standard
Sc	45		ug/L			463781	526721	1	Standard
Cr	52	5.904	ug/L	0.192	3	19463	147608	1	Standard
Cr	53	6.551	ug/L	0.121	1	219	16387	0	Standard
Ge	72		ug/L			24722	26771	3	KED
Ni	60	19.778	ug/L	0.282	1	5	19591	1	KED
Ni	62	20.092	ug/L	0.238	1	1	3323	3	KED
Cu	63	18.794	ug/L	0.415	2	38	55104	3	KED
Cu	65	18.601	ug/L	0.159	0	33	27423	3	KED
Zn	66	48.388	ug/L	1.128	2	24	18753	1	KED
Zn	67	52.608	ug/L	1.703	3	3	3379	3	KED
As	75	0.566	ug/L	0.019	3	3	110	0	KED
Se	78	-0.065	ug/L	0.243	371	17	17	25	KED
Y	89		ug/L			333921	372568	1	Standard
Kr	83		ug/L			50	65	16	Standard
In-1	115		ug/L			8068	8037	0	KED
Cd	111	0.123	ug/L	0.030	24	1	31	24	KED
Cd	114	0.139	ug/L	0.033	24	1	84	24	KED
In	115		ug/L			466833	502937	1	Standard
Ag	107	0.005	ug/L	0.001	28	109	210	12	Standard
Tb	159		ug/L			642030	705444	1	Standard
Tl	205	0.004	ug/L	0.000	5	29	190	5	Standard
Pb	208	1.070	ug/L	0.003	0	311	55536	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 07:44:34

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22299	4	Standard
Cl	37		ug/L			3389325	3197687	1	Standard
[> Sc	45		ug/L			463781	485064	3	Standard
| Cr	52	-0.008	ug/L	0.028	369	19463	20210	4	Standard
| Cr	53	0.094	ug/L	0.004	4	219	441	1	Standard
[> Ge	72		ug/L			24722	24857	4	KED
| Ni	60	-0.001	ug/L	0.003	381	5	5	57	KED
| Ni	62	0.000	ug/L	0.013	5331	1	1	100	KED
| Cu	63	0.002	ug/L	0.003	127	38	43	13	KED
| Cu	65	-0.009	ug/L	0.003	32	33	21	22	KED
| Zn	66	0.025	ug/L	0.033	132	24	33	33	KED
| Zn	67	0.032	ug/L	0.039	120	3	5	43	KED
| As	75	0.011	ug/L	0.008	80	3	5	32	KED
| Se	78	-0.217	ug/L	0.225	103	17	13	31	KED
Y	89		ug/L			333921	338957	2	Standard
Kr	83		ug/L			50	45	11	Standard
[> In-1	115		ug/L			8068	7755	2	KED
| Cd	111	-0.002	ug/L	0.004	162	1	0	100	KED
| Cd	114	-0.001	ug/L	0.002	239	1	1	107	KED
[> In	115		ug/L			466833	476319	3	Standard
| Ag	107	-0.004	ug/L	0.001	11	109	29	30	Standard
[> Tb	159		ug/L			642030	664985	2	Standard
| Tl	205	0.000	ug/L	0.000	142	29	33	6	Standard
| Pb	208	-0.003	ug/L	0.000	1	311	158	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 07:49:14

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22698	2	Standard
Cl	37		ug/L			3389325	3413698	2	Standard
[> Sc	45		ug/L			463781	508736	1	Standard
| Cr	52	47.679	ug/L	0.300	0	19463	1000611	2	Standard
| Cr	53	48.516	ug/L	0.822	1	219	115687	1	Standard
[> Ge	72		ug/L			24722	25736	0	KED
| Ni	60	47.377	ug/L	0.765	1	5	45120	1	KED
| Ni	62	46.846	ug/L	1.993	4	1	7446	4	KED
| Cu	63	48.694	ug/L	0.780	1	38	137222	2	KED
| Cu	65	49.346	ug/L	0.625	1	33	69882	1	KED
| Zn	66	47.867	ug/L	1.236	2	24	17843	3	KED
| Zn	67	48.702	ug/L	0.977	2	3	3008	1	KED
| As	75	49.371	ug/L	0.885	1	3	8973	1	KED
| Se	78	50.152	ug/L	1.008	2	17	1031	2	KED
Y	89		ug/L			333921	367015	1	Standard
Kr	83		ug/L			50	63	27	Standard
[> In-1	115		ug/L			8068	8215	2	KED
| Cd	111	48.202	ug/L	1.186	2	1	11943	1	KED
| Cd	114	48.293	ug/L	1.134	2	1	29389	0	KED
[> In	115		ug/L			466833	502040	0	Standard
| Ag	107	48.746	ug/L	0.641	1	109	938082	1	Standard
[> Tb	159		ug/L			642030	706125	2	Standard
| Tl	205	49.699	ug/L	1.066	2	29	1981645	0	Standard
| Pb	208	49.170	ug/L	1.016	2	311	2539263	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 07:56:37

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	21703	1	Standard
Cl	37		ug/L			3389325	3333522	1	Standard
[> Sc	45		ug/L			463781	483319	2	Standard
| Cr	52	-0.020	ug/L	0.010	53	19463	19904	3	Standard
| Cr	53	0.019	ug/L	0.001	4	219	272	2	Standard
[> Ge	72		ug/L			24722	25238	5	KED
| Ni	60	0.004	ug/L	0.007	195	5	8	65	KED
| Ni	62	0.028	ug/L	0.007	23	1	6	17	KED
| Cu	63	0.014	ug/L	0.002	14	38	77	7	KED
| Cu	65	0.005	ug/L	0.003	62	33	41	13	KED
| Zn	66	0.063	ug/L	0.003	4	24	47	6	KED
| Zn	67	0.158	ug/L	0.088	55	3	12	37	KED
| As	75	0.011	ug/L	0.021	186	3	5	70	KED
| Se	78	-0.292	ug/L	0.196	67	17	12	25	KED
Y	89		ug/L			333921	349147	0	Standard
Kr	83		ug/L			50	54	13	Standard
[> In-1	115		ug/L			8068	7766	2	KED
| Cd	111	0.002	ug/L	0.004	248	1	1	50	KED
| Cd	114	0.001	ug/L	0.005	366	1	2	122	KED
[> In	115		ug/L			466833	484671	1	Standard
| Ag	107	0.006	ug/L	0.001	18	109	224	9	Standard
[> Tb	159		ug/L			642030	667811	0	Standard
| Tl	205	0.002	ug/L	0.000	27	29	88	17	Standard
| Pb	208	-0.000	ug/L	0.001	220	311	305	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:01:17**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	32210	2	Standard
Cl	37		ug/L			3389325	8700308	1	Standard
> Sc	45		ug/L			463781	502451	5	Standard
| Cr	52	0.250	ug/L	0.032	12	19463	26128	2	Standard
| Cr	53	5.243	ug/L	0.176	3	219	12545	1	Standard
> Ge	72		ug/L			24722	24260	3	KED
| Ni	60	0.199	ug/L	0.022	11	5	184	12	KED
| Ni	62	0.207	ug/L	0.064	31	1	33	31	KED
| Cu	63	0.155	ug/L	0.008	5	38	448	2	KED
| Cu	65	0.132	ug/L	0.018	13	33	209	11	KED
| Zn	66	1.500	ug/L	0.097	6	24	549	7	KED
| Zn	67	1.362	ug/L	0.157	11	3	82	13	KED
| As	75	0.038	ug/L	0.016	41	3	9	24	KED
| Se	78	1.675	ug/L	0.128	7	17	49	7	KED
Y	89		ug/L			333921	351000	3	Standard
Kr	83		ug/L			50	66	20	Standard
> In-1	115		ug/L			8068	7600	1	KED
| Cd	111	0.039	ug/L	0.008	21	1	10	18	KED
| Cd	114	0.020	ug/L	0.011	54	1	12	46	KED
> In	115		ug/L			466833	484218	2	Standard
| Ag	107	0.008	ug/L	0.001	17	109	269	7	Standard
> Tb	159		ug/L			642030	690416	2	Standard
| Tl	205	0.002	ug/L	0.000	22	29	118	17	Standard
| Pb	208	0.012	ug/L	0.001	6	311	960	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:05:56**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	66404	3	Standard
Cl	37		ug/L			3389325	4900825	3	Standard
> Sc	45		ug/L			463781	473825	0	Standard
| Cr	52	4.743	ug/L	0.153	3	19463	110606	2	Standard
| Cr	53	6.398	ug/L	0.034	0	219	14403	0	Standard
> Ge	72		ug/L			24722	24322	5	KED
| Ni	60	0.780	ug/L	0.044	5	5	707	6	KED
| Ni	62	0.819	ug/L	0.082	9	1	125	13	KED
| Cu	63	7.023	ug/L	0.205	2	38	18727	4	KED
| Cu	65	6.893	ug/L	0.158	2	33	9246	3	KED
| Zn	66	33.292	ug/L	2.118	6	24	11708	1	KED
| Zn	67	38.428	ug/L	1.254	3	3	2243	5	KED
| As	75	0.473	ug/L	0.024	4	3	84	1	KED
| Se	78	-0.119	ug/L	0.054	45	17	15	9	KED
Y	89		ug/L			333921	338410	1	Standard
Kr	83		ug/L			50	48	27	Standard
> In-1	115		ug/L			8068	7479	2	KED
| Cd	111	0.047	ug/L	0.008	16	1	12	12	KED
| Cd	114	0.044	ug/L	0.006	14	1	26	14	KED
> In	115		ug/L			466833	452153	0	Standard
| Ag	107	0.001	ug/L	0.001	188	109	116	17	Standard
> Tb	159		ug/L			642030	653892	2	Standard
| Tl	205	0.004	ug/L	0.000	5	29	189	6	Standard
| Pb	208	0.086	ug/L	0.001	1	311	4450	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-06**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:10:35**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	61098	4	Standard
Cl	37		ug/L			3389325	5313531	4	Standard
> Sc	45		ug/L			463781	493104	3	Standard
| Cr	52	2.938	ug/L	0.085	2	19463	79151	2	Standard
| Cr	53	4.426	ug/L	0.081	1	219	10438	2	Standard
> Ge	72		ug/L			24722	24209	2	KED
| Ni	60	0.549	ug/L	0.046	8	5	497	5	KED
| Ni	62	0.588	ug/L	0.085	14	1	89	11	KED
| Cu	63	5.789	ug/L	0.085	1	38	15375	1	KED
| Cu	65	5.735	ug/L	0.236	4	33	7665	3	KED
| Zn	66	2.659	ug/L	0.152	5	24	954	5	KED
| Zn	67	6.683	ug/L	0.234	3	3	391	4	KED
| As	75	0.260	ug/L	0.018	7	3	47	6	KED
| Se	78	-0.210	ug/L	0.173	82	17	13	22	KED
Y	89		ug/L			333921	348808	1	Standard
Kr	83		ug/L			50	52	9	Standard
> In-1	115		ug/L			8068	7519	2	KED
| Cd	111	0.007	ug/L	0.006	81	1	3	45	KED
| Cd	114	0.010	ug/L	0.010	107	1	6	83	KED
> In	115		ug/L			466833	471719	1	Standard
| Ag	107	-0.002	ug/L	0.000	23	109	79	8	Standard
> Tb	159		ug/L			642030	670468	0	Standard
| Tl	205	0.004	ug/L	0.000	6	29	187	5	Standard
| Pb	208	0.020	ug/L	0.001	4	311	1285	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-08**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:15:14**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	60298	1	Standard
Cl	37		ug/L			3389325	5093286	0	Standard
> Sc	45		ug/L			463781	481673	1	Standard
| Cr	52	3.734	ug/L	0.070	1	19463	92802	0	Standard
| Cr	53	5.002	ug/L	0.109	2	219	11494	1	Standard
> Ge	72		ug/L			24722	23867	4	KED
| Ni	60	0.535	ug/L	0.016	3	5	478	7	KED
| Ni	62	0.481	ug/L	0.071	14	1	72	9	KED
| Cu	63	4.992	ug/L	0.094	1	38	13075	4	KED
| Cu	65	4.885	ug/L	0.189	3	33	6437	1	KED
| Zn	66	2.809	ug/L	0.067	2	24	993	6	KED
| Zn	67	9.250	ug/L	0.268	2	3	532	2	KED
| As	75	0.303	ug/L	0.031	10	3	54	11	KED
| Se	78	-0.098	ug/L	0.124	125	17	15	12	KED
Y	89		ug/L			333921	342021	2	Standard
Kr	83		ug/L			50	60	3	Standard
> In-1	115		ug/L			8068	7762	3	KED
| Cd	111	0.014	ug/L	0.001	4	1	4	0	KED
| Cd	114	0.011	ug/L	0.007	62	1	7	49	KED
> In	115		ug/L			466833	469672	1	Standard
| Ag	107	-0.002	ug/L	0.000	7	109	67	4	Standard
> Tb	159		ug/L			642030	666838	2	Standard
| Tl	205	0.003	ug/L	0.000	15	29	148	12	Standard
| Pb	208	0.039	ug/L	0.001	1	311	2248	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-10**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:19:53**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	69038	5	Standard
Cl	37		ug/L			3389325	5057243	3	Standard
> Sc	45		ug/L			463781	476972	1	Standard
| Cr	52	5.113	ug/L	0.100	1	19463	118481	2	Standard
| Cr	53	6.217	ug/L	0.116	1	219	14094	0	Standard
> Ge	72		ug/L			24722	24632	1	KED
| Ni	60	0.513	ug/L	0.010	1	5	473	1	KED
| Ni	62	0.497	ug/L	0.075	15	1	77	14	KED
| Cu	63	5.256	ug/L	0.190	3	38	14205	2	KED
| Cu	65	5.265	ug/L	0.152	2	33	7163	1	KED
| Zn	66	3.469	ug/L	0.114	3	24	1259	2	KED
| Zn	67	12.117	ug/L	0.219	1	3	718	0	KED
| As	75	0.332	ug/L	0.050	15	3	60	13	KED
| Se	78	-0.201	ug/L	0.049	24	17	14	7	KED
Y	89		ug/L			333921	334153	2	Standard
Kr	83		ug/L			50	52	7	Standard
> In-1	115		ug/L			8068	7420	4	KED
| Cd	111	0.020	ug/L	0.009	44	1	6	32	KED
| Cd	114	0.013	ug/L	0.008	58	1	8	45	KED
> In	115		ug/L			466833	455278	0	Standard
| Ag	107	-0.001	ug/L	0.001	82	109	85	21	Standard
> Tb	159		ug/L			642030	659855	1	Standard
| Tl	205	0.003	ug/L	0.000	6	29	159	3	Standard
| Pb	208	0.049	ug/L	0.001	2	311	2661	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-12**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:24:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	71475	1	Standard
Cl	37		ug/L			3389325	5253755	0	Standard
> Sc	45		ug/L			463781	501622	4	Standard
| Cr	52	4.330	ug/L	0.164	3	19463	108671	3	Standard
| Cr	53	5.386	ug/L	0.087	1	219	12869	2	Standard
> Ge	72		ug/L			24722	24067	1	KED
| Ni	60	0.567	ug/L	0.009	1	5	510	0	KED
| Ni	62	0.612	ug/L	0.070	11	1	92	10	KED
| Cu	63	4.364	ug/L	0.133	3	38	11530	2	KED
| Cu	65	4.278	ug/L	0.099	2	33	5693	1	KED
| Zn	66	3.259	ug/L	0.305	9	24	1158	9	KED
| Zn	67	7.973	ug/L	0.804	10	3	462	8	KED
| As	75	0.346	ug/L	0.011	3	3	62	2	KED
| Se	78	-0.033	ug/L	0.079	237	17	16	8	KED
Y	89		ug/L			333921	360814	3	Standard
Kr	83		ug/L			50	59	13	Standard
> In-1	115		ug/L			8068	7542	1	KED
| Cd	111	0.019	ug/L	0.004	23	1	5	16	KED
| Cd	114	0.014	ug/L	0.006	44	1	9	39	KED
> In	115		ug/L			466833	478134	1	Standard
| Ag	107	-0.002	ug/L	0.000	20	109	81	8	Standard
> Tb	159		ug/L			642030	692767	3	Standard
| Tl	205	0.005	ug/L	0.001	14	29	209	15	Standard
| Pb	208	0.053	ug/L	0.002	3	311	2998	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-14**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:29:12**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	60057	2	Standard
Cl	37		ug/L			3389325	5078806	2	Standard
> Sc	45		ug/L			463781	487147	1	Standard
| Cr	52	2.536	ug/L	0.028	1	19463	70318	1	Standard
| Cr	53	3.957	ug/L	0.034	0	219	9245	1	Standard
> Ge	72		ug/L			24722	24604	1	KED
| Ni	60	1.599	ug/L	0.061	3	5	1461	2	KED
| Ni	62	1.626	ug/L	0.045	2	1	248	3	KED
| Cu	63	4.751	ug/L	0.153	3	38	12829	2	KED
| Cu	65	4.716	ug/L	0.163	3	33	6413	2	KED
| Zn	66	3.096	ug/L	0.192	6	24	1125	4	KED
| Zn	67	5.542	ug/L	0.882	15	3	329	14	KED
| As	75	0.260	ug/L	0.049	18	3	48	16	KED
| Se	78	-0.028	ug/L	0.077	276	17	17	8	KED
Y	89		ug/L			333921	344267	1	Standard
Kr	83		ug/L			50	51	9	Standard
> In-1	115		ug/L			8068	7746	1	KED
| Cd	111	0.006	ug/L	0.004	74	1	2	33	KED
| Cd	114	0.007	ug/L	0.007	98	1	5	71	KED
> In	115		ug/L			466833	475572	0	Standard
| Ag	107	-0.003	ug/L	0.000	14	109	51	16	Standard
> Tb	159		ug/L			642030	681781	1	Standard
| Tl	205	0.005	ug/L	0.000	7	29	226	5	Standard
| Pb	208	0.022	ug/L	0.001	4	311	1405	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-16**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:34:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	67661	1	Standard
Cl	37		ug/L			3389325	5010039	4	Standard
> Sc	45		ug/L			463781	478879	0	Standard
| Cr	52	4.417	ug/L	0.112	2	19463	105480	2	Standard
| Cr	53	5.514	ug/L	0.085	1	219	12578	1	Standard
> Ge	72		ug/L			24722	24577	1	KED
| Ni	60	0.503	ug/L	0.024	4	5	462	3	KED
| Ni	62	0.571	ug/L	0.170	29	1	88	28	KED
| Cu	63	4.125	ug/L	0.100	2	38	11133	1	KED
| Cu	65	4.053	ug/L	0.078	1	33	5511	2	KED
| Zn	66	3.169	ug/L	0.108	3	24	1149	1	KED
| Zn	67	8.397	ug/L	0.367	4	3	497	2	KED
| As	75	0.348	ug/L	0.041	11	3	63	12	KED
| Se	78	-0.013	ug/L	0.085	657	17	17	10	KED
Y	89		ug/L			333921	336146	2	Standard
Kr	83		ug/L			50	53	9	Standard
> In-1	115		ug/L			8068	7878	0	KED
| Cd	111	0.012	ug/L	0.002	19	1	4	12	KED
| Cd	114	0.014	ug/L	0.008	56	1	9	47	KED
> In	115		ug/L			466833	461723	1	Standard
| Ag	107	-0.002	ug/L	0.001	36	109	64	23	Standard
> Tb	159		ug/L			642030	663323	1	Standard
| Tl	205	0.004	ug/L	0.001	14	29	196	10	Standard
| Pb	208	0.050	ug/L	0.002	3	311	2732	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-18**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 08:40:18**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	67964	2	Standard
Cl	37		ug/L			3389325	4998081	2	Standard
> Sc	45		ug/L			463781	480896	2	Standard
| Cr	52	3.785	ug/L	0.047	1	19463	93645	2	Standard
| Cr	53	4.865	ug/L	0.100	2	219	11167	0	Standard
> Ge	72		ug/L			24722	24218	1	KED
| Ni	60	0.627	ug/L	0.025	3	5	566	2	KED
| Ni	62	0.582	ug/L	0.007	1	1	88	1	KED
| Cu	63	4.091	ug/L	0.053	1	38	10882	1	KED
| Cu	65	4.040	ug/L	0.050	1	33	5413	1	KED
| Zn	66	2.641	ug/L	0.048	1	24	948	1	KED
| Zn	67	5.871	ug/L	0.411	7	3	344	7	KED
| As	75	0.334	ug/L	0.047	13	3	60	13	KED
| Se	78	-0.028	ug/L	0.123	442	17	17	12	KED
Y	89		ug/L			333921	346907	0	Standard
Kr	83		ug/L			50	54	11	Standard
> In-1	115		ug/L			8068	7844	1	KED
| Cd	111	0.011	ug/L	0.006	55	1	4	35	KED
| Cd	114	0.007	ug/L	0.007	94	1	5	69	KED
> In	115		ug/L			466833	476337	1	Standard
| Ag	107	-0.002	ug/L	0.001	38	109	71	20	Standard
> Tb	159		ug/L			642030	676961	1	Standard
| Tl	205	0.006	ug/L	0.000	5	29	262	4	Standard
| Pb	208	0.034	ug/L	0.001	3	311	2007	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 08:44:51

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	25063	1	Standard
Cl	37		ug/L			3389325	3404929	1	Standard
[> Sc	45		ug/L			463781	459777	0	Standard
| Cr	52	-0.022	ug/L	0.015	67	19463	18877	1	Standard
| Cr	53	0.111	ug/L	0.015	13	219	455	7	Standard
[> Ge	72		ug/L			24722	25131	3	KED
| Ni	60	-0.001	ug/L	0.001	171	5	5	21	KED
| Ni	62	0.016	ug/L	0.013	84	1	4	49	KED
| Cu	63	0.001	ug/L	0.004	272	38	42	22	KED
| Cu	65	-0.005	ug/L	0.006	105	33	26	31	KED
| Zn	66	0.031	ug/L	0.017	53	24	35	13	KED
| Zn	67	0.041	ug/L	0.003	8	3	5	0	KED
| As	75	0.011	ug/L	0.005	48	3	5	20	KED
| Se	78	-0.181	ug/L	0.178	98	17	14	22	KED
Y	89		ug/L			333921	316245	2	Standard
Kr	83		ug/L			50	50	20	Standard
[> In-1	115		ug/L			8068	7735	1	KED
| Cd	111	0.002	ug/L	0.007	429	1	1	86	KED
| Cd	114	-0.001	ug/L	0.002	241	1	1	103	KED
[> In	115		ug/L			466833	477662	1	Standard
| Ag	107	-0.005	ug/L	0.000	3	109	26	12	Standard
[> Tb	159		ug/L			642030	658900	1	Standard
| Tl	205	-0.000	ug/L	0.000	338	29	28	24	Standard
| Pb	208	-0.004	ug/L	0.000	6	311	127	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 08:49:31

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	23128	2	Standard
Cl	37		ug/L			3389325	3259358	1	Standard
[> Sc	45		ug/L			463781	473174	1	Standard
| Cr	52	47.003	ug/L	0.259	0	19463	917755	1	Standard
| Cr	53	47.940	ug/L	0.892	1	219	106331	2	Standard
[> Ge	72		ug/L			24722	25044	0	KED
| Ni	60	46.596	ug/L	0.640	1	5	43180	0	KED
| Ni	62	46.574	ug/L	0.821	1	1	7203	1	KED
| Cu	63	48.262	ug/L	1.201	2	38	132328	2	KED
| Cu	65	47.182	ug/L	0.940	1	33	65019	2	KED
| Zn	66	47.521	ug/L	1.681	3	24	17233	2	KED
| Zn	67	49.898	ug/L	0.357	0	3	2999	0	KED
| As	75	50.083	ug/L	1.270	2	3	8857	1	KED
| Se	78	50.345	ug/L	0.722	1	17	1007	0	KED
Y	89		ug/L			333921	349419	1	Standard
Kr	83		ug/L			50	52	13	Standard
[> In-1	115		ug/L			8068	7904	1	KED
| Cd	111	48.940	ug/L	1.255	2	1	11666	1	KED
| Cd	114	48.494	ug/L	1.252	2	1	28397	1	KED
[> In	115		ug/L			466833	495676	1	Standard
| Ag	107	46.657	ug/L	0.986	2	109	886385	1	Standard
[> Tb	159		ug/L			642030	701507	1	Standard
| Tl	205	47.073	ug/L	0.309	0	29	1865225	1	Standard
| Pb	208	47.409	ug/L	0.836	1	311	2432879	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 08:56:54

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22261	0	Standard
Cl	37		ug/L			3389325	3267303	1	Standard
[> Sc	45		ug/L			463781	449527	3	Standard
| Cr	52	0.001	ug/L	0.036	6905	19463	18860	2	Standard
| Cr	53	0.026	ug/L	0.009	33	219	266	5	Standard
[> Ge	72		ug/L			24722	23679	1	KED
| Ni	60	0.005	ug/L	0.002	44	5	9	20	KED
| Ni	62	0.018	ug/L	0.015	84	1	4	49	KED
| Cu	63	0.018	ug/L	0.002	12	38	81	8	KED
| Cu	65	0.004	ug/L	0.004	100	33	36	13	KED
| Zn	66	0.098	ug/L	0.010	9	24	56	5	KED
| Zn	67	0.070	ug/L	0.052	74	3	6	41	KED
| As	75	0.006	ug/L	0.012	186	3	4	48	KED
| Se	78	-0.102	ug/L	<u>0.276</u>	270	17	15	33	KED
Y	89		ug/L			333921	324687	4	Standard
Kr	83		ug/L			50	55	36	Standard
[> In-1	115		ug/L			8068	7756	0	KED
| Cd	111	-0.001	ug/L	0.005	417	1	1	86	KED
| Cd	114	-0.001	ug/L	0.004	522	1	1	193	KED
[> In	115		ug/L			466833	463947	4	Standard
| Ag	107	0.007	ug/L	0.001	13	109	227	2	Standard
[> Tb	159		ug/L			642030	647731	4	Standard
| Tl	205	0.002	ug/L	0.000	9	29	90	2	Standard
| Pb	208	-0.001	ug/L	0.000	53	311	279	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-20**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 09:01:34**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	56188	4	Standard
Cl	37		ug/L			3389325	5078440	4	Standard
> Sc	45		ug/L			463781	486248	2	Standard
| Cr	52	1.689	ug/L	0.044	2	19463	53547	1	Standard
| Cr	53	2.751	ug/L	0.072	2	219	6484	1	Standard
> Ge	72		ug/L			24722	24966	1	KED
| Ni	60	0.911	ug/L	0.016	1	5	847	0	KED
| Ni	62	0.922	ug/L	0.027	2	1	144	3	KED
| Cu	63	5.972	ug/L	0.266	4	38	16352	3	KED
| Cu	65	5.828	ug/L	0.184	3	33	8034	2	KED
| Zn	66	2.286	ug/L	0.105	4	24	849	3	KED
| Zn	67	3.553	ug/L	0.150	4	3	215	4	KED
| As	75	0.328	ug/L	0.011	3	3	61	3	KED
| Se	78	-0.158	ug/L	0.045	28	17	15	6	KED
Y	89		ug/L			333921	347091	1	Standard
Kr	83		ug/L			50	59	36	Standard
> In-1	115		ug/L			8068	7081	15	KED
| Cd	111	0.017	ug/L	0.009	56	1	5	47	KED
| Cd	114	0.012	ug/L	0.012	95	1	7	67	KED
> In	115		ug/L			466833	472156	1	Standard
| Ag	107	0.002	ug/L	0.001	39	109	139	6	Standard
> Tb	159		ug/L			642030	667909	1	Standard
| Tl	205	0.007	ug/L	0.001	14	29	278	11	Standard
| Pb	208	0.021	ug/L	0.001	6	311	1355	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-22**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 09:06:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	68192	1	Standard
Cl	37		ug/L			3389325	5025016	1	Standard
[> Sc	45		ug/L			463781	485121	0	Standard
[Cr	52	3.558	ug/L	0.075	2	19463	90043	1	Standard
[Cr	53	4.498	ug/L	0.093	2	219	10437	1	Standard
[> Ge	72		ug/L			24722	24266	0	KED
[Ni	60	0.591	ug/L	0.070	11	5	536	11	KED
[Ni	62	0.640	ug/L	0.066	10	1	97	9	KED
[Cu	63	3.569	ug/L	0.142	3	38	9517	3	KED
[Cu	65	3.556	ug/L	0.124	3	33	4778	3	KED
[Zn	66	2.438	ug/L	0.021	0	24	879	0	KED
[Zn	67	5.816	ug/L	0.544	9	3	341	9	KED
[As	75	0.357	ug/L	0.046	12	3	64	12	KED
[Se	78	-0.049	ug/L	0.093	190	17	16	10	KED
[Y	89		ug/L			333921	339457	1	Standard
[Kr	83		ug/L			50	62	12	Standard
[> In-1	115		ug/L			8068	7603	1	KED
[Cd	111	0.010	ug/L	0.011	108	1	3	66	KED
[Cd	114	0.010	ug/L	0.004	43	1	7	33	KED
[> In	115		ug/L			466833	476799	0	Standard
[Ag	107	-0.001	ug/L	0.001	126	109	97	18	Standard
[> Tb	159		ug/L			642030	683886	0	Standard
[Tl	205	0.005	ug/L	0.001	9	29	238	8	Standard
[Pb	208	0.028	ug/L	0.001	2	311	1713	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-24**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 09:10:52**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	37087	2	Standard
Cl	37		ug/L			3389325	8595798	4	Standard
> Sc	45		ug/L			463781	499573	0	Standard
| Cr	52	0.369	ug/L	0.011	3	19463	28407	0	Standard
| Cr	53	5.683	ug/L	0.097	1	219	13515	0	Standard
> Ge	72		ug/L			24722	25281	1	KED
| Ni	60	0.429	ug/L	0.005	1	5	406	2	KED
| Ni	62	0.479	ug/L	0.100	20	1	76	21	KED
| Cu	63	3.704	ug/L	0.086	2	38	10288	1	KED
| Cu	65	3.558	ug/L	0.136	3	33	4979	2	KED
| Zn	66	1.740	ug/L	0.162	9	24	660	9	KED
| Zn	67	2.271	ug/L	0.115	5	3	140	5	KED
| As	75	0.354	ug/L	0.012	3	3	66	3	KED
| Se	78	1.723	ug/L	0.269	15	17	52	9	KED
Y	89		ug/L			333921	346905	1	Standard
Kr	83		ug/L			50	55	9	Standard
> In-1	115		ug/L			8068	7750	1	KED
| Cd	111	0.011	ug/L	0.005	44	1	4	26	KED
| Cd	114	0.003	ug/L	0.005	163	1	3	86	KED
> In	115		ug/L			466833	468395	0	Standard
| Ag	107	0.000	ug/L	0.001	421	109	111	7	Standard
> Tb	159		ug/L			642030	686524	1	Standard
| Tl	205	0.002	ug/L	0.000	15	29	108	10	Standard
| Pb	208	0.060	ug/L	0.002	4	311	3367	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-26**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 09:15:55**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	37011	1	Standard
Cl	37		ug/L			3389325	8738651	3	Standard
Sc	45		ug/L			463781	494701	1	Standard
Cr	52	0.401	ug/L	0.022	5	19463	28775	1	Standard
Cr	53	6.241	ug/L	0.051	0	219	14675	0	Standard
Ge	72		ug/L			24722	25118	2	KED
Ni	60	0.355	ug/L	0.028	7	5	335	6	KED
Ni	62	0.403	ug/L	0.141	34	1	64	31	KED
Cu	63	2.254	ug/L	0.041	1	38	6233	0	KED
Cu	65	2.206	ug/L	0.063	2	33	3079	0	KED
Zn	66	1.850	ug/L	0.128	6	24	696	7	KED
Zn	67	2.054	ug/L	0.123	5	3	126	6	KED
As	75	0.355	ug/L	0.048	13	3	66	14	KED
Se	78	1.764	ug/L	0.289	16	17	53	11	KED
Y	89		ug/L			333921	357511	1	Standard
Kr	83		ug/L			50	54	10	Standard
In-1	115		ug/L			8068	7775	3	KED
Cd	111	0.003	ug/L	0.002	66	1	2	24	KED
Cd	114	0.005	ug/L	0.003	60	1	4	38	KED
In	115		ug/L			466833	482757	1	Standard
Ag	107	-0.001	ug/L	0.001	70	109	86	19	Standard
Tb	159		ug/L			642030	689803	0	Standard
Tl	205	0.002	ug/L	0.000	12	29	97	8	Standard
Pb	208	0.052	ug/L	0.002	4	311	2944	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0203-28**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 09:21:58**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	36253	2	Standard
Cl	37		ug/L			3389325	8610618	1	Standard
> Sc	45		ug/L			463781	508187	1	Standard
| Cr	52	0.332	ug/L	0.026	7	19463	28125	2	Standard
| Cr	53	5.983	ug/L	0.158	2	219	14458	0	Standard
> Ge	72		ug/L			24722	25575	2	KED
| Ni	60	0.334	ug/L	0.024	7	5	322	9	KED
| Ni	62	0.408	ug/L	0.088	21	1	66	23	KED
| Cu	63	1.825	ug/L	0.060	3	38	5144	1	KED
| Cu	65	1.757	ug/L	0.078	4	33	2507	7	KED
| Zn	66	1.765	ug/L	0.081	4	24	677	2	KED
| Zn	67	2.097	ug/L	0.145	6	3	132	9	KED
| As	75	0.368	ug/L	0.023	6	3	69	4	KED
| Se	78	1.743	ug/L	0.095	5	17	53	3	KED
Y	89		ug/L			333921	353138	1	Standard
Kr	83		ug/L			50	54	29	Standard
> In-1	115		ug/L			8068	7831	2	KED
| Cd	111	0.006	ug/L	0.004	68	1	2	33	KED
| Cd	114	0.005	ug/L	0.005	104	1	4	68	KED
> In	115		ug/L			466833	489614	1	Standard
| Ag	107	-0.002	ug/L	0.001	50	109	81	21	Standard
> Tb	159		ug/L			642030	694042	1	Standard
| Tl	205	0.002	ug/L	0.000	17	29	92	11	Standard
| Pb	208	0.049	ug/L	0.001	2	311	2847	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:26:32

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	25409	2	Standard
Cl	37		ug/L			3389325	3557060	1	Standard
[> Sc	45		ug/L			463781	491084	0	Standard
| Cr	52	0.020	ug/L	0.030	150	19463	21003	3	Standard
| Cr	53	0.251	ug/L	0.005	2	219	808	2	Standard
[> Ge	72		ug/L			24722	26075	1	KED
| Ni	60	-0.000	ug/L	0.002	620	5	5	33	KED
| Ni	62	0.043	ug/L	0.041	96	1	8	75	KED
| Cu	63	0.004	ug/L	0.004	96	38	52	22	KED
| Cu	65	-0.014	ug/L	0.002	14	33	15	18	KED
| Zn	66	0.045	ug/L	0.039	85	24	42	34	KED
| Zn	67	0.058	ug/L	0.018	31	3	6	15	KED
| As	75	0.011	ug/L	0.002	16	3	5	4	KED
| Se	78	-0.273	ug/L	0.147	53	17	13	23	KED
Y	89		ug/L			333921	336985	0	Standard
Kr	83		ug/L			50	60	28	Standard
[> In-1	115		ug/L			8068	8278	4	KED
| Cd	111	-0.000	ug/L	0.004	2417	1	1	69	KED
| Cd	114	0.000	ug/L	0.003	2360	1	1	109	KED
[> In	115		ug/L			466833	498099	0	Standard
| Ag	107	-0.004	ug/L	0.000	11	109	31	30	Standard
[> Tb	159		ug/L			642030	675712	2	Standard
| Tl	205	0.001	ug/L	0.000	18	29	60	7	Standard
| Pb	208	-0.003	ug/L	0.000	12	311	169	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:31:12

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	24039	2	Standard
Cl	37		ug/L			3389325	3404288	1	Standard
[> Sc	45		ug/L			463781	482857	0	Standard
| Cr	52	48.794	ug/L	0.414	0	19463	971436	1	Standard
| Cr	53	49.497	ug/L	0.397	0	219	112027	1	Standard
[> Ge	72		ug/L			24722	25609	2	KED
| Ni	60	47.668	ug/L	1.209	2	5	45155	0	KED
| Ni	62	48.536	ug/L	1.535	3	1	7673	1	KED
| Cu	63	48.945	ug/L	0.239	0	38	137241	2	KED
| Cu	65	47.913	ug/L	0.862	1	33	67498	0	KED
| Zn	66	48.496	ug/L	1.036	2	24	17980	0	KED
| Zn	67	48.854	ug/L	1.343	2	3	3002	1	KED
| As	75	49.576	ug/L	1.264	2	3	8963	0	KED
| Se	78	49.684	ug/L	1.631	3	17	1017	3	KED
Y	89		ug/L			333921	347322	2	Standard
Kr	83		ug/L			50	45	10	Standard
[> In-1	115		ug/L			8068	7981	2	KED
| Cd	111	48.944	ug/L	1.549	3	1	11778	0	KED
| Cd	114	48.496	ug/L	1.469	3	1	28669	0	KED
[> In	115		ug/L			466833	489115	1	Standard
| Ag	107	47.652	ug/L	1.096	2	109	893152	0	Standard
[> Tb	159		ug/L			642030	688336	0	Standard
| Tl	205	49.484	ug/L	1.044	2	29	1923759	1	Standard
| Pb	208	49.114	ug/L	1.308	2	311	2472906	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:38:35

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22821	2	Standard
Cl	37		ug/L			3389325	3303752	2	Standard
[> Sc	45		ug/L			463781	452324	1	Standard
| Cr	52	0.029	ug/L	0.032	112	19463	19501	2	Standard
| Cr	53	0.117	ug/L	0.017	14	219	461	7	Standard
[> Ge	72		ug/L			24722	24427	1	KED
| Ni	60	0.006	ug/L	0.005	85	5	11	44	KED
| Ni	62	0.021	ug/L	0.026	123	1	5	78	KED
| Cu	63	0.026	ug/L	0.004	14	38	107	8	KED
| Cu	65	0.007	ug/L	0.005	66	33	43	13	KED
| Zn	66	0.076	ug/L	0.029	37	24	50	20	KED
| Zn	67	0.119	ug/L	0.092	77	3	10	54	KED
| As	75	0.014	ug/L	0.005	38	3	5	16	KED
| Se	78	-0.317	ug/L	0.046	14	17	11	6	KED
Y	89		ug/L			333921	329214	1	Standard
Kr	83		ug/L			50	48	22	Standard
[> In-1	115		ug/L			8068	7765	0	KED
| Cd	111	-0.001	ug/L	0.002	217	1	1	43	KED
| Cd	114	0.003	ug/L	0.002	71	1	3	33	KED
[> In	115		ug/L			466833	479875	1	Standard
| Ag	107	0.006	ug/L	0.001	19	109	213	8	Standard
[> Tb	159		ug/L			642030	649885	1	Standard
| Tl	205	0.002	ug/L	0.000	5	29	111	5	Standard
| Pb	208	-0.001	ug/L	0.000	36	311	276	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:43:15

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	46607	4	Standard
Cl	37		ug/L			3389325	3660106	1	Standard
[> Sc	45		ug/L			463781	573409	1	Standard
| Cr	52	0.143	ug/L	0.014	10	19463	27360	0	Standard
| Cr	53	0.090	ug/L	0.013	14	219	513	6	Standard
[> Ge	72		ug/L			24722	27830	0	KED
| Ni	60	0.037	ug/L	0.002	6	5	44	6	KED
| Ni	62	0.050	ug/L	0.006	12	1	10	10	KED
| Cu	63	0.061	ug/L	0.006	9	38	229	7	KED
| Cu	65	0.040	ug/L	0.010	24	33	99	14	KED
| Zn	66	2.711	ug/L	0.018	0	24	1118	0	KED
| Zn	67	2.544	ug/L	0.245	9	3	173	9	KED
| As	75	0.008	ug/L	0.005	58	3	5	18	KED
| Se	78	-0.211	ug/L	0.204	96	17	15	28	KED
Y	89		ug/L			333921	401630	2	Standard
Kr	83		ug/L			50	66	20	Standard
[> In-1	115		ug/L			8068	9013	3	KED
| Cd	111	-0.002	ug/L	0.005	292	1	1	114	KED
| Cd	114	-0.001	ug/L	0.003	256	1	1	183	KED
[> In	115		ug/L			466833	547133	2	Standard
| Ag	107	0.003	ug/L	0.001	38	109	199	11	Standard
[> Tb	159		ug/L			642030	765871	1	Standard
| Tl	205	0.003	ug/L	0.000	10	29	167	6	Standard
| Pb	208	0.043	ug/L	0.001	2	311	2764	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:47:54

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	45136	2	Standard
Cl	37		ug/L			3389325	3664719	1	Standard
[> Sc	45		ug/L			463781	579239	2	Standard
| Cr	52	0.091	ug/L	0.010	11	19463	26422	1	Standard
| Cr	53	0.070	ug/L	0.007	9	219	465	5	Standard
[> Ge	72		ug/L			24722	27948	1	KED
| Ni	60	0.035	ug/L	0.009	26	5	42	22	KED
| Ni	62	0.036	ug/L	0.028	79	1	8	58	KED
| Cu	63	0.059	ug/L	0.010	16	38	222	13	KED
| Cu	65	0.047	ug/L	0.011	23	33	109	16	KED
| Zn	66	2.673	ug/L	0.200	7	24	1107	6	KED
| Zn	67	2.599	ug/L	0.142	5	3	177	5	KED
| As	75	0.029	ug/L	0.003	9	3	9	5	KED
| Se	78	-0.301	ug/L	0.175	58	17	13	27	KED
Y	89		ug/L			333921	404881	2	Standard
Kr	83		ug/L			50	60	13	Standard
[> In-1	115		ug/L			8068	9048	1	KED
| Cd	111	-0.001	ug/L	0.005	707	1	1	91	KED
| Cd	114	-0.000	ug/L	0.002	1041	1	1	65	KED
[> In	115		ug/L			466833	559859	1	Standard
| Ag	107	-0.001	ug/L	0.001	112	109	118	10	Standard
[> Tb	159		ug/L			642030	773175	1	Standard
| Tl	205	0.001	ug/L	0.000	20	29	66	9	Standard
| Pb	208	0.041	ug/L	0.002	5	311	2701	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:52:34

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	46856	1	Standard
Cl	37		ug/L			3389325	3559386	3	Standard
[> Sc	45		ug/L			463781	588216	1	Standard
| Cr	52	0.109	ug/L	0.008	7	19463	27280	0	Standard
| Cr	53	0.055	ug/L	0.003	4	219	428	0	Standard
[> Ge	72		ug/L			24722	28255	2	KED
| Ni	60	0.036	ug/L	0.009	25	5	43	19	KED
| Ni	62	0.053	ug/L	0.010	18	1	11	16	KED
| Cu	63	0.059	ug/L	0.003	4	38	226	5	KED
| Cu	65	0.050	ug/L	0.006	12	33	115	9	KED
| Zn	66	2.738	ug/L	0.179	6	24	1145	4	KED
| Zn	67	2.410	ug/L	0.075	3	3	166	5	KED
| As	75	0.017	ug/L	0.004	24	3	7	13	KED
| Se	78	-0.062	ug/L	0.137	219	17	19	14	KED
Y	89		ug/L			333921	401170	2	Standard
Kr	83		ug/L			50	55	10	Standard
[> In-1	115		ug/L			8068	9318	1	KED
| Cd	111	0.004	ug/L	0.006	161	1	2	57	KED
| Cd	114	-0.001	ug/L	0.003	190	1	0	189	KED
[> In	115		ug/L			466833	554901	2	Standard
| Ag	107	-0.002	ug/L	0.001	22	109	81	15	Standard
[> Tb	159		ug/L			642030	774407	0	Standard
| Tl	205	0.001	ug/L	0.000	49	29	62	21	Standard
| Pb	208	0.041	ug/L	0.001	1	311	2719	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 09:57:13

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22824	2	Standard
Cl	37		ug/L			3389325	3169407	0	Standard
[> Sc	45		ug/L			463781	429729	2	Standard
| Cr	52	-0.013	ug/L	0.019	141	19463	17802	0	Standard
| Cr	53	0.089	ug/L	0.007	7	219	382	2	Standard
[> Ge	72		ug/L			24722	23710	2	KED
| Ni	60	0.026	ug/L	0.012	45	5	28	37	KED
| Ni	62	0.031	ug/L	0.028	89	1	6	62	KED
| Cu	63	0.042	ug/L	0.004	10	38	146	9	KED
| Cu	65	0.031	ug/L	0.014	45	33	72	25	KED
| Zn	66	0.870	ug/L	0.052	5	24	321	3	KED
| Zn	67	0.537	ug/L	0.162	30	3	33	28	KED
| As	75	0.016	ug/L	0.017	103	3	5	46	KED
| Se	78	-0.237	ug/L	0.151	63	17	12	19	KED
Y	89		ug/L			333921	312910	2	Standard
Kr	83		ug/L			50	52	30	Standard
[> In-1	115		ug/L			8068	7225	1	KED
| Cd	111	0.001	ug/L	0.009	1285	1	1	124	KED
| Cd	114	0.008	ug/L	0.006	80	1	5	59	KED
[> In	115		ug/L			466833	454548	2	Standard
| Ag	107	-0.005	ug/L	0.001	10	109	21	39	Standard
[> Tb	159		ug/L			642030	622616	0	Standard
| Tl	205	0.001	ug/L	0.000	14	29	72	9	Standard
| Pb	208	-0.004	ug/L	0.000	1	311	106	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 10:01:52

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22662	4	Standard
Cl	37		ug/L			3389325	3182776	2	Standard
[> Sc	45		ug/L			463781	431460	1	Standard
| Cr	52	0.021	ug/L	0.015	70	19463	18476	0	Standard
| Cr	53	0.073	ug/L	0.007	9	219	351	3	Standard
[> Ge	72		ug/L			24722	23682	1	KED
| Ni	60	0.031	ug/L	0.012	37	5	32	30	KED
| Ni	62	0.018	ug/L	0.019	109	1	4	65	KED
| Cu	63	0.038	ug/L	0.007	17	38	134	14	KED
| Cu	65	0.028	ug/L	0.004	12	33	68	8	KED
| Zn	66	0.895	ug/L	0.036	4	24	329	4	KED
| Zn	67	0.864	ug/L	0.088	10	3	52	9	KED
| As	75	0.017	ug/L	0.009	51	3	6	25	KED
| Se	78	-0.170	ug/L	0.137	80	17	14	16	KED
Y	89		ug/L			333921	313170	1	Standard
Kr	83		ug/L			50	50	9	Standard
[> In-1	115		ug/L			8068	7453	1	KED
| Cd	111	0.008	ug/L	0.006	84	1	3	45	KED
| Cd	114	0.003	ug/L	0.002	68	1	3	34	KED
[> In	115		ug/L			466833	461099	1	Standard
| Ag	107	-0.005	ug/L	0.001	12	109	23	47	Standard
[> Tb	159		ug/L			642030	626502	0	Standard
| Tl	205	0.001	ug/L	0.000	19	29	50	7	Standard
| Pb	208	-0.005	ug/L	0.000	3	311	71	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 10:06:32

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031623A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			22791	22912	3	Standard
Cl	37		ug/L			3389325	3088303	0	Standard
[> Sc	45		ug/L			463781	428292	1	Standard
| Cr	52	0.008	ug/L	0.032	372	19463	18120	3	Standard
| Cr	53	0.073	ug/L	0.009	12	219	349	5	Standard
[> Ge	72		ug/L			24722	23464	0	KED
| Ni	60	0.030	ug/L	0.012	42	5	31	35	KED
| Ni	62	0.071	ug/L	0.015	21	1	12	18	KED
| Cu	63	0.036	ug/L	0.008	21	38	128	15	KED
| Cu	65	0.022	ug/L	0.005	22	33	60	11	KED
| Zn	66	0.877	ug/L	0.047	5	24	320	4	KED
| Zn	67	0.805	ug/L	0.285	35	3	48	32	KED
| As	75	0.014	ug/L	0.022	165	3	5	68	KED
| Se	78	-0.224	ug/L	0.080	35	17	12	11	KED
Y	89		ug/L			333921	308879	1	Standard
Kr	83		ug/L			50	52	22	Standard
[> In-1	115		ug/L			8068	7358	2	KED
| Cd	111	0.007	ug/L	0.012	176	1	2	88	KED
| Cd	114	0.008	ug/L	0.003	44	1	5	32	KED
[> In	115		ug/L			466833	459284	1	Standard
| Ag	107	-0.005	ug/L	0.000	3	109	20	14	Standard
[> Tb	159		ug/L			642030	619872	1	Standard
| Tl	205	0.000	ug/L	0.000	106	29	40	30	Standard
| Pb	208	-0.005	ug/L	0.000	2	311	76	9	Standard



INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00057

Instrument: ICPMS2

Calibration Date: 03/17/2023 14:06

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Chromium-52	0	0	0.5	54370	10	20577.7	20	20050.4	50	19579.64	100	18596.79
Chromium-53	0	0	0.5	2504	10	2235.6	20	2252.3	50	2277.12	100	2184.07



INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC

Instrument: ICPMS2

Calibration: GC00057

Calibration Date: 3/17/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Chromium-52	22195.76	79.4	0.9995		0.998	
Chromium-53	1908.848	49.3	0.9996		0.998	



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/17/23 Analyst: MB Sequence: SLC0300 Cal: GC00057

All corrections made by analyst unless otherwise noted. MS 3/17/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L2923		
		-CAL2	L2709		
		-CAL3	L2710		
		-CAL4	L2711		
		-CAL5	L2985		
		-CAL6	L2713		
		-IBL1	—		
		-ICV1	L0243		
		-ICB1	L2923		
		-CCV1	L2985		
		-CCB1	L2923		
		-CRL1	L2709		
		-IFA1	L2581	C-50↑	
		-IFB1	L2744		
		-HCV1	L2745		
		-HCV2	L2746		
		-IBL2+3	—		
		-CCV2			
		↓ -CCB2			
		BLC0336-BLK2	REN		Mg only
		↓ -BS2	↓		60µL each ↓
		BLC0402-BLK2	DW		Ba, Mg, Pb, Se, Tl only
	✓	↓ -BS2	↓		60µL each / Mg K7409 + K7025 / natSy ↓
		Z3C0346-01	↓		↓ +N ₂



ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/17/23 Analyst: NS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. NS 3/17/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ4Φ2-0V2	DW		Br, Mg, Na, Pb, Se, Tl only
		↓ -MS2	↓		60 ul each K7409+K7025
		23CΦ341-Φ1RE1	↓	50	Na only
✓		↓ -Φ1	↓		Na Sat'd / St. no 23y
		SEQ-IBL4			
		↓ -CCV3			
		↓ -CCB3			
		23BΦ552-Φ1	REN	100	Mg only
		↓ -Φ2	↓	↓	↓
		BLCΦ4Φ2-B5X2	DW		60 ul each K7409+K7025 Br, Mg, Pb, Se, Tl only
		23CΦΦ66-Φ1	↓		Mg, Pb only
		23CΦ169-Φ1	↓		Pb, Se only
		23CΦ2Φ2-Φ1	↓		Mg, Pb only
		23CΦ34Φ-Φ1	↓		Mg only
		23CΦ341-Φ1	↓		Na Sat'd Br, Mg, Pb / Na Se, Tl only / NR
		SEQ-IBL5			
		↓ -CCV4			
		↓ -CCB4			
✓		↓ -CAL1			All but Cr, Cu, Pb Removed
		↓ -CCV5			
		↓ -CCB5			
		BLCΦ475-BLK1	DW		
		↓ -B51	↓		60 ul K7409
		BLCΦ476-BLK1	↓		



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/17/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLCΦ476-BS1	DW		
		23BΦ519-14			
		↓ -15			
		↓ -16			
		BLCΦ475-DUP1			
		↓ -MS1	↓		60 ml K7409
		SEQ-IBL6			
		↓ -CCV6			
		↓ -CCB6			
		23BΦ519-17	DW		
		↓ -18			
		↓ -19			
		↓ -20			
		↓ -21			
		↓ -22			
		↓ -23			
		↓ -24			
		↓ -25	↓		
		SEQ-IBL7			
		↓ -CCV7			
		↓ -CCB7			
	✓	C195-Φ1 TEST	—	100	TEST ONLY
		SEQ-IBL8			
		23BΦ519-26	DW		



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/7/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. MB 3/7/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23B0519-27	DW		
		↓ -28	↓		
		↓ -29	↓		
		↓ -30	↓		
		↓ -31	↓		
		↓ -32	↓		Cu ↑ Cu NR
		SEQ-IBL9			
		↓ -CCV8			
		↓ -CCB8			
		23B0519-32RE1	DW	20	Cu only
		↓ -33	↓		
✓		↓ -34	↓		Cu ↑ wrong sample
		SEQ-IBLA			
		23B0519-35	DW		
✓		↓ -34RE1	↓	20	
		↓ -36	↓		
		BLC0476-DVP1	↓		
		↓ -MS1	↓		
		SEQ-IBLB			
		↓ -CCV9			
		↓ -CCB9			
✓		23B0519-34RE1	DW	20	
		↓ -34	↓		Best noisy / Cu almost ↑ Cu NR
		SEQ-IBLC			



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/17/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		2300519-34RE1	DW	5	Cu only
		2300157-01	↓		
		↓ -02			
		↓ -03			
		2300243-01			Cu almost ↑ Cu NR
		2300244-01	↓		
		2300243-01RE1			5	Cu only
		SEQ-CCVA			
		↓ -CCBA			
		2300246-01	DW		
		2300255-01	↓		
		2300329-01			
		2300348-01			
		2300393-01			
		↓ -02			
		2300394-01			
		2300395-01			
		2300396-01	↓		
		SEQ-IBLQ			
		↓ -CCVB			
	✓	↓ -CCBB			Int. STDs no.3y
		↓ -CCBB			
		2300397-01	DW		
		2300400-01	↓		



ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/17/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23C0409-01	OW		
		SEQ-CCVC			
		↓ -CCBC			
✓		↓ -CALI			Cu, Pb Removed
		↓ -CEVD			
		↓ -CCBD			Se sl. no. 34 - 76R + Analytes OK
		23A0088-06	SWN	50	
		↓ -07	↓	↓	
		↓ -08	↓	↓	
		↓ -09	↓	↓	
		↓ -01	↓	↓	
		BLC0079-DVPZ			
		↓ -MS2	↓	↓	
		↓ -MS02	↓	↓	Se sl. no. 34 - 76R + Analytes OK
		↓ -PS2	↓	↓	60 ml 167409
		SEQ-IBLE			
		↓ -CCVE			
		↓ -CCBE			
		23A0088-10	SWN	50	
		↓ -11	↓	↓	
		↓ -12	↓	↓	
		↓ -13	↓	↓	
		↓ -14	↓	↓	
		↓ -15	↓	↓	



Analytical Resources,
Incorporated
Analytical Chemists and
Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 3/17/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23B0229-04	SWN	50	
		↓ -05	↓	↓	
		↓ -06	↓	↓	
		↓ -08	↓	↓	
		SE2-CCVF			
		↓ -CCBF			
		Rinse/DI			
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>MB 3/17/23</p> </div>					

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Friday, March 17, 2023 13:23:43

Sample Description:

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth

Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5472

MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode
Be	9.0		3968.0		3967.951		92.561		2.3	Standard
In	114.9		66655.7		-400177.422		2077.689		0.5	Standard
U	238.1		52843.2		52843.224		1593.383		3.0	Standard
[CeO	155.9		929.2		0.015		0.001		6.6	Standard
> Ce	139.9		62853.3		62853.324		1816.151		2.9	Standard
[Ce++	70.0		1403.9		0.022		0.001		3.4	Standard
Bkgd	220.0		0.3		0.300		0.415		138.3	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Friday, March 17, 2023 13:25:47

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/17/2023 1:23:40 PM

End Time: 3/17/2023 1:27:00 PM

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 3967.95

Obtained Intensity (In 115): 66655.66

Obtained Intensity (U 238): 52843.22

Obtained Intensity (Bkgd 220): 0.30

Obtained Formula (Ce++ 70 / Ce 140): 0.022 (=1403.87 / 62853.32)

Obtained Formula (CeO 156 / Ce 140): 0.015 (=929.23 / 62853.32)

Obtained RSD (Be 9): 0.0233

Obtained RSD (In 115): 0.0052

Obtained RSD (U 238): 0.0302

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.83 mm	0.20 mm	57433.22

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/17/2023 1:23:40 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 3967.95
Obtained Intensity (In 115): 66655.66
Obtained Intensity (U 238): 52843.22
Obtained Intensity (Bkgd 220): 0.30
Obtained Formula (Ce++ 70 / Ce 140): 0.022 (=1403.87 / 62853.32)
Obtained Formula (CeO 156 / Ce 140): 0.015 (=929.23 / 62853.32)
Obtained RSD (Be 9): 0.0233
Obtained RSD (In 115): 0.0052
Obtained RSD (U 238): 0.0302

[Passed] Optimum value(s): N/A

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.
Intensity Criterion: In 115 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	0.83 mm	0.20 mm	57433.22

End Time: 3/17/2023 1:27:00 PM

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Friday, March 17, 2023 13:34:33

Sample Description:

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth

Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5479

MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		4323.1		4323.121		88.939		2.1	Standard	
In	114.9		65267.2		65267.164		606.893		0.9	Standard	
U	238.1		52171.2		52171.166		566.701		1.1	Standard	
[	CeO	155.9		1040.4		0.017		0.000		2.7	Standard
|>	Ce	139.9		60548.5		60548.511		207.238		0.3	Standard
[	Ce++	70.0		1329.1		0.022		0.001		3.4	Standard
	Bkgd	220.0		0.2		0.167		0.118		70.7	Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1712.00	Analog Stage Voltage
1600.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Friday, March 17, 2023 13:36:37

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 3/17/2023 1:27:07 PM

End Time: 3/17/2023 1:36:37 PM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.64 mm	0.17 mm	59021.67

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.05

Obtained Intensity (In 115): 63605.28

Obtained Formula (CeO 156 / Ce 140): 0.0191 (=1104.04 / 57739.45)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.703)

Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.719)

Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.697)

Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.701)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.992; Intercept = -12.47

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.999; Intercept = -13.07

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 4323.12

Obtained Intensity (In 115): 65267.16

Obtained Intensity (U 238): 52171.17

Obtained Intensity (Bkgd 220): 0.17

Obtained Formula (Ce++ 70 / Ce 140): 0.022 (=1329.06 / 60548.51)

Obtained Formula (CeO 156 / Ce 140): 0.017 (=1040.37 / 60548.51)

Obtained RSD (Be 9): 0.0206

Obtained RSD (In 115): 0.0093

Obtained RSD (U 238): 0.0109

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 3/17/2023 1:27:07 PM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 115 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	0.64 mm	0.17 mm	59021.67

Nebulizer Gas Flow STD/KED [NEB]

Optimization Settings:

Method: Optimize.mth.

Initial Try - Start/End/Step: 1/1.1/0.01.

Intensity Criterion: In 115 Maximum

Formula Criterion: CeO 156 / Ce 140 <= 0.025

Optimization Results:

Initial Try

Obtained Intensity (In 115): 63605.28

Obtained Formula (CeO 156 / Ce 140): 0.0191 (=1104.04 / 57739.45)

[Passed] optimum value(s): 1.05

Mass Calibration and Resolution

Optimization Settings:

Method: Tuning.mth.

MassCal File: Default.tun

Iterations: 6

Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution

Peak height (%) for Res. Opt.: 10

Optimization Results:

Initial Try

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.703)

Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.719)

Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.697)

Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.701)

[Passed] optimum value(s): N/A

QID STD/DRC

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.992; Intercept = -12.47

Analyte	Mass	Points	DAC	MaxIntensity
---------	------	--------	-----	--------------

Li	7	41	-12.5	15972.9
Mg	24	41	-12	26099.8
In	115	41	-9	64493.3
Ce	140	41	-7.5	60154.4
Pb	208	41	-7	33302.8
U	238	41	-7	52845.6

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.999; Intercept = -13.07

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13.5	10195.6
Mg	24	41	-14	14503.4
In	115	41	-9	39093.4
Ce	140	41	-8	48618.6
Pb	208	41	-6.5	28949.3
U	238	41	-6	43450

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.

Intensity Criterion: Be 9 > 2000

Intensity Criterion: In 115 > 40000

Intensity Criterion: U 238 > 30000

Intensity Criterion: Bkgd 220 <= 1

Formula Criterion: Ce++ 70 / Ce 140 <= 0.03

Formula Criterion: CeO 156 / Ce 140 <= 0.025

RSD Criterion: Be 9.0122 < 0.05

RSD Criterion: In 114.904 < 0.05

RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 4323.12

Obtained Intensity (In 115): 65267.16

Obtained Intensity (U 238): 52171.17

Obtained Intensity (Bkgd 220): 0.17

Obtained Formula (Ce++ 70 / Ce 140): 0.022 (=1329.06 / 60548.51)

Obtained Formula (CeO 156 / Ce 140): 0.017 (=1040.37 / 60548.51)

Obtained RSD (Be 9): 0.0206

Obtained RSD (In 115): 0.0093

Obtained RSD (U 238): 0.0109

[Passed] Optimum value(s): N/A

End Time: 3/17/2023 1:36:37 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:06:54

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L				18331	1
	Cl	37	ug/L				3641919	1
[>	Sc	45	ug/L				503619	1
|	Na	23	ug/L				32609	1
|	Mg	24	ug/L				925	2
|	Cr	52	ug/L				17470	2
|	Cr	53	ug/L				135	5
[>	Ge	72	ug/L				450022	1
|	Cu	63	ug/L				1287	3
|	Cu	65	ug/L				104	8
|	Se	82	ug/L				4	133
|	Se	78	ug/L				14573	0
	Y	89	ug/L				321393	0
	Kr	83	ug/L				188	8
[>	In	115	ug/L				445880	1
|	Ba	135	ug/L				16	16
|	Ba	137	ug/L				29	22
[>	Tb	159	ug/L				595208	1
|	Tl	205	ug/L				14	14
|	Pb	208	ug/L				159	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:09:24

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	23602	6
Cl	37		ug/L			3641919	3686982	2
[> Sc	45		ug/L			503619	493869	2
| Na	23	100.000	ug/L	3.060	3	32609	2587822	2
| Mg	24	20.000	ug/L	0.864	4	925	335299	3
| Cr	52	0.500	ug/L	0.038	7	17470	27185	3
| Cr	53	0.500	ug/L	0.012	2	135	1252	2
[> Ge	72		ug/L			450022	444192	2
| Cu	63	0.500	ug/L	0.013	2	1287	6931	4
| Cu	65	0.500	ug/L	0.012	2	104	2774	2
| Se	82	0.500	ug/L	0.041	8	4	179	8
| Se	78	0.500	ug/L	0.209	41	14573	15067	0
Y	89		ug/L			321393	323209	3
Kr	83		ug/L			188	175	7
[> In	115		ug/L			445880	441849	2
| Ba	135	0.500	ug/L	0.022	4	16	1783	5
| Ba	137	0.500	ug/L	0.022	4	29	3156	2
[> Tb	159		ug/L			595208	588765	1
| Tl	205	0.200	ug/L	0.010	4	14	6782	3
| Pb	208	0.100	ug/L	0.004	3	159	4774	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:11:55

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	25521	5
Cl	37		ug/L			3641919	3658729	1
[> Sc	45		ug/L			503619	512023	1
| Na	23	999.428	ug/L	11.322	1	32609	25089576	1
| Mg	24	999.996	ug/L	24.259	2	925	17177296	1
| Cr	52	9.997	ug/L	0.136	1	17470	205777	0
| Cr	53	9.999	ug/L	0.286	2	135	22356	1
[> Ge	72		ug/L			450022	470441	0
| Cu	63	9.998	ug/L	0.219	2	1287	113410	1
| Cu	65	9.998	ug/L	0.276	2	104	52808	2
| Se	82	10.001	ug/L	0.127	1	4	3872	1
| Se	78	9.981	ug/L	0.299	2	14573	23556	1
Y	89		ug/L			321393	337539	1
Kr	83		ug/L			188	166	7
[> In	115		ug/L			445880	459014	1
| Ba	135	9.998	ug/L	0.191	1	16	34091	0
| Ba	137	9.998	ug/L	0.068	0	29	59835	0
[> Tb	159		ug/L			595208	618202	0
| Tl	205	10.000	ug/L	0.032	0	14	345432	0
| Pb	208	10.000	ug/L	0.035	0	159	457113	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:14:45

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	25407	3
Cl	37		ug/L			3641919	3659840	1
[> Sc	45		ug/L			503619	517938	3
| Na	23	1993.902	ug/L	69.761	3	32609	50007037	5
| Mg	24	1995.987	ug/L	72.722	3	925	34408335	4
| Cr	52	20.028	ug/L	0.370	1	17470	401008	1
| Cr	53	19.995	ug/L	0.200	0	135	45046	2
[> Ge	72		ug/L			450022	471169	1
| Cu	63	20.016	ug/L	0.291	1	1287	226751	1
| Cu	65	20.051	ug/L	0.339	1	104	107033	2
| Se	82	19.946	ug/L	0.185	0	4	7649	2
| Se	78	20.204	ug/L	0.232	1	14573	32841	1
Y	89		ug/L			321393	337837	2
Kr	83		ug/L			188	168	9
[> In	115		ug/L			445880	463085	2
| Ba	135	20.085	ug/L	0.293	1	16	70261	1
| Ba	137	20.005	ug/L	0.286	1	29	120845	2
[> Tb	159		ug/L			595208	627057	3
| Tl	205	19.902	ug/L	0.163	0	14	683782	2
| Pb	208	19.911	ug/L	0.353	1	159	906550	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:17:46

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	18645	4
Cl	37		ug/L			3641919	3862679	1
[> Sc	45		ug/L			503619	539079	1
| Na	23	4978.907	ug/L	111.645	2	32609	127239882	3
| Mg	24	4955.906	ug/L	126.664	2	925	85173695	3
| Cr	52	49.695	ug/L	0.531	1	17470	978982	1
| Cr	53	49.768	ug/L	0.801	1	135	113856	1
[> Ge	72		ug/L			450022	475401	1
| Cu	63	49.850	ug/L	0.987	1	1287	559457	2
| Cu	65	49.908	ug/L	0.556	1	104	266203	1
| Se	82	49.896	ug/L	0.848	1	4	19103	3
| Se	78	49.884	ug/L	0.202	0	14573	58702	1
Y	89		ug/L			321393	346657	3
Kr	83		ug/L			188	200	5
[> In	115		ug/L			445880	466122	2
| Ba	135	49.910	ug/L	0.807	1	16	174135	1
| Ba	137	49.952	ug/L	0.483	0	29	302246	2
[> Tb	159		ug/L			595208	646686	3
| Tl	205	49.919	ug/L	1.664	3	14	1753673	0
| Pb	208	49.712	ug/L	0.512	1	159	2269072	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:22:26

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	24509	2
Cl	37		ug/L			3641919	3883248	1
[> Sc	45		ug/L			503619	514489	3
| Na	23	10044.519	ug/L	534.042	5	32609	248317583	2
| Mg	24	10033.973	ug/L	352.014	3	925	166328307	0
| Cr	52	99.984	ug/L	2.693	2	17470	1859679	0
| Cr	53	100.038	ug/L	3.306	3	135	218407	0
[> Ge	72		ug/L			450022	457887	1
| Cu	63	99.771	ug/L	1.749	1	1287	1068904	1
| Cu	65	99.441	ug/L	2.737	2	104	501356	1
| Se	82	99.509	ug/L	0.700	0	4	36094	0
| Se	78	99.795	ug/L	1.997	2	14573	97701	1
Y	89		ug/L			321393	334006	0
Kr	83		ug/L			188	203	6
[> In	115		ug/L			445880	447400	1
| Ba	135	100.568	ug/L	0.467	0	16	343369	1
| Ba	137	100.660	ug/L	1.306	1	29	597754	0
[> Tb	159		ug/L			595208	633828	2
| Tl	205	100.224	ug/L	1.932	1	14	3478182	0
| Pb	208	99.818	ug/L	1.848	1	159	4438228	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:27:47

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	22470	0
Cl	37		ug/L			3641919	3800669	2
[> Sc	45		ug/L			503619	503721	0
| Na	23	0.170	ug/L	0.021	12	32609	36728	1
| Mg	24	0.149	ug/L	0.008	5	925	3343	3
| Cr	52	0.052	ug/L	0.020	39	17470	18414	1
| Cr	53	0.004	ug/L	0.004	126	135	142	7
[> Ge	72		ug/L			450022	457136	0
| Cu	63	0.022	ug/L	0.003	15	1287	1545	3
| Cu	65	-0.001	ug/L	0.002	123	104	99	8
| Se	82	0.026	ug/L	0.016	60	4	13	42
| Se	78	0.198	ug/L	0.113	57	14573	14967	0
Y	89		ug/L			321393	330344	2
Kr	83		ug/L			188	176	10
[> In	115		ug/L			445880	456078	3
| Ba	135	0.001	ug/L	0.001	108	16	20	18
| Ba	137	0.000	ug/L	0.001	209	29	32	20
[> Tb	159		ug/L			595208	608286	1
| Tl	205	0.004	ug/L	0.000	7	14	147	5
| Pb	208	0.001	ug/L	0.000	8	159	209	1

Sample Information

Sample Date/Time: Friday, March 17, 2023 14:22:26

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.r

Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCa\Default.tun

Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Na	23	1.0000	0.048	100.00	1000	2000	5000	10000
Mg	24	0.9999	0.032	20.00	1000	2000	5000	10000
Cr	52	1.0000	0.036	0.50	10	20	50	100
Cr	53	1.0000	0.004	0.50	10	20	50	100
Ge	72							
Cu	63	1.0000	0.023	0.50	10	20	50	100
Cu	65	0.9999	0.011	0.50	10	20	50	100
Se	82	0.9999	0.001	0.50	10	20	50	100
Se	78	1.0000	0.002	0.50	10	20	50	100
Y	89							
Kr	83							
In	115							
Ba	135	0.9999	0.008	0.50	10	20	50	100
Ba	137	0.9999	0.013	0.50	10	20	50	100
Tb	159							
Tl	205	1.0000	0.055	0.20	10	20	50	100
Pb	208	1.0000	0.070	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:33:07

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	24083	3
Cl	37		ug/L			3641919	3830926	1
[> Sc	45		ug/L			503619	553291	0
| Na	23	4951.532	ug/L	30.782	0	32609	131800235	0
| Mg	24	4946.904	ug/L	189.512	3	925	88257562	3
| Cr	52	50.526	ug/L	1.257	2	17470	1020706	2
| Cr	53	49.735	ug/L	1.025	2	135	116934	2
[> Ge	72		ug/L			450022	479788	1
| Cu	63	50.454	ug/L	0.971	1	1287	566960	0
| Cu	65	52.062	ug/L	0.555	1	104	275117	1
| Se	82	78.374	ug/L	1.623	2	4	29692	0
| Se	78	78.814	ug/L	2.017	2	14573	84102	0
Y	89		ug/L			321393	350532	0
Kr	83		ug/L			188	184	4
[> In	115		ug/L			445880	473165	1
| Ba	135	50.298	ug/L	1.063	2	16	181597	0
| Ba	137	50.515	ug/L	0.697	1	29	317265	0
[> Tb	159		ug/L			595208	655082	2
| Tl	205	49.755	ug/L	0.609	1	14	1784766	1
| Pb	208	51.041	ug/L	0.742	1	159	2345734	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:38:28

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	18542	2
Cl	37		ug/L			3641919	3691840	1
[> Sc	45		ug/L			503619	497356	2
| Na	23	0.329	ug/L	0.522	158	32609	39847	27
| Mg	24	0.307	ug/L	0.514	167	925	5676	139
| Cr	52	0.044	ug/L	0.032	73	17470	18028	0
| Cr	53	-0.000	ug/L	0.005	8316	135	133	6
[> Ge	72		ug/L			450022	455275	1
| Cu	63	0.005	ug/L	0.006	111	1287	1358	3
| Cu	65	0.002	ug/L	0.006	281	104	115	23
| Se	82	0.037	ug/L	0.007	18	4	17	13
| Se	78	0.475	ug/L	0.132	27	14573	15134	0
Y	89		ug/L			321393	326853	0
Kr	83		ug/L			188	190	6
[> In	115		ug/L			445880	451143	1
| Ba	135	0.003	ug/L	0.004	137	16	26	50
| Ba	137	0.002	ug/L	0.005	300	29	38	70
[> Tb	159		ug/L			595208	594383	1
| Tl	205	0.005	ug/L	0.004	80	14	178	73
| Pb	208	0.003	ug/L	0.005	183	159	267	73

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:40:58

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	18486	2
Cl	37		ug/L			3641919	3911927	2
[> Sc	45		ug/L			503619	547482	4
| Na	23	4850.535	ug/L	86.874	1	32609	127701673	3
| Mg	24	4901.329	ug/L	55.233	1	925	86513276	3
| Cr	52	49.530	ug/L	0.891	1	17470	990025	2
| Cr	53	48.705	ug/L	1.108	2	135	113241	2
[> Ge	72		ug/L			450022	480345	1
| Cu	63	50.693	ug/L	0.677	1	1287	570460	2
| Cu	65	51.687	ug/L	0.943	1	104	273532	3
| Se	82	50.190	ug/L	0.330	0	4	19043	2
| Se	78	50.548	ug/L	1.007	1	14573	59591	2
Y	89		ug/L			321393	343129	4
Kr	83		ug/L			188	196	3
[> In	115		ug/L			445880	468777	3
| Ba	135	48.771	ug/L	1.055	2	16	174396	1
| Ba	137	49.010	ug/L	0.282	0	29	304953	2
[> Tb	159		ug/L			595208	651392	2
| Tl	205	48.755	ug/L	0.527	1	14	1739324	2
| Pb	208	49.999	ug/L	0.196	0	159	2285348	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:45:59

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	18832	2
Cl	37		ug/L			3641919	3759050	4
[> Sc	45		ug/L			503619	512756	2
| Na	23	0.074	ug/L	0.025	33	32609	35048	4
| Mg	24	0.066	ug/L	0.051	77	925	2049	44
| Cr	52	0.031	ug/L	0.037	120	17470	18359	5
| Cr	53	-0.003	ug/L	0.002	73	135	131	5
[> Ge	72		ug/L			450022	460802	2
| Cu	63	-0.003	ug/L	0.004	173	1287	1290	1
| Cu	65	0.001	ug/L	0.001	111	104	111	5
| Se	82	0.027	ug/L	0.009	32	4	14	23
| Se	78	0.321	ug/L	0.273	84	14573	15185	1
Y	89		ug/L			321393	328152	3
Kr	83		ug/L			188	186	6
[> In	115		ug/L			445880	453910	2
| Ba	135	-0.000	ug/L	0.001	483	16	15	16
| Ba	137	0.001	ug/L	0.001	231	29	33	23
[> Tb	159		ug/L			595208	601032	2
| Tl	205	0.003	ug/L	0.001	23	14	106	21
| Pb	208	0.001	ug/L	0.000	25	159	204	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:50:25

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	22691	0
Cl	37		ug/L			3641919	3726049	3
[> Sc	45		ug/L			503619	528718	2
| Na	23	103.572	ug/L	2.387	2	32609	2668617	4
| Mg	24	20.958	ug/L	0.990	4	925	358578	7
| Cr	52	0.572	ug/L	0.024	4	17470	29191	4
| Cr	53	0.525	ug/L	0.022	4	135	1318	3
[> Ge	72		ug/L			450022	479258	2
| Cu	63	0.511	ug/L	0.011	2	1287	7090	0
| Cu	65	0.526	ug/L	0.013	2	104	2884	2
| Se	82	0.519	ug/L	0.034	6	4	200	5
| Se	78	0.301	ug/L	0.350	116	14573	15777	0
Y	89		ug/L			321393	339053	1
Kr	83		ug/L			188	172	13
[> In	115		ug/L			445880	469790	1
| Ba	135	0.549	ug/L	0.015	2	16	1986	4
| Ba	137	0.530	ug/L	0.014	2	29	3338	3
[> Tb	159		ug/L			595208	629792	2
| Tl	205	0.212	ug/L	0.008	3	14	7319	2
| Pb	208	0.112	ug/L	0.012	10	159	5132	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:53:07

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	83620	0
Cl	37		ug/L			3641919	9989368	4
[> Sc	45		ug/L			503619	560781	3
| Na	23	20772.082	ug/L	131.428	0	32609	560226609	2
| Mg	24	20384.155	ug/L	235.973	1	925	368616929	3
| Cr	52	0.886	ug/L	0.034	3	17470	37242	1
| Cr	53	4.223	ug/L	0.085	2	135	10203	4
[> Ge	72		ug/L			450022	483701	2
| Cu	63	0.872	ug/L	0.050	5	1287	11252	6
| Cu	65	0.429	ug/L	0.015	3	104	2397	4
| Se	82	0.052	ug/L	0.014	27	4	24	20
| Se	78	0.028	ug/L	0.176	624	14573	15686	1
Y	89		ug/L			321393	349538	2
Kr	83		ug/L			188	213	4
[> In	115		ug/L			445880	474862	2
| Ba	135	0.134	ug/L	0.007	5	16	503	2
| Ba	137	0.124	ug/L	0.005	3	29	812	1
[> Tb	159		ug/L			595208	680088	1
| Tl	205	0.020	ug/L	0.001	2	14	746	4
| Pb	208	0.042	ug/L	0.001	2	159	2172	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:55:37

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	84331	2
Cl	37		ug/L			3641919	10420953	3
[> Sc	45		ug/L			503619	586380	1
| Na	23	21178.924	ug/L	887.517	4	32609	597443553	4
| Mg	24	20711.443	ug/L	169.704	0	925	391634922	2
| Cr	52	20.714	ug/L	0.315	1	17470	455541	2
| Cr	53	23.571	ug/L	0.761	3	135	58812	3
[> Ge	72		ug/L			450022	489630	3
| Cu	63	20.810	ug/L	0.518	2	1287	239460	2
| Cu	65	20.562	ug/L	0.147	0	104	110977	3
| Se	82	0.044	ug/L	0.024	55	4	21	43
| Se	78	0.194	ug/L	0.311	160	14573	16021	1
Y	89		ug/L			321393	361101	2
Kr	83		ug/L			188	211	9
[> In	115		ug/L			445880	474227	1
| Ba	135	0.131	ug/L	0.009	7	16	492	7
| Ba	137	0.127	ug/L	0.003	2	29	827	1
[> Tb	159		ug/L			595208	691084	1
| Tl	205	0.018	ug/L	0.001	5	14	692	6
| Pb	208	0.038	ug/L	0.001	1	159	2014	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 14:58:07

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	24726	1
Cl	37		ug/L			3641919	4047350	0
[> Sc	45		ug/L			503619	551170	1
| Na	23	20318.587	ug/L	415.301	2	32609	538583031	0
| Mg	24	20127.233	ug/L	628.024	3	925	357622166	1
| Cr	52	207.122	ug/L	4.424	2	17470	4108400	0
| Cr	53	198.047	ug/L	2.986	1	135	463363	0
[> Ge	72		ug/L			450022	468827	0
| Cu	63	208.618	ug/L	2.020	0	1287	2287213	1
| Cu	65	199.272	ug/L	2.881	1	104	1028823	2
| Se	82	196.333	ug/L	0.387	0	4	72697	1
| Se	78	202.857	ug/L	1.475	0	14573	187677	0
Y	89		ug/L			321393	346317	2
Kr	83		ug/L			188	217	4
[> In	115		ug/L			445880	456977	2
| Ba	135	202.205	ug/L	6.315	3	16	704821	0
| Ba	137	200.826	ug/L	5.418	2	29	1217706	0
[> Tb	159		ug/L			595208	663909	1
| Tl	205	193.760	ug/L	1.735	0	14	7044541	0
| Pb	208	199.568	ug/L	2.505	1	159	9295426	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:00:37

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	25188	1
Cl	37		ug/L			3641919	3964661	0
[> Sc	45		ug/L			503619	518753	0
| Na	23	30453.363	ug/L	252.853	0	32609	759888352	1
| Mg	24	30581.634	ug/L	550.804	1	925	511592577	2
| Cr	52	316.775	ug/L	3.779	1	17470	5905256	0
| Cr	53	300.640	ug/L	4.521	1	135	662003	0
[> Ge	72		ug/L			450022	442126	0
| Cu	63	310.795	ug/L	3.152	1	1287	3212595	1
| Cu	65	298.189	ug/L	3.219	1	104	1451668	0
| Se	82	289.064	ug/L	1.572	0	4	100932	0
| Se	78	297.821	ug/L	0.864	0	14573	253146	0
Y	89		ug/L			321393	326511	1
Kr	83		ug/L			188	264	6
[> In	115		ug/L			445880	436212	1
| Ba	135	303.354	ug/L	6.793	2	16	1009589	0
| Ba	137	303.701	ug/L	3.458	1	29	1758402	1
[> Tb	159		ug/L			595208	648670	0
| Tl	205	282.024	ug/L	0.400	0	14	10019163	0
| Pb	208	289.543	ug/L	2.533	0	159	13178533	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:05:58

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	23718	3
Cl	37		ug/L			3641919	3830995	1
[> Sc	45		ug/L			503619	535605	2
| Na	23	3.726	ug/L	4.428	118	32609	129590	85
| Mg	24	2.958	ug/L	4.664	157	925	51314	154
| Cr	52	0.080	ug/L	0.035	43	17470	20099	1
| Cr	53	0.086	ug/L	0.036	42	135	338	22
[> Ge	72		ug/L			450022	484763	1
| Cu	63	0.130	ug/L	0.060	45	1287	2853	22
| Cu	65	0.033	ug/L	0.043	129	104	286	77
| Se	82	0.072	ug/L	0.040	56	4	31	46
| Se	78	0.100	ug/L	0.129	129	14573	15784	0
Y	89		ug/L			321393	348309	3
Kr	83		ug/L			188	175	4
[> In	115		ug/L			445880	475509	3
| Ba	135	0.031	ug/L	0.042	136	16	125	116
| Ba	137	0.029	ug/L	0.042	144	29	209	121
[> Tb	159		ug/L			595208	624349	1
| Tl	205	0.061	ug/L	0.047	77	14	2078	76
| Pb	208	0.032	ug/L	0.049	154	159	1541	137

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:10:29

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	24091	0
Cl	37		ug/L			3641919	3795208	1
[> Sc	45		ug/L			503619	543373	3
| Na	23	0.685	ug/L	0.034	4	32609	53070	2
| Mg	24	0.250	ug/L	0.042	16	925	5389	14
| Cr	52	0.034	ug/L	0.024	69	17470	19504	1
| Cr	53	0.041	ug/L	0.009	23	135	239	6
[> Ge	72		ug/L			450022	482723	2
| Cu	63	0.049	ug/L	0.012	24	1287	1929	6
| Cu	65	0.007	ug/L	0.003	48	104	147	12
| Se	82	0.027	ug/L	0.011	41	4	14	29
| Se	78	-0.041	ug/L	0.372	907	14573	15591	0
Y	89		ug/L			321393	349465	0
Kr	83		ug/L			188	167	3
[> In	115		ug/L			445880	477296	1
| Ba	135	0.005	ug/L	0.001	20	16	35	9
| Ba	137	0.005	ug/L	0.002	34	29	62	16
[> Tb	159		ug/L			595208	636742	0
| Tl	205	0.013	ug/L	0.002	11	14	476	11
| Pb	208	0.002	ug/L	0.000	11	159	275	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:14:59

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	19031	2
Cl	37		ug/L			3641919	3882988	2
[> Sc	45		ug/L			503619	540457	1
| Na	23	4854.727	ug/L	170.484	3	32609	126251857	4
| Mg	24	4954.137	ug/L	84.392	1	925	86348582	2
| Cr	52	51.003	ug/L	0.751	1	17470	1006232	0
| Cr	53	49.698	ug/L	0.429	0	135	114130	0
[> Ge	72		ug/L			450022	482540	0
| Cu	63	50.152	ug/L	0.884	1	1287	566933	1
| Cu	65	50.824	ug/L	0.825	1	104	270161	2
| Se	82	50.561	ug/L	1.333	2	4	19271	2
| Se	78	50.635	ug/L	1.224	2	14573	59942	1
Y	89		ug/L			321393	348518	3
Kr	83		ug/L			188	201	9
[> In	115		ug/L			445880	471953	1
| Ba	135	48.928	ug/L	0.266	0	16	176227	1
| Ba	137	48.605	ug/L	0.139	0	29	304507	1
[> Tb	159		ug/L			595208	648018	1
| Tl	205	49.184	ug/L	0.322	0	14	1745561	1
| Pb	208	50.346	ug/L	0.672	1	159	2289256	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:20:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	20057	0
Cl	37		ug/L			3641919	3805033	0
[> Sc	45		ug/L			503619	544237	1
| Na	23	0.117	ug/L	0.038	32	32609	38302	1
| Mg	24	0.012	ug/L	0.001	6	925	1214	1
| Cr	52	0.022	ug/L	0.028	127	17470	19318	4
| Cr	53	0.011	ug/L	0.005	41	135	171	4
[> Ge	72		ug/L			450022	481317	0
| Cu	63	0.006	ug/L	0.004	59	1287	1444	3
| Cu	65	-0.000	ug/L	0.004	1057	104	110	17
| Se	82	0.016	ug/L	0.013	78	4	10	45
| Se	78	-0.064	ug/L	0.029	45	14573	15530	0
Y	89		ug/L			321393	343594	0
Kr	83		ug/L			188	188	1
[> In	115		ug/L			445880	476740	0
| Ba	135	0.000	ug/L	0.001	901	16	17	28
| Ba	137	-0.000	ug/L	0.001	292	29	29	14
[> Tb	159		ug/L			595208	626709	0
| Tl	205	0.005	ug/L	0.001	26	14	182	23
| Pb	208	0.000	ug/L	0.000	118	159	183	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0336-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:24:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	30649	1
Cl	37		ug/L			3641919	3815173	1
[> Sc	45		ug/L			503619	549088	0
| Na	23	5.894	ug/L	0.086	1	32609	191226	1
| Mg	24	0.267	ug/L	0.015	5	925	5735	5
| Cr	52	0.180	ug/L	0.014	7	17470	22597	1
| Cr	53	0.125	ug/L	0.011	8	135	439	5
[> Ge	72		ug/L			450022	481668	3
| Cu	63	0.141	ug/L	0.009	6	1287	2968	2
| Cu	65	0.152	ug/L	0.006	3	104	920	5
| Se	82	0.033	ug/L	0.001	3	4	16	5
| Se	78	0.016	ug/L	0.622	3870	14573	15600	0
| Y	89		ug/L			321393	350936	1
| Kr	83		ug/L			188	158	5
[> In	115		ug/L			445880	474974	1
| Ba	135	0.009	ug/L	0.001	7	16	51	4
| Ba	137	0.010	ug/L	0.001	11	29	92	5
[> Tb	159		ug/L			595208	632292	2
| Tl	205	0.015	ug/L	0.005	32	14	534	29
| Pb	208	0.003	ug/L	0.001	17	159	299	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0336-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:26:34**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	30993	4
Cl	37		ug/L			3641919	3962218	0
[> Sc	45		ug/L			503619	572004	1
| Na	23	5042.511	ug/L	258.321	5	32609	138690553	3
| Mg	24	5145.818	ug/L	222.327	4	925	94877512	3
| Cr	52	25.834	ug/L	1.397	5	17470	548965	3
| Cr	53	25.707	ug/L	1.424	5	135	62523	3
[> Ge	72		ug/L			450022	503365	0
| Cu	63	25.839	ug/L	0.959	3	1287	305340	2
| Cu	65	25.980	ug/L	1.152	4	104	144080	3
| Se	82	78.039	ug/L	3.315	4	4	31021	3
| Se	78	78.137	ug/L	4.042	5	14573	87623	3
Y	89		ug/L			321393	365451	1
Kr	83		ug/L			188	175	6
[> In	115		ug/L			445880	493134	1
| Ba	135	25.025	ug/L	0.850	3	16	94181	3
| Ba	137	24.772	ug/L	0.585	2	29	162165	2
[> Tb	159		ug/L			595208	679034	1
| Tl	205	24.790	ug/L	0.990	3	14	921489	2
| Pb	208	25.525	ug/L	1.122	4	159	1215622	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0402-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:29:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	26157	4
Cl	37		ug/L			3641919	3805321	1
[> Sc	45		ug/L			503619	528456	0
| Na	23	1.266	ug/L	0.522	41	32609	66318	18
| Mg	24	0.475	ug/L	0.485	101	925	9018	90
| Cr	52	0.067	ug/L	0.025	36	17470	19595	2
| Cr	53	0.021	ug/L	0.009	41	135	189	9
[> Ge	72		ug/L			450022	482062	2
| Cu	63	0.002	ug/L	0.004	230	1287	1396	3
| Cu	65	0.016	ug/L	0.002	12	104	199	7
| Se	82	0.030	ug/L	0.023	78	4	15	57
| Se	78	-0.280	ug/L	0.360	128	14573	15359	0
| Y	89		ug/L			321393	341863	0
| Kr	83		ug/L			188	176	7
[> In	115		ug/L			445880	471051	0
| Ba	135	0.028	ug/L	0.006	19	16	118	17
| Ba	137	0.024	ug/L	0.002	7	29	183	6
[> Tb	159		ug/L			595208	629258	1
| Tl	205	0.003	ug/L	0.002	56	14	134	51
| Pb	208	0.015	ug/L	0.002	12	159	824	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0402-BS2

Sample Dil Factor:

Comments:

DEL

Sample Date/Time: Friday, March 17, 2023 15:31:35

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	26933	1
Cl	37		ug/L			3641919	3893375	4
[> Sc	45		ug/L			503619	548487	5
| Na	23	4596.577	ug/L	98.316	2	32609	121365331	6
| Mg	24	4750.729	ug/L	173.680	3	925	84111894	8
| Cr	52	25.027	ug/L	0.246	0	17470	510728	4
| Cr	53	24.710	ug/L	0.291	1	135	57675	5
[> Ge	72		ug/L			450022	474573	3
| Cu	63	25.613	ug/L	0.253	0	1287	285467	3
| Cu	65	25.414	ug/L	0.364	1	104	132912	3
| Se	82	79.987	ug/L	0.620	0	4	29983	3
| Se	78	79.422	ug/L	1.398	1	14573	83744	4
Y	89		ug/L			321393	347781	3
Kr	83		ug/L			188	193	8
[> In	115		ug/L			445880	468091	3
| Ba	135	24.455	ug/L	0.117	0	16	87367	2
| Ba	137	24.813	ug/L	0.047	0	29	154199	3
[> Tb	159		ug/L			595208	653791	3
| Tl	205	24.231	ug/L	0.319	1	14	867674	3
| Pb	208	24.939	ug/L	0.265	1	159	1144369	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0346-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:34:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	92173	1
Cl	37		ug/L			3641919	3657658	3
Sc	45		ug/L			503619	571969	2
Na	23	3557.652	ug/L	119.998	3	32609	97938929	5
Mg	24	5070.701	ug/L	84.591	1	925	93500834	1
Cr	52	4.347	ug/L	0.055	1	17470	108901	2
Cr	53	4.133	ug/L	0.042	1	135	10186	3
Ge	72		ug/L			450022	473955	3
Cu	63	9.844	ug/L	0.104	1	1287	110380	3
Cu	65	10.080	ug/L	0.163	1	104	52726	4
Se	82	0.320	ug/L	0.029	9	4	123	6
Se	78	-0.015	ug/L	0.603	4000	14573	15322	0
Y	89		ug/L			321393	332400	2
Kr	83		ug/L			188	175	8
In	115		ug/L			445880	458022	2
Ba	135	3.105	ug/L	0.025	0	16	10869	1
Ba	137	3.088	ug/L	0.021	0	29	18802	1
Tb	159		ug/L			595208	625338	1
Tl	205	0.010	ug/L	0.002	22	14	342	22
Pb	208	0.060	ug/L	0.002	3	159	2821	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0402-DUP2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:38:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	96577	1
Cl	37		ug/L			3641919	3720135	1
Sc	45		ug/L			503619	581479	1
Na	23	3569.425	ug/L	115.631	3	32609	99843245	2
Mg	24	5216.399	ug/L	30.287	0	925	97806723	0
Cr	52	4.379	ug/L	0.112	2	17470	111388	2
Cr	53	4.177	ug/L	0.188	4	135	10461	3
Ge	72		ug/L			450022	482378	1
Cu	63	10.058	ug/L	0.211	2	1287	114743	1
Cu	65	10.048	ug/L	0.177	1	104	53468	0
Se	82	0.286	ug/L	0.034	12	4	113	11
Se	78	-0.586	ug/L	0.283	48	14573	15105	0
Y	89		ug/L			321393	343730	1
Kr	83		ug/L			188	172	8
In	115		ug/L			445880	462473	2
Ba	135	3.115	ug/L	0.075	2	16	11005	0
Ba	137	3.136	ug/L	0.076	2	29	19273	0
Tb	159		ug/L			595208	630124	3
Tl	205	0.006	ug/L	0.001	21	14	222	16
Pb	208	0.057	ug/L	0.003	4	159	2701	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0402-MS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:41:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	73443	2
Cl	37		ug/L			3641919	3738920	1
> Sc	45		ug/L			503619	589383	1
| Na	23	7879.896	ug/L	81.626	1	32609	223440764	2
| Mg	24	9334.823	ug/L	221.473	2	925	177376322	1
| Cr	52	27.354	ug/L	0.840	3	17470	597888	1
| Cr	53	26.765	ug/L	0.802	2	135	67086	1
> Ge	72		ug/L			450022	480458	1
| Cu	63	34.906	ug/L	0.206	0	1287	393294	0
| Cu	65	34.863	ug/L	0.680	1	104	184527	1
| Se	82	96.978	ug/L	1.091	1	4	36798	0
| Se	78	96.712	ug/L	2.200	2	14573	99823	0
Y	89		ug/L			321393	342701	0
Kr	83		ug/L			188	186	7
> In	115		ug/L			445880	458913	2
| Ba	135	27.876	ug/L	0.157	0	16	97636	2
| Ba	137	27.745	ug/L	0.253	0	29	169011	1
> Tb	159		ug/L			595208	644091	0
| Tl	205	24.287	ug/L	0.088	0	14	856738	0
| Pb	208	25.023	ug/L	0.212	0	159	1130984	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0341-01RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 15:43:46**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	28131	2
Cl	37		ug/L			3641919	3636773	0
[> Sc	45		ug/L			503619	540880	0
| Na	23	2093.619	ug/L	51.399	2	32609	54507814	3
| Mg	24	18.847	ug/L	0.431	2	925	329706	2
| Cr	52	0.116	ug/L	0.010	8	17470	21017	1
| Cr	53	0.105	ug/L	0.015	14	135	385	8
[> Ge	72		ug/L			450022	489717	2
| Cu	63	2.637	ug/L	0.058	2	1287	31566	0
| Cu	65	2.652	ug/L	0.015	0	104	14416	2
| Se	82	0.060	ug/L	0.011	18	4	27	17
| Se	78	-0.653	ug/L	0.308	47	14573	15274	0
Y	89		ug/L			321393	348687	1
Kr	83		ug/L			188	177	3
[> In	115		ug/L			445880	468271	1
| Ba	135	0.103	ug/L	0.009	8	16	383	6
| Ba	137	0.099	ug/L	0.006	6	29	645	5
[> Tb	159		ug/L			595208	629777	1
| Tl	205	0.009	ug/L	0.001	8	14	324	7
| Pb	208	0.081	ug/L	0.001	1	159	3729	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0341-01

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, March 17, 2023 15:46:16

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	291592	12
Cl	37		ug/L			3641919	3946136	0
[> Sc	45		ug/L			503619	565293	4
| Na	23	S	ug/L	S	S	32609	S	S
| Mg	24	566.586	ug/L	47.153	8	925	10305906	4
| Cr	52	3.907	ug/L	0.480	12	17470	98473	5
| Cr	53	3.067	ug/L	0.236	7	135	7494	3
[> Ge	72		ug/L			450022	456480	6
| Cu	63	127.964	ug/L	14.210	11	1287	1359424	3
| Cu	65	126.311	ug/L	13.441	10	104	631851	3
| Se	82	0.111	ug/L	0.061	54	4	43	41
| Se	78	0.120	ug/L	1.677	1401	14573	14816	2
| Y	89		ug/L			321393	344704	5
| Kr	83		ug/L			188	180	7
[> In	115		ug/L			445880	432902	6
| Ba	135	4.364	ug/L	0.405	9	16	14370	2
| Ba	137	4.322	ug/L	0.406	9	29	24760	2
[> Tb	159		ug/L			595208	612782	6
| Tl	205	0.009	ug/L	0.001	14	14	304	7
| Pb	208	2.509	ug/L	0.193	7	159	107679	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:50:30

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	26980	1
Cl	37		ug/L			3641919	3785698	1
[> Sc	45		ug/L			503619	536970	1
| Na	23	2.775	ug/L	3.182	114	32609	106978	78
| Mg	24	0.188	ug/L	0.068	36	925	4249	28
| Cr	52	0.052	ug/L	0.004	8	17470	19635	0
| Cr	53	0.024	ug/L	0.004	18	135	197	4
[> Ge	72		ug/L			450022	482047	0
| Cu	63	0.033	ug/L	0.009	26	1287	1755	5
| Cu	65	0.004	ug/L	0.002	42	104	135	6
| Se	82	0.026	ug/L	0.004	15	4	14	10
| Se	78	-0.394	ug/L	0.221	56	14573	15265	1
Y	89		ug/L			321393	338187	2
Kr	83		ug/L			188	169	2
[> In	115		ug/L			445880	464586	1
| Ba	135	0.002	ug/L	0.001	41	16	24	12
| Ba	137	0.001	ug/L	0.001	127	29	36	23
[> Tb	159		ug/L			595208	626394	1
| Tl	205	0.001	ug/L	0.000	7	14	56	5
| Pb	208	0.005	ug/L	0.001	15	159	390	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:53:00

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	21459	3
Cl	37		ug/L			3641919	3835482	1
[> Sc	45		ug/L			503619	548534	0
| Na	23	4890.747	ug/L	59.423	1	32609	129070641	1
| Mg	24	5011.445	ug/L	108.674	2	925	88636978	1
| Cr	52	50.650	ug/L	0.542	1	17470	1014398	0
| Cr	53	49.595	ug/L	0.640	1	135	115610	1
[> Ge	72		ug/L			450022	477533	2
| Cu	63	51.085	ug/L	0.482	0	1287	571401	1
| Cu	65	51.044	ug/L	0.333	0	104	268502	2
| Se	82	51.588	ug/L	0.269	0	4	19458	2
| Se	78	51.897	ug/L	1.429	2	14573	60393	0
Y	89		ug/L			321393	350079	0
Kr	83		ug/L			188	193	5
[> In	115		ug/L			445880	469695	0
| Ba	135	49.128	ug/L	0.662	1	16	176099	1
| Ba	137	49.139	ug/L	0.276	0	29	306383	0
[> Tb	159		ug/L			595208	654989	1
| Tl	205	49.382	ug/L	0.220	0	14	1771416	1
| Pb	208	49.892	ug/L	0.141	0	159	2293158	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 15:58:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	20421	1
Cl	37		ug/L			3641919	3803386	3
[> Sc	45		ug/L			503619	526611	1
| Na	23	0.621	ug/L	0.470	75	32609	49675	21
| Mg	24	0.207	ug/L	0.238	115	925	4426	88
| Cr	52	0.034	ug/L	0.019	57	17470	18903	3
| Cr	53	0.016	ug/L	0.013	82	135	176	15
[> Ge	72		ug/L			450022	473917	0
| Cu	63	-0.014	ug/L	0.008	60	1287	1201	7
| Cu	65	0.004	ug/L	0.005	126	104	132	20
| Se	82	0.038	ug/L	0.006	14	4	18	11
| Se	78	-0.221	ug/L	0.157	71	14573	15156	0
Y	89		ug/L			321393	336695	0
Kr	83		ug/L			188	169	6
[> In	115		ug/L			445880	459602	0
| Ba	135	0.002	ug/L	0.001	53	16	23	15
| Ba	137	0.001	ug/L	0.002	229	29	34	31
[> Tb	159		ug/L			595208	618497	0
| Tl	205	0.004	ug/L	0.002	40	14	142	35
| Pb	208	0.002	ug/L	0.002	106	159	263	39

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0552-01**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:01:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	28770	1
Cl	37		ug/L			3641919	3740800	2
[> Sc	45		ug/L			503619	549331	2
| Na	23	298.159	ug/L	3.074	1	32609	7912565	1
| Mg	24	1226.333	ug/L	16.341	1	925	21722880	2
| Cr	52	0.696	ug/L	0.012	1	17470	32758	2
| Cr	53	0.676	ug/L	0.028	4	135	1723	1
[> Ge	72		ug/L			450022	489463	3
| Cu	63	0.071	ug/L	0.002	2	1287	2211	3
| Cu	65	0.100	ug/L	0.005	4	104	653	5
| Se	82	0.040	ug/L	0.011	28	4	19	18
| Se	78	-0.577	ug/L	0.430	74	14573	15329	0
| Y	89		ug/L			321393	352908	1
| Kr	83		ug/L			188	171	6
[> In	115		ug/L			445880	484179	1
| Ba	135	0.744	ug/L	0.017	2	16	2764	2
| Ba	137	0.748	ug/L	0.021	2	29	4841	3
[> Tb	159		ug/L			595208	644713	2
| Tl	205	0.003	ug/L	0.001	22	14	113	17
| Pb	208	0.032	ug/L	0.001	3	159	1632	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0552-02**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:03:45**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	30819	2
Cl	37		ug/L			3641919	3788992	3
Sc	45		ug/L			503619	549521	0
Na	23	111.899	ug/L	1.570	1	32609	2993176	1
Mg	24	155.844	ug/L	2.202	1	925	2762525	1
Cr	52	1.148	ug/L	0.047	4	17470	41667	2
Cr	53	1.084	ug/L	0.022	2	135	2675	1
Ge	72		ug/L			450022	486984	1
Cu	63	0.038	ug/L	0.007	18	1287	1830	3
Cu	65	0.068	ug/L	0.004	6	104	476	5
Se	82	0.021	ug/L	0.015	71	4	12	46
Se	78	-0.563	ug/L	0.175	31	14573	15271	0
Y	89		ug/L			321393	352026	1
Kr	83		ug/L			188	174	8
In	115		ug/L			445880	480085	2
Ba	135	0.139	ug/L	0.009	6	16	525	6
Ba	137	0.137	ug/L	0.003	1	29	906	1
Tb	159		ug/L			595208	649834	1
Tl	205	0.001	ug/L	0.000	46	14	52	31
Pb	208	0.030	ug/L	0.001	1	159	1556	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0402-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:08:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	25183	2
Cl	37		ug/L			3641919	3858384	2
Sc	45		ug/L			503619	539008	2
Na	23	4863.262	ug/L	101.264	2	32609	126073810	0
Mg	24	4852.644	ug/L	81.868	1	925	84321254	0
Cr	52	25.288	ug/L	0.807	3	17470	506810	1
Cr	53	25.607	ug/L	0.805	3	135	58694	0
Ge	72		ug/L			450022	473580	0
Cu	63	25.574	ug/L	0.311	1	1287	284396	1
Cu	65	25.902	ug/L	0.427	1	104	135166	1
Se	82	80.677	ug/L	1.284	1	4	30176	1
Se	78	80.268	ug/L	1.337	1	14573	84278	0
Y	89		ug/L			321393	338275	1
Kr	83		ug/L			188	169	4
In	115		ug/L			445880	463934	0
Ba	135	24.462	ug/L	0.092	0	16	86619	0
Ba	137	24.562	ug/L	0.223	0	29	151290	1
Tb	159		ug/L			595208	647568	0
Tl	205	24.530	ug/L	0.318	1	14	869982	1
Pb	208	25.043	ug/L	0.068	0	159	1138043	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0066-01**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:11:25

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	149778	3
Cl	37		ug/L			3641919	3714756	0
[> Sc	45		ug/L			503619	589362	0
| Na	23	4930.209	ug/L	196.364	3	32609	139767091	3
| Mg	24	6079.140	ug/L	131.169	2	925	115525218	1
| Cr	52	0.564	ug/L	0.031	5	17470	32356	2
| Cr	53	0.214	ug/L	0.015	7	135	693	5
[> Ge	72		ug/L			450022	489097	0
| Cu	63	1.871	ug/L	0.045	2	1287	22789	1
| Cu	65	1.851	ug/L	0.008	0	104	10083	0
| Se	82	0.081	ug/L	0.028	33	4	35	29
| Se	78	-0.992	ug/L	0.156	15	14573	14957	0
| Y	89		ug/L			321393	345139	0
| Kr	83		ug/L			188	165	11
[> In	115		ug/L			445880	464596	1
| Ba	135	8.500	ug/L	0.161	1	16	30149	0
| Ba	137	8.453	ug/L	0.107	1	29	52152	0
[> Tb	159		ug/L			595208	640309	0
| Tl	205	0.014	ug/L	0.002	17	14	517	16
| Pb	208	0.057	ug/L	0.000	0	159	2724	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0169-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:13:55**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	423221	1
Cl	37		ug/L			3641919	3748718	1
[> Sc	45		ug/L			503619	594238	0
| Na	23	6322.435	ug/L	20.866	0	32609	180738796	0
| Mg	24	10152.485	ug/L	78.092	0	925	194539661	1
| Cr	52	1.916	ug/L	0.020	1	17470	61403	0
| Cr	53	0.387	ug/L	0.001	0	135	1134	0
[> Ge	72		ug/L			450022	479917	1
| Cu	63	6.604	ug/L	0.084	1	1287	75438	0
| Cu	65	6.590	ug/L	0.041	0	104	34933	0
| Se	82	0.042	ug/L	0.005	10	4	20	8
| Se	78	-0.719	ug/L	0.289	40	14573	14912	0
| Y	89		ug/L			321393	345821	0
| Kr	83		ug/L			188	195	7
[> In	115		ug/L			445880	461198	1
| Ba	135	2.101	ug/L	0.017	0	16	7408	1
| Ba	137	2.102	ug/L	0.005	0	29	12895	1
[> Tb	159		ug/L			595208	638744	0
| Tl	205	0.007	ug/L	0.001	16	14	260	16
| Pb	208	0.014	ug/L	0.000	2	159	786	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0202-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:16:25**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	743775	3
Cl	37		ug/L			3641919	3610235	1
[> Sc	45		ug/L			503619	599016	1
| Na	23	10945.445	ug/L	143.592	1	32609	315409839	2
| Mg	24	4747.960	ug/L	105.710	2	925	91725884	3
| Cr	52	3.394	ug/L	0.067	1	17470	93613	1
| Cr	53	0.531	ug/L	0.005	0	135	1510	1
[> Ge	72		ug/L			450022	474516	2
| Cu	63	1.194	ug/L	0.022	1	1287	14596	1
| Cu	65	1.007	ug/L	0.038	3	104	5372	3
| Se	82	0.093	ug/L	0.030	32	4	38	26
| Se	78	-0.582	ug/L	0.424	72	14573	14858	0
| Y	89		ug/L			321393	339484	0
| Kr	83		ug/L			188	172	18
[> In	115		ug/L			445880	452754	1
| Ba	135	0.122	ug/L	0.008	6	16	438	4
| Ba	137	0.122	ug/L	0.006	4	29	763	5
[> Tb	159		ug/L			595208	626338	2
| Tl	205	0.007	ug/L	0.001	10	14	267	7
| Pb	208	0.016	ug/L	0.001	6	159	872	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0340-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:19:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	260971	4
Cl	37		ug/L			3641919	3697630	1
[> Sc	45		ug/L			503619	549061	0
| Na	23	3175.264	ug/L	23.506	0	32609	83887823	0
| Mg	24	4360.385	ug/L	19.733	0	925	77199461	0
| Cr	52	1.605	ug/L	0.090	5	17470	50626	3
| Cr	53	0.652	ug/L	0.015	2	135	1667	1
[> Ge	72		ug/L			450022	466232	0
| Cu	63	19.457	ug/L	0.175	0	1287	213342	1
| Cu	65	19.693	ug/L	0.154	0	104	101203	1
| Se	82	0.089	ug/L	0.024	26	4	36	23
| Se	78	-0.312	ug/L	0.092	29	14573	14833	0
| Y	89		ug/L			321393	333509	1
| Kr	83		ug/L			188	188	6
[> In	115		ug/L			445880	456762	1
| Ba	135	1.802	ug/L	0.045	2	16	6296	2
| Ba	137	1.780	ug/L	0.036	2	29	10819	0
[> Tb	159		ug/L			595208	625620	1
| Tl	205	0.007	ug/L	0.000	6	14	240	7
| Pb	208	2.582	ug/L	0.023	0	159	113506	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0341-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:21:45**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	264049	0
Cl	37		ug/L			3641919	3901540	2
Sc	45		ug/L			503619	542096	1
Na	23		ug/L	S	S	32609	S	S
Mg	24	562.596	ug/L	4.941	0	925	9834325	0
Cr	52	3.860	ug/L	0.071	1	17470	93751	1
Cr	53	3.142	ug/L	0.040	1	135	7374	2
Ge	72		ug/L			450022	441366	3
Cu	63	126.545	ug/L	5.099	4	1287	1305415	1
Cu	65	122.301	ug/L	4.334	3	104	594001	1
Se	82	0.068	ug/L	0.020	28	4	27	27
Se	78	0.443	ug/L	0.723	163	14573	14634	0
Y	89		ug/L			321393	334205	4
Kr	83		ug/L			188	176	5
In	115		ug/L			445880	416906	3
Ba	135	4.322	ug/L	0.167	3	16	13752	0
Ba	137	4.260	ug/L	0.124	2	29	23586	1
Tb	159		ug/L			595208	598464	3
Tl	205	0.005	ug/L	0.000	5	14	176	5
Pb	208	2.524	ug/L	0.084	3	159	106075	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:26:57

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	27200	3
Cl	37		ug/L			3641919	3688903	1
[> Sc	45		ug/L			503619	524185	1
| Na	23	1.534	ug/L	0.882	57	32609	72676	30
| Mg	24	0.192	ug/L	0.010	5	925	4211	3
| Cr	52	0.078	ug/L	0.000	0	17470	19647	1
| Cr	53	0.017	ug/L	0.005	30	135	179	6
[> Ge	72		ug/L			450022	471262	2
| Cu	63	-0.044	ug/L	0.006	13	1287	866	6
| Cu	65	0.002	ug/L	0.001	37	104	122	4
| Se	82	0.026	ug/L	0.031	117	4	13	81
| Se	78	-0.076	ug/L	0.419	548	14573	15190	0
Y	89		ug/L			321393	336889	2
Kr	83		ug/L			188	164	12
[> In	115		ug/L			445880	454973	1
| Ba	135	0.004	ug/L	0.001	13	16	30	5
| Ba	137	0.001	ug/L	0.000	37	29	36	5
[> Tb	159		ug/L			595208	612094	2
| Tl	205	0.001	ug/L	0.000	31	14	43	21
| Pb	208	0.005	ug/L	0.000	8	159	391	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:29:28

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	23120	5
Cl	37		ug/L			3641919	3851797	2
[> Sc	45		ug/L			503619	566025	1
| Na	23	4977.884	ug/L	23.780	0	32609	135558829	1
| Mg	24	4998.478	ug/L	81.886	1	925	91233982	2
| Cr	52	50.714	ug/L	0.345	0	17470	1048026	0
| Cr	53	49.817	ug/L	0.788	1	135	119816	1
[> Ge	72		ug/L			450022	490455	1
| Cu	63	51.540	ug/L	0.598	1	1287	592107	0
| Cu	65	51.555	ug/L	0.554	1	104	278529	1
| Se	82	51.289	ug/L	1.016	1	4	19868	1
| Se	78	51.156	ug/L	0.550	1	14573	61388	1
Y	89		ug/L			321393	353156	1
Kr	83		ug/L			188	186	6
[> In	115		ug/L			445880	475397	0
| Ba	135	50.422	ug/L	0.278	0	16	182934	0
| Ba	137	49.913	ug/L	0.832	1	29	314984	1
[> Tb	159		ug/L			595208	673875	0
| Tl	205	48.895	ug/L	0.465	0	14	1804523	0
| Pb	208	49.767	ug/L	0.284	0	159	2353285	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:34:48

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			18331	21693	2
Cl	37		ug/L			3641919	3716045	1
[> Sc	45		ug/L			503619	517687	0
| Na	23	0.033	ug/L	0.060	183	32609	34329	4
| Mg	24	0.048	ug/L	0.017	34	925	1758	16
| Cr	52	0.058	ug/L	0.021	36	17470	19030	1
| Cr	53	0.008	ug/L	0.007	84	135	157	10
[> Ge	72		ug/L			450022	473333	1
| Cu	63	-0.059	ug/L	0.002	2	1287	700	1
| Cu	65	0.001	ug/L	0.001	201	104	113	6
| Se	82	0.021	ug/L	0.017	78	4	12	50
| Se	78	-0.211	ug/L	0.143	67	14573	15145	0
Y	89		ug/L			321393	339525	0
Kr	83		ug/L			188	181	8
[> In	115		ug/L			445880	461820	1
| Ba	135	-0.000	ug/L	0.001	259	16	15	29
| Ba	137	0.000	ug/L	0.001	1238	29	30	12
[> Tb	159		ug/L			595208	614003	1
| Tl	205	0.002	ug/L	0.000	20	14	76	15
| Pb	208	0.000	ug/L	0.000	116	159	183	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:38:28

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L				19862	2
Cl	37		ug/L				3785314	1
[> Sc	45		ug/L				521536	0
| Cr	52		ug/L				18553	1
| Cr	53		ug/L				157	15
[> Ge	72		ug/L				462028	1
| Cu	63		ug/L				616	1
| Cu	65		ug/L				113	6
Y	89		ug/L				328726	1
Kr	83		ug/L				58	15
[> Tb	159		ug/L				619477	1
| Pb	208		ug/L				140	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:40:12

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	19978	1
	Cl	37		ug/L			3785314	3791393	0
[>	Sc	45		ug/L			521536	541747	1
|	Cr	52	50.967	ug/L	0.722	1	18553	1008530	2
|	Cr	53	50.525	ug/L	0.126	0	157	116331	1
[>	Ge	72		ug/L			462028	475608	0
|	Cu	63	50.938	ug/L	0.891	1	616	566766	1
|	Cu	65	50.798	ug/L	0.538	1	113	266122	0
	Y	89		ug/L			328726	344151	0
	Kr	83		ug/L			58	57	6
[>	Tb	159		ug/L			619477	654926	0
|	Pb	208	50.217	ug/L	0.116	0	140	2307756	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 16:44:46

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	19947	0
	Cl	37		ug/L			3785314	3800806	0
[>	Sc	45		ug/L			521536	516244	1
|	Cr	52	-0.002	ug/L	0.005	238	18553	18324	0
|	Cr	53	-0.009	ug/L	0.008	80	157	135	12
[>	Ge	72		ug/L			462028	463249	2
|	Cu	63	0.000	ug/L	0.001	374	616	622	2
|	Cu	65	0.000	ug/L	0.001	3910	113	113	1
	Y	89		ug/L			328726	334651	1
	Kr	83		ug/L			58	51	12
[>	Tb	159		ug/L			619477	622912	1
|	Pb	208	0.001	ug/L	0.000	38	140	191	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0475-BLK1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:48:25**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	25569	1
	Cl	37		ug/L			3785314	3735970	1
[>	Sc	45		ug/L			521536	519980	2
|	Cr	52	0.048	ug/L	0.032	66	18553	19386	0
|	Cr	53	0.004	ug/L	0.002	46	157	165	0
[>	Ge	72		ug/L			462028	465186	0
|	Cu	63	0.007	ug/L	0.004	47	616	700	5
|	Cu	65	0.008	ug/L	0.001	14	113	154	3
	Y	89		ug/L			328726	326466	1
	Kr	83		ug/L			58	57	4
[>	Tb	159		ug/L			619477	615934	2
|	Pb	208	0.007	ug/L	0.001	11	140	437	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0475-BS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:50:08**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	26225	2
	Cl	37	ug/L			3785314	3720519	0
[>	Sc	45	ug/L			521536	517730	2
|	Cr	52	26.009	1.071	4	18553	500556	1
|	Cr	53	25.632	0.960	3	157	56445	1
[>	Ge	72	ug/L			462028	466929	0
|	Cu	63	26.318	0.263	0	616	287831	1
|	Cu	65	26.515	0.358	1	113	136429	1
	Y	89	ug/L			328726	341760	0
	Kr	83	ug/L			58	59	8
[>	Tb	159	ug/L			619477	627116	2
|	Pb	208	26.330	0.357	1	140	1158569	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0476-BLK1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:51:52**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	26379	2
	Cl	37		ug/L			3785314	3730879	2
[>	Sc	45		ug/L			521536	508932	1
|	Cr	52	0.070	ug/L	0.014	19	18553	19371	1
|	Cr	53	0.001	ug/L	0.000	32	157	156	2
[>	Ge	72		ug/L			462028	466169	1
|	Cu	63	0.001	ug/L	0.002	167	616	634	2
|	Cu	65	0.001	ug/L	0.001	263	113	116	6
	Y	89		ug/L			328726	327638	0
	Kr	83		ug/L			58	53	5
[>	Tb	159		ug/L			619477	615133	0
|	Pb	208	0.004	ug/L	0.000	8	140	293	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0476-BS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:53:35**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	25350	2
	Cl	37	ug/L			3785314	3711586	0
[>	Sc	45	ug/L			521536	519706	1
|	Cr	52	ug/L	0.454	1	18553	506029	1
|	Cr	53	ug/L	0.113	0	157	56904	1
[>	Ge	72	ug/L			462028	467107	1
|	Cu	63	ug/L	0.693	2	616	289726	1
|	Cu	65	ug/L	0.518	1	113	135938	1
	Y	89	ug/L			328726	334535	1
	Kr	83	ug/L			58	54	11
[>	Tb	159	ug/L			619477	630755	1
|	Pb	208	ug/L	0.400	1	140	1159443	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-14**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:56:50**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	166157	2
	Cl	37	ug/L			3785314	3708443	2
[>	Sc	45	ug/L			521536	561899	1
|	Cr	52	0.702	0.056	7	18553	34111	1
|	Cr	53	0.272	0.004	1	157	817	1
[>	Ge	72	ug/L			462028	472502	1
|	Cu	63	63.684	2.000	3	616	703703	2
|	Cu	65	63.164	1.692	2	113	328674	1
	Y	89	ug/L			328726	333268	1
	Kr	83	ug/L			58	54	2
[>	Tb	159	ug/L			619477	628838	1
|	Pb	208	0.013	0.001	5	140	712	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-15**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 16:58:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	186950	2
	Cl	37		ug/L			3785314	3728738	1
[>	Sc	45		ug/L			521536	561039	0
|	Cr	52	0.989	ug/L	0.049	4	18553	39830	2
|	Cr	53	0.501	ug/L	0.005	0	157	1361	1
[>	Ge	72		ug/L			462028	470520	1
|	Cu	63	89.210	ug/L	1.195	1	616	981489	0
|	Cu	65	89.544	ug/L	0.061	0	113	464025	1
	Y	89		ug/L			328726	335644	1
	Kr	83		ug/L			58	70	3
[>	Tb	159		ug/L			619477	635957	1
|	Pb	208	0.006	ug/L	0.000	4	140	430	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-16**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:00:16**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	176572	0
	Cl	37	ug/L			3785314	3644101	1
[>	Sc	45	ug/L			521536	559838	0
|	Cr	52	ug/L	0.033	3	18553	39886	1
|	Cr	53	ug/L	0.003	0	157	1546	0
[>	Ge	72	ug/L			462028	460270	0
|	Cu	63	ug/L	0.043	0	616	468818	0
|	Cu	65	ug/L	0.277	0	113	219206	0
	Y	89	ug/L			328726	333171	1
	Kr	83	ug/L			58	66	7
[>	Tb	159	ug/L			619477	626616	1
|	Pb	208	ug/L	0.095	1	140	322398	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0475-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:04:06**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	216850	1
	Cl	37	ug/L			3785314	3834631	1
[>	Sc	45	ug/L			521536	571774	1
|	Cr	52	ug/L	0.023	1	18553	43943	0
|	Cr	53	ug/L	0.023	3	157	1563	3
[>	Ge	72	ug/L			462028	480200	1
|	Cu	63	ug/L	0.856	1	616	483443	1
|	Cu	65	ug/L	0.228	0	113	229274	1
	Y	89	ug/L			328726	350513	2
	Kr	83	ug/L			58	65	7
[>	Tb	159	ug/L			619477	652699	2
|	Pb	208	ug/L	0.134	1	140	330966	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0475-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:06:08**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	172974	1
	Cl	37	ug/L			3785314	3705356	0
[>	Sc	45	ug/L			521536	563713	2
|	Cr	52	ug/L	0.344	1	18553	512778	1
|	Cr	53	ug/L	0.080	0	157	56752	2
[>	Ge	72	ug/L			462028	475599	1
|	Cu	63	ug/L	1.178	1	616	744013	3
|	Cu	65	ug/L	1.147	1	113	353149	2
	Y	89	ug/L			328726	340617	1
	Kr	83	ug/L			58	74	12
[>	Tb	159	ug/L			619477	637142	1
|	Pb	208	ug/L	0.284	0	140	1446548	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:07:52

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	26790	5
	Cl	37		ug/L			3785314	3675867	2
[>	Sc	45		ug/L			521536	512043	2
|	Cr	52	0.104	ug/L	0.050	48	18553	20106	2
|	Cr	53	0.012	ug/L	0.002	14	157	180	1
[>	Ge	72		ug/L			462028	469185	0
|	Cu	63	-0.013	ug/L	0.003	18	616	479	5
|	Cu	65	0.003	ug/L	0.002	66	113	128	6
	Y	89		ug/L			328726	336088	2
	Kr	83		ug/L			58	56	2
[>	Tb	159		ug/L			619477	629957	2
|	Pb	208	0.008	ug/L	0.001	7	140	508	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:09:36

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	22062	0
	Cl	37		ug/L			3785314	3785067	0
[>	Sc	45		ug/L			521536	536034	1
|	Cr	52	51.128	ug/L	0.437	0	18553	1001041	2
|	Cr	53	50.475	ug/L	0.716	1	157	114978	0
[>	Ge	72		ug/L			462028	476434	0
|	Cu	63	50.691	ug/L	0.263	0	616	565041	0
|	Cu	65	51.448	ug/L	0.399	0	113	270004	0
	Y	89		ug/L			328726	345574	0
	Kr	83		ug/L			58	63	14
[>	Tb	159		ug/L			619477	651640	1
|	Pb	208	49.926	ug/L	0.648	1	140	2282622	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:14:09

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	20007	0
	Cl	37		ug/L			3785314	3705864	1
[>	Sc	45		ug/L			521536	502251	0
|	Cr	52	0.043	ug/L	0.020	46	18553	18641	1
|	Cr	53	-0.002	ug/L	0.004	197	157	147	6
[>	Ge	72		ug/L			462028	456715	0
|	Cu	63	-0.017	ug/L	0.002	14	616	431	6
|	Cu	65	-0.000	ug/L	0.002	1202	113	110	10
	Y	89		ug/L			328726	325516	1
	Kr	83		ug/L			58	54	4
[>	Tb	159		ug/L			619477	609930	1
|	Pb	208	0.002	ug/L	0.000	12	140	207	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-17**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:17:06**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	170042	1
	Cl	37		ug/L			3785314	3759531	2
[>	Sc	45		ug/L			521536	548839	1
|	Cr	52	0.958	ug/L	0.022	2	18553	38349	0
|	Cr	53	0.647	ug/L	0.029	4	157	1672	3
[>	Ge	72		ug/L			462028	465066	1
|	Cu	63	5.613	ug/L	0.132	2	616	61612	0
|	Cu	65	5.553	ug/L	0.148	2	113	28545	2
	Y	89		ug/L			328726	335735	1
	Kr	83		ug/L			58	62	4
[>	Tb	159		ug/L			619477	629586	1
|	Pb	208	0.521	ug/L	0.005	0	140	23140	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-18**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:20:10**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	189007	0
	Cl	37		ug/L			3785314	3625892	2
[>	Sc	45		ug/L			521536	557205	1
|	Cr	52	1.109	ug/L	0.026	2	18553	41948	1
|	Cr	53	0.540	ug/L	0.012	2	157	1445	0
[>	Ge	72		ug/L			462028	470312	1
|	Cu	63	165.924	ug/L	1.443	0	616	1824387	2
|	Cu	65	167.903	ug/L	1.462	0	113	869543	1
	Y	89		ug/L			328726	334209	0
	Kr	83		ug/L			58	59	30
[>	Tb	159		ug/L			619477	630114	2
|	Pb	208	1.176	ug/L	0.015	1	140	52146	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-19**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:21:53**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	185175	0
	Cl	37		ug/L			3785314	3694557	0
[>	Sc	45		ug/L			521536	556678	0
|	Cr	52	0.967	ug/L	0.017	1	18553	39098	1
|	Cr	53	0.532	ug/L	0.004	0	157	1424	1
[>	Ge	72		ug/L			462028	474291	0
|	Cu	63	55.135	ug/L	0.463	0	616	611748	0
|	Cu	65	55.532	ug/L	0.411	0	113	290124	1
	Y	89		ug/L			328726	335778	2
	Kr	83		ug/L			58	56	12
[>	Tb	159		ug/L			619477	633844	0
|	Pb	208	1.391	ug/L	0.009	0	140	62015	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-20**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:23:36**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	154971	2
	Cl	37		ug/L			3785314	3698371	0
[>	Sc	45		ug/L			521536	555776	1
|	Cr	52	0.835	ug/L	0.041	4	18553	36399	3
|	Cr	53	0.493	ug/L	0.017	3	157	1330	1
[>	Ge	72		ug/L			462028	468959	2
|	Cu	63	60.095	ug/L	2.712	4	616	658826	2
|	Cu	65	60.113	ug/L	1.101	1	113	310436	1
	Y	89		ug/L			328726	334087	0
	Kr	83		ug/L			58	59	12
[>	Tb	159		ug/L			619477	628722	0
|	Pb	208	0.008	ug/L	0.001	14	140	481	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-21**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:25:18**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	156019	1
	Cl	37		ug/L			3785314	3712039	0
[>	Sc	45		ug/L			521536	541161	2
|	Cr	52	0.881	ug/L	0.023	2	18553	36324	1
|	Cr	53	0.496	ug/L	0.023	4	157	1303	2
[>	Ge	72		ug/L			462028	460120	1
|	Cu	63	13.045	ug/L	0.217	1	616	140867	0
|	Cu	65	12.910	ug/L	0.186	1	113	65511	0
	Y	89		ug/L			328726	331890	2
	Kr	83		ug/L			58	61	5
[>	Tb	159		ug/L			619477	622130	0
|	Pb	208	0.014	ug/L	0.001	6	140	754	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-22**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:27:01**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	150736	3
	Cl	37		ug/L			3785314	3767997	1
[>	Sc	45		ug/L			521536	573470	1
|	Cr	52	0.782	ug/L	0.057	7	18553	36460	3
|	Cr	53	0.513	ug/L	0.006	1	157	1422	1
[>	Ge	72		ug/L			462028	474323	2
|	Cu	63	44.412	ug/L	0.729	1	616	492856	1
|	Cu	65	44.633	ug/L	0.867	1	113	233201	2
	Y	89		ug/L			328726	341335	1
	Kr	83		ug/L			58	62	15
[>	Tb	159		ug/L			619477	635775	1
|	Pb	208	0.239	ug/L	0.001	0	140	10801	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-23**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:28:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	165707	2
	Cl	37	ug/L			3785314	3635689	3
[>	Sc	45	ug/L			521536	543490	4
|	Cr	52	0.871	0.038	4	18553	36270	2
|	Cr	53	0.431	0.023	5	157	1157	2
[>	Ge	72	ug/L			462028	457934	4
|	Cu	63	150.387	2.257	1	616	1609290	3
|	Cu	65	150.879	5.797	3	113	759946	1
	Y	89	ug/L			328726	331131	4
	Kr	83	ug/L			58	61	8
[>	Tb	159	ug/L			619477	616012	5
|	Pb	208	0.008	0.001	12	140	490	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-24**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:30:27**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	152835	3
	Cl	37	ug/L			3785314	3691085	0
[>	Sc	45	ug/L			521536	556205	1
|	Cr	52	0.733	0.025	3	18553	34391	2
|	Cr	53	0.405	0.005	1	157	1123	2
[>	Ge	72	ug/L			462028	470246	0
|	Cu	63	139.155	1.592	1	616	1529869	0
|	Cu	65	139.955	1.545	1	113	724749	0
	Y	89	ug/L			328726	334665	0
	Kr	83	ug/L			58	68	3
[>	Tb	159	ug/L			619477	632955	2
|	Pb	208	0.007	0.001	7	140	471	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-25**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:33:59**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	165717	0
	Cl	37	ug/L			3785314	3661665	1
[>	Sc	45	ug/L			521536	552611	2
|	Cr	52	0.939	0.054	5	18553	38249	3
|	Cr	53	0.468	0.010	2	157	1266	3
[>	Ge	72	ug/L			462028	471942	0
|	Cu	63	101.601	1.089	1	616	1121153	0
|	Cu	65	102.544	1.405	1	113	532932	0
	Y	89	ug/L			328726	337744	1
	Kr	83	ug/L			58	58	2
[>	Tb	159	ug/L			619477	629453	2
|	Pb	208	0.008	0.001	11	140	477	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:36:14

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	25457	3
	Cl	37		ug/L			3785314	3729850	3
[>	Sc	45		ug/L			521536	514367	2
|	Cr	52	0.085	ug/L	0.026	30	18553	19861	0
|	Cr	53	0.006	ug/L	0.007	116	157	168	10
[>	Ge	72		ug/L			462028	463888	0
|	Cu	63	-0.023	ug/L	0.003	14	616	372	8
|	Cu	65	0.002	ug/L	0.003	148	113	125	13
	Y	89		ug/L			328726	334098	1
	Kr	83		ug/L			58	55	17
[>	Tb	159		ug/L			619477	617366	0
|	Pb	208	0.005	ug/L	0.000	5	140	367	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:37:57

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	21072	3
	Cl	37		ug/L			3785314	3778755	1
[>	Sc	45		ug/L			521536	536247	0
|	Cr	52	50.829	ug/L	0.515	1	18553	995564	0
|	Cr	53	49.930	ug/L	1.113	2	157	113790	1
[>	Ge	72		ug/L			462028	471627	1
|	Cu	63	51.099	ug/L	1.283	2	616	563691	1
|	Cu	65	50.903	ug/L	1.203	2	113	264392	1
	Y	89		ug/L			328726	347892	0
	Kr	83		ug/L			58	56	0
[>	Tb	159		ug/L			619477	649648	0
|	Pb	208	50.395	ug/L	0.391	0	140	2297256	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:42:31

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	20624	2
	Cl	37		ug/L			3785314	3805842	2
[>	Sc	45		ug/L			521536	533147	3
|	Cr	52	0.033	ug/L	0.034	104	18553	19578	0
|	Cr	53	-0.004	ug/L	0.001	26	157	152	2
[>	Ge	72		ug/L			462028	479188	1
|	Cu	63	-0.025	ug/L	0.003	12	616	361	7
|	Cu	65	-0.001	ug/L	0.001	67	113	111	5
	Y	89		ug/L			328726	343397	2
	Kr	83		ug/L			58	54	11
[>	Tb	159		ug/L			619477	638917	1
|	Pb	208	0.001	ug/L	0.000	26	140	210	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: C195-01 TEST

Sample Dil Factor: 100

DEL

Comments:

Sample Date/Time: Friday, March 17, 2023 17:47:52

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	55032	3
	Cl	37		ug/L			3785314	3813348	2
[>	Sc	45		ug/L			521536	556111	3
|	Cr	52	1.098	ug/L	0.027	2	18553	41651	3
|	Cr	53	0.991	ug/L	0.017	1	157	2508	4
[>	Ge	72		ug/L			462028	487958	2
|	Cu	63	95.944	ug/L	2.147	2	616	1094940	3
|	Cu	65	97.165	ug/L	1.349	1	113	522242	3
	Y	89		ug/L			328726	357712	0
	Kr	83		ug/L			58	51	10
[>	Tb	159		ug/L			619477	653302	1
|	Pb	208	0.353	ug/L	0.004	1	140	16305	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 17:51:48

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	23886	1
	Cl	37		ug/L			3785314	3636938	0
[>	Sc	45		ug/L			521536	511822	0
|	Cr	52	0.045	ug/L	0.026	57	18553	19042	2
|	Cr	53	-0.005	ug/L	0.005	110	157	144	7
[>	Ge	72		ug/L			462028	457280	0
|	Cu	63	-0.023	ug/L	0.001	5	616	362	4
|	Cu	65	-0.001	ug/L	0.002	131	113	105	8
	Y	89		ug/L			328726	327962	1
	Kr	83		ug/L			58	46	21
[>	Tb	159		ug/L			619477	617842	0
|	Pb	208	0.005	ug/L	0.000	9	140	366	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-26**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:54:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	39519	1
	Cl	37		ug/L			3785314	3606503	0
[>	Sc	45		ug/L			521536	506767	0
|	Cr	52	0.206	ug/L	0.045	21	18553	21759	3
|	Cr	53	0.128	ug/L	0.009	7	157	428	3
[>	Ge	72		ug/L			462028	464998	1
|	Cu	63	2.986	ug/L	0.044	1	616	33069	1
|	Cu	65	3.021	ug/L	0.078	2	113	15578	1
	Y	89		ug/L			328726	329844	1
	Kr	83		ug/L			58	54	2
[>	Tb	159		ug/L			619477	619466	2
|	Pb	208	0.022	ug/L	0.000	2	140	1085	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-27**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:56:16**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	138860	3
	Cl	37		ug/L			3785314	3607820	2
[>	Sc	45		ug/L			521536	550147	1
|	Cr	52	0.787	ug/L	0.063	7	18553	35074	2
|	Cr	53	0.513	ug/L	0.016	3	157	1363	2
[>	Ge	72		ug/L			462028	464758	1
|	Cu	63	32.965	ug/L	0.388	1	616	358641	1
|	Cu	65	32.883	ug/L	0.503	1	113	168373	1
	Y	89		ug/L			328726	332124	0
	Kr	83		ug/L			58	62	1
[>	Tb	159		ug/L			619477	619482	1
|	Pb	208	0.090	ug/L	0.001	1	140	4064	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-28**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:57:59**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	162458	2
	Cl	37	ug/L			3785314	3609947	1
[>	Sc	45	ug/L			521536	556893	0
|	Cr	52	0.848	0.010	1	18553	36734	0
|	Cr	53	0.456	0.028	6	157	1245	5
[>	Ge	72	ug/L			462028	469064	0
|	Cu	63	77.260	1.515	1	616	847603	2
|	Cu	65	78.267	0.349	0	113	404338	0
	Y	89	ug/L			328726	333278	1
	Kr	83	ug/L			58	63	23
[>	Tb	159	ug/L			619477	626985	0
|	Pb	208	0.826	0.013	1	140	36464	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-29**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 17:59:43**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	149864	2
	Cl	37		ug/L			3785314	3675099	0
[>	Sc	45		ug/L			521536	557289	1
|	Cr	52	0.805	ug/L	0.027	3	18553	35888	1
|	Cr	53	0.477	ug/L	0.018	3	157	1297	2
[>	Ge	72		ug/L			462028	463931	1
|	Cu	63	82.640	ug/L	2.225	2	616	896489	2
|	Cu	65	81.730	ug/L	1.777	2	113	417564	1
	Y	89		ug/L			328726	334298	1
	Kr	83		ug/L			58	58	6
[>	Tb	159		ug/L			619477	634454	1
|	Pb	208	0.248	ug/L	0.007	2	140	11173	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-30**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:01:26**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	175425	1
	Cl	37		ug/L			3785314	3671764	2
[>	Sc	45		ug/L			521536	561601	0
|	Cr	52	0.745	ug/L	0.028	3	18553	34973	1
|	Cr	53	0.293	ug/L	0.013	4	157	867	4
[>	Ge	72		ug/L			462028	472390	0
|	Cu	63	188.085	ug/L	1.699	0	616	2077068	1
|	Cu	65	184.520	ug/L	4.613	2	113	959893	2
	Y	89		ug/L			328726	335257	1
	Kr	83		ug/L			58	58	19
[>	Tb	159		ug/L			619477	632095	0
|	Pb	208	0.007	ug/L	0.000	2	140	457	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-31**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:03:09**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	161799	1
	Cl	37		ug/L			3785314	3819715	2
[>	Sc	45		ug/L			521536	579898	1
|	Cr	52	0.822	ug/L	0.036	4	18553	37700	1
|	Cr	53	0.452	ug/L	0.017	3	157	1287	4
[>	Ge	72		ug/L			462028	484551	0
|	Cu	63	40.590	ug/L	0.316	0	616	460280	0
|	Cu	65	40.973	ug/L	0.475	1	113	218730	1
	Y	89		ug/L			328726	345495	1
	Kr	83		ug/L			58	65	8
[>	Tb	159		ug/L			619477	643325	1
|	Pb	208	0.216	ug/L	0.004	1	140	9874	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-32**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:04:52**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	218100	1
	Cl	37		ug/L			3785314	3902294	1
[>	Sc	45		ug/L			521536	586267	0
|	Cr	52	0.982	ug/L	0.028	2	18553	41477	2
|	Cr	53	0.458	ug/L	0.028	6	157	1317	4
[>	Ge	72		ug/L			462028	486019	0
|	Cu	63	1363.732	ug/L	19.892	1	616	15490179	1
|	Cu	65	1332.561	ug/L	23.564	1	113	7131103	1
	Y	89		ug/L			328726	356452	0
	Kr	83		ug/L			58	67	6
[>	Tb	159		ug/L			619477	656237	0
|	Pb	208	3.236	ug/L	0.033	1	140	149134	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:06:49

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	27324	3
	Cl	37		ug/L			3785314	3700389	1
[>	Sc	45		ug/L			521536	520160	0
|	Cr	52	0.087	ug/L	0.010	11	18553	20115	0
|	Cr	53	0.009	ug/L	0.004	43	157	176	4
[>	Ge	72		ug/L			462028	465601	0
|	Cu	63	0.139	ug/L	0.142	102	616	2135	72
|	Cu	65	0.174	ug/L	0.153	87	113	1005	77
	Y	89		ug/L			328726	333913	0
	Kr	83		ug/L			58	59	11
[>	Tb	159		ug/L			619477	621414	1
|	Pb	208	0.006	ug/L	0.000	8	140	393	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:09:43

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	22374	3
	Cl	37		ug/L			3785314	3814336	1
[>	Sc	45		ug/L			521536	547282	2
|	Cr	52	50.993	ug/L	1.183	2	18553	1019086	1
|	Cr	53	50.790	ug/L	0.933	1	157	118116	1
[>	Ge	72		ug/L			462028	486785	0
|	Cu	63	51.101	ug/L	1.024	2	616	582003	2
|	Cu	65	51.274	ug/L	0.840	1	113	274937	1
	Y	89		ug/L			328726	353302	1
	Kr	83		ug/L			58	66	3
[>	Tb	159		ug/L			619477	660103	1
|	Pb	208	50.382	ug/L	0.059	0	140	2333660	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:14:16

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	20656	3
	Cl	37		ug/L			3785314	3729452	1
[>	Sc	45		ug/L			521536	514639	2
|	Cr	52	0.064	ug/L	0.021	32	18553	19480	2
|	Cr	53	-0.003	ug/L	0.001	50	157	149	3
[>	Ge	72		ug/L			462028	462505	1
|	Cu	63	-0.024	ug/L	0.003	11	616	357	7
|	Cu	65	0.001	ug/L	0.001	101	113	120	6
	Y	89		ug/L			328726	330493	0
	Kr	83		ug/L			58	56	7
[>	Tb	159		ug/L			619477	616857	2
|	Pb	208	0.001	ug/L	0.000	10	140	199	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-32RE1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:17:20**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	30764	2
	Cl	37		ug/L			3785314	3676814	0
[>	Sc	45		ug/L			521536	524564	2
|	Cr	52	0.105	ug/L	0.028	26	18553	20635	0
|	Cr	53	0.039	ug/L	0.006	14	157	245	6
[>	Ge	72		ug/L			462028	470839	1
|	Cu	63	71.067	ug/L	1.663	2	616	782504	1
|	Cu	65	72.268	ug/L	1.879	2	113	374708	1
	Y	89		ug/L			328726	340727	1
	Kr	83		ug/L			58	57	17
[>	Tb	159		ug/L			619477	635417	1
|	Pb	208	0.198	ug/L	0.004	1	140	8977	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-33**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:19:03**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	184274	1
	Cl	37		ug/L			3785314	3700389	1
[>	Sc	45		ug/L			521536	554949	1
|	Cr	52	1.049	ug/L	0.028	2	18553	40609	2
|	Cr	53	0.543	ug/L	0.017	3	157	1447	2
[>	Ge	72		ug/L			462028	463851	0
|	Cu	63	34.192	ug/L	0.583	1	616	371261	1
|	Cu	65	34.757	ug/L	0.297	0	113	177628	1
	Y	89		ug/L			328726	335342	0
	Kr	83		ug/L			58	59	5
[>	Tb	159		ug/L			619477	624287	1
|	Pb	208	0.698	ug/L	0.014	1	140	30730	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0519-34

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, March 17, 2023 18:21:13

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	201551	0
	Cl	37		ug/L			3785314	3688615	2
[>	Sc	45		ug/L			521536	546290	1
|	Cr	52	1.024	ug/L	0.054	5	18553	39456	1
|	Cr	53	0.471	ug/L	0.010	2	157	1257	3
[>	Ge	72		ug/L			462028	456967	1
|	Cu	63	1338.427	ug/L	25.297	1	616	14294107	2
|	Cu	65	1346.150	ug/L	6.965	0	113	6773551	1
	Y	89		ug/L			328726	329854	1
	Kr	83		ug/L			58	63	14
[>	Tb	159		ug/L			619477	616961	1
|	Pb	208	3.267	ug/L	0.031	0	140	141547	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:24:53

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	24612	2
	Cl	37		ug/L			3785314	3710762	2
[>	Sc	45		ug/L			521536	514119	2
|	Cr	52	0.079	ug/L	0.024	30	18553	19731	1
|	Cr	53	0.005	ug/L	0.004	78	157	165	2
[>	Ge	72		ug/L			462028	466031	0
|	Cu	63	-0.010	ug/L	0.002	18	616	518	4
|	Cu	65	0.017	ug/L	0.002	10	113	202	4
	Y	89		ug/L			328726	336278	0
	Kr	83		ug/L			58	49	10
[>	Tb	159		ug/L			619477	620724	1
|	Pb	208	0.005	ug/L	0.000	7	140	364	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-35**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:26:37**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	144805	1
	Cl	37	ug/L			3785314	3713822	1
[>	Sc	45	ug/L			521536	545808	1
|	Cr	52	0.835	0.025	3	18553	35742	2
|	Cr	53	0.583	0.011	1	157	1516	0
[>	Ge	72	ug/L			462028	465388	2
|	Cu	63	52.615	1.070	2	616	572856	2
|	Cu	65	53.071	0.550	1	113	272093	2
	Y	89	ug/L			328726	333057	2
	Kr	83	ug/L			58	55	17
[>	Tb	159	ug/L			619477	622985	0
|	Pb	208	0.162	0.002	1	140	7237	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0519-34RE1

Sample Dil Factor: 20

Comments:

DEL

Sample Date/Time: Friday, March 17, 2023 18:28:50

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	30734	6
	Cl	37		ug/L			3785314	3673480	3
[>	Sc	45		ug/L			521536	523014	1
|	Cr	52	0.133	ug/L	0.005	3	18553	21098	1
|	Cr	53	0.063	ug/L	0.007	11	157	298	6
[>	Ge	72		ug/L			462028	473490	0
|	Cu	63	13.369	ug/L	0.219	1	616	148559	1
|	Cu	65	13.525	ug/L	0.169	1	113	70623	0
	Y	89		ug/L			328726	341417	1
	Kr	83		ug/L			58	51	1
[>	Tb	159		ug/L			619477	636682	0
|	Pb	208	0.030	ug/L	0.001	3	140	1498	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-36**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:31:19**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	167024	2
	Cl	37	ug/L			3785314	3641343	0
[>	Sc	45	ug/L			521536	551706	1
|	Cr	52	ug/L	0.029	3	18553	38176	0
|	Cr	53	ug/L	0.001	0	157	1247	2
[>	Ge	72	ug/L			462028	469376	2
|	Cu	63	ug/L	0.681	1	616	618337	0
|	Cu	65	ug/L	1.270	2	113	292416	1
	Y	89	ug/L			328726	331866	0
	Kr	83	ug/L			58	60	13
[>	Tb	159	ug/L			619477	628572	1
|	Pb	208	ug/L	0.020	0	140	100844	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0476-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:34:51**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	199023	1
	Cl	37	ug/L			3785314	3699744	1
[>	Sc	45	ug/L			521536	545745	0
|	Cr	52	ug/L	0.035	3	18553	41373	1
|	Cr	53	ug/L	0.011	2	157	1337	2
[>	Ge	72	ug/L			462028	465768	1
|	Cu	63	ug/L	0.321	0	616	617069	1
|	Cu	65	ug/L	0.903	1	113	296118	3
	Y	89	ug/L			328726	334549	1
	Kr	83	ug/L			58	62	17
[>	Tb	159	ug/L			619477	632099	1
|	Pb	208	ug/L	0.044	1	140	100877	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0476-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:37:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	140918	0
	Cl	37		ug/L			3785314	3685157	0
[>	Sc	45		ug/L			521536	538715	2
|	Cr	52	25.267	ug/L	0.238	0	18553	506771	1
|	Cr	53	24.830	ug/L	0.470	1	157	56921	1
[>	Ge	72		ug/L			462028	463778	3
|	Cu	63	83.775	ug/L	1.148	1	616	908383	1
|	Cu	65	82.547	ug/L	2.527	3	113	421394	0
	Y	89		ug/L			328726	335703	2
	Kr	83		ug/L			58	69	24
[>	Tb	159		ug/L			619477	628792	1
|	Pb	208	27.441	ug/L	0.392	1	140	1210611	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:38:48

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	26299	1
	Cl	37		ug/L			3785314	3781815	0
[>	Sc	45		ug/L			521536	529774	2
|	Cr	52	0.105	ug/L	0.021	19	18553	20841	3
|	Cr	53	0.006	ug/L	0.007	114	157	174	10
[>	Ge	72		ug/L			462028	481497	0
|	Cu	63	-0.013	ug/L	0.012	95	616	500	27
|	Cu	65	0.018	ug/L	0.008	43	113	211	18
	Y	89		ug/L			328726	347423	0
	Kr	83		ug/L			58	59	4
[>	Tb	159		ug/L			619477	646019	1
|	Pb	208	0.009	ug/L	0.004	48	140	543	34

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:40:32

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	21971	1
	Cl	37		ug/L			3785314	3852785	1
[>	Sc	45		ug/L			521536	551974	2
|	Cr	52	51.183	ug/L	0.922	1	18553	1031546	0
|	Cr	53	50.625	ug/L	1.201	2	157	118735	1
[>	Ge	72		ug/L			462028	487641	1
|	Cu	63	51.843	ug/L	0.544	1	616	591410	0
|	Cu	65	51.672	ug/L	0.198	0	113	277547	1
	Y	89		ug/L			328726	359815	1
	Kr	83		ug/L			58	56	16
[>	Tb	159		ug/L			619477	669359	0
|	Pb	208	49.889	ug/L	0.619	1	140	2343106	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:45:05

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	21153	3
	Cl	37		ug/L			3785314	3702447	1
[>	Sc	45		ug/L			521536	529924	0
|	Cr	52	0.053	ug/L	0.002	3	18553	19857	0
|	Cr	53	-0.010	ug/L	0.004	40	157	137	6
[>	Ge	72		ug/L			462028	476858	2
|	Cu	63	-0.031	ug/L	0.003	8	616	291	10
|	Cu	65	-0.003	ug/L	0.004	154	113	101	21
	Y	89		ug/L			328726	339823	1
	Kr	83		ug/L			58	57	4
[>	Tb	159		ug/L			619477	630450	0
|	Pb	208	0.002	ug/L	0.000	12	140	229	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0519-34RE1

Sample Dil Factor: 20

Comments:

DEL

Sample Date/Time: Friday, March 17, 2023 18:48:29

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	27250	2
	Cl	37		ug/L			3785314	3742872	3
[>	Sc	45		ug/L			521536	535298	4
|	Cr	52	0.088	ug/L	0.017	18	18553	20727	3
|	Cr	53	0.066	ug/L	0.005	8	157	311	0
[>	Ge	72		ug/L			462028	486509	2
|	Cu	63	14.043	ug/L	0.107	0	616	160329	3
|	Cu	65	14.172	ug/L	0.120	0	113	76025	1
	Y	89		ug/L			328726	345771	4
	Kr	83		ug/L			58	56	5
[>	Tb	159		ug/L			619477	649813	2
|	Pb	208	0.031	ug/L	0.001	2	140	1563	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-34**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:50:12

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	142849	2
	Cl	37		ug/L			3785314	3666605	2
[>	Sc	45		ug/L			521536	535975	6
|	Cr	52	1.224	ug/L	0.108	8	18553	42478	1
|	Cr	53	0.822	ug/L	0.038	4	157	2028	5
[>	Ge	72		ug/L			462028	455505	6
|	Cu	63	267.706	ug/L	9.636	3	616	2846550	3
|	Cu	65	258.032	ug/L	11.410	4	113	1291982	2
	Y	89		ug/L			328726	330964	3
	Kr	83		ug/L			58	61	10
[>	Tb	159		ug/L			619477	615922	4
|	Pb	208	0.148	ug/L	0.003	2	140	6516	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 18:56:24

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	23836	2
	Cl	37		ug/L			3785314	3665301	1
[>	Sc	45		ug/L			521536	520431	3
|	Cr	52	0.052	ug/L	0.010	18	18553	19493	3
|	Cr	53	-0.008	ug/L	0.007	80	157	139	8
[>	Ge	72		ug/L			462028	466020	1
|	Cu	63	-0.029	ug/L	0.002	5	616	303	4
|	Cu	65	-0.003	ug/L	0.001	34	113	100	6
	Y	89		ug/L			328726	340195	2
	Kr	83		ug/L			58	54	13
[>	Tb	159		ug/L			619477	626725	1
|	Pb	208	0.001	ug/L	0.000	24	140	182	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0519-34RE1**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Friday, March 17, 2023 18:59:46**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	44375	4
	Cl	37		ug/L			3785314	3634893	0
[>	Sc	45		ug/L			521536	540704	2
|	Cr	52	0.265	ug/L	0.026	9	18553	24369	3
|	Cr	53	0.181	ug/L	0.011	5	157	579	5
[>	Ge	72		ug/L			462028	483784	2
|	Cu	63	52.293	ug/L	0.888	1	616	591958	3
|	Cu	65	52.492	ug/L	0.451	0	113	279709	1
	Y	89		ug/L			328726	349396	2
	Kr	83		ug/L			58	52	3
[>	Tb	159		ug/L			619477	651829	1
|	Pb	208	0.050	ug/L	0.001	1	140	2455	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0157-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:03:15**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	534614	0
	Cl	37		ug/L			3785314	3960640	1
[>	Sc	45		ug/L			521536	584000	1
|	Cr	52	2.812	ug/L	0.049	1	18553	79613	2
|	Cr	53	1.199	ug/L	0.071	5	157	3146	4
[>	Ge	72		ug/L			462028	458862	1
|	Cu	63	47.686	ug/L	0.317	0	616	512002	1
|	Cu	65	47.208	ug/L	0.153	0	113	238631	1
	Y	89		ug/L			328726	334975	1
	Kr	83		ug/L			58	84	4
[>	Tb	159		ug/L			619477	642532	0
|	Pb	208	8.074	ug/L	0.056	0	140	364140	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0157-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:06:03**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	556991	2
	Cl	37		ug/L			3785314	3945683	0
[>	Sc	45		ug/L			521536	597900	0
|	Cr	52	3.069	ug/L	0.124	4	18553	86989	2
|	Cr	53	1.235	ug/L	0.034	2	157	3314	2
[>	Ge	72		ug/L			462028	461317	1
|	Cu	63	110.616	ug/L	2.088	1	616	1193006	0
|	Cu	65	113.053	ug/L	0.796	0	113	574324	0
	Y	89		ug/L			328726	335475	0
	Kr	83		ug/L			58	55	23
[>	Tb	159		ug/L			619477	628033	1
|	Pb	208	2.803	ug/L	0.037	1	140	123665	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0157-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:08:09**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	561126	0
	Cl	37		ug/L			3785314	4034657	1
[>	Sc	45		ug/L			521536	610851	3
|	Cr	52	2.620	ug/L	0.144	5	18553	78995	0
|	Cr	53	0.803	ug/L	0.011	1	157	2267	3
[>	Ge	72		ug/L			462028	465833	0
|	Cu	63	0.647	ug/L	0.016	2	616	7667	3
|	Cu	65	0.457	ug/L	0.018	3	113	2458	3
	Y	89		ug/L			328726	344333	0
	Kr	83		ug/L			58	63	8
[>	Tb	159		ug/L			619477	642237	1
|	Pb	208	0.011	ug/L	0.000	2	140	642	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0243-01**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 19:11:56

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	143352	1
	Cl	37		ug/L			3785314	3826412	1
[>	Sc	45		ug/L			521536	537319	1
|	Cr	52	0.727	ug/L	0.030	4	18553	33103	1
|	Cr	53	0.301	ug/L	0.016	5	157	850	5
[>	Ge	72		ug/L			462028	480894	2
|	Cu	63	269.783	ug/L	3.524	1	616	3032315	1
|	Cu	65	265.057	ug/L	3.884	1	113	1403324	0
	Y	89		ug/L			328726	342928	2
	Kr	83		ug/L			58	56	4
[>	Tb	159		ug/L			619477	643153	0
|	Pb	208	2.919	ug/L	0.020	0	140	131857	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0244-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:15:59**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	244954	2
	Cl	37		ug/L			3785314	3803757	1
[>	Sc	45		ug/L			521536	531666	1
|	Cr	52	1.354	ug/L	0.062	4	18553	44701	1
|	Cr	53	0.677	ug/L	0.021	3	157	1687	2
[>	Ge	72		ug/L			462028	462743	1
|	Cu	63	6.623	ug/L	0.064	0	616	72239	1
|	Cu	65	6.603	ug/L	0.152	2	113	33747	0
	Y	89		ug/L			328726	330806	1
	Kr	83		ug/L			58	60	10
[>	Tb	159		ug/L			619477	620652	1
|	Pb	208	0.069	ug/L	0.002	2	140	3159	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0243-01RE1**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:18:14**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	41229	1
	Cl	37		ug/L			3785314	3642386	1
[>	Sc	45		ug/L			521536	522310	3
|	Cr	52	0.149	ug/L	0.017	11	18553	21352	2
|	Cr	53	0.082	ug/L	0.012	14	157	339	8
[>	Ge	72		ug/L			462028	467693	1
|	Cu	63	54.027	ug/L	1.156	2	616	591201	3
|	Cu	65	53.908	ug/L	0.806	1	113	277760	3
	Y	89		ug/L			328726	334207	2
	Kr	83		ug/L			58	54	9
[>	Tb	159		ug/L			619477	620329	2
|	Pb	208	0.630	ug/L	0.007	1	140	27574	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 19:21:08

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	22243	3
	Cl	37		ug/L			3785314	3823201	0
[>	Sc	45		ug/L			521536	538682	0
|	Cr	52	50.421	ug/L	0.184	0	18553	992266	0
|	Cr	53	50.688	ug/L	0.176	0	157	116046	0
[>	Ge	72		ug/L			462028	471639	1
|	Cu	63	51.891	ug/L	0.318	0	616	572574	1
|	Cu	65	51.689	ug/L	0.535	1	113	268540	1
	Y	89		ug/L			328726	344721	1
	Kr	83		ug/L			58	57	6
[>	Tb	159		ug/L			619477	646704	1
|	Pb	208	50.018	ug/L	0.432	0	140	2269686	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 19:25:42

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	21000	2
	Cl	37		ug/L			3785314	3745328	1
[>	Sc	45		ug/L			521536	516695	3
|	Cr	52	0.044	ug/L	0.046	104	18553	19184	1
|	Cr	53	0.002	ug/L	0.006	267	157	161	11
[>	Ge	72		ug/L			462028	465356	2
|	Cu	63	-0.026	ug/L	0.005	17	616	343	15
|	Cu	65	0.006	ug/L	0.004	60	113	145	15
	Y	89		ug/L			328726	331922	1
	Kr	83		ug/L			58	53	10
[>	Tb	159		ug/L			619477	617426	0
|	Pb	208	0.005	ug/L	0.003	65	140	343	38

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0246-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:33:19**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	384208	1
	Cl	37		ug/L			3785314	3769863	0
[>	Sc	45		ug/L			521536	549746	1
|	Cr	52	2.112	ug/L	0.043	2	18553	61147	0
|	Cr	53	0.570	ug/L	0.035	6	157	1497	6
[>	Ge	72		ug/L			462028	477503	0
|	Cu	63	240.608	ug/L	4.698	1	616	2685396	1
|	Cu	65	237.947	ug/L	5.376	2	113	1251075	1
	Y	89		ug/L			328726	341821	1
	Kr	83		ug/L			58	54	11
[>	Tb	159		ug/L			619477	639373	0
|	Pb	208	0.076	ug/L	0.001	1	140	3548	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0255-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:35:05**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	146570	4
	Cl	37		ug/L			3785314	3795647	3
[>	Sc	45		ug/L			521536	554021	2
|	Cr	52	0.730	ug/L	0.047	6	18553	34182	0
|	Cr	53	0.479	ug/L	0.022	4	157	1294	6
[>	Ge	72		ug/L			462028	474105	1
|	Cu	63	8.424	ug/L	0.049	0	616	93975	1
|	Cu	65	8.250	ug/L	0.205	2	113	43176	1
	Y	89		ug/L			328726	335489	1
	Kr	83		ug/L			58	64	11
[>	Tb	159		ug/L			619477	627159	1
|	Pb	208	0.053	ug/L	0.001	1	140	2457	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0329-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:37:12**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	151123	2
	Cl	37		ug/L			3785314	3615024	1
[>	Sc	45		ug/L			521536	517514	4
|	Cr	52	0.903	ug/L	0.070	7	18553	35110	0
|	Cr	53	0.467	ug/L	0.035	7	157	1182	6
[>	Ge	72		ug/L			462028	463287	1
|	Cu	63	32.863	ug/L	0.379	1	616	356400	1
|	Cu	65	32.670	ug/L	0.480	1	113	166744	1
	Y	89		ug/L			328726	328397	2
	Kr	83		ug/L			58	58	19
[>	Tb	159		ug/L			619477	616249	3
|	Pb	208	0.123	ug/L	0.007	5	140	5472	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0348-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:39:03**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	261537	1
	Cl	37	ug/L			3785314	3571649	0
[>	Sc	45	ug/L			521536	556094	2
|	Cr	52	1.265	0.033	2	18553	44969	1
|	Cr	53	0.249	0.018	7	157	754	3
[>	Ge	72	ug/L			462028	461958	1
|	Cu	63	10.819	0.101	0	616	117416	1
|	Cu	65	10.814	0.191	1	113	55108	0
	Y	89	ug/L			328726	335379	0
	Kr	83	ug/L			58	54	18
[>	Tb	159	ug/L			619477	624775	0
|	Pb	208	0.587	0.007	1	140	25891	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0393-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:40:56**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	295114	2
	Cl	37	ug/L			3785314	3956716	2
[>	Sc	45	ug/L			521536	576075	1
|	Cr	52	1.371	0.042	3	18553	48785	0
|	Cr	53	0.835	0.032	3	157	2214	3
[>	Ge	72	ug/L			462028	467278	0
|	Cu	63	29.867	0.301	1	616	326790	1
|	Cu	65	29.688	0.617	2	113	152861	2
	Y	89	ug/L			328726	335910	2
	Kr	83	ug/L			58	62	8
[>	Tb	159	ug/L			619477	625978	0
|	Pb	208	0.486	0.010	2	140	21498	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0393-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:42:51**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	314181	4
	Cl	37		ug/L			3785314	4004359	1
[>	Sc	45		ug/L			521536	583986	1
|	Cr	52	1.530	ug/L	0.063	4	18553	52774	1
|	Cr	53	0.816	ug/L	0.053	6	157	2198	4
[>	Ge	72		ug/L			462028	467162	0
|	Cu	63	28.895	ug/L	0.417	1	616	316068	0
|	Cu	65	28.588	ug/L	0.472	1	113	147161	1
	Y	89		ug/L			328726	340940	0
	Kr	83		ug/L			58	57	30
[>	Tb	159		ug/L			619477	632077	1
|	Pb	208	0.423	ug/L	0.011	2	140	18916	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0394-01**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 19:45:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	94879	1
	Cl	37		ug/L			3785314	3706303	2
[>	Sc	45		ug/L			521536	542656	3
|	Cr	52	0.455	ug/L	0.051	11	18553	28127	0
|	Cr	53	0.422	ug/L	0.019	4	157	1134	1
[>	Ge	72		ug/L			462028	471951	2
|	Cu	63	5.054	ug/L	0.155	3	616	56341	1
|	Cu	65	4.967	ug/L	0.081	1	113	25918	1
	Y	89		ug/L			328726	334167	2
	Kr	83		ug/L			58	51	5
[>	Tb	159		ug/L			619477	621706	2
|	Pb	208	0.180	ug/L	0.002	0	140	8011	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0395-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:47:03**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	141276	1
	Cl	37		ug/L			3785314	3757321	2
[>	Sc	45		ug/L			521536	539219	2
|	Cr	52	0.702	ug/L	0.011	1	18553	32744	1
|	Cr	53	0.330	ug/L	0.008	2	157	917	1
[>	Ge	72		ug/L			462028	476335	3
|	Cu	63	127.976	ug/L	3.598	2	616	1424541	1
|	Cu	65	130.118	ug/L	2.460	1	113	682290	1
	Y	89		ug/L			328726	343007	1
	Kr	83		ug/L			58	58	10
[>	Tb	159		ug/L			619477	637817	0
|	Pb	208	1.451	ug/L	0.004	0	140	65092	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0396-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 19:49:53**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	107585	2
	Cl	37		ug/L			3785314	3619250	0
[>	Sc	45		ug/L			521536	525719	1
|	Cr	52	0.619	ug/L	0.035	5	18553	30359	0
|	Cr	53	0.380	ug/L	0.019	4	157	1006	4
[>	Ge	72		ug/L			462028	468149	0
|	Cu	63	55.227	ug/L	0.683	1	616	604842	1
|	Cu	65	55.454	ug/L	0.452	0	113	285960	1
	Y	89		ug/L			328726	335058	1
	Kr	83		ug/L			58	63	10
[>	Tb	159		ug/L			619477	620689	0
|	Pb	208	0.153	ug/L	0.002	1	140	6815	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 19:51:54

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	25001	6
	Cl	37		ug/L			3785314	3640190	0
[>	Sc	45		ug/L			521536	508290	1
|	Cr	52	0.092	ug/L	0.005	5	18553	19763	1
|	Cr	53	0.002	ug/L	0.002	77	157	158	3
[>	Ge	72		ug/L			462028	458348	0
|	Cu	63	-0.013	ug/L	0.015	115	616	475	32
|	Cu	65	0.017	ug/L	0.022	133	113	196	57
	Y	89		ug/L			328726	331054	2
	Kr	83		ug/L			58	53	11
[>	Tb	159		ug/L			619477	616223	1
|	Pb	208	0.001	ug/L	0.000	11	140	198	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 19:54:47

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	22445	4
	Cl	37		ug/L			3785314	3822693	1
[>	Sc	45		ug/L			521536	557002	2
|	Cr	52	51.558	ug/L	0.822	1	18553	1048465	0
|	Cr	53	50.943	ug/L	0.302	0	157	120586	1
[>	Ge	72		ug/L			462028	494070	1
|	Cu	63	50.882	ug/L	0.396	0	616	588129	0
|	Cu	65	50.675	ug/L	1.133	2	113	275840	3
	Y	89		ug/L			328726	359445	2
	Kr	83		ug/L			58	50	16
[>	Tb	159		ug/L			619477	667852	2
|	Pb	208	49.839	ug/L	0.629	1	140	2335228	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, March 17, 2023 19:59:21

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	20725	3
	Cl	37		ug/L			3785314	3650139	3
[>	Sc	45		ug/L			521536	492106	12
|	Cr	52	0.076	ug/L	0.069	90	18553	18750	6
|	Cr	53	-0.000	ug/L	0.009	1830	157	146	1
[>	Ge	72		ug/L			462028	440070	8
|	Cu	63	-0.028	ug/L	0.003	9	616	296	15
|	Cu	65	0.002	ug/L	0.002	142	113	115	16
	Y	89		ug/L			328726	312367	9
	Kr	83		ug/L			58	61	8
[>	Tb	159		ug/L			619477	584169	9
|	Pb	208	0.004	ug/L	0.003	72	140	298	46

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:01:31

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	19384	2
	Cl	37		ug/L			3785314	3712354	0
[>	Sc	45		ug/L			521536	517408	1
|	Cr	52	0.042	ug/L	0.022	52	18553	19187	1
|	Cr	53	-0.006	ug/L	0.005	71	157	142	8
[>	Ge	72		ug/L			462028	466497	2
|	Cu	63	-0.034	ug/L	0.003	8	616	247	10
|	Cu	65	-0.003	ug/L	0.002	72	113	98	9
	Y	89		ug/L			328726	333738	1
	Kr	83		ug/L			58	57	15
[>	Tb	159		ug/L			619477	615934	0
|	Pb	208	0.000	ug/L	0.000	100	140	155	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0397-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:03:31**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	106527	3
	Cl	37		ug/L			3785314	3724992	2
[>	Sc	45		ug/L			521536	520669	0
|	Cr	52	0.649	ug/L	0.028	4	18553	30629	2
|	Cr	53	0.488	ug/L	0.016	3	157	1236	2
[>	Ge	72		ug/L			462028	467765	0
|	Cu	63	60.679	ug/L	0.849	1	616	663895	0
|	Cu	65	61.338	ug/L	0.636	1	113	316011	0
	Y	89		ug/L			328726	335578	0
	Kr	83		ug/L			58	47	10
[>	Tb	159		ug/L			619477	622020	1
|	Pb	208	0.131	ug/L	0.003	2	140	5840	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0400-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:05:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			19862	106312	3
	Cl	37	ug/L			3785314	3702461	1
[>	Sc	45	ug/L			521536	534479	3
|	Cr	52	0.647	0.068	10	18553	31371	1
|	Cr	53	0.460	0.026	5	157	1202	1
[>	Ge	72	ug/L			462028	474803	2
|	Cu	63	27.790	0.288	1	616	308979	1
|	Cu	65	27.509	0.429	1	113	143924	2
	Y	89	ug/L			328726	337906	2
	Kr	83	ug/L			58	56	14
[>	Tb	159	ug/L			619477	628733	1
|	Pb	208	0.313	0.001	0	140	13951	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0409-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:06:57**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	118118	1
	Cl	37		ug/L			3785314	3723030	0
[>	Sc	45		ug/L			521536	537333	0
|	Cr	52	0.629	ug/L	0.010	1	18553	31230	0
|	Cr	53	0.419	ug/L	0.015	3	157	1117	3
[>	Ge	72		ug/L			462028	469176	0
|	Cu	63	1.695	ug/L	0.010	0	616	19210	1
|	Cu	65	1.503	ug/L	0.056	3	113	7879	4
	Y	89		ug/L			328726	335813	0
	Kr	83		ug/L			58	61	3
[>	Tb	159		ug/L			619477	627738	0
|	Pb	208	0.754	ug/L	0.005	0	140	33361	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:08:41

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	22806	2
	Cl	37		ug/L			3785314	3691373	1
[>	Sc	45		ug/L			521536	532098	2
|	Cr	52	51.475	ug/L	1.084	2	18553	999889	0
|	Cr	53	50.318	ug/L	1.663	3	157	113736	1
[>	Ge	72		ug/L			462028	471717	1
|	Cu	63	51.141	ug/L	0.613	1	616	564361	0
|	Cu	65	50.853	ug/L	0.673	1	113	264221	1
	Y	89		ug/L			328726	345837	1
	Kr	83		ug/L			58	48	20
[>	Tb	159		ug/L			619477	649672	1
|	Pb	208	48.941	ug/L	0.727	1	140	2230808	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:13:15

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		ug/L			19862	20084	2
	Cl	37		ug/L			3785314	3691483	0
[>	Sc	45		ug/L			521536	505136	0
|	Cr	52	0.060	ug/L	0.022	36	18553	19046	1
|	Cr	53	-0.015	ug/L	0.007	45	157	121	10
[>	Ge	72		ug/L			462028	458000	3
|	Cu	63	-0.035	ug/L	0.001	3	616	237	2
|	Cu	65	-0.003	ug/L	0.000	13	113	95	1
	Y	89		ug/L			328726	328063	2
	Kr	83		ug/L			58	53	8
[>	Tb	159		ug/L			619477	615156	0
|	Pb	208	0.001	ug/L	0.001	80	140	167	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:35:05

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L				20087	1
Cl	37		ug/L				3627607	3
[> Sc	45		ug/L				527811	1
| Cr	52		ug/L				19894	2
[Cr	53		ug/L				132	1
Y	89		ug/L				342789	2
Kr	83		ug/L				51	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:36:27

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	20526	1
Cl	37		ug/L			3627607	3655957	1
[> Sc	45		ug/L			527811	524459	0
| Cr	52	50.714	ug/L	0.698	1	19894	972616	0
[Cr	53	50.563	ug/L	1.258	2	132	112671	2
Y	89		ug/L			342789	343733	1
Kr	83		ug/L			51	59	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:40:40

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			20087	18727	1
	Cl	37	ug/L			3627607	3496891	0
[>	Sc	45	ug/L			527811	455481	7
|	Cr	0.041	ug/L	0.061	146	19894	17791	2
[	Cr	0.009	ug/L	0.015	160	132	130	14
	Y	89	ug/L			342789	295997	8
	Kr	83	ug/L			51	58	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-06**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:43:00**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25639	1
Cl	37		ug/L			3627607	3607422	1
Sc	45		ug/L			527811	573491	1
Cr	52	5.902	ug/L	0.123	2	19894	142886	2
Cr	53	5.976	ug/L	0.266	4	132	14681	3
Y	89		ug/L			342789	453626	1
Kr	83		ug/L			51	68	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-07**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:44:22**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	26017	4
Cl	37		ug/L			3627607	3570180	0
Sc	45		ug/L			527811	570519	1
Cr	52	6.770	ug/L	0.190	2	19894	159851	1
Cr	53	6.885	ug/L	0.082	1	132	16815	1
Y	89		ug/L			342789	453083	0
Kr	83		ug/L			51	54	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-08**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:45:44**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25415	1
Cl	37		ug/L			3627607	3670241	1
Sc	45		ug/L			527811	588132	1
Cr	52	6.583	ug/L	0.122	1	19894	160856	0
Cr	53	6.611	ug/L	0.132	1	132	16646	1
Y	89		ug/L			342789	462857	2
Kr	83		ug/L			51	63	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-09**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:47:06**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25913	2
Cl	37		ug/L			3627607	3535326	3
Sc	45		ug/L			527811	575261	1
Cr	52	6.568	ug/L	0.049	0	19894	157035	1
Cr	53	6.613	ug/L	0.081	1	132	16287	0
Y	89		ug/L			342789	453610	0
Kr	83		ug/L			51	67	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-01**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:48:29**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	24885	4
Cl	37		ug/L			3627607	3548198	2
Sc	45		ug/L			527811	551663	2
Cr	52	6.606	ug/L	0.064	0	19894	151374	3
Cr	53	6.596	ug/L	0.193	2	132	15574	0
Y	89		ug/L			342789	431010	0
Kr	83		ug/L			51	66	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-DUP2**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:49:51**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	26314	2
Cl	37		ug/L			3627607	3698522	1
Sc	45		ug/L			527811	558157	1
Cr	52	6.398	ug/L	0.055	0	19894	148980	1
Cr	53	6.549	ug/L	0.145	2	132	15649	0
Y	89		ug/L			342789	426355	1
Kr	83		ug/L			51	63	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-MS2**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:51:13**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	24637	3
Cl	37		ug/L			3627607	3609274	2
Sc	45		ug/L			527811	552681	1
Cr	52	18.061	ug/L	0.397	2	19894	378466	2
Cr	53	17.867	ug/L	0.640	3	132	42032	1
Y	89		ug/L			342789	428554	0
Kr	83		ug/L			51	67	22

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLC0079-MSD2**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 20:52:35**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25122	3
Cl	37		ug/L			3627607	3549076	2
Sc	45		ug/L			527811	538786	6
Cr	52	16.499	ug/L	0.663	4	19894	338255	2
Cr	53	16.483	ug/L	1.035	6	132	37726	0
Y	89		ug/L			342789	410569	3
Kr	83		ug/L			51	57	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLC0079-PS2

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 17, 2023 20:53:57

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25561	3
Cl	37		ug/L			3627607	3709157	2
[> Sc	45		ug/L			527811	567451	0
| Cr	52	31.646	ug/L	1.042	3	19894	664678	2
[Cr	53	31.913	ug/L	0.909	2	132	76991	2
Y	89		ug/L			342789	436026	2
Kr	83		ug/L			51	62	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:55:20

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	22310	3
Cl	37		ug/L			3627607	3583161	2
[> Sc	45		ug/L			527811	511839	0
| Cr	52	-0.041	ug/L	0.024	57	19894	18535	2
[Cr	53	0.000	ug/L	0.005	2922	132	128	7
Y	89		ug/L			342789	331306	0
Kr	83		ug/L			51	54	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 20:56:43

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	19962	0
Cl	37		ug/L			3627607	3613089	2
[> Sc	45		ug/L			527811	518512	1
| Cr	52	51.587	ug/L	0.588	1	19894	977782	0
[Cr	53	50.655	ug/L	1.507	2	132	111573	1
Y	89		ug/L			342789	344093	1
Kr	83		ug/L			51	60	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:00:56

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	19002	1
Cl	37		ug/L			3627607	3660073	1
[> Sc	45		ug/L			527811	524058	1
| Cr	52	-0.044	ug/L	0.017	38	19894	18928	2
[Cr	53	0.000	ug/L	0.006	3590	132	131	9
Y	89		ug/L			342789	342142	1
Kr	83		ug/L			51	53	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-10**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:02:19**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25314	2
Cl	37		ug/L			3627607	3597172	1
Sc	45		ug/L			527811	566396	0
Cr	52	5.716	ug/L	0.103	1	19894	137335	1
Cr	53	5.797	ug/L	0.118	2	132	14076	2
Y	89		ug/L			342789	439444	1
Kr	83		ug/L			51	71	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-11**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:03:41**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	26643	1
Cl	37		ug/L			3627607	3493900	1
Sc	45		ug/L			527811	552248	1
Cr	52	6.307	ug/L	0.048	0	19894	145617	2
Cr	53	6.430	ug/L	0.154	2	132	15204	0
Y	89		ug/L			342789	438275	1
Kr	83		ug/L			51	58	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-12**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:05:04**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	26937	4
Cl	37		ug/L			3627607	3623779	0
Sc	45		ug/L			527811	576375	1
Cr	52	6.171	ug/L	0.234	3	19894	149112	1
Cr	53	6.376	ug/L	0.199	3	132	15736	2
Y	89		ug/L			342789	453928	0
Kr	83		ug/L			51	63	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-13**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:06:26**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25908	1
Cl	37		ug/L			3627607	3625466	2
Sc	45		ug/L			527811	584122	1
Cr	52	6.356	ug/L	0.260	4	19894	155001	2
Cr	53	6.400	ug/L	0.166	2	132	16009	2
Y	89		ug/L			342789	457577	1
Kr	83		ug/L			51	60	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-14**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:07:48**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25821	3
Cl	37		ug/L			3627607	3548554	1
Sc	45		ug/L			527811	565638	1
Cr	52	6.476	ug/L	0.064	0	19894	152570	1
Cr	53	6.635	ug/L	0.150	2	132	16072	3
Y	89		ug/L			342789	450100	0
Kr	83		ug/L			51	62	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0088-15**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:09:10**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	25713	3
Cl	37		ug/L			3627607	3710351	1
Sc	45		ug/L			527811	597447	3
Cr	52	6.215	ug/L	0.192	3	19894	155465	0
Cr	53	6.395	ug/L	0.166	2	132	16356	1
Y	89		ug/L			342789	465760	3
Kr	83		ug/L			51	61	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-04**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:10:33**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	26938	2
Cl	37		ug/L			3627607	3628966	1
Sc	45		ug/L			527811	553233	2
Cr	52	5.983	ug/L	0.182	3	19894	139457	4
Cr	53	6.197	ug/L	0.112	1	132	14685	0
Y	89		ug/L			342789	430008	1
Kr	83		ug/L			51	72	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-05**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:11:55**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	27002	0
Cl	37		ug/L			3627607	3601549	4
Sc	45		ug/L			527811	557155	1
Cr	52	6.559	ug/L	0.107	1	19894	151952	2
Cr	53	6.626	ug/L	0.070	1	132	15807	1
Y	89		ug/L			342789	432940	0
Kr	83		ug/L			51	64	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23B0229-06**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, March 17, 2023 21:13:17**

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	26938	4
Cl	37		ug/L			3627607	3615298	1
Sc	45		ug/L			527811	570068	3
Cr	52	7.006	ug/L	0.147	2	19894	164525	2
Cr	53	7.085	ug/L	0.207	2	132	17274	1
Y	89		ug/L			342789	454459	1
Kr	83		ug/L			51	55	4

23B0229 ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23B0228-08

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, March 17, 2023 21:14:39

MB 3/17/23

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	27725	2
Cl	37		ug/L			3627607	3633178	0
Sc	45		ug/L			527811	583694	0
Cr	52	7.541	ug/L	0.269	3	19894	179665	2
Cr	53	7.595	ug/L	0.057	0	132	18959	0
Y	89		ug/L			342789	462527	2
Kr	83		ug/L			51	58	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:17:12

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			20087	20382	4
	Cl	37	ug/L			3627607	3613062	1
[>	Sc	45	ug/L			527811	516630	0
|	Cr	52	ug/L	0.926	1	19894	974727	2
[	Cr	53	ug/L	1.067	2	132	111469	1
	Y	89	ug/L			342789	339979	1
	Kr	83	ug/L			51	48	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:21:25

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13	ug/L			20087	19404	1
	Cl	37	ug/L			3627607	3575559	2
[>	Sc	45	ug/L			527811	493496	1
|	Cr	-0.020	ug/L	0.028	139	19894	18242	1
[	Cr	-0.000	ug/L	0.002	5731	132	123	1
	Y	89	ug/L			342789	322692	1
	Kr	83	ug/L			51	51	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:22:48

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	31452	3
Cl	37		ug/L			3627607	3689507	3
Sc	45		ug/L			527811	575016	3
Cr	52	0.062	ug/L	0.012	19	19894	22950	3
Cr	53	0.011	ug/L	0.007	66	132	171	11
Y	89		ug/L			342789	365929	3
Kr	83		ug/L			51	48	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:24:10

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	31967	0
Cl	37		ug/L			3627607	3814213	0
Sc	45		ug/L			527811	591870	1
Cr	52	0.083	ug/L	0.018	21	19894	24068	0
Cr	53	0.019	ug/L	0.004	22	132	196	4
Y	89		ug/L			342789	385470	1
Kr	83		ug/L			51	50	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:25:33

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	32446	3
Cl	37		ug/L			3627607	3799722	0
Sc	45		ug/L			527811	604410	1
Cr	52	0.045	ug/L	0.026	57	19894	23752	1
Cr	53	0.007	ug/L	0.009	128	132	168	12
Y	89		ug/L			342789	384418	0
Kr	83		ug/L			51	48	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:26:55

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	22053	2
Cl	37		ug/L			3627607	3372748	0
[> Sc	45		ug/L			527811	458897	0
| Cr	52	-0.020	ug/L	0.026	127	19894	16966	2
[Cr	53	0.004	ug/L	0.004	114	132	122	7
Y	89		ug/L			342789	303998	2
Kr	83		ug/L			51	43	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:28:18

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	21387	5
Cl	37		ug/L			3627607	3316831	4
[> Sc	45		ug/L			527811	417628	12
| Cr	52	0.036	ug/L	0.044	121	19894	16230	8
[Cr	53	0.000	ug/L	0.001	574	132	104	11
Y	89		ug/L			342789	276217	12
Kr	83		ug/L			51	50	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, March 17, 2023 21:29:41

Number of Replicates: 3

Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethodSTD.mth

Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun

Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac

Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\031723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	13		ug/L			20087	23352	2
Cl	37		ug/L			3627607	3470668	3
[> Sc	45		ug/L			527811	473644	1
| Cr	52	-0.027	ug/L	0.004	16	19894	17399	0
[Cr	53	0.005	ug/L	0.002	38	132	127	3
Y	89		ug/L			342789	311536	1
Kr	83		ug/L			51	49	7



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0248-ICV1	Arsenic-75a	50.000	48.6	97.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLC0248-CCV1	Arsenic-75a	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.1	100	ug/L	PA 6020B UCT-KE
SLC0248-CCV2	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLC0248-CCV3	Arsenic-75a	50.000	49.9	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLC0248-CCV4	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0248-CCV4	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLC0248-CCV5	Arsenic-75a	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.6	97.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.0	96.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLC0248-CCV6	Arsenic-75a	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
SLC0248-CCV7	Arsenic-75a	50.000	49.9	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.8	106	ug/L	PA 6020B UCT-KE
SLC0248-CCV8	Arsenic-75a	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
SLC0248-CCV9	Arsenic-75a	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.4	94.7	ug/L	PA 6020B UCT-KE



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method	
SLC0248-CCV9	Zinc-66	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	51.2	102	ug/L	PA 6020B UCT-KE	
SLC0248-CCVA	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE	
	Cadmium-111	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	50.9	102	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE	
	SLC0248-CCVB	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLC0248-CCVC	Cadmium-111	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	48.5	97.1	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE	
	SLC0248-CCVD	Arsenic-75a	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	SLC0248-CCVE	Cadmium-111	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
Cadmium-114		50.000	49.3	98.6	ug/L	PA 6020B UCT-KE	
Copper-63		50.000	47.4	94.7	ug/L	PA 6020B UCT-KE	
Copper-65		50.000	47.9	95.8	ug/L	PA 6020B UCT-KE	
Zinc-66		50.000	48.7	97.4	ug/L	PA 6020B UCT-KE	
Zinc-67		50.000	48.2	96.4	ug/L	PA 6020B UCT-KE	
SLC0248-CCVD		Arsenic-75a	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
SLC0248-CCVD		Cadmium-111	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.4	96.8	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE	
	SLC0248-CCVE	Arsenic-75a	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	SLC0248-CCVE	Cadmium-111	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
Cadmium-114		50.000	48.3	96.6	ug/L	PA 6020B UCT-KE	
Copper-63		50.000	47.6	95.2	ug/L	PA 6020B UCT-KE	



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method	
SLC0248-CCVE	Copper-65	50.000	47.6	95.2	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	49.9	99.9	ug/L	PA 6020B UCT-KE	
SLC0248-CCVF	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE	
	Cadmium-111	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	50.0	100	ug/L	PA 6020B UCT-KE	
	SLC0248-CCVG	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
		Cadmium-111	50.000	48.2	96.3	ug/L	PA 6020B UCT-KE
Cadmium-114		50.000	48.0	95.9	ug/L	PA 6020B UCT-KE	
Copper-63		50.000	49.7	99.4	ug/L	PA 6020B UCT-KE	
Copper-65		50.000	48.1	96.1	ug/L	PA 6020B UCT-KE	
Zinc-66		50.000	50.2	100	ug/L	PA 6020B UCT-KE	
Zinc-67		50.000	50.3	101	ug/L	PA 6020B UCT-KE	
SLC0248-CCVH		Arsenic-75a	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	48.3	96.6	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	47.9	95.7	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE	
	SLC0248-CCVI	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
Cadmium-111		50.000	48.9	97.9	ug/L	PA 6020B UCT-KE	
Cadmium-114		50.000	48.5	97.0	ug/L	PA 6020B UCT-KE	
Copper-63		50.000	48.3	96.5	ug/L	PA 6020B UCT-KE	
Copper-65		50.000	47.2	94.4	ug/L	PA 6020B UCT-KE	
Zinc-66		50.000	47.5	95.0	ug/L	PA 6020B UCT-KE	
Zinc-67		50.000	49.9	99.8	ug/L	PA 6020B UCT-KE	
SLC0248-CCVJ		Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.9	97.9	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE	



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0248-CCVJ	Copper-63	50.000	48.9	97.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE

* Values outside of QC limits



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/16/23 17:09

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL1	Arsenic-75a	-0.0250	0.0373	0.200	ug/L	
SLC0248-IBL1	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-IBL1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0248-IBL1	Copper-63	-0.0220	0.173	0.500	ug/L	
SLC0248-IBL1	Copper-65	-0.0290	0.35	0.500	ug/L	
SLC0248-IBL1	Zinc-66	-0.0130	2.92	6.00	ug/L	
SLC0248-IBL1	Zinc-67	0.0320	0.94	6.00	ug/L	
SLC0248-ICB1	Arsenic-75a	-0.0360	0.0373	0.200	ug/L	
SLC0248-ICB1	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0248-ICB1	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLC0248-ICB1	Copper-63	-0.0370	0.173	0.500	ug/L	
SLC0248-ICB1	Copper-65	-0.0320	0.35	0.500	ug/L	
SLC0248-ICB1	Zinc-66	-0.0680	2.92	6.00	ug/L	
SLC0248-ICB1	Zinc-67	-0.112	0.94	6.00	ug/L	
SLC0248-CCB1	Arsenic-75a	-0.0220	0.0373	0.200	ug/L	
SLC0248-CCB1	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-CCB1	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0248-CCB1	Copper-63	-0.0270	0.173	0.500	ug/L	
SLC0248-CCB1	Copper-65	-0.0260	0.35	0.500	ug/L	
SLC0248-CCB1	Zinc-66	-0.0430	2.92	6.00	ug/L	
SLC0248-CCB1	Zinc-67	-0.0130	0.94	6.00	ug/L	
SLC0248-IBL2	Arsenic-75a	-0.0240	0.0373	0.200	ug/L	
SLC0248-IBL2	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLC0248-IBL2	Cadmium-114	0.00700	0.04	0.100	ug/L	
SLC0248-IBL2	Copper-63	-0.0360	0.173	0.500	ug/L	
SLC0248-IBL2	Copper-65	-0.0350	0.35	0.500	ug/L	
SLC0248-IBL2	Zinc-66	-0.0350	2.92	6.00	ug/L	
SLC0248-IBL2	Zinc-67	-0.0470	0.94	6.00	ug/L	
SLC0248-CCB2	Arsenic-75a	-0.0420	0.0373	0.200	ug/L	
SLC0248-CCB2	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-CCB2	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-CCB2	Copper-63	-0.0310	0.173	0.500	ug/L	
SLC0248-CCB2	Copper-65	-0.0380	0.35	0.500	ug/L	
SLC0248-CCB2	Zinc-66	-0.0120	2.92	6.00	ug/L	
SLC0248-CCB2	Zinc-67	-0.0330	0.94	6.00	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/16/23 19:23

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL3	Arsenic-75a	-0.0350	0.0373	0.200	ug/L	
SLC0248-IBL3	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLC0248-IBL3	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-IBL3	Copper-63	-0.0250	0.173	0.500	ug/L	
SLC0248-IBL3	Copper-65	-0.0380	0.35	0.500	ug/L	
SLC0248-IBL3	Zinc-66	-0.0430	2.92	6.00	ug/L	
SLC0248-IBL3	Zinc-67	-0.109	0.94	6.00	ug/L	
SLC0248-CCB3	Arsenic-75a	-0.0420	0.0373	0.200	ug/L	
SLC0248-CCB3	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLC0248-CCB3	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0248-CCB3	Copper-63	-0.0320	0.173	0.500	ug/L	
SLC0248-CCB3	Copper-65	-0.0390	0.35	0.500	ug/L	
SLC0248-CCB3	Zinc-66	-0.0360	2.92	6.00	ug/L	
SLC0248-CCB3	Zinc-67	-0.0530	0.94	6.00	ug/L	
SLC0248-IBL4	Arsenic-75a	-0.0430	0.0373	0.200	ug/L	
SLC0248-IBL4	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0248-IBL4	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0248-IBL4	Copper-63	-0.0330	0.173	0.500	ug/L	
SLC0248-IBL4	Copper-65	-0.0300	0.35	0.500	ug/L	
SLC0248-IBL4	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLC0248-IBL4	Zinc-67	0.0500	0.94	6.00	ug/L	
SLC0248-IBL5	Arsenic-75a	-0.0390	0.0373	0.200	ug/L	
SLC0248-IBL5	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-IBL5	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0248-IBL5	Copper-63	-0.0370	0.173	0.500	ug/L	
SLC0248-IBL5	Copper-65	-0.0340	0.35	0.500	ug/L	
SLC0248-IBL5	Zinc-66	-0.0310	2.92	6.00	ug/L	
SLC0248-IBL5	Zinc-67	-0.0690	0.94	6.00	ug/L	
SLC0248-CCB4	Arsenic-75a	-0.0400	0.0373	0.200	ug/L	
SLC0248-CCB4	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0248-CCB4	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-CCB4	Copper-63	-0.0300	0.173	0.500	ug/L	
SLC0248-CCB4	Copper-65	-0.0370	0.35	0.500	ug/L	
SLC0248-CCB4	Zinc-66	-0.0200	2.92	6.00	ug/L	
SLC0248-CCB4	Zinc-67	-0.0570	0.94	6.00	ug/L	
SLC0248-IBL6	Arsenic-75a	-0.0250	0.0373	0.200	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/16/23 21:53

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL6	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0248-IBL6	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-IBL6	Copper-63	-0.0110	0.173	0.500	ug/L	
SLC0248-IBL6	Copper-65	-0.0150	0.35	0.500	ug/L	
SLC0248-IBL6	Zinc-66	-0.0060	2.92	6.00	ug/L	
SLC0248-IBL6	Zinc-67	-0.0240	0.94	6.00	ug/L	
SLC0248-CCB5	Arsenic-75a	-0.0320	0.0373	0.200	ug/L	
SLC0248-CCB5	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0248-CCB5	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0248-CCB5	Copper-63	-0.0330	0.173	0.500	ug/L	
SLC0248-CCB5	Copper-65	-0.0370	0.35	0.500	ug/L	
SLC0248-CCB5	Zinc-66	-0.0130	2.92	6.00	ug/L	
SLC0248-CCB5	Zinc-67	0.0510	0.94	6.00	ug/L	
SLC0248-CCB6	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0248-CCB6	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-CCB6	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0248-CCB6	Copper-63	-0.00900	0.173	0.500	ug/L	
SLC0248-CCB6	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-CCB6	Zinc-66	0.0050	2.92	6.00	ug/L	
SLC0248-CCB6	Zinc-67	0.0400	0.94	6.00	ug/L	
SLC0248-IBL7	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0248-IBL7	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0248-IBL7	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0248-IBL7	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0248-IBL7	Copper-65	0.00900	0.35	0.500	ug/L	
SLC0248-IBL7	Zinc-66	0.0650	2.92	6.00	ug/L	
SLC0248-IBL7	Zinc-67	0.0930	0.94	6.00	ug/L	
SLC0248-CCB7	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0248-CCB7	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-CCB7	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLC0248-CCB7	Copper-63	0.00	0.173	0.500	ug/L	
SLC0248-CCB7	Copper-65	0.00600	0.35	0.500	ug/L	
SLC0248-CCB7	Zinc-66	0.0150	2.92	6.00	ug/L	
SLC0248-CCB7	Zinc-67	0.121	0.94	6.00	ug/L	
SLC0248-IBL8	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLC0248-IBL8	Cadmium-111	0.00400	0.03	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 00:17

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL8	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0248-IBL8	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0248-IBL8	Copper-65	0.00300	0.35	0.500	ug/L	
SLC0248-IBL8	Zinc-66	0.0400	2.92	6.00	ug/L	
SLC0248-IBL8	Zinc-67	0.133	0.94	6.00	ug/L	
SLC0248-CCB8	Arsenic-75a	0.0280	0.0373	0.200	ug/L	
SLC0248-CCB8	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-CCB8	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0248-CCB8	Copper-63	0.0260	0.173	0.500	ug/L	
SLC0248-CCB8	Copper-65	0.0340	0.35	0.500	ug/L	
SLC0248-CCB8	Zinc-66	0.0300	2.92	6.00	ug/L	
SLC0248-CCB8	Zinc-67	0.0990	0.94	6.00	ug/L	
SLC0248-IBL9	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0248-IBL9	Cadmium-111	0.0120	0.03	0.100	ug/L	
SLC0248-IBL9	Cadmium-114	0.0130	0.04	0.100	ug/L	
SLC0248-IBL9	Copper-63	-0.00300	0.173	0.500	ug/L	
SLC0248-IBL9	Copper-65	0.00800	0.35	0.500	ug/L	
SLC0248-IBL9	Zinc-66	0.0520	2.92	6.00	ug/L	
SLC0248-IBL9	Zinc-67	0.0940	0.94	6.00	ug/L	
SLC0248-CCB9	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLC0248-CCB9	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-CCB9	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0248-CCB9	Copper-63	-0.00200	0.173	0.500	ug/L	
SLC0248-CCB9	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-CCB9	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLC0248-CCB9	Zinc-67	0.0550	0.94	6.00	ug/L	
SLC0248-IBLA	Arsenic-75a	-0.0100	0.0373	0.200	ug/L	
SLC0248-IBLA	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-IBLA	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLC0248-IBLA	Copper-63	-0.00100	0.173	0.500	ug/L	
SLC0248-IBLA	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0248-IBLA	Zinc-66	0.0570	2.92	6.00	ug/L	
SLC0248-IBLA	Zinc-67	0.0640	0.94	6.00	ug/L	
SLC0248-CCBA	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0248-CCBA	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-CCBA	Cadmium-114	0.00	0.04	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 02:26

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-CCBA	Copper-63	-0.00600	0.173	0.500	ug/L	
SLC0248-CCBA	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-CCBA	Zinc-66	0.0030	2.92	6.00	ug/L	
SLC0248-CCBA	Zinc-67	0.113	0.94	6.00	ug/L	
SLC0248-IBLB	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLC0248-IBLB	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLC0248-IBLB	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0248-IBLB	Copper-63	-0.00200	0.173	0.500	ug/L	
SLC0248-IBLB	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-IBLB	Zinc-66	0.0270	2.92	6.00	ug/L	
SLC0248-IBLB	Zinc-67	0.0780	0.94	6.00	ug/L	
SLC0248-CCBB	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLC0248-CCBB	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLC0248-CCBB	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0248-CCBB	Copper-63	-0.0100	0.173	0.500	ug/L	
SLC0248-CCBB	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-CCBB	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLC0248-CCBB	Zinc-67	0.110	0.94	6.00	ug/L	
SLC0248-CCBC	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLC0248-CCBC	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLC0248-CCBC	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-CCBC	Copper-63	0.0170	0.173	0.500	ug/L	
SLC0248-CCBC	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0248-CCBC	Zinc-66	0.103	2.92	6.00	ug/L	
SLC0248-CCBC	Zinc-67	0.0600	0.94	6.00	ug/L	
SLC0248-IBLC	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0248-IBLC	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-IBLC	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0248-IBLC	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0248-IBLC	Copper-65	-0.00200	0.35	0.500	ug/L	
SLC0248-IBLC	Zinc-66	0.0480	2.92	6.00	ug/L	
SLC0248-IBLC	Zinc-67	-0.0310	0.94	6.00	ug/L	
SLC0248-CCBD	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLC0248-CCBD	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLC0248-CCBD	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0248-CCBD	Copper-63	0.0140	0.173	0.500	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 04:42

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-CCBD	Copper-65	0.00600	0.35	0.500	ug/L	
SLC0248-CCBD	Zinc-66	0.108	2.92	6.00	ug/L	
SLC0248-CCBD	Zinc-67	0.103	0.94	6.00	ug/L	
SLC0248-IBLD	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLC0248-IBLD	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0248-IBLD	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0248-IBLD	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0248-IBLD	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0248-IBLD	Zinc-66	0.0540	2.92	6.00	ug/L	
SLC0248-IBLD	Zinc-67	0.0460	0.94	6.00	ug/L	
SLC0248-CCBE	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLC0248-CCBE	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLC0248-CCBE	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-CCBE	Copper-63	0.0120	0.173	0.500	ug/L	
SLC0248-CCBE	Copper-65	0.0140	0.35	0.500	ug/L	
SLC0248-CCBE	Zinc-66	0.115	2.92	6.00	ug/L	
SLC0248-CCBE	Zinc-67	-0.0370	0.94	6.00	ug/L	
SLC0248-IBLE	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLC0248-IBLE	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLC0248-IBLE	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0248-IBLE	Copper-63	0.00700	0.173	0.500	ug/L	
SLC0248-IBLE	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-IBLE	Zinc-66	0.0620	2.92	6.00	ug/L	
SLC0248-IBLE	Zinc-67	0.107	0.94	6.00	ug/L	
SLC0248-IBLF	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLC0248-IBLF	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLC0248-IBLF	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0248-IBLF	Copper-63	0.00300	0.173	0.500	ug/L	
SLC0248-IBLF	Copper-65	0.00	0.35	0.500	ug/L	
SLC0248-IBLF	Zinc-66	0.0240	2.92	6.00	ug/L	
SLC0248-IBLF	Zinc-67	-0.0440	0.94	6.00	ug/L	
SLC0248-CCBF	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLC0248-CCBF	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0248-CCBF	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLC0248-CCBF	Copper-63	0.0160	0.173	0.500	ug/L	
SLC0248-CCBF	Copper-65	0.00900	0.35	0.500	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 06:41

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-CCBF	Zinc-66	0.0510	2.92	6.00	ug/L	
SLC0248-CCBF	Zinc-67	-0.0290	0.94	6.00	ug/L	
SLC0248-CCBG	Arsenic-75a	0.0130	0.0373	0.200	ug/L	
SLC0248-CCBG	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLC0248-CCBG	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0248-CCBG	Copper-63	0.0170	0.173	0.500	ug/L	
SLC0248-CCBG	Copper-65	0.00300	0.35	0.500	ug/L	
SLC0248-CCBG	Zinc-66	0.0730	2.92	6.00	ug/L	
SLC0248-CCBG	Zinc-67	0.0310	0.94	6.00	ug/L	
SLC0248-IBLH	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0248-IBLH	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLC0248-IBLH	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0248-IBLH	Copper-63	0.00200	0.173	0.500	ug/L	
SLC0248-IBLH	Copper-65	-0.00900	0.35	0.500	ug/L	
SLC0248-IBLH	Zinc-66	0.0250	2.92	6.00	ug/L	
SLC0248-IBLH	Zinc-67	0.0320	0.94	6.00	ug/L	
SLC0248-CCBH	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0248-CCBH	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-CCBH	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLC0248-CCBH	Copper-63	0.0140	0.173	0.500	ug/L	
SLC0248-CCBH	Copper-65	0.00500	0.35	0.500	ug/L	
SLC0248-CCBH	Zinc-66	0.0630	2.92	6.00	ug/L	
SLC0248-CCBH	Zinc-67	0.158	0.94	6.00	ug/L	
SLC0248-IBLI	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0248-IBLI	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLC0248-IBLI	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0248-IBLI	Copper-63	0.00100	0.173	0.500	ug/L	
SLC0248-IBLI	Copper-65	-0.00500	0.35	0.500	ug/L	
SLC0248-IBLI	Zinc-66	0.0310	2.92	6.00	ug/L	
SLC0248-IBLI	Zinc-67	0.0410	0.94	6.00	ug/L	
SLC0248-CCBI	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLC0248-CCBI	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0248-CCBI	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLC0248-CCBI	Copper-63	0.0180	0.173	0.500	ug/L	
SLC0248-CCBI	Copper-65	0.00400	0.35	0.500	ug/L	
SLC0248-CCBI	Zinc-66	0.0980	2.92	6.00	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 08:56

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-CCBI	Zinc-67	0.0700	0.94	6.00	ug/L	
SLC0248-IBLJ	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLC0248-IBLJ	Cadmium-111	0.00	0.03	0.100	ug/L	
SLC0248-IBLJ	Cadmium-114	0.00	0.04	0.100	ug/L	
SLC0248-IBLJ	Copper-63	0.00400	0.173	0.500	ug/L	
SLC0248-IBLJ	Copper-65	-0.0140	0.35	0.500	ug/L	
SLC0248-IBLJ	Zinc-66	0.0450	2.92	6.00	ug/L	
SLC0248-IBLJ	Zinc-67	0.0580	0.94	6.00	ug/L	
SLC0248-CCBJ	Arsenic-75a	0.0140	0.0373	0.200	ug/L	
SLC0248-CCBJ	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLC0248-CCBJ	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLC0248-CCBJ	Copper-63	0.0260	0.173	0.500	ug/L	
SLC0248-CCBJ	Copper-65	0.00700	0.35	0.500	ug/L	
SLC0248-CCBJ	Zinc-66	0.0760	2.92	6.00	ug/L	
SLC0248-CCBJ	Zinc-67	0.119	0.94	6.00	ug/L	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0248-CAL1	XDT_m2230316-011	NA	03/16/23 16:35
CAL 1 - LOW CHECK	SLC0248-CAL2	XDT_m2230316-012	NA	03/16/23 16:39
CAL 2	SLC0248-CAL3	XDT_m2230316-013	NA	03/16/23 16:44
CAL 3	SLC0248-CAL4	XDT_m2230316-014	NA	03/16/23 16:49
CAL 4	SLC0248-CAL5	XDT_m2230316-015	NA	03/16/23 16:54
CAL 5	SLC0248-CAL6	XDT_m2230316-016	NA	03/16/23 17:01
RINSE	SLC0248-IBL1	XDT_m2230316-017	NA	03/16/23 17:09
Initial Cal Check	SLC0248-ICV1	XDT_m2230316-019	NA	03/16/23 17:16
Initial Cal Blank	SLC0248-ICB1	XDT_m2230316-020	NA	03/16/23 17:23
Calibration Check	SLC0248-CCV1	XDT_m2230316-021	NA	03/16/23 17:29
Calibration Blank	SLC0248-CCB1	XDT_m2230316-022	NA	03/16/23 17:36
Instrument RL Check	SLC0248-CRL1	XDT_m2230316-024	NA	03/16/23 17:47
Interference Check A	SLC0248-IFA1	XDT_m2230316-025	NA	03/16/23 17:52
Interference Check B	SLC0248-IFB1	XDT_m2230316-026	NA	03/16/23 17:57
LR200	SLC0248-HCV1	XDT_m2230316-027	NA	03/16/23 18:02
LR300	SLC0248-HCV2	XDT_m2230316-028	NA	03/16/23 18:06
Instrument Blank	SLC0248-IBL2	XDT_m2230316-029	NA	03/16/23 18:14
Calibration Check	SLC0248-CCV2	XDT_m2230316-030	NA	03/16/23 18:21
Calibration Blank	SLC0248-CCB2	XDT_m2230316-031	NA	03/16/23 18:28
ZZZZZ	BLC0441-BLK1	XDT_m2230316-032	Water	03/16/23 18:34
ZZZZZ	BLC0441-BS1	XDT_m2230316-033	Water	03/16/23 18:39
Instrument Blank	SLC0248-IBL3	XDT_m2230316-041	NA	03/16/23 19:23
Calibration Check	SLC0248-CCV3	XDT_m2230316-042	NA	03/16/23 19:27
Calibration Blank	SLC0248-CCB3	XDT_m2230316-043	NA	03/16/23 19:35
Instrument Blank	SLC0248-IBL4	XDT_m2230316-045	NA	03/16/23 19:47
ZZZZZ	23C0363-01	XDT_m2230316_PRE-046	Water	03/16/23 20:00
Instrument Blank	SLC0248-IBL5	XDT_m2230316-053	NA	03/16/23 20:37
Calibration Check	SLC0248-CCV4	XDT_m2230316-055	NA	03/16/23 20:49
Calibration Blank	SLC0248-CCB4	XDT_m2230316-056	NA	03/16/23 20:57



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLC0248-IBL6	XDT_m2230316-066	NA	03/16/23 21:53
Calibration Check	SLC0248-CCV5	XDT_m2230316-067	NA	03/16/23 21:58
Calibration Blank	SLC0248-CCB5	XDT_m2230316-068	NA	03/16/23 22:05
Calibration Check	SLC0248-CCV6	XDT_m2230316-070	NA	03/16/23 22:20
Calibration Blank	SLC0248-CCB6	XDT_m2230316-071	NA	03/16/23 22:27
ZZZZZ	23C0073-01	XDT_m2230316-075	Water	03/16/23 22:46
ZZZZZ	23C0073-01	XDT_m2230316-075	Water	03/16/23 22:46
ZZZZZ	23C0073-01	XDT_m2230316-075	Water	03/16/23 22:46
ZZZZZ	BLC0441-DUP1	XDT_m2230316-076	Water	03/16/23 22:51
ZZZZZ	BLC0441-MS1	XDT_m2230316-077	Water	03/16/23 22:56
Instrument Blank	SLC0248-IBL7	XDT_m2230316-081	NA	03/16/23 23:17
Calibration Check	SLC0248-CCV7	XDT_m2230316-082	NA	03/16/23 23:22
Calibration Blank	SLC0248-CCB7	XDT_m2230316-083	NA	03/16/23 23:29
Instrument Blank	SLC0248-IBL8	XDT_m2230316-093	NA	03/17/23 00:17
Calibration Check	SLC0248-CCV8	XDT_m2230316-094	NA	03/17/23 00:22
Calibration Blank	SLC0248-CCB8	XDT_m2230316-095	NA	03/17/23 00:29
Blank	BLC0079-BLK1	XDT_m2230316-098	Solid	03/17/23 00:43
LCS	BLC0079-BS1	XDT_m2230316-099	Solid	03/17/23 00:48
ZZZZZ	23A0088-01	XDT_m2230316-100	Solid	03/17/23 00:53
ZZZZZ	23A0088-01	XDT_m2230316-100	Solid	03/17/23 00:53
ZZZZZ	23A0088-01	XDT_m2230316-100	Solid	03/17/23 00:53
ZZZZZ	23A0088-01	XDT_m2230316-100	Solid	03/17/23 00:53
Instrument Blank	SLC0248-IBL9	XDT_m2230316-105	NA	03/17/23 01:16
Calibration Check	SLC0248-CCV9	XDT_m2230316-106	NA	03/17/23 01:20
Calibration Blank	SLC0248-CCB9	XDT_m2230316-107	NA	03/17/23 01:28
ZZZZZ	23A0088-02	XDT_m2230316-108	Solid	03/17/23 01:33
ZZZZZ	23A0088-05	XDT_m2230316-109	Solid	03/17/23 01:37
ZZZZZ	23A0088-06	XDT_m2230316-110	Solid	03/17/23 01:42
ZZZZZ	23A0088-06	XDT_m2230316-110	Solid	03/17/23 01:42



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0088-06	XDT_m2230316-110	Solid	03/17/23 01:42
ZZZZZ	23A0088-06	XDT_m2230316-110	Solid	03/17/23 01:42
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
Instrument Blank	SLC0248-IBLA	XDT_m2230316-117	NA	03/17/23 02:14
Calibration Check	SLC0248-CCVA	XDT_m2230316-118	NA	03/17/23 02:19
Calibration Blank	SLC0248-CCBA	XDT_m2230316-119	NA	03/17/23 02:26
ZZZZZ	23A0088-13	XDT_m2230316-120	Solid	03/17/23 02:31
ZZZZZ	23A0088-13	XDT_m2230316-120	Solid	03/17/23 02:31
ZZZZZ	23A0088-13	XDT_m2230316-120	Solid	03/17/23 02:31
ZZZZZ	23A0088-13	XDT_m2230316-120	Solid	03/17/23 02:31



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0088-14	XDT_m2230316-121	Solid	03/17/23 02:36
ZZZZZ	23A0088-14	XDT_m2230316-121	Solid	03/17/23 02:36
ZZZZZ	23A0088-14	XDT_m2230316-121	Solid	03/17/23 02:36
ZZZZZ	23A0088-14	XDT_m2230316-121	Solid	03/17/23 02:36
ZZZZZ	23A0088-15	XDT_m2230316-122	Solid	03/17/23 02:40
ZZZZZ	23A0088-15	XDT_m2230316-122	Solid	03/17/23 02:40
ZZZZZ	23A0088-15	XDT_m2230316-122	Solid	03/17/23 02:40
ZZZZZ	23A0088-15	XDT_m2230316-122	Solid	03/17/23 02:40
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1150	23B0229-04	XDT_m2230316-125	Solid	03/17/23 02:54
LDW23-SS1150	23B0229-04	XDT_m2230316-125	Solid	03/17/23 02:54
LDW23-SS1150	23B0229-04	XDT_m2230316-125	Solid	03/17/23 02:54
LDW23-SS1150	23B0229-04	XDT_m2230316-125	Solid	03/17/23 02:54
LDW23-SS1008	23B0229-05	XDT_m2230316-126	Solid	03/17/23 02:59
LDW23-SS1008	23B0229-05	XDT_m2230316-126	Solid	03/17/23 02:59
LDW23-SS1008	23B0229-05	XDT_m2230316-126	Solid	03/17/23 02:59
LDW23-SS1008	23B0229-05	XDT_m2230316-126	Solid	03/17/23 02:59
LDW23-SC1008	23B0229-06	XDT_m2230316-127	Solid	03/17/23 03:04
LDW23-SC1008	23B0229-06	XDT_m2230316-127	Solid	03/17/23 03:04
LDW23-SC1008	23B0229-06	XDT_m2230316-127	Solid	03/17/23 03:04
LDW23-SC1008	23B0229-06	XDT_m2230316-127	Solid	03/17/23 03:04
LDW23-SC1013	23B0229-08	XDT_m2230316-128	Solid	03/17/23 03:08



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1013	23B0229-08	XDT_m2230316-128	Solid	03/17/23 03:08
LDW23-SC1013	23B0229-08	XDT_m2230316-128	Solid	03/17/23 03:08
LDW23-SC1013	23B0229-08	XDT_m2230316-128	Solid	03/17/23 03:08
Instrument Blank	SLC0248-IBLB	XDT_m2230316-129	NA	03/17/23 03:13
Calibration Check	SLC0248-CCVB	XDT_m2230316-130	NA	03/17/23 03:18
Calibration Blank	SLC0248-CCBB	XDT_m2230316-131	NA	03/17/23 03:25
Calibration Check	SLC0248-CCVC	XDT_m2230316-133	NA	03/17/23 03:34
Calibration Blank	SLC0248-CCBC	XDT_m2230316-134	NA	03/17/23 03:42
Instrument Blank	SLC0248-IBLC	XDT_m2230316-144	NA	03/17/23 04:30
Calibration Check	SLC0248-CCVD	XDT_m2230316-145	NA	03/17/23 04:34
Calibration Blank	SLC0248-CCBD	XDT_m2230316-146	NA	03/17/23 04:42
Instrument Blank	SLC0248-IBLD	XDT_m2230316-156	NA	03/17/23 05:30
Calibration Check	SLC0248-CCVE	XDT_m2230316-157	NA	03/17/23 05:35
Calibration Blank	SLC0248-CCBE	XDT_m2230316-158	NA	03/17/23 05:42
ZZZZZ	23C0074-01	XDT_m2230316-163	Water	03/17/23 06:05
ZZZZZ	23C0074-01	XDT_m2230316-163	Water	03/17/23 06:05
ZZZZZ	23C0074-01	XDT_m2230316-163	Water	03/17/23 06:05
Instrument Blank	SLC0248-IBLE	XDT_m2230316-164	NA	03/17/23 06:10
ZZZZZ	23C0022-02	XDT_m2230316-165	Water	03/17/23 06:15
ZZZZZ	23C0022-02	XDT_m2230316-165	Water	03/17/23 06:15
ZZZZZ	23C0022-02	XDT_m2230316-165	Water	03/17/23 06:15
ZZZZZ	23C0022-02	XDT_m2230316-165	Water	03/17/23 06:15
ZZZZZ	23C0022-02	XDT_m2230316-165	Water	03/17/23 06:15
ZZZZZ	23C0022-02	XDT_m2230316-165	Water	03/17/23 06:15
Instrument Blank	SLC0248-IBLF	XDT_m2230316-168	NA	03/17/23 06:29
Calibration Check	SLC0248-CCVF	XDT_m2230316-169	NA	03/17/23 06:33
Calibration Blank	SLC0248-CCBF	XDT_m2230316-170	NA	03/17/23 06:41
Calibration Check	SLC0248-CCVG	XDT_m2230316-172	NA	03/17/23 06:50
Calibration Blank	SLC0248-CCBG	XDT_m2230316-173	NA	03/17/23 06:58



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLC0248-IBLH	XDT_m2230316-183	NA	03/17/23 07:44
Calibration Check	SLC0248-CCVH	XDT_m2230316-184	NA	03/17/23 07:49
Calibration Blank	SLC0248-CCBH	XDT_m2230316-185	NA	03/17/23 07:56
Instrument Blank	SLC0248-IBLI	XDT_m2230316-195	NA	03/17/23 08:44
Calibration Check	SLC0248-CCVI	XDT_m2230316-196	NA	03/17/23 08:49
Calibration Blank	SLC0248-CCBI	XDT_m2230316-197	NA	03/17/23 08:56
Instrument Blank	SLC0248-IBLJ	XDT_m2230316-203	NA	03/17/23 09:26
Calibration Check	SLC0248-CCVJ	XDT_m2230316-204	NA	03/17/23 09:31
Calibration Blank	SLC0248-CCBJ	XDT_m2230316-205	NA	03/17/23 09:38



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Standard ID: L002581

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0248-IFA1	Arsenic-75a	0	0.0050		ug/L
	Cadmium-111	0	0.0740		ug/L
	Cadmium-114	0	0.0510		ug/L
	Copper-63	0	0.1030		ug/L
	Copper-65	0	0.1080		ug/L
	Zinc-66	0	0.1750		ug/L
	Zinc-67	0	0.1390		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Standard ID: L002581

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0248-IFB1	Arsenic-75a	20.000	19.036	95.2	ug/L
	Cadmium-111	20.000	18.810	94.1	ug/L
	Cadmium-114	20.000	18.766	93.8	ug/L
	Copper-63	20.000	20.414	102	ug/L
	Copper-65	20.000	20.177	101	ug/L
	Zinc-66	20.000	18.523	92.6	ug/L
	Zinc-67	20.000	17.281	86.4	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Lab Sample ID: SLC0248-CRL1

Analyte	True	Found	%R	Units	QC Limits
Arsenic-75a	0.20000	0.143	71.5	ug/L	50 - 150
Cadmium-111	0.10000	0.0870	87.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0830	83.0	ug/L	50 - 150
Copper-63	0.50000	0.494	98.8	ug/L	50 - 150
Copper-65	0.50000	0.478	95.6	ug/L	50 - 150
Zinc-66	6.0000	6.56	109	ug/L	50 - 150
Zinc-67	6.0000	5.48	91.4	ug/L	50 - 150

* Values outside of QC limits



**HIGH-CONCENTRATION
CALIBRATION VERIFICATION
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00054

Laboratory ID: SLC0248-HCV1

Sequence: SLC0248

Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	197	-1.4	10.00
Cadmium-111	200.00	195	-2.7	10.00
Cadmium-114	200.00	193	-3.3	10.00
Copper-63	200.00	200	0.2	10.00
Copper-65	200.00	198	-0.8	10.00
Zinc-66	200.00	198	-1.0	10.00
Zinc-67	200.00	191	-4.5	10.00

* Values outside of QC limits



HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00054

Laboratory ID: SLC0248-HCV2

Sequence: SLC0248

Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	300	0.1	10.00
Cadmium-111	300.00	280	-6.6	10.00
Cadmium-114	300.00	281	-6.2	10.00
Copper-63	300.00	303	1.0	10.00
Copper-65	300.00	294	-2.0	10.00
Zinc-66	300.00	286	-4.7	10.00
Zinc-67	300.00	285	-5.1	10.00

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:45	37	180	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:50	37	180	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:54	37	180	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:59	37	180	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 03:04	37	180	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 03:08	36	180	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ICPMS2

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCU10
 Lot Number: P2-CU682108
 Matrix: 3% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Copper
 Starting Material: Cu Metal
 Starting Material Lot#: 2095
 Starting Material Purity: 99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL
Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

- Assay Method #1** **9977 ± 50 µg/mL**
 ICP Assay NIST SRM 3114 Lot Number: 121207

- Assay Method #2** **10024 ± 26 µg/mL**
 EDTA NIST SRM 928 Lot Number: 928

- Assay Method #3** **10007 ± 46 µg/mL**
 Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.007542	M Eu < 0.000942	O Na < 0.001434	M Se < 0.016971	M Zn < 0.005657
O Al < 0.000609	O Fe < 0.008700	M Nb < 0.000942	O Si < 0.003052	M Zr < 0.000942
M As < 0.010371	M Ga < 0.000942	M Nd < 0.000942	M Sm < 0.000942	
M Au < 0.001885	M Gd < 0.000942	M Ni < 0.003781	M Sn < 0.005657	
O B < 0.003663	M Ge < 0.005657	M Os < 0.000942	M Sr < 0.000942	
M Ba < 0.004253	M Hf < 0.000942	O P < 0.031668	M Ta < 0.000942	
M Be < 0.000942	O Hg < 0.007064	M Pb < 0.005789	M Tb < 0.000942	
M Bi < 0.000942	M Ho < 0.000942	M Pd < 0.000942	M Te < 0.004714	
O Ca < 0.002304	M In < 0.000942	M Pr < 0.000942	M Th < 0.000942	
M Cd < 0.000942	M Ir < 0.000942	M Pt < 0.000942	O Ti < 0.002801	
M Ce < 0.000942	O K < 0.000763	M Rb < 0.000942	M Tl < 0.000942	
M Co < 0.001890	M La < 0.000942	M Re < 0.000942	M Tm < 0.000942	
M Cr < 0.005657	O Li < 0.000243	i Rh <	M U < 0.000942	
M Cs < 0.000942	M Lu < 0.000942	M Ru < 0.039588	M V < 0.003771	
s Cu <	O Mg < 0.000320	O S < 0.007174	M W < 0.005657	
M Dy < 0.000942	O Mn < 0.000793	M Sb < 0.001885	M Y < 0.000942	
M Er < 0.000942	M Mo < 0.005657	M Sc < 0.000942	M Yb < 0.000942	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 Cu(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGPB10
Lot Number: S2-PB713228
Matrix: 0.5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Lead
Starting Material: Lead Nitrate
Starting Material Lot#: 2343
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL
Density: 1.015 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000310	M Eu < 0.000310	M Na < 0.001470	M Se < 0.009100	O Zn < 0.006155
O Al < 0.017098	O Fe < 0.002496	M Nb < 0.000310	O Si < 0.003761	O Zr < 0.001700
M As < 0.003100	M Ga < 0.000310	M Nd < 0.000310	M Sm < 0.000310	
M Au < 0.000910	M Gd < 0.000310	O Ni < 0.001709	M Sn < 0.001300	
O B < 0.005600	M Ge < 0.002200	M Os < 0.000310	O Sr < 0.000444	
O Ba < 0.007865	M Hf < 0.000310	O P < 0.038000	M Ta < 0.000310	
O Be < 0.000320	M Hg < 0.002200	s Pb < 0.000610	M Tb < 0.000610	
M Bi < 0.028000	M Ho < 0.000310	M Pd < 0.000610	M Te < 0.000310	
O Ca < 0.019834	M In < 0.000310	M Pr < 0.000310	M Th < 0.000310	
O Cd < 0.000630	M Ir < 0.000310	M Pt < 0.000910	O Ti < 0.005129	
M Ce < 0.004787	O K < 0.008207	M Rb < 0.006700	M Tl < 0.016000	
M Co < 0.000610	M La < 0.001900	M Re < 0.000310	M Tm < 0.000310	
O Cr < 0.001500	O Li < 0.000110	O Rh < 0.007700	M U < 0.000310	
M Cs < 0.006100	M Lu < 0.000310	M Ru < 0.001300	M V < 0.001600	
M Cu < 0.001600	O Mg < 0.003317	O S < 0.052000	M W < 0.000910	
M Dy < 0.000310	O Mn < 0.001600	O Sb < 0.015000	M Y < 0.000310	
M Er < 0.000310	M Mo < 0.000610	O Sc < 0.000630	M Yb < 0.000310	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, HF and HNO₃. Avoid H₂SO₄. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H₂O / HNO₃); Oxides (The many different Pb oxides are soluble in HNO₃ with the exception of PbO₂ which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H₂O / HNO₃); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGZN10
Lot Number: S2-ZN711249
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Zinc
Starting Material: Zinc Metal
Starting Material Lot#: 2349
Starting Material Purity: 99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9981 ± 56 µg/mL ICP Assay NIST SRM 3168a Lot Number: 120629
Assay Method #2	9987 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10002 ± 32 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.002000	M Eu < 0.000500	O Na < 0.008713	M Se < 0.048000	s Zn <
O Al < 0.011000	O Fe < 0.015467	M Nb < 0.000500	O Si < 0.007842	M Zr < 0.000500
O As < 0.012000	M Ga < 0.004900	M Nd < 0.000500	M Sm < 0.000500	
M Au < 0.006500	M Gd < 0.000500	O Ni < 0.003049	M Sn < 0.002614	
O B < 0.019000	M Ge < 0.009100	M Os < 0.000500	M Sr < 0.000500	
M Ba < 0.000500	M Hf < 0.000500	O P < 0.059000	M Ta < 0.000500	
O Be < 0.000230	O Hg < 0.003800	M Pb < 0.016774	M Tb < 0.000500	
M Bi < 0.002400	M Ho < 0.000500	M Pd < 0.001000	M Te < 0.017000	
O Ca < 0.052283	M In < 0.003500	M Pr < 0.000500	M Th < 0.000500	
O Cd < 0.000588	M Ir < 0.001000	M Pt < 0.000500	M Ti < 0.002000	
M Ce < 0.000500	O K < 0.017209	M Rb < 0.002500	M Tl < 0.000500	
M Co < 0.000653	M La < 0.000500	M Re < 0.000500	M Tm < 0.000500	
O Cr < 0.001089	O Li < 0.000230	M Rh < 0.000500	M U < 0.000500	
M Cs < 0.000500	M Lu < 0.000500	M Ru < 0.005000	M V < 0.000500	
O Cu < 0.001938	O Mg < 0.000871	O S < 0.048000	M W < 0.001000	
M Dy < 0.000500	O Mn < 0.000172	M Sb < 0.004300	M Y < 0.000500	
M Er < 0.000500	M Mo < 0.001500	O Sc < 0.000900	M Yb < 0.000500	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSE10
Lot Number: S2-SE711004
Matrix: 3% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Selenium
Starting Material: Se Metal
Starting Material Lot#: 1962
Starting Material Purity: 99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/(u_{char i}^2)))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 u_{char} = $[\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.002242	M	Eu <	0.000373	O Na	0.013654	s	Se <		O Zn	0.002374
M Al	0.004450	M	Fe	0.008478	O Nb <	0.002975	O Si	0.006249	M Zr <	0.001868	
O As <	0.022040	M	Ga <	0.000373	M Nd <	0.000373	M Sm <	0.000373			
M Au <	0.000373	M	Gd <	0.000373	O Ni	0.001843	M Sn	0.000847			
O B <	0.007714	M	Ge <	0.002616	M Os <	0.000373	M Sr <	0.001121			
M Ba <	0.001495	M	Hf <	0.000373	O P <	0.022040	M Ta <	0.000373			
M Be <	0.001495	M	Hg <	0.002240	M Pb	0.006358	M Tb <	0.006353			
M Bi <	0.000373	M	Ho <	0.000373	M Pd <	0.000373	M Te <	0.012707			
O Ca	0.006530	M	In <	0.000373	M Pr <	0.001495	M Th <	0.002990			
M Cd	0.001165	M	Ir <	0.000373	M Pt <	0.000373	M Ti <	0.003363			
M Ce <	0.000373	O K	0.001999	M Rb <	0.001868	M Tl	0.008584				
M Co <	0.000373	M La <	0.001121	M Re <	0.000373	M Tm <	0.000373				
M Cr	0.002861	O Li	0.000062	M Rh <	0.000373	M U <	0.000373				
M Cs <	0.001121	M Lu <	0.000373	M Ru <	0.001493	M V <	0.000747				
M Cu <	0.000747	O Mg	0.001156	O S	0.024591	M W <	0.002242				
M Dy <	0.000373	M Mn <	0.000373	M Sb <	0.002242	M Y <	0.000373				
M Er <	0.000373	O Mo <	0.003195	M Sc <	0.001121	M Yb <	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H₂SeO₃

Chemical Compatibility -Soluble in HCl, HNO₃,H₃PO₄, H₂SO₄ and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO₃or HNO₃ / HF); Organic Matrices (acid digestion with hot concentrated H₂SO₄ accompanied by the careful dropwise addition of H₂O₂ until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMO10
Lot Number: S2-MO706255
Matrix: H₂O
tr. NH₄OH
Value / Analyte(s): 10 000 µg/mL ea:
Molybdenum
Starting Material: Ammonium Molybdate
Starting Material Lot#: 2361
Starting Material Purity: 99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL
Density: 1.011 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000590	M Eu < 0.000300	M Na < 0.008739	M Se < 0.008000	M Zn < 0.005942
M Al < 0.005592	M Fe < 0.006500	M Nb < 0.029000	i Si < 0.001800	M Zr < 0.001800
M As < 0.002100	M Ga < 0.000300	i Nd < 0.000300	M Sm < 0.000300	
M Au < 0.000300	M Gd < 0.000300	M Ni < 0.008000	M Sn < 0.008900	
M B < 0.003300	M Ge < 0.000300	M Os < 0.000590	M Sr < 0.001747	
M Ba < 0.016778	M Hf < 0.001800	i P < 0.004200	M Ta < 0.004200	
M Be < 0.000890	M Hg < 0.003300	M Pb < 0.000300	M Tb < 0.000300	
M Bi < 0.000890	M Ho < 0.000300	M Pd < 0.001800	M Te < 0.021000	
O Ca < 0.062920	M In < 0.032000	M Pr < 0.013000	M Th < 0.000300	
O Cd < 0.026000	M Ir < 0.000300	M Pt < 0.000300	O Ti < 0.032000	
M Ce < 0.008300	M K < 1.293372	M Rb < 0.045442	M Tl < 0.012584	
M Co < 0.005942	M La < 0.000300	M Re < 0.000300	M Tm < 0.000300	
M Cr < 0.005243	O Li < 0.000594	M Rh < 0.000300	M U < 0.005300	
M Cs < 0.005243	M Lu < 0.000300	M Ru < 0.079000	M V < 0.000890	
M Cu < 0.022371	M Mg < 0.005592	i S < 0.873900	M W < 0.873900	
M Dy < 0.000300	M Mn < 0.005900	M Sb < 0.015031	M Y < 0.000300	
M Er < 0.000300	s Mo < 0.000300	M Sc < 0.001200	M Yb < 0.000300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9

[MoO₄]²⁻(chemical form as received)

Chemical Compatibility -Mo is received in a NH₄OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO₄]²⁻ is soluble in concentrated HCl [MoOCl₅]²⁻, dilute HF / HNO₃ [MoOF₅]²⁻ and basic media [MoO₄]²⁻. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO₄]²⁻ chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF₅]²⁻ for months in 1% HNO₃ / LDPE container. 1-10,000 ppm single element solutions as the [MoO₄]²⁻ chemically stable for years in 1% NH₄OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO₃ or hot dilute HCl); Oxide (soluble in HF or NH₄OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 60,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGTL10
Lot Number: T2-TL714687
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Thallium
Starting Material: TINO₃
Starting Material Lot#: 2118
Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL
Density: 1.036 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/(u_{char j}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000200	M Eu < 0.000200	O Na < 0.002489	M Se < 0.011019	O Zn < 0.002298
O Al < 0.004184	O Fe < 0.002824	M Nb < 0.000200	O Si < 0.003760	M Zr < 0.000200
M As < 0.002003	M Ga < 0.000200	M Nd < 0.000200	M Sm < 0.000200	
O Au < 0.002824	M Gd < 0.000200	M Ni < 0.001724	M Sn < 0.000601	
O B < 0.004184	M Ge < 0.000801	M Os < 0.000198	O Sr < 0.000313	
M Ba < 0.000400	M Hf < 0.000200	O P < 0.010460	M Ta < 0.000200	
O Be < 0.000104	M Hg < 0.000794	M Pb < 0.000811	M Tb < 0.000200	
M Bi < 0.005209	M Ho < 0.000200	M Pd < 0.000400	M Te < 0.005008	
O Ca < 0.002436	M In < 0.000200	M Pr < 0.000200	M Th < 0.000200	
M Cd < 0.001318	M Ir < 0.000198	M Pt < 0.000801	O Ti < 0.001255	
M Ce < 0.000200	O K < 0.006175	M Rb < 0.000200	s Tl <	
M Co < 0.000601	M La < 0.000200	M Re < 0.000200	M Tm < 0.000200	
M Cr < 0.000801	O Li < 0.000177	M Rh < 0.000200	M U < 0.000200	
M Cs < 0.003606	M Lu < 0.000200	M Ru < 0.000397	M V < 0.002203	
M Cu < 0.001001	O Mg < 0.000529	O S < 0.015690	M W < 0.000601	
M Dy < 0.000200	M Mn < 0.000801	M Sb < 0.000400	M Y < 0.000200	
M Er < 0.000200	M Mo < 0.001202	O Sc < 0.000711	M Yb < 0.000200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Ti(H₂O)₆⁺
Chemical Compatibility - Soluble in HCl, HNO₃, and H₂SO₄. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Ti Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO₃ which forms chiefly the Ti⁺ ion.); Oxide (The thalious oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt₀ followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCD10
Lot Number: S2-CD710508
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Cadmium
Starting Material: Cd Metal
Starting Material Lot#: 1953
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10010 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	10011 ± 30 µg/mL ICP Assay NIST SRM 3108 Lot Number: 130116
Assay Method #3	10003 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

O Ag < 0.003200	O Eu < 0.002500	O Na < 0.005499	M Se < 0.005700	O Zn < 0.001100
O Al < 0.008903	O Fe < 0.000602	M Nb < 0.000400	O Si < 0.016758	O Zr < 0.002600
M As < 0.003600	M Ga < 0.001200	M Nd < 0.000800	M Sm < 0.000400	
M Au < 0.000810	M Gd < 0.000400	M Ni < 0.003600	M Sn < 0.003200	
O B < 0.004189	O Ge < 0.012000	M Os < 0.000810	O Sr < 0.000330	
M Ba < 0.002400	M Hf < 0.000400	O P < 0.022000	M Ta < 0.000800	
M Be < 0.000400	M Hg < 0.001700	M Pb < 0.002400	M Tb < 0.000400	
M Bi < 0.000400	M Ho < 0.000400	M Pd < 0.001200	M Te < 0.008000	
O Ca < 0.011259	O In < 0.013000	M Pr < 0.000400	M Th < 0.000400	
s Cd < 0.000400	M Ir < 0.000410	M Pt < 0.000400	O Ti < 0.000602	
M Ce < 0.000400	O K < 0.005237	M Rb < 0.004400	M Tl < 0.000523	
M Co < 0.000400	M La < 0.000400	M Re < 0.000400	M Tm < 0.000400	
O Cr < 0.005100	O Li < 0.000054	M Rh < 0.000400	M U < 0.000400	
M Cs < 0.002400	M Lu < 0.000400	M Ru < 0.002500	M V < 0.002000	
O Cu < 0.004800	O Mg < 0.000288	O S < 0.022000	M W < 0.000400	
M Dy < 0.000400	O Mn < 0.000860	O Sb < 0.018000	M Y < 0.000400	
M Er < 0.000400	M Mo < 0.001600	O Sc < 0.000430	M Yb < 0.000400	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd₂(OH)₃⁺ and Cd(OH)₂(aq)

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃ / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (soluble in HCl or HNO₃); Ores (dissolve in HCl /HNO₃ then take to fumes with H₂SO₄. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMN10
Lot Number: S2-MN704240
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Manganese
Starting Material: Mn Metal
Starting Material Lot#: 2275
Starting Material Purity: 99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9989 ± 69 µg/mL ICP Assay NIST SRM 3132 Lot Number: 050429
Assay Method #2	10011 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10024 ± 47 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001500	M Eu < 0.000730	O Na 0.176097	M Se < 0.006600	M Zn 0.009925
O Al 0.004322	M Fe < 0.650000	M Nb < 0.000730	O Si 0.097654	M Zr < 0.000730
M As < 0.008000	M Ga 0.004322	M Nd < 0.001500	M Sm < 0.000730	
M Au < 0.000730	M Gd < 0.000730	M Ni 0.024013	M Sn < 0.002200	
M B 0.068838	M Ge < 0.004400	M Os < 0.000730	O Sr 0.000928	
M Ba < 0.001500	M Hf < 0.000730	i P <	M Ta < 0.000730	
M Be < 0.000730	M Hg < 0.002200	M Pb 0.007364	M Tb < 0.000730	
M Bi < 0.003000	M Ho < 0.000730	M Pd < 0.000730	M Te < 0.019000	
O Ca 0.062434	M In < 0.003000	M Pr < 0.000730	M Th < 0.000730	
M Cd < 0.001500	M Ir < 0.000730	M Pt < 0.000730	O Ti < 0.006500	
M Ce < 0.007300	O K 0.006403	M Rb < 0.006600	M Tl < 0.000730	
O Co 0.014728	M La < 0.003000	M Re < 0.000730	M Tm < 0.000730	
O Cr 0.272151	O Li 0.000416	M Rh < 0.003000	M U < 0.001500	
M Cs < 0.000730	M Lu < 0.000730	M Ru < 0.004400	M V < 0.000730	
O Cu 0.007684	O Mg 0.320177	i S <	M W < 0.004400	
M Dy < 0.001500	s Mn <	M Sb < 0.021000	O Y 0.001360	
M Er < 0.001500	M Mo 0.010245	O Sc < 0.004100	M Yb < 0.000730	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 Mn(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H₂SO₄ and heat to SO₃ fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16 O,37Cl18O,40Ar15 N,38Ar17O,36Ar18O 1H ,38Ar16O1H,37Cl17 O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGSB10
 Lot Number: R2-SB688559
 Matrix: 3% (v/v) HNO3
 3% (w/v) tartaric acid
 Value / Analyte(s): 10 000 µg/mL ea:
 Antimony
 Starting Material: Antimony Metal
 Starting Material Lot#: 1857
 Starting Material Purity: 99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL
Density: 1.061 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 10003 ± 41 µg/mL
 ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char} = [\sum((w_i)^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.000200	M Eu <	0.000300	O Na	0.140000	M Se <	0.007300	O Zn	0.005000
M Al	0.003200	O Fe	0.060000	M Nb <	0.000100	O Si	0.150000	O Zr <	0.006300
M As <	0.004400	M Ga <	0.000400	M Nd <	0.000100	M Sm <	0.000100		
M Au <	0.000210	M Gd <	0.000100	O Ni	0.004800	M Sn <	0.001800		
M B <	0.011000	M Ge <	0.000600	M Os <	0.000110	O Sr	0.000750		
O Ba <	0.004900	M Hf <	0.000100	O P	0.540000	M Ta	0.003300		
M Be <	0.000400	M Hg <	0.000110	M Pb <	0.000400	M Tb <	0.000100		
M Bi <	0.000200	M Ho <	0.000100	M Pd <	0.000210	M Te <	0.000600		
O Ca	0.110000	M In <	0.000100	M Pr <	0.001600	M Th <	0.000100		
M Cd <	0.000200	M Ir <	0.000110	M Pt <	0.000600	M Ti <	0.002800		
M Ce	0.006500	O K	0.020000	M Rb <	0.001000	M Tl <	0.000100		
M Co <	0.000200	O La <	0.016000	M Re <	0.000100	M Tm <	0.000100		
M Cr	0.006900	O Li <	0.000430	M Rh <	0.000300	M U <	0.000100		
M Cs <	0.000200	M Lu <	0.000100	M Ru <	0.000310	M V <	0.000800		
M Cu <	0.000600	O Mg	0.021000	n S <		M W <	0.000200		
M Dy <	0.000100	O Mn	0.001900	s Sb <		M Y <	0.000100		
M Er <	0.000100	M Mo <	0.000500	O Sc <	0.002300	M Yb <	0.000100		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility - Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) - Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in PtO followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAS10
Lot Number: T2-AS718260
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Arsenic
Starting Material: As Metal
Starting Material Lot#: 2208
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL
Density: 1.037 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.003200	M Eu < 0.000530	O Na < 0.032544	M Se < 0.006300	O Zn < 0.001952
M Al < 0.007593	O Fe < 0.001475	O Nb < 0.012000	O Si < 0.238658	O Zr < 0.004100
s As < 0.000530	M Ga < 0.000530	M Nd < 0.000530	M Sm < 0.000530	
M Au < 0.003100	M Gd < 0.000530	M Ni < 0.002100	M Sn < 0.000530	
M B < 0.026035	M Ge < 0.001600	M Os < 0.000520	M Sr < 0.000530	
M Ba < 0.000530	M Hf < 0.000530	O P < 0.043000	M Ta < 0.000530	
O Be < 0.000360	M Hg < 0.001600	M Pb < 0.002100	M Tb < 0.000530	
M Bi < 0.000530	M Ho < 0.000530	M Pd < 0.001100	M Te < 0.004700	
O Ca < 0.004339	M In < 0.023000	M Pr < 0.005300	M Th < 0.000530	
M Cd < 0.001100	M Ir < 0.000520	M Pt < 0.000530	O Ti < 0.002300	
M Ce < 0.000530	O K < 0.002061	M Rb < 0.000530	M Tl < 0.000530	
M Co < 0.000530	M La < 0.001100	M Re < 0.000530	M Tm < 0.000530	
O Cr < 0.001800	O Li < 0.000120	M Rh < 0.000530	M U < 0.000530	
M Cs < 0.005300	M Lu < 0.000530	M Ru < 0.000520	M V < 0.002700	
M Cu < 0.001600	O Mg < 0.000154	O S < 0.028205	M W < 0.012000	
M Dy < 0.000530	O Mn < 0.000154	M Sb < 0.000530	M Y < 0.000530	
M Er < 0.000530	M Mo < 0.000530	O Sc < 0.001700	M Yb < 0.000530	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3, H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphous form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powdered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37C I,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGBA10
 Lot Number: R2-BA692576
 Matrix: 2% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Barium
 Starting Material: Barium Nitrate
 Starting Material Lot#: 1969
 Starting Material Purity: 99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL
Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10018 ± 50 µg/mL ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	10023 ± 31 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	10023 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000410	O Eu < 0.005200	O Na < 0.004610	M Se < 0.003700	O Zn < 0.000658
M Al < 0.003100	O Fe < 0.015707	M Nb < 0.000210	O Si < 0.005573	M Zr < 0.001300
M As < 0.001300	M Ga < 0.000210	M Nd < 0.000210	O Sm < 0.021000	
M Au < 0.001300	M Gd < 0.000210	M Ni < 0.000810	M Sn < 0.000410	
O B < 0.005200	M Ge < 0.002500	M Os < 0.000410	O Sr < 0.003850	
s Ba < 0.000320	M Hf < 0.000810	O P < 0.026000	M Ta < 0.000410	
O Be < 0.000320	M Hg < 0.000210	M Pb < 0.002300	M Tb < 0.000210	
M Bi < 0.000210	M Ho < 0.000210	M Pd < 0.000210	M Te < 0.001900	
O Ca < 0.007093	M In < 0.000210	M Pr < 0.000210	M Th < 0.000210	
M Cd < 0.000210	M Ir < 0.000210	M Pt < 0.000210	M Ti < 0.002100	
M Ce < 0.001300	O K < 0.035467	M Rb < 0.002100	M Tl < 0.000210	
M Co < 0.000410	O La < 0.005200	M Re < 0.000210	M Tm < 0.000410	
M Cr < 0.001700	O Li < 0.000630	M Rh < 0.000210	M U < 0.000210	
M Cs < 0.003300	M Lu < 0.001700	M Ru < 0.000210	O V < 0.005200	
M Cu < 0.001300	O Mg < 0.000861	O S < 0.268539	M W < 0.000410	
M Dy < 0.000210	M Mn < 0.000410	M Sb < 0.001300	O Y < 0.005200	
M Er < 0.001300	M Mo < 0.000410	M Sc < 0.000410	M Yb < 0.001300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 Ba(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO₃ / LDPE container.

Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO₃); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent BaSO₄ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGBE10
 Lot Number: R2-BE692992
 Matrix: 6% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Beryllium
 Starting Material: Beryllium Acetate
 Starting Material Lot#: 2281
 Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL
Density: 1.128 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10042 ± 67 µg/mL ICP Assay NIST SRM 3105a Lot Number: 090514
Assay Method #2	10025 ± 51 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001100	M Eu < 0.000270	O Na < 0.040962	M Se < 0.005000	M Zn < 0.013054
O Al < 0.016205	O Fe < 0.015754	M Nb < 0.000270	O Si < 0.024307	O Zr < 0.001900
M As < 0.002900	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000520	M Gd < 0.000270	M Ni < 0.003700	M Sn < 0.000790	
M B < 0.091000	M Ge < 0.000270	M Os < 0.000260	M Sr < 0.000630	
M Ba < 0.002700	M Hf < 0.000270	O P < 0.066000	M Ta < 0.000270	
s Be < 0.000530	M Hg < 0.000520	M Pb < 0.000270	M Tb < 0.000270	
M Bi < 0.072022	M Ho < 0.000270	M Pd < 0.000520	M Te < 0.003700	
O Ca < 0.000790	M In < 0.000790	M Pr < 0.000270	M Th < 0.000270	
M Cd < 0.000270	M Ir < 0.000260	M Pt < 0.000270	O Ti < 0.000400	
M Ce < 0.000270	O K < 0.045014	M Rb < 0.000270	M Tl < 0.000790	
O Co < 0.003200	M La < 0.000270	M Re < 0.000270	M Tm < 0.000270	
O Cr < 0.001800	O Li < 0.000660	M Rh < 0.001100	M U < 0.000270	
M Cs < 0.001440	M Lu < 0.000270	M Ru < 0.000260	M V < 0.000790	
M Cu < 0.002100	O Mg < 0.016205	i S < 0.000270	M W < 0.000530	
M Dy < 0.000270	M Mn < 0.001215	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.000530	O Sc < 0.000930	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 Be(H₂O)₄+2

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO₃ / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta I(is best dissolved in diluted H₂SO₄); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO₄ fusion); Ores (H₂SO₄/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCO10
 Lot Number: R2-CO695285
 Matrix: 3% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Cobalt
 Starting Material: Co Metal
 Starting Material Lot#: 2326
 Starting Material Purity: 99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

- Assay Method #1** **10031 ± 67 µg/mL**
 ICP Assay NIST SRM 3113 Lot Number: 190630

- Assay Method #2** **10019 ± 32 µg/mL**
 EDTA NIST SRM 928 Lot Number: 928

- Assay Method #3** **10000 ± 35 µg/mL**
 Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/CRM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) X_i$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.014660	M Eu	<	0.000590	O Na	0.007534	M Se	<	0.019000	M Zn	0.003461	
M Al	<	0.024000	M Fe	0.050905	M Nb	<	0.000590	O Si	0.075340	M Zr	<	0.001200
i As	<		M Ga	<	0.000590	M Nd	<	0.000590	M Sm	<	0.000590	
M Au	<	0.004100	M Gd	<	0.000590	O Ni	0.427608	M Sn	<	0.001200		
M B	<	0.031000	M Ge	<	0.003000	M Os	<	0.000590	O Sr	<	0.000260	
M Ba	<	0.000590	M Hf	<	0.000590	n P	<		M Ta	<	0.001200	
O Be	<	0.001300	M Hg	<	0.001800	M Pb	0.003257	M Tb	<	0.000590		
M Bi	<	0.003000	M Ho	<	0.000590	M Pd	<	0.000590	M Te	<	0.005300	
O Ca	0.010588	M In	<	0.001200	M Pr	<	0.000590	M Th	<	0.000590		
M Cd	<	0.004700	M Ir	<	0.001200	M Pt	<	0.002400	M Ti	<	0.014000	
M Ce	<	0.000590	O K	0.008144	M Rb	<	0.000590	M Tl	0.002647			
s Co	<		M La	<	0.000590	M Re	<	0.000590	M Tm	<	0.000590	
M Cr	<	0.021000	O Li	<	0.000130	M Rh	<	0.000590	M U	<	0.000590	
M Cs	<	0.002400	M Lu	<	0.000590	M Ru	<	0.007100	O V	<	0.000880	
M Cu	0.189369	O Mg	0.001893	n S	<			M W	<	0.000590		
M Dy	<	0.000590	M Mn	<	0.001800	M Sb	<	0.003600	M Y	<	0.000590	
M Er	<	0.000590	M Mo	<	0.002400	O Sc	<	0.001600	M Yb	<	0.000590	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 Co(H₂O)₆²⁺

Chemical Compatibility - Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAG10
Lot Number: S2-AG712977
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Silver
Starting Material: Ag Shot
Starting Material Lot#: 2289
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10051 ± 52 µg/mL ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	10051 ± 19 µg/mL Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	10049 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s Ag <	M Eu <	0.000260	O Na	0.003811	M Se <	0.003900	O Zn	0.048146	
M Al	0.002688	O Fe	0.006419	M Nb <	0.000260	O Si	0.005215	M Zr <	0.000260
M As <	0.001100	M Ga <	0.000260	M Nd <	0.000260	M Sm <	0.000260		
M Au <	0.000260	M Gd <	0.000260	O Ni	0.001765	M Sn	0.020060		
O B <	0.004300	M Ge <	0.002300	M Os <	0.001100	O Sr <	0.000110		
M Ba <	0.000520	M Hf <	0.000260	O P <	0.017000	M Ta <	0.000260		
O Be <	0.001100	M Hg <	0.000770	M Pb <	0.003600	M Tb <	0.000260		
M Bi	0.004814	M Ho <	0.000260	M Pd	0.044134	M Te <	0.009000		
O Ca	0.005215	M In	0.003691	M Pr <	0.000260	M Th <	0.000260		
M Cd <	0.000260	M Ir <	0.000520	M Pt <	0.001100	O Ti <	0.000440		
M Ce <	0.002100	O K <	0.008700	M Rb <	0.001100	M Tl <	0.004100		
O Co <	0.000330	M La <	0.000260	M Re <	0.000260	M Tm <	0.000260		
O Cr <	0.002500	O Li <	0.000110	M Rh <	0.000520	M U <	0.000260		
M Cs <	0.002600	M Lu <	0.000260	M Ru <	0.000260	M V <	0.000260		
O Cu	0.357085	O Mg	0.001203	O S <	0.017000	M W <	0.000260		
M Dy <	0.000260	O Mn <	0.000220	M Sb <	0.014000	M Y <	0.000260		
M Er <	0.000260	M Mo <	0.000260	O Sc <	0.000220	M Yb <	0.000260		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 Ag(H₂O)₆⁺
Chemical Compatibility - Stable in HNO₃, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [AgCl_x1-x] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite, bromide, chloride, iodide, carbonate, chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ag Containing Samples (Preparation and Solution) - Metal (Soluble in HNO₃); Oxides (Soluble in HNO₃); Ores (Digestion with conc. HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCR(3)10
Lot Number: S2-CR709784
Matrix: 10% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Chromium
Starting Material: Cr Metal
Starting Material Lot#: 2328
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL
Density: 1.072 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/(u_{char i}^2)))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.001700	M	Eu <	0.003400	O	Na	0.090372	M	Se <	0.012000	O	Zn <	0.006100
M Al	0.034916	O	Fe	0.246471	M	Nb <	0.017000	n	Si <		M	Zr <	0.007800
M As <	0.028000	O	Ga <	0.013000	M	Nd <	0.013000	M	Sm <	0.006900			
M Au <	0.001700	M	Gd <	0.000560	M	Ni	0.016020	M	Sn	0.006983			
O B <	0.025000	O	Ge <	0.014000	M	Os <	0.000560	M	Sr	0.006367			
M Ba <	0.008900	M	Hf <	0.000560	i	P <		M	Ta <	0.000560			
M Be <	0.013000	M	Hg <	0.001700	M	Pb	0.010064	M	Tb <	0.000560			
M Bi <	0.002300	M	Ho <	0.000560	M	Pd <	0.021000	M	Te <	0.010000			
O Ca	0.075995	M	In <	0.000560	M	Pr <	0.001700	M	Th <	0.000560			
M Cd <	0.000560	M	Ir <	0.000560	M	Pt <	0.001200	O	Ti	0.013555			
M Ce <	0.001200	O	K	0.043132	i	Rb <		M	Tl <	0.000560			
M Co <	0.002600	M	La <	0.001200	M	Re <	0.001200	O	Tm <	0.013000			
s Cr <		O	Li	0.000390	M	Rh <	0.095000	M	U <	0.000560			
M Cs <	0.007800	M	Lu <	0.000560	M	Ru <	0.087000	O	V	0.014993			
O Cu	0.007599	O	Mg	0.000883	i	S <		M	W <	0.049000			
M Dy <	0.000560	M	Mn	0.008626	M	Sb <	0.003400	M	Y <	0.001700			
M Er <	0.019000	M	Mo <	0.032000	M	Sc	0.003080	M	Yb <	0.000560			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 Cr(H₂O)₆3+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cr₃ Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with KHSO₄ and extraction with hot KCl. The residue fused with Na₂CO₃ and KClO₃, 3:1. B. Fusion with NaKSO₄ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na₂O₂ or NaOH and KNO₃ or NaOH and Na₂O₂. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGNI10
 Lot Number: P2-NI686384
 Matrix: 3% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Nickel
 Starting Material: Ni Metal
 Starting Material Lot#: 2277 and 2282
 Starting Material Purity: 99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL
Density: 1.038 g/mL (measured at 20 ± 4 °C)

Assay Information:

- Assay Method #1** **9971 ± 54 µg/mL**
 ICP Assay NIST SRM 3136 Lot Number: 120619

- Assay Method #2** **9970 ± 32 µg/mL**
 EDTA NIST SRM 928 Lot Number: 928

- Assay Method #3** **9993 ± 33 µg/mL**
 Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.002606	M Eu	<	0.001100	O Na	0.004965	O Se	<	0.067000	M Zn	0.006578	
M Al	<	0.013000	O Fe	0.018618	M Nb	<	0.001100	O Si	0.010923	M Zr	<	0.001100
O As	<	0.067000	M Ga	<	0.001100	M Nd	<	0.001100	M Sm	<	0.001100	
M Au	<	0.002100	M Gd	<	0.001100	s Ni	<		M Sn	<	0.016000	
M B	<	0.017000	M Ge	<	0.004200	M Os	0.002110	O Sr	<	0.000940		
M Ba	<	0.001100	M Hf	<	0.001100	i P	<		M Ta	<	0.001100	
O Be	<	0.000410	M Hg	0.014895	M Pb	0.006578	M Tb	<	0.001100			
M Bi	<	0.004200	M Ho	<	0.001100	M Pd	<	0.001100	M Te	<	0.015000	
O Ca	0.003351	M In	<	0.001100	M Pr	<	0.001100	M Th	<	0.001100		
M Cd	0.001365	M Ir	0.004716	M Pt	<	0.001100	M Ti	<	0.004200			
M Ce	<	0.001100	O K	0.004716	M Rb	<	0.001100	M Tl	<	0.001100		
O Co	0.017377	M La	<	0.001100	M Re	0.001737	M Tm	<	0.001100			
O Cr	<	0.006700	O Li	<	0.000140	M Rh	<	0.006300	M U	<	0.001100	
M Cs	<	0.007300	M Lu	<	0.001100	M Ru	<	0.019000	M V	<	0.002100	
M Cu	0.004096	O Mg	0.000372	i S	<			M W	<	0.006300		
M Dy	<	0.001100	O Mn	<	0.001900	M Sb	0.005833	O Y	<	0.000540		
M Er	<	0.001100	M Mo	<	0.008400	M Sc	<	0.002100	M Yb	<	0.001100	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H₂O)₆²⁺
Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGV10
Lot Number: S2-V711005
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Vanadium
Starting Material: Vanadium Pentoxide
Starting Material Lot#: 1782
Starting Material Purity: 99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL
Density: 1.104 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000110	M Eu < 0.000110	O Na 0.120000	M Se < 0.009400	M Zn 0.009400
O Al 0.120000	O Fe 0.460000	M Nb < 0.001300	O Si 0.270000	M Zr < 0.002900
M As < 0.000210	M Ga < 0.009300	M Nd < 0.000610	M Sm < 0.000110	
M Au < 0.004700	M Gd < 0.000110	M Ni 0.012000	M Sn 0.003900	
M B 0.051000	M Ge < 0.000410	M Os < 0.000110	O Sr 0.007100	
M Ba 0.003600	M Hf < 0.000110	O P < 0.034000	M Ta < 0.000110	
O Be < 0.000560	M Hg < 0.000410	M Pb 0.001400	M Tb < 0.000110	
M Bi < 0.000210	M Ho < 0.000110	M Pd < 0.000410	M Te < 0.000110	
O Ca 0.730000	M In < 0.000110	M Pr < 0.000110	M Th < 0.000210	
M Cd < 0.000610	M Ir < 0.000110	M Pt < 0.000110	M Ti 0.017000	
M Ce < 0.000610	M K 0.052000	M Rb < 0.000310	M Tl < 0.000110	
M Co < 0.001300	M La < 0.000410	M Re 0.001700	M Tm < 0.000110	
O Cr 0.170000	M Li < 0.000810	M Rh < 0.000110	M U < 0.000410	
M Cs 0.005600	M Lu < 0.000110	M Ru < 0.000110	s V <	
M Cu < 0.001300	M Mg 0.053000	i S <	M W 0.002000	
M Dy < 0.000110	M Mn 0.007900	M Sb 0.078000	M Y < 0.000110	
M Er < 0.000110	M Mo 0.094000	M Sc < 0.000410	M Yb < 0.000110	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H₂V₁₀O₂₈4-

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄, HF, H₃PO₄ and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in NiO or Na₂CO₃ / KNO₃); Oxides (V₂O₃ - use HCl, V₂O₄ - use HCl or HNO₃, V₂O₅ - use concentrated acids); Ores (Na₂CO₃ / KNO₃ in PtO caution - nitrates attack PtO followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V₂O₅ above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAL10
Lot Number: T2-AL716102
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Aluminum
Starting Material: Aluminum Nitrate Nonahydrate
Starting Material Lot#: 2460
Starting Material Purity: 99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL
Density: 1.087 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10059 ± 40 µg/mL ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	10044 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10049 ± 35 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.002100	M Eu < 0.002100	O Na 0.352819	M Se < 0.005200	M Zn 0.006018
s Al < 0.002100	O Fe 0.074714	M Nb < 0.000520	O Si 0.017848	O Zr 0.004358
M As 0.008716	O Ga 0.112072	M Nd < 0.000520	M Sm < 0.000520	
M Au < 0.008400	M Gd < 0.001100	O Ni < 0.006000	M Sn 0.000747	
O B < 0.014000	M Ge < 0.005200	M Os < 0.000650	O Sr 0.000518	
O Ba 0.012867	M Hf < 0.004100	n P < 0.000520	M Ta < 0.000520	
O Be < 0.000270	M Hg < 0.002000	M Pb 0.002282	M Tb < 0.000520	
M Bi 0.001930	M Ho < 0.000520	M Pd < 0.000520	M Te < 0.001100	
O Ca 0.076790	M In < 0.002100	M Pr < 0.000520	M Th < 0.000520	
M Cd < 0.000520	M Ir < 0.000650	M Pt < 0.000520	O Ti 0.001930	
M Ce < 0.001100	O K 0.043583	M Rb < 0.000520	M Tl < 0.000520	
O Co < 0.005400	M La < 0.002100	M Re < 0.000520	M Tm < 0.000520	
O Cr 0.006018	O Li 0.000112	M Rh < 0.000520	M U < 0.000520	
M Cs 0.000643	M Lu < 0.000520	M Ru < 0.002000	M V 0.001286	
O Cu < 0.008300	O Mg 0.068488	i S < 0.000520	M W < 0.009800	
M Dy < 0.002100	O Mn 0.000913	M Sb < 0.003100	M Y < 0.001100	
M Er < 0.000520	M Mo 0.005396	O Sc < 0.000950	M Yb < 0.000520	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H₂O)₆+3

Chemical Compatibility -Soluble in HCl, HNO₃, vF and v₂SO₄. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)₄(H₂O)₂⁻ species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO₃); a- Al₂O₃ (Na₂CO₃ fusion in PtO);

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGK10
Lot Number: S2-K711973
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Potassium
Starting Material: KNO₃
Starting Material Lot#: 2313
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.024 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9987 ± 24 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	10004 ± 84 µg/mL ICP Assay NIST SRM 3141a Lot Number: 140813
Assay Method #3	10007 ± 45 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.001400	M Eu < 0.000660	O Na < 0.246220	M Se < 0.007900	O Zn < 0.018056
O Al < 0.001592	O Fe < 0.005909	M Nb < 0.000660	O Si < 0.011490	O Zr < 0.001600
M As < 0.005300	M Ga < 0.000660	M Nd < 0.000660	M Sm < 0.000660	
M Au < 0.002000	M Gd < 0.000660	O Ni < 0.004900	M Sn < 0.000660	
O B < 0.005600	M Ge < 0.002000	M Os < 0.003300	O Sr < 0.000055	
O Ba < 0.000860	M Hf < 0.000660	O P < 0.032000	M Ta < 0.000660	
O Be < 0.000082	M Hg < 0.002000	M Pb < 0.002300	M Tb < 0.000660	
M Bi < 0.006600	M Ho < 0.000660	M Pd < 0.000660	M Te < 0.017000	
O Ca < 0.031187	M In < 0.000660	M Pr < 0.000660	M Th < 0.000660	
O Cd < 0.000450	M Ir < 0.000660	M Pt < 0.002700	M Ti < 0.000660	
M Ce < 0.000660	s K <	M Rb < 0.476026	M Tl < 0.000660	
O Co < 0.000780	M La < 0.000660	M Re < 0.000660	M Tm < 0.000660	
O Cr < 0.000541	O Li < 0.000084	M Rh < 0.000660	M U < 0.000660	
M Cs < 0.000660	M Lu < 0.000660	M Ru < 0.000660	O V < 0.001100	
M Cu < 0.002700	O Mg < 0.006237	O S < 0.027905	M W < 0.000660	
M Dy < 0.000660	O Mn < 0.000476	M Sb < 0.000660	M Y < 0.000660	
M Er < 0.000660	M Mo < 0.000660	O Sc < 0.000340	O Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Avoid use of HClO₄ due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO₄⁻.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMG10
Lot Number: S2-MG704239
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Magnesium
Starting Material: Magnesium Metal
Starting Material Lot#: 2168
Starting Material Purity: 99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL
Density: 1.053 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10022 ± 62 µg/mL ICP Assay NIST SRM 3131a Lot Number: 140110
Assay Method #2	10078 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10033 ± 26 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i^2)(u_{char\ i}^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O Ag	0.002106	M	Eu <	0.000910	O Na	0.071075	O Se <	0.048000	O Zn	0.003299
M Al	0.003553	M	Fe	0.002538	M Nb <	0.000460	O Si <	0.032000	O Zr <	0.002700
M As <	0.001400	M	Ga <	0.000460	M Nd <	0.000910	M Sm <	0.000460		
M Au <	0.001400	M	Gd <	0.000460	O Ni <	0.001600	M Sn <	0.002300		
O B	0.006853	M	Ge <	0.001400	M Os <	0.000460	O Sr	0.000279		
O Ba	0.000964	M	Hf <	0.000460	O P	0.015230	M Ta <	0.000460		
O Be <	0.000120	M	Hg <	0.000460	M Pb <	0.000460	M Tb <	0.000460		
M Bi <	0.000460	M	Ho <	0.000460	M Pd <	0.003200	M Te <	0.007300		
O Ca	0.053306	M	In <	0.000460	M Pr <	0.000460	M Th <	0.000460		
O Cd <	0.000360	M	Ir <	0.000460	M Pt <	0.001900	O Ti <	0.001700		
M Ce <	0.002300	M	K	0.048229	M Rb	0.002411	M Tl	0.003046		
M Co <	0.000910	M	La <	0.002800	M Re <	0.000460	M Tm <	0.000460		
M Cr <	0.002300	O	Li	0.027922	M Rh <	0.000460	M U <	0.000460		
M Cs	0.001040	M	Lu <	0.000460	M Ru <	0.000460	M V <	0.000460		
O Cu <	0.003000	s	Mg <		O S <	0.190000	M W <	0.000460		
M Dy <	0.000460	O	Mn	0.015230	M Sb	0.020814	O Y <	0.000720		
M Er <	0.000460	M	Mo <	0.000910	O Sc <	0.000480	M Yb <	0.000460		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H₂O)₆+2

Chemical Compatibility -Soluble in HCl, HNO₃, and H₂SO₄ avoid HF, H₃PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCA10
Lot Number: T2-CA716103
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Calcium
Starting Material: CaCO₃
Starting Material Lot#: 2472
Starting Material Purity: 99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL
Density: 1.039 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10005 ± 45 µg/mL ICP Assay NIST SRM 3109a Lot Number: 130213
Assay Method #2	10005 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10005 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001200	M Eu < 0.001200	O Na < 0.006112	M Se < 0.024000	M Zn < 0.005362
M Al < 0.065419	O Fe < 0.009115	M Nb < 0.001200	O Si < 0.139417	O Zr < 0.006700
O As < 0.013000	M Ga < 0.015000	M Nd < 0.020000	M Sm < 0.001200	
M Au < 0.017000	M Gd < 0.004800	O Ni < 0.000793	M Sn < 0.003600	
O B < 0.001179	M Ge < 0.003600	M Os < 0.001200	M Sr < 0.081505	
O Ba < 0.002788	M Hf < 0.001200	O P < 0.041000	M Ta < 0.001200	
O Be < 0.000410	M Hg < 0.004800	M Pb < 0.001608	M Tb < 0.001200	
M Bi < 0.001608	M Ho < 0.001200	M Pd < 0.001200	M Te < 0.003600	
s Ca <	M In < 0.001200	M Pr < 0.000257	M Th < 0.001200	
O Cd < 0.001300	M Ir < 0.001200	M Pt < 0.003600	O Ti < 0.001900	
M Ce < 0.001029	O K < 0.009759	M Rb < 0.001200	M Tl < 0.001200	
O Co < 0.000418	M La < 0.001823	M Re < 0.001200	M Tm < 0.001200	
O Cr < 0.003324	O Li < 0.007300	M Rh < 0.001200	M U < 0.002144	
M Cs < 0.007399	M Lu < 0.000128	M Ru < 0.001200	M V < 0.001286	
O Cu < 0.011000	M Mg < 1.286934	O S < 0.055767	O W < 0.024000	
M Dy < 0.002400	O Mn < 0.004611	M Sb < 0.009600	O Y < 0.000536	
M Er < 0.002400	M Mo < 0.003539	O Sc < 0.001400	M Yb < 0.001200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H₂O)₆+2

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₂SO₄, vF, v3PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Ca Containing Samples)Preparation and Solution -Metal (best dissolved in diluted HNO₃); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO₂). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO₃. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na₂CO₃ followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGNA10
Lot Number: T2-NA717221
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Sodium
Starting Material: Na₂CO₃
Starting Material Lot#: 2358 and 2453
Starting Material Purity: 99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL
Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9974 ± 18 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	9977 ± 34 µg/mL ICP Assay NIST SRM 3152a Lot Number: 200413
Assay Method #3	9987 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000930	M Eu < 0.000930	s Na <	M Se < 0.003800	O Zn < 0.000138
M Al < 0.004409	O Fe < 0.002393	M Nb < 0.000930	O Si < 0.056696	O Zr < 0.003200
O As < 0.023000	M Ga < 0.000930	M Nd < 0.000930	M Sm < 0.000930	
O Au < 0.004100	M Gd < 0.000930	O Ni < 0.003000	M Sn < 0.002800	
O B < 0.001385	M Ge < 0.004700	M Os < 0.000930	O Sr < 0.000251	
M Ba < 0.004031	M Hf < 0.000930	O P < 0.010205	M Ta < 0.000930	
O Be < 0.000130	M Hg < 0.000930	M Pb < 0.000930	M Tb < 0.000930	
M Bi < 0.000930	M Ho < 0.000930	M Pd < 0.000930	M Te < 0.001900	
O Ca < 0.176388	M In < 0.000930	M Pr < 0.000930	M Th < 0.000352	
O Cd < 0.000860	M Ir < 0.000930	M Pt < 0.000930	O Ti < 0.000592	
M Ce < 0.001900	O K < 0.302380	M Rb < 0.000930	M Tl < 0.000930	
O Co < 0.001800	O La < 0.002100	M Re < 0.000930	M Tm < 0.000930	
M Cr < 0.002800	O Li < 0.000031	M Rh < 0.000930	M U < 0.000930	
M Cs < 0.000930	M Lu < 0.000930	M Ru < 0.001900	O V < 0.001600	
O Cu < 0.003900	O Mg < 0.026458	O S < 0.040317	O W < 0.028000	
M Dy < 0.000930	O Mn < 0.000740	M Sb < 0.000930	O Y < 0.000860	
M Er < 0.000930	O Mo < 0.003600	O Sc < 0.000610	O Yb < 0.000250	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGU1
Lot Number: S2-U707914
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Uranium
Starting Material: Uranyl Nitrate Hexahydrate
Starting Material Lot#: P2-2322
Starting Material Purity: 99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL
Density: 1.010 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000270	M Eu < 0.000270	M Na < 0.011000	M Se < 0.009300	M Zn < 0.002358
M Al < 0.011000	M Fe < 0.003222	M Nb < 0.000270	M Si < 0.160000	M Zr < 0.001100
M As < 0.002400	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000270	M Gd < 0.000270	M Ni < 0.020000	M Sn < 0.011000	
M B < 0.000270	M Ge < 0.000800	M Os < 0.001900	M Sr < 0.000270	
M Ba < 0.003800	M Hf < 0.000270	i P <	M Ta < 0.000270	
M Be < 0.000270	M Hg < 0.000540	M Pb < 0.002200	M Tb < 0.000270	
M Bi < 0.000270	M Ho < 0.000270	M Pd < 0.000540	M Te < 0.003800	
M Ca < 0.140000	M In < 0.000270	M Pr < 0.000270	M Th < 0.000129	
M Cd < 0.000270	M Ir < 0.000270	M Pt < 0.000270	M Ti < 0.002700	
M Ce < 0.000540	O K < 0.250000	M Rb < 0.000800	M Tl < 0.000270	
M Co < 0.000800	M La < 0.000117	M Re < 0.064000	M Tm < 0.000270	
M Cr < 0.000943	M Li < 0.003000	M Rh < 0.000270	s U <	
M Cs < 0.000106	M Lu < 0.000270	M Ru < 0.000540	M V < 0.000540	
M Cu < 0.001100	M Mg < 0.003000	i S <	M W < 0.000540	
M Dy < 0.000270	M Mn < 0.006900	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.006400	M Sc < 0.000540	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO₂²⁺(uranyl)

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₃PO₄. H₂SO₄ and HF matrices should not be a problem depending upon [U]. Although the UO₂²⁺ ion is distinctly basic, any U+4 will precipitate in basic media. UO₂²⁺salts are generally soluble in water and UO₂²⁺ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF₄ and UF₆ are water soluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO₃); Oxide (Soluble in HNO₃); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO₃. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H₂SO₄.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: AR-ICVMS-2
Lot Number: T2-MEB719895
Matrix: 3% (v/v) HNO3
tr. HF
Value / Analyte(s): 2.5 µg/mL ea:
Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.499 ± 0.015 µg/mL	Molybdenum, Mo	2.500 ± 0.017 µg/mL

Density: 1.014 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i})^2 / (\sum(1/(u_{char\ i})^2))$$

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	AR-ICVMS-3	
Lot Number:	T2-MEB719896	
Matrix:	7% (v/v) HNO ₃	
Value / Analyte(s):	250 µg/mL ea:	
	Aluminum,	Calcium,
	Iron,	Potassium,
	Magnesium,	Sodium,
	4 µg/mL ea:	
	Selenium,	
	2.5 µg/mL ea:	
	Thorium,	Thallium,
	Uranium,	Vanadium,
	Zinc,	Manganese,
	Cadmium,	Cobalt,
	Chromium,	Copper,
	Arsenic,	Barium,
	Beryllium,	Nickel,
	Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } j}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: AR-6020ICS-0A10
 Lot Number: T2-MEB719898
 Matrix: 1.4% (v/v) HNO3
 Value / Analyte(s):
 1 000 µg/mL ea:
 Chloride,
 200 µg/mL ea:
 Carbon,
 100 µg/mL ea:
 Calcium, Aluminum,
 Iron, Potassium,
 Magnesium, Sodium,
 Phosphorus, Sulfur,
 2 µg/mL ea:
 Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.4 µg/mL	Calcium, Ca	100.0 ± 0.5 µg/mL
Carbon, C	200.1 ± 0.5 µg/mL	Chloride, Cl	1 000 ± 5 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Magnesium, Mg	100.0 ± 0.5 µg/mL
Molybdenum, Mo	2.001 ± 0.014 µg/mL	Phosphorus, P	100.0 ± 0.6 µg/mL
Potassium, K	100.0 ± 0.5 µg/mL	Sodium, Na	100.0 ± 0.5 µg/mL
Sulfur, S	100.0 ± 0.5 µg/mL	Titanium, Ti	2.001 ± 0.015 µg/mL

Density: 1.009 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SS1236

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-02 A SDG: 23B0229
 Sampled: 02/08/23 11:28 Prepared: 03/07/23 15:55 File ID: SMM 03-08-23-051
 % Solids: 55.01 Preparation: SMM EPA 7471B Analyzed: 03/08/23 14:18
 Batch: BLC0077 Sequence: SLC0108 Initial/Final: 0.236 g Wet / 50 mL
 Instrument: HYDRA Calibration: GC00025

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.136	1	0.00809	0.0385	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SS1237

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-03 A SDG: 23B0229
 Sampled: 02/08/23 11:52 Prepared: 03/07/23 15:55 File ID: SMM 03-08-23-052
 % Solids: 53.14 Preparation: SMM EPA 7471B Analyzed: 03/08/23 14:20
 Batch: BLC0077 Sequence: SLC0108 Initial/Final: 0.229 g Wet / 50 mL
 Instrument: HYDRA Calibration: GC00025

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.159	1	0.00863	0.0411	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SS1150

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-04 A SDG: 23B0229
 Sampled: 02/08/23 12:11 Prepared: 03/07/23 15:55 File ID: SMM 03-08-23-053
 % Solids: 51.84 Preparation: SMM EPA 7471B Analyzed: 03/08/23 14:22
 Batch: BLC0077 Sequence: SLC0108 Initial/Final: 0.259 g Wet / 50 mL
 Instrument: HYDRA Calibration: GC00025

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.156	1	0.00782	0.0372	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SS1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-05 D SDG: 23B0229
 Sampled: 02/08/23 12:45 Prepared: 03/07/23 15:55 File ID: SMM 03-08-23-054
 % Solids: 46.84 Preparation: SMM EPA 7471B Analyzed: 03/08/23 14:25
 Batch: BLC0077 Sequence: SLC0108 Initial/Final: 0.234 g Wet / 50 mL
 Instrument: HYDRA Calibration: GC00025

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.298	1	0.00958	0.0456	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-06 A SDG: 23B0229
 Sampled: 02/08/23 13:30 Prepared: 03/07/23 15:55 File ID: SMM 03-08-23-055
 % Solids: 49.29 Preparation: SMM EPA 7471B Analyzed: 03/08/23 14:27
 Batch: BLC0077 Sequence: SLC0108 Initial/Final: 0.228 g Wet / 50 mL
 Instrument: HYDRA Calibration: GC00025

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.278	1	0.00934	0.0445	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1013

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-08 A SDG: 23B0229
 Sampled: 02/08/23 15:25 Prepared: 03/07/23 15:55 File ID: SMM 03-08-23-056
 % Solids: 51.39 Preparation: SMM EPA 7471B Analyzed: 03/08/23 14:29
 Batch: BLC0077 Sequence: SLC0108 Initial/Final: 0.22 g Wet / 50 mL
 Instrument: HYDRA Calibration: GC00025

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.282	1	0.00929	0.0442	



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SUM

Balance ID: BAL10

Matrix: SOIL

Analyst: AP

Block ID: 9

Date: 03/07/23

Bath Temp: 78C

Start Time: 1436

End Time: 1535

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) Volume (mL)	Final Volume (mL)	# KMnO ₄ Aliquots	CLP	Comments
23A88-06	D		0.252	50			
-07			0.209				
-08			0.227				
-09			0.224				
-10			0.230				
-11			0.227				
-12			0.230				
-13			0.287				
-14			0.233				
↓ -15	↓		0.253				
23B229-02	A		0.236				
-03	↓		0.229				
-04	↓		0.259				
-05	D		0.234				
-06	A		0.228				
↓ -08	↓		0.220				
BLC0077-blk	—		—				
-bs	—		—				23A88-06
-dup	—		0.254				
-MS	—		0.256				
-MSD	—		0.252				
↓ -SPM	—		0.202				
							AP 3/3/23

Chemical/Reagent ID:

HNO₃: L492

H₂SO₄: L922

HCl: —

5% K₂S₂O₈: L437

5% KMnO₄: L11727

Digest Tube Lot: 2208065 (1)

(1) 2210117

5037F



Form I
METHOD BLANK DATA SHEET
EPA 7471B
Total Metals

Blank

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLC0077

Laboratory ID: BLC0077-BLK1

Prepared: 03/07/23 15:55

Matrix: Solid

Preparation: SMM EPA 7471B

Analyzed: 03/08/23 12:35

Sequence: SLC0108

Calibration: GC00025

Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U



STANDARD REFERENCE MATERIAL RECOVERY
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLC0077-SRM1

Batch: BLC0077

Initial/Final: 0.202 g / 50 mL

Preparation: SMM EPA 7471B

Analyzed: 03/08/2023 14:39

Standard ID: K008376

Expires: 04/20/2025

Standard Lot#: D112-540

Description: Metals In Soil

ANALYTE	TRUE (mg/kg wet)	FOUND (mg/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Mercury	3.3100	3.74	0.0520	0.248	D	113	86.1 - 139.9

* Values outside of QC limits



INITIAL CALIBRATION DATA

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00025

Instrument: HYDRA

Calibration Date: 03/08/2023 15:00

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	2.021E+07	0.0005	8768000	0.001	7082000	0.002	6281000	0.005	5708800

Sample ID	Mean	Units	Del	Date/Method
SEQ-CAL1	1610	PPB		08 Mar 2023 11:10:43ARI 5 ppb (NO 0.05)
SEQ-CAL2	2201	PPB		08 Mar 2023 11:13:05ARI 5 ppb (NO 0.05)
SEQ-CAL3	4550	PPB		08 Mar 2023 11:15:26ARI 5 ppb (NO 0.05)
SEQ-CAL4	7637	PPB		08 Mar 2023 11:17:47ARI 5 ppb (NO 0.05)
SEQ-CAL5	13485	PPB		08 Mar 2023 11:20:07ARI 5 ppb (NO 0.05)
SEQ-CAL6	30437	PPB		08 Mar 2023 11:22:27ARI 5 ppb (NO 0.05)
SEQ-ICV	103.4% 4.1365	PPB ✓		08 Mar 2023 11:39:45ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0388	PPB ✓		08 Mar 2023 11:42:03ARI 5 ppb (NO 0.05)
SEQ-CRL	74.3% 0.0743	PPB ✓		08 Mar 2023 11:44:25ARI 5 ppb (NO 0.05)
SEQ-CCV	102.3% 4.0936	PPB ✓		08 Mar 2023 11:46:46ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0378	PPB ✓		08 Mar 2023 11:49:04ARI 5 ppb (NO 0.05)
BLC0036-BLK1	-0.2931	PPB X		08 Mar 2023 11:51:26ARI 5 ppb (NO 0.05)
BLC0036-BS1	1.5445	PPB X		08 Mar 2023 11:53:45ARI 5 ppb (NO 0.05)
SEQ-CCV	(L)-7.5% -0.2983	PPB ✓		08 Mar 2023 11:56:04ARI 5 ppb (NO 0.05)
SEQ-CAL1	1347	PPB		08 Mar 2023 12:00:14ARI 5 ppb (NO 0.05)
SEQ-CAL2	2021	PPB		08 Mar 2023 12:02:35ARI 5 ppb (NO 0.05)
SEQ-CAL3	4384	PPB		08 Mar 2023 12:04:56ARI 5 ppb (NO 0.05)
SEQ-CAL4	7082	PPB		08 Mar 2023 12:07:17ARI 5 ppb (NO 0.05)
SEQ-CAL5	12562	PPB		08 Mar 2023 12:09:37ARI 5 ppb (NO 0.05)
SEQ-CAL6	28544	PPB		08 Mar 2023 12:11:57ARI 5 ppb (NO 0.05)
SEQ-ICV	106.8% 4.2729	PPB ✓		08 Mar 2023 12:14:45ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0394	PPB ✓		08 Mar 2023 12:17:03ARI 5 ppb (NO 0.05)
SEQ-CRL	79.4% 0.0794	PPB ✓		08 Mar 2023 12:19:25ARI 5 ppb (NO 0.05)
SEQ-CCV	109.0% 4.3582	PPB ✓		08 Mar 2023 12:21:46ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0426	PPB ✓		08 Mar 2023 12:24:04ARI 5 ppb (NO 0.05)
BLC0036-BLK1	-0.2785	PPB X		08 Mar 2023 12:26:26ARI 5 ppb (NO 0.05)
BLC0036-BS1	1.6600	PPB ✓		08 Mar 2023 12:28:45ARI 5 ppb (NO 0.05)
BLC0072-BLK1	-0.2845	PPB ✓		08 Mar 2023 12:31:04ARI 5 ppb (NO 0.05)
BLC0072-BS1	1.8532	PPB ✓		08 Mar 2023 12:33:22ARI 5 ppb (NO 0.05)
BLC0077-BLK1	-0.0010	PPB ✓		08 Mar 2023 12:35:42ARI 5 ppb (NO 0.05)
BLC0077-BS1	2.0486	PPB ✓		08 Mar 2023 12:38:00ARI 5 ppb (NO 0.05)
SEQ-CCV	107.5% 4.3002	PPB ✓		08 Mar 2023 12:40:20ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0177	PPB ✓		08 Mar 2023 12:42:38ARI 5 ppb (NO 0.05)
SEQ-CCV	108.5% 4.3409	PPB ✓		08 Mar 2023 13:38:34ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0220	PPB ✓		08 Mar 2023 13:40:52ARI 5 ppb (NO 0.05)
23A0088-06	0.3914	PPB		08 Mar 2023 13:43:14ARI 5 ppb (NO 0.05)
BLC0077-DUP1	0.4773	PPB		08 Mar 2023 13:45:33ARI 5 ppb (NO 0.05)
BLC0077-MS1	1.1097	PPB X		08 Mar 2023 13:47:52ARI 5 ppb (NO 0.05)
BLC0077-MSD1	1.6005	PPB ✓		08 Mar 2023 13:50:10ARI 5 ppb (NO 0.05)
23A0088-07	0.4419	PPB		08 Mar 2023 13:52:29ARI 5 ppb (NO 0.05)
23A0088-08	0.6162	PPB		08 Mar 2023 13:54:49ARI 5 ppb (NO 0.05)
23A0088-09	0.5707	PPB		08 Mar 2023 13:57:08ARI 5 ppb (NO 0.05)
23A0088-10	0.3664	PPB		08 Mar 2023 13:59:28ARI 5 ppb (NO 0.05)
23A0088-11	0.4654	PPB		08 Mar 2023 14:01:48ARI 5 ppb (NO 0.05)
23A0088-12	0.4619	PPB		08 Mar 2023 14:04:08ARI 5 ppb (NO 0.05)
SEQ-CCV	107.8% 4.3120	PPB ✓		08 Mar 2023 14:06:29ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0229	PPB ✓		08 Mar 2023 14:08:47ARI 5 ppb (NO 0.05)
23A0088-13	0.5143	PPB		08 Mar 2023 14:11:09ARI 5 ppb (NO 0.05)
23A0088-14	0.4253	PPB		08 Mar 2023 14:13:30ARI 5 ppb (NO 0.05)
23A0088-15	0.4709	PPB		08 Mar 2023 14:15:51ARI 5 ppb (NO 0.05)
23B0229-02	0.3527	PPB		08 Mar 2023 14:18:10ARI 5 ppb (NO 0.05)
23B0229-03	0.3870	PPB		08 Mar 2023 14:20:29ARI 5 ppb (NO 0.05)
23B0229-04	0.4182	PPB		08 Mar 2023 14:22:48ARI 5 ppb (NO 0.05)
23B0229-05	0.6523	PPB		08 Mar 2023 14:25:07ARI 5 ppb (NO 0.05)
23B0229-06	0.6247	PPB		08 Mar 2023 14:27:26ARI 5 ppb (NO 0.05)
23B0229-08	0.6368	PPB		08 Mar 2023 14:29:44ARI 5 ppb (NO 0.05)
BLC0077-PS1	1.6429	PPB ✓		08 Mar 2023 14:32:04ARI 5 ppb (NO 0.05)
SEQ-CCV	107.6% 4.3025	PPB ✓		08 Mar 2023 14:34:24ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0155	PPB ✓		08 Mar 2023 14:36:42ARI 5 ppb (NO 0.05)
BLC0077-SRM1	1.5117	PPB ✓		08 Mar 2023 14:39:04ARI 5 ppb (NO 0.05)
SEQ-CCV	82.7% 3.3096	PPB ✓		08 Mar 2023 14:41:24ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0066	PPB ✓		08 Mar 2023 14:43:43ARI 5 ppb (NO 0.05)

Del ↓

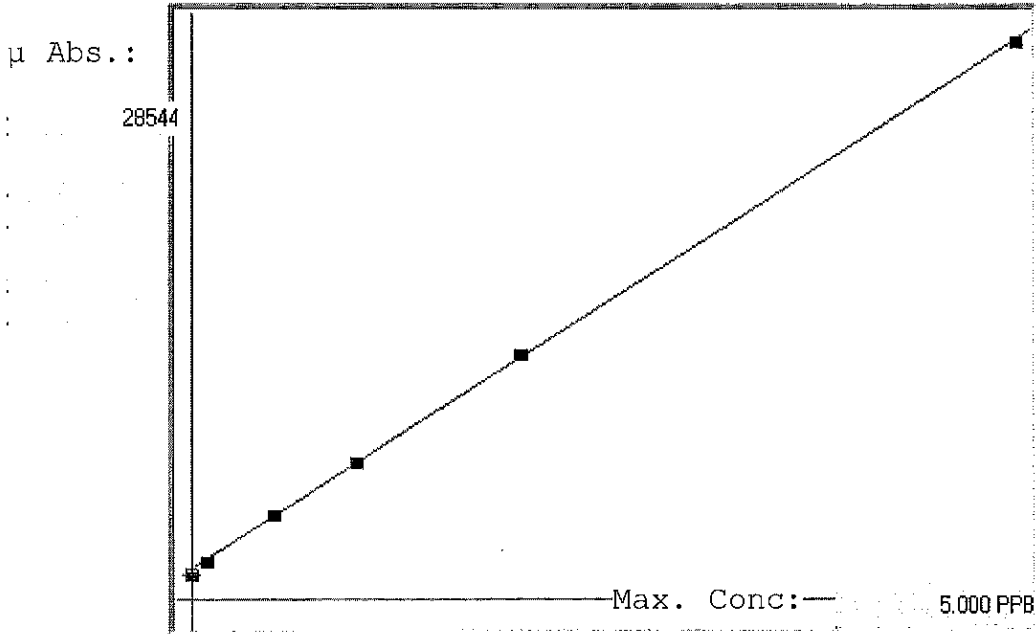
PL

PL Del ↓

PL ↓

ARI 5 ppb (NO 0.05)

Linear



A= 0.0000e+000

B= 1.8458e-004

C= -2.8757e-001

Rho= 0.9998912

Accept=Accepted

Accepted Date=

03/08/23 12:14

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	-0.039	-0.039	1347	11.025	1334	1347	1361		
SEQ-CAL2 - 0.1 PPB	0.100	0.086	-0.014	2021	0.2 %	2016	2028	2020		
SEQ-CAL3 - 0.5 PPB	0.500	0.522	0.022	4384	1.5 %	4313	4470	4370		
SEQ-CAL4 - 1.0 PPB	1.000	1.020	0.020	7082	0.3 %	7096	7054	7096		
SEQ-CAL5 - 2.0 PPB	2.000	2.031	0.031	12562	0.6 %	12475	12542	12669		
SEQ-CAL6 - 5.0 PPB	5.000	4.981	-0.019	28544	0.2 %	28463	28543	28626		

Mercury Analysis Log

Analyst: ML

Date: 03/08/23

Instrument: HYDRA

Page: 1 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEA -cal1	SMM	IX		Re Calib; Del
-cal2				
-cal3				
-cal4				
-cal5				
-cal6				
-ICV				
-ICB				
-CRL				
-CCV				
↓ -CB				
BLC0036 -BIKI				below RL
↓ -BSI		X 1.54	77.1R	
SEA -CCV				no read; Del
-cal1				
-cal2				
-cal3				
-cal4				
-cal5				
-cal6				
-ICV				
-ICB				
-CRL				
-CCV				
↓ -CB				
BLC0036 -BIKI				below RL
↓ -BSI		1.66	83.1R	Del
BLC0072 -BIKI				below RL
↓ -BSI		1.85		
BLC0077 -BIKI				

Chemical/Reagent ID:
10% SnCl₂: L2064

14% NH₂OH/NaCl: L2485

Standard ID:
Standard: _____

ICV/CCV: _____

Mercury Analysis Log

Analyst: _____
 Instrument: _____

Date: _____
 Page: 2 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
↓ -B61			√ 2.048	102.4 I.R
SEQ -CCV			√ 4.30	
↓ -CCB			√ -0.017	
↓ -CCV			√ 4.34	
↓ -CCB			√ 4.34 ①	
23A0088 -06				
BLC0077 -DUP				RPD = 19.77
↓ -MSI			X 1.109	71.8 I.R
↓ -MSDI			√ 1.60	120.9 I.R
23A0088 -07				
↓ -08				
↓ -09				
↓ -10				
↓ -11				
↓ -12				
SEQ -CCV			√ 4.31	
↓ -CCB			√ -0.022	
23A0088 -13				
↓ -14				
↓ -15				
23B0229 -02				
↓ -03				
↓ -04				
↓ -05				
↓ -06				
↓ -08				
BLC0077 -PSI			√ 1.64	125 I.R
SEQ -CCV			√ 4.30	
↓ -CCB			√ -0.015	
BLC0077 -SRM1		10X	√ 1.51	113 I.R

Chemical/Reagent ID: _____
 10% SnCl₂: _____
 Standard ID: _____
 Standard: _____

① -0.022

14% NH₂OH/NaCl: _____

ICV/CCV: _____



INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: HYDRA

Calibration: GC00025

Control Limit: +/- 20.00%

Sequence: SLC0108

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0108-ICV1	Mercury	0.0040000	0.00427	107	mg/L	EPA 7471B
SLC0108-CCV1	Mercury	0.0040000	0.00436	109	mg/L	EPA 7471B
SLC0108-CCV2	Mercury	0.0040000	0.00430	108	mg/L	EPA 7471B
SLC0108-CCV3	Mercury	0.0040000	0.00434	109	mg/L	EPA 7471B
SLC0108-CCV4	Mercury	0.0040000	0.00431	108	mg/L	EPA 7471B
SLC0108-CCV5	Mercury	0.0040000	0.00430	108	mg/L	EPA 7471B
SLC0108-CCV6	Mercury	0.0040000	0.00331	82.7	mg/L	EPA 7471B

* Values outside of QC limits



INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: HYDRA

Calibration: GC00025

Sequence: SLC0108

Date Analyzed: 03/08/23 12:17

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0108-ICB1	Mercury	-0.000039	0.000021	0.000100	mg/L	
SLC0108-CCB1	Mercury	-0.000043	0.000021	0.000100	mg/L	
SLC0108-CCB2	Mercury	-0.000018	0.000021	0.000100	mg/L	
SLC0108-CCB3	Mercury	-0.000022	0.000021	0.000100	mg/L	
SLC0108-CCB4	Mercury	-0.000023	0.000021	0.000100	mg/L	
SLC0108-CCB5	Mercury	-0.000016	0.000021	0.000100	mg/L	
SLC0108-CCB6	Mercury	-0.000007	0.000021	0.000100	mg/L	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0108

Instrument: HYDRA

Calibration: GC00025

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLC0108-CAL1	SMM 03-08-23-015	NA	03/08/23 12:00
Cal Standard	SLC0108-CAL2	SMM 03-08-23-016	NA	03/08/23 12:02
Cal Standard	SLC0108-CAL3	SMM 03-08-23-017	NA	03/08/23 12:04
Cal Standard	SLC0108-CAL4	SMM 03-08-23-018	NA	03/08/23 12:07
Cal Standard	SLC0108-CAL5	SMM 03-08-23-019	NA	03/08/23 12:09
Cal Standard	SLC0108-CAL6	SMM 03-08-23-020	NA	03/08/23 12:11
Initial Cal Check	SLC0108-ICV1	SMM 03-08-23-021	NA	03/08/23 12:14
Initial Cal Blank	SLC0108-ICB1	SMM 03-08-23-022	NA	03/08/23 12:17
Instrument RL Check	SLC0108-CRL1	SMM 03-08-23-023	NA	03/08/23 12:19
Calibration Check	SLC0108-CCV1	SMM 03-08-23-024	NA	03/08/23 12:21
Calibration Blank	SLC0108-CCB1	SMM 03-08-23-025	NA	03/08/23 12:24
Blank	BLC0077-BLK1	SMM 03-08-23-030	Solid	03/08/23 12:35
LCS	BLC0077-BS1	SMM 03-08-23-031	Solid	03/08/23 12:38
Calibration Check	SLC0108-CCV2	SMM 03-08-23-032	NA	03/08/23 12:40
Calibration Blank	SLC0108-CCB2	SMM 03-08-23-033	NA	03/08/23 12:42
Calibration Check	SLC0108-CCV3	SMM 03-08-23-034	NA	03/08/23 13:38
Calibration Blank	SLC0108-CCB3	SMM 03-08-23-035	NA	03/08/23 13:40
Calibration Check	SLC0108-CCV4	SMM 03-08-23-046	NA	03/08/23 14:06
Calibration Blank	SLC0108-CCB4	SMM 03-08-23-047	NA	03/08/23 14:08
LDW23-SS1236	23B0229-02	SMM 03-08-23-051	Solid	03/08/23 14:18
LDW23-SS1237	23B0229-03	SMM 03-08-23-052	Solid	03/08/23 14:20
LDW23-SS1150	23B0229-04	SMM 03-08-23-053	Solid	03/08/23 14:22
LDW23-SS1008	23B0229-05	SMM 03-08-23-054	Solid	03/08/23 14:25
LDW23-SC1008	23B0229-06	SMM 03-08-23-055	Solid	03/08/23 14:27
LDW23-SC1013	23B0229-08	SMM 03-08-23-056	Solid	03/08/23 14:29
Calibration Check	SLC0108-CCV5	SMM 03-08-23-058	NA	03/08/23 14:34
Calibration Blank	SLC0108-CCB5	SMM 03-08-23-059	NA	03/08/23 14:36
Reference	BLC0077-SRM1	SMM 03-08-23-060	Solid	03/08/23 14:39
Calibration Check	SLC0108-CCV6	SMM 03-08-23-061	NA	03/08/23 14:41



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0108

Instrument: HYDRA

Calibration: GC00025

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0108-CCB6	SMM 03-08-23-062	NA	03/08/23 14:43



DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: HYDRA

Calibration: GC00025

Sequence: SLC0108

Lab Sample ID: SLC0108-CRL1

Analyte	True	Found	%R	Units	QC Limits
Mercury	0.000100	0.000079	79.4	mg/L	70 - 130

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	03/07/23 15:55	27	28	03/08/23 14:18	28	28	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	03/07/23 15:55	27	28	03/08/23 14:20	28	28	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	03/07/23 15:55	27	28	03/08/23 14:22	28	28	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	03/07/23 15:55	27	28	03/08/23 14:25	28	28	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	03/07/23 15:55	27	28	03/08/23 14:27	28	28	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	03/07/23 15:55	27	28	03/08/23 14:29	28	28	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGHG1
Lot Number: S2-HG711246
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Mercury
Starting Material: Hg Metal
Starting Material Lot#: 1959
Starting Material Purity: 99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL
Density: 1.026 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	1004 ± 6 µg/mL ICP Assay NIST SRM 3133 Lot Number: 160921
Assay Method #2	998 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	1001 ± 3 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000210	M Eu < 0.000210	O Na < 0.000626	M Se < 0.008100	M Zn < 0.000810
M Al < 0.000161	O Fe < 0.001600	M Nb < 0.000410	O Si < 0.000626	M Zr < 0.000410
M As < 0.002500	M Ga < 0.000210	M Nd < 0.000210	M Sm < 0.000210	
O Au < 0.001700	M Gd < 0.000210	O Ni < 0.001400	M Sn < 0.000410	
M B < 0.008500	M Ge < 0.000410	M Os < 0.003900	O Sr < 0.000110	
M Ba < 0.000210	M Hf < 0.000210	O P < 0.029000	M Ta < 0.000210	
O Be < 0.000110	s Hg < 0.000210	M Pb < 0.000210	M Tb < 0.000210	
M Bi < 0.001100	M Ho < 0.000210	M Pd < 0.003500	M Te < 0.005700	
O Ca < 0.004754	M In < 0.000210	M Pr < 0.000210	M Th < 0.000210	
M Cd < 0.000210	M Ir < 0.000210	M Pt < 0.000210	O Ti < 0.000430	
M Ce < 0.000210	O K < 0.000731	M Rb < 0.000210	O Tl < 0.005400	
M Co < 0.000210	M La < 0.000210	M Re < 0.000210	M Tm < 0.000210	
O Cr < 0.003300	O Li < 0.000110	M Rh < 0.001100	M U < 0.000410	
M Cs < 0.000410	M Lu < 0.000210	M Ru < 0.000810	M V < 0.000210	
M Cu < 0.000810	O Mg < 0.000104	O S < 0.022000	M W < 0.001100	
M Dy < 0.000210	O Mn < 0.000430	M Sb < 0.000210	M Y < 0.000210	
M Er < 0.000210	M Mo < 0.000210	M Sc < 0.000210	M Yb < 0.000210	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO₃. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO₃ / LDPE container, stable in 10% HNO₃ packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO₃ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO₃ / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxide (Soluble in HNO₃); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0

NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: QCP-QCS-4
Lot Number: R2-MEB695951
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 5 µg/mL ea:
Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	5.011 ± 0.023 µg/mL		

Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u^2_{char} + u^2_{bb} + u^2_{Its} + u^2_{ts})^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u^2_{char a} + u^2_{bb} + u^2_{Its} + u^2_{ts})^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



K8376

▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.
2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:

$$U_{\text{expanded}} = k * \text{SQRT}((U_{\text{char}})^2 + (U_{\text{homogen}})^2 + (U_{\text{LTS}})^2 + (U_{\text{STS}})^2 + (U_{\text{RSS}})^2)$$

Where:

 - U_{expanded} = Expanded uncertainty.
 - k = Coverage factor.
 - U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
 - U_{homogen} = Standard uncertainty of the homogeneity assessment.
 - U_{LTS} = Standard uncertainty associated with long-term stability.
 - U_{STS} = Standard uncertainty associated with short-term (transport) stability.
 - U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).
3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.
4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.
5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.
6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
 The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.
7. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.
8. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Quality Officer

Matthew Seebeck

ISO/IEC 17025:2017



ISO/IEC 17034:2016



▪ Certificate of Analysis ▪

ANALYTICAL VERIFICATION

Parameter	Certified Value ¹	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery ⁵	n	SRM Number ⁶	Recovery
		mg/kg	%			%
Aluminum	10100	7970	78.9	144	-	-
Antimony	277	136	49.1	161	-	-
Arsenic	101	87.4	86.6	188	-	-
Barium	411	347	84.5	173	-	-
Beryllium	124	103	82.8	162	-	-
Boron	220	133	60.4	105	-	-
Cadmium	212	160	75.5	190	-	-
Calcium	5190	4100	79.0	131	-	-
Chromium	282	231	82.0	184	-	-
Cobalt	310	241	77.8	166	-	-
Copper	165	144	87.4	188	-	-
Iron	15000	14200	94.7	144	-	-
Lead	289	266	92.1	196	-	-
Lithium	6.42	6.37	99.2	33	-	-
Magnesium	2570	2220	86.5	132	-	-
Manganese	670	555	82.8	165	-	-
Mercury	3.31	3.74	113	117	-	-
Molybdenum	253	211	83.6	158	-	-
Nickel	458	350	76.5	187	-	-
Potassium	2420	1940	80.2	136	-	-
Selenium	154	130	84.7	174	-	-
Silver	65.0	57.1	87.9	166	-	-
Sodium	161	117	73.0	123	-	-
Strontium	98.8	84.5	85.5	113	-	-
Thallium	87.4	75.4	86.3	163	-	-
Tin	112	93.8	83.8	114	-	-
Titanium	463	333	71.8	115	-	-
Uranium	208	186	89.5	43	-	-
Vanadium	103	88.6	86.0	161	-	-
Zinc	187	160	85.5	186	-	-

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No.: D115-540
Certificate Issue Date: September 14, 2021
Expiration Date: April 20, 2025
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value ¹	Reference Value	Uncertainty ²	QC Performance Acceptance Limits ³	PT Performance Acceptance Limits ⁴
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	7970	10.4	3760 - 12200	3960 - 12000
Antimony	277	136	11.1	D.L. - 275	27.7 - 339
Arsenic	101	87.4	14.2	71.5 - 103	61.2 - 114
Barium	411	347	9.45	279 - 415	261 - 452
Beryllium	124	103	6.07	83.1 - 122	77.0 - 136
Boron	220	133	32.2	84.5 - 181	79.7 - 242
Cadmium	212	160	8.65	127 - 193	120 - 233
Calcium	5190	4100	11.2	3220 - 4970	2940 - 5710
Chromium	282	231	14.9	184 - 279	162 - 310
Cobalt	310	241	12.8	193 - 289	181 - 341
Copper	165	144	13.1	119 - 170	108 - 182
Iron	15000	14200	19.2	8600 - 19800	5010 - 23400
Lead	289	266	34.5	217 - 315	197 - 335
Lithium	6.42	6.37	18.0	4.19 - 8.54	3.13 - 9.60
Magnesium	2570	2220	6.94	1660 - 2780	1360 - 3080
Manganese	670	555	10.5	439 - 670	429 - 737
Mercury	3.31	3.74	7.72	2.85 - 4.63	2.24 - 5.23
Molybdenum	253	211	26.1	167 - 256	151 - 278
Nickel	458	350	19.3	277 - 424	245 - 504
Potassium	2420	1940	6.65	1330 - 2550	1130 - 2750
Selenium	154	130	5.42	101 - 160	87.0 - 174
Silver	65.0	57.1	9.66	44.8 - 69.5	40.1 - 74.1
Sodium	161	117	23.8	79.3 - 156	35.7 - 199
Strontium	98.8	84.5	9.49	66.6 - 102	60.3 - 109

Certified Reference Material

▪ Certificate of Analysis ▪

Parameter	Certified Value¹	Reference Value	Uncertainty²	QC Performance Acceptance Limits³	PT Performance Acceptance Limits⁴
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	87.4	75.4	4.33	60.1 - 90.7	48.5 - 102
Tin	112	93.8	10.1	71.9 - 116	52.7 - 135
Titanium	463	333	10.9	54.7 - 610	14.7 - 650
Uranium	208	186	7.30	137 - 235	125 - 247
Vanadium	103	88.6	12.2	68.6 - 109	58.1 - 119
Zinc	187	160	8.03	126 - 194	112 - 208



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1236

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-01 C SDG: 23B0229

Sampled: 02/08/23 10:04 Prepared: 02/14/23 15:24 File ID:

% Solids: 50.59 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26

Batch: BLB0363 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.59	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1236

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-02 D SDG: 23B0229

Sampled: 02/08/23 11:28 Prepared: 02/14/23 15:24 File ID:

% Solids: 55.01 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26

Batch: BLB0363 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	55.01	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1237

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-03 D SDG: 23B0229
 Sampled: 02/08/23 11:52 Prepared: 02/14/23 15:24 File ID:
 % Solids: 53.14 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26
 Batch: BLB0363 Sequence: Initial/Final: 5 g Wet / 5 g
 Instrument: BAL2 Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	53.14	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1150

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-04 D SDG: 23B0229
 Sampled: 02/08/23 12:11 Prepared: 02/14/23 15:24 File ID:
 % Solids: 51.84 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26
 Batch: BLB0363 Sequence:
 Instrument: BAL2 Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	51.84	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1008

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-05 D SDG: 23B0229

Sampled: 02/08/23 12:45 Prepared: 02/14/23 15:24 File ID:

% Solids: 46.84 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26

Batch: BLB0363 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	46.84	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1008

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-06 D SDG: 23B0229

Sampled: 02/08/23 13:30 Prepared: 02/14/23 15:24 File ID:

% Solids: 49.29 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26

Batch: BLB0363 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	49.29	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1014

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-07 C SDG: 23B0229

Sampled: 02/08/23 14:24 Prepared: 02/14/23 15:24 File ID:

% Solids: 70.24 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26

Batch: BLB0363 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	70.24	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1013

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-08 D SDG: 23B0229

Sampled: 02/08/23 15:25 Prepared: 02/14/23 15:24 File ID:

% Solids: 51.39 Preparation: No Prep Wet Chem Analyzed: 02/14/23 15:26

Batch: BLB0363 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	51.39	1	0.04	0.04	



PREPARATION BATCH SUMMARY

SM 2540 G-97

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLB0363 Batch Matrix: Solid Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1236	23B0229-01		02/14/23 15:24	
LDW23-SS1236	23B0229-02		02/14/23 15:24	
LDW23-SS1237	23B0229-03		02/14/23 15:24	
LDW23-SS1150	23B0229-04		02/14/23 15:24	
LDW23-SS1008	23B0229-05		02/14/23 15:24	
LDW23-SC1008	23B0229-06		02/14/23 15:24	
LDW23-SC1014	23B0229-07		02/14/23 15:24	
LDW23-SC1013	23B0229-08		02/14/23 15:24	
Blank	BLB0363-BLK1		02/14/23 15:24	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples
Method: PSEP 1986, SM2540, EPA 160.1
 (dry at 104 (12-24 hr) then combust at 550 (30 min))

Batch: BLB0363
 Date: 2/14/2023 15:26
 Analyst: UW

Instrumentation: Drying Ovens: 12; Muffle Furnace: 2; Analytical Balance: BAL2

Batch drying time
 record times as mm/dd/yy hh:mm
 date/time in oven: 2/14/2023 18:02
 date/time out: 2/15/2023 9:10
 elapsed hrs = 15.1 OK

TS (%) calculated as:
 Final dry wt (g) = (Dry Wt - Tare Wt)
 TS = (Final Dry Wt)/ (grams Sample-Tare)

Oven Temps, °C
 Start Temp 111
 Dry Cycle 1 101
 Dry Cycle 2
 Dry Cycle 3

TVS (mg/kg dry wt) calculated as:
 Final ash wt (g) = (min ash wt - tare wt)
 TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
 if ash wt > dry wt, "Chk for Err"
 if dry wt-ash wt < 0.001 g, "< (1/dry wt) *1,000,000

Balance Calibration Check
 Record weights to 4 places

Cal Weight ID:	CV-02	CV-02	CV-02	CV-02	CV-02
Date & Time:	2/14/23 16:57	2/14/23 17:14	2/15/23 10:15		
Cal Wt (g):	10.0000	10.0000	10.0000		
	Cal OK!	Cal OK!	Cal OK!	Cal OK!	Cal OK!

Sample ID	Dish #	Tare Wt. (g)	Dish & Sample (g)	Dry Wt 104C (grams)			dry Wt (g)	TS (%)	Notes	ASH WT 550C (grams)			Ash Wt (g)	TVS		Notes	Fixed (%)
				1	2	3				1	2	3		(mg/kg)	(%)		
BLB0363-BLK1	1	0.8165	0.0000	0.8164			-0.0001	0.01%		0.8163	0.8164	STOP	-0.0002	(1,000,000)	-100.00%		200.00
23B0132-02	2	0.8080	7.7567	6.2917			5.4837	78.92%									
23B0186-02	3	0.7976	7.6119	2.1886			1.3910	20.41%									
23B0201-04	4	0.8178	8.7379	0.8578			0.0400	0.51%									
23B0217-02	5	0.7970	9.9528	7.8559			7.0589	77.10%		7.7296	7.7242	STOP	6.9272	18.657	1.87%		98.13
BLB0363-DUP1	6	0.8191	8.8818	6.9830			6.1639	76.45%	RPD=0.8	6.8768	6.8740	STOP	6.0549	17.684	1.77%	RPD=5.4	98.23
BLB0363-DUP2	7	0.8274	9.7658	7.6926			6.8652	76.81%	RSD=0.4	7.5774	7.5745	STOP	6.7471	17.203	1.72%	RSD=4.2	98.28
23B0217-03	8	0.7801	8.5405	6.4880			5.7079	73.55%									
23B0217-04	9	0.7882	8.2467	6.0610			5.2728	70.70%									
23B0217-05	10	0.7791	9.9661	7.8837			7.1046	77.33%									
23B0217-06	11	0.8327	8.8414	6.9735			6.1408	76.68%									
23B0228-01	12	0.8155	9.5531	6.6730			5.8575	67.04%									
23B0229-01	13	0.8069	6.7036	3.7901			2.9832	50.59%									
23B0229-02	14	0.7832	6.4483	3.8997			3.1165	55.01%									
23B0229-03	15	0.8288	7.6607	4.4594			3.6306	53.14%									
23B0229-04	16	0.8370	7.3723	4.2251			3.3881	51.84%									
23B0229-05	17	0.8489	6.9526	3.7079			2.8590	46.84%									
23B0229-06	18	0.8065	6.6629	3.6930			2.8865	49.29%									
23B0229-07	19	0.8210	9.6116	6.9955			6.1745	70.24%									
23B0229-08	20	0.7915	6.8197	3.8895			3.0980	51.39%									
23B0276-01	21	0.8121	9.6147	6.3198			5.5077	62.57%									
23B0278-01	22	0.8155	6.9050	3.4122			2.5967	42.64%		3.1587	3.1583	STOP	2.3428	97.778	9.78%		90.22
23B0278-02	23	0.7992	7.0762	3.4903			2.6911	42.87%		3.2454	3.2440	STOP	2.4448	91.524	9.15%		90.85

NOTE: Do not enter data in blue shaded cells as they are calculated fields. Green shaded cells MAY be altered if a reweigh is called for.

TOTAL SOLIDS (TS) BENCHSHEET for Solid samples						Batch: BLC0129		
Method: Total Solids, Metals Correction						Date: 3/6/2023 16:31		
dry at 104°C (12-24 hr)						Analyst: AR		
Instrumentation		Drying Oven: OVEN07		Analytical Balance: BAL10				
Batch drying time		Temp in: 102 °C Temp out: 103 °C		TS (%) calculated as: Final dry wt (g) = (Dry Wt - Tare Wt) TS = (Final Dry Wt)/ (grams Sample-Tare)				
record times as mm/dd/yy hh:mm								
date/time in oven:	3/6/2023 17:10							
date/time out:	3/7/2023 15:37							
elapsed hrs =	22.4	OK						
Sample ID	Tare Weight (g)	Tare + Sample Weight (g)	Tare + Sample Dry Weight @ 104°C (g)			dry Wt (g)	TS (%)	Notes
			1	2	3			
23A0088-01	1.0290	10.0360	7.3740			6.3450	70.45%	
23A0088-02	1.0380	10.0570	7.3880			6.3500	70.41%	
23A0088-05	1.0140	10.0350	7.3240			6.3100	69.95%	
23A0088-06	1.0100	10.0750	6.0320			5.0220	55.40%	
23A0088-07	1.0050	10.0340	6.2970			5.2920	58.61%	
23A0088-08	1.0530	10.0370	6.3530			5.3000	58.99%	
23A0088-09	1.0330	10.0210	6.1700			5.1370	57.15%	
23A0088-10	1.0350	10.0500	5.5480			4.5130	50.06%	
23A0088-11	1.0020	10.0640	5.7230			4.7210	52.10%	
23A0088-12	1.0110	10.0500	6.2550			5.2440	58.02%	
23A0088-13	1.0320	10.0160	6.8800			5.8480	65.09%	
23A0088-14	0.9980	10.0420	6.6070			5.6090	62.02%	
23A0088-15	1.0160	10.0440	6.8510			5.8350	64.63%	
23B0229-02	1.0400	10.0660	6.3920			5.3520	59.30%	
23B0229-03	1.0290	10.0350	5.9910			4.9620	55.10%	
23B0229-04	1.0430	10.0560	6.0120			4.9690	55.13%	
23B0229-05	1.0090	10.0120	5.2840			4.2750	47.48%	
23B0229-06	1.0090	10.0100	5.5390			4.5300	50.33%	
23B0229-08	1.0120	10.0530	5.7100			4.6980	51.96%	
23B0561-01	1.0040	10.0520	9.0260			8.0220	88.66%	
23B0563-01	1.0140	10.0100	10.0150			9.0010	100.06%	
23C0042-01	1.0300	10.0470	5.8290			4.7990	53.22%	
23C0042-02	1.0270	10.0040	6.1400			5.1130	56.96%	
23C0042-03	1.0030	10.0050	6.8970			5.8940	65.47%	
23C0042-04	1.0300	10.0840	6.9360			5.9060	65.23%	
23C0042-05	1.0010	10.0770	7.0850			6.0840	67.03%	
23C0042-06	1.0140	10.0030	7.0570			6.0430	67.23%	
23C0042-07	1.0070	10.0750	7.0410			6.0340	66.54%	
23C0042-08	1.0310	10.0230	7.2640			6.2330	69.32%	
23C0042-09	1.0090	10.0630	7.4540			6.4450	71.18%	



Form I
METHOD BLANK DATA SHEET
SM 2540 G-97
TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLB0363

Laboratory ID: BLB0363-BLK1

Prepared: 02/14/23 15:24

Matrix: Solid

Preparation: No Prep Wet Chem

Analyzed: 02/14/23 15:26

Sequence:

Calibration:

Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U



HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1236 23B0229-01	02/08/23 10:04	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SC1014 23B0229-07	02/08/23 14:24	02/08/23 16:47	02/14/23 15:24	6	28	02/14/23 15:26	6	28	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	02/14/23 15:24	5	28	02/14/23 15:26	6	28	

* Indicates hold time exceedance.



Analytical Resources, LLC
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SS1236

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-02 A SDG: 23B0229
 Sampled: 02/08/23 11:28 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-123
 % Solids: 55.01 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:45
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.023 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	19.2	20	0.46	0.89	
7439-92-1	Lead	17.4	20	0.09	0.18	
7440-22-4	Silver	0.33	20	0.04	0.36	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SS1237

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-03 A SDG: 23B0229
 Sampled: 02/08/23 11:52 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-124
 % Solids: 53.14 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:50
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.047 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	22.0	20	0.47	0.90	
7439-92-1	Lead	20.2	20	0.09	0.18	
7440-22-4	Silver	0.19	20	0.04	0.36	J



Form I
INORGANIC ANALYSIS DATA SHEET

LDW23-SS1150

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-04 A SDG: 23B0229
 Sampled: 02/08/23 12:11 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-125
 % Solids: 51.84 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:54
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.043 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	20.3	20	0.10	0.18	
7440-22-4	Silver	0.20	20	0.04	0.37	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SS1150

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-04 A SDG: 23B0229

Sampled: 02/08/23 12:11 Prepared: 03/14/23 17:30 File ID: XDT_m2230317-152

% Solids: 51.84 Preparation: SWN EPA 3050B Analyzed: 03/17/23 21:10

Batch: BLC0079 Sequence: SLC0300 Initial/Final: 1.043 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00057

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	27.7	50	1.20	2.31	D



Form I
INORGANIC ANALYSIS DATA SHEET

LDW23-SS1008

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-05 D SDG: 23B0229

Sampled: 02/08/23 12:45 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-126

% Solids: 46.84 Preparation: SWN EPA 3050B Analyzed: 03/17/23 02:59

Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.046 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	33.6	20	0.11	0.20	
7440-22-4	Silver	0.36	20	0.04	0.41	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SS1008

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-05 D SDG: 23B0229

Sampled: 02/08/23 12:45 Prepared: 03/14/23 17:30 File ID: XDT_m2230317-153

% Solids: 46.84 Preparation: SWN EPA 3050B Analyzed: 03/17/23 21:11

Batch: BLC0079 Sequence: SLC0300 Initial/Final: 1.046 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00057

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	33.5	50	1.33	2.55	D



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-06 A SDG: 23B0229
 Sampled: 02/08/23 13:30 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-127
 % Solids: 49.29 Preparation: SWN EPA 3050B Analyzed: 03/17/23 03:04
 Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.044 g Wet / 50 mL
 Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	32.6	20	0.10	0.19	
7440-22-4	Silver	0.32	20	0.04	0.39	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1008

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-06 A SDG: 23B0229

Sampled: 02/08/23 13:30 Prepared: 03/14/23 17:30 File ID: XDT_m2230317-154

% Solids: 49.29 Preparation: SWN EPA 3050B Analyzed: 03/17/23 21:13

Batch: BLC0079 Sequence: SLC0300 Initial/Final: 1.044 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00057

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	34.0	50	1.26	2.43	D



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1013

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-08 A SDG: 23B0229

Sampled: 02/08/23 15:25 Prepared: 03/14/23 17:30 File ID: XDT_m2230316-128

% Solids: 51.39 Preparation: SWN EPA 3050B Analyzed: 03/17/23 03:08

Batch: BLC0079 Sequence: SLC0248 Initial/Final: 1.035 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00054

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	32.9	20	0.10	0.19	
7440-22-4	Silver	0.35	20	0.04	0.38	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1013

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-08 A SDG: 23B0229

Sampled: 02/08/23 15:25 Prepared: 03/14/23 17:30 File ID: XDT_m2230317-155

% Solids: 51.39 Preparation: SWN EPA 3050B Analyzed: 03/17/23 21:14

Batch: BLC0079 Sequence: SLC0300 Initial/Final: 1.035 g Wet / 50 mL

Instrument: ICPMS2 Calibration: GC00057

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	35.4	50	1.22	2.35	D



PREPARATION BATCH SUMMARY
EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23B0229
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLC0079 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1236	23B0229-02	XDT_m2230316-123	03/14/23 17:30	
LDW23-SS1237	23B0229-03	XDT_m2230316-124	03/14/23 17:30	
LDW23-SS1150	23B0229-04	XDT_m2230317-152	03/14/23 17:30	
LDW23-SS1150	23B0229-04	XDT_m2230316-125	03/14/23 17:30	
LDW23-SS1008	23B0229-05	XDT_m2230317-153	03/14/23 17:30	
LDW23-SS1008	23B0229-05	XDT_m2230316-126	03/14/23 17:30	
LDW23-SC1008	23B0229-06	XDT_m2230317-154	03/14/23 17:30	
LDW23-SC1008	23B0229-06	XDT_m2230316-127	03/14/23 17:30	
LDW23-SC1013	23B0229-08	XDT_m2230317-155	03/14/23 17:30	
LDW23-SC1013	23B0229-08	XDT_m2230316-128	03/14/23 17:30	
Blank	BLC0079-BLK1	XDT_m2230316-098	03/14/23 17:30	
LCS	BLC0079-BS1	XDT_m2230316-099	03/14/23 17:30	



Digestion Log

Analyst: AP Date: 3/14/23 Time: 1240-1730 Balance ID: BAL10
 Matrix: soil Block ID: 3 Block Temp: 92°C Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: <u>SUN</u>		Prep Code:		Comments
			Initial Wt (g) Vol (mL)	Final Vol (mL)	Initial Wt (g) Vol (mL)	Final Vol (mL)	
23A88-01	D		1.036	50			
-02			1.055				
-05			1.012				
-06			1.020				
-07			1.022				
-08			1.018				
-09			1.041				
-10			1.015				
-11			1.028				
-12			1.015				
-13			1.005				
-14			1.056				
-15			1.012				
23B229-02	A		1.023				
03			1.047				
-04			1.043				
-05	D		1.046				
-06	A		1.044				
-08			1.035				
BLC79-blk							23A88-01
-105							
-dup			1.036				
-MS			1.035				
-MSD			1.035				
-SPM			1.001				

Chemical/Reagent ID:

HNO₃: 492 1:1 HNO₃: L2316 HCl: — H₂O₂: K11056
 Tube Lot#: 2708005 Boiling Chip Lot#: — (DoD Only)



Form I
METHOD BLANK DATA SHEET
EPA 6020B
Total Metals

Blank

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLC0079

Laboratory ID: BLC0079-BLK1

Prepared: 03/14/23 17:30

Matrix: Solid

Preparation: SWN EPA 3050B

Analyzed: 03/17/23 00:43

Sequence: SLC0248

Calibration: GC00054

Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U
7440-22-4	Silver-107	ND	20	0.02	0.20	U



LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>03/17/23 00:48</u>
Batch:	<u>BLC0079</u>	Laboratory ID:	<u>BLC0079-BS1</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>1 g / 50 mL</u>		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	26.0		104	80 - 120
Lead-208	25.0	27.0		108	80 - 120
Silver-107	25.0	25.9		104	80 - 120

* Indicates values outside of QC limits



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0248-ICV1	Chromium-52	50.000	49.2	98.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.8	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
	Silver-107	50.000	51.1	102	ug/L	EPA 6020B
SLC0248-CCV1	Chromium-52	50.000	49.3	98.5	ug/L	EPA 6020B
	Chromium-53	50.000	50.1	100	ug/L	EPA 6020B
	Lead-208	50.000	49.0	98.0	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLC0248-CCV2	Chromium-52	50.000	48.5	96.9	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	51.1	102	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.3	ug/L	EPA 6020B
SLC0248-CCV3	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.6	99.2	ug/L	EPA 6020B
	Lead-208	50.000	51.0	102	ug/L	EPA 6020B
	Silver-107	50.000	49.5	99.1	ug/L	EPA 6020B
SLC0248-CCV4	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.2	ug/L	EPA 6020B
	Lead-208	50.000	49.6	99.1	ug/L	EPA 6020B
	Silver-107	50.000	50.7	101	ug/L	EPA 6020B
SLC0248-CCV5	Chromium-52	50.000	49.0	97.9	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
	Lead-208	50.000	49.5	99.1	ug/L	EPA 6020B
	Silver-107	50.000	50.5	101	ug/L	EPA 6020B
SLC0248-CCV6	Chromium-52	50.000	48.0	95.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.1	96.2	ug/L	EPA 6020B
	Lead-208	50.000	49.0	97.9	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLC0248-CCV7	Chromium-52	50.000	47.3	94.7	ug/L	EPA 6020B
	Chromium-53	50.000	48.1	96.1	ug/L	EPA 6020B
	Lead-208	50.000	50.0	100	ug/L	EPA 6020B
	Silver-107	50.000	50.0	100	ug/L	EPA 6020B
SLC0248-CCV8	Chromium-52	50.000	47.1	94.2	ug/L	EPA 6020B
	Chromium-53	50.000	47.6	95.3	ug/L	EPA 6020B



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0248-CCV8	Lead-208	50.000	50.4	101	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLC0248-CCV9	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.4	ug/L	EPA 6020B
	Lead-208	50.000	49.1	98.2	ug/L	EPA 6020B
SLC0248-CCVA	Silver-107	50.000	48.9	97.9	ug/L	EPA 6020B
	Chromium-52	50.000	47.7	95.3	ug/L	EPA 6020B
SLC0248-CCVB	Chromium-53	50.000	47.7	95.4	ug/L	EPA 6020B
	Lead-208	50.000	49.1	98.2	ug/L	EPA 6020B
	Silver-107	50.000	48.0	95.9	ug/L	EPA 6020B
SLC0248-CCVC	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	96.9	ug/L	EPA 6020B
	Lead-208	50.000	48.7	97.3	ug/L	EPA 6020B
	Silver-107	50.000	48.1	96.2	ug/L	EPA 6020B
SLC0248-CCVD	Chromium-52	50.000	47.5	95.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.7	ug/L	EPA 6020B
	Lead-208	50.000	48.6	97.2	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLC0248-CCVE	Chromium-52	50.000	47.4	94.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	96.1	ug/L	EPA 6020B
	Lead-208	50.000	49.9	99.8	ug/L	EPA 6020B
	Silver-107	50.000	47.2	94.5	ug/L	EPA 6020B
SLC0248-CCVF	Chromium-52	50.000	47.2	94.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.7	97.5	ug/L	EPA 6020B
	Lead-208	50.000	49.5	98.9	ug/L	EPA 6020B
	Silver-107	50.000	48.6	97.1	ug/L	EPA 6020B
SLC0248-CCVG	Chromium-52	50.000	48.6	97.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.7	ug/L	EPA 6020B
	Lead-208	50.000	49.6	99.3	ug/L	EPA 6020B
	Silver-107	50.000	48.4	96.8	ug/L	EPA 6020B
SLC0248-CCVH	Chromium-52	50.000	48.2	96.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.6	97.2	ug/L	EPA 6020B
	Lead-208	50.000	49.8	99.6	ug/L	EPA 6020B
	Silver-107	50.000	48.3	96.5	ug/L	EPA 6020B



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Control Limit: +/- 10.00%

Sequence: SLC0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0248-CCVH	Chromium-52	50.000	47.7	95.4	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	97.0	ug/L	EPA 6020B
	Lead-208	50.000	49.2	98.3	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.5	ug/L	EPA 6020B
SLC0248-CCVI	Chromium-52	50.000	47.0	94.0	ug/L	EPA 6020B
	Chromium-53	50.000	47.9	95.9	ug/L	EPA 6020B
	Lead-208	50.000	47.4	94.8	ug/L	EPA 6020B
	Silver-107	50.000	46.7	93.3	ug/L	EPA 6020B
SLC0248-CCVJ	Chromium-52	50.000	48.8	97.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
	Lead-208	50.000	49.1	98.2	ug/L	EPA 6020B
	Silver-107	50.000	47.7	95.3	ug/L	EPA 6020B

* Values outside of QC limits



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00057

Control Limit: +/- 10.00%

Sequence: SLC0300

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0300-ICV1	Chromium-52	50.000	50.5	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.5	ug/L	EPA 6020B
SLC0300-CCV1	Chromium-52	50.000	49.5	99.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.7	97.4	ug/L	EPA 6020B
SLC0300-CCV2	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.4	ug/L	EPA 6020B
SLC0300-CCV3	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.6	99.2	ug/L	EPA 6020B
SLC0300-CCV4	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.8	99.6	ug/L	EPA 6020B
SLC0300-CCV5	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
SLC0300-CCV6	Chromium-52	50.000	51.1	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
SLC0300-CCV7	Chromium-52	50.000	50.8	102	ug/L	EPA 6020B
	Chromium-53	50.000	49.9	99.9	ug/L	EPA 6020B
SLC0300-CCV8	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.8	102	ug/L	EPA 6020B
SLC0300-CCV9	Chromium-52	50.000	51.2	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
SLC0300-CCVA	Chromium-52	50.000	50.4	101	ug/L	EPA 6020B
	Chromium-53	50.000	50.7	101	ug/L	EPA 6020B
SLC0300-CCVB	Chromium-52	50.000	51.6	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.9	102	ug/L	EPA 6020B
SLC0300-CCVC	Chromium-52	50.000	51.5	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
SLC0300-CCVD	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
SLC0300-CCVE	Chromium-52	50.000	51.6	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.7	101	ug/L	EPA 6020B
SLC0300-CCVF	Chromium-52	50.000	51.6	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.8	102	ug/L	EPA 6020B

* Values outside of QC limits



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/16/23 17:09

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL1	Chromium-52	0.00700	0.26	0.500	ug/L	
SLC0248-IBL1	Chromium-53	0.00300	0.239	0.500	ug/L	
SLC0248-IBL1	Lead-208	0.00400	0.0513	0.100	ug/L	
SLC0248-IBL1	Silver-107	0.0200	0.022	0.200	ug/L	
SLC0248-ICB1	Chromium-52	0.0190	0.26	0.500	ug/L	
SLC0248-ICB1	Chromium-53	0.00900	0.239	0.500	ug/L	
SLC0248-ICB1	Lead-208	0.00400	0.0513	0.100	ug/L	
SLC0248-ICB1	Silver-107	0.0140	0.022	0.200	ug/L	
SLC0248-CCB1	Chromium-52	0.0310	0.26	0.500	ug/L	
SLC0248-CCB1	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLC0248-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0248-CCB1	Silver-107	0.0110	0.022	0.200	ug/L	
SLC0248-IBL2	Chromium-52	0.0200	0.26	0.500	ug/L	
SLC0248-IBL2	Chromium-53	0.0460	0.239	0.500	ug/L	
SLC0248-IBL2	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-IBL2	Silver-107	0.0420	0.022	0.200	ug/L	
SLC0248-CCB2	Chromium-52	0.00600	0.26	0.500	ug/L	
SLC0248-CCB2	Chromium-53	0.0210	0.239	0.500	ug/L	
SLC0248-CCB2	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCB2	Silver-107	0.0210	0.022	0.200	ug/L	
SLC0248-IBL3	Chromium-52	-0.00200	0.26	0.500	ug/L	
SLC0248-IBL3	Chromium-53	0.00600	0.239	0.500	ug/L	
SLC0248-IBL3	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0248-IBL3	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0248-CCB3	Chromium-52	0.0190	0.26	0.500	ug/L	
SLC0248-CCB3	Chromium-53	0.00400	0.239	0.500	ug/L	
SLC0248-CCB3	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0248-CCB3	Silver-107	0.00900	0.022	0.200	ug/L	
SLC0248-IBL4	Chromium-52	0.00300	0.26	0.500	ug/L	
SLC0248-IBL4	Chromium-53	0.115	0.239	0.500	ug/L	
SLC0248-IBL4	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0248-IBL4	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0248-IBL5	Chromium-52	0.0280	0.26	0.500	ug/L	
SLC0248-IBL5	Chromium-53	0.0510	0.239	0.500	ug/L	
SLC0248-IBL5	Lead-208	-0.00100	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/16/23 20:37

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL5	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0248-CCB4	Chromium-52	0.0310	0.26	0.500	ug/L	
SLC0248-CCB4	Chromium-53	0.0140	0.239	0.500	ug/L	
SLC0248-CCB4	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCB4	Silver-107	0.0100	0.022	0.200	ug/L	
SLC0248-IBL6	Chromium-52	0.0480	0.26	0.500	ug/L	
SLC0248-IBL6	Chromium-53	0.336	0.239	0.500	ug/L	
SLC0248-IBL6	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0248-IBL6	Silver-107	-0.00100	0.022	0.200	ug/L	
SLC0248-CCB5	Chromium-52	0.0220	0.26	0.500	ug/L	
SLC0248-CCB5	Chromium-53	0.100	0.239	0.500	ug/L	
SLC0248-CCB5	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCB5	Silver-107	0.00800	0.022	0.200	ug/L	
SLC0248-CCB6	Chromium-52	-0.0180	0.26	0.500	ug/L	
SLC0248-CCB6	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLC0248-CCB6	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0248-CCB6	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-IBL7	Chromium-52	0.0250	0.26	0.500	ug/L	
SLC0248-IBL7	Chromium-53	0.196	0.239	0.500	ug/L	
SLC0248-IBL7	Lead-208	0.00700	0.0513	0.100	ug/L	
SLC0248-IBL7	Silver-107	0.00400	0.022	0.200	ug/L	
SLC0248-CCB7	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLC0248-CCB7	Chromium-53	0.0170	0.239	0.500	ug/L	
SLC0248-CCB7	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCB7	Silver-107	0.00800	0.022	0.200	ug/L	
SLC0248-IBL8	Chromium-52	-0.0510	0.26	0.500	ug/L	
SLC0248-IBL8	Chromium-53	-0.0380	0.239	0.500	ug/L	
SLC0248-IBL8	Lead-208	0.00100	0.0513	0.100	ug/L	
SLC0248-IBL8	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0248-CCB8	Chromium-52	-0.0310	0.26	0.500	ug/L	
SLC0248-CCB8	Chromium-53	-0.0360	0.239	0.500	ug/L	
SLC0248-CCB8	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCB8	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-IBL9	Chromium-52	-0.0530	0.26	0.500	ug/L	
SLC0248-IBL9	Chromium-53	-0.0460	0.239	0.500	ug/L	
SLC0248-IBL9	Lead-208	0.00500	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 01:16

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBL9	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0248-CCB9	Chromium-52	-0.0250	0.26	0.500	ug/L	
SLC0248-CCB9	Chromium-53	-0.0540	0.239	0.500	ug/L	
SLC0248-CCB9	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCB9	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-IBLA	Chromium-52	-0.0280	0.26	0.500	ug/L	
SLC0248-IBLA	Chromium-53	-0.0580	0.239	0.500	ug/L	
SLC0248-IBLA	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0248-IBLA	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0248-CCBA	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLC0248-CCBA	Chromium-53	-0.0580	0.239	0.500	ug/L	
SLC0248-CCBA	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCBA	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0248-IBLB	Chromium-52	-0.0250	0.26	0.500	ug/L	
SLC0248-IBLB	Chromium-53	-0.0610	0.239	0.500	ug/L	
SLC0248-IBLB	Lead-208	0.00200	0.0513	0.100	ug/L	
SLC0248-IBLB	Silver-107	-0.00400	0.022	0.200	ug/L	
SLC0248-CCBB	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLC0248-CCBB	Chromium-53	-0.0590	0.239	0.500	ug/L	
SLC0248-CCBB	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-CCBB	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-CCBC	Chromium-52	-0.00200	0.26	0.500	ug/L	
SLC0248-CCBC	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLC0248-CCBC	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLC0248-CCBC	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0248-IBLC	Chromium-52	0.0340	0.26	0.500	ug/L	
SLC0248-IBLC	Chromium-53	0.0250	0.239	0.500	ug/L	
SLC0248-IBLC	Lead-208	0.00300	0.0513	0.100	ug/L	
SLC0248-IBLC	Silver-107	0.00800	0.022	0.200	ug/L	
SLC0248-CCBD	Chromium-52	0.0290	0.26	0.500	ug/L	
SLC0248-CCBD	Chromium-53	0.00700	0.239	0.500	ug/L	
SLC0248-CCBD	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLC0248-CCBD	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-IBLD	Chromium-52	0.0200	0.26	0.500	ug/L	
SLC0248-IBLD	Chromium-53	0.0300	0.239	0.500	ug/L	
SLC0248-IBLD	Lead-208	-0.00100	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 05:30

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-IBLD	Silver-107	-0.00400	0.022	0.200	ug/L	
SLC0248-CCBE	Chromium-52	0.0190	0.26	0.500	ug/L	
SLC0248-CCBE	Chromium-53	0.0210	0.239	0.500	ug/L	
SLC0248-CCBE	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLC0248-CCBE	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-IBLE	Chromium-52	0.0310	0.26	0.500	ug/L	
SLC0248-IBLE	Chromium-53	0.0680	0.239	0.500	ug/L	
SLC0248-IBLE	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLC0248-IBLE	Silver-107	-0.00300	0.022	0.200	ug/L	
SLC0248-IBLF	Chromium-52	0.0270	0.26	0.500	ug/L	
SLC0248-IBLF	Chromium-53	0.0350	0.239	0.500	ug/L	
SLC0248-IBLF	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0248-IBLF	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0248-CCBF	Chromium-52	0.00400	0.26	0.500	ug/L	
SLC0248-CCBF	Chromium-53	0.0250	0.239	0.500	ug/L	
SLC0248-CCBF	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLC0248-CCBF	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-CCBG	Chromium-52	-0.0110	0.26	0.500	ug/L	
SLC0248-CCBG	Chromium-53	-0.0190	0.239	0.500	ug/L	
SLC0248-CCBG	Lead-208	0.00700	0.0513	0.100	ug/L	
SLC0248-CCBG	Silver-107	0.0150	0.022	0.200	ug/L	
SLC0248-IBLH	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLC0248-IBLH	Chromium-53	0.0940	0.239	0.500	ug/L	
SLC0248-IBLH	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLC0248-IBLH	Silver-107	-0.00400	0.022	0.200	ug/L	
SLC0248-CCBH	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLC0248-CCBH	Chromium-53	0.0190	0.239	0.500	ug/L	
SLC0248-CCBH	Lead-208	0.00	0.0513	0.100	ug/L	
SLC0248-CCBH	Silver-107	0.00600	0.022	0.200	ug/L	
SLC0248-IBLI	Chromium-52	-0.0220	0.26	0.500	ug/L	
SLC0248-IBLI	Chromium-53	0.111	0.239	0.500	ug/L	
SLC0248-IBLI	Lead-208	-0.00400	0.0513	0.100	ug/L	
SLC0248-IBLI	Silver-107	-0.00500	0.022	0.200	ug/L	
SLC0248-CCBI	Chromium-52	0.00100	0.26	0.500	ug/L	
SLC0248-CCBI	Chromium-53	0.0260	0.239	0.500	ug/L	
SLC0248-CCBI	Lead-208	-0.00100	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Date Analyzed: 03/17/23 08:56

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0248-CCBI	Silver-107	0.00700	0.022	0.200	ug/L	
SLC0248-IBLJ	Chromium-52	0.0200	0.26	0.500	ug/L	
SLC0248-IBLJ	Chromium-53	0.251	0.239	0.500	ug/L	
SLC0248-IBLJ	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLC0248-IBLJ	Silver-107	-0.00400	0.022	0.200	ug/L	
SLC0248-CCBJ	Chromium-52	0.0290	0.26	0.500	ug/L	
SLC0248-CCBJ	Chromium-53	0.117	0.239	0.500	ug/L	
SLC0248-CCBJ	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLC0248-CCBJ	Silver-107	0.00600	0.022	0.200	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00057

Sequence: SLC0300

Date Analyzed: 03/17/23 14:27

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0300-IBL1	Chromium-52	0.0520	0.26	0.500	ug/L	
SLC0300-IBL1	Chromium-53	0.00400	0.239	0.500	ug/L	
SLC0300-ICB1	Chromium-52	0.0440	0.26	0.500	ug/L	
SLC0300-ICB1	Chromium-53	0.00	0.239	0.500	ug/L	
SLC0300-CCB1	Chromium-52	0.0310	0.26	0.500	ug/L	
SLC0300-CCB1	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLC0300-IBL2	Chromium-52	0.0800	0.26	0.500	ug/L	
SLC0300-IBL2	Chromium-53	0.0860	0.239	0.500	ug/L	
SLC0300-IBL3	Chromium-52	0.0340	0.26	0.500	ug/L	
SLC0300-IBL3	Chromium-53	0.0410	0.239	0.500	ug/L	
SLC0300-CCB2	Chromium-52	0.0220	0.26	0.500	ug/L	
SLC0300-CCB2	Chromium-53	0.0110	0.239	0.500	ug/L	
SLC0300-IBL4	Chromium-52	0.0520	0.26	0.500	ug/L	
SLC0300-IBL4	Chromium-53	0.0240	0.239	0.500	ug/L	
SLC0300-CCB3	Chromium-52	0.0340	0.26	0.500	ug/L	
SLC0300-CCB3	Chromium-53	0.0160	0.239	0.500	ug/L	
SLC0300-IBL5	Chromium-52	0.0780	0.26	0.500	ug/L	
SLC0300-IBL5	Chromium-53	0.0170	0.239	0.500	ug/L	
SLC0300-CCB4	Chromium-52	0.0580	0.26	0.500	ug/L	
SLC0300-CCB4	Chromium-53	0.00800	0.239	0.500	ug/L	
SLC0300-CCB5	Chromium-52	-0.00200	0.26	0.500	ug/L	
SLC0300-CCB5	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLC0300-IBL6	Chromium-52	0.104	0.26	0.500	ug/L	
SLC0300-IBL6	Chromium-53	0.0120	0.239	0.500	ug/L	
SLC0300-CCB6	Chromium-52	0.0430	0.26	0.500	ug/L	
SLC0300-CCB6	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLC0300-IBL7	Chromium-52	0.0850	0.26	0.500	ug/L	
SLC0300-IBL7	Chromium-53	0.00600	0.239	0.500	ug/L	
SLC0300-CCB7	Chromium-52	0.0330	0.26	0.500	ug/L	
SLC0300-CCB7	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLC0300-IBL8	Chromium-52	0.0450	0.26	0.500	ug/L	
SLC0300-IBL8	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLC0300-IBL9	Chromium-52	0.0870	0.26	0.500	ug/L	
SLC0300-IBL9	Chromium-53	0.00900	0.239	0.500	ug/L	
SLC0300-CCB8	Chromium-52	0.0640	0.26	0.500	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00057

Sequence: SLC0300

Date Analyzed: 03/17/23 18:14

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0300-CCB8	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLC0300-IBLA	Chromium-52	0.0790	0.26	0.500	ug/L	
SLC0300-IBLA	Chromium-53	0.00500	0.239	0.500	ug/L	
SLC0300-IBLB	Chromium-52	0.105	0.26	0.500	ug/L	
SLC0300-IBLB	Chromium-53	0.00600	0.239	0.500	ug/L	
SLC0300-CCB9	Chromium-52	0.0530	0.26	0.500	ug/L	
SLC0300-CCB9	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLC0300-IBLC	Chromium-52	0.0520	0.26	0.500	ug/L	
SLC0300-IBLC	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLC0300-CCBA	Chromium-52	0.0440	0.26	0.500	ug/L	
SLC0300-CCBA	Chromium-53	0.00200	0.239	0.500	ug/L	
SLC0300-IBLD	Chromium-52	0.0920	0.26	0.500	ug/L	
SLC0300-IBLD	Chromium-53	0.00200	0.239	0.500	ug/L	
SLC0300-CCBB	Chromium-52	0.0420	0.26	0.500	ug/L	
SLC0300-CCBB	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLC0300-CCBC	Chromium-52	0.0600	0.26	0.500	ug/L	
SLC0300-CCBC	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLC0300-CCBD	Chromium-52	0.0410	0.26	0.500	ug/L	
SLC0300-CCBD	Chromium-53	0.00900	0.239	0.500	ug/L	
SLC0300-IBLE	Chromium-52	-0.0410	0.26	0.500	ug/L	
SLC0300-IBLE	Chromium-53	0.00	0.239	0.500	ug/L	
SLC0300-CCBE	Chromium-52	-0.0440	0.26	0.500	ug/L	
SLC0300-CCBE	Chromium-53	0.00	0.239	0.500	ug/L	
SLC0300-CCBF	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLC0300-CCBF	Chromium-53	0.00	0.239	0.500	ug/L	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0248-CAL1	XDT_m2230316-011	NA	03/16/23 16:35
CAL 1 - LOW CHECK	SLC0248-CAL2	XDT_m2230316-012	NA	03/16/23 16:39
CAL 2	SLC0248-CAL3	XDT_m2230316-013	NA	03/16/23 16:44
CAL 3	SLC0248-CAL4	XDT_m2230316-014	NA	03/16/23 16:49
CAL 4	SLC0248-CAL5	XDT_m2230316-015	NA	03/16/23 16:54
CAL 5	SLC0248-CAL6	XDT_m2230316-016	NA	03/16/23 17:01
RINSE	SLC0248-IBL1	XDT_m2230316-017	NA	03/16/23 17:09
Initial Cal Check	SLC0248-ICV1	XDT_m2230316-019	NA	03/16/23 17:16
Initial Cal Blank	SLC0248-ICB1	XDT_m2230316-020	NA	03/16/23 17:23
Calibration Check	SLC0248-CCV1	XDT_m2230316-021	NA	03/16/23 17:29
Calibration Blank	SLC0248-CCB1	XDT_m2230316-022	NA	03/16/23 17:36
Instrument RL Check	SLC0248-CRL1	XDT_m2230316-024	NA	03/16/23 17:47
Interference Check A	SLC0248-IFA1	XDT_m2230316-025	NA	03/16/23 17:52
Interference Check B	SLC0248-IFB1	XDT_m2230316-026	NA	03/16/23 17:57
LR200	SLC0248-HCV1	XDT_m2230316-027	NA	03/16/23 18:02
LR300	SLC0248-HCV2	XDT_m2230316-028	NA	03/16/23 18:06
Instrument Blank	SLC0248-IBL2	XDT_m2230316-029	NA	03/16/23 18:14
Calibration Check	SLC0248-CCV2	XDT_m2230316-030	NA	03/16/23 18:21
Calibration Blank	SLC0248-CCB2	XDT_m2230316-031	NA	03/16/23 18:28
Instrument Blank	SLC0248-IBL3	XDT_m2230316-041	NA	03/16/23 19:23
Calibration Check	SLC0248-CCV3	XDT_m2230316-042	NA	03/16/23 19:27
Calibration Blank	SLC0248-CCB3	XDT_m2230316-043	NA	03/16/23 19:35
Instrument Blank	SLC0248-IBL4	XDT_m2230316-045	NA	03/16/23 19:47
Instrument Blank	SLC0248-IBL5	XDT_m2230316-053	NA	03/16/23 20:37
Calibration Check	SLC0248-CCV4	XDT_m2230316-055	NA	03/16/23 20:49
Calibration Blank	SLC0248-CCB4	XDT_m2230316-056	NA	03/16/23 20:57
Instrument Blank	SLC0248-IBL6	XDT_m2230316-066	NA	03/16/23 21:53
Calibration Check	SLC0248-CCV5	XDT_m2230316-067	NA	03/16/23 21:58
Calibration Blank	SLC0248-CCB5	XDT_m2230316-068	NA	03/16/23 22:05



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLC0248-CCV6	XDT_m2230316-070	NA	03/16/23 22:20
Calibration Blank	SLC0248-CCB6	XDT_m2230316-071	NA	03/16/23 22:27
Instrument Blank	SLC0248-IBL7	XDT_m2230316-081	NA	03/16/23 23:17
Calibration Check	SLC0248-CCV7	XDT_m2230316-082	NA	03/16/23 23:22
Calibration Blank	SLC0248-CCB7	XDT_m2230316-083	NA	03/16/23 23:29
Instrument Blank	SLC0248-IBL8	XDT_m2230316-093	NA	03/17/23 00:17
Calibration Check	SLC0248-CCV8	XDT_m2230316-094	NA	03/17/23 00:22
Calibration Blank	SLC0248-CCB8	XDT_m2230316-095	NA	03/17/23 00:29
Blank	BLC0079-BLK1	XDT_m2230316-098	Solid	03/17/23 00:43
LCS	BLC0079-BS1	XDT_m2230316-099	Solid	03/17/23 00:48
ZZZZZ	23A0088-01	XDT_m2230316-100	Solid	03/17/23 00:53
ZZZZZ	23A0088-01	XDT_m2230316-100	Solid	03/17/23 00:53
Instrument Blank	SLC0248-IBL9	XDT_m2230316-105	NA	03/17/23 01:16
Calibration Check	SLC0248-CCV9	XDT_m2230316-106	NA	03/17/23 01:20
Calibration Blank	SLC0248-CCB9	XDT_m2230316-107	NA	03/17/23 01:28
ZZZZZ	23A0088-06	XDT_m2230316-110	Solid	03/17/23 01:42
ZZZZZ	23A0088-06	XDT_m2230316-110	Solid	03/17/23 01:42
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-07	XDT_m2230316-111	Solid	03/17/23 01:46
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-08	XDT_m2230316-112	Solid	03/17/23 01:51
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-09	XDT_m2230316-113	Solid	03/17/23 01:56
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-10	XDT_m2230316-114	Solid	03/17/23 02:00
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
ZZZZZ	23A0088-11	XDT_m2230316-115	Solid	03/17/23 02:05
Instrument Blank	SLC0248-IBLA	XDT_m2230316-117	NA	03/17/23 02:14
Calibration Check	SLC0248-CCVA	XDT_m2230316-118	NA	03/17/23 02:19



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0248-CCBA	XDT_m2230316-119	NA	03/17/23 02:26
ZZZZZ	23A0088-13	XDT_m2230316-120	Solid	03/17/23 02:31
ZZZZZ	23A0088-13	XDT_m2230316-120	Solid	03/17/23 02:31
ZZZZZ	23A0088-14	XDT_m2230316-121	Solid	03/17/23 02:36
ZZZZZ	23A0088-14	XDT_m2230316-121	Solid	03/17/23 02:36
ZZZZZ	23A0088-15	XDT_m2230316-122	Solid	03/17/23 02:40
ZZZZZ	23A0088-15	XDT_m2230316-122	Solid	03/17/23 02:40
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1236	23B0229-02	XDT_m2230316-123	Solid	03/17/23 02:45
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1237	23B0229-03	XDT_m2230316-124	Solid	03/17/23 02:50
LDW23-SS1150	23B0229-04	XDT_m2230316-125	Solid	03/17/23 02:54
LDW23-SS1150	23B0229-04	XDT_m2230316-125	Solid	03/17/23 02:54
LDW23-SS1008	23B0229-05	XDT_m2230316-126	Solid	03/17/23 02:59
LDW23-SS1008	23B0229-05	XDT_m2230316-126	Solid	03/17/23 02:59
LDW23-SC1008	23B0229-06	XDT_m2230316-127	Solid	03/17/23 03:04
LDW23-SC1008	23B0229-06	XDT_m2230316-127	Solid	03/17/23 03:04
LDW23-SC1013	23B0229-08	XDT_m2230316-128	Solid	03/17/23 03:08
LDW23-SC1013	23B0229-08	XDT_m2230316-128	Solid	03/17/23 03:08
Instrument Blank	SLC0248-IBLB	XDT_m2230316-129	NA	03/17/23 03:13
Calibration Check	SLC0248-CCVB	XDT_m2230316-130	NA	03/17/23 03:18
Calibration Blank	SLC0248-CCBB	XDT_m2230316-131	NA	03/17/23 03:25
Calibration Check	SLC0248-CCVC	XDT_m2230316-133	NA	03/17/23 03:34
Calibration Blank	SLC0248-CCBC	XDT_m2230316-134	NA	03/17/23 03:42
Instrument Blank	SLC0248-IBLC	XDT_m2230316-144	NA	03/17/23 04:30
Calibration Check	SLC0248-CCVD	XDT_m2230316-145	NA	03/17/23 04:34
Calibration Blank	SLC0248-CCBD	XDT_m2230316-146	NA	03/17/23 04:42



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0248

Instrument: ICPMS2

Calibration: GC00054

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLC0248-IBLD	XDT_m2230316-156	NA	03/17/23 05:30
Calibration Check	SLC0248-CCVE	XDT_m2230316-157	NA	03/17/23 05:35
Calibration Blank	SLC0248-CCBE	XDT_m2230316-158	NA	03/17/23 05:42
Instrument Blank	SLC0248-IBLE	XDT_m2230316-164	NA	03/17/23 06:10
Instrument Blank	SLC0248-IBLF	XDT_m2230316-168	NA	03/17/23 06:29
Calibration Check	SLC0248-CCVF	XDT_m2230316-169	NA	03/17/23 06:33
Calibration Blank	SLC0248-CCBF	XDT_m2230316-170	NA	03/17/23 06:41
Calibration Check	SLC0248-CCVG	XDT_m2230316-172	NA	03/17/23 06:50
Calibration Blank	SLC0248-CCBG	XDT_m2230316-173	NA	03/17/23 06:58
Instrument Blank	SLC0248-IBLH	XDT_m2230316-183	NA	03/17/23 07:44
Calibration Check	SLC0248-CCVH	XDT_m2230316-184	NA	03/17/23 07:49
Calibration Blank	SLC0248-CCBH	XDT_m2230316-185	NA	03/17/23 07:56
Instrument Blank	SLC0248-IBLI	XDT_m2230316-195	NA	03/17/23 08:44
Calibration Check	SLC0248-CCVI	XDT_m2230316-196	NA	03/17/23 08:49
Calibration Blank	SLC0248-CCBI	XDT_m2230316-197	NA	03/17/23 08:56
Instrument Blank	SLC0248-IBLJ	XDT_m2230316-203	NA	03/17/23 09:26
Calibration Check	SLC0248-CCVJ	XDT_m2230316-204	NA	03/17/23 09:31
Calibration Blank	SLC0248-CCBJ	XDT_m2230316-205	NA	03/17/23 09:38



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0300

Instrument: ICPMS2

Calibration: GC00057

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLC0300-CAL1	XDT_m2230317-006	NA	03/17/23 14:06
CAL 1 - LOW CHECK	SLC0300-CAL2	XDT_m2230317-007	NA	03/17/23 14:09
CAL 2	SLC0300-CAL3	XDT_m2230317-008	NA	03/17/23 14:11
CAL 3	SLC0300-CAL4	XDT_m2230317-009	NA	03/17/23 14:14
CAL 4	SLC0300-CAL5	XDT_m2230317-010	NA	03/17/23 14:17
CAL 5	SLC0300-CAL6	XDT_m2230317-011	NA	03/17/23 14:22
RINSE	SLC0300-IBL1	XDT_m2230317-012	NA	03/17/23 14:27
Initial Cal Check	SLC0300-ICV1	XDT_m2230317-014	NA	03/17/23 14:33
Initial Cal Blank	SLC0300-ICB1	XDT_m2230317-015	NA	03/17/23 14:38
Calibration Check	SLC0300-CCV1	XDT_m2230317-016	NA	03/17/23 14:40
Calibration Blank	SLC0300-CCB1	XDT_m2230317-017	NA	03/17/23 14:45
Instrument RL Check	SLC0300-CRL1	XDT_m2230317-018	NA	03/17/23 14:50
Interference Check A	SLC0300-IFA1	XDT_m2230317-019	NA	03/17/23 14:53
Interference Check B	SLC0300-IFB1	XDT_m2230317-020	NA	03/17/23 14:55
LR200	SLC0300-HCV1	XDT_m2230317-021	NA	03/17/23 14:58
LR300	SLC0300-HCV2	XDT_m2230317-022	NA	03/17/23 15:00
Instrument Blank	SLC0300-IBL2	XDT_m2230317-023	NA	03/17/23 15:05
Instrument Blank	SLC0300-IBL3	XDT_m2230317-024	NA	03/17/23 15:10
Calibration Check	SLC0300-CCV2	XDT_m2230317-025	NA	03/17/23 15:14
Calibration Blank	SLC0300-CCB2	XDT_m2230317-026	NA	03/17/23 15:20
Instrument Blank	SLC0300-IBL4	XDT_m2230317-036	NA	03/17/23 15:50
Calibration Check	SLC0300-CCV3	XDT_m2230317-037	NA	03/17/23 15:53
Calibration Blank	SLC0300-CCB3	XDT_m2230317-038	NA	03/17/23 15:58
ZZZZZ	23B0552-01	XDT_m2230317-039	Water	03/17/23 16:01
ZZZZZ	23B0552-02	XDT_m2230317-040	Water	03/17/23 16:03
Instrument Blank	SLC0300-IBL5	XDT_m2230317-047	NA	03/17/23 16:26
Calibration Check	SLC0300-CCV4	XDT_m2230317-048	NA	03/17/23 16:29
Calibration Blank	SLC0300-CCB4	XDT_m2230317-049	NA	03/17/23 16:34
Calibration Check	SLC0300-CCV5	XDT_m2230317-051	NA	03/17/23 16:40



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0300

Instrument: ICPMS2

Calibration: GC00057

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLC0300-CCB5	XDT_m2230317-052	NA	03/17/23 16:44
Instrument Blank	SLC0300-IBL6	XDT_m2230317-062	NA	03/17/23 17:07
Calibration Check	SLC0300-CCV6	XDT_m2230317-063	NA	03/17/23 17:09
Calibration Blank	SLC0300-CCB6	XDT_m2230317-064	NA	03/17/23 17:14
Instrument Blank	SLC0300-IBL7	XDT_m2230317-074	NA	03/17/23 17:36
Calibration Check	SLC0300-CCV7	XDT_m2230317-075	NA	03/17/23 17:37
Calibration Blank	SLC0300-CCB7	XDT_m2230317-076	NA	03/17/23 17:42
Instrument Blank	SLC0300-IBL8	XDT_m2230317-078	NA	03/17/23 17:51
Instrument Blank	SLC0300-IBL9	XDT_m2230317-086	NA	03/17/23 18:06
Calibration Check	SLC0300-CCV8	XDT_m2230317-087	NA	03/17/23 18:09
Calibration Blank	SLC0300-CCB8	XDT_m2230317-088	NA	03/17/23 18:14
Instrument Blank	SLC0300-IBLA	XDT_m2230317-092	NA	03/17/23 18:24
Instrument Blank	SLC0300-IBLB	XDT_m2230317-098	NA	03/17/23 18:38
Calibration Check	SLC0300-CCV9	XDT_m2230317-099	NA	03/17/23 18:40
Calibration Blank	SLC0300-CCB9	XDT_m2230317-100	NA	03/17/23 18:45
Instrument Blank	SLC0300-IBLC	XDT_m2230317-103	NA	03/17/23 18:56
Calibration Check	SLC0300-CCVA	XDT_m2230317-111	NA	03/17/23 19:21
Calibration Blank	SLC0300-CCBA	XDT_m2230317-112	NA	03/17/23 19:25
Instrument Blank	SLC0300-IBLD	XDT_m2230317-122	NA	03/17/23 19:51
Calibration Check	SLC0300-CCVB	XDT_m2230317-123	NA	03/17/23 19:54
Calibration Blank	SLC0300-CCBB	XDT_m2230317-125	NA	03/17/23 20:01
Calibration Check	SLC0300-CCVC	XDT_m2230317-129	NA	03/17/23 20:08
Calibration Blank	SLC0300-CCBC	XDT_m2230317-130	NA	03/17/23 20:13
Calibration Check	SLC0300-CCVD	XDT_m2230317-132	NA	03/17/23 20:36
Calibration Blank	SLC0300-CCBD	XDT_m2230317-133	NA	03/17/23 20:40
ZZZZZ	23A0088-06	XDT_m2230317-134	Solid	03/17/23 20:43
ZZZZZ	23A0088-07	XDT_m2230317-135	Solid	03/17/23 20:44
ZZZZZ	23A0088-08	XDT_m2230317-136	Solid	03/17/23 20:45
ZZZZZ	23A0088-09	XDT_m2230317-137	Solid	03/17/23 20:47



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0300

Instrument: ICPMS2

Calibration: GC00057

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0088-01	XDT_m2230317-138	Solid	03/17/23 20:48
Instrument Blank	SLC0300-IBL	XDT_m2230317-143	NA	03/17/23 20:55
Calibration Check	SLC0300-CCVE	XDT_m2230317-144	NA	03/17/23 20:56
Calibration Blank	SLC0300-CCBE	XDT_m2230317-145	NA	03/17/23 21:00
ZZZZZ	23A0088-10	XDT_m2230317-146	Solid	03/17/23 21:02
ZZZZZ	23A0088-11	XDT_m2230317-147	Solid	03/17/23 21:03
ZZZZZ	23A0088-12	XDT_m2230317-148	Solid	03/17/23 21:05
ZZZZZ	23A0088-13	XDT_m2230317-149	Solid	03/17/23 21:06
ZZZZZ	23A0088-14	XDT_m2230317-150	Solid	03/17/23 21:07
ZZZZZ	23A0088-15	XDT_m2230317-151	Solid	03/17/23 21:09
LDW23-SS1150	23B0229-04	XDT_m2230317-152	Solid	03/17/23 21:10
LDW23-SS1008	23B0229-05	XDT_m2230317-153	Solid	03/17/23 21:11
LDW23-SC1008	23B0229-06	XDT_m2230317-154	Solid	03/17/23 21:13
LDW23-SC1013	23B0229-08	XDT_m2230317-155	Solid	03/17/23 21:14
Calibration Check	SLC0300-CCVF	XDT_m2230317-156	NA	03/17/23 21:17
Calibration Blank	SLC0300-CCBF	XDT_m2230317-157	NA	03/17/23 21:21



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Standard ID: L002581

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0248-IFA1	Chromium-52	0	0.8370		ug/L
	Chromium-53	0	4.9130		ug/L
	Lead-208	0	0.0370		ug/L
	Silver-107	0	0.0080		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Standard ID: L002581

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0248-IFB1	Chromium-52	20.000	20.429	102	ug/L
	Chromium-53	20.000	24.598	123	ug/L
	Lead-208	0	0.0390		ug/L
	Silver-107	20.000	20.223	101	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00057

Sequence: SLC0300

Standard ID: L002581

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0300-IFA1	Chromium-52	0	0.8860		ug/L
	Chromium-53	0	4.2230		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00057

Sequence: SLC0300

Standard ID: L002581

Lab Sample ID	Analyte	True	Found	%R	Units
SLC0300-IFB1	Chromium-52	20.000	20.714	104	ug/L
	Chromium-53	20.000	23.571	118	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00054

Sequence: SLC0248

Lab Sample ID: SLC0248-CRL1

Analyte	True	Found	%R	Units	QC Limits
Chromium-52	0.50000	0.545	109	ug/L	50 - 150
Chromium-53	0.50000	0.510	102	ug/L	50 - 150
Lead-208	0.10000	0.101	101	ug/L	50 - 150
Silver-107	0.20000	0.209	105	ug/L	50 - 150

* Values outside of QC limits



DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS2

Calibration: GC00057

Sequence: SLC0300

Lab Sample ID: SLC0300-CRL1

Analyte	True	Found	%R	Units	QC Limits
Chromium-52	0.50000	0.572	114	ug/L	50 - 150
Chromium-53	0.50000	0.525	105	ug/L	50 - 150

* Values outside of QC limits



**HIGH-CONCENTRATION
CALIBRATION VERIFICATION
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00054

Laboratory ID: SLC0248-HCV1

Sequence: SLC0248

Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	193	-3.6	10.00
Chromium-53	200.00	193	-3.6	10.00
Lead-208	200.00	204	2.0	10.00
Silver-107	200.00	198	-1.0	10.00

* Values outside of QC limits



HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00054

Laboratory ID: SLC0248-HCV2

Sequence: SLC0248

Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	292	-2.6	10.00
Chromium-53	300.00	296	-1.3	10.00
Lead-208	300.00	296	-1.2	10.00
Silver-107	300.00	298	-0.8	10.00

* Values outside of QC limits



**HIGH-CONCENTRATION
CALIBRATION VERIFICATION
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00057

Laboratory ID: SLC0300-HCV1

Sequence: SLC0300

Standard ID: L002745

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	207	3.6	10.00
Chromium-53	200.00	198	-1.0	10.00

* Values outside of QC limits



HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00057

Laboratory ID: SLC0300-HCV2

Sequence: SLC0300

Standard ID: L002746

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	317	5.6	10.00
Chromium-53	300.00	301	0.2	10.00

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:45	37	180	
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:50	37	180	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 21:10	37	180	
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:54	37	180	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 21:11	37	180	
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 02:59	37	180	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 21:13	37	180	
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 03:04	37	180	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 21:14	37	180	
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	03/14/23 17:30	34	180	03/17/23 03:08	36	180	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ICPMS2

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCU10
Lot Number: P2-CU682108
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Copper
Starting Material: Cu Metal
Starting Material Lot#: 2095
Starting Material Purity: 99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL
Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9977 ± 50 µg/mL ICP Assay NIST SRM 3114 Lot Number: 121207
Assay Method #2	10024 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10007 ± 46 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.007542	M Eu < 0.000942	O Na < 0.001434	M Se < 0.016971	M Zn < 0.005657
O Al < 0.000609	O Fe < 0.008700	M Nb < 0.000942	O Si < 0.003052	M Zr < 0.000942
M As < 0.010371	M Ga < 0.000942	M Nd < 0.000942	M Sm < 0.000942	
M Au < 0.001885	M Gd < 0.000942	M Ni < 0.003781	M Sn < 0.005657	
O B < 0.003663	M Ge < 0.005657	M Os < 0.000942	M Sr < 0.000942	
M Ba < 0.004253	M Hf < 0.000942	O P < 0.031668	M Ta < 0.000942	
M Be < 0.000942	O Hg < 0.007064	M Pb < 0.005789	M Tb < 0.000942	
M Bi < 0.000942	M Ho < 0.000942	M Pd < 0.000942	M Te < 0.004714	
O Ca < 0.002304	M In < 0.000942	M Pr < 0.000942	M Th < 0.000942	
M Cd < 0.000942	M Ir < 0.000942	M Pt < 0.000942	O Ti < 0.002801	
M Ce < 0.000942	O K < 0.000763	M Rb < 0.000942	M Tl < 0.000942	
M Co < 0.001890	M La < 0.000942	M Re < 0.000942	M Tm < 0.000942	
M Cr < 0.005657	O Li < 0.000243	i Rh <	M U < 0.000942	
M Cs < 0.000942	M Lu < 0.000942	M Ru < 0.039588	M V < 0.003771	
s Cu <	O Mg < 0.000320	O S < 0.007174	M W < 0.005657	
M Dy < 0.000942	O Mn < 0.000793	M Sb < 0.001885	M Y < 0.000942	
M Er < 0.000942	M Mo < 0.005657	M Sc < 0.000942	M Yb < 0.000942	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 Cu(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGPB10
Lot Number: S2-PB713228
Matrix: 0.5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Lead
Starting Material: Lead Nitrate
Starting Material Lot#: 2343
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL
Density: 1.015 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10024 ± 41 µg/mL ICP Assay NIST SRM 3128 Lot Number: 101026
Assay Method #2	10054 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000310	M Eu < 0.000310	M Na < 0.001470	M Se < 0.009100	O Zn < 0.006155
O Al < 0.017098	O Fe < 0.002496	M Nb < 0.000310	O Si < 0.003761	O Zr < 0.001700
M As < 0.003100	M Ga < 0.000310	M Nd < 0.000310	M Sm < 0.000310	
M Au < 0.000910	M Gd < 0.000310	O Ni < 0.001709	M Sn < 0.001300	
O B < 0.005600	M Ge < 0.002200	M Os < 0.000310	O Sr < 0.000444	
O Ba < 0.007865	M Hf < 0.000310	O P < 0.038000	M Ta < 0.000310	
O Be < 0.000320	M Hg < 0.002200	s Pb < 0.000610	M Tb < 0.000610	
M Bi < 0.028000	M Ho < 0.000310	M Pd < 0.000610	M Te < 0.000310	
O Ca < 0.019834	M In < 0.000310	M Pr < 0.000310	M Th < 0.000310	
O Cd < 0.000630	M Ir < 0.000310	M Pt < 0.000910	O Ti < 0.005129	
M Ce < 0.004787	O K < 0.008207	M Rb < 0.006700	M Tl < 0.016000	
M Co < 0.000610	M La < 0.001900	M Re < 0.000310	M Tm < 0.000310	
O Cr < 0.001500	O Li < 0.000110	O Rh < 0.007700	M U < 0.000310	
M Cs < 0.006100	M Lu < 0.000310	M Ru < 0.001300	M V < 0.001600	
M Cu < 0.001600	O Mg < 0.003317	O S < 0.052000	M W < 0.000910	
M Dy < 0.000310	O Mn < 0.001600	O Sb < 0.015000	M Y < 0.000310	
M Er < 0.000310	M Mo < 0.000610	O Sc < 0.000630	M Yb < 0.000310	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, HF and HNO₃. Avoid H₂SO₄. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H₂O / HNO₃); Oxides (The many different Pb oxides are soluble in HNO₃ with the exception of PbO₂ which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H₂O / HNO₃); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGZN10
Lot Number: S2-ZN711249
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Zinc
Starting Material: Zinc Metal
Starting Material Lot#: 2349
Starting Material Purity: 99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9981 ± 56 µg/mL ICP Assay NIST SRM 3168a Lot Number: 120629
Assay Method #2	9987 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10002 ± 32 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.002000	M Eu < 0.000500	O Na < 0.008713	M Se < 0.048000	s Zn <
O Al < 0.011000	O Fe < 0.015467	M Nb < 0.000500	O Si < 0.007842	M Zr < 0.000500
O As < 0.012000	M Ga < 0.004900	M Nd < 0.000500	M Sm < 0.000500	
M Au < 0.006500	M Gd < 0.000500	O Ni < 0.003049	M Sn < 0.002614	
O B < 0.019000	M Ge < 0.009100	M Os < 0.000500	M Sr < 0.000500	
M Ba < 0.000500	M Hf < 0.000500	O P < 0.059000	M Ta < 0.000500	
O Be < 0.000230	O Hg < 0.003800	M Pb < 0.016774	M Tb < 0.000500	
M Bi < 0.002400	M Ho < 0.000500	M Pd < 0.001000	M Te < 0.017000	
O Ca < 0.052283	M In < 0.003500	M Pr < 0.000500	M Th < 0.000500	
O Cd < 0.000588	M Ir < 0.001000	M Pt < 0.000500	M Ti < 0.002000	
M Ce < 0.000500	O K < 0.017209	M Rb < 0.002500	M Tl < 0.000500	
M Co < 0.000653	M La < 0.000500	M Re < 0.000500	M Tm < 0.000500	
O Cr < 0.001089	O Li < 0.000230	M Rh < 0.000500	M U < 0.000500	
M Cs < 0.000500	M Lu < 0.000500	M Ru < 0.005000	M V < 0.000500	
O Cu < 0.001938	O Mg < 0.000871	O S < 0.048000	M W < 0.001000	
M Dy < 0.000500	O Mn < 0.000172	M Sb < 0.004300	M Y < 0.000500	
M Er < 0.000500	M Mo < 0.001500	O Sc < 0.000900	M Yb < 0.000500	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSE10
Lot Number: S2-SE711004
Matrix: 3% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Selenium
Starting Material: Se Metal
Starting Material Lot#: 1962
Starting Material Purity: 99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char\ i}^2) / (\sum(1/(u_{char\ i}^2)))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 u_{char} = $[\sum((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char\ a})$$

X_a = mean of Assay Method A with
 $u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char\ a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.002242	M	Eu <	0.000373	O Na	0.013654	s	Se <		O Zn	0.002374
M Al	0.004450	M	Fe	0.008478	O Nb <	0.002975	O Si	0.006249	M Zr <	0.001868	
O As <	0.022040	M	Ga <	0.000373	M Nd <	0.000373	M Sm <	0.000373			
M Au <	0.000373	M	Gd <	0.000373	O Ni	0.001843	M Sn	0.000847			
O B <	0.007714	M	Ge <	0.002616	M Os <	0.000373	M Sr <	0.001121			
M Ba <	0.001495	M	Hf <	0.000373	O P <	0.022040	M Ta <	0.000373			
M Be <	0.001495	M	Hg <	0.002240	M Pb	0.006358	M Tb <	0.006353			
M Bi <	0.000373	M	Ho <	0.000373	M Pd <	0.000373	M Te <	0.012707			
O Ca	0.006530	M	In <	0.000373	M Pr <	0.001495	M Th <	0.002990			
M Cd	0.001165	M	Ir <	0.000373	M Pt <	0.000373	M Ti <	0.003363			
M Ce <	0.000373	O	K	0.001999	M Rb <	0.001868	M Tl	0.008584			
M Co <	0.000373	M	La <	0.001121	M Re <	0.000373	M Tm <	0.000373			
M Cr	0.002861	O	Li	0.000062	M Rh <	0.000373	M U <	0.000373			
M Cs <	0.001121	M	Lu <	0.000373	M Ru <	0.001493	M V <	0.000747			
M Cu <	0.000747	O	Mg	0.001156	O S	0.024591	M W <	0.002242			
M Dy <	0.000373	M	Mn <	0.000373	M Sb <	0.002242	M Y <	0.000373			
M Er <	0.000373	O	Mo <	0.003195	M Sc <	0.001121	M Yb <	0.000373			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H₂SeO₃

Chemical Compatibility -Soluble in HCl, HNO₃,H₃PO₄, H₂SO₄ and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO₃or HNO₃ / HF); Organic Matrices (acid digestion with hot concentrated H₂SO₄ accompanied by the careful dropwise addition of H₂O₂ until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMO10
Lot Number: S2-MO706255
Matrix: H2O
tr. NH4OH
Value / Analyte(s): 10 000 µg/mL ea:
Molybdenum
Starting Material: Ammonium Molybdate
Starting Material Lot#: 2361
Starting Material Purity: 99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL
Density: 1.011 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000590	M Eu < 0.000300	M Na < 0.008739	M Se < 0.008000	M Zn < 0.005942
M Al < 0.005592	M Fe < 0.006500	M Nb < 0.029000	i Si < 0.001800	M Zr < 0.001800
M As < 0.002100	M Ga < 0.000300	i Nd < 0.000300	M Sm < 0.000300	
M Au < 0.000300	M Gd < 0.000300	M Ni < 0.008000	M Sn < 0.008900	
M B < 0.003300	M Ge < 0.000300	M Os < 0.000590	M Sr < 0.001747	
M Ba < 0.016778	M Hf < 0.001800	i P < 0.004200	M Ta < 0.004200	
M Be < 0.000890	M Hg < 0.003300	M Pb < 0.000300	M Tb < 0.000300	
M Bi < 0.000890	M Ho < 0.000300	M Pd < 0.001800	M Te < 0.021000	
O Ca < 0.062920	M In < 0.032000	M Pr < 0.013000	M Th < 0.000300	
O Cd < 0.026000	M Ir < 0.000300	M Pt < 0.000300	O Ti < 0.032000	
M Ce < 0.008300	M K < 1.293372	M Rb < 0.045442	M Tl < 0.012584	
M Co < 0.005942	M La < 0.000300	M Re < 0.000300	M Tm < 0.000300	
M Cr < 0.005243	O Li < 0.000594	M Rh < 0.000300	M U < 0.005300	
M Cs < 0.005243	M Lu < 0.000300	M Ru < 0.079000	M V < 0.000890	
M Cu < 0.022371	M Mg < 0.005592	i S < 0.873900	M W < 0.873900	
M Dy < 0.000300	M Mn < 0.005900	M Sb < 0.015031	M Y < 0.000300	
M Er < 0.000300	s Mo < 0.000300	M Sc < 0.001200	M Yb < 0.000300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9

[MoO₄]²⁻(chemical form as received)

Chemical Compatibility -Mo is received in a NH₄OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO₄]²⁻ is soluble in concentrated HCl [MoOCl₅]²⁻, dilute HF / HNO₃ [MoOF₅]²⁻ and basic media [MoO₄]²⁻. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO₄]²⁻ chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF₅]²⁻ for months in 1% HNO₃ / LDPE container. 1-10,000 ppm single element solutions as the [MoO₄]²⁻ chemically stable for years in 1% NH₄OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO₃ or hot dilute HCl); Oxide (soluble in HF or NH₄OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 60,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGTL10
Lot Number: T2-TL714687
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Thallium
Starting Material: TINO₃
Starting Material Lot#: 2118
Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL
Density: 1.036 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000200	M Eu < 0.000200	O Na < 0.002489	M Se < 0.011019	O Zn < 0.002298
O Al < 0.004184	O Fe < 0.002824	M Nb < 0.000200	O Si < 0.003760	M Zr < 0.000200
M As < 0.002003	M Ga < 0.000200	M Nd < 0.000200	M Sm < 0.000200	
O Au < 0.002824	M Gd < 0.000200	M Ni < 0.001724	M Sn < 0.000601	
O B < 0.004184	M Ge < 0.000801	M Os < 0.000198	O Sr < 0.000313	
M Ba < 0.000400	M Hf < 0.000200	O P < 0.010460	M Ta < 0.000200	
O Be < 0.000104	M Hg < 0.000794	M Pb < 0.000811	M Tb < 0.000200	
M Bi < 0.005209	M Ho < 0.000200	M Pd < 0.000400	M Te < 0.005008	
O Ca < 0.002436	M In < 0.000200	M Pr < 0.000200	M Th < 0.000200	
M Cd < 0.001318	M Ir < 0.000198	M Pt < 0.000801	O Ti < 0.001255	
M Ce < 0.000200	O K < 0.006175	M Rb < 0.000200	s Tl <	
M Co < 0.000601	M La < 0.000200	M Re < 0.000200	M Tm < 0.000200	
M Cr < 0.000801	O Li < 0.000177	M Rh < 0.000200	M U < 0.000200	
M Cs < 0.003606	M Lu < 0.000200	M Ru < 0.000397	M V < 0.002203	
M Cu < 0.001001	O Mg < 0.000529	O S < 0.015690	M W < 0.000601	
M Dy < 0.000200	M Mn < 0.000801	M Sb < 0.000400	M Y < 0.000200	
M Er < 0.000200	M Mo < 0.001202	O Sc < 0.000711	M Yb < 0.000200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Ti(H₂O)₆¹⁺
Chemical Compatibility - Soluble in HCl, HNO₃, and H₂SO₄. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Ti Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO₃ which forms chiefly the Ti¹⁺ ion.); Oxide (The thalious oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt₀ followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCD10
Lot Number: S2-CD710508
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Cadmium
Starting Material: Cd Metal
Starting Material Lot#: 1953
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10010 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	10011 ± 30 µg/mL ICP Assay NIST SRM 3108 Lot Number: 130116
Assay Method #3	10003 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

O Ag < 0.003200	O Eu < 0.002500	O Na < 0.005499	M Se < 0.005700	O Zn < 0.001100
O Al < 0.008903	O Fe < 0.000602	M Nb < 0.000400	O Si < 0.016758	O Zr < 0.002600
M As < 0.003600	M Ga < 0.001200	M Nd < 0.000800	M Sm < 0.000400	
M Au < 0.000810	M Gd < 0.000400	M Ni < 0.003600	M Sn < 0.003200	
O B < 0.004189	O Ge < 0.012000	M Os < 0.000810	O Sr < 0.000330	
M Ba < 0.002400	M Hf < 0.000400	O P < 0.022000	M Ta < 0.000800	
M Be < 0.000400	M Hg < 0.001700	M Pb < 0.002400	M Tb < 0.000400	
M Bi < 0.000400	M Ho < 0.000400	M Pd < 0.001200	M Te < 0.008000	
O Ca < 0.011259	O In < 0.013000	M Pr < 0.000400	M Th < 0.000400	
s Cd < 0.000400	M Ir < 0.000410	M Pt < 0.000400	O Ti < 0.000602	
M Ce < 0.000400	O K < 0.005237	M Rb < 0.004400	M Tl < 0.000523	
M Co < 0.000400	M La < 0.000400	M Re < 0.000400	M Tm < 0.000400	
O Cr < 0.005100	O Li < 0.000054	M Rh < 0.000400	M U < 0.000400	
M Cs < 0.002400	M Lu < 0.000400	M Ru < 0.002500	M V < 0.002000	
O Cu < 0.004800	O Mg < 0.000288	O S < 0.022000	M W < 0.000400	
M Dy < 0.000400	O Mn < 0.000860	O Sb < 0.018000	M Y < 0.000400	
M Er < 0.000400	M Mo < 0.001600	O Sc < 0.000430	M Yb < 0.000400	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd₂(OH)(aq)₃₊ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃ / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (soluble in HCl or HNO₃); Ores (dissolve in HCl /HNO₃ then take to fumes with H₂SO₄. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMN10
Lot Number: S2-MN704240
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Manganese
Starting Material: Mn Metal
Starting Material Lot#: 2275
Starting Material Purity: 99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9989 ± 69 µg/mL ICP Assay NIST SRM 3132 Lot Number: 050429
Assay Method #2	10011 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10024 ± 47 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.001500	M Eu < 0.000730	O Na 0.176097	M Se < 0.006600	M Zn 0.009925
O Al 0.004322	M Fe < 0.650000	M Nb < 0.000730	O Si 0.097654	M Zr < 0.000730
M As < 0.008000	M Ga 0.004322	M Nd < 0.001500	M Sm < 0.000730	
M Au < 0.000730	M Gd < 0.000730	M Ni 0.024013	M Sn < 0.002200	
M B 0.068838	M Ge < 0.004400	M Os < 0.000730	O Sr 0.000928	
M Ba < 0.001500	M Hf < 0.000730	i P <	M Ta < 0.000730	
M Be < 0.000730	M Hg < 0.002200	M Pb 0.007364	M Tb < 0.000730	
M Bi < 0.003000	M Ho < 0.000730	M Pd < 0.000730	M Te < 0.019000	
O Ca 0.062434	M In < 0.003000	M Pr < 0.000730	M Th < 0.000730	
M Cd < 0.001500	M Ir < 0.000730	M Pt < 0.000730	O Ti < 0.006500	
M Ce < 0.007300	O K 0.006403	M Rb < 0.006600	M Tl < 0.000730	
O Co 0.014728	M La < 0.003000	M Re < 0.000730	M Tm < 0.000730	
O Cr 0.272151	O Li 0.000416	M Rh < 0.003000	M U < 0.001500	
M Cs < 0.000730	M Lu < 0.000730	M Ru < 0.004400	M V < 0.000730	
O Cu 0.007684	O Mg 0.320177	i S <	M W < 0.004400	
M Dy < 0.001500	s Mn <	M Sb < 0.021000	O Y 0.001360	
M Er < 0.001500	M Mo 0.010245	O Sc < 0.004100	M Yb < 0.000730	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 Mn(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H₂SO₄ and heat to SO₃ fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16 O,37Cl18O,40Ar15 N,38Ar17O,36Ar18O 1H ,38Ar16O1H,37Cl17 O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGSB10
 Lot Number: R2-SB688559
 Matrix: 3% (v/v) HNO3
 3% (w/v) tartaric acid
 Value / Analyte(s): 10 000 µg/mL ea:
 Antimony
 Starting Material: Antimony Metal
 Starting Material Lot#: 1857
 Starting Material Purity: 99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL
Density: 1.061 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 10003 ± 41 µg/mL
 ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.000200	M Eu <	0.000300	O Na	0.140000	M Se <	0.007300	O Zn	0.005000
M Al	0.003200	O Fe	0.060000	M Nb <	0.000100	O Si	0.150000	O Zr <	0.006300
M As <	0.004400	M Ga <	0.000400	M Nd <	0.000100	M Sm <	0.000100		
M Au <	0.000210	M Gd <	0.000100	O Ni	0.004800	M Sn <	0.001800		
M B <	0.011000	M Ge <	0.000600	M Os <	0.000110	O Sr	0.000750		
O Ba <	0.004900	M Hf <	0.000100	O P	0.540000	M Ta	0.003300		
M Be <	0.000400	M Hg <	0.000110	M Pb <	0.000400	M Tb <	0.000100		
M Bi <	0.000200	M Ho <	0.000100	M Pd <	0.000210	M Te <	0.000600		
O Ca	0.110000	M In <	0.000100	M Pr <	0.001600	M Th <	0.000100		
M Cd <	0.000200	M Ir <	0.000110	M Pt <	0.000600	M Ti <	0.002800		
M Ce	0.006500	O K	0.020000	M Rb <	0.001000	M Tl <	0.000100		
M Co <	0.000200	O La <	0.016000	M Re <	0.000100	M Tm <	0.000100		
M Cr	0.006900	O Li <	0.000430	M Rh <	0.000300	M U <	0.000100		
M Cs <	0.000200	M Lu <	0.000100	M Ru <	0.000310	M V <	0.000800		
M Cu <	0.000600	O Mg	0.021000	n S <		M W <	0.000200		
M Dy <	0.000100	O Mn	0.001900	s Sb <		M Y <	0.000100		
M Er <	0.000100	M Mo <	0.000500	O Sc <	0.002300	M Yb <	0.000100		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility - Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) - Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAS10
Lot Number: T2-AS718260
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Arsenic
Starting Material: As Metal
Starting Material Lot#: 2208
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL
Density: 1.037 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10062 ± 46 µg/mL ICP Assay NIST SRM 3103a Lot Number: 100818
Assay Method #2	10055 ± 76 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.003200	M Eu < 0.000530	O Na < 0.032544	M Se < 0.006300	O Zn < 0.001952
M Al < 0.007593	O Fe < 0.001475	O Nb < 0.012000	O Si < 0.238658	O Zr < 0.004100
s As < 0.000530	M Ga < 0.000530	M Nd < 0.000530	M Sm < 0.000530	
M Au < 0.003100	M Gd < 0.000530	M Ni < 0.002100	M Sn < 0.000530	
M B < 0.026035	M Ge < 0.001600	M Os < 0.000520	M Sr < 0.000530	
M Ba < 0.000530	M Hf < 0.000530	O P < 0.043000	M Ta < 0.000530	
O Be < 0.000360	M Hg < 0.001600	M Pb < 0.002100	M Tb < 0.000530	
M Bi < 0.000530	M Ho < 0.000530	M Pd < 0.001100	M Te < 0.004700	
O Ca < 0.004339	M In < 0.023000	M Pr < 0.005300	M Th < 0.000530	
M Cd < 0.001100	M Ir < 0.000520	M Pt < 0.000530	O Ti < 0.002300	
M Ce < 0.000530	O K < 0.002061	M Rb < 0.000530	M Tl < 0.000530	
M Co < 0.000530	M La < 0.001100	M Re < 0.000530	M Tm < 0.000530	
O Cr < 0.001800	O Li < 0.000120	M Rh < 0.000530	M U < 0.000530	
M Cs < 0.005300	M Lu < 0.000530	M Ru < 0.000520	M V < 0.002700	
M Cu < 0.001600	O Mg < 0.000154	O S < 0.028205	M W < 0.012000	
M Dy < 0.000530	O Mn < 0.000154	M Sb < 0.000530	M Y < 0.000530	
M Er < 0.000530	M Mo < 0.000530	O Sc < 0.001700	M Yb < 0.000530	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3, H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphous form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powdered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37C I,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGBA10
 Lot Number: R2-BA692576
 Matrix: 2% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Barium
 Starting Material: Barium Nitrate
 Starting Material Lot#: 1969
 Starting Material Purity: 99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL
Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10018 ± 50 µg/mL ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	10023 ± 31 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	10023 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an UPLA-Filtered Clean Room. An UPLA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000410	O Eu < 0.005200	O Na < 0.004610	M Se < 0.003700	O Zn < 0.000658
M Al < 0.003100	O Fe < 0.015707	M Nb < 0.000210	O Si < 0.005573	M Zr < 0.001300
M As < 0.001300	M Ga < 0.000210	M Nd < 0.000210	O Sm < 0.021000	
M Au < 0.001300	M Gd < 0.000210	M Ni < 0.000810	M Sn < 0.000410	
O B < 0.005200	M Ge < 0.002500	M Os < 0.000410	O Sr < 0.003850	
s Ba < 0.000320	M Hf < 0.000810	O P < 0.026000	M Ta < 0.000410	
O Be < 0.000320	M Hg < 0.000210	M Pb < 0.002300	M Tb < 0.000210	
M Bi < 0.000210	M Ho < 0.000210	M Pd < 0.000210	M Te < 0.001900	
O Ca < 0.007093	M In < 0.000210	M Pr < 0.000210	M Th < 0.000210	
M Cd < 0.000210	M Ir < 0.000210	M Pt < 0.000210	M Ti < 0.002100	
M Ce < 0.001300	O K < 0.035467	M Rb < 0.002100	M Tl < 0.000210	
M Co < 0.000410	O La < 0.005200	M Re < 0.000210	M Tm < 0.000410	
M Cr < 0.001700	O Li < 0.000630	M Rh < 0.000210	M U < 0.000210	
M Cs < 0.003300	M Lu < 0.001700	M Ru < 0.000210	O V < 0.005200	
M Cu < 0.001300	O Mg < 0.000861	O S < 0.268539	M W < 0.000410	
M Dy < 0.000210	M Mn < 0.000410	M Sb < 0.001300	O Y < 0.005200	
M Er < 0.001300	M Mo < 0.000410	M Sc < 0.000410	M Yb < 0.001300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 Ba(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO₃ / LDPE container.

Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO₃); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent BaSO₄ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGBE10
 Lot Number: R2-BE692992
 Matrix: 6% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Beryllium
 Starting Material: Beryllium Acetate
 Starting Material Lot#: 2281
 Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL
Density: 1.128 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10042 ± 67 µg/mL ICP Assay NIST SRM 3105a Lot Number: 090514
Assay Method #2	10025 ± 51 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001100	M Eu < 0.000270	O Na < 0.040962	M Se < 0.005000	M Zn < 0.013054
O Al < 0.016205	O Fe < 0.015754	M Nb < 0.000270	O Si < 0.024307	O Zr < 0.001900
M As < 0.002900	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000520	M Gd < 0.000270	M Ni < 0.003700	M Sn < 0.000790	
M B < 0.091000	M Ge < 0.000270	M Os < 0.000260	M Sr < 0.000630	
M Ba < 0.002700	M Hf < 0.000270	O P < 0.066000	M Ta < 0.000270	
s Be < 0.000530	M Hg < 0.000520	M Pb < 0.000270	M Tb < 0.000270	
M Bi < 0.072022	M Ho < 0.000270	M Pd < 0.000520	M Te < 0.003700	
O Ca < 0.000790	M In < 0.000790	M Pr < 0.000270	M Th < 0.000270	
M Cd < 0.000270	M Ir < 0.000260	M Pt < 0.000270	O Ti < 0.000400	
M Ce < 0.000270	O K < 0.045014	M Rb < 0.000270	M Tl < 0.000790	
O Co < 0.003200	M La < 0.000270	M Re < 0.000270	M Tm < 0.000270	
O Cr < 0.001800	O Li < 0.000660	M Rh < 0.001100	M U < 0.000270	
M Cs < 0.001440	M Lu < 0.000270	M Ru < 0.000260	M V < 0.000790	
M Cu < 0.002100	O Mg < 0.016205	i S < 0.000270	M W < 0.000530	
M Dy < 0.000270	M Mn < 0.001215	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.000530	O Sc < 0.000930	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 Be(H₂O)₄+2

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO₃ / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta I(is best dissolved in diluted H₂SO₄); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO₄ fusion); Ores (H₂SO₄/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCO10
Lot Number: R2-CO695285
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Cobalt
Starting Material: Co Metal
Starting Material Lot#: 2326
Starting Material Purity: 99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10031 ± 67 µg/mL ICP Assay NIST SRM 3113 Lot Number: 190630
Assay Method #2	10019 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10000 ± 35 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/CRM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) X_i$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an UPLA-Filtered Clean Room. An UPLA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.014660	M Eu	<	0.000590	O Na	0.007534	M Se	<	0.019000	M Zn	0.003461	
M Al	<	0.024000	M Fe	0.050905	M Nb	<	0.000590	O Si	0.075340	M Zr	<	0.001200
i As	<		M Ga	<	0.000590	M Nd	<	0.000590	M Sm	<	0.000590	
M Au	<	0.004100	M Gd	<	0.000590	O Ni	0.427608	M Sn	<	0.001200		
M B	<	0.031000	M Ge	<	0.003000	M Os	<	0.000590	O Sr	<	0.000260	
M Ba	<	0.000590	M Hf	<	0.000590	n P	<		M Ta	<	0.001200	
O Be	<	0.001300	M Hg	<	0.001800	M Pb	0.003257	M Tb	<	0.000590		
M Bi	<	0.003000	M Ho	<	0.000590	M Pd	<	0.000590	M Te	<	0.005300	
O Ca	0.010588	M In	<	0.001200	M Pr	<	0.000590	M Th	<	0.000590		
M Cd	<	0.004700	M Ir	<	0.001200	M Pt	<	0.002400	M Ti	<	0.014000	
M Ce	<	0.000590	O K	0.008144	M Rb	<	0.000590	M Tl	0.002647			
s Co	<		M La	<	0.000590	M Re	<	0.000590	M Tm	<	0.000590	
M Cr	<	0.021000	O Li	<	0.000130	M Rh	<	0.000590	M U	<	0.000590	
M Cs	<	0.002400	M Lu	<	0.000590	M Ru	<	0.007100	O V	<	0.000880	
M Cu	0.189369	O Mg	0.001893	n S	<			M W	<	0.000590		
M Dy	<	0.000590	M Mn	<	0.001800	M Sb	<	0.003600	M Y	<	0.000590	
M Er	<	0.000590	M Mo	<	0.002400	O Sc	<	0.001600	M Yb	<	0.000590	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 Co(H₂O)₆²⁺

Chemical Compatibility - Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAG10
Lot Number: S2-AG712977
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Silver
Starting Material: Ag Shot
Starting Material Lot#: 2289
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10051 ± 52 µg/mL ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	10051 ± 19 µg/mL Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	10049 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

s Ag <	M Eu <	0.000260	O Na	0.003811	M Se <	0.003900	O Zn	0.048146	
M Al	0.002688	O Fe	0.006419	M Nb <	0.000260	O Si	0.005215	M Zr <	0.000260
M As <	0.001100	M Ga <	0.000260	M Nd <	0.000260	M Sm <	0.000260		
M Au <	0.000260	M Gd <	0.000260	O Ni	0.001765	M Sn	0.020060		
O B <	0.004300	M Ge <	0.002300	M Os <	0.001100	O Sr <	0.000110		
M Ba <	0.000520	M Hf <	0.000260	O P <	0.017000	M Ta <	0.000260		
O Be <	0.001100	M Hg <	0.000770	M Pb <	0.003600	M Tb <	0.000260		
M Bi	0.004814	M Ho <	0.000260	M Pd	0.044134	M Te <	0.009000		
O Ca	0.005215	M In	0.003691	M Pr <	0.000260	M Th <	0.000260		
M Cd <	0.000260	M Ir <	0.000520	M Pt <	0.001100	O Ti <	0.000440		
M Ce <	0.002100	O K <	0.008700	M Rb <	0.001100	M Tl <	0.004100		
O Co <	0.000330	M La <	0.000260	M Re <	0.000260	M Tm <	0.000260		
O Cr <	0.002500	O Li <	0.000110	M Rh <	0.000520	M U <	0.000260		
M Cs <	0.002600	M Lu <	0.000260	M Ru <	0.000260	M V <	0.000260		
O Cu	0.357085	O Mg	0.001203	O S <	0.017000	M W <	0.000260		
M Dy <	0.000260	O Mn <	0.000220	M Sb <	0.014000	M Y <	0.000260		
M Er <	0.000260	M Mo <	0.000260	O Sc <	0.000220	M Yb <	0.000260		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 Ag(H₂O)₆⁺
Chemical Compatibility - Stable in HNO₃, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [AgCl_x1-x] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite, bromide, chloride, iodide, carbonate, chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ag Containing Samples (Preparation and Solution) - Metal (Soluble in HNO₃); Oxides (Soluble in HNO₃); Ores (Digestion with conc. HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCR(3)10
Lot Number: S2-CR709784
Matrix: 10% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Chromium
Starting Material: Cr Metal
Starting Material Lot#: 2328
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL
Density: 1.072 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 u_{char} = $[\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.001700	M	Eu <	0.003400	O	Na	0.090372	M	Se <	0.012000	O	Zn <	0.006100
M Al	0.034916	O	Fe	0.246471	M	Nb <	0.017000	n	Si <		M	Zr <	0.007800
M As <	0.028000	O	Ga <	0.013000	M	Nd <	0.013000	M	Sm <	0.006900			
M Au <	0.001700	M	Gd <	0.000560	M	Ni	0.016020	M	Sn	0.006983			
O B <	0.025000	O	Ge <	0.014000	M	Os <	0.000560	M	Sr	0.006367			
M Ba <	0.008900	M	Hf <	0.000560	i	P <		M	Ta <	0.000560			
M Be <	0.013000	M	Hg <	0.001700	M	Pb	0.010064	M	Tb <	0.000560			
M Bi <	0.002300	M	Ho <	0.000560	M	Pd <	0.021000	M	Te <	0.010000			
O Ca	0.075995	M	In <	0.000560	M	Pr <	0.001700	M	Th <	0.000560			
M Cd <	0.000560	M	Ir <	0.000560	M	Pt <	0.001200	O	Ti	0.013555			
M Ce <	0.001200	O	K	0.043132	i	Rb <		M	Tl <	0.000560			
M Co <	0.002600	M	La <	0.001200	M	Re <	0.001200	O	Tm <	0.013000			
s Cr <		O	Li	0.000390	M	Rh <	0.095000	M	U <	0.000560			
M Cs <	0.007800	M	Lu <	0.000560	M	Ru <	0.087000	O	V	0.014993			
O Cu	0.007599	O	Mg	0.000883	i	S <		M	W <	0.049000			
M Dy <	0.000560	M	Mn	0.008626	M	Sb <	0.003400	M	Y <	0.001700			
M Er <	0.019000	M	Mo <	0.032000	M	Sc	0.003080	M	Yb <	0.000560			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 Cr(H₂O)₆3+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cr₃ Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with KHSO₄ and extraction with hot KCl. The residue fused with Na₂CO₃ and KClO₃, 3:1. B. Fusion with NaKSO₄ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na₂O₂ or NaOH and KNO₃ or NaOH and Na₂O₂. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGNI10
 Lot Number: P2-NI686384
 Matrix: 3% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Nickel
 Starting Material: Ni Metal
 Starting Material Lot#: 2277 and 2282
 Starting Material Purity: 99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL
Density: 1.038 g/mL (measured at 20 ± 4 °C)

Assay Information:

- Assay Method #1** **9971 ± 54 µg/mL**
 ICP Assay NIST SRM 3136 Lot Number: 120619

- Assay Method #2** **9970 ± 32 µg/mL**
 EDTA NIST SRM 928 Lot Number: 928

- Assay Method #3** **9993 ± 33 µg/mL**
 Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.002606	M Eu	<	0.001100	O Na	0.004965	O Se	<	0.067000	M Zn	0.006578	
M Al	<	0.013000	O Fe	0.018618	M Nb	<	0.001100	O Si	0.010923	M Zr	<	0.001100
O As	<	0.067000	M Ga	<	0.001100	M Nd	<	0.001100	M Sm	<	0.001100	
M Au	<	0.002100	M Gd	<	0.001100	s Ni	<		M Sn	<	0.016000	
M B	<	0.017000	M Ge	<	0.004200	M Os	0.002110	O Sr	<	0.000940		
M Ba	<	0.001100	M Hf	<	0.001100	i P	<		M Ta	<	0.001100	
O Be	<	0.000410	M Hg	0.014895	M Pb	0.006578	M Tb	<	0.001100			
M Bi	<	0.004200	M Ho	<	0.001100	M Pd	<	0.001100	M Te	<	0.015000	
O Ca	0.003351	M In	<	0.001100	M Pr	<	0.001100	M Th	<	0.001100		
M Cd	0.001365	M Ir	0.004716	M Pt	<	0.001100	M Ti	<	0.004200			
M Ce	<	0.001100	O K	0.004716	M Rb	<	0.001100	M Tl	<	0.001100		
O Co	0.017377	M La	<	0.001100	M Re	0.001737	M Tm	<	0.001100			
O Cr	<	0.006700	O Li	<	0.000140	M Rh	<	0.006300	M U	<	0.001100	
M Cs	<	0.007300	M Lu	<	0.001100	M Ru	<	0.019000	M V	<	0.002100	
M Cu	0.004096	O Mg	0.000372	i S	<			M W	<	0.006300		
M Dy	<	0.001100	O Mn	<	0.001900	M Sb	0.005833	O Y	<	0.000540		
M Er	<	0.001100	M Mo	<	0.008400	M Sc	<	0.002100	M Yb	<	0.001100	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H₂O)₆²⁺

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGV10
Lot Number: S2-V711005
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Vanadium
Starting Material: Vanadium Pentoxide
Starting Material Lot#: 1782
Starting Material Purity: 99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL
Density: 1.104 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000110	M Eu < 0.000110	O Na 0.120000	M Se < 0.009400	M Zn 0.009400
O Al 0.120000	O Fe 0.460000	M Nb < 0.001300	O Si 0.270000	M Zr < 0.002900
M As < 0.000210	M Ga < 0.009300	M Nd < 0.000610	M Sm < 0.000110	
M Au < 0.004700	M Gd < 0.000110	M Ni 0.012000	M Sn 0.003900	
M B 0.051000	M Ge < 0.000410	M Os < 0.000110	O Sr 0.007100	
M Ba 0.003600	M Hf < 0.000110	O P < 0.034000	M Ta < 0.000110	
O Be < 0.000560	M Hg < 0.000410	M Pb 0.001400	M Tb < 0.000110	
M Bi < 0.000210	M Ho < 0.000110	M Pd < 0.000410	M Te < 0.000110	
O Ca 0.730000	M In < 0.000110	M Pr < 0.000110	M Th < 0.000210	
M Cd < 0.000610	M Ir < 0.000110	M Pt < 0.000110	M Ti 0.017000	
M Ce < 0.000610	M K 0.052000	M Rb < 0.000310	M Tl < 0.000110	
M Co < 0.001300	M La < 0.000410	M Re 0.001700	M Tm < 0.000110	
O Cr 0.170000	M Li < 0.000810	M Rh < 0.000110	M U < 0.000410	
M Cs 0.005600	M Lu < 0.000110	M Ru < 0.000110	s V <	
M Cu < 0.001300	M Mg 0.053000	i S <	M W 0.002000	
M Dy < 0.000110	M Mn 0.007900	M Sb 0.078000	M Y < 0.000110	
M Er < 0.000110	M Mo 0.094000	M Sc < 0.000410	M Yb < 0.000110	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H₂V₁₀O₂₈-

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄, HF, H₃PO₄ and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in NiO or Na₂CO₃ / KNO₃); Oxides (V₂O₃ - use HCl, V₂O₄ - use HCl or HNO₃, V₂O₅ - use concentrated acids); Ores (Na₂CO₃ / KNO₃ in PtO caution - nitrates attack PtO followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V₂O₅ above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

<u>Technique/Line</u>	<u>Estimated D.L.</u>	<u>Order</u>	<u>Interferences</u> (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAL10
Lot Number: T2-AL716102
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Aluminum
Starting Material: Aluminum Nitrate Nonahydrate
Starting Material Lot#: 2460
Starting Material Purity: 99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL
Density: 1.087 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10059 ± 40 µg/mL ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	10044 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10049 ± 35 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.002100	M Eu < 0.002100	O Na < 0.352819	M Se < 0.005200	M Zn < 0.006018
s Al < 0.002100	O Fe < 0.074714	M Nb < 0.000520	O Si < 0.017848	O Zr < 0.004358
M As < 0.008716	O Ga < 0.112072	M Nd < 0.000520	M Sm < 0.000520	
M Au < 0.008400	M Gd < 0.001100	O Ni < 0.006000	M Sn < 0.000747	
O B < 0.014000	M Ge < 0.005200	M Os < 0.000650	O Sr < 0.000518	
O Ba < 0.012867	M Hf < 0.004100	n P < 0.000520	M Ta < 0.000520	
O Be < 0.000270	M Hg < 0.002000	M Pb < 0.002282	M Tb < 0.000520	
M Bi < 0.001930	M Ho < 0.000520	M Pd < 0.000520	M Te < 0.001100	
O Ca < 0.076790	M In < 0.002100	M Pr < 0.000520	M Th < 0.000520	
M Cd < 0.000520	M Ir < 0.000650	M Pt < 0.000520	O Ti < 0.001930	
M Ce < 0.001100	O K < 0.043583	M Rb < 0.000520	M Tl < 0.000520	
O Co < 0.005400	M La < 0.002100	M Re < 0.000520	M Tm < 0.000520	
O Cr < 0.006018	O Li < 0.000112	M Rh < 0.000520	M U < 0.000520	
M Cs < 0.000643	M Lu < 0.000520	M Ru < 0.002000	M V < 0.001286	
O Cu < 0.008300	O Mg < 0.068488	i S < 0.003100	M W < 0.009800	
M Dy < 0.002100	O Mn < 0.000913	M Sb < 0.003100	M Y < 0.001100	
M Er < 0.000520	M Mo < 0.005396	O Sc < 0.000950	M Yb < 0.000520	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H₂O)₆+3

Chemical Compatibility -Soluble in HCl, HNO₃, vF and v₂SO₄. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)₄(H₂O)₂⁻ species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO₃); a- Al₂O₃ (Na₂CO₃ fusion in PtO);

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGK10
Lot Number: S2-K711973
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Potassium
Starting Material: KNO₃
Starting Material Lot#: 2313
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.024 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9987 ± 24 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	10004 ± 84 µg/mL ICP Assay NIST SRM 3141a Lot Number: 140813
Assay Method #3	10007 ± 45 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.001400	M Eu < 0.000660	O Na < 0.246220	M Se < 0.007900	O Zn < 0.018056
O Al < 0.001592	O Fe < 0.005909	M Nb < 0.000660	O Si < 0.011490	O Zr < 0.001600
M As < 0.005300	M Ga < 0.000660	M Nd < 0.000660	M Sm < 0.000660	
M Au < 0.002000	M Gd < 0.000660	O Ni < 0.004900	M Sn < 0.000660	
O B < 0.005600	M Ge < 0.002000	M Os < 0.003300	O Sr < 0.000055	
O Ba < 0.000860	M Hf < 0.000660	O P < 0.032000	M Ta < 0.000660	
O Be < 0.000082	M Hg < 0.002000	M Pb < 0.002300	M Tb < 0.000660	
M Bi < 0.006600	M Ho < 0.000660	M Pd < 0.000660	M Te < 0.017000	
O Ca < 0.031187	M In < 0.000660	M Pr < 0.000660	M Th < 0.000660	
O Cd < 0.000450	M Ir < 0.000660	M Pt < 0.002700	M Ti < 0.000660	
M Ce < 0.000660	s K <	M Rb < 0.476026	M Tl < 0.000660	
O Co < 0.000780	M La < 0.000660	M Re < 0.000660	M Tm < 0.000660	
O Cr < 0.000541	O Li < 0.000084	M Rh < 0.000660	M U < 0.000660	
M Cs < 0.000660	M Lu < 0.000660	M Ru < 0.000660	O V < 0.001100	
M Cu < 0.002700	O Mg < 0.006237	O S < 0.027905	M W < 0.000660	
M Dy < 0.000660	O Mn < 0.000476	M Sb < 0.000660	M Y < 0.000660	
M Er < 0.000660	M Mo < 0.000660	O Sc < 0.000340	O Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Avoid use of HClO₄ due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO₄⁻.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMG10
Lot Number: S2-MG704239
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Magnesium
Starting Material: Magnesium Metal
Starting Material Lot#: 2168
Starting Material Purity: 99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL
Density: 1.053 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10022 ± 62 µg/mL ICP Assay NIST SRM 3131a Lot Number: 140110
Assay Method #2	10078 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10033 ± 26 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

O Ag	0.002106	M	Eu <	0.000910	O Na	0.071075	O Se <	0.048000	O Zn	0.003299
M Al	0.003553	M	Fe	0.002538	M Nb <	0.000460	O Si <	0.032000	O Zr <	0.002700
M As <	0.001400	M	Ga <	0.000460	M Nd <	0.000910	M Sm <	0.000460		
M Au <	0.001400	M	Gd <	0.000460	O Ni <	0.001600	M Sn <	0.002300		
O B	0.006853	M	Ge <	0.001400	M Os <	0.000460	O Sr	0.000279		
O Ba	0.000964	M	Hf <	0.000460	O P	0.015230	M Ta <	0.000460		
O Be <	0.000120	M	Hg <	0.000460	M Pb <	0.000460	M Tb <	0.000460		
M Bi <	0.000460	M	Ho <	0.000460	M Pd <	0.003200	M Te <	0.007300		
O Ca	0.053306	M	In <	0.000460	M Pr <	0.000460	M Th <	0.000460		
O Cd <	0.000360	M	Ir <	0.000460	M Pt <	0.001900	O Ti <	0.001700		
M Ce <	0.002300	M	K	0.048229	M Rb	0.002411	M Tl	0.003046		
M Co <	0.000910	M	La <	0.002800	M Re <	0.000460	M Tm <	0.000460		
M Cr <	0.002300	O	Li	0.027922	M Rh <	0.000460	M U <	0.000460		
M Cs	0.001040	M	Lu <	0.000460	M Ru <	0.000460	M V <	0.000460		
O Cu <	0.003000	s	Mg <		O S <	0.190000	M W <	0.000460		
M Dy <	0.000460	O	Mn	0.015230	M Sb	0.020814	O Y <	0.000720		
M Er <	0.000460	M	Mo <	0.000910	O Sc <	0.000480	M Yb <	0.000460		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H₂O)₆+2

Chemical Compatibility -Soluble in HCl, HNO₃, and H₂SO₄ avoid HF, H₃PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCA10
Lot Number: T2-CA716103
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Calcium
Starting Material: CaCO₃
Starting Material Lot#: 2472
Starting Material Purity: 99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL
Density: 1.039 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10005 ± 45 µg/mL ICP Assay NIST SRM 3109a Lot Number: 130213
Assay Method #2	10005 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10005 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.001200	M Eu < 0.001200	O Na < 0.006112	M Se < 0.024000	M Zn < 0.005362
M Al < 0.065419	O Fe < 0.009115	M Nb < 0.001200	O Si < 0.139417	O Zr < 0.006700
O As < 0.013000	M Ga < 0.015000	M Nd < 0.020000	M Sm < 0.001200	
M Au < 0.017000	M Gd < 0.004800	O Ni < 0.000793	M Sn < 0.003600	
O B < 0.001179	M Ge < 0.003600	M Os < 0.001200	M Sr < 0.081505	
O Ba < 0.002788	M Hf < 0.001200	O P < 0.041000	M Ta < 0.001200	
O Be < 0.000410	M Hg < 0.004800	M Pb < 0.001608	M Tb < 0.001200	
M Bi < 0.001608	M Ho < 0.001200	M Pd < 0.001200	M Te < 0.003600	
s Ca < 0.001200	M In < 0.001200	M Pr < 0.000257	M Th < 0.001200	
O Cd < 0.001300	M Ir < 0.001200	M Pt < 0.003600	O Ti < 0.001900	
M Ce < 0.001029	O K < 0.009759	M Rb < 0.001200	M Tl < 0.001200	
O Co < 0.000418	M La < 0.001823	M Re < 0.001200	M Tm < 0.001200	
O Cr < 0.003324	O Li < 0.007300	M Rh < 0.001200	M U < 0.002144	
M Cs < 0.007399	M Lu < 0.000128	M Ru < 0.001200	M V < 0.001286	
O Cu < 0.011000	M Mg < 1.286934	O S < 0.055767	O W < 0.024000	
M Dy < 0.002400	O Mn < 0.004611	M Sb < 0.009600	O Y < 0.000536	
M Er < 0.002400	M Mo < 0.003539	O Sc < 0.001400	M Yb < 0.001200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H₂O)₆+2

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₂SO₄, vF, v3PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Ca Containing Samples)Preparation and Solution -Metal (best dissolved in diluted HNO₃); Ores (Carbonate fusion in Pt₀ followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO₂). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO₃. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na₂CO₃ followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O ² 12C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGNA10
Lot Number: T2-NA717221
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Sodium
Starting Material: Na₂CO₃
Starting Material Lot#: 2358 and 2453
Starting Material Purity: 99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL
Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9974 ± 18 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	9977 ± 34 µg/mL ICP Assay NIST SRM 3152a Lot Number: 200413
Assay Method #3	9987 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000930	M Eu < 0.000930	s Na <	M Se < 0.003800	O Zn < 0.000138
M Al < 0.004409	O Fe < 0.002393	M Nb < 0.000930	O Si < 0.056696	O Zr < 0.003200
O As < 0.023000	M Ga < 0.000930	M Nd < 0.000930	M Sm < 0.000930	
O Au < 0.004100	M Gd < 0.000930	O Ni < 0.003000	M Sn < 0.002800	
O B < 0.001385	M Ge < 0.004700	M Os < 0.000930	O Sr < 0.000251	
M Ba < 0.004031	M Hf < 0.000930	O P < 0.010205	M Ta < 0.000930	
O Be < 0.000130	M Hg < 0.000930	M Pb < 0.000930	M Tb < 0.000930	
M Bi < 0.000930	M Ho < 0.000930	M Pd < 0.000930	M Te < 0.001900	
O Ca < 0.176388	M In < 0.000930	M Pr < 0.000930	M Th < 0.000352	
O Cd < 0.000860	M Ir < 0.000930	M Pt < 0.000930	O Ti < 0.000592	
M Ce < 0.001900	O K < 0.302380	M Rb < 0.000930	M Tl < 0.000930	
O Co < 0.001800	O La < 0.002100	M Re < 0.000930	M Tm < 0.000930	
M Cr < 0.002800	O Li < 0.000031	M Rh < 0.000930	M U < 0.000930	
M Cs < 0.000930	M Lu < 0.000930	M Ru < 0.001900	O V < 0.001600	
O Cu < 0.003900	O Mg < 0.026458	O S < 0.040317	O W < 0.028000	
M Dy < 0.000930	O Mn < 0.000740	M Sb < 0.000930	O Y < 0.000860	
M Er < 0.000930	O Mo < 0.003600	O Sc < 0.000610	O Yb < 0.000250	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGU1
Lot Number: S2-U707914
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Uranium
Starting Material: Uranyl Nitrate Hexahydrate
Starting Material Lot#: P2-2322
Starting Material Purity: 99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL
Density: 1.010 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000270	M Eu < 0.000270	M Na < 0.011000	M Se < 0.009300	M Zn < 0.002358
M Al < 0.011000	M Fe < 0.003222	M Nb < 0.000270	M Si < 0.160000	M Zr < 0.001100
M As < 0.002400	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000270	M Gd < 0.000270	M Ni < 0.020000	M Sn < 0.011000	
M B < 0.000270	M Ge < 0.000800	M Os < 0.001900	M Sr < 0.000270	
M Ba < 0.003800	M Hf < 0.000270	i P <	M Ta < 0.000270	
M Be < 0.000270	M Hg < 0.000540	M Pb < 0.002200	M Tb < 0.000270	
M Bi < 0.000270	M Ho < 0.000270	M Pd < 0.000540	M Te < 0.003800	
M Ca < 0.140000	M In < 0.000270	M Pr < 0.000270	M Th < 0.000129	
M Cd < 0.000270	M Ir < 0.000270	M Pt < 0.000270	M Ti < 0.002700	
M Ce < 0.000540	O K < 0.250000	M Rb < 0.000800	M Tl < 0.000270	
M Co < 0.000800	M La < 0.000117	M Re < 0.064000	M Tm < 0.000270	
M Cr < 0.000943	M Li < 0.003000	M Rh < 0.000270	s U <	
M Cs < 0.000106	M Lu < 0.000270	M Ru < 0.000540	M V < 0.000540	
M Cu < 0.001100	M Mg < 0.003000	i S <	M W < 0.000540	
M Dy < 0.000270	M Mn < 0.006900	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.006400	M Sc < 0.000540	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO₂²⁺(uranyl)

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₃PO₄. H₂SO₄ and HF matrices should not be a problem depending upon [U]. Although the UO₂²⁺ ion is distinctly basic, any U+4 will precipitate in basic media. UO₂²⁺salts are generally soluble in water and UO₂²⁺ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF₄ and UF₆ are water soluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO₃); Oxide (Soluble in HNO₃); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO₃. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H₂SO₄.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: AR-ICVMS-2
Lot Number: T2-MEB719895
Matrix: 3% (v/v) HNO3
tr. HF
Value / Analyte(s): 2.5 µg/mL ea:
Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.499 ± 0.015 µg/mL	Molybdenum, Mo	2.500 ± 0.017 µg/mL

Density: 1.014 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	AR-ICVMS-3	
Lot Number:	T2-MEB719896	
Matrix:	7% (v/v) HNO3	
Value / Analyte(s):	250 µg/mL ea:	
	Aluminum,	Calcium,
	Iron,	Potassium,
	Magnesium,	Sodium,
	4 µg/mL ea:	
	Selenium,	
	2.5 µg/mL ea:	
	Thorium,	Thallium,
	Uranium,	Vanadium,
	Zinc,	Manganese,
	Cadmium,	Cobalt,
	Chromium,	Copper,
	Arsenic,	Barium,
	Beryllium,	Nickel,
	Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/(u_{\text{char } j}^2)))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

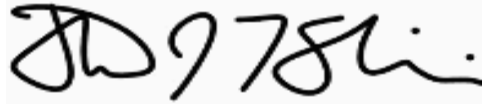
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: AR-6020ICS-0A10
 Lot Number: T2-MEB719898
 Matrix: 1.4% (v/v) HNO₃
 Value / Analyte(s):
 1 000 µg/mL ea:
 Chloride,
 200 µg/mL ea:
 Carbon,
 100 µg/mL ea:
 Calcium, Aluminum,
 Iron, Potassium,
 Magnesium, Sodium,
 Phosphorus, Sulfur,
 2 µg/mL ea:
 Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.4 µg/mL	Calcium, Ca	100.0 ± 0.5 µg/mL
Carbon, C	200.1 ± 0.5 µg/mL	Chloride, Cl	1 000 ± 5 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Magnesium, Mg	100.0 ± 0.5 µg/mL
Molybdenum, Mo	2.001 ± 0.014 µg/mL	Phosphorus, P	100.0 ± 0.6 µg/mL
Potassium, K	100.0 ± 0.5 µg/mL	Sodium, Na	100.0 ± 0.5 µg/mL
Sulfur, S	100.0 ± 0.5 µg/mL	Titanium, Ti	2.001 ± 0.015 µg/mL

Density: 1.009 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1236

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-01 C SDG: 23B0229

Sampled: 02/08/23 10:04 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-020

% Solids: 50.59 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 05:12

Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.1724 g Wet / 0.1724 mL

Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.05	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1236

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-02 D SDG: 23B0229
 Sampled: 02/08/23 11:28 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-023
 % Solids: 55.01 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 06:43
 Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.5452 g Wet / 0.5452 mL
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.75	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1237

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-03 D SDG: 23B0229
 Sampled: 02/08/23 11:52 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-024
 % Solids: 53.14 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 07:13
 Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.5351 g Wet / 0.5351 mL
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.70	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1150

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-04 D SDG: 23B0229
 Sampled: 02/08/23 12:11 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-025
 % Solids: 51.84 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 07:44
 Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.5303 g Wet / 0.5303 mL
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.96	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-05 D SDG: 23B0229
 Sampled: 02/08/23 12:45 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-026
 % Solids: 46.84 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 08:14
 Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.51 g Wet / 0.51 mL
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.94	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1008

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-06 D SDG: 23B0229
 Sampled: 02/08/23 13:30 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-029
 % Solids: 49.29 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 09:45
 Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.3007 g Wet / 0.3007 mL
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.96	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1014

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid Laboratory ID: 23B0229-07RE1 C SDG: 23B0229

Sampled: 02/08/23 14:24 Prepared: 02/14/23 12:18 File ID: CubeData_03062023@1641-005

% Solids: 70.24 Preparation: PSEP 1986 (modified) Analyzed: 03/02/23 19:19

Batch: BLB0342 Sequence: SLC0025 Initial/Final: 0.145 g Wet / 0.145 mL

Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.62	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1013

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23B0229-08 D SDG: 23B0229
 Sampled: 02/08/23 15:25 Prepared: 02/14/23 12:18 File ID: CubeData_02162023@1136-031
 % Solids: 51.39 Preparation: PSEP 1986 (modified) Analyzed: 02/15/23 10:46
 Batch: BLB0342 Sequence: SLB0179 Initial/Final: 0.2508 g Wet / 0.2508 mL
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.51	1	0.02	0.02	



Form I
METHOD BLANK DATA SHEET
EPA 9060A m
TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLB0342

Laboratory ID: BLB0342-BLK1

Prepared: 02/14/23 12:18

Matrix: Solid

Preparation: PSEP 1986 (modified)

Analyzed: 02/14/23 22:09

Sequence: SLB0179

Calibration: FD00070

Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U



LCS / LCS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>02/14/23 22:39</u>
Batch:	<u>BLB0342</u>	Laboratory ID:	<u>BLB0342-BS1</u>
Preparation:	<u>PSEP 1986 (modified)</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>0.021 g / 0.021 mL</u>		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	44.0		99.0	80 - 120

* Indicates values outside of QC limits



DUPLICATES

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLB0342-DUP3

Batch: BLB0342

Lab Source ID: 23B0229-01

Preparation: PSEP 1986 (modified)

Initial/Final: 0.1407 g / 0.1407 mL

Source Sample Name: LDW23-SC1236

% Solids: 50.59

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Organic Carbon	20	2.05	2.23	8.22	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD



MS / MS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23B0229</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>02/15/23 06:13</u>
Batch:	<u>BLB0342</u>	Laboratory ID:	<u>BLB0342-MS2</u>
Preparation:	<u>PSEP 1986 (modified)</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>0.1148 g / 0.1148 mL</u>	Source Sample:	<u>LDW23-SC1236</u>

COMPOUND	SPIKE ADDED (% dry)	SAMPLE CONCENTRATION (% dry)	Q	MS CONCENTRATION (% dry)	Q	MS % REC. #	QC LIMITS REC.
Total Organic Carbon	5.66	2.05		7.74		100	75 - 125

* Values outside of QC limits



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SKD0371

Instrument: TOC Cube

Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SKD0371-CAL1	CubeData_04272022@1136-001	NA	04/26/22 12:30
Cal Standard	SKD0371-CAL2	CubeData_04272022@1136-002	NA	04/26/22 13:00
Cal Standard	SKD0371-CAL3	CubeData_04272022@1136-003	NA	04/26/22 13:30
Cal Standard	SKD0371-CAL4	CubeData_04272022@1136-004	NA	04/26/22 14:00
Cal Standard	SKD0371-CAL5	CubeData_04272022@1136-005	NA	04/26/22 14:30
Cal Standard	SKD0371-CAL6	CubeData_04272022@1136-006	NA	04/26/22 15:00
Cal Standard	SKD0371-CAL7	CubeData_04272022@1136-007	NA	04/26/22 15:30
Cal Standard	SKD0371-CAL8	CubeData_04272022@1136-008	NA	04/26/22 16:00
Cal Standard	SKD0371-CAL9	CubeData_04272022@1136-009	NA	04/26/22 16:30
Cal Standard	SKD0371-CALA	CubeData_04272022@1136-010	NA	04/26/22 17:00
Cal Standard	SKD0371-CALB	CubeData_04272022@1136-011	NA	04/26/22 17:30
Cal Standard	SKD0371-CALC	CubeData_04272022@1136-012	NA	04/26/22 18:00
Cal Standard	SKD0371-CALD	CubeData_04272022@1136-013	NA	04/26/22 18:30
Cal Standard	SKD0371-CALE	CubeData_04272022@1136-014	NA	04/26/22 19:00
Cal Standard	SKD0371-CALF	CubeData_04272022@1136-015	NA	04/26/22 19:31
Cal Standard	SKD0371-CALG	CubeData_04272022@1136-016	NA	04/26/22 20:01
Cal Standard	SKD0371-CALH	CubeData_04272022@1136-017	NA	04/26/22 20:31
Cal Standard	SKD0371-CALI	CubeData_04272022@1136-018	NA	04/26/22 21:01
Cal Standard	SKD0371-CALJ	CubeData_04272022@1136-019	NA	04/26/22 21:31
Cal Standard	SKD0371-CALK	CubeData_04272022@1136-020	NA	04/26/22 22:01
Initial Cal Check	SKD0371-ICV1	CubeData_04272022@1136-027	NA	04/27/22 02:03
Initial Cal Blank	SKD0371-ICB1	CubeData_04272022@1136-028	NA	04/27/22 02:33
Cal Standard	SKD0371-CALL	CubeData_04272022@1136-021	NA	04/27/22 11:08
Cal Standard	SKD0371-CALM	CubeData_04272022@1136-022	NA	04/27/22 11:08
Cal Standard	SKD0371-CALN	CubeData_04272022@1136-023	NA	04/27/22 11:09
Cal Standard	SKD0371-CALO	CubeData_04272022@1136-024	NA	04/27/22 11:09



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0179

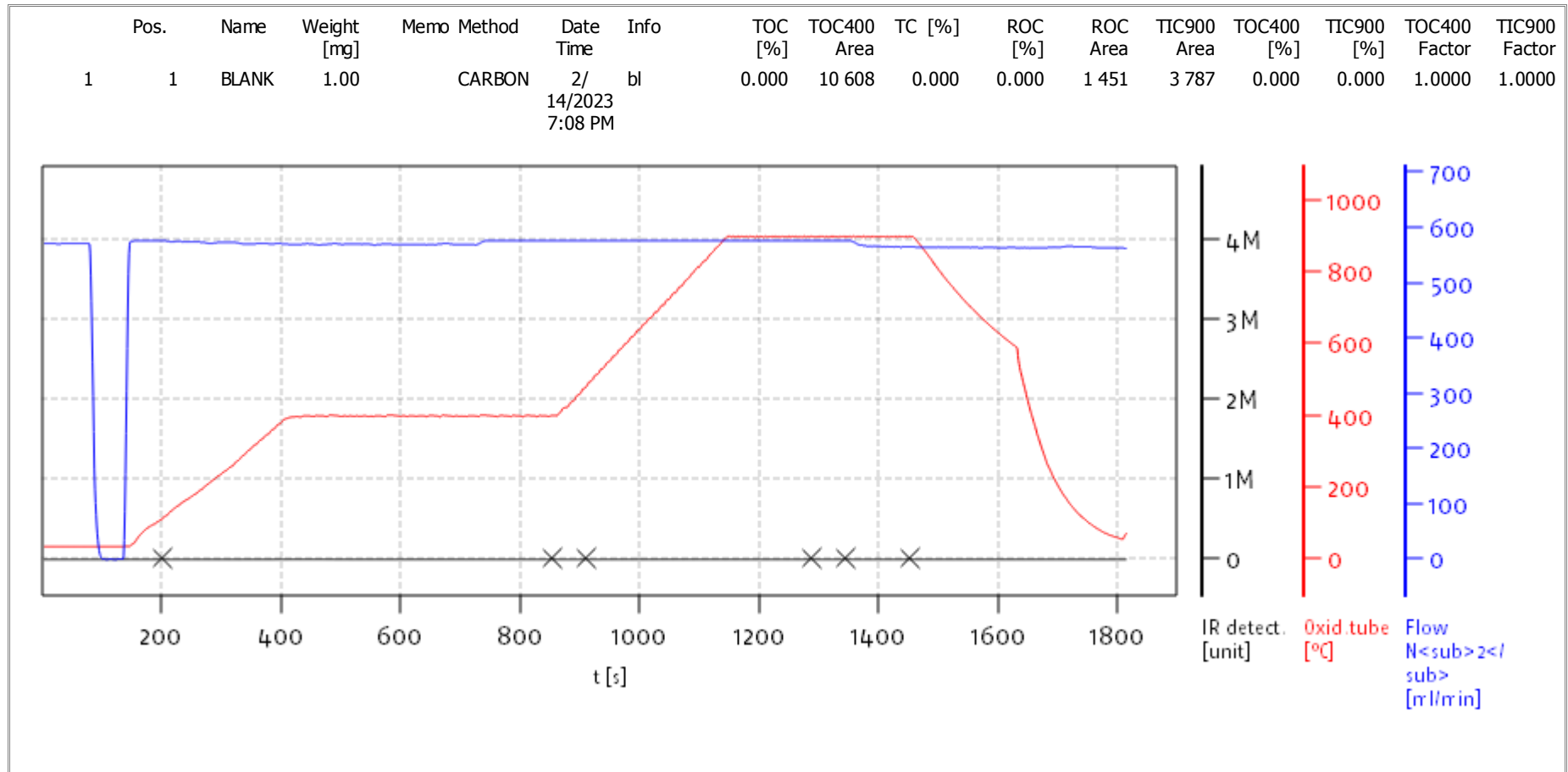
Instrument: TOC Cube

Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Blank	SLB0179-ICB1	CubeData_02162023@1136-003	NA	02/14/23 20:39
Initial Cal Check	SLB0179-ICV1	CubeData_02162023@1136-004	NA	02/14/23 21:09
MRL Check	BLB0342-MRL1	CubeData_02162023@1136-005	Solid	02/14/23 21:39
Blank	BLB0342-BLK1	CubeData_02162023@1136-006	Solid	02/14/23 22:09
LCS	BLB0342-BS1	CubeData_02162023@1136-007	Solid	02/14/23 22:39
Reference	BLB0342-SRM1	CubeData_02162023@1136-008	Solid	02/14/23 23:09
Calibration Check	SLB0179-CCV1	CubeData_02162023@1136-015	NA	02/15/23 02:41
Calibration Blank	SLB0179-CCB1	CubeData_02162023@1136-016	NA	02/15/23 03:11
LDW23-SC1236	23B0229-01	CubeData_02162023@1136-020	Solid	02/15/23 05:12
LDW23-SC1236	BLB0342-DUP3	CubeData_02162023@1136-021	Solid	02/15/23 05:42
LDW23-SC1236	BLB0342-MS2	CubeData_02162023@1136-022	Solid	02/15/23 06:13
LDW23-SS1236	23B0229-02	CubeData_02162023@1136-023	Solid	02/15/23 06:43
LDW23-SS1237	23B0229-03	CubeData_02162023@1136-024	Solid	02/15/23 07:13
LDW23-SS1150	23B0229-04	CubeData_02162023@1136-025	Solid	02/15/23 07:44
LDW23-SS1008	23B0229-05	CubeData_02162023@1136-026	Solid	02/15/23 08:14
Calibration Check	SLB0179-CCV2	CubeData_02162023@1136-027	NA	02/15/23 08:44
Calibration Blank	SLB0179-CCB2	CubeData_02162023@1136-028	NA	02/15/23 09:15
LDW23-SC1008	23B0229-06	CubeData_02162023@1136-029	Solid	02/15/23 09:45
LDW23-SC1013	23B0229-08	CubeData_02162023@1136-031	Solid	02/15/23 10:46
Calibration Check	SLB0179-CCV3	CubeData_02162023@1136-039	NA	02/15/23 14:49
Calibration Blank	SLB0179-CCB3	CubeData_02162023@1136-040	NA	02/15/23 15:20
Calibration Check	SLB0179-CCV4	CubeData_02162023@1136-050	NA	02/15/23 20:54
Calibration Blank	SLB0179-CCB4	CubeData_02162023@1136-051	NA	02/15/23 21:25
Calibration Check	SLB0179-CCV5	CubeData_02162023@1136-061	NA	02/16/23 02:27
Calibration Blank	SLB0179-CCB5	CubeData_02162023@1136-062	NA	02/16/23 02:57



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

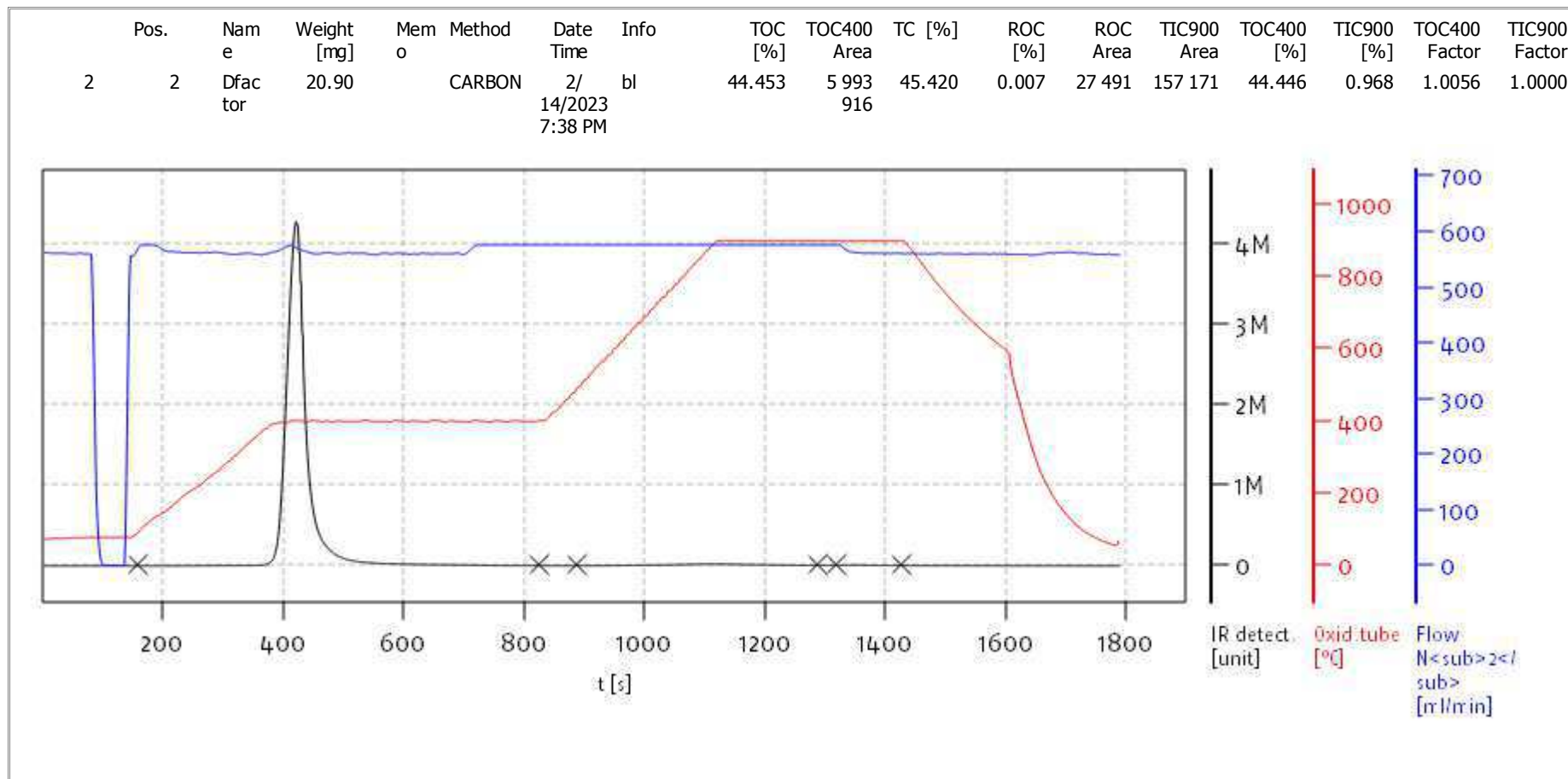
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

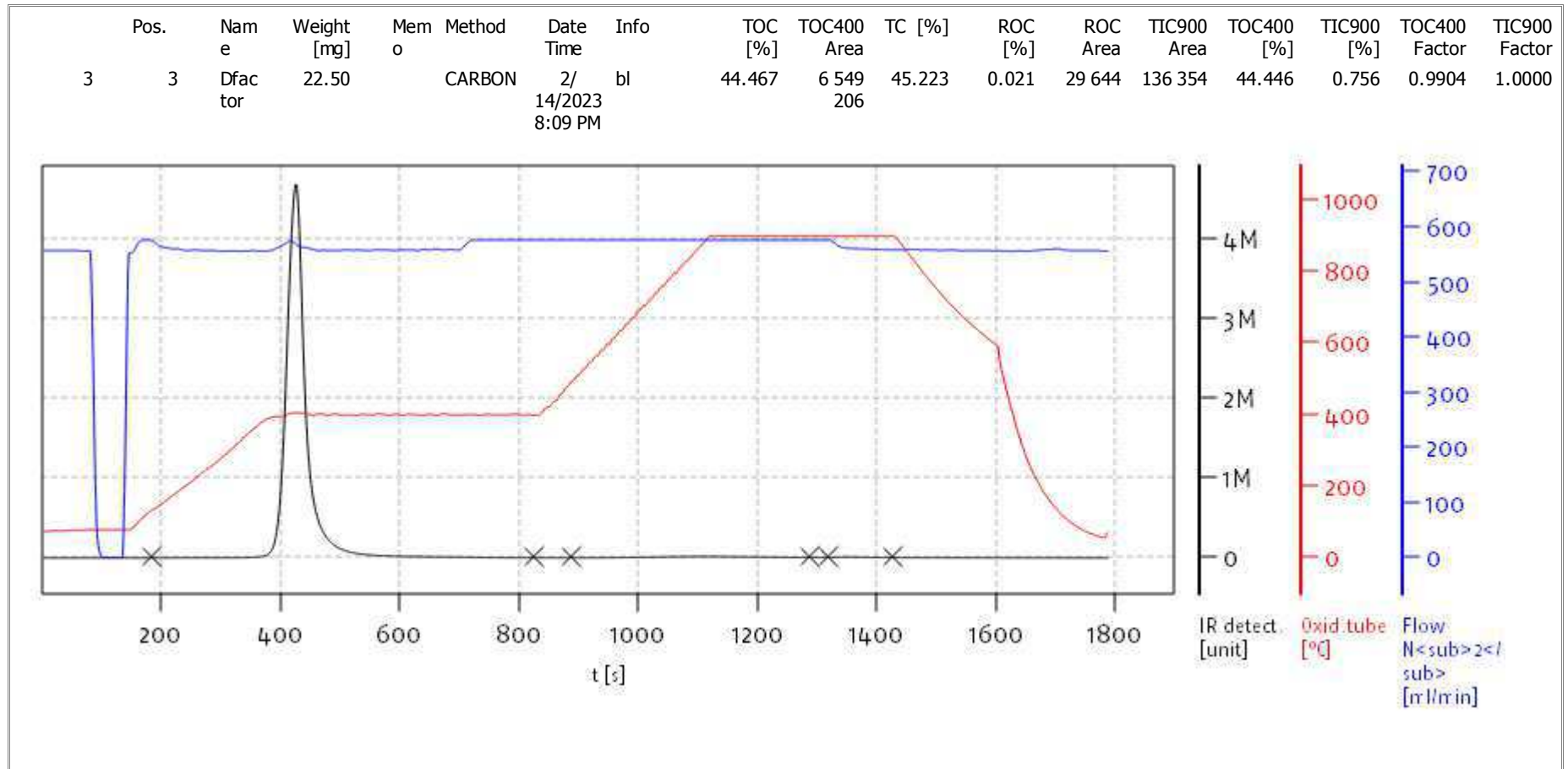
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

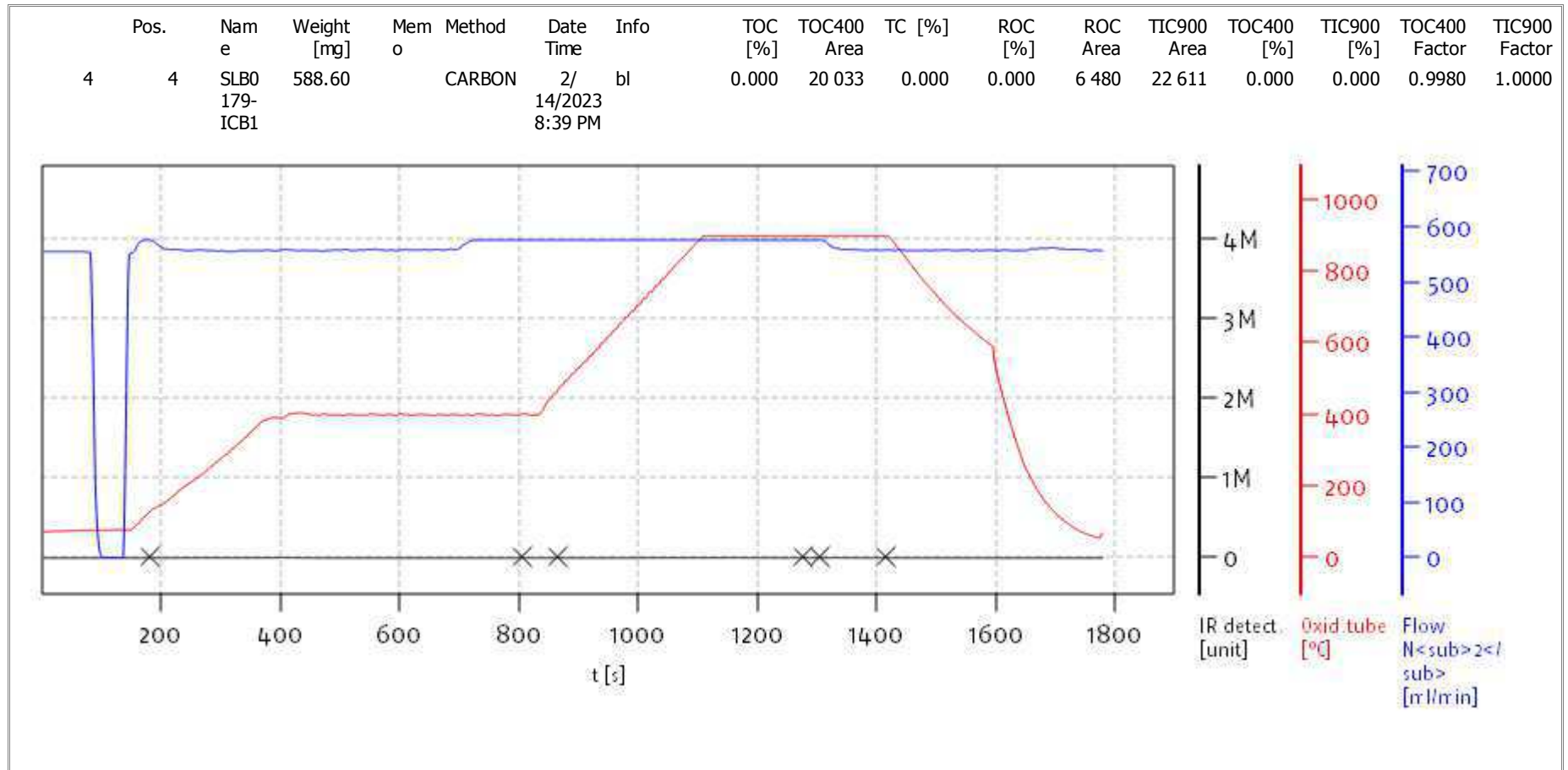
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

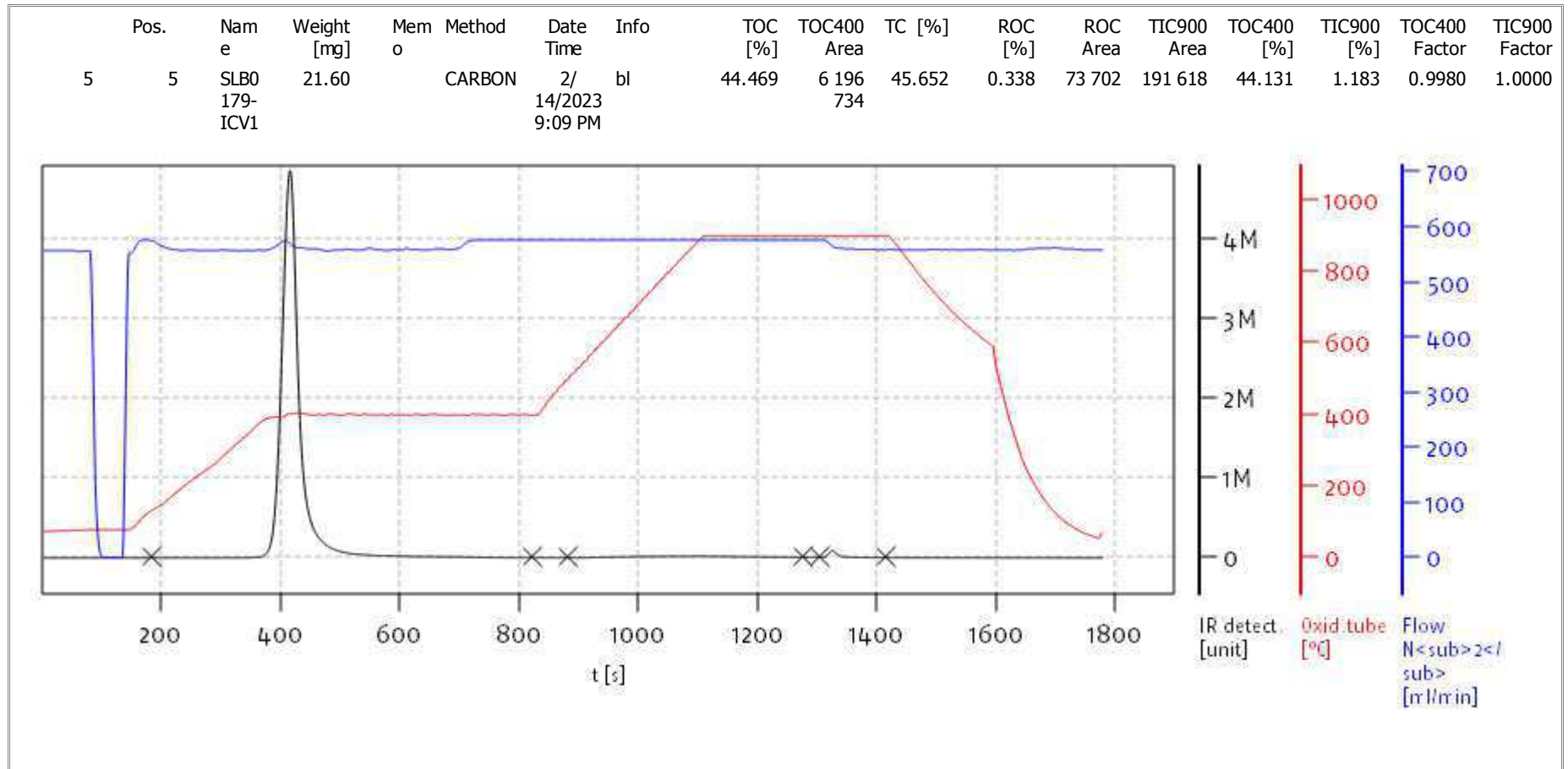
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

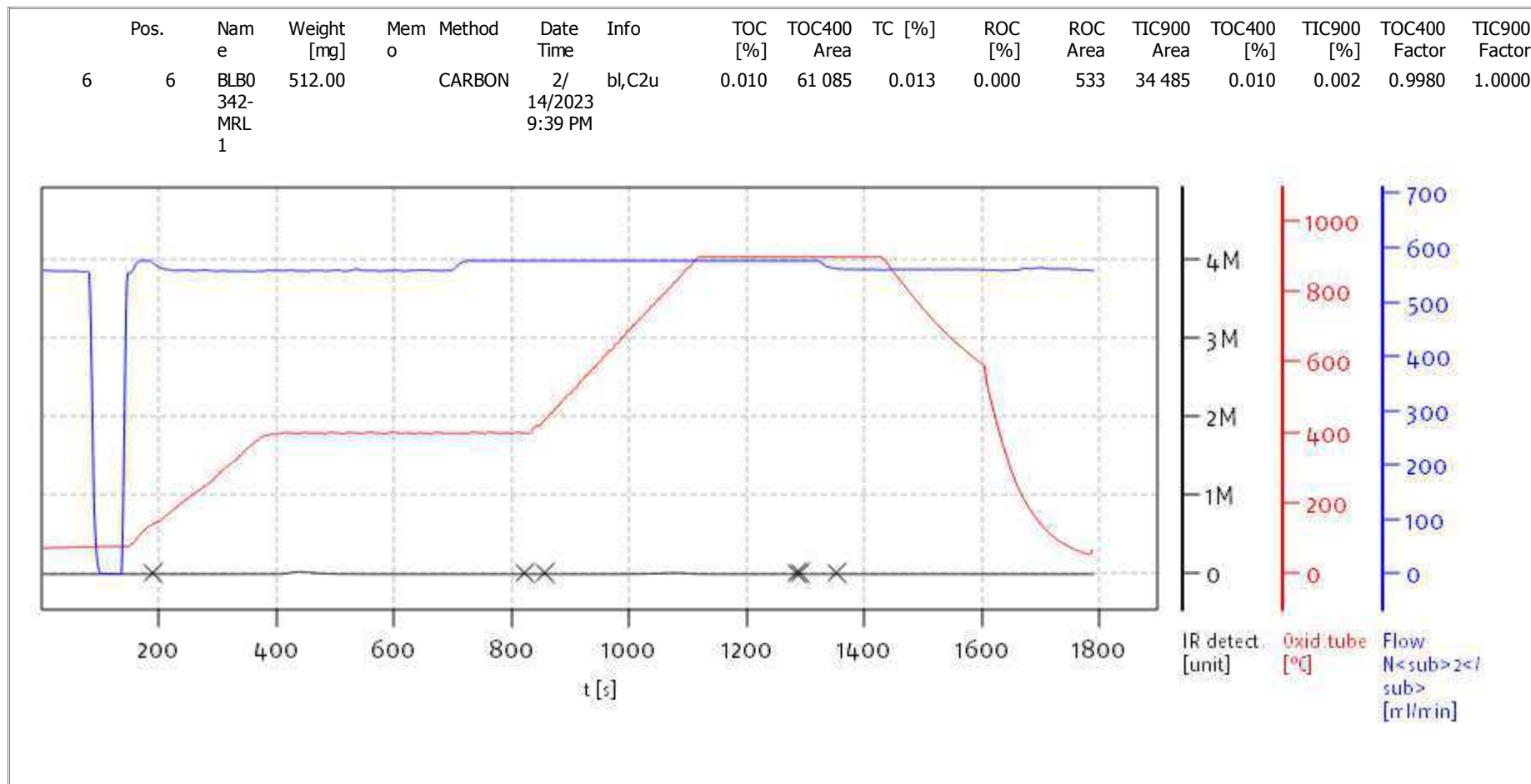
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

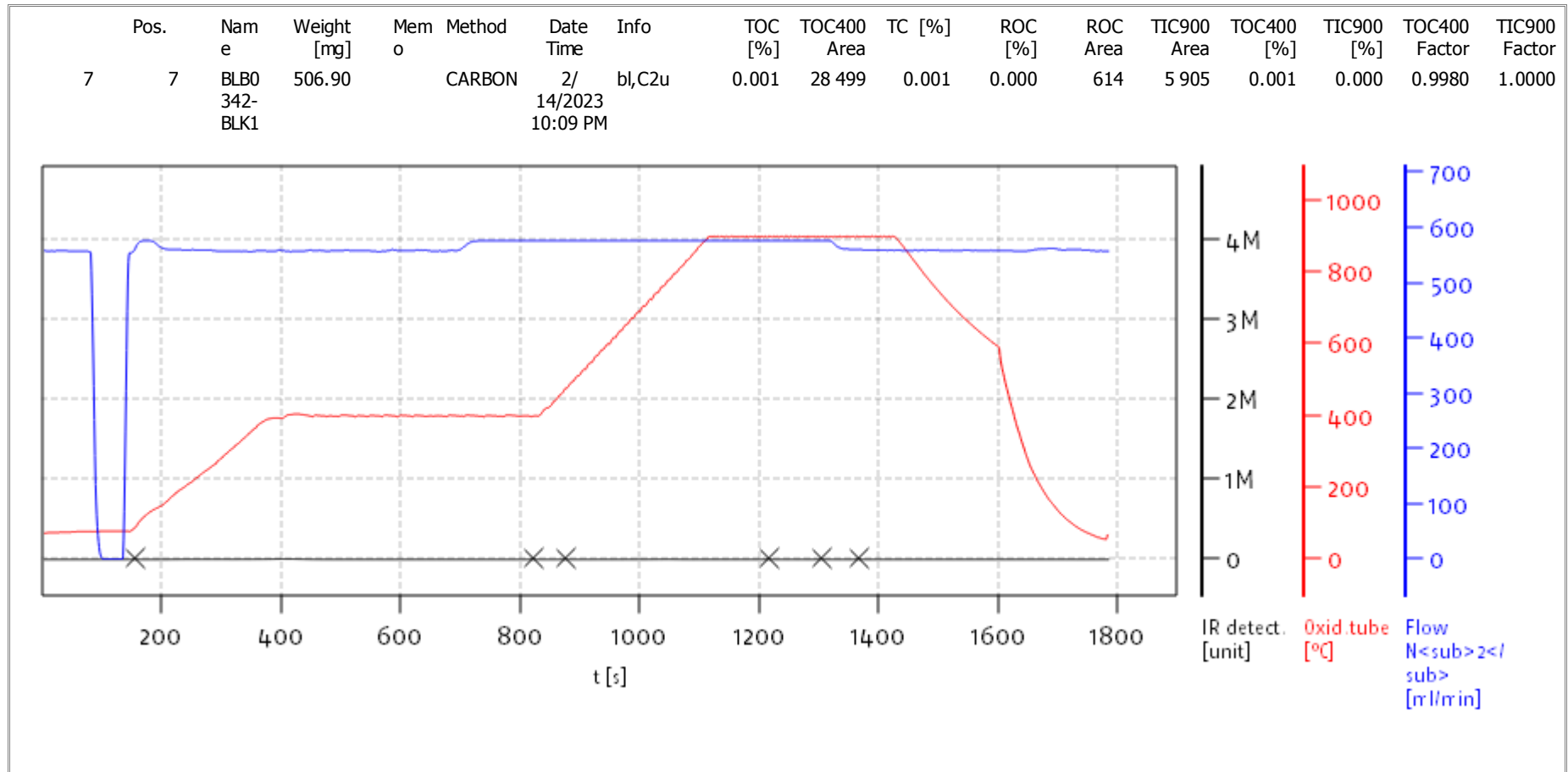
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

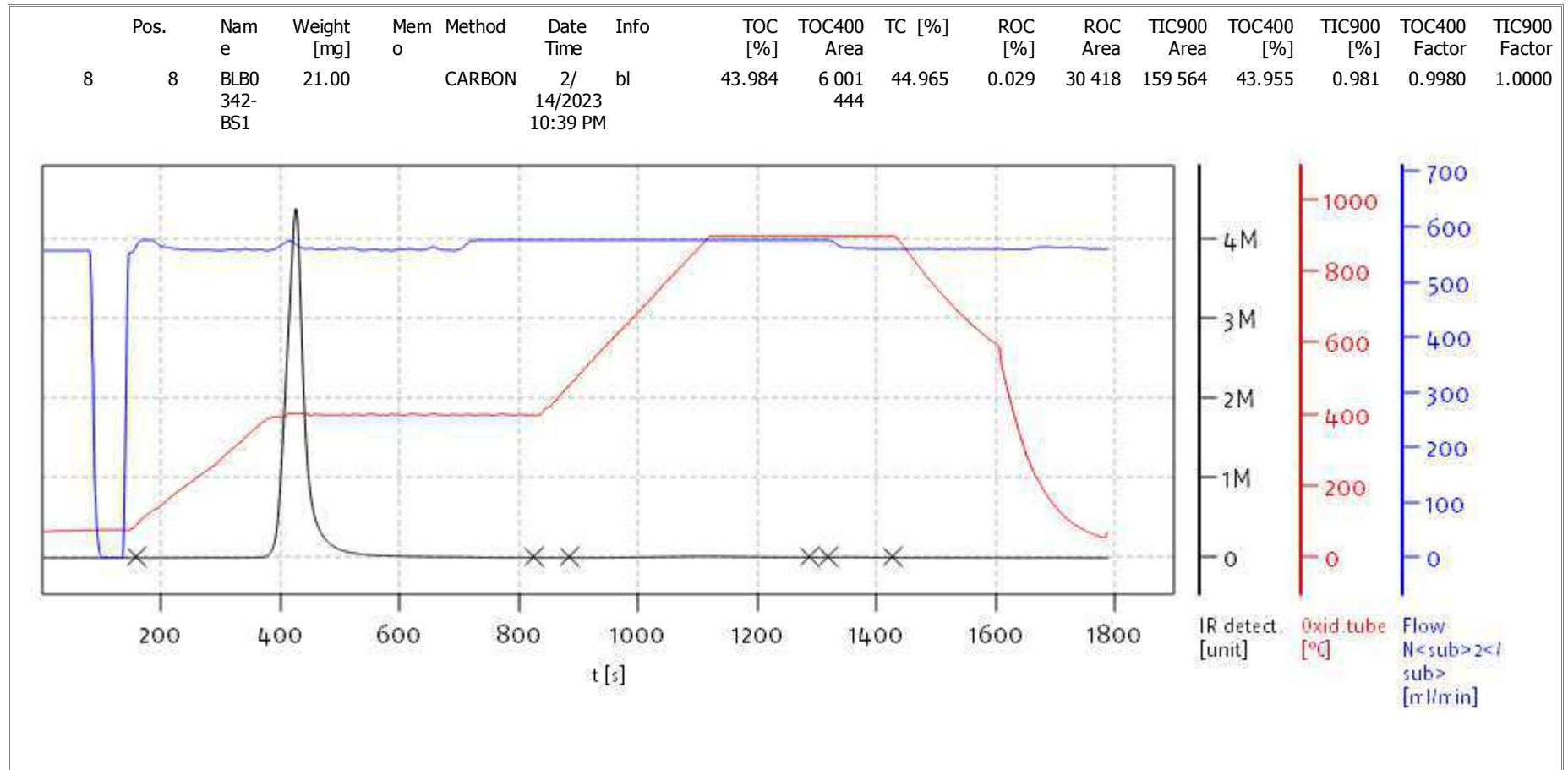
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

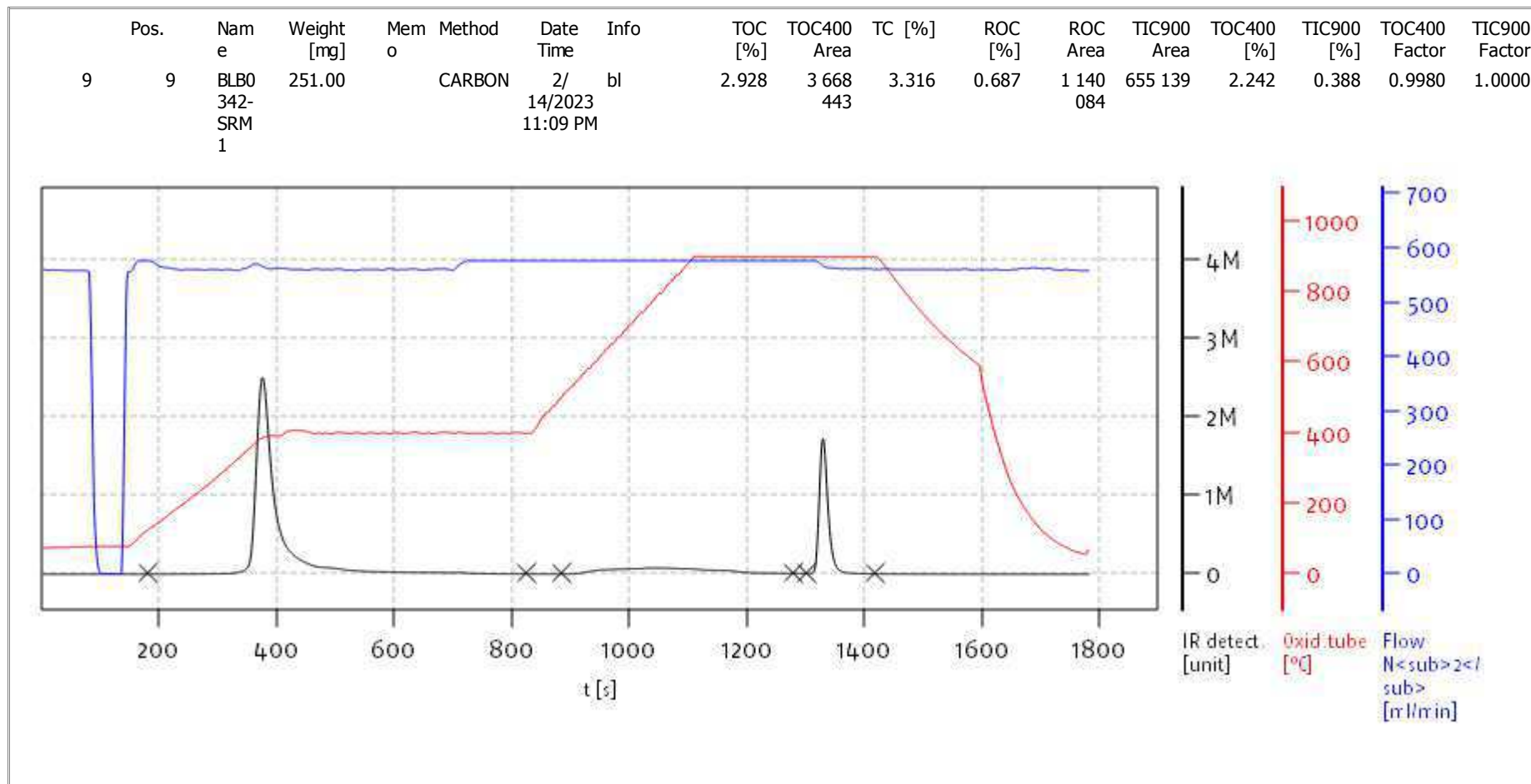
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

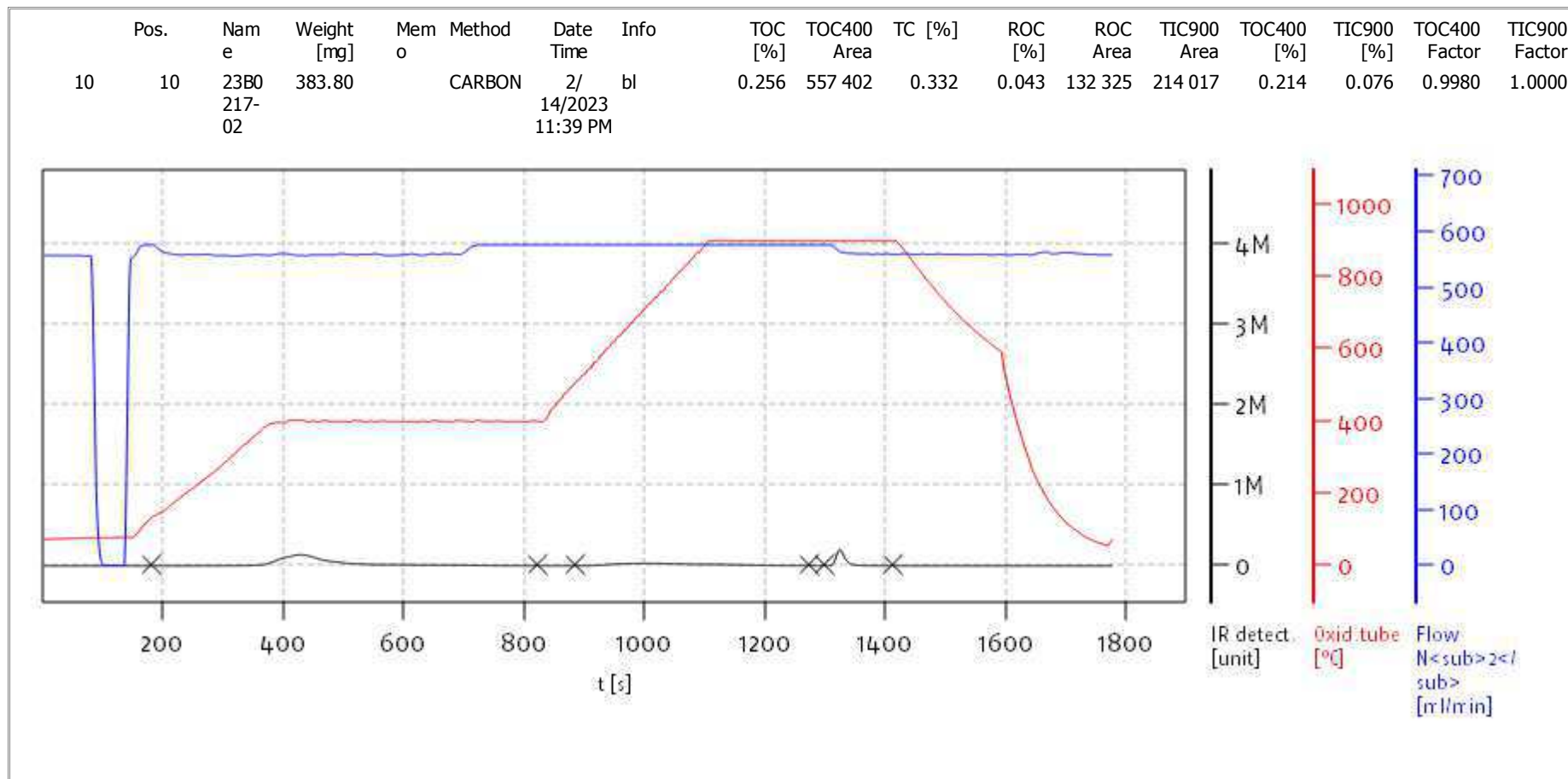
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

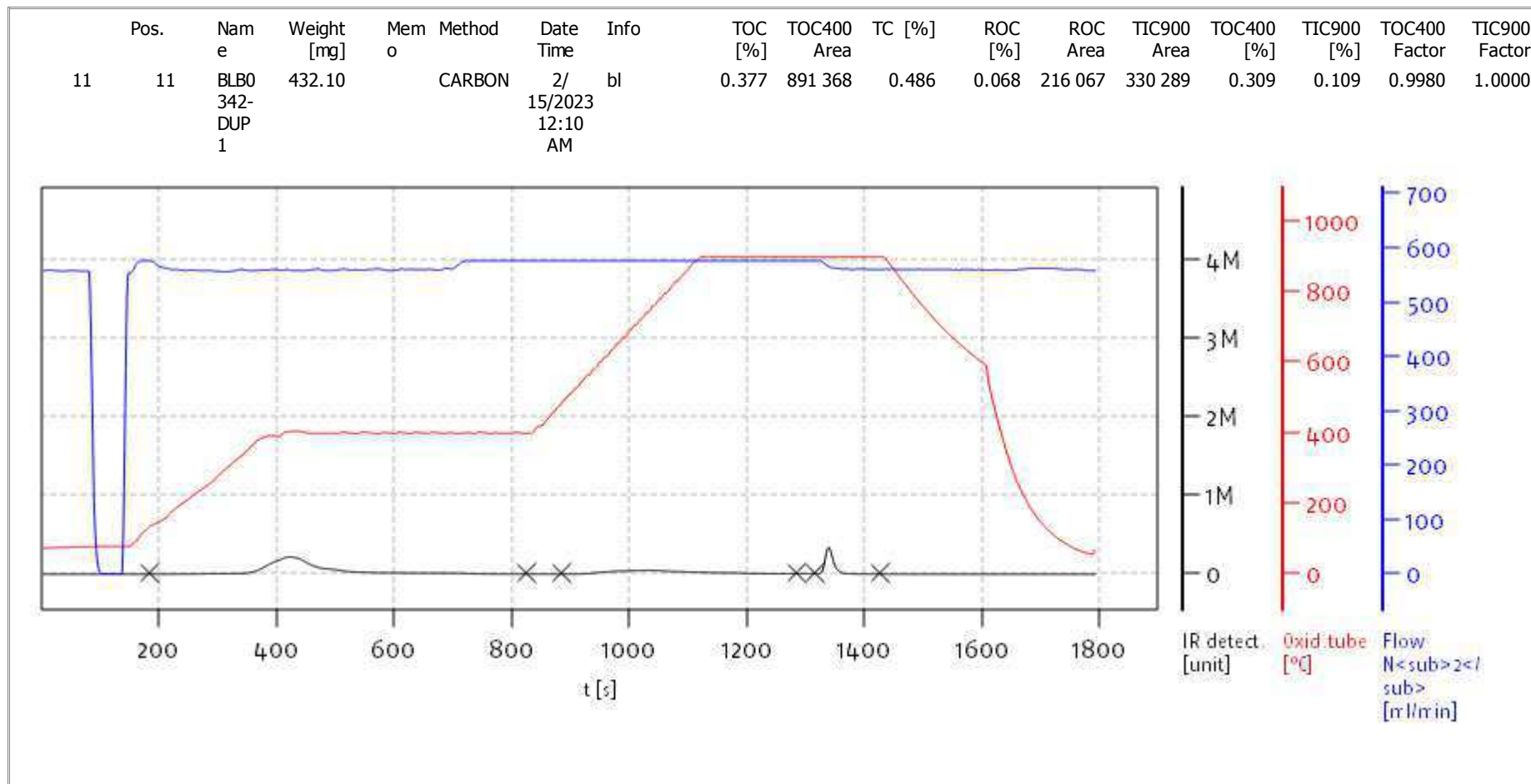
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

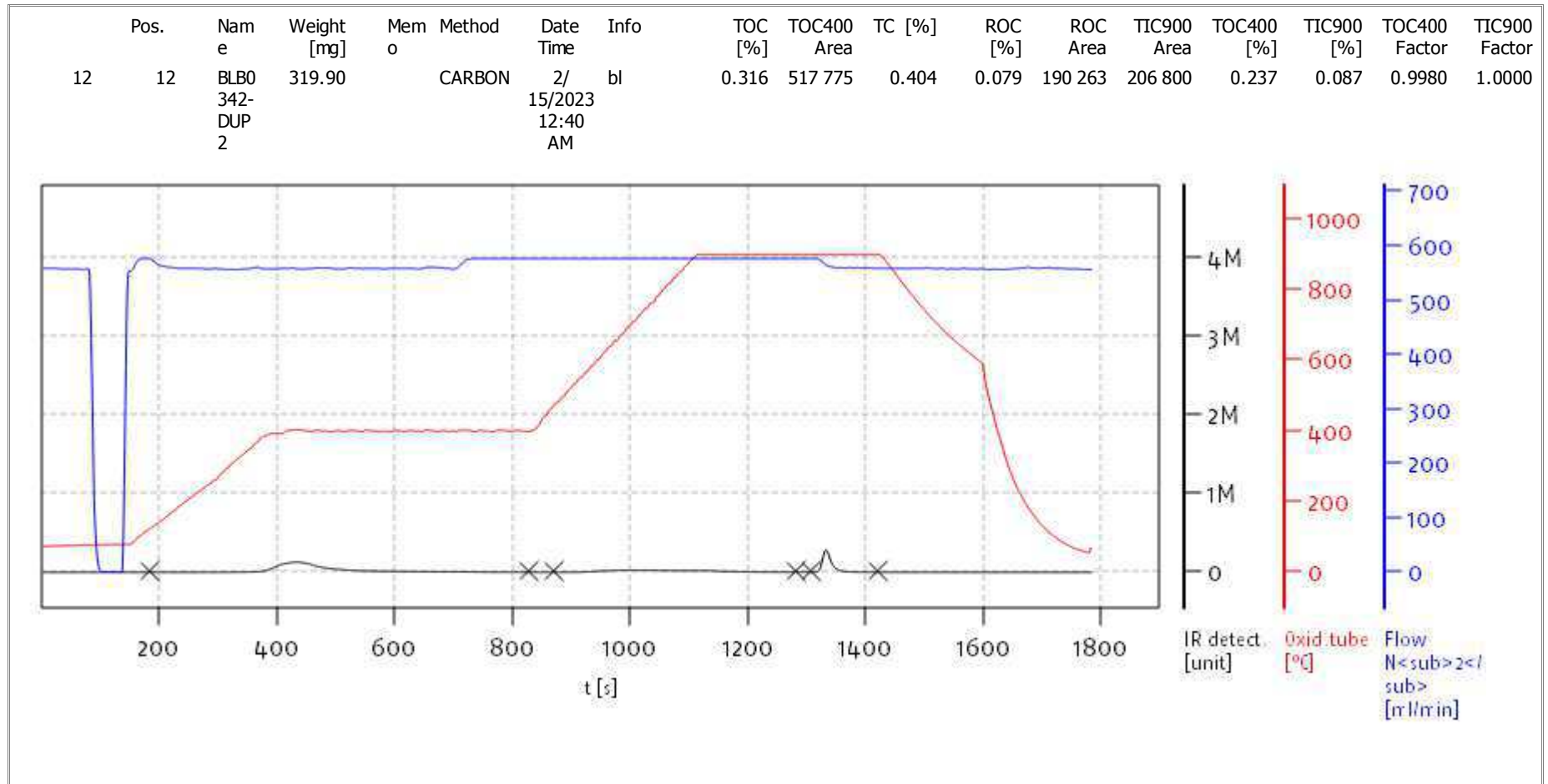
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

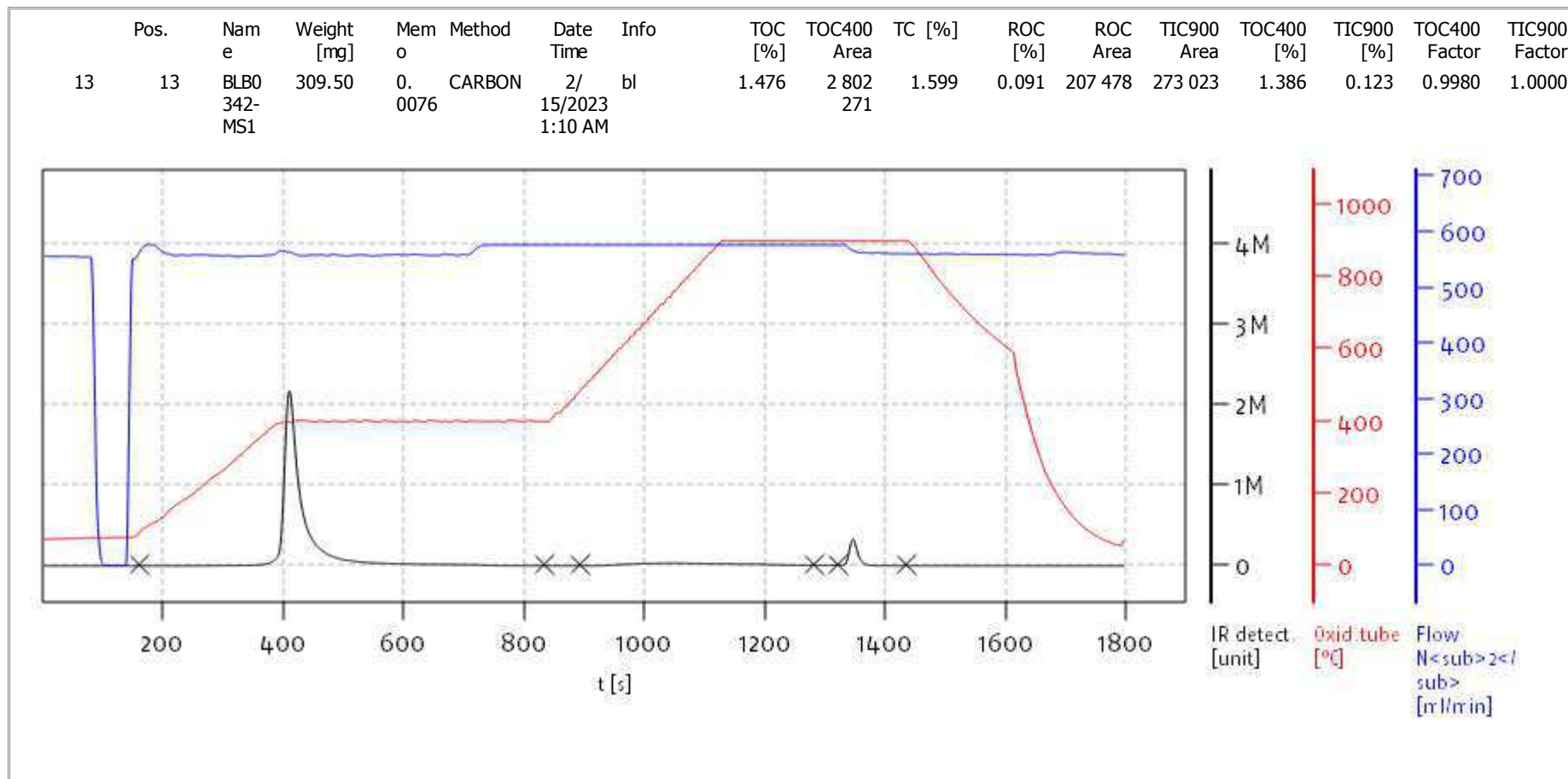
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

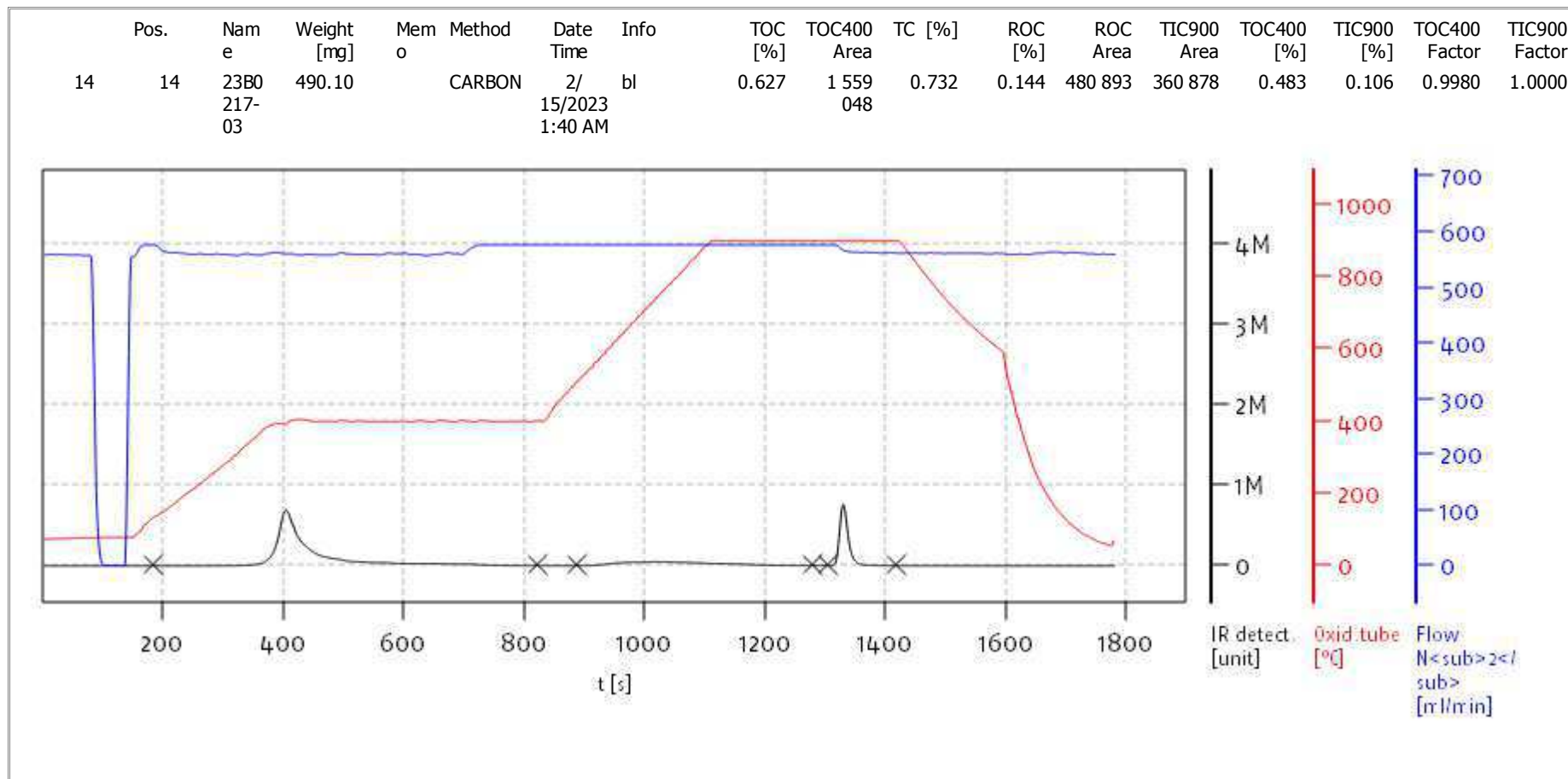
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

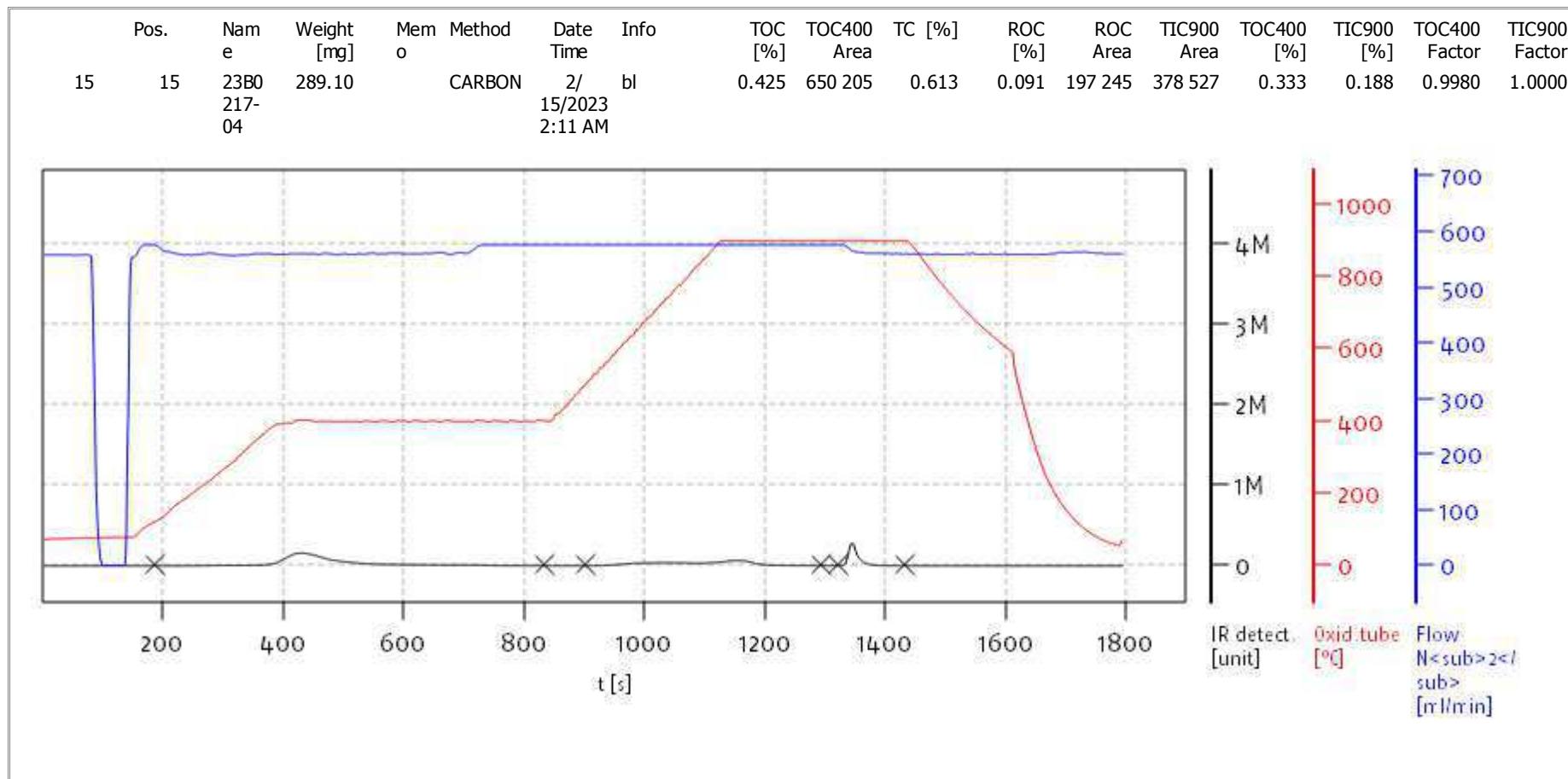
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

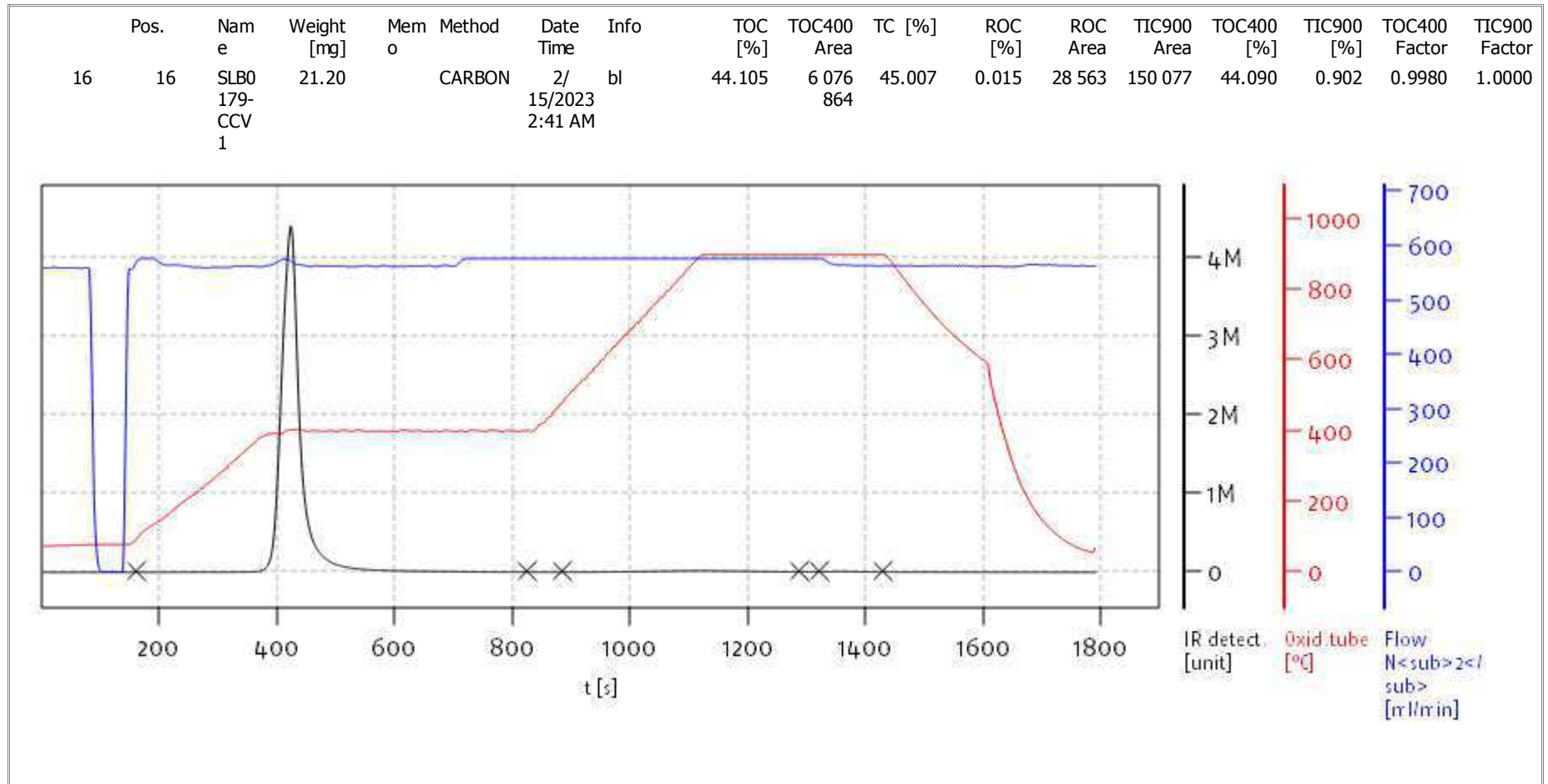
Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

Access: solITOC superuser

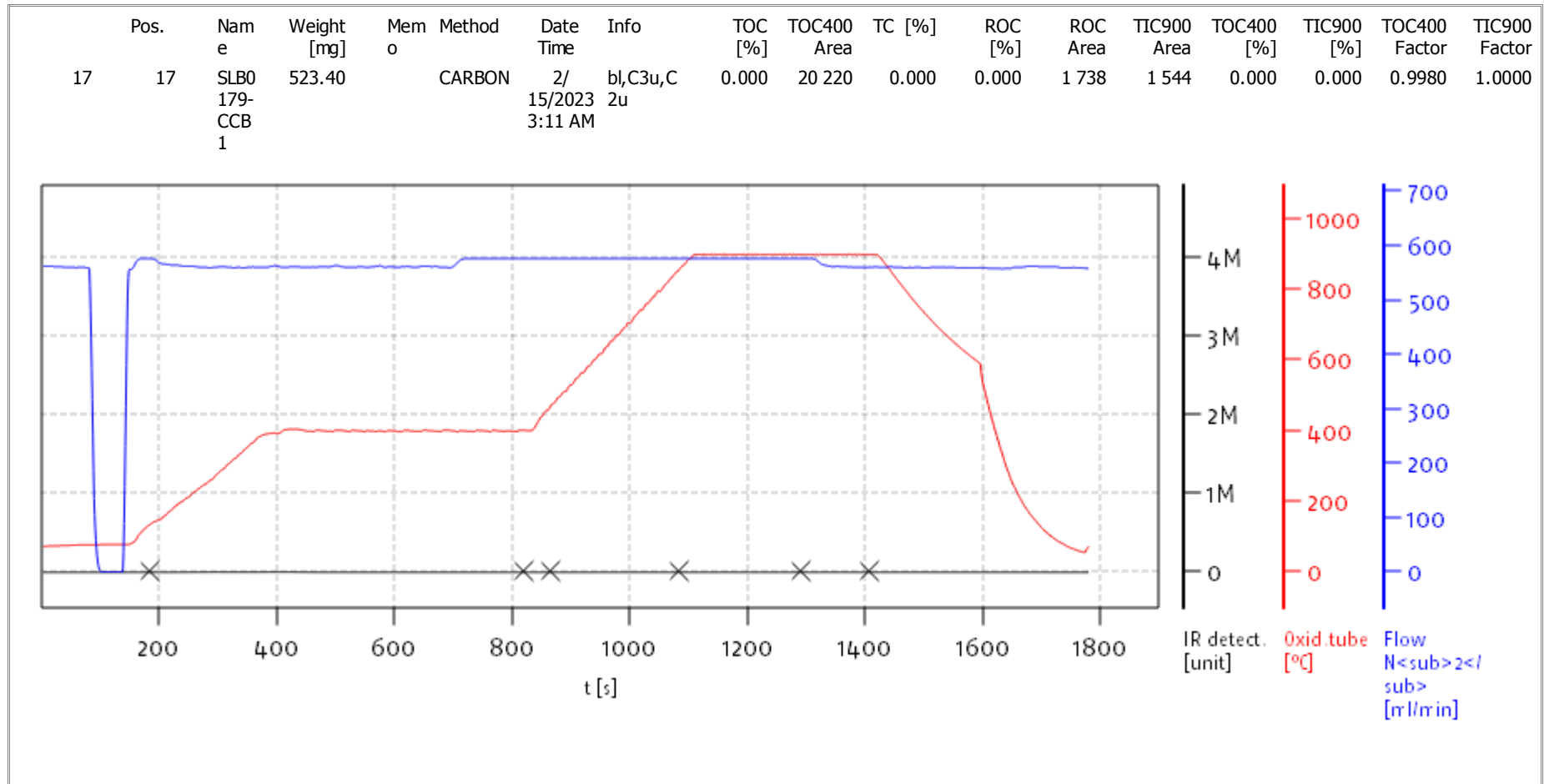
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

Access: solITOC superuser

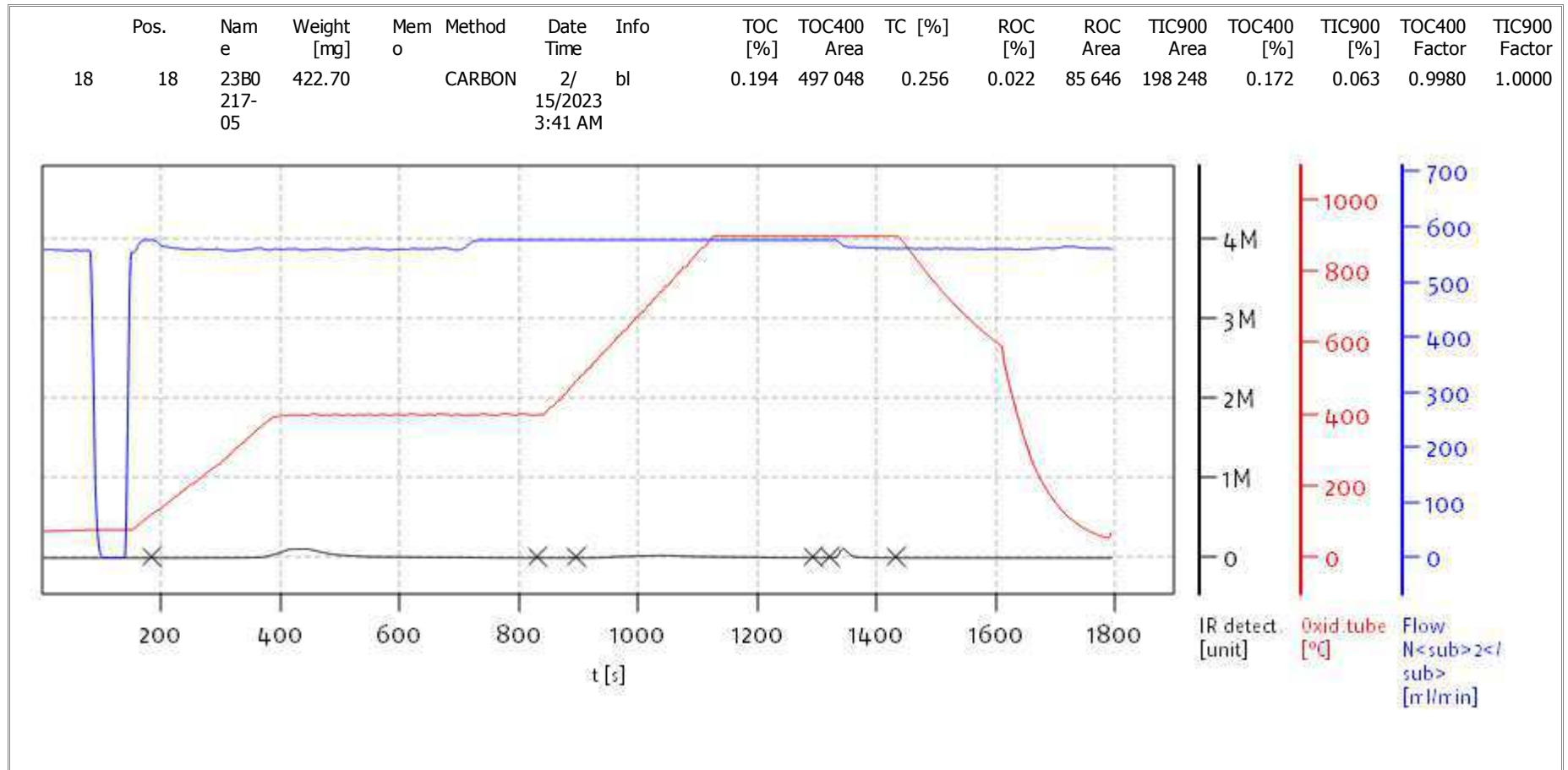
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

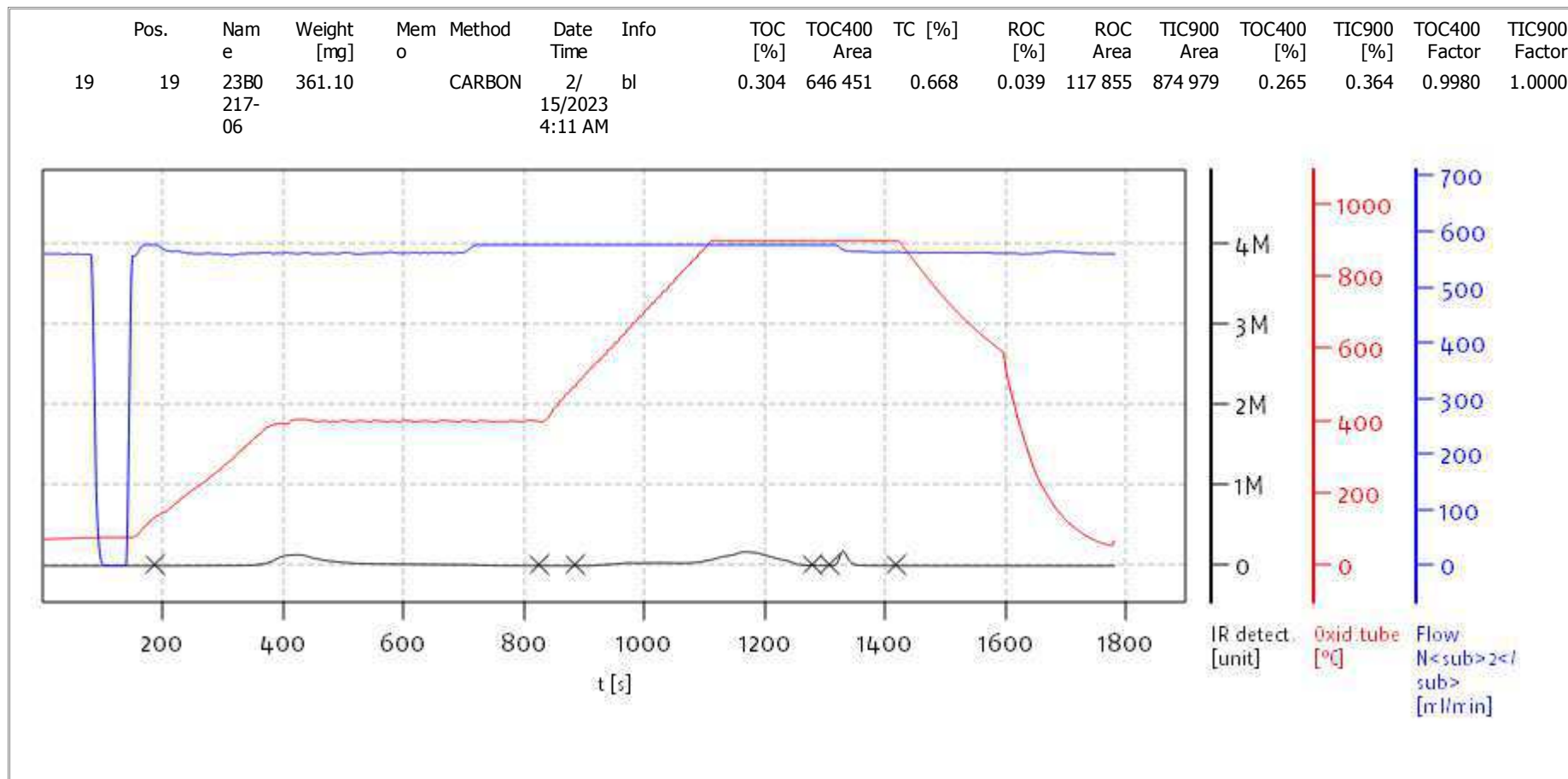
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

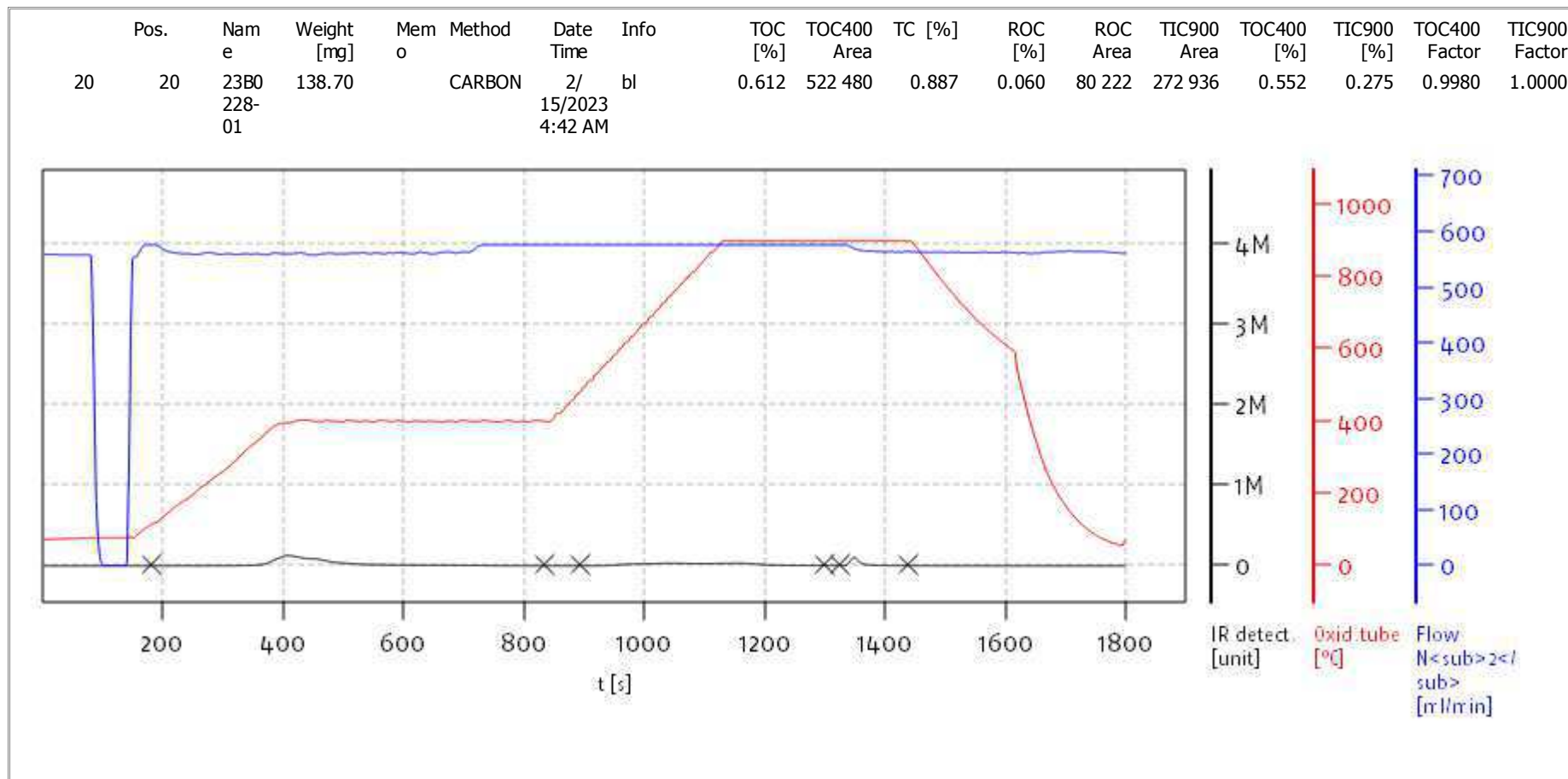
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

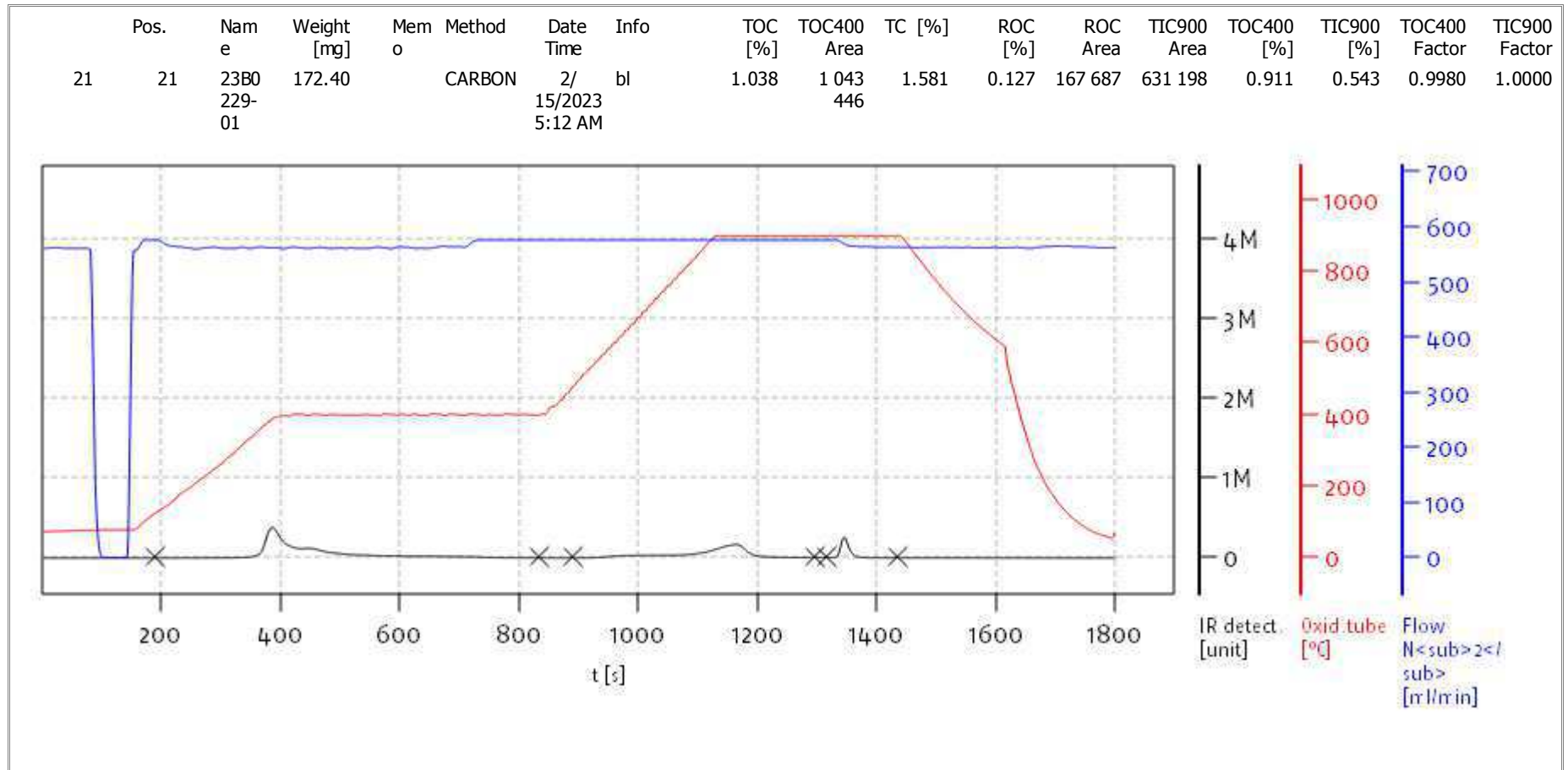
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

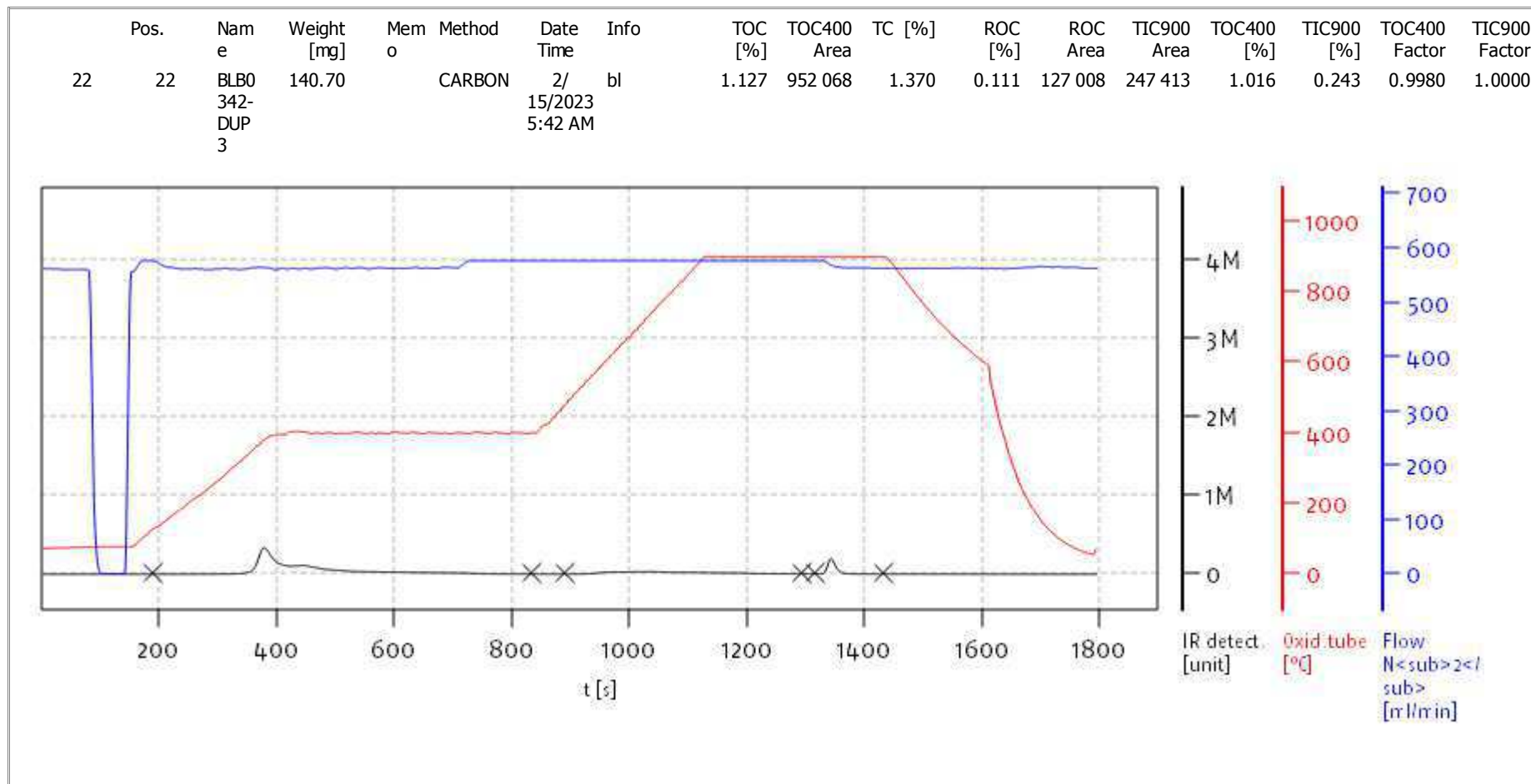
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

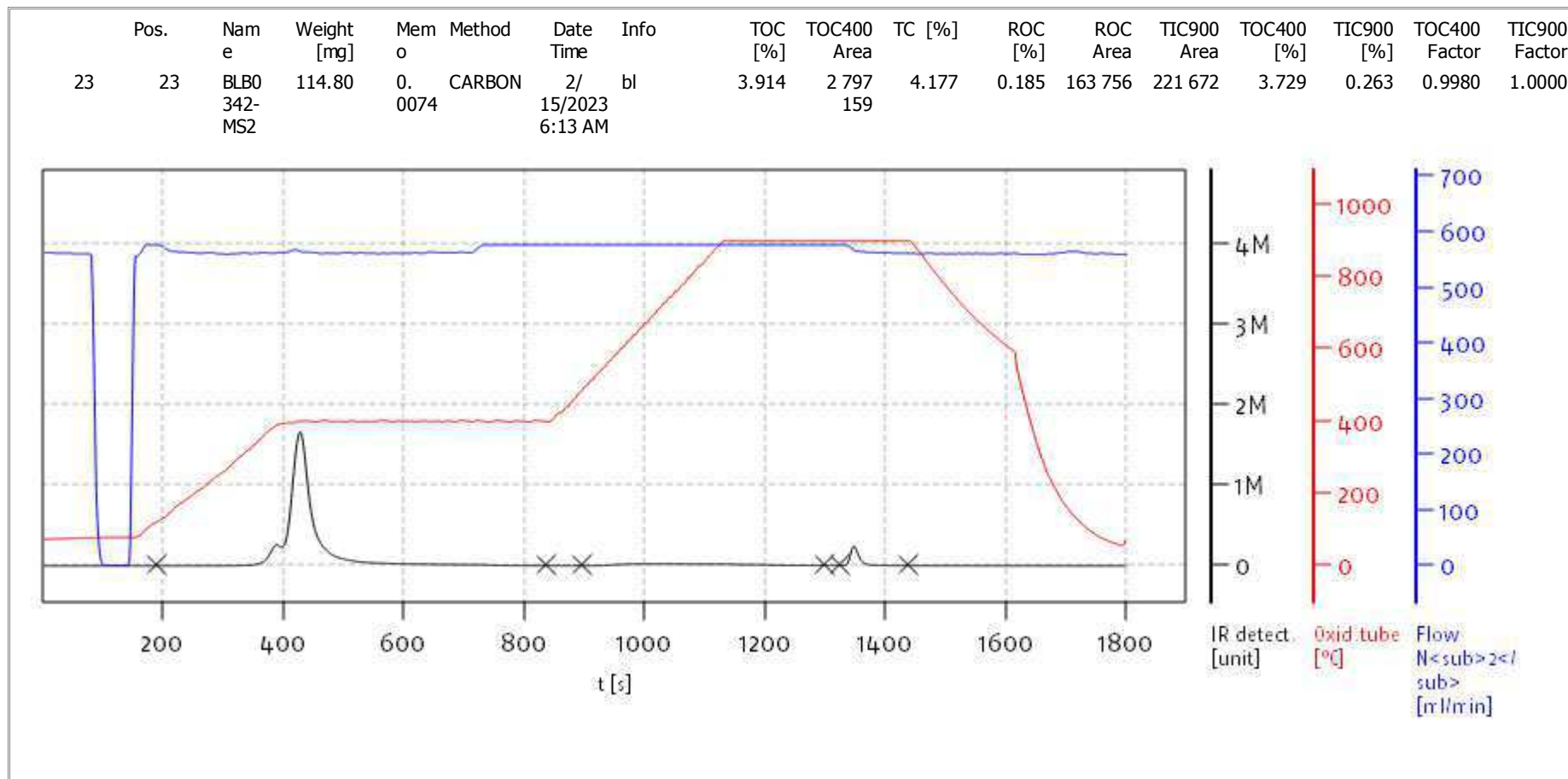
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

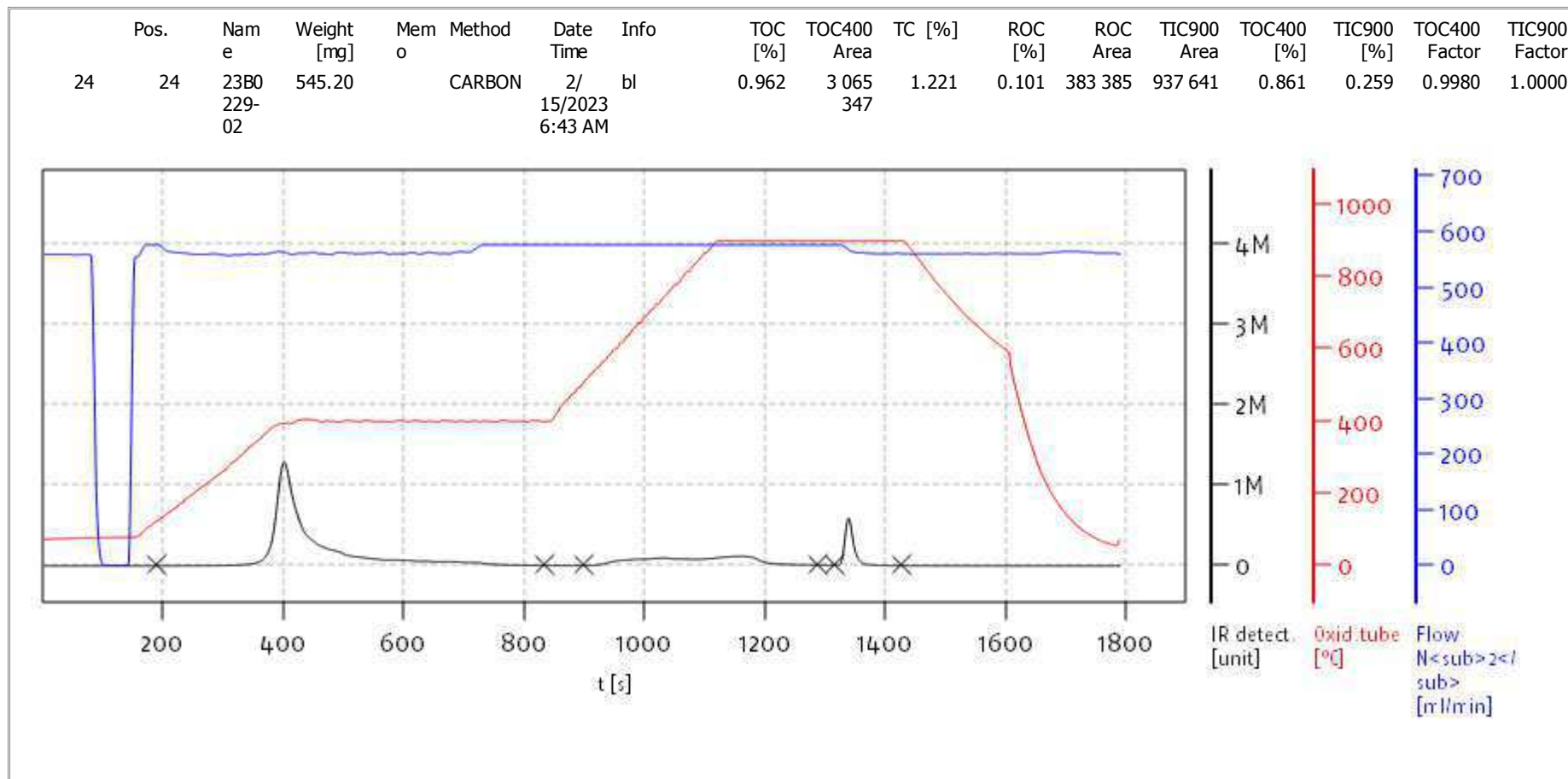
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

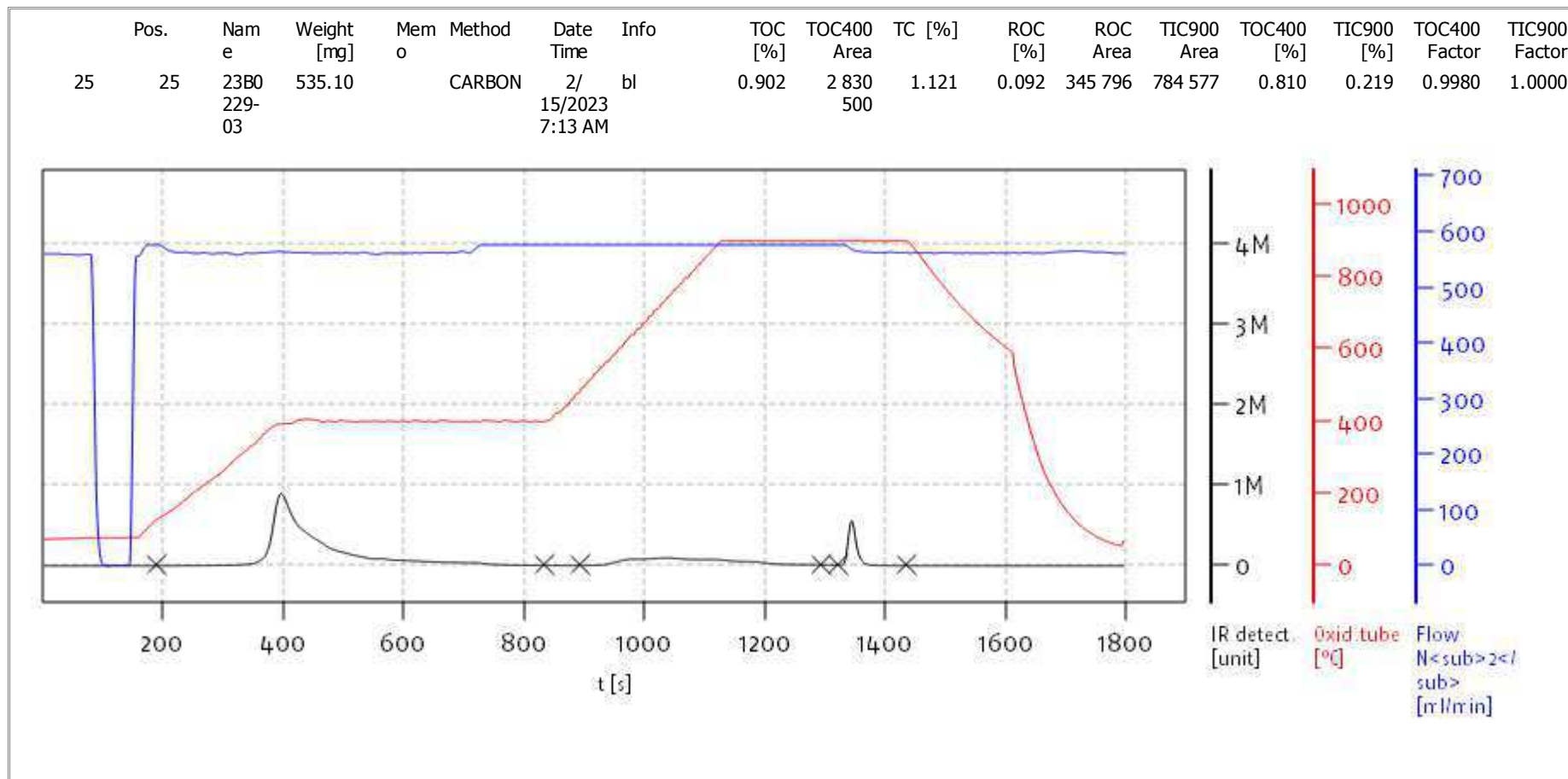
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

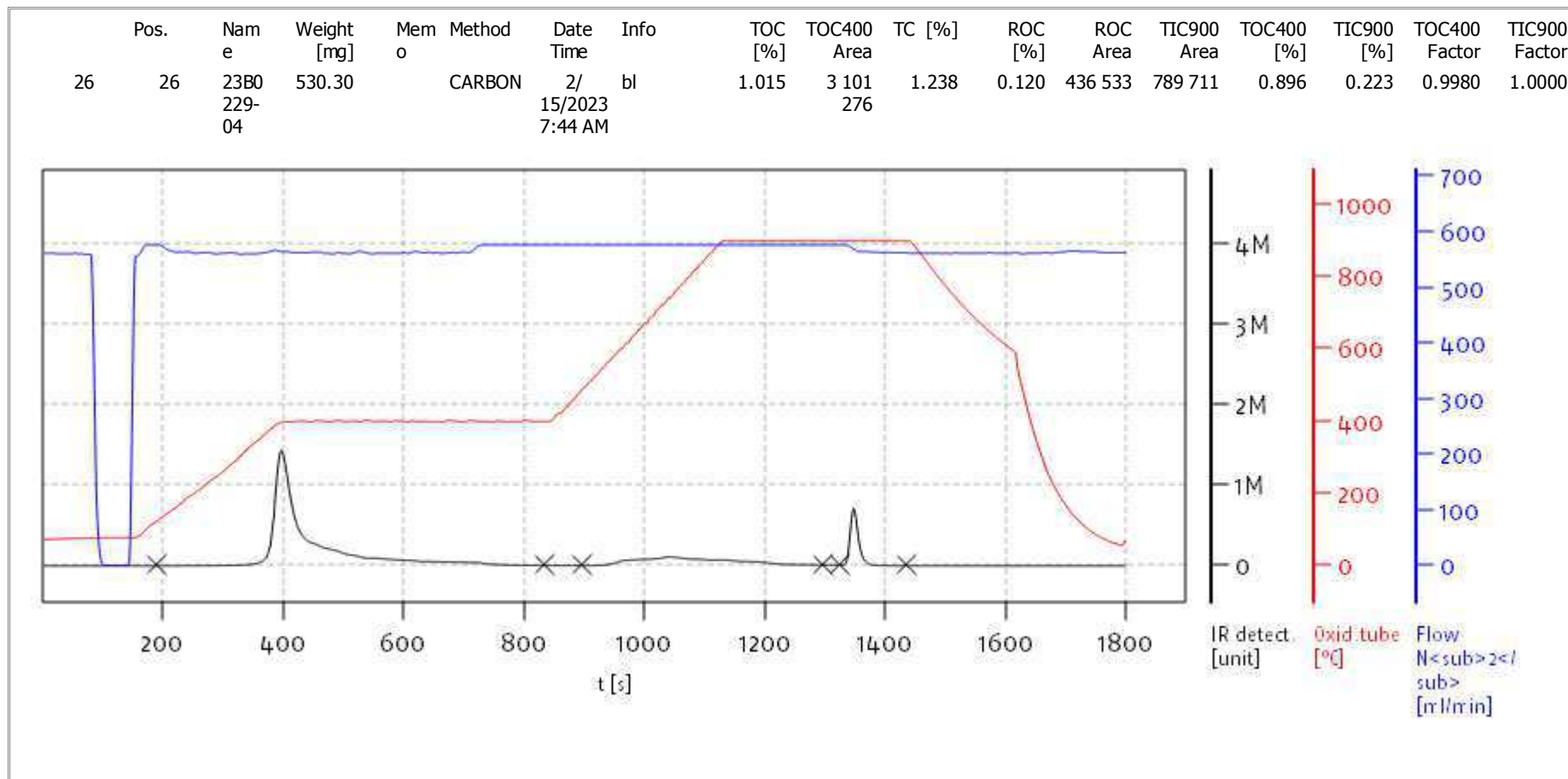
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

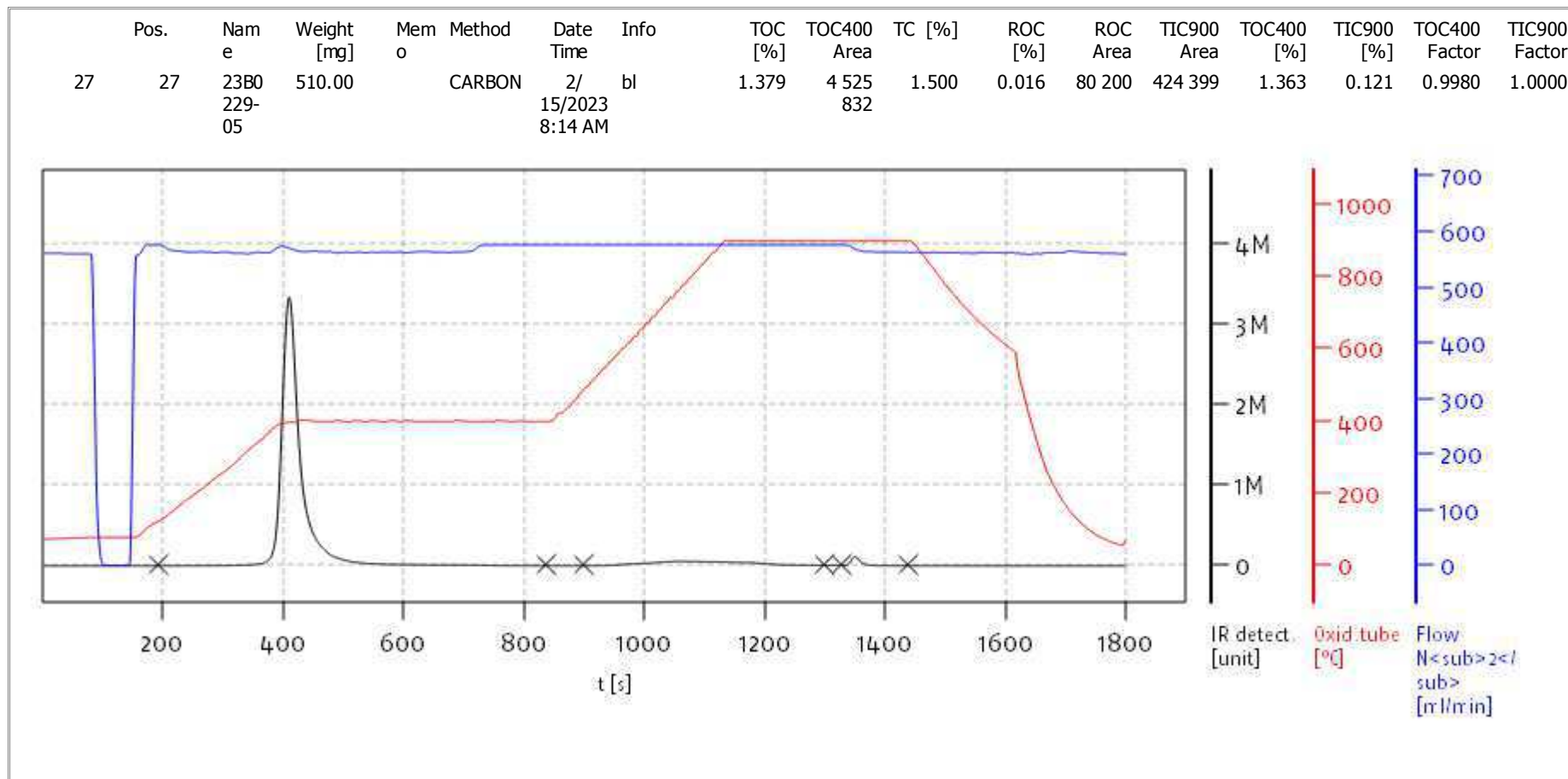
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

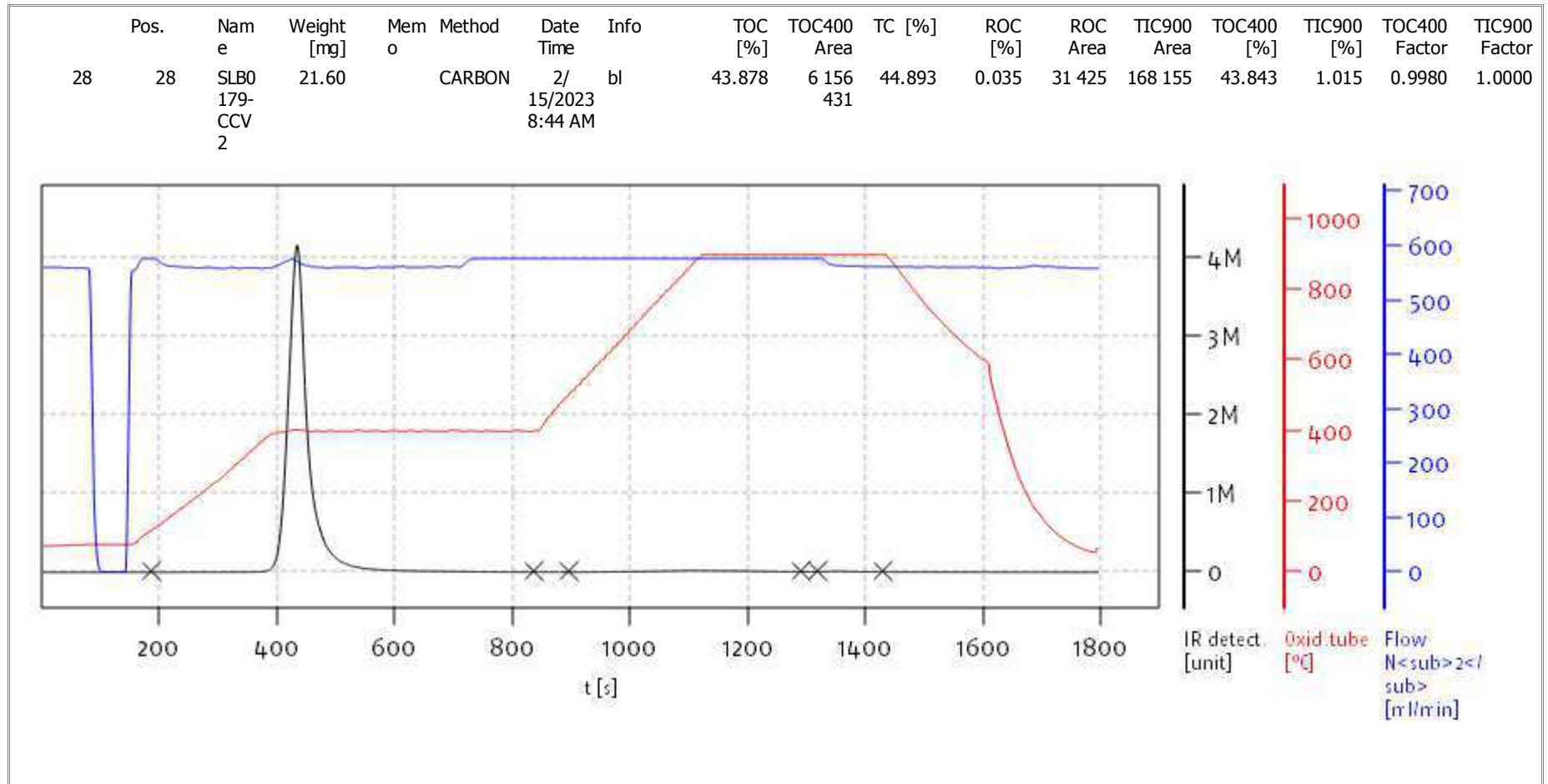
Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

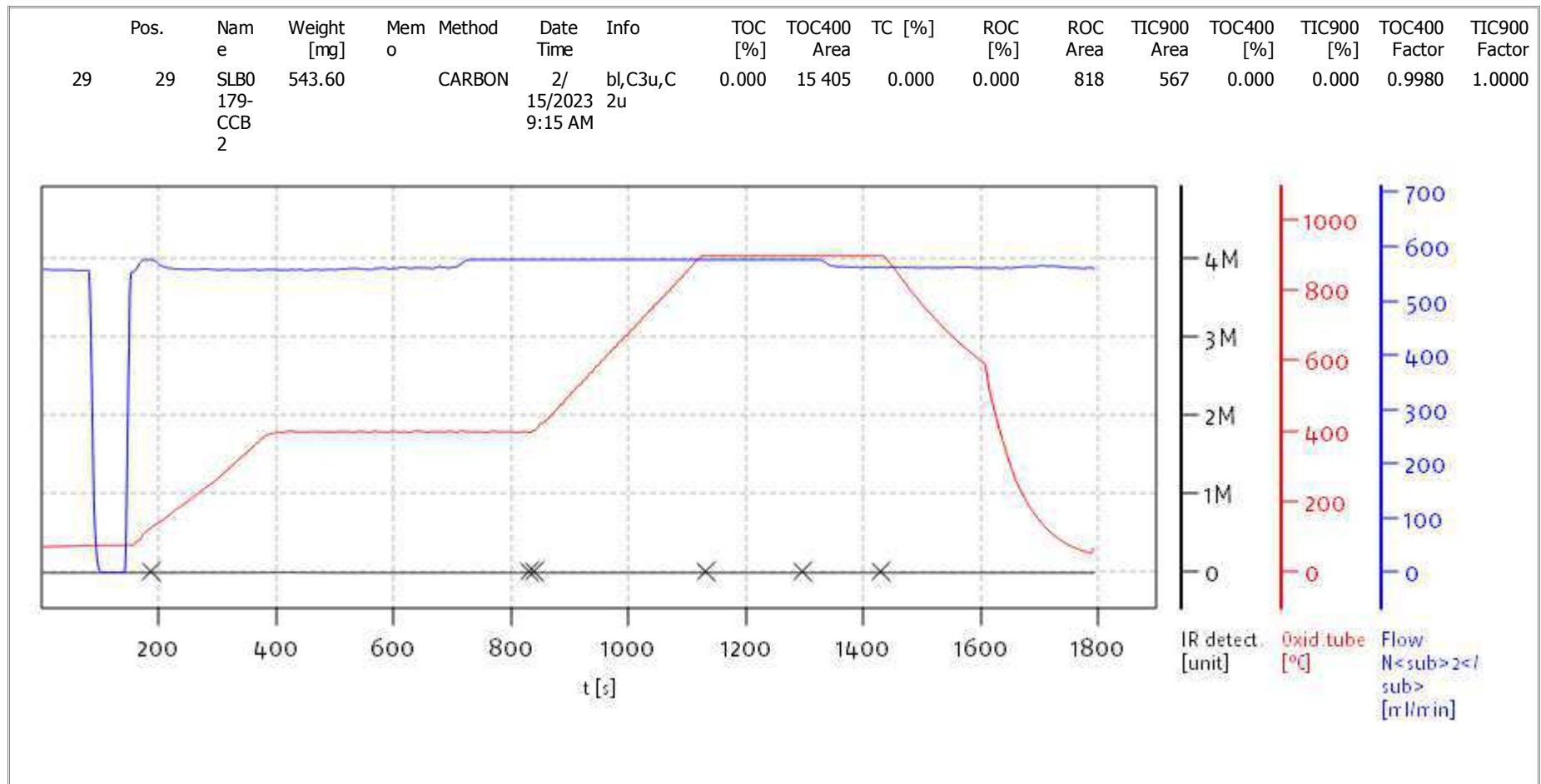
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

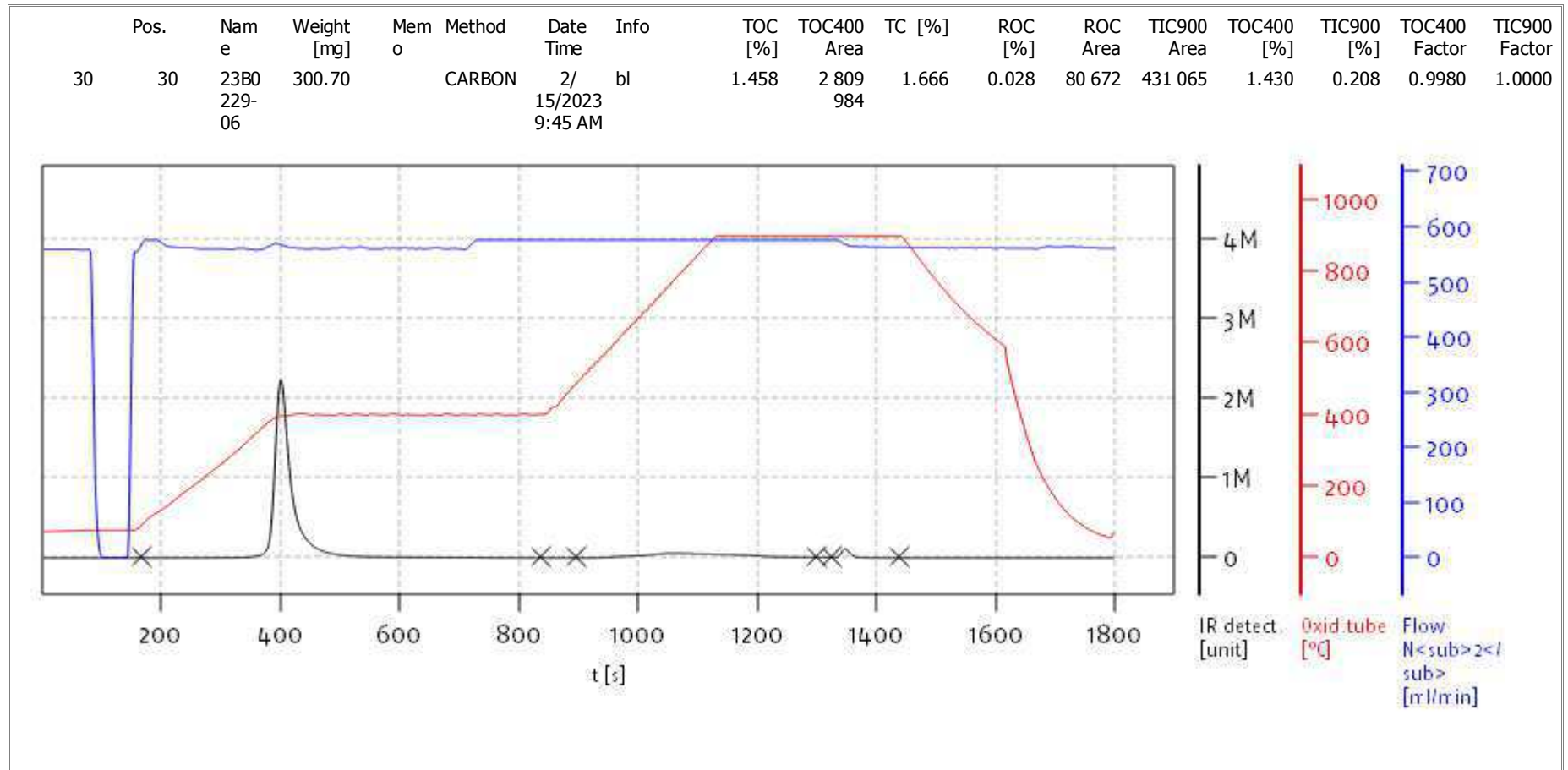
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

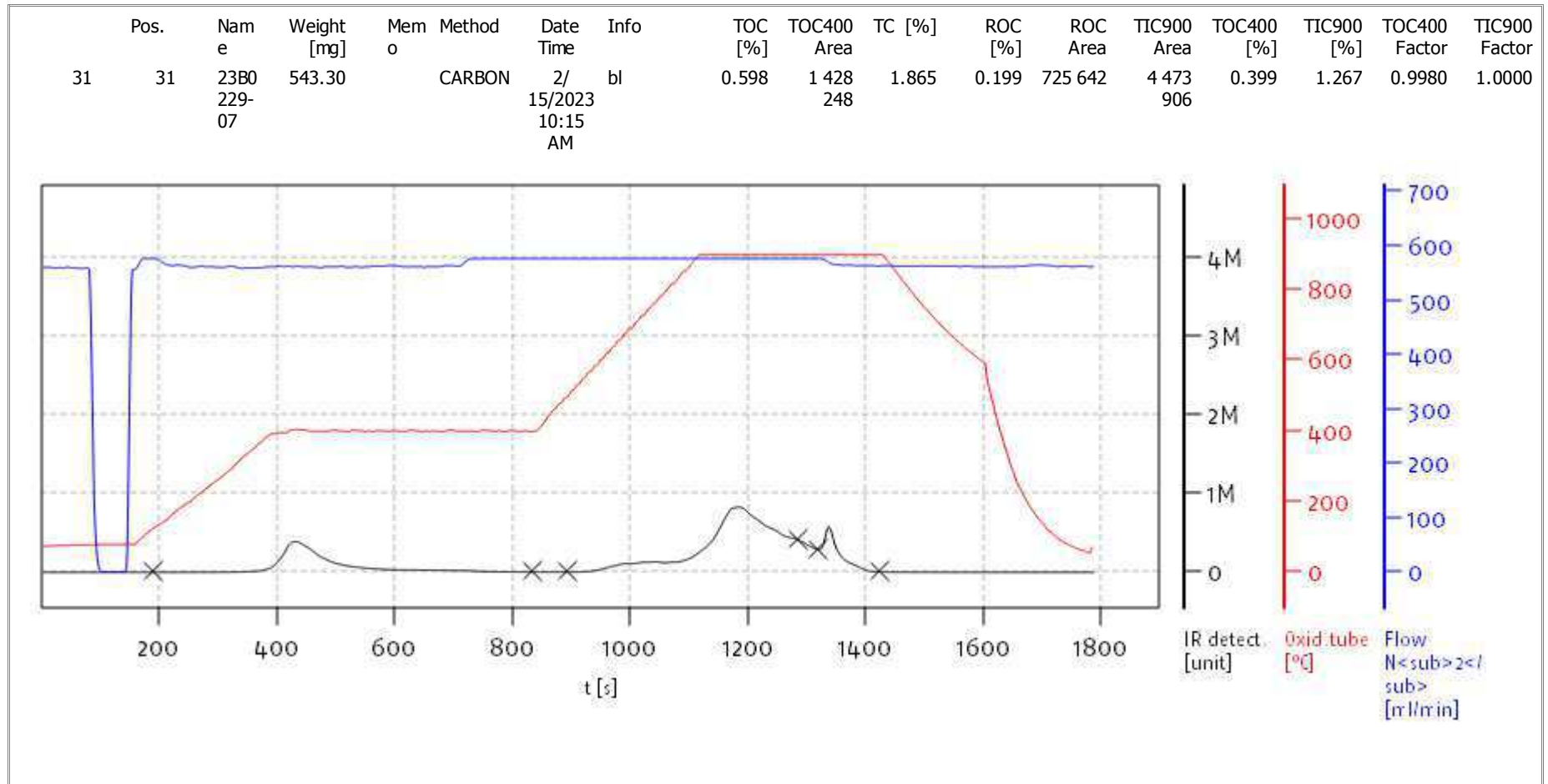
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

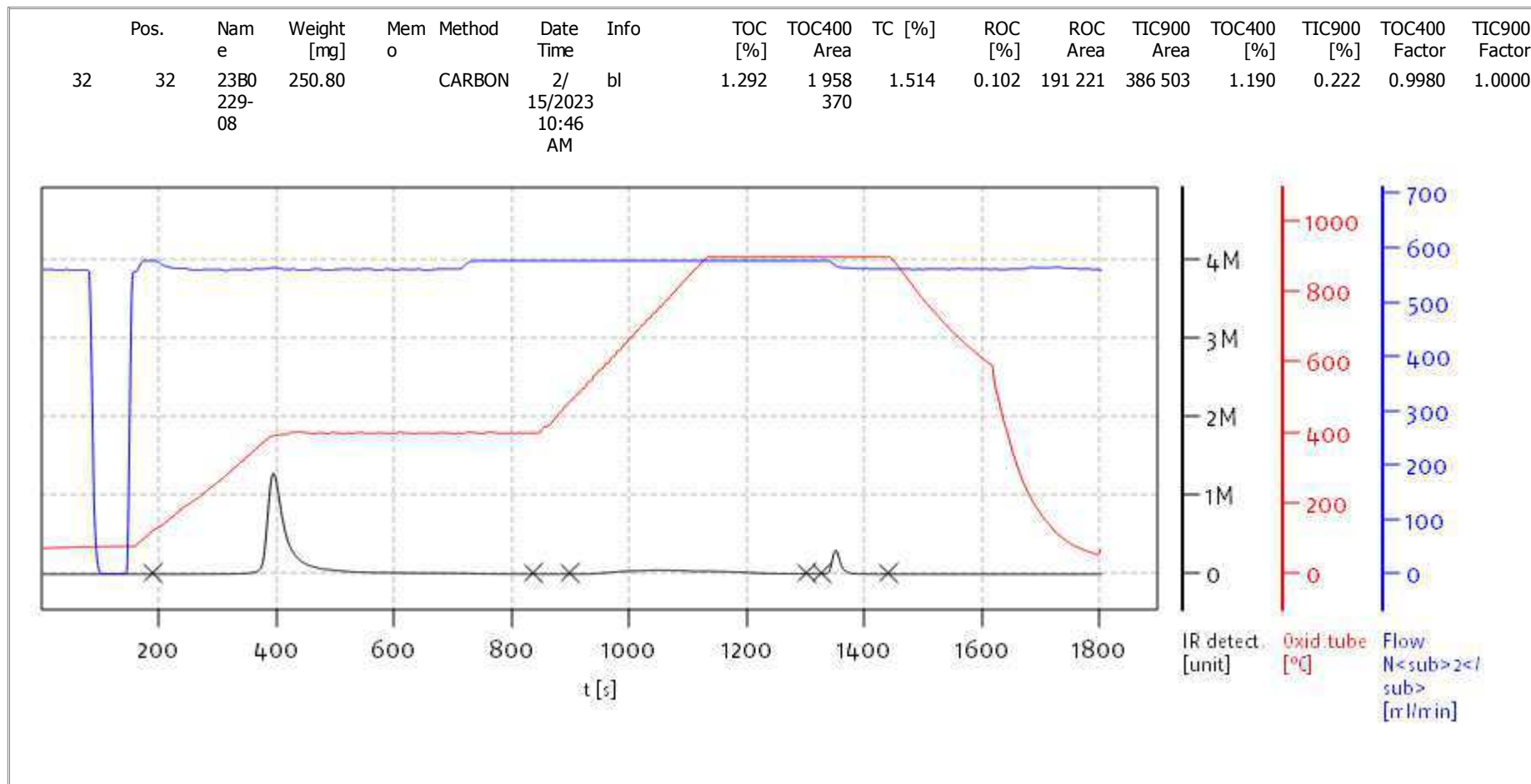
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

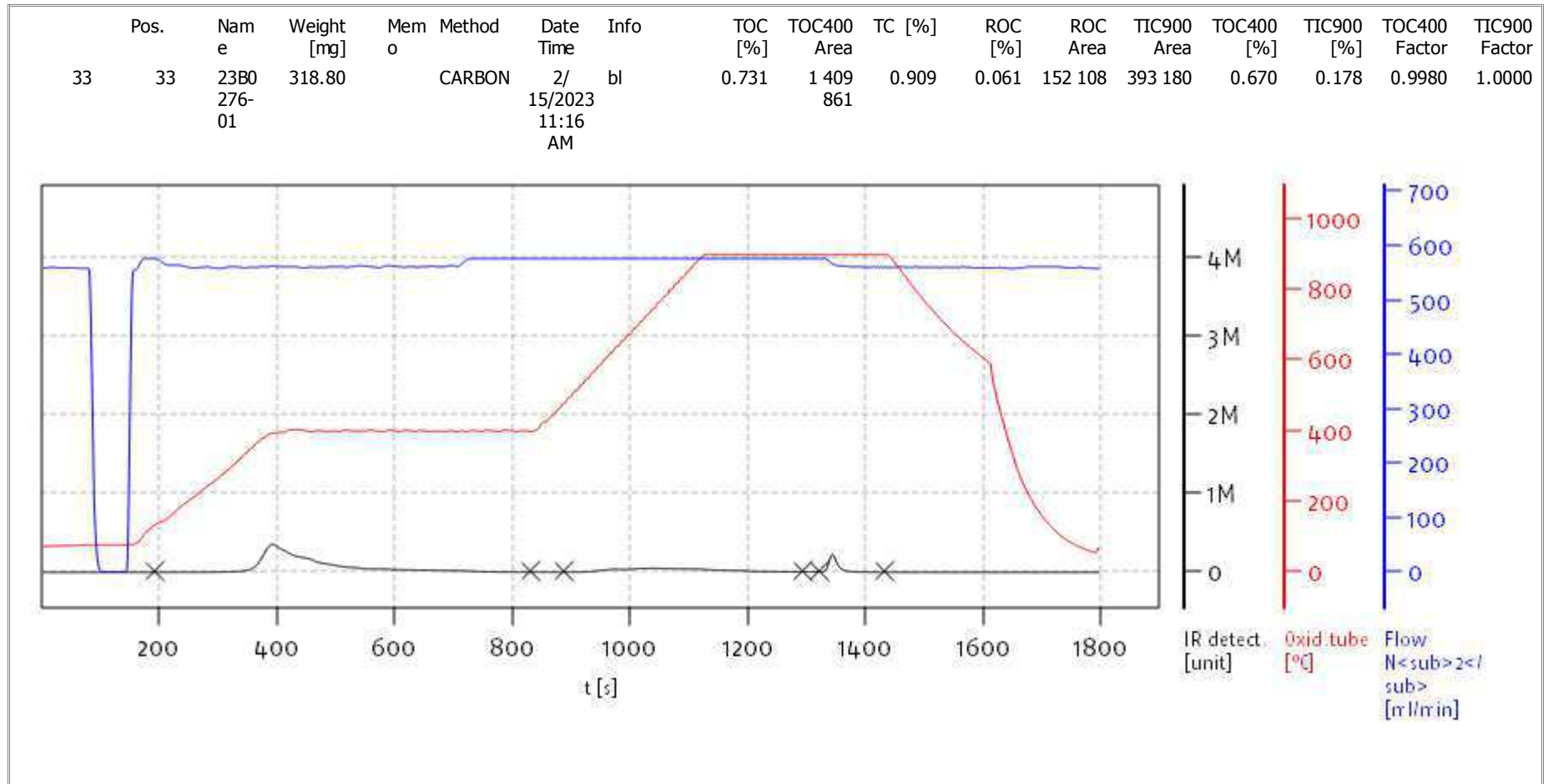
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

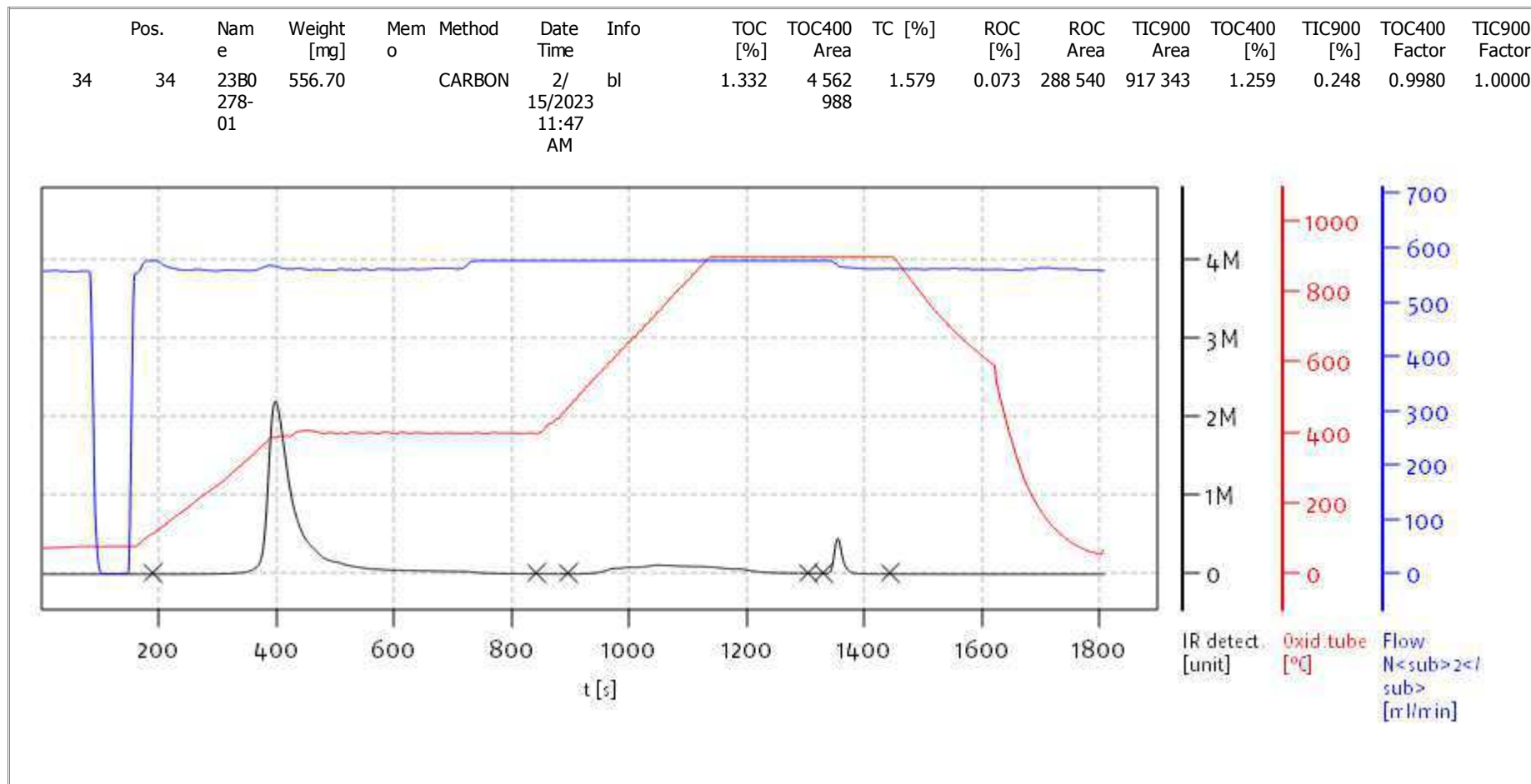
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

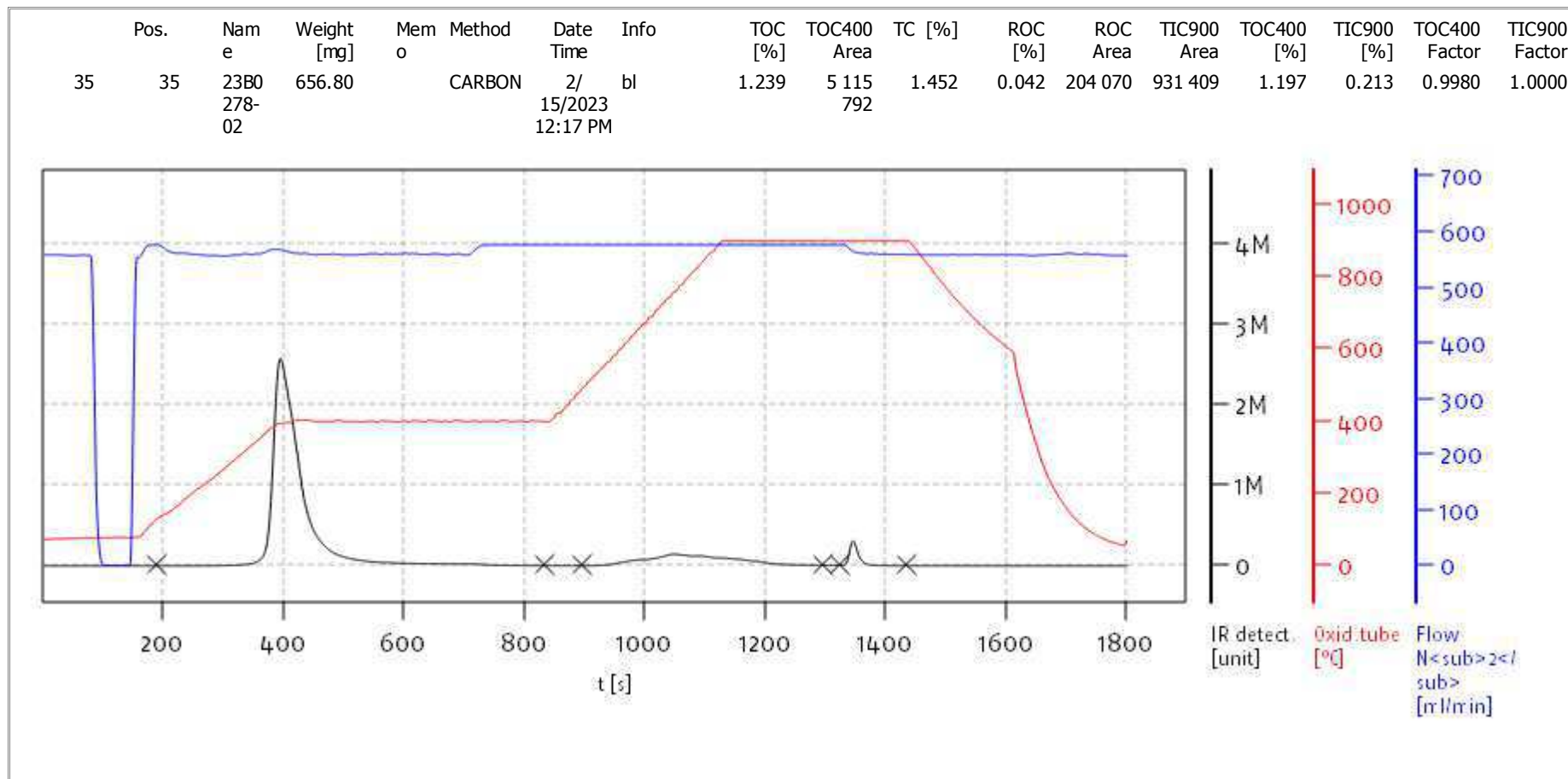
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

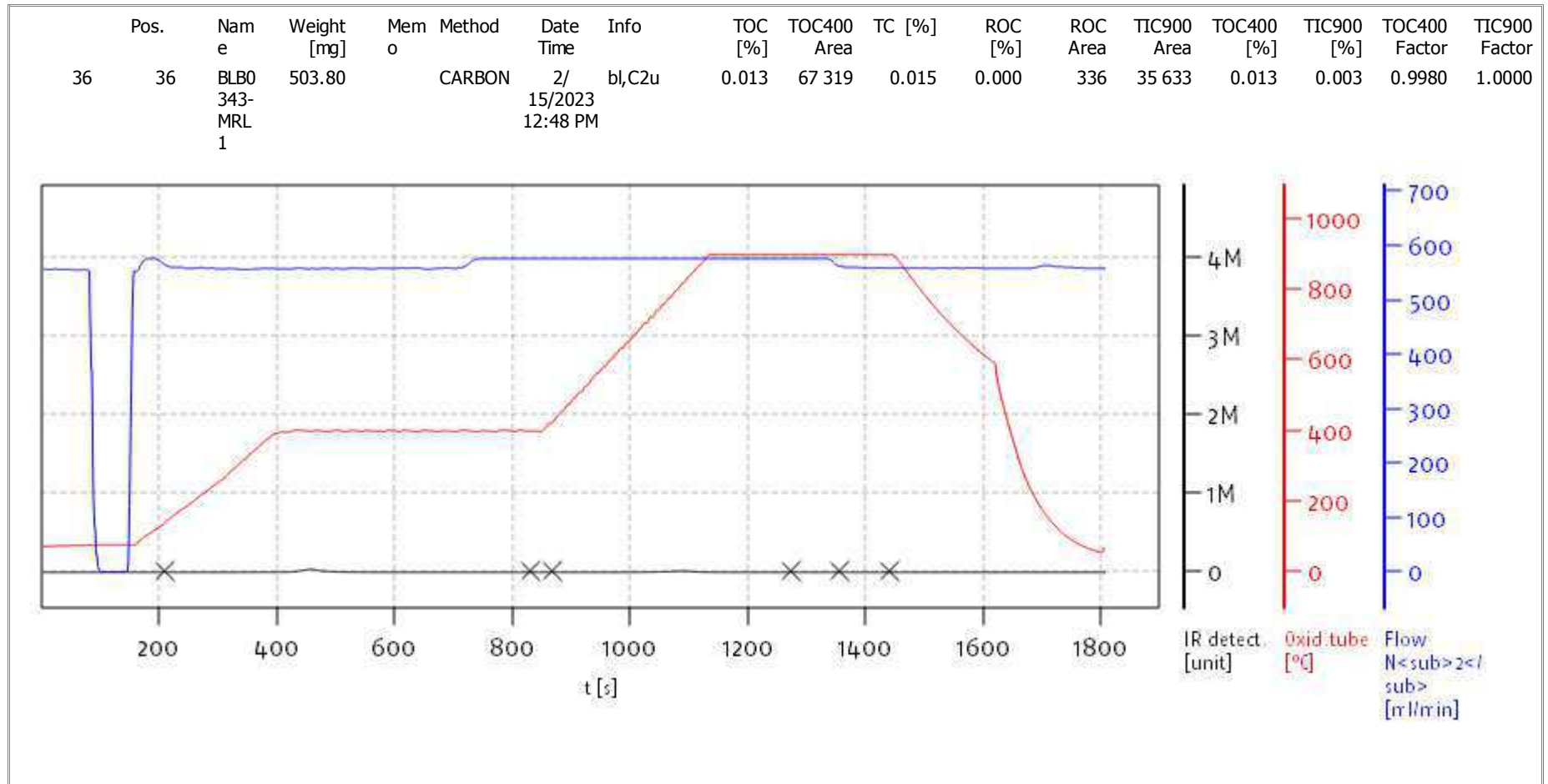
Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

Access: solITOC superuser

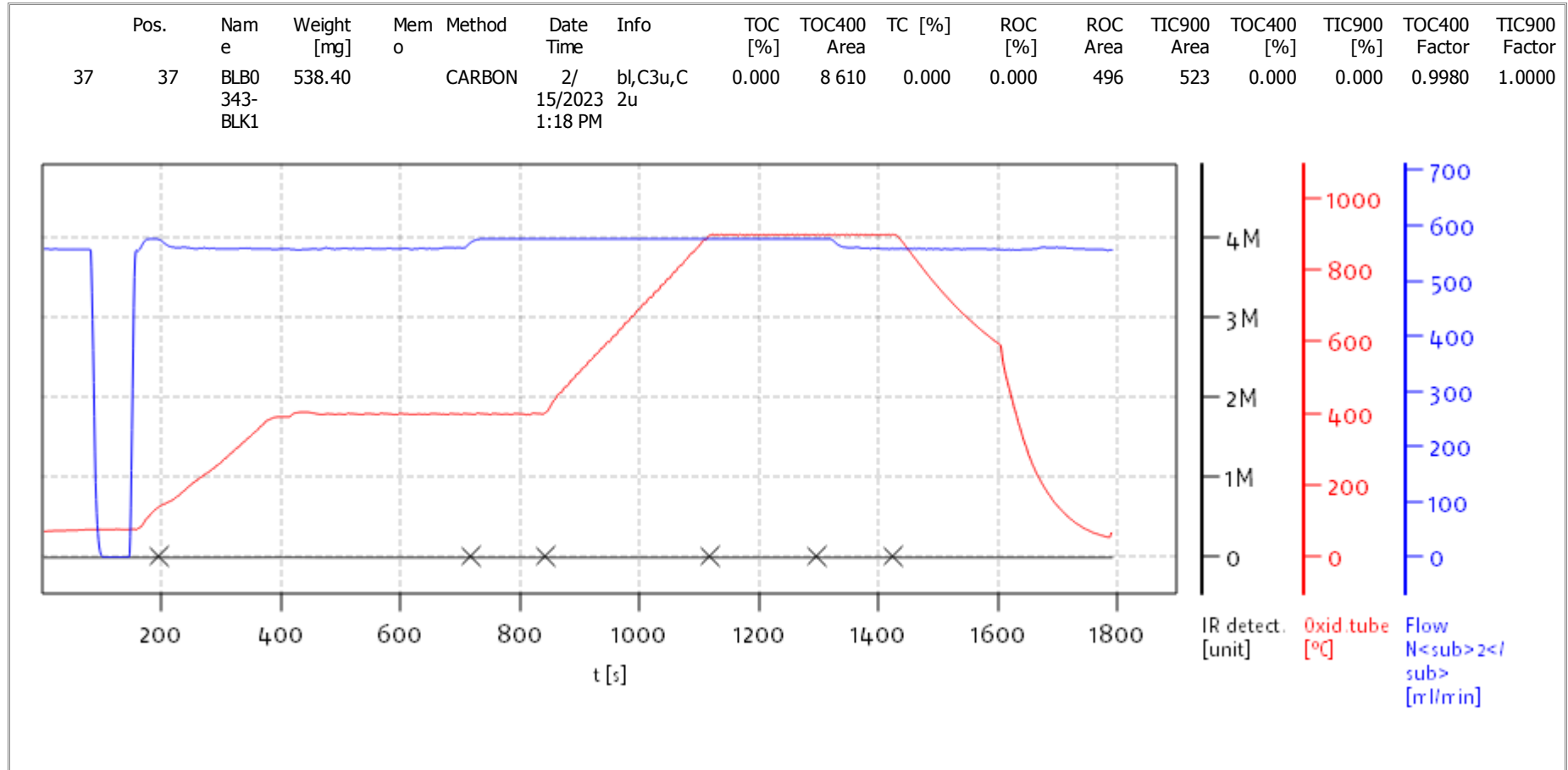
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

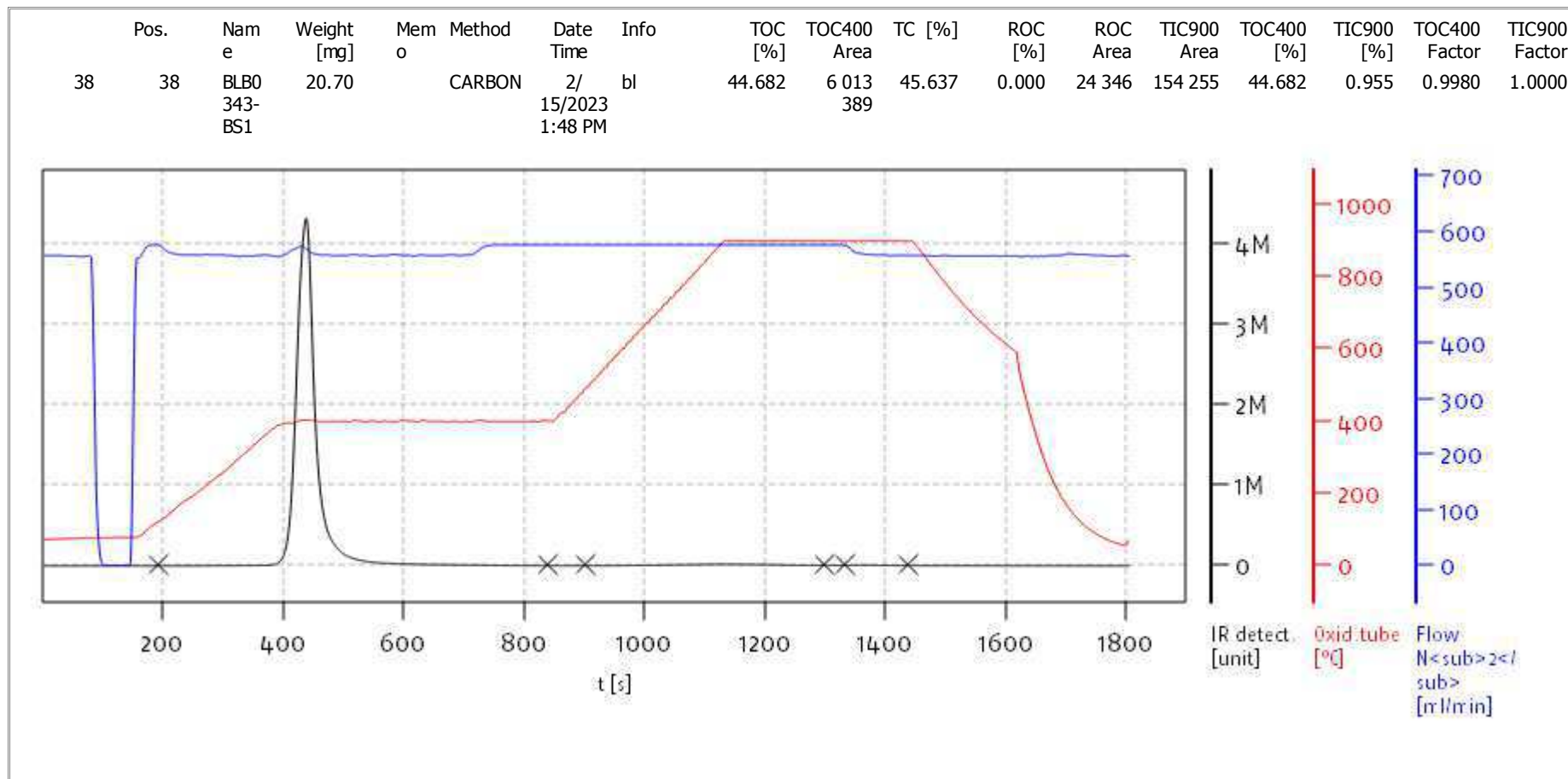
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

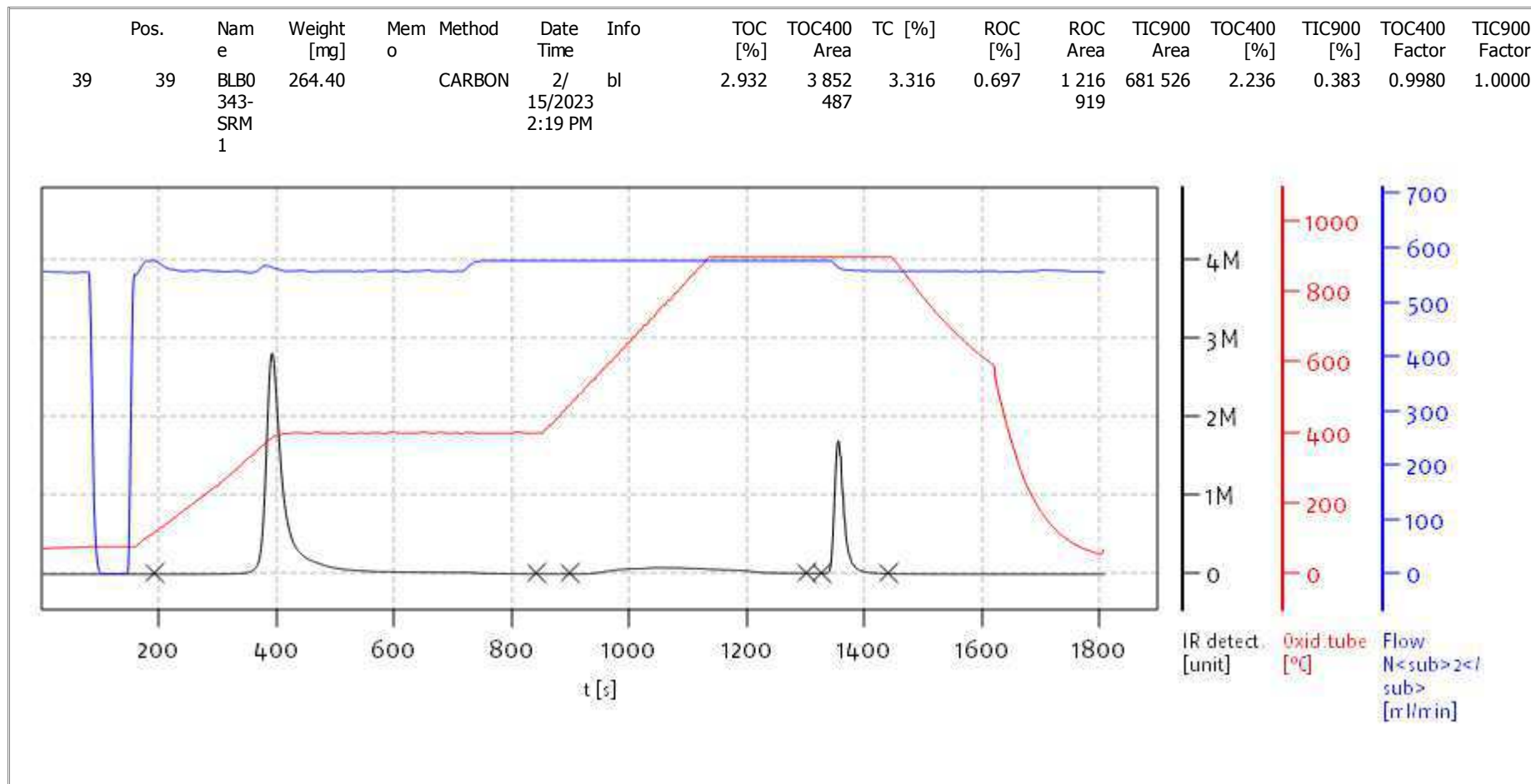
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

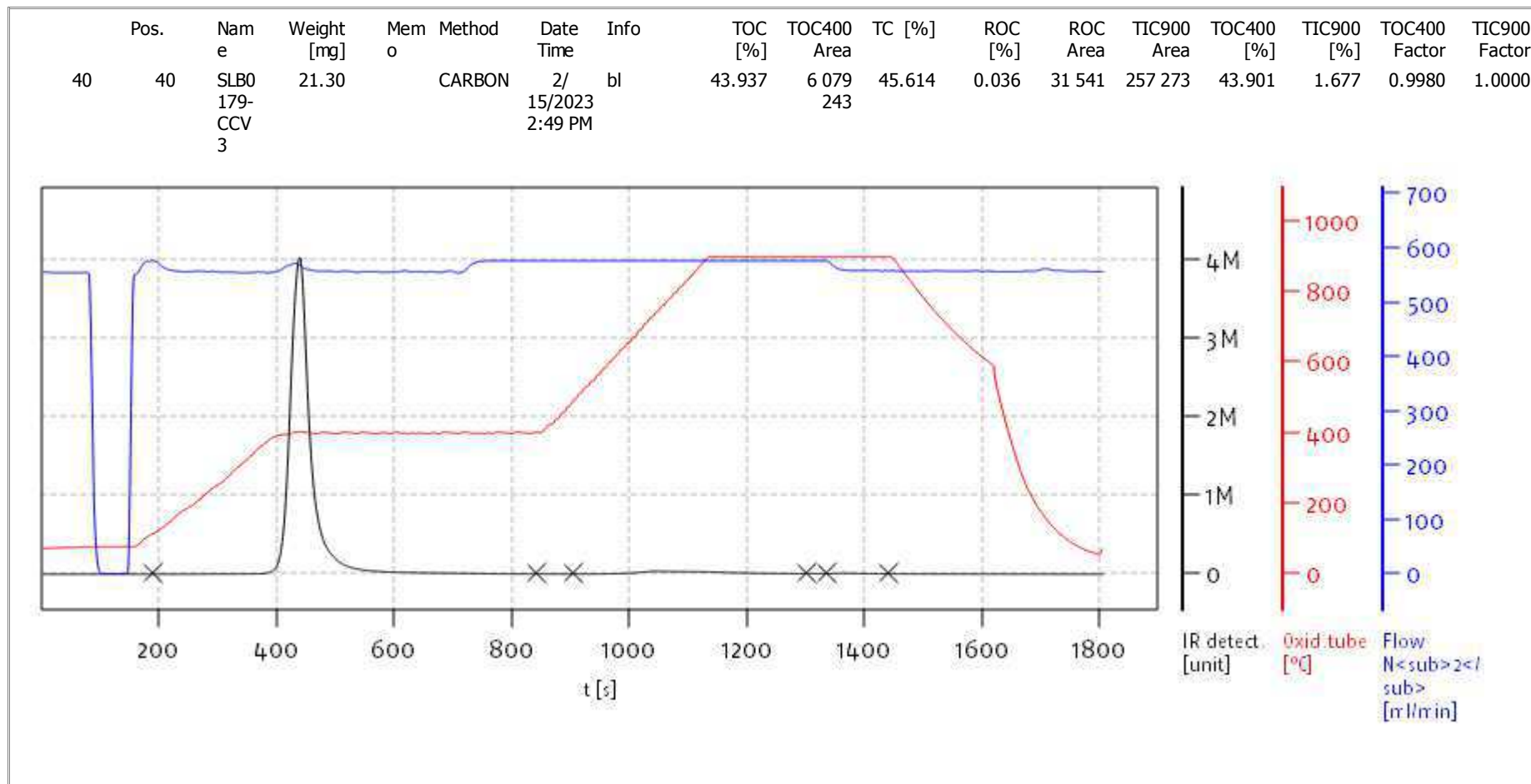
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

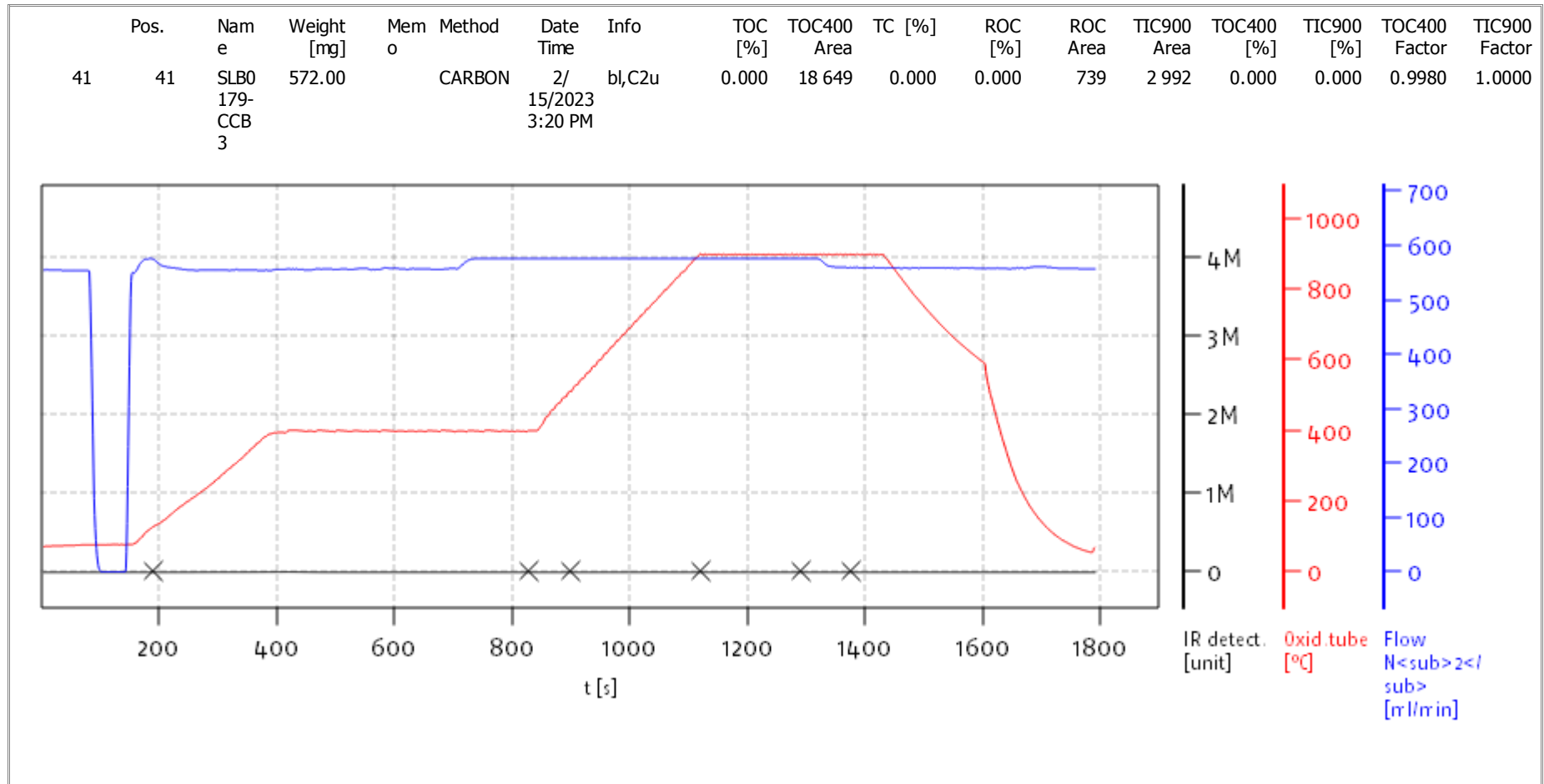
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

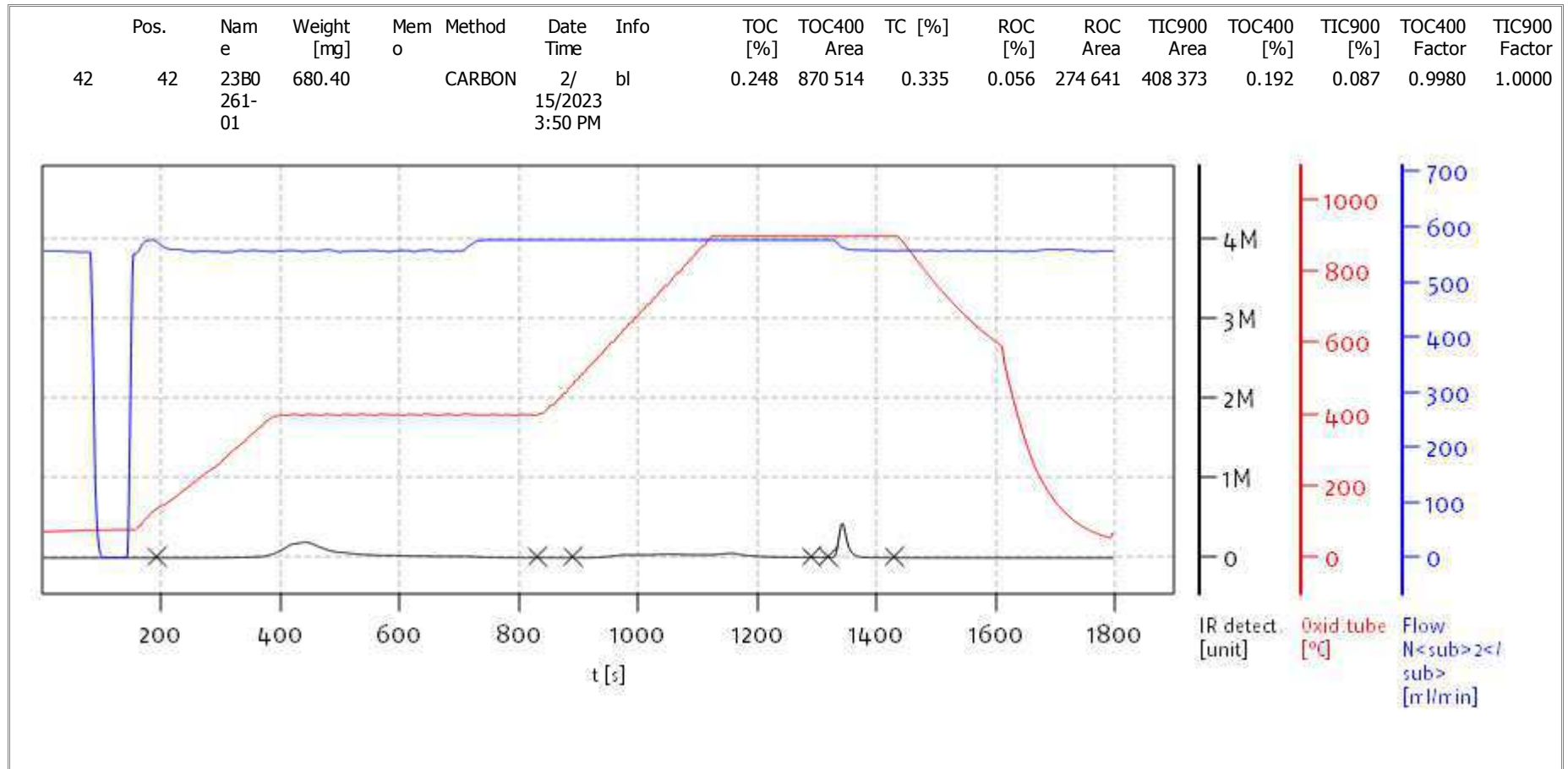
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

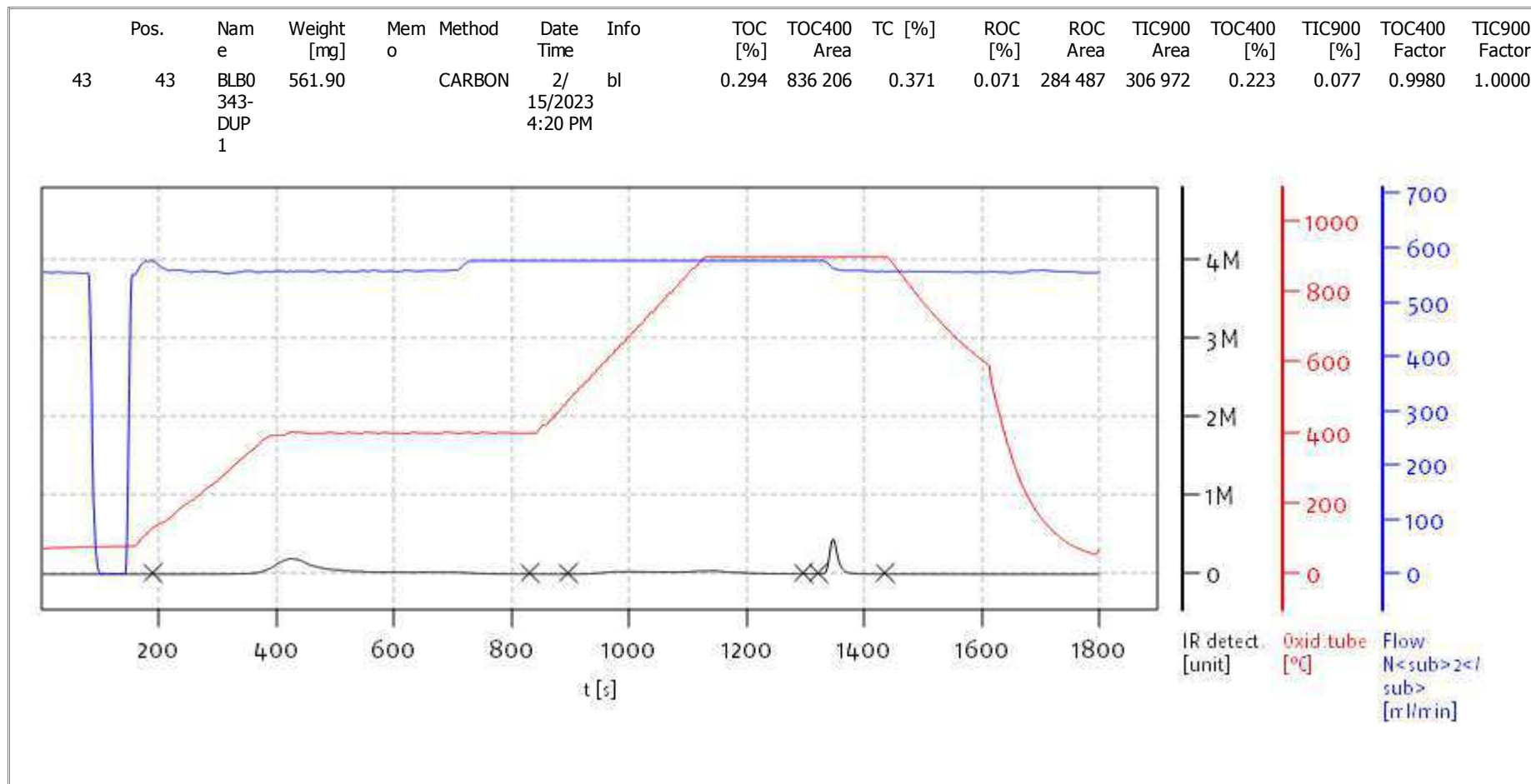
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

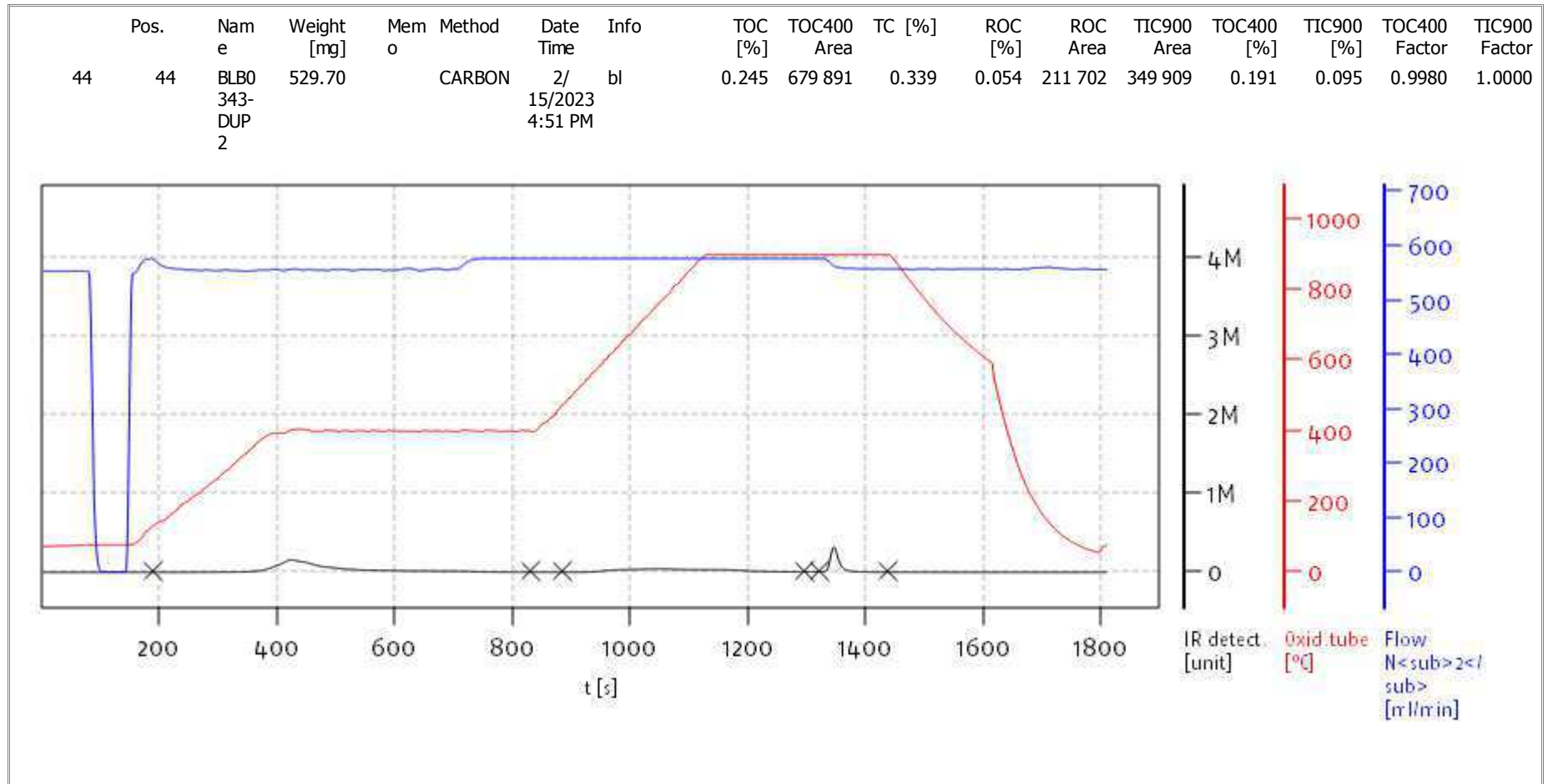
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

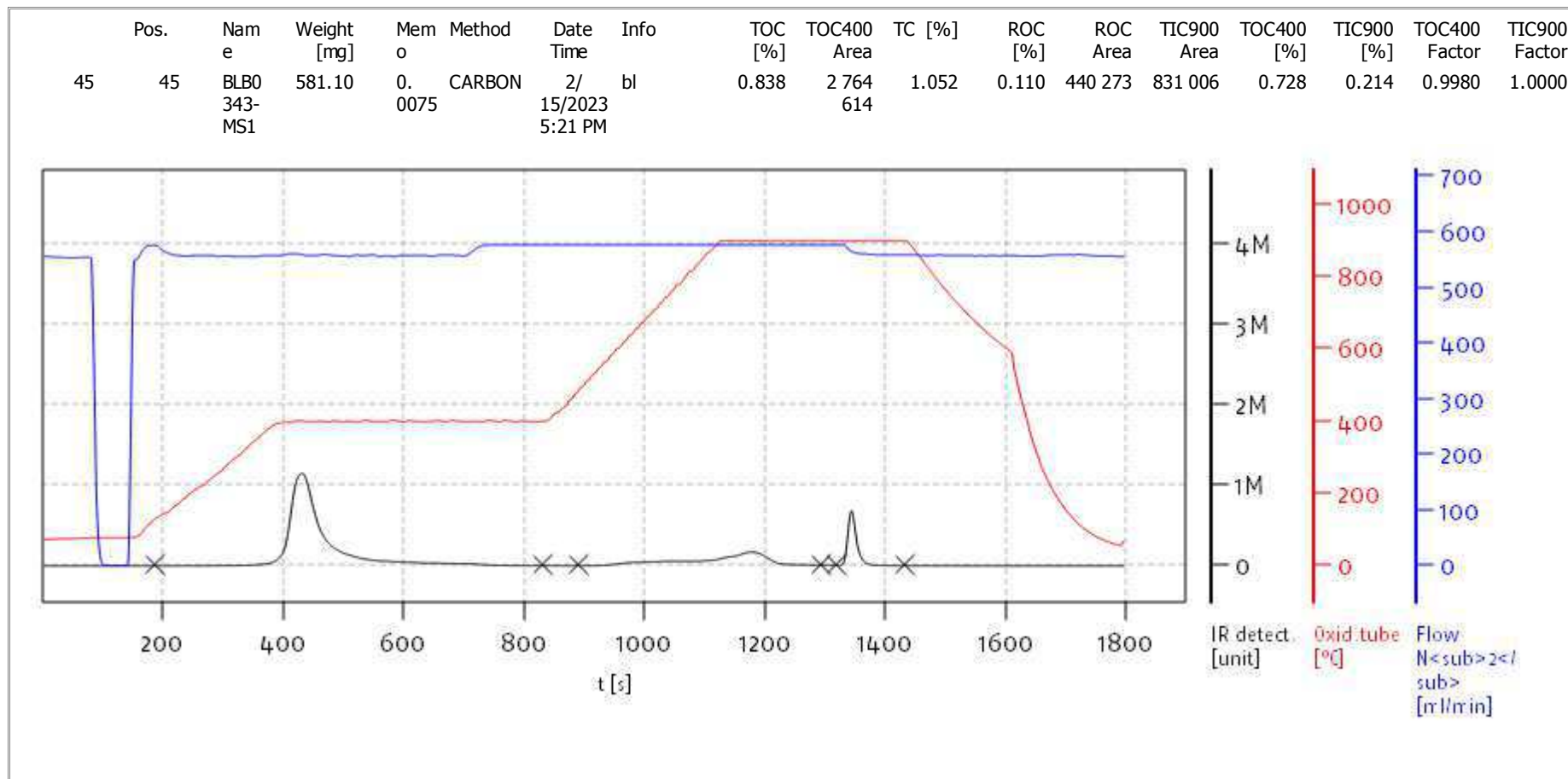
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

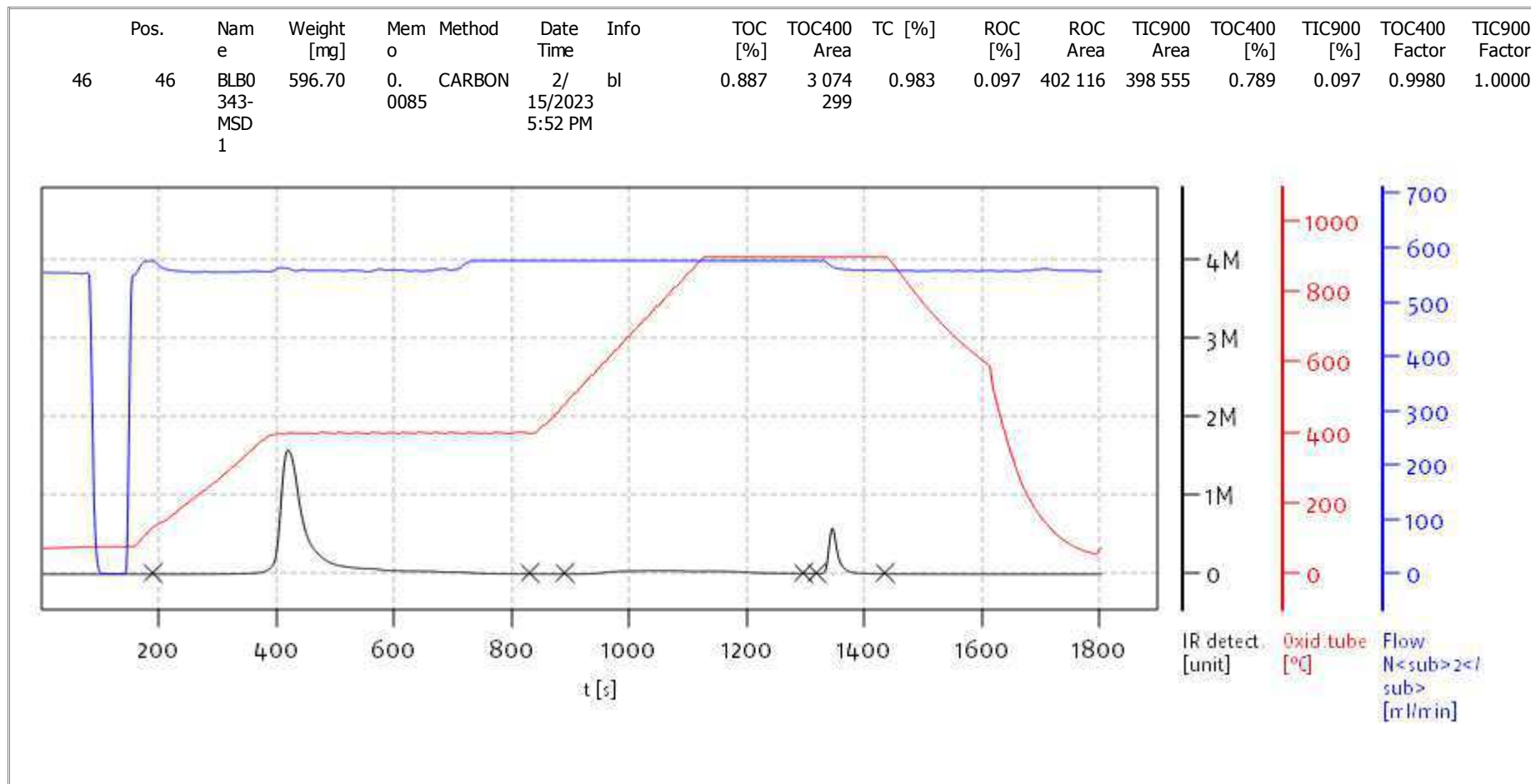
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

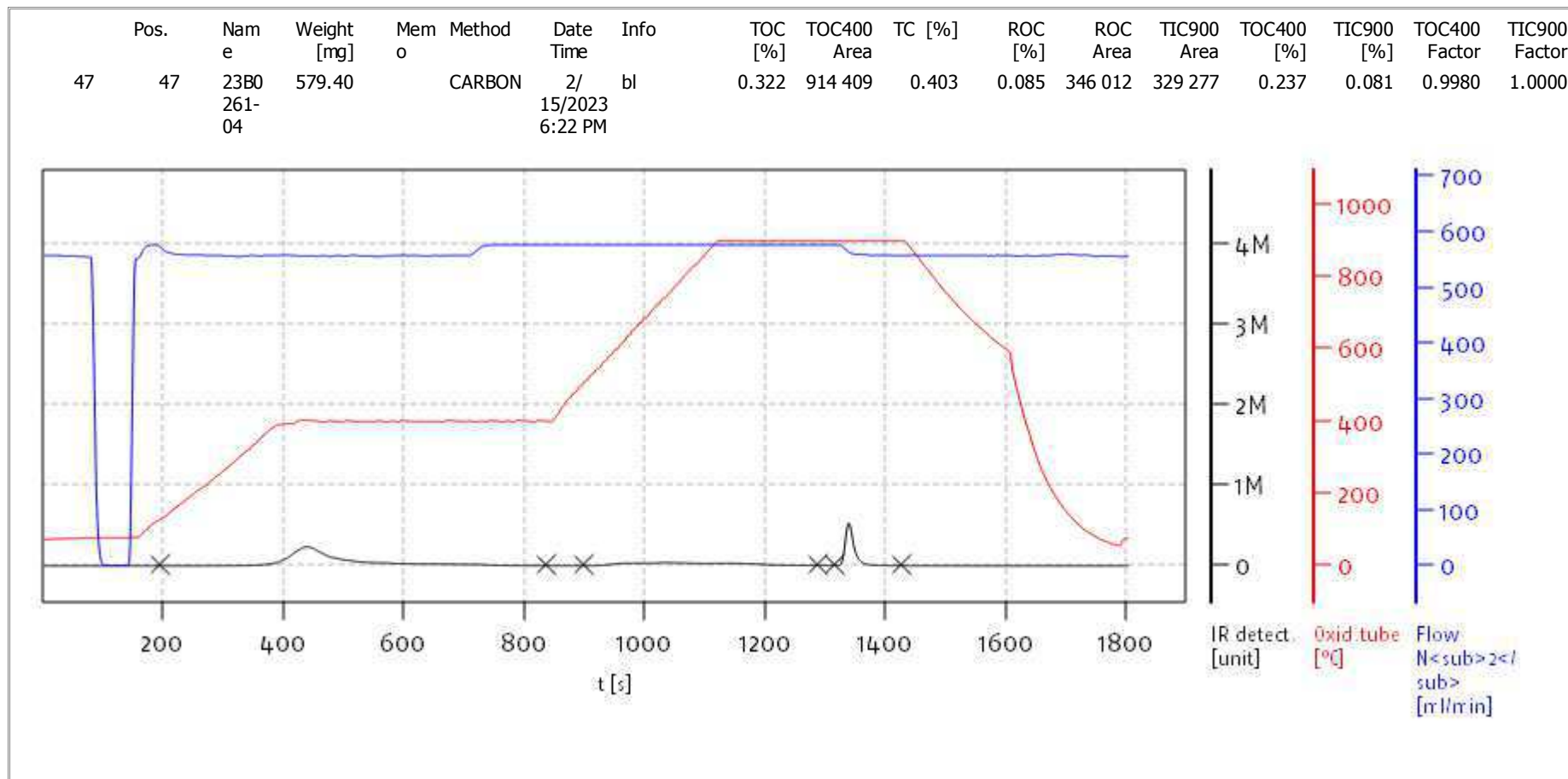
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

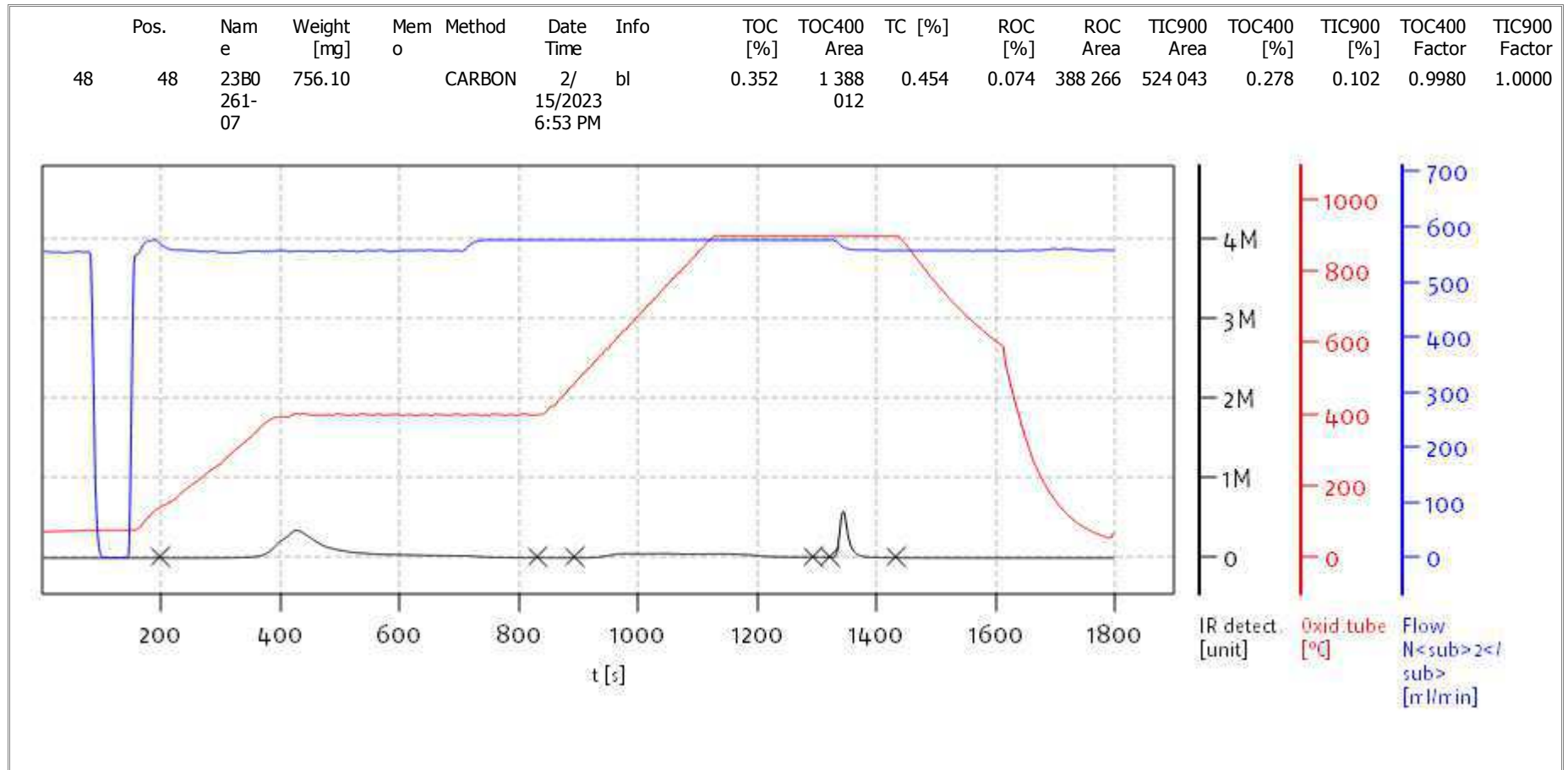
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

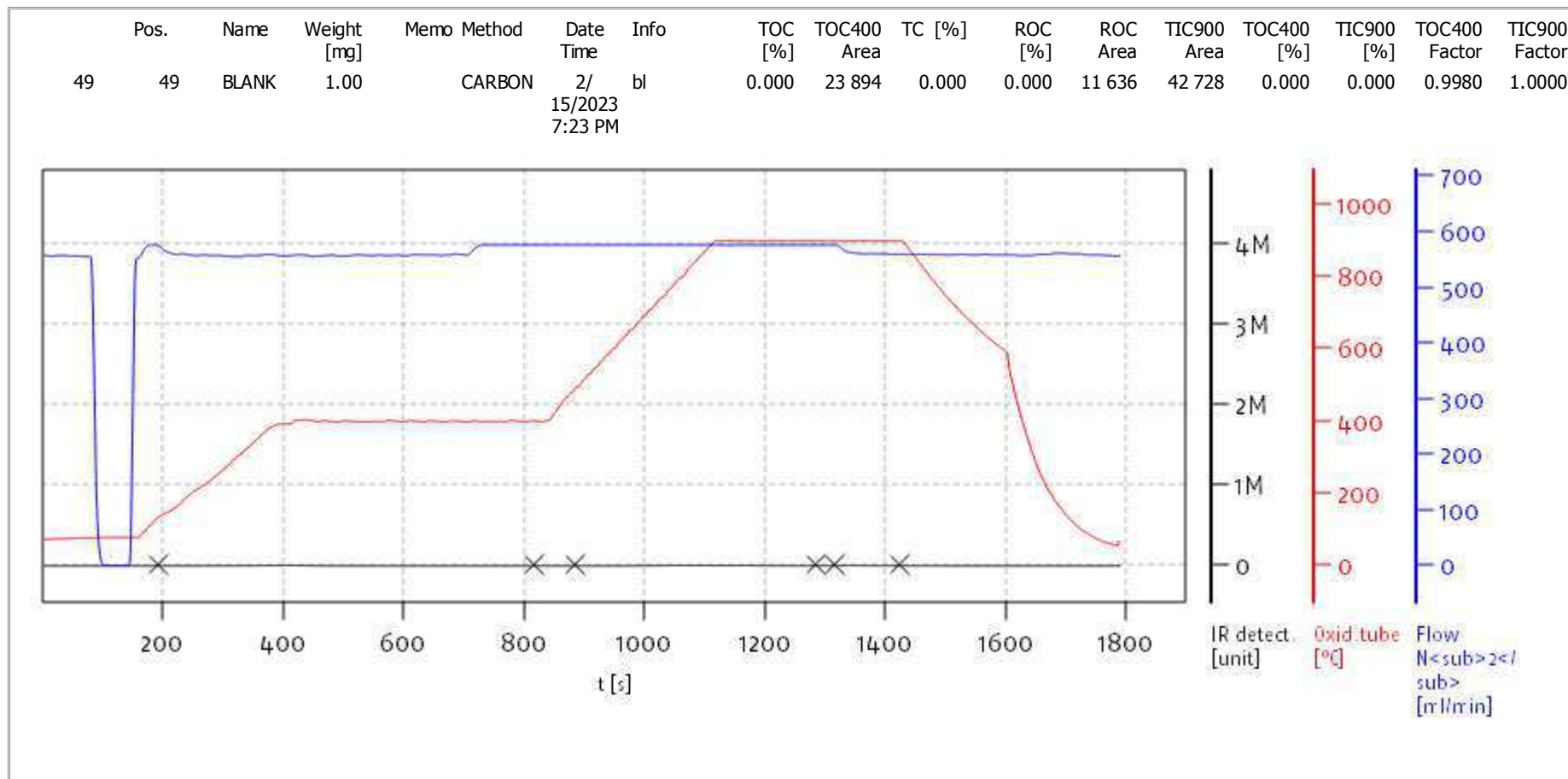
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

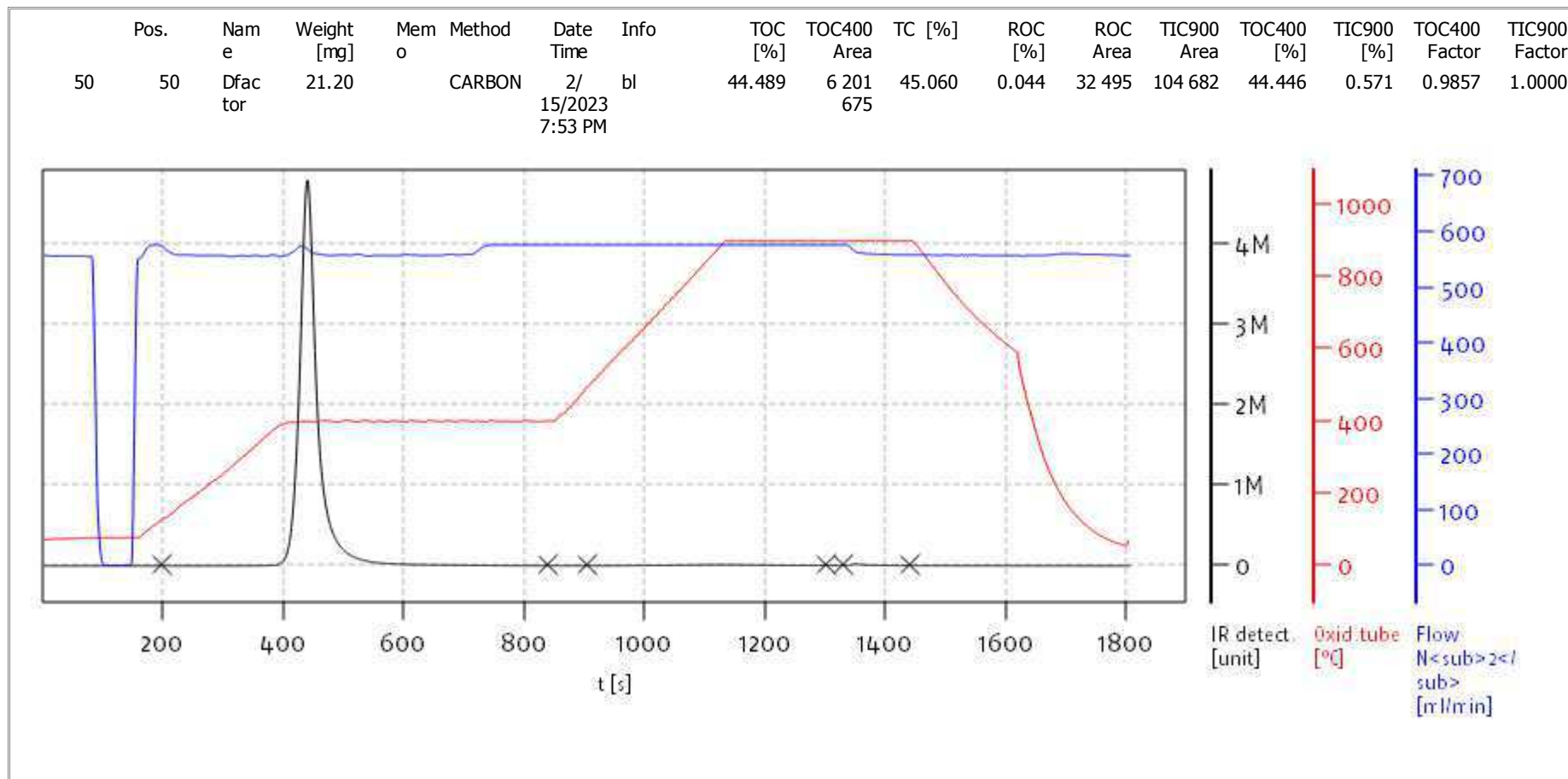
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

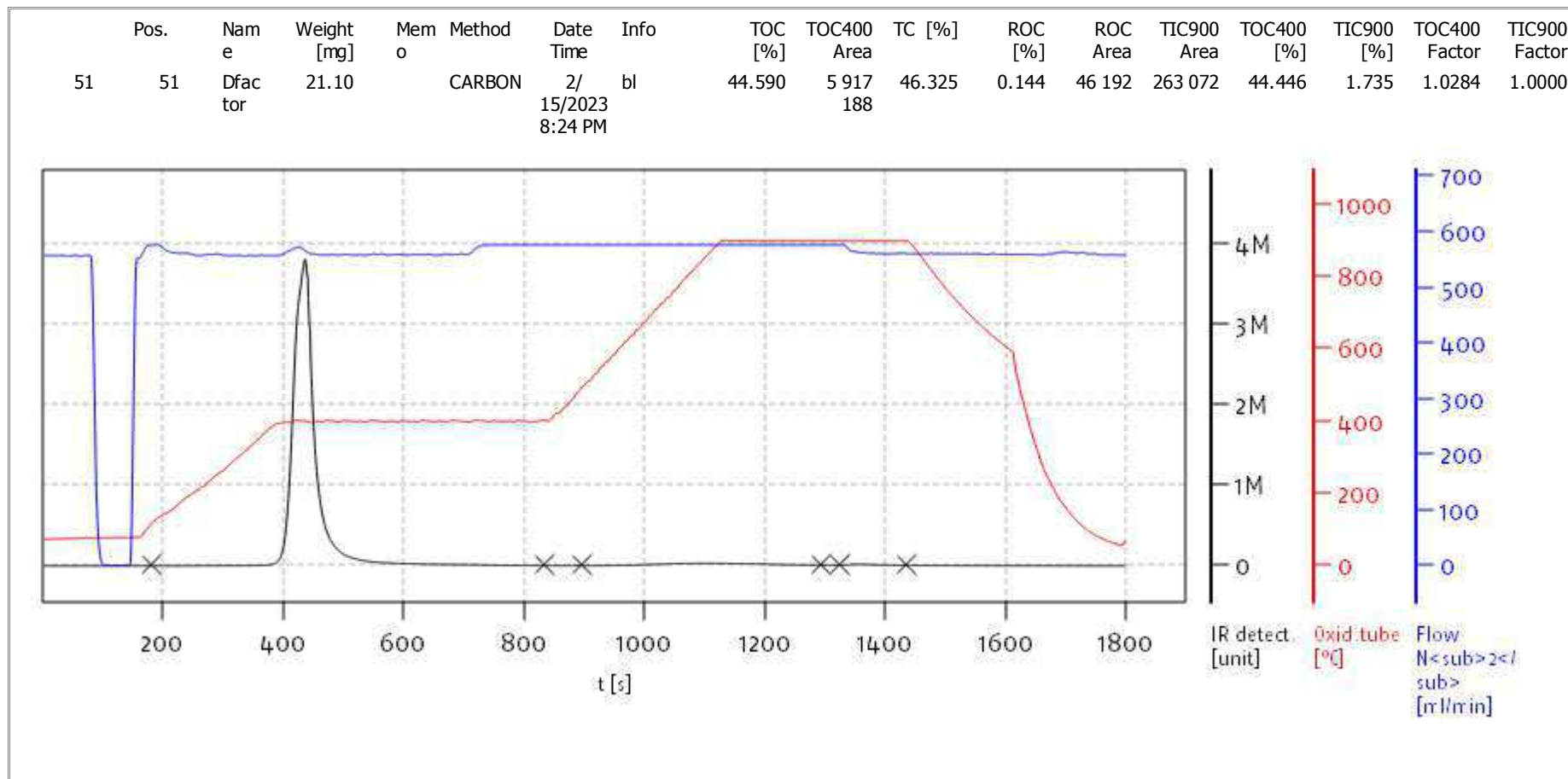
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

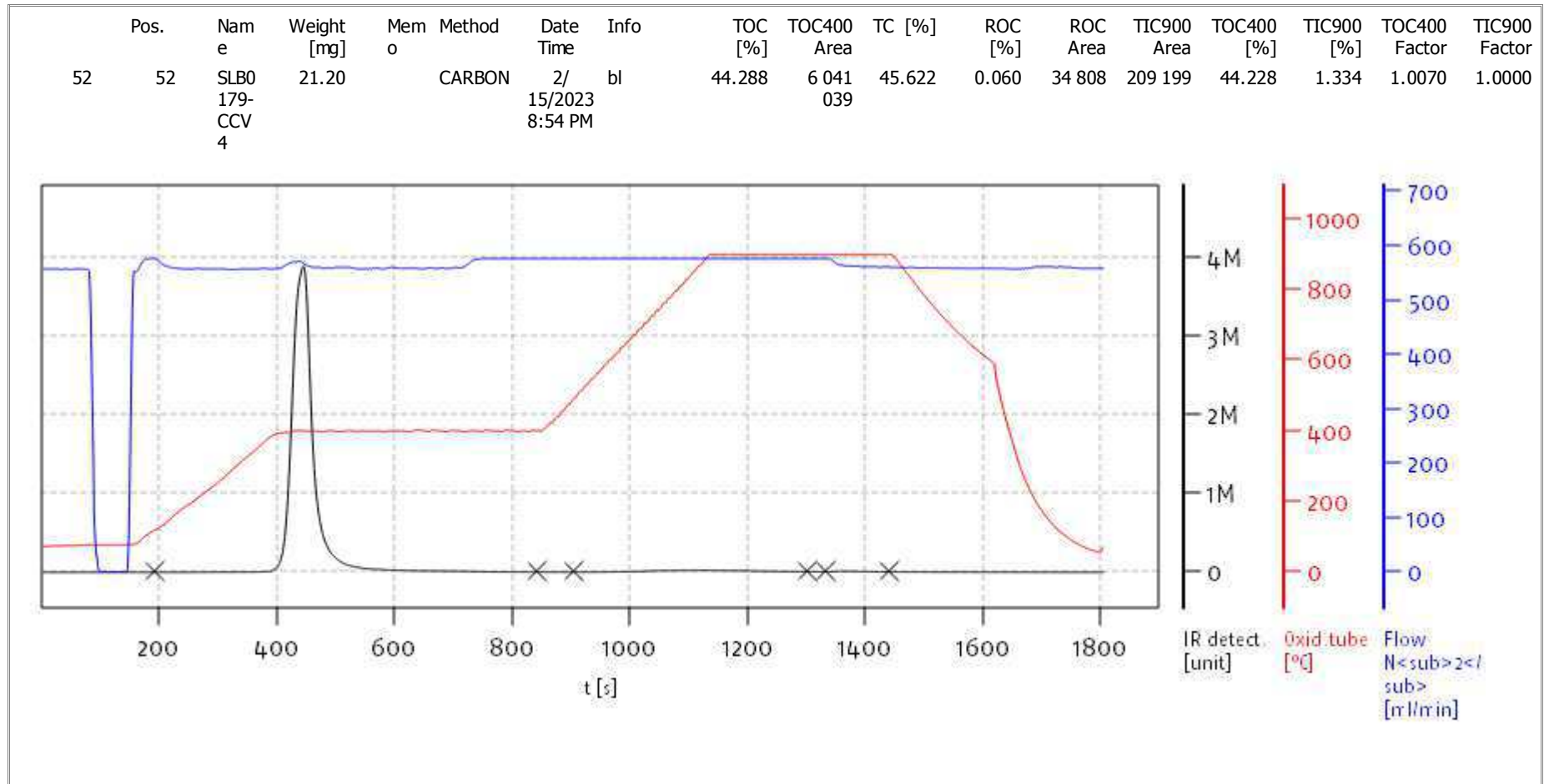
Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

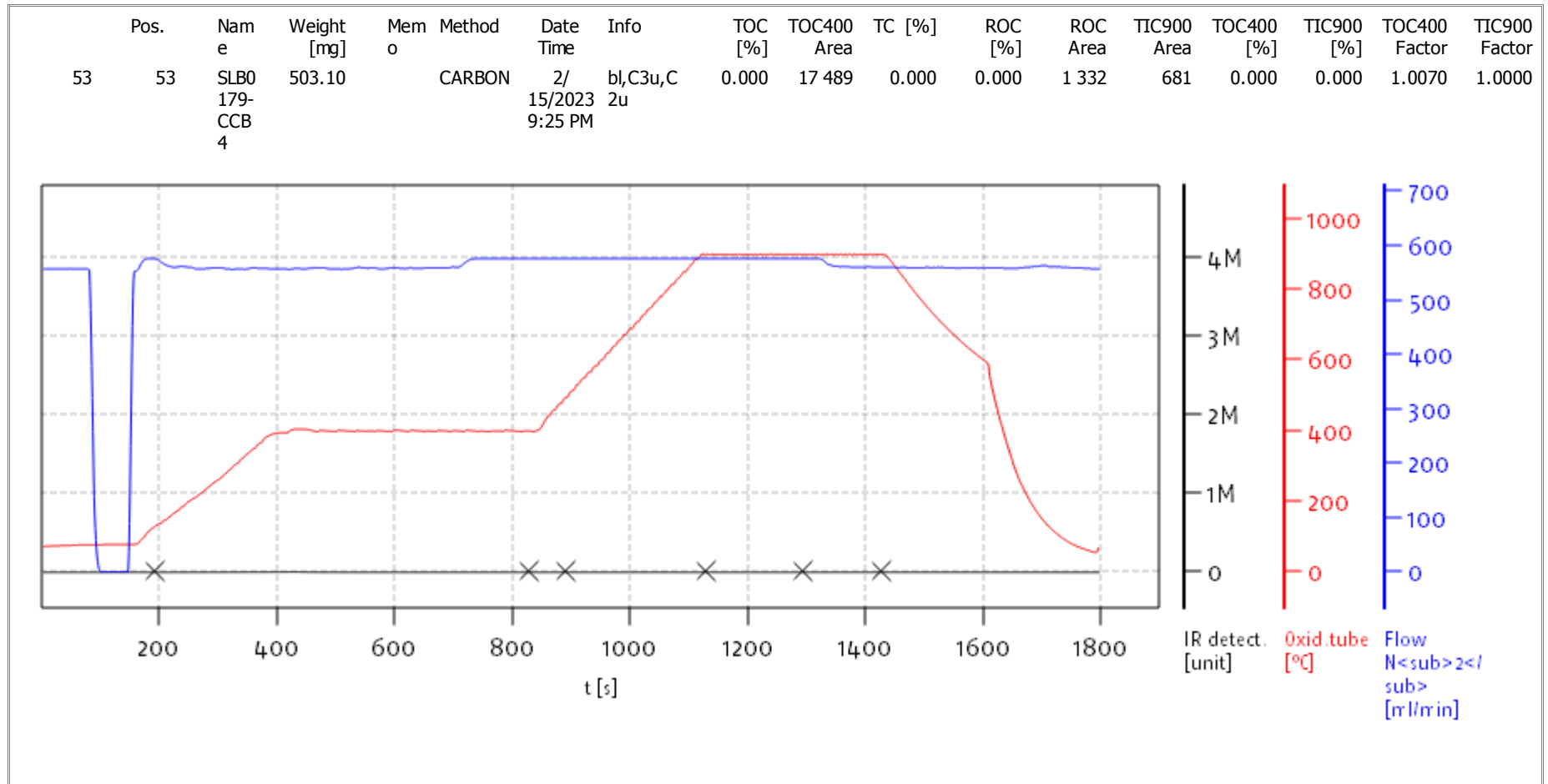
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

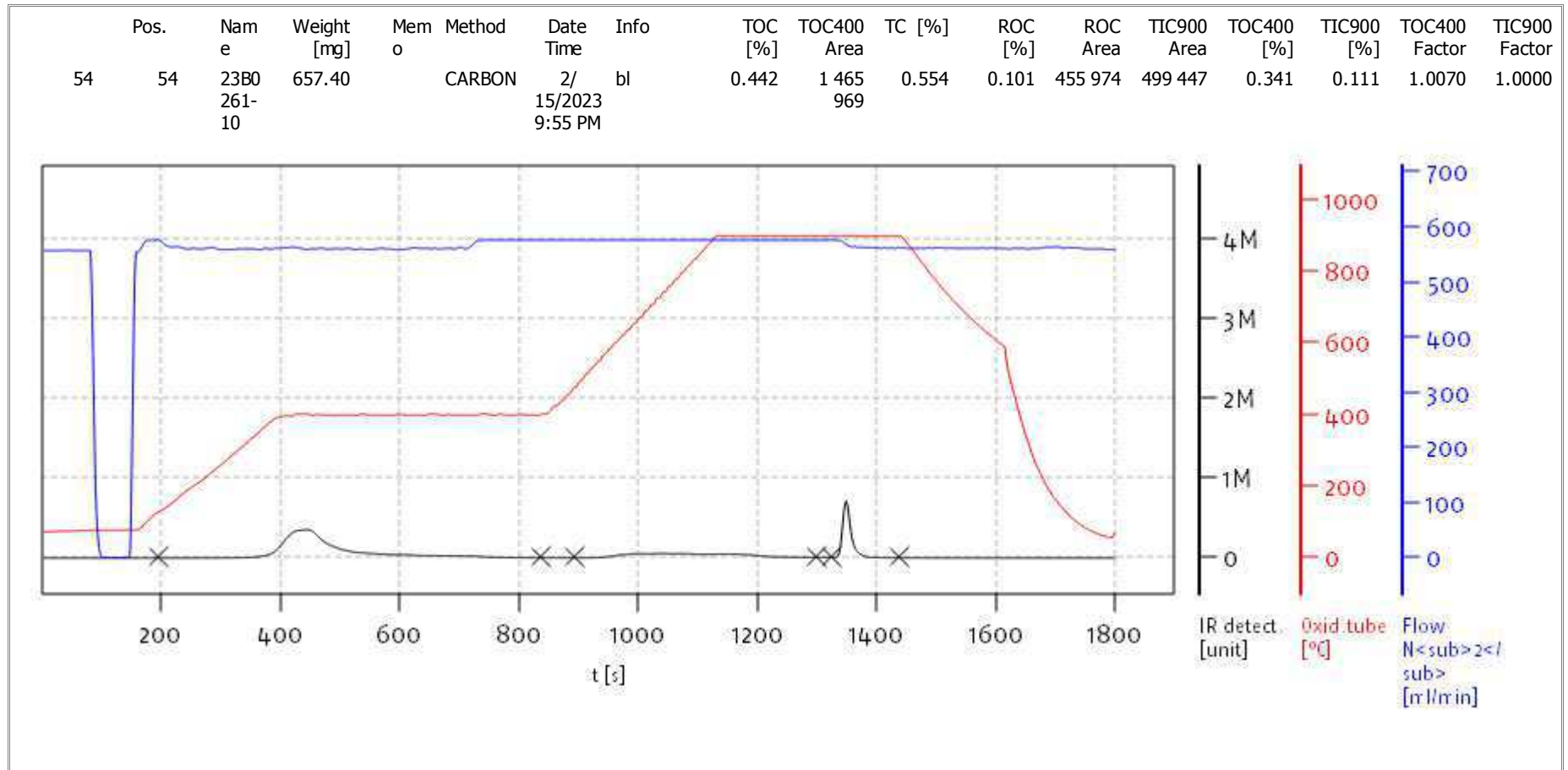
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

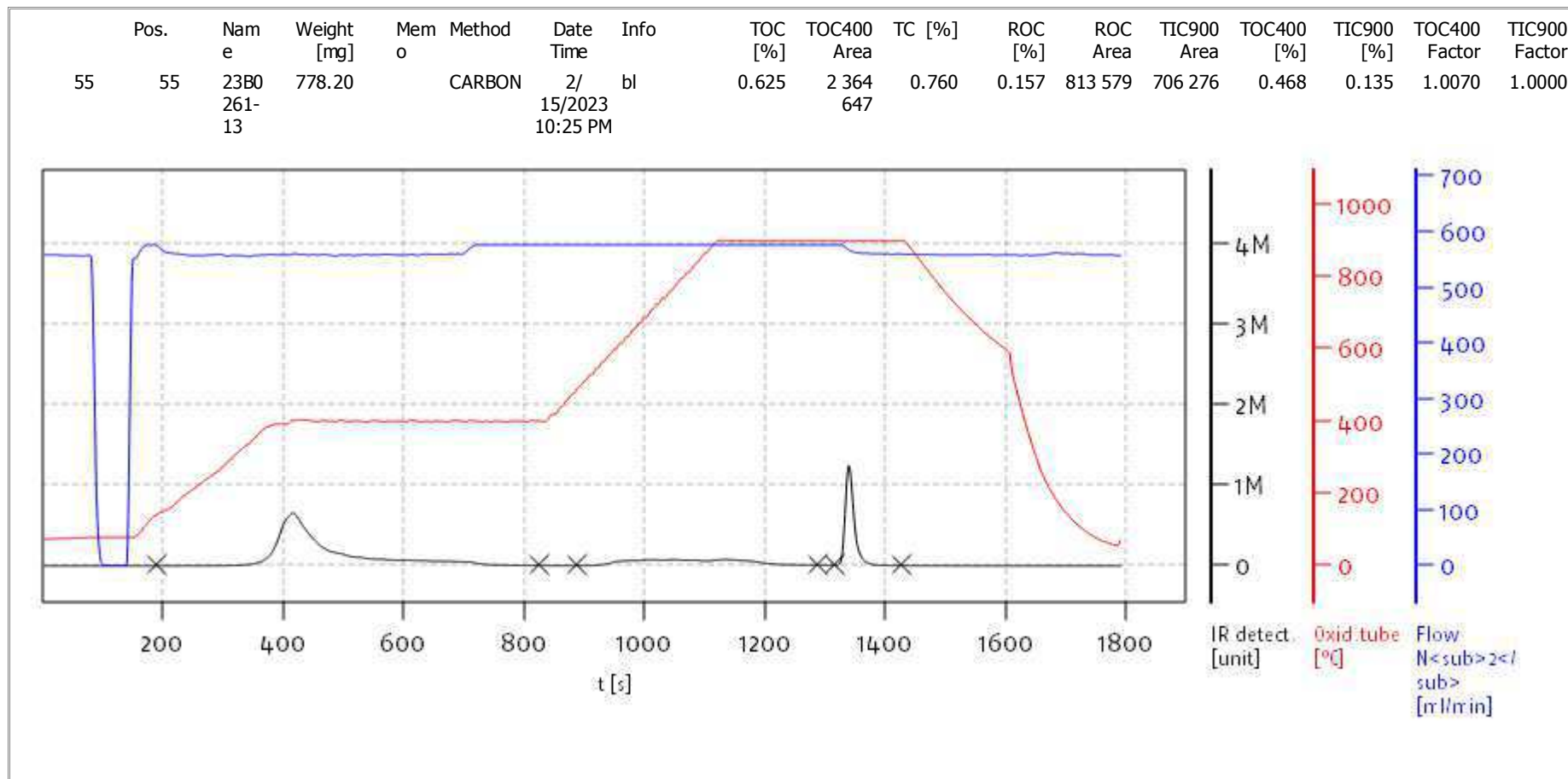
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

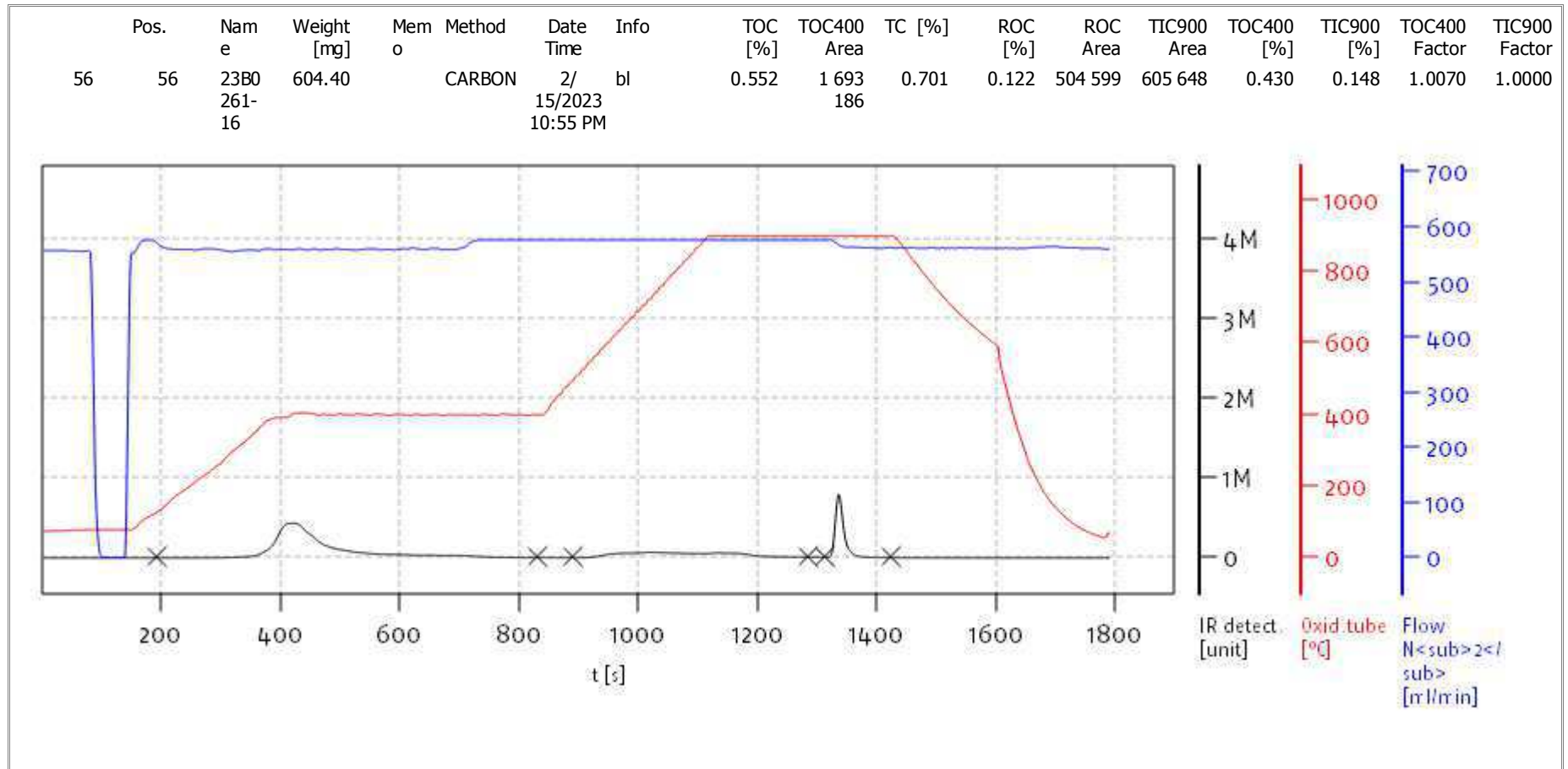
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

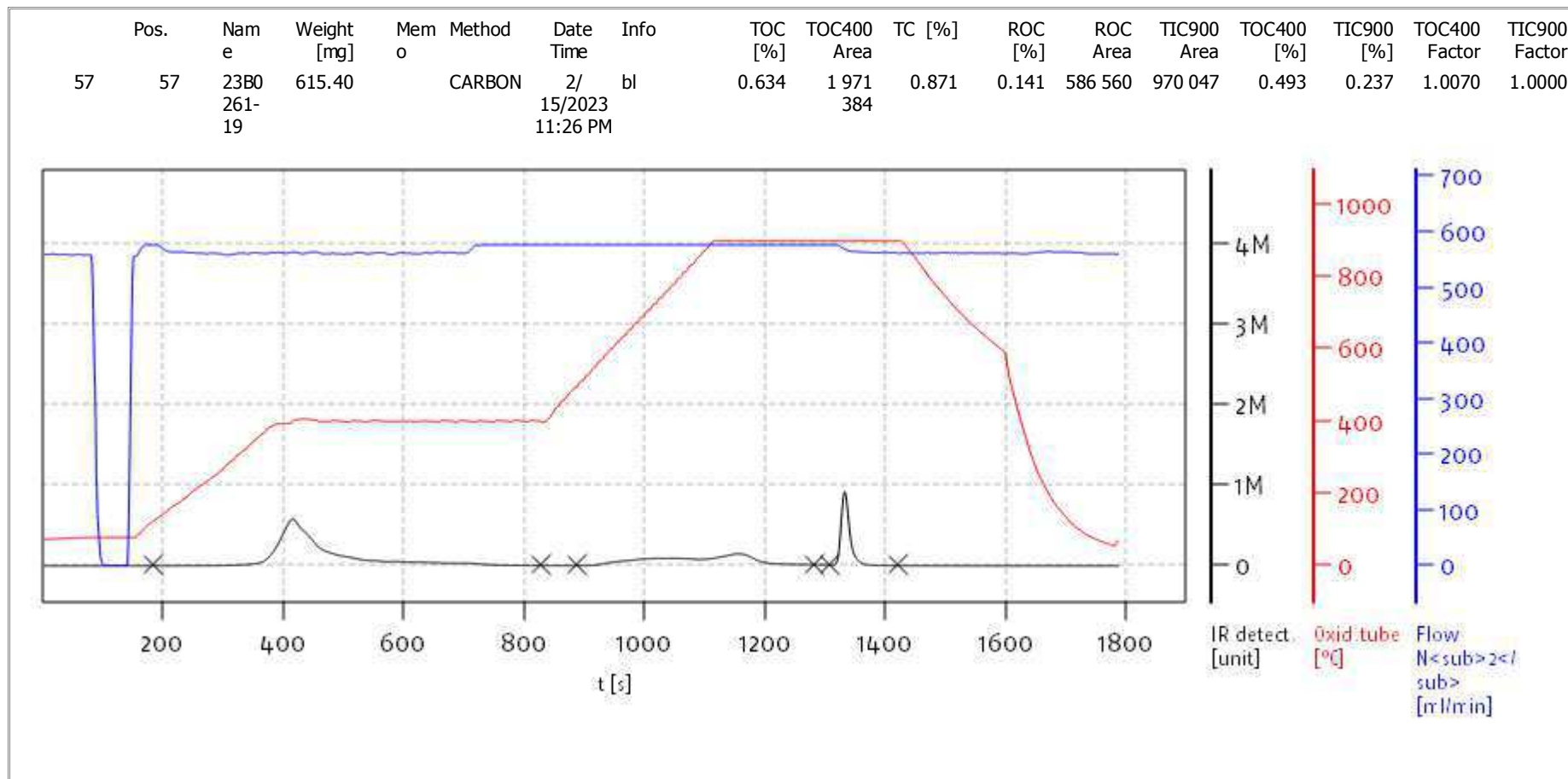
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

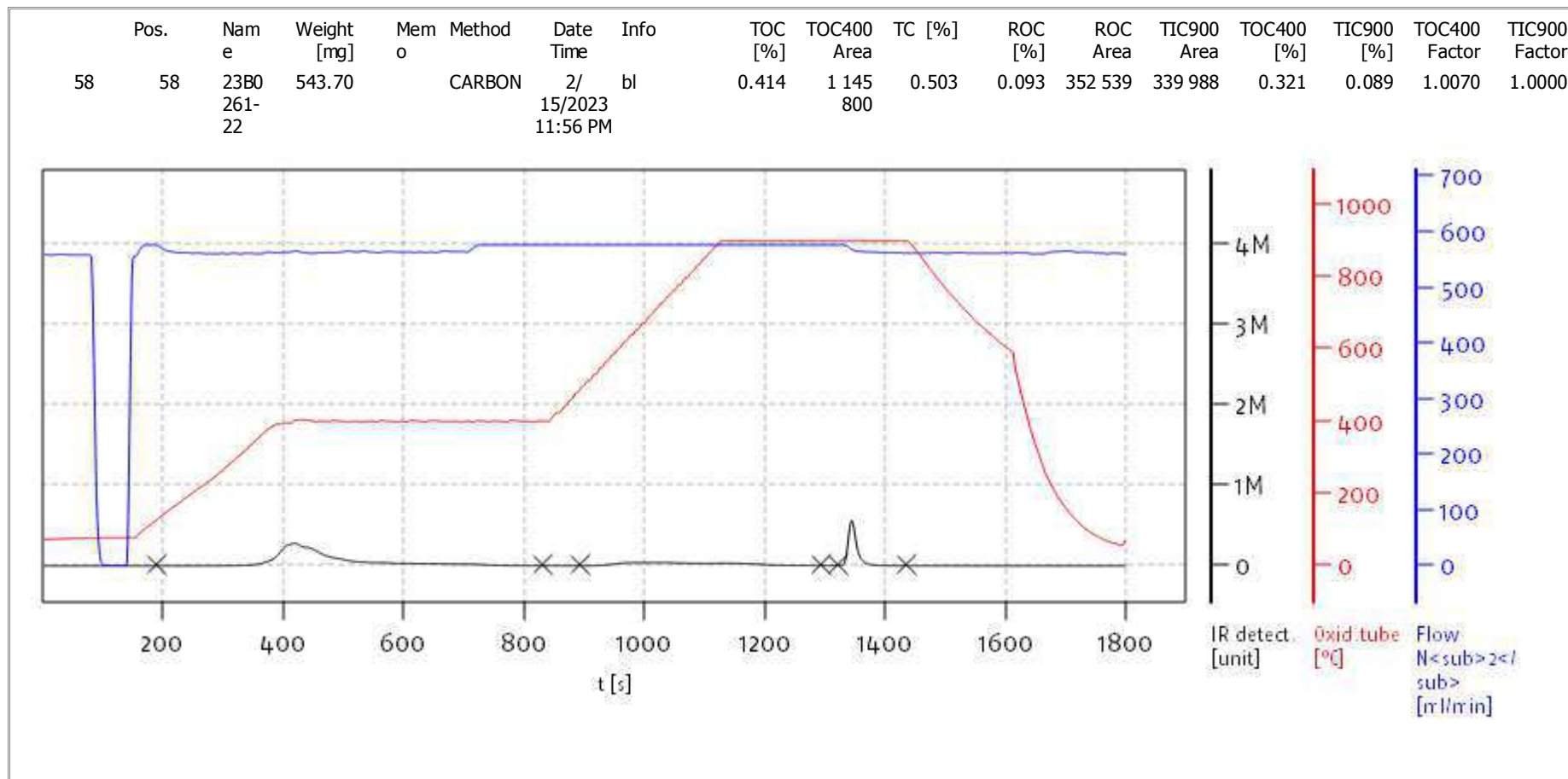
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

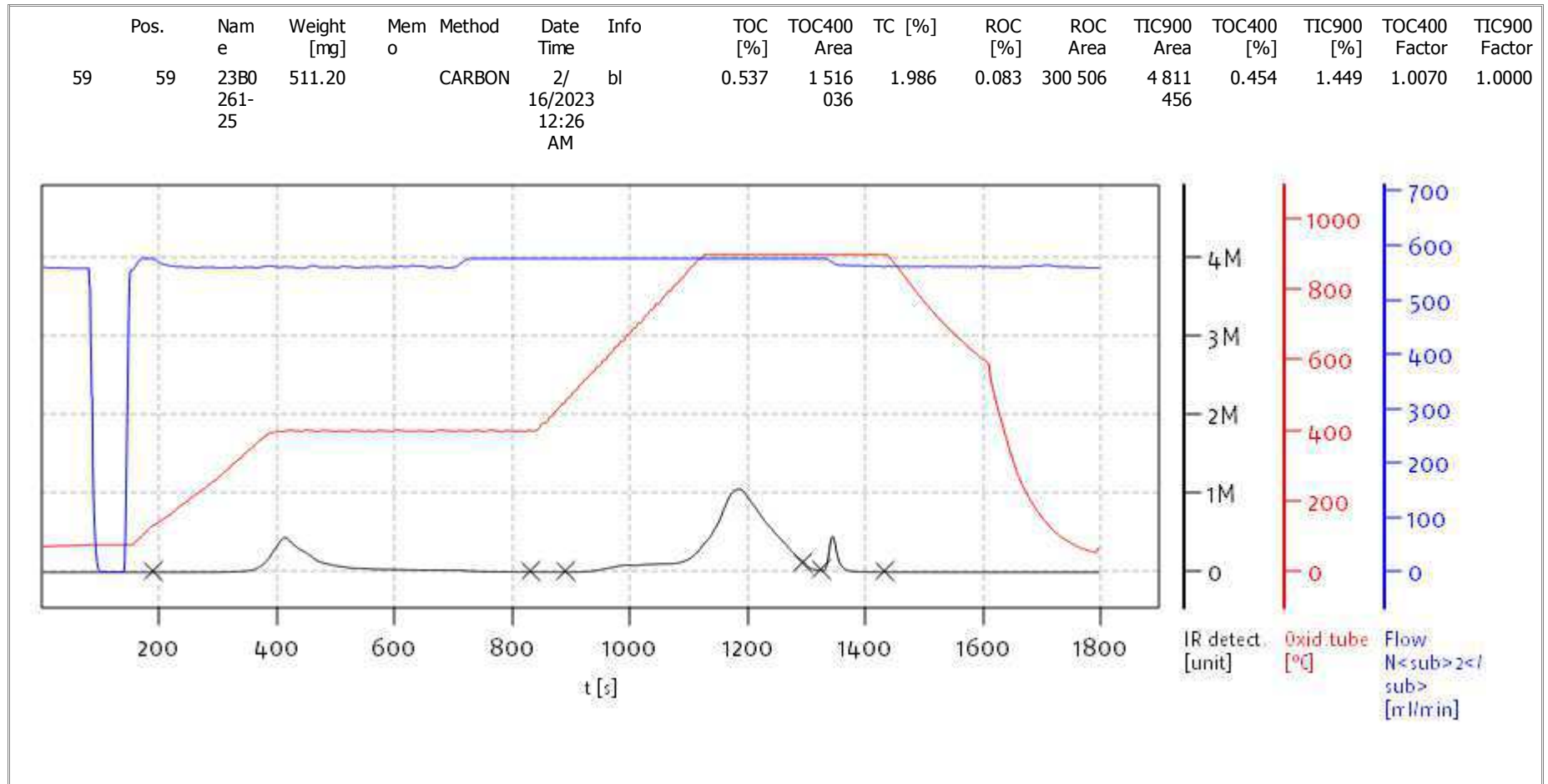
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

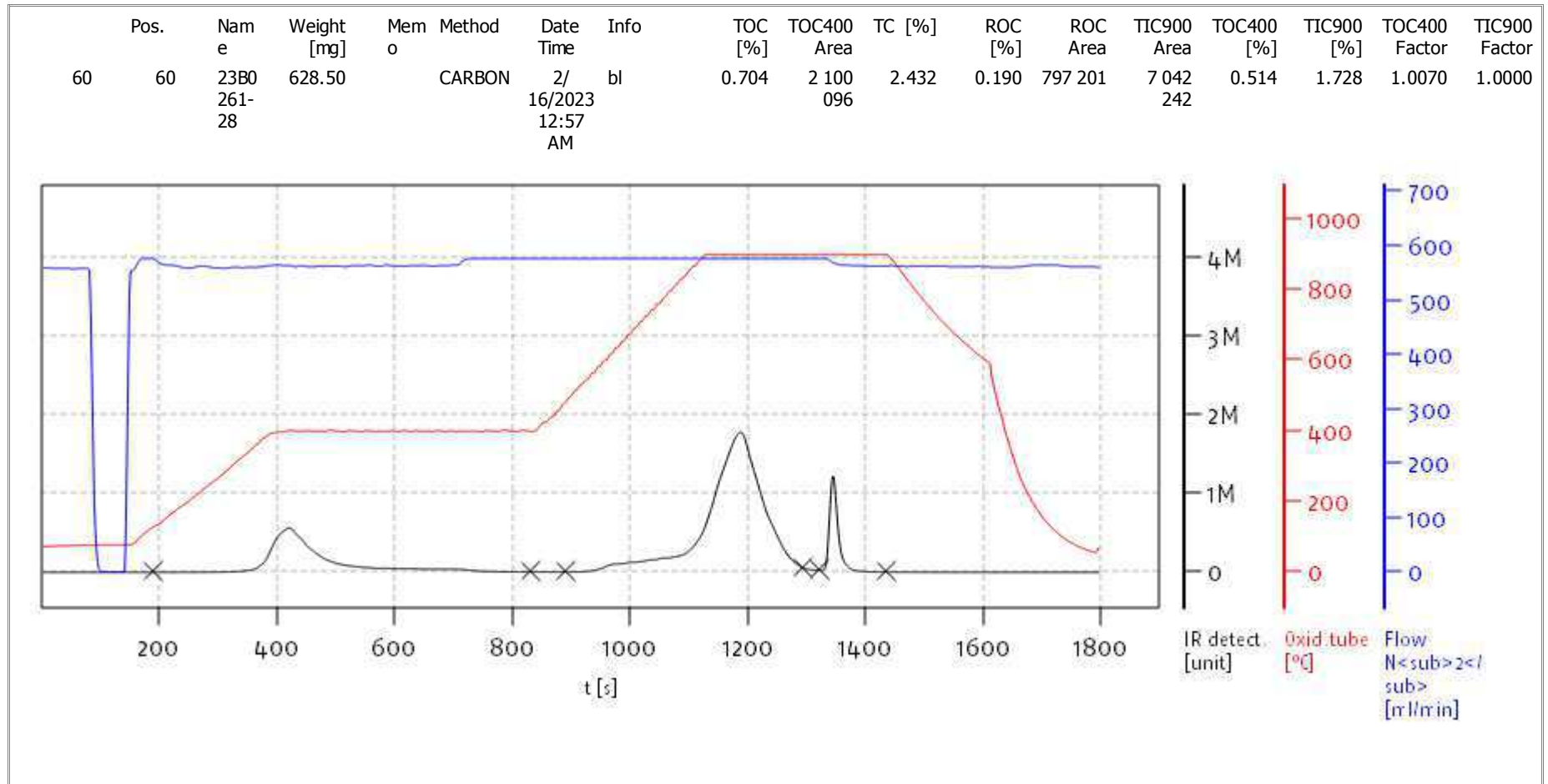
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

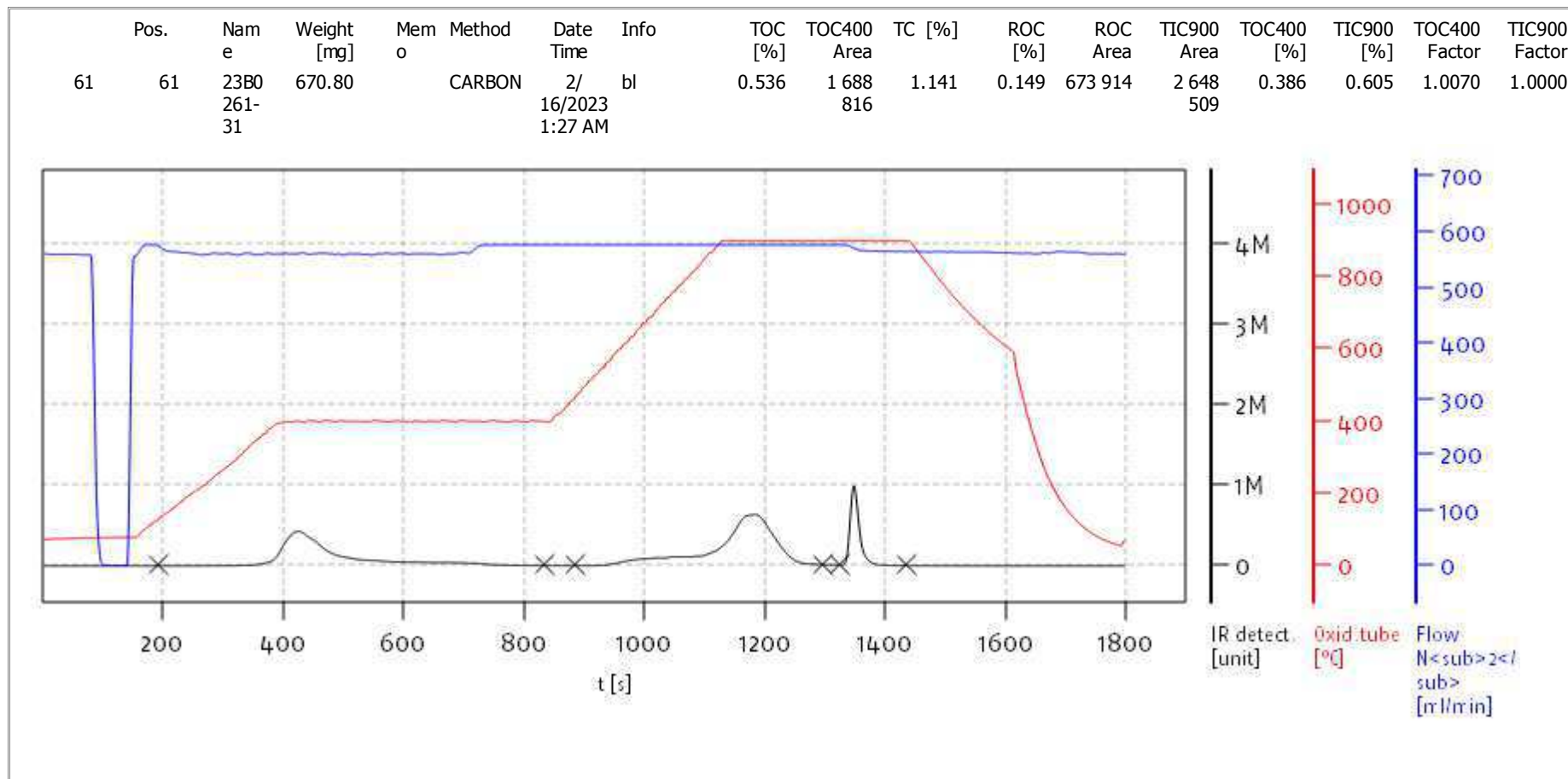
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

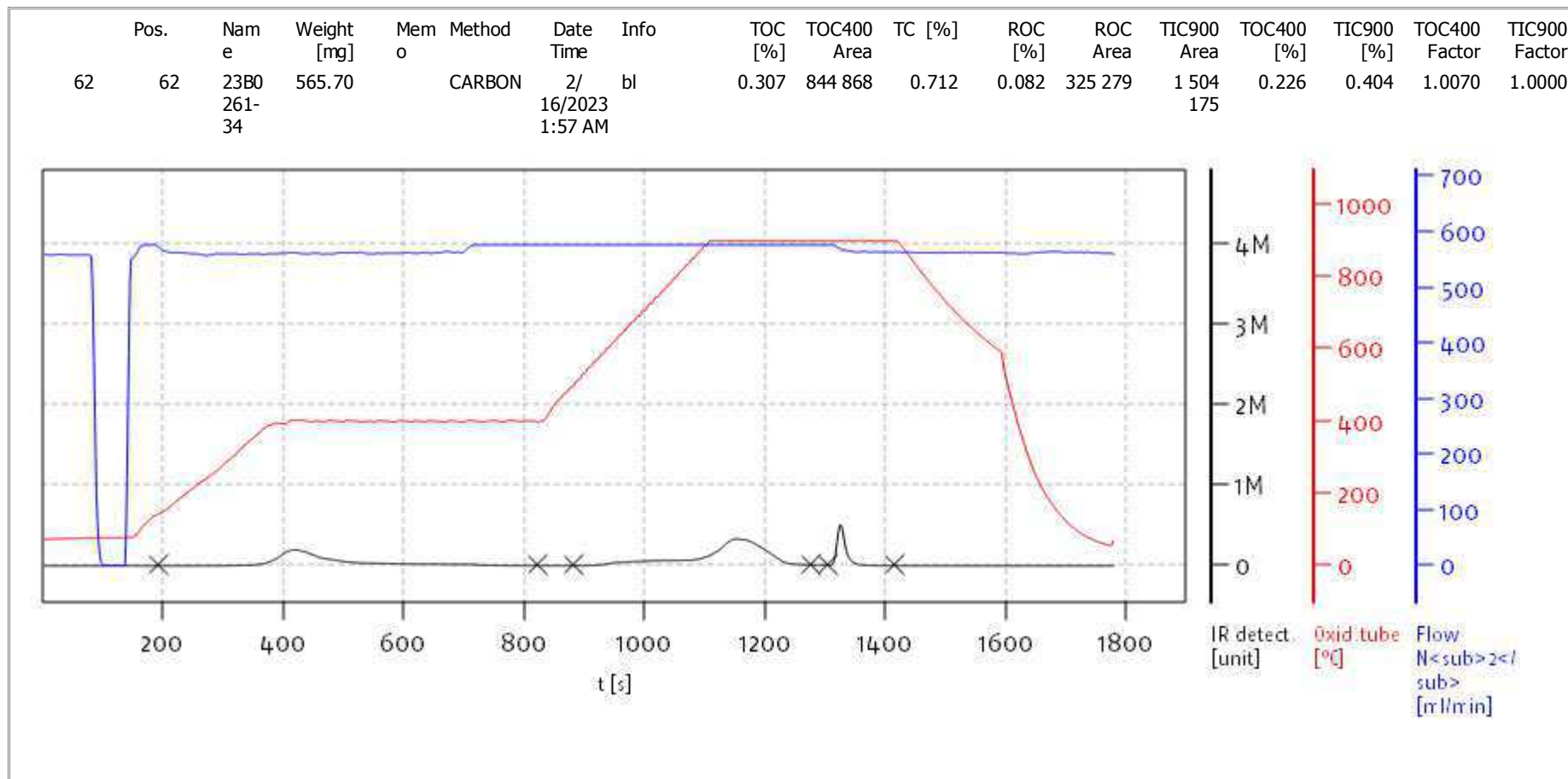
Access: soliTOC superuser

Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

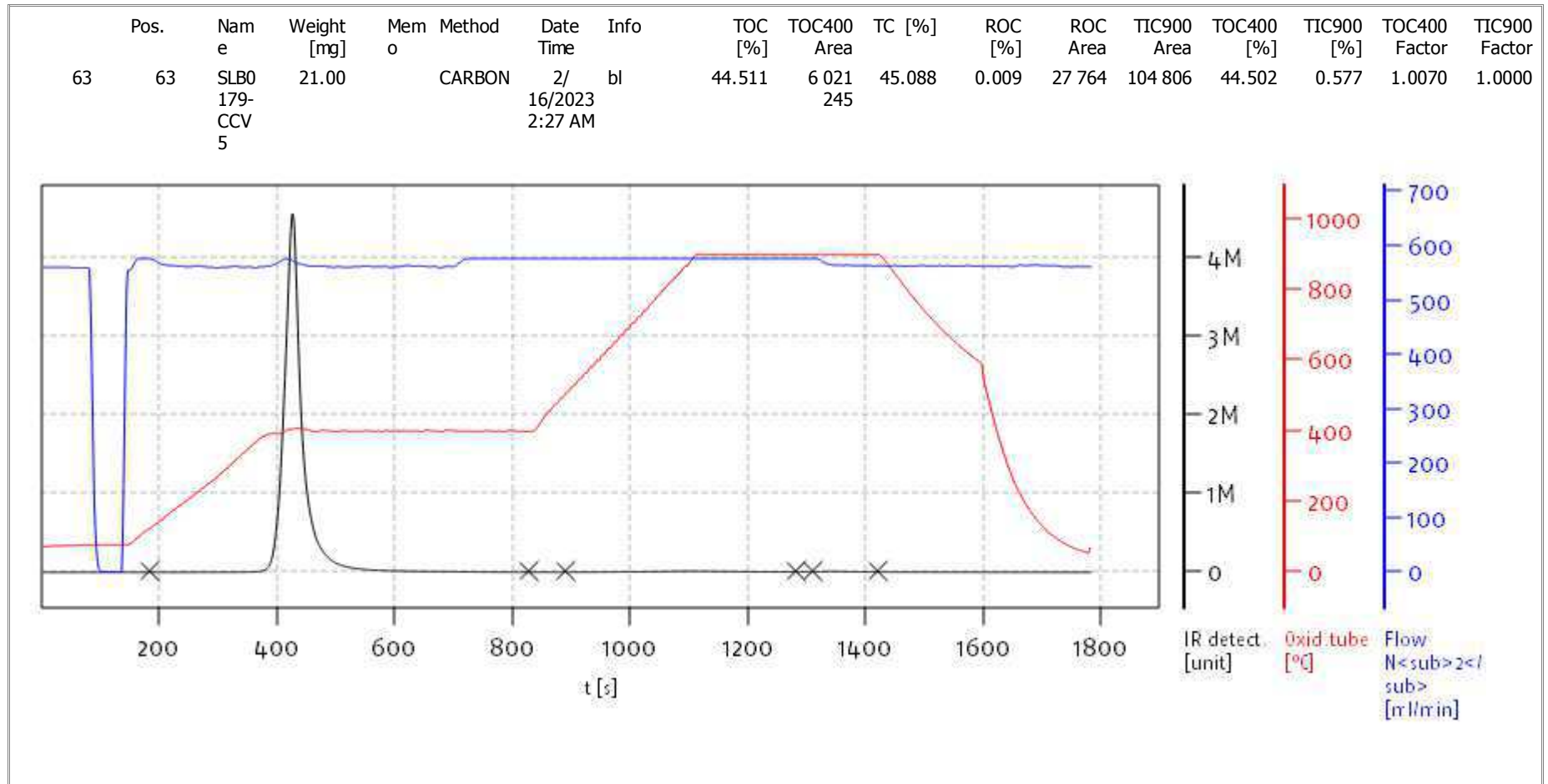
Date: Thu Feb 16 09:54:06 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

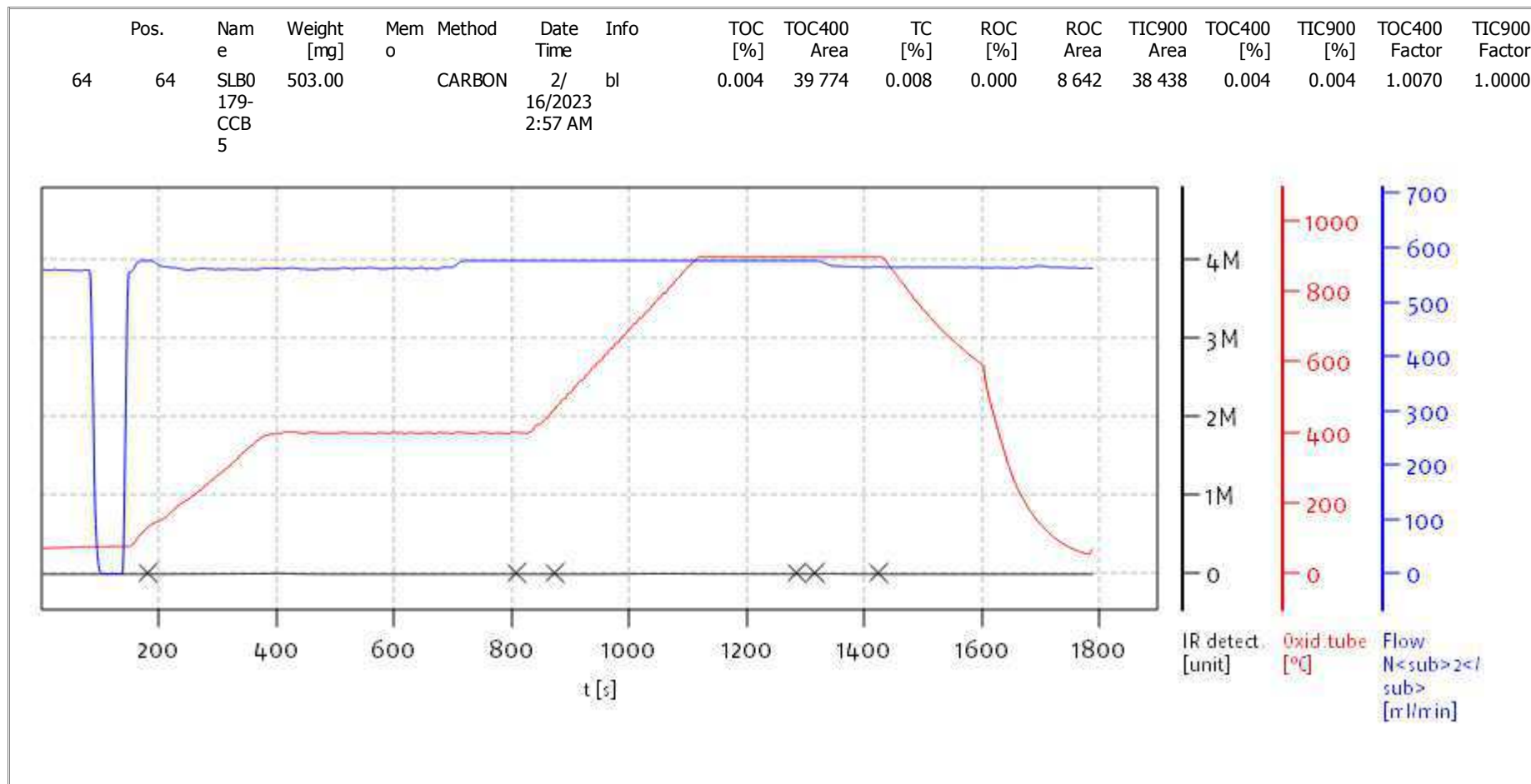
Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

Date: Thu Feb 16 09:54:06 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

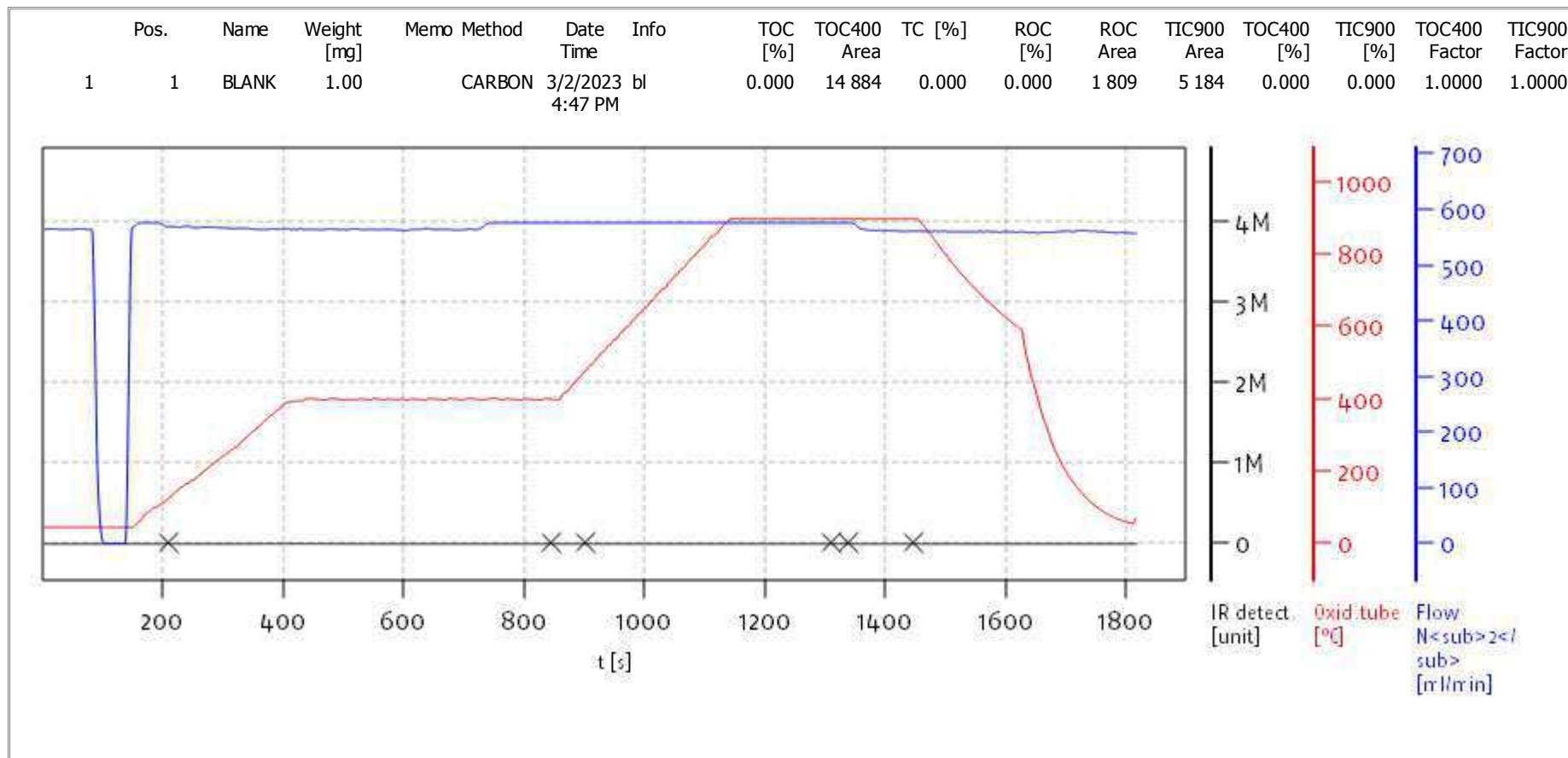
Sequence: SLC0025

Instrument: TOC Cube

Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0025-ICV1	CubeData_03062023@1641-003	NA	03/02/23 18:18
Initial Cal Blank	SLC0025-ICB1	CubeData_03062023@1641-004	NA	03/02/23 18:48
LDW23-SC1014	23B0229-07RE1	CubeData_03062023@1641-005	Solid	03/02/23 19:19
Calibration Check	SLC0025-CCV1	CubeData_03062023@1641-015	NA	03/03/23 00:21
Calibration Blank	SLC0025-CCB1	CubeData_03062023@1641-016	NA	03/03/23 00:52
Calibration Check	SLC0025-CCV2	CubeData_03062023@1641-027	NA	03/03/23 06:25
Calibration Blank	SLC0025-CCB2	CubeData_03062023@1641-028	NA	03/03/23 06:56
Calibration Check	SLC0025-CCV3	CubeData_03062023@1641-031	NA	03/03/23 08:27
Calibration Blank	SLC0025-CCB3	CubeData_03062023@1641-032	NA	03/03/23 08:57

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

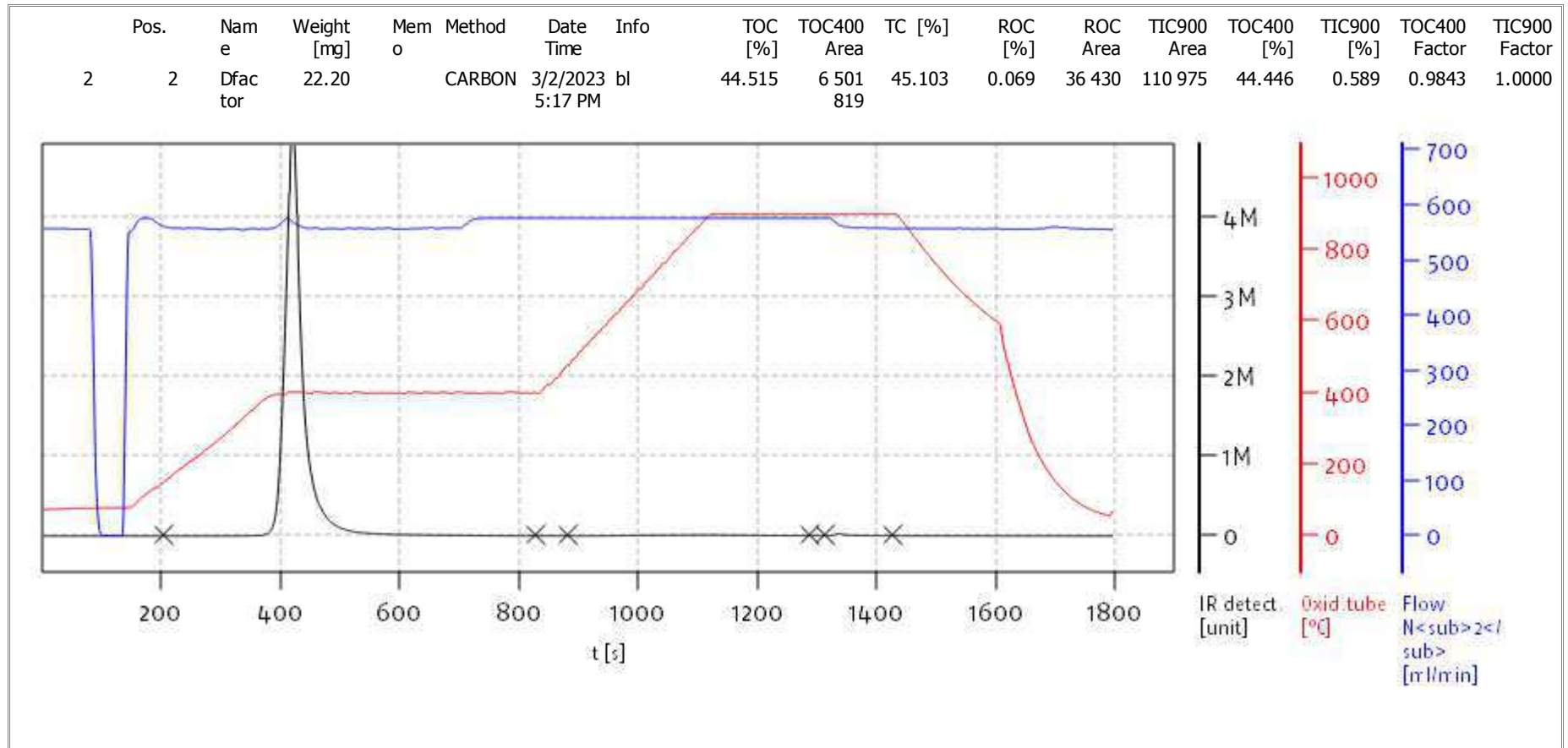
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

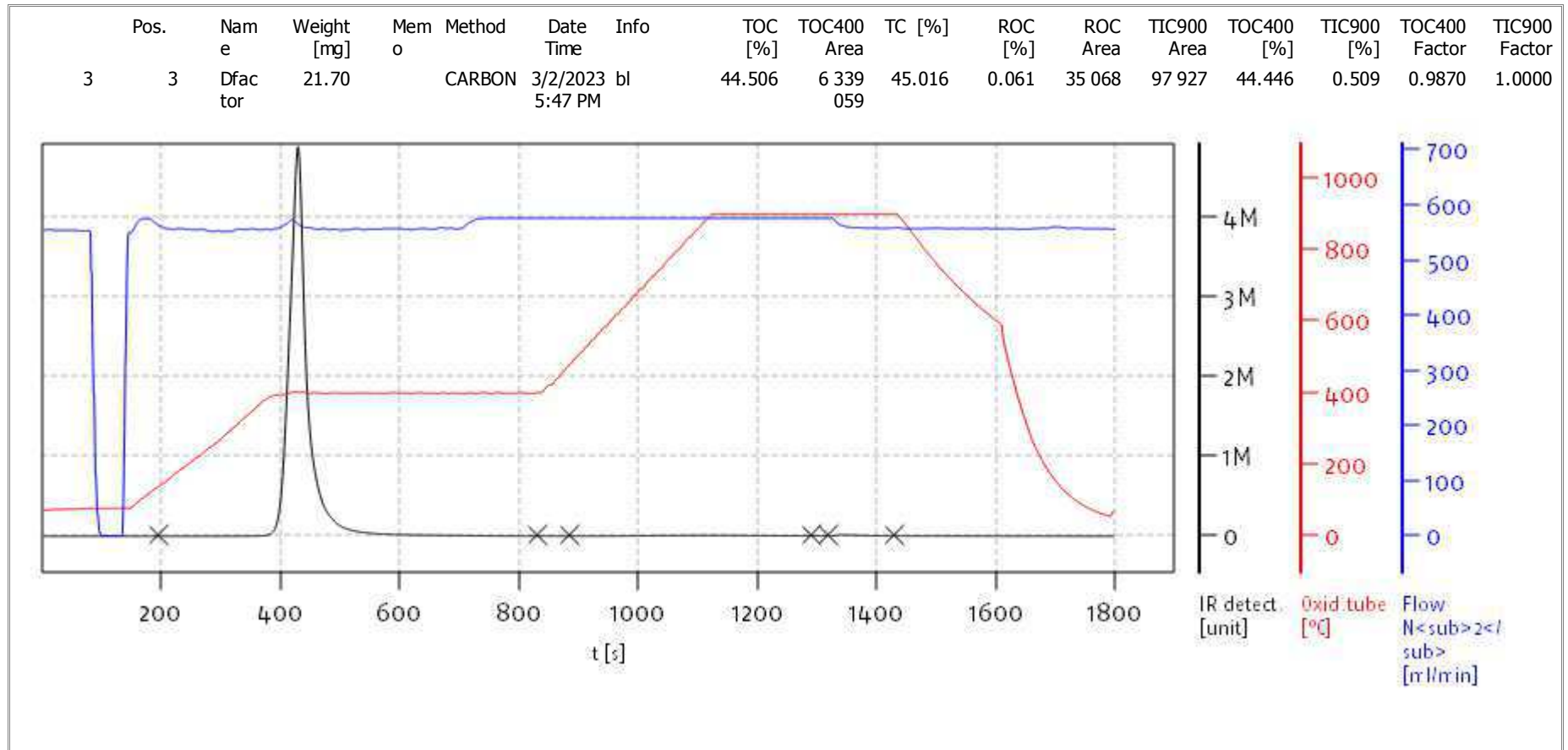
Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

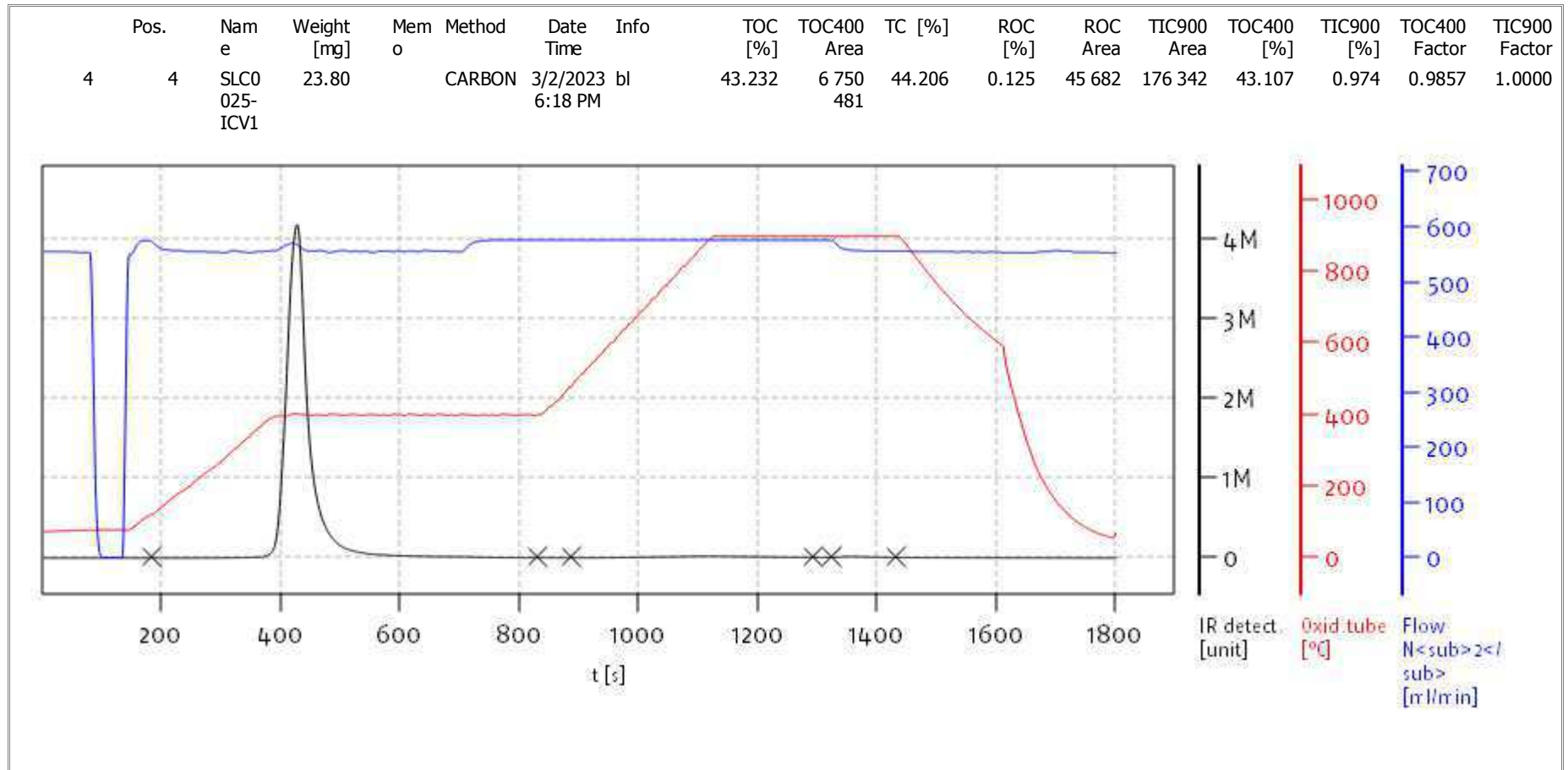
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

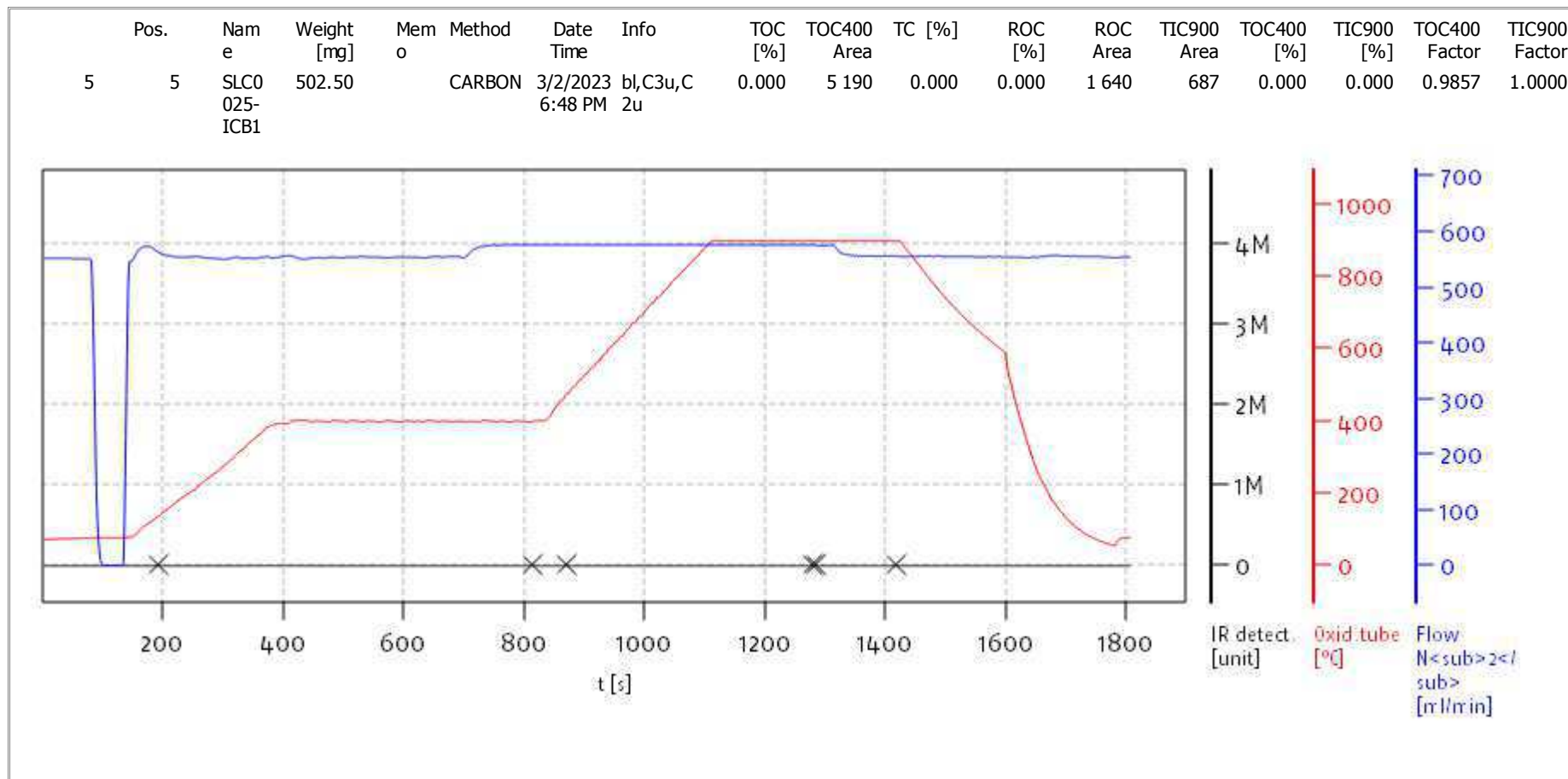
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

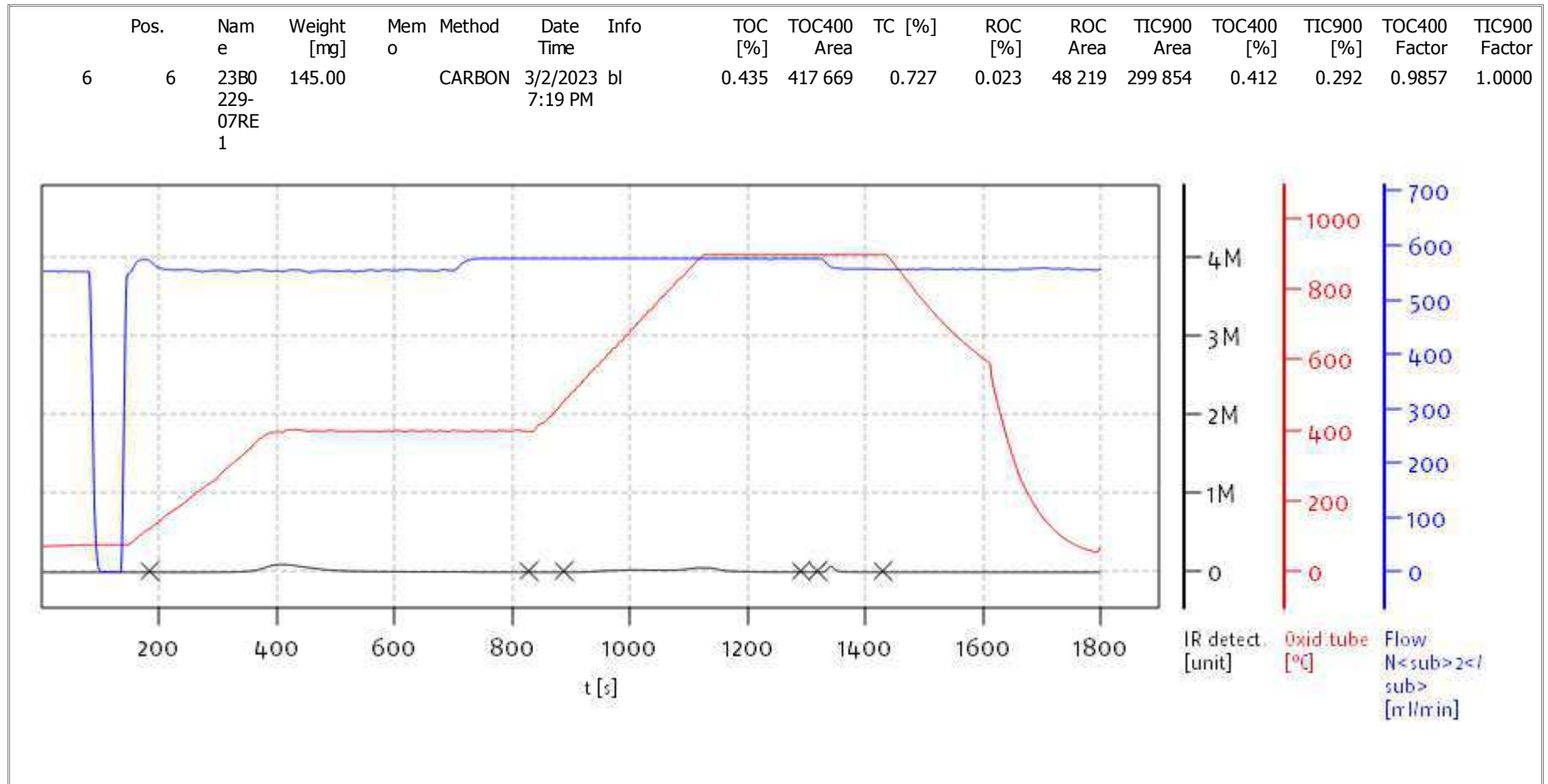
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

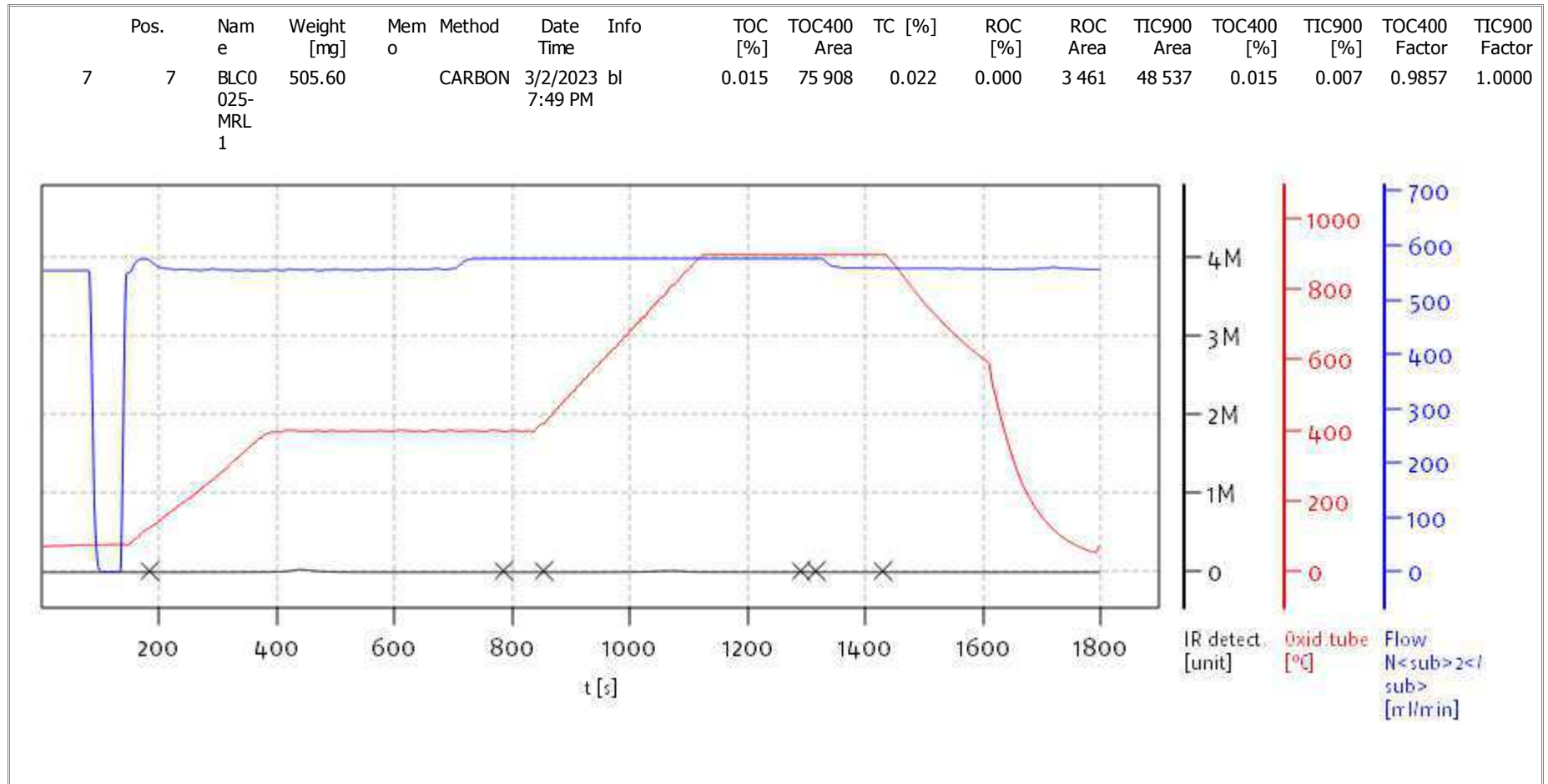
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

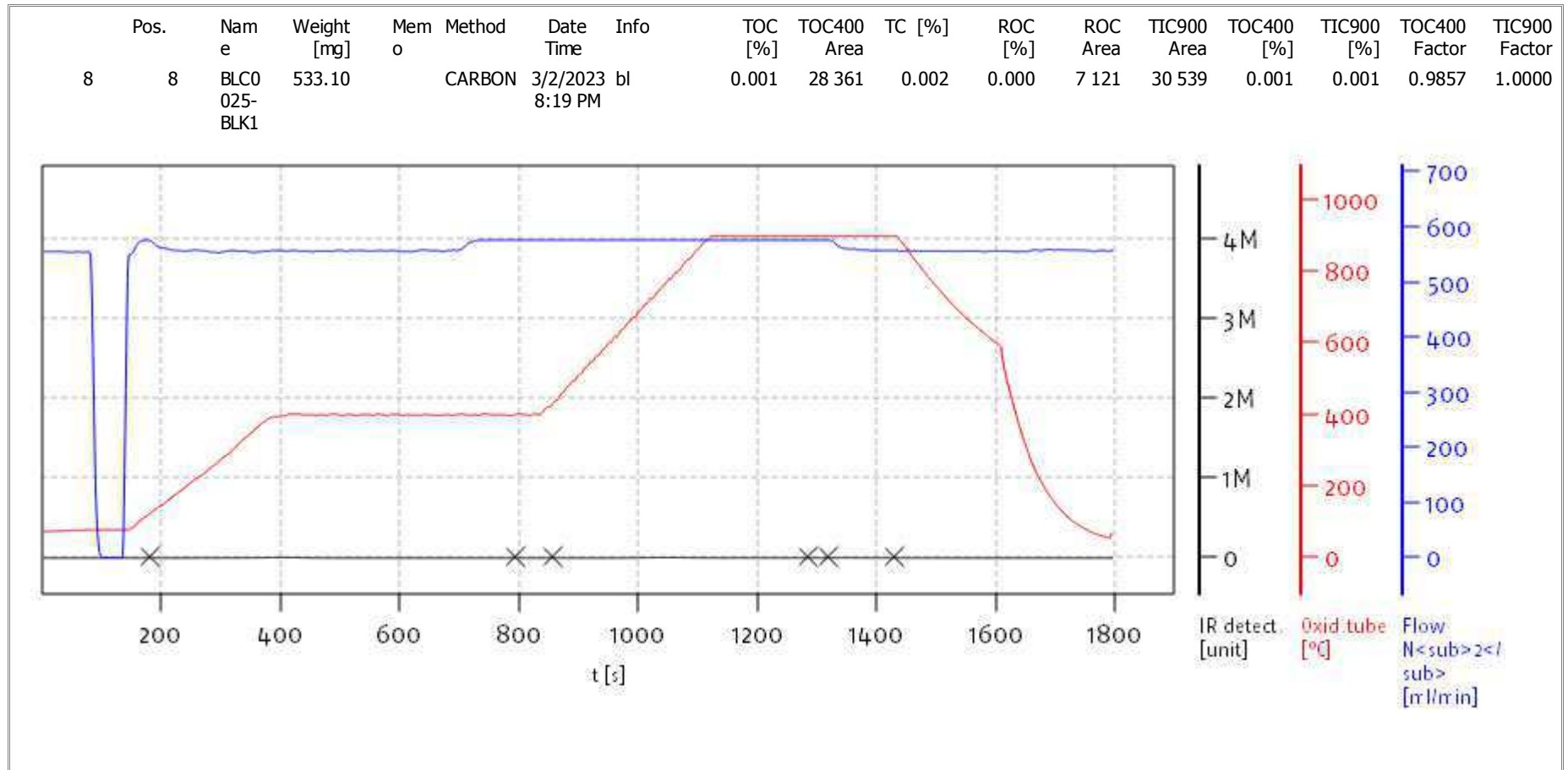
Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

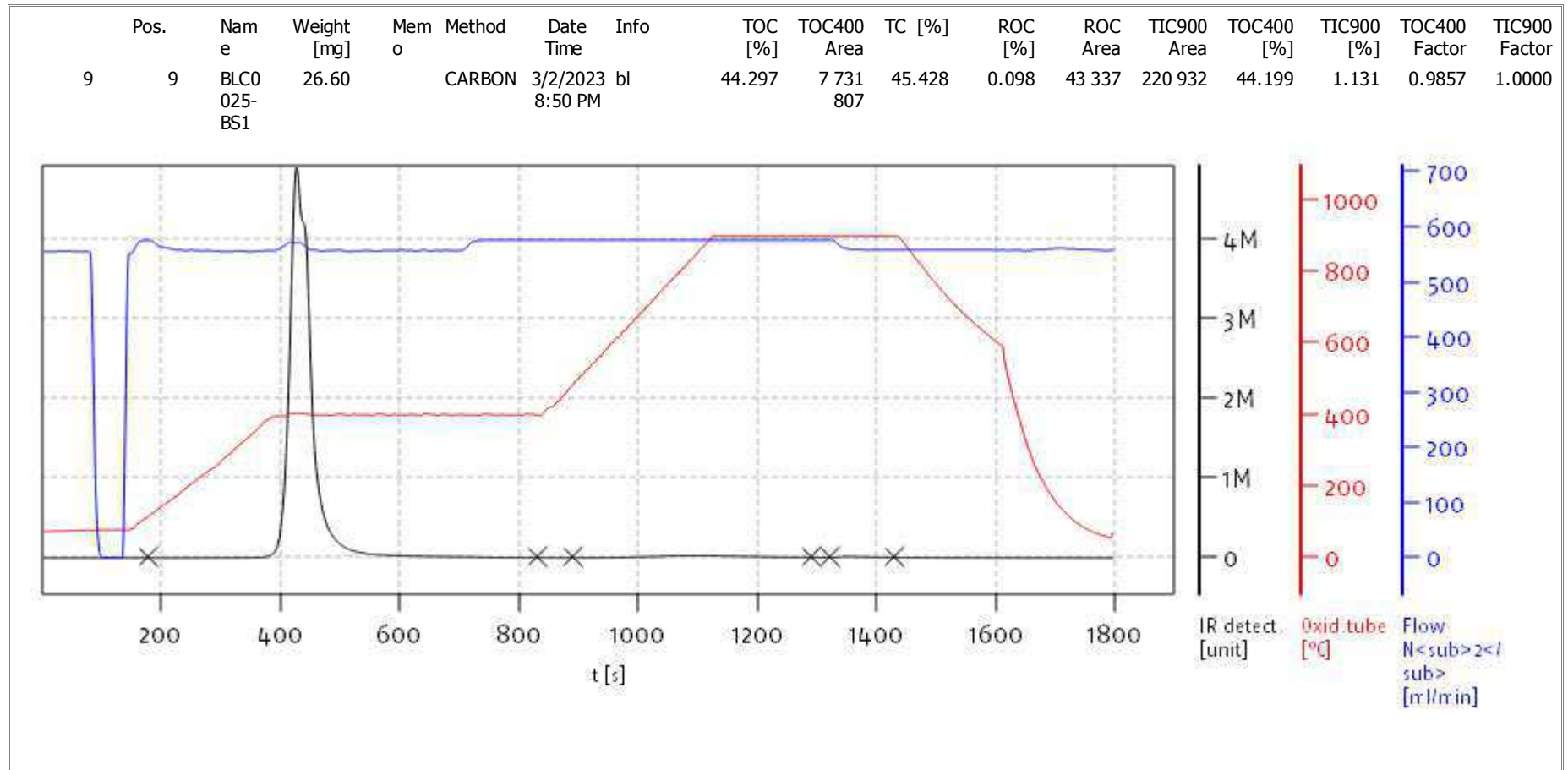
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

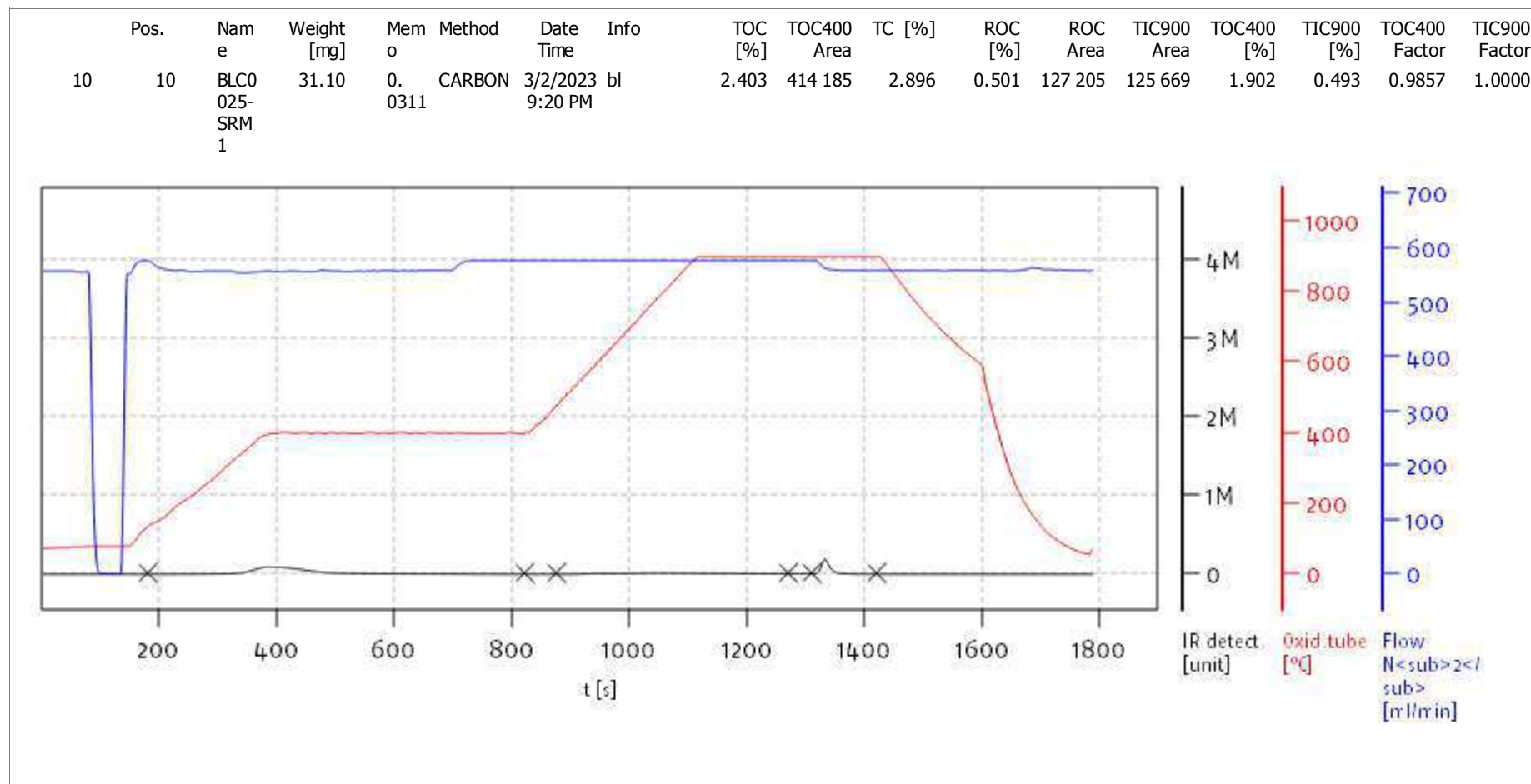
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

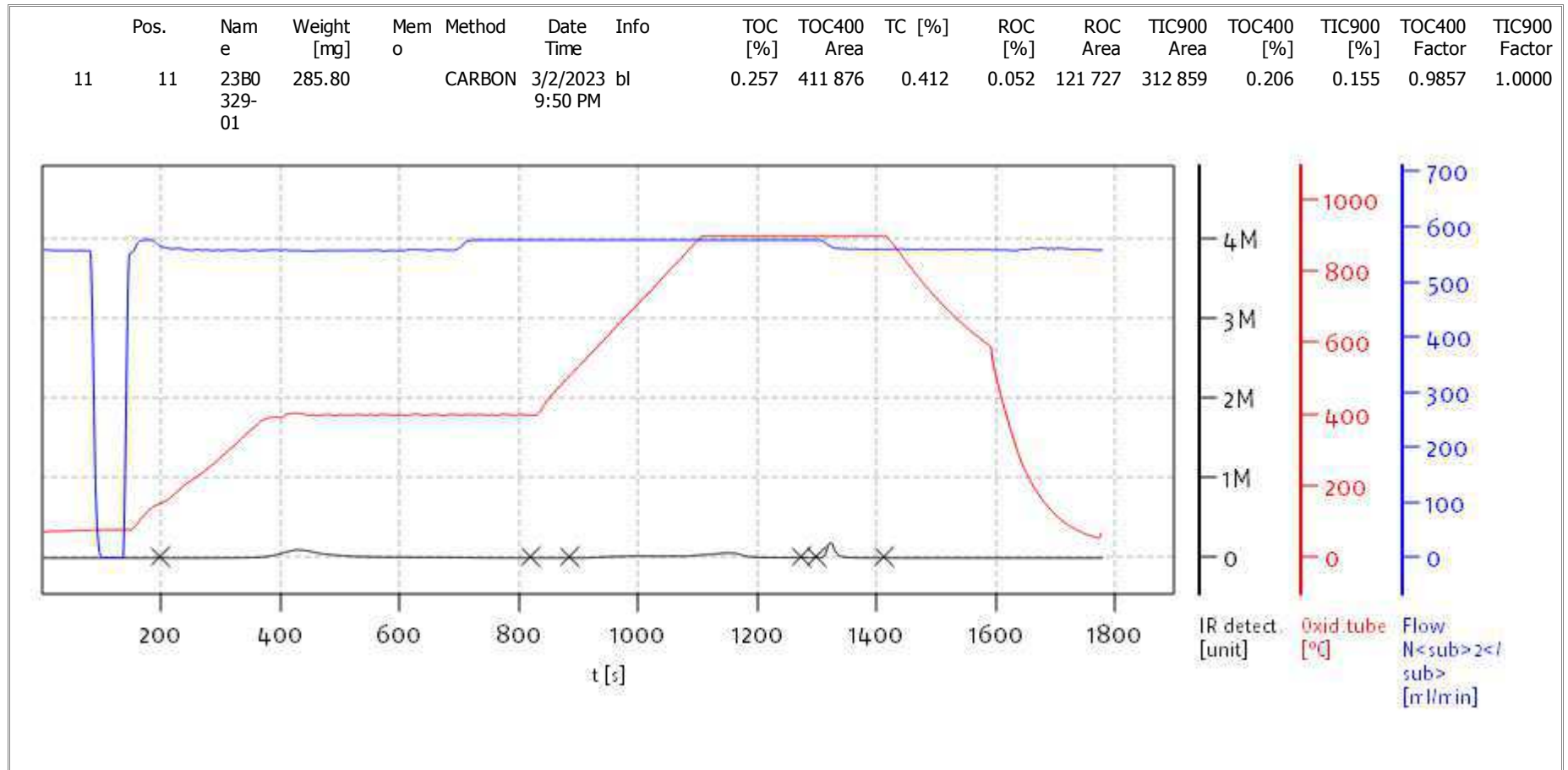
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

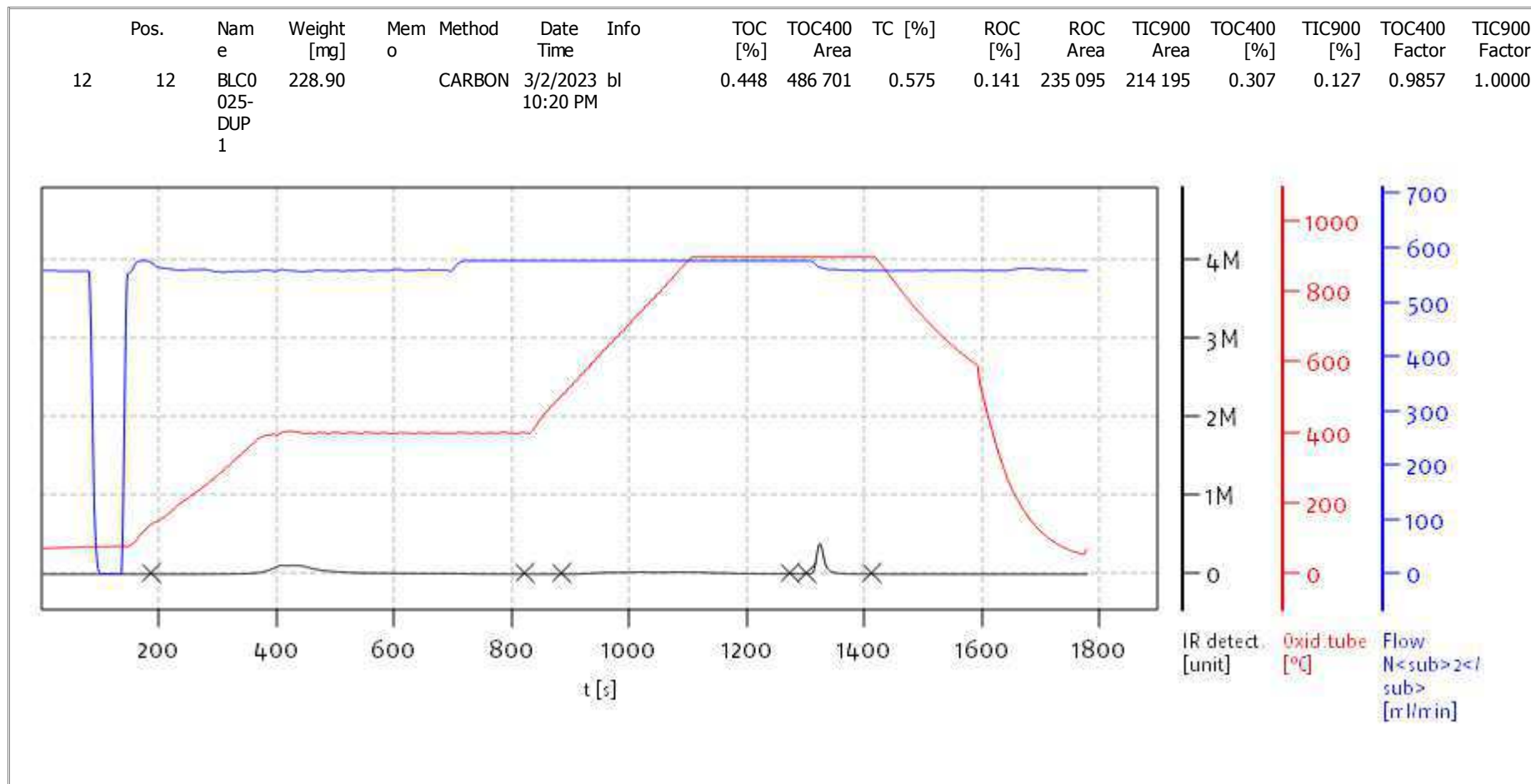
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

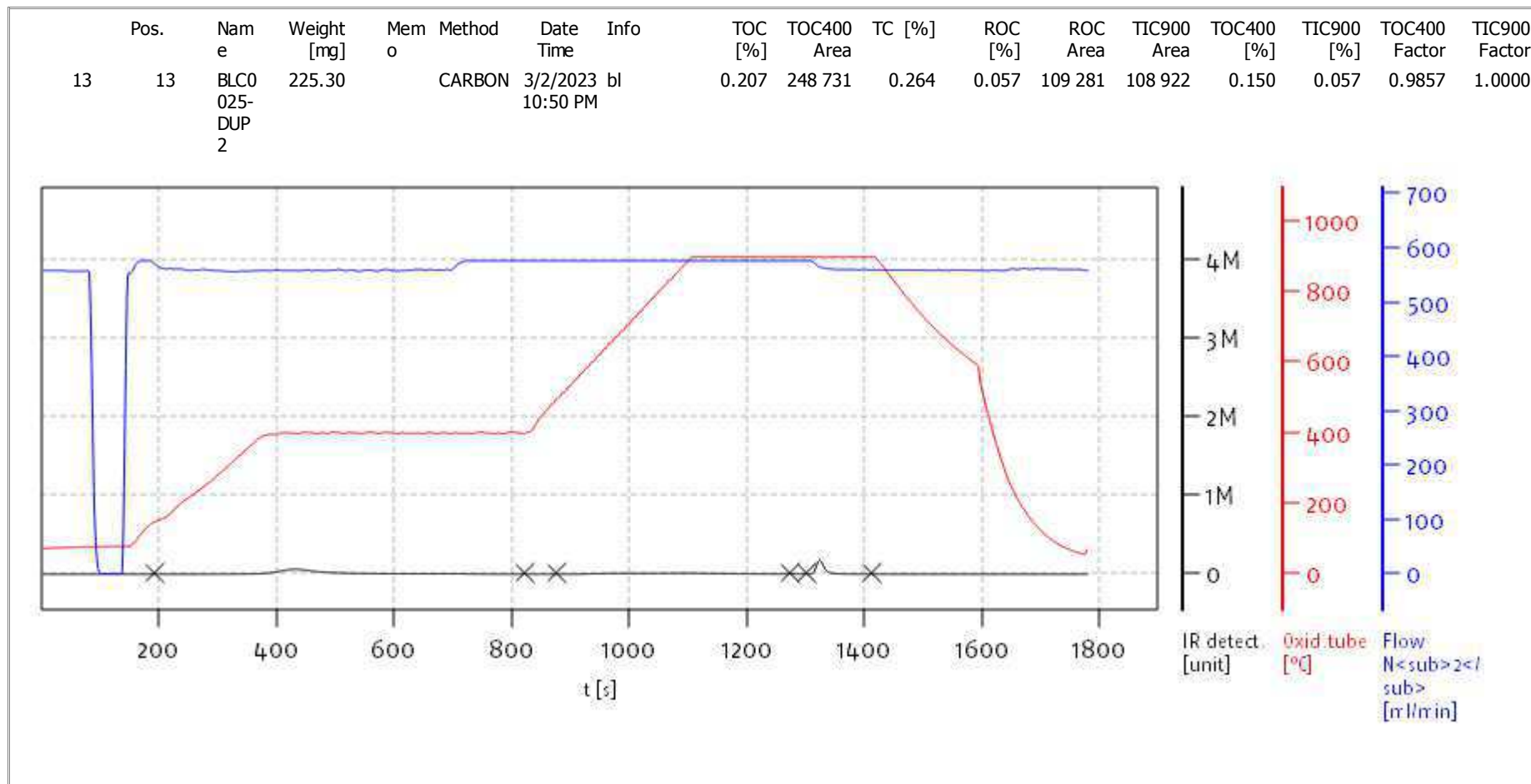
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

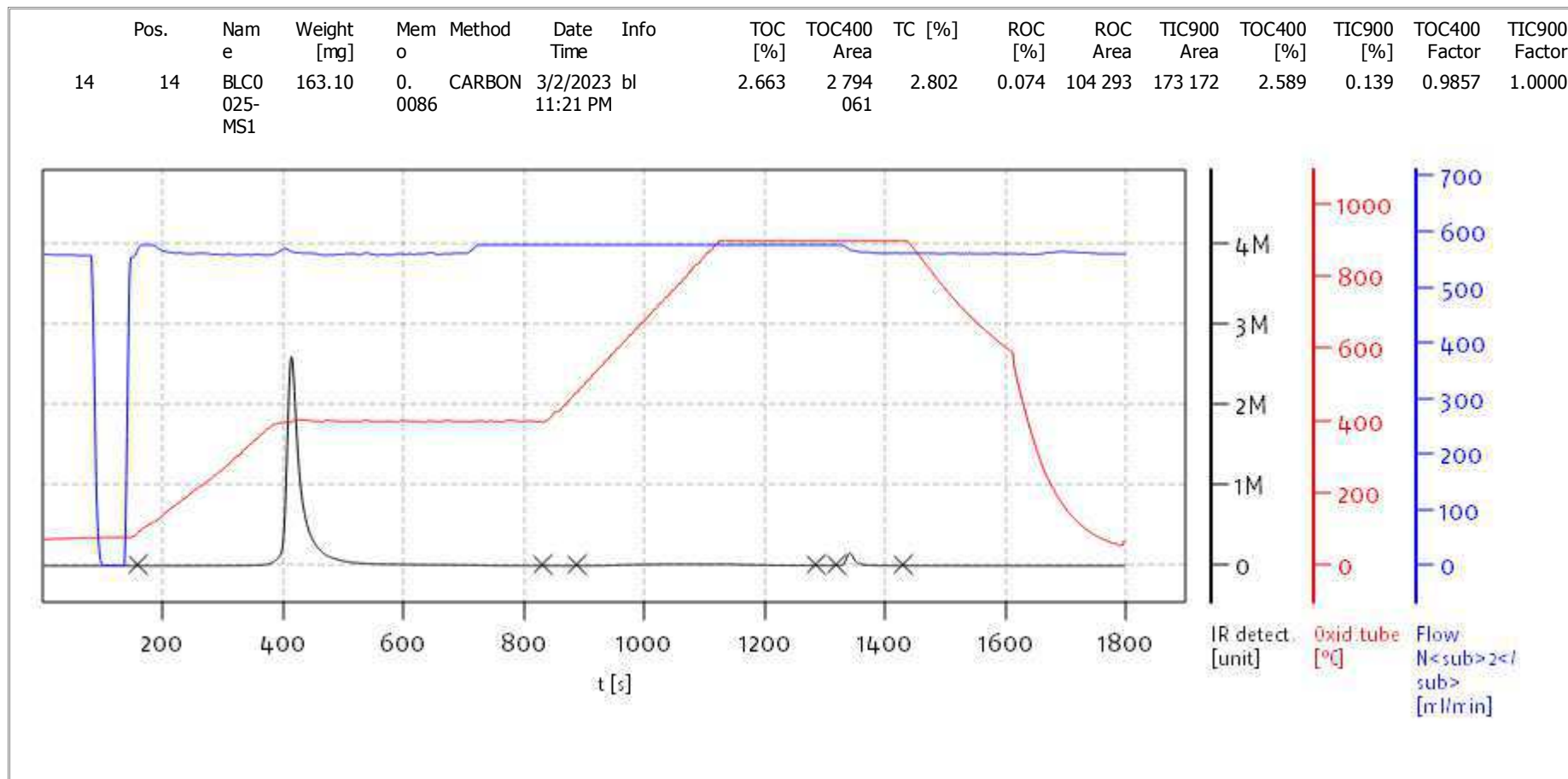
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

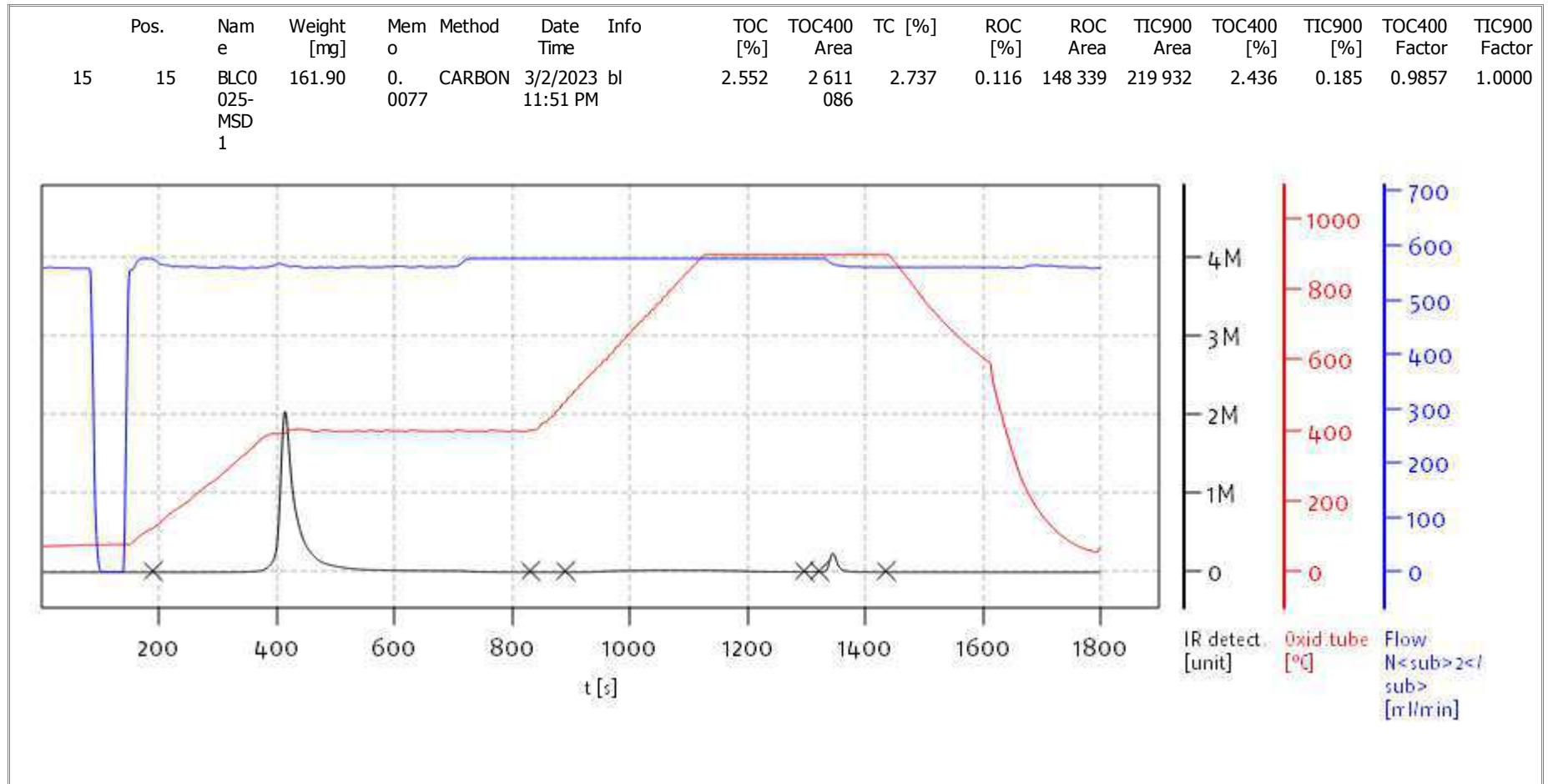
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

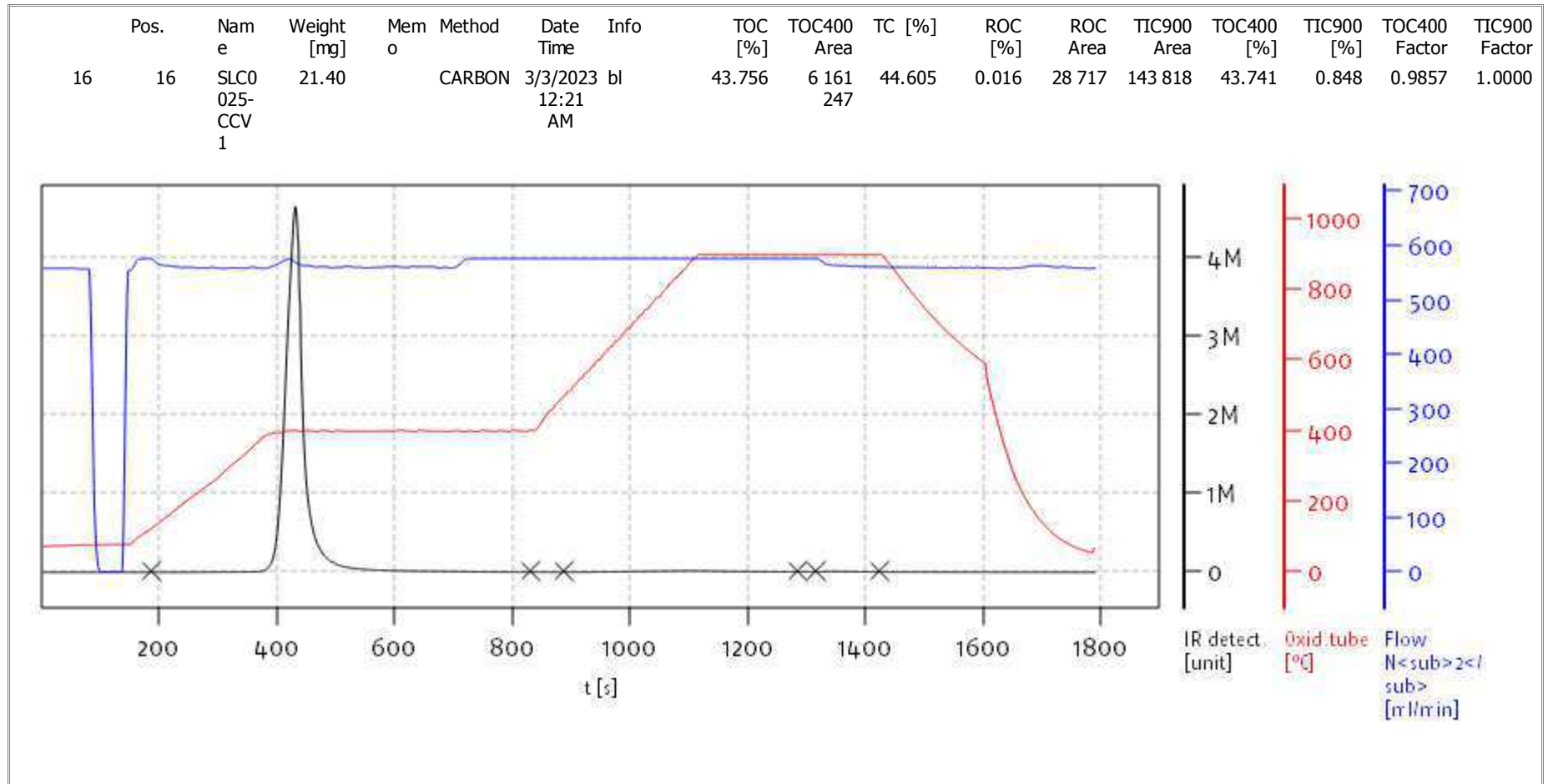
Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

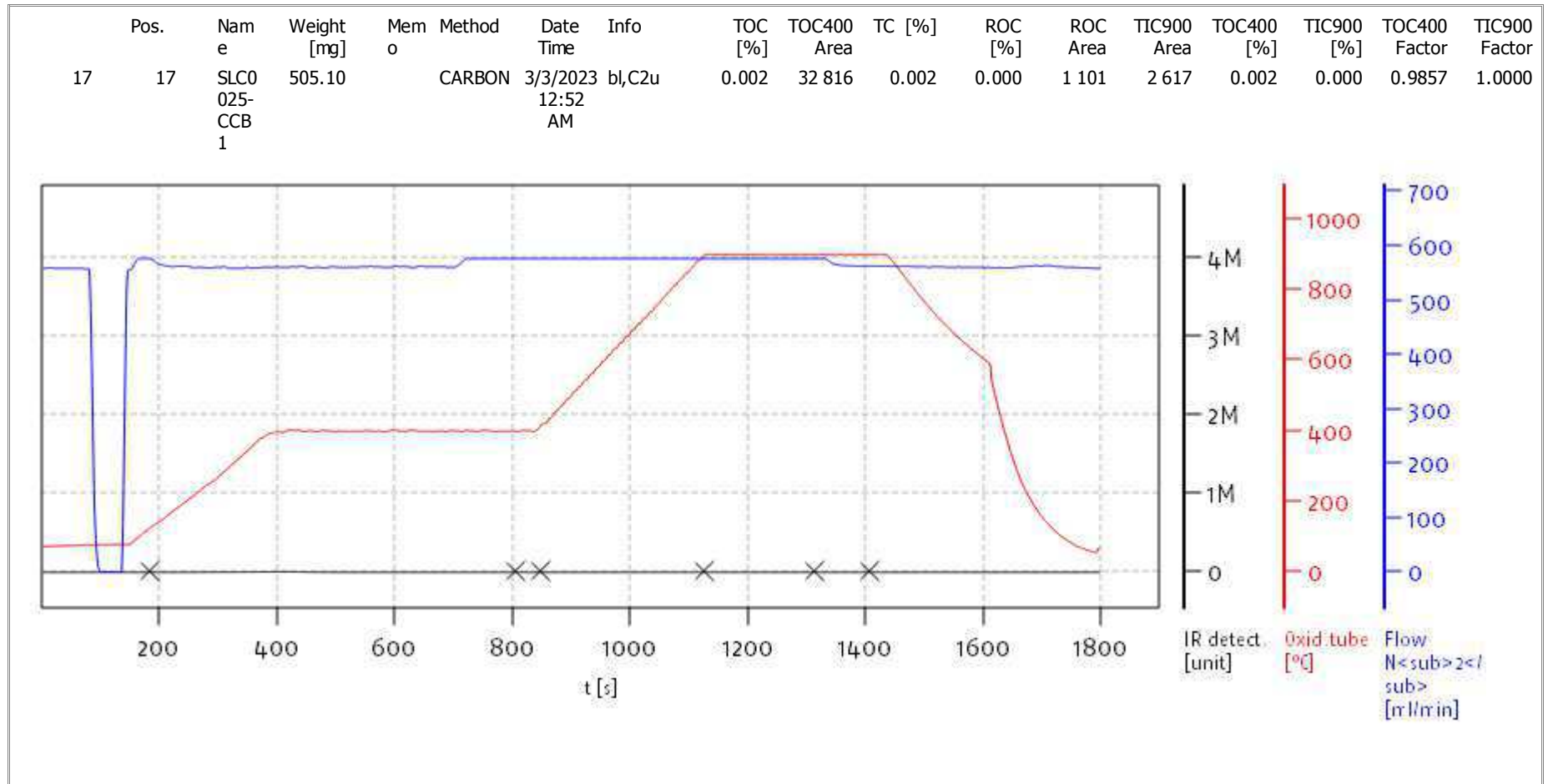
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

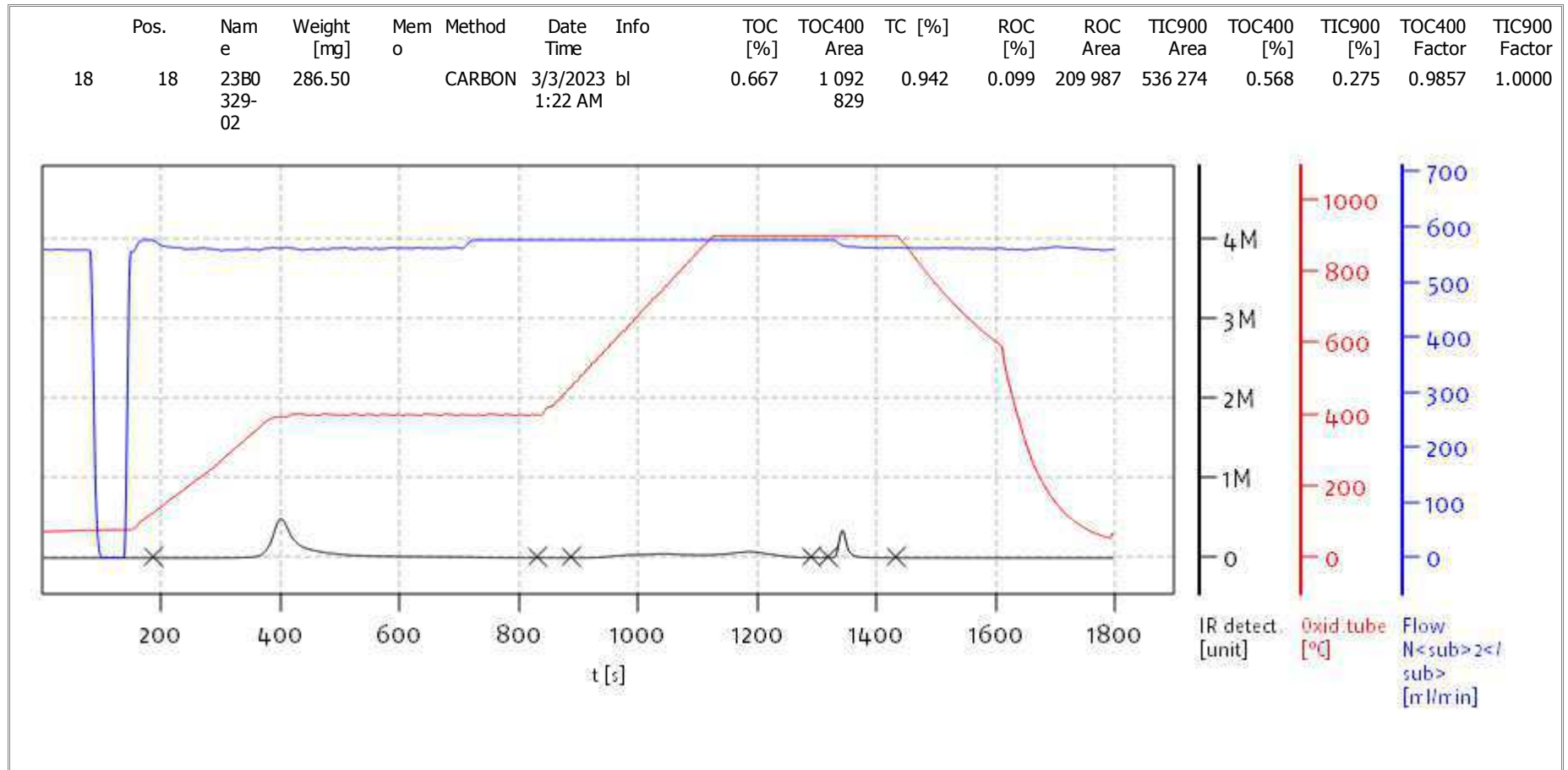
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

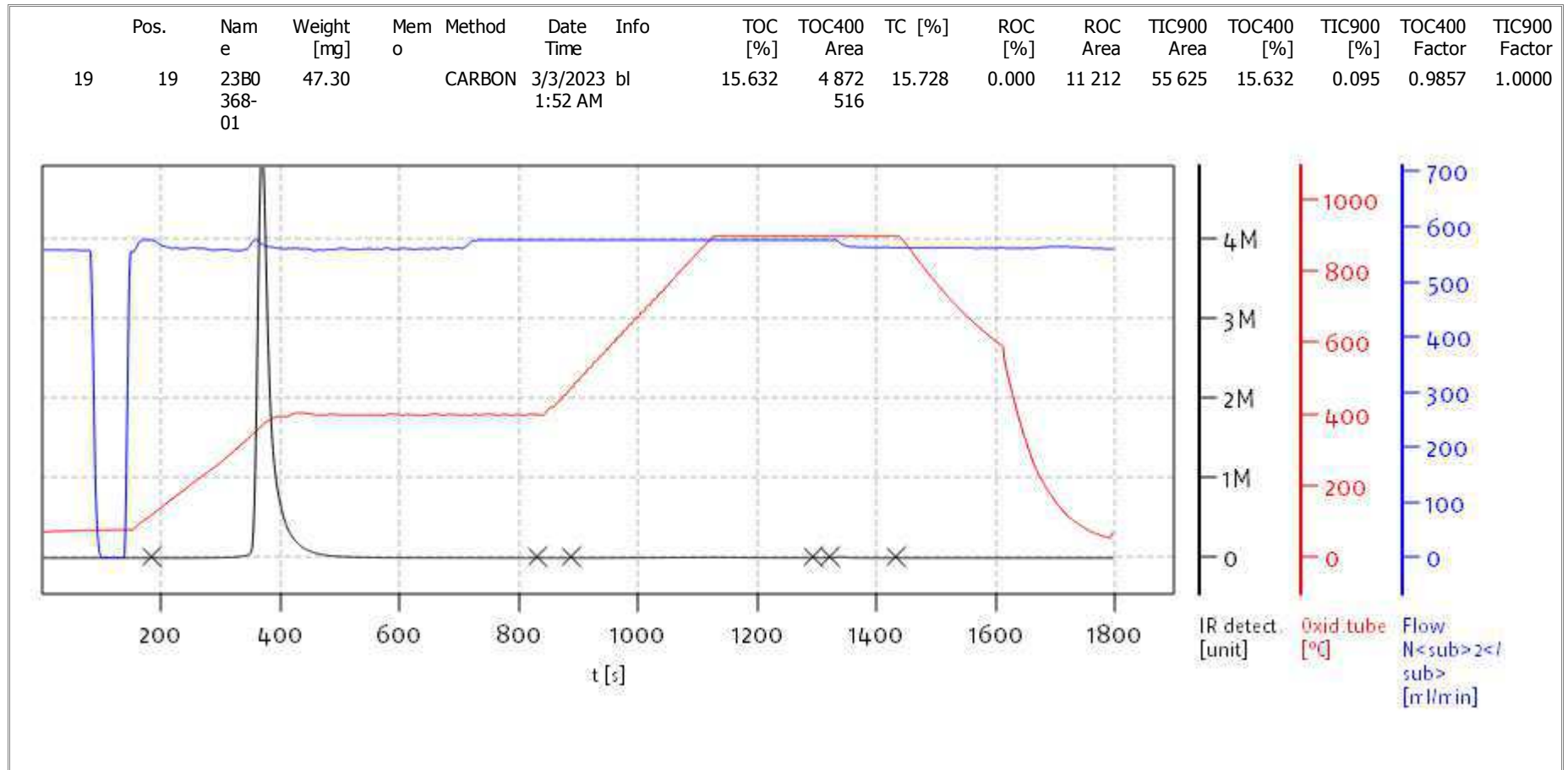
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

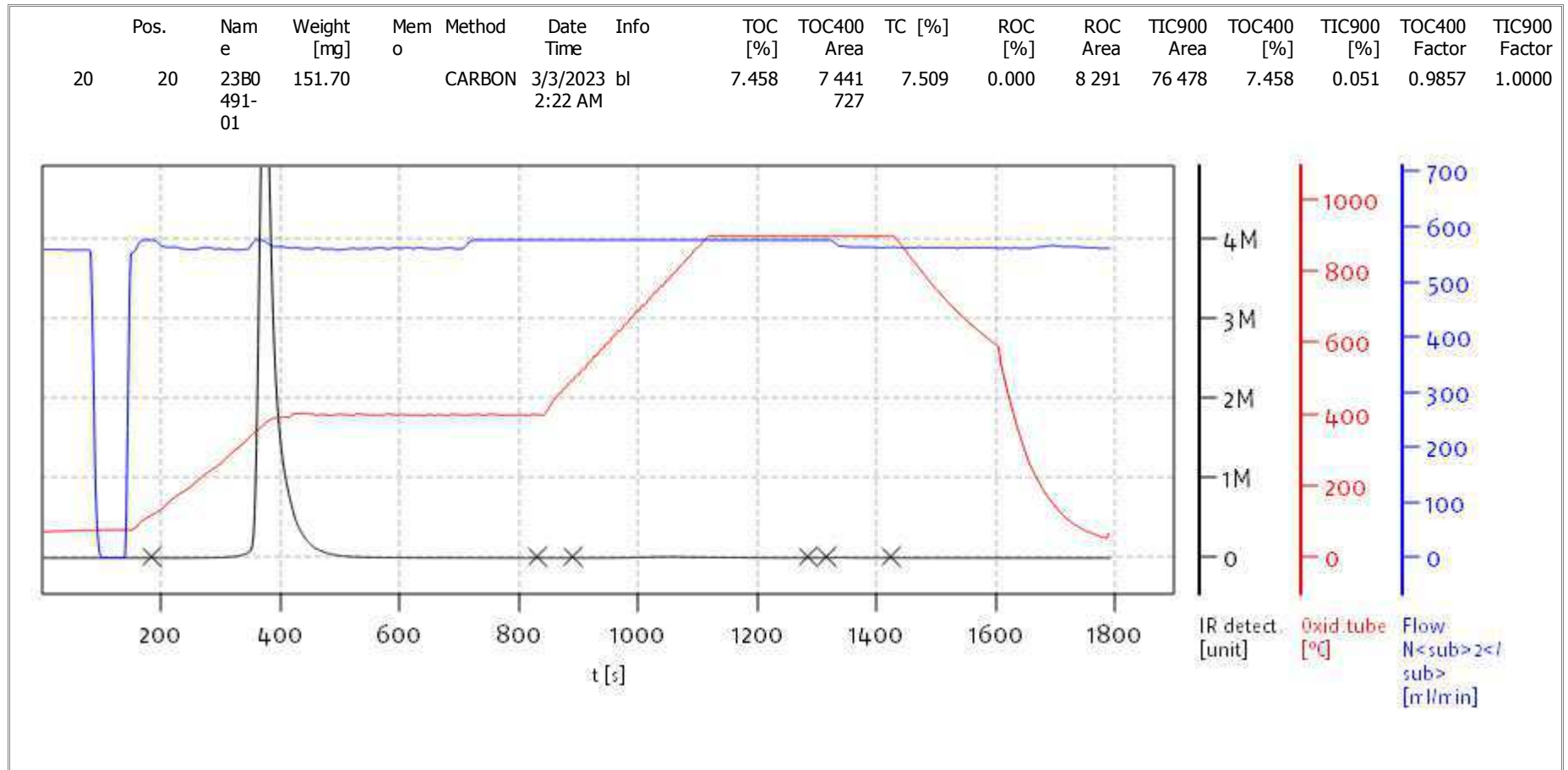
Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

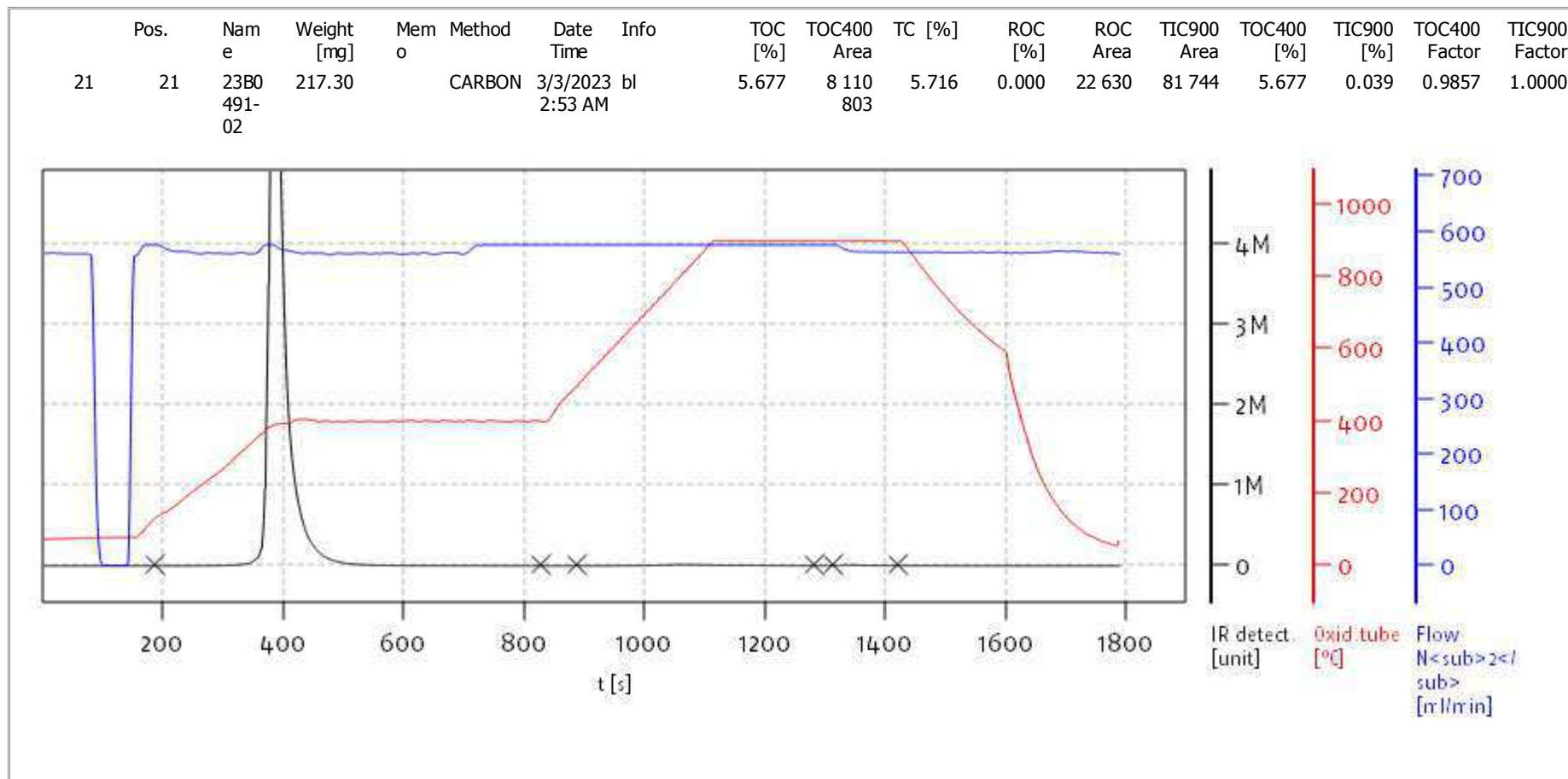
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

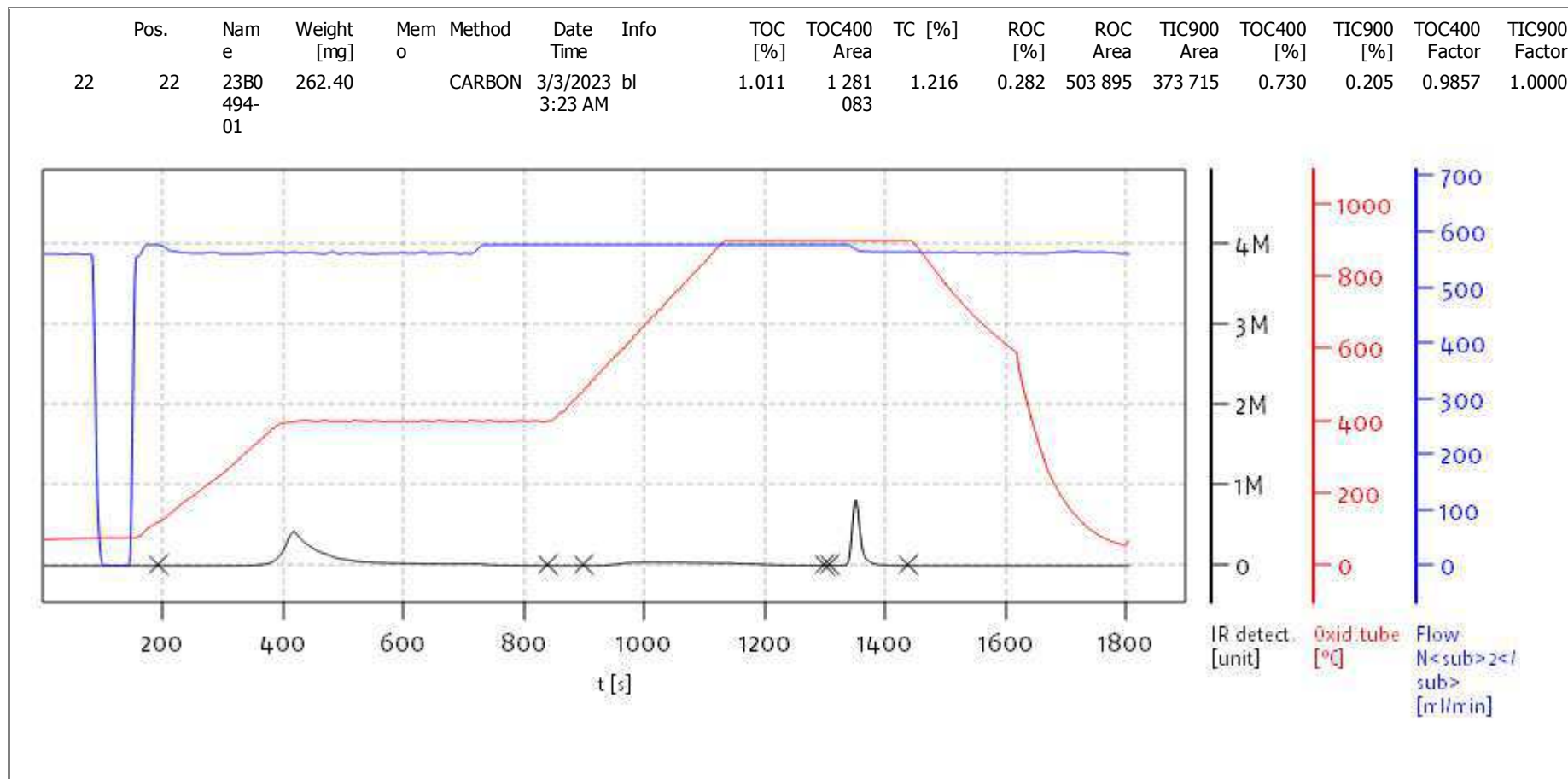
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

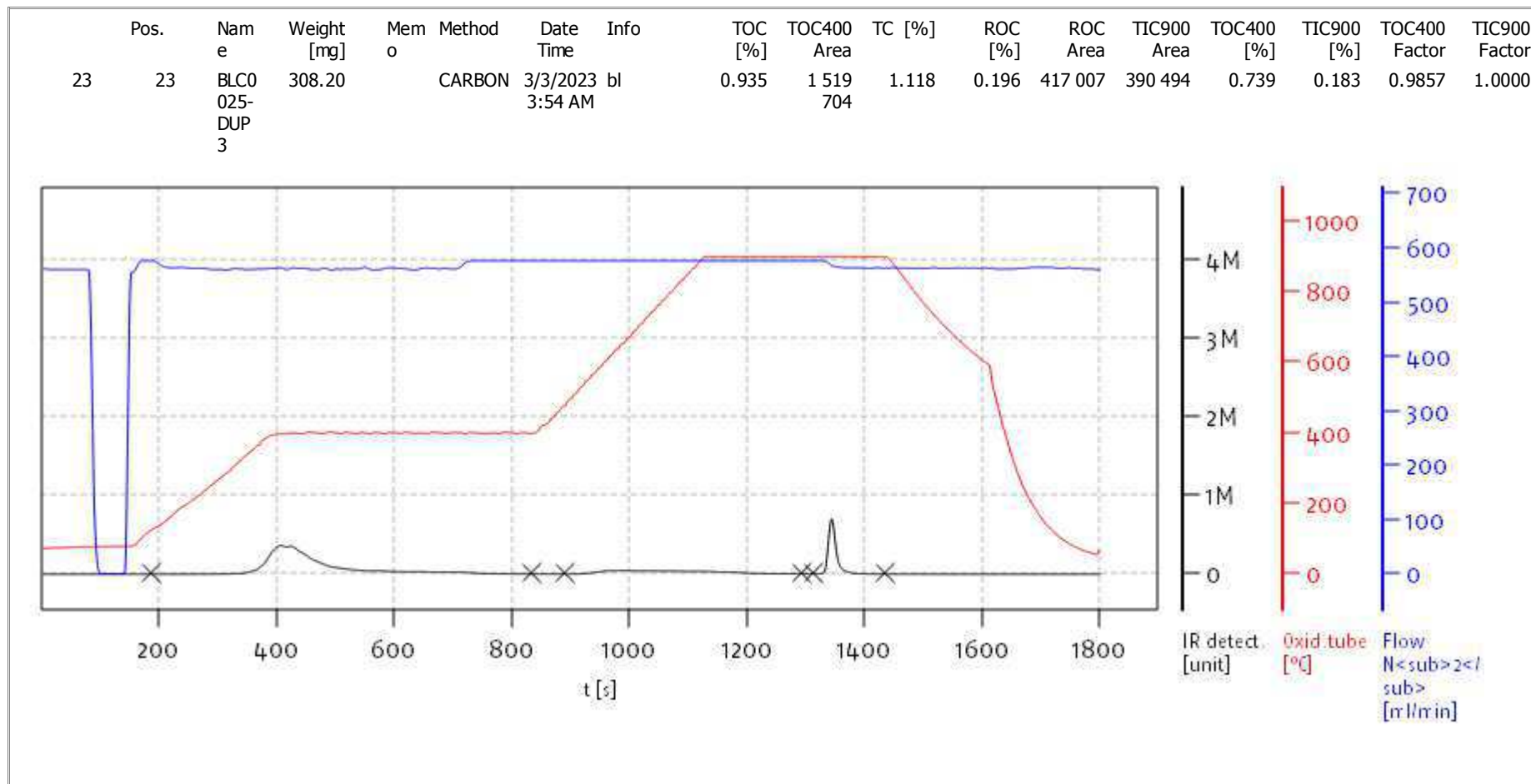
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

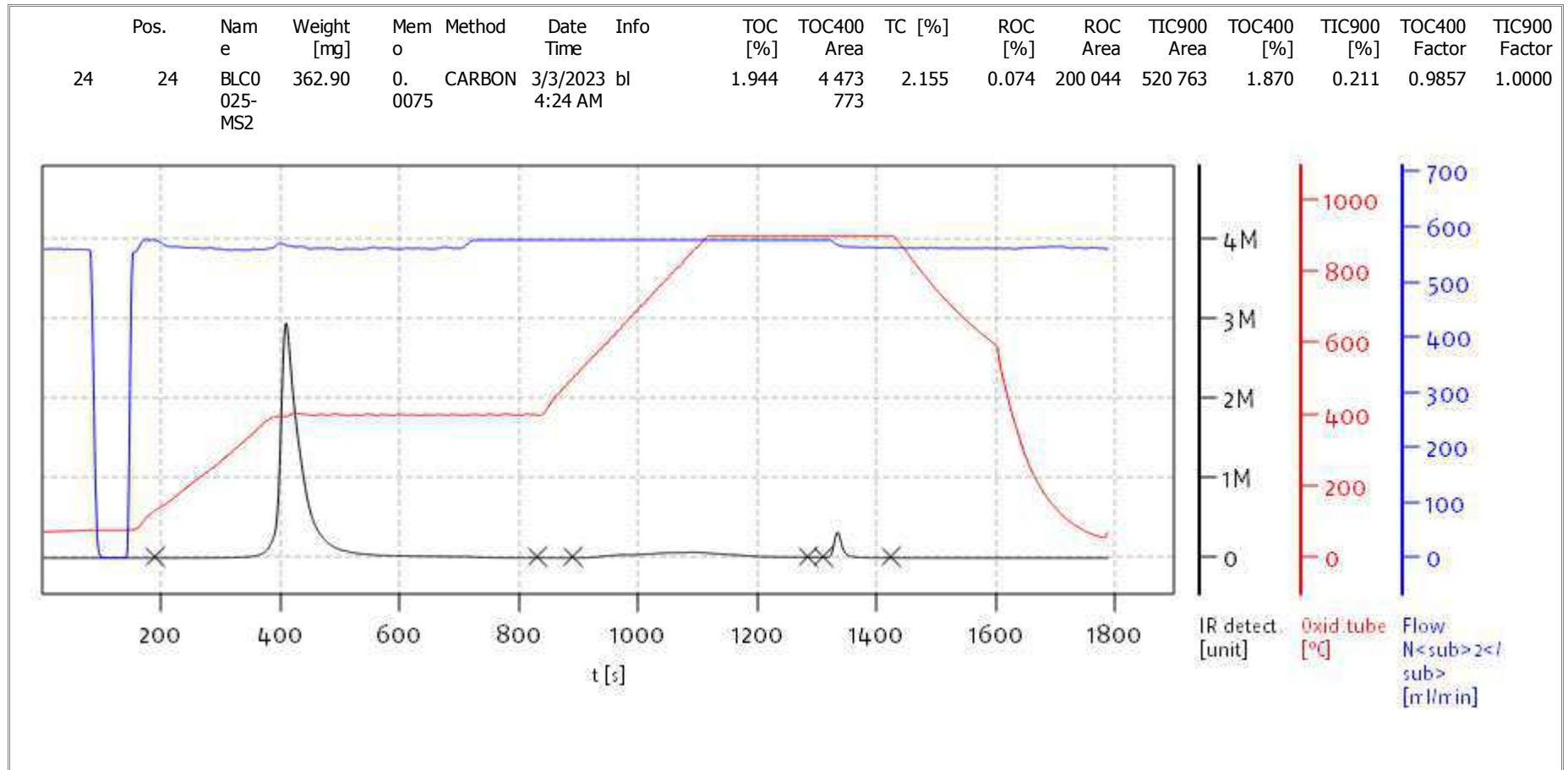
Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

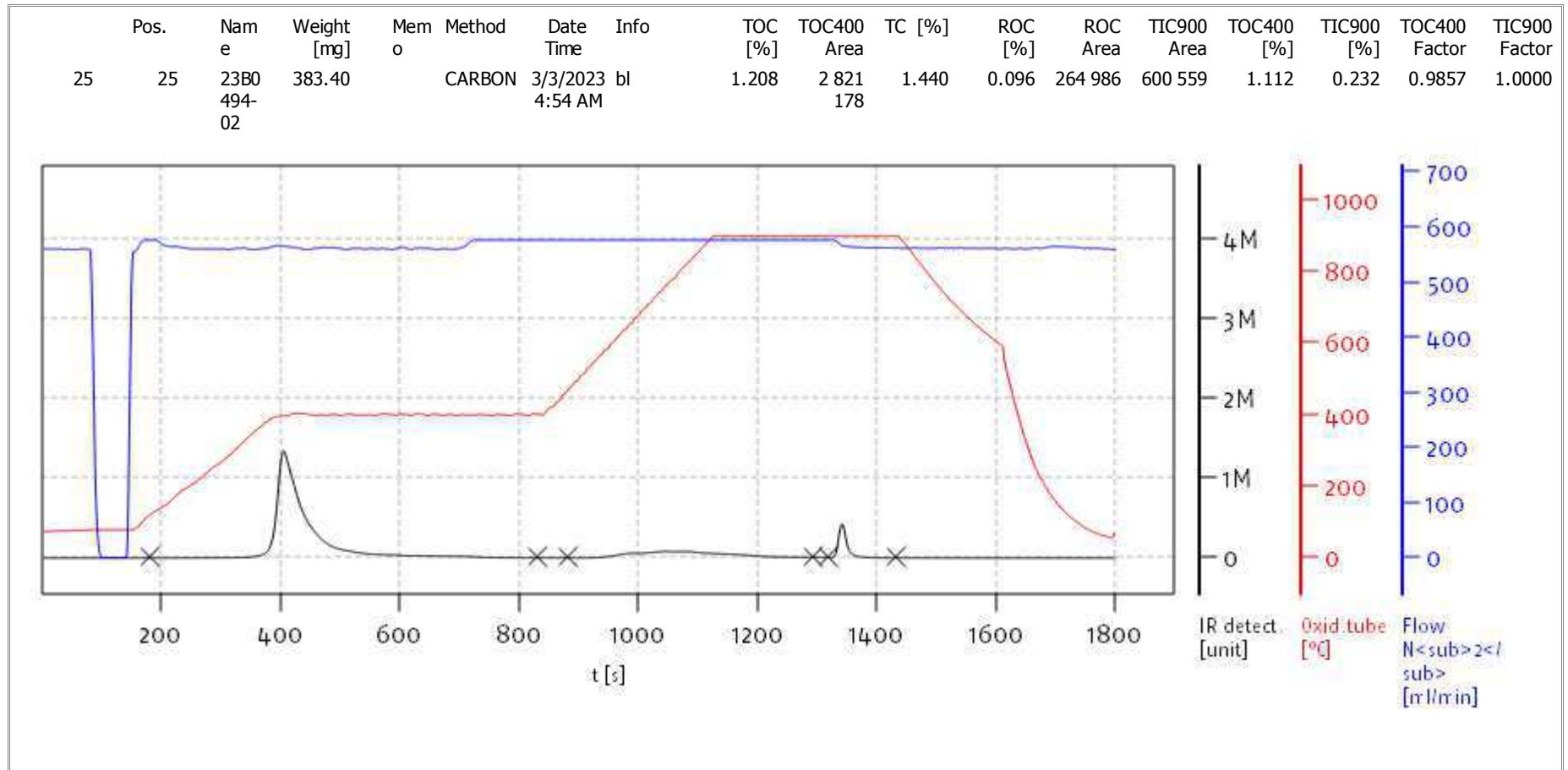
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

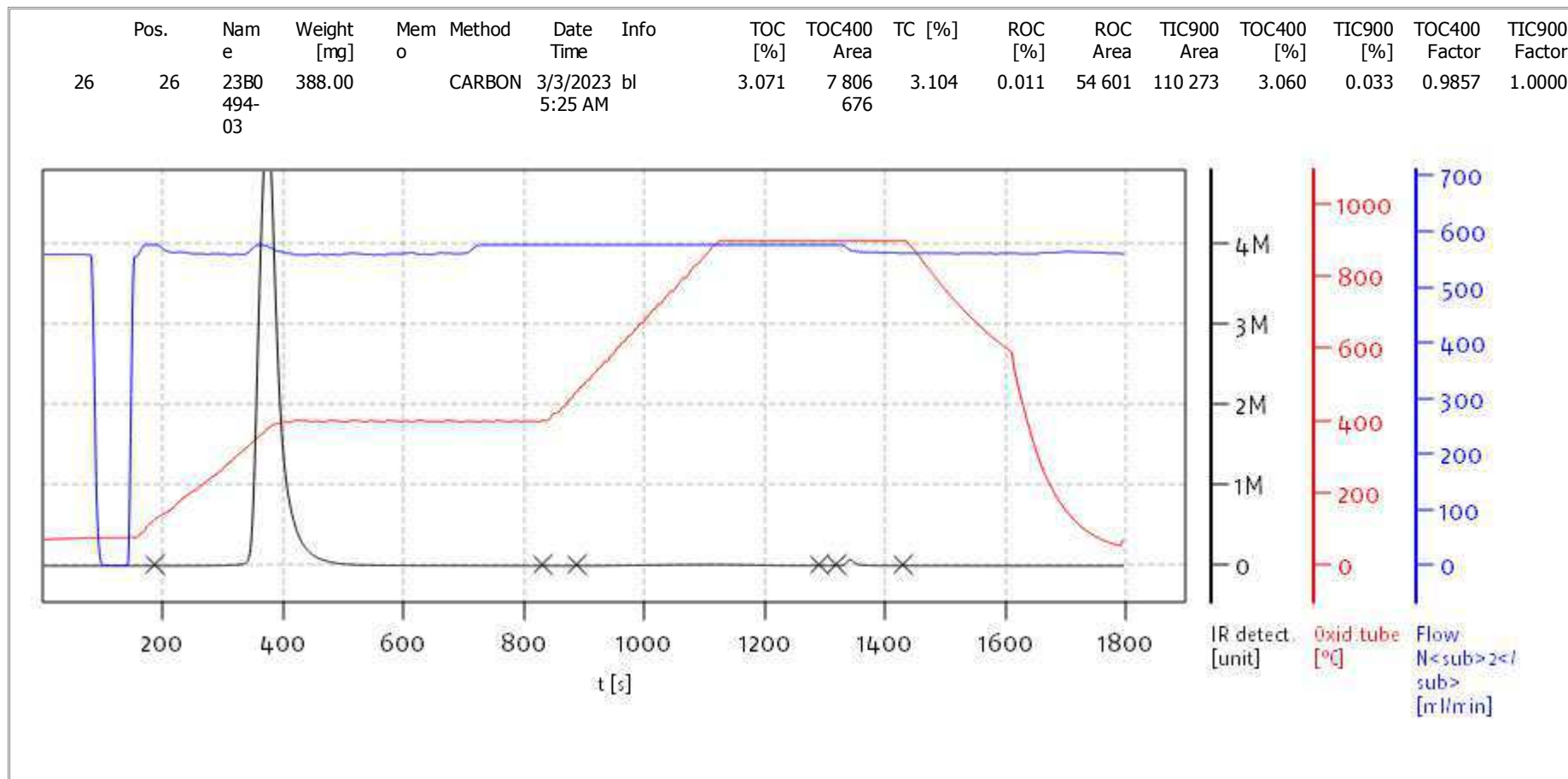
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

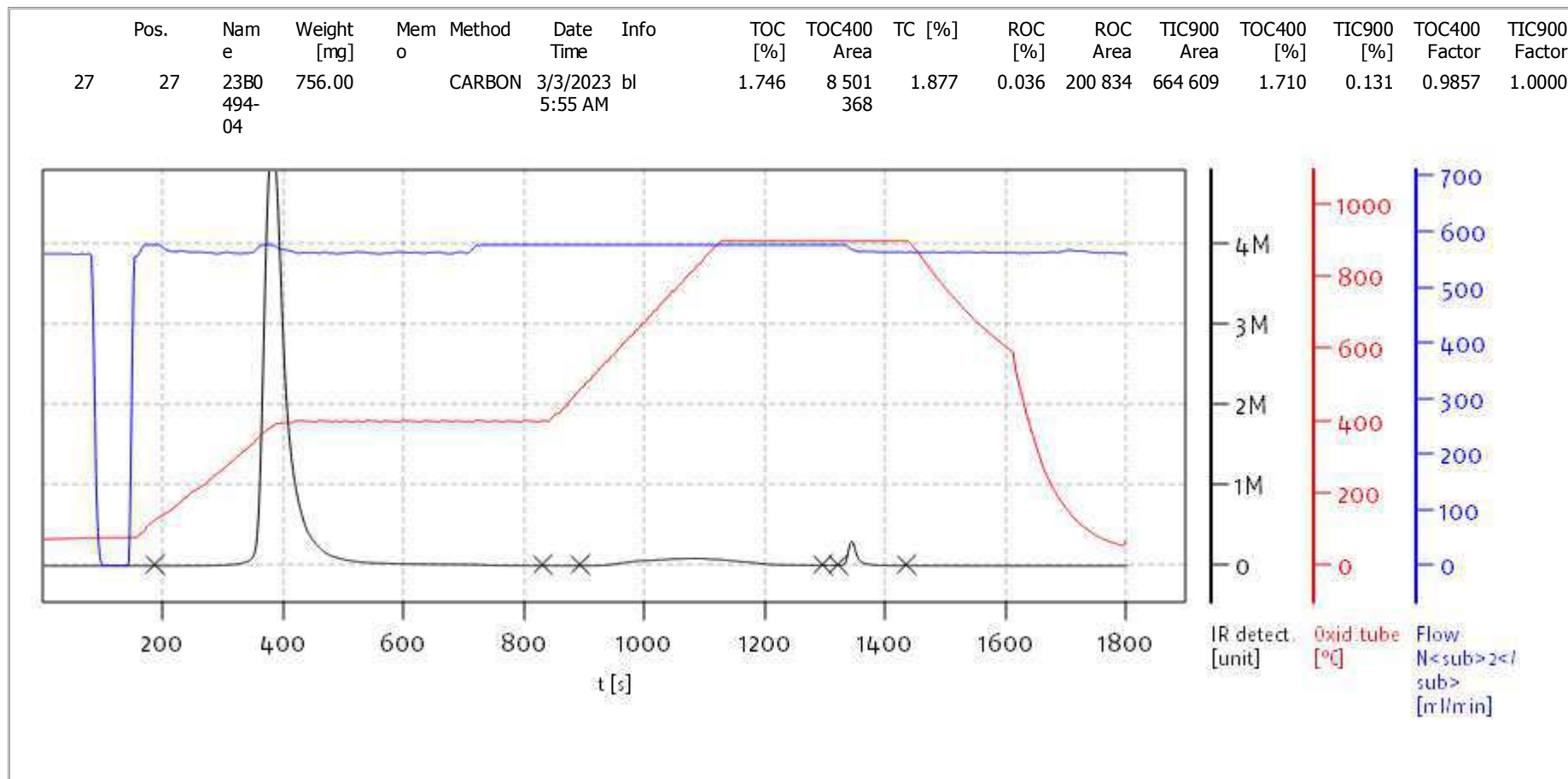
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

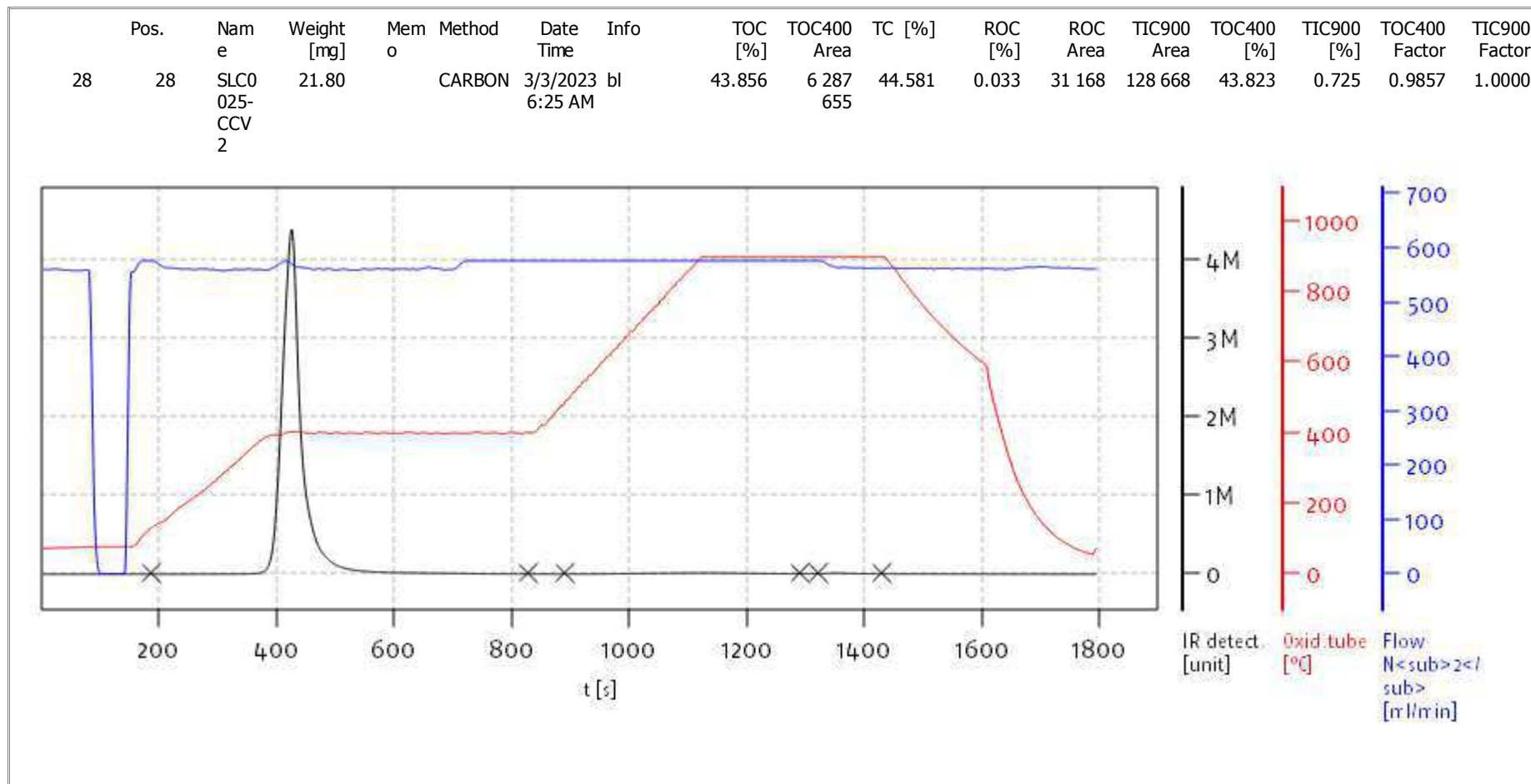
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

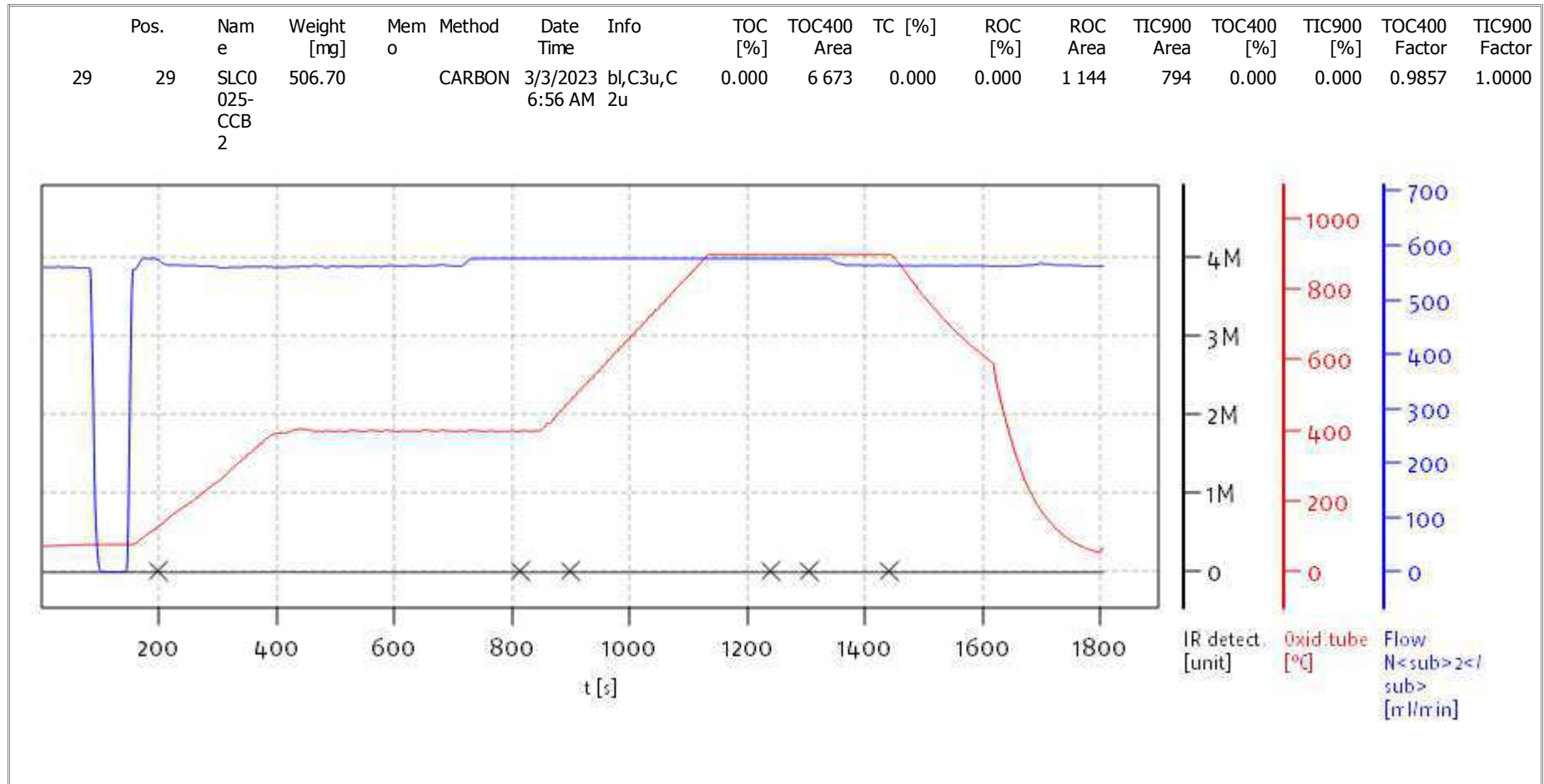
Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

Access: solITOC superuser

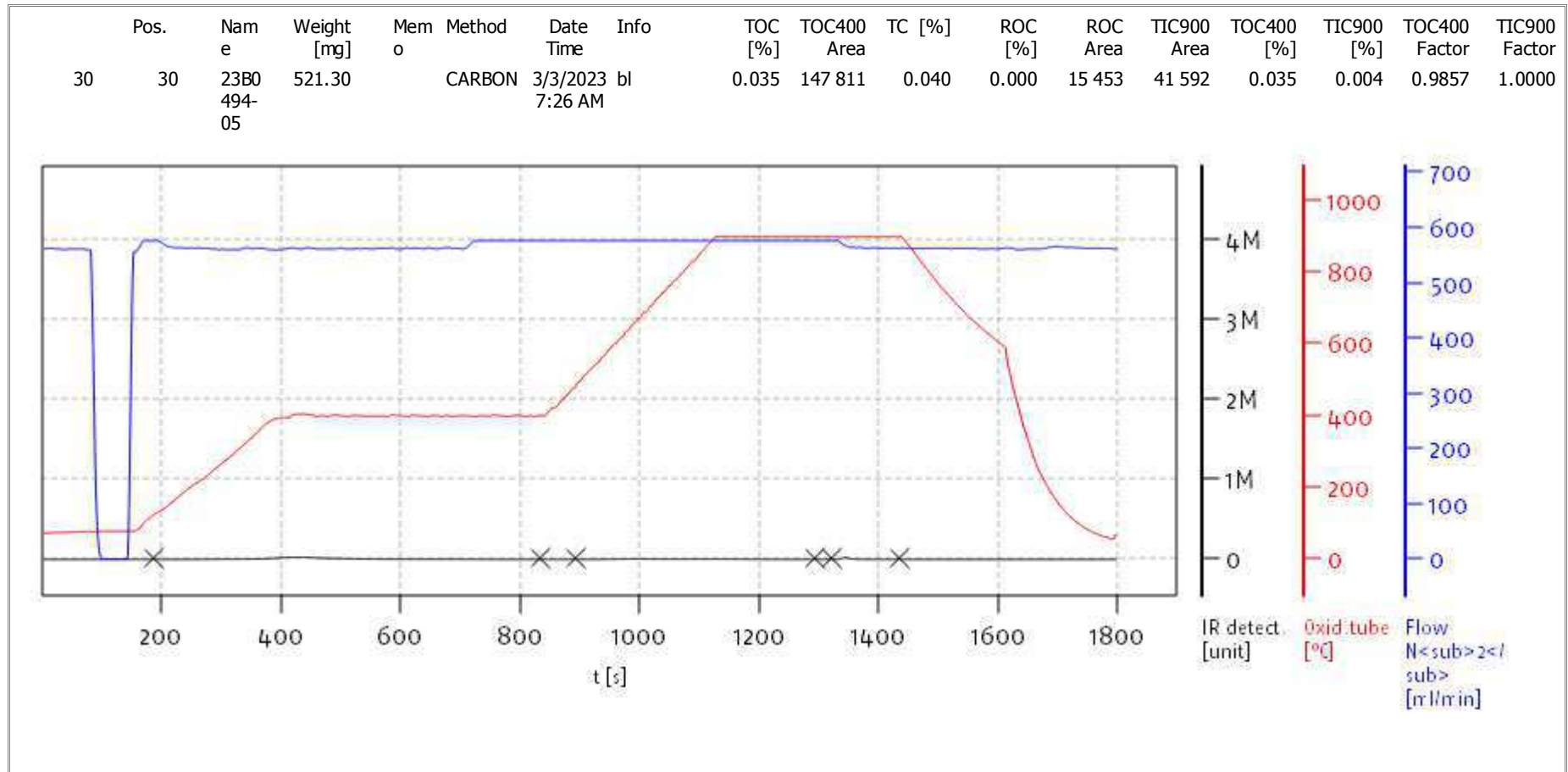
Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

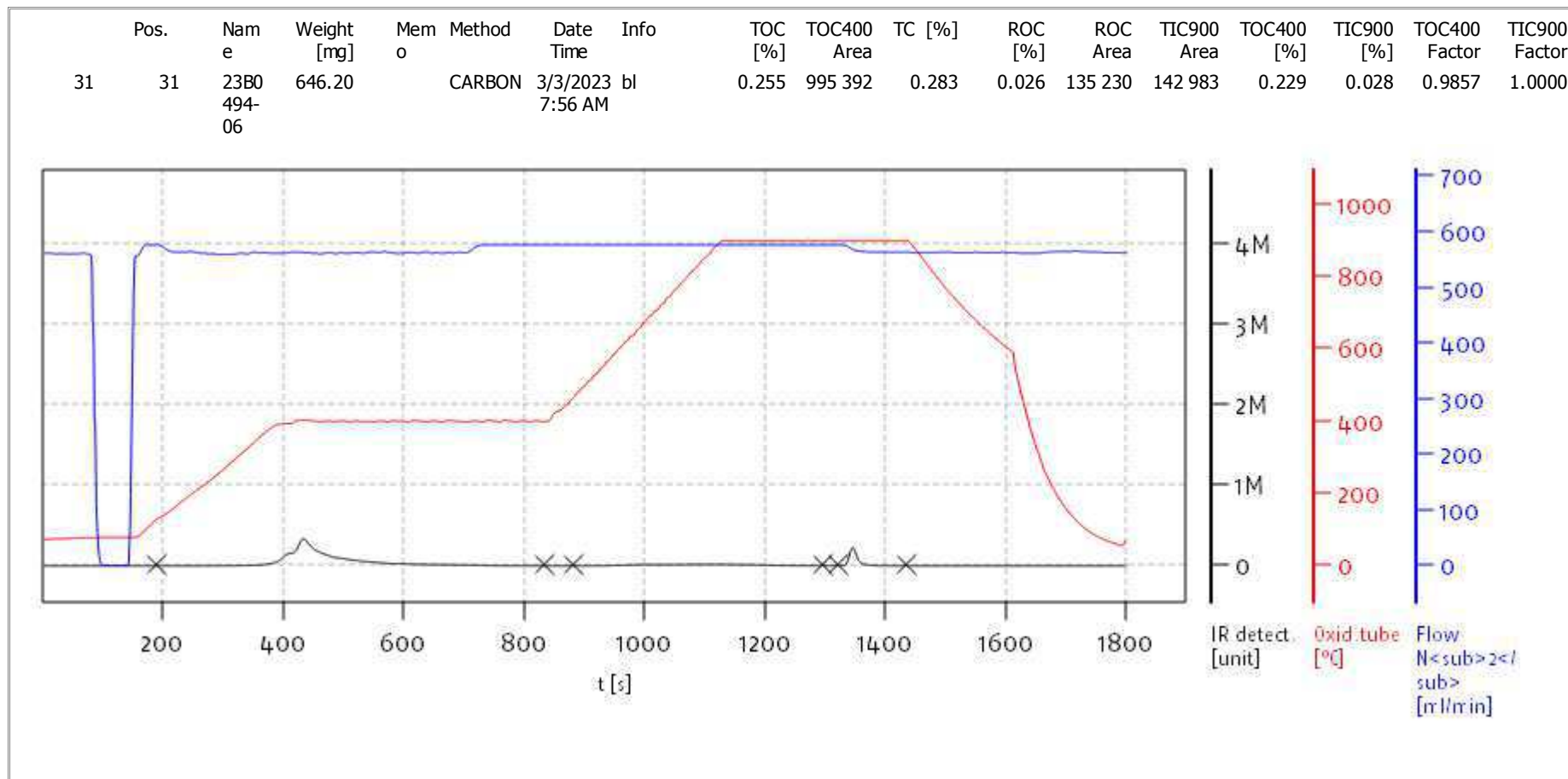
Access: soliTOC superuser

Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: soliTOC superuser

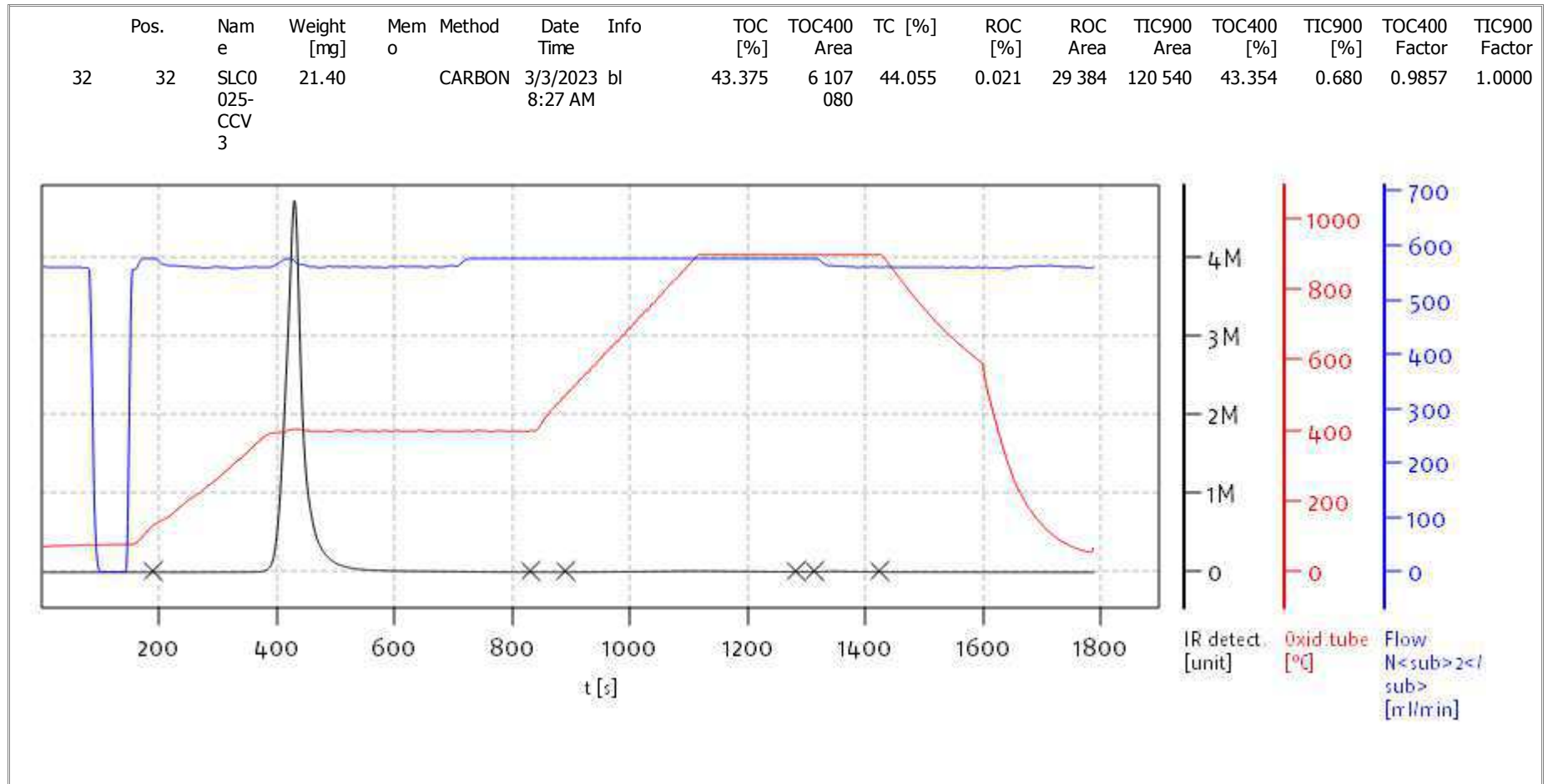
Date: Mon Mar 6 16:40:07 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE



Name:

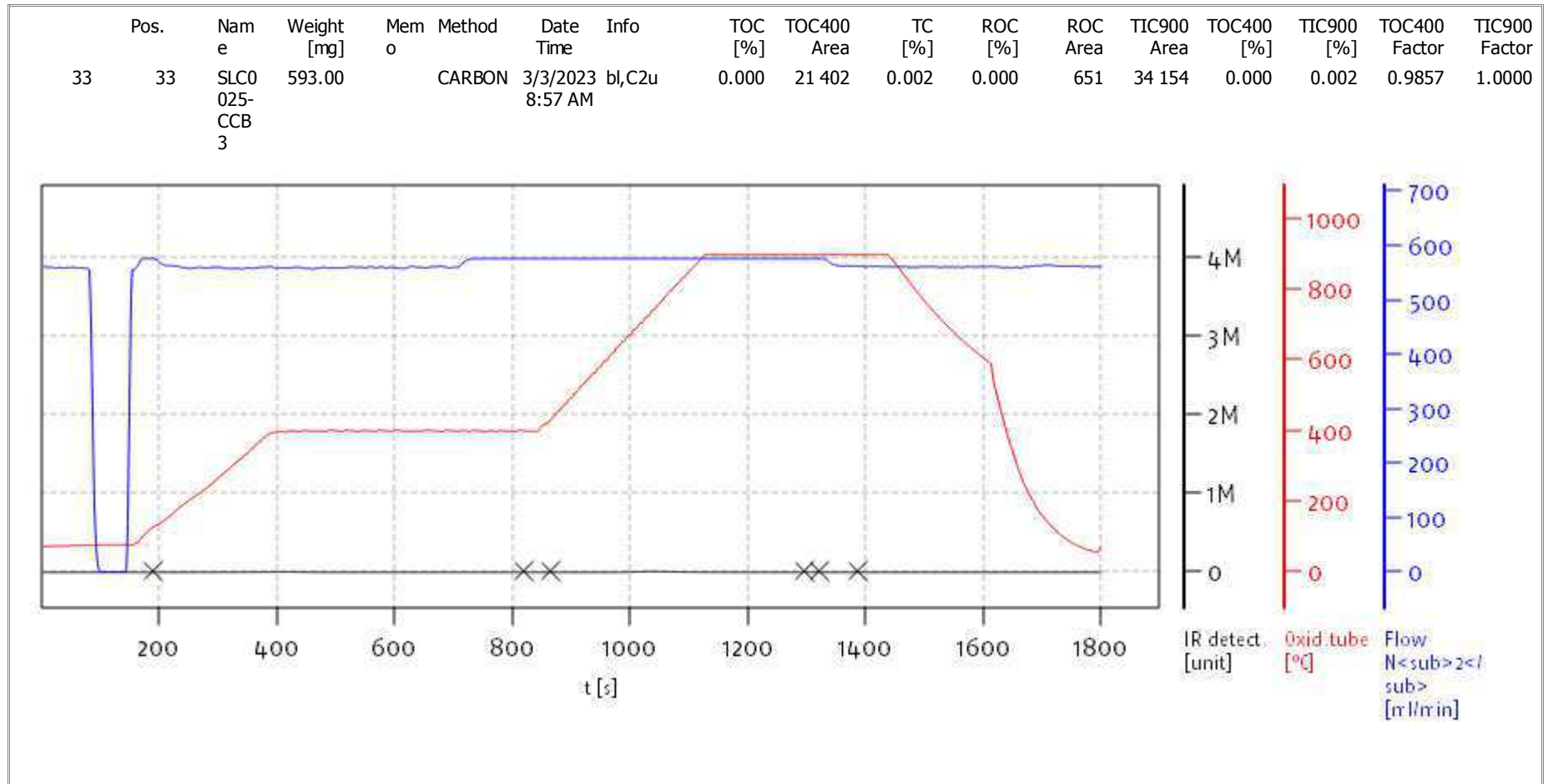
Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: CDE



Name:

Access: solITOC superuser

Date: Mon Mar 6 16:40:07 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Inorganic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
% Soot	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Inorganic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
% Soot	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Inorganic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
% Soot	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Inorganic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
% Soot	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

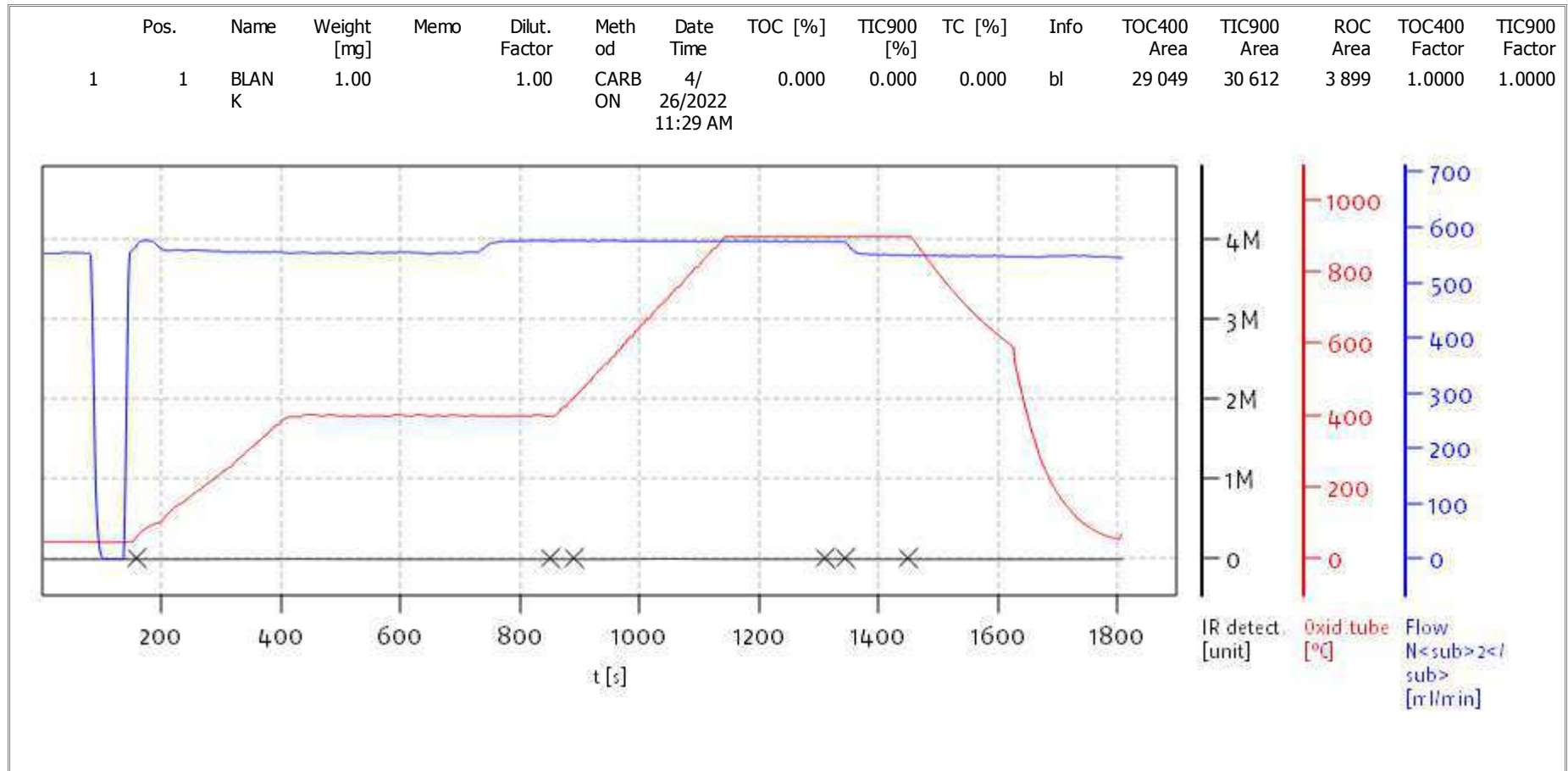
Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Total Organic Carbon	1424064	15.9	0.9988			
Total Carbon	1424064	15.9	0.9988			
Total Inorganic Carbon	1424064	15.9	0.9988			
% Soot	1424064	15.9	0.9988			



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

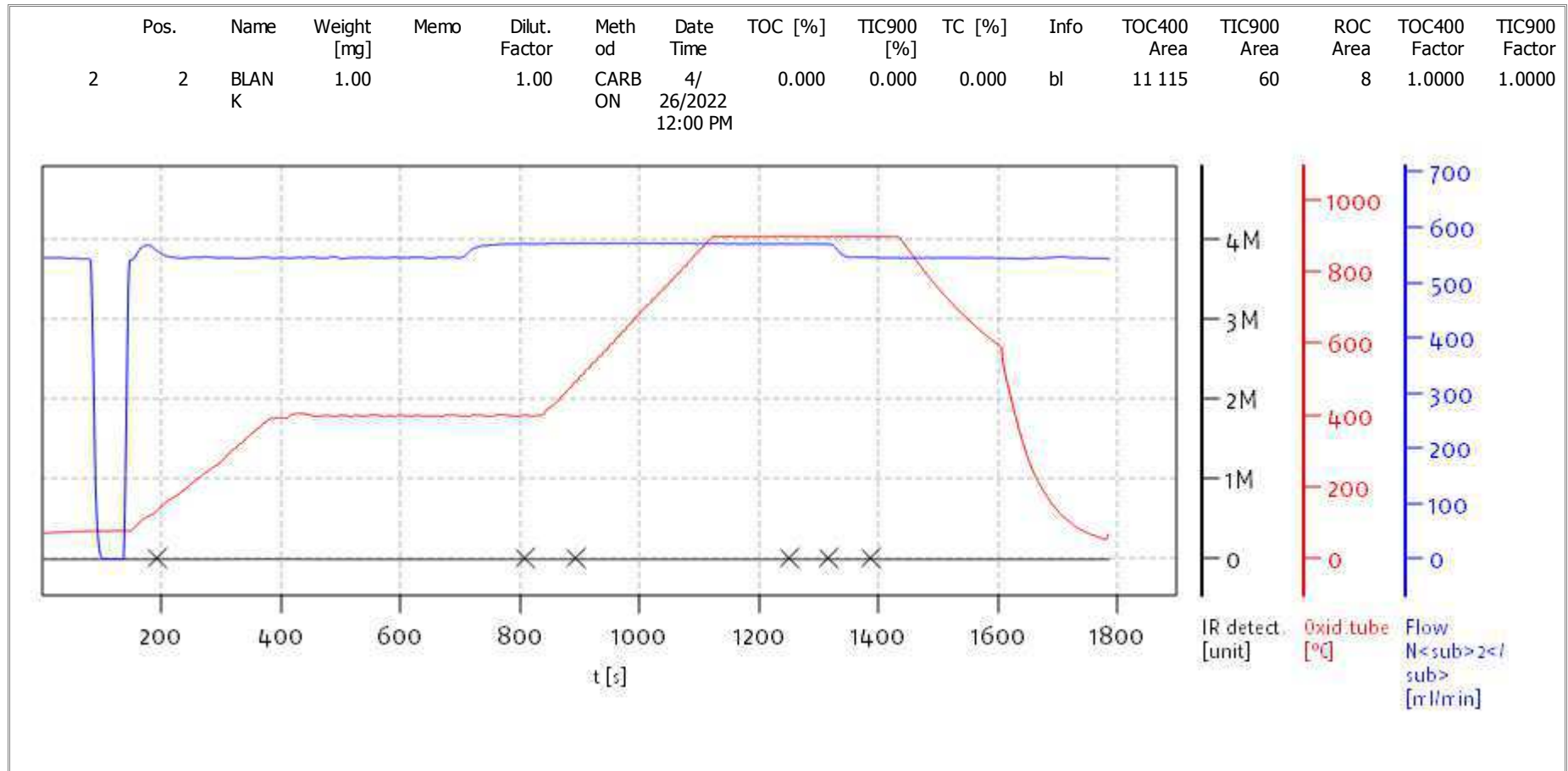
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

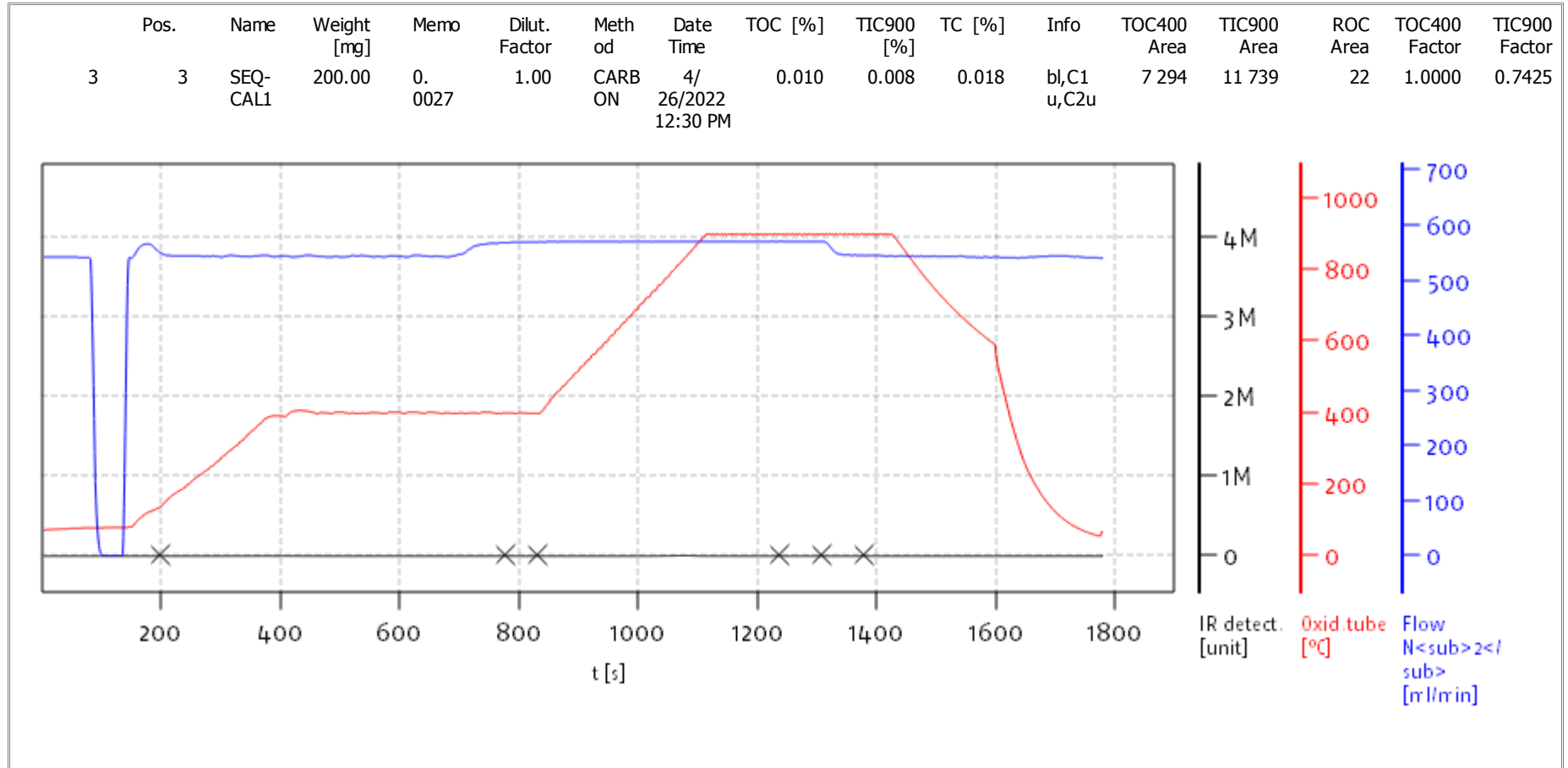
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

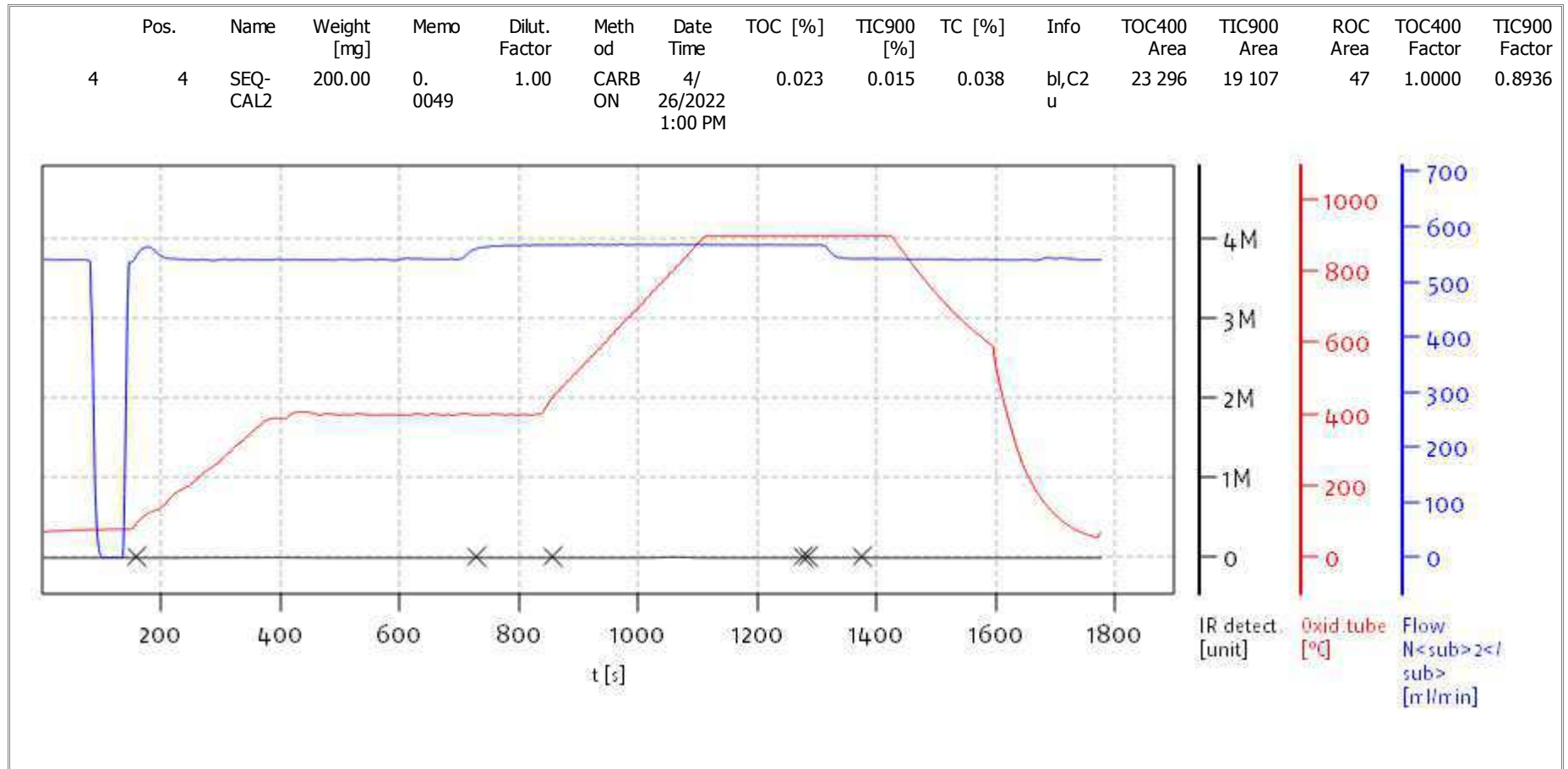
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

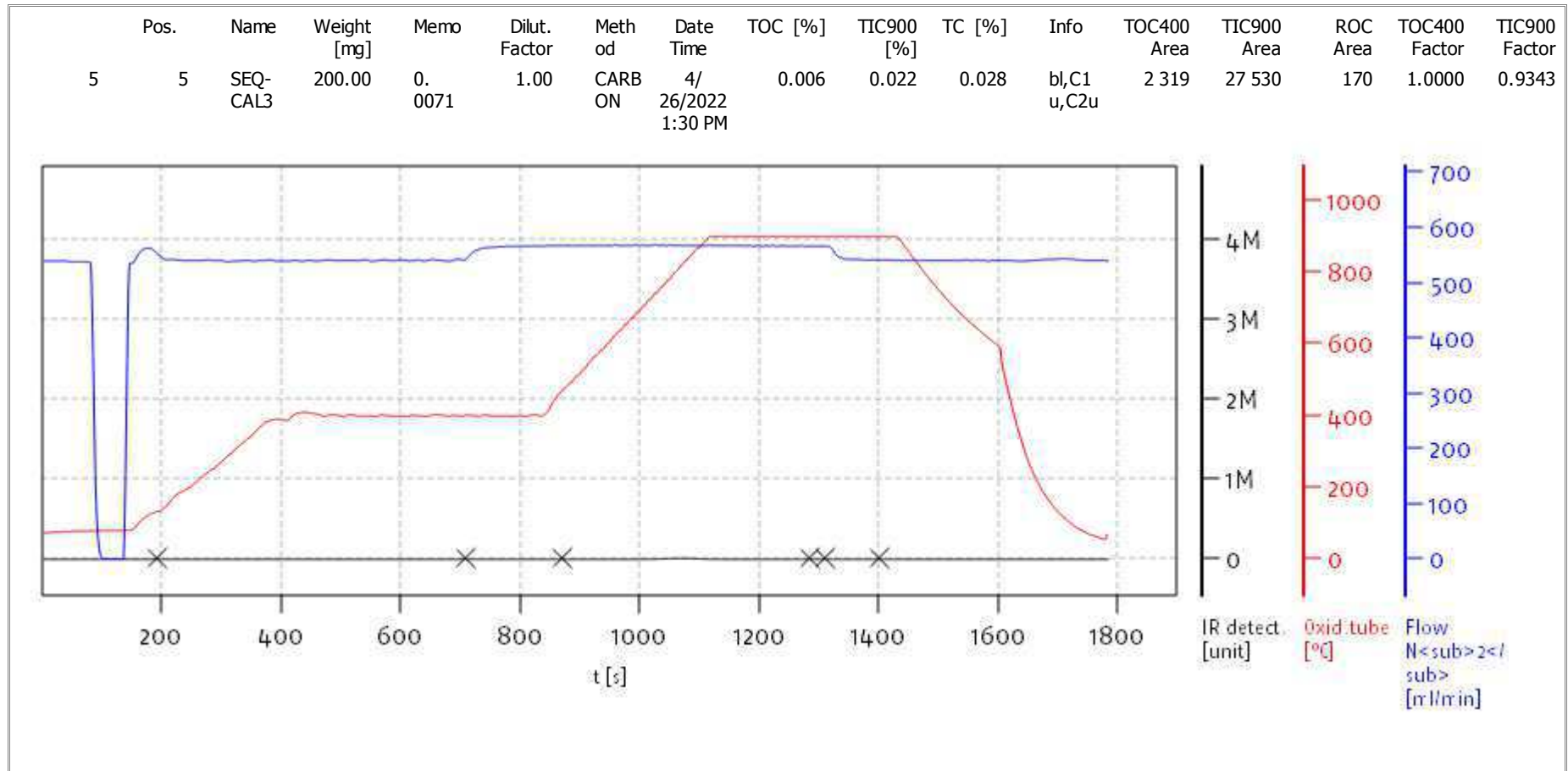
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

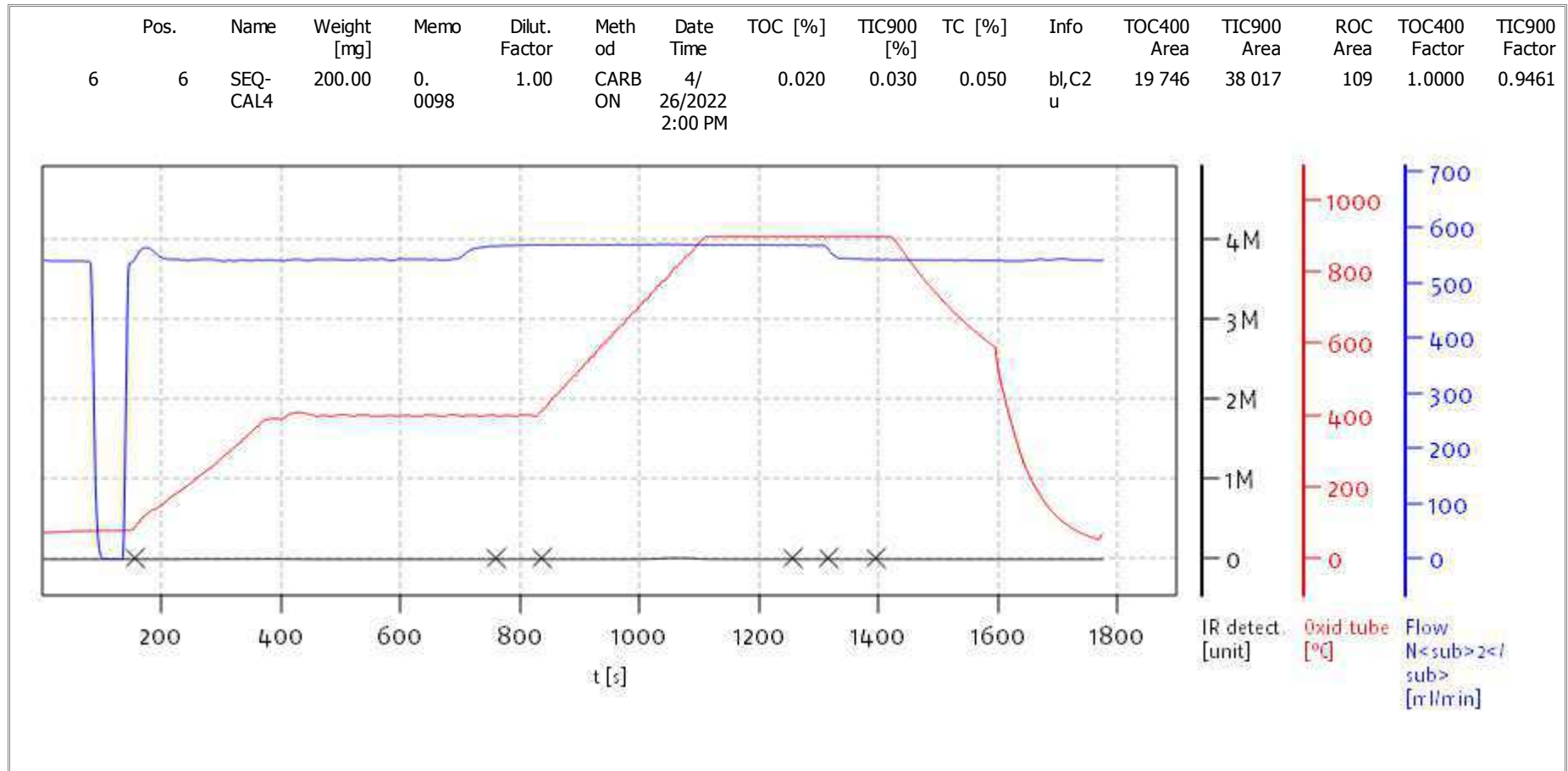
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

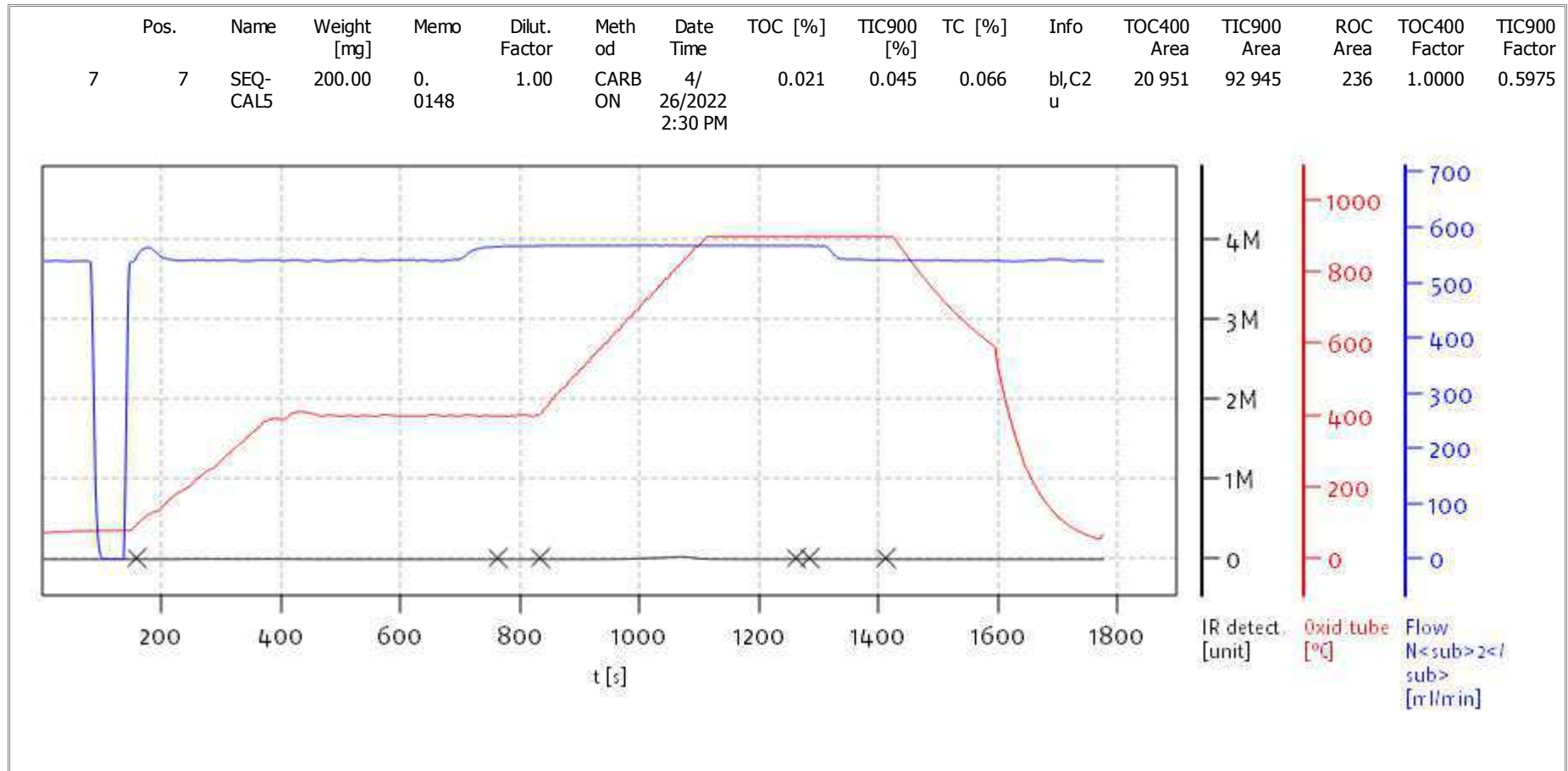
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

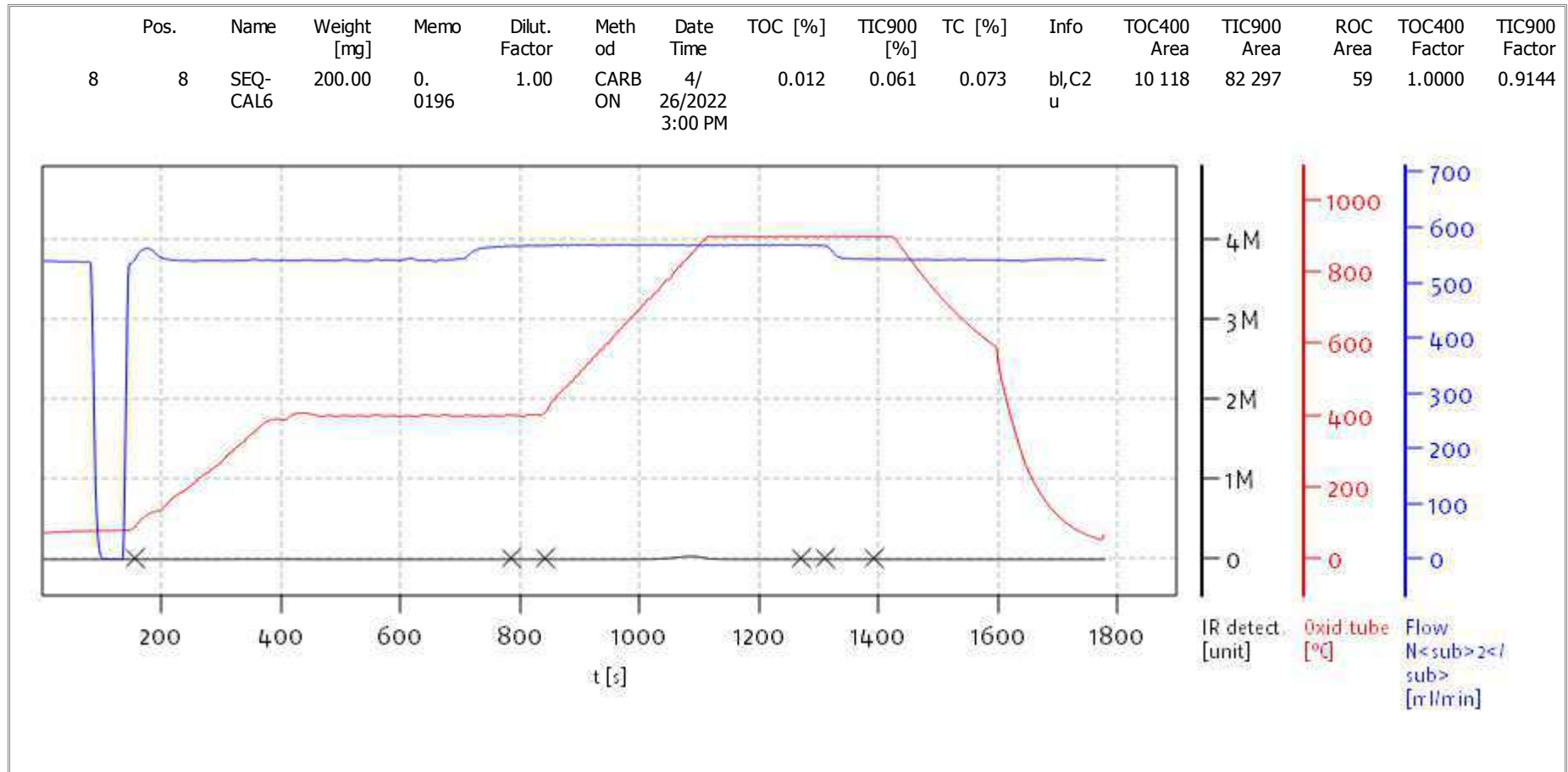
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

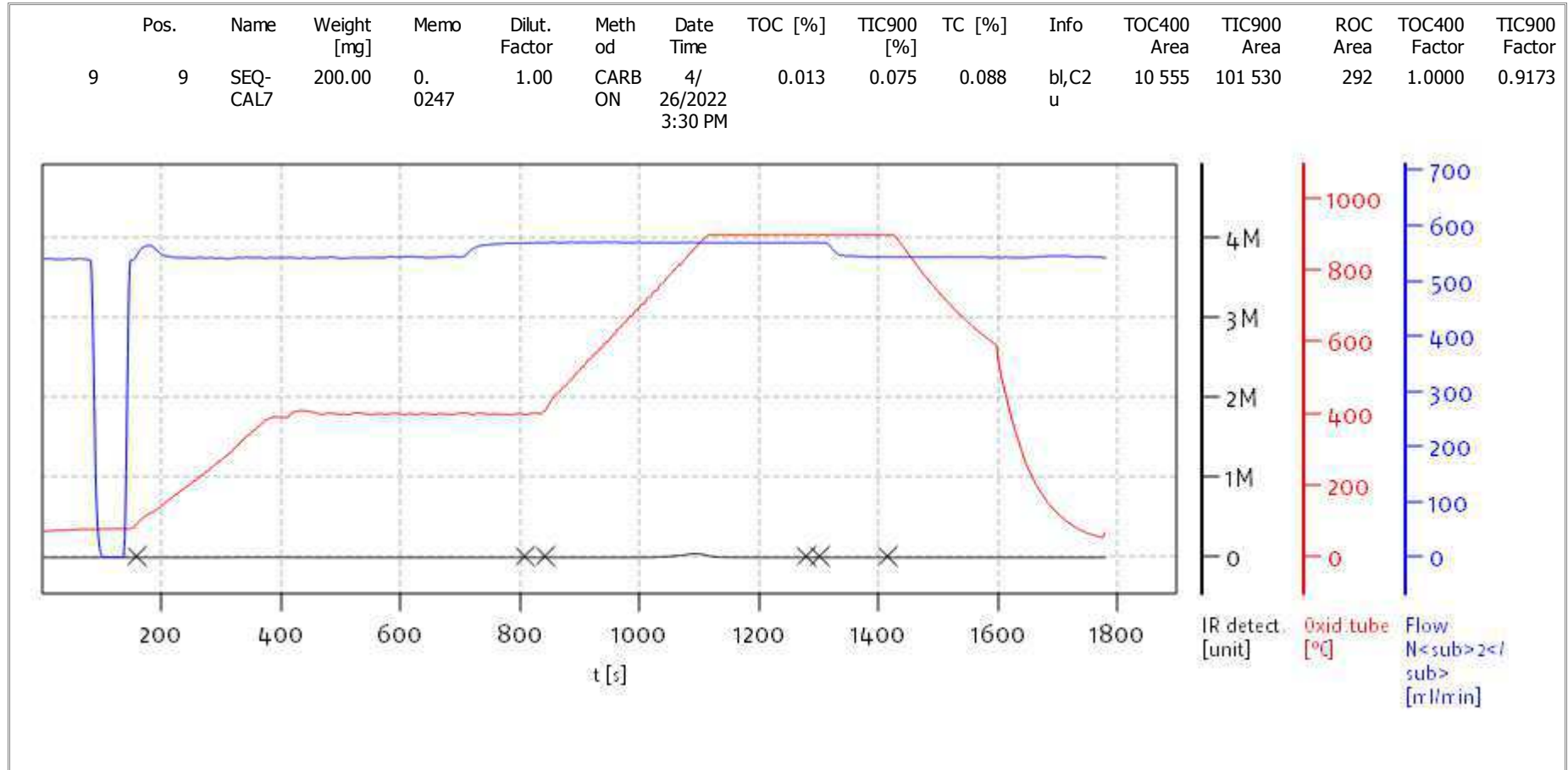
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

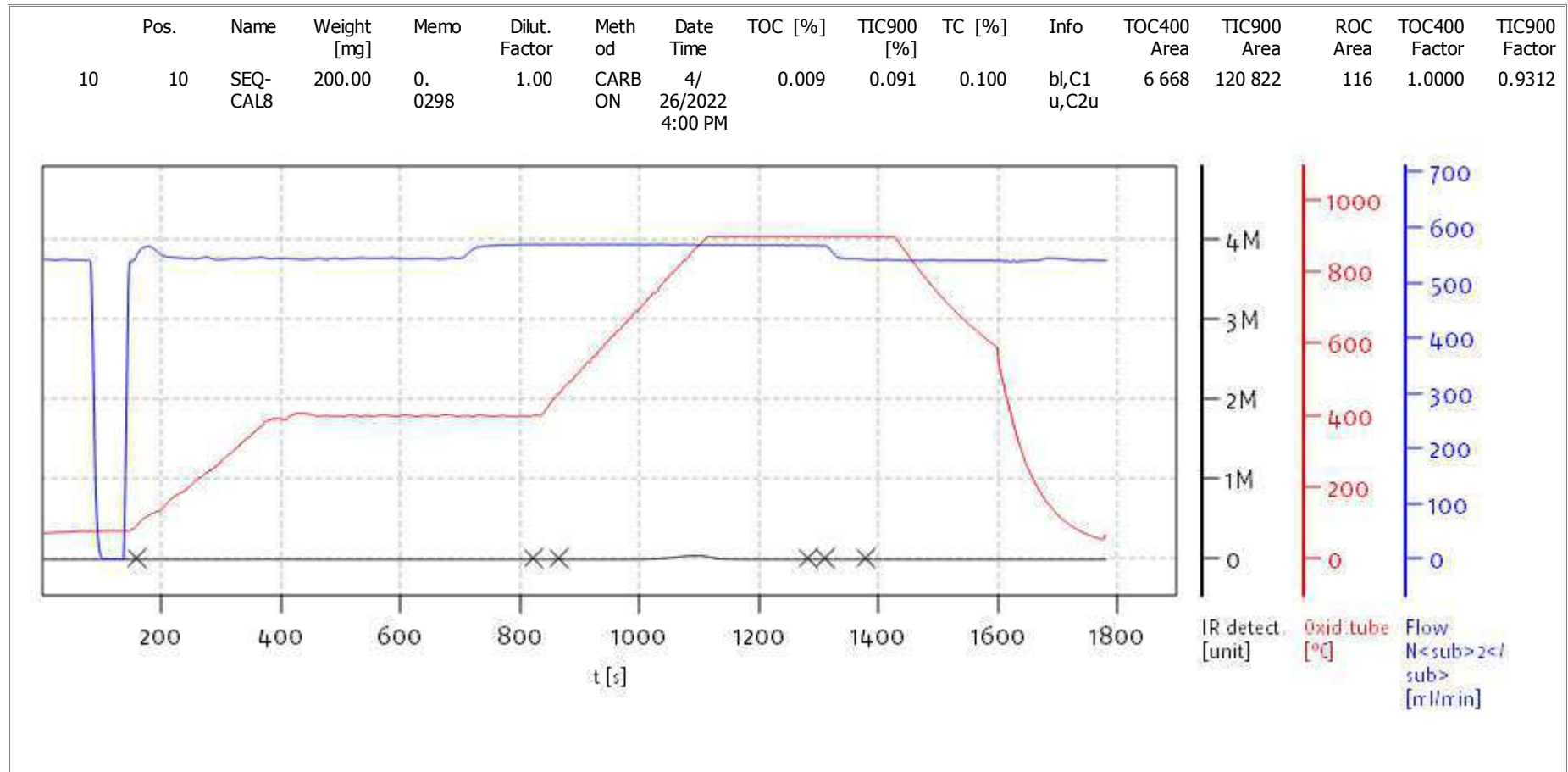
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

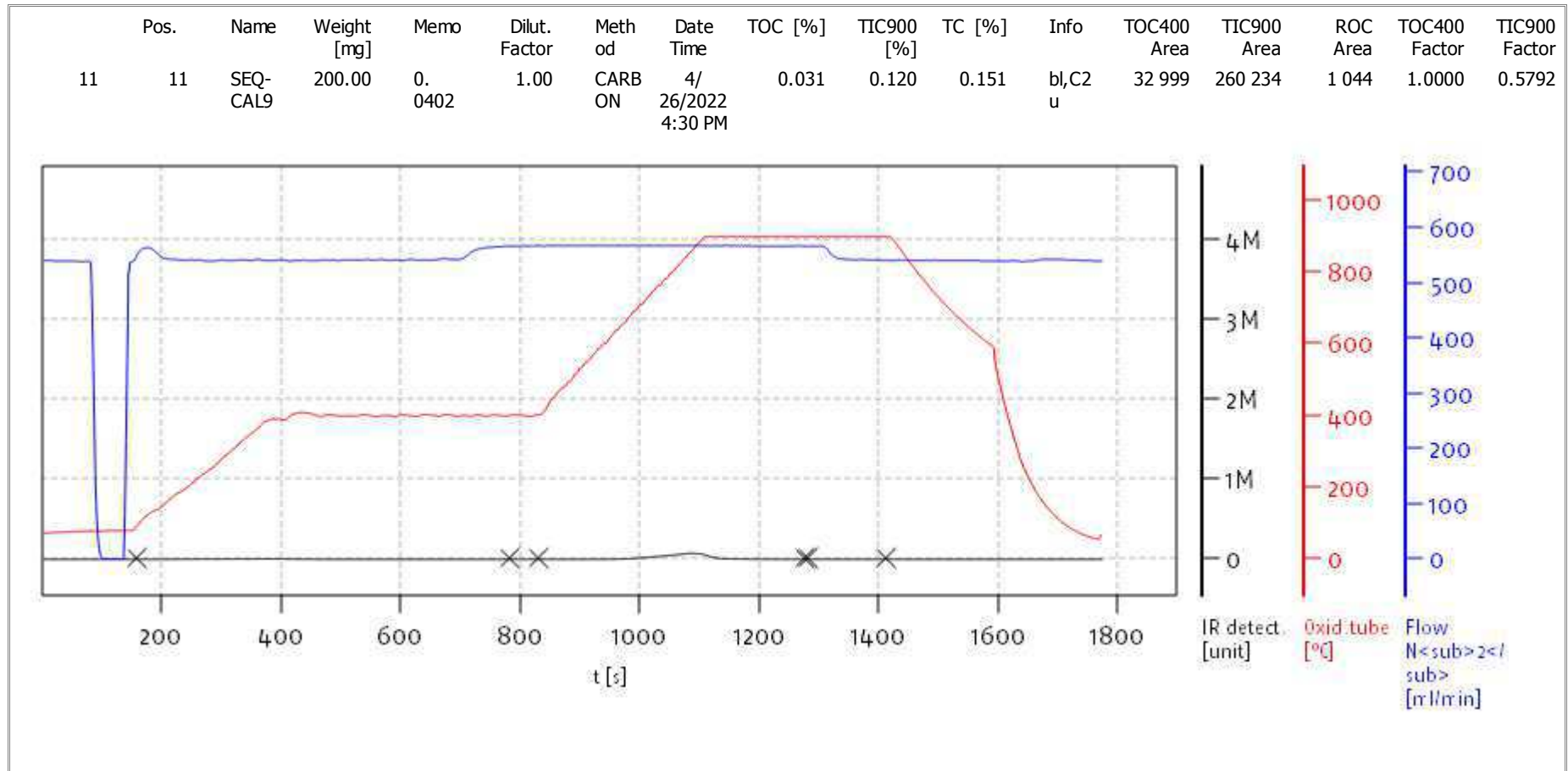
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

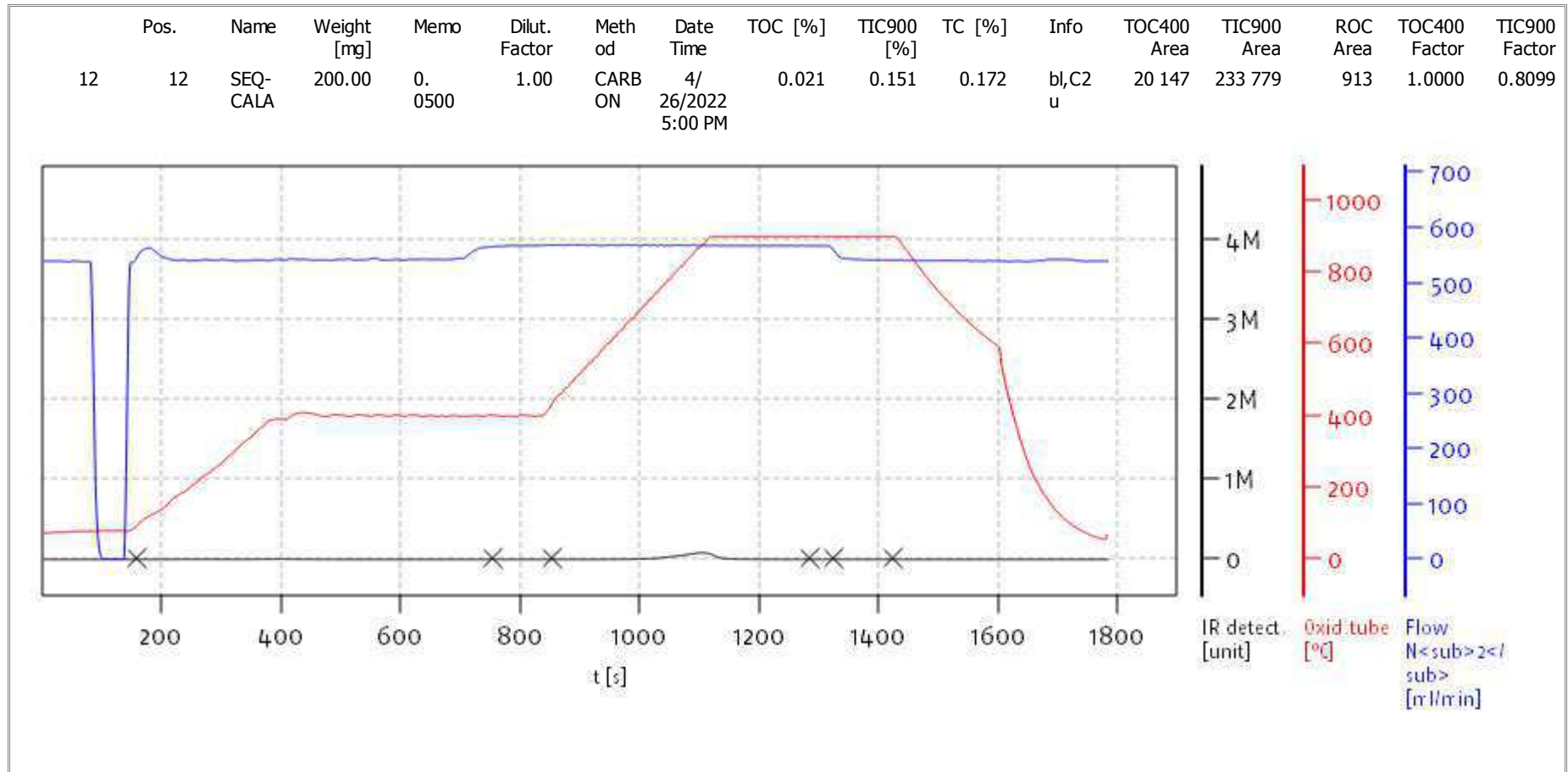
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

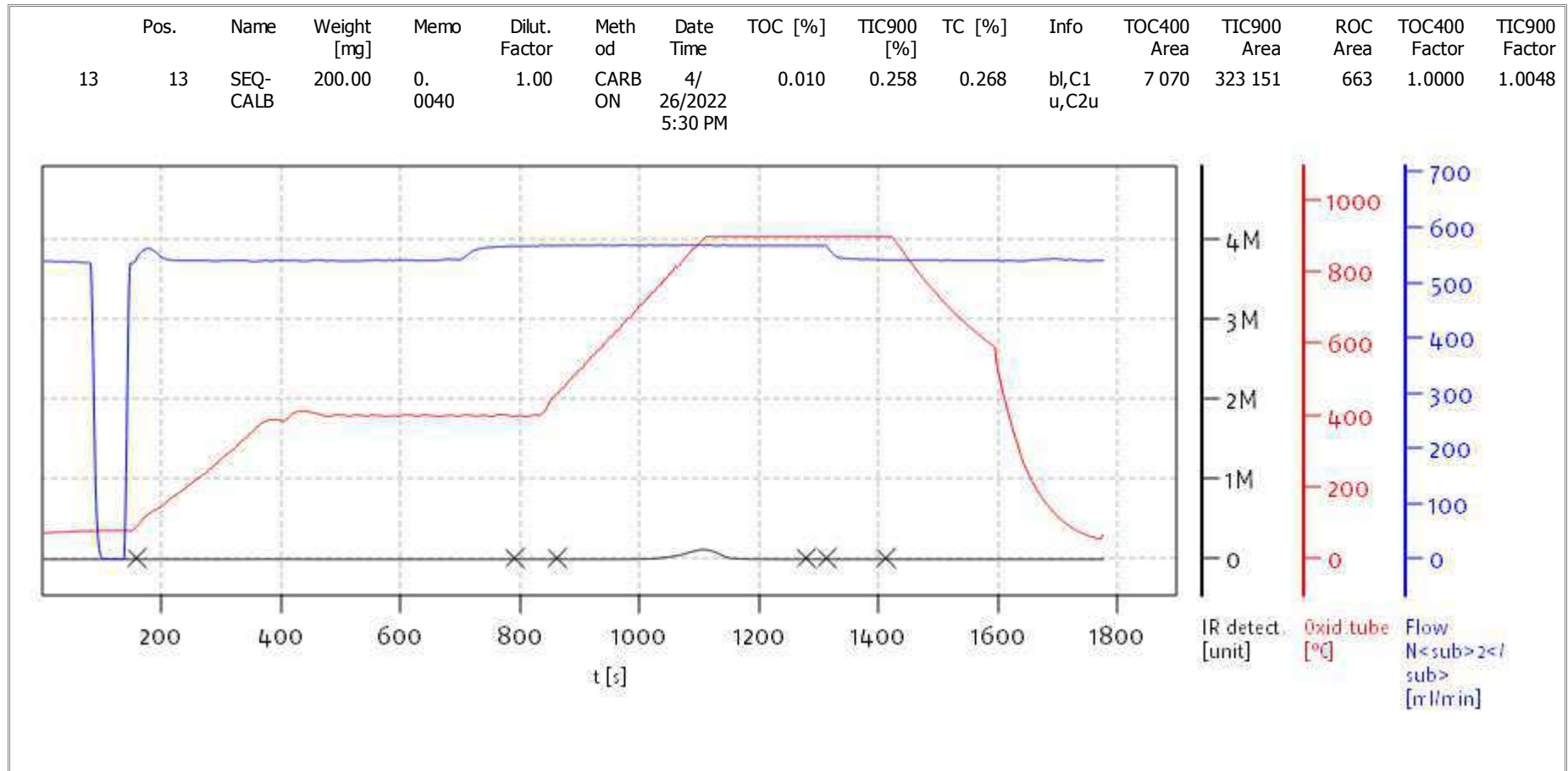
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

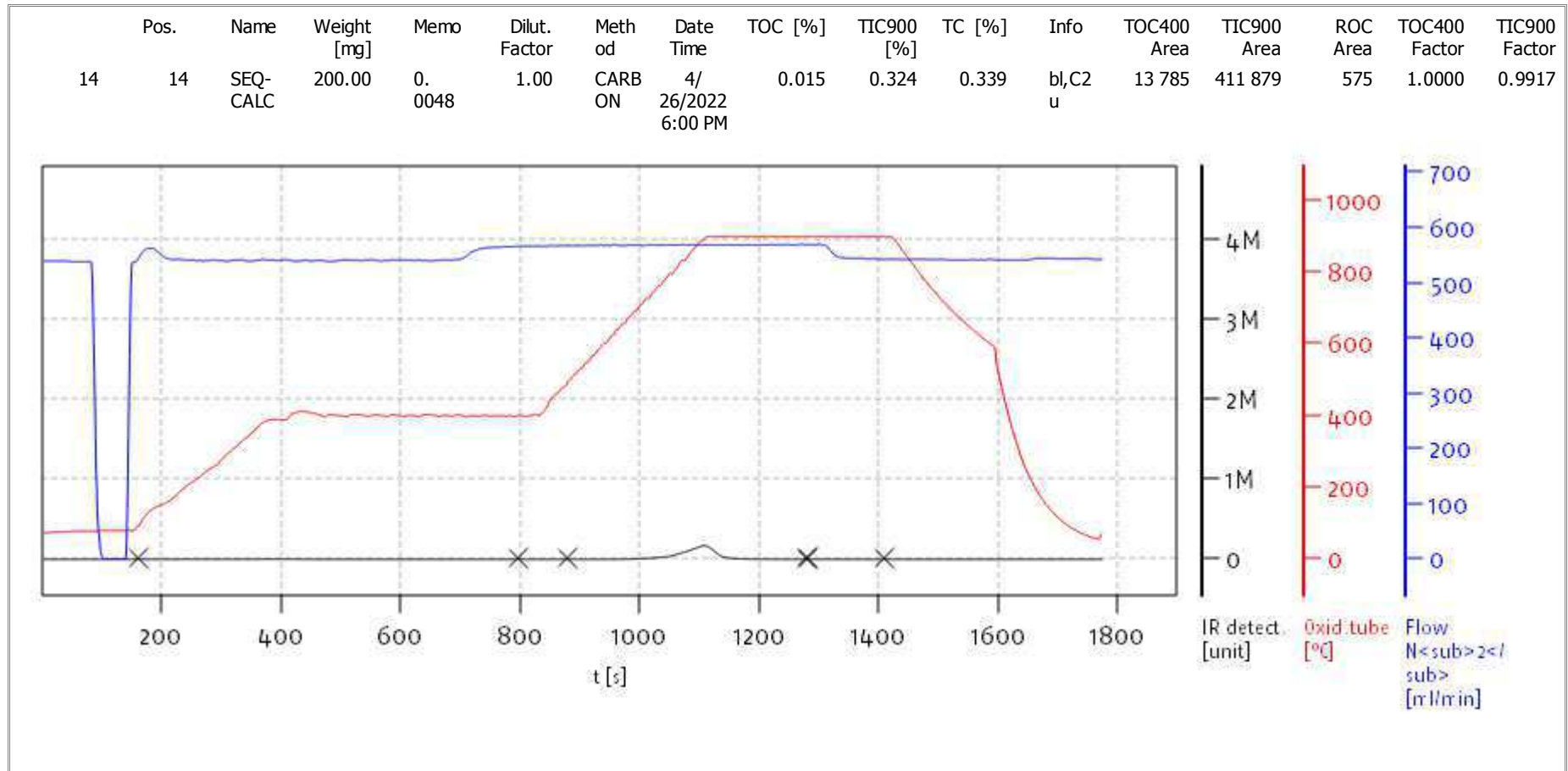
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

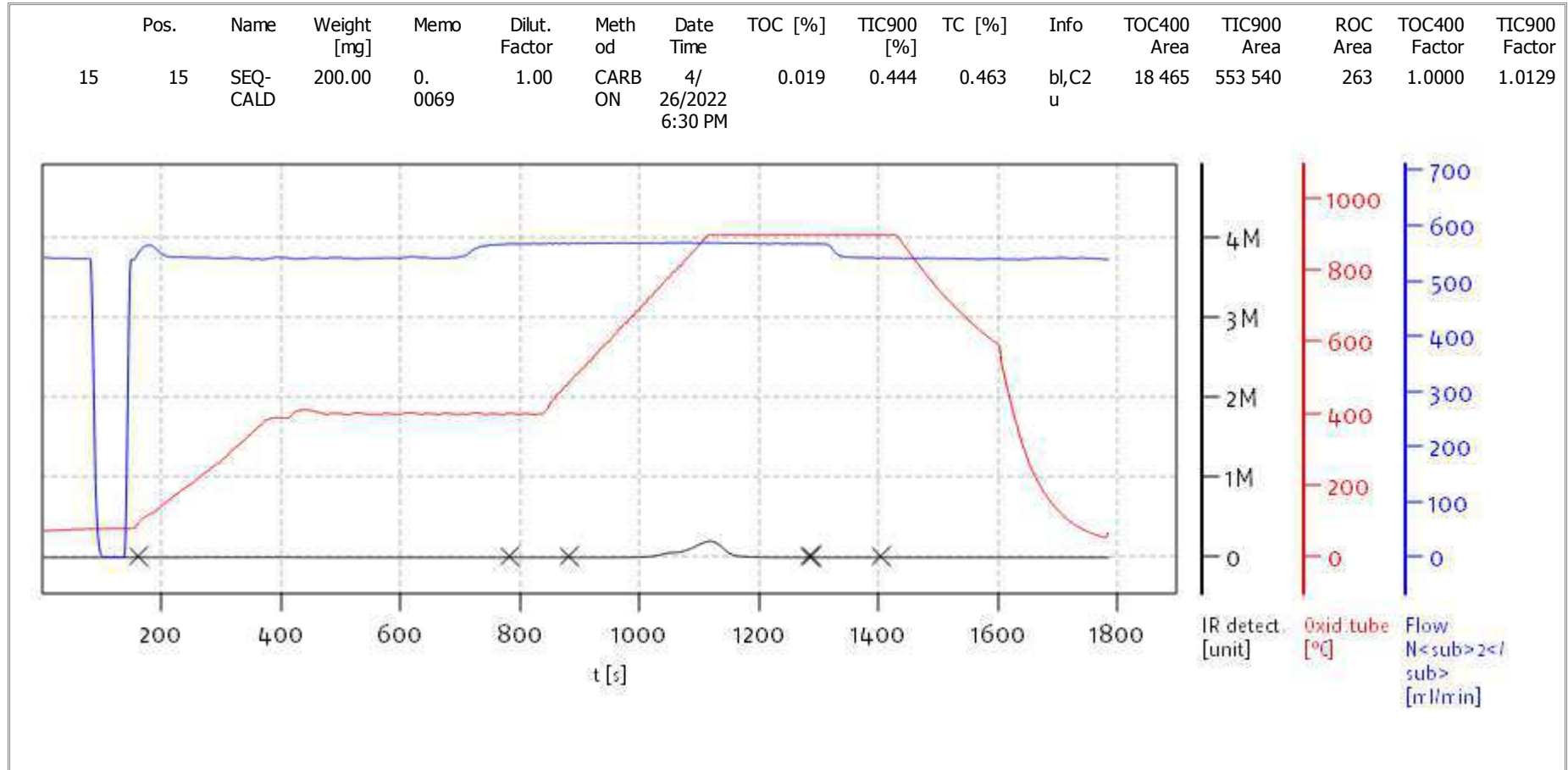
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

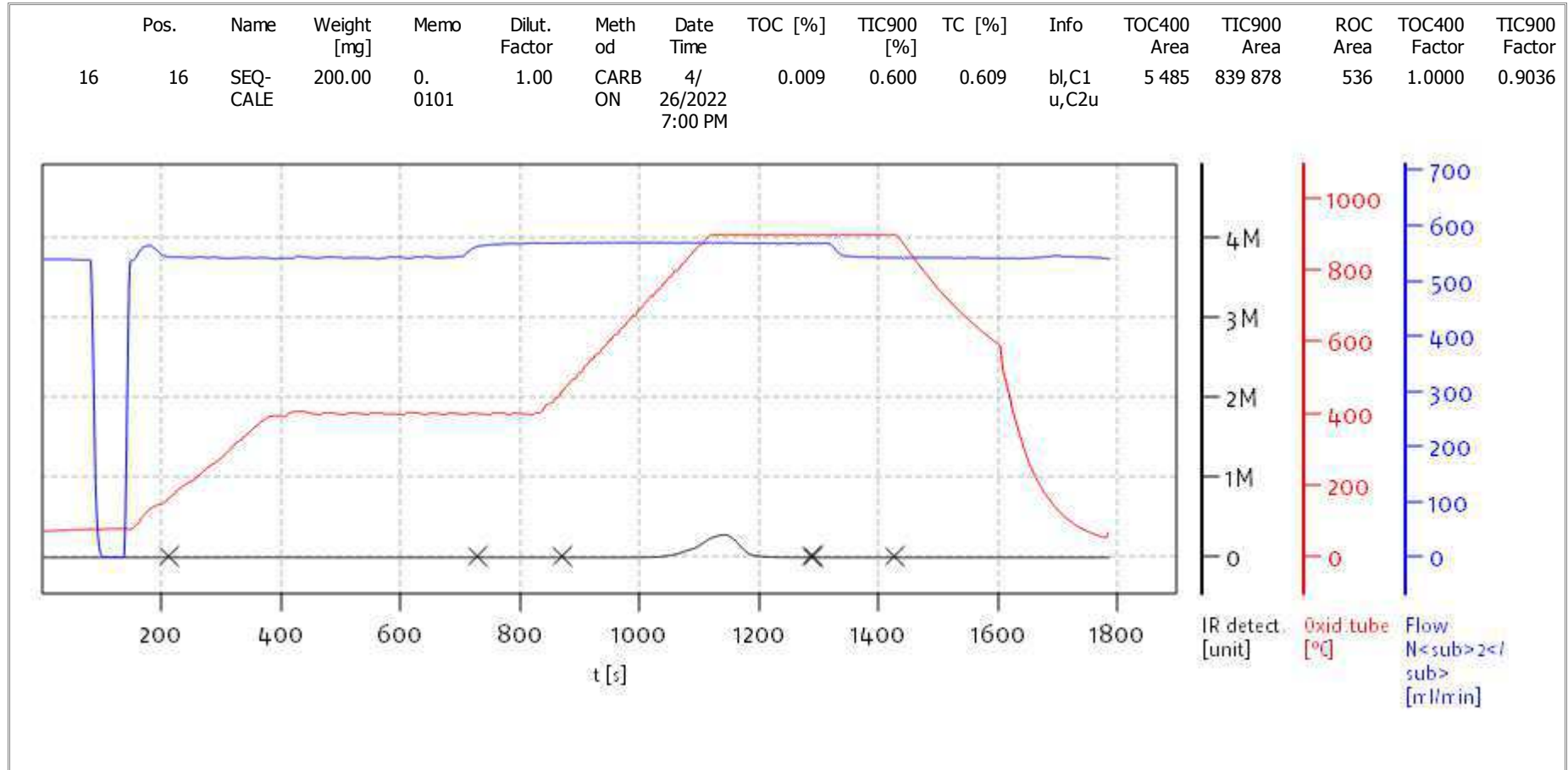
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

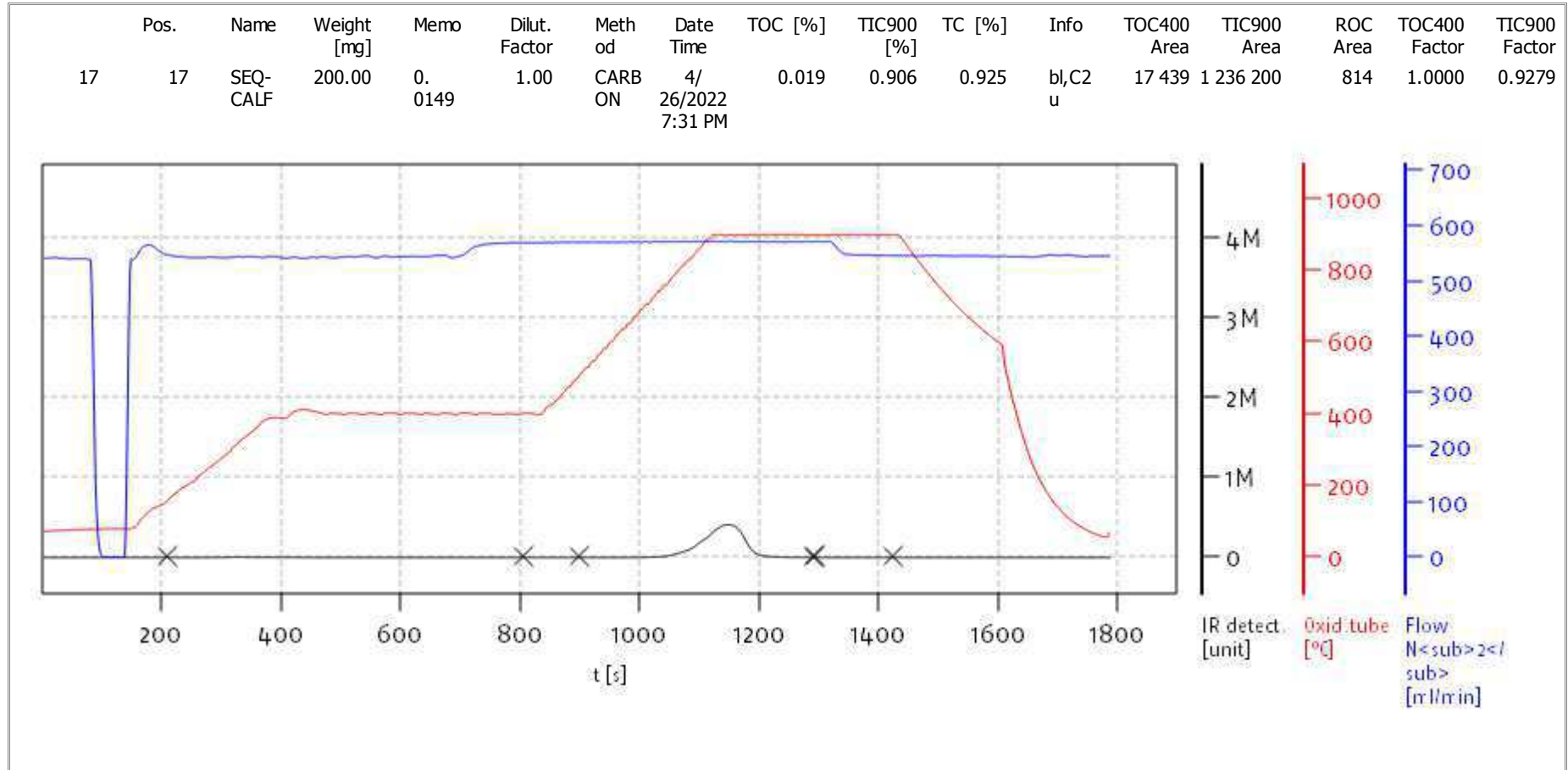
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

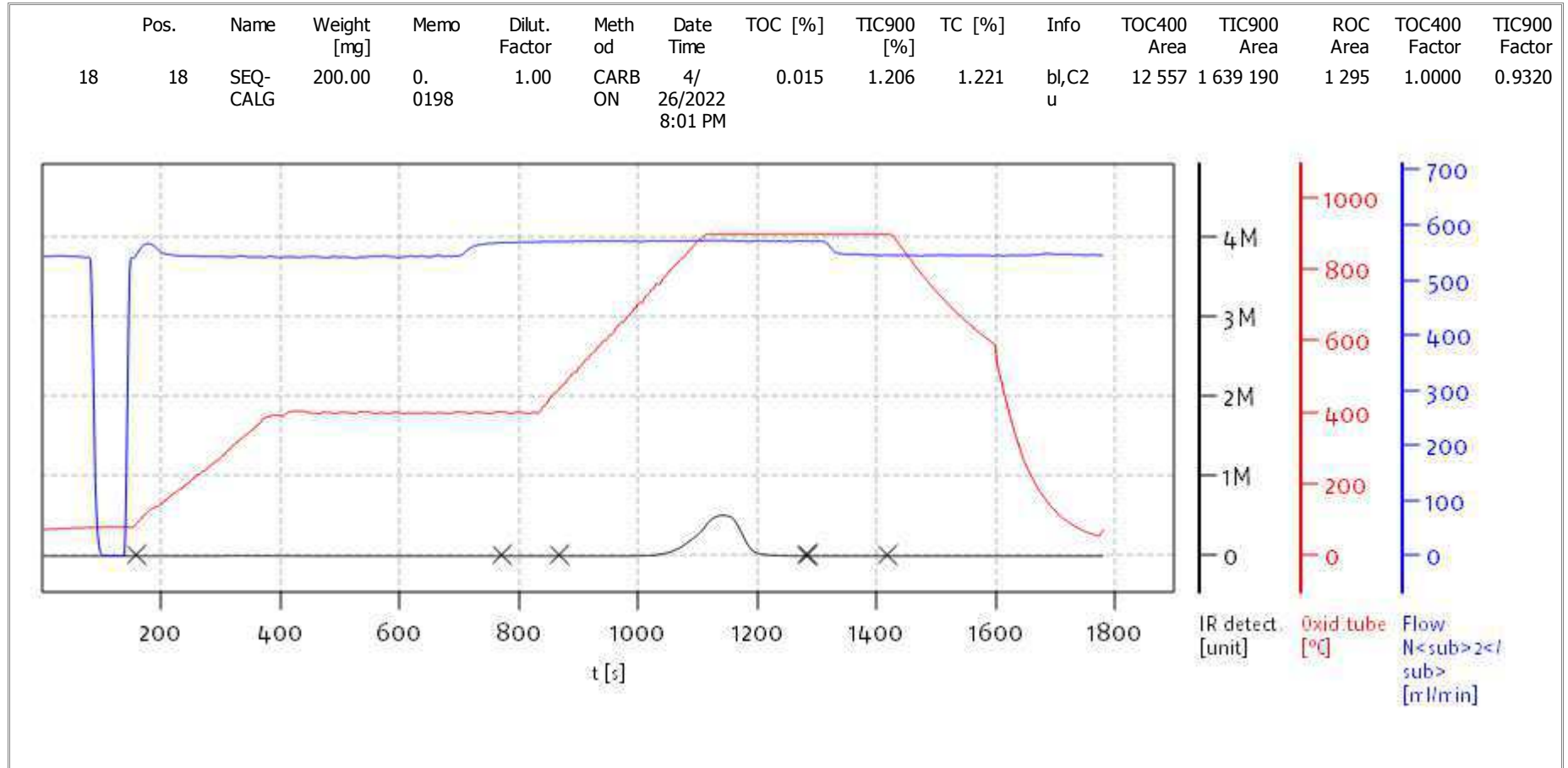
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

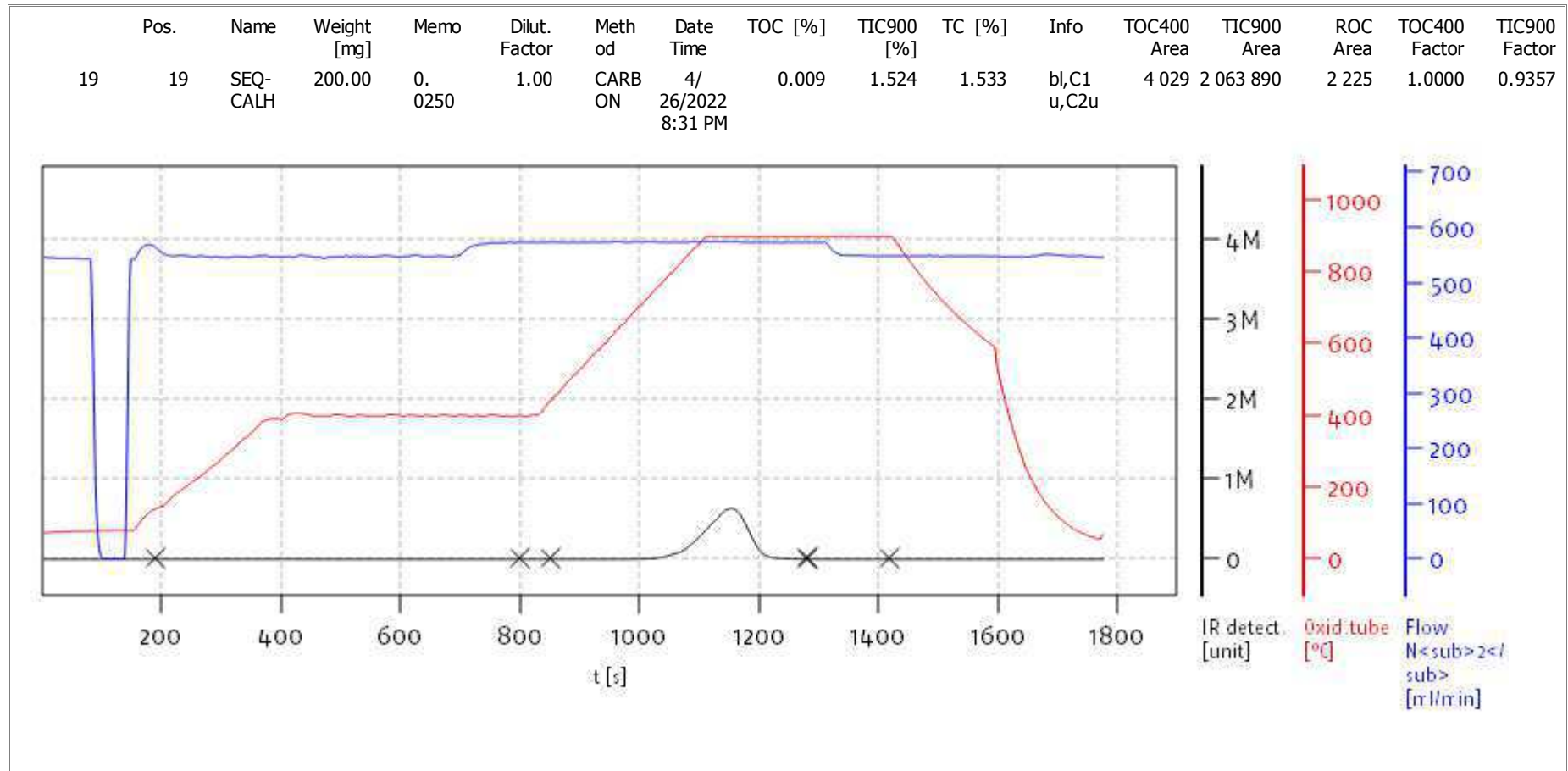
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

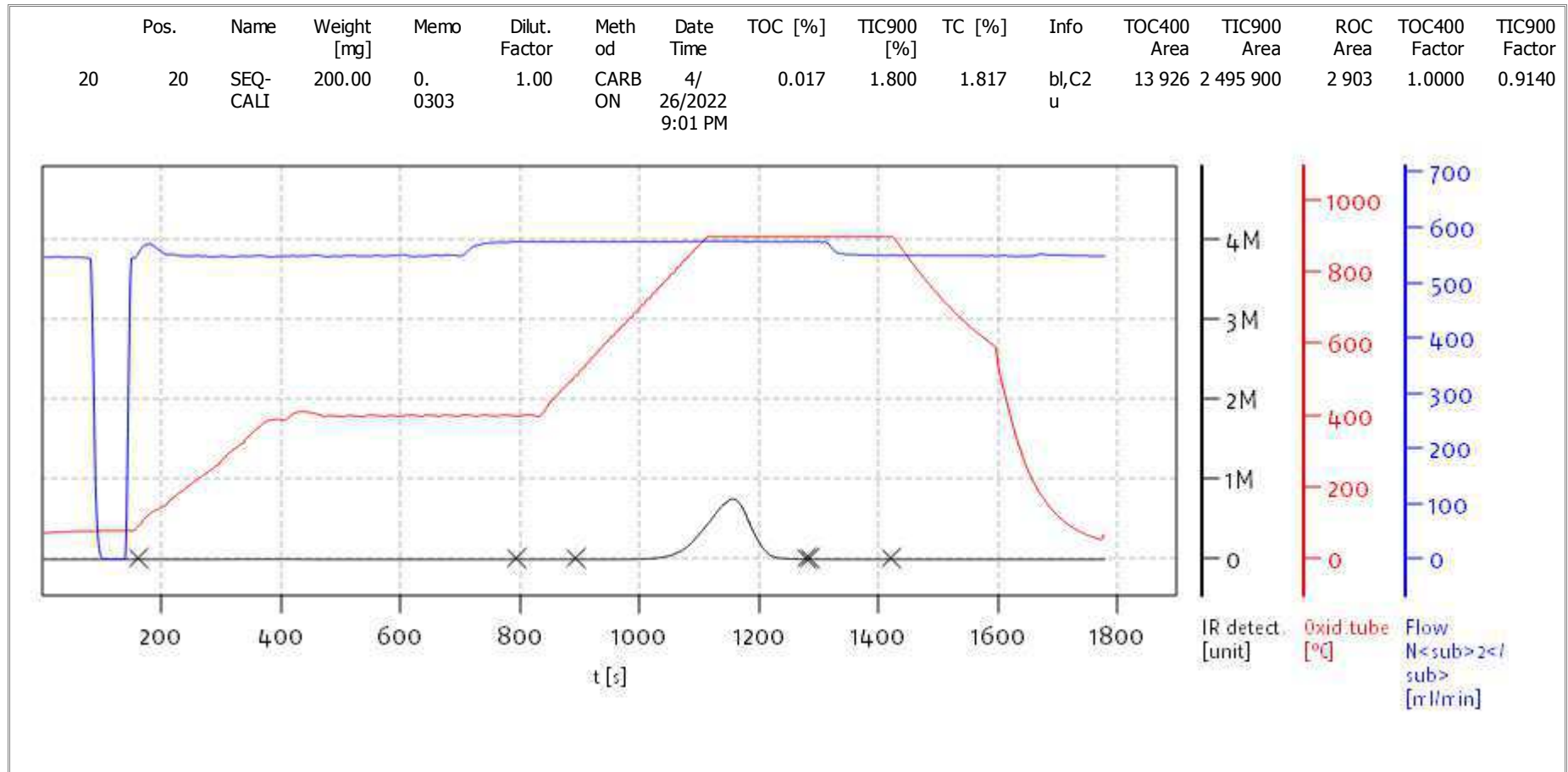
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

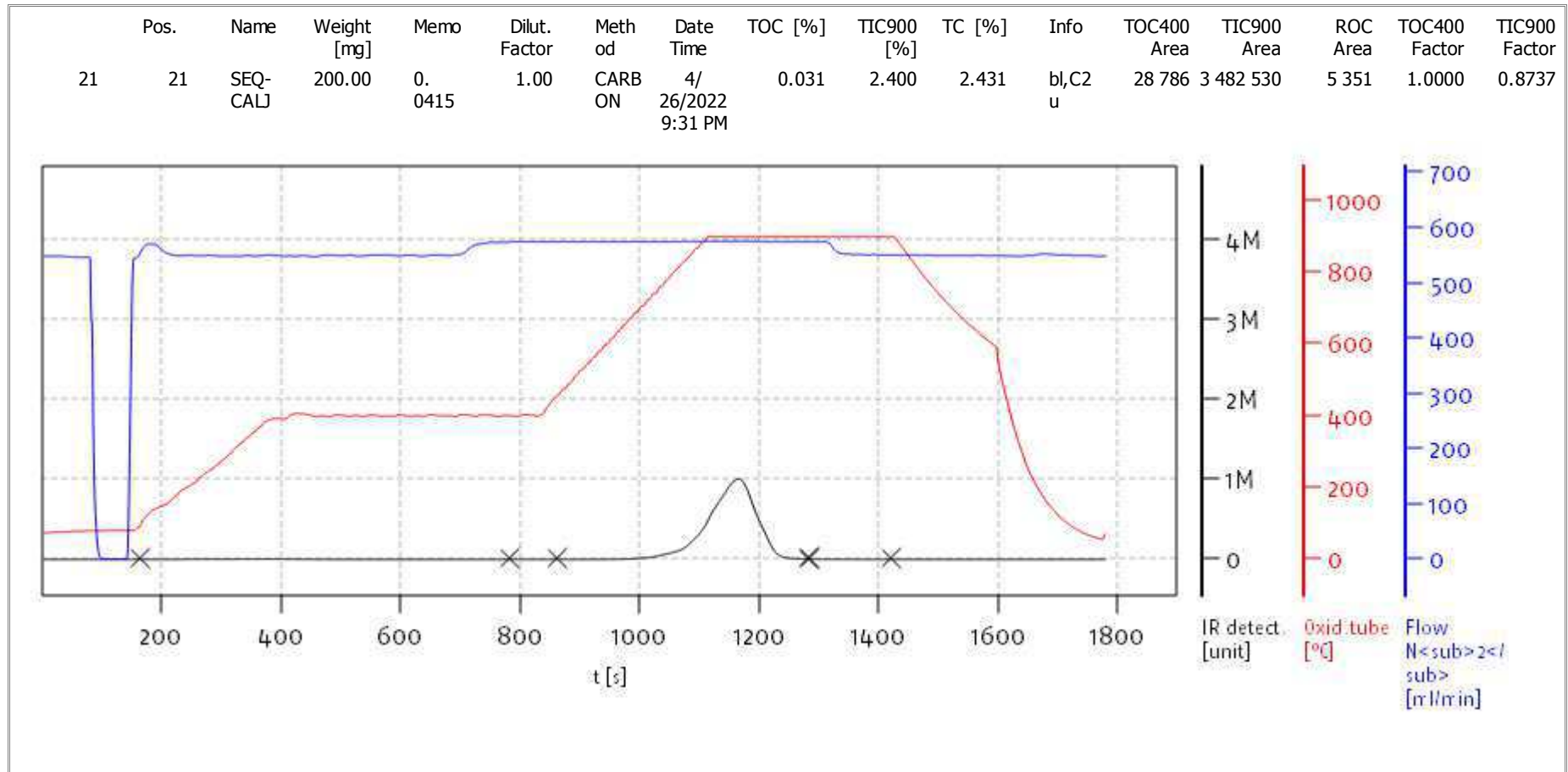
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

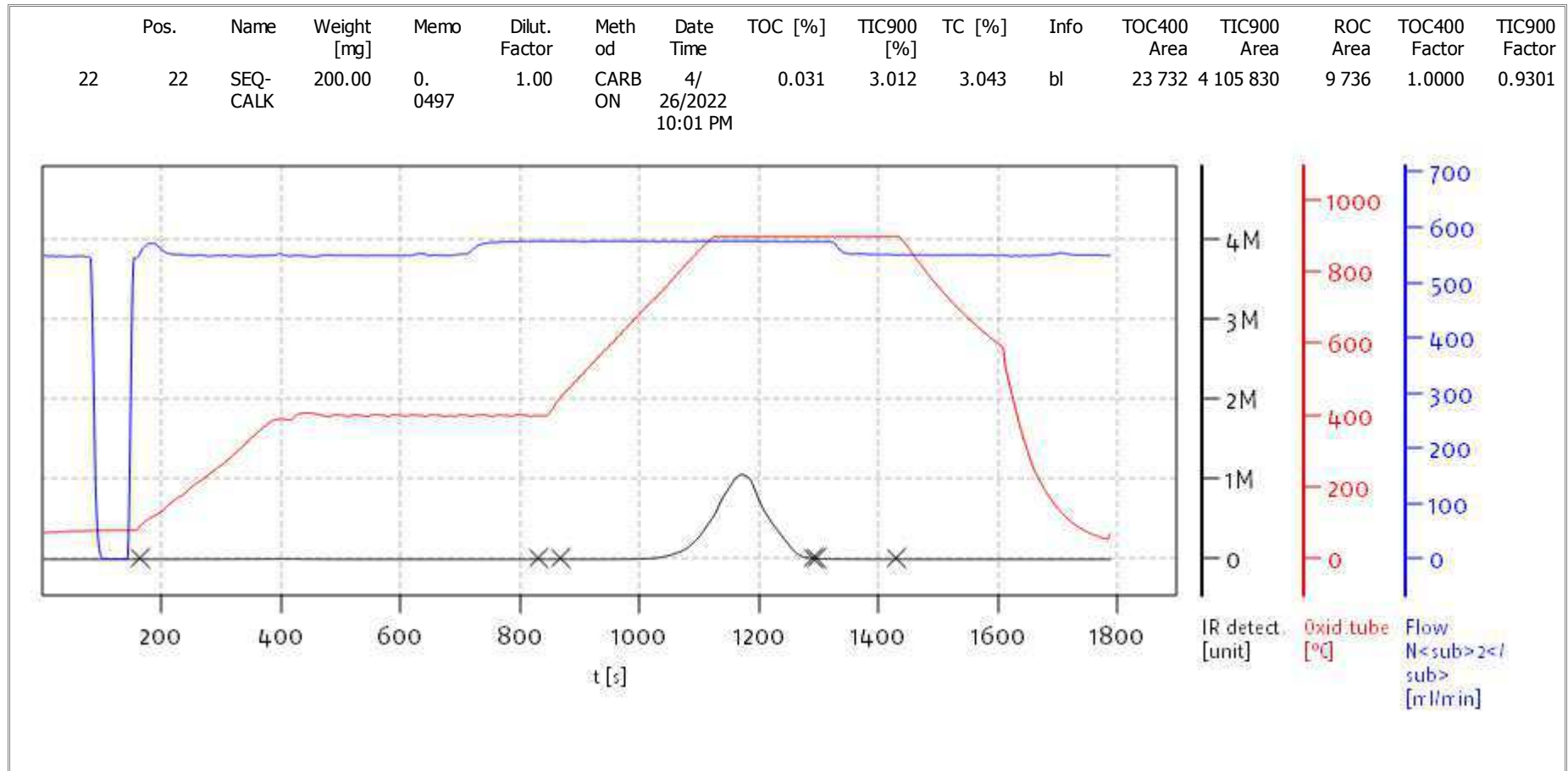
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

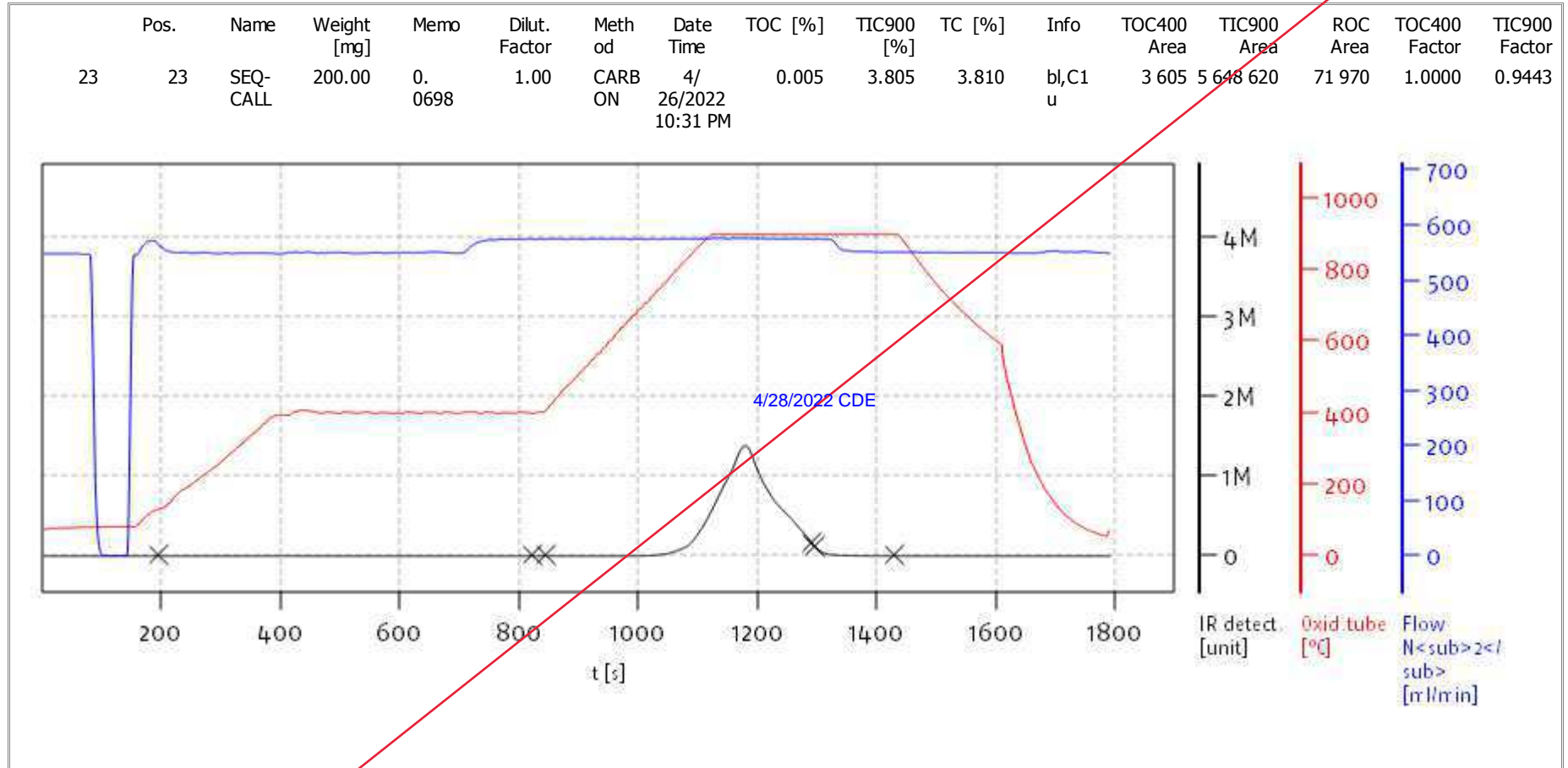
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

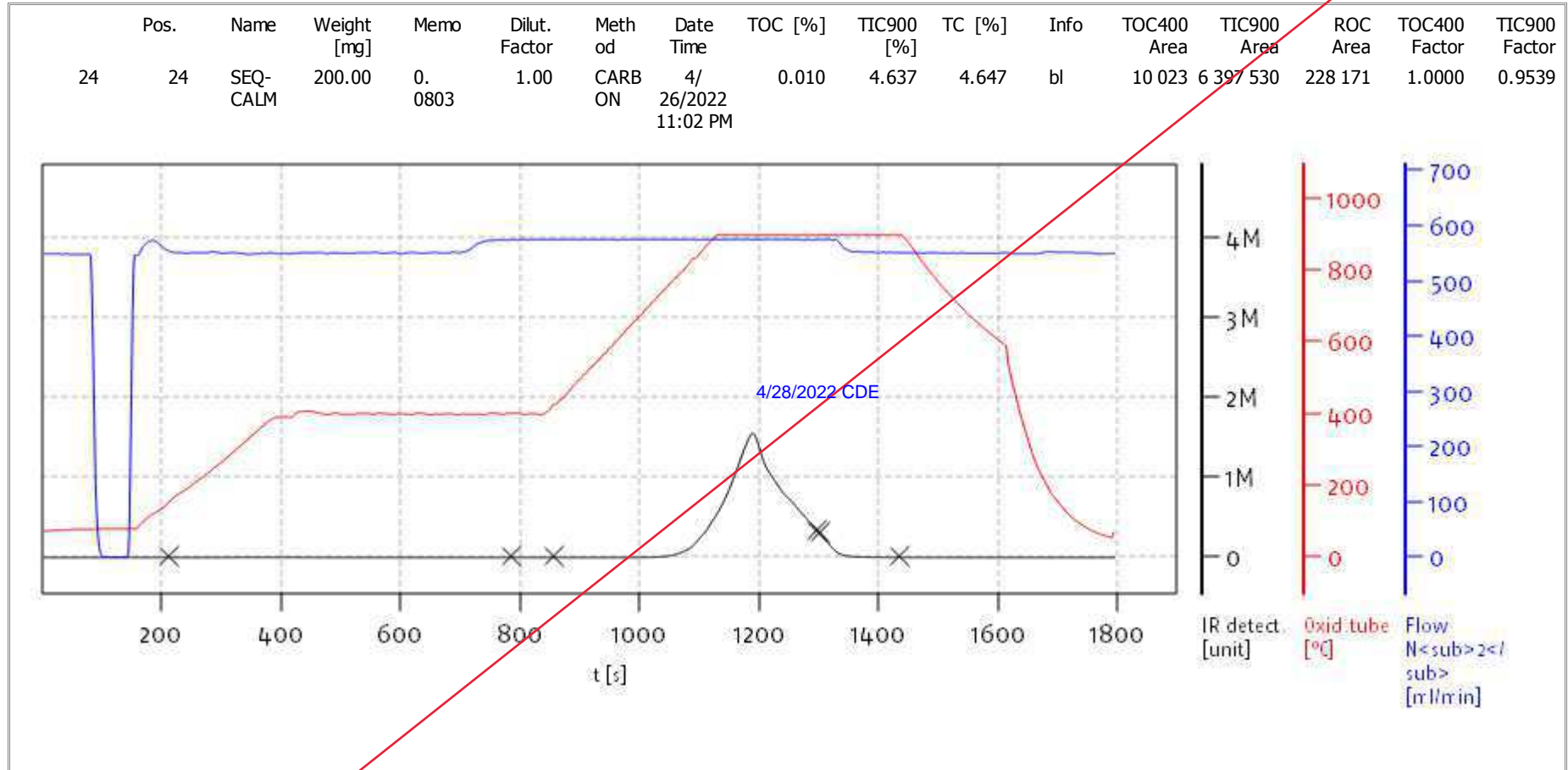
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

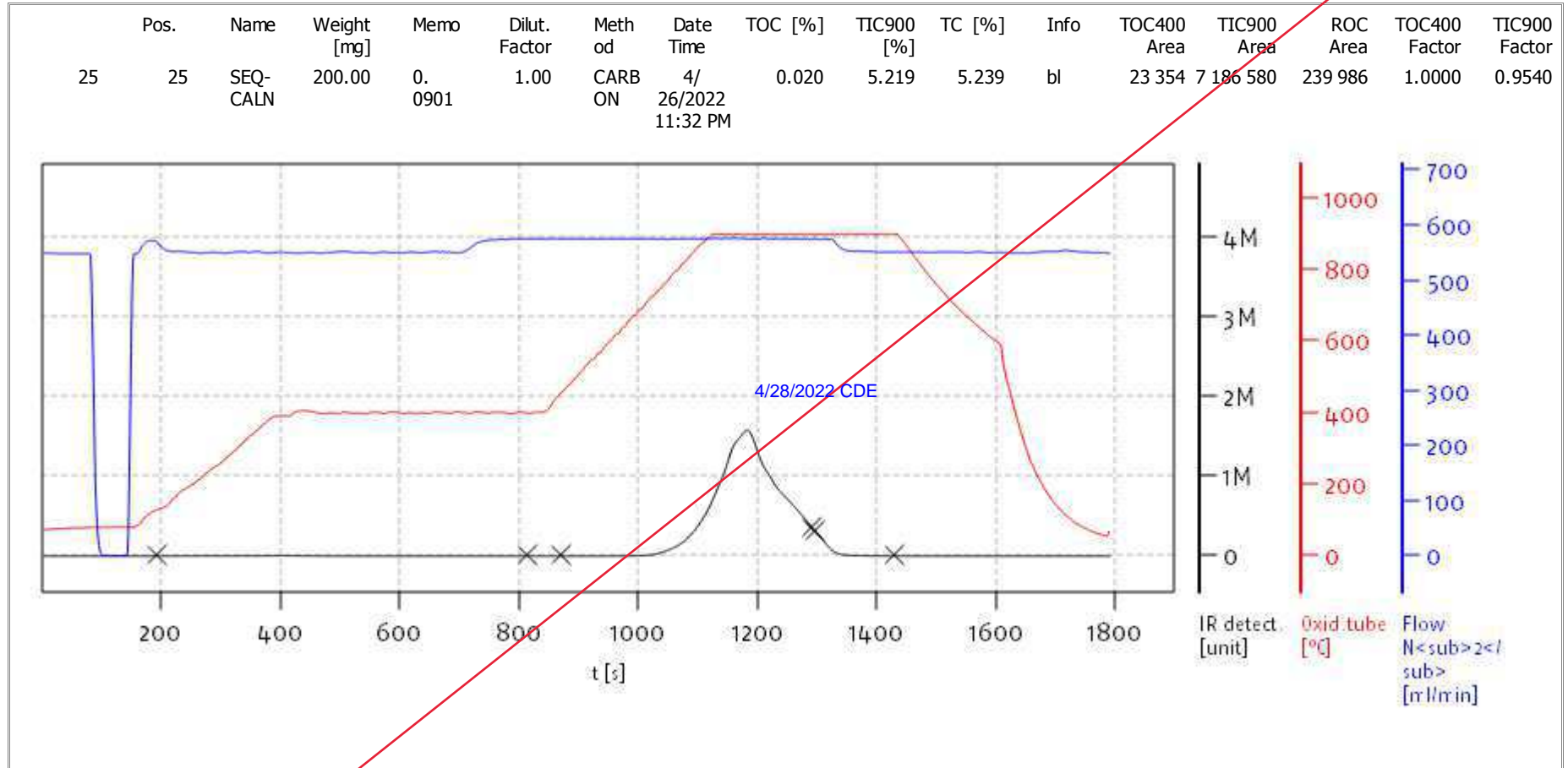
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

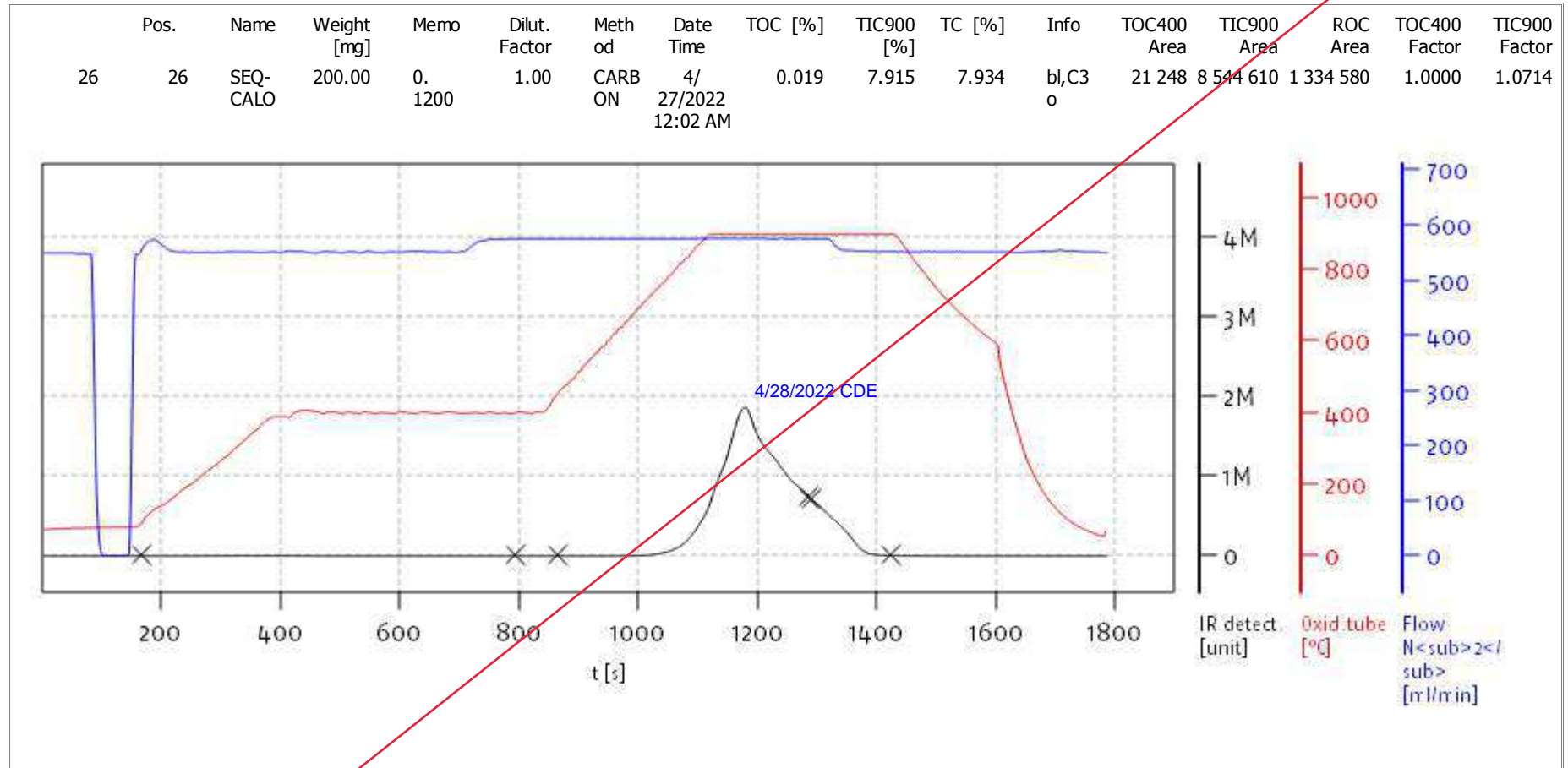
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

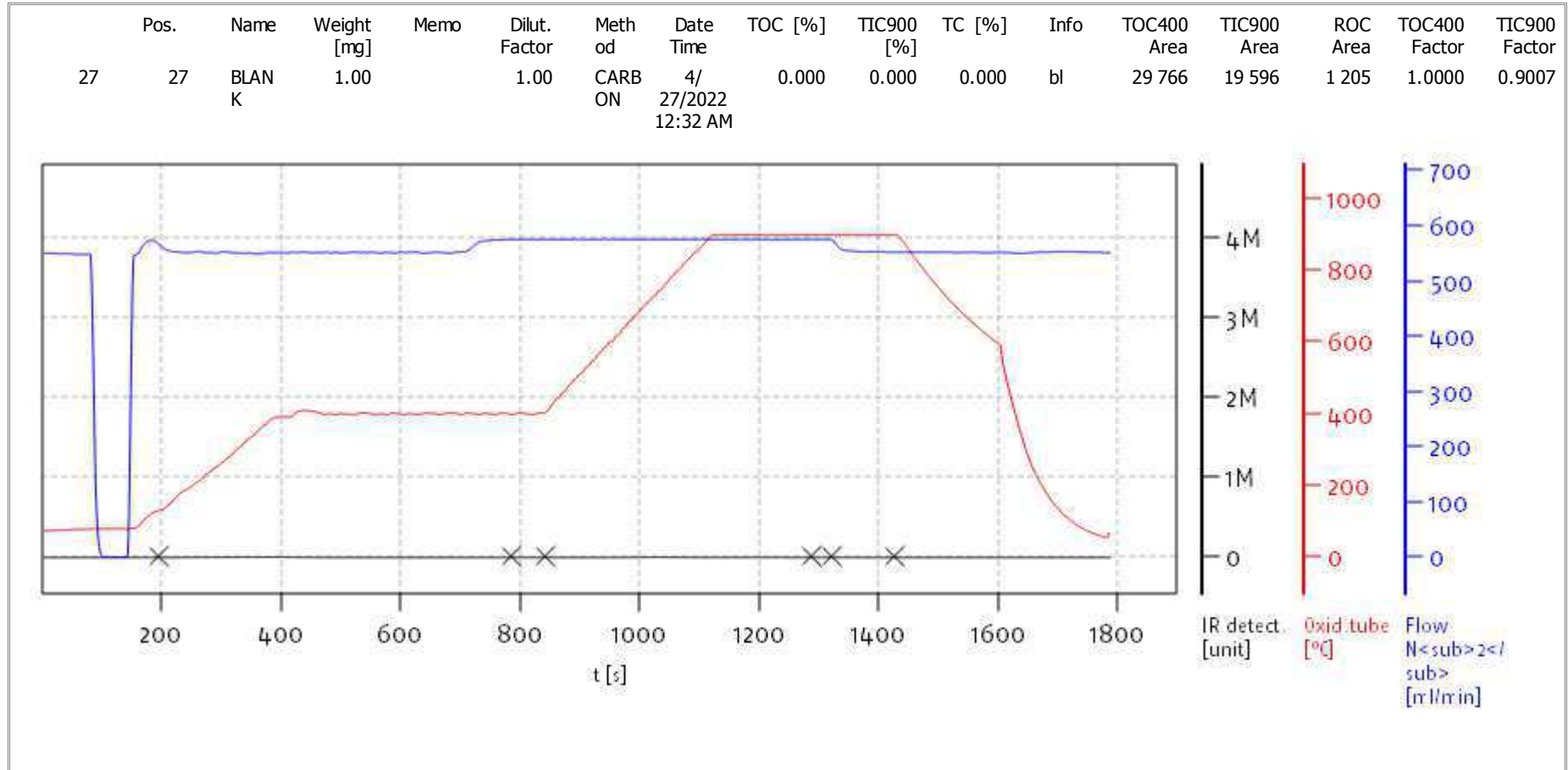
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

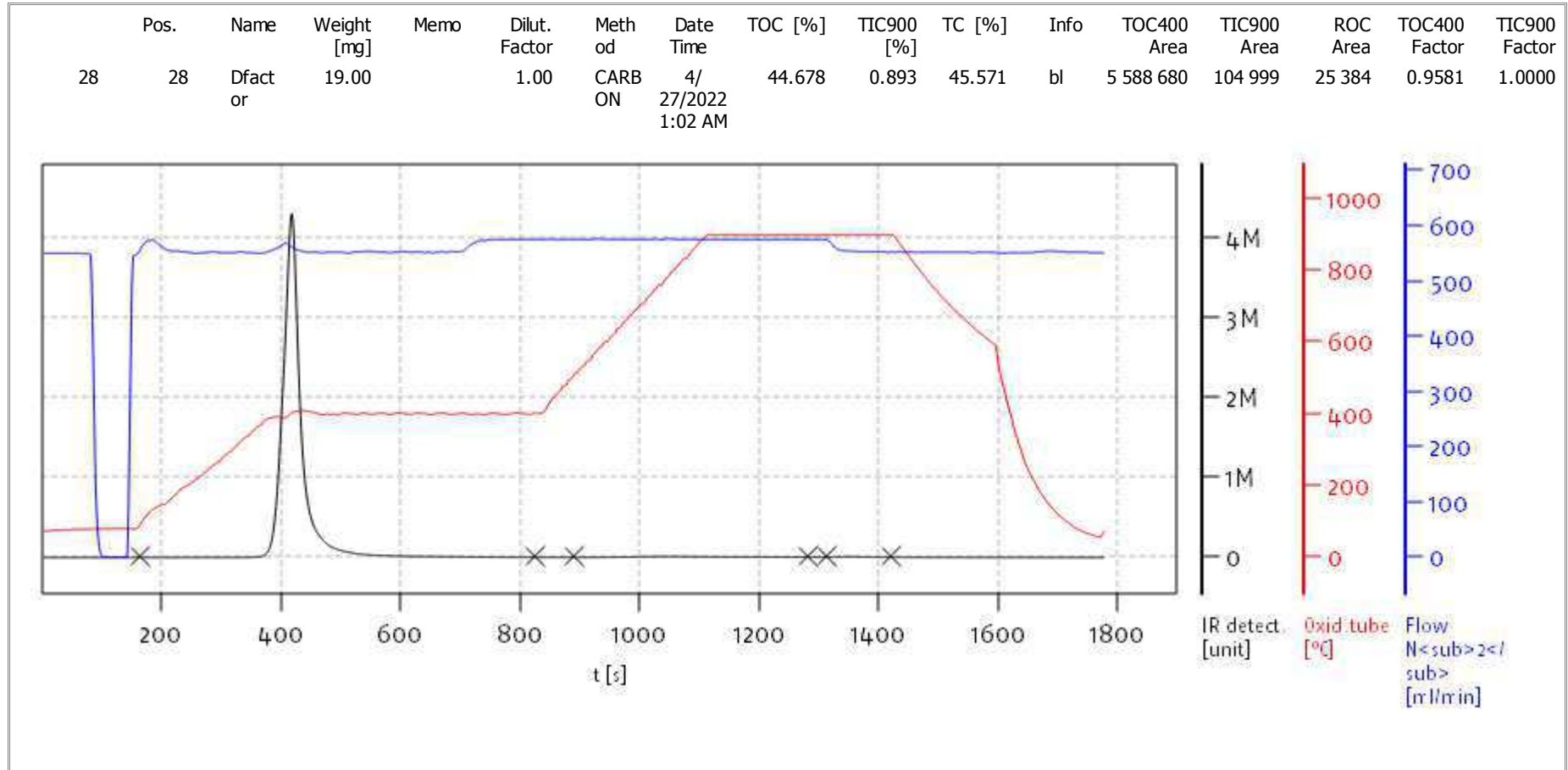
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

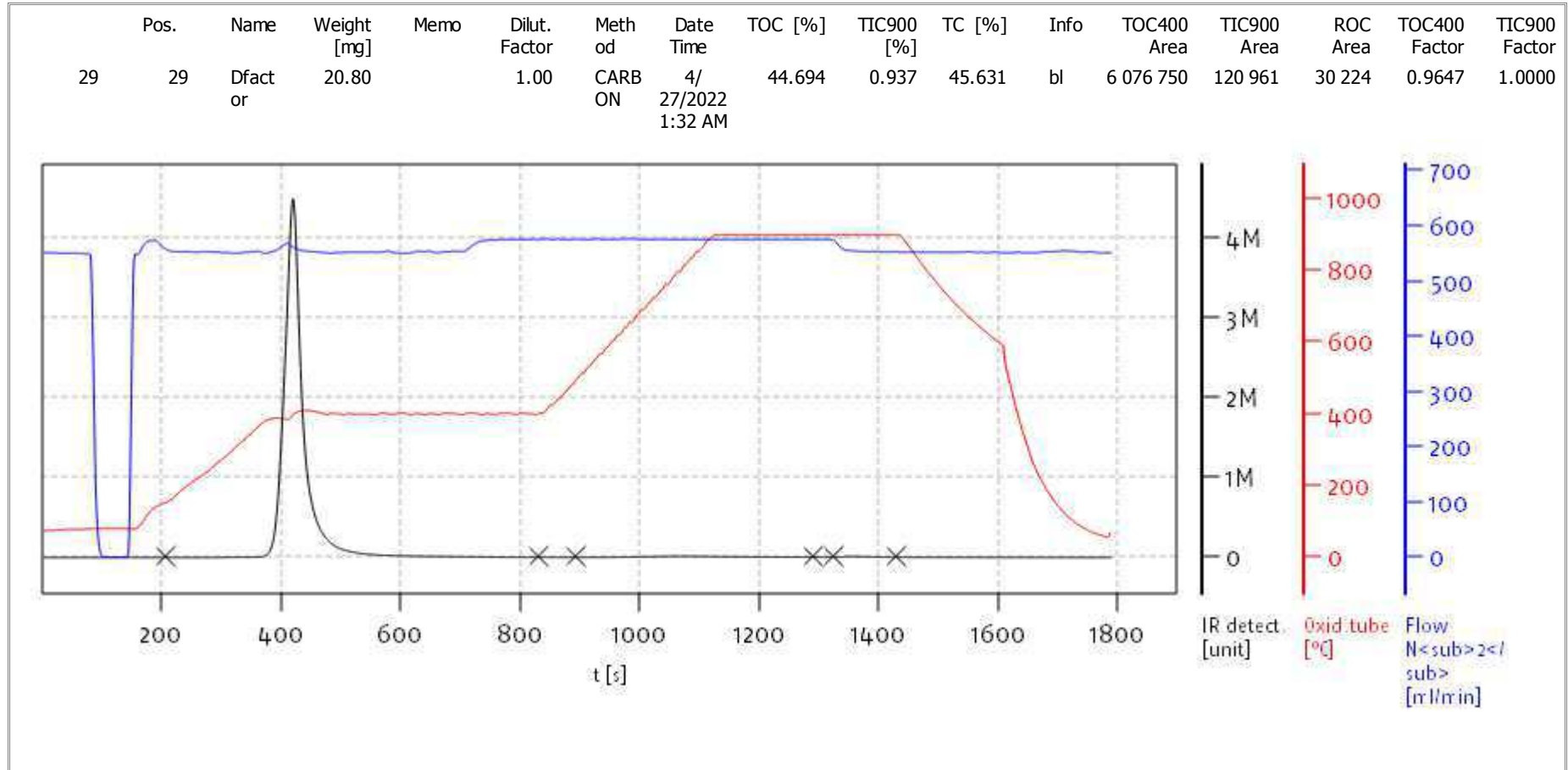
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

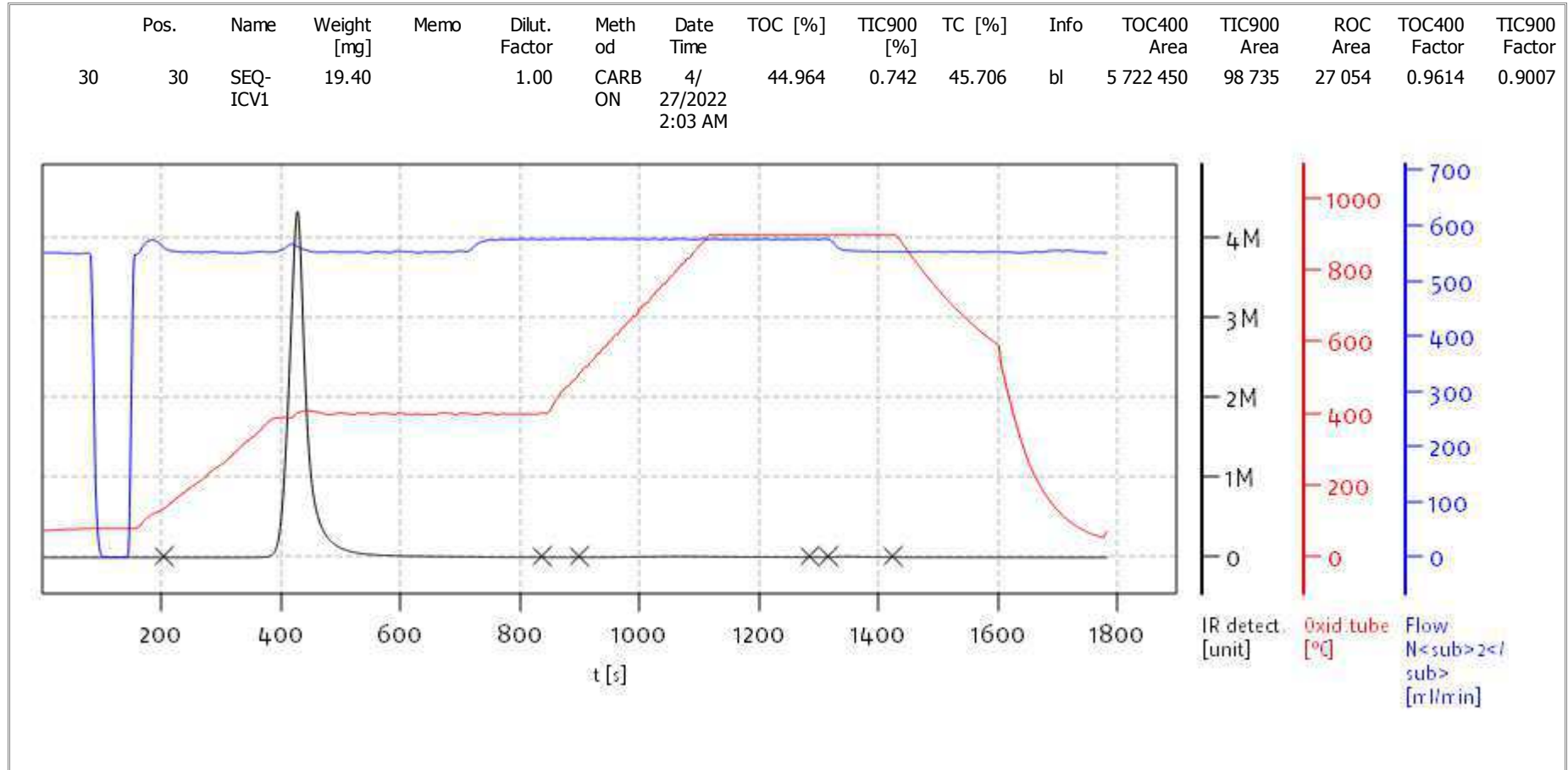
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

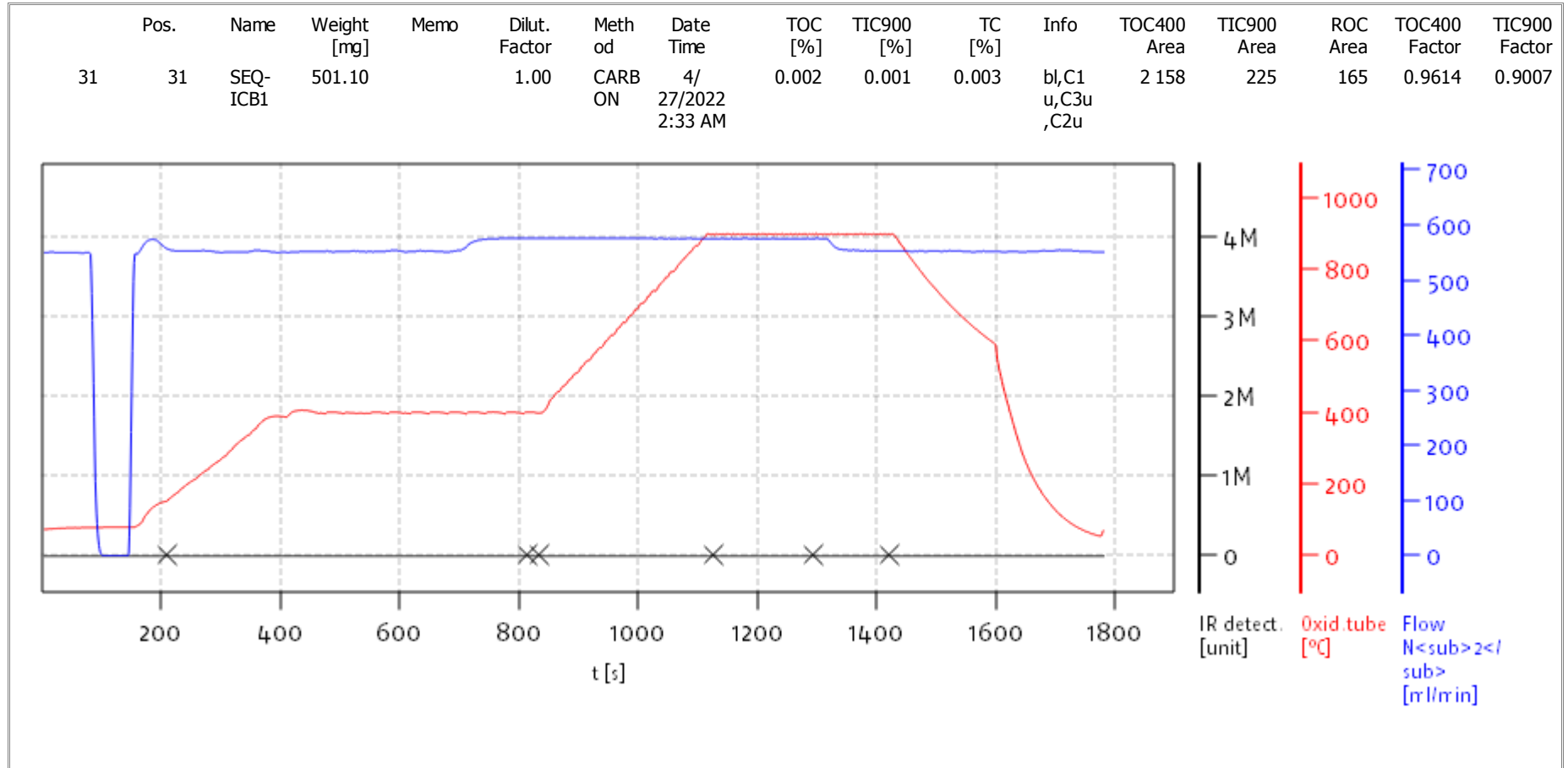
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

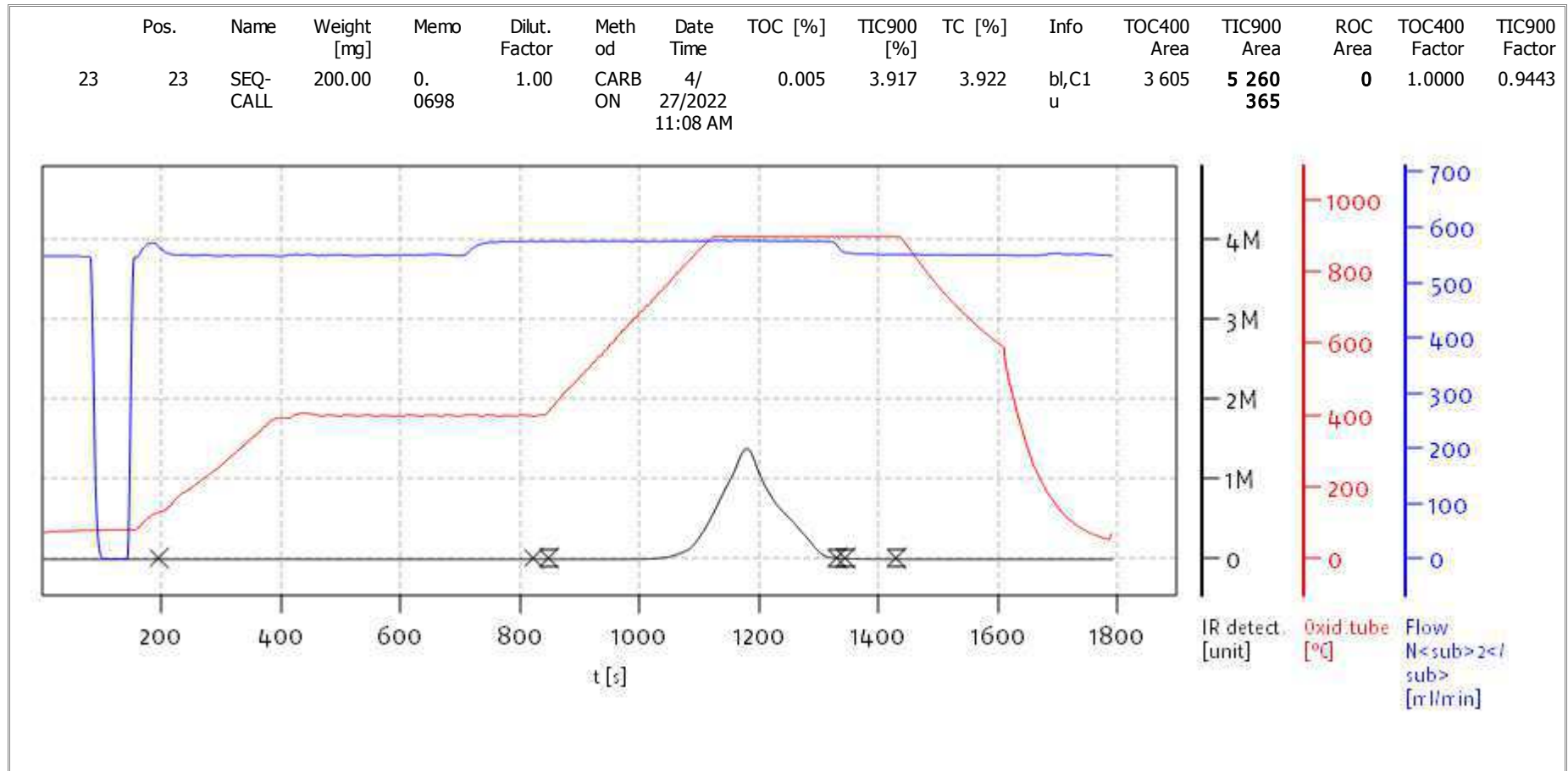
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

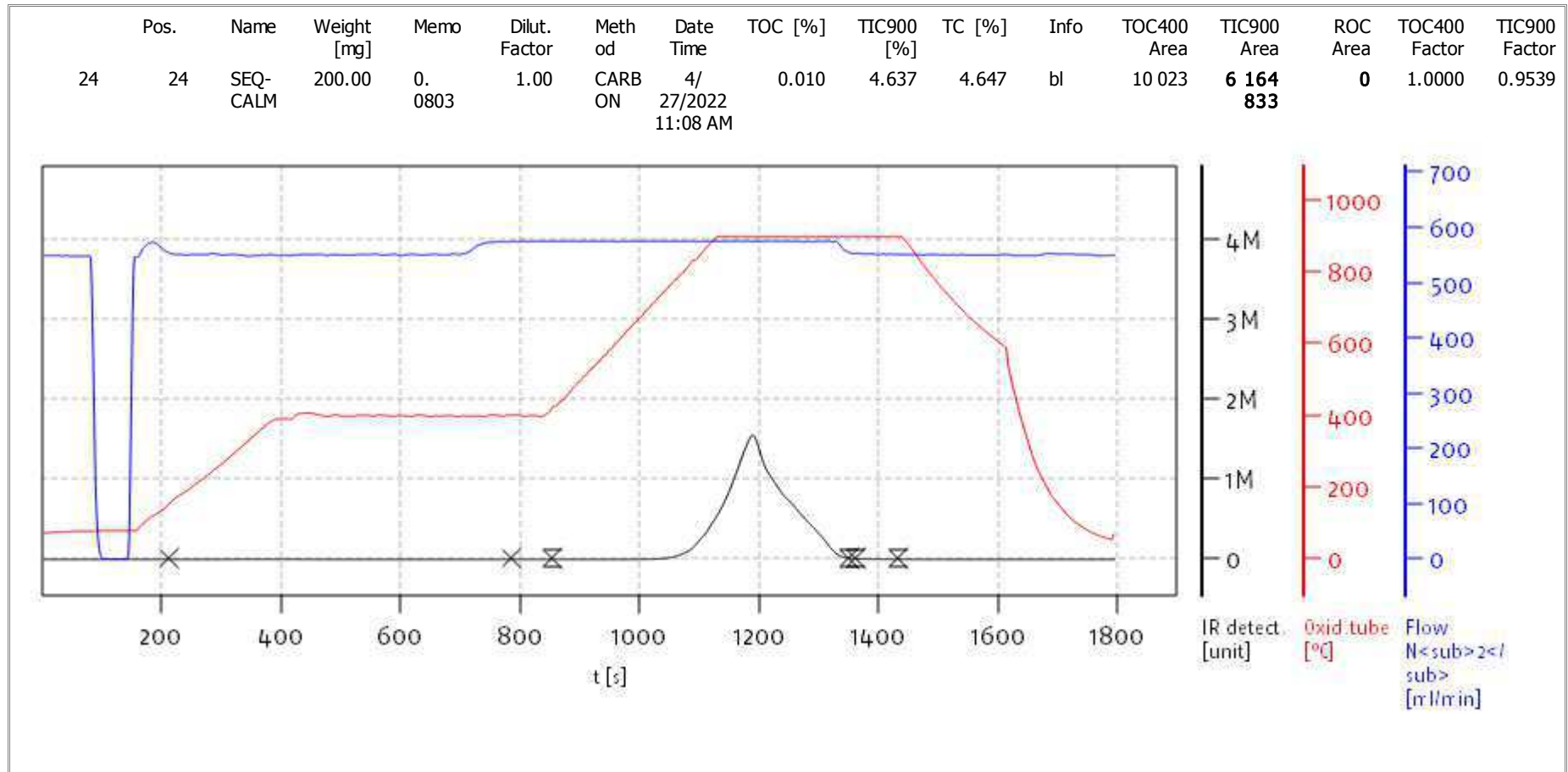
Date: Wed Apr 27 11:10:16 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

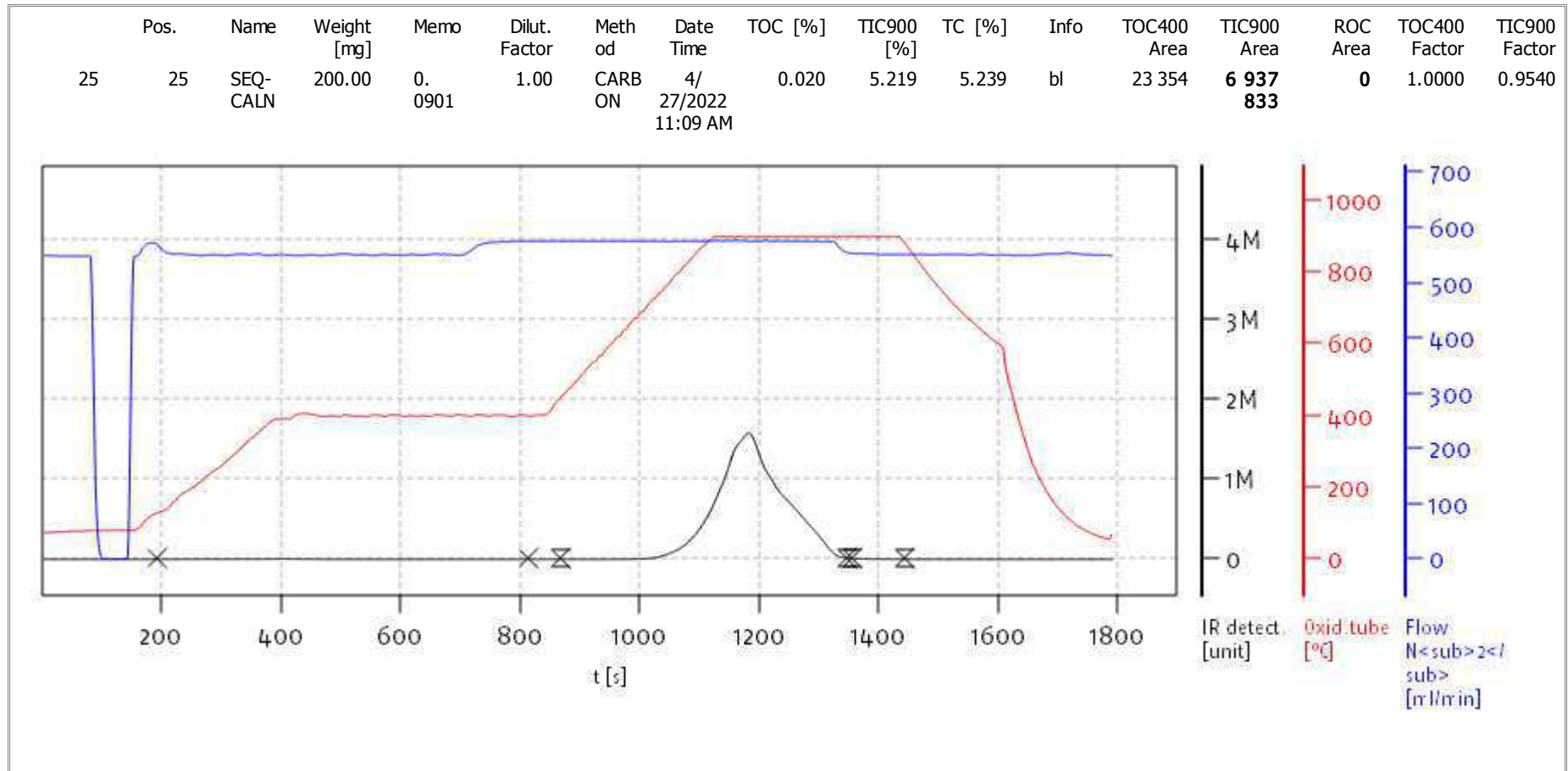
Date: Wed Apr 27 11:10:16 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

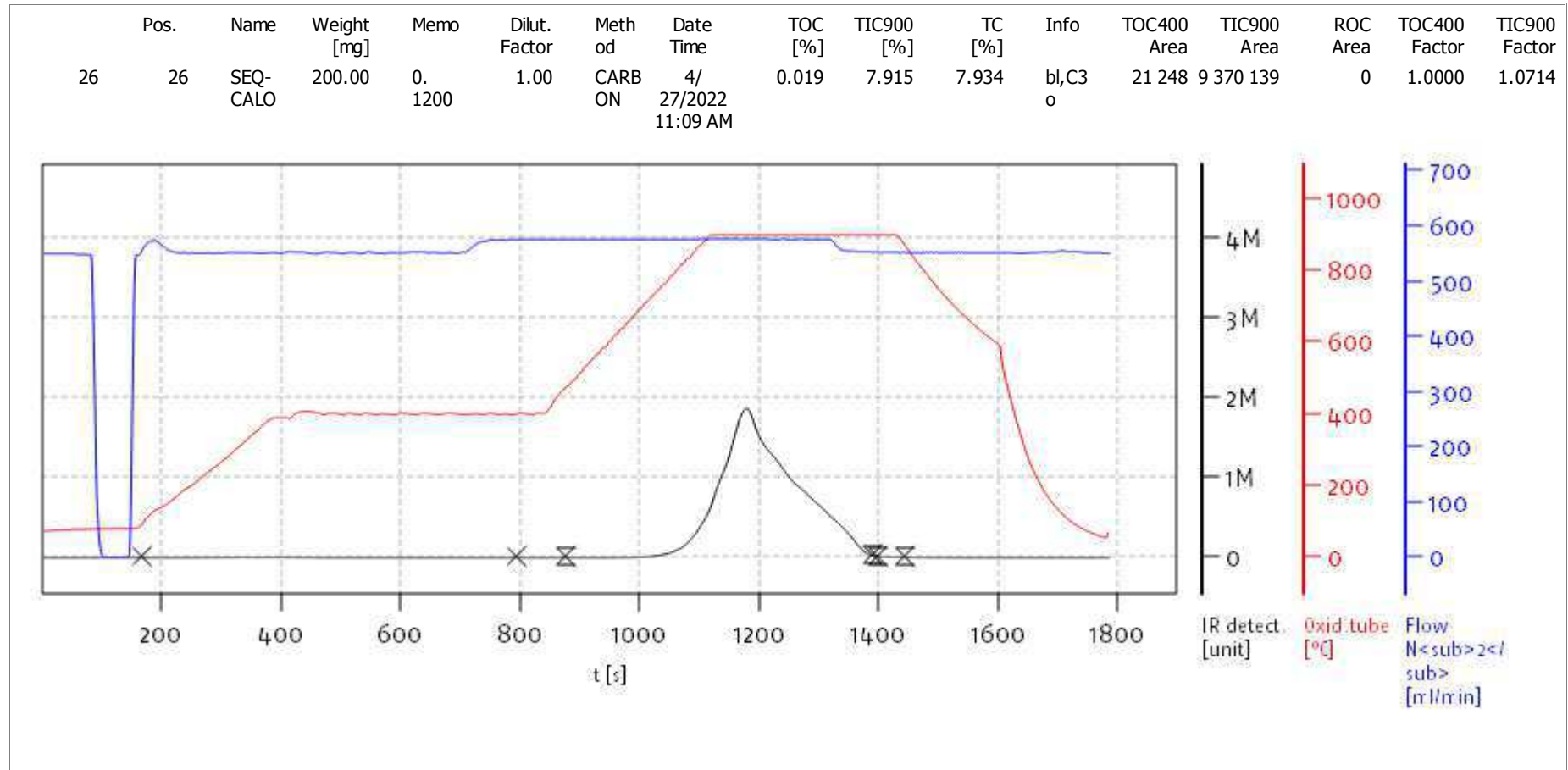
Date: Wed Apr 27 11:10:16 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

Date: Wed Apr 27 11:10:16 2022

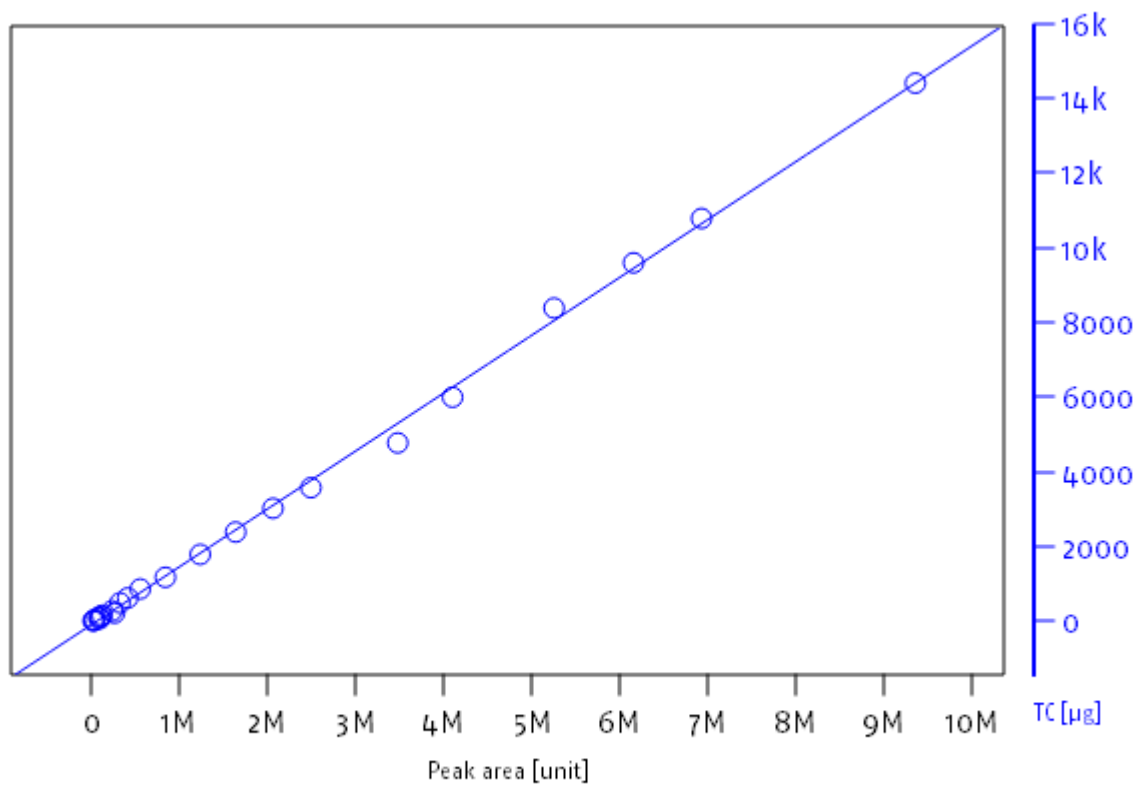


solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Calibration parameters TC, Whole range

a	-4.107546e-02
b	+1.548032e-06
c	+0.000000e+00
d	+0.000000e+00
e	+0.000000e+00
r	0.998372
r_old	0.998372
Proc.-SD	166.070255 µg

Calibration graph TC, Whole range



Name:

Access: solITOC superuser

Date: Wed Apr 27 11:19:56 2022



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Sequence: SKD0371

Date Analyzed: 04/27/22 02:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SKD0371-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Sequence: SLB0179

Date Analyzed: 02/14/23 20:39

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLB0179-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLB0179-CCB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLB0179-CCB2	Total Organic Carbon	0.00	0.02	0.02	%	
SLB0179-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	
SLB0179-CCB4	Total Organic Carbon	0.00	0.02	0.02	%	
SLB0179-CCB5	Total Organic Carbon	0.004	0.02	0.02	%	



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Sequence: SLC0025

Date Analyzed: 03/02/23 18:48

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLC0025-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLC0025-CCB1	Total Organic Carbon	0.002	0.02	0.02	%	
SLC0025-CCB2	Total Organic Carbon	0.00	0.02	0.02	%	
SLC0025-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 9060A m**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Control Limit: +/- 10.00%

Sequence: SKD0371

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SKD0371-ICV1	Total Organic Carbon	44.446	43.7	98.3	%	EPA 9060A m
	Total Carbon	44.446	44.1	99.2	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	0.40		%	EPA 9060A m
	% Soot	0.0000	0.004		%	EPA 9060A m

* Values outside of QC limits



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 9060A m**

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Control Limit: +/- 10.00%

Sequence: SLB0179

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLB0179-ICV1	Total Organic Carbon	44.446	44.5	100	%	EPA 9060A m
SLB0179-CCV1	Total Organic Carbon	44.446	44.1	99.2	%	EPA 9060A m
SLB0179-CCV2	Total Organic Carbon	44.446	43.9	98.7	%	EPA 9060A m
SLB0179-CCV3	Total Organic Carbon	44.446	43.9	98.9	%	EPA 9060A m
SLB0179-CCV4	Total Organic Carbon	44.446	44.3	99.6	%	EPA 9060A m
SLB0179-CCV5	Total Organic Carbon	44.446	44.5	100	%	EPA 9060A m

* Values outside of QC limits



INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Control Limit: +/- 10.00%

Sequence: SLC0025

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLC0025-ICV1	Total Organic Carbon	44.446	43.2	97.3	%	EPA 9060A m
SLC0025-CCV1	Total Organic Carbon	44.446	43.8	98.4	%	EPA 9060A m
SLC0025-CCV2	Total Organic Carbon	44.446	43.9	98.7	%	EPA 9060A m
SLC0025-CCV3	Total Organic Carbon	44.446	43.4	97.6	%	EPA 9060A m

* Values outside of QC limits



STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLB0342-SRM1

Batch: BLB0342

Initial/Final: 0.251 g / 0.251 mL

Preparation: PSEP 1986 (modified)

Analyzed: 02/14/2023 23:09

Standard ID: L000790

Expires: 05/19/2024

Standard Lot#: NA

Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.93	0.02	0.02		97.9	80 - 120

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1236 23B0229-01	02/08/23 10:04	02/08/23 16:47	02/14/23 12:18	6	14	02/15/23 05:12			
LDW23-SS1236 23B0229-02	02/08/23 11:28	02/08/23 16:47	02/14/23 12:18	6	14	02/15/23 06:43			
LDW23-SS1237 23B0229-03	02/08/23 11:52	02/08/23 16:47	02/14/23 12:18	6	14	02/15/23 07:13			
LDW23-SS1150 23B0229-04	02/08/23 12:11	02/08/23 16:47	02/14/23 12:18	6	14	02/15/23 07:44			
LDW23-SS1008 23B0229-05	02/08/23 12:45	02/08/23 16:47	02/14/23 12:18	5	14	02/15/23 08:14			
LDW23-SC1008 23B0229-06	02/08/23 13:30	02/08/23 16:47	02/14/23 12:18	5	14	02/15/23 09:45			
LDW23-SC1014 23B0229-07RE1	02/08/23 14:24	02/08/23 16:47	02/14/23 12:18	5	14	03/02/23 19:19			
LDW23-SC1013 23B0229-08	02/08/23 15:25	02/08/23 16:47	02/14/23 12:18	5	14	02/15/23 10:46			
Duplicate BLB0342-DUP3	02/08/23 10:04	02/08/23 16:47	02/14/23 12:18	6	14	02/15/23 05:42			
Matrix Spike BLB0342-MS2	02/08/23 10:04	02/08/23 16:47	02/14/23 12:18	6	14	02/15/23 06:13			

* Indicates hold time exceedance.



Analytical Resources, LLC
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23B0229

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: TOC Cube

Analyte	MDL	RL	Units
Total Organic Carbon	0.02	0.02	%



National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 1941b

Organics in Marine Sediment

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. Information values are also provided for total organic carbon (TOC), total carbon, hydrogen, and nitrogen. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Certified Mass Fraction Values: Certified mass fraction values for PAHs, PCB congeners, and chlorinated pesticides are provided in Table 1 through Table 3. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST from two or more chemically independent analytical techniques along with results from an interlaboratory comparison study [1]. A NIST certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account [1].

Reference Mass Fraction Values: Reference mass fraction values for additional PAHs (some in combination), additional PCB congeners, and additional chlorinated pesticides are provided in Table 4 through Table 7. Reference values for alkylated PAH groups are provided in Table 8 and for selected hopanes and steranes in Table 9. A reference value for total organic carbon is provided in Table 10. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods [1].

Information Mass Fraction Values: Information mass fraction values are provided in Table 11 for carbon, hydrogen, and nitrogen. An information value is considered to be a value that will be of use to the SRM user, but insufficient information is available to assess the uncertainty associated with the value [1]. Information values cannot be used to establish metrological traceability.

Expiration of Certification: The certification of SRM 1941b is valid, within the measurement uncertainty specified, until **01 October 2020**, provided the SRM is handled and stored in accordance with the instructions given in this certificate (see "Instructions for Handling, Storage, and Use"). This certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of SRM Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Coordination of the technical measurements leading to the certification of this material was under the leadership of M.M. Schantz and S.A. Wise of the NIST Chemical Sciences Division.

Analytical measurements for the certification of SRM 1941b were performed at NIST by J.R. Kucklick, B.J. Porter, D.L. Poster, M.M. Schantz, P. Schubert, S. Tutschku, and L.L. Yu of the NIST Chemical Sciences Division.

Carlos A. Gonzalez, Chief
Chemical Sciences Division

Measurements for TOC were provided by a commercial laboratory and T.L. Wade of the Geochemical and Environmental Research Group, Texas A&M University (College Station, TX). The carbon, hydrogen, and nitrogen data were provided by a commercial laboratory. Results for the PAHs, PCBs, and chlorinated pesticides from 38 laboratories (see Appendix A) that participated in an interlaboratory comparison exercise coordinated by NIST were used. Results for the alkylated PAH groups, hopanes, and steranes from 33 laboratories (see Appendix B) that participated in another interlaboratory comparison exercise coordinated by NIST were also used.

Collection and preparation of SRM 1941b were performed by M.P. Cronise and C.N. Fales of the NIST Office of Reference Materials and B.J. Porter and M.M. Schantz of the NIST Chemical Sciences Division. The sediment material was collected with the assistance of G.G. Lauenstein, J. Collier, and J. Lewis (National Oceanic and Atmospheric Administration, Silver Spring, MD).

Consultation on the statistical design of the experimental work and evaluation of the data were provided by S.D. Leigh and J.H. Yen of the NIST Statistical Engineering Division.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

INSTRUCTIONS FOR HANDLING, STORAGE, AND USE

Handling: This material is naturally occurring marine sediment from an urban area and may contain constituents of unknown toxicities; therefore, caution and care should be exercised during its handling and use.

Storage: SRM 1941b must be stored in its original bottle at temperatures less than 30 °C and away from direct sunlight.

Use: Prior to removal of subsamples for analysis, the contents of the bottle should be mixed. The mass fractions of constituents in SRM 1941b are reported on a dry-mass basis. The SRM, as received, contains a mass fraction of approximately 2.4 % moisture (see "Conversion to Dry-Mass Basis"). The sediment sample should be dried to a constant mass before weighing for analysis; or a separate subsample of the sediment should be removed from the bottle at the time of analysis and dried to determine the mass fraction on a dry-mass basis. If the constituents of interest are volatile, then the moisture must be determined with a separate subsample.

PREPARATION AND ANALYSIS⁽¹⁾

Sample Collection and Preparation: The sediment used to prepare this SRM was collected from the Chesapeake Bay at the mouth of the Baltimore (MD) Harbor near the Francis Scott Key Bridge (39°12.3'N and 76°31.4'W). This location is very near the site where SRM 1941 and SRM 1941a were collected. The sediment was collected using a Kynar-coated modified Van Veen-type grab sampler. A total of approximately 3300 kg of wet sediment was collected from the site. The sediment was freeze-dried, sieved at 150 µm (100 % passing), homogenized in a cone blender, radiation sterilized (⁶⁰Co), and then packaged in screw-capped amber glass bottles each containing approximately 50 g.

Conversion to Dry-Mass Basis: The results for the constituents in SRM 1941b are reported on a dry-mass basis; however, the material "as received" contains residual moisture. The amount of moisture in SRM 1941b was determined by measuring the mass loss after freeze-drying subsamples of 1.1 g to 1.3 g for four days at 1 Pa with a -10 °C shelf temperature and a -50 °C condenser temperature. The moisture content in SRM 1941b at the time of the certification analyses was 2.39 % ± 0.08 % (95 % confidence level). Analytical results for the organic constituents were determined on an as-received basis and then converted to a dry-mass basis by dividing by the conversion factor of 0.9761 (gram dry mass per gram as-received mass).

Polycyclic Aromatic Hydrocarbons: The general approach used for the value assignment of the PAHs in SRM 1941b was similar to that reported in detail elsewhere [2]. The approach consisted of combining results from analyses using various combinations of different extraction techniques and solvents, clean-up/isolation procedures, and chromatographic separation and detection techniques: Soxhlet extraction and pressurized-fluid extraction (PFE) using dichloromethane (DCM) or a hexane/acetone mixture, cleanup of the extracts using solid-phase extraction (SPE) or normal-phase liquid chromatography (LC), followed by analysis using the following techniques: (1) reversed-phase liquid chromatography with fluorescence detection (LC-FL) analysis of the total PAH fraction, (2) reversed-phase

⁽¹⁾ Certain commercial equipment, instruments or materials are identified in this certificate to adequately specify the experimental procedure. Such identification does not imply recommendation or endorsement by the National Institute of Standards and Technology.

LC-FL analysis of isomeric PAH fractions isolated by normal-phase LC (i.e., multidimensional LC), (3) gas chromatography/mass spectrometry (GC/MS) analysis of the PAH fraction on three stationary phases of different selectivity, i.e., a 5 % (all column compositions are given as mole fractions in %) phenyl-substituted methylpolysiloxane phase, a 50 % phenyl-substituted methylpolysiloxane phase, and a relatively non-polar proprietary phase.

Three sets of GC/MS results, designated as GC/MS (I), GC/MS (II), and GC/MS (III), were obtained using three columns with different selectivities for the separation of PAHs. For GC/MS (I) analyses, duplicate subsamples of approximately 1 g from ten bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 2 % DCM in hexane (all solvent concentrations are given as volume fractions in %). The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5 MS, J&W Scientific, Folsom, CA). The GC/MS (II) analyses were performed using 5 g subsamples from six bottles of SRM 1941b. These samples were extracted using PFE with DCM. The high molecular mass compounds were removed from the extracts using size exclusion chromatography (SEC) with a preparative-scale divinylbenzene-polystyrene column (10 μm particle size with 10 nm diameter pores), and the sulfur was removed from the extracts by adding copper powder. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The analysis was by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17 MS, J&W Scientific). For the GC/MS (III), 9 g subsamples from six bottles of SRM 1941b were Soxhlet-extracted for 18 h with 250 mL of a mixture of 50 % hexane/50 % acetone. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific).

Two sets of LC-FL results, designated as LC-FL (total) and LC-FL (isomer), were used in the certification process. For the LC-FL (total), subsamples of approximately 1 g from six bottles of SRM 1941b were extracted using PFE with a mixture of 50 % hexane/50 % acetone. The extracts were concentrated and then processed through an aminopropylsilane SPE cartridge using 2 % DCM in hexane to obtain the total PAH fraction. For the LC-FL (isomer), a 5 g subsample from the six bottles was extracted using PFE with DCM and processed through an aminopropylsilane SPE cartridge using 10 % DCM in hexane; the PAH fraction was then fractionated further on a semi-preparative aminopropylsilane column (μBondapak NH₂, 9 mm i.d. × 30 cm, Waters Associates, Milford, MA) to isolate isomeric PAH fractions as described previously [3–6]. The total PAH fraction and the isomeric PAH fractions were analyzed using a 5 μm particle-size polymeric octadecylsilane (C₁₈) column (4.6 mm i.d. × 25 cm, Hypersil-PAH, Keystone Scientific, Inc., Bellefonte, PA) with wavelength-programmed fluorescence detection [4,5].

For the GC/MS and LC-FL measurements described above, selected perdeuterated PAHs were added to the sediment prior to solvent extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PAHs in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

Homogeneity Assessment for PAHs: The homogeneity of SRM 1941b was assessed by analyzing duplicate samples of approximately 1 g from ten bottles selected by stratified random sampling. Samples were extracted, processed, and analyzed as described above for GC/MS (I). No statistically significant differences among bottles were observed for the PAHs at this sample size.

PAH Isomers of Molecular Mass 300 and 302: For the determination of the molecular mass 300 and 302 isomers, three subsamples of approximately 5 g each were extracted using PFE with DCM. The extracts were then concentrated with a solvent change to hexane and passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17MS, J&W Scientific). Perdeuterated dibenzo[*a,i*]pyrene was added to the sediment prior to extraction for use as an internal standard [8].

PCBs and Chlorinated Pesticides: The general approach used for the determination of PCBs and chlorinated pesticides in SRM 1941b consisted of combining results from analyses using various combinations of different extraction techniques and solvents, cleanup/isolation procedures, and chromatographic separation and detection techniques. Techniques and solvents included Soxhlet extraction and PFE using DCM or a hexane/acetone mixture.

clean-up/isolation using SPE or LC, followed by analysis using GC/MS and gas chromatography with electron capture detection (GC-ECD) on two columns with different selectivity for the separation of PCBs and chlorinated pesticides. The analytical methods are described in detail elsewhere [2].

Six sets of results were obtained and designated as GC-ECD (I) A and B, GC/MS (I) A and B, GC/MS (II), and Interlaboratory Comparison Exercise. For the GC-ECD (I) analyses, approximately 10 g subsamples from six bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur, and SEC, as described above, was used to remove the high molecular mass compounds. The concentrated extract was then fractionated on a semi-preparative aminopropylsilane column to isolate two fractions containing: (1) the PCBs and lower-polarity pesticides and (2) the more polar pesticides. GC-ECD analyses of the two fractions were performed on two columns of different selectivities for PCB separations: 0.25 mm × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5, J&W Scientific), and a 0.25 mm × 60 m fused silica capillary column with a non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The results from the 5 % phenyl phase are designated as GC-ECD (IA) and the results from the proprietary phase are designated as GC-ECD (IB). For the GC-ECD analyses, two PCB congeners that are not significantly present in the sediment extract (PCB 103 and PCB 198 [9,10]) and endosulfan I-*d*₄, 4,4'-DDE-*d*₈, 4,4'-DD-*d*₈, and 4,4'-DDT-*d*₈ were added to the sediment prior to extraction for use as internal standards for quantification purposes.

Two sets of results were obtained by GC/MS. For GC/MS (I), approximately 9 g subsamples from six bottles were Soxhlet- extracted with a mixture of 50 % hexane/50 % acetone for approximately 18 h. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS with two ionization modes, electron impact (EI) and negative ion chemical ionization (NICI). The GC/MS EI method, GC/MS (IA), used a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The GC/MS NICI method, GC/MS (IB), used a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5MS, J&W Scientific). The GC/MS (II) results were obtained in the same manner as the GC/MS (IA) analyses except that three subsamples were Soxhlet-extracted with DCM for approximately 18 h. For the GC/MS analyses, selected carbon-13 labeled PCB congeners and chlorinated pesticides were added to the sediment prior to extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PCB congeners and chlorinated pesticides in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

The reference value for PCB 77 was determined from a separate fraction. The samples were extracted and processed as for GC-ECD (I) above. The first (PCB and lower-polarity pesticide) fraction from the semi-preparative aminopropylsilane column was further fractionated using a Cosmosil PYE (pyrenylethyl group bonded) column (5 μm particle size, 4.6 mm i.d. × 25 cm; Phenomenex, Torrance, CA) [11]. Three fractions were collected: the first fraction contained the pesticides and multi-*ortho* PCBs, the second fraction contained the polychlorinated naphthalenes, non-*ortho* PCB congeners, and some mono-*ortho* PCB congeners, and the third fraction removed the residual planar compounds from the column. The second fraction was analyzed by GC/MS NICI using the same column as GC/MS (IB) above. Carbon-13 labeled PCB 77 was used as an internal standard for quantification purposes.

Alkylated PAH Groups, Hopanes, and Steranes: SRM 1941b was used in an interlaboratory comparison exercise in 2011 [12]. Results from 33 laboratories that participated in this exercise were used in the determination of the reference values for alkylated PAH groups, hopanes, and steranes in SRM 1941b. Note that not all laboratories returned data for each analyte. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest. For the alkylated PAHs, the majority of the laboratories (>90 %) used the parent PAH for determination of the response factor for the corresponding alkylated group.

Total Organic Carbon (TOC): Two laboratories provided results for TOC using similar procedures. Briefly, subsamples of approximately 200 mg were reacted with 6 mol/L hydrochloric acid and rinsed with deionized water prior to combustion in a gas fusion furnace. The carbon monoxide and carbon dioxide produced were measured and compared to a blank for calculation of the percent TOC. Each laboratory analyzed subsamples from three bottles of SRM 1941b. One of the laboratories also analyzed three subsamples from three bottles of SRM 1941b for carbon, hydrogen, and nitrogen.

Table 1. Certified Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions ^(a) ($\mu\text{g}/\text{kg}$)
Naphthalene ^(b,c,d,e,f,g)	848 \pm 95 ^(h)
Fluorene ^(b,c,d,e,f,g)	85 \pm 15 ^(h)
Phenanthrene ^(b,c,d,e,f,g)	406 \pm 44 ^(h)
Anthracene ^(b,c,d,e,f,g)	184 \pm 18 ^(h)
3-Methylphenanthrene ^(b,c,d)	105 \pm 13 ^(h)
2-Methylphenanthrene ^(b,c,d)	128 \pm 14 ^(h)
1-Methylphenanthrene ^(b,c,d,g)	73.2 \pm 5.9 ^(h)
Fluoranthene ^(b,c,d,e,f,g)	651 \pm 50 ^(h)
Pyrene ^(b,c,d,e,f,g)	581 \pm 39 ^(h)
Benz[<i>a</i>]anthracene ^(b,c,d,e,f,g)	335 \pm 25 ^(h)
Chrysene ^(d,f)	291 \pm 31 ^(h)
Triphenylene ^(d,f)	108 \pm 5 ⁽ⁱ⁾
Benzo[<i>b</i>]fluoranthene ^(c,e)	453 \pm 21 ^(h)
Benzo[<i>k</i>]fluoranthene ^(b,c,d,e)	225 \pm 18 ^(h)
Benzo[<i>e</i>]pyrene ^(b,c,d,g)	325 \pm 25 ^(h)
Benzo[<i>a</i>]pyrene ^(b,c,d,f,g)	358 \pm 17 ^(h)
Perylene ^(b,c,d,f,g)	397 \pm 45 ^(h)
Benzo[<i>ghi</i>]perylene ^(b,c,d,f,g)	307 \pm 45 ^(h)
Indeno[1,2,3- <i>cd</i>]pyrene ^(b,c,d,f,g)	341 \pm 57 ^(h)
Dibenz[<i>a,j</i>]anthracene ^(b,c,d,f)	48.9 \pm 4.6 ^(h)
Dibenz[<i>a,c</i>]anthracene ^(c,f)	36.7 \pm 5.2 ^(h)
Dibenz[<i>a,h</i>]anthracene ^(c,f)	53 \pm 10 ^(h)
Benzo[<i>b</i>]chrysene ^(b,c,d,f)	53 \pm 12 ^(h)
Picene ^(b,c,d)	46.6 \pm 4.7 ^(h)

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(c) GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(d) GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(e) LC-FL (total) of total PAH fraction after PFE with DCM.

^(f) LC-FL (isomer) of isomeric PAH fractions after PFE with DCM.

^(g) 1999 Interlaboratory Comparison Study [7] with 21 to 29 laboratories submitting data for each PAH.

^(h) Certified values are weighted means of the results from two to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

⁽ⁱ⁾ The certified value is an unweighted mean of the results from two analytical methods. The uncertainty listed with the value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the value is metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 2. Certified Mass Fraction Values for PCB Congeners^(a) in SRM 1941b

PCB Congeners		Mass Fractions ^(b) ($\mu\text{g}/\text{kg}$)
PCB	8 (2,4'-Dichlorobiphenyl) ^(c,d,e,f,g)	1.65 \pm 0.19 ^(h)
PCB	18 (2,2',5'-Trichlorobiphenyl) ^(c,d,e,f,g)	2.39 \pm 0.29 ^(h)
PCB	28 (2,4,4'-Trichlorobiphenyl) ^(c,d,e,f,g)	4.52 \pm 0.57 ^(h)
PCB	31 (2,4',5'-Trichlorobiphenyl) ^(c,e,f)	3.18 \pm 0.41 ^(h)
PCB	44 (2,2',3,5'-Tetrachlorobiphenyl) ^(c,d,e,f,g)	3.85 \pm 0.20 ⁽ⁱ⁾
PCB	49 (2,2',4,5'-Tetrachlorobiphenyl) ^(c,d,e,f)	4.34 \pm 0.28 ⁽ⁱ⁾
PCB	52 (2,2',5,5'-Tetrachlorobiphenyl) ^(c,d,e,f,g)	5.24 \pm 0.28 ⁽ⁱ⁾
PCB	66 (2,3',4,4'-Tetrachlorobiphenyl) ^(c,e,f,g,j)	4.96 \pm 0.53 ⁽ⁱ⁾
PCB	87 (2,2',3,4,5'-Pentachlorobiphenyl) ^(c,d,f,j)	1.14 \pm 0.16 ^(h)
PCB	95 (2,2',3,5',6-Pentachlorobiphenyl) ^(c,e,f,g)	3.93 \pm 0.62 ⁽ⁱ⁾
PCB	99 (2,2',4,4',5-Pentachlorobiphenyl) ^(c,d,e,f,g)	2.90 \pm 0.36 ⁽ⁱ⁾
PCB	101 (2,2',4,5,5'-Pentachlorobiphenyl) ^(c,e,f,g,j)	5.11 \pm 0.34 ⁽ⁱ⁾
PCB	105 (2,3,3',4,4'-Pentachlorobiphenyl) ^(c,d,e,f,g,j)	1.43 \pm 0.10 ⁽ⁱ⁾
PCB	110 (2,3,3',4',6-Pentachlorobiphenyl) ^(c,e,f,j)	4.62 \pm 0.36 ⁽ⁱ⁾
PCB	118 (2,3',4,4',5-Pentachlorobiphenyl) ^(c,d,e,f,g,j)	4.23 \pm 0.19 ⁽ⁱ⁾
PCB	128 (2,2',3,3',4,4'-Hexachlorobiphenyl) ^(c,d,e,f,g,j)	0.696 \pm 0.044 ⁽ⁱ⁾
PCB	138 (2,2',3,4,4',5'-Hexachlorobiphenyl) ^(c,e,f,j)	3.60 \pm 0.28 ⁽ⁱ⁾
PCB	149 (2,2',3,4',5',6-Hexachlorobiphenyl) ^(c,d,e,j)	4.35 \pm 0.26 ^(h)
PCB	153 (2,2',4,4',5,5'-Hexachlorobiphenyl) ^(c,d,e,f,g,j)	5.47 \pm 0.32 ⁽ⁱ⁾
PCB	156 (2,3,3',4,4',5-Hexachlorobiphenyl) ^(c,d,e,f,j)	0.507 \pm 0.090 ^(h)
PCB	170 (2,2',3,3',4,4',5-Heptachlorobiphenyl) ^(c,d,e,f,g,j)	1.35 \pm 0.09 ⁽ⁱ⁾
PCB	180 (2,2',3,4,4',5,5'-Heptachlorobiphenyl) ^(c,d,e,f,g,j)	3.24 \pm 0.51 ⁽ⁱ⁾
PCB	183 (2,2',3,4,4',5',6-Heptachlorobiphenyl) ^(c,d,e,j)	0.979 \pm 0.087 ^(h)
PCB	187 (2,2',3,4',5,5',6-Heptachlorobiphenyl) ^(c,d,e,f,g,j)	2.17 \pm 0.22 ⁽ⁱ⁾
PCB	194 (2,2',3,3',4,4',5,5'-Octachlorobiphenyl) ^(c,d,e,j)	1.04 \pm 0.06 ^(h)
PCB	195 (2,2',3,3',4,4',5,6-Octachlorobiphenyl) ^(c,e,g,j)	0.645 \pm 0.060 ⁽ⁱ⁾
PCB	201 (2,2',3,3',4,5',6'-Octachlorobiphenyl) ^(c,e,j)	0.777 \pm 0.034 ^(h)
PCB	206 (2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl) ^(c,e,f,g,j)	2.42 \pm 0.19 ⁽ⁱ⁾
PCB	209 Decachlorobiphenyl ^(c,d,e,f,g,j)	4.86 \pm 0.45 ⁽ⁱ⁾

^(a) PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform to IUPAC rules, except PCB 201. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 201 is listed as PCB 200.

^(b) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(c) GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(d) GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

^(e) GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

^(f) GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

^(g) 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each PCB congener.

^(h) Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

⁽ⁱ⁾ Certified values are weighted means of the results from three to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(j) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

Table 3. Certified Mass Fraction Values for Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions ^(a) ($\mu\text{g}/\text{kg}$)
Hexachlorobenzene ^(b,c,d,e)	5.83 \pm 0.38 ^(f)
<i>cis</i> -Chlordane ^(b,c,d,e,g)	0.85 \pm 0.11 ^(h)
<i>trans</i> -Chlordane ^(b,c,e)	0.566 \pm 0.093 ^(f)
<i>cis</i> -Nonachlor ^(b,e,g)	0.378 \pm 0.053 ^(h)
<i>trans</i> -Nonachlor ^(b,c,d,e,g)	0.438 \pm 0.073 ^(f)
4,4'-DDE ^(b,d,e,g)	3.22 \pm 0.28 ^(h)
4,4'-DDD ^(b,d,e,g)	4.66 \pm 0.46 ^(h)

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(c) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

^(d) GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

^(e) 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each pesticide.

^(f) Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(g) GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

^(h) Certified values are weighted means of the results from three to five analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed and the values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 4. Reference Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions ^(a)		
	(µg/kg)		
1-Methylnaphthalene ^(b,c,d,e)	127	±	14 ^(f)
2-Methylnaphthalene ^(b,c,d,e)	276	±	53 ^(f)
2,6-Dimethylnaphthalene ^(b,c,d,e)	75.9	±	4.5 ^(f)
2,3,5-Trimethylnaphthalene ^(b,c,d,e)	25.5	±	5.1 ^(f)
Biphenyl ^(b,c,d,e)	74.0	±	8.0 ^(f)
Acenaphthylene ^(b,c,d,e)	53.3	±	6.4 ^(f)
Acenaphthene ^(b,c,d,e)	38.4	±	5.2 ^(f)
9-Methylphenanthrene ^(c)	63.5	±	2.5 ^(g)
4-Methylphenanthrene and 9-Methylphenanthrene ^(b,d)	80.1	±	4.8 ^(f)
2-Methylanthracene ^(c,d)	36	±	15 ^(f)
8-Methylfluoranthene ^(b)	49.5	±	2.7 ^(g)
7-Methylfluoranthene ^(b)	45.4	±	1.5 ^(g)
1-Methylfluoranthene ^(b)	42.4	±	2.1 ^(g)
3-Methylfluoranthene ^(b)	28.8	±	1.3 ^(g)
2-Methylpyrene ^(b)	78.7	±	4.0 ^(g)
4-Methylpyrene ^(b)	66.4	±	2.6 ^(g)
1-Methylpyrene ^(b)	52.5	±	2.3 ^(g)
Acephenanthrene ^(d)	30.5	±	1.9 ^(g)
Benzo[<i>c</i>]phenanthrene ^(b,c,d)	58	±	15 ^(f)
Benzo[<i>a</i>]fluoranthene ^(b,c,d)	73	±	18 ^(f)
Benzo[<i>j</i>]fluoranthene ^(c)	217	±	5 ^(g)
Indeno[1,2,3- <i>cd</i>]fluoranthene ^(d)	9.63	±	0.34 ^(g)
Pentaphene ^(d)	25.3	±	1.0 ^(g)

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(c) GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(d) GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(e) 1999 Interlaboratory Comparison Study [7] with 14 to 26 laboratories submitting data for each PAH.

^(f) Reference values are weighted means of the results from two to four analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of PAHs listed as determined by the methods indicated. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(g) Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U , is calculated as $U = k u_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k , is determined from the Student's t -distribution for the associated degrees of freedom (19 for footnote b and 5 for footnotes c and d) and 95 % confidence level for each analyte. The measurand is the total mass fraction of the PAHs listed as determined by the method indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 5. Reference Mass Fraction Values for PAHs of Molecular Mass 300 and 302 in SRM 1941b

PAHs of Molecular Mass 300 and 302	Mass Fractions ^(a,b,c) ($\mu\text{g}/\text{kg}$)
Coronene	72.6 \pm 4.7
Dibenzo[<i>b,e</i>]fluoranthene	10.3 \pm 0.3
Naphtho[1,2- <i>b</i>]fluoranthene	91.0 \pm 3.1
Naphtho[1,2- <i>k</i>]fluoranthene and Naphtho[2,3- <i>j</i>]fluoranthene	79.8 \pm 2.5
Naphtho[2,3- <i>b</i>]fluoranthene	23.5 \pm 0.3
Dibenzo[<i>b,k</i>]fluoranthene	95.6 \pm 3.1
Dibenzo[<i>a,k</i>]fluoranthene	26.6 \pm 0.4
Dibenzo[<i>j,l</i>]fluoranthene	63.8 \pm 1.8
Dibenzo[<i>a,l</i>]pyrene	11.1 \pm 1.0
Naphtho[2,3- <i>k</i>]fluoranthene	10.7 \pm 0.6
Naphtho[1,2- <i>a</i>]pyrene	16.7 \pm 1.4
Naphtho[2,3- <i>e</i>]pyrene	33.2 \pm 2.3
Dibenzo[<i>a,e</i>]pyrene	76.1 \pm 3.6
Naphtho[2,1- <i>a</i>]pyrene	59.2 \pm 1.8
Dibenzo[<i>e,i</i>]pyrene	35.0 \pm 2.4
Naphtho[2,3- <i>a</i>]pyrene	16.5 \pm 0.6
Benzo[<i>b</i>]perylene	38.2 \pm 1.2
Dibenzo[<i>a,i</i>]pyrene	25.5 \pm 1.0
Dibenzo[<i>a,h</i>]pyrene	6.94 \pm 0.29

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U , is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k , is determined from the Student's t -distribution for two degrees of freedom and 95 % confidence level for each analyte. The measurand is the total mass fraction of the constituent listed as determined by the method indicated. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(c) GC/MS on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM [8].

Table 6. Reference Mass Fraction Values for PCB Congeners^(a) in SRM 1941b

PCB Congeners			Mass Fractions ^(b,c) ($\mu\text{g}/\text{kg}$)		
PCB	45	(2,2',3,6-Tetrachlorobiphenyl) ^(d,e)	0.73	±	0.12
PCB	56	(2,3,3',4'-Tetrachlorobiphenyl) ^(d,f,g)	1.21	±	0.11
PCB	63	(2,3,4',5-Tetrachlorobiphenyl) ^(e,f,g)	0.213	±	0.040
PCB	70	(2,3',4',5-Tetrachlorobiphenyl) ^(e,f,g)	4.99	±	0.29
PCB	74	(2,4,4',5-Tetrachlorobiphenyl) ^(e,f,g)	2.04	±	0.15
PCB	77	(3,3',4,4'-Tetrachlorobiphenyl) ^(h)	0.31	±	0.03
PCB	107	(2,3,3',4',5-Pentachlorobiphenyl) ^(d,e,f,g)	0.628	±	0.028
PCB	132	(2,2',3,3',4,6'-Hexachlorobiphenyl) ^(d,f,g)	1.28	±	0.27
PCB	146	(2,2',3,4',5,5'-Hexachlorobiphenyl) ^(e,f,g)	1.22	±	0.12
PCB	158	(2,3,3',4,4',6-Hexachlorobiphenyl) ^(d,e,f,g)	0.65	±	0.15
PCB	163	(2,3,3',4',5,6-Hexachlorobiphenyl) ^(e,f,g)	1.28	±	0.06
PCB	174	(2,2',3,3',4,5,6'-Heptachlorobiphenyl) ^(d,e,f,g)	1.51	±	0.39
PCB	193	(2,3,3',4',5,5',6-Heptachlorobiphenyl) ^(d,e,f,g)	0.292	±	0.075

^(a) PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform with IUPAC rules, except PCB 107. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 107 is listed as PCB 108.

^(b) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(c) For these PCB congeners except PCB 77, the reference values are unweighted means of the results from two to four analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled within-method variance following the ISO/JCGM Guide [14,15]. For PCB 77, the reference value is the mean of results obtained by NIST using one analytical technique. The expanded uncertainty, U , is calculated as $U = kuc$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k , is determined from the Student's t -distribution corresponding to two degrees of freedom and 95 % confidence level for PCB 77. The measurand is the total mass fraction of the PCB Congeners listed as determined by the method or methods indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as microgram per kilogram on a dry-mass basis.

^(d) GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

^(e) GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

^(f) GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(g) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

^(h) GC/MS NICI on a 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC-ECD (I) fractionated using a PYE column.

Table 7. Reference Mass Fraction Values for Selected Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions ^(a,b) ($\mu\text{g}/\text{kg}$)
2,4'-DDE ^(c,d)	0.38 \pm 0.12
4,4'-DDT ^(e,f)	1.12 \pm 0.42

^(a) Mass Fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) The reference values are unweighted means of the results from two analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed as determined by the methods indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(c) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

^(d) GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

^(e) GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

^(f) 1999 Interlaboratory Comparison Study [7] with 10 laboratories submitting data for 4,4'-DDT.

Table 8. Reference Mass Fraction Values for Alkylated PAH Groups in SRM 1941b

Alkylated PAH Group	Mass Fraction ^(a,b) ($\mu\text{g}/\text{kg}$)
C2-decalins	18 \pm 5
C4-decalins	41 \pm 4
C2-naphthalenes	187 \pm 53
C3-naphthalenes	158 \pm 42
C1-benzothiophenes	25 \pm 14
C2-benzothiophenes	20 \pm 11
C3-benzothiophenes	22 \pm 13
C4-benzothiophenes	18 \pm 5
C1-fluorenes	57 \pm 18
C2-fluorenes	122 \pm 43
C3-fluorenes	128 \pm 31
C1-phenanthrenes/anthracenes	313 \pm 99
C2-phenanthrenes/anthracenes	247 \pm 62
C3-phenanthrenes/anthracenes	165 \pm 46
C4-phenanthrenes/anthracenes	87 \pm 36
C1-dibenzothiophenes	54 \pm 13
C2-dibenzothiophenes	91 \pm 18
C3-dibenzothiophenes	84 \pm 15
C4-dibenzothiophenes	57 \pm 13
C1-fluoranthenes/pyrenes	252 \pm 48
C2-fluoranthenes/pyrenes	205 \pm 38
C3-fluoranthenes/pyrenes	102 \pm 22
C4-fluoranthenes/pyrenes	121 \pm 59
C1-benzanthracenes/chrysenes/triphenylenes	208 \pm 43
C2-benzanthracenes/chrysenes/triphenylenes	120 \pm 24
C3-benzanthracenes/chrysenes/triphenylenes	73 \pm 31
C4-benzanthracenes/chrysenes/triphenylenes	41 \pm 11

^(a) The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U , is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the alkylated PAH groups listed as determined by the interlaboratory study methods. The values listed are metrologically traceable to the SI unit of mass fraction, expressed as micrograms per kilogram on a dry-mass basis.

^(b) Data from the interlaboratory study [12].

Table 9. Reference Mass Fraction Values for Hopanes and Steranes in SRM 1941b

Hopane or Sterane	Mass Fraction ^(a,b) (µg/kg)
17α(H)-22,29,30-Trisnorhopane	54 ± 18
17α(H)-21β(H)-30-Norhopane	137 ± 21
17α(H)-21β(H)-30-Hopane	215 ± 44
17α(H)-21β(H)-22R-Homohopane	44 ± 10
17α(H)-21β(H)-22S-Homohopane	48 ± 13
5α(H)-14α(H),17α(H)-Cholestane 20R	41 ± 11
5α(H)-14β(H),17β(H)-Cholestane 20R	27 ± 6
5α(H)-14β(H),17β(H)-24-Methylcholestane 20R	21 ± 8
5α(H)-14α(H),17α(H)-24-Ethylcholestane 20R	19 ± 5
5α(H)-14β(H),17β(H)-24-Ethylcholestane 20R	41 ± 9

- ^(a) The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U , is calculated as $U = k u_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the constituent listed as determined by the methods used during the interlaboratory study. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
- ^(b) Data from the interlaboratory study [12].

Table 10. Reference Mass Fraction Value for Total Organic Carbon in SRM 1941b

Total Organic Carbon (TOC)	2.99 % ± 0.24 % ^(a,b)
----------------------------	----------------------------------

- ^(a) Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.
- ^(b) The reference value for total organic carbon is a weighted mean value from routine measurements made by two laboratories [21]. The uncertainty listed is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance. The reporting follows the ISO/JCGM Guides [2]. The measurand is the total mass fraction of TOC listed as determined by the methods indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as a percent on a dry-mass basis.

Table 11. Information Mass Fraction Values for Carbon, Hydrogen, and Nitrogen in SRM 1941b

Elements	Mass Fractions ^(a) (%)
Carbon	3.3
Hydrogen	1.2
Nitrogen	<0.5

- ^(a) Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.

REFERENCES

- [1] May, W.E.; Parris, R.M.; Beck II, C.M.; Fassett, J.D.; Greenberg, R.R.; Guenther, F.R.; Kramer, G.W.; Wise, S.A.; Gills, T.E.; Colbert, J.C.; Gettings, R.J.; MacDonald, B.R.; *Definition of Terms and Modes Used at NIST for Value-Assignment of Reference Materials for Chemical Measurements*; NIST Special Publication 260-136 (2000); available at <http://www.nist.gov/srm/publications.cfm> (accessed Jan 2015).
- [2] Wise, S.A.; Poster, D.L.; Schantz, M.M.; Kucklick, J.R.; Sander, L.C.; Lopez de Alda, M.; Schubert, P.; Parris, R.M.; Porter, B.J.; *Two New Marine Sediment Standard Reference Materials (SRMs) for the Determination of Organic Contaminants*; *Anal. Bioanal. Chem.*, Vol. 378, pp. 1251–1264 (2004).
- [3] Wise, S.A.; Chesler, S.N.; Hertz, H.S.; Hilpert, L.R.; May, W.E.; *Chemically-Bonded Aminosilane Stationary Phase for the High Performance Liquid Chromatographic Separation of Polynuclear Aromatic Hydrocarbons*; *Anal. Chem.*, Vol. 49, pp. 2306–2310 (1977).
- [4] May, W.E.; Wise, S.A.; *Liquid Chromatographic Determination of Polycyclic Aromatic Hydrocarbons in Air Particulate Extracts*; *Anal. Chem.*, Vol. 56, pp. 225–232 (1984).
- [5] Wise, S.A.; Benner, B.A.; Byrd, G.D.; Chesler, S.N.; Rebbert, R.E.; Schantz, M.M.; *Determination of Polycyclic Aromatic Hydrocarbons in a Coal Tar Standard Reference Material*; *Anal. Chem.*, Vol. 60, pp. 887–894 (1988).
- [6] Wise, S.A.; Deissler, A.; Sander, L.C.; *Liquid Chromatographic Determination of Polycyclic Aromatic Hydrocarbon Isomers of Molecular Weight 278 and 302 in Environmental Standard Reference Materials*; *Polycyclic Aromat. Compd.*, Vol. 3, pp. 169–184 (1993).
- [7] Schantz, M.M.; Parris, R.M.; Wise, S.A.; *NIST/NOAA Intercomparison Exercise Program for Organic Contaminants in the Marine Environment: Description and Results of 1999 Organic Intercomparison Exercises*; NOAA Technical Memorandum NOS NCCOS CCMA 146, Silver Spring, MD (2000).
- [8] Schubert, P.; Schantz, M.M.; Sander, L.C.; Wise, S.A.; *Determination of Polycyclic Aromatic Hydrocarbons with Molecular Mass 300 and 302 in Environmental-Matrix Standard Reference Materials by Gas Chromatography-Mass Spectrometry*; *Anal. Chem.*, Vol. 75, pp. 234–246 (2003).
- [9] Ballschmiter, K.; Zell, M.; *Analysis of Polychlorinated Biphenyls (PCB) by Glass Capillary Gas Chromatography - Composition of Technical Aroclor- and Clophen-PCB Mixtures*; *Fresenius' Z. Anal. Chem.*, Vol. 302, pp. 20–31 (1980).
- [10] Schulte, E.; Malisch, R.; *Calculation of the Real PCB Content in Environmental Samples. I. Investigation of the Composition of Two Technical PCB Mixtures*; *Fresenius' Z. Anal. Chem.*, Vol. 314, pp. 545–551 (1983).
- [11] Brubaker, W.W., Jr.; Schantz, M.M.; Wise, S.A.; *Determination of Non-ortho Polychlorinated Biphenyls in Environmental Standard Reference Materials*; *Fresenius' J. Anal. Chem.*, Vol. 367, pp. 401–406 (2000).
- [12] Schantz, M.M.; Kucklick, J.R.; *NIST Interlaboratory Analytical Comparison Study to Support Deepwater Horizon Natural Resource Damage Assessment: Description and Results for Crude Oil QA10OIL01*; NISTIR 7793 (2011).
- [13] Ruhkin, A.L.; Vangel, M.G.; *Estimation of a Common Mean and Weighted Means Statistics*; *J. Am. Statist. Assoc.*, Vol. 93, pp. 303–308 (1998).
- [14] JCGM 100:2008; *Evaluation of Measurement Data — Guide to the Expression of Uncertainty in Measurement (GUM 1995 with Minor Corrections)*; Joint Committee for Guides in Metrology (2008); available at http://www.bipm.org/utis/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed Jan 2015); see also Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297; U.S. Government Printing Office: Washington, DC (1994); available at <http://www.nist.gov/pml/pubs/tn1297/index.cfm> (accessed Jan 2015).
- [15] JCGM 101:2008; *Evaluation of measurement data – Supplement 1 to the “Guide to the expression of uncertainty in measurement” - Propagation of distributions using a Monte Carlo method*; JCGM (2008); available at http://www.bipm.org/utis/common/documents/jcgm/JCGM_101_2008_E.pdf (accessed Jan 2015).
- [16] Levenson, M.S.; Banks, D.L.; Eberhardt, K.R.; Gill, L.M.; Guthrie, W.F.; Liu, H.-K.; Vangel, M.G.; Yen, J.H.; Zhang, N.F.; *An Approach to Combining Results from Multiple Methods Motivated by the ISO GUM*; *J. Res. Natl. Inst. Stand. Technol.*, Vol. 105, pp. 571–579 (2000).

Certificate Revision History: 16 January 2015 (Corrected IUPAC name for PCB-56 and PCB-107; editorial changes); 10 June 2014 (Units corrected from mg/kg to µg/kg in Tables 8 and 9; editorial changes); 10 April 2012 (Reference value added for alkylated PAH groups, hopanes, and steranes; extension of certification period; editorial changes); 16 August 2004 (Reference values for the butyl tins removed; editorial changes); 15 July 2002 (Original certificate date).

Users of this SRM should ensure that the Certificate of Analysis in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at <http://www.nist.gov/srm>.

APPENDIX A

The laboratories listed below performed measurements that contributed to the certification of PAHs, PCBs, and chlorinated pesticides in SRM 1941b Organics in Marine Sediment.

Arthur D. Little, Inc; Cambridge, MA
Axys Analytical Services; Sidney, BC, Canada
B & B Laboratories; College Station, TX
Battelle Ocean Sciences; Duxbury, MA
Bedford Institute of Oceanography; Dartmouth, NS, Canada
California Department of Fish and Game; Rancho Cordova, CA
Central Contra Costa Sanitary District; Martinez, CA
Chesapeake Biological Laboratory; Solomons, MD
Centro de Investigaciones Energeticas Medioambientales y Tecnologicas; Madrid, Spain
City of Los Angeles Environmental Monitoring Division; Playa del Rey, CA
City of San Jose Environmental Services Department; San Jose, CA
Columbia Analytical Services; Kelso, WA
East Bay Municipal Utility District; Oakland, CA
Florida Department of Environmental Protection; Tallahassee, FL
Manchester Environmental Laboratory; Port Orchard, WA
Murray State University; Murray, KY
Massachusetts Water Resources Authority Central Lab; Winthrop, MA
National Research Council of Canada; Ottawa, Ontario, Canada
National Oceanic and Atmospheric Association (NOAA), National Marine Fisheries Service (NMFS), Auke Bay Laboratory; Juneau, AK
NOAA, National Ocean Service/Center for Coastal Environmental Health and Biomolecular Research; Charleston, SC
NOAA, NMFS, Sandy Hook Marine Laboratory; Highlands, NJ
NOAA, NMFS, Northwest Fisheries Science Center; Seattle, WA
Orange County Sanitation District; Fountain Valley, CA
Philip Analytical Services; Burlington, Ontario, Canada
Serv de Hidrografia Naval; Buenos Aires, Argentina
Skidaway Institute of Technology; Savannah, GA
Southwest Laboratory of Oklahoma; Broken Arrow, OK
Severn Trent Knoxville Laboratory; Knoxville, TN
Texas A&M University, Geochemical and Environmental Research Group; College Station, TX
Texas Parks and Wildlife Department; San Marcos, TX
University of California at Los Angeles, Institute of Geophysics and Planetary Physics; Los Angeles, CA
University of Connecticut, Environmental Research Institute; Storrs, CT
University of Rhode Island, Graduate School of Oceanography; Narragansett, RI
US Department of Agriculture, Environmental Chemistry Laboratory; Beltsville, MD
US Environmental Protection Agency, Atlantic Ecology Division; Narragansett, RI
US Geological Survey, National Water Quality Laboratory; Denver, CO
Woods Hole Group Environmental Lab; Raynham, MA
Wright State University; Dayton, OH

APPENDIX B

The laboratories listed below performed measurements that contributed to the certification of alkylated PAH groups, hopanes, and steranes in SRM 1941b Organics in Marine Sediment.

Alpha Analytical, Inc.; Mansfield, MA
Analytical Resources, Inc.; Tukwila, WA
Axy's Analytical Services; Sydney, BC, Canada
Battelle Analytical & Environmental Chemistry Laboratory; Duxbury, MA
Center for Laboratory Sciences; Pasco, WA
Columbia Analytical Services; Jacksonville, FL
Columbia Analytical Services; Rochester, NY
Columbia Analytical Services, Kelso, WA
Florida Department of Environmental Protection; Tallahassee, FL
Florida International University; North Miami, FL
Michigan Department of Natural Resources and Environment; Lansing, MI
Mississippi State Chemical Laboratory; Mississippi State, MS
NIST; Charleston, SC
NIST; Gaithersburg, MD
NOAA/NCCOS/NOS; Charleston, SC
NOAA/NMFS/Alaska Fisheries Science Center; Juneau, AK
NY State Department of Health; Albany, NY
Pace Analytical Services, Inc. Minneapolis; Minneapolis, MN
RJ Lee Group, Inc; Monroeville, PA
TDI/B&B Laboratories, Inc.; College Station, TX
TestAmerica Laboratories; Mobile, AL
TestAmerica Laboratories; West Sacramento, CA
TestAmerica Laboratories; University Park, IL
TestAmerica Laboratories; Schriever, LA
TestAmerica Laboratories; Edison, NJ
TestAmerica Laboratories; Knoxville, TN
TestAmerica Laboratories; Pittsburgh, PA
TestAmerica Laboratories; South Burlington, VT
TestAmerica Laboratories; Tacoma, WA
US Army Engineer Research and Development Center; Vicksburg, MS
USGS Columbia Environmental Research Center; Columbia, MO
University of Iowa, State Hygienic Laboratory; Iowa City, IO
Washington State Public Health Laboratories; Shoreline, WA



Date of Issue:
31 March 2014

SAFETY DATA SHEET

1. SUBSTANCE AND SOURCE IDENTIFICATION

Product Identifier

SRM Number: 1941b
SRM Name: Organics in Marine Sediment
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Company Information

National Institute of Standards and Technology
Standard Reference Materials Program
100 Bureau Drive, Stop 2300
Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
FAX: 301-948-3730
E-mail: SRMMSDS@nist.gov
Website: <http://www.nist.gov/srm>

Emergency Telephone ChemTrec:
1-800-424-9300 (North America)
+1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

Physical Hazard: Not classified.
Health Hazard: Not classified.

Label Elements

Symbol
No Symbol/Pictogram

Signal Word
Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

Substance: Marine sediment

Other Designations: Sediment.

This material is naturally occurring marine sediment from an urban area. The material contains trace amounts of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and should be handled with care. Components are listed in compliance with OSHA's 29 CFR 1910.1200; for the actual values see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Marine Sediment	Not available	Not available	23B0229 CLPLIKE (Rev1) - Page 4431 of 4444 100

4. FIRST AID MEASURES

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

Ingestion: If adverse effects occur after ingestion, seek medical treatment.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Negligible fire hazard. Avoid generating dust. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:

Suitable: Use extinguishing media appropriate for surrounding fire.

Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1

Fire = 0

Reactivity = 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. HANDLING AND STORAGE

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handling in accordance with all current regulations and standards.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits: No occupational exposure limits have been established for marine sediment. This material is a particulate matter and adequate inhalation/respiratory protection should be used to minimize exposure. The exposure limits for Particulates Not Otherwise Regulated (PNOR) are applicable.

OSHA (PEL): 15 mg/m³ (TWA, total particulates not otherwise regulated)

OSHA (PEL) 5 mg/m³ (TWA, respirable particulates not otherwise regulated)

NIOSH (REL): 10 mg/m³ (TWA, total particulates not otherwise regulated, 8 h)

NIOSH (REL): 5 mg/m³ (TWA, respirable particulates not otherwise regulated)

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance (physical state, color, etc.):	amorphous powder
Molecular Formula:	not applicable
Molar Mass (g/mol):	not applicable
Odor:	not available
Odor threshold:	not available
pH:	not available
Evaporation rate:	not applicable
Melting point/freezing point (°C):	not available
Specific Gravity (water=1)	not available
Vapor Pressure (mmHg):	not applicable
Vapor Density (air = 1):	not applicable
Viscosity (cP):	not applicable
Solubility(ies):	not available
Partition coefficient (n-octanol/water):	not available
Particle Size:	<150 µm

Thermal Stability Properties:

Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	not available
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid generating dust.

Incompatible Materials: None listed.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: Inhalation Skin Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Generated dust may cause irritation if inhaled.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Generated dust may cause irritation.

Skin Contact: May cause mechanical irritation.

Eye Contact: May cause mechanical irritation.

Ingestion: No data available.

Numerical Measures of Toxicity:

Acute Toxicity: Not classified; no data available.

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye damage/ Eye irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen Yes No
Marine sediment is not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH: No.
CHRONIC HEALTH: No.
FIRE: No.
REACTIVE: No.
PRESSURE: No.

State Regulations:

California Proposition 65: Not listed.

U.S. TSCA Inventory: Not listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:

WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 31 March 2014

Sources: 29 CFR Occupational Health and Safety Office (OSHA) 1910.1000, *Limits for Air Contaminants*, Table Z-1; available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9992 (accessed Mar 2014).

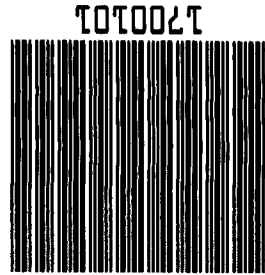
Center for Disease Control (CDC) NIOSH Pocket Guide to Chemical Hazards, *Particulates not otherwise regulated*; available at <http://www.cdc.gov/niosh/npg/npgd0480.html> (accessed Mar 2014).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The certified values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730. <http://www.nist.gov/srm>



Weight	
# of pieces	
Packed by	
Picked by	

9/21/16 04:04 PM

NOT FOR HUMAN CONSUMPTION,
LABORATORY USE ONLY.

1 / EACH

Organics in Marine Sediment

Total qty:

1941B

0 EACH

0

1 EACH

1

1 EACH

1

Order	UOM	Ship	UOM	B/O	UOM	Item	Description
-------	-----	------	-----	-----	-----	------	-------------

Order discrepancies (other than back ordered items) must be reported to our Customer Relations Department at 301-975-6776 within 5 days of receipt of shipment or this order will be considered complete. NIST SRMs/RMs are generally not returnable - with the exception of defective goods or shipments made in error by NIST. To return a SRM/RM, please call for instructions and a Return SRM/RM Authorization Number before shipment. Returns WILL NOT BE ACCEPTED without prior authorization.

Ship via	UFS Ground	Description	
Salesmen	MCMIDM2	Instructions	
Contact	DAVE MITCHELL	Prof	
		Truck#	
		Blanket	
		Ship from	

DAVE MITCHELL
ANALYTICAL RESOURCES INC
4611 S 134TH PLACE
SUITE 100
TUKWILA, WA 98168-3240
1 (206) 695-6205

DAVE MITCHELL
ANALYTICAL RESOURCES INC
4611 S 134TH PLACE
SUITE 100
TUKWILA, WA 98168-3240
1 (206) 695-6205

Ship to: 68456



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_


Formula: (C₆H₁₀O₅)_n **Formula Weight:** N/A
CAS #: 9004-34-6 **Storage:** 15 - 30°C
Physical Description: White Powder

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh	Wt %	
+60 mesh	<8%	<1%
+200 mesh	>45%	55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um
TUP: <9/600 cm²
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022



07/26/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

This is an electronically generated document
<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site
Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: (C₆H₁₀O₅)_n
CAS #: 9004-34-6
Physical Description: White Powder

Formula Weight: N/A
Storage: 15 - 30°C

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh	Wt %	
+60 mesh	<8%	<1%
+200 mesh	>45%	55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822

Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um
TUP: <9/600 cm²
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022



07/26/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

This is an electronically generated document
<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site
Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: (C₆H₁₀O₅)_n
CAS #: 9004-34-6
Physical Description: White Powder

Formula Weight: N/A
Storage: 15 - 30°C


Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh	Wt %	
+60 mesh	<8%	<1%
+200 mesh	>45%	55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822

Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um
TUP: <9/600 cm²
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022



07/26/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

This is an electronically generated document
<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site
Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)

TOTAL SOLIDS BENCHSHEET						Batch:	BLB0340	
Method: PSEP 1986						Date:	2/14/2023 11:36	
(dry at 103-105 C)						Analyst:	CR	
Instrumentation						Drying Oven:	15	
						Analytical Balance:	B139298002	
Batch drying time								
Record times as mm/dd/yy hh:mm			Oven Temp, C	TS (%) calculated as:		Oven Temps, °C		
Date/time in oven:	2/15/2023 12:23		109	Final dry wt (g) = (Dry Wt - Tare Wt)		Start Temp:	109	
Date/time out:	2/16/2023 9:31		99	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)		End Temp:	99	
Elapsed hrs:	21.1							
SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted		
23B0077-05	0.7900	12.2000	9.8200	9.03	79.14%	No		
23B0217-02	0.8000	12.3400	9.5800	8.78	76.08%	Yes		
23B0217-03	0.8100	12.8800	9.8600	9.05	74.98%	Yes		
23B0217-04	0.7900	12.1200	9.2500	8.46	74.67%	Yes		
23B0217-05	0.8000	12.2800	9.8300	9.03	78.66%	Yes		
23B0217-06	0.7900	11.9000	9.4500	8.66	77.95%	Yes		
23B0228-01	0.7800	12.4700	8.0300	7.25	62.02%	No		
23B0229-01	0.8200	11.7100	6.4700	5.65	51.88%	Yes		
23B0229-02	0.8000	11.2300	6.6400	5.84	55.99%	Yes		
23B0229-03	0.7900	12.9400	7.4500	6.66	54.81%	Yes		
23B0229-04	0.7800	12.3400	6.8100	6.03	52.16%	Yes		
23B0229-05	0.7700	11.3200	5.5100	4.74	44.93%	Yes		
23B0229-06	0.8100	12.4300	6.4600	5.65	48.62%	Yes		
23B0229-07	0.8000	11.6500	8.2500	7.45	68.66%	Yes		
23B0229-08	0.7600	11.6300	6.1600	5.40	49.68%	Yes		
23B0263-01	0.8000	12.8500	11.6300	10.83	89.88%	No		
23B0278-01	0.8100	12.4300	5.8600	5.05	43.46%	Yes		
23B0278-02	0.7700	12.1400	5.9100	5.14	45.21%	Yes		

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Instrumentation

Batch: BLB0340

Date: 2/14/2023 11:36

Analyst: OR

Drying Oven: 015

Analytical Balance: B139298002

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven: 2/15/23 12:23
 Date/time out: 2/16/23 9:31
 Elapsed hrs: 0.0

Oven Temp, C

109
99

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/(sample & dish -dish tare)

Oven Temps, °C

Start Temp: 109
 End Temp: 99

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23B0077-05	0.79	12.20	9.82			No
23B0217-02	0.80	12.34	9.58			No YES
23B0217-03	0.81	12.88	9.86			No YES
23B0217-04	0.79	12.12	9.25			No YES
23B0217-05	0.80	12.28	9.83			No YES
23B0217-06	0.79	11.90	9.45			No YES
23B0228-01	0.78	12.47	8.03			No
23B0229-01	0.82	11.71	6.47			No YES
23B0229-02	0.80	11.23	6.64			No YES
23B0229-03	0.79	12.94	7.45			No YES
23B0229-04	0.78	12.34	6.81			No YES
23B0229-05	0.77	11.32	5.51			No YES
23B0229-06	0.81	12.43	6.46			No YES
23B0229-07	0.80	11.65	8.25			No YES
23B0229-08	0.76	11.63	6.16			No YES
23B0263-01	0.80	12.85	11.63			No
23B0278-01	0.81	12.43	8.86			No YES
23B0278-02	0.77	12.14	5.91			No YES

T/S + Screens
 1 copy - 23B0217
 23B0263
 2 copies - 23B0229
 23B0278
 3 copies - 23B0077
 No copies - 23B0228

Done!!